



PLANNING AND ZONING BOARD MEETING

City Hall – Council Chamber
405 Bagshaw Way, Edgewood, Florida
Monday, August 14, 2023 at 6:30 PM

Ryan Santurri
Chair

David Nelson
Vice-Chair

David Gragg
Board Member

Melissa Gibson
Board Member

Todd Nolan
Board Member

AGENDA

WELCOME! We are very glad you have joined us for today’s Planning and Zoning meeting. The Planning and Zoning Board is an advisory board to City Council comprised of citizen members who voluntarily and without compensation devote their time and talents to a variety of zoning and land development issues in the community. All P&Z recommendations are subject to final action by City Council. The results of today’s meeting will be presented at the noted City Council meeting for approval of recommended actions. Any person desiring to appeal a recommended action of the Board should observe the notice regarding appeals below. **CAUTION:** Untimely filing by any appellant shall result in an automatic denial of the appeal.

A. CALL TO ORDER & PLEDGE OF ALLEGIANCE

B. ROLL CALL AND DETERMINATION OF QUORUM

C. APPROVAL OF MINUTES

- 1. June 12, 2023 Planning & Zoning Meeting Minutes

D. NEW BUSINESS

- 1. 4201 S. Orange Ave. - The Waterfront Site Plan Approval
- 2. Discussion Item - City ISR

E. UNFINISHED BUSINESS

F. COMMENTS/ANNOUNCEMENTS

G. ADJOURNMENT

UPCOMING MEETINGS

- Tuesday, August 15, 2023.....City Council Meeting
- Wednesday, August 23, 2023.....Charter Review Meeting
- Wednesday, September 6, 2023.....1st Budget Hearing
- Monday, September 11, 2023.....Planning & Zoning Meeting
- Tuesday, September 19, 2023.....City Council/2nd Budget Hearing

General Rules of Order

You are welcome to attend and express your opinion. The Board is pleased to hear non-repetitive comments related to business before the Board; however, a **five (5) minute time limit per person** has been set by the Board. Large groups are asked to name a spokesperson. If you wish to appear before the Board, please fill out an Appearance Request Registration Form and give it to the City Clerk. When recognized, state your name and speak directly into the microphone. The City is guided by **Roberts Rules of Order** in governing the conduct of the meeting. Persons with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at (407) 851-2920 at least 24 hours in advance of the meeting.

We ask that all electronic devices (i.e. cell phones, pagers) be silenced during our meeting!

Thank you for participating in your government!

Appeals

According to Edgewood City Code Section 26-24 (2), "any person aggrieved by any recommendation of the Board acting either under its general powers or as a Board of Adjustment may file a notice of appeal to the City Council within seven (7) days after such recommendation is filed with the City Clerk. Per **Section 286.0105**, Florida Statutes state that if you decide to appeal a decision made with respect to any matter, you will need a record of the proceeding and may need to ensure that a verbatim record is made.

Americans with Disabilities Act

In accordance with the American Disabilities Act (ADA), if any person with a disability as defined by the ADA needs special accommodation to participate in this proceeding, he or she should telephone the **City Clerk at (407) 851-2920**.

CALL TO ORDER & PLEDGE OF ALLEGIANCE

ROLL CALL & DETERMINATION OF QUORUM

APPROVAL OF MINUTES



PLANNING AND ZONING BOARD MEETING

City Hall – Council Chamber
405 Bagshaw Way, Edgewood, Florida
Monday, June 12, 2023 at 6:30 PM

Ryan Santurri
Vice-Chair

Melissa Gibson
Board Member

David Gragg
Board Member

David Nelson
Board Member

Todd Nolan
Board Member

DRAFT MINUTES

A. CALL TO ORDER & PLEDGE OF ALLEGIANCE

Chair Santurri called the meeting to order at 6:32 pm and then led the Pledge of Allegiance.

B. ROLL CALL AND DETERMINATION OF QUORUM

City Clerk Riffle confirmed there was a quorum with all Board Members present.

Board Members Present

Chair Ryan Santurri
Vice Chair David Nelson
Board Member Gibson
Board Member Gragg
Board Member Nolan

Staff Present

City Clerk Sandra Riffle
City Attorney Ryan Knight
City Planner Ellen Hardgrove

Applicant

Paul Watterson, Boise Cascade

C. APPROVAL OF MINUTES

1. April 10, 2023 Planning & Zoning Meeting Minutes

There were no public comments.

Board Member Gragg made a motion to approve the April 10, 2023 P&Z meeting minutes; seconded by Board Member Nelson. Motion approved by voice vote (5/0).

D. NEW BUSINESS

1. **Variances 2023-02 & 2023-03 : Boise Cascade Landscape & Parking**

Planner Hardgrove presented the history of the property at 75 Holden Avenue. Wayne Densch, Inc. was located on the property before Boise Cascade and built up the property.

Boise Cascade requests variances for parking and landscaping. The site is categorized as legally nonconforming due to minimal landscaping on site and the number of parking spaces.

Variance Request 2023-02 Landscaping - To allow an exemption to code-requiring compliant landscaping when existing development is greater than 5,000 square feet and proposed expansion is in excess of 5,000 square feet.

County Zoning standards apply to this property because City zoning was never established on the property after it was annexed into the City.

Required County Landscaping Standards include

- Landscaping along the building side fronting Holden Avenue
- Landscaping where vehicular use area is adjacent to Holden
- Landscaping of parking row end caps: minimum 8 feet x 8 feet with a tree in each end cap, and a maximum of 10 spaces in each row
- Landscaping where vehicular use area is adjacent to residential (west and north side of the property):
- Landscaping of open storage area
- Landscaping along other property perimeters: one (1) shade tree for each forty (40) lineal feet or fraction thereof

Because of space limitations of existing improvements, the applicant is requesting approval of a variance from all of these Code requirements and proposes landscaping as reflected on a site plan dated April 24, 2023.

Planner Hardgrove highlighted some of the comments from the staff report on the proposed landscaping plan including the following.

- Landscaping along the building side fronting Holden Avenue: The applicant is proposing to add 2 shade trees in front of the building. There are currently 5 tall palms and 7 Dwarf Date palms in front of the building. To meet Code, 6 additional understory or palm trees or 4 additional shade trees would be needed.
- Landscaping where vehicular use area is adjacent to Holden: No buffer between the Holden Avenue right of way (ROW) and the parking area east of the westernmost driveway. Parking spaces would need to be removed if any landscaping was to be planted in this location since the vehicular parking area edge is the right-of-way line. There is, however, a hedge and 5 understory trees (crape myrtles) planted within the right-of-way along this parking area at a rate of 1 understory tree per 68 feet as shown in Exhibit 2 (vs. the required 1 per 15 feet)

The applicant is proposing to add landscaping along Holden Avenue east of the easternmost driveway and along the railroad track as shown in Exhibit 4 to mitigate the noncompliance with landscaping standards along Holden. The proposed rate of understory trees is 1 tree/25 feet along Holden Avenue, including the existing grouping of palms (vs the required 1 tree/15 feet), and 1 tree/±28 feet along the railroad tracts. A hedge is also proposed along these frontages

- Landscaping of parking row end caps: The applicant is not proposing any landscaping in the parking lot since any change would reduce the number of parking spaces.

- Landscaping where vehicular use area is adjacent to residential (west and north side of the property):

1) Adjacent to the Fellowship Baptist Church of Orlando Inc. property (11-23-29- 0000-00-025) - The lack of required trees in a 7-foot-wide pervious buffer along the west side of the vehicular use is not proposed to be corrected. The required minimum 15-foot setback for open storage is not shown to be corrected adjacent to the church property. The open storage is very near the property line.

2) Adjacent to the homes along Forrestal Avenue – Staff recommends the proposed trees along the residences along Forrestal Avenue be planted on the west side of the stormwater pond and be shade trees. The existing 7 feet high concrete wall is proposed to be maintained.

- Landscaping along other property perimeters: No trees are proposed along the north property line (one (1) shade tree for each forty (40) lineal feet or fraction thereof required). Staff is recommending shade trees in this location. An existing fence along the north property line is proposed to be maintained.

She noted that the commercial zoned property open space requirement is a minimum of 20% and the Boise property will only have 17%. The amount of onsite pervious area, however, is not proposed to change; the proposed buildings will be on existing impervious areas.

Variance Request 2023-03 - A variance to allow less than the required parking for warehouse use.

Applicant Paul Watterson, representing Boise Cascade, said Boise is proposing the new building to address the need for more indoor storage, and is trying to improve efficiency and have up-to-code buildings.

Mr. Watterson confirmed to Chair Santurri that they do not have any issues with the staff's recommended conditions of approval.

Public Comment

Patti Bass, an Edgewood resident, was concerned about noise coming from the property at 3:00 am.

Mr. Watterson said drivers may come in at 3:00 am but the trucks are loaded the night before. They usually arrive back between 5:00 and 6:00 pm, up until 8:00 pm, depending on the weather and that forklifts are not loading at 3:00 am. He said there is no inbound traffic at early hours and most of the unloading takes place between 10:00 am and 4:00 pm.

Discussion ensued relative to hours of operation. Planner Hardgrove confirmed to Chair Santurri that there are no restrictions for commercial property hours.

Mr. Watterson was concerned that Boise Cascade management would not want to lose the autonomy for hours of operation. He said they do not operate over the weekend. The proposed new building would not change the hours of operation, but it would make it a little quieter since there is more indoor storage space.

Chair Santurri said the noise is occurring now, but he does not want it to get worse.

Board Member Nolan noted that Boise Cascade has operated at that property for 22 years.

Chair Santurri made a motion to recommend approval of Variance 2023-03 [the parking variance] to allow a maximum increase of 17,060 square feet of building onsite without increasing the number of parking spaces except for one additional ADA-compliant space. The motion was seconded by Board Member Gragg. Motion approved by roll call vote (5/0).

Chair Santurri	Favor
Board Member Nelson	Favor
Board Member Gibson	Favor
Board Member Nelson	Favor
Board Member Nolan	Favor

Board Member Nelson recommended approval of Variance 2023-02 [the landscaping variance] to allow the addition of more than 5,000 square feet of building with the landscaping, open space, and parking/vehicular circulation as shown on the submitted site plan dated received April 24, 2023 with the following conditions.

A. The maximum additional building square footage on the property shall be 17,059.46 (26,400 square feet new construction less the demolition of 9,340.54 square feet), and 11,000 square feet of non-enclosed lean-to square footage.

B. Modify the plan to show additional landscaping as following

1. Along and adjacent to the building side fronting Holden Avenue:

- a. Provide additional plants to provide a continuous hedge along the building frontage (excluding the western part of the building frontage where covered parking exists), with the new plants being at least 24 inches high at planting and being of a species capable of growing to at least 36 inches in height within 18 months. Maintain the existing and new hedges at a height of not less than 36 inches.***
- b. Add 4 evergreen shade trees along the building frontage, e.g., between the existing palm groupings. Each evergreen shade tree shall be of a species with a mature height of 30'-40' and a minimum caliper of 4" and a minimum of 16 feet in height at planting.***
- c. Maintain the existing palms.***

2. Along the Holden Avenue frontage, east of the easternmost driveway:

- a. Plant multi-stemmed evergreen understory trees at a minimum rate of 1 understory tree/25 feet, with each tree planted on center, with a minimum of***

- three (3) stems, each stem a minimum 1.5-inch caliper and 4 feet spread. The existing cluster of palms in this location can substitute for one required understory tree.*
- b. Plant a continuous hedge of plants at least 30 inches high at planting, planted 30 inches on center, of a species capable of growing to at least 3 feet in height within 6 months, and maintained at a height of not less than 36 inches.*
- 3. Along the east property line, south of the building to the buffer along Holden**
- a. Plant evergreen shade trees at a rate of 1 tree/35 feet, setback from the east property line at a distance that the chosen species at maturity will not interfere with railroad operations. Groupings of evergreen multi-stemmed understory trees can substitute for these shade trees at a minimum rate of 1 grouping (3 understory trees)/20 feet, with each grouping evenly spaced and with each tree a minimum of three (3) stems, each stem a minimum 1.5-inch caliper and 4 feet spread.*
- b. Plant a continuous hedge of shrubs at least 30 inches high at planting, 30 inches on center, of a species capable of growing to at least 3 feet in height within 18 months and maintained at a height of not less than 36 inches.*
- 4. Along the west property line**
- a. Maintain the 7 feet high wall along the perimeter of the property adjacent to the church and homes along Forrestal Avenue.*
- b. Adjacent to the homes fronting Forrestal Avenue, on the west side of the existing stormwater pond, provide evergreen shade trees instead of cypress trees at a rate of 1 tree/35 feet on center, with each tree a minimum of 4-inch caliper and capable of a canopy 30 to 40 feet wide at maturity. Mature height to be attainable within three years. The intent is to provide a dense visual screening from 7 feet to at least 30 feet in height;*
- 5. Along the north property line provide at least one evergreen (1) shade tree or groupings (three trees) of evergreen multi-stemmed understory trees every fifty (50) feet within the 15 feet building setback along the north property line. Each shade tree shall be a minimum of ten (10) feet tall, with a minimum caliper of three (3) inches as measured twelve (12) inches above the root ball. Each understory tree shall have a minimum of three (3) stems, each stem a minimum 1.5-inch caliper and 4 feet spread.**
- C. Maintenance of a solid, minimum 6 feet-high fence.**
- D. All onsite landscaping shall be irrigated.**
- E. A minimum of 15% open space on the property shall be maintained.**
- F. Outdoor storage or materials and equipment shall be setback a minimum of 15 feet from the property lines of current tax parcel 11-23-29-0000-00-025; i.e., Fellowship Baptist Church of Orlando Inc.**
- G. No materials, equipment or other goods stored outdoors shall exceed 24 feet in height within 100 feet of the adjacent residential zoned property fronting Forestal Avenue.**
- H. Two ADA-compliant parking spaces shall be provided onsite. If additional parking is provided onsite, ADA-compliant parking spaces shall be provided at a rate of at least 1/25 new parking spaces.**

The motion was seconded by Board Member Gragg. Approved by roll call vote (5/0)

Board Member Nolan	Favor
Board Member Gibson	Favor
Board Member Gragg	Favor
Board Member Nelson	Favor
Chair Santurri	Favor

2. Ordinance 2023-07: Projected Signs

Planner Hardgrove said this is a follow-up to the projection sign discussion at the April 2023 P&Z meeting. If approved by City Council, the ordinance would prohibit signs projected on building faces or other structures.

Chair Santurri said he believes the ordinance covers the signs previously discussed.

There was no public comment.

Chair Santurri recommended approval of Ordinance 2023-07; seconded by Board Member Nelson. Motion approved (5/0) by roll call vote.

Board Member Nolan	Favor
Board Member Gibson	Favor
Board Member Gragg	Favor
Board Member Nelson	Favor
Chair Santurri	Favor

3. Ordinance 2023-08: County to City Rezoning - R1A Oak Cove

Planner Hardgrove addressed ordinances 2023-08 and 2023-09 together and said this was a continuation of the City’s effort to establish city zoning on previously annexed property that has retained its County zoning. She said the site standards of the current zoning and the proposed zoning are the same except the new City zoning will establish a maximum of 45% impervious surface ratio (ISR), which is standard throughout the city’s current residential zoning districts.

She explained she did a cursory review of every property and two lots are problematic relative to establishing a maximum 45% ISR: 404 and 500 Gatlin. 404 Gatlin Avenue is already nonconforming as the lot width is 37 feet wide rather than the required 85 feet. Similarly, 500 Gatlin Avenue has a lot width of 75 feet instead of 85 feet. Both lots are estimated to exceed the ISR maximum. of 46%. Neither property will be able to add any additional impervious surface unless a variance is approved.

Public Comment: Planner Hardgrove confirmed to Edgewood resident, Mr. Vaughn, that there should be no tax consequence from the rezoning.

There was no public comment.

Chair Santurri made a motion to recommend approval of Ordinance 2023-08; seconded by Board Member Gragg. The motion was approved (5/0) by roll call vote.

Board Member Gibson	Favor
Board Member Gragg	Favor
Board Member Nelson	Favor
Board Member Nolan	Favor
Chair Santurri	Favor

4. Ordinance 2023-09: County to City Rezoning - R1AA Gatlin

Based on the discussion related to Ordinance 2023-08, **Board Member Nelson made a motion to recommend approval of Ordinance 2023-09; seconded by Chair Santurri. The motion was approved (5/0) by roll call vote.**

Motion made by Vice-Chair Nelson, Seconded by Chair Santurri.

Chair Santurri	Favor
Board Member Gragg	Favor
Board Member Gibson	Favor
Board Member Nelson	Favor
Board Member Nolan	Favor

E. UNFINISHED BUSINESS - none

F. COMMENTS/ANNOUNCEMENTS - none

G. ADJOURNMENT

The meeting was adjourned at 7:46 pm.

Ryan Santurri, Chair

Attest:

Sandra Riffle, City Clerk

NEW BUSINESS

4201 S. Orange Ave.

The Waterfront Site Plan

Approval



1117 East Robinson St.
Orlando, FL 32801
Phone: 407.425.0452
Fax: 407.648.1036

July 26, 2023

Sandy Riffle, CMC, CBTO
City Clerk
City of Edgewood
405 Bagshaw Way
Edgewood, FL 32809

4201 S Orange Ave – The Waterfront – Construction plan approval
CPH Project number E7601

Dear Sandy,

We are in receipt of the set of revised civil and landscape plans, dated July 25, 2023, for the above listed project. The plans included the civil and landscaping plans for the modification to the site. The plans were in response to our review letter from April 12, 2023 and our conference calls between April 17 and May 3, to discuss the civil and landscape comments. We have reviewed the revised plans, our past review letters and the City Variance Decision letters for the site.

We have no objections to the City approving the construction plans with the following conditions:

1. The removal of the septic tank, drain field, and trees will occur when the parking lot work begins.
2. A cross access easement has been added to the south end of the project area. A sketch and legal description of the easement will be required. This may be submitted and recorded at a later date, prior to project close out and CO from the City.
3. The proposed sign shown on the plans will require a separate permit and is not included in this approval.

Please be reminded, approval of the Construction Plans by the City of Edgewood does not grant authority to alter other portions of this property, nor does it waive any permits that may have been required by Federal, State, or County agencies which may have jurisdiction.

Sincerely,
CPH, LLC

Allen C. Lane, Jr., P.E.
Sr. Project Manager

CC: Galen Pugh, AICP, PLA, CPH
Ellen Hardgrove, Planner
File

J:\E7601\Civil\City Plans-Application Review\4201 S Orange Ave - Waterfront Variance App\letters\4201 S Orange Ave - Waterfront site plan approval letter 7-26-23.docx



1117 East Robinson St.
Orlando, FL 32801
Phone: 407.425.0452
Fax: 407.648.1036

July 25, 2023

Sandy Riffle
City Clerk
City of Edgewood
405 Bagshaw Way
Edgewood, FL 32809

4201 S Orange Ave – The Waterfront – plan review
CPH Project number E7601

Dear Sandy,

We are in receipt of the set of revised civil plans, electronically signed July 24, 2023 by Stephen Allen, for the above listed project. The Landscape and Irrigation drawings are attached to this Civil Drawing Set, but are not electronically signed and sealed..

I have reviewed the landscape and irrigation drawings and do not have any further comments or objections to the submitted drawings. However, the landscape and irrigation drawings must be signed and sealed and submitted to the City prior to City Council stamped approval.

Please be reminded, approval of the site work by the City of Edgewood does not grant authority to alter other portions of this property, nor does it waive any permits that may have been required by Federal, State, or County agencies, which may have jurisdiction.

Please contact me with any questions.

Sincerely,
CPH, LLC

A handwritten signature in blue ink, appearing to read 'James K. Winter', is written over a light blue horizontal line.

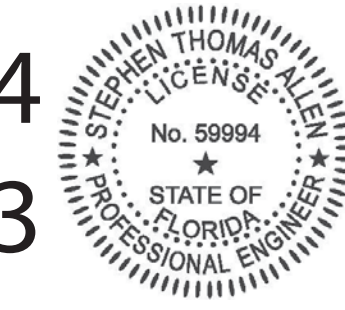
James K. Winter, RLA, CLARB
SR. Landscape Architect

CC: Galen Pugh, AICP, PLA, James Winter, RLA, CLARB, CPH
Ellen Hardgrove, Planner,
File

RECEIVED
7/24/2023
CITY OF EDGEWOOD

THE WATERFRONT CONSTRUCTION PLANS OCU PERMIT # 19-U-143

Stephen Allen
 2023.07.24
 16:44:23
 '00'04-



This is has been electronically signed and seal by Stephen Allen, PE using a Digital Signature and date. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

LEGAL DESCRIPTION

FROM THE SOUTHWEST CORNER OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA, RUN NORTH 00°22'10" EAST 10.06 CHAINS ALONG THE WEST BOUNDARY OF SAID SECTION 12; THENCE SOUTH 89°22'20" EAST 5 CHAINS; THENCE NORTH 00°22'10" EAST 188.65 FEET ALONG A LINE 330 FEET EAST OF AND PARALLEL WITH THE SAID WEST BOUNDARY OF SECTION 12 FOR THE POINT OF BEGINNING; RUN THENCE NORTH 73° 47'20" EAST 93.80 FEET; THENCE NORTH 22° 30' EAST 486 FEET, MORE OR LESS, TO A POINT ON THE NORTH BOUNDARY OF THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 12; THENCE WESTERLY 473 FEET, MORE OR LESS, ALONG SAID NORTH BOUNDARY TO A POINT ON THE EXISTING EASTERLY RIGHT OF WAY LINE OF STATE ROAD 527 (ORANGE AVENUE), SAID RIGHT OF WAY LINE BEING ON THE ARC OF A CURVE CONCAVE NORTHEASTERLY, HAVING A RADIUS OF 2252.01 FEET; RUN THENCE SOUTHEASTERLY 47 FEET, MORE OR LESS, ALONG THE ARC OF SAID CURVE TO THE END OF SAID CURVE; RUN THENCE SOUTH 15°46'57" EAST 465.45 FEET ALONG SAID EASTERLY RIGHT OF WAY LINE TO A POINT SOUTH 73°47'20" WEST OF THE POINT OF BEGINNING; RUN THENCE NORTH 73°47'20" EAST 60.74 FEET TO THE POINT OF BEGINNING. LESS ALL THAT PART WITHIN RIGHT OF WAY OF STATE ROAD 527.

AND

THAT PART OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS: COMMENCE ON THE SOUTH LINE OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST AT A POINT 470.63 FEET NORTH 89°33'13" EAST OF THE SOUTHWEST CORNER OF SAID SECTION 12; THENCE RUN NORTH 73°45'13" EAST A DISTANCE OF 830.54 FEET; THENCE RUN NORTH 73°45'13" EAST A DISTANCE OF 45 FEET FOR THE POINT OF BEGINNING; THENCE CONTINUE NORTH 73°45'13" EAST A DISTANCE OF 58.37 FEET TO A POINT ON A CURVE CONCAVE TO THE SOUTHWESTERLY AND HAVING A RADIUS OF 849.02 FEET AND A CHORD BEARING OF NORTH 25°46'09" WEST; THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 15° 13'16" A DISTANCE OF 225.42 FEET; THENCE RUN NORTH 33°22'47" WEST A DISTANCE OF 71.84 FEET; THENCE RUN SOUTH 16°14'47" EAST A DISTANCE OF 290.44 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT FROM ALL OF THE ABOVE:

THAT PART OF THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS: COMMENCE ON THE SOUTH LINE OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST, ORANGE COUNTY, FLORIDA, AT A POINT 470.63 FEET NORTH 89°33'13" EAST OF THE SOUTHWEST CORNER OF SAID SECTION 12; THENCE RUN NORTH 16°14'47" WEST A DISTANCE OF 1137.20 FEET; THENCE RUN NORTH 73°45'13" EAST A DISTANCE OF 40 FEET FOR THE POINT OF BEGINNING; THENCE RUN SOUTH 33°22'47" EAST A DISTANCE OF 16.97 FEET; THENCE RUN NORTH 16°14'47" WEST A DISTANCE OF 112.61 FEET; THENCE RUN NORTH 73°45'13" EAST A DISTANCE OF 45 FEET; THENCE RUN NORTH 16°14'47" WEST A DISTANCE OF 52.03 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE EASTERLY AND HAVING A RADIUS OF 2202.01 FEET, AND A CHORD BEARING OF NORTH 15°33'29" WEST, THENCE RUN NORTHWESTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 01° 22'37" A DISTANCE OF 52.91 FEET TO THE END OF SAID CURVE; THENCE RUN SOUTH 88° 34'39" WEST A DISTANCE OF 51.38 FEET TO THE BEGINNING OF A CURVE CONCAVE TO THE WESTERLY AND HAVING A RADIUS OF 2252.01 FEET AND A CHORD BEARING OF SOUTH 15°24'21" EAST; THENCE RUN SOUTHEASTERLY ALONG THE ARC OF SAID CURVE THROUGH A CENTRAL ANGLE OF 01° 40'51" A DISTANCE OF 66.06 FEET TO THE END OF SAID CURVE; THENCE RUN SOUTH 16° 14'47" EAST A DISTANCE OF 10.03 FEET; THENCE RUN NORTH 73°45'13" EAST A DISTANCE OF 40 FEET; THENCE RUN SOUTH 16°14'47" EAST A DISTANCE OF 22 FEET; THENCE RUN SOUTH 73°45'13" WEST A DISTANCE OF 40 FEET; THENCE RUN SOUTH 16°14'47" EAST A DISTANCE OF 116.39 FEET TO THE POINT OF BEGINNING.

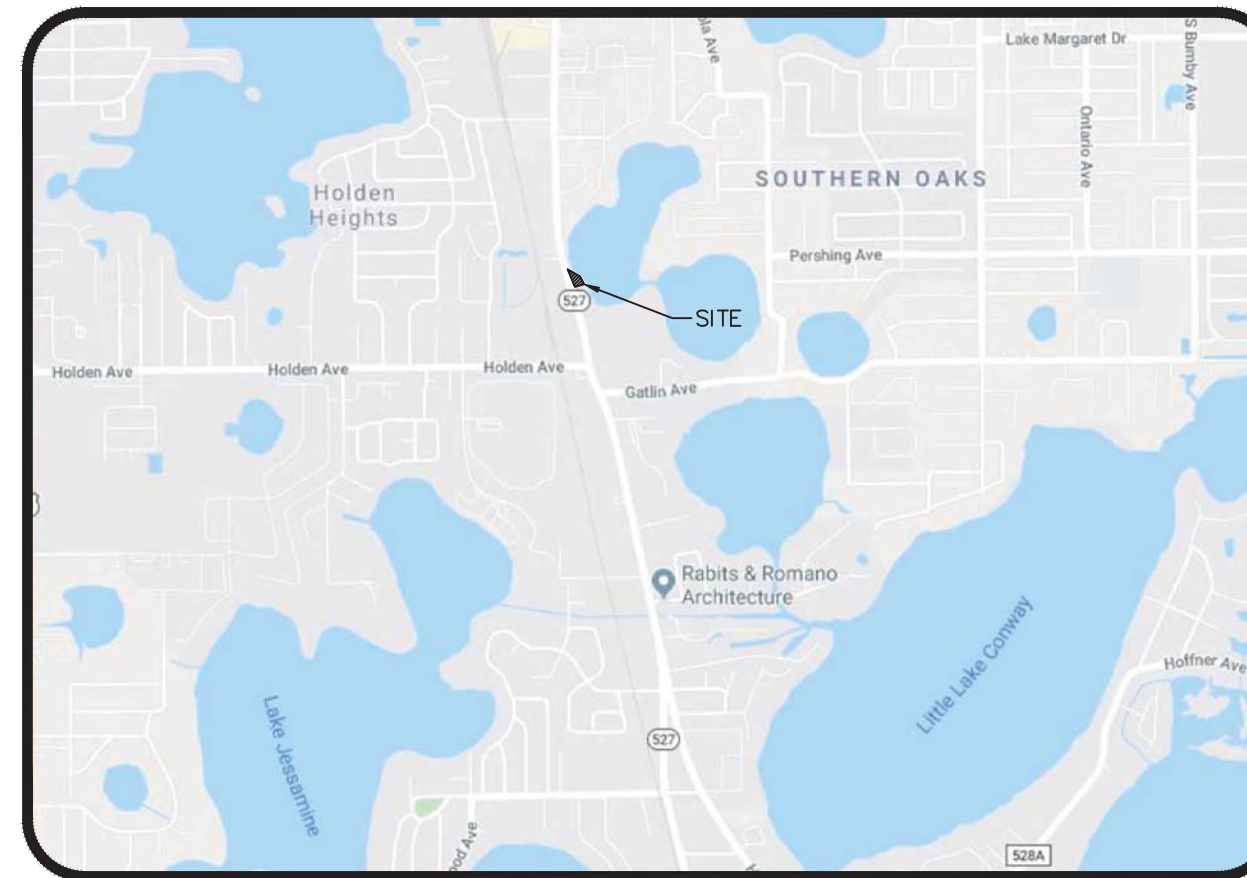
PROJECT CONSULTANTS

CIVIL ENGINEERS
 CIVILCORP ENGINEERING, INC.
 630 N. WYMORE RD. STE 310
 MAITLAND, FL 32751
 PHONE: (407) 755-1700

ARCHITECT
 JWB ARCHITECTS
 2295 S HIAWASSEE RD, STE 304
 ORLANDO, FL 32835
 PHONE: (407) 298-5020

SURVEYORS
 VISIONLAND SERVICE
 941 S PENNSYLVANIA AVE
 WINTER PARK, FLORIDA 32785
 PHONE: (888) 399-8474

LOCATION MAP



SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST

**4201 S ORANGE AVE
 ORLANDO, FL 32806
 PARCEL ID # 12-23-29-0000-00-037**

OWNER/APPLICANT:
LOCK INVESTMENTS, LLC
 CONTACT: RYAN DAVIS
 836 HIGHLAND AVE
 ORLANDO, FL 32803
 PHONE: (407) 963-6978
 EMAIL: RYAN.STEPUP@GMAIL.COM

PREPARED BY:



CIVILCORP ENGINEERING, INC.
 CERTIFICATE OF AUTHORIZATION #29390
 630 N. WYMORE RD. STE 310
 MAITLAND, FL 32751
 PHONE: (407)755-1700

PLAN SET INDEX

- C-1 COVER SHEET
- C-2 SURVEY (BY OTHERS)
- C-3 DEMO & EROSION CONTROL PLAN
- C-4 SITE PLAN
- C-5 GRADING PLAN
- C-5A GRADING CROSS SECTIONS
- C-6 UTILITY PLAN
- C-7 GENERAL CIVIL NOTES
- C-8 DETAIL SHEET
- C-9 DETAIL SHEET
- C-10 DETAIL SHEET
- C-11 DETAILS SHEET
- LSP-1 LIFT STATION PLAN

SITE DATA

PROPERTY LOCATION:
 4201 S ORANGE AVE
 ORLANDO, FL 32806

PARCEL ID:
 12-23-29-0000-00-037

LAND OWNERS:
 LOCH INVESTMENTS, LLC
 CONTACT: RYAN DAVIS
 836 HIGHLAND AVE
 ORLANDO, FL 32803-3941
 PHONE: (407) 963-6978
 EMAIL: RYAN.STEPUP@GMAIL.COM

PROPERTY ZONING:
 ECD (EDGEWOOD CENTRAL DISTRICT)

FUTURE LAND USE:
 COMMERCIAL

EXISTING PROPERTY USE:
 RESTAURANT

PROPOSED PROPERTY USE:
 RESTAURANT

SEATING AREAS:
 BUILDING AERA 2,541 SF
 COVERED BRICK 454 SF
 LAKEFRONT PATIO 853 SF
 LAKEFRONT GRASS 1,903 SF
 TOTAL SEATING AREA 3,210 SF

LOT COVERAGE CALCULATIONS (EXISTING)
 IMPERVIOUS 11,855 SF 8.45%
 PERVIOUS 128,515 SF 91.55%
 TOTAL SITE AREA 140,370 SF 100.00%

LOT COVERAGE CALCULATIONS (PROPOSED)
 IMPERVIOUS 19,988 SF 14.24%
 PERVIOUS 120,382 SF 85.76%
 TOTAL SITE AREA 140,370 SF 100.00%

SEATING COUNT
 INDOOR
 TABLES = 50 SEATS
 BAR = 21 SEATS
 TOTAL = 71 SEATS
 OUTDOOR
 TABLES = 36 SEATS
 TOTAL INDOOR & OUTDOOR = 107 SEATS

PARKING REQUIRED
 RESTAURANT: 1 SPACE PER 100 SF GFA + 1 SPACE PER 200 SF OPEN AIR DINING AREA
 2,541 SF * 1 SPACE / 100 SF + 3,210 SF * 1 SEAT / 200 SF = 42 SPACES REQUIRED

PARKING PROPOSED
 (40) 90' REGULAR SPACES + (2) 90' ACCESSIBLE SPACES
 TOTAL = 42 PARKING SPACES PROVIDED

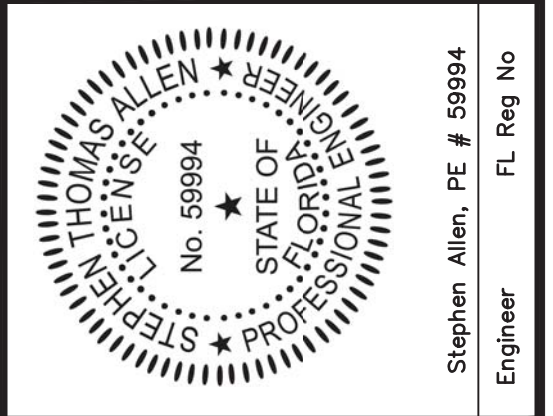
PHASING
 THE SITE WILL BE DEVELOPED IN ONE PHASE.

This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
 Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Revisions	Project No.	Scale						
<table border="1"> <tr> <th>#</th> <th>Date</th> <th>Description</th> </tr> <tr> <td>1</td> <td>09/17/20</td> <td>REVISED PER COUNTY COMMENTS</td> </tr> </table>	#	Date	Description	1	09/17/20	REVISED PER COUNTY COMMENTS	129-022	NTS
#	Date	Description						
1	09/17/20	REVISED PER COUNTY COMMENTS						
	Drawn By	Date						
	STA	11/05/19						

LOCH INVESTMENTS, LLC

CivilCorp Engineering, Inc.
 630 N Wymore Rd, Ste 310
 Maitland, FL 32751
 Phone: 407-516-0437
 Certificate of Authorization No. 29390



**THE WATERFRONT
 4201 S. ORANGE AVE, EDGEWOOD FL**

COVER SHEET

PROJECT NAME
 SHEET NAME

SHEET NO.
C-1

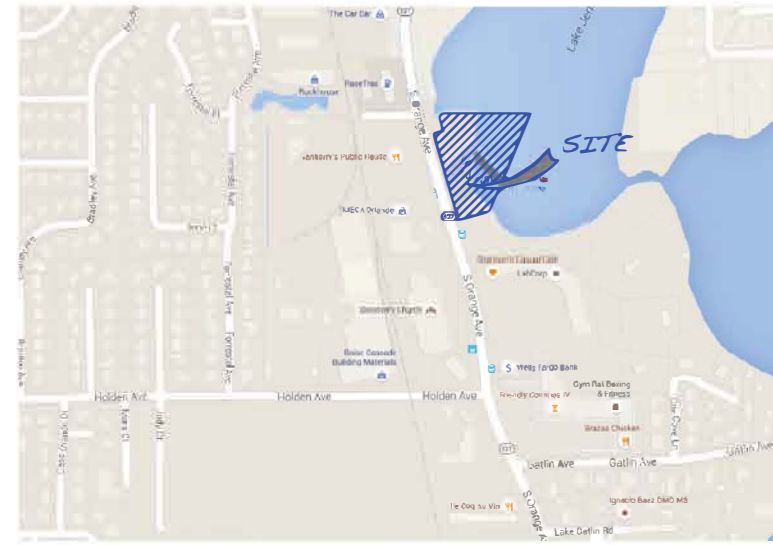


ADDRESS
4201 S Orange Avenue
Orlando, FL 32806

ALTA/ACSM Land Title Survey

ALTA/ACSM Land Title Survey

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/ACSM Land Title Surveys, jointly established and adopted by ALTA and NSPS, and includes Items 1, 2, 3, 4, 7a, and 8 of Table A thereof. The field work was completed on June 23rd, 2016.



VICINITY MAP: NOT TO SCALE

The Surveyor has reviewed all survey related items contained in Schedule B-II of that certain Commitment for Title Insurance issued by Fidelity National Title Insurance Company with Order Number: 5837670, Customer Reference: 230889-4 and an Effective Date of June 03, 2016 at 5:00 P.M. and has the following comments:

- Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires for value of record or interest or mortgage thereon covered by this Commitment. **Not applicable for Surveyor's review.**
- Taxes and assessments for the year 2016 and subsequent years, which are not yet due and payable. **Not applicable for Surveyor's review.**
For 2015 Tax Year Parcel/ID # 12-23-29-0000-00-037, taxes are delinquent under Certificate Number 2016-0013359.000
- Standard Exceptions:
 - Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land. **Not applicable for Surveyor's review.**
 - Rights or claims of parties in possession not shown by the public records. **Not applicable for Surveyor's review.**
 - Any lien, or right to a lien, for services, labor, or materials heretofore or hereafter furnished, imposed by law and not shown by the public records. **Not applicable for Surveyor's review.**
 - Taxes or assessments which are not shown as existing liens in the public records. **Not applicable for Surveyor's review.**
- Any claim that any portion of the insured land is sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such land. **Not applicable for Surveyor's review.**
- Any minerals or mineral rights leased, granted or retained by current or prior owners. **Not applicable for Surveyor's review.**
- Easement in favor of American Telephone and Telegraph Company recorded August 7, 1947 in Deed Book 749, page 433. **Subject to easement contained therein. Document contains insufficient information to accurately plot easement.**
- Lease Agreement by and between Krishnall D. Persaud and Sabeta Persaud, Lessor and POA Acquisition Corporation, Lessee, recorded April 6, 1995, in Official Records Book 4902, Page 4136. **Not applicable for Surveyor's review.**
- Ordinance No. 95-415 recorded December 12, 1995 in Official Records Book 4986, Page 3095. **Does not directly affect the Subject Property.**
- Lease Agreement in favor of Julie's Topplers, Inc. 1/3 Julie's Waterfront Restaurant as evidenced in the Amended Judgment of Foreclosure recorded January 18, 2006 in Official Records Book 8552, Page 2530. **Not applicable for Surveyor's review.**
- Title to any submerged land included within the land described in this Policy is not insured. **Not applicable for Surveyor's review.**
- The inalienable rights of the public to use the navigable waters covering the lands described on Schedule A. **Not applicable for Surveyor's review.**
- Notwithstanding the legal description in Schedule A, this Policy does not insure title to any lands lying below the mean or ordinary high water line of any navigable or tidally influenced waters. **Not applicable for Surveyor's review.**
- The nature, extent or existence of riparian rights is not insured. **Not applicable for Surveyor's review.**

Legal Description (as provided)

From the Southwest corner of Section 12, Township 23 South, Range 29 East, Orange County, Florida, run North 00°22'10" East 10.06 chains along the West boundary of said Section 12; thence South 89°22'20" East 5 chains; thence North 00°22'10" East 188.65 feet along a line 330 feet East of and parallel with the said West boundary of Section 12 for the Point of Beginning; run thence North 73°47'20" East 93.80 feet; thence North 22°30' East 486 feet, more or less, to a point on the North boundary of the Southwest quarter of the Southwest quarter of Section 12; thence Westerly 473 feet, more or less, along said North boundary to a point on the existing Easterly right of way line of State Road 527 (Orange Avenue), said right of way line being on the arc of a curve concave Northeasterly, having a radius of 2252.01 feet; run thence Southeasterly 47 feet, more or less, along the arc of said curve to the end of said curve; run thence South 15°46'57" East 465.45 feet along said Easterly right of way line to a point South 73°47'20" West of the Point of Beginning; run thence North 73°47'20" East 60.74 feet to the Point of Beginning. Less all that part within right of way of State Road 527.

That part of the West half of the Southwest quarter of Section 12, Township 23 South, Range 29 East, Orange County, Florida, described as follows: Commence on the South line of Section 12, Township 23 South, Range 29 East at a point 470.63 feet North 89°33'13" East of the Southwest corner of said Section 12; thence run North 16°14'47" West a distance of 830.54 feet; thence run North 73°45'13" East a distance of 45 feet for the Point of Beginning; thence continue North 73°45'13" East a distance of 58.37 feet to a point on a curve concave to the Southwesterly and having a radius of 849.02 feet and a chord bearing of North 25°46'09" West; thence run Northwesterly along the arc of said curve through a central angle of 15°13'16" a distance of 225.42 feet; thence run North 33°22'47" West a distance of 71.84 feet; thence run South 16°14'47" East a distance of 290.44 feet to the Point of Beginning.

Less and Except from all of the above:
That part of the West Half of the Southwest quarter of Section 12, Township 23 South, Range 29 East, Orange County, Florida, described as follows: Commence on the South line of Section 12, Township 23 South, Range 29 East, Orange County, Florida, at a point 470.63 feet North 89°33'13" East of the Southwest corner of said Section 12; thence run North 16°14'47" West a distance of 1137.20 feet, thence run North 73°45'13" East a distance of 40 feet for the Point of Beginning; thence run South 33°22'47" East a distance of 16.97 feet; thence run North 16°14'47" West a distance of 112.61 feet; thence run North 73°45'13" East a distance of 45 feet; thence run North 16°14'47" West a distance of 52.03 feet to the beginning of a curve concave to the Easterly and having a radius of 2202.01 feet, and a chord bearing of North 15°33'29" West, thence run Northwesterly along the arc of said curve through a central angle of 01°22'37" a distance of 52.91 feet to the end of said curve; thence run South 88°34'39" West a distance of 51.38 feet to the beginning of a curve concave to the Westerly and having a radius of 2252.01 feet and a chord bearing of South 15°24'21" East; thence run Southeasterly along the arc of said curve through a central angle of 01°40'51" a distance of 66.06 feet to the end of said curve; thence run South 16°14'47" East a distance of 10.03 feet; thence run North 73°45'13" East a distance of 40 feet; thence run South 16°14'47" East a distance of 22 feet; thence run South 73°45'13" West a distance of 40 feet; thence run South 16°14'47" East a distance of 116.39 feet to the Point of Beginning.

NOTE:
ELEVATIONS SHOWN HEREON ARE BASED ON CITY BENCHMARK# BM 11-024, ELEVATION 94.77 (NAVD88)

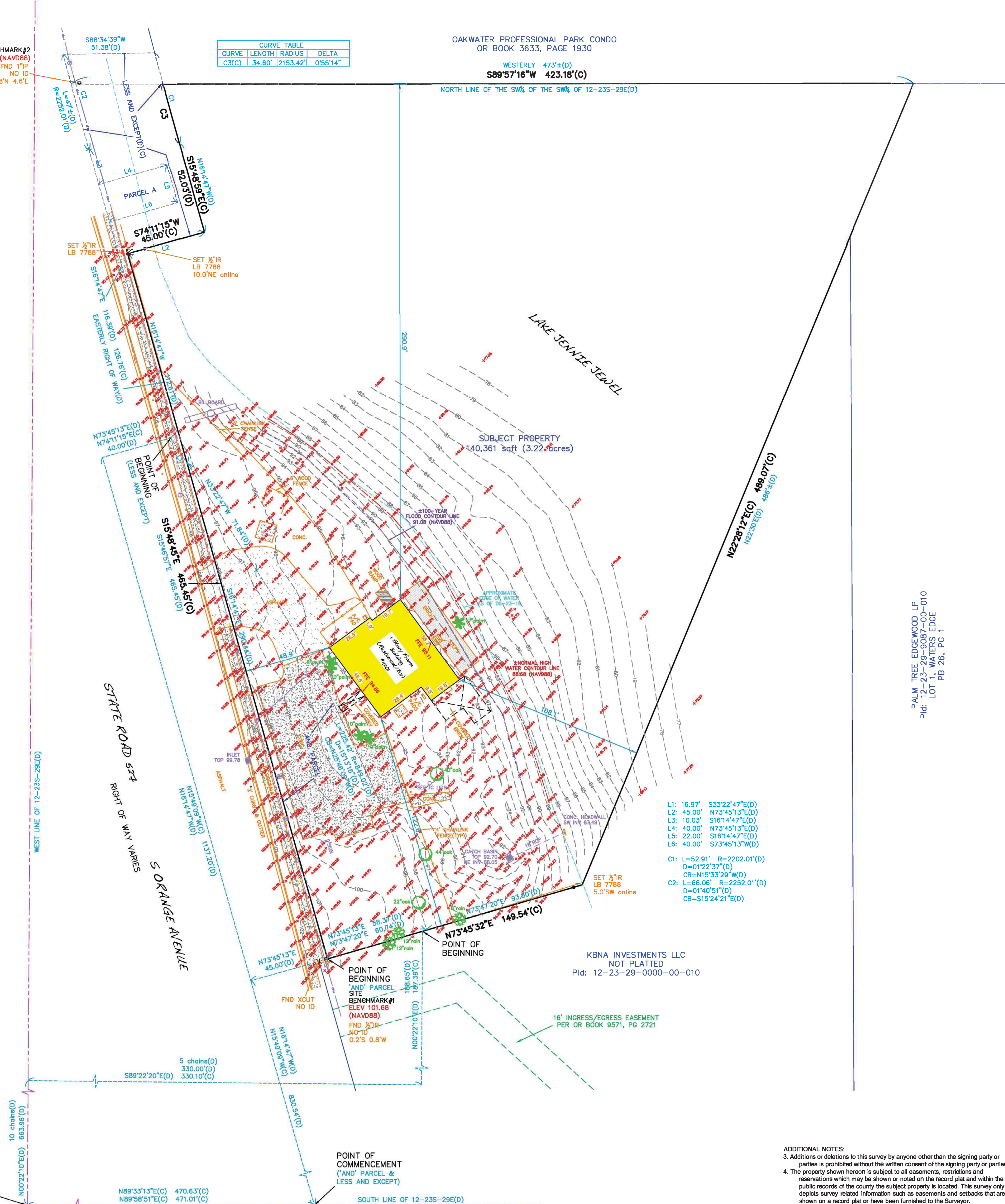
- LEGEND**
- = Concrete Monument (CM)
 - ⊕ = Drill Hole (DH)
 - = Iron Pipe & Cap (IP)
 - = Iron Rod & Cap (IR)
 - = Nail & Disk (N&D)
 - = Permanent Control Point
 - PRM = Permanent Reference Monument
 - OR Book = Official Record Book
 - PB = Plat Book
 - Pg = Page
 - CONC. = Concrete
 - D = Central Angle
 - L = Arc Length
 - R = Radius
 - CB = Chord Bearing
 - CH = Chord Length
 - FND = Found
 - ID = Identification
 - LB = Licensed Business
 - LS = Licensed Surveyor
 - PVC = Polyvinyl Chloride
 - TYP. = Typical
 - ⊕ = Power Pole
 - oh = Overhead Utilities
 - ⊕ = Water Meter
 - (C) = Calculated Distance
 - (D) = Deed Dimension
 - FFE = Finished Floor Elevation
 - INV = Invert
 - ⊕ = Grade Shot
 - ⊕ = Telephone Manhole
 - ⊕ = Fiber Optic Riser
 - RCP = Reinforced Concrete Pipe

- NOTES:**
- ACREAGE SHOWN HEREON IS FOR THE ENTIRE PARCEL INCLUDING BOTH SUBMERGED AND UPLAND PORTIONS OF THE SUBJECT PROPERTY
 - SUBJECT TO ALL LITTORAL AND/OR RIPARIAN RIGHTS WHICH MAY OR MAY NOT EXIST FOR THE SUBJECT PROPERTY.
 - DEPICTION OF BOUNDARY/DEED LINES ARE FOR INFORMATIONAL PURPOSES ONLY AND DOES NOT CONSTITUTE OWNERSHIP INTO THE WATERS OF LAKE JENNIE JEWEL.
 - PARCEL "A" SHOWN HEREON DOES NOT ADJOIN THE SUBJECT PROPERTY HOWEVER IT IS ALSO NOT LESSED OUT IN THE LEGAL DESCRIPTION. SURVEYOR IS UNAWARE OF OWNERSHIP/STATUS OF PARCEL "A"
 - CURRENT OWNERS OF ADJOINING LANDS SHOWN HEREON WERE TAKEN FROM ORANGE COUNTY PROPERTY APPRAISER'S INTERACTIVE WEBSITE

- NOTES:**
- ONLY TREES 4" AND LARGER (DIAMETER BREAST HEIGHT) HAVE BEEN LOCATED AND SHOWN HEREON PER CLIENT'S REQUEST
 - UNDERGROUND UTILITIES SHOWN HEREON HAVE BEEN MARKED BY OTHERS

- = Sanitary Point Marker
- = Fiber Optics Point Marker
- = Water Point Marker
- = Gas Point Marker
- = Cable Point Marker

POINT OF COMMENCEMENT
SW CORNER OF SECTION 12, TOWNSHIP 23 SOUTH, RANGE 29 EAST (12-23S-29E)



CURVE TABLE			
CURVE	LENGTH	RADIUS	DELTA
C1(C)	34.60'	2153.42'	0°55'14"

OAKWATER PROFESSIONAL PARK CONDO
OR BOOK 3633, PAGE 1930

WESTERLY 473±(D)
S89°57'16"W 423.18'(C)

NORTH LINE OF THE SW¼ OF THE SW¼ OF 12-23S-29E(D)

- L1: 16.97' S33°22'47"E(D)
 - L2: 45.00' N73°45'13"E(D)
 - L3: 10.03' S16°14'47"E(D)
 - L4: 40.00' N73°45'13"E(D)
 - L5: 22.00' S16°14'47"E(D)
 - L6: 40.00' S73°45'13"W(D)
- C1: L=52.91' R=2202.01'(D)
D=01°22'37"(D)
CB=N15°33'29"W(D)
 - C2: L=66.06' R=2252.01'(D)
D=01°40'51"(D)
CB=S15°24'21"E(D)

PALM TREE EDGEWOOD LP
Pld: 12-23-29-9087-00-010
LOT 1, WATERS EDGE
PB 26, PG 1

KBNA INVESTMENTS LLC
NOT PLATTED
Pld: 12-23-29-0000-00-010

16' INGRESS/EGRESS EASEMENT
PER OR BOOK 9571, PG 2721

- ADDITIONAL NOTES:**
- Parties or deletions to this survey by anyone other than the signing party or parties is prohibited without the written consent of the signing party or parties.
 - The property shown hereon is subject to all easements, restrictions and reservations which may be shown or noted on the record plat and within the public records of the county the subject property is located. This survey only depicts survey related information such as easements and setbacks that are shown on a record plat or have been furnished to the Surveyor.
 - Building ties and dimensions for improvements should not be used to reconstruct boundary lines.

COPYRIGHT 2011

JOB #: VLSR16-16065

CLIENT #: 230889-4

FIELD DATE: 06-23-16 / 08-31-16 CREW: 2300 / 2100

DRAFTER: BT

APPROVED: JEW

SCALE: 1" = 30'

Borrower's Acknowledgment and Acceptance

Borrower's Acknowledgment and Acceptance

GRAY ROBINSON
ATTORNEYS AT LAW

CERTIFIED TO BE UNENDEARED.
I, JEFFREY E. WILLIAMS, P.S., a duly licensed surveyor in the State of Florida, certify that I am the author of this survey and that the same was made in accordance with the provisions of the Florida Statutes, Chapter 403, and the rules and regulations of the Board of Surveying and Mapping, State of Florida.

FLOOD ZONE
SUBJECT PROPERTY (SHOWN IN BROWN) APPEARS TO BE LOCATED IN FLOOD ZONE. FLOOD ZONE INFORMATION IS BASED ON THE FLOOD ZONE MAP OF THE COUNTY OF ORANGE, FLORIDA, AND IS NOT GUARANTEED. ANY FLOOD ZONE MAP, AS HAS WITHIN A LIMITED FLOOD ZONE, MAY BE SUBJECT TO CHANGE WITHOUT NOTICE. THE SURVEYOR MAKES NO WARRANTY AS TO THE ACCURACY OF THE FLOOD ZONE INFORMATION. THE BUYER SHOULD CONSULT WITH THE APPROPRIATE AGENCIES FOR FURTHER INFORMATION.

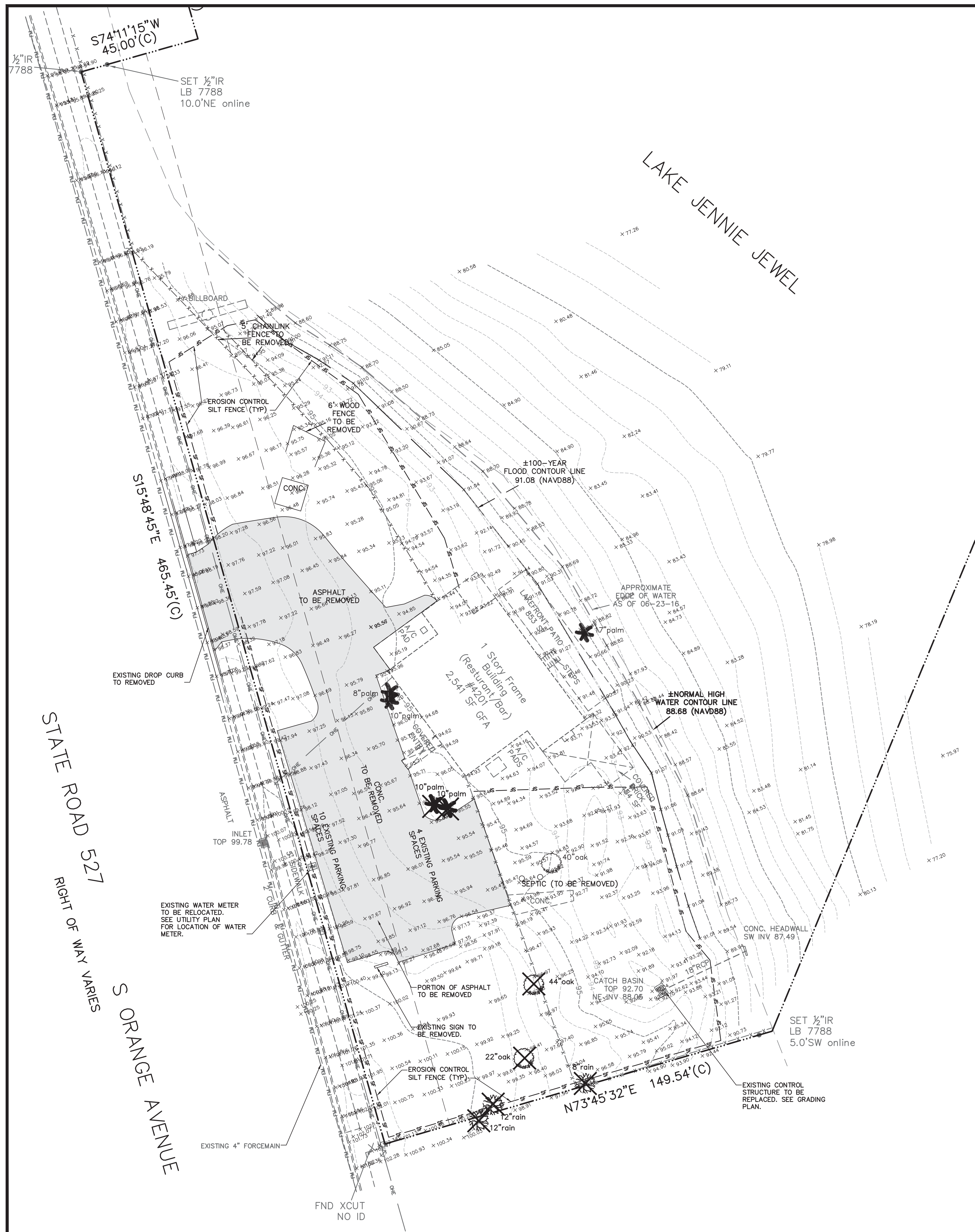
LIST OF POSSIBLE ENCROACHMENTS:
ENCROACHMENTS OF THE SUBJECT PROPERTY ARE SHOWN BY DASHED LINES. SOME ENCROACHMENTS ARE NOT SHOWN BY DASHED LINES. THE SURVEYOR HAS CONDUCTED VISUAL INSPECTIONS OF THE SUBJECT PROPERTY AND HAS FOUND NO ENCROACHMENTS. THE BUYER SHOULD CONDUCT VISUAL INSPECTIONS OF THE SUBJECT PROPERTY AND SHOULD CONSULT WITH THE APPROPRIATE AGENCIES FOR FURTHER INFORMATION.

NOTES:
THIS SURVEY WAS PREPARED FOR THE EXCLUSIVE USE OF THE CLIENT. THE SURVEYOR MAKES NO WARRANTY AS TO THE ACCURACY OF THE SURVEY INFORMATION. THE BUYER SHOULD CONSULT WITH THE APPROPRIATE AGENCIES FOR FURTHER INFORMATION.

SURVEYOR'S CERTIFICATE
I, JEFFREY E. WILLIAMS, P.S., a duly licensed surveyor in the State of Florida, certify that I am the author of this survey and that the same was made in accordance with the provisions of the Florida Statutes, Chapter 403, and the rules and regulations of the Board of Surveying and Mapping, State of Florida.

DATE: 08/31/16
DRAFTER: BT
DATE: 08/31/16
DRAFTER: BT

JEFFREY E. WILLIAMS, P.S.
PROFESSIONAL SURVEYOR
NOT VALID WITHOUT THE ELECTRONIC SIGNATURE AND/OR ORIGINAL SEAL OF THE SURVEYOR



ADDITIONAL NOTES

- NON-STORMWATER DISCHARGES: IT IS EXPECTED THAT THE FOLLOWING NON-STORMWATER DISCHARGES WILL OCCUR FROM THE SITE DURING THE CONSTRUCTION PERIOD:
 - PAVEMENT WASH WATERS (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED).
 - UNCONTAMINATED GROUNDWATER (FROM DEWATERING EXCAVATION). ALL NON-STORMWATER DISCHARGES WILL BE DIRECTED TO THE PROPOSED DRAINAGE STRUCTURES/SWALES.
- CONTRACTOR IS RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EROSION CONTROL IF IT BECOMES NECESSARY TO MEET THE STATE AND LOCAL STANDARDS.

PERMANENT EROSION CONTROL MEASURES (BMP'S)

- PERMANENT SODDING: ALL AREAS WHICH HAVE BEEN DISTURBED BY CONSTRUCTION WILL AT A MINIMUM, BE SODDED. THE SEEDING MIX MUST PROVIDE BOTH LONG-TERM VEGETATION AND RAPID GROWTH SEASONAL VEGETATION. SLOPES STEEPER THAN 4:1 SHALL BE SEED AND MULCHED OR SODDED.
- MAINTENANCE OF STORMWATER MANAGEMENT SYSTEM: THE PERMITTED STORMWATER MANAGEMENT SYSTEM SHALL BE MAINTAINED, CLEANED AND INSPECTED IN ACCORDANCE WITH THE WATER MANAGEMENT DISTRICT PERMIT.

EROSION TEMPORARY MEASURES (BMP'S)

- SYNTHETIC BALE BARRIERS SHALL BE USED TO PROTECT PROPOSED INLETS PER DETAILS.
- FILTER FABRIC BARRIERS SHALL BE USED AT THE PERIMETER/LIMITS OF PROPOSED CONSTRUCTION TO PREVENT SEDIMENT FROM LEAVING THE PROJECT BOUNDARIES OR DISCHARGING INTO OFF-SITE DRAINAGE FACILITIES.
- STOCKPILING MATERIAL: NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
- INLET PROTECTION: INLETS AND CATCH BASINS WHICH DISCHARGE DIRECTLY OFF-SITE SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET TEMPORARY SEEDING AND MULCHING. AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT AREA NOT ANTICIPATED TO BE RE-EXCAVATED OR DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN 30 DAYS SHALL BE SEED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER DURING THE SEASON IN WHICH IT IS PLANTED AND WILL NOT LATER COMPETE WITH THE PERMANENT GRASSING. SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN PARAGRAPH NUMBER 2 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF SEEDING AREA ADEQUATE TO PREVENT MOVEMENT OF SEED AND MULCH.
- MAINTENANCE: ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT CONTROL SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

DEWATERING METHODS AND LOCATIONS

DEWATERING SHALL BE UTILIZED ONLY IF NECESSARY BY MEANS OF WELL POINT SYSTEM. DISCHARGE FROM THE WELL POINT SYSTEM SHALL BE DIRECTED TO THE PROPOSED DRAINAGE STRUCTURES. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS FOR WELL POINT SYSTEM PRIOR TO CONSTRUCTION.

CONSTRUCTION SEQUENCE

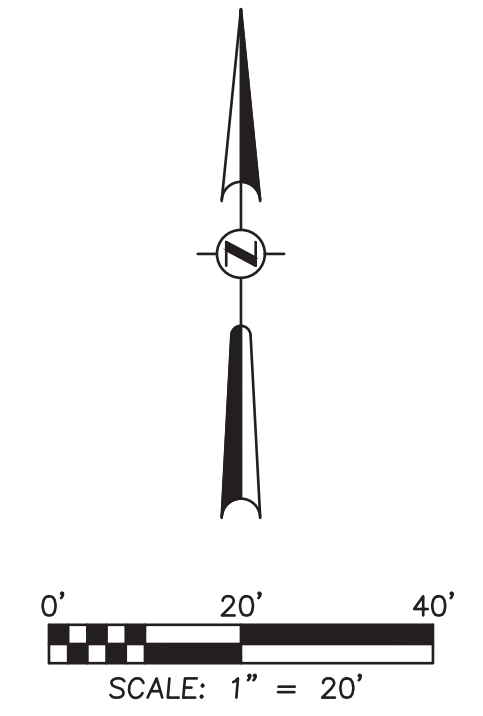
- INSTALL STABILIZED CONSTRUCTION ENTRANCE
- INSTALL SILT FENCES (STAKED EVERY 100' MAX) AND SYNTHETIC BALES AS REQUIRED
- STOCKPILE TOPSOIL IF REQUIRED
- PERFORM PRELIMINARY GRADING ON SITE AS REQUIRED
- STABILIZE DENUDED AREAS AND STOCKPILES AS SOON AS PRACTICAL
- INSTALL STORM SEWER
- CONSTRUCT BUILDING AND OTHER UNDERGROUND UTILITIES
- INSTALL PAVEMENT AND CURBING
- INSTALL LANDSCAPE AND SOD
- REMOVE ACCUMULATED SEDIMENT FROM BASINS
- WHEN ALL CONSTRUCTION ACTIVITY IS COMPLETE AND THE SITE IS STABILIZED, REMOVE ANY TEMPORARY BMP MEASURES.

SOIL TYPES

SEE SOILS REPORT

INSPECTIONS

- CONSTRUCTION SITE WILL BE INSPECTED FOR EROSION PROBLEMS DAILY AFTER EACH RAINFALL GREATER THAN 0.5 INCHES. A RAIN GAGE WILL BE ON SITE TO MEASURE THE RAINFALL AMOUNTS.
- ALL CONTROL MEASURES WILL BE INSPECTED BY THE SUPERINTENDENT, THE PERSON RESPONSIBLE FOR THE DAY TO DAY SITE OPERATIONS OR SOMEONE APPOINTED BY THE SUPERINTENDENT AT LEAST ONCE AND FOLLOWING ANY STORM EVEN OF 0.25 INCHES OR GREATER.
- ALL TURBIDITY CONTROL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER; IF A REPAIR IS NECESSARY, IT WILL BE INITIATED WITHIN 24 HOURS.
- BUILT UP SEDIMENT WILL BE REMOVED FROM THE SILT FENCE WHEN IT HAS REACHED ON-THIRD THE HEIGHT OF THE FENCE.
- THE SILT FENCE WILL BE INSPECTED FOR DEPTH OF SEDIMENT, TEARS, TO SEE IF THE FABRIC IS SECURELY ATTACHED TO THE FENCE POSTS, AND TO SEE THAT THE FENCE POSTS ARE FIRMLY IN THE GROUND.
- TEMPORARY AND PERMANENT SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND HEALTHY GROWTH.
- A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION. A COPY OF THE REPORT FORM TO BE COMPLETED CAN BE OBTAINED BY THE ENGINEER. THE REPORTS WILL BE KEPT ON SITE DURING CONSTRUCTION AND AVAILABLE UPON REQUEST TO THE OWNER, ENGINEER OR ANY FEDERAL, STATE OR LOCAL AGENCY APPROVING SEDIMENT AND EROSION CONTROL PLANS OR STORMWATER MANAGEMENT PLANS. THE REPORTS SHALL BE MADE AND RETAINED AS PART OF THE STORMWATER POLLUTION PREVENTION PLAN FOR AT LEAST TREE YEARS FROM THE DATE THAT THE SITE IS FINALLY STABILIZED AND THE NOTICE OF TERMINATION IS SUBMITTED. THE REPORTS SHALL IDENTIFY ANY INCIDENTS OF NON-COMPLIANCE.
- PERSONNEL SELECTED FOR INSPECTION AND MAINTENANCE RESPONSIBILITIES WILL RECEIVE TRAINING FROM THE SITE SUPERINTENDENT. THEY WILL BE TRAINED IN ALL THE INSPECTION AND MAINTENANCE PRACTICES NECESSARY FOR KEEPING THE EROSION AND SEDIMENT CONTROLS USED ON-SITE IN GOOD WORKING ORDER AND FILLING OUT THE INSPECTION AND MAINTENANCE REPORTS.



This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
 Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

Revisions	Project No.	Drawn By	Date
1	129-022	STA	11/05/19
2			
3			

LOCH INVESTMENTS, LLC

CivilCorp Engineering, Inc.
 630 N. Wynona Rd. Ste 310
 Maitland, FL 32751
 Phone: 407-516-0437
 Certificate of Authorization No. 29390

Stephen Allen, PE # 59994
 FL Reg No

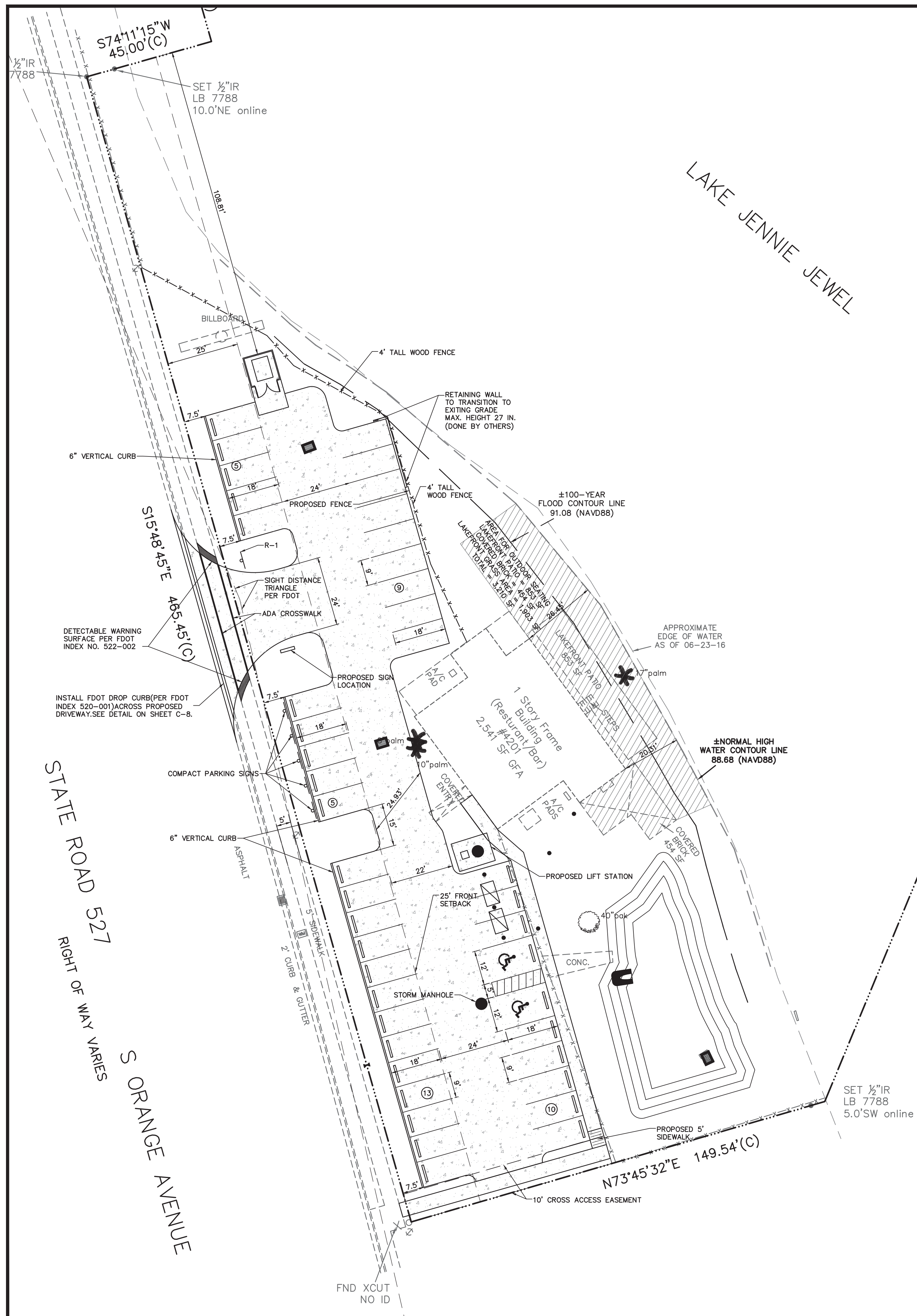
THE WATERFRONT
 4201 S. ORANGE AVE, EDGEWOOD FL

DEMO AND EROSION CONTROL PLAN

PROJECT NAME

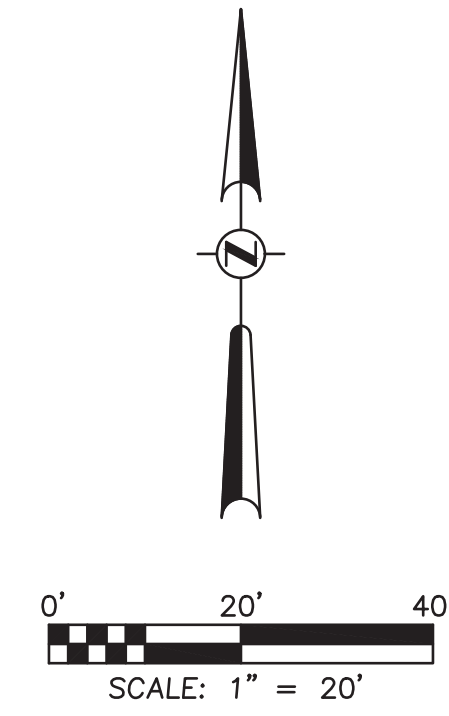
SHEET NAME

SHEET NO.
C-3



SITE LEGEND

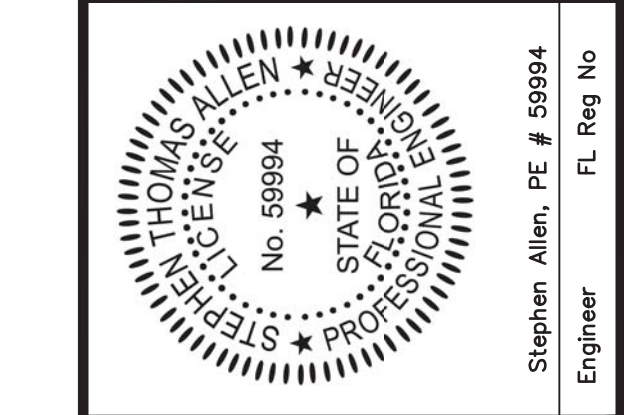
- SITE BOUNDARY LINE
- CENTER LINE OF ROAD
- EASEMENT LINE
- EXISTING EDGE OF PAVEMENT
- PROPOSED CONCRETE PAVEMENT
- PROPOSED ASPHALT
- SIDEWALK
- LINEAR FEET
- SQUARE FEET
- HANDICAP PARKING
- HANDICAP
- TYPICAL
- 5' RADIUS
- # PARKING SPACES
- POTENTIAL OUTDOOR SEATING



Revisions	Date	By	Description
5	04/18/23		REVISED PER CITY COMMENTS
4	03/20/23		REVISED PER CITY COMMENTS
3	02/03/23		REVISED PER CITY COMMENTS
2	12/7/22		REVISED PER CITY COMMENTS
1	04/06/22		REVISED PER CITY COMMENTS
#			

LOCH INVESTMENTS, LLC

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 630 N Wynona Rd, Ste 310
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THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

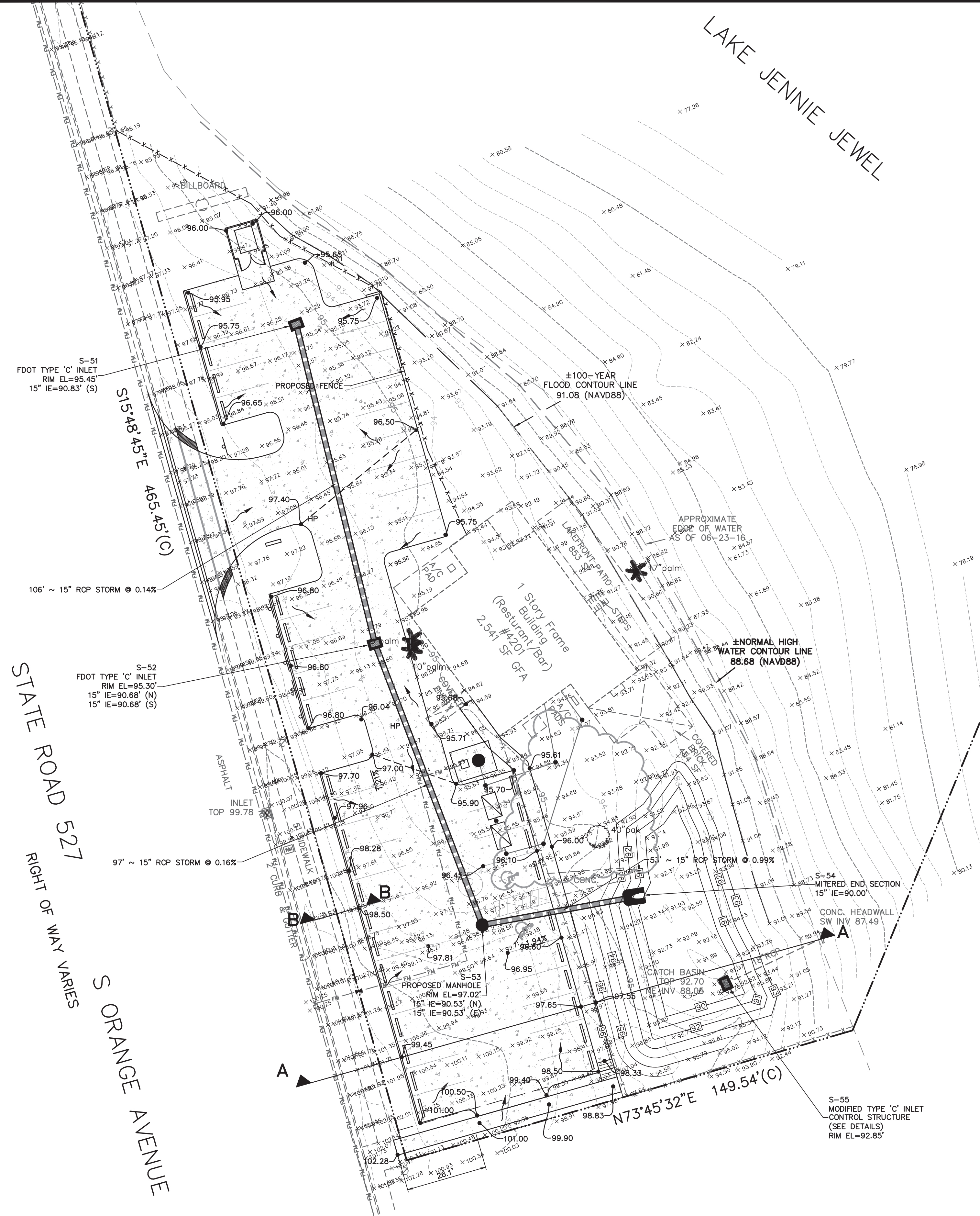
SITE PLAN

PROJECT NAME

SHEET NAME

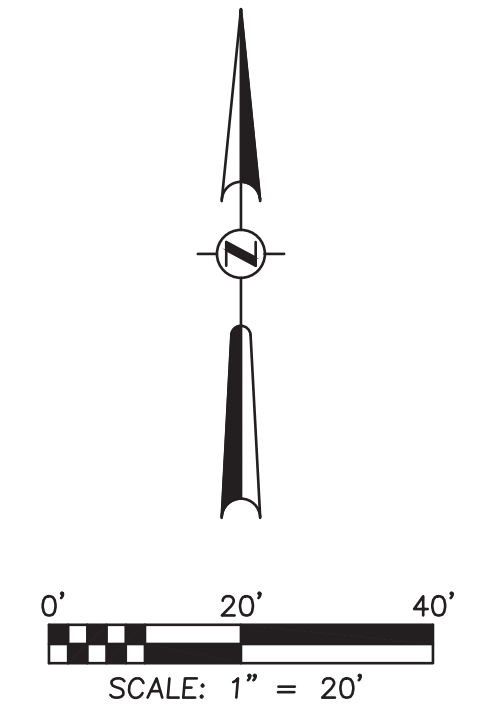
SHEET NO.
C-4

This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
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GRADING LEGEND

- ELEVATION EL
- TYPICAL TYP
- CLEANOUT CO
- INVERT ELEVATION IE
- HANDICAP HC
- EXISTING ELEVATION 14.10
- PROPOSED SPOT ELEVATION
- DRAINAGE INLET
- MITERED END SECTION
- SURFACE STORMWATER FLOW
- ELLIPTICAL REINFORCED CONCRETE PIPE ERCP
- REINFORCED CONCRETE PIPE RCP
- POLY VINYL CHLORIDE PIPE PVC
- FINISH FLOOR ELEVATION FFE
- SIDEWALK S/W



Revisions	Date	Description	By
7	04/16/23	REVISED PER CITY COMMENTS	STA
6	03/20/23	REVISED PER CITY COMMENTS	STA
5	02/03/23	REVISED PER CITY COMMENTS	STA
4	12/29/22	REVISED PER CITY COMMENTS	STA
3	04/06/22	REVISED PER CITY COMMENTS	STA
2	09/17/20	REVISED PER COUNTY COMMENTS	STA
1	1/31/2020	REVISED PER DOU COMMENTS	EG
#			

LOCH INVESTMENTS, LLC

CivilCorp Engineering, Inc.
 630 N. Wynore Rd. Ste 310
 Maitland, FL 32751
 Phone: 407-516-0437
 Certificate of Authorization No. 29390

Stephen Allen, PE # 59994
 FL Reg No

THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

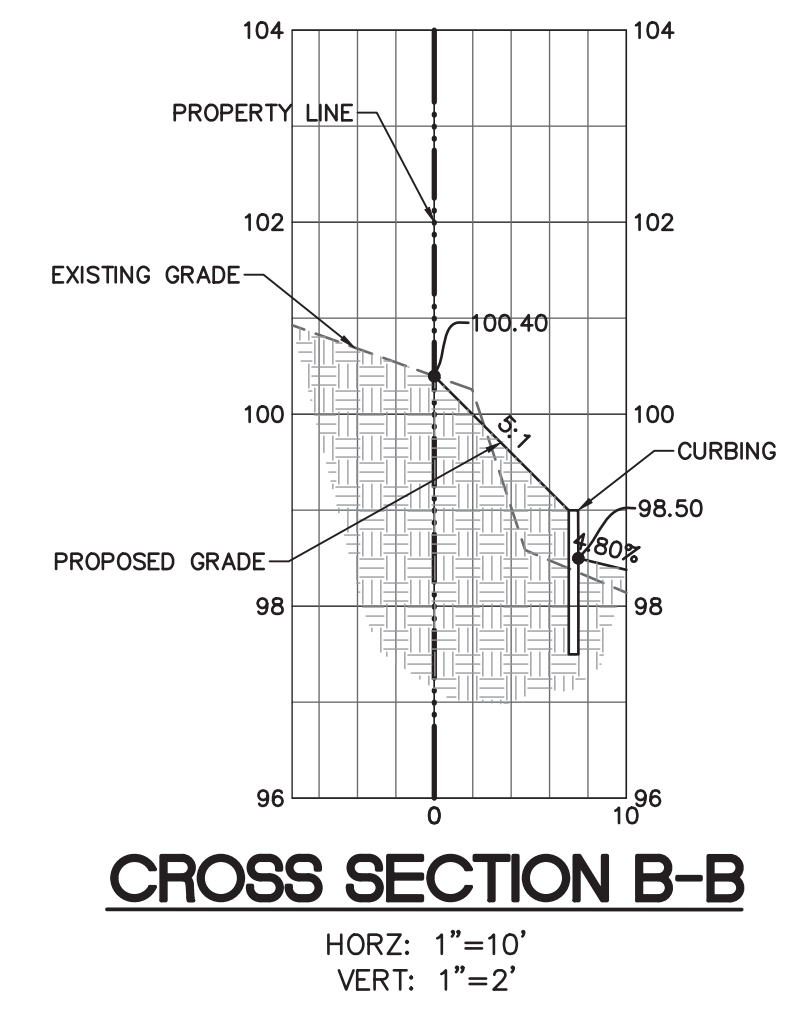
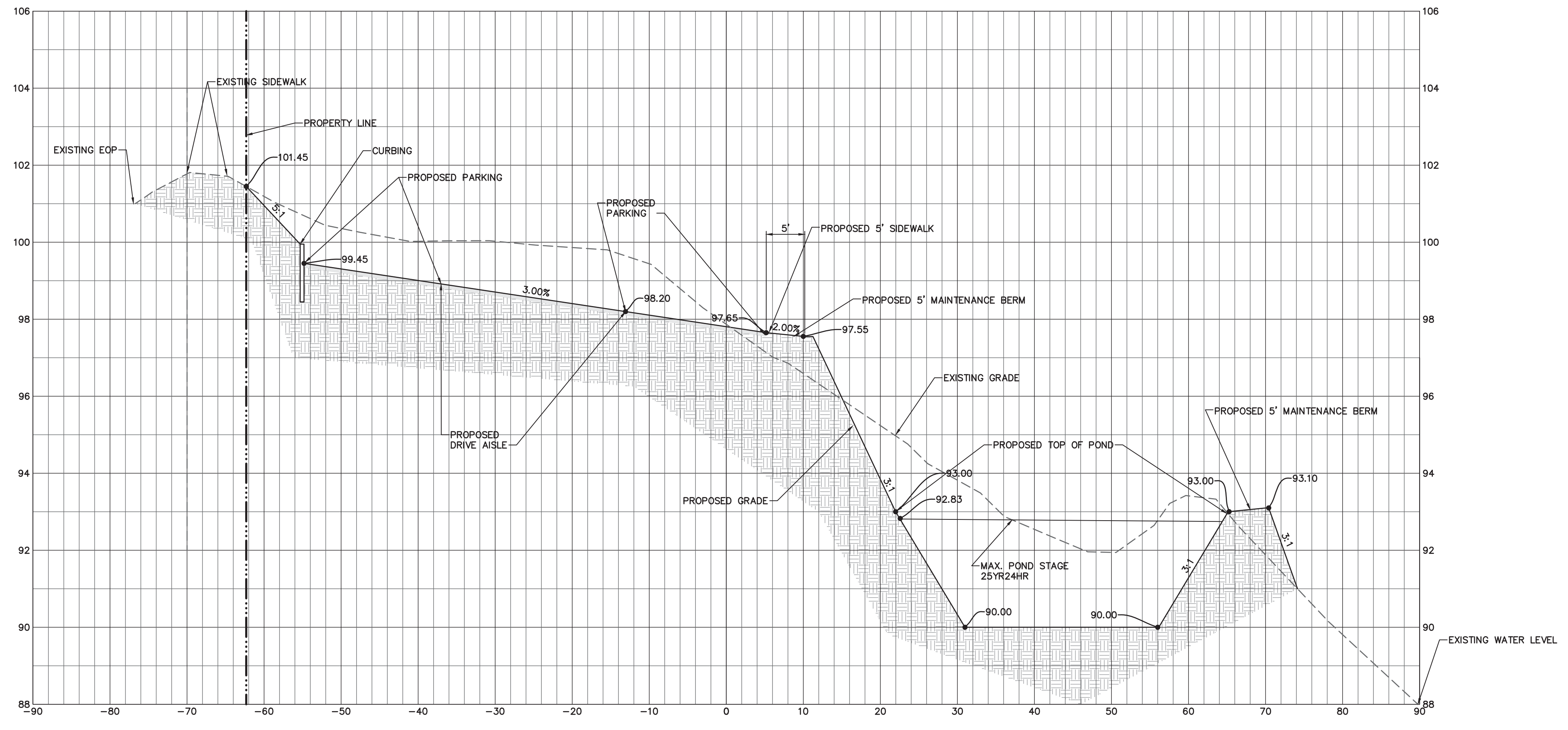
GRADING PLAN

PROJECT NAME

SHEET NAME

SHEET NO.
C-5

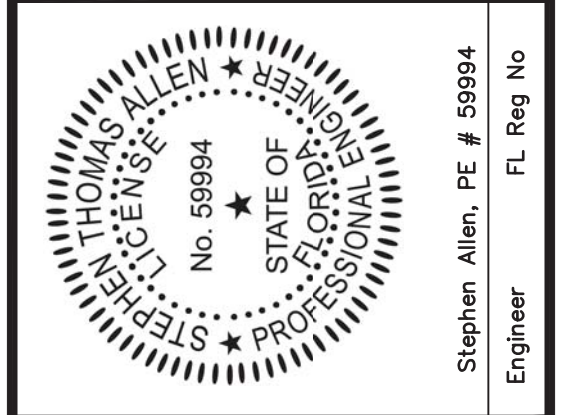
This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
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Revisions		Project No.	Drawn By	STA
4	1	129-022	AS SHWON	06/30/23
3	2			
2	1			
1	1			
#	#			

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THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

GRADING CROSS SECTIONS

PROJECT NAME

SHEET NAME

SHEET NO.
C-5A

PLUMBING NOTE

THE CONTRACTOR TO VERIFY THE FLOW ONLY FROM THE KITCHEN AREA IS DIVERTED TO THE GREASE INTERCEPTORS. BATHROOM AREA SANITARY LINE SHOULD BE DIVERTED DOWNSTREAM

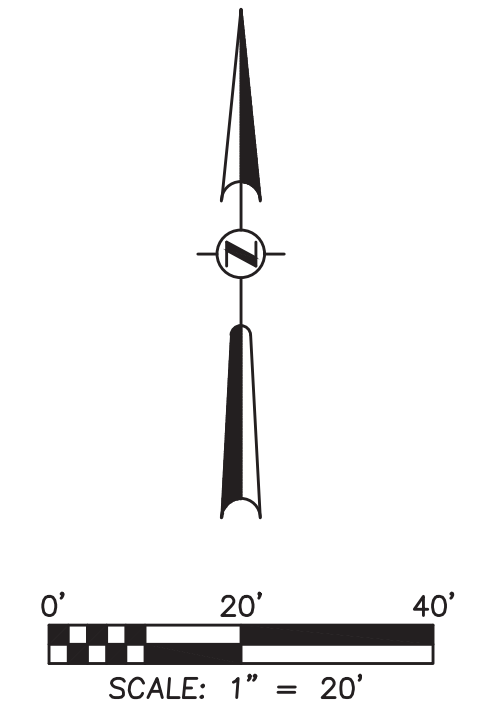
GREASE INTERCEPTOR SIZING

PROJECT DESCRIPTION:

- 107 SEATS
- 20 GALLONS / SEAT PER OCU MANUAL SECTION 2310
- 107 X 20 = 2,140 GALLONS (1,250 GALLONS MAXIMUM)
- THEREFORE USE REDUCED RATE IN SERIES
- 107 X 10 = 1,070 GALLONS (USED 2 - 750 GALLONS)

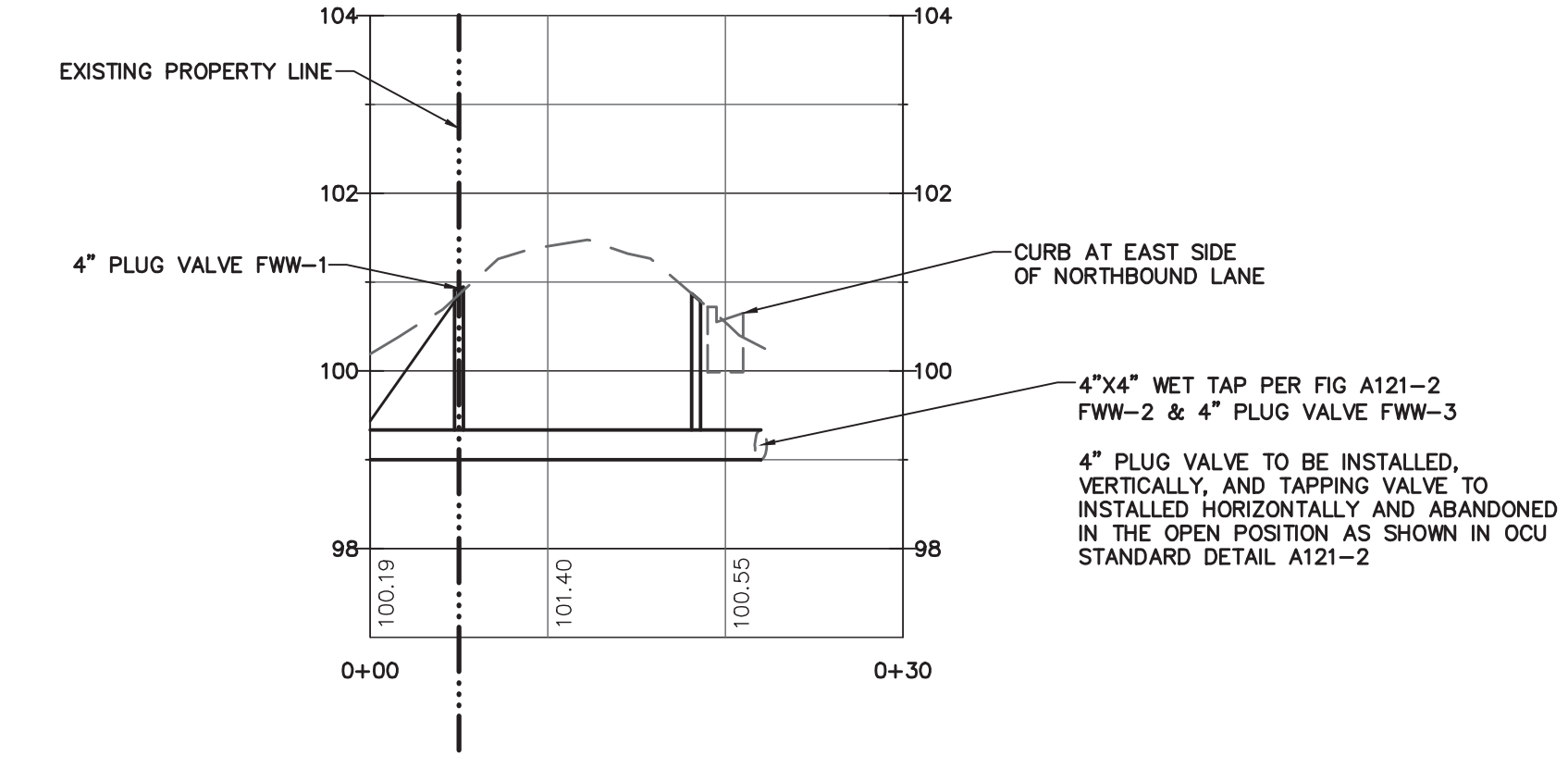
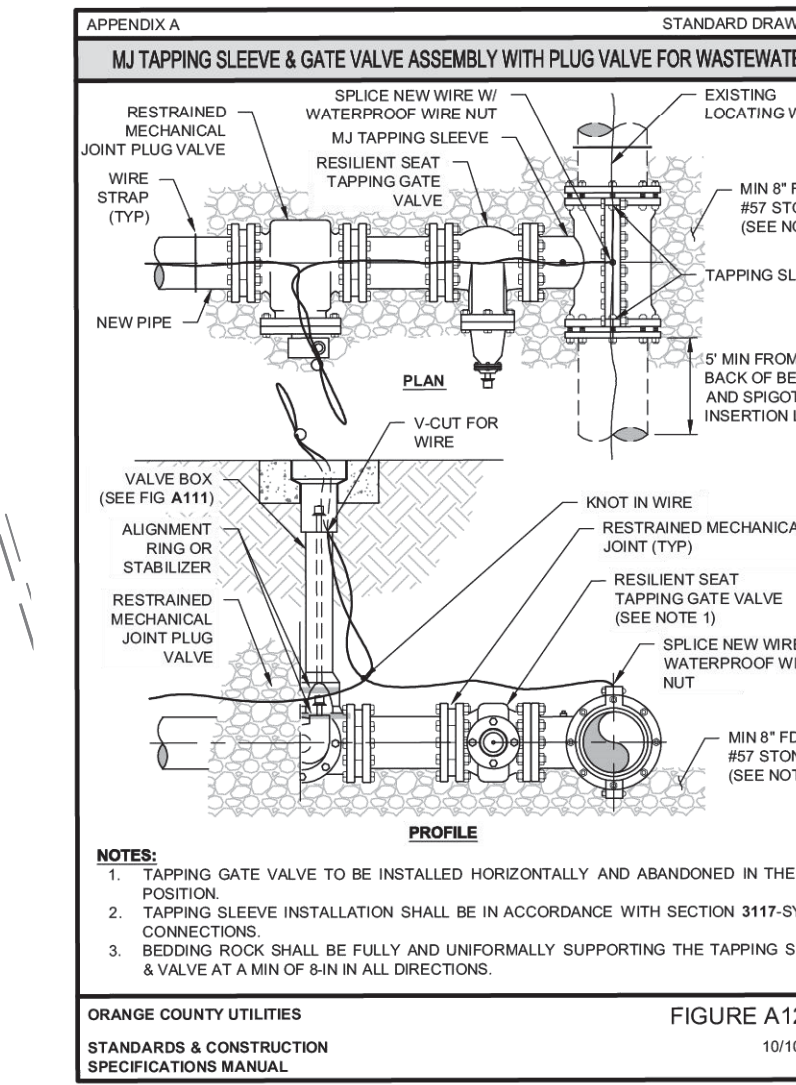
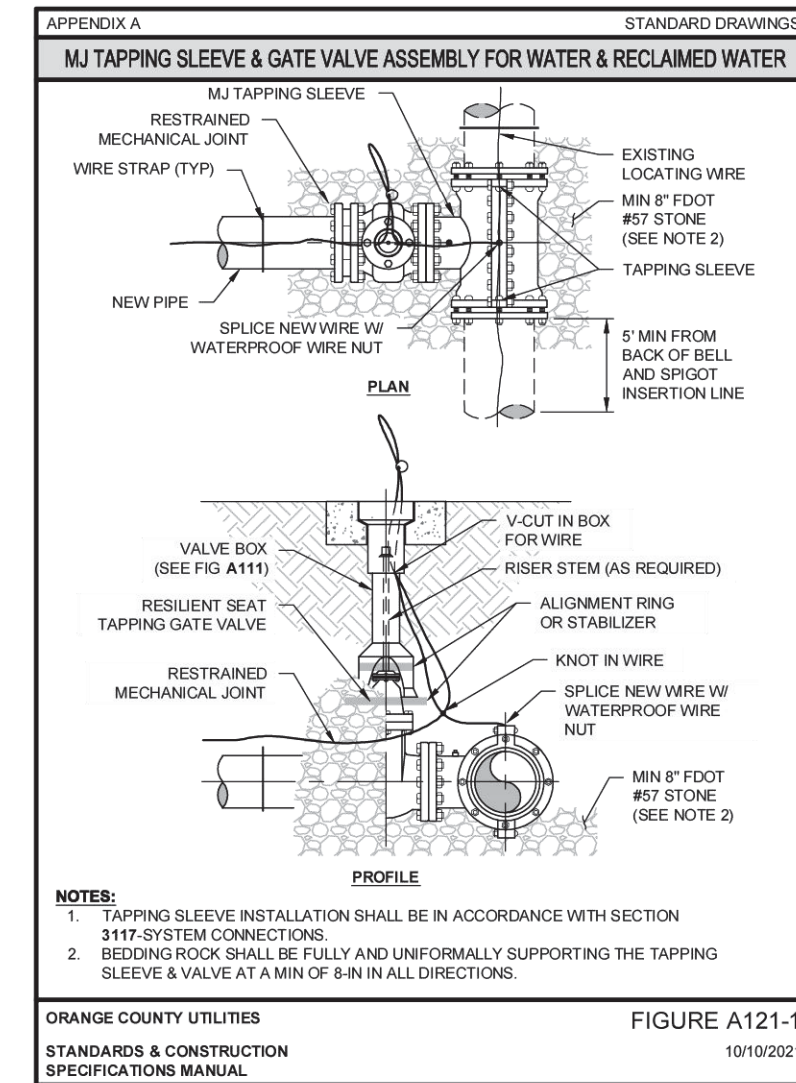
UTILITY LEGEND

- EXISTING WATER MAIN
- EXISTING SANITARY MAIN
- EXISTING OVER HEAD WIRE
- EXISTING GATE VALVE
- EXISTING FIRE HYDRANT
- EXISTING WATER METER
- EXISTING SANITARY MANHOLE
- EXISTING SANITARY CLEANOUT
- SANITARY SEWER
- PROPOSED CLEANOUT - CO
- PROPOSED GATE VALVE - GV
- PROPOSED FIRE HYDRANT - FH
- PROPOSED WATER METER
- PROPOSED BACKFLOW PREVENTER
- WATER LINE
- REDUCED PRESSURE BACKFLOW PREVENTER
- DOUBLE DETECTOR CHECK VALVE ASSEMBLY



ORANGE COUNTY NOTES

- ALL EXISTING UTILITIES HAVE BEEN FIELD VERIFIED (VERTICALLY AND HORIZONTALLY) AT ALL POINTS OF CONNECTION AND AT ALL AREAS OF CONFLICT WITH OCU INFRASTRUCTURE.
- MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND IRRIGATION MAINS.
- ALL UTILITIES, INCLUDING PUMP STATION, LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
- PLEASE FOLLOW THE ORANGE COUNTY HEALTH DEPARTMENT PROCEDURES FOR ABANDONING EXISTING SEPTIC TANK.

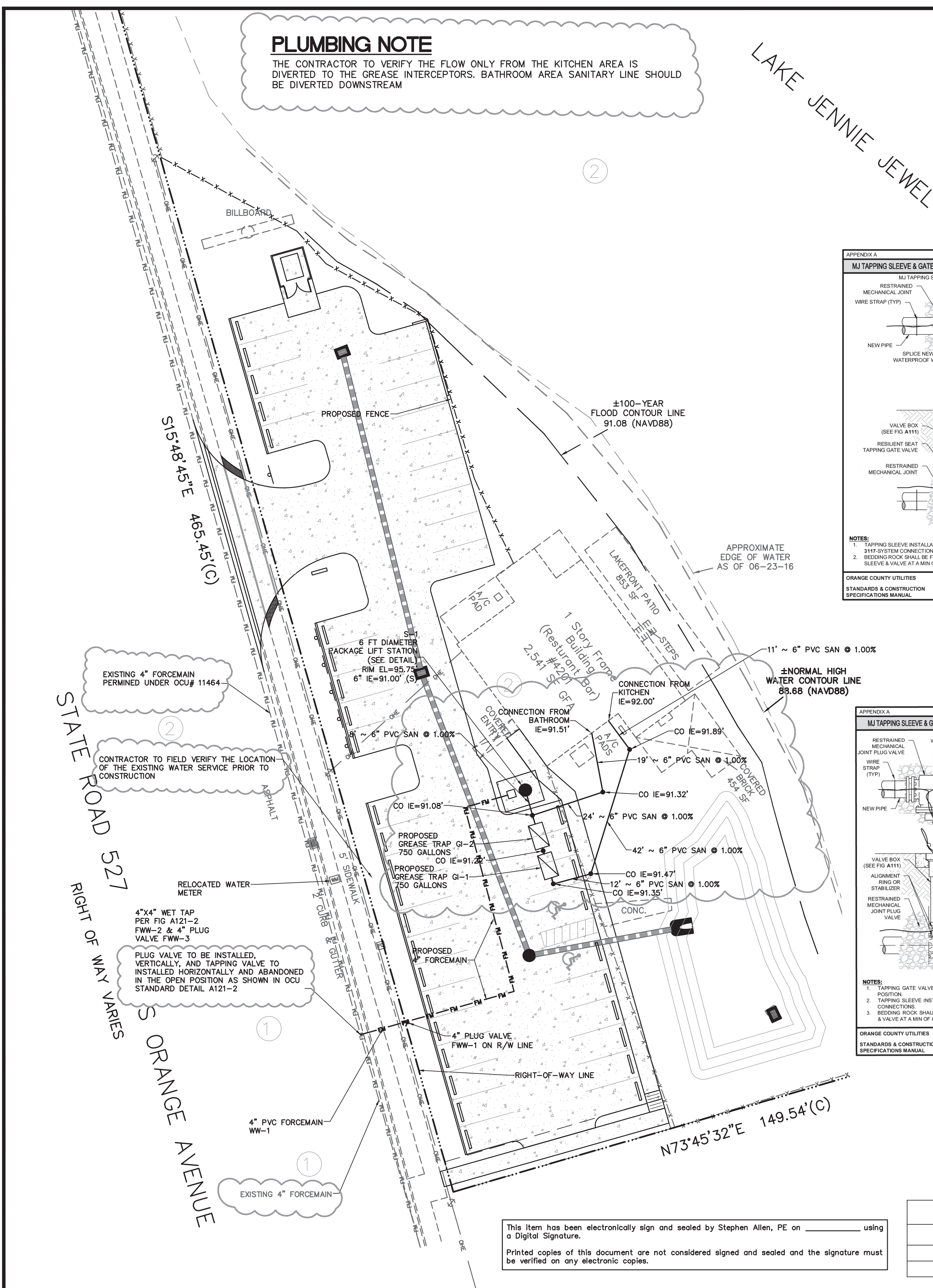


PUBLIC FORCEMAIN PROFILE

HOR: 1"=10'
VERT: 1"=2'

PRIVATE PUMP STATION						
ID NUMBER	PLAN SHEET #	EASTING	NORTHING	ELEVATION	COMMENTS	
LS-1	C-6			95.75		

GREASE INTERCEPTOR						
ID NUMBER	PLAN SHEET #	EASTING	NORTHING	ELEVATION	GALLONS	COMMENTS
GI-1	C-6				750	
GI-2	C-6				750	



This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
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VALVE ASSET TABLE															
ID NUMBER	PLAN SHEET #	EASTING	NORTHING	ELEVATION	VALVE TYPE	MAIN TYPE	VALVE SIZE	VALVE MANUFACTURER	VALVE MODEL #	# OF TURNS TO CLOSE	GEAR ACTUATOR	GEAR RATIO	SIDE ACTUATOR	ACTUATOR MANUFACTURER	COMMENTS
FWW-1	C-6				PLUG VALVE	FORCE MAIN	4 IN								
FWW-2	C-6				TAPPING SLEEVE	FORCE MAIN	4 IN								
FWW-3	C-6				PLUG VALVE	FORCE MAIN	4 IN								

PIPE ASSET TABLE												
ID NUMBER	PLAN SHEET #	EASTING	NORTHING	ELEVATION	MAIN TYPE	TYPE OF SHOT	CONSTRUCTION METHOD	MATERIAL	PRESSURE CLASS	MANUFACTURER	COMMENTS	
WW-1	C-6				FORCE MAIN		OPEN CUT	PVC	DR 21			

STA	REVISIONS	PROJECT NO.	DRAWN BY	DATE
12/01/22	1	129-022	129-022	11/05/19
2	2	Scale	1"=20'	
3	3	Project No.	129-022	Date
4	4	Scale	1"=20'	

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Phone: 407-516-0437
Certificate of Authorization No. 29390

CivilCorp Engineering, Inc.
No. 55994
FL Reg No. 55994
Stephen Allen, PE # 55994
Engineer

THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

UTILITY PLAN

PROJECT NAME: THE WATERFRONT
SHEET NAME: UTILITY PLAN
SHEET NO.: C-6

GENERAL CONSTRUCTION NOTES (REV 07/25/19)

- 1. ALL ELEVATION REFER TO VERTICAL DATUM AS INDICATED ON THE SURVEY PROVIDED HEREIN.
- 2. LOCATIONS, ELEVATIONS, AND DIMENSIONS OF EXISTING UTILITIES, STRUCTURES, AND OTHER FEATURES ARE SHOWN ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARATION OF THESE PLANS. THE CONTRACTOR SHALL VERIFY THE LOCATIONS, ELEVATIONS, AND DIMENSIONS OF ALL EXISTING UTILITIES, STRUCTURES AND OTHER FEATURES AFFECTING THIS WORK PRIOR TO CONSTRUCTION, AND NOTIFY ENGINEER OF DISCREPANCIES.
- 3. THE CONTRACTOR SHALL EXERCISE EXTREME CAUTION IN AREAS OF BURIED UTILITIES, AND SHALL PROVIDE AT LEAST 2 BUSINESS DAYS NOTICE TO THE VARIOUS UTILITY COMPANIES, IN ORDER TO PERMIT MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES, IN ADVANCE OF CONSTRUCTION, BY CALLING 811. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING ALL UTILITIES NOT INCLUDED IN THE "SUNSHINE" PROGRAM.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO EXISTING FACILITIES, ABOVE OR BELOW GROUND, THAT MAY OCCUR AS A RESULT OF THE WORK PERFORMED BY THIS CONTRACTOR.
- 5. ALL UNDERGROUND UTILITIES MUST BE IN PLACE, BACKFILLED, COMPACTED AND TESTED OR INSPECTED PRIOR TO PAVEMENT AND STRUCTURE CONSTRUCTION.
- 6. 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 REQUIREMENTS AND CODES.
- 7. ALL SPECIFICATIONS AND DOCUMENTS REFERENCED BY THE PLANS AND PERMITS SHALL BE OF LATEST REVISIONS AND/OR LATEST EDITION.
- 8. ALL WORK BY CONTRACTOR/SUBCONTRACTOR SHALL COMPLY WITH THE REGULATIONS AND ORDINANCES OF THE VARIOUS GOVERNMENTAL AGENCIES HAVING JURISDICTION OVER THE WORK.
- 9. THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE OWNER'S ENGINEER, SHOP DRAWINGS ON ALL PROPOSED PRECAST AND MANUFACTURED STRUCTURES. FAILURE TO OBTAIN APPROVAL BEFORE INSTALLATION MAY RESULT IN REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE. ALL SHOP DRAWINGS ARE TO BE REVIEWED AND APPROVED BY CONTRACTOR SIGNATURE PRIOR TO SUBMITTAL TO THE OWNER'S ENGINEER.
- 10. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND APPROPRIATE AGENCIES, AND PROVIDE THEM WITH ALL REQUIRED SHOP DRAWINGS, THE CONTRACTOR'S NAME, STARTING DATE, PROJECTED SCHEDULE, AND OTHER INFORMATION AS REQUIRED, AT LEAST TWO (2) WORKING DAYS PRIOR TO CONSTRUCTION. ANY WORK PERFORMED PRIOR TO NOTIFYING THE ENGINEER, OR WITHOUT AGENCY INSPECTOR PRESENT, MAY BE DEEMED NON-COMPLIANT AND WILL BE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- 11. WORK PERFORMED UNDER THIS CONTRACT SHALL BE COORDINATED WITH OTHER WORK BEING PERFORMED ON SITE BY OTHER CONTRACTORS AND UTILITY COMPANIES. IT WILL BE NECESSARY FOR THE CONTRACTOR TO COORDINATE AND SCHEDULE HIS ACTIVITIES, WITH OTHER CONTRACTORS AND UTILITY COMPANIES.
- 12. BACKFILL MATERIAL SHALL BE COMPACTED AROUND PIPES IN 6" LAYERS UP TO A LEVEL OF AT LEAST ONE FOOT ABOVE THE TOP AND BELOW BOTTOM OF THE PIPE. IN AREAS TO BE PAVED, BACKFILL SHALL BE COMPACTED TO 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.
- 13. SITE WORK CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF AT LEAST 4,000 P.S.I. IN 28 DAYS, UNLESS OTHERWISE NOTED.
- 14. CONCRETE REINFORCING SHALL CONFORM TO ASTM A615 GRADE OR BETTER, UNLESS OTHERWISE INDICATED ON STRUCTURE PLANS.
- 15. ALL PRIVATE AND PUBLIC PROPERTY AFFECTED BY THIS WORK SHALL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN EXISTING CONDITIONS. ADDITIONAL COSTS SHALL BE COORDINATED BETWEEN CONTRACTOR AND VENDOR.
- 16. ALL DISTURBED AREAS WHICH ARE NOT TO BE SODDED, ARE TO BE SEEDED AND MULCHED TO FDOT STANDARDS, AND MAINTAINED UNTIL ACCEPTABLE TO THE REGULATORY AGENCY AND ENGINEER OF RECORD, HAVE BEEN OBTAINED. ANY WASHOUTS, REGRADING, RESEEDING, AND GRASSING WORK, AND OTHER EROSION WORK REQUIRED, WILL BE PERFORMED BY THE CONTRACTOR, UNTIL THE SYSTEM IS ACCEPTED, BY THE OWNER, REGULATORY AGENCY AND ENGINEER OF RECORD.
- 17. THE CONTRACTOR SHALL UTILIZE THE "DESIGN SURVEYOR" TO LOCATE AND FLAG ALL PROPERTY CORNERS PRIOR TO CONSTRUCTION AND INSPECTION AND CERTIFICATION. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE PROPERTY CORNERS, WHICH HAVE BEEN LOST DURING CONSTRUCTION, REESTABLISHED BY A PROFESSIONAL LAND SURVEYOR, PREFERABLY THE "DESIGN SURVEYOR".
- 18. THE SOILS ENGINEER IS TO SUPPLY THE ENGINEER WITH A PHOTOCOPIY OF ALL COMPACTION TESTS, AND ASPHALT RESULTS. THE SOILS ENGINEER IS TO CERTIFY TO THE ENGINEER OF RECORD, IN WRITING, THAT ALL TESTING REQUIREMENTS, REQUIRED BY THE OWNER, LOCAL REGULATORY AGENCY, AND THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT), FOR THE IMPROVEMENTS, AS REQUIRED BY THE SOILS REPORT, ENGINEERING CONSTRUCTION DRAWINGS AND PERMITS, HAVE BEEN SATISFIED.
- 19. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING REQUIREMENTS AS SHOWN ON THE ENGINEERING CONSTRUCTION DRAWINGS AND IN THE SOILS REPORT. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER IS TO SUBMIT CERTIFICATIONS TO THE OWNER'S ENGINEER, STATION THAT ALL REQUIREMENTS HAVE BEEN MET.
- 20. THE CONTRACTOR IS TO REVIEW THE DESIGN SOIL REPORTS AND BORINGS PRIOR TO BIDDING THE PROJECT AND PRIOR TO COMMENCING CONSTRUCTION.
- 21. THE 100% IRRIGATION SYSTEM SHALL BE DIFFERENTIATED FROM POTABLE WATER PIPING. ALL IRRIGATION PIPING, IRRIGATION HEADS AND OTHER APPURTENANCES SHALL BE PURPLE.
- 22. THE CONTRACTOR SHALL MAINTAIN A COPY OF THE APPROVED PLANS AND PERMITS AT THE CONSTRUCTION SITE, AT ALL TIMES.
- 23. THESE DRAWINGS DO NOT INCLUDE NECESSARY COMPONENTS FOR INSTRUCTION OF THE CONTRACTOR REGARDING CONSTRUCTION SAFETY. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR MEANS AND METHODS FOR CONSTRUCTION SITE SAFETY.
- 24. ALL SODDING, SEEDING AND MULCHING SHALL INCLUDE WATER AND FERTILIZATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THESE AREAS UNTIL THE PROJECT IS COMPLETED AND ACCEPTED BY OTHERS.
- 25. CITY OF EDGEWOOD MUST BE NOTIFIED TWO (2) FULL BUSINESS DAYS PRIOR TO LANE OR WORK IN THE ROADWAY.

WORK IN FDOT RIGHTS-OF-WAY (REV 10/21/2021)

- 1. ALL STRIPING SHALL BE THERMOPLASTIC AND SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS.
- 2. REFLECTIVE PAVEMENT MARKERS SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATIONS AND SUPPLEMENTS
- 3. ALL SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION AND SUPPLEMENTS.
- 4. REFLECTIVE PAVEMENT MARKERS SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17352.
- 5. STRIPING WITHIN FDOT RIGHT-OF-WAY SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17346.
- 6. SIGNS WITHIN FDOT RIGHT-OF-WAY SHALL BE CONSTRUCTED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 11860 AND SHALL BE PLACED IN ACCORDANCE WITH FDOT STANDARD INDEX NO. 17302.
- 7. SIGNING AND STRIPING WITHIN FDOT RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- 8. ALL WORK PERFORMED WITHIN THE FLORIDA DEPARTMENT OF TRANSPORTATION RIGHTS-OF-WAY SHALL BE IN ACCORDANCE WITH THE 2020-21 FDOT STANDARD PLANS
 - A. 2020 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE 2017 UTILITY ACCOMMODATION MANUAL. FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE SPECIFICATION 2018 MANUAL.
 - B. FLORIDA DEPARTMENT OF TRANSPORTATION ROADWAY AND TRAFFIC DESIGN 2018 MANUAL (A.K.A STANDARD INDEX). COMPLIANCE WITH ALL APPLICABLE INDICES IS REQUIRED.
 - C. NOTIFY FDOT TWO BUSINESS DAYS START NOTICE CONTACT PHONE NUMBER 321-319-8100. CONTRACTOR MUST BE REQUIRED TO SUBMIT BORE LOGS AND AS-BUILT PLANS AFTER COMPLETION OF THE PERMIT
 - D. PERMITTEE SHALL NOT BEGIN ANY WORKS ALONG FDOT RIGHTWAY UNTIL AN INSPECTOR IS PRESENT AT THE JOB SITE AND AGREE THAT A PROPER PREPARATIONS HAVE BEEN MADE.

CLEARING AND EROSION CONTROL NOTES (REV 07/25/19)

- 1. PRIOR TO ANY SITE CLEARING, ALL TREES SHOWN TO REMAIN ON THE CONSTRUCTION PLANS SHALL BE PROTECTED IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY'S TREE ORDINANCE AND DETAILS CONTAINED IN THESE PLANS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN THESE TREES IN GOOD CONDITION. NO TREES SHOWN TO REMAIN SHALL BE REMOVED WITHOUT WRITTEN APPROVAL FROM THE OWNER.
- 2. THE CONTRACTOR IS TO PREPARE THE SITE PRIOR TO BEGINNING ACTUAL CONSTRUCTION IN ACCORDANCE WITH THE SOILS TESTING REPORT. COPIES OF THE SOILS REPORT ARE AVAILABLE THROUGH THE OWNER OR THE SOILS TESTING COMPANY. QUESTIONS REGARDING SITE PREPARATION REQUIREMENTS DESCRIBED IN THE SOILS REPORT ARE TO BE DIRECTED TO THE SOILS TESTING COMPANY.
- 3. THE CONTRACTOR SHALL CLEAR AND GRUB ONLY THOSE PORTIONS OF THE SITE, NECESSARY FOR CONSTRUCTION. DISTURBED AREAS WILL BE SEEDED, MULCHED, OR PLANTED WITH OTHER APPROVED LANDSCAPE MATERIAL IMMEDIATELY FOLLOWING CONSTRUCTION.
- 4. THE TOP SOIL REMOVED DURING CLEARING AND GRUBBING SHALL BE STOCKPILED AT A SITE DESIGNATED BY THE OWNER TO BE USED FOR LANDSCAPING PURPOSES, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- 5. ALL CONSTRUCTION DEBRIS AND OTHER WASTE MATERIAL SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH APPLICABLE REGULATIONS. ONLY "GRADING BY HAND" IS PERMITTED WITHIN THE CANOPY LINE OF TREES THAT ARE TO REMAIN.
- 6. THE CONTRACTOR IS TO OBTAIN ALL NECESSARY PERMITS FOR REMOVING ANY EXISTING STRUCTURES.
- 7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY ALL UTILITY COMPANIES TO DISCONNECT OR REMOVE THEIR FACILITIES PRIOR TO REMOVING OR DEMOLISHING ANY EXISTING STRUCTURES FROM THE SITE.
- 8. THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR ACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE VARIOUS UTILITIES AND TO MAKE THE NECESSARY ARRANGEMENTS FOR ANY RELOCATIONS OF THE THESE UTILITIES WITH THE OWNER OF THE UTILITY. THE CONTRACTOR SHALL EXERCISE CAUTION WHEN CROSSING ANY UNDERGROUND UTILITY, WHETHER SHOWN ON THE PLANS OR LOCATED BY THE UTILITY COMPANY. ALL UTILITIES WHICH INTERFACE WITH THE PROPOSED CONSTRUCTION SHALL BE RELOCATED BY THE RESPECTIVE UTILITY COMPANIES, AND THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES DURING RELOCATION OPERATIONS. ANY DELAY OR INCONVENIENCE CAUSED TO THE CONTRACTOR BY THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.
- 9. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAKING A VISUAL INSPECTION OF THE SITE AND WILL BE RESPONSIBLE FOR THE DEMOLITION AND REMOVAL OF ALL UNDERGROUND AND ABOVE GROUND STRUCTURES THAT WILL NOT BE INCORPORATED WITH THE NEW FACILITIES. SHOULD ANY DISCREPANCIES EXIST WITH THE PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CALLING THE OWNER AND REQUESTING A CLARIFICATION OF THE PLANS PRIOR TO DEMOLITION.
- 10. DURING CONSTRUCTION, ALL STORM SEWER INLETS IN THE VICINITY OF THE PROJECT SHALL BE PROTECTED BY SEDIMENT TRAPS SUCH AS SECURED SYNTHETIC BALES, SOD, STONE, ETC., WHICH SHALL BE MAINTAINED AND MODIFIED AS REQUIRED BY CONSTRUCTION PROGRESS.
- 11. ALL EROSION AND SILTATION CONTROL METHODS SHALL BE IMPLEMENTED PRIOR TO THE START OF CONSTRUCTION AND MAINTAINED UNTIL CONSTRUCTION IS COMPLETED.
- 12. WHEN CONSTRUCTION IS COMPLETED, THE RETENTION/DETENTION AREAS WILL BE RESHAPED, CLEANED OF SLIT, MUD AND DEBRIS, AND RE-SODDED IN ACCORDANCE TO THE PLANS.
- 13. CONTRACTOR IS TO PROVIDE EROSION CONTROL/SEDIMENTATION BARRIER (SYNTHETIC BALES OR SILTATION CURTAIN) TO PREVENT SITUATION OF ADJACENT PROPERTY, STREETS, STORM SEWERS, WATERWAYS, AND EXISTING WETLANDS. IN ADDITION, THE CONTRACTOR SHALL PLACE STRAW MULCH, OR OTHER SUITABLE MATERIAL ON THE GROUND IN AREAS WHERE CONSTRUCTION RELATED TRAFFIC IS TO ENTER AND EXIT THE SITE. IF, IN THE OPINION OF THE ENGINEER AND/OR LOCAL AUTHORITIES, EXCESSIVE QUANTITIES OF EARTH ARE TRANSPORTED OFF-SITE EITHER BY NATURAL DRAINAGE OR BY VEHICULAR TRAFFIC, THE CONTRACTOR IS TO REMOVE SAID EARTH TO THE SATISFACTION OF THE ENGINEER AND/OR AUTHORITIES. IF THE ENTRANCE DRIVE TO THE SITE IS NOT DISTURBED, PROVIDE WHEEL WASH AREA FOR ALL EXISTING CONSTRUCTION VEHICLES TO HELP PREVENT TRACKING SOIL OFF-SITE AND ONTO THE FDOT ROADWAY.
- 14. IF WIND EROSION BECOMES SIGNIFICANT DURING CONSTRUCTION, THE CONTRACTOR SHALL STABILIZE THE AFFECTED AREA USING SPRINKLING, IRRIGATION, OR OTHER ACCEPTABLE METHODS.
- 15. THERE IS TO BE NO DISCHARGE (I.E. PUMPING, SHEET FLOW, SWALE, DITCH, ETC.) INTO EXISTING LAKE SYSTEM, WETLAND, OR RIVER, WITHOUT THE USE OF SETTLING PONDS. IF THE CONTRACTOR DESIRES TO DISCHARGE INTO THE EXISTING LAKE SYSTEM OR RIVER, A SETTLING POND PLAN MUST BE SUBMITTED AND APPROVED BY THE ENGINEER OF RECORD AND LOCAL REGULATORY AGENCY PRIOR TO CONSTRUCTION.

PAVING, GRADING AND DRAINAGE NOTES (REV 07/25/19)

- 1. ALL DELETERIOUS SUBSTANCE MATERIAL, (I.E. MUCH, PEAT, BURIED DEBRIS), IS TO BE EXCAVATED IN ACCORDANCE WITH THESE PLANS, OR AS DIRECTED BY THE OWNER'S ENGINEER, OR OWNER'S SOIL TESTING COMPANY. DELETERIOUS MATERIAL IS TO BE STOCKPILED OR REMOVED FROM THE SITE AS DIRECTED BY THE OWNER. EXCAVATED AREAS ARE TO BE BACKFILLED WITH APPROVED MATERIALS AND COMPACTED AS SHOWN ON THESE PLANS.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING EXCAVATIONS AGAINST COLLAPSE AND WILL PROVIDE BRACING, SHEETING, OR SHORING, AS NECESSARY. TRENCHES SHALL BE KEPT DRY WHILE PIPE AND APPURTENANCES ARE BEING PLACED. DEWATERING SHALL BE USED AS REQUIRED.
- 3. IT MAY BE NECESSARY TO FIELD ADJUST PAVEMENT ELEVATIONS TO PRESERVE THE ROOT SYSTEMS OF TREES SHOWN TO BE SAVED. THE CONTRACTOR IS TO COORDINATE WITH OWNER'S ENGINEER PRIOR TO ANY ELEVATION CHANGES.
- 4. PRIOR TO CONSTRUCTION CONCRETE PAVEMENT, THE CONTRACTOR IS TO SUBMIT A PROPOSED JOINTING PATTERN TO THE OWNER'S ENGINEER FOR APPROVAL.
- 5. THE CONTRACTOR IS TO PROVIDE A 1/2" BITUMINOUS EXPANSION JOINT MATERIAL WITH SEALER, AT ABUTMENT OF CONCRETE AND ANY STRUCTURE.
- 6. ALL PAVEMENT MARKINGS SHALL BE MADE WITH TRAFFIC PAINT IN ACCORDANCE TO FDOT STANDARD SPECIFICATIONS 971-12 OR 971-13. PARKING STALL STRIPING TO BE 4" WIDE PAINTED WHITE STRIPES, UNLESS OTHERWISE SPECIFIED BY AGENCIES.
- 7. THE CONTRACTOR IS TO INSTALL EXTRA BASE MATERIAL WHEN THE DISTANCE BETWEEN THE PAVEMENT ELEVATION AND THE TOP OF THE PIPE OR BELL IS LESS THAN TWELVE (12) INCHES.
- 8. STANDARD INDICES REFER TO THE LATEST EDITION OF FDOT "ROADWAY AND TRAFFIC DESIGN STANDARDS".
- 9. ALL STORM SEWER PIPE SHALL BE REINFORCED CONCRETE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON PLANS.
- 10. PVC STORM PIPE, 12" AND SMALLER SHALL CONFORM TO AWWA C-900, CLASS 150 STANDARDS, UNLESS OTHERWISE NOTED.
- 11. PIPE LENGTHS SHOWN ARE APPROXIMATE AND TO THE CENTER OF DRAINAGE STRUCTURES. PIPE LENGTH FOR MITERED END AND FLARED END SECTIONS ARE TO END OF PIPE.
- 12. ALL DRAINAGE STRUCTURE GRATES AND COVERS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED FOR AND CAPABLE OF WITHSTANDING H-20 LOADINGS.
- 13. THE CONTRACTOR IS TO SOD THE RETENTION/DETENTION POND AS INDICATED ON PLANS WITHIN ONE WEEK FOLLOWING CONSTRUCTION OF THE POND.
- 14. MATERIALS AND CONSTRUCTION METHODS FOR STREETS AND STORM DRAINAGE CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY AND THE FLORIDA DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2018, OR LATEST REVISION THEREOF AND SUPPLEMENTAL SPECIFICATIONS THERETO.
- 15. UNDERCUTTING AND/OR OVER EXCAVATING THE RETENTION/DETENTION AREAS WILL NOT BE ALLOWED UNLESS NOTED OTHERWISE ON THE GRADING PLAN.
- 16. THE CONTRACTOR SHALL PROVIDE CERTIFIED RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES, INVERTS, AND LOCATIONS OF ALL STORMWATER FACILITIES INCLUDING THE STORMWATER POND, DRAINAGE STRUCTURES, BERMS & SWALES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER FOR THE PURPOSE OF CERTIFYING THE STORMWATER MANAGEMENT SYSTEM.

PAVING, GRADING AND DRAINAGE TESTING AND INSPECTION REQUIREMENTS (REV 07/25/19)

- 1. THE STORM DRAINAGE PIPING AND FILTRATION SYSTEM SHALL BE SUBJECT TO A VISUAL INSPECTION BY THE OWNER'S ENGINEER PRIOR TO THE PLACEMENT OF BACKFILL. THE CONTRACTOR IS TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE AN INSPECTION.
- 2. THE CONTRACTOR SHALL MAINTAIN THE STORM DRAINAGE SYSTEMS UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- 3. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING THE APPLICABLE TESTING WITH THE SOILS ENGINEER. TESTS WILL BE REQUIRED PURSUANT WITH THE TESTING SCHEDULE FOUND IN THE ENGINEERING CONSTRUCTION DRAWINGS. UPON COMPLETION OF THE WORK, THE SOILS ENGINEER MUST SUBMIT CERTIFICATION TO THE OWNER'S ENGINEER STATING THAT ALL REQUIREMENTS HAVE BEEN MET.

WATER CLEARANCE REQUIREMENTS (REV 07/25/19)

- 1. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER, STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER (OR A HORIZONTAL DISTANCE OF AT LEAST THREE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY-TYPE SANITARY SEWER IF THE BOTTOM OF THE WATER MAIN WILL BE LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER); A HORIZONTAL DISTANCE OF AT LEAST SIX FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; AND A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM."
- 2. NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE THE OTHER PIPELINE OR AT LEAST 12 INCHES BELOW THE OTHER PIPELINE; AND NEW OR RELOCATED, UNDERGROUND WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL CROSS ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OTHER PIPELINE.
- 3. AT THE UTILITY CROSSINGS DESCRIBED IN NUMBER 2. ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE WILL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE OR THE PIPES WILL BE ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORM SEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C., AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY- OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

WATER SYSTEM NOTES (REV 07/25/19)

- 1. ALL WATER MAINS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 2. ALL WATER SYSTEM WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 3. CONFLICTS BETWEEN WATER AND STORM OR SANITARY SEWER TO BE RESOLVED BY ADJUSTING THE WATER LINES AS NECESSARY.
- 4. ALL DUCTILE IRON PIPE SHALL BE CLASS 350 IN ACCORDANCE WITH ANSI A 21.51 (AWWA C151) AND AND PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21.51 (AWWA C151) AND SHALL BE MORTAR LINED, STANDARD THICKNESS, AND BITUMINOUS SEALED IN ACCORDANCE WITH ANSI A 21.4 (AWWA C 104).
- 5. ALL FITTINGS LARGER THAN 3" SHALL BE MECHANICAL JOINT, DUCTILE IRON CLASS 350 IN ACCORDANCE WITH ANSI A 21.10 AND 21.11 (AWWA C110 AND AWWA C111 RESPECTIVELY). FITTINGS SHALL BE CEMENT MORTAR LINED AND BITUMINOUS COATED IN ACCORDANCE WITH AWWA C104 AND AWWA C151 RESPECTIVELY.
- 6. THE CONTRACTOR IS TO INSTALL TEMPORARY BLOW-OFFS AT THE END OF WATER SERVICE LATERALS TO ASSURE ADEQUATE FLUSHING AND DISINFECTION.
- 7. ALL PVC WATER MAINS 4" THROUGH 12" SHALL BE IN ACCORDANCE WITH AWWA C900. PIPE SHALL BE CLASS 150 AND MEET THE REQUIREMENTS OF SDR 18 IN ACCORDANCE WITH ASTM D-2241.
- 8. WATER MAIN PIPE LARGER THAN 2" AND LESS THAN 4" SHALL BE PRESSURE CLASS 200 AND MEET THE REQUIREMENTS OF SDR 21 IN ACCORDANCE WITH ASTM D2241 UNLESS SPECIFIED OTHERWISE.
- 9. ALL PIPE AND FITTINGS 2" AND SMALLER SHALL BE POLYETHYLENE TUBING WITH COMPRESSION FITTINGS.
- 10. ALL GATE VALVES 2" OR LARGER SHALL BE RESILIENT SEAT OR RESILIENT WEDGE MEETING THE REQUIREMENTS OF AWWA C509.
- 11. ALL FIRE HYDRANTS SHALL MEET THE REQUIREMENTS OF AWWA C502 AND SHALL BE APPROVED BY THE LOCAL UTILITY AND FIRE MARSHAL.
- 12. MATERIALS AND CONSTRUCTION METHODS FOR WATER DISTRIBUTION SYSTEM SHALL BE IN ACCORDANCE WITH THE LOCAL REGULATORY AGENCY CODES, PLANS, AND SPECIFICATIONS FOR CONSTRUCTION, LATEST REVISION THEREOF, AND SUPPLEMENTAL SPECIFICATIONS THERETO. APPROVAL AND CONSTRUCTION OF ALL POTABLE WATER SERVICE MAIN EXTENSIONS AND CONNECTIONS MUST BE COORDINATED THROUGH THE LOCAL REGULATORY AGENCY.
- 13. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW THE LOCATION ON ALL WATER MAINS AND SERVICES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER.

WATER SYSTEM TESTING AND INSPECTION REQUIREMENTS (REV 07/25/19)

- 1. ALL COMPONENTS OF THE WATER SYSTEM, INCLUDING FITTINGS, HYDRANTS, CONNECTIONS, AND VALVES SHALL BE BACKFILLED AND COMPACTED PRIOR TO BEING PRESSURE TESTED AND ACCEPTED BY THE ENGINEER AND LOCAL AUTHORITIES. PRESSURE TESTS SHALL BE IN ACCORDANCE WITH LOCAL WATER DEPARTMENT & FDEP SPECIFICATIONS. CONTRACTOR SHALL NOTIFY OWNER'S ENGINEER AND WATER DEPARTMENT INSPECTORS TWO (2) BUSINESS DAYS IN ADVANCE OF PERFORMING TESTS.
- 2. CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED CHLORINATION/DISINFECTION AND BACTERIOLOGICAL SAMPLING IN ACCORDANCE TO FDEP REGULATIONS. CONTRACTOR SHALL OBTAIN CLEARANCE OF DOMESTIC WATER SYSTEM. COPIES OF ALL BACTERIOLOGICAL TESTS (WHICH SHALL ALSO INDICATE THE CHLORINE RESIDUAL) SHALL BE SUBMITTED TO ENGINEER.

FDEP NOTES (REV 07/25/19)

- 1. ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT WILL CONFORM TO APPLICABLE AMERICAN WATER WORKS ASSOCIATION (AWWA) STANDARDS.
- 2. ALL PUBLIC WATER SYSTEM COMPONENTS, EXCLUDING FIRE HYDRANTS, THAT WILL BE INSTALLED UNDER THIS PROJECT AND THAT WILL COME INTO CONTACT WITH DRINKING WATER WILL CONFORM TO NSF INTERNATIONAL STANDARD 61.
- 3. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAN 0.2% LEAD.
- 4. ALL POTABLE WATER PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE COLOR CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPH 62-555.320(21)(B)3, F.A.C., USING BLUE AS A PREDOMINANT COLOR. (UNDERGROUND PLASTIC PIPE WILL BE SOLID-WALL BLUE PIPE, WILL HAVE A CO-EXTRUDED BLUE EXTERNAL SKIN, OR WILL BE WHITE OR BLACK PIPE WITH BLUE STRIPES INCORPORATED INTO, OR APPLIED TO, THE PIPE WALL; AND UNDERGROUND METAL OR CONCRETE PIPE WILL HAVE BLUE STRIPES APPLIED TO THE PIPE WALL. PIPE STRIPED DURING MANUFACTURING OF THE PIPE WILL HAVE CONTINUOUS STRIPES THAT RUN PARALLEL TO THE AXIS OF THE PIPE. THAT ARE LOCATED AT NO GREATER THAN 90-DEGREE INTERVALS AROUND THE PIPE, AND THAT WILL REMAIN INTACT DURING AND AFTER INSTALLATION OF THE PIPE. IF TAPE OR PAINT IS USED TO STRIPE PIPE DURING INSTALLATION OF THE PIPE, THE TAPE OR PAINT WILL BE APPLIED IN A CONTINUOUS LINE THAT RUNS PARALLEL TO THE AXIS OF THE PIPE AND THAT IS LOCATED ABOVE THE TOP OF THE PIPE. FOR PIPE WITH AN INTERNAL DIAMETER OF 24 INCHES OR GREATER, TAPE OR PAINT WILL BE APPLIED IN CONTINUOUS LINES ALONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE. ABOVEGROUND PIPE WILL BE PAINTED BLUE OR WILL BE COLOR CODED OR MARKED LIKE UNDERGROUND PIPE.)
- 5. THE OPEN END OF THE AIR RELIEF PIPE FROM ALL AUTOMATIC AIR RELIEF VALVES INSTALLED UNDER THIS PROJECT WILL BE EXTENDED TO AT LEAST ONE FOOT ABOVE GRADE AND WILL BE PROVIDED WITH A SCREENED, DOWNWARD-FACING ELBOW.
- 6. NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDED PROCEDURES.
- 7. A CONTINUOUS AND UNIFORM BEDDING WILL BE PROVIDED IN TRENCHES FOR UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT; BACKFILL MATERIAL WILL BE TAMPED IN LAYERS AROUND UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT. UNDERGROUND HIGH PRESSURE PIPE SHALL BE PROVIDED WITH FULL SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURERS' RECOMMENDED INSTALLATION PROCEDURES) FOUND IN TRENCHES WILL BE REMOVED FOR A DEPTH OF AT LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.
- 8. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT.
- 9. NEW OR ALTERED WATER MAINS THAT ARE INCLUDED IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C605, RESPECTIVELY, AND ALL NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600.
- 10. NEW OR ALTERED WATER MAINS, INCLUDING FIRE HYDRANT LEADS AND INCLUDING SERVICE LINES THAT WILL BE UNDER THE CONTROL OF A PUBLIC WATER SYSTEM AND THAT HAVE AN INSIDE DIAMETER OF THREE INCHES OR GREATER, WILL BE DISINFECTED AND BACTERIOLOGICALLY EVALUATED IN ACCORDANCE WITH RULE 62-555.340, F.A.C.

SANITARY SEWER NOTES (REV 07/25/19)

- 1. ALL SANITARY SEWER MAINS & LATERALS SHALL HAVE A MINIMUM OF 36 INCHES OF COVER.
- 2. ALL SANITARY SEWER MAINS & SERVICE LATERALS SHALL BE CONSTRUCTED OF POLYVINYL CHLORIDE PIPE, SDR 35 FOR DEPTHS 3'-12' AND SDR 26 FOR DEPTHS 12'-18' OR AS OTHERWISE INDICATED ON THE CONSTRUCTION DRAWINGS.
- 3. ALL SANITARY SEWER WORK SHALL CONFORM WITH LOCAL REGULATORY STANDARDS AND SPECIFICATIONS.
- 4. PRIOR TO COMMENCING WORK WHICH REQUIRES CONNECTING NEW WORK TO EXISTING LINES OR APPURTENANCES, THE CONTRACTOR SHALL VERIFY LOCATION AND ELEVATION OF EXISTING CONNECTION POINT AND NOTIFY OWNER'S ENGINEER OF ANY CONFLICTS OR DISCREPANCIES.
- 5. PVC PIPE AND FITTINGS SHALL CONFORM TO ASTM SPECIFICATIONS DESIGNATION D-3034-77C, MA SDR 35. INSTALLATION OF SDR 35 PIPE SHALL BE IN STRICT ACCORDANCE WITH THE REQUIREMENTS OF ASTM SPECIFICATION SECTION D2221. ALL SANITARY SEWER PIPELINES SHALL BE SOLID GREEN IN COLOR.
- 6. ALL PVC FORCE MAINS SHALL BE CLASS 200, SDR 21, COLOR GREEN, WITH A GREEN MAGNETIC TAPE A MINIMUM OF 2" WIDE, PLACED 1 FOOT BELOW THE PROPOSED GRADE. THE PRINTING ON THE MAGNETIC TAPE SHOULD READ "FORCEMAIN".
- 7. ALL DUCTILE IRON PIPE SHALL BE PRESSUR CLASS 350 IN ACCORDANCE WITH ANSI A 21.51-91 (AWWA C 151), DUCTILE IRON PIPE SHALL RECEIVE EXTERIOR BITUMINOUS COATING IN ACCORDANCE WITH ANSI A 21-51 (AWWA C151) AND SHALL BE CEMENT MORTAR LINED, STANDARD THICKNESS IN ACCORDANCE WITH ANSI 21.4 (AWWA C104).
- 8. ALL SANITARY SEWER GRAVITY MAINS OR SANITARY SEWER FORCEMAINS THAT REQUIRE DUCTILE IRON PIPE ARE TO BE POLYUMED OR EPOXY LINED.
- 9. ALL SANITARY SEWER COVERS SHALL BE TRAFFIC RATED FOR H-20 LEADING.
- 10. THE CONTRACTOR SHALL PROVIDE CERTIFIED UTILITY RECORD DRAWINGS, SIGNED AND SEALED BY A PROFESSIONAL LAND SURVEYOR. THE RECORD DRAWINGS SHALL SHOW FINAL GRADES AND LOCATIONS ON ALL SANITARY SEWER MAINS AND SERVICES. THE CONTRACTOR SHALL PROVIDE TEN COPIES OF THE CERTIFIED RECORD DRAWINGS TO THE ENGINEER.
- 11. ALL SANITARY FORCEMAINS AND GRAVITY MAINS SHALL BE SEPARATED A MINIMUM OF 6 FEET HORIZONTALLY (10 FEET PREFERRED) AND A MINIMUM OF 12 INCHES VERTICALLY (6 INCHES MINIMUM FOR GRAVITY BUT 12 INCHES IS PREFERRED) FROM ADJACENT WATER MAINS. WHEN THESE SEPARATION DISTANCES ARE NOT POSSIBLE, CONTRACTOR SHALL CONSULT ENGINEER AND AGENCY HAVING JURISDICTION FOR PIPE MATERIAL AND/OR ENCASEMENT ALTERNATIVES.

SANITARY SEWER TESTING AND INSPECTION REQUIREMENTS (REV 07/25/19)

- 1. ALL GRAVITY SEWER PIPING SHALL BE SUBJECT TO VISUAL INSPECTION BY THE OWNER'S ENGINEER. CONTRACTOR TO NOTIFY THE ENGINEER 48 HOURS IN ADVANCE TO SCHEDULE INSPECTION.
- 2. CONTRACTOR SHALL CONDUCT VIDEO CAMERA INSPECTION OF ALL GRAVITY SEWER PIPING AND PROVIDE ENGINEER WITH VIDEO TAPE OR DVD OF INSPECTION FOR VIEW AND APPROVAL.
- 3. THE GRAVITY SANITARY SEWER AND ALL SERVICE LATERALS SHALL BE SUBJECT TO ADDITIONAL TESTING AS REQUIRED BY LOCAL REGULATIONS. TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SHALL BE SUBMITTED TO THE LOCAL AUTHORITIES FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
- 4. ALL FORCE MAINS SHALL BE SUBJECT TO HYDROSTATIC PRESSURE TEST IN ACCORDANCE WITH THE REGULATORY AGENCY HAVING JURISDICTION. SAID TESTS ARE TO BE CERTIFIED BY THE ENGINEER OF RECORD AND SUBMITTED TO THE REGULATORY AGENCY FOR APPROVAL. COORDINATION AND NOTIFICATION OF ALL PARTIES IS THE CONTRACTOR'S REASONABILITY.

GENERAL SAFETY NOTES

- 1. DURING THE CONSTRUCTION AND/OR MAINTENANCE OF THIS PROJECT, ALL SAFETY REGULATIONS ARE TO BE ENFORCED BY THE CONTRACTOR. THE CONTRACTOR OR HIS REPRESENTATIVE SHALL BE RESPONSIBLE FOR THE CONTROL AND SAFETY OF THE TRAVELING PUBLIC AND THE SAFETY OF HIS PERSONNEL.
- 2. THE MINIMUM STANDARDS TO SET FORTH IN THE CURRENT EDITION OF THE STATE OF FLORIDA, MANUAL ON TRAFFIC CONTROL AND SAFE PRACTICES FOR STREET AND HIGHWAY CONSTRUCTION, MAINTENANCE AND UTILITY OPERATIONS SHALL BE FOLLOWED IN THE DESIGN APPLICATION, INSTALLATION, MAINTENANCE, AND REMOVAL OF THE TRAFFIC CONTROL DEVICES, WARNING DEVICES, AND BARRIERS NECESSARY TO PROTECT THE PUBLIC AND WORKMEN FROM HAZARDS WITHIN THE PROJECT LIMITS.
- 3. ALL TRAFFIC CONTROL MARKINGS AND DEVICES SHALL CONFORM TO THE PROVISIONS SET FORTH IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES PREPARED BY THE U.S. DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION.
- 4. LABOR SAFETY REGULATIONS SHALL CONFORM TO THE PROVISIONS SET FORTH BY OSHA IN THE FEDERAL REGISTER AND THE FLORIDA DEPARTMENT OF TRANSPORTATION REGULATIONS.
- 5. IT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COMPLY AND ENFORCE ALL APPLICABLE SAFETY REGULATIONS. THE ABOVE INFORMATION HAS BEEN PROVIDED FOR THE CONTRACTOR'S INFORMATION ONLY AND DOES NOT IMPLY THAT THE OWNER OR ENGINEER WILL INSPECT AND/OR ENFORCE SAFETY REGULATIONS.
- 6. ALL MAINTENANCE OF TRAFFIC SHALL ADHERE TO THE REQUIREMENTS OF THE DESIGN STANDARDS 600 INDEXES.

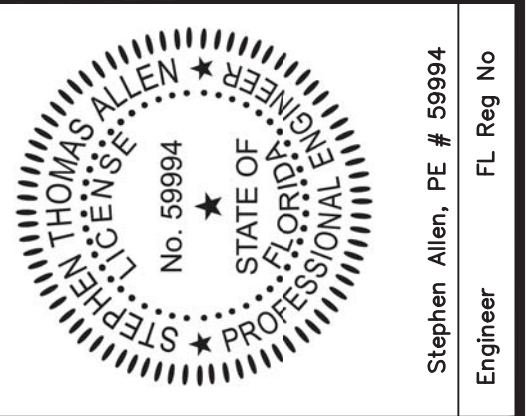
Revisions	By	Date
1		
2		
3		
4		

Project No.	129-022
Scale	NTS
Drawn By	STA
Date	11/05/19

LOCH INVESTMENTS, LLC

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THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

GENERAL CIVIL NOTES

PROJECT NAME

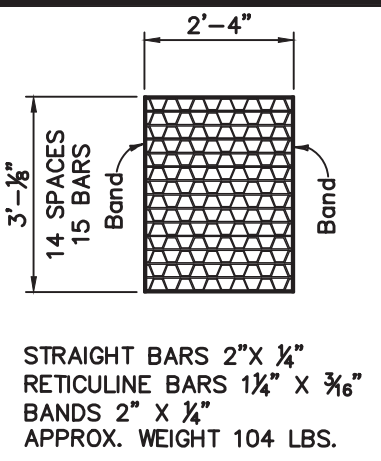
SHEET NAME

SHEET NO.
C-7

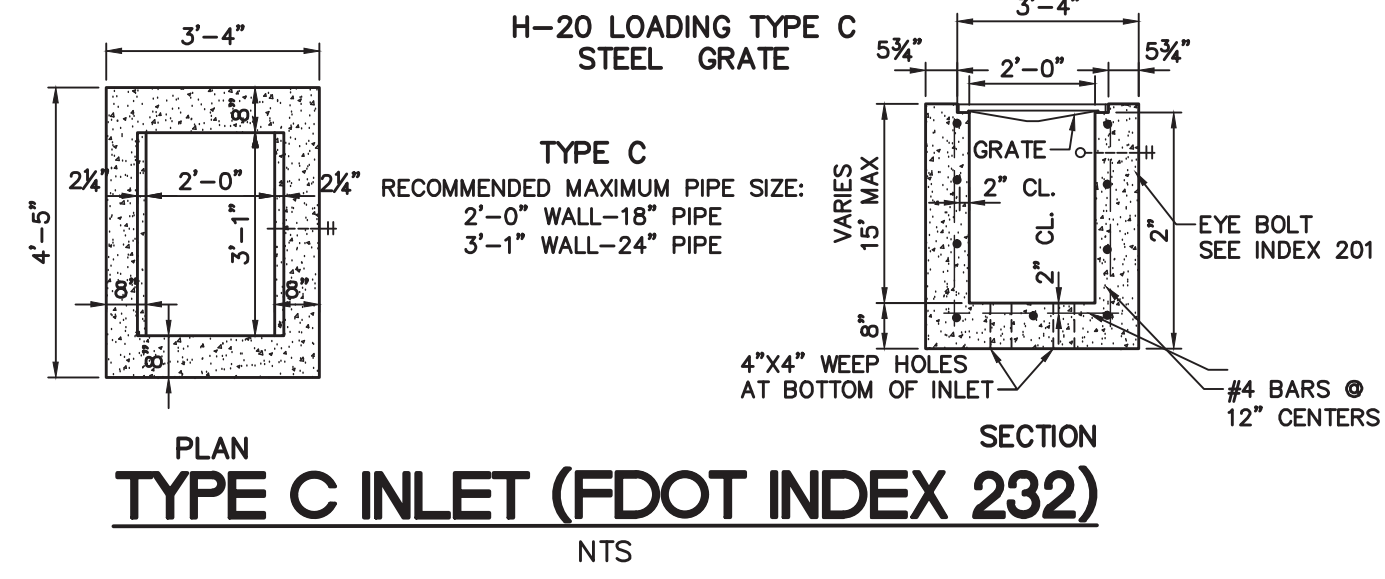
Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

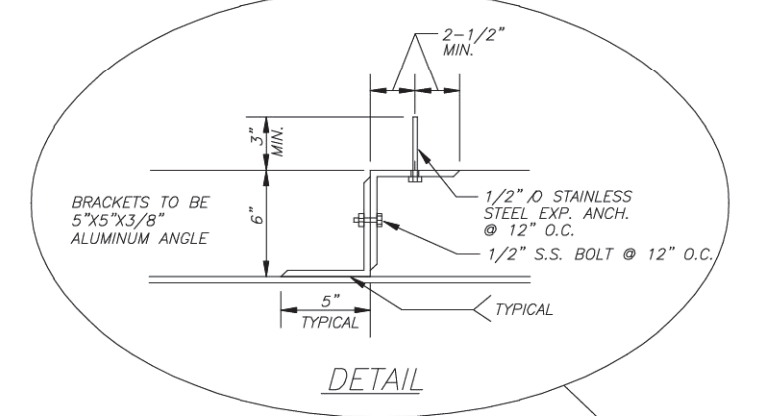
This Item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



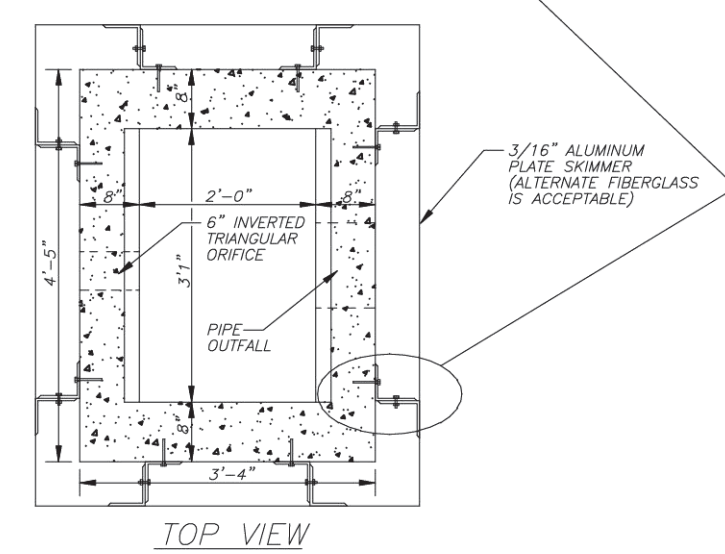
STRAIGHT BARS 2" X 4"
RETICULATE BARS 1 1/2" X 3/4"
BANDS 2" X 4"
APPROX. WEIGHT 104 LBS.



TYPE C INLET (FDOT INDEX 232)
NTS



DETAIL



TOP VIEW
SKIMMER DETAILS

APPENDIX A STANDARD DRAWINGS

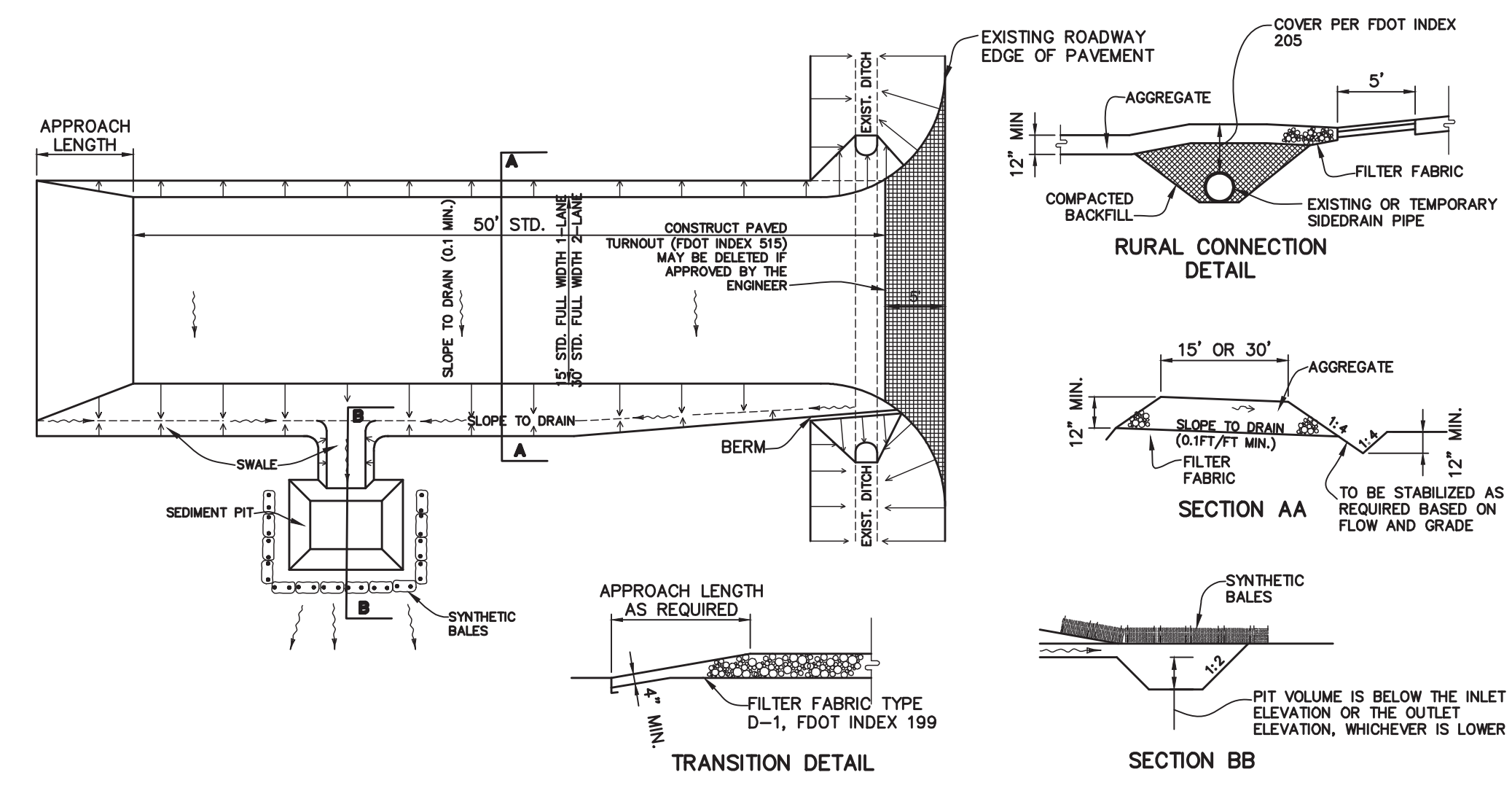
VERTICAL PIPELINE SEPARATION REQUIREMENTS

VERTICAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

PROPOSED UTILITY	POTABLE WATER (NOTE 4)	RECLAIMED WATER MAIN	WASTEWATER FORCEMAIN	SANITARY SEWER	STORM SEWER (NOTE 3)
POTABLE WATER (NOTE 4)	12"	12"	12" / 18"	12" / 18"	12" / 18"
RECLAIMED WATER MAIN	12"	12"	12"	12"	12" / 18"
WASTEWATER FORCEMAIN	12"	12"	12"	12"	12" / 18"
SANITARY SEWER	12" / 18"	12"	12"	12"	12" / 18"

- NOTES:**
- DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
 - THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE.
 - THE 18-IN SEPARATION REQUIREMENT APPLIES WHEN THE STORM PIPE OR SANITARY SEWER CROSSES ABOVE THE UTILITY MAIN, AND WHEN THE STORM PIPE HAS A DIAMETER EQUAL TO OR GREATER THAN 24-IN. OTHERWISE, THE REQUIRED SEPARATION IS 12-IN.
 - THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES.
 - NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
 - REFERENCE FIGURE A116-1 FOR HORIZONTAL PIPELINE SEPARATION REQUIREMENTS.
 - JOINT SPACING AT CROSSING SHALL COMPLY WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, F.A.C.

ORANGE COUNTY UTILITIES
STANDARDS & CONSTRUCTION
SPECIFICATIONS MANUAL
FIGURE A116-2
10/10/2021



- GENERAL NOTES:**
- A SOIL TRACKING PREVENTION DEVICE (STPD) SHALL BE CONSTRUCTED AT LOCATION DESIGNATED BY THE ENGINEER FOR POINTS OF EGRESS FROM UNSTABILIZED AREAS OF THE PROJECT TO PUBLIC ROADS WHERE OFF-SITE TRACKING OF MUD COULD OCCUR. TRAFFIC FROM UNSTABILIZED AREAS OF THE CONSTRUCTION PROJECT SHALL BE DIRECTED THRU A STPD. BARRIERS FLAGGING, OR OTHER POSITIVE MEANS SHALL BE USED AS REQUIRED TO LIMIT AND DIRECT VEHICULAR EGRESS ACROSS THE STPD.
 - THE CONTRACTOR MAY PROPOSE AN ALTERNATIVE TO MINIMIZE OFF-SITE TRACKING OF SEDIMENT. THE ALTERNATIVE MUST BE REVIEWED AND APPROVED BY THE ENGINEER AND/OR LOCAL MUNICIPALITY PRIOR TO ITS USE.
 - ALL MATERIAL SPILLED, DROPPED, OR TRACKED ONTO PUBLIC ROADS (INCLUDING THE STPD AGGREGATE AND CONSTRUCTION MUD) SHALL BE REMOVED DAILY, OR MORE FREQUENTLY IF SO DIRECTED BY THE ENGINEER AND/OR LOCAL MUNICIPALITY.
 - AGGREGATES SHALL BE DESCRIBED IN SECTION 901 EXCLUDING 901-2.3. AGGREGATES SHALL BE FDOT SIZE #1. IF THIS SIZE IS NOT AVAILABLE, THE NEXT AVAILABLE SMALLER SIZE AGGREGATE MAY BE SUBSTITUTED WITH THE APPROVAL OF THE ENGINEER. SIZES CONTAINING EXCESSIVE SMALL AGGREGATE WILL TRACK OFF THE PROJECT AND ARE UNSUITABLE.
 - THE SEDIMENT PIT SHOULD PROVIDE A RETENTION VOLUME OF 3600 CUBIC FEET/ACRE OF SURFACE AREA DRAINING TO THE PIT. WHEN THE STPD IS ISOLATED FROM OTHER DRAINAGE AREAS, THE FOLLOWING PIT VOLUMES WILL SATISFY THIS REQUIREMENT:
15' X 50' = 100 FT³
30' X 30' X 50' = 200 FT³
 - THE SWALE DITCH DRAINING THE STPD SHALL HAVE A 0.02% MINIMUM AND A 1.0% MAXIMUM GRADE ALONG THE STPD AND TO THE SEDIMENT PIT.
 - MITERED END SECTIONS ARE NOT REQUIRED WHEN THE SIDEDRAIN PIPE SATISFIES THE CLEAR ZONE REQUIREMENTS.
 - THE STPD SHALL BE MAINTAINED IN A CONDITION THAT WILL ALLOW IT TO PERFORM ITS FUNCTION. TO PREVENT OFF-SITE TRACKING, THE STPD SHALL BE RINSED DAILY WHEN IN USE TO MOVE ACCUMULATED MUD DOWNWARD THRU THE STONE. ADDITIONAL STABILIZATION OF THE VEHICULAR ROUTE LEADING TO THE STPD MAY BE REQUIRED TO LIMIT THE MUD TRACKED.
 - THE NOMINAL SIZE OF A STANDARD STPD IS 15'X50' UNLESS OTHERWISE SHOWN IN THE PLANS. IF THE VOLUME OF ENTERING AND EXITING VEHICLES WARRANT, A 30' WIDTH STPD MAY BE USED IF APPROVED BY THE ENGINEER. WHEN A DOUBLE WIDTH (30') STPD IS USED, THE PAY QUANTITY SHALL BE 2 FOR EACH LOCATION.

CONSTRUCTION ENTRANCE DETAILS
NTS

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THE WATERFRONT
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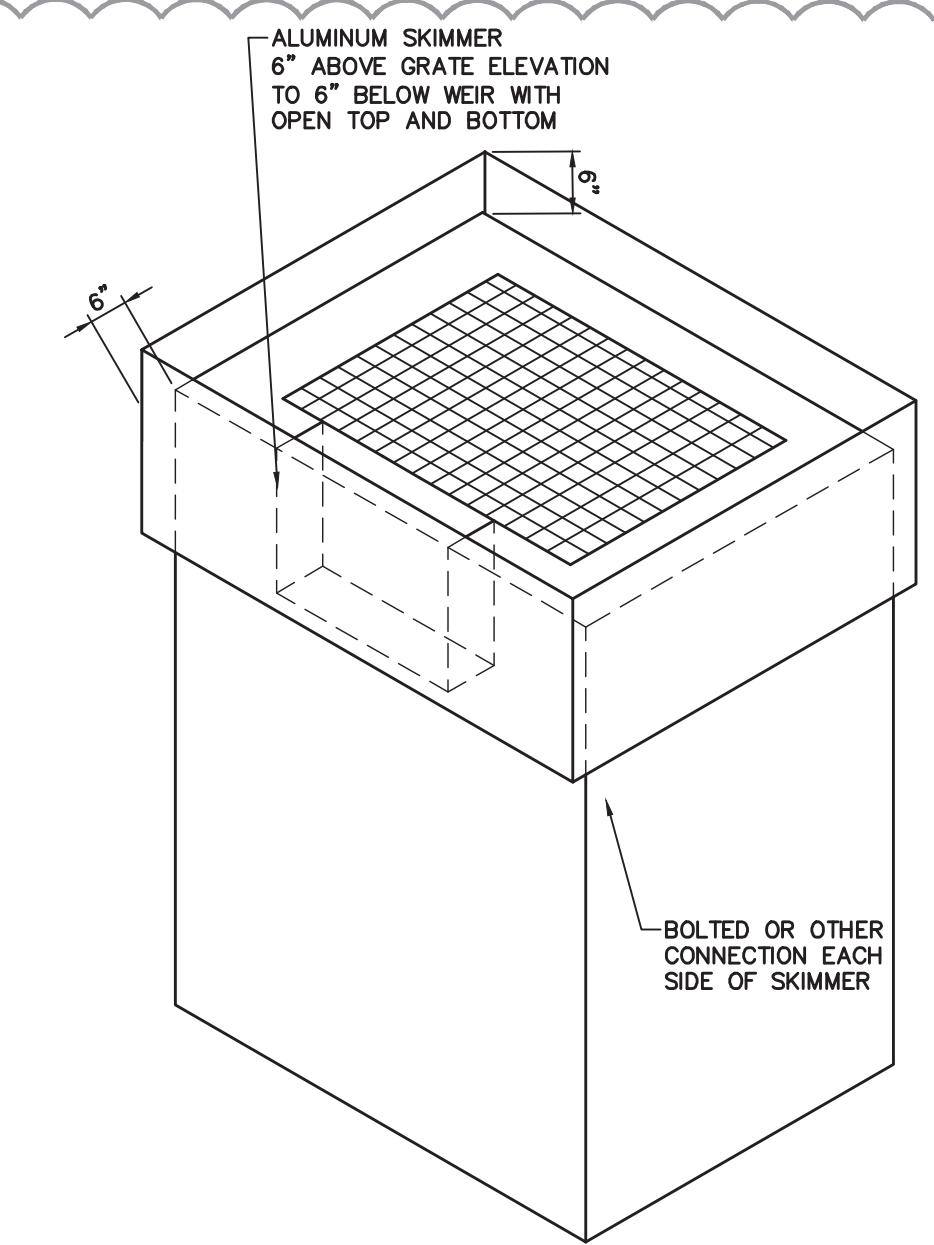
DETAIL SHEET

PROJECT NAME

SHEET NAME

SHEET NO.

C-9



ITEM	ELEVATION	WIDTH	HEIGHT
GRATE	92.85'	STANDARD	STANDARD
WEIR	92.04'	14"	9.72"
SKIMMER	91.54'	STANDARD	181"
OUTFALL PIPE	88.05'	18"	18"

**MODIFIED TYPE 'C' INLET
OUTFALL CONTROL STRUCTURE (S-55)**
NTS

APPENDIX A STANDARD DRAWINGS

HORIZONTAL PIPELINE SEPARATION REQUIREMENTS

HORIZONTAL SEPARATION REQUIREMENTS (NOTES 1 & 2)

PROPOSED UTILITY	POTABLE WATER (NOTE 3)		RECLAIMED WATER MAIN (SEE NOTE 7)		WASTEWATER FORCEMAIN		SANITARY SEWER	STORM SEWER	STRUCTURAL FOUNDATION WALLS, ETC. (SEE NOTE 8)
	4"-12"	16"-UP	4"-12"	16"-UP	4"-12"	16"-UP	ALL SIZES	ALL SIZES	ALL SIZES
POTABLE WATER (NOTE 3)	4"-12"	3'	5'	3'	5'	6'	6'	3'	10'
	16"-UP	5'	5'	5'	5'	6'	6'	5'	15' (NOTE 5)
RECLAIMED WATER MAIN (SEE NOTE 7)	4"-12"	3'	5'	3'	5'	3'	5'	3'	10'
	16"-UP	5'	5'	5'	5'	5'	5'	5'	15' (NOTE 5)
WASTEWATER FORCEMAIN	4"-12"	6'	6'	3'	5'	3'	5'	3'	10'
	16"-UP	6'	6'	5'	5'	5'	5'	5'	15' (NOTE 5)
SANITARY SEWER	ALL SIZES	6'	6'	3'	5'	3'	5'	3'	VARIES PER DEPTH

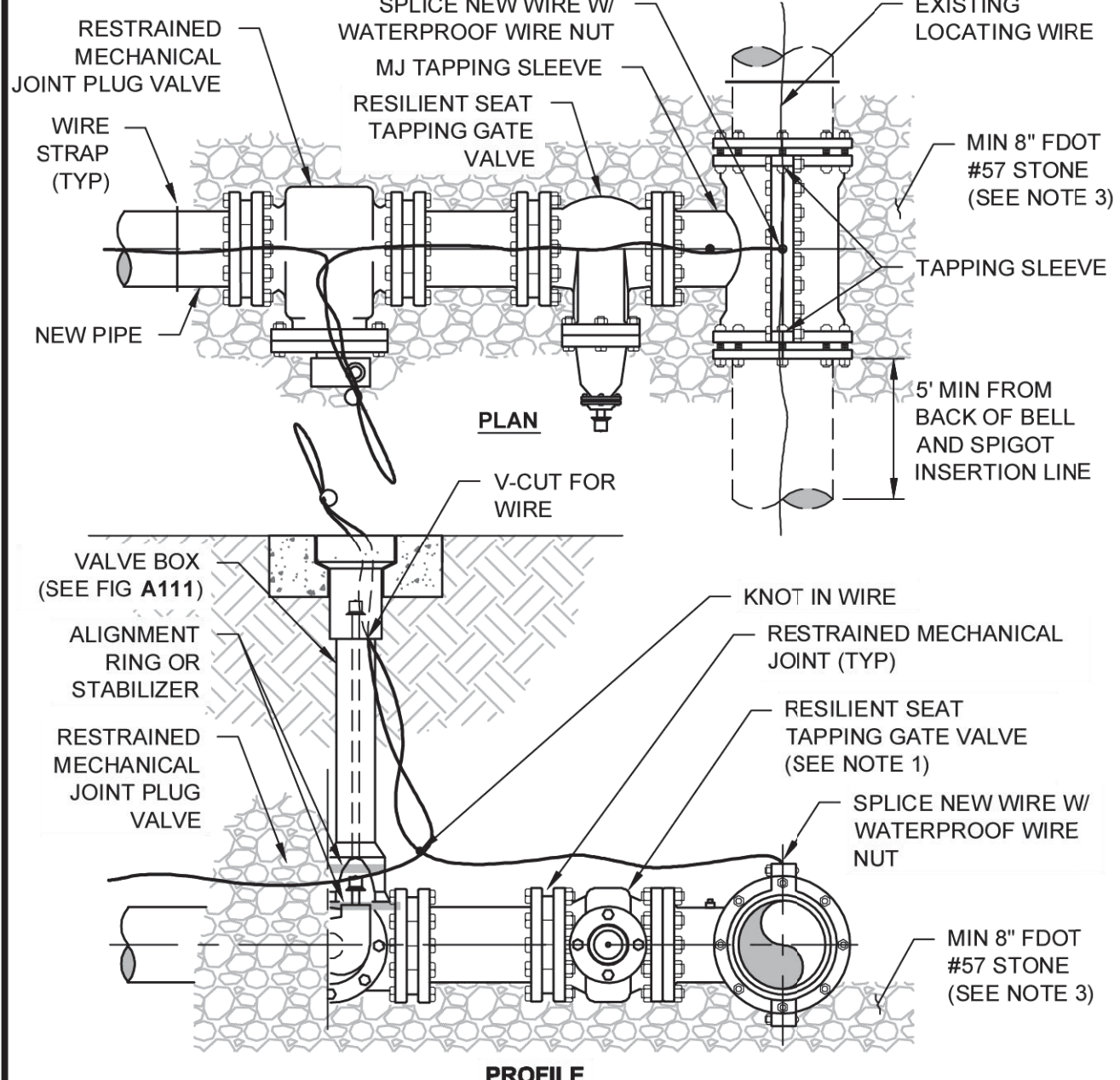
- NOTES:**
- DISTANCES GIVEN ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
 - THIS SEPARATION REQUIREMENT IS TO PROVIDE ACCESSIBILITY FOR CONSTRUCTION AND MAINTENANCE. FOR PIPES INSTALLED AT GREATER DEPTHS THAN THE MINIMUM OCU DESIGN STANDARDS, PROVIDE AN ADDITIONAL FOOT OF SEPARATION FOR EACH ADDITIONAL FOOT OF DEPTH.
 - THIS SEPARATION REQUIREMENT COMPLIES WITH THE MINIMUM FDEP SEPARATION REQUIREMENTS OUTLINED IN 62-555.314, FAC. VARIANCES FROM THE FDEP REQUIREMENTS MUST COMPLY WITH 62-555.314(5), FAC AND MUST BE APPROVED INDIVIDUALLY BY BOTH FDEP AND UTILITIES PRIOR TO INSTALLATION.
 - NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
 - PRESSURE MAINS 16-IN TO 24-IN MAY HAVE 10-FT SEPARATION FROM STRUCTURAL FOUNDATION, WALLS, ETC IF NEW MAINS ARE RESTRAINED FOR THE ENTIRE LENGTH.
 - REFERENCE FIGURE A116-2 FOR VERTICAL PIPELINE SEPARATION REQUIREMENTS.
 - RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-810, F.A.C.
 - ADDITIONAL SEPARATION SHALL BE REQUIRED BY UTILITIES FOR CONSTRUCTION OF, INCLUDING, BUT NOT LIMITED TO: LIVE LOADS, MULTI-STORY COMMERCIAL BUILDINGS, SUPERSTRUCTURES, EMBANKMENTS, RETAINING WALLS, BRIDGES, RAILROADS, HIGH VOLTAGE TRANSMISSION MAINS, GAS MAINS, ETC.

ORANGE COUNTY UTILITIES
STANDARDS & CONSTRUCTION
SPECIFICATIONS MANUAL
FIGURE A116-1
10/10/2021

Always call 811 two full business days before you dig to have underground utilities located and marked.

APPENDIX A STANDARD DRAWINGS

MJ TAPPING SLEEVE & GATE VALVE ASSEMBLY WITH PLUG VALVE FOR WASTEWATER

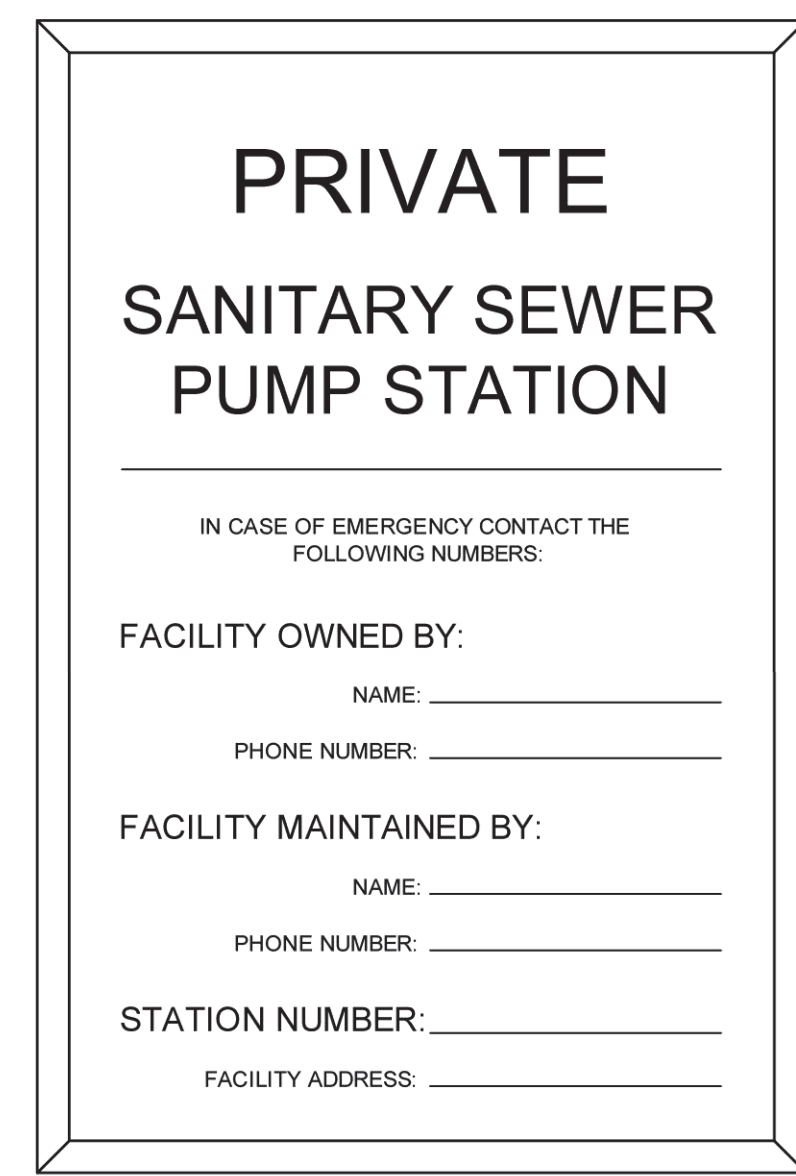


- NOTES:**
- TAPPING GATE VALVE TO BE INSTALLED HORIZONTALLY AND ABANDONED IN THE OPEN POSITION.
 - TAPPING SLEEVE INSTALLATION SHALL BE IN ACCORDANCE WITH SECTION 3117-SYSTEM CONNECTIONS.
 - BEDDING ROCK SHALL BE FULLY AND UNIFORMLY SUPPORTING THE TAPPING SLEEVE & VALVE AT A MIN OF 8-IN IN ALL DIRECTIONS.

ORANGE COUNTY UTILITIES
STANDARDS & CONSTRUCTION
SPECIFICATIONS MANUAL
FIGURE A121-2
10/10/2021

APPENDIX A STANDARD DRAWINGS

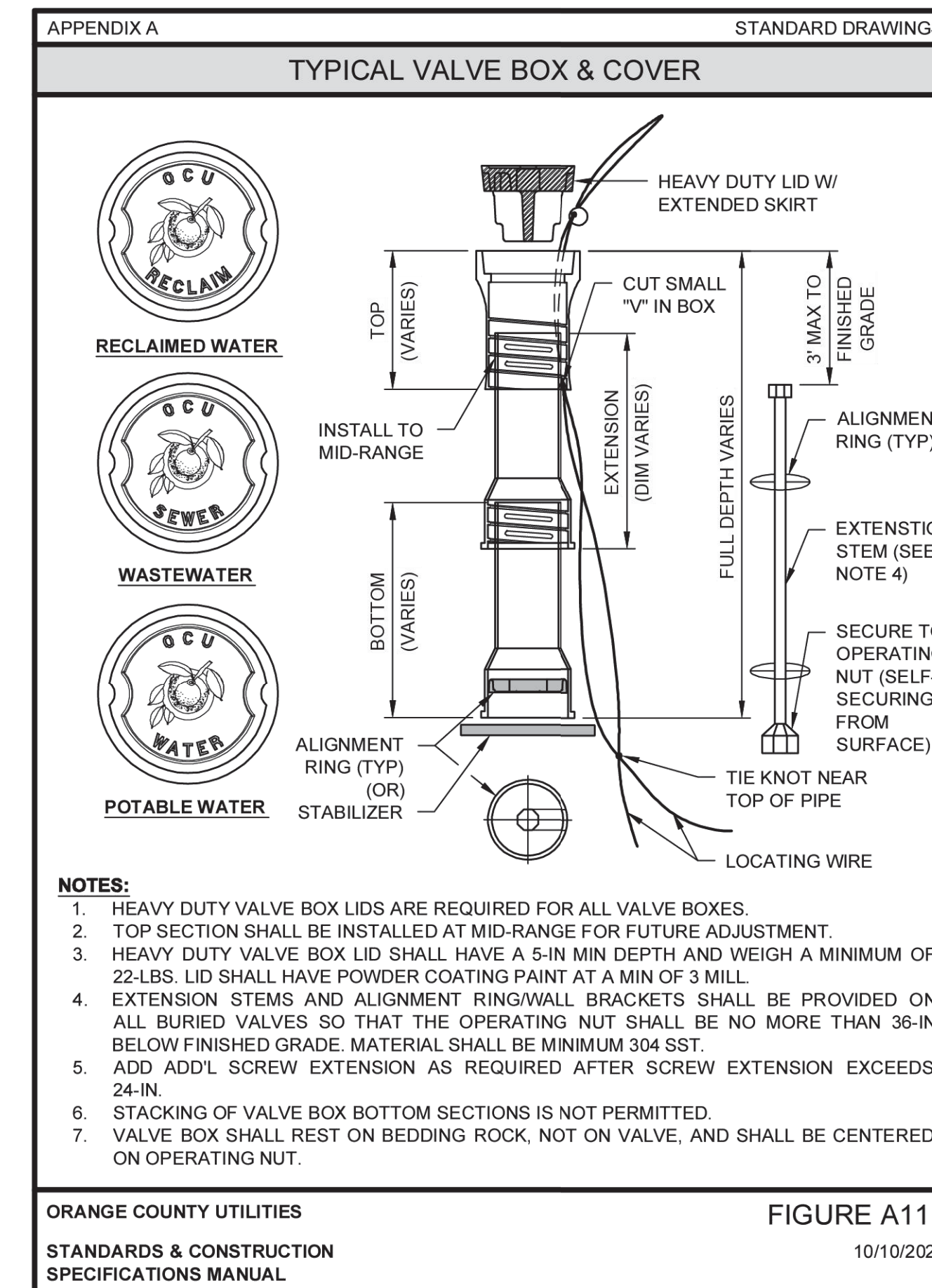
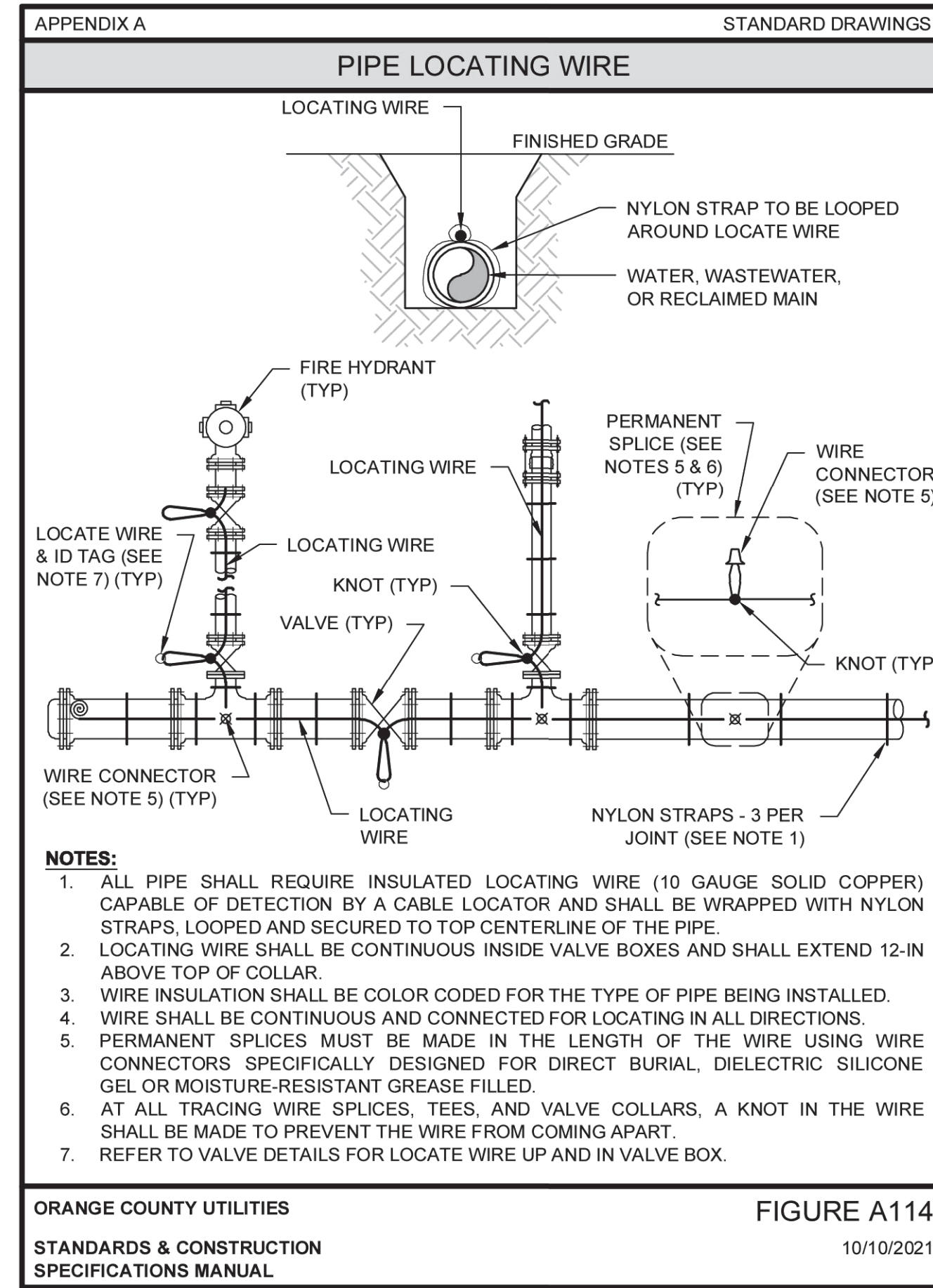
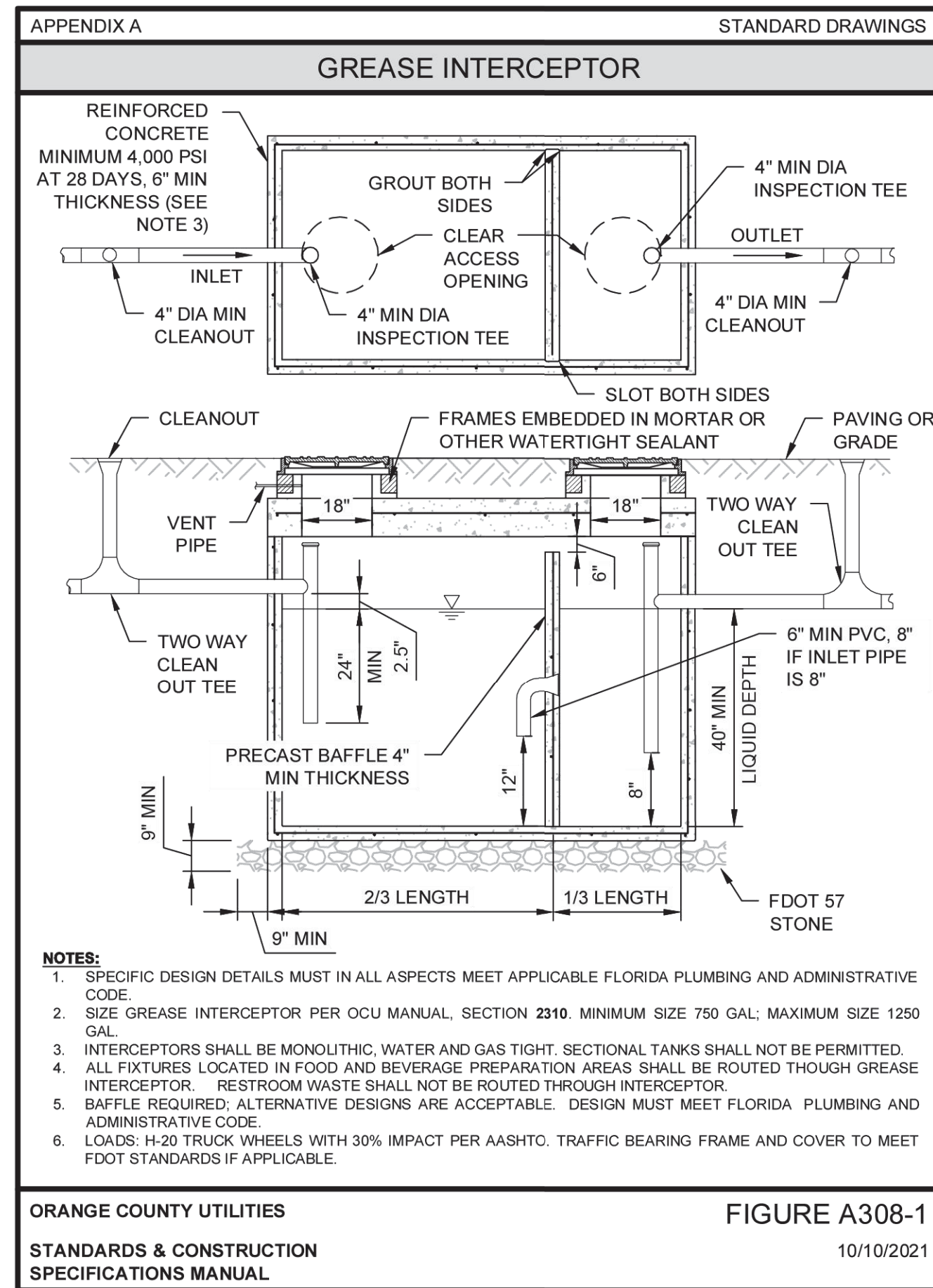
PRIVATE PUMP STATION SIGN



- NOTES:**
- MINIMUM SIZE OF SIGN: 12-IN X 18-IN.
 - SIGN INSTALLATION IS A REQUIREMENT OF CHAPTER 37, ARTICLE XX, SECTION 37-754 OF THE ORANGE COUNTY CODE.
 - OBTAIN STATION NUMBER FROM ORANGE COUNTY UTILITIES.
 - SIGN SHALL BE 0.04 GAUGE ALUMINUM.

ORANGE COUNTY UTILITIES
STANDARDS & CONSTRUCTION
SPECIFICATIONS MANUAL
FIGURE A420
10/10/2021

This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature.
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Revisions	Date	Description
1	1/29/2020	REVISED PER OCU COMMENTS
2		
3		
4		

Project No.	129-022
Scale	1"=20'
Drawn By	STA
Date	11/05/19

LOCH INVESTMENTS, LLC

CivilCorp Engineering, Inc.
630 N Wynmore Rd, Ste 310
Maitland, FL 32751
Phone: 407-516-0437
Certificate of Authorization No. 29390

CivilCorp Engineering, Inc.

Stephen Allen, PE # 99994
FL Reg No

THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

DETAIL SHEET

PROJECT NAME	
SHEET NAME	

SHEET NO.
C-10

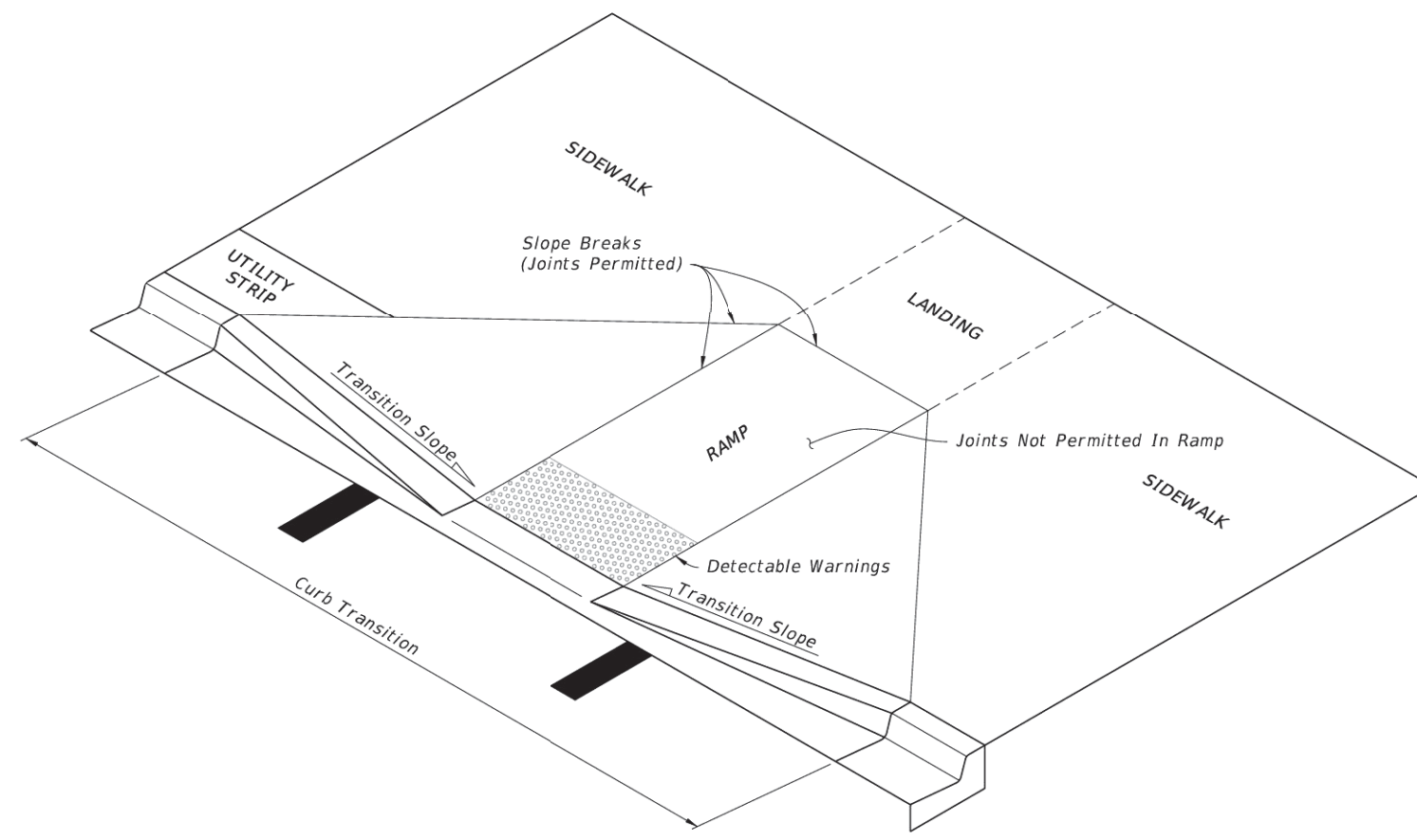
Always call 811 two full business days before you dig to have underground utilities located and marked.

Sunshine811.com

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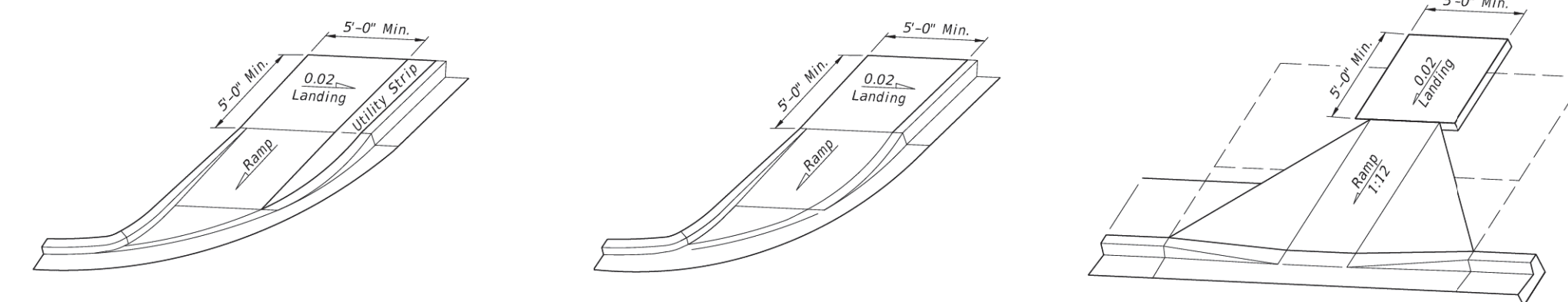
GENERAL NOTES:

- Cross Slopes and Grades:**
 - Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
 - Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
- Curb, Curb and Gutter and/or Sidewalk:**
 - Refer to Index 522-001 for concrete thickness and sidewalk details.
 - Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
- Curb Ramp Alpha-Identification:**
 - Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - Alpha-identifications CR-I and CR-J are intentionally omitted.
- Detectable Warnings:**
 - Install detectable warnings in accordance with Specification 527.
 - Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp; otherwise, the truncated domes are not required to be aligned.
- Detectable Warnings - Acceptance Criteria:**
 - Color and texture shall be complete and uniform.
 - 90% of individual truncated domes shall be in accordance with the Americans with Disabilities Act Standards for Transportation Facilities, Section 705.
 - There shall be no more than 4 non-compliant domes in any one square foot.
 - Non-compliant domes shall not be adjacent to other non-compliant domes.
 - Surfaces shall not deviate more than 0.10" from a true plane.

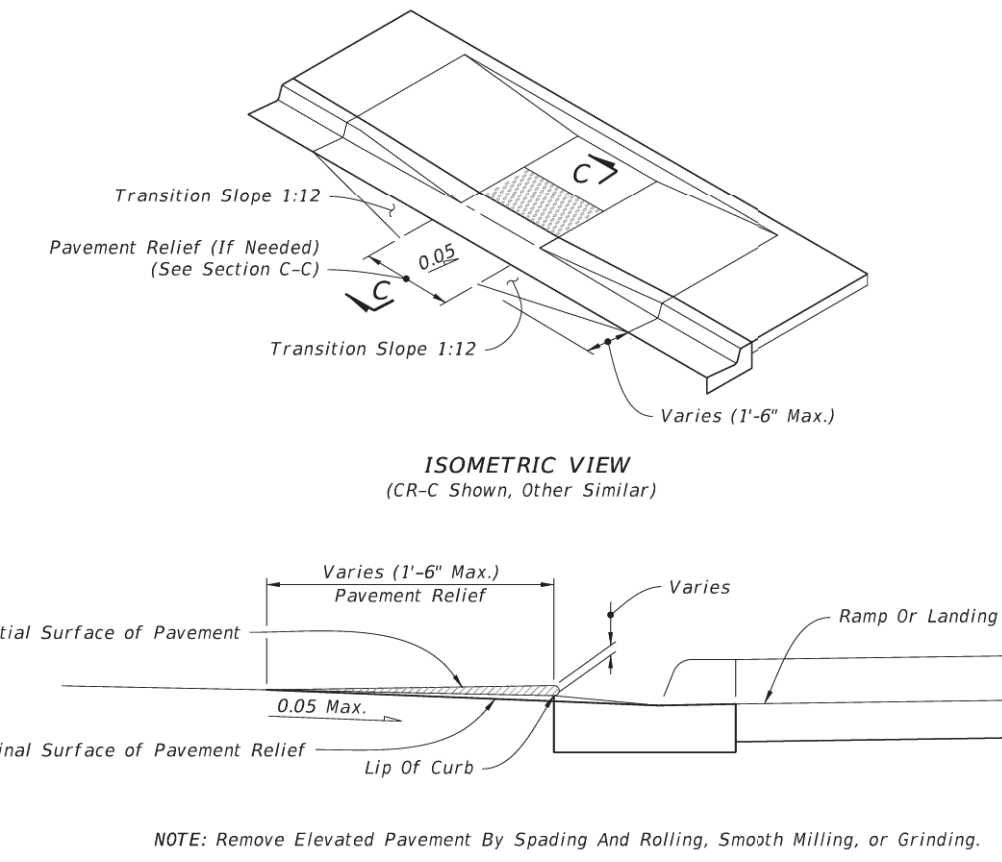


CURB RAMP NOMENCLATURE

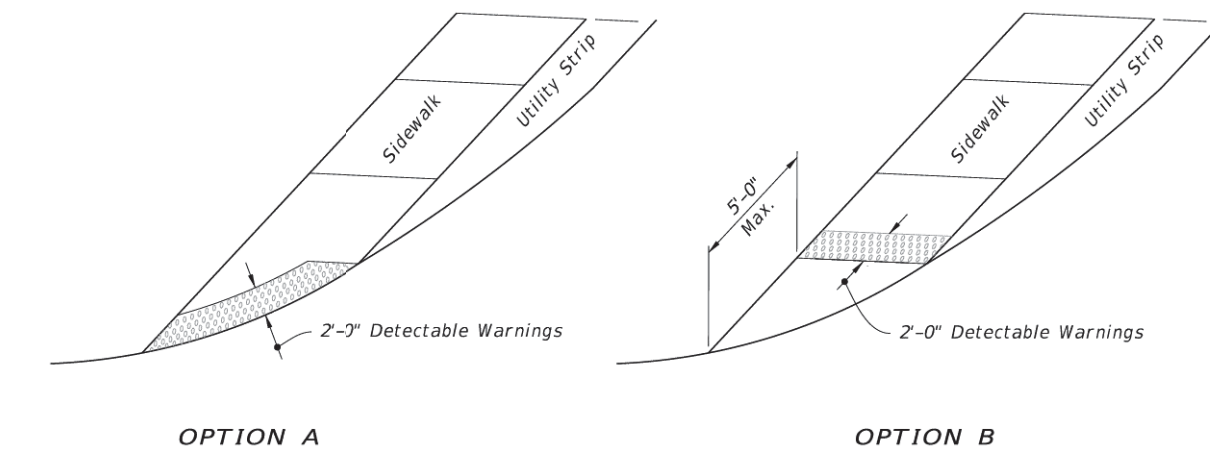
LAST REVISION 11/01/19	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMP	INDEX 522-002	SHEET 1 of 7
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LANDINGS FOR CURB RAMP WITHOUT SIDEWALKS
(See CR-F, CR-G & CR-K Respectively For Detectable Warning Details/Options)



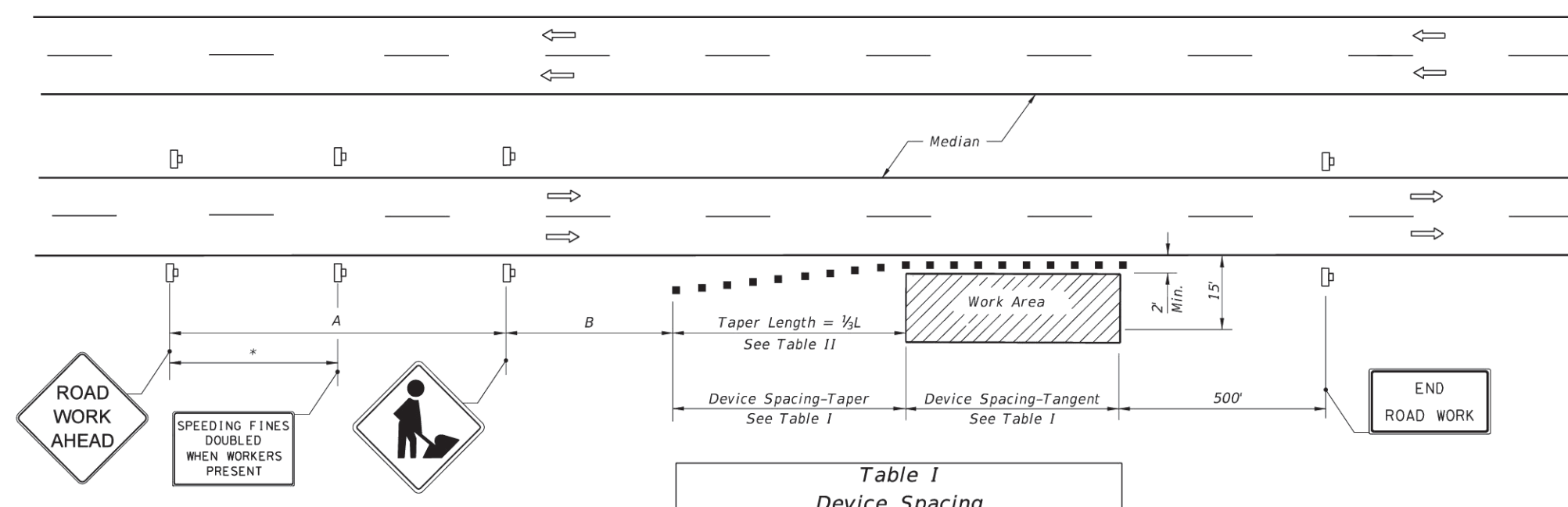
SECTION C-C



DETECTABLE WARNING ON FLUSH SHOULDER SIDEWALKS

CURB RAMP WITHOUT SIDEWALKS AND FLUSH SHOULDER SIDEWALKS

LAST REVISION 11/01/18	DESCRIPTION:	FDOT	FY 2021-22 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMP	INDEX 522-002	SHEET 6 of 7
---------------------------	--------------	------	------------------------------	--	------------------	-----------------



Speed	Spacing (ft.)
40 mph or less	200
45 mph	350
50 mph or greater	500

Speed (mph)	Max. Distance Between Devices (ft.)			
	Cones or Tubular Markers		Type I or Type II Barricades or Vertical Panels or Drums	
	Taper	Tangent	Taper	Tangent
25	25	50	25	50
30 to 45	25	50	30	50
50 to 70	25	50	50	100

Speed (mph)	½L (ft.)			Notes
	8' Shldr.	10' Shldr.	12' Shldr.	
25	28	35	42	L = W ² / 60
30	40	50	60	
35	55	68	82	
40	72	90	107	L = WS
45	120	150	180	
50	133	167	200	
55	147	183	220	
60	160	200	240	L = WS
65	173	217	260	
70	187	233	280	

½L = Length of shoulder taper in feet
 W = Width of total shoulder in feet (combined paved and unpaved width)
 S = Posted speed limit (mph)

GENERAL NOTES

- When a high volume of work vehicles are entering and leaving the Work Area at speeds slower than 10 MPH below the posted speed, place an M07-S-06 sign in the ROAD WORK AHEAD sign location and shift the ROAD WORK AHEAD sign upstream 500 ft.
- This TCZ plan also applies to work performed in the median more than 2' but less than 15' from the edge of travelway.
- When work is being performed on a multilane undivided roadway the signs normally mounted in the median (as shown) shall be omitted.
- WORKERS signs to be removed or fully covered when no work is being performed.
- SHOULDER WORK sign may be used as an alternate to the WORKER symbol sign.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed in accordance with other applicable TTC Indexes.
- For general TCZ requirements and additional information, refer to Index 102-600.

DURATION NOTES

- Signs and channelizing devices may be omitted if all of the following conditions are met:
 - Work operations are 60 minutes or less.
 - Vehicles in the work area have high-intensity, rotating, flashing, oscillating, or strobe lights operating.

CONDITIONS

WHERE ANY VEHICLE, EQUIPMENT, WORKERS OR THEIR ACTIVITIES ENCRoACH THE AREA CLoSER THAN 15' BUT NOT CLoSER THAN 2' TO THE EDGE OF TRAVELWAY.

LAST REVISION 11/01/17	DESCRIPTION:	FDOT	FY 2020-21 STANDARD PLANS	MULTILANE, WORK ON SHOULDER	INDEX 102-612	SHEET 1 of 1
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LOCH INVESTMENTS, LLC

CivilCorp Engineering, Inc.
 630 N Wymore Rd, Ste 310
 Maitland, FL 32751
 Phone: 407-516-0437
 Certificate of Authorization No. 29390



THE WATERFRONT
4201 S. ORANGE AVE, EDGEWOOD FL

FDOT DETAILS

Always call 811 two full business days before you dig to have underground utilities located and marked.

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PROJECT NAME	SHEET NAME
SHEET NO.	C-11

Drawn By
STA
129-022

Date
11/05/19

Project No.
129-022

Scale
1"=20'

Revisions

Rev	Date	Description
1	1/29/2020	

By

Sta

Date

Project No.

Scale

Date

Drawn By

STA

11/05/19

129-022

1"=20'

129-022

11/05/19

STA

Drawn By

Date

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RILEY & Company, Inc. (H-20 GP)

w/ BATTERY BACK-UP FOR AUDIO AND VISUAL ALARMS AND AUTOMATIC SUMP FLUSH VALVE

SCOPE: Supply one complete H-20 GP Pre-Fab Lift Station, per design. Pumps shall be capable of grinding and pumping domestic & commercial sewage. Complete system shall be supplied by: **RILEY & Company, Inc.** Sanford, FL 32773 (Ph. 407-265-9963)

PRIOR TO BID DATE, ANY PREFAB LIFT STATION SUPPLIER NOT SPECIFIED, BUT WANTING TO BE PRE-APPROVED AS AN ALTERNATE SUPPLIER MUST SUBMIT THE FOLLOWING FOR ENGINEER APPROVAL:

- 1- Submit complete data on the alternate system showing that the equipment meets or exceeds the quality and performance of the specified system.
- 2- Submit a plotted system head curve on the proposed alternate pump curve utilizing the design criteria (elevations, force main losses, pressures and station losses).
- 3- Pumps and electrical control panel must be warranted for a minimum of 3 years.
- 4- Fiberglass wetwell must be warranted for a minimum of 20 years.
- 5- Any fees charged by Engineer to review alternate systems shall be paid by contractor.

The H-20 Load Rated Fiberglass Wetwell Must Be Manufactured By L.F. Manufacturing, Giddings, Texas, Which Includes A Written 20 Yr. Warranty. Certification of the wetwell H-20 load rating must be supplied with submittals. H-20 certification must be signed and sealed by an engineer registered in the State of Florida.

After the H-20 load rated wetwell has been installed, the ASTM Certification Number and Serial Tracking Number must be visible.

PUMPS: (3 YEAR WARRANTY)

The submersible pumps shall be manufactured by ITT Flygt Corporation. The pumps shall be installed in the H-20 GP FRP wetwell utilizing a dual slide rail system. Each grinder pump shall contain special cutters to reduce sewage to a fine slurry. The stationary cutter shall consist of hardened 316 "L" stainless steel and the rotary cutter shall consist of chrome alloy cast iron.

Major pump components shall be grey cast iron, ASTM A-48, Class 35B. The pump motor shall be NEMA B design and housed in an air-filled watertight chamber. The stator windings shall be insulated with moisture resistant Class H insulation by use of the trickle impregnation method. The motor shall be heat-shrink fit into the stator housing. The use of bolts, pins, or other fastening devices is not acceptable. Thermal switches set to open at 125 degrees C shall be embedded in the stator end coils to monitor the temperature of each phase winding. The motor horsepower shall be adequate so that the pump is non-overloading throughout the entire pump performance curve from shut-off through run-out.

The pump shall be provided with a dual mechanical seal. The lower seal shall consist of a stationary tungsten-carbide ring and a rotating ceramic ring. The upper seal shall consist of a stationary ceramic ring and a rotating carbon ring.

DUPEX CONTROL PANEL: (3 YEAR WARRANTY)

To insure complete unit and warranty responsibility the electrical control panel must be manufactured and built by the pump supplier. The pump supplier must be a TUV (UL508A CERTIFIED) manufacturing facility, with a minimum of 5 years history in the manufacturing of electrical control panels.

The enclosure shall be NEMA 4X, minimum 30" high x 30" wide x 10" deep fiberglass with 5 point latching system.

The enclosure shall have external mounting feet to allow for wall mounting. The following components shall be mounted through the enclosure:

- 1- ea. Red Alarm Beacon (Light) 4" x 4" Minimum Diameter
- 1- ea. Alarm Horn (minimum 95 DCB)
- 1- ea. Generator Receptacle w/ weatherproof cover (SCM460-UL 1686)
- 1- ea. Alarm Silence Pushbutton

The back panel shall be fabricated from .125, 5052-H32 marine alloy aluminum. All components shall be mounted by machined stainless steel screws.

The following components shall be mounted to back panel:

- 2- ea. Motor Contactors
- 1- ea. Volt Monitor (1 Ph) Phase Monitor (3 Ph) w/2 N/O & 1 N/C Contacts
- 1- ea. Control Transformer (480 Volt Only) (Min. 500VA)
- 1- ea. Silence Relay Module
- 1- ea. Duplex Alternator w/ Pump Selector Switch
- 1- ea. Model RCBB5AH Battery Back-Up w/ Smart Charger
- 20- ea. Terminals For Field Connections
- 6- ea. Terminals For Motor Connections (Single Phase Only)
- 7- ea. Grounding Lugs
- 1- ea. Seal Failure Relay

The inner door shall be fabricated from .080, 5052-H32 marine alloy aluminum. The inner door shall have a continuous aluminum piano hinge.

The following components shall be mounted through the inner door:

- 1- ea. Main Circuit Breaker
- 1- ea. Emergency Circuit Breaker
- 1- ea. Mechanical Interlock For Emergency And Main Breakers (UL Listed)
- 2- ea. Short Circuit Protectors w/ Auxiliary Contacts
- 1- ea. Control Circuit Breaker
- 2- ea. Seal Failure Indicator Lights
- 1- ea. Hand-Off-Auto Selector Switches
- 2- ea. Pump Run Pilot Lights
- 1- ea. Power On Pilot Light
- 2- ea. Elapse Time Meters (Non-Resettable)
- 1- ea. GFI Duplex Convenience Outlet

COMPONENT SPECIFICATIONS:

All circuit breakers shall be molded thermal magnetic. The mechanical interlock shall prevent the normal and emergency main breakers being energized at the same time.

An emergency generator receptacle shall be supplied in accordance with DEP standards. The generator receptacle shall be adequately sized to meet the equipment operating conditions.

NEUTRAL TO BE SUPPLIED FOR BOTH 230V 3PHASE OR 230V SINGLE PHASE POWER

All motor short circuit protection devices must provide for under voltage release and class 10 overload protection on all three phases. Visible trip indication, test, and reset capability must be provided without opening inner door. Open frame, across the line, contactors shall be rated per IEC standards and properly sized per the motor requirements. Contactors shall provide for safe touch power and control terminals.

Lightning Arrestor shall meet UL1449 3rd Edition or exceed the requirements of ANSI/IEEE Std. C62.21-1984 section 8.6.1. and 8.7.3 shall be supplied by electrician and mounted on the bottom side of the switch disconnect ahead of the pump control panel.

A voltage monitor shall be supplied for single phase service. A phase monitor shall be supplied for (3) phase service. A green pilot light shall be supplied for each motor. The pilot light shall illuminate each time the motor is called to run. Each pump shall have an Elapse Time Meter to record the accumulated run time. The ETM shall be 2" diameter, non-resettable, six digit, totally encapsulated unit.

A Red pilot light shall be supplied for control power. The pilot light shall illuminate when the control power is available inside the control panel.

Relays shall be ice-cube plug in type. Relay contacts shall be rated 10 amp minimum, DPDT.

Twenty (20) terminals shall be supplied for field connections. The terminals shall be rated 25 amps minimum.

Each motor over-temperature contact shall be connected to the terminal strip and shall open a contact to de-energize the appropriate motor upon a high temperature within the motor. A 15 Amp GFI duplex receptacle shall be supplied and mounted on the innerdoor.

Ground lugs shall be supplied and appropriately sized for each motor and for service entrance.

MISCELLANEOUS: All wiring on the back panel shall be contained within the wiring duct. All wiring between the inner door and the back panel shall be contained with in a plastic spiral wrap. Each wire shall have a wire number at each end to correspond to the as built drawing for field troubleshooting. The control panel must be manufactured in-house by lift station supplier and be a TUV (UL508A Certified) facility.

FASTENERS & APPURTANCES: All fasteners, lifting cables, float cable bracket, hinges, and appurtances shall be made of AISI 304SS.

A 304SS slide/latch assembly shall be provided for holding the doors open on the wetwell and valve box. Slide rails shall be made of SCH.40 AISI 304SS pipe. Pump lifting cables shall be made of AISI 304 SS. Pump lifting bales shall be made of AISI 304 SS.

H-20 LOAD RATED WETWELL WITH LIFTING LUGS:

The fiberglass wetwell must be H-20 load rated with integral lifting lugs, fiberglass slope in bottom of wetwell and valve box. Certification of the H-20 load rating must be supplied at the time of submittals to Engineer. The wetwell shall be manufactured of fiberglass reinforced polyester (FRP) of depth and diameter as shown on the lift station elevation detail. The wall thickness shall be adequate for the depth of the wetwell to maintain the H-20 LOAD RATING.

EXECUTION:

Installation shall be in strict accordance with the manufacturer's recommendations in the locations shown on the drawing.

INSPECTION & TESTING: A factory representative shall be provided for a one (1) time start-up and shall have complete knowledge of the proper operation and maintenance of complete system. Megger the motors. The pump motors shall be megged out prior to the start-up to ensure that the insulation of the pump motor/cable is intact. The pump controls and pumps shall be checked for mechanical reliability and proper operation.

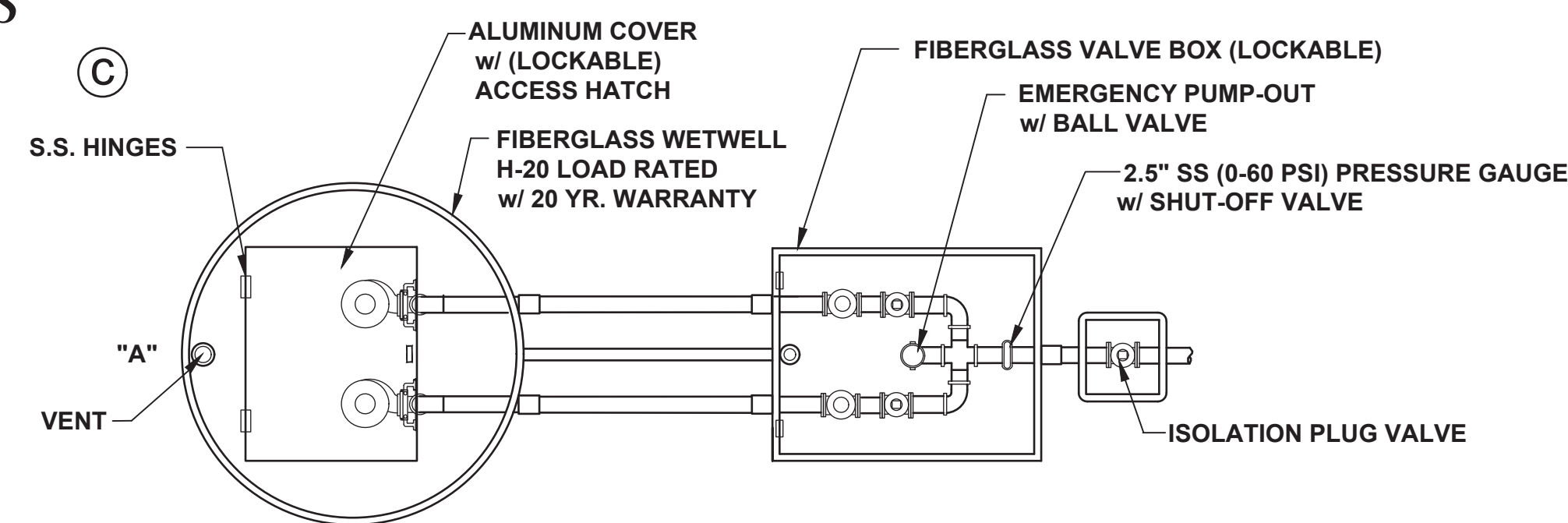
LIFT STATION WILL BE PRIVATELY OWNED AND MAINTAINED.

PRIVATE LIFT STATION # LS#11123			
PUMP DATA		ELEVATIONS	
PRIMARY PUMP CAPACITY	110 GPM	TOP OF WETWELL	95.75
PRIMARY TDH	100 'TDH	INLET INVERT	91.00
PUMP MANUFACTURER	HOMA	HIGH LEVEL ALARM (HLA)	90.50
PUMP MODEL #	GRP59/3	2nd PUMP ON (LAG)	90.00
R.P.M.	3450	1st PUMP ON (LEAD)	89.50
HORSEPOWER	8.9	PUMPS OFF (OFF)	88.20
ELECTRICAL/ VOLTS / PHASE	230V/3	BOTTOM OF WETWELL	85.75
PUMP DISCHARGE SIZE	2"	WETWELL DIAMETER	72"

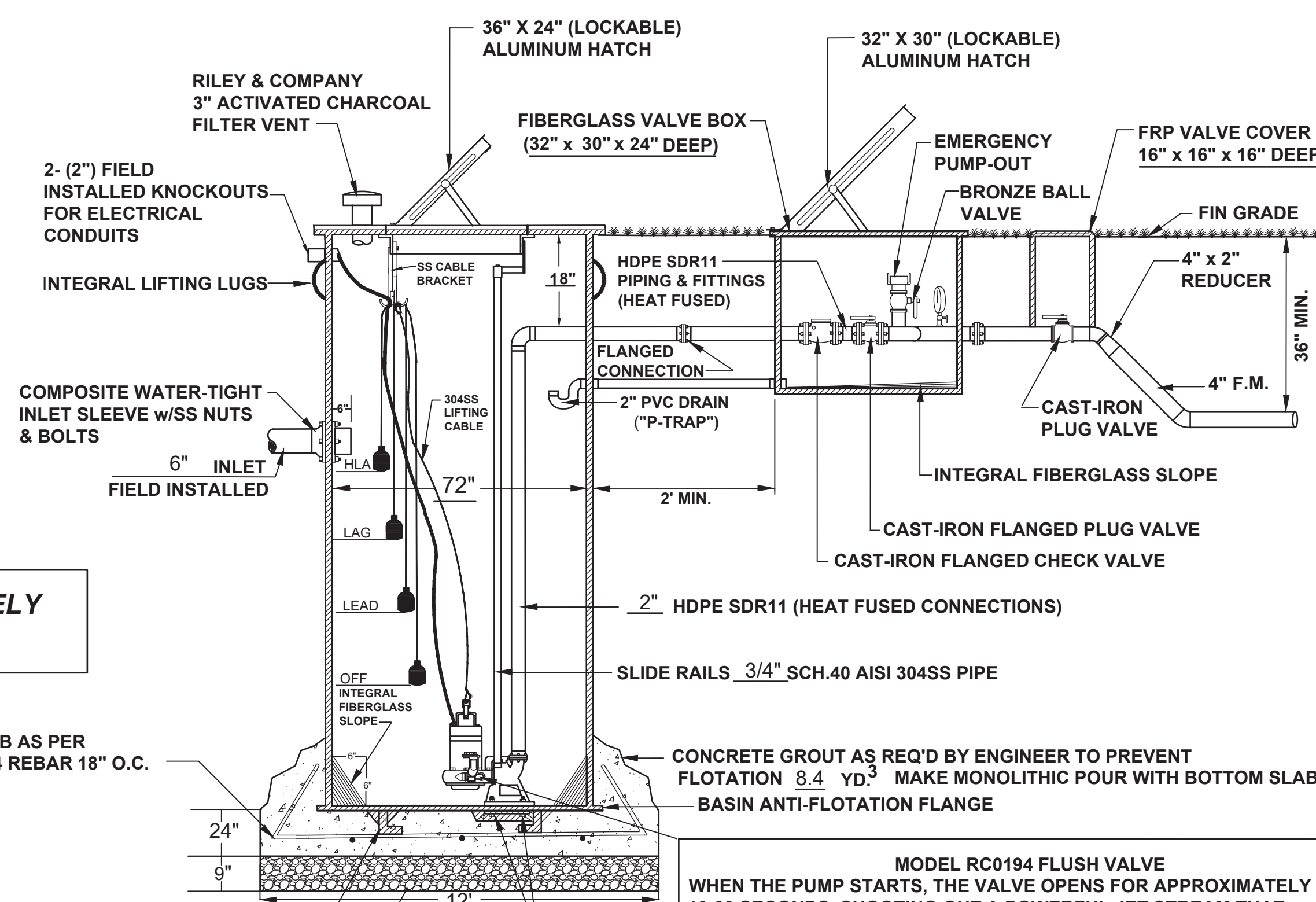
* ELECTRICIAN NOTES:

1. DRAWING NOT TO SCALE
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES
3. ELECTRICIAN SHALL SEAL OFF CONDUIT RUNS
4. ELECTRICIAN TO MOUNT LIGHTNING ARRESTOR AT SWITCH DISCONNECT
5. CONTRACTOR SHALL VERIFY POWER SOURCE PRIOR TO ORDERING EQUIPMENT
6. NEUTRAL TO BE SUPPLIED FOR 230V-3 PHASE OR 230V-SINGLE PHASE POWER.

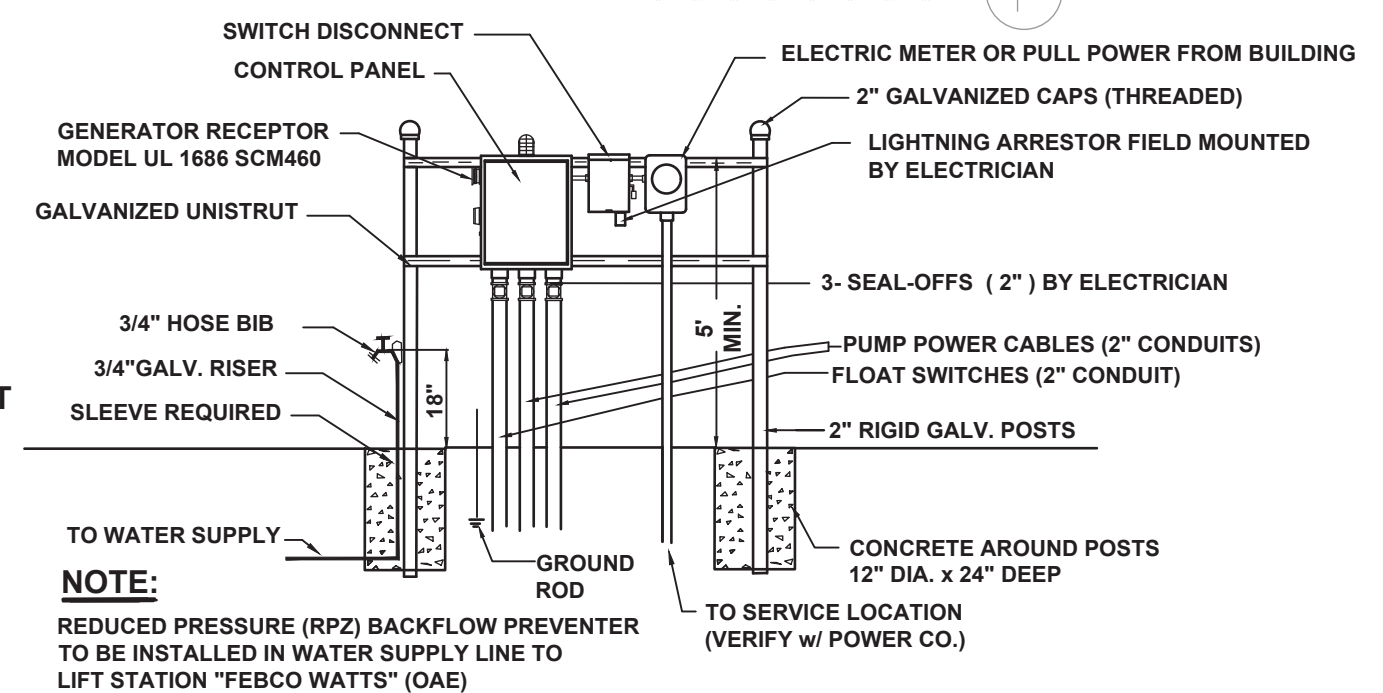
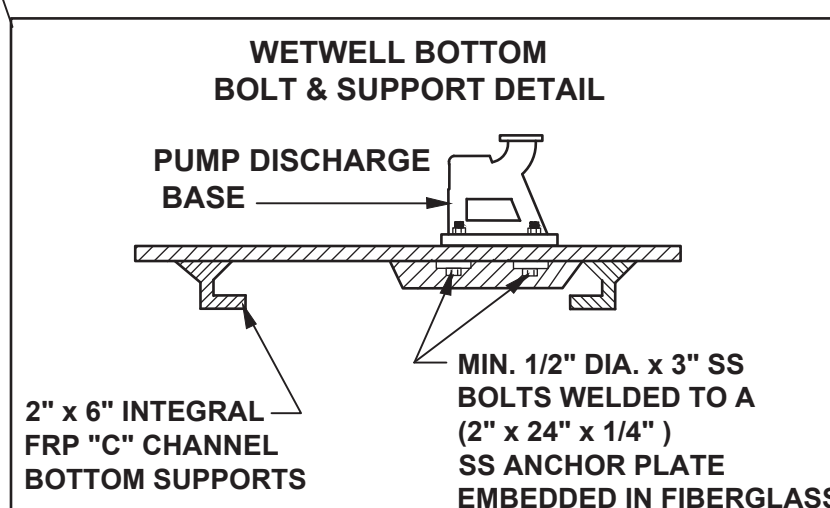
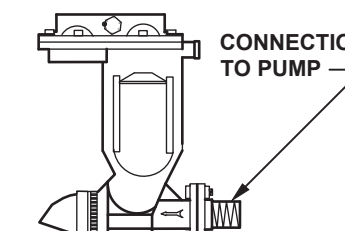
RILEY & CO. / H-20 GP 09-19-11



NOTE: PUMP CONTROL PANEL SHALL BE LOCATED 3 FEET FROM WETWELL PERIMETER AT POINT "A"



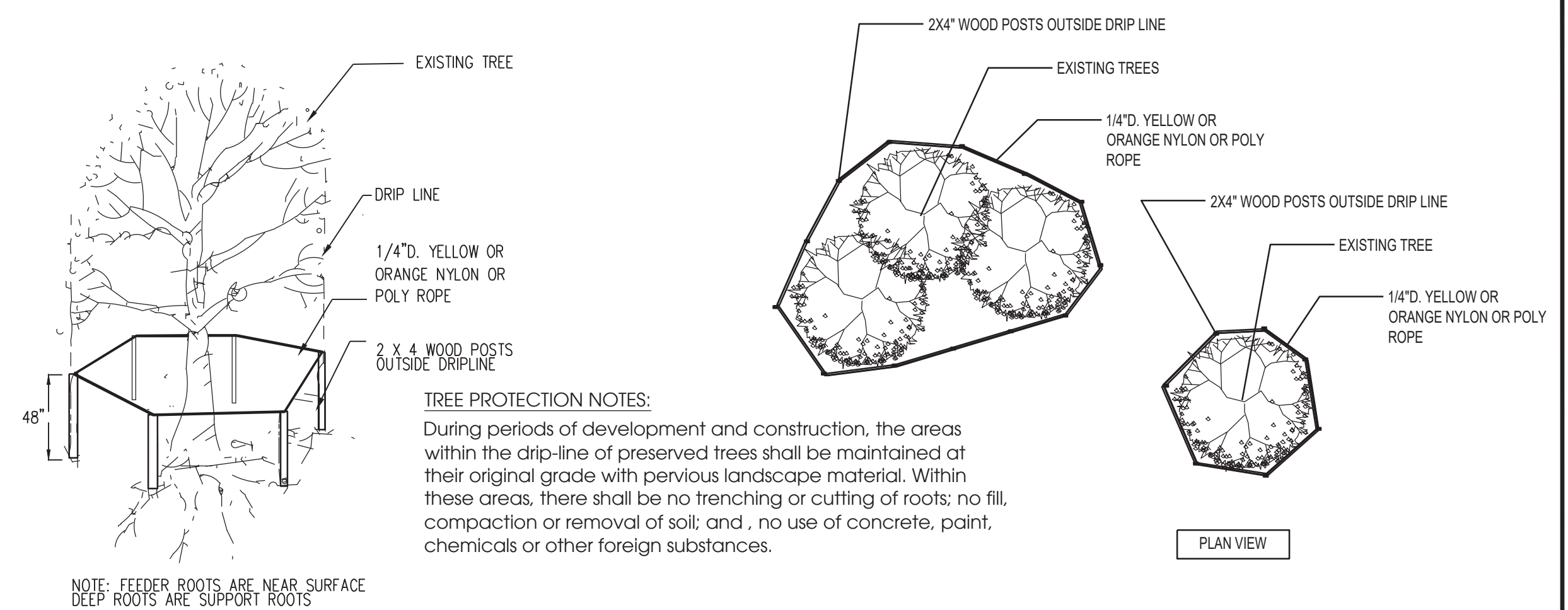
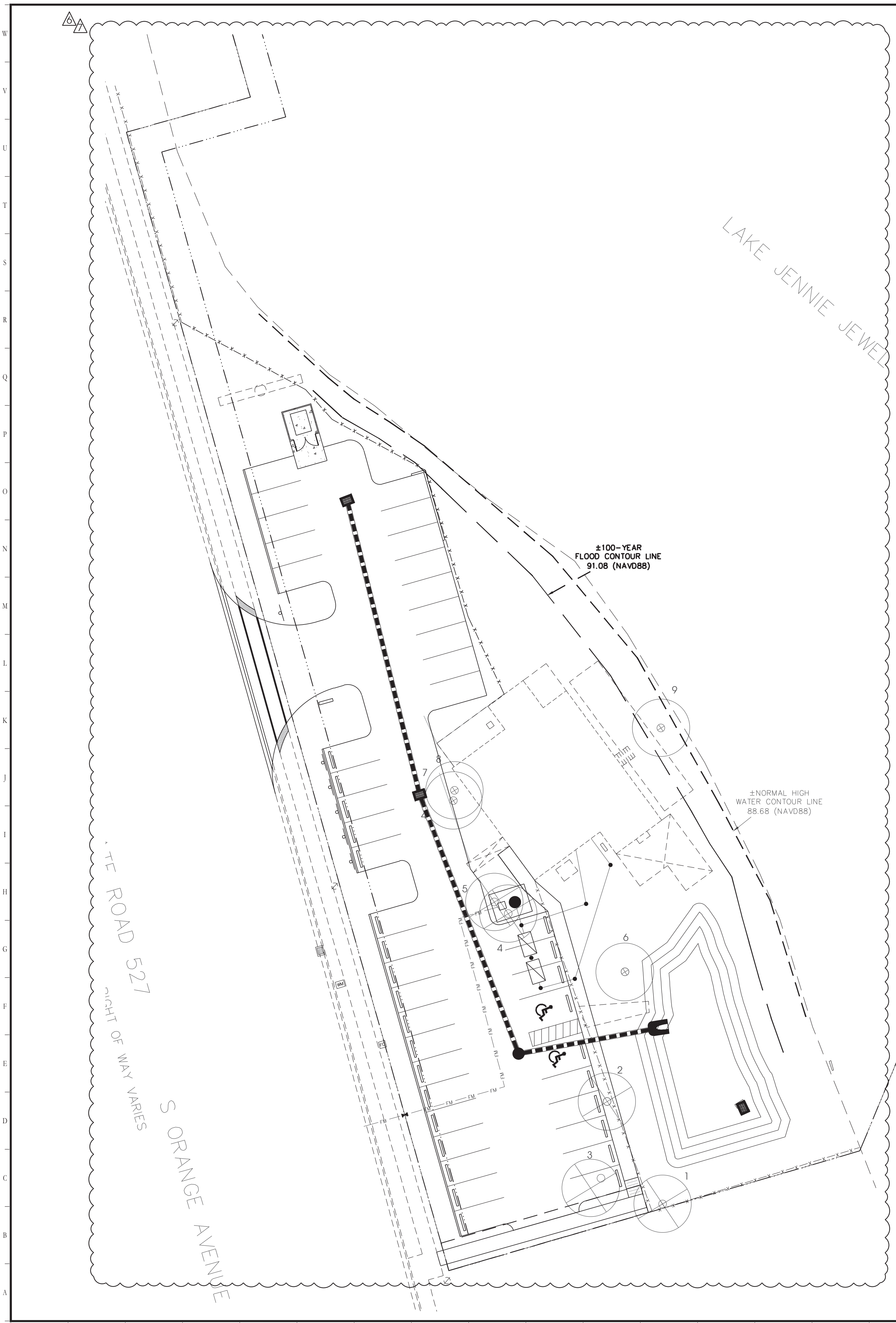
MODEL RC0194 FLUSH VALVE
WHEN THE PUMP STARTS, THE VALVE OPENS FOR APPROXIMATELY 10-30 SECONDS, SHOOTING OUT A POWERFUL JET STREAM THAT FLUSHES ALL SOLIDS INTO SUSPENSION, READY TO BE PUMPED AWAY. BECAUSE THE FLUSHING SEQUENCE IS AN INTEGRAL PART OF THE PUMPING CYCLE, FLUSHING OCCURS EVERY TIME THE PUMP STARTS. THIS REDUCES GREASE AND SOLIDS BUILD-UP AND REDUCES UNPLEASANT ODORS.



ELECTRICAL RISER FOR ILLUSTRATION PURPOSES ONLY

This item has been electronically sign and sealed by Stephen Allen, PE on _____ using a Digital Signature. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.

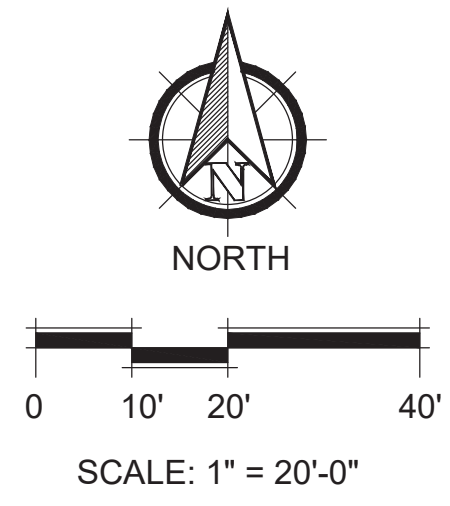
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REVISED PER COUNTY COMMENTS	2	09/17/20	STA	By	STA	
REVISED PER DCU COMMENTS	1	1/29/2020	EG	By	STA	
Description			Project No.	129-022	Date	NTS
Revisions			Scale			
LOCH INVESTMENTS, LLC CivilCorp Engineering, Inc. 630 N Wynore Rd, Ste 310 Maitland, FL 32751 Phone: 407-516-0437 Certificate of Authorization No. 29390 Stephen Allen, PE # 99994 Engineer FL Reg. No.			CivilCorp Engineering, Inc. State of Florida Professional Engineer No. 99994			
THE WATERFRONT 4201 S. ORANGE AVE, EDGEWOOD FL			LIFT STATION PLAN			
PROJECT NAME			SHEET NAME			
SHEET NO. LSP-1						



TREE PROTECTION NOTES:
 During periods of development and construction, the areas within the drip-line of preserved trees shall be maintained at their original grade with pervious landscape material. Within these areas, there shall be no trenching or cutting of roots; no fill, compaction or removal of soil; and, no use of concrete, paint, chemicals or other foreign substances.

10 Tree Protection Detail
 Scale: N.T.S.

EXISTING TREE LIST				
TREE NUMBER	TREE TYPE	DBH		STATUS
1	RAIN	8"		REMOVED
2	DAK	44"		REMOVED
3	DAK	22"		REMOVED
4	PALM	10"		REMOVED
5	PALM	10"		REMOVED
6	DAK	40"		SAVED
7	PALM	10"		SAVED
8	PALM	8"		SAVED
9	PALM	17"		SAVED



Designed By:

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WATERFRONT
CITY OF EDGEWATER

PERMIT
TREE MITIGATION PLAN

Rev:	Date:	Description:	By:
1	4/14/2022	CITY CMMNTS.	AA
2	7/27/2022	BASE&CMMNTS.	AA
3	2/08/2023	BASE&CMMNTS.	FA
4	4/05/2023	BASE&CMMNTS.	FA
5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

Date: 12/21/2021	Scale: SEE PLAN
Drawn By: AA	Designed By: AA
Approved By:	Project No: 21106
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Seal: _____

Sheet Number:
TM-00

FILE: Z:\4 Studio\Projects\2021\21106-The Waterfront\2 Autocad\3 Permit\Sheets\21106-Permit REV7.dwg
 PRINT DATE: 24-Jul-23
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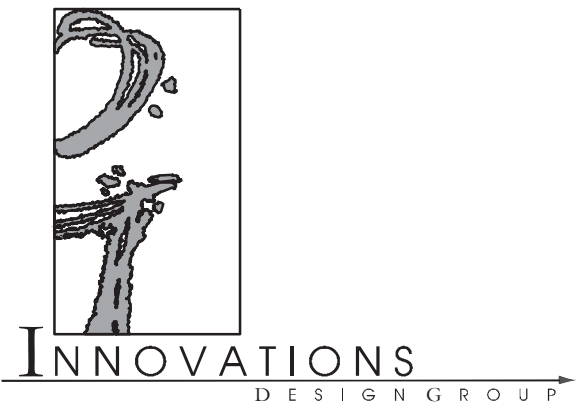
LANDSCAPE INSTALLATION NOTES :

- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BASE INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
- CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES. IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING OPERATIONS. DRAWINGS ARE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE THE CLEARING LIMITS NOTED ON THE DRAWINGS. (REFER TO CIVIL ENGINEERING DRAWINGS).
- REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
- CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE EXISTING GROUND COVER FOR ALL PLANTING BEDS AS SPECIFIED PRIOR TO PLANTING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH THE SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL PERFORM SOIL TESTING PRIOR TO INSTALLATION TO DETERMINE NUTRIENTS PRESENT IN SOIL, PH OF SOIL, AND SOIL TEXTURE OF TOP 12" OF SOIL. BASED ON THE RESULTS OF THE TESTS THE CONTRACT SHALL MAKE THE NECESSARY AMENDMENTS TO SUPPORT THE HEALTH OF THE NEWLY INSTALLED PLANTS.
- ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS AS PUBLISHED BY THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE. ALL PLANT MATERIAL SHALL MEET FLORIDA #1 OR BETTER.
- ALL TREES SHALL HAVE SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE SPECIFIED.
- ALL CONTAINER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- ALL TREE CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- ANY TREES WITH A TRUNK FORMED "V" SHAPE CROTCH WILL BE REJECTED.
- EROSION CONTROL FABRIC SHALL BE INSTALLED IN ALL SHRUB AND GROUND COVER PLANTING AREAS AS PER SPECIFICATIONS FOR ALL SLOPES THAT EXCEED 3:1 . SEE GRADING PLANS FOR LOCATION OF SLOPES GREATER THAN 3:1 AND ADJACENT TO ANY WETLAND AREAS.
- TYPICALLY, SHRUB AND GROUND COVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING). PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED UNDER "SPACING" ON THE PLANT LIST.
- LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT. ANY MATERIAL INSTALLED WITHOUT APPROVAL IS SUBJECT TO BEING RELOCATED AT THE CONTRACTOR'S EXPENSE.
- LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL MULCH ALL NEW PLANT MATERIAL THROUGHOUT AND COMPLETELY TO DEPTH OF 3" UTILIZING HARDWOOD MULCH UNLESS OTHERWISE SPECIFIED.
- ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE BEFORE PLANTING CAN BEGIN.
- CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND THE PROJECT MANUAL (IF AVAILABLE) AND SPECIFICATIONS FOR FURTHER AND COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL LANDSCAPE PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE WATERING AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
- LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING OF ALL AREAS INCLUDING CREATING POSITIVE DRAINAGE AWAY FROM BUILDINGS.
- LANDSCAPE CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION.
- CONTRACTORS SHALL COMPLY WITH ALL NPDES REQUIREMENTS.

PLANT LIST			
KEY	BOTANICAL NAME	COMMON NAME	SPECIFICATION
SHADE TREES			
MG	Magnolia grandiflora	Southern Magnolia	2" Cal. 10' HT x 5' Spd
QV	Quercus virginiana	Live Oak	6" Cal. 18' HT
UNDERSTORY TREES			
LIT	Lagerstromia indica 'Tonto'	Tonto Crape Myrtle	2" Cal. 7' HT x 4' Spd
MF	Myrcianthes fragrans	Simpson's Stopper	2" Cal. 10' HT x 3' Spd
ED	Elaeocarpus decipens	Japanese Blueberry	2" Cal. 10' HT x 5' Spd
SHRUBS			
PM	Podocarpus macrophyllus	Podocarpus	36" HT 30" O.C.
RI	Rhaphlepis indica	Indian Hawthorn	24" HT 30" O.C.
VO	Viburnum odoratissimum	Sweet Viburnum	36" HT 36" O.C.
GROUND COVER			
DT	Dianella tasmanica	Blueberry Flax Lily	1 GAL Full Pot; 24" O.C.
TAM	Trachelospermum asiaticum 'Tricolor'	Tricolor Dwarf Asiatic Jasmine	1 GAL Full Pot; 18" O.C.
TURF			
SOD	Stenotaphrum secundatum 'Floritam'	Floritam St. Augustine	SOD
SOD 2	Paspalum notatum	Bahia Grass	SOD

NOTES:
 1. Bahia Grass to be on bottom of pond

Designed By:



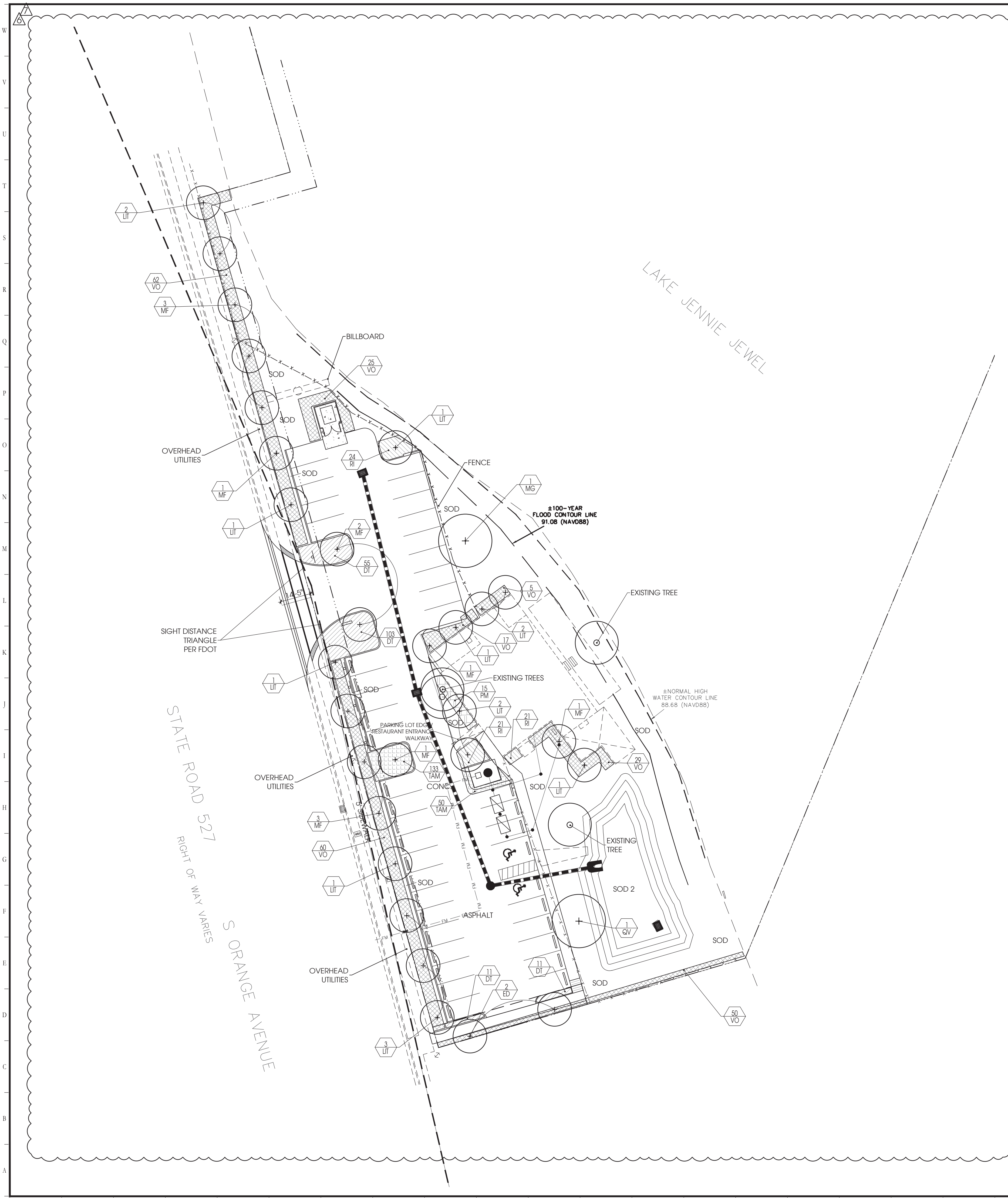
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WATERFRONT
 CITY OF EDGEWATER
PERMIT
 LANDSCAPE NOTES

Rev:	Date:	Description:	By:
1	4/14/2022	CITY CMMNTS.	AA
2	7/27/2022	BASE&CMMNTS.	AA
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5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

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Drawn By: AA	Designed By: AA
Approved By:	Project No: 21106
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Seal:	Sheet Number: LS-00
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Code Requirements Notes

Right of way:
 8' by 8' Landscape break after every 10 parking spots
 Landscape Islands require 1 tree
 A landscape strip at least seven feet in width.
 When substituting Understory Trees for Shade Tree under powerlines, 1 Tree per 25' is required per Sect 114-4.

Calculations:
 180 LF / 25' : 7.2 Required Understory Trees- Provided 8
 198 LF / 25' : 7.9 Required Understory Trees- Provided 9

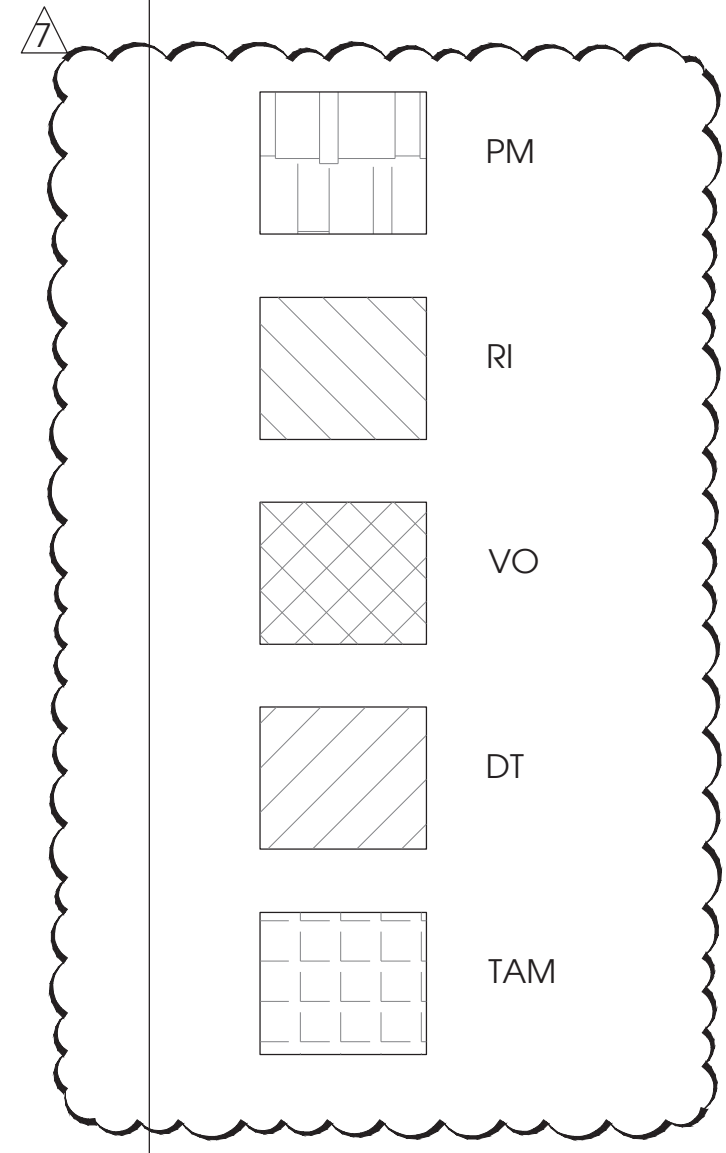
One shade tree for each 40 linear feet, or fraction thereof.
 A continuous hedge at least 30 inches high at planting of a species capable of growing to at least 36 inches in height within 18 months, which hedge shall be maintained at a height not less than 36 inches. The height of the hedge shall be measured from parking lot grade.
 Where wheel stops are not used, the required plantings shall not be planted within two feet of the curb, to allow for vehicle overhang.

Side Buffers:
 This buffer shall be completely opaque from the ground up to a height of at least eight feet and shall be a minimum of 25 feet wide.
 Where a vehicular use area is adjacent to properties zoned or designated for residential use on the official zoning maps or the future land use map of the comprehensive policy plan, a landscape buffer shall be provided. The buffer shall be completely opaque from the ground to height of at least six feet and shall be a minimum of seven feet in width.

Building Facade:
 At least 50 percent of the required landscaped area shall consist of landscaping capable of achieving a minimum of 30 inches in height, with one shade tree planted for each 35 feet or fraction thereof of the lineal building facade, or one understory tree or palm tree planted for each 15 feet or fraction thereof of the lineal building facade.

Dumpster:
 shielded by a landscaped screen or fencing at least six feet in height which shall be at least 50 percent opaque when viewed from any point along any abutting residential district boundary.

PLANT LEGEND	
KEY	COMMON NAME
SHADE TREES	
MG	Southern Magnolia
QV	Cathedral Live Oak
ED	Japanese Blueberry
UNDERSTORY TREES	
LIT	Crape Myrtle
MF	Simpson's Stopper
SHRUBS	
PM	Podocarpus
RI	Indian Hawthorn
VO	Sweet Viburnum
GROUND COVER	
DT	Blueberry Flax Lily
TAM	Tricolor Dwarf Asiatic Jasmine
TURF	
SOD	Floritam St. Augustine
SOD 2	Bahia Grass



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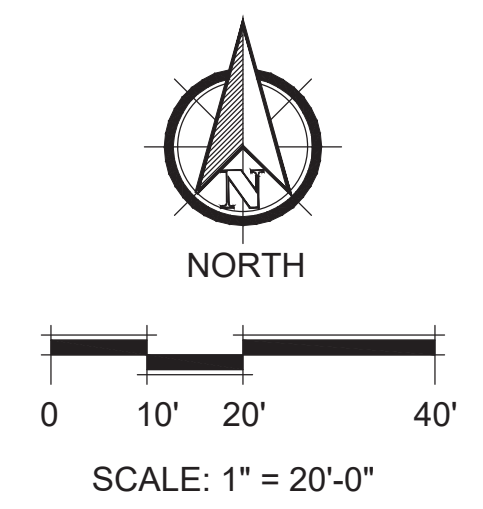
PERMIT
 LANDSCAPE PLAN

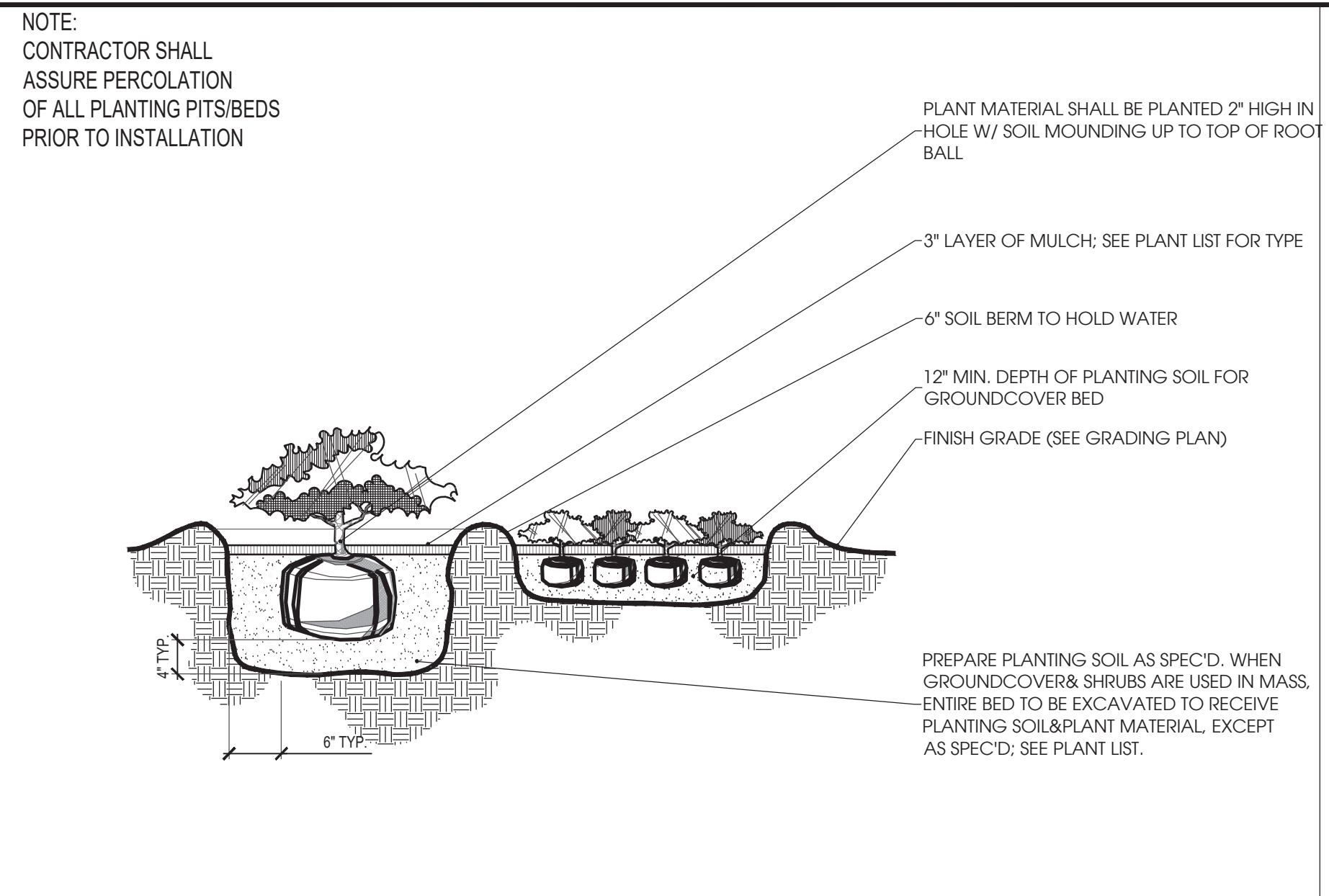
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4	4/05/2023	BASE&CMMNTS.	FA
5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

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Drawn By: AA	Designed By: AA
Approved By:	Project No: 21106
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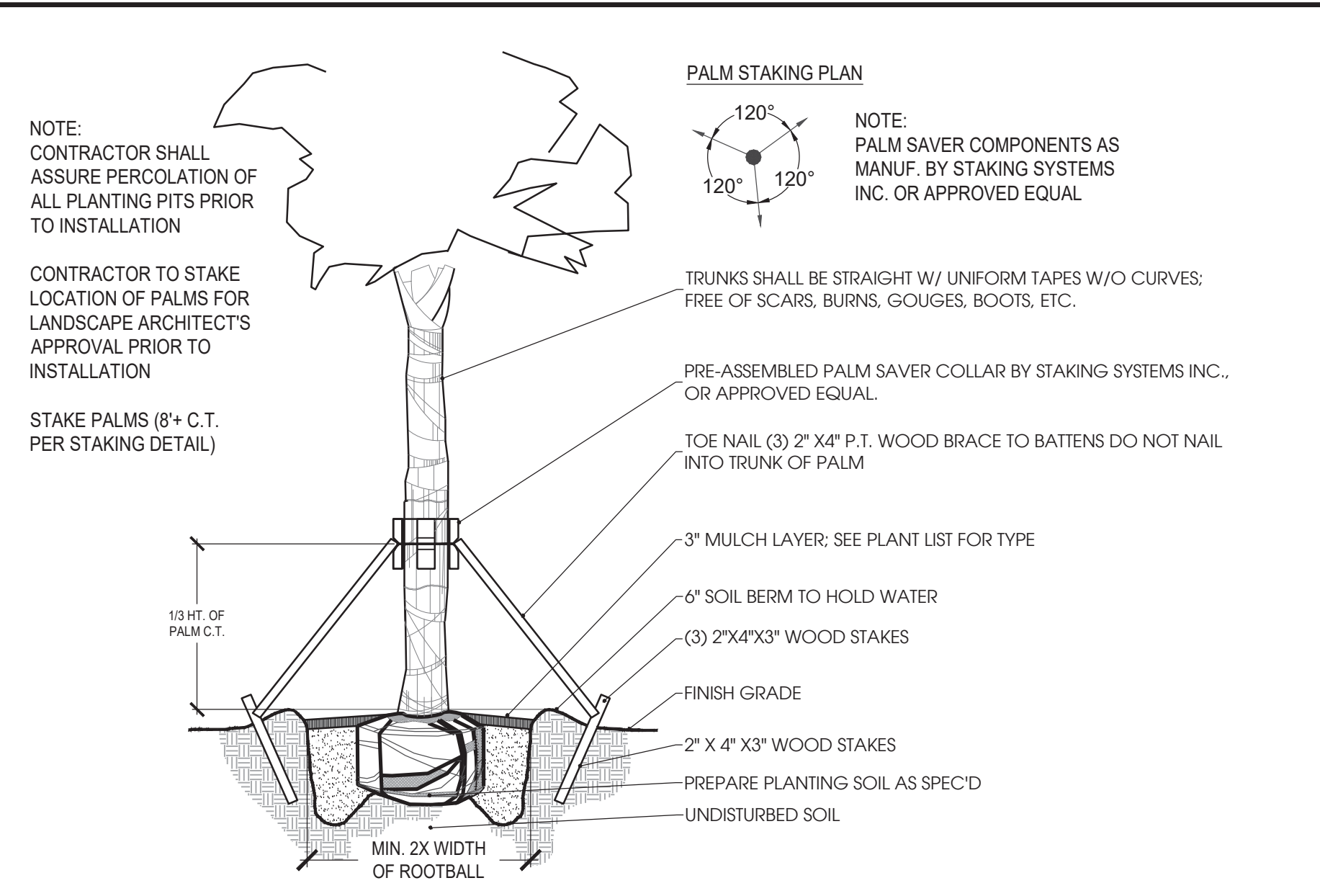
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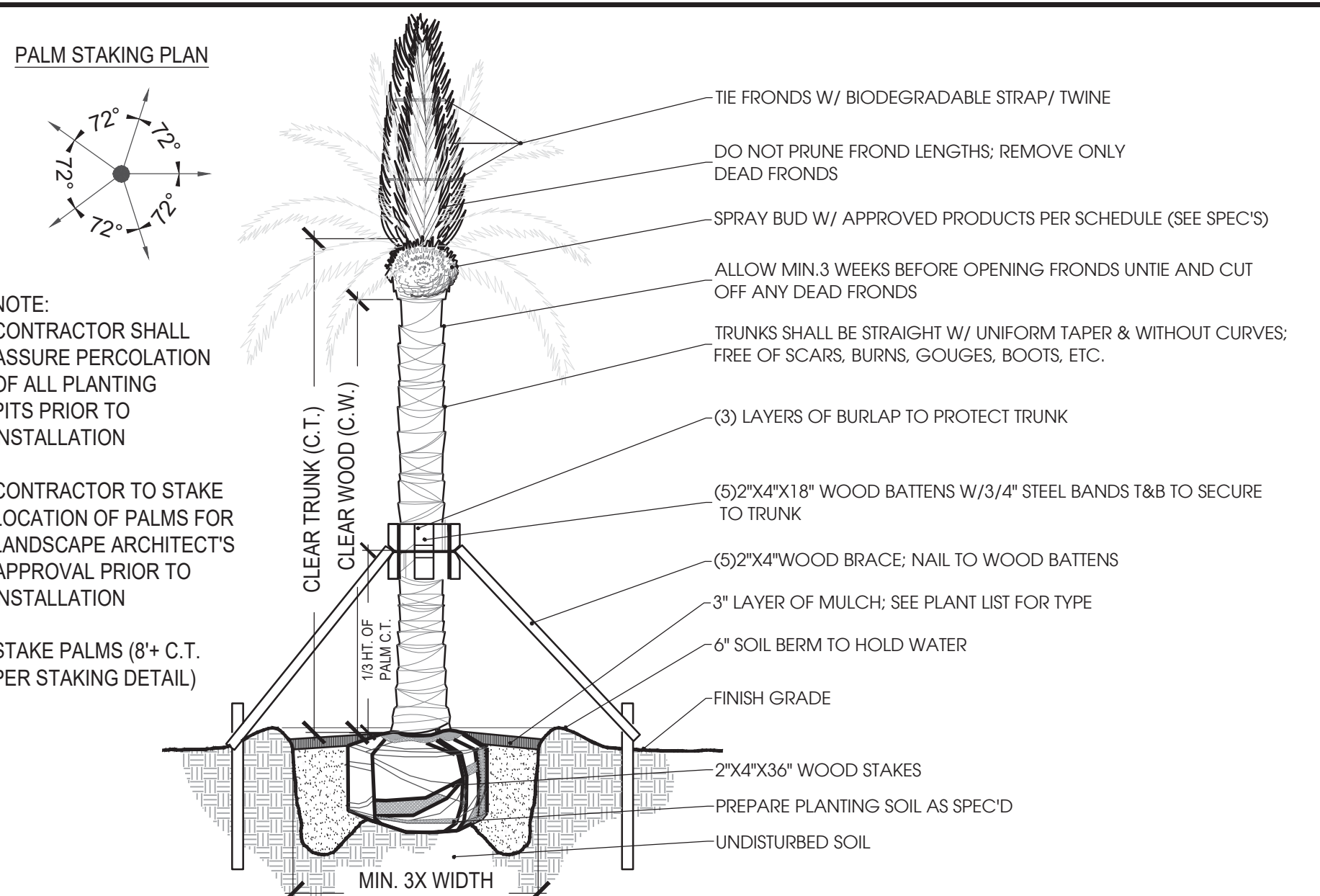




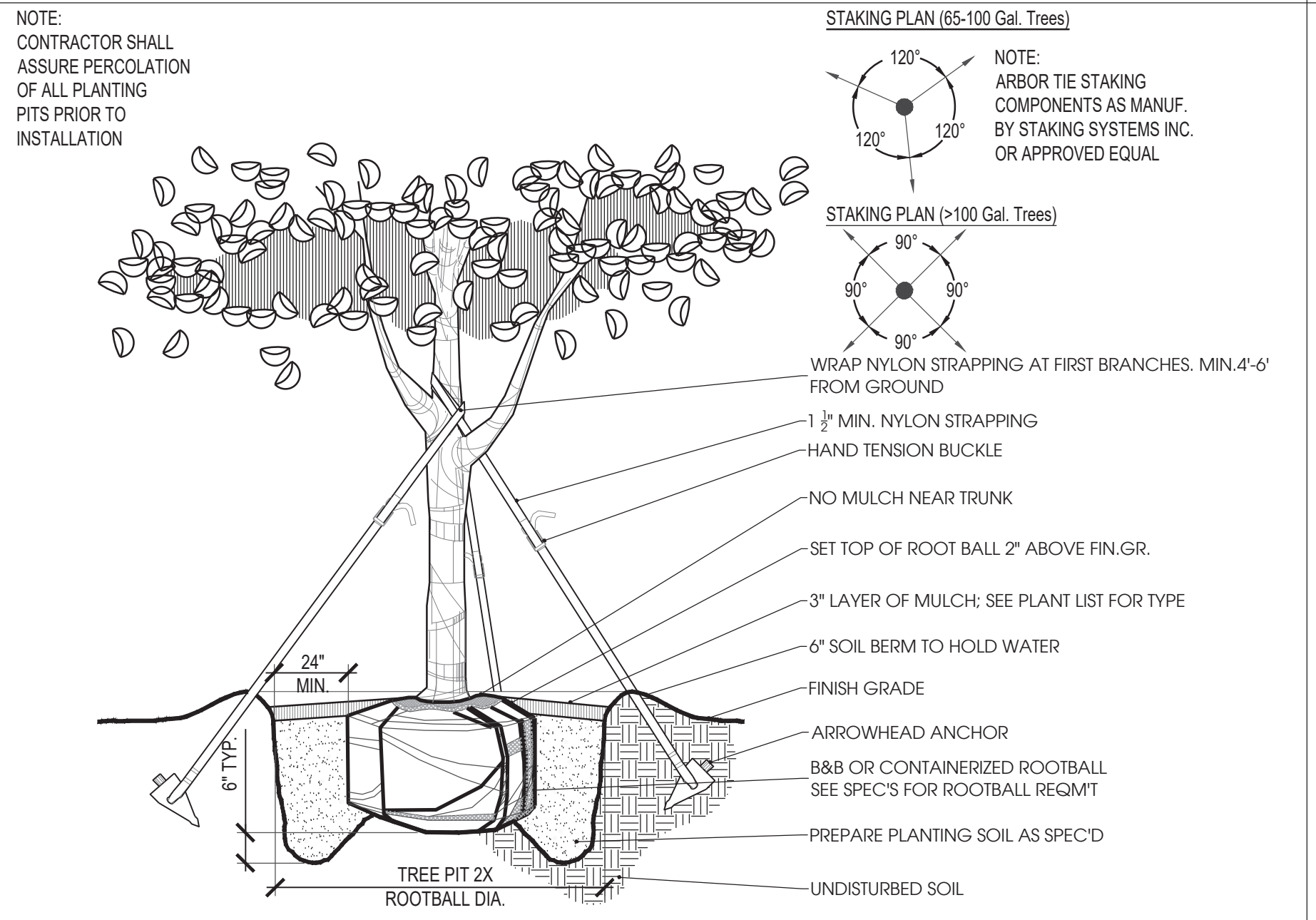
1 Shrub & Groundcover Planting
Scale: N.T.S.



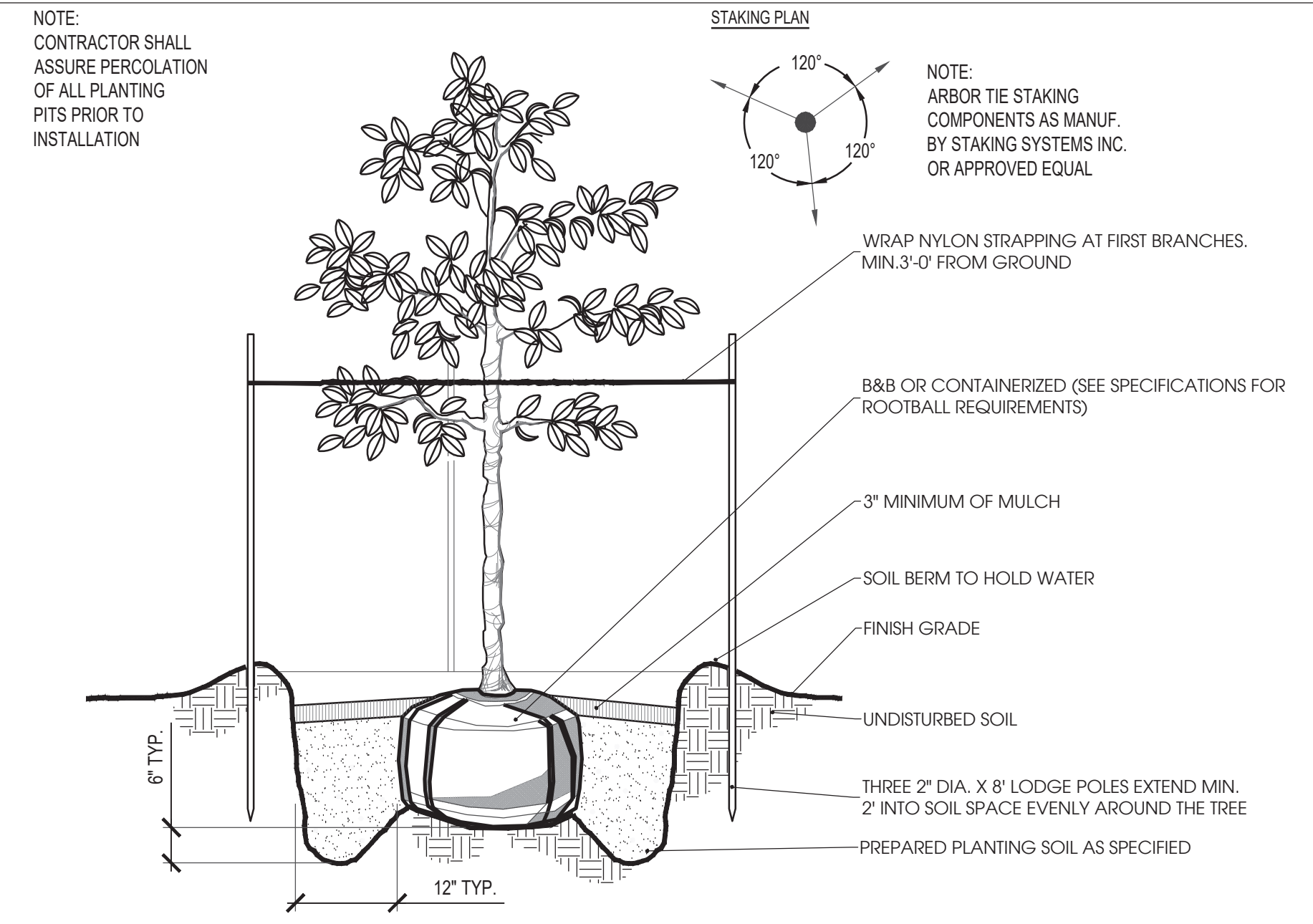
2 Sabal Palm Planting
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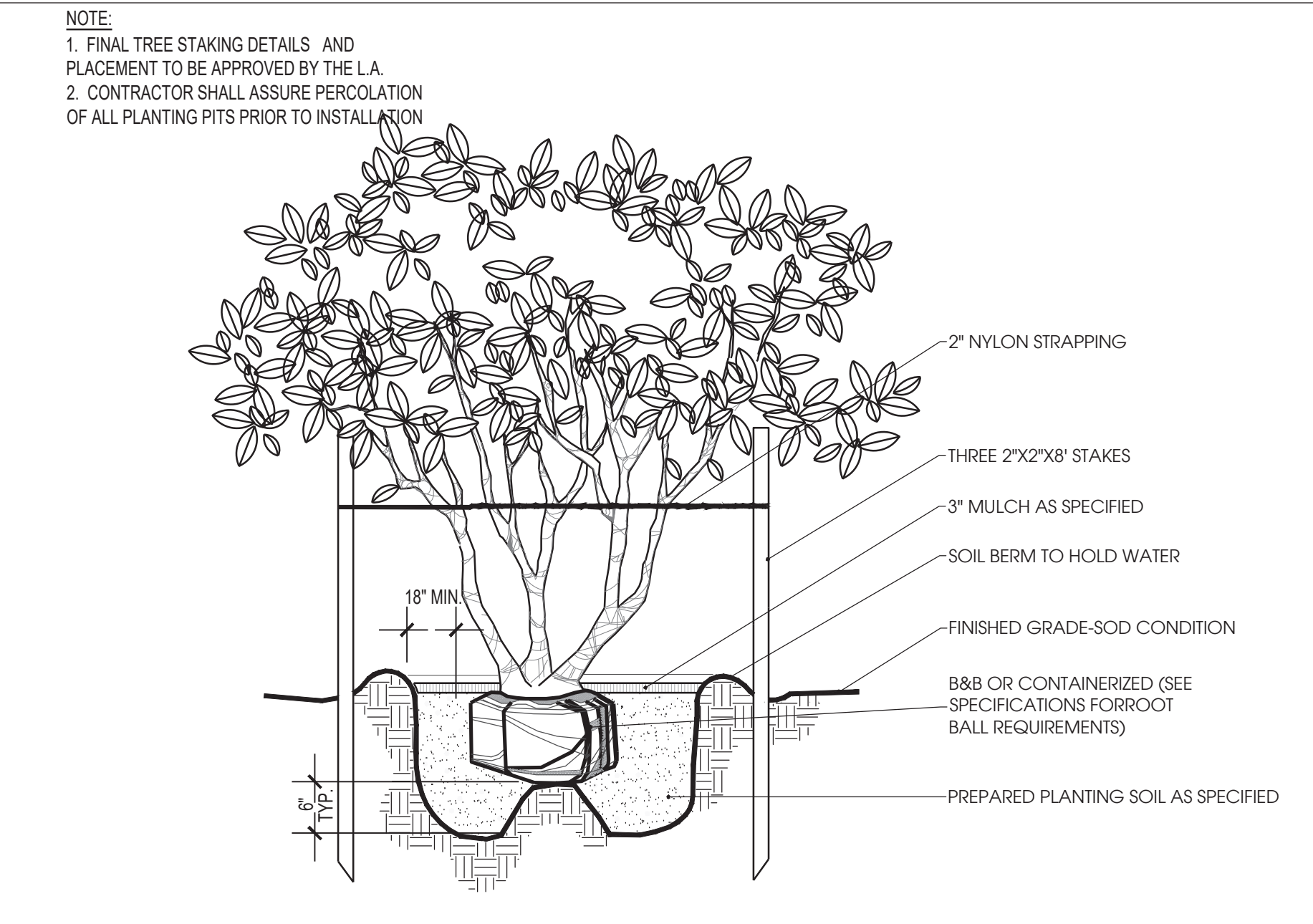
3 Phoenix Palm Planting
Scale: N.T.S.



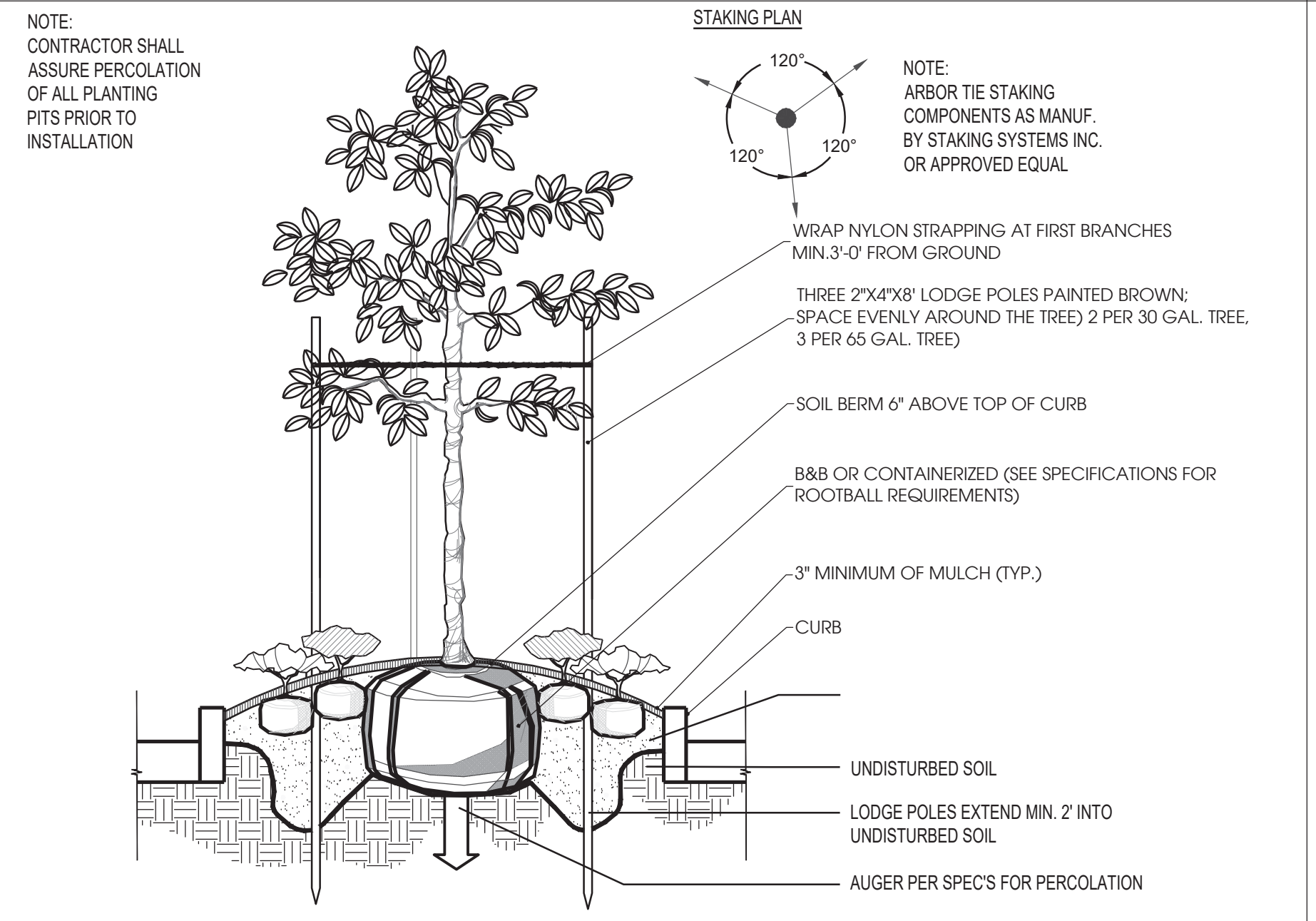
4 Tree Planting (65-100 Gal.)
Scale: N.T.S.



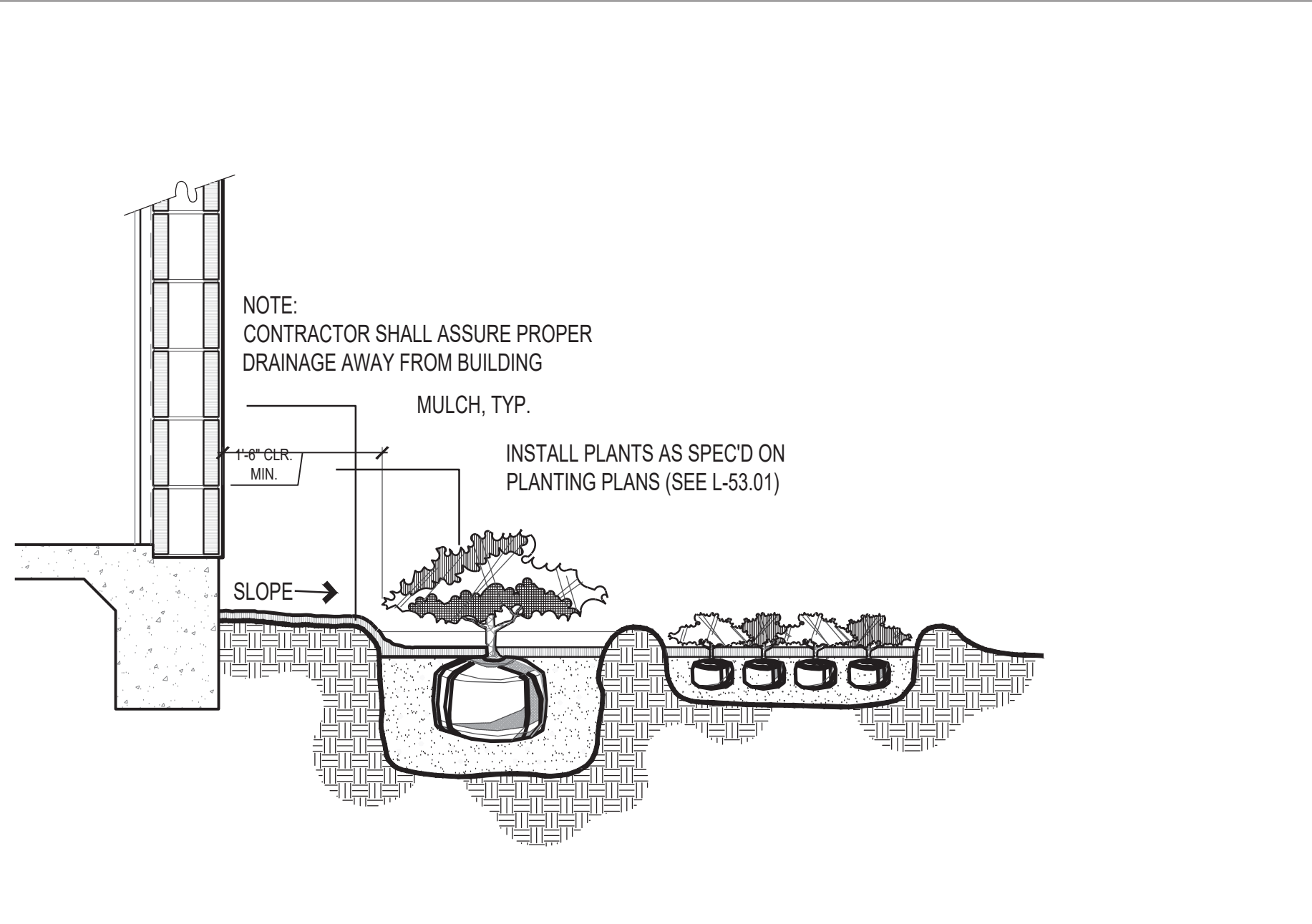
5 Tree Planting (15-45 Gal.)
Scale: N.T.S.



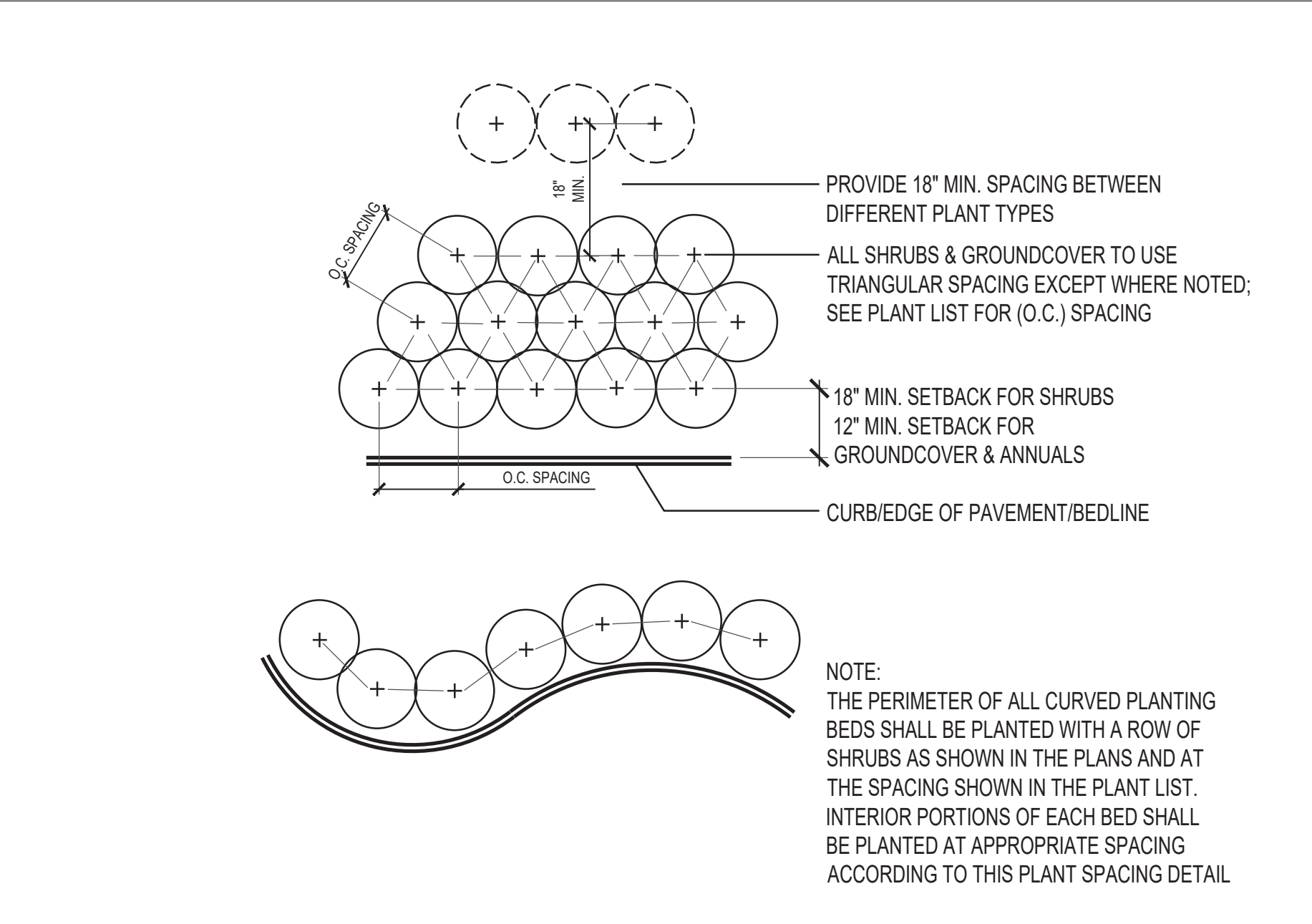
6 Multi-Trunk Tree Planting
Scale: N.T.S.



7 Curbed Island Plantings
Scale: N.T.S.



8 Foundation Planting
Scale: N.T.S.



9 Shrub and Groundcover Spacing
Scale: N.T.S.

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WATERFRONT
CITY OF EDGEWATER

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LANDSCAPE DETAILS

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5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

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FILE: Z:\4 Studio\Projects\2021\121106-The Waterfront\1.2 Autocad\15 Permit\Sheets\121106-Permit REV7.dwg
PRINT DATE: 24-Jul-23
DRAWING SIZE: 24" X 36"

HUNTER SPRAY IRRIGATION

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
○	A B C	15' FULL 15' HALF 15' QUARTER	3.75 1.86 .97	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
●	D E F	12' FULL 12' HALF 12' QUARTER	2.7 1.3 .67	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
○	G H I	10' FULL 10' HALF 10' QUARTER	1.59 .88 .42	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
⊕	J K L	8' FULL 8' HALF 8' QUARTER	.97 .47 .24	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
●	M N O	5' FULL 5' HALF 5' QUARTER	.47 .23 .12	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
■	P Q R	5'X30' SIDE 5'X30' CENTER 5'X15' END	1.3 1.3 .65	PRDS-12-PRS30-CV-R-SS530 PRDS-12-PRS30-CV-R-CS530 PRDS-12-PRS30-CV-R-EC515
□	S	9'X18' SIDE	1.72	PRDS-12-PRS30-CV-R-SS918
💧	T	BUBBLER	.5	PCN50 ON FLEX PIPE
▨	U	DRIP LINE	0.017sf	HUNTER HDL-09-12-R, LD-STAKE 5'OC

HUNTER ROTOR AND MATCHED ROTATORS IRRIGATION

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
△	AR	44' FULL	8.0	PGP-04-CV-R-8
△	BR	40' HALF	4.0	PGP-04-CV-R-4
△	CR	34' QUARTER	2.0	PGP-04-CV-R-2
▲	DR	25' FULL	3.0	PGP-04-CV-R-3.0SR
▲	ER	25' HALF	1.5	PGP-04-CV-R-1.5SR
▲	FR	25' QUARTER	.75	PGP-04-CV-R-.75SR
⊕	GR	15'-20' FULL	1.47	PRDS-12-PRS40-CV-R-MP2RED
⊕	HR	15'-20' HALF	.74	PRDS-12-PRS40-CV-R-MP2BLACK
⊕	IR	15'-20' QUARTER	.4	PRDS-12-PRS40-CV-R-MP2BLACK
⊕	JR	8'-13' FULL	.75	PRDS-12-PRS40-CV-R-MPIOLIVE
⊕	KR	8'-13' HALF	.37	PRDS-12-PRS40-CV-R-MPIRED
⊕	LR	8'-13' QUARTER	.19	PRDS-12-PRS40-CV-R-MPIRED
⊕	MR	5'-30' SIDE	.44	PRDS-12-PRS40-CV-R-MPSS550
⊕	NR	5'-15' END	.22	PRDS-12-PRS40-CV-R-MPLCS515
💧	OR	BUBBLER	.25	PCN25 ON FLEX PIPE

MISCELLANEOUS IRRIGATION ITEMS

🔌	CONTROLLER	I-CORE 6 STATION CONTROLLER WITH RFC RAIN & FREEZE SENSOR
M	METER	1" POTABLE IRRIGATION METER
⊕	VALVE	ICV-101G-FS-R-AS-30
---	MAINLINE	1.5" MAINLINE
~	D.C.V.A.	1" DOUBLE CHECK VALVE ASSEMBLY
■■■■	SLEEVE	SCH40 PVC SLEEVE 2 TIMES SIZE OF PIPE

=NOTES=

- SPRAYS IN LAWN LAWN AREAS SHALL BE 6" POP-UPS.
- ADJUST HEADS TO AVOID OVER SPRAY.
- USE PURPLE HEADS, PIPES, & VALVES ONLY.
- FIELD ADJUST IRRIGATION PLAN TO ACCOMMODATE SITE CHANGES.
- VELOCITY SHALL NOT EXCEED 5' PER SEC. IN ALL PIPELINES
- ALL POTS SHALL BE IRRIGATED WITH DRIP BUBBLER AND ATTACHED TO LAND IRRIGATION ZONE

IRRIGATION INSTALLATION GENERAL NOTES
SECTION 02810
PART ONE - GENERAL

1.0 SUMMARY

- A. All portions of Division I - General Requirements are included with this section.
- B. Furnish all transportation, materials, labor, equipment, and services to complete all work shown on the drawings and as specified.

1.1 RELATED SECTIONS: section 02900 landscape planting

1.2 TOLERANCE

- A. Install sprinkler heads where indicated by symbol.
- B. Drawings are schematic. Adjust pipe and locations to conform to site conditions and to avoid obstructions. Conceal components behind walls of shrubbery where possible. Verify questionable locations before installation.

1.3 SUBMITTAL

- A. Submit two bound folders containing:
 1. Written operating instructions for all components.
 2. Complete parts list and manufacturer's data.
 3. Copy of well completion report.
 4. Written maintenance instructions.
 5. Provide 2 sets as-built record drawings with the following items dimensioned to the nearest foot:
 - a. Sprinkler main lines
 - b. Water source
 - c. Control valves
 - d. Gate valve
 - e. Electric control wire path (Red-line prints).
- B. Products furnished but not installed:
 1. 2 extra heads of each type and size
 2. 2 extra nozzles of each type and size
 3. 2 extra head wrenches for each type of head
 4. 1 extra valve box with lid

1.4 COORDINATE WORK WITH OWNER AND OTHER TRADES

- A. A licensed electrician will install/provide power to the controller, pump, or fountain if utilized on project.

1.5 QUALITY ASSURANCE

- A. Contractor is expected to participate in preconstruction meeting with Owner and landscape architect to coordinate schedule, clarify questions, and discuss acceptable performance criteria for payment.
- B. Contractor is expected to participate in contract closeout meeting with Owner and landscape architect to verify proper completion of the work, establish "Date of Substantial Completion", and advise Owner as to system operation.

1.6 WARRANTIES

- A. Contractor will be fully responsible for system operation until Date of Substantial Completion.
- B. Contractor is fully responsible for all parts and workmanship for one year after Date of Substantial Completion of each specific phase or portion of the project.
- C. See to the fulfillment of all manufacturer's warranties.

PART TWO - PRODUCTS

2.0 MATERIALS

Backfill shall be free from stone, trash, or other debris.

2.1 MANUFACTURED UNITS

- A. Automatic electro-mechanical controller fully installed and operating.
- B. Electric valve installed in valve box.
- C. Valve box with lid manufactured by "Antek" or "Brooks".
- D. Connection for control wires manufactured by "Pentite" or "3M" installed as per manufacturer's directions, and above grade in valve boxes.
- E. Gate valves shall be brass and installed in valve box.
- F. Automatic drain valves shall be installed in 1 cubic foot gravel.

2.2 COMPONENTS

- A. Control wire shall be direct burial # 14, type UF. Tape to underside of main every 10 feet. Install spare ground, wire + 5 extra wires.
- B. Main line shall be class 200 PVC (ANSI/ASTM D2241).
- C. Lateral lines shall be class 160 PVC minimum (ANSI/ASTM D2241).
- D. Sleeve at all road and drive crossings shall be class 200 PVC.
- E. All pipe, connectors and misc. fittings for the meter and check valve assembly will be galvanized.
- F. all electrical work will conform to year construction N.E.C.

PART THREE - EXECUTION

3.0 EXAMINATION

Examine surfaces to which work will be applied and immediately notify landscape architect in writing if site is not in proper condition for Contractor to perform his duties under the terms of this contract.

3.1 PROTECTION

- A. Locate identify, and mark all known utilities in area of the work. Take reasonable care to avoid damages or hazards.
- B. Damage caused by Contractor's work will be repaired to Owner's satisfaction at Contractor's expense.
- C. Document any damage to work caused by other trades. Immediately bring costs to Owner's attention and quickly repair at Owner's expense, as directed.

3.2 PREPARATION

- A. Surface Preparation. Stake out each run of pipes, each head, and each valve.
- B. Test control wire for continuity before unreeling for installation.

3.3 INSTALLATION

- A. Keep pipe interior clean and dry at all times.
- B. Ensure a square cut at all joints and ream ends to a smooth finish, inside and out.
- C. Lay all runs greater than 100 feet from side to side on trench bottom in serpentine pattern.
- D. Support all pipe with clean, compact soil.
- E. Backfill and compact to original soil.
- F. Set heads plumb and flush with top of sod or mulch.
- G. For lateral lines flush all debris from lines. Open valve and screw on one head at a time, starting at valve and continuing to the end. Ensure that lines are watertight.

3.4 TOLERANCES

- A. Main line and drive crossings shall have 18 inches minimum cover.
- B. Lateral lines shall have 12 inches minimum cover.
- C. All heads shall be 4 inches minimum from walks, drives, or curbs.
- D. All pop-up heads and valve boxes shall be installed with top flush with grade.
- E. All heads shall be installed plumb.

3.5

FIELD TESTS

Apply 100 psi hydrostatic pressure to main lines for 120 minutes. If a leak is found, repair and retest until satisfactory.

3.6 ADJUSTMENTS

- A. Adjust sprinkler patterns and radius. Ensure uniform and sufficient coverage for optimum plant growth.
- B. No heads shall be allowed to spray walls, fences, walks, or drives.
- C. Set times to operate as appropriate for season, soil type, drainage, and plant requirements.

3.7 FIELD QUALITY CONTROL

- A. Landscape architect or Owner may conduct periodic inspections to determine that the terms of this contract are fulfilled.
- B. Contractor will be expected to participate with Owner in final inspection to review project for conformance to the contract. Items to be reviewed include, type, quantities, sizes, locations, dimensions, and quality of materials and workmanship.
- C. The Contractor shall keep the premises free from accumulations of waste materials or rubbish caused by his employees or work at all times.

END OF SECTION

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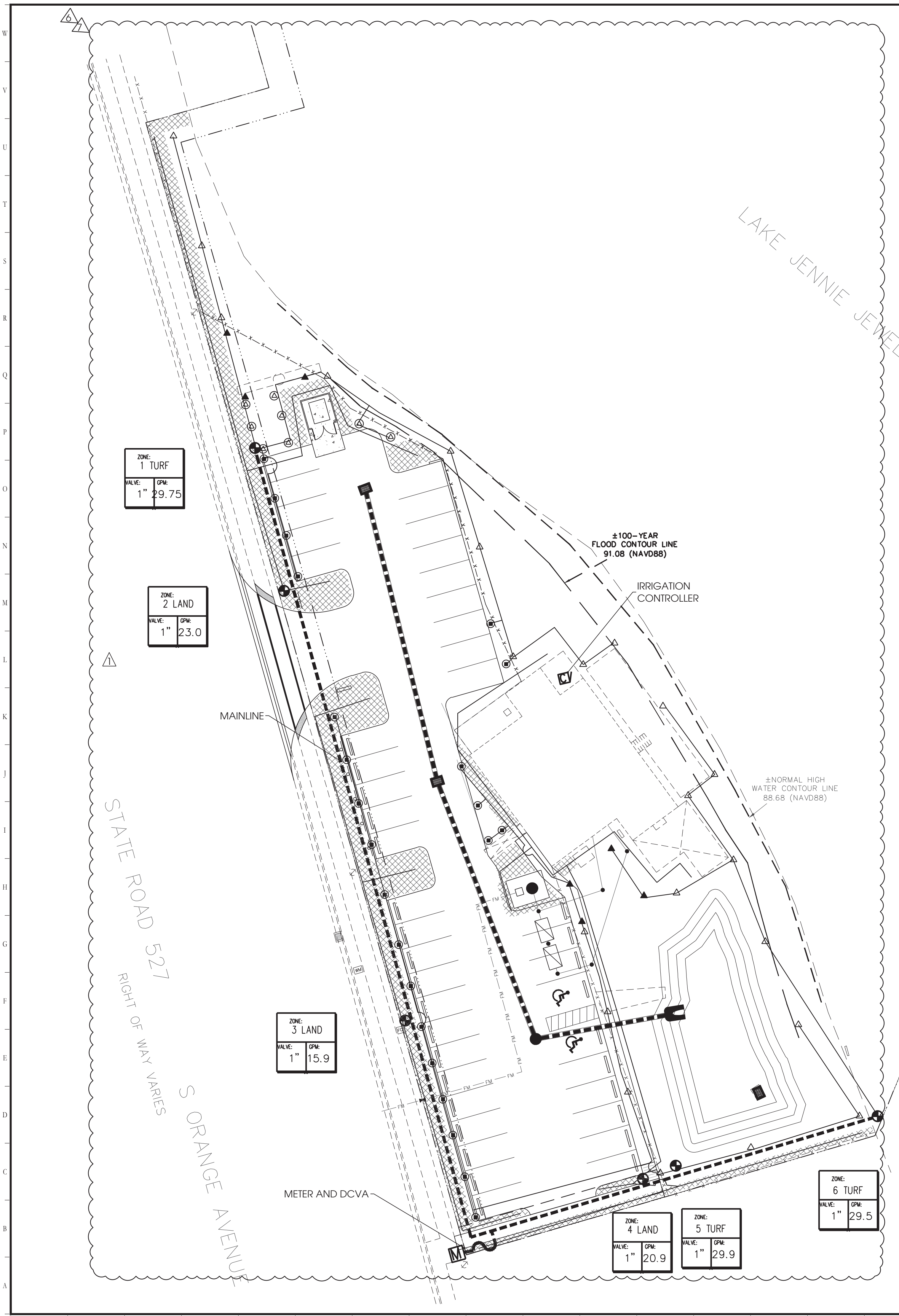
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3	2/08/2023	BASE&CMMNTS.	FA
4	4/05/2023	BASE&CMMNTS.	FA
5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

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IRRIGATION LEGEND

SYB	KEY	SYB	KEY
○	A B C	△	AR BR CR
●	D E F	▲	DR ER FR
◐	G H I	◑	GR HR IR
◒	J K L	◓	JR KR LR
◔	M N O	◕	MR NR
◖	P Q R	◗	OR
◘	S		
◙	T		

Ⓜ	CONTROLLER
Ⓜ	METER
⊕	VALVE
---	MAINLINE
~	DOUBLE CHECK VALVE ASSEMBLY D.C.V.A.
----	SLEEVE

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WATERFRONT
CITY OF EDGEWATER

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IRRIGATION PLAN

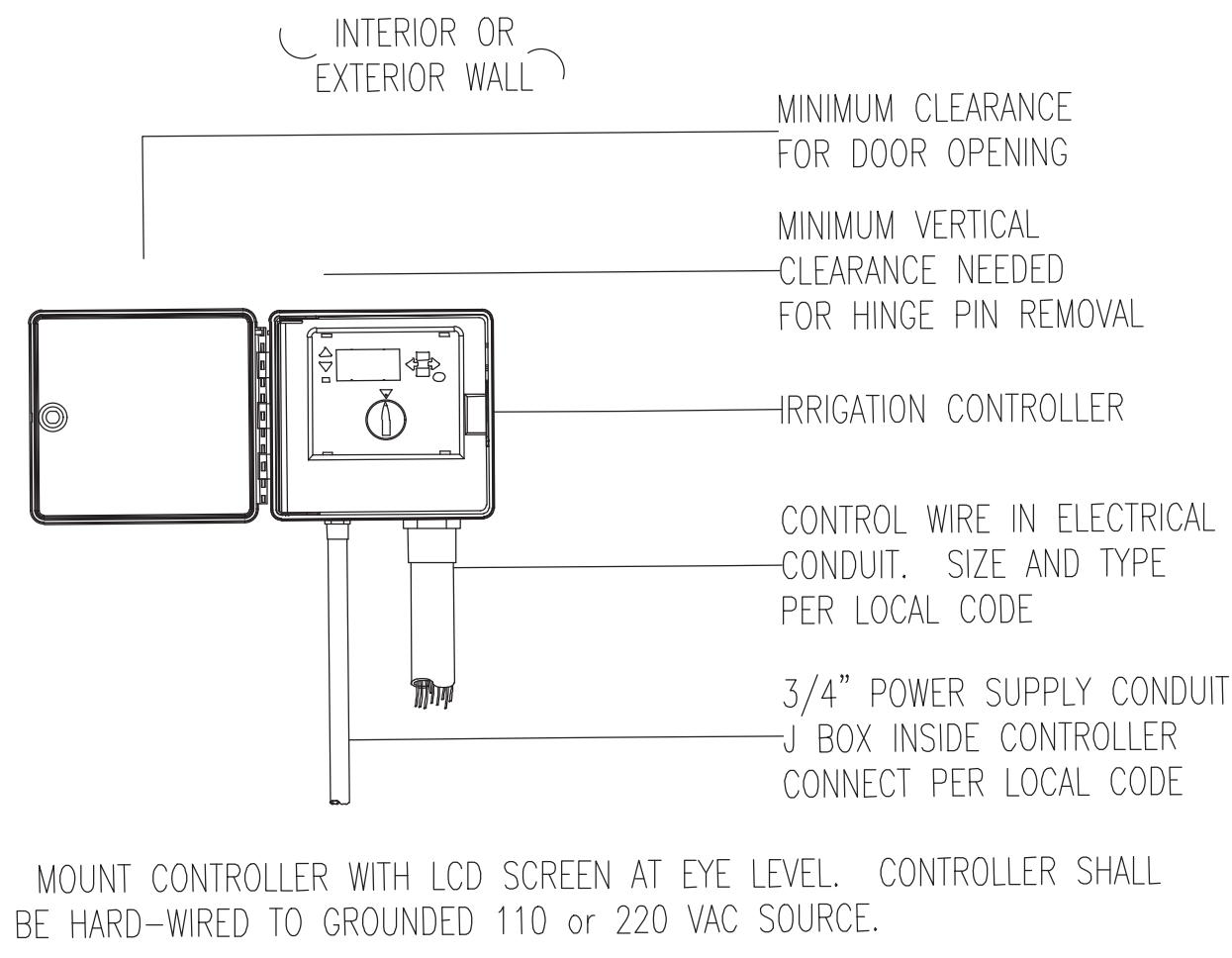
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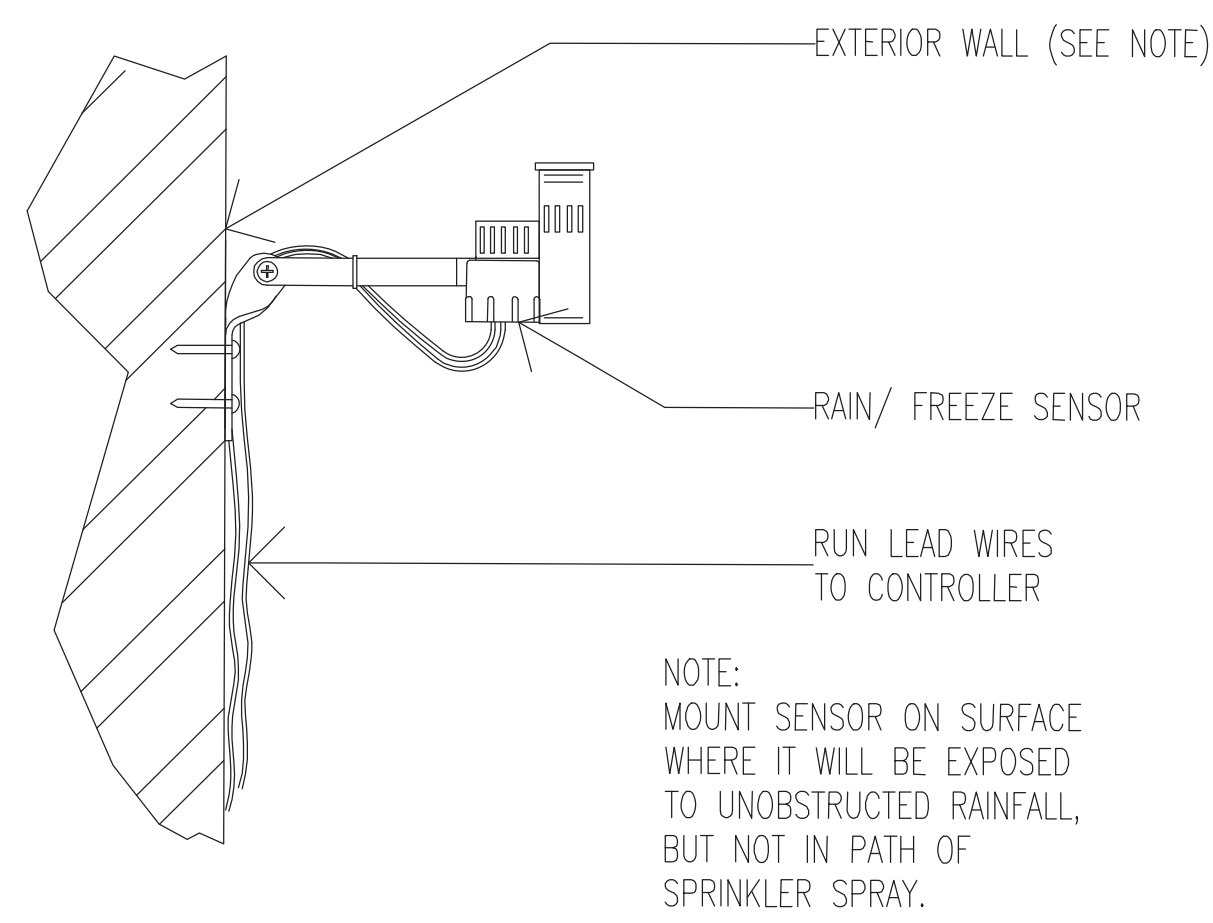
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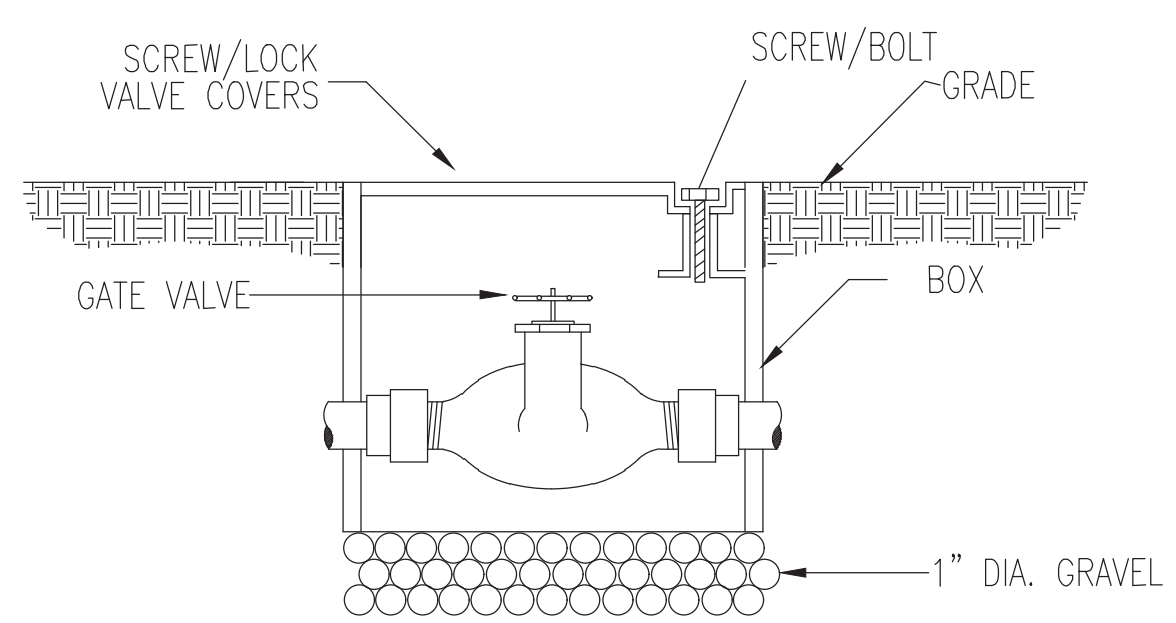
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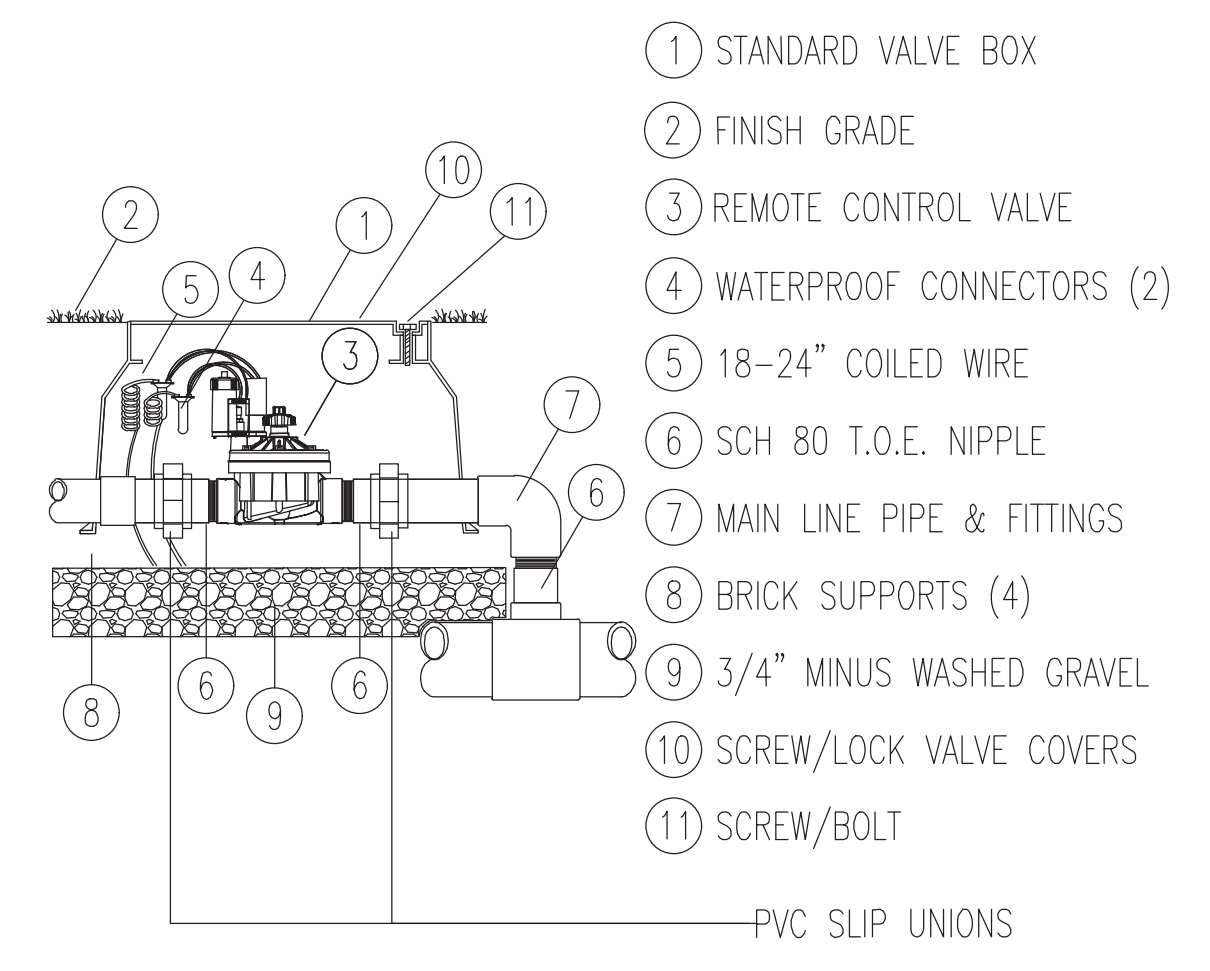
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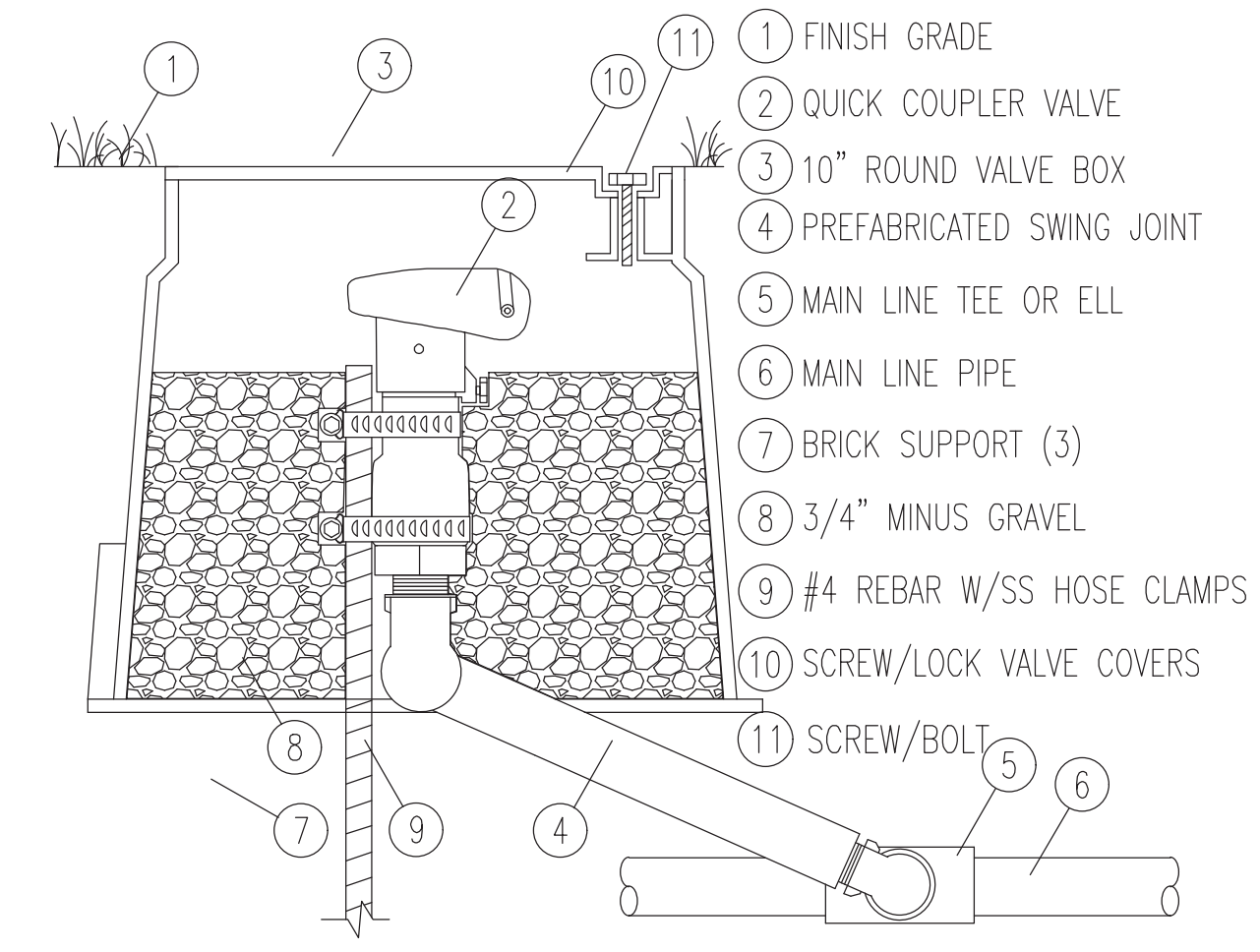
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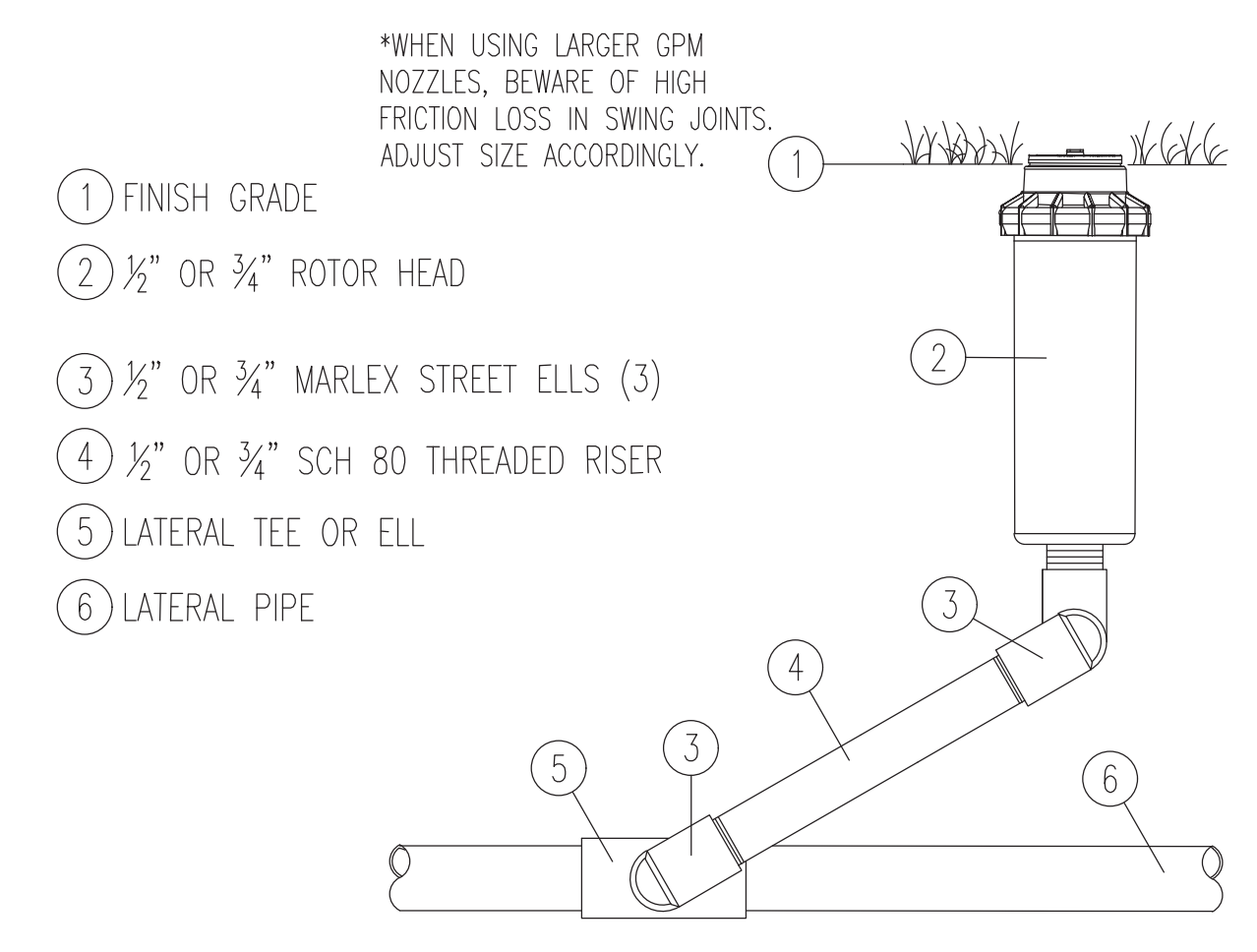
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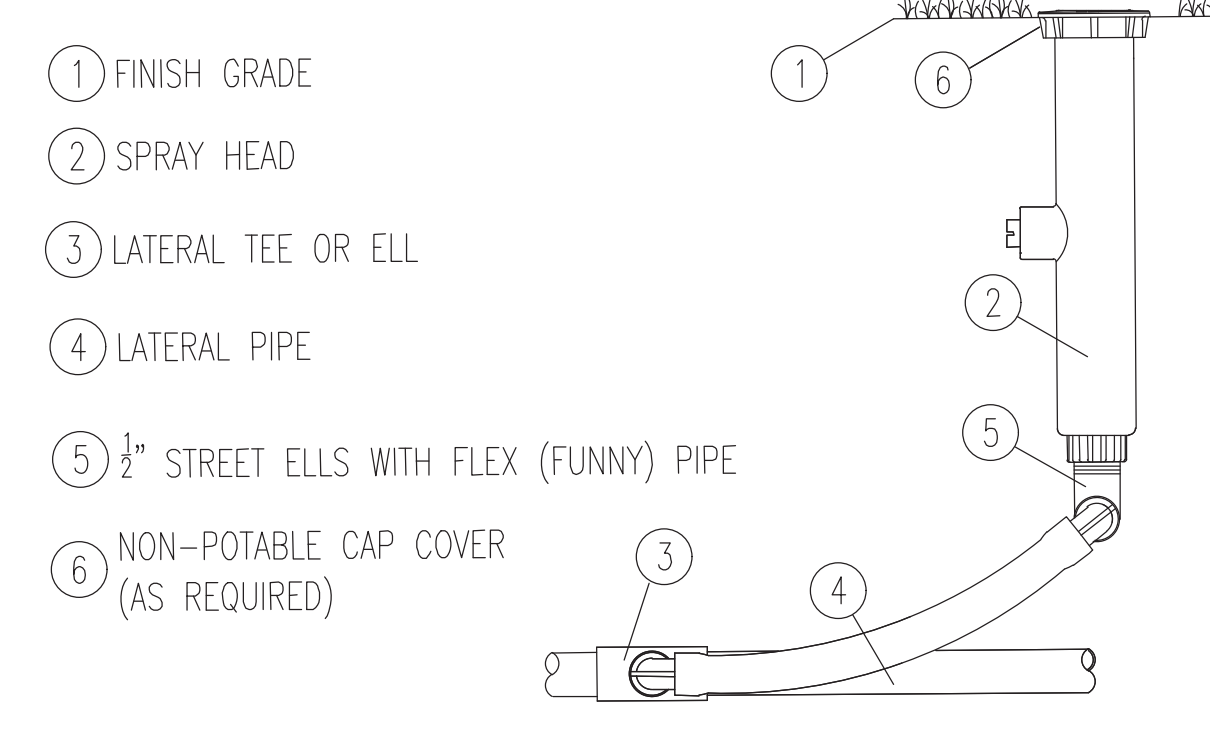
4 Remote Control Valve
Scale: N.T.S.



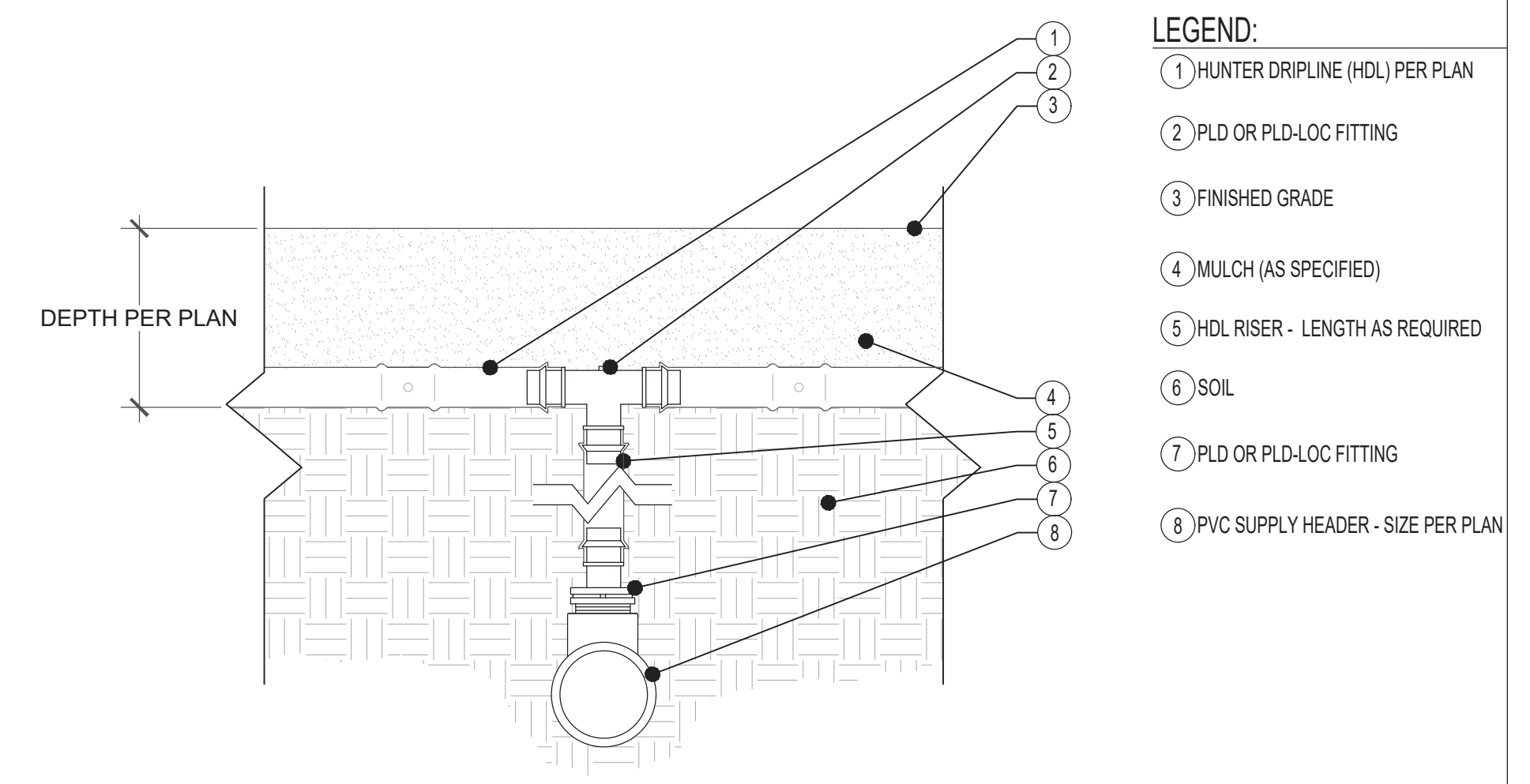
5 Quick Coupler Valve
Scale: N.T.S.



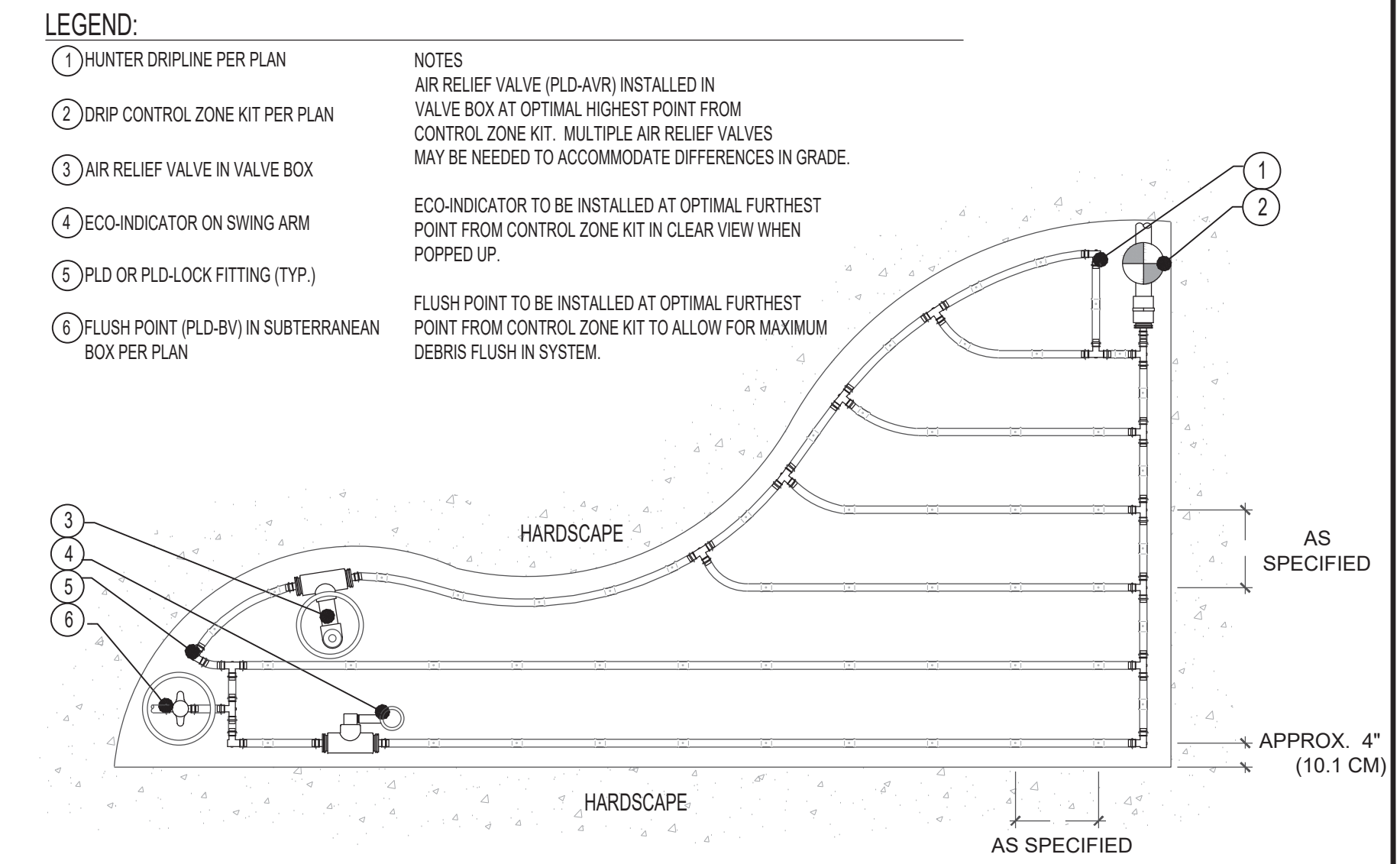
6 Rotor Head
Scale: N.T.S.



7 Spray Head
Scale: N.T.S.



8 Drip Line
Scale: N.T.S.



9 Drip Line
Scale: N.T.S.

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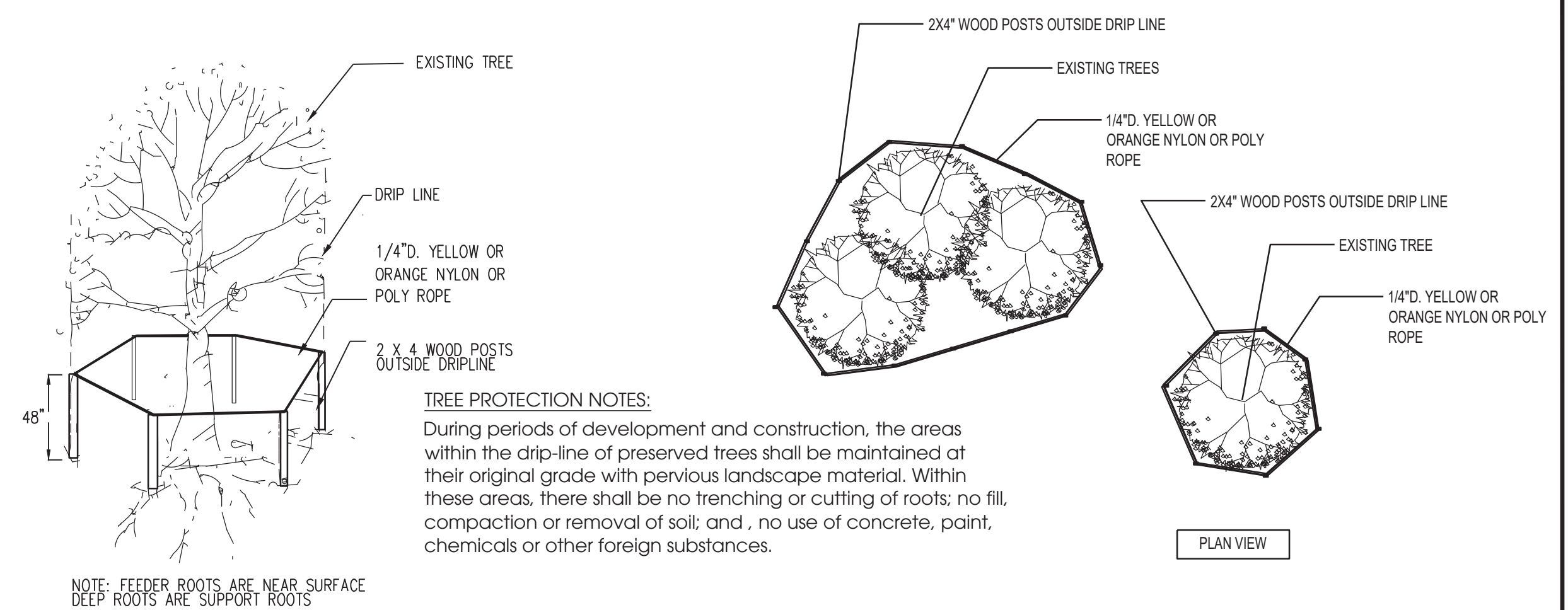
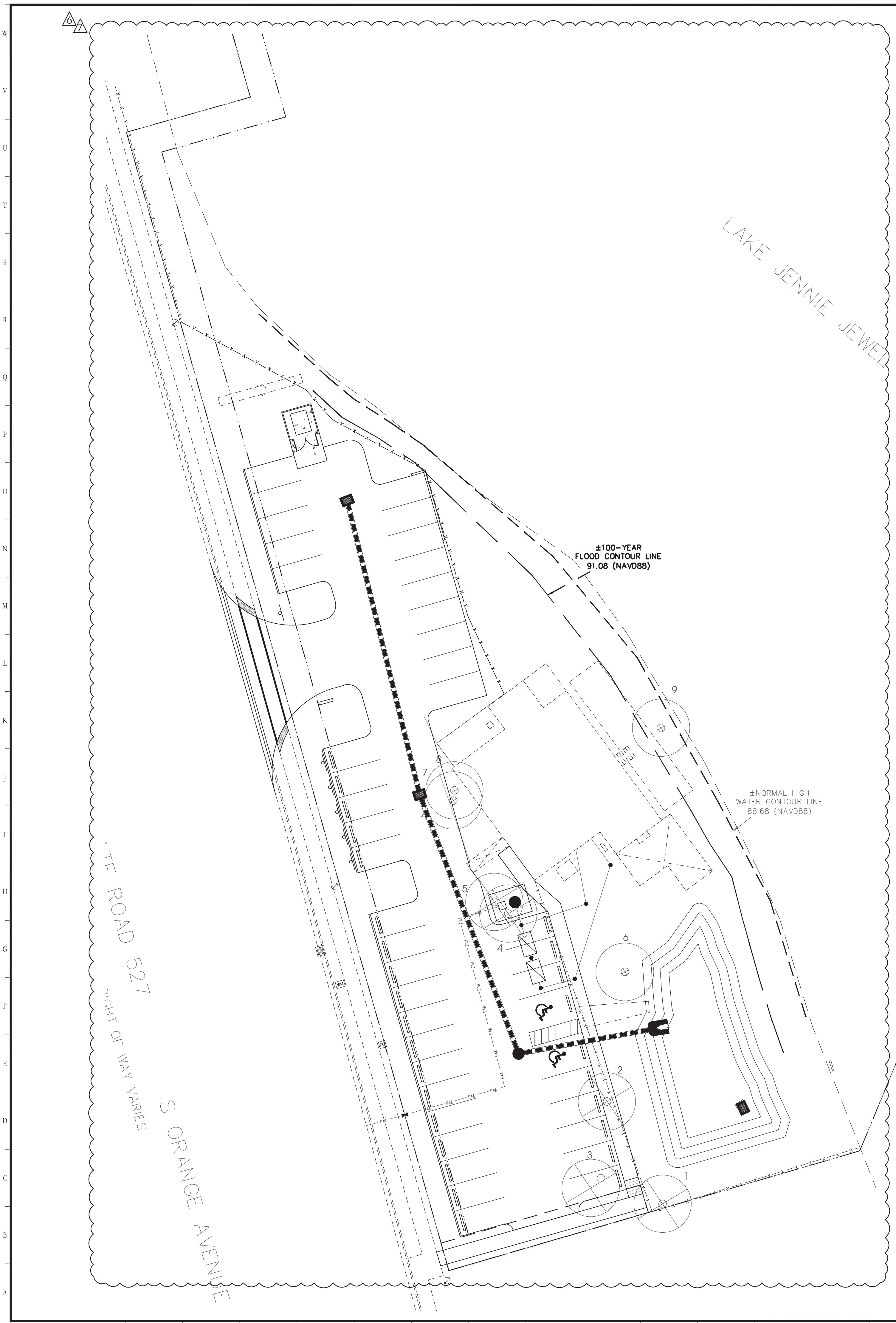
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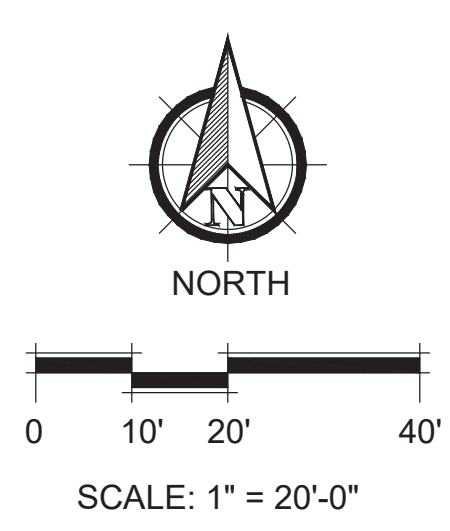
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TREE PROTECTION NOTES:
 During periods of development and construction, the areas within the drip-line of preserved trees shall be maintained at their original grade with pervious landscape material. Within these areas, there shall be no trenching or cutting of roots; no fill, compaction or removal of soil; and, no use of concrete, paint, chemicals or other foreign substances.

10 Tree Protection Detail
 Scale: N.T.S.

EXISTING TREE LIST				
TREE NUMBER	TREE TYPE	DBH		STATUS
1	RAIN	8"		REMOVED
2	DAK	44"		REMOVED
3	DAK	22"		REMOVED
4	PALM	10"		REMOVED
5	PALM	10"		REMOVED
6	DAK	40"		SAVED
7	PALM	10"		SAVED
8	PALM	8"		SAVED
9	PALM	17"		SAVED



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 TREE MITIGATION PLAN

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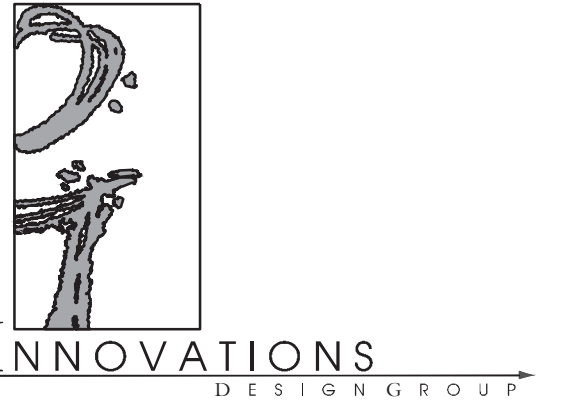
LANDSCAPE INSTALLATION NOTES :

- THE CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS AND BASE INFORMATION PRIOR TO INITIATING PLANTING INSTALLATION. ALL EXISTING PLANTING SHALL REMAIN INTACT AND UNDISTURBED UNLESS OTHERWISE NOTED ON THE PLANS.
- CONTRACTOR SHALL NOTIFY ALL NECESSARY UTILITY COMPANIES 48 HOURS MINIMUM PRIOR TO DIGGING FOR VERIFICATION OF ALL UNDERGROUND UTILITIES, IRRIGATION AND ALL OTHER OBSTRUCTIONS AND COORDINATE WITH OWNER'S REPRESENTATIVE PRIOR TO INITIATING OPERATIONS. DRAWINGS ARE PREPARED ACCORDING TO THE BEST INFORMATION AVAILABLE AT THE TIME OF PREPARING THESE DOCUMENTS.
- CONTRACTOR SHALL FAMILIARIZE HIMSELF/HERSELF WITH EXISTING SITE CONDITIONS PRIOR TO INITIATING PLANTING. ALL EXISTING SITE FURNISHINGS, PAVING, LANDSCAPE AND OTHER ELEMENTS TO REMAIN SHALL BE PROTECTED FROM ANY DAMAGE UNLESS OTHERWISE NOTED.
- UNLESS OTHERWISE NOTED, THE LIMITS OF CONSTRUCTION ARE THE CLEARING LIMITS NOTED ON THE DRAWINGS. (REFER TO CIVIL ENGINEERING DRAWINGS).
- REPORT ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DRAWINGS AND FIELD CONDITIONS TO THE OWNER'S REPRESENTATIVE IMMEDIATELY.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL WORK WITH RELATED CONTRACTORS AND WITH THE GENERAL CONSTRUCTION OF THE PROJECT IN ORDER NOT TO IMPEDE THE PROGRESS OF THE WORK OF OTHERS OR THE CONTRACTOR'S OWN WORK.
- CONTRACTOR SHALL BE RESPONSIBLE TO REMOVE EXISTING GROUND COVER FOR ALL PLANTING BEDS AS SPECIFIED PRIOR TO PLANTING INSTALLATION. CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE ALL PORTIONS OF EXISTING LAWN AREAS DAMAGED WHILE COMPLETING PLANTING INSTALLATION WITH THE SAME GRASS SPECIES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL PERFORM SOIL TESTING PRIOR TO INSTALLATION TO DETERMINE NUTRIENTS PRESENT IN SOIL, PH OF SOIL, AND SOIL TEXTURE OF TOP 12" OF SOIL. BASED ON THE RESULTS OF THE TESTS THE CONTRACT SHALL MAKE THE NECESSARY AMENDMENTS TO SUPPORT THE HEALTH OF THE NEWLY INSTALLED PLANTS.
- ALL PLANT MATERIAL SHALL BE IN FULL AND STRICT ACCORDANCE WITH THE FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS AS PUBLISHED BY THE STATE OF FLORIDA DEPARTMENT OF AGRICULTURE. ALL PLANT MATERIAL SHALL MEET FLORIDA #1 OR BETTER.
- ALL TREES SHALL HAVE SIX FEET (6') CLEAR TRUNK UNLESS OTHERWISE SPECIFIED.
- ALL CONTAINER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- ALL TREE CALIPER SIZES NOTED ON PLANT LIST ARE MINIMUM. INCREASE SIZE IF NECESSARY TO CONFORM TO PLANT SIZE AND SPECIFICATIONS. ANY MATERIAL NOT MEETING THE SPECIFIED SIZE SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
- ANY TREES WITH A TRUNK FORMED "V" SHAPE CROTCH WILL BE REJECTED.
- EROSION CONTROL FABRIC SHALL BE INSTALLED IN ALL SHRUB AND GROUND COVER PLANTING AREAS AS PER SPECIFICATIONS FOR ALL SLOPES THAT EXCEED 3:1 . SEE GRADING PLANS FOR LOCATION OF SLOPES GREATER THAN 3:1 AND ADJACENT TO ANY WETLAND AREAS.
- TYPICALLY, SHRUB AND GROUND COVER PLANTINGS ARE SHOWN AS MASS PLANTING BEDS. PLANTS SHALL BE PLACED ON A TRIANGULAR SPACING CONFIGURATION (STAGGERED SPACING). PLANT CENTER TO CENTER DIMENSIONS (O.C.) ARE LISTED UNDER "SPACING" ON THE PLANT LIST.
- LANDSCAPE CONTRACTOR SHALL FIELD STAKE THE LOCATION OF ALL PLANT MATERIAL PRIOR TO INITIATING INSTALLATION FOR THE REVIEW AND APPROVAL OF THE OWNER'S REPRESENTATIVE AND/OR LANDSCAPE ARCHITECT. ANY MATERIAL INSTALLED WITHOUT APPROVAL IS SUBJECT TO BEING RELOCATED AT THE CONTRACTOR'S EXPENSE.
- LANDSCAPE CONTRACTOR SHALL FIELD ADJUST LOCATION OF PLANT MATERIAL AS NECESSARY TO AVOID DAMAGE TO ALL EXISTING UNDERGROUND UTILITIES AND/OR EXISTING ABOVE GROUND ELEMENTS. ALL CHANGES REQUIRED SHALL BE COMPLETED AT THE CONTRACTOR'S EXPENSE AND SHALL BE COORDINATED WITH THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL MULCH ALL NEW PLANT MATERIAL THROUGHOUT AND COMPLETELY TO DEPTH OF 3" UTILIZING HARDWOOD MULCH UNLESS OTHERWISE SPECIFIED.
- ANY SUBSTITUTIONS IN SIZE AND/OR PLANT MATERIAL MUST BE APPROVED BY LANDSCAPE ARCHITECT AND/OR OWNER'S REPRESENTATIVE BEFORE PLANTING CAN BEGIN.
- CONTRACTOR SHALL REFER TO THE LANDSCAPE PLANTING DETAILS, PLANT LIST, GENERAL NOTES AND THE PROJECT MANUAL (IF AVAILABLE) AND SPECIFICATIONS FOR FURTHER AND COMPLETE LANDSCAPE PLANTING INSTRUCTIONS.
- LANDSCAPE CONTRACTOR SHALL COORDINATE ALL LANDSCAPE PLANTING WORK WITH IRRIGATION WORK. LANDSCAPE WATERING AS REQUIRED BY OWNER'S REPRESENTATIVE TO SUPPLEMENT IRRIGATION WATERING AND RAINFALL. LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR HAND WATERING IN ALL PLANTING AREAS, REGARDLESS OF THE STATUS OF EXISTING OR PROPOSED IRRIGATION.
- LANDSCAPE CONTRACTOR SHALL CLEAN THE WORK AREAS AT THE END OF EACH WORKING DAY. RUBBISH AND DEBRIS SHALL BE COLLECTED AND DEPOSITED OFF-SITE DAILY. ALL MATERIALS, PRODUCTS AND EQUIPMENT SHALL BE STORED IN AN ORGANIZED FASHION AS DIRECTED BY THE OWNER'S REPRESENTATIVE.
- LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR FINE GRADING OF ALL AREAS INCLUDING CREATING POSITIVE DRAINAGE AWAY FROM BUILDINGS.
- LANDSCAPE CONTRACTOR SHALL RE-GRADE ALL AREAS DISTURBED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION WORK. LANDSCAPE CONTRACTOR SHALL REPLACE (BY EQUAL SIZE AND QUALITY) ANY AND ALL EXISTING PLANT MATERIAL DISTURBED OR DAMAGED BY PLANT REMOVAL, RELOCATION AND/OR INSTALLATION.
- CONTRACTORS SHALL COMPLY WITH ALL NPDES REQUIREMENTS.

PLANT LIST			
KEY	BOTANICAL NAME	COMMON NAME	SPECIFICATION
SHADE TREES			
MG	Magnolia grandiflora	Southern Magnolia	2" Cal. 10' HT x 5' Spd
QV	Quercus virginiana	Live Oak	6" Cal. 18' HT
UNDERSTORY TREES			
LIT	Lagerstromia indica 'Tonto'	Tonto Crape Myrtle	2" Cal. 7' HT x 4' Spd
MF	Myrcianthes fragrans	Simpson's Stopper	2" Cal. 10' HT x 3' Spd
ED	Elaeocarpus decipens	Japanese Blueberry	2" Cal. 10' HT x 5' Spd
SHRUBS			
PM	Podocarpus macrophyllus	Podocarpus	36" HT 30" O.C.
RI	Rhaphlepis indica	Indian Hawthorn	24" HT 30" O.C.
VO	Viburnum odoratissimum	Sweet Viburnum	36" HT 36" O.C.
GROUND COVER			
DT	Dianella tasmanica	Blueberry Flax Lily	1 GAL Full Pot; 24" O.C.
TAM	Trachelospermum asiaticum 'Tricolor'	Tricolor Dwarf Asiatic Jasmine	1 GAL Full Pot; 18" O.C.
TURF			
SOD	Stenotaphrum secundatum 'Floritam'	Floritam St. Augustine	SOD
SOD 2	Paspalum notatum	Bahia Grass	SOD

- NOTES:
 1. Bahia Grass to be on bottom of pond

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WATERFRONT
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 LANDSCAPE NOTES

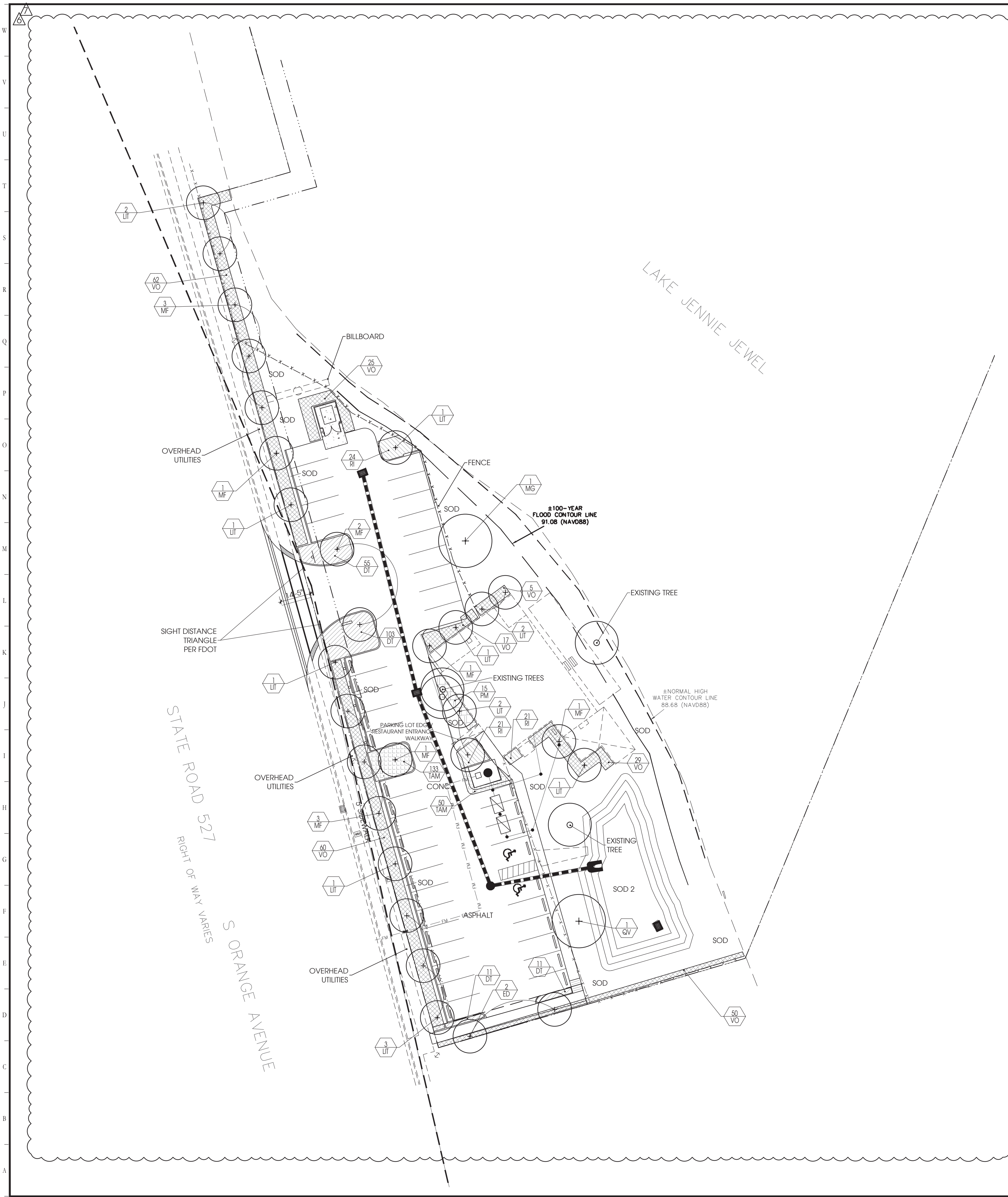
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5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
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Code Requirements Notes

Right of way:
 8' by 8' Landscape break after every 10 parking spots
 Landscape Islands require 1 tree
 A landscape strip at least seven feet in width.
 When substituting Understory Trees for Shade Tree under powerlines, 1 Tree per 25' is required per Sect 114-4.

Calculations:
 180 LF / 25' : 7.2 Required Understory Trees- Provided 8
 198 LF / 25' : 7.9 Required Understory Trees- Provided 9

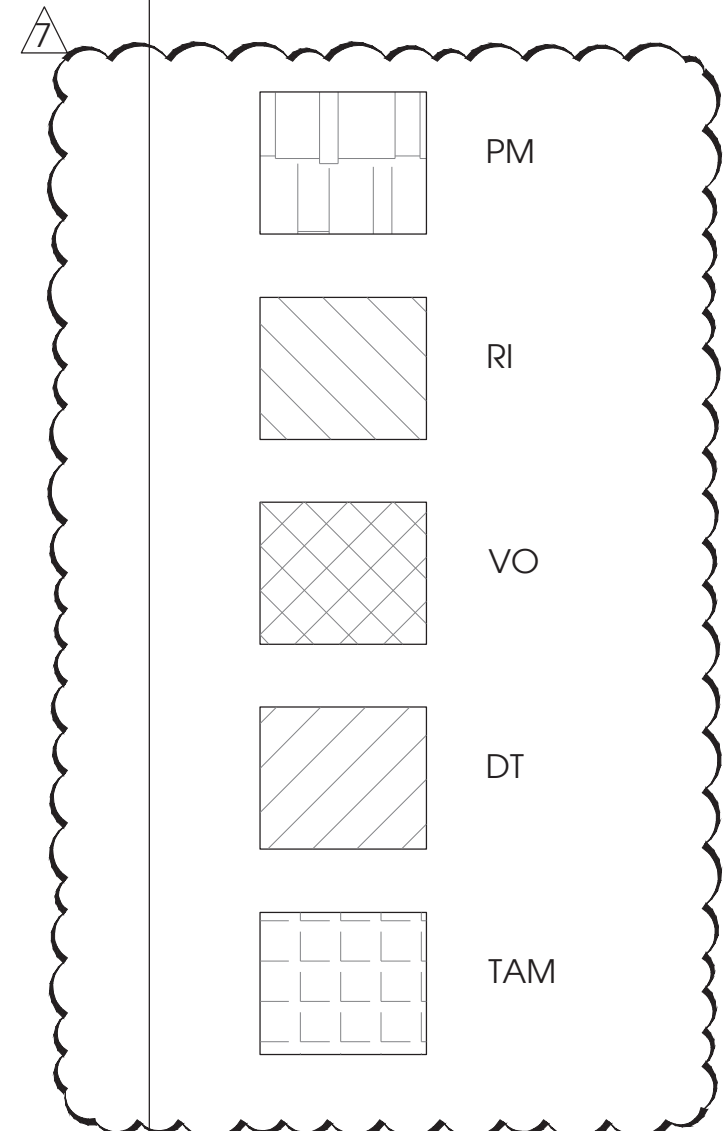
One shade tree for each 40 linear feet, or fraction thereof.
 A continuous hedge at least 30 inches high at planting of a species capable of growing to at least 36 inches in height within 18 months, which hedge shall be maintained at a height not less than 36 inches. The height of the hedge shall be measured from parking lot grade.
 Where wheel stops are not used, the required plantings shall not be planted within two feet of the curb, to allow for vehicle overhang.

Side Buffers:
 This buffer shall be completely opaque from the ground up to a height of at least eight feet and shall be a minimum of 25 feet wide.
 Where a vehicular use area is adjacent to properties zoned or designated for residential use on the official zoning maps or the future land use map of the comprehensive policy plan, a landscape buffer shall be provided. The buffer shall be completely opaque from the ground to height of at least six feet and shall be a minimum of seven feet in width.

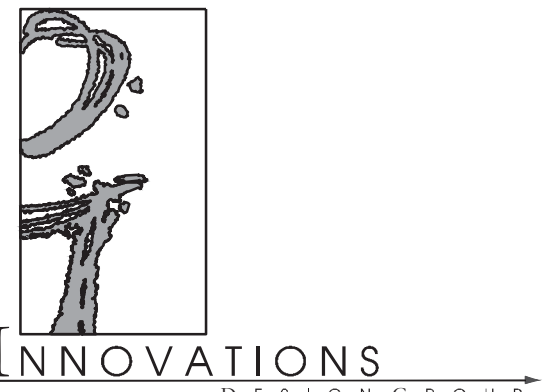
Building Facade:
 At least 50 percent of the required landscaped area shall consist of landscaping capable of achieving a minimum of 30 inches in height, with one shade tree planted for each 35 feet or fraction thereof of the lineal building facade, or one understory tree or palm tree planted for each 15 feet or fraction thereof of the lineal building facade.

Dumpster:
 shielded by a landscaped screen or fencing at least six feet in height which shall be at least 50 percent opaque when viewed from any point along any abutting residential district boundary.

PLANT LEGEND	
KEY	COMMON NAME
SHADE TREES	
MG	Southern Magnolia
QV	Cathedral Live Oak
ED	Japanese Blueberry
UNDERSTORY TREES	
LIT	Crape Myrtle
MF	Simpson's Stopper
SHRUBS	
PM	Podocarpus
RI	Indian Hawthorn
VO	Sweet Viburnum
GROUND COVER	
DT	Blueberry Flax Lily
TAM	Tricolor Dwarf Asiatic Jasmine
TURF	
SOD	Floritam St. Augustine
SOD 2	Bahia Grass



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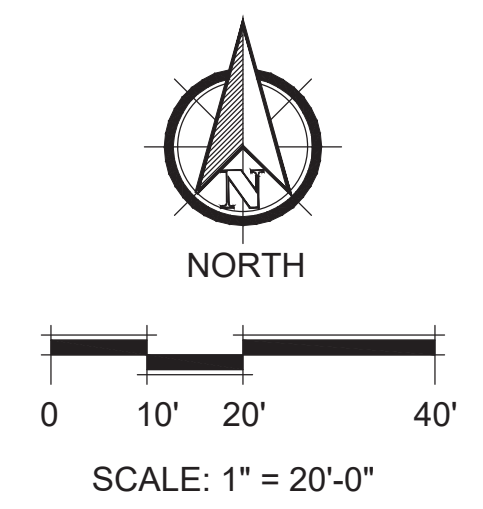
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4	4/05/2023	BASE&CMMNTS.	FA
5	4/24/2023	BASE&CMMNTS.	AP
6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

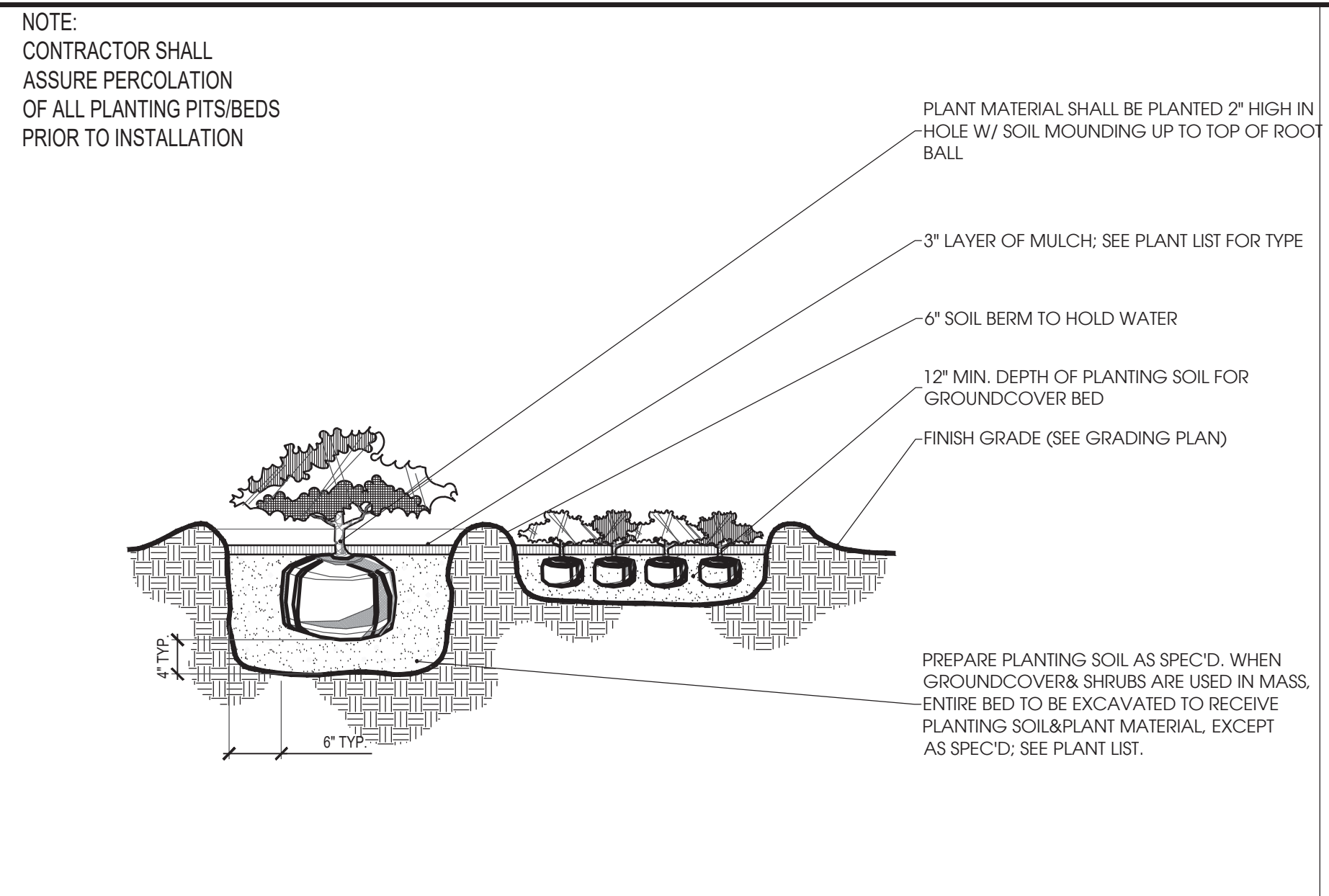
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Drawn By: AA	Designed By: AA
Approved By:	Project No: 21106
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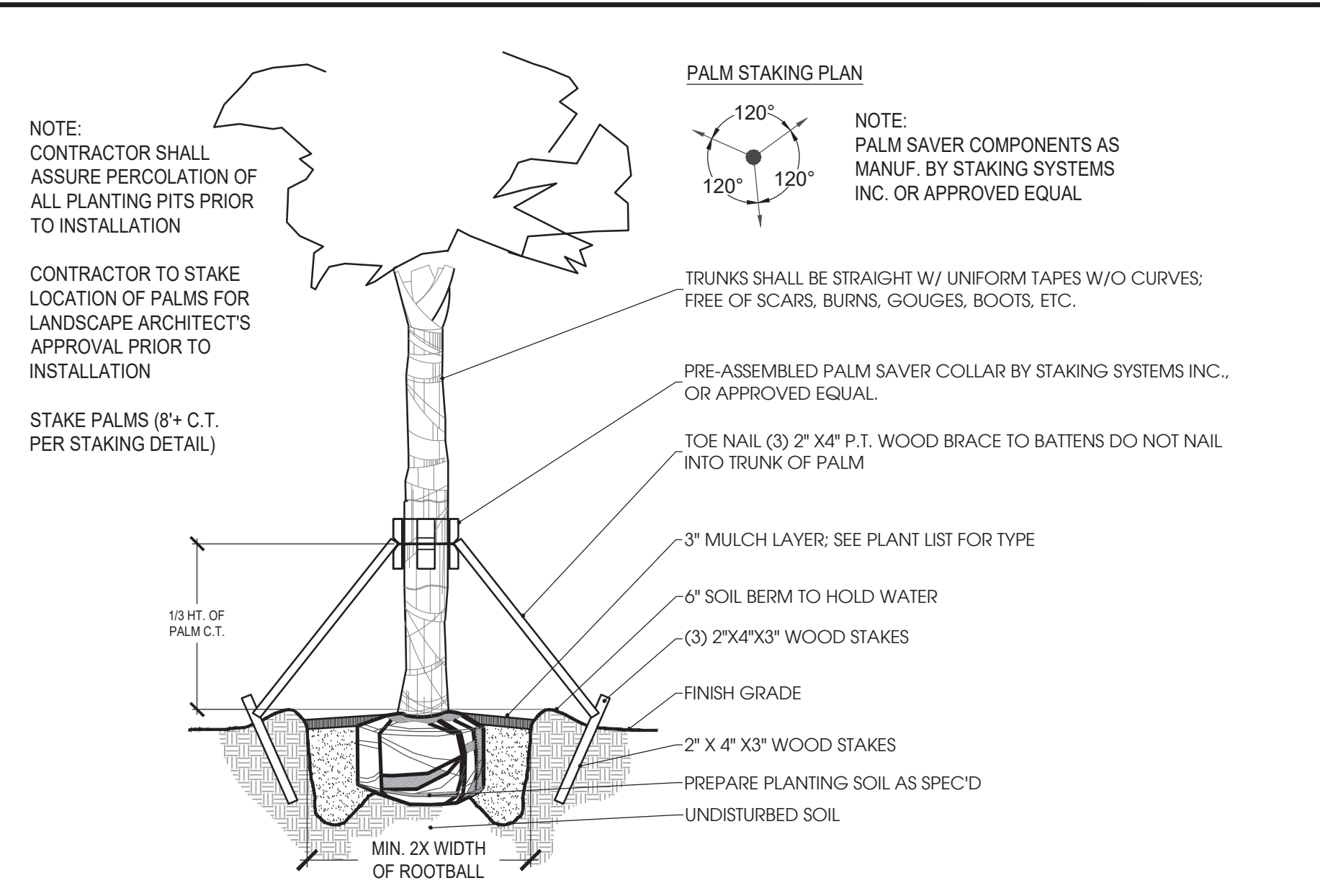
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LS-01

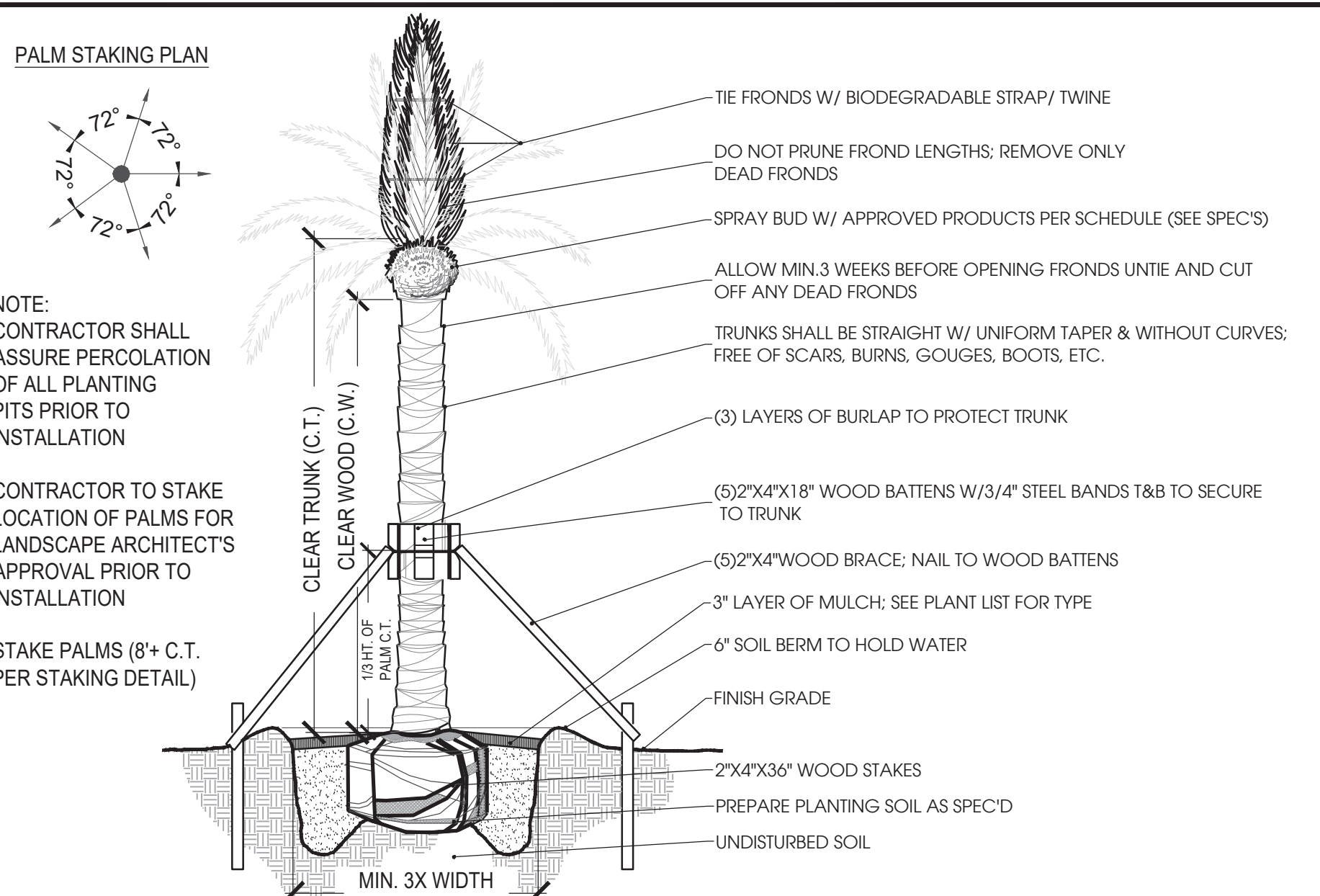




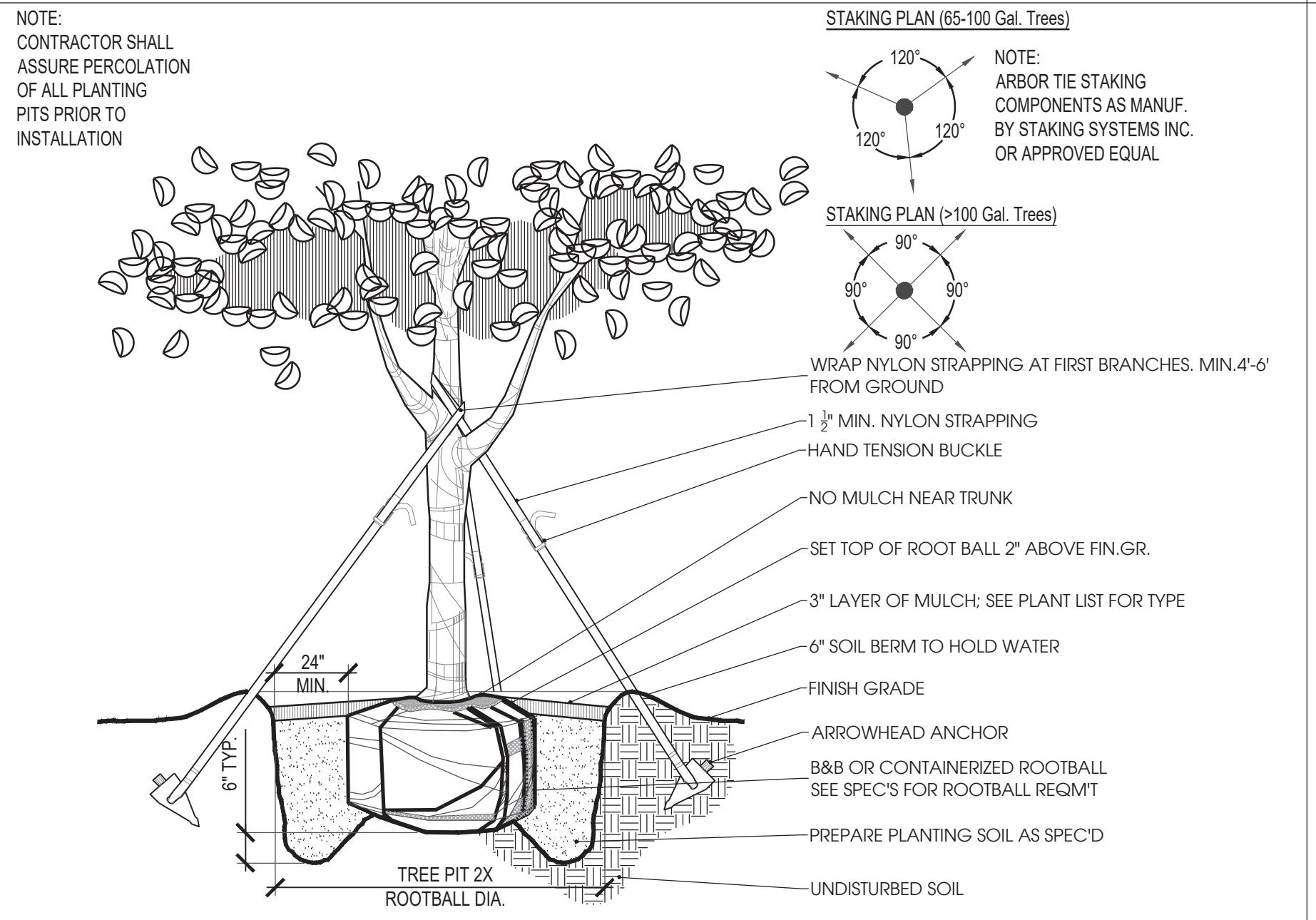
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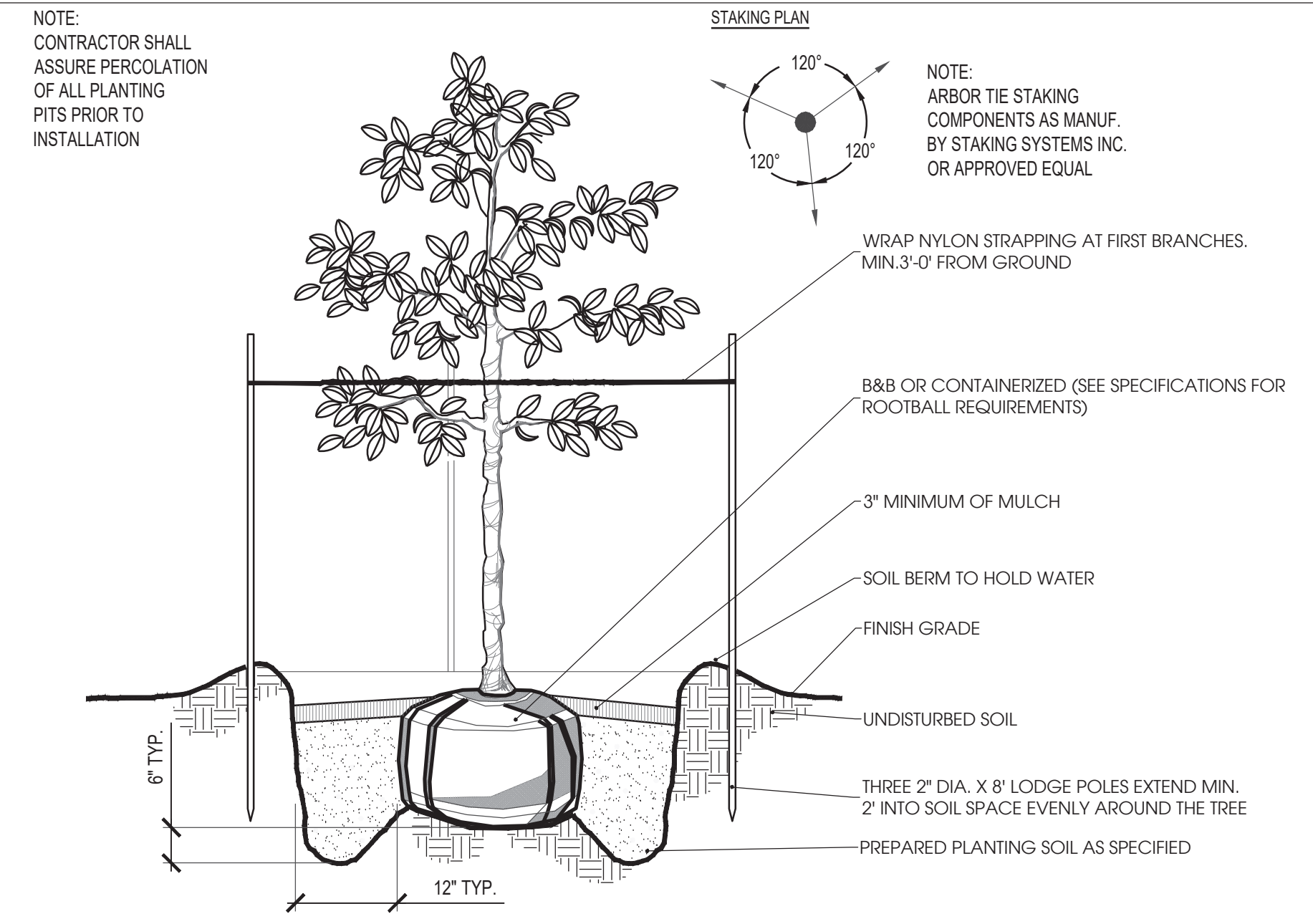
2 Sabal Palm Planting
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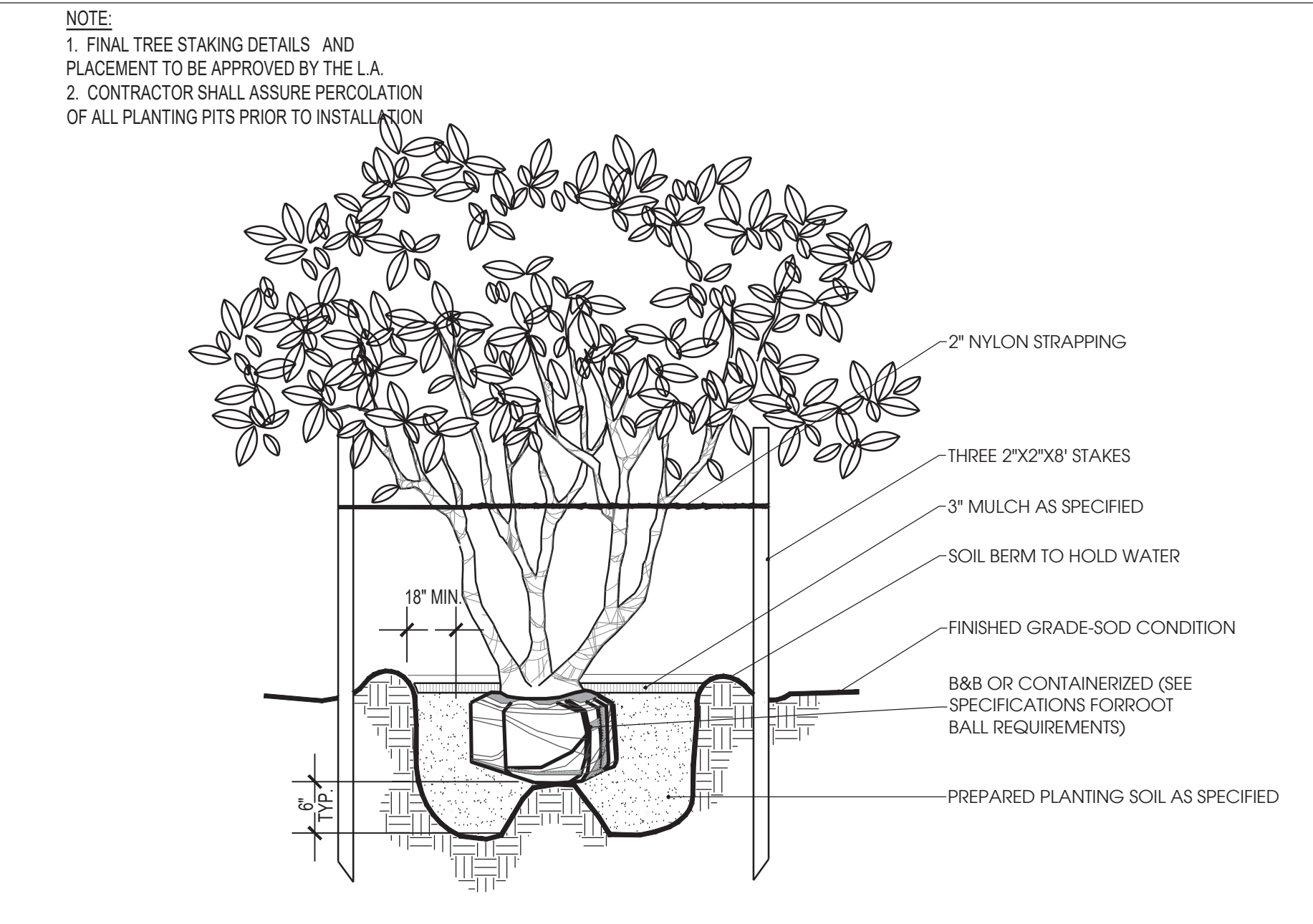
3 Phoenix Palm Planting
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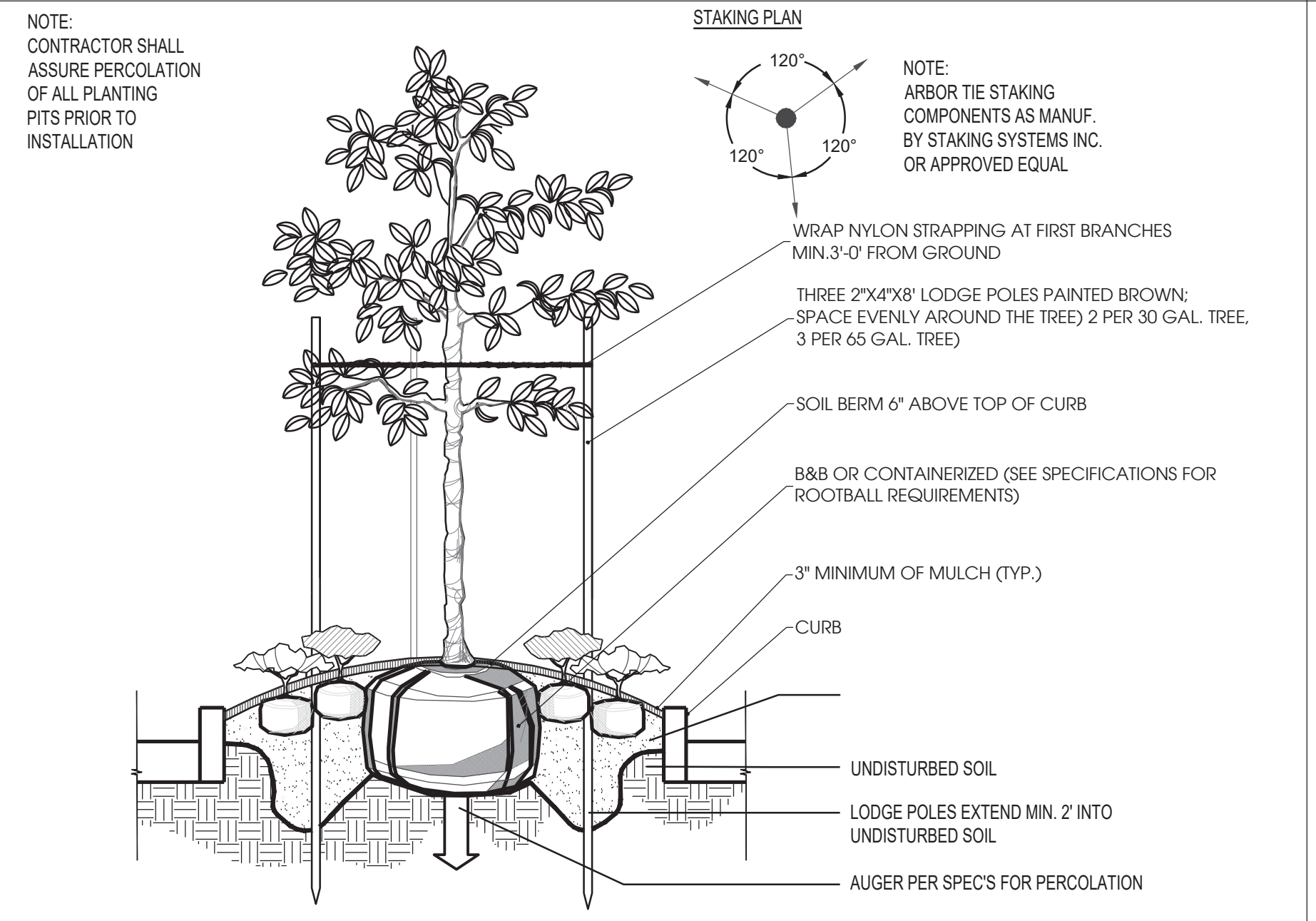
4 Tree Planting (65-100 Gal.)
Scale: N.T.S.



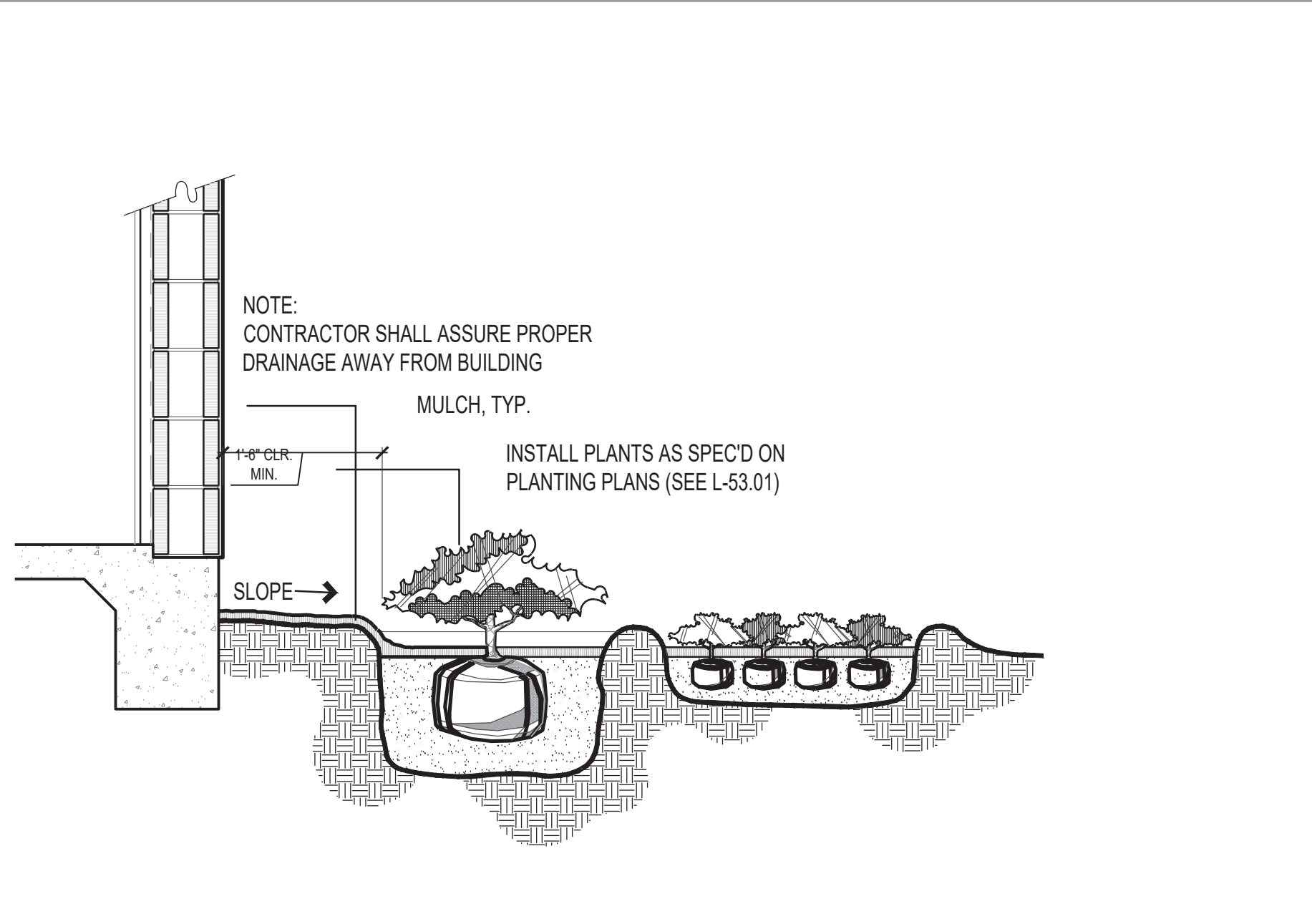
5 Tree Planting (15-45 Gal.)
Scale: N.T.S.



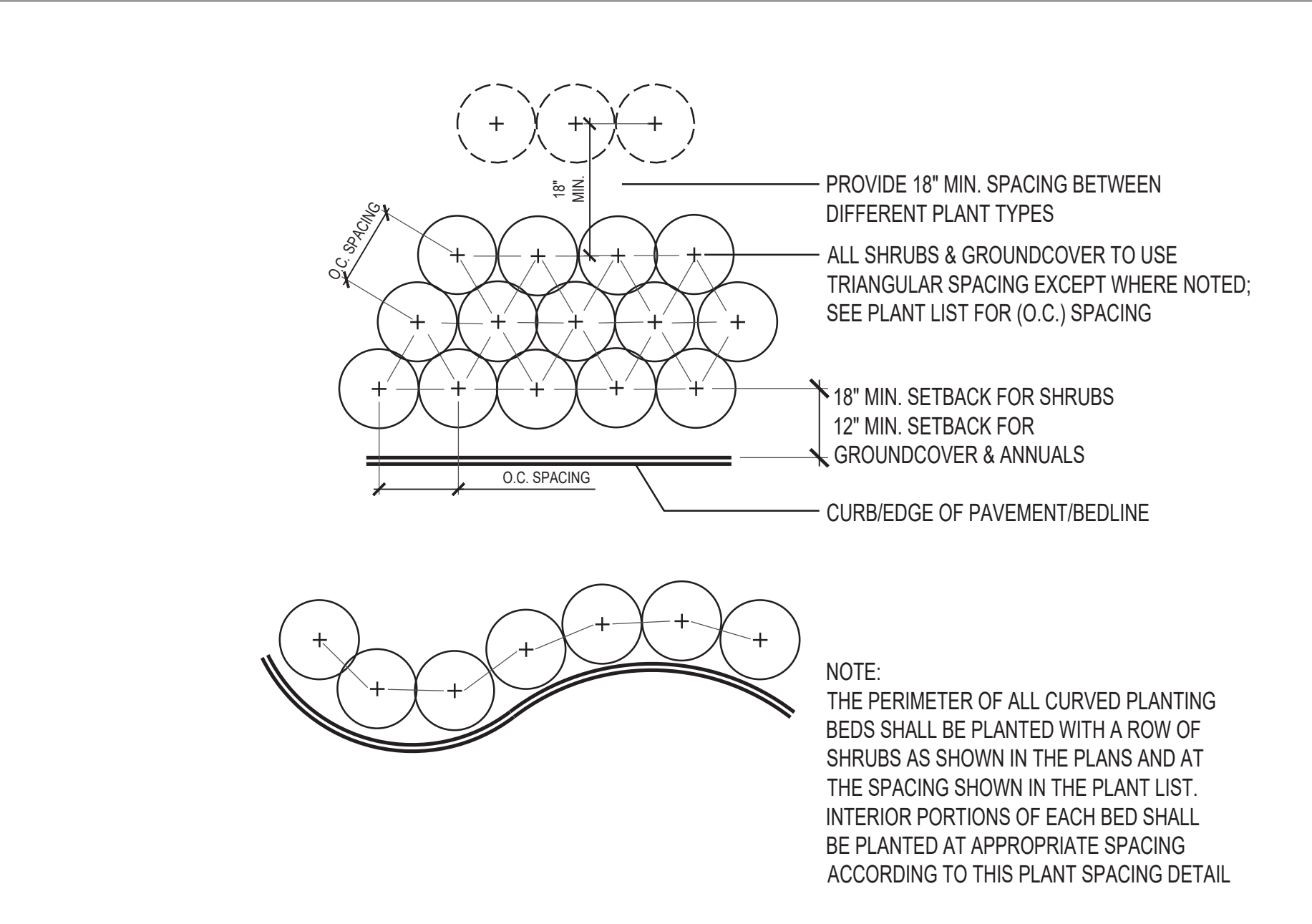
6 Multi-Trunk Tree Planting
Scale: N.T.S.



7 Curbed Island Plantings
Scale: N.T.S.



8 Foundation Planting
Scale: N.T.S.



9 Shrub and Groundcover Spacing
Scale: N.T.S.

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WATERFRONT
CITY OF EDGEWATER

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Rev:	Date:	Description:	By:
1	4/14/2022	CITY CMMNTS.	AA
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6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

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LS-02

FILE: Z:\4 Studio\Projects\2021\21106-The Waterfront\1.2 Autocad\5 Permit\Sheets\21106-Permit REV7.dwg
PRINT DATE: 24-Jul-23
DRAWING SIZE: 24" X 36"

HUNTER SPRAY IRRIGATION

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
○	A B C	15' FULL 15' HALF 15' QUARTER	3.75 1.86 .97	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
●	D E F	12' FULL 12' HALF 12' QUARTER	2.7 1.3 .67	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
○	G H I	10' FULL 10' HALF 10' QUARTER	1.59 .88 .42	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
⊕	J K L	8' FULL 8' HALF 8' QUARTER	.97 .47 .24	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
●	M N O	5' FULL 5' HALF 5' QUARTER	.47 .23 .12	PRDS-12-PRS30-CV-R-15F PRDS-12-PRS30-CV-R-15H PRDS-12-PRS30-CV-R-15Q
■	P Q R	5'X30' SIDE 5'X30' CENTER 5'X15' END	1.3 1.3 .65	PRDS-12-PRS30-CV-R-SS530 PRDS-12-PRS30-CV-R-CS530 PRDS-12-PRS30-CV-R-EC515
□	S	9'X18' SIDE	1.72	PRDS-12-PRS30-CV-R-SS918
💧	T	BUBBLER	.5	PCN50 ON FLEX PIPE
▨	U	DRIP LINE	0.017sf	HUNTER HDL-09-12-R, LD-STAKE 5'OC

HUNTER ROTOR AND MATCHED ROTATORS IRRIGATION

SYB	KEY	PATTERN	GPM	SPECIFICATIONS
△	AR	44' FULL	8.0	PGP-04-CV-R-8
△	BR	40' HALF	4.0	PGP-04-CV-R-4
△	CR	34' QUARTER	2.0	PGP-04-CV-R-2
▲	DR	25' FULL	3.0	PGP-04-CV-R-3.0SR
▲	ER	25' HALF	1.5	PGP-04-CV-R-1.5SR
▲	FR	25' QUARTER	.75	PGP-04-CV-R-.75SR
⊕	GR	15'-20' FULL	1.47	PRDS-12-PRS40-CV-R-MP2RED
⊕	HR	15'-20' HALF	.74	PRDS-12-PRS40-CV-R-MP2BLACK
⊕	IR	15'-20' QUARTER	.4	PRDS-12-PRS40-CV-R-MP2BLACK
⊕	JR	8'-13' FULL	.75	PRDS-12-PRS40-CV-R-MPIOLIVE
⊕	KR	8'-13' HALF	.37	PRDS-12-PRS40-CV-R-MPIRED
⊕	LR	8'-13' QUARTER	.19	PRDS-12-PRS40-CV-R-MPIRED
⊕	MR	5'-30' SIDE	.44	PRDS-12-PRS40-CV-R-MPSS550
⊕	NR	5'-15' END	.22	PRDS-12-PRS40-CV-R-MPLCS515
💧	OR	BUBBLER	.25	PCN25 ON FLEX PIPE

MISCELLANEOUS IRRIGATION ITEMS

🔌	CONTROLLER	I-CORE 6 STATION CONTROLLER WITH RFC RAIN & FREEZE SENSOR
M	METER	1" POTABLE IRRIGATION METER
⊕	VALVE	ICV-101G-FS-R-AS-30
---	MAINLINE	1.5" MAINLINE
~	D.C.V.A.	1" DOUBLE CHECK VALVE ASSEMBLY
▬▬▬	SLEEVE	SCH40 PVC SLEEVE 2 TIMES SIZE OF PIPE

=NOTES=

- SPRAYS IN LAWN LAWN AREAS SHALL BE 6" POP-UPS.
- ADJUST HEADS TO AVOID OVER SPRAY.
- USE PURPLE HEADS, PIPES, & VALVES ONLY.
- FIELD ADJUST IRRIGATION PLAN TO ACCOMMODATE SITE CHANGES.
- VELOCITY SHALL NOT EXCEED 5' PER SEC. IN ALL PIPELINES
- ALL POTS SHALL BE IRRIGATED WITH DRIP BUBBLER AND ATTACHED TO LAND IRRIGATION ZONE

IRRIGATION INSTALLATION GENERAL NOTES
SECTION 02810
PART ONE - GENERAL

1.0 SUMMARY

- A. All portions of Division I - General Requirements are included with this section.
- B. Furnish all transportation, materials, labor, equipment, and services to complete all work shown on the drawings and as specified.

1.1 RELATED SECTIONS: section 02900 landscape planting

1.2 TOLERANCE

- A. Install sprinkler heads where indicated by symbol.
- B. Drawings are schematic. Adjust pipe and locations to conform to site conditions and to avoid obstructions. Conceal components behind walls of shrubbery where possible. Verify questionable locations before installation.

1.3 SUBMITTAL

- A. Submit two bound folders containing:
 1. Written operating instructions for all components.
 2. Complete parts list and manufacturer's data.
 3. Copy of well completion report.
 4. Written maintenance instructions.
 5. Provide 2 sets as-built record drawings with the following items dimensioned to the nearest foot:
 - a. Sprinkler main lines
 - b. Water source
 - c. Control valves
 - d. Gate valve
 - e. Electric control wire path (Red-line prints).
- B. Products furnished but not installed:
 1. 2 extra heads of each type and size
 2. 2 extra nozzles of each type and size
 3. 2 extra head wrenches for each type of head
 4. 1 extra valve box with lid

1.4 COORDINATE WORK WITH OWNER AND OTHER TRADES

- A. Licensed electrician will install/provide power to the controller, pump, or fountain if utilized on project.

1.5 QUALITY ASSURANCE

- A. Contractor is expected to participate in preconstruction meeting with Owner and landscape architect to coordinate schedule, clarify questions, and discuss acceptable performance criteria for payment.
- B. Contractor is expected to participate in contract closeout meeting with Owner and landscape architect to verify proper completion of the work, establish "Date of Substantial Completion", and advise Owner as to system operation.

1.6 WARRANTIES

- A. Contractor will be fully responsible for system operation until Date of Substantial Completion.
- B. Contractor is fully responsible for all parts and workmanship for one year after Date of Substantial Completion of each specific phase or portion of the project.
- C. See to the fulfillment of all manufacturer's warranties.

PART TWO - PRODUCTS

2.0 MATERIALS

Backfill shall be free from stone, trash, or other debris.

2.1 MANUFACTURED UNITS

- A. Automatic electro-mechanical controller fully installed and operating.
- B. Electric valve installed in valve box.
- C. Valve box with lid manufactured by "Antek" or "Brooks".
- D. Connection for control wires manufactured by "Pentite" or "3M" installed as per manufacturer's directions, and above grade in valve boxes.
- E. Gate valves shall be brass and installed in valve box.
- F. Automatic drain valves shall be installed in 1 cubic foot gravel.

2.2 COMPONENTS

- A. Control wire shall be direct burial # 14, type UF. Tape to underside of main every 10 feet. Install spare ground, wire + 5 extra wires.
- B. Main line shall be class 200 PVC (ANSI/ASTM D2241).
- C. Lateral lines shall be class 160 PVC minimum (ANSI/ASTM D2241).
- D. Sleeve at all road and drive crossings shall be class 200 PVC.
- E. All pipe, connectors and misc. fittings for the meter and check valve assembly will be galvanized.
- F. all electrical work will conform to year construction N.E.C.

PART THREE - EXECUTION

3.0 EXAMINATION

Examine surfaces to which work will be applied and immediately notify landscape architect in writing if site is not in proper condition for Contractor to perform his duties under the terms of this contract.

3.1 PROTECTION

- A. Locate identify, and mark all known utilities in area of the work. Take reasonable care to avoid damages or hazards.
- B. Damage caused by Contractor's work will be repaired to Owner's satisfaction at Contractor's expense.
- C. Document any damage to work caused by other trades. Immediately bring costs to Owner's attention and quickly repair at Owner's expense, as directed.

3.2 PREPARATION

- A. Surface Preparation. Stake out each run of pipes, each head, and each valve.
- B. Test control wire for continuity before unreeling for installation.

3.3 INSTALLATION

- A. Keep pipe interior clean and dry at all times.
- B. Ensure a square cut at all joints and ream ends to a smooth finish, inside and out.
- C. Lay all runs greater than 100 feet from side to side on trench bottom in serpentine pattern.
- D. Support all pipe with clean, compact soil.
- E. Backfill and compact to original soil.
- F. Set heads plumb and flush with top of sod or mulch.
- G. For lateral lines flush all debris from lines. Open valve and screw on one head at a time, starting at valve and continuing to the end. Ensure that lines are watertight.

3.4 TOLERANCES

- A. Main line and drive crossings shall have 18 inches minimum cover.
- B. Lateral lines shall have 12 inches minimum cover.
- C. All heads shall be 4 inches minimum from walks, drives, or curbs.
- D. All pop-up heads and valve boxes shall be installed with top flush with grade.
- E. All heads shall be installed plumb.

3.5

FIELD TESTS

Apply 100 psi hydrostatic pressure to main lines for 120 minutes. If a leak is found, repair and retest until satisfactory.

3.6 ADJUSTMENTS

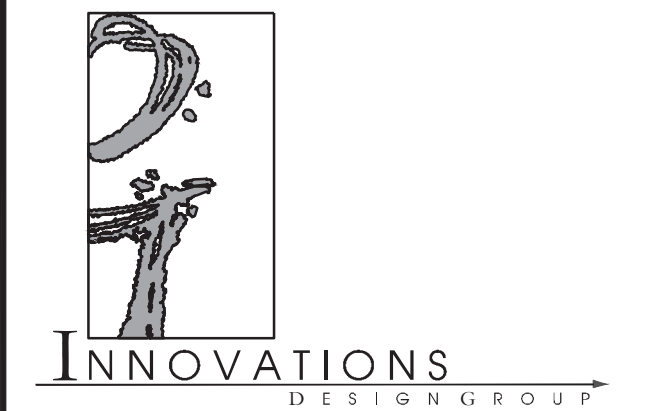
- A. Adjust sprinkler patterns and radius. Ensure uniform and sufficient coverage for optimum plant growth.
- B. No heads shall be allowed to spray walls, fences, walks, or drives.
- C. Set times to operate as appropriate for season, soil type, drainage, and plant requirements.

3.7 FIELD QUALITY CONTROL

- A. Landscape architect or Owner may conduct periodic inspections to determine that the terms of this contract are fulfilled.
- B. Contractor will be expected to participate with Owner in final inspection to review project for conformance to the contract. Items to be reviewed include, type, quantities, sizes, locations, dimensions, and quality of materials and workmanship.
- C. The Contractor shall keep the premises free from accumulations of waste materials or rubbish caused by his employees or work at all times.

END OF SECTION

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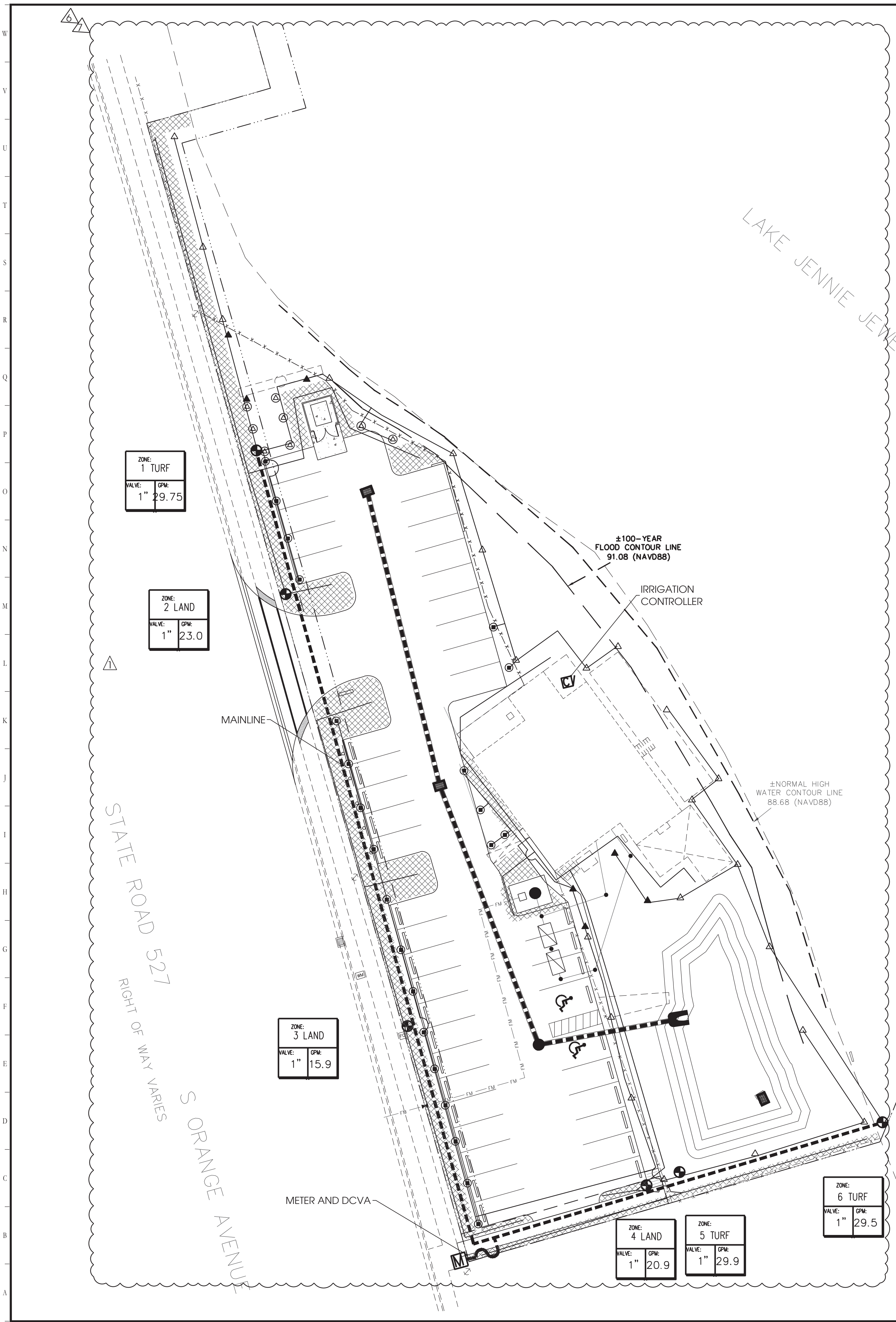
WATERFRONT
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PERMIT
IRRIGATION NOTES

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3	2/08/2023	BASE&CMMNTS.	FA
4	4/05/2023	BASE&CMMNTS.	FA
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6	5/12/2023	BASE	AP
7	7/21/2023	BASE	RR

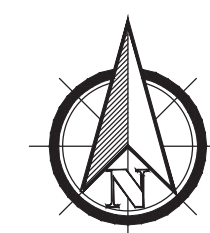
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Approved By:	Project No: 21106
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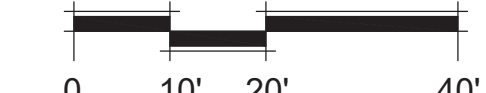


IRRIGATION LEGEND			
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● ● ●	D E F	▲	DR ER FR
○ ● ○	G H I	⊙	GR HR IR
⊕ ⊕ ⊕	J K L	⊙	JR KR LR
● ● ●	M N O	⊙	MR NR
■ ■ ■	P Q R	●	OR
□	S		
○	T		

Ⓜ	CONTROLLER
Ⓜ	METER
⊙	VALVE
---	MAINLINE
~	DOUBLE CHECK VALVE ASSEMBLY D.C.V.A.
----	SLEEVE



NORTH



SCALE: 1" = 20'-0"

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WATERFRONT
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IRRIGATION PLAN

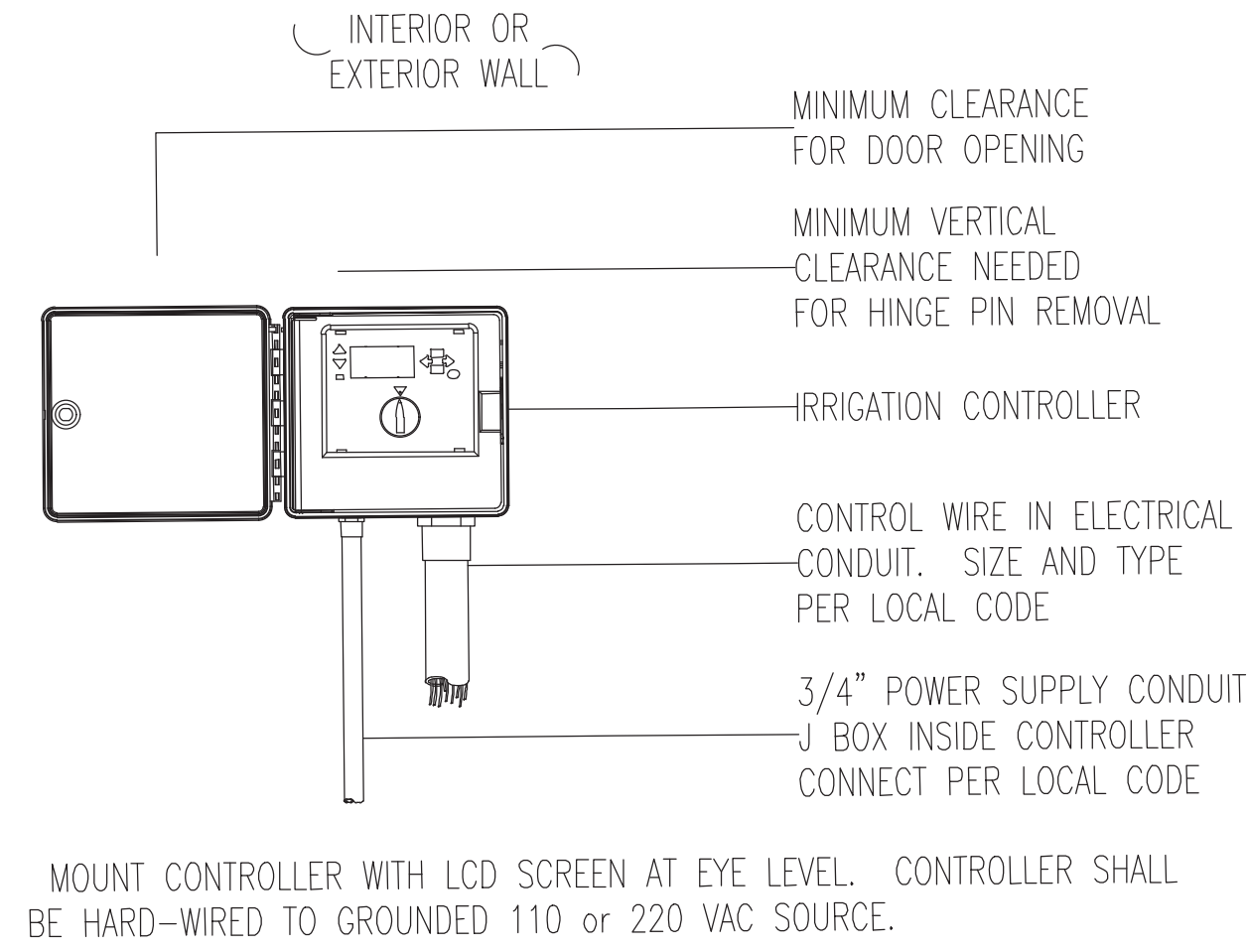
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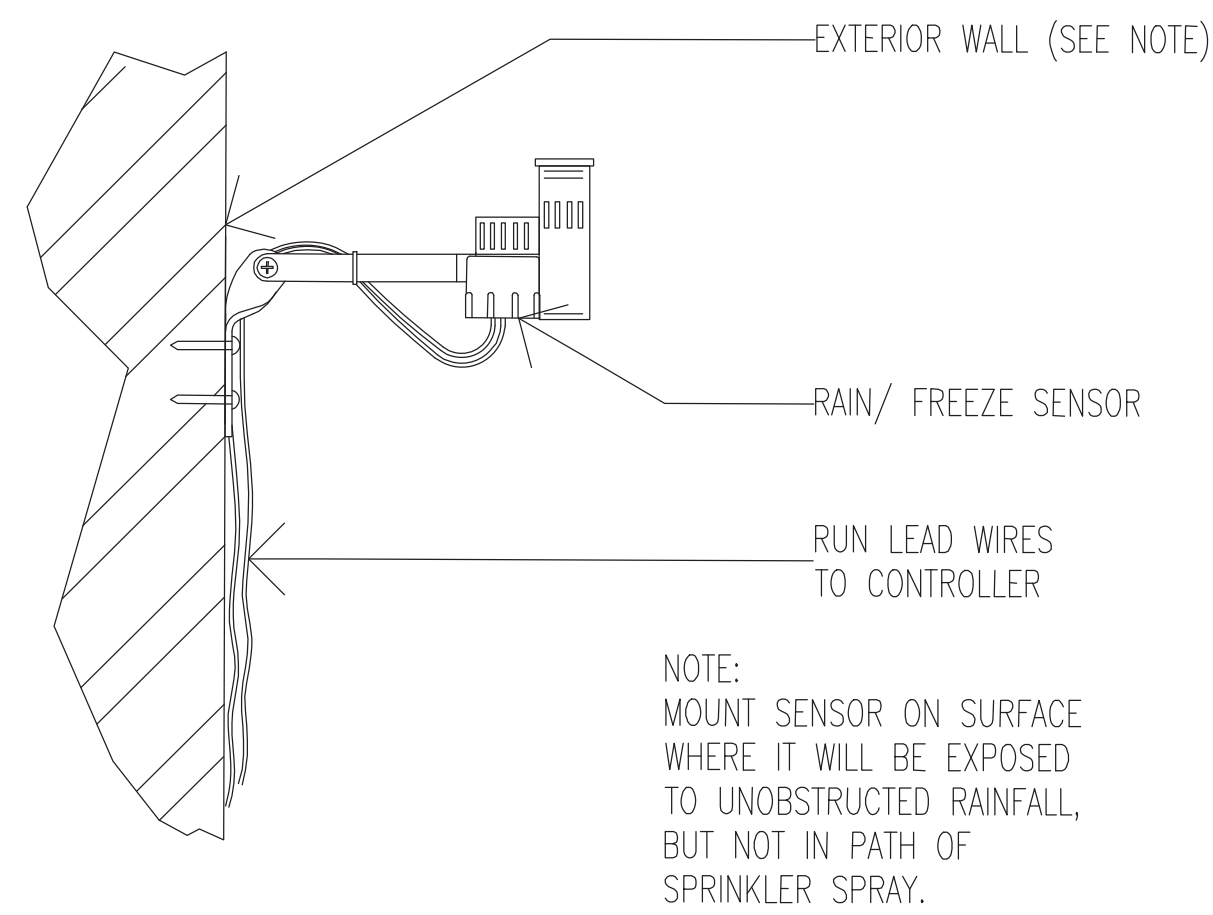
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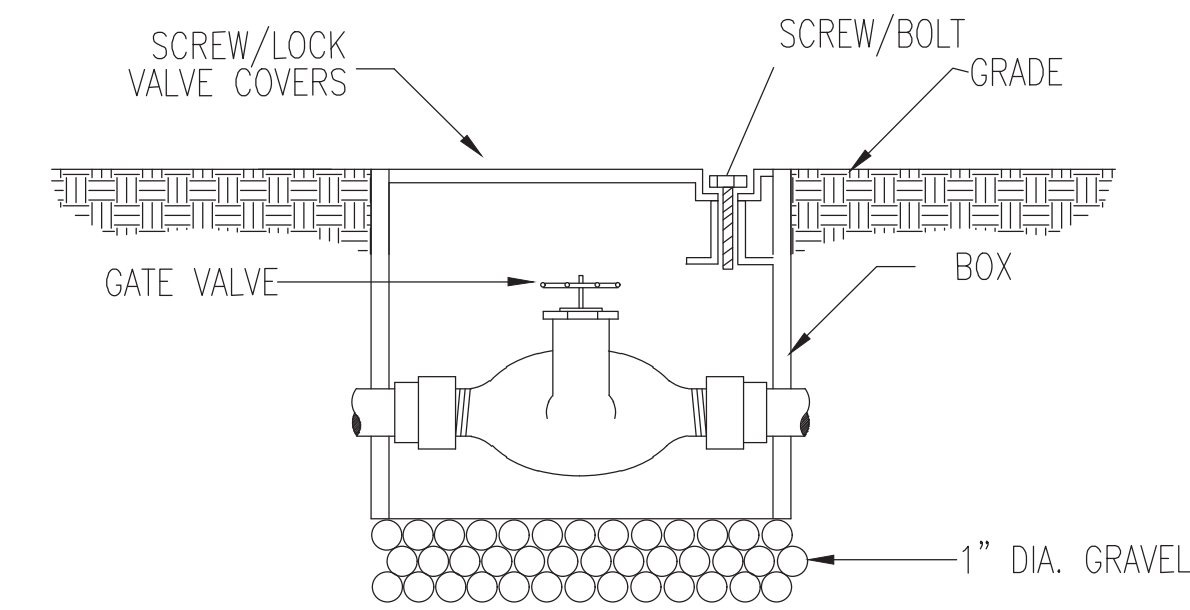
1 Irrigation Controller

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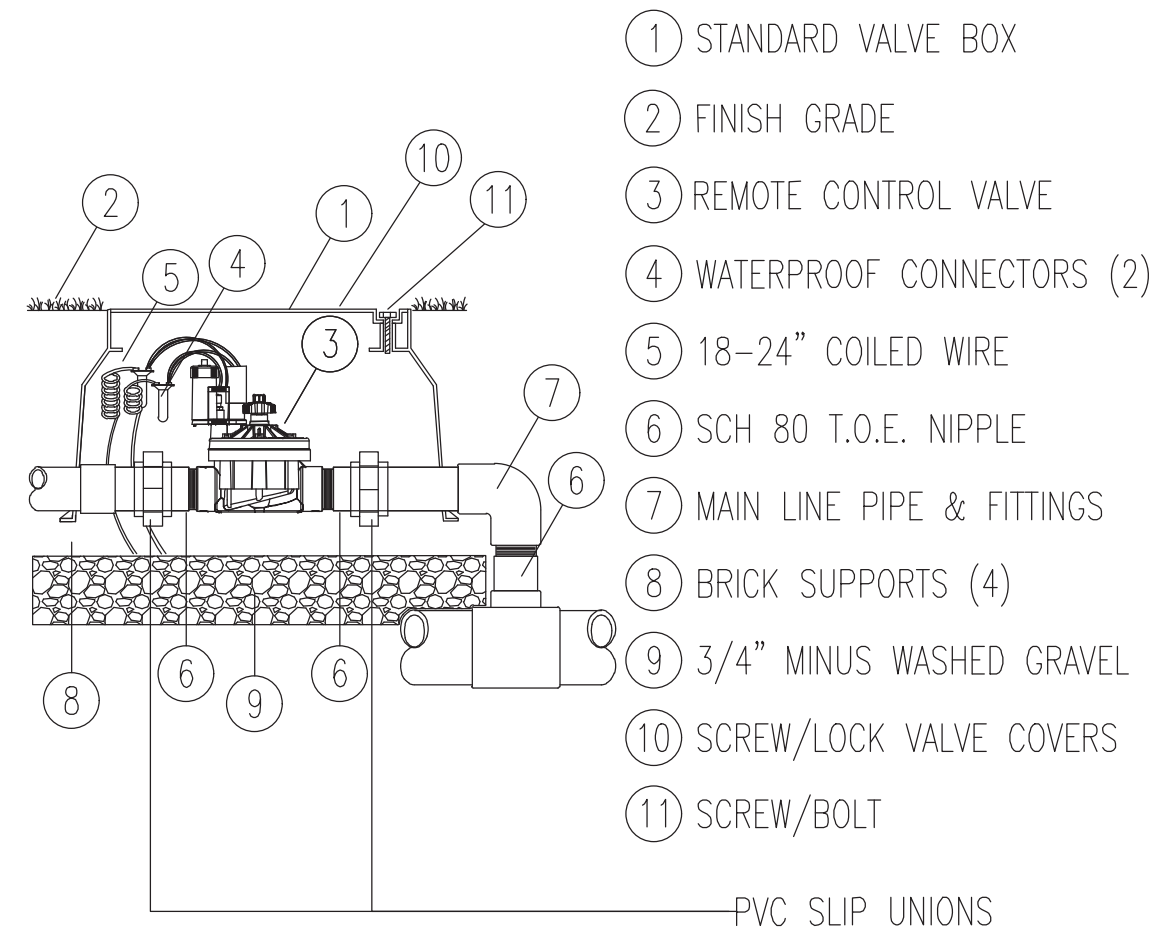
2 Rain and Freeze Sensor

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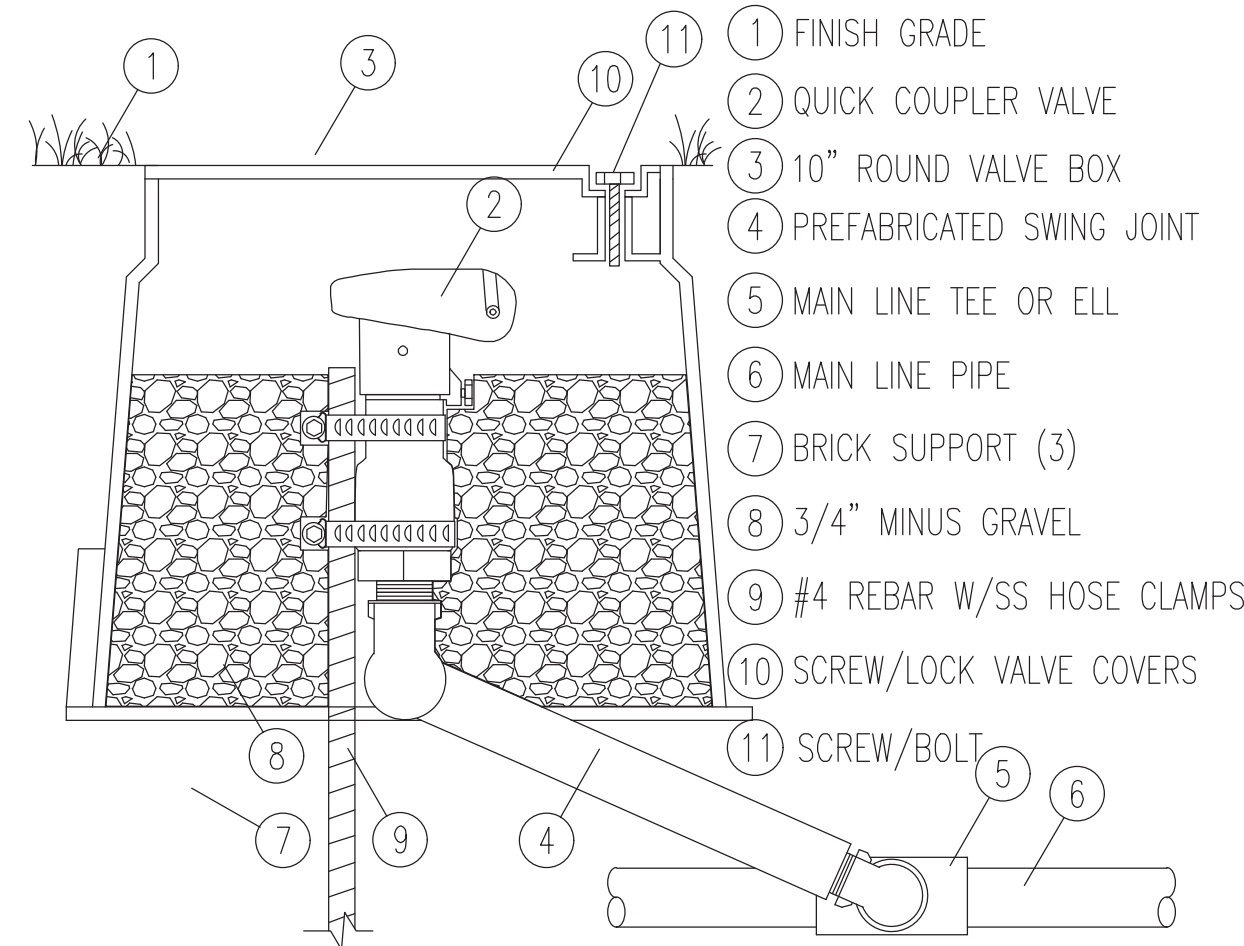
3 Gate Valve

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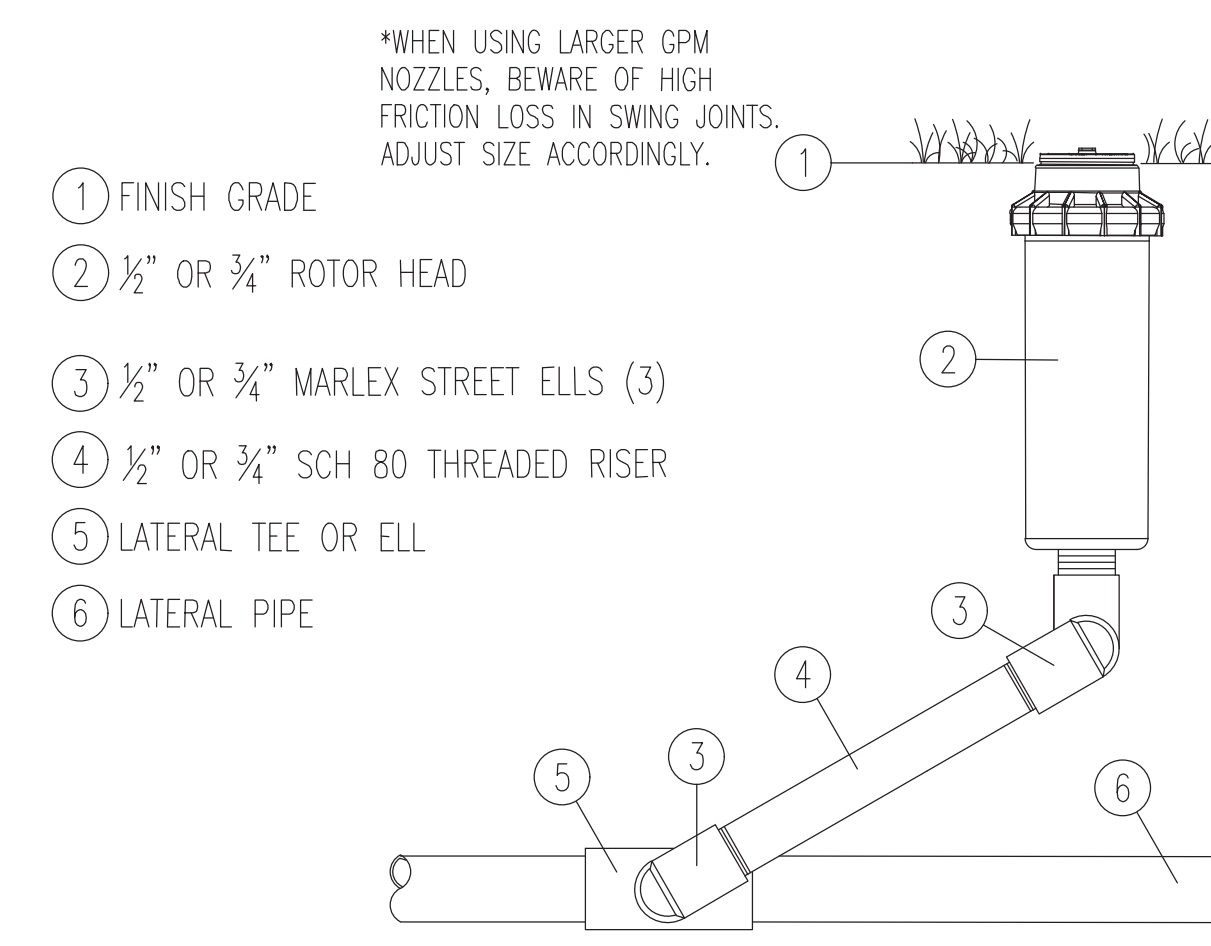
4 Remote Control Valve

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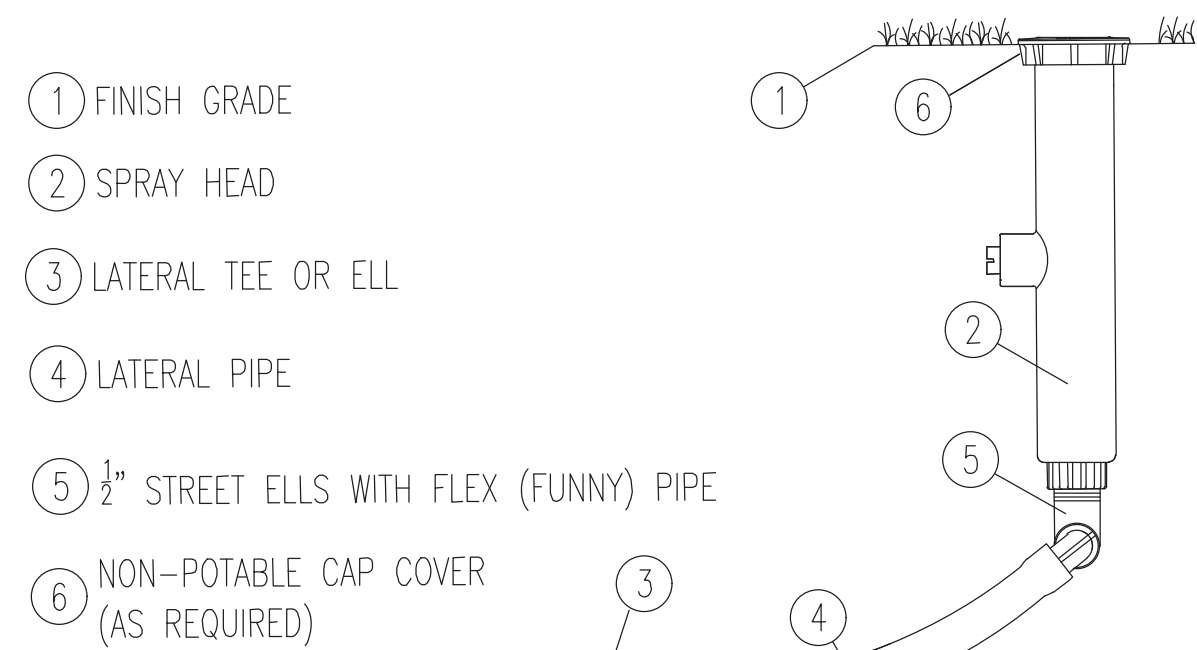
5 Quick Coupler Valve

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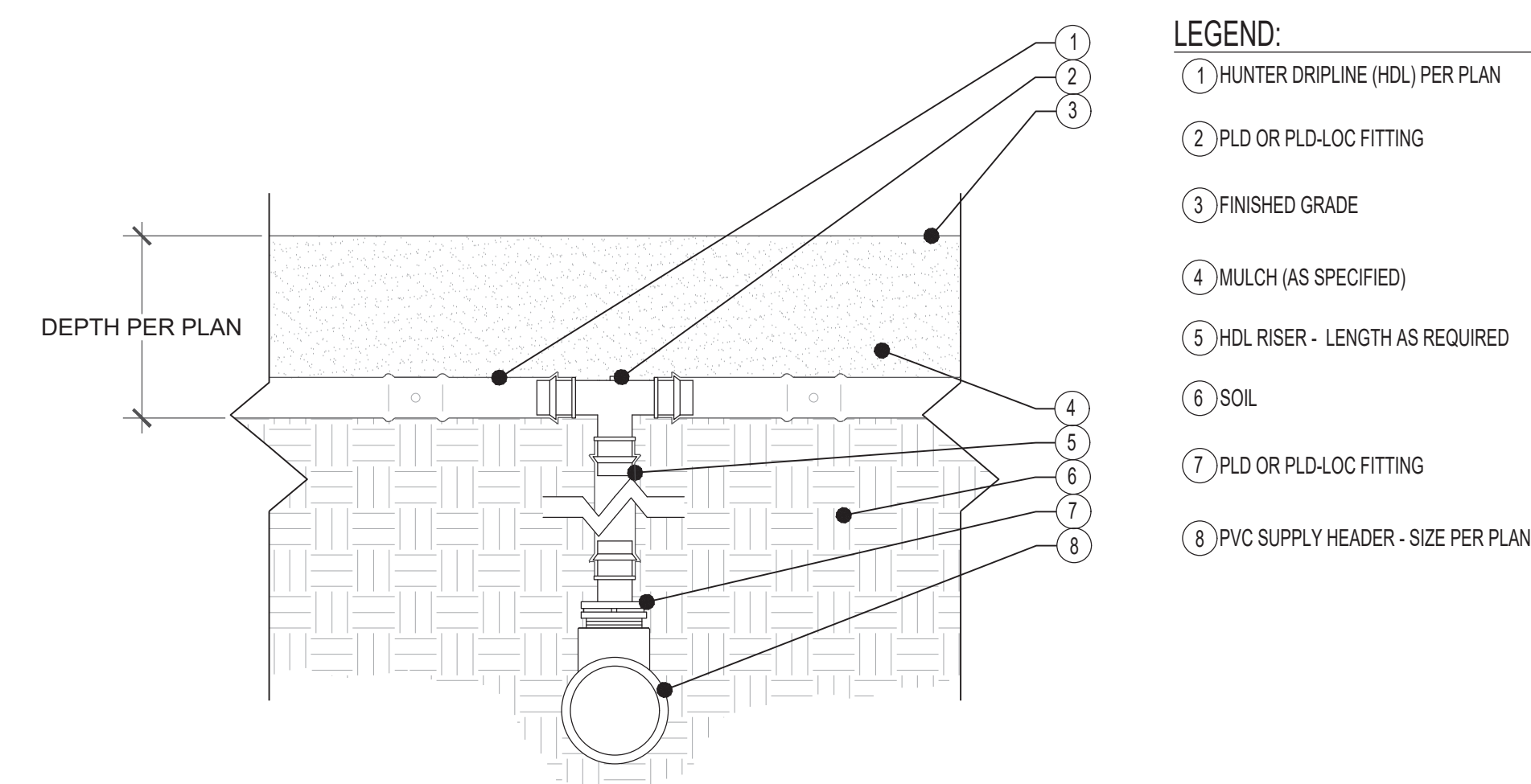
6 Rotor Head

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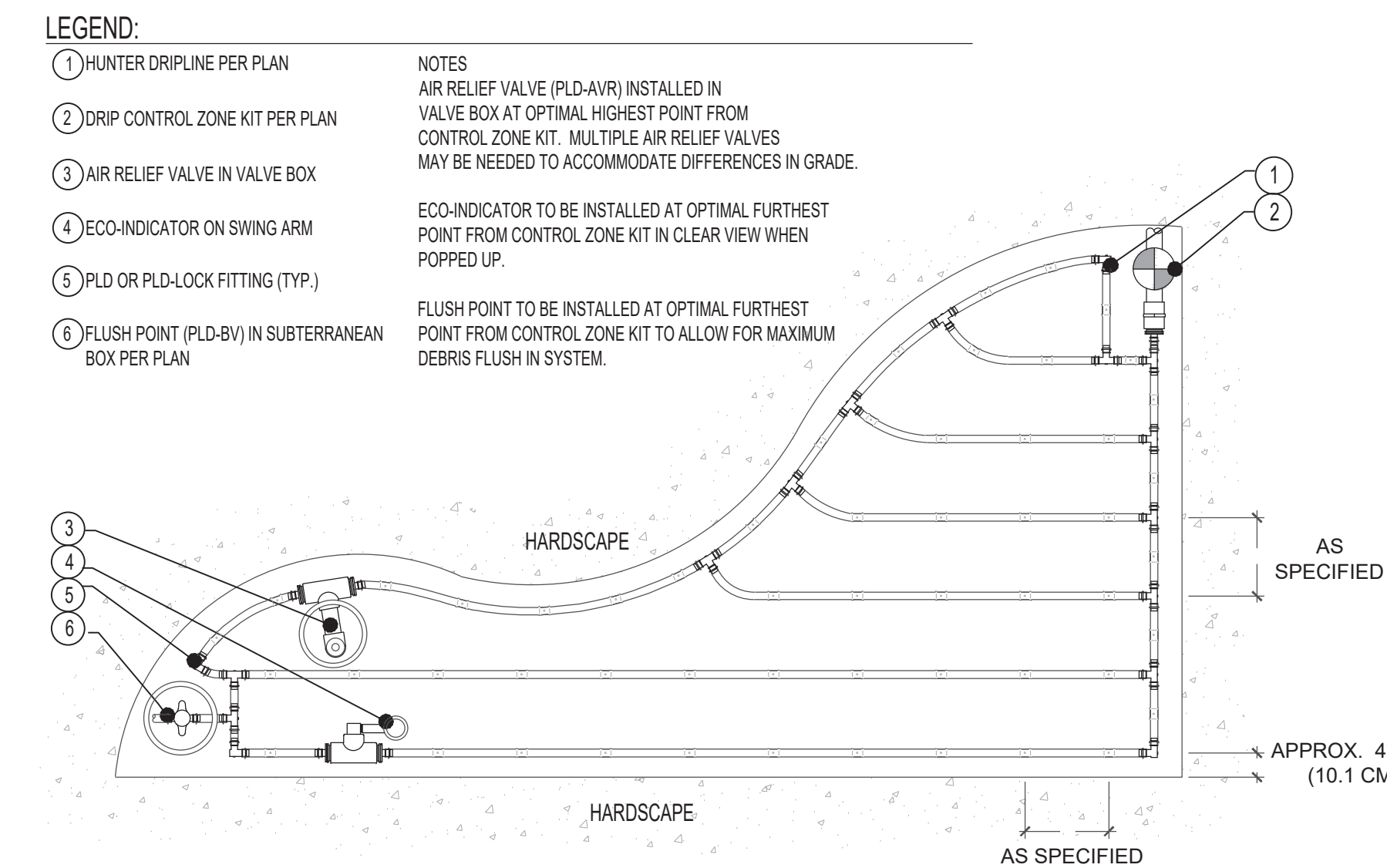
7 Spray Head

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8 Drip Line

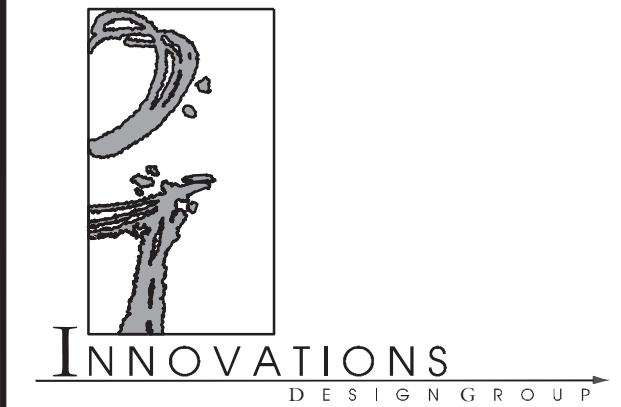
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9 Drip Line

Scale: N.T.S.

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Discussion Item:

City ISR

UNFINISHED BUSINESS

COMMENTS & ANNOUNCEMENTS

ADJOURNMENT