



**PLANNING AND ZONING ADVISORY BOARD AGENDA
REGULAR MEETING**

**Village Hall Council Chambers
226 Cypress Lane
Palm Springs, FL 33461
Tuesday, December 10, 2019
6:30 PM**

Persons who need an accommodation in order to attend or participate in this meeting should contact the Village Clerk at (561) 965-4010 at least three (3) business days prior to the meeting in order to request such assistance.

- 1. CALL TO ORDER**
- 2. ROLL CALL**
- 3. INVOCATION**
- 4. PLEDGE OF ALLEGIANCE**
- 5. ADDITIONS, DELETIONS, OR MODIFICATIONS, AND APPROVAL OF AGENDA**
- 6. PUBLIC HEARINGS**
 - 6.1 Ordinance No. 2019-23 - Village Code Amendment - Chapter 34 - Special Exception Uses
[Ord No. 2019-23- Chapter 34 - Special Exception Criterion \(4\).docx](#)
 - 6.2 Discussion: Potential Village Code Amendment - Chapter 34 - Synthetic Turf
[Draft Artificial Turf code provisions for P&Z discussion](#)
[Synthetic Turf Guidelines](#)
 - 6.3 Master Site Development Plan - 2601 10th Avenue North & Florida Mango Road
[Exhibit "A" - Staff Report and Conditions of Approval](#)
[CPD Master Plan, Landscape Plan, Traffic Study and Master Sign Plan](#)

Narrative and Justification Statement
Site Photos Exhibit
TPS Letter and Comment letters
Aerial and Location Maps

- 6.4 Resolution No. 2019-46 - Site Development Plan (SPR19-12) and Special Exception Use (PSSE19-08) - RaceTrac - 2601 10th Avenue North

Exhibit "A" - Staff Report and Conditions of Approval
Site Plan, Landscape Plans, Floor Plan, Elevations and Engineering Plans
Project Narrative and Justification Statements
TPS Letter and Comment Letters
Map of Existing Gas Stations and Car Washes
Aerial and Location Maps

- 6.5 Resolution No. 2019-47 - Site Development Plan (SPR19-14) and Special Exception Use (PSSE19-09) - Tire Kingdom - 2601 10th Avenue North

Exhibit "A" - Staff Report and Conditions of Approval
Site Plan, Landscape Plans, Elevations and Sign Plans

Project Narrative and Justification Statement
TPS Letter and Comment Letters
Aerial Map and Location Map
Auto Service Facilities Map

- 6.6 Ordinance No. 2019-24 - Village Code Amendment - Chapter 34 - Supplemental Regulations - Car Washes and Gas Stations

Ord No. 2019-24 - Supplemental Regulations for Vehicle Oriented Uses (2).docx
Map of Existing Gas Stations and Car Washes.pdf
Gas Stations 500 Foot Buffer
Gas Stations 1500 Foot Buffer

7. ADJOURNMENT

Next Meeting

JANUARY 14, 2020

If a person decides to appeal any decision made by this Council with respect to any matter considered at this meeting, he will need a record of the proceeding, and that for such purpose he may need to ensure that verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.1: Ordinance No. 2019-23 - Village Code Amendment - Chapter 34 - Special Exception Uses

SUMMARY:

Planning, Zoning & Building staff is requesting an amendment to the Village Code - Chapter 34 - Article VI "Land Use" to provide an additional criterion when considering a request for a special exception use. The proposed modification is recommended in light of the number of vehicle-oriented uses (which are special exception uses) that have proposed the past few years, and the accompanying concerns that 1) there may be a sufficient number of these uses to support our community of 23,500 residents, and 2) there may be a need to focus/approve projects that create higher paying jobs for our residents while assisting in promoting a higher quality of life and investment within our Village to ensure a strong, vibrant community.

Note: Although significant investment has occurred due to the re-development of many properties within the Village, many of the current and/or proposed vehicle-oriented uses provide a limited number of jobs to support our workforce housing community.

Further, a (preliminary) key goal of the newly created Palm Springs Community Redevelopment Agency (CRA) is to expand job development and economic growth to support the livability within our Village and our surrounding community.

The proposed amendment adds an additional criterion, for a total of seven (7), as a relevant factor for consideration when reviewing a request for a special exception use:

(7) The proposed use would enhance and/or promote redevelopment of the Village, fulfill redevelopment objectives, and/or have a positive economic impact on the Village, including creating new jobs, economic growth and provide needed community-serving (neighborhood retail and commercial) uses and businesses.

This proposal was discussed with the Planning & Zoning Board at its June 11, 2019 meeting, and with the Village Council at their October 10, 2019 meeting. The proposed ordinance was prepared by the Planning, Zoning & Building Director and reviewed by the Village Attorney.

FISCAL IMPACT:

The proposed ordinance does not have a direct fiscal impact to the Village.

ATTACHMENTS:

Ord No. 2019-23- Chapter 34 - Special Exception Criterion (4).docx

ORDINANCE NO. 2019-23

AN ORDINANCE OF THE VILLAGE OF PALM SPRINGS, FLORIDA, AMENDING THE VILLAGE CODE OF ORDINANCES AT CHAPTER 34 "LAND DEVELOPMENT", ARTICLE VI "LAND USE", DIVISION 2 "ADMINISTRATION", SECTION 34-606 "SPECIAL EXCEPTION PROCEDURES" TO PROVIDE ADDITIONAL CRITERION FOR SPECIAL EXCEPTION USES; PROVIDING FOR CODIFICATION, REPEAL OF CONFLICTING ORDINANCES, SEVERABILITY AND AN EFFECTIVE DATE.

WHEREAS, the Village of Palm Springs, Florida (the "Village") is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the Village currently has regulations in place at Chapter 34 of the Village Code of Ordinances regarding development or improvements of land; and

WHEREAS, a special exception use is defined as "a use that would not be appropriate generally or without restriction throughout the zoning district"; and

WHEREAS, the Village desires to amend the existing regulations to provide an additional criterion for special exception uses; and

WHEREAS, the Village finds that providing allowances for special exception uses are desirable, when said uses assist in promoting a higher quality of life and investment within the Village to ensure a strong, vibrant community; and

WHEREAS, the Village finds making amendments to existing land development regulations to expand relevant factors for special exception uses serves a valid public purpose.

NOW THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL OF THE VILLAGE OF PALM SPRINGS, FLORIDA:

Section 1. The foregoing recitals are incorporated herein as true and correct findings of fact of the Village Council, and serve as a basis for adoption of this Ordinance.

Section 2. Chapter 34 "Land Development", Article VI "Land Use", Division 2 "Administration", Section 34-606 is hereby amended as follows:

Sec. 34-606. - Special exception procedures.

(a) ~~The land development planning and zoning board~~ shall review all requests for special exception uses, with the exception of minor special exception uses, except on appeal, and forward their recommendations on the request to the village council for their consideration. The village council shall hear and decide requests for special exception uses in a quasi-judicial proceeding. Any person aggrieved

by a decision of the council may appeal the final order of the council in accordance with the Florida Rules of Appellate Procedure.

(b) In reviewing a request for a special exception use, the village council shall take into consideration all technical, relevant factors and the factors and criteria set forth herein. A special exception use shall not be approved unless an applicant establishes that all of the following criteria are met:

- (1) The proposed special exception use is consistent with the goals, objectives, and policies of the village's comprehensive plan.
- (2) The proposed special exception is consistent with the land development and zoning regulations and all other portions of this Code.
- (3) The proposed special exception use is compatible with the character and use (existing and future) of the surrounding properties in its function; hours of operation; type and amount of traffic to be generated; building location, mass, height and setback; and other relevant factors peculiar to the proposed special exception use and the surrounding property.
- (4) The establishment of the proposed special exception use in the identified location does not create a concentration or proliferation of the same or similar type of special exception use, which may be deemed detrimental to the development or redevelopment of the area in which the special exception use is proposed to be developed.
- (5) The proposed special exception use does not have a detrimental impact on surrounding properties based on:
 - a. The number of persons anticipated to be using, residing, or working on the property as a result of the special exception use;
 - b. The degree of noise, odor, visual, or other potential nuisance factors generated by the special exception use; and
 - c. The effect on the amount and flow of traffic within the vicinity of the proposed special exception use.
- (6) That the proposed special exception use:
 - a. Does not significantly reduce light and air to adjacent properties.
 - b. Does not adversely affect property values in adjacent areas.
 - c. Would not be a deterrent to the improvement, development or redevelopment of surrounding properties in accord with existing regulations.

d. Does not negatively impact adjacent natural systems or public facilities, including parks and open spaces.

e. Provides pedestrian amenities, including, but not limited to, benches, trash receptacles, and/or bicycle parking.

(7) The proposed use would enhance and/or promote redevelopment of the Village, fulfill redevelopment objectives, and/or have a positive economic impact on the Village, including creating new jobs, economic growth and provide needed community-serving (neighborhood retail and commercial) uses and businesses.

Section 3. Codification. The ordinance shall be codified in the Code of Ordinances of the Village of Palm Springs, Florida.

Section 4. Repeal of Conflicting Ordinances. All Ordinances, Resolutions or parts of Ordinances and Resolutions in conflict herewith are hereby repealed.

Section 5. Severability. If any word, clause, sentence, paragraph, section or part thereof contained in this Ordinance is declared to be unconstitutional, unenforceable, void or inoperative by a court of competent jurisdiction, such declaration shall not affect the validity of the remainder of this Ordinance.

Section 6. Effective Date. This Ordinance shall become effective immediately upon adoption.

Council Member _____, offered the foregoing Ordinance, and moved its adoption. The motion was seconded by Council Member _____, and upon being put to a vote, the vote was as follows:

	<u>Aye</u>	<u>Nay</u>	<u>Absent</u>
BEVERLY SMITH, MAYOR	☐	☐	☐
JONI BRINKMAN, VICE MAYOR	☐	☐	☐
PATTI WALLER, MAYOR PRO TEM	☐	☐	☐
DOUG GUNTHER, COUNCIL MEMBER	☐	☐	☐
GARY READY, COUNCIL MEMBER	☐	☐	☐

The Mayor thereupon declared this Ordinance approved and adopted by the Village Council of the Village of Palm Springs, Florida, on second reading, the ____ day of _____, 20 ____.

VILLAGE OF PALM SPRINGS, FLORIDA

BY: _____
BEVERLY "BEV" SMITH, MAYOR

First Reading: _____

Second Reading: _____

ATTEST:

BY: _____
KIMBERLY M. WYNN, CMC, VILLAGE CLERK

REVIEWED FOR LEGAL FORM AND SUFFICIENCY

BY: _____
GLEN J. TORCIVIA, VILLAGE ATTORNEY



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.2: Discussion: Potential Village Code Amendment - Chapter 34 - Synthetic Turf

SUMMARY:

Planning, Zoning & Building staff had previously discussed a potential code amendment with the P&Z Board during the June 11, 2019 meeting, but did not obtain a consensus on how to proceed. Staff is seeking direction on whether to bring forward an ordinance that allows for synthetic turf to be utilized in residential and governmental areas, subject to design standards, or whether the current prohibition should remain (with the ability for a variance to be requested for unique applications).

Background: The County Water Resources Task Force Technical/Professional Working Group has been discussing standards for artificial turf. This working group is comprised of staff from the various cities, and includes the Village Stormwater Program Coordinator. Cities are experiencing increased requests from residents to use artificial turf rather than sod in yards. The working group is concerned about potential leaching of hazardous chemicals (i.e., lead) from artificial turf that could infiltrate water supply and drainage systems. Due to this concern, they have sought advice of a synthetic turf expert and are considering zoning standards that might be used countywide. Attached are draft LDR revisions that incorporate the minimum quality guidelines recommended for synthetic turf. Staff is bringing this forward for P&Z Board input.

FISCAL IMPACT:

There is no fiscal impact for this item.

ATTACHMENTS:

Draft Artificial Turf code provisions for P&Z discussion

Synthetic Turf Guidelines

Sec. 34-163. - Single-family dwellings.

(a) Procedure. Where construction or major reconstruction of a single-family dwelling, not within a cluster development or planned unit development, requires review of landscaping under this article, no separate landscaping plan will be required. The landscape requirements as set forth in this section 34-163 shall be used as a guide but the strict adherence to the section is not required. However, the general intent of the section as for coverage and aesthetics is an expectation which may be enforced by the land development department. No certificate of occupancy shall be issued until after the landscaping is inspected and found to be in compliance with such requirements.

(b) Trees. Each lot on which a single-family dwelling is constructed or reconstructed shall be landscaped with one tree for each 1,500 square feet, or fraction thereof, of lot area, excluding such area containing vegetation required to be preserved by law. Not more than 15 trees shall be required under such standard. At least 50 percent of such trees shall be shade trees.

(c) Grass areas. All areas not contained in structures or parking shall be landscaped or planted in grass prior to occupancy. Grass areas shall be planted with species suitable as permanent lawns in the county. Grass areas may be sodded or plugged, provided that a solid cover of sod shall be used in swales, on slopes or in other areas subject to erosion, and shall be used in all rights-of-way. In areas where grass seed is used, nursegrass seed shall also be sown for immediate effect, and maintenance shall be provided until coverage is complete. If the lawn is not established by sodding with 100 percent coverage, the density of sod or other method of establishment of the lawn shall be sufficient to provide establishment of 100 percent coverage within one year after issuance of the building permit. Synthetic turf may be used in lieu of turf grass pursuant to Section 34-188(6).

(d) Appropriate materials. Appropriate landscaping materials shall be used pursuant to the standards of section 34-181. Requirements for use of treated wastewater for irrigation shall apply only where such systems are available. Restrictions on use of native vegetation shall only apply where the landscaping is being supplied by the builder as part of the construction of a new residence.

(e) Maintenance. Landscaping shall be maintained in an orderly manner as required under section 34-221. Vegetation shall be maintained in such a manner as to avoid inconvenience to owners or occupants of adjoining property. Where portions of a plant grow in such a manner as to cross a property line or to inconvenience users of a public street or sidewalk, the plant shall be maintained to limit or restrict intrusion into the area of the adjoining property or right-of-way.

Sec. 34-184. - Artificial plants and vegetation.

No artificial trees, plants or vegetation shall be used to meet any requirement of this article, with the exception of synthetic turf pursuant to Section 34-188(6).

Sec. 34-188. - Ground treatment.

The ground area within required landscaping areas which is not dedicated to trees or preservation of existing vegetation shall receive appropriate landscape treatment and shall present a finished appearance and complete coverage upon completion. Sand or pavement shall not be considered appropriate landscape treatment. The following standards shall apply to the design of ground treatment:

(1) Ground cover may be planted in lieu of grass in conjunction with planting of trees, shrubs or hedges. Ground cover shall provide a minimum of 50 percent coverage immediately upon planting and 100 percent coverage within two years after planting.

(2) Mulch shall be temporarily applied to areas not immediately covered by ground cover. Mulch may also be used as a permanent ground treatment in landscape designs where ground cover or grass is inappropriate, such as in a pine preservation area. Where mulch is intended to be installed permanently, it shall be renewed and maintained to a minimum depth of two inches.

(3) Pebbles or egg rock may be used in a limited way as a ground treatment in areas where drainage is a problem.

(4) Grass areas shall be planted with species suitable as permanent lawns in the county. Grass areas visible from a right-of-way or adjacent property, or in other areas subject to erosion including swales and slopes, shall be sodded. St. Augustine grass should be used adjacent to areas that accommodate pedestrian traffic, or where visible from a street or abutting property. Bahia grass may be used in large, non-manicured, turf areas such as open fields, recreation areas, or other areas that are generally viewed from a distance or from a moving vehicle. In such areas, bahia grass plugs may be planted. In limited areas where grass seed is used, with the approval of the land development director, nursegrass seed shall also be sown for immediate effect, and maintenance shall be provided until coverage is complete.

(5) Ground cover is not required where existing native vegetation is allowed to remain undisturbed, provided that the native vegetation is protected from disturbance both during and after site development.

(6) Synthetic turf materials, in lieu of turf grass vegetation, shall be permitted in residential and government districts, parkland, recreational areas and playgrounds not exceeding an area of up to 30 percent of the required landscape area. When artificial turf is used, subject to a landscape permit, it shall:

- a. have a polyethylene monofilament fiber with a minimum yarn/face weight of 40 ounces per square yard, and ½" or less distance between individual fiber tufts, and minimum grass zone pile height of 1.5 inches, and dual primary backing of 7 ounces per yard;
- b. be non-flammable and lead free and green in color;
- c. include an infill material of silica sand variety. Rubber crumb infill shall be prohibited;
- d. be separated from live vegetation and soil by a solid barrier device, such as concrete or brick pavers;
- e. have a minimum permeability drainage rate of 25 inches of rain per square yard per hour to an adequate drainage system installed beneath the turf to prevent run-off, pooling and flooding;
- f. be trimmed to fit against all regular and irregular edges to resemble a natural look;

- g. be replaced or repaired when the surface fails to simulate a green grass appearance, including disrepair with fading or holes or loose areas, as determined by Code Compliance. Replacement shall be completed within 60 days of notification by Code Compliance.;
- h. be subject to approval of a product certification demonstrating compliance with the above guidelines, which shall be required at the time of permitting;
- i. not be permitted in the front yard of residential districts; and
- j. not be permitted in swales or within public rights-of-ways, unless otherwise approved by the PZ&B Director.

(7) The Village of Palm Springs shall not be held liable for any damage to any artificial turf or other items placed within the right-of-way or within an easement, within six feet of a retaining wall or seawall or within any area covering Village utilities.

Sec. 34-881. - Landscaping and paving.

Landscaping requirements for residential, commercial and other allowable uses shall conform to the requirements established in article III of this chapter. The maximum area of impervious and semi-pervious parking surface in the front yard of any residential zoning district, shall be 40 percent, unless the front yard shall contain a semicircular driveway in which event, the maximum area of impervious and semi-pervious parking surface shall be 60 percent of the front yard. Driveways shall be setback a minimum of three feet from side yards to accommodate sodded or landscaped pervious area along the perimeter of each parcel between the driveway and the property line.



John Gallina

Synthetic Turf Consulting

John@johngallina.com
(561) 252-3280



Landscape Turf Guidelines

- **KEY POINTS**

- To assure that the synthetic turf you select is of high quality, and will retain its lifelike appearance for at the warranted life of the product. I suggest you take these simple precautions;
- Insist on a quality product that meets or exceeds the minimum specifications listed in the following pages, and that it is identified as appropriate for its intended use.
- Research the synthetic turf manufacturer and installation company from whom you may contract. Check their references and visit their installations if possible.
- Review all documents, including work plans, construction schedules, and contractor warranties.
- Find out where the synthetic grass is manufactured. If its manufactured outside the U.S., e.g., China, you will need to be particularly careful to understand how customer questions, service issues, and warranty claims will be handled.
- Keep the synthetic grass sample you select, and compare it before the installation to the product that is delivered.

Minimum Quality Guidelines

SYNTHETIC GRASS FEATURE	MINIMUM GUIDELINE	COMMENT
Total Yarn Weight aka Face Weight	40 oz. per sq. yd.	Total weight of the yarn above the backing
Total Weight of Synthetic Grass	70 oz. per sq. yd.	
Pile Height	1 ½ "	Height of the fiber from the backing to its tip
Distance between individual Fiber Tufts	½ " or less	Longer pile may look more natural, but could increase yarn weight and cost
Dual Primary Backing	7 oz. per yd.	
Coating	Polyurethane (PU)	The back of the synthetic grass is coated to lock the fibers in place (tuft bind)
Tuft Bind	6.8 lbs.	The higher the tuft bind, the better

Guidelines for Infill

- Synthetic grass systems with infill are preferred over systems without infill, except in certain special applications that are only available without infill. Infill is needed to help keep the synthetic grass installation from moving – infill; provides an even distribution of weight that will minimize the expansion and contraction of turf when the temperature changes. A synthetic grass system that does not use infill will need to be anchored with nails;
- Among the acceptable infill materials are washed silica sands that are round, sub-round, or sub-round to sub-angular. Other types of acceptable infill include heat treated acrylic coated silica sand or TPE-coated silica sand, and TPE and EPDM granules.

GUIDELINES TO ASSURE A NATURAL APPEARANCE

- Select landscape synthetic grass that replicates the grass varieties that are most prevalent in your locality.
- NOTE: There have been random instances of fiber shrinkage and melting of polyethylene fibers due to high heat from reflective surfaces, particularly so-called Low-E glass, which reflects solar rays. If an installation has Low-E windows and doors facing south, I recommend that before installation you:
 - Visit the site in the middle of a hot, sunny day to determine where the reflected energy is focused, even from the second story.
 - If screening of the windows and doors is not feasible or desired, devise a landscape plan that includes planted areas or hardscape in the areas affected by ref

**TEST REPORT**

DATE: 04/01/2011

TEST NUMBER: 138139

CLIENT	Controlled Products
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TEST METHOD CONDUCTED	ASTM F1551 Water Permeability of Synthetic Turf Systems and Permeable Bases, DIN 18-035
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DESCRIPTION OF TEST SAMPLE	
IDENTIFICATION	SoftLawn
COLOR	Green
ROLL	4C41703B
CONSTRUCTION	Landscape
FIBER	----
BACKING	Unitary
REFERENCE	PO #41311

GENERAL PRINCIPLE

The test procedure is used to determine the flow rate of rainfall through a material. A volume of water is poured through the surface and timed. Calculations are then made on the inches of water that would pass through the substrate per hour. The sample was tested as received.

TEST RESULTS

SAMPLE IDENTIFICATION	RESULTS
SoftLawn	242.1 Inches/Hour
	25.56 Sec/6" zone
	78.9 Gal/min/yd ²

*NOTE: Tested with 3 lbs of infill.

APPROVED BY:

This report is provided for the exclusive use of the client to whom it is addressed. It may be used in its entirety to gain product acceptance from duly constituted authorities. This report applies only to those samples tested and is not necessarily indicative of apparently identical or similar products. This report, or the name of Professional Testing Laboratory Inc. shall not be used under any circumstance in advertising to the general public.



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.3: Master Site Development Plan - 2601 10th Avenue North & Florida Mango Road

SUMMARY: Mr. Brian Terry, agent for Race Trac Petroleum Inc (applicant), is requesting approval of a Master Site Development Plan to allow the demolition of the existing 4-story commercial office building and redevelopment the site to accommodate 3 separate development plans on the portion of the property west of the Chase Bank Building (±8.61 acres).

The site consists of an existing 4-story office building with approximately 88,707 square feet and the newly constructed 4,081 square foot Chase Bank, which is proposed to remain. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and the building has been unutilized since then.

The proposed Commercial Planned Development (CPD) master plan provides for the following elements:

Perimeter landscape and compatibility features, including a privacy wall between the subject commercial parcel and abutting residential properties to the west, north and east, and entry feature landscaping at the entrance drives;

1. Shared access into the CPD from Florida Mango Road and 10th Avenue North, with internal access into the future development parcels;
2. Shared infrastructure improvements (note: the existing Village water main is being re-routed out of the road right-of-way dedication area and through the property, and an easement will be provided over the existing sewer force main);
3. Master Sign Program for the CPD, which includes 4 monument signs (note: existing nonconforming signs will be removed);
4. Village sign easement (this is an outstanding development order condition of the Chase

Bank);

5. Uses permissible within the Commercial General zoning district shall be determined with each individual site plan.
6. Architectural Guidelines for the CPD to provide a consistent theme throughout the unified project through use of colors, materials, architectural elements (rooflines, awnings, etc.) - note: the application must be supplemented with these details

The property is proposed to be re-platted to create four parcels (a separate application is forthcoming) and a site plan for each lot will be processed separately.

At a meeting on Monday, December 2nd, the property owner announced that they would be modifying the master plan to retain the existing pavement (parking spaces) in Lot 1, the future development area, and fence the area to prevent overnight parking, vagrancy, and dumping. A minimum 20% open space is required for the CPD and compliance must be demonstrated with the modification to the applicant's proposal.

As separate agenda items, the P&Z Board will consider the requests for site development plans (SPR19-12 & SPR19-14) and two special exception uses (PSSE19-08 & PSSE19-09) to permit the construction of a gas station with convenience store building and an automotive service facility within ±3.11 acres. The remaining ± 4.63 acres on the north side will be sodded until new plans for commercial use are approved for this portion of the property.

Staff does not object to the applicant's intent to permit the redevelopment project allowing the revitalization of the existing unutilized property.

FISCAL IMPACT:

The proposed master site plan for the commercial planned development does not have a direct fiscal impact to the Village.

ATTACHMENTS:

Exhibit "A" - Staff Report and Conditions of Approval
CPD Master Plan, Landscape Plan, Traffic Study and Master Sign Plan
Narrative and Justification Statement
Site Photos Exhibit
TPS Letter and Comment letters
Aerial and Location Maps



PLANNING, ZONING & BUILDING STAFF REPORT

SUBJECT: Planned Commercial Development – 2601 10th Avenue North- 10th Ave N & Florida Mango Rd.- Master Site Plan

Application Summary			
Applicant / Petitioner	Race Trac Petroleum Inc	Submittal Date	6/24/2019
Reference Name	10 th & Mango Racetrac – Master Plan	Case Number	SPR19-13
		Parcel Control No	70-43-44-20-39-000-0010 & 70-43-44-20-39-000-0020
Location	2601 10 th Avenue North & 2603 10 th Avenue North	Site Area	±8.61 gross acres
P&Z Bd Meeting	December 10, 2019	Council Meeting	Not scheduled
Requests			
Proposed Use(s)	Commercial Planned Development with Master Site Development Plan to allow the demolition of the existing 4-story commercial office building and redevelopment the site to accommodate 3 separate development plans on the remaining portion of the property west of the Chase Bank building.		
Number of parcels	4 Commercial General Lots Lot 1- 4.63 acres maximum FAR 100,807 sf Lot 2 – 0.87 acres (existing to remain) 4,081 sf Chase Bank building (0.11 FAR) Lot 3 – 1.76 acres maximum FAR 38,342 sf Lot 4 – 1.3 acres maximum FAR 28,314 sf		
Setbacks			
Code	Required Minimum		
West, North and East	As a Commercial Planned Development adjacent to residential use, the minimum setback shall be 30'. Existing Chase Bank is located 243.5' from North side and 76.55' from Florida Mango Road right-of-way.		
South	As a Commercial General zoning district property, the minimum at front shall be 50' Existing Chase Bank is at 101.3' setback from 10 th Ave North		
Site Characteristics			
Existing Use	Existing vacant office building and Chase Bank building to remain.	Proposed Use	Chase Bank building to remain and subdivide the remaining portion into 3 separate commercial lots.
Existing Zoning	Commercial General (CG)	Existing Future Land Use	Commercial
Surrounding Existing Land Use, Future Land Use, and Zoning			
Direction	Existing Use	Future Land Use	Zoning District
North	Residential uses	Commercial & Low Density Residential	Commercial General (CG) & Residential Multiple-Family (RM)
South	Residential uses	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
East	Commercial shopping center	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
West	Residential mobile home park	High Density Residential	Residential Multiple-Family (RM)
Recommendation			

Planning, Zoning & Building Staff recommends conditional approval of the commercial planned development master site development plan, depicted on the proposed master site plan, to permit the redevelopment and revitalization project of the existing underutilized property.



I. Site History

- Ordinance 2010-02: Annexation

The property was voluntarily annexed into the Village of Palm Springs as a developed parcel on February 11, 2010 and designated with the Land Development as Commercial General zoning districts and Future Land Use Commercial.

- Resolution 2017-26: Site Plan and Special Exception Use

On August 10, 2017 the Village's Council approved a Site Plan and Concurrently a Special Exception Use to redevelop the site by demolishing the existing bank drive-through and constructing a freestanding 4,081 square feet Chase Bank Branch with two lanes drive-through ATM with by-pass lane.

- Resolution 2018-22: Plat

The Village's Council approved on July 12, 2018 under above resolution, a final plat application to subdivide the 8.6 acre property at the northwest corner of the 10th Avenue North and Florida Mango Road to create a separate lot for Chase Bank building, the boundaries of the second lot created coincided with those of the special exception/site plan approved under Resolution 2017-26.

II. Comprehensive Plan Consistency

The subject property's Future Land Use designation and Zoning are Commercial and Commercial General (CG), respectively. The proposed site development plan to re-develop the property to accommodate 3 separate development plans on the remaining portion of the property west of the Chase Bank building, is consistent with goals, objectives and policies of the Village's Comprehensive Plan.

III. Variances Requested

No variances have been applied as part of this master site plan application.

IV. Neighborhood Compatibility

- 1) The proposed project is located on the northwest corner of 10th Avenue North and South Florida Mango Road.
- 2) An existing shopping center is located on the east side of the property with several different retails, offices and restaurants establishments occupying the suites.
- 3) Surrounding properties are generally residential use.

V. Regulatory Issues

- The master site plan generally conforms to the property development standards of the CG district.
 - 1) Proposed project plan generally meets required site development regulations.
 - 2) An 8' wide right-of-way shall be dedicated to Palm Beach County.
 - 3) A right-of way construction permit is required to be obtained with PBC.
 - 4) Revised plans shall be provided to the Planning, Zoning and Building Department prior to Council consideration.
 - 5) Existing eastern egress driveway on 10th Ave North shall be eliminated accordingly with PBC requirements.
 - 6) A westbound right-turn lane at the project driveway on 10th Avenue shall be constructed by the PBC standards.
 - 7) Permits from all applicable permitting agencies, including but not limited to Lake Worth Drainage District, Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs are required prior to construction.
 - 8) Civil/Utility plans shall be approved by the Village's Engineer.
 - 9) Proposed Site Plan meets the Traffic Performance Standards of Palm Beach County.
 - 10) The property owner would be modifying the master plan to retain the existing pavement (parking spaces in Lot 1) and fence the area to prevent overnight parking, vagrancy and dumping. A minimum 20% open pace is required and compliance must be demonstrated with the modification to the applicant's proposal.

VI. Environmental Issues:

There are no environmental (wetlands, floodplains, etc.) issues identified.

VII. Community Outreach/ Notification

- The subject property was posted on November 27, 2019.
- Public Notification letters were mailed to all property owners within 300 feet radius of subject property on November 26, 2019.
- Legal advertisement was published in the paper on November 28, 2019.
- Staff received a visit from one of the adjacent residents from the mobile home park that has concerns regarding noises and high of the concrete wall.

VIII. Proposed Development Plan Details

The petitioner's development plans dated received on June 28, 2019 depicts the following:

- An application submitted for a Master Site Development Plan Approval for the demolition of the existing 4-story commercial office building and redevelopment the site to accommodate 3 separate development plans on the remaining portion of the property west of the Chase Bank building.
 1. Master Site Plan dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 2. Master Landscape plans dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 3. Engineering plans dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 4. Architectural plans dated received June 28, 2019 revised and resubmitted on September 27, 2019.
 5. Photometric plan dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 6. An open space exhibit dated received September 27, 2019 revised and resubmitted on October 31, 2019.
 7. Overall site plan dated received August 27, 2019 revised and resubmitted on October 31, 2019.
 8. Master sign plan dated received August 27, 2019 revised and resubmitted on October 31, 2019.
 9. Boundary survey.
 10. Project narrative.
 11. Traffic study.
 12. Drainage calculations.

IX Recommendation

The applicant is requesting a Master Site Development Plan to allow the demolition of the existing 4-story commercial office building and redevelopment the site to accommodate 3 separate development plans on the portion of the property west of the Chase Bank Building.

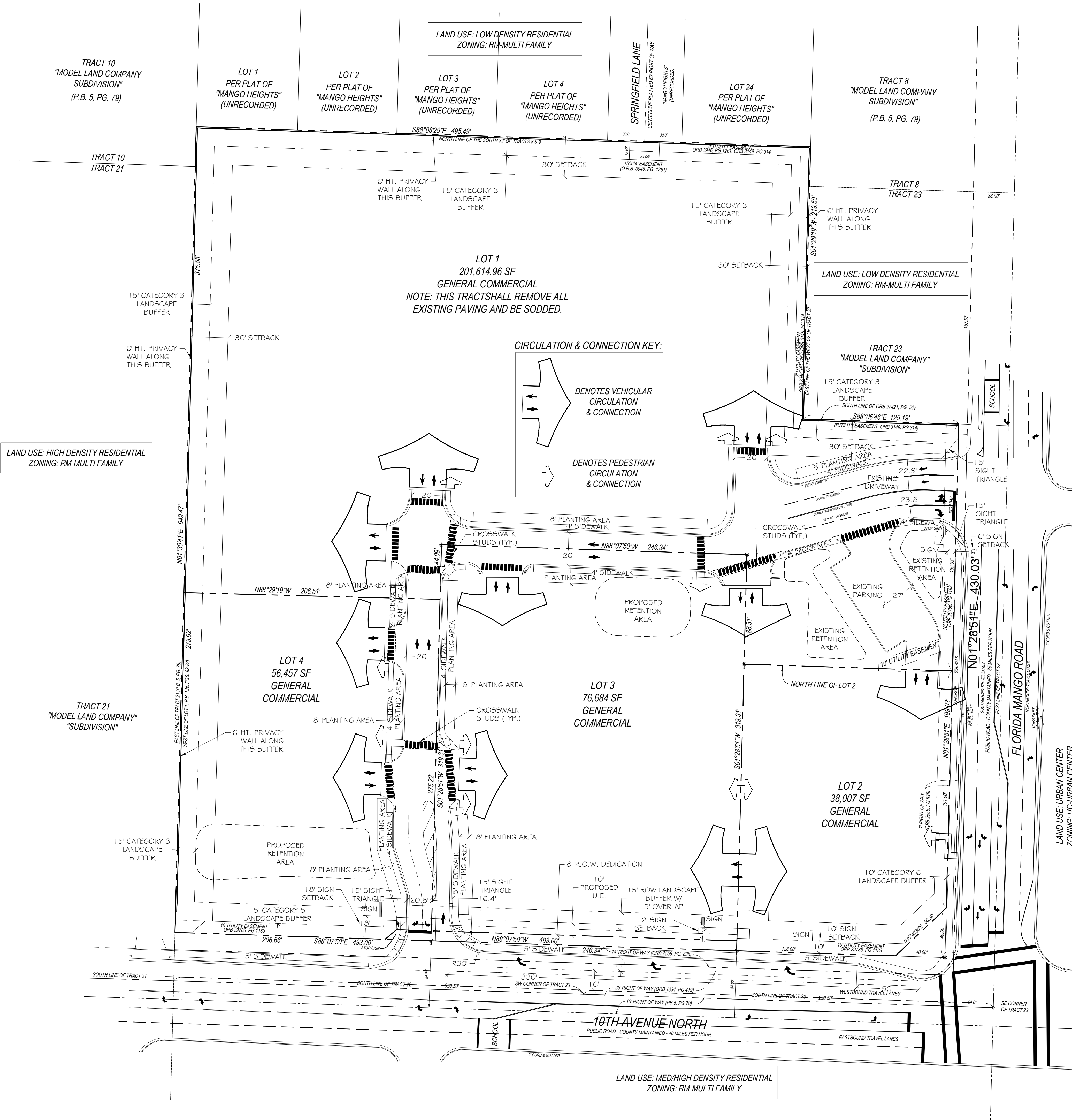
Each site-specific site development plan will be processed separately and, as depicted on the proposed master site development plan, Staff supports the applicant's intent to permit the redevelopment project allowing the revitalization of the existing unutilized property.

Planning, Zoning & Building Staff has conducted a review of the application and found the proposed project to be consistent with goal, objectives and policies of the Village's Comprehensive Plan. The proposed project is generally consistent with the Land Development and zoning regulations and recommends conditional approval of the Master Site Development Plan subject to the following forty-eight (48) conditions below:

1. Build out date December 31, 2022.
2. Property control number shall be revised on the plans **prior to Council consideration**.
3. Site data on the master plan sheet MP.1 shall be revised **prior to Council consideration** to eliminate specific uses on Lots 1, 3 and 4.
4. Proposed Lot 1 is limited to a maximum intensity of 50,000 square feet (approximately 0.25 FAR) accordingly with TPS letter issued on August 23, 2018.
5. Conceptual engineering plans shall be revised **prior to Council consideration** as follow:
 - a. Property boundaries shall match the approved Plat.
 - b. On sheet C2.2, the sheet scale is incorrect
 - c. Depict Utility Easement over the sanitary sewer main lines and manholes (easement shall be executed, accepted by Village Council and recorded **prior to 1st Certificate of Occupancy**)
 - d. Proposed line stop on 10th Ave North needs to relocated further to the west, in grassy area, so that new valve is not in pavement. Water main from that point can bend 45° under pavement area.

6. Plans shall be revised **prior to Council consideration** to relocate the stop bars in advance of the crosswalk with a minimum setback of 4 feet.
7. The Engineer of Record shall provide documentation **prior to Council consideration** on the connection of the existing sidewalk parallel to the existing retention area near the ATM drive-through to the proposed sidewalk along the existing driveway.
8. Site plan shall be revised **prior to Council consideration** to include bicycle and vehicle parking information in the site data table and provide bicycle parking spaces adjacent to each building.
9. The eastbound through and left-turn queues at 10th Avenue North/Florida Mango Road are expected to spillback beyond the site driveway on 10th Avenue North, and the southbound left-turn movement at 10th Avenue North/site driveway is expected to operate with LOS F. The left-turn egress movement may cause safety concerns due to traffic congestion and queue spillback at 10th Avenue North/Florida Mango Road, site plan shall be revised **prior to Council consideration** to remove the left-turn egress movement at 10th Avenue North driveway. Driveway shall be configured for a right-out-only egress.
10. The dumpster placement appears to be impacting the sight distance of exiting vehicles from the drive-through ATM looking south, applicant shall explore the possible relocation of the dumpster and provide documentation **prior to Council Consideration**.
11. The inbound lanes at the Florida Mango Road driveway shall be realigned with the internal drive aisle to the west and the number of inbound lanes shall be reduced to one (1) to reduce the pedestrian crossing distance, plans shall be revised **prior to Council consideration**.
12. The additional 8' wide right of way dedication to Palm Beach County along the 10th Avenue North shall be executed and recorded **prior to issuance of the first Certificate of Occupancy**.
13. Sheet EPH3.1 shall be revised **prior to Council consideration** to eliminate on the calculation summary table, any specific uses listed, as a master site lightning only use categories are considered.
14. Open space data on the open space exhibit sheet shall be revised **prior to Council consideration** to eliminate the specific use for each lot.
15. Any future proposed development plans for each lot shall demonstrate compatibility with existing Chase bank building and surrounding environment accordingly with the Village of Palm Springs Building Design Guideline per Ordinance No. 2017-13.
16. **Prior to Council consideration** the overall master sign plan shall be re-submitted accordingly with the VPS Land Development Regulations Section 34-273 & 34-275, plans shall demonstrate compatibility on color, size, texture and architectural designs.
17. Any existing or proposed utility box/cabinet shall be screened from view. Staff recommends wrapping the cabinet/box with a match design accordingly with the existing/proposed location.
18. Pedestrian connection to the proposed Lot 1 is missing the crossing studs to slow traffic and warn of pedestrian activity, plans shall be revised **prior to Council consideration**.
19. Perimeter landscaping shall provide 1 tree every 20' all the time.
20. Perimeter compatibility treatments, specifically 6' privacy walls, shall be installed **prior to demolition** of then existing office building. (Landscaping may be deferred to avoid conflicts with construction). All perimeter landscaping, including entry features, shall be installed **prior to 1st CO**.
21. Existing non-conforming pole sign shall be removed **at time of permitting**.
22. Proposed village sign easement location is subject to Village Manager's approval and shall be dedicated (executed, accepted by Village Council and recorded) **prior to 1st CO**.
23. LP.1 sheet shall be revised **prior to Council consideration** to eliminate the specific use for each lot.
24. A Utility/Civil Plan shall be approved by the Village Engineer **at time of permitting**.
25. A ROW permit shall be obtained with the PBC **at time of permitting**.
26. A unity of control instrument, including but not limited to shared access, infrastructure, signage and

- maintenance, shall be approved by the Village at time of **Preliminary Plat approval**.
27. A root barrier shall be provided on trees that are within 12' of utility lines.
 28. The construction dumpster shall be only provided by Waste Pro USA who is under franchise Agreement with the Village.
 29. Photometric plans shall be approved by the Planning, Zoning and Building Department **at time of permitting**.
 30. Landscaped areas shall be irrigated including but not limited to buffer, islands, planter boxes, etc.
 31. Irrigation plans shall be provided **at the time of permitting**. Non-potable water shall be used for the irrigation system per Village code.
 32. Provide permits from all applicable permitting agencies, including but not limited to, Lake Worth Drainage District, Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs **at the time of permitting**.
 33. The property owner shall register an Agent of Record, prior to issuance of a permit, to establish a contact person responsible for compliance with this Development Order, including site plan/landscape plan details and conditions of approval.
 34. All mechanical equipment's and above-ground infrastructure shall be screened from view.
 35. The Applicant may be required to undertake additional security measures, based on the number of complaints or calls for service for incidents at the premises, as determined by the Police Chief. Such additional security measures, as approved by the Police Chief, may include increased on-site security at the operator's sole expense.
 36. Verify utility and easement locations to ensure that there are no conflicts with landscaping, revise **at time of permitting** as needed.
 37. All electric utilities shall be underground.
 38. A pre-construction meeting shall be scheduled with the Village Planning, Zoning & Building Development Department prior to commencement of any construction activity. Permits are required from the Planning, Zoning & Building Department prior to commencing any construction or renovation. The project shall be constructed in accordance with the FBC edition in effect **at the time of permitting**.
 39. A silt barrier shall be installed around the perimeter of the property (within the affected area for the site improvements and new building construction) prior to commencement of any site work or construction activity, and a track pad shall be installed at the construction entrance(s), both of which shall remain through substantial completion.
 40. Any sidewalk broken or damaged during construction shall be replaced by the contractor **prior to CO**.
 41. The Landscaping shall be certified by the Landscape Architect upon completion and **prior to Certificate of Occupancy/Certificate of Completion** of each improvement area.
 42. Absolutely no occupancy, other than construction personnel, is permitted **prior to TCO/CO**.
 43. Photometrics must be certified by an engineer **prior to CO**.
 44. The civil engineer of record shall certify the site construction **prior to Certificate of Occupancy**.
 45. The applicant may be required to provide a resident inspector for structural elements such as concrete pours in accordance with Section 109.1.3 FBC 2010 and F.S. 553.791. Determination shall be made at time of pre-construction conference with Planning Zoning and Building Director.
 46. The General Contractor shall be on site during any and all construction activity in accordance with FS 489.1195.
 47. The project shall receive approval from all Authorities Having Jurisdiction and submit copies of approvals to the Village of Palm Springs.
 48. **At the time of CO**, the petitioner shall provide the Planning, Zoning and Building Department with electronic copies of as-builts.



SITE DATA	
ADDRESS	2601 10TH AVE. NORTH, PALM SPRINGS, FL.
PCN	70-43-44-20-01-008-0080
OWNER	10th AVENUE PARTNERSHIP, LTD.
GROSS SITE AREA	8.61 AC or 374,995.96 SF
8' ROW DEDICATION	2,233 SF
NET SITE AREA	8.56 AC or 372,762.96 SF
TOTAL OPEN SPACE REQUIRED (20%)	1.71 AC or 74,553 SF of Net Site Area
TOTAL OPEN SPACE PROVIDED	2.07 AC. or 90,079 SF (Lots 1 - 4)
	24.17% of Net Site Area
LOT 1 (FUTURE DEVELOPMENT):	
TOTAL SITE AREA	4.63 AC. or 201,614.96 SF
TOTAL OPEN SPACE REQUIRED	40,323 SF (20%)
TOTAL OPEN SPACE PROVIDED	41,423 SF (20.5%)
BUILDING SF	T.B.D. (ONCE SITE PLAN IS PREPARED)
FAR	T.B.D. (ONCE SITE PLAN IS PREPARED)
LOT 2 (CHASE BANK):	
TOTAL SITE AREA	.87 AC. or 38,007 SF
TOTAL OPEN SPACE REQUIRED	7,601 SF (20%)
TOTAL OPEN SPACE PROVIDED	9,880 SF (26%)
BUILDING SF	4,061 SF
FAR	.11
LOT 3 (RACETRAC):	
NET SITE AREA	1.76 AC. or 76,684 SF
TOTAL OPEN SPACE REQUIRED	15,337 SF (20%)
TOTAL OPEN SPACE PROVIDED	15,754 SF (20.5%)
BUILDING SF	5,411 SF
FAR	.07
LOT 4 (TIRE KINGDOM):	
NET SITE AREA	1.3 AC. or 56,457 SF
TOTAL OPEN SPACE REQUIRED	11,291 SF (20%)
TOTAL OPEN SPACE PROVIDED	23,022 SF (41%)
BUILDING SF	5,682 SF
FAR	.10

NOTES:
-Any existing or proposed utility box/cabinet shall be screened from view. The box/cabinet will be wrapped with a match design accordingly with the existing/proposed location.

insite studio

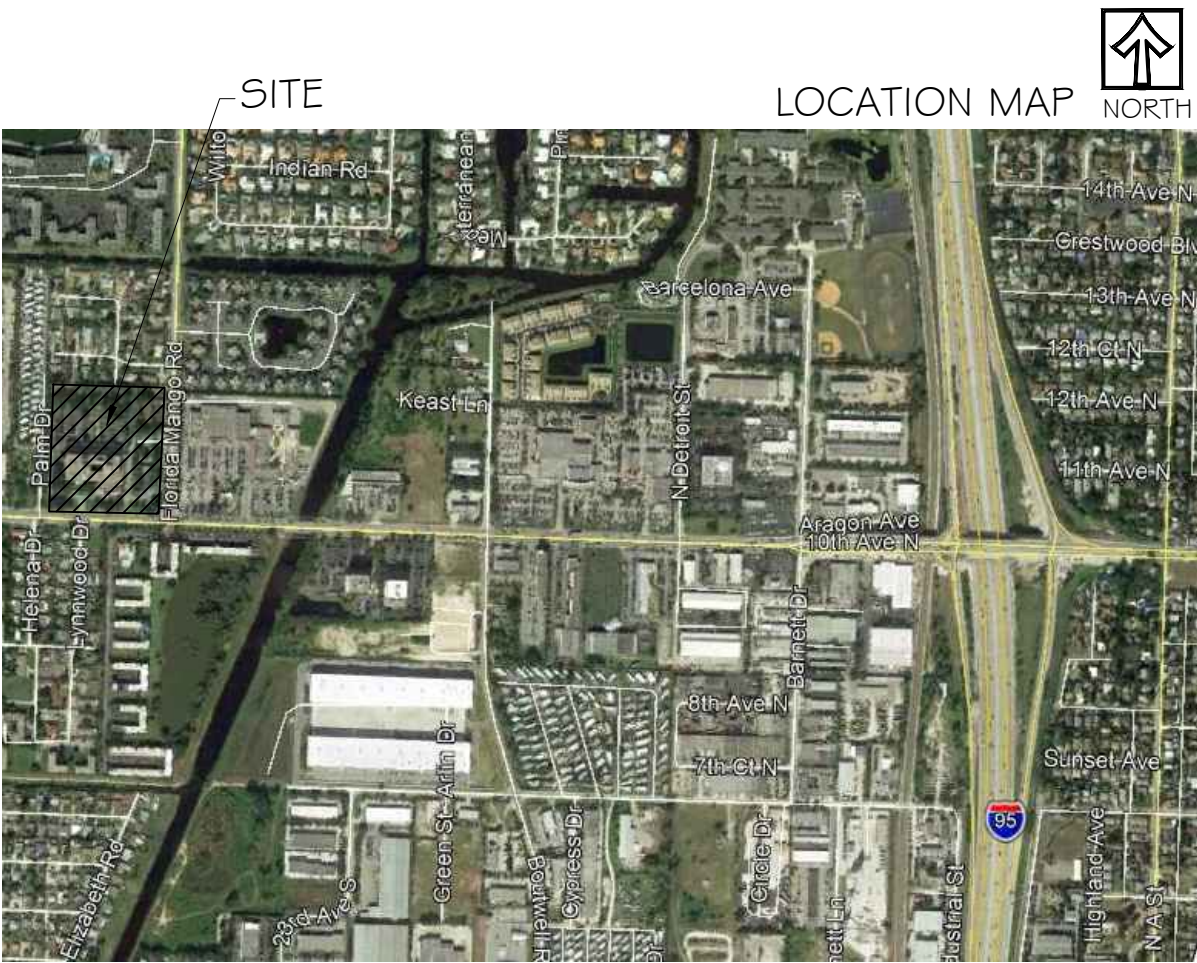
planning + landscape architecture

8144 Okeechobee Blvd, Suite A, West Palm Beach, FL 33411
phone: 361-247-0740 email: info@insitustudio.com
www.insitustudio.com license# LC2800666

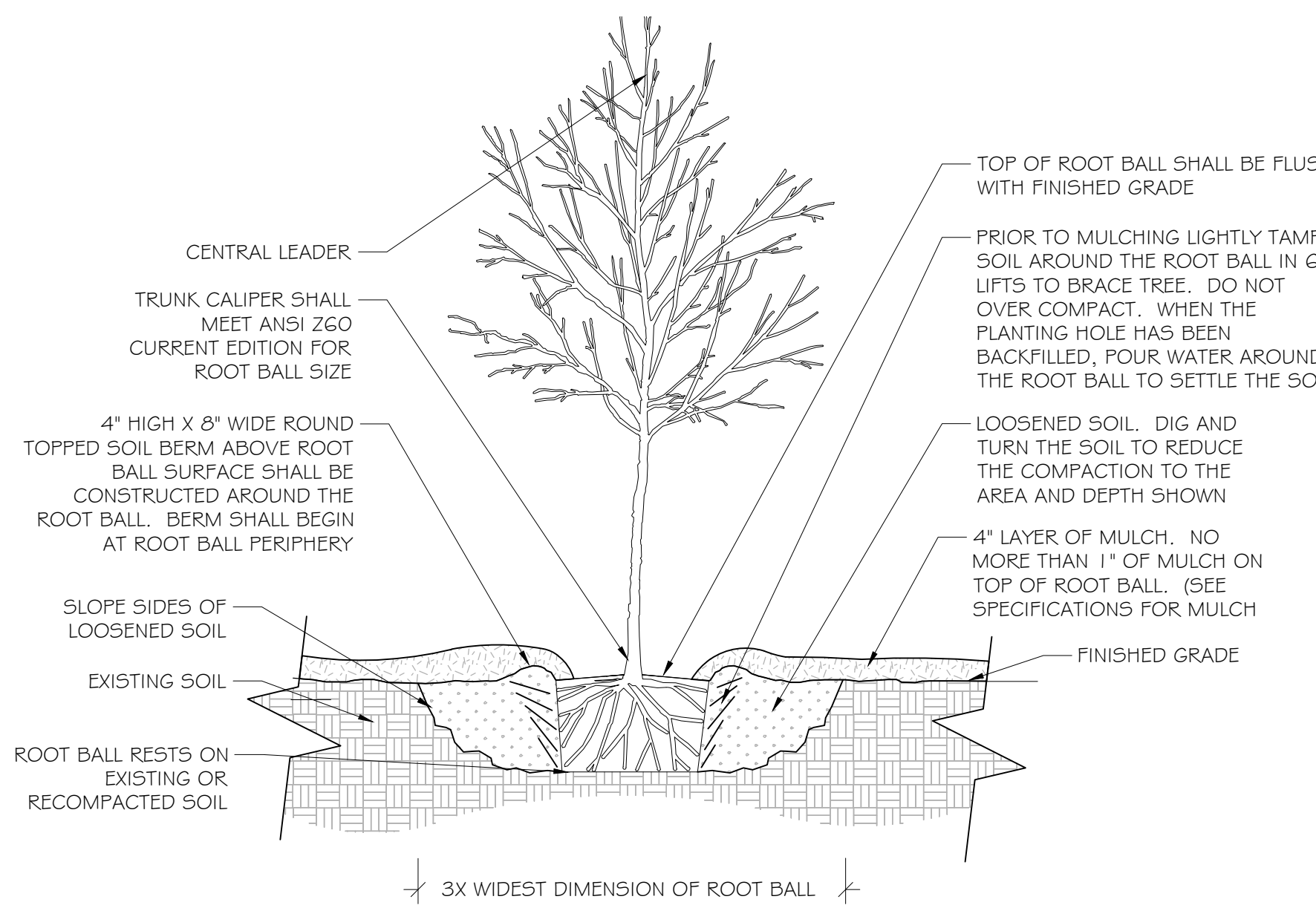
Consultants:
Revisions:
08/22/19: Per Village comments
09/27/19: Per Village comments
10/29/19: Per Village comments

VILLAGE COLLECTION
OF PALM SPRINGS

10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

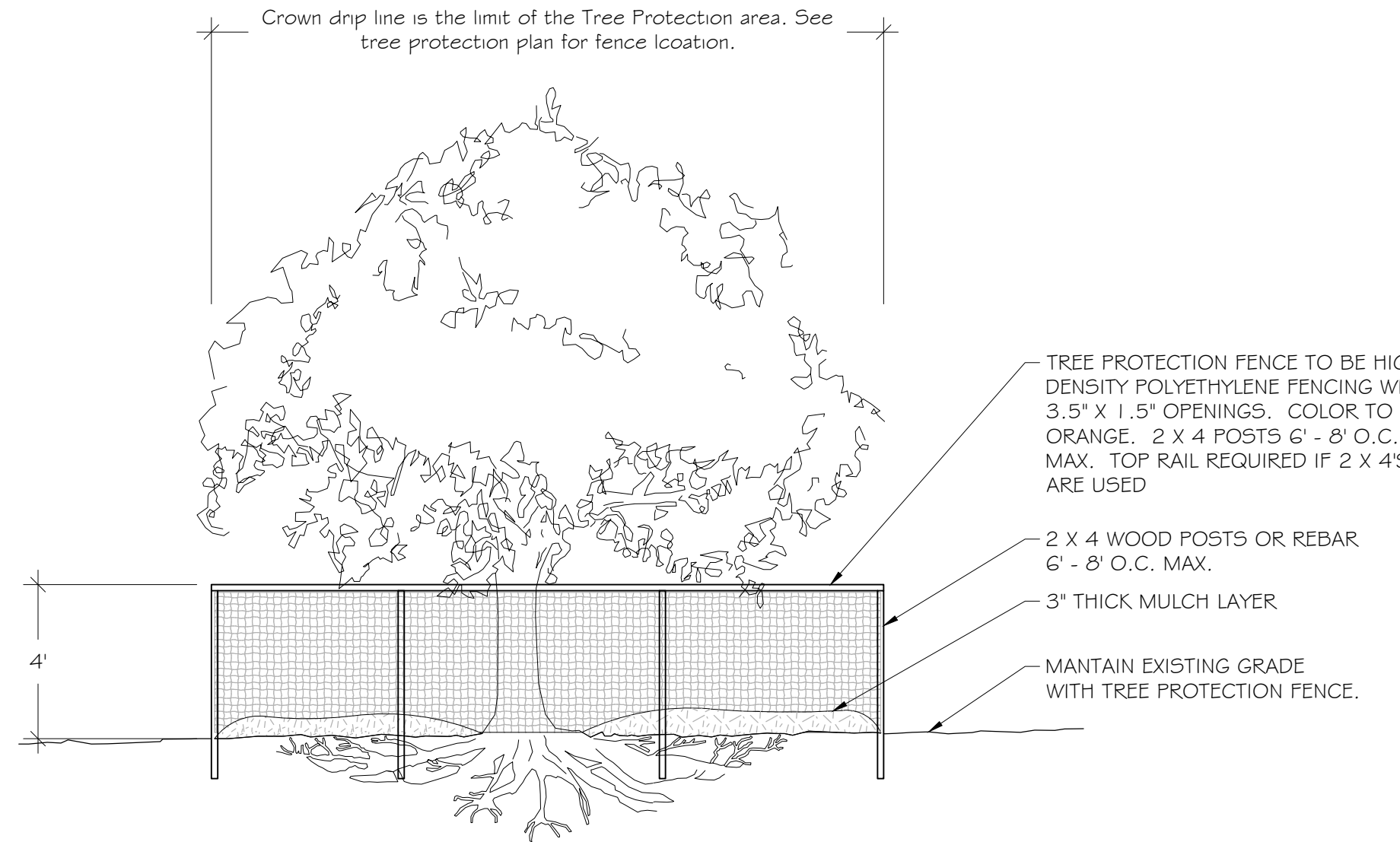


Drawn By:	SMT
Drawing #:	1034
Date:	4/4/2019



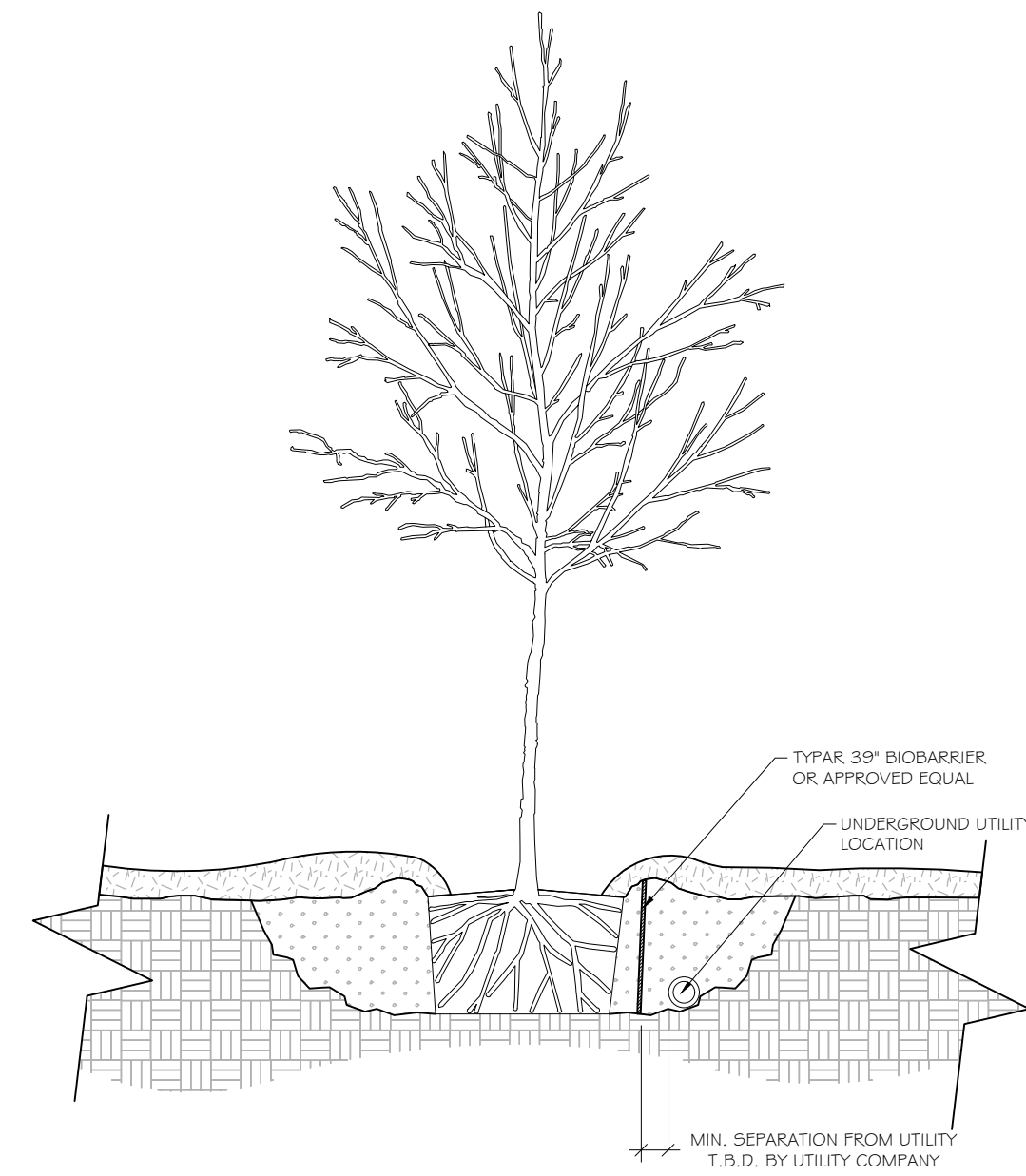
1 TREE PLANTING DETAIL 1/2" = 1'-0"

NOTES:
 1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
 2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

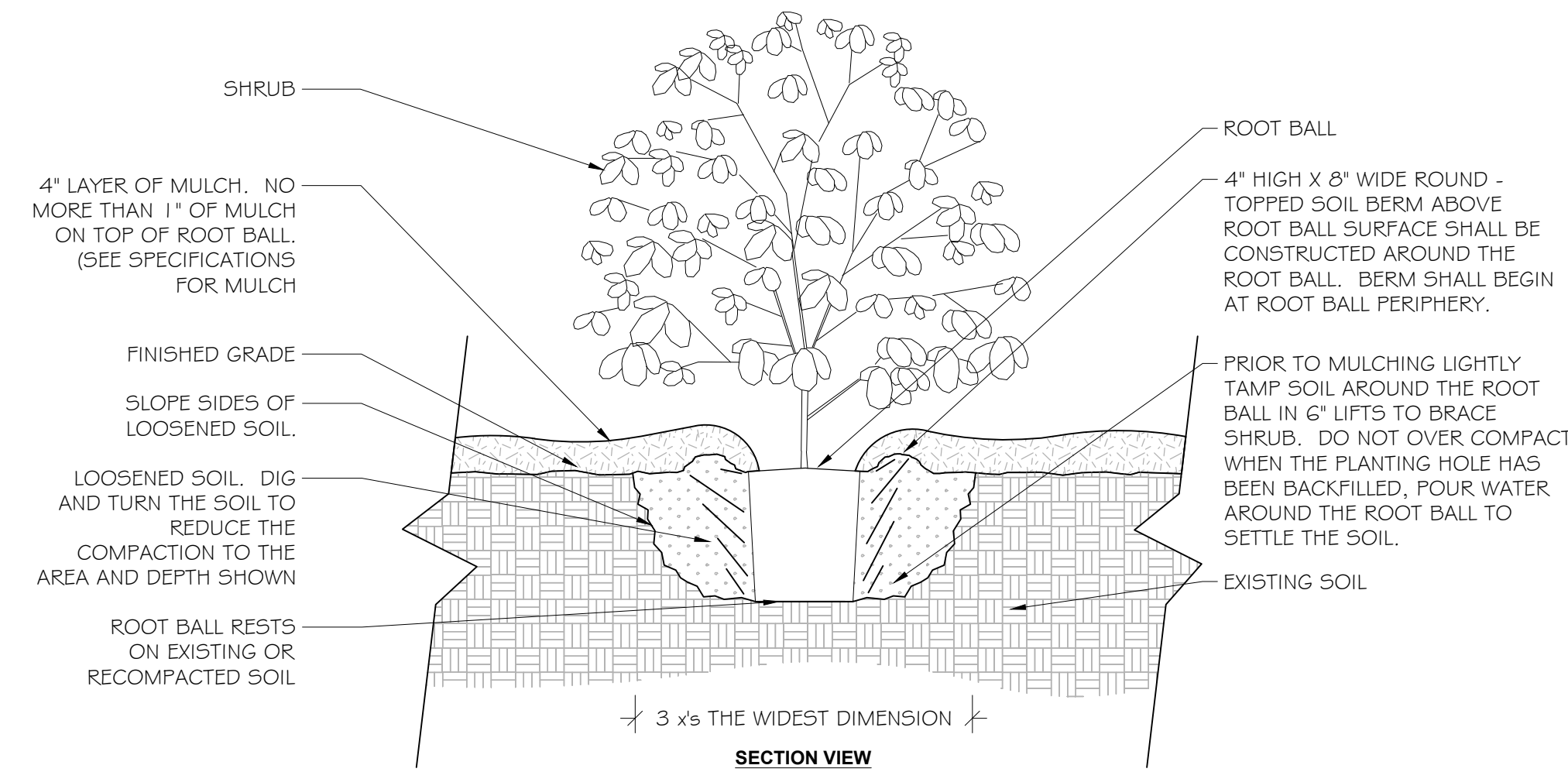


4 TREE PROTECTION DETAIL SCALE : 1/4" = 1'-0"

NOTES:
 1. KEEP OUT OF TREE PROTECTION AREA
 2. FENCE TO BE INSTALLED ALONG DRIPLINE OF EXISTING TREES
 3. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.

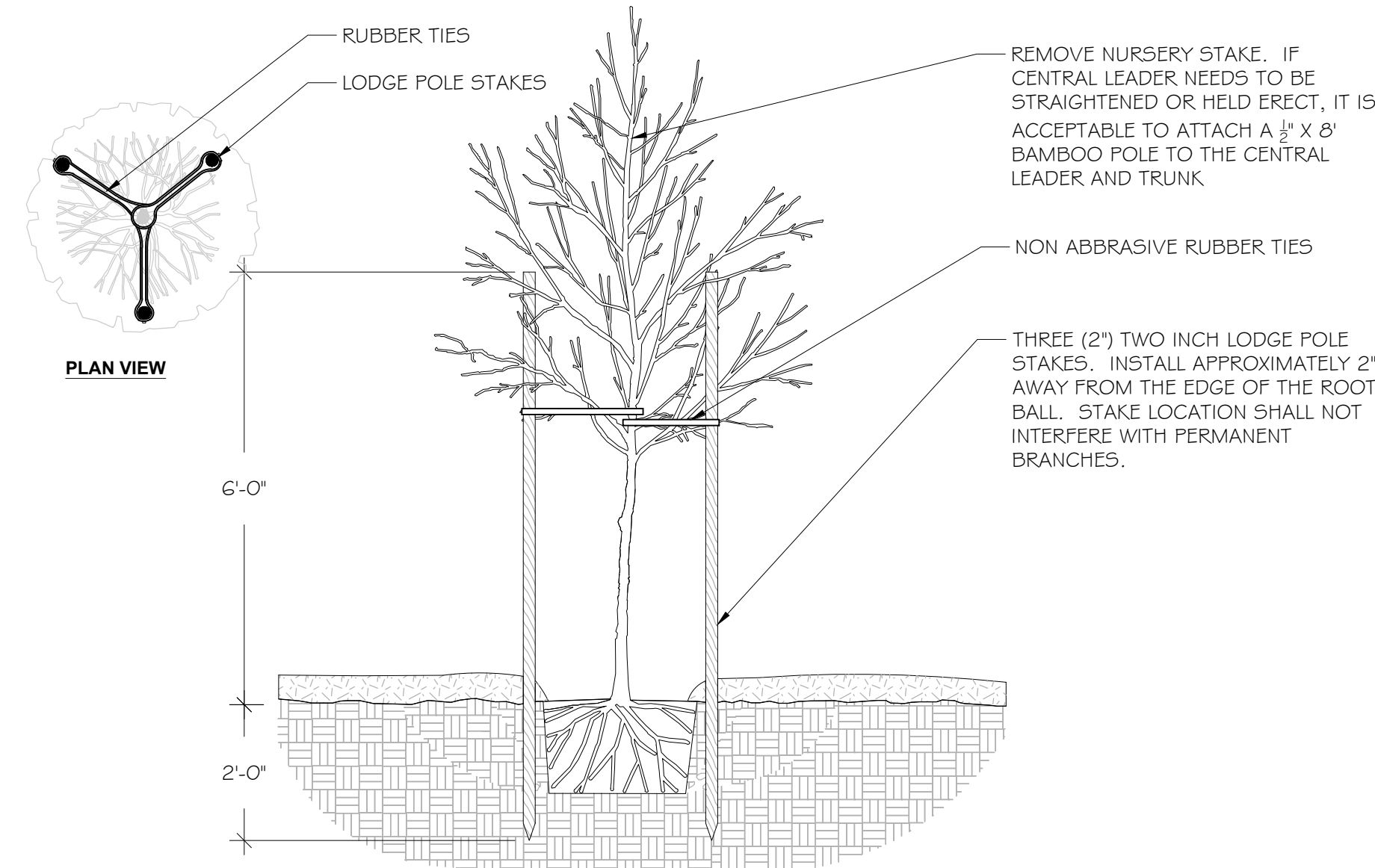


7 ROOT BARRIER DETAIL 1/2" = 1'-0"

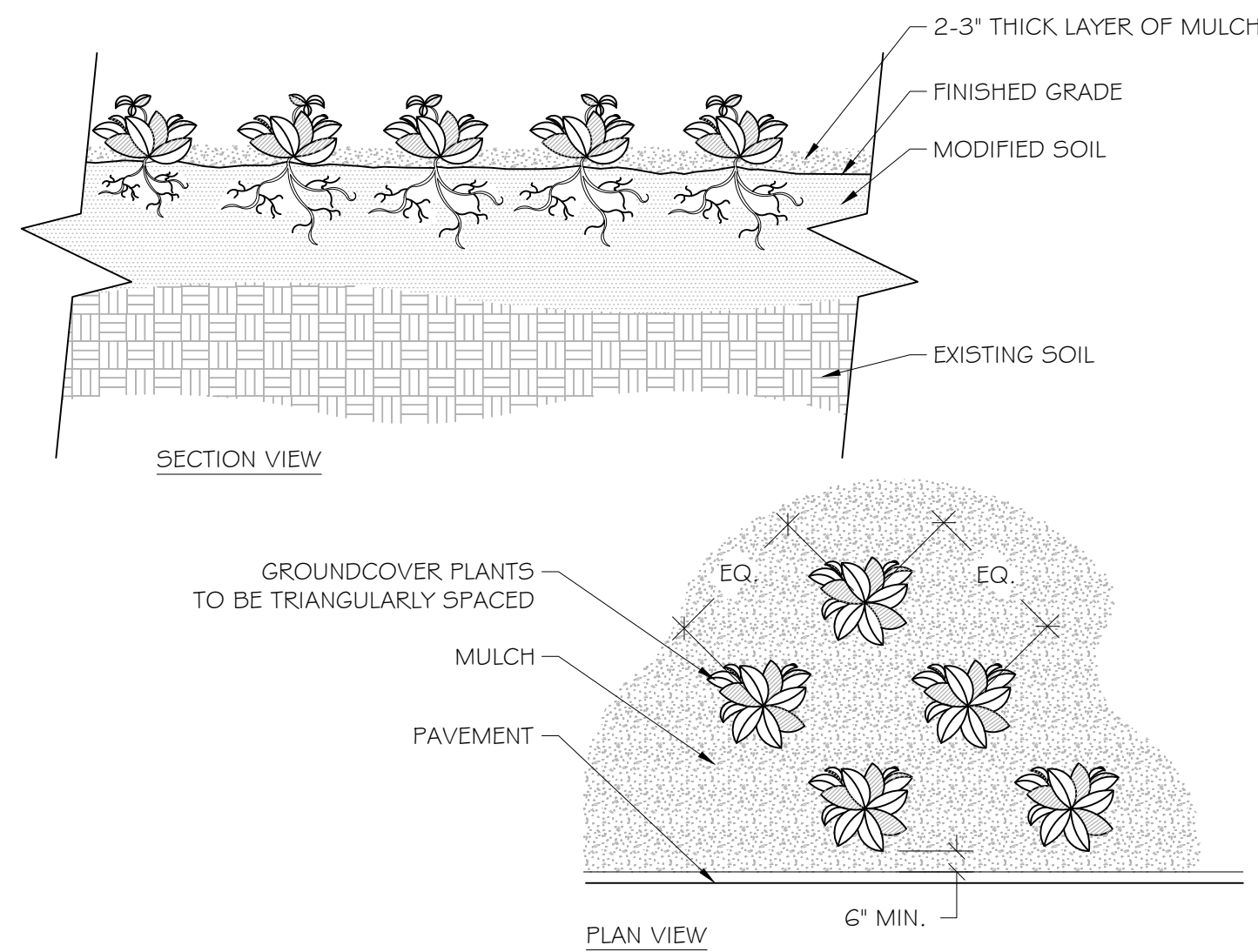


2 SHRUB PLANTING DETAIL 3/4" = 1'-0"

NOTES:
 1. SHRUB SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS
 2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.

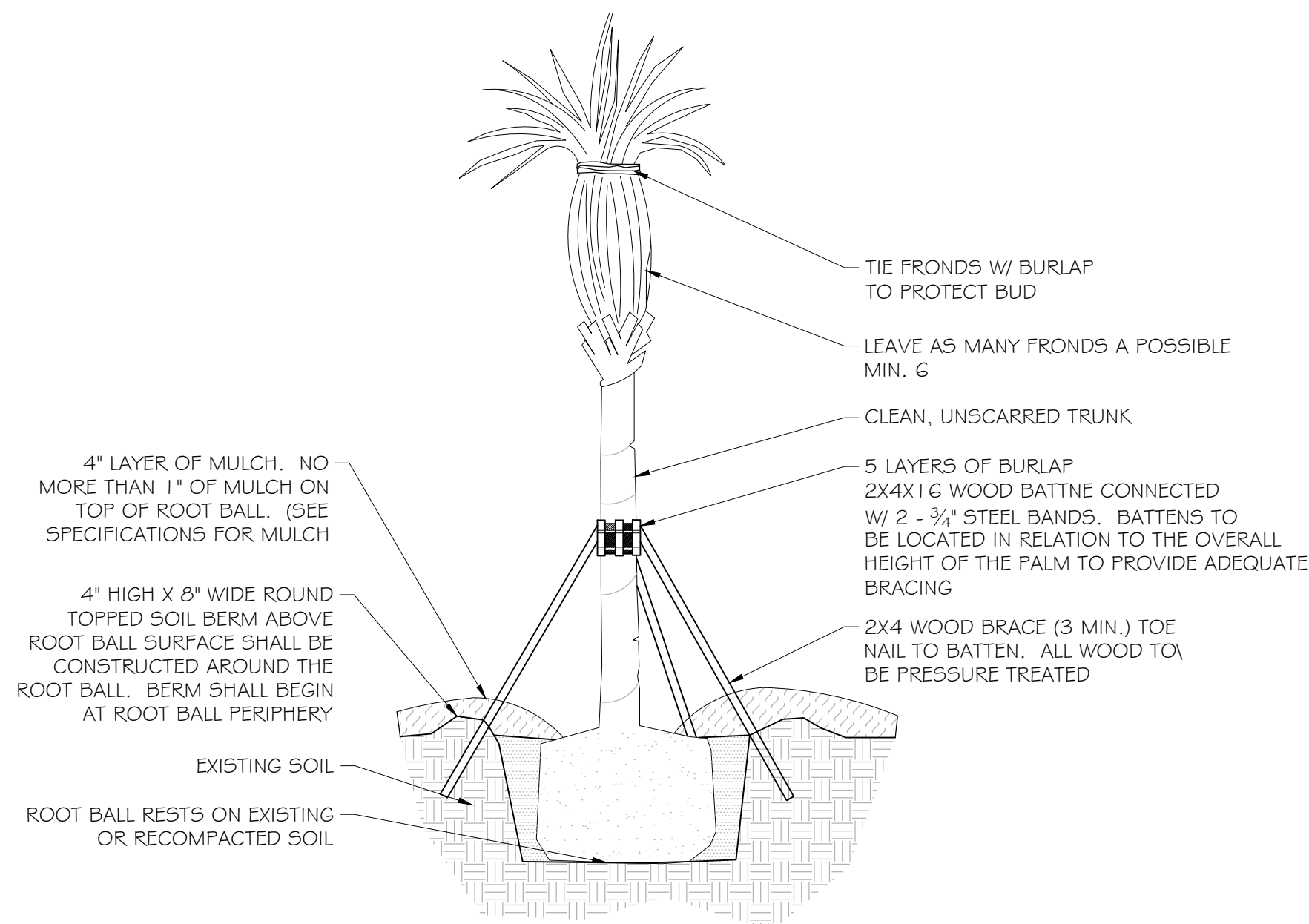


5 TREE STAKING DETAIL 1/2" = 1'-0"



3 GROUNDCOVER 3/4" = 1'-0"

NOTES:
 1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
 2- SMALL ROOTS (1/4\"/>

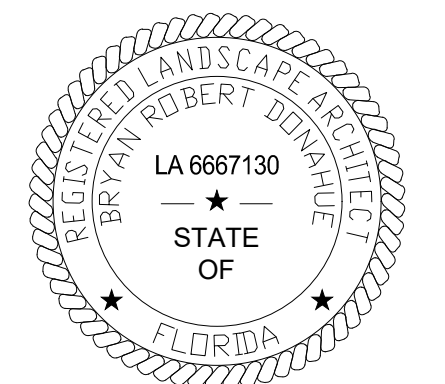


6 PALM STAKING DETAIL SCALE : 1/4" = 1'-0"

Consultants:

Revisions:
 8/1/2019; per City comments

**VILLAGE COLLECTION
 OF PALM SPRINGS**
 10th Ave. N. & Florida Mango Rd.
 Village of Palm Springs, Florida



BRYAN ROBERT DONAHUE, PLA
 LICENSE # LA6667130

Drawn By: SMT
 Drawing #: 1034
 Date: 6/27/2019
**LANDSCAPE
 DETAILS**

SHEET # **LP.2**

GENERAL CONDITIONS

- A. CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his/her work, he/she shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his/her failure to observe these instructions.
- C. MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his/her work.
- D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he/she shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.
- E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- F. CHANGES IN THE WORK: The Owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.
- G. CORRECTION OF WORK: The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.
- H. Owner's Authorized Representative: The Owner's authorized representative acts as the authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.
- I. CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his/her bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.
- J. SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.
- K. PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

016539
Tree and Plant Protection

PART 1 GENERAL

- 1.1 SUMMARY
- A. The scope of work includes all labor, materials, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with protection of existing trees and other plants as shown on the drawings and as specified herein.
1. Provide preconstruction evaluations
 2. Provide tree and plant protection fencing
 3. Provide protection of root zones and above ground tree and plants
 4. Provide pruning of existing trees and plants
 5. Coordinate with the requirements of Section Planting Soil for modifications to the soil within the root zone of existing trees and plants.
 6. Provide all insect and disease control.
 7. Provide maintenance of existing trees and plants including irrigation during the construction period as recommended by the arborist report.
 8. Provide maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
 9. Remove tree protection fencing and other protection from around and under trees and plants.
 10. Clean up and disposal of all excess and surplus material.

1.2 CONTRACT DOCUMENTS

- A. The Contract of specifications and general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. It is the intent of this section that the requirements apply to all sections of the project specification such that any subcontractor must comply with the restrictions on work within designated Tree and Plant Protection Areas.
- 1.3 RELATED DOCUMENTS AND REFERENCES
- A. Related Documents:
1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.
 2. Section - Planting
- B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references therein. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.
1. ANSI A300 (Part 5) - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.
 2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide For The Green Industry", Published by Urban Tree Foundation, Visalia, California, most current edition.
 3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

- A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

1.5 PERMITS AND REGULATIONS

- A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.
- B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.
- C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.
- 1.6 PROTECTION OF WORK, PROPERTY AND PERSON
- A. The Contractor shall protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- 1.7 CHANGES IN THE WORK
- A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.
- 1.8 CORRECTION OF WORK
- A. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest possible time that can be coordinated with other work and seasonal weather demands.
- 1.9 DEFINITIONS

- All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
- Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contract administrator with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.
- B. Reasonable and reasonably: When used in this specification is intended to mean that the conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification recognizes that plants are not free of defects, and that plant conditions change with time. This specification also recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative expert shall determine when conditions within the plan are judged as reasonable.
- C. Shrub: Woody plants with mature height approximately less than 25 feet.
- D. Tree and Plant Protection Area: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and defined by a circle centered on the trunk with each tree with a radius equal to the crown drip unless otherwise indicated by the owner's representative.
- E. Tree: Single and multi-stemmed plants, including palms with anticipated mature height approximately greater than 25 feet or any plant identified on the plans as a tree.

1.10 SUBMITTALS

- A. PRODUCT DATA: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the start of any work at the site.
- 1.11 OBSERVATION of the work
- A. The Owner's Representative may inspect the work at any time.
- 1.12 PRE-CONSTRUCTION CONFERENCE
- A. Schedule a pre - construction meeting with the Owner's Representative at least seven (7) days before beginning work to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.
1. The following Contractors shall attend the preconstruction conference:
 - a. General Contractor.
 - b. Consulting Arborist.
 - c. Subcontractor assigned to install Tree and Plant Protection measures.
 - d. Earthwork Contractor.
 - e. All site utility Contractors that may be required to dig or trench into the soil.
 - f. Landscape subcontractor.
 - g. Irrigation subcontractor
- B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

1.13 QUALITY ASSURANCE

- A. Contractor qualifications:
1. All pruning, branch tie back, tree removal, root pruning, and fertilizing required by this section shall be performed by or under the direct supervision of ISA Certified Arborist. Submit aforementioned individual's qualifications for approval by the Owner's Representative.
 2. All applications of pesticide or herbicide shall be performed by a person maintaining a current state license to apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all current state licensing certifications including applicable chemical applicator licenses.

PART 2 PRODUCTS

2.3 TREE PROTECTION FENCING:

- B. PLASTIC MESH FENCE: Heavy - duty - orange plastic mesh fencing fabric 48 inches wide. Fencing shall be attached to metal "U" or "T" post - or wooden post driven into the ground of sufficient depth to hold the fabric solidly in place with out sagging. The fabric shall be attached to the post using attachment ties of sufficient number and strength to hold up the fabric without sagging. The Owner's Representative may request, at any time, additional post, deeper post depths and or additional fabric attachments if the fabric begins to sag, lean or otherwise not present a sufficient barrier to access.
- C. GATES: For each fence type and in each separate fenced area, provide a minimum of one 3 foot wide gate. Gates shall be lockable. The location of the gates shall be approved by the Owner's Representative.
- D. Submit suppliers product data that product meets the requirements for approval.
- 2.4 tree protection sign:
- A. Heavy-duty cardboard signs, 8.5 inches x 11 inches, white colored background with black 2 inch high or larger letters block letters. The signs shall be attached to the tree protection fence every 50 feet o.c. The tree protection sign shall read "Tree and Plant Protection Area- Keep Out".
- 2.5 TREE GROWTH REGULATOR (TGR)
- A. Cambistat 25C.
- B. Submit suppliers product data that product meets the requirements for approval.
- 2.6 MATTING
- A. Matting for vehicle and work protection shall be heavy duty matting designed for vehicle loading over tree roots. Alternamats as manufactured by Alternamats, Inc. Franklin, PA 16323 or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.
- 2.7 GEGRID
- A. Geogrid shall be woven polyester fabric with PVC coating, Uni-axial or biaxial geogrid, inert to biological degradation, resistant to naturally occurring chemicals, alkalis, acids.
1. Geogrid shall be Miragrid 2XT as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.

2.8 FILTER FABRIC

- A. Filter fabric shall be nonwoven polypropylene fibers, inert to biological degradation and resistant of naturally occurring chemicals, alkalis and acids.
1. Miraf 135 N as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.
- 2.8.1 EXERCUTION
- 3.1 SITE EXAMINATION
- A. Examine the site, tree, plant and soil conditions. Notify the Owner's Representative in writing of any conditions that may impact the successful Tree and Plant Protections that is the intent of this section.
- 3.2 COORDINATION WITH PROJECT WORK
- A. The Contractor shall coordinate with all other work that may impact the completion of the work.
- B. Prior to the start of Work, prepare a detailed schedule of the work for coordination with other trades.
- C. Coordinate the relocation of any irrigation lines currently present on the irrigation plan, heads or the conduits of other utility lines or structures that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.
- 3.3 TREE AND PLANT PROTECTION AREA: The Tree and Plant Protection Area is defined as all areas indicated on the tree protection plan. Where no limit of the Tree and Plant Protection area is defined on the drawings, the limit shall be the drip line (outer edge of the branch crown) of each tree.
- 3.4 Preparation:
- A. Prior to the preconstruction meeting, layout the limits of the Tree and Plant Protection Area and then alignments of required Tree and Plant Protection Fencing and root pruning. Obtain the Owner's Representative's approval of the limits of the protection area and the alignment of all fencing and root pruning.
- B. Flag all trees and shrubs to be removed by wrapping orange plastic ribbon around the trunk and obtain the Owner's Representative's approval of all trees and shrubs to be removed prior to the start of tree and shrub removal. After approval, mark all trees and shrubs to be removed with orange paint in a band completely around the base of the tree or shrub 4.5 feet above the ground.
- C. Flag all trees and shrubs to remain with white plastic ribbon laid completely around the trunk or each tree and on a prominent branch for each shrub. Obtain the Owner's Representative's approval of all trees and shrubs to be remain prior to the start of tree and shrub removal.
- D. Prior to any construction activity at the site including utility work, grading, storage of materials, or installation of temporary construction facilities, install all tree protection fencing, Filter Fabric, silt fence, tree protection signs, Geogrid, Mulch and or Wood Chips as shown on the drawings.

3.5 SOIL MOISTURE

- A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintained above permanent wilt point to a depth of at least 8 inches. No soil work or other activity shall be permitted within the Tree and Plant Protection Area when the volumetric soil moisture is above field capacity. The permanent wilt point and field capacity for each type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture).
- | Soil type | Permanent wilt point v/v | Field capacity v/v |
|-----------------------------------|--------------------------|--------------------|
| Loam, Silty loam sand, Sandy loam | 5 - 8% | 12 - 18% |
| Loam, Sandy clay, Sandy clay loam | 11 - 22% | 27 - 36% |
| Clay loam, Silt loam | 11 - 22% | 31 - 36% |
| Silty clay, Silt clay loam | 22 - 27% | 38 - 41% |
1. Volumetric soil moisture shall be measured with a digital, electric conductivity meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent meter.
 2. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend operations until the soil moisture drains to below field capacity.
- 3.6 ROOT PRUNING:
- A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Protection Area or trees to remain, root prune all existing trees to a depth of 24 inches below existing grade in alignments following the edges of the Tree and Plant Protection Area as directed by the Owner's Representative. Root pruning shall be in conformance with ANSI A300 (part 8) latest edition.
1. Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet of the limit of grading.
 2. After completion of the cut, make clean cuts with a lopper, saw or pruner to remove all torn root ends on the tree side of the excavation, and backfill the trench immediately with existing soil, filling all voids.

- 3.7 INSTALLATION OF GEOTEXTILES, FILTER FABRIC, MATTING, WOOD CHIPS AND OR MULCH
- A. Install Geogrids, Filter Fabric, Matting, Wood Chips or Mulch in areas and depths shown on the plans and details or as directed by the Owner's representative. In general it is the intent of this specification to provide the following levels of protection:

1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chips or Mulch.
 2. Areas where foot traffic or storage of lightweight materials is anticipated to be unavoidable provide a layer of Filter Fabric under the 5 inches of Wood Chips or Mulch.
 3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8 inches of Wood Chips or Mulch.
4. Areas where heavy vehicle traffic is unavoidable provide a layer of Geogrids under 8 - 12 inches of Wood Chips or Mulch.
- B. The Owner's Representative shall approve the appropriate level of protection.
- C. In the above requirements, light vehicle is defined as a track skid steer with a ground pressure of 4 psi or lighter. A heavy vehicle is any vehicle with a tire or track pressure of greater than 4 psi. Lightweight materials are any packaged materials that can be physically moved by hand into the location. Bulk materials such as soil, or aggregate shall never be stored within the Tree and Plant Protection Area.
- 3.8 PROTECTION:
- A. Protect the Tree and Plant Protection Area at all times from compaction of the soil; damage of any kind to trunks, bark, branches, leaves and roots of all plants; and contamination of the soil; bark or leaves with construction materials, debris, silt, fuels, oils, and any chemicals substance. Notify the Owner's Representative of any spills, compaction or damage and take corrective action immediately using methods approved by the Owner's Representative.
- 3.9 GENERAL REQUIREMENTS AND LIMITATIONS FOR OPERATIONS WITHIN THE TREE AND PLANT PROTECTION AREA:
- A. The Contractor shall not engage in any construction activity within the Tree and Plant Protection Area without the approval of the Owner's Representative including: operating, moving or storing equipment; storing supplies or materials; locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree and Plant Protection Area may be indicated on the drawings along with any required remedial activity as listed below.
- B. In the event that construction activity is unavoidable within the Tree and Plant Protection Area, notify the Owner's Representative and submit a detailed written plan of action for approval. The plan shall include a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time period for the activity, and a list of remedial actions that will be required to reduce the impact on the Tree and Plant Protection Area from the activity. Remedial actions shall include but shall not be limited to the following:
1. In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either by the use of hand tools, directional boring and or Air Knife excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots or soil.
 2. When encountered, exposed roots, 1 inches and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in Wood Chips and shall be maintained above permanent wilt point at all times. Roots one inch and larger in diameter shall not be cut with out the approval of the owner's representative. Excavation shall be tunneled under these roots without cutting them. In the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.
 3. Tree branches that interfere with the construction may be tied back or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the Owner's Representative. Tying back or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI A300, part 8) and be performed under supervision of the arborist.
 4. Matting: Install temporary matting over the Wood Chips or Mulch to the extent indicated. Do not permit foot traffic, scaffolding or the storage of materials within the Tree and Plant Protection Area to occur off of the temporary matting.
 5. Trunk Protection: Protect the trunk of each tree to remain by covering it with a ring of 8 foot long 2 inch x 6 - inch planks loosely banded onto the tree with 3 steel bands. Staple the bands to the planks as necessary to hold them securely in place. Trunk protection must be kept in place no longer than 12 months. If construction requires work near a particular tree to continue longer than 12 months, the steel bands shall be inspected every six months and loosened if they are found to have become tight.
 6. Air Excavation Tool: If excavation for footings or utilities is required within the Tree and Plant Protection Area, air excavation tool techniques shall be used where practical or as designed on the drawings.
 - a. Remove the Wood Chips from an area approximately 18 inches beyond the limits of the hole or trench to be excavated. Cover the Wood Chips for a distance of not less than 15 feet around the limit of the excavation area with Filter Fabric or plastic sheeting to protect the Wood Chips from silt. Mound the Wood Chips so that the plastic slopes towards the excavation.
 - b. Using a sprinkler or soaker hose, apply water slowly to the area of the excavation for a period of at least 4 hours, approximately 12 hours prior to the work so that the ground water level is at or near field capacity at the beginning of the work. For excavations that go beyond the damp soil, rewet the soil as necessary to keep soil moisture near field capacity.
 - c. Using an air excavation tool specifically designed and manufactured for the intended purpose, and at pressures recommended by the manufacturer of the equipment, fracture the existing soil to the shape and the depths required. Work at rates and using techniques that do not harm tree roots. Air pressure shall be a maximum of 90-100 psi.
 1. The air excavation tool shall be "Air-Spade" as manufactured by Concept Engineering Group, Inc., Verona, PA (412) 826-8800, or Air Knife as manufactured by Easy Use Air Tools, Inc. Allison Park, Pa (866) 328-5723 or approved equal.
 - d. Using a commercial, high-powered vacuum truck if required, remove the soil from the excavation produced by the Air Knife excavation. The vacuum truck should generally operate simultaneously with the hose operator, such that the soil produced is picked up from the excavation hole, and the exposed roots can be observed and not damaged by the ongoing operation. Do not drive the vacuum truck into the Tree and Plant Protection Area unless the area is protected from compaction as approved in advance as determined by the Owner's Representative.
 - e. Remove all excavated soil and excavated Wood Chips, and contaminated soil at the end of the excavation.
 - f. Schedule the work so that foundations or utility work is completed immediately after the excavation. Do not let the roots dry out. Mist the roots several times during the day. If the excavated area must remain open over night, mist the roots and cover the excavation with black plastic.
 - g. Dispose of all soil in a manner that meets local laws and regulations.
 - h. Restore soil within the trench as soon as the work is completed. Utilize soil of similar texture to the removed soil and lightly compact with hand tools. Leave soil mounded over the trench to a height of approximately 10% of the trench depth to account for settlement.
 - i. Restore any Geogrids, Filter Fabric, Wood Chips or Mulch and or matting that was previously required for the area.

3.10 TREE REMOVAL:

- a. Remove all trees indicated by the drawings and specifications, as requiring removal, in a manner that will not damage existing roots or structures or compact the soil.
- b. Remove trees that are adjacent to trees or structures to remain, in sections, to limit the opportunity of damage to adjacent crowns, trunks, ground plane elements and structures.
- c. Do not drop trees with a single cut unless the tree will fall in an area not included in the Tree and Plant Protection Area. No tree to be removed within 50 feet of the Tree and Plant Protection Area shall be pushed over or up-rooted using a piece of grading equipment.
- d. Protect adjacent paving, soil, trees, shrubs, ground cover plantings and underground plants to remain from damage during all tree removal operations, and from construction operations. Protection shall include the root system, trunk, limbs, and crown from breakage or scarring, and the soil from compaction.
- e. Remove stumps and immediate root plate from existing trees to be removed. Grind trunk bases and large buttress roots to a depth of the largest buttress root or at least 18 inches below the top most roots which ever is less and over the area of three times the diameter of the trunk (DBH).
 1. For trees where the stump will fall under new paved areas, grind roots to a total depth of 18 inches below the existing grade. If the sides of the stump hole still have greater than approximately 20% wood visible, continue grinding operation deeper and or wider until the resulting hole has less than 20% wood. Remove all wood chips produced by the grinding operation and back fill in 8 inch layers with controlled fill of a quality acceptable to the site engineer for fill material under structures, compacted to 95% of the maximum dry density standard proctor. The Owner's Representative shall approve each hole at the end of the grinding operation.
 2. In areas where the tree location is to be a planting bed or lawn, remove all woodchips and backfill stump holes with planting soil as defined in Specification Section Planting Soil, in maximum of 12 inch layers and compact to 80 - 85% of the maximum dry density standard proctor.

3.11 PRUNING:

- a. Within six months of the estimated date of substantial completion, prune all dead or hazardous branches larger than 2 inch in diameter from all trees to remain.
 - b. Implement all pruning recommendations found in the arborist report.
 - c. Prune any low, hanging branches and vines from existing trees and shrubs that overhang walks, streets and drives, or parking areas as follows:
 1. Walks - within 8 feet vertically of the proposed walk elevation.
 2. Parking areas - within 12 feet vertically of the proposed parking surface elevation.
 3. Streets and drives - within 14 feet vertically of the proposed parking surface elevation.
- D. All pruning shall be done in accordance with ANSI A300 (part 1), ISA BMP Tree Pruning (latest edition, and the "Structural Pruning: A Guide for the Green Industry", Edward Gilman, Brian Kempf, Nelda Matheny and Jim Clark, 2013 Urban Tree Foundation, Visalia CA.
- E. Perform other pruning task as indicated on the drawings or requested by the Owner's Representative.
- F. Where there specific disease vectors present, sterilize all pruning tools between the work in individual trees.

3.13 WATERING

- A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants to be preserved during the entire construction period. Adequate water is defined to be maintaining soil moisture above the permanent wilt point to a depth of 8 inches or greater.
- B. The Contractor shall adjust the automatic irrigation system, if available, and apply additional water, using hoses or water tanks as required.
- C. Periodically test the moisture content in the soil within the root zone to determine the water content.
- 3.14 WEED REMOVAL
- A. During the construction period, control any plants that seed in and around the fenced Tree and Plant Protection area at least three times a year.
1. All plants that are not shown on the planting plan or on the Tree and Plant Protection Plan to remain shall be considered as weeds.
- B. At the end of the construction period provide one final weeding of the Tree and Plant Protection Area.
- 3.15 INSECT AND DISEASE CONTROLLER
- A. Monitor all plants required for disease and insect infestations during the entire construction period. Provide all disease and insect control to keep the plants in a healthy state using the principles of Integrated Plant Management (IPM). All pesticides shall be applied by a certified pesticide applicator.
- 3.16 CLEAN-UP
- A. During tree and plant protection work, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.
 1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.
- B. Once tree protection work is complete, wash all soil from pavements and other structures. Ensure that Mulch is confined to planting beds.
- C. Make all repairs to grades, ruts, and damage to the work or other work at the site.
- D. Remove and dispose of all excess Mulch, Wood Chips, packaging, and other material brought to the site by the Contractor.

3.17 Removal of fencing and other Tree and plant protection

- A. At the end of the construction period or when requested by the Owner's Representative remove all fencing, Wood Chips or Mulch, Geogrids and Filter Fabric, trunk protection and or any other Tree and Plant Protection material.
- 3.16 DAMAGE OR LOSS TO EXISTING PLANTS TO REMAIN
- B. Any trees or plants designated to remain and which are damaged by the Contractor shall be replaced in kind by the Contractor at their own expense. Trees shall be replaced with a tree of similar species and of equal size or 6 inch caliper which ever is less. Shrubs shall be replaced with a plant of similar species and equal size or the largest size plants reasonably available which ever is less. Where replacement plants are to be less than the size of the plant that is damaged, the Owner's Representative shall approve the size and quality of the replacement plant.
1. All trees and plants shall be installed per the requirements of Specification Section Planting.
- C. Plant that are damaged shall be considered as requiring replacement or appraisal in the event that the damage affects more than 25 % of the crown, 25% of the trunk circumference, or root protection area, or the tree is damaged in such a manner that the tree could develop into a potential hazard. Trees and shrubs to be replaced shall be removed by the Contractor at his own expense.
1. The Owner's Representative may engage an independent arborist to assess any tree or plant that appears to have been damaged to determine their health or condition.
- C. Any tree that is determined to be dead, damaged or potentially hazardous by the Owner's arborist and upon the request of the Owner's Representative shall be immediately removed by the Contractor at no additional expense to the owner. Tree removal shall include all chips out of all wood parts and grinding of the stump to a depth sufficient to plant the replacement tree or plant, removal of all debris from the stump site and filling the resulting hole with topsoil.
- D. Any remedial work on damaged existing plants recommended by the consulting arborist shall be completed by the Contractor at no cost to the owner. Remedial work shall include but is not limited to: soil compaction remediation and vertical mulching, pruning and or cabling, insect and disease control including injections, compensatory watering, additional mulching, and could include application tree growth regulators (TGR).
- E. Remedial work may extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.
- END OF SECTION 016539

SECTION 32 9300

PLANTING

PART 1 GENERAL

1.1 SUMMARY

- A. The scope of work includes all labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with furnishing, delivery, and installation of plant (also known as "landscaping") complete as shown on the drawings and as specified herein.
- B. The scope of work in this section includes, but is not limited to, the following:
1. Locate, purchase, deliver and install all specified plants.
 2. Water all specified plants.
 3. Mulch, fertilize, stake, and prune all specified plants.
 4. Maintenance of all specified plants until the beginning of the warranty period.
 5. Plant warranty.
 6. Clean up and disposal of all excess and surplus material.
 7. Maintenance of all specified plants during the warranty period.

1.2 CONTRACT DOCUMENTS

- A. Shall consist of specifications and general conditions and the construction drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

1.3 RELATED DOCUMENTS AND REFERENCES

- A. Related Documents:
1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section
 2. Related Specification Sections
 - a. Section - Tree Protection and Plant Protection
 - B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references therein. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail or as determined by the Owner's Representative.
 1. State of California, Department of Food and Agriculture, Regulations for Nursery Inspections, Rules and Grading.
 2. ANSI Z601 - American Standard for Nursery Stock, most current edition.
 3. ANSI A300 - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current edition and parts and Florida Grades and Standards for Nursery Stock, current edition (Florida Department of Agriculture, Tallahassee FL).
 - C. Interpretation of plant names and descriptions shall reference the following documents. Where the names or plant descriptions disagree between the several documents, the most current document shall prevail.
 - a. USDA - The Germplasm Resources Information Network ([GRIN](http://www.ars-grin.gov/npgs/searchgrn.html)) <http://www.ars-grin.gov/npgs/searchgrn.html>
 - b. Manual of Woody Landscape Plants; Michael Dirr; Stipes Publishing, Champaign, Illinois; Most Current Edition.
 - c. The New Sunset Western Garden Book, Oxmoor House, most current edition.
 6. Pruning practices shall conform to recommendations "Structural Pruning: A Guide For The Green Industry" most current edition; published by Urban Tree Foundation, Visalia, California.
 7. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

- A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.
- B. In the case of a discrepancy in the plant quantities between the plan drawings and the plant call outs, list or plant schedule, the number of plants or square footage of the planting bed actually drawn on the plan drawings shall be deemed correct and prevail.

1.5 PERMITS AND REGULATIONS

- A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.
- B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.
- C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

1.6 PROTECTION OF WORK, PROPERTY AND PERSON

- A. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

1.7 CHANGES IN THE WORK

- A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.
- B. All changes in the work, notifications and contractor's request for information (RFI) shall conform to the contract general condition requirements.
- 1.8 CORRECTION OF WORK
- A. The Contractor, at their own cost, shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest as possible time that can be coordinated with other work and seasonal weather demands.

1.9 DEFINITIONS

- All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
- A. Bowed trees: A container root ball package made of wood in the shape of a four-sided box.
- B. Container plant: Plants that are grown in and/or are currently in a container including bough trees.
- C. Defective plant: Any plant that fails to meet the plant quality requirement of this specification.
- D. End of Warranty Final Acceptance: The date when the Owner's Representative accepts that the plants and work in this section meet all the requirements of the warranty. It is intended that the materials and workmanship warranty for Planting, Planting Soil, and Irrigation work run concurrent with each other.
- E. Field grown trees (B&B): Trees growing in field soil for at least 12 months prior to harvest.
- F. Healthy: Plants that are growing in a condition that expresses leaf size, crown density, color; and with annual growth rates typical of the species and cultivar's horticultural description, adjusted for the planting site soil, drainage and weather conditions.
- G. Kinked root: A root within the root package that bends more than 90 degrees.
- H. Maintenance: Actions that preserve the health of plants after installation and as defined in this specification.
- I. Maintenance period: The time period, as defined in this specification, which the Contractor is to provide maintenance.
- J. Normal: the prevailing local of industry standard(s).
- K. Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.
- L. Reasonable and reasonably: When used in this specification relative to plant quality, it is intended to mean that the conditions cited will not affect the establishment or long term health, growth or growth of the plant. This specification recognizes that it is not possible to produce plants free of all defects, but that some accepted industry protocols and standards

result in plants unacceptable to this project.

- When reasonable or reasonably is used in relation to other issues such as weeds, diseased, insects, it shall mean at least low enough that no treatment would be required when applying recognized Integrated Plant Management practices.
- This specification recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative's expert shall determine when conditions are judged as reasonable.
- M. Root ball: The mass of roots including any soil or substrate that is shipped with the tree within the root ball package.
- N. Root ball package: The material that surrounds the root ball during shipping. The root package may include the material in which the plant was grown, or new packaging placed around the root ball for shipping.
- O. Root collar (root crown, root flare, trunk flare, flare): The region at the base of the trunk where the majority of the structural roots join the plant stem, usually at or near ground level.
- P. Shrub: Woody plants with mature height approximately less than 15 feet.
- Q. Shrub harvested and transplanted: Field grown trees that are mechanically harvested and immediately transplanted to the final growing site without being removed from the digging machine.
- R. Stem: The trunk of the tree.
- S. Substantial Completion Acceptance: The date at the end of the Planting, Planting Soil, and Irrigation installation where the Owner's Representative accepts that all work in these sections is complete and the Warranty period has begun. This date may be different than the date of substantial completion for the other sections of the project.
- T. Stem girdling root: Any root more than 1/4 inch diameter currently touching the trunk, or with the potential to touch the trunk, above the root collar approximately tangent to the trunk circumference or circling the trunk. Roots shall be considered as Stem Girdling that have, or are likely to have in the future, root to trunk bark contact.
- U. Structural root: One of the largest roots emerging from the root collar.
- V. Tree: Single and multi-stemmed plants with mature height approximately greater than 15 feet.
- 1.10 SUBMITTALS
- A. See contract general conditions for policy and procedure related to submittals.
- B. Submit all product submittals 4 weeks prior to installation of plantings.
- C. Product data: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the installation of plants.
- D. Plant growers' certificates: Submit plant growers' certificates for all plants indicating that each meets the requirements of the specification, including the requirements of tree quality, to the Owner's Representative for approval. Provide submittal four weeks before the installation of plants.
- E. Samples: Submit

1.15 SELECTION AND OBSERVATION OF PLANTS

- A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.
- B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to meet specifications as set forth in this specification. If a particular defect or standard element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.
1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the quality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant.
2. Corrections are to be undertaken at the nursery prior to shipping.
- C. The Contractor shall bear all cost related to plant corrections.
- D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.
- E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.
- F. The Contractor shall require the grower or wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.
- G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material white on site.

1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE

- A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall be accompanied by a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.

1.17 SITE CONDITIONS

- A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.
1. Should substandard drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of corrections. If the Contractor fails to notify the Owner's Representative of such conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications.
- B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative.
- C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.
1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the Owner's Representative.
- D. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.
1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.

1.18 PLANTING AROUND UTILITIES

- A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.
- B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.
- C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planning areas. The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

PART 2 PRODUCTS

2.1 PLANTS: GENERAL

- A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.
1. All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 *American Standard for Nursery Stock* latest edition, unless modified by provisions in this specification. When there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct.
2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z60.1. Larger plants shall not be acceptable if the resulting root ball cannot be fit into the required planting space.
3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.
- B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.
- C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants.
- D. Plant Quality:
1. **General.** Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, borers, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant

2. Plant quality above the soil line:

- a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following:
- 1.) Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar pruned to a central and dominant leader.
- a.) Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars.
- 2.) Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress or over watering as indicated by wilted, shriveled, or dead leaves.
- 3.) Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.
- a.) Main branches shall be distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.
- b.) Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch union.
- c.) The attachment of the largest branches (scaffold branches) shall be free of included bark.
- 4.) Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds), sunburned areas, conks (fungi feeding bores), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).
3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning cut shall be present.
- 1.) All trees are assumed to have one central leader trees unless a different form is specified in the plant list or drawings.
4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall be visible above the soil line.
5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake. Auxiliary stake may be used to maintain a straight leader in the upper half of the tree.

3. Plant quality at or below the soil line:

- a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:
- 1.) The roots shall be reasonably free of scrapes, broken or split wood.
- 2.) The root system shall be reasonably free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Wounds resulting from root pruning used to produce a high quality root system are not considered injuries.
- 3.) A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.
- a.) Plants with structural roots on only one side of the trunk (J roots) shall be rejected.
- 4.) The root collar shall be within the upper 2 inches of the substrate/soil. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly developed, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

- A. Protect materials during delivery during delivery and storage. Adequately protect plants from drying out, exposure of roots to sun, wind or extremes of heat and cold temperatures. If planting is delayed more than 24 hours after

delivery, set plants in a location protected from sun and wind. Provide adequate water to the root ball package during the shipping and storage period.

1. All plant materials must be available for observation prior to planting.
2. Using a soil moisture meter, periodically check the soil moisture in the root balls of all plants to assure that the plants are being adequately watered. Volumetric soil moisture shall be maintained above wilting point and below field capacity for the root ball substrate or soil.
- B. Do not deliver more plants to the site than there is space with adequate storage conditions. Provide a suitable remote staging area for plants and other supplies.
1. The Owner's Representative or Contractor shall approve the duration, method and location of storage of plants.
- C. Provide protective covering over all plants during transporting.

3.2 ADVERSE WEATHER CONDITIONS

- A. No planting shall take place during extremely hot, dry, windy or freezing weather.

3.3 COORDINATION WITH PROJECT WORK

- A. The Contractor shall coordinate with all other work that may impact the completion of the work.
- B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.
- C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.4 LAYOUT AND PLANTING SEQUENCE

- A. Relative positions of all plants and trees are subject to approval of the Owner's Representative.
- B. Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.
- C. When applicable, plant trees before other plants are installed.
- D. It is understood that plants are not precise objects and that minor adjustments in the layout will be required as the planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.

3.5 SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION

- A. Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.
1. Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and tilling. Where possible, restrict the driving lanes to one area instead of driving over and compacting a large area of soil.
2. Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.

3.6 SOIL MOISTURE

- A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following ranges.
- | Soil type | Permanent wilting point | Field capacity |
|-----------------------------------|-------------------------|----------------|
| Sand, Loamy sand, Sandy loam | 5 - 8% | 12-18% |
| Loam, Sandy clay, Sandy clay loam | 14 - 25% | 27-36% |
| Clay loam, Silt loam | 11 - 22% | 31 - 36% |
| Silty clay, Silty clay loam | 22 - 27% | 38 - 41% |
1. Volumetric soil moisture shall be measured with a digital moisture meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent.
- B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.

3.7 INSTALLATION OF PLANTS: GENERAL

- C. Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the Owner's Representative of any condition observed.
- D. No more plants shall be distributed about the planting bed area than can be planted and watered on the same day.
- E. The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality in Part 2 Products: Plants General: Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.
1. Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may make the plant unstable or stress the plant to the point that the Owner's Representative may choose to reject the plant rather than the modifications to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.
2. Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2 Products: Plants General: Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.
3. The resulting root ball may need additional staking and water after planting. The Owner's Representative may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty.
4. The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.
- F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, meet all the requirements of the specifications for container and boxed root balls. Root cutting and shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.
- G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if not removed.

- H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, remove the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.

1. For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.

- a. The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.

- b. Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand shovels.

2. If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified.

3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any required root ball modification.

4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6 inches.

- H. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the roots. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.

- I. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant plumb and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.

- J. The Owner's Representative may request that plants orientation be rotated when planted based on the form of the plant.

- K. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section 3.16 Planting Soil for requirements to modify the soil within the planting bed.

- L. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. DO NOT over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.

1. When the planting hole has been backfilled to three quarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.

- M. Where indicated on the drawings, build a 4 inch high, level berm of Planting Soil around the outside of the root ball to retain water. Tamp the berm to reduce leaking and erosion of the saucer.

- N. Thoroughly water the Planting Soil and root ball immediately after planting.

- O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative's seals are to remain on plants until the end of the warranty period.

- P. Remove corrugated cardboard trunk protection after planting.

- Q. Follow additional requirements for the permitted root ball packages.

3.8 Permitted Root ball packages and Special planting requirements

- A. The following are permitted root ball packages and special plantings requirements that shall be followed during the planting process in addition to the above General planting requirements.

B. BALLED AND BURLAPPED PLANTS

1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap

away; do not fold down onto the Planting Soil.

2. If the plant is shipped with a wire basket that does not meet the requirements of a "Low Rise" basket, remove the top 6 - 8 inches of the basket wires just before the final backfilling of the tree.
3. Earth root balls shall be kept intact except for any modifications required by the Owner's Representative to make root package comply with the requirement in Part 2 Products.

C. SPADE HARVESTED AND TRANSPLANTED PLANTS

1. After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil out to a radius from the root ball edge equal to the diameter of the root ball to a depth of 8 - 10 inches by hand digging to disturb the soil interface.
2. Fill any gaps below with loose soil.

D. CONTAINER (INCLUDES BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS

1. This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is too low in the root ball.
2. Remove the container.
3. Perform root ball shaving as defined in Installation of Plants: General above.
4. Remove all roots and substrate above the root collar and the main structural roots according to root correction details so root system conforms to root observations detail.
5. Remove all substrate at the bottom of the root ball that does not contain roots.
6. Using a hose, power washer or air excavation device, wash out the substrate from around the trunk and top of the remaining root ball and find and remove all stem girdling roots within the root ball above the top of the structural roots.

E. BARE ROOT PLANTS

1. Dig the planting hole to the diameter of the spread of the roots to a depth in the center that maintains the root collar at the elevation of the surrounding finished grade and slightly deeper along the edges of the hole.
2. Spread all roots out radial to the trunk in the prepared hole making the hole wider where needed to accommodate long roots. Root tips shall be directed away from the trunk. Prune any broken roots removing the least amount of tissue possible.
3. Maintain the trunk plumb while backfilling soil around the roots.
4. Lightly tamp the soil around the roots to eliminate voids and reduce settlement.
- 3.9 GROUND COVER, PERENNIAL AND ANNUAL PLANTS
- A. Assure that soil moisture is within the required levels prior to planting. Irrigation, if required, shall be applied at least 12 hours prior to planting to avoid planting in muddy soils.
- B. Assure that soil grades in the beds are smooth and as shown on the plans.
- C. Plants shall be planted in even, triangularly spaced rows, at the intervals called out for on the drawings, unless otherwise noted. The first row of Annual flower plants shall be 6 inches from the bed edge unless otherwise directed.
- D. Dig planting holes sufficiently large enough to insert the root system without deforming the roots. Set the top of the root system at the grade of the soil.
- E. Schedule the planting to occur prior to application of the mulch. If the bed is already mulched, pull the mulch from around the hole and plant into the soil. Do not plant the root system in the mulch. Full mulch back so it is not on the root ball surface.
- F. Press soil to bring the root system in contact with the soil.
- G. Spread any excess soil around in the spaces between plants.
- H. Apply mulch to the bed being sure not to cover the tops of the plants with or the tops of the root ball with mulch.
1. Water each planting area as soon as the planting is completed. Apply additional water to keep the soil moisture at the required levels. Do not over water.

3.10 PALM PLANTING

- A. Palm trees shall be placed at grade making sure not to plant the tree any deeper in the ground than the palm trees originally stood.
- B. The trees shall be placed with their vertical axis in a plumb position.
- C. All backfill shall be native soil except in cases where planting in rock. Water-settle the back fill.
- D. Do not cover root ball with mulch or topsoil.
- E. Provide a watering berm at each palm. Berms shall extend a minimum of 18 inches out from the trunk all around and shall be a minimum of (6) inches high.
- F. Remove twine which ties fronds together after placing palm in planting hole and securing it in the upright position.

3.11 STAKING AND GUYING

- A. Do not stake or guy trees unless specifically required by the Contract Documents, or in the event that the Contractor feels that staking is the only alternative way to keep particular trees plumb.
6. The Owner's Representative shall have the authority to require that trees are staked or to reject staking as an alternative way to stabilize the tree.
7. The trees that required heavily modified root balls to meet the root quality standards may become unstable. The Owner's Representative may choose to reject these trees rather than utilize staking to temporarily support the tree.
- B. Trees that are guyed shall have their guyes and stakes removed after one full growing season or at other times as required by the Owner's Representative.
- C. Tree guying shall utilize the tree staking and guying materials specified. Guying to be tied in such a manner as to create a minimum 12-inch loop to prevent girdling. Refer to manufacturer's recommendations and the planting detail for installation.

1. Plants shall stand plumb after staking or guying.

2. Slakes shall be driven to sufficient depth to hold the tree rigid.

- D. For trees planted in planting mix over waterproofed membrane, use dead men buried 24 inches to the top of the dead men in the soil. Tie the guy to the dead man with a double wrap of line around the dead man followed by a double half hitch. When guys are removed, leave the dead men in place and cut the guy tape 12 inches above the ground, leaving the tape end covered in mulch.

3.12 STRAIGHTENING PLANTS

- A. Maintain all plants in a plumb position throughout the warranty period. Straighten all trees that move out of plumb including those not staked. Plants to be straightened shall be excavated and the root ball moved to a plumb position, and then re-backfilled.
- B. Do not straighten plants by pulling the trunk with guyes.

3.13 INSTALLATION OF FERTILIZER AND OTHER CHEMICAL ADDITIVES

- A. Do not apply any soluble fertilizer to plantings during the first year after transplanting unless soil test determines that fertilizer or other chemical additives is required. Apply chemical additives only upon the approval of the Owner's Representative.

- B. Controlled release fertilizers shall be applied according to the manufacturer's instructions and standard horticultural practices.

3.14 PRUNING OF TREES AND SHRUBS

- A. Prune plants as directed by the Owner's Representative. Pruning trees shall be limited to addressing structural defects as shown in detail, follow recommendations in "Structural Pruning: A Guide For The Green Industry" published by Urban Tree Foundation, Visalia CA.
- All pruning shall be performed by a person experienced in structural tree pruning.

- C. Except for plants specified as multi-stemmed or as otherwise instructed by the Owner's Representative, preserve or create a central leader.

- D. Pruning of large trees shall be done using pole pruners or if needed, from a ladder or hydraulic lift to gain access to the top of the tree. Do not climb in newly planted trees. Small trees can be structurally pruned by laying them over before planting. Pruning may also be performed at the nursery prior to shipping.

- E. Remove and replace excessively pruned or malformed stock resulting from improper pruning that occurred in the nursery or after.
- F. Pruning shall be done with clean, sharp tools.

- G. No tree pruned or staked shall be used.

3.15 MULCHING OF PLANTS

- A. Apply 3 inches of mulch before settlement, covering the entire planting bed area. Install no more than 1 inch of mulch over the top of the root balls of all plants. Taper 2 inches when abutting pavement.
- B. For trees planted in lawn areas the mulch shall extend to a 5 foot radius around the tree or to the extent indicated on the plans.
- C. Lift all leaves, low hanging stems and other green portions of small plants out of the mulch if covered.

3.16 PLANTING BED FINISHING

- B. Separate the edges of planting beds and lawn areas with a smooth, formed edge cut into the turf with the bed mulch level slightly lower, 1 and 2 inches, than the adjacent turf sod or as directed by the Owner's Representative. Bed edge lines shall be depicted on the drawings.

3.17 WATERING

- A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants from the point of installation until the date of Substantial Completion Acceptance. The Contractor shall adjust the automatic irrigation system, if available, and apply additional or adjust for less water using hoses as required.
- B. Hand water root balls of all plants to assure that the root balls have moisture above wilt point and below field capacity. Test the moisture content in each root ball and the soil outside the root ball to determine the water content.

3.18 CLEAN-UP

- A. During installation, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.

1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.

- B. Once installation is complete, wash all soil from pavements and other structures. Ensure that mulch is confined to planting beds and that all tags and flagging tape are removed from the site. The Owner's Representative's seals are to remain on the trees and removed at the end of the warranty period.
- C. Make all repairs to grades, ruts, and damage by the plant installer to the work or other work at the site.
- D. Remove and dispose of all excess planting soil, subsoil, mulch, plants, packaging, and other material brought to the site by the Contractor.

3.19 PROTECTION DURING CONSTRUCTION

- A. The Contractor shall protect planting and related work and other site work from damage due to planting operations, operations by other Contractors or trespassers. Maintain protection during installation until Substantial Completion Acceptance. Treat, repair or replace damaged work immediately.
- B. Damage done by the Contractor, or any of their sub-contractors to existing or installed plants, or any other parts of the work or existing features to remain, including roots, trunk or branches of large existing trees, soil, paving, utilities, lighting, irrigation, other finished work and surfaces including those on adjacent property, shall be cleaned, repaired or replaced by the Contractor at no expense to the Owner. The Owner's Representative shall determine when such cleaning, replacement or repair is satisfactory.

3.20 PLANT MAINTENANCE PRIOR TO SUBSTANTIAL COMPLETION ACCEPTANCE

- A. During the project work period and prior to Substantial Completion Acceptance, the Contractor shall maintain all plants.
- B. Maintenance during the period prior to Substantial Completion Acceptance shall consist of pruning, watering, cultivating, weeding, mulching, removal of dead material, repairing and replacing of tree stakes, tightening and repairing of guys, repairing and replacing of damaged tree wrap material, resetting plants to proper grades and upright position, and fumigating and applying such sprays as are necessary to keep plantings reasonably free of damaging insects and disease, and in healthy condition. The threshold for applying insecticides and herbicide shall follow established Integrated Pest Management (IPM) procedures. Mulch areas shall be kept reasonably free of weeds, grass.

3.21 SUBSTANTIAL COMPLETION ACCEPTANCE

- A. Upon written notice from the Contractor, the Owners Representative shall review the work and make a determination if the work is substantially complete.
1. Notification shall be at least 7 days prior to the date the contractor is requesting the review.
- B. The date of substantial completion of the planting shall be the date when the Owner's Representative accepts that all work in Planting, Planting Soil, and Irrigation installation sections is complete.
- C. The Plant Warranty period begins at date of written notification of substantial completion from the Owner's Representative. The date of substantial completion may be different than the date of substantial completion for the other sections of the project.

3.22 MAINTENANCE DURING THE WARRANTY PERIOD by others

- A. After Substantial Completion Acceptance, the Contractor shall make sufficient site visits to observe the Owner's maintenance and become aware of problems with the maintenance in time to request changes, until the date of End of Warranty Final Acceptance.
1. Notify the Owner's Representative in writing if maintenance, including watering, is not sufficient to maintain plants in a healthy condition. Such notification must be made in a timely period so that the Owner's Representative may take corrective action.
- a. Notification must define the maintenance needs and describe any corrective action required.
2. In the event that the Contractor fails to visit the site and/or notify, in writing, the Owner's Representative of maintenance needs, lack of maintenance shall not be used as grounds for voiding or modifying the provisions of the warranty.

3.23 MAINTENANCE DURING THE WARRANTY PERIOD by the plant installer

- A. During the warranty period, provide all maintenance for all plantings to keep the plants in a healthy state and the planting areas clean and neat.
- B. General requirements:
1. All work shall be undertaken by trained planting crews under the supervision of a foreman with a minimum of 5 years experience supervising commercial plant maintenance crews.
2. All chemical and fertilizer applications shall be made by licensed applicators for the type of chemicals to be used. All work and chemical use shall comply with all applicable local, provincial and federal requirements.
3. Assume that hoses and watering equipment and other maintenance equipment does not block paths or be placed in a manner that may create tripping hazards. Use standard safety warning barriers and other procedures to maintain the site in a safe manner for visitors at all times.
4. All workers shall wear required safety equipment and apparel appropriate for the tasks being undertaken.
5. The Contractor shall not store maintenance equipment at the site at times when they are not in use unless authorized in writing by the Owner's Representative.
6. Maintenance vehicles shall not park on the site including walks and lawn areas at any time without the Owner's Representative's written permission.
7. Maintain a detailed log of all maintenance activities including types of tasks, date of task, types and quantities of materials and products used, watering times and amounts, and number of each crew. Periodically review the logs with the Owner's Representative, and submit a copy of the logs at the end of each year of the maintenance agreement.
8. Meet with the Owner's Representative a minimum of three times a year to review the progress and discuss any changes that are needed in the maintenance program. At the end of the warranty period attend a hand over meeting to formally transfer the responsibilities of maintenance to the Owner's Representative. Provide all information on past maintenance activities and provide a list of critical tasks that will be needed over the next 12 months. Provide all maintenance logs and soil test data. Make the Contractor's supervisor available for a minimum of one year after the end of the warranty period to answer questions about past maintenance.

C. Provide the following maintenance tasks:

1. Watering: Provide all water required to keep soil within and around the root balls at optimum moisture content for plant growth.
- a. Maintain all watering systems and equipment and keep them operational.
- b. Monitor soil moisture to provide sufficient water. Check soil moisture and root ball moisture with a soil moisture meter on a regular basis and record moisture readings. Do not over water.
2. Soil nutrient levels: Take a minimum of 4 soil samples from around the site in the spring and fall and have them tested by an accredited agricultural soil testing lab for chemical composition of plant required nutrients, pH, salt and % organic matter. Test results shall include laboratory recommendations for nutrient applications. Apply fertilizers at rates recommended by the soil test.
- a. Make any other soil test and/or plant tissue test that may be indicated by plant conditions that may not be related to soil nutrient levels such as soil contaminated by other chemicals or lack of chemical uptake by the plant.
3. Plant pruning: Remove cross over branching, shorten or remove developing co dominant leaders, dead wood and winter-damaged branches. Unless directed by the Owner's Representative, do not shear plants or make heading cuts.
4. Restore plants: Reset any plants that have settled or are leaning as soon as the condition is noticed.
5. Guying and staking: Maintain plant guys in a taut position. Remove tree guys and staking after the first full growing season unless directed by Owner's Representative.
6. Weed control: Keep all beds free of weeds. Hand-remove all weeds and any plants that do not appear on the planting plan. Chemical weed control is permitted only with the approval of the Owner's Representative. Schedule weeding as needed to maintain weeds free of status.
7. Trash removal: Remove all trash and debris from all planting beds and maintain the beds in a neat and tidy appearance.
8. Plant pest control: Maintain disease, insects and other pests at manageable levels. Manageable levels shall be defined as damage to plants that may be noticeable to a professional but not to the average

CONTRACTOR GENERAL CONDITIONS NOTES

RF's. CONTRACTOR SHALL SUBMIT RF'S WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND.

2. SUBMITTALS AND PRODUCT DATA. CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMISSIONS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.

3. SHOP DRAWINGS. CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.

4. LAYOUT AND COORDINATION DRAWINGS. CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS. PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL CONFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS WITH FUNCTION AS INTENDED, BEING USED, BEING AS-BUILT AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES.

5. DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.

6. SUBSTITUTIONS.

A. CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS.

B. PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM. PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN.

C. PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION, INCLUDE INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT TIME.

D. PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPINION, AFTER THOUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACT DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED.

E. CONSULTANT'S EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR OR APPROVED BY THE OWNER SHALL BE COMPENSATED TO THE CONSULTANT BY THE CONTRACTOR.

7. AS-BUILT DRAWINGS. THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND OWNER AT PROJECT CLOSEOUT. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

8. INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS- CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS, DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

9. CONTRACTOR/DELEGATED/SUCCESSOR ENGINEER - CONTRACTOR IS ASSIGNED TO PROVIDE DESIGN/BUILD SERVICES FOR SELECTED SYSTEMS. CONTRACTOR'S ENGINEER SHALL COMPLY WITH ALL FAC 61615 REQUIREMENTS. DELEGATED/SUCCESSOR ENGINEER SHALL SUBMIT SIGNED/SEALED DRAWINGS TO A/E, TO AGENCIES, RESPOND TO ALL RF'S, AGENCY COMMENTS, AND BECOME THE DESIGNATED SYSTEM ENGINEER OF RECORD.

UL LISTING AND NRTL CERTIFICATIONS NOTE

CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE DOCUMENTATION AND CERTIFICATIONS FOR ANY EQUIPMENT THAT THE PROPOSER/S WITH A NRTL (NATIONALLY RECOGNIZED TESTING LAB) LISTING AND LABELING EQUIVALENT TO THE BASIS OF DESIGN U/L LISTING.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ACCEPTABILITY BY THE LOCAL AHJ AND AGENCIES FOR THE NRTL LISTING AND CERTIFICATION FOR THE PRODUCTS HE PROPOSES AND DEMONSTRATE SUCH AS PART OF THE PRODUCT DATA SUBMISSION AND INSTALLATION.

GENERAL ELECTRICAL NOTES

1. DO NOT SCALE THE ELECTRICAL DRAWING. REFER TO THE ARCHITECTURAL PLAN AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT AND CONFORM WITH OWNERS REPRESENTATIVES. CONTRACTOR SHALL REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR PROJECT COORDINATION.
11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EDITIONS CURRENTLY ADOPTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION OF THE FOLLOWING: THE NATIONAL ELECTRICAL CODE (NFPA 70), NFPA 72, NFPA 75, THE FIRE PREVENTION CODE INCLUDING NFPA 1 & NFPA 101, NFPA 110, AND THE IFBC, AND THE FFPC.
3. UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER, WITH "THHN" INSULATION FOR SIZE #10 AND SMALLER; CONDUCTORS LARGER THAN #10 SHALL HAVE "THWN" INSULATION. ALL CONDUCTORS IN WET LOCATIONS MUST HAVE "THWN" INSULATION. ALL CONDUCTORS #10 AND SMALLER MAY BE SOLID. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS MUST COMPLY WITH ARTICLE 310 OF THE N.E.C.
4. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK MAKE, QUICK BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.
6. THESE PLANS DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION, THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND MEET ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
7. THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDING AS REQUIRED IN ARTICLE 250, NATIONAL ELECTRICAL CODE. THE GROUNDING SYSTEM SHALL BE TESTED AND SHALL BE PROVIDED TO MEASURE A MAXIMUM OF 5 OHMS. PROVIDE A COPY OF THE TEST REPORT TO ENGINEER.
8. ALL MATERIALS SHALL BE NEW AND SHALL BEAR U.L. LABELS WHERE APPLICABLE.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANSHIP MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY ENGINEER/ARCHITECT MUST BE A CONDITION OF THE SUBCONTRACTOR.
10. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER, LIGHT, COMPANY, TELEPHONE COMPANY, AND BROADBAND PROVIDER.
11. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS TO SUIT JOB CONDITIONS, BALANCE LOADS ON EACH PHASE.
22. SEE NOTES ON PLANS FOR OTHER REQUIREMENTS.
17. FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS CALLED FOR ON PLANS, OR AS SELECTED BY OWNER.
11. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.
15. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF A PORTION OF THE INSTALLATION WHICH MAY BE DAMAGED.
16. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
17. CHECK ALL EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND CURRENT BEFORE CONNECTION TO CIRCUITS AND START UP.
18. ELECTRICAL CONTRACTOR SHALL CHECK AND VERIFY EQUIPMENT FURNISHED AGAINST THOSE SPECIFIED OR INTENDED AND REVISE BRANCH CIRCUITS AS MAY BE REQUIRED WITH PRIOR APPROVAL OF ENGINEER/ARCHITECT.
19. ALL SYSTEMS AND ROUGH-IN SHALL BE CONCEALED IN FINISHED AREAS. COORDINATE WITH ARCHITECT.
20. THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE BASIS OF DESIGN EQUIPMENT SPECIFIED BY DIVISION 16 AND OTHER DIVISIONS. WHERE THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE A/E AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO INSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DECISION TO SUBSTITUTE PRODUCTS OR MODIFY DESIGN REQUIRING A/E SERVICES, THE A/E RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.
21. CONTRACTOR SHALL PROVIDE A CONTROLS TRADE SUBCONTRACTOR TO DESIGN AND INSTALL ALL CONTROLS TO MEET THE PROJECT REQUIREMENTS.

AIR CONDITIONING EQUIPMENT AND CONTROLS SPECIFICATION

1. ELECTRICAL CONTRACTOR SHALL INSTALL ALL CONTROL RACEWAY (CONDUIT), WIRE INSTALLATION, CONNECTIONS ETC. IN ACCORDANCE WITH WIRING DIAGRAMS ON AIR EQUIPMENT.
2. A/C / ELECTRICAL PLANS OR DIAGRAMS FURNISHED BY MANUFACTURER OF THE EQUIPMENT.
3. ALL POWER WIRING FOR THE AIR CONDITIONING EQUIPMENT SHALL BE FURNISHED, INSTALLED AND CONNECTED UNDER THIS SECTION OF THE SPECIFICATION.
4. MECHANICAL CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR ALL AIR CONDITIONING EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONNECTIONS TO AIR CONDITIONING EQUIPMENT PER MANUFACTURERS SPECIFICATIONS.
5. AIR CONDITIONING EQUIPMENT INCLUDES CONDENSER, COMPRESSOR AND FAN, FAN COIL UNITS, ELECTRICAL STRIP HEATER, THERMOSTAT, ETC.

SITE LIGHTING/PHOTOMETRIC NOTES	
1.	COORDINATE AND VERIFY ALL SITE ELECTRICAL REQUIREMENTS WITH ARCHITECT PRIOR TO ANY CONSTRUCTION/ INSTALLATION.
2.	THE COMPLETE STREET LIGHTING POLE MOUNTED ASSEMBLY MUST WITHSTAND A MINIMUM 175 MPH WINDLOADS. CALCULATIONS AND FOUNDATION DESIGN BY CIVIL/STRUCTURAL ENGINEER.
3.	PROVIDE IN-LINE FUSES AT EACH POLE, ONE IN EACH HOT LEG.
4.	ALL SITE LIGHTING CONDUITS SHALL BE BURIED AT A MINIMUM OF 24" BELOW FINISHED GRADE.
5.	ALL SITE LIGHTING SHALL BE PHOTOCELL CONTROLLED UNLESS SPECIFIED OTHERWISE.

SITE POLE NOTE
WIND LOAD CALCULATIONS AND SITE POLE STRUCTURAL DETAILS ARE TO BE SUBMITTED TO THE BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. (BY CONTRACTOR AND HIS DELEGATED F.L.P.E. STRUCTURAL ENGINEER)

ELECTRICAL SHEET INDEX	
SHEET #	DESCRIPTION
EPH0.1	ELECTRICAL NOTES AND SHEET INDEX
EPH1.1	PHOTOMETRIC PLAN
EPH3.1	LIGHTING LEGEND AND DETAILS

FBC NOTE
1. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.1). PROVIDE OWNER WITH A RECORD SET DRAWING OF COMPLETE INSTALLATION DRAWINGS.
2. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.2). PROVIDE OWNER WITH OPERATIONAL MANUALS AND MAINTENANCE MANUALS.

LIGHTING NOTES
1. ELECTRICAL CONTRACTOR TO VERIFY IF ANY LIGHTING FIXTURES REQUIRE STEP-DOWN TRANSFORMERS. QUANTITY AND LOCATION OF THE TRANSFORMERS TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION. CONSULT ARCHITECT FOR LOCATIONS PRIOR TO BIDDING. PROVIDE ALL TRANSFORMERS AND INCLUDE IN BID.
2. ALL LIGHTING FIXTURES AND FANS TO BE SELECTED & LOCATED BY OWNER /ARCHITECT/INTERIOR DESIGNER, UNLESS OTHERWISE NOTED.
3. ARCHITECT TO SET MOUNTING HEIGHTS FOR ALL FIXTURES WHERE APPLICABLE, UNLESS OTHERWISE NOTED.
4. CONTRACTOR TO PROVIDE LUMINAIRES TO CONFORM TO ENERGY CODE, THERMAL ENVELOPE RATINGS.

FLORIDA BUILDING CODE 2017 CONFORMANCE	
1.	CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL TO CONFORM TO FBC 2017 ENERGY COMPLIANCE, RELATED SECTIONS, AND STANDARDS.
2.	OWNER SHALL PROVIDE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT(Cx)A TO PREPARE FUNCTIONAL TEST PROCEDURES (DOCUMENT SYSTEMS PERFORMANCE, WITNESS CONTRACTOR TESTING), AS REQUIRED BY FBC FOR LIGHTING AND HVAC SYSTEMS.
3.	CONTRACTOR SHALL PROVIDE SERVICES TO TEST, BALANCE AND COMMISSION THE SYSTEM VIA AN INDEPENDENT AGENT FOR THE MECHANICAL SYSTEMS ENERGY PERFORMANCE.
4.	CONTRACTOR TO PROVIDE COMPLETE CERTIFICATIONS AND CHECKLISTS AS REQUIRED BY FBC FOR HIS WORK RESPONSIBILITIES .

VOLTAGE DROP NOTE

THE CONTRACTOR, AS PART OF HIS PRICING AND BIDDING, SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND TERMINATIONS, INCLUDING GFL AND UTILITY REQUIREMENTS AND APPROVALS FOR ALL CONDUCTING AND TERMINATIONS, TO SATISFY THE PROJECT REQUIREMENTS: IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND INCLUDE ALL HIS BRANCH CIRCUIT, FEEDER, AND SERVICE CONDUCTOR CONDUITING AND WIRING LENGTHS AND ROUTING BASED ON HIS PROPOSED INSTALLATION MEANS AND METHODS. WIRING LENGTHS, SHOWN AS THE BASIS OF DESIGN LENGTHS, ARE MERELY AN APPROXIMATION BY THE CONSULTANT. THE CONTRACTOR SHALL USE THOSE BASIS OF DESIGN CONDUCTOR LENGTHS AND WIRING SIZES AS THE MINIMUM, NOT LIMITED TO, REQUIREMENTS FOR THE PROJECT BIDDING. THE CONTRACTOR, PRIOR TO BIDDING, SHALL CONFIRM ALL HIS PROPOSED LENGTHS, MAKE ANY AND ALL ADJUSTMENTS AS MAY IMPACT THE ELECTRICAL SYSTEMS AND EQUIPMENT FOR CODE COMPLIANCE AND CONSTRUCTABILITY, AND DOCUMENT ALL PROPOSED CHANGES AND ADJUSTMENTS TO THE ARCHITECT AS PART OF HIS BID RESPONSE. THE CONTRACTOR SHALL SUBMIT COMPLETE SCALED PROPOSED ROUTINGS FOR SERVICES AND FEEDERS, QUANTITIES AND CONDUCTORING, SECTIONS THRU BUILDING FOR RACKING, OUTDBACK CROSS SECTIONS FOR CLEARANCES AND COORDINATED AS FREE OF ALL INTERFERENCES, ETC. CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION TO THE ARCHITECT FOR REVIEW NO LATER THAN 3 WEEKS AFTER NOTICE TO PROCEED.

SCOPE OF WORK
SITE LIGHTING PHOTOMETRICS FOR NEW BUILDING/SITE.

CODE COMPLIANCE	
FLORIDA BUILDING CODE, 6TH EDITION, 2017.	
NATIONAL ELECTRICAL CODE, 2014.	

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.

[illegible]

**VILLAGE COLLECTION OF PALM
SPRINGS**
VILLAGE OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

EAF
CONSULTING

300 LOCK ROAD, SUITE 302
DEERFIELD BEACH, FLORIDA 33442
TEL: (561) 391-9992 FAX: (561) 391-9998
CERTIFICATE OF AUTHORIZATION NO. 28107
URSULA IAPARTE, P.E. LICENSE #73122
STEPHEN F. ROLLIN, P.E. LICENSE #36428
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E-MAIL: INFO@EAFCONSULTING.COM
DESIGNED BY: MW PM: AN P/N 10072

Drawn By:	M.W.
Drawing #:	
Date:	06/27/19
ELECTRICAL NOTES AND SHEET INDEX	

SHEET # EPH0.1



PHOTOMETRIC PLAN
SCALE: 1"=20'-0"

ALL LIGHTING FIXTURES IN THIS AREA
ARE PROVIDED BY OTHERS UNDER
SEPARATE PERMIT.

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.

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Consultants:

OWNER CHGS	8/8/19
OWNER CHGS	8/22/19
OWNER CHGS	10/23/19

Revisions:

OWNER CHGS	8/8/19
OWNER CHGS	8/22/19
OWNER CHGS	10/23/19

VILLAGE COLLECTION OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

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DESIGNED BY: HW PML: AN PIN 19072

Drawn By: M.W.
Drawing #:
Date: 06/27/19
PHOTOMETRIC PLAN

SHEET # EPH1.1

Calculation Summary					
Project: TIRE KINGDOM & RACE TRAC, PALM SPRINGS - SITE - REV4 --- OCT - 23 - 2019					
Label	Avg	Max	Min	Avg/Min	Max/Min
SPILL HORIZONTAL 6' AG	0.02	0.33	0.00	N.A.	N.A.
SPILL TO 10TH AVENUE NORTH	0.35	3.1	0.0	N.A.	N.A.
SPILL TO LOT 1	0.79	4.3	0.0	N.A.	N.A.
SPILL TO LOT 4	0.74	3.7	0.0	N.A.	N.A.
SPILL VERTICAL 6' AG	0.07	0.33	0.00	N.A.	N.A.
FUEL CANOPY	28.83	39.7	17.5	1.85	2.27
RACETRAC - PARK & DRIVE	4.55	12.1	1.4	3.25	8.64
SITE	4.56	12.1	1.1	4.15	11.00
TIRE KINGDOM - PARK & DRIVE	2.97	6.3	1.0	2.97	6.30



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Consultants:

Revisions:

2	OWNER	CHGS	8/22/19
3	OWNER	CHGS	10/23/19

**VILLAGE COLLECTION OF PALM
SPRINGS**

PERMIT SET: 07/26/19

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E-MAIL: INFO@FAECONSULTING.COM
DESIGNED BY: MW PM: AN P/N 19072

Drawn By: M.W.

Drawing #:

Date: 06/27/19

LIGHTING LEGEND AND DETAILS

SHEET # EPH3.1

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

[illegible]

JOB NO: _____ PROJECT: _____ CUSTOMER: _____

LENGTH OF POLE	35 FT.			
EMBEDMENT SPECIFIED	10 FT.			
HEIGHT ABOVE GROUND	25 FT.			
WEIGHT	2900 LBS.			
WIND VELOCITY (mph)	150	160	170	180
MAXIMUM EPA* (sq. ft.)				

Above embedment shown in SAND.
Other embedment depth may be required for other soil condition.

STANDARD PIPE TENON SIZE	
Nominal Diameter (in)	Outside Diameter (in)
2"	2 3/8"
2 1/2"	2 7/8"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"

Please order tenon by nominal diameter

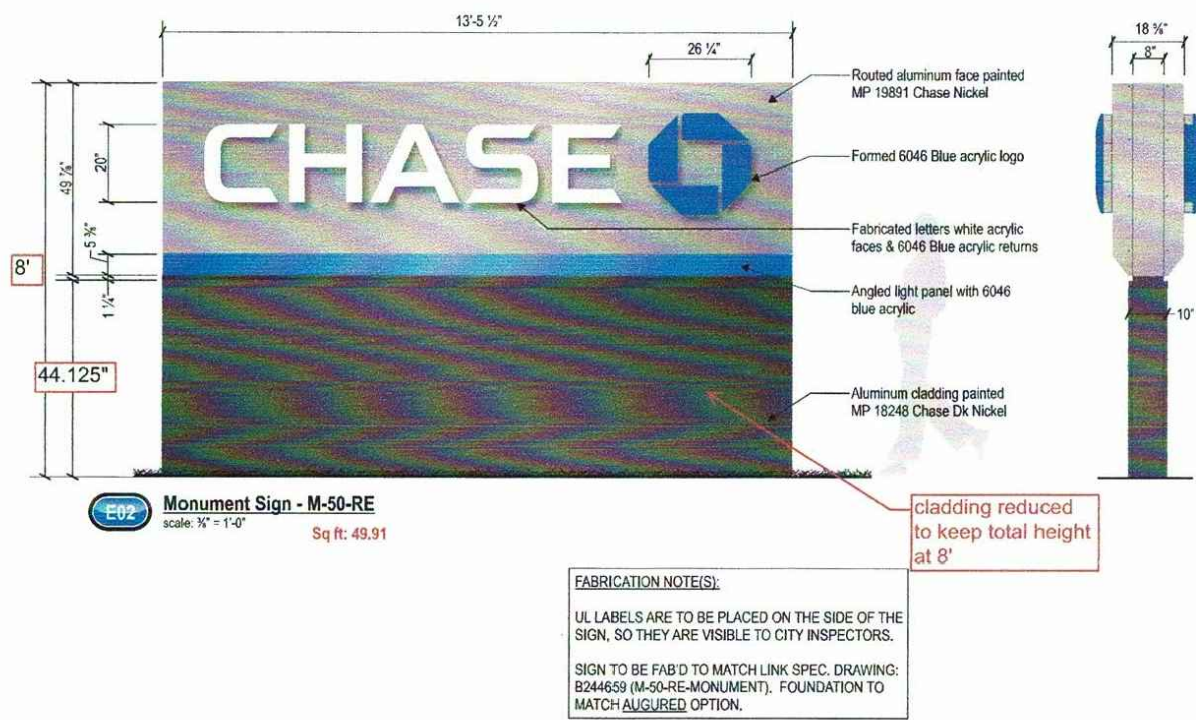
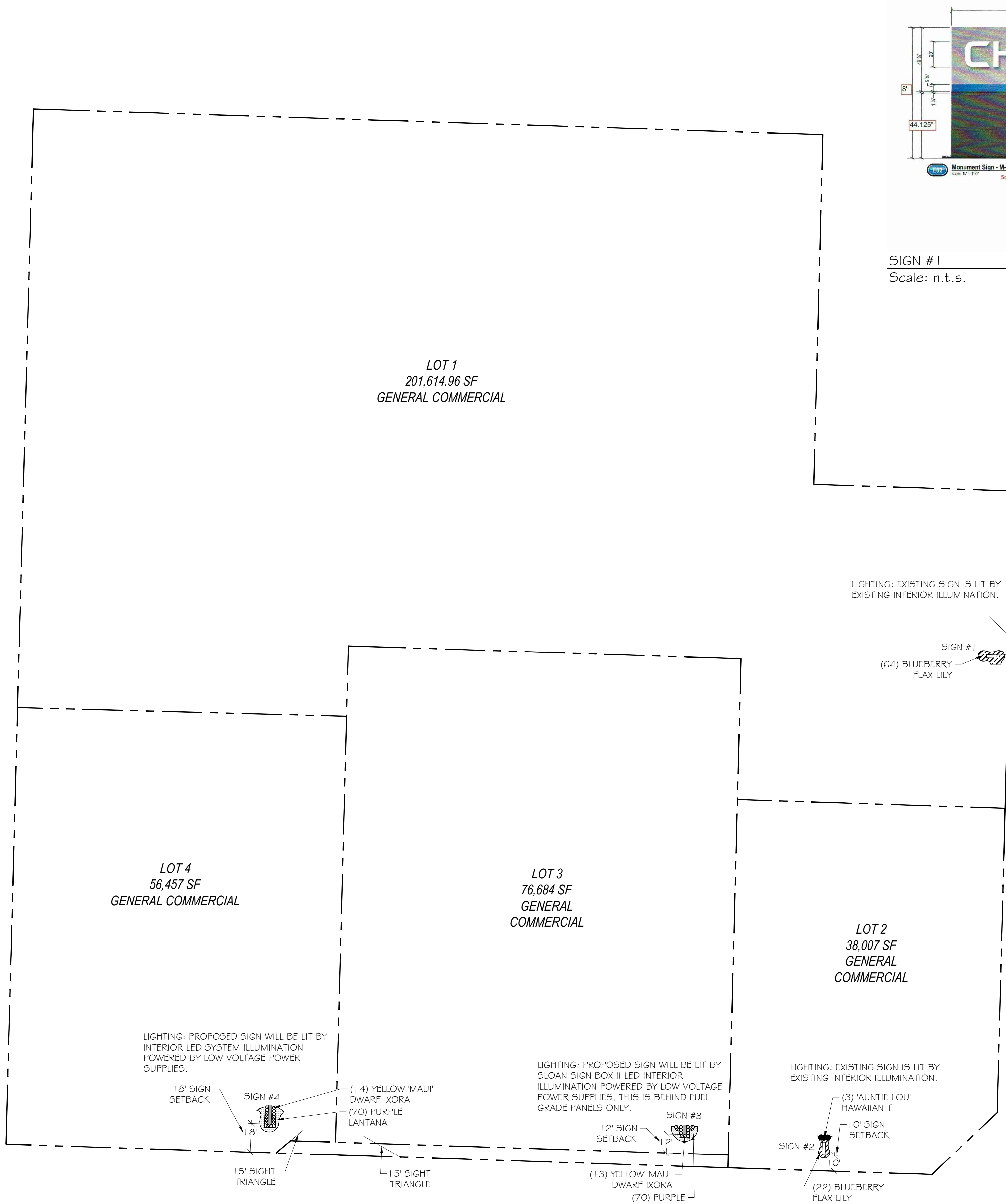
35 ft. TYPE II -0 POLE

PRECAST
SPECIALTIES
Precast Specialties, LLC.
CGC-060216

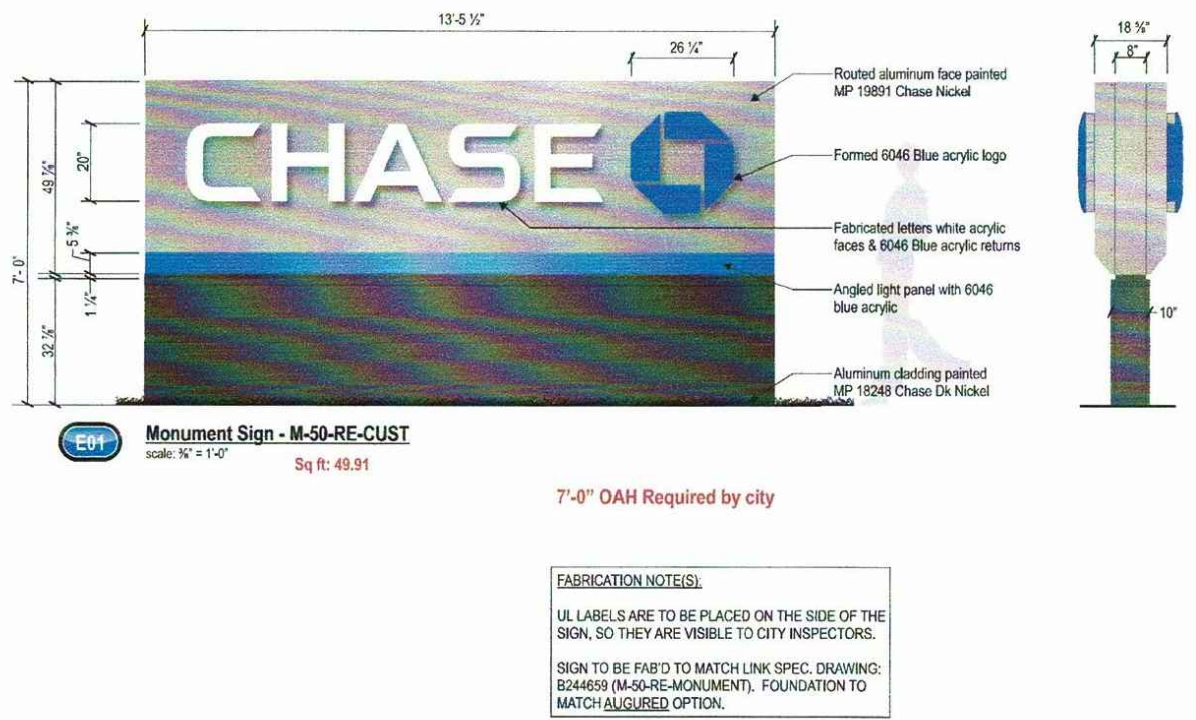
1380 N.E. 48th Street | Pompano Beach, FL 33064

3898 Selvitz Road | Fort Pierce, FL 34981

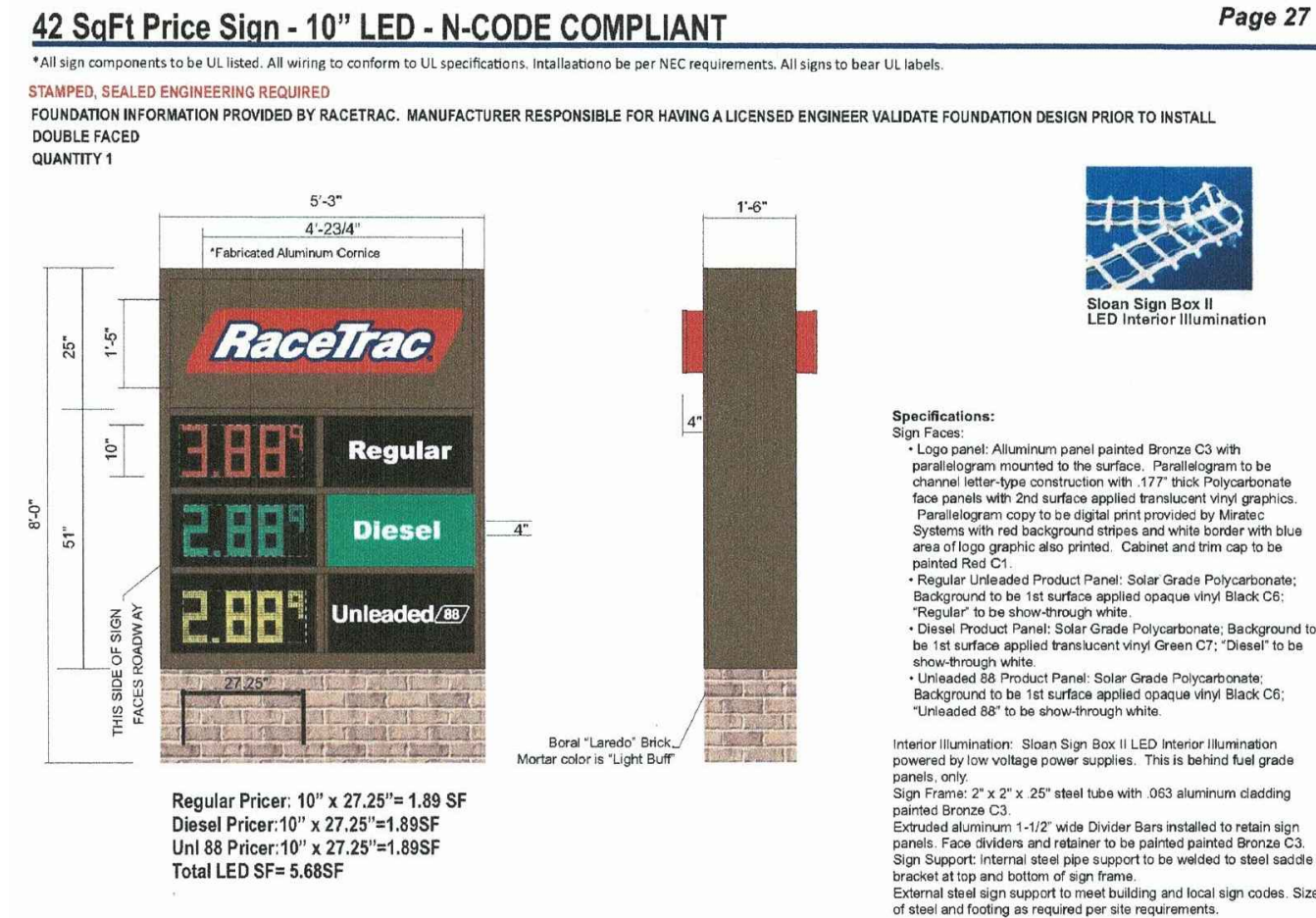
(954) 781-4040 | Fax: (954) 781-3539



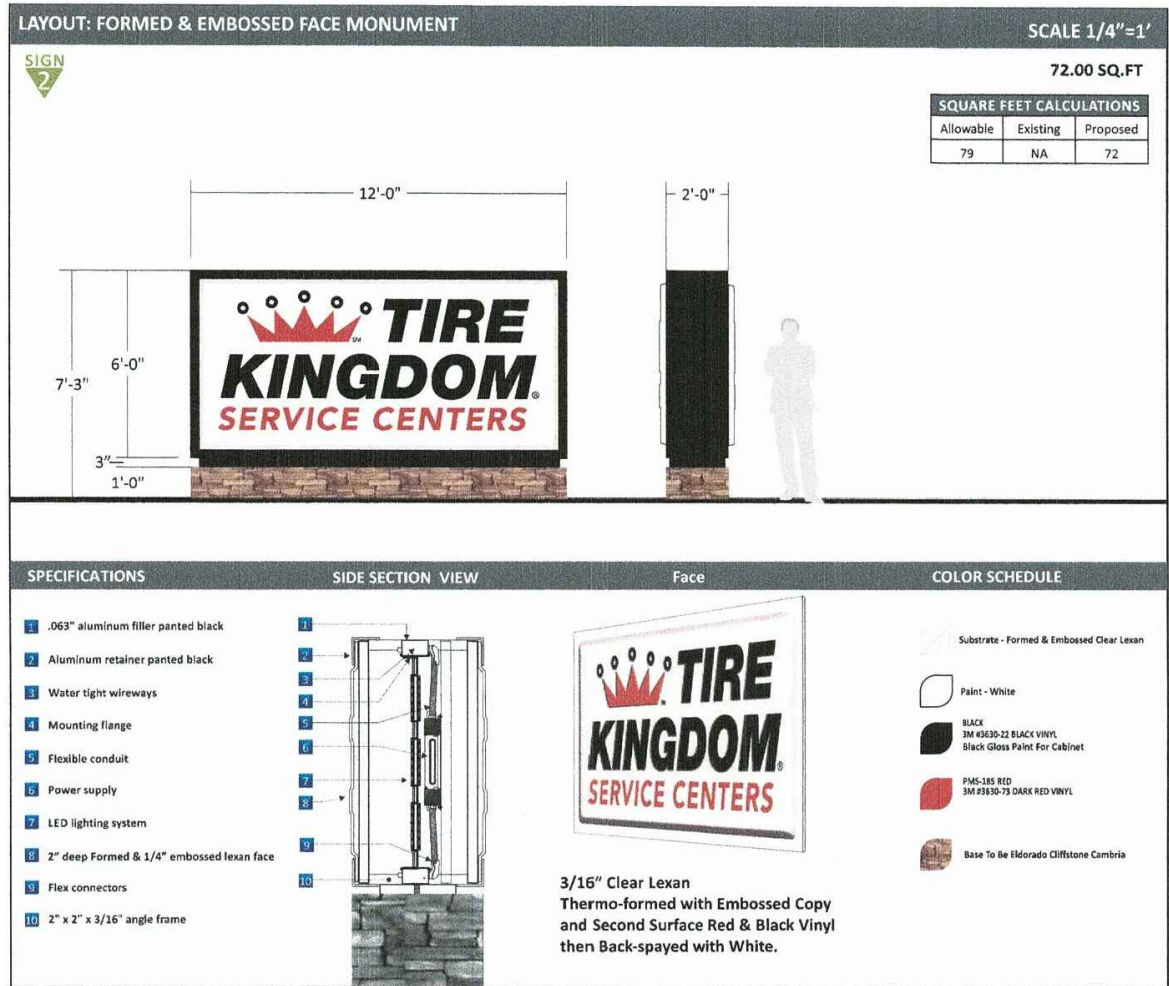
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Scale: n.t.s.



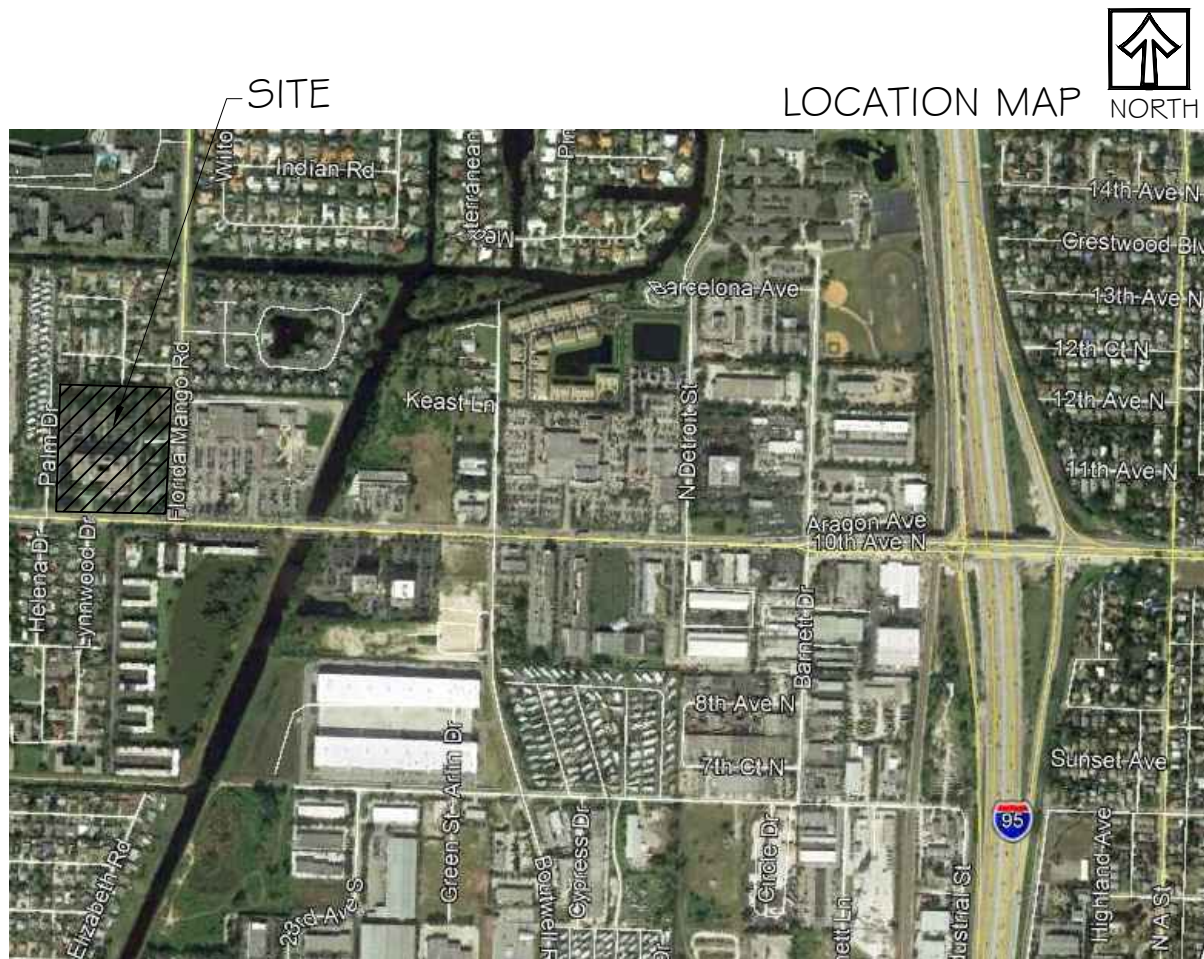
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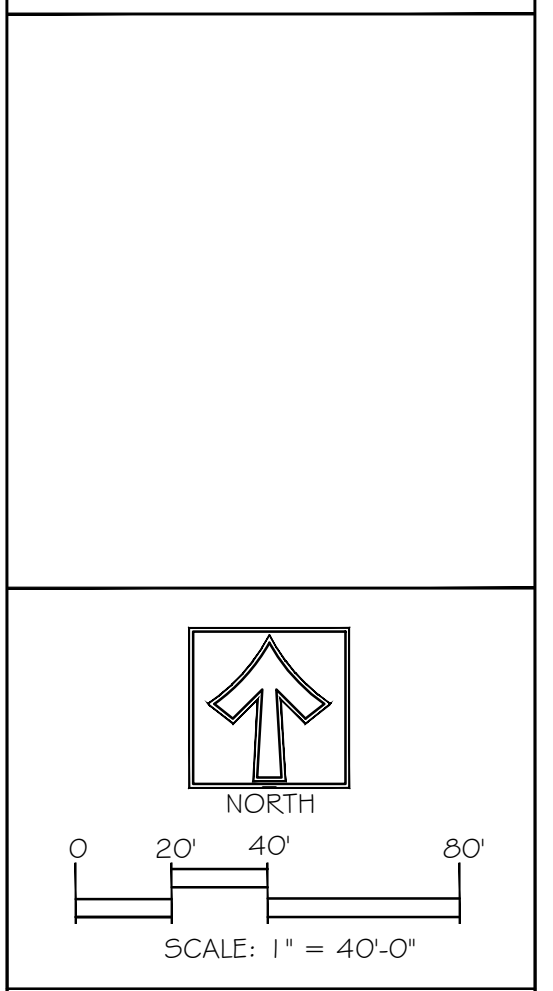


SIGN #4
Scale: n.t.s.



Consultants:
Revisions:
10-29-19: per Village comments

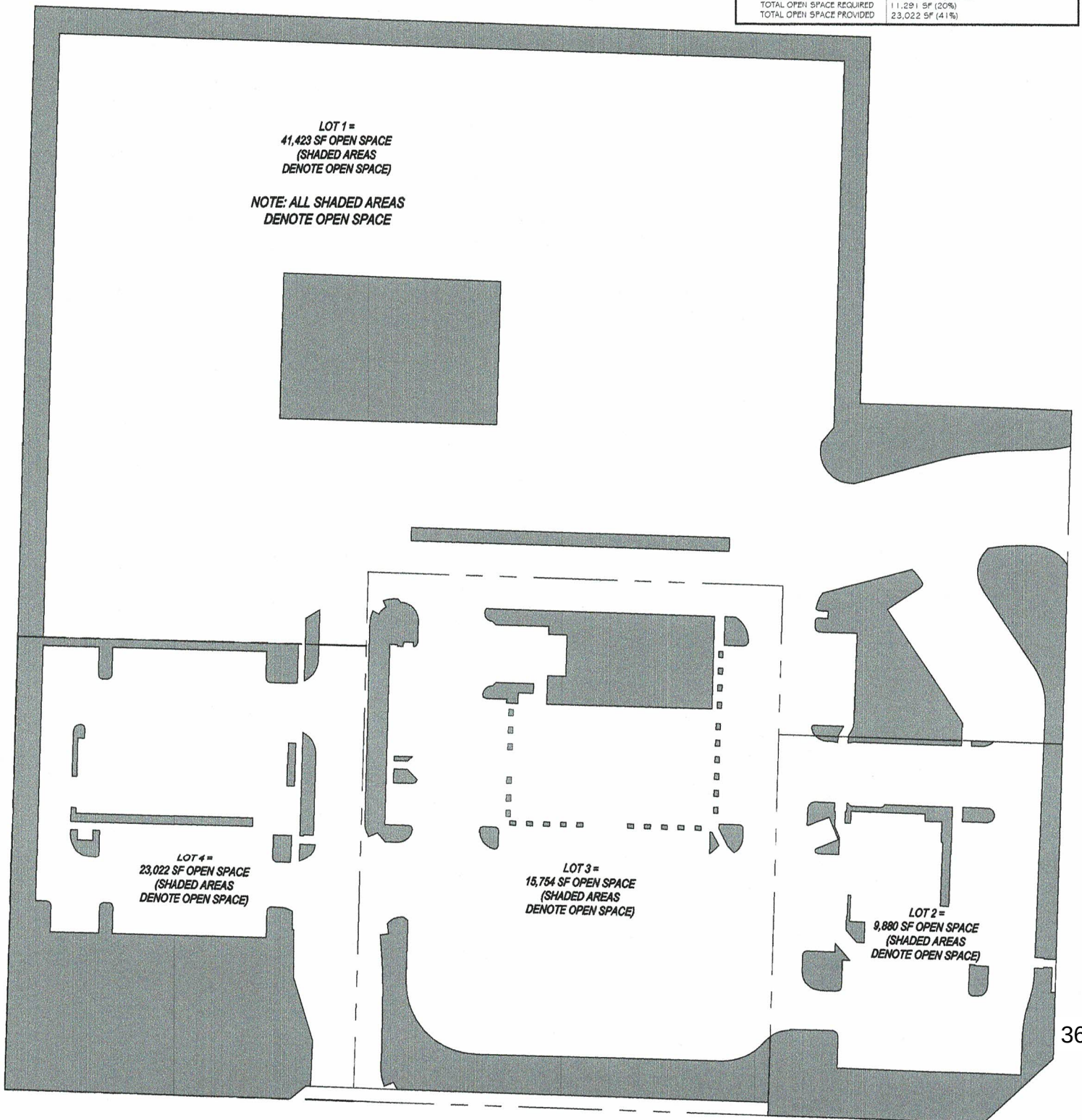
VILLAGE COLLECTION
OF PALM SPRINGS
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

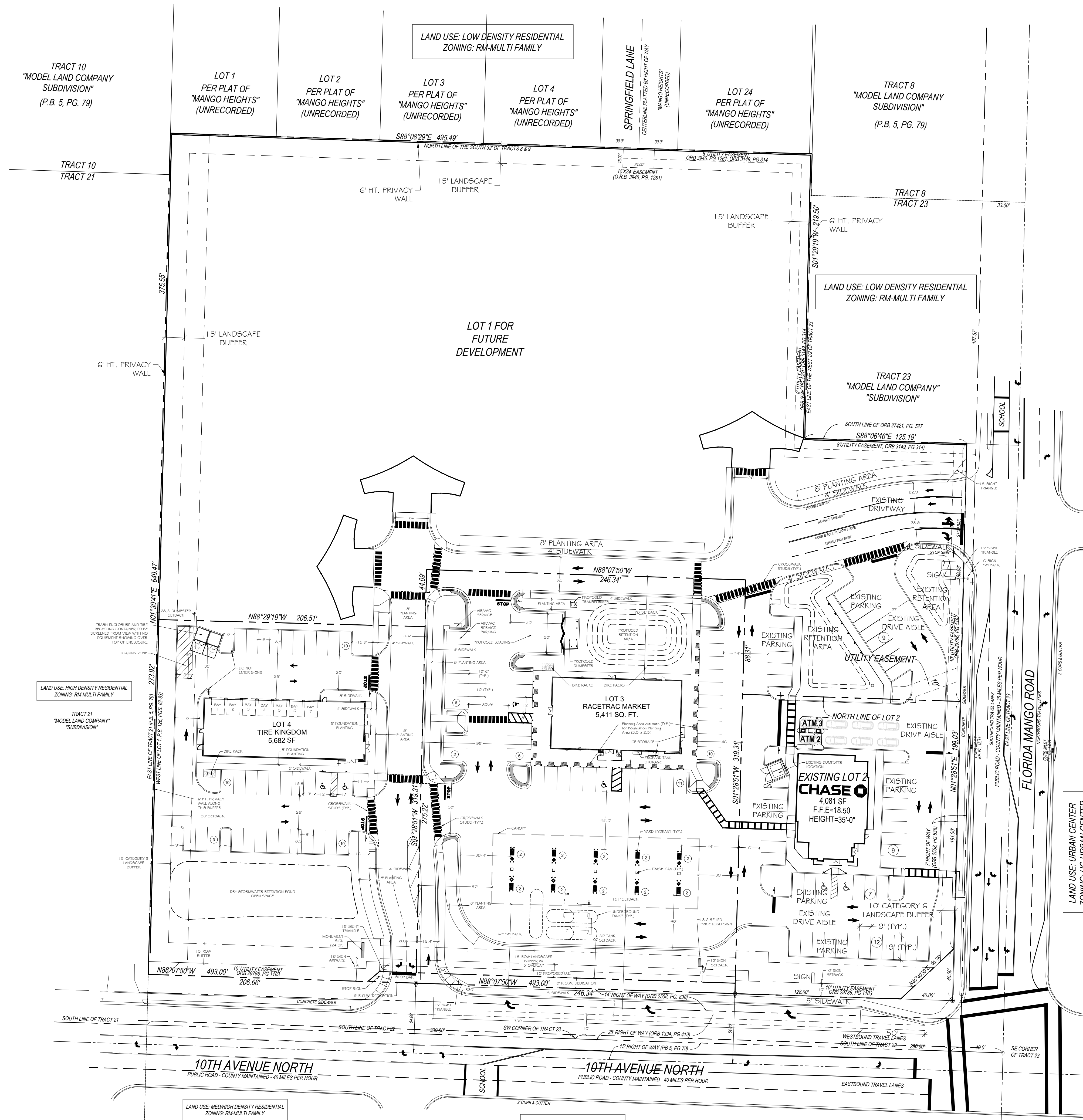


OPEN SPACE EXHIBIT:

Scale: N.T.S.

OPEN SPACE DATA	
ADDRESS	2601 10TH AVE. NORTH, PALM SPRINGS, FL.
PCN	70-43-44-20-01-008-0080
OWNER	10th AVENUE PARTNERSHIP, LTD.
GROSS SITE AREA	8.61 AC. or 374,995.96 SF
8' ROW DEDICATION	2,233 SF
NET SITE AREA	8.56 AC. or 372,762.96 SF
TOTAL OPEN SPACE REQUIRED (20%)	1.71 AC. or 74,553 SF of Net Site Area
TOTAL OPEN SPACE AREA PROVIDED	2.07 AC. or 90,079 SF (Lots 1 - 4) 24.17% of Net Site Area
LOT 1 (FUTURE DEVELOPMENT):	
TOTAL SITE AREA	4.63 AC. or 201,614.96 SF
TOTAL OPEN SPACE REQUIRED	40,323 SF (20%)
TOTAL OPEN SPACE PROVIDED	41,423 SF (20.5%)
LOT 2 (CHASE BANK):	
TOTAL SITE AREA	.87 AC. or 38,007 SF
TOTAL OPEN SPACE REQUIRED	7,601 SF (20%)
TOTAL OPEN SPACE PROVIDED	9,880 SF (26%)
LOT 3 (PACETRAC):	
NET SITE AREA	1.76 AC. or 76,684 SF
TOTAL OPEN SPACE REQUIRED	15,337 SF (20%)
TOTAL OPEN SPACE PROVIDED	15,754 SF (20.5%)
LOT 4 (TIRE KINGDOM):	
NET SITE AREA	1.3 AC. or 56,457 SF
TOTAL OPEN SPACE REQUIRED	11,291 SF (20%)
TOTAL OPEN SPACE PROVIDED	23,022 SF (41%)





SITE DATA	
ADDRESS	2601 10TH AVE. NORTH, PALM SPRINGS, FL.
PCN	70-43-44-20-01-008-0080
OWNER	10TH AVENUE PARTNERSHIP, LTD.
GROSS SITE AREA	8.61 AC or 374,995.96 SF
8' ROW DEDICATION	2,233 SF
NET SITE AREA	8.56 AC or 372,762.96 SF
TOTAL OPEN SPACE REQUIRED (20%)	1.71 AC or 74,553 SF of Net Site Area
TOTAL OPEN SPACE AREA PROVIDED	2.07 AC. or 90,079 SF (Lots 1 - 4)
	24.17% of Net Site Area
LOT 1 (FUTURE DEVELOPMENT):	
TOTAL SITE AREA	4.63 AC. or 201,614.96 SF
TOTAL OPEN SPACE REQUIRED	40,323 SF (20%)
TOTAL OPEN SPACE PROVIDED	41,423 SF (20.5%)
BUILDING SF	T.B.D. (ONCE SITE PLAN IS PREPARED)
FAR	T.B.D. (ONCE SITE PLAN IS PREPARED)
LOT 2 (CHASE BANK):	
TOTAL SITE AREA	.87 AC. or 38,007 SF
TOTAL OPEN SPACE REQUIRED	7,601 SF (20%)
TOTAL OPEN SPACE PROVIDED	9,880 SF (26%)
BUILDING SF	4,081 SF
FAR	.11
LOT 3 (RACETRAC):	
NET SITE AREA	1.76 AC. or 76,684 SF
TOTAL OPEN SPACE REQUIRED	15,337 SF (20%)
TOTAL OPEN SPACE PROVIDED	15,754 SF (20.5%)
BUILDING SF	5,411 SF
FAR	.07
LOT 4 (TIRE KINGDOM):	
NET SITE AREA	1.3 AC. or 56,457 SF
TOTAL OPEN SPACE REQUIRED	11,291 SF (20%)
TOTAL OPEN SPACE PROVIDED	23,022 SF (41%)
BUILDING SF	5,682 SF
FAR	.10

NOTES:
-Any existing or proposed utility box/cabinet shall be screened from view. The box/cabinet will be wrapped with a match design accordingly with the existing/proposed location.

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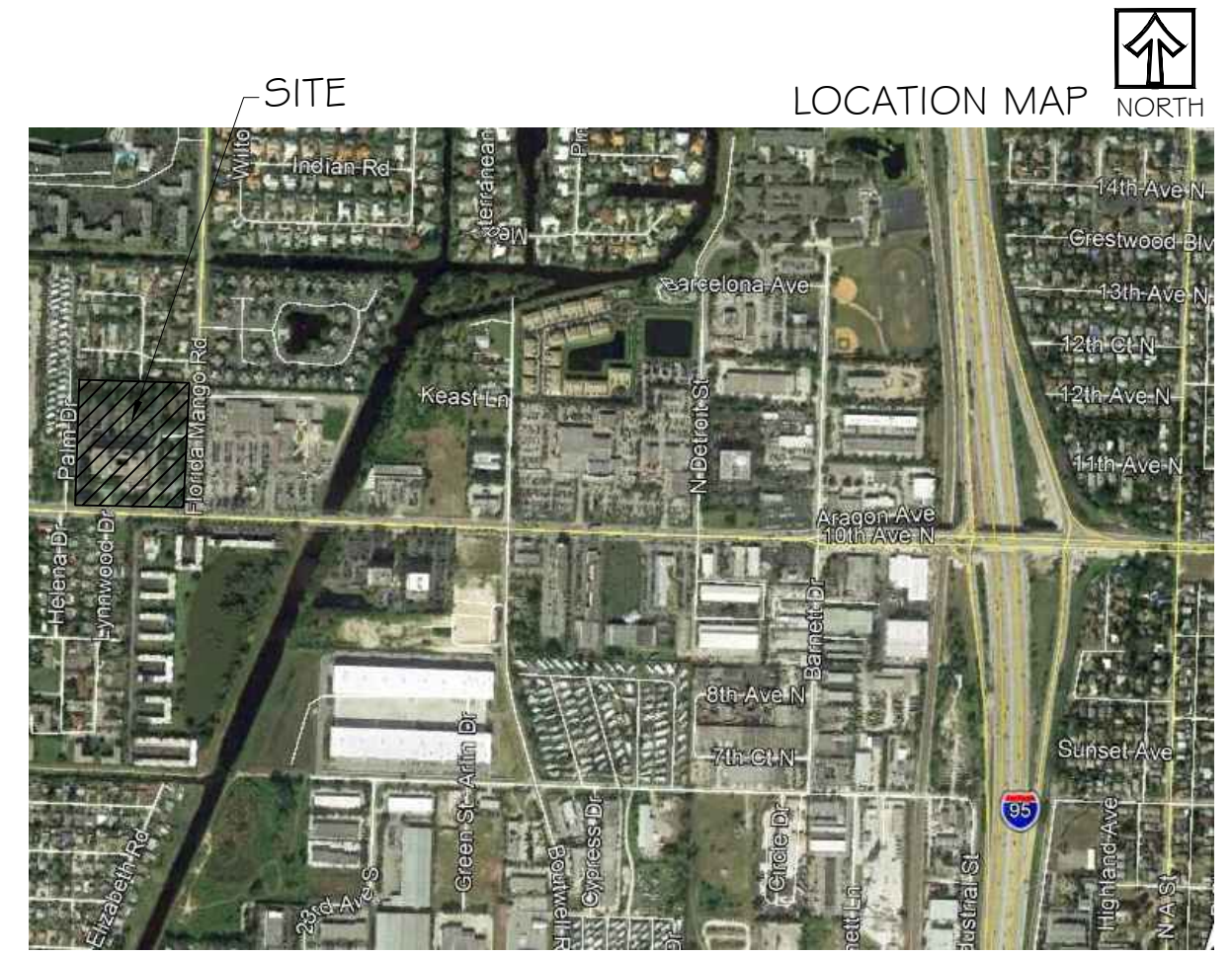
planning + landscape architecture

8144 Okeechobee Blvd, Suite A, West Palm Beach, FL 33411
phone: 361-247-0740 email: info@insitestudio.com
www.insitestudio.com license# LC2800066

Consultants:
Revisions:
08/22/19: per Village comments
10/29/19: per Village comments

VILLAGE COLLECTION
OF PALM SPRINGS

10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida





2601 10th AVE N

PARCEL NO: 70434420390000010

CONCEPTUAL PLANS

UTILITY PROVIDERS		
<u>WATER</u>	<u>ELECTRIC</u> FP&L 4406 S.W. CARGO WAY PALM CITY, FL 34990 CONTACT: Shiran Saadon-Porter PHONE: (772) 223-4244	<u>TELEPHONE</u> At&t 329 NW Dixie Highway Stuart, FL 34994 CONTACT: James Virge PHONE: 772-971-8267
<u>SANITARY SEWER</u>		



1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTIONS ACCORDING TO AGENCY INSTRUCTION.
2. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK, INCLUDING LANDSCAPING.
3. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNERS CONSTRUCTION MANAGER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO USE ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. CONSTRUCTION MANAGERS APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE CONTRACTORS RESPONSIBILITY FOR PERFORMANCE OF THE ITEM.
4. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT IS NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
5. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY.
6. CONTRACTOR SHALL REVIEW SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION.
7. AT LEAST 72 HOURS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS. IF THE CONTRACTOR'S WORK IS DEEMED TO BE IN VIOLATION OF ANY AGENCY AS REQUIRED, ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER OR WITHOUT AGENCY INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL USE EACH PLAN IN CONJUNCTION WITH THE ENTIRE SET OF DRAWINGS AND JOB SPECIFICATIONS. DO NOT REMOVE OR DEMOLISH ANYTHING WITHOUT VERIFYING AND COORDINATING WITH ALL ELECTRICAL, PLUMBING, MECHANICAL, GENERAL TRADES, AND UTILITY COMPANIES AS THEY AFFECT THE OVERALL PROJECT.
9. ALL WORK SHOWN SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS

CONSTRUCTION INFORMATION

811

Know what's below.
Call before you dig.

RACETRAC 24-HOUR PHONE NUMBER: 1-404-626-1482
CONTACT NAME: KEVIS SANTIAGO

CONTACT RACETRAC PETROLEUM, INC. PROJECT MANAGER PRIOR TO
ANY REVISIONS TO THE PLAN SUPPLIED BY RACETRAC PETROLEUM, INC.

COVER SHEET		RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SE SUITE 900 ATLANTA, GA 30339 (770) 431-7600	
DATE	10/21/2019		
SCALE	AS SHOWN		
DRAWN-BY	MJL		
DRAWING NAME: FJ180819-COVER.dwg			
COV			
SHEET NO.	VERSION		

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

1. It is the contractor's responsibility to become familiar with the permit and inspection requirements of the various governmental agencies. The contractor shall obtain all necessary permits prior to construction, and schedule inspection according to agency instruction.
2. All work performed shall comply with the regulations and ordinances of the various governmental agencies having jurisdiction over the work, including landscaping.
3. At least 3 working days prior to construction the contractor shall notify the owner, engineer and appropriate agencies and supply them with all required shop drawings, the contractor's name, starting date, projected schedule, and other information as required. Any work performed prior to notifying the owner & engineer of record or without agency inspector present may be subject to removal and replacement at the contractor's expense. Failure to obtain approval before installation may result in removal and replacement at the contractor's expense. Contractor shall submit for review to the owner's construction manager, shop drawings on all precast and manufactured items to use on this site. Construction manager's approval of a shop drawing does not relieve contractor's responsibility for performance of the item.
4. Work performed under this contract shall interface smoothly with other work being performed on site by other contractors and utility companies. It is necessary for the contractor to coordinate and schedule his activities, where necessary, with other contractor's and utility companies.
5. Materials and construction methods for streets and storm drainage construction shall be in accordance with the local regulatory agency.
6. Contractor shall review soil reports and borings prior to bidding the project and commencing construction.
7. The contractor shall use each plan in conjunction with the entire set of drawings and job specifications. Do not remove or demolish anything without verifying and coordination with all electrical, plumbing, mechanical, general trades, and utility companies as they effect the overall project.
8. Refer to architectural drawings for building dimensions.

1. The contractor is responsible for all permits required to carry out the work as shown on the Demolition Plan.
2. The contractor is responsible to verify existing utilities prior to demolition and excavation.
3. The contractor is responsible to comply with all local, state and federal regulations in the removal/demolition of hazardous materials.
4. Contractor is responsible for all registrations, permits and fees required to remove and properly dispose of all demolition materials.
5. Demolition contractor is responsible for obtaining approvals and notifications to all local, state and federal authorities.
6. The contractor shall be responsible for the disconnection of the utility services to the existing structures prior to demolition of any buildings. The contractor shall coordinate with respective utility companies prior to the removal and/or relocation of utilities.
7. The contractor shall coordinate with the utility company concerning portions of work which may be performed by the utility company's forces and any fees which are to be paid to the utility company for their services. The contractor is not responsible for paying all fees and charges.
8. The contractor is responsible for the demolition and removal of all structures, pads, walls, flumes, foundations, parking, drives, drainage structures, utilities, etc., such that the improvements shown on the remaining plans can be constructed. All facilities to be removed shall be undercut to suitable material and brought to grade with suitable, compact fill material per the specifications. The contractor is responsible for all permits involved and is responsible for removing and dumping the debris in an approved, lawful manner.
9. All existing utilities are to be removed, terminated and capped at the right-of-way. All existing meters, valves, etc. are to be removed unless otherwise noted on the plans.
10. All existing service lines for telephone, electric, sewer, and cable television services are to be removed to existing trunk lines unless otherwise noted on the plans.
11. Contractor is responsible for all costs involved in the removal or relocation of any utility. The contractor is responsible for coordination with applicable utility companies.
12. The contractor shall maintain all utility services to the existing adjacent businesses at all times. The contractor shall coordinate with the tenant and utility company for the relocation and/or removal of utilities if necessary. Services shall not be interrupted without approval from the tenant.
13. The site may be occupied by existing structures, storm lines, pavement, power poles and utilities. It is the contractor's responsibility to contact all utility companies that may have utilities on the site to get a determination if any utilities existing will be impacted. The contractor is responsible for determining if the utilities should be abandoned or removed.
14. All areas where pavement, structure slabs, foundations, utilities, conduits, and/or utility structures have been removed shall be backfilled with select backfill material. All select backfill material shall be placed and compacted per the requirements of specifications and the owners geotechnical engineer.
15. All existing fences, signs, power poles, and light poles located on-site shall be demolished and removed unless otherwise noted.
16. Existing cast in place septic tanks (if found on-site) shall be pumped by a licensed contractor. The septic tank shall then be removed and the area backfilled per the project specifications unless otherwise noted. All work shall be in accordance with health department requirements.
17. Contractor is responsible for walking site and determining extents of demolition work prior to bid date.
18. Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
19. Prior to any work on-site, the contractor shall contact the one call system. The contractor is responsible for all utility removals whether located by the one call system or not.
20. Contractor shall coordinate removal of existing electrical services on-site with the power company. Power company is responsible for the disconnection and removal of existing services unless otherwise noted.
21. Limits of pavement shown to be removed are approximate and for reference only. Contractor shall field verify the limits of pavement to determine the extent of the existing pavement to be removed.
22. If not shown on the demolition drawings, the contractor shall remove all existing materials as necessary to complete all new work as required by other portions of the contract documents.
23. Salvage rights for all demolished materials shall be first given to the owner. Any materials not retained by the owner shall be removed from the site and disposed of by the contractor at the contractor's expense.
24. Refer to survey for limits and boundary of property.

1. The contractor shall construct the silt fencing as shown on the Erosion Control Plan at the perimeter of the disturbed area prior to land clearing activities.
2. Land disturbing activities shall be kept to a minimum and will not extend beyond the limits shown.
3. Prior to construction, the erosion and sediment control measures shown on the Erosion Control Plan shall be in place. Clearing and grubbing operations will be engaged in only as necessary to allow the placement of erosion and sediment control measures as shown until all such measures are in place.
4. Contractor shall install temporary construction entrance prior to any earthwork operations.
5. Contractor shall maintain silt fences for the duration of the project until accepted by the owner at no expense to owner.
6. Contractor shall maintain erosion control facilities during the entire construction period. Facilities are not to be removed until completion of the project and the site is stabilized.
7. Silt fences shall be cleaned or replaced when trapped sediment reaches 50 percent of the above ground fence height or a lower height based on manufacturer's specifications.
8. Sediment and erosion control measures will be inspected on a daily basis and repaired, adjusted and maintained as needed or required by governing agencies at no additional expense to the owner to provide erosion and sediment control for the duration of construction and until all disturbed areas are stabilized.
9. Contractor shall inspect on a daily basis for needed removal of any accumulated silts, debris, or repair of damaged silt fence at no additional expense to owner.
10. All erosion control measures except the required rip rap are temporary devices. These temporary devices shall be removed prior to completion of construction once stabilization of all grassed areas are complete.
11. Additional devices may be required as deemed necessary by governing authorities.
12. All graded areas shall be stabilized with a permanent fast growing cover and/or mulch upon completion of grading operations. Completion of grading operations does not mean at the end of the project. As soon as final grades are established in an unpaired area, the contractor shall stabilize with a temporary grass or permanent sod. If a temporary grass is applied, it will be the contractor's responsibility to apply a permanent seed or sod at the proper time of year.
13. Fill slopes should be planted as soon as an area of the site is brought to final grade. Surface runoff shall be intercepted at the top of temporary and permanent slopes during construction so that water is not allowed to flow over the slope face.
14. The general contractor and the grading contractor shall review their proposed grading sequence to insure that the least amount of land possible at any one time is disturbed with out permanent stabilization.
15. Contractor shall be responsible to ensure compliance with the N.P.D.E.S. Stormwater requirements. This includes, but is not limited to, inspection requirements.
16. Contractor is responsible for repairs or damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, striping, curb, etc., and all repairs shall be equal to or better than existing conditions.

1. Boundary and topographic survey was prepared by Anytown Land Surveying, LLC dated xx/xx/xxxx.
2. Contractor shall refer to plans by architect for exact locations and dimensions of vestibule, towers, slope paving, columns, door locations, sidewalks, exit porches, ramps, precise building dimensions, and exact building utility entrance locations.
3. Contractor shall refer to plans by others for entry locations of all water, sewer service, electrical, and telephone service. Contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with the regulatory agency as to the location and tie-in locations and/or connections to their facilities.
4. Contractor shall be responsible for all relocations, including but not limited to, all utilities, storm drainage, signs, traffic signals and poles, etc. as required for all site improvements. All work shall be in accordance with governing authorities specifications and shall be approved by such.
5. Existing utility lines shown are approximate locations only. The contractor shall field verify all existing utility line locations prior to any construction. Any deviations from the design locations shall be reported to the owner or engineer prior to construction.
6. See Cover Sheet for list of utility companies and contact persons.
7. All necessary permits and approvals from agencies governing the construction of this work shall be secured prior to beginning construction.
8. The contractor is responsible for the protection of all areas indicated to remain undisturbed or to remain as buffers, all property corners, and coordination of a registered land surveyor to replace all pins eliminated or damaged during construction.
9. Existing structures within construction limits are to be abandoned, removed, or relocated per plans. All cost shall be included in base bid.
10. Contractor is responsible for repairs or damage to any existing improvements during construction, such as but not limited to, drainage, utilities, pavement, striping, curb, etc. and all repairs shall be equal to or better than existing conditions.
11. The contractor shall coordinate the installation of all underground utilities with his work. All underground utilities (water, sanitary sewer, storm sewer, electrical conduit, irrigation systems, and any other miscellaneous utilities) shall be in place prior to the placement of base course material, and the placement of any appropriate soil stabilization technique.
12. Contractor shall provide bollards for protection of all above ground utilities and appurtenances adjacent to drive areas.
13. Contractor shall match existing pavement in grade and alignment.
14. Construction shall comply with all governing codes and improvements shall be constructed to the same.
15. All work shall be done in accordance with the plans and specifications.
16. All work and material shall comply with all regulatory agency's regulations and codes and O.S.H.A. standards.

1. All dimensions shown to building are to face of structural CMU.
2. All curb dimensions are to the face of gutter of curb unless otherwise noted

CONTRACTOR SHALL MAINTAIN A MINIMUM GROUND COVER OF 3' OVER UNDERGROUND STORAGE TANKS.

- Topographic information was taken from a topographic survey by Bloomster Land Surveyors. If contractor does not accept the existing topography as shown on the plans, without exception, he shall have made, at his expense, a topographic survey by a registered land surveyor and submit it to the owner for review.
- Existing contours interval is shown at one foot (1').
- The contractor is specifically cautioned that the location and/or elevation of existing utilities (above and below ground) as shown on these plans is based on record on either the various utility companies, visual observations at the site, existing surveys and/or where possible, measurements taken in the field. RaceTrac Petroleum does not guarantee that existing utility locations are exact and the information is not to be relied on as being exact or complete. It shall be the responsibility of the contractor to determine the exact locations of existing utilities (above and below ground) before beginning any construction. The contractor must call the appropriate utility company at least forty-eight hours (48 hrs) before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
- It shall be the responsibility of the contractor to notify owner and/or engineer of any utility conflicts with the proposed improvements shown on the plans.
- All cut or fill slopes shall be X:1 or flatter unless otherwise noted.
- Contractor shall verify horizontal and vertical location of all existing storm sewer structures, pipes, and all utilities prior to construction.
- Clearing and grubbing limits shall include all areas disturbed by grading operations. Contractor is responsible for the protection of all undisturbed areas, all property corners, and coordination of a registered land surveyor to replace all pins eliminated or damaged during construction.
- Existing drainage structures to remain are to be inspected and repaired as needed, and existing pipes to be cleaned out to remove all silts and debris.
- If any existing structures to remain are damaged during construction, it shall be the contractors responsibility to repair and/or replace the existing structure as necessary to return it to existing conditions or better.
- Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, striping, curbs, etc. and all repairs shall be equal to or better than existing conditions.
- All unsurfaced areas in disturbed by grading operations shall receive four inches (4") of topsoil, seed, mulch, water, etc. Contractor shall grass disturbed areas in accordance with the landscape plan and City/County specifications until healthy stand of grass is obtained.
- Proposed spot elevations represent finished pavement or ground surface grade unless otherwise noted on drawings.
- Contractor shall trim, tack, and match existing pavement at locations where new pavement meets existing pavement.
- All grading operations shall be staked by a registered civil engineer or licensed land surveyor approved by the owner.
- Reference structural specifications and geotechnical report for building pad preparation and compaction.
- Contractor to review boring logs provided by RaceTrac.
- All storm pipe entering structures shall be grouted to assure connection at structure is watertight.
- All storm sewer manholes in paved areas shall be flush with pavement, and shall have traffic bearing ring and covers.
- Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
- The contractor shall adhere to all terms and conditions as outlined in the General N.P.D.E.S. Permit for storm water discharge associated with construction activities.
- Contractor shall assure positive drainage away from building and for all natural and paved areas.
- All retaining walls to be protected during backfill by contractor. This includes but is not limited to, providing and installing proper bracing during backfill being places adjacent to retaining walls.

1. ALL PIPES ENTERING STORM SEWER STRUCTURES SHALL BE SEALED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
2. REFERENCE DETAIL SHEETS FOR STORM WATER DETAILS.
3. THE CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS ON ALL RUNS OF PIPE THAT DO NOT UTILIZE CONCRETE PIPE. BUOYANCY CALCULATIONS SHALL BE PREPARED, SIGNED, AND SEALED BY A REGISTERED ENGINEER. SHALL REPRESENT ACTUAL CONDITIONS, AND SHALL DEMONSTRATE THAT THE PIPE UTILIZED WILL NOT BECOME BUOYANT UNDER ANY CONDITIONS. THE CONTRACTOR MAY ELECT TO PROVIDE A RESTRAINING SYSTEM, DESIGNED BY A REGISTERED ENGINEER, ADEQUATE TO RESIST BUOYANT FORCES WHERE NECESSARY.

1. DRAINAGE STRUCTURES SHALL BE PRECAST OR CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH DOT REQUIREMENTS AS FOLLOWS:

- A. AREA INLETS - CB-01 OR PC-01 (PIPE SIZE 36" AND SMALLER) ALL INLET FRAMES AND GRATES SHALL BE VULCAN FOUNDRY CORP. CATALOG V-4863 OR EQUAL.
- B. TRENCH DRAINS SHALL BE AQUADUCT. PROVIDED BY RACETRAC AND INSTALLED BY GENERAL CONTRACTOR.

CONTRACTOR TO INCLUDE FOR ALL SECONDARY CONDUITS (CONDUIT ONLY) DEPICTED ON UTILITY PAGE IN BASE BID. INCHES FOR LENGTH UP POLE APPROX 30FT. WIRE IS ASSUMED TO BE BY UTILITY DEPARTMENT. SECONDARY WIRE WILL BE PROVIDED IN BID AS AN ALTERNATE PRICE IN L.F. AND HANDLED AS A CHANGE ORDER IF REQUIRED.

CONTRACTOR TO INCLUDE TWO (2) 1" CONDUIT TO BOTH SIGN LOCATIONS.

- A. ONE (1) 1" CONDUIT IS FOR ELECTRICAL.
- B. ONE (1) 1" CONDUIT IS FOR COMMUNICATION.
- C. CONTRACTOR IS RESPONSIBLE TO PROVIDE CAT 5 HOME-RUN BETWEEN PRICE SIGN AND FINAL DESTINATION INSIDE THE BUILDING. FINAL DESTINATION TO BE DETERMINED BY RACETRAC CONSTRUCTION MANAGER DURING CONSTRUCTION.

CONTRACTOR TO SEE SHEET SD1 FOR AIRVAC SERVICE STATION ELECTRICAL REQUIREMENTS.

- A. CONTRACTOR TO PROVIDE SMALL CONCRETE UTILITY VAULTS FOR UTILITY JUNCTIONS. CONCRETE VAULT TO BE FLUSH WITH CONCRETE OR LANDSCAPING.
- B. AIRVAC SERVICE STATION ELECTRICAL CONDUITS TO BE 1".
- C. INCLUDE A WEATHER PROOF WIRE BOX INSIDE OF THE CONCRETE VAULT. LEAVE THREE (3) PULL STRINGS INSIDE CONDUIT FOR FUTURE USE.

- Standard duty pavement areas shall be portland cement concrete. Details of the standard duty concrete pavement are provided on detail sheets.
- Area over tanks, dumpster pad, and the approach in front of the dumpster to be eight inches (8") thick 4000 PSI w/ fiber mesh and number five (5) rebars placed eighteen inches (18") on center each way.
- Notify owner 3 days prior to pour of initial section of driveway paving. Racetrac representative to approve initial pour.
- Testing of materials required for the construction of the paving improvements shall be performed by an agency, approved by the owner for testing materials. It shall be the contractor's responsibility to ensure, by the standard testing procedures, that the work constructed meets the requirements of the project specifications.
- All signs, pavement markings, and other traffic control devices shall conform to the "manual on uniform traffic control devices" latest edition.
- Traffic control shall be in accordance with the state dot standard specifications for roads and bridges. The contractor shall review all traffic control devices with dot prior to installation.
- Contractor shall furnish and install all pavement markings for parking stalls, handicapped parking symbols, and miscellaneous striping within parking lot and around building.
- See Irrigation Plans and MEP Plans prior to paving for location of proposed sleeving and conduits. Extra conduit shall be placed under driveways for future use.
- All handicap ramping, striping, and pavement markings shall conform to the americans with disabilities act of 1990.
- Contractor to submit a pouring plan to the construction manager prior to the beginning of any paving work.**
- Contractor shall install slab construction joints at the end of a days pour. Slab contraction and slab construction joints are to be installed in accordance with the concrete specifications as shown on the RaceTrac Standard Details, sheets SD3 and SD4.**
- Paving contractor to coordinate with building contractor on the construction and paving near the screening walls and the dumpster pads.
- All discrepancies found by contractor related to underground utilities or other appurtenances shall be resolved to the satisfaction of owner and engineer prior to placement of any paving. Contractor to ensure positive drainage from the proposed buildings and no ponding in subgrade of areas to be paved, and notify owner and engineer if any discrepancies are found prior to installation of any paving.
- Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
- All joints shall extend through the curb.
- Compaction shall be done in accordance with the recommendations of the geotechnical report.
- All pavement to be sloped for positive drainage.

1. The Contractor is specifically cautioned that the location and/or elevation of existing utilities (above and below ground) as shown on these plans is based on record on either the various utility companies, visual observations at the site, existing surveys and/or where possible, measurements taken in the field. Racetrack Petroleum does not guarantee that existing utility locations are exact and the information is not to be relied on as being exact or complete. It shall be the responsibility of the contractor to determine the exact locations of existing utilities (above and below ground) before beginning any construction. The contractor must call the appropriate utility company at least forty-eight hours (48 hrs) before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
2. Contractor shall verify horizontal and vertical location of all existing storm sewer structures, pipes, and all utilities prior to construction. Existing utility lines shown are approximate locations only. The contractor shall field verify all existing utility line locations prior to any construction. Any deviations from the design locations shall be reported to the owner and engineer of record prior to construction.
3. Contractor to remove or relocate when applicable, all existing buildings, foundations, easements, and connecting improvements, drain pipes, sanitary sewer pipe, power poles and guy wires, water meters and water lines, wells, sidewalks, sign poles, underground gas, septic tanks, and asphalt, shown and not shown, within construction limits and where needed, to allow for fill material, unless otherwise denoted, to be removed as unclassified excavation.
4. Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, utilities, pavement, striping, curbs, etc. Repairs shall be equal to or better than existing conditions.
5. Contractor shall refer to architects plans and specifications for actual location of all utility entrances to include sanitary sewer laterals, domestic and fire protection water service, electrical, and telephone. Contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with city utility requirements as to locations and scheduling for tie-ins/connections prior to connecting existing facilities.
6. Contractor shall coordinate with architectural plans, power company, & telephone company for actual routing of power and telephone service to building.
7. See detail sheets for backfilling and compaction requirements on utility trenches.
8. Contractor shall comply to the fullest extent with the latest standard of Ohio directives or any other agency having jurisdiction for excavation and trenching procedures. The contractor shall use support systems, sloping, benching, and other means of protection. This to include but not limited to, access and egress from all excavation and trenching. The contractor is responsible for complying with the performance criteria for OSHA.
9. Contractor shall coordinate with other utilities to assure proper depth and prevent any conflict of utilities.
10. The minimum horizontal separation between the closest two points of the water and sewer line is ten (10) feet, or minimum vertical separation between the closest two points of the water and sewer line is eighteen (18) inches.
11. Contractor shall grout around all pipe entrances to sanitary sewer manholes with non-shrinking grout to assure connection is water tight.
12. Contractor shall on all utilities, coordinate inspection with the appropriate authorities prior to covering trenches at installation.
13. The contractor shall conduct all required tests to the satisfaction of the respective utility companies and owners inspecting authorities.
14. Site contractor to coordinate proposed reconnection of all utilities with Architectural Plans as well as utility companies and building contractor. The general contractor is responsible for any and all expenses that result from delayed or failed test during any phase of the construction process. This includes fees incurred through rescheduling of any racetrack vendors or equipment to accommodate.
15. All water and sanitary sewer crossings to be perpendicular with a full stick of ductile iron pipe in the sewer lines at the crossing.
16. Contractor to coordinate with signage contractor and architect for exact location of signage, required electrical conduits, foundations, etc.
17. See cover sheet for list of utility companies and contact persons.

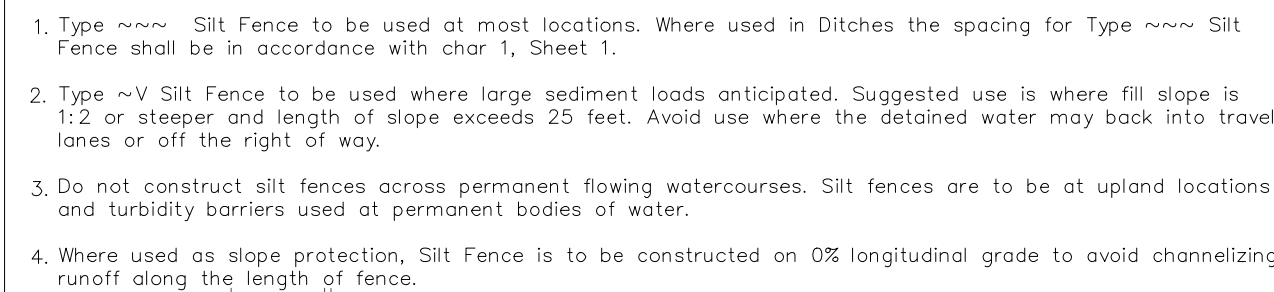
GENERAL REQUIREMENTS		DATE	
RACETRAC MARKET		SCALE	
10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County		AS SHOWN	
DRAWING NAME:		DRAWN-BY:	
FJ180019-NOTES.dwg		MJL	
GR1		DATE	
SHEET NO.		VERSION	

RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SE
SUITE 900 ATLANTA, GA 30339
(770) 431-7600

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THOMAS
ENGINEERING GROUP
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125 W. MOUNTAIN RD. SUITE 206
JUPITER, FL 33458
TEL: (561) 746-1000
FAX: (561) 253-7273
www.ThomasEngineeringGroup.com

FLORIDA BOARD OF PROFESSIONAL ENGINEERS
No. 68345
BRANDON CULMER
PROFESSIONAL ENGINEER
STATE OF FLORIDA



- NOTES**
1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
 2. ALL EXISTING UTILITIES SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH COUNTY AND LOCAL UTILITY COMPANY REQUIREMENTS. ALL DEMOLITION DEBRIS TO BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
 3. CONTRACTOR SHALL REFER TO CONSTRUCTION PHASING PLANS FOR ORDER OF REMOVAL OF ANY UTILITIES AND/OR STRUCTURES.

THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY:
BLOOMSTER PROFESSIONAL LAND SURVEYORS, INC.
641 NORTHEAST SPENCER STREET,
JENSEN BEACH, FL, 34957
DATED: 09/11/16

2. THOMAS ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION.

3. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO THOMAS ENGINEERING GROUP, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.

4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FORTO:

A. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4270.

B. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.

C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.

D. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE.

E. PROTECTING AND MAINTAINING IN OPERATION, ALL ACTIVE SYSTEM THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.

F. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.

G. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS AND SCHEDULES AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.

H. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE PROPERLY REMOVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOILS, ASBESTOS, OR OTHER REFERENCED OR IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE OWNER'S ENVIRONMENTAL CONSULTANT. THE OWNER OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE.

5. SAFETY OR SUPERVISION, CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY.

6. TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE, THE DEMOLITION CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRS OR DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.

7. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.

8. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE PROJECT. THE CONTRACTOR IS ALSO RESPONSIBLE PLACE ALL EXISTING AND REQUIRED SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.

9. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS-OF-WAY.

10. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM INTERFERENCE WITH ROADWAY TRAVEL, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.

11. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.

12. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE CLEANED AS NECESSARY. DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS, THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.

13. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.

14. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THE MINIMUM REQUIREMENTS THAT ARE REQUIRED TO BE COMPLIED WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.

15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL CITY, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.

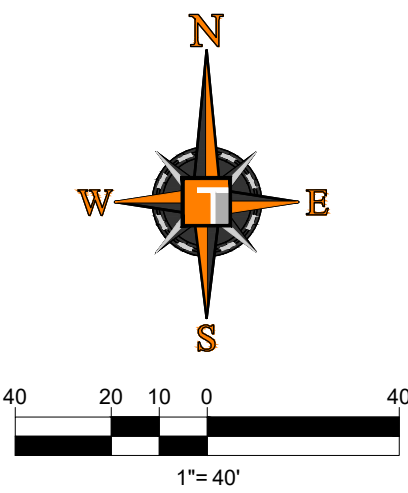
16. CONTRACTOR SHALL REFER TO LANDSCAPING PLAN FOR TREE REMOVAL.

17. SOIL STABILIZATION SUCH AS SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSION GENERATED BY CONSTRUCTION ACTIVITIES SHALL BE COMPLETED PROGRESSIVELY AS VEGETATION REMOVAL OCCURS. THE PROPOSED AREA OF SOIL STABILIZATION SHALL BEGIN WITH THE START OF CONSTRUCTION OR SOIL STABILIZATION SHALL BEGIN WITHIN 15 DAYS, AND SHALL BE COMPLETE WITHIN 30 DAYS OF VEGETATION REMOVAL WITHIN A GIVEN AREA OF THE SITE.

18. DISPOSAL OF LAND CLEARING DEBRIS SHALL BE CHIPPED ONSITE AND/OR DELIVERED TO APPROVED MARTIN COUNTY CHIPPING FACILITY. ALL NONVEGETATIVE DEBRIS SHALL BE DISPOSED OF AT AN APPROVED LANDFILL SITE.



CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '83
TO COVERT TO NGVD ADD 1.50



- STRIPING KEY**
A = 6" SOLID WHITE
B = 8" SOLID WHITE
C = 12" SOLID WHITE
D = 18" SOLID WHITE
E = 24" SOLID WHITE
F = 6" SKIP WHITE TYP (10'-30")
G = 6" SKIP WHITE TYP (6'-10")
H = 6" SKIP WHITE TYP (2'-4")
I = 6" SOLID YELLOW
J = 18" SOLID YELLOW
K = 6" DOUBLE YELLOW
L = 6" SKIP YELLOW TYP (10'-30")
M = 6" SKIP YELLOW TYP (6'-10")
N = 6" SKIP YELLOW TYP (2'-4")
P=RPM BI-DIRECTIONAL AMBER/AMBER
R = FDP WHITE
S = FDP YELLOW
T = RPM BI-DIRECTIONAL WHITE/RED
U = RPM BI-DIRECTIONAL RED/YELLOW
V = RPM BI-DIRECTIONAL BLUE/BLUE

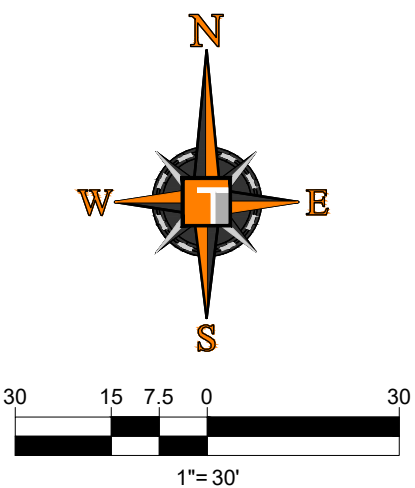
- GENERAL NOTES:
1. Damages to loops or any signal equipment caused by construction of this project must be repaired or replaced to original or better condition at no cost to Palm Beach County.
 2. Contractor shall contact Palm Beach County Traffic Operations at 561-233-3900 forty-eight (48) hours prior to construction if work is being done within 10 feet of any signal equipment.
 3. All construction and restoration work within Palm Beach County Right of Way shall comply with the latest edition of the FDOT Standard Index and the FDOT Standard Specifications for Road and Bridge Construction.

PAVEMENT SECTION IN RIGHT OF WAY SHALL BE AS FOLLOWS:

1" Type S-III Asphaltic Concrete
Tack Coat at 0.05 gal/sy
1.5" Type S-I Asphaltic Concrete
RC-70 Prime Coat at 0.10 gal/sy
13.5" Baserock (6" max lifts)
12" Compacted Subgrade
8" ABC-3 may be substituted for 13.5" of baserock
Both base and subbase shall be compacted to 98% Dry Density per
AASHTO T-180

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

[illegible]



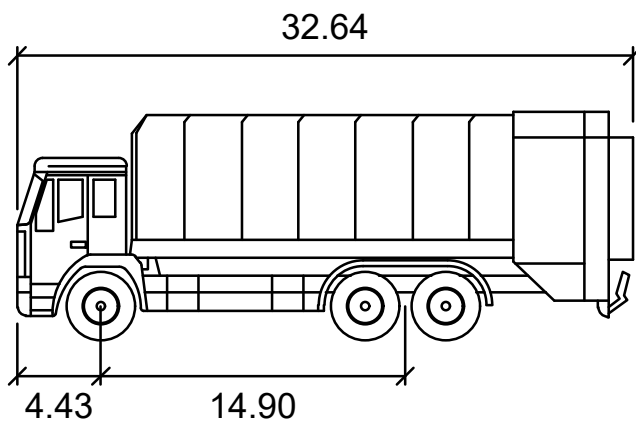
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- PAVEMENT SECTION IN RIGHT OF WAY SHALL BE AS FOLLOWS:**
- 1" Type S-III Asphaltic Concrete
 - Tack Coat at 0.05 gal/sy
 - 1.5" Type S-I Asphaltic Concrete
 - RC-70 Prime Coat at 0.10 gal/sy
 - 13.5" Base rock (6" max lifts)
 - 12" Compacted Subgrade
- 8" ABC-3 may be substituted for 13.5" of base rock
- Both base and subbase shall be compacted to 98% Dry Density per AASHTO T-180

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PAVING, GRADING AND DRAINAGE PLAN		RACETRAC MARKET		10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County		NO.		DATE	
DATE		SCALE		AS SHOWN		DRAWN-BY		MJL	
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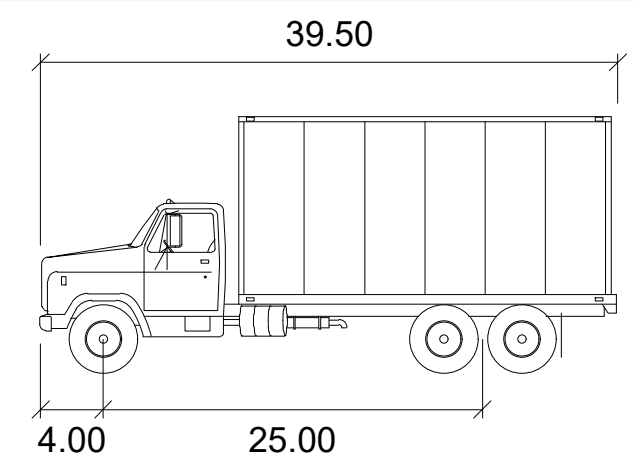
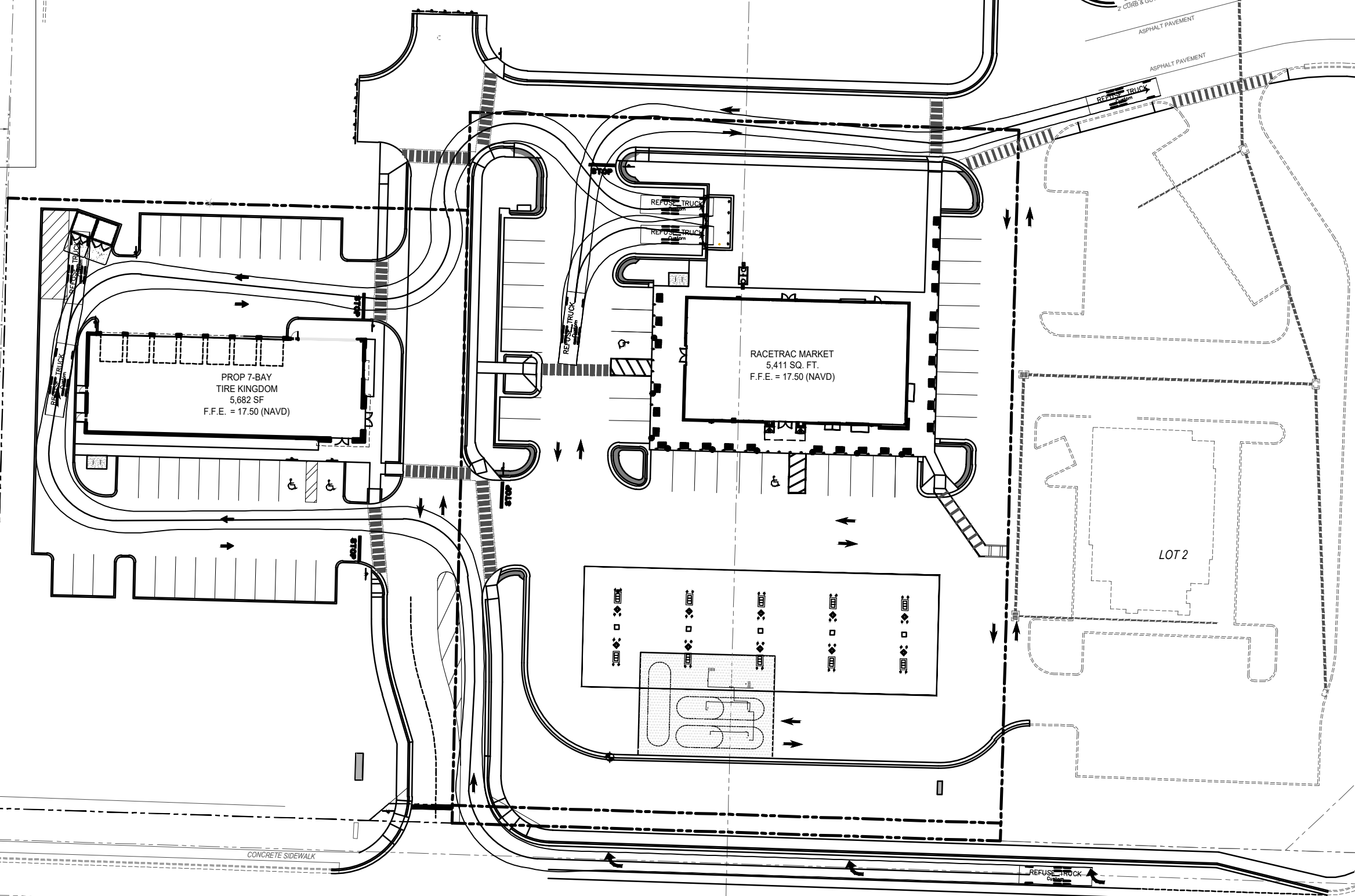
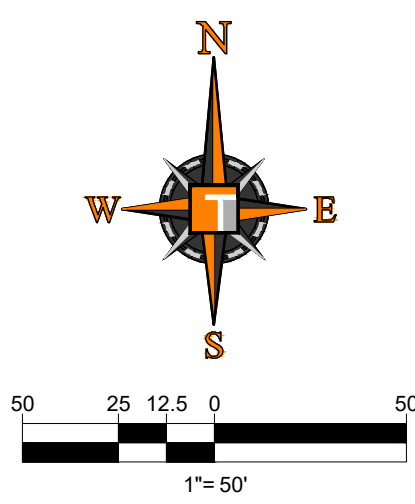


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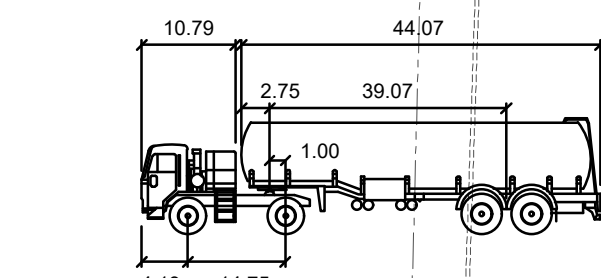
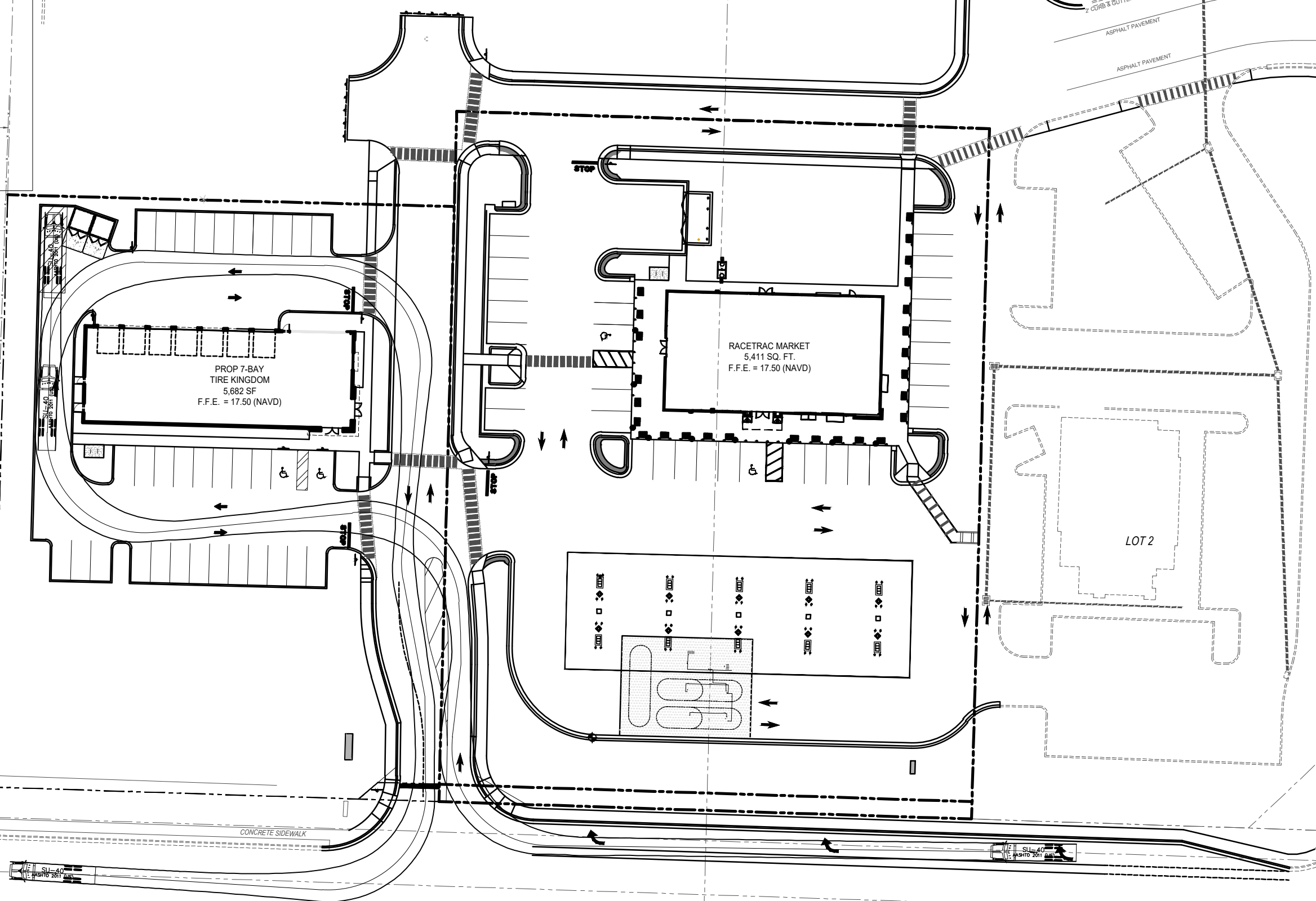
REFUSE TRUCK

	feet
Width	: 8.20
Track	: 8.20
Lock to Lock Time	: 6.0
Steering Angle	: 42.1



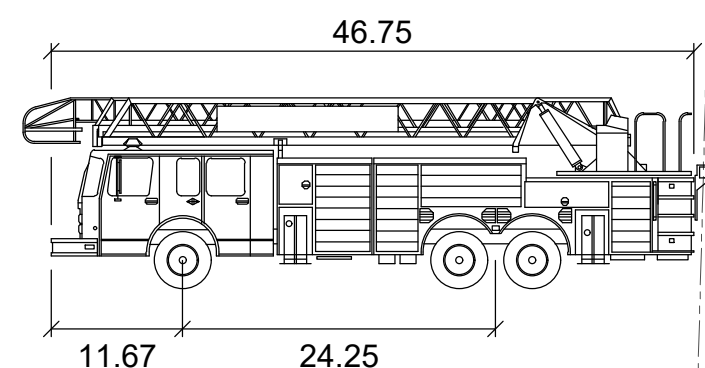
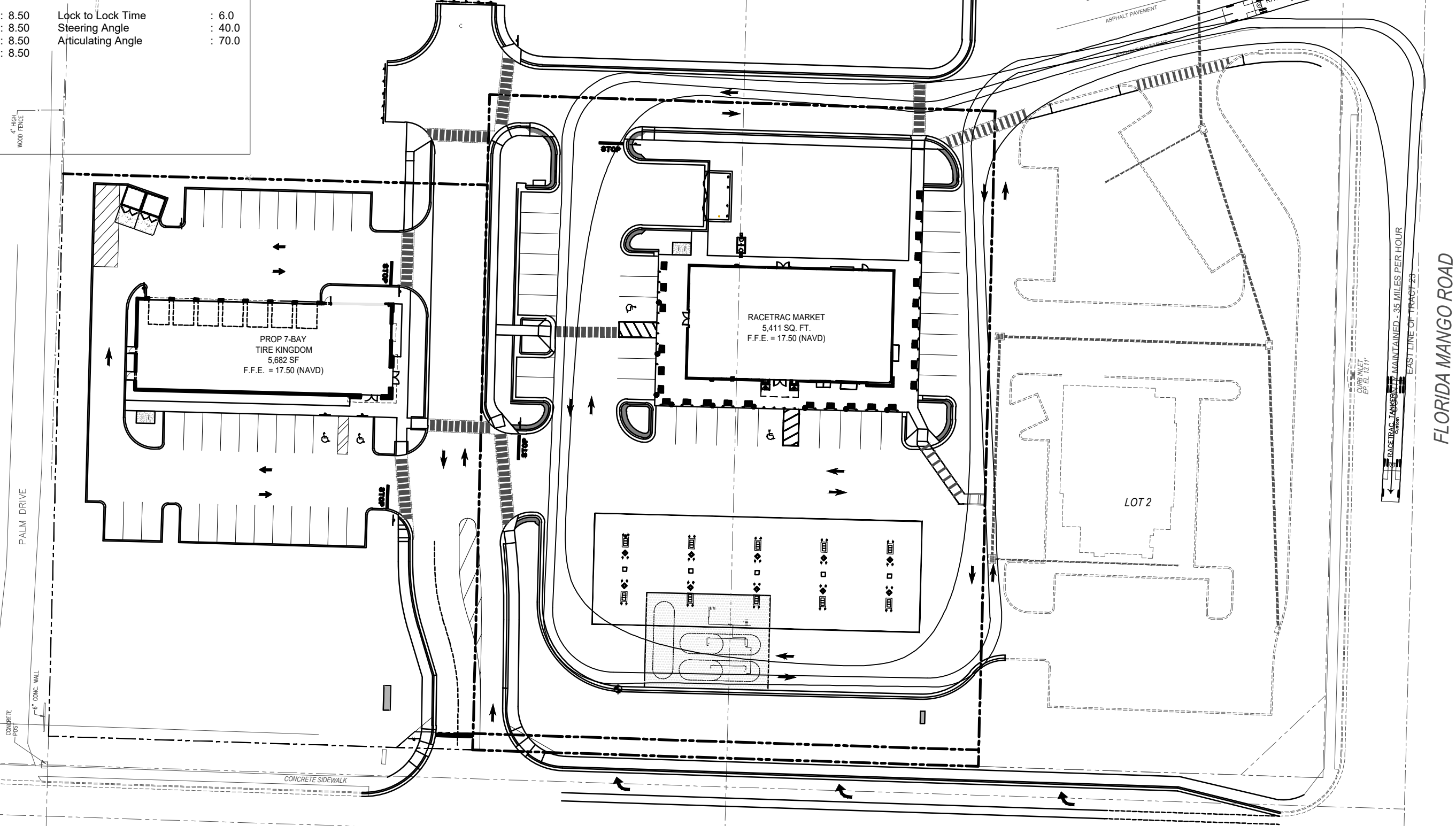
SU-40

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



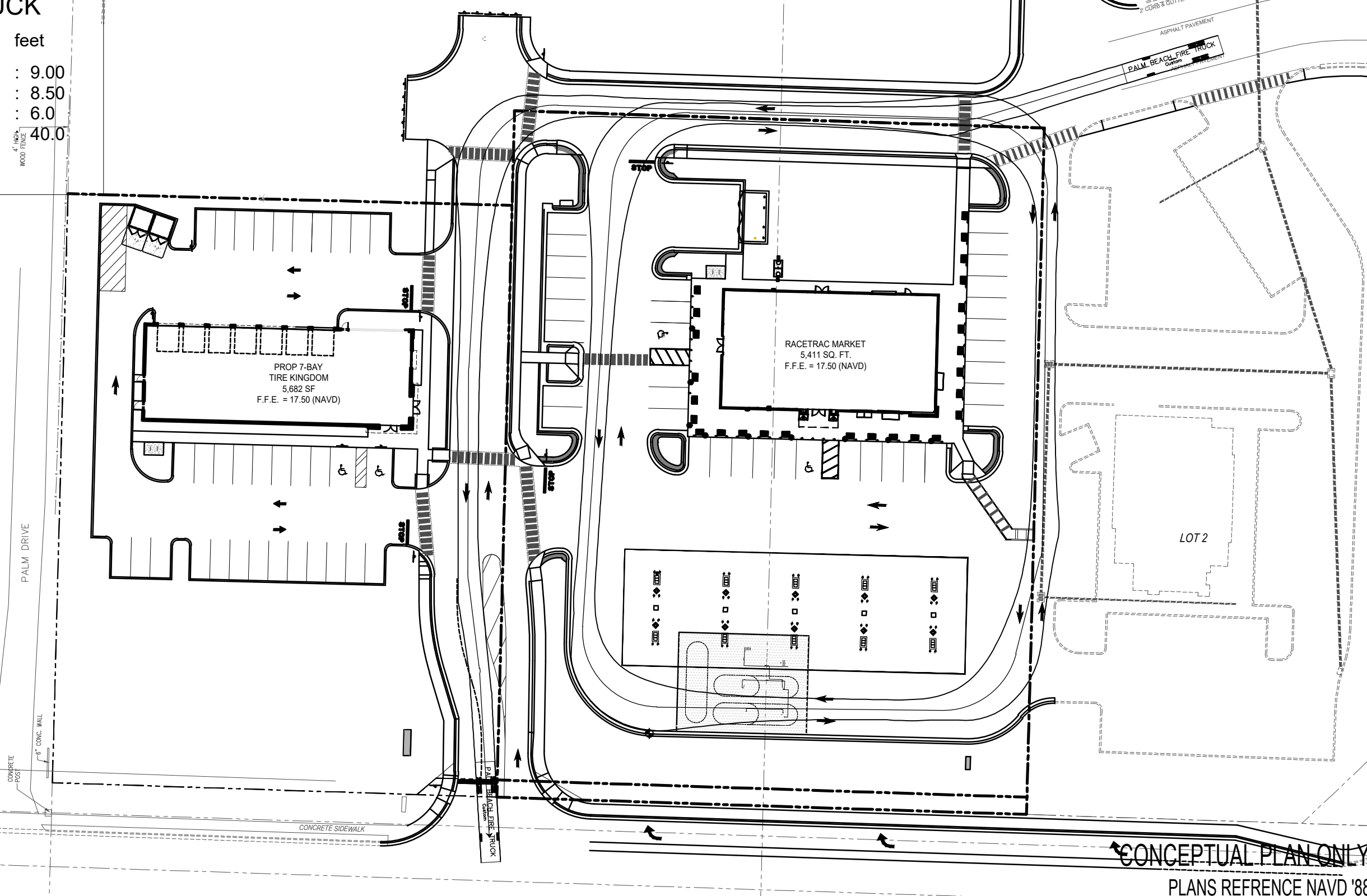
RACETRAC TANKER

	feet
Tractor Width	: 8.50
Trailer Width	: 8.50
Tractor Track	: 8.50
Trailer Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0
Articulating Angle	: 70.0



PALM BEACH FIRE TRUCK

	feet
Width	: 9.00
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0



CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

THOMAS ENGINEERS & ARCHITECTS 125 W. INDIANTOWN RD., SUITE 206 PALM SPRINGS, FLORIDA 33486 PH: (561) 253-7503 FX: (561) 253-7721 www.thomasegnaengr.com		BRANDON OLIVER No. 68345 FLORIDA PROFESSIONAL ENGINEER No. 27526 FLORIDA BOARD OF ENGINEERING		NO.	DATE
THESE PLANS ARE SUBJECT TO FEDERAL REGULATIONS AND ANY USE OF SAME WITHOUT THE EXPRESSED WRITTEN PERMISSION OF RACETRAC PETROLEUM, INC. IS PROHIBITED.		Racetrac RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SE SUITE 900 ATLANTA, GA 30339 (770) 431-7600		TRUCK ROUTES PLAN RACETRAC MARKET 10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County	
DATE SCALE DRAWN-BY DRAWING NAME: FJ180019-ROUTES.dwg		AS SHOWN MJL C4		SHEET NO. VERSION	

GENERAL CONCRETE PAVEMENT NOTES

1. REVIEW AND VERIFY ALL AS-BUILT CONDITIONS WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS AND ANY FABRICATION.

2. INDUSTRY STANDARDS GOVERNING THIS WORK ARE OF THE LATEST ISSUE AT THE DATE OF THIS DRAWING RELEASE.

3. ENSURE STORAGE, HANDLING, PREPARATION, INSTALLATION, ETC. OF ALL MATERIALS ARE IN ACCORDANCE WITH MANUFACTURER'S / VENDOR'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS.

PAVEMENT SUBGRADE AND BASE NOTES

1. ENSURE TESTING AGENCY VERIFIES THE SUBGRADE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. RECOMPACT SOFT AREAS AS DIRECTED BY THE GEOTECHNICAL ENGINEER. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THAT THE SUBGRADE HAS BEEN PROPERLY COMPACTED.

2. ENSURE TESTING AGENCY EVALUATES THE SUBGRADE PROOF-ROLLING TO BE DONE BY A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR OTHER EQUIVALENTLY WHEELED VEHICLE ACCEPTABLE TO THE TESTING AGENCY. REPAIR SOFT AREAS THAT DEPRESS DEEPER THAN 1/2 INCH AS DIRECTED BY THE TESTING AGENCY. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THE SUBGRADE HAS BEEN PROOF-ROLLED AND IS ACCEPTABLE.

3. ** DO NOT PROOF-ROLL ON TOP OF OR WITHIN 5 FEET OF THE EDGE OF THE UNDERGROUND STORAGE TANK LOCATIONS.

4. AGGREGATE BASE MATERIAL:

A. COARSE AGGREGATE BASE: CRUSHER RUN WITH ROCK FINES. USE ASTM D448, NO. 467, 57 OR 67 BLEND ONLY IF NOTED OR ALLOWED.

B. FINE AGGREGATE BASE: CLEAN SCREENINGS ASTM D 448, NO. 10 WITH 6% TO 12% PASSING NO. 200 SIEVE.

5. AGGREGATE BASE MATERIAL INSTALLATION:

A. COMPACT COARSE AGGREGATE BASE TO FINAL THICKNESS SHOWN IN LAYERS NOT EXCEEDING 6 INCHES, WITH MINIMUM OF 2 PASSES PER LAYER WITH A VIBRATORY COMPACTOR.

B. COMPACT BASE TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

C. CHOK-OFF TOP SURFACE OF COARSE AGGREGATE BASE WITH FINE AGGREGATE BASE MATERIAL DUE TO THE FOLLOWING:

C.1. AS REQUIRED TO MEET FINE GRADE ELEVATION TOLERANCES SPECIFIED.

C.2. WHERE COARSE AGGREGATE BASE MATERIAL DOES NOT HAVE SUFFICIENT FINE PARTICLES TO PRODUCE A SURFACE THAT IS FREE OF EXPOSED AGGREGATE OR SURFACE VOIDS IMMEDIATELY PRIOR TO PAVEMENT INSTALLATION.

D. COMPACT FINE AGGREGATE BASE CHOK-OFF LAYER WITH A MINIMUM OF 2 PASSES WITH A VIBRATORY COMPACTOR.

E. TOP SURFACE OF BASE MATERIAL TO BE DRY, SMOOTH, FLAT, DENSE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

6. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER IMMEDIATELY PRIOR TO PLACING PAVEMENT. TESTING AGENCY TO PROVIDE LETTER REPORT TO OWNER'S REPRESENTATIVE STATING THE BASE IS ACCEPTABLE.

7. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF UNUSUAL SOIL CONDITIONS ARE FOUND.

8. PROTECT EXISTING STRUCTURES, UTILITIES, PROPERTY CORNERS, ETC. RESTORE ALL ITEMS DAMAGED, AS REQUIRED BY OWNER, AT NO COST TO OWNER OR WITHOUT EXTENSION OF CONTRACT TIME. ** DO NOT ALLOW STORED EXCAVATION MATERIAL TO DISRUPT PROPER DRAINAGE OF AREA, DAMAGE TO SURROUNDING AREAS, OR STAIN ADJACENT CONCRETE.

9. DISPOSE OF EXCAVATED MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE.

CONCRETE PAVEMENT NOTES:

1. CONFORM TO ACT 318 AND 117 FOR THE DESIGN AND PLACEMENT OF CONCRETE, REINFORCING, AND RELATED ITEMS.

2. CONFORM TO ACT 306.1 FOR COLD WEATHER CONCRETING AND ACT 305R WHEN ANY COMBINATION OF HIGH TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND VELOCITY TEND TO IMPAIR THE QUALITY OF THE CONCRETE. REJECT CONCRETE IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEGREES FAHRENHEIT (°F) OR ABOVE. PROTECT SURFACES OF EXPOSED CONCRETE FROM PRECIPITATION DAMAGE UNTIL ADEQUATE STRENGTH IS GAINED TO PREVENT DAMAGE.

3. CONFORM TO ACT 302.1R, 304R, 308, 309R AND 347R FOR CONCRETE, FORM WORK, CURING, AND RELATED ITEMS. CONFORM TO CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS FOR PLACING REINFORCING.

4. THE GEOTECHNICAL ENGINEERING REPORT INDICATES THAT THE SOILS ON-SITE HAVE A XXXXXXXX SULFATE EXPOSURE. WHERE IMPORTED FILL OR BASE MATERIALS ARE IN CONTACT WITH CONCRETE, THE SULFATE CONTENT AND EXPOSURE OF THESE MATERIALS SHALL BE ACQUIRED BY TEST. SUBMIT ALL TEST RESULTS WITH CONCRETE MIX DESIGNS. FAILURE TO PROVIDE SUPPORTING TEST RESULTS FROM AN ACCREDITED TESTING LABORATORY WILL REQUIRE THE CONCRETE MIX TO BE PROPORTIONED FOR VERY SEVERE SULFATE EXPOSURE AT NO ADDITIONAL COST OR DELAY IN THE PROJECT SCHEDULE.

5. CONCRETE SHALL BE PROPORTIONED TO MEET THE PROJECT SPECIFICATIONS AND THE MINIMUM CRITERIA ESTABLISHED IN "TABLE 4" (THIS SHEET) BASED ON THE SULFATE EXPOSURE FROM ANY ADJACENT SOILS OR FILL MATERIALS.

6. ADDITIONALLY, EXTERIOR CONCRETE EXPOSED TO FREEZING TEMPERATURES AND/OR SALT OR DEICING CHEMICALS SHALL HAVE AIR ENTRAINMENT AND THE CEMENT CONTENT APPROPRIATE FOR THE EXPECTED EXPOSURE. SEE SPECIFICATIONS FOR MORE INFORMATION.

7. CONCRETE TO MEET DURABILITY REQUIREMENTS OF ACT 301. FREEZING AND THAWING EXPOSURE CATEGORY TO BE [F0] [F1] [F2] [F3]. SULFATE EXPOSURE CATEGORY TO BE [S0] [S1] [S2] [S3]. AND CORROSION PROTECTION EXPOSURE CATEGORY TO BE [C0] [C1] [C2]. PROVIDE A MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS OF [3500 PSI] [4000 PSI] [4500 PSI] [5000 PSI] WITH MAXIMUM WATER/CEMENTITIOUS RATIO OF [0.55] [0.50] [0.45] [0.40].

8. ENSURE REINFORCING BARS CONFORM TO ASTM A615 GRADE 60, DEFORMED.

9. PROVIDE CLASS B TENSION LAP SPLICES PER ACT 318, FOR CONCRETE STRENGTH AND BAR LOCATIONS NOTED.

10. MAINTAIN FULL THICKNESS FOR DEPRESSED OR SLOPED PAVEMENTS.

11. ** DO NOT ADD WATER OR PLAIN CEMENT TO ANY PAVEMENT SURFACE DURING FINISHING OPERATIONS.

12. PERFORM NO FINISHING OPERATION WHILE WATER IS PRESENT ON PAVEMENT SURFACE.

13. STRIKE OFF CONCRETE TO REQUIRED ELEVATIONS AND IMMEDIATELY START FINISHING/PLATTING OPERATIONS. ENSURE FINISHING OPERATIONS ARE NO MORE THAN NECESSARY TO REMOVE IRREGULARITIES AND MEET SPECIFIED TOLERANCES. USE A HIGHWAY STRAIGHTEDGE 10 FOOT WIDE MAXIMUM, UNLESS OTHERWISE ALLOWED BY OWNER'S REPRESENTATIVE. IN ORDER TO CUT OFF HIGH SPOTS AND FILL IN LOW SPOTS, PERFORM FINISHING OPERATIONS NECESSARY TO ENSURE PAVEMENT WILL DRAIN WELL. UNIFORMLY FINISH SURFACE TO TEXTURE PREVIOUSLY APPROVED BY OWNER'S REPRESENTATIVE. ** DO NOT ALLOW SURFACE TO DRY DURING FINISHING OPERATIONS AND BEFORE CURING COMPOUND IS APPLIED. USE EVAPORATION RETARDANT AS NECESSARY TO PREVENT SURFACE DRYING AND PLASTIC SHRINKAGE CRACKS.

14. FOR TOLERANCES CONFORM TO ACT 117 AND ACT 347R, EXCEPT AS NOTED BELOW:

A. PAVEMENT AGGREGATE BASE FINE GRADE <0, -3/4 INCH.

B. MINIMUM PAVEMENT TOLERANCE: -3/4 INCH.

C. WHEN COMPUTING THE AVERAGE OF ALL SAMPLES, SAMPLES WITH A THICKNESS MORE THAN 3/4 INCH ABOVE THE SPECIFIED THICKNESS SHALL BE ASSUMED TO HAVE A THICKNESS OF 3/4 INCH MORE THAN THE SPECIFIED THICKNESS.

D. AVERAGE PAVEMENT THICKNESS TOLERANCE: -0.

E. THICKNESS SAMPLES ARE TO BE RANDOMLY LOCATED FROM EACH PAVEMENT PLACEMENT AND NOT EXCEED 1000 SQUARE FEET OF PAVEMENT SURFACE AREA.

15. START SAWING PAVEMENT CONTRACTION JOINTS USING A "SOFF-CUT" SAW, BLADES AND SKID PLATES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. UNLESS RAVELING OR DISLODGING OCCURS, COMPLETE SAWING OF JOINTS WITHIN THE MAXIMUM ELAPSED TIME LIMIT NOTED BELOW, BUT PREFERABLY LESS. THE SPECIFIED TIME FOR ANY ONE LOCATION STARTS WHEN FINISHING OPERATIONS ARE COMPLETE FOR THAT LOCATION. THE SPECIFIED TEMPERATURE IS THE MAXIMUM AIR TEMPERATURE IN DEGREES FAHRENHEIT (°F) THAT OCCURS WITHIN THE SPECIFIED TIME LIMIT. THE ELAPSED TIME MAY NEED TO BE SHORTENED EVEN MORE IF DRY AND OR WINDY CONDITIONS ARE PRESENT. ENSURE JOINTS ARE CLEANED AFTER SAWING AND REMAIN CLEAN UNTIL SEALED.

MAX DEGREES FAHRENHEIT (°F)

MAX ELAPSED HOURS

85 AND ABOVE

60 - 84

50 - 59

40 - 49

1

2

3

4

16. START CURING AS SOON AS CONCRETE SURFACE WILL NOT BE DAMAGED BY CURING OPERATIONS. CURE CONCRETE CONTINUOUSLY FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS.

17. ENSURE PAVEMENT SURFACE IS PROTECTED FROM EQUIPMENT SCRAPES, IMPACT ABRASIONS, STAINS, ETC. REPAIR PAVEMENT SURFACE AS DIRECTED BY OWNER'S REPRESENTATIVE. VEHICLE AND EQUIPMENT TRAFFIC IS PROHIBITED UNTIL THE COMPLETION OF PAVEMENT CURING PERIOD. ENSURE VEHICLES AND EQUIPMENT ARE DIAPERED TO PREVENT OIL OR OTHER FLUID LEAKS FROM STAINING THE PAVEMENT.

18. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PROCESS, CIVIL AND VENDOR'S DRAWINGS FOR EMBEDDED ITEMS NOT SHOWN. COORDINATE AND PLACE ALL EMBEDDED ITEMS SHOWN ON THE DRAWINGS OR REQUIRED BY ALL TRADES.

19. PRE-CONSTRUCTION MEETINGS:

A. ATTEND PRE-CONSTRUCTION MEETING TO BE SCHEDULED AT LEAST 7 DAYS BEFORE STARTING MAIN CONCRETE PAVEMENT.

B. ATTENDANCE DESIGNATED BY THE OWNER'S REPRESENTATIVE AND THE FOLLOWING: STRUCTURAL SERVICES INC. REPRESENTATIVE, TESTING AGENCY, CONTRACTOR, CONCRETE SUPPLIER (INCLUDING QUALITY CONTROL PERSONNEL), AND SUBCONTRACTORS FOR SUBGRADE AND BASE PREPARATION, REINFORCEMENT, PUMPING OR OTHER MEANS OF CONVEYING, PLACEMENT, FINISHING, SAWING, FORMWORK, AND OTHER PERTINENT PORTIONS OF WORK.

C. REPRESENTATIVES ARE TO BE PERSONNEL WHO ARE DIRECTLY INVOLVED IN PROJECT AND WHO HAVE AUTHORITY TO CONTROL WORK.

GENERAL CONCRETE PAVEMENT NOTES

1. REVIEW AND VERIFY ALL AS-BUILT CONDITIONS WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS AND ANY FABRICATION.

2. INDUSTRY STANDARDS GOVERNING THIS WORK ARE OF THE LATEST ISSUE AT THE DATE OF THIS DRAWING RELEASE.

3. ENSURE STORAGE, HANDLING, PREPARATION, INSTALLATION, ETC. OF ALL MATERIALS ARE IN ACCORDANCE WITH MANUFACTURER'S / VENDOR'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS.

PAVEMENT SUBGRADE AND BASE NOTES

1. ENSURE TESTING AGENCY VERIFIES THE SUBGRADE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. RECOMPACT SOFT AREAS AS DIRECTED BY THE GEOTECHNICAL ENGINEER. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THAT THE SUBGRADE HAS BEEN PROPERLY COMPACTED.

2. ENSURE TESTING AGENCY EVALUATES THE SUBGRADE PROOF-ROLLING TO BE DONE BY A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR OTHER EQUIVALENTLY WHEELED VEHICLE ACCEPTABLE TO THE TESTING AGENCY. REPAIR SOFT AREAS THAT DEPRESS DEEPER THAN 1/2 INCH AS DIRECTED BY THE TESTING AGENCY. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THE SUBGRADE HAS BEEN PROOF-ROLLED AND IS ACCEPTABLE.

3. ** DO NOT PROOF-ROLL ON TOP OF OR WITHIN 5 FEET OF THE EDGE OF THE UNDERGROUND STORAGE TANK LOCATIONS.

4. AGGREGATE BASE MATERIAL:

A. COARSE AGGREGATE BASE: CRUSHER RUN WITH ROCK FINES. USE ASTM D448, NO. 467, 57 OR 67 BLEND ONLY IF NOTED OR ALLOWED.

B. FINE AGGREGATE BASE: CLEAN SCREENINGS ASTM D 448, NO. 10 WITH 6% TO 12% PASSING NO. 200 SIEVE.

5. AGGREGATE BASE MATERIAL INSTALLATION:

A. COMPACT COARSE AGGREGATE BASE TO FINAL THICKNESS SHOWN IN LAYERS NOT EXCEEDING 6 INCHES, WITH MINIMUM OF 2 PASSES PER LAYER WITH A VIBRATORY COMPACTOR.

B. COMPACT BASE TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

C. CHOK-OFF TOP SURFACE OF COARSE AGGREGATE BASE WITH FINE AGGREGATE BASE MATERIAL DUE TO THE FOLLOWING:

C.1. AS REQUIRED TO MEET FINE GRADE ELEVATION TOLERANCES SPECIFIED.

C.2. WHERE COARSE AGGREGATE BASE MATERIAL DOES NOT HAVE SUFFICIENT FINE PARTICLES TO PRODUCE A SURFACE THAT IS FREE OF EXPOSED AGGREGATE OR SURFACE VOIDS IMMEDIATELY PRIOR TO PAVEMENT INSTALLATION.

D. COMPACT FINE AGGREGATE BASE CHOK-OFF LAYER WITH A MINIMUM OF 2 PASSES WITH A VIBRATORY COMPACTOR.

E. TOP SURFACE OF BASE MATERIAL TO BE DRY, SMOOTH, FLAT, DENSE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

6. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER IMMEDIATELY PRIOR TO PLACING PAVEMENT. TESTING AGENCY TO PROVIDE LETTER REPORT TO OWNER'S REPRESENTATIVE STATING THE BASE IS ACCEPTABLE.

7. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF UNUSUAL SOIL CONDITIONS ARE FOUND.

8. PROTECT EXISTING STRUCTURES, UTILITIES, PROPERTY CORNERS, ETC. RESTORE ALL ITEMS DAMAGED, AS REQUIRED BY OWNER, AT NO COST TO OWNER OR WITHOUT EXTENSION OF CONTRACT TIME. ** DO NOT ALLOW STORED EXCAVATION MATERIAL TO DISRUPT PROPER DRAINAGE OF AREA, DAMAGE TO SURROUNDING AREAS, OR STAIN ADJACENT CONCRETE.

9. DISPOSE OF EXCAVATED MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE.

CONCRETE PAVEMENT NOTES:

1. CONFORM TO ACT 318 AND 117 FOR THE DESIGN AND PLACEMENT OF CONCRETE, REINFORCING, AND RELATED ITEMS.

2. CONFORM TO ACT 306.1 FOR COLD WEATHER CONCRETING AND ACT 305R WHEN ANY COMBINATION OF HIGH TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND VELOCITY TEND TO IMPAIR THE QUALITY OF THE CONCRETE. REJECT CONCRETE IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEGREES FAHRENHEIT (°F) OR ABOVE. PROTECT SURFACES OF EXPOSED CONCRETE FROM PRECIPITATION DAMAGE UNTIL ADEQUATE STRENGTH IS GAINED TO PREVENT DAMAGE.

3. CONFORM TO ACT 302.1R, 304R, 308, 309R AND 347R FOR CONCRETE, FORM WORK, CURING, AND RELATED ITEMS. CONFORM TO CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS FOR PLACING REINFORCING.

4. THE GEOTECHNICAL ENGINEERING REPORT INDICATES THAT THE SOILS ON-SITE HAVE A XXXXXXXX SULFATE EXPOSURE. WHERE IMPORTED FILL OR BASE MATERIALS ARE IN CONTACT WITH CONCRETE, THE SULFATE CONTENT AND EXPOSURE OF THESE MATERIALS SHALL BE ACQUIRED BY TEST. SUBMIT ALL TEST RESULTS WITH CONCRETE MIX DESIGNS. FAILURE TO PROVIDE SUPPORTING TEST RESULTS FROM AN ACCREDITED TESTING LABORATORY WILL REQUIRE THE CONCRETE MIX TO BE PROPORTIONED FOR VERY SEVERE SULFATE EXPOSURE AT NO ADDITIONAL COST OR DELAY IN THE PROJECT SCHEDULE.

5. CONCRETE SHALL BE PROPORTIONED TO MEET THE PROJECT SPECIFICATIONS AND THE MINIMUM CRITERIA ESTABLISHED IN "TABLE 4" (THIS SHEET) BASED ON THE SULFATE EXPOSURE FROM ANY ADJACENT SOILS OR FILL MATERIALS.

6. ADDITIONALLY, EXTERIOR CONCRETE EXPOSED TO FREEZING TEMPERATURES AND/OR SALT OR DEICING CHEMICALS SHALL HAVE AIR ENTRAINMENT AND THE CEMENT CONTENT APPROPRIATE FOR THE EXPECTED EXPOSURE. SEE SPECIFICATIONS FOR MORE INFORMATION.

7. CONCRETE TO MEET DURABILITY REQUIREMENTS OF ACT 301. FREEZING AND THAWING EXPOSURE CATEGORY TO BE [F0] [F1] [F2] [F3]. SULFATE EXPOSURE CATEGORY TO BE [S0] [S1] [S2] [S3]. AND CORROSION PROTECTION EXPOSURE CATEGORY TO BE [C0] [C1] [C2]. PROVIDE A MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS OF [3500 PSI] [4000 PSI] [4500 PSI] [5000 PSI] WITH MAXIMUM WATER/CEMENTITIOUS RATIO OF [0.55] [0.50] [0.45] [0.40].

8. ENSURE REINFORCING BARS CONFORM TO ASTM A615 GRADE 60, DEFORMED.

9. PROVIDE CLASS B TENSION LAP SPLICES PER ACT 318, FOR CONCRETE STRENGTH AND BAR LOCATIONS NOTED.

10. MAINTAIN FULL THICKNESS FOR DEPRESSED OR SLOPED PAVEMENTS.

11. ** DO NOT ADD WATER OR PLAIN CEMENT TO ANY PAVEMENT SURFACE DURING FINISHING OPERATIONS.

12. PERFORM NO FINISHING OPERATION WHILE WATER IS PRESENT ON PAVEMENT SURFACE.

13. STRIKE OFF CONCRETE TO REQUIRED ELEVATIONS AND IMMEDIATELY START FINISHING/PLATTING OPERATIONS. ENSURE FINISHING OPERATIONS ARE NO MORE THAN NECESSARY TO REMOVE IRREGULARITIES AND MEET SPECIFIED TOLERANCES. USE A HIGHWAY STRAIGHTEDGE 10 FOOT WIDE MAXIMUM, UNLESS OTHERWISE ALLOWED BY OWNER'S REPRESENTATIVE. IN ORDER TO CUT OFF HIGH SPOTS AND FILL IN LOW SPOTS, PERFORM FINISHING OPERATIONS NECESSARY TO ENSURE PAVEMENT WILL DRAIN WELL. UNIFORMLY FINISH SURFACE TO TEXTURE PREVIOUSLY APPROVED BY OWNER'S REPRESENTATIVE. ** DO NOT ALLOW SURFACE TO DRY DURING FINISHING OPERATIONS AND BEFORE CURING COMPOUND IS APPLIED. USE EVAPORATION RETARDANT AS NECESSARY TO PREVENT SURFACE DRYING AND PLASTIC SHRINKAGE CRACKS.

14. FOR TOLERANCES CONFORM TO ACT 117 AND ACT 347R, EXCEPT AS NOTED BELOW:

A. PAVEMENT AGGREGATE BASE FINE GRADE <0, -3/4 INCH.

B. MINIMUM PAVEMENT TOLERANCE: -3/4 INCH.

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E. THICKNESS SAMPLES ARE TO BE RANDOMLY LOCATED FROM EACH PAVEMENT PLACEMENT AND NOT EXCEED 1000 SQUARE FEET OF PAVEMENT SURFACE AREA.

15. START SAWING PAVEMENT CONTRACTION JOINTS USING A "SOFF-CUT" SAW, BLADES AND SKID PLATES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. UNLESS RAVELING OR DISLODGING OCCURS, COMPLETE SAWING OF JOINTS WITHIN THE MAXIMUM ELAPSED TIME LIMIT NOTED BELOW, BUT PREFERABLY LESS. THE SPECIFIED TIME FOR ANY ONE LOCATION STARTS WHEN FINISHING OPERATIONS ARE COMPLETE FOR THAT LOCATION. THE SPECIFIED TEMPERATURE IS THE MAXIMUM AIR TEMPERATURE IN DEGREES FAHRENHEIT (°F) THAT OCCURS WITHIN THE SPECIFIED TIME LIMIT. THE ELAPSED TIME MAY NEED TO BE SHORTENED EVEN MORE IF DRY AND OR WINDY CONDITIONS ARE PRESENT. ENSURE JOINTS ARE CLEANED AFTER SAWING AND REMAIN CLEAN UNTIL SEALED.

MAX DEGREES FAHRENHEIT (°F)

MAX ELAPSED HOURS

85 AND ABOVE

60 - 84

50 - 59

40 - 49

1

2

3

4

16. START CURING AS SOON AS CONCRETE SURFACE WILL NOT BE DAMAGED BY CURING OPERATIONS. CURE CONCRETE CONTINUOUSLY FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS.

17. ENSURE PAVEMENT SURFACE IS PROTECTED FROM EQUIPMENT SCRAPES, IMPACT ABRASIONS, STAINS, ETC. REPAIR PAVEMENT SURFACE AS DIRECTED BY OWNER'S REPRESENTATIVE. VEHICLE AND EQUIPMENT TRAFFIC IS PROHIBITED UNTIL THE COMPLETION OF PAVEMENT CURING PERIOD. ENSURE VEHICLES AND EQUIPMENT ARE DIAPERED TO PREVENT OIL OR OTHER FLUID LEAKS FROM STAINING THE PAVEMENT.

18. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PROCESS, CIVIL AND VENDOR'S DRAWINGS FOR EMBEDDED ITEMS NOT SHOWN. COORDINATE AND PLACE ALL EMBEDDED ITEMS SHOWN ON THE DRAWINGS OR REQUIRED BY ALL TRADES.

19. PRE-CONSTRUCTION MEETINGS:

A. ATTEND PRE-CONSTRUCTION MEETING TO BE SCHEDULED AT LEAST 7 DAYS BEFORE STARTING MAIN CONCRETE PAVEMENT.

B. ATTENDANCE DESIGNATED BY THE OWNER'S REPRESENTATIVE AND THE FOLLOWING: STRUCTURAL SERVICES INC. REPRESENTATIVE, TESTING AGENCY, CONTRACTOR, CONCRETE SUPPLIER (INCLUDING QUALITY CONTROL PERSONNEL), AND SUBCONTRACTORS FOR SUBGRADE AND BASE PREPARATION, REINFORCEMENT, PUMPING OR OTHER MEANS OF CONVEYING, PLACEMENT, FINISHING, SAWING, FORMWORK, AND OTHER PERTINENT PORTIONS OF WORK.

C. REPRESENTATIVES ARE TO BE PERSONNEL WHO ARE DIRECTLY INVOLVED IN PROJECT AND WHO HAVE AUTHORITY TO CONTROL WORK.

TABLE A (SEE CONCRETE PAVEMENT NOTE #5)

SULFATE EXPOSURE	WATER SOLUBLE SULFATE (SO4) IN WATER PPM	SULFATE (SO4) IN WATER PPM	PORTLAND CEMENT TYPE	MAXIMUM W/C RATIO	CONCRETE PAVEMENTS
NEGLIGIBLE	0.00 < SO4 < 0.10	0 < SO4 < 150	I	0.55	3500
MODERATE	0.10 < SO4 < 0.20	150 < SO4 < 1500	II	0.50	4000
SEVERE	0.20 < SO4 < 2.00	1500 < SO4 < 10,000	V	0.45	4500
VERY SEVERE	SO4 > 2.00	SO4 > 10,000	V PLUS POZZOLAN	0.40	5000

NOTE TO CIVIL ENGINEERING COMPANY

TYPICALLY USE "MODERATE" EXPOSURE FROM TABLE. CONTACT EPM IF EXPOSURE CLASS SHOULD BE CHANGED.

1 SD3

NTS

SLAB PENETRATIONS DETAIL

NOTES:

1. SLAB PENETRATIONS INCLUDE, BUT ARE NOT LIMITED TO, BOLLARDS, MANHOLES, INLETS, CLEANOUTS, WATER VALVES, ETC.

2 - #4 1-1/2" CLR FROM TOP

PAVEMENT PENETRATION

1" CLR (TYP)

CONSTRUCTION, CONTRACTION OR ISOLATION JOINT. SEE DETAILS 9, 10 OR 11, SHEET SD3 FOR INFORMATION.

3" (MIN)

1'-6" (TYP)

DO NOT LET REINFORCEMENT CROSS JOINT (TYP)

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, WRAPPED AROUND PENETRATION, FULL DEPTH OF PAVEMENT. REMOVE ZIP STRIP AND FILL WITH SEALANT, SIMILAR TO DETAIL 9B, SHEET SD3 WITH SEALANT FLUSH WITH TOP PAVEMENT.

8 SD3

NTS

PNA DIAMOND DOWEL PLATE DETAIL (TYP)

NOTES:

1. PNA CONTACT INFORMATION IS: 1-800-542-0214, PNA-INC.COM

FIRST SLAB POUR

SECOND SLAB POUR

CONCRETE FIRST SLAB POUR

6" MIN

MID DEPTH

EMBEDDED DIAMOND DOWEL POCKET FORMER, INSTALLED USING FORM TEMPLATE.

DIAMOND DOWEL PLATE DIMENSIONS: 1/4" THICK, 4-1/2" SQUARE, 6.36" AT THE JOINT.

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

24"

12"

24"

10A SD3

10B SD3

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

9 SD3

NTS

SLAB CONTRACTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONTRACTION JOINT

SAWCUT TO BE 1/8" WIDE BY 1" MIN. TO 1-1/2" MAX. DEEP "SOFF-CUT".

SEE PAVING PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

9A SD3

NTS

PCC JOINT DETAIL

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONTRACTION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT

1/4"

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

TOP OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

9B SD3

NTS

COMPRESSIBLE CLOSED FOAM PLANK ISOLATION JOINT DETAIL

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONTRACTION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT

1/4"

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

TOP OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

10 SD3

NTS

CONSTRUCTION JOINT PARTIAL PLAN DETAIL

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

CONSTRUCTION JOINT

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

24"

12"

24"

10A SD3

10B SD3

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

10A SD3

NTS

SLAB CONSTRUCTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONSTRUCTION JOINT

#3 X 24" LONG REBAR SPACED AT 24" O.C. CENTERED WITH JOINT.

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

CHAIRS REQUIRED FOR REBAR ALIGNMENT DURING CONCRETE PLACEMENT

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

10B SD3

NTS

SLAB CONSTRUCTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONSTRUCTION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT

3"

3"

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

IMMEDIATELY AFTER REMOVING BULKHEAD, APPLY CURING COMPOUND TO PAVEMENT VERTICAL EDGE AT A COVERAGE RATE OF 300 SF MAX PER GALLON.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

10C SD3

NTS

CONSTRUCTION JOINT INTERSECTION PARTIAL PLAN DETAIL

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

CONSTRUCTION JOINT

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

18" MIN

6" MIN

CONSTRUCTION JOINT

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

11 SD3

NTS

ISOLATION JOINT PARTIAL PLAN DETAIL

ISOLATION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT, SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

IMMEDIATELY AFTER REMOVING BULKHEAD, APPLY CURING COMPOUND TO PAVEMENT VERTICAL EDGE AT A COVERAGE RATE OF 300 SF MAX PER GALLON.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT, SEE DETAIL 9B, SHEET SD3.

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

11A SD3

NTS

ISOLATION JOINT SECTION

ISOLATION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT, SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

IMMEDIATELY AFTER REMOVING BULKHEAD, APPLY CURING COMPOUND TO PAVEMENT VERTICAL EDGE AT A COVERAGE RATE OF 300 SF MAX PER GALLON.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT, SEE DETAIL 9B, SHEET SD3.

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

11B SD3

NTS

ISOLATION JOINT @ TANK PAD AND DUMPSTER PAD PAVEMENT SECTION

NOTE:

1. THIS SECTION ASSUMES THE TANK OR DUMPSTER PAD PAVEMENT WILL BE PLACED PRIOR TO THE THINNER MAIN PAVEMENT.

TANK OR DUMPSTER PAVEMENT

PAVEMENT

ISOLATION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT, SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

IMMEDIATELY AFTER REMOVING BULKHEAD, APPLY CURING COMPOUND TO PAVEMENT VERTICAL EDGE AT A COVERAGE RATE OF 300 SF MAX PER GALLON.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT, SEE DETAIL 9B, SHEET SD3.

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

12"

11B SD3

NTS

ISOLATION JOINT @ TANK PAD AND DUMPSTER PAD PAVEMENT SECTION

NOTE:

1. THIS SECTION ASSUMES THE TANK OR DUMPSTER PAD PAVEMENT WILL BE PLACED PRIOR TO THE THINNER MAIN PAVEMENT.

TANK OR DUMPSTER PAVEMENT

PAVEMENT

ISOLATION JOINT

REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT, SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

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1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT, SEE DETAIL 9B, SHEET SD3.

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

12"

CONCEPTUAL PLAN ONLY

PLANS REFERENCE NAVD 88 TO COVERT TO NGVD ADD 7.509'

RT Standard Details

RACETRAC MARKET

10th Avenue North @ Florida Mango Road
Palm Springs, Florida
Palm Beach County

DATE

SCALE

DRAWN-BY

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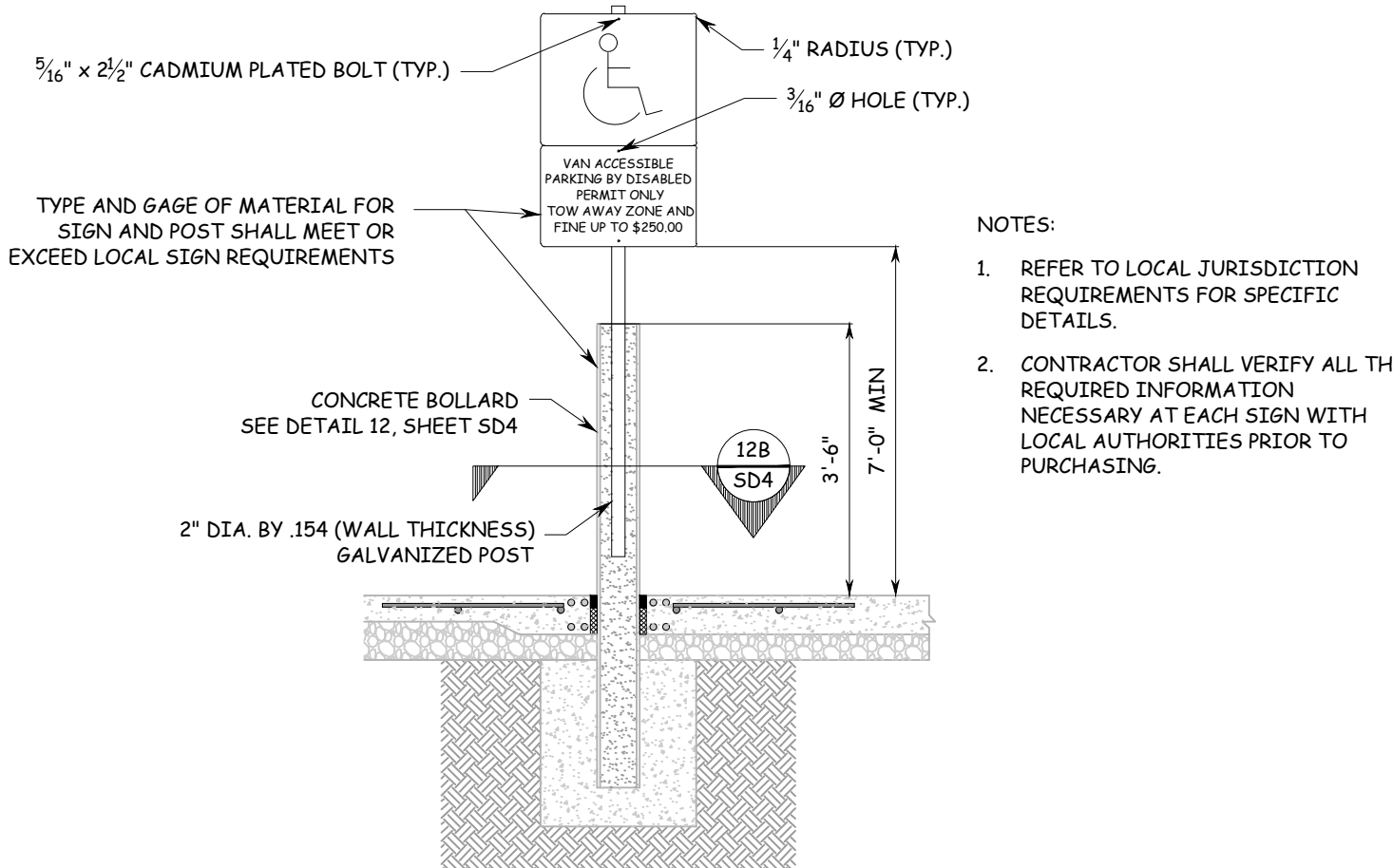
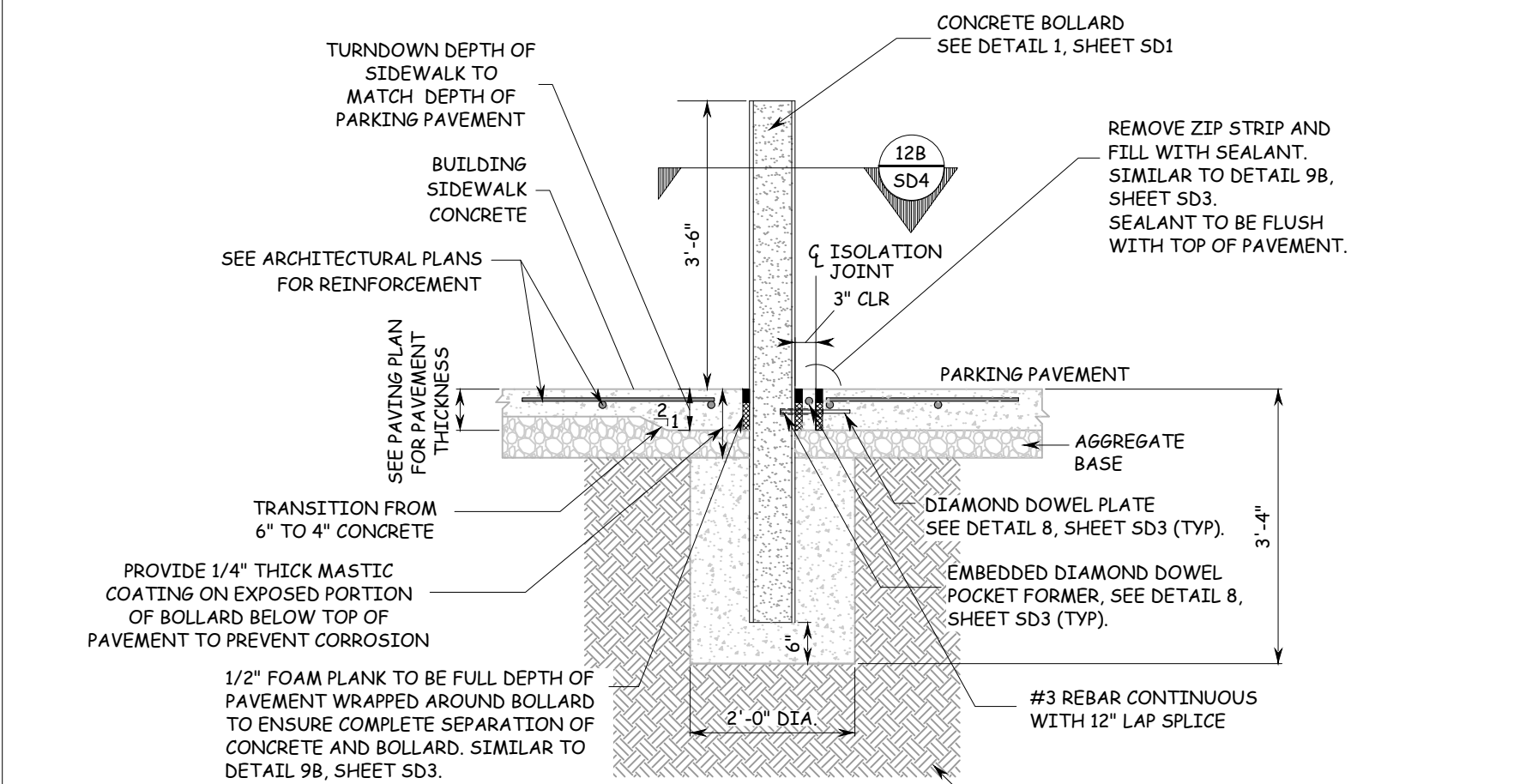
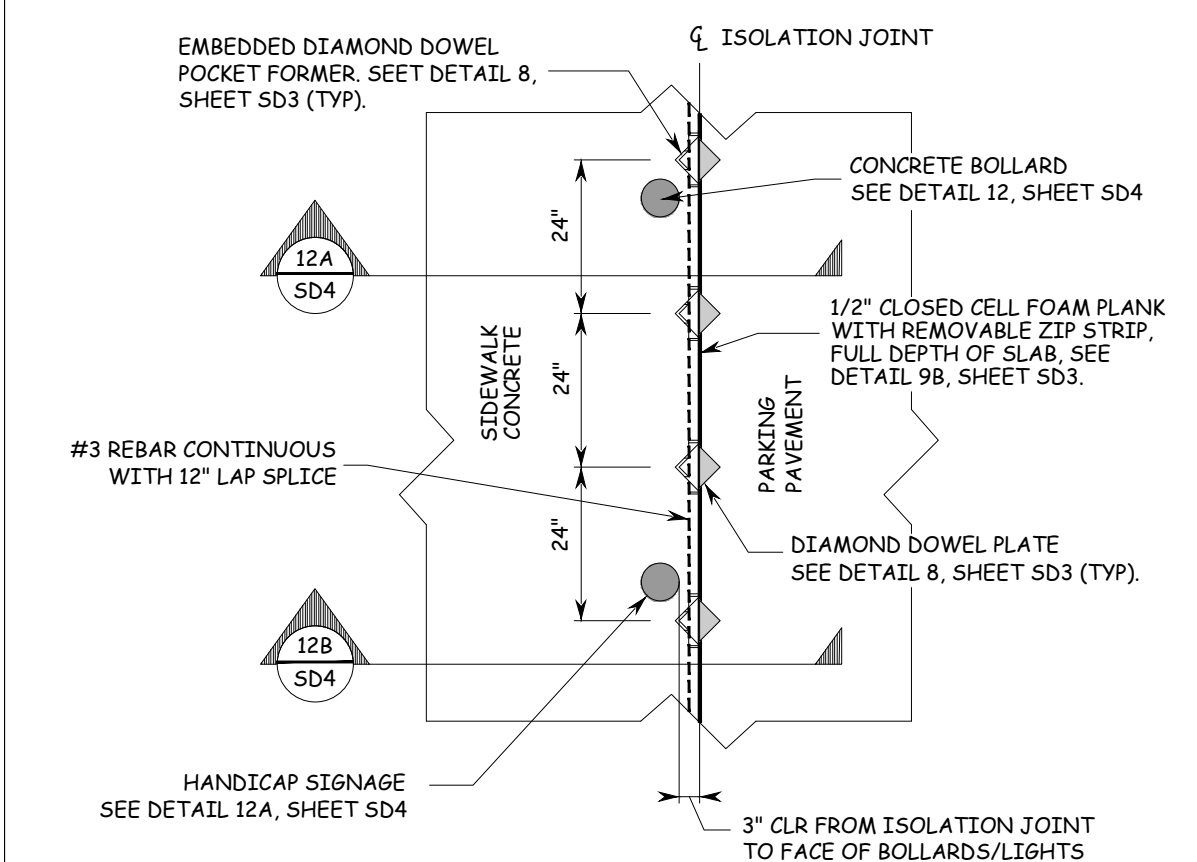
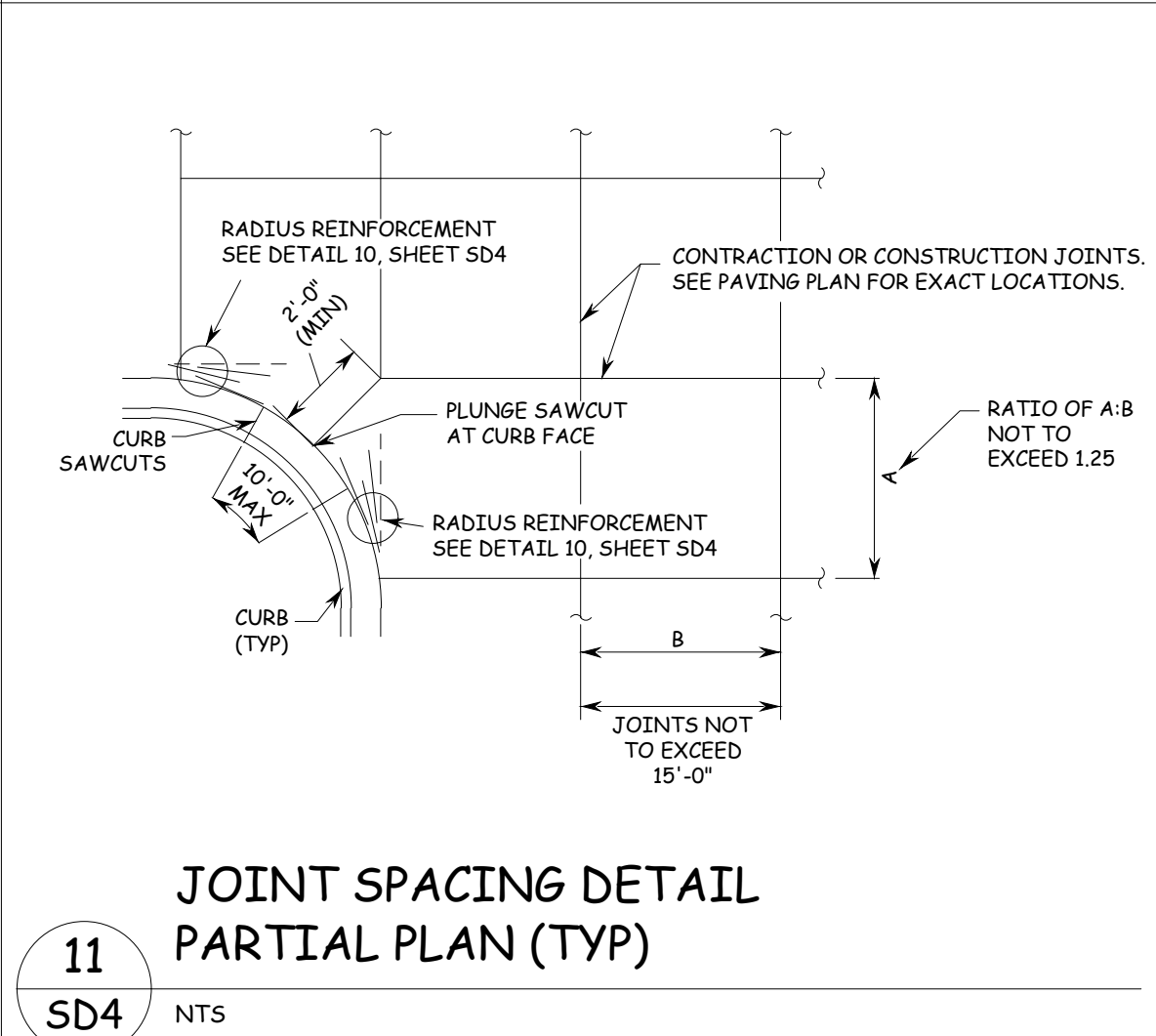
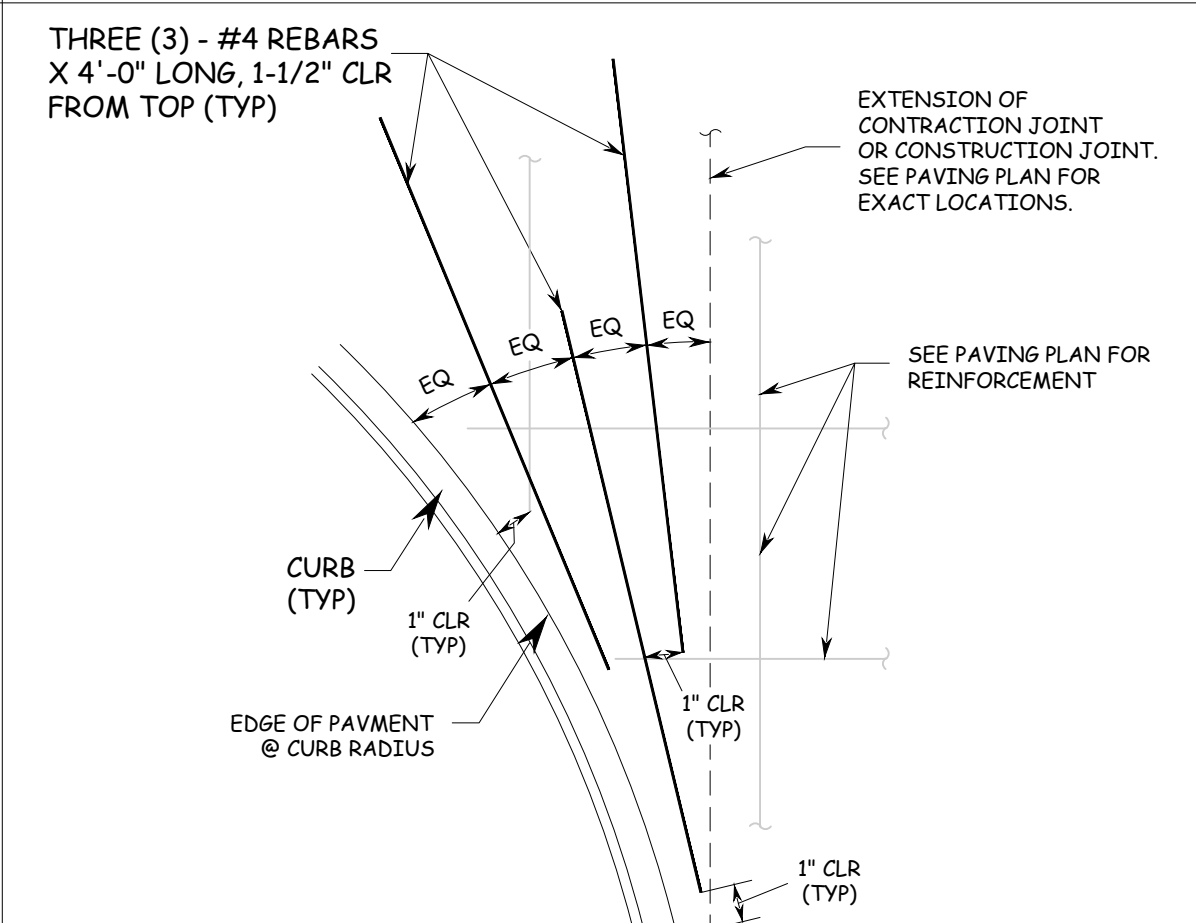
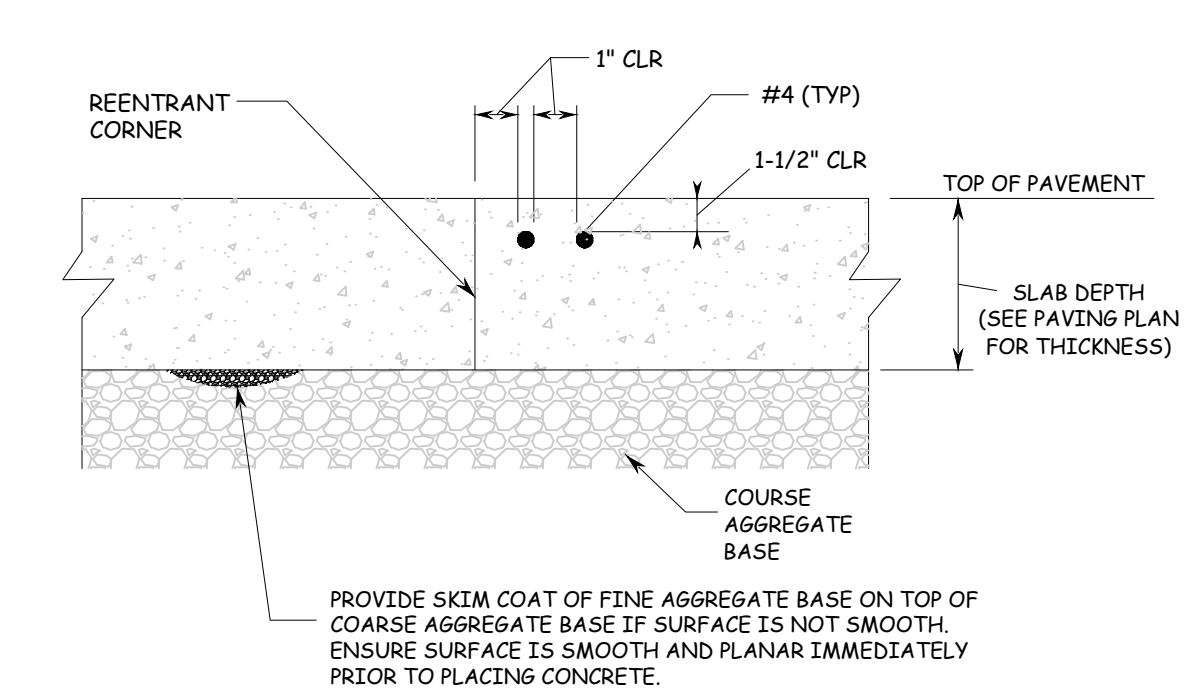
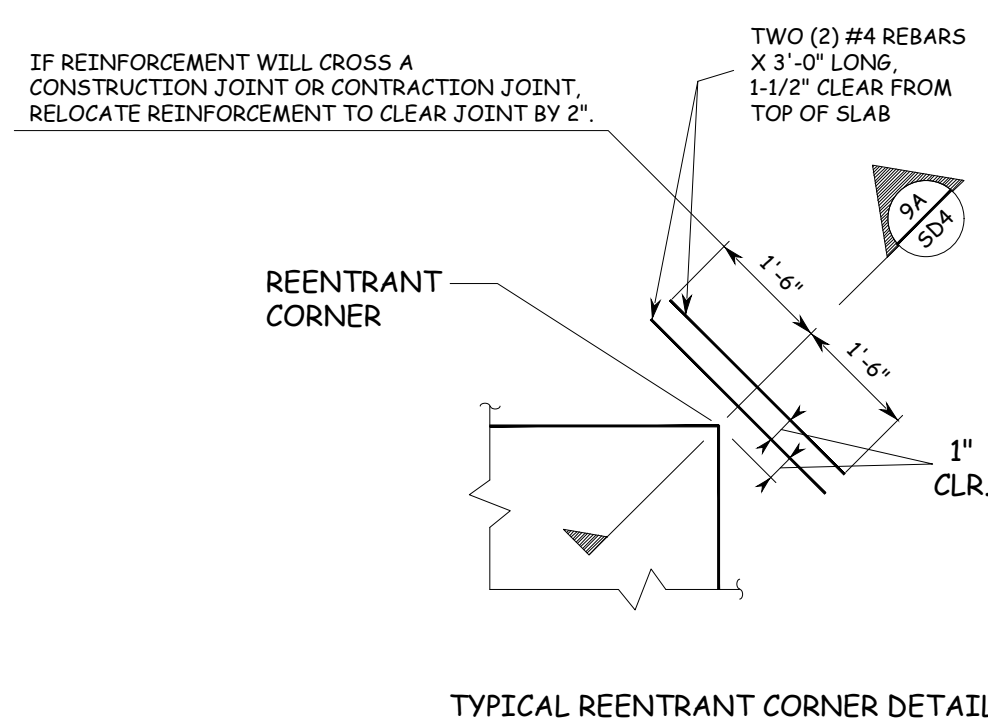
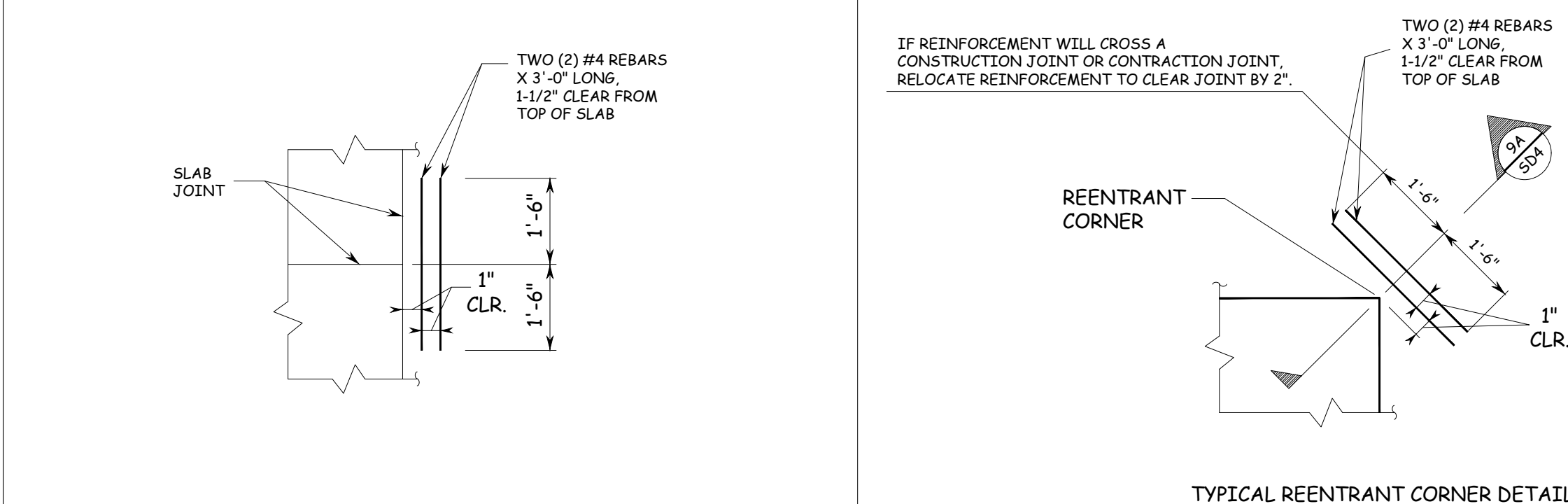
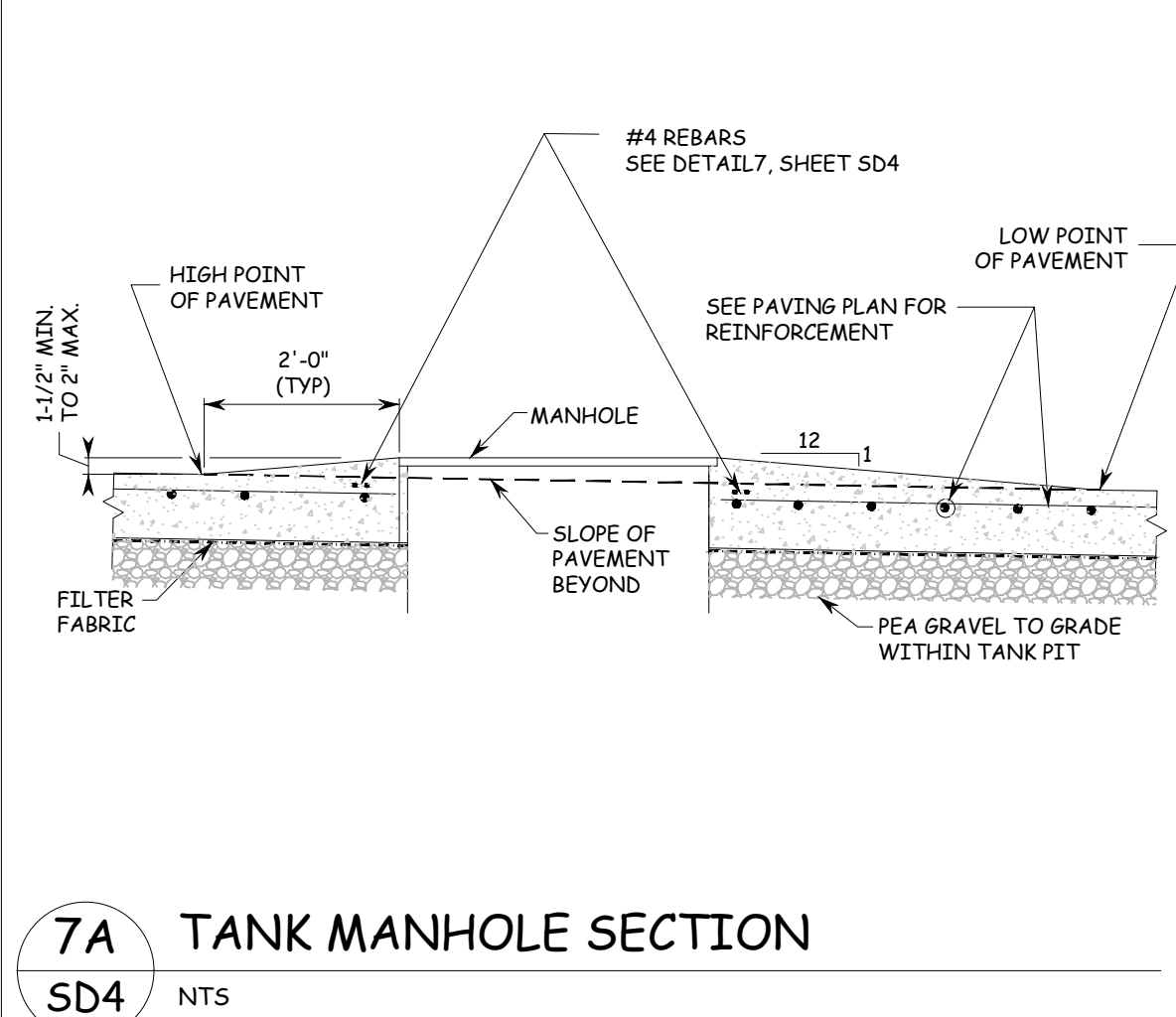
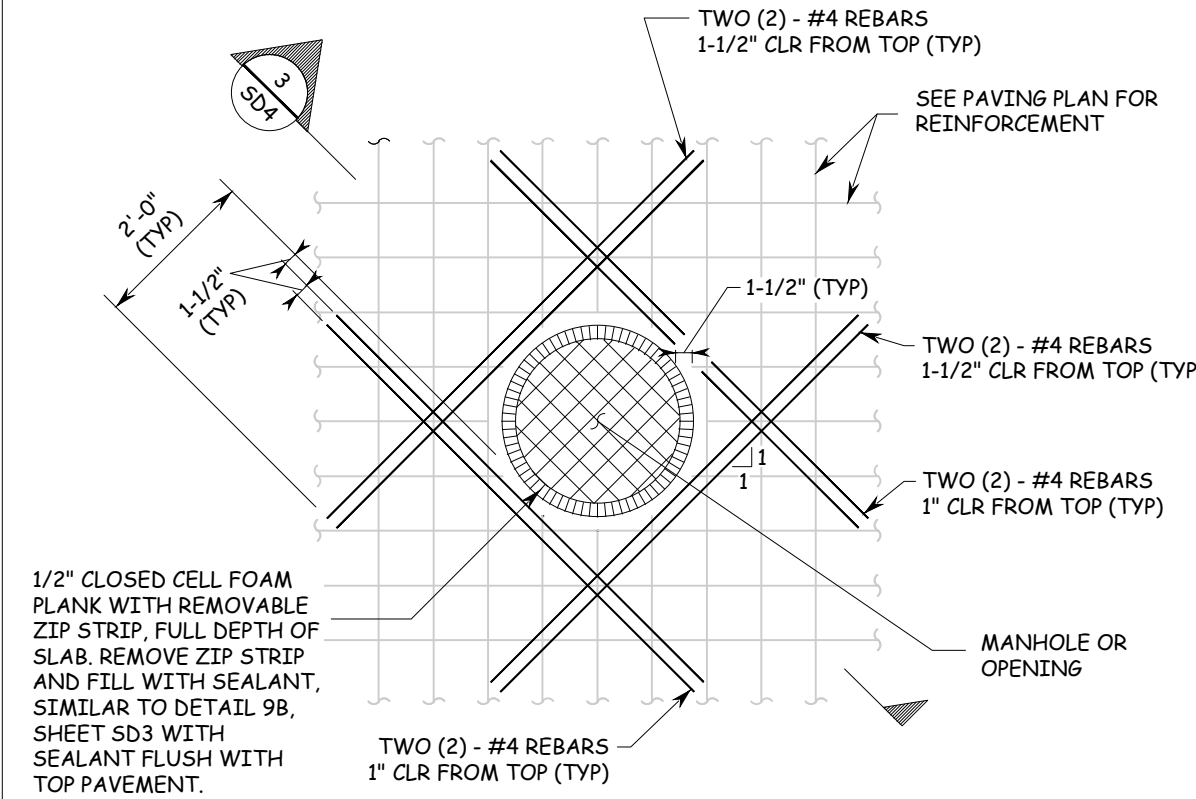
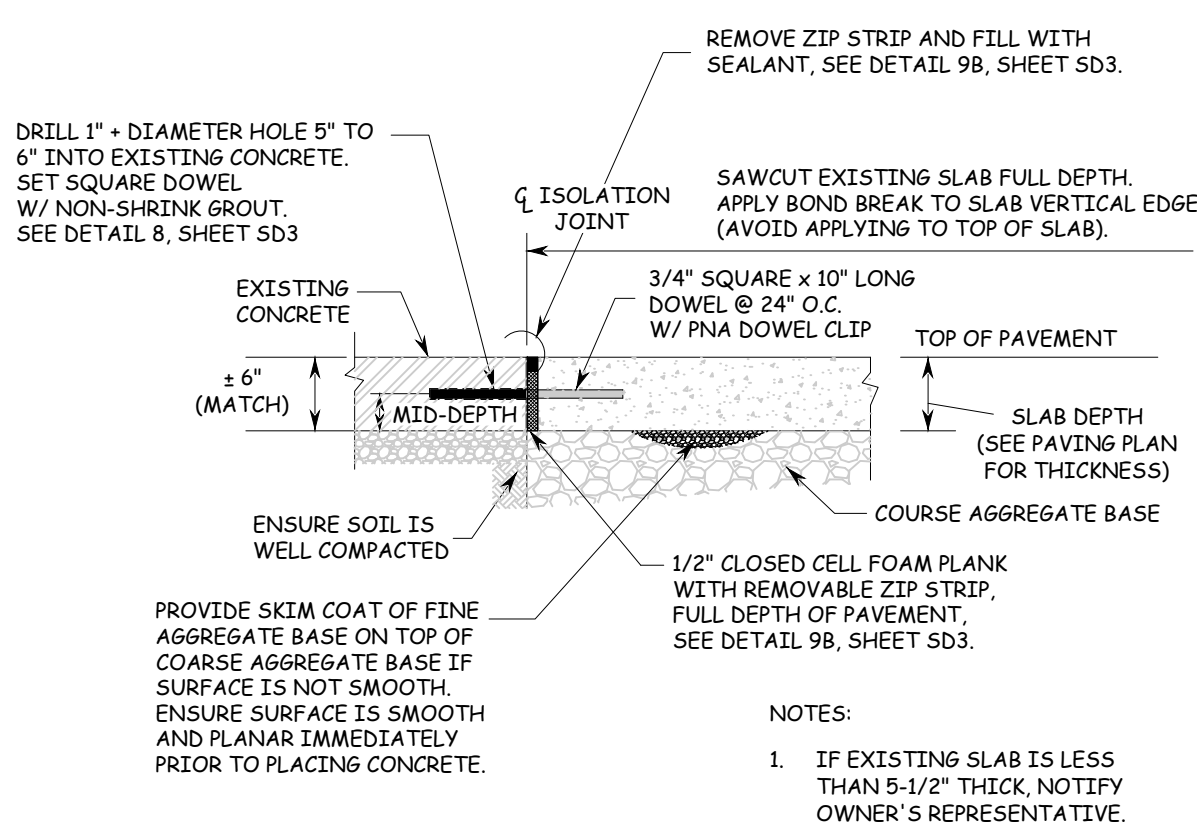
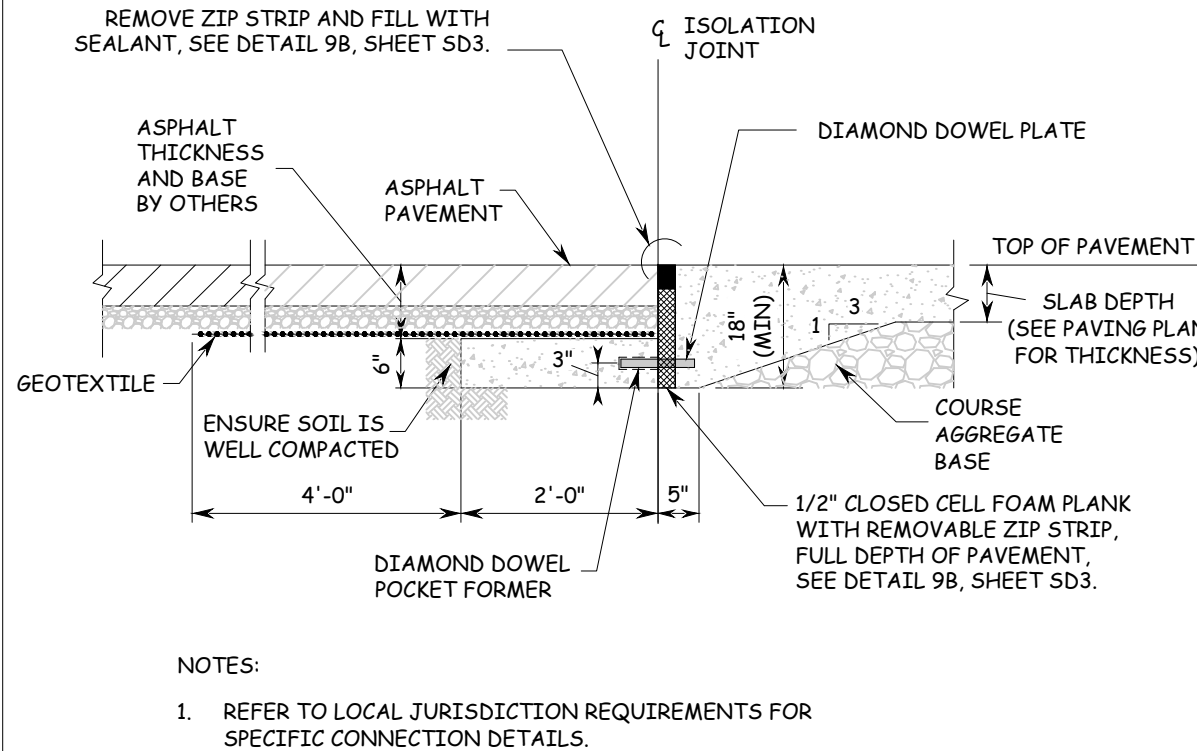
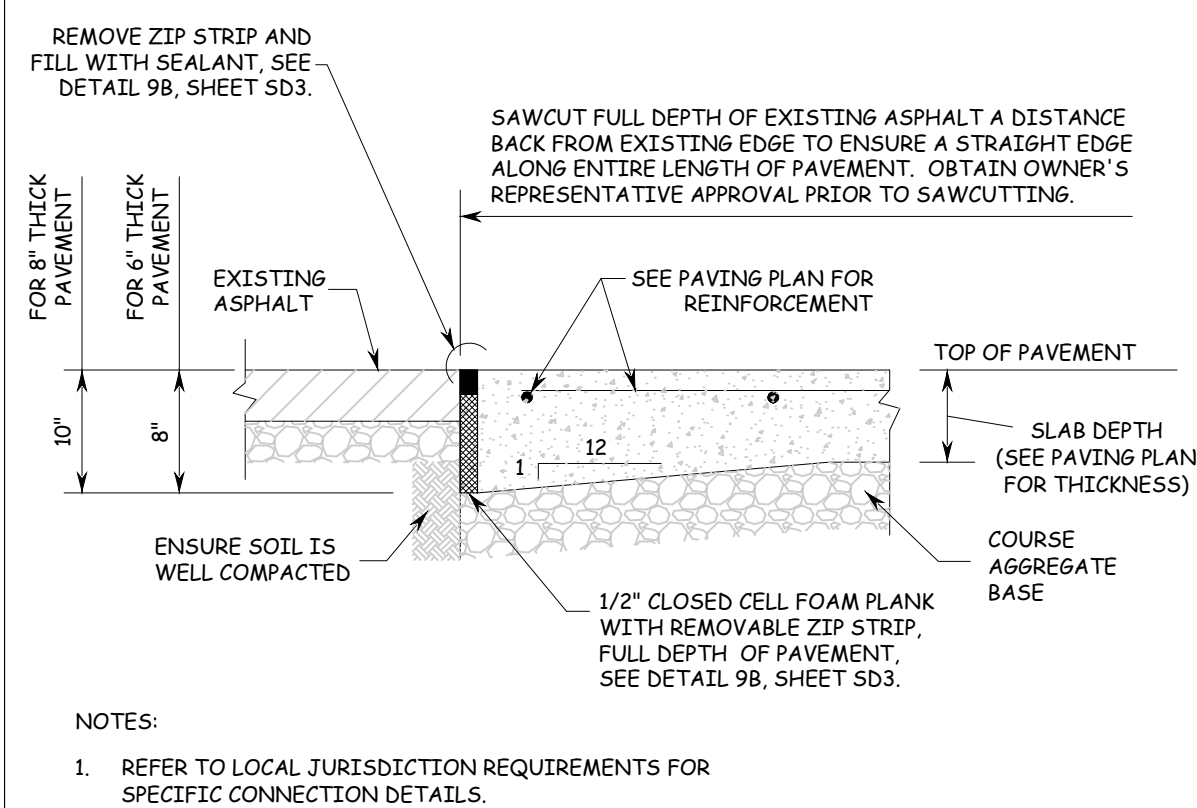
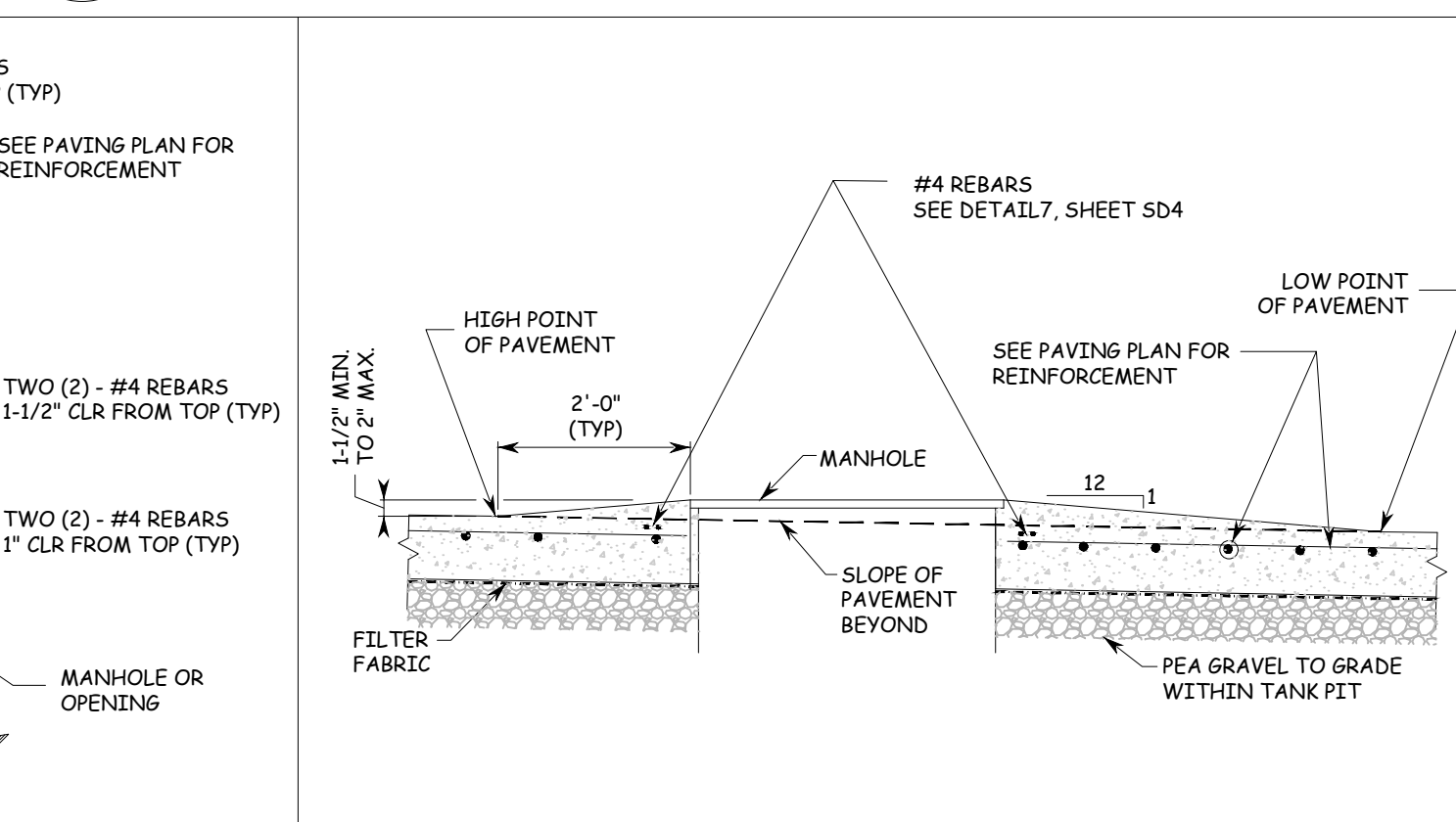
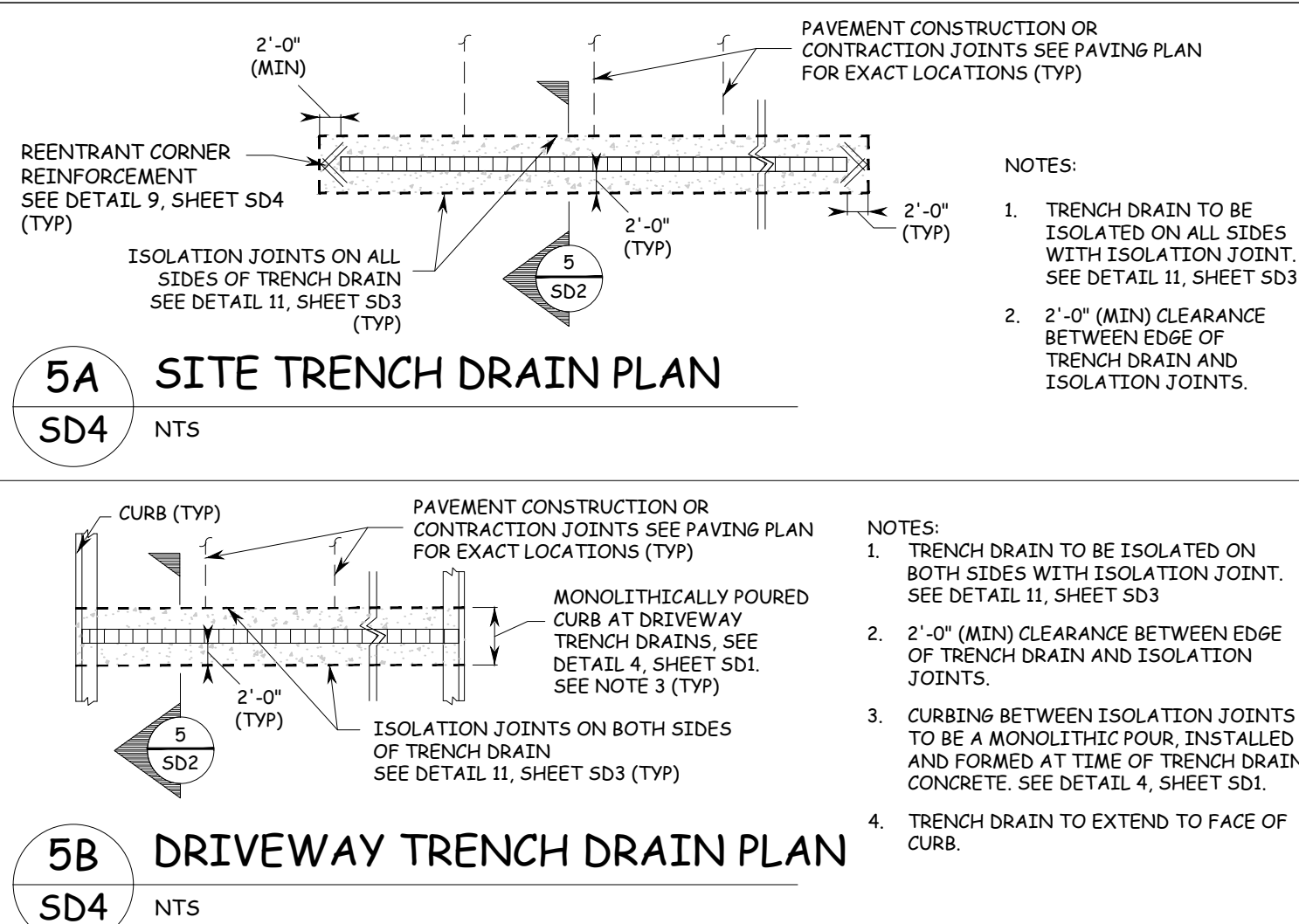
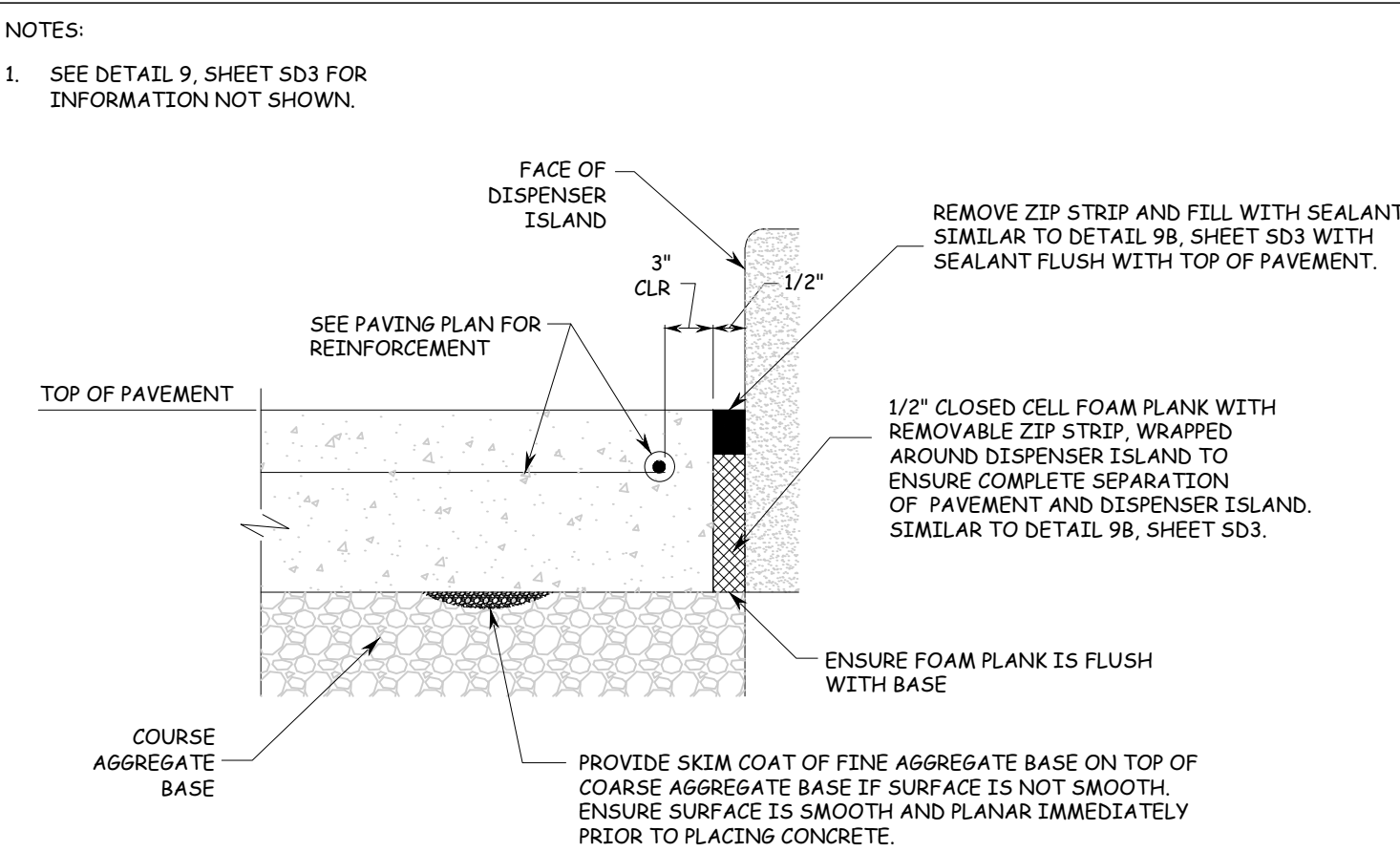
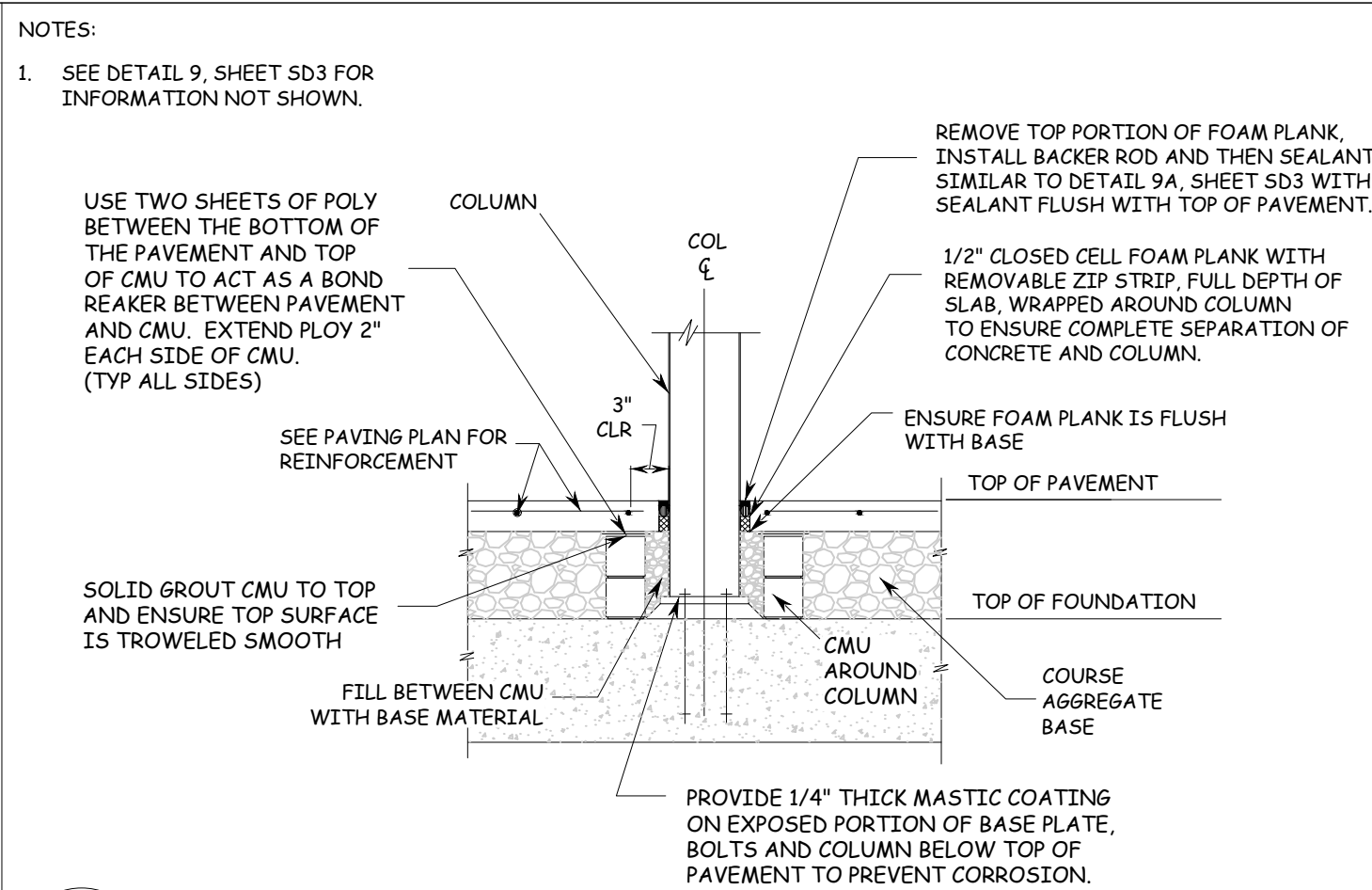
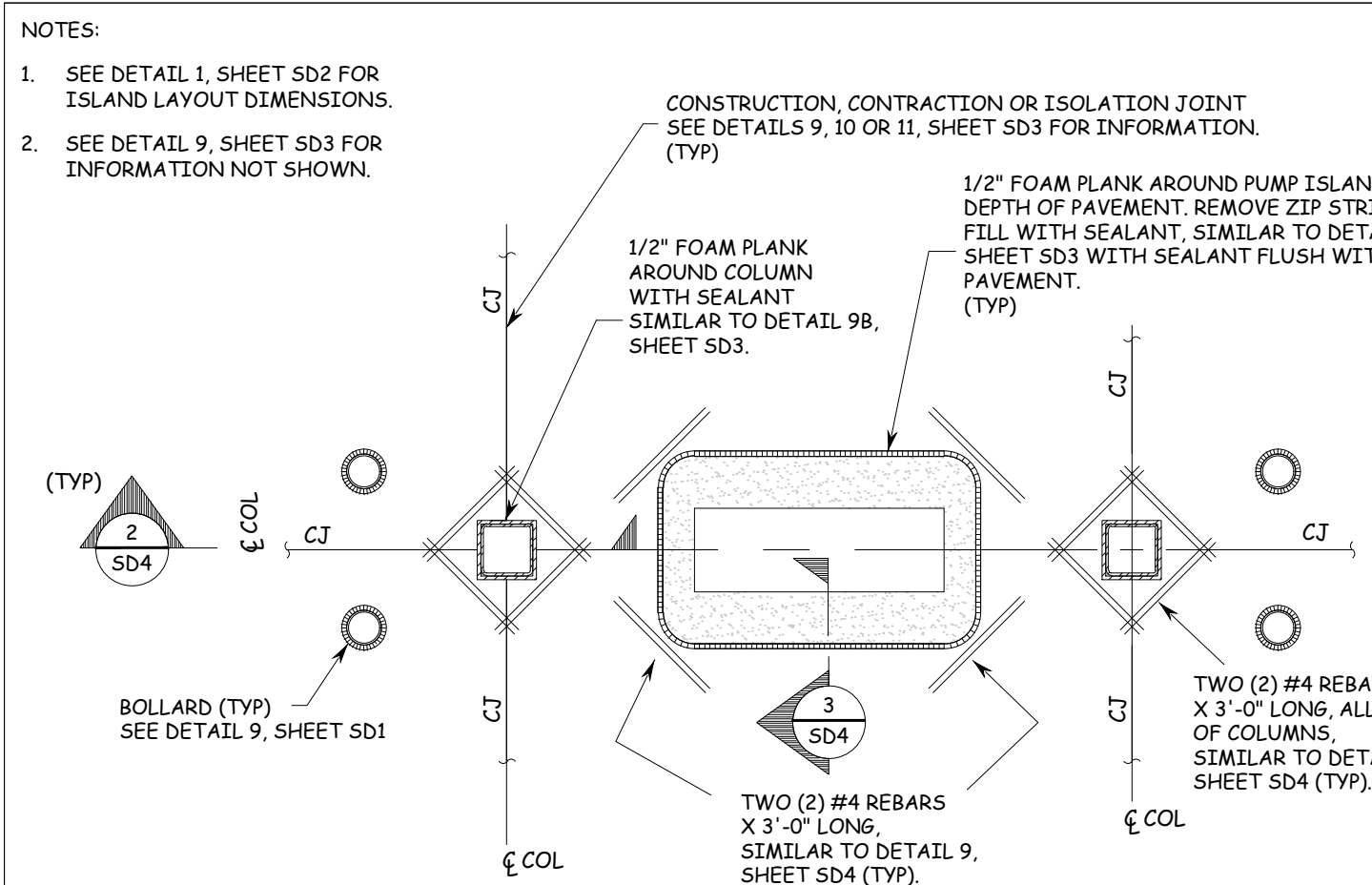
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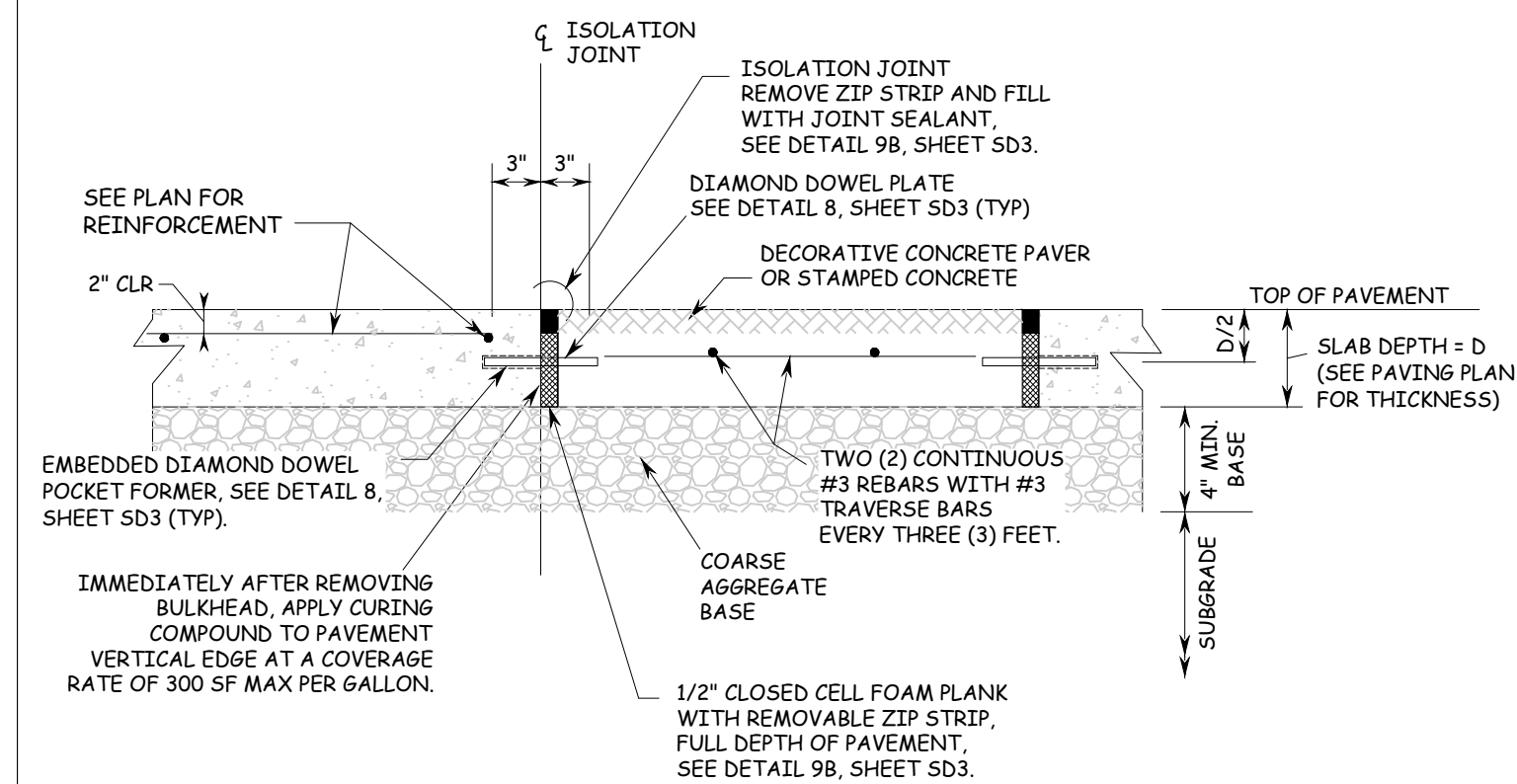
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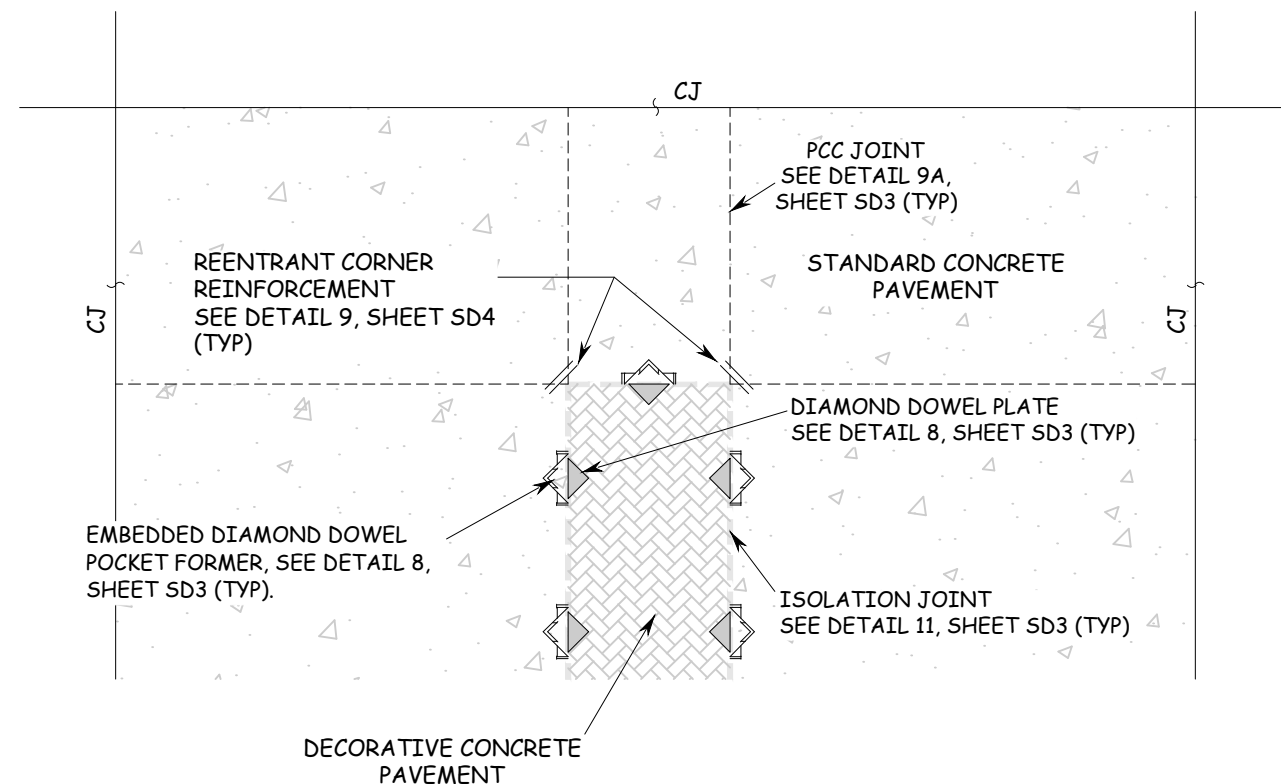
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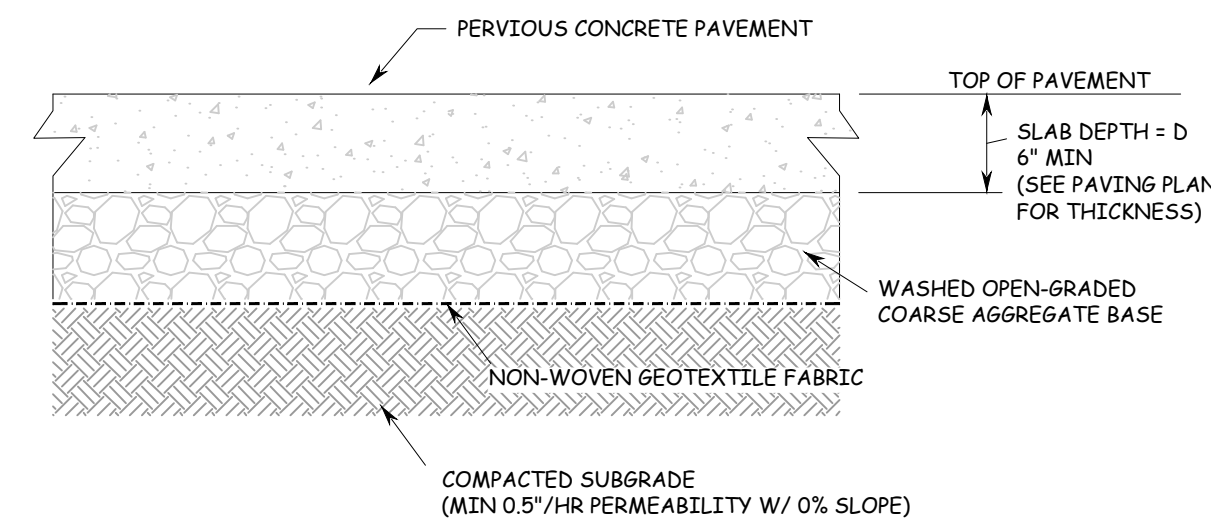




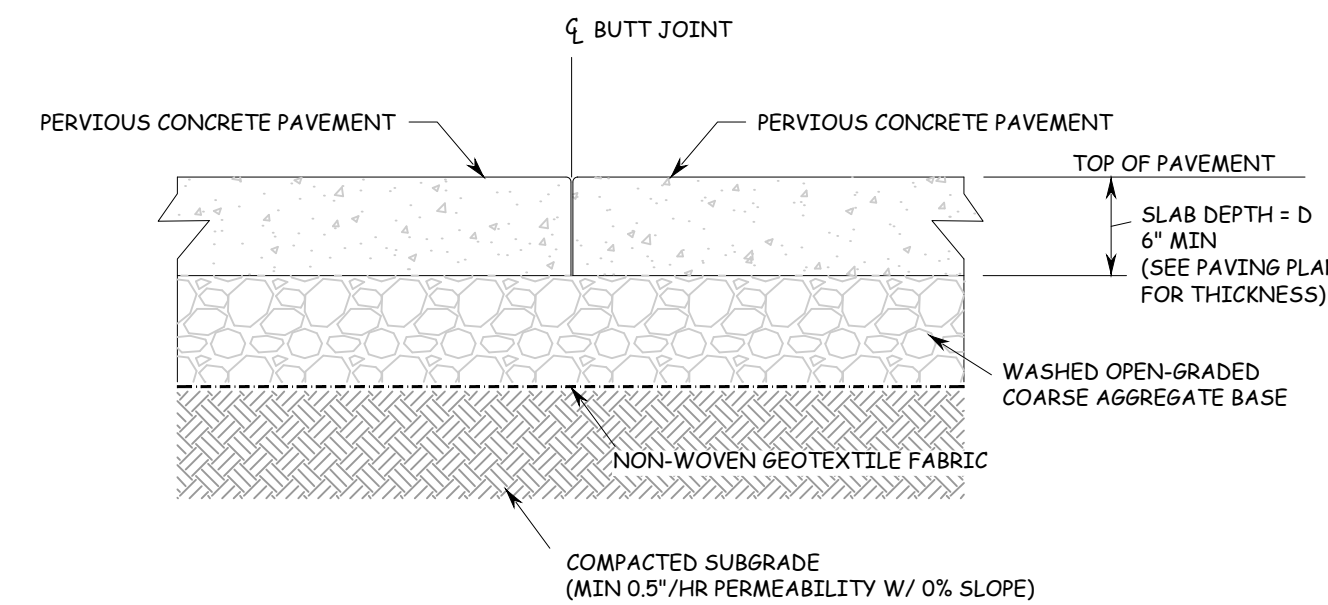
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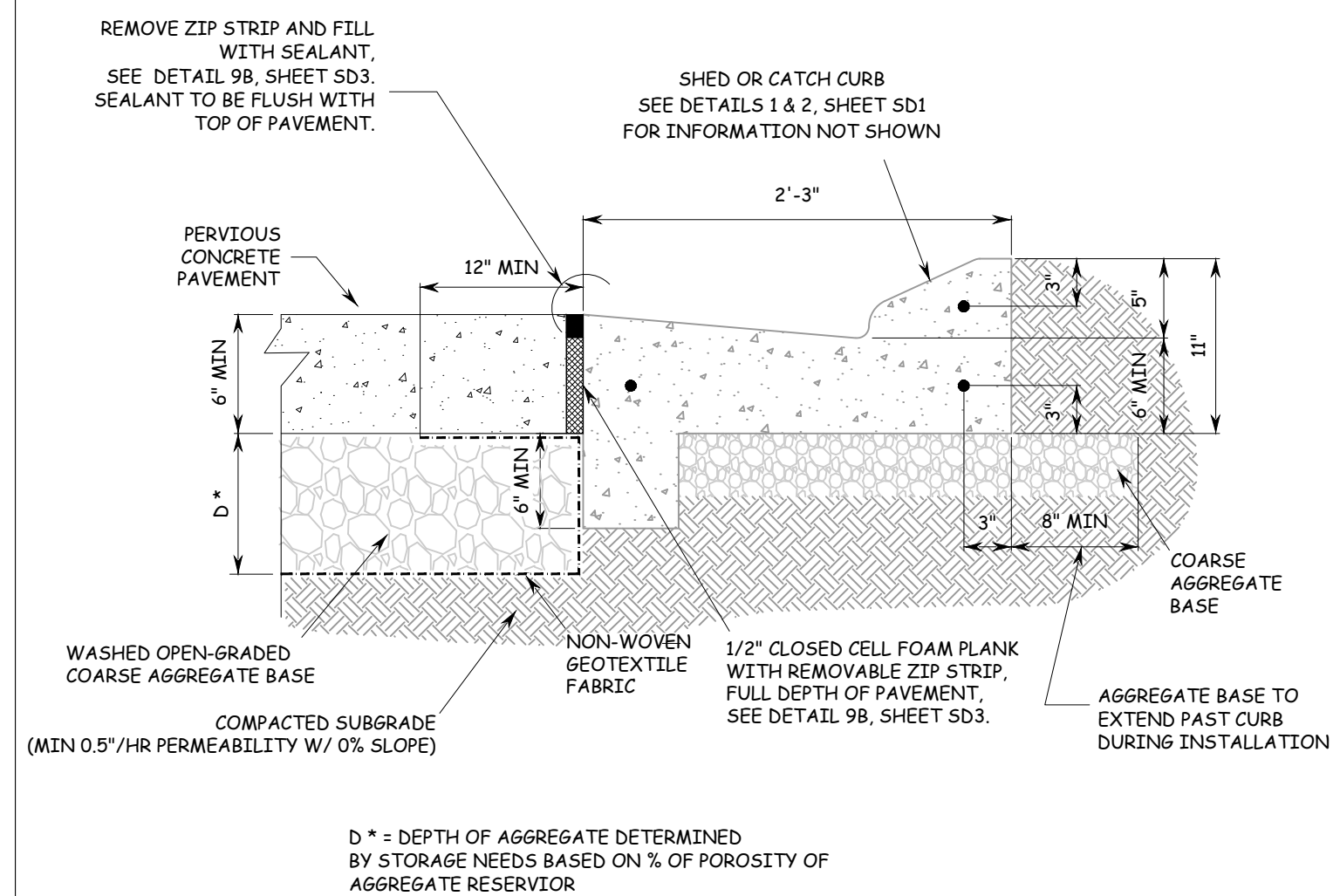
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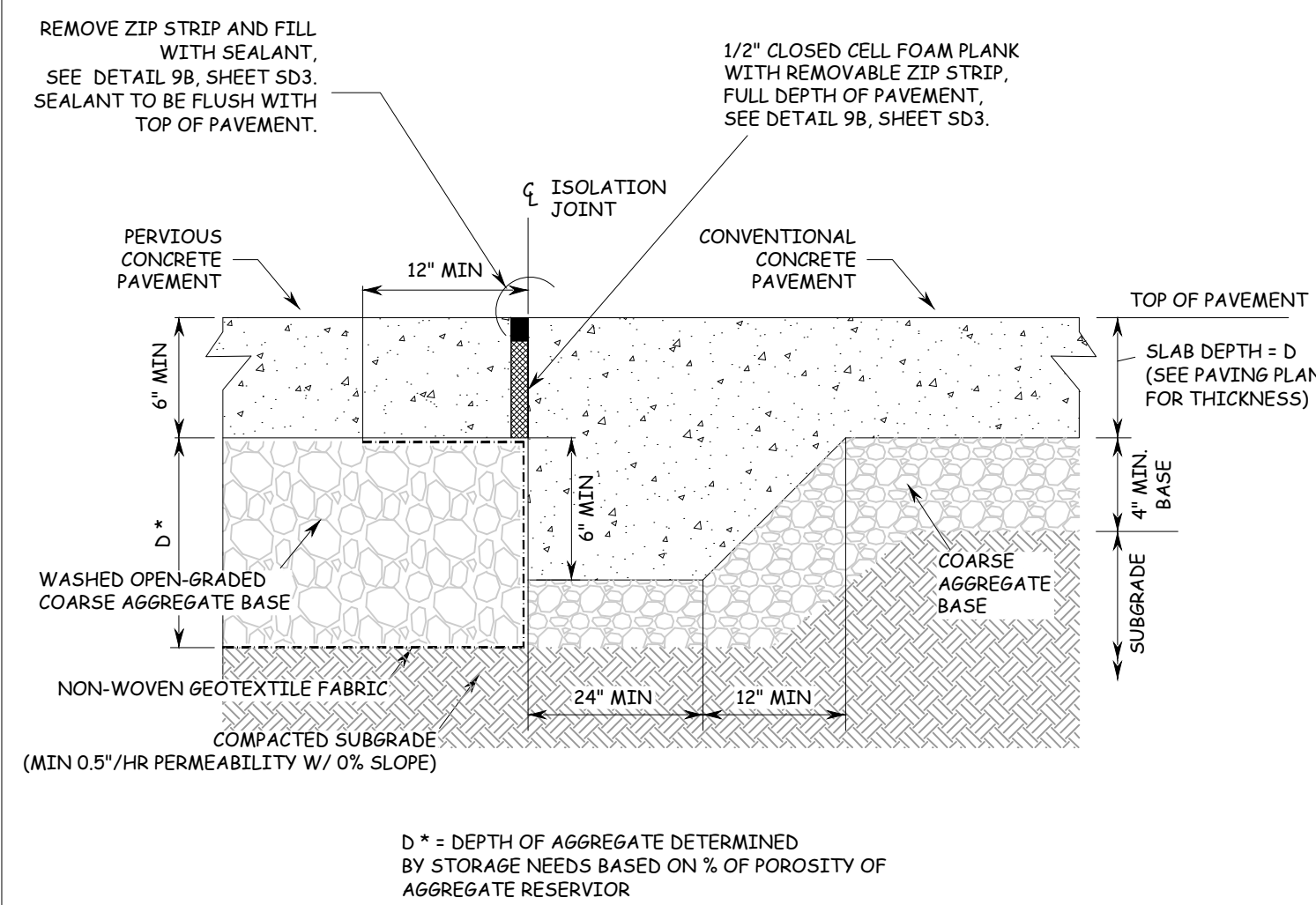
3 PERVIOUS CONCRETE DETAIL
SD5 NTS



4 PERVIOUS CONCRETE - BUTT JOINT DETAIL



5 PERVIOUS CONCRETE @ CURB DETAIL
SD5 NTS



6
SD5

PERVIOUS CONCRETE / CONVENTIONAL CONCRETE
DETAIL

NTS

[illegible]

BRANDON ULMER
No. 68345
PROFESSIONAL ENGINEER
October 25, 2013
FLORIDA LICENSE NO. 68345
FLORIDA BUSINESS LICENSE NO. 17528

THOMAS
ENGINEERING GROUP

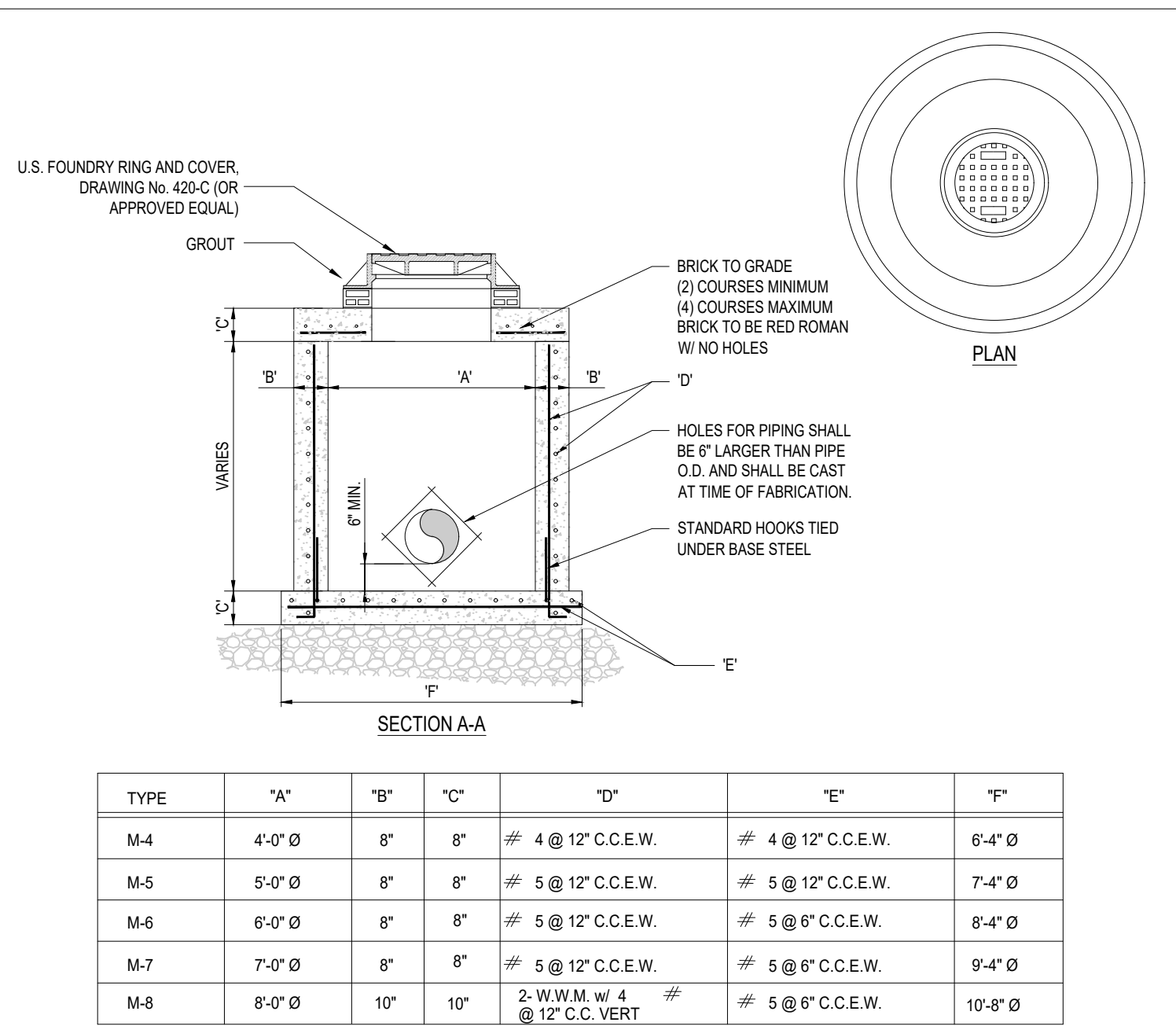
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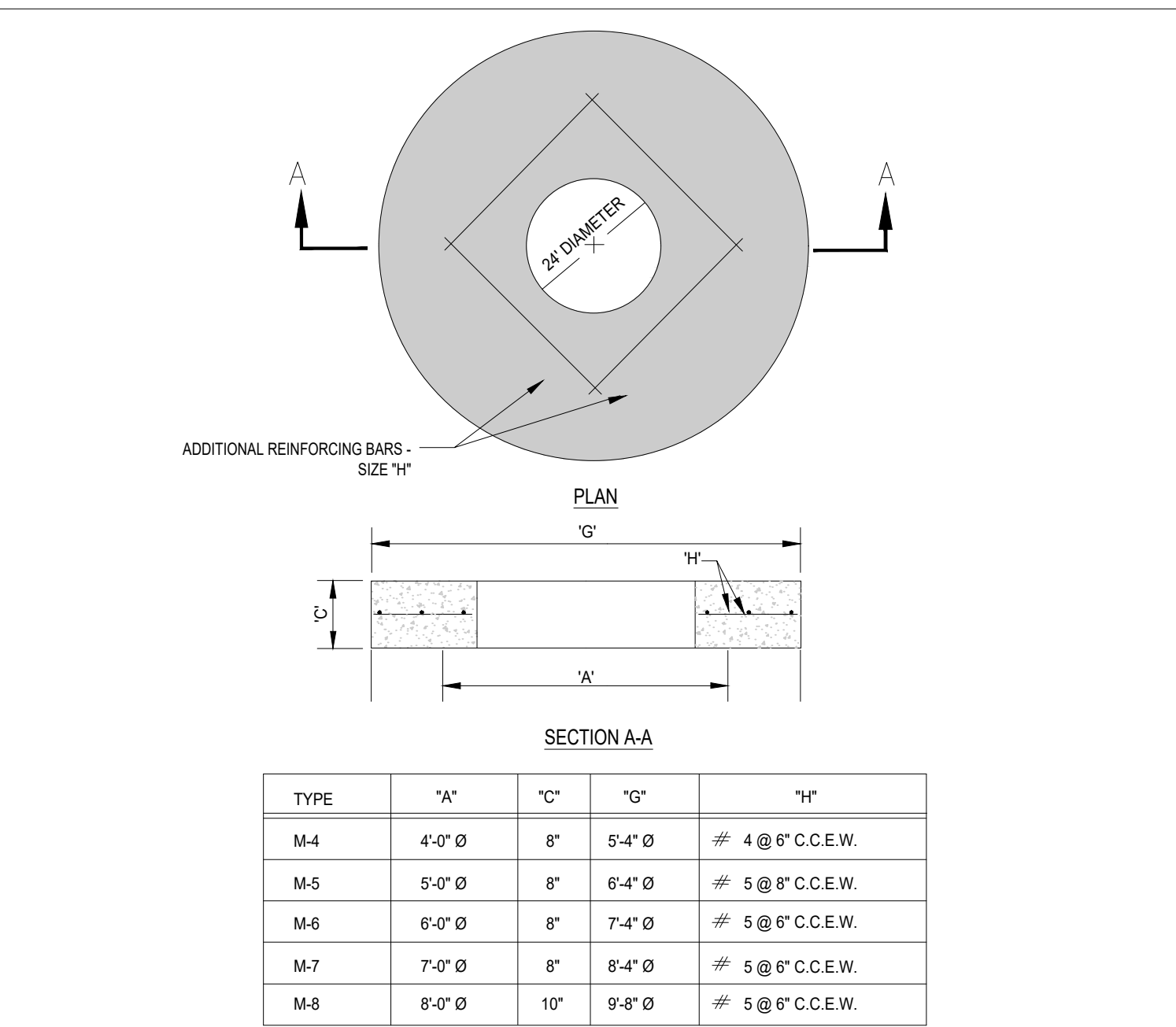
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DATE		SCALE		AS SHOWN	
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DRAWING NAME: F:\180019-RT Standard Details.dwg					
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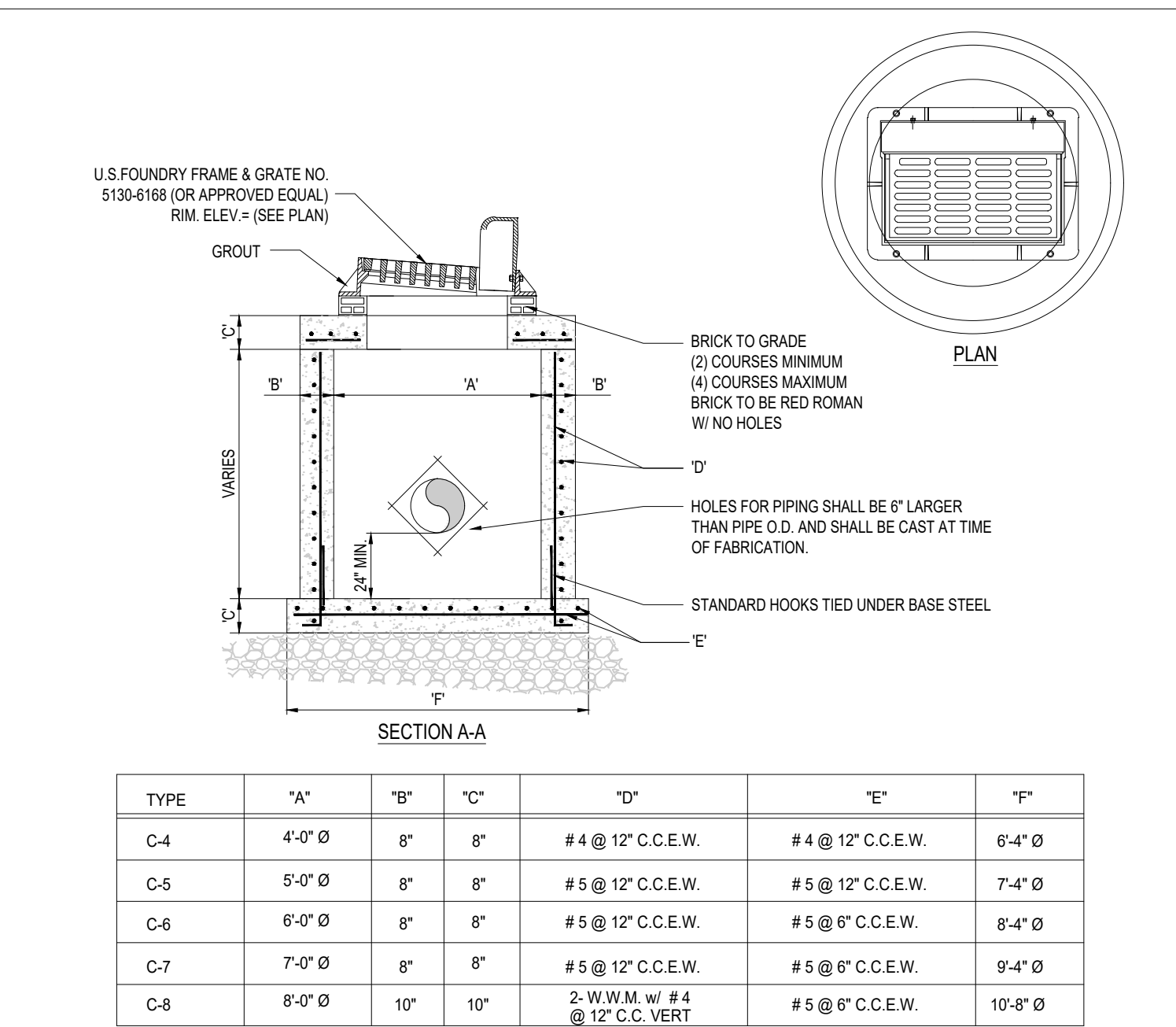
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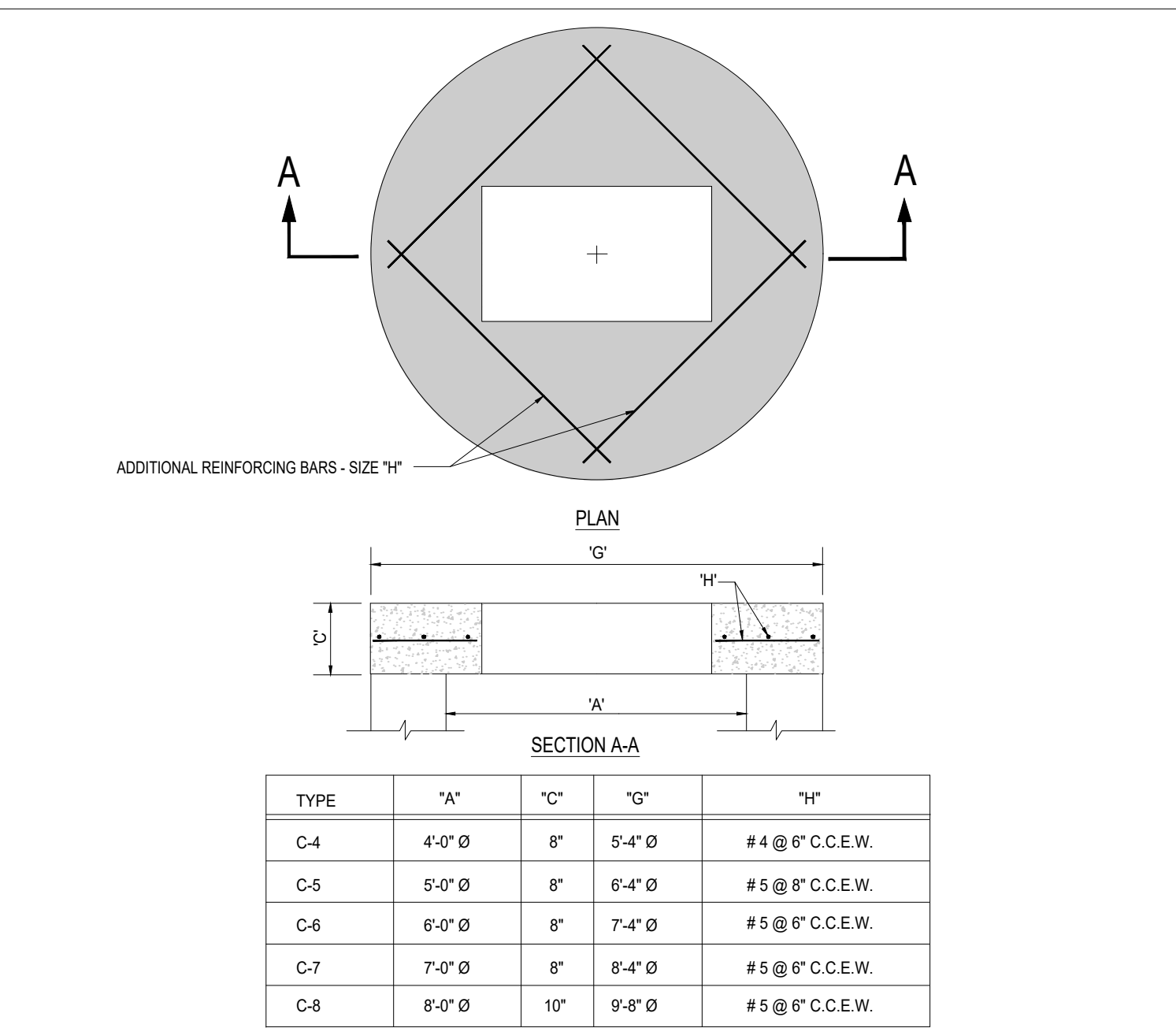
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SCALE: NONE



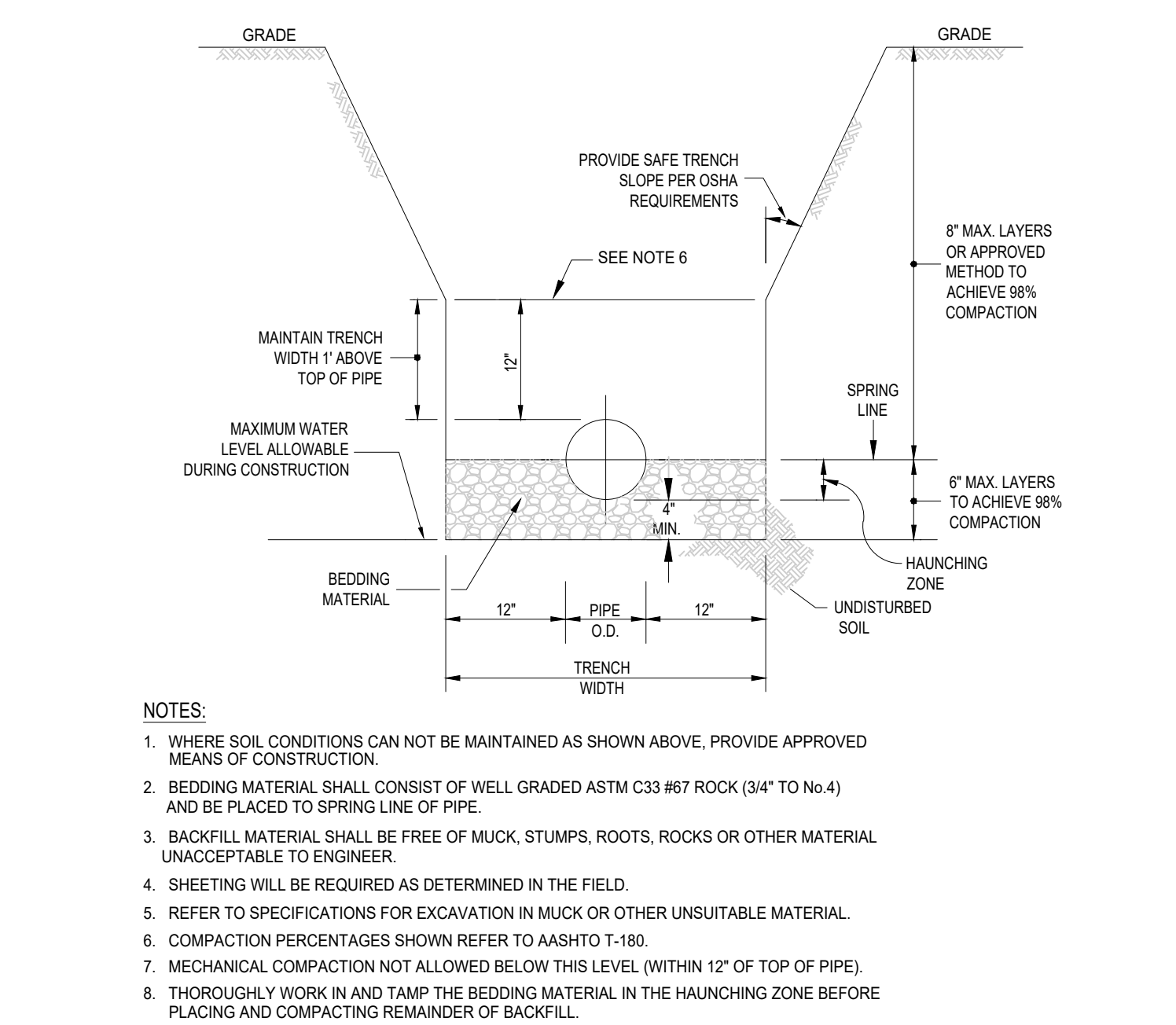
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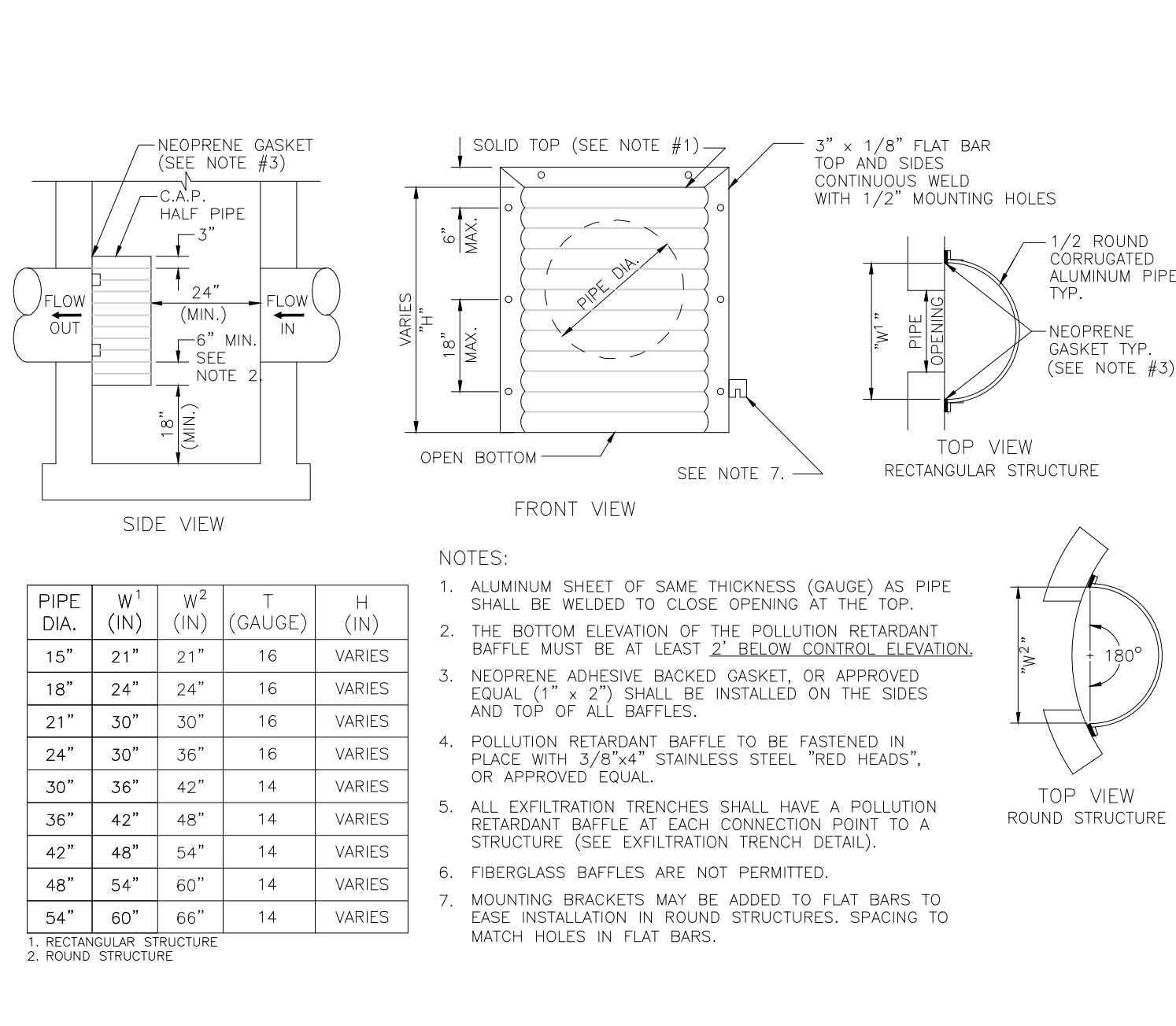
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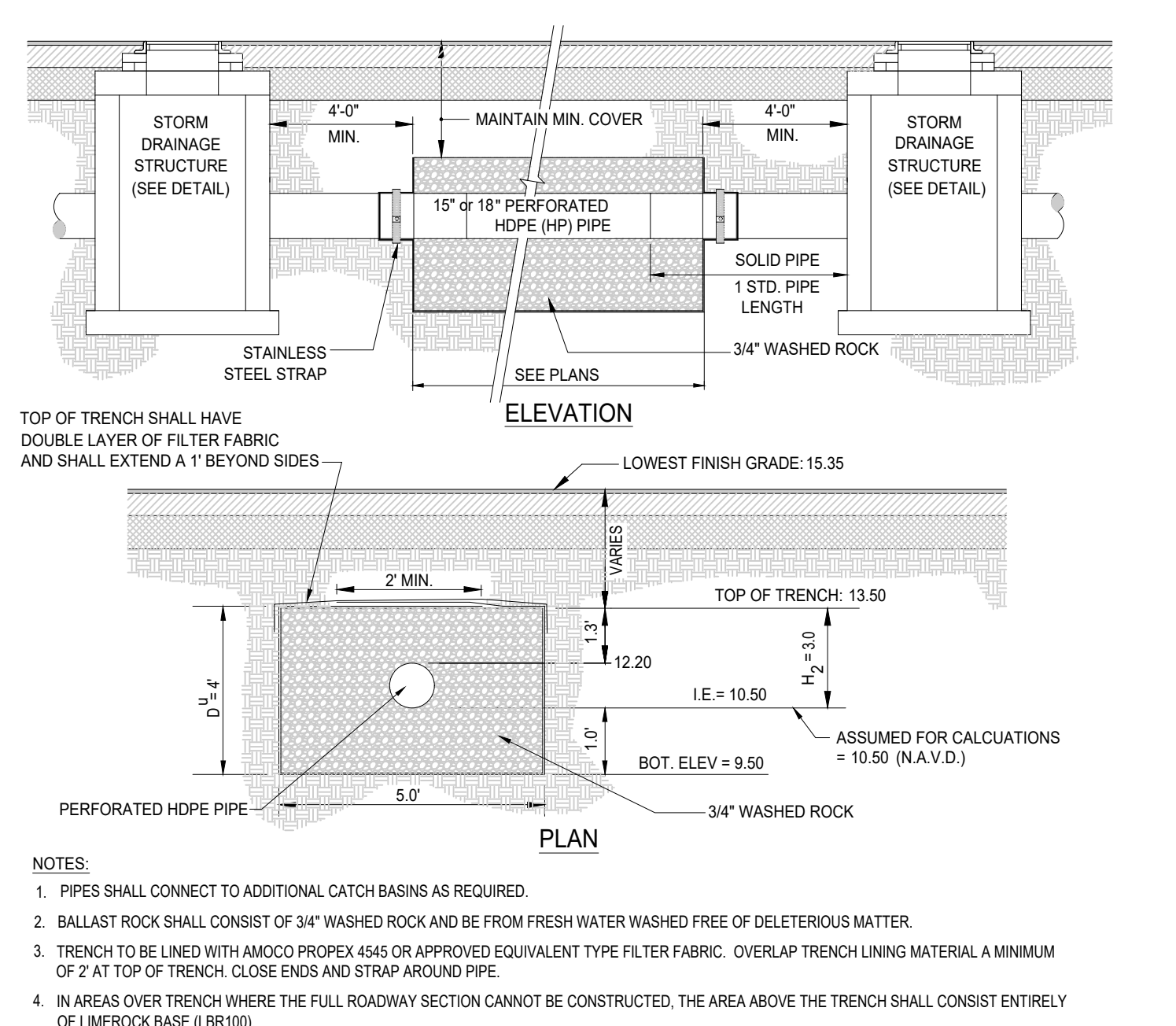
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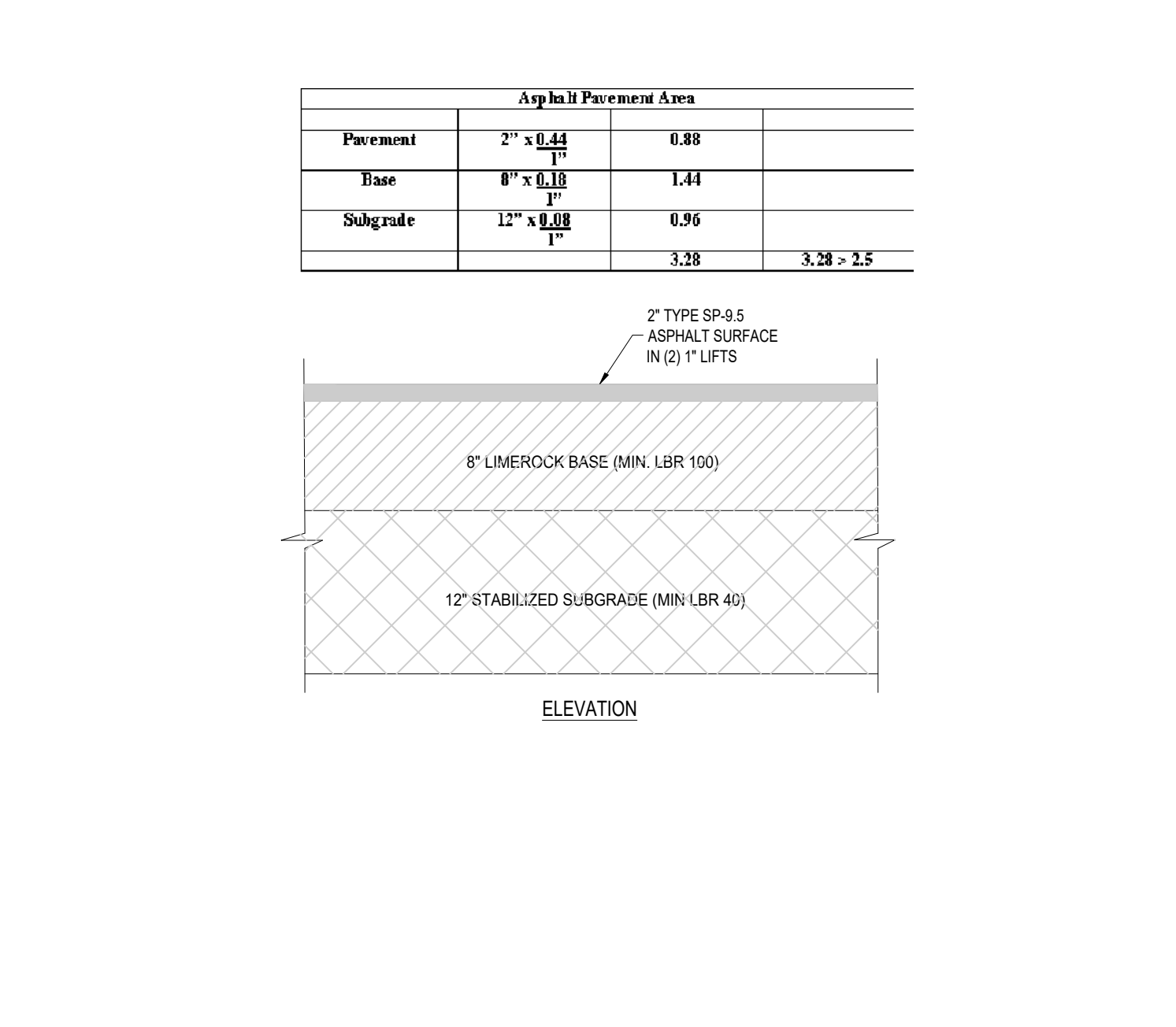
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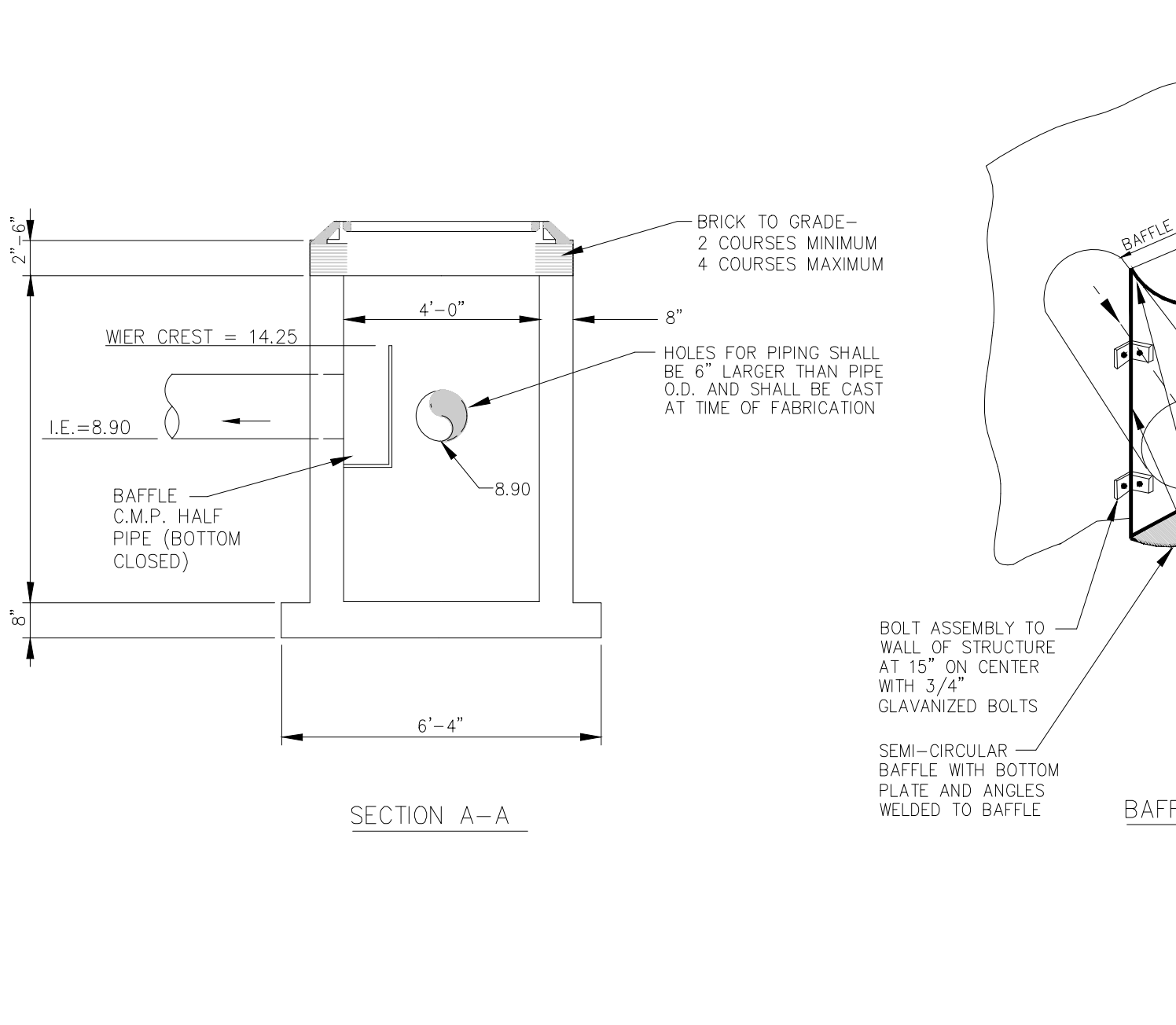
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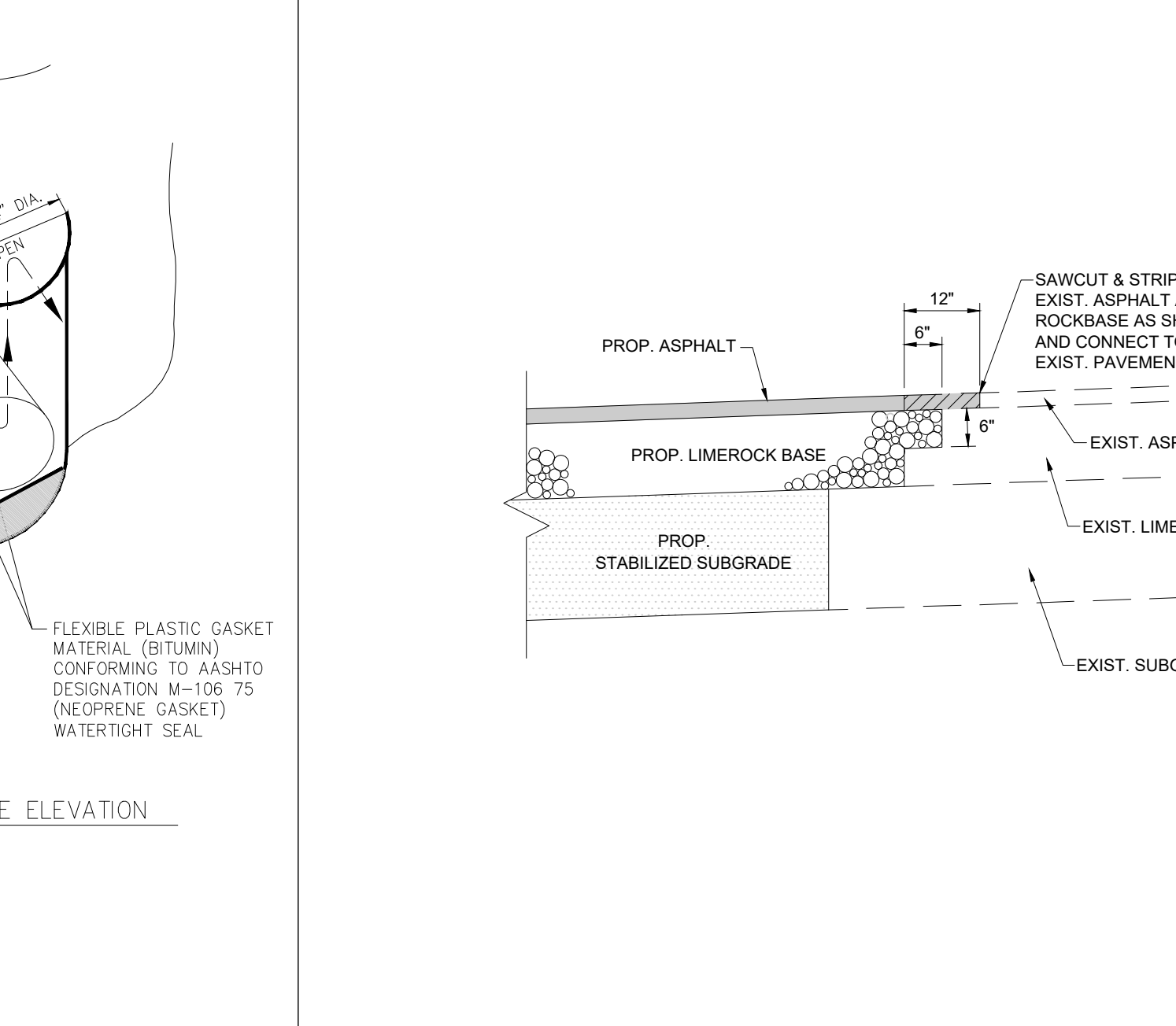
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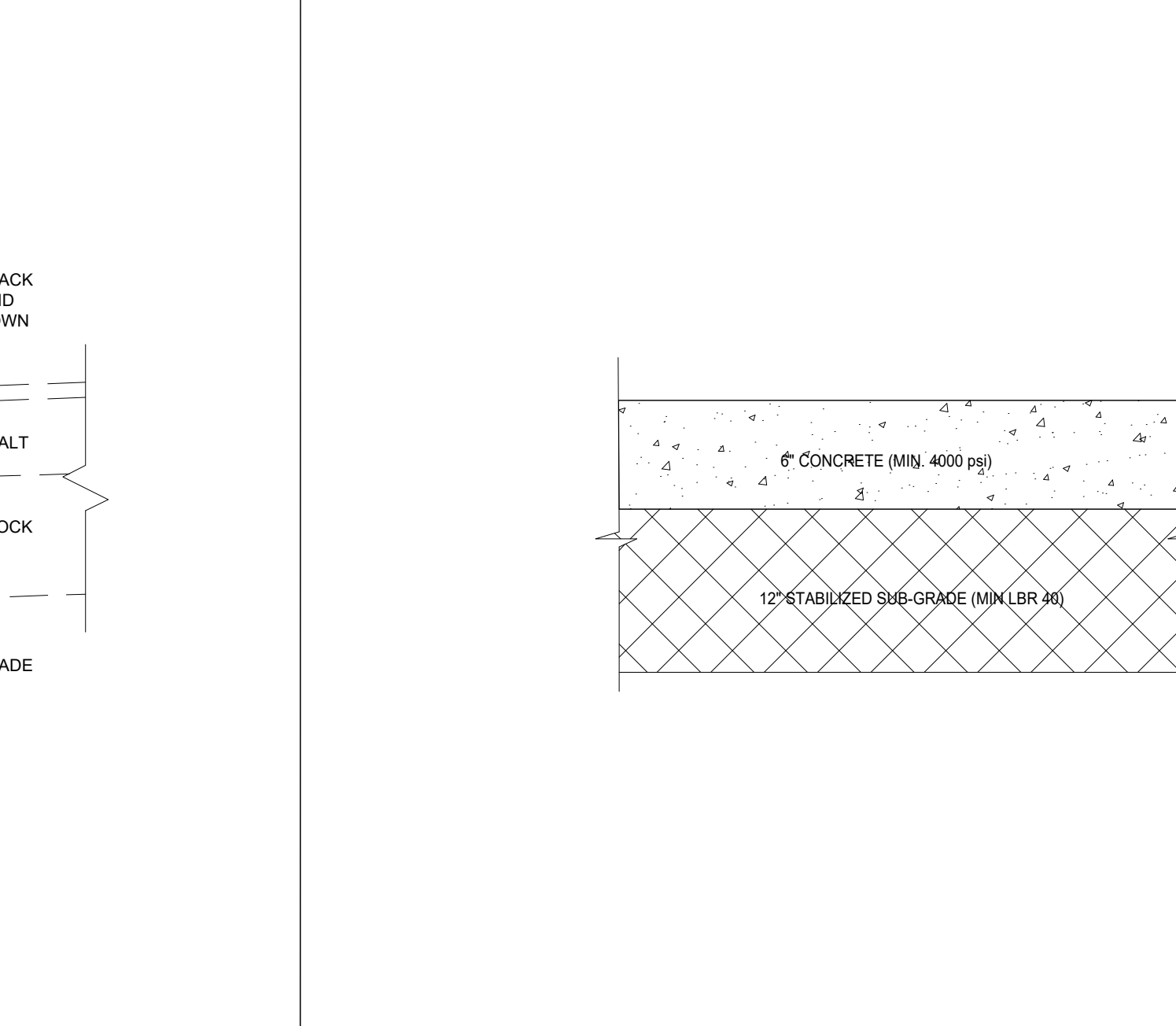
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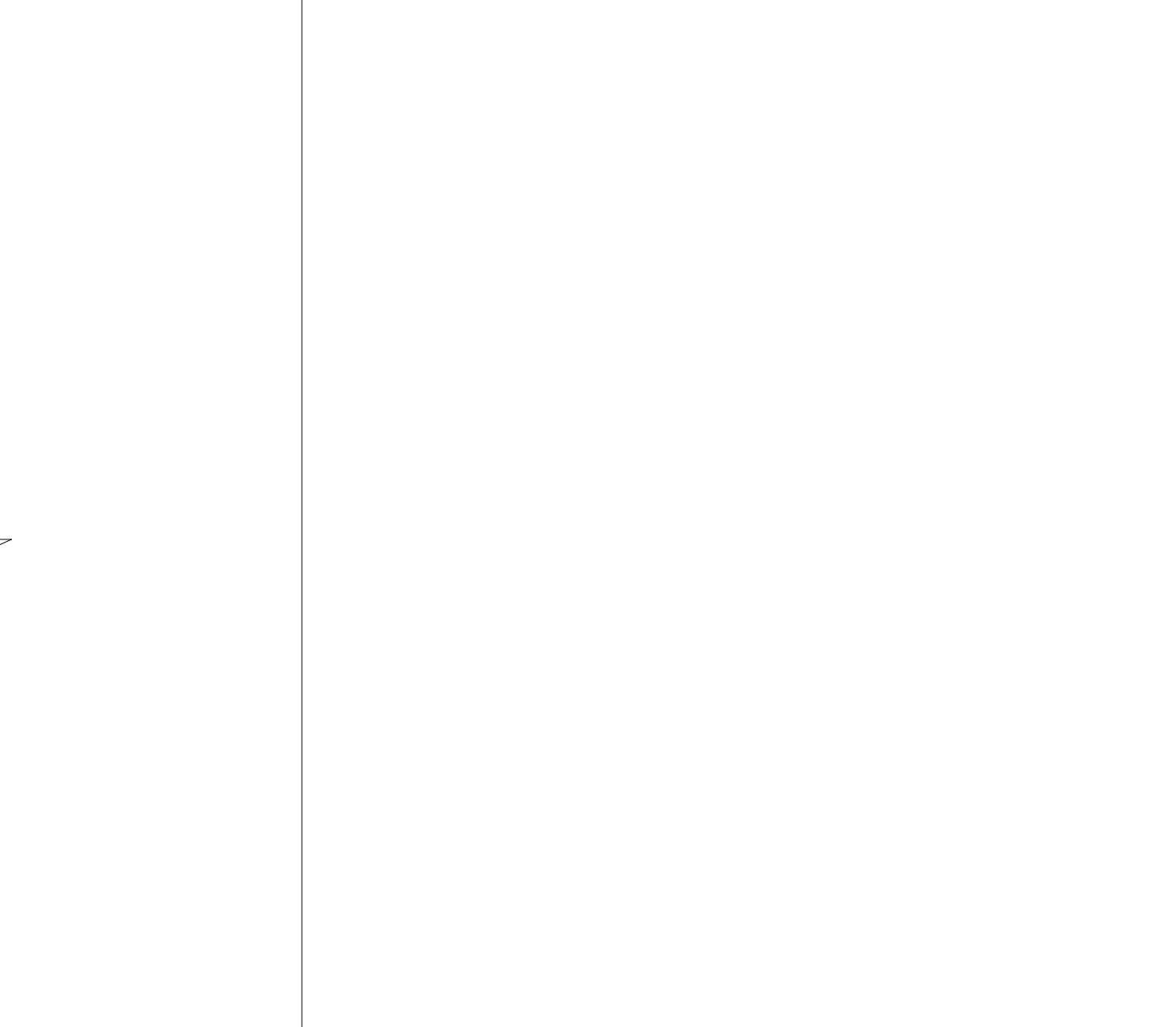
11 SAWCUT/MATCH ASPHALT PAVEMENT DETAIL

SCALE: NONE



8 CONCRETE PAVEMENT

SCALE: NONE



9 CONCRETE PAVEMENT

SCALE: NONE

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

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CONSTRUCTION DETAILS
RACETRAC MARKET
10th Avenue North @ Florida Mango Road
Palm Springs, Florida
Palm Beach County
DATE
SCALE
DRAWN-BY
DRAWING NAME:
F:\180019-RT Standard Details.dwg
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TRACT 10
"MODEL LAND COMPANY
SUBDIVISION"
(P.B. 5, PG. 79)

TRACT 10
TRACT 21

LEGEND:
NAVD = NORTH AMERICAN VERTICAL DATUM
F.F.E. = FINISH FLOOR ELEVATION
EL = ELEVATION
x 0.00' = SPOT ELEVATION
EPB = ELECTRIC PULLBOX
C/O = CLEANOUT
ORB = OFFICIAL RECORDS BOOK
PB = PLAT BOOK
PG = PAGE
-E- = UNDERGROUND ELECTRIC
-UN- = UNDERGROUND UNKNOWN
-SS- = UNDERGROUND SANITARY SEWER
-S- = UNDERGROUND STORM
-WL- = UNDERGROUND WATER LINE
-FO- = UNDERGROUND FIBER OPTIC
-C- = UNDERGROUND TELECOMMUNICATIONS

TRACT 21
"MODEL LAND COMPANY"
SUBDIVISION"
(P.B. 5, PG. 79)

LOT 1
PER PLAT OF
"MANGO HEIGHTS"
(UNRECORDED)

LOT 2
PER PLAT OF
"MANGO HEIGHTS"
(UNRECORDED)

LOT 3
PER PLAT OF
"MANGO HEIGHTS"
(UNRECORDED)

LOT 4
PER PLAT OF
"MANGO HEIGHTS"
(UNRECORDED)

LOT 24
PER PLAT OF
"MANGO HEIGHTS"
(UNRECORDED)

TRACT 8
"MODEL LAND COMPANY
SUBDIVISION"
(P.B. 5, PG. 79)

N01°30'41"E 649.47'

EAST LINE OF TRACT 21
WEST LINE OF TRACT 22

SOUTH LINE OF TRACT 21

N08°08'29"W 495.49'

N01°29'19"E 219.50'

N01°28'51"E 353.39'

S01°28'51"W 231.00'

S01°28'51"W 231.00'

S01°28'51"W 231.00'

S01°28'51"W 231.00'

S01°28'51"W 231.00'

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S01°28'51"W 231.00'

S01°28'51"W 231.00'

S01°28'51"W 231.00'

PARCEL ID: 7043442001008080
2601 10TH AVENUE NORTH
10TH AVENUE PARTNERSHIP LTD
401 SOUTH DIXIE HIGHWAY STE 300
WEST PALM BEACH, FLORIDA 33401

PROPOSED LOT 1
TENTH AVENUE NORTH

RACETRAC PETROLEUM SITE

SITE UNDER CONSTRUCTION
(CHASE BANK)

PROPOSED LOT 2
TENTH AVENUE NORTH

10TH AVENUE NORTH

SE CORNER
OF TRACT 23

FLORIDA MANGO ROAD

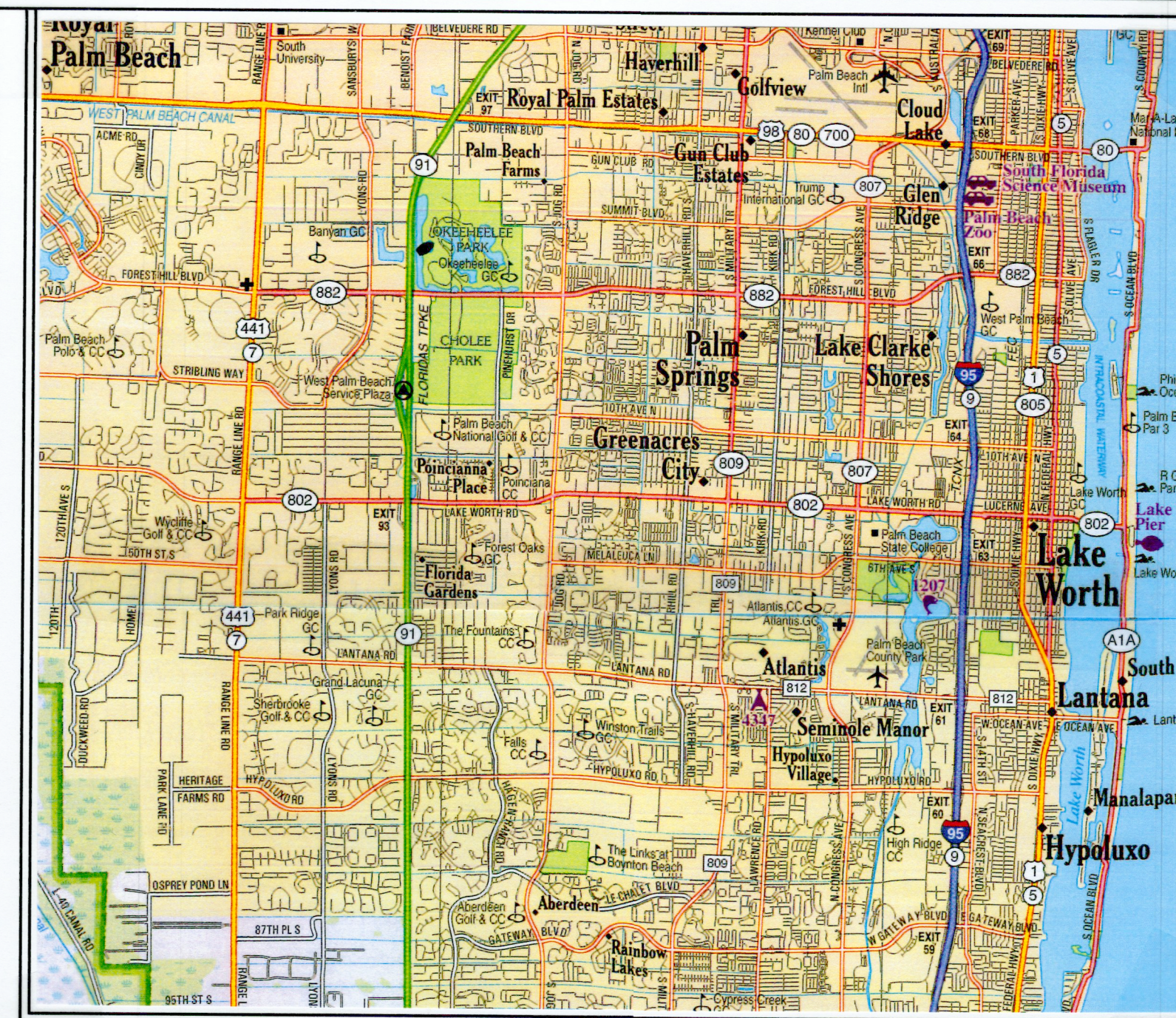
EAST LINE OF TRACT 23

EAST LINE OF TRACT 23

GRAPHIC SCALE



(IN FEET)
1 inch = 40 ft.



LOCATION MAP: NOT TO SCALE

BOUNDARY SURVEY

LOT 1, TENTH AVENUE PLAT
10th AVE N. and FLORIDA MANGO ROAD
VILLAGE OF PALM SPRINGS, FLORIDA

LEGAL DESCRIPTION:

PROPOSED LOT 1 OF TENTH AVENUE NORTH, AS RECORDED IN PLAT BOOK _____, PAGE _____ OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.
ALSO BEING A PORTION OF TRACTS 22 AND 23 OF MODEL LAND COMPANY'S SUBDIVISION OF SECTION 20, TOWNSHIP 44 SOUTH, RANGE 43 EAST, ACCORDING TO THE PLAT THEREOF ON FILE IN THE OFFICE OF THE CLERK IN AND FOR PALM BEACH COUNTY, FLORIDA, RECORDED IN PLAT BOOK 5, PAGE 79.

SURVEYOR'S NOTES:

- BOUNDARY SURVEY SHOWN (REMAINDER OF PROPOSED LOT 1 OF TENTH AVENUE PLAT) IS SOLELY FOR THE PURPOSE OF LOCATION OF TREES ON LOT 1. NO IMPROVEMENTS WERE LOCATED BY THIS FIRM. THE UNDERLYING IMPROVEMENTS AS SHOWN IN LIGHT SHADE WAS FURNISHED BY CLIENT.
- NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND UTILITIES ON OR ADJACENT TO THIS SITE. THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE TAKEN FROM ASBUILT DRAWINGS AND/OR ON-SITE LOCATION AND SHOULD BE VERIFIED BEFORE CONSTRUCTION.
- NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND FOOTINGS OF BUILDINGS OR FENCES ON OR ADJACENT TO THIS SITE.
- LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS AND/OR RIGHTS OF WAY OF RECORD EXCEPT AS SHOWN ON THE RECORD PLAT IF ANY.
- THIS PROPERTY WAS SURVEYED IN ACCORDANCE WITH A TITLE COMMITMENT PROVIDED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, FILE NO. CM181062, COMMITMENT DATE: APRIL 25, 2018 AT 5:00 PM.
- SCHEDULE II
EXCEPTION #4: ORB 1202, PAGE 421 - DOES NOT AFFECT RACETRAC PROPERTY, LIES WITHIN THE RIGHT OF WAY OF 10th AVENUE NORTH
EXCEPTION #5: ORB 3149, PG 314 - AFFECTS PARENT TRACT, NOT RACETRAC SITE
EXCEPTION #6: ORB 3946, PG 1261; ORB 3946, PG 1263 - AFFECTS PARENT TRACT, NOT RACETRAC SITE
EXCEPTION #7: ORB ORB 29786, PG 251; ORB 29786, PG 1183 - AFFECTS PROPERTY, AS SHOWN ON SKETCH
EXCEPTION #8: ORB 27925, PG 1184 - AFFECTS PROPERTY, UNPLOTTABLE
EXCEPTION #9: ORB 27925, PG 1194; ORB 27949, PG 285 - AFFECTS PROPERTY, UNPLOTTABLE
EXCEPTION #10: DEED BOOK 833, PG 185 - AFFECTS PROPERTY, UNPLOTTABLE (RESTRICTS FILLING STATIONS)
6. THE BEARING BASE OF THIS SURVEY IS ALONG THE NORTH RIGHT OF WAY LINE OF 10TH AVENUE NORTH, S88°07'50"W, BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM EAST ZONE, 8390 ADJUSTMENT.
7. LEGAL DESCRIPTION FURNISHED BY CLIENT.
8. ALL BEARINGS AND DISTANCES SHOWN ARE PLAT AND MEASURED UNLESS OTHERWISE NOTED.
9. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
10. THIS SITE LIES IN FLOOD ZONE 'X' AS SCALED AND INTERPOLATED ON FEMA MAP NO. 120192-0589-F, DATED: OCTOBER 5, 2017.

SURVEYOR'S CERTIFICATION:

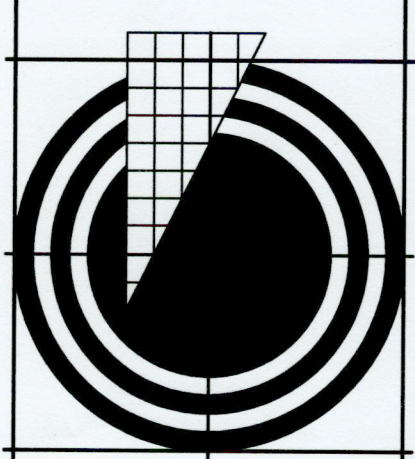
I HEREBY CERTIFY THAT THIS SURVEY MAP AND/OR REPORT WAS PREPARED UNDER MY RESPONSIBLE CHARGE AND MEETS THE STANDARDS OF PRACTICE AS SET FORTH BY THE FLORIDA BOARD OF PROFESSIONAL SURVEYOR AND MAPPERS IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE AND THAT IT IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF. SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CRAIG D. WATSON
PROFESSIONAL SURVEYOR & MAPPER
NO. 5647 STATE OF FLORIDA

DATE	REVISIONS	DWG	CHK
8/2/18	RT COMMENTS	DPK	CDW

PREPARED FOR:
RACETRAC PETROLEUM
200 GALLERIA PARKWAY SE STE. 900
ATLANTA, GEORGIA 30339

WATSON | KILLANE
SURVEYING AND MAPPING, INC.
2240 NE DIXIE HIGHWAY - JENSEN BEACH, FLORIDA 34957
PHONE 772-334-0868 - EMAIL: WATSONKILLANE@GMAIL.COM
LICENSED BUSINESS NO. 8241



JOB NUMBER: 18-329
FIELD DATE: 3-7-19
CHECKED BY: CDW
DRAWN BY: DPK
SCALE: 1"=40'
SHEET 1 OF 1

TRAFFIC IMPACT ANALYSIS

RaceTrac Market 10th Avenue North & Florida Mango Palm Beach County, FL

Prepared for:
RaceTrac Petroleum, Inc.
Atlanta, Georgia

Prepared by:


Engineering & Planning, Inc.

1172 SW 30th Street, Suite 500
Palm City, FL 34990
(772) 286-8030

131005
July 2019
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CA 29013

Shaun G. MacKenzie P.E.
PE Number 61751

EXECUTIVE SUMMARY

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts resulting from the proposed RaceTrac Market on the northwest corner of 10th Avenue North and Florida Mango Road in Palm Springs, Florida (70-43-44-20-01-008-0080). The applicant proposes to redevelop an existing multi-story office building and Chase Bank with a 20 Vehicle Fueling Position Gas Station, 5,488 SF Convenience Store, a 4,081 SF drive-in bank, a 6,496 SF Tire Store, and 50,000 SF of General Commercial.

The proposed project is expected to generate the following net new external trips:

- 2,732 daily, 141 AM peak hour (70 in/71 out), and 165 PM peak hour (109 in/56 out)

The proposed project is expected to generate the following driveway trips:

- 6,897 daily, 325 AM peak hour (162 in/163 out), and 451 M peak hour (251 in/200 out)

This traffic impact analysis shows that the proposed Project will meet Palm Beach County's Traffic Performance Standards through December 31, 2022 (i.e. Test 1 - Part 1, Test 1 - Part II, and Test 2).

A right-turn ingress lane will be constructed at the western driveway on 10th Avenue North.

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LIST OF EXHIBITS

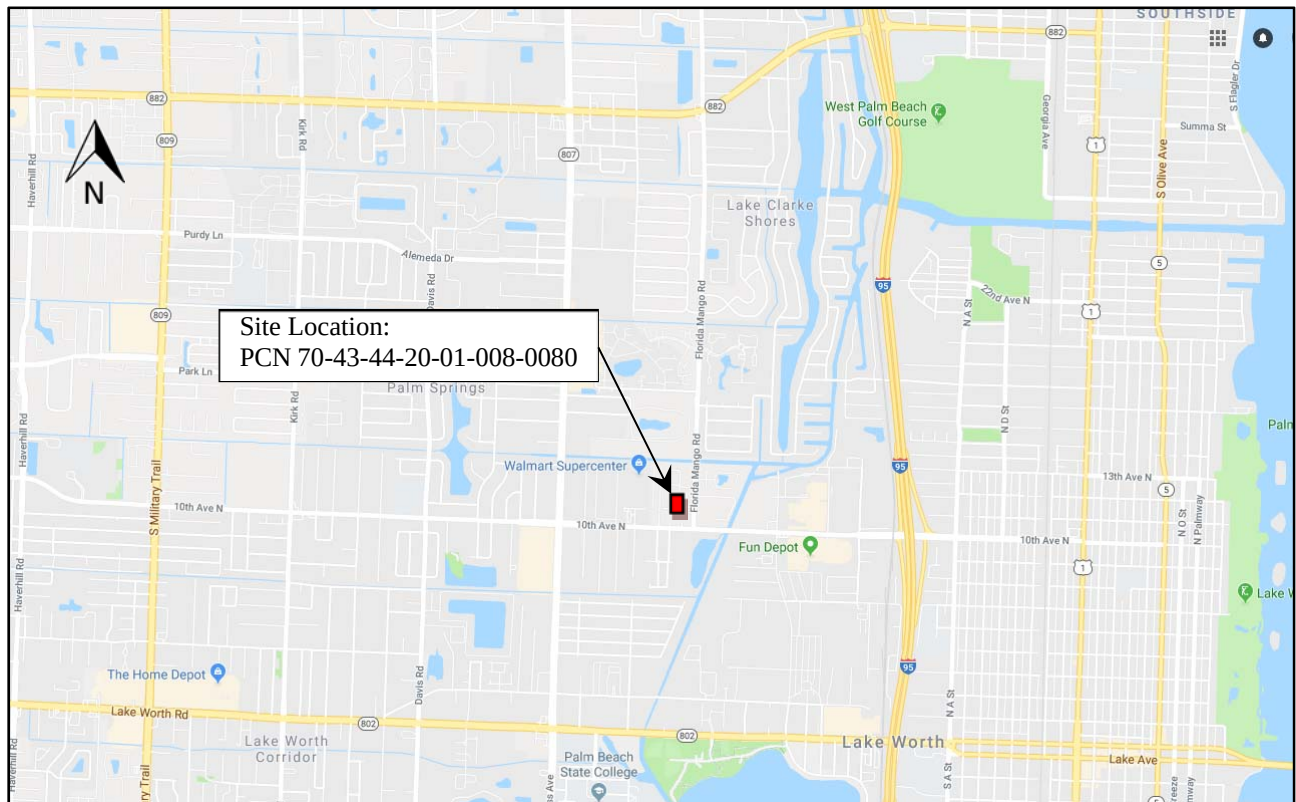
Exhibit 1. Trip Generation
Exhibit 2. Test 1 – Part 2 AM Peak Hour
Exhibit 3. Test 1 – Part 2 PM Peak Hour
Exhibit 4. Test 2
Exhibit 5-20. Intersection Development Worksheets and Critical Volume Analysis

INTRODUCTION

MacKenzie Engineering & Planning, Inc. was retained to prepare a traffic impact analysis for the project. This document presents the methodology used and the findings of the traffic impact analysis. The analysis was conducted in accordance with the requirements of the Countywide Traffic Performance Standards of Palm Beach County. The analysis used current data available from Palm Beach County.

This analysis has been prepared to evaluate traffic impacts resulting from the proposed development of a RaceTrac Market on the northwest corner of 10th Avenue North and Florida Mango Road in Palm Springs, Florida (70-43-44-20-01-008-0080). The applicant proposes to amend the redevelopment plan on the property approved on 2/12/19 (PBC ID 1811007) for a 4,081 square foot (SF) drive-in bank, 20 fueling position gas station and 5,488 SF convenience store. The applicant proposes to redevelop an existing multi-story office building and Chase Bank with a 20 Vehicle Fueling Position Gas Station, 5,488 SF Convenience Store, a 4,081 SF drive-in bank, a 6,496 SF Tire Store, and 50,000 SF of either Medical Office or General Commercial. A buildout year of 2022 was analyzed for the proposed project. Figure 1 illustrates the site location.

Figure 1. Site Location Map



INVENTORY AND PLANNING DATA

The traffic data used in this analysis were obtained from Palm Beach County. The data included:

- Historic traffic count data
- Roadway geometrics
- Intersection turning movement counts

RaceTrac provided project development information.

PROJECT TRAFFIC

Traffic Generation

Existing Uses

The existing site consists of 86,272 SF of General Office and a 9,033 SF drive-in bank.

Trip Generation Rates/ Formulas

The study uses Palm Beach County trip generation rates and/or equations for all uses as shown in the Table 3. In order to provide a conservative analysis, the project is evaluated with 50,000 SF of general commercial use (Table 1) and 50,000 SF of medical office use (Table 2). The most conservative (highest) trip generation for any time period and/or direction is utilized in the analysis.

Proposed Site

The proposed development plan consists of a 20 Vehicle Fueling Position Gas Station, 5,488 SF Convenience Store, a 4,081 SF drive-in bank, a 6,496 SF Tire Store, and 50,000 SF of General Commercial. The applicant desires flexibility for some or all of the 50,000 SF commercial building to be used for medical office.

Option A – Retail (50,000 SF)

The proposed project is expected to generate the following net new external trips:

- 2,732 daily, 45 AM peak hour (-9 in/54 out), and 165 PM peak hour (109 in/56 out)

Option B – Medical Office (50,000 SF)

The proposed project is expected to generate the following net new external trips:

- 2,341 daily, 141 AM peak hour (70 in/71 out), and 149 PM peak hour (70 in/79 out)

Proposed Trip Generation

In order to provide a conservative analysis Option A was used for the daily and PM peak our and Option B was used for the AM Peak hour. The proposed project is expected to generate the following net new external trips:

- 2,732 daily, 141 AM peak hour (70 in/71 out), and 165 PM peak hour (109 in/56 out)

The proposed project is expected to generate the following driveway trips:

- 6,897 daily, 325 AM peak hour (162 in/163 out), and 451 M peak hour (251 in/200 out)

Internal Capture

The existing AM and PM peak hour internal capture is conservatively estimated at 3.1 and 2.1 percent, respectively. The proposed AM and PM peak hour internal capture is conservatively estimated at 2.7 and 4.7 percent, respectively. This is a conservation rate given the potential interaction between the diverse uses on the site.

Pass-by Trip Capture

The proposed pass-by capture is in accordance with the Palm Beach County pass-by rates for the respective land uses, as shown in Exhibit 1.

Table 1. Trip Generation w/ Retail

Land Use		Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
Existing Site Traffic										
General Office (>5ksf)		86.272	1000 SF	919	108	93	15	99	16	83
Drive-In Bank		9.033	1000 SF	904	86	50	36	185	93	92
Subtotal				1,823	194	143	51	284	109	175
Internal Capture										
General Office (>5ksf)		2.8%	3.0%	28	3	2	1	3	1	2
Drive-In Bank		3.5%	1.6%	15	3	1	2	3	2	1
Subtotal		3.1%	2.1%	43	6	3	3	6	3	3
Pass-By Traffic										
General Office (>5ksf)		10.0%		89	11	9	2	10	2	8
Drive-In Bank		47.0%		418	39	23	16	86	43	43
Subtotal				507	50	32	18	96	45	51
NET EXISTING TRIPS				1,273	138	108	30	182	61	121
Total Existing Driveway Volumes				1,780	188	140	48	278	106	172
Proposed Site Traffic										
Drive-In Bank		4.081	1000 SF	408	39	23	16	83	42	41
Conv. Mrkt w/ Gas Pumps 5.488 20		5.488 ksf + 20 pumps		4,734	331	166	165	331	166	165
Gen. Commercial		50.000	1000 SF	3,752	47	29	18	325	156	169
Tire Store		6.496	1000 SF	185	18	12	6	26	11	15
Subtotal				9,079	435	230	205	765	375	390
Internal Capture										
Drive-In Bank		5.1%	8.4%	34	2	1	1	7	3	4
Conv. Mrkt w/ Gas Pumps		1.5%	4.5%	215	5	2	3	15	8	7
Gen. Commercial		4.3%	3.7%	139	2	1	1	12	6	6
Tire Store		5.6%	7.7%	14	1	1	0	2	1	1
Subtotal		2.3%	4.7%	402	10	5	5	36	18	18
Pass-By Traffic										
Drive-In Bank		47.0%		176	17	10	7	36	18	18
Conv. Mrkt w/ Gas Pumps		61.0%		2,757	199	100	99	193	96	97
Gen. Commercial		46.8%		1,691	21	13	8	146	70	76
Tire Store		28.0%		48	5	3	2	7	3	4
Subtotal				4,672	242	126	116	382	187	195
NET PROPOSED TRIPS				4,005	183	99	84	347	170	177
Total Proposed Driveway Volumes				8,677	425	225	200	729	357	372
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)				2,732	45	(9)	54	165	109	56
NET CHANGE IN DRIVEWAY VOLUMES				6,897	237	85	152	451	251	200

Table 2. Trip Generation w/ Medical Office

Land Use	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
Existing Site Traffic									
General Office (>5ksf) Drive-In Bank	86.272	1000 SF	919	108	93	15	99	16	83
	9.033	1000 SF	904	86	50	36	185	93	92
	Subtotal		1,823	194	143	51	284	109	175
Internal Capture		PM/ AM DAILY							
General Office (>5ksf)	2.8%	3.0%	28	3	2	1	3	1	2
Drive-In Bank	3.5%	1.6%	15	3	1	2	3	2	1
Subtotal		3.1% 2.1%	43	6	3	3	6	3	3
Pass-By Traffic									
General Office (>5ksf)	10.0%		89	11	9	2	10	2	8
Drive-In Bank	47.0%		418	39	23	16	86	43	43
Subtotal			507	50	32	18	96	45	51
NET EXISTING TRIPS			1,273	138	108	30	182	61	121
Total Existing Driveway Volumes			1,780	188	140	48	278	106	172
Proposed Site Traffic									
Drive-In Bank Conv. Mrkt w/ Gas Pumps 5.488	4.081	1000 SF	408	39	23	16	83	42	41
	5.488 ksf + 20 pumps		4,734	331	166	165	331	166	165
	20								
Medical Office	50.000	1000 SF	1,740	139	108	31	173	48	125
Tire Store	6.496	1000 SF	185	18	12	6	26	11	15
Subtotal			7,067	527	309	218	613	267	346
Internal Capture		PM/ AM DAILY							
Drive-In Bank	5.1%	8.4%	34	2	1	1	7	3	4
Conv. Mrkt w/ Gas Pumps	2.1%	3.0%	143	7	2	5	10	7	3
Medical Office	2.9%	4.0%	70	4	3	1	7	2	5
Tire Store	5.6%	7.7%	14	1	1	0	2	1	1
Subtotal		2.7% 4.2%	261	14	7	7	26	13	13
Pass-By Traffic									
Drive-In Bank	47.0%		176	17	10	7	36	18	18
Conv. Mrkt w/ Gas Pumps	61.0%		2,801	198	100	98	196	97	99
Medical Office	10.0%		167	14	11	3	17	5	12
Tire Store	28.0%		48	5	3	2	7	3	4
Subtotal			3,192	234	124	110	256	123	133
NET PROPOSED TRIPS			3,614	279	178	101	331	131	200
Total Proposed Driveway Volumes			6,806	513	302	211	587	254	333
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)			2,341	141	70	71	149	70	79
NET CHANGE IN DRIVEWAY VOLUMES			5,026	325	162	163	309	148	161

Table 3. Trip Generation Rates

Note: Trip generation was calculated using the following data:								
Land Use	ITE	Unit	DailyRate	Pass-by Rate	AM Peak Hour		PM Peak Hour	
	Code				in/out	Rate	in/out	Equation
Conv. Mrkt w/ Gas Pumps	FDOT	1000 SF & Pumps	14.3 x PM Trips	61%	50/50	used PM information	50/50	12.3 x Fuel Pumps + 15.5 x 1,000 SF
General Office (>5ksf)	710	1000 SF	$\ln(T) = 0.97 \ln(X) + 2.5$	10%	86/14	$T = 0.94 (X) + 26.49$	16/84	1.15
Drive-In Bank	912	1000 SF	100.03	47%	58/42	9.50	50/50	20.45
Tire Store	848	1000 SF	28.52	28%	64/36	2.72	43/57	3.98
Gen. Commercial	820	1000 SF	$\ln(T) = 0.68 \ln(X) + 5.57$	83.18 - 9.3 LN(A)	62/38	0.94	48/52	$\ln(T) = 0.74 \ln(X) + 2.89$
Medical Office	720	1000 SF	34.8	10%	78/22	2.78	28/72	3.46

Radius of Impact

Based on Table 12.B.2.D-7 3A of Article 12 of the Palm Beach County Unified Land Development Code, for a peak hour trip generation of 141 AM peak hour and 165 PM peak hour trips, the radius of development influence shall be two miles.

TRAFFIC DISTRIBUTION

Traffic distribution and assignment was determined using engineering judgment, trip lengths based on the uses and from a review of the roadway network. The overall distribution is summarized by general directions and is depicted below:

NORTH	-	20 percent
EAST	-	50 percent
WEST	-	30 percent

ASSURED AND PROGRAMMED CONSTRUCTION

A review conducted of the Five-Year Plans of Palm Beach County and FDOT, as well as those improvements committed by the developers of projects in the area. Several improvements nearby are planned, including turn-lane improvements at Boutwell Road & 10th Avenue North, 3-Laning of Florida Mango Road from 10th Avenue North to Summit Boulevard, and additional travel lanes on 10th Avenue North at the I-95 interchange.

BACKGROUND TRAFFIC

Background traffic identifies how the study area's transportation system is forecast to operate in the buildout year. This includes traffic growth that is associated with the general (historic) growth in the area and the growth due the development of unbuilt portions of approved major developments. Per Palm Beach County, the greater of either the historical growth rate or the traffic volumes from the approved projects plus a nominal one percent growth rate was applied to roadway links and intersections.

Historical Growth

According to the requirements of the TPS Article 12 Chapter C.1.C.4.b., the existing traffic volumes were adjusted using factors determined by a review of the historic traffic count data published by Palm Beach County. The study uses a 1.5 percent growth rate as shown in Table 4.

Table 4. Growth Rate Calculation

Roadway	From	To	Sta ID	Traffic Count Year						Growth Rate
				2014	2015	2016	2017	2018	2019	
6TH Ave S	Congress Ave	Sunset Ave	4631	29480	28494	30973	30485	31942	32716	2.3%
	I-95	SR 805 (Dixie Hwy)	4307	27896	29872	30013	31163	31912	34706	3.4%
Melaleuca Lane	Haverhill Rd	Military Tr	4657	23843	24818	26916	26869	26528	27540	2.4%
	Military Tr	Kirk Rd	4617	25172	25665	26476	27847	28514	28164	2.5%
10TH Ave N	Military Tr	Kirk Rd	4603	26705	26370	27508	27357	27526	27686	0.8%
	Kirk Rd	Congress Ave	4653	31996	31960	32520	32274	31629	32877	0.3%
	Congress Ave	I-95	4203	44441	45255	46089	41500	43500	45262	-0.4%
Congress Ave	Forest Hill Blvd	10th Ave N	4210	35570	34955	36796	0	40729	42189	0.9%
	10th Ave N	French Ave	4604	40836	38733	39628	43828	43904	46689	3.0%
Florida Mango RD	Summit Blvd	Forest Hill Blvd	3646	6637	6289	7015	7007	6876	6874	1.2%
	Forest Hill Blvd	10th Ave N	4212	10422	10995	10853	11647	11389	11464	1.8%
Forest Hill Blvd	Haverhill Rd	Military Tr	3625	43356	43254	44204	43503	43928	43592	0.2%
	Military Tr	Kirk Rd	3627	42653	41933	44156	0	44021	43629	-2.2%
	Kirk Rd	Congress Ave	3629	43744	42266	44053	44262	45722	47705	1.8%
	I-95	Parker Ave	3317	27989	27796	27984	0	28275	29919	-1.6%
Lake Worth Rd	Military Tr	Kirk Rd	4611	42870	42951	44545	0	44802	43679	-2.3%
	Kirk Rd	Congress Ave	4647	38338	38415		40892	40684	40791	1.4%
	Congress Ave	Boutwell Rd	4651	24599	23415		0	26619	27172	0.2%
Military T rail	Forest Hill Blvd	Cresthaven Blvd	4206	43038	45554	44729	44781	44979	44656	0.4%
	Cresthaven Blvd	10th Ave N	4650	42561	43454	44984	44631	44876	43525	0.6%
	10th Ave N	Lake Worth Rd	4618	40172	41244	43124	0	41597	40039	-3.0%
	Lake Worth Rd	Melaleuca Ln	4602	35405	36403	39572	37881	40325	37227	1.5%
Weighted Average										0.57%
Growth Rate Used										1.50%

TEST ONE - PART I (INTERSECTION ANALYSIS)

According to the County's TPS Section 2.A.1, Part I of Test One requires an analysis of the major intersection(s) nearest to each link that is directly assessed and significantly impacted by the proposed project. In addition, it is also required that an analysis be performed on all intersections where the project traffic is equal to or greater than 10 percent of the total traffic on at least one of the intersection approaches.

Intersections with Ten Percent Project Traffic on Approach

Based on the project trip generation at the end of Buildout phase, there were no intersections where the project traffic was equal to or greater than 10 percent on at least one of the intersection approaches.

Intersections on Significantly Impacted Links

The project directly accesses 10th Avenue North and Florida Mango Road.

In the AM peak hour, the project significantly impacts 10th Avenue North from Congress Avenue to I-95 and Florida Mango Road northbound from Forest Hill Blvd to the project site and Florida Mango Road southbound from Forest Hill Blvd to 10th Avenue North. In the PM peak hour, the project significantly impacts 10th Avenue North eastbound from Congress Avenue to the Project Site, 10th Avenue North eastbound from Florida Mango Road to Boutwell Road, 10th Avenue North westbound from Project Site to I-95, Florida Mango Road northbound from Forest Hill Blvd to 10th Avenue North, and Florida Mango Road southbound from Summit Blvd to 10th Avenue North.

The study analyzes:

- 10th Avenue North and Florida Mango Road
- 10th Avenue North and Congress Avenue
- Forest Hill Blvd and Florida Mango Road

The intersections were analyzed using the Critical Sum planning methodology as outlined in the 1985 Highway Capacity Manual (HCM).

The critical sum analysis of the intersections show that the critical volume at 10th Avenue North and Florida Mango Road (AM and PM peak hour), 10th Avenue North and Congress Avenue (AM peak hour) and Forest Hill Blvd and Florida Mango Road (AM and PM peak hour) are not expected to exceed the threshold of 1,400 vehicles per hour with the project site traffic at the end of the project buildout. The critical sum analysis sheets are included in the Appendix.

Table 5. Intersection Critical Volume Analyses

<u>Intersection</u>	Intersection Critical Sum	
	<u>AM Peak Hour</u>	<u>PM Peak Hour</u>
10th Avenue North and Florida Mango Road	902	1,361
10th Avenue North and Congress Avenue	1,189	1,392*
Forest Hill Blvd and Florida Mango Road	1,362	1,115

*With background improvements

10th Avenue North and Congress Avenue - PM Peak Hour

Background Traffic Analysis

A critical sum analysis was performed for the 2022 buildout year with the PM peak hour background and committed traffic. The critical movement analysis at 10th Avenue North and Congress Avenue does not meet the minimum standard of 1,400 vehicles per hour as shown in Table 6. Further analysis of the background conditions were performed to determine the needed improvements in the background condition.

Background Traffic Analysis with Improvements

A critical sum analysis was performed for the 2022 buildout year with the PM peak hour background and committed traffic to determine the minimum roadway laneage to be added in place prior to adding project traffic. The following improvement, hereinafter referred to as “the PM Peak Hour Background Needed Improvement,” was added to achieve an acceptable critical sum:

- Congress Avenue – Southbound Right Turn lane

The critical sum analysis of the intersection in the background condition with the PM Peak Hour Background Needed Improvement shows that the critical volume at the intersections is expected to operate acceptably under the threshold of 1,400 vehicles per hour in the background condition.

Total Traffic Analysis with Improvements

Project site traffic was added to the background traffic with the PM Peak Hour Background Needed Improvement and a critical sum analysis was performed. The critical sum analysis shows that the intersection is projected to operate acceptably. The critical sum analysis sheets are included in the Appendix.

Table 6. PM Peak Hour Intersection Critical Sum Summary

	Background Traffic	Background Traffic with Improvements	Project Traffic
<u>Intersection</u>	<u>PM Peak Hour</u>	<u>PM Peak Hour</u>	<u>PM Peak Hour</u>
10th Avenue North and Congress Avenue	1,474	1,388	1,392

The improvements needed at the intersections are a result of background traffic. No additional improvements are required. Therefore, Test One – Part I is satisfied.

TEST ONE - PART II (LINK EVALUATION)

According to the County's TPS Section 2.A.2, Part II of Test One requires a one-way peak hour link performance standard evaluation for each link considering its total one-way peak hour traffic volume and the roadway laneage to be in place by the end of the project buildout in 2022. Significant links are road segments impacted by project traffic that equals or exceeds one percent of a roadway's service volume.

Total Peak Hour

The project traffic and background traffic for the AM and PM peak hours for one-way peak hour conditions are shown in Exhibits 2A and 3A, respectively.

Significantly Impacted Roadways

Based on the County's TPS, the project significantly impacts the following roadway segments:

AM peak hour

- 10th Avenue North from Congress Avenue to I-95
- Florida Mango Road northbound from Forest Hill Blvd to the project site
- Florida Mango Road southbound from Forest Hill Blvd to 10th Avenue North

PM peak hour

- 10th Avenue North eastbound from Congress Avenue to the Project Site
- 10th Avenue North eastbound from Florida Mango Road to I-95
- 10th Avenue North westbound from Project Site to I-95
- Florida Mango Road northbound from Forest Hill Blvd to 10th Avenue North
- Florida Mango Road southbound from Summit Blvd to 10th Avenue North

Background Traffic Analysis

An analysis was performed for the 2022 buildout year with the PM peak hour background and committed traffic. All road segments are projected to operate acceptably in 2022 background plus committed traffic conditions, except the following:

- 10th Avenue North from Congress Avenue to I-95 - AM Peak Hour; and
- 10th Avenue North from Congress Avenue to I-95 - PM Peak Hour

As a 6-lane facility, 10th Avenue North is projected to operate acceptably. The 6-laning of 10th Avenue North from Congress Avenue to I-95 will hereinafter be referred to as “the PM Peak Hour Background Needed Roadway Improvement”.

Total Traffic Analysis with Improvements

Project site traffic was added to the background traffic with the PM Peak Hour Background Needed Roadway Improvement. All facilities are projected to operate acceptably, as shown in Exhibits 2B and 3B, therefore; the provisions of the TPS are met for Test I Part II.

Test 1 – Part II is satisfied

TEST TWO - PART I (LINK EVALUATION)

Based on the requirements of Palm Beach County’s TPS Section 2.B., an analysis was undertaken for all the roadway links included in the Palm Beach County Thoroughfare Map within the maximum radius of development influence to determine the Test Two significantly impacted links. Per Palm Beach County standards, all the roadway links on which the project traffic impact is greater than 3% of the LOS-E service volume are considered significantly impacted by the project traffic.

Total Peak Hour

A Test Two one-way peak hour link performance standard evaluation was undertaken for all thoroughfare links within the project study area. The analysis was performed considering the peak hour background traffic volume and the peak hour project traffic volume to be in place in 2022. Based on the analysis, none of the Test Two roadway links are significantly impacted by the project, as shown in Exhibit 4.

Test Two is satisfied.

DRIVEWAYS

The existing site will be redeveloped with a 20 Vehicle Fueling Position Gas Station, 5,488 SF Convenience Store, a 4,081 SF drive-in bank, a 6,496 SF Tire Store, and 50,000 SF of either Medical Office (AM peak hour) or General Commercial (PM peak hour).

On September 20, 2018, KMF Traffic Group, LLC, obtained driveway volumes on Florida Mango Road. The existing site has the following access to remain:

- Western Driveway - 10th Avenue North: Full opening
- Florida Mango Road: Full opening

Turn-lanes will be required at the following driveways:

Western Driveway and 10th Avenue North:

- Eastbound left-turn lane (Existing)
- Southbound left-turn lane (To remain)
- Westbound right-turn lane (Proposed)

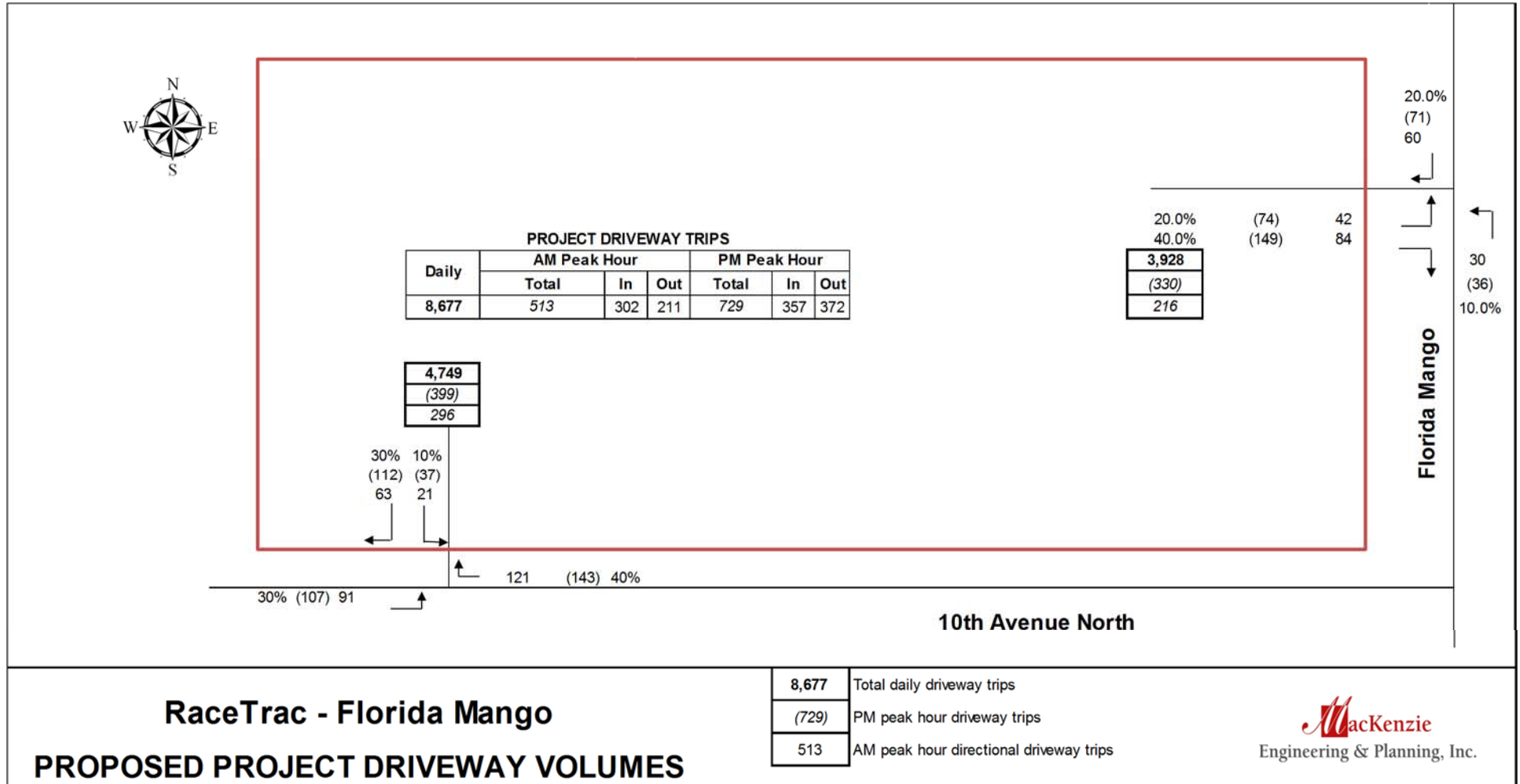
Florida Mango Road

- Northbound left-turn lane (Existing)
- East left-turn lane (To remain)

A southbound right turn lane is not required because the peak hour right turning volume is 50 vehicles

The proposed project driveway volumes are shown in Figure 3.

Figure 3. Proposed Driveway Volumes



TURN LANE ANALYSIS

Florida Mango Road & Driveway

An analysis of the northbound left-turn lane at the Florida Mango Road & project driveway was performed during the AM and PM Peak Hour utilizing HCM2010 methodology using Synchro 9. The queueing analysis can be found in the Appendix.

Table 7. Florida Mango Rd & Driveway Northbound Left Queueing Analysis

	NBL	
	AM	PM
95th Percentile Queue (Veh)	0.1	0.1
95th Percentile Queue (Feet)	25	25
Existing Storage (Feet)	130	130
Acceptable	YES	YES

The queue length was evaluated using the 95th percentile storage ratio and the existing turn lane length for each turn-lane. Based on the analysis, all storages are adequate.

10th Avenue North & Driveway

An analysis of the eastbound left-turn lane at the 10th Avenue North & project driveway was performed during the AM and PM Peak Hour utilizing HCM2010 methodology using Synchro 9. The queueing analysis can be found in the Appendix.

Table 8. 10th Ave North & Driveway Eastbound Left Queueing Analysis

	EBL	
	AM	PM
95th Percentile Queue (Veh)	0.7	1.8
95th Percentile Queue (Feet)	25	50
Existing Storage (Feet)	150	150
Acceptable	YES	YES

The queue length was evaluated using the 95th percentile storage ratio and the existing turn lane length for each turn-lane. Based on the analysis, all storages are adequate.

10th Avenue North & Florida Mango Road

An analysis of the southbound left-turn lane at the 10th Ave North & Florida Mango Rd was performed during the AM and PM Peak Hour utilizing Synchro 9. The analysis can be found in the Appendix.

Table 9. 10th Ave N & Florida Mango Rd Southbound AM Peak Hour Queuing Analysis

	SBL AM Peak Hour	
	Pre	Post
95th Percentile Queue (Feet)	237	256
95th Percentile Queue (cars)	10	11
Existing Storage (Feet)	115	115
Acceptable	No	No

The queue length was evaluated using the 95th percentile storage ratio and the existing turn lane length for each turn-lane. The southbound left turn queue in the AM peak hour pre and post development conditions are 10 and 11 vehicles, respectively.

Table 10. 10th Ave N & Florida Mango Rd Southbound PM Peak Hour Queuing Analysis

	SBL PM Peak Hour	
	Pre	Post
95th Percentile Queue (Feet)	211	226
95th Percentile Queue (cars)	9	10
Existing Storage (Feet)	115	115
Acceptable	No	No

The queue length was evaluated using the 95th percentile storage ratio and the existing turn lane length for each turn-lane. The southbound left turn queue in the PM peak hour pre and post development conditions are 9 and 10 vehicles, respectively.

During the AM and PM peak hour, the project increasing the 95th percentile queue by one vehicle or 25 feet. Based on the analysis, the left-turn queue of the interior southbound left-turn lane is exceeded in the pre and post-development conditions. However, the southbound left-turn queue does not extend to the project driveway. The projected 95th percentile left-turn queue reaches 250 feet. The Florida Mango driveway opening is 340 feet from the intersection. Therefore, the projected queue storage is adequate. The second southbound left-turn is also shared with the southbound through lane, but the through movement traffic is minimal (less than 10 percent of the left-turn traffic) and only provides entrance to a multi-family neighborhood.

CONCLUSION

MacKenzie Engineering and Planning, Inc. (MEP) was retained to evaluate the transportation impacts resulting from the proposed RaceTrac Market on the northwest corner of 10th Avenue North and Florida Mango Road in Palm Springs, Florida (70-43-44-20-01-008-0080). The applicant proposes to redevelop an existing multi-story office building and Chase Bank with a 20 Vehicle Fueling Position Gas Station, 5,488 SF Convenience Store, a 4,081 SF drive-in bank, a 6,496 SF Tire Store, and 50,000 SF of General Commercial.

The proposed project is expected to generate the following net new external trips:

- 2,732 daily, 141 AM peak hour (70 in/71 out), and 165 PM peak hour (109 in/56 out)

The proposed project is expected to generate the following driveway trips:

- 6,897 daily, 325 AM peak hour (162 in/163 out), and 451 M peak hour (251 in/200 out)

This traffic impact analysis shows that the proposed Project will meet Palm Beach County's Traffic Performance Standards through December 31, 2022 (i.e. Test 1 - Part 1, Test 1 - Part II, and Test 2).

A right-turn ingress lane will be constructed at the western driveway on 10th Avenue North.

APPENDICES

Exhibit 1. Trip Generation

Exhibit 2. Test 1 – Part 2 AM Peak Hour

Exhibits 3. Test 1 – Part 2 PM Peak Hour

Exhibit 4. Test 2

Exhibit 5-20. Intersection Development Worksheets

A- Intersection Analysis

B- TPS Roadway Segment and Intersection Traffic Data

C- FDOT Peak Season Factor

D- PBC TPS Tables 12.B.2.C-12.B.2.D

E- Site Plan

F- Property ID Card

G- Palm Beach County Traffic Division Trip Generation

EXHIBIT 1A									
RaceTrac - Florida Mango									
Trip Generation (w/ Retail)									
Land Use	Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
				Total	In	Out	Total	In	Out
<u>Existing Site Traffic</u>									
General Office (>5ksf)	86.272	1000 SF	919	108	93	15	99	16	83
Drive-In Bank	9.033	1000 SF	904	86	50	36	185	93	92
Subtotal			1,823	194	143	51	284	109	175
<u>Internal Capture</u>									
General Office (>5ksf)	2.8%	3.0%	28	3	2	1	3	1	2
Drive-In Bank	3.5%	1.6%	15	3	1	2	3	2	1
Subtotal	3.1%	2.1%	43	6	3	3	6	3	3
<u>Pass-By Traffic</u>									
General Office (>5ksf)	10.0%		89	11	9	2	10	2	8
Drive-In Bank	47.0%		418	39	23	16	86	43	43
Subtotal			507	50	32	18	96	45	51
NET EXISTING TRIPS			1,273	138	108	30	182	61	121
Total Existing Driveway Volumes			1,780	188	140	48	278	106	172
<u>Proposed Site Traffic</u>									
Drive-In Bank	4.081	1000 SF	408	39	23	16	83	42	41
Conv. Mrkt w/ Gas Pumps 5.488 20	5.488 ksf + 20 pumps		4,734	331	166	165	331	166	165
Gen. Commercial	50.000	1000 SF	3,752	47	29	18	325	156	169
Tire Store	6.496	1000 SF	185	18	12	6	26	11	15
Subtotal			9,079	435	230	205	765	375	390
<u>Internal Capture</u>									
Drive-In Bank	5.1%	8.4%	34	2	1	1	7	3	4
Conv. Mrkt w/ Gas Pumps	1.5%	4.5%	215	5	2	3	15	8	7
Gen. Commercial	4.3%	3.7%	139	2	1	1	12	6	6
Tire Store	5.6%	7.7%	14	1	1	0	2	1	1
Subtotal	2.3%	4.7%	402	10	5	5	36	18	18
<u>Pass-By Traffic</u>									
Drive-In Bank	47.0%		176	17	10	7	36	18	18
Conv. Mrkt w/ Gas Pumps	61.0%		2,757	199	100	99	193	96	97
Gen. Commercial	46.8%		1,691	21	13	8	146	70	76
Tire Store	28.0%		48	5	3	2	7	3	4
Subtotal			4,672	242	126	116	382	187	195
NET PROPOSED TRIPS			4,005	183	99	84	347	170	177
Total Proposed Driveway Volumes			8,677	425	225	200	729	357	372
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)			2,732	45	(9)	54	165	109	56
NET CHANGE IN DRIVEWAY VOLUMES			6,897	237	85	152	451	251	200
Note: Trip generation was calculated using the following data:									
Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour		PM Peak Hour		Equation
					in/out	Rate	in/out		
Conv. Mrkt w/ Gas Pumps	FDOT	1000 SF & Pumps	14.3 x PM Trips	61%	50/50	used PM information	50/50	12.3 x Fuel Pumps + 15.5 x 1,000 SF	
General Office (>5ksf)	710	1000 SF	Ln(T) = 0.97 Ln(X) + 2.5	10%	86/14	T = 0.94 (X) + 26.49	16/84	1.15	
Drive-In Bank	912	1000 SF	100.03	47%	58/42	9.50	50/50	20.45	
Tire Store	848	1000 SF	28.52	28%	64/36	2.72	43/57	3.98	
Gen. Commercial	820	1000 SF	Ln(T) = 0.68 Ln(X) + 5.57	83.18 - 9.3 LN(A)	62/38	0.94	48/52	Ln(T) = 0.74 Ln(X) + 2.89	
Medical Office	720	1000 SF	34.8	10%	78/22	2.78	28/72	3.46	

EXHIBIT 1B										
RaceTrac - Florida Mango										
Trip Generation (w/ Medical Office)										
Land Use		Intensity		Daily Trips	AM Peak Hour			PM Peak Hour		
					Total	In	Out	Total	In	Out
<u>Existing Site Traffic</u>										
General Office (>5ksf)		86.272	1000 SF	919	108	93	15	99	16	83
Drive-In Bank		9.033	1000 SF	904	86	50	36	185	93	92
Subtotal				1,823	194	143	51	284	109	175
<u>Internal Capture</u>										
General Office (>5ksf)		2.8%	3.0%	28	3	2	1	3	1	2
Drive-In Bank		3.5%	1.6%	15	3	1	2	3	2	1
Subtotal		3.1%	2.1%	43	6	3	3	6	3	3
<u>Pass-By Traffic</u>										
General Office (>5ksf)		10.0%		89	11	9	2	10	2	8
Drive-In Bank		47.0%		418	39	23	16	86	43	43
Subtotal				507	50	32	18	96	45	51
NET EXISTING TRIPS				1,273	138	108	30	182	61	121
Total Existing Driveway Volumes				1,780	188	140	48	278	106	172
<u>Proposed Site Traffic</u>										
Drive-In Bank		4.081	1000 SF	408	39	23	16	83	42	41
Conv. Mrkt w/ Gas Pumps		5.488	20	5.488 ksf + 20 pumps	331	166	165	331	166	165
Medical Office		50.000	1000 SF	1,740	139	108	31	173	48	125
Tire Store		6.496	1000 SF	185	18	12	6	26	11	15
Subtotal				7,067	527	309	218	613	267	346
<u>Internal Capture</u>										
Drive-In Bank		5.1%	8.4%	34	2	1	1	7	3	4
Conv. Mrkt w/ Gas Pumps		2.1%	3.0%	143	7	2	5	10	7	3
Medical Office		2.9%	4.0%	70	4	3	1	7	2	5
Tire Store		5.6%	7.7%	14	1	1	0	2	1	1
Subtotal		2.7%	4.2%	261	14	7	7	26	13	13
<u>Pass-By Traffic</u>										
Drive-In Bank		47.0%		176	17	10	7	36	18	18
Conv. Mrkt w/ Gas Pumps		61.0%		2,801	198	100	98	196	97	99
Medical Office		10.0%		167	14	11	3	17	5	12
Tire Store		28.0%		48	5	3	2	7	3	4
Subtotal				3,192	234	124	110	256	123	133
NET PROPOSED TRIPS				3,614	279	178	101	331	131	200
Total Proposed Driveway Volumes				6,806	513	302	211	587	254	333
NET CHANGE IN TRIPS (FOR THE PURPOSES OF CONCURRENCY)				2,341	141	70	71	149	70	79
NET CHANGE IN DRIVEWAY VOLUMES				5,026	325	162	163	309	148	161
Note: Trip generation was calculated using the following data:										
Land Use	ITE Code	Unit	Daily Rate	Pass-by Rate	AM Peak Hour		PM Peak Hour			
	in/out				Rate	in/out	Equation			
Conv. Mrkt w/ Gas Pumps	FDOT	1000 SF & Pumps	14.3 x PM Trips	61%	50/50	used PM information	50/50	12.3 x Fuel Pumps + 15.5 x 1,000 SF		
General Office (>5ksf)	710	1000 SF	Ln(T) = 0.97 Ln(X) + 2.5	10%	86/14	T = 0.94 (X) + 26.49	16/84	1.15		
Drive-In Bank	912	1000 SF	100.03	47%	58/42	9.50	50/50	20.45		
Tire Store	848	1000 SF	28.52	28%	64/36	2.72	43/57	3.98		
Medical Office	720	1000 SF	34.8	10%	78/22	2.78	28/72	3.46		

EXHIBIT 1C

Analysis Period: PM____, Midday____, AM X . Project Number: 009013 Task Number: _____
Analyst: MEP Project Name: RaceTrac - Florida Mango - Retail
Date: 6/13/2019 Scenario: AM Peak Hour - Projected

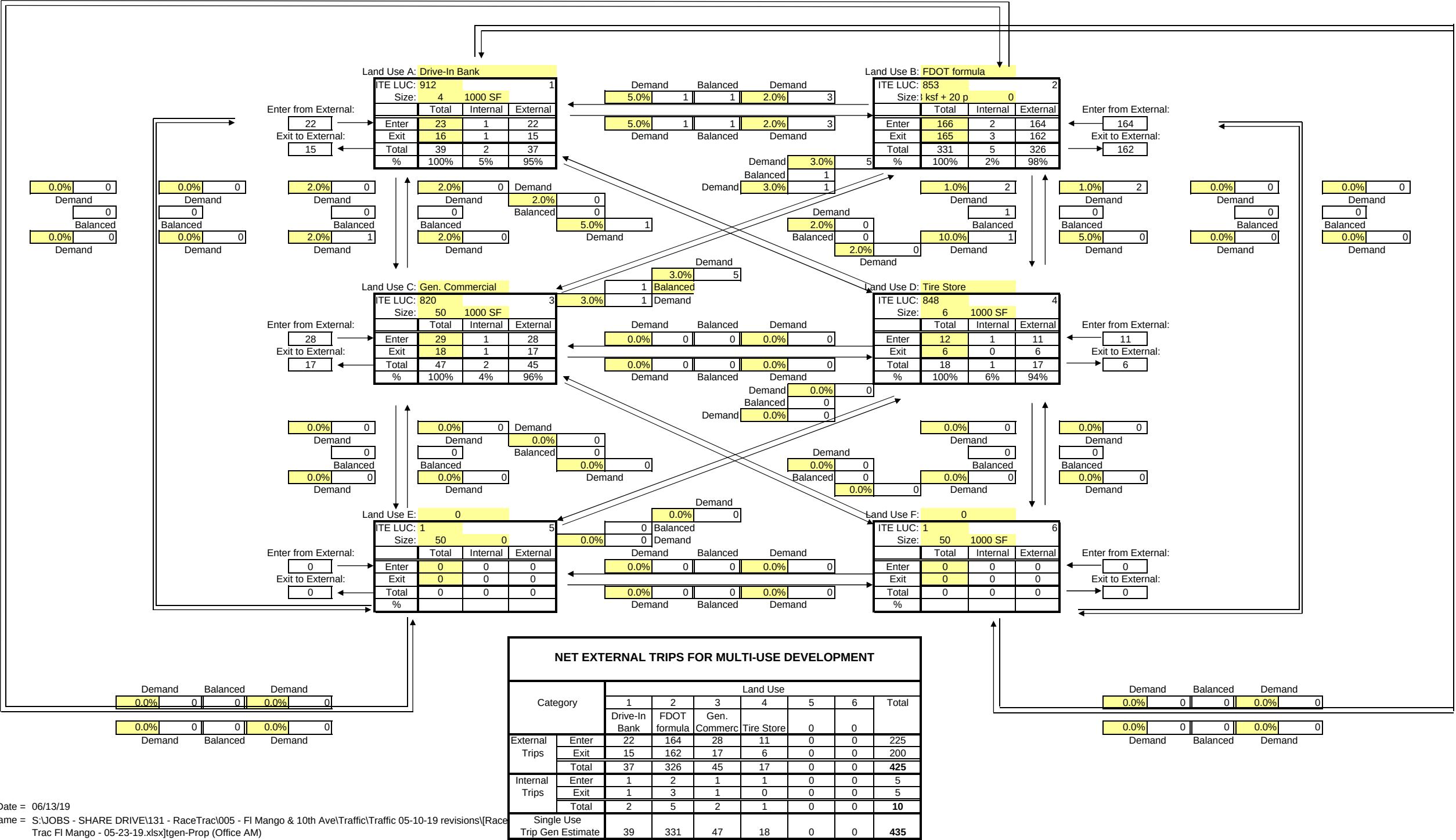


EXHIBIT 1D

Analysis Period: PM X, AM .
Analyst: MEP
Date: 6/13/2019

Project Number: 009013
Project Name: RaceTrac - Florida Mango - Retail
Scenario: PM Peak Hour - Projected

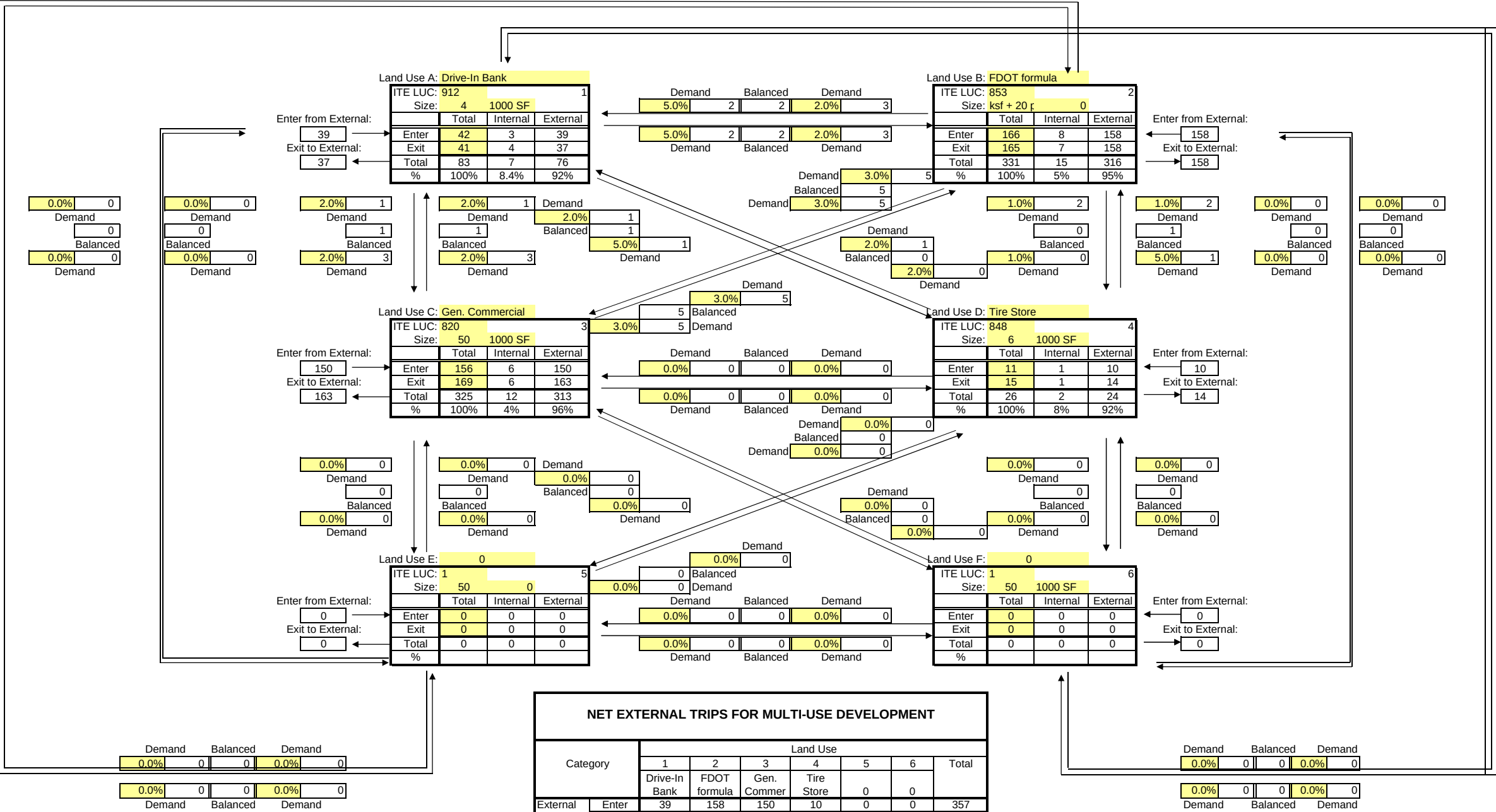


EXHIBIT 1E

Analysis Period: PM____, Midday____, AM X . Project Number: 009013 Task Number: _____
Analyst: MEP Project Name: RaceTrac - Florida Mango - Medical Office
Date: 6/13/2019 Scenario: AM Peak Hour - Projected

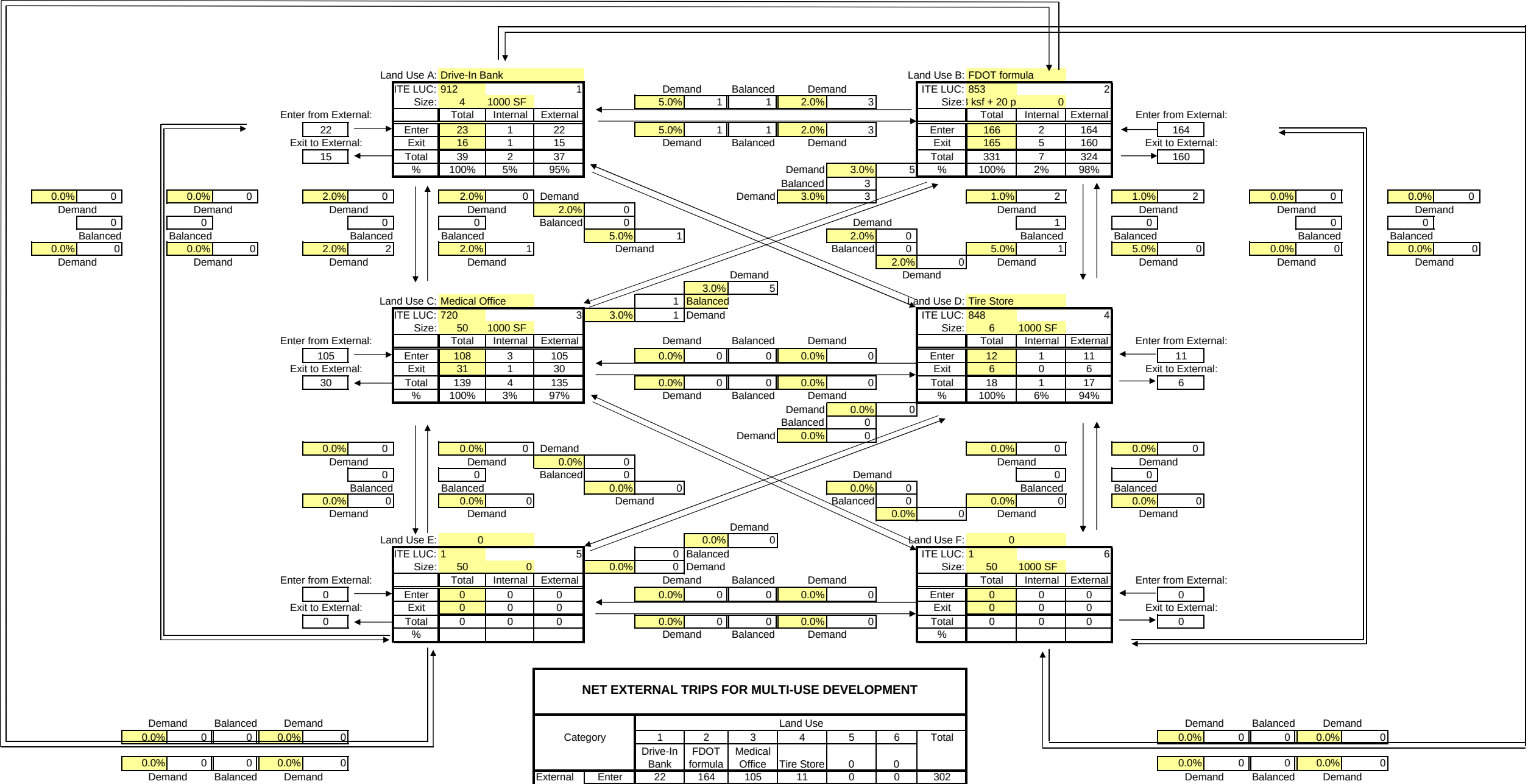


EXHIBIT 1F

Analysis Period: PM X, AM
Analyst: MEP
Date: 6/13/2019

Project Number: 009013
Project Name: RaceTrac - Florida Mango - Medical Office
Scenario: PM Peak Hour - Projected

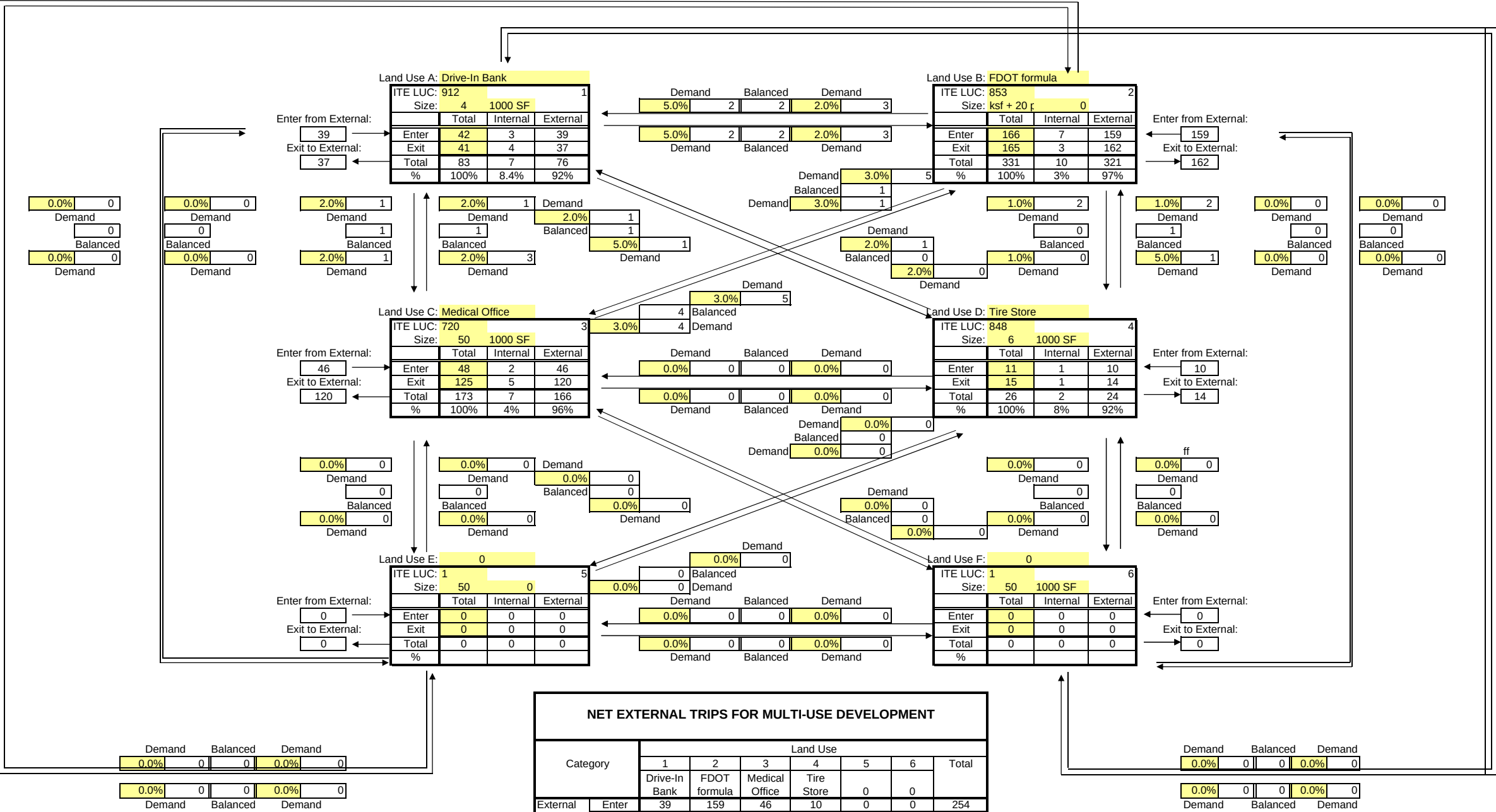


EXHIBIT 1G

Analysis Period: PM____, Midday____, AM X . Project Number: 073002 Task Number: _____
Analyst: MEP Project Name: RaceTrac - Florida Mango - Existing
Date: 6/13/2019 Scenario: AM Peak Hour

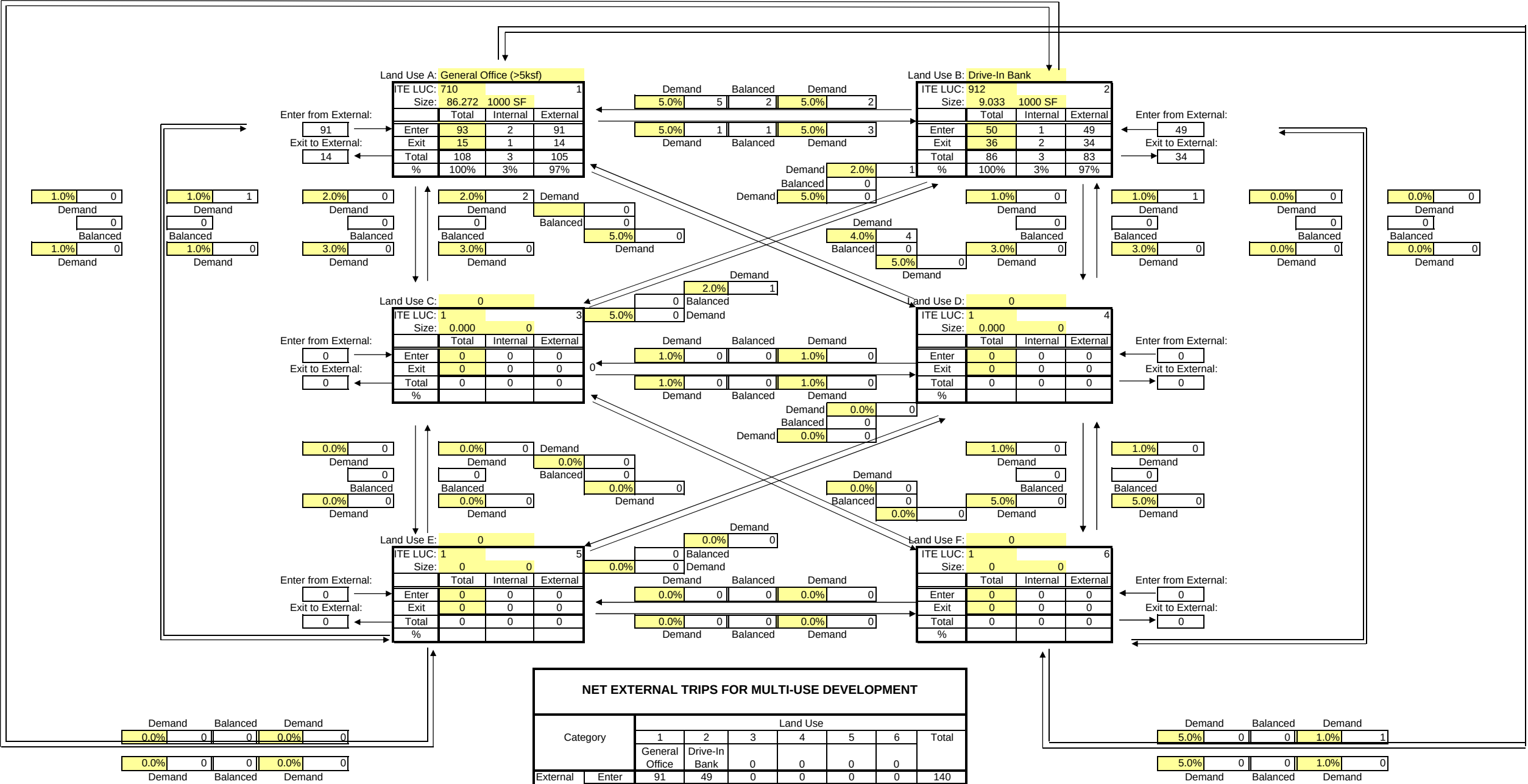


EXHIBIT 1H

Analysis Period: PM X, AM
Analyst: MEP
Date: 6/13/2019

Project Number: 073002
Project Name: RaceTrac - Florida Mango - Existing
Scenario: PM Peak Hour

Task Number:

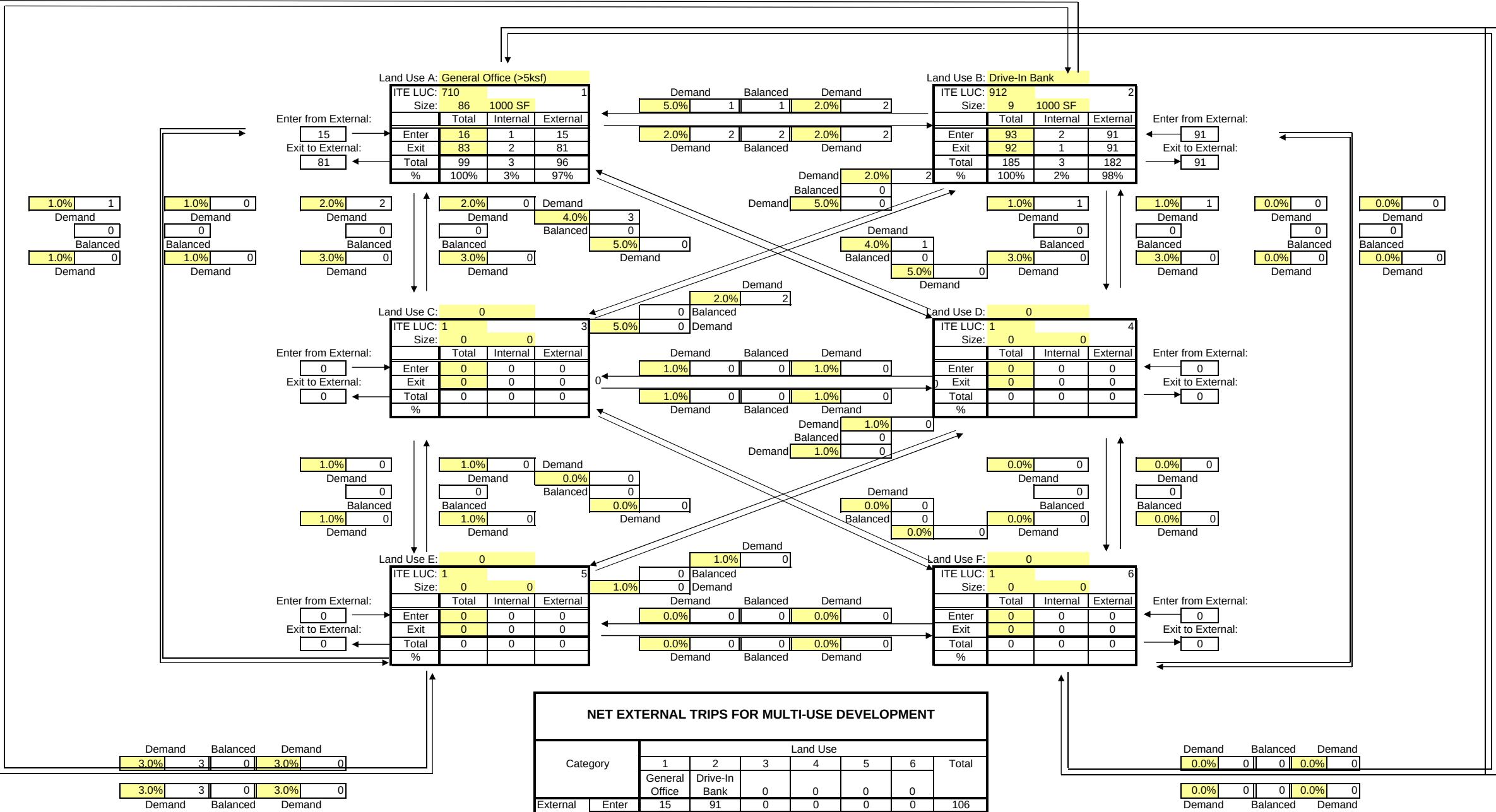


EXHIBIT 2A - AM PEAK HOUR																												
RaceTrac - Florida Mango																												
TEST 1 - PART 2 - AM PEAK HOUR ONE-WAY LINK ANALYSIS																												
Roadway From To		Class	Existing		Committed		Percent Project Assign	AM Peak Hour Project Trips		AM Peak Hour Significance		Significant Impact ?		2019 PM PHPD Volume			Growth Factor	Committed Traffic ⁽⁴⁾		Committed Traffic + 1% Growth Rate		Growth from Historic Growth Rate		2022 Background Peak Hour Volume		Meets Test 1 Standard ?		Backgrnd Needed Improv.
			Number Of Lanes	LOS 'D' Capacity	Number Of Lanes	LOS 'D' Capacity		NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	
Florida Mango Road																												
Summit Blvd	Forest Hill Blvd	1	2L	880	2L	880	10%	7	7	0.8%	0.8%	no	no															
Forest Hill Blvd	Project Site	1	2L	880	2L	880	20%	14	14	1.6%	1.6%	YES	YES	645	369	(2)	1.50%	31	26	51	37	29	17	696	406	Yes	Yes	
Project Site	10th Avenue North	1	2L	880	2L	880	10%	7		0.8%		no																
Project Site	10th Avenue North	1	2L	880	2L	880	40%		28		3.2%		YES		369	(2)	1.50%		26		37		17		406		Yes	
10th Avenue North																												
Military Trail	Kirk Rd	2	5L	1,770	5L	1,770	10%	7	7	0.4%	0.4%	no	no															
Kirk Rd	Congress Ave	2	5L	1,770	5L	1,770	15%	11	11	0.6%	0.6%	no	no															
Congress Avenue	Project Site	2	5L	1,770	5L	1,770	30%	21	21	1.2%	1.2%	YES	YES	1,661	1,404	(3)	1.50%	68	83	118	126	76	64	1779	1530	No	Yes	6-Laning
Project Site	Florida Mango Rd	2	5L	1,770	5L	1,770	10%	7		0.4%		no																
Project Site	Florida Mango Rd	2	5L	1,770	5L	1,770	40%		28		1.6%	YES	YES		1,404	(3)	1.50%		83		126		64		1530	Yes	Yes	
Florida Mango Road	Boutwell Rd	2	5L	1,770	5L	1,770	50%	36	35	2.0%	2.0%	YES	YES	1,661	1,404	(3)	1.50%	66	111	116	154	76	64	1777	1558	No	Yes	6-Laning
Boutwell Rd	I-95	2	5L	1,770	5L	1,770	45%	32	32	1.8%	1.8%	YES	YES	1,661	1,404	(3)	1.50%	133	81	183	124	76	64	1844	1528	No	Yes	6-Laning
I-95	N. Dixie Hwy	2	5L	1,770	5L	1,770	10%	7	7	0.4%	0.4%	no	no															
Congress Avenue																												
Forest Hill Blvd	10th Ave N	2	6LD	2,680	6LD	2,680	5%	4	4	0.1%	0.1%	no	no															
10th Ave N	French Ave	2	6LD	2,680	6LD	2,680	10%	7	7	0.3%	0.3%	no	no															
Military Trail																												
Cresthaven Blvd	10th Ave N	1	6LD	2,940	6LD	2,940	2.5%	2	2	0.1%	0.1%	no	no															
10th Ave N	Lake Worth Rd	1	6LD	2,940	6LD	2,940	2.5%	2	2	0.1%	0.1%	no	no															
Forest Hill Blvd																												
Congres Avenue	Florida Mango Rd	2	6LD	2,680	6LD	2,680	5.0%	4	4	0.1%	0.1%	no	no															
Florida Mango Rd	I-95	2	6LD	2,680	6LD	2,680	5.0%	4	4	0.1%	0.1%	no	no															
Lake Worth Road																												
Military Trail	Congres Avenue	1	6LD	2,940	6LD	2,940	5.0%	4	4	0.1%	0.1%	no	no															
Congres Avenue	I-95	2	4LD	1,770	4LD	1,770	0.0%	0	0	0.0%	0.0%	no	no															
Melaleuca Lane/6th Ave S																												
Military Trail	Congres Avenue	1	5L	1,960	5L	1,960	2.5%	2	2	0.1%	0.1%	no	no															
Congres Avenue	I-95	1	5L	1,960	5L	1,960	1.0%	1	1	0.1%	0.1%	no	no															
Dixie Highway																												
Forest Hill Blvd	10th Ave N	2	4LU	1,680	4LU	1,680	4%	3	3	0.2%	0.2%	no	no															
10th Ave N	Lake Worth Rd	2	4LU	1,680	4LU	1,680	4%	3	3	0.2%	0.2%	no	no															

Notes:

- Obtained from Palm Beach County Station 3646
- Obtained from Palm Beach County Station 4212
- Obtained from Palm Beach County Station 4203
- Committed traffic obtained from Palm Beach County Active TPS Projects

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EXHIBIT 2B - AM PEAK HOUR
RaceTrac - Florida Mango
TEST 1 - PART 2 - PM PEAK HOUR ONE-WAY LINK ANALYSIS

Roadway		Class	2022 Background Needed Lanes		Project Trips		2022		2022 Total		Meets Test 1	
From	To		Number Of Lanes	LOS 'D' Capacity			Background	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB
						NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB
Florida Mango Road												
Forest Hill Blvd	Project Site	1	2L	880	14	14	696	453	710	467	Yes	Yes
Project Site	10th Avenue North	1	2L	880		28		406		434		Yes
10th Avenue North												
Congress Avenue	Project Site	2	6LD	2,680	21	21	1,779	1,530	1,800	1,551	Yes	Yes
Project Site	Florida Mango Rd	2	5L	1,770		28		1,530		1,558		Yes
Florida Mango Road	Boutwell Rd	2	6LD	2,680	36	35	1,777	1,558	1,813	1,593	Yes	Yes
Boutwell Rd	I-95	2	6LD	2,680	32	32	1,844	1,528	1,876	1,560	Yes	Yes

EXHIBIT 3A - PM PEAK HOUR RaceTrac - Florida Mango TEST 1 - PART 2 - PM PEAK HOUR ONE-WAY LINK ANALYSIS																													
Roadway FromTo		Class	Existing		Committed		Percent Project Assign	Project Trips NB/EB SB/WB		Significance NB/EB SB/WB		Significant Impact ? NB/EB SB/WB		2019 PM PHPD Volume NB/EB SB/WB			Growth Factor	Committed Traffic ⁽⁴⁾ NB/EB SB/WB		Committed Traffic + 1% Growth Rate NB/EB SB/WB		Growth from Historic Growth Rate		2022 Background Peak Hour Volume		Meets Test 1 Standard ?		Backgrnd Needed Improv.	
			Number Of Lanes	LOS 'D' Capacity	Number Of Lanes	LOS 'D' Capacity																NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB		NB/EB
Florida Mango Road Summit Blvd Forest Hill Blvd Forest Hill Blvd Project Site Project Site 10th Avenue North Project Site 10th Avenue North		1 1 1 1	2L 2L 2L 2L	880 880 880 880	2L 2L 2L 2L	880 880 880 880	10% 20% 10% 40%	6 11 11 22	11 22	0.7% 1.3% 1.3% 2.5%	1.3% 2.5% 1.3% 2.5%	no YES YES YES	YES YES YES YES	434 434 434 595	334 595 595 595	⁽⁴⁾ ⁽⁴⁾ ⁽²⁾ ⁽²⁾	1.50% 1.50% 1.50% 1.50%	71 71 71 77	1 77 84 77	11 84 84 95	20 20 20 27	15 27 27 27	518 679 518 690	349 679 690 690	Yes Yes Yes Yes	Yes Yes Yes Yes			
10th Avenue North Military Trail Kirk Rd Kirk Rd Congress Ave Congress Avenue Project Site Project Site Florida Mango Rd Project Site Florida Mango Rd Florida Mango Road Boutwell Rd Boutwell Rd I-95 I-95 N. Dixie Hwy		2 2 2 2 2 2 2 2 2	5L 5L 5L 5L 5L 5L 5L 5L 5L	1,770 1,770 1,770 1,770 1,770 1,770 1,770 1,770 1,770	5L 5L 5L 5L 5L 5L 5L 5L 5L	1,770 1,770 1,770 1,770 1,770 1,770 1,770 1,770 1,770	10% 15% 30% 10% 40% 50% 45% 10%	11 16 33 6 44 28 25 6	6 8 17	0.6% 0.9% 1.9% 0.3% 2.5% 1.6% 1.4% 0.3%	0.3% 0.5% 0.96% 0.3% 2.5% 3.1% 2.8% 0.6%	no no YES no YES YES YES no	no no no no YES YES YES no	1,593 1,593 1,593 1,578 1,578 1,593 1,578	⁽³⁾ ⁽⁴⁾ ⁽²⁾ ⁽³⁾	1.50% 1.50% 1.50% 1.50%	198 198 249 231	246 189 222 252	237 237 297 300	73 72 73 72	1,839 1,815 1,890 1,872	1,839 1,815 1,848 1,878	No No No No	No No No No	6-Laning 6-Laning 6-Laning 6-Laning				
Congress Avenue Forest Hill Blvd 10th Ave N 10th Ave N French Ave		2 2	6LD 6LD	2,680 2,680	6LD 6LD	2,680 2,680	5% 10%	3 11	5 6	0.1% 0.4%	0.2% 0.2%	no no	no no																
Military Trail Cresthaven Blvd 10th Ave N 10th Ave N Lake Worth Rd		1 1	6LD 6LD	2,940 2,940	6LD 6LD	2,940 2,940	3% 3%	1 3	3 1	0.0% 0.1%	0.1% 0.0%	no no	no no																
Forest Hill Blvd Congres Avenue Florida Mango Rd Florida Mango Rd I-95		2 2	6LD 6LD	2,680 2,680	6LD 6LD	2,680 2,680	5% 5%	5 3	3 5	0.2% 0.1%	0.1% 0.2%	no no	no no																
Lake Worth Road Military Trail Congres Avenue I-95		1 2	6LD 4LD	2,940 1,770	6LD 4LD	2,940 1,770	5% 5%	5 0	3 0	0.2% 0.0%	0.1% 0.0%	no no	no no																
Melaleuca Lane/6th Ave S Military Trail Congres Avenue I-95		1 1	5L 5L	1,960 1,960	5L 5L	1,960 1,960	3% 1%	3 1	1 1	0.2% 0.1%	0.1% 0.1%	no no	no no																
Dixie Highway Forest Hill Blvd 10th Ave N 10th Ave N Lake Worth Rd		2 2	4LU 4LU	1,680 1,680	4LU 4LU	1,680 1,680	4% 4%	2 4	4 2	0.1% 0.2%	0.2% 0.1%	no no	no no																

Notes:

1. Obtained from Palm Beach County Station 3646
2. Obtained from Palm Beach County Station 4212
3. Obtained from Palm Beach County Station 4203
4. Committed traffic obtained from Palm Beach County Active TPS Projects

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EXHIBIT 3B - PM PEAK HOUR
RaceTrac - Florida Mango
TEST 1 - PART 2 - PM PEAK HOUR ONE-WAY LINK ANALYSIS

EXHIBIT 3B - PM PEAK HOUR RaceTrac - Florida Mango TEST 1 - PART 2 - PM PEAK HOUR ONE-WAY LINK ANALYSIS													
Roadway FromTo		Class	2022 Background Needed Lanes		Percent Project Assign	Project Trips		2022		2022 Total		Meets Test 1 Standard ?	
			Number Of Lanes	LOS 'D' Capacity				Background		NB/EB	SB/WB	NB/EB	SB/WB
NB/EB	SB/WB				NB/EB	SB/WB	NB/EB	SB/WB	NB/EB				
Florida Mango Road													
Summit Blvd	Forest Hill Blvd	1	2L	880	10%	6	11		349		360		Yes
Forest Hill Blvd	Project Site	1	2L	880	20%	11	22	518	679	529	701	Yes	Yes
Project Site	10th Avenue North	1	2L	880	10%	11		518		529		Yes	
Project Site	10th Avenue North	1	2L	880	40%		22		690		712		Yes
10th Avenue North													
Congress Avenue	Project Site	2	6LD	2,680	30%	33	17	1,839		1,872		Yes	
Project Site	Florida Mango Rd	2	6LD	2,680	40%		44		1,815		1,859		Yes
Florida Mango Road	Boutwell Rd	2	6LD	2,680	50%	28	55	1,890	1,848	1,918	1,903	Yes	Yes
Boutwell Rd	I-95	2	6LD	2,680	45%	25	49	1,872	1,878	1,897	1,927	Yes	Yes

EXHIBIT 4
RaceTrac - Florida Mango
TEST 2 - PEAK HOUR ONE-WAY LINK ANALYSIS
TABLE 12.B.C-4 2A: LOS E - LINK SERVICE VOLUMES

Roadway From	To	Class	Existing		Committed		Percent Project Assignment	AM Peak Hour		PM Peak Hour		Project Significance				Significant Impact ???
			Number Of Lanes	LOS 'E' Capacity	Number Of Lanes	LOS 'E' Capacity		Project Trips		Project Trips		AM		PM		
								NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	NB/EB	SB/WB	
Florida Mango Road																
Summit Blvd	Forest Hill Blvd	1	2L	880	2L	880	10%	7	7	6	11	0.8%	0.8%	0.7%	1.3%	No
Forest Hill Blvd	Project Site	1	2L	880	2L	880	20%	14	14	11	22	1.6%	1.6%	1.3%	2.5%	No
Project Site	10th Avenue North	1	2L	880	2L	880	10%	7		11		0.8%		1.3%		No
Project Site	10th Avenue North	1	2L	880	2L	880	40%		28		22		3.2%		2.5%	Yes
10th Avenue North																
Military Trail	Kirk Rd	2	5L	1,870	5L	1,870	10%	7	7	11	6	0.4%	0.4%	0.6%	0.3%	No
Kirk Rd	Congress Ave	2	5L	1,870	5L	1,870	15%	11	11	16	8	0.6%	0.6%	0.9%	0.4%	No
Congress Avenue	Project Site	2	5L	1,870	5L	1,870	30%	21	21	33	17	1.1%	1.1%	1.8%	0.9%	No
Project Site	Florida Mango Rd	2	5L	1,870	5L	1,870	10%	7		6		0.4%		0.3%		No
Project Site	Florida Mango Rd	2	5L	1,870	5L	1,870	40%		28		44		1.5%		2.4%	No
Florida Mango Road	Boutwell Rd	2	5L	1,870	5L	1,870	50%	36	35	28	55	1.9%	1.9%	1.5%	2.9%	No
Boutwell Rd	I-95	2	5L	1,870	5L	1,870	45%	32	32	25	49	1.7%	1.7%	1.3%	2.6%	No
I-95	N. Dixie Hwy	2	5L	1,870	5L	1,870	10%	7	7	6	11	0.4%	0.4%	0.3%	0.6%	No
Congress Avenue																
Forest Hill Blvd	10th Ave N	2	6LD	2,830	6LD	2,830	5%	4	4	3	5	0.1%	0.1%	0.1%	0.2%	No
10th Ave N	French Ave	2	6LD	2,830	6LD	2,830	10%	7	7	11	6	0.3%	0.3%	0.4%	0.2%	No
Military Trail																
Cresthaven Blvd	10th Ave N	1	6LD	2,940	6LD	2,940	3%	2	2	1	3	0.1%	0.1%	0.0%	0.1%	No
10th Ave N	Lake Worth Rd	1	6LD	2,940	6LD	2,940	3%	2	2	3	1	0.1%	0.1%	0.1%	0.0%	No
Forest Hill Blvd																
Congres Avenue	Florida Mango Rd	2	6LD	2,830	6LD	2,830	5%	4	4	5	3	0.1%	0.1%	0.2%	0.1%	No
Florida Mango Rd	I-95	2	6LD	2,830	6LD	2,830	5%	4	4	3	5	0.1%	0.1%	0.1%	0.2%	No
Lake Worth Road																
Military Trail	Congres Avenue	1	6LD	2,940	6LD	2,940	5%	4	4	5	3	0.1%	0.1%	0.2%	0.1%	No
Congres Avenue	I-95	2	4LD	1,870	4LD	1,870	0%	0	0	0	0	0.0%	0.0%	0.0%	0.0%	No
Melaleuca Lane/6th Ave S																
Military Trail	Congres Avenue	1	5L	1,960	5L	1,960	3%	2	2	3	1	0.1%	0.1%	0.2%	0.1%	No
Congres Avenue	I-95	1	5L	1,960	5L	1,960	1%	1	1	1	1	0.1%	0.1%	0.1%	0.1%	No
Dixie Highway																
Forest Hill Blvd	10th Ave N	2	4LU	1,780	4LU	1,780	4%	3	3	2	4	0.2%	0.2%	0.1%	0.2%	No
10th Ave N	Lake Worth Rd	2	4LU	1,780	4LU	1,780	4%	3	3	4	2	0.2%	0.2%	0.2%	0.1%	No

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RaceTrac Market - 10th & FL Mango
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 5
FL Mango Rd & 10th Avenue N

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM		62	206	5		6	128	19		11	6	15		46	0	54	558
7:15 AM	7:30 AM		47	276	8		6	184	25		11	7	13		51	5	42	675
7:30 AM	7:45 AM		45	285	3		5	177	30		10	5	12		55	0	56	683
7:45 AM	8:00 AM		56	278	9		7	210	31		6	6	7		74	4	69	757
8:00 AM	8:15 AM		46	279	12		1	215	33		7	1	7		55	0	45	701
8:15 AM	8:30 AM		61	282	5		3	208	39		5	2	5		57	0	77	744
8:30 AM	8:45 AM		43	290	7		4	209	39		2	2	11		76	1	56	740
8:45 AM	9:00 AM		48	259	8		8	211	45		5	3	1		48	2	45	683
Peak Hour Traffic Volume																		
7:45 AM	8:45 AM	0	206	1129	33	0	15	842	142	0	20	11	30	0	262	5	247	2942

Count Taken: 12/5/2018
Buildout year: 2022
Growth Rate: 1.0% 1.5%
Seasonal Factor: 1.00

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
12/5/2018	0	206	1129	33	0	15	842	142	0	20	11	30	0	262	5	247
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes	206	1129	33		15	842	142		20	11	30		262	5	247	
	1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%	
Growth 1%	8	46	1		1	34	6		1	0	1		11	0	10	
Committed*	1	56	0		0	81	17		0	0	0		7	0	1	
Committed + 1%	9	102	1		1	115	23		1	0	1		18	0	11	
	1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%	
Growth 1.5%	13	69	2		1	52	9		1	1	2		16	0	15	
Growth 1.5% or Committed + 1%	13	102	2		1	115	23		1	1	2		18	0	15	
2022 Volumes	219	1231	35		16	957	165		21	12	32		280	5	262	
Pre W/ Div	219	1231	35		16	957	165		21	12	32		280	5	262	
Project	0	7	0		0	28	7	0	0	0	0		28	0	0	
Post	219	1238	35		16	985	172		21	12	32		308	5	262	
	0/ 219				0/ 16				0/ 21				0/ 308			
Project Traffic Assignment	0%	0%	10%	0%	0%	0%	40%	10%	0%	0%	0%	0%	0%	40%	0%	0%

* Obtained from the TPS Database Signal ID 35820

RaceTrac Market - 10th & FL Mango

AM PEAK HOUR

EXHIBIT 6

FL Mango Rd & 10th Avenue N

Critical Volume Analysis

	Eastbound				Westbound				Northbound				Southbound			
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
12/5/2018																
Background Volume	0	219	1231	35	0	16	957	165	0	21	12	32	0	280	5	262
Project Assign	0%	0%	10%	0%	0	0	40%	10%	0%	0%	0%	0%	0%	40%	0%	0%
Direction			Out				In	In						Out		
Total Project Volume	0	0	7	0	0	0	28	7	0	0	0	0	0	28	0	0
Total Volume		219	1,238	35		16	985	172		21	12	32		308	5	262
Critical Volume Analysis																
No. of Lanes		1	2	0		1	2	1		0	1	1		2	0	1
Approach Vol by Lane Group		219	1273	< 0		16	985	172		0 >	33	32		308	5	262
Approach Volume	1,492				1,173				65				575			
Per Lane Volume b4 RTOR		219	637	0		16	493	172		0	33	32		157	0	262
Overlap Phase				No				Yes				No				Yes
RTOR				10				157				60				219
Per Lane Volume		219	632	0		16	493	15		0	33	0		157	0	43
North-South Critical	SB LT + NB TH =				190				NB LT + SB TH =				43			
East-West Critical	WB LT + EB TH =				648				EB LT + WB TH =				712			
Maximum Critical Sum	190				+				712				= 902			
STATUS ?									UNDER							
s:\jobs - share drive\131 - racetrac\005 - fl mango & 10th ave\traffic\traffic 05-10-19 revisions\intersection surrounding 05-23-19.xlsx]10th & fl mar 7/19/2019 9:25																
			NB LT	NB TH			SB LT	SB TH			EB LT	EB TH			WB LT	WB TH

RaceTrac Market - 10th & FL Mango
PM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 7
FL Mango Rd & 10th Avenue N

		ebu	ebf	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
4:00 PM	4:15 PM		104	231	8		5	316	52		6	4	0		48	4	79	857
4:15 PM	4:30 PM		74	194	5		4	320	73		5	3	6		37	3	72	796
4:30 PM	4:45 PM		80	234	8		8	286	67		4	0	3		53	0	68	811
4:45 PM	5:00 PM		81	225	14		6	278	57		7	3	5		66	4	69	815
5:00 PM	5:15 PM		88	191	5		8	364	90		8	4	3		43	1	81	886
5:15 PM	5:30 PM		96	213	22		9	325	74		6	2	3		58	5	78	891
5:30 PM	5:45 PM		100	208	10		2	274	71		11	6	9		55	5	97	848
5:45 PM	6:00 PM		87	206	15		11	318	62		8	4	7		51	9	78	856
Peak Hour Traffic Volume																		
5:00 PM	6:00 PM	0	371	818	52	0	30	1281	297	0	33	16	22	0	207	20	334	3481

Count Taken: 12/5/2018
Buildout year: 2022
Growth Rate: 1.0% 1.5%
Seasonal Factor: 1.00

	ebu	ebf	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
12/5/2018	0	371	818	52	0	30	1281	297	0	33	16	22	0	207	20	334
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes																
	371	818	52		30	1281	297		33	16	22		207	20	334	
	1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%	
Growth 1%	15	33	2		1	52	12		1	1	1		8	1	14	
Committed*	3	183	0		0	180	13		0	0	0		13	0	3	
Committed + 1%	18	216	2		1	232	25		1	1	1		21	1	17	
	1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%	
Growth 1.5%	23	50	3		2	79	18		2	1	1		13	1	20	
Growth 1.5% or Committed + 1%	23	216	3		2	232	25		2	1	1		21	1	20	
2022 Volumes	394	1034	55		32	1513	322		35	17	23		228	21	354	
Pre W/ Div	394	1034	55		32	1513	322		35	17	23		228	21	354	
Project	0	6	0		0	44	11	0	0	0	0		22	0	0	
Post	394	1040	55		32	1557	333		35	17	23		250	21	354	
	0/ 394				0/ 32				0/ 35				0/ 250			

Project Traffic Assignment	ebu	ebf	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
	0%	0%	Out 10%	0%	0%	0%	In 40%	In 10%	0%	0%	0%	0%	0%	Out 40%	0%	0%

* Obtained from the TPS Database Signal ID 35810

RaceTrac Market - 10th & FL Mango

PM PEAK HOUR

EXHIBIT 8

FL Mango Rd & 10th Avenue N

Critical Volume Analysis

	Eastbound				Westbound				Northbound				Southbound			
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
12/5/2018 Background Volume	0	394	1034	55	0	32	1513	322	0	35	17	23	0	228	21	354
Project Assign Direction	0%	0%	10% Out	0%	0%	0%	40% In	10% In	0%	0%	0%	0%	0%	40% Out	0%	0%
Total Project Volume	0	0	6	0	0	0	44	11	0	0	0	0	0	22	0	0
Total Volume		394	1,040	55		32	1,557	333		35	17	23		250	21	354

Critical Volume Analysis

No. of Lanes		1	2	0		1	2	1		0	1	1		2	0	1	
Approach Vol by Lane Group		394	1095	< 0		32	1557	333		0 >	52	23		250	21	354	
Approach Volume		1,489				1,922				75				625			
Per Lane Volume b4 RTOR		394	548	0		32	779	333		0	52	23		136	0	354	
Overlap Phase				No				Yes				No				Yes	
RTOR				10				136				60				394	
Per Lane Volume		394	543	0		32	779	197		0	52	0		136	0	0	
North-South Critical		SB LT + NB TH =						188		NB LT + SB TH =						0	
East-West Critical		WB LT + EB TH =						575		EB LT + WB TH =						1173	
Maximum Critical Sum		188					+	1173					=	1,361			

STATUS ?

NEAR

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7/19/2019 9:25

				NB LT	NB TH			SB LT	SB TH			EB LT	EB TH			WB LT	WB TH
--	--	--	--	-------	-------	--	--	-------	-------	--	--	-------	-------	--	--	-------	-------

RaceTrac Market - 10th & FL Mango
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 9
Congress Ave & 10th Avenue N

Count Taken: 11/29/2017
Buildout year: 2022
Growth Rate: 1.0% 1.5%
Seasonal Factor: 1.00

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
11/29/2017	14	440	641	294	1	393	390	245	3	138	1020	324	4	204	1130	119
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		454	641	294		394	390	245		141	1020	324		208	1130	119
		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%
Growth 1%		23	33	15		20	20	12		7	52	17		11	58	6
Committed*		2	31	9		19	24	19		8	10	16		22	18	7
Committed + 1%		25	64	24		39	44	31		15	62	33		33	76	13
		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%
Growth 1.5%		35	50	23		30	30	19		11	79	25		16	87	9
Growth 1.5% or Committed + 1%		35	64	24		39	44	31		15	79	33		33	87	13
2022 Volumes		489	705	318		433	434	276		156	1099	357		241	1217	132
Pre W/ Div		489	705	318		433	434	276		156	1099	357		241	1217	132
Project		0	11	0		7	11	4	0	0	0	7		4	0	0
Post		489	716	318		440	445	280		156	1099	364		245	1217	132
	14/	475			1/	439			3/	153			4/	241		
Project Traffic Assignment	0%	0%	In 15%	0%	0%	Out 10%	Out 15%	Out 5%	0%	0%	0%	In 10%	0%	In 5%	0%	0%

* Obtained from the TPS Database Signal ID 35810

RaceTrac Market - 10th & FL Mango

AM PEAK HOUR

EXHIBIT 10

Congress Ave & 10th Avenue N

Critical Volume Analysis

	Eastbound				Westbound				Northbound				Southbound			
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
11/29/2017																
Background Volume	0	489	705	318	0	433	434	276	0	156	1099	357	0	241	1217	132
Project Assign	0%	0%	15%	0%	0	0	15%	5%	0%	0%	0%	10%	0%	5%	0%	0%
Direction			In			Out	Out	Out				In		In		
Total Project Volume	0	0	11	0	0	7	11	4	0	0	0	7	0	4	0	0
Total Volume		489	716	318		440	445	280		156	1,099	364		245	1,217	132
Critical Volume Analysis																
No. of Lanes		2	2	1		2	2	1		1	3	1		1	3	0
Approach Vol by Lane Group		489	716	318		440	445	280		156	1099	364		245	1349	< 0
Approach Volume	1,523				1,165				1,619				1,594			
Per Lane Volume b4 RTOR		245	358	318		220	223	280		156	366	364		245	450	0
Overlap Phase				Yes				Yes				Yes				No
RTOR				156				245				220				10
Per Lane Volume		245	358	162		220	223	35		156	366	144		245	446	0
North-South Critical	SB LT + NB TH =				611				NB LT + SB TH =				602			
East-West Critical	WB LT + EB TH =				578				EB LT + WB TH =				468			
Maximum Critical Sum	611				+				578				= 1,189			
STATUS ?																
UNDER																
s:\jobs - share drive\131 - racetrac\005 - fl mango & 10th ave\traffic\traffic 05-10-19 revisions\intersection surrounding 05-23-19.xlsx]10th & congr7/19/2019 9:25																
			NB LT	NB TH			SB LT	SB TH			EB LT	EB TH			WB LT	WB TH

RaceTrac Market - 10th & FL Mango
 PM PEAK HOUR TURNING MOVEMENTS
 EXHIBIT 11
 Congress Ave & 10th Avenue N

Count Taken: 11/29/2017
 Buildout year: 2022
 Growth Rate: 1.0% 1.5%
 Seasonal Factor: 1.00

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
11/29/2017	30	243	620	226	3	446	913	318	18	258	1065	354	9	252	1115	251
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes	273	620	226	449	913	318	276	1065	354	261	1115	251	1.0%	1.0%	1.0%	1.0%
Growth 1%	14	32	12	23	47	16	14	54	18	13	57	13	1.0%	1.0%	1.0%	1.0%
Committed*	6	103	29	50	73	53	32	39	54	50	33	3	1.0%	1.0%	1.0%	1.0%
Committed + 1%	20	135	41	73	120	69	46	93	72	63	90	16	1.0%	1.0%	1.0%	1.0%
Growth 1.5%	21	48	17	35	71	25	21	82	27	20	86	19	1.50%	1.50%	1.50%	1.50%
Growth 1.5% or Committed + 1%	21	135	41	73	120	69	46	93	72	63	90	19	1.50%	1.50%	1.50%	1.50%
2022 Volumes	294	755	267	522	1041	390	322	1158	426	329	1205	270				
Pre W/ Div	294	755	267	522	1033	387	322	1158	426	324	1205	270				
Project	0	16	0	6	8	3	0	0	0	11	5	0				
Post	294	771	267	528	1041	390	322	1158	437	329	1205	270				
	30/ 264			3/ 525			18/ 304			9/ 320						
Project Traffic Assignment	0%	0%	15%	0%	0%	10%	15%	5%	0%	0%	0%	10%	0%	5%	0%	0%

* Obtained from the TPS Database Signal ID 35810

RaceTrac Market - 10th & FL Mango																
PM PEAK HOUR																
EXHIBIT 12																
Congress Ave & 10th Avenue N																
Critical Volume Analysis																
	Eastbound				Westbound				Northbound				Southbound			
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT
11/29/2017																
Background Volume	0	294	755	267	0	522	1033	387	0	322	1158	426	0	324	1205	270
Project Assign	0%	0%	15%	0%	0%	10%	15%	5%	0%	0%	0%	10%	0%	5%	0%	0%
Direction			In			Out	Out	Out				In		In		
Total Project Volume	0	0	16	0	0	6	8	3	0	0	0	11	0	5	0	0
Total Volume		294	771	267		528	1,041	390		322	1,158	437		329	1,205	270
Critical Volume Analysis Background Traffic																
No. of Lanes		2	2	1		2	2	1		1	3	1		1	3	0
Approach Vol by Lane Group		294	755	267		522	1033	387		322	1158	426		324	1475	< 0
Approach Volume		1,316				1,942				1,906				1,799		
Per Lane Volume b4 RTOR		147	378	267		261	517	387		322	386	426		324	492	0
Overlap Phase				Yes				Yes				Yes				No
RTOR				322				324				261				10
Per Lane Volume		147	378	0		261	517	63		322	386	165		324	488	0
North-South Critical		SB LT + NB TH =				710				NB LT + SB TH =				810		
East-West Critical		WB LT + EB TH =				639				EB LT + WB TH =				664		
Maximum Critical Sum		810				+ 664				=				1,474		
STATUS ? OVER																
Critical Volume Analysis - Background Traffic (with Needed Improvements)																
No. of Lanes		2	2	1		2	2	1		1	3	1		1	3	1
Approach Vol by Lane Group		294	755	267		522	1033	387		322	1158	426		324	1205	270
Approach Volume		1,316				1,942				1,906				1,799		
Per Lane Volume b4 RTOR		147	378	267		261	517	387		322	386	426		324	402	270
Overlap Phase				Yes				Yes				Yes				No
RTOR				322				324				261				60
Per Lane Volume		147	378	0		261	517	63		322	386	165		324	402	210
North-South Critical		SB LT + NB TH =				710				NB LT + SB TH =				724		
East-West Critical		WB LT + EB TH =				639				EB LT + WB TH =				664		
Maximum Critical Sum		724				+ 664				=				1,388		
STATUS ? NEAR																
Critical Volume Analysis - Total Traffic (with Background Needed Improvements)																
No. of Lanes		2	2	1		2	2	1		1	3	1		1	3	1
Approach Vol by Lane Group		294	771	267		528	1041	390		322	1158	437		329	1205	270
Approach Volume		1,332				1,959				1,917				1,804		
Per Lane Volume b4 RTOR		147	386	267		264	521	390		322	386	437		329	402	270
Overlap Phase				Yes				Yes				Yes				No
RTOR				322				329				264				60
Per Lane Volume		147	386	0		264	521	61		322	386	173		329	402	210
North-South Critical		SB LT + NB TH =				715				NB LT + SB TH =				724		
East-West Critical		WB LT + EB TH =				650				EB LT + WB TH =				668		
Maximum Critical Sum		724				+ 668				=				1,392		
STATUS ? NEAR																
s:\jobs - share drive\131 - racetrac\005 - fl mango & 10th ave\traffic\traffic 05-10-19 revisions\intersection surrounding 05-23-19.xlsx\10th & congress																
7/19/2019 9:25																
				NB LT	NB TH			SB LT	SB TH			EB LT	EB TH		WB LT	WB TH

RaceTrac Market - 10th & FL Mango
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 13
FL Mango Rd & Forest Hill Blvd

Count Taken: 5/13/2019
Buildout year: 2022
Growth Rate: 1.0% 1.5%
Seasonal Factor: 1.09

	ebu	ebf	ebt	ebr	wbu	wbf	wbt	wbr	nbu	nbf	nbt	nbr	sbu	sbf	sbt	sbr
5/13/2019	3	115	1750	95	17	116	1122	87	0	122	215	334	0	210	183	172
Seasonal Factor	0	10	158	9	2	10	101	8	0	11	19	30	0	19	16	15
Adjusted Volumes		128	1908	104		145	1223	95		133	234	364		229	199	187
		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%
Growth 1%		4	58	3		4	37	3		4	7	11		7	6	6
Committed*		0	4	14		15	6	1		12	0	13		0	0	0
Committed + 1%		4	62	17		19	43	4		16	7	24		7	6	6
		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%
Growth 1.5%		6	87	5		7	56	4		6	11	17		10	9	9
Growth 1.5% or Committed + 1%		6	87	17		19	56	4		16	11	24		10	9	9
2022 Volumes		134	1995	121		164	1279	99		149	245	388		239	208	196
Pre W/ Div		134	1995	121		164	1279	99		149	245	388		239	208	196
Project		0	0	4		4	0	0	0	4	7	4		0	7	0
Post		134	1995	125		168	1279	99		153	252	392		239	215	196
	3/	131			19/	149			0/	153			0/	239		
Project Traffic Assignment	0%	0%	0%	In 5%	0%	In 5%	0%	0%	0%	5%	Out 10%	Out 5%	0%	0%	In 10%	0%

* Obtained from the TPS Database Signal ID 35810

RaceTrac Market - 10th & FL Mango

AM PEAK HOUR

EXHIBIT 14

FL Mango Rd & Forest Hill Blvd

Critical Volume Analysis

	Eastbound				Westbound				Northbound				Southbound				
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	
5/13/2019																	
Background Volume	0	134	1995	121	0	164	1279	99	0	149	245	388	0	239	208	196	
Project Assign	0%	0%	0%	5%	0	0	0%	0%	0%	5%	10%	5%	0%	0%	10%	0%	
Direction				In		In				Out	Out	Out			In		
Total Project Volume	0	0	0	4	0	4	0	0	0	4	7	4	0	0	7	0	
Total Volume		134	1,995	125		168	1,279	99		153	252	392		239	215	196	
Critical Volume Analysis																	
No. of Lanes		1	3	0		1	3	0		1	1	1		1	1	1	
Approach Vol by Lane Group		134	2120	< 0		168	1378	< 0		153	252	392		239	215	196	
Approach Volume	2,254				1,546				797				650				
Per Lane Volume b4 RTOR		134	707	0		168	459	0		153	252	392		239	215	196	
Overlap Phase				No				No				Yes				Yes	
RTOR				10				10				168				134	
Per Lane Volume		134	703	0		168	456	0		153	252	224		239	215	62	
North-South Critical	SB LT + NB TH =				491				NB LT + SB TH =				368				
East-West Critical	WB LT + EB TH =				871				EB LT + WB TH =				590				
Maximum Critical Sum	491				+				871				= 1,362				
STATUS ?									NEAR								
s:\jobs - share drive\131 - racetrac\005 - fl mango & 10th ave\traffic\traffic 05-10-19 revisions\intersection surrounding 05-23-19.xlsx]fl mango & f																	
7/19/2019 9:25																	
				NB LT	NB TH			SB LT	SB TH			EB LT	EB TH			WB LT	WB TH

RaceTrac Market - 10th & FL Mango
PM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 15
FL Mango Rd & Forest Hill Blvd

Count Taken: 5/13/2019
Buildout year: 2022
Growth Rate: 1.0% 1.5%
Seasonal Factor: 1.09

	ebu	ebf	ebt	ebr	wbu	wbf	wbt	wbr	nbu	nbf	nbt	nbr	sbu	sbf	sbt	sbr
5/13/2019	19	80	1070	140	5	200	1334	113	0	147	149	129	0	99	135	96
Seasonal Factor	2	7	96	13	0	18	120	10	0	13	13	12	0	9	12	9
Adjusted Volumes		108	1166	153		223	1454	123		160	162	141		108	147	105
		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%
Growth 1%		3	35	5		7	44	4		5	5	4		3	4	3
Committed*		0	20	42		43	18	0		32	0	35		1	0	0
Committed + 1%		3	55	47		50	62	4		37	5	39		4	4	3
		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%		1.50%	1.50%	1.50%
Growth 1.5%		5	53	7		10	66	6		7	7	6		5	7	5
Growth 1.5% or Committed + 1%		5	55	47		50	66	6		37	7	39		5	7	5
2022 Volumes		113	1221	200		273	1520	129		197	169	180		113	154	110
Pre W/ Div		113	1221	200		273	1520	129		197	169	180		113	154	110
Project		0	0	5		5	0	0	0	3	6	3		0	11	0
Post		113	1221	205		278	1520	129		200	175	183		113	165	110
	21/	92			5/	273			0/	200			0/	113		
Project Traffic Assignment	0%	0%	0%	In 5%	0%	In 5%	0%	0%	0%	5%	Out 10%	Out 5%	0%	0%	In 10%	0%

* Obtained from the TPS Database Signal ID 35810

RaceTrac Market - 10th & FL Mango

PM PEAK HOUR

EXHIBIT 16

FL Mango Rd & Forest Hill Blvd

Critical Volume Analysis

	Eastbound				Westbound				Northbound				Southbound				
	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	UT	LT	Thru	RT	
5/13/2019																	
Background Volume	0	113	1221	200	0	273	1520	129	0	197	169	180	0	113	154	110	
Project Assign	0%	0%	0%	5%	0	0	0%	0%	0%	5%	10%	5%	0%	0%	10%	0%	
Direction				In		In				Out	Out	Out			In		
Total Project Volume	0	0	0	5	0	5	0	0	0	3	6	3	0	0	11	0	
Total Volume		113	1,221	205		278	1,520	129		200	175	183		113	165	110	
Critical Volume Analysis																	
No. of Lanes		1	3	0		1	3	0		1	1	1		1	1	1	
Approach Vol by Lane Group		113	1426	< 0		278	1649	< 0		200	175	183		113	165	110	
Approach Volume	1,539				1,927				558				388				
Per Lane Volume b4 RTOR		113	475	0		278	550	0		200	175	183		113	165	110	
Overlap Phase				Yes				Yes				Yes				No	
RTOR				10				10				278				60	
Per Lane Volume		113	472	0		278	546	0		200	175	0		113	165	50	
North-South Critical	SB LT + NB TH =				288				NB LT + SB TH =				365				
East-West Critical	WB LT + EB TH =				750				EB LT + WB TH =				659				
Maximum Critical Sum	365				+				750				= 1,115				
STATUS ?									UNDER								
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7/19/2019 9:25																	
				NB LT	NB TH			SB LT	SB TH			EB LT	EB TH			WB LT	WB TH

RaceTrac Market - 10th & FL Mango
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 17
FL Mango Rd & Driveway

		ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr	totals
7:00 AM	7:15 AM		1	0	1		2	0	1		0	53	14		1	101	3	177
7:15 AM	7:30 AM		1	0	0		2	1	2		0	56	3		2	126	4	197
7:30 AM	7:45 AM		2	0	1		6	1	7		0	76	9		11	97	3	213
7:45 AM	8:00 AM		3	2	1		5	0	5		0	66	6		11	119	3	221
8:00 AM	8:15 AM		1	0	1		8	0	6		2	69	13		7	114	1	222
8:15 AM	8:30 AM		0	0	0		4	0	3		1	82	7		5	91	3	196
8:30 AM	8:45 AM		0	2	1		7	1	3		1	64	7		7	109	0	202
8:45 AM	9:00 AM		1	0	0		17	0	4		0	45	9		17	82	3	178
Peak Hour Traffic Volume																		
7:15 AM	8:15 AM	0	7	2	3	0	21	2	20	0	2	267	31	0	31	456	11	853

Count Taken: 9/20/2018
Buildout year: 2022
Growth Rate: 1.0%
Seasonal Factor*: 1.07

1.50%

	ebu	ebl	ebt	ebr	wbu	wbl	wbt	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
9/20/2018	0	0	0	0	0	21	2	20	0	0	267	31	0	31	456	0
Seasonal Factor	0	0	0	0	0	1	0	1	0	0	19	2	0	2	32	0
Adjusted Volumes		0	0	0		22	2	21		0	286	33		33	488	0
		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%		1.0%	1.0%	1.0%
Growth 1%		0	0	0		1	0	1		0	12	1		1	20	0
Committed**											23				9	
Committed + 1%		0	0	0		1	0	1		0	35	1		1	29	0
		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.0%	1.5%	1.5%		1.5%	1.5%	0.0%
Growth 1.5%		0	0	0		0	0	0		0	18	2		2	30	0
Growth 1.5% or Committed + 1%		0	0	0		1	0	1		0	35	2		2	30	0
2022 Volumes		0	0	0		23	2	22		0	321	35		35	518	0
Pre W/ Div		0	0	0		23	2	22		0	321	35		35	518	0
Project		42	0	84		0	0	0		30	0	0		0	0	60
Post		42	0	84		23	2	22		30	321	35		35	518	60

Project Traffic Assignment	Out			Out			In			In		
	0%	20%	0%	40%	0%	0%	0%	0%	0%	10%	0%	0%

* Obtained from the 2016 FDOT PSCF due to Hurricane Irma

** Obtained from the TPS Database Signal ID 35820 and includes Golden Roads Apartment and Akal Property

RaceTrac Market - 10th & FL Mango
PM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 18
FL Mango Rd & Driveway

		ebu	ebf	ebt	ebr	wbu	wbf	wbt	wbr	nbf	nbl	nbt	nbr	sbf	sbl	sbt	sbr	totals
4:00 PM	4:15 PM		2	2	1		14	2	12		3	86	13		14	94	4	247
4:15 PM	4:30 PM		4	1	5		16	1	14		0	99	13		6	76	4	239
4:30 PM	4:45 PM		1	3	2		17	2	15		2	107	12		17	89	5	272
4:45 PM	5:00 PM		6	1	3		14	0	18		4	110	12		15	79	5	267
5:00 PM	5:15 PM		6	1	1		19	1	17		1	128	10		19	120	2	325
5:15 PM	5:30 PM		3	0	3		25	1	19		0	113	26		10	91	6	297
5:30 PM	5:45 PM		5	1	0		16	2	16		0	114	21		22	104	8	309
5:45 PM	6:00 PM		6	2	3		18	1	20		2	119	20		17	112	2	322
Peak Hour Traffic Volume																		
5:00 PM	6:00 PM	0	20	4	7	0	78	5	72	0	3	474	77	0	68	427	18	1253

Count Taken:	9/20/2018	
Buildout year:	2022	
Growth Rate:	1.0%	1.50%
Seasonal Factor*:	1.07	

	ebu	ebf	ebt	ebr	wbu	wbf	wbt	wbr	nbf	nbf	nbt	nbr	sbu	sbf	sbt	sbr
9/20/2018	0	0	0	0	0	78	5	72	0	0	474	77	0	68	427	0
Seasonal Factor	0	0	0	0	0	5	0	5	0	0	33	5	0	5	30	0
Adjusted Volumes		0	0	0		83	5	77		0	507	82		73	457	0
		1%	1%	1%		1%	1%	1%		1%	1%	1%		1%	1%	1%
Growth 1%		0	0	0		3	0	3		0	21	3		3	19	0
Committed**		0	0	0		0	0	0		0	52	0		0	54	0
Committed + 1%		0	0	0		3	0	3		0	73	3		3	73	0
		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%		0.5%	1.5%	1.5%		1.5%	1.5%	0.5%
Growth 1.5%		0	0	0		0	0	0		0	31	5		4	28	0
Growth 1.5% or Committed + 1%		0	0	0		3	0	3		0	73	5		4	73	0
2022 Volumes		0	0	0		86	5	80		0	580	87		77	530	0
Pre W/ Div		0	0	0		86	5	80		0	580	87		77	530	0
Project		74	0	149		0	0	0		36	0	0		0	0	71
Post		74	0	149		86	5	80		36	580	87		77	530	71

Project Traffic Assignment	Out				In				In						
	0%	20%	0%	40%	0%	0%	0%	0%	0%	10%	0%	0%	0%	0%	0%

* Obtained from the 2016 FDOT PSCF due to Hurricane Irma

** Obtained from the TPS Database Signal ID 35820 and includes Golden Roads Apartment and Akal Property

RaceTrac Market - 10th & FL Mango
AM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 19
Western Driveway & 10th Avenue N

Count Taken: 12/5/2018
Buildout year: 2022
Growth Rate: 1.0% 1.50%
Seasonal Factor: 1.02

	ebu	ebl	ebt*	ebr	wbu	wbl	wbt*	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
12/5/2018	0	0	1368	0	0	0	1109	0	0	0	0	0	0	0	0	0
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes		0	1368	0		0	1109	0		0	0	0		0	0	0
		1%	1%	1%		1%	1%	1%		1%	1%	1%		1%	1%	1%
Growth 1%	0	0	56	0		0	45	0		0	0	0		0	0	0
Committed*	0	0	57	0		0	82	0		0	0	0		0	0	0
Committed + 1%		0	113	0		0	127	0		0	0	0		0	0	0
		0.0%	1.5%	0.0%		0.0%	1.5%	0.0%		0.0%	0.0%	0.0%		0.0%	0.0%	0.0%
Growth 1.5%	0	0	84	0		0	68	0		0	0	0		0	0	0
Growth 1.5% or Committed + 1%	0	0	113	0		0	127	0		0	0	0		0	0	0
2022 Volumes	0	0	1481	0	0	0	1236	0	0	0	0	0	0	0	0	0
Pre W/ Div	0	0	1481	0	0	0	1236	0	0	0	0	0	0	0	0	0
Project	91	0	0	0	0	0	0	121	0	0	0	0	21	0	0	63
Post	91	0	1481	0	0	0	1236	121	0	0	0	0	21	0	0	63

Project Traffic Assignment	In							In							Out		Out
	0%	30%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	10%	0%	30%	

* EBT and WBT Volumes obtained from the TPS Database Signal ID 35820

RaceTrac Market - 10th & FL Mango
PM PEAK HOUR TURNING MOVEMENTS
EXHIBIT 20
Western Driveway & 10th Avenue N

Count Taken: 12/5/2018
Buildout year: 2022
Growth Rate: 1.0% 1.50%
Seasonal Factor: 1.02

	ebu	ebl	ebt*	ebr	wbu	wbl	wbt*	wbr	nbu	nbl	nbt	nbr	sbu	sbl	sbt	sbr
12/5/2018	0	0	1241	0	0	0	1648	0	0	0	0	0	0	0	0	0
Seasonal Factor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Adjusted Volumes																
		1%	1%	1%		1%	1%	1%		1%	1%	1%		1%	1%	1%
Growth 1%	0	50	0		0	67	0		0	0	0		0	0	0	0
Committed**	0	186	0		0	183	0		0	0	0		0	0	0	0
Committed + 1%	0	236	0		0	250	0		0	0	0		0	0	0	0
		0.00%	1.50%	0.00%		0.00%	1.50%	0.00%		0.00%	0.00%	0.00%		0.00%	0.00%	0.00%
Growth 1.5%	0	76	0		0	101	0		0	0	0		0	0	0	0
Growth 1.5% or Committed + 1%	0	236	0		0	250	0		0	0	0		0	0	0	0
2022 Volumes	0	1477	0		0	1898	0		0	0	0		0	0	0	0
Pre W/ Div	0	1477	0		0	1898	0		0	0	0		0	0	0	0
Project	107	0	0		0	0	143		0	0	0		37	0	112	
Post	107	1477	0		0	1898	143		0	0	0		37	0	112	

Project Traffic Assignment	In						In						Out		Out	
	0%	30%	0%	0%	0%	0%	0%	40%	0%	0%	0%	0%	0%	10%	0%	30%

* EBT and WBT Volumes obtained from the TPS Database Signal ID 35820

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Pre Dev - AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1231	35	16	957	165	21	12	32	280	5	262
Future Volume (vph)	219	1231	35	16	957	165	21	12	32	280	5	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		0	85		160	0		0	115		250
Storage Lanes	1		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.996				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.970		0.950	0.954	
Satd. Flow (prot)	1770	3525	0	1770	3539	1583	0	1807	1583	1681	1688	1583
Flt Permitted	0.193			0.205				0.970		0.950	0.954	
Satd. Flow (perm)	360	3525	0	382	3539	1583	0	1807	1583	1681	1688	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				127			123			276
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		273			500			364			400	
Travel Time (s)		4.1			7.6			7.1			7.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	231	1296	37	17	1007	174	22	13	34	295	5	276
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	231	1333	0	17	1007	174	0	35	34	150	150	276
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2	3	4	4		3	3	1
Permitted Phases	6			2		2			4			3
Detector Phase	1	6		2	2	3	4	4	4	3	3	1
Switch Phase												
Minimum Initial (s)	4.0	19.0		19.0	19.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0
Minimum Split (s)	11.0	32.0		35.0	35.0	35.0	38.0	38.0	38.0	35.0	35.0	11.0
Total Split (s)	24.0	87.0		63.0	63.0	35.0	38.0	38.0	38.0	35.0	35.0	24.0
Total Split (%)	15.0%	54.4%		39.4%	39.4%	21.9%	23.8%	23.8%	23.8%	21.9%	21.9%	15.0%
Maximum Green (s)	17.0	80.0		56.0	56.0	28.0	31.0	31.0	31.0	28.0	28.0	17.0

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

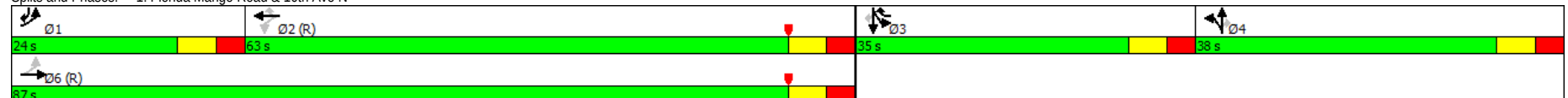
RaceTrac - FL Mango
Pre Dev - AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	4.0		4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None	None	None	None	None
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		18.0		21.0	21.0	21.0	24.0	24.0	24.0	21.0	21.0	
Pedestrian Calls (#/hr)		0		0	0	0	0	0	0	0	0	
Act Effct Green (s)	115.0	115.0		88.5	88.5	114.2		7.8	7.8	18.8	18.8	39.7
Actuated g/C Ratio	0.72	0.72		0.55	0.55	0.71		0.05	0.05	0.12	0.12	0.25
v/c Ratio	0.54	0.53		0.08	0.51	0.15		0.40	0.18	0.76	0.76	0.46
Control Delay	13.6	12.5		24.6	26.2	3.3		86.2	2.0	91.6	91.1	5.3
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	12.5		24.6	26.2	3.3		86.2	2.0	91.6	91.1	5.3
LOS	B	B		C	C	A		F	A	F	F	A
Approach Delay		12.6			22.9			44.7			50.1	
Approach LOS		B			C			D			D	
Queue Length 50th (ft)	76	321		8	351	14		36	0	163	163	0
Queue Length 95th (ft)	139	471		29	514	47		76	0	237	236	51
Internal Link Dist (ft)		193			420			284			320	
Turn Bay Length (ft)	290			85		160				115		250
Base Capacity (vph)	438	2534		211	1956	1250		350	405	294	295	607
Starvation Cap Reductn	0	0		0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.53	0.53		0.08	0.51	0.14		0.10	0.08	0.51	0.51	0.45

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 25 (16%), Referenced to phase 2:WBTl and 6:EBTL, Start of Yellow
 Natural Cycle: 130
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.76
 Intersection Signal Delay: 23.2
 Intersection Capacity Utilization 83.0%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Florida Mango Road & 10th Ave N



Queues
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Pre Dev - AM Peak

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	231	1333	17	1007	174	35	34	150	150	276
v/c Ratio	0.54	0.53	0.08	0.51	0.15	0.40	0.18	0.76	0.76	0.46
Control Delay	13.6	12.5	24.6	26.2	3.3	86.2	2.0	91.6	91.1	5.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	13.6	12.5	24.6	26.2	3.3	86.2	2.0	91.6	91.1	5.3
Queue Length 50th (ft)	76	321	8	351	14	36	0	163	163	0
Queue Length 95th (ft)	139	471	29	514	47	76	0	237	236	51
Internal Link Dist (ft)		193		420		284			320	
Turn Bay Length (ft)	290		85		160			115		250
Base Capacity (vph)	438	2534	211	1956	1250	350	405	294	295	607
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.53	0.08	0.51	0.14	0.10	0.08	0.51	0.51	0.45
Intersection Summary										

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Post Dev - AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	219	1238	35	16	985	172	21	12	32	308	5	262
Future Volume (vph)	219	1238	35	16	985	172	21	12	32	308	5	262
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		0	85		160	0		0	115		250
Storage Lanes	1		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.996				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.970		0.950	0.954	
Satd. Flow (prot)	1770	3525	0	1770	3539	1583	0	1807	1583	1681	1688	1583
Flt Permitted	0.176			0.204				0.970		0.950	0.954	
Satd. Flow (perm)	328	3525	0	380	3539	1583	0	1807	1583	1681	1688	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				128			123			276
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		273			500			364			400	
Travel Time (s)		4.1			7.6			7.1			7.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	231	1303	37	17	1037	181	22	13	34	324	5	276
Shared Lane Traffic (%)										49%		
Lane Group Flow (vph)	231	1340	0	17	1037	181	0	35	34	165	164	276
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2	3	4	4		3	3	1
Permitted Phases	6			2		2			4			3
Detector Phase	1	6		2	2	3	4	4	4	3	3	1
Switch Phase												
Minimum Initial (s)	4.0	19.0		19.0	19.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0
Minimum Split (s)	11.0	32.0		35.0	35.0	35.0	38.0	38.0	38.0	35.0	35.0	11.0
Total Split (s)	24.0	87.0		63.0	63.0	35.0	38.0	38.0	38.0	35.0	35.0	24.0
Total Split (%)	15.0%	54.4%		39.4%	39.4%	21.9%	23.8%	23.8%	23.8%	21.9%	21.9%	15.0%
Maximum Green (s)	17.0	80.0		56.0	56.0	28.0	31.0	31.0	31.0	28.0	28.0	17.0

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

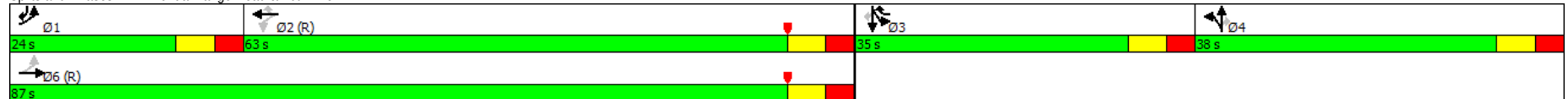
RaceTrac - FL Mango
Post Dev - AM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	4.0		4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None	None	None	None	None
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		18.0		21.0	21.0	21.0	24.0	24.0	24.0	21.0	21.0	
Pedestrian Calls (#/hr)		0		0	0	0	0	0	0	0	0	
Act Effct Green (s)	113.6	113.6		85.5	85.5	112.7		7.8	7.8	20.2	20.2	42.6
Actuated g/C Ratio	0.71	0.71		0.53	0.53	0.70		0.05	0.05	0.13	0.13	0.27
v/c Ratio	0.55	0.54		0.08	0.55	0.16		0.40	0.18	0.78	0.77	0.44
Control Delay	14.4	13.3		26.2	28.7	3.6		86.2	2.0	91.1	90.2	4.9
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	13.3		26.2	28.7	3.6		86.2	2.0	91.1	90.2	4.9
LOS	B	B		C	C	A		F	A	F	F	A
Approach Delay		13.5			25.0			44.7			51.5	
Approach LOS		B			C			D			D	
Queue Length 50th (ft)	79	336		9	381	17		36	0	178	177	0
Queue Length 95th (ft)	143	490		30	551	51		76	0	256	254	49
Internal Link Dist (ft)		193			420			284			320	
Turn Bay Length (ft)	290			85		160				115		250
Base Capacity (vph)	427	2502		203	1891	1223		350	405	294	295	628
Starvation Cap Reductn	0	0		0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.54	0.54		0.08	0.55	0.15		0.10	0.08	0.56	0.56	0.44

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 25 (16%), Referenced to phase 2:WBTl and 6:EBTL, Start of Yellow
 Natural Cycle: 140
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 0.78
 Intersection Signal Delay: 24.8
 Intersection Capacity Utilization 84.0%
 Analysis Period (min) 15
 Intersection LOS: C
 ICU Level of Service E

Splits and Phases: 1: Florida Mango Road & 10th Ave N



Queues

RaceTrac - FL Mango

1: Florida Mango Road & 10th Ave N

Post Dev - AM Peak

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	231	1340	17	1037	181	35	34	165	164	276
v/c Ratio	0.55	0.54	0.08	0.55	0.16	0.40	0.18	0.78	0.77	0.44
Control Delay	14.4	13.3	26.2	28.7	3.6	86.2	2.0	91.1	90.2	4.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	14.4	13.3	26.2	28.7	3.6	86.2	2.0	91.1	90.2	4.9
Queue Length 50th (ft)	79	336	9	381	17	36	0	178	177	0
Queue Length 95th (ft)	143	490	30	551	51	76	0	256	254	49
Internal Link Dist (ft)		193		420		284			320	
Turn Bay Length (ft)	290		85		160			115		250
Base Capacity (vph)	427	2502	203	1891	1223	350	405	294	295	628
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.54	0.54	0.08	0.55	0.15	0.10	0.08	0.56	0.56	0.44
Intersection Summary										

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Pre Dev - PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	394	1034	55	32	1513	322	35	17	23	228	21	354
Future Volume (vph)	394	1034	55	32	1513	322	35	17	23	228	21	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		0	85		160	0		0	115		250
Storage Lanes	1		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.992				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.967		0.950	0.960	
Satd. Flow (prot)	1770	3511	0	1770	3539	1583	0	1801	1583	1681	1699	1583
Flt Permitted	0.065			0.248				0.967		0.950	0.960	
Satd. Flow (perm)	121	3511	0	462	3539	1583	0	1801	1583	1681	1699	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				156			123			306
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		273			500			364			400	
Travel Time (s)		4.1			7.6			7.1			7.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	415	1088	58	34	1593	339	37	18	24	240	22	373
Shared Lane Traffic (%)										46%		
Lane Group Flow (vph)	415	1146	0	34	1593	339	0	55	24	130	132	373
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2	3	4	4		3	3	1
Permitted Phases	6			2		2			4			3
Detector Phase	1	6		2	2	3	4	4	4	3	3	1
Switch Phase												
Minimum Initial (s)	4.0	19.0		19.0	19.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0
Minimum Split (s)	11.0	32.0		35.0	35.0	35.0	38.0	38.0	38.0	35.0	35.0	11.0
Total Split (s)	24.0	87.0		63.0	63.0	35.0	38.0	38.0	38.0	35.0	35.0	24.0
Total Split (%)	15.0%	54.4%		39.4%	39.4%	21.9%	23.8%	23.8%	23.8%	21.9%	21.9%	15.0%
Maximum Green (s)	17.0	80.0		56.0	56.0	28.0	31.0	31.0	31.0	28.0	28.0	17.0

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Pre Dev - PM Peak

	↖	→	↗	↖	←	↖	↗	↑	↖	↗	↓	↖
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	4.0		4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None	None	None	None	None
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		18.0		21.0	21.0	21.0	24.0	24.0	24.0	21.0	21.0	
Pedestrian Calls (#/hr)		0		0	0	0	0	0	0	0	0	
Act Effct Green (s)	115.0	115.0		56.0	56.0	80.1		9.4	9.4	17.1	17.1	70.6
Actuated g/C Ratio	0.72	0.72		0.35	0.35	0.50		0.06	0.06	0.11	0.11	0.44
v/c Ratio	0.67	0.45		0.21	1.29	0.39		0.52	0.11	0.72	0.73	0.43
Control Delay	43.9	11.4		41.0	177.0	13.3		89.6	1.1	90.4	90.6	5.6
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	11.4		41.0	177.0	13.3		89.6	1.1	90.4	90.6	5.6
LOS	D	B		D	F	B		F	A	F	F	A
Approach Delay		20.1			146.5			62.7			40.6	
Approach LOS		C			F			E			D	
Queue Length 50th (ft)	323	254		25	~1110	112		57	0	141	143	31
Queue Length 95th (ft)	#556	379		57	#1248	170		106	0	211	214	87
Internal Link Dist (ft)		193			420			284			320	
Turn Bay Length (ft)	290			85		160				115		250
Base Capacity (vph)	623	2525		161	1238	967		348	405	294	297	869
Starvation Cap Reductn	0	0		0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.67	0.45		0.21	1.29	0.35		0.16	0.06	0.44	0.44	0.43

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 50 (31%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.29
 Intersection Signal Delay: 82.5
 Intersection Capacity Utilization 94.7%
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Florida Mango Road & 10th Ave N



Queues

1: Florida Mango Road & 10th Ave N

Pre Dev - PM Peak

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	415	1146	34	1593	339	55	24	130	132	373
v/c Ratio	0.67	0.45	0.21	1.29	0.39	0.52	0.11	0.72	0.73	0.43
Control Delay	43.9	11.4	41.0	177.0	13.3	89.6	1.1	90.4	90.6	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	43.9	11.4	41.0	177.0	13.3	89.6	1.1	90.4	90.6	5.6
Queue Length 50th (ft)	323	254	25	~1110	112	57	0	141	143	31
Queue Length 95th (ft)	#556	379	57	#1248	170	106	0	211	214	87
Internal Link Dist (ft)		193		420		284			320	
Turn Bay Length (ft)	290		85		160			115		250
Base Capacity (vph)	623	2525	161	1238	967	348	405	294	297	869
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.67	0.45	0.21	1.29	0.35	0.16	0.06	0.44	0.44	0.43

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Post Dev - PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	394	1048	55	32	1557	333	35	17	23	250	21	354
Future Volume (vph)	394	1048	55	32	1557	333	35	17	23	250	21	354
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	290		0	85		160	0		0	115		250
Storage Lanes	1		0	1		1	0		1	1		1
Taper Length (ft)	25			25			25			25		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.95	0.95	1.00
Frt		0.993				0.850			0.850			0.850
Flt Protected	0.950			0.950				0.967		0.950	0.959	
Satd. Flow (prot)	1770	3514	0	1770	3539	1583	0	1801	1583	1681	1697	1583
Flt Permitted	0.065			0.244				0.967		0.950	0.959	
Satd. Flow (perm)	121	3514	0	455	3539	1583	0	1801	1583	1681	1697	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		5				157			123			306
Link Speed (mph)		45			45			35			35	
Link Distance (ft)		273			500			364			400	
Travel Time (s)		4.1			7.6			7.1			7.8	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	415	1103	58	34	1639	351	37	18	24	263	22	373
Shared Lane Traffic (%)										46%		
Lane Group Flow (vph)	415	1161	0	34	1639	351	0	55	24	142	143	373
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Number of Detectors	1	2		1	2	1	1	2	1	1	2	1
Detector Template	Left	Thru		Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Leading Detector (ft)	20	100		20	100	20	20	100	20	20	100	20
Trailing Detector (ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Position(ft)	0	0		0	0	0	0	0	0	0	0	0
Detector 1 Size(ft)	20	6		20	6	20	20	6	20	20	6	20
Detector 1 Type	Cl+Ex	Cl+Ex		Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex	Cl+Ex
Detector 1 Channel												
Detector 1 Extend (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Queue (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 1 Delay (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector 2 Position(ft)		94			94			94			94	
Detector 2 Size(ft)		6			6			6			6	
Detector 2 Type		Cl+Ex			Cl+Ex			Cl+Ex			Cl+Ex	
Detector 2 Channel												
Detector 2 Extend (s)		0.0			0.0			0.0			0.0	
Turn Type	pm+pt	NA		Perm	NA	pm+ov	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	1	6			2	3	4	4		3	3	1
Permitted Phases	6			2		2			4			3
Detector Phase	1	6		2	2	3	4	4	4	3	3	1
Switch Phase												
Minimum Initial (s)	4.0	19.0		19.0	19.0	6.0	6.0	6.0	6.0	6.0	6.0	4.0
Minimum Split (s)	11.0	32.0		35.0	35.0	35.0	38.0	38.0	38.0	35.0	35.0	11.0
Total Split (s)	24.0	87.0		63.0	63.0	35.0	38.0	38.0	38.0	35.0	35.0	24.0
Total Split (%)	15.0%	54.4%		39.4%	39.4%	21.9%	23.8%	23.8%	23.8%	21.9%	21.9%	15.0%
Maximum Green (s)	17.0	80.0		56.0	56.0	28.0	31.0	31.0	31.0	28.0	28.0	17.0

Lanes, Volumes, Timings
1: Florida Mango Road & 10th Ave N

RaceTrac - FL Mango
Post Dev - PM Peak

												
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
All-Red Time (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	7.0	7.0		7.0	7.0	7.0		7.0	7.0	7.0	7.0	7.0
Lead/Lag	Lead			Lag	Lag	Lead	Lag	Lag	Lag	Lead	Lead	Lead
Lead-Lag Optimize?	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Vehicle Extension (s)	2.0	4.0		4.0	4.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Recall Mode	None	C-Max		C-Max	C-Max	None	None	None	None	None	None	None
Walk Time (s)		7.0		7.0	7.0	7.0	7.0	7.0	7.0	7.0	7.0	
Flash Dont Walk (s)		18.0		21.0	21.0	21.0	24.0	24.0	24.0	21.0	21.0	
Pedestrian Calls (#/hr)		0		0	0	0	0	0	0	0	0	
Act Effct Green (s)	113.8	113.8		56.0	56.0	81.4		9.4	9.4	18.4	18.4	70.6
Actuated g/C Ratio	0.71	0.71		0.35	0.35	0.51		0.06	0.06	0.12	0.12	0.44
v/c Ratio	0.68	0.46		0.21	1.32	0.40		0.52	0.11	0.74	0.74	0.43
Control Delay	45.1	12.2		41.1	192.2	13.3		89.6	1.1	89.5	89.2	5.6
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	12.2		41.1	192.2	13.3		89.6	1.1	89.5	89.2	5.6
LOS	D	B		D	F	B		F	A	F	F	A
Approach Delay		20.8			158.7			62.7			41.9	
Approach LOS		C			F			E			D	
Queue Length 50th (ft)	327	266		25	~1163	118		57	0	154	155	31
Queue Length 95th (ft)	#581	402		57	#1301	173		106	0	226	226	87
Internal Link Dist (ft)		193			420			284			320	
Turn Bay Length (ft)	290			85		160				115		250
Base Capacity (vph)	609	2500		159	1238	968		348	405	294	296	869
Starvation Cap Reductn	0	0		0	0	0		0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0		0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0		0	0	0	0	0
Reduced v/c Ratio	0.68	0.46		0.21	1.32	0.36		0.16	0.06	0.48	0.48	0.43

Intersection Summary

Area Type: Other
 Cycle Length: 160
 Actuated Cycle Length: 160
 Offset: 50 (31%), Referenced to phase 2:WBTL and 6:EBTL, Start of Yellow
 Natural Cycle: 150
 Control Type: Actuated-Coordinated
 Maximum v/c Ratio: 1.32
 Intersection Signal Delay: 89.1
 Intersection Capacity Utilization 96.5%
 Analysis Period (min) 15
 ~ Volume exceeds capacity, queue is theoretically infinite.
 Queue shown is maximum after two cycles.
 # 95th percentile volume exceeds capacity, queue may be longer.
 Queue shown is maximum after two cycles.

Splits and Phases: 1: Florida Mango Road & 10th Ave N



Queues

1: Florida Mango Road & 10th Ave N

Post Dev - PM Peak

										
Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	415	1161	34	1639	351	55	24	142	143	373
v/c Ratio	0.68	0.46	0.21	1.32	0.40	0.52	0.11	0.74	0.74	0.43
Control Delay	45.1	12.2	41.1	192.2	13.3	89.6	1.1	89.5	89.2	5.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	45.1	12.2	41.1	192.2	13.3	89.6	1.1	89.5	89.2	5.6
Queue Length 50th (ft)	327	266	25	~1163	118	57	0	154	155	31
Queue Length 95th (ft)	#581	402	57	#1301	173	106	0	226	226	87
Internal Link Dist (ft)		193		420		284			320	
Turn Bay Length (ft)	290		85		160			115		250
Base Capacity (vph)	609	2500	159	1238	968	348	405	294	296	869
Starvation Cap Reductn	0	0	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.68	0.46	0.21	1.32	0.36	0.16	0.06	0.48	0.48	0.43

Intersection Summary

~ Volume exceeds capacity, queue is theoretically infinite.

Queue shown is maximum after two cycles.

95th percentile volume exceeds capacity, queue may be longer.

Queue shown is maximum after two cycles.

Intersection												
Int Delay, s/veh	2.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰↱		↰	↱	↰	↱	↰	↱
Traffic Vol, veh/h	42	0	84	23	2	22	30	321	35	35	518	60
Future Vol, veh/h	42	0	84	23	2	22	30	321	35	35	518	60
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	150	-	260	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	44	0	88	24	2	23	32	338	37	37	545	63

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1065	1052	577	1096	1083	338	608	0	0	338	0	0
Stage 1	651	651	-	401	401	-	-	-	-	-	-	-
Stage 2	414	401	-	695	682	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	200	227	516	191	217	704	970	-	-	1221	-	-
Stage 1	457	465	-	626	601	-	-	-	-	-	-	-
Stage 2	616	601	-	433	450	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	183	213	516	151	203	704	970	-	-	1221	-	-
Mov Cap-2 Maneuver	304	321	-	248	305	-	-	-	-	-	-	-
Stage 1	442	451	-	605	581	-	-	-	-	-	-	-
Stage 2	574	581	-	348	436	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s	15.2			16.6			0.7			0.5		
HCM LOS	C			C								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	970	-	-	304	516	360	1221	-	-
HCM Lane V/C Ratio	0.033	-	-	0.145	0.171	0.137	0.03	-	-
HCM Control Delay (s)	8.8	-	-	18.8	13.4	16.6	8	-	-
HCM Lane LOS	A	-	-	C	B	C	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.6	0.5	0.1	-	-

Intersection												
Int Delay, s/veh	10.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations	↰	↱			↰↱		↰	↱	↰	↱	↰	↱
Traffic Vol, veh/h	74	0	149	86	5	80	36	580	87	77	530	71
Future Vol, veh/h	74	0	149	86	5	80	36	580	87	77	530	71
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	130	-	-	-	-	-	150	-	260	150	-	-
Veh in Median Storage, #	-	1	-	-	1	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	0	157	91	5	84	38	611	92	81	558	75

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1488	1443	595	1522	1481	611	633	0	0	611	0	0
Stage 1	757	757	-	686	686	-	-	-	-	-	-	-
Stage 2	731	686	-	836	795	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	102	132	504	97	125	494	950	-	-	968	-	-
Stage 1	400	416	-	438	448	-	-	-	-	-	-	-
Stage 2	413	448	-	362	399	-	-	-	-	-	-	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	~ 75	116	504	~ 61	110	494	950	-	-	968	-	-
Mov Cap-2 Maneuver	168	219	-	142	219	-	-	-	-	-	-	-
Stage 1	384	381	-	420	430	-	-	-	-	-	-	-
Stage 2	325	430	-	228	366	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s	24.7		71.7		0.5		1	
HCM LOS	C		F					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	950	-	-	168	504	216	968	-	-
HCM Lane V/C Ratio	0.04	-	-	0.464	0.311	0.833	0.084	-	-
HCM Control Delay (s)	8.9	-	-	43.7	15.3	71.7	9.1	-	-
HCM Lane LOS	A	-	-	E	C	F	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	2.2	1.3	6.3	0.3	-	-

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection						
Int Delay, s/veh	1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	91	1481	1236	121	21	63
Future Vol, veh/h	91	1481	1236	121	21	63
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	96	1559	1301	127	22	66
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	1301	0	-	0	2272	651
Stage 1	-	-	-	-	1301	-
Stage 2	-	-	-	-	971	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	528	-	-	-	34	411
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	328	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	528	-	-	-	28	411
Mov Cap-2 Maneuver	-	-	-	-	123	-
Stage 1	-	-	-	-	219	-
Stage 2	-	-	-	-	268	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.8	0		21.7		
HCM LOS	C					
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	528	-	-	-	123	411
HCM Lane V/C Ratio	0.181	-	-	-	0.18	0.161
HCM Control Delay (s)	13.3	-	-	-	40.6	15.4
HCM Lane LOS	B	-	-	-	E	C
HCM 95th %tile Q(veh)	0.7	-	-	-	0.6	0.6

Intersection						
Int Delay, s/veh	3.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations	↘	↗	↗	↘	↘	↗
Traffic Vol, veh/h	107	1477	1898	143	37	112
Future Vol, veh/h	107	1477	1898	143	37	112
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	150	-	-	0	0	0
Veh in Median Storage, #	-	0	0	-	1	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	113	1555	1998	151	39	118

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	1998	0	3001
Stage 1	-	-	1998
Stage 2	-	-	1003
Critical Hdwy	4.14	-	6.84
Critical Hdwy Stg 1	-	-	5.84
Critical Hdwy Stg 2	-	-	5.84
Follow-up Hdwy	2.22	-	3.52
Pot Cap-1 Maneuver	283	-	~ 11
Stage 1	-	-	91
Stage 2	-	-	315
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	283	-	~ 7
Mov Cap-2 Maneuver	-	-	59
Stage 1	-	-	91
Stage 2	-	-	189

Approach	EB	WB	SB
HCM Control Delay, s	1.7	0	60.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	283	-	-	-	59	242
HCM Lane V/C Ratio	0.398	-	-	-	0.66	0.487
HCM Control Delay (s)	25.9	-	-	-	144.4	33.2
HCM Lane LOS	D	-	-	-	F	D
HCM 95th %tile Q(veh)	1.8	-	-	-	2.8	2.5

Notes			
~: Volume exceeds capacity	\$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



PBC Traffic Division - Hand Turning Movement Counts

Signalized Intersection Turning Movement Counts: Jan 2014 - June 1,2019

SIGNAL ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
35860	10th Ave N	A St	7/23/2018	7:15 AM	0	117	27	10	0	2	28	224	0	89	679	106	0	10	860	7	2159
35860	10th Ave N	A St	7/23/2018	12:00 PM	0	132	32	13	0	5	23	94	0	74	735	71	0	19	752	7	1957
35860	10th Ave N	A St	7/24/2018	4:30 PM	0	121	106	9	0	13	43	141	0	110	1302	85	0	28	797	19	2774
35860	10th Ave N	A St	12/14/2015	7:30 AM	0	154	29	15	0	5	24	246	0	101	742	146	0	18	999	9	2488
35860	10th Ave N	A St	12/14/2015	12:30 PM	0	81	23	16	0	11	27	107	0	100	737	64	0	12	770	11	1959
35860	10th Ave N	A St	12/14/2015	4:45 PM	0	155	40	25	0	6	36	162	1	181	1068	173	0	23	885	16	2771
35860	10th Ave N	A St	10/8/2014	7:30 AM	0	183	24	3	0	7	48	251	0	97	746	160	0	20	983	5	2527
35860	10th Ave N	A St	10/8/2014	4:45 PM	0	143	37	15	0	5	20	163	0	156	1081	113	0	20	903	5	2661
35840	10th Ave N	Barnett Dr	7/25/2018	7:15 AM	0	83	12	247	0	40	12	33	0	21	960	92	2	310	1007	117	2936
35840	10th Ave N	Barnett Dr	7/25/2018	12:00 PM	0	122	8	206	0	48	1	29	0	23	944	137	3	198	1082	55	2856
35840	10th Ave N	Barnett Dr	7/25/2018	4:30 PM	0	153	7	327	0	125	19	54	0	24	1004	123	1	242	1347	39	3465
35840	10th Ave N	Barnett Dr	10/1/2015	7:45 AM	0	19	20	142	0	152	5	45	0	37	1140	53	0	158	1248	199	3218
35840	10th Ave N	Barnett Dr	10/1/2015	3:15 PM	0	47	15	109	0	225	13	75	0	43	1070	39	0	125	1401	115	3277
35830	10th Ave N	Boutwell Rd	11/16/2017	7:15 AM	0	135	12	197	0	29	9	13	0	8	1052	166	1	252	873	20	2767
35830	10th Ave N	Boutwell Rd	11/16/2017	12:00 PM	0	161	2	142	0	18	4	9	0	16	860	139	0	142	1022	13	2528
35830	10th Ave N	Boutwell Rd	11/16/2017	4:45 PM	0	166	11	163	0	28	29	20	0	8	834	188	0	206	1272	13	2938
35830	10th Ave N	Boutwell Rd	2/2/2015	7:30 AM	0	91	5	209	0	28	7	10	0	17	1302	133	0	179	979	17	2977
35830	10th Ave N	Boutwell Rd	2/2/2015	4:45 PM	0	153	9	171	0	38	19	21	0	14	1183	181	0	202	1416	22	3429
35830	10th Ave N	Boutwell Rd	11/6/2014	7:15 AM	0	98	8	349	0	33	9	9	0	9	1246	122	0	203	853	11	2950
35830	10th Ave N	Boutwell Rd	11/6/2014	4:45 PM	0	194	14	215	0	33	19	9	0	7	1041	169	0	232	1472	17	3422
35810	10th Ave N	Congress Ave	11/29/2017	7:15 AM	3	138	1020	324	4	204	1130	119	14	440	641	294	1	393	390	245	5360
35810	10th Ave N	Congress Ave	11/29/2017	12:00 PM	23	202	852	364	15	248	806	108	5	241	602	209	9	460	595	244	4983
35810	10th Ave N	Congress Ave	11/29/2017	4:30 PM	18	258	1065	354	9	252	1115	251	30	243	620	226	3	446	913	318	6121
35810	10th Ave N	Congress Ave	3/25/2015	7:30 AM	7	107	744	288	1	269	1043	81	7	207	751	273	2	385	514	222	4901
35810	10th Ave N	Congress Ave	12/17/2015	7:30 AM	13	129	865	293	8	294	1124	103	8	249	790	202	8	474	618	258	5436
35810	10th Ave N	Congress Ave	12/17/2015	12:30 PM	26	148	704	220	17	274	834	132	4	181	748	194	10	473	693	210	4868
35810	10th Ave N	Congress Ave	12/17/2015	4:45 PM	23	272	966	372	7	241	970	207	20	240	683	208	9	473	916	244	5851
35810	10th Ave N	Congress Ave	3/25/2015	4:45 PM	13	228	971	422	13	231	1045	201	32	208	558	220	17	373	789	315	5636
35810	10th Ave N	Congress Ave	4/1/2014	7:30 AM	12	117	745	289	1	231	1133	67	6	222	735	252	5	391	529	192	4927
35810	10th Ave N	Congress Ave	4/1/2014	4:45 PM	30	242	1041	350	5	212	1271	161	31	165	602	227	13	396	1327	233	6306
35800	10th Ave N	Davis Rd	12/3/2018	7:30 AM	0	73	122	118	0	120	95	68	0	130	1015	62	0	43	602	65	2513

SIGNAL ID	E-W STREET	N-S STREET	DATE	TIME	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	TOTAL
50260	Flavor Pict Rd/Coconut Ln	Military Tr	2/13/2019	4:45 PM	1	209	1814	65	2	130	825	139	0	130	87	100	0	73	105	98	3778
50260	Flavor Pict Rd/Coconut Ln	Military Tr	12/12/2017	7:30 AM	7	107	836	48	0	123	1816	91	0	113	67	203	0	61	45	146	3663
50260	Flavor Pict Rd/Coconut Ln	Military Tr	12/12/2017	12:00 PM	1	142	935	47	3	77	872	99	0	156	100	150	0	69	69	94	2814
50260	Flavor Pict Rd/Coconut Ln	Military Tr	12/12/2017	4:45 PM	3	226	1937	46	1	128	860	145	0	139	101	99	0	69	100	156	4010
50260	Flavor Pict Rd/Coconut Ln	Military Tr	11/5/2015	7:30 AM	5	69	620	40	0	100	1783	86	0	83	55	165	0	55	43	143	3247
50260	Flavor Pict Rd/Coconut Ln	Military Tr	11/5/2015	4:45 PM	4	114	1591	34	2	101	777	83	1	93	88	72	0	49	102	144	3255
50260	Flavor Pict Rd/Coconut Ln	Military Tr	1/28/2014	7:45 AM	4	81	573	19	1	110	1707	90	0	97	40	146	0	42	35	130	3075
50260	Flavor Pict Rd/Coconut Ln	Military Tr	1/28/2014	4:30 PM	3	153	1305	26	2	120	821	114	0	147	77	87	2	27	98	172	3154
12500	Florida Bl	Alt A1A/SR 811	9/13/2016	7:30 AM	53	0	1164	71	1	105	1852	0	0	0	0	0	9	240	0	101	3596
12500	Florida Bl	Alt A1A/SR 811	9/13/2016	12:15 PM	27	0	1067	63	4	64	1281	0	0	0	0	0	2	117	0	49	2674
12500	Florida Bl	Alt A1A/SR 811	9/13/2016	4:45 PM	55	0	1625	113	11	125	1508	0	0	0	0	0	5	158	0	103	3703
12500	Florida Bl	Alt A1A/SR 811	10/9/2014	7:30 AM	43	0	1063	72	3	118	1765	0	0	0	0	0	0	252	0	116	3432
12500	Florida Bl	Alt A1A/SR 811	10/9/2014	4:45 PM	58	0	1462	88	10	111	1536	0	0	0	0	0	5	140	0	88	3498
33500	Forest Hill Bl	Congress Ave	11/28/2018	7:30 AM	26	271	1277	310	7	249	972	128	18	415	1413	354	1	422	1007	184	7054
33500	Forest Hill Bl	Congress Ave	11/28/2018	12:00 PM	33	259	716	230	27	180	623	154	25	178	846	272	0	237	964	114	4858
33500	Forest Hill Bl	Congress Ave	1/19/2017	7:30 AM	4	251	1106	278	7	205	841	151	19	290	1405	319	10	229	900	216	6231
33500	Forest Hill Bl	Congress Ave	1/19/2017	12:00 PM	7	306	776	236	27	163	585	166	15	158	840	277	9	214	930	143	4852
33500	Forest Hill Bl	Congress Ave	1/19/2017	4:45 PM	10	326	944	259	14	190	1067	209	23	207	953	324	6	357	1278	133	6300
33500	Forest Hill Bl	Congress Ave	10/27/2015	7:30 AM	9	224	1123	208	5	214	907	141	3	220	1685	247	5	192	883	148	6214
33500	Forest Hill Bl	Congress Ave	10/27/2015	4:45 PM	13	248	1057	125	6	290	1040	185	13	187	1049	177	4	291	1366	102	6153
33500	Forest Hill Bl	Congress Ave	11/28/2018	4:45 PM	33	406	1126	334	11	191	1229	166	36	206	1112	290	3	502	1471	120	7236
33490	Forest Hill Bl	Davis Rd/Tucker Rd	10/26/2015	7:30 AM	0	10	5	10	0	138	36	132	16	117	2006	82	16	57	1105	62	3792
33490	Forest Hill Bl	Davis Rd/Tucker Rd	10/26/2015	5:00 PM	0	50	35	19	1	56	9	128	30	82	1179	8	7	10	1679	95	3388
33510	Forest Hill Bl	FI Mango Rd	5/13/2019	7:30 AM	0	122	215	334	0	210	183	172	3	115	1750	95	17	116	1122	87	4541
33510	Forest Hill Bl	FI Mango Rd	5/13/2019	12:00 PM	0	141	93	150	0	55	70	91	6	49	1046	121	14	163	1069	52	3120
33510	Forest Hill Bl	FI Mango Rd	5/13/2019	4:45 PM	0	147	149	129	0	99	135	96	19	80	1070	140	5	200	1334	113	3716
33510	Forest Hill Bl	FI Mango Rd	10/28/2015	7:30 AM	0	131	188	287	0	199	165	145	4	120	1855	90	17	98	1142	71	4512
33510	Forest Hill Bl	FI Mango Rd	10/28/2015	4:45 PM	1	155	165	128	1	120	123	101	22	72	1204	114	18	242	1705	121	4292
33580	Forest Hill Bl	Georgia Ave	10/21/2015	7:30 AM	0	24	12	10	0	31	29	62	0	96	784	54	0	15	696	25	1838
33580	Forest Hill Bl	Georgia Ave	10/21/2015	5:00 PM	0	44	23	12	0	19	25	69	1	54	720	40	0	8	743	22	1780
33447	Forest Hill Bl	Haverhill Rd	3/26/2019	7:30 AM	0	84	807	139	0	220	608	296	1	409	1594	146	18	96	831	224	5473
33447	Forest Hill Bl	Haverhill Rd	3/26/2019	12:00 PM	6	65	405	74	1	114	394	173	2	171	826	88	3	107	827	180	3436
33447	Forest Hill Bl	Haverhill Rd	3/26/2019	5:00 PM	5	170	784	87	0	188	813	476	0	309	941	138	12	167	1252	272	5614
33447	Forest Hill Bl	Haverhill Rd	1/25/2017	7:30 AM	0	125	835	139	0	215	580	190	0	428	1643	81	25	91	850	257	5459
33447	Forest Hill Bl	Haverhill Rd	1/25/2017	12:00 PM	4	64	595	76	2	158	362	148	0	321	995	70	15	73	906	160	3949
33447	Forest Hill Bl	Haverhill Rd	1/25/2017	5:00 PM	5	184	832	98	11	167	805	359	3	273	1219	115	18	202	1297	259	5847
33447	Forest Hill Bl	Haverhill Rd	10/22/2015	7:30 AM	3	119	609	263	1	229	688	257	0	345	1378	153	27	100	869	238	5279



Palm Beach County

Historic Peak Season Traffic Counts (2014-2019)

STN#	ROAD	FROM	TO	LANES	PK HR LOS	DAILY TRAFFIC VOLUMES					2019 DAILY		18-19 GR	3YR GR	2019 AM PEAK HOUR			2019 PM PEAK HOUR		
						2014	2015	2016	2017	2018	VOL	DATE			2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
4677	2ND AVE	Lake Worth Rd	Congress Ave	2	880	6256	6036	6685	5967	5843	6189	1/16/2019	5.92%	-2.54%	500	195	326	626	385	241
4679	2ND AVE	Congress Ave	Boutwell Rd	2	880	4517	4805	4977	5266	6190	6655	1/16/2019	7.51%	10.17%	563	352	211	696	321	375
4631	6TH AVE S	Congress Ave	Sunset Ave	4D	1960	29480	28494	30973	30485	31942	32716	4/3/2019	2.42%	1.84%	2580	1642	965	2604	1229	1388
4307	6TH AVE S	I-95	SR 805 (Dixie Hwy)	4D	1770	27896	29872	30013	31163	31912	34706	3/13/2019	8.76%	4.96%	2370	1055	1463	2738	1544	1194
4601	10TH AVE N	Haverhill Rd	Military Tr	5	1770		21786	23192	21662		23463	3/6/2019		0.39%	2050	1063	990	1804	774	1014
4603	10TH AVE N	Military Tr	Kirk Rd	5	1960	26705	26370	27508	27357	27526	27686	3/6/2019	0.58%	0.22%	1895	1094	801	2083	1003	1117
4653	10TH AVE N	Kirk Rd	Congress Ave	5	1960	31996	31960	32520	32274	31629	32877	3/11/2019	3.95%	0.36%	2005	1263	778	2453	1046	1407
4203	10TH AVE N	Congress Ave	I-95	5	1770	44441	45255	46089			45262	3/13/2019		-0.60%	3005	1661	1404	3171	1593	1578
5603	23RD AVE SW	Congress Ave	I-95	2	880	13562	13739	14470	15725	15867	15051	4/2/2019	-5.14%	1.32%	1339	755	584	1297	618	693
5305	23RD AVE SW	I-95	Seacrest Blvd	2	880	12827	12932	13703	14291		9583	3/6/2019		-11.24%	589	274	354	787	323	480
5811	23RD AVE SW	Seacrest Blvd	US-1	2	810	8638	8857	9033	9397	9788	9272	4/2/2019	-5.27%	0.87%	622	337	285	794	419	384
5621	23RD AVE SW (GOLF RD)	Military Tr	E Country Rd	2	1140	11640	12929	12698	13570	13777	13033	4/2/2019	-5.40%	0.87%	1169	759	410	1145	523	629
5617	23RD AVE SW (GOLF RD)	E Country Rd	Congress Ave	2	1140	13698	13457	14308	14534		15290	1/30/2019		2.24%	1359	951	411	1319	829	535
3201	45TH ST	Jog Rd	Haverhill Rd	4D	1960	6341	5653	4298	4716	5237	5216	4/10/2019	-0.40%	6.67%	441	218	233	405	221	191
3607	45TH ST	Haverhill Rd	Military Tr	4D	1960	26349	28391	29419	31750	31264	31033	3/13/2019	-0.74%	1.80%	2198	1198	1002	2411	1343	1137

STN#	ROAD	FROM	TO	LANES	PK HR LOS	DAILY TRAFFIC VOLUMES					2019 DAILY		18-19 GR	3YR GR	2019 AM PEAK HOUR			2019 PM PEAK HOUR		
						2014	2015	2016	2017	2018	VOL	DATE			2-WAY	NB/EB	SB/WB	2-WAY	NB/EB	SB/WB
3646	FLORIDA MANGO RD	Summit Blvd	Forest Hill Blvd	2	880	6637	6289	7015	7007	6876	6874	3/26/2019	-0.03%	-0.67%	874	490	384	616	283	334
4212	FLORIDA MANGO RD	Forest Hill Blvd	10th Ave N	2	880	10422	10995	10853	11647	11389	11464	3/26/2019	0.66%	1.84%	1005	645	369	1020	434	595
3407	FOREST HILL BLVD	South Shore Blvd	SR 7	6D	3186	49976	47835	49134	47637	50083	46754	2/4/2019	-6.65%	-1.64%	3532	2106	1480	4011	1844	2167
3423	FOREST HILL BLVD	SR-7	Lyons Rd	6D	2940	38802	37209	38149		38991	38657	2/4/2019	-0.86%	0.44%	2921	1398	1577	3458	1807	1651
3221	FOREST HILL BLVD	Lyons Rd	Pinehurst Dr	6D	2940	36090	36125	37452		39821	37987	2/4/2019	-4.61%	0.47%	3114	1510	1664	3326	1759	1567
3666	FOREST HILL BLVD	Pinehurst Dr	Jog Rd	6D	2680	39249	42563	42712		42333	41394	1/16/2019	-2.22%	-1.04%	3351	1693	1682	3441	1784	1695
3636	FOREST HILL BLVD	Jog Rd	Sherwood Forest Blv	6D	2940	42370	37786	40086		39859	38810	1/16/2019	-2.63%	-1.07%	2975	1478	1520	3203	1701	1502
3667	FOREST HILL BLVD	Sherwood Forest Blvd	Haverhill Rd	6D	2680	40738	41136	42331	40880	40627	41992	3/11/2019	3.36%	-0.27%	3150	1905	1245	3259	1494	1784
3625	FOREST HILL BLVD	Haverhill Rd	Military Tr	6D	2940	43356	43254	44204	43503	43928	43592	3/11/2019	-0.76%	-0.46%	3096	1969	1183	3202	1446	1773
3627	FOREST HILL BLVD	Military Tr	Kirk Rd	6D	2940	42653	41933	44156		44021	43629	4/22/2019	-0.89%	-0.40%	3122	1792	1397	3020	1372	1670
3629	FOREST HILL BLVD	Kirk Rd	Congress Ave	6D	2680	43744	42266	44053	44262	45722	47705	3/11/2019	4.34%	2.69%	4076	2020	2077	3242	1640	1623
3317	FOREST HILL BLVD	I-95	Parker Ave	5	1770	27989	27796	27984		28275	29919	3/26/2019	5.81%	2.25%	2599	1382	1249	2327	1232	1181
3831	FOREST HILL BLVD	Parker Ave	Dixie Hwy	5	1770	19363	19467	19313	19700	20262	20735	3/13/2019	2.33%	2.40%	1460	720	740	1681	864	819
3841	FOREST HILL BLVD	Dixie Hwy	Olive Ave	2	810	5164	5338	5185		5307	5396	3/26/2019	1.68%	1.34%	502	278	226	434	530	228
1217	FREDERICK SMALL RD	Central Blvd	Military Tr	4D	1960	8335	8119	8869	8586	9646	8737	2/11/2019	-9.42%	-0.50%	961	588	373	803	372	476
1215	FREDERICK SMALL RD	Military Tr	Alt A1A	2	880	9745	9724	10751	10726	11186	10233	2/11/2019	-8.52%	-1.63%	958	522	436	907	431	522
4663	GATEWAY BLVD	Hagen Ranch Rd	Jog Rd	2	880	5853	6372	6433	6662	6764	6864	2/27/2019	1.48%	2.19%	628	319	309	629	309	327
4659	GATEWAY BLVD	Jog Rd	Military Tr	4D	1960	17097	17274	17267	18406	18391	18506	2/26/2019	0.63%	2.34%	1758	1001	763	1642	759	894
4649	GATEWAY BLVD	Military Tr	Lawrence Rd	6D	2940	23873	23948	24965	26868	25941	27472	2/26/2019	5.90%	3.24%	2870	1257	1616	2166	1051	1153

KMF Traffic Group, LLC

Stuart, FL
(772) 221-7971

Manual Traffic Count - All Traffic
Florida Mango Rd & President/Chase Drive
Lake Worth, FL

File Name : FLMANGO
Site Code : MK1806
Start Date : 9/20/2018
Page No : 1

Groups Printed- All Traffic

	Florida Mango NB				Florida Mango SB				Chase Driveway EB				President Driveway WB				
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
07:00 AM	14	53	0	67	3	101	1	105	1	0	1	2	1	0	2	3	177
07:15 AM	3	56	0	59	4	126	2	132	0	0	1	1	2	1	2	5	197
07:30 AM	9	76	0	85	3	97	11	111	1	0	2	3	7	1	6	14	213
07:45 AM	6	66	0	72	3	119	11	133	1	2	3	6	5	0	5	10	221
Total	32	251	0	283	13	443	25	481	3	2	7	12	15	2	15	32	808
08:00 AM	13	69	2	84	1	114	7	122	1	0	1	2	6	0	8	14	222
08:15 AM	7	82	1	90	3	91	5	99	0	0	0	0	3	0	4	7	196
08:30 AM	7	64	1	72	0	109	7	116	1	2	0	3	3	1	7	11	202
08:45 AM	9	45	0	54	3	82	17	102	0	0	1	1	4	0	17	21	178
Total	36	260	4	300	7	396	36	439	2	2	2	6	16	1	36	53	798
*** BREAK ***																	
04:00 PM	13	86	3	102	4	94	14	112	1	2	2	5	12	2	14	28	247
04:15 PM	13	99	0	112	4	76	6	86	5	1	4	10	14	1	16	31	239
04:30 PM	12	107	2	121	5	89	17	111	2	3	1	6	15	2	17	34	272
04:45 PM	12	110	4	126	5	79	15	99	3	1	6	10	18	0	14	32	267
Total	50	402	9	461	18	338	52	408	11	7	13	31	59	5	61	125	1025
05:00 PM	10	128	1	139	2	120	19	141	1	1	6	8	17	1	19	37	325
05:15 PM	26	113	0	139	6	91	10	107	3	0	3	6	19	1	25	45	297
05:30 PM	21	114	0	135	8	104	22	134	0	1	5	6	16	2	16	34	309
05:45 PM	20	119	2	141	2	112	17	131	3	2	6	11	20	1	18	39	322
Total	77	474	3	554	18	427	68	513	7	4	20	31	72	5	78	155	1253
Grand Total	195	1387	16	1598	56	1604	181	1841	23	15	42	80	162	13	190	365	3884
Apprch %	12.2	86.8	1		3	87.1	9.8		28.8	18.8	52.5		44.4	3.6	52.1		
Total %	5	35.7	0.4	41.1	1.4	41.3	4.7	47.4	0.6	0.4	1.1	2.1	4.2	0.3	4.9	9.4	

Palm Beach County

Signal Timing Sheet

9/21/2018

35820 : 3005 - 10th Av N and Fla Mango Rd (Standard File)

Phase [1.1.1]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5	6 (ET)	7	8	9	10	11	12	13	14	15	16
Walk		7	7	7		7										
Ped Clearance		21	21	24		18										
Min Green	4	19	6	6		19			5	5	5	5	5	5	5	5
Passage	2	4	2	2		4			1	1	1	1	1	1	1	1
Max1	20	55	30	20		55			25	25	25	25	25	25	25	25
Max2									50	50	50	50	50	50	50	50
Yellow	4	4	4	4	4	4	4	4	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Red	3	3	3	3		3			1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5

Phase Option [1.1.2]

	1 (EL)	2 (WT)	3 (ST)	4 (NT)	5	6 (ET)	7	8	9	10	11	12	13	14	15	16
Enable	ON	ON	ON	ON		ON										
Auto Entry				ON												
Auto Exit		ON				ON										
Non Act1																
Non Act2																
Lock Call		ON				ON			ON	ON	ON	ON	ON	ON	ON	ON
Min Recall		ON				ON										
Max Recall																
Ped Recall																
Dual Entry		ON				ON										
Sim Gap Enable									ON	ON	ON	ON	ON	ON	ON	ON
Rest In Walk																

Detector, Vehicle Parameters 1-16 [5.1]

	1 (EBL1)	2 (WBL1)	3 (WBT1)	4 (WBT2)	5 (WBR1)	6 (SBL1)	7 (SBT1)	8 (SBR1)	9 (NBT1)	10 (NBR1)	11 (EBT1)	12 (EBT2)	13	14	15	16
Call Phase	1	2	2	2	2	3	3	3	4	4	6	6				
Switch Phase	6															
Delay Time					10			10		10						

Detector, Vehicle Parameters 17-32 [5.1]

	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 33-48 [5.1]

	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Call Phase																
Switch Phase																
Delay Time																

Detector, Vehicle Parameters 49-64 [5.1]

	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64
Call Phase																
Switch Phase																
Delay Time																

Approved By: lgao

Date: _____

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Palm Beach County

System Timing Sheet

9/21/2018

35820 : 3005 - 10th Av N and Fla Mango Rd (Standard File)

TB Coor, Day Plan [4.4]

Day Plan Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		6	9	15	19	23										
Minute			30													
Action	100	2	1	3	4	100										

Day Plan Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21	23											
Minute																
Action	100	4	1	4	100											

Day Plan Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour		7	9	21	23											
Minute																
Action	100	4	1	4	100											

Coordination, Pattern 1-16 [2.1]/Coordination, Alt Tables+[2.6]

Pattern	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Cycle Time	140	160	160	120												
Offset Time	117	25	50	68												
Split Number	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Seq Number	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Ph Opt Alt																
Ph Time Alt	1	2	3	4												

Coordination, Splits [2.7.1]

Split Table 1	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	22	45	35	38		67		73								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 2	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	63	35	38		87		73								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	24	63	35	38		87		73								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time	20	36	32	32		56		64								
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: lgao

Date: _____

Palm Beach County

Preempt & Overlap Timing Sheet

9/21/2018

35820 : 3005 - 10th Av N and Fla Mango Rd (Standard File)

Preemption Times[3.1]/Phases[3.2]/Options[3.3]

Channel	1	2	3	4	5	6
Lock Input			ON	ON	ON	ON
Override Flash						
Override Higher						
Flash Dwell						
Link						
Delay						
Min Duration						
Min Green			5	5	5	5
Min Walk			4	4	4	4
Ped Clear			24	24	24	24
Track Green						
Min Dwell			10	10	10	10
Max Presence			120	120	120	120
Track R1						
Track R2						
Track R3						
Track R4						
Dwell P1			2	2	3	4
Dwell P2			6	6		
Dwell P3						
Dwell P4						
Dwell P5						
Dwell P6						
Dwell P7						
Dwell P8						
Dwell P9						
Dwell P10						
Dwell P11						
Dwell P12						
Dwell Ped1						
Dwell Ped2						
Dwell Ped3						
Dwell Ped4						
Dwell Ped5						
Dwell Ped6						
Dwell Ped7						
Dwell Ped8						
Exit R1			2	2	2	2
Exit R2			6	6	6	6
Exit R3						
Exit R4						

Preemption Times+[3.4]/Overlaps+[3.5]/Options+[3.6]

Preempt	1	2	3	4	5	6
Enable			ON	ON	ON	ON
Type	EMERG	EMERG	EMERG	EMERG	EMERG	EMERG
Skip Track						
Volt Mon Flash						
Coord in Preempt						
Max2						
Return Max/Min	MAX	MAX	MAX	MAX	MAX	MAX
Extend Dwell						
Pattern						
Output Mode	TS2	TS2	TS2	TS2	TS2	TS2
Track Over 1						
Track Over 2						
Track Over 3						
Track Over 4						
Track Over 5						
Track Over 6						
Track Over 7						
Track Over 8						
Track Over 9						
Track Over 10						
Track Over 11						
Track Over 12						
Dwell Over 1						
Dwell Over 2						
Dwell Over 3						
Dwell Over 4						
Dwell Over 5						
Dwell Over 6						
Dwell Over 7						
Dwell Over 8						
Dwell Over 9						
Dwell Over 10						
Dwell Over 11						
Dwell Over 12						
Ped Clear						
Yellow						
Red						
Return Min/Max						
Delay Inh						
Exit Time						
All Red B4						

Overlap Program Parameters [1.5.2.1]

Overlap	Included Phases	Modifier Phases	Type	Green	Yellow	Red
Overlap 1			NORMAL		3.5	1.5
Overlap 2			NORMAL		3.5	1.5
Overlap 3			NORMAL		3.5	1.5
Overlap 4			NORMAL		3.5	1.5
Overlap 5			NORMAL		3.5	1.5
Overlap 6			NORMAL		3.5	1.5
Overlap 7			NORMAL		3.5	1.5
Overlap 8			NORMAL		3.5	1.5
Overlap 9			NORMAL		3.5	1.5
Overlap 10			NORMAL		3.5	1.5
Overlap 11			NORMAL		3.5	1.5
Overlap 12			NORMAL		3.5	1.5
Overlap 13			NORMAL		3.5	1.5
Overlap 14			NORMAL		3.5	1.5
Overlap 15			NORMAL		3.5	1.5
Overlap 16			NORMAL		3.5	1.5

Approved By: lgao

Date: _____

Palm Beach County

Alternate Timing Sheet

9/21/2018

35820 : 3005 - 10th Av N and Fla Mango Rd (Standard File)

Alternate Phase Program 1, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1			4	2	20	8	4	3	1	
2	7	21	19	4	55	55	4	3	2	
3	7	21	6	2	30	9	4	3	3	
4	7	24	6	2	20	8	4	3	4	
5										
6	7	18	19	4	55	55	4	3	6	
7										
8										

Alternate Phase Program 2, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1			4	2	20	8	4	3	1	
2	7	21	19	4	55	55	4	3	2	
3	7	21	6	2	30	11	4	3	3	
4	7	24	6	2	20	10	4	3	4	
5										
6	7	18	19	4	55	55	4	3	6	
7										
8										

Alternate Phase Program 3, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1			4	2	20	10	4	3	1	
2	7	21	19	4	55	55	4	3	2	
3	7	21	6	2	30	12	4	3	3	
4	7	24	6	2	20	8	4	3	4	
5										
6	7	18	19	4	55	55	4	3	6	
7										
8										

Alternate Phase Program 4, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1			4	2	20	8	4	3	1	
2	7	21	19	4	55	55	4	3	2	
3	7	21	6	2	30	8	4	3	3	
4	7	24	6	2	20	8	4	3	4	
5										
6	7	18	19	4	55	55	4	3	6	
7										
8										

Alternate Phase Program 5, Interval Times [1.1.6.1]

Phase	Walk	Ped Clear	Min Green	Passage	Max1	Max2	Yellow	Red Clear	Assign Ph	Bike Clear
1										
2										
3										
4										
5										
6										
7										
8										

TB Coor, Day Plan [4.4]

Day Plan Table 4	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 5	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Day Plan Table 6	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Hour																
Minute																
Action	100															

Approved By: lgao

Date: _____

Palm Beach County

Special System Timing Sheet

9/21/2018

35820 : 3005 - 10th Av N and Fla Mango Rd (Standard File)

Coordination, Splits [2.7.1]

Split Table 7	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 8	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 9	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 10	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 11	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 12	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 13	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 14	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 15	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Split Table 16	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Time																
Mode	NON	MAX	NON	NON	NON	MAX	NON	NON	NON	NON	NON	NON	NON	NON	NON	NON
Coord-Ph		ON														

Approved By: lgao

Date: _____

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Input Data

ROAD NAME: 10th Ave N
CURRENT YEAR: 2016
ANALYSIS YEAR: 2024
GROWTH RATE: 3.75%

STATION: 4203
FROM: S Congress Ave
TO: Midpoint
COUNT DATE: 3/2/2016
PSF: 1

Report Created
5/21/2019

Time Period Direction	Link Analysis AM			PM			Type	% Complete	Status	Expires	AM TW	in	out	PM TW	in	out	Traffic Assignment								AM TW	in	out	PM TW	in	out
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB											AM TW	in	out	PM TW	in	out	AM TW	in						
Committed Developments							Res	0%	Built	2017																				
Lake Worth Corners							NR	50%	Built	2008																				
Forest Hill / Congress Pharmacy							NR	0%	Expired	2010																				
Buena Vista Commerce Park							NR	75%	Built	2008																				
Palm Springs Park of Commerce							NR	77.20%	Built	2011																				
Lake Worth Middle School	11	9	2	13	4	9	Res	0%	Built	2026																				
Tonset Property							NR	100%	Built	2012																				
Mavericks High School							NR	49%	Built	2015																				
Mid-County Center							NR	0%	Expired	2015																				
Storefront Center at Congress	21	12	10	105	51	54	NR	75%	Built	2019																				
Walmart-Palm Springs							NR	100%	Built	2013																				
2720 10th Avenue Medical Office							NR	44%	Built	2013																				
Race-Trac							Res	80%	Built	2017																				
The Village at Lake Worth							NR	81%	Built	2018																				
McDonald's Congress Ave							NR	66%	Built	2017																				
APEC Petroleum							NR	0%	Built	2019																				
Value Place Hotel	3	3	1	4	1	2	Res	0%	Built	2019																				
Village of Valor East							Res	0%	Built	2018																				
Waterville	2	1	0	2	1	1	Res	0%	Built	2019																				
Villages of Valor West							NR	0%	Built	2019																				
AutoZone #6361							NR	0%	Built	2019																				
Kingswood Academy of Palm Springs							NR	44%	Built	2016																				
WAWA-Lakeworth & Congress							NR	98%	Built	2016																				
Chili's @ Palm Springs Plaza							NR	0%	Built	2017																				
WAWA - SEC 10th and Military Trail	47	25	22	149	74	75	NR	0%	2022	2022	188	101	87	594	294	300	25%	25%	25%	25%	25%	25%	25%	47	25	22	149	74	75	
Waterside Plaza	13	6	7	57	30	28	NR	0%	2019	2019	50	26	24	229	111	118	25%	25%	25%	25%	25%	25%	13	6	7	57	30	28		
East Parcel Annex	29	6	23	35	23	12	Res	0%	2024	2024	96	19	77	117	76	41	30%	30%	30%	30%	30%	30%	29	6	23	35	23	12		
Golden Roads Apartments	40	14	26	47	28	19	Res	0%	2022	2022																				
Akal Property																														
Total Committed Developments	166	76	91	412	212	200																								
Total Committed Residential	85	33	52	101	57	43																								
Total Committed Non-Residential	81	43	39	311	155	157																								
Double Count Reduction	16	8	8	25	14	11																								
Total Discounted Committed Developments	150	68	83	387	198	189																								
Historical Growth	1085	558	541	1051	501	561																								
Comm Dev+1% Growth	413	203	214	642	319	325																								
Growth Volume Used	1085	558	541	1051	501	561																								
Total Volume	4255	2188	2121	4123	1965	2201																								
Lanes	SL																													
LOS D Capacity	3220	1770	1770	3220	1770	1770																								
LOS E Capacity	3400	1870	1870	3400	1870	1870																								

A	B	C	D	E	F	G	H	I																		
Input Data																										
ROAD NAME: 10th Ave N				STATION: 4203				Report Created																		
CURRENT YEAR: 2016				FROM: Midpoint				5/21/2019																		
ANALYSIS YEAR: 2024				TO: Boutwell Rd																						
GROWTH RATE: 3.75%				COUNT DATE: 3/2/2016																						
				PSF: 1																						
Link Analysis																										
AM									PM																	
NB/EB SB/WB									2-way NB/EB SB/WB																	
Time Period																										
Direction																										
Committed Developments																										
ADOPT A FAMILY									Type % Complete									Status Expires								
Dollar General Lake Worth									1 0 0 21 10 11 NR 100%									Built 2003								
Lake Worth Corners									Res 0%									Built 2019								
Lake Worth Middle School									NR 77.20%									Built 2017								
Mavericks High School									NR 100%									Built 2011								
Mid-County Center									NR 49%									Built 2012								
Walmart-Palm Springs									20 9 11 98 51 48 NR 75%									Built 2015								
2720 10th Avenue Medical Office									NR 100%									Built 2019								
Race-Trac									NR 44%									Built 2013								
The Village at Lake Worth									Res 80%									Built 2013								
APEC Petroleum									NR 66%									Built 2017								
Value Place Hotel									NR 0%									Built 2019								
Village of Valor East									3 1 3 4 2 1 Res 0%									Built 2019								
Waterville									Res 0%									Built 2018								
Villages of Valor West									2 1 0 2 1 1 Res 0%									Built 2019								
WAWA-Lakeworth & Congress									NR 44%									Built 2016								
WAWA - SEC 10th and Military Trail									NR 0%									Built 2017								
Waterside Plaza									66 30 35 208 105 103 NR 0%									2022 2022								
East Parcel Annex									13 6 7 57 30 28 NR 0%									2019 2019								
Golden Roads Apartments									38 8 31 47 30 16 Res 0%									2024 2024								
Alak Property									53 18 35 63 38 25 Res 0%									2022 2022								
Total Committed Developments									196 73 122 500 267 233																	
Total Committed Residential									96 28 69 116 71 43																	
Total Committed Non-Residential									100 45 53 384 196 190																	
Double Count Reduction									20 7 11 29 18 11																	
Total Discounted Committed Developments									176 66 111 471 249 222																	
Historical Growth									1085 558 541 1051 501 561																	
Comm Dev+1% Growth									439 201 242 726 370 358																	
Growth Volume Used									1085 558 541 1051 501 561																	
Total Volume									4255 2188 2121 4123 1965 2201																	
Lanes									5L																	
LOS D Capacity									3220 1770 1770 3220 1770 1770																	
LOS E Capacity									3400 1870 1870 3400 1870 1870																	
																		AM TW								
																		in								
																		out								
																		PM TW								
																		in								
																		out								
																		Traffic Assignment								
																		AM TW								
																		in								
																		out								
																		PM TW								
																		in								
																		out								

Input Data

ROAD NAME: 10th Ave N
CURRENT YEAR: 2016
ANALYSIS YEAR: 2024
GROWTH RATE: 3.75%

STATION: 4203
FROM: Florida Mango Rd
TO: Midpoint
COUNT DATE: 3/2/2016
PSF: 1

Report Created
5/21/2019

Time Period Direction	Link Analysis																														
	AM			PM																											
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB																									
Committed Developments							Type	% Complete	Status	Expires							Traffic Assignment														
ADOPT A FAMILY							NR	100%	Built	2003																					
Dollar General Lake Worth	1	0	0	21	10	11	NR	0%	2019	2019																					
Lake Worth Corners							Res	0%	Built	2017																					
Lake Worth Middle School							NR	77.20%	Built	2011																					
Mavericks High School							NR	100%	Built	2012																					
Mid-County Center							NR	49%	Built	2015																					
Walmart-Palm Springs	20	9	11	98	51	48	NR	75%	2019	2019																					
2720 10th Avenue Medical Office							NR	100%	Built	2013																					
Race-Trac							NR	44%	Built	2013																					
The Village at Lake Worth							Res	80%	Built	2017																					
APEC Petroleum							NR	66%	Built	2017																					
Value Place Hotel							NR	0%	Built	2019																					
Village of Valor East	3	1	3	4	2	1	Res	0%	2019	2019																					
Waterville							Res	0%	Built	2018																					
Villages of Valor West	2	1	0	2	1	1	Res	0%	2019	2019																					
WAWA-Lakeworth & Congress							NR	44%	Built	2016																					
WAWA - SEC 10th and Military Trail							NR	0%	Built	2017																					
Waterside Plaza	66	30	35	208	105	103	NR	0%	2022	2022	188		101	87	594	294	300	35%	35%	35%	35%	35%	35%	35%	35%	66	30	35	208	105	103
East Parcel Annex	13	6	7	57	30	28	NR	0%	2019	2019	50		26	24	229	111	118	25%	25%	25%	25%	25%	25%	25%	25%	13	6	7	57	30	28
Golden Roads Apartments	38	8	31	47	30	16	Res	0%	2024	2024	96		19	77	117	76	41	40%	40%	40%	40%	40%	40%	40%	40%	38	8	31	47	30	16
Akal Property	53	18	35	63	38	25	Res	0%	2022	2022																					
Total Committed Developments	196	73	122	500	267	233																									
Total Committed Residential	96	28	69	116	71	43																									
Total Committed Non-Residential	100	45	53	384	196	190																									
Double Count Reduction	20	7	11	29	18	11																									
Total Discounted Committed Developments	176	66	111	471	249	222																									
Historical Growth	1085	558	541	1051	501	561																									
Comm Dev+1% Growth	439	201	242	726	370	358																									
Growth Volume Used	1085	558	541	1051	501	561																									
Total Volume	4255	2188	2121	4123	1965	2201																									
Lanes	5L																														
LOS D Capacity	3220	1770	1770	3220	1770	1770																									
LOS E Capacity	3400	1870	1870	3400	1870	1870																									

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Input Data

ROAD NAME: 10th Ave N

STATION: 4203

Report Created

CURRENT YEAR: 2016

FROM: Midpoint

5/22/2019

ANALYSIS YEAR: 2024

TO: N Interstate 95

GROWTH RATE: 3.75%

COUNT DATE: 3/2/2016

PSF: 1

Time Period Direction	Link Analysis						Type	% Complete	Status	Expires																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	AM			PM							AM TW	in	out	PM TW	in	out	Traffic Assignment						AM TW	in	out	PM TW	in	out																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						

Input Data
 ROAD NAME: 10th Ave N STATION: 4203 Report Created
 CURRENT YEAR: 2016 FROM: Boutwell Rd 5/22/2019
 ANALYSIS YEAR: 2024 TO: Midpoint
 GROWTH RATE: 3.75% COUNT DATE: 3/2/2016
 PSF: 1

Time Period Direction	Link Analysis						Type	% Complete	Status	Expires																				
	AM			PM							2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB														
	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB					AM TW	in	out	PM TW	in	out		Traffic Assignment						AM TW	in	out	PM TW	in	out	
Committed Developments																														
Dollar General Lake Worth	1	0	0	21	10	11	NR	0%	2019	2019																				
Lake Worth Corners							Res	0%	Built	2017																				
Lake Worth Middle School							NR	77.20%	Built	2011																				
Mid-County Center							NR	49%	Built	2015																				
Walmart-Palm Springs	19	9	11	96	50	47	NR	75%	2019	2019																				
2720 10th Avenue Medical Office							NR	100%	Built	2013																				
Race-Trac							NR	44%	Built	2013																				
The Village at Lake Worth							Res	80%	Built	2017																				
APEC Petroleum							NR	66%	Built	2017																				
Value Place Hotel							NR	0%	Built	2019																				
Village of Valor East	16	13	3	19	7	12	Res	0%	2019	2019																				
Waterville							Res	0%	Built	2018																				
Villages of Valor West	8	1	7	8	6	3	Res	0%	2019	2019																				
Waterside Plaza	56	26	30	178	90	88	NR	0%	2022	2022	o	188	101	87	594	294	300	30%	30%	30%	30%	30%	30%	30%	56	26	30	178	90	88
East Parcel Annex	13	6	7	57	30	28	NR	0%	2019	2019	o	50	26	24	229	111	118	25%	25%	25%	25%	25%	25%	25%	13	6	7	57	30	28
Golden Roads Apartments	53	42	10	64	23	42	Res	0%	2024	2024	o	96	19	77	117	76	41	55%	55%	55%	55%	55%	55%	55%	53	42	10	64	23	42
Akal Property	67	44	23	79	32	47	Res	0%	2022	2022																				
Total Committed Developments	233	141	91	522	248	278																								
Total Committed Residential	144	100	43	170	68	104																								
Total Committed Non-Residential	89	41	48	352	180	174																								
Double Count Reduction	18	8	10	43	17	26																								
Total Discounted Committed Developments	215	133	81	479	231	252																								
Historical Growth	1085	558	541	1051	501	561																								
Comm Dev+1% Growth	478	268	212	734	352	388																								
Growth Volume Used	1085	558	541	1051	501	561																								
Total Volume	4255	2188	2121	4123	1965	2201																								
Lanes	5L																													
LOS D Capacity	3220	1770	1770	3220	1770	1770																								
LOS E Capacity	3400	1870	1870	3400	1870	1870																								

A	B	C	D	E	F	G	H	I																						
Input Data																														
ROAD NAME: Florida Mango Rd			STATION: 4212			Report Created																								
CURRENT YEAR: 2017			FROM: Midpoint			5/21/2019																								
ANALYSIS YEAR: 2024			TO: Forest Hill Blvd																											
GROWTH RATE: 3.77%			COUNT DATE: 2/15/2017																											
			PSF: 1																											
Link Analysis																														
Time Period		AM			PM																									
Direction		2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB																							
Committed Developments							Type	% Complete	Status	Expires	AM TW	in	out	PM TW	in	out	Traffic Assignment						AM TW	in	out	PM TW	in	out		
Circus Trix		1	0	0	3	1	2	NR	0%	2021	2021																			
Lake Worth Corners							Res	0%	Built	2017																				
Forest Hill / Congress Pharmacy							NR	50%	Built	2008																				
Lake Worth Middle School							NR	77.20%	Built	2011																				
Walmart-Palm Springs		1	1	1	6	3	3	NR	75%	Built	2019																			
The Village at Lake Worth							Res	80%	Built	2017																				
APEC Petroleum							NR	66%	Built	2017																				
Value Place Hotel							NR	0%	Built	2019																				
Waterville							Res	0%	Built	2018																				
WAWA - Forest Hill & Congress							NR	25%	Built	2016																				
2773 Public Charter School							NR	50%	Built	2016																				
Akal Property		13	9	5	16	6	9	Res	0%	2022	2022																			
Waterside Plaza		38	17	20	119	60	59	NR	0%	2022	2022	188	101	87	594	294	300	20%	20%	20%	20%	20%	20%	20%	38	17	20	119	60	59
East Parcel Annex		0	0	0	0	0	0	NR	0%	2019	2019	50	26	24	229	111	118	0%	0%	0%	0%	0%	0%	0%	0	0	0	0	0	0
Golden Roads Apartments		10	8	2	12	4	8	Res	0%	2024	2024	96	19	77	117	76	41	10%	10%	10%	10%	10%	10%	10%	10	8	2	12	4	8
Total Committed Developments		63	35	28	156	74	81																							
Total Committed Residential		23	17	7	28	10	17																							
Total Committed Non-Residential		40	18	21	128	64	64																							
Double Count Reduction		6	4	2	7	3	4																							
Total Discounted Committed Developments		57	31	26	149	71	77																							
Historical Growth		314	202	113	332	159	175																							
Comm Dev+1% Growth		133	80	54	230	110	120																							
Growth Volume Used		314	202	113	332	159	175																							
Total Volume		1374	885	495	1454	695	767																							
Lanes		2L																												
LOS D Capacity		1480	880	880	1480	880	880																							
LOS E Capacity		1570	880	880	1570	880	880																							

Input Data
ROAD NAME: Florida Mango Rd STATION: 4212
CURRENT YEAR: 2017 FROM: 10th Ave
ANALYSIS YEAR: 2024 TO: Midpoint
GROWTH RATE: 3.77% COUNT DATE: 2/15/2017
PSF: 1

Report Created
5/21/2019

Link Analysis		AM		PM																			
Time Period	Direction	2-way	NB/EB	SB/WB	2-way	NB/EB	SB/WB											Traffic Assignment					
								Type	% Complete	Status	Expires	AM TW	in	out	PM TW	in	out						
Committed Developments		1	0	0	3	1	2	NR	0%	2021	2021												
Circus Trix								Res	0%	Built	2017												
Lake Worth Corners								NR	77.20%	Built	2011												
Lake Worth Middle School								NR	75%	2019	2019												
Walmart-Palm Springs		1	1	1	6	3	3	NR	80%	Built	2017												
The Village at Lake Worth								Res	66%	Built	2017												
APEC Petroleum								NR	0%	Built	2017												
Value Place Hotel								NR	0%	Built	2019												
Waterville								Res	0%	Built	2018												
WAWA - Forest Hill & Congress								NR	25%	Built	2016												
2773 Public Charter School								NR	50%	Built	2016												
Akal Property		13	9	5	16	6	9	Res	0%	2022	2022												
Waterside Plaza		38	17	20	119	60	59	NR	0%	2022	2022	188	101	87	594	294	300	20%	20%	20%	20%	20%	20%
East Parcel Annex		0	0	0	0	0	0	NR	0%	2019	2019	50	26	24	229	111	118	0%	0%	0%	0%	0%	0%
Golden Roads Apartments		10	8	2	12	4	8	Res	0%	2024	2024	96	19	77	117	76	41	10%	10%	10%	10%	10%	10%
Total Committed Developments		63	35	28	156	74	81																
Total Committed Residential		23	17	7	28	10	17																
Total Committed Non-Residential		40	18	21	128	64	64																
Double Count Reduction		6	4	2	7	3	4																
Total Discounted Committed Developments		57	31	26	149	71	77																
Historical Growth		314	202	113	332	159	175																
Comm Dev+1% Growth		133	80	54	230	110	120																
Growth Volume Used		314	202	113	332	159	175																
Total Volume		1374	885	495	1454	695	767																
Lanes		2L																					
LOS D Capacity		1480	880	880	1480	880	880																
LOS E Capacity		1570	880	880	1570	880	880																

A	B	C	D	E	F	G	H	I
	Input Data							
	ROAD NAME: Florida Mango Rd			STATION: 3646			Report Created	
	CURRENT YEAR: 2017			FROM: Midpoint			5/22/2019	
	ANALYSIS YEAR: 2024			TO: Summit Blvd				
	GROWTH RATE: 1.83%			COUNT DATE: 2/15/2017				
				PSF: 1				

Link Analysis

Time Period		AM		PM	
Direction	2-way	NB/EB	SB/WB	2-way	NB/EB SB/WB

Committed Developments							Type	% Complete	Status	Expires
CHS Properties	2	1	1	2	1	1	NR	52%	2025	2025
Forest Hill / Congress Pharmacy							NR	50%	Built	2008
Renaissance Charter School							NR	100%	Built	2017
WAWA - Forest Hill & Congress							NR	25%	Built	2016
2773 Public Charter School							NR	50%	Built	2016
Total Committed Developments	2	1	1	2	1	1				
Total Committed Residential	0	0	0	0	0	0				
Total Committed Non-Residential	2	1	1	2	1	1				
Double Count Reduction	0	0	0	0	0	0				
Total Discounted Committed Developments	2	1	1	2	1	1				
Historical Growth	108	53	55	94	43	51				
Comm Dev+1% Growth	59	29	30	52	24	28				
Growth Volume Used	108	53	55	94	43	51				
Total Volume	905	445	460	789	360	429				
Lanes	2L									
LOS D Capacity	1480	880	880	1480	880	880				
LOS E Capacity	1570	880	880	1570	880	880				

Input Data		
ROAD NAME: Florida Mango Rd	STATION: 3646	Report Created
CURRENT YEAR: 2017	FROM: Forest Hill Blvd	5/22/2019
ANALYSIS YEAR: 2024	TO: Midpoint	
GROWTH RATE: 1.83%	COUNT DATE: 2/15/2017	
	PSF: 1	

Time Period Direction	Link Analysis						Type	% Complete	Status	Expires
	2-way	AM NB/EB	SB/WB	2-way	PM NB/EB	SB/WB				
Committed Developments										
CHS Properties	2	1	1	2	1	1	NR	52%	2025	2025
Forest Hill / Congress Pharmacy							NR	50%	Built	2008
Renaissance Charter School							NR	100%	Built	2017
WAWA - Forest Hill & Congress							NR	25%	Built	2016
2773 Public Charter School							NR	50%	Built	2016
Total Committed Developments	2	1	1	2	1	1				
Total Committed Residential	0	0	0	0	0	0				
Total Committed Non-Residential	2	1	1	2	1	1				
Double Count Reduction	0	0	0	0	0	0				
Total Discounted Committed Developments	2	1	1	2	1	1				
Historical Growth	108	53	55	94	43	51				
Comm Dev+1% Growth	59	29	30	52	24	28				
Growth Volume Used	108	53	55	94	43	51				
Total Volume	905	445	460	789	360	429				
Lanes	2L									
LOS D Capacity	1480	880	880	1480	880	880				
LOS E Capacity	1570	880	880	1570	880	880				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
					Input Data									
	E-W Street: 10th Ave N				COUNT DATE: 3/24/2015				Report					
	N-S STREET: Florida Mango Rd				CURRENT YEAR: 2015				5/22/2019					
	TIME PERIOD: AM				ANALYSIS YEAR: 2024									
	GROWTH RATE: 3.74%				PSF: 1									
	SIGNAL ID: 35820													

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete	Status	Expires
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Race-Trac													NR	44%	Built	2013
Value Place Hotel													NR	0%	Built	2019
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Waterville													Res	0%	Built	2018
Villages of Valor West	0	1	0	0	0	0	0	0	0	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Waterside Plaza	0	25	0	0	0	22	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	6	0	0	0	7	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	6	0	0	0	23	8	0	0	0	0	2	Res	0%	2024	2024
Akal Property	0	14	0	0	0	26	9	0	0	0	0	5	Res	0%	2022	2022
Walmart-Palm Springs	1	9	0	0	0	11	0	0	0	0	0	1	NR	75%	2019	2019
Total Committed Developments	1	61	0	0	89	17	0	0	0	7	0	1				
Total Committed Residential	0	21	0	0	49	17	0	0	0	7	0	0				
Total Committed Non-Residential	1	40	0	0	40	0	0	0	0	0	0	1				
Double Count Reduction	0	5	0	0	8	0	0	0	0	0	0	0				
Total Discounted Committed	1	56	0	0	81	17	0	0	0	7	0	1				

E-W Street: 10th Ave N
 N-S STREET: Florida Mango Rd
 TIME PERIOD: PM
 GROWTH RATE: 3.74%
 SIGNAL ID: 35820

Input Data
 COUNT DATE: 3/24/2015
 CURRENT YEAR: 2015
 ANALYSIS YEAR: 2024
 PSF: 1

Report
 5/22/2019

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete	Status	Expires
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Race-Trac													NR	44%	Built	2013
Value Place Hotel													NR	0%	Built	2019
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Waterville													Res	0%	Built	2018
Villages of Valor West	0	1	0	0	1	0	0	0	0	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Waterside Plaza	0	74	0	0	0	75	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	30	0	0	0	28	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	23	0	0	0	12	4	0	0	0	0	8	Res	0%	2024	2024
Akal Property	0	14	0	0	0	26	9	0	0	0	0	5	Res	0%	2022	2022
Walmart-Palm Springs	3	51	0	0	0	48	0	0	0	0	0	3	NR	75%	2019	2019
Total Committed Developments	3	193	0	0	190	13	0	0	0	13	0	3				
Total Committed Residential	0	38	0	0	39	13	0	0	0	13	0	0				
Total Committed Non-Residential	3	155	0	0	151	0	0	0	0	0	0	3				
Double Count Reduction	0	10	0	0	10	0	0	0	0	0	0	0				
Total Discounted Committed	3	183	0	0	180	13	0	0	0	13	0	3				

A B C D E F G H I J K L M N O

E-W Street: 10th Ave N
N-S STREET: Congress Ave
TIME PERIOD: AM
GROWTH RATE: 1.16%
SIGNAL ID: 35810

Input Data

COUNT DATE: 3/25/2015
CURRENT YEAR: 2015
ANALYSIS YEAR: 2024
PSF: 1

Report Created
5/22/2019

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Kingswood Academy of Palm Springs													NR	0%	Built	2019
Race-Trac													NR	44%	Built	2013
McDonald's Congress Ave	0	0	2	2	0	0	2	3	2	0	3	0	NR	81%	Built	2018
Value Place Hotel													NR	0%	Built	2019
Tonset Property	2	0	0	0	0	2	0	2	0	10	10	7	Res	0%	2026	2026
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Village of Valor East	0	0	0	1	0	0	0	0	3	0	0	0	Res	0%	2019	2019
Lantana Airport SDA1													NR	0%	Expired	2012
Storefront Center at Congress													NR	0%	Expired	2015
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Villages of Valor West	0	0	0	0	0	0	0	0	1	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Lantana Airport SDA2													NR	0%	Expired	2012
Forest Hill / Congress Pharmacy													NR	50%	Built	2008
Walmart-Palm Springs	0	5	0	3	5	2	0	0	4	3	0	0	NR	75%	2019	2019
Buena Vista Commerce Park													NR	0%	Expired	2010
Waterside Plaza	0	25	0	0	0	13	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	0	7	0	7	0	0	6	6	0	7	0	NR	0%	2019	2019
Golden Roads Apartments	0	2	0	0	8	8	8	0	2	0	0	0	Res	0%	2024	2024
AutoZone #6361													NR	0%	Built	2019
Total Committed Developments	2	32	9	21	26	21	8	11	18	25	20	7				
Total Committed Residential	2	2	0	9	8	10	0	2	6	12	10	7				
Total Committed Non-Residential	0	30	9	12	18	11	8	9	12	13	10	0				
Double Count Reduction	0	1	0	2	2	2	0	1	2	3	2	0				
Total Discounted Committed	2	31	9	19	24	19	8	10	16	22	18	7				

E-W Street: 10th Ave N	Input Data	
N-S STREET: Congress Ave	COUNT DATE: 3/25/2015	Report Created
TIME PERIOD: PM	CURRENT YEAR: 2015	5/22/2019
GROWTH RATE: 1.16%	ANALYSIS YEAR: 2024	
SIGNAL ID: 35810	PSF: 1	

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Kingswood Academy of Palm Springs													NR	0%	Built	2019
Race-Trac													NR	44%	Built	2013
McDonald's Congress Ave	0	0	1	1	0	0	1	2	1	0	2	0	NR	81%	Built	2018
Value Place Hotel													NR	0%	Built	2019
Tonset Property	6	0	0	0	0	9	0	9	0	4	4	3	Res	0%	2026	2026
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Village of Valor East	0	0	0	2	0	0	0	0	1	0	0	0	Res	0%	2019	2019
Lantana Airport SDA1													NR	0%	Expired	2012
Storefront Center at Congress													NR	0%	Expired	2015
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Villages of Valor West	0	0	0	1	0	0	0	0	1	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Lantana Airport SDA2													NR	0%	Expired	2012
Forest Hill / Congress Pharmacy													NR	50%	Built	2008
Walmart-Palm Springs	0	23	0	16	25	13	0	0	15	12	0	0	NR	75%	2019	2019
Buena Vista Commerce Park													NR	0%	Expired	2010
Palm Springs Park of Commerce	0	0	0	0	0	0	1	0	1	0	0	0	NR	75%	Built	2008
Waterside Plaza	0	74	0	0	0	45	0	0	0	29	0	0	NR	0%	2022	2022
East Parcel Annex	0	0	28	0	28	0	0	0	0	0	28	0	NR	0%	2019	2019
Golden Roads Apartments	0	8	0	0	4	4	4	0	0	8	0	0	Res	0%	2024	2024
AutoZone #6361													NR	0%	Built	2019
Total Committed Developments	6	105	29	52	74	56	32	41	57	53	34	3				
Total Committed Residential	6	8	0	7	4	13	0	9	10	12	4	3				
Total Committed Non-Residential	0	97	29	45	70	43	32	32	47	41	30	0				
Double Count Reduction	0	2	0	2	1	3	0	2	3	3	1	0				
Total Discounted Committed	6	103	29	50	73	53	32	39	54	50	33	3				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
				Input Data										
E-W Street: Forest Hill Blvd				COUNT DATE: 10/9/2013						Report Created				
N-S STREET: Florida Mango Rd				CURRENT YEAR: 2013						5/23/2019				
TIME PERIOD: AM				ANALYSIS YEAR: 2021										
GROWTH RATE: -0.92%				PSF: 1.04										
SIGNAL ID: 33510														

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete	Status	Expires
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Circus Trix	0	2	0	0	3	0	0	0	0	0	0	0	NR	0%	2021	2021
Summit/Congress Plaza													NR	68.75%	Not Approved	2007
Lake Worth Middle School													NR	77.20%		2011
CHS Properties	0	1	0	0	2	1	0	0	0	0	0	0	NR	63%	2025	2025
Forest Hill / Congress Pharmacy													NR	0%	Built	2008
Hispanic Daycare													NR	0%	Built	2016
Renaissance Charter School													NR	0%	Built	2017
Walmart-Palm Springs	0	1	0	1	1	0	0	0	1	0	0	0	NR	72%	2019	2019
Waterside Plaza	0	0	10	10	0	0	9	0	9	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	0	0	0	0	0	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	0	5	5	0	0	4	0	4	0	0	0	Res	0%	2024	2024
Congress Center													NR	0%	Expired	2008
Total Committed Developments	0	4	15	16	6	1	13	0	14	0	0	0				
Total Committed Residential	0	0	5	5	0	0	4	0	4	0	0	0				
Total Committed Non-Residential	0	4	10	11	6	1	9	0	10	0	0	0				
Double Count Reduction	0	0	1	1	0	0	1	0	1	0	0	0				
Total Discounted Committed	0	4	14	15	6	1	12	0	13	0	0	0				

E-W Street: Forest Hill Blvd
 N-S STREET: Florida Mango Rd
 TIME PERIOD: PM
 GROWTH RATE: -0.92%
 SIGNAL ID: 33510

Input Data
 COUNT DATE: 10/9/2013
 CURRENT YEAR: 2013
 ANALYSIS YEAR: 2021
 PSF: 1.04

Report Created
 5/23/2019

	Intersection Volume Development												Type	% Complete	Status	Expires			
	Eastbound			Westbound			Northbound			Southbound									
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right							
Committed Developments																			
Circus Trix	0	14	2		0	13	0		1	0	0		0	0	0	NR	0%	2021	2021
Summit/Congress Plaza																NR	68.75%	Not Approved	2007
Lake Worth Middle School																NR	77.20%	Built	2011
CHS Properties	0	2	0		0	2	0		0	0	0		1	0	0	NR	63%	2025	2025
Forest Hill / Congress Pharmacy																NR	0%	Built	2008
Hispanic Daycare																NR	100%	Built	2016
Renaissance Charter School																NR	0%	Built	2017
Walmart-Palm Springs	0	4	0		3	3	0		0	0	4		0	0	0	NR	72%	2019	2019
Waterside Plaza	0	0	29	0	29	0	0	0	30	0	30	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	0	15	0	15	0	0	0	2	0	2	0	0	0	0	Res	0%	2024	2024
Congress Center																NR	0%	Expired	2008
Total Committed Developments	0	20	46		47	18	0		33	0	36		1	0	0				
Total Committed Residential	0	0	15		15	0	0		2	0	2		0	0	0				
Total Committed Non-Residential	0	20	31		32	18	0		31	0	34		1	0	0				
Double Count Reduction	0	0	4		4	0	0		1	0	1		0	0	0				
Total Discounted Committed	0	20	42		43	18	0		32	0	35		1	0	0				

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
				Input Data										
E-W Street: 10th Ave N				COUNT DATE: 3/24/2015				Report						
N-S STREET: Florida Mango Rd				CURRENT YEAR: 2015				5/22/2019						
TIME PERIOD: AM				ANALYSIS YEAR: 2024										
GROWTH RATE: 3.74%				PSF: 1										
SIGNAL ID: 35820														

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete	Status	Expires
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Race-Trac													NR	44%	Built	2013
Value Place Hotel													NR	0%	Built	2019
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Waterville													Res	0%	Built	2018
Villages of Valor West	0	1	0	0	0	0	0	0	0	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Waterside Plaza	0	25	0	0	0	22	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	6	0	0	0	7	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	6	0	0	0	23	8	0	0	0	0	2	Res	0%	2024	2024
Akal Property	0	14	0	0	0	26	9	0	0	0	0	5	Res	0%	2022	2022
Walmart-Palm Springs	1	9	0	0	0	11	0	0	0	0	0	1	NR	75%	2019	2019
Total Committed Developments	1	61	0	0	89	17	0	0	0	7	0	1				
Total Committed Residential	0	21	0	0	49	17	0	0	0	7	0	0				
Total Committed Non-Residential	1	40	0	0	40	0	0	0	0	0	0	1				
Double Count Reduction	0	5	0	0	8	0	0	0	0	0	0	0				
Total Discounted Committed	1	56	0	0	81	17	0	0	0	7	0	1				

E-W Street: 10th Ave N
 N-S STREET: Florida Mango Rd
 TIME PERIOD: PM
 GROWTH RATE: 3.74%
 SIGNAL ID: 35820

Input Data
 COUNT DATE: 3/24/2015
 CURRENT YEAR: 2015
 ANALYSIS YEAR: 2024
 PSF: 1

Report
 5/22/2019

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete	Status	Expires
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Race-Trac													NR	44%	Built	2013
Value Place Hotel													NR	0%	Built	2019
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Waterville													Res	0%	Built	2018
Villages of Valor West	0	1	0	0	1	0	0	0	0	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Waterside Plaza	0	74	0	0	0	75	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	30	0	0	0	28	0	0	0	0	0	0	NR	0%	2019	2019
Golden Roads Apartments	0	23	0	0	0	12	4	0	0	0	0	8	Res	0%	2024	2024
Akal Property	0	14	0	0	0	26	9	0	0	0	0	5	Res	0%	2022	2022
Walmart-Palm Springs	3	51	0	0	0	48	0	0	0	0	0	3	NR	75%	2019	2019
Total Committed Developments	3	193	0	0	190	13	0	0	0	13	0	3				
Total Committed Residential	0	38	0	0	39	13	0	0	0	13	0	0				
Total Committed Non-Residential	3	155	0	0	151	0	0	0	0	0	0	3				
Double Count Reduction	0	10	0	0	10	0	0	0	0	0	0	0				
Total Discounted Committed	3	183	0	0	180	13	0	0	0	13	0	3				

A B C D E F G H I J K L M N O

E-W Street: 10th Ave N
N-S STREET: Congress Ave
TIME PERIOD: AM
GROWTH RATE: 1.16%
SIGNAL ID: 35810

Input Data

COUNT DATE: 3/25/2015
CURRENT YEAR: 2015
ANALYSIS YEAR: 2024
PSF: 1

Report Created
5/22/2019

Intersection Volume Development

	Eastbound			Westbound			Northbound			Southbound			Type	% Complete		
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right				
Committed Developments																
Kingswood Academy of Palm Springs													NR	0%	Built	2019
Race-Trac													NR	44%	Built	2013
McDonald's Congress Ave	0	0	2	2	0	0	2	3	2	0	3	0	NR	81%	Built	2018
Value Place Hotel													NR	0%	Built	2019
Tonset Property	2	0	0	0	0	2	0	2	0	10	10	7	Res	0%	2026	2026
Lake Worth Middle School													NR	77.20%	Built	2011
The Village at Lake Worth													Res	40%	Built	2017
APEC Petroleum													NR	66%	Built	2017
Village of Valor East	0	0	0	1	0	0	0	0	3	0	0	0	Res	0%	2019	2019
Lantana Airport SDA1													NR	0%	Expired	2012
Storefront Center at Congress													NR	0%	Expired	2015
Lake Worth Corners													Res	0%	Built	2017
Mid-County Center													NR	49%	Built	2015
Villages of Valor West	0	0	0	0	0	0	0	0	1	0	0	0	Res	0%	2019	2019
WAWA-Lakeworth & Congress													NR	44%	Built	2016
Lantana Airport SDA2													NR	0%	Expired	2012
Forest Hill / Congress Pharmacy													NR	50%	Built	2008
Walmart-Palm Springs	0	5	0	3	5	2	0	0	4	3	0	0	NR	75%	2019	2019
Buena Vista Commerce Park													NR	0%	Expired	2010
Waterside Plaza	0	25	0	0	0	13	0	0	0	0	0	0	NR	0%	2022	2022
East Parcel Annex	0	0	7	0	7	0	0	6	6	0	7	0	NR	0%	2019	2019
Golden Roads Apartments	0	2	0	0	8	8	8	0	2	0	0	0	Res	0%	2024	2024
AutoZone #6361													NR	0%	Built	2019
Total Committed Developments	2	32	9	21	26	21	8	11	18	25	20	7				
Total Committed Residential	2	2	0	9	8	10	0	2	6	12	10	7				
Total Committed Non-Residential	0	30	9	12	18	11	8	9	12	13	10	0				
Double Count Reduction	0	1	0	2	2	2	0	1	2	3	2	0				
Total Discounted Committed	2	31	9	19	24	19	8	10	16	22	18	7				

E-W Street: 10th Ave N	Input Data	Report Created
N-S STREET: Congress Ave	COUNT DATE: 3/25/2015	5/22/2019
TIME PERIOD: PM	CURRENT YEAR: 2015	
GROWTH RATE: 1.16%	ANALYSIS YEAR: 2024	
SIGNAL ID: 35810	PSF: 1	

Intersection Volume Development													
	Eastbound			Westbound			Northbound			Southbound			
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Committed Developments													Type % Complete
Kingswood Academy of Palm Springs													NR 0% Built 2019
Race-Trac													NR 44% Built 2013
McDonald's Congress Ave	0	0	1	1	0	0	1	2	1	0	2	0	NR 81% Built 2018
Value Place Hotel													NR 0% Built 2019
Tonset Property	6	0	0	0	0	9	0	9	0	4	4	3	Res 0% 2026 2026
Lake Worth Middle School													NR 77.20% Built 2011
The Village at Lake Worth													Res 40% Built 2017
APEC Petroleum													NR 66% Built 2017
Village of Valor East	0	0	0	2	0	0	0	0	1	0	0	0	Res 0% 2019 2019
Lantana Airport SDA1													NR 0% Expired 2012
Storefront Center at Congress													NR 0% Expired 2015
Lake Worth Corners													Res 0% Built 2017
Mid-County Center													NR 49% Built 2015
Villages of Valor West	0	0	0	1	0	0	0	0	1	0	0	0	Res 0% 2019 2019
WAWA-Lakeworth & Congress													NR 44% Built 2016
Lantana Airport SDA2													NR 0% Expired 2012
Forest Hill / Congress Pharmacy													NR 50% Built 2008
Walmart-Palm Springs	0	23	0	16	25	13	0	0	15	12	0	0	NR 75% 2019 2019
Buena Vista Commerce Park													NR 0% Expired 2010
Palm Springs Park of Commerce	0	0	0	0	0	0	1	0	1	0	0	0	NR 75% Built 2008
Waterside Plaza	0	74	0	0	0	45	0	0	0	29	0	0	NR 0% 2022 2022
East Parcel Annex	0	0	28	0	28	0	0	0	0	0	28	0	NR 0% 2019 2019
Golden Roads Apartments	0	8	0	0	4	4	4	0	0	8	0	0	Res 0% 2024 2024
AutoZone #6361													NR 0% Built 2019
Total Committed Developments	6	105	29	52	74	56	32	41	57	53	34	3	
Total Committed Residential	6	8	0	7	4	13	0	9	10	12	4	3	
Total Committed Non-Residential	0	97	29	45	70	43	32	32	47	41	30	0	
Double Count Reduction	0	2	0	2	1	3	0	2	3	3	1	0	
Total Discounted Committed	6	103	29	50	73	53	32	39	54	50	33	3	

2018 PEAK SEASON FACTOR CATEGORY REPORT - REPORT TYPE: ALL
 CATEGORY: 9301 CEN.-W OF US1 TO SR7

WEEK	DATES	SF	MOCF: 0.95 PSCF
1	01/01/2018 - 01/06/2018	1.00	1.05
2	01/07/2018 - 01/13/2018	1.00	1.05
3	01/14/2018 - 01/20/2018	0.99	1.04
* 4	01/21/2018 - 01/27/2018	0.98	1.03
* 5	01/28/2018 - 02/03/2018	0.96	1.01
* 6	02/04/2018 - 02/10/2018	0.95	1.00
* 7	02/11/2018 - 02/17/2018	0.94	0.99
* 8	02/18/2018 - 02/24/2018	0.94	0.99
* 9	02/25/2018 - 03/03/2018	0.94	0.99
*10	03/04/2018 - 03/10/2018	0.94	0.99
*11	03/11/2018 - 03/17/2018	0.95	1.00
*12	03/18/2018 - 03/24/2018	0.95	1.00
*13	03/25/2018 - 03/31/2018	0.96	1.01
*14	04/01/2018 - 04/07/2018	0.96	1.01
*15	04/08/2018 - 04/14/2018	0.97	1.02
*16	04/15/2018 - 04/21/2018	0.97	1.02
17	04/22/2018 - 04/28/2018	0.99	1.04
18	04/29/2018 - 05/05/2018	1.01	1.06
19	05/06/2018 - 05/12/2018	1.02	1.07
20	05/13/2018 - 05/19/2018	1.04	1.09
21	05/20/2018 - 05/26/2018	1.04	1.09
22	05/27/2018 - 06/02/2018	1.04	1.09
23	06/03/2018 - 06/09/2018	1.04	1.09
24	06/10/2018 - 06/16/2018	1.04	1.09
25	06/17/2018 - 06/23/2018	1.05	1.11
26	06/24/2018 - 06/30/2018	1.06	1.12
27	07/01/2018 - 07/07/2018	1.06	1.12
28	07/08/2018 - 07/14/2018	1.07	1.13
29	07/15/2018 - 07/21/2018	1.08	1.14
30	07/22/2018 - 07/28/2018	1.06	1.12
31	07/29/2018 - 08/04/2018	1.05	1.11
32	08/05/2018 - 08/11/2018	1.04	1.09
33	08/12/2018 - 08/18/2018	1.02	1.07
34	08/19/2018 - 08/25/2018	1.03	1.08
35	08/26/2018 - 09/01/2018	1.03	1.08
36	09/02/2018 - 09/08/2018	1.03	1.08
37	09/09/2018 - 09/15/2018	1.04	1.09
38	09/16/2018 - 09/22/2018	1.03	1.08
39	09/23/2018 - 09/29/2018	1.02	1.07
40	09/30/2018 - 10/06/2018	1.01	1.06
41	10/07/2018 - 10/13/2018	1.00	1.05
42	10/14/2018 - 10/20/2018	1.00	1.05
43	10/21/2018 - 10/27/2018	1.00	1.05
44	10/28/2018 - 11/03/2018	1.00	1.05
45	11/04/2018 - 11/10/2018	1.00	1.05
46	11/11/2018 - 11/17/2018	1.00	1.05
47	11/18/2018 - 11/24/2018	1.00	1.05
48	11/25/2018 - 12/01/2018	1.00	1.05
49	12/02/2018 - 12/08/2018	1.00	1.05
50	12/09/2018 - 12/15/2018	1.00	1.05
51	12/16/2018 - 12/22/2018	1.00	1.05
52	12/23/2018 - 12/29/2018	1.00	1.05
53	12/30/2018 - 12/31/2018	0.99	1.04

* PEAK SEASON

25-FEB-2019 16:26:26

830UPD

4_9301_PKSEASON.TXT

Project into separate lots shall still require all parcels or lots in their entirety taken together of that subdivision to be addressed against the standard and any required CRALLS mitigation for the overall Project to be completed by the developers of the separate lots. [Ord. 2010-022]

Table 12.B.2.C-1 1A: LOS D Link Service Volumes

Facility Type		ADT	Peak Hour Two Way	Peak Hour, Peak Direction		
				Class I	Class II	Uninterrupted Flow
2 lanes undivided (1)	2L	15,200	1,480	880	810	1,140
2 lanes one-way	2LO	19,900		2,350	2,120	
3 lanes two-way	3L	15,200	1,480	880	810	
3 lanes one-way	3LO	30,200		3,530	3,220	
4 lanes undivided (1)	4L	31,500	3,060	1,860	1,680	3,150
4 lanes divided	4LD	33,200	3,220	1,960	1,770	3,320
5 lanes two-way	5L	33,200	3,220	1,960	1,770	
6 lanes divided	6LD	50,300	4,880	2,940	2,680	4,980
8 lanes divided	8LD	67,300	6,530	3,940	3,590	
4 lanes expressway	4LX	73,600	6,770	3,720		
6 lanes expressway	6LX	110,300	10,150	5,580		
8 lanes expressway	8LX	146,500	13,480	7,420		
10 lanes expressway	10LX	184,000	16,930	9,320		
[Ord. 2005-002] [Ord. 2007-013] [Ord. 2010-022]						
Notes:						
Based on the 2009 FDOT Quality/ LOS Handbook						
1. Service volumes for "undivided" roadways assume exclusive left turn lanes are provided at signalized intersections. If there are no left turn lanes, reduce these values by 20 percent.						

Table 12.B.2.C-2 1B: LOS D Intersection Thresholds

LOS	Critical Movement	HCM Operational Analysis
D	1,400	Greater than 35.0 to 55.0 Seconds of Delay
Note:		
The delay identifies seconds of delay greater than 35.0 and less than or equal to 55.0.		

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Table 12.B.2.C-3 1C: LOS D Speed Thresholds

Urban Street Class	I	II	III
Range of Free Flow Speeds (FFS)	55 to 45 miles per hour	45 to 35 miles per hour	35 to 30 miles per hour
Typical FFS	50 miles per hour	40 miles per hour	35 miles per hour
LOS	Average Travel Speed (Miles per Hour)		
D	Greater than 21 to 27	Greater than 17 to 22	Greater than 14 to 18
Note:			
Speed values refer to a "range" of values that will achieve LOS D. For example speeds greater than 21 but less than or equal to 27 miles per hour will all be LOS D for a Class I roadway.			

Table 12.B.2.C-4 2A: LOS E- Link Service Volumes

Facility Type		ADT	Peak Hour Two Way	Peak Hour, Peak Direction		
				Class I	Class II	Uninterrupted Flow
2 lanes undivided (1)	2L	16,200	1,570	880	860	1,440
2 lanes one-way	2LO	21,100		2,350	2,240	
3 lanes two-way	3L	16,200	1,570	880	860	
3 lanes one-way	3LO					
		31,900		3,530	3,400	
4 lanes undivided (1)	4L	33,300	3,230	1,860	1,780	3,570
4 lanes divided	4LD	35,100	3,400	1,960	1,870	3,760
5 lanes two-way	5L	35,100	3,400	1,960	1,870	
6 lanes divided	6LD	53,100	5,150	2,940	2,830	5,650
8 lanes divided	8LD	70,900	6,880	3,940	3,780	
4 lanes expressway	4LX	79,400	7,300			4,020
6 lanes expressway	6LX	122,700	11,290			6,200
8 lanes expressway	8LX	166,000	15,270			8,400
10 lanes expressway	10LX	209,200	19,250			10,580
[Ord. 2005 - 002] [Ord. 2007-013] [Ord. 2010-022]						
Notes:						
Based on the 2009 FDOT Quality/ LOS Handbook						
1. Service volumes for "undivided" roadways assume exclusive left turn lanes are provided at signalized intersections. If there are no left turn lanes, reduce these values by 20 percent.						

Table 12.B.2.C-5 2B: LOS E Intersection Thresholds

LOS	Critical Movement	HCM Operational Analysis
E	1500	Greater than 55.0 to 80.0 Seconds of delay
Note:		
The delay identifies seconds of delay greater than 55.0 and less than or equal to 80.0.		

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Table 12.B.2.C-6 2C: LOS E Speed Thresholds

Urban Street Class	I	II	III
Range of Free Flow Speeds (FFS)	55 to 45 miles per hour	45 to 35 miles per hour	35 to 30 miles per hour
Typical FFS	50 miles per hour	40 miles per hour	35 miles per hour
LOS	Average Travel Speed (Miles per Hour)		
E	Greater than 16 to 21	Greater than 13 to 17	Greater than 10 to 14
Note:			
Speed values refer to a "range" of values that will achieve LOS D. For example speeds greater than 21 but less than or equal to 27 miles per hour will all be LOS D for a Class I roadway.			

D. Radius of Development Influence/Project Significance

Table 12.B.2.D-7, 3A represents the Radius of Development Influence for the specific volume of the proposed Project's Net Trips. [Ord. 2006-043] [Ord. 2007-013]

Table 12.B.2.D-7 3A: Radius of Development Influence

Net External Peak Hour		Two-Way Trip Generation	Radius
1	thru	20	Directly accessed link(s)
21	thru	50	0.5 miles
51	thru	100	1 mile
101	thru	500	2 miles
501	thru	1,000	3 miles
1,001	thru	2,000	4 miles
2,001	and	Up	5 miles
[Ord. 2005-002] [Ord. 2006-043] [Ord. 2007-013] [Ord. 2010-022]			

Table 12.B.2.D-9 3C -Test One Levels of Significance

Facility	All Links (except I-95 and the Turnpike)	I-95/Turnpike
Significance Level	one percent LOS D within Radius, five percent LOS D outside Radius	five percent LOS D
[Ord. 2006-043]		

Table 12.B.2.D-10 3D - Test Two Levels of Significance

Facility	All Links (except I-95 and the Turnpike)	I-95/Turnpike
Significance Level	three percent LOS E within Radius, five percent LOS E outside Radius	five percent LOS E
[Ord. 2006-043]		

- For Test 1, a Project must address those Links within the Radius of Development Influence on which its Net Trips are greater than one percent of the LOS D of the Link affected on a peak hour peak direction basis AND those Links outside the Radius of Development Influence on which its Net Trips are greater than five percent of the LOS D of the Link affected on a peak hour peak direction basis up to the limits set forth in [Table 12.B.2.C-1 1A: LOS D Link Service Volumes](#). Provided, in all cases, I-95 and Florida's Turnpike shall be addressed only if Net Trips on these facilities are greater than five percent of the LOS D of the Link affected on a peak hour peak direction basis up to the limits set forth in [Table 12.B.2.C-1 1A: LOS D Link Service Volumes](#). [Ord. 2006-043] [Ord. 2007-013] [Ord. 2010-022]
- For Test 2, a Project must address those Links within the Radius of Development Influence on which its Net Trips are greater than three percent of the LOS E of the Link affected on a peak hour peak direction basis up to the limits set forth in [Table 12.B.2.C-4, 2.A: LOS E Link Service Volumes](#) AND those Links outside the Radius of Development Influence on which its Net Trips are greater than five percent of the LOS E of the Link affected on a peak hour peak direction basis up to the limits set forth in [Table 12.B.2.C-4, 2A: LOS E Link Service Volumes](#). Provided, in all cases, I-95 and Florida's Turnpike shall be addressed only if Net Trips on these facilities are greater than five percent of the LOS E of the Link affected on a peak hour peak direction basis up to the limits set forth in [Table 12.B.2.C-4, 2.A: LOS E Link Service Volumes](#). [Ord. 2006-043] [Ord. 2007-013] [Ord. 2010-022]

- 2) Along minor collector streets, driveways shall be located such that the near edge of driveway pavement is at least 15 feet from the shared property line. Flares or returns for the proposed driveways shall be separated from the flares or returns for existing driveways on abutting lots by at least 10 feet.
- 3) Along major collector and arterial streets, driveways shall be located in accordance with applicable requirements of "Access Management Standards for County Roads Shown on the Thoroughfare Right-of-Way Identification Map", available from the Traffic Division.
- 4) Driveways serving shopping centers shall be well spaced, and the number of driveways shall be the minimum number practical to serve the site.

5. DRIVEWAY CONSTRUCTION

Except for those driveways serving individual single family or duplex residential lots, each driveway shall be classified as one of the following types and constructed in accordance with the following requirements.

Where it is deemed necessary by the County Engineer for traffic safety and operational reasons, the applicable requirements may be increased or decreased as a result of site specific conditions. The construction of physical barriers, such as medians, may be required by the County Engineer on adjacent streets, after his review of the specific site access proposal.

a. Minor Driveway

A minor driveway is one that serves an average daily traffic volume of no more than 500 vehicles (trips). The minimum distance from the street right of way at any driveway to any interior service drive or parking space shall be 25 feet, measured on a line perpendicular to the street right-of-way. Minor driveways shall provide minimum single lane widths of 12 feet and provide

minimum pavement return radii of 20 feet. In cases when minor driveway connections are to be made to curbed streets the connections may be constructed using drop curb instead of radial returns. Minor driveways may have left and turn lanes and/or median modifications as required by the County Engineer.

b. Intermediate Driveway

An intermediate driveway is one that serves an average daily traffic volume greater than 500 vehicles but not more than 2,000 vehicles (trips). The minimum distance from the street right of way at any driveway to any interior service drive or parking space shall be 50 feet, measured on a line perpendicular to the street right-of-way. Intermediate driveways shall provide minimum ingress lanes 12 feet wide and egress lanes 12 feet wide. Where left and right turn egress is allowed, dual egress lanes may be provided and marked appropriately for use as left and right turn lanes. Intermediate driveways shall provide minimum pavement return radii of 30 feet. Intermediate driveways may have left and turn lanes and/or median modifications as required by the County Engineer.

c. Major Driveway

A major driveway is one that serves an average daily traffic volume in excess of 2,000 vehicles (trips). The minimum distance from the street right-of-way at any driveway to any interior service drive or parking space shall be 100 feet, measured on a line perpendicular to the street right-of-way. Major driveways shall provide minimum ingress lanes 14 feet wide and egress lanes 12 feet wide. Where left and right turn egress is allowed, dual egress lanes shall be provided and marked appropriately for use as left and right turn lanes. Intermediate driveways shall provide minimum pavement return radii of 40 feet. Major driveways shall have left and right turn lanes and/or median modification as required by the County Engineer.

6. TURN LANE REQUIREMENTS FOR DRIVEWAYS

a. Left Turn Lanes

A 12 foot wide left turn lane with appropriate storage and transitions shall be provided at each driveway where inbound peak hour left turning traffic is 30 vehicles or more. This requirement may be waived by the County Engineer when, in his opinion, the speed and volume of opposing traffic is not sufficient to require a left turn lane.

b. Right Turn Lanes

A 12 foot wide right turn lane with appropriate storage and transition shall be provided at each driveway where street average daily traffic volumes exceed 10,000 vehicles per day, and driveway volume exceeds 1,000 trips per day, with at least 75 right turns inbound in the peak hour.

7. TRAFFIC SIGNALIZATION

Traffic signalization for driveway entrance(s) when warranted, as determined by the County Engineer, shall be installed at the sole expense of the project's developer.

Location Address 2601 10TH AVE N 104**Municipality** PALM SPRINGS**Parcel Control Number** 70-43-44-20-01-008-0080**Subdivision** MODEL LAND CO**Official Records Book** 27925**Page** 1152**Sale Date** NOV-2015

Legal Description MODEL LAND CO SUB S 32 FT OF W 1/2 OF TR 8, S 32 FT OF TR 9, TR 22 (LESS S 25 FT RD R/W & TR 23 (LESS W 132.15 FT OF E 165 FT OF N 150FT OF S 618.93 FT & N 38.03 FT OF E 1/2 (LESS E 33 FT RD R/W & S 25 FT RD R/W)

Owners

10TH AVENUE PARTNERSHIP LTD

Mailing address401 S DIXIE HWY STE 300
WEST PALM BEACH FL 33401 5834

Sales Date	Price	OR Book/Page	Sale Type	Owner
NOV-2015	\$6,900,000	27925 / 01152	WARRANTY DEED	10TH AVENUE PARTNERSHIP LTD
DEC-2009	\$5,790,000	23588 / 00838	WARRANTY DEED	HEALTH CARE DISTRICT OF PBC LESSOR
JUN-2007	\$7,500,000	21817 / 01116	WARRANTY DEED	B H LAKE WORTH LLC
FEB-2006	\$10	19875 / 00335	WARRANTY DEED	WMICC DELAWARE HOLDINGS LLC
SEP-2003	\$10	16030 / 00140	DEED OF TRUST	WASHINGTON MUTUAL BANK FA

1 2

No Exemption Information Available.

Number of Units 0 ***Total Square Feet** 95705 **Acres** 8.8230**Use Code** 1800 - OFFICE MULTISTORY**Zoning** CG - Commercial General (70-PALM SPRINGS)

Tax Year	2018 P	2017	2016
Improvement Value	\$0	\$0	\$0
Land Value	\$0	\$0	\$0
Total Market Value	\$6,800,000	\$6,200,000	\$6,000,000

P =

Preliminary

All values are as of January 1st each year

Tax Year	2018 P	2017	2016
Assessed Value	\$6,800,000	\$6,200,000	\$6,000,000
Exemption Amount	\$0	\$0	\$0
Taxable Value	\$6,800,000	\$6,200,000	\$6,000,000

Tax Year	2018 P	2017	2016
Ad Valorem	\$139,480	\$129,998	\$130,684
Non Ad Valorem	\$20,536	\$19,948	\$19,361
Total tax	\$160,016	\$149,946	\$150,045



Palm Beach County Trip Generation Rates

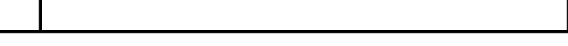
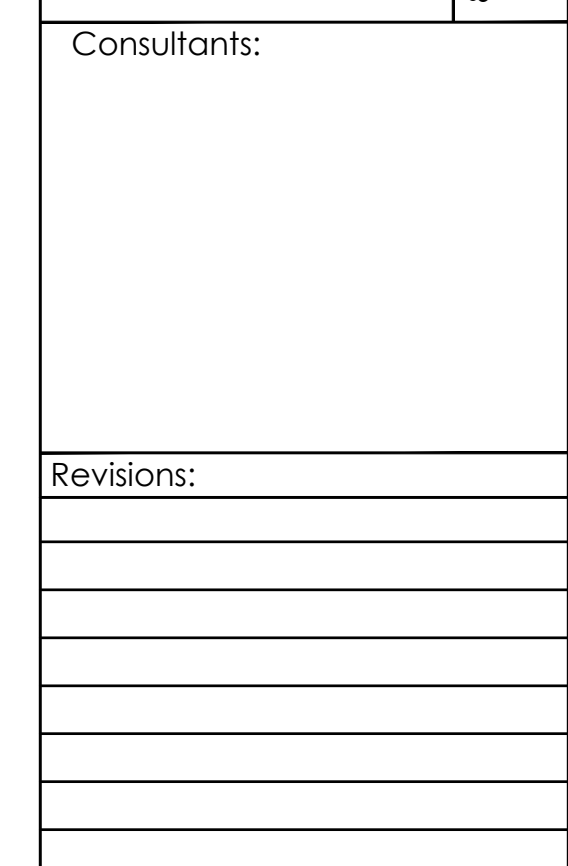
Cat.	Landuse	ITE Code	Unit	Daily Rate/Equation	Pass-By %	AM Peak Hour		PM Peak Hour	
						In/Out	Rate/Equation	In/Out	Rate/Equation
Industrial	Light Industrial	110	1000 S.F.	6.97	10%	88/12	0.92	12/88	0.97
	Warehouse	150	1000 S.F.	3.56	10%	79/21	0.30	25/75	0.32
	Flex Space - IND FLU	PBC	1000 S.F.	7.86	10%	64/36	1.53	40/60	1.21
	Flex Space - COM FLU	PBC	1000 S.F.	29.67	45%	72/28	2.12	40/60	2.67
	Mini-Warehouse/SS	151	1000 S.F.	2.50	10%	55/45	0.14	50/50	0.26
Residential	Single Family Detached	210	Dwelling Unit	10	0%	25/75	0.75	63/37	$\text{Ln}(T) = 0.90 \text{Ln}(X) + 0.51$
	Apartment	220	Dwelling Unit	6.65	0%	20/80	$T = 0.49(X) + 3.73$	65/35	0.62
	Condo/TH (Fee Simple)	230	Dwelling Unit	6.65	0%	17/83	$\text{Ln}(T) = 0.80 \text{Ln}(X) + 0.26$	67/33	$\text{Ln}(T) = 0.82 \text{Ln}(X) + 0.32$
	55+ SF Detached	251	Dwelling Unit	3.68	0%	35/65	0.22	61/39	0.27
	55+ SF Attached	252	Dwelling Unit	3.44	0%	34/66	0.2	54/46	0.25
	Congregate Care Facility	253	Dwelling Unit	2.02	0%	59/41	0.06	55/45	0.17
	Assisted Living Facility	254	Beds	2.66	0%	65/35	0.14	44/56	0.22
Ldg	Hotel	310	Rooms	8.17	10%	59/41	0.53	51/49	0.6
Rec	Movie Theater	444	Seats	1.8	5%	N/A	0	60/40	0.144
	Health Club	492	1000 S.F.	32.93	5%	50/50	1.41	57/43	3.53
Institutional	Elementary School	520	Students	1.29	0%	55/45	0.45	49/51	0.15
	Middle/Junior School	522	Students	1.62	0%	55/45	0.54	49/51	0.16
	High School	530	Students	1.71	0%	68/32	0.42	47/53	0.13
	Private School (K-8)	534	Students	Use Private K-12 rate	0%	55/45	0.90	47/53	0.19
	Private School (K-12)	536	Students	2.48	0%	61/39	0.81	43/57	0.17
	Church/Synagogue ^a	560	1000 S.F.	9.11	5%	62/38	0.56	48/52	0.55
	Day Care	565	1000 S.F.	74.06	50%	53/47	12.18	47/53	12.34
	Library	590	1000 S.F.	56.24	10%	71/29	1.04	48/52	7.30
Med	Hospital	610	1000 S.F.	13.22	10%	63/37	0.95	38/62	0.93
	Nursing Home	620	beds	2.74	10%	69/31	0.17	33/67	0.22
Office	General Office	710	1000 S.F.	$\text{Ln}(T) = 0.76 \text{Ln}(X) + 3.68$	10%	88/12	$\text{Ln}(T) = 0.80 \text{Ln}(X) + 1.57$	17/83	1.49
	Medical Office	720	1000 S.F.	36.13	10%	79/21	2.39	28/72	$\text{Ln}(T) = 0.90 \text{Ln}(X) + 1.53$
	Medical Office (Reduced) ^b	PBC	1000 S.F.	18.07	10%	79/21	1.2	27/73	$T = 1/2 \text{ Med. Office PM}$
	Government Office	730	1000 S.F.	68.93	10%	84/16	1.16	31/69	1.21



Palm Beach County Trip Generation Rates

Cat.	Landuse	ITE Code	Unit	Daily Rate/Equation	Pass-By %	AM Peak Hour		PM Peak Hour	
						In/Out	Rate/Equation	In/Out	Rate/Equation
Retail	Nursery (Wholesale)	818	acre	4.50	0%	N/A	0.26	N/A	0.45
	Gen. Commercial	820	1000 S.F.	$\ln(T) = .65 \ln(X) + 5.83^c$	Note d	62/38	0.96	48/52	$\ln(T) = 0.67 \ln(X) + 3.31^e$
	New Car Sales	841	1000 S.F.	32.30	15%	75/25	1.92	40/60	2.62
	Tire Store	848	1000 S.F.	24.87	28%	63/37	2.89	43/57	4.15
	Pharmacy + DT	881	1000 S.F.	96.91	50%	52/48	3.45	50/50	9.91
Services	Drive-In Bank ^f	912	1000 S.F.	148.15	47%	57/43	12.08	50/50	24.3
	Quality Restaurant	931	1000 S.F.	89.95	44%	50/50	0.81	67/33	7.49
	High Turnover Sit-Down Rest.	932	1000 S.F.	127.15	43%	55/45	10.81	60/40	9.85
	Fast Food Restaurant w/o DT	933	1000 S.F.	396.90	45%	60/40	43.87	51/49	26.15
	Fast Food Restaurant + DT	934	1000 S.F.	496.12	49%	51/49	45.42	52/48	32.65
	Gas Station	944	Fuel Positions	168.56	50%	50/50	12.16	50/50	13.87
	Convenience Store	851	1000 S.F.	737.99	61%	50/50	67.03	51/49	52.41
	Carwash (Automated) ^g	PBC	Lane	166.00	0%	50/50	11.97	50/50	13.65

- Footnotes: a) Weekend peak hour rate = 12.04 per 1,000 s.f. with a 49/51 directional split
b) To be used only when adjacent to hospital, for Med. Office square footage not to exceed 44% of the hospital square footage
c) For intensities under 10,000 s.f., use a rate of 152.03 / 1,000 SF instead of the equation.
d) Pass-by percent = 62% for 10,000 sf or less, otherwise = $83.18 - 9.30 * \ln(A)$ where A is 1,000 s.f. of leasable area
e) For densities under 10,000 s.f., use a rate of 12.81 / 1,000 sf instead of the equation.
f) Use these rates for a drive-in bank with up to 4 drive-thru lanes (excl. ATM lane). For additional drive-thru lanes, use per lane rates from ITE Code 912 (139.25 daily, 9.29 AM, 33.24 PM. Use same in/out splits)
g) Daily rate taken from PBC trip gen. study. Peak hour rates derived by applying peak to daily ratios for gas station to daily carwash rate



June 28, 2019

Kim Glas-Castro
Planning, Zoning & Building Director
226 Cypress Lane
Palm Springs, FL 33461

Kglas-castro@vpsfl.org

Re: RaceTrac PD Approval – Project Narrative

**NW Corner of 10th Avenue and Florida Mango
Village of Palm Springs**

Project History & Background

This site is located at 2601 10th Avenue North, on the Northwest corner of 10th Avenue and Florida Mango, approximately one mile west of I-95. The parcel is identified as PCN 70-73-44-20-01-008-0080 and is a total size of 8.6 acres. The site was annexed into the Village of Palm Springs in 2010 and was assigned a Commercial Future Land Use designation and a Commercial General (CG) Zoning designation.

The site consists of an existing four-story office building with approximately 88,707 SF and the newly constructed 4081 SF Chase Bank which was approved by Resolution 2017-26. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and the owners have actively marketed the building with a goal of continuing the use of the building for office. Due to the site location, floor plate size of the existing building and a lack of demand from the market for +/- 88,000 SF of office users the building can no longer be utilized.

Subsequently, the property owners must consider redevelopment of the site which they actively pursued in 2017 with the request to place Chase Bank in a stand-alone building on the property corner. Chase was the last remaining tenant in the building and with their relocation the building is 100% vacant. This application continues the unique opportunity to redevelop this site to the benefit of the Village and local residents.

Application Request

This application has been submitted to request Master Site Plan PD approval of approximately 50,000 sf Retail/Office/Medical building, a 6,496 sf tire store, 5,411 sf convenience store/gas station and a previously approved 4,081 sf financial institution. A Site Plan application with a Special Exception use request has been submitted for the Service Station / Gas Station and Convenience Food & Beverage, concurrent to this request.

The proposal would require the demolition of the existing office building to accommodate the construction of the proposed buildings. The development site is approximately 8.6 acres and comprises the remaining portions of the property West of the new Chase Bank.

The correlating site plan has been developed in a manor to accommodate the redevelopment of the overall property.

The following requests are included within the concurrent Site Plan application:

- Section 34-824(a)(5)** Special Exception request for a Gas station with a convenience store
- Section 34-891(1)** Variance request from the hours of operation
Code Requirement = 7am – 11pm
Variance Request = 24-hours operation of the facility
- Section 34-328(1)** Variance request from the “Primary Frontage” limitation
Code Requirement = 238.19 SF Maximum
Variance Request = 852.35 SF
- Section 34-328(a)(4)** Variance request to allow for canopy signage (Red/White/Blue color band) to wrap around the entire perimeter of the canopy.
Code Requirement = 0 SF
Variance Request = 216 SF each side, 769.68 SF north side of canopy

Section 34-684(2) Site Plan Approval

Site Plan PD Approval Criteria – Article VI, Division 5

The proposed development shall be consistent with the goals, objectives and policies, and all other provisions of the village comprehensive development plan.

Section 34-1065 Commercial Planned Developments

Commercial PD Criteria – Article VI, Division 7, Subdivision IX

The proposed development adheres to the objectives of Section 34-1065, outlining development standards for a Commercial Planned Development.

- a) Minimum acreage requirement. The minimum acreage for any commercial and/or industrial planned development shall be two acres. There are no minimum building site size requirements for each individual structure proposed within the planned development plan. However, open space shall be provided around each building to provide adequately for light, air, and proper relationship of the building to the site consistent with the level of service standards and policies set out in the comprehensive plan.

The proposed development adheres to the minimum acreage requirements, the subject property is comprised of approximately 8.6 acres.

- b) Intensity. Intensity requirements for commercial and/or industrial planned developments shall be the same as provided for in the applicable future land use designation and are not waivable.

Per Policy G.3 of the Comprehensive Plan, the proposed development adheres to the required minimum 0.50 FAR of the Commercial Future Land Use designation. The proposed FAR for the entire property is 0.18.

- c) Permitted uses. Unless otherwise established by the village council, the uses permitted in the planned development shall be governed by the uses permitted in the underlying land development district. Supplemental regulations of the underlying land development district and/or division 7. Supplemental district regulations shall remain effective for the planned development, unless specifically modified in the development order.

The proposed uses are consistent with permitted uses of the Commercial General Zoning District. A separate application has been submitted to request a Special Exception for the convenience store/gas station.

- d) Layout, design. In the layout and design of the proposed planned development, the applicant shall consider, and the land development board and village council shall review for, the provision of adequate light and air, traffic circulation, drainage patterns, pedestrian safety, emergency vehicle access and all other provisions normally provided for by the area and dimension regulations.

The applicant has proposed a master plan which carefully considers the provision of adequate light and air, traffic circulation, drainage patterns, pedestrian safety and emergency vehicle access.

- e) Maximum building height. The maximum building height in a planned development shall be established by the underlying land development district. Final determination of maximum building height shall consider the following: (1) The proposed uses of the structure; (2) The bulk, mass, and context of adjacent structures or proposed structures; (3) The compatibility with adjacent existing or proposed uses; (4) The relationship to the adjoining uses and the surrounding development; and (5) The provision of open space in the proposed project.

The proposed plan adheres to the allowable four stories or 45' building height requirement of the Commercial General Zoning District.

- f) Setbacks. Setbacks are required per the underlying district. The village council may impose appropriate setbacks along the perimeters of planned developments as a means to buffer the adjacent land uses. However, a setback shall be at least 30 feet for planned developments proposing commercial and/or industrial uses adjacent to lower intensity land uses, such as, residential, recreational, and institutional uses. Structures or buildings that are to be located at the perimeter of the proposed development shall be appropriately setback from the perimeter and buffered from the adjacent incompatible uses.

The proposed development shall adhere to the setback requirements outlined in the table below.

Required Setbacks	
Front	50'
Rear	20'
Side Yard (interior)	15'
Side Yard (corner)	25'

- g) Required open space. The minimum open space requirement for commercial and/or industrial planned developments shall be 20 percent of the gross land area.

The proposed development shall adhere to the minimum open space requirement of 20 percent.

- h) Shared parking. The number of required parking spaces for commercial and/or industrial planned developments which have different peak parking demands and operating hours may be waived by the village council; provided however, that a shared parking study be submitted, reviewed and approved by the village council. A shared parking plan shall be enforced through written agreement or through a unity of control.

The applicant shall comply with parking requirements of the proposed uses. If a waiver should be requested in the future, a shared parking plan shall be provided.

- i) Unified Control. (1) All land included within a commercial and/or industrial planned development shall be owned or under the control of the applicant (whether the applicant is an individual, partnership or corporation, or a group of individuals, partnerships or corporations), or if planned for parcelization with multiple owners shall remain unified via the approved master development plan and development order. The applicant shall document unified control of the entire area within the proposed planned development, with provisions for cross-access, shared parking, and shared infrastructure, as may be appropriate for the specific project. (2) The planned development shall be developed in accordance with the master site plan approved by the village, and sufficient guarantees shall be provided for adequate operation and maintenance of common facilities. The applicant shall provide agreements, covenants, contracts, deed restrictions or sureties acceptable to the village.

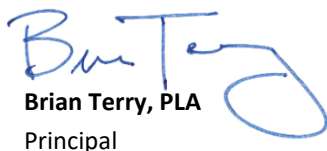
The applicant shall ensure the unification of the parcels within the subject area.

- j) Maintenance of common areas and facilities. A program for maintenance of all common areas, including open space, parking areas, utility sites, etc., shall be submitted to the village prior to issuance of a certificate of occupancy. The submission shall include formation of associations, agreements, contracts, deed restrictions, sureties or other legal instruments to guarantee the installation and continued maintenance of such common areas and facilities.

The applicant shall submit a maintenance program for all common areas, prior to issuance of certificate of occupancy.

Thank you for your consideration of this application. If you have any questions, please don't hesitate to contact me at 561-249-0940.

Sincerely,


Brian Terry, PLA
Principal

Insite Studio, Inc.

September 27, 2019

Village of Palm Springs
Planning, Zoning & Building Director
226 Cypress Lane
Palm Springs, FL 33461

**Re: Master Plan – 10th Avenue and Florida Mango
Architectural Guidelines**

Currently, the site consists of an existing four-story office building with approximately 88,707 SF and a newly constructed 4081 SF Chase Bank which was approved by Resolution 2017-26. Due to the site location, floor plate size of the existing building and a lack of demand from the market for +/- 88,000 SF of office users the building can no longer be utilized. The applicant has requested Master Plan approval for the subject site, which will include demolishing the existing office building and constructing a gas station, tire repair store and a 50,000 sf General Commercial Building.

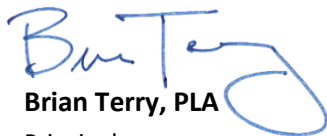
In order to maintain architectural cohesivity and compatibility within the development, the applicant has proposed similar architectural elements and design patterns between all parcels. At this time, the applicant shall provide architecture plan revisions for the proposed RaceTrac & Tire Kingdom Site Plan applications in the next re-submittal. These plans reflect features that complement the existing Chase bank on the property, which include:

- Providing earth tone colors on the building's exterior
- Stucco finish with stone or block accents
- Awnings placed over the windows
- Pitched metal roof on the tower features and building entrances

The proposed plan will create a balance of land uses, which complements the surrounding area. The petitioner has provided Landscape Enhancements, illustrated in the Landscape Plan provided. The proposed landscape improvements, architectural enhancements and internal walkways shall promote cohesivity and interconnectedness between the existing and proposed uses.

If you have any questions, please don't hesitate to contact me at 561-249-0940.

Sincerely,



Brian Terry, PLA

Principal
Insite Studio, Inc.

Site Photos Exhibit

1 - NE view of existing office building and proposed development parcel



2 - S view of existing office building and proposed development parcel



3 - NW view of existing office building and proposed development parcel



4 - SE view of existing office building and proposed development parcel



5 - SW view of existing office building and proposed development parcel



6- SW view of existing Chase Bank





**Department of Engineering
and Public Works**

P.O. Box 21229

West Palm Beach, FL 33416-1229

(561) 684-4000

FAX: (561) 684-4050

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**Palm Beach County
Board of County
Commissioners**

Mack Bernard, Mayor

Dave Kerner, Vice Mayor

Hal R. Valeche

Gregg K. Weiss

Robert S. Weinroth

Mary Lou Berger

Melissa McKinlay

County Administrator

Verdenia C. Baker

August 23, 2019

Shaun G. MacKenzie, P.E.
MacKenzie Engineering and Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990

**RE: RaceTrac Market-10th Ave & Florida Mango
Project #: 190711 (Previously 181007)
Traffic Performance Standards Review**

Dear Mr. MacKenzie:

The Palm Beach County Traffic Division has reviewed the **RaceTrac Market-10th Ave & Florida Mango** Traffic Impact Statement, dated July 24, 2019, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality:	Palm Springs
Location:	NWC of 10 th Avenue and Florida Mango Road
PCN:	70-43-44-20-39-000-0010/-0020
Access:	One full access driveway connection onto Florida Mango Road and one full access driveway connection onto 10 th Avenue (As used in the study and is NOT an approval by the County through this letter)
Existing Uses:	Drive-In Bank = 9,033 SF General Office = 86,272 SF
Proposed Uses:	Replace existing with: Medical Office or Gen. Commercial = 50,000 SF Drive-In Bank = 4,081 SF Gas Station = 20 FP Convenience Store = 5,488 SF Tire Store = 6,496 SF
New Daily Trips:	2,732
New Peak Hour Trips:	141 (70/71) AM; 165 (109/56) PM
Build-out:	December 31, 2022

Based on our review, the Traffic Division has determined the proposed development meets the Traffic Performance Standards of Palm Beach County, subject to the following comments:

1. No Building Permits for the site may be issued after December 31, 2022.
2. The Property Owner shall eliminate the existing eastern egress driveway on 10th Avenue.
3. The Property Owner shall construct westbound right-turn lane at the project driveway on 10th Avenue to county standards, or as approved by the County Engineer.

"An Equal Opportunity
Affirmative Action Employer"



Shaun G. MacKenzie, P.E.
August 23, 2019
Page 2

It is highly recommended that the Property Owner construct a north approach right turn lane at the project entrance on Florida Mango Rd. The right turning traffic is very close to county standards for a right turn lane. This driveway is also expected to experience high volume of traffic.

Please note the receipt of a Traffic Performance Standards (TPS) approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email QBari@pbcgov.org.

Sincerely,

A handwritten signature in blue ink that reads "Quazi Bari".

Quazi Bari, P.E.
Senior Professional Engineer
Traffic Division

QB:HA:rb

cc:

Kim Glas-Castro, Director of Planning, Zoning & Building, Village of Palm Springs
Hanane Akif, E.I., Project Coordinator II, Traffic Division
Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review
F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2019\190711 - RACETRAC - 10TH AND FLORIDA MANGO.DOCX

November 13, 2019

Kimberly Glas-Castro
Planning, Zoning & Building Department
226 Cypress Lane
Palm Springs, FL 33461

Re: Traffic Impact Statement Review – RaceTrac Market (2nd review)

Dear Ms. Glas-Castro:

Please find below our review comments associated with the revised RaceTrac Market site plan, received November 4, 2019.

1. Site Plan: Stop bars, if proposed, should be placed in advance of the crosswalk with a minimum setback of 4 feet. Please revise.
2. Site Plan: Please connect the sidewalk parallel to the existing retention area near the ATM drive-through to the proposed sidewalk along the existing driveway.
3. Site Plan: Please include bicycle and vehicle parking information in the site data table and provide bicycle parking spaces adjacent to each building.
4. Traffic Study: The eastbound through and left-turn queues at 10th Avenue North/Florida Mango Road are expected to spillback beyond the site driveway on 10th Avenue North, and the southbound left-turn movement at 10th Avenue North/site driveway is expected to operate with LOS F. The left-turn egress movement may cause safety concerns due to traffic congestion and queue spillback at 10th Avenue North/Florida Mango Road. Please remove the left-turn egress movement at this site driveway.
5. Site Plan: The dumpster placement appears to be impacting the sight distance of exiting vehicles from the drive-through ATM looking south. Please revise.
6. Site Plan: The inbound lanes at the Florida Mango Road driveway appears to misalign with the internal drive aisle to the west. Please realign the internal drive aisle. Also, please reduce the number of inbound lanes to one (1) to reduce the pedestrian crossing distance.

Please give me a call at 954-560-5251 with any questions you may have.

Sincerely,
via planning, inc.



Thuha Nguyen Lyew, PE, PTOE

November 12, 2019**To: Iramis Cabrera, Village of Palm Springs Planner****From: Tara Bamber, PE****Re: 2601 10th Avenue North – Master Plan
Site Plan Comment Letter
Engenuity Group Project No. 6001.77**

We have received the following on 11-4-19 for the above reference project:

1. Civil Plans, 14 sheets (COV, GR1, C1, C2, C2.1, C2.2, C3, C4, SD1-SD5, C5.0), signed & sealed 10-25-19, by Thomas Engineering Group
2. Overall Site Plan, 1 sheet (OSP.1), revised 10-29-19, by Insite Studio
3. Master Landscape Plan, 1 sheet (LP.1), revised 10-29-19, by Insite Studio
4. Master Plan, 1 sheet (MP.1), revised 10-29-19, by Insite Studio
5. Open Space Exhibit, 1 sheet
6. Response Letter, 4 sheets, dated 10-30-19, by Insite Studio

The following comments need to be addressed prior to Site Plan approval:

1. Conceptual Engineering Plans:
 - a. Property boundaries shall match the approved Plat.
 - b. On Sheet C2.2, the sheet scale is incorrect.
 - c. Provide Utility Easement over the Sanitary Sewer main lines and manholes.
2. Landscape Plans:
 - a. Add civil infrastructure to the plan and resolve any conflicts.
3. The Civil/Utility permit review comments are not included in this letter.

If you should have any questions, please give me a call at 561-655-1151.

Cc: Chad Girard, PE
Lisa Tropepe, PE
Ed Horton

11-5-2019

Will Carey <WCarey@pbcgov.org>

Hello Iramis,

No objection to the master plan.

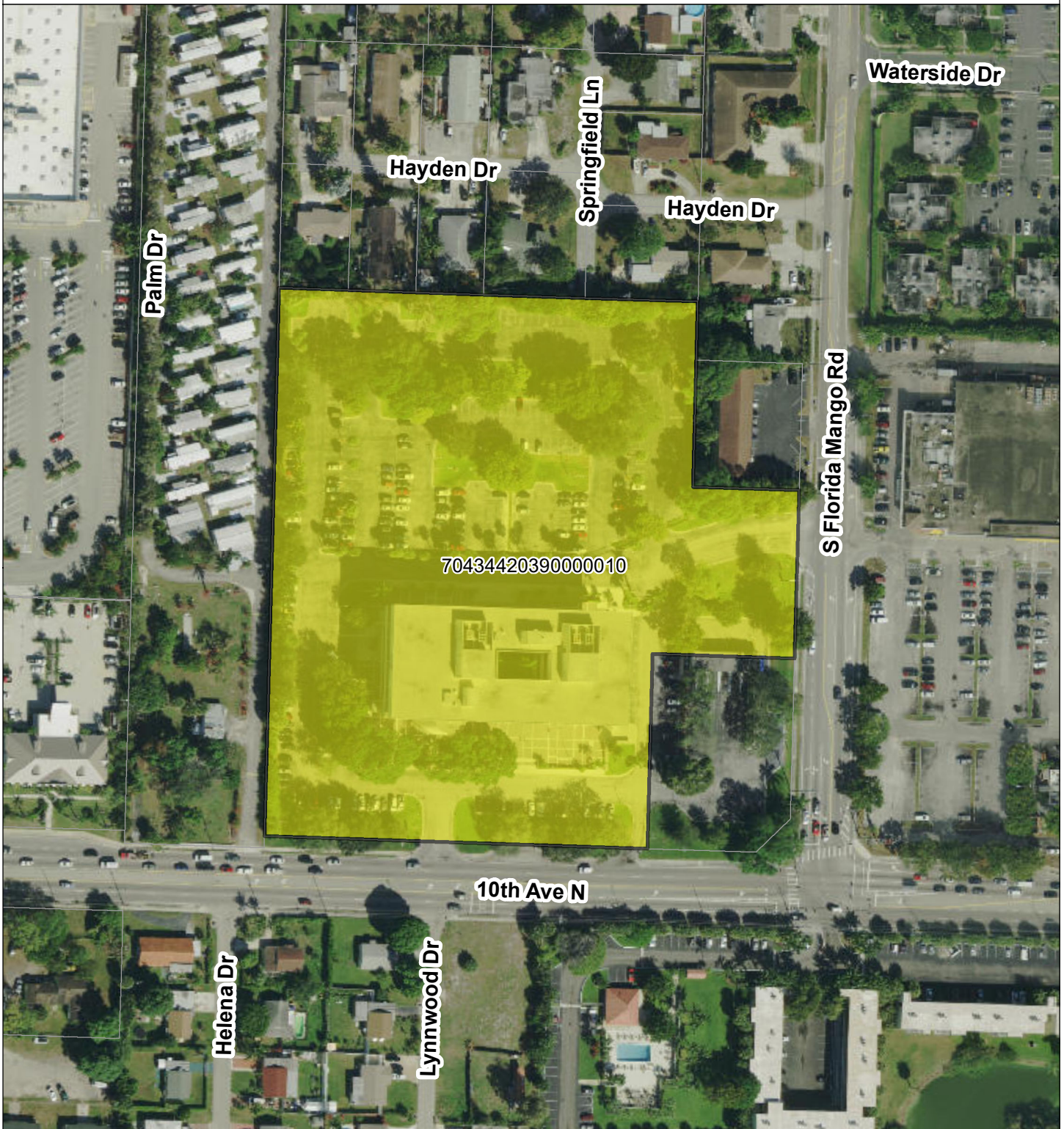
Just as an FYI to the applicant: The right of way dedication will be required prior to the drive way permit issuance. I suggest the applicant submit the right of way dedication paperwork as soon as possible to our right of way section as the dedication process usually takes longer than the right of way construction permit review.

<http://discover.pbcgov.org/engineering/roadwayproduction/Documents>



VILLAGE OF PALM SPRINGS

10th & Mango RaceTrac-Master Plan



0 50 100 200 300 400 500 600 Feet



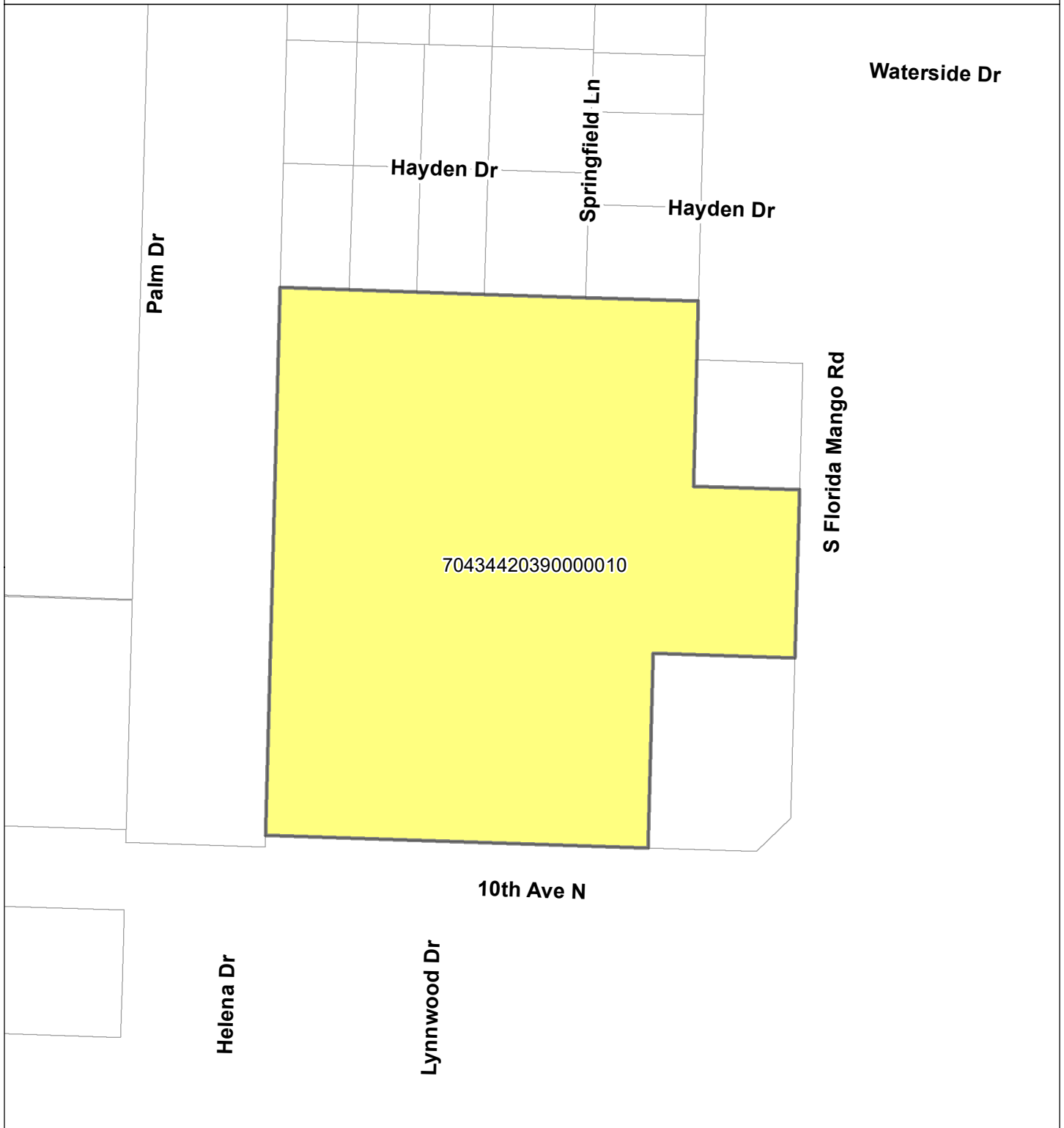
 2601 10th Avenue North

Date: 7/2/2019



VILLAGE OF PALM SPRINGS

10th & Mango RaceTrac-Master Plan



0 50 100 200 300 400 500 600 Feet



 2601 10th Avenue North

Date: 7/2/2019



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.4: Resolution No. 2019-46 - Site Development Plan (SPR19-12) and Special Exception Use (PSSE19-08) - RaceTrac - 2601 10th Avenue North

SUMMARY:

Mr. Brian Terry, agent for Race Trac Petroleum Inc, the applicant, is requesting a Site Plan approval (SPR19-12) and concurrent approval for a Special Exception Use (PSSE19-08) to permit the construction of 5,411 square feet convenience store along with 8,613 square feet gas canopy with 20 fueling positions, within 1.81 acres directly west of the new Chase Bank building, the building and fueling canopy will be oriented towards 10th Avenue North..

The site currently consists of an existing four-story office building with approximately 88,707 SF and the newly constructed 4,081 SF Chase Bank. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and has been underutilized since then.

The site plan has been developed to accommodate the redevelopment of the overall property as there will be approximately 5.5 acres of land remaining on the north side.

Planning, Zoning & Building Staff has conducted a review of the application and has concerns that criteria for a Special Exception use have not been met. Currently there are 31 total gas station within the Village limits and abutting the Village boundaries, granting the proposed special exception use would create a proliferation of the same or similar types of use, which is detriment to the redevelopment of the area and may have a detrimental impact on surrounding properties in terms of air pollution, crime and visual impact on community character.

A Special Exception is “a use that would not be appropriate generally or without restriction throughout the zoning district”. Staff does not find that the requested Special Exception would

provide for the appropriate use of the land pursuant to Section 34-602(d) in consideration of the previously mentioned issues.

The applicant must modify the application to request one (1) waiver for the proposed site plan:

Relief from Sec. 34-164 - To allow the required foundation planting areas (5 foot wide for 25% of the building facade) to be shifted to planter boxes set between decorative bollards between the pedestrian walkway and the parking stalls.

Further, the application must be supplemented with a narrative demonstrating compliance with architectural guidelines for the Commercial Planned Development to show compatibility with the proposed gas station/convenience store and existing Chase bank building.

Note: The applicant is also requesting three variances which are for Village Council consideration: 24-hours of operation, sign face area for wrap around gas canopy, and sign face area for merchandise sign on building façade.

Planning, Zoning & Building Staff does not support the proposal, however, should the Planning & Zoning Board desire to recommend approval of the Special Exception Use and Site Development Plan, Staff recommends that said motion include the following forty-five (45) conditions outlined in the staff report.

FISCAL IMPACT:

The proposed project does not have a direct fiscal impact to the Village.

ATTACHMENTS:

Exhibit "A" - Staff Report and Conditions of Approval
Site Plan, Landscape Plans, Floor Plan, Elevations and Engineering Plans
Project Narrative and Justification Statements
TPS Letter and Comment Letters
Map of Existing Gas Stations and Car Washes
Aerial and Location Maps



PLANNING, ZONING & BUILDING STAFF REPORT

SUBJECT: Site Development Plan– 2601 10th Avenue North- RaceTrac Site plan

Application Summary			
Applicant / Petitioner	Race Trac Petroleum Inc	Submittal Date	10/29/2018
Reference Name	RaceTrac	Case Number	SPR19-12, PSSE19-08, PSV19-22, PSV19-23, PSV19-24
		Parcel Control No	70-43-44-20-39-000-0010
Location	2601 10 th Avenue North (proposed Lot 3)	Site Area	±1.81 gross acres
P&Z Bd Meeting	December 10, 2019	Council Meeting	Not scheduled
Requests			
Proposed Use(s)	Site Development Plan (within a Commercial Planned Development) and concurrently requesting Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, and to construct 5,411 square feet convenience store with 20 fueling positions.		
Number of buildings	Proposed Lot 3 1 convenience store building 5,411 sf 1 canopy with 10 fuel pumps 8,613 sf		
Variances	COUNCIL CONSIDERATION: PSV19-22 Requesting a Variance relief from Section 34-891(1) to allow the convenience store with fueling stations to operate twenty-four (24) hours a day, seven (7) days per week. PSV19-23 Requesting a Variance relief from Section 34-328(1) to allow seven hundred-eighteen (718) square feet sign face area facing a public right-of-way. PSV19-24 Requesting a Variance relief from Section 34-328(a)(4) to allow one thousand-sixty-eight (1,068) square feet sign area wrap around the canopy sides not facing a public right-of-way.		
Setbacks			
Direction	Proposed		
North (rear)	78'		
South (front)	63' (canopy), 191' (convenience store building)		
East (side)	30' (canopy), 46' (convenience store building)		
West (side)	57' (canopy), 99' convenience store building)		
Note: As a proposed outparcel within the Commercial Planned Development, compliance with standards of the CG zoning district for a stand-alone parcel are not required, from planning and zoning perspective – the property is a single development project with unified master site plan.			
Site Characteristics			
Existing Use	Existing vacant office building and Chase Bank building to remain.	Proposed Use	Chase Bank building to remain and on proposed Lot 3, new convenience store with 20 fueling positions.
Existing Zoning	Commercial General (CG)	Existing Future Land Use	Commercial
Surrounding Existing Land Use, Future Land Use, and Zoning			
Direction	Existing Use	Future Land Use	Zoning District
North	Residential uses	Commercial & Low Density Residential	Commercial General (CG) & Residential Multiple-Family (RM)

South	Residential uses	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
East	Commercial shopping center	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
West	Residential mobile home park	High Density Residential	Residential Multiple-Family (RM)
Recommendation			
<u>Staff does not support</u> the applicant's request in its entirety. Staff <u>does support</u> the red, blue and white stripping around the entire perimeter of the gas canopy including the logo sign over the main entrance and on the north side of the canopy. <u>Staff does not support</u> the graphic cabinet sign on the southeast corner of the building finding this sign unattractive and unnecessary and does not contribute to the architecture of the building. It is valid to note that this exact graphic sign was denied by Village's Council under Resolution 2012-75 for the RaceTrac gas station located on the southwest corner of S. Congress Avenue and Lake Worth Road. Further, PZB Staff <u>does not support</u> the requested Special Exception, finding criteria of Section 34-606(b)(3), (4) and (5) have not been met. Additionally, Staff hasn't received a descriptive narrative in reference to proposed architectural designs. The project shall demonstrate the compatibility with existing Chase Bank building accordingly with the VPS Building Design Guidelines per Ordinance No. 2017-13.			



I. Site History

- Ordinance 2010-02: Annexation

The property was voluntarily annexed into the Village of Palm Springs as a developed parcel on February 11, 2010 and designated with the Land Development as Commercial General zoning districts and Future Land Use Commercial.

- Resolution 2017-26: Site Plan and Special Exception Use

On August 10, 2017 the Village's Council approved a Site Plan and Concurrently a Special Exception Use to redevelop the site by demolishing the existing bank drive-through and constructing a freestanding 4,081 square feet Chase Bank Branch with two lanes drive-through ATM with by-pass lane.

- Resolution 2018-22: Plat

The Village's Council approved on July 12, 2018 under above resolution, a final plat application to subdivide the 8.6 acre property at the northwest corner of the 10th Avenue North and Florida Mango Road to create a separate lot for Chase Bank building, the boundaries of the second lot created coincided with those of the special exception/site plan approved under Resolution 2017-26.

II. Comprehensive Plan Consistency

The subject property's Future Land Use designation and Zoning are Commercial and Commercial General (CG), respectively. The proposed site development plan for the construction of a new gas station with convenience store is permitted as special exception use and is generally consistent with goals, objectives and policies of the Village's Comprehensive Plan.

III. Variances Requested

Village Council Consideration

The applicant is seeking the following variances:

- **PSV19-22** Requesting a Variance relief from Section 34-891(1) to allow the convenience store with fueling stations to operate twenty-four (24) hours a day, seven (7) days per week.

The applicant's full justification is hereto:

- a. That special condition and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same land development district.

Hours of Operation are unique to the use proposed as a service facility for the local residents. The limitation of the hours from 7am-11pm are not consistent with the proposed use as a gas station and convenience store, these facilities operate 24-hours a day to provide fuel and convenience goods past the normal commercial operating hours. This is unique as a business type, service the public when all other commercial businesses are closed. The proposed use is fronting on 10th Avenue, and well removed from any nearby residential uses assuring that the operation during the later hours would not be detrimental to the adjacent properties. The proposed request for 24-hour operation is consistent with other facilities within the Village of Palm Springs.

- b. That the special conditions and circumstances do not result from the actions of the applicant.

The unique condition of the operation cycle for the proposed use standard operating procedure within the industry. The applicant is only proposing to operate this facility in a consistent manner with other like facilities on similar roadways and in similar locations. The applicant is not requesting more than what has been afforded other like gas stations within the Village.

- c. That granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, buildings, or structures in the same land development district.

Justification not provided by the applicant.

- d. That literal interpretation of the provisions of this chapter would deprive the applicant of rights commonly enjoyed by other properties in the same land development district under the terms of this chapter and would work unnecessary and undue hardship on the applicant.

Literal interpretation of this article certainly would deprive the applicant of right commonly enjoyed by similar facilities. The most recent examples are the RaceTrac facility on the SW corner of Lake Worth Road and Congress as well as the Wa-Wa located on the NE corner of the same intersection. Additionally, the closest three facilities to the proposed site include a Circle K, Murphy Oil and Mobile gas stations which all operate 24-hours a day. Limiting this site would clearly deprive the applicant of similar rights enjoyed by like uses.

- e. That the variance granted is the minimum variance that will make possible the reasonable use of the land, building, or structure.

As stated above, the minimum variance necessary is for the 24-hour use to be consistent with the similar uses within the vicinity. There are no site constraints that deem this location different or unique from the other facilities that operate consistent with this request. Any limitation on the hours of operation less than what has been provided to others would create a financial and competitive hardship for this site.

- f. That the granting of the variance will be in harmony with the general intent and purpose of this chapter.

Justification not provided by the applicant.

- g. That such variance will not be injurious to the area involved or otherwise detrimental to the public welfare.

The proposed variance has no detrimental effect on the public or properties surrounding this site. Currently, the site is a vacated office building which has no active use in the daytime or nighttime. The existing conditions create underutilized and empty space that could potentially attract unsafe or unwelcomed activities.

Staff does not object to the applicant's request.

- **PSV19-23** Requesting a Variance relief from Section 34-328(1) to allow seven hundred-eighteen (718) square feet sign face area facing a public right-of-way.

The applicant's full justification is hereto:

This variance request is to allow for the increase of the Primary Frontage signage. The primary building façade facing 10th Avenue is allowed per code up to 238.19 SF based on the building façade area (19'-10" by 100'-1") x 0.12. The request is to allow a total of 769.68 SF of signage which will include a total of three identification signs and the red, white and blue fuel canopy strip. Please refer to the Signage Program included in this application to reference the signs noted below.

40 SF = "A" – Tower Sign
42 SF = "E" – Wall Cabinet
55 SF = Canopy Logo Sign
581 SF = Canopy Stripe
718 SF = Total Sign Area

- a. That special condition and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same land development district.

The proposed variance is unique in that this use has two primary structures as a "front" façade, the convenience store building as well as the gas canopy. Typically, within a commercial district such as this there is only one primary building façade with no structure in front impeding visibility. The signage as proposed meets the general intention that signage be limited by the size of the building façade, in this case a total of 238.19 SF. In looking at the three main signs proposed "A", "E", and the "Canopy Sign Logo" our signage would only amount to 136.67 SF. This only 57% of the permitted signage area. Rather than increase the signage by providing additional sign structures or larger signs we would like to utilize the red, white and blue canopy strip into the design. Due to the overall length of the canopy we exceed to the allowable SF area but believe is consistent with the intent of the zoning code and other gas stations with the same zoning.

- b. That the special conditions and circumstances do not result from the actions of the applicant.

The site is very well screened from view from 10th Avenue due to the existing Oak trees which the applicant intends to preserve in place. Due to the visibility concerns to the building, accommodating the accent stripe on the gas canopy will allow accommodation for visibility to the passing motorist. The applicant has taken efforts to minimize the number of individual signs or create disproportioned signs on the building façade to maintain a simple and clean aesthetic for the building and canopy. In fact, the proposed signage is only 57% of the allowable area. The increase square footage request is directly related to the canopy stripe which is unique to the building type and use being proposed. The stripe was previously approved by the Village for a similar location at the SW corner of Lake Worth and Congress Avenue.

- c. That granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, buildings, or structures in the same land development district.

Justification not provided by the applicant.

- d. That literal interpretation of the provisions of this chapter would deprive the applicant of rights commonly enjoyed by other properties in the same land development district under the terms of this chapter and would work unnecessary and undue hardship on the applicant.

Literal interpretation of this article would be counter to similar variances granted by the Village on similar circumstances. The Village approved a similar variance PSV2012-14 for RaceTrac in a similar circumstance and would be detrimental to the image and consistency of the building architecture.

- e. That the variance granted is the minimum variance that will make possible the reasonable use of the land, building, or structure.

The signage area proposed is the minimum size needed to maintain consistency of the building type and allow for the proposed strip to be consistent across the entire façade of the gas canopy. The aesthetic of the stripe

provides visual interest to the overall site and allows for the other signage to be understated as proposed at over 100 SF less than is allowed.

- f. That the granting of the variance will be in harmony with the general intent and purpose of this chapter.

Justification not provided by the applicant.

- g. That such variance will not be injurious to the area involved or otherwise detrimental to the public welfare.

There is no detrimental effect to the community, or surrounding property by granting this variance. The proposed signage is tasteful and consistent with other commercial uses within the corridor and there is no aspect to the signage that could be considered a danger to motorist or pedestrians.

- **PSV19-24** Requesting a Variance relief from Section 34-328(a)(4) to allow one thousand-sixty-eight (1,068) square feet sign area wrap around the canopy sides not facing a public right-of-way.

The applicant's full justification is hereto:

- a. That special condition and circumstances exist which are peculiar to the land, structure, or building involved, and which are not applicable to other lands, structures, or buildings in the same land development district.

Although this specific site only has frontage on 10th Avenue, the overall site boundary encompasses approximately 8 acres and has frontage on Florida Mango on the East. With the way the site is being designed, the building will be visible from Florida Mango, the adjacent Chase Bank, and internally within the overall development. Allowing the stripe to circumnavigate the canopy would allow for a consistent architectural theme consistent with a site that had frontage on multiple roadways.

- b. That the special conditions and circumstances do not result from the actions of the applicant.

The applicant is working with Village staff to make sure the site is developed in a manner that will promote the master development of the property which is viewed and accessible from each direction. Due to that condition, the continuation of the stripe around the canopy would provide consistency in the architecture across the entire site.

- c. That granting the variance requested will not confer on the applicant any special privilege that is denied by this chapter to other lands, buildings, or structures in the same land development district.

Justification not provided by the applicant.

- d. That literal interpretation of the provisions of this chapter would deprive the applicant of rights commonly enjoyed by other properties in the same land development district under the terms of this chapter and would work unnecessary and undue hardship on the applicant.

If interpreted literally, the canopy would have blank facades on the North, East and West facades of the canopy. This would leave an "unfinished" appearance and would be detrimental to the aesthetic of the overall site. A very similar circumstance was approved by the Village of Palm Springs (PSV2012-13) for the RaceTrac site at the SW corner of Lake Worth and Congress allowing the stripe to continue around the building. Denial of this variance would deprive the same applicant rights that they enjoy on a site within the Village.

- e. That the variance granted is the minimum variance that will make possible the reasonable use of the land, building, or structure.

This is the minimum variance necessary for the application. No additional signs or advertisement are being proposed on the “side” or “rear” facades, the area is strictly limited to the gas canopy stripe.

- f. That the granting of the variance will be in harmony with the general intent and purpose of this chapter.

Justification not provided by the applicant.

- g. That such variance will not be injurious to the area involved or otherwise detrimental to the public welfare.

There is no detrimental effect on the public welfare or property to the surrounding area. The addition of the stripe around the interior of the canopy will primarily be visible once on the site. There is no effect to the neighboring properties, residents or neighborhood by approving this variance request.

Sign Variances requested are as follow:

<i>Direction</i>	<i>Permitted</i>	<i>Proposed</i>
<i>North</i>	<i>0 SF</i>	<i>Canopy ±636 SF (stripping only)</i>
<i>South</i>	<i>304 SF (including canopy area)</i>	<i>Logo on the building (sign A) 40 SF Swirl on the building (sign E) 42 SF Fuel canopy ±636 SF (stripping and logo)</i>
<i>East</i>	<i>77 SF (including canopy area)</i>	<i>Fuel canopy 216 SF (stripping only)</i>
<i>West</i>	<i>0 SF</i>	<i>Fuel canopy 216 SF (stripping only)</i>

Staff does not support the applicant’s request in its entirety. Staff does support the red, blue and white stripping around the entire perimeter of the gas canopy including the logo sign over the main entrance and on the north side of the canopy. Staff does not support the graphic cabinet sign on the southeast corner of the building finding this sign unattractive and unnecessary and does not contribute to the architecture of the building. It is valid to note that this exact graphic sign was denied by Village’s Council under Resolution No. 2012-75 for the RaceTrac gas station located on the southwest corner of S Congress Avenue and Lake Worth Road.

IV. Neighborhood Compatibility

- 1) The proposed project is located on the northwest corner of 10th Avenue North and South Florida Mango Road.
- 2) An existing shopping center is located on the east side of the property with several different retails, offices and restaurants establishments occupying the suites.
- 3) Surrounding properties are generally residential use.
- 4) The proposed gas station with convenience store is permitted as special exception use within the Commercial General zoning district.

V. Regulatory Issues

- The site plan generally conforms to the property development standards of the CG district.
 - 1) Proposed project plan generally meets required site development regulations.
 - 2) An 8’ wide right-of-way shall be dedicated to Palm Beach County.
 - 3) A right-of way construction permit is required to be obtained with PBC.
 - 4) Revised plans shall be provided to the Planning, Zoning and Building Department prior to Council consideration.
 - 5) Existing eastern egress driveway on 10th Ave North shall be eliminated accordingly with PBC requirements.
 - 6) A westbound right-turn lane at the project driveway on 10th Avenue shall be constructed by the PBC standards.
 - 7) Permits from all applicable permitting agencies, including but not limited to Lake Worth Drainage District,

Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs are required prior to construction.

- 8) Civil/Utility plans shall be approved by the Village's Engineer.
- 9) Proposed Site Plan meets the Traffic Performance Standards of Palm Beach County.

VI. Environmental Issues:

There are no environmental (wetlands, floodplains, etc.) issues identified.

VII. Community Outreach/ Notification

- The subject property was posted on November 27, 2019.
- Public Notification letters were mailed to all property owners within 300 feet radius of subject property on November 26, 2019.
- Legal advertisement was published in the paper on November 28, 2019.
- Staff has not received any inquiries or comments as a result of the notices.

VIII. Proposed Development Plan Details

The petitioner's development plans dated received on October 29, 2018 depicts the following:

- An application submitted for a Site Development Plan and concurrently requesting Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, construct 5,411 square feet convenience store with 20 fueling positions on the remaining portion of the property west of the Chase Bank building.
 1. Site Plan dated received October 29, 2018 revised and resubmitted on October 31, 2019.
 2. Landscape plans dated received October 29, 2018 revised and resubmitted on October 31, 2019.
 3. Engineering plans dated received October 29, 2018 revised and resubmitted on October 31, 2019.
 4. Architectural plans dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 5. Photometric plan dated received June 28, 2019 revised and resubmitted on October 31, 2019.
 6. Sign package dated received October 29, 2018 revised and resubmitted on August 27, 2019.
 7. Boundary survey.
 8. Project narrative and justification statements.
 9. Traffic study.
 10. Justification and Market analysis

IX Recommendation

The applicant is requesting a Site Development Plan (within a Commercial Planned Development) and is concurrently requesting Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, and to construct a 5,411 square feet convenience store with 20 fueling positions on a 1.81 acres portion of the property west of the Chase Bank building.

Planning, Zoning & Building Staff has conducted a review of the application and has concerns that criteria for a Special Exception use have not been met. Specifically, Section 34-606(b)(3), (4), and (5) have not been met in that:

- 1) Currently there are 8 existing gas stations along 10th Avenue North between I95 and Military Trail. There are a total of 17 gas stations within the Village limits and another 14 abutting the Village boundaries (13 of them within the future annexation area) for a total of 31 gas stations with convenience stores; therefore, granting the proposed special exception use would create a proliferation of the same or similar types of use, 185 which is detriment to the (re)development of the area, and therefore does not meet criterion (4); and
- 2) The proposed special exception use may have a detrimental impact on surrounding properties in terms of air pollution, crime and visual impact on community character.

A Special Exception is “a use that **would not be appropriate generally** or without restriction throughout the zoning district”. Staff does not find that the requested Special Exception (gas station with convenience store) would provide for the appropriate use of the land pursuant to Section 34-602(d) in consideration of the previously mentioned issues.

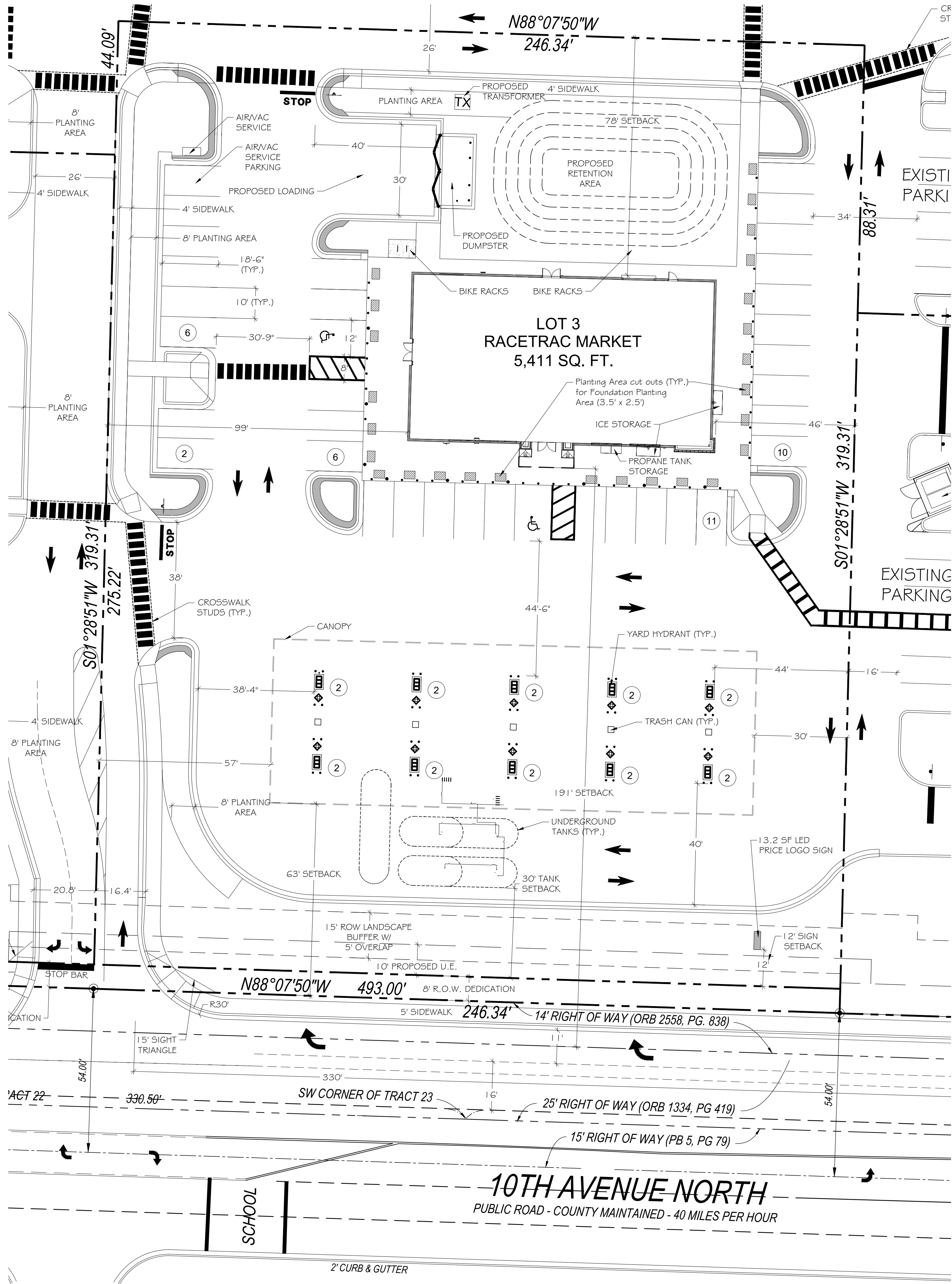
Should the Planning & Zoning Board desire to recommend approval of the Special Exception Use and Site Development Plan, Planning, Zoning and Building Staff recommends that said motion include the following forty-five (45) conditions below:

1. Build out date December 31, 2022.
2. The special exception approval shall be implemented within 18 months of Council approval.
3. The site plan approval is valid within 24 months of Council approval.
4. Property control number shall be revised on the plans **prior to Council consideration**.
5. Conceptual engineering plans shall be revised **prior to Council consideration** as follow:
 - a. Property boundaries shall match the approved Plat.
 - b. On sheet C2.2, the sheet scale is incorrect
 - c. Depict Utility Easement over the sanitary sewer main lines and manholes (easement shall be executed, accepted by Village Council and recorded **prior to 1st Certificate of Occupancy**)
 - d. Proposed line stop on 10th Ave North needs to be relocated further to the west, in grassy area, so that new valve is not in pavement. Water main from that point can bend 45° under pavement area.
6. Plans shall be revised **prior to Council consideration** to relocate the stop bars in advance of the crosswalk with a minimum setback of 4 feet.
7. A completed justification statement for the Variances requested shall be provided **prior to Council consideration**.
8. Proposed ice storage and propane tanks shall be relocated to the west side of the building, plans shall be revised **prior to Council consideration** including the architecture elevations.
9. No toppers (advertising signs) or spanners panels signs shall be posted on top/around of gas pumps.
10. A loading space is proposed to be shared with the dumpster area- hours of deliveries and trash collection shall be coordinated to not create conflicts.
11. No outdoor seating area is permitted at this location.
12. A different alternative (more decorative) bollard shall be provided for review and approval to the Planning, zoning and Building Department **prior to Council consideration**.
13. A waiver request shall be submitted and added to the site plan data to shift the required foundation planting to planters **prior to Council consideration**.
14. Landscape buffers shall only be encumbered/overlapped a maximum of 5' by any utility easement.
15. Planters shall be provided every other pair of bollards and a minimum 3' clearance shall be maintained for ADA accessible compliance.

Required	Proposed
South side 25 LF	35 LF
East side 14 LF	35 LF

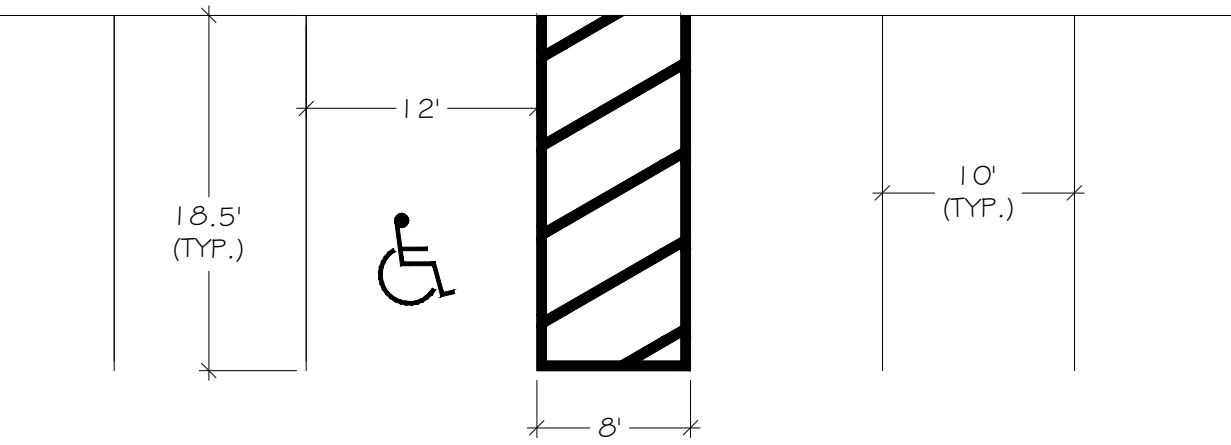
16. The 8' dimension for the monument sign shall be measured from the adjacent grade not from the artificial graded or berm.
17. Any utility or mechanical equipment shall be screened from view, including but not limited to vacuum equipment's. Staff recommends wrapping the equipment with a vinyl wrap of appropriate design for the proposed locations.
18. Free air shall be provided to the public.
19. Sales of alcohol will be regulated by Florida Statutes.
20. A descriptive narrative shall be provided **prior to Council consideration** in reference to proposed architectural designs and the existing Chase Bank building architecture.
21. The additional 8' wide right of way dedication to Palm Beach County along the 10th Avenue North shall be executed and recorded **prior to issuance of the Certificate of Occupancy**.

22. Sheet EPH3.1 shall be revised **prior to Council consideration** to eliminate on the calculation summary table, any specific uses listed, as a master site lightning only use categories are considered.
23. A Utility/Civil Plan shall be approved by the Village Engineer **at time of permitting**.
24. A ROW permit shall be obtained with the PBC **at time of permitting**.
25. A root barrier shall be provided on trees that are within 12' of utility lines.
26. The construction dumpster shall be only provided by Waste Pro USA who is under franchise Agreement with the Village.
27. Photometric plans shall be approved by the Planning, Zoning and Building Department **at time of permitting**.
28. Landscaped areas shall be irrigated including but not limited to buffer, islands, planter boxes, etc.
29. Irrigation plans shall be provided **at the time of permitting**. Non-potable water shall be used for the irrigation system per Village code.
30. Provide permits from all applicable permitting agencies, including but not limited to, Lake Worth Drainage District, Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs **at the time of permitting**.
31. The property owner shall register an Agent of Record, prior to issuance of a permit, to establish a contact person responsible for compliance with this Development Order, including site plan/landscape plan details and conditions of approval.
32. Future subdivision (replat) to create a separate parcel (outparcel) is subject to a unity of control instrument for the commercial planned development.
33. The Applicant may be required to undertake additional security measures, based on the number of complaints or calls for service for incidents at the premises, as determined by the Police Chief. Such additional security measures, as approved by the Police Chief, may include increased on-site security at the operator's sole expense.
34. Verify utility and easement locations to ensure that there are no conflicts with landscaping, revise **at time of permitting** as needed.
35. All electric utilities shall be underground.
36. A pre-construction meeting shall be scheduled with the Village Planning, Zoning & Building Development Department prior to commencement of any construction activity. Permits are required from the Planning, Zoning & Building Department prior to commencing any construction or renovation. The project shall be constructed in accordance with the FBC edition in effect **at the time of permitting**.
37. A silt barrier shall be installed around the perimeter of the property (within the affected area for the site improvements and new building construction) prior to commencement of any site work or construction activity, and a track pad shall be installed at the construction entrance(s), both of which shall remain through substantial completion.
38. Any sidewalk broken or damaged during construction shall be replaced by the contractor **prior to CO**.
39. The Landscaping shall be certified by the Landscape Architect upon completion and **prior to Certificate of Occupancy/Certificate of Completion** of each improvement area.
40. Absolutely no occupancy, other than construction personnel, is permitted **prior to TCO/CO**.
41. Photometrics must be certified by an engineer **prior to CO**.
42. The civil engineer of record shall certify the site construction **prior to Certificate of Occupancy**.
43. The applicant may be required to provide a resident inspector for structural elements such as concrete pours in accordance with Section 109.1.3 FBC 2010 and F.S. 553.791. Determination shall be made at time of pre-construction conference with Planning Zoning and Building Director.
44. The General Contractor shall be on site during any and all construction activity in accordance with FS 489.1195.
45. **At the time of CO**, the petitioner shall provide the Planning, Zoning and Building Department with electronic copies of as-builts.

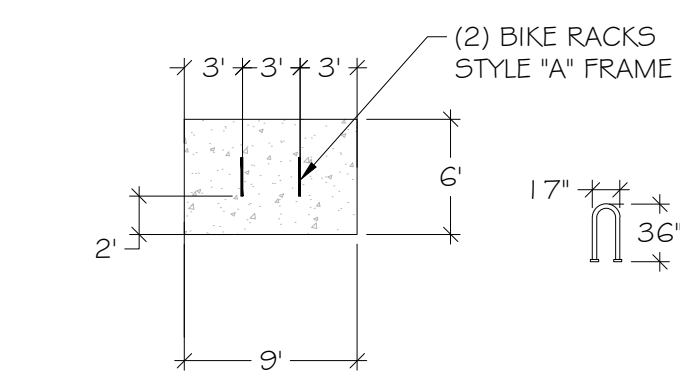


LAND USE: MED/HIGH DENSITY RESIDENTIAL
ZONING: RM-MULTI FAMILY

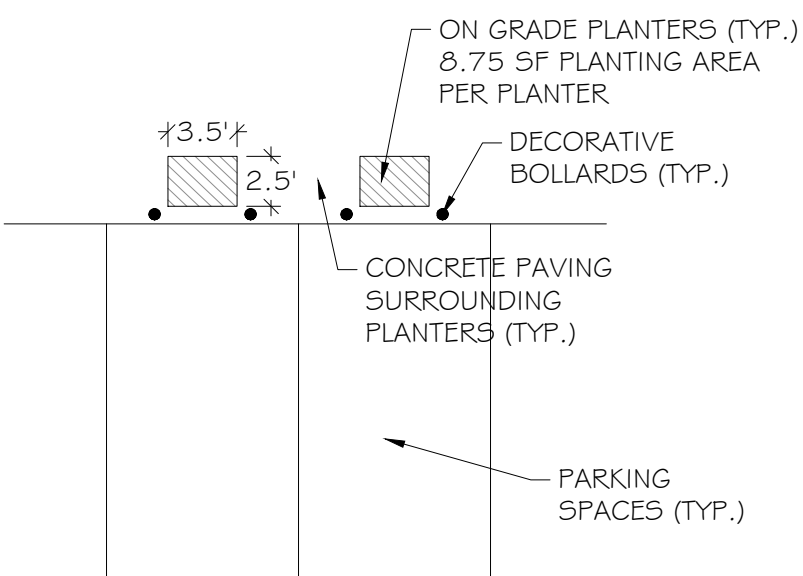
SITE DATA	
ADDRESS	2601 10TH AVE. NORTH, PALM SPRINGS, FL.
PCN	70-43-44-20-01-008-0080
OWNER	10TH AVENUE PARTNERSHIP, LTD.
TENANT	RACETRAC PETROLEUM
CURRENT USE	MULTISTORY OFFICE BUILDING W/PARKING
PROPOSED USE	STAND ALONE RACETRAC GAS STATION
LAND USE DESIGNATION	RETAIL
ZONING	CG
GROSS SITE AREA	1.81 AC or 78,655 SF
8' ROW DEDICATION	1,971 SF
NET SITE AREA	1.76 AC or 76,684 SF
PROPOSED IMPERVIOUS AREA	60,930 SF (79.50%)
PROPOSED BUILDING COVERAGE	7.05% (RACETRAC)
PROPOSED BUILDING HEIGHT	23'
PROPOSED FAR	.07
REQUIRED OPEN SPACE	20% MIN.
PROPOSED OPEN SPACE	15,754 SF (20.5%)
REQUIRED PARKING	55 (1 SPACE PER 1,005 SF OF GROSS BLDG. AREA)
PROPOSED PARKING	55 (2 OF THOSE ACCESSIBLE)
REQUIRED SOUTH FACADE PLANTING	100 LF x .25 = 25 LF REQUIRED
PROVIDED SOUTH FACADE PLANTING	10 PLANTERS x 3.5' LF PER = 35 LF PROVIDED
REQUIRED EAST FACADE PLANTING	56 LF x .25 = 14 LF REQUIRED
PROVIDED EAST FACADE PLANTING	10 PLANTERS x 3.5' LF PER = 35 LF PROVIDED



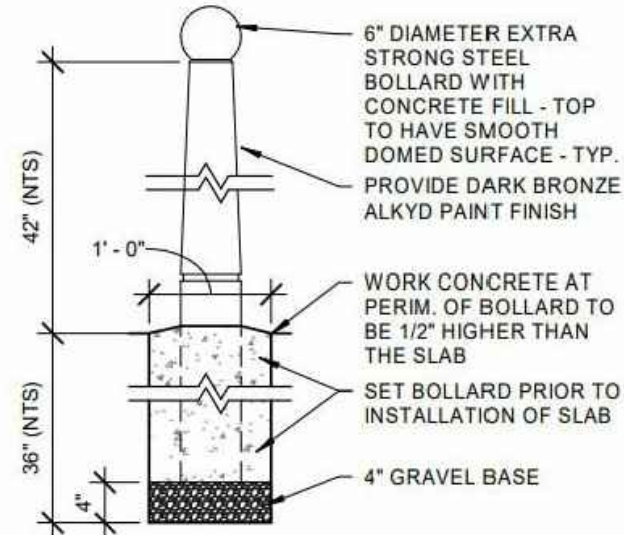
A PARKING DIMENSIONS
SCALE: 1" = 10'-0"



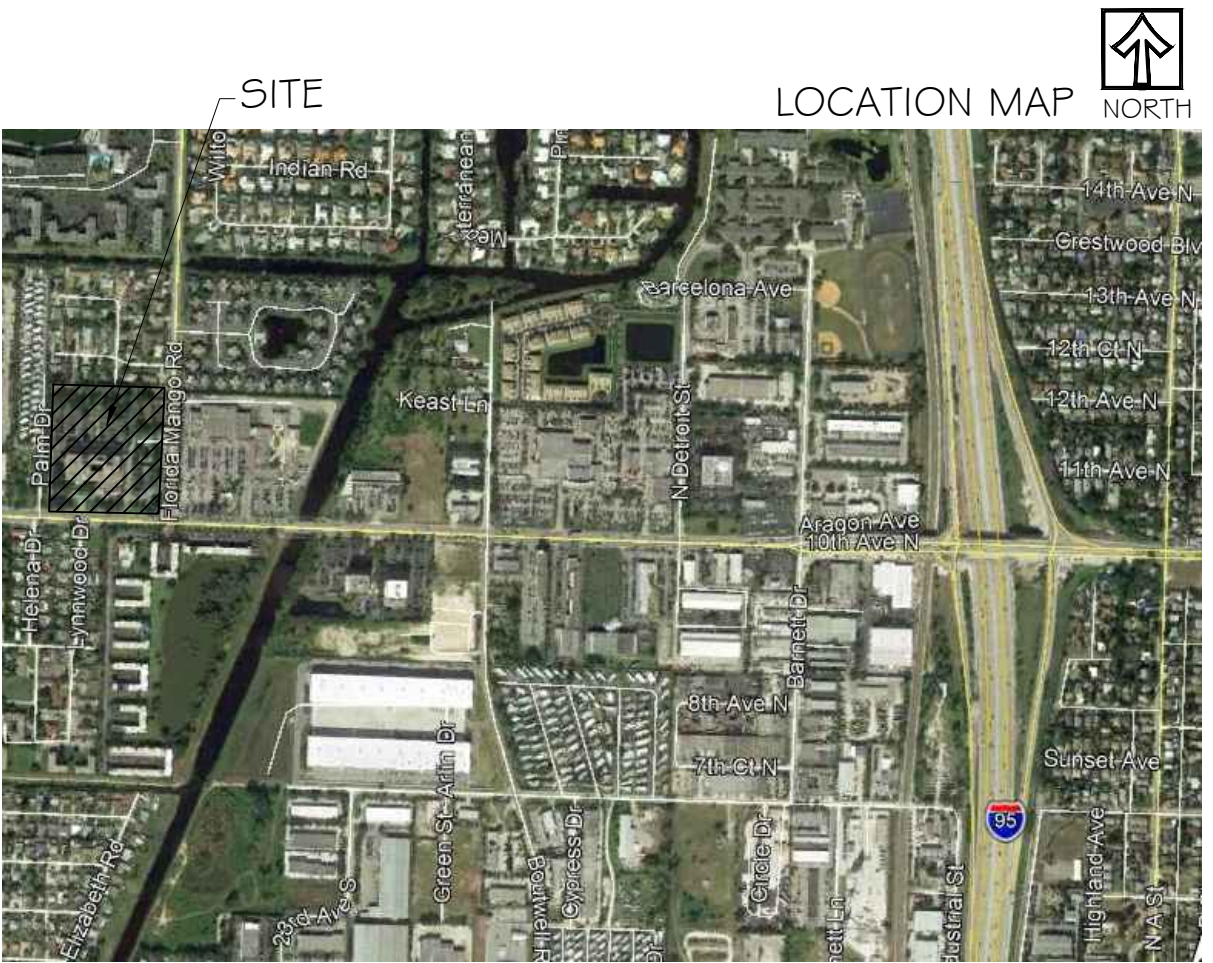
B BIKE RACK
SCALE: 1" = 10'-0"



C PLANTER DETAIL
SCALE: 1" = 10'-0"



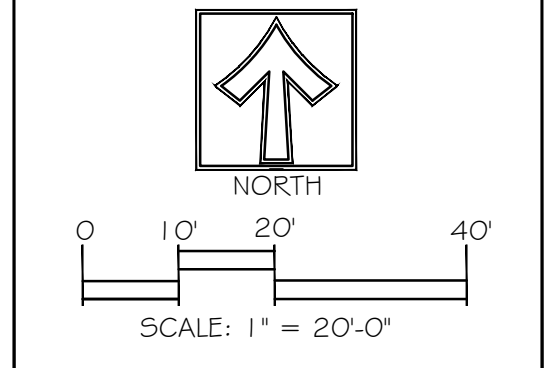
D DECORATIVE BOLLARD DETAIL
SCALE: N.T.S.



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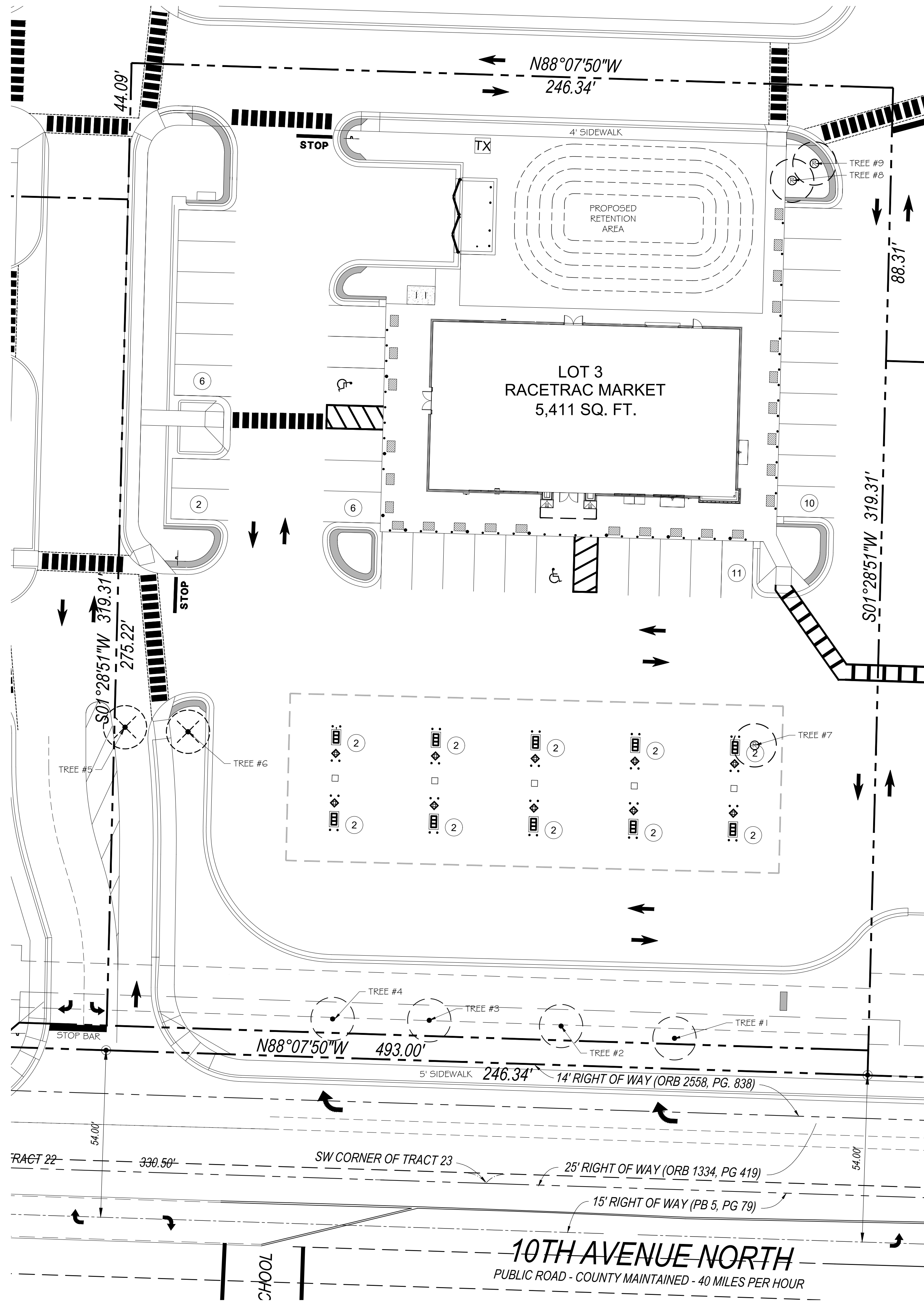
Consultants:	
07/31/19: Per Village comments	
09/24/19: Per Village comments	
10/29/19: Per ROW Dedication	

RACETRAC
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

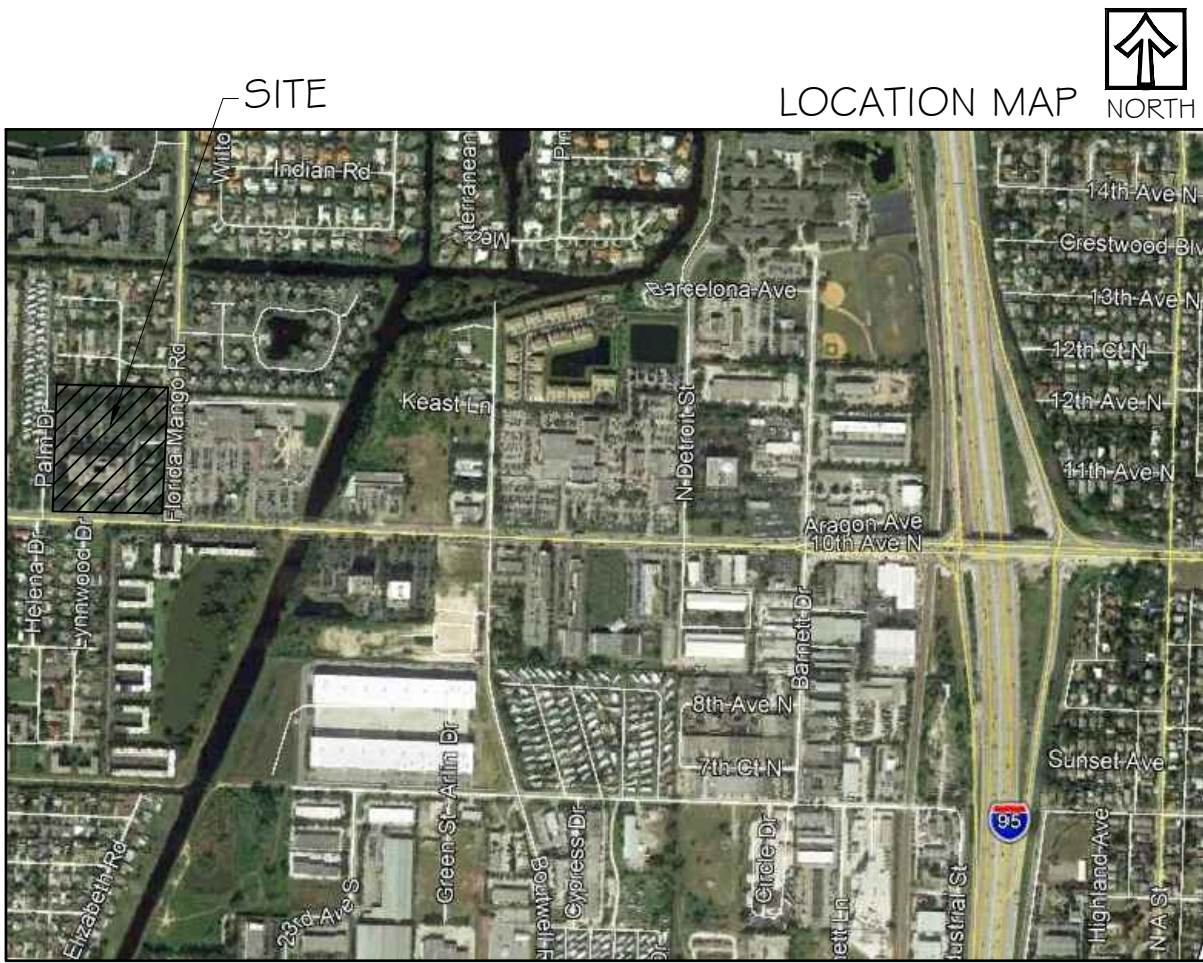
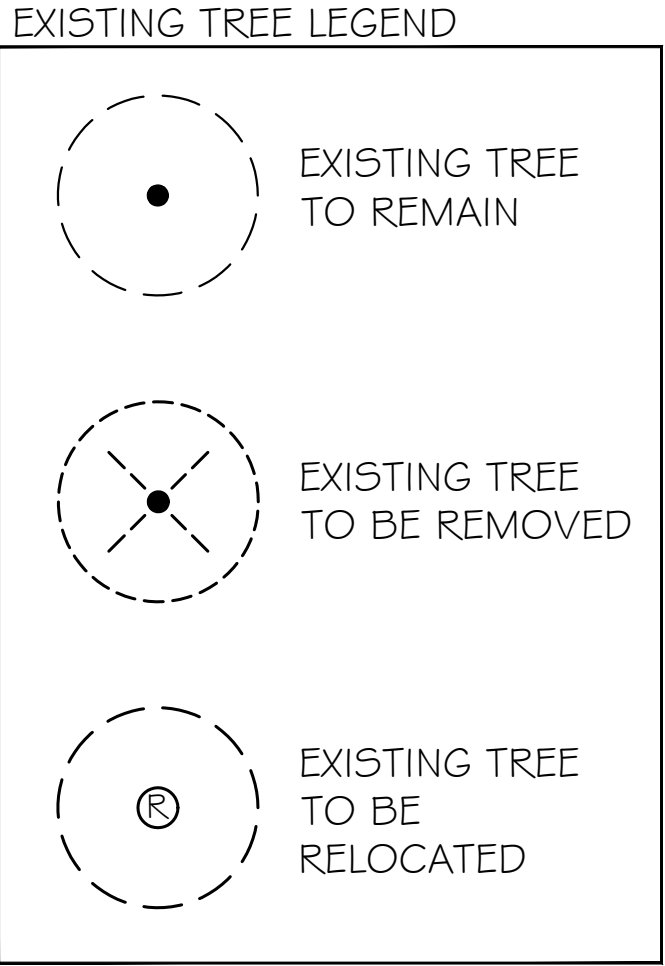


Drawn By: SMT
Drawing #: 1034 Racetrac
Date: 6/27/2019

SITE PLAN



TREE DISPOSITION LIST			
TREE #:	TYPE:	SIZE:	DISPOSITION:
1	OAK	30"	REMAIN
2	OAK	31"	REMAIN
3	OAK	12"	REMAIN
4	OAK	27"	REMAIN
5	FICUS BENJAMINA	72" +/-	REMOVE
6	FICUS BENJAMINA	72" +/-	REMOVE
7	ROYAL PALM	11"	RELOCATE
8	ROYAL PALM	10"	RELOCATE
9	ROYAL PALM	11"	RELOCATE



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Revisions:

3-28-19: Rev. per tree survey
10-29-19: per ROW dedication

RACETRAC
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

BRYAN ROBERT DONAHUE, PLA
LICENSE # LA6667130

NORTH
0 10' 20' 40'
SCALE: 1" = 20'-0"

Drawn By: SMT
Drawing #: 1034
Date: 10/26/2018

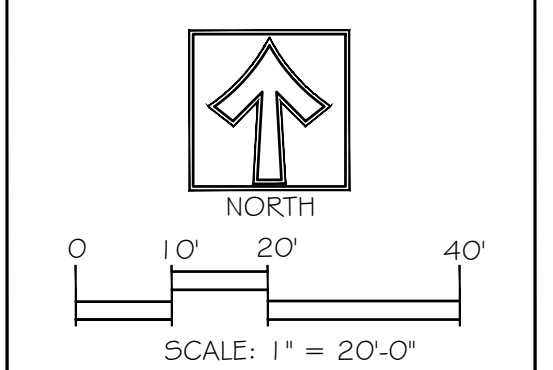
TREE DISPOSITION
PLAN

SHEET # TD.1

Revisions:
3-28-19: Rev. per tree survey
6-27-19: Rev. per entry plants
8-22-19: Rev. per entry plants
9-24-19: Rev. per SP changes
10-29-19: per ROW dedication

RACETRAC
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

BRYAN ROBERT DONAHUE, PLA
LICENSE # LA6667130



Drawn By: SMT
Drawing #: 1034
Date: 10/26/2018

LANDSCAPE
PLAN

SHEET # LP.1

RELOCATED TREE SCHEDULE

		TREES	
SYMBOL	QTY	COMMON NAME	SCIENTIFIC NAME
*RE-r	3	RELOCATED ROYAL PALM	ROYSTONEA ELATA
		REMARKS	
		FROM DISPOSITION, SHEET TD.1	

PLANT SCHEDULE

TREES				
SYMBOL	QTY	COMMON NAME	SCIENTIFIC NAME	REMARKS
*IC	5	DAHOOON HOLLY	ILEX CASSINE	12'HT X 5' SPR. 2" CAL MIN. 5' C.T.
*QV	7	LIVE OAK	QUERCUS VIRGINIANA	12'HT X 5' SPR. 2" CAL MIN. 5' C.T.
PALMS				
PS	3	SYLVESTER PALM	PHOENIX SYLVESTRIS	12" C.T./ Diamond Cut/ FL#1/ Matched
*RE	8	ROYAL PALM	ROYSTONEA ELATA	25' OA HT. 12' G.W. MIN. CONTINUOUS TRUNK DIAMETER
SMALL TREES & SHRUBS				
*CHR	130	REDTIP COCOPLUM	CHRYSOBALANUS ICACO	36'HT. MIN. X 24" SPRD. 24" O.C.
*CLU	131	CLUSIA	CLUSIA GUTTIFERA	36'HT. MIN. X 24" SPRD. 24" O.C.
CRO	119	'MAMMEY' CROTON	CODIAEUM VARIEGATUM 'MAMMEY'	30'HT. MIN. X 18" SPRD. 24" O.C.
CRI	15	GREEN CRINUM LILY	CRINUM ASIATICUM	30'HT. MIN., 7 GAL, AS SHOWN
*HAM	50	FIREBUSH	HAMELIA PATENS	30'HT. MIN. X 18" SPRD. 24" O.C.
IXO	117	'YELLOW 'MAUI' DWARF IXORA	IXORA COCCINEA 'MAUI'	30'HT. MIN. X 18" SPRD. 24" O.C.
JI	4	JATROPHA	JATROPHA INTEGERRIMA	5'HT. MIN. MULTI-TRUNK, AS SHOWN
RUE	68	RUELLIA	RUELLIA BRITTONIANA	30'HT. MIN. X 18" SPRD. 24" O.C.
GROUNDCOVERS				
DIA	284	BLUEBERRY FLAX LILY	DIANELLA TASMANICA	12'HT. X 12" SPRD. 12" O.C.
*LAN	210	PURPLE LANTANA	LANTANA MONTEVIDENSIS	12'HT. X 12" SPRD. 12" O.C.
SOD	T.B.D.	ST. AUGUSTINE SOD	STENOTAPHRUM SECONDATUM	CONTRACTOR TO DETERMINE QTY.

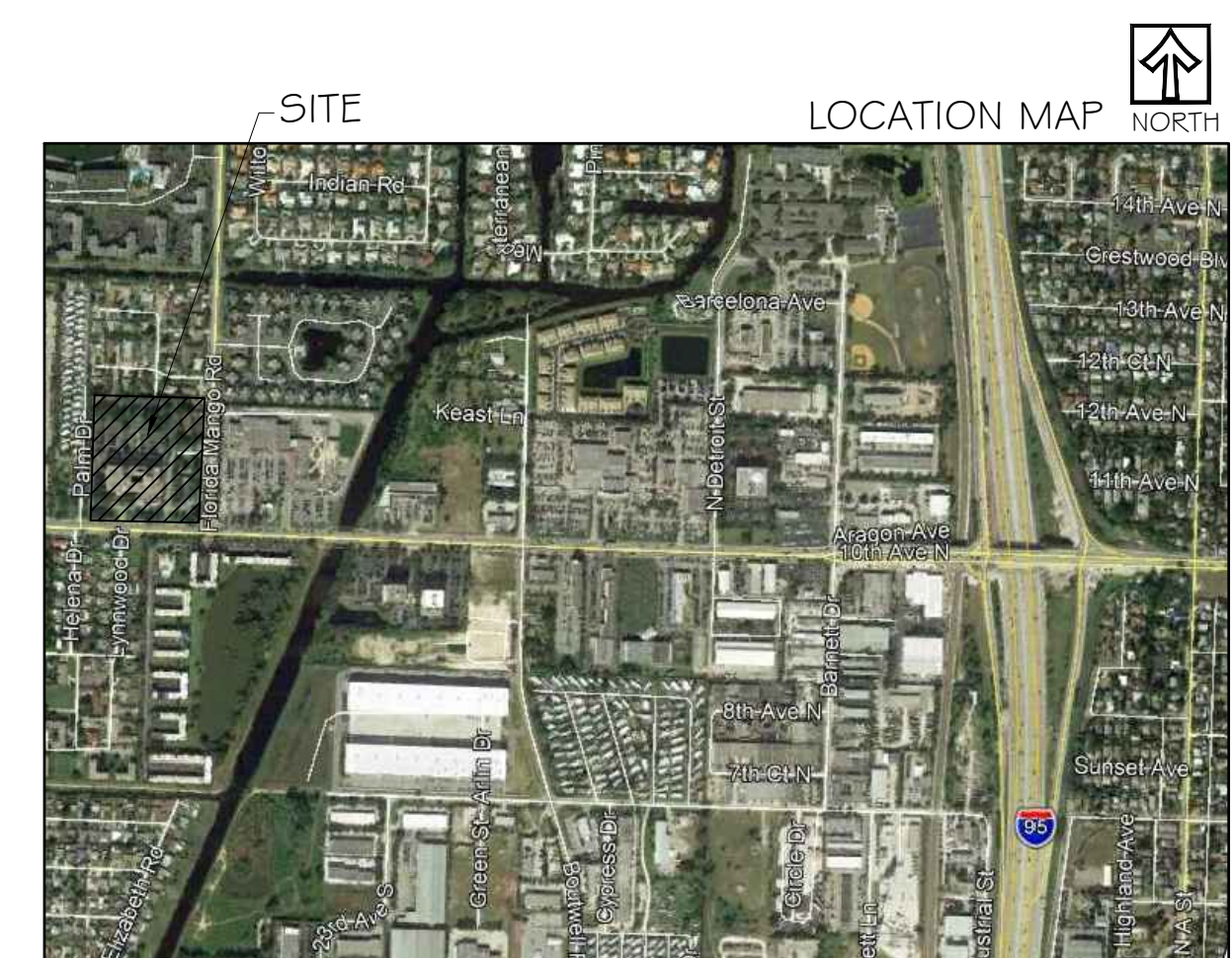
* DENOTES NATIVE SPECIES

LANDSCAPE NOTES:

- ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSEY PLANTS, UNLESS OTHERWISE NOTED.
- ALL PLANTING AND SOD AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR.
- ALL PLANTING BEDS/ ISLANDS SHALL BE FREE OF SHELLROCK, CONSTRUCTION DEBRIS, OR OTHER MISCELLANEOUS DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE.
- ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION.
- IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT.
- ALL TREES PLANTED UNDER OR NEAR OVERHEAD POWER LINES SHALL COMPLY WITH FPL RIGHT TREE, RIGHT PLACE REQUIREMENTS.
- CONTRACTOR IS REQUIRED TO CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.

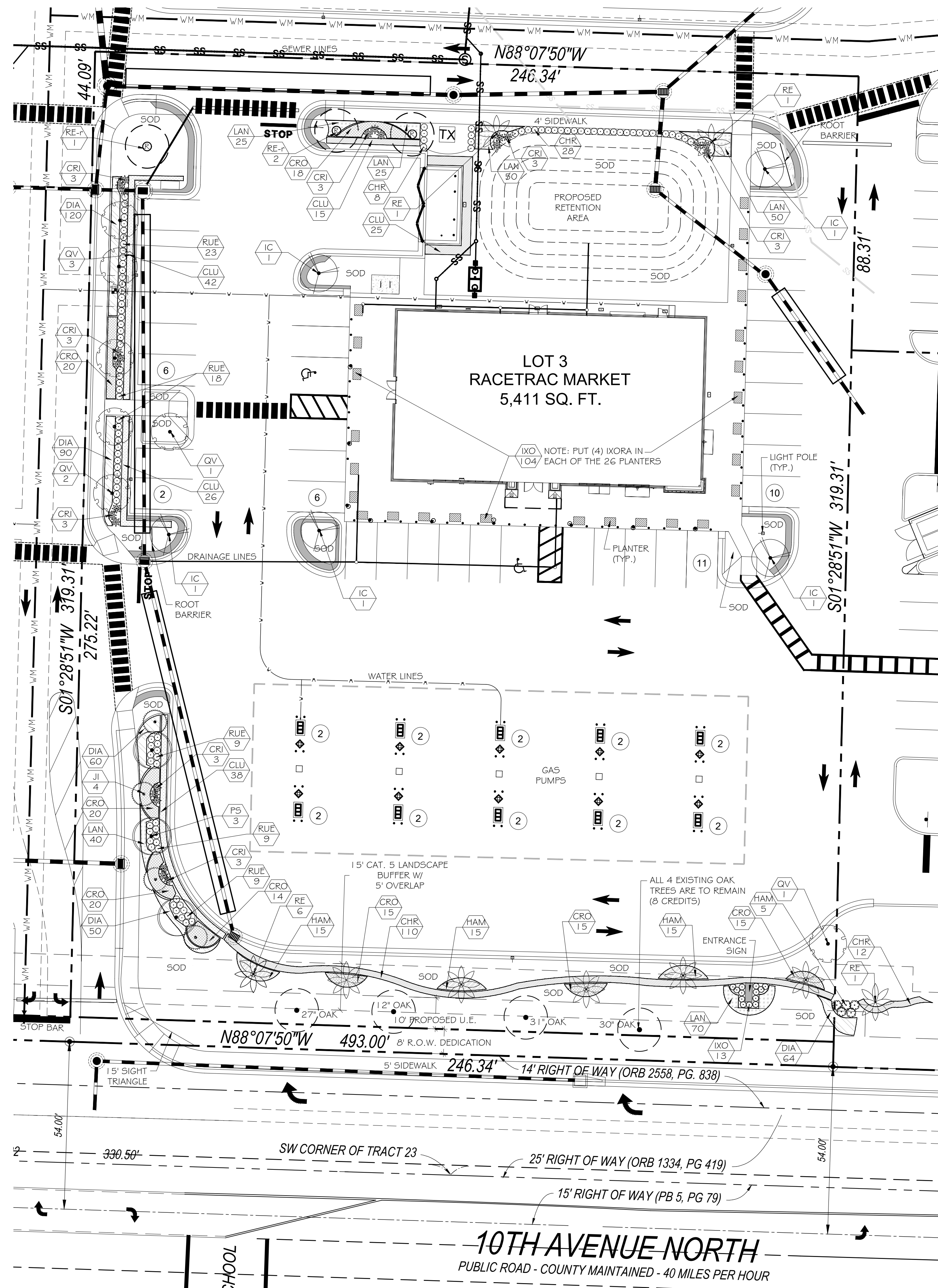
LANDSCAPE REQUIREMENT CHART

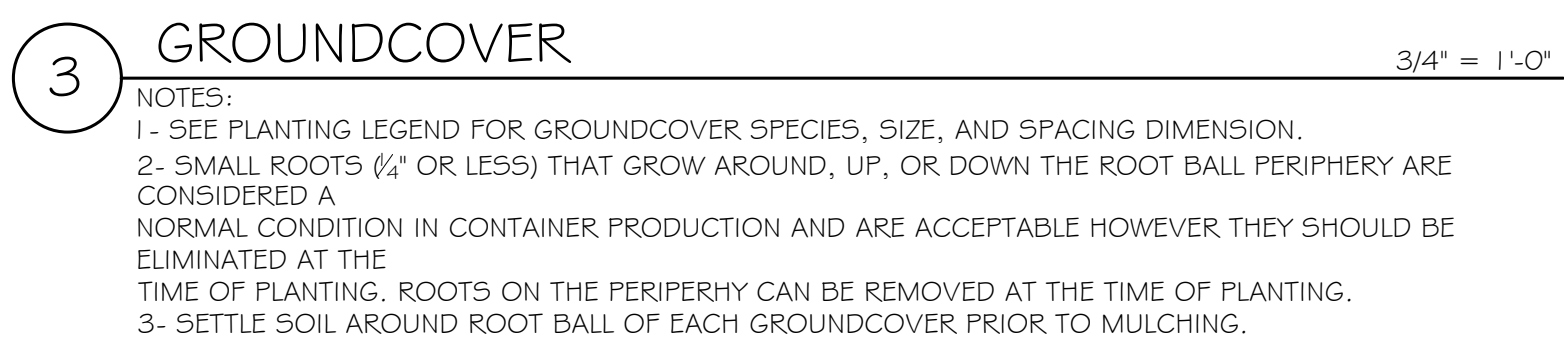
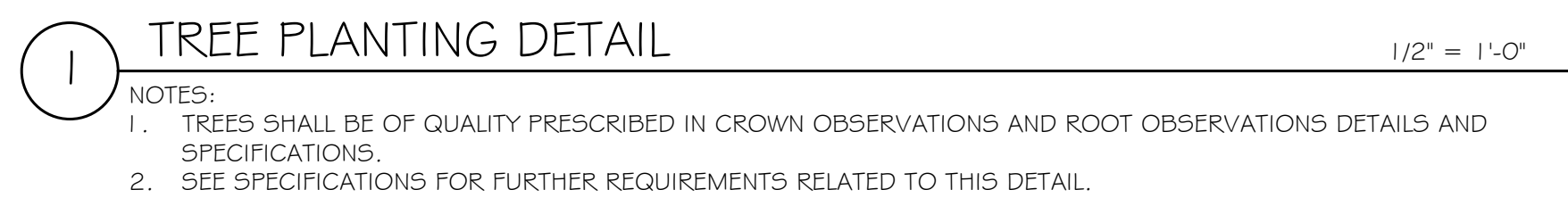
LOCATION/ AREA	CODE REQUIREMENT	REQUIRED	PROVIDED
NET SITE AREA: 76,684 SF	1 TREE PER 2,500 SF	31 TREES	35 TREES (INCLUDES 8 CREDITS FROM EXISTING OAKS TO REMAIN)
PARKING SPACE LANDSCAPE AREA: 35 SPACES	20 SF PER EACH SPACE	700 SF	3,529 SF
PARKING ISLAND TREES	1 TREE PER ISLAND	7 TREES	7 TREES
WEST PL MEDIAN (191 LINEAR FEET)	1 TREE PER 40' LF	5 TREES	5 TREES
SOUTH PL (246.34 LINEAR FEET) 15' CATEGORY 5 BUFFER	1 TREE PER 20' LF 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS	13 TREES 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS	14 TREES (8 CREDITS FROM EXIST. OAKS) 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS
BUILDING FOUNDATION PLANTINGS	25% OF BUILDING FACADE THAT FACES THE STREET	25% OF 156 LF FACADE	58.3% OF FRONT & SIDE FACADES (91 LF PROVIDED IN PLANTERS)
PALM RATIO	CAN ONLY COUNT FOR LESS THAN 50% OF REQUIRED TREES	LESS THAN 50%	40.0% OF PALMS (14 OF 35)
NATIVE SPECIES PLANTINGS RATIO	40% OF PLANTINGS MUST BE NATIVE IF NO WASTEWATER SYSTEM USED	40%	46.4% OF NATIVE SPECIES



Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com





GENERAL CONDITIONS

- A. CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his/her work, he/she shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his/her failure to observe these instructions.
- C. MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his/her work.
- D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he/she shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.
- E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- F. CHANGES IN THE WORK: The Owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.
- G. CORRECTION OF WORK: The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.
- H. Owner's Authorized Representative: The Owner's authorized representative acts as the authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.
- I. CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his/her bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.
- J. SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.
- K. PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

015639
Tree and Plant Protection

PART 1 GENERAL

- 1.1 SUMMARY
A. The scope of work includes all labor, materials, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with protection of existing trees and other plants as shown on the drawings and as specified herein.
1. Provide preconstruction evaluations
2. Provide tree and plant protection fencing
3. Provide protection of root zones and above ground tree and plants
4. Provide pruning of existing trees and plants
5. Coordinate with the requirements of Section Planting Soil for modifications to the soil within the root zone of existing trees and plants.
6. Provide all insect and disease control.
7. Provide maintenance of existing trees and plants including irrigation during the construction period as recommended by the arborist report.
8. Provide maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
9. Remove tree protection fencing and other protection from around and under trees and plants.
10. Clean up and disposal of all excess and surplus material.

1.2 CONTRACT DOCUMENTS

- A. The contract documents and general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. It is the intent of this section that the requirements apply to all sections of the project specification such that any subcontractor must comply with the restrictions on work within designated Tree and Plant Protection Areas.
- 1.3 RELATED DOCUMENTS AND REFERENCES
- A. Related Documents:
1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.
2. Section - Planting
- B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references therein. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.
1. ANSI A300 (Part 5) - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.
2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide For The Green Industry"; Published by Urban Tree Foundation, Visalia, California, most current edition.
3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

- 1.4 VERIFICATION
A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.

- 1.5 PERMITS AND REGULATIONS
A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.

- B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.

- C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

- 1.6 PROTECTION OF WORK, PROPERTY AND PERSON
A. The Contractor shall protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.

1.7 CHANGES IN THE WORK

- A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.

1.8 CORRECTION OF WORK

- A. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest possible time that can be coordinated with other work and seasonal weather demands.

1.9 DEFINITIONS

- All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
- Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contact authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.
- B. Reasonable and reasonably: When used in this specification is intended to mean that the conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification recognizes that plants are not free of defects, and that plant conditions change with time. This specification also recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative expert shall determine when conditions within the plant are judged as reasonable.
- C. Shrub: Woody plants with mature height approximately less than 25 feet.
- D. Tree and Plant Protection Area: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and defined by a circle centered on the trunk with each tree with a radius equal to the crown drip unless otherwise indicated by the Owner's Representative.
- E. Tree: Single and multi-stemmed plants, including palms with anticipated mature height approximately greater than 25 feet or any plant identified on the plans as a tree.

1.10 SUBMITTALS

- A. PRODUCT DATA: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the start of any work at the site.

- 1.11 OBSERVATION OF THE WORK
A. The Owner's Representative may inspect the work at any time.

1.12 PRE-CONSTRUCTION CONFERENCE

- A. Schedule a pre - construction meeting with the Owner's Representative at least seven (7) days before beginning work to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

1. The following Contractors shall attend the preconstruction conference:
- a. General Contractor.
- b. Consulting Arborist.
- c. Subcontractor assigned to install Tree and Plant Protection measures.
- d. Earthwork Contractor.
- e. All site utility Contractors that may be required to dig or trench into the soil.
- f. Landscape subcontractor.
- g. Irrigation subcontractor

- B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

1.13 QUALITY ASSURANCE

- A. Contractor qualifications:
1. All pruning, branch tie back, tree removal, root pruning, and fertilizing required by this section shall be performed by or under the direct supervision of ISA Certified Arborist Submit aforementioned individual's qualifications for approval by the Owner's Representative.
2. All applications of pesticide or herbicide shall be performed by a person maintaining a current state license to apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all current state licensing certifications including applicable chemical applicator licenses.

- B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

2.3 TREE PROTECTION FENCING:

- A. PLASTIC MESH FENCE: Heavy - duty orange plastic mesh fencing fabric 48 inches wide. Fencing shall be attached to metal "U" or "T" post or wooden post driven into the ground of sufficient depth to hold the fabric solidly in place with out sagging. The fabric shall be attached to the post using attachment ties of sufficient number and strength to hold up the fabric without sagging. The Owner's Representative may request, at any time, additional post, deeper post depths and or additional fabric attachments if the fabric begins to sag, lean or otherwise not present a sufficient barrier to access.

- B. GATES: For each fence type and in each separate fenced area, provide a minimum of one 3 foot wide gate. Gates shall be lockable. The location of the gates shall be approved by the Owner's Representative.

- D. Submit suppliers product data that product meets the requirements for approval.

2. tree protection sign:
- A. Heavy-duty cardboard signs, 8.5 inches x 11 inches, white colored background with black 2 inch high or larger letters block letters. The signs shall be attached to the tree protection fence every 50 feet o.c. The tree protection sign shall read "Tree and Plant Protection Area- Keep Out".

2.5 TREE GUARD REGULATOR (TGR)

- A. Cambistat 25C.
- B. Submit suppliers product data that product meets the requirements for approval.

2.6 MATTING

- A. Matting for vehicle and work protection shall be heavy duty matting designed for vehicle loading over tree roots, Alternamats as manufactured by Alternamats, Inc. Franklin, PA 16323 or approved equal.

- B. Submit suppliers product data that product meets the requirements for approval.

2.7 GEOTRID

- A. Geogrid shall be woven polyester fabric with PVC coating, Uni-axial or biaxial geogrid, inert to biological degradation, resistant to naturally occurring chemicals, alkalis, acids.

1. Geogrid shall be Miragrid 2XT as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.

- B. Submit suppliers product data that product meets the requirements for approval.

2.8 FILTER FABRIC

- A. Filter fabric shall be nonwoven polypropylene fibers, inert to biological degradation and resistant of naturally occurring chemicals, alkalis and acids.

1. Mirafi 135 N as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.

- B. Submit suppliers product data that product meets the requirements for approval.

PART 3 EXECUTION

- 3.1 SITE EXAMINATION
A. Examine the site, tree, plant and soil conditions. Notify the Owner's Representative in writing of any conditions that may impact the successful Tree and Plant Protections that is the intent of this section.

- 3.2 COORDINATION WITH PROJECT WORK
A. The Contractor shall coordinate with all other work that may impact the completion of the work.

- B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.

- C. Coordinate the relocation of any irrigation lines currently present on the irrigation plan, heads or the conduits of other utility lines or structures that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

- 3.3 TREE AND PLANT PROTECTION AREA: The Tree and Plant Protection Area is defined as all areas indicated on the tree protection plan. Where no limit of the Tree and Plant Protection Area is defined on the drawings, the limit shall be the drip line (outer edge of the branch crown) of each plant.

- 3.4 Preparation:
A. Prior to the preconstruction meeting, layout the limits of the Tree and Plant Protection Area and then alignments of required Tree and Plant Protection Fencing and root pruning. Obtain the Owner's Representative's approval of the limits of the protection area and the alignment of all fencing and root pruning.

- B. Flag all trees and shrubs to be removed by wrapping orange plastic ribbon around the trunk and obtain the Owner's Representative's approval of all trees and shrubs to be removed prior to the start of tree and shrub removal. After approval, mark all trees and shrubs to be removed with orange paint in a band completely around the base of the tree or shrub 4.5 feet above the ground.

- C. Flag all trees and shrubs to remain with white plastic ribbon laid completely around the trunk or each tree and on a prominent branch for each shrub. Obtain the Owner's Representative's approval of all trees and shrubs to be remain prior to the start of tree and shrub removal.

- D. Prior to any construction activity at the site including utility work, grading, storage of materials, or installation of temporary construction facilities, install all tree protection fencing, Filter Fabric, silt fence, tree protection signs, Geogrid, Mulch and or Wood Chips as shown on the drawings.

3.5 SOIL MOISTURE

- A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintained above permanent wilt point to a depth of at least 8 inches. No soil work or other activity shall be permitted within the Tree and Plant Protection Area when the volumetric soil moisture is above field capacity. The permanent wilt point and field capacity for each type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture).

1. Volumetric soil moisture shall be measured with a digital, electric conductivity meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent meter.

- B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend operations until the soil moisture drains to below field capacity.

- 3.6 ROOT PRUNING:
A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Protection Area or trees to remain, root prune all existing trees to a depth of 24 inches below existing grade in alignments following the edges of the Tree and Plant Protection Area or as directed by the Owner's Representative. Root pruning shall be in conformance with ANSI A300 (part 8) latest edition.

1. Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet of the limit of grading.

2. After completion of the cut, make clean cuts with a lopper, saw or pruner to remove all torn root ends on the tree side of the excavation, and backfill the trench immediately with existing soil, filling all voids.

- 3.7 INSTALLATION OF GEOTGRIDS, FILTER FABRIC, MATTING, WOOD CHIPS AND OR MULCH
A. Install Geogrids, Filter Fabric, Matting, Wood Chips or Mulch in areas and depths shown on the plans and details or as directed by the Owner's Representative. In general it is the intent of this specification to provide the following levels of protection:

1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chips or Mulch.

2. Areas where foot traffic or storage of lightweight materials is defined to be unavoidable provide a layer of Filter Fabric under the 5 inches of Wood Chips or Mulch.

3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8 inches of Wood Chips or Mulch.

4. Areas where heavy vehicle traffic is unavoidable provide a layer of Geogrids under 8 - 12 inches of Wood Chips or Mulch.

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1.15 SELECTION AND OBSERVATION OF PLANTS

A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.

B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to meet specifications as set forth in this specification. If a particular defect or substandard element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.

1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the quality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant.

2. Corrections are to be undertaken at the nursery prior to shipping.

C. The Contractor shall bear all cost related to plant corrections.

D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.

E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.

F. The Contractor shall require the grower or on-wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.

G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material while on site.

1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE

A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall be accompanied by a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.

1.17 SITE CONDITIONS

A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.

1. Should subsurface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of corrections. If the Contractor fails to notify the Owner's Representative of such conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications.

B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative.

C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.

1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the Owner's Representative.

D. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.

1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.

1.18 PLANTING AROUND UTILITIES

A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.

B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.

C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planning areas. The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

PART 2 PRODUCTS

2.1 PLANTS: GENERAL

A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.

1. All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 "American Standard for Nursery Stock" latest edition, unless modified by provisions in this specification. When there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct.

2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z60.1. Using plants that are not acceptable if the resulting root ball cannot be fit into the required planting space.

3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.

B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.

C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants.

D. Plant Quality:

1. **General.** Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, bores, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant

2. Plant quality above the soil line:

a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following:

- Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar pruned to a central and dominant leader.
 - Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars.
- Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. Trees shall not show signs of prolonged moisture stress or over watering as indicated by wilted, shriveled, or dead leaves.
- Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.
 - Main branches shall be distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.
 - Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch union.
 - The attachment of the largest branches (scaffold branches) shall be free of included bark.
- Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds), sunburned areas, conks (fungi feeding holes), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).

3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning out cut shall be present.

- All trees are assumed to have one central leader trees unless a different form is specified in the plant list or drawings.

4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall be visible above the soil line.

5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake. Auxiliary stake may be used to maintain a straight leader in the upper half of the tree.

3. **Plant quality at or below the soil line:**

a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:

- The roots shall be reasonably free of scrapes, broken or split wood.
- The root system shall be reasonably free of injury from biotic (e.g., insects and pathogens) and abiotic (e.g., herbicide toxicity and salt injury) agents. Weeds resulting from root pruning used to produce a high quality root system are not considered injuries.
- A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.
 - Plants with structural roots on only one side of the trunk (I roots) shall be rejected.
- The root collar shall be within the upper 2 inches of the substrate. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly developed, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.

- The root system shall be reasonably free of stem girdling roots over the root collar or kinked roots from nursery production practices.
- At time of observations and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by shriveled, discolored, distorted, or dead roots.

E. **Submittals:** Submit for approval the required plant quality certifications from the grower where plants are to be purchased, for each plant type. The certification must state that each plant meets all the above plant quality requirements.

1. The grower's certification of plant quality does not prohibit the Owner's Representative from observing any plant or rejecting the plant if it is found to not meet the specification requirements.

2.2 **ROOT BALL PACKAGE OPTIONS:** The following root ball packages are permitted. Specific root ball packages shall be required where indicated on the plant list or in this specification. Any type of root ball packages that is not specifically defined in this specification shall not be permitted.

A. BALLED AND BURLAPPED PLANTS

1. All Balled and Burlapped Plants shall be field grown, and the root ball packaged in a burlap and twine and/or burlap and wire basket package.

3. Plants shall be harvested with the following modifications to standard nursery practices.

a. Prior to digging any tree that fails to meet the requirement for maximum soil and roots above the root collar, carefully removed the soil from the top of the root ball of each plant, using hand tools, water or an air spade, to locate the root collar and attach the soil depth over the structural roots structures. Remove all stem girdling roots above the root collar. Care must be exercised not to damage the surface of the root collar and the top of the structural roots.

b. Trees shall be dug for a minimum of 4 weeks and a maximum of 52 weeks prior to shipping. Trees dug 4 to 52 weeks prior to shipping are defined as hardened-off. Digging is defined as cutting all roots and lifting the tree out of the ground and either moving it to a new location in the nursery or placing it back into the same hole. Trees that are stored out of the ground shall be placed in a holding area protected from extremes of wind and sun with the root ball protected by covering with mulch or straw and irrigated sufficiently to keep moisture in the root ball above wilt point and below saturation

c. If wire baskets are used to support the root ball, a "low profile" basket shall be used. A low profile basket is defined as having the top of the highest loops on the basket no less than 4 inches and no greater than 8 inches below the shoulder of the root ball package. The basket shall be removed completely at time of planting.

1.) At nurseries where sandy soils prevent the use of "low profile baskets", baskets that support the entire root ball, including the top, are allowable.

d. Twine and burlap used for wrapping the root ball package shall be natural, biodegradable material. If the burlap decomposes after digging the tree then the root ball shall be re-wrapped prior to shipping if roots have not yet begun to break up and kill intact during shipping.

SPADE HARVESTED AND TRANSPLANTED

1. Spade Harvested and Transplanted Plants shall meet all the requirements for field grown trees. Root ball diameters shall be of similar size as the ANSI Z60.1 requirements for Balled and Burlapped plants.

2. Trees shall be harvested prior to leafing out (bud break) in the spring or during the fall planting period except for plants known to be considered as fall planting hazards. Plants that are fall planting hazards shall only be harvested prior to leafing out in the spring.

3. Trees shall be moved and planted within 48 hours of the initial harvesting and shall remain in the spade machine until planted.

C. CONTAINER (INCLUDING ABOVE-GROUND FABRIC CONTAINERS AND BOXES) PLANTS

4. Container plants may be permitted only when indicated on the drawing. In this specification, or approved by the Owner's Representative.

5. Provide plants shall be established and well rooted in removable containers.

6. Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant.

D. BARE ROOT PLANTS

7. Harvest bare root plants while the plant is dormant and a minimum of 4 weeks prior to leaf out (bud break).

8. The root spread dimensions of the harvested plants shall conform to ANSI Z60.1 for nursery grown bare root plants for each size and type of plant. Just prior to shipping to the job site, dip the root system into a slurry of hydrogel (cross linked polyacrylamide) and water mixed at a rate of 15 oz. of hydrogel in 25 gallons of water. Do not shake off the excess hydrogel. Place the root system in a plastic black plastic bag and tie the bag snugly around the trunk. Bundle and tie the upper branches together.

9. Keep the trees in a cool dark space for storage and delivery. If daytime outside temperatures exceeds 70 degrees F, utilize a refrigerated storage area with temperature between 35 and 50 degrees.

10. Where possible, plant time of planting to be before bud break. For trees to be planted after bud break, place the trees before bud break in an irrigated bed of pea gravel.

- The pea gravel bed shall be 18 inches deep over a sheet of plastic.
- Space trees to allow the unbundled branches to grow without shading each other.
- Once stored in pea gravel, allow the trees sufficient time for the new root system to flush and spring growth of leaves to fully develop before planting.
- Pea gravel stored trees may be kept for up to one growing season.
- Pea gravel stored trees shall be dipped, packaged and shipped similar to the requirements for freshly dug bare root plants.

2.3 ANNUAL FLOWERING AND SEASONAL COLOR PLANTS

E. Container or flat-grown plants should be sized as noted in the planting plan. Plants shall be well-rooted and healthy.

2.4 PALMS

F. Except as modified below or where the requirements are not appropriate to the specification of palms, palms shall meet all the requirements of the specification for plant quality section above.

G. Defoliating, tying, and hedging:

1. In preparing palm trees for relocation, all dead fronds shall be removed.

A. All remaining fronds above horizontal shall be lifted up and tied together around the crown in an upright position. Do not tie too tightly, bind or injure the bud. Use juber twine shall be used in tying up the fronds; wire will not be permitted. Fronds shall be untied immediately after planting.

C. Digging the root balls:

- When digging out the root ball, no evacuation shall be done closer than 24 inches to the trunk at ground level and the excavation shall extend below the major root system to a minimum depth of 3.5 feet. The bottom of the root ball shall be cut off square and perpendicular to the trunk below the major root system.
- The Contractor shall not free-fall, drag, roll or abuse the tree or put a strain on the crown (bud area) at any time. A protective device shall be used around the trunk of the tree while lifting and relocating so as not to injure the bud, or scar or skin the trunk in any way.

2.5 PLANTING SOIL

Planting Soil shall contain a mixture of 1/3 sand, 1/3 topsoil and 2/3 peat humus. Sand shall be clean, salt-free and containing no extraneous matter. Topsoil shall be friable fertile soil with representative characteristics of area soils. It should be free of heavy silt, stone, excess lime, shell rock, plant roots, debris or other foreign matter. It shall not contain noxious plant growth (such as bermuda, torpedos or nut grass). It shall test between the pH range of 5.0 to 7.0 unless otherwise specified and contain no toxic residues or substances that would endanger plant growth. If topsoil is not available on site, it shall be imported from local sources with similar soil characteristics to that found at project site. Obtain topsoil only from naturally, well-drained sites where topsoil occurs in a depth not less than 4". Peat humus shall be decomposed peat with no identifiable fibers or if available, muck may be substituted and shall be free from stones, excessive plant roots, debris or other foreign matter. Muck shall not be overly saturated with water.

2.6 MULCH

A. Mulch shall be Melaleuca or Eucalyptus and shall cover all landscape bed areas in a 3" minimum layer. Do not let mulch pile up on root ball or around trunks of trees plants. Submit supplier's product specification data sheet and a one gallon sample for approval.

2.7 TREE STAKING AND GUYING MATERIAL

A. Tree guying to be flat woven polypropylene material, 3/4 inch wide, and 900 lb. break strength. Color to be Green. Product to be ArborTie manufactured by Deep Root Partners, L.P. or approved equal.

B. Stakes shall be lodge pole stakes free of knots and of diameters and lengths appropriate to the size of plant as required to adequately support the plant.

C. Below ground anchorage systems to be constructed of 2 x 2 dimensional untreated wood securing (using 3 inch long screws) horizontal portions to 4 feet long vertical stakes driven straight into the ground outside the root ball.

D. Submit manufacturer's product data for approval.

2.9 WATERING BAGS

E. Plastic tree watering bags holding a minimum of 15 gallons of water and with a slow drip hole(s) water release system, specifically designed to water establishing trees. Water should release over a several day period, not within a few hours

F. Watering bags shall be:

- Treagator Irrigation Bags sized to the appropriate model for the requirements of the plant, manufactured by Spectrum Products, Inc., Youngville, NC 27566.
 - Ooze Tube sized to the appropriate model for the requirements of the plant, manufactured by Engineered Water Solutions, Atlanta, GA.
 - Or approved equal.
- C. Submit manufacturer's product data for approval.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

A. Protect materials during delivery during delivery and storage. Adequately protect plants from drying out, exposure of roots to sun, wind or deterioration from heat and cold temperatures. If planting is delayed more than 24 hours after

delivery, set plants in a location protected from sun and wind. Provide adequate water to the root ball package during the shipping and storage period.

1. All plant materials must be available for observation prior to planting.

2. Using a soil moisture meter, periodically check the soil moisture in the root balls of all plants to assure that the plants are being adequately watered. Volumetric soil moisture shall be maintained above wilting point and below field capacity for the root ball substrate or soil.

B. Do not deliver more plants to the site than there is space with adequate storage conditions. Provide a suitable remote staging area for plants and other supplies.

1. The Owner's Representative or Contractor shall approve the duration, method and location of storage of plants.

C. Provide protective covering over all plants during transporting.

3.2 ADVERSE WEATHER CONDITIONS

A. No planting shall take place during extremely hot, dry, windy or freezing weather.

3.3 COORDINATION WITH PROJECT WORK

A. The Contractor shall coordinate with all other work that may impact the completion of the work.

B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.

C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.4 LAYOUT AND PLANTING SEQUENCE

A. Relative positions of all plants and trees are subject to approval of the Owner's Representative.

B. Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.

C. When applicable, plant trees before other plants are installed.

D. It is understood that plants are not precise objects and that minor adjustments in the layout will be required as the planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.

3.5 SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION

A. Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.

- Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and tilling. Where possible, restrict the driving lanes to one area instead of driving over and compacting a large area of soil.
- Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.

3.6 SOIL MOISTURE

A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following ranges.

Soil type	Permanent wilting point	Field capacity
Sand, Loamy sand, Sandy loam	5 - 8%	12-18%
Loam, Sandy clay, Sandy clay loam	14 - 25%	27-36%
Clay loam, Silt loam	11 - 22%	31 - 36%
Silty clay, Silty clay loam	22 - 27%	38 - 41%

1. Volumetric soil moisture shall be measured with a digital moisture meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent.

B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.

3.7 INSTALLATION OF PLANTS: GENERAL

C. Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the Owner's Representative of any condition observed.

D. No more plants shall be distributed about the planting bed area than can be planted and watered on the same day.

E. The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality in Part 2 Products: Plants General: Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.

- Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may make the plant unstable or stress the plant to the point that the Owner's Representative may choose to reject the plant rather than permitting the modification.
- Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2 Products: Plants General: Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.
- The resulting root ball may need additional staking and water after planting. The Owner's Representative may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty.
- The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.

F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, meet all the requirements of the specification for plant quality section above. Root balls shall be shaved to remove all circling, descending and matted roots. Shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.

G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if not removed.

H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, excavate the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.

1. For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.

a. The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.

b. Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand shovels.

2. If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified.

3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after the root ball modification.

4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6 inches.

H. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.

I. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant upright and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.

J. The Owner's Representative may request that plants orientation be rotated when planted based on the form of the plant.

K. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section 3.15 Planting Soil, for requirements to modify the soil within the planting bed.

L. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. DO NOT over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.

1. When the planting hole has been backfilled to three quarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.

M. Where indicated on the drawings, build a 4 inch high, level berm of Planting Soil around the outside of the root ball to retain water. Tamp the berm to reduce leaking and erosion of the saucer.

N. Thoroughly water the Planting Soil and root ball immediately after planting.

O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative's seals are to remain on plants until the end of the warranty period.

P. Remove corrugated cardboard trunk protection after planting.

Q. Follow additional requirements for the permitted root ball packages.

3.8 Permitted Root ball packages and Special planting requirements

A. The following are permitted root ball packages and special planting requirements that shall be followed during the planting process in addition to the above General planting requirements.

B. BALLED AND BURLAPPED PLANTS

1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap

away; do not fold down onto the Planting Soil.

2. If the plant is shipped with a wire basket that does not meet the requirements of a "Low Rise" basket, remove the top 6 - 8 inches of the basket wires just before the final backfilling of the tree.

3. Earth root balls shall be kept intact except for any modifications required by the Owner's Representative to make root package comply with the requirement in Part 2 Products.

C. SPADE HARVESTED AND TRANSPLANTED PLANTS

1. After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil out to a radius from the root ball edge equal to the diameter of the root ball to a depth of 6 - 10 inches by hand digging to disturb the soil interface.

2. Fill any gaps below with loose soil.

D. CONTAINER (INCLUDING BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS

1. This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is too low in the root ball.

2. Remove the container.

3. Perform root ball shaving as defined in Installation of Plants: General above.

4. Remove all roots and substrate above the root collar and the main structural roots according to root correction details so root system conforms to root observations detail.

5. Remove all substrate at the bottom of the root ball that does not contain roots.

CONTRACTOR GENERAL CONDITIONS NOTES

1. RFI'S: CONTRACTOR SHALL SUBMIT RFI'S WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND.
2. SUBMITTALS AND PRODUCT DATA: CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMISSIONS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
3. SHOP DRAWINGS: CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.
4. LAYOUT AND COORDINATION DRAWINGS: CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS. PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL CONFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS, BUILDING FUNCTION AS INTENDED, BE FIT FOR PURPOSE, AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES.
5. DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.
6. SUBSTITUTIONS:
 - A. CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS.
 - B. PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM. PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN.
 - C. PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION. INCLUDE INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT TIME.
 - D. PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPINION, AFTER THOROUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACT DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED.
7. E. CONSULTANT'S EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR OR APPROVED BY THE OWNER SHALL BE COMPENSATED TO THE CONSULTANT BY THE CONTRACTOR.
8. AS-BUILT DRAWINGS: THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND/OR AT PROJECT CLOSEOUT. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.
9. INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS- CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS, DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.
10. CONTRACTOR/DELEGATED/SUCCESSOR ENGINEER - CONTRACTOR IS ASSIGNED TO PROVIDE DESIGN/BUILD SERVICES FOR SELECTED SYSTEMS. CONTRACTOR'S ENGINEER SHALL COMPLY WITH ALL FAC GIGS REQUIREMENTS. DELEGATED/SUCCESSOR ENGINEER SHALL SUBMIT SIGNED/SEALED DRAWINGS TO A/E, TO AGENCIES, RESPOND TO ALL RFI'S, AGENCY COMMENTS, AND BECOME THE DESIGNATED SYSTEM ENGINEER OF RECORD.

UL LISTING AND NRTL CERTIFICATIONS NOTE

CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE DOCUMENTATION AND CERTIFICATIONS FOR ANY EQUIPMENT THAT IT PROPOSES WITH A NRTL (NATIONALLY RECOGNIZED TESTING LAB) LISTING AND LABELING EQUIVALENT TO THE BASIS OF DESIGN ULL LISTING.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ACCEPTABILITY BY THE LOCAL AHJ AND AGENCIES FOR THE NRTL LISTING AND CERTIFICATION FOR THE PRODUCTS HE PROPOSES AND DEMONSTRATE SUCH AS PART OF THE PRODUCT DATA SUBMISSION AND INSTALLATION.

GENERAL ELECTRICAL NOTES

1. **DO NOT SCALE THE ELECTRICAL DRAWING. REFER TO THE ARCHITECTURAL PLAN AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT AND CONFIRM WITH OWNERS REPRESENTATIVES. CONTRACTOR SHALL REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR PROJECT COORDINATION.**
1. **ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EDITIONS CURRENTLY ADOPTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION OF THE FOLLOWING: THE NATIONAL ELECTRICAL CODE (NFPA 70), NFPA 72, NFPA 75, THE FIRE PREVENTION CODE INCLUDING NFPA 1 & NFPA 10, NFPA 110, AND THE FBC, AND THE FPFC.**
3. **UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER, WITH "THIN" INSULATION FOR SIZE #10 AND SMALLER. CONDUCTORS LARGER THAN #10 SHALL HAVE "THIN" INSULATION. ALL CONDUCTORS IN WET LOCATIONS MUST HAVE "THIN" INSULATION. ALL CONDUCTORS #10 AND SMALLER MAY BE TIED. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS MUST COMPLY WITH ARTICLE 310 OF THE N.E.C.**
4. **OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.**
5. **DISCONNECT SWITCHES SHALL BE HP, RATED, HEAVY DUTY, QUICK MAKE, QUICK BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.**
6. **THESE PLANS DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION, THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND MEET ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.**
7. **THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDING AS REQUIRED IN ARTICLE 250, NATIONAL ELECTRICAL CODE. THE GROUNDING SYSTEM SHALL BE TESTED AND SHALL BE PROVIDED TO MEASURE A MAXIMUM OF 5 OHMS. PROVIDE A COPY OF THE TEST REPORT TO ENGINEER.**
8. **ALL MATERIALS SHALL BE NEW AND SHALL BEAR U.L. LABELS WHERE APPLICABLE.**
9. **ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKSMANSHIP MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY ENGINEER/ARCHITECT MUST BE A CONDITION OF THE SUBCONTRACTOR.**
10. **THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER, LIGHT COMPANY, TELEPHONE COMPANY, AND BROADBAND PROVIDER.**
11. **CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS TO SUIT JOB CONDITIONS, BALANCE LOADS ON EACH PHASE.**
12. **SEE NOTES ON PLANS FOR OTHER REQUIREMENTS.**
13. **FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS CALLED FOR ON PLANS, OR AS SELECTED BY OWNER.**
14. **ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.**
15. **CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF ANY PHASE OF THE INSTALLATION WHICH MAY BE DAMAGED.**
16. **ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.**
17. **CHECK ALL EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND CURRENT BEFORE CONNECTION TO CIRCUITS AND START UP.**
18. **ELECTRICAL CONTRACTOR SHALL CHECK AND VERIFY EQUIPMENT FURNISHED AGAINST THOSE SPECIFIED OR INTENDED AND REVISE BRANCH CIRCUITS AS MAY BE REQUIRED WITH PRIOR APPROVAL OF ENGINEER/ARCHITECT.**
19. **ALL SYSTEMS AND ROUGH-IN SHALL BE CONCEALED IN FINISHED SURFACES. COORDINATE WITH ARCHITECT.**
20. **THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE BASIS OF DESIGN (EQUIPMENT SPECIFIED BY DIVISION 16 AND OTHER DIVISIONS). WHEN THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE A/E AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO INSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHEN THE CONTRACTOR'S DECISION TO SUBSTITUTE PRODUCTS OR MODIFY DESIGN REQUIRING A/E SERVICES, THE A/E RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.**
21. **CONTRACTOR SHALL PROVIDE A CONTROLS TRADE SUBCONTRACTOR TO DESIGN AND INSTALL ALL CONTROLS TO MEET THE PROJECT REQUIREMENTS.**

AIR CONDITIONING EQUIPMENT AND CONTROLS SPECIFICATION

1. **ELECTRICAL CONTRACTOR SHALL INSTALL ALL CONTROL RACEWAY (CONDUIT), WIRE INSTALLATION, CONNECTIONS ETC. IN ACCORDANCE WITH WIRING DIAGRAMS ON AIR EQUIPMENT.**
2. **A/C / ELECTRICAL PLANS OR DIAGRAMS FURNISHED BY MANUFACTURER OF THE EQUIPMENT.**
3. **ALL POWER WIRING FOR THE AIR CONDITIONING EQUIPMENT SHALL BE FURNISHED, INSTALLED AND CONNECTED UNDER THE SUPERVISION OF THE CONTRACTOR.**
4. **MECHANICAL CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR ALL AIR CONDITIONING EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONNECTIONS TO AIR CONDITIONING EQUIPMENT PER MANUFACTURERS SPECIFICATIONS.**
5. **AIR CONDITIONING EQUIPMENT INCLUDES CONDENSER, COMPRESSOR AND FAN, FAN COIL UNITS, ELECTRICAL STRIP HEATER, THERMOSTAT, ETC.**

SITE LIGHTING/PHOTOMETRIC NOTES	
1.	COORDINATE AND VERIFY ALL SITE ELECTRICAL REQUIREMENTS WITH ARCHITECT PRIOR TO ANY CONSTRUCTION/INSTALLATION.
2.	THE COMPLETE STREET LIGHTING POLE MOUNTED ASSEMBLY MUST WITHSTAND A MINIMUM 175 MPH WINDLOADS. CALCULATIONS AND FOUNDATION DESIGN BY CIVIL/STRUCTURAL ENGINEER.
3.	PROVIDE IN-LINE FUSES AT EACH POLE, ONE IN EACH HOT LEG.
4.	PROVIDE IN-LINE CONDUITS SHALL BE BURIED AT A MINIMUM OF 24" BELOW FINISHED GRADE.
5.	ALL SITE LIGHTING SHALL BE PHOTOCELL CONTROLLED UNLESS SPECIFIED OTHERWISE.

SITE POLE NOTE
WIND LOAD CALCULATIONS AND SITE POLE STRUCTURAL DETAILS ARE TO BE SUBMITTED TO THE BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. (BY CONTRACTOR AND HIS DELEGATED FL P.E. STRUCTURAL ENGINEER)

ELECTRICAL SHEET INDEX	
SHEET #	DESCRIPTION
EPH0.1	ELECTRICAL NOTES AND SHEET INDEX
EPH1.1	PHOTOMETRIC PLAN
EPH3.1	LIGHTING LEGEND AND DETAILS

FBC NOTE
1. CONTRACTOR SHALL COMPLY WITH FBC ((408.2.5.1)). PROVIDE OWNER WITH A RECORD SET DRAWING OF COMPLETE INSTALLATION DRAWINGS.
2. CONTRACTOR SHALL COMPLY WITH FBC ((408.2.5.2)). PROVIDE OWNER WITH OPERATIONAL MANUALS AND MAINTENANCE MANUALS.

LIGHTING NOTES
1. ELECTRICAL CONTRACTOR TO VERIFY IF ANY LIGHTING FIXTURES REQUIRE STEP-DOWN TRANSFORMERS, QUANTITY AND LOCATION OF THE TRANSFORMERS TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION. CONSULT ARCHITECT FOR LOCATIONS PRIOR TO BIDDING. PROVIDE ALL TRANSFORMERS AND INCLUDE IN BID.
2. ALL LIGHTING FIXTURES AND FANS TO BE SELECTED & LOCATED BY OWNER /ARCHITECT/INTERIOR DESIGNER, UNLESS OTHERWISE NOTED.
3. ARCHITECT TO SET MOUNTING HEIGHTS FOR ALL FIXTURES WHERE APPLICABLE, UNLESS OTHERWISE NOTED.
4. CONTRACTOR TO PROVIDE LUMINAIRES TO CONFORM TO ENERGY CODE, THERMAL ENVELOPE RATINGS.

FLORIDA BUILDING CODE 2017 CONFORMANCE	
1.	CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL TO CONFORM TO FBC 2017 ENERGY COMPLIANCE, RELATED SECTIONS, AND STANDARDS.
2.	OWNER SHALL PROVIDE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT(Cx)A TO PREPARE FUNCTIONAL TEST PROCEDURES (DOCUMENT SYSTEMS PERFORMANCE, WITNESS CONTRACTOR TESTING), AS REQUIRED BY FBC FOR LIGHTING AND HVAC SYSTEMS.
3.	CONTRACTOR SHALL PROVIDE SERVICES TO TEST, BALANCE AND COMMISSION THE SYSTEM VIA AN INDEPENDENT AGENT FOR THE MECHANICAL SYSTEMS ENERGY PERFORMANCE.
4.	CONTRACTOR TO PROVIDE COMPLETE CERTIFICATIONS AND CHECKLISTS AS REQUIRED BY FBC FOR HIS WORK RESPONSIBILITIES.

VOLTAGE DROP NOTE

THE CONTRACTOR, AS PART OF HIS PRICING AND BIDDING, SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND TERMINATIONS, INCLUDING PFL AND UTILITY REQUIREMENTS AND APPROVALS FOR ALL CONDUCTING AND TERMINATIONS, TO SATISFY THE PROJECT REQUIREMENTS. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND INCLUDE ALL HIS BRANCH CIRCUIT, FEEDER, AND SERVICE CONDUCTOR CONDUITING AND WIRING LENGTHS AND ROUTING BASED ON HIS PROPOSED INSTALLATION MEANS AND METHODS. WIRING LENGTHS, SHOWN AS THE BASIS OF DESIGN LENGTHS, ARE MERELY AN APPROXIMATION BY THE CONSULTANT. THE CONTRACTOR SHALL USE THOSE BASIS OF DESIGN CONDUCTOR LENGTHS AND WIRING SIZES AS THE MINIMUM, NOT LIMITED TO, REQUIREMENTS FOR THE PROJECT BIDDING. THE CONTRACTOR, PRIOR TO BIDDING, SHALL CONFIRM ALL HIS PROPOSED LENGTHS, MAKE ANY AND ALL ADJUSTMENTS AS MAY IMPACT THE ELECTRICAL SYSTEMS AND EQUIPMENT FOR CODE COMPLIANCE AND CONSTRUCTABILITY, AND DOCUMENT ALL PROPOSED CHANGES AND ADJUSTMENTS TO THE ARCHITECT AS PART OF HIS BID RESPONSE. THE CONTRACTOR SHALL SUBMIT COMPLETE SCALED PROPOSED ROUTINGS FOR SERVICES AND FEEDERS, QUANTITIES AND CONDUCTORING, SECTIONS THRU BUILDING FOR RACKING, DUTYBANK CROSS SECTIONS FOR CLEARANCES AND COORDINATED AS FREE OF ALL INTERFERENCES, ETC. CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION TO THE ARCHITECT FOR REVIEW NO LATER THAN 3 WEEKS AFTER NOTICE TO PROCEED.

SCOPE OF WORK
SITE LIGHTING PHOTOMETRICS FOR NEW BUILDING/SITE.

CODE COMPLIANCE	
FLORIDA BUILDING CODE, 6th EDITION, 2017.	
NATIONAL ELECTRICAL CODE, 2014.	

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

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[illegible]

**VILLAGE COLLECTION OF PALM
SPRINGS**
VILLAGE OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

FAE
CONSULTING

300 LOCK ROAD, SUITE 302
DEERFIELD BEACH, FLORIDA 33442
TEL: (561) 391-9292 FAX: (561) 391-9998
CERTIFICATE OF AUTHORIZATION NO. 28137
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DESIGNED BY: MW PM: AN P/N: 19072

Drawn By:	M.W.
Drawing #:	
Date:	06/27/19
ELECTRICAL NOTES AND SHEET INDEX	

SHEET # EPH0.1



PHOTOMETRIC PLAN
SCALE: 1"=20'-0"

ALL LIGHTING FIXTURES IN THIS AREA
ARE PROVIDED BY OTHERS UNDER
SEPARATE PERMIT.

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

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planning + landscape architecture

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Consultants:

Revisions:

- 1 OWNER CHGS 8/8/19
- 2 OWNER CHGS 8/22/19
- 3 OWNER CHGS 10/23/19

VILLAGE COLLECTION OF PALM SPRINGS
SPRINGS

VILLAGE OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

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DESIGNED BY: HW PML: AN PIN 19072

Drawn By: M.W.
Drawing #:
Date: 06/27/19
PHOTOMETRIC PLAN

SHEET # EPH1.1

Luminaire Schedule						
Project: TIRE KINGDOM & RACE TRAC, PALM SPRINGS - SITE - REV4 --- OCT - 23 - 2019						
Symbol	Qty	Label	Description	LLF	Lum. Watts	Total Watts
	30	A	SCV-LED-13L-SC-50	0.900	84.3	2529
	2	B	A2_B1-05	0.900	11.5	23
	9	C	SP2-STR-Y4-2050-FCO-MOD(KB 12LED)-BB	0.900	27.3	245.7
	3	D	XALM-2-LED-VHO-50-IL	0.900	313.6	940.8
	4	E	XALM-FT-LED-VHO-50-IL	0.900	315	1260
	3	F	XWM-FT-LED-06-50	0.900	53.9	161.7
	3	G	XWM-FT-LED-04-50	0.900	38	114
	2	SA	GARDCO ECF-S-64L-1A-NW-G2-SW	0.900	205.9	823.6
	2	SB	GARDCO ECF-S-64L-1A-NW-G2-4	0.900	205.9	411.8
	1	SB1	GARDCO ECF-S-32L-1_2A-NW-G2-4	0.900	122	122
	1	SC1	GARDCO ECF-S-32L-1_2A-NW-G2-2-HIS	0.900	121.6	121.6
	1	SC2	GARDCO ECF-S-32L-700-NW-G2-2-HIS	0.900	72.9	72.9

Calculation Summary					
Project: TIRE KINGDOM & RACE TRAC, PALM SPRINGS - SITE - REV4 --- OCT - 23 - 2019					
Label	Avg	Max	Min	Avg/Min	Max/Min
SPILL HORIZONTAL 6' AG	0.02	0.33	0.00	N.A.	N.A.
SPILL TO 10TH AVENUE NORTH	0.35	3.1	0.0	N.A.	N.A.
SPILL TO LOT 1	0.79	4.3	0.0	N.A.	N.A.
SPILL TO LOT 4	0.74	3.7	0.0	N.A.	N.A.
SPILL VERTICAL 6' AG	0.07	0.33	0.00	N.A.	N.A.
FUEL CANOPY	28.83	39.7	17.5	1.65	2.27
RACETRAC - PARK & DRIVE	4.55	12.1	1.4	3.25	8.64
SITE	4.56	12.1	1.1	4.15	11.00
TIRE KINGDOM - PARK & DRIVE	2.97	6.3	1.0	2.97	6.30

Consultants:

Revisions:

OWNER CHGS 8/22/19
 OWNER CHGS 10/23/19

Site & Area
EcoForm
 EcoForm S - small area light

Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Cat. No: _____
 Type: _____ Qty: _____
 Lamps: _____
 Notes: _____

Ordering guide example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Pin Current	LED Color-Temperature	Mounting	Distribution	Voltage	Options
ECF-S							
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	130mA	Warm White 3000K, 70°CRI	Arm Mount (standard)	Type 2 2-90° Rotated left 90°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V	00 0-10V External dimming (by others) ¹ 01 Dual Circuit Control ¹⁴ 02 Field Adjustable 03 Integral with interface module for S/W-Wise ¹⁵ 04 Integral wireless module ¹⁶ 05 Pole mounted motion sensor ¹⁶ (see accessories) 06 BL Bi-level functionality 07 Dimmer: Automatic Profile Dimming 08 CS50 Safety 50% Dimming, 7 hours ¹⁴ 09 CS50 Medium 50% Dimming, 8 hours ¹⁴ 10 CS50 Economy 50% Dimming, 9 hours ¹⁴ 11 CS50 All Night 30% Dimming ¹⁴ 12 Type 5 13 Type 5 SW Type SW 14 AFR Auto Front Row 15 AFR-90 Auto Front Row Rotated left 90° 16 AFR-270 Auto Front Row Rotated right 270°
48L 48 LEDs (3 modules)	900mA	Cool White 5000K, 70°CRI	CW-G2 Generation 2	The following 4000K, 70°CRI mounting ARs must be ordered separately (see accessories): 5F Slip Filter Mount ¹ (fits to 2 1/4" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ¹	Type 3 3-90° Rotated left 90° 3-270° Rotated right 270° Type 4 4-Type 4 4-90° Rotated left 90° 4-270° Rotated right 270° Type 5 5-Type 5 SW Type SW AFR Auto Front Row AFR-90 Auto Front Row Rotated left 90° AFR-270 Auto Front Row Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V HVU 347-480V (50/60Hz)	IMR3 Integral with #3 lens ¹ IMR7 Field Adjustable IMR7 Integral with interface module for S/W-Wise ¹⁵ IMR7 Integral wireless module ¹⁶ IMR7 Pole mounted motion sensor ¹⁶ (see accessories) IMR7 BL Bi-level functionality IMR7 Dimmer: Automatic Profile Dimming IMR7 CS50 Safety 50% Dimming, 7 hours ¹⁴ IMR7 CS50 Medium 50% Dimming, 8 hours ¹⁴ IMR7 CS50 Economy 50% Dimming, 9 hours ¹⁴ IMR7 CS50 All Night 30% Dimming ¹⁴ IMR7 Type 5 IMR7 Type 5 SW Type SW IMR7 AFR Auto Front Row IMR7 AFR-90 Auto Front Row Rotated left 90° IMR7 AFR-270 Auto Front Row Rotated right 270°
64L 64 LEDs (4 modules)	900mA	Cool White 5000K, 70°CRI	CW-G2 Generation 2	The following 4000K, 70°CRI mounting ARs must be ordered separately (see accessories): 5F Slip Filter Mount ¹ (fits to 2 1/4" O.D. tenon) WS Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ¹	Type 3 3-90° Rotated left 90° 3-270° Rotated right 270° Type 4 4-Type 4 4-90° Rotated left 90° 4-270° Rotated right 270° Type 5 5-Type 5 SW Type SW AFR Auto Front Row AFR-90 Auto Front Row Rotated left 90° AFR-270 Auto Front Row Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V UNV 120-277V HVU 347-480V (50/60Hz)	IMR3 Integral with #3 lens ¹ IMR7 Field Adjustable IMR7 Integral with interface module for S/W-Wise ¹⁵ IMR7 Integral wireless module ¹⁶ IMR7 Pole mounted motion sensor ¹⁶ (see accessories) IMR7 BL Bi-level functionality IMR7 Dimmer: Automatic Profile Dimming IMR7 CS50 Safety 50% Dimming, 7 hours ¹⁴ IMR7 CS50 Medium 50% Dimming, 8 hours ¹⁴ IMR7 CS50 Economy 50% Dimming, 9 hours ¹⁴ IMR7 CS50 All Night 30% Dimming ¹⁴ IMR7 Type 5 IMR7 Type 5 SW Type SW IMR7 AFR Auto Front Row IMR7 AFR-90 Auto Front Row Rotated left 90° IMR7 AFR-270 Auto Front Row Rotated right 270°

1. BL-IMR3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
 2. Mounts to a 4" round pole with adapter. Included for square poles.
 3. Limited to a maximum of 45 degrees aiming above horizontal.
 4. Not available with other dimming control options.
 5. Not available with motion sensor.
 6. Not available with photocell control.

7. Available only in 120 or 277V.
 8. Not available in 347 or 480V.
 9. Must specify input voltage.
 10. Dimming will not be connected to NEMA receptacle if ordering with other control options.
 11. Not available in 480V.
 12. Not available with DCC.
 13. Not available with SF and WS. RPAs provided with black finish standard.

14. HSB not available with Type 5 and SW options.
 15. Available only with SW, LLC, and BL control options.
 16. Available only with SW and BL control options.

ECF-S_EcoForm_area_small 04/19 page 1 of 8

JOB NO: _____ PROJECT: _____ CUSTOMER: _____

35 ft. TYPE II -0 POLE

LENGTH OF POLE	35 FT.
EMBEDMENT SPECIFIED	10 FT.
HEIGHT ABOVE GROUND	25 FT.
WEIGHT	2900 LBS.
WIND VELOCITY (mph)	150 160 170 180
MAXIMUM EPA* (sq. ft.)	

Above embedment shown in SAND. Other embedment depth may be required for other soil condition.

STANDARD PIPE TENON SIZE	
Nominal Diameter (in)	Outside Diameter (in)
2"	2 3/8"
2 1/2"	2 7/8"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"

Please order tenon by nominal diameter

1380 N.E. 48th Street | Pompano Beach, FL 33064
 3898 Selvit Road | Fort Pierce, FL 34961
 (954) 781-4040 | Fax: (954) 781-3539

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

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Drawn By: M.W.
 Drawing #:
 Date: 06/27/19
 LIGHTING LEGEND AND DETAILS

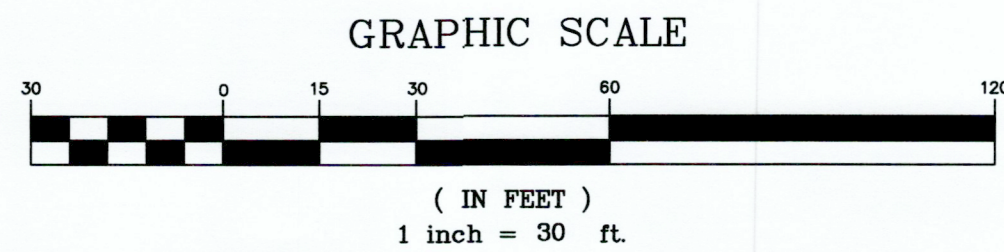
SHEET # EPH3.1

VILLAGE COLLECTION OF PALM SPRINGS
 VILLAGE OF PALM SPRINGS, Florida

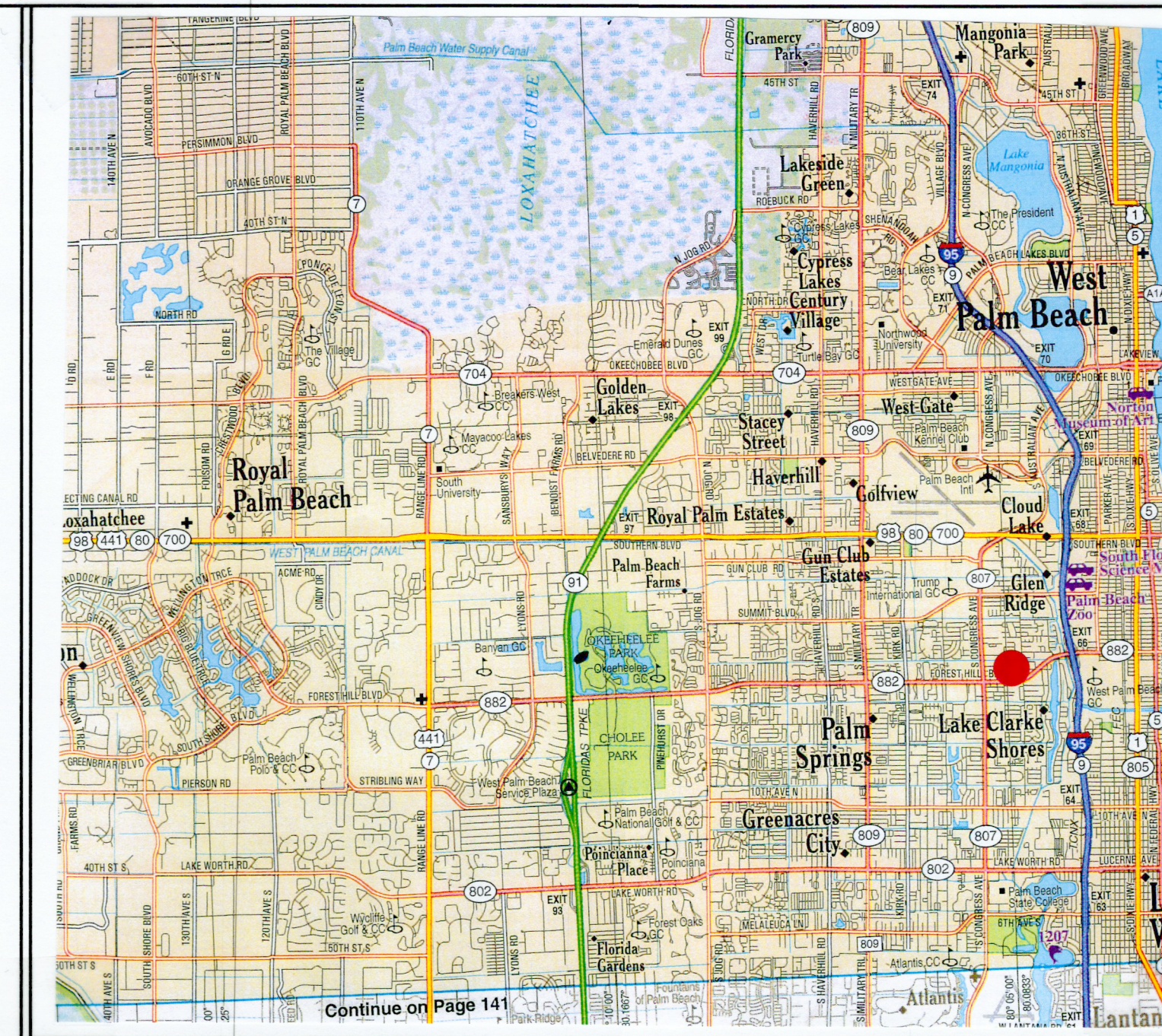
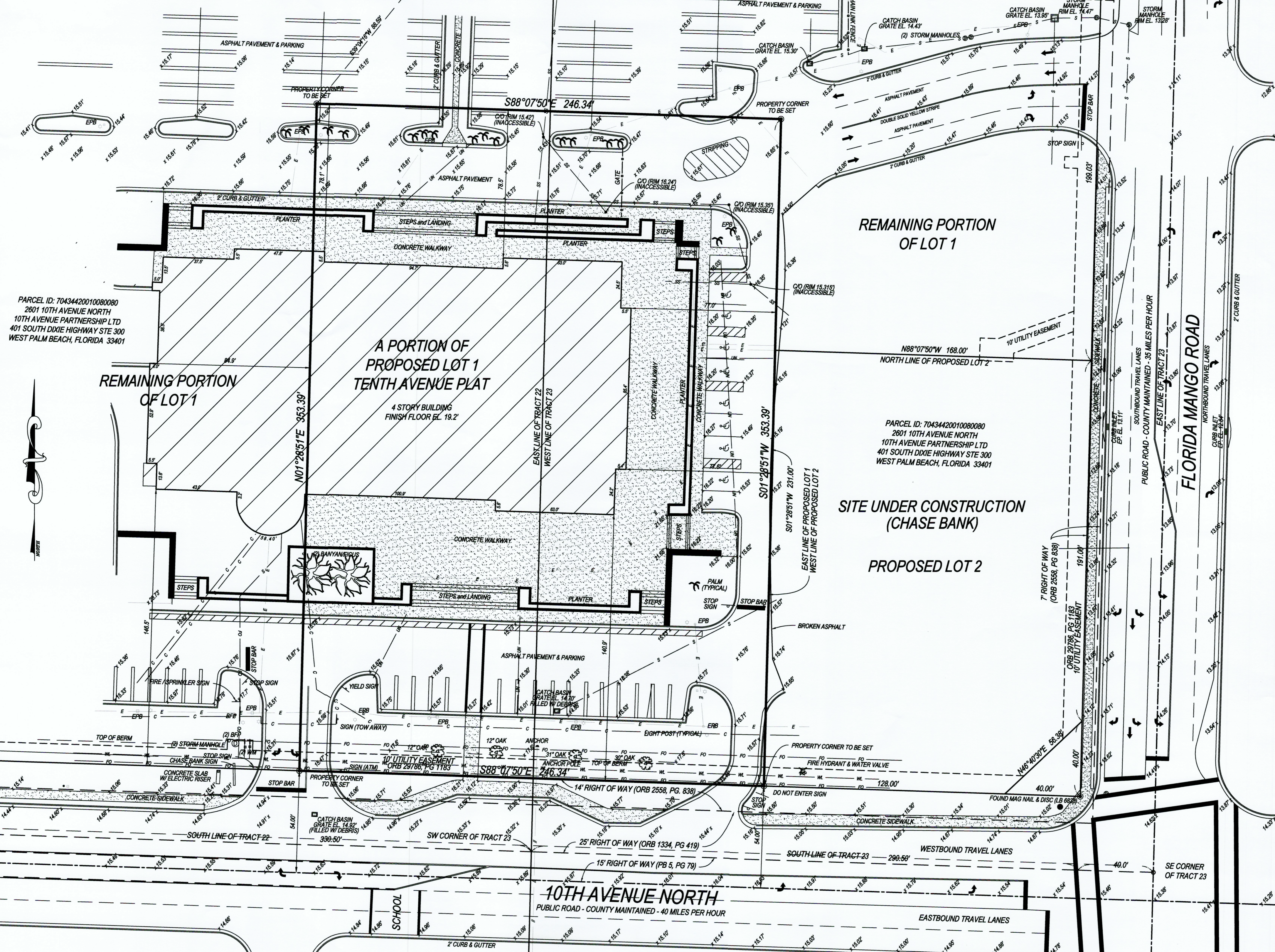
PERMIT SET: 07/26/19

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 DESIGNED BY: HW PM: AN PN: 19072

LEGEND:
NAVD = NORTH AMERICAN VERTICAL DATUM
F.F.E. = FINISH FLOOR ELEVATION
EL. = ELEVATION
x 0.00' = SPOT ELEVATION
EPB = ELECTRIC PULLBOX
C/O = CLEANOUT
ORB = OFFICIAL RECORDS BOOK
PB = PLAT BOOK
PG = PAGE
-E- = UNDERGROUND ELECTRIC
-UN- = UNDERGROUND UNKNOWN
-SS- = UNDERGROUND SANITARY SEWER
-S- = UNDERGROUND STORM
-WL- = UNDERGROUND WATER LINE
-FO- = UNDERGROUND FIBER OPTIC
-C- = UNDERGROUND TELECOMMUNICATIONS



REMAINING PORTION
OF LOT 1



LOCATION MAP: NOT TO SCALE

ALTA/NSPS LAND TITLE SURVEY

10th AVE N. and FLORIDA MANGO ROAD
VILLAGE OF PALM SPRINGS, FLORIDA

LEGAL DESCRIPTION:

BEING A PORTION OF LOT 1 OF PROPOSED PLAT OF TENTH AVENUE NORTH, AS RECORDED IN PLAT BOOK _____, PAGE _____ OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA.
BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEING AT THE SOUTHEAST CORNER OF SAID LOT 1, SAID POINT ALSO BEING ON THE NORTH RIGHT OF WAY LINE OF 10TH AVENUE NORTH; THENCE NORTH 88°07'50" WEST, ALONG SAID LINE, A DISTANCE OF 246.34 FEET; THENCE NORTH 01°28'51" EAST, A DISTANCE OF 353.39 FEET; THENCE SOUTH 88°07'50" EAST, A DISTANCE OF 246.34 FEET; THENCE SOUTH 01°28'51" EAST, A DISTANCE OF 353.39 FEET TO THE POINT OF BEGINNING.
CONTAINING: 87050.16 SQUARE FEET OR 2.00 ACRES MORE OR LESS.

SURVEYOR'S NOTES:

1. NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND UTILITIES ON OR ADJACENT TO THIS SITE. THE APPROXIMATE LOCATION OF ALL UTILITIES SHOWN HEREON WERE TAKEN FROM ASBUILT DRAWINGS AND/OR ON-SITE LOCATION AND SHOULD BE VERIFIED BEFORE CONSTRUCTION.
2. NO ATTEMPT WAS MADE BY THIS FIRM TO LOCATE UNDERGROUND FOOTINGS OF BUILDINGS OR FENCES ON OR ADJACENT TO THIS SITE.
3. LANDS SHOWN HEREON WERE NOT ABSTRACTED FOR EASEMENTS AND/OR RIGHTS OF WAY OF RECORD EXCEPT AS SHOWN ON THE RECORD PLAT IF ANY.
4. THIS PROPERTY WAS SURVEYED IN ACCORDANCE WITH A TITLE COMMITMENT PROVIDED BY OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY, FILE NO. CM181062, COMMITMENT DATE: APRIL 25, 2018 AT 5:00 PM.
5. SCHEDULE B - SECTION II
6. EXCEPTION #4: ORB 1202, PAGE 421 - DOES NOT AFFECT RACETRAC PROPERTY, LIES WITHIN THE RIGHT OF WAY OF 10th AVENUE NORTH.
7. EXCEPTION #5: ORB 3149, PG 314 - AFFECTS PARENT TRACT, NOT RACETRAC SITE.
8. EXCEPTION #6: ORB 3946, PG 1261; ORB 3946, PG 1263 - AFFECTS PARENT TRACT, NOT RACETRAC SITE.
9. EXCEPTION #7: ORB 29756, PG 251; ORB 29786, PG 1183 - AFFECTS PROPERTY, AS SHOWN ON SKETCH.
10. EXCEPTION #8: ORB 27925, PG 1184 - AFFECTS PROPERTY, UNPLOTTABLE.
11. EXCEPTION #9: ORB 27925, PG 1194; ORB 27949, PG 283 - AFFECTS PROPERTY, UNPLOTTABLE.
12. EXCEPTION #10: DEED BOOK 633, PG 185 - AFFECTS PROPERTY, UNPLOTTABLE (RESTRICTS FILLING STATIONS).
13. ALL ELEVATIONS SHOWN ARE BASED ON NORTH AMERICAN VERTICAL DATUM 1988 (NAVD 88).
14. THE BEARING BASE OF THIS SURVEY IS ALONG THE NORTH RIGHT OF WAY LINE OF 10TH AVENUE NORTH, S88°07'50"W, BASED ON FLORIDA STATE PLANE COORDINATE SYSTEM EAST ZONE, 8390 ADJUSTMENT.
15. LEGAL DESCRIPTION FURNISHED BY CLIENT.
16. ALL BEARINGS AND DISTANCES SHOWN ARE PLAT AND MEASURED UNLESS OTHERWISE NOTED.
17. ADDITIONS OR DELETIONS TO SURVEY MAPS OR REPORTS BY OTHER THAN THE SIGNING PARTY OR PARTIES IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY OR PARTIES.
18. THIS SITE LIES IN FLOOD ZONE "X" AS SCALED AND INTERPOLATED ON FEMA MAP NO. 120192-0589-F, DATED: OCTOBER 5, 2017.
19. THERE WAS NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.
20. SITE PARCEL ID: 70434420010080080

SURVEYOR'S CERTIFICATION:

TO: RACETRAC PETROLEUM, INC. and OLD REPUBLIC NATIONAL TITLE INSURANCE COMPANY.
THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2016 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 8, 9, 11, 13 AND 16 OF TABLE 'A' THEREOF. THE FIELD WORK WAS PERFORMED 6-6-2016.

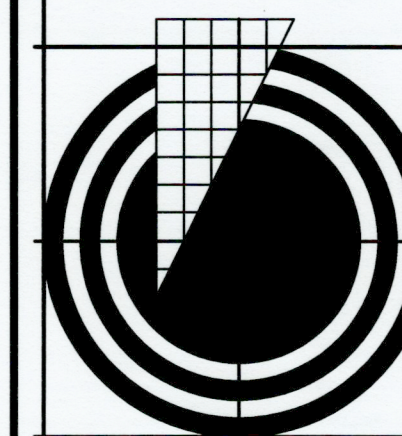
SURVEY MAP AND REPORT OR THE COPIES THEREOF ARE NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

CRAIG D. WATSON
PROFESSIONAL SURVEYOR & MAPPER
NO. 3647 STATE OF FLORIDA

DATE	REVISIONS	CHK	CDW
8/2/19	RT COMMENTS		

PREPARED FOR:
RACETRAC PETROLEUM
200 GALLERIA PARKWAY SE, STE. 900
ATLANTA, GEORGIA 30339

WATSON | KILLANE
SURVEYING AND MAPPING, INC.
2240 NE DIXIE HIGHWAY - JENSEN BEACH, FLORIDA 34957
PHONE 772-334-0868 - EMAIL: WATSONKILLANE@GMAIL.COM
LICENSED BUSINESS NO. 8241



JOB NUMBER: 18-329
FIELD DATE: 5-24-18
CHECKED BY: CDW
DRAWN BY: DPK
SCALE: 1"= 20'
SHEET 1 OF 1

[illegible]

RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SOUTHEAST
SUITE 900
ATLANTA, GEORGIA 30339
(770) 431-7600

**10TH AVENUE N
AT FLORIDA MANGO
PALM SPRINGS, FL**

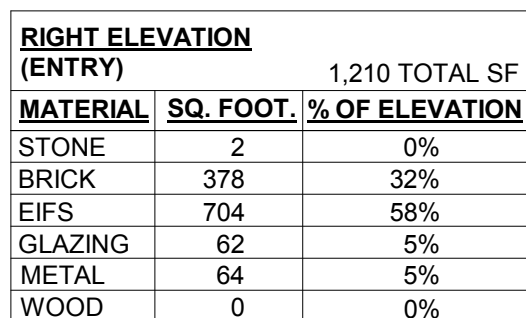
PROTOTYPE SERIES 5.5K 2.0
2018 LH SV

STANDARD PLAN BULLETINS (SPB) MODIFY THE PROTOTYPE SERIES SET NOTED ABOVE. THE LISTED SPB REPRESENTS THE LATEST MODIFICATION INCORPORATED TO THIS PROTOTYPE SERIES SET AT ORIGINAL RELEASE. THE ISSUE/ REVISION RECORD COLUMN ABOVE LISTS ANY REVISIONS OR SPB INCORPORATED THIS SET AFTER THE ORIGINAL RELEASE. CONTACT RACETRAC ENGINEERING AND CONSTRUCTION FOR ANY SUBSEQUENT BULLETINS NOT INCORPORATED HEREIN.

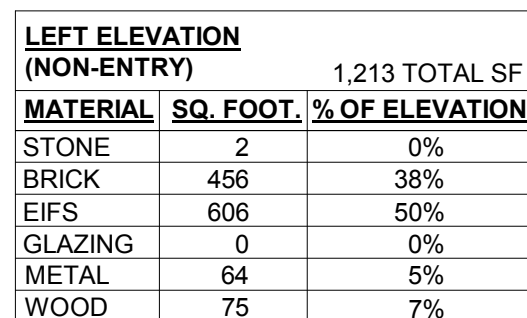
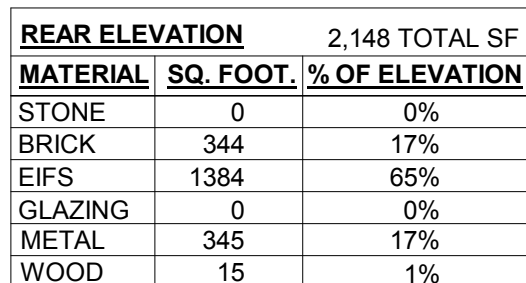
SHEET TITLE

**EXTERIOR
ELEVATIONS**

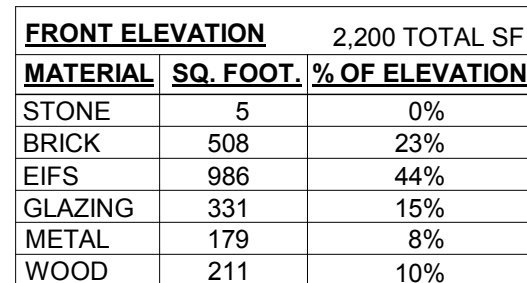
A300



4 $\frac{3}{16}'' = 1'-0''$


$$3 \overline{) 3/16'' = 1'-0''}$$


2) $\frac{3}{16}'' = 1'-0''$



1 $\frac{3}{16}'' = 1'-0''$

ELEVATION KEYNOTES

1	WALL MOUNTED SECURITY CAMERA
2	3" SQUARE DOWNSPOUT. REFER TO CIVIL DRAWINGS FOR CONNECTIONS
3	MECHANICAL EQUIPMENT BEYOND
4	REFER TO DETAILS ON SHEET A431 FOR CAST STONE SHAPE
5	HOSE BIB; REFER TO PLUMBING DRAWINGS
6	PATIO FAN; REFER TO SPECIFICATIONS
7	ILLUMINATED SIGN PANEL BY OWNER MOUNTED ON RACEWAY.
8	ACM PANEL REVEAL LINE. REFER TO REFLECTED CEILING PLAN FOR DIMENSIONS
9	INTERCOM AND SPEAKER
10	EMERGENCY FUEL SHUT OFF SWITCH. MOUNT TOP OF SIGN AT 48" A.F.F.
11	LOCATION OF ELECTRICAL SERVICE C/T AND METER
12	GENERATOR TAP BOX - SEE ELECTRICAL FOR LOCATION
13	SECURITY CAMERA MOUNTED TO FASCIA
14	OVERFLOW SPILL SCUPPER
15	PACKAGE PASSER. REFER TO EQUIPMENT PLAN
16	PROVIDE METAL GUARD GATE AT LADDER TO 8'-0" A.F.F. WITH LOCKING HASP
17	4'-0" WIDE X 1'-7" HIGH SCUPPER. REFER TO DETAILS 9 & 10 ON SHEET A201
18	ASSA ABLOY ROCK WOOD 622 190 DEGREE DOOR VIEWER

EXTERIOR MATERIAL SCHEDULE			
AWNING		ALUMINUM AWNING	SELECTED BY RACETRAC
BRICK			
BR-1	BORAL CAST STONE	LAREDO BRICK	MORTAR COLOR "LIGHT BUFF"
CS-1	CONTINENTAL CAST STONE OR APPROVED OTHER	MATCH BORAL TUSCAN LINTEL CHAMPAGNE	COLOR 1102 NATURAL STONE; MORTAR COLOR "LIGHT BUFF". SEAL WITH (SL-5) SEALANT.
CEMENT BOARD			
HP-1	JAMES HARDIE	ARTISAN V-GROOVE SIDING	PATENT SHERWIN WILLIAMS SEALS-KIN #7675
EIFS			
EF-1	STO	STO THERMI CL	"FINE FINISH" APPLICATION; COLOR TO MATCH SW #6141 "SOFTER TAN"
GLAZING			
GL-5		1-5/16" IMPACT RATED INSULATED GLAZING	CLIMATE ZONES 1 OR 2: IGU 0.28 U-FACTOR, SHGC PP=0.25±0.27 (1/4" CLEAR TEMPERED 70XL LOW-E #2 + 1/2" AIR + 1/4" CLEAR + 0.90 SG + 1/4" CLEAR OR APPROVED ALTERNATE.
GL-7		1-5/16" IMPACT RATED ACID ETCHED INSULATED GLAZING	CLIMATE ZONES 1 OR 2: IGU 0.28 U-FACTOR, SHGC PP=0.25±0.27 (1/4" CLEAR TEMPERED 70XL LOW-E #2 + 1/2" AIR + 1/4" CLEAR SATIN ETCHED #3 + 0.1 SG + 1/4" CLEAR) OR APPROVED ALTERNATE
METAL			
M-1		PREFINISHED 4" 2-PIECE COMPRESSION METAL COVER	METAL TO MATCH STOREFRONT COLOR DARK BRONZE
M-2		COLOR DARK BRONZE.	METAL TO MATCH STOREFRONT COLOR DARK BRONZE
M-3	VISTAWALL (OR APPROVED ALTERNATE)	FG-5000 IMPACT RESISTANT STOREFRONT SYSTEM (OR APPROVED ALTERNATE)	PREFINISHED DARK BRONZE ANODIZED ALUMINUM AA-M12C22444
M-5	ALCOA VERASETEX	REYNOLDBOND PE WPA TONGUE AND	COLORWELD 500 "CLASSIC BRONZE" PAINT INTERACTIVE CREAM

PAINT		GROOVE	
EP-1	SHERWIN WILLIAMS	EXTERIOR PAINT TO SW #7020 "BLACK FOX"	
ROOFING			
DURO	DUROLAST	50 MIL MEMBRANE ROOFING SYSTEM	WHITE; MECHANICALLY FASTENED
TREX			
TX-1	SELECT COMPOSITE	1/2" THICKNESS	WOODLAND BROWN
WINDOW FILM			
WF-1		WINDOW FILM; 3M PRESTIGE 70 SOLAR FILM	
WF-2		WINDOW FILM; OPAQUE	



- | SHEET KEYNOTES | |
|----------------|---|
| 1 | OUTLETS LOCATED ABOVE CEILING FOR FUTURE WIRELESS ACCESS POINT. |
| 2 | MOUNT SECURITY CAMERA AT 12'-0". |
| 3 | PROVIDE MANUFACTURER RECOMMENDED CABLING BACK TO TELECOMMUNICATIONS CLOSET. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. |
| 4 | PROVIDE (2) CAT5 LINES FROM ATM TO THE TELEPHONE BOARD/FRAME RAYLE ROUTER. INSTALL RJ11 CONNECTOR ON LINE TO TELEPHONE BOARD/RJ45 CONNECTOR TO ROUTER. |
| 5 | 5MP-OUTDOOR-UD-5340 |
| 7 | 4MP-OUTDOOR-FIXED-EPD4700 |
| 8 | 1MP-INDOOR VARIFOCA-FD-3400 |
| 9 | 4MP-INDOOR-FIXED-EPD4700 |
| 10 | 2MP-INDOOR VRIFOCAL-FD-2400. |
| 11 | 2MP-OUTDOOR BULLET-EBL2100 |
| 12 | MOUNT CAMERA ON FALCE OF SOFFIT ABOVE FOOD BAR. |
| 13 | MOUNT SECURITY CAMERA ON LIGHT POLE AT 8'-0". CAMERA TO FACE AND MONITOR THE STORE ENTRANCE. |
| 14 | L.V.E.C. SHALL PROVIDE CAT5 CABLING FOR FUTURE ADDITION OF CEILING MOUNTED CAMERA. CAT5 CABLE MUST RUN FROM THE ITVM BACK TO THE TELECOMMUNICATIONS CLOSET. |
| 15 | DECORATIVE LIGHT POLE. |

PRELIMINARY DRAWING

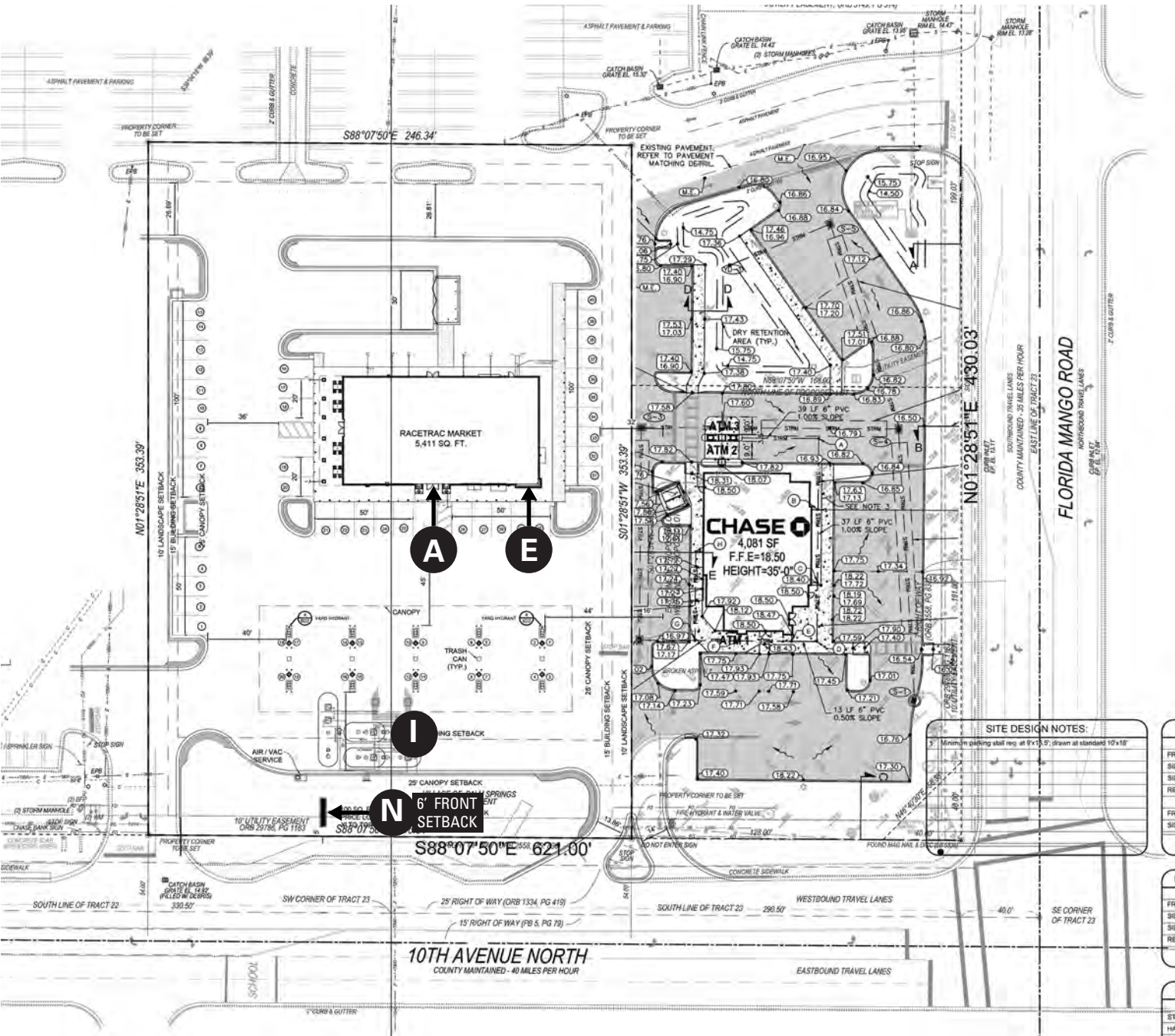


R55K1358 - Florida Mango 2.0
2601 10TH AVE N Palm Springs
Palm Springs, Florida 33461

	COLOR	SUPPLIER(S)	PART NUMBER(S)
C1	RED	AKZO NOBEL MATTHEWS	Akzo SIGN91780 Red* MP81489 R137186 LVS Semi-Gloss V1.1 Racetrac Red
C2	WHITE	AKZO NOBEL MATTHEWS	Akzo Sign 10553 White* MP83729 R143456 LVS Semi Gloss V1.1 White
C3	DARK BRONZE	AKZO NOBEL MATTHEWS	Dark Bronze 313E MP21286 R170760 Dark Bronze 313E
C5	BLUE	AKZO NOBEL MATTHEWS 3M	Akzo Code Sign3243 Blue* MP02136 R143265 LVS Semi-Gloss V1.1 Sultan Blue 7725-17 Vivid Blue Opaque Vinyl
C6	PRICER BLACK	3M	3630-22 Black Translucent Vinyl
C7	PRICER GREEN	3M	3630-156 Vivid Green Translucent Vinyl
C8	PRICER RED	3M	3630-143 Poppy Red Translucent Vinyl
C9	PRICER ORANGE	ORACAL	8500-323 Coral Red Translucent Vinyl
C10	AWNING GREEN	3M	Kelly Green 46, 3M Opaque Vinyl
C11	AWNING RED #1	AKZO NOBEL MATTHEWS	PMS 1807C Color Match (see provided sample) PMS 1807C Color Match (see provided sample)
C12	AWNING RED #2	3M	7725-58 Burgundy Opaque Vinyl
C13	AWNING GREEN #1	AKZO NOBEL MATTHEWS	PMS 1348C Color Match (see provided sample) PMS 348C Color Match (see provided sample)
C14	AWNING GREEN #2	3M	7725-56 Dark Green Opaque Vinyl
C15	AWNING LT. GREEN #1	AKZO NOBEL MATTHEWS	SW 6444 Color Match (see provided sample) SW 6444 Color Match (see provided sample)
C16	AWNING LT. GREEN #2	3M	3635-91 Smoke Grey
C17	AWNING BRONZE #2	3M	180C-22 Matte Black
C18	ADDRESS WHITE	3M	7725-10 White Opaque Vinyl

	RACETRAC PRINT-Provided by Miratec Systems
	SWIRL WORLD PRINT-Provided by Miratec Systems

REVISIONS
Aug. 21, 2018
Dec. 21, 2018



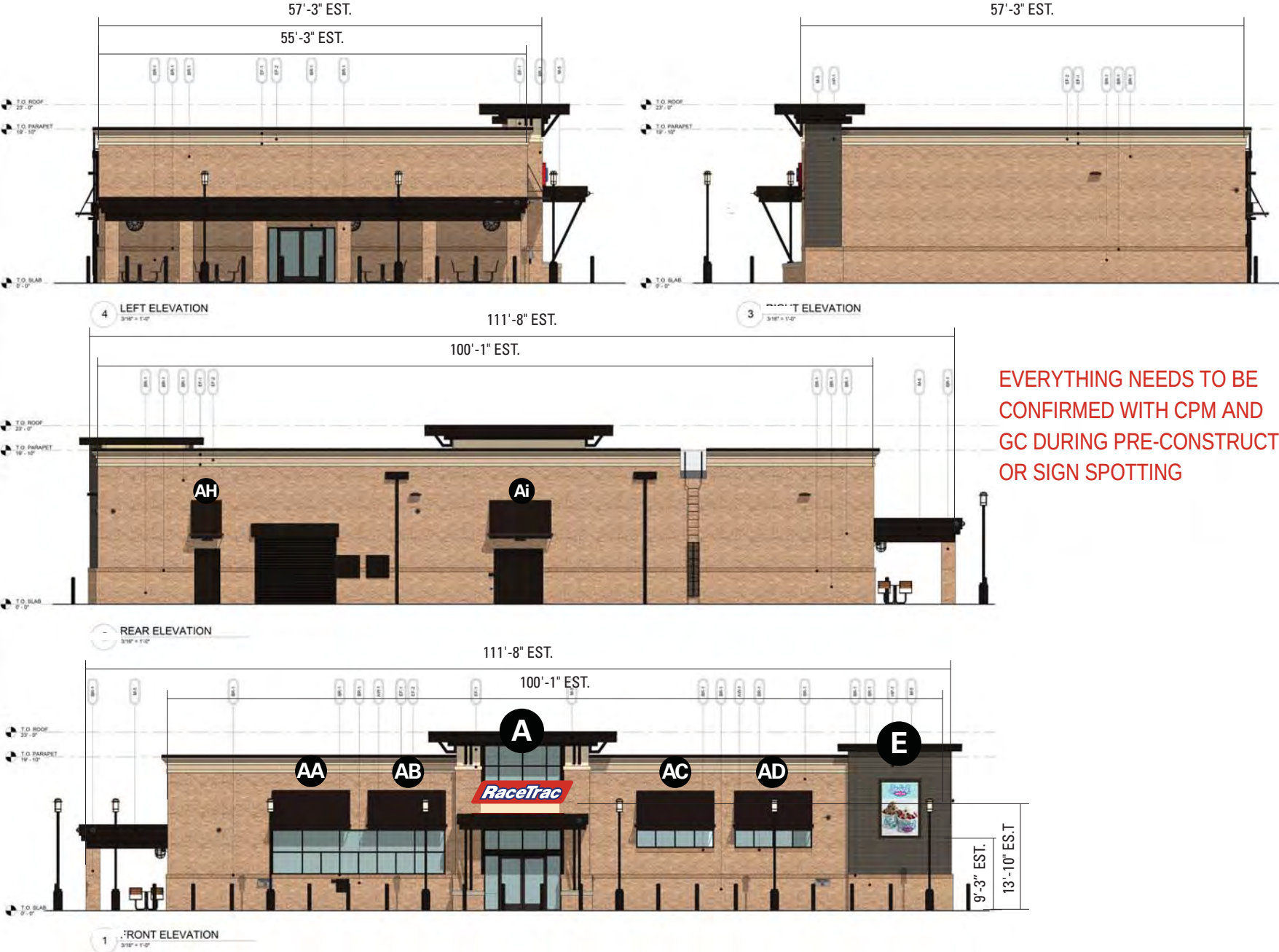
Sign Legend	
A	Tower Sign
E	Swirld World Cabinet
I	Canopy Cloud Sign
N	Price Sign

2601 10TH AVE N Palm Springs
Palm Sprin 203 Florida 33461



GENERAL NOTE: ALL WORK SHALL BE IN COMPLIANCE WITH RECOGNIZED INDUSTRY STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE STATE AND LOCAL CODES. NO SUBSTITUTIONS ALLOWED.

5.5K 2.0

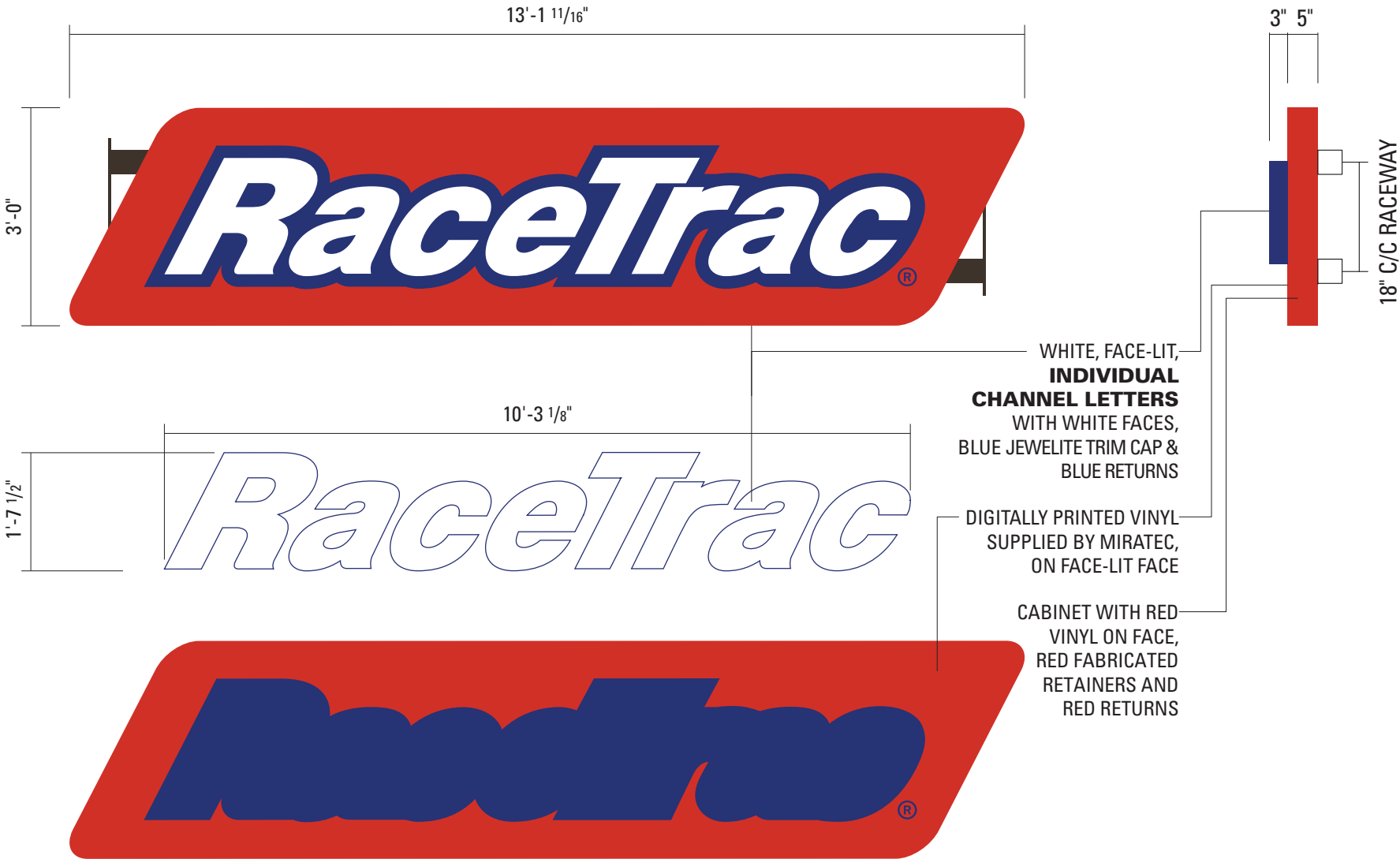


EVERYTHING NEEDS TO BE
CONFIRMED WITH CPM AND
GC DURING PRE-CONSTRUCTION
OR SIGN SPOTTING



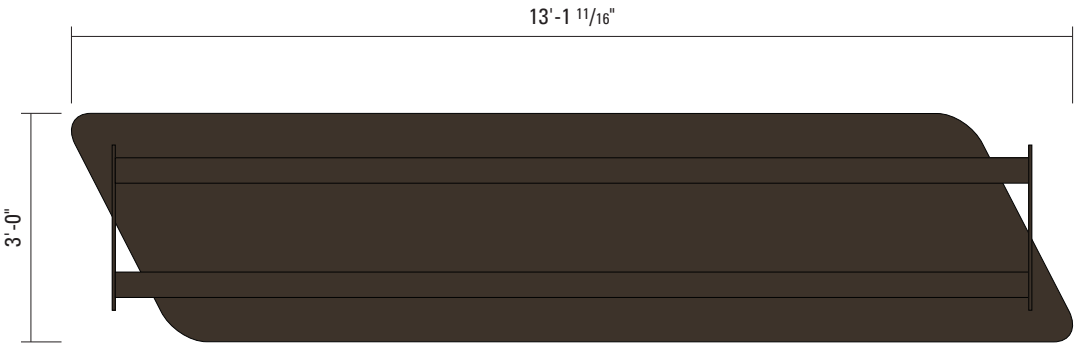
SINGLE FACED
QUANTITY 1
40 SqFt Total

SIGN MUST MOUNT TO WALL BETWEEN STONE COLUMNS VIA RACEWAY.
VENDOR TO CONFIRM EXACT MOUNTING AND OPENING WIDTH.

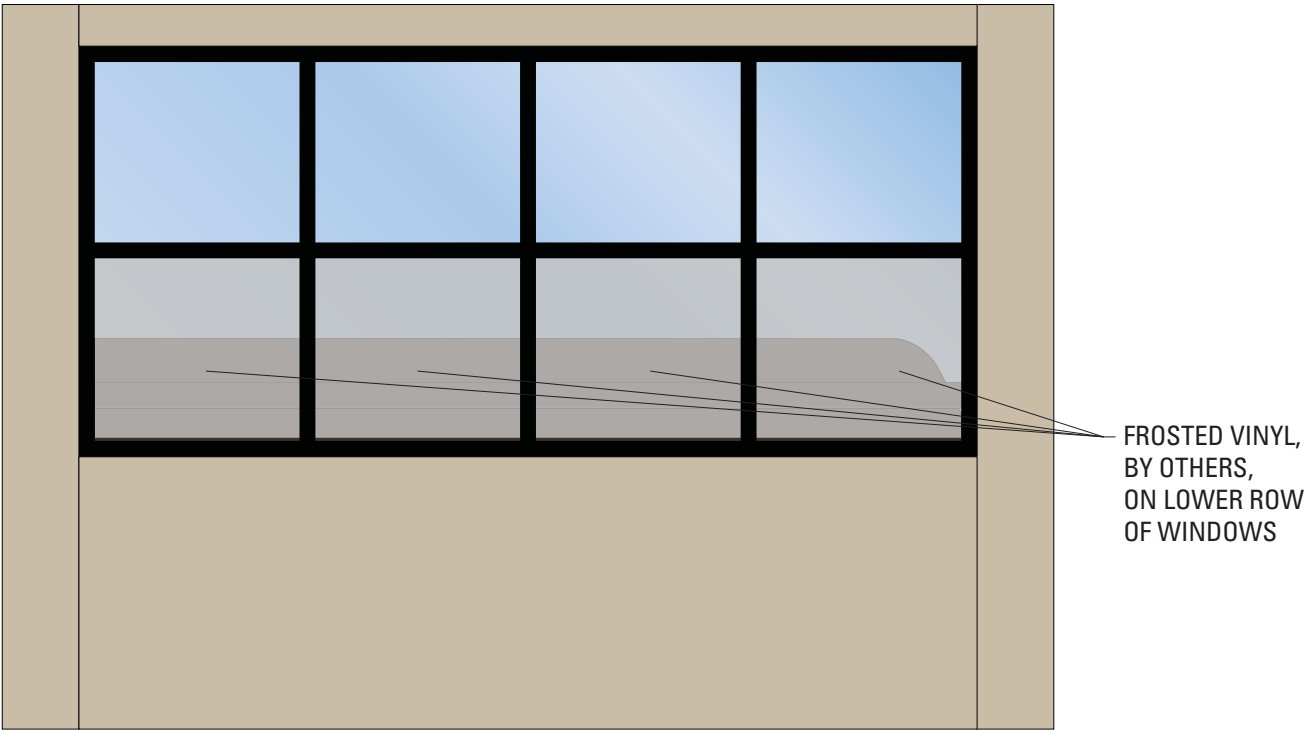


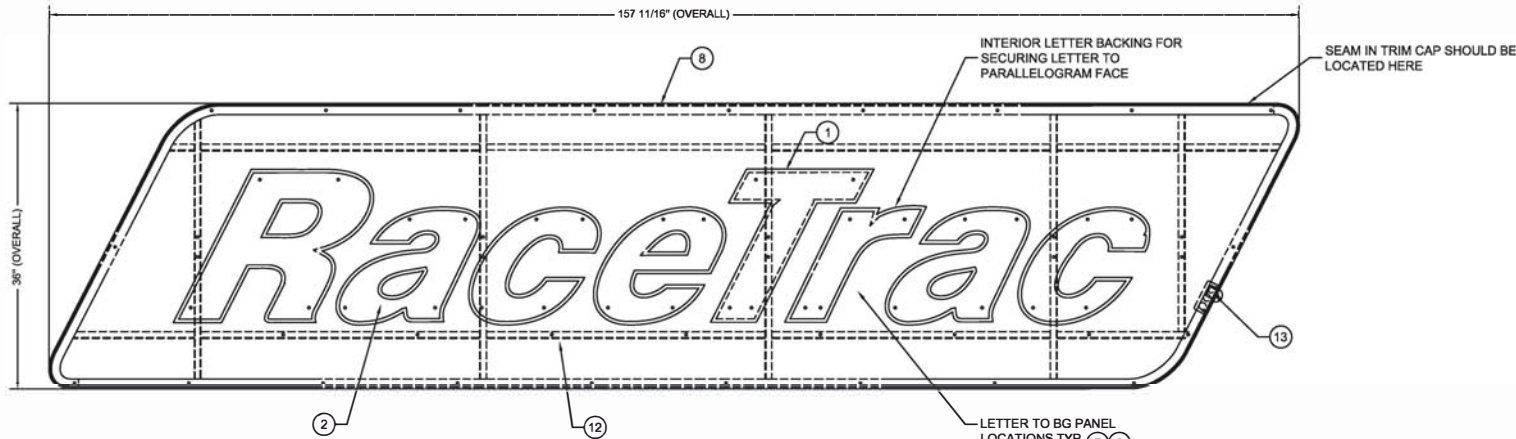
SINGLE FACED
QUANTITY 1
40 SqFt Total

SIGN MUST MOUNT TO WALL BETWEEN STONE COLUMNS VIA RACEWAY.
VENDOR TO CONFIRM EXACT MOUNTING AND OPENING WIDTH.



VIEW OF REAR OF A1 FROM INTERIOR OF BUILDING
* View Represents what would be seen from ground





FRONT ELEVATION @ 40 SQFT PARALLELOGRAM - FOR EFIS/BRICK

(SEE COLOR SCHEDULE ON SHT 2)

CONSTRUCTION NOTES:

- FACE TREATMENT:**
SEE COLOR SCHEDULE.
- RETURN TO FACE ATTACHMENT:**
WELDED OR ADHERED WITH STRUCTURAL ADHESIVE.
- LED SPECIFICATIONS:**
SLOAN PRISM (701269-6WSJ1-MB) LED'S FOR LETTERS AND PARALLELOGRAM
- LETTER INTERIOR:**
PAINT INTERIOR STARBRITE WHITE OR EQUIV.
CAULK INSIDE PERIMETER OF LETTERS TO PREVENT LIGHT LEAKS.
- PAIN:**
ALL EXTERIOR PAINTS TO HAVE SEMI-GLOSS FINISH (SEE COLOR SCHEDULE)
ALL PAINTS TO HAVE A 2.8 VOC.
OR LESS AS REQUIRED BY CODE.
- FRAMING:**
WELD ALL AROUND ALL ANGLE FRAME JOINTS UNLESS NOTED OTHERWISE.
- ALL DISSIMILAR MATERIALS THAT CONTACT EACH OTHER MUST BE PRIMED, PAINT, OR COATED TO PREVENT CORROSION

INSTALLATION NOTES:

- MANUFACTURER TO PROVIDE FULL SIZE MOUNTING PATTERN.
- INSTALLER TO DRILL MOUNTING HOLES, INSTALL CONDUIT ON BACK OF LETTERS TO PASS THRU WALL.
- JUNCTION BOXES TO BE INSTALLED ON THE INSIDE OF WALL BEHIND LETTERS & BACKGROUND PANEL.
- INSTALLER TO RUN CONDUIT AND CONNECTING WIRE TO EACH JUNCTION BOX.
- INSTALLATION OF JUNCTION BOXES AND ELECTRICAL CONNECTIONS TO BE DONE BY QUALIFIED INDIVIDUAL THAT MEETS LOCAL AND NATIONAL CODES.
- MANUFACTURER TO SUPPLY TRANSFORMER BOXES WITH LOUVERED VENTS AND SCREENS, TO HELP IN THE DISSIPATION OF HEAT.
- INSTALLER TO SUPPLY MOUNTING ANGLE.
- WHEN USING HILTI ANCHORING SYSTEM, IT IS TO BE USED IN STRICT ACCORDANCE WITH MANUFACTURER'S GUIDELINES.
- INSTALLER TO SUPPLY FASTENERS TO MOUNT BACKGROUND PANEL TO BUILDING WALL.

GENERAL NOTES:

- DO NOT USE GRAPHICS SHOWN ON THIS DRAWING FOR PRODUCTION REFER TO PRODUCTION ELECTRONIC FILES.
- MANUFACTURER TO REFERENCE COLOR ART WORK TO ENSURE THAT ALL COLORS ARE CORRECT, IMMEDIATELY CONTACT RACETRAC IF COLOR ART WORK AND PRODUCT DRAWING HAVE ANY DISCREPANCIES OR HAVE NOT BEEN PROVIDED.
- INSTALLER SHALL VERIFY ALL SITE CONDITIONS AND DIMENSIONS.
- EXISTING WALL CONSTRUCTION TYPE MUST BE DETERMINED AT THE ACTUAL PROPOSED LOCATION OF THE LETTERS BY THE INSTALLER.
- INSTALLER SHALL VERIFY THAT FASTENERS CHOSEN ARE SUITABLE WITH WALL CONDITION TO WITHSTAND THE STATED PULLOUT FORCE.
- THE BUILDING ENGINEER SHALL INCLUDE THE LOADS APPLIED BY THE SIGN STRUCTURE IN THE DESIGN OF THE WALL SYSTEM.
- INSTALLATION SHALL CONFORM TO NATIONAL ELECTRICAL CODE AND OTHER APPLICABLE CODES.
- ALL SEAMS IN TRIM CAPS SHOULD BE LOCATED ON TOP OF LETTER AND PARALLELOGRAM

ALUMINUM MATERIAL NOTE:

- SPECIFICATION FOR ALL NON-STRUCTURAL MEMBERS TO BE ALUMINUM 3003 ALLOY.
- SPECIFICATION FOR ALL STRUCTURAL MEMBERS TO BE ALUMINUM 5052 ALLOY.

FIND #	DESCRIPTION	TOTAL QUANTITY
1	.063" THK. X 3" LG. ALUM. LETTER RETURN (SEE COLOR SCHEDULE)	A/R
2	.170" THK. WHITE POLYCARBONATE FACE (SEE COLOR SCHEDULE)	A/R
3	.125" THK. AL. BACKING - FOR PARALLELOGRAM (SEE COLOR SCHEDULE)	A/R
4	.063" THK. FABRICATED ALUMINUM TRIM CAP	A/R
5	1 1/4" X 1 1/4" X 1/8" ALUMINUM ANGLE CLIP	A/R
6	.090" THK. ALUM. LETTER BACK	A/R
7	1/4" MS SCREW WITH WASHER FOR LETTER MOUNTING	40
8	.063" THK. X 5" LG. AL. PARALLELOGRAM RETRN (SEE COLOR SCHEDULE)	A/R
9	1" LONG ALUMINUM PIPESPACER	46
10	SLOAN PRISM WHITE LED (701269-6WSJ1-MB)	120
11	ELECTRICAL MALE AND FEMALE DISCONNECT CON'S (1 SET PER LTR)	8
12	1 1/2" X 1 1/2" X 3/16" STEEL ARCHITECTURAL ANGLE FRAME (FOR BACKGROUND PANEL LETTER MOUNTING)	A/R
13	1 1/4" X 1 1/4" X 3/16" AL. ANGLE MOUNTING FRAME (FOR BG PANEL)	A/R
14	1/4" RIVNUTS	A/R
15	1 1/2" X 1 1/2" X 1/8" STEEL TUBE (FOR VRT SUPPORTS IN BG PANEL)	A/R
16	1" X 1" X 1/16" THK. ALUMINUM LIGHT SHIELD	5
17	#10 ALUMINUM FLAT PAN HEAD THREADING SCREW @ 9" O.C.	103
18		
19	SLOAN 12V60W POWER SUPPLY W/ FASTENERS	3
20	3/8" DIA. LIQUID TIGHT CONDUIT CONNECTOR	A/R
21	3/8" DIA. LIQUID TIGHT FLEXIBLE CONDUIT	A/R
22	20 AMP TOGGLE DISCONNECT SWITCH	1
23	3M U3850 CLEAR FILM - PRINTED MIRATEC VINYL RT PARALLELOGRAM	1
24	J-BOX WITH COVER FOR PRIMARY CONNECTION	1
25	3" X 3" X 1/4" STEEL GUSSETS	8
26		4
27		8
28		12
29	1/2" MOUNTING HARDWARE	8
30		A/R
31		6
32		A/R
33	1" JEWELITE TRIM CAP (FOR LETTERS) (SEE COLOR SCHEDULE)	A/R
34	RED PAINT "C1" - AKZO SIGN 91780, SEMI-GLOSS (SEE COLOR SCHEDULE)	A/R
35	RED PAINT "C1" - AKZO SIGN 91780, SEMI-GLOSS, 2 OUNCE PAINT KIT	1
36	BLUE PAINT "C5" - AKZO SIGN 3243, SEMI-GLOSS (SEE COLOR SCHEDULE)	A/R
37	BLUE PAINT "C5" - AKZO SIGN 3243, SEMI-GLOSS, 2 OUNCE PAINT KIT	1
38		
39	#8 COUNTERSUNK THREAD ROLLING SCREW	A/R
40	Bronze PAINT "C3" - AKZO SIGN 31356, SEMI (SEE COLOR SCHEDULE)	A/R
41	Bronze PAINT "C3" - AKZO SIGN 31356, SEMI-GLOSS 2 OZ PAINT KIT	1
42	NEOPRENE GASKET	A/R
43	3M U3850 CLEAR FILM - PRINTED MIRATEC VINYL RT PARALLELOGRAM DARK RED, LIGHT RED, AND BLUE	A/R

1. **ELECTRICAL:**
MANUFACTURER TO PROVIDE 10'-0" ELECTRICAL PIGTAIL TO EACH INDIVIDUAL LETTER & LOGO.

NOTE: (22)
20 AMP DISCONNECT SWITCH SHOULD BE LOCATED ON THE PRIMARY SIDE OF ALL POWER SUPPLIES. SWITCH MUST BE LOCATED IN SIGHT OF LETTERS OR HAVE CAPABILITY OF BEING LOCKED IN OPEN CIRCUIT POSITION TO MEET U.L. REQUIREMENTS.

CLIENT:



DESCRIPTION:

MAIN I.D. TOWER SIGN
40 SQ.FT. W/ DIM. LTRS
BETWEEN POLE MNT

NOTE:

All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.

SHT.

1

OF

4

BY:

JPR

DATE:

9/25/17

Project Number:

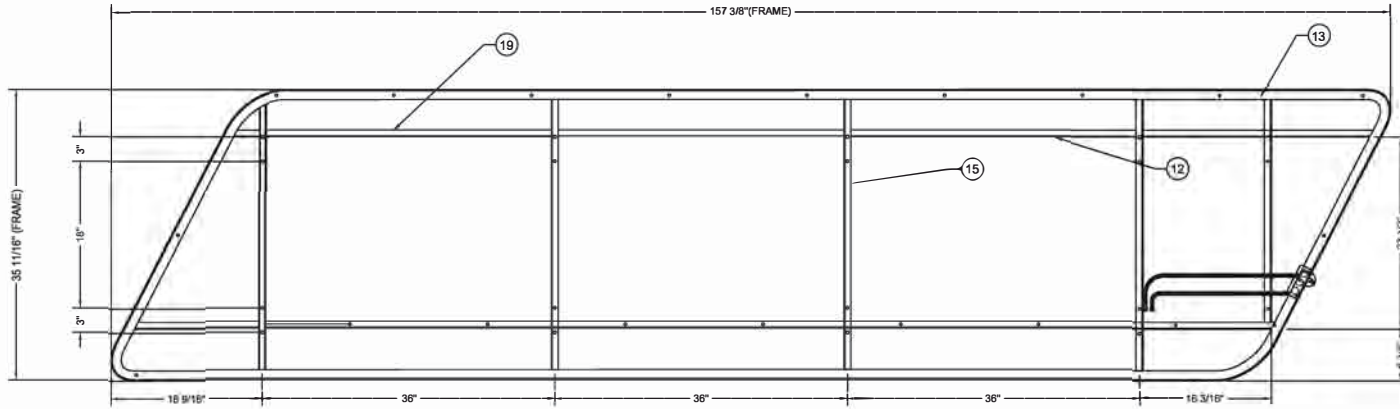
RaceTrac

Drawing Number:

B360128



7675 Oak Ridge Highway
Knoxville, Tennessee 37931
Voice: 865.342.8200
Fax: 865.539.6311



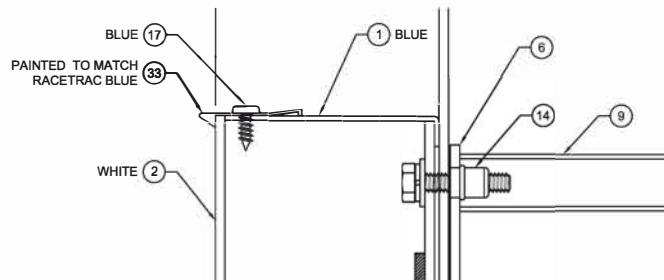
FRONT ELEVATION @ BACKGROUND PANEL
(FACE & LETTERS REMOVED FOR CLARITY)

COLOR SCHEDULE	
"LETTERS" COLOR SCHEDULE:	
FACE MATERIAL:	WHITE (170\"/>

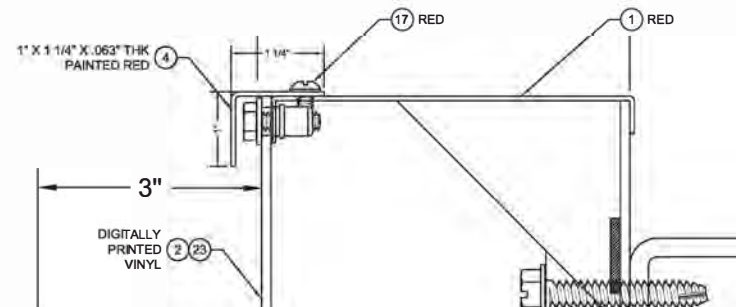
NOTE:
WHERE DISSIMILAR METALS ARE IN CONTACT THEY MUST BE COATED OR A BARRIER MUST BE PLACED BETWEEN THEM TO PREVENT GALVANIC REACTION.

- (23) VINYL NOTES:**
1. DIGITALLY PRINTED VINYL BY MIRATEC SYSTEMS
 - 1.1. PURECOLOR TECHNOLOGY™ IS THE ONLY APPROVED CONSTRUCTION. NO SUBSTITUTIONS ARE ALLOWED. COLOR SPECIFICATIONS, MATERIAL SPECIFICATION, AND WARRANTIES HAVE ALREADY BEEN DETERMINED AND COMMUNICATED TO OUR APPROVED WHOLESALE GRAPHICS MANUFACTURER, MIRATEC SYSTEMS
 - 1.2.

PRIMARY MOUNTING NOTE:
PROTOTYPICAL MOUNTING LAYOUT SHOWN – ATTACHMENT QUANTITY AND FASTENER SIZE CAN BE DETERMINED BY SIGN VENDOR AND IS DEPENDENT ON SIGN VENDOR VERIFYING THE SIZE AND NUMBER WITH A LICENSED CIVIL ENGINEER USING SPECIFIC SITE AND WIND LOAD INFORMATION

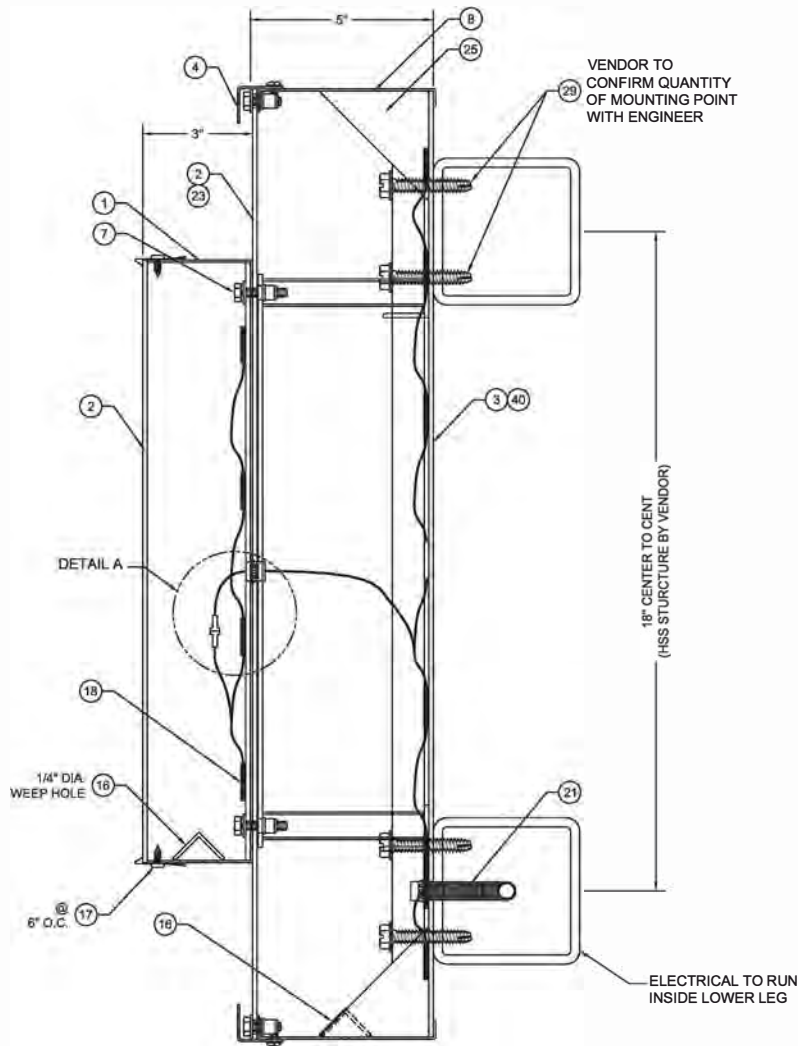


LETTER COLOR DETAIL

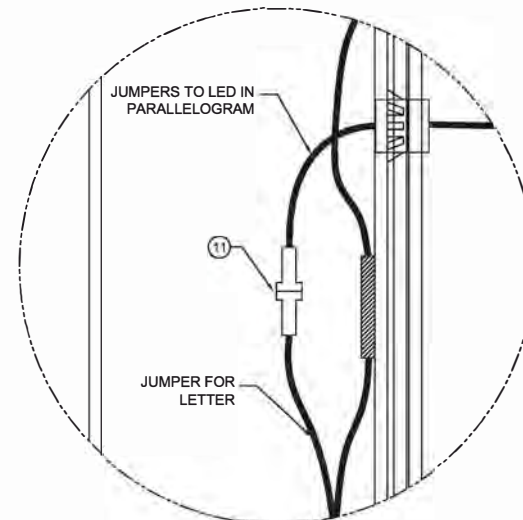


PARALLELOGRAM COLOR DETAIL

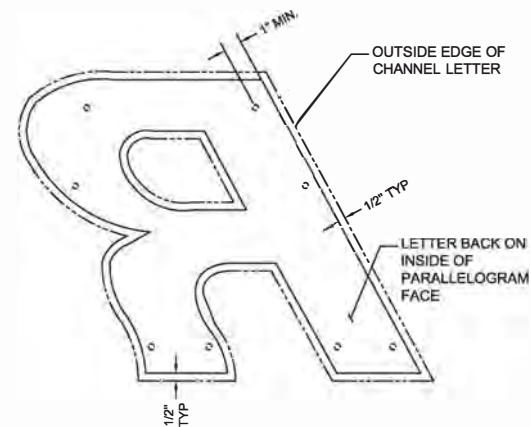
CLIENT:		DESCRIPTION:	MAIN I.D. OR CANOPY I.D. 40 SQ.FT. W/ DIM. LTRS BETWEEN POLE MNT	NOTE: All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	SHT.	BY:	Project Number:		7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8200 Fax: 865.539.6311
					2	JPR	RaceTrac		
					OF	DATE:	Drawing Number:		
					4	9/25/17	B360128		



TYPICAL SECTION FOR BETWEEN POLE MOUNT
(NTS)



DETAIL A



INTERIOR LETTER BACKING DETAIL

CLIENT:



DESCRIPTION:

MAIN I.D. OR CANOPY I.D.
40 SQ.FT. W/ DIM. LTRS
BETWEEN POLE MNT

NOTE:
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SHT.

3

BY:

JPR

Project Number:

RaceTrac

OF

4

DATE:

9/25/17

Drawing Number:

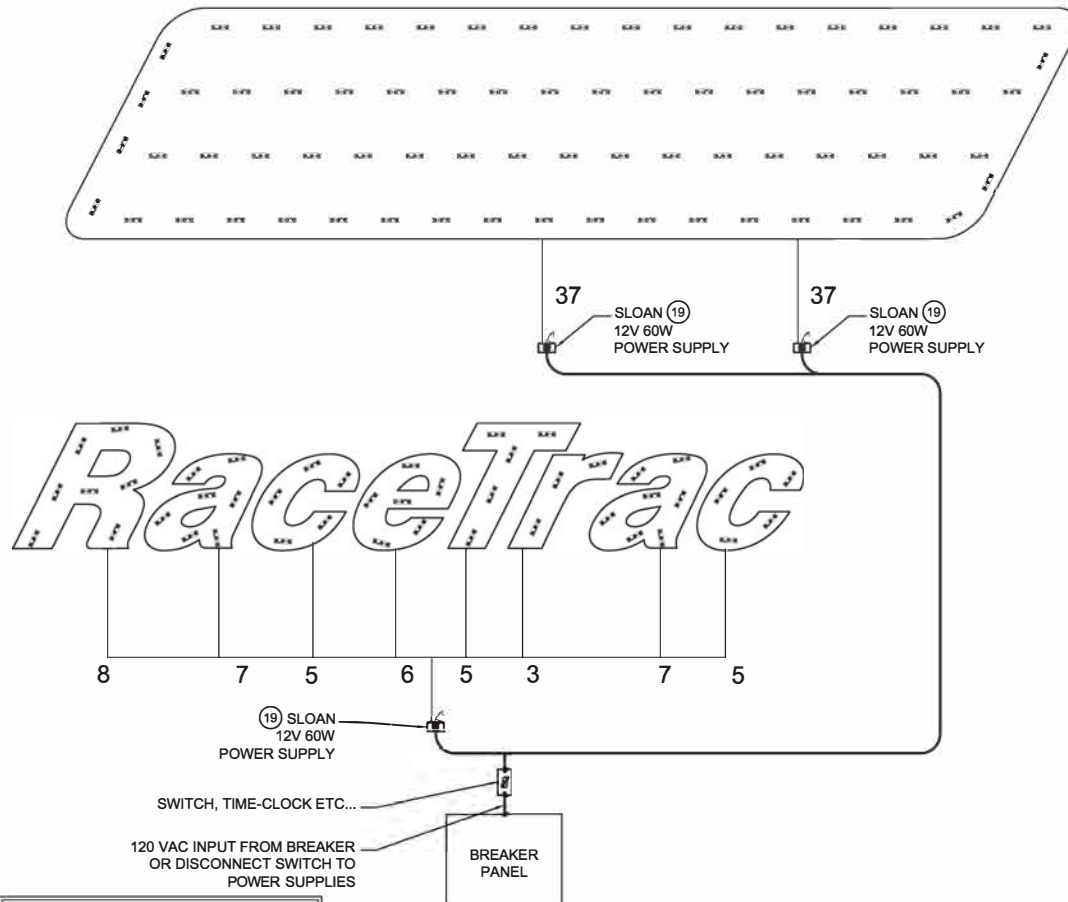
B360128



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Knoxville, Tennessee 37931
Voice: 865.342.8200
Fax: 865.539.6311



NOTE:
EACH INDIVIDUAL LETTER TO BE
GROUNDED



LED ELECTRICAL CHART				
LTR.	WHITE LED	TRANSFORMER	AMPS	20 AMP
BG PNL	74	2	2.0	
R	8			
a	7			
c	5			
e	6			
T	5	1	1.0	1
r	3			
a	7			
c	5			
TOTAL	9	120	3.0	1

NOTE:
(3) SLOAN 12V 60W - 120-277V INPUT
POWER SUPPLIES @ 1.0 AMPS EACH
ARE REQUIRED. THIS SIGN HAS A
TOTAL OF 3.0 AMPS. AND WILL
REQUIRE (1) 20 AMP CIRCUIT

ELECTRICAL INSTALLATION KIT

AN ELECTRICAL INSTALLATION KIT TO BE
INCLUDED WITH ALL LETTERSETS SHIPPED.
THESE SHALL INCLUDE;
1. (1) MOUNTING PATTERN
2. (30') WATERPROOF CONDUIT
3. (2) JUNCTION BOXES
4. (20) CONDUIT CONNECTORS
5. (1+) TRANSFORMER BOX WITH
POWER SUPPLIES

NOTE:
MANUFACTURER TO FOLLOW LED
LAYOUT EXACTLY. PLEASE USE
18 GAUGE WIRE FOR LED JUMPS
WHEN NEEDED. THIS IS TO ENSURE
PROPER EVEN ILLUMINATION.

NOTE:
MANUFACTURER TO FOLLOW LED
LAYOUT EXACTLY WHERE TO PLACE
ELECTRICAL HOLES TO ENSURE
PROPER EVEN ILLUMINATION.

FRONT ELEVATION @ LED LAYOUT
(SEE ELECTRICAL CHART)

CLIENT:



DESCRIPTION: MAIN I.D. OR CANOPY I.D.
40 SQ.FT. W/ DIM. LTRS
BETWEEN POLE MNT

NOTE:
All designs and plans indicated on this drawing are the sole
property of The InSite Group, created specifically for the noted
project. Use of these designs or plans for any purpose other
than the intended application shall be prohibited without the
written consent of The InSite Group. Disclosure of any of the
information enclosed within, without consent of owner, is a
violation of intellectual property and shall not be tolerated.

SHT:
4
OF
4

BY:
JPR
DATE:
9/25/17

Project Number:
RaceTrac
Drawing Number:
B360128



7875 Oak Ridge Highway
Knoxville, Tennessee 37931
Voice: 865.342.8500
Fax: 865.339.6311



5.5K 2.0
GRAPHIC SUPPLIED DIRECTLY FROM MIRATEC, ORDERED BY RACETRAC
SINGLE FACED
QUANTITY 1
42 SqFt
NOTE: Cabinet frame painted AKZO Dark Bronze 313E.
INSTALL ONLY





2601 10TH AVE N Palm Springs
Palm Springs Florida 33461
211



See Color Schedule on Page 2

GENERAL NOTE: ALL WORK SHALL BE IN COMPLIANCE WITH RECOGNIZED INDUSTRY STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE STATE AND LOCAL CODES. NO SUBSTITUTIONS ALLOWED.



5 3/16"

4 1

2 1

Technical drawing of a vertical assembly. The drawing shows a vertical profile with a top flange. A dimension line at the top indicates a width of 5 3/16". Two callout lines point to specific features: one points to a small circular feature labeled '4 1', and the other points to a larger circular feature labeled '2 1'. The drawing is a line drawing with no shading.

1. **FACE TREATMENT:**
SEE COLOR SCHEDULE.
2. **LED SPECIFICATIONS:**
SLOAN PRISM (701269-6WSJ1-MB) LED'S ON LED PANEL
WITHIN SIGN CABINET
3. **LETTER INTERIOR:**
PAINT INTERIOR STARBRITE WHITE OR EQUIV.
CAULK INSIDE PERIMETER TO PREVENT LIGHT LEAKS.
4. **PAINT:**
ALL EXTERIOR PAINTS TO HAVE
SEMI-GLOSS FINISH (SEE COLOR SCHEDULE)
ALL PAINTS TO HAVE A 2.8 VOC.
OR LESS AS REQUIRED BY CODE.
5. **FRAMING:**
ALL DISSIMILAR MATERIALS THAT CONTACT EACH
OTHER MUST BE PRIMED, PAINT, OR COATED TO
PREVENT CORROSION

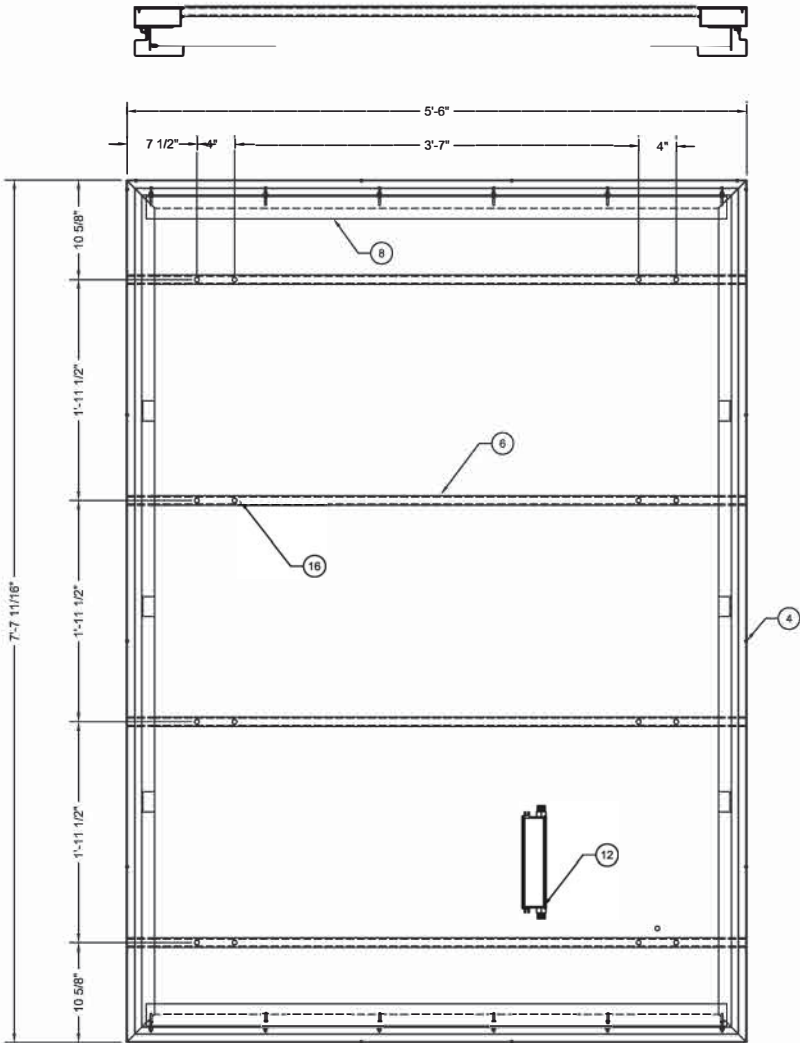
SIDE ELEVATION

FIND #	DESCRIPTION	TOTAL QUANTITY
1	SIGN COMP #2103 FLAT BLEED S. FACE FRAME W/ REFLECTOR SLOT	26.2BLF
2	.090" THK BROKE FORMED RETAINER COVER	26.2BLF
3	GUDEN INDUSTRIAL HARDWARE - HEAVY DUTY HINGE (PS10090808-7Z)	1
4	#10 TEK SCREW - FOR COVER SCREWS @ 24" ON CENTER	18
5	1/4" DIA X 1" LONG - OPEN HOOK FOR FACE RETENTION	12
6	1" X 1" X 1/8" SQ TUBE @ 87.3123" LONG	3
7	2" X 3" X 1/8" C-CHANNEL FOR FRAME	26.2BLF
8	2 1/2" X 2 1/2" X 1/8" THK ALUMINUM ANGLE	18
9	7" 1/4" X 5" X 1/16" X .090" THK ALUMINUM BACK	1
10	3/4" X 3/4" X 1/8" ALUMINUM ANGLE FOR MOUNTING THE COVER	A/R
11	#10 TEK SCREWS (FOR LED PANEL TO FRAME AND SUPPORTS)	44
12	SLOAN 12V60W POWER SUPPLY W/ FASTENERS	2
13	SLOAN PRISM WHITE LED (701269-6WSJ-AB)	65
14	FACES PRINTED BY MIRATECH AND BACKED WITH 3M 3635-70 DIF VINYL	1
15	BRZ PAINT "C3" - AKZO NOBEL DARK BROWN 313E, MATTE GLOSS	A/R
16	3/8" MOUNTING HARDWARE	A/R
17	#10 CSK THREAD ROLLING SCREWS	60
18	COMPRESSION SPRINGS - 1" OPEN LENGTH - OPEN ENDS	6
19	3/4" DIA X 1/8" WALL X 4 3/4" LONG ALUMINUM STAND OFF	16

1. MANUFACTURER TO PROVIDE 10'-0" ELECTRICAL PIGTAIL TO EACH INDIVIDUAL LETTER & LOGO.

NOTE: (22)
20 AMP DISCONNECT SWITCH SHOULD BE LOCATED ON THE PRIMARY SIDE OF ALL POWER SUPPLIES. SWITCH MUST BE LOCATED IN SIGHT OF LETTERS OR HAVE CAPABILITY OF BEING LOCKED IN OPEN CIRCUIT POSITION TO MEET U.L. REQUIREMENTS.

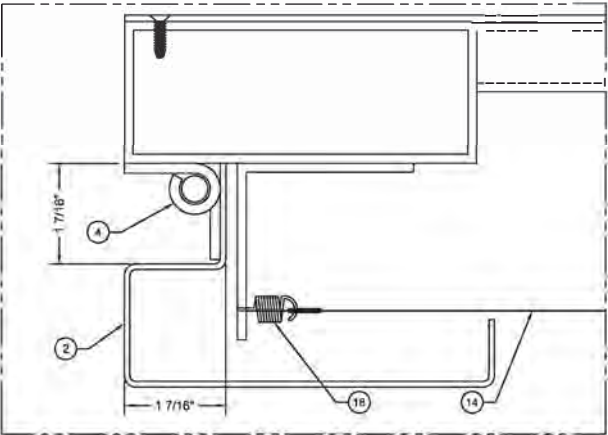
THE InSite Group | 7675 Oak Ridge Highway
Knoxville, Tennessee 37931
Voice: 865.342.8200
Fax: 865.539.6311



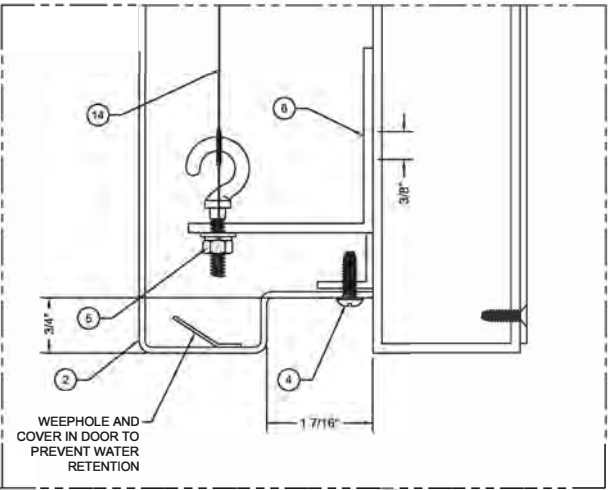
FRAME DETAIL FRONT ELEVATION
(FACE AND LED'S REMOVED FOR CLARIFICATION)



SIDE ELEVATION

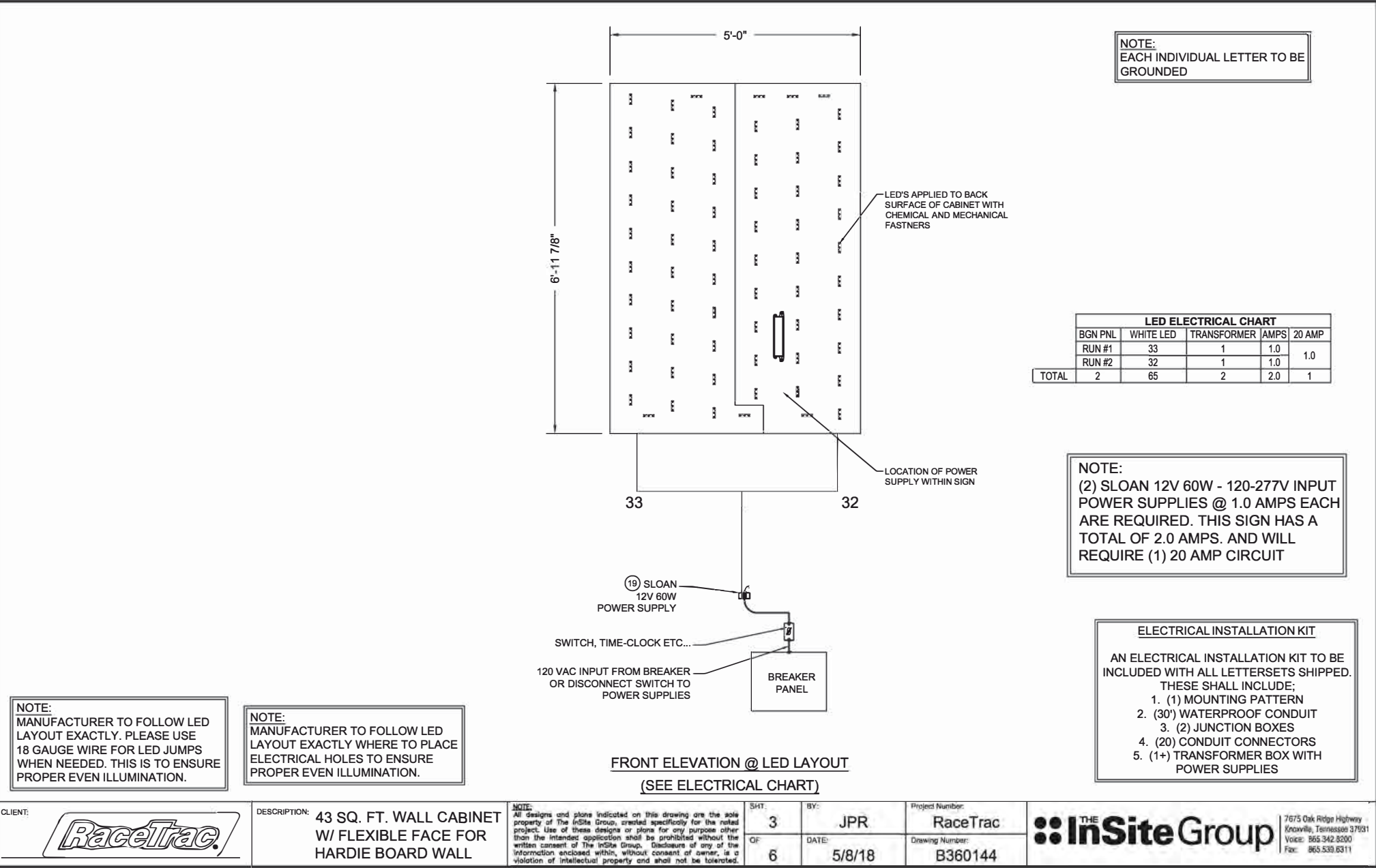


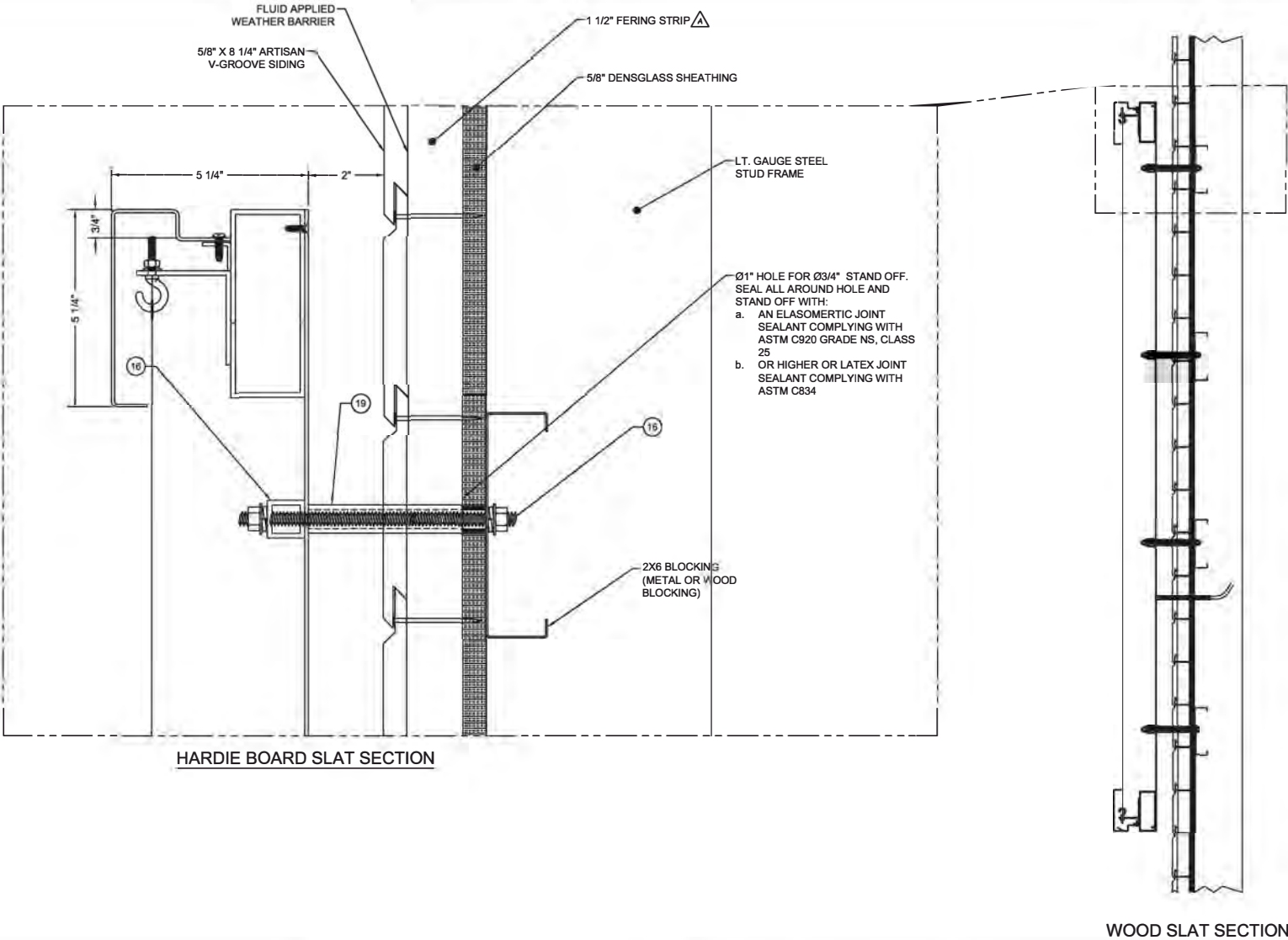
LEFT SIDE ONLY - COVER DETAIL



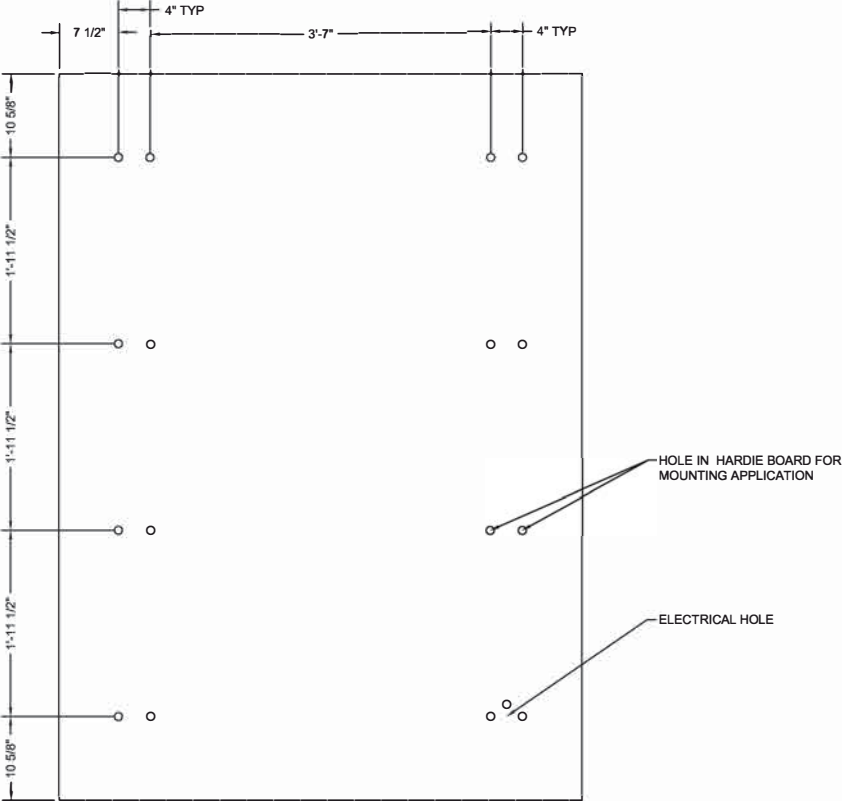
TOP/RIGHT/BOTTOM SIDES - COVER DETAIL

CLIENT:		DESCRIPTION: 43 SQ. FT. WALL CABINET W/ FLEXIBLE FACE FOR HARDIE BOARD WALL	NOTE: All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	SHT:	BY:	Project Number: RaceTrac		7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8500 Fax: 865.539.0311
				OF:	DATE:			
				2	JPR			
				6	5/8/18	Drawing Number: B360144		

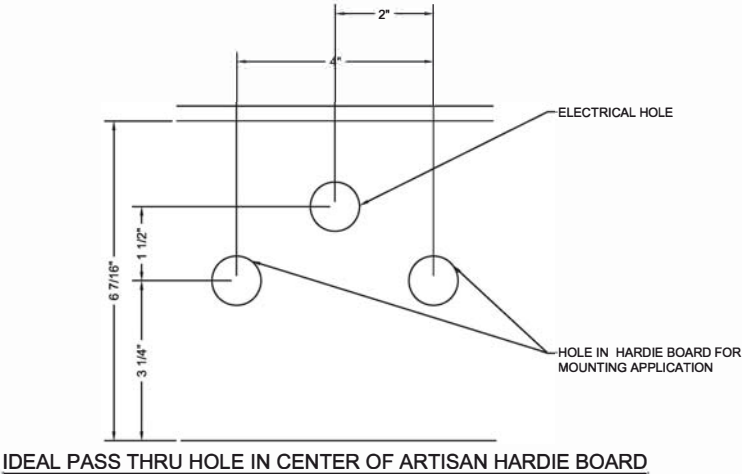




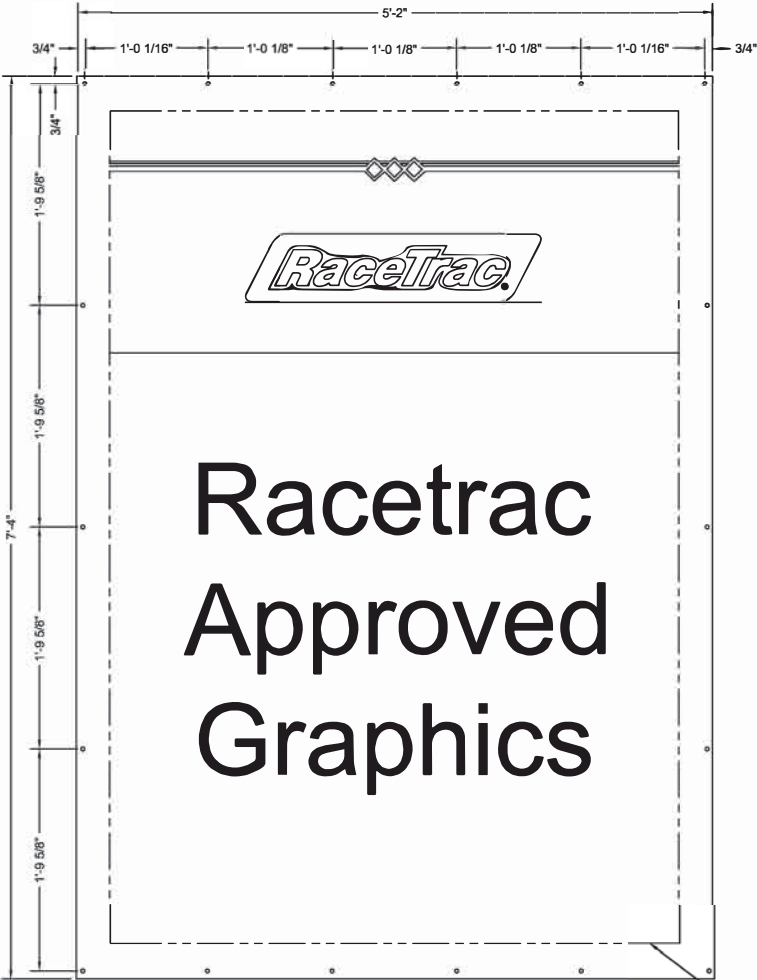
CLIENT:		DESCRIPTION: 43 SQ. FT. WALL CABINET W/ FLEXIBLE FACE FOR HARDIE BOARD WALL	NOTE: All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	SHT. 4	BY: JPR	Project Number: RaceTrac		7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8200 Fax: 865.539.6311
				OF 6	DATE: 5/8/18	Drawing Number: B360144		



WALL MOUNTING IN RELATION TO CABINET
(TEMPLATE MADE FROM 1/4" SINTRA)

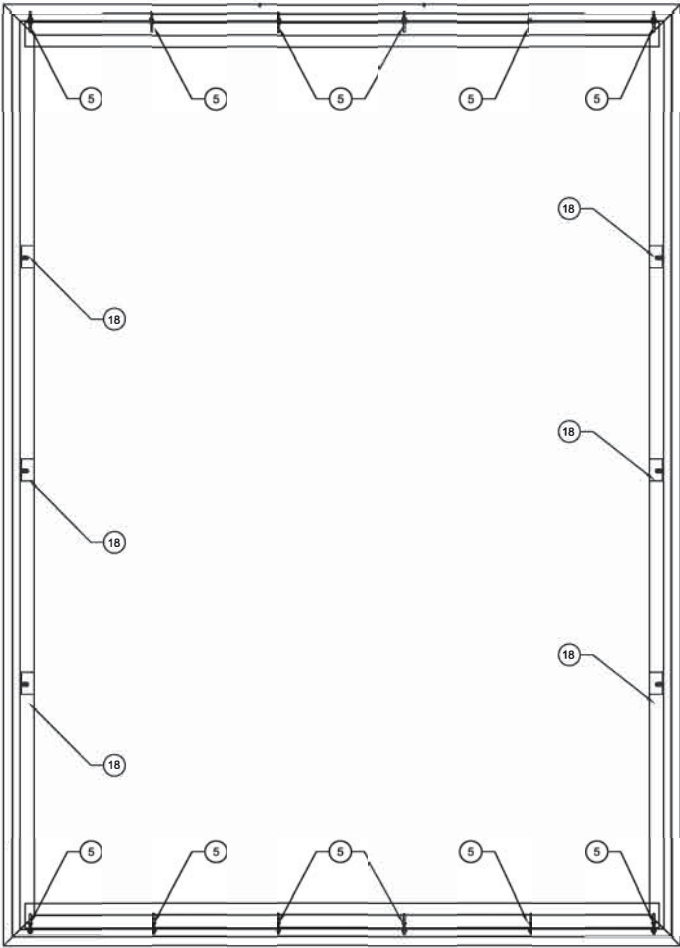


CLIENT:		DESCRIPTION: 43 SQ. FT. WALL CABINET W/ FLEXIBLE FACE FOR HARDIE BOARD WALL	NOTE: All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	SHT:	BY:	Project Number:		7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8500 Fax: 865.539.0311
				5	JPR	RaceTrac		
				OF	DATE:	Drawing Number:		
				6	5/8/18	B360144		



FACE DETAIL (WITH GROMMENT LOCATIONS)

CABINET V.O.

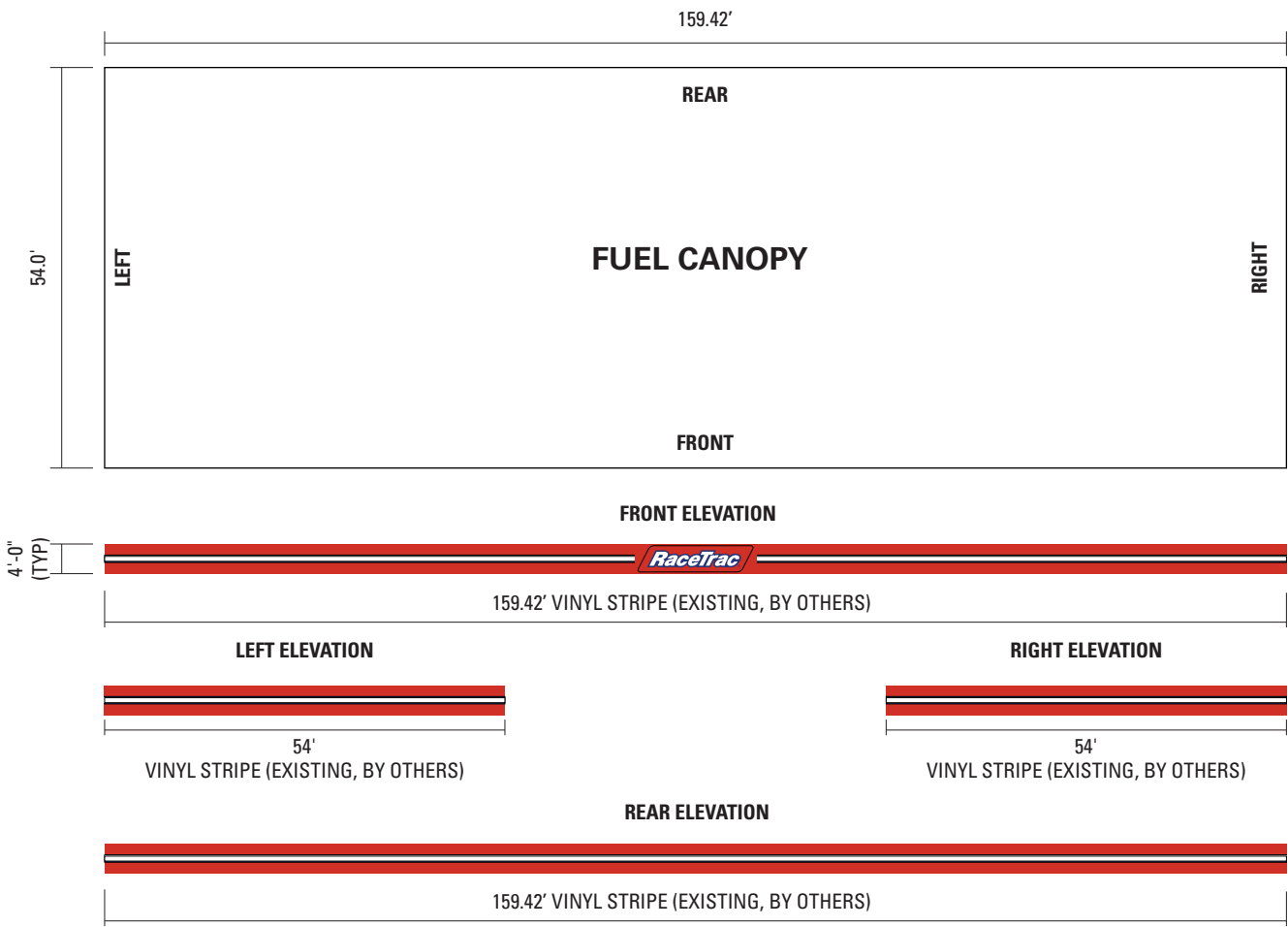


CABINET (FACE AND RETAINER REMOVED)

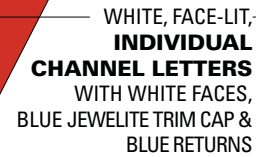
CLIENT: 	DESCRIPTION: 43 SQ. FT. WALL CABINET W/ FLEXIBLE FACE FOR HARDIE BOARD WALL	NOTE: All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	SHEET: 6 OF 6	BY: JPR DATE: 5/8/18	Project Number: RaceTrac Drawing Number: B360144	 7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8500 Fax: 865.539.0311
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CANOPY FRONT	ITEM	SQ. FT.	LIN. FT.
	CLOUD SIGN	55	15.4
TOTAL FRONT		55	15.4

ENTIRE CANOPY		SQ. FT.	LIN. FT.
		55	15.4



2601 10TH AVE N Palm Springs
Palm Sprin 219 Florida 33461



CABINET WITH RED-
VINYL ON FACE,
RED FABRICATED
RETAINERS AND
RED RETURNS

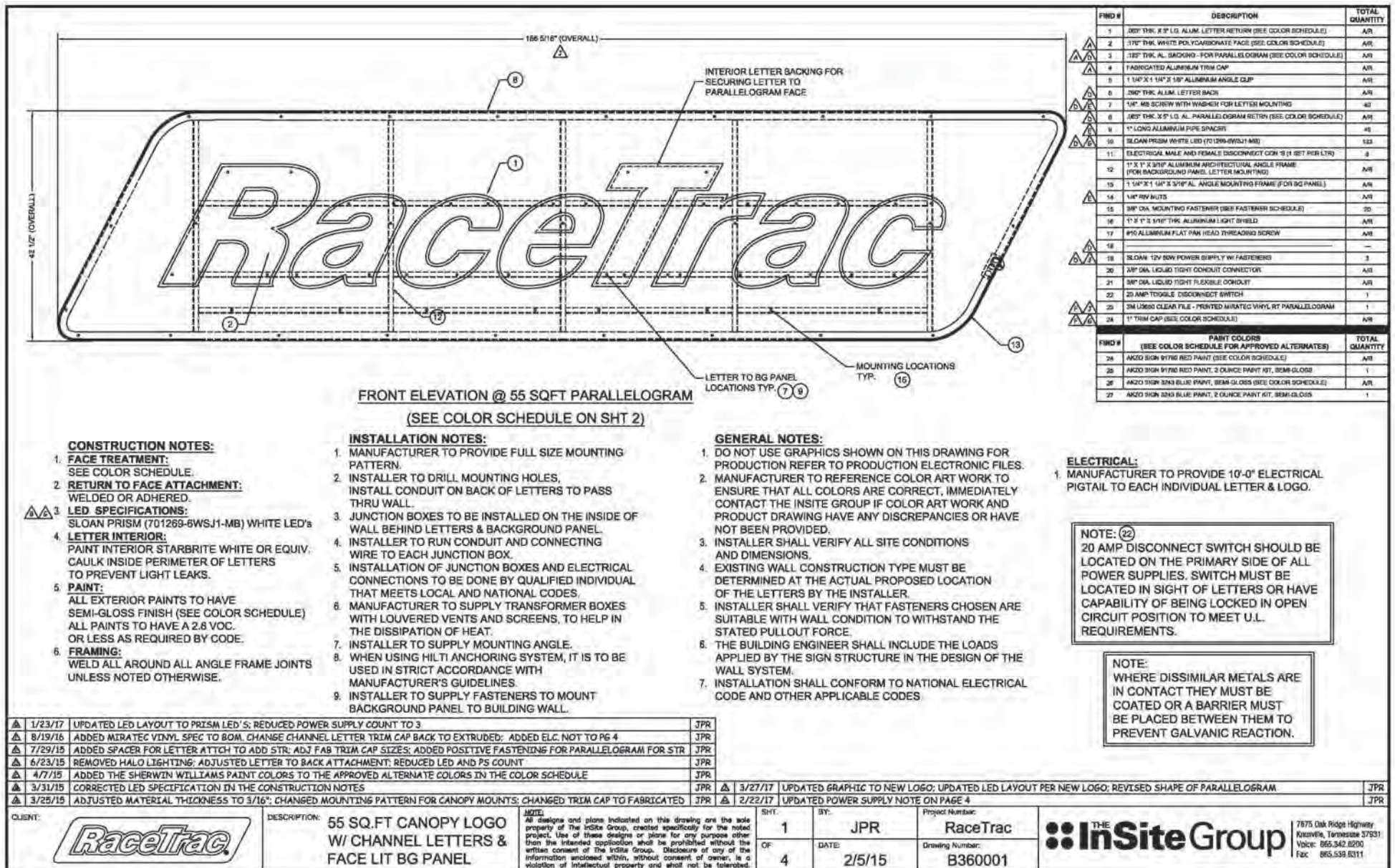


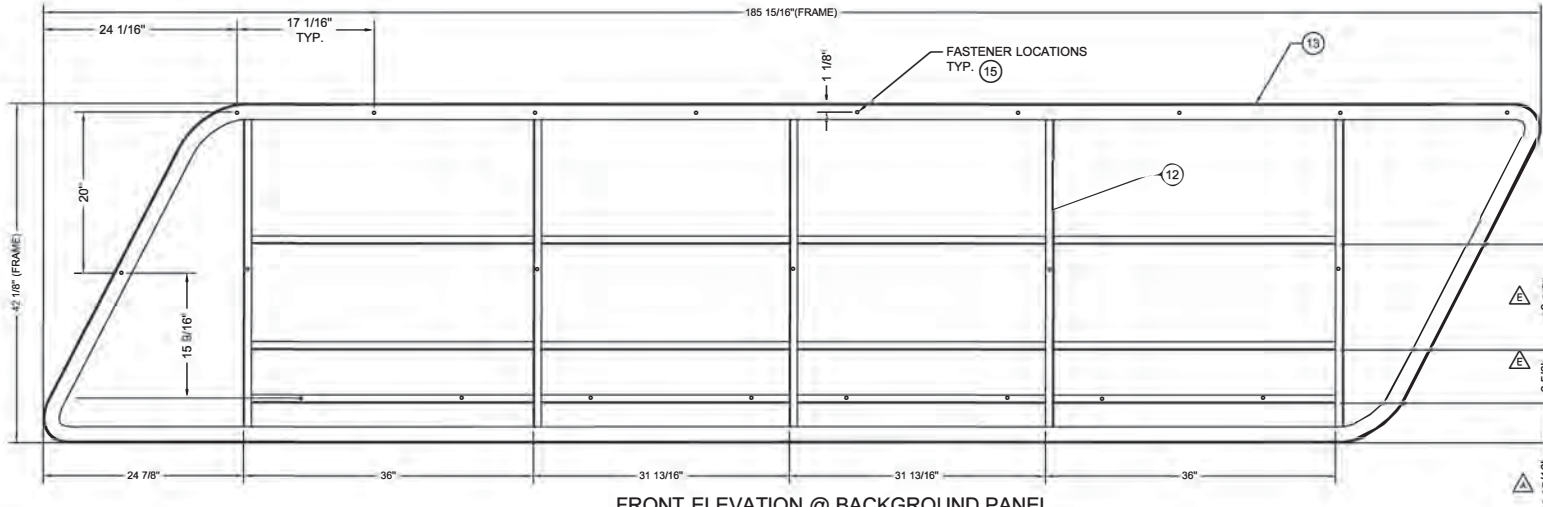
—UPON INSTALLATION, TRIM VINYL AT 90°,—
5" FROM SIDES OF SIGN



See Color Schedule on Page 2

GENERAL NOTE: ALL WORK SHALL BE IN COMPLIANCE WITH RECOGNIZED INDUSTRY STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE STATE AND LOCAL CODES. NO SUBSTITUTIONS ALLOWED.





FRONT ELEVATION @ BACKGROUND PANEL
(FACE & LETTERS REMOVED FOR CLARITY)

NOTE:

FOR ALL OTHER WALL CONDITIONS THAT ARE NOT ON THE APPROVED FASTENER SCHEDULE, INSTALLER TO DETERMINE A SUITABLE METHOD OF ATTACHMENT FOR SIGNAGE AND OBTAIN APPROVAL FROM THE INSITE GROUP. IF INSTALLER IS UNSURE OF A METHOD, THE INSITE GROUP MUST BE CONSULTED. FOR ALL ATTACHMENT METHODS, INSTALLER MUST ADHERE TO GUIDELINES ON USE AND SITE PREPARATION PUT FORTH BY FASTENER MANUFACTURER.

VINYL NOTES:

1. DIGITALLY PRINTED VINYL BY MIRATEC SYSTEMS
 - 1.1. PURECOLOR TECHNOLOGY™ IS THE ONLY APPROVED CONSTRUCTION. NO SUBSTITUTIONS ARE ALLOWED. COLOR SPECIFICATIONS, MATERIAL SPECIFICATION, AND WARRANTIES HAVE ALREADY BEEN DETERMINED AND COMMUNICATED TO OUR APPROVED WHOLESALE GRAPHICS MANUFACTURER, MIRATEC SYSTEMS
 - 1.2.

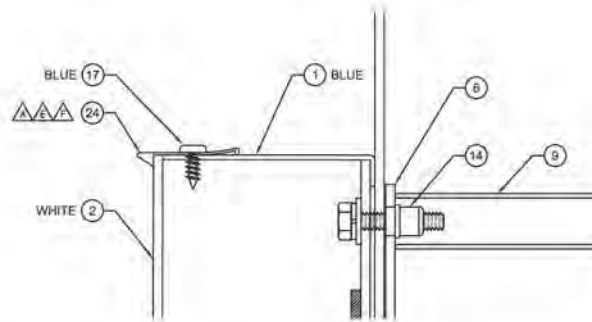
PRIMARY MOUNTING NOTE:

PROTOTYPICAL MOUNTING LAYOUT SHOWN — ATTACHMENT QUANTITY AND FASTENER SIZE CAN BE DETERMINED BY SIGN VENDOR AND IS DEPENDENT ON SIGN VENDOR VERIFYING THE SIZE AND NUMBER WITH A LICENSED CIVIL ENGINEER USING SPECIFIC SITE AND WIND LOAD INFORMATION

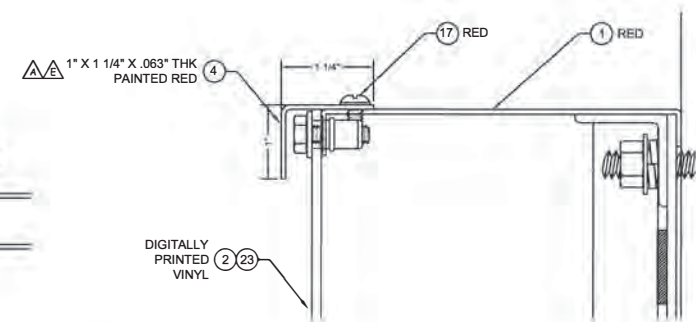
COLOR SCHEDULE

"LETTERS" COLOR SCHEDULE:	
FACE MATERIAL:	WHITE (170" THK. #7328 WHITE ACRYLIC)
FACE TREATMENT:	NONE
BACK MATERIAL:	CLEAR (170" THK. CLEAR POLYCARBONATE)
RETURN/TRIMCAP COLOR:	AKZO SIGN 3243 BLUE PAINT, SEMI-GLOSS
"BACKGROUND PANEL" COLOR SCHEDULE:	
FACE MATERIAL:	WHITE (170" THK. #7328 WHITE ACRYLIC)
FACE TREATMENT:	DIGITALLY PRINTED TRANSLUCENT VINYL BY MIRATEC (SEE VINYL NOTE)
APPLY FIRST SURFACE:	3M #3635-70 WHITE DIFFUSER VINYL, APPLY SECOND SURFACE
BACK MATERIAL:	CLEAR (170" THK. CLEAR POLYCARBONATE)
RETURN/TRIMCAP COLOR:	AKZO SIGN 91780 RED PAINT
APPROVED ALTERNATE PAINT COLORS	
DARK RED PAINT COLOR	
MATTHEWS PAINT:	#MP 81489 RED PAINT, SEMI-GLOSS
AKZO PAINT:	AKZO SIGN 91780 RED PAINT
SHERWIN WILLIAMS PAINT:	#5762162 - LV3 - RED PAINT, SEMI-GLOSS
BLUE PAINT COLOR	
MATTHEWS PAINT:	#MP02316 BLUE PAINT, SEMI-GLOSS
AKZO PAINT:	AKZO SIGN 3243 BLUE PAINT
SHERWIN WILLIAMS PAINT:	#5762170 - LV3 - BLUE PAINT, SEMI-GLOSS

FASTENER SCHEDULE		
	3/8" DIA. THREADED ROD	FOR USE WITH WOOD, CONCRETE BLOCK OR EIFS WALL SYSTEMS.
	3/8" RED HEAD L.D.T. (LARGE DIAMETER TAPCON)	FOR USE WITH CONCRETE BLOCK, BRICK OR CONCRETE. EMBED A MIN. OF 2 1/2".
	3/8" DIA. HILTI HIT ROD WITH HY150 MAX ADHESIVE	FOR USE WITH CONCRETE. EMBED A MIN. OF 2".
	3/8" DIA. HILTI HIT ROD WITH HY20 ADHESIVE	FOR USE WITH MASONRY AND BRICK. EMBED A MIN. OF 3 3/8".
	3/8" DIA. HILTI HIT ROD WITH HY20 ADHESIVE	FOR USE WITH CONCRETE BLOCK. EMBED A MIN. OF 2".
	3/8" DIA. HILTI HLC SLEEVE ANCHOR	FOR USE WITH CONCRETE, MASONRY AND BRICK. EMBED A MIN. OF 3 3/8".



LETTER COLOR DETAIL



PARALLELOGRAM COLOR DETAIL

CLIENT:



DESCRIPTION:

55 SQ.FT CANOPY LOGO
W/ CHANNEL LETTERS &
FACE LIT BG PANEL

NOTE:

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SHT.

2

OF

4

BY:

JPR

DATE:

2/5/15

Project Number:

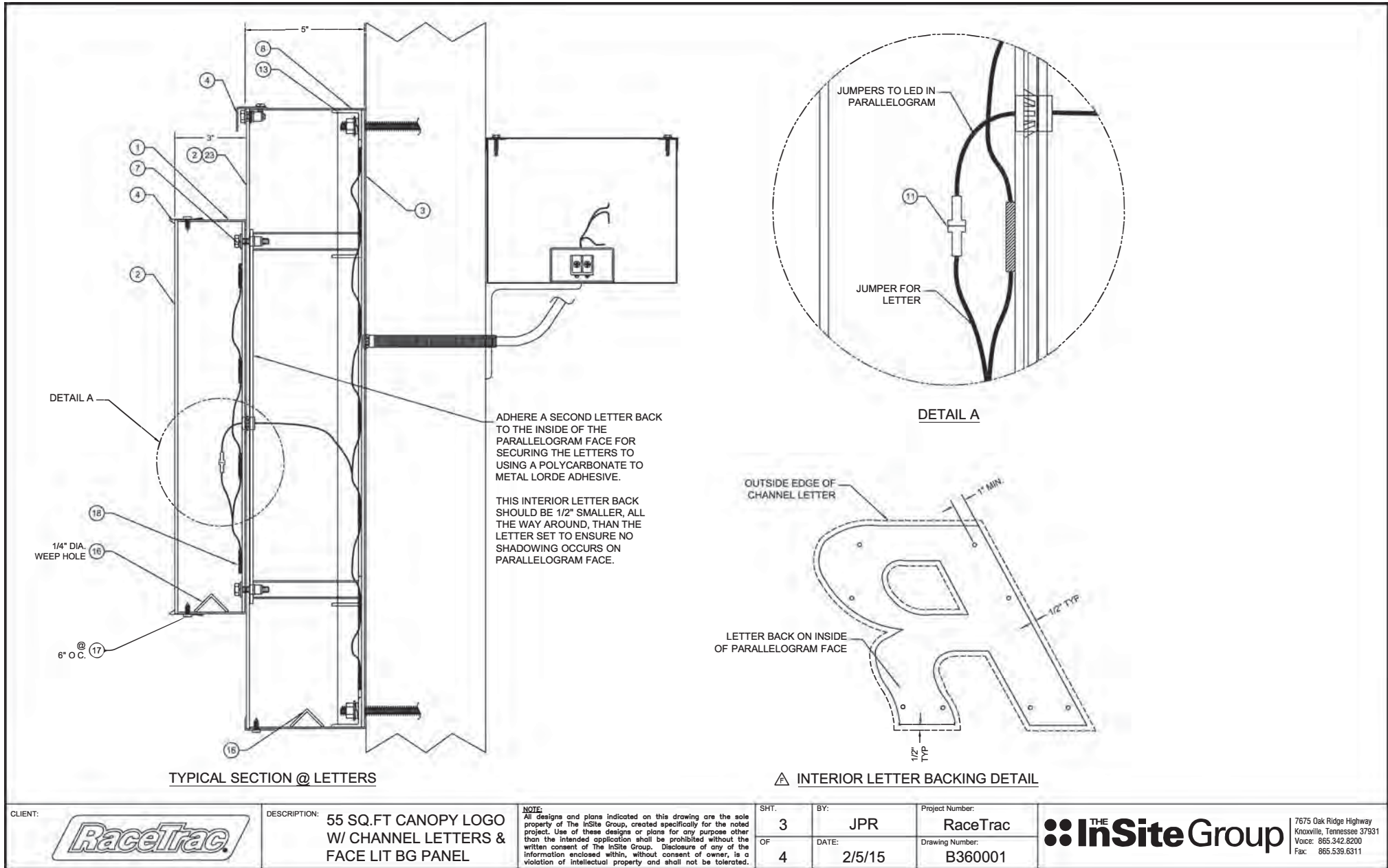
RaceTrac

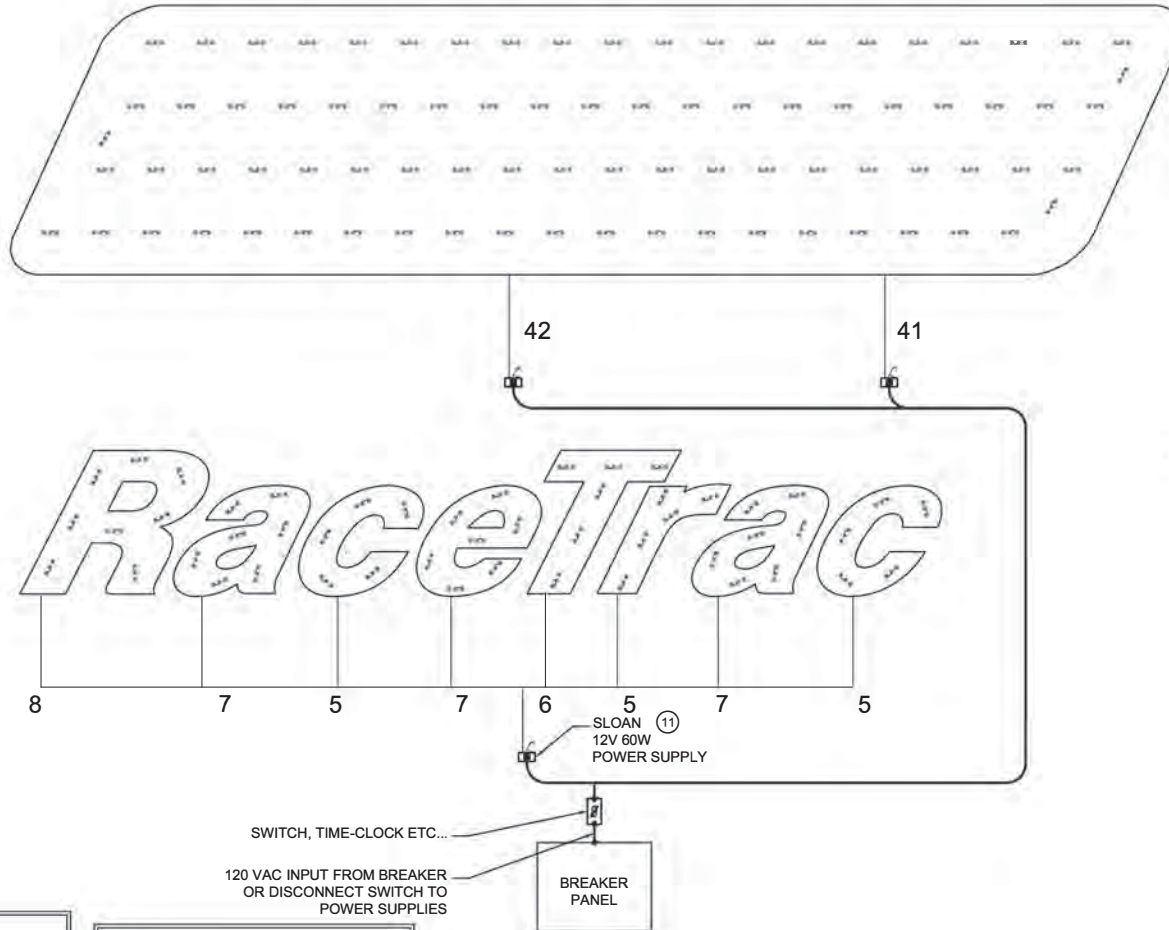
Drawing Number:

B360001



7675 Oak Ridge Highway
Knoxville, Tennessee 37931
Voice: 865.342.8200
Fax: 865.539.6311





NOTE:
EACH INDIVIDUAL LETTER TO BE
GROUNDED

LED ELECTRICAL CHART				
LTR.	WHITE LED	TRANSFORMER	AMPS	20 AMP
BG PNL	83	2	2.0	
R	8	1	1.0	1
a	7			
c	5			
e	7			
T	6			
r	5			
a	7			
c	5			
△△△ TOTAL	9	133	3	3.0

NOTE:
(1) 20 AMP CIRCUIT
REQUIRED

NOTE:
(3) SLOAN 12V 60W - 120-277V INPUT
POWER SUPPLIES @ 1.0 AMPS EACH
ARE REQUIRED. THIS SIGN HAS A
TOTAL OF 3.0 AMPS. AND WILL
REQUIRE (1) 20 AMP CIRCUIT

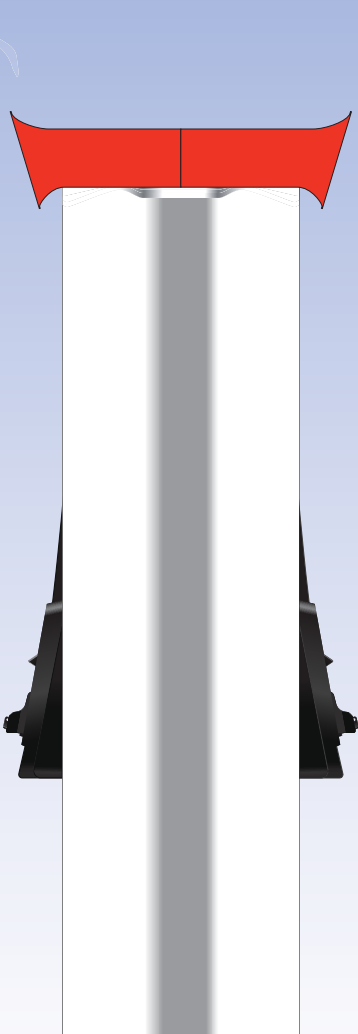
ELECTRICAL INSTALLATION KIT

AN ELECTRICAL INSTALLATION KIT TO BE
INCLUDED WITH ALL LETTERSETS SHIPPED.
THESE SHALL INCLUDE;
1. (1) MOUNTING PATTERN
2. (30') WATERPROOF CONDUIT
3. (2) JUNCTION BOXES
4. (20) CONDUIT CONNECTORS
5. (1+) TRANSFORMER BOX WITH
POWER SUPPLIES

NOTE:
MANUFACTURER TO FOLLOW LED
LAYOUT EXACTLY. PLEASE USE
18 GAUGE WIRE FOR LED JUMPS
WHEN NEEDED. THIS IS TO ENSURE
PROPER EVEN ILLUMINATION.

NOTE:
MANUFACTURER TO FOLLOW LED
LAYOUT EXACTLY WHERE TO PLACE
ELECTRICAL HOLES TO ENSURE
PROPER EVEN ILLUMINATION.

CLIENT:	DESCRIPTION:	NOTES:	SHT.	BY:	Project Number:	THE InSite Group	7675 Oak Ridge Highway Knoxville, Tennessee 37931 Voice: 865.342.8200 Fax: 865.539.6311
	55 SQ.FT CANOPY LOGO W/ CHANNEL LETTERS & FACE LIT BG PANEL	All designs and plans indicated on this drawing are the sole property of The InSite Group, created specifically for the noted project. Use of these designs or plans for any purpose other than the intended application shall be prohibited without the written consent of The InSite Group. Disclosure of any of the information enclosed within, without consent of owner, is a violation of intellectual property and shall not be tolerated.	4 OF 4	JPR DATE: 2/5/15	RaceTrac Drawing Number: B360001		



3+2+1 Side View



3+2+1 Front & Rear View

 GR0011680	Designer: Gilbarco E900 NF6	Color Legend ○ White Gilbarco E900 NF6 ● Red RaceTrac 145 ● Green RaceTrac 145 ● Yellow RaceTrac 145 ● Black Gilbarco E900 NF6 / 145 / 145 ● Blue RaceTrac 145 ● Orange RaceTrac 145 ● Light Blue RaceTrac 145	Additional Specs • 10.4 Color Screen • DuraMax Tuxedo Side Sheathing • Full Decaled Lower Door • Brandview Canopy • Global Contactless Module • 2D Imager • Single PPU • Solid Black Bezel • Call Button • Unleaded 88 image	Gilbarco Inc. Graphics Department will maintain original artwork. Colors are to show likeness only and are not to be used for color matching approvals. Gilbarco Inc. Confidential: This print is the property of Gilbarco Inc. NC USA. Information hereon is confidential and must not be reproduced or released outside Gilbarco Inc. without proper authorization.  7300 West Friendly Avenue P.O. Box 22087 Greensboro, NC 27402-2087 Phone 336.547.5239 Fax 336.547.3004
	12/05/2018			
	Rev. A			

2601 10TH AVE N Palm Springs
Palm Sprin 224 Florida 33461

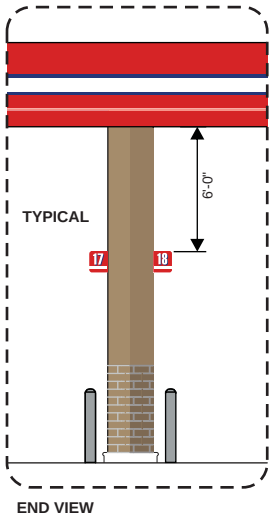
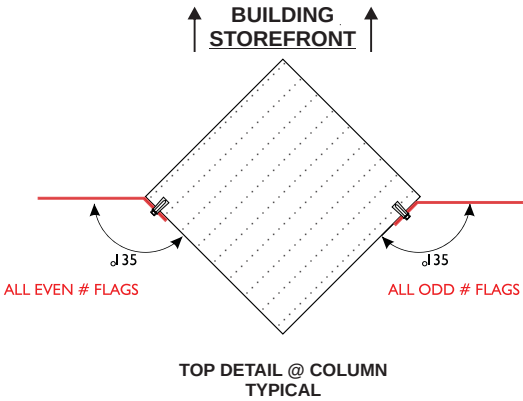
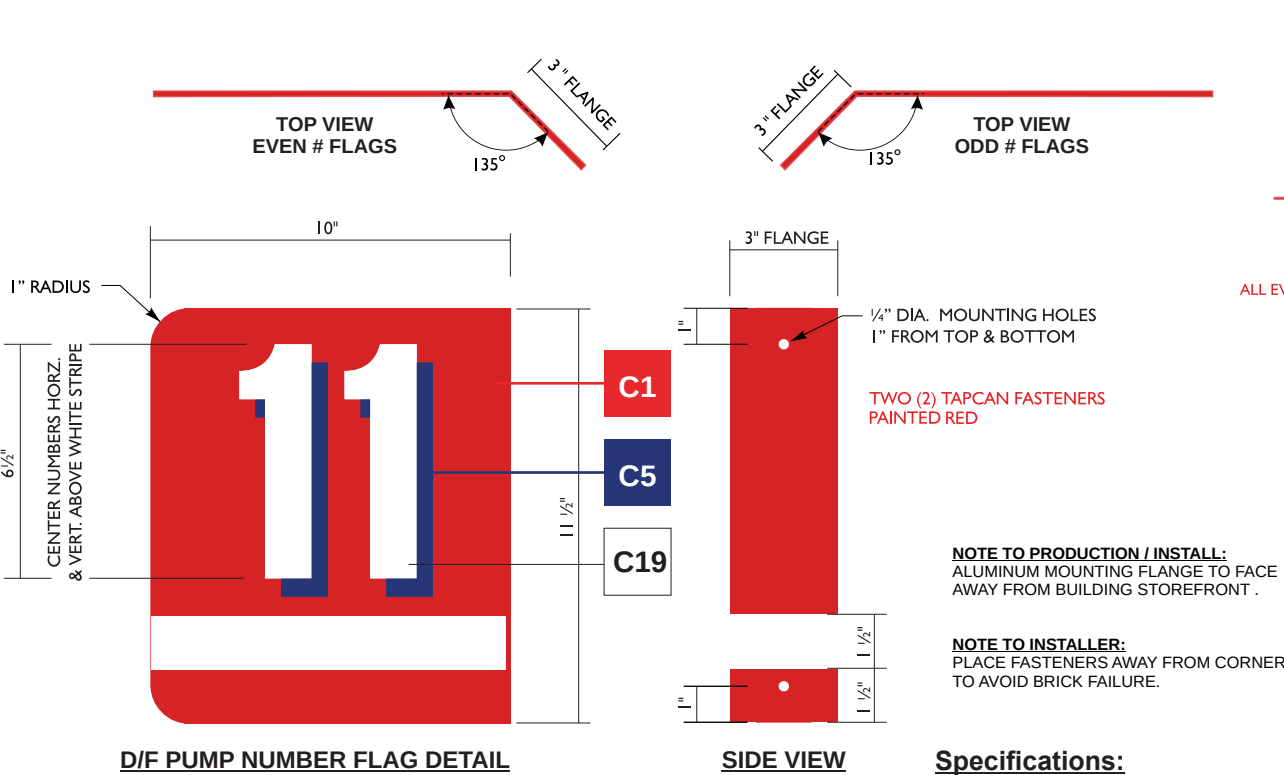


See Color Schedule on Page 2

GENERAL NOTE: ALL WORK SHALL BE IN COMPLIANCE WITH RECOGNIZED INDUSTRY STANDARDS, MANUFACTURER'S RECOMMENDATIONS AND ALL APPLICABLE STATE AND LOCAL CODES. NO SUBSTITUTIONS ALLOWED.

Pump Number Flags - M - Cladding Mount

MPD QUANTITY: 20

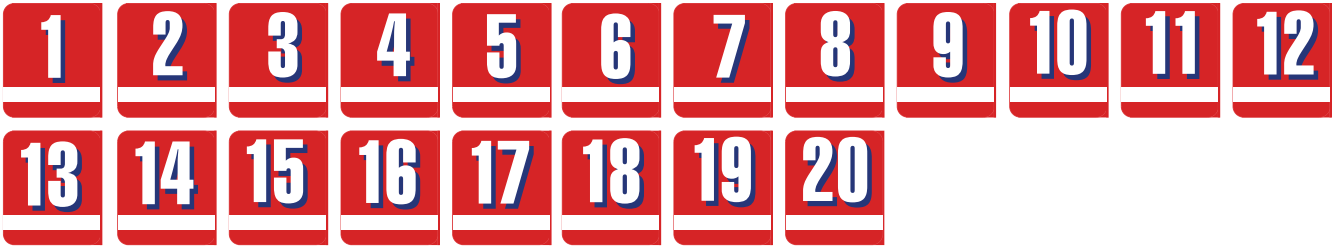


NOTE TO PRODUCTION / INSTALL:
ALUMINUM MOUNTING FLANGE TO FACE AWAY FROM BUILDING STOREFRONT.

NOTE TO INSTALLER:
PLACE FASTENERS AWAY FROM CORNER TO AVOID BRICK FAILURE.

Specifications:
•.080" Aluminum blank
•Quantities may vary

FONT NAME: HELVETICA



PUMP NUMBER FLAG SET: .79 SF EACH PANEL

42 SqFt Price Sign - 10" LED - N-CODE COMPLIANT

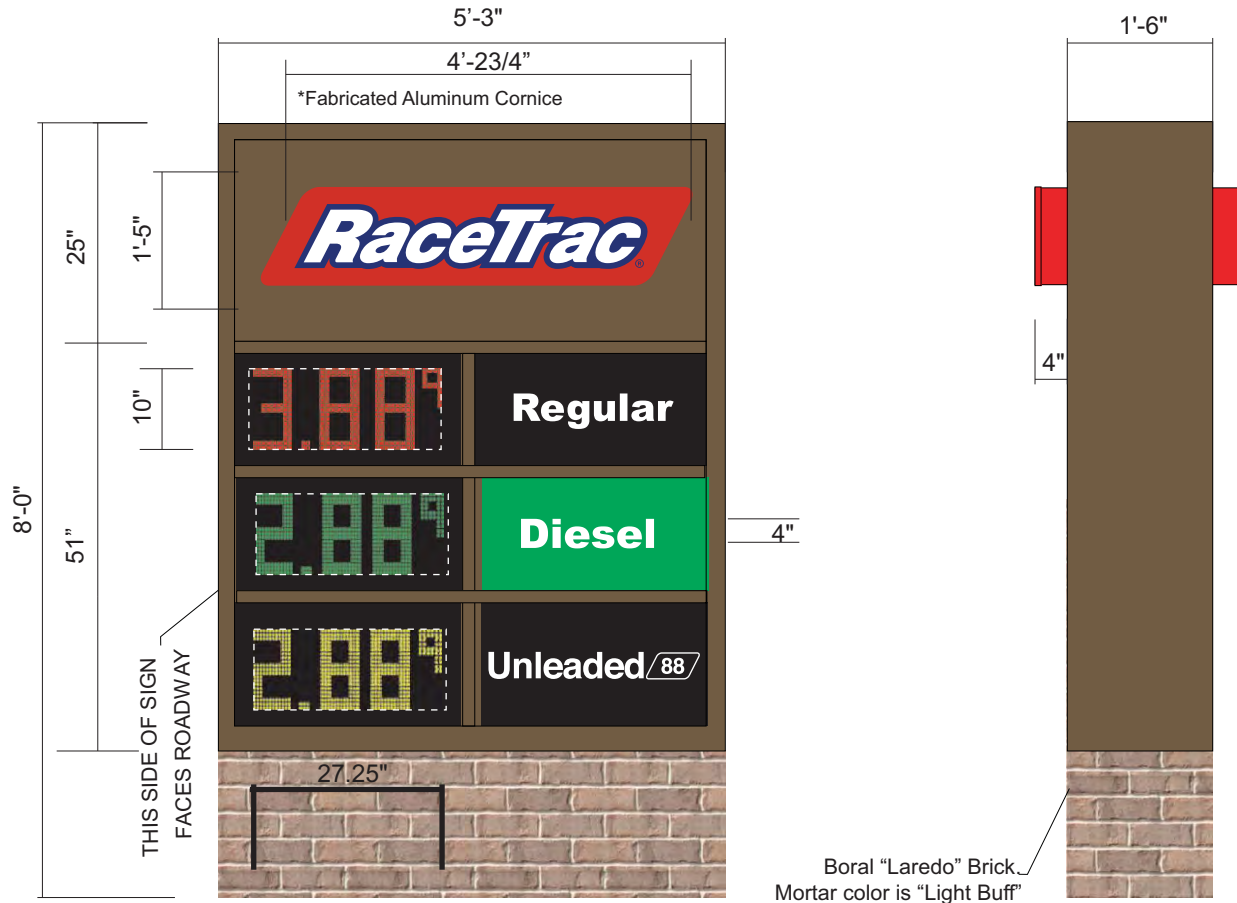
*All sign components to be UL listed. All wiring to conform to UL specifications. Installation to be per NEC requirements. All signs to bear UL labels.

STAMPED, SEALED ENGINEERING REQUIRED

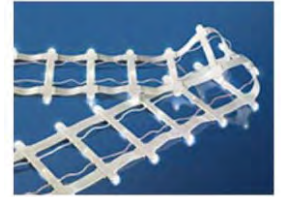
FOUNDATION INFORMATION PROVIDED BY RACETRAC. MANUFACTURER RESPONSIBLE FOR HAVING A LICENSED ENGINEER VALIDATE FOUNDATION DESIGN PRIOR TO INSTALL

DOUBLE FACED

QUANTITY 1



Regular Pricer: 10" x 27.25"= 1.89 SF
Diesel Pricer: 10" x 27.25"=1.89SF
Unl 88 Pricer: 10" x 27.25"=1.89SF
Total LED SF= 5.68SF



Sloan Sign Box II
LED Interior Illumination

Specifications:

Sign Faces:

- Logo panel: Aluminum panel painted Bronze C3 with parallelogram mounted to the surface. Parallelogram to be channel letter-type construction with .177" thick Polycarbonate face panels with 2nd surface applied translucent vinyl graphics. Parallelogram copy to be digital print provided by Miratec Systems with red background stripes and white border with blue area of logo graphic also printed. Cabinet and trim cap to be painted Red C1.
- Regular Unleaded Product Panel: Solar Grade Polycarbonate; Background to be 1st surface applied opaque vinyl Black C6; "Regular" to be show-through white.
- Diesel Product Panel: Solar Grade Polycarbonate; Background to be 1st surface applied translucent vinyl Green C7; "Diesel" to be show-through white.
- Unleaded 88 Product Panel: Solar Grade Polycarbonate; Background to be 1st surface applied opaque vinyl Black C6; "Unleaded 88" to be show-through white.

Interior Illumination: Sloan Sign Box II LED Interior Illumination powered by low voltage power supplies. This is behind fuel grade panels, only.

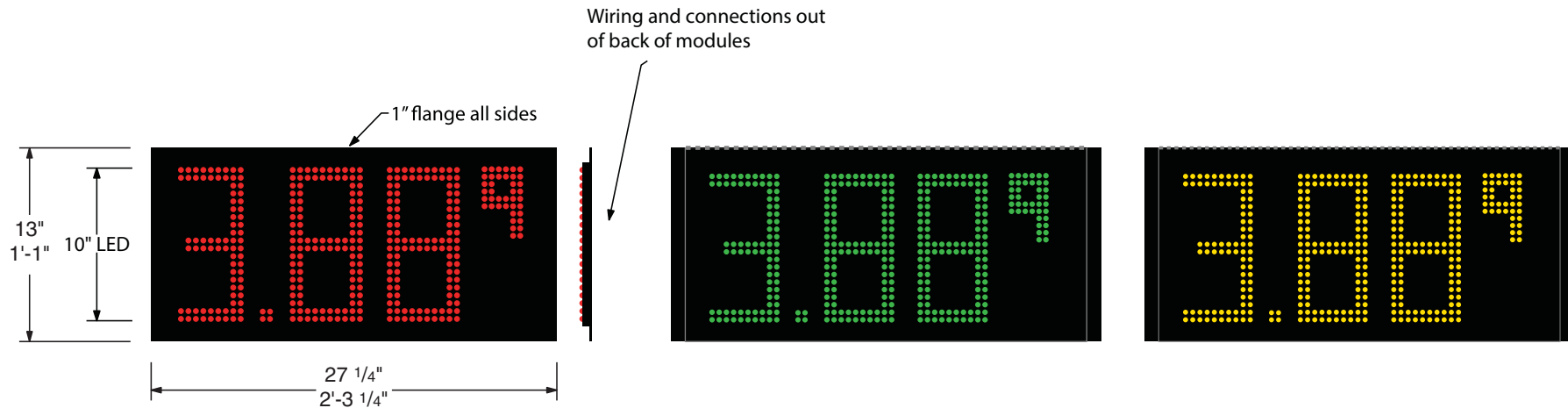
Sign Frame: 2" x 2" x .25" steel tube with .063 aluminum cladding painted Bronze C3.

Extruded aluminum 1-1/2" wide Divider Bars installed to retain sign panels. Face dividers and retainer to be painted painted Bronze C3.

Sign Support: Internal steel pipe support to be welded to steel saddle bracket at top and bottom of sign frame.

External steel sign support to meet building and local sign codes. Size of steel and footing as required per site requirements.

 316 S. 6th Street, St. Joseph, MO 64501 800.821.9013	Client		Install Location		Sales		Date: Dec 10, 2015		Job #:		
	Harbinger Signs				Mark Allaman 816-387-4232 mark @sunshine.us.com		Revisions:		Date:		
Client Approval:					Date:						



Cabinet Specs		Label Specs	Other	This original drawing is provided as part of a planned project and is not to be exhibited, copied or reproduced without the written permission of Sunshine Electronic Display Corporation or its authorized agent. All installation details are suggested only. All signs must be installed in accordance with NATIONAL, STATE, ELECTRICAL AND BUILDING CODES. Sunshine Electronic Display Corporation has no responsibility for wind loads, installations or electrical circuits. These are the sole responsibility of the Buyer/user. * Actual LED size and configuration may vary
Digit Size & Style:	10" LED		* Control box mounted inside existing cabinet	
Digit Color:	Red			
Overall Cabinet Size:	13"h x 27.25"w			
Cabinet Color:	Black			
Single or Double Face:	Double			
Build type:	Digits only			



June 28, 2019

Kim Glas-Castro
Planning, Zoning & Building Director
226 Cypress Lane
Palm Springs, FL 33461

Kglas-castro@vpsfl.org

Re: RaceTrac Gas Station – Project Narrative
NW Corner of 10th Avenue and Florida Mango
Village of Palm Springs

Project History & Background

This site is located at 2601 10th Avenue North, on the Northwest corner of 10th Avenue and Florida Mango, approximately one mile west of I-95. The parcel is identified as PCN 70-73-44-20-01-008-0080 and is a total size of 8.90 acres. The site was annexed into the Village of Palm Springs in 2010 and was assigned a Commercial Land Use designation and a Commercial General (CG) Zoning designation.

The site consists of an existing four-story office building with approximately 88,707 SF and the newly constructed 4081 SF Chase Bank which was approved by Resolution 2017-26. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and the owners have actively marketed the building with a goal of continuing the use of the building for office. Due to the site location, floor plate size of the existing building and a lack of demand from the market for +/- 88,000 SF of office users the building can no longer be utilized.

Subsequently, the property owners must consider redevelopment of the site which they actively pursued in 2017 with the request to place Chase Bank in a stand-alone building on the property corner. Chase was the last remaining tenant in the building and with their relocation the building is 100% vacant. This application continues the unique opportunity to redevelop this site to the benefit of the Village and local residents.

Application Request

This application has been submitted to request a Site Plan approval and Special Exception for a Service Station / Gas Station along with a Convenience Food & Beverage on the property. A Site Plan PD application has been submitted concurrent to this request. The proposal would require the demolition of the existing office building to accommodate the construction of a 5,411 SF convenience store and ten pump (twenty fueling positions) gas station. The development site is approximately 1.8 acres and would be directly West of the new Chase Bank with the building and fueling canopy oriented towards 10th Avenue North.

The site plan has been developed in a manner to accommodate the redevelopment of the overall property as there will be approximately 5.9 acres of land remaining on site. The Master Plan request includes the future development of an approximately 50,000 sf Retail/Office/Medical building in the north portion of the site and a 6,496 sf tire store directly west of the proposed convenience store/gas station.

The following requests are included within this application:

- Section 34-824(a)(5)** Special Exception request for a Gas station with a convenience store
- Section 34-891(1)** Variance request from the hours of operation
Code Requirement = 7am – 11pm
Variance Request = 24-hours operation of the facility
- Section 34-328(1)** Variance request from the “Primary Frontage” limitation
Code Requirement = 238.19 SF Maximum
Variance Request = 852.35 SF
- Section 34-328(a)(4)** Variance request to allow for canopy signage (Red/White/Blue color band) to wrap around the entire perimeter of the canopy.
Code Requirement = 0 SF
Variance Request = 216 SF each side, 769.68 SF north side of canopy

The following narrative addresses the criteria for each request of this application.

Section 34-824(a)(5) Special Exception request for a gas station with a convenience store
Special Exception Criteria – Chapter 34, Section 34-608

1. The proposed special exception use is consistent with goals, objectives, and policies of the village’s comprehensive plan.

The land use designation for this property is Commercial which is consistent with Objective K of the Village’s Comprehensive Plan. The proposed use of a Gas Station for a portion of the property provides for the redevelopment of an underutilized commercial property within the Village. Redevelopment limits urban sprawl, provides a service to both the local and regional residents, utilizes existing infrastructure and promotes a compact urban form.

2. The proposed special exception is consistent with the land development and zoning regulations and all other portions of this Code.

The special exception request and site plan is consistent with the Village’s land development and zoning regulations. The site has been designed to meet all applicable development regulations for setbacks, parking, landscape, open space, pervious area and FAR and does not require any variances. It is important to note that although the Gas Station only utilizes 2.00 acres of the 8.90 acre site, it will provide an opportunity for the existing non-conformities to be removed and future redevelopment on the remaining parcels will bring the site in compliance with development regulations.

3. The proposed special exception use is compatible with the character and use (existing and future) of the surrounding properties in its function; hours of operation, type and amount of traffic to be generated; building

location, mass, height and setback; and other relevant factors peculiar to the proposed special exception use and the surrounding property.

The proposed use of a portion of this site for a Gas Station is an ideal location do to the site's proximity to I-95, access at an intersection of two major roadways, and with frontage of the commercial corridor of 10th Avenue North. With the removal of the existing office building, the intensity of the overall project is significantly from over 88,000 SF of building to less than 10,000 SF of building area. The proposed use is consistent with the character of corridor and with the existing Commercial Land Use and General Commercial Zoning district. This site has historically but utilized for commercial uses, this application simply accommodates for the continued utilization of the property for the highest and best use.

4. The establishment of the proposed special exception use in the identified location does not create a concentration or proliferation of the same or similar type of special exception use, which may be deemed detrimental to the development or redevelopment of the area in which the special exception use is proposed to be developed.

Although there are other gas stations with the vicinity of this site location, there is a significant demand for this use along the 10th Avenue corridor and would provide a service to both local and regional residents. The establishment of this use on the property is the catalyst for the redevelopment of the overall property which is currently not providing benefit to the Village. The proposed gas station uses only two acres of the site allowing for over five acres of new development potential for the remainder of the property. The Gas Station use will provide infrastructure improvements on the property in way of drainage, utilities, a new turn lane and lighting to accommodate the continued redevelopment of the property.

5. The proposed special exception use does not have a detrimental impact on surrounding properties based on:

a. The number of persons anticipated to be using, residing, or working on the property as a result of the special exception use;

The use will have detrimental impact on the surrounding properties as the use is located in the center of the property and fronting on 10th Avenue. The building will be located almost 300' away from the West property line and 400' away from the North property boundary. The existing curb cut locations are utilized for ingress and egress and keep day to day traffic away from neighboring residents.

b. The degree of noise, odor, visual, or other potential nuisance factors generated by the special exception use; and

The use is strategically located in the center of the property and fronting along 10th Avenue. The redevelopment of the site will allow for the site aesthetic to be improved with new landscape, lighting and architectural character consistent with the area. There will be no nuisance generated by this proposed use.

c. The effect on the amount and flow of traffic within the vicinity of the proposed special exception use.

The proposed site redevelopment has no significant impacts on regional roadways. The project driveways will be redeveloped to comply with all Palm Beach County requirements.

6. That the proposed special exception use:

a. Does not significantly reduce light and air to adjacent properties.

The proposed plan will not reduce light or air to adjacent properties. The buildings will be smaller in scale than the existing office building providing for more sunlight and air to penetrate the site from the South towards the neighbors to the North of the site. All light levels for the proposed use will be consistent with

Village requirements and can be reviewed on the photometric plan provided within this submittal. There is not detriment to the adjacent properties.

b. Does not adversely affect property values in adjacent areas.

This development will not have a negative impact on the surrounding properties' value. The development will provide for the opportunity of new investment in the property that will stimulate property values, provide for new architecture while updating the landscape and lighting.

c. Would not be deterrent to the improvement, development or redevelopment of surrounding properties in accord with existing regulations.

The proposed development will provide the framework for the continued redevelopment of the surrounding properties. The gas station development plan creates the vehicular and pedestrian circulation pattern that will promote access to the undeveloped portion of land. The new "loop" roadway system will be connected and provide opportunities for utilities to be provided so that the entire site may redevelop. The existing site does not function in this manner.

d. Does not negatively impact adjacent natural systems or public facilities, including parks and open spaces.

This proposed development is not adjacent to and in no way impacts any natural systems or public facilities, including parks and open spaces.

e. Provides pedestrian amenities, including, but not limited to, benches, trash receptacles, and/or bicycle parking.

The proposed plan provides for increased pedestrian access to the property and connectivity between the proposed and existing uses. With this development, the design incorporates a new pedestrian connection to the sidewalk along 10th Avenue which does not exist today. This sidewalk connection parallels the main entrance driveway and connection point for not only the proposed gas station but will also provide connectivity to the future development parcels on the site. Additionally, accommodation has been made to connect the gas station with the Chase Bank parcel. Seating, trash receptacles and bicycle parking all have been provided along the pedestrian sidewalk surrounding the gas station.

Section 34-891(1) Variance request from the hours of operation

Variance Criteria – Chapter 34, Section 34-329(b)(1-5)

This variance request is to allow for the operation of the site 24-hours a day as opposed to the current Commercial operation hours of 7:00 am to 11:00 pm.

1. Special and unique conditions exist which are peculiar to the applicant's case and which are not generally applicable to the property located within the zoning district or neighborhood involved, such as natural or manmade sight limitations from the public rights-of-way.

Hours of Operation are unique to the use proposed as a service facility for the local residents. The limitation of the hours from 7am-11pm are not consistent with the proposed use as a gas station and convenience store, these facilities operate 24-hours a day to provide fuel and convenience goods past the normal commercial operating hours. This is unique as a business type, service the public when all other commercial businesses are closed. The proposed use is fronting on 10th Avenue, and well removed from any nearby

residential uses assuring that the operation during the later hours would not be detrimental to the adjacent properties. The proposed request for 24-hour operation is consistent with other facilities within the Village of Palm Springs.

2. The special and unique conditions are not directly attributable to the actions of the applicant.

The unique condition of the operation cycle for the proposed use standard operating procedure within the industry. The applicant is only proposing to operate this facility in a consistent manner with other like facilities on similar roadways and in similar locations. The applicant is not requesting more than what has been afforded other like gas stations within the Village.

3. The literal interpretation of this article, as applied to the applicant, would deprive the applicant of rights commonly enjoyed by persons who are similarly situated.

Literal interpretation of this article certainly would deprive the applicant of right commonly enjoyed by similar facilities. The most recent examples are the RaceTrac facility on the SW corner of Lake Worth Road and Congress as well as the Wa-Wa located on the NE corner of the same intersection. Additionally, the closest three facilities to the proposed site include a Circle K, Murphy Oil and Mobile gas stations which all operate 24-hours a day. Limiting this site would clearly deprive the applicant of similar rights enjoyed by like uses.

4. The variance granted is the minimum variance necessary for the applicant to make reasonable use of the property.

As stated above, the minimum variance necessary is for the 24-hour use to be consistent with the similar uses within the vicinity. There are no site constraints that deem this location different or unique from the other facilities that operate consistent with this request. Any limitation on the hours of operation less than what has been provided to others would create a financial and competitive hardship for this site.

5. Granting the variance is not detrimental to the public welfare, or injurious to property or improvements in the zoning district or neighborhood involved.

The proposed variance has no detrimental effect on the public or properties surrounding this site. Currently, the site is a vacated office building which has no active use in the daytime or night time. The existing conditions create underutilized and empty space that could potentially attract unsafe or unwelcomed activities.

Section 34-328(1) Variance request from the “Primary Frontage” limitation

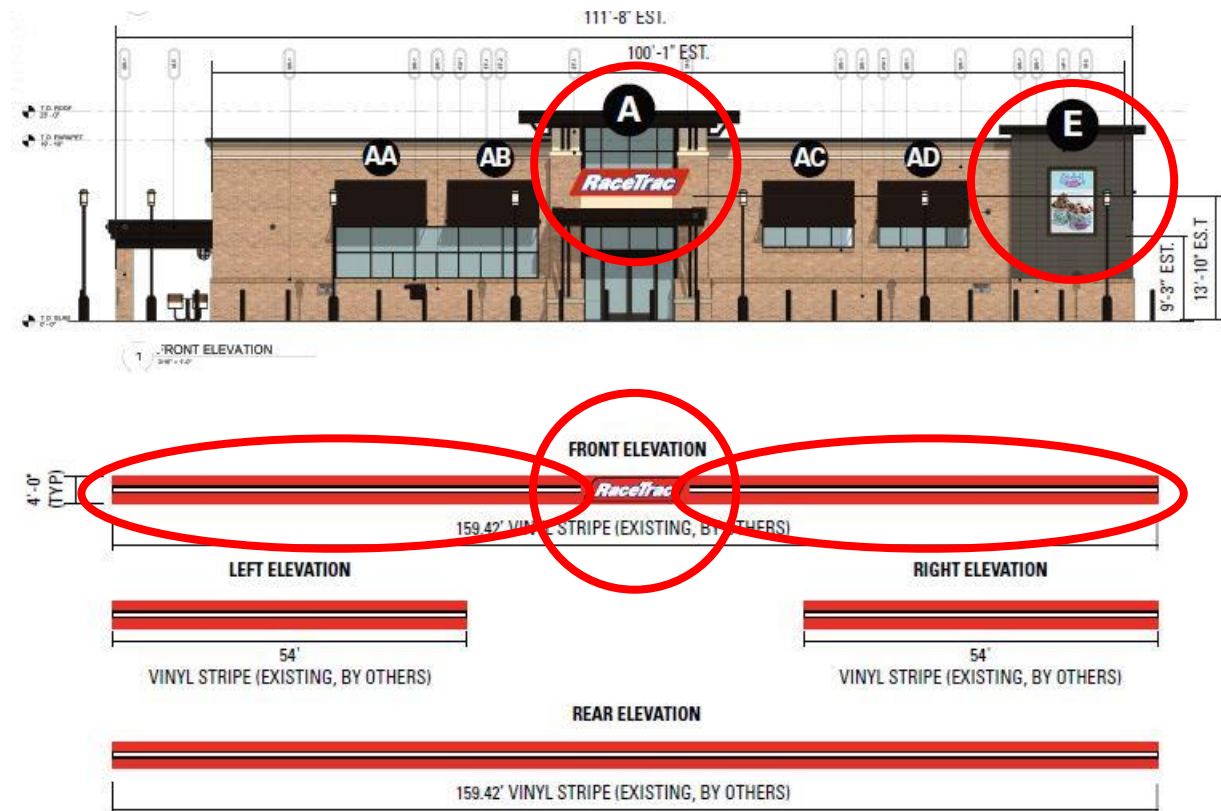
Variance Criteria – Chapter 34, Section 34-329(b)(1-5)

This variance request is to allow for the increase of the Primary Frontage signage. The primary building façade facing 10th Avenue is allowed per code up to 238.19 SF based on the building façade area (19'-10" by 100'-1") x 0.12. The request is to allow a total of 769.68 SF of signage which will include a total of three identification signs and the red, white and blue fuel canopy strip. Please refer to the Signage Program included in this application to reference the signs noted below.

39.5 SF = “A” – Tower Sign

42.17 SF = “E” – Wall Cabinet

55.0 SF = Canopy Logo Sign
582.68 SF = Canopy Stripe
719.35 SF = Total Sign Area



1. Special and unique conditions exist which are peculiar to the applicant's case and which are not generally applicable to the property located within the zoning district or neighborhood involved, such as natural or manmade sight limitations from the public rights-of-way.

The proposed variance is unique in that this use has two primary structures as a “front” façade, the convenience store building as well as the gas canopy. Typically, within a commercial district such as this there is only one primary building façade with no structure in front impeding visibility. The signage as proposed meets the general intention that signage be limited by the size of the building façade, in this case a total of 238.19 SF. In looking at the three main signs proposed “A”, “E”, and the “Canopy Sign Logo” our signage would only amount to 136.67 SF. This only 57% of the permitted signage area. Rather than increase the signage by providing additional sign structures or larger signs we would like to utilize the red, white and blue canopy strip into the design. Due to the overall length of the canopy we exceed to the allowable SF area but believe is consistent with the intent of the zoning code and other gas stations with the same zoning.

2. The special and unique conditions are not directly attributable to the actions of the applicant.

The site is very well screened from view from 10th Avenue due to the existing Oak trees which the applicant intends to preserve in place. Due to the visibility concerns to the building, accommodating the accent stripe on the gas canopy will allow accommodation for visibility to the passing motorist. The applicant has taken

efforts to minimize the number of individual signs or create disproportioned signs on the building façade to maintain a simple and clean aesthetic for the building and canopy. In fact, the proposed signage is only 57% of the allowable area. The increase square footage request is directly related to the canopy stripe which is unique to the building type and use being proposed. The stripe was previously approved by the Village for a similar location at the SW corner of Lake Worth and Congress Avenue.

3. The literal interpretation of this article, as applied to the applicant, would deprive the applicant of rights commonly enjoyed by persons who are similarly situated.

Literal interpretation of this article would be counter to similar variances granted by the Village on similar circumstances. The Village approved a similar variance PSV2012-14 for RaceTrac in a similar circumstance and would be detrimental to the image and consistency of the building architecture.

4. The variance granted is the minimum variance necessary for the applicant to make reasonable use of the property.

The signage area proposed is the minimum size needed to maintain consistency of the building type and allow for the proposed strip to be consistent across the entire façade of the gas canopy. The aesthetic of the stripe provides visual interest to the overall site and allows for the other signage to be understated as proposed at over 100 SF less than is allowed.

5. Granting the variance is not detrimental to the public welfare, or injurious to property or improvements in the zoning district or neighborhood involved.

There is no detrimental effect to the community, or surrounding property by granting this variance. The proposed signage is tasteful and consistent with other commercial uses within the corridor and there is no aspect to the signage that could be considered a danger to motorist or pedestrians.

Section 34-328(a)(4) Variance request to allow for canopy signage (Red/White/Blue color band) to wrap around the entire perimeter of the canopy.

Variance Criteria – Chapter 34, Section 34-329(b)(1-5)

This variance request is to allow for the canopy stripe to extend around all four sides of the gas canopy even though those façades do not face a primary street.

1. Special and unique conditions exist which are peculiar to the applicant's case and which are not generally applicable to the property located within the zoning district or neighborhood involved, such as natural or manmade sight limitations from the public rights-of-way.

Although this specific site only has frontage on 10th Avenue, the overall site boundary encompasses approximately 8 acres and has frontage on Florida Mango on the East. With the way the site is being designed, the building will be visible from Florida Mango, the adjacent Chase Bank, and internally within the overall development. Allowing the stripe to circumnavigate the canopy would allow for a consistent architectural theme consistent with a site that had frontage on multiple roadways.

2. The special and unique conditions are not directly attributable to the actions of the applicant.

The applicant is working with Village staff to make sure the site is developed in a manner that will promote the master development of the property which is viewed and accessible from each direction. Due to that condition, the continuation of the stripe around the canopy would provide consistency in the architecture across the entire site.

3. The literal interpretation of this article, as applied to the applicant, would deprive the applicant of rights commonly enjoyed by persons who are similarly situated.

If interpreted literally, the canopy would have blank facades on the North, East and West facades of the canopy. This would leave an “unfinished” appearance and would be detrimental to the aesthetic of the overall site. A very similar circumstance was approved by the Village of Palm Springs (PSV2012-13) for the RaceTrac site at the SW corner of Lake Worth and Congress allowing the stripe to continue around the building. Denial of this variance would deprive the same applicant rights that they enjoy on a site within the Village.

4. The variance granted is the minimum variance necessary for the applicant to make reasonable use of the property.

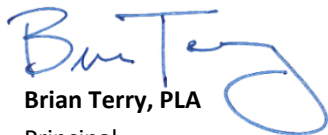
This is the minimum variance necessary for the application. No additional signs or advertisement are being proposed on the “side” or “rear” facades, the area is strictly limited to the gas canopy stripe.

5. Granting the variance is not detrimental to the public welfare, or injurious to property or improvements in the zoning district or neighborhood involved.

There is no detrimental effect on the public welfare or property to the surrounding area. The addition of the stripe around the interior of the canopy will primarily be visible once on the site. There is no effect to the neighboring properties, residents or neighborhood by approving this variance request.

Thank you for your consideration of this application. If you have any questions, please don't hesitate to contact me at 561-249-0940.

Sincerely,



Brian Terry, PLA

Principal

Insite Studio, Inc.



JUSTIFICATION & MARKET ANALYSIS

10th Ave N @ Florida Mango Rd, Lake Worth, FL
September 25, 2019

RaceTrac Petroleum, Inc.
200 Galleria Parkway Southeast
Suite 900
Atlanta, GA 30339

Introduction

Headquartered in Atlanta, Georgia, RaceTrac Petroleum, Inc. is a third-generation led, family-owned company that owns and operates approximately 534 RaceTrac convenience stores across five southern states: Florida, Georgia, Texas, Louisiana, and Mississippi. RaceTrac also operates approximately 250 RaceWay locations in twelve states throughout the south. In Florida, RaceTrac currently operates 244 RaceTrac stores and 40 RaceWay locations and has over 50 additional projects in development.

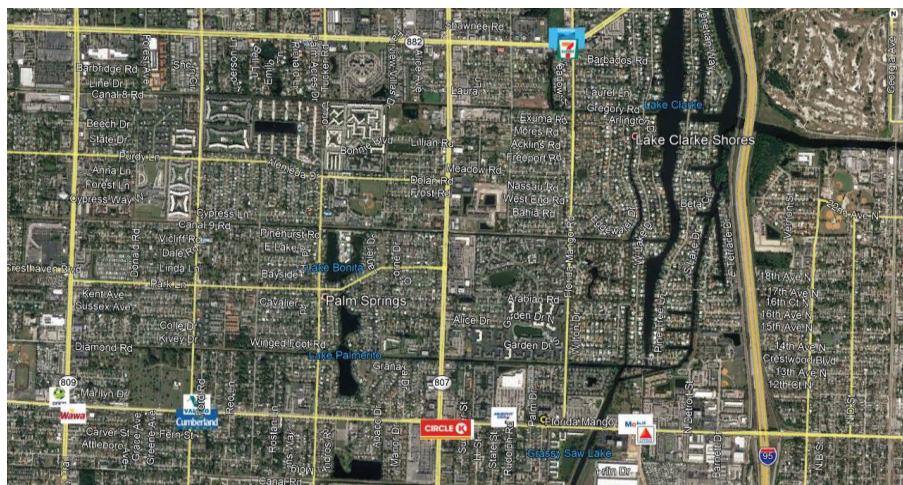
RaceTrac strives to carry out our vision of being the “Convenience Store of Choice” by offering more than 4,000 retail and grocery items to address our guests’ needs, including premium food offerings and endless beverage options. The company debuted the new 5,500 square foot model stores in 2016 with the aim of making people’s lives simpler and more enjoyable. These new prototypes feature indoor and outdoor seating, an expansive coffee bar, Swirl World frozen yogurt, and free Wi-Fi in addition to the large selection of premium beverage and food items.

At the proposed RaceTrac location on the northwest corner of 10th Ave N and Florida Mango Rd, RaceTrac’s real estate analysis team strongly believes this submarket of Palm Beach County is not only underserved by the total quantity of fuel and convenience options available, but also in the quality of those existing facilities serving Palm Beach residents. For these two specific reasons, RaceTrac is excited about the opportunity to serve Palm Beach residents at this location.

The existing average annual daily traffic counts are of significant appeal for RaceTrac in identifying this trade area. Per FDOT 2018 data, daily trips on 10th Ave N are 43,500 vehicles per day (VPD) and 10,900 VPD on Florida Mango Rd. Convenience stores are 61% bypass, meaning that 61% of the cars utilizing them were already on the road and stopped for convenience.

Quality of Existing Fuel & Convenience Providers

Traveling from the subject site two miles north and south along both 10th Ave N and Florida Mango Rd, there are a total of ten convenience store competitors. All of these competitors are within the primary market of the subject site, and for the purpose of our internal analyses, this two-mile distance represents the trade area for this potential site.



As displayed on the aerial image above and outlined on the table below, 7-Eleven and Chevron are located to the north of the subject property. There is also a Mobil and Citgo to the east of the subject property on 10th Ave N. West of the subject property on 10th Ave N is Murphy USA, Circle K, Cumberland Farms, Valero, Wawa, and Orion Fuels.

Competitor	Dispensers	Primary Direction Served	Distance (mi)
Murphy USA	6	Westbound	0.1
Mobil	6	Eastbound	0.2
Citgo	2	Eastbound	0.2
Circle K	7	Westbound	0.4
Cumberland Farms	5	Westbound	1.4
Valero	4	Westbound	1.4
Chevron	4	Northbound	1.5
7-Eleven	5	Northbound	1.5
Wawa	6	Westbound	1.8
Orion Fuels	6	Westbound	1.8

RaceTrac's new architectural design sets a new standard among competitors within the market. This standard not only elevates the convenience store sector, but all retailers. The existing competitors in the market should be compared to these new efforts and allowing RaceTrac to build on the subject property will establish a new baseline for retail architectural efforts. Many of the existing convenience stores referenced below would likely need to enhance offerings to stay competitive in the market place. Also to note, a few of the competitors were only advertising their cash price on their pricing sign. The end result would only benefit the citizens of Palm Beach County with competitive fuel pricing and state of the art stores.

Murphy USA –



Mobil –



Citgo –



Circle K (Marathon) –



Cumberland Farms –



Valero -



Chevron –



7-Eleven (Sunoco) -



Wawa –



Orion Fuels -



Quantitative Analysis

The existing fuel retailers provide only 51 multiple product dispensers (MPDs) in total within the market trade area of the subject site. Along 10th Ave N at the proposed location, there are 43,500 vehicles based on FDOT's traffic data while on Florida Mango Rd there are 10,900 vehicles.

In light of the volume of traffic on 10th Ave N and Florida Mango Rd generated by our demographic provider's estimate of the total population of 121,700 people living and working within the trade area, 51 MPDs represents a deficient number of fueling stations to adequately meet the needs of Palm Beach County residents in the area based upon the real estate analysis team's assessment.

Upon closer examination, the following will prove a lack of supply as it relates specifically to the combined 54,400 vehicles traveling along this corridor. The National Association of Convenience Stores (NACS) average fuel gallons per retail outlet for 2018 in Florida were 53,181 gallons per outlet per week. For the purposes of this analysis, the analysis team has calculated the existing convenience stores' fuel gallons along 10th Ave N and Florida Mango Rd to align with the NACS average for the state. NACS states the average driver consumes 10.6 gallons of fuel per week which aligns with that of internal data.

Additionally, the analysis team considered a volume-per-dispenser approach. Based upon NACS averages, a typical convenience store pumps 318,369 gallons per dispenser per year. For purposes of analysis, both methods are averaged together to ensure a complete picture.

Based upon these calculations, the annual demand in this trade area equates to 29.9 million gallons as represented on the tables below. The combined annual fuel volumes for the existing convenience stores as outlined above calculate to 21.9 million gallons per year. This creates a supply deficit of 8 million gallons per year.

Traditionally, RaceTrac convenience stores outperform the NACS fuel gallons average by 1.5 times. Using this figure applied to the NACS average in Florida, there remains a shortage of over 3.8 million gallons in this trade area.

Market Supply

Market Supply	By Outlet	By Dispenser Count	Data
	Competitor	Dispensers	Distance (mi)
	Murphy USA	6	0.1
	Mobil	6	0.2
	Citgo	2	0.2
	Circle K	7	0.4
	Cumberland Farms	5	1.4
	Valero	4	1.4
	Chevron	4	1.5
	7-Eleven	5	1.5
	Wawa	6	1.8
	Orion Fuels	6	1.8
Total	10	51	1.0
NACS Average Weekly Gallons (Florida)	53,181		
Total Trade Area Supply (Annual)	27,654,120	(53,181 x 10 stores x 52 wks)	
NACS Average Annual Gallons per Dispenser		318,369	
Total Trade Area Supply (Annual)		16,236,819	

Market Demand & Summary

Market Demand		Data
Average Annual Daily Traffic Count (2018) - Primary Road		43,500
Average Annual Daily Traffic Count (2018) - Secondary Road		10,900
Average Gallons per Week per Vehicle (NACS)		10.6
Annual Fuel Demand (54,400 x 10.6 gal/wk x 52)		29,985,280
Summary		Data
Market Supply (Based upon c-store count)		27,654,120
Market Supply (Based upon dispenser count)		16,236,819
Market Supply (Average of two methods)		21,945,470
Market Deficit (Based upon c-store count) (27.6M - 29.9M)		(2,331,160)
Market Deficit (Based upon dispenser count) (16.2M - 29.9M)		(13,748,461)
Market Deficit (Average of two methods) (21.9M - 29.9M)		(8,039,811)
RaceTrac Gallons (NACS regional average x 150%)		4,148,118
Remaining Fuel Deficit in Trade Area		(3,891,693)

Conclusion

When compared to the total number of consumers who live and work in the area and travel along 10th Ave N and Florida Mango Rd in front of the proposed intersection, the total number of existing convenience stores is inadequate to meet the needs of Palm Beach County residents. Additionally, the convenience stores that do exist represent potentially both a substandard customer experience and a non-competitive product offering. RaceTrac is ready and eager to meet the needs of Palm Beach County residents within this trade area.

Every new RaceTrac brings approximately 20 new jobs to the community, and each of the markets we serve is a special part of the RaceTrac family. RaceTrac looks forward to serving future Palm Beach County residents at the proposed intersection and throughout the County as we grow our brand through both new store growth and unparalleled guest experiences.



Crime Prevention through Environmental Design (CPTED) Considerations and Corporate Policies

CPTED is a multi-disciplinary approach to reducing crime through use of design elements and the management of the surrounding environment. CPTED principles aim to reduce victimization, discourage offenders prior to a criminal act, and create a sense of community with the reduction of fear and crime.

Site Design

Pumps are placed in front of the store, adjacent to busy roadways, to ensure that operations are handled as safely as possible. Leaving the busiest area onsite, the fuel canopy, visible from both the street and the inside of the store is good practice.

RaceTrac stores are always well lit with emphasis also placed on the back of the store and dumpster areas. We equip our stores with many cameras both inside and out to provide a full picture of activities occurring on-site.

Our open store design contributes to discouraging crime. This includes low shelving and displays inside as well as well maintained shrubs and large windows unobstructed by signage to maintain lines of site.

Hours and Operations

Our desired 24/7/365 operations are not only for the convenience of our guests and the communities that we serve, but also to facilitate a safer experience for guests and team members alike. When the site is occupied and lit at all times, it discourages people from trespassing and avoids the vulnerability of opening and closing times.

RaceTrac has a zero tolerance policy for loitering and our teams are heavily staffed and are trained to monitor and ask loiterers to leave if necessary. A minimum of two employees are scheduled to be on-site at all times. If an unforeseen circumstance causes there to be only be a single employee, the front doors are to be locked and the package passer is used for all transactions.

Portable alarms are also made available to employees to assist in the event of an emergency.

Partnership with law enforcement

RaceTrac encourages public servants to visit our stores for free coffee or fountain beverages. By making a site a destination for law enforcement, loitering is discouraged and mitigated.



**Department of Engineering
and Public Works**

P.O. Box 21229

West Palm Beach, FL 33416-1229

(561) 684-4000

FAX: (561) 684-4050

www.pbcgov.com



**Palm Beach County
Board of County
Commissioners**

Mack Bernard, Mayor

Dave Kerner, Vice Mayor

Hal R. Valeche

Gregg K. Weiss

Robert S. Weinroth

Mary Lou Berger

Melissa McKinlay

County Administrator

Verdenia C. Baker

August 23, 2019

Shaun G. MacKenzie, P.E.
MacKenzie Engineering and Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990

**RE: RaceTrac Market-10th Ave & Florida Mango
Project #: 190711 (Previously 181007)
Traffic Performance Standards Review**

Dear Mr. MacKenzie:

The Palm Beach County Traffic Division has reviewed the **RaceTrac Market-10th Ave & Florida Mango** Traffic Impact Statement, dated July 24, 2019, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality:	Palm Springs
Location:	NWC of 10 th Avenue and Florida Mango Road
PCN:	70-43-44-20-39-000-0010/-0020
Access:	One full access driveway connection onto Florida Mango Road and one full access driveway connection onto 10 th Avenue (As used in the study and is NOT an approval by the County through this letter)
Existing Uses:	Drive-In Bank = 9,033 SF General Office = 86,272 SF
Proposed Uses:	Replace existing with: Medical Office or Gen. Commercial = 50,000 SF Drive-In Bank = 4,081 SF Gas Station = 20 FP Convenience Store = 5,488 SF Tire Store = 6,496 SF
New Daily Trips:	2,732
New Peak Hour Trips:	141 (70/71) AM; 165 (109/56) PM
Build-out:	December 31, 2022

Based on our review, the Traffic Division has determined the proposed development meets the Traffic Performance Standards of Palm Beach County, subject to the following comments:

1. No Building Permits for the site may be issued after December 31, 2022.
2. The Property Owner shall eliminate the existing eastern egress driveway on 10th Avenue.
3. The Property Owner shall construct westbound right-turn lane at the project driveway on 10th Avenue to county standards, or as approved by the County Engineer.

"An Equal Opportunity
Affirmative Action Employer"



Shaun G. MacKenzie, P.E.
August 23, 2019
Page 2

It is highly recommended that the Property Owner construct a north approach right turn lane at the project entrance on Florida Mango Rd. The right turning traffic is very close to county standards for a right turn lane. This driveway is also expected to experience high volume of traffic.

Please note the receipt of a Traffic Performance Standards (TPS) approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email QBari@pbcgov.org.

Sincerely,

A handwritten signature in blue ink, reading "Quazi Bari".

Quazi Bari, P.E.
Senior Professional Engineer
Traffic Division

QB:HA:rb

cc:

Kim Glas-Castro, Director of Planning, Zoning & Building, Village of Palm Springs
Hanane Akif, E.I., Project Coordinator II, Traffic Division
Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review
F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2019\190711 - RACETRAC - 10TH AND FLORIDA MANGO.DOCX

11-5-2019

Will Carey

Hello Iramis,

No objections to the site plan. Looks good. The applicant will need to submit for a right of way construction permit (if they haven't already done so).

November 12, 2019

**To: Iramis Cabrera, Village of Palm Springs Planner
Chad Girard, PE, Assist. Public Service Director**

From: Tara Bamber, PE 

**Re: Racetrac- 10th Ave. N & Florida Mango
Site Plan Comment Letter
Engenuity Group Project No. 6001.63**

We have received the following on 11-5-19 through WeTransfer for the above reference project:

1. Civil Plans, 14 sheets (COV, GR1, C1, C2, C2.1, C2.2, C3, C4, SD1- SD4, C5.0), dated 10-25-19, by Thomas Engineering Group
2. Landscape Plan, 5 sheets (TD.1, LP.1- LP.4), revised 10-29-19, by Insite Studio
3. Open Space Exhibit, 1 sheet
4. Site Plan, 1 sheet (SP.1), revised 10-29-19, by Insite Studio
5. Response Letter, 4 sheets, dated 10-30-19, by Insite Studio

The following comments need to be addressed be prior to Site Plan approval:

1. Conceptual Engineering Plans:
 - a. Property Boundary shall match approved Plat.
 - b. On Sheet C2.2, the sheet scale is incorrect.
2. Provide Preliminary Drainage Calculations indicating how system will be separated from the Master System.
3. The Civil/Utility permit review comments are not included in this letter.

If you should have any questions, please give me a call at 561-655-1151.

**Cc: Lisa Tropepe, PE
Ed Horton**



Village of Palm Springs
Land Development Department
226 Cypress Lane, Palm Springs, FL 33461
(561) 965-4016 Fax (561) 439-4132

LETTER OF TRANSMITTAL

To: Tom Ceccarelli/Frank Castro/John Gee
Matt Hammond / Chad Girard / Ed Horton
Walter Lenhart

Date: November 4, 2019

RE: RaceTrac at 10th Ave N and Florida Mango Rd

4th Submittal 10-31-2019

Attached are:

- ☒ Prints ☐ Reproducibles ☐ Correspondence
☐ Report ☐ Specifications ☐ Applications
☐ Other _____

COPIES	DATE	DESCRIPTION
1	10/31/2019	Re-submittal package for new gas station

Transmitted:

- ☐ For Approval ☐ As Requested ☐ For Review and Comment
☐ For Revisions ☐ For Your Use
☐ Other _____

REMARKS:

Upon review, please forward any comments regarding the attached materials to me. Should you have any questions regarding the attached materials, do not hesitate to contact me at (561) 434-5090 or 561-965-4016. Thank you for your assistance.

1. Need to find out if fire will be okay with the removal of fire hydrant in front of Chase Bank. (If so show on plans)
2. Will both buildings be required to have fire lines? Signed: Iramis Cabrera
3. Line Stop on 10th Ave needs to come farther west, Valve for new tap in grass and water main 45° bend into property so New valve is not in asphalt.
4. Need a dedicated easement for New sanitary sewer.

Ed Horton
11-4-19

P.B.C. Fire-Rescue
Plan Review Critique

Walter J. Lenhart
Business: 561-233-0056
Fax: 561-233-0057

Permit: FP#:

Date: 9/14/19; 11/15/19

Project: RaceTrac

Address: 2601 10th Avenue North

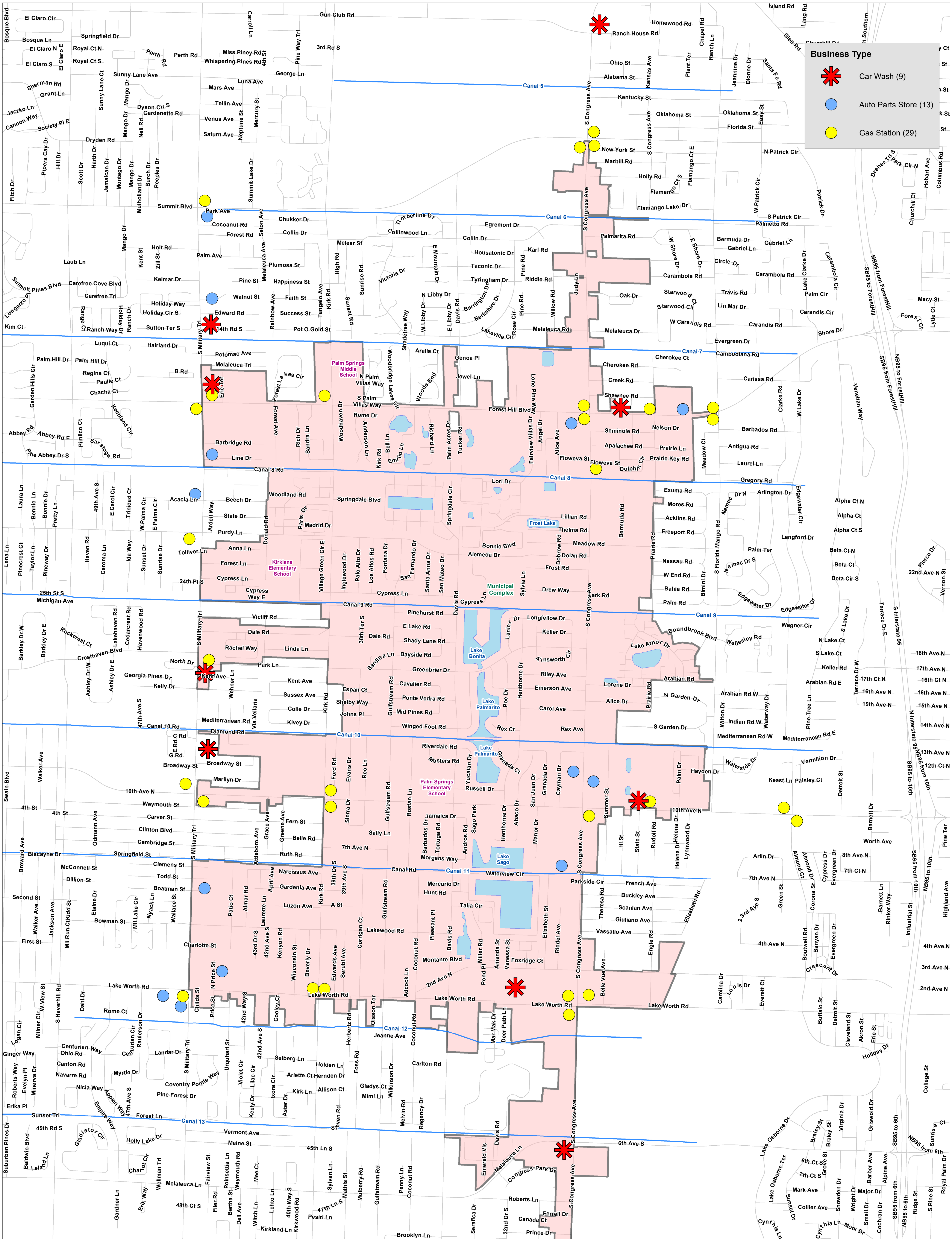
Occupancy: Mercantile

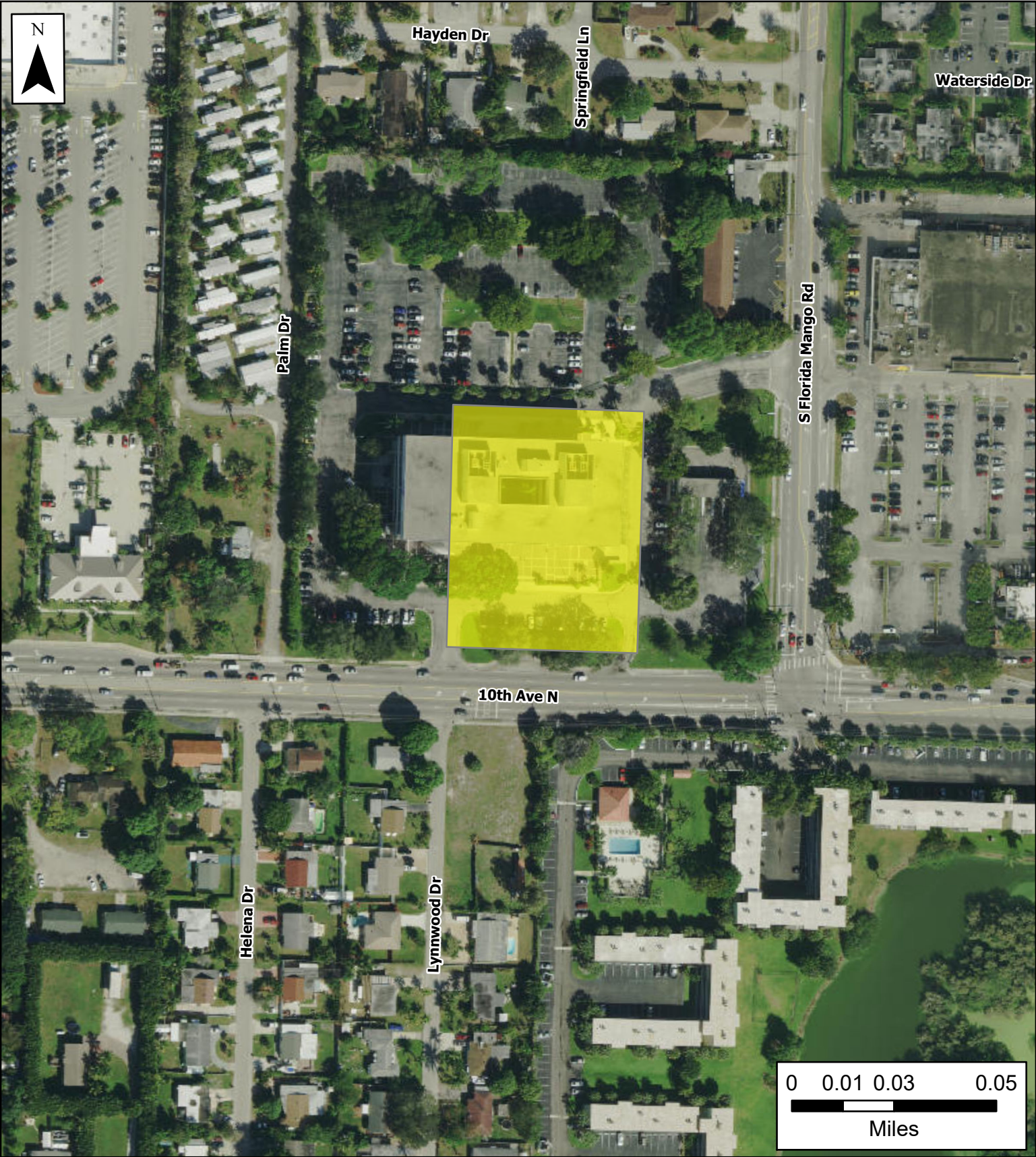
Construction Type:

<u>Page</u>	<u>Comment</u>	<u>Code</u>
C3	Fire sprinkler system is required. Show the size of the fire line going to the building. The fire department connection and fire hydrant location must be shown. Three copies of the civil drawings Must be submitted to the PBC Fire Rescue Water Officer Pedro Segovia For review. The review fee is \$500.00. Pedro's contact information Is (561) 233-0054. E-mail is PSegovia@pbcgov.org	
OSP.1	The 18 ft. one way road width dimension must be measured from face of curb to face of curb.	

VILLAGE OF PALM SPRINGS

VEHICLE ORIENTED USES





Village of Palm Springs

2601 10th Ave North
Race Trac

Location Map

 Race Trac

The Data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The Village of Palm Springs make no warranties, express or implied, as to the use of the licensed Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update.

Data Source: Property Boundary provided by Village of Palm Springs, Basemap imagery provided by ESRI Online Services.



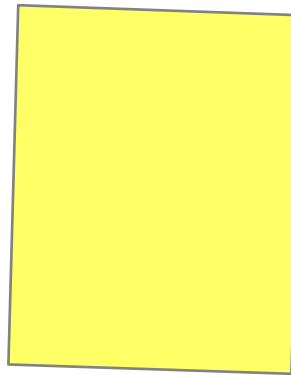
Hayden Dr

Springfield Ln

Waterside Dr

Palm Dr

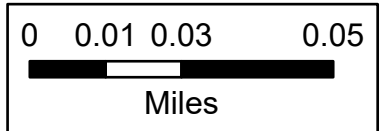
S Florida Mango Rd



10th Ave N

Helena Dr

Lynnwood Dr



Miles



Village of Palm Springs

2601 10th Ave North
Race Trac

Location Map

 Race Trac

253

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Data Source: Property Boundary provided by Village of Palm Springs.



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.5: Resolution No. 2019-47 - Site Development Plan (SPR19-14) and Special Exception Use (PSSE19-09) - Tire Kingdom - 2601 10th Avenue North

SUMMARY:

Brian Terry, the agent for the owner, 10th Avenue Partnership LTD, the applicant, is requesting a Site Plan approval (SPR19-14) and concurrently Special Exception Use (PSSE19-09) to permit the construction of 5,682 square feet automotive service building with seven (7) service bays, within 1.3 acres on the southwest portion of the property, the building is oriented towards 10th Avenue North with the service doors facing north.

The site consists of an existing four-story office building with approximately 88,707 square feet SF and the newly constructed 4,081 SF Chase Bank. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and has been unutilized since then. The site plan has been developed in a manner to accommodate the redevelopment of the overall property as there will be approximately 5.5 acres of land remaining on the north side.

Planning, Zoning & Building Staff has conducted a review of the application and has concerns that criteria for a Special Exception use have not been met. Currently there are 29 automotive service facilities within the Village limits and abutting the Village boundaries, granting the proposed special exception use would create a proliferation of the same or similar types of use, which is detrimental to the redevelopment of the area and may have a detrimental impact on surrounding properties in terms of visual impact on community character.

A Special Exception is "a use that would not be appropriate generally or without restriction throughout the zoning district". Staff does not find that the requested Special Exception would provide for the appropriate use of the land pursuant to Section 34-602(d) in consideration of

the previously mentioned issues.

The application must be supplemented with a narrative demonstrating compliance with architectural guidelines for the Commercial Planned Development to show compatibility with the proposed vehicle repair facility and existing Chase bank building (and proposed RaceTrac).

Planning, Zoning & Building Staff does not support the proposal, however, should the Planning & Zoning Board desire to recommend approval of the Special Exception Use and Site Development Plan, Staff recommends that said motion include the following forty-five (45) conditions outlined in the staff report.

FISCAL IMPACT:

The proposed use does not have a direct fiscal impact to the Village.

ATTACHMENTS:

Exhibit "A" - Staff Report and Conditions of Approval
Site Plan, Landscape Plans, Elevations and Sign Plans
Project Narrative and Justification Statement
TPS Letter and Comment Letters
Aerial Map and Location Map
Auto Service Facilities Map



PLANNING, ZONING & BUILDING STAFF REPORT

SUBJECT: Site Development Plan– 2601 10th Avenue North- Tire Kingdom Site plan

Application Summary			
Applicant / Petitioner	10 th avenue Partnership LTD	Submittal Date	7/26/2019
Reference Name	10 th & Mango Tire Kingdom	Case Number	SPR19-14, PSSE19-09
		Parcel Control No	70-43-44-20-39-000-0010
Location	2601 10 th Avenue North (proposed Lot 4)	Site Area	±1.3 gross acres
P&Z Bd Meeting	December 10, 2019	Council Meeting	Not scheduled
Requests			
Proposed Use(s)	Site Development Plan (within a Commercial Planned Development) and concurrently requesting Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, and to construct 5,682 square feet automotive service building with seven (7) service bays.		
Number of buildings	Proposed Lot 4 1 building 5,682 sf		
Variances	No Variances submitted		
Setbacks			
Direction	Proposed		
North (rear)	Over 55'		
South (front)	Over 180'		
East (side)	Over 40'		
West (side)	Over 35'		
Note: As a proposed outparcel within the Commercial Planned Development, compliance with standards of the CG zoning district for a stand-alone parcel are not required, from planning and zoning perspective – the property is a single development project with unified master site plan.			
Site Characteristics			
Existing Use	Existing vacant office building and Chase Bank building to remain.	Proposed Use	Chase Bank building to remain and on proposed Lot 4, new automotive service building with 7 service bays.
Existing Zoning	Commercial General (CG)	Existing Future Land Use	Commercial
Surrounding Existing Land Use, Future Land Use, and Zoning			
Direction	Existing Use	Future Land Use	Zoning District
North	Residential uses	Commercial & Low Density Residential	Commercial General (CG) & Residential Multiple-Family (RM)
South	Residential uses	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
East	Commercial shopping center	Unknown Unincorporated Palm Beach County	Unknown Unincorporated Palm Beach County
West	Residential mobile home park	High Density Residential	Residential Multiple-Family (RM)
Recommendation			
PZB Staff does not support the requested Special Exception, finding criteria of Section 34-606(b)(3), (4) and (5) have not been met.			

Additionally, Staff has not received a descriptive narrative in reference to propose architectural designs. The project shall demonstrate the compatibility with existing Chase Bank building accordingly with the VPS Building Design Guidelines per Ordinance 2017-13.



I. Site History

- Ordinance 2010-02: Annexation

The property was voluntarily annexed into the Village of Palm Springs as a developed parcel on February 11, 2010 and designated with the Land Development as Commercial General zoning districts and Future Land Use Commercial.

- Resolution 2017-26: Site Plan and Special Exception Use

On August 10, 2017 the Village's Council approved a Site Plan and Concurrently a Special Exception Use to redevelop 257 the site by demolishing the existing bank drive-through and constructing a freestanding 4,081 square foot Chase Bank Branch with two lanes drive-through ATM with by-pass lane.

- Resolution 2018-22: Plat

The Village's Council approved on July 12, 2018 under above resolution, a final plat application to subdivide the 8.6 acre property at the northwest corner of the 10th Avenue North and Florida Mango Road to create a separate lot for Chase Bank building, the boundaries of the second lot created coincided with those of the special exception/site plan approved under Resolution 2017-26.

II. Comprehensive Plan Consistency

The subject property's Future Land Use designation and Zoning are Commercial and Commercial General (CG), respectively. The proposed site development plan for the construction of a new automotive service facility is permitted as special exception use and is generally consistent with goals, objectives and policies of the Village's Comprehensive Plan.

III. Variances Requested

No Variances have been applied as part of this site plan application.

IV. Neighborhood Compatibility

- 1) The proposed project is located on the northwest corner of 10th Avenue North and South Florida Mango Road.
- 2) An existing shopping center is located on the east side of the property with several different retails, offices and restaurants establishments occupying the suites.
- 3) Surrounding properties are generally residential use.
- 4) The proposed automotive service facility is permitted as special exception use within the Commercial General zoning district.

V. Regulatory Issues

- The site plan generally conforms to the property development standards of the CG district.
 - 1) Proposed project plan generally meets required site development regulations.
 - 2) An 8' wide right-of-way shall be dedicated to Palm Beach County.
 - 3) A right-of way construction permit is required to be obtained with PBC.
 - 4) Revised plans shall be provided to the Planning, Zoning and Building Department prior to Council consideration.
 - 5) A westbound right-turn lane at the project driveway on 10th Avenue shall be constructed by the PBC standards.
 - 6) Permits from all applicable permitting agencies, including but not limited to Lake Worth Drainage District, Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs are required prior to construction.
 - 7) Civil/Utility plans shall be approved by the Village's Engineer.
 - 8) Proposed Site Plan meets the Traffic Performance Standards of Palm Beach County.

VI. Environmental Issues:

There are no environmental (wetlands, floodplains, etc.) issues identified.

VII. Community Outreach/ Notification

- The subject property was posted on November 27, 2019.
- Public Notification letters were mailed to all property owners within 300 feet radius of subject property on November 26, 2019.

- Legal advertisement was published in the paper on November 28, 2019.
- Staff has not received any inquiries or comments as a result of the notices.

VIII. Proposed Development Plan Details

The petitioner's development plans dated received on July 26, 2019 depicts the following:

- An application submitted for a Site Development Plan and concurrently requesting a Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, construct 5,682 square feet automotive service facility with 7 service bays on the western portion of the remaining land of the property west of the Chase Bank building.
 1. Site Plan dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 2. Landscape plans dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 3. Engineering plans dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 4. Architectural plans dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 5. Photometric plan dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 6. Signage plan dated received July 26, 2019 revised and resubmitted on October 31, 2019.
 7. Boundary survey.
 8. Project narrative and justification statements.
 9. Traffic study.
 10. Tire Kingdom Marketing Rationale

IX Recommendation

The applicant is requesting a Site Development Plan (within a Commercial Planned Development) and is concurrently requesting Special Exception Use to allow the demolition of the existing 4-story commercial office building and as part of the redevelopment project of the site, and to construct a 5,682 square feet automotive service facility with 7 service bays on a 1.3 acres portion of the property west of the Chase Bank building.

Applicant's justification statement states:

"Although there are other automobile service stations in the vicinity of this site location, there is a significant demand for this use along the 10th Avenue corridor and would provide a service to both local and regional residents. The establishment of this use on the property is the continuance for the redevelopment of the overall property which is currently not providing benefit to the Village. The Automobile Service Station use will provide infrastructure improvements on the property in way of drainage, utilities, a new turn lane and lighting to accommodate the continued redevelopment of the property"

Planning, Zoning & Building Staff has conducted a review of the application and has concerns that criteria for a Special Exception use have not been met. Specifically, Section 34-606(b)(3), (4), and (5) have not been met in that:

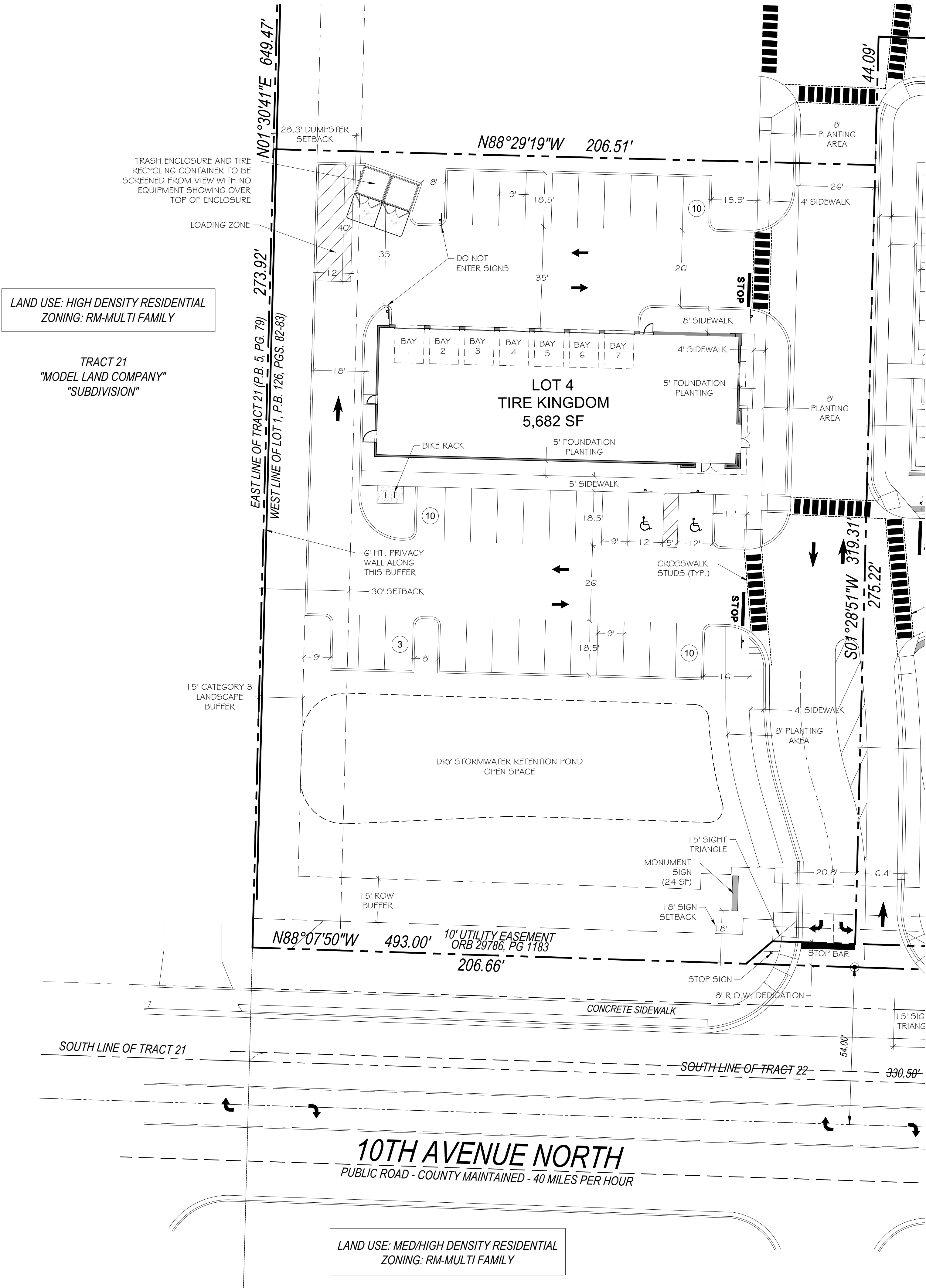
- 1) Currently there are 29 automotive service facilities within the Village limits and abutting the Village boundaries (1 is located within 1,500 feet on the same 10th Ave North segment); therefore, granting the proposed special exception use would create a proliferation of the same or similar types of use, which is detriment to the (re)development of the area, and therefore does not meet criterion (4); and
- 2) The proposed special exception use may have a detrimental impact on surrounding properties in terms of visual impact on community character.

A Special Exception is "a use that **would not be appropriate generally** or without restriction throughout the zoning district". Staff does not find that the requested Special Exception (automotive service facility) would provide for the appropriate use of the land pursuant to Section 34-602(d) in consideration of the previously mentioned issues and doesn't find the proposed use being beneficial to the Village's residents.

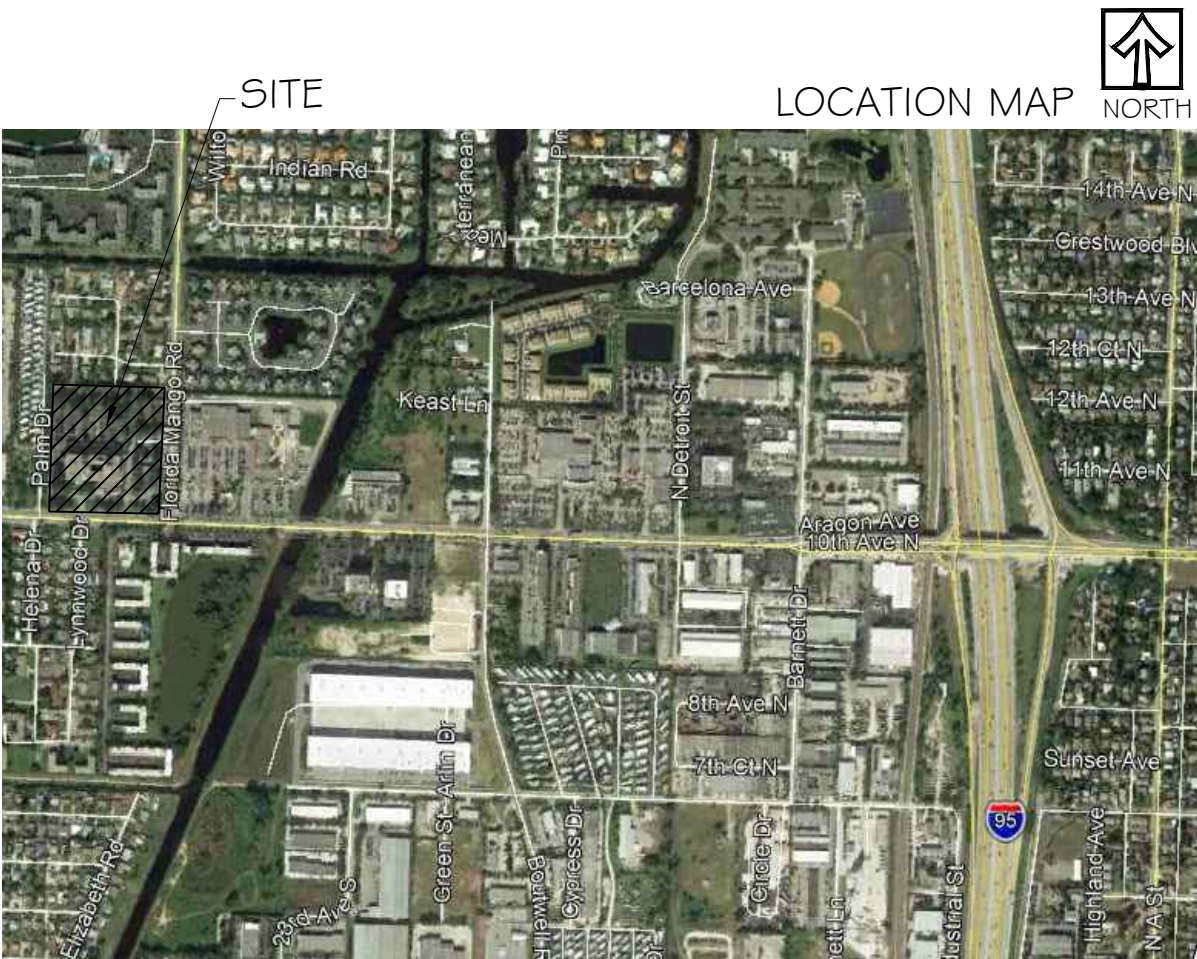
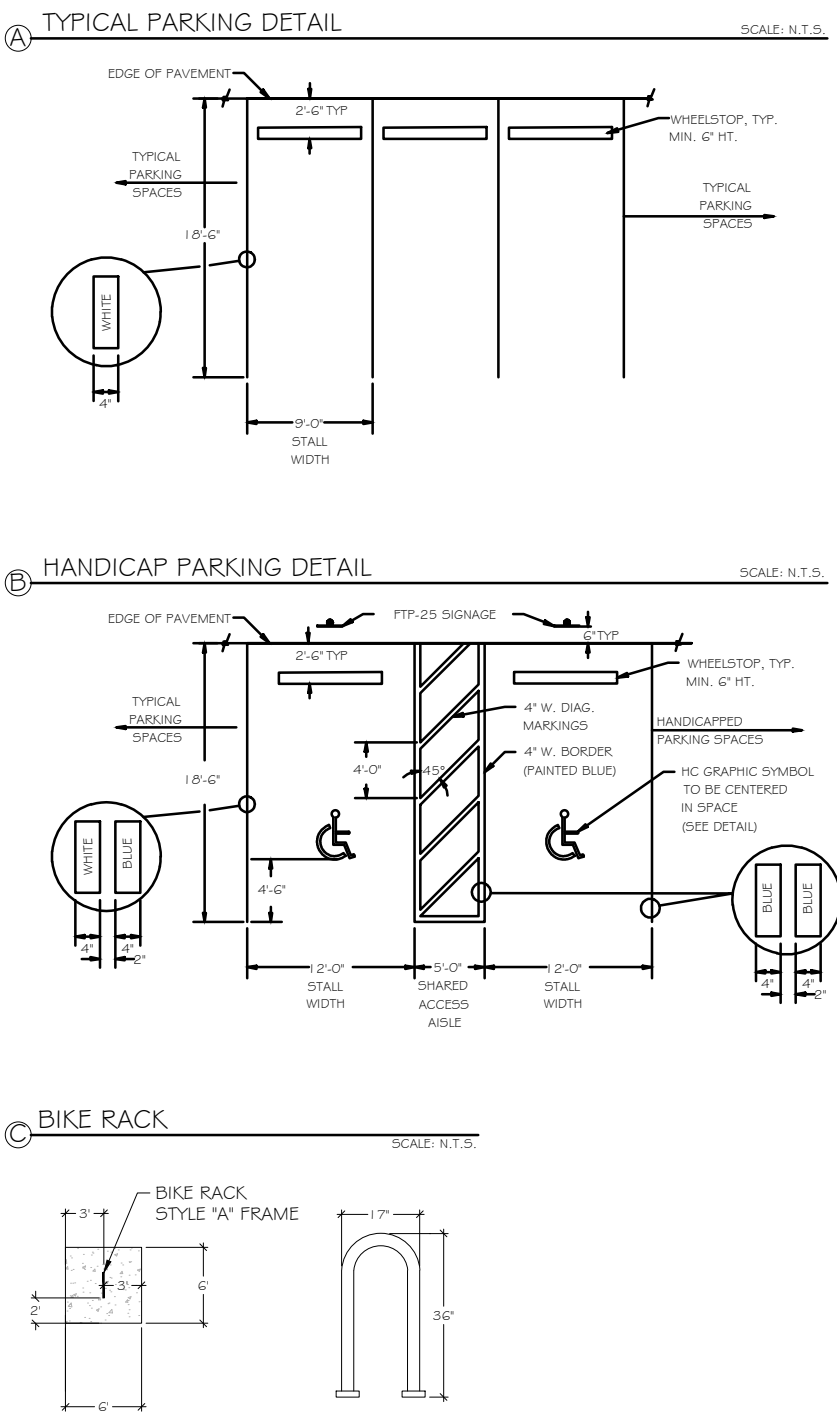
Should the Planning & Zoning Board desire to recommend approval of the Special Exception Use and Site Development Plan, Planning, Zoning and Building Staff recommends that said motion include the following forty-four (45) conditions below:

1. Build out date December 31, 2022.
2. Property control number shall be revised on the plans **prior to Council consideration**.
3. The special exception approval shall be implemented within 18 months of Council approval.
4. The site plan approval is valid within 24 months of Council approval.
5. Conceptual engineering plans shall be revised **prior to Council consideration** as follow:
 - a. Property boundaries shall match the approved Plat.
 - b. On sheet C2.2, the sheet scale is incorrect
 - c. Depict Utility Easement over the sanitary sewer main lines and manholes (easement shall be executed, accepted by Village Council and recorded **prior to 1st Certificate of Occupancy**)
 - d. Proposed line stop on 10th Ave North needs to be relocated further to the west, in grassy area, so that new valve is not in pavement. Water main from that point can bend 45° under pavement area.
6. All pedestrian crossing designated areas shall include crossing studs or alternative measures to slow traffic and warn of pedestrian activity.
7. Fire sprinkler system is required, plans shall show the size of the fire line going to the building, the fire department connection and location of the fire hydrant, revise plans **prior to Council consideration**.
8. A fire hydrant must be located at the site, plans shall be revised **prior to Council consideration**.
9. The 18' roadway width dimension must be from face of curb to face of curb at the one-way drive, plans shall be revised **prior to Council consideration**.
10. The 10' utility easement from Florida Mango Road shall be extended to the proposed transformer location, plans shall be revised **prior to Council consideration**.
11. The existing pole sign shall be removed **prior to the issuance** of any building permit.
12. Dumpster enclosure details shall be provided **prior to Council consideration**.
13. Shrubs shall be added on the west side of the dumpster/tire recycling enclosure, plans shall be revised **prior to Council consideration**.
14. The numeral street address shall be placed on the monument sign in not smaller than 8" numbers, plans shall be revised **at time of permitting**.
15. Any existing or proposed utility box/cabinet shall be screened from view, Staff recommends wrapping the cabinet/box with a match design accordingly with the existing/proposed location.
16. Landscaped buffer shall be provided along the north side, plans shall be revised **prior to Council consideration**.
17. Proposed widths of the foundation planting along the main driveway shall be labeled on the landscape plan **prior to Council consideration**.
18. Only 1 wall sign is proposed on the building facing 10th Ave North right-of-way.
19. Proposed location of the loading zone is adjacent to the dumpster, hours of deliveries and trash collection shall be coordinated to not create conflicts.
20. Landscape buffers shall only be encumbered/overlapped a maximum of 5' by any utility easement.
21. A descriptive narrative shall be provided **prior to Council consideration** in reference to proposed architectural designs and the existing Chase Bank building architecture.
22. Sheet EPH3.1 shall be revised **prior to Council consideration** to eliminate on the calculation summary table, any specific uses listed, as a master site lightning only use categories are considered. 260
23. A Utility/Civil Plan shall be approved by the Village Engineer **at time of permitting**.
24. A ROW permit shall be obtained with the PBC **at time of permitting**.

25. A root barrier shall be provided on trees that are within 12' of utility lines.
26. The construction dumpster shall be only provided by Waste Pro USA who is under franchise Agreement with the Village.
27. Photometric plans shall be approved by the Planning, Zoning and Building Department **at time of permitting**.
28. Landscaped areas shall be irrigated including but not limited to buffer, islands, planter boxes, etc.
29. Irrigation plans shall be provided **at the time of permitting**. Non-potable water shall be used for the irrigation system per Village code.
30. Provide permits from all applicable permitting agencies, including but not limited to, Lake Worth Drainage District, Lake Worth Beach Electric Utilities, PBC Fire Rescue and Village of Palm Springs **at the time of permitting**.
31. The property owner shall register an Agent of Record, prior to issuance of a permit, to establish a contact person responsible for compliance with this Development Order, including site plan/landscape plan details and conditions of approval.
32. Future subdivision (replat) to create a separate parcel (outparcel) is subject to a unity of control instrument for the commercial planned development.
33. The Applicant may be required to undertake additional security measures, based on the number of complaints or calls for service for incidents at the premises, as determined by the Police Chief. Such additional security measures, as approved by the Police Chief, may include increased on-site security at the operator's sole expense.
34. Verify utility and easement locations to ensure that there are no conflicts with landscaping, revise **at time of permitting** as needed.
35. All electric utilities shall be underground.
36. A pre-construction meeting shall be scheduled with the Village Planning, Zoning & Building Development Department prior to commencement of any construction activity. Permits are required from the Planning, Zoning & Building Department prior to commencing any construction or renovation. The project shall be constructed in accordance with the FBC edition in effect **at the time of permitting**.
37. A silt barrier shall be installed around the perimeter of the property (within the affected area for the site improvements and new building construction) prior to commencement of any site work or construction activity, and a track pad shall be installed at the construction entrance(s), both of which shall remain through substantial completion.
38. Any sidewalk broken or damaged during construction shall be replaced by the contractor **prior to CO**.
39. The Landscaping shall be certified by the Landscape Architect upon completion and **prior to Certificate of Occupancy/Certificate of Completion** of each improvement area.
40. Absolutely no occupancy, other than construction personnel, is permitted **prior to TCO/CO**.
41. Photometrics must be certified by an engineer **prior to CO**.
42. The civil engineer of record shall certify the site construction **prior to Certificate of Occupancy**.
43. The applicant may be required to provide a resident inspector for structural elements such as concrete pours in accordance with Section 109.1.3 FBC 2010 and F.S. 553.791. Determination shall be made at time of pre-construction conference with Planning Zoning and Building Director.
44. The General Contractor shall be on site during any and all construction activity in accordance with FS 489.1195.
45. **At the time of CO**, the petitioner shall provide the Planning, Zoning and Building Department with electronic copies of as-builts.



SITE DATA	
ADDRESS	2601 10TH AVE. NORTH, PALM SPRINGS, FL.
FCN	70-43-44-20-01-008-0080
OWNER	10th AVENUE PARTNERSHIP, LTD.
TENANT	TIRE KINGDOM
CURRENT USE	MULTISTORY OFFICE BUILDING W/ PARKING
PROPOSED USE	AUTOMOBILE SERVICE STATION (AUTOMOTIVE REPAIRS)
LAND USE DESIGNATION	RETAIL
ZONING	CG
GROSS SITE AREA	1.3 AC. or 56,719 SF
8' ROW DEDICATION	262 SF
NET SITE AREA	1.3 AC. or 56,457 SF
PROPOSED IMPERVIOUS AREA	33,435 SF (59.2%)
PROPOSED BUILDING COVERAGE	10.1% (TIRE KINGDOM)
PROPOSED BUILDING HEIGHT	23'-4"
PROPOSED FAR	.10
REQUIRED OPEN SPACE	20% MIN.
PROPOSED OPEN SPACE	23,022 SF (40.8%)
TOTAL REQUIRED PARKING	29 (1 SPACE PER 200SF OF GROSS BLDG. AREA)
TOTAL PROPOSED PARKING	33 (2 ACCESSIBLE)
REQUIRED SOUTH FACADE PLANTING	125 LF x .25 = 31.25 LF REQUIRED
PROVIDED SOUTH FACADE PLANTING	105 LF PROVIDED

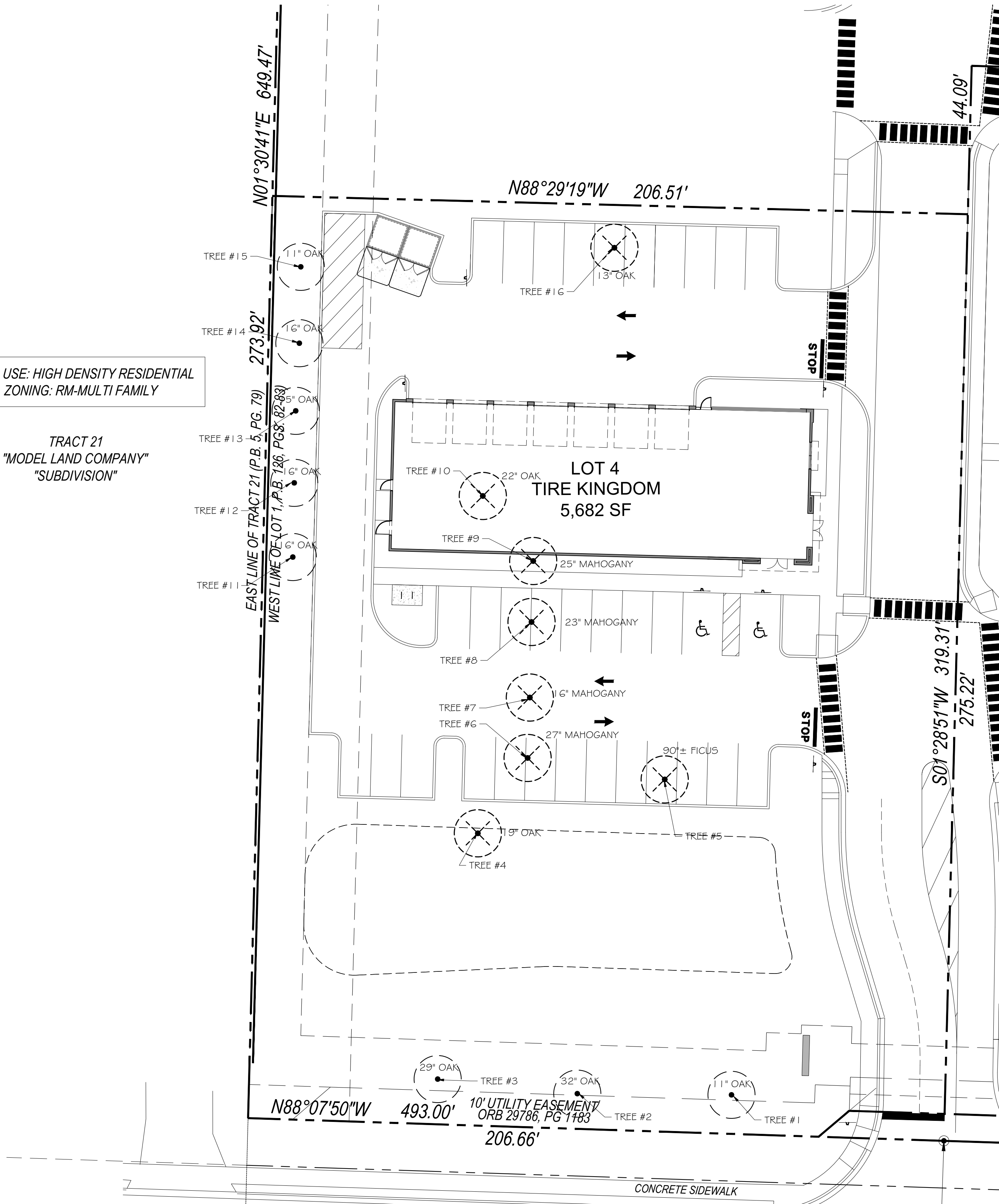


Consultants:
Revisions:
07/31/19: Per Village comments
09/24/19: Per Village comments
10/29/19: Per ROW Dedication

TIRE KINGDOM AT THE
VILLAGE COLLECTION
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

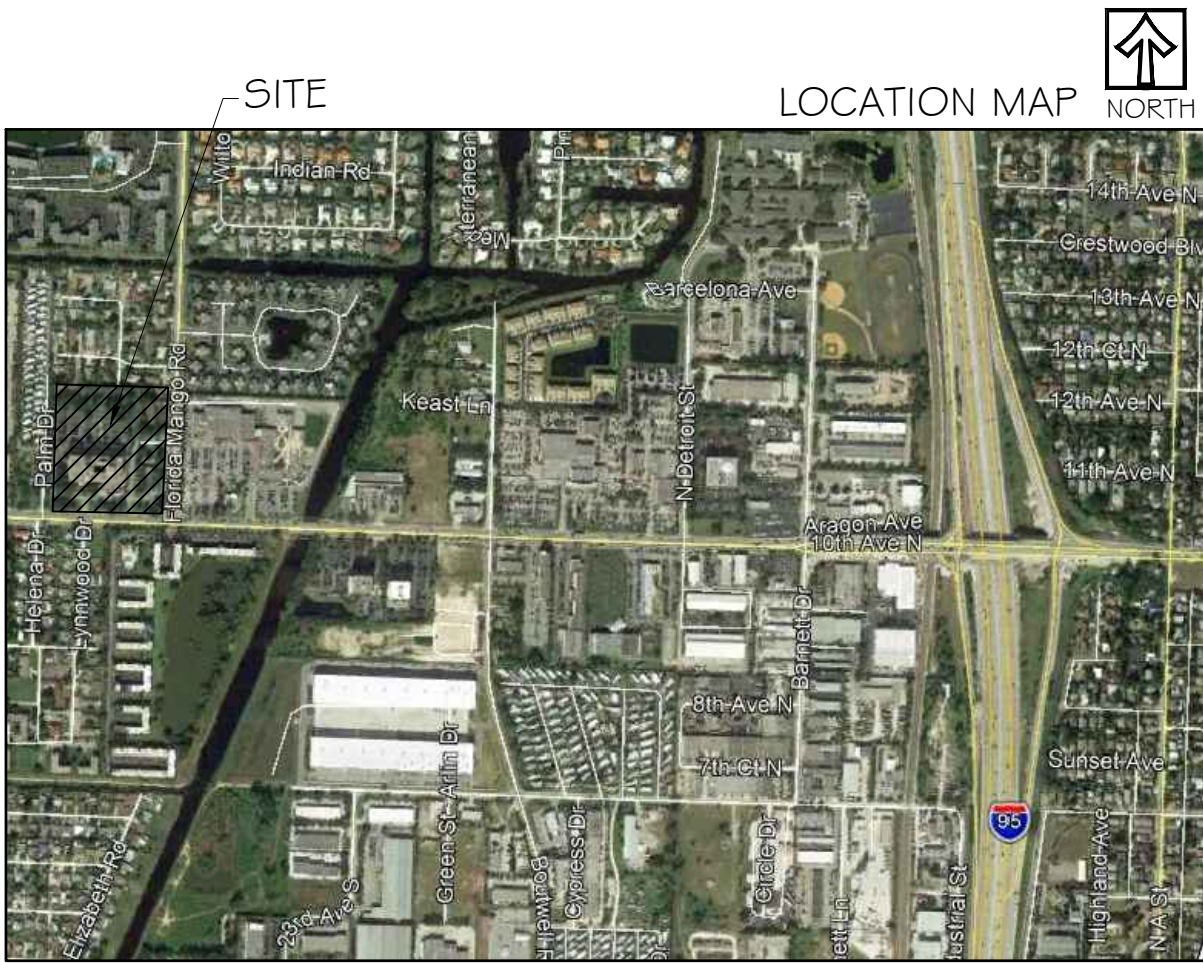
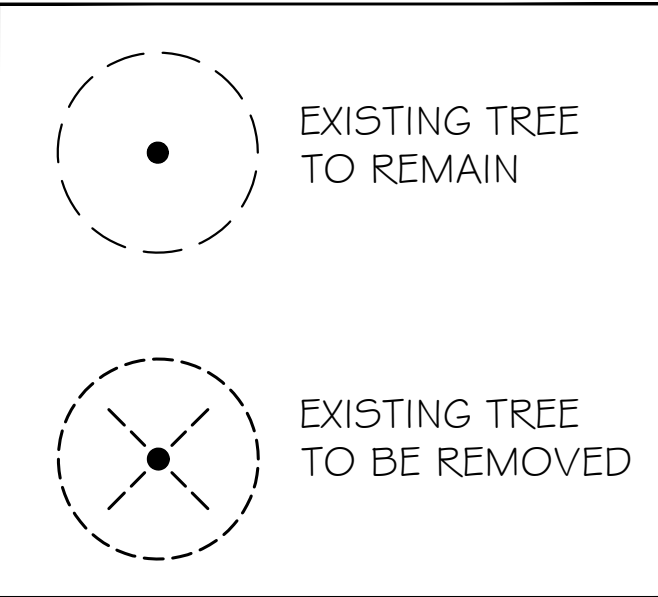
LAND USE: HIGH DENSITY RESIDENTIAL
ZONING: RM-MULTI FAMILY

TRACT 21
"MODEL LAND COMPANY"
"SUBDIVISION"



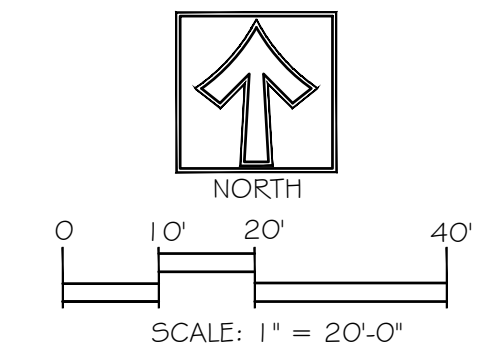
TREE DISPOSITION LIST				
TREE #:	TYPE:	SIZE:	DISPOSITION:	COMMENTS:
1	OAK	11"	REMAIN	
2	OAK	32"	REMAIN	
3	OAK	29"	REMAIN	
4	OAK	19"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
5	FICUS BENJAMINA	90' +/-	REMOVE	
6	MAHOGANY	27"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
7	MAHOGANY	16"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
8	MAHOGANY	23"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
9	MAHOGANY	25"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
10	OAK	22"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND
11	OAK	16"	REMAIN	
12	OAK	16"	REMAIN	
13	OAK	15"	REMAIN	
14	OAK	16"	REMAIN	
15	OAK	11"	REMAIN	
16	OAK	13"	REMOVE	SURFACE ROOTS, LOCATED IN EXISTING TREE ISLAND

EXISTING TREE LEGEND



TIRE KINGDOM AT THE
VILLAGE COLLECTION
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

BRYAN ROBERT DONAHUE, PLA
LICENSE # LA6667130



Drawn By: SMT
Drawing #: 1034
Date: 7/25/2019

TREE DISPOSITION
PLAN

SHEET # TD.1

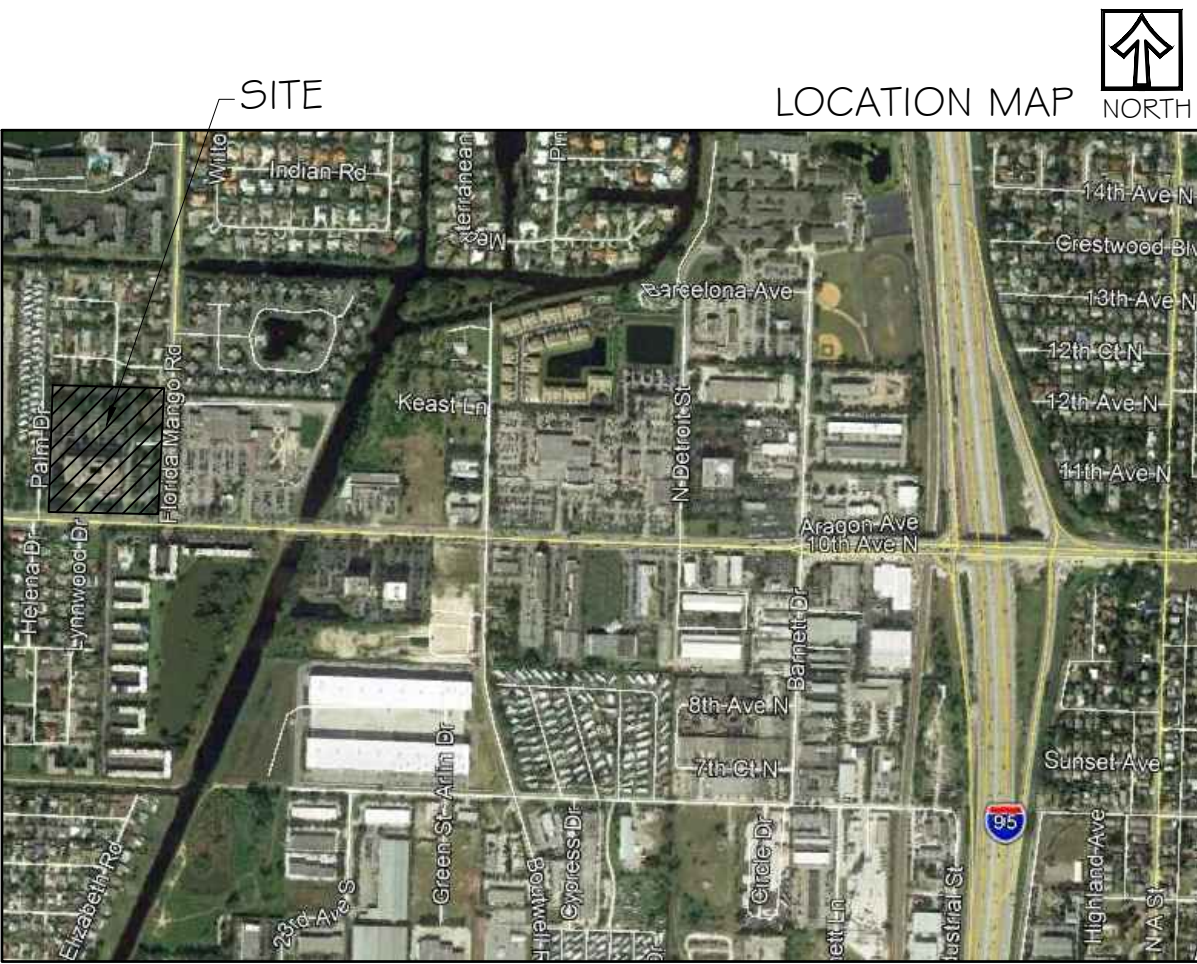
Always call 811 two full business days before you dig to
have underground utilities located and marked.

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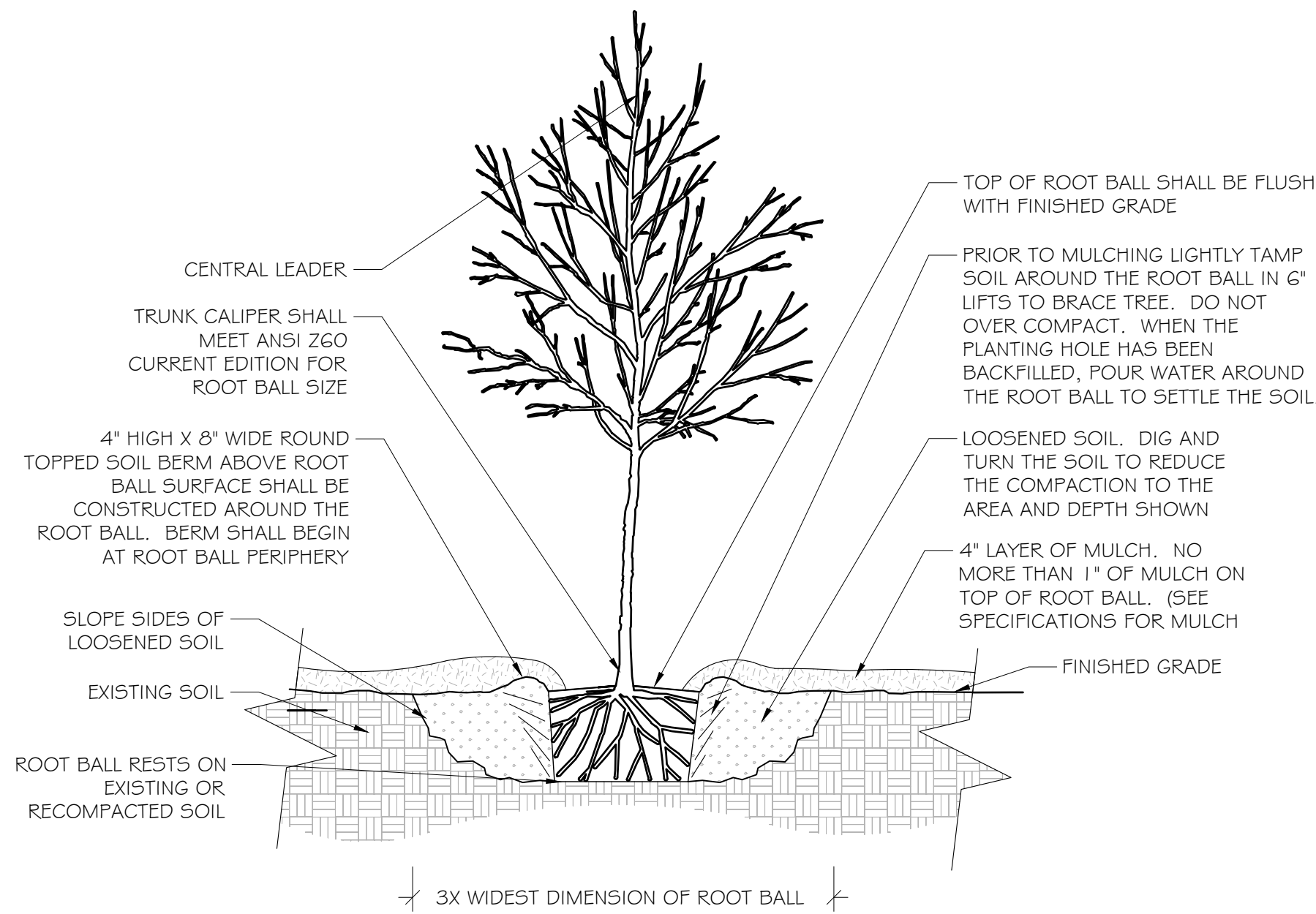
TREES				
SYMBOL	QTY	COMMON NAME	SCIENTIFIC NAME	REMARKS
*IC	5	DAHOOH HOLLY	ILEX CASSINE	12'HT X 5' SPR. 2" CAL MIN. 5' C.T.
*QV	10	LIVE OAK	QUERCUS VIRGINIANA	12'HT X 5' SPR. 2" CAL MIN. 5' C.T.
PALMS				
*PS	3	SYLVESTER PALM	PHOENIX SYLVESTRIS	12' C.T./ Diamond Cut/ FL#11/ Matched
*RE	6	ROYAL PALM	ROYSTONEA ELATA	25' OA HT. 12' G.W. MIN. CONTINUOUS TRUNK DIAMETER
SMALL TREES & SHRUBS				
*CHR	150	REDTIP COCOPLUM	CHRYSOBALANUS ICACO	36'HT. MIN. X 24" SPRD. 24" O.C.
*CLU	226	CLUSIA	CLUSIA GUTTIFERA	36'HT. MIN. X 24" SPRD. 24" O.C.
CRO	90	'MAMMEY' CROTON	CODIAEUM VARIEGATUM 'MAMMEY'	30'HT. MIN. X 18" SPRD. 24" O.C.
CON	17	SILVER BUTTONWOOD	CONOCARPUS ERE. SERICEUS	30'HT. MIN. X 24" SPRD. 24" O.C.
CRI	12	GREEN CRINUM LILY	CRINUM ASIATICUM	30'HT. MIN., 7 GAL. AS SHOWN
*HAM	15	FIREBUSH	HAEMELIA PATENS	30'HT. MIN. X 18" SPRD. 24" O.C.
IXO	14	YELLOW 'MAUI' DWARF IXORA	IXORA COCCINEA 'MAUI'	30'HT. MIN. X 18" SPRD. 24" O.C.
JL	4	JATROPHA	JATROPHA INTEGERRIMA	5'HT. MIN. MULTI-TRUNK. AS SHOWN
RUE	52	RUELLIA	RUELLIA BRITTONIANA	30'HT. MIN. X 18" SPRD. 24" O.C.
GROUNDCOVERS				
DIA	215	BLUEBERRY FLAX LILY	DIANELLA TASMANICA	12'HT. X 12" SPRD. 12" O.C.
*LAN	120	PURPLE LANTANA	LANTANA MONTEVIDENSIS	12'HT. X 12" SPRD. 12" O.C.
SOD	T.B.D.	ST. AUGUSTINE SOD	STENOTAPHRUM SECUNDATUM	CONTRACTOR TO DETERMINE QTY.

LOCATION/ AREA	CODE REQUIREMENT	REQUIRED	PROVIDED
NET SITE AREA: 56,457 SF	1 TREE PER 2,500 SF	23 TREES	39 TREES (INCLUDES 16 CREDITS FROM EXISTING OAKS TO REMAIN)
PARKING SPACE LANDSCAPE AREA: 35 SPACES	20 SF PER EACH SPACE	700 SF	1,542 SF
PARKING ISLAND TREES	1 TREE PER ISLAND	7 TREES	7 TREES
EAST PL MEDIAN (167 LINEAR FEET)	1 TREE PER 40' LF	5 TREES	6 TREES
SOUTH PL (206.66 LINEAR FEET) 15' CATEGORY 5 BUFFER	1 TREE PER 20' LF 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS	12 TREES 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS	12 TREES (6 CREDITS FROM EXIST. OAKS & 6 NEW ROYAL PALMS) 3' HT. MEANDERING HEDGE 2 LEVELS OR TIERS
WEST PL (274.0 LINEAR FEET) 15' CATEGORY 3 BUFFER	1 TREE PER 20' LF 3' HT. HEDGE 6' HT. WALL OR FENCE	14 TREES 3' HT. HEDGE 6' HT. WALL OR FENCE	15 TREES (10 CREDITS FROM EXIST. OAKS & 5 NEW OAKS) 3' HT. HEDGE 6' HT. WALL
BUILDING FOUNDATION PLANTINGS	25% OF BUILDING FACADE THAT FACES THE STREET	25% OF 125 LF FACADE	105' LF PROVIDED = 84%
PALM RATIO	CAN ONLY COUNT FOR LESS THAN 50% OF REQUIRED TREES	LESS THAN 50%	23.1% OF PALMS (9 OF 39)
NATIVE SPECIES PLANTINGS RATIO	40% OF PLANTINGS MUST BE NATIVE IF NO WASTEWATER SYSTEM USED	40%	55.3% OF NATIVE SPECIES



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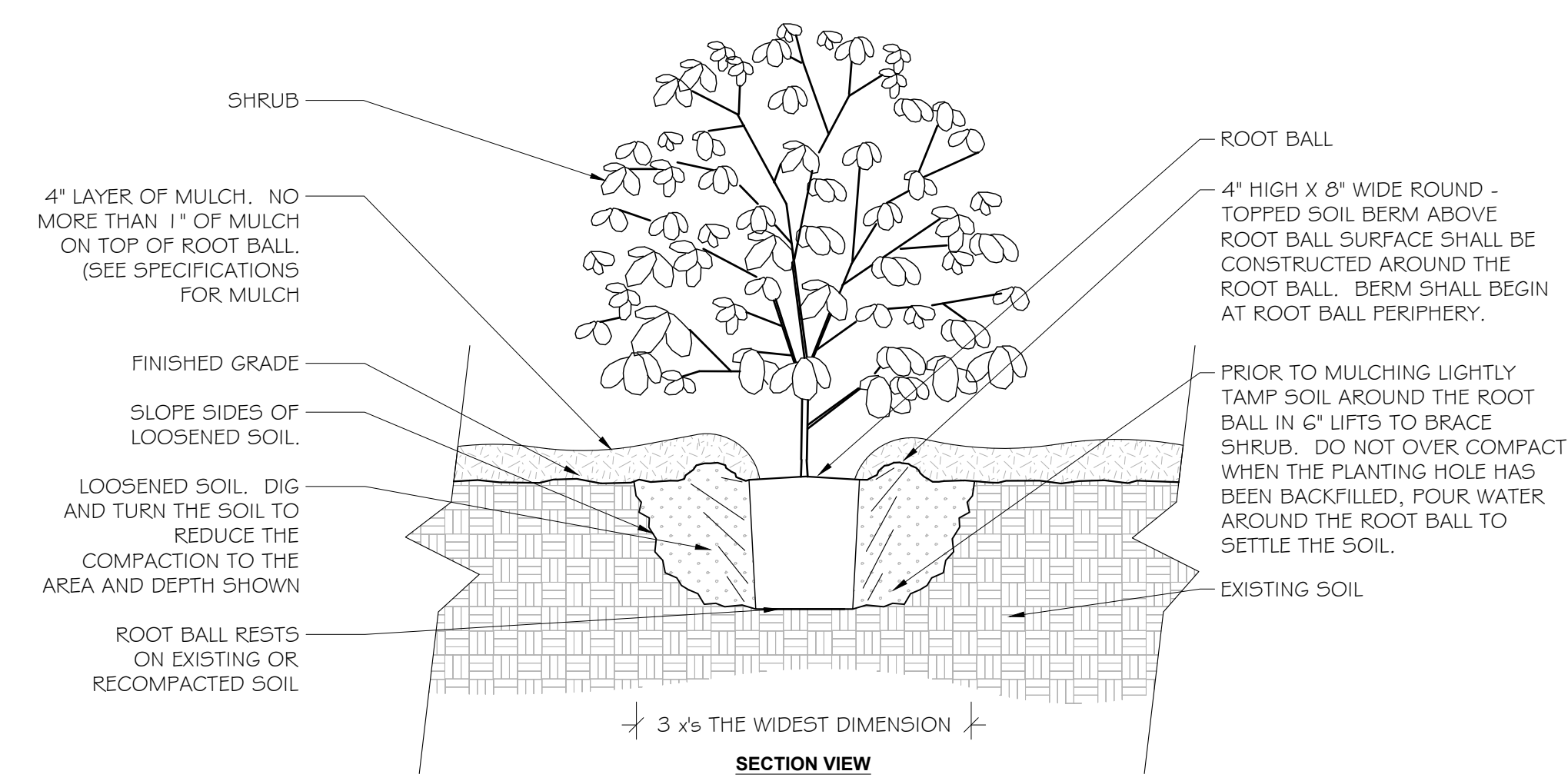
SHEET # LP.1



1 TREE PLANTING DETAIL 1/2" = 1'-0"

NOTES:

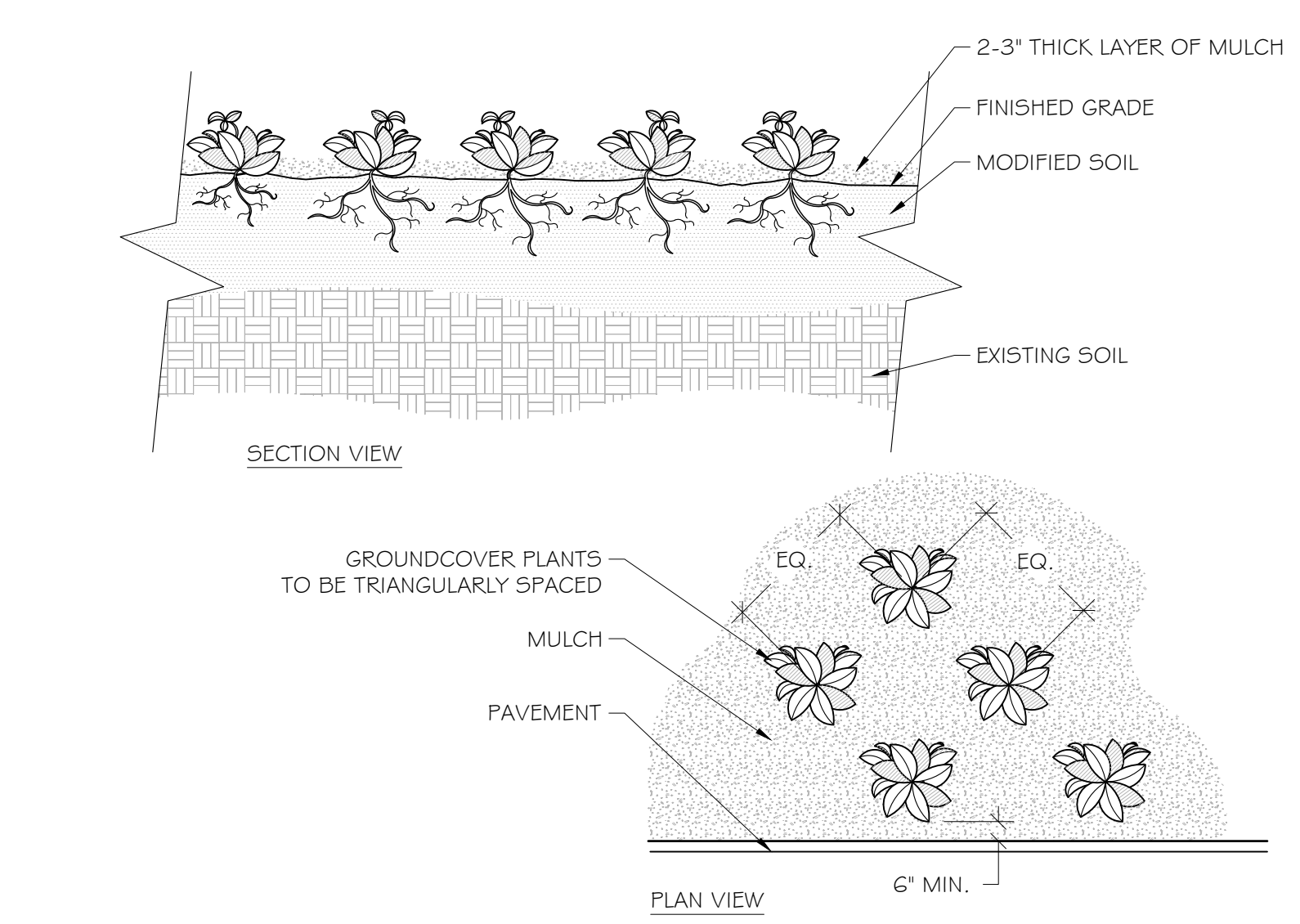
1. TREES SHALL BE OF QUALITY PRESCRIBED IN CROWN OBSERVATIONS AND ROOT OBSERVATIONS DETAILS AND SPECIFICATIONS.
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



2 SHRUB PLANTING DETAIL 3/4" = 1'-0"

NOTES:

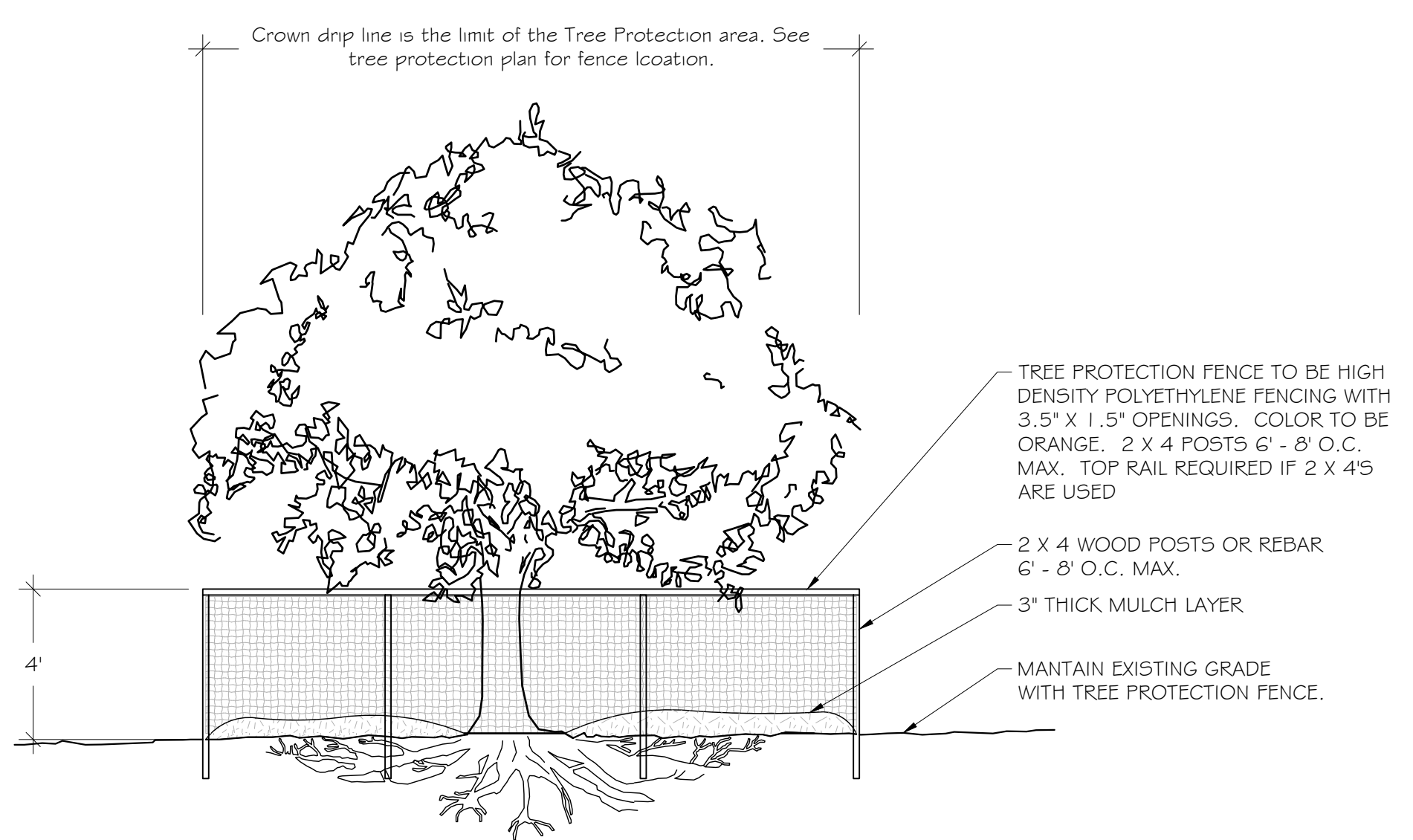
1. SHRUB SHALL BE OF QUALITY PRESCRIBED IN THE ROOT OBSERVATIONS DETAIL AND SPECIFICATIONS
2. SEE SPECIFICATIONS FOR FURTHER REQUIREMENTS RELATED TO THIS DETAIL.



3 GROUNDCOVER 3/4" = 1'-0"

NOTES:

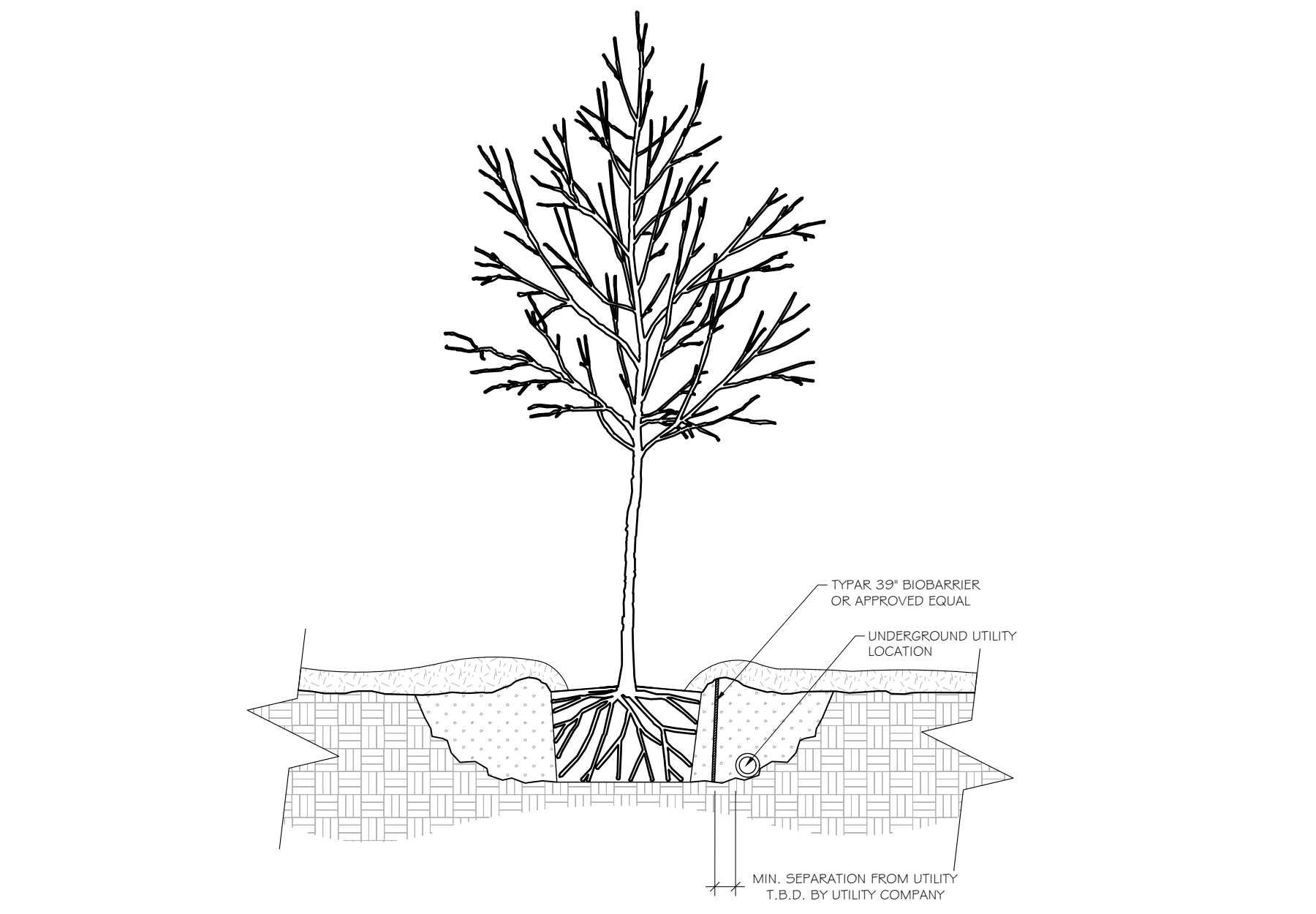
- 1- SEE PLANTING LEGEND FOR GROUNDCOVER SPECIES, SIZE, AND SPACING DIMENSION.
- 2- SMALL ROOTS (1/4" OR LESS) THAT GROW AROUND, UP, OR DOWN THE ROOT BALL PERIPHERY ARE CONSIDERED A NORMAL CONDITION IN CONTAINER PRODUCTION AND ARE ACCEPTABLE HOWEVER THEY SHOULD BE ELIMINATED AT THE TIME OF PLANTING. ROOTS ON THE PERIPHERY CAN BE REMOVED AT THE TIME OF PLANTING.
- 3- SETTLE SOIL AROUND ROOT BALL OF EACH GROUNDCOVER PRIOR TO MULCHING.



4 TREE PROTECTION DETAIL SCALE : 1/4" = 1'-0"

NOTES:

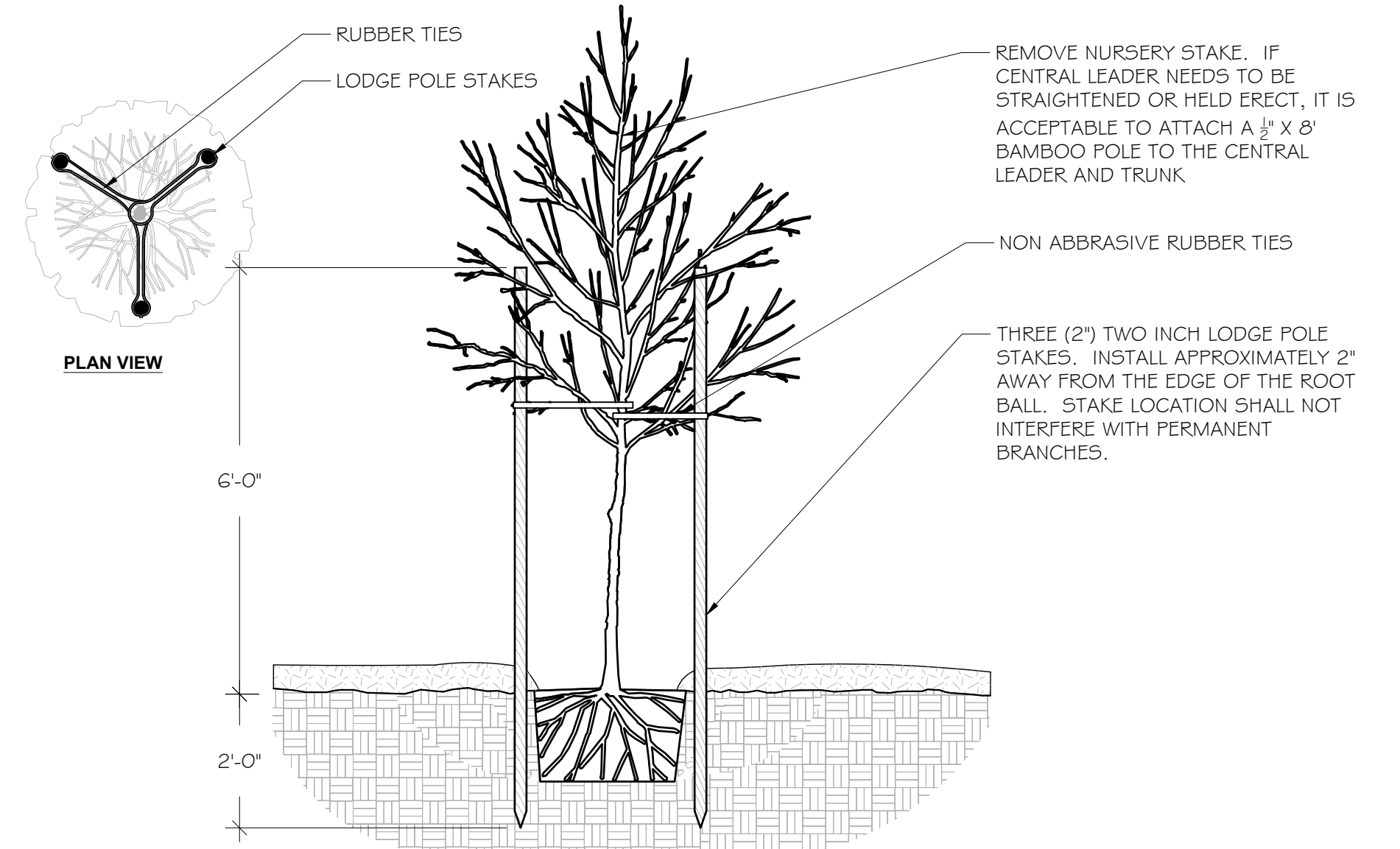
1. KEEP OUT OF TREE PROTECTION AREA
2. FENCE TO BE INSTALLED ALONG DRIPLINE OF EXISTING TREES
3. NO EQUIPMENT SHALL OPERATE INSIDE THE PROTECTIVE FENCING INCLUDING DURING FENCE INSTALLATION AND REMOVAL.



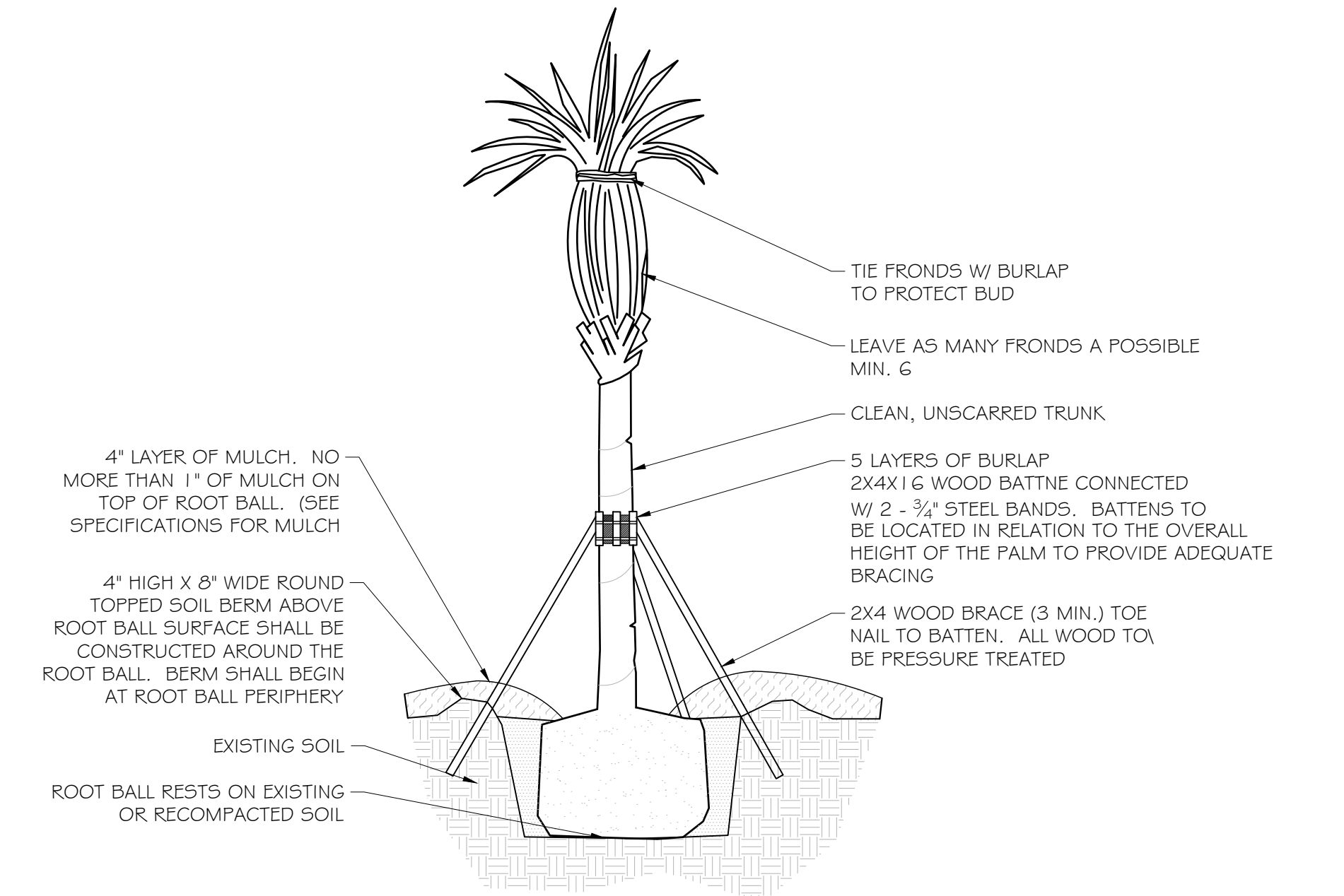
7 ROOT BARRIER DETAIL 1/2" = 1'-0"

LANDSCAPE NOTES:

1. ALL PLANTS TO BE FLORIDA #1 QUALITY OR BETTER AS DEFINED IN THE LATEST EDITION OF THE FLORIDA GRADES AND STANDARDS FOR NURSEY PLANTS, UNLESS OTHERWISE NOTED.
2. ALL PLANTING AND SOD AREAS SHALL RECEIVE 100% IRRIGATION COVERAGE FROM AN AUTOMATIC IRRIGATION SYSTEM WITH A RAIN SENSOR.
3. ALL PLANTING BEDS/ ISLANDS SHALL BE FREE OF SHELLROCK, CONSTRUCTION DEBRIS, OR OTHER MISCELLANEOUS DEBRIS, EXCAVATED TO A DEPTH OF 30" OR TO CLEAN NATIVE SOILS, AND BACKFILLED WITH THE SPECIFIED SOIL MIXTURE.
4. ROOT BARRIERS ARE REQUIRED FOR ALL TREES LOCATED WITHIN 10' OF UNDERGROUND UTILITIES.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS AND PERMITS FROM LOCAL MUNICIPALITY AND GOVERNING AGENCIES PRIOR TO REMOVAL OF ANY EXISTING VEGETATION OR BEGINNING INSTALLATION.
6. IN THE EVENT OF A CONFLICT BETWEEN THE QUANTITIES SHOWN IN THE PLANT SCHEDULE AND GRAPHICALLY DEPICTED AND LABELED ON THE PLAN, THE PLAN WILL PREVAIL. IF SUCH CONFLICT IS DISCOVERED, CONTRACTOR SHALL CONSULT WITH LANDSCAPE ARCHITECT.
7. ALL TREES PLANTED UNDER OR NEAR OVERHEAD POWER LINES SHALL COMPLY WITH FPL RIGHT TREE, RIGHT PLACE REQUIREMENTS.
8. CONTRACTOR IS REQUIRED TO CALL SUNSHINE 811 TO HAVE ALL UNDERGROUND UTILITIES LOCATED PRIOR TO ANY DIGGING, EXCAVATION, OR UNDERGROUND WORK. IF PROPOSED DESIGN CONFLICTS WITH EXISTING OR PROPOSED UTILITY LOCATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT LANDSCAPE ARCHITECT TO DEVELOP A SOLUTION FOR THE CONFLICT.



5 TREE STAKING DETAIL 1/2" = 1'-0"



6 PALM STAKING DETAIL SCALE : 1/4" = 1'-0"

Revisions:

TIRE KINGDOM AT THE VILLAGE COLLECTION
10th Ave. N. & Florida Mango Rd.
Village of Palm Springs, Florida

BRYAN ROBERT DONAHUE, PLA
LICENSE # LA6667130

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Drawn By: SMT
Drawing #: 1034
Date: 7/25/2019

LANDSCAPE DETAILS

GENERAL CONDITIONS

- A. CONTRACT DOCUMENTS: Shall consist of specifications and its general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. VERIFICATION: The Contractor shall verify measurements on the drawings before beginning work. In case of error or discrepancy in the drawings or specifications or in the work of others affecting his/her work, he/she shall notify the Owner's Representative immediately. The Contractor shall be held responsible for any damages or loss due to his/her failure to observe these instructions.
- C. MATERIALS, MACHINERY, EMPLOYEES: Except as otherwise noted, the Contractor shall provide and pay for all materials, labor, tools, and other items necessary and incidental to the completion of his/her work.
- D. SURVEYS, PERMITS, REGULATIONS: The Owner shall furnish an adequate survey of the property. The Contractor shall obtain and pay for all permits and comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a variance exists therewith he/she shall promptly notify the Owner's Representative in writing and any necessary changes shall be adjusted as provided in the contract for changes in the work.
- E. PROTECTION OF WORK, PROPERTY AND PERSON: The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- F. CHANGES IN THE WORK: The Owner may order changes in the work, and the contract sum being adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extras must be made in writing before executing the work involved.
- G. CORRECTION OF WORK: The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative for a period of ninety (90) days from the date of completion of the contract.
- H. Owner's Authorized Representative: The Owner's authorized representative acts as the authorized representative of the Owner in conjunction with the project manager, and has authority to accept or reject materials or workmanship and to make minor changes in the work not involving extra cost. He will also interpret the meaning of the contract documents and may stop the work if necessary to ensure its proper execution.
- I. CLARIFICATION OF DRAWINGS BEFORE BIDDING: After reviewing the drawings thoroughly it is the Contractor's responsibility to clarify with the Owner's Representative any questions the Contractor may have regarding the method of construction, quantities, or quality of materials included or called out. If the Contractor cannot contact the Owner's Representative, the Contractor must qualify his/her bid or accept the interpretation of the Owner's Representative on the questionable areas as they develop during construction.
- J. SAMPLES: The Owner's Representative reserves the right to take and analyze samples of materials for conformity to specifications at any time. The Contractor shall furnish samples upon request by the Owner's Representative. Rejected materials shall be immediately removed from the site and replaced at the Contractor's expense. The cost of testing materials not meeting specifications shall be paid by the Contractor.
- K. PRE-CONSTRUCTION CONFERENCE: Schedule a pre-construction meeting with the Owner's Representative at least seven (7) days before beginning work. The purpose of this conference is to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

015639
Tree and Plant Protection

PART 1 GENERAL

- 1.1 SUMMARY
- A. The scope of work includes all labor, materials, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with protection of existing trees and other plants as shown on the drawings and as specified herein.
1. Provide preconstruction evaluations
2. Provide tree and plant protection fencing
3. Provide protection of root zones and above ground tree and plants
4. Provide pruning of existing trees and plants
5. Coordinate with the requirements of Section Planting Soil for modifications to the soil within the root zone of existing trees and plants.
6. Provide all insect and disease control.
7. Provide maintenance of existing trees and plants including irrigation during the construction period as recommended by the arborist report.
8. Provide maintenance of existing trees and plants including irrigation during the post construction plant maintenance period.
9. Remove tree protection fencing and other protection from around and under trees and plants.
10. Clean up and disposal of all excess and surplus material.

1.2 CONTRACT DOCUMENTS

- A. The contract documents and general conditions and the drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.
- B. It is the intent of this section that the requirements apply to all sections of the project specification such that any subcontractor must comply with the restrictions on work within designated Tree and Plant Protection Areas.
- 1.3 RELATED DOCUMENTS AND REFERENCES
- A. Related Documents:
1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section.
2. Section - Planting
- B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references therein. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail.
1. ANSI A300 (Part 5) - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current editions.
2. Pruning practices shall conform with recommendations "Structural Pruning: A Guide For The Green Industry"; Published by Urban Tree Foundation, Visalia, California, most current edition.
3. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

- A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.
- 1.5 PERMITS AND REGULATIONS
- A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.
- B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.
- C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

1.6 PROTECTION OF WORK, PROPERTY AND PERSON

- A. The Contractor shall protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- 1.7 CHANGES IN THE WORK
- A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.

1.8 CORRECTION OF WORK

- A. The Contractor shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest possible time that can be coordinated with other work and seasonal weather demands.
- 1.9 DEFINITIONS

- All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
- Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contact authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.
- B. Reasonable and reasonably: When used in this specification is intended to mean that the conditions cited will not affect the establishment or long term stability, health or growth of the plant. This specification recognizes that plants are not free of defects, and that plant conditions change with time. This specification also recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative expert shall determine when conditions within the plant are judged as reasonable.
- C. Shrub: Woody plants with mature height approximately less than 25 feet.
- D. Tree and Plant Protection Area: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and defined by a circle centered on the trunk with each tree with a radius equal to the crown drip unless otherwise indicated by the Owner's Representative.
- E. Tree: Single and multi-stemmed plants, including palms with anticipated mature height approximately greater than 25 feet or any plant identified on the plans as a tree.

1.10 SUBMITTALS

- A. PRODUCT DATA: Submit manufacturer product data and literature describing all products required by this section to the Owner's Representative for approval. Provide submittal four weeks before the start of any work at the site.
- 1.11 OBSERVATION OF THE WORK
- A. The Owner's Representative may inspect the work at any time.
- 1.12 PRE-CONSTRUCTION CONFERENCE
- A. Schedule a pre - construction meeting with the Owner's Representative at least seven (7) days before beginning work to review any questions the Contractor may have regarding the work, administrative procedures during construction and project work schedule.

1. The following Contractors shall attend the preconstruction conference:
- a. General Contractor.
- b. Consulting Arborist.
- c. Subcontractor assigned to install Tree and Plant Protection measures.
- d. Earthwork Contractor.
- e. All site utility Contractors that may be required to dig or trench into the soil.
- f. Landscape subcontractor.
- g. Irrigation subcontractor
- B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

1.13 QUALITY ASSURANCE

- A. Contractor qualifications:
1. All pruning, branch tie, bark, tree removal, root pruning, and fertilizing required by this section shall be performed by or under the direct supervision of ISA Certified Arborist. Submit aforementioned individual's qualifications for approval by the Owner's Representative.
2. All applications of pesticide or herbicide shall be performed by a person maintaining a current state license to apply chemical pesticides valid in the jurisdiction of the project. Submit copies of all current state licensing certifications including applicable chemical applicator licenses.
- B. Prior to this meeting, mark all trees and plants to remain and or be removed as described in this specification for review and approval by the Owner's Representative.

PART 2 PRODUCTS

- 2.3 TREE PROTECTION FENCING:
- A. PLASTIC MESH FENCE: Heavy - duty orange plastic mesh fencing fabric 48 inches wide. Fencing shall be attached to metal "U" or "T" post or wooden post driven into the ground of sufficient depth to hold the fabric solidly in place with out sagging. The fabric shall be attached to the post using attachment ties of sufficient number and strength to hold up the fabric without sagging. The Owner's Representative may request, at any time, additional post, deeper post depths and or additional fabric attachments if the fabric begins to sag, lean or otherwise not present a sufficient barrier to access.
- B. GATES: For each fence type and in each separate fenced area, provide a minimum of one 3 foot wide gate. Gates shall be lockable. The location of the gates shall be approved by the Owner's Representative.
- C. Submit suppliers product data that product meets the requirements for approval.
- 2.4 tree protection sign:
- A. Heavy-duty cardboard signs, 8.5 inches x 11 inches, white colored background with black 2 inch high or larger letters block letters. The signs shall be attached to the tree protection fence every 50 feet o.c. The tree protection sign shall read "Tree and Plant Protection Area- Keep Out".
- 2.5 TREE TRUNK REGULATOR (TGR)
- A. Cambistat 25C.
- B. Submit suppliers product data that product meets the requirements for approval.
- 2.6 MATTING
- A. Matting for vehicle and work protection shall be heavy duty matting designed for vehicle loading over tree roots, Alternamats as manufactured by Alternamats, Inc. Franklin, PA 16323 or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.

- 2.7 GEOTRID
- A. Geogrid shall be woven polyester fabric with PVC coating, Uni-axial or biaxial geogrid, inert to biological degradation, resistant to naturally occurring chemicals, alkalis, acids.
1. Geogrid shall be Miragrid 2XT as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.
- 2.8 FILTER FABRIC
- A. Filter fabric shall be nonwoven polypropylene fibers, inert to biological degradation and resistant of naturally occurring chemicals, alkalis and acids.
1. Mirafi 135 N as manufactured by Ten Cate Nicolon, Norcross, GA. <http://www.tencate.com> or approved equal.
- B. Submit suppliers product data that product meets the requirements for approval.

PART 3 EXECUTION

- 3.1 SITE EXAMINATION
- A. Examine the site, tree, plant and soil conditions. Notify the Owner's Representative in writing of any conditions that may impact the successful Tree and Plant Protections that is the intent of this section.
- 3.2 COORDINATION WITH PROJECT WORK
- A. The Contractor shall coordinate with all other work that may impact the completion of the work.
- B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.
- C. Coordinate the relocation of any irrigation lines currently present on the irrigation plan, heads or the conduits of other utility lines or structures that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.
- 3.3 TREE AND PLANT PROTECTION AREA: The Tree and Plant Protection Area is defined as all areas indicated on the tree protection plan. Where no limit of the Tree and Plant Protection Area is defined on the drawings, the limit shall be the drip line (outer edge of the branch crown) of each tree.
- 3.4 Preparation:
- A. Prior to the preconstruction meeting, layout the limits of the Tree and Plant Protection Area and then alignments of required Tree and Plant Protection Fencing and root pruning. Obtain the Owner's Representative's approval of the limits of the protection area and the alignment of all fencing and root pruning.
- B. Flag all trees and shrubs to be removed by wrapping orange plastic ribbon around the trunk and obtain the Owner's Representative's approval of all trees and shrubs to be removed prior to the start of tree and shrub removal. After approval, mark all trees and shrubs to be removed with orange paint in a band completely around the base of the tree or shrub 4.5 feet above the ground.
- C. Flag all trees and shrubs to remain with white plastic ribbon laid completely around the trunk or each tree and on a prominent branch for each shrub. Obtain the Owner's Representative's approval of all trees and shrubs to be remain prior to the start of tree and shrub removal.
- D. Prior to any construction activity at the site including utility work, grading, storage of materials, or installation of temporary construction facilities, install all tree protection fencing, Filter Fabric, silt fence, tree protection signs, Geogrid, Mulch and or Wood Chips as shown on the drawings.

- 3.5 SOIL MOISTURE
- A. Volumetric soil moisture level, in all soils within the Tree and Plant Protection Area shall be maintained above permanent wilt point to a depth of at least 8 inches. No soil work or other activity shall be permitted within the Tree and Plant Protection Area when the volumetric soil moisture is above field capacity. The permanent wilt point and field capacity for each type of soil texture shall be defined as follows (numbers indicate percentage volumetric soil moisture).
- | Soil type | Permanent wilt point v/v | Field capacity v/v |
|-----------------------------------|--------------------------|--------------------|
| Sand, Loamy sand, Sandy loam | 5 - 8% | 12 - 18% |
| Loam, Sandy clay, Sandy clay loam | 27 - 36% | 31 - 36% |
| Clay loam, Silt loam | 14 - 25% | 31 - 36% |
| Silty clay, Silt clay loam | 22 - 27% | 38 - 41% |
1. Volumetric soil moisture shall be measured with a digital, electric conductivity meter. The meter shall be the Digital Soil Moisture Meter, DSM5500 by General Specialty Tools and Instruments, or approved equivalent meter.
- B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend operations until the soil moisture drains to below field capacity.

3.6 ROOT PRUNING:

- A. Prior to any excavating into the existing soil grade within 25 feet of the limit of the Tree and Plant Protection Area or trees to remain, root prune all existing trees to a depth of 24 inches below existing grade in alignments following the edges of the Tree and Plant Protection Area or as directed by the Owner's Representative. Root pruning shall be in conformance with ANSI A300 (part 8) latest edition.
1. Using a rock saw, chain trencher or similar trenching device, make a vertical cut within 2 feet of the limit of grading.
2. After completion of the cut, make clean cuts with a lopper, saw or pruner to remove all torn root ends on the tree side of the excavation, and backfill the trench immediately with existing soil, filling all voids.
- 3.7 INSTALLATION OF GEOTGRIDS, FILTER FABRIC, MATTING, WOOD CHIPS AND OR MULCH
- A. Install Geogrids, Filter Fabric, Matting, Wood Chips or Mulch in areas and depths shown on the plans and details or as directed by the Owner's Representative. In general it is the intent of this specification to provide the following levels of protection:
1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chips or Mulch.
2. Areas where foot traffic or storage of lightweight materials is anticipated to be unavoidable provide a layer of Filter Fabric under the 5 inches of Wood Chips or Mulch.
3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8

inches of Wood Chips or Mulch.

4. Areas where heavy vehicle traffic is unavoidable provide a layer of Geogrids under 8 - 12 inches of Wood Chips or Mulch, or Geogrids and a layer of matting over the Wood Chips or Mulch.
- B. The Owner's Representative shall approve the appropriate level of protection.
- C. In the above requirements, light vehicle is defined as a track skid steer with a ground pressure of 4 psi or lighter. A heavy vehicle is any vehicle with a tire or track pressure of greater than 4 psi. Lightweight materials are any packaged materials that can be physically moved by hand into the location. Bulk materials such as soil, or aggregate shall never be stored within the Tree and Plant Protection Area.
- 3.8 PROTECTION:
- A. Protect the Tree and Plant Protection Area at all times from compaction of the soil; damage of any kind to trunks, bark, branches, leaves and roots of all plants; and contamination of the soil, bark or leaves with construction materials, debris, silt, fuels, oils, and any chemicals substance. Notify the Owner's Representative of any spills, compaction or damage and take corrective action immediately using methods approved by the Owner's Representative.
- 3.9 GENERAL REQUIREMENTS AND LIMITATIONS FOR OPERATIONS WITHIN THE TREE AND PLANT PROTECTION AREA:
- A. The Contractor shall not engage in any construction activity within the Tree and Plant Protection Area without the approval of the Owner's Representative including: operating, moving or storing equipment; storing supplies or materials; locating temporary facilities including trailers or portable toilets and shall not permit employees to traverse the area to access adjacent areas of the project or use the area for lunch or any other work breaks. Permitted activity, if any, within the Tree and Plant Protection Area may be indicated on the drawings along with any required remedial activity as listed below.
- B. In the event that construction activity is unavoidable within the Tree and Plant Protection Area, notify the Owner's Representative and submit a detailed written plan of action for approval. The plan shall include a statement detailing the reason for the activity including why other areas are not suited; a description of the proposed activity; the time period for the activity, and a list of remedial actions that will reduce the impact on the Tree and Plant Protection Area from the activity. Remedial actions shall include but shall not be limited to the following:

1. In general, demolition and excavation within the drip line of trees and shrubs shall proceed with extreme care either by the use of hand tools, directional boring and or Air Knife excavation where indicated or with other low impact equipment that will not cause damage to the tree, roots or soil.
2. When encountered, exposed roots, 1 inches and larger in diameter shall be worked around in a manner that does not break the outer layer of the root surface (bark). These roots shall be covered in Wood Chips and bark and be maintained above permanent wilt point at all times. Roots one inch and larger in diameter shall not be cut with out the approval of the owners representative. Excavation shall be tunneled under these roots without cutting them. In the areas where roots are encountered, work shall be performed and scheduled to close excavations as quickly as possible over exposed roots.
3. Tree branches that interfere with the construction may be barked or pruned to clear only to the point necessary to complete the work. Other branches shall only be removed when specifically indicated by the Owner's Representative. Tying bark or trimming of all branches and the cutting of roots shall be in accordance with accepted arboricultural practices (ANSI A300, part 8) and be performed under supervision of the arborist.
4. Matting: Install temporary matting over Wood Chips or Mulch to the extent indicated. Do not permit foot traffic, scaffolding or the storage of materials within the Tree and Plant Protection Area to occur off of the temporary matting.
5. Trunk Protection: Protect the trunk of each tree to remain by covering it with a ring of 8 foot long 2 inch x 6 - inch planks loosely banded onto the tree with 3 steel bands. Staple the bands to the planks as necessary to hold them securely in place. Trunk protection must be kept in place no longer than 12 months. If construction requires work near a particular tree to continue longer than 12 months, the steel bands shall be inspected every six months and loosened if they are found to have become tight.
6. Air Excavation Tool: If excavation for footings or utilities is required within the Tree and Plant Protection Area, air excavation tool techniques shall be used where practical or as designed on the drawings.

- a. Remove the Wood Chips from an area approximately 18 inches beyond the limits of the hole or trench to be excavated. Cover the Wood Chips for a distance of not less than 15 feet around the limit of the excavation area with Filter Fabric or plastic sheeting to protect the Wood Chips from silt. Mound the Wood Chips so that the plastic slopes towards the excavation.
- b. Using a sprinkler or soaker hose, apply water slowly to the area of the excavation for a period of at least 4 hours, approximately 12 hours prior to the work so that the ground water level is at or near field capacity at the beginning of the work. For each go beyond the damp soil, rewet the soil as necessary to keep soil moisture near field capacity.
- c. Using an air excavation tool specifically designed and manufactured for the intended purpose, and all pressures recommended by the manufacturer of the equipment, fracture the existing soil to the shape and the depths required. Work at rates and using techniques that do not harm tree roots. Air pressure shall be a maximum of 90-100 psi.
- 1) The air excavation tool shall be "Air-Spade" as manufactured by Concept Engineering Group, Inc., Verona, PA (412) 826-8800, or Air Knife as manufactured by Easy Use Air Tools, Inc. Allison Park, Pa (866) 328-5723 or approved equal.
- d. Using a commercial, high-powered vacuum truck if required, remove the soil from the excavation produced by the Air Knife excavation. The vacuum truck should generally operate simultaneously with the hose operator, such that the soil produced is picked up from the excavation hole, and the exposed roots can be observed and trimmed by the operator before the vacuum operation. Do not drive the vacuum truck into the Tree and Plant Protection Area unless the area is protected from compaction as approved in advance by the Owner's Representative.
- e. Remove all excavated soil and excavated Wood Chips, and contaminated soil at the end of the excavation.
- f. Schedule the work so that foundations or utility work is completed immediately after the excavation. Do not let the roots dry out. Mist the roots several times during the day. If the excavated area must remain open over night, mist the roots and cover the excavation with black plastic.
- g. Dispose of all soil in a manner that meets local laws and regulations.
- h. Restore soil within the trench as soon as the work is completed. Utilize soil of similar texture to the removed soil and lightly compact with hand tools. Leave soil mounded over the trench to a height of approximately 10% of the trench depth to account for settlement.
- i. Restore any Geogrids, Filter Fabric, Wood Chips or Mulch and or matting that was previously required for the excavation.

- 3.10 TREE REMOVAL:
- A. Remove all trees indicated by the drawings and specifications, as requiring removal, in a manner that will not damage adjacent trees or structures or compact the soil.
- B. Remove trees that are adjacent to trees or structures to remain, in sections, to limit the opportunity of damage to adjacent crows, trunks, ground plane elements and structures.
- C. Do not drop trees with a single cut unless the tree will fall in an area not included in the Tree and Plant Protection Area. No tree to be removed within 50 feet of the Tree and Plant Protection Area shall be pushed over or up-rooted using a piece of grading equipment.
- D. Protect adjacent saving, soil, trees, shrubs, ground cover plantings and understory plants to remain from damage during all tree removal operations, and from construction operations. Protection shall include the root system, trunk, limbs, and crown from breakage or scarring, and the soil from compaction.
- E. Remove stumps and immediate root plane from existing trees to be removed. Grind trunk bases and large buttress roots to a depth of the largest buttress root or at least 18 inches below the top most roots where ever is less and over the area of three times the diameter of the trunk (DBH).
1. For trees where the stump will fall under new paved areas, grind roots to a total depth of 18 inches below the existing grade. If the sides of the stump hole still have greater than approximately 20% wood visible, continue grinding operation deeper and or wider until the resulting hole has less than 20% wood. Remove all wood chips produced by the grinding operation and back fill in 8 inch layers with controlled fill of a quality acceptable to the site engineer for fill material under structures, compacted to 95% of the maximum dry density standard proctor. The Owner's Representative shall approve each hole at the end of the grinding operation.
2. In areas where the tree location is to be a planting bed or lawn, remove all woodchips and backfill slump holes with planting soil as defined in Specification Section Planting Soil, in maximum of 12 inch layers and compact to 80 - 85% of the maximum dry density standard proctor.

- 3.11 PRUNING:
- A. Within six months of the estimated date of substantial completion, prune all dead or hazardous branches larger than 2 inch in diameter from all trees to remain.
- B. Implement all pruning recommendations found in the arborist report.
- C. Prune any low, hanging branches and vines from existing trees and shrubs that overhang walks, streets and drives, or parking areas as follows:
1. Walks - within 8 feet vertically of the proposed walk elevation.
2. Parking areas - within 12 feet vertically of the proposed parking surface elevation.
3. Streets and drives - within 14 feet vertically of the proposed parking surface elevation.
- D. All pruning shall be done in accordance with ANSI A300 (part 1), ISA BMP Tree Pruning (latest edition, and the "Structural Pruning: A Guide for the Green Industry", Edward Gilman, Brian Kempf, Nelda Matheny and Jim Clark, 2013 Urban Tree Foundation, Visalia CA.
- E. Perform other pruning task as indicated on the drawings or requested by the Owner's Representative.
- F. Where there specific disease vectors present, sterilize all pruning tools between the work in individual trees.
- 3.13 WATERING
- A. The Contractor shall be fully responsible to ensure that adequate water is provided to all plants to be preserved during the entire construction period. Adequate water is defined to be maintaining soil moisture above the permanent wilt point to a depth of 8 inches or greater.
- B. The Contractor shall adjust the automatic irrigation system, if available, and apply additional water, using hoses or water tanks as required.
- C. Periodically test the moisture content in the soil within the root zone to determine the water content.

- 3.14 WEED REMOVAL
- A. During the construction period, control any plants that seed in and around the fenced Tree and Plant Protection area at least three times a year.
1. All plants that are not shown on the planting plan or on the Tree and Plant Protection Plan to remain shall be considered as weeds.
- B. At the end of the construction period provide one final weeding of the Tree and Plant Protection Area.
- 3.15 INSECT AND DISEASE CONTROLLER
- A. Monitor all plants to remain for disease and insect infestations during the entire construction period. Provide all disease and insect control required to keep the plants in a healthy state using the principles of Integrated Plant Management (IPM). All pesticides shall be applied by a certified pesticide applicator.
- 3.16 CLEAN-UP
- A. During tree and plant protection work, keep the site free of trash, pavements reasonably clean and work area in an orderly condition at the end of each day. Remove trash and debris in containers from the site no less than once a week.
1. Immediately clean up any spilled or tracked soil, fuel, oil, trash or debris deposited by the Contractor from all surfaces within the project or on public right of ways and neighboring property.

- B. Once tree protection work is complete, wash all soil from pavements and other structures. Ensure that Mulch is confined to planting beds.
- C. Make all repairs to grades, ruts, and damage to the work or other work at the site.
- D. Remove and dispose of all excess Mulch, Wood Chips, packaging, and other material brought to the site by the Contractor.
1. All areas within the Tree and Plant Protection area provide a minimum of 5 inches of Wood Chips or Mulch.
2. Areas where foot traffic or storage of lightweight materials is anticipated to be unavoidable provide a layer of Filter Fabric under the 5 inches of Wood Chips or Mulch.
3. Areas where occasional light vehicle traffic is anticipated to be unavoidable provide a layer of Geogrids under 8

3.17 Removal of fencing and other Tree and plant protection

- A. At the end of the construction period or when requested by the Owner's Representative remove all fencing, Wood Chips or Mulch, Geogrids and Filter Fabric, trunk protection and or any other Tree and Plant Protection material.
- 3.16 DAMAGE OR LOSS TO EXISTING PLANTS TO REMAIN
- B. Any trees or plants designated to remain and which are damaged by the Contractor shall be replaced in kind by the Contractor at their own expense. Trees shall be replaced with a tree of similar species and of equal size or 6 inch caliper which ever is less. Shrubs shall be replaced with a plant of similar species and equal size or the largest size plants reasonably available which ever is less. Where replacement plants are to be less than the size of the plant that is damaged, the Owner's Representative shall approve the size and quality of the replacement plant.
1. All trees and plants shall be installed per the requirements of Specification Section Planting.
- C. Plants that are damaged shall be considered as requiring replacement or appraisal in the event that the damage affects more than 25 % of the crown, 25% of the trunk circumference, or root protection area, or the tree is damaged in such a manner that the tree could develop into a potential hazard. Trees and shrubs to be replaced shall be removed by the Contractor at his own expense.
1. The Owner's Representative may engage an independent arborist to assess any tree or plant that appears to have been damaged to determine their health or condition.
- C. Any tree that is determined to be dead, damaged or potentially hazardous by the Owner's arborist and upon the request of the Owner's Representative shall be immediately removed by the Contractor at no additional expense to the owner. Tree removal shall include all chips out of all wood parts and grinding of the stump to a depth sufficient to plant the replacement tree or plant, removal of all debris from the stump site and filling the resulting hole with topsoil.
- D. Any remedial work on damaged existing plants recommended by the consulting arborist shall be completed by the Contractor at no cost to the owner. Remedial work shall include but is not limited to: soil compaction remediation and vertical mulching, pruning and or cabling, insect and disease control including injections, compensatory watering, additional mulching, and could include application tree growth regulators (TGR).
- E. Remedial work may extend up to two years following the completion of construction to allow for any requirements of multiple applications or the need to undertake applications at required seasons of the year.

END OF SECTION 015639

SECTION 32 9300

PLANTING

PART 1 GENERAL

1.1 SUMMARY

- A. The scope of work includes all labor, materials, appliances, tools, equipment, facilities, transportation and services necessary for, and incidental to performing all operations in connection with furnishing, delivery, and installation of plant (also known as "landscaping") complete as shown on the drawings and as specified herein.
- B. The scope of work in this section includes, but is not limited to, the following:
1. Locate, purchase, deliver and install all specified plants.
2. Water all specified plants.
3. Mulch, fertilize, stake, and prune all specified plants.
4. Maintenance of all specified plants until the beginning of the warranty period.
5. Plant warranty.
6. Clean up and disposal of all excess and surplus material.
7. Maintenance of all specified plants during the warranty period.

1.2 CONTRACT DOCUMENTS

- A. Shall consist of specifications and general conditions and the construction drawings. The intent of these documents is to include all labor, materials, and services necessary for the proper execution of the work. The documents are to be considered as one. Whatever is called for by any parts shall be as binding as if called for in all parts.

1.3 RELATED DOCUMENTS AND REFERENCES

- A. Related Documents:
1. Drawings and general provisions of contract including general and supplementary conditions and Division I specifications apply to work of this section
2. Related Specification Sections
- a. Section - Tree Protection and Plant Protection
- B. References: The following specifications and standards of the organizations and documents listed in this paragraph form a part of the specification to the extent required by the references therein. In the event that the requirements of the following referenced standards and specification conflict with this specification section the requirements of this specification shall prevail. In the event that the requirements of any of the following referenced standards and specifications conflict with each other the more stringent requirement shall prevail or as determined by the Owner's Representative.
1. State of California, Department of Food and Agriculture, Regulations for Nursery Inspections, Rules and Grading.
2. ANSI Z601 - American Standard Practices for Nursery Stock, most current edition.
3. ANSI A300 - Standard Practices for Tree, Shrub and other Woody Plant Maintenance, most current edition and parts.
4. Florida Grades and Standards for Nursery Stock, current edition (Florida Department of Agriculture, Tallahassee FL).
5. Interpretation of plant names and descriptions shall reference the following documents. Where the names or plant descriptions disagree between the several documents, the most current document shall prevail.
- a. USDA - The Germplasm Resources Information Network ([GRIN](http://www.ars-grin.gov/nps/searchgrin.html)) <http://www.ars-grin.gov/nps/searchgrin.html>
- b. Manual of Woody Landscape Plants; Michael Dirr; Stipes Publishing, Champaign, Illinois; Most Current Edition.
- c. The New Sunset Western Garden Book, Oxmoor House, most current edition.
6. Pruning practices shall conform to recommendations "Structural Pruning: A Guide For The Green Industry" most current edition; published by Urban Tree Foundation, Visalia, California.
7. Glossary of Arboricultural Terms, International Society of Arboriculture, Champaign IL, most current edition.

1.4 VERIFICATION

- A. All scaled dimensions on the drawings are approximate. Before proceeding with any work, the Contractor shall carefully check and verify all dimensions and quantities, and shall immediately inform the Owner's Representative of any discrepancies between the information on the drawings and the actual conditions, refraining from doing any work in said areas until given approval to do so by the Owner's Representative.
- B. In the case of a discrepancy in the plant quantities between the plan drawings and the plant call outs, list or plant schedule, the number of plants or square footage of the planting bed actually drawn on the plan drawings shall be deemed correct and prevail.

1.5 PERMITS AND REGULATIONS

- A. The Contractor shall obtain and pay for all permits related to this section of the work unless previously excluded under provision of the contract or general conditions. The Contractor shall comply with all laws and ordinances bearing on the operation or conduct of the work as drawn and specified. If the Contractor observes that a conflict exists between permit requirements and the work outlined in the contract documents, the Contractor shall promptly notify the Owner's Representative in writing including a description of any necessary changes and changes to the contract price resulting from changes in the work.
- B. Wherever references are made to standards or codes in accordance with which work is to be performed or tested, the edition or revision of the standards and codes current on the effective date of this contract shall apply, unless otherwise expressly set forth.
- C. In case of conflict among any referenced standards or codes or between any referenced standards and codes and the specifications, the more restrictive standard shall apply or Owner's Representative shall determine which shall govern.

1.6 PROTECTION OF WORK, PROPERTY AND PERSON

- A. The Contractor shall adequately protect the work, adjacent property, and the public, and shall be responsible for any damages or injury due to his/her actions.
- 1.7 CHANGES IN THE WORK
- A. The Owner's Representative may order changes in the work, and the contract sum should be adjusted accordingly. All such orders and adjustments plus claims by the Contractor for extra compensation must be made and approved in writing before executing the work involved.
- B. All changes in the work, notifications and contractor's request for information (RFI) shall conform to the contract general condition requirements.

1.8 CORRECTION OF WORK

- A. The Contractor, at their own cost, shall re-execute any work that fails to conform to the requirements of the contract and shall remedy defects due to faulty materials or workmanship upon written notice from the Owner's Representative, at the soonest as possible time that can be coordinated with other work and seasonal weather demands.
- 1.9 DEFINITIONS
- All terms in this specification shall be as defined in the "Glossary of Arboricultural Terms" or as modified below.
- A. Bowed trees: A container root ball package made of wood in the shape of a four-sided box.
- B. Container plant: Plants that are grown in and/or are currently in a container including bowed trees.
- C. Defective plant: Any plant that fails to meet the plant quality requirement of this specification.
- D. End of Warranty Final Acceptance: The date when the Owner's Representative accepts that the plants and work in this section meet all the requirements of the warranty. It is intended that the materials and workmanship warranty for Planting, Planting Soil, and Irrigation work run concurrent with each other.
- E. Field grown trees (B&B): Trees growing in field soil for at least 12 months prior to harvest.
- F. Healthy: Plants that are growing in a condition that expresses leaf size, crown density, color; and with annual growth rates typical of the species and cultivar's horticultural description, adjusted for the planting site soil, drainage and weather conditions.
- G. Kinked root: A root within the root package that bends more than 90 degrees.

- H. Maintenance: Actions that preserve the health of plants after installation and as defined in this specification.
- I. Maintenance period: The time period, as defined in this specification, which the Contractor is to provide maintenance.
- J. Normal: the prevailing local or industry standard(s).
- K. Owner's Representative: The person appointed by the Owner to represent their interest in the review and approval of the work and to serve as the contracting authority with the Contractor. The Owner's Representative or Owner may appoint other persons to review and approve any aspects of the work, such as the landscape architect who prepared the plans.
- L. Reasonable and reasonably: When used in this specification relative to plant quality, it is intended to mean that the conditions cited will not affect the establishment or long term health, growth or growth of the plant. This specification recognizes that it is not possible to produce plants free of all defects, but that some accepted industry protocols and standards

result in plants unacceptable to this project.

- When reasonable or reasonably is used in relation to other issues such as weeds, diseases, insects, it shall mean at least low enough that no treatment would be required when applying recognized Integrated Plant Management practices.
- This specification recognizes that some decisions cannot be totally based on measured findings and that professional judgment is required. In cases of differing opinion, the Owner's Representative's expert shall determine when conditions are judged as reasonable.
- M. Root ball: The mass of roots including any soil or substrate that is shipped with the tree within the root ball package.
- N. Root ball package: The material that surrounds the root ball during shipping. The root package may include the material in which the plant was grown, or new packaging placed around the root ball for shipping.
- O. Root collar (root crown, root flare, trunk flare, flare): The region at the base of the trunk where the majority of the structural roots join the plant stem, usually at or near ground level.
- P. Shrub: Woody plants with mature height approximately less than 15 feet.
- Q. Spade harvested and transplanted: Field grown trees that are mechanically harvested and immediately transplanted to the final growing site without being removed from the digging machine.
- R. Stem: The trunk of the tree.
- S. Substantial Completion Acceptance: The date at the end of the Planting, Planting Soil, and Irrigation installation where the Owner's Representative accepts that all work in these sections is complete and the Warranty period has begun. This date may be different than the date of substantial completion for the other sections of the project.
- T. Stem girdling root: Any root more than ¼ inch diameter currently touching the trunk, or with the potential to touch the trunk, above the root collar approximately tangent to the trunk circumference or circling the trunk. Roots shall be considered as Stem Girdling that have, or are likely to have in the future, root to trunk bark contact.
- U. Structural root: One of the largest roots emerging from the root collar.
- V. Tree: Single and multi-stemmed plants with mature height approximately greater than 15 feet.

1.10 SUBMITTALS

1.15 SELECTION AND OBSERVATION OF PLANTS

A. The Owner's Representative may review all plants subject to approval of size, health, quality, character, etc. Review or approval of any plant during the process of selection, delivery, installation and establishment period shall not prevent that plant from later rejection in the event that the plant quality changes or previously existing defects become apparent that were not observed.

B. Plant Selection: The Owner's Representative reserves the right to select and observe all plants at the nursery prior to delivery and to meet specifications as set forth in this specification. If a particular defect or substandard element can be corrected at the nursery, as determined by the Owner's Representative, the agreed upon remedy may be applied by the nursery or the Contractor provided that the correction allows the plant to meet the requirements set forth in this specification. Any work to correct plant defects shall be at the contractor's expense.

1. The Owner's Representative may make invasive observation of the plant's root system in the area of the root collar and the top of the root ball in general in order to determine that the plant meets the quality requirements for depth of the root collar and presence of roots above the root collar. Such observations will not harm the plant.

2. Corrections are to be undertaken at the nursery prior to shipping.

C. The Contractor shall bear all cost related to plant corrections.

D. All plants that are rejected shall be immediately removed from the site and acceptable replacement plants provided at no cost to the Owner.

E. Submit to the Owner's Representative, for approval, plant sources including the names and locations of nurseries proposed as sources of acceptable plants, and a list of the plants they will provide. The plant list shall include the botanical and common name and the size at the time of selection. Observe all nursery materials to determine that the materials meet the requirements of this section.

F. The Contractor shall require the grower or wholesale supplier to permit the Owner's Representative to observe the root system of all plants at the nursery or job site prior to planting including random removal of soil or substrate around the base of the plant. Observation may be as frequent and as extensive as needed to verify that the plants meet the requirements of the specifications and conform to requirements.

G. Where requested by the Owner's Representative, submit photographs of plants or representative samples of plants. Photographs shall be legible and clearly depict the plant specimen. Each submitted image shall contain a height reference, such as a measuring stick. The approval of plants by the Owner's Representative via photograph does not preclude the Owner's Representative's right to reject material while on site.

1.16 PLANT SUBSTITUTIONS FOR PLANTS NOT AVAILABLE

A. Submit all requests for substitutions of plant species, or size to the Owner's Representative, for approval, prior to purchasing the proposed substitution. Request for substitution shall include a list of nurseries contacted in the search for the required plant and a record of other attempts to locate the required material. Requests shall also include sources of plants found that may be of a smaller or larger size, or a different shape or habit than specified, or plants of the same genus and species but different cultivar origin, or which may otherwise not meet the requirements of the specifications, but which may be available for substitution.

1.17 SITE CONDITIONS

A. It is the responsibility of the Contractor to be aware of all surface and sub-surface conditions, and to notify the Owner's Representative, in writing, of any circumstances that would negatively impact the health of plantings. Do not proceed with work until unsatisfactory conditions have been corrected.

1. Should subsurface drainage or soil conditions be encountered which would be detrimental to growth or survival of plant material, the Contractor shall notify the Owner's Representative in writing, stating the conditions and submit a proposal covering cost of corrections. If the Contractor fails to notify the Owner's Representative of such conditions, he/she shall remain responsible for plant material under the warranty clause of the specifications.

B. It is the responsibility of the Contractor to be familiar with the local growing conditions, and if any specified plants will be in conflict with these conditions. Report any potential conflicts, in writing, to the Owner's Representative.

C. This specification requires that all Planting Soil and Irrigation (if applicable) work be completed and accepted prior to the installation of any plants.

1. Planting operations shall not begin until such time that the irrigation system is completely operational for the area(s) to be planted, and the irrigation system for that area has been preliminarily observed and approved by the Owner's Representative.

D. Actual planting shall be performed during those periods when weather and soil conditions are suitable in accordance with locally accepted horticultural practices.

1. Do not install plants into saturated or frozen soils. Do not install plants during inclement weather, such as rain or snow or during extremely hot, cold or windy conditions.

1.18 PLANTING AROUND UTILITIES

A. Contractor shall carefully examine the civil, record, and survey drawings to become familiar with the existing underground conditions before digging.

B. Determine location of underground utilities and perform work in a manner that will avoid possible damage. Hand excavate, as required. Maintain grade stakes set by others until parties concerned mutually agree upon removal.

C. Notification of Local Utility Locator Service, Sunshine 811, is required for all planting areas. The Contractor is responsible for knowing the location and avoiding utilities that are not covered by Sunshine 811.

PART 2 PRODUCTS

2.1 PLANTS: GENERAL

A. Standards and measurement: Provide plants of quantity, size, genus, species, and variety or cultivars as shown and scheduled in contract documents.

1. All plants including the root ball dimensions or container size to trunk caliper ratio shall conform to ANSI Z60.1 "American Standard for Nursery Stock" latest edition, unless modified by provisions in this specification. When there is a conflict between this specification and ANSI Z60.1, this specification section shall be considered correct.

2. Plants larger than specified may be used if acceptable to the Owner's Representative. Use of such plants shall not increase the contract price. If larger plants are accepted the root ball size shall be in accordance with ANSI Z60.1. Using larger plants may not be acceptable if the resulting root ball cannot be fit into the required planting space.

3. If a range of size is given, no plant shall be less than the minimum size and not less than 50 percent of the plants shall be as large as the maximum size specified. The measurements specified are the minimum and maximum size acceptable and are the measurements after pruning, where pruning is required.

B. Proper Identification: All trees shall be true to name as ordered or shown on planting plans.

C. Compliance: All trees shall comply with federal and state laws and regulations requiring observation for plant disease, pests, and weeds. Observation certificates required by law shall accompany each shipment of plants.

D. Plant Quality:

1. **General.** Provide healthy stock, grown in a nursery and reasonably free of die-back, disease, insects, eggs, borers, and larvae. At the time of planting all plants shall have a root system, stem, and branch form that will not restrict normal growth, stability and health for the expected life of the plant

2. Plant quality above the soil line:

a. Plants shall be healthy with the color, shape, size and distribution of trunk, stems, branches, buds and leaves normal to the plant type specified. Tree quality above the soil line shall comply with the Florida Grades and Standards tree grade Florida Fancy or Florida #1 and the following:

- Crown: The form and density of the crown shall be typical for a young specimen of the species or cultivar pruned to a central and dominant leader.
 - Crown specifications do not apply to plants that have been specifically trained in the nursery as topiary, espalier, multi-stem, clump, or unique selections such as contorted or weeping cultivars.
- Leaves: The size, color, and appearance of leaves shall be typical for the time of year and stage of growth of the species or cultivar. There shall not show signs of prolonged moisture stress or over watering as indicated by wilted, shriveled, or dead leaves.
- Branches: Shoot growth (length and diameter) throughout the crown should be appropriate for the age and size of the species or cultivar. Trees shall not have dead, diseased, broken, distorted, or otherwise injured branches.
 - Main branches shall be distributed along the central leader not clustered together. They shall form a balanced crown appropriate for the cultivar/species.
 - Branch diameter shall be no larger than two-thirds (one-half is preferred) the diameter of the central leader measured 1 inch above the branch union.
 - The attachment of the largest branches (scaffold branches) shall be free of included bark.
- Trunk: The tree trunk shall be relatively straight, vertical, and free of wounds that penetrate to the wood (properly made pruning cuts, closed or not, are acceptable and are not considered wounds), sunburned areas, conks (fungus feeding holes), wood cracks, sap leakage, signs of boring insects, galls, cankers, girdling ties, or lesions (mechanical injury).

3. Trees shall have one central leader. If the leader was headed, a new leader (with a live terminal bud) at least one-half the diameter of the pruning out shall be present.

1. All trees are assumed to have one central leader trees unless a different form is specified in the plant list or drawings.

4. All graft unions, where applicable, shall be completely closed without visible sign of graft rejection. All grafts shall be visible above the soil line.

5. Trunk caliper and taper shall be sufficient so that the lower five feet of the trunk remains vertical without a stake. Auxiliary stake may be used to maintain a straight leader in the upper half of the tree.

3. Plant quality at or below the soil line:

a. Plant roots shall be normal to the plant type specified. Root observations shall take place without impacting tree health. Root quality at or below the soil line shall comply with the project Root Acceptance details and the following:

- The roots shall be reasonably free of scrapes, broken or split wood.
- The root system shall be reasonably free of injury from biotic (e.g. insects and pathogens) and abiotic (e.g. herbicide toxicity and salt injury) agents. Weeds resulting from root pruning used to produce a high quality root system are not considered injuries.
- A minimum of three structural roots reasonably distributed around the trunk (not clustered on one side) shall be found in each plant. Root distribution shall be uniform throughout the root ball, and growth shall be appropriate for the species.
 - Plants with structural roots on only one side of the trunk (J roots) shall be rejected.
- The root collar shall be within the upper 2 inches of the substrate. Two structural roots shall reach the side of the root ball near the top surface of the root ball. The grower may request a modification to this requirement for species with roots that rapidly descend, provided that the grower removes all stem girdling roots above the structural roots across the top of the root ball.

- The root system shall be reasonably free of stem girdling roots over the root collar or kinked roots from nursery production practices.
- At time of observations and delivery, the root ball shall be moist throughout. Roots shall not show signs of excess soil moisture conditions as indicated by shriveled, discolored, distorted, or dead roots.

E. Submittals: Submit for approval the required plant quality certifications from the grower where plants are to be purchased, for each plant type. The certification must state that each plant meets all the above plant quality requirements.

1. The grower's certification of plant quality does not prohibit the Owner's Representative from observing any plant or rejecting the plant if it is found to not meet the specification requirements.

2.2 ROOT BALL PACKAGE OPTIONS: The following root ball packages are permitted. Specific root ball packages shall be required where indicated on the plant list or in this specification. Any type of root ball packages that is not specifically defined in this specification shall not be permitted.

A. BALLED AND BURLAPPED PLANTS

1. All Balled and Burlapped Plants shall be field grown, and the root ball packaged in a burlap and twine and/or burlap and wire basket package.

3. Plants shall be harvested with the following modifications to standard nursery practices.

a. Prior to digging any tree that fails to meet the requirement for maximum soil and roots above the root collar, carefully removed the soil from the top of the root ball of each plant, using hand tools, water or an air spade, to locate the root collar and attach the soil depth over the structural roots/packages. Remove all stem girdling roots above the root collar. Care must be exercised not to damage the surface of the root collar and the top of the structural roots.

b. Trees shall be dug for a minimum of 4 weeks and a maximum of 52 weeks prior to shipping. Trees dug 4 to 52 weeks prior to shipping are defined as hardened-off. Digging is defined as cutting all roots and lifting the tree out of the ground and either moving it to a new location in the nursery or placing it back into the same hole. Trees that are stored out of the ground shall be placed in a holding area protected from extremes of wind and sun with the root ball protected by covering with mulch or straw and irrigated sufficiently to keep moisture in the root ball above wilt point and below saturation

c. If wire baskets are used to support the root ball, a "low profile" basket shall be used. A low profile basket is defined as having the top of the highest loops on the basket no less than 4 inches and no greater than 8 inches below the shoulder of the root ball package. The basket shall be removed completely at time of planting.

1.) At nurseries where sandy soils prevent the use of "low profile baskets", baskets that support the entire root ball, including the top, are allowable.

d. Twine and burlap used for wrapping the root ball package shall be natural, biodegradable material. If the burlap decomposes after digging the tree then the root ball shall be re-wrapped prior to shipping if roots have not yet begun to break up and rot in contact during shipping.

SPADE HARVESTED AND TRANSPLANTED

1. Spade Harvested and Transplanted Plants shall meet all the requirements for field grown trees. Root ball diameters shall be of similar size as the ANSI Z60.1 requirements for Balled and Burlapped plants.

2. Trees shall be harvested prior to leafing out (bud break) in the spring or during the fall planting period except for plants known to be considered as fall planting hazards. Plants that are fall planting hazards shall only be harvested prior to leafing out in the spring.

3. Trees shall be moved and planted within 48 hours of the initial harvesting and shall remain in the spade machine until planted.

C. CONTAINER (INCLUDING ABOVE-GROUND FABRIC CONTAINERS AND BOXES) PLANTS

4. Container plants may be permitted only when indicated on the drawing, in this specification, or approved by the Owner's Representative.

5. Provide plants shall be established and well rooted in removable containers.

6. Container class size shall conform to ANSI Z60.1 for container plants for each size and type of plant.

D. BARE ROOT PLANTS

7. Harvest bare root plants while the plant is dormant and a minimum of 4 weeks prior to leaf out (bud break).

8. The root spread dimensions of the harvested plants shall conform to ANSI Z60.1 for nursery grown bare root plants for each size and type of plant. Just prior to shipping to the job site, dip the root system into a slurry of hydrogel (cross linked polyacrylamide) and water mixed at a rate of 15 oz. of hydrogel in 25 gallons of water. Do not shake off the excess hydrogel. Place the root system in a plastic black plastic bag and tie the bag snugly around the trunk. Bundle and tie the upper branches together.

9. Keep the trees in a cool dark space for storage and delivery. If daytime outside temperatures exceeds 70 degrees F, utilize a refrigerated storage area with temperature between 35 and 50 degrees.

10. Where possible, plant time of planting to be before bud break. For trees to be planted after bud break, place the trees before bud break in an irrigated bed of pea gravel.

- The pea gravel bed shall be 18 inches deep over a sheet of plastic.
- Space trees to allow the unbundled branches to grow without shading each other.
- Once stored in pea gravel, allow the trees sufficient time for the new root system to flush and spring growth of leaves to fully develop before planting.
- Pea gravel stored trees may be kept for up to one growing season.
- Pea gravel stored trees shall be dipped, packaged and shipped similar to the requirements for freshly dug bare root plants.

2.3 ANNUAL FLOWERING AND SEASONAL COLOR PLANTS

E. Container or flat-grown plants should be sized as noted in the planting plan. Plants shall be well-rooted and healthy.

2.4 PALMS

F. Except as modified below or where the requirements are not appropriate to the specification of palms, palms shall meet all the requirements of the plant quality section above.

G. Defoliating, tying, and hedging:

1. In preparing palm trees for relocation, all dead fronds shall be removed.

4. All remaining fronds above horizontal shall be lifted up and tied together around the crown in an upright position. Do not tie too tightly, bind or injure the bud. Jute binder twine shall be used in tying up the fronds; wire will not be permitted. Fronds shall be untied immediately after planting.

C. Digging the root balls:

- When digging out the root ball, no evacuation shall be done closer than 24 inches to the trunk at ground level and the excavation shall extend below the major root system to a minimum depth of 3.5 feet. The bottom of the root ball shall be cut off square and perpendicular to the trunk below the major root system.
- The Contractor shall not free-fall, drag, roll or abuse the tree or put a strain on the crown (bud area) at any time. A protective device shall be used around the trunk of the tree while lifting and relocating so as not to injure the bud, or scar or skin the trunk in any way.

2.5 PLANTING SOIL

Planting Soil shall contain a mixture of 1/3 sand, 1/3 topsoil and 2/3 peat humus. Sand shall be clean, salt-free and containing no extraneous matter. Topsoil shall be friable fertile soil with representative characteristics of area soils. It should be free of heavy silt, stone, excess lime, shell rock, plant roots, debris or other foreign matter. It shall not contain noxious plant growth (such as bermuda, torpedos or nut grass). It shall test between the pH range of 5.0 to 7.0 unless otherwise specified and contain no toxic residues or substances that would endanger plant growth. If topsoil is not available on site, it shall be imported from local sources with similar soil characteristics to that found at project site. Obtain topsoil only from naturally well-drained sites where topsoil occurs in a depth not less than 4". Peat humus shall be decomposed peat with no identifiable fibers or if available, muck may be substituted and shall be free from stones, excessive plant roots, debris or other foreign matter. Muck shall not be overly saturated with water.

2.6 MULCH

A. Mulch shall be Melaleuca or Eucalyptus and shall cover all landscape bed areas in a 3" minimum layer. Do not let mulch pile up on root ball or around trunks of trees plants. Submit supplier's product specification data sheet and a one gallon sample for approval.

2.7 TREE STAKING AND GUYING MATERIAL

A. Tree guying to be flat woven polypropylene material, 3/4 inch wide, and 900 lb. break strength. Color to be Green. Product to be ArborTie manufactured by Deep Root Partners, L.P. or approved equal.

B. Stakes shall be lodge pole stakes free of knots and of diameters and lengths appropriate to the size of plant as required to adequately support the plant.

C. Below ground anchorage systems to be constructed of 2 x 2 dimensional untreated wood securing (using 3 inch long screws) horizontal portions to 4 feet vertical stakes driven straight into the ground outside the root ball.

D. Submit manufacturer's product data for approval.

2.9 WATERING BAGS

E. Plastic tree watering bags holding a minimum of 15 gallons of water and with a slow drip hole(s) water release system, specifically designed to water establishing trees. Water should release over a several day period, not within a few hours

F. Watering bags shall be:

- Treagator Irrigation Bags sized to the appropriate model for the requirements of the plant, manufactured by Spectrum Products, Inc., Youngville, NC 27566.
- Ooze Tube sized to the appropriate model for the requirements of the plant, manufactured by Engineered Water Solutions, Atlanta, GA.
- Or approved equal.

C. Submit manufacturer's product data for approval.

PART 3 EXECUTION

3.1 DELIVERY, STORAGE AND HANDLING

A. Protect materials during delivery during delivery and storage. Adequately protect plants from drying out, exposure of roots to sun, wind or extremes of heat and cold temperatures. If planting is delayed more than 24 hours after

delivery, set plants in a location protected from sun and wind. Provide adequate water to the root ball package during the shipping and storage period.

- All plant materials must be available for observation prior to planting.
- Using a soil moisture meter, periodically check the soil moisture in the root balls of all plants to assure that the plants are being adequately watered. Volumetric soil moisture shall be maintained above wilting point and below field capacity for the root ball substrate or soil.

B. Do not deliver more plants to the site than there is space with adequate storage conditions. Provide a suitable remote staging area for plants and other supplies.

1. The Owner's Representative or Contractor shall approve the duration, method and location of storage of plants.

C. Provide protective covering over all plants during transporting.

3.2 ADVERSE WEATHER CONDITIONS

A. No planting shall take place during extremely hot, dry, windy or freezing weather.

3.3 COORDINATION WITH PROJECT WORK

A. The Contractor shall coordinate with all other work that may impact the completion of the work.

B. Prior to the start of work, prepare a detailed schedule of the work for coordination with other trades.

C. Coordinate the relocation of any irrigation lines, heads or the conduits of other utility lines that are in conflict with tree locations. Root balls shall not be altered to fit around lines. Notify the Owner's Representative of any conflicts encountered.

3.4 LAYOUT AND PLANTING SEQUENCE

A. Relative positions of all plants and trees are subject to approval of the Owner's Representative.

B. Notify the Owner's Representative, one (1) week prior to layout. Layout all individual tree and shrub locations. Place plants above surface at planting location or place a labeled stake at planting location. Layout bed lines with paint for the Owner's Representative's approval. Secure the Owner's Representative's acceptance before digging and start of planting work.

C. When applicable, plant trees before other plants are installed.

D. It is understood that plants are not precise objects and that minor adjustments in the layout will be required as the planting plan is constructed. These adjustments may not be apparent until some or all of the plants are installed. Make adjustments as required by the Owner's Representative including relocating previously installed plants.

3.5 SOIL PROTECTION DURING PLANT DELIVERY AND INSTALLATION

A. Protect soil from compaction during the delivery of plants to the planting locations, digging of planting holes and installing plants.

- Where possible deliver and plant trees that require the use of heavy mechanized equipment prior to final soil preparation and tilling. Where possible, restrict the driving lanes to one area instead of driving over and compacting a large area of soil.
- Till to a depth of 6 inches, all soil that has been driven over during the installation of plants.

3.6 SOIL MOISTURE

A. Volumetric soil moisture level, in both the planting soil and the root balls of all plants, prior to, during and after planting shall be above permanent wilting point and below field capacity for each type of soil texture within the following ranges.

Soil type	Permanent wilting point	Field capacity
Sand, Loamy sand, Sandy loam	5 - 8%	12-18%
Loam, Sandy clay, Sandy clay loam	14 - 25%	27-36%
Clay loam, Silt loam	11 - 22%	31 - 36%
Silty clay, Silty clay loam	22 - 27%	38 - 41%

1. Volumetric soil moisture shall be measured with a digital moisture meter. The meter shall be the Digital Soil Moisture Meter, DSM500 by General Specialty Tools and Instruments, or approved equivalent.

B. The Contractor shall confirm the soil moisture levels with a moisture meter. If the moisture is too high, suspend planting operations until the soil moisture drains to below field capacity.

3.7 INSTALLATION OF PLANTS: GENERAL

C. Observe each plant after delivery and prior to installation for damage of other characteristics that may cause rejection of the plant. Notify the Owner's Representative of any condition observed.

D. No more plants shall be distributed about the planting bed area than can be planted and watered on the same day.

E. The root system of each plant, regardless of root ball package type, shall be observed by the Contractor, at the time of planting to confirm that the roots meet the requirements for plant root quality in Part 2 Products: Plants General: Plant Quality. The Contractor shall undertake at the time of planting, all modifications to the root system required by the Owner's Representative to meet these quality standards.

- Modifications, at the time of planting, to meet the specifications for the depth of the root collar and removal of stem girdling roots and circling roots may make the plant unstable or stress the plant to the point that the Owner's Representative may choose to reject the plant rather than permitting the modification.
- Any modifications required by the Owner's Representative to make the root system conform to the plant quality standards outlined in Part 2 Products: Plants General: Quality, or other requirements related to the permitted root ball package, shall not be considered as grounds to modify or void the plant warranty.

3. The resulting root ball may need additional staking and water after planting. The Owner's Representative may reject the plant if the root modification process makes the tree unstable or if the tree is not healthy at the end of the warranty period. Such plants shall still be covered under the warranty

4. The Contractor remains responsible to confirm that the grower has made all required root modifications noted during any nursery observations.

F. Container and Boxed Root Ball Shaving: The outer surfaces of ALL plants in containers and boxes, including the top, meet all the requirements of the plant quality section above. Root shaving shall be performed using saws, knives, sharp shovels or other suitable equipment that is capable of making clean cuts on the roots. Shaving shall remove a minimum of one inch of root mat or up to 2 inches as required to remove all root segments that are not growing reasonably radial to the trunk.

G. Exposed Stem Tissue after Modification: The required root ball modifications may result in stem tissue that has not formed trunk bark being exposed above the soil line. If such condition occurs, wrap the exposed portion of the stem in a protective wrapping with a white filter fabric. Secure the fabric with biodegradable masking tape. DO NOT USE string, twine, green nursery ties or any other material that may girdle the trunk if removed.

H. Excavation of the Planting Space: Using hand tools or tracked mini-excavator, excavate the planting hole into the Planting Soil to the depth of the root ball measured after any root ball modification to correct root problems, and wide enough for working room around the root ball or to the size indicated on the drawing or as noted below.

- For trees and shrubs planted in soil areas that are NOT tilled or otherwise modified to a depth of at least 12 inches over a distance of more than 10 feet radius from each tree, or 5 feet radius from each shrub, the soil around the root ball shall be loosened as defined below or as indicated on the drawings.
 - The area of loosening shall be a minimum of 3 times the diameter of the root ball at the surface sloping to 2 times the diameter of the root ball at the depth of the root ball.
 - Loosening is defined as digging into the soil and turning the soil to reduce the compaction. The soil does not have to be removed from the hole, just dug, lifted and turned. Lifting and turning may be accomplished with a tracked mini excavator, or hand shovels.
- If an auger is used to dig the initial planting hole, the soil around the auger hole shall be loosened as defined above for trees and shrubs planted in soil areas that are NOT tilled or otherwise modified.

3. The measuring point for root ball depth shall be the average height of the outer edge of the root ball after any required root ball modification.

4. If motorized equipment is used to deliver plants to the planting area over exposed planting beds, or used to loosen the soil or dig the planting holes, all soil that has been driven over shall be tilled to a depth of 6 inches.

H. For trees to be planted in prepared Planting Soil that is deeper than the root ball depth, compact the soil under the root ball using a mechanical tamper to assure a firm bedding for the root ball. If there is more than 12 inches of planting soil under the root ball excavate and tamp the planting soil in lifts not to exceed 12 inches.

I. Set top outer edge of the root ball at the average elevation of the proposed finish. Set the plant mulch and upright in the center of the planting hole. The tree graft, if applicable, shall be visible above the grade. Do not place soil on top of the root ball.

J. The Owner's Representative may request that plants orientation be rotated when planted based on the form of the plant.

K. Backfill the space around the root ball with the same planting soil or existing soil that was excavated for the planting space. See Specification Section 3.15 Planting Soil, for requirements to modify the soil within the planting bed.

L. Brace root ball by tamping Planting Soil around the lower portion of the root ball. Place additional Planting Soil around base and sides of ball in six-inch (6") lifts. Lightly tamp each lift using foot pressure or hand tools to settle backfill, support the tree and eliminate voids. DO NOT over compact the backfill or use mechanical or pneumatic tamping equipment. Over compaction shall be defined as greater than 85% of maximum dry density, standard proctor or greater than 250 psi as measured by a cone penetrometer when the volumetric soil moisture is lower than field capacity.

1. When the planting hole has been backfilled to three quarters of its depth, water shall be poured around the root ball and allowed to soak into the soil to settle the soil. Do not flood the planting space. If the soil is above field capacity, allow the soil to drain to below field capacity before finishing the planting. Air pockets shall be eliminated and backfill continued until the planting soil is brought to grade level.

M. Where indicated on the drawings, build a 4 inch high, level berm of Planting Soil around the outside of the root ball to retain water. Tamp the berm to reduce leakage and erosion of the saucer.

N. Thoroughly water the Planting Soil and root ball immediately after planting.

O. Remove all nursery plant identification tags and ribbons as per Owner's Representative instructions. The Owner's Representative's seals are to remain on plants until the end of the warranty period.

P. Remove corrugated cardboard trunk protection after planting.

Q. Follow additional requirements for the permitted root ball packages.

3.8 Permitted Root ball packages and Special planting requirements

A. The following are permitted root ball packages and special planting requirements that shall be followed during the planting process in addition to the above General planting requirements.

B. BALLED AND BURLAPPED PLANTS

1. After the root ball has been backfilled, remove all twine and burlap from the top of the root ball. Cut the burlap

away; do not fold down onto the Planting Soil.

- If the plant is shipped with a wire basket that does not meet the requirements of a "Low Rise" basket, remove the top 6 - 8 inches of the basket wires just before the final backfilling of the tree.
- Earth root balls shall be kept intact except for any modifications required by the Owner's Representative to make root package comply with the requirement in Part 2 Products.

C. SPADE HARVESTED AND TRANSPLANTED PLANTS

- After installing the tree, loosen the soil along the seam between the root ball and the surrounding soil out to a radius from the root ball edge equal to the diameter of the root ball to a depth of 6 - 10 inches by hand digging to disturb the soil interface.
- Fill any gaps below this level with loose soil.

D. CONTAINER (INCLUDING BOXED AND ABOVE-GROUND FABRIC CONTAINERS) PLANTS

- This specification assumes that most container plants have significant stem girdling and circling roots, and that the root collar is too low in the root ball.
- Remove the container.
- Perform root ball shaving as defined in Installation of Plants: General above.
- Remove all roots and substrate above the root collar and the main structural roots according to root correction details so root system conforms to root observations detail.
- Remove all substrate at the bottom of the root ball that does not contain roots.
- Using a hose, power washer or air excavation device, wash out the container from around the trunk and top of the remaining root ball and find and remove all stem girdling roots within the root ball above the top of the structural roots.

E. BARE ROOT PLANTS

- Dig the planting hole to the diameter of the spread of the roots to a depth in the center that maintains the root collar at the elevation of the surrounding finished grade and slightly deeper along the edges of the hole.
- Spread all roots out radial to the trunk in the prepared hole making the hole wider where needed to accommodate long roots. Root tips shall be directed away

CONTRACTOR GENERAL CONDITIONS NOTES

RF's. CONTRACTOR SHALL SUBMIT RF'S WITH HIS PROPOSED SOLUTION IN A TIMELY MANNER. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 5 WORKING DAYS TO RESPOND.

2. SUBMITTALS AND PRODUCT DATA. CONTRACTOR SHALL PREPARE A SUBMITTAL SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SUBMISSIONS. ALL SUBMITTALS, PRODUCT DATA, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.

3. SHOP DRAWINGS. CONTRACTOR SHALL PREPARE A SHOP DRAWING SCHEDULE FOR APPROVAL BY THE A/E. CONTRACTOR RECOGNIZES THE CONSULTANT SHALL REQUIRE UP TO 10 WORKING DAYS TO REVIEW SHOP DRAWINGS. ALL SHOP DRAWINGS, SHALL BE CLEARLY STAMPED AND INDICATED APPROVED BY THE CONTRACTOR PRIOR TO SUBMISSION TO THE CONSULTANT.

4. LAYOUT AND COORDINATION DRAWINGS. CONTRACTOR SHALL PREPARE SCALED COMPREHENSIVE COORDINATED LAYOUT DRAWINGS. PROVIDE SECTIONS, GENERAL ARRANGEMENTS, ELEVATIONS INCLUDING ALL DISCIPLINES FOR HIS PROPOSED LAYOUT AND ROUTING PRIOR TO FABRICATION. SUBMIT TO OWNER AND A/E FOR REVIEW AND GENERAL CONFORMANCE. PROVIDE DRAWINGS THAT DEMONSTRATE VIA COORDINATED ELEMENTS AND SYSTEMS WITH STRUCTURE THAT CLEARLY INDICATE PROPOSED SYSTEMS WITH FUNCTION AS INTENDED, BEING USED, BEING AS-BUILT AND CONFORM TO REQUIRED CODE AND MANUFACTURER WORKING AND MAINTENANCE CLEARANCES.

5. DEVIATIONS FROM BASIS FOR DESIGN SYSTEMS SHALL BE CLEARLY IDENTIFIED ON ALL SUBMISSIONS.

6. SUBSTITUTIONS.

A. CONTRACTOR SHALL PREPARE REQUESTS WITH COMPLETE COORDINATION INFORMATION, INCLUDE ALL CHANGES REQUIRED IN OTHER ELEMENTS OF THE WORK TO ACCOMMODATE THE SUBSTITUTION INCLUDING WORK PERFORMED BY THE OWNER AND THE SEPARATE CONTRACTORS.

B. PROVIDE COMPLETE SUPPORTING DATA QUALIFYING THE SUBSTITUTION COMPARED TO THE BASIS OF DESIGN SYSTEM. PROVIDE A DETAILED LIST OF ANY VARIANCES, PHYSICAL OR SPATIAL LAYOUTS, ELEVATIONS, ETC. TO THE BASIS OF DESIGN.

C. PROVIDE A STATEMENT INDICATING THE EFFECT THE SUBSTITUTION WILL HAVE ON THE WORK SCHEDULE IN COMPARISON TO THE SCHEDULE WITHOUT APPROVAL OF THE PROPOSED SUBSTITUTION, INCLUDE INFORMATION REGARDING THE EFFECT OF THE PROPOSED SUBSTITUTION ON THE CONTRACT TIME.

D. PROVIDE CERTIFICATION BY THE CONTRACTOR TO THE EFFECT THAT, IN THE CONTRACTOR'S OPINION, AFTER THOUGH EVALUATION, THE PROPOSED SUBSTITUTION WILL RESULT IN WORK THAT IN EVERY SIGNIFICANT RESPECT IS EQUAL TO OR BETTER THAN THE WORK REQUIRED BY THE CONTRACT DOCUMENTS AND THAT IT WILL PERFORM ADEQUATELY IN THE APPLICATION INDICATED.

E. CONSULTANT'S EXPENSES THAT ARE INCURRED DUE TO REVISIONS OR SUBSTITUTIONS REQUESTED BY THE CONTRACTOR OR APPROVED BY THE OWNER SHALL BE COMPENSATED TO THE CONSULTANT BY THE CONTRACTOR.

7. AS-BUILT DRAWINGS. THE CONTRACTOR SHALL MAINTAIN AND PREPARE A COMPLETE AND ACCURATE SET OF AS-BUILTS DURING THE PROJECT AND ISSUE TO THE A/E AND OWNER AT PROJECT CLOSEOUT. DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL ISSUE SKETCHES OR SCALED DRAWINGS FOR FIELD CHANGES THAT ARE PROPOSED OR MADE WHICH VARY FROM THE BASIS OF DESIGN. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

8. INSTALLATION, TESTING AND BALANCING, START UP, COMMISSIONING AND PERFORMANCE TROUBLESHOOTING OF SYSTEMS- CONTRACTOR RECOGNIZES HE IS SOLELY RESPONSIBLE FOR PERFORMANCE AND COMPLETION OF THESE SERVICES AS PART OF THE PROJECT REQUIREMENTS, DURING THE COURSE OF THE PROJECT, THE CONTRACTOR SHALL DOCUMENT THE SERVICES COMPLETED TO THE OWNER AND A/E. CONSULTANT EXPENSES THAT ARE INCURRED DUE TO SUPPORTING SERVICES OR REVISIONS REQUIRED BY BUILDING DEPARTMENT, OWNER, CONTRACTOR, AND MANUFACTURER SHALL BE COMPENSABLE TO THE CONSULTANT BY THE CONTRACTOR.

9. CONTRACTOR/DELEGATED/SUCCESSOR ENGINEER - CONTRACTOR IS ASSIGNED TO PROVIDE DESIGN/BUILD SERVICES FOR SELECTED SYSTEMS. CONTRACTOR'S ENGINEER SHALL COMPLY WITH ALL FAC 61615 REQUIREMENTS. DELEGATED/SUCCESSOR ENGINEER SHALL SUBMIT SIGNED/SEALED DRAWINGS TO A/E, TO AGENCIES, RESPOND TO ALL RF'S, AGENCY COMMENTS, AND BECOME THE DESIGNATED SYSTEM ENGINEER OF RECORD.

UL LISTING AND NRTL CERTIFICATIONS NOTE

CONTRACTOR/MANUFACTURER SHALL PROVIDE COMPLETE DOCUMENTATION AND CERTIFICATIONS FOR ANY EQUIPMENT THAT THE PROPOSER/S WITH A NRTL (NATIONALLY RECOGNIZED TESTING LAB) LISTING AND LABELING EQUIVALENT TO THE BASIS OF DESIGN U/L LISTING.

IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFIRM ACCEPTABILITY BY THE LOCAL AHJ AND AGENCIES FOR THE NRTL LISTING AND CERTIFICATION FOR THE PRODUCTS HE PROPOSES AND DEMONSTRATE SUCH AS PART OF THE PRODUCT DATA SUBMISSION AND INSTALLATION.

GENERAL ELECTRICAL NOTES

1. DO NOT SCALE THE ELECTRICAL DRAWING. REFER TO THE ARCHITECTURAL PLAN AND ELEVATIONS FOR EXACT LOCATION OF ALL EQUIPMENT AND CONFORM WITH OWNERS REPRESENTATIVES. CONTRACTOR SHALL REFER TO THE ENTIRE SET OF CONTRACT DOCUMENTS FOR PROJECT COORDINATION.
11. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE EDITIONS CURRENTLY ADOPTED BY THE LOCAL AUTHORITIES HAVING JURISDICTION OF THE FOLLOWING: THE NATIONAL ELECTRICAL CODE (NFPA 70), NFPA 72, NFPA 75, THE FIRE PREVENTION CODE INCLUDING NFPA 1 & NFPA 101, NFPA 110, AND THE IFBC, AND THE FFPC.
3. UNLESS OTHERWISE NOTED, ALL CONDUCTORS SHALL BE COPPER, WITH "THHN" INSULATION FOR SIZE #10 AND SMALLER; CONDUCTORS LARGER THAN #10 SHALL HAVE "THWN" INSULATION. ALL CONDUCTORS IN WET LOCATIONS MUST HAVE "THWN" INSULATION. ALL CONDUCTORS #10 AND SMALLER MAY BE SOLID. ALL CONDUCTORS #8 AND LARGER SHALL BE STRANDED. ALL CONDUCTORS MUST COMPLY WITH ARTICLE 310 OF THE N.E.C.
4. OUTLET BOXES SHALL BE PRESSED STEEL IN DRY LOCATIONS, CAST ALLOY WITH THREADED HUBS IN WET LOCATIONS AND SPECIAL ENCLOSURES FOR OTHER CLASSIFIED AREAS.
5. DISCONNECT SWITCHES SHALL BE H.P. RATED, HEAVY DUTY, QUICK MAKE, QUICK BREAK, WITH ENCLOSURES AS REQUIRED BY EXPOSURE.
6. THESE PLANS DO NOT SHOW EVERY MINOR DETAIL OF CONSTRUCTION, THE CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL ITEMS FOR A COMPLETE ELECTRICAL SYSTEM AND MEET ALL REQUIREMENTS NECESSARY FOR EQUIPMENT TO BE PLACED IN PROPER WORKING ORDER.
7. THE ELECTRICAL SYSTEM SHALL BE COMPLETELY AND EFFECTIVELY GROUNDING AS REQUIRED IN ARTICLE 250, NATIONAL ELECTRICAL CODE. THE GROUNDING SYSTEM SHALL BE TESTED AND SHALL BE PROVIDED TO MEASURE A MAXIMUM OF 5 OHMS. PROVIDE A COPY OF THE TEST REPORT TO ENGINEER.
8. ALL MATERIALS SHALL BE NEW AND SHALL BEAR U.L. LABELS WHERE APPLICABLE.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR IN A FIRST CLASS WORKMANSHIP MANNER. THE COMPLETE SYSTEM SHALL BE FULLY OPERATIVE AND ACCEPTANCE BY ENGINEER/ARCHITECT MUST BE A CONDITION OF THE SUBCONTRACTOR.
10. THE ELECTRICAL INSTALLATION SHALL MEET ALL STANDARD REQUIREMENTS OF POWER, LIGHT, COMPANY, TELEPHONE COMPANY, AND BROADBAND PROVIDER.
11. CIRCUITS SHOWN ON PLANS ARE TO DETERMINE LOAD DATA AND PANEL SIZE. THE CONTRACTOR SHALL PROVIDE CIRCUITS TO SUIT JOB CONDITIONS, BALANCE LOADS ON EACH PHASE.
22. SEE NOTES ON PLANS FOR OTHER REQUIREMENTS.
17. FURNISH AND INSTALL LIGHTING FIXTURES AND LAMPS AS CALLED FOR ON PLANS, OR AS SELECTED BY OWNER.
11. ALL WORK SHALL BE COORDINATED WITH OTHER TRADES TO AVOID INTERFERENCE WITH THE PROCESS OF CONSTRUCTION.
15. CORRECTION OF ANY DEFECTS SHALL BE COMPLETED WITHOUT ADDITIONAL CHARGE AND SHALL INCLUDE REPLACEMENT OR REPAIR OF A PORTION OF THE INSTALLATION WHICH MAY BE DAMAGED.
16. ALL REQUIRED INSURANCE SHALL BE PROVIDED FOR PROTECTION AGAINST PUBLIC LIABILITY OF PROPERTY DAMAGE FOR THE DURATION OF THE WORK.
17. CHECK ALL EQUIPMENT FOR PROPER VOLTAGE, PHASE, AND CURRENT BEFORE CONNECTION TO CIRCUITS AND START UP.
18. ELECTRICAL CONTRACTOR SHALL CHECK AND VERIFY EQUIPMENT FURNISHED AGAINST THOSE SPECIFIED OR INTENDED AND REVISE BRANCH CIRCUITS AS MAY BE REQUIRED WITH PRIOR APPROVAL OF ENGINEER/ARCHITECT.
19. ALL SYSTEMS AND ROUGH-IN SHALL BE CONCEALED IN FINISHED AREAS. COORDINATE WITH ARCHITECT.
20. THE ELECTRICAL PORTION OF THE CONTRACT DOCUMENTS ARE COORDINATED WITH THE BASIS OF DESIGN EQUIPMENT SPECIFIED BY DIVISION 16 AND OTHER DIVISIONS. WHERE THE CONTRACTOR ELECTS TO SUBSTITUTE A PRODUCT IN LIEU OF PROVIDING THE DESIGN BASIS, AND SAID SUBSTITUTION IS ACCEPTED BY THE A/E AND OWNER, THE CONTRACTOR SHALL MAKE ALL CORRECTIONS TO THE ELECTRICAL SYSTEM NECESSARY IN ORDER TO INSURE A COMPLETE AND OPERATIONAL INSTALLATION OF THE EQUIPMENT AT NO ADDITIONAL COSTS. WHERE THE CONTRACTOR'S DECISION TO SUBSTITUTE PRODUCTS OR MODIFY DESIGN REQUIRING A/E SERVICES, THE A/E RESERVES THE RIGHT TO REQUEST COMPENSATION FROM THE CONTRACTOR FOR SAID SERVICES.
21. CONTRACTOR SHALL PROVIDE A CONTROLS TRADE SUBCONTRACTOR TO DESIGN AND INSTALL ALL CONTROLS TO MEET THE PROJECT REQUIREMENTS.

AIR CONDITIONING EQUIPMENT AND CONTROLS SPECIFICATION

1. ELECTRICAL CONTRACTOR SHALL INSTALL ALL CONTROL RACEWAY (CONDUIT), WIRE INSTALLATION, CONNECTIONS ETC. IN ACCORDANCE WITH WIRING DIAGRAMS ON AIR EQUIPMENT.
2. A/C / ELECTRICAL PLANS OR DIAGRAMS FURNISHED BY MANUFACTURER OF THE EQUIPMENT.
3. ALL POWER WIRING FOR THE AIR CONDITIONING EQUIPMENT SHALL BE FURNISHED, INSTALLED AND CONNECTED UNDER THIS SECTION OF THE SPECIFICATION.
4. MECHANICAL CONTRACTOR SHALL PROVIDE MOTOR STARTERS FOR ALL AIR CONDITIONING EQUIPMENT. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL CONNECTIONS TO AIR CONDITIONING EQUIPMENT PER MANUFACTURERS SPECIFICATIONS.
5. AIR CONDITIONING EQUIPMENT INCLUDES CONDENSER, COMPRESSOR AND FAN, FAN COIL UNITS, ELECTRICAL STRIP HEATER, THERMOSTAT, ETC.

SITE LIGHTING/PHOTOMETRIC NOTES	
1.	COORDINATE AND VERIFY ALL SITE ELECTRICAL REQUIREMENTS WITH ARCHITECT PRIOR TO ANY CONSTRUCTION/ INSTALLATION.
2.	THE COMPLETE STREET LIGHTING POLE MOUNTED ASSEMBLY MUST WITHSTAND A MINIMUM 175 MPH WINDLOADS. CALCULATIONS AND FOUNDATION DESIGN BY CIVIL/STRUCTURAL ENGINEER.
3.	PROVIDE IN-LINE FUSES AT EACH POLE, ONE IN EACH HOT LEG.
4.	ALL SITE LIGHTING CONDUITS SHALL BE BURIED AT A MINIMUM OF 24" BELOW FINISHED GRADE.
5.	ALL SITE LIGHTING SHALL BE PHOTOCELL CONTROLLED UNLESS SPECIFIED OTHERWISE.

SITE POLE NOTE
WIND LOAD CALCULATIONS AND SITE POLE STRUCTURAL DETAILS ARE TO BE SUBMITTED TO THE BUILDING DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. (BY CONTRACTOR AND HIS DELEGATED F.L.P.E. STRUCTURAL ENGINEER)

ELECTRICAL SHEET INDEX	
SHEET #	DESCRIPTION
EPH0.1	ELECTRICAL NOTES AND SHEET INDEX
EPH1.1	PHOTOMETRIC PLAN
EPH3.1	LIGHTING LEGEND AND DETAILS

FBC NOTE
1. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.1). PROVIDE OWNER WITH A RECORD SET DRAWING OF COMPLETE INSTALLATION DRAWINGS.
2. CONTRACTOR SHALL COMPLY WITH FBC (C408.2.5.2). PROVIDE OWNER WITH OPERATIONAL MANUALS AND MAINTENANCE MANUALS.

LIGHTING NOTES
1. ELECTRICAL CONTRACTOR TO VERIFY IF ANY LIGHTING FIXTURES REQUIRE STEP-DOWN TRANSFORMERS. QUANTITY AND LOCATION OF THE TRANSFORMERS TO BE FIELD VERIFIED PRIOR TO CONSTRUCTION. CONSULT ARCHITECT FOR LOCATIONS PRIOR TO BIDDING. PROVIDE ALL TRANSFORMERS AND INCLUDE IN BID.
2. ALL LIGHTING FIXTURES AND FANS TO BE SELECTED & LOCATED BY OWNER /ARCHITECT/INTERIOR DESIGNER, UNLESS OTHERWISE NOTED.
3. ARCHITECT TO SET MOUNTING HEIGHTS FOR ALL FIXTURES WHERE APPLICABLE, UNLESS OTHERWISE NOTED.
4. CONTRACTOR TO PROVIDE LUMINAIRES TO CONFORM TO ENERGY CODE, THERMAL ENVELOPE RATINGS.

FLORIDA BUILDING CODE 2017 CONFORMANCE	
1.	CONTRACTOR TO PROVIDE ALL LABOR AND MATERIAL TO CONFORM TO FBC 2017 ENERGY COMPLIANCE, RELATED SECTIONS, AND STANDARDS.
2.	OWNER SHALL PROVIDE SERVICES OF AN INDEPENDENT COMMISSIONING AGENT(Cx)A TO PREPARE FUNCTIONAL TEST PROCEDURES (DOCUMENT SYSTEMS PERFORMANCE, WITNESS CONTRACTOR TESTING), AS REQUIRED BY FBC FOR LIGHTING AND HVAC SYSTEMS.
3.	CONTRACTOR SHALL PROVIDE SERVICES TO TEST, BALANCE AND COMMISSION THE SYSTEM VIA AN INDEPENDENT AGENT FOR THE MECHANICAL SYSTEMS ENERGY PERFORMANCE.
4.	CONTRACTOR TO PROVIDE COMPLETE CERTIFICATIONS AND CHECKLISTS AS REQUIRED BY FBC FOR HIS WORK RESPONSIBILITIES.

VOLTAGE DROP NOTE

THE CONTRACTOR, AS PART OF HIS PRICING AND BIDDING, SHALL INCLUDE ALL LABOR, MATERIAL, EQUIPMENT AND TERMINATIONS, INCLUDING GFL AND UTILITY REQUIREMENTS AND APPROVALS FOR ALL CONDUCTING AND TERMINATIONS, TO SATISFY THE PROJECT REQUIREMENTS. IT IS SOLELY THE CONTRACTOR'S RESPONSIBILITY TO VERIFY AND INCLUDE ALL HIS BRANCH CIRCUIT, FEEDER, AND SERVICE CONDUCTOR CONDUITING AND WIRING LENGTHS AND ROUTING BASED ON HIS PROPOSED INSTALLATION MEANS AND METHODS. WIRING LENGTHS, SHOWN AS THE BASIS OF DESIGN LENGTHS, ARE MERELY AN APPROXIMATION BY THE CONSULTANT. THE CONTRACTOR SHALL USE THOSE BASIS OF DESIGN CONDUCTOR LENGTHS AND WIRING SIZES AS THE MINIMUM, NOT LIMITED TO, REQUIREMENTS FOR THE PROJECT BIDDING. THE CONTRACTOR, PRIOR TO BIDDING, SHALL CONFIRM ALL HIS PROPOSED LENGTHS, MAKE ANY AND ALL ADJUSTMENTS AS MAY IMPACT THE ELECTRICAL SYSTEMS AND EQUIPMENT FOR CODE COMPLIANCE AND CONSTRUCTABILITY, AND DOCUMENT ALL PROPOSED CHANGES AND ADJUSTMENTS TO THE ARCHITECT AS PART OF HIS BID RESPONSE. THE CONTRACTOR SHALL SUBMIT COMPLETE SCALED PROPOSED ROUTINGS FOR SERVICES AND FEEDERS, QUANTITIES AND CONDUCTORING, SECTIONS THRU BUILDING FOR RACKING, OUTBACK CROSS SECTIONS FOR CLEARANCES AND COORDINATED AS FREE OF ALL INTERFERENCES, ETC. CONTRACTOR SHALL SUBMIT ALL DOCUMENTATION TO THE ARCHITECT FOR REVIEW NO LATER THAN 3 WEEKS AFTER NOTICE TO PROCEED.

SCOPE OF WORK
SITE LIGHTING PHOTOMETRICS FOR NEW BUILDING/SITE.

CODE COMPLIANCE	
FLORIDA BUILDING CODE, 6TH EDITION, 2017.	
NATIONAL ELECTRICAL CODE, 2014.	

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE-SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

PRIOR TO SUBMITTING THE BID, THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND INFORM THE ARCHITECT AND THE ENGINEER OF ANY DISCREPANCY BETWEEN THESE DOCUMENTS AND THE EXISTING CONDITIONS AND SHALL INCLUDE IN THE BID TO CORRECT THE SAME AS DIRECTED. THE ENGINEER AND THE ARCHITECT, ARE NOT RESPONSIBLE FOR ANY ADDITIONAL COSTS RESULTING FROM VERIFIABLE EXISTING CONDITIONS DISCOVERED AFTER CONTRACT HAS BEEN AWARDED. NO CHANGES SHALL BE MADE TO THESE PLANS WITHOUT PRIOR APPROVAL FROM THE ENGINEER OF RECORD. ALL CHANGES SHALL BE SUBMITTED FOR REVIEW PRIOR TO INSTALLATION. NOT FOR BID UNTIL PERMIT HAS BEEN ISSUED.



Consultants:

Revisions:

VILLAGE COLLECTION OF PALM SPRINGS
VILLAGE OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19



300 LOCK ROAD, SUITE 302
DEERFIELD BEACH, FLORIDA 33442
TEL: (561) 391-9292 FAX: (561) 391-9898
CERTIFICATE OF AUTHORIZATION NO. 28107
URSULA IAFRATE, P.E. LICENSE #73122
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DESIGNED BY: MW PM: AN P/N 19072

Drawn By: M.W

Drawing #

Date: 06/27/19

ELECTRICAL NOTES AND
SHEET INDEX

SHEET # EPH0.1



PHOTOMETRIC PLAN
SCALE: 1"=20'-0"

ALL LIGHTING FIXTURES IN THIS AREA
ARE PROVIDED BY OTHERS UNDER
SEPARATE PERMIT.

FIRE SAFETY FLORIDA STATUTES: TO THE BEST OF THE ENGINEER'S KNOWLEDGE, THE PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE MINIMUM BUILDING CODES AND THE APPLICABLE FIRE SAFETY STANDARDS AS DETERMINED BY THE LOCAL AUTHORITY IN ACCORDANCE WITH F.B.C. 2017 SECTION 110.8.4.4 AND CHAPTER 633, FLORIDA STATUTES.

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Consultants:

Revisions:

- 1 OWNER CHGS 8/8/19
- 2 OWNER CHGS 8/22/19
- 3 OWNER CHGS 10/23/19

VILLAGE COLLECTION OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

DESIGNED BY: MW

DATE: 06/27/19

PH: AN

PIN: 19072

Drawn By: M.W.

Drawing #: PHOTOMETRIC PLAN

SHEET # EPH1.1

Luminaire Schedule						
Project: TIRE KINGDOM & RACE TRAC, PALM SPRINGS - SITE - REV4 --- OCT - 23 - 2019						
Symbol	Qty	Label	Description	LLF	Lum. Watts	Total Watts
	30	A	SCV-LED-13L-SC-50	0.900	84.3	2529
	2	B	A2_B1-05	0.900	11.5	23
	9	C	SP2-STR-Y4-2050-FCO-MOD(KB6 12LED)-BB	0.900	27.3	245.7
	3	D	XALM-2-LED-VHO-50-IL	0.900	313.6	940.8
	4	E	XALM-FT-LED-VHO-50-IL	0.900	315	1260
	3	F	XWM-FT-LED-06-50	0.900	53.9	161.7
	3	G	XWM-FT-LED-04-50	0.900	38	114
	2	SA	GARDCO ECF-S-64L-1A-NW-62-9W	0.900	205.9	823.6
	2	SB	GARDCO ECF-S-64L-1A-NW-62-4	0.900	205.9	411.8
	1	SB1	GARDCO ECF-S-32L-1_2A-NW-62-4	0.900	122	122
	1	SC1	GARDCO ECF-S-32L-1_2A-NW-62-2-HIS	0.900	121.6	121.6
	1	SC2	GARDCO ECF-S-32L-700-NW-62-2-HIS	0.900	72.9	72.9

Calculation Summary					
Project: TIRE KINGDOM & RACE TRAC, PALM SPRINGS - SITE - REV4 --- OCT - 23 - 2019					
Label	Avg	Max	Min	Avg/Min	Max/Min
SPILL HORIZONTAL 6' AG	0.02	0.33	0.00	N.A.	N.A.
SPILL TO 10TH AVENUE NORTH	0.35	3.1	0.0	N.A.	N.A.
SPILL TO LOT 1	0.79	4.3	0.0	N.A.	N.A.
SPILL TO LOT 4	0.74	3.7	0.0	N.A.	N.A.
SPILL VERTICAL 6' AG	0.07	0.33	0.00	N.A.	N.A.
FUEL CANOPY	28.83	39.7	17.5	1.65	2.27
RACETRAC - PARK & DRIVE	4.55	12.1	1.4	3.25	8.64
SITE	4.56	12.1	1.1	4.15	11.00
TIRE KINGDOM - PARK & DRIVE	2.97	6.3	1.0	2.97	6.30

Consultants:

Revisions:

OWNER CHGS 8/22/19
 OWNER CHGS 10/23/19

VILLAGE COLLECTION OF PALM SPRINGS
 VILLAGE OF PALM SPRINGS, Florida

PERMIT SET: 07/26/19

Drawn By: M.W.

Drawing #:

Date: 06/27/19

LIGHTING LEGEND AND DETAILS

SHEET # EPH3.1

Site & Area
EcoForm
 EcoForm S small area light

Gardco EcoForm Gen-2 combines economy with performance in an LED area luminaire. Capable of delivering up to 26,400 lumens or more in a compact, low profile LED luminaire, EcoForm offers a new level of customer value. EcoForm features an innovative retrofit arm kit, simplifying site conversions to LED by eliminating the need to drill additional holes in most existing poles. Integral control systems available for further energy savings. Includes Service Tag, our innovative way to provide assistance throughout the life of the product.

Project: _____
 Location: _____
 Dist. No: _____
 Type: _____ Qty: _____
 Lamps: _____
 Notes: _____

Ordering guide example: ECF-S-64L-900-NW-G2-AR-5-120-HIS-MGY

Prefix	Number of LEDs	Pin Current	LED Color-Temperature	Mounting	Distribution	Voltage	Options
ECF-S							
ECF-S EcoForm site and area, small	32L 32 LEDs (2 modules)	130mA	Warm White 3000K, 70°CRI	Arm Mount (standard)	Type 2 2-90° Rotated left 90°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V	00 0-10V External dimming (by others) ¹ 01 Dual Circuit Control ¹⁴ 02 Field Adjustable 03 Integral with interface module for 50W/100W ¹⁵ 04 Integral wireless module ¹⁶ 05 Pole mounted motion sensor ¹⁶ (see accessories) 06 BL Bi-level functionality 07 Dimmer: Automatic Profile Dimming 08 CS50 Safety 50% Dimming, 7 hours ¹⁴ 09 CS50 Medium 50% Dimming, 8 hours ¹⁴ 10 CS50 Economy 50% Dimming, 9 hours ¹⁴ 11 CS50 All Night 50% Dimming ¹⁴ 12 CS50 Safety 30% Dimming, 7 hours ¹⁴ 13 CS50 Medium 30% Dimming, 8 hours ¹⁴ 14 CS50 Economy 30% Dimming, 9 hours ¹⁴ 15 CS50 All Night 30% Dimming ¹⁴ 16 Type 5 17 Type 5 SW Type SW 18 AFR Auto Front Row 19 AFR-90 Auto Front Row Rotated left 90° 20 AFR-270 Auto Front Row Rotated right 270°
48L 48 LEDs (3 modules)	900 900mA	Cool White 5000K, 70°CRI	CW-G2 Generation 2	The following 4000K, 70°CRI mounting ARs must be ordered separately (see accessories): 5F Slip Filter Mount ¹ (fits to 2 1/4" O.D. tenon) W5 Wall mount with surface conduit rear entry permitted RAM Retrofit arm mount kit ¹	Type 3 3-90° Rotated left 90° Type 3 3-270° Rotated right 270° Type 4 4-90° Rotated left 90° Type 4 4-270° Rotated right 270° Type 5 5-90° Rotated left 90° Type 5 5-270° Rotated right 270° Type 5 5-90° Rotated left 90° Type 5 5-270° Rotated right 270°	120 120V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 130 130V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 140 140V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 150 150V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 160 160V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 170 170V 208 208V 240 240V 277 277V 347 347V 480 480V 500 500V 575 575V 180 180V 208 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1. BL-IMR3/7 equipped with out-boarded sensor housing when voltage is HVU (347-480V)
 2. Mounts to a 4" round pole with adapter. Included for square poles.
 3. Limited to a maximum of 45 degrees aiming above horizontal.
 4. Not available with other dimming control options.
 5. Not available with motion sensor.
 6. Not available with photocell control.

7. Available only in 120 or 277V.
 8. Not available in 347 or 480V.
 9. Must specify input voltage.
 10. Dimming will not be connected to NEMA receptacle if ordering with other control options.
 11. Not available in 480V.
 12. Not available with DCC.
 13. Not available with SF and WS. RPA's provided with black finish standard.

14. HIS not available with Type 5 and SW options.
 15. Available only with SW, LLC, and BL control options.
 16. Available only with SW and BL control options.

ECF-S_EcoForm_area_small 04/19 page 1 of 8

JOB NO: _____ PROJECT: _____ CUSTOMER: _____

LENGTH OF POLE	35 FT.
EMBEDMENT SPECIFIED	10 FT.
HEIGHT ABOVE GROUND	25 FT.
WEIGHT	2900 LBS.
WIND VELOCITY (mph)	150 160 170 180
MAXIMUM EPA* (sq. ft.)	

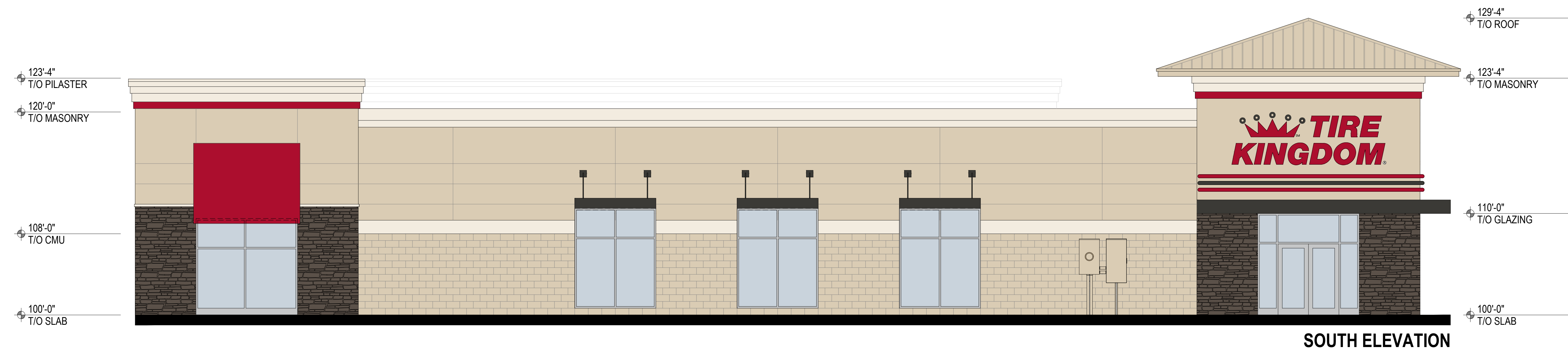
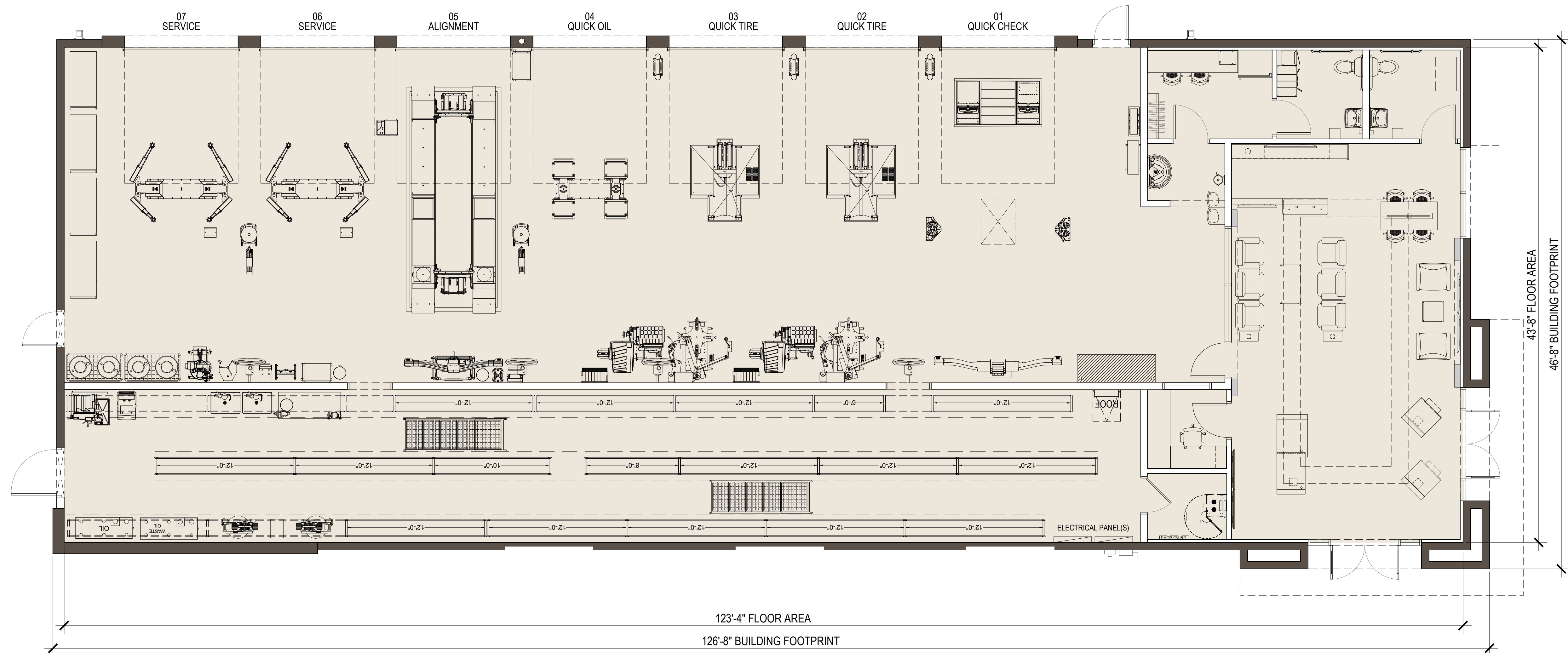
Above embedment shown in SAND. Other embedment depth may be required for other soil condition.

STANDARD PIPE TENON SIZE	
Nominal Diameter (in)	Outside Diameter (in)
2"	2 3/8"
2 1/2"	2 7/8"
3"	3 1/2"
3 1/2"	4"
4"	4 1/2"

TIRE KINGDOM - PALM SPRINGS, FL

DESIGN DATA:

TIRE INVENTORY	1,400 ± TIRES
FLOOR AREA	5,386 SF
BUILDING FOOTPRINT	5,716 SF



TIRE KINGDOM - PALM SPRINGS, FL



EAST ELEVATION

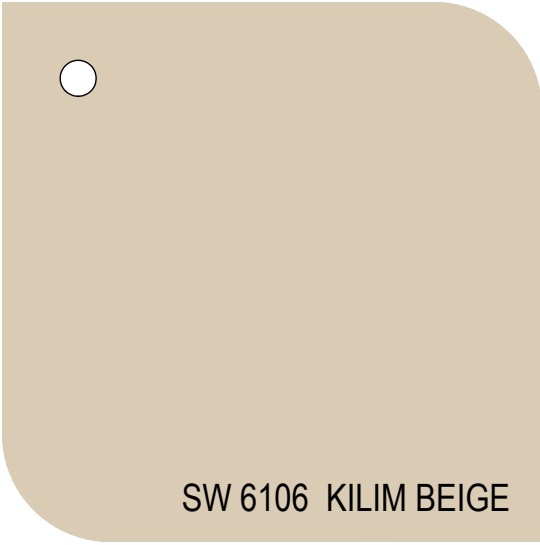


WEST ELEVATION

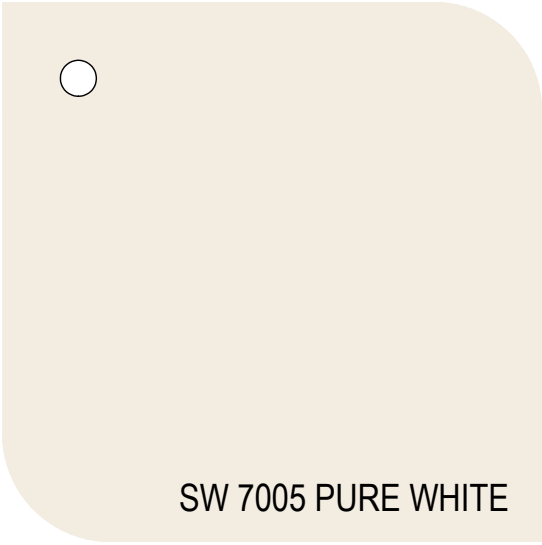
EF-1



EF-2



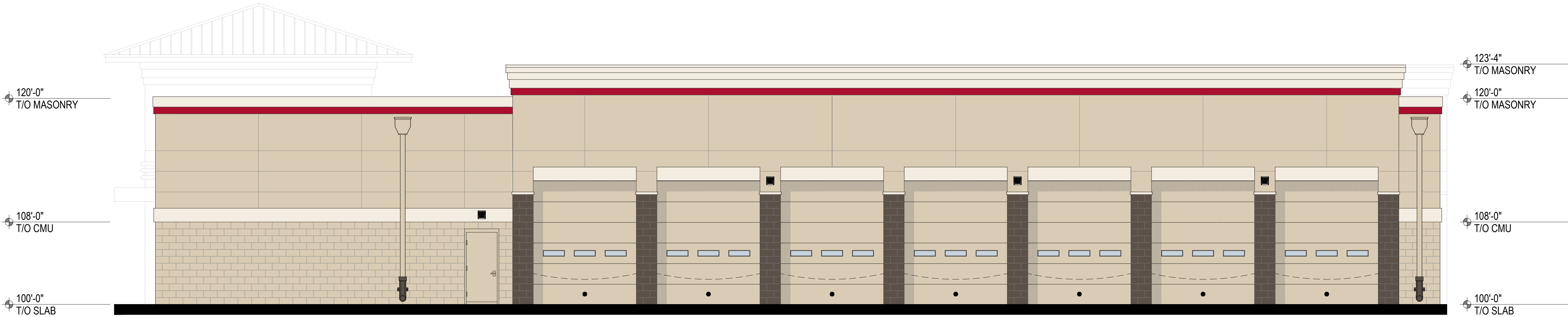
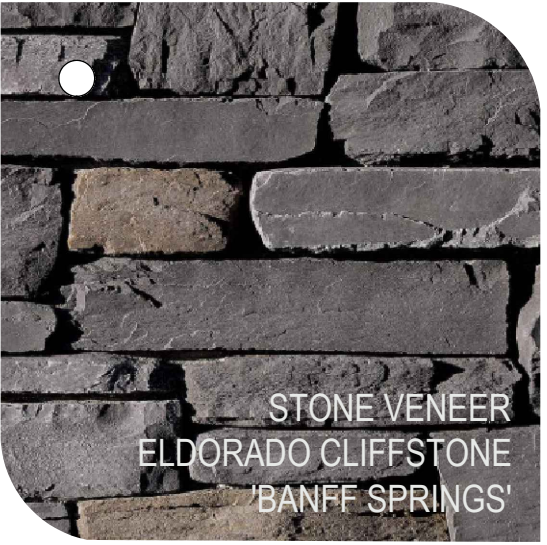
EF-3



EF-4



SV-1



NORTH ELEVATION



WILKUS ARCHITECTS

7-BAY INLINE MODEL (MODIFIED)



V.2019.1.07.02
28 AUGUST 2019
PAGE 2 OF 2



10th Ave. North and Florida Mango Rd.
Palm Springs, FL 33461



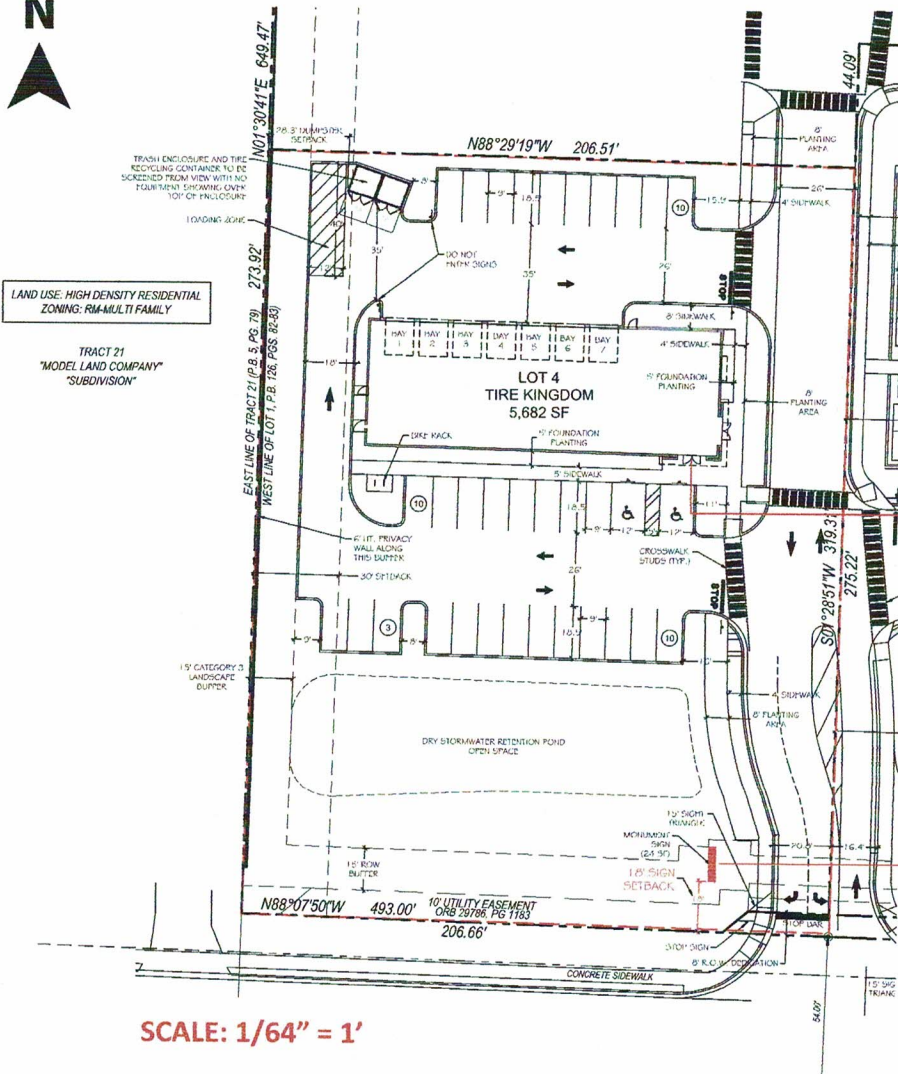
AERIAL VIEW

Code:

Building: (1) sign allowed. Area of sign is determined by: height*width*constant. The constant for commercial buildings is .14 for 10' or less, .12 for 10' to 20' and .10 for more than 20'

Freestanding: (1) per parcel. with allowance for an additional monument sign on each additional public street frontage in excess of 75 linear feet of width. The maximum permitted area for a monument sign shall be prorated on the basis of one-half square foot of sign area, not including the base, for each linear foot of property line adjacent to a public street, up to a maximum of 120 square feet. Within the permissible sign face allowance, the permitted sign may contain the center or individual business name, and/or tenant listings.

The maximum height is based off the set back from the ROW. A 5' setback allows a maximum sign height of 5', 6' -10' setback allows a sign height of 7', 11' -20' allows 8' height and 20' or higher set back allows a maximum height of 10'



SCALE: 1/64" = 1'

SQUARE FEET



**TIRE
KINGDOM.**

49.84



**TIRE
KINGDOM.
SERVICE CENTERS
XXXXXX**

72

**TIRE
KINGDOM.**

Address _____
10th Ave. North
and Florida Mango Rd.,
City _____ Palm Springs
State _____ FL 33461

Account Representative:
S.HICKS

This design and engineering is submitted as our proposal, and the right to use or exhibit in any form, is not authorized without written permission by Vixxo.

Approvals Signature(s) / Initials

Client _____
Design _____
Production _____

Designer _____ JS
Design # _____ Vx182671 R3
Original Date _____ 1/25/19
Revision Date _____ 10/30/19

All electrical scope to be completed in a U.L. approved method and shall meet current N.E.C. standards.



VIXXO
Sign & Lighting

2:5 274

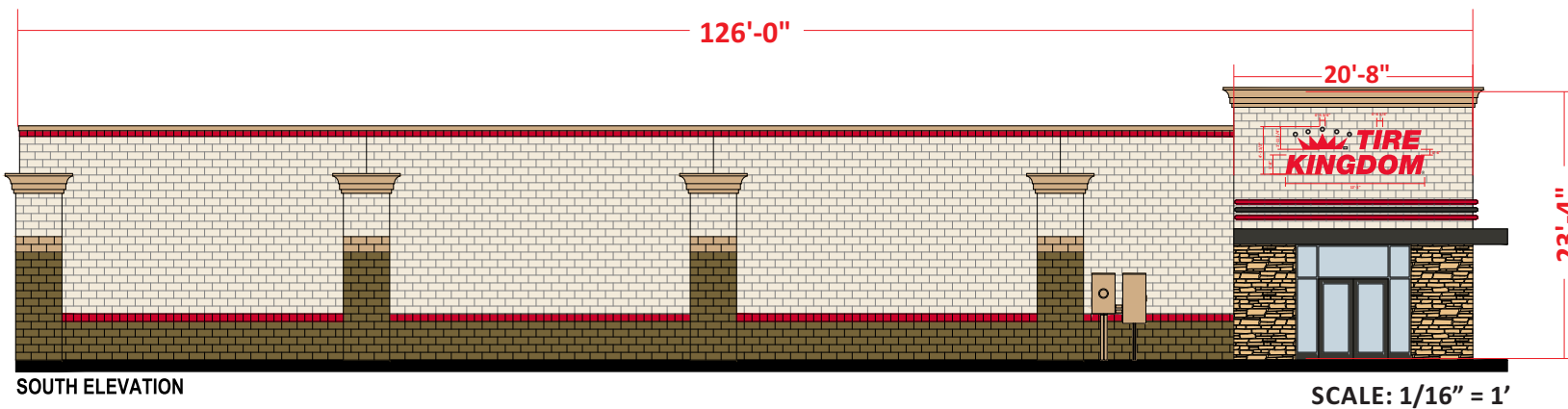
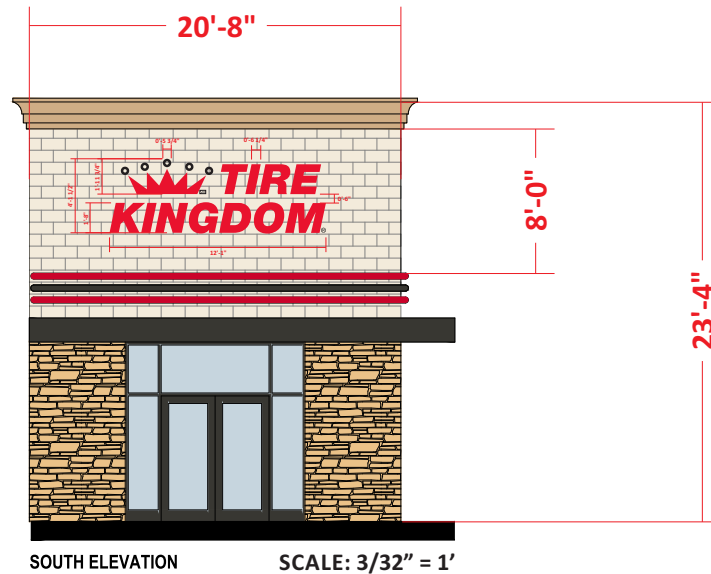
The purchaser agrees to hold the seller harmless against any claims for action for damages which may occur as a result of drilling for piers and foundations, including but not limited to sewer, gas lines or any underground obstacles which the purchaser or others may deem valuable.

ELEVATION



SCOPE OF WORK:

Manufacture and install (1) set 22.75" / 20" "Tire Kingdom" individually mounted channel letters



Address _____
 10th Ave. North
 and Florida Mango Rd.,
 City _____ Palm Springs
 State _____ FL 33461

Account Representative:
S.HICKS

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Approvals Signature(s) / Initials

Client _____
 Design _____
 Production _____

Designer _____ JS
 Design # _____ Vx182671 R2
 Original Date _____ 1/25/19
 Revision Date _____ 07/15/19

All electrical scope to be completed in a U.L. approved method and shall meet current N.E.C. standards

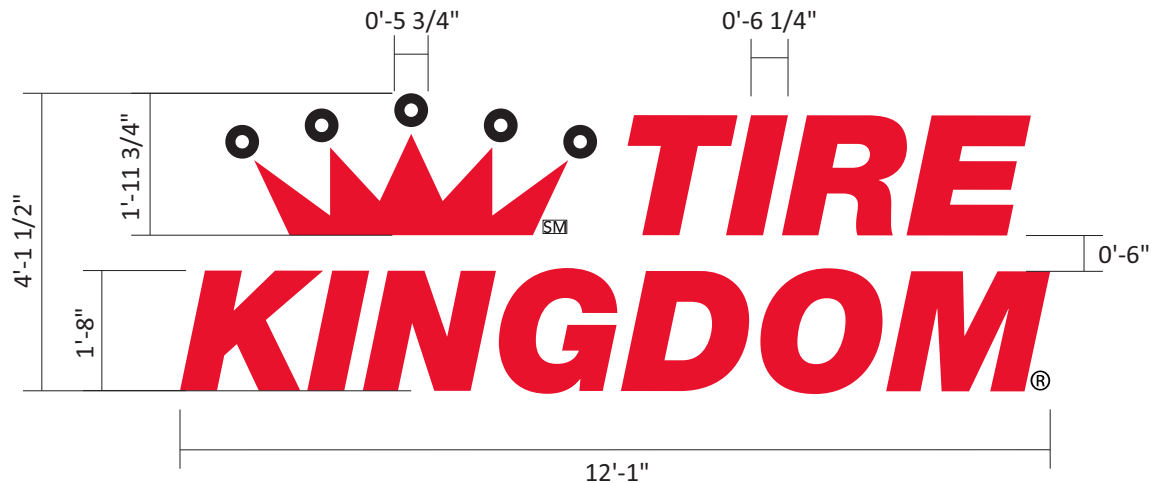


275
3:5

The purchaser agrees to hold the seller harmless against any cause for action for damages which may occur as a result of drilling for piers and foundations, including but not limited to sewer, gas lines or any underground obstacles which the purchaser or others may deem valuable.



49.84 SQ/FT



Address _____
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and Florida Mango Rd.,
City _____ Palm Springs
State _____ FL 33461

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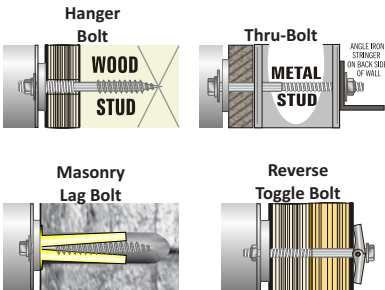
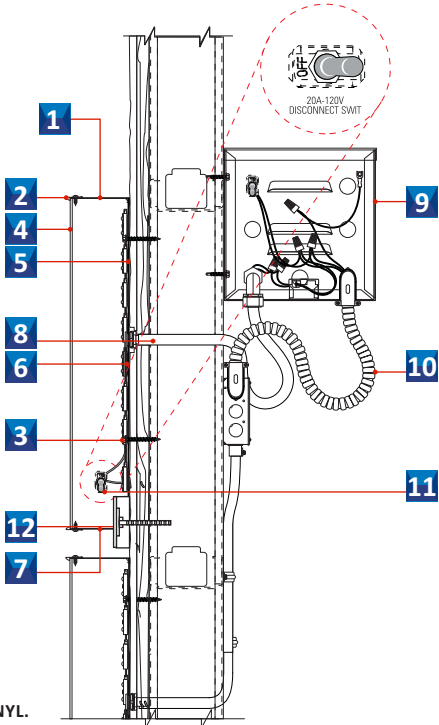
SPECIFICATIONS

SIDE SECTION VIEW

MOUNTING DETAIL

COLOR SCHEDULE

- 1 5" FABRICATED .040" ALUMINUM RETURNS PAINTED BLACK
PAINT INTERIOR WITH LIGHT ENHANCING PAINT
- 2 1" TRIM CAP TO BE BLACK
- 3 NON-CORROSIVE INSTALLATION HARDWARE:
GALVANIZED
- 4 3/16" THICK PLEX/POLYCARBONATE FACE
RED FOR CROWN BASE & LETTERS
WHITE WITH APPLIED VINYL FOR CROWN TIPS
- 5 VIXXO APPROVED LED DIODE MODULE WHITE
- 6 .063" FLAT ALUMINUM BACKS
- 7 1/4" WEEP HOLES (2) TWO PER LETTER
WITH INTERIOR COVERS
- 8 GROUNDED WALL PASS-THRU
SEALED WATER TIGHT
- 9 LOW VOLTAGE ELECTRONIC POWER SUPPLY
LOCATED IN INTERIOR WALL AREA INSIDE A
PROTECTIVE CASE BOX
- 10 WATERPROOF FLEXIBLE CONDUIT FOR WIRING
- 11 VISIBLE DISCONNECT SWITCH
- 12 REGISTRATION MARK & TRADEMARK TO BE
3" WHITE PLEX DISC WITH BLACK TRIM-CAP & BLACK VINYL.
MOUNTED BY PAD & ALL-THREAD: SEE DETAIL

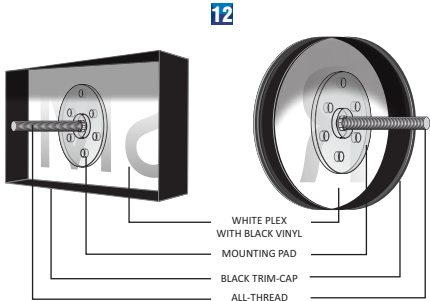


*All Hardware to be
Galvanized and Non Corrosive

- #2283 RED R&H PLEX
- WHITE #7328 WHITE R&H PLEX
- BLACK PRE-PAINTED ALUMINUM
BLACK TRIMCAP
BLACK VINYL FOR CROWN TIPS, ® & TM

Electrical Requirement

L.E.D.	L.E.D. MODULES
POWER SUPPLY	24V "ADVANCE" POWER SUPPLY
AMPS	0.79A
CIRCUITS	(1) 20A-120V
DISCONNECT	(1) 20A-120V



Approvals Signature(s) / Initials

Client _____
Design _____
Production _____

Designer _____ JS
Design # _____ Vx182671 R2
Original Date _____ 1/25/19
Revision Date _____ 07/15/19

All electrical scope to be completed in a U.L. approved method and shall meet current N.E.C. standards



276
4:5

The purchaser agrees to hold the seller harmless against any cause for action for damages which may occur as a result of drilling for piers and foundations, including but not limited to sewer, gas lines or any underground obstacles which the purchaser or others may deem valuable.

LAYOUT: FORMED & EMBOSSED FACE MONUMENT

SCALE 1/4"=1'



72.00 SQ.FT

SQUARE FEET CALCULATIONS		
Allowable	Existing	Proposed
79	NA	72



Address _____
10th Ave. North
and Florida Mango Rd.,
City _____ Palm Springs
State _____ FL 33461

Account Representative:
S.HICKS

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Approvals Signature(s) / Initials _____

Client _____
Design _____
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All electrical scope to be completed in a U.L. approved method and shall meet current N.E.C. standards



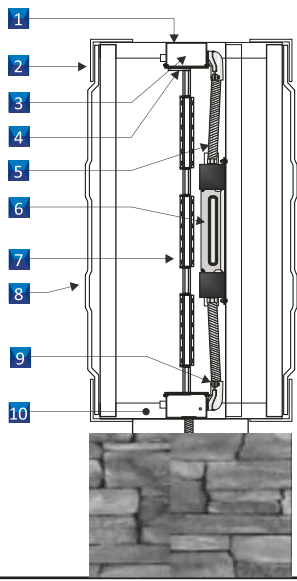
VIXXO
Sign & Lighting
277
5:5

The purchaser agrees to hold the seller harmless against any cause for action for damages which may occur as a result of drilling for piers and foundations, including but not limited to sewer, gas lines or any underground obstacles which the purchaser or others may deem valuable.

SPECIFICATIONS

- 1 .063" aluminum filler painted black
- 2 Aluminum retainer painted black
- 3 Water tight wireways
- 4 Mounting flange
- 5 Flexible conduit
- 6 Power supply
- 7 LED lighting system
- 8 2" deep Formed & 1/4" embossed lexan face
- 9 Flex connectors
- 10 2" x 2" x 3/16" angle frame

SIDE SECTION VIEW



Face



3/16" Clear Lexan
Thermo-formed with Embossed Copy and Second Surface Red & Black Vinyl then Back-spayed with White.

COLOR SCHEDULE

- Substrate - Formed & Embossed Clear Lexan
- Paint - White
- BLACK
3M #3630-22 BLACK VINYL
Black Gloss Paint For Cabinet
- PMS-185 RED
3M #3630-73 DARK RED VINYL
- Base To Be Eldorado Cliffstone Cambria



2601 10th AVE N

PARCEL NO: 70434420390000010

CONCEPTUAL PLANS

UTILITY PROVIDERS		
<u>WATER</u>	<u>ELECTRIC</u> FP&L 4406 S.W. CARGO WAY PALM CITY, FL 34990 CONTACT: Shiran Saadon-Porter PHONE: (772) 223-4244	<u>TELEPHONE</u> At&t 329 NW Dixie Highway Stuart, FL 34994 CONTACT James Virge PHONE: 772-971-8267
<u>SANITARY SEWER</u>		



1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO BECOME FAMILIAR WITH THE PERMIT AND INSPECTION REQUIREMENTS OF THE VARIOUS GOVERNMENTAL AGENCIES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS PRIOR TO CONSTRUCTION, AND SCHEDULE INSPECTION ACCORDING TO AGENCY INSTRUCTION.
2. ALL WORK PERFORMED SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK, INCLUDING LANDSCAPING.
3. CONTRACTOR SHALL SUBMIT FOR REVIEW TO THE OWNER'S CONSTRUCTION MANAGER SHOP DRAWINGS ON ALL PRECAST AND MANUFACTURED ITEMS TO USE ON THIS SITE. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT CONTRACTOR'S EXPENSE. CONSTRUCTION MANAGER'S APPROVAL OF A SHOP DRAWING DOES NOT RELIEVE CONTRACTOR'S RESPONSIBILITY FOR PERFORMANCE OF THE ITEM.
4. WORK PERFORMED UNDER THIS CONTRACT SHALL INTERFACE SMOOTHLY WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT IS NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WHERE NECESSARY WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
5. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY.
6. CONTRACTOR SHALL REVIEW SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND COMMENCING CONSTRUCTION.
7. WITHIN 72 HOURS PRIOR TO CONSTRUCTION THE CONTRACTOR SHALL MEET WITH THE ENGINEER AND APPROPRIATE AGENCIES AND SUPPLY THEM WITH ALL REQUIRED SHOP DRAWINGS AND PERMITS. THE STARTING DATE, PROJECTED SCHEDULE AND OTHER INFORMATION AS REQUIRED, ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER OR WITHOUT AGENCY INSPECTOR PRESENT MAY BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
8. THE CONTRACTOR SHALL USE EACH PLAN IN CONJUNCTION WITH THE ENTIRE SET OF DRAWINGS AND JOB SPECIFICATIONS. DO NOT REMOVE OR DEMOLISH ANYTHING WITHOUT VERIFYING AND COORDINATING WITH ALL ELECTRICAL, PLUMBING, MECHANICAL, GENERAL TRADES, AND UTILITY COMPANIES AS THEY AFFECT THE OVERALL PROJECT.
9. ALL WORK SHOWN SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS

CONSTRUCTION INFORMATION



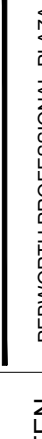
Know what's below.
Call before you dig.

RACETRAC 24-HOUR PHONE NUMBER: 1-404-626-1482
CONTACT NAME: KEVIS SANTIAGO

CONTACT RACETRAC PETROLEUM, INC. PROJECT MANAGER PRIOR TO
ANY REVISIONS TO THE PLAN SUPPLIED BY RACETRAC PETROLEUM, INC.

COVER SHEET		RACETRAC MARKET		10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County	
DATE	10/21/2019	SCALE	AS SHOWN		
DRAWN-BY	MJL				
DRAWING NAME: FJ180819-COVER.dwg					
COV					
SHEET NO.	VERSION				

THESE PLANS ARE
SUBJECT TO FEDERAL
AND STATE LAWS.
ANY USE OF SAME
WITHOUT THE
EXPRESSED WRITTEN
PERMISSION OF
RACE TRAC
PETROLEUM, INC. IS
PROHIBITED.



RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SE
SUITE 900 ATLANTA, GA 30339
(770) 431-7600

THOMAS ENGINEERING GROUP, INC.

PEBWORTH PROFESSIONAL PLAZA
125 W. INDIAN LANE SUITE 206
JUPITER, FL 33408
P.O. BOX 205-7503
JUPITER, FL 33408
www.ThomasEngineeringGroup.com



BRANDON ULMER
No. 88545
PROFESSIONAL ENGINEER
Mechanical
FLORIDA BOARD OF PROFESSIONAL ENGINEERS
No. 21528

NO.

DATE

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

1. It is the contractor's responsibility to become familiar with the permit and inspection requirements of the various governmental agencies. The contractor shall obtain all necessary permits prior to construction, and schedule inspection according to agency instruction.
2. All work performed shall comply with the regulations and ordinances of the various governmental agencies having jurisdiction over the work, including landscaping.
3. At least 3 working days prior to construction the contractor shall notify the owner, engineer and appropriate agencies and supply them with all required shop drawings, the contractor's name, starting date, projected schedule, and other information as required. Any work performed prior to notifying the owner & engineer of record or without agency inspection present may be subject to removal and replacement at the contractor's expense. Failure to obtain approval before installation may result in removal and replacement at the contractor's expense. Contractor shall submit for review to the owner's construction manager, shop drawings on all precast and manufactured items to use on this site. Construction manager's approval of a shop drawing does not relieve contractor's responsibility for performance of the item.
4. Work performed under this contract shall interface smoothly with other work being performed on site by other contractors and utility companies. It is necessary for the contractor to coordinate and schedule his activities, where necessary, with other contractor's and utility companies.
5. Materials and construction methods for streets and storm drainage construction shall be in accordance with the local regulatory agency.
6. Contractor shall review soil reports and borings prior to bidding the project and commencing construction.
7. The contractor shall use each plan in conjunction with the entire set of drawings and job specifications. Do not remove or demolish anything without verifying and coordination with all electrical, plumbing, mechanical, general trades, and utility companies as they effect the overall project.
8. Refer to architectural drawings for building dimensions.

1. The contractor is responsible for all permits required to carry out the work as shown on the Demolition Plan.
2. The contractor is responsible to verify existing utilities prior to demolition and excavation.
3. The contractor is responsible to comply with all local, state and federal regulations in the removal/demolition of hazardous materials.
4. Contractor is responsible for all registrations, permits and fees required to remove and properly dispose of all demolition materials.
5. Demolition contractor is responsible for obtaining approvals and notifications to all local, state and federal authorities.
6. The contractor shall be responsible for the disconnection of the utility services to the existing structures prior to demolition of any buildings. The contractor shall coordinate with respective utility companies prior to the removal and/or relocation of utilities.
7. The contractor shall coordinate with the utility company concerning portions of work which may be performed by the utility company's forces and any fees which are to be paid to the utility company for their services. The contractor is not responsible for paying all fees and charges.
8. The contractor is responsible for the demolition and removal of all structures, pads, walls, flumes, foundations, parking, drives, drainage structures, utilities, etc., such that the improvements shown on the remaining plans can be constructed. All facilities to be removed shall be undercut to suitable material and brought to grade with suitable, compact fill material per the specifications. The contractor is responsible for all permits involved and is to be responsible for removing and dumping the debris in an approved, lawful manner.
9. All existing utilities are to be removed, terminated and capped at the right-of-way. All existing meters, valves, etc. are to be removed unless otherwise noted on the plans.
10. All existing service lines for telephone, electric, sewer, and cable television services are to be removed to existing trunk lines unless otherwise noted on the plans.
11. Contractor is responsible for all costs involved in the removal or relocation of any utility. The contractor is responsible for coordination with applicable utility companies.
12. The contractor shall maintain all utility services to the existing adjacent businesses at all times. The contractor shall coordinate with the tenant and utility company for the relocation and/or removal of utilities if necessary. Services shall not be interrupted without approval from the tenant.
13. The site may be occupied by existing structures, storm lines, pavement, power poles and utilities. It is the contractor's responsibility to contact all utility companies that may have utilities on the site to get a determination if any utilities existing will be impacted. The contractor is responsible for determining if the utilities should be abandoned or removed.
14. All areas where pavement, structure slabs, foundations, utilities, conduits, and/or utility structures have been removed shall be backfilled with select backfill material. All select backfill material shall be placed and compacted per the requirements of specifications and the owners geotechnical engineer.
15. All existing fences, signs, power poles, and light poles located on-site shall be demolished and removed unless otherwise noted.
16. Existing cast in place septic tanks (if found on-site) shall be pumped by a licensed contractor. The septic tank shall then be removed and the area backfilled per the project specifications unless otherwise noted. All work shall be in accordance with health department requirements.
17. Contractor is responsible for walking site and determining extents of demolition work prior to bid date.
18. Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
19. Prior to any work on-site, the contractor shall contact the one call system. The contractor is responsible for all utility removals whether located by the one call system or not.
20. Contractor shall coordinate removal of existing electrical services on-site with the power company. Power company is responsible for the disconnection and removal of existing services unless otherwise noted.
21. Limits of pavement shown to be removed are approximate and for reference only. Contractor shall field verify the limits of pavement to determine the extent of the existing pavement to be removed.
22. If not shown on the demolition drawings, the contractor shall remove all existing materials as necessary to complete all new work as required by other portions of the contract documents.
23. Salvage rights for all demolished materials shall be first given to the owner. Any materials not retained by the owner shall be removed from the site and disposed of by the contractor at the contractor's expense.
24. Refer to survey for limits and boundary of property.

1. The contractor shall construct the silt fencing as shown on the Erosion Control Plan at the perimeter of the disturbed area prior to land clearing activities.
2. Land disturbing activities shall be kept to a minimum and will not extend beyond the limits shown.
3. Prior to construction, the erosion and sediment control measures shown on the Erosion Control Plan shall be in place. Clearing and grubbing operations will be engaged in only as necessary to allow the placement of erosion and sediment control measures as shown until all such measures are in place.
4. Contractor shall install temporary construction entrance prior to any earthwork operations.
5. Contractor shall maintain silt fences for the duration of the project until accepted by the owner at no expense to owner.
6. Contractor shall maintain erosion control facilities during the entire construction period. Facilities are not to be removed until completion of the project and the site is stabilized.
7. Silt fences shall be cleaned or replaced when trapped sediment reaches 50 percent of the above ground fence height or a lower height based upon manufacturer's specifications.
8. Sediment and erosion control measures will be inspected on a daily basis and repaired, adjusted and maintained as needed or required by governing agencies at no additional expense to the owner to provide erosion and sediment control for the duration of construction and until all disturbed areas are stabilized.
9. Contractor shall inspect on a daily basis for needed removal of any accumulated silts, debris, or repair of damaged silt fence at no additional expense to owner.
10. All erosion control measures except the required rip rap are temporary devices. These temporary devices shall be removed prior to completion of construction once stabilization of all graded areas are complete.
11. Additional devices may be required as deemed necessary by governing authorities.
12. All graded areas shall be stabilized with a permanent fast growing cover and/or much upon completion of grading operations. Completion of grading operations does not mean at the end of the project. As soon as final grades are established in an unpaved area, the contractor shall stabilize with a temporary grass or permanent sod. If a temporary grass is applied, it will be the contractor's responsibility to apply a permanent seed or sod at the proper time of year.
13. Fill slopes should be planted as soon as an area of the site is brought to final grade. Surface runoff shall be intercepted at the top of temporary and permanent slopes during construction so that water is not allowed to flow over the slope face.
14. The general contractor and the grading contractor shall review there proposed grading sequence to insure that the least amount of land possible at any one time is disturbed with out permanent stabilization.
15. Contractor shall be responsible to ensure compliance with the N.P.D.E.S. Stormwater requirements. This includes, but is not limited to, inspection requirements.
16. Contractor is responsible for repairs or damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, striping, curb, etc., and all repairs shall be equal to or better than existing conditions.

Boundary and topographic survey was prepared by Anytown Land Surveying, LLC dated x/x/x/xxxx.

Contractor shall refer to plans by architect for exact locations and dimensions of vestibule, towers, slope paving, columns, door locations, sidewalks, exit porches, ramps, precise building dimensions, and exact building utility entrance locations.

Contractor shall refer to plans by others for entry locations of all water, sewer service, electrical, and telephone service. Contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with the regulatory agency as to the location and tie-in locations and/or connections to their facilities.

Contractor shall be responsible for all relocations, including but not limited to, all utilities, storm drainage, signs, traffic signals and poles, etc. as required for all site improvements. All work shall be in accordance with governing authorities specifications and shall be approved by such.

Existing utility lines shown are approximate locations only. The contractor shall field verify all existing utility line locations prior to any construction. Any deviations from the design locations shall be reported to the owner or engineer prior to construction.

See Cover Sheet for list of utility companies and contact persons.

All necessary permits and approvals from agencies governing the construction of this work shall be secured prior to beginning construction.

The contractor is responsible for the protection of all areas indicated to remain undisturbed or to remain as buffers, all property corners, and coordination of a registered land surveyor to replace all pins eliminated or damaged during construction.

Existing structures within construction limits are to be abandoned, removed, or relocated per plans. All cost shall be included in base bid.

Contractor is responsible for repairs or damage to any existing improvements during construction, such but not limited to, drainage, utilities, pavement, stripping, curb, etc. and all repairs shall be equal to or better than existing conditions.

The contractor shall coordinate the installation of all underground utilities with his work. All underground utilities (water, sanitary sewer, storm sewer, electrical conduit, irrigation systems, and any other miscellaneous utilities) shall be in place prior to the placement of base course material, and the placement of any appropriate soil stabilization technique.

Contractor shall provide bollards for protection of all above ground utilities and appurtenances adjacent to drive areas.

Contractor shall match existing pavement in grade and alignment.

Construction shall comply with all governing codes and improvements shall be constructed to the same.

All work shall be done in accordance with the plans and specifications.

All work and material shall comply with all regulatory agency's regulations and codes and O.S.H.A. standards.

1. All dimensions shown to building are to face of structural CMU.
2. All curb dimensions are to the face of gutter of curb unless otherwise noted

CONTRACTOR SHALL MAINTAIN A MINIMUM GROUND COVER OF 3' OVER UNDERGROUND STORAGE TANKS.

1. Topographic information was taken from a topographic survey by Bloomster Land Surveyors. If contractor does not accept the existing topography as shown on the plans, without exception, he shall have made, at his expense, a topographic survey by a registered land surveyor and submit it to the owner for review.
2. Existing contours interval is shown at one foot (1').
3. The contractor is specifically cautioned that the location and/or elevation of existing utilities (above and below ground) as shown on these plans is based on record on either the various utility companies, visual observations at the site, existing surveys and/or where possible, measurements taken in the field. Racetrac Petroleum does not guarantee that existing utility locations area exact and the information is not to be relied on as being exact or complete. It shall be the responsibility of the contractor to determine the exact locations of existing utilities (above and below ground) before beginning any construction. The contractor must call the appropriate utility company at least forty-eight hours (48 hrs) before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
4. It shall be the responsibility of the contractor to notify owner and/or engineer of any utility conflicts with the proposed improvements shown on the plans.
5. All cut or fill slopes shall be X:1 or flatter unless otherwise noted.
6. Contractor shall verify horizontal and vertical location of all existing storm sewer structures, pipes, and all utilities prior to construction.
7. Clearing and grubbing limits shall include all areas disturbed by grading operations. Contractor is responsible for the protection of all undisturbed areas, all property corners, and coordination of a registered land surveyor to replace all pins eliminated or damaged during construction.
8. Existing drainage structures to remain are to be inspected and repaired as needed, and existing pipes to be cleaned out to remove all silts and debris.
9. If any existing structures to remain are damaged during construction, it shall be the contractors responsibility to repair and/or replace the existing structure as necessary to return it to existing conditions or better.
10. Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, striping, curbs, etc. and all repairs shall be equal to or better than existing conditions.
11. All unsurfaced areas in disturbed by grading operations shall receive four inches (4") of topsoil, seed, mulch,water, etc. Contractor shall grass disturbed areas in accordance with the landscape plan and City/County specifications until healthy stand of grass is obtained.
12. Proposed spot elevations represent finished pavement or ground surface grade unless otherwise noted on drawings.
13. Contractor shall trim, tack, and match existing pavement at locations where new pavement meets existing pavement.
14. All grading operations shall be staked by a registered civil engineer or licensed land surveyor approved by the owner.
15. Reference structural specifications and geotechnical report for building pad preparation and compaction.
16. Contractor to review boring logs provided by RaceTrac.
17. All storm pipe entering structures shall be grouted to assure connection at structure is watertight.
18. All storm sewer manholes in paved areas shall be flush with pavement, and shall have traffic bearing ring and covers.
19. Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
20. The contractor shall adhere to all terms and conditions as outlined in the General N.P.D.E.S. Permit for storm water discharge associated with construction activities.
21. Contractor shall assure positive drainage away from building and for all natural and paved areas.
22. All retaining walls to be protected during backfill by contractor. This includes but is not limited to, providing and installing proper bracing during backfill being places adjacent to retaining walls.

1. ALL PIPES ENTERING STORM SEWER STRUCTURES SHALL BE SEALED TO ASSURE CONNECTION AT STRUCTURE IS WATER TIGHT.
2. REFERENCE DETAIL SHEETS FOR STORM WATER DETAILS.
3. THE CONTRACTOR SHALL SUBMIT BUOYANCY CALCULATIONS ON ALL RUNS OF PIPE THAT DO NOT UTILIZE CONCRETE PIPE. BUOYANCY CALCULATIONS SHALL BE PREPARED, SIGNED, AND SEALED BY A REGISTERED ENGINEER, SHALL REPRESENT ACTUAL FIELD CONDITIONS, AND SHALL DEMONSTRATE THAT THE PIPE UTILIZED WILL NOT BECOME BUOYANT UNDER ANY CONDITIONS. THE CONTRACTOR MAY ELECT TO PROVIDE A RESTRAINING SYSTEM, DESIGNED BY A REGISTERED ENGINEER ADEQUATE TO RESIST BUOYANT FORCES WHERE NECESSARY.

DRAINAGE STRUCTURES SHALL BE PRECAST OR CAST-IN-PLACE CONCRETE IN ACCORDANCE WITH DOT REQUIREMENTS AS FOLLOWS:

- A. AREA INLETS - CB-01 OR PC-01 (PIPE SIZE 36" AND SMALLER) ALL INLET FRAMES AND GRATES SHALL BE VULCAN FOUNDRY CORP. CATALOG #Y-4863 OR EQUAL.
- B. TRENCH DRAINS SHALL BE AQUADUCT, PROVIDED BY RACETRAC AND INSTALLED BY GENERAL CONTRACTOR.

CONTRACTOR TO INCLUDE FOR ALL SECONDARY CONDUITS (CONDUIT ONLY) DEPICTED ON UTILITY PAGE IN BASE BID. INCL. FOR LENGTH UP POLE APPROX 30FT. WIRE IS ASSUMED TO BE BY UTILITY DEPARTMENT. SECONDARY WIRE WILL BE PROVIDED IN BID AS AN ALTERNATE PRICE IN L.F. AND HANDLED AS A CHANGE ORDER IF REQUIRED.

CONTRACTOR TO INCLUDE TWO (2) 1" CONDUIT TO BOTH SIGN LOCATIONS.

A. ONE (1) 1" CONDUIT IS FOR ELECTRICAL.

B. ONE (1) 1" CONDUIT IS FOR COMMUNICATION.

C. CONTRACTOR IS RESPONSIBLE TO PROVIDE CAT 5 HOME-RUN BETWEEN PRICE SIGN AND FINAL DESTINATION INSIDE TR. BUILDING. FINAL DESTINATION TO BE DETERMINED BY RACETRAC CONSTRUCTION MANAGER DURING CONSTRUCTION.

CONTRACTOR TO SEE SHEET SD1 FOR AIR/VAC SERVICE STATION ELECTRICAL REQUIREMENTS.

A. CONTRACTOR TO PROVIDE SMALL CONCRETE UTILITY VAULTS FOR UTILITY JUNCTIONS. CONCRETE VAULT TO BE FLUSH WITH CONCRETE OR LANDSCAPING.

B. AIR/VAC SERVICE STATION ELECTRICAL CONDUITS TO BE 1".

C. INCLUDE A WEATHER PROOF JUNCTION BOX INSIDE OF THE CONCRETE VAULT. LEAVE THREE (3) PULL STRINGS INSIDE CONDUIT FOR FUTURE USE.

- Standard duty cement concrete. Details of the standard duty concrete pavement are provided on detail sheets.
- Area over tanks, dumpster pad, and the approach in front of the dumpster to be eight inches (8") thick 4000 PSI w/ fiber mesh and number five (#5) rebars placed eighteen inches (18") on center each way.
- Notify owner 3 days prior to pour of initial section of driveway paving. Racetrac representative to approve initial pour.
- Testing of materials required for the construction of the paving improvements shall be performed by an agency, approved by the owner, for testing materials. It shall be the contractor's responsibility to ensure, by the standard testing procedures, that the work constructed meets the requirements of the project specifications.
- All signs, pavement markings, and other traffic control devices shall conform to the "manual on uniform traffic control devices" latest edition.
- Traffic control shall be in accordance with the state dot standard specifications for roads and bridges. The contractor shall review all traffic control devices with dot prior to installation.
- Contractor shall furnish and install all pavement markings for parking stalls, handicapped parking symbols, and miscellaneous striping within parking lot and around building.
- See Irrigation Plans and MEP Plans prior to paving for location of proposed sleeving and conduits. Extra conduit shall be placed under driveways for future use.
- All handicap ramping, striping, and pavement markings shall conform to the americans with disabilities act of 1990.
- Contractor to submit a pouring plan to the construction manager prior to the beginning of any paving work.**
- Contractor shall install slab construction joints at the end of a days pour. Slab contraction and slab construction joints are to be installed in accordance with the concrete specifications as shown on the RaceTrac Standard Details, sheets SD3 and SD4.**
- Paving contractor to coordinate with building contractor on the construction and paving near the screening walls and the dumpster pads.
- All discrepancies found by contractor related to underground utilities or other appurtenances shall be resolved to the satisfaction of owner and engineer prior to placement of any paving. Contractor to ensure positive drainage from the proposed buildings and no ponding in subgrade of areas to be paved, and notify owner and engineer if any discrepancies are found prior to installation of any paving.
- Existing manhole tops, valve boxes, etc. to remain are to be adjusted as required to match proposed grades. If necessary, re-adjustments shall be performed upon completion of paving and fine grading to ensure a smooth transition.
- All joints shall extend through the curb.
- Compaction shall be done in accordance with the recommendations of the geotechnical report.
- All pavement to be sloped for positive drainage.

1. The Contractor is specifically cautioned that the location and/or elevation of existing utilities (above and below ground) as shown on these plans is based on record on either the various utility companies, visual observations at the site, existing surveys and/or where possible, measurements taken in the field. Racetrac Petroleum does not guarantee that existing utility locations are exact and the information is not to be relied on as being exact or complete. It shall be the responsibility of the contractor to determine the exact locations of existing utilities (above and below ground) before beginning any construction. The contractor must call the appropriate utility company at least forty-eight hours (48 hrs) before any excavation to request exact field location of utilities. It shall be the responsibility of the contractor to relocate all existing utilities which conflict with the proposed improvements shown on the plans.
2. Contractor shall verify horizontal and vertical location of all existing storm sewer structures, pipes, and all utilities prior to construction. Existing utility lines shown are approximate locations only. The contractor shall verify all existing utility line locations prior to any construction. Any deviations from the design locations shall be reported to the owner and engineer of record prior to construction.
3. Contractor to remove or relocate when applicable, all existing buildings, foundations, easements, and connecting improvements, drain pipes, sanitary sewer pipe, power poles and guy wires, water meters and water lines, wells, sidewalks, sign poles, underground gas, septic tanks, and asphalt, shown and not shown, within construction limits and where needed, to allow for fill material, unless otherwise denoted, to be removed as unclassified excavation.
4. Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, utilities, pavement, striping, curbs, etc. Repairs shall be equal to or better than existing conditions.
5. Contractor shall refer to architects plans and specifications for actual location of all utility entrances to include sanitary sewer laterals, domestic and fire protection water service, electrical, and telephone. Contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with city utility requirements as to locations and scheduling for tie-ins/connectors prior to connecting existing facilities.
6. Contractor shall coordinate with architectural plans, power company, & telephone company for actual routing of power and telephone service to building.
7. See detail sheets for backfilling and compaction requirements on utility trenches.
8. Contractor shall comply to the fullest extent with the latest standard of osha directives or any other agency having jurisdiction for excavation and trenching procedures. The contractor shall use support systems, sloping, benching, and other means of protection. This to include but not limited to, access and egress from all excavation and trenching. The contractor is responsible for complying with the performance criteria for OSHA.
9. Contractor shall coordinate with other utilities to assure proper depth and prevent any conflict of utilities.
10. The minimum horizontal separation between the closest two points of the water and sewer line is ten (10) feet, or minimum vertical separation between the closest two points of the water and sewer line is eighteen (18) inches.
11. Contractor shall grout around all pipe entrances to sanitary sewer manholes with non-shrinking grout to assure connection is water tight.
12. Contractor shall on all utilities, coordinate inspection with the appropriate authorities prior to covering trenches at installation.
13. The contractor shall conduct all required tests to the satisfaction of the respective utility companies and owners inspecting authorities.
14. Site contractor to coordinate proposed reconnection of all utilities with Architectural Plans as well as utility companies and building contractor. The general contractor is responsible for any and all expenses that result from delayed or failed test during any phase of the construction process. This includes fees incurred through rescheduling of any racetrac vendors or equipment to accommodate.
15. All water and sewer crossing to be perpendicular with a full stick of ductile iron pipe in the sewer line at the crossing.
16. Contractor to coordinate with signage contractor and architect for exact location of signage, required electrical conduits, foundations, etc.
17. See cover sheet for list of utility companies and contact persons.

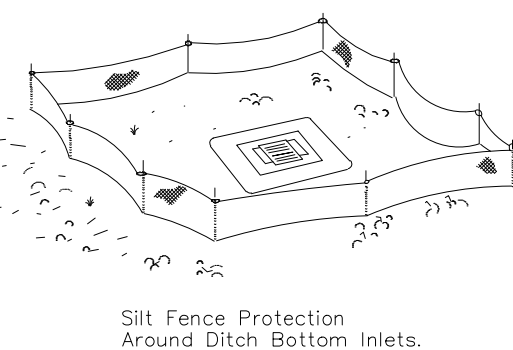
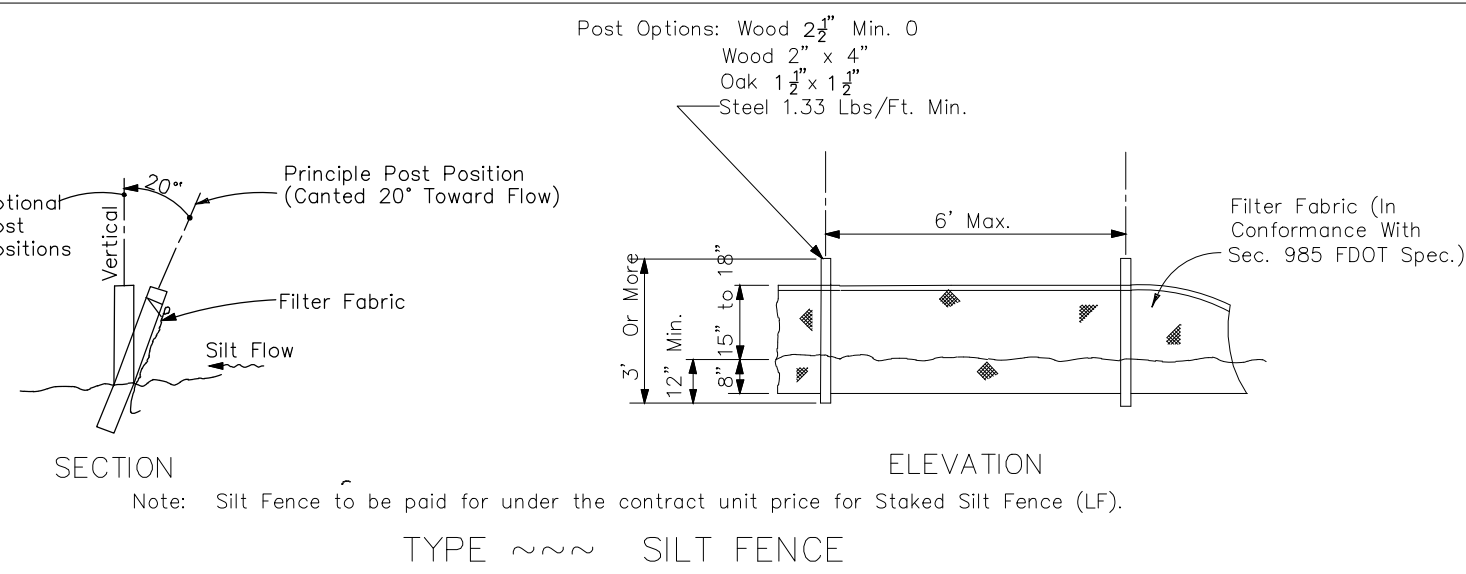
GENERAL REQUIREMENTS		DATE	
RACETRAC MARKET		SCALE	
10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County		AS SHOWN	
DRAWING NAME: FJ180019-NOTES.dwg		DRAWN-BY: MJL	
GR1		DATE	
SHEET NO.		VERSION	

RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SE
SUITE 900 ATLANTA, GA 30339
(770) 431-7600

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PERMISSION OF
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PETROLEUM, INC. IS
PROHIBITED.

THOMAS
ENGINEERING GROUP
PERKINS PROFESSIONAL P.A. 204
125 W. MOUNTAIN RD. SUITE 206
JUPITER, FL 33458
TEL: (561) 746-1000
FX: (561) 253-7273
www.ThomasEngineeringGroup.com

FLORIDA BOARD OF PROFESSIONAL ENGINEERS
No. 68345
BRANDON CULMER
PE (CIVIL) LICENSE NO. 68345
EXPIRATION DATE 12/31/2024



1. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING ALL EXISTING SITE IMPROVEMENTS AND UTILITIES. ALL DISCREPANCIES SHALL BE IDENTIFIED TO THE ENGINEER IN WRITING.
2. ALL EXISTING UTILITIES SHALL BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH COUNTY AND LOCAL UTILITY COMPANY REQUIREMENTS. A QUALIFICATION DESIGN TO BE REMOVED BY CONTRACTOR IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS.
3. CONTRACTOR SHALL REFER TO CONSTRUCTION PHASING PLANS FOR ORDER OF REMOVAL OF ANY UTILITIES AND/OR STRUCTURES.

THIS PLAN REFERENCES DOCUMENTS AND INFORMATION BY: BLOOMSTER PROFESSIONAL LAND SURVEYORS, INC. 641 NORTH HENDER STREET, JENSEN BEACH, FL, 34957 DATED 09/11/16

2. THOMAS ENGINEERING GROUP, LLC IS NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION.

3. ALL DEMOLITION ACTIVITIES ARE TO BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AS WELL AS ALL FEDERAL, STATE AND LOCAL REGULATIONS. ANY DISCREPANCIES OR DEVIATIONS SHALL BE IDENTIFIED BY THE CONTRACTOR TO THOMAS ENGINEERING GROUP, LLC IN WRITING FOR RESOLUTION PRIOR TO INITIATION OF SITE ACTIVITY.

4. PRIOR TO STARTING ANY DEMOLITION CONTRACTOR IS RESPONSIBLE FOR TO:

A. THE CONTRACTOR SHALL OBTAIN A SUNSHINE STATE ONE CALL LOCATION CERTIFICATION PRIOR TO ANY EXCAVATION OR DEMOLITION. THE NUMBER IS 1-800-432-4770.

B. ENSURING COPIES OF ALL PERMITS AND APPROVALS MUST BE MAINTAINED ON SITE AND AVAILABLE FOR REVIEW.

C. INSTALLING THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE.

D. LOCATE/CAP ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE.

E. PROTECTING AND MAINTAINING IN OPERATION, ALL EXISTING SYSTEMS THAT ARE NOT BEING REMOVED DURING ALL DEMOLITION ACTIVITIES.

F. FAMILIARIZING THEMSELVES WITH THE APPLICABLE UTILITY SERVICE PROVIDER AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION REQUIRED FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE THE OWNER WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTION AND UTILITY COMPANY REQUIREMENTS.

G. COORDINATION WITH UTILITY COMPANIES REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS MAY BE REQUIRED TO MINIMIZE THE IMPACT ON THE AFFECTED PARTIES.

H. A COMPLETE INSPECTION OF CONTAMINANTS BY A LICENSED ENVIRONMENTAL TESTING AGENCY, OF ALL BUILDINGS AND/OR STRUCTURES TO BE REMOVED. SAME SHALL BE PERFORMED IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND FEDERAL ENVIRONMENTAL REGULATIONS. ANY/ALL CONTAMINANTS SHALL BE PROVED AND DISPOSED OF BY A FEDERALLY LICENSED CONTRACTOR IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS. ALL ENVIRONMENTAL WORK INCLUDING HAZARDOUS MATERIAL, SOLIDS, ASBESTOS, OR OTHER REFERENCED SHALL IMPLIED HEREIN IS THE SOLE RESPONSIBILITY OF THE WINNING ENVIRONMENTAL CONSULTANT. THE FIRM OR ENGINEER OF RECORD IS NOT RESPONSIBLE FOR JOB SITE.

5. SAFETY OR SUPERVISION, CONTRACTOR IS TO PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, FOLLOWING ALL THE OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY. THE CONTRACTOR SHALL PROVIDE ALL THE "MEANS AND METHODS" NECESSARY.

6. TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE, THE DEMOLITION CONTRACTOR IS TO REMAIN RESPONSIBLE FOR ANY DAMAGE TO ALL ITEMS THAT ARE TO REMAIN AS A RESULT OF HIS ACTIVITIES. ALL REPAIRS SHALL USE NEW MATERIAL. THE REPAIRS SHALL RESTORE THE ITEM TO THE PRE-DEMOLITION CONDITION.

7. IN THE ABSENCE OF SPECIFICATIONS, THE CONTRACTOR SHALL PERFORM EARTH MOVEMENT ACTIVITIES, DEMOLITION AND REMOVAL OF ALL FOUNDATION WALLS, FOOTINGS, AND OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE IN ACCORDANCE WITH DIRECTION BY OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.

8. EXPLOSIVES SHALL NOT BE USED WITHOUT PRIOR WRITTEN CONSENT OF BOTH THE OWNER AND APPLICABLE GOVERNMENTAL AUTHORITIES. ALL THE REQUIRED PERMITS AND EXPLOSIVE CONTROL MEASURES THAT ARE REQUIRED BY THE FEDERAL, STATE, AND LOCAL GOVERNMENTS SHALL BE IN PLACE PRIOR TO STARTING AN EXPLOSIVE DEMOLITION. THE CONTRACTOR ALSO RESPONSIBLE CALL INSPECTION AND SEISMIC VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES.

9. CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH: THE "MANUAL ON UNIFORM TRAFFIC CONTROL," AS WELL AS FEDERAL, STATE, AND LOCAL REGULATIONS WHEN DEMOLITION RELATED ACTIVITIES IMPACT ROADWAYS OR ROADWAY RIGHTS- OF -WAY.

10. CONDUCT DEMOLITION ACTIVITIES IN SUCH A MANNER TO ENSURE MINIMUM DISTURBANCE WITH ROADWAYS, SIDEWALKS, WALKWAYS, AND OTHER ADJACENT FACILITIES. STREET CLOSURE PERMITS MUST BE RECEIVED FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY.

11. DEMOLITION ACTIVITIES AND EQUIPMENT SHALL NOT USE AREAS OUTSIDE THE DEFINED PROPERTY LINE WITHOUT WRITTEN PERMISSION OF THE OWNER, AND/OR APPROPRIATE GOVERNMENT AGENCY.

12. USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. AFTER THE DEMOLITION IS COMPLETE, ADJACENT STRUCTURES AND IMPROVEMENTS SHALL BE RESPONSIBLE FOR ALL DUST AND DEBRIS CAUSED BY THE DEMOLITION OPERATIONS. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION.

13. CONTRACTOR IS RESPONSIBLE TO SAFEGUARD SITE AS NECESSARY TO PREVENT THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF UNAUTHORIZED PERSONS AT ANY TIME.

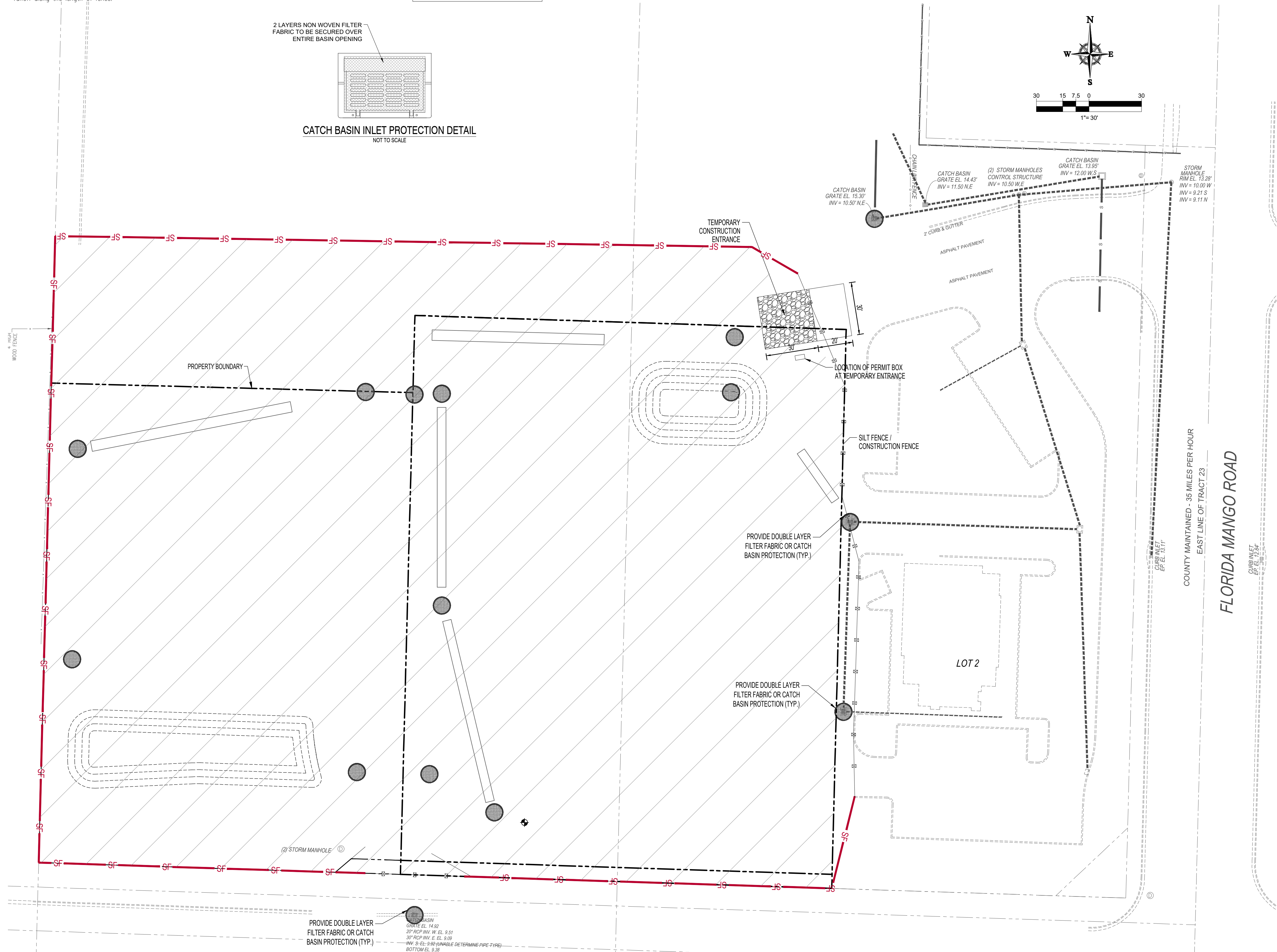
14. THIS DEMOLITION PLAN IS INTENDED TO IDENTIFY THOSE EXISTING ITEMS/CONDITIONS WHICH ARE TO BE REMOVED. IT IS NOT INTENDED TO PROVIDE DIRECTION OTHER THAN THE METHODS OF DEMOLITION. THERE SHALL BE NO CONFLICT WITH STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE.

15. DEBRIS SHALL NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION WASTES AND DEBRIS (SOLID WASTE) SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL CITY, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES.

16. CONTRACTOR SHALL REFER TO LANDSCAPING PLAN FOR TREE REMOVAL.

17. SOIL STABILIZATION SUCH AS SEEDING, WETTING, AND MULCHING WHICH MINIMIZE AIRBORNE DUST AND PARTICULATE EMISSION GENERATED BY CONSTRUCTION ACTIVITIES SHALL BE COMPLETED PROGRESSIVELY AS VEGETATION REMOVAL OCCURS WITHIN GIVEN AREA OF DISTURBANCE. SOIL STABILIZATION SHALL BE COMPLETED BY CONSTRUCTION OR SOIL STABILIZATION SHALL BEGIN WITHIN 15 DAYS, AND SHALL BE COMPLETE WITHIN 30 DAYS OF VEGETATION REMOVAL WITHIN A GIVEN AREA OF THE SITE.

18. DISPOSAL OF LAND CLEARING DEBRIS SHALL BE CHIPPED ONSITE AND/OR DELIVERED TO APPROVED MARTIN COUNTY CHIPPING FACILITY. ALL NONVEGETATIVE DEBRIS SHALL BE DISPOSED OF AT AN APPROVED LANDFILL SITE.



	PROPOSED SILT FENCE
	SOIL TRACKING PREVENTION MAT
	INLET/STRUCTURE PROTECTION
	LIMITS OF DISTURBANCE AREA OF DEMOLITION, CLEARING & GRUBBING

LAND CLEARING AND SWPPP PLAN		10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County
RACETRAC MARKET		
DATE		
SCALE	AS SHOWN	
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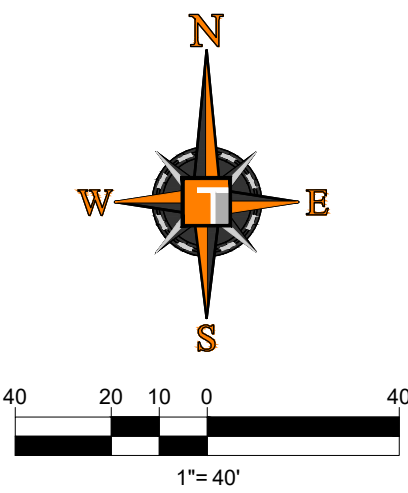


Figure 1 illustrates the comparison of proposed concrete and asphalt pavements. The top two diagrams, labeled "PROPOSED CONCRETE PAVEMENT", show a concrete slab on a subgrade with a thin layer of aggregate on top. The bottom diagram, labeled "PROPOSED ASPHALT PAVEMENT", shows a thick asphalt layer on a subgrade.

- STRIPING KEY**
A = 6" SOLID WHITE
B = 8" SOLID WHITE
C = 12" SOLID WHITE
D = 18" SOLID WHITE
E = 24" SOLID WHITE
F = 6" SKIP WHITE TYP (10'-30")
G = 6" SKIP WHITE TYP (6'-10")
H = 6" SKIP WHITE TYP (2'-4")
I = 6" SOLID YELLOW
J = 18" SOLID YELLOW
K = 6" DOUBLE YELLOW
L = 6" SKIP YELLOW TYP (10'-30")
M = 6" SKIP YELLOW TYP (6'-10")
N = 6" SKIP YELLOW TYP (2'-4")
P=RPB BI-DIRECTIONAL AMBER/AMBER
R = FDP WHITE
S = FDP YELLOW
T = RPB BI-DIRECTIONAL WHITE/RED
U = RPB BI-DIRECTIONAL RED/YELLOW
V = RPB BI-DIRECTIONAL BLUE/BLUE

GENERAL NOTES:

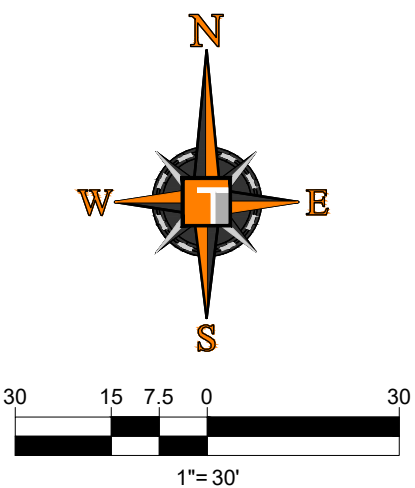
1. Damages to loops or any signal equipment caused by construction of this project must be repaired or replaced to original or better condition at no cost to Palm Beach County.
2. Contractor shall contact Palm Beach County Traffic Operations at 561-233-3900 forty-eight (48) hours prior to construction if work is being done within 10 feet of any signal equipment.
3. All construction and restoration work within Palm Beach County Right of Way shall comply with the latest edition of the FDOT Standard Index and the FDOT Standard Specifications for Road and Bridge Construction.

PAVEMENT SECTION IN RIGHT OF WAY SHALL BE AS FOLLOWS:

1" Type S-III Asphaltic Concrete
Tack Coat at 0.05 gal/sy
1.5" Type S-I Asphaltic Concrete
RC-70 Prime Coat at 0.10 gal/sy
13.5" Baserock (6" max lifts)
12" Compacted Subgrade
8" ABC-3 may be substituted for 13.5" of baserock
Both base and subbase shall be compacted to 98% Dry Density per
AASHTO T-180

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

[illegible]

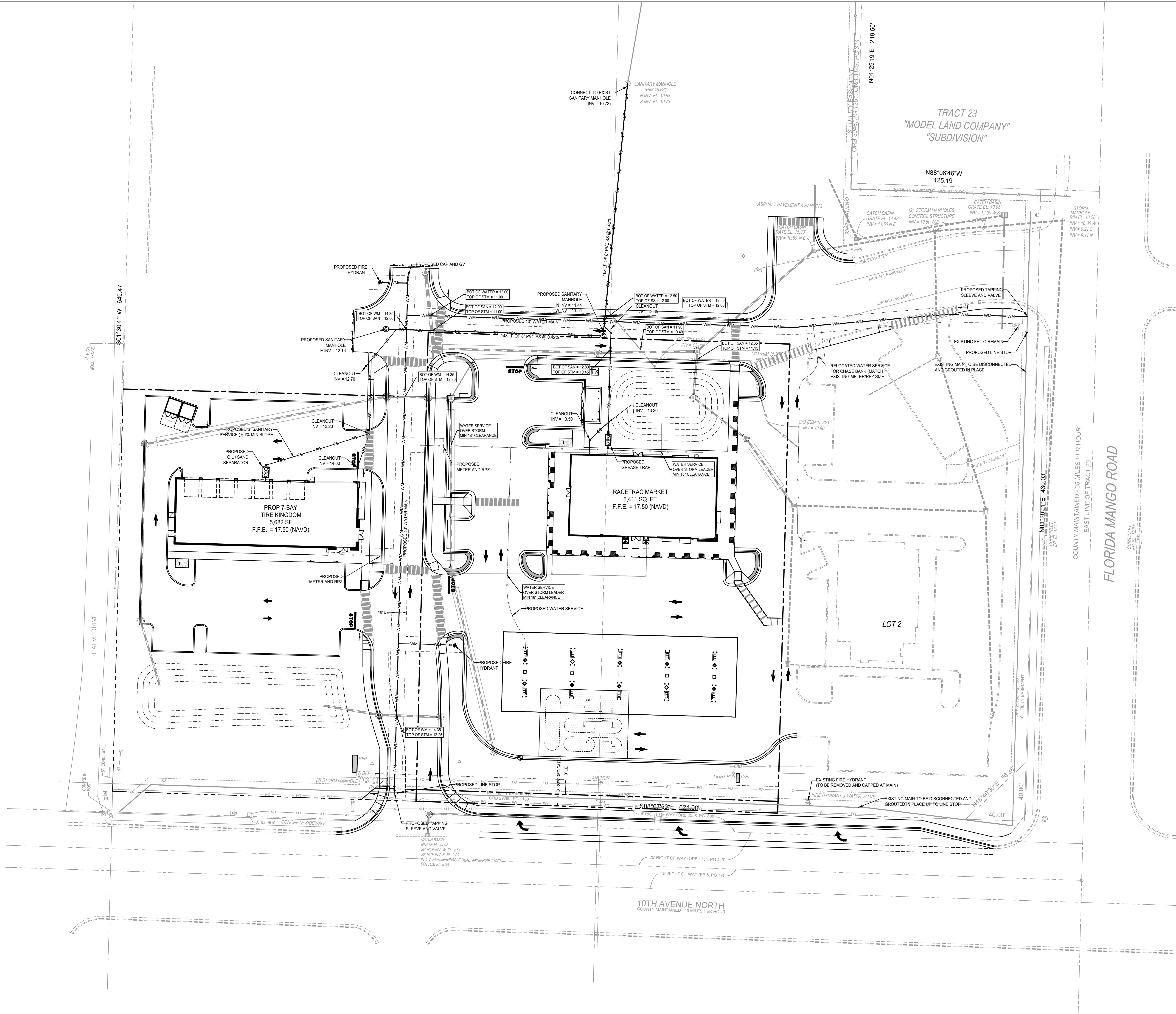


A= 6" SOLID WHITE
B= 8" SOLID WHITE
C= 12" SOLID WHITE
D= 18" SOLID WHITE
E= 24" SOLID WHITE
F= 6" SKIP WHITE TYP (10'-30')
G= 6" SKIP WHITE TYP (6'-10')
H= 6" SKIP WHITE TYP (2'-4')
I= 6" SOLID YELLOW
J= 18" SOLID YELLOW
K= 6" DOUBLE YELLOW
L= 6" SKIP YELLOW TYP (10'-30')
M= 6" SKIP YELLOW TYP (6'-10')
N= 6" SKIP YELLOW TYP (2'-4')
P=RPM BI-DIRECTIONAL AMBER/AMBER
R= FDP WHITE
S= FDP YELLOW
T= RPM BI-DIRECTIONAL WHITE/RED
U= RPM BI-DIRECTIONAL RED/YELLOW
V= RPM BI-DIRECTIONAL BLUE/BLUE

- PAVEMENT SECTION IN RIGHT OF WAY SHALL BE AS FOLLOWS:**
- 1" Type S-III Asphaltic Concrete
 - Tack Coat at 0.05 gal/sy
 - 1.5" Type S-I Asphaltic Concrete
 - RC-70 Prime Coat at 0.10 gal/sy
 - 13.5" Base rock (6" max lifts)
 - 12" Compacted Subgrade
- 8" ABC-3 may be substituted for 13.5" of base rock
- Both base and subbase shall be compacted to 98% Dry Density per AASHTO T-180

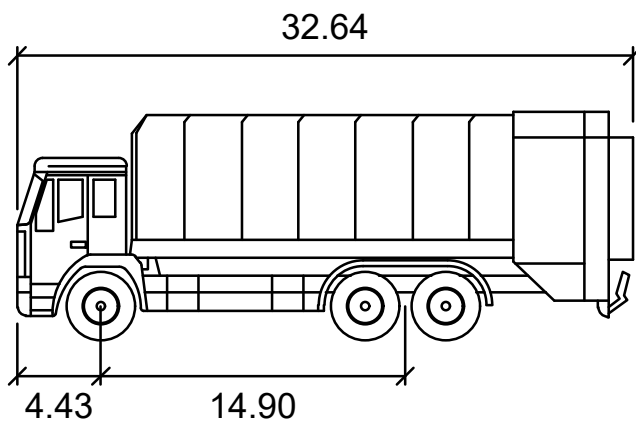
THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS: ANY USE OF SAME WITHOUT THE WRITTEN PERMISSION OF RACETRAC, PETROLEUM, INC. IS PROHIBITED.		Racetrac RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SE SUITE 900 ATLANTA, GA 30339 (770) 431-7600		THOMAS ENGINEERING GROUP PERMITS PROFESSIONAL, P.A. 125 W. INDIANTOWN RD., SUITE 206 JUPITER, FL 33458 TEL (561) 283-7721 FX (561) 283-7721 www.ThomasEngineeringGroup.com		BRANDON CUMMER No. 68345 PROFESSIONAL ENGINEER No. 27528 FLORIDA LICENSED PROFESSIONAL ENGINEER		DATE	
PAVING, GRADING AND DRAINAGE PLAN		RACETRAC MARKET		10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County		NO.		DATE	
DATE		SCALE		AS SHOWN		DRAWN-BY		MJL	
DRAWING NAME: FJ180119-CONCEPT-PCD.dwg									
C2.2									
SHEET NO.		VERSION							

Printed on Friday, October 25, 2019, 12:46 PM by Michael Legleiter
R:\RACETRAC\19-0003 - 10TH & FL-MANGO\CONCEPT-PLAN-19-0003-03-UTILITY-PLAN



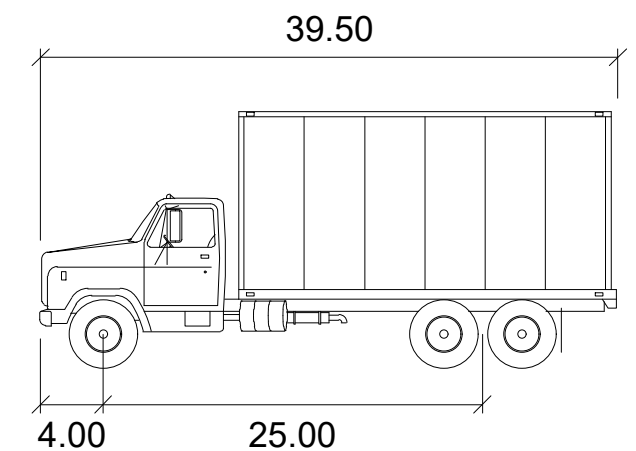
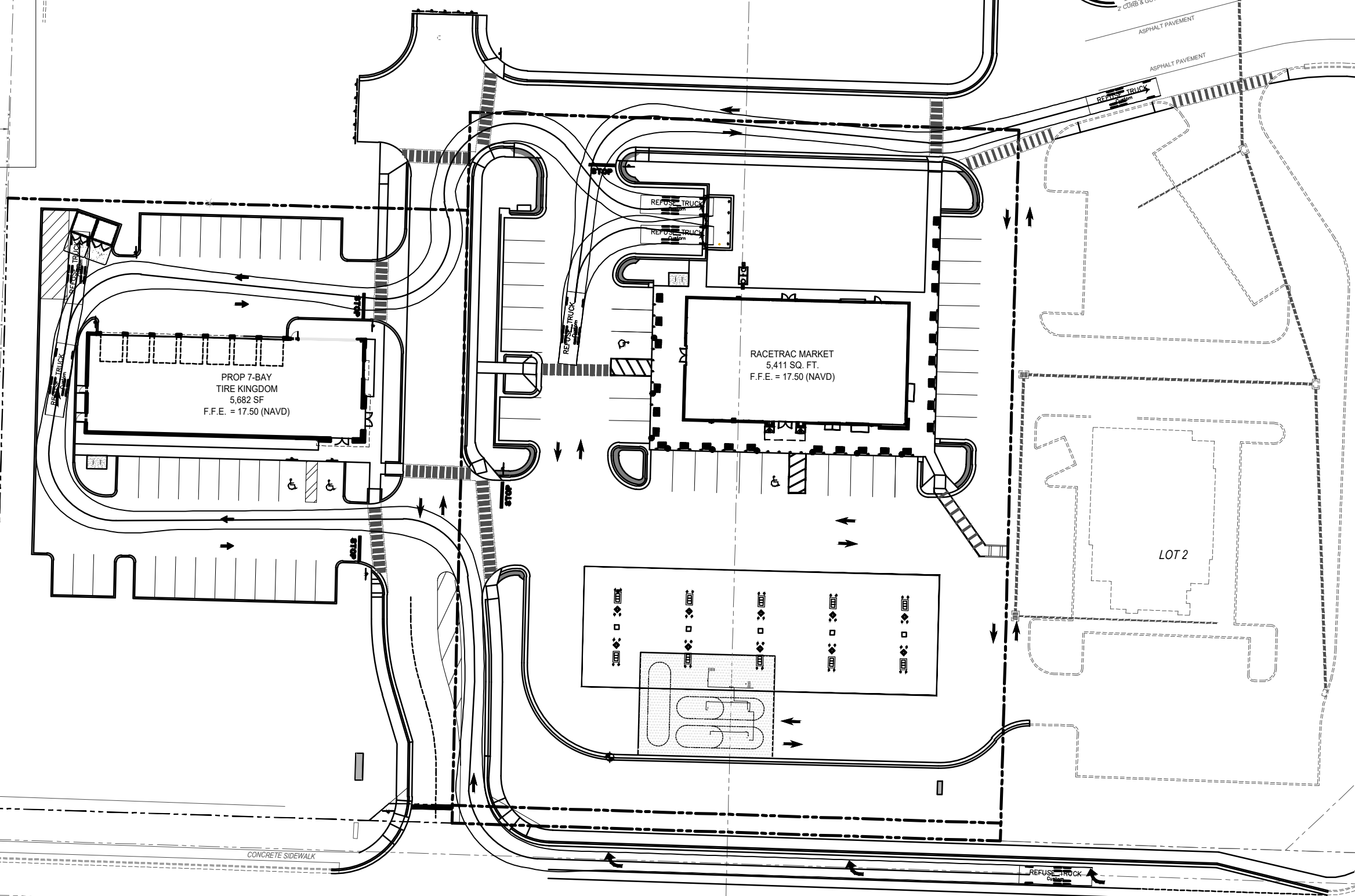
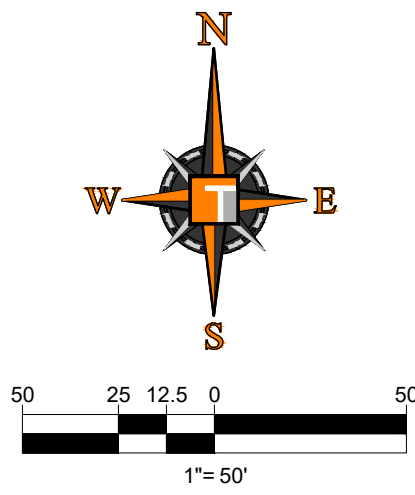
CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

UTILITY PLAN		RACETRAC MARKET	10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County	DATE SCALE DRAWN-BY DRAWING NAME: C3	AS SHOWN MJL F:\180019-CONCEPT-WS.dwg	SHEET NO.	VERSION						
RACETRAC PETROLEUM, INC. 200 GALLERIA PARKWAY SE SUITE 900 ATLANTA, GA 30339 (770) 431-7600													
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												DATE	



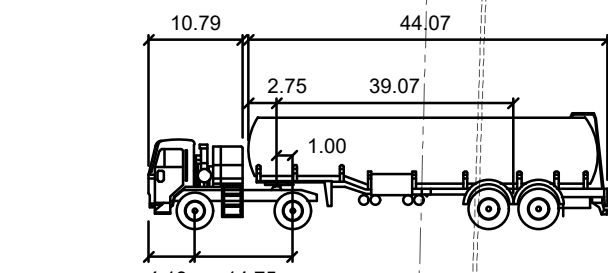
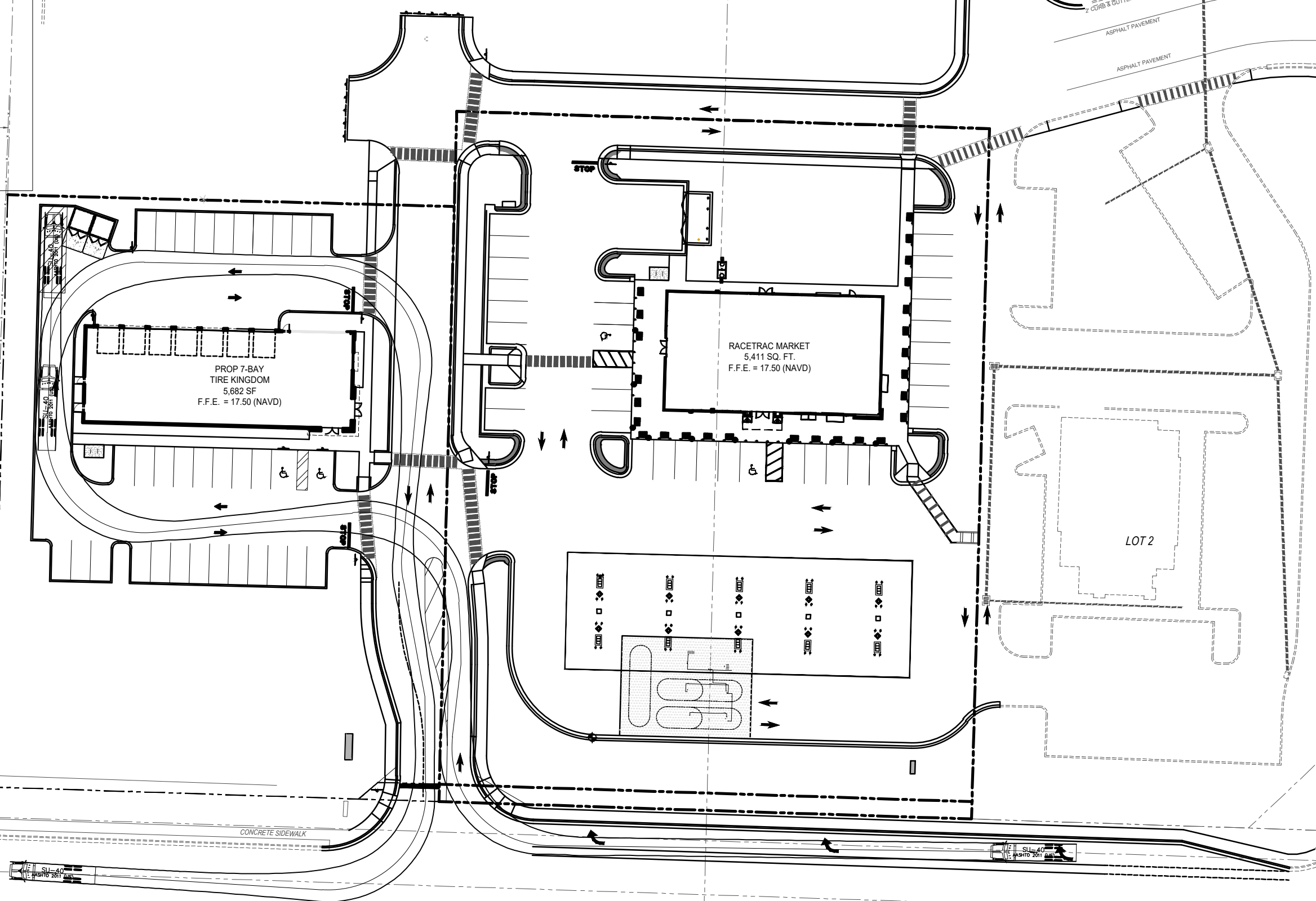
REFUSE TRUCK

	feet
Width	: 8.20
Track	: 8.20
Lock to Lock Time	: 6.0
Steering Angle	: 42.1



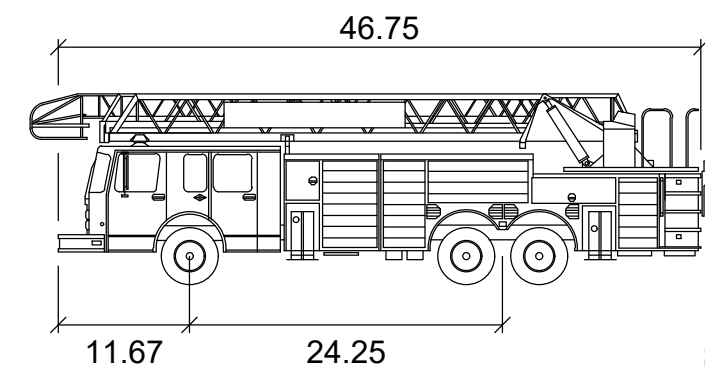
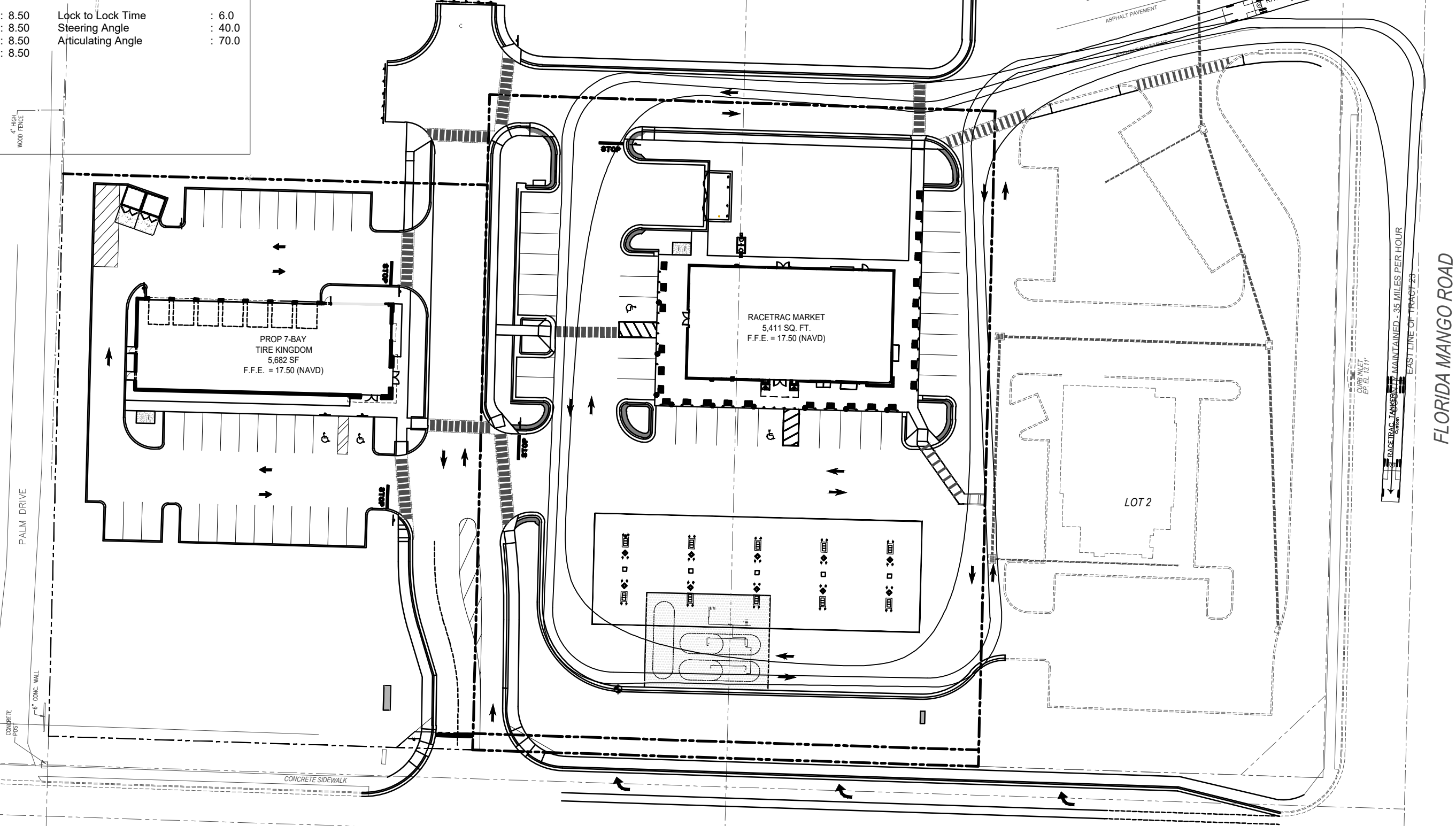
SU-40

	feet
Width	: 8.00
Track	: 8.00
Lock to Lock Time	: 6.0
Steering Angle	: 31.8



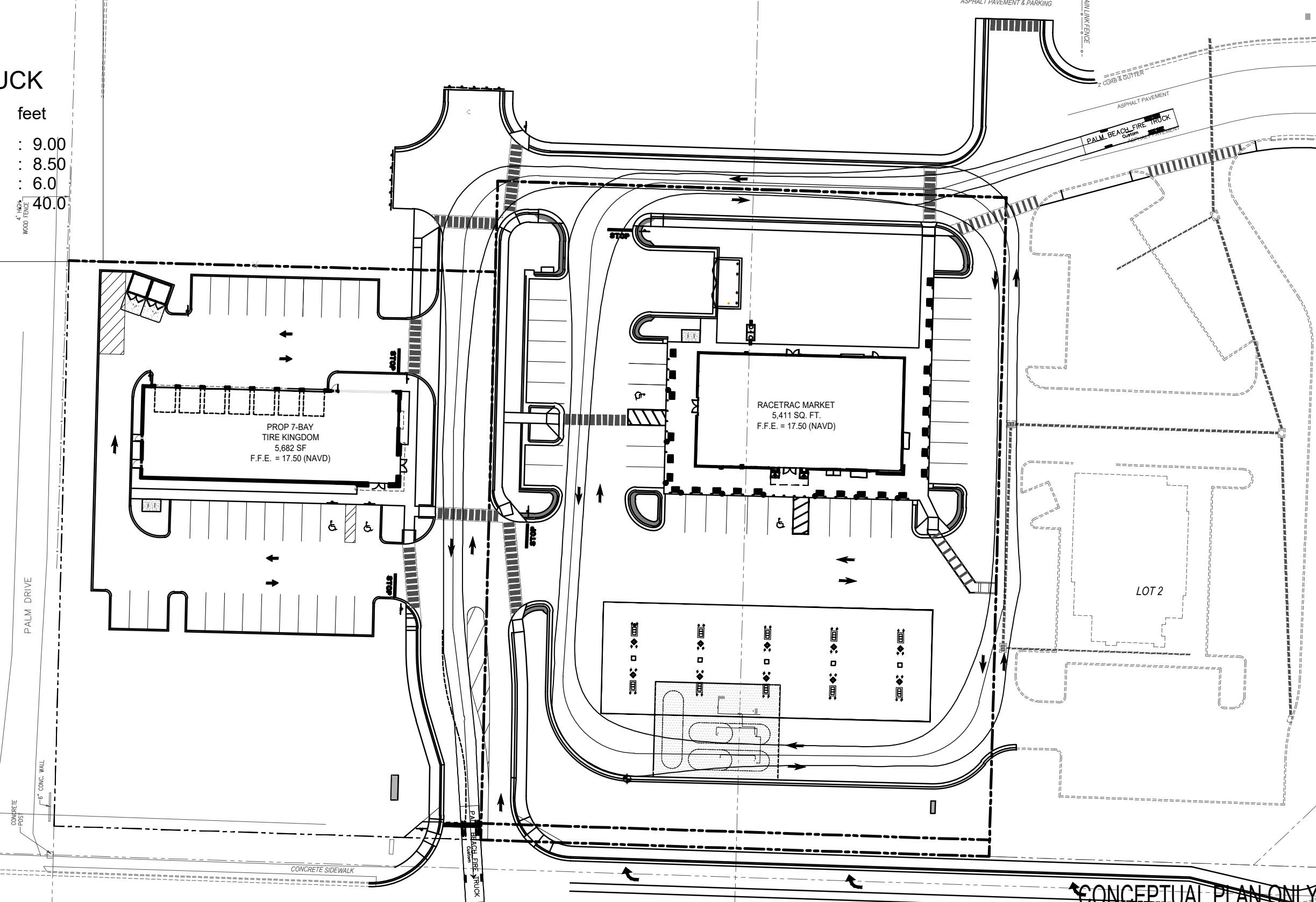
RACETRAC TANKER

	feet
Tractor Width	: 8.50
Trailer Width	: 8.50
Tractor Track	: 8.50
Trailer Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0
Articulating Angle	: 70.0



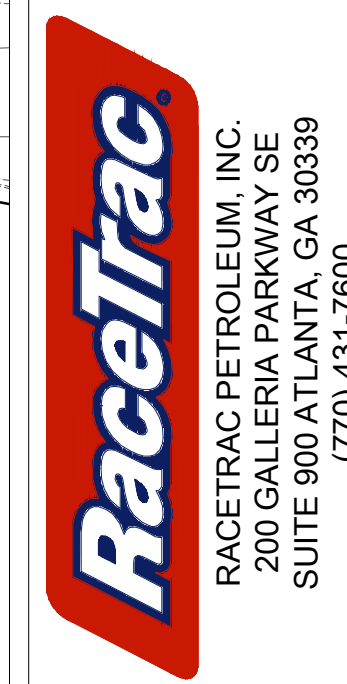
PALM BEACH FIRE TRUCK

	feet
Width	: 9.00
Track	: 8.50
Lock to Lock Time	: 6.0
Steering Angle	: 40.0



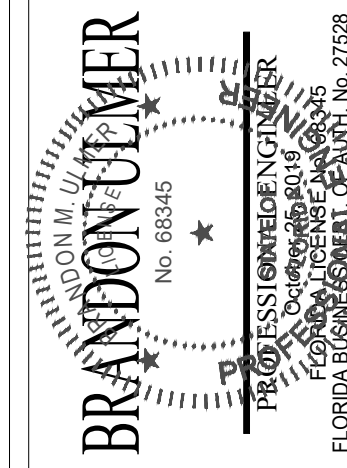
CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

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PETROLEUM, INC. IS
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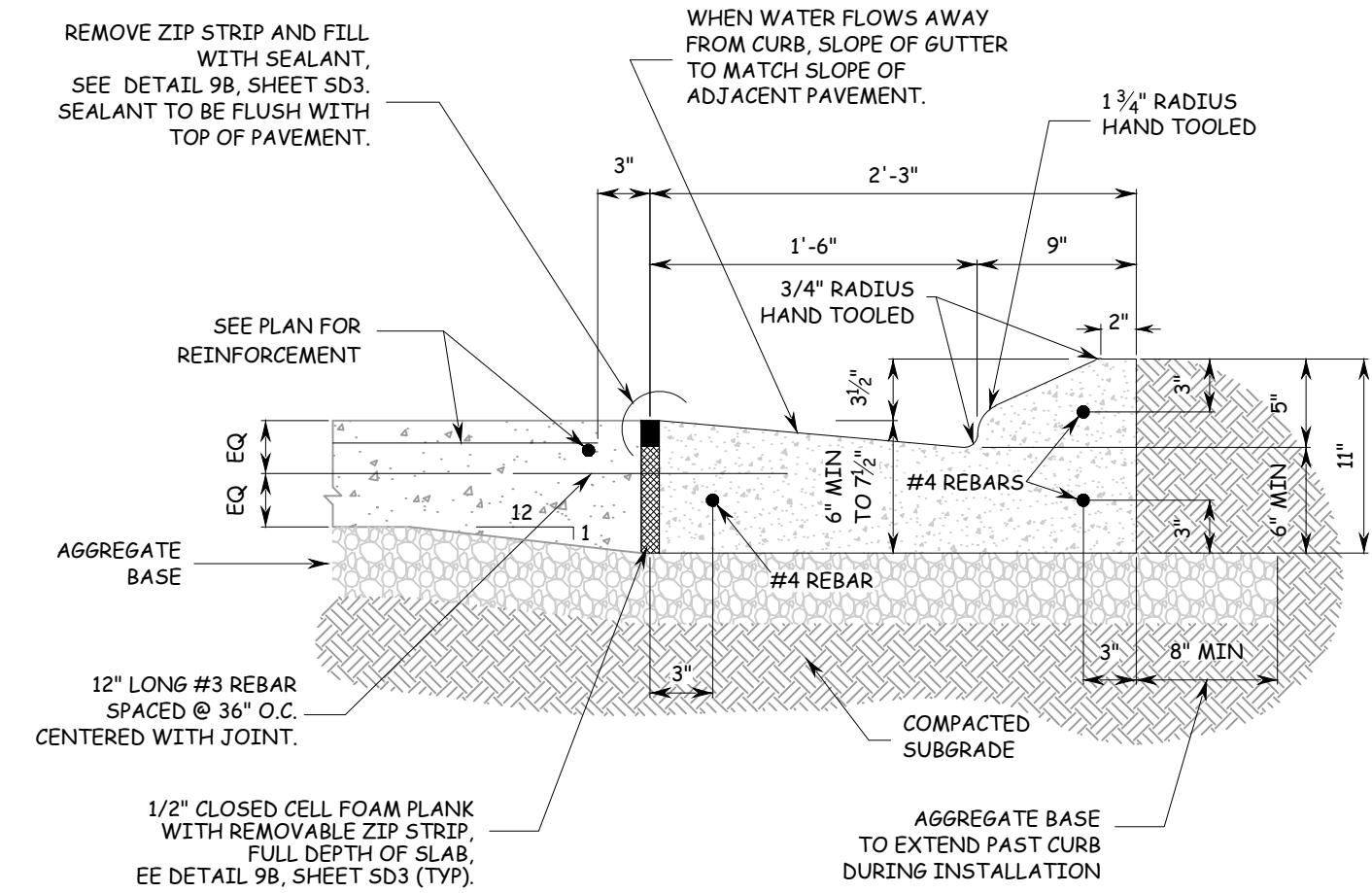
TRUCK ROUTES PLAN
RACETRAC MARKET
10th Avenue North @ Florida Mango Road
Palm Springs, Florida
Palm Beach County

DATE	AS SHOWN
SCALE	MJL
DRAWN-BY	
DRAWING NAME:	
F:\180019\ROUTES.dwg	
C4	VERSION
SHEET NO.	



THOMAS
ENGINEERS & ARCHITECTS
P.E. & ARCHITECT
125 W. INDIANTOWN RD., SUITE 206
PALM SPRINGS, FL 33461
PH: (561) 203-7503
FX: (561) 203-7721
www.thomasegroup.com

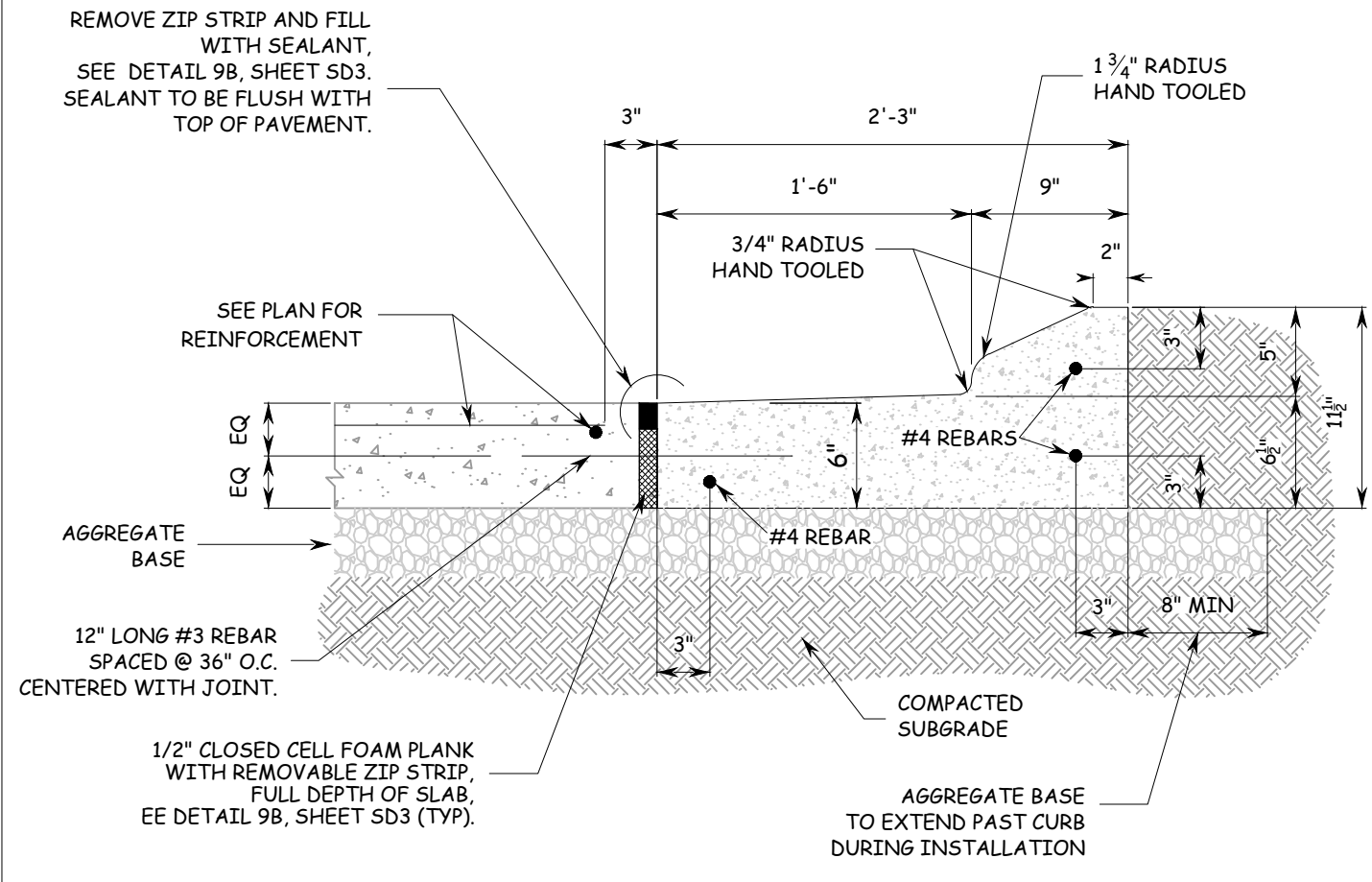
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C:\PROJECTS\19-0001\19-0001-RT Standard Details.dwg
PLOT: 19-0001-RT Standard Details.dwg
PLOT DATE: 10/25/2019
PLOT TIME: 12:46 PM
PLOT BY: Michael Legleiter



- NOTES:
- CURB CONSTRUCTION AND CONTRACTION JOINTS LOCATIONS NOT TO EXCEED 10 FEET.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1-1/2" DEEP AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1" DEEP. SIMILAR TO DETAIL 9A, SHEET SD3.
 - VERIFY JOINT LOCATIONS WITH THE OWNER'S REPRESENTATIVE.

1 CATCH CURB DETAIL @ CONCRETE SLAB

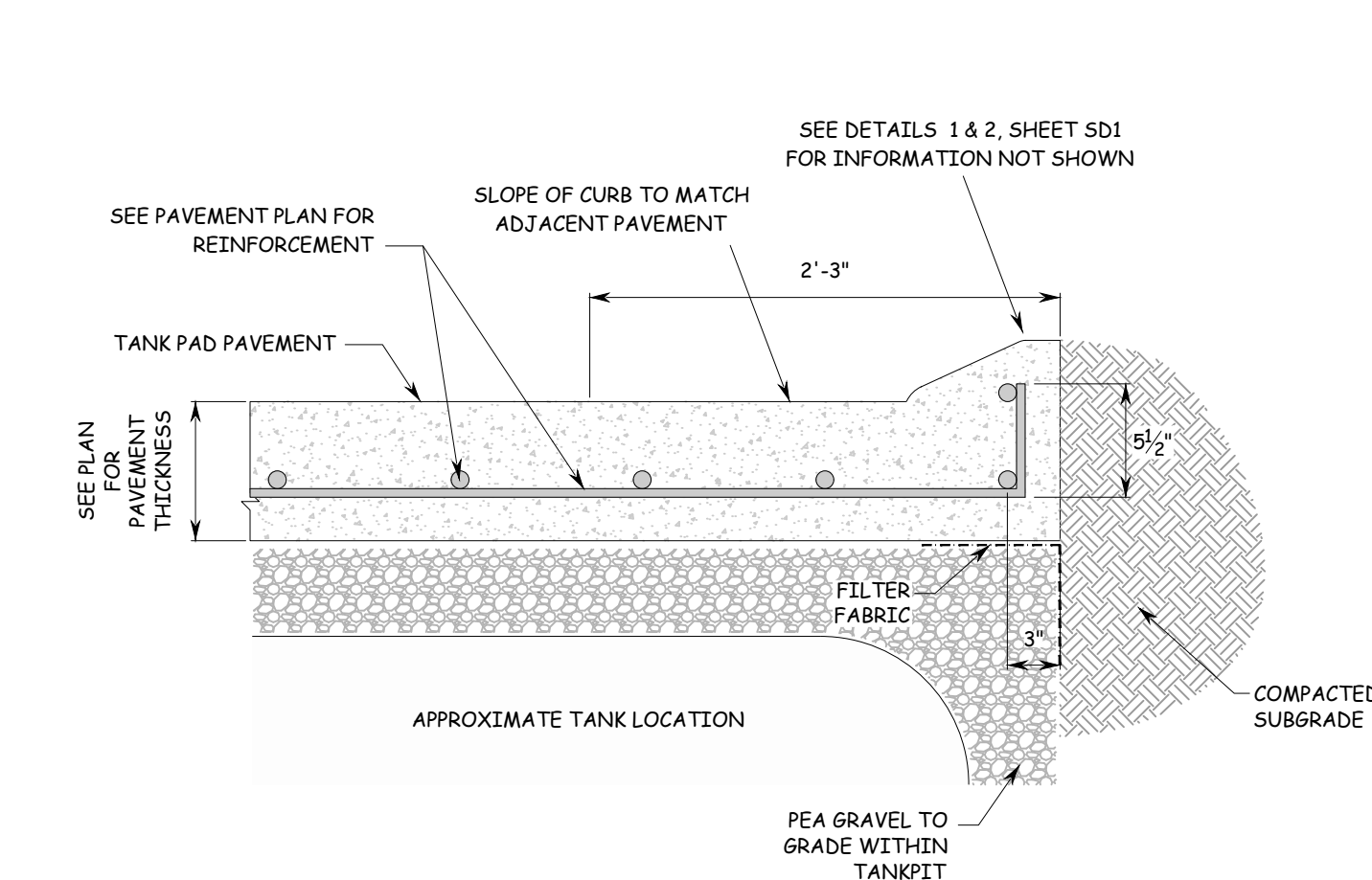
SD1 NTS



- NOTES:
- CURB CONSTRUCTION AND CONTRACTION JOINTS LOCATIONS NOT TO EXCEED 10 FEET.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1-1/2" DEEP AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1" DEEP. SIMILAR TO DETAIL 9A, SHEET SD3.
 - VERIFY JOINT LOCATIONS WITH THE OWNER'S REPRESENTATIVE.
 - USE THIS DETAIL WHEN ADJACENT PAVEMENT SLOPES AWAY FROM CURBING.

2 SHED CURB DETAIL @ CONCRETE SLAB

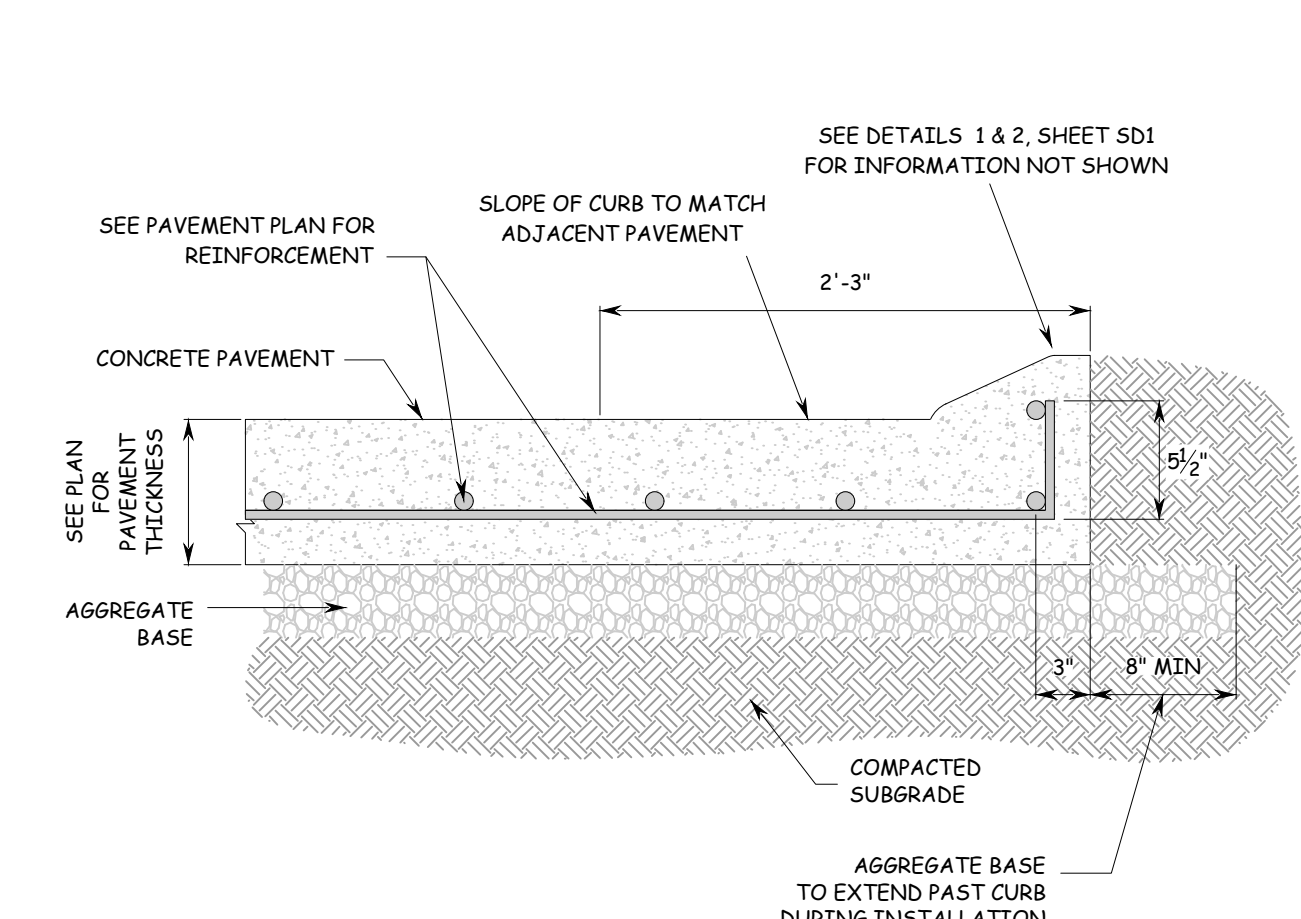
SD1 NTS



- NOTES:
- CURB CONSTRUCTION AND CONTRACTION JOINTS LOCATIONS NOT TO EXCEED 10 FEET.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1-1/2" DEEP AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1" DEEP. SIMILAR TO DETAIL 9A, SHEET SD3. VERIFY JOINT LOCATIONS WITH THE OWNER'S REPRESENTATIVE.
 - THIS CURB TYPE IS TO BE USED ALONG THE CURB LINE ADJACENT TO THE TANK PAVEMENT. SEE PLAN FOR LOCATION.

3 TANK AREA CURB DETAIL

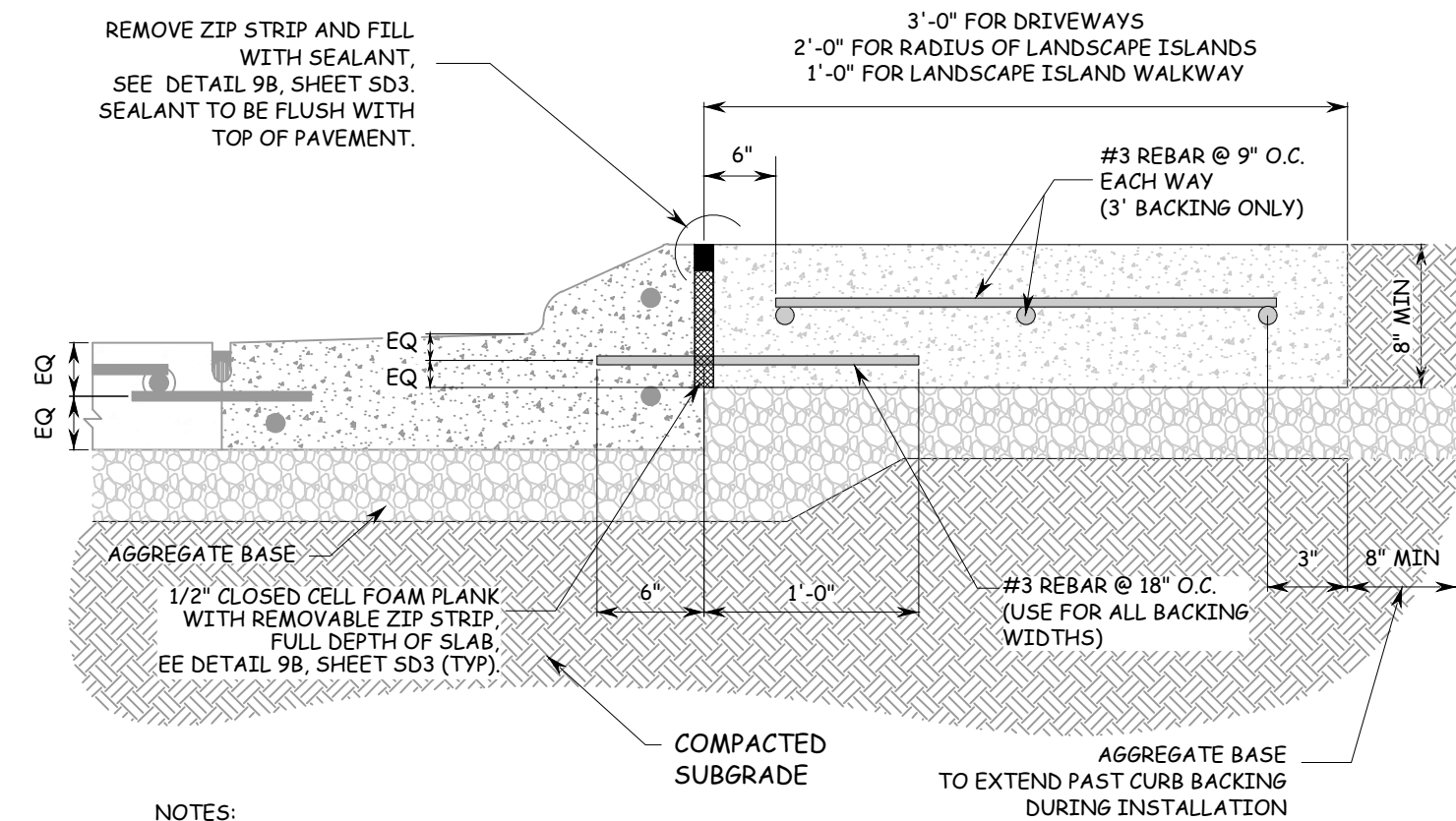
SD1 NTS



- NOTES:
- CURB CONSTRUCTION AND CONTRACTION JOINTS LOCATIONS NOT TO EXCEED 10 FEET.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1-1/2" DEEP AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1" DEEP. SIMILAR TO DETAIL 9A, SHEET SD3. VERIFY JOINT LOCATIONS WITH THE OWNER'S REPRESENTATIVE.
 - THIS CURB TYPE IS TO BE USED ALONG THE CURB LINE ADJACENT TO THE DRIVEWAY TRENCH DRAINS. SEE PLAN FOR LOCATIONS.

4 MONOLITHIC CURB DETAIL

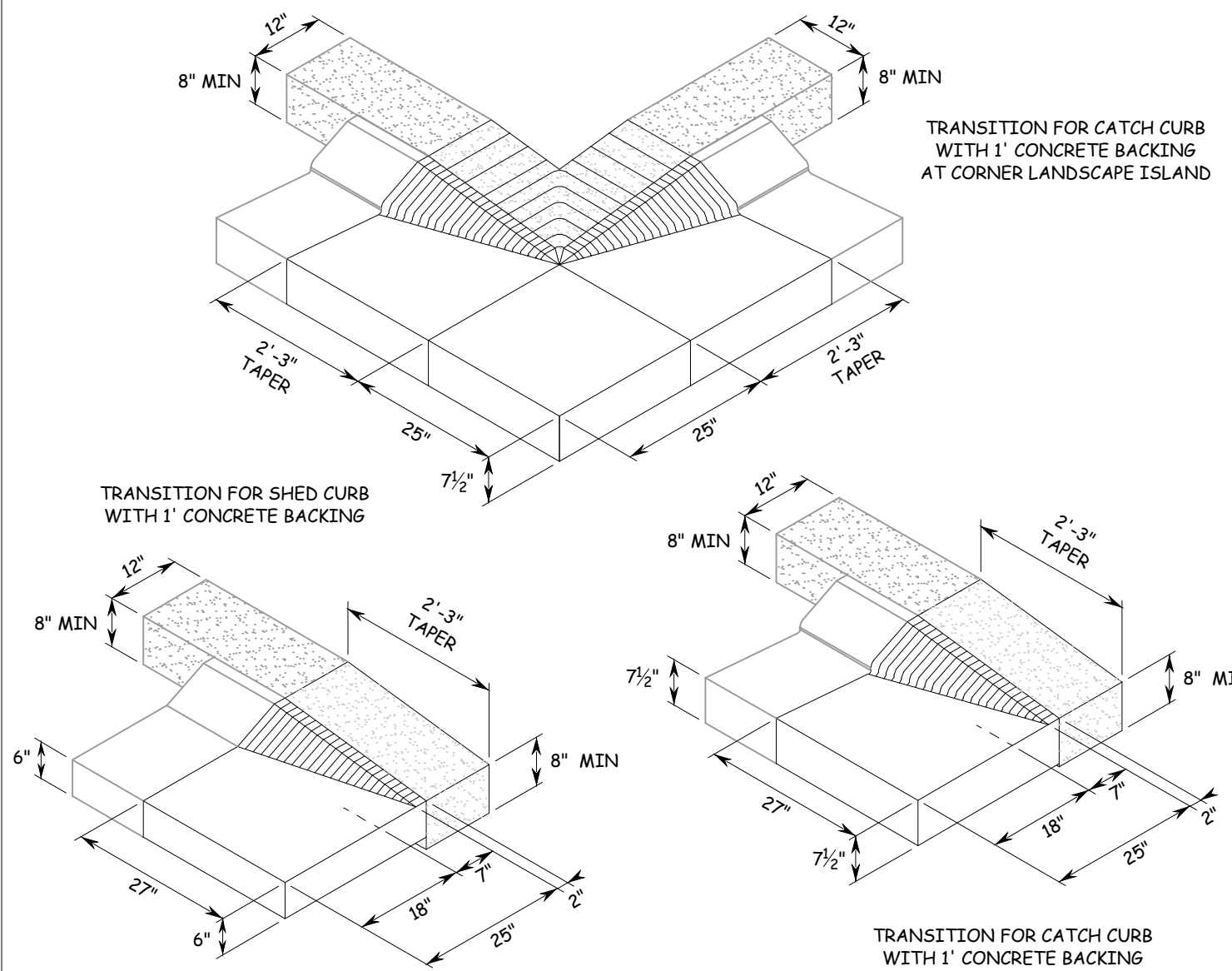
SD1 NTS



- NOTES:
- CURB CONSTRUCTION AND CONTRACTION JOINTS LOCATIONS NOT TO EXCEED 10 FEET.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1-1/2" DEEP AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES.
 - SAWCUT CONTRACTION JOINTS 1/8" WIDE BY 1" DEEP. FILL JOINTS WITH PAVEMENT SEALANT PER DETAIL 9B, SHEET SD3. VERIFY JOINT LOCATIONS WITH THE OWNER'S REPRESENTATIVE.
 - CURB BACKING WIDTHS:
 - THREE (3) FOOT BACKING IS TO BE USED ALONG THE RADIUS OF DRIVEWAYS AND IS STRUCTURALLY REINFORCED WITH #3 REBARS @ 9" O.C. EACH WAY.
 - TWO (2) FOOT BACKING IS TO BE USED ALONG THE RADIUS OF LANDSCAPE ISLANDS WITHIN HIGH TRAFFIC AREAS. TWO (2) FOOT BACKING IS NOT STRUCTURALLY REINFORCED.
 - ONE (1) FOOT BACKING IS TO BE USED AS A PEDESTRIAN WALKWAY WITHIN LANDSCAPE ISLANDS. ONE (1) FOOT BACKING IS NOT STRUCTURALLY REINFORCED.
 - SEE PAVING PLAN FOR EXACT LOCATIONS OF CURB BACKING.

5 CONCRETE BACKING FOR ON-SITE CURB

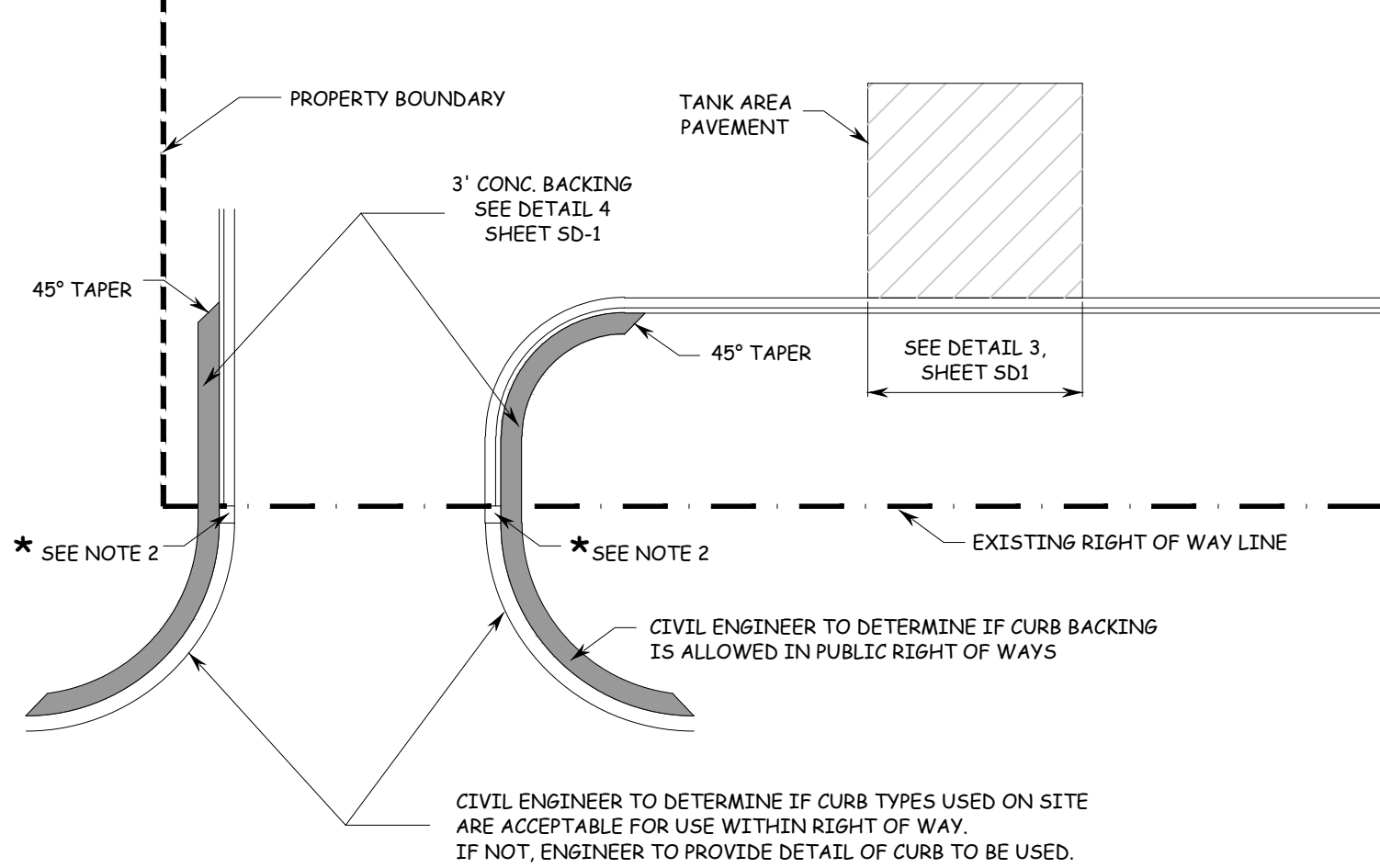
SD1 NTS



SEE SITE PLAN FOR EXACT LOCATIONS

6 CURB TRANSITION DETAILS

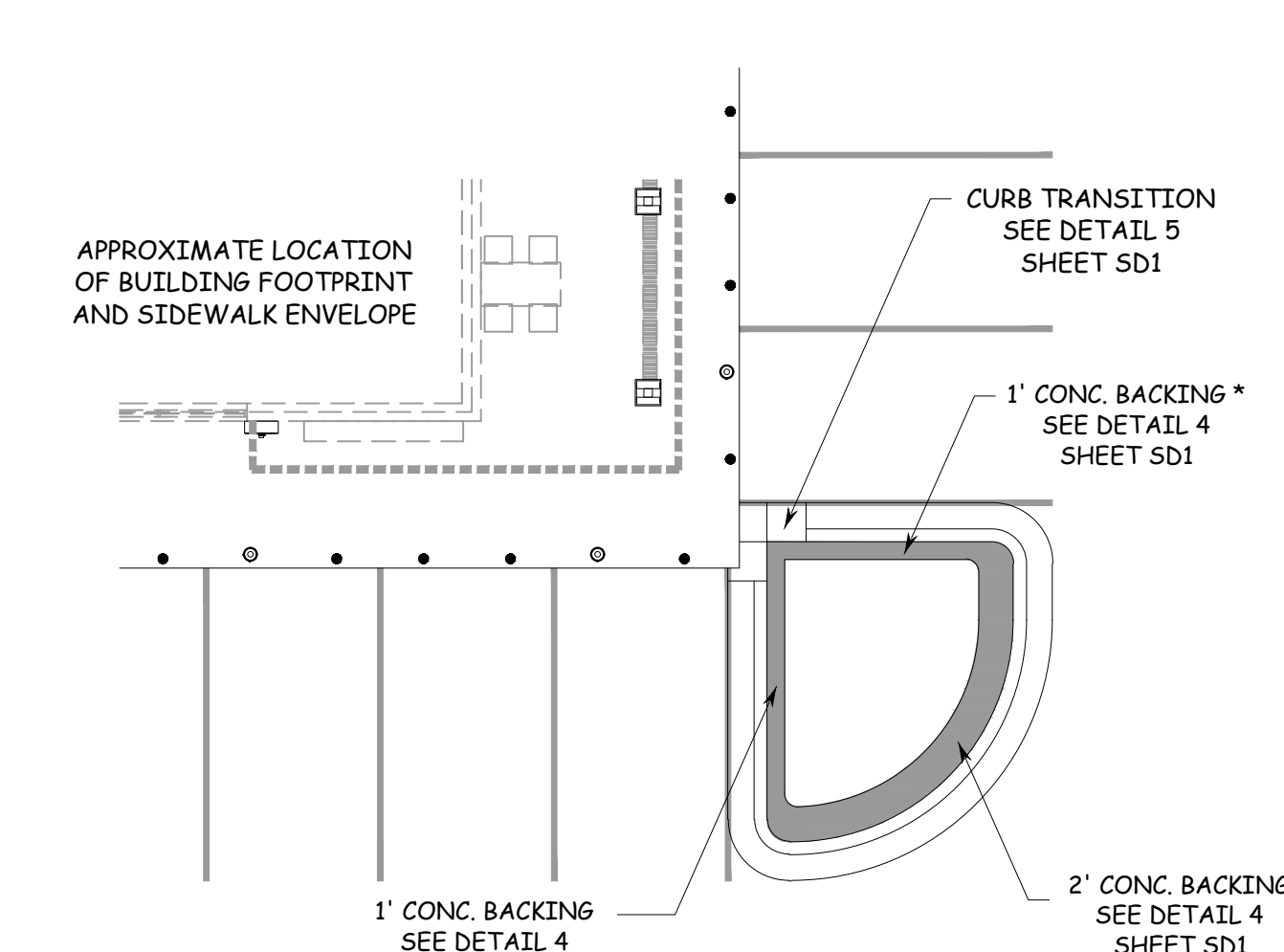
SD1 NTS



- NOTES:
- REFER TO "SITE PLAN" FOR EXACT LOCATIONS OF THE DIFFERING CURB TYPES.
 - * = RACETRAC CONSTRUCTION PROJECT MANAGER TO COORDINATE WITH CONCRETE SUBCONTRACTOR TO DETERMINE BEST TRANSITION METHOD BETWEEN DIFFERING CURB TYPES.

7 CURB LAYOUT PLAN VIEW

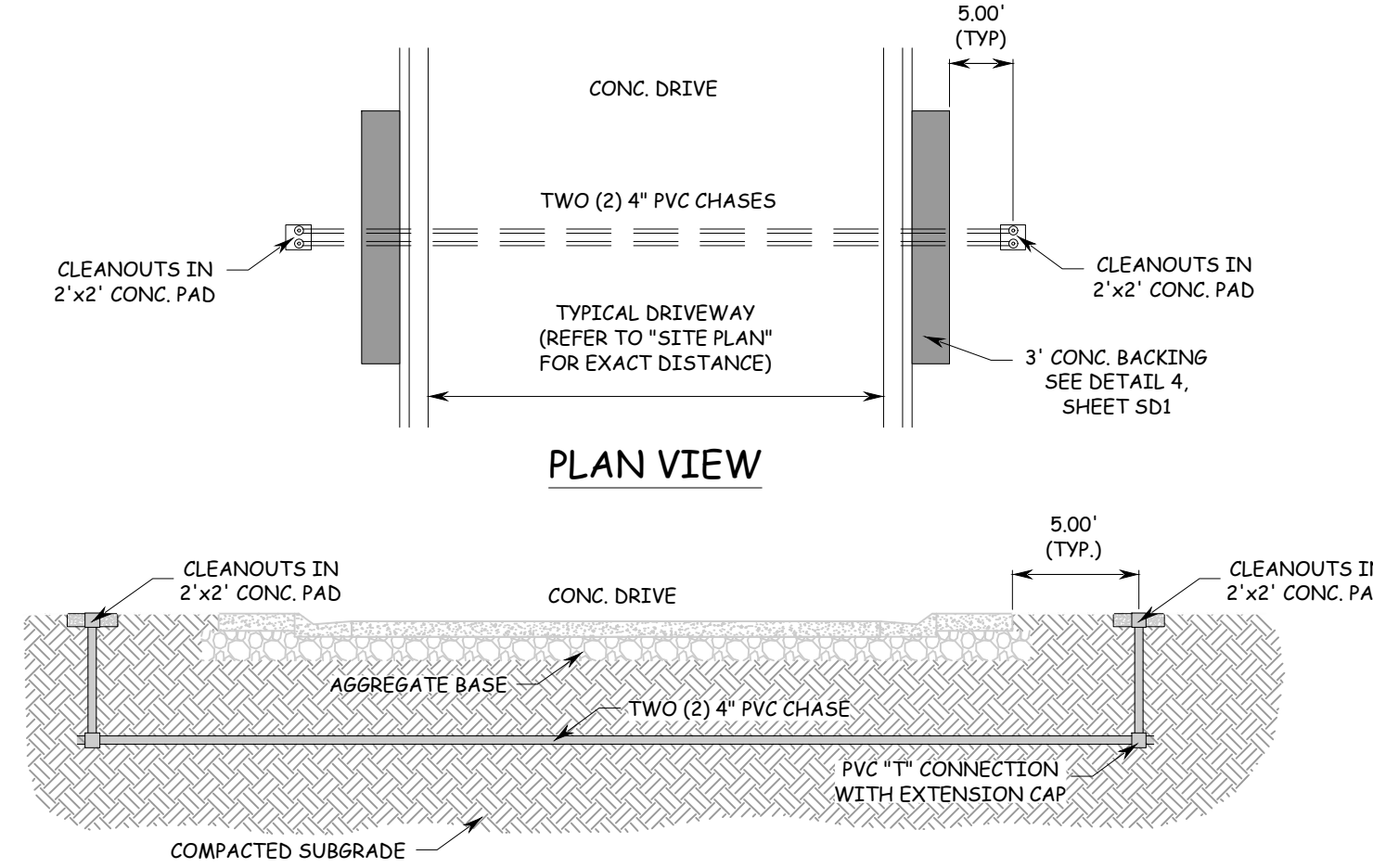
SD1 NTS



- NOTES:
- REFER TO "SITE PLAN" FOR EXACT LOCATIONS OF THE DIFFERING CURB TYPES.
 - REFER TO SITE PLAN FOR EXACT LOCATIONS.

8 CONCRETE BACKING PLAN VIEW

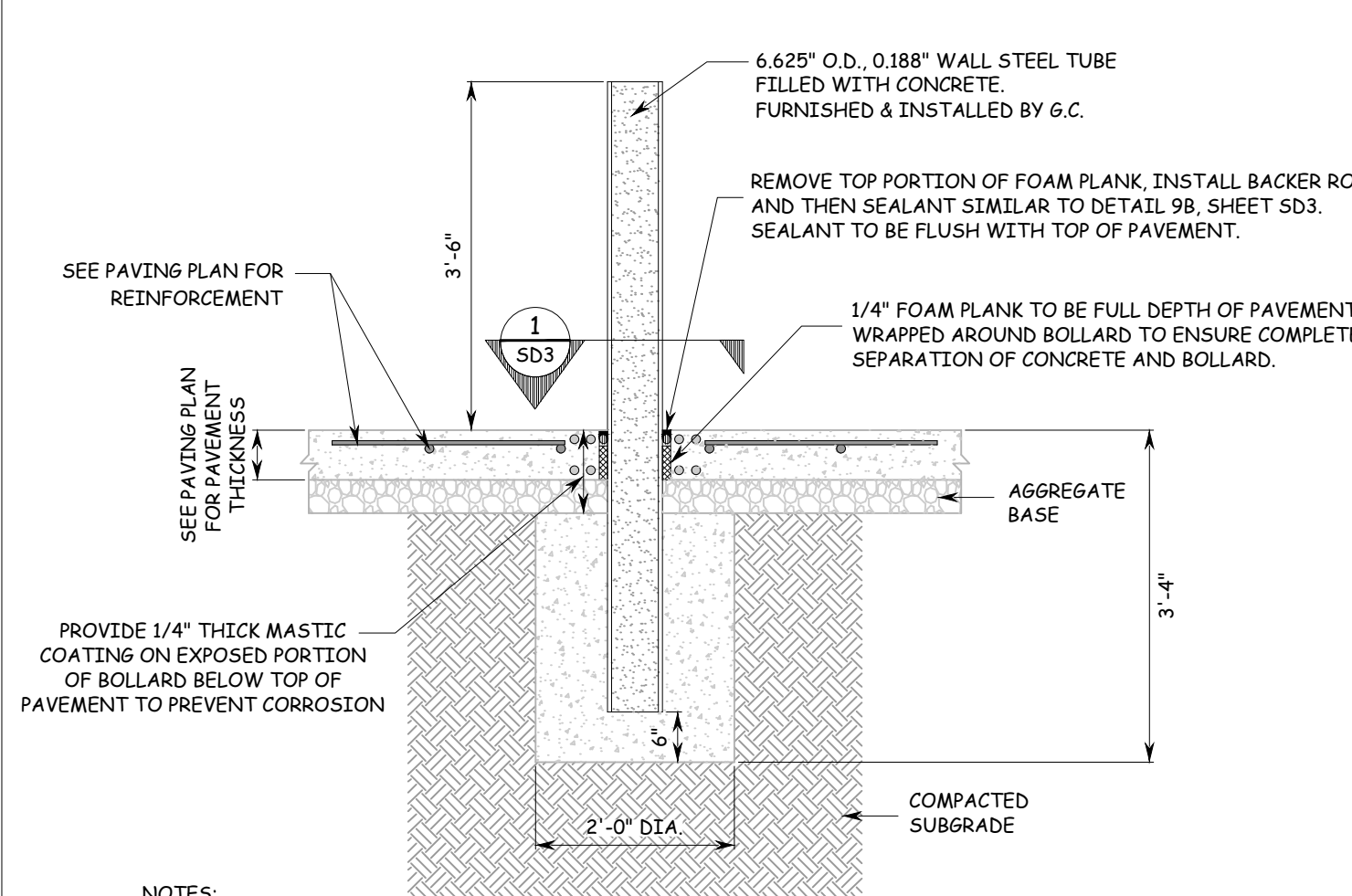
SD1 NTS



- NOTES:
- PVC CHASE TO BE PLACED UNDER ALL DRIVEWAYS. REFER TO "SITE PLAN" FOR EXACT LOCATIONS.
 - CHASES ARE NOT TO BE USED FOR IRRIGATION INSTALLED WITH THIS DEVELOPMENT. IRRIGATION SLEEVES WILL BE SEPARATE.
 - REFER TO "UTILITY PLAN" AND IRRIGATION PLAN FOR IRRIGATION SLEEVE LOCATIONS.

9 PVC CHASE DETAIL

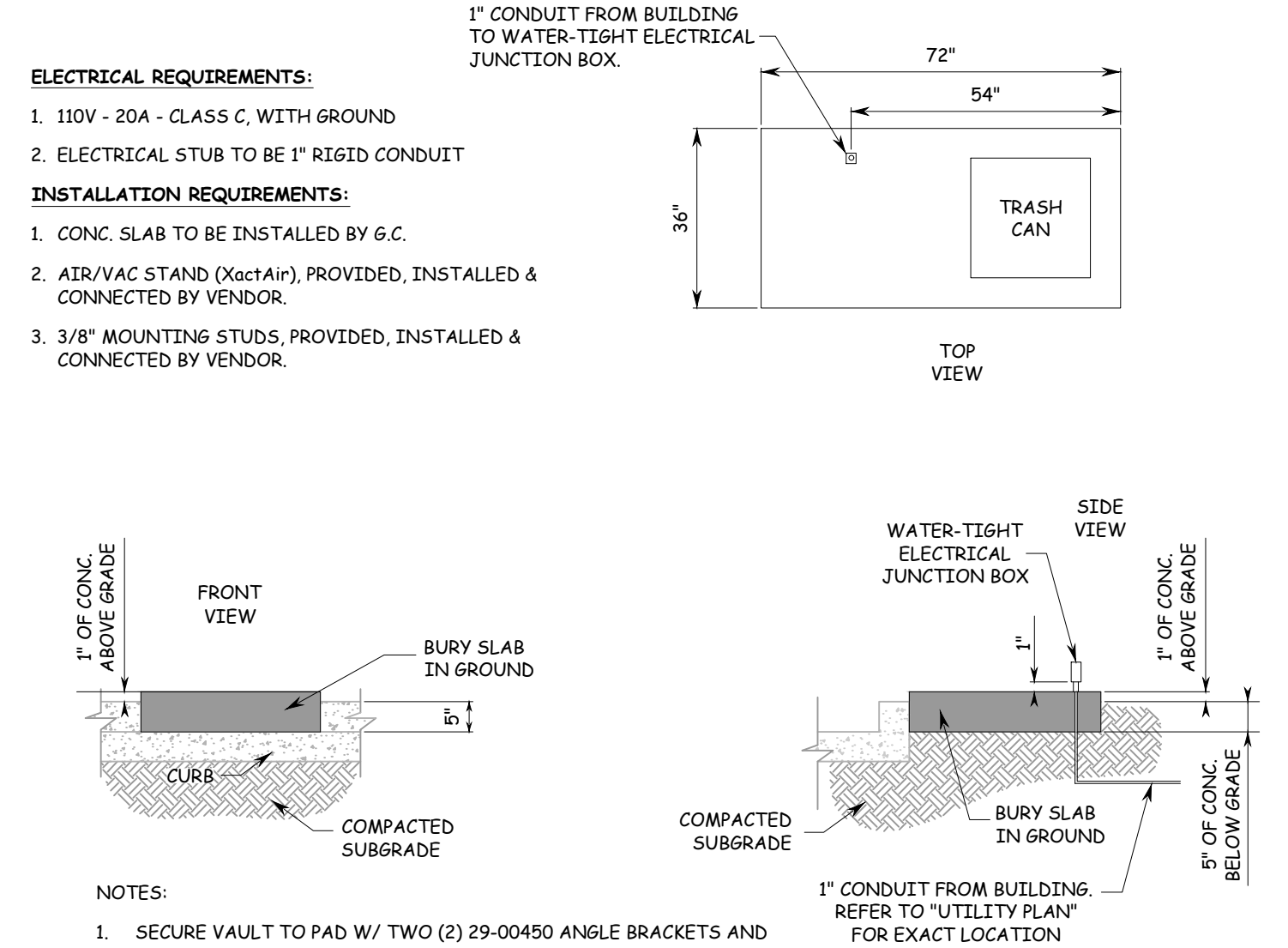
SD1 NTS



- NOTES:
- BUMPER POSTS TO BE PLUMB AND ALIGNED IN A STRAIGHT LINE AND FILLED WITH CONCRETE.
 - TOPS TO BE SMOOTH W/ SQUARE EDGE, PRIMERED WITH "END RUST" BY DURO AND PAINTED WITH INDUSTRIAL OIL BASED ENAMEL, COLOR TO MATCH DECORATIVE LIGHT POLES.
 - REFER TO PAVING PLAN FOR EXACT CONCRETE THICKNESS.
 - REFER TO PAVING PLAN FOR CONCRETE COMPRESSIVE STRENGTH & SUBGRADE COMPACTION REQUIREMENTS.

10 CANOPY BOLLARD DETAIL

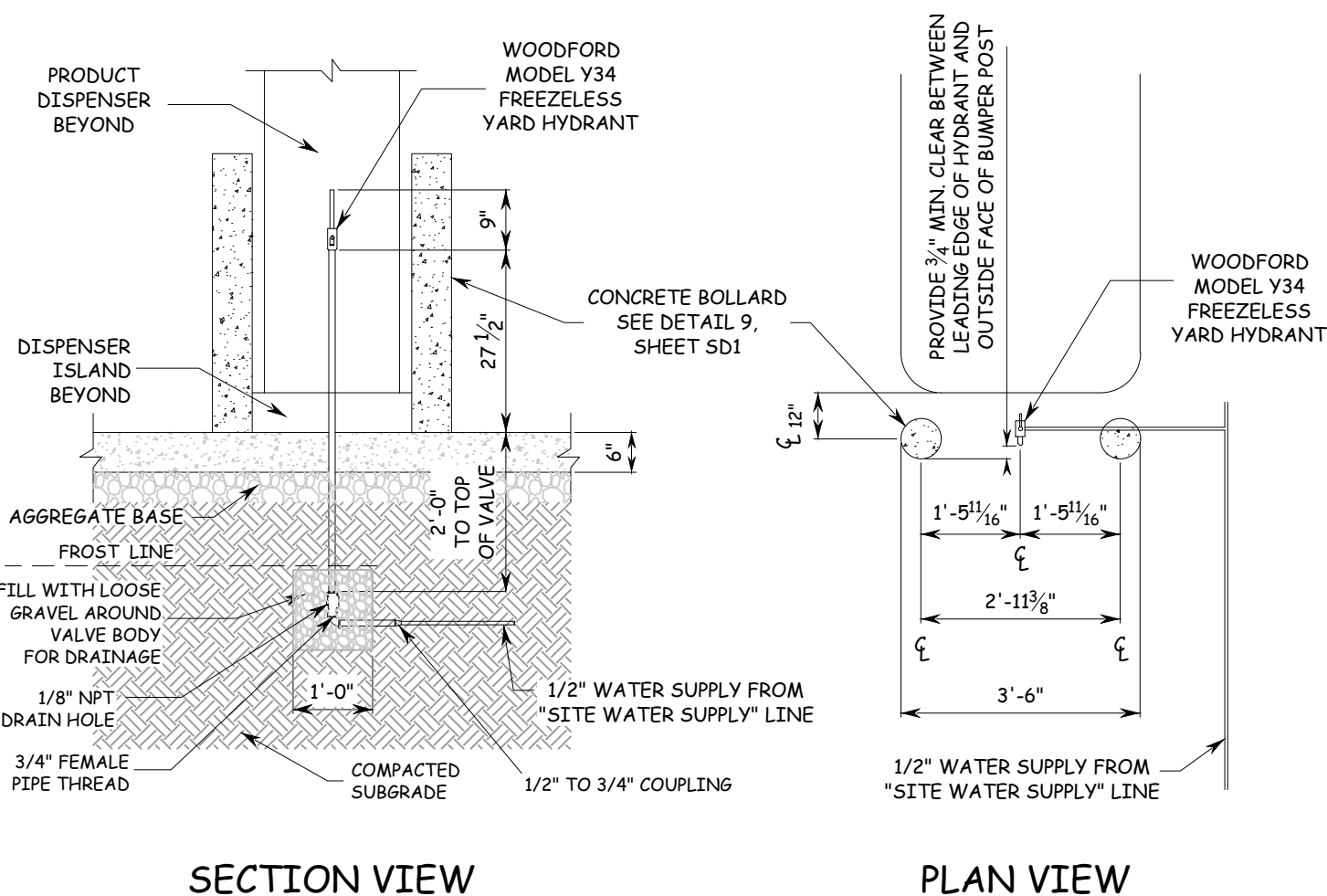
SD1 NTS



- NOTES:
- SECURE VAULT TO PAD W/ TWO (2) 29-00450 ANGLE BRACKETS AND FOUR (4) 1/2" Ø x 4" SIMPSON TITAN HD SCREWTYPE ANCHORS (TYP.)
 - REFER TO PAVING PLAN FOR EXACT CONCRETE THICKNESS.
 - REFER TO PAVING PLAN FOR CONCRETE COMPRESSIVE STRENGTH & SUBGRADE COMPACTION REQUIREMENTS.

11 AIR/VAC SERVICE DETAIL

SD1 NTS



- NOTES:
- SEE "SITE PLAN" FOR EXACT LOCATIONS.
 - REFER TO PAVING PLAN FOR EXACT CONCRETE THICKNESS.
 - REFER TO PAVING PLAN FOR CONCRETE COMPRESSIVE STRENGTH & SUBGRADE COMPACTION REQUIREMENTS.

12 YARD HYDRANT DETAIL

SD1 NTS

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

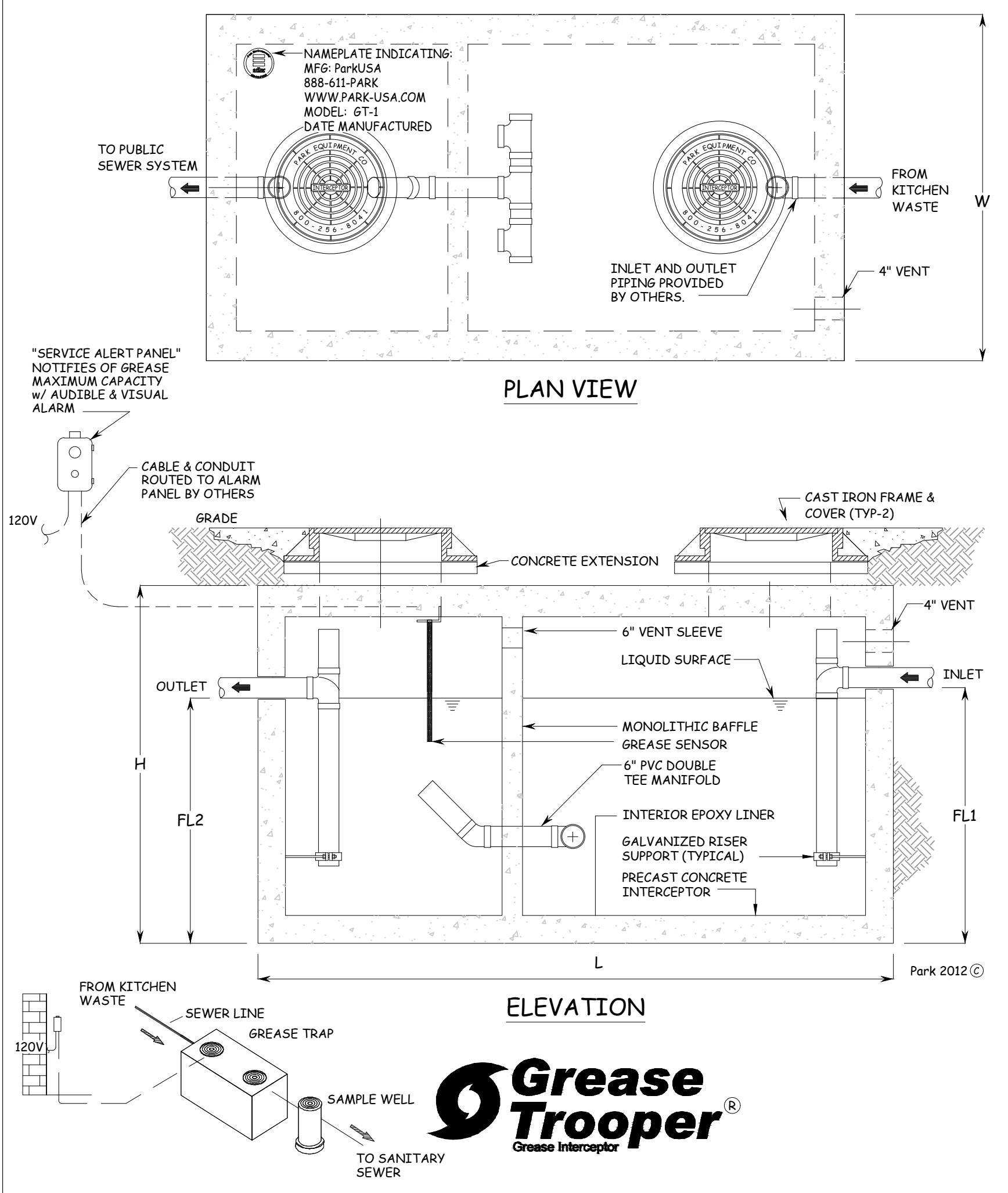
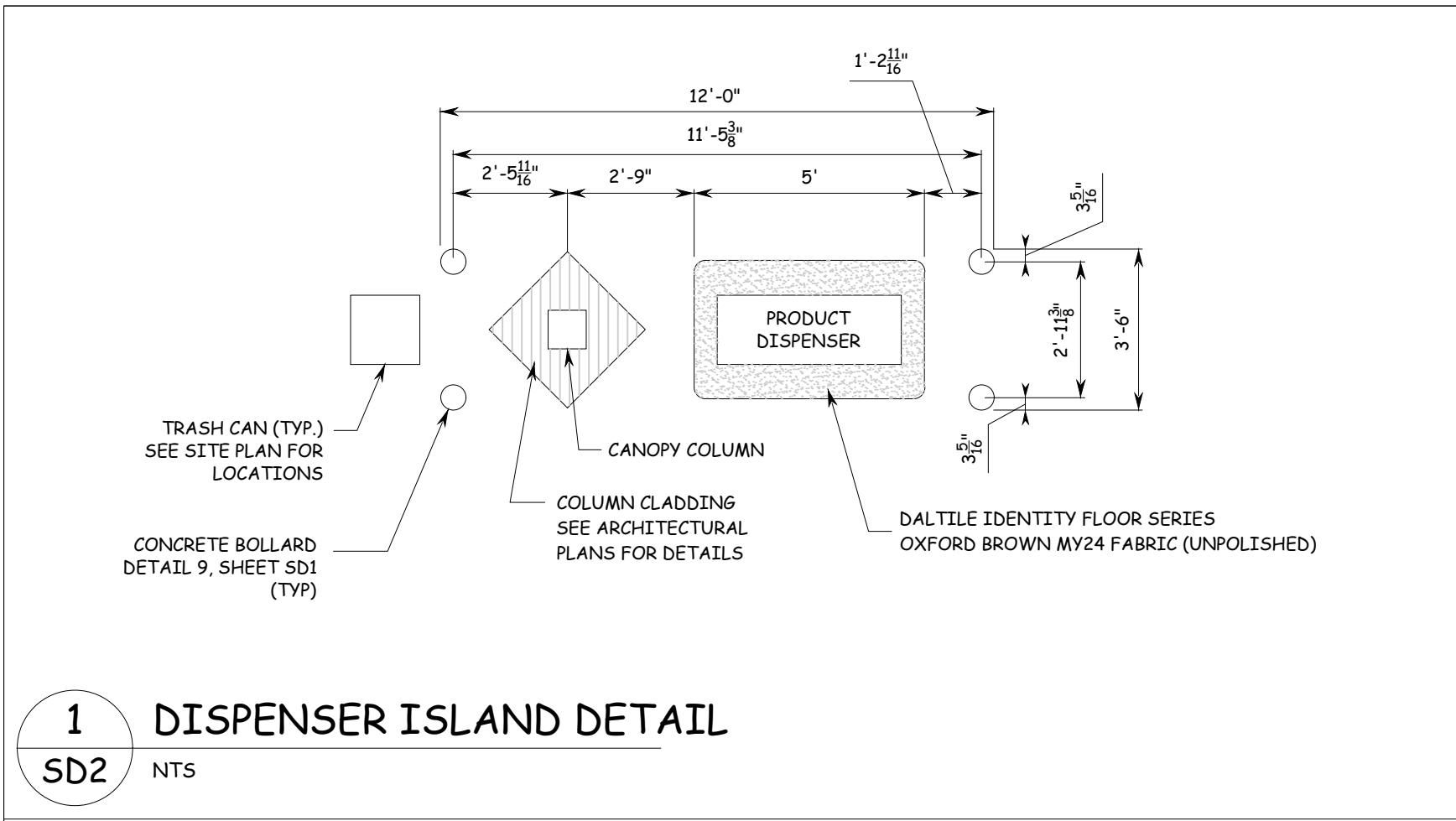
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DATE		SCALE		AS SHOWN	
DRAWN-BY		MUL			
DRAWING NAME:		FJ180019-RT Standard Details.dwg			
SD1		SD1			
SHEET NO.		VERSION			

BRANDON ULMER
PROFESSIONAL ENGINEER
No. 68545
FLORIDA LICENSE NO. 68545
www.thomasthomasgroup.com

THOMAS
THOMAS GROUP
125 W. INDIAN TOWN RD., SUITE 208
PALM BEACH, FL 33480
PH: (561) 283-7653
FAX: (561) 283-7721

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Racetrac
RACETRAC PETROLEUM, INC.
200 GALLERIA PARKWAY SE
SUITE 900 ATLANTA, GA 30339
(770) 431-7600



Grease Trooper Grease Interceptor

GREASE INTERCEPTOR SCHEDULE									
MODEL NO.	CAPACITY USGAL	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH L	WIDTH W	HEIGHT H	INLET FL1	OUTLET FL2	
GT-1500	1,500	3,500	16,050	9'-2"	5'-8"	7'-0"	5'-9"	5'-6"	

OTHER SIZES ARE AVAILABLE. CONTACT RACETRAC FOR MORE INFORMATION.

ENGINEERING DATA:

THE GREASE INTERCEPTOR IS STRUCTURALLY & HYDRAULICALLY ENGINEERED TO CONFORM TO REGIONAL PLUMBING CODES RECOMMENDED IN MOST CITIES. CONSULT WITH LOCAL AUTHORITIES FOR SPECIFIC APPLICATION REQUIREMENTS.

SHOP DRAWINGS SHALL INCLUDE COMPLETE STRUCTURAL AND BUOYANCY CALCULATIONS CERTIFIED BY A LICENSED PROFESSIONAL ENGINEER. CONSULT WITH PARK EQUIPMENT COMPANY FOR EXACT EXCAVATION DIMENSIONS & SHIPPING INFORMATION.

REINFORCEMENTS:

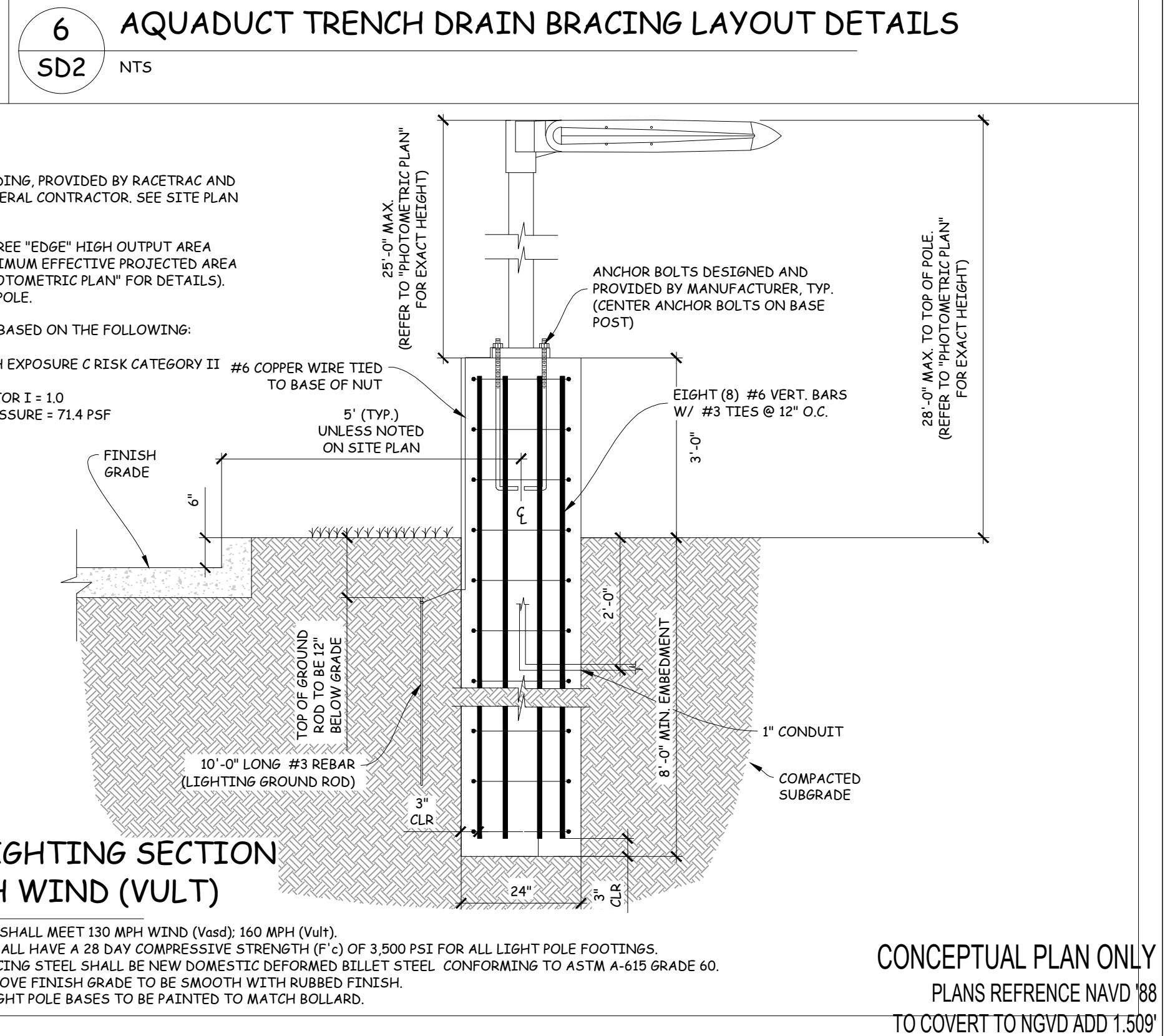
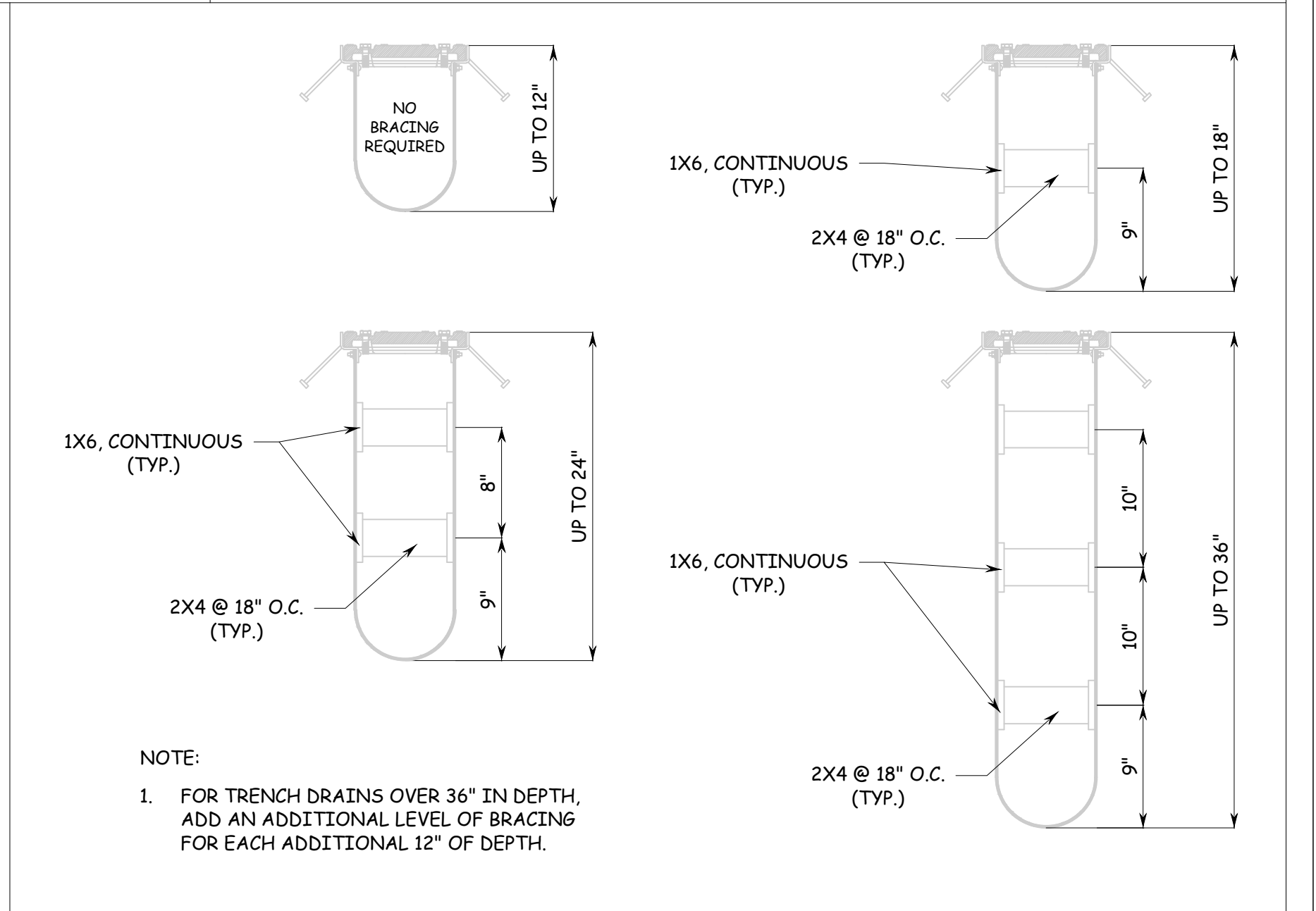
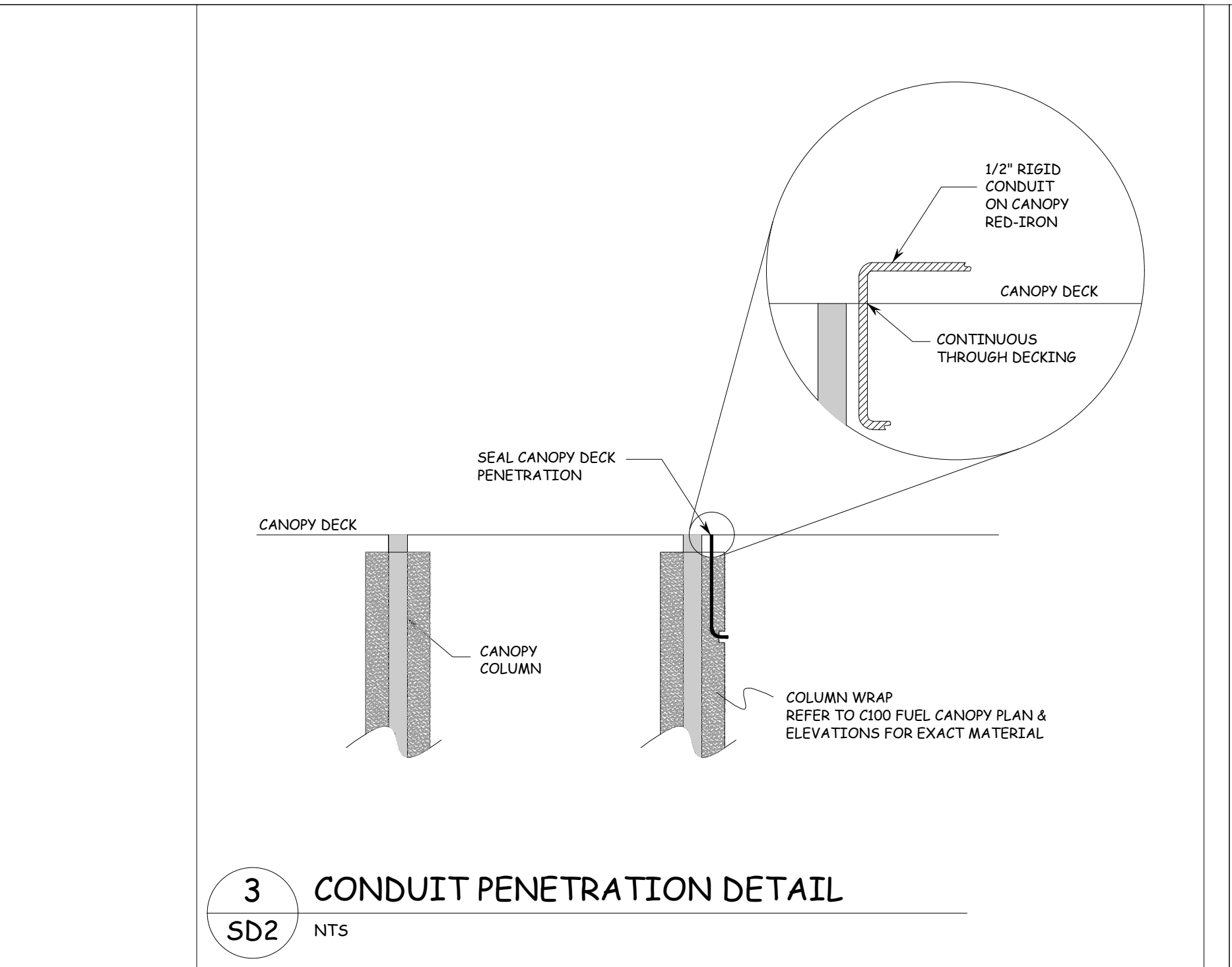
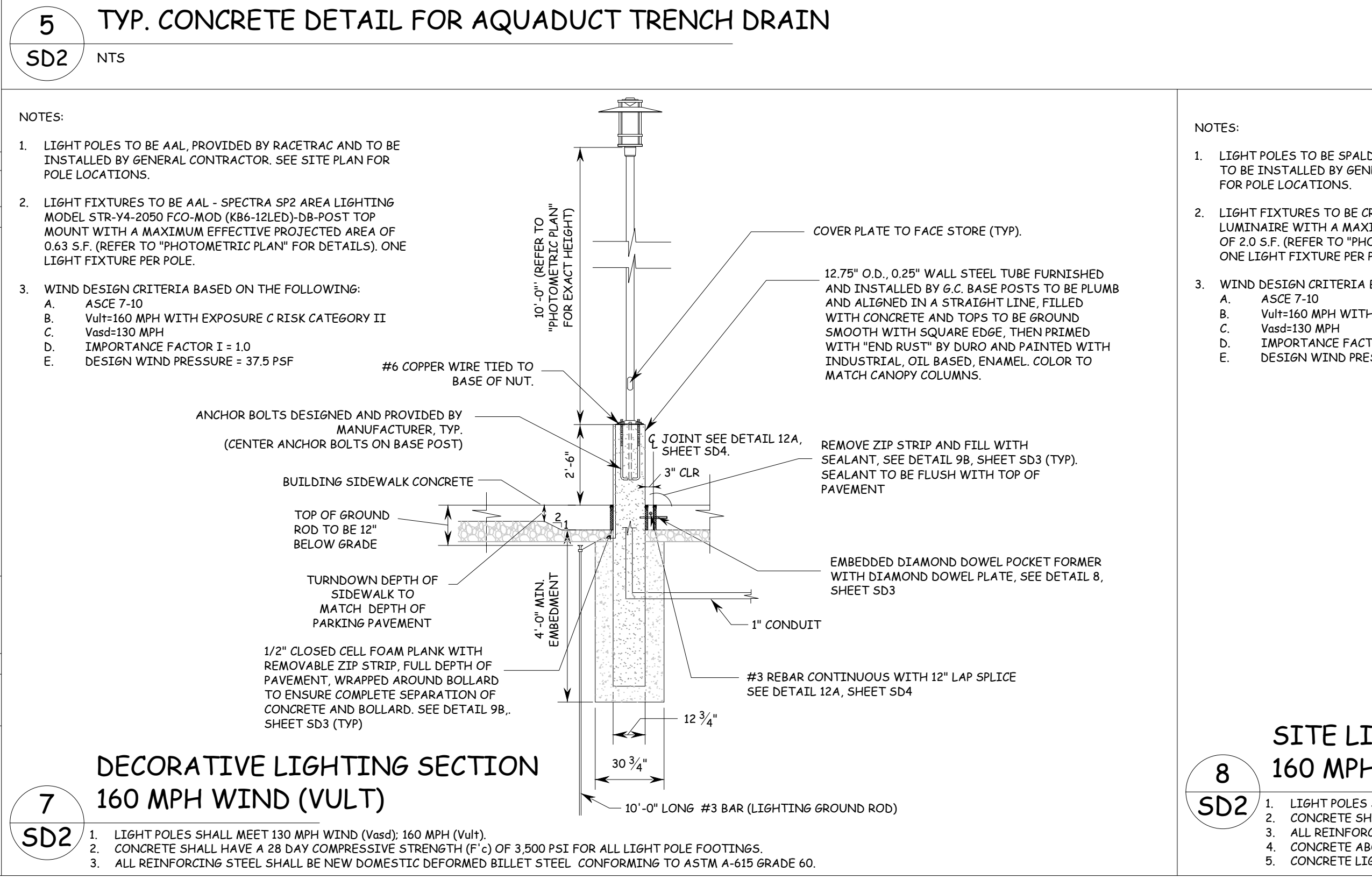
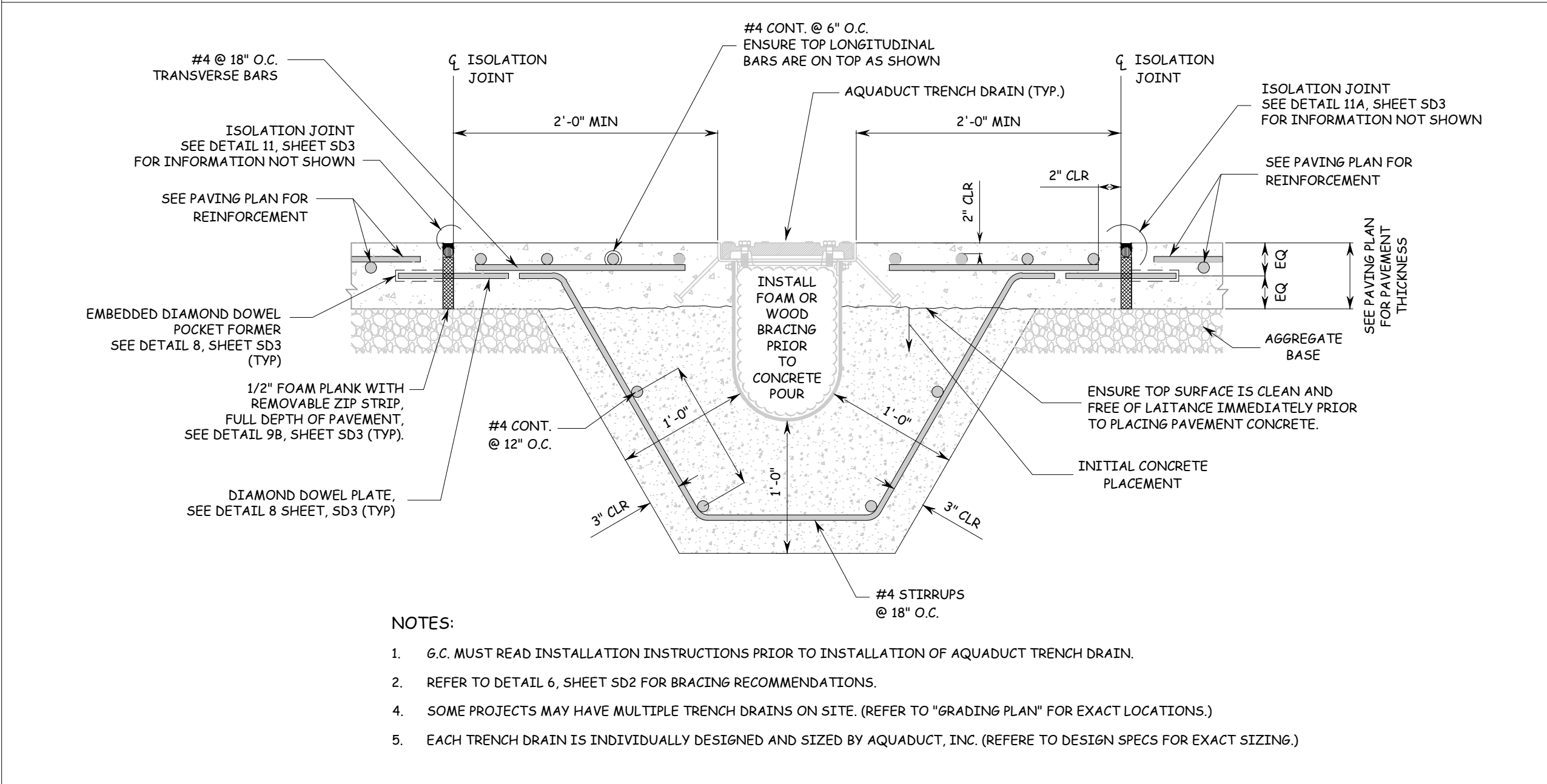
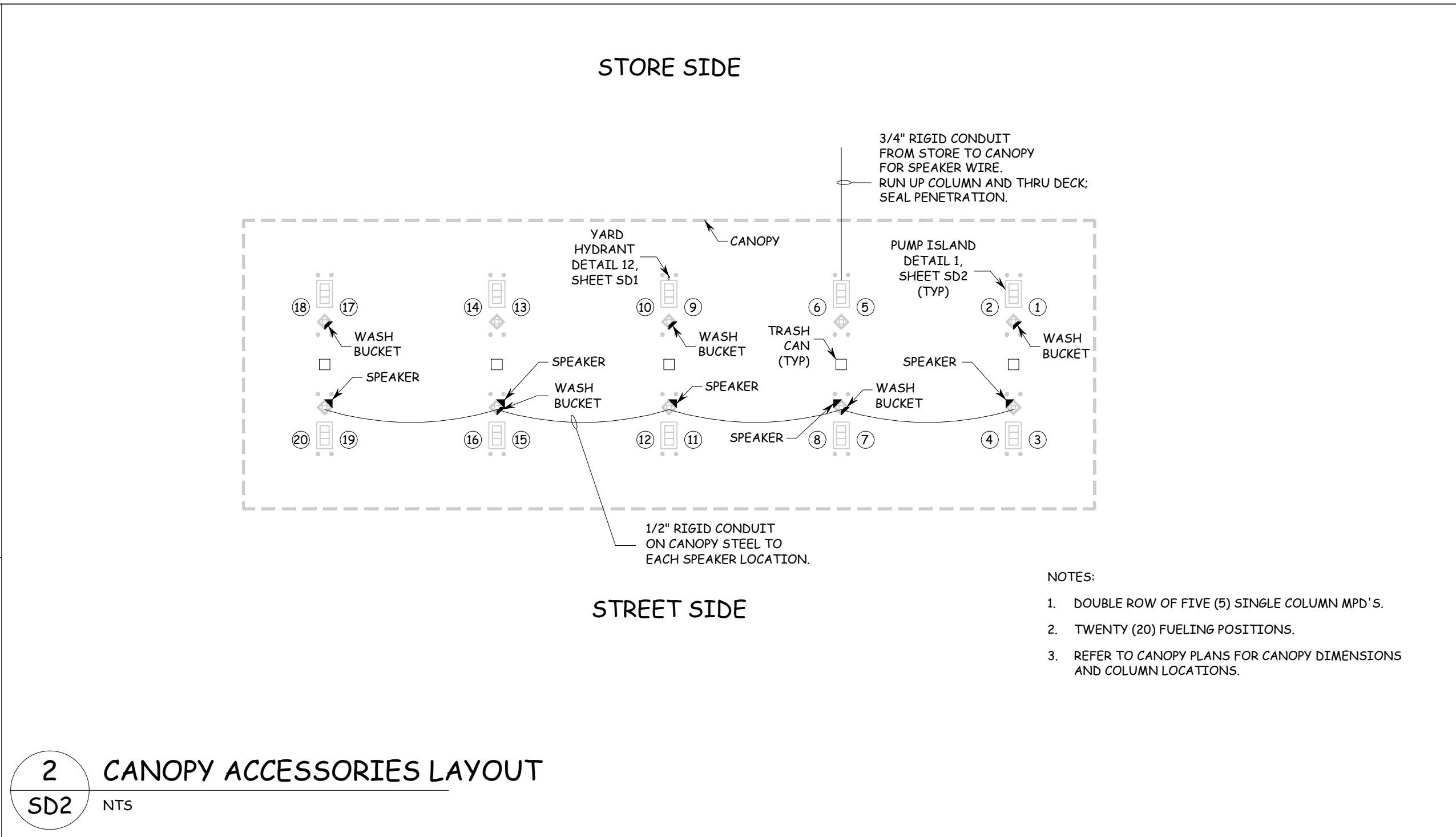
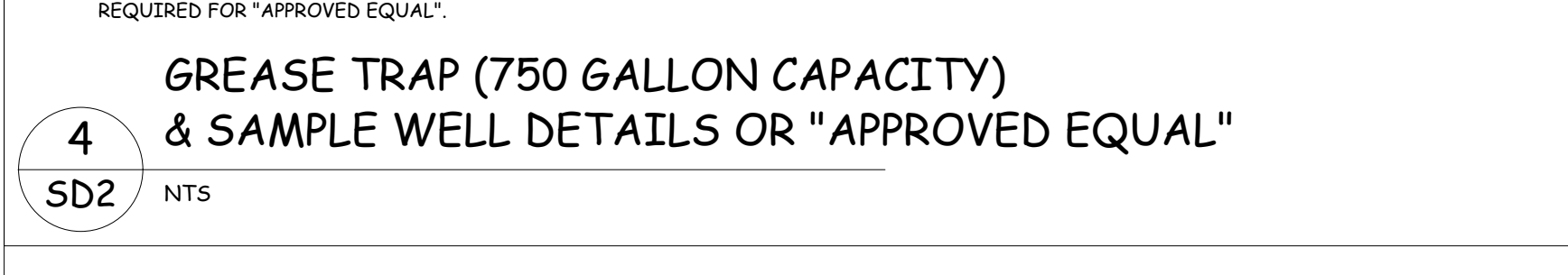
GRADE 60 REINFORCEMENT WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.

C.I. CASTINGS:

MANHOLE FRAMES, COVERS OR GRATES ARE MANUFACTURED OF GRAY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30. MANHOLE SHALL BE NOMINAL 24 INCH DIAMETER AND BE TRAFFIC DUTY.

Logos: ANSII, NPCA, EPA, ASPE, ASTM

GREASE INTERCEPTOR SERIES GT 750 GALLON CAPACITY			
SCALE	NONE	DWG. NO.	REV.
DATE	2012	GT-1	A



RT Standard Details		RACETRAC MARKET	
10th Avenue North @ Florida Mango Road Palm Springs, Florida Palm Beach County		DATE SCALE AS SHOWN DRAWN-BY MJL DRAWING NAME: FJ180019-RT Standard Details.dwg	
DATE		SD2	
SHEET NO.		VERSION	

BRANDON OLMER
PROFESSIONAL ENGINEER
FLORIDA LICENSE NO. 68545

THOMAS ENGINEERS
FEBRUARY PROFESSIONAL PLAZA
125 W. INDIAN TOWN RD., SUITE 208
PALM BEACH, FL 33480
PH: (561) 283-7633
FX: (561) 283-7521
www.thomasengineersgroup.com

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200 GALLERIA PARKWAY SE
SUITE 900 ATLANTA, GA 30339
(770) 431-7600

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A:\RACETRAC\180019-RT Standard Details\180019-RT Standard Details.dwg

GENERAL CONCRETE PAVEMENT NOTES

1. REVIEW AND VERIFY ALL AS-BUILT CONDITIONS WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS AND ANY FABRICATION.

2. INDUSTRY STANDARDS GOVERNING THIS WORK ARE OF THE LATEST ISSUE AT THE DATE OF THIS DRAWING RELEASE.

3. ENSURE STORAGE, HANDLING, PREPARATION, INSTALLATION, ETC. OF ALL MATERIALS ARE IN ACCORDANCE WITH MANUFACTURER'S / VENDOR'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS.

PAVEMENT SUBGRADE AND BASE NOTES

1. ENSURE TESTING AGENCY VERIFIES THE SUBGRADE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. RECOMPACT SOFT AREAS AS DIRECTED BY THE GEOTECHNICAL ENGINEER. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THAT THE SUBGRADE HAS BEEN PROPERLY COMPACTED.

2. ENSURE TESTING AGENCY EVALUATES THE SUBGRADE FOR PROOF-ROLLING TO BE DONE BY A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR OTHER EQUIVALENTLY WHEELED VEHICLE ACCEPTABLE TO THE TESTING AGENCY. REPAIR SOFT AREAS THAT DEPRESS DEEPER THAN 1/2 INCH AS DIRECTED BY THE TESTING AGENCY. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THE SUBGRADE HAS BEEN PROOF-ROLLED AND IS ACCEPTABLE.

3. ** DO NOT PROOF-ROLL ON TOP OF OR WITHIN 5 FEET OF THE EDGE OF THE UNDERGROUND STORAGE TANK LOCATIONS.

4. AGGREGATE BASE MATERIAL:

A. COARSE AGGREGATE BASE: CRUSHER RUN WITH ROCK FINES. USE ASTM D448, NO. 467, 57 OR 67 BLEND ONLY IF NOTED OR ALLOWED.

B. FINE AGGREGATE BASE: CLEAN SCREENINGS ASTM D 448, NO. 10 WITH 6% TO 12% PASSING NO. 200 SIEVE.

5. AGGREGATE BASE MATERIAL INSTALLATION:

A. COMPACT COARSE AGGREGATE BASE TO FINAL THICKNESS SHOWN IN LAYERS NOT EXCEEDING 6 INCHES, WITH MINIMUM OF 2 PASSES PER LAYER WITH A VIBRATORY COMPACTOR.

B. COMPACT BASE TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

C. CHOK-OFF TOP SURFACE OF COARSE AGGREGATE BASE WITH FINE AGGREGATE BASE MATERIAL DUE TO THE FOLLOWING:

C.1. AS REQUIRED TO MEET FINE GRADE ELEVATION TOLERANCES SPECIFIED.

C.2. WHERE COARSE AGGREGATE BASE MATERIAL DOES NOT HAVE SUFFICIENT FINE PARTICLES TO PRODUCE A SURFACE THAT IS FREE OF EXPOSED AGGREGATE OR SURFACE VOIDS IMMEDIATELY PRIOR TO PAVEMENT INSTALLATION.

D. COMPACT FINE AGGREGATE BASE CHOK-OFF LAYER WITH A MINIMUM OF 2 PASSES WITH A VIBRATORY COMPACTOR.

E. TOP SURFACE OF BASE MATERIAL TO BE DRY, SMOOTH, FLAT, DENSE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

6. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER IMMEDIATELY PRIOR TO PLACING PAVEMENT. TESTING AGENCY TO PROVIDE LETTER REPORT TO OWNER'S REPRESENTATIVE STATING THE BASE IS ACCEPTABLE.

7. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF UNUSUAL SOIL CONDITIONS ARE FOUND.

8. PROTECT EXISTING STRUCTURES, UTILITIES, PROPERTY CORNERS, ETC. RESTORE ALL ITEMS DAMAGED, AS REQUIRED BY OWNER, AT NO COST TO OWNER OR WITHOUT EXTENSION OF CONTRACT TIME. ** DO NOT ALLOW STORED EXCAVATION MATERIAL TO DISRUPT PROPER DRAINAGE OF AREA, DAMAGE TO SURROUNDING AREAS, OR STAIN ADJACENT CONCRETE.

9. DISPOSE OF EXCAVATED MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE.

CONCRETE PAVEMENT NOTES:

1. CONFORM TO ACT 318 AND 117 FOR THE DESIGN AND PLACEMENT OF CONCRETE, REINFORCING, AND RELATED ITEMS.

2. CONFORM TO ACT 306.1 FOR COLD WEATHER CONCRETING AND ACT 305R WHEN ANY COMBINATION OF HIGH TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND VELOCITY TEND TO IMPAIR THE QUALITY OF THE CONCRETE. REJECT CONCRETE IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEGREES FAHRENHEIT (°F) OR ABOVE. PROTECT SURFACES OF EXPOSED CONCRETE FROM PRECIPITATION DAMAGE UNTIL ADEQUATE STRENGTH IS GAINED TO PREVENT DAMAGE.

3. CONFORM TO ACT 302.1R, 304R, 308, 309R AND 347R FOR CONCRETE, FORM WORK, CURING, AND RELATED ITEMS. CONFORM TO CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS FOR PLACING REINFORCING.

4. THE GEOTECHNICAL ENGINEERING REPORT INDICATES THAT THE SOILS ON-SITE HAVE A XXXXXXXX SULFATE EXPOSURE. WHERE IMPORTED FILL OR BASE MATERIALS ARE IN CONTACT WITH CONCRETE, THE SULFATE CONTENT AND EXPOSURE OF THESE MATERIALS SHALL BE ACQUIRED BY TEST. SUBMIT ALL TEST RESULTS WITH CONCRETE MIX DESIGNS. FAILURE TO PROVIDE SUPPORTING TEST RESULTS FROM AN ACCREDITED TESTING LABORATORY WILL REQUIRE THE CONCRETE MIX TO BE PROPORTIONED FOR VERY SEVERE SULFATE EXPOSURE AT NO ADDITIONAL COST OR DELAY IN THE PROJECT SCHEDULE.

5. CONCRETE SHALL BE PROPORTIONED TO MEET THE PROJECT SPECIFICATIONS AND THE MINIMUM CRITERIA ESTABLISHED IN "TABLE A" (THIS SHEET) BASED ON THE SULFATE EXPOSURE FROM ANY ADJACENT SOILS OR FILL MATERIALS.

6. ADDITIONALLY, EXTERIOR CONCRETE EXPOSED TO FREEZING TEMPERATURES AND/OR SALT OR DEICING CHEMICALS SHALL HAVE AIR ENTRAINMENT AND THE CEMENT CONTENT APPROPRIATE FOR THE EXPECTED EXPOSURE. SEE SPECIFICATIONS FOR MORE INFORMATION.

7. CONCRETE TO MEET DURABILITY REQUIREMENTS OF ACT 301. FREEZING AND THAWING EXPOSURE CATEGORY TO BE [F0] [F1] [F2] [F3]. SULFATE EXPOSURE CATEGORY TO BE [S0] [S1] [S2] [S3]. AND CORROSION PROTECTION EXPOSURE CATEGORY TO BE [C0] [C1] [C2]. PROVIDE A MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS OF (3500 PSI) (4000 PSI) (4500 PSI) (5000 PSI) WITH MAXIMUM WATER/CEMENTITIOUS RATIO OF [0.55] [0.50] [0.45] [0.40].

8. ENSURE REINFORCING BARS CONFORM TO ASTM A615 GRADE 60, DEFORMED.

9. PROVIDE CLASS B TENSION LAP SPLICES PER ACT 318, FOR CONCRETE STRENGTH AND BAR LOCATIONS NOTED.

10. MAINTAIN FULL THICKNESS FOR DEPRESSED OR SLOPED PAVEMENTS.

11. ** DO NOT ADD WATER OR PLAIN CEMENT TO ANY PAVEMENT SURFACE DURING FINISHING OPERATIONS.

12. PERFORM NO FINISHING OPERATION WHILE WATER IS PRESENT ON PAVEMENT SURFACE.

13. STRIKE OFF CONCRETE TO REQUIRED ELEVATIONS AND IMMEDIATELY START FINISHING/PLATTING OPERATIONS. ENSURE FINISHING OPERATIONS ARE NO MORE THAN NECESSARY TO REMOVE IRREGULARITIES AND MEET SPECIFIED TOLERANCES. USE A HIGHWAY STRAIGHTEDGE 10 FOOT WIDE MAXIMUM, UNLESS OTHERWISE ALLOWED BY OWNER'S REPRESENTATIVE. IN ORDER TO CUT OFF HIGH SPOTS AND FILL IN LOW SPOTS, PERFORM FINISHING OPERATIONS NECESSARY TO ENSURE PAVEMENT WILL DRAIN WELL. UNIFORMLY FINISH SURFACE TO TEXTURE PREVIOUSLY APPROVED BY OWNER'S REPRESENTATIVE. ** DO NOT ALLOW SURFACE TO DRY DURING FINISHING OPERATIONS AND BEFORE CURING COMPOUND IS APPLIED. USE EVAPORATION RETARDANT AS NECESSARY TO PREVENT SURFACE DRYING AND PLASTIC SHRINKAGE CRACKS.

14. FOR TOLERANCES CONFORM TO ACT 117 AND ACT 347R, EXCEPT AS NOTED BELOW:

A. PAVEMENT AGGREGATE BASE FINE GRADE <0, -3/4 INCH.

B. MINIMUM PAVEMENT TOLERANCE: -3/4 INCH.

C. WHEN COMPUTING THE AVERAGE OF ALL SAMPLES, SAMPLES WITH A THICKNESS MORE THAN 3/4 INCH ABOVE THE SPECIFIED THICKNESS SHALL BE ASSUMED TO HAVE A THICKNESS OF 3/4 INCH MORE THAN THE SPECIFIED THICKNESS.

D. AVERAGE PAVEMENT THICKNESS TOLERANCE: -0.

E. THICKNESS SAMPLES ARE TO BE RANDOMLY LOCATED FROM EACH PAVEMENT PLACEMENT AND NOT EXCEED 1000 SQUARE FEET OF PAVEMENT SURFACE AREA.

15. START SAWING PAVEMENT CONTRACTION JOINTS USING A "SOFF-CUT" SAW, BLADES AND SKID PLATES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. UNLESS RAVELING OR DISLODGING OCCURS, COMPLETE SAWING OF JOINTS WITHIN THE MAXIMUM ELAPSED TIME LIMIT NOTED BELOW, BUT PREFERABLY LESS. THE SPECIFIED TIME FOR ANY ONE LOCATION STARTS WHEN FINISHING OPERATIONS ARE COMPLETE FOR THAT LOCATION. THE SPECIFIED TEMPERATURE IS THE MAXIMUM AIR TEMPERATURE IN DEGREES FAHRENHEIT (°F) THAT OCCURS WITHIN THE SPECIFIED TIME LIMIT. THE ELAPSED TIME MAY NEED TO BE SHORTENED EVEN MORE IF DRY AND OR WINDY CONDITIONS ARE PRESENT. ENSURE JOINTS ARE CLEANED AFTER SAWING AND REMAIN CLEAN UNTIL SEALED.

MAX DEGREES FAHRENHEIT (°F)

MAX ELAPSED HOURS

85 AND ABOVE

60 - 84

50 - 59

40 - 49

1

2

3

4

16. START CURING AS SOON AS CONCRETE SURFACE WILL NOT BE DAMAGED BY CURING OPERATIONS. CURE CONCRETE CONTINUOUSLY FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS.

17. ENSURE PAVEMENT SURFACE IS PROTECTED FROM EQUIPMENT SCRAPES, IMPACT ABRASIONS, STAINS, ETC. REPAIR PAVEMENT SURFACE AS DIRECTED BY OWNER'S REPRESENTATIVE. VEHICLE AND EQUIPMENT TRAFFIC IS PROHIBITED UNTIL THE COMPLETION OF PAVEMENT CURING PERIOD. ENSURE VEHICLES AND EQUIPMENT ARE DIAPERED TO PREVENT OIL OR OTHER FLUID LEAKS FROM STAINING THE PAVEMENT.

18. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PROCESS, CIVIL AND VENDOR'S DRAWINGS FOR EMBEDDED ITEMS NOT SHOWN. COORDINATE AND PLACE ALL EMBEDDED ITEMS SHOWN ON THE DRAWINGS OR REQUIRED BY ALL TRADES.

19. PRE-CONSTRUCTION MEETINGS:

A. ATTEND PRE-CONSTRUCTION MEETING TO BE SCHEDULED AT LEAST 7 DAYS BEFORE STARTING MAIN CONCRETE PAVEMENT.

B. ATTENDANCE DESIGNATED BY THE OWNER'S REPRESENTATIVE AND THE FOLLOWING: STRUCTURAL SERVICES INC. REPRESENTATIVE, TESTING AGENCY, CONTRACTOR, CONCRETE SUPPLIER (INCLUDING QUALITY CONTROL PERSONNEL), AND SUBCONTRACTORS FOR SUBGRADE AND BASE PREPARATION, REINFORCEMENT, PUMPING OR OTHER MEANS OF CONVEYING, PLACEMENT, FINISHING, SAWING, FORMWORK, AND OTHER PERTINENT PORTIONS OF WORK.

C. REPRESENTATIVES ARE TO BE PERSONNEL WHO ARE DIRECTLY INVOLVED IN PROJECT AND WHO HAVE AUTHORITY TO CONTROL WORK.

TABLE A (SEE CONCRETE PAVEMENT NOTE #5)

SULFATE EXPOSURE	WATER SOLUBLE SULFATE (SO4) IN WATER PPM	SULFATE (SO4) IN WATER PPM	PORTLAND CEMENT TYPE	MAXIMUM W/C RATIO	CONCRETE PAVEMENTS
NEGLIGIBLE	0.00 < SO4 < 0.10	0 < SO4 < 150	I	0.55	3500
MODERATE	0.10 < SO4 < 0.20	150 < SO4 < 1500	II	0.50	4000
SEVERE	0.20 < SO4 < 2.00	1500 < SO4 < 10,000	V	0.45	4500
VERY SEVERE	SO4 > 2.00	SO4 > 10,000	V PLUS POZZOLAN	0.40	5000

NOTE TO CIVIL ENGINEERING COMPANY

TYPICALLY USE "MODERATE" EXPOSURE FROM TABLE. CONTACT EPM IF EXPOSURE CLASS SHOULD BE CHANGED.

1 SD3

NTS

SLAB PENETRATIONS DETAIL

NOTES:

1. SLAB PENETRATIONS INCLUDE, BUT ARE NOT LIMITED TO, BOLLARDS, MANHOLES, INLETS, CLEANOUTS, WATER VALVES, ETC.

2 - #4 1-1/2" CLR FROM TOP

1-1/2" CLR FROM TOP

PAVEMENT PENETRATION

1" CLR (TYP)

CONSTRUCTION, CONTRACTION OR ISOLATION JOINT. SEE DETAILS 9, 10 OR 11, SHEET SD3 FOR INFORMATION.

3" (MIN)

1'-6" (TYP)

DO NOT LET REINFORCEMENT CROSS JOINT (TYP)

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, WRAPPED AROUND PENETRATION, FULL DEPTH OF PAVEMENT. REMOVE ZIP STRIP AND FILL WITH SEALANT, SIMILAR TO DETAIL 9B, SHEET SD3 WITH SEALANT FLUSH WITH TOP PAVEMENT.

8 SD3

NTS

PNA DIAMOND DOWEL PLATE DETAIL (TYP)

NOTES:

1. PNA CONTACT INFORMATION IS: 1-800-542-0214, PNA-INC.COM

FIRST SLAB POUR

SECOND SLAB POUR

MID DEPTH

EMBEDDED DIAMOND DOWEL POCKET FORMER, INSTALLED USING FORM TEMPLATE.

DIAMOND DOWEL PLATE DIMENSIONS: 1/4" THICK, 4-1/2" SQUARE, 6.36" AT THE JOINT.

CONCRETE FIRST SLAB POUR

6" MIN

MID DEPTH

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE DIMENSIONS: 1/4" THICK, 4-1/2" SQUARE, 6.36" AT THE JOINT.

24"

12"

24"

10A SD3

10B SD3

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

9 SD3

NTS

SLAB CONTRACTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONTRACTION JOINT

SAWCUT TO BE 1/8" WIDE BY 1" MIN. TO 1-1/2" MAX. DEEP "SOFF-CUT".

SEE PAVING PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

9A SD3

NTS

PCC JOINT DETAIL

NOTES:

1. SAWCUT JOINTS IN ACCORDANCE WITH CONCRETE PAVEMENT NOTE 16, SHEET SD3.

2. WAIT AS LONG AS FEASIBLE TO SEAL JOINTS TO ALLOW CONCRETE SHRINKAGE TO OCCUR.

TOP OF PAVEMENT

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

FULL DEPTH OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

9B SD3

NTS

COMPRESSIBLE CLOSED FOAM PLANK ISOLATION JOINT DETAIL

NOTES:

1. SAWCUT JOINTS IN ACCORDANCE WITH CONCRETE PAVEMENT NOTE 16, SHEET SD3.

2. WAIT AS LONG AS FEASIBLE TO SEAL JOINTS TO ALLOW CONCRETE SHRINKAGE TO OCCUR.

TOP OF PAVEMENT

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

FULL DEPTH OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

10 SD3

NTS

CONSTRUCTION JOINT PARTIAL PLAN DETAIL

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

CONSTRUCTION JOINT

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

24"

12"

24"

10A SD3

10B SD3

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

10A SD3

NTS

SLAB CONSTRUCTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONSTRUCTION JOINT

SEE PAVING PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

CHAIRS REQUIRED FOR REBAR ALIGNMENT DURING CONCRETE PLACEMENT

#3 X 24" LONG REBAR SPACED AT 24" O.C. CENTERED WITH JOINT.

D/2

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

10B SD3

NTS

SLAB CONSTRUCTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONSTRUCTION JOINT

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

IMMEDIATELY AFTER REMOVING BULKHEAD, APPLY CURING COMPOUND TO PAVEMENT VERTICAL EDGE AT A COVERAGE RATE OF 300 SF MAX PER GALLON.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

10C SD3

NTS

CONSTRUCTION JOINT INTERSECTION PARTIAL PLAN DETAIL

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

CONSTRUCTION JOINT

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

18" MIN

6" MIN

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

11 SD3

NTS

ISOLATION JOINT PARTIAL PLAN DETAIL

ISOLATION JOINT

11A SD3

FIRST SLAB POUR

SECOND SLAB POUR

24"

24"

1/2" CLOSED FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT. SEE DETAIL 9B, SHEET SD3.

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

11A SD3

NTS

ISOLATION JOINT SECTION

ISOLATION JOINT

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

ISOLATION JOINT REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT, SEE DETAIL 9B, SHEET SD3.

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT. SEE DETAIL 9B, SHEET SD3.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

11B SD3

NTS

ISOLATION JOINT @ TANK PAD AND DUMPSTER PAD PAVEMENT SECTION

NOTE:

1. THIS SECTION ASSUMES THE TANK OR DUMPSTER PAD PAVEMENT WILL BE PLACED PRIOR TO THE THINNER MAIN PAVEMENT.

TANK OR DUMPSTER PAVEMENT

PAVEMENT

ISOLATION JOINT

ISOLATION JOINT REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT. SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT. SEE DETAIL 9B, SHEET SD3.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

11 SD3

NTS

ISOLATION JOINT @ TANK PAD AND DUMPSTER PAD PAVEMENT SECTION

NOTE:

1. THIS SECTION ASSUMES THE TANK OR DUMPSTER PAD PAVEMENT WILL BE PLACED PRIOR TO THE THINNER MAIN PAVEMENT.

TANK OR DUMPSTER PAVEMENT

PAVEMENT

ISOLATION JOINT

ISOLATION JOINT REMOVE ZIP STRIP AND FILL WITH JOINT SEALANT. SEE DETAIL 9B, SHEET SD3.

SEE PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

3"

3"

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, FULL DEPTH OF PAVEMENT. SEE DETAIL 9B, SHEET SD3.

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

GENERAL CONCRETE PAVEMENT NOTES

1. REVIEW AND VERIFY ALL AS-BUILT CONDITIONS WHICH AFFECT NEW CONSTRUCTION PRIOR TO SUBMISSION OF SHOP DRAWINGS AND ANY FABRICATION.

2. INDUSTRY STANDARDS GOVERNING THIS WORK ARE OF THE LATEST ISSUE AT THE DATE OF THIS DRAWING RELEASE.

3. ENSURE STORAGE, HANDLING, PREPARATION, INSTALLATION, ETC. OF ALL MATERIALS ARE IN ACCORDANCE WITH MANUFACTURER'S / VENDOR'S PRINTED RECOMMENDATIONS AND INSTRUCTIONS.

PAVEMENT SUBGRADE AND BASE NOTES

1. ENSURE TESTING AGENCY VERIFIES THE SUBGRADE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER. RECOMPACT SOFT AREAS AS DIRECTED BY THE GEOTECHNICAL ENGINEER. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THAT THE SUBGRADE HAS BEEN PROPERLY COMPACTED.

2. ENSURE TESTING AGENCY EVALUATES THE SUBGRADE FOR PROOF-ROLLING TO BE DONE BY A FULLY LOADED TANDEM-AXLE DUMP TRUCK OR OTHER EQUIVALENTLY WHEELED VEHICLE ACCEPTABLE TO THE TESTING AGENCY. REPAIR SOFT AREAS THAT DEPRESS DEEPER THAN 1/2 INCH AS DIRECTED BY THE TESTING AGENCY. TESTING AGENCY TO PROVIDE A LETTER REPORT TO THE OWNER'S REPRESENTATIVE STATING THE SUBGRADE HAS BEEN PROOF-ROLLED AND IS ACCEPTABLE.

3. ** DO NOT PROOF-ROLL ON TOP OF OR WITHIN 5 FEET OF THE EDGE OF THE UNDERGROUND STORAGE TANK LOCATIONS.

4. AGGREGATE BASE MATERIAL:

A. COARSE AGGREGATE BASE: CRUSHER RUN WITH ROCK FINES. USE ASTM D448, NO. 467, 57 OR 67 BLEND ONLY IF NOTED OR ALLOWED.

B. FINE AGGREGATE BASE: CLEAN SCREENINGS ASTM D 448, NO. 10 WITH 6% TO 12% PASSING NO. 200 SIEVE.

5. AGGREGATE BASE MATERIAL INSTALLATION:

A. COMPACT COARSE AGGREGATE BASE TO FINAL THICKNESS SHOWN IN LAYERS NOT EXCEEDING 6 INCHES, WITH MINIMUM OF 2 PASSES PER LAYER WITH A VIBRATORY COMPACTOR.

B. COMPACT BASE TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

C. CHOK-OFF TOP SURFACE OF COARSE AGGREGATE BASE WITH FINE AGGREGATE BASE MATERIAL DUE TO THE FOLLOWING:

C.1. AS REQUIRED TO MEET FINE GRADE ELEVATION TOLERANCES SPECIFIED.

C.2. WHERE COARSE AGGREGATE BASE MATERIAL DOES NOT HAVE SUFFICIENT FINE PARTICLES TO PRODUCE A SURFACE THAT IS FREE OF EXPOSED AGGREGATE OR SURFACE VOIDS IMMEDIATELY PRIOR TO PAVEMENT INSTALLATION.

D. COMPACT FINE AGGREGATE BASE CHOK-OFF LAYER WITH A MINIMUM OF 2 PASSES WITH A VIBRATORY COMPACTOR.

E. TOP SURFACE OF BASE MATERIAL TO BE DRY, SMOOTH, FLAT, DENSE SURFACE IMMEDIATELY BEFORE PLACING CONCRETE.

6. ENSURE TESTING AGENCY VERIFIES AGGREGATE BASE IS COMPACTED TO THE SPECIFIED MAXIMUM DRY DENSITY AS DETERMINED BY THE GEOTECHNICAL ENGINEER IMMEDIATELY PRIOR TO PLACING PAVEMENT. TESTING AGENCY TO PROVIDE LETTER REPORT TO OWNER'S REPRESENTATIVE STATING THE BASE IS ACCEPTABLE.

7. NOTIFY THE OWNER'S REPRESENTATIVE IMMEDIATELY IF UNUSUAL SOIL CONDITIONS ARE FOUND.

8. PROTECT EXISTING STRUCTURES, UTILITIES, PROPERTY CORNERS, ETC. RESTORE ALL ITEMS DAMAGED, AS REQUIRED BY OWNER, AT NO COST TO OWNER OR WITHOUT EXTENSION OF CONTRACT TIME. ** DO NOT ALLOW STORED EXCAVATION MATERIAL TO DISRUPT PROPER DRAINAGE OF AREA, DAMAGE TO SURROUNDING AREAS, OR STAIN ADJACENT CONCRETE.

9. DISPOSE OF EXCAVATED MATERIAL AS REQUIRED BY OWNER'S REPRESENTATIVE.

CONCRETE PAVEMENT NOTES:

1. CONFORM TO ACT 318 AND 117 FOR THE DESIGN AND PLACEMENT OF CONCRETE, REINFORCING, AND RELATED ITEMS.

2. CONFORM TO ACT 306.1 FOR COLD WEATHER CONCRETING AND ACT 305R WHEN ANY COMBINATION OF HIGH TEMPERATURE, LOW RELATIVE HUMIDITY, AND WIND VELOCITY TEND TO IMPAIR THE QUALITY OF THE CONCRETE. REJECT CONCRETE IF ITS TEMPERATURE AT TIME OF PLACEMENT IS 90 DEGREES FAHRENHEIT (°F) OR ABOVE. PROTECT SURFACES OF EXPOSED CONCRETE FROM PRECIPITATION DAMAGE UNTIL ADEQUATE STRENGTH IS GAINED TO PREVENT DAMAGE.

3. CONFORM TO ACT 302.1R, 304R, 308, 309R AND 347R FOR CONCRETE, FORM WORK, CURING, AND RELATED ITEMS. CONFORM TO CRSI MANUAL OF STANDARD PRACTICE AND CRSI PLACING REINFORCING BARS FOR PLACING REINFORCING.

4. THE GEOTECHNICAL ENGINEERING REPORT INDICATES THAT THE SOILS ON-SITE HAVE A XXXXXXXX SULFATE EXPOSURE. WHERE IMPORTED FILL OR BASE MATERIALS ARE IN CONTACT WITH CONCRETE, THE SULFATE CONTENT AND EXPOSURE OF THESE MATERIALS SHALL BE ACQUIRED BY TEST. SUBMIT ALL TEST RESULTS WITH CONCRETE MIX DESIGNS. FAILURE TO PROVIDE SUPPORTING TEST RESULTS FROM AN ACCREDITED TESTING LABORATORY WILL REQUIRE THE CONCRETE MIX TO BE PROPORTIONED FOR VERY SEVERE SULFATE EXPOSURE AT NO ADDITIONAL COST OR DELAY IN THE PROJECT SCHEDULE.

5. CONCRETE SHALL BE PROPORTIONED TO MEET THE PROJECT SPECIFICATIONS AND THE MINIMUM CRITERIA ESTABLISHED IN "TABLE A" (THIS SHEET) BASED ON THE SULFATE EXPOSURE FROM ANY ADJACENT SOILS OR FILL MATERIALS.

6. ADDITIONALLY, EXTERIOR CONCRETE EXPOSED TO FREEZING TEMPERATURES AND/OR SALT OR DEICING CHEMICALS SHALL HAVE AIR ENTRAINMENT AND THE CEMENT CONTENT APPROPRIATE FOR THE EXPECTED EXPOSURE. SEE SPECIFICATIONS FOR MORE INFORMATION.

7. CONCRETE TO MEET DURABILITY REQUIREMENTS OF ACT 301. FREEZING AND THAWING EXPOSURE CATEGORY TO BE [F0] [F1] [F2] [F3]. SULFATE EXPOSURE CATEGORY TO BE [S0] [S1] [S2] [S3]. AND CORROSION PROTECTION EXPOSURE CATEGORY TO BE [C0] [C1] [C2]. PROVIDE A MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS OF (3500 PSI) (4000 PSI) (4500 PSI) (5000 PSI) WITH MAXIMUM WATER/CEMENTITIOUS RATIO OF [0.55] [0.50] [0.45] [0.40].

8. ENSURE REINFORCING BARS CONFORM TO ASTM A615 GRADE 60, DEFORMED.

9. PROVIDE CLASS B TENSION LAP SPLICES PER ACT 318, FOR CONCRETE STRENGTH AND BAR LOCATIONS NOTED.

10. MAINTAIN FULL THICKNESS FOR DEPRESSED OR SLOPED PAVEMENTS.

11. ** DO NOT ADD WATER OR PLAIN CEMENT TO ANY PAVEMENT SURFACE DURING FINISHING OPERATIONS.

12. PERFORM NO FINISHING OPERATION WHILE WATER IS PRESENT ON PAVEMENT SURFACE.

13. STRIKE OFF CONCRETE TO REQUIRED ELEVATIONS AND IMMEDIATELY START FINISHING/PLATTING OPERATIONS. ENSURE FINISHING OPERATIONS ARE NO MORE THAN NECESSARY TO REMOVE IRREGULARITIES AND MEET SPECIFIED TOLERANCES. USE A HIGHWAY STRAIGHTEDGE 10 FOOT WIDE MAXIMUM, UNLESS OTHERWISE ALLOWED BY OWNER'S REPRESENTATIVE. IN ORDER TO CUT OFF HIGH SPOTS AND FILL IN LOW SPOTS, PERFORM FINISHING OPERATIONS NECESSARY TO ENSURE PAVEMENT WILL DRAIN WELL. UNIFORMLY FINISH SURFACE TO TEXTURE PREVIOUSLY APPROVED BY OWNER'S REPRESENTATIVE. ** DO NOT ALLOW SURFACE TO DRY DURING FINISHING OPERATIONS AND BEFORE CURING COMPOUND IS APPLIED. USE EVAPORATION RETARDANT AS NECESSARY TO PREVENT SURFACE DRYING AND PLASTIC SHRINKAGE CRACKS.

14. FOR TOLERANCES CONFORM TO ACT 117 AND ACT 347R, EXCEPT AS NOTED BELOW:

A. PAVEMENT AGGREGATE BASE FINE GRADE <0, -3/4 INCH.

B. MINIMUM PAVEMENT TOLERANCE: -3/4 INCH.

C. WHEN COMPUTING THE AVERAGE OF ALL SAMPLES, SAMPLES WITH A THICKNESS MORE THAN 3/4 INCH ABOVE THE SPECIFIED THICKNESS SHALL BE ASSUMED TO HAVE A THICKNESS OF 3/4 INCH MORE THAN THE SPECIFIED THICKNESS.

D. AVERAGE PAVEMENT THICKNESS TOLERANCE: -0.

E. THICKNESS SAMPLES ARE TO BE RANDOMLY LOCATED FROM EACH PAVEMENT PLACEMENT AND NOT EXCEED 1000 SQUARE FEET OF PAVEMENT SURFACE AREA.

15. START SAWING PAVEMENT CONTRACTION JOINTS USING A "SOFF-CUT" SAW, BLADES AND SKID PLATES AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT RAVELING OR DISLODGING OF AGGREGATES. UNLESS RAVELING OR DISLODGING OCCURS, COMPLETE SAWING OF JOINTS WITHIN THE MAXIMUM ELAPSED TIME LIMIT NOTED BELOW, BUT PREFERABLY LESS. THE SPECIFIED TIME FOR ANY ONE LOCATION STARTS WHEN FINISHING OPERATIONS ARE COMPLETE FOR THAT LOCATION. THE SPECIFIED TEMPERATURE IS THE MAXIMUM AIR TEMPERATURE IN DEGREES FAHRENHEIT (°F) THAT OCCURS WITHIN THE SPECIFIED TIME LIMIT. THE ELAPSED TIME MAY NEED TO BE SHORTENED EVEN MORE IF DRY AND OR WINDY CONDITIONS ARE PRESENT. ENSURE JOINTS ARE CLEANED AFTER SAWING AND REMAIN CLEAN UNTIL SEALED.

MAX DEGREES FAHRENHEIT (°F)

MAX ELAPSED HOURS

85 AND ABOVE

60 - 84

50 - 59

40 - 49

1

2

3

4

16. START CURING AS SOON AS CONCRETE SURFACE WILL NOT BE DAMAGED BY CURING OPERATIONS. CURE CONCRETE CONTINUOUSLY FOR A MINIMUM OF SEVEN CONSECUTIVE DAYS.

17. ENSURE PAVEMENT SURFACE IS PROTECTED FROM EQUIPMENT SCRAPES, IMPACT ABRASIONS, STAINS, ETC. REPAIR PAVEMENT SURFACE AS DIRECTED BY OWNER'S REPRESENTATIVE. VEHICLE AND EQUIPMENT TRAFFIC IS PROHIBITED UNTIL THE COMPLETION OF PAVEMENT CURING PERIOD. ENSURE VEHICLES AND EQUIPMENT ARE DIAPERED TO PREVENT OIL OR OTHER FLUID LEAKS FROM STAINING THE PAVEMENT.

18. REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PROCESS, CIVIL AND VENDOR'S DRAWINGS FOR EMBEDDED ITEMS NOT SHOWN. COORDINATE AND PLACE ALL EMBEDDED ITEMS SHOWN ON THE DRAWINGS OR REQUIRED BY ALL TRADES.

19. PRE-CONSTRUCTION MEETINGS:

A. ATTEND PRE-CONSTRUCTION MEETING TO BE SCHEDULED AT LEAST 7 DAYS BEFORE STARTING MAIN CONCRETE PAVEMENT.

B. ATTENDANCE DESIGNATED BY THE OWNER'S REPRESENTATIVE AND THE FOLLOWING: STRUCTURAL SERVICES INC. REPRESENTATIVE, TESTING AGENCY, CONTRACTOR, CONCRETE SUPPLIER (INCLUDING QUALITY CONTROL PERSONNEL), AND SUBCONTRACTORS FOR SUBGRADE AND BASE PREPARATION, REINFORCEMENT, PUMPING OR OTHER MEANS OF CONVEYING, PLACEMENT, FINISHING, SAWING, FORMWORK, AND OTHER PERTINENT PORTIONS OF WORK.

C. REPRESENTATIVES ARE TO BE PERSONNEL WHO ARE DIRECTLY INVOLVED IN PROJECT AND WHO HAVE AUTHORITY TO CONTROL WORK.

TABLE A (SEE CONCRETE PAVEMENT NOTE #5)

SULFATE EXPOSURE	WATER SOLUBLE SULFATE (SO4) IN WATER PPM	SULFATE (SO4) IN WATER PPM	PORTLAND CEMENT TYPE	MAXIMUM W/C RATIO	CONCRETE PAVEMENTS
NEGLIGIBLE	0.00 < SO4 < 0.10	0 < SO4 < 150	I	0.55	3500
MODERATE	0.10 < SO4 < 0.20	150 < SO4 < 1500	II	0.50	4000
SEVERE	0.20 < SO4 < 2.00	1500 < SO4 < 10,000	V	0.45	4500
VERY SEVERE	SO4 > 2.00	SO4 > 10,000	V PLUS POZZOLAN	0.40	5000

NOTE TO CIVIL ENGINEERING COMPANY

TYPICALLY USE "MODERATE" EXPOSURE FROM TABLE. CONTACT EPM IF EXPOSURE CLASS SHOULD BE CHANGED.

1 SD3

NTS

SLAB PENETRATIONS DETAIL

NOTES:

1. SLAB PENETRATIONS INCLUDE, BUT ARE NOT LIMITED TO, BOLLARDS, MANHOLES, INLETS, CLEANOUTS, WATER VALVES, ETC.

2 - #4 1-1/2" CLR FROM TOP

1-1/2" CLR FROM TOP

PAVEMENT PENETRATION

1" CLR (TYP)

CONSTRUCTION, CONTRACTION OR ISOLATION JOINT. SEE DETAILS 9, 10 OR 11, SHEET SD3 FOR INFORMATION.

3" (MIN)

1'-6" (TYP)

DO NOT LET REINFORCEMENT CROSS JOINT (TYP)

1/2" CLOSED CELL FOAM PLANK WITH REMOVABLE ZIP STRIP, WRAPPED AROUND PENETRATION, FULL DEPTH OF PAVEMENT. REMOVE ZIP STRIP AND FILL WITH SEALANT, SIMILAR TO DETAIL 9B, SHEET SD3 WITH SEALANT FLUSH WITH TOP PAVEMENT.

8 SD3

NTS

PNA DIAMOND DOWEL PLATE DETAIL (TYP)

NOTES:

1. PNA CONTACT INFORMATION IS: 1-800-542-0214, PNA-INC.COM

FIRST SLAB POUR

SECOND SLAB POUR

MID DEPTH

EMBEDDED DIAMOND DOWEL POCKET FORMER, INSTALLED USING FORM TEMPLATE.

DIAMOND DOWEL PLATE DIMENSIONS: 1/4" THICK, 4-1/2" SQUARE, 6.36" AT THE JOINT.

CONCRETE FIRST SLAB POUR

6" MIN

MID DEPTH

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

DIAMOND DOWEL PLATE DIMENSIONS: 1/4" THICK, 4-1/2" SQUARE, 6.36" AT THE JOINT.

24"

12"

24"

10A SD3

10B SD3

#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

9 SD3

NTS

SLAB CONTRACTION JOINT SECTION

PCC JOINT SEE DETAIL 9A, SHEET SD3

CONTRACTION JOINT

SAWCUT TO BE 1/8" WIDE BY 1" MIN. TO 1-1/2" MAX. DEEP "SOFF-CUT".

SEE PAVING PLAN FOR REINFORCEMENT

2" CLR

TOP OF PAVEMENT

SLAB DEPTH = D (SEE PAVING PLAN FOR THICKNESS)

4" MIN BASE

SUBGRADE

COARSE AGGREGATE BASE

PROVIDE SKIM COAT OF FINE AGGREGATE BASE ON TOP OF COARSE AGGREGATE BASE IF SURFACE IS NOT SMOOTH. ENSURE SURFACE IS SMOOTH AND PLANAR IMMEDIATELY PRIOR TO PLACING CONCRETE.

9A SD3

NTS

PCC JOINT DETAIL

NOTES:

1. SAWCUT JOINTS IN ACCORDANCE WITH CONCRETE PAVEMENT NOTE 16, SHEET SD3.

2. WAIT AS LONG AS FEASIBLE TO SEAL JOINTS TO ALLOW CONCRETE SHRINKAGE TO OCCUR.

TOP OF PAVEMENT

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

FULL DEPTH OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

9B SD3

NTS

COMPRESSIBLE CLOSED FOAM PLANK ISOLATION JOINT DETAIL

NOTES:

1. SAWCUT JOINTS IN ACCORDANCE WITH CONCRETE PAVEMENT NOTE 16, SHEET SD3.

2. WAIT AS LONG AS FEASIBLE TO SEAL JOINTS TO ALLOW CONCRETE SHRINKAGE TO OCCUR.

TOP OF PAVEMENT

1" MIN TO 1-1/2" MAX

1/8" SAWCUT

FULL DEPTH OF PAVEMENT

1/2" CLOSED CELL FOAM PLANK W/ REMOVABLE ZIP STRIP. MUST BE FULL DEPTH OF SLAB.

COARSE AGGREGATE BASE

10 SD3

NTS

CONSTRUCTION JOINT PARTIAL PLAN DETAIL

EMBEDDED DIAMOND DOWEL POCKET FORMER, SEE DETAIL 8, SHEET SD3 (TYP).

CONSTRUCTION JOINT

DIAMOND DOWEL PLATE SEE DETAIL 8, SHEET SD3 (TYP)

24"

12"

24"

10A SD3

10B SD3

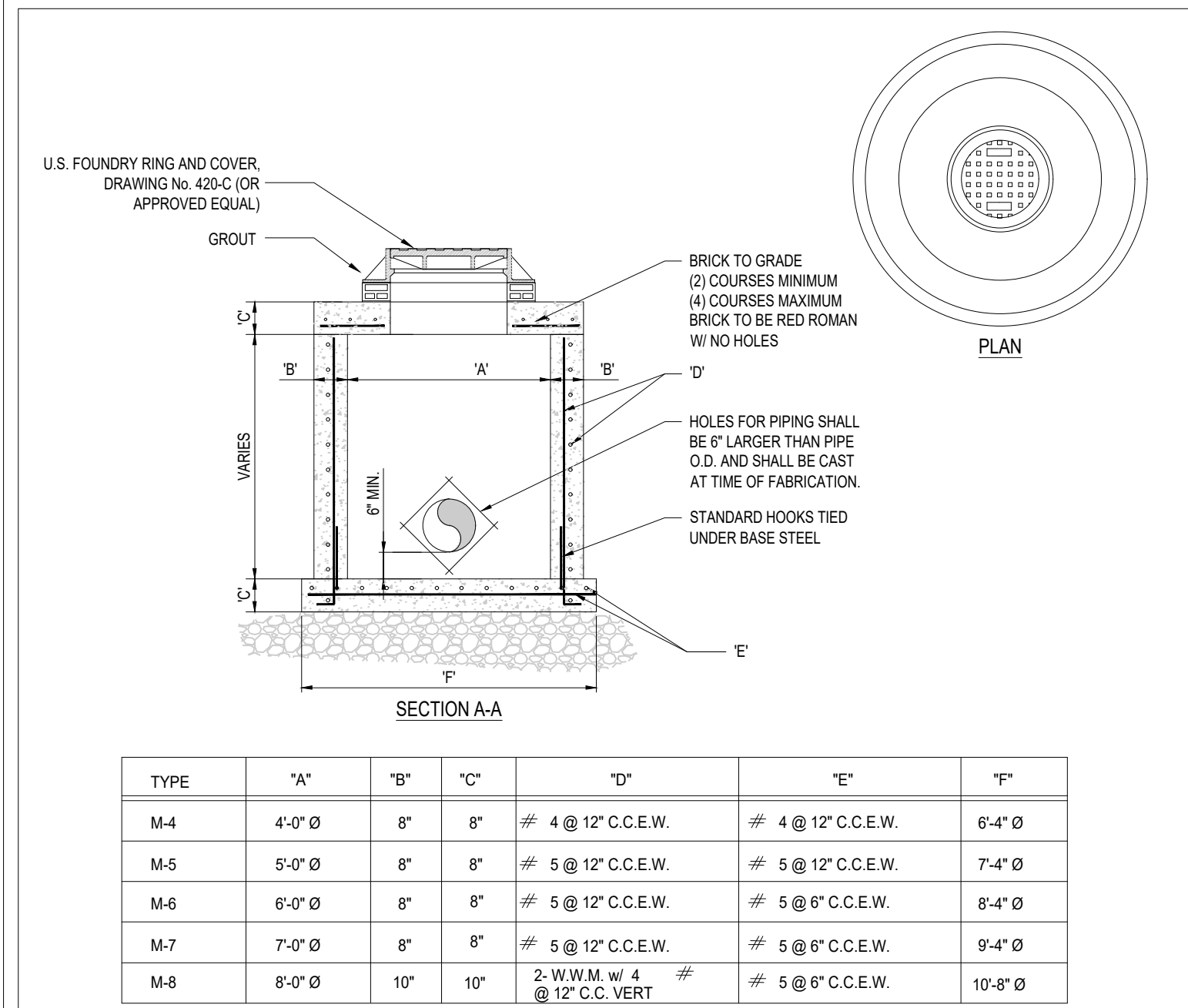
#3 X 24" LONG REBAR SPACED @ 24" O.C. CENTERED WITH JOINT (TYP)

10A SD3

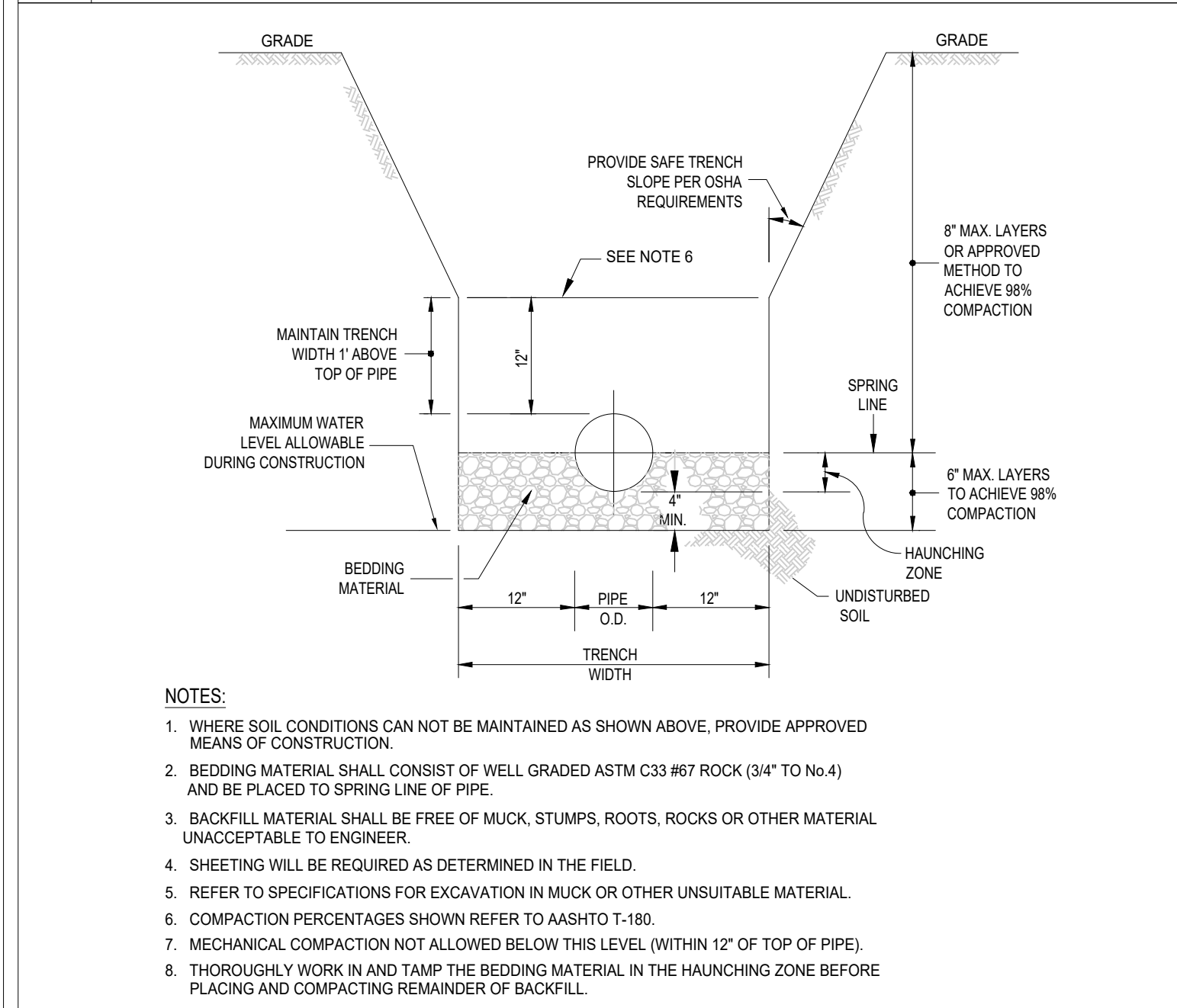
NTS

SLAB CONSTRUCTION JOINT SECTION

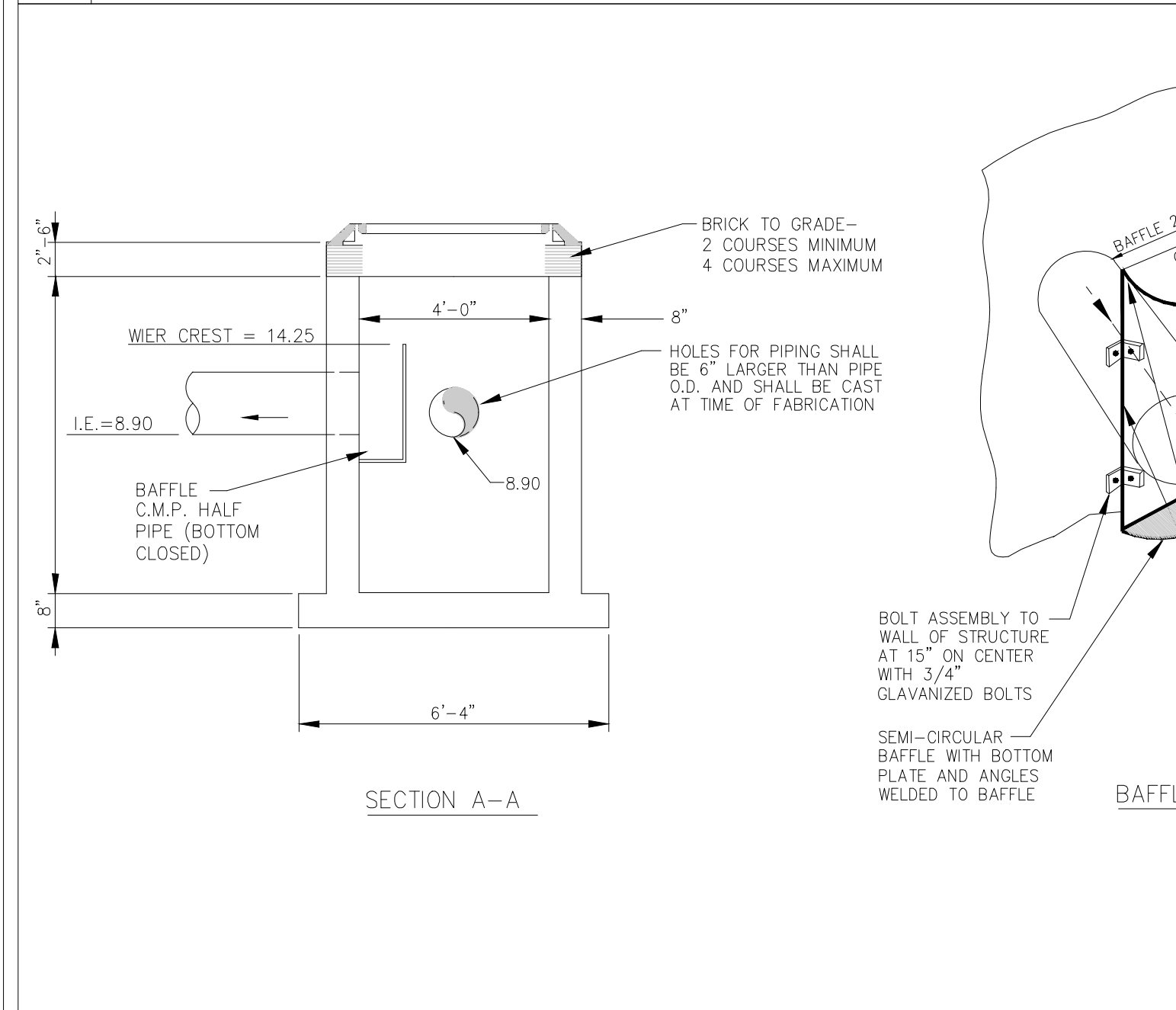
PCC JOINT SEE DETAIL 9A, SHEET SD3



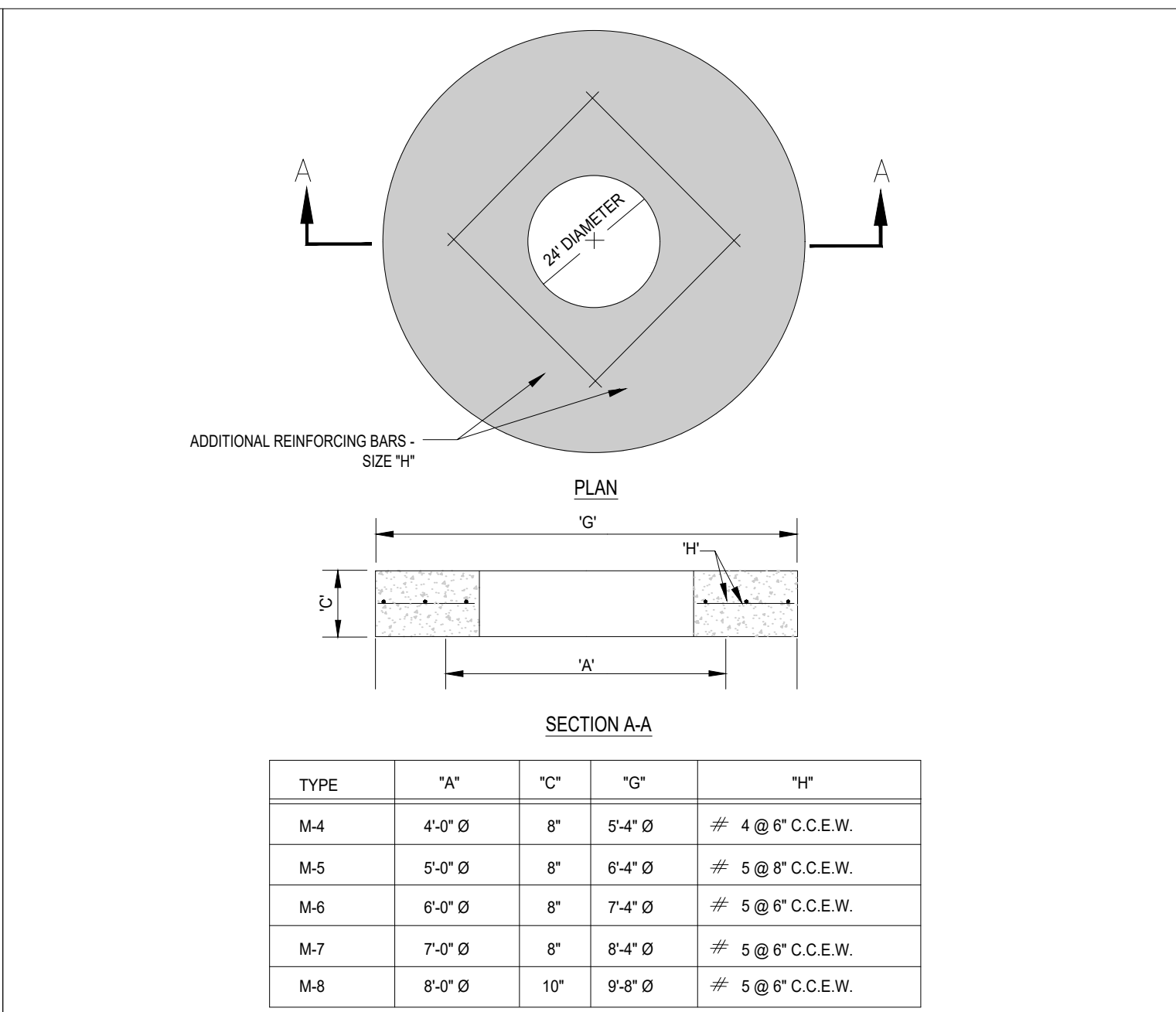
3 PRECAST CIRCULAR DRAINAGE MANHOLE
SCALE: NONE



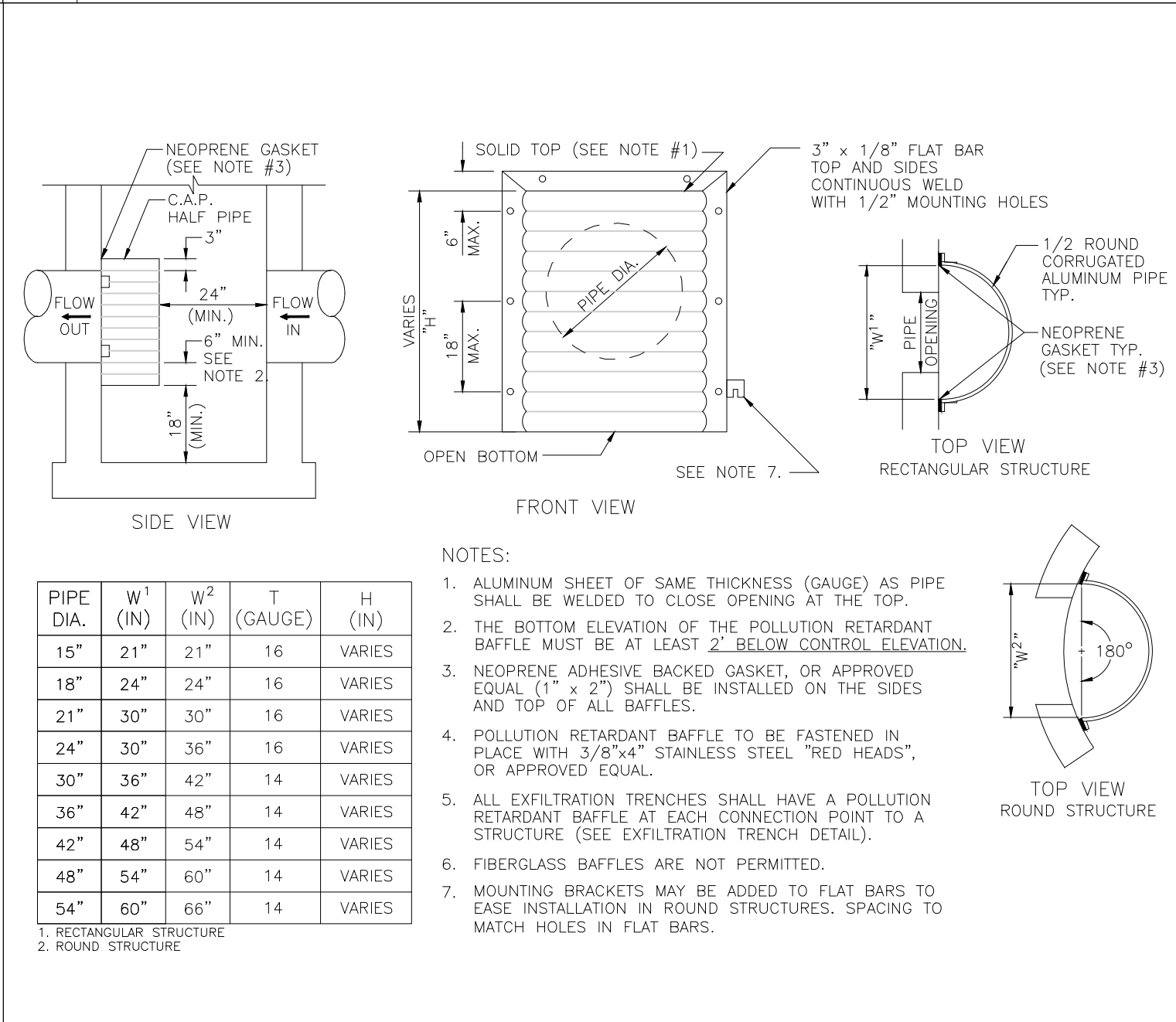
7 TRENCH DETAIL
SCALE:



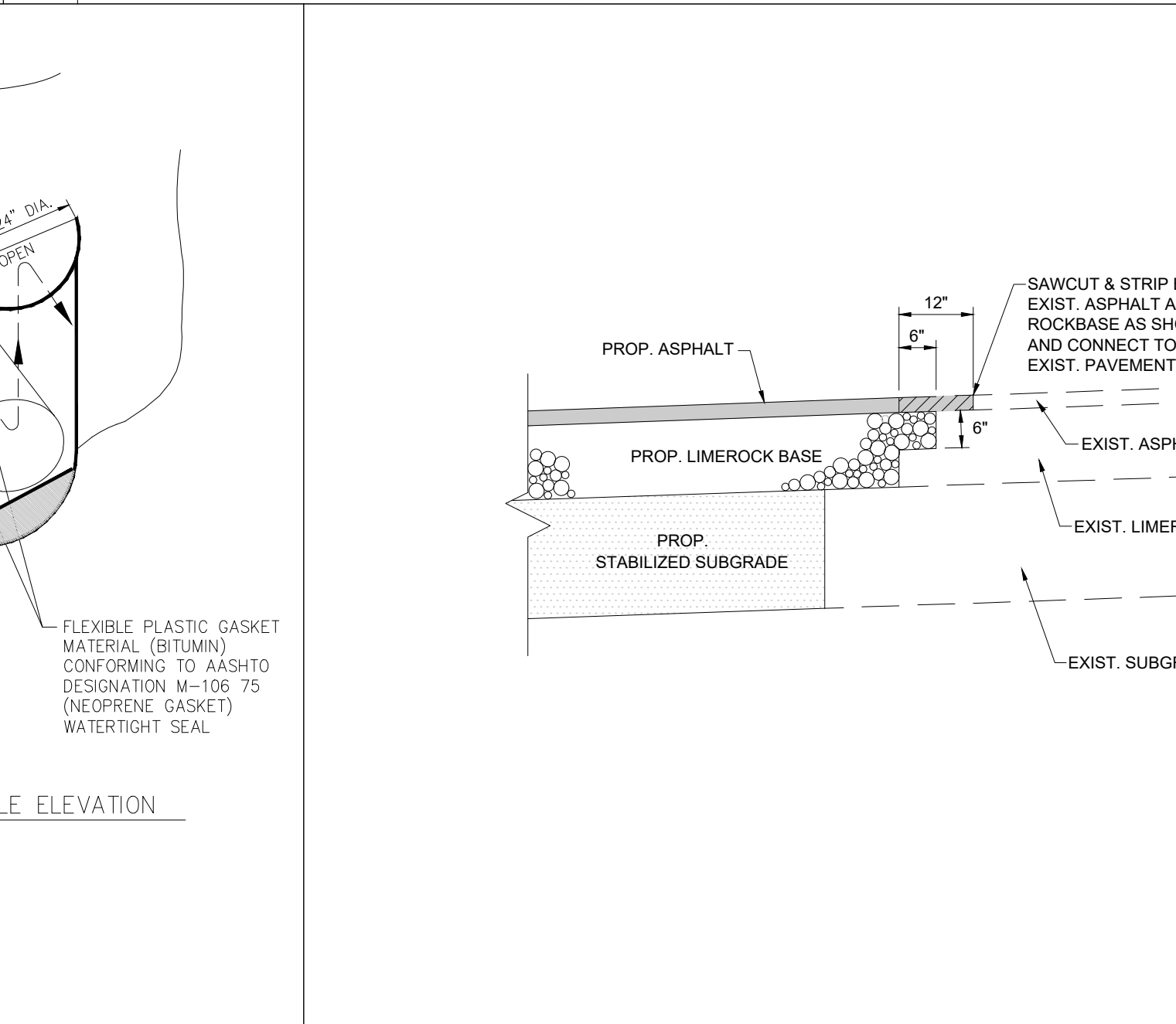
10 INVERTED DEBRIS BAFFLE (CONTROL STRUCTURE)
SCALE: NONE



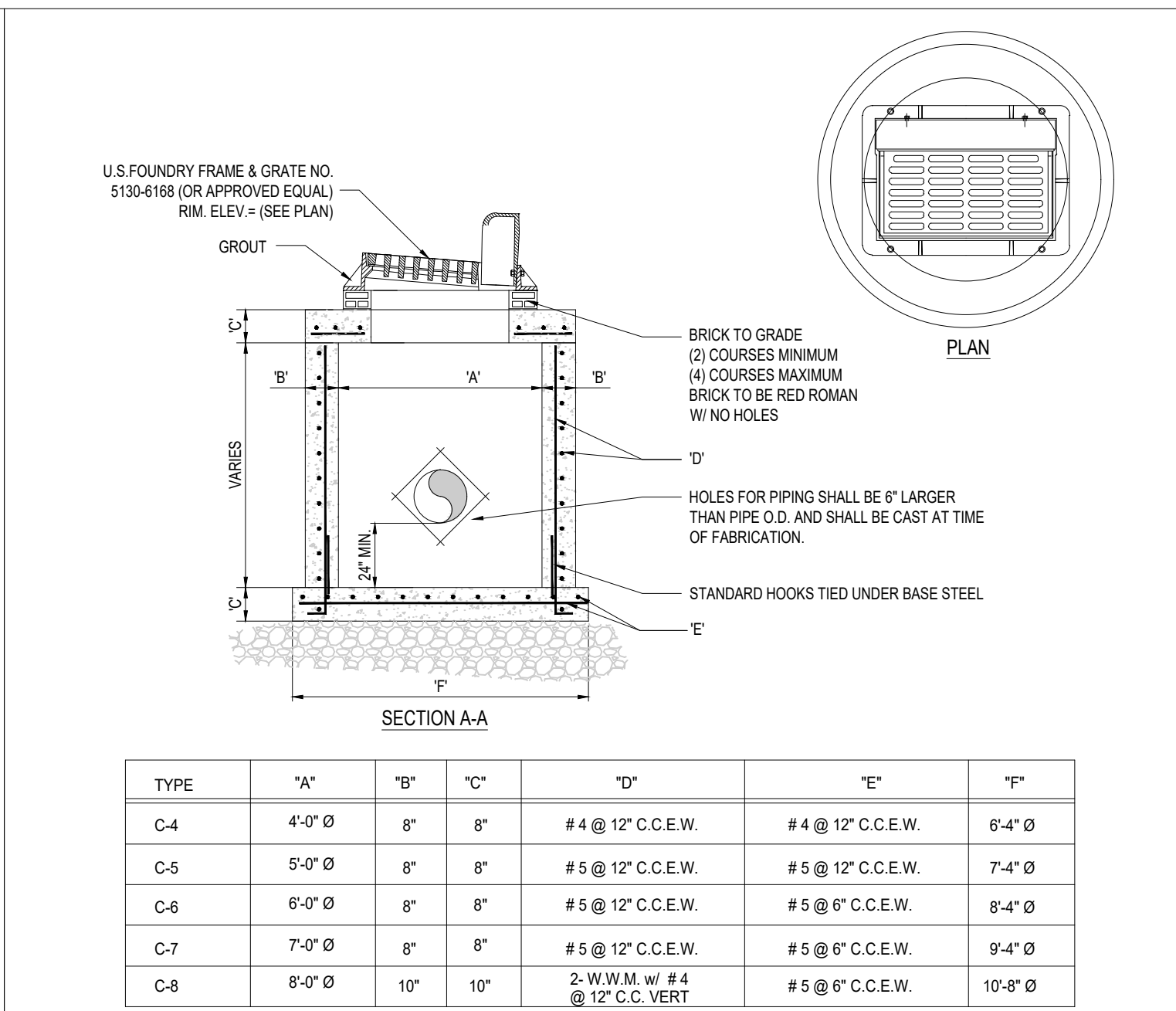
4 PRECAST CONCRETE-TOP SLAB FOR DRAINAGE MANHOLES
SCALE: NONE



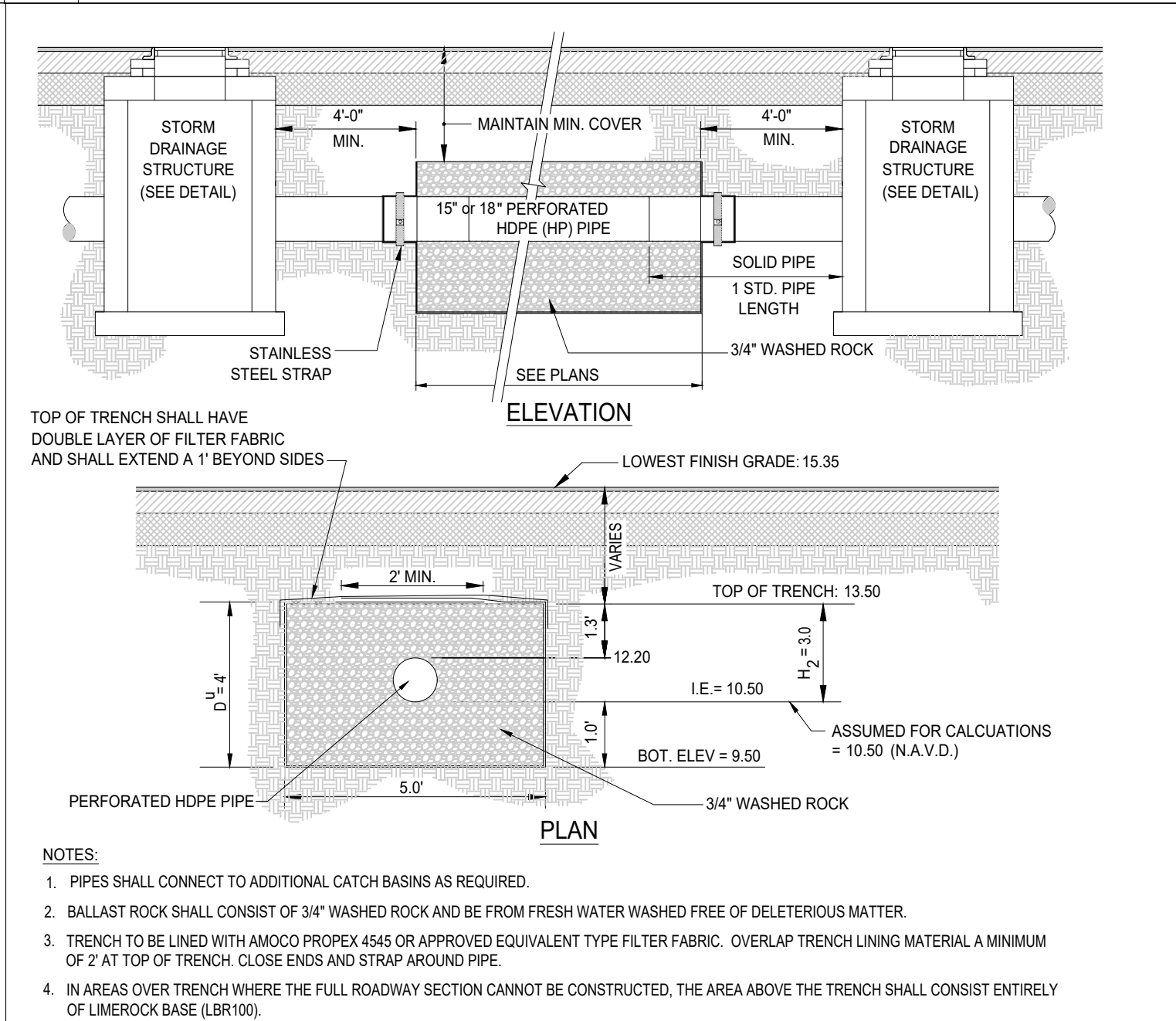
8 POLLUTION RETARDANT BAFFLE DETAIL
SCALE: NONE



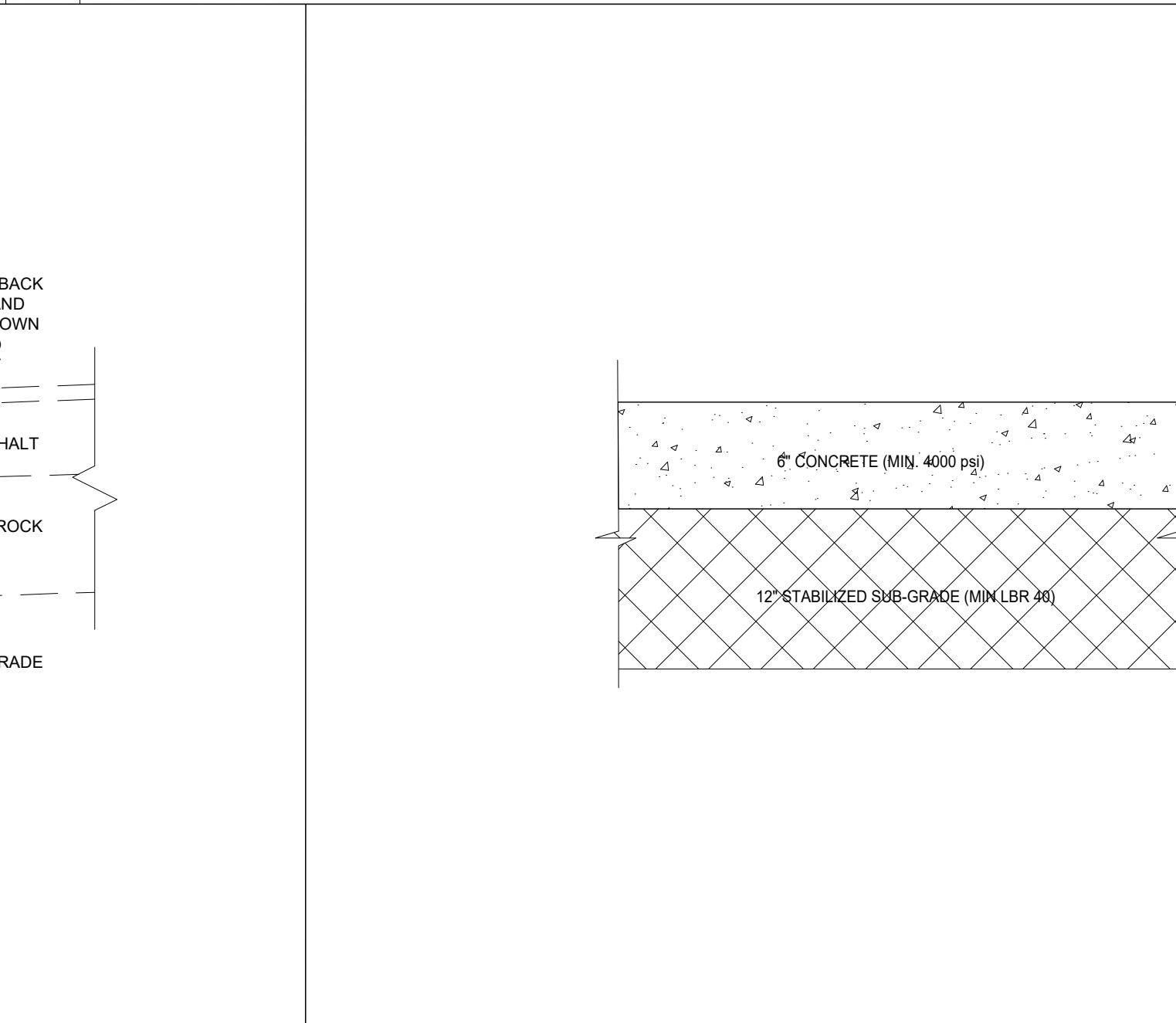
11 SAWCUT/MATCH ASPHALT PAVEMENT DETAIL
SCALE: NONE



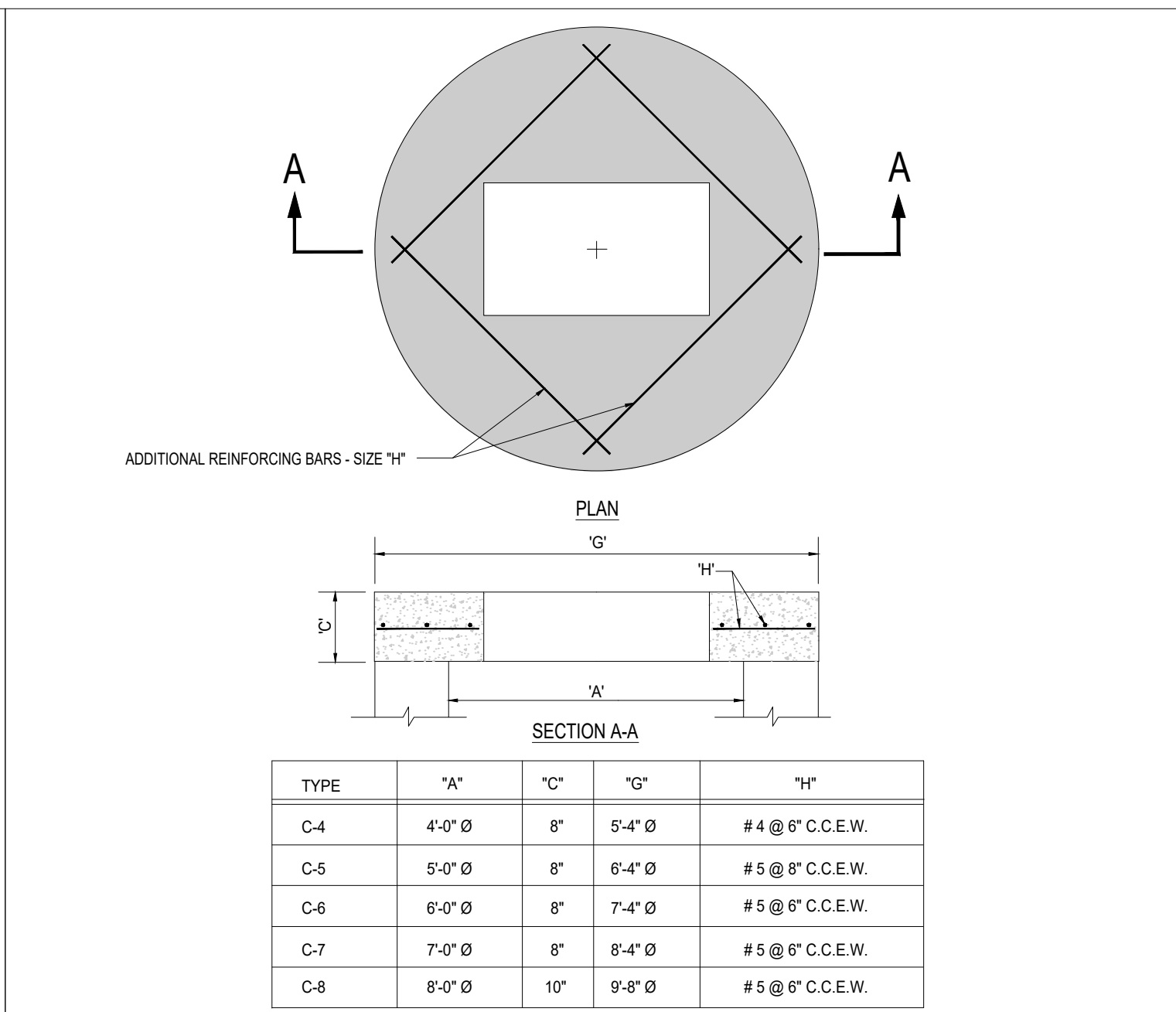
5 PRECAST CIRCULAR CURB INLET
SCALE: NONE



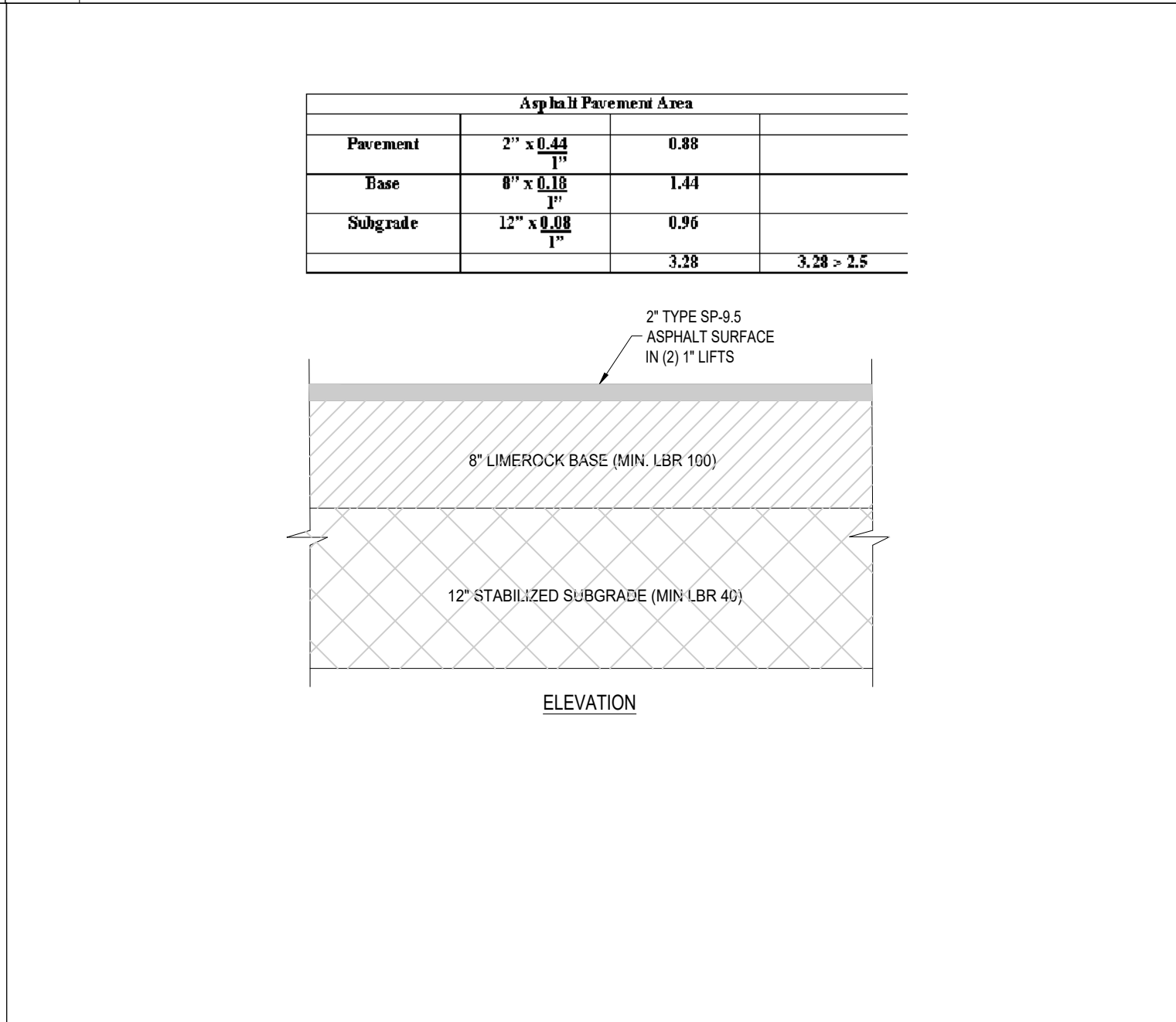
9 EXFILTRATION TRENCH
SCALE: NONE



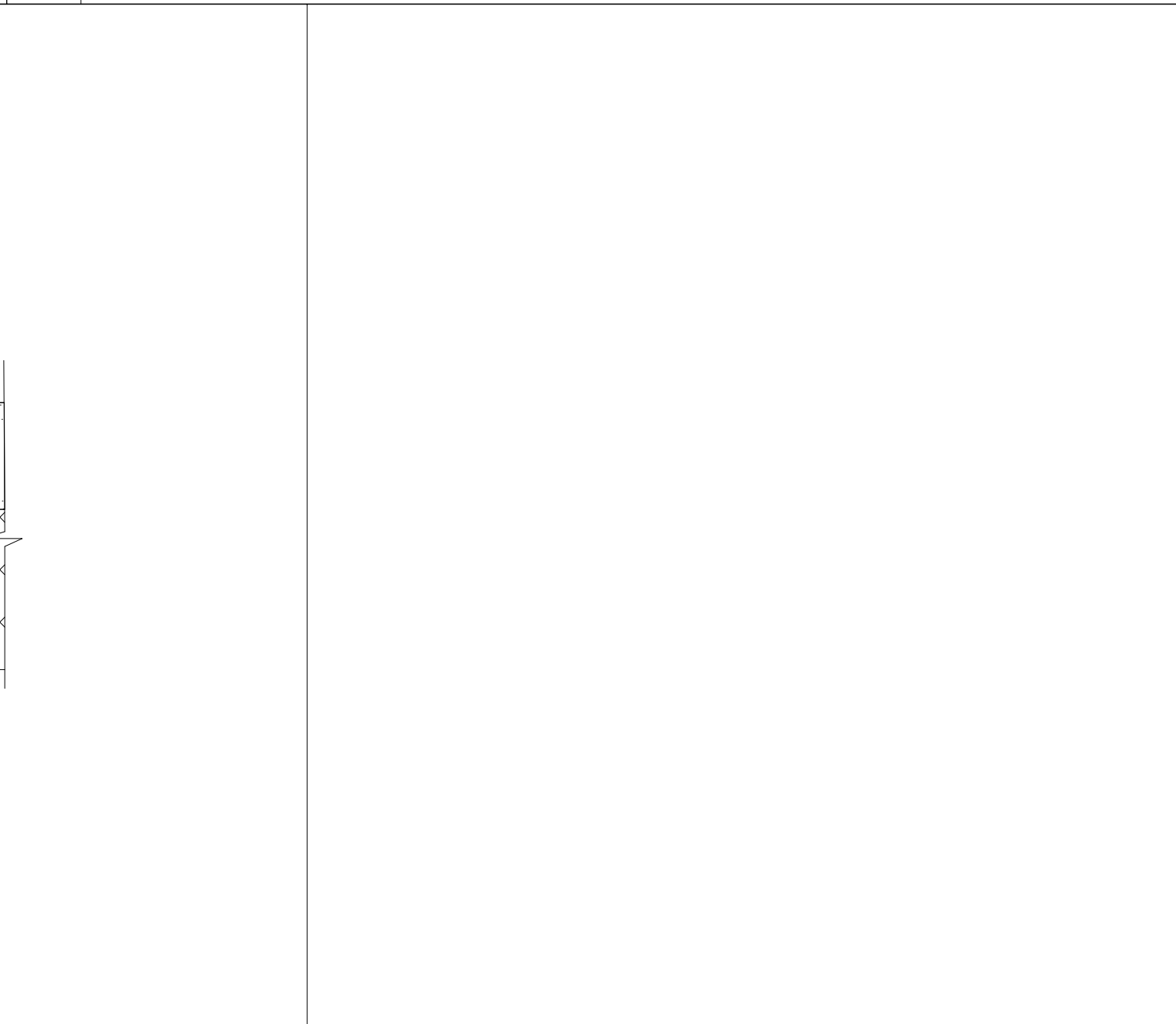
8 CONCRETE PAVEMENT
SCALE: NONE



6 PRECAST CONCRETE-TOP SLAB
SCALE: NONE



9 ASPHALT PAVEMENT DETAIL
SCALE: NONE



CONCRETE PAVEMENT
SCALE: NONE

CONCEPTUAL PLAN ONLY
PLANS REFERENCE NAVD '88
TO COVERT TO NGVD ADD 1.509'

BRANDON OLMER
PROFESSIONAL ENGINEER
No. 66545
FLORIDA LICENSE NO. 66545
www.thomasthomasgroup.com

THOMAS
TERRACE
125 W. INDIAN TOWN RD., SUITE 206
PALM SPRINGS, FLORIDA 33486
PH: (561) 283-7721
FX: (561) 283-7633
www.thomasthomasgroup.com

CONSTRUCTION DETAILS
RACETRAC MARKET
10th Avenue North @ Florida Mango Road
Palm Springs, Florida
Palm Beach County

DATE
SCALE
DRAWN-BY
DRAWING NAME:
FJ180019-RT Standard Details.dwg

C5.0
SHEET NO.

AS SHOWN
MJL
RACETRAC PETROLEUM, INC. IS
PROHIBITED.

DATE
NO.
27528

July 26, 2019

(Resubmittal August 29, 2019)

Village of Palm Springs

Planning, Zoning & Building Director

Kim Glas-Castro

226 Cypress Lane

Palm Springs, FL 33461

Kglas-castro@vpsfl.org

Re: Tire Kingdom – Project Narrative

NW Corner of 10th Avenue and Florida Mango

Site Plan Approval

Revision 1

Project History & Background

This site is located at 2601 10th Avenue North, on the Northwest corner of 10th Avenue and Florida Mango, approximately one mile west of I-95. The parcel is identified as PCN 70-43-44-20-39-000-0010 & 70-43-44-20-39-000-0020 and is composed of 8.90 acres. The site was annexed into the Village of Palm Springs in 2010 and was assigned a Commercial Land Use designation and a Commercial General (CG) Zoning designation.

The site consists of an existing four-story office building with approximately 88,707 SF and the newly constructed 4081 SF Chase Bank which was approved by Resolution 2017-26. The existing office building was owned by the Health Care District when it was purchased by the current owners. The Health Care District vacated the property and the owners have actively marketed the building with a goal of continuing the use of the building for office. Due to the site location, floor plate size of the existing building and a lack of demand from the market for +/- 88,000 SF of office users the building can no longer be utilized.

Subsequently, the property owners must consider redevelopment of the site which they actively pursued in 2017 with the request to place Chase Bank in a stand-alone building on the property corner. Chase was the last remaining tenant in the building and with their relocation the building is 100% vacant. This application continues the unique opportunity to redevelop this site to the benefit of the Village and local residents.

Application Request

This application has been submitted to request Site Plan approval and Special Exception for an Automobile Service Station (Automotive repairs, minor). The proposed Site Plan is part of a Master Plan that was submitted on June 28th, 2019 and is currently under review by the Village of Palm Springs. The proposed Master Plan consists of the subject site, a service station/convenience store and 50,000 sf office/retail/medical building. The proposal would require the demolition of the existing office building to accommodate the construction of a 5,682 SF automobile minor service building. The development site (affected area) is approximately 1.5 acres and would be directly West of the

proposed RaceTrac gas station and convenience store with the building frontage oriented towards 10th Avenue North.

The following requests are included within this application:

Section 34-824(a)(10) Special Exception request for a Service Station, Full Service

Section 34-272(a)(5) Special Exception request for an Automobile Minor Service Building
Special Exception Criteria – Chapter 34, Section 34-608

1. The proposed special exception use is consistent with goals, objectives, and policies of the village’s comprehensive plan.

The land use designation for this property is Commercial which is consistent with Objective K of the Village’s Comprehensive Plan. The proposed use of an Automotive Repair – Minor building on a portion of the property provides for the redevelopment of an underutilized commercial property within the Village of Palm Springs. Redevelopment limits urban sprawl, provides a service to both the local and regional residents, utilizes existing infrastructure and promotes a compact urban form.

2. The proposed special exception is consistent with the land development and zoning regulations and all other portions of this Code.

The special exception request and site plan is consistent with the Village’s land development and zoning regulations. The site has been designed to meet all applicable development regulations for setbacks, parking, landscape, open space, pervious area and FAR and does not require any variances. It is important to note that although an Automotive Repair – Minor building only utilizes 1.51 acres of the 8.90 acre site, it will provide an opportunity for the existing non-conformities to be removed and future redevelopment on the remaining parcels will bring the site in compliance with development regulations.

3. The proposed special exception use is compatible with the character and use (existing and future) of the surrounding properties in its function; hours of operation, type and amount of traffic to be generated; building location, mass, height and setback; and other relevant factors peculiar to the proposed special exception use and the surrounding property.

The proposed use of a portion of this site for an Automotive Repair Service building is an ideal location due to the site’s proximity to the proposed Gas Station directly to the east and to I-95, access at an intersection of two major roadways, and with frontage of the commercial corridor of 10th Avenue North. With the removal of the existing office building, the intensity of the overall Master Plan is significantly less from over 88,000 SF of building to less than 62,000 SF of building area. The proposed use is consistent with the character of corridor and with the existing Commercial Land Use and General Commercial Zoning district. This site has historically but utilized for commercial uses, this application simply accommodates for the continued utilization of the property for the highest and best use.

4. The establishment of the proposed special exception use in the identified location does not create a concentration or proliferation of the same or similar type of special exception use, which may be deemed detrimental to the development or redevelopment of the area in which the special exception use is proposed to be developed.

Although there are other automobile service stations in the vicinity of this site location, there is a significant demand for this use along the 10th Avenue corridor and would provide a service to both local and regional residents. The establishment of this use on the property is the continuance for the redevelopment of the overall property which is

currently not providing benefit to the Village. The Automobile Service Station use will provide infrastructure improvements on the property in way of drainage, utilities, a new turn lane and lighting to accommodate the continued redevelopment of the property. Other east/west corridors in Palm Beach County east of Military Trail, with similar business use make-up and circulation, have clusters or groups of auto-repair service stations. It's not uncommon to find multiple auto service stations within a mile of each other, which occurs along Northlake Blvd, Indiantown Rd, Blue Heron Blvd and Hypoluxo Rd. The increasing usage and established vehicular circulation along 10th Ave N, sustain a demand for auto-repair shops.

In addition, the proposed use provides the Village residents with a service on a developed site that has otherwise remained underutilized with a vacant office building for the past few years.

5. The proposed special exception use does not have a detrimental impact on surrounding properties based on:

a. The number of persons anticipated to be using, residing, or working on the property as a result of the special exception use;

The proposed use will not have detrimental impact on the surrounding properties as the use is located near the center of the property and fronting on 10th Avenue. The building is situated an appropriate distance from the West property line and 400' away from the North property boundary. The existing curb cut locations are utilized for ingress and egress and keep day to day traffic away from neighboring residents.

b. The degree of noise, odor, visual, or other potential nuisance factors generated by the special exception use; and

The use is strategically located in the center of the property and fronting along 10th Avenue. The redevelopment of the site will allow for the site aesthetic to be improved with new landscape, lighting and architectural character consistent with the area. There will be no nuisance generated by this proposed use.

c. The effect on the amount and flow of traffic within the vicinity of the proposed special exception use.

The proposed site redevelopment has no significant impacts on regional roadways. The project driveways will be redeveloped to comply with all Palm Beach County requirements.

6. That the proposed special exception use:

a. Does not significantly reduce light and air to adjacent properties.

The proposed plan will not reduce light or air to adjacent properties. The buildings will be smaller in scale than the existing office building providing for more sunlight and air to penetrate the site from the South towards the neighbors to the North of the site. All light levels for the proposed use will be consistent with Village requirements and can be reviewed on the photometric plan provided within this submittal. There is not detriment to the adjacent properties.

b. Does not adversely affect property values in adjacent areas.

This development will not have a negative impact on the surrounding properties' value. The development will provide for the opportunity of new investment in the property that will stimulate property values, provide for new architecture while updating the landscape and lighting.

c. Would not be deterrent to the improvement, development or redevelopment of surrounding properties in accord with existing regulations.

The proposed development will provide the framework for the continued redevelopment of the surrounding properties. Development of the proposed plan creates a vehicular and pedestrian circulation pattern that will promote access to the undeveloped portion of land. The new “loop” roadway system will be connected and provide opportunities for utilities to be provided so that the entire site may redevelop. The existing site does not function in this manner.

d. Does not negatively impact adjacent natural systems or public facilities, including parks and open spaces.

This proposed development is not adjacent to and in no way impacts any natural systems or public facilities, including parks and open spaces.

e. Provides pedestrian amenities, including, but not limited to, benches, trash receptacles, and/or bicycle parking.

The proposed plan provides for increased pedestrian access to the property and connectivity between the proposed and existing uses. With this development, the design incorporates a new pedestrian connection to the sidewalk along 10th Avenue which does not exist today. This sidewalk connection parallels the main entrance driveway and will provide connectivity to all the proposed uses on the site.

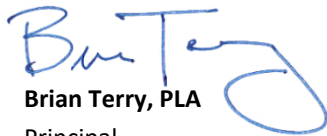
Section 34-328(1) Wall, under-canopy and window signs.

Signage Compliance

The primary building façade facing 10th Avenue is allowed per code up to 57.59 SF based on the building façade area (20'-8" by 23'-4") x 0.12. The request is to allow a total of 49.84 SF of signage which will include the wall sign located on the South elevation. Please refer to the Signage Program included in this application to reference the signs noted below.

Thank you for your consideration of this application. If you have any questions, please don't hesitate to contact me at 561-249-0940.

Sincerely,



Brian Terry, PLA

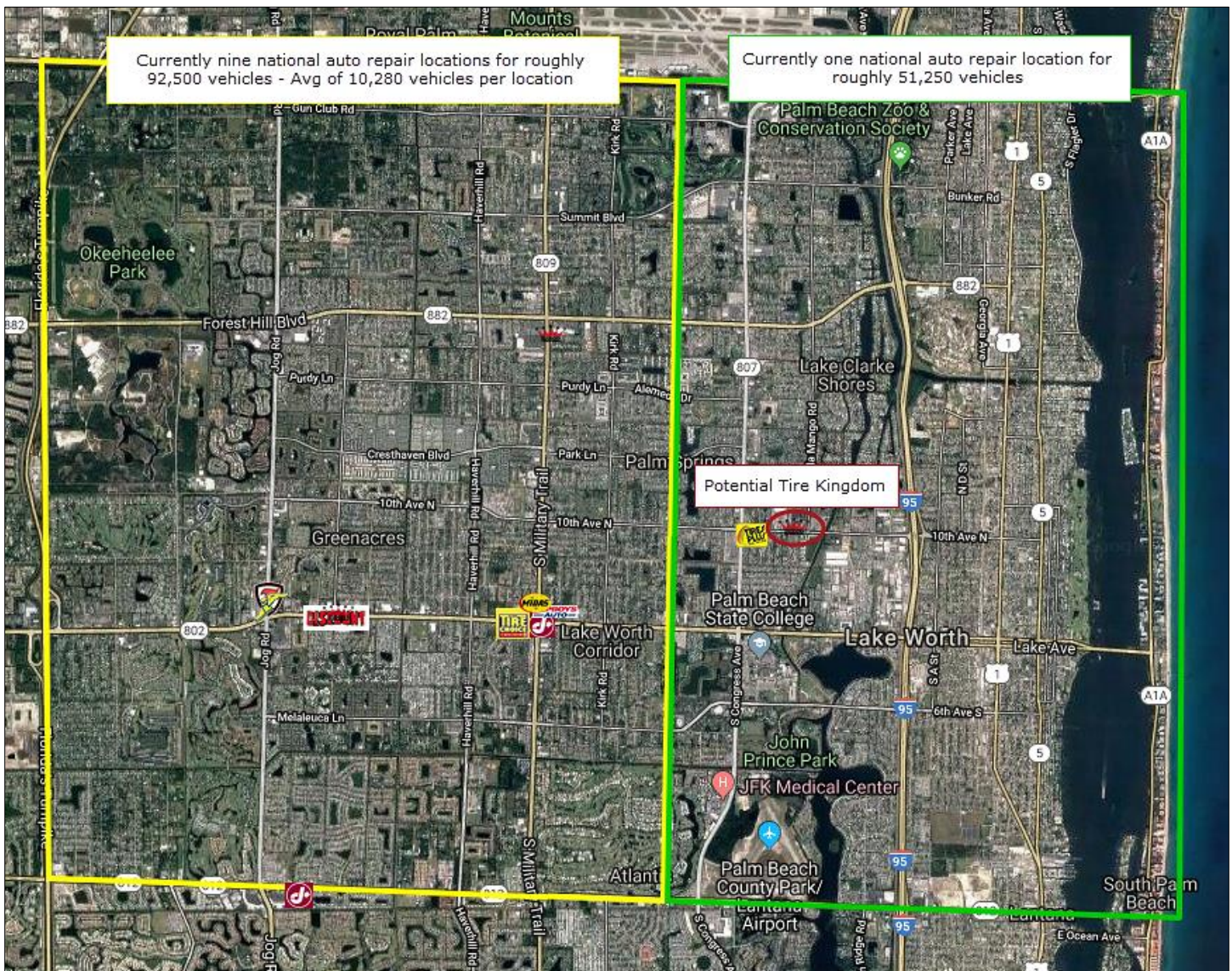
Principal

Insite Studio, Inc.

TIRE KINGDOM – PALM SPRINGS, FL

The population of Palm Springs, Lake Clarke Shores, Lake Worth Beach, Palm Beach, and West Palm Beach are underserved for national auto repair facilities. A TBC branded (Tire Kingdom) store will provide the communities with a strong nationwide brand that has been in the South Florida market since 1972.

Tire Kingdom offers tire price matching and any warranty work is accepted at all of our 700 plus locations throughout the US.





**Department of Engineering
and Public Works**

P.O. Box 21229

West Palm Beach, FL 33416-1229

(561) 684-4000

FAX: (561) 684-4050

www.pbcgov.com



**Palm Beach County
Board of County
Commissioners**

Mack Bernard, Mayor

Dave Kerner, Vice Mayor

Hal R. Valeche

Gregg K. Weiss

Robert S. Weinroth

Mary Lou Berger

Melissa McKinlay

County Administrator

Verdenia C. Baker

August 23, 2019

Shaun G. MacKenzie, P.E.
MacKenzie Engineering and Planning, Inc.
1172 SW 30th Street, Suite 500
Palm City, FL 34990

**RE: RaceTrac Market-10th Ave & Florida Mango
Project #: 190711 (Previously 181007)
Traffic Performance Standards Review**

Dear Mr. MacKenzie:

The Palm Beach County Traffic Division has reviewed the **RaceTrac Market-10th Ave & Florida Mango** Traffic Impact Statement, dated July 24, 2019, pursuant to the Traffic Performance Standards in Article 12 of the Palm Beach County Unified Land Development Code (ULDC). The project is summarized as follows:

Municipality:	Palm Springs
Location:	NWC of 10 th Avenue and Florida Mango Road
PCN:	70-43-44-20-39-000-0010/-0020
Access:	One full access driveway connection onto Florida Mango Road and one full access driveway connection onto 10 th Avenue (As used in the study and is NOT an approval by the County through this letter)
Existing Uses:	Drive-In Bank = 9,033 SF General Office = 86,272 SF
Proposed Uses:	Replace existing with: Medical Office or Gen. Commercial = 50,000 SF Drive-In Bank = 4,081 SF Gas Station = 20 FP Convenience Store = 5,488 SF Tire Store = 6,496 SF
New Daily Trips:	2,732
New Peak Hour Trips:	141 (70/71) AM; 165 (109/56) PM
Build-out:	December 31, 2022

Based on our review, the Traffic Division has determined the proposed development meets the Traffic Performance Standards of Palm Beach County, subject to the following comments:

1. No Building Permits for the site may be issued after December 31, 2022.
2. The Property Owner shall eliminate the existing eastern egress driveway on 10th Avenue.
3. The Property Owner shall construct westbound right-turn lane at the project driveway on 10th Avenue to county standards, or as approved by the County Engineer.

"An Equal Opportunity
Affirmative Action Employer"



Shaun G. MacKenzie, P.E.
August 23, 2019
Page 2

It is highly recommended that the Property Owner construct a north approach right turn lane at the project entrance on Florida Mango Rd. The right turning traffic is very close to county standards for a right turn lane. This driveway is also expected to experience high volume of traffic.

Please note the receipt of a Traffic Performance Standards (TPS) approval letter does not constitute the review and issuance of a Palm Beach County Right-of-Way (R/W) Construction Permit nor does it eliminate any requirements that may be deemed as site related. For work within Palm Beach County R/W, a detailed review of the project will be provided upon submittal for a R/W permit application. The project is required to comply with all Palm Beach County standards and may include R/W dedication.

The County traffic concurrency approval is subject to the Project Aggregation Rules set forth in the Traffic Performance Standards Ordinance.

The approval letter shall be valid no longer than one year from date of issuance, unless an application for a Site Specific Development Order has been approved, an application for a Site Specific Development Order has been submitted, or the approval letter has been superseded by another approval letter for the same property.

If you have any questions regarding this determination, please contact me at 561-684-4030 or email QBari@pbcgov.org.

Sincerely,

A handwritten signature in blue ink that reads "Quazi Bari".

Quazi Bari, P.E.
Senior Professional Engineer
Traffic Division

QB:HA:rb

cc:

Kim Glas-Castro, Director of Planning, Zoning & Building, Village of Palm Springs
Hanane Akif, E.I., Project Coordinator II, Traffic Division
Steve Bohovsky, Technical Assistant III, Traffic Division

File: General - TPS - Mun - Traffic Study Review
F:\TRAFFIC\HA\MUNICIPALITIES\APPROVALS\2019\190711 - RACETRAC - 10TH AND FLORIDA MANGO.DOCX



13081 MILITARY TRAIL
DELRAY BEACH, FLORIDA 33484-1105

Board of Supervisors
James M. Alderman
Stephen Bedner
Jeffrey P. Phipps, Sr.
Harry Raucher
John I. Whitworth III
Executive Director
Tommy B. Strowd, P.E.
Attorney
Mark A. Perry, P.A.

July 8, 2019

Iramis Cabrera
Village of Palm Springs
226 Cypress Lane
Palm Springs, Florida 33461-1699

**Re: RACE TRAC PETROLEUM | 2601 10th Avenue North
NW Quad of 10th Avenue North and Florida Mango Road
Model Land Co; A Portion of Tract 8 and 9 Less Right-of-Way for 10th Avenue
PCN: 70-43-44-20-01-008-0080
LWDD Record No. RI-18-0102**

Dear Ms. Cabrera:

This petition, located at the NW Quad Florida Mango Road and 10th Avenue North, is located west of Lake Worth Drainage District's (LWDD) E-4 Canal and is not adjacent.

This project may require a Right-of-Way Permit for a Drainage Outfall Connection if the site drains directly or indirectly to one of LWDD's canals.

LWDD has no objection to the certification of this petition.

Sincerely,

Anne H. Perry

Anne H. Perry
Right-of-Way Specialist

September 11, 2019

**To: Iramis Cabrera, VPS Planner
Chad Girard, P.E., Assist. Public Service Director**

From: Tara Bamber, PE 

**Re: Tire Kingdom at 2601 N 10th Avenue
Site Plan Approval Letter
Engenuity Group Project No. 6001.80**

We reviewed the following documents received on 9-4-19

1. Conceptual Civil Plans, 5 sheets (C1- C4), signed & sealed 8-22-19, by Thomas Engineering
2. Landscape Plan, 5 sheets (TD.1, LP.1-LP.4), revised 8-29-19, by Insite Studio
3. Site Plan, 1 sheet (SP.1), revised 8-29-19, by Insite Studio
4. Traffic Impact Analysis, 109 sheets, signed & sealed, 7-24-19, by Mackenzie Engineering & Planning, Inc
5. Traffic Performance Standards Review Letter, dated 8-23-19, PBC
6. Project Narrative, 4 sheets, resubmitted 8-29-19, by Insite Studio
7. Comment Response Letter TK, 5 sheets, dated 8-29-19, by Insite Studio

We recommend Site Plan approval with the following conditions:

1. Provide a topographic boundary survey.
2. Provide SFWMD permit for the Master Plan. Provide Master Plan at 2601 N 10th Avenue plans and Drainage Report at time of Civil/Utility review for individual parcels.
3. The site is in the South Florida Water Management District (SFWMD) C-51 Basin. Follow basin rules in the drainage calculations.
4. The final Civil/Utility permit approval shall be contingent on Site Plan and Civil/Utility permit approval for the Master Plan at 2601 N 10th Avenue.

If you should have any questions, please give me a call at (561) 655-1151

**Cc: Lisa Tropepe, PE
Ed Horton**

P.B.C. Fire-Rescue
Plan Review Critique

Walter J. Lenhart
Business: 561-233-0056
Fax: 561-233-0057

Permit: FP#:

Date: 9/14/19; 11/16/19

Project: Tire Kingdom

Address: 2601 10th Avenue North

Occupancy: Special Purpose Industrial

Construction Type:

<u>Page</u>	<u>Comment</u>	<u>Code</u>
C-3	Fire sprinkler system is required. show the size of the fire line going to the building. The fire department connection and fire hydrant location must be shown. A fire hydrant must be located At the Tire Kingdom site.	
SP.1	The 18 ft. roadway width dimension must be from face of curb to face of curb at the one way drive. Three copies of the civil plans must be submitted to the PBC Fire Rescue Water Officer Pedro Segovia For review. The review fee is \$500.00. Pedro's contact information is (561) 233-0054 or PSegovia@pbcgov.org	



Village of Palm Springs
Land Development Department
226 Cypress Lane, Palm Springs, FL 33461
(561) 965-4016 Fax (561) 439-4132

LETTER OF TRANSMITTAL

To: Matthew Hammond/ Chad Girard/Ed Horton
Tom Ceccarelli/Frank Castro
Walter Lenhart

Date: November 5, 2019

RE: Tire Kingdom at 2601 10th Avenue North- Site Plan

2nd submittal 8-30-2019
3rd submittal 10-31-2019

Attached are:

x Prints

☐ Report

☐ Other _____

☐ Reproducibles

☐ Specifications

☐ Correspondence

☐ Applications

COPIES	DATE	DESCRIPTION
1	10/31/2019	Site Plan Package/Civil Plans

Transmitted:

☐ For Approval

☐ For Revisions

☐ Other _____

☐ As Requested

☐ For Your Use

xxxx For Review and Comment

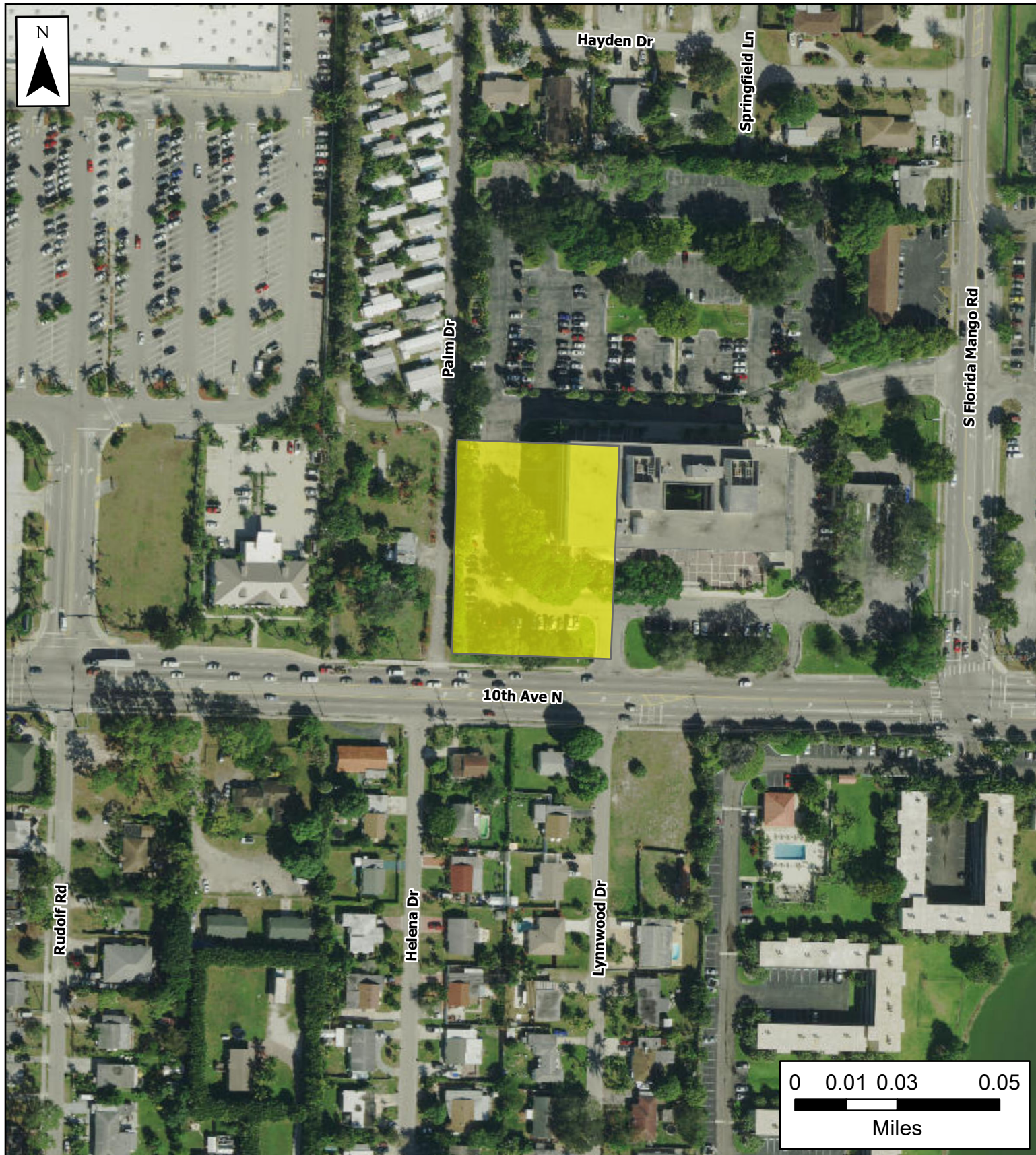
REMARKS:

Upon review, please forward any comments regarding the attached materials to me. Should you have any questions regarding the attached materials, do not hesitate to contact me at (561) 434-5090 or icabrera@vpsfl.org. Thank you for your assistance.

Line Stop on 10th Ave needs to be more west
in grassy area so new valve will not be in pavement.
Water main from that point can 45 bend into pavement area.
Need easement for new sanitary sewer.

Signed: Iramis Cabrera

@ Head 11-8-2019



Village of Palm Springs

2601 10th Ave North
Tire Kingdom

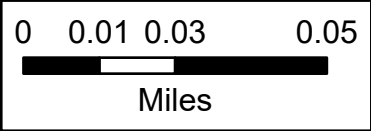
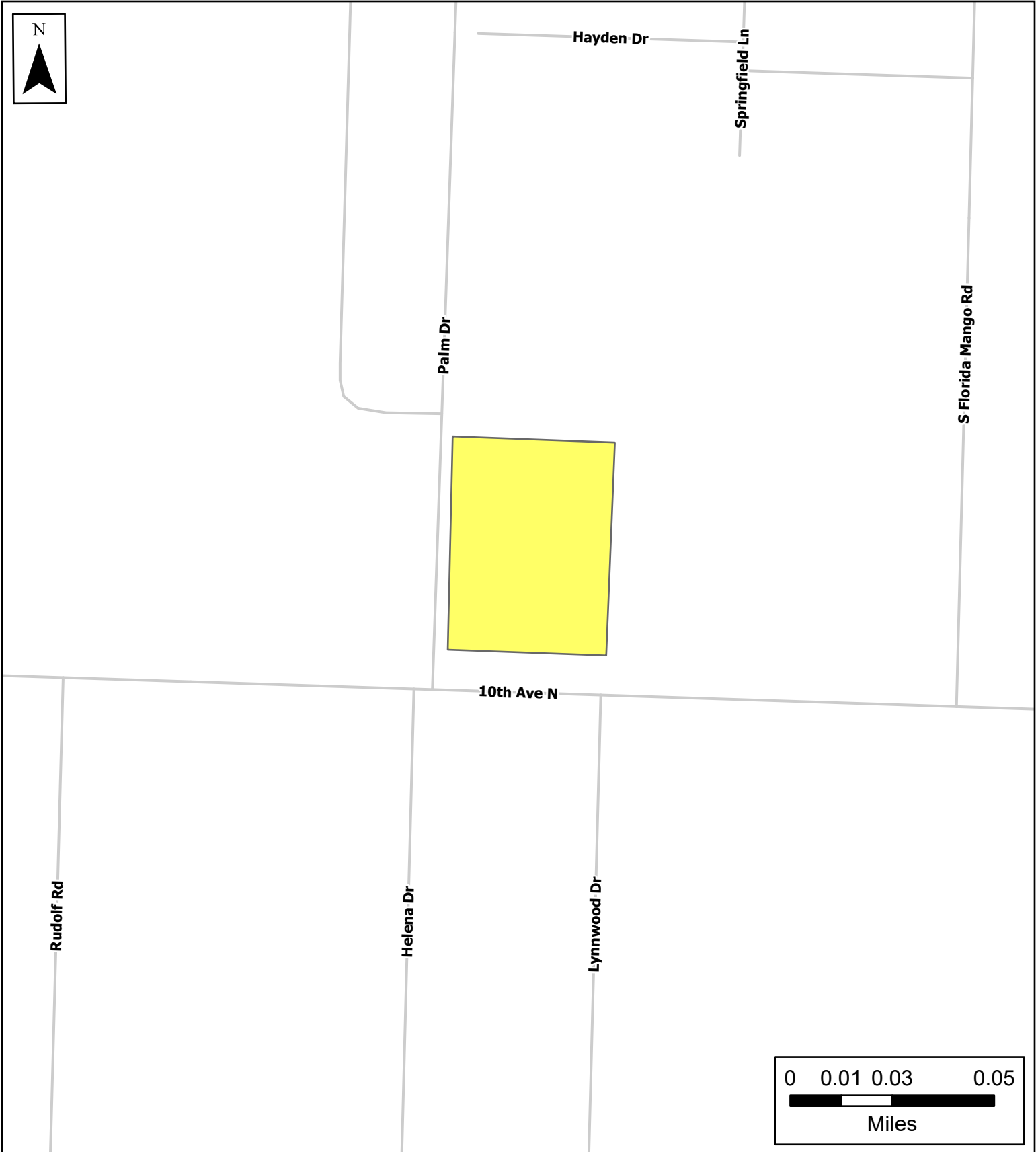
Location Map

Tire Kingdom

303

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Data Source: Property Boundary provided by Village of Palm Springs, Basemap imagery provided by ESRI online services.



Village of Palm Springs

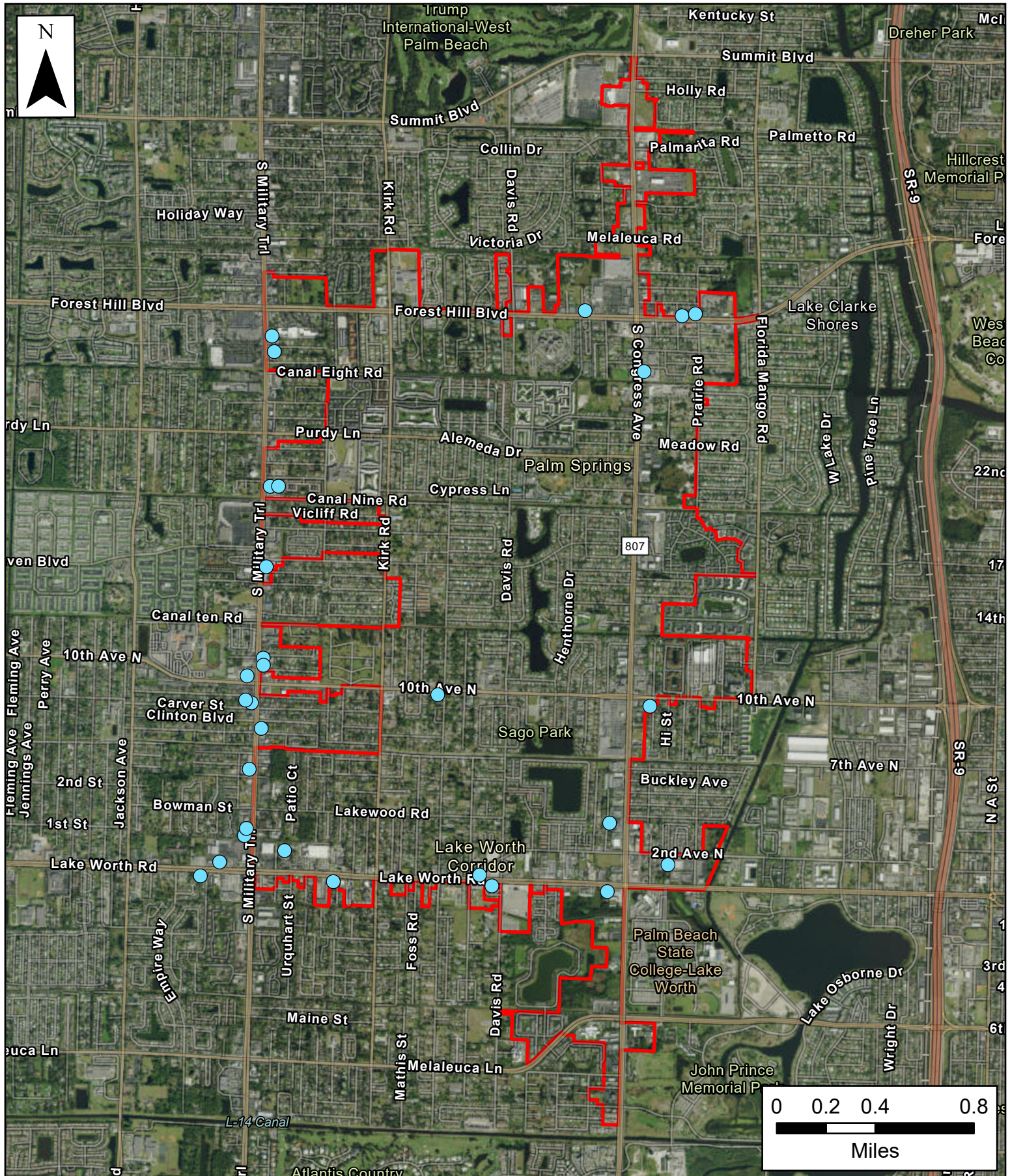
2601 10th Ave North
Tire Kingdom

Location Map

 Tire Kingdom

The Data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The Village of Palm Springs make no warranties, express or implied, as to the use of the licensed Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update.

Data Source: Property Boundary provided by Village of Palm Springs.



Village of Palm Springs

Automotive Service Facilities

The Data is provided "as is" without warranty or any representation of accuracy, timeliness or completeness. The burden for determining accuracy, completeness, timeliness, merchantability and fitness for or the appropriateness for use rests solely on the requester. The Village of Palm Springs make no warranties, express or implied, as to the use of the licensed Data. There are no implied warranties of merchantability or fitness for a particular purpose. The requester acknowledges and accepts the limitations of the Data, including the fact that the Data is dynamic and is in a constant state of maintenance, correction and update.

- Auto Service Facilities (29)
- Village Limits

305

Data Source: Auto Service Facilities provided by the Village of Palm Springs, Basemap imagery provided by ESRI Online Services.



Village of Palm Springs

Executive Brief

AGENDA DATE: December 10, 2019

DEPARTMENT: Planning, Zoning & Building

ITEM 6.6: Ordinance No. 2019-24 - Village Code Amendment - Chapter 34 - Supplemental Regulations - Car Washes and Gas Stations

SUMMARY:

The Planning, Zoning and Building staff is recommending amendments to the Land Development Regulations (LDR) to provide supplemental regulations for vehicle-oriented uses, such as minimum site and design conditions, locational requirements and distance separation requirements.

The purpose of the proposed LDR amendments is to provide a strong, vibrant community that is not impacted by an over-saturation of convenience stores, gas stations and car wash uses and to provide minimum performance standards to curtail high traffic generation, noise, air pollution, crime, competition with smaller local businesses and visual impact on community character. Currently, gas stations and car washes are permissible within the CG district with special exception approval, but with no requirements for placement, size, distance separation and/or setbacks from special uses such as residences, schools or playgrounds.

Currently, there are seventeen (17) gas stations within the Village limits and another fourteen (14) within the immediate vicinity. Additionally, the Village maintains six (6) varieties of car washes (including the most recently approved car wash on 10th Avenue North) and three (3) more within the surrounding area.

Note: The Village has 463 parcels currently zoned with CG land development district.

PZ&B staff has conducted an evaluation of other cities' regulations and found the majority to include distance separation requirements from similar uses of 1000-1500', locational requirements for placement at a major intersection, and distance separation requirements from public places, parks, schools, churches, nursing homes, etc. of 500' - 1000'. The

proposed Ordinance 2019-24 provides the following:

- 1500' distance separation between gas stations, convenience stores and car wash uses
1. 500' distance separation between gas stations and parks, schools, and other institutional uses
 2. Performance standards (that have become typical conditions of approval recommended by Village staff): free air stations, screening wall within landscape buffer adjacent to residential uses, use of recycled water in car washes, service bay doors not facing the public street

The proposed regulations do not affect existing vehicle-oriented uses with regards to location, setbacks, perimeter wall, and other specific details contained on the existing uses' site plan. However, discontinuation of any car wash, convenience store or gas station for a 12-month period will require conformance with the new regulations.

Note: Special exception uses currently expire after discontinuation for 12 months as defined in the Village Code.

The Village's LDR's previously contained distance separation requirements between similar uses and between public/institutional uses; however, these supplemental regulations were eliminated in 2013 when code provisions were consolidated to eliminate redundancies (Ordinance 2013-03). The proposed ordinance reinstates the distance separation requirements that were previously within the LDR's.

After discussion at the October 10, 2019 Village Council meeting in which staff was directed to bring forward supplemental regulations for consideration, the proposed ordinance was modified by the Planning, Zoning and Building Director, and reviewed by the Village Attorney.

The Planning & Zoning Board first considered the proposed amendments during their July 31, 2018 special meeting and recommended approval of the proposed ordinance with a 1,500' distance separation between similar uses (which is the distance separation that had been provided in the Code prior to 2013 amendments).

FISCAL IMPACT:

The proposed ordinance does not have a direct fiscal impact to the Village.

ATTACHMENTS:

Ord No. 2019-24 - Supplemental Regulations for Vehicle Oriented Uses (2).docx

Map of Existing Gas Stations and Car Washes.pdf

Gas Stations 500 Foot Buffer

Gas Stations 1500 Foot Buffer

ORDINANCE NO. 2019-24

AN ORDINANCE OF THE VILLAGE OF PALM SPRINGS, FLORIDA, AMENDING THE VILLAGE CODE OF ORDINANCES AT CHAPTER 34 "LAND DEVELOPMENT", ARTICLE VI "LAND USE", DIVISION 7 "SUPPLEMENTAL DISTRICT REGULATIONS, SUBDIVISION XV "CONVENIENCE (FOOD AND BEVERAGE) STORES, FULL SERVICE FUEL STATIONS, AND GAS STATIONS WITH AND WITHOUT CONVENIENCE STORES", TO MODIFY THE REGULATIONS GOVERNING THE LOCATION AND USE OF CAR WASHES AND GAS STATIONS; PROVIDING FOR CODIFICATION; PROVIDING FOR REPEAL OF CONFLICTING ORDINANCES; PROVIDING FOR SEVERABILITY, AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, the Village of Palm Springs, Florida (the "Village") is a duly constituted municipality having such power and authority conferred upon it by the Florida Constitution and Chapter 166, Florida Statutes; and

WHEREAS, the Village has recently seen a large increase in the number of gas stations being located in the Village where such uses create traffic and pedestrian flow issues; and

WHEREAS, Village staff has also received a number of complaints regarding the operation of car washes, convenience stores and gas stations that would indicate further directives are needed in order to appropriately regulate these uses; and

WHEREAS, it is determined that further regulations are needed regarding the location and use of car washes, convenience stores and gas stations; and

WHEREAS, this proposed ordinance modifies the current code regulating the locations and use of car washes, convenience stores and gas stations; and

WHEREAS, the Village Council has reviewed the recommended revisions and has determined that it is in the best interest of the public health, safety and general welfare of the Village to adopt this ordinance.

NOW THEREFORE, BE IT ORDAINED BY THE VILLAGE COUNCIL OF THE VILLAGE OF PALM SPRINGS, FLORIDA:

Section 1. The foregoing recitals are incorporated herein as true and correct findings of fact of the Village Council, and serve as a basis for adoption of this Ordinance.

Section 2. Chapter 34 "Land Development", Article VI "Land Use", Division 7 "Supplemental District Regulations", Subdivision XV "Convenience (Food and Beverage) Stores, Full Service Fuel Stations, and Gas Stations with and without Convenience Stores" is hereby amended to read as follows:

Subdivision XV “Car Washes, Convenience (Food and Beverage) Stores, Full Service Fuel Stations, and Gas Stations with and without Convenience Stores”

Sec. 34-1201. - Purpose.

The purpose of this subdivision is to develop reasonable guidelines, standards and regulations for the use of property as a car wash, convenience (food and beverage) store, full service fuel station, and/or gas station with or without a convenience store.

Sec. 34-1202. - Location. To mitigate the adverse impacts created by excessive concentrations of specific uses at intersections and along roadways that adversely impact traffic flow, pedestrian circulation and visual impacts related to site layout, the following location and separation criteria shall apply:

- (1) Car washes, Convenience stores, full service fuel stations, and gas stations with or without convenience stores shall be located only adjacent to major arterials, and within 500 feet of any intersection of roadways classified as an arterial or collector (as measured from the nearest points of property lines on any two parcels of land (or unified project perimeter, if a planned development)) or adjacent to a signalized intersection.
- (2) There shall be a minimum separation distance of 1,500 feet between the nearest points of property lines on any two parcels of land (or unified project perimeter, if a planned development), whether located in the Village or not, occupied or to be occupied for a fuel/gas station or convenience store or car wash purpose.
- (3) There shall be a minimum separation distance of 500 feet between the nearest points of property lines for a parcel occupied for fuel/gas station or car wash purposes and a parcel occupied by a church, public or private school, daycare, hospital, governmentally owned or operated building, nursing home or assisted living facility, theater, auditorium, stadium area, place of assembly, and/or a public play field.

Sec. 34-1203. - Obstructions of view.

A proposed convenience store shall be free of all obstructions of view from the adjacent street to main store windows, giving a clear and unobstructed view of the cashier's station, including obstructions of landscaping, signage (including window signage), and gasoline service islands.

Sec. 34-1204. - Amusement devices and video arcades.

A proposed convenience store shall not have amusement devices or video arcades.

Sec. 34-1205. - Outdoor displays.

All outdoor displays of merchandise at a car wash, convenience store, full service fuel station, or gas stations with or without a convenience store shall be appropriately screened

and not visible from any adjacent right-of-way. Outdoor displays shall be located so as not to interfere with any vehicular or pedestrian access way or fire safety systems and equipment. The location of outdoor display areas shall be delineated on a Village-approved site plan. Displays of equipment/merchandise shall be in a non-elevated/non-extended position. Advertising displays, including “spanners”, “pump toppers”, and “pumpsiders” (changeable signage or ads placed on top or around gas pumps or between columns) are prohibited. No advertising shall be placed on trash receptacles, bollards, ice boxes or gas pumps.

Sec. 34-1206. - Curbs and curb breaks.

A raised curb of at least six inches in height shall be erected along all street property lines, except for driveway openings. Curb breaks are limited to two per street frontage. Curb-cuts shall not be located closer than 25 feet to the intersection of the ultimate right-of-way lines at a corner nor closer than 15 feet from any abutting property line or alley. Direct access to a road classified as a local street is discouraged.

Sec. 34-1207. - Setback requirements.

All gasoline pumps, above ground tanks, vents, pump islands and pump island canopies shall conform with setback requirements for the district, except that no such above gasoline pumps, ground pumps, tanks, vents, pump islands or pump island canopies shall be located closer than 25 feet to any property line. All underground tanks shall be setback a minimum of 15 feet from any property or ultimate right-of-way line, whichever is more restrictive, and all associated above-ground equipment shall be screened from view from the public street with landscaping or other aesthetic materials.

Sec. 34-1208. – Design and Performance standards.

- (1) Service bay doors shall not be oriented toward any adjacent property in a residential district or toward any adjacent public street, unless screened by a minimum six-foot wall and/or landscaping.
- (2) Car washing and detailing activities shall not be visible from any right-of-way. Visibility may be screened by approved landscaping, fencing or by building design and location. Car washing and detailing shall utilize recycled water.
- (3) Within Mixed-use districts, car washes, convenience stores and fuel/gas stations shall be permitted uses only when a complementary mix of uses is provided to generate synergy and convenience that enhances the physical space and creates a vibrant environment per Article VI, Division 6, Subdivision VIII, and:
 - a. The maximum number of fuel pumps shall be six (6). Fuel pump islands and canopies shall be screened by the main building structure, and the retail market/office building should be placed at the street frontage with a pedestrian

entrance from, and display windows along the sidewalk, to encourage pedestrian use.

- b. Each structure shall be architecturally consistent and related to the overall architectural theme of the planned development.
- c. The roof design of all structures, including pump canopies, shall incorporate pitched roof treatments with a low to moderate pitch.

Sec. 34-1209. – Wall requirement. An opaque masonry wall shall be erected to a height of no less than six feet within the perimeter landscape buffer adjacent to a residential district, school, daycare, nursing home or assisted living facility. Said wall shall be finished with a graffiti-resistant paint.

Sec. 34-1210.- Free air stations. Free air / fills shall be provided to the public, whenever air stations are provided.

Sec. 34-1211. – Effect on Existing Uses. As of January 9, 2020, any car wash, convenience store, full service fuel station, or gas station with and without convenience store in existence and operating in compliance with all applicable Village Code requirements in effect prior to the adoption of this Ordinance 2019- 24, or lawfully under construction, that would become non-conforming by virtue of the adoption of this Ordinance 2019-24, will be considered conforming with regards to use, location, setbacks, perimeter wall, and other applicable provisions of the Village Code and site-specific development order if the facility remains in operation. Such existing car wash, convenience store, full service fuel station, or gas station with and without convenience stores shall be required to comply with all applicable Village Code provisions and site-specific development order conditions of approval in effect prior to the adoption of this Ordinance.

Sec. 34-1212. – Discontinuation and Abandonment of Use. As of January 9, 2020, any car wash, convenience store, full service fuel station, or gas station with and without convenience store that has discontinued operation or has been abandoned for a period of twelve (12) months, as determined by the Planning, Zoning & Building Director, shall not be re-established unless it complies with the requirements of this Ordinance 2019-24. Any reconstruction/rehabilitation under Sec. 34-1213, which in continuing in good faith, shall not constitute a discontinuation or abandonment of the use.

Sec. 34-1213. - Reconstruction/Rehabilitation. Reconstruction/rehabilitation of an existing car wash, convenience store, full service fuel station, or gas station with and without convenience store that is deemed conforming under Sec. 34-1211 is permitted at any time and for any reason, including casualty loss, voluntary demolition and rebuilding, or implementation of façade renovations, site renovation or modernization, provided that after

such reconstruction/rehabilitation the facility must comply with all applicable Village Code provisions and site-specific development order conditions of approval in effect prior to the adoption of this Ordinance.

Secs. ~~34-1208~~ 34-1214—34-1220. - Reserved.

Section 3. Codification. The sections of the ordinance shall be made a part of the Village Code of Laws and ordinances and may be re-numbered or re-lettered to accomplish such, and the word “ordinance” may be changed to “section”, “division”, or any other appropriate word.

Section 4. Repeal of Conflicting Ordinances. All Ordinances, Resolutions or parts of Ordinances and Resolutions in conflict herewith are hereby repealed.

Section 5. Severability. If any word, clause, sentence, paragraph, section or part thereof contained in this Ordinance is declared to be unconstitutional, unenforceable, void or inoperative by a court of competent jurisdiction, such declaration shall not affect the validity of the remainder of this Ordinance.

Section 6. Effective Date. This Ordinance shall become effective immediately upon adoption.

Council Member _____, offered the foregoing Ordinance, and moved its adoption. The motion was seconded by Council Member _____, and upon being put to a vote, the vote was as follows:

	<u>Aye</u>	<u>Nay</u>	<u>Absent</u>
BEVERLY SMITH, MAYOR	☐	☐	☐
JONI BRINKMAN, VICE MAYOR	☐	☐	☐
PATTI WALLER, MAYOR PRO TEM	☐	☐	☐
DOUG GUNTHER, COUNCIL MEMBER	☐	☐	☐
GARY READY, COUNCIL MEMBER	☐	☐	☐

The Mayor thereupon declared this Ordinance approved and adopted by the Village Council of the Village of Palm Springs, Florida, on second reading, this _____ day of _____, 2020.

VILLAGE OF PALM SPRINGS, FLORIDA

BY: _____
BEVERLY "BEV" SMITH, MAYOR

First Reading _____

Second Reading _____

ATTEST:

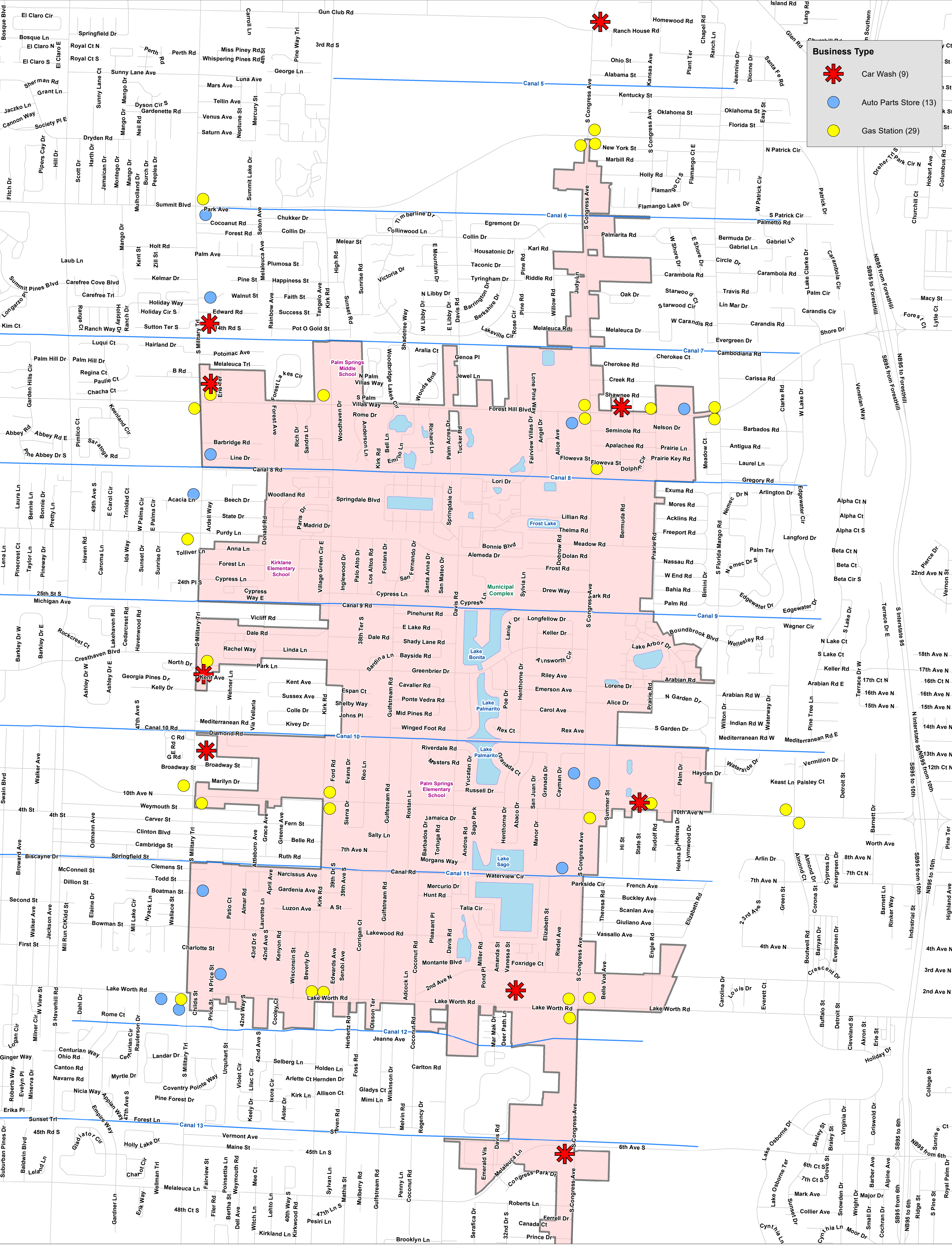
BY: _____
KIMBERLY M. WYNN, VILLAGE CLERK

REVIEWED FOR LEGAL FORM AND SUFFICIENCY

BY: _____
GLEN J. TORCIVIA, VILLAGE ATTORNEY

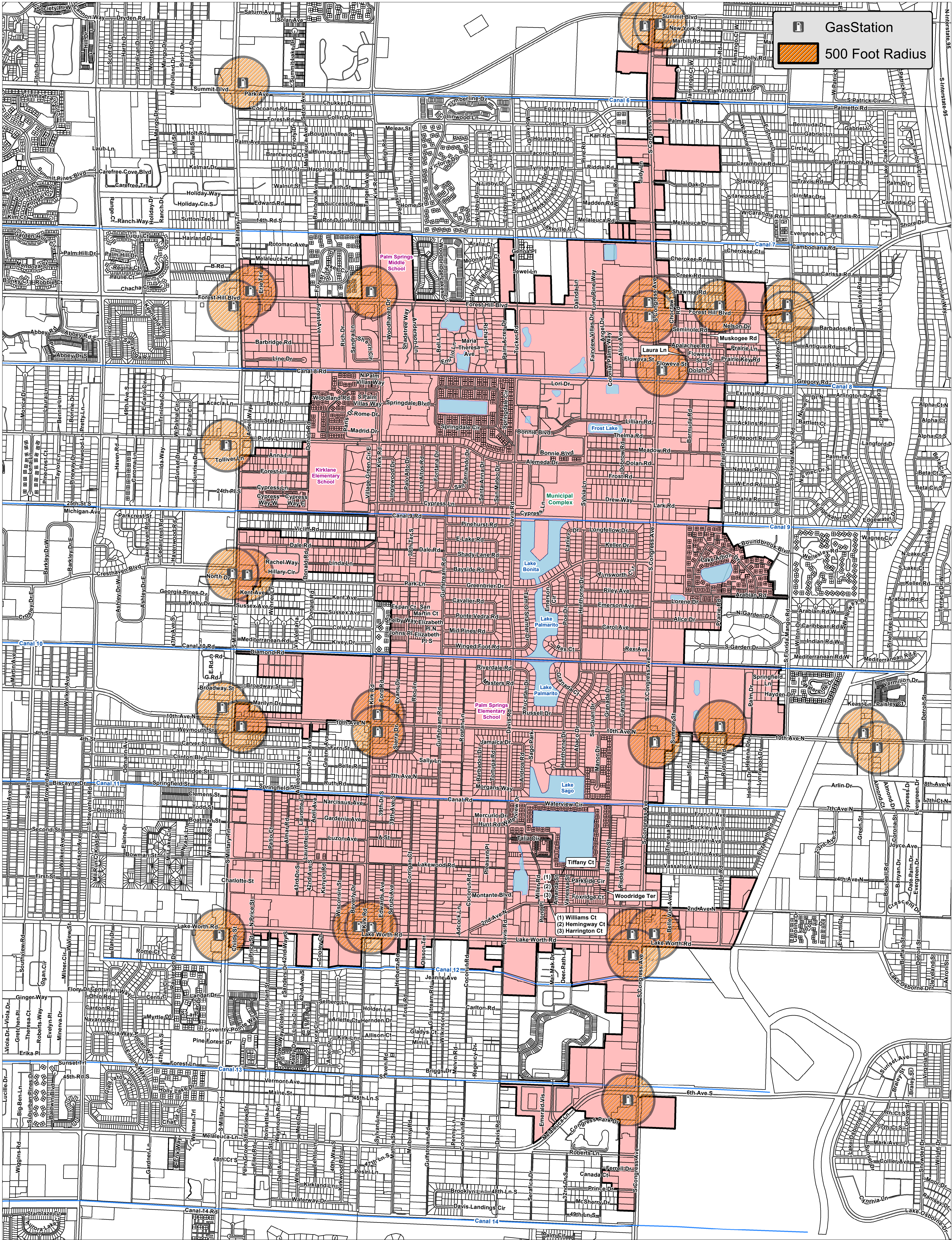
VILLAGE OF PALM SPRINGS

VEHICLE ORIENTED USES



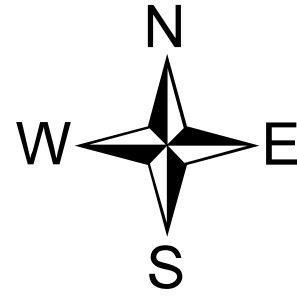
VILLAGE OF PALM SPRINGS

VILLAGE LIMITS



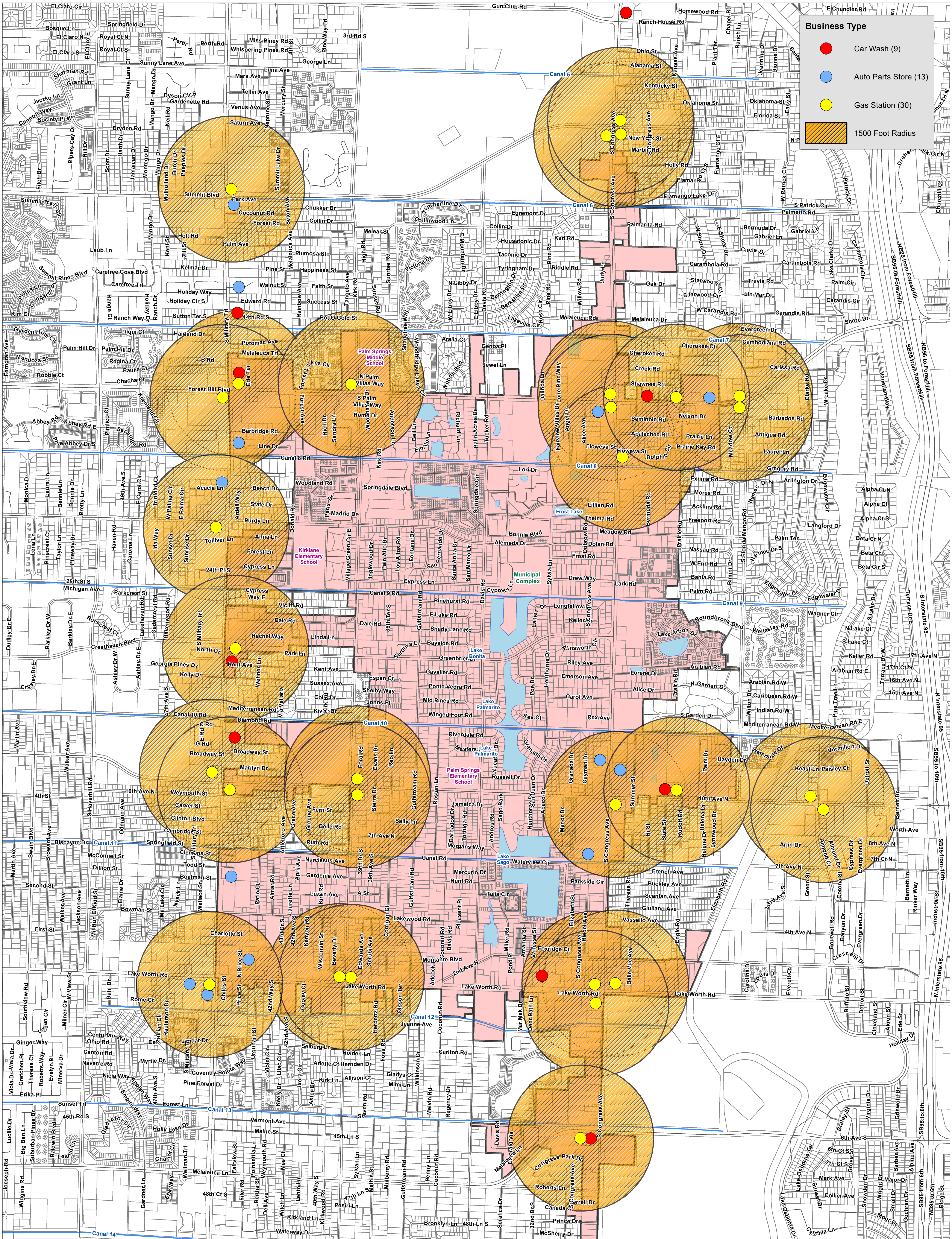
0 1,250 2,500 5,000 Feet

DATE: 07/03/2018



VILLAGE OF PALM SPRINGS

VEHICLE ORIENTED USES



0 1,000 2,000 3,000 4,000 Feet

DATE: 12/5/2019

