APOPKA DEVELOPMENT REVIEW COMMITTEE AGENDA
May 20, 2026 9:00 AM
Apopka City Hall Commission Chambers

PUBLIC COMMENT PERIOD

SPECIAL EVENTS

1. **SPX-26-1 - Carolina Textiles - Special Exception (SPX), 1st Submittal**
   Owner(s): Carter Land Development LLC
   Applicant(s): Beaufort Design Build - Adam Biery
   Location: PID: 09-21-28-0868-04-013
   Proposed Use: Outdoor Storage/Overnight Parking
   Project Manager: Jun Sohn, Ph.D

SITE PLAN:

SUBDIVISION PLAN

1. **CSP-26-18 - Lester Oaks - Construction Site Plan (CSP), 1st Submittal**
   Owner(s): Christopher Williams
   Applicant(s): Faber Engineering - Tom Faber
   Location: 550 West Lester Road
   Proposed Use: 7-Lot Single Family Residential Subdivision
   Project Manager: Amer Hamza

2. **CSP-26-20 - 1920 Sheeler Park - Construction Site Plan (CSP), 1st Submittal**
   Owner(s): Marvin Reid and Susan Reid
   Applicant(s): Pape-Dawson Consulting Engineers - Marc D Stehli PE
   Location: 1920 Sheeler Avenue
   Proposed Use: Plans for a 109 Lot Subdivision
   Project Manager: Jun Sohn, Ph.D

DISCUSSION

ADJOURNMENT
Individuals with disabilities needing assistance to participate in any of these proceedings should contact the City Clerk at least two (2) working days in advance of the meeting date and time at (407) 703-1704. F.S. 286.0105 If a person decides to appeal any decision or recommendation made by Council with respect to any matter considered at this meeting, he will need record of the proceedings, and that for such purposes he may need to ensure that a verbatim record of the proceedings is made, which record includes the testimony and evidence upon which the appeal is to be based.

Any opening invocation that is offered before the official start of the Council meeting shall be the voluntary offering of a private person, to and for the benefit of the Council. The views or beliefs expressed by the invocation speaker have not been previously reviewed or approved by the City Council or the city staff, and the City is not allowed by law to endorse the religious or non-religious beliefs or views of such speaker. Persons in attendance at the City Council meeting are invited to stand during the opening ceremony. However, such

invitation shall not be construed as a demand, order, or any other type of command. No person in attendance at the meeting shall be required to participate in any opening invocation that is offered or to participate in the Pledge of Allegiance. You may remain seated within the City Council Chambers or exit the City Council Chambers and return upon completion of the opening invocation and/or Pledge of Allegiance if you do not wish to participate in or witness the opening invocation and/or the recitation of the Pledge of Allegiance.

I. Severability. In case any one or more provisions contained in this Agreement shall, for any reason, be held invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision hereof and this Agreement shall be construed as if such invalid, illegal or unenforceable provision had not been contained herein.

J. Florida Contract. This Agreement shall be deemed a Florida contract and construed according to the laws of such state, regardless of whether this Agreement is being executed by any of the parties hereto in other states or otherwise. The proper and exclusive venue for any action concerning this Agreement shall be the Circuit Court in and for Orange County, Florida.

K. Additional Terms. Seller and Buyer make the following terms and conditions part of the Contract:

Buyer acknowledges the City of Apopka lift station at the SEC of the land has an encroachment on the land. Buyer shall not recognize this as a title defect.

Buyer shall provide the Seller the following:

1) In the form of an easement recorded at closing, the right to use of the stormwater retention pond on the south side of the parcel to support development of Seller's land directly north of the parcel.

2) Buyer shall provide Seller underground stormwater piping stubbed out 5 FT inside Seller's property (bordering the parcel to the north) at a point to be mutually agreed upon.

3) Buyer and Seller shall confirm and execute a mutually agreeable written plan (the "Stormwater Support Plan") for Buyer to satisfy Seller's stormwater runoff support requirements for Seller's development of the approximately 2.54± acre portion of Seller's property depicted in the red-bordered area on Exhibit B attached hereto and incorporated herein (the "Stormwater Support Area"). The Stormwater Support Plan will be finalized upon the earlier to occur of: (a) ten (10) days after Buyer's delivery to Seller of Buyer's sixty percent (60%) civil engineering plan set for the Property (or a later-stage plan set), or (b) January 2, 2026, and in all events no later than 15 days of the closing date fifteen (15) days prior to the Closing Date. The Stormwater Support Plan will align with and be coordinated to Buyer's civil engineering plans for the Property and will specify design criteria, tie-in locations, capacities, phasing, and responsibilities for design, permitting, construction, and maintenance related to stormwater support for the Stormwater Support Area.

4) **Construction of Entrance and Easement for Access.**

Buyer agrees, at Buyer's sole cost and expense, to design, permit, and construct a paved vehicular entrance and driveway connection to the Property (the "Entrance") from or near the intersection of the Property boundary and **Cooper Palms Parkway**, in a location substantially aligned with the existing or planned access point along Cooper Palms Parkway, subject to all required governmental approvals. The Entrance shall be constructed in a good and workmanlike manner and in compliance with applicable laws, ordinances, and permitting requirements.

In connection with the Entrance construction, Buyer shall grant and record, at closing or promptly upon completion of the Entrance (whichever occurs first), a **perpetual, non-exclusive easement for ingress and egress** (the "Easement") in favor of Seller, its successors and assigns, over and across the Entrance and a connecting route across the Property to provide vehicular and pedestrian access to and from Seller's retained property lying adjacent to or near the Property (the "Retained Parcel").

The Easement shall be **perpetual** and **run with the land**; be **non-exclusive**, allowing use by Buyer, Seller, and their respective invitees, tenants, contractors, and successors; be of sufficient width (not less than **24 feet**) to accommodate standard two-way vehicular traffic; Include the right to install, use, and maintain paving, curbing, drainage, and related improvements necessary for safe vehicular access; Require each party to maintain, or share proportionally in the maintenance, repair, and replacement of the Easement Area and related improvements, as set forth in the recorded easement agreement.

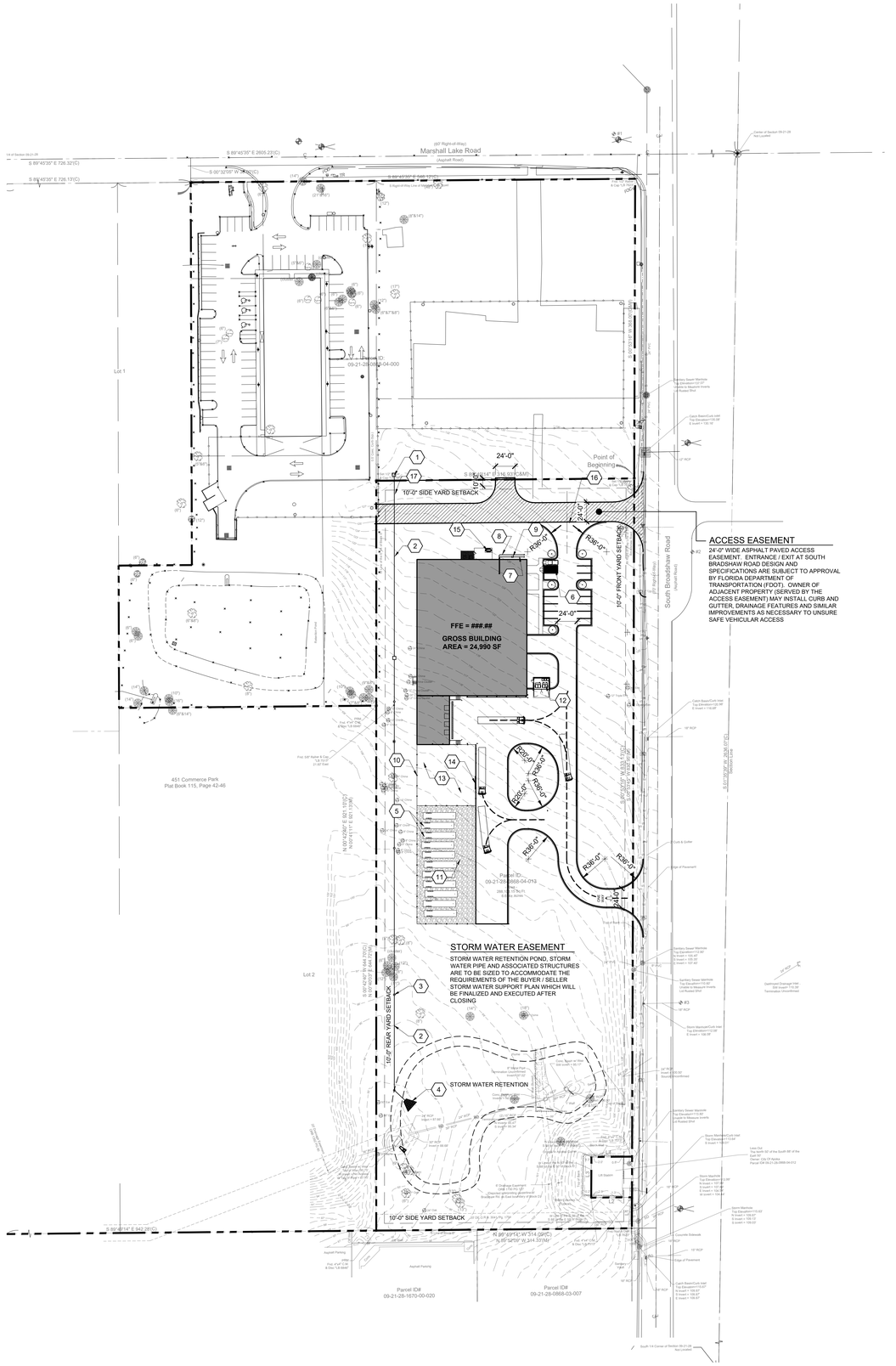
Prior to Closing, Buyer and Seller shall mutually approve the form of a **recordable Access Easement Agreement**, consistent with this section, which shall be executed and recorded in the Public Records of the county where the Property is located at or before Closing. Buyer's obligation to grant the Easement shall survive Closing and shall not merge into the deed.

The obligations in this Section shall **survive Closing** and shall be binding upon Buyer and its successors and assigns and inure to the benefit of Seller and its successors and assigns.

Exhibit and Access Point Depictions. In furtherance of the Entrance and Easement terms above, the parties acknowledge and agree that the approximate locations of: (a) the entrance/curb cut along South Bradshaw Road opposite Cooper Palms Parkway, (b) a vehicular access point generally near the midpoint of the northern boundary of the 6.61± acre parcel to provide access to Seller's property to the north, and (c) a vehicular access point along the western boundary of the 6.61± acre parcel to provide access to Seller's property to the west (collectively, the "Access Points"), are depicted in concept form on Exhibit C attached hereto and incorporated herein by this reference. The Access Points shown on Exhibit C are approximate and conceptual and may be adjusted for final engineering, permitting, utility conflicts, sight distance, and applicable governmental or third-party approvals, provided that any adjustments are (i) made in good faith and in coordination with the parties' civil plans, (ii) do not materially diminish the functionality or continuity of access to and from South Bradshaw Road and the Retained Parcels, and (iii) are memorialized in the form of the recordable Access Easement Agreement to be mutually approved prior to Closing. Buyer will incorporate the Access Points, as finalized through the permitting process, into the design, permitting, and construction of the Entrance and internal driveway connection(s) at Buyer's sole cost, and the legal description of the Easement area(s) will be based on the as-built survey of the completed improvements and recorded accordingly.

SIGNATURE PAGE FOLLOWS

A6 EASEMENT TERMS
NTS



A2 SITE PLAN
1/64" = 1'-0"
0 24' 48' 96'

GENERAL NOTES:

A. TOTAL GROSS BUILDING AREA = 24,990 SF

SHEET KEY NOTES: (X)

1. REINFORCED CONCRETE STRUCTURE FOR CONNECTION OF FUTURE STORM WATER PIPE
2. REINFORCED CONCRETE STORM SEWER PIPE. SIZE TO BAS DETERMINED AND AS DOCUMENTED IN THE BUYER / SELLER STORM WATER SUPPORT PLAN
3. STORM SEWER MANHOLE. SPACING TO BE DETERMINED BY VOLUME AND FLOW RATE
4. RIP-RAP OUTLET STRUCTURE
5. 40' TRACTOR TRAILER
6. ACCESSIBLE PARKING SPACE
7. #" DOMESTIC WATER LINE FROM EXISTING UTILITY LINE AT SOUTH BRADSHAW ROAD. UTILITY COMPANY TO LOCATE TAP AND METER
8. #" SANITARY SEWER LINE TO EXISTING UTILITY LINE AT SOUTH BRADSHAW ROAD. UTILITY COMPANY TO LOCATE TAP
9. RPZ BACKFLOW PREVENTER IN VAULT
10. FENCED STORAGE, HEIGHT AND MATERIALS AS REQUIRED BY THE CITY OF APOPKA
11. TRAILER STORAGE
12. DUMPSTER ENCLOSURE
13. OUTDOOR STORAGE AREA
14. 16'-0" SLIDING GATE
15. ELECTRICAL TRANSFORMER SET BY UTILITY COMPANY ON REINFORCED CONCRETE PAD CONSTRUCTED BY CONTRACTOR. COORDINATE WITH UTILITY COMPANY ON PAD LOCATION, DIMENSIONS AND REINFORCING
16. 24'-0" WIDE ASPHALT PAVED ACCESS EASEMENT TO ADJACENT PROPERTY. PAVED DRIVEWAY DOES NOT INCLUDE CONCRETE CURB AND GUTTER UNLESS INSTALLED BY THE SELLER (ADJACENT PROPERTY OWNER)
17. STORM WATER PIPE TO BE STUBBED-UP AND CAPPED 5'-0" INSIDE OF ADJACENT PROPERTY LINE

ZONING DATA: (X)

A. ADDRESS: SOUTH BRADSHAW ROAD, APOPKA, FLORIDA 32703
B. ZONING DISTRICT: LIGHT INDUSTRIAL
C. INTENSITY AND DIMENSIONAL STANDARDS
   - C.1. MINIMUM LOT AREA: 12,000 SF
   - C.2. MINIMUM LOT WIDTH: 100 FT
   - C.3. MINIMUM FRONT YARD SETBACK: 10 FT
   - C.4. MINIMUM SIDE YARD SETBACK: 10 FT
   - C.5. MINIMUM REAR YARD SETBACK: 10 FT
   - C.6. MAXIMUM BUILDING HEIGHT: 45 FT
   - C.7. MAXIMUM FLOOR AREA RATIO: 0.40
D. OFF-STREET VEHICULAR PARKING
   - D.1. PRINCIPAL USE CATEGORY: WAREHOUSE DISTRIBUTION
   - D.3. MINIMUM NUMBER OF SPACES: 2 / 1,000 SF OF OFFICES
     - D.3.1. OFFICE SPACE: 2,102 GROSS SF
     - D.3.2. PARKING REQUIRED: 2,102 / 1,000 = 2.1 x 2 = 5 SPACES
     - D.3.3. PARKING PROVIDED = 15 (BASED ON THE # OF EMPLOYEES)
   - D.4. ACCESSIBLE PARKING SPACES: 1
   - D.5. DIMENSIONAL STANDARDS (90 DEGREE): 9'-0" WIDE x 18'-0"
   - D.6. AISLE WIDTH: 24'-0"
   - D.7. LOADING AREA: TO THE MAXIMUM EXTENT PRACTICABLE, LOADING AREAS SHOULD BE LOCATED TO THE REAR OF THE SPACE THEY SERVE
   - D.8. LOADING BERTH SIZE: 15' WIDE x 55' LONG (FULL SIZE TRACTOR TRAILER)
   - D.9. MINIMUM NUMBER OF LOADING BERTHS: 2
   - D.10. NUMBER OF LOADIMG BERTHS PROVIDED: 4
E. LANDSCAPING
   - E.1. BUFFERYARD: TYPE A - BASIC
   - E.2. PARKING LOT: NO MORE THAN TEN (1) PARKING SPACES WITHOUT A TREE ISLAND
   - E.3. FOUNDATION PLANTING: THE FACADE FACING A RIGHT-OF-WAY SHALL CONTAIN A FOUR (4) FOOT WIDE FOUNDATION LANDSCAPING AREA ADJACENT TO THE BUILDING AND EXTENDING THE LENGTH OF THE FACADE. LANDSCAPING SHALL CONTAIN:
     - E.3.1. 24" TALL PLANTED 30" ON CENTER
     - E.3.2. ONE (1) SMALL DECORATIVE OR ORNAMENTAL TREE THAT IS AT LEAST 15 GALLONS PLANTED 20'-0" ON CENTER
   - E.4. LOW VOLUME IRRIGATION IS REQUIRED IN BUFFERS AND FOUNDATION BEDS
F. DESIGN GUIDELINES FOR LIGHT INDUSTRIAL USES
   - F.1. PROVIDE A CONTINUOUS LANDSCAPE AREA BETWEEN THE STREET AND BUILDING UNINTERRUPTED BY PARKING AREAS OR DRIVEWAYS FOR AT LEAST 50% OF THE FRONTAGE
   - F.2. SURFACE PARKING MUST BE SCREENED FROM ADJACENT PARCELS WITH LANDSCAPING
   - F.3. ALL ROOFTOP EQUIPMENT MUST BE SCREENED FROM ALL DIRECTIONS
   - F.4. BLANK WALLS SHALL BE ENHANCED BY THE USE OF VERTICAL ELEMENTS AND WINDOWS TO BREAK THE MONOTONY. AT LEAST FIFTY (50%) OF THE MAIN FACADE FACING A MAJOR THOROUGHFARE MUST INCORPORATE ARCHITECTURAL DETAIL
   - F.5. PROVIDE PEDESTRIAN AND BICYCLE CONNECTIONS FROM PRINCIPAL STRUCTURES TO ADJACENT USES
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   - F.8. STORM WATER RETENTION PONDS ARE TO BE NATURALISTIC AND MAY ONLY BE FENCED WITH SPECIAL PERMISSION

LEGEND:

PROPOSED SINGLE STORY WAREHOUSE BUILDING

100'-0" EXISTING / PROPOSED SPOT ELEVATION

BUILDING WILL BE FULLY SPRINKLERED IN ACCORDANCE WITH NFPA 13

BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

CHARLOTTE
7315 Swansea Lane
Cornelius, NC 28031

(843) 466-3664
info@beaufortdesignbuild.com
www.beaufortdesignbuild.com

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

CAROLINA TEXTILES

CAROLINA TEXTILE APOPKA FL

SOUTH BRADSHAW ROAD APOPKA, FL 32703

DESIGN DEVELOPMENT

REVISIONS / SUBMISSIONS

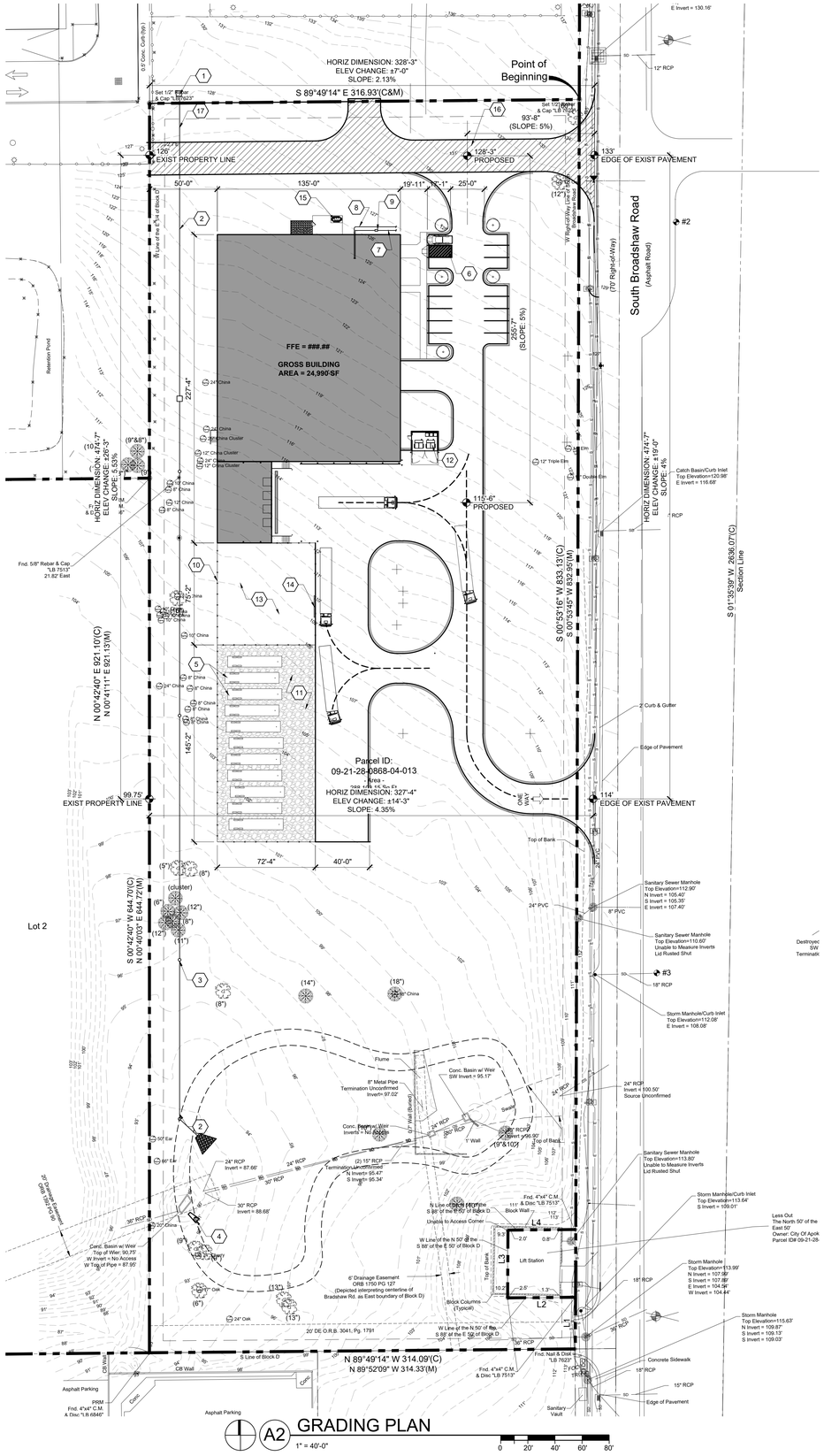
NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	FEBRUARY 10, 2026
JOB NUMBER	25039.00
DRAWN	GRM
CHECKED	ADB
APPROVED	DCS

ARCHITECTURAL SITE PLAN

AC-102



GENERAL NOTES:

A. TOTAL GROSS BUILDING AREA = 24,990 SF

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BEAUFORT
2 Fire Station Lane
Seabrook, SC 29940

CHARLOTTE
7315 Swansea Lane
Cornelius, NC 28031

(843) 466-3664
info@beaufortdesignbuild.com
www.beaufortdesignbuild.com

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BEAUFORT DESIGN BUILD

ARCHITECT / ENGINEER'S SEAL

CAROLINA TEXTILES

CAROLINA TEXTILE APOPKA FL

SOUTH BRADSHAW ROAD
APOPKA, FL 32703

DESIGN DEVELOPMENT

REVISIONS / SUBMISSIONS

NO.	DESCRIPTION	DATE

SHEET INFORMATION

DATE	FEBRUARY 10, 2026
JOB NUMBER	25039.00
DRAWN	GRM
CHECKED	ADB
APPROVED	DCS

CONCEPTUAL GRADING PLAN

AC-103

FINAL DEVELOPMENT PLANS

FOR

LESTER OAKS

Digitally signed by Thomas R Faber
Date: 2026.04.06 08:30:48-04'00'

THOMAS R. FABER
FLORIDA P.E. NO. 87427
REGISTRY #36499

SHEET INDEX	
C1.0	COVER SHEET
C2.0	GENERAL NOTES
C3.0	EXISTING CONDITIONS AND DEMO PLAN
C4.0	SITE PLAN
C5.0	UTILITY PLAN
C6.0	DRAINAGE AND GRADING PLAN
C7.0	PLAN AND PROFILE
C8.0	OFFSITE IMPROVEMENTS PLAN
C9.0	EROSION CONTROL PLAN
C10.0	FIRE TRUCK CIRCULATION PLAN
C11.0	CONSTRUCTION DETAILS
C12.0 - C12.3	UTILITY DETAILS
C13.0 - C13.1	LIFT STATION PLAN AND DETAILS
-	LANDSCAPE PLANS
-	IRRIGATION PLANS

550 WEST LESTER RD.
APOPKA, FL

PARCEL ID:
33-20-28-0000-00-069

PROJECT TEAM:

OWNER/APPLICANT
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

LANDSCAPE ARCHITECT
LANDSCAPE DYNAMICS
P.O. BOX 2852
WINTER PARK, FL 32790
(407) 579-1811

CIVIL ENGINEER
FABER ENGINEERING, INC.
3165 MCCRORY PLACE, STE 151
ORLANDO, FL 32803
(407) 595-1566

ENVIRONMENTAL ENGINEER
ECOLOGICAL CONSULTING SOLUTIONS, INC.
410 NORTH ST., UNIT 130
LONGWOOD, FL 32750
(407) 869-9434

SURVEYOR
BISHMAN SURVEYING & MAPPING, INC
301 N. TUBB STREET, SUITE 106
OAKLAND, FL 34760
(407) 905-8877

GEOTECHNICAL ENGINEER
GEO-TECHNOLOGY ASSOCIATES, INC.
4617 PARKBREEZE COURT
ORLANDO, FL 32808
(321) 482-4239



VICINITY MAP
1"=2000'

UTILITY PROVIDERS:

WATER / WASTE WATER & RECLAIM WATER
CITY OF APOPKA
748 EAST CLEVELAND ST.
APOPKA, FLORIDA 32703
(407) 703-1727

GAS
LAKE APOPKA NATURAL GAS DISTRICT
1320 WINTER GARDEN - VINELAND RD.
WINTER GARDEN, FL 34787
(407) 656-2734

PHONE / CABLE
SPECTRUM
3767 ALL AMERICAN BLVD.
ORLANDO, FLORIDA 32810
(407) 532-8509

ELECTRIC
DUKE ENERGY
452 EAST CROWN POINT RD.
WINTER GARDEN, FLORIDA 32787
(407) 889-1718

Faber Engineering, Inc.

3165 MCCRORY PLACE, SUITE 151
ORLANDO, FL 32803
(407) 595-1566

LEGAL DESCRIPTION:

THE NORTH 230 FEET OF THE EAST 1/2 OF THE NW 1/4 OF THE NW 1/4 OF SECTION 33, TOWNSHIP 20 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA; LESS THE NORTH 30 FEET THEREOF HERETOFORE DEEDED TO THE COUNTY OF ORANGE FOR ROAD PURPOSES.

THE ABOVE DESCRIBED PANEL CONTAINS A TOTAL OF 3.05 ACRES, MORE OR LESS.

GENERAL CONSTRUCTION NOTES:

1. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE FABER ENGINEERING, INC. WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO INSURE TIMELY CERTIFICATION OF CONSTRUCTION TO AGENCIES AND TO AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY.
2. CONTRACTOR SHALL MAINTAIN A SET OF PLANS ACCURATELY MARKED-UP WITH AS-BUILT INFORMATION ON RIM AND INVERT ELEVATIONS. AS-BUILT INFORMATION PREPARED BY A REGISTERED LAND SURVEYOR IN ACCORDANCE WITH CITY OF APOPKA LAND DEVELOPMENT REQUIREMENTS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FINAL ACCEPTANCE OF THE WORK.
3. REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION. DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT CONTRACTOR'S EXPENSE.
5. CONTRACTOR IS RESPONSIBLE FOR GRADING ALL ROADWAYS TO DRAIN POSITIVELY. INTERSECTIONS SHALL BE TRANSITIONED TO PROVIDE SMOOTH DRIVING SURFACE WHILE MAINTAINING POSITIVE DRAINAGE. SHOULD AREAS OF POOR DRAINAGE RESULT FROM THE ADJUSTMENTS DESCRIBED, THE CONTRACTOR SHALL NOTIFY THE SITE SUPERINTENDENT PRIOR TO PLACING BASE SO THAT RECOMMENDATIONS FOR CORRECTION MAYBE MADE.
6. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES FOUND BETWEEN THESE PLANS AND THE FIELD CONDITIONS PRIOR TO CONSTRUCTION.
7. CHAPTER 17-153 OF THE FLORIDA STATUES REQUIRES THAT AN EXCAVATOR NOTIFY ALL GAS UTILITIES A MINIMUM OF TWO WORKING DAYS PRIOR TO EXCAVATING. DRAWINGS SHOW ONLY THE APPROXIMATE LOCATION OF GAS MAINS AND DO NOT SHOW SERVICE LINES. THE ONLY SAFE AND PROPER WAY TO LOCATE EITHER MAINS OR SERVICE LINES IS BY ON-SITE INSPECTION BY GAS COMPANY PERSONNEL. THEREFORE, EXCAVATORS ARE INSTRUCTED TO TELEPHONE THE GAS COMPANY TWO WORKING DAYS BEFORE ENTERING A NEW CONSTRUCTION AREA.
8. ALL MEDIANS AND ISLANDS TO BE FILLED WITH CLEAN SOIL AND COMPACTED PER LANDSCAPE REQUIREMENTS.
9. ALL PAVEMENT RETURN RADII SHALL BE MEASURED FROM THE EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
10. ALL DISTURBED AREAS SHALL BE RETURNED TO PRECONSTRUCTION CONDITIONS, OR BETTER.
11. ALL PAVEMENT MARKERS, STRIPING, SIGNAGE, AND OTHER TRAFFIC CONTROL DEVICES TO BE INSTALLED BY CONTRACTOR PER F.D.O.T AND CITY OF APOPKA STANDARDS.
12. THE FOLLOWING AGENCIES AND COMPANIES SHALL BE NOTIFIED 48 HOURS PRIOR TO BEGINNING CONSTRUCTION:

    A. CITY OF APOPKA ENGINEERING DEPARTMENT
    B. CITY OF APOPKA UTILITIES
    C. SPECTRUM
    D. DUKE ENERGY
    E. FLORIDA PUBLIC UTILITIES

13. BOUNDARY AND TOPOGRAPHIC DATA WAS PROVIDED BY BISHMAN SURVEYING & MAPPING, INC.
14. ALL MARKINGS TO COMPLY WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
15. ALL TRAFFIC CONTROL SIGNS AND STRIPES SHALL CONFORM TO THE M.U.T.C.D. AND CITY OF APOPKA TRAFFIC STANDARDS.
16. SIDEWALKS SHALL BE BUILT TO BE FLORIDA ACCESSIBILITY CODE COMPLIANT, INCLUDING HANDICAPPED RAMPS.
17. THE APPLICANT SHALL COORDINATE AND SCHEDULE A PRE-CONSTRUCTION MEETING PRIOR TO THE START OF CONSTRUCTION.
18. THE CONTRACTOR SHALL NOTIFY THE COUNTY ENGINEERING DIVISION, IN WRITING, AT LEAST FIVE DAYS PRIOR TO THE START OF CONSTRUCTION.
19. NO PAVING SHALL COMMENCE UNTIL WRITTEN AUTHORIZATION HAS BEEN GIVEN BY THE COUNTY ENGINEER. THE ASPHALT MIX DESIGN MUST BE APPROVED AND A PRE-PAVING MEETING MUST BE HELD PRIOR TO THE APPROVAL BY THE COUNTY ENGINEER TO PAVE. ONLY THE APPROVED PLANS STAMPED AND SIGNED BY THE COUNTY ENGINEER SHALL BE USED ON THE PROJECT. ANY CHANGE(S) TO THE APPROVED PLANS MUST BE SUBMITTED BY THE ENGINEER OF RECORD AND MUST BE APPROVED BY THE COUNTY ENGINEER BEFORE CONSTRUCTION OF THE CHANGE(S) CAN BE STARTED.
19. THE CONTRACTOR IS A REQUIRED TO OBTAIN A BUILDING PERMIT FROM CITY OF APOPKA BUILDING DEPARTMENT PRIOR TO CONSTRUCTION OF ANY RETAINING WALLS.

EROSION CONTROL GENERAL NOTES:

1. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL COMPLY WITH STATE AND LOCAL SOIL EROSION CONTROL AND CONSERVATION STANDARDS. ADDITIONAL MEASURES TO PREVENT/CONTROL SOIL SEDIMENTATION OR EROSION MAY BE REQUIRED DUE TO SITE CONSIDERATIONS WITHIN THE BOUNDARY LIMITS AND DOWNSTREAM.
2. PRIOR TO DEVELOPMENT, PERIMETER SHALL BE CLEARLY MARKED AND ALL SOIL DISTURBANCE TO BE CONTAINED WITHIN. OFF-SITE WORK MAY BE NECESSARY DUE TO ACTUAL SITE SLOPE OR DRAINAGE REQUIREMENTS. ALL CONTROL MEASURES MUST CONFORM TO SITE STANDARDS.
3. ALL POINTS OF SITE INGRESS AND EGRESS TO BE CONSTRUCTED PRIOR TO ANY OTHER DEVELOPMENT. THEY MUST BE STABILIZED AND INCLUDE SOIL EROSION/ SEDIMENTATION CONTROL MEASURES IN ORDER TO PREVENT TRACKING AND SILTING OF MUD INTO PUBLIC ROADWAYS OR DRAINAGE AREAS TO BE IMMEDIATELY REMOVED.
4. ALL STORM DRAIN AND SANITARY SEWER TRENCHES NOT IN PAVED AREAS ARE TO BE MULCHED AND/OR SEEDED WITHIN 14 DAYS AFTER INITIAL BACKFILL.
5. DURING CONSTRUCTION, ALL SEDIMENT CONTROL STRUCTURES WILL BE INSPECTED AFTER EACH RAINFALL AND REPAIRED IF NECESSARY. SEDIMENT TO BE REMOVED TO A SUITABLE DISPOSAL AREA AND STABILIZED WITH PERMANENT VEGETATIVE COVER.
6. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL SEDIMENT AND EROSION CONTROL MEASURES UNTIL DISTURBED AREAS ARE STABILIZED.
7. AFTER FINE GRADING, ALL DISTURBED AREAS ARE TO BE PERMANENTLY MULCHED AND/OR SODDED.
8. NO SLOPE SHALL BE GREATER THAN 4:1 UNLESS OTHERWISE NOTED.
9. FOLLOWING INITIAL SOIL DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN SEVEN CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 4:1; AND FOURTEEN DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE. THIS DOES NOT APPLY TO THOSE AREAS WHICH ARE SHOWN ON THE PLAN AND ARE CURRENTLY BEING PERFORMED. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE THAT STABILIZED AREAS CONTINUOUSLY MEET THE APPROPRIATE REQUIREMENTS OF GOVERNING AUTHORITIES.
10. SILT FENCED TO BE PLACED AROUND PERIMETER OF PROPERTY AS SHOWN. CONTRACTOR TO VERIFY LIMITS OF SILT FENCE PRIOR TO INSTALLATION.
11. EROSION CONTROL MEASURES WILL BE MAINTAINED AT ALL TIMES. ADDITIONAL EROSION AND SEDIMENTATION CONTROL MEASURES WILL BE INSTALLED IF DEEMED NECESSARY BY ON-SITE INSPECTION.
12. THE INSTALLATION OF EROSION CONTROL MEASURES AND PRACTICES SHALL OCCUR PRIOR TO LAND-DISTURBING ACTIVITIES.

GENERAL UTILITY NOTES:

1. CONTRACTOR IS TO VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION IN THEIR VICINITY. ANY DAMAGE TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AS SOON AS POSSIBLE.
2. WATER MAIN SEPARATION (VERTICAL AND HORIZONTAL) FROM FORCE MAIN, STORM, AND RECLAIMED WATER MUST BE IN COMPLIANCE WITH FDEP GUIDELINES WITH NO STANDARD MITIGATION ALLOWED. THE WATER MAIN SEPARATION FROM FORCE MAIN, STORM, AND RECLAIMED WATER MUST ALSO BE IN COMPLIANCE WITH CITY OF APOPKA SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL MINIMUM SEPARATION REQUIREMENTS ARE MAINTAINED.
3. ALL POTABLE WATER, RECLAIMED WATER, AND FORCE MAINS TO MEET CITY OF APOPKA SPECIFICATIONS.
4. RESTORE ALL DISTURBED RIGHT-OF-WAY AREAS TO PREVIOUS CONDITION.
5. ALL WORK ON UTILITIES SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE UTILITY COMPANIES, OWNER, AND PROJECT ENGINEER.
6. HYDROSTATIC TESTING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C600 OR M23 AS APPLICABLE.
7. DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C651.
8. ALL P.V.C. WATER PIPES MUST BEAR THE NSF LOGO FOR POTABLE WATER USE. P.V.C. WATER PIPES WITH DIAMETERS LESS THAN FOUR INCHES SHALL BE SCHEDULE 40 PVC IN ACCORDANCE WITH ASTM 1785.
9. CONTRACTOR SHALL MAINTAIN MINIMUM 3' COVER OVER WATER MAINS, FORCE MAINS, AND RECLAIMED WATER MAINS.
10. ALL DUCTILE IRON PIPES MUST BE IN ACCORDANCE WITH AWWA C151.
11. THE CONTRACTOR SHALL NOTIFY CITY OF APOPKA UTILITIES CONSTRUCTION DEPARTMENT AT LEAST 48 HOURS PRIOR TO ANY UTILITIES CONSTRUCTION.
12. ALL EXISTING UTILITIES AT POINTS OF CONFLICT SHALL BE FIELD VERIFIED BY THE "CONTRACTOR" PRIOR TO CONSTRUCTION AND MEET MINIMUM SPACING REQUIREMENTS.

PAVING & DRAINAGE NOTES:

1. THE MINIMUM ROADWAY GRADE SHALL BE 0.30%.
2. COORDINATION WITH LANDSCAPE CONTRACTOR TO ASSURE PONDS ARE SODDED TO PREVENT SCOURING.
3. F.D.O.T. EROSION AND SEDIMENT CONTROL DESIGN MANUAL SHALL BE USED FOR EROSION AND SEDIMENT CONTROL. BEST MANAGEMENT PRACTICES AS REQUIRED BY CITY OF APOPKA SHALL BE OBSERVED.
4. SITE GRADING, PAVING, AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO CITY OF APOPKA AND F.D.O.T. DEVELOPMENT STANDARDS AND SPECIFICATIONS.
5. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO INSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
6. THE STORM WATER RETENTION/DETENTION PONDS SHALL BE CONSTRUCTED DURING THE EARLY STAGES OF CONSTRUCTION. SODDED AND/OR SEEDED AREAS SHOULD HAVE VEGETATION ADDED AS SOON AS FEASIBLE.
7. SOILS INFORMATION WAS PROVIDED TO FABER ENGINEERING, INC. BY GEO-TECHNOLOGY ASSOCIATES, INC.
8. THE PROPOSED SILT FENCE SHOWN ON THE PLANS IS THE MINIMUM REQUIRED. ADDITIONAL CONTROLS TO BE UTILIZED AS NEEDED. THE CONTRACTOR SHALL INSTALL THE SILT FENCE PRIOR TO ANY CLEARING OR GRADING ON-SITE. ONCE SILT FENCE HAS BEEN INSTALLED, THE CONTRACTOR SHALL MAINTAIN INTEGRITY THROUGH PERIODIC INSPECTION AND REPAIR.
9. ALL CONCRETE PIPE JOINTS SHALL BE WRAPPED WITH FILTER FABRIC MEETING FDOT REQUIREMENTS.
10. WITHIN THE RIGHT-OF-WAY, BACKFILL FOR PIPE AND STRUCTURES WILL BE DENSIFIED TO 100% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. BASE AND STABILIZED SUBGRADE, WITHIN THE RIGHT-OF-WAY WILL BE DENSIFIED TO 98% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180.
11. ALL CURB INLET TOPS ARE PRECAST CONCRETE.
12. THE SUBGRADE SHALL BE LEVELED, COMPACTED AND TESTED FOR A DEPTH OF 2' PRIOR TO THE PLACEMENT OF ANY FILL. COMPACTION SHOULD CONTINUE UNTIL A MINIMUM DENSITY EQUIVALENT TO 95 PERCENT OF THE SOIL'S MAXIMUM MODIFIED PROCTOR DENSITY VALUE (ASTM D-1557) HAS BEEN ACHIEVED. COMPACTION SHOULD BE PERFORMED USING NON-VIBRATORY COMPACTION EQUIPMENT SUCH AS A HEAVY RUBBER TIRED FRONT-END LOADER. THE FRONT-END LOADER SHOULD HAVE A MINIMUM BUCKET SIZE OF 3 CUBIC YARDS, WHICH SHOULD REMAIN FULL DURING COMPACTION OPERATIONS. ALL FILL NECESSARY TO ATTAIN FINAL SITE GRADES SHOULD BE COMPACTED TO THE DENSITY DESCRIBED ABOVE.
13. ALL REINFORCED CONCRETE STORM SEWER PIPES SHALL BE CLASS III (ASTM C-76) UNLESS OTHERWISE NOTED ON THE PLANS. ALL DRAINAGE STRUCTURES SHALL BE IN ACCORDANCE WITH FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS UNLESS OTHERWISE NOTED ON THE PLANS.
14. FOR DRAINAGE STRUCTURES TO BE USED ON SITE REFERENCE FDOT STANDARD PLANS 425-XXX.
15. STRUCTURAL FILL REQUIRED TO ATTAIN FINAL SITE GRADES SHOULD BE COMPRISED OF CLEAN SAND WITH LESS THAN 7 PERCENT PASSING THE U.S. NO. 200 SIEVE. THE FILL SHOULD BE PLACED IN MAXIMUM 12" THICK LIFTS AND COMPACTED TO THE DESITY DESCRIBED ABOVE.
16. FINISHED GRADE ELEVATIONS SHALL BE TABLE TOPPED 8-INCHES BELOW STATED FINISHED FLOOR ELEVATIONS.
17. ALL ELEVATIONS SHOWN IN PLANS ARE BASED ON NAVD88 DATUM.

AS-BUILT REQUIREMENTS

- AS-BUILT DRAWINGS IN BOTH PDF AND AUTOCAD SHALL BE SUBMITTED AFTER FINAL INSPECTION AND PRIOR TO ACCEPTANCE FOR WATER, WASTEWATER AND DRAINAGE SYSTEMS, BOTH ON AND OFF-SITE. THESE DRAWINGS SHALL BE BASED UPON FIELD SURVEYS, AND WILL SHOW ALL BOUNDARY, RIGHTS-OF-WAY, EASEMENT AND LOT LINES, AND SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL LAND SURVEYOR (PLS) IN ACCORDANCE WITH RULE 61G17-6, F.A.C.
- ALL AS-BUILTS SHOULD BE IN VERTICAL DATUM NAVD88.
- AUTOCAD FILES SHOULD BE IN STATE PLANE COORDINATES (SPC) FEET, EAST ZONE – FLORIDA, NORTH AMERICAN DATUM (NAD) 1983 AND 2013 VERSION.
- UTILITY (WATER, SEWER AND RECLAIM) DRAWINGS NEED TO CLEARLY MARK PRIVATE OR PUBLIC OWNERSHIP. IN ADDITION, CLEARLY LABEL THE COUNTY POINT OF CONNECTION ON PRIVATE MAINS.
- DURING THE PROGRESS OF THE WORK, THE APPLICANT SHALL RECORD ON ALL FIELD SETS OF DRAWINGS THE ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORMWATER, POTABLE WATER, RECLAIMED WATER AND WASTEWATER PIPING AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND POND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL SHOW ACTUAL INSTALLED PIPE MATERIAL, PIPE SIZE, CLASS, ETC. UPON COMPLETION OF THE WORK, THIS DATA SHALL BE RECORDED DIGITALLY ON ORIGINAL DRAWINGS.
- DRAWINGS SHALL INCLUDE KEY ELEVATION INFORMATION FOR STORMWATER CONTROL STRUCTURES INCLUDING (BUT NOT LIMITED TO) INVERTS FOR BLEEDER DEVICES AND ELEVATIONS OF WEIR CRESTS.
- DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION, AND WHEN APPLICABLE, SHOULD INCLUDE BUT NOT BE LIMITED TO GRADING FOR PARKING LOT, TRAIL, POND, SIDEWALK, STREET, AND FINISH FLOOR ELEVATION FOR THE BUILDING ETC.
- DRAWINGS SHALL CLEARLY SHOW LOCATION, DESCRIPTION, AND DEPTH OF ALL ABANDONED PIPE THAT IS LEFT IN PLACE.
- DRAWINGS SHALL CLEARLY LABEL FIRE LINES AND IRRIGATION LINES ACCORDINGLY.
- DRAWINGS SHALL CLEARLY DEPICT AND LABEL ALL IRRIGATION VALVES, CONTROLLERS, SLEEVES (BOTH LOCATION AND SIZE), ZONE INFORMATION, AND METER, TAP, AND BACKFLOW LOCATIONS. ANY FIELD CHANGES TO THE IRRIGATION SYSTEM MUST BE NOTED.
- LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS.
- DIMENSIONS BETWEEN ALL MANHOLES AND/OR INLETS SHALL BE FIELD VERIFIED AND SHOWN. THE INVERTS AND GRADE ELEVATIONS OF ALL MANHOLES/INLETS SHALL BE SHOWN.
- THE DEPTH FROM FINISH GRADE OF POTABLE WATER, RECLAIMED WATER, AND SEWER FORCE MAINS SHALL BE INDICATED AT ALL VALVE LOCATIONS.
- DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL.
- DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON THE ORIGINAL APPROVED DRAWINGS BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE SHOWN.
- DRAWINGS SHALL SHOW LOCATIONS AND DESCRIPTIONS OF ALL CONNECTIONS THAT WERE MADE TO ANY MAINS DURING THE PROJECT, WHETHER PERMANENT OR TEMPORARY, INCLUDING ABANDONED TAPS, LINE STOPS, VALVES, ETC.
- SPOT ELEVATIONS ARE REQUIRED AT FIFTY (50)-FOOT INTERVALS ALONG ALL PROJECT DRAINAGE DITCHES AND SWALES, AT A MINIMUM CAPTURING THE TOP AND BOTTOM OF THE DITCH/SWALE AT EACH INTERVAL.
- SPOT ELEVATIONS SHALL BE PROVIDED AT 25-FT INTERVALS AND AT SUFFICIENT LOCATIONS TO CAPTURE GRADE VARIATIONS FOR NEW/IMPROVED SIDEWALK, DRIVEWAY, PARKING LOT, ROADWAY AND STREET INTERSECTIONS, AND ALL CROSSWALK LOCATIONS TO DEMONSTRATE ADA COMPLIANCE AND NO SIGNIFICANT DEVIATIONS FROM THE ORIGINAL DRAWINGS. THESE ELEVATIONS NEED TO BE SHOWN AS TO THE NEAREST HUNDREDTH (0.01') OF A FOOT(FT).
- OBJECTS SHOULD BE ASSIGNED BY LAYER WITH COLOR BY LAYER. NO CRYPTIC LAYER NAMES. IF CRYPTIC LAYER NAMES ARE USED (I.E., DXF FILES) THEN A LIST DEFINING LAYER NAMES MUST BE PROVIDED. IF ENTITIES ARE NOT CORRECTLY ASSIGNED BY LAYER IT MAKES IT DIFFICULT TO EXTRACT THE DATA (I.E., IF WATER LINES ARE INADVERTENTLY DRAWN ON THE SEWER LAYER THEY WILL DISAPPEAR WHEN THE WATER LAYER IS ISOLATED).
- ELECTRONIC DRAWINGS THAT DO NOT FOLLOW THESE SPECIFICATIONS WILL BE RETURNED FOR CORRECTION AND THE CONTRACTOR MAY HAVE THEIR PUBLIC WORKS & UTILITIES DEPARTMENT CERTIFICATE OF COMPLETION AND/OR SUBSEQUENT BUILDING DIVISION CERTIFICATE OF OCCUPANCY WITHHELD UNTIL THE CORRECTIONS HAVE BEEN ADEQUATELY ADDRESSED.

FDEP SANITARY SEWER NOTES:

1. TESTING IS REQUIRED AFTER THE FINAL BACKFILL HAS BEEN IN PLACE AT LEAST 30 DAYS TO PERMIT STABILIZATION OF THE SOIL-PIPE SYSTEM. TESTING REQUIREMENTS SPECIFY: 1) NO PIPE SHALL EXCEED A DEFLECTION OF 5%; 2) USING A RIGID BALL OR MANDREL FOR THE DEFLECTION TEST WITH A DIAMETER NO LESS THAN 95% OF THE BASE INSIDE DIAMETER OR AVERAGE INSIDE DIAMETER OF THE PIPE, DEPENDING ON WHICH IS SPECIFIED IN THE ASTM SPECIFICATIONS, INCLUDING THE APPENDIX, TO WHICH THE PIPE MANUFACTURED; AND 3) PERFORMING THE TEST WITHOUT MECHANICAL PULLING DEVICES. [RSWF 33.85]
2. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT: 1) NO VISIBLE LEAKAGE ALLOWED; 2) EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET; AND 3) AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE IN ASTM C-828 FOR CLAY PIPE, ASTM C 924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. [RSWF 33.93, 33.94, AND 33.95]
3. A BENCH SHALL BE PROVIDED ON EACH SIDE OF ANY MANHOLE CHANNEL WHEN THE PIPE DIAMETER(S) ARE LESS THAN THE MANHOLE DIAMETER AND THAT NO LATERAL SEWER, SERVICE CONNECTION, OR DROP MANHOLE PIPE DISCHARGES ONTO THE SURFACE OF THE BENCH.

FDEP WATER NOTES:

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. (FAC 62-555.320)(21)(B), RSWW 8.0, AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330; EXCEPTIONS ALLOWED UNDER FAC 62-555.320(21)(C))
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 AS ADOPTED IN RULE 62-555.320.(3)(B), F.A.C., OR OTHER APPLICABLE STANDARD, REGULATIONS, OR REQUIREMENTS REFERENCED IN PARAGRAPH 62-555.320(3)(B), F.A.C., (FAC 62-555.320(3)(B); EXCEPTIONS ALLOWED UNDER FAC 62-555.320(3)(D))
3. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL CONTAIN NO MORE THAN 8.0% LEAD, AND ANY SOLDER A FLUX USED IN THIS PROJECT WILL CONTAIN NO MORE THAT 2.0% LEAD. (FAC 62-555.322)
4. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT WILL BE CODED OR MARKED IN ACCORDANCE WITH SUBPARAGRAPHS 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 STRIP 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 ALONG 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 COLORED CODED OR MARKED LIKE UNDERGROUND PIPE.) (FAC 62-555.320 (21)(B)3)
5. NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE INSTALLED IN ACCORDANCE WITH APPLICABLE AWWA STANDARDS OR IN ACCORDANCE WITH MANUFACTURES' RECOMMENDED PROCEDURES. (FAC 62-555.320(20)(B), RSWW 8.5.1, AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330)
6. 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 AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY SUPPORT AND PROTECT THE PIPE; AND UNSUITABLY SIZED STONES (AS DESCRIBED IN APPLICABLE AWWA STANDARDS OR MANUFACTURES' RECOMMENDED INSULATION 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. (FAC 62-555.320(21)(B), RSWW 8.5.2)
7. ALL WATER MAIN TEES, BENDS, PLUGS, AND HYDRANTS INSTALLED UNDER THIS PROJECT WILL BE PROVIDED WITH THRUST BLOCKS OR RESTRAINED JOINTS TO PREVENT MOVEMENT. (FAC 62-555.320 (21)(B) AND RSWW 8.5.4)
8. NEW OR ALTERED WATER MAINS, THAT ARE INCLUDE IN THIS PROJECT AND THAT WILL BE CONSTRUCTED OF ASBESTOS-CEMENT OR POLYVINYL CHLORIDE PIPE WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARDS C603 OR C605, RESPECTIVELY, AS INCORPORATED INTO RULE 62-555.330, FAC., AND ALL OTHER NEW OR ALTERED WATER MAINS INCLUDED IN THIS PROJECT WILL BE PRESSURE AND LEAKAGE TESTED IN ACCORDANCE WITH AWWA STANDARD C600 AS INCORPORATED INTO RULE 62-555.330. (FAC 62-555.320 (21)(B) 1 AND AWWA STANDARDS AS INCORPORATED INTO FAC 62-555.330)
9. 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, FAC (FAC 62-555.320(21)(B) 2 AND FAC 62-555.340)
10. NEW OR RELOCATED, UNDERGROUND WATER MAINS INCLUDED IN THIS PROJECT WILL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST 3 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 COVERING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.; A HORIZONTAL DISTANCE OF AT LEAST 6 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 3 FEET BETWEEN THE OUTSIDE 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 10 FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM." (FAC 62-555.314(1); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5))
11. 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 WILL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES ABOVE 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. (FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5))
12. AT THE UTILITY CROSSING DESCRIBED IN PART II.C.W 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 ARRANGES SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORMSEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER 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. (FAC 62-555.314(2); EXCEPTIONS ALLOWED UNDER FAC 62-555.314(5))

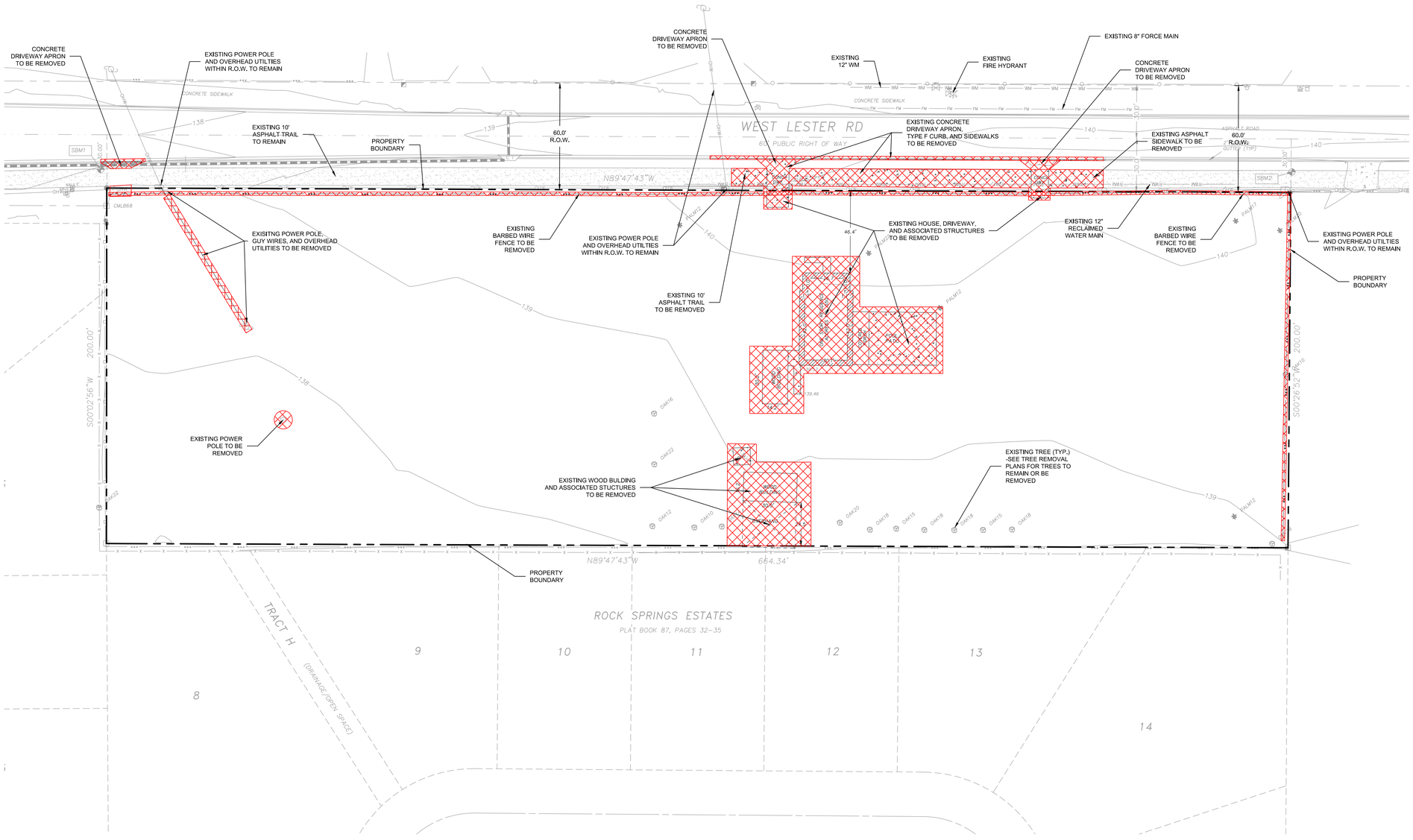
Faber Engineering, Inc.
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(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC. REGIST

GRAPHIC SCALE
30 0 15 30 60
FEET
1 Inch = 30 Ft.

N



HATCH LEGEND

DEMOLITION HATCHING

DEMOLITION NOTES

1. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE UTILIZED IN THE WORK.
2. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS, AND UNDERGROUND STRUCTURES EXISTING ON THE SITE AT THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.
3. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION, CAPPING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.
4. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.

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FABER ENGINEERING, INC
REGISTRY #29409

EXISTING CONDITIONS AND DEMOLITION PLAN

LESTER OAKS

APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

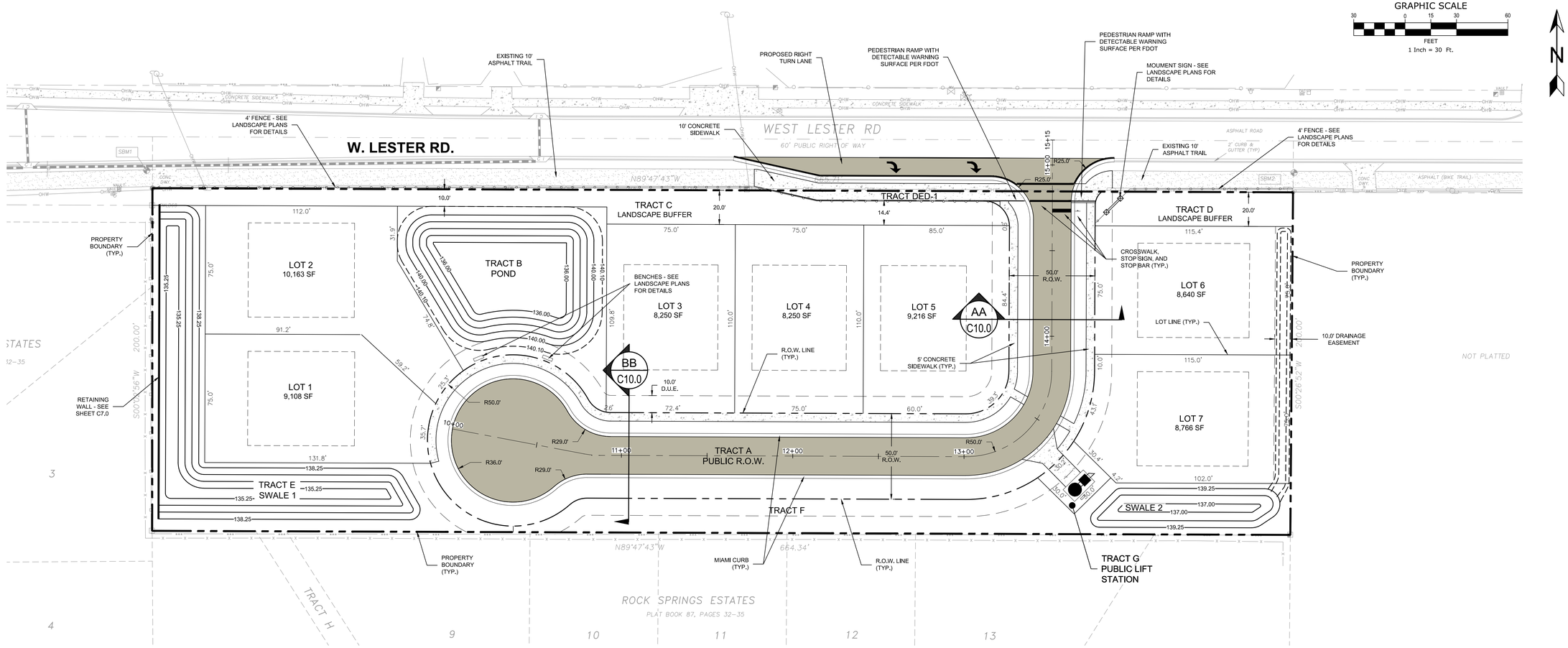
CHRIS WILLIAMS
550 W LESTER RD,
APOPKA, FL 32712

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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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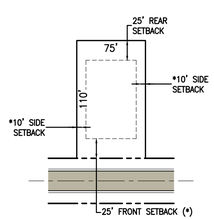


PROPOSED IMPERVIOUS CALCULATIONS

DESCRIPTION	AREA	PERCENTAGE
LOT IMPERVIOUS	0.78 AC.	25.6%
R.O.W. IMPERVIOUS	0.43 AC.	14.1%
PERVIOUS	1.84 AC.	60.3%
TOTAL IMPERVIOUS AREA	1.21 AC.	39.7%
TOTAL AREA	3.05 AC.	100.00%

TRACT TABLE

NAME	USE	OWNERSHIP	AREA (AC.)
TRACT A	PUBLIC R.O.W.	CITY OF APOPKA	0.64 (21.0%)
TRACT B	OPEN SPACE/RETENTION	HOA	0.24 (7.9%)
TRACT C	BUFFER/OPEN SPACE	HOA	0.15 (4.9%)
TRACT D	BUFFER/OPEN SPACE	HOA	0.05 (1.6%)
TRACT E	RETENTION	HOA	0.27 (8.8%)
TRACT F	TREE SAVE/OPEN SPACE/RETENTION	HOA	0.23 (7.5%)
TRACT G	LIFT STATION	CITY OF APOPKA	0.02 (0.7%)
TRACT DED-1	R.O.W. DEDICATION	CITY OF APOPKA	0.02 (0.7%)
–	SINGLE FAMILY LOTS	–	1.43 (46.9%)
		TOTAL AREA:	3.05 (100%)



*STREET SIDE SET BACK 25'

TYPICAL MINIMUM LOT
SCALE: NTS

OPEN SPACE CALCULATIONS

REQUIRED OPEN SPACE = 20%

0.20 X 3.05 AC. = 0.61 AC.

PROPOSED OPEN SPACE:

+ 0.18 AC. (75% TRACT B)
+ 0.15 AC. (TRACT C)
+ 0.05 AC. (TRACT D)
+ 0.23 AC. (TRACT F)

TOTAL: 0.61 AC. (20%)

SOIL DATA

NRCS SOIL SURVEY LINE

SOIL NUMBER	SOIL NAME	HYDROLOGIC GROUP
2	ARCHBOLD FINE SAND, 0 TO 5 PERCENT SLOPES	A

***NOTE: ENTIRE SITE CONTAINS THE SAME SOIL GROUP**

TRIP GENERATION TABLE[1]

ITE CODE & DESCRIPTION		RATE[1]	UNITS	TRIPS
210 - SINGLE FAMILY DETACHED HOUSING	AM PEAK HOUR	0.75	7	5
	PM PEAK HOUR	0.99	7	7
	AVERAGE DAILY	9.43	7	66

[1] TRIP RATES REFERENCED FROM THE INSTITUTE OF TRANSPORTATION ENGINEERS (ITE) *TRIP GENERATION MANUAL*, 11TH EDITION.

SITE DATA AND NOTES

1. PARCEL ID'S: 33-20-28-0000-00-069
2. GROSS SITE AREA = 3.05 AC.
3. THE SITE CONTAINS NO WETLANDS OR FLOODPLAINS.
4. EXISTING FUTURE LAND USE = RLS
5. EXISTING ZONING = T (TRANSITIONAL)
6. PROPOSED ZONING = RSF-1B
7. EXISTING USE = SINGLE FAMILY RESIDENTIAL
8. PROPOSED USE = SINGLE FAMILY RESIDENTIAL
9. PROPOSED LOTS = 7 SINGLE FAMILY DETACHED
10. MAXIMUM ALLOWED DENSITY = 3.5 DU/AC.
11. PROPOSED DENSITY = 7 UNITS/3.05 AC = 2.30 DU /AC
12. BUILDING SETBACKS:
    -FRONT = 25 FT
    -SIDE = 10 FT
    -REAR = 25 FT
    -STREET SIDE = 25
13. REQUIRED LANDSCAPE BUFFERS:
    -NORTH = 10'
    -SOUTH = N/A
    -EAST = N/A
    -WEST = N/A
14. MINIMUM LOT AREA = 8,000 SF (75' MIN. WIDTH)
15. MINIMUM LIVING AREA = 1,600 SF
16. MAXIMUM ALLOWED BUILDING HEIGHT = 35 FT
17. THIS PROPERTY IS DESIGNATED ZONE "X"; AREAS DETERMINED TO BE OUTSIDE OF THE 0.2% ANNUAL CHANCE FLOODPLAIN PER FEMA FIRM PANEL 12095C0110H (SEPTEMBER 24, 2021)
18. COMMUNITY IDENTIFICATION SIGNAGE SHALL COMPLY WITH APPLICABLE CITY OF APOPKA LAND DEVELOPMENT CODE REQUIREMENTS.
19. THE STORMWATER MANAGEMENT SYSTEM FOR THE PROJECT SHALL COMPLY WITH ALL CITY OF APOPKA AND SJRWMD REQUIREMENTS.
20. POTABLE WATER AND SANITARY SEWER TO BE PROVIDED BY THE CITY OF APOPKA.
21. IRRIGATION WILL BE VIA RECLAIMED WATER PROVIDED BY THE CITY OF APOPKA.
22. PROPOSED WATER MAIN, RECLAIMED WATER MAIN, AND SANITARY SEWER WILL BE PUBLICLY OWNED AND MAINTAINED. UTILITIES ARE DESIGNED TO MEET CITY OF APOPKA STANDARDS.
23. ROADWAYS WILL BE PUBLICLY OWNED AND MAINTAINED.
24. THE PROJECT WILL BE DEVELOPED IN ONE PHASE.

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SEAL:

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REGISTRY #30459

SITE PLAN

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

REV#	DATE
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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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GRAPHIC SCALE
30 0 15 30 60
FEET
1 Inch = 30 Ft.

N

W. LESTER RD.

WEST LESTER RD
60' PUBLIC RIGHT OF WAY

PROPERTY BOUNDARY (TYP.)

CONNECT TO EXISTING 12" WM WITH 6"X12" WET TAPPING SLEEVE AND VALVE

DIRECTIONAL DRILL 56 LF 8" PVC FM PER CITY OF APOPKA STANDARDS

EXISTING FIRE HYDRANT

EXISTING 12" WATER MAIN

CONNECT TO EXISTING 4" FM WITH 4" X 4" WET TAPPING SLEEVE AND VALVE

DIRECTIONAL DRILL 46 LF 4" HDPE FM PER CITY OF APOPKA STANDARDS

EXISTING 6" FORCE MAIN

EXISTING 12" RWM

TRACT C

TRACT DED-1

TRACT D

LOT 2

TRACT B
POND

LOT 3

LOT 4

LOT 5

LOT 6

LOT 7

LOT 1

TRACT A
PUBLIC R.O.W.

TRACT E
SWALE 1

TRACT F

SWALE 2

TRACT G
PUBLIC LIFT STATION

TRACT H
(DRAINAGE/OPEN SPACE)

ROCK SPRINGS ESTATES
PLAT BOOK 87, PAGES 32–35

NOT PLATTED

ASPHALT ROAD

2' CURB & GUTTER (TYP)

ASPHALT (BIKE TRAIL)

CONCRETE SIDEWALK

SBM1

SBM2

15+00

14+00

10+00

11+00

12+00

13+00

SP–1

SP–2

4" PVC WM

4"X4" TEE

4" PVC RWM

DOUBLE SANITARY SEWER SERVICE (TYP.)

SINGLE RECLAIMED WATER SERVICE (TYP.)

6"X6" TEE
6"X4" REDUCER

DOUBLE POTABLE WATER SERVICE (TYP.)

SINGLE POTABLE WATER SERVICE (TYP.)

SINGLE SANITARY SEWER SERVICE (TYP.)

10.0' D.U.E.

6" PVC WM

CONNECT TO EXISTING 12" RWM WITH 4"X12" WET TAPPING SLEEVE AND VALVE

4" PVC FM

4" PVC RWM

DOUBLE RECLAIMED WATER SERVICE (TYP.)

WET WELL

SS–1
SANITARY MANHOLE
10+27.54 4.64 R

4"X4" TEE
4" G.V.

FIRE HYDRANT ASSEMBLY (TYP.)

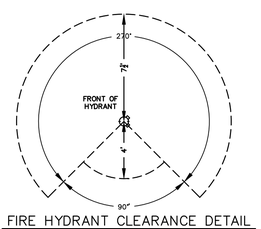
SS–2
SANITARY MANHOLE
13+33.04 5.50 R

1" WM SERVICE AND RPZBFP TO LIFT STATION

UTILITY DEMANDS

WATER: 7 DU X 350 GPD/DU = 2,450 GPD

WASTEWATER: 7 DU X 300 GPD/DU = 2,100 GPD



FIRE HYDRANT CLEARANCE DETAIL

D.U.E. = DRAINAGE, UTILITY, EASEMENT

NOTES

1. NEEDED FIRE FLOW FOR SINGLE FAMILY DWELLING UNITS SHALL BE AS FOLLOWS: HOMES 5,000 SF OR LESS SHALL PROVIDE 1,000 GPM; HOMES EXCEEDING 5,000 SF SHALL PROVIDE FIRE FLOW IN ACCORDANCE WITH NFPA 1, 18.4.5.2.1.
2. A 36 IN. CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF THE FIRE HYDRANTS AND A CLEAR SPACE OF NOT LESS THAN 60 IN. (1524 MM) SHALL BE PROVIDED IN FRONT OF EACH HYDRANT CONNECTION HAVING A DIAMETER GREATER THAN 21/2 IN. NFPA 1, 18.5.7 HYDRANT SHALL BE MARKED WITH A BLUE REFLECTOR THAT IS PLACED 6" IN THE ROADWAY IN ACCORDANCE WITH NFPA 1)
3. UTILITY EASEMENTS DEDICATED TO THE CITY OF APOPKA SHALL BE PROVIDED OVER ALL WATER AND SEWER MAINS LOCATED OUTSIDE THE PUBLIC RIGHT OF WAY.

FDEP SEPARATION REQUIREMENTS UNDER 62-555.314 EFFECTIVE 8-28-2003

HAZARD	HORIZONTAL SEPARATION	VERTICAL SEPARATION		JOINT SPACING
		WATER ABOVE	WATER BELOW	
STORM SEWER	3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
STORM FORCE MAIN	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF REGULATED UNDER 62-610	3FT MIN	12IN MIN	12IN MIN	3FT MIN
RECLAIMED WATER IF NOT REGULATED UNDER 62-610	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
VACUUM SANITARY SEWER	10FT PREF, 3FT MIN	12IN PREF, 6IN MIN	12IN MIN	3FT MIN
GRAVITY SANITARY SEWER	10FT PREF, 6FT MIN, 3FT MIN IF WATER MAIN IS 6IN ABOVE GRAVITY SANITARY SEWER.	12IN PREF, 6IN MIN	12IN MIN	6FT MIN
SANITARY SEWER FORCE MAIN	10FT PREF, 6FT MIN	12IN MIN	12IN MIN	6FT MIN
SEWAGE TREATMENT & DISPOSAL SYSTEM	10FT MIN	NONE	NONE	NONE

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FABER ENGINEERING, INC
REGISTRY #26409

UTILITY PLAN

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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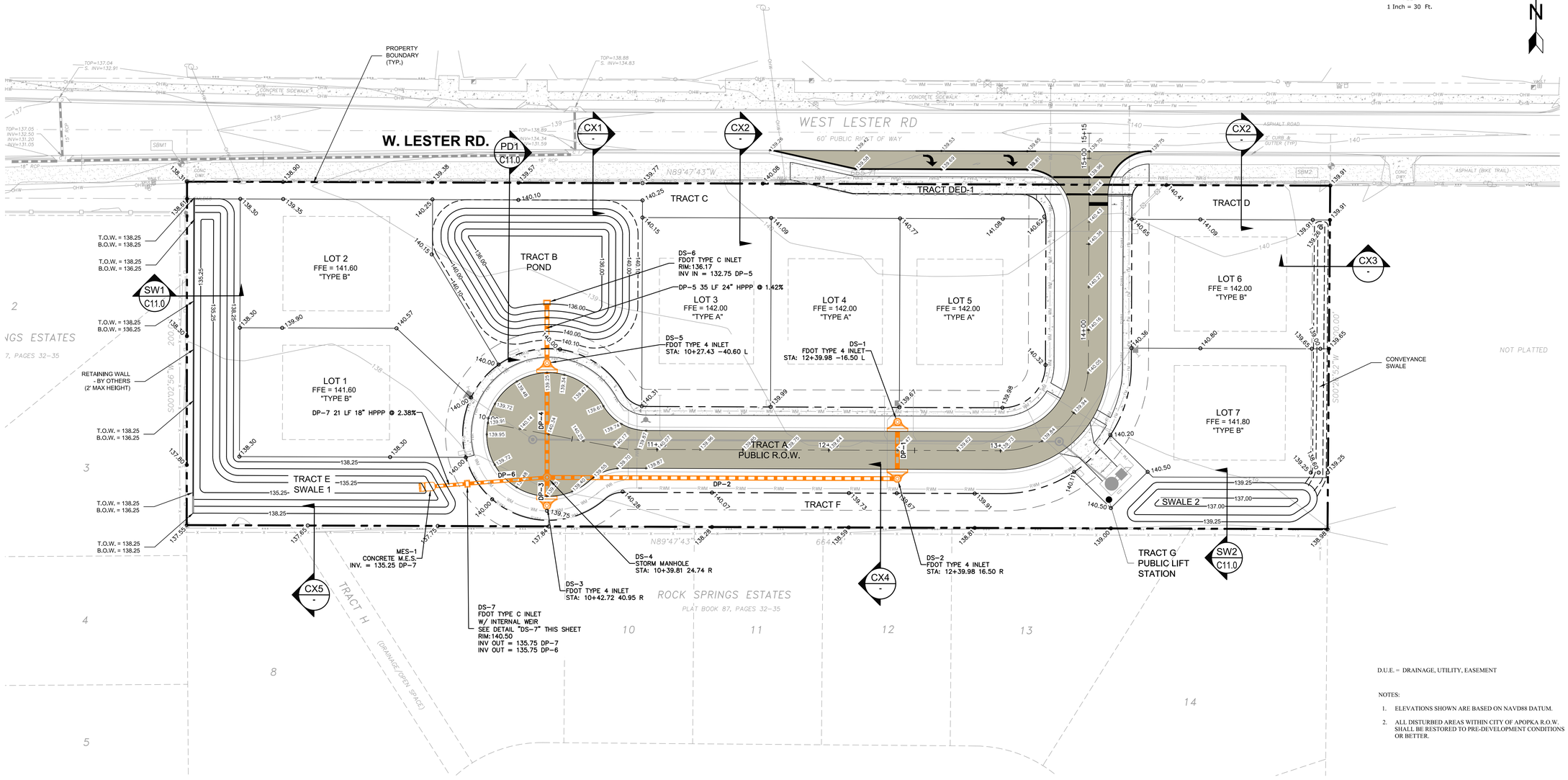
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DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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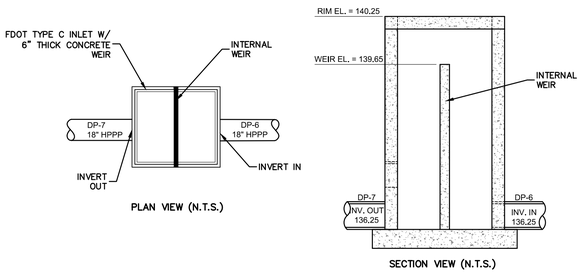
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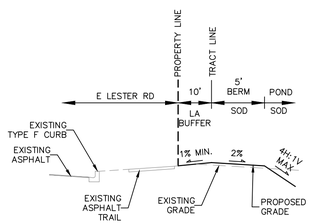
D.U.E. = DRAINAGE, UTILITY, EASEMENT

NOTES:

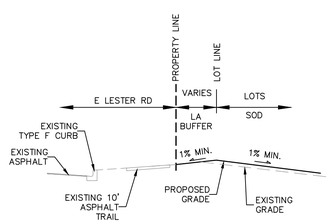
1. ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM.
2. ALL DISTURBED AREAS WITHIN CITY OF APOPKA R.O.W. SHALL BE RESTORED TO PRE-DEVELOPMENT CONDITIONS OR BETTER.



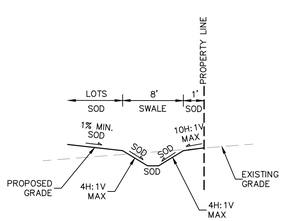
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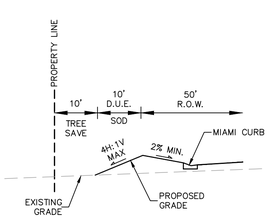
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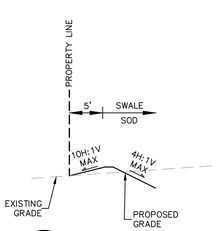
CX2 CROSS SECTION
N.T.S.



CX3 CROSS SECTION
N.T.S.



CX4 CROSS SECTION
N.T.S.



CX5 CROSS SECTION
N.T.S.

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SEAL:

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REGISTRY #29439

DRAINAGE AND GRADING PLAN

LESTER OAKS

APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

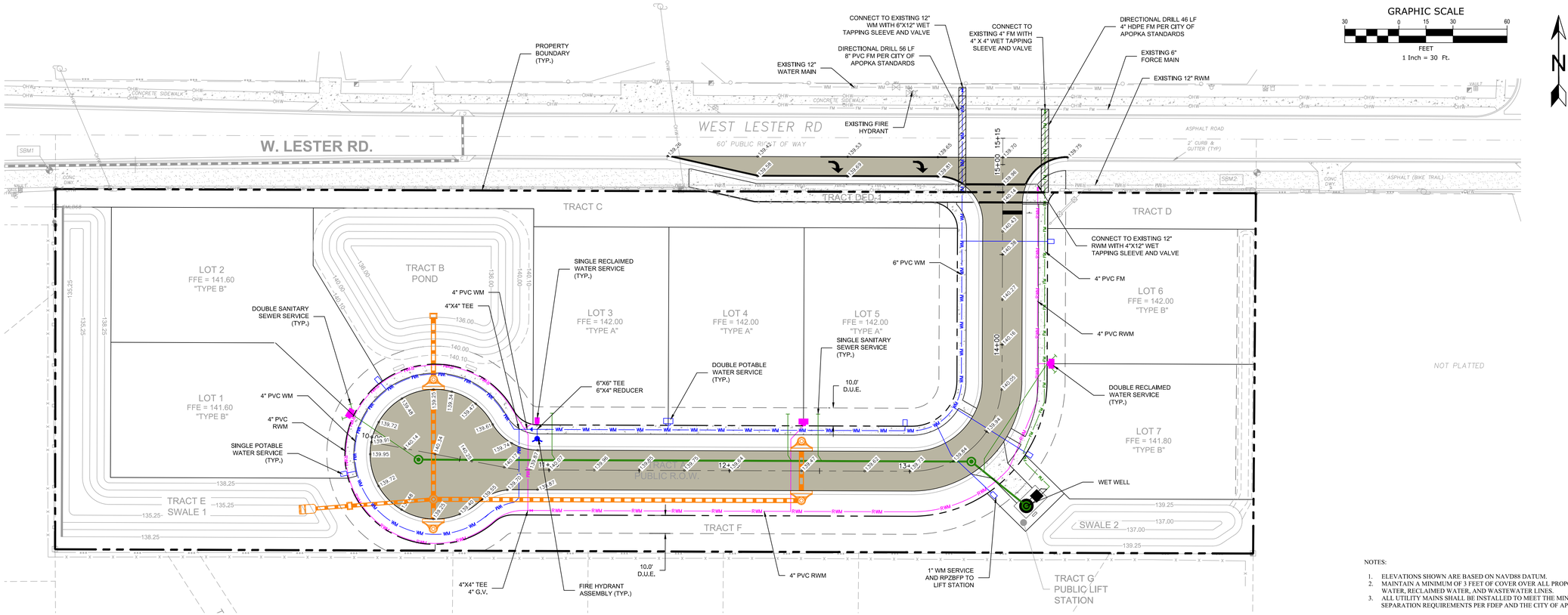
CHRIS WILLIAMS
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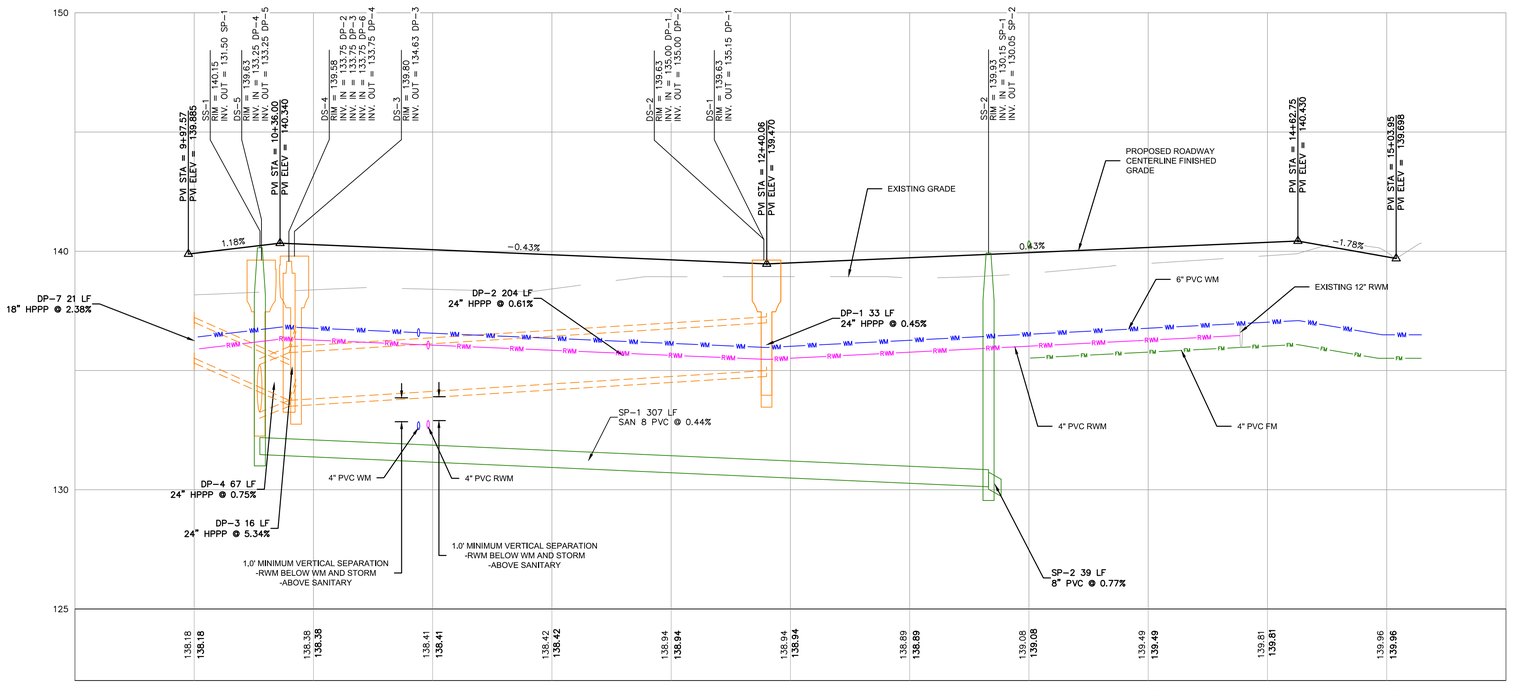
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NOTES:

1. ELEVATIONS SHOWN ARE BASED ON NAVD88 DATUM.
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, RECLAIMED WATER, AND WASTEWATER LINES.
3. ALL UTILITY MAINS SHALL BE INSTALLED TO MEET THE MINIMUM SEPARATION REQUIREMENTS PER FDEP AND THE CITY OF APOPKA.



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REGISTRY #29409

PLAN AND PROFILE

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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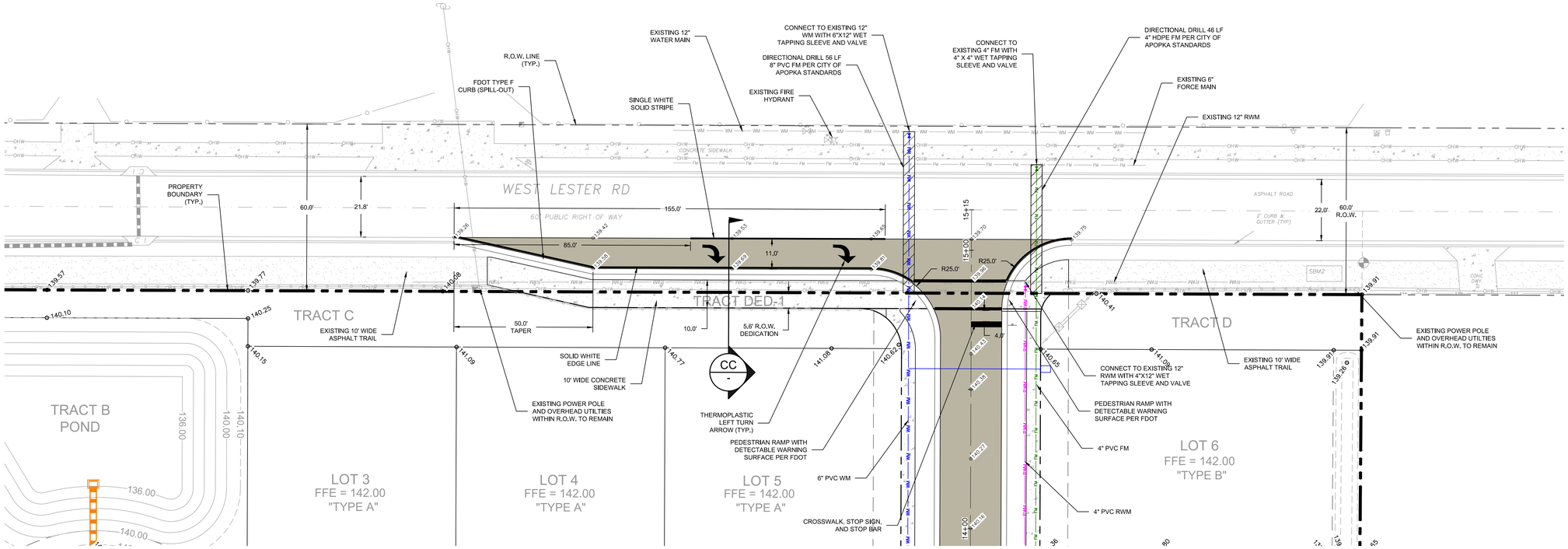
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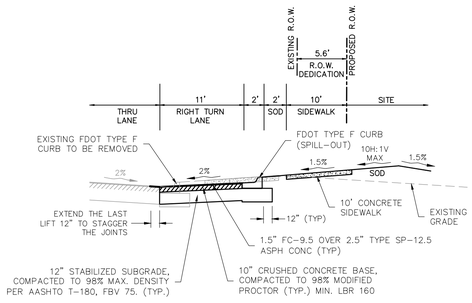
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FEET

1 Inch = 20 Ft.

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NOTE: IF THE EXISTING PAVEMENT SECTION EXCEEDS THE PROPOSED PAVEMENT THICKNESS ABOVE, THE PROPOSED PAVEMENT SECTION SHALL BE INCREASED TO MATCH THE EXISTING THICKNESS.

TL1 — RIGHT TURN LANE SECTION
N.T.S.

NOTES:

1. ALL CONSTRUCTION MATERIALS AND METHODS, SHALL MEET THE FDOT DESIGN STANDARDS PLANS (LATEST EDITION), THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, AND THE UTILITY ACCOMMODATION MANUAL, (LATEST EDITIONS).
2. ALL DISTURBED AREAS WITHIN CITY OF APOPKA RIGHT OF WAY SHALL BE GRADED AND SODDED WITH ARGENTINE BAHIA SOD.
3. ALL STRIPING SHALL BE LEAD-FREE THERMOPLASTIC.
4. ALL MAINTENANCE OF TRAFFIC SHALL ADHERE TO THE REQUIREMENTS OF THE FDOT DESIGN STANDARDS PLAN 102-### INDEXES.
5. ALL STRIPING PER FDOT STANDARDS PLAN INDEX 711-001
4. EXISTING UTILITIES AT POINTS OF CONFLICT SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. NOTIFY ENGINEER IF EXISTING CONDITIONS DIFFER FROM PLANS.
5. ELEVATIONS ARE BASED ON NAVD88 DATUM.
6. CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDERS FOR ANY EXISTING UTILITIES TO BE RELOCATED, AS NECESSARY.
7. HANDICAP (HC) RAMPS MUST BE CONSTRUCTED AT THE STREET INTERSECTION(S) AND DRIVEWAY CONNECTION(S) TO COMPLY WITH THE AMERICANS WITH DISABILITY ACT (ADA) AND ARE REQUIRED TO MEET FDOT DESIGN STANDARDS.

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FABER ENGINEERING, INC
REGISTRY #29409

PLAN AND PROFILE

LESTER OAKS

APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

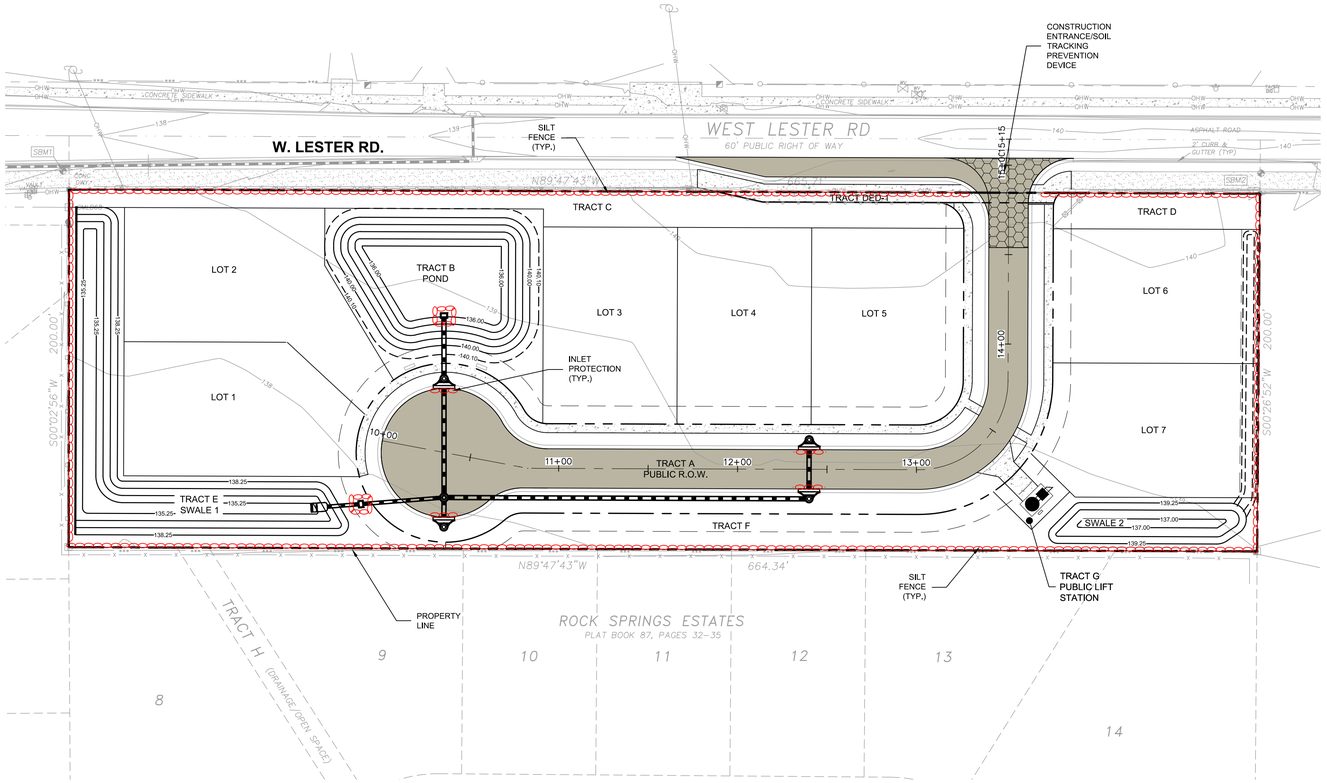
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

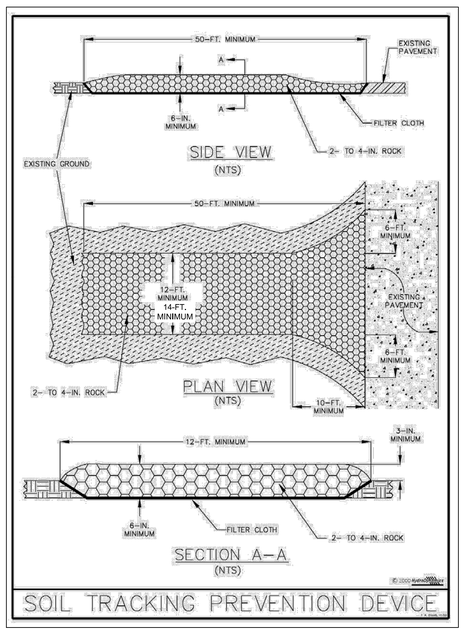
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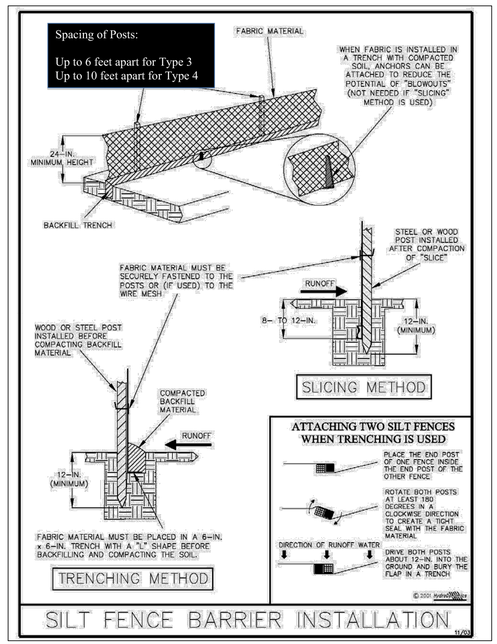
JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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GRAPHIC SCALE

40 0 20 40 80

FEET

1 Inch = 40 Ft.

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STORMWATER POLLUTION PREVENTION NOTES:

1. THE CONTRACTOR SHALL EXECUTE ALL MEASURES NECESSARY TO LIMIT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT TO THE VOLUME AND AMOUNT THAT ARE EXISTING PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THIS CONDITION WILL BE SATISFIED FOR THE TOTAL ANTICIPATED CONSTRUCTION PERIOD. PROVISION MUST BE MADE TO PRESERVE THE INTEGRITY GRADING PATTERNS, ETC. REQUIRED TO MEET THIS PROVISION THROUGHOUT THE ENTIRETY OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE SILT BARRIERS, TEMPORARY GRASSING, ETC. AS REQUIRED TO FULLY COMPLY WITH THE INTENT OF THIS SPECIFICATION.
2. NO EXCAVATED MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATER BODY OR STORMWATER COLLECTION FACILITY.
3. THE SURFACE AREA OF OPEN, RAW ERODIBLE SOIL EXPOSED BY CLEARING AND GRUBBING OPERATIONS OR EXCAVATION AND FILLING OPERATIONS SHALL BE CONTROLLED, SO THAT THIS OPERATION WILL NOT SIGNIFICANTLY AFFECT OFF-SITE DEPOSIT OF SEDIMENTS.
4. INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT LADEN STORMWATER RUNOFF UNTIL THE COMPLETION OF ALL CONSTRUCTION OPERATIONS THAT MAY CONTRIBUTE SEDIMENT TO THE INLET.
5. AREAS OPENED BY CONSTRUCTION OPERATIONS THAT ARE NOT ANTICIPATED TO BE DRESSED OR RECEIVE FINAL GRASSING TREATMENT WITH IN THIRTY DAYS SHALL BE SEEDED WITH A QUICK GROWING GRASS SPECIES WHICH WILL PROVIDE AN EARLY COVER, DURING THE SEASON IN WHICH IT IS PLANTED. TEMPORARY SEEDING SHALL BE CONTROLLED SO AS TO NOT ALTER OR COMPETE WITH PERMANENT GRASSING. THE RATE OF SEEDING SHALL BE 30 POUNDS PER ACRE.
6. THE SEEDED OR SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
7. IF AFTER 14 DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER, THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED TO ESTABLISH THE DESIRED VEGETATION COVER.
8. ALL FEATURES OF THE PROJECT SHALL BE CONSTRUCTED TO PREVENT EROSION AND SEDIMENT AND SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION PROPERLY WITHOUT THE TRANSPORT OF SEDIMENTS OUTSIDE THE LIMITS OF THE PROJECT.
9. ALL DISTURBED AREAS OUTSIDE THE EXCAVATION AND FILL LIMITS WILL BE RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THEIR CONDITION PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL NEWLY PLANTED GRASSES OR VEGETATION AND RETENTION/DETENTION FACILITIES UNTIL THE WORK HAS BEEN ACCEPTED BY THE CITY/COUNTY.
11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE STABILITY OF EMBANKMENTS AND SHALL REPLACE ANY PORTION WHICH, IN THE OPINION OF THE ENGINEER, HAS BECOME DISPLACED DUE TO EROSION OR DUE TO CARELESSNESS OR NEGLIGENCE ON THE PART OF THE CONTRACTOR.
12. THE CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS CONTROLLING POLLUTION OF THE ENVIRONMENT. MEASURES SHALL BE TAKEN BY THE CONTRACTOR TO CONTROL EROSION AND SEDIMENT RUNOFF FROM THE SITE DURING CONSTRUCTION. SUCH METHODS SHALL BE IN ACCORDANCE WITH THE CURRENT FLORIDA DEPARTMENT OF TRANSPORTATION STANDARDS.
13. ABSOLUTELY NO WORK WILL BE ALLOWED WITHIN ANY CONSERVATION AREA, BUFFER AREA, MITIGATION AREA OR DESIGNATED WETLAND AREA UNLESS SO SPECIFICALLY DESCRIBED BY THE PLANS AND GRANTED BY REASON OF PERMIT FROM THE GOVERNMENTAL ENTITY HAVING JURISDICTION OVER SAID AREA.
14. PRIOR TO CLEARING AND GRUBBING, THE LIMITS OF WETLANDS, BUFFERS WETLANDS, BUFFERS AND MITIGATION AREAS SHALL BE CLEARLY MARKED ALONG THE PROPOSED RIGHT OF WAY LINE TO PROTECT THESE AREAS FROM ENCROACHMENT FROM CONSTRUCTION ACTIVITIES.
15. ALL FILL EMBANKMENT AND GRADED AREAS SHALL BE PROTECTED AGAINST EROSION BY METHODS STATED IN SECTION 104, F.D.O.T. STANDARD SPECIFICATIONS FOR BRIDGE AND ROAD CONSTRUCTION. SIDE SLOPE MAY BE SEED AND MULCHED, PROVIDED THAT THE MULCH MATERIAL IS DISC HARROWED AND THE SIDE SLOPES ARE NEITHER GREATER THAN 3:1 NOR PART OF A DRAINAGE CONVEYANCE.
16. EROSION CONTROL AT ALL INLET DRAINAGE STRUCTURES DURING CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH LOCAL MUNICIPAL REQUIREMENT AND THE F.D.O.T. EROSION AND SEDIMENT CONTROL MANUAL (2013 ED.).
17. INSPECTIONS ON EROSION CONTROL MEASURES WILL BE PERFORMED BY THE CONTRACTOR ONCE PER WEEK AND WITHIN 24 HOURS AFTER 1/2 INCH OF RAINFALL. THE INSPECTIONS MUST BE LOGGED BY THE CONTRACTOR AND KEPT WITH THE APPROVED PLANS AND SWPPP.
18. GRAVEL CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO MINIMIZE EXPORT OF ONSITE DIRT. IF GRAVEL IS NOT ALLOWED, THE CONSTRUCTION ENTRANCES SHALL BE SWEPT PERIODICALLY AND LOGGED BY THE CONTRACTOR.
19. THE CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES TO PREVENT DUST FROM POLLUTING ADJACENT PROPERTIES.

EROSION CONTROL:

THE CONTRACTOR SHALL PERFORM EROSION CONTROL MEASURES IN ACCORDANCE WITH LOCAL MUNICIPAL AND WATER MANAGEMENT DISTRICT STANDARDS, DETAILS CONTAINED IN THE PLANS, AND THE FOLLOWING NOTES AND AS DIRECTED BY THE ENGINEER.

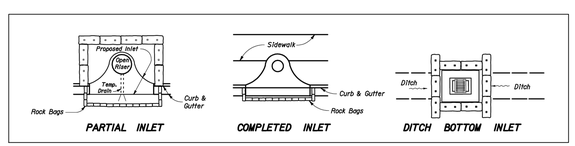
A. TEMPORARY EROSION CONTROL

1. STOCKPILING MATERIAL. NO EXCAVATING MATERIAL SHALL BE STOCKPILED IN SUCH A MANNER AS TO DIRECT RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
2. INLET PROTECTION – INLETS AND CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT-LADEN STORM RUNOFF DIRECTLY OFF THE PROJECT SITE OR INTO ANY ADJACENT WATERBODY OR STORMWATER COLLECTION FACILITY.
3. TEMPORARY SEEDING / STRIP SODDING – AREAS OPENED BY CONSTRUCTION OPERATIONS AND THAT ARE NOT ANTICIPATED TO BE DRESSED AND RECEIVE FINAL GRASSING TREATMENT WITHIN THIRTY DAYS SHALL BE STRIP-SODDED ALONG ALL DEDICATED ROW'S. THIS WILL PREVENT SEDIMENT RUNOFF FROM INDIVIDUAL LOTS INTO THE ROW AND DRAINAGE SYSTEMS, AND WILL NOT LATER COMPETE WITH THE PERMANENT LOT GRASSING.
4. TEMPORARY SEEDING AND MULCHING – SLOPES STEEPER THAN 6:1 THAT FALL WITHIN THE CATEGORY ESTABLISHED IN NOTE 3 ABOVE SHALL ADDITIONALLY RECEIVE MULCHING OF APPROXIMATELY 2 INCHES LOOSE MEASURE OF MULCH MATERIAL CUT INTO THE SOIL OF THE SEEDED AREA TO A DEPTH OF 4 INCHES.
5. TEMPORARY GRASSING – THE SEEDED OR THE SEEDED AND MULCHED AREA(S) SHALL BE ROLLED AND WATERED AS REQUIRED TO ASSURE OPTIMUM GROWING CONDITIONS FOR THE ESTABLISHMENT OF A GOOD GRASS COVER.
6. TEMPORARY REGRASSING – IF AFTER FOURTEEN DAYS, THE TEMPORARY GRASSED AREAS HAVE NOT ATTAINED A MINIMUM OF 75% GOOD GRASS COVER THE AREA WILL BE REWORKED AND ADDITIONAL SEED APPLIED SUFFICIENT TO ESTABLISH THE DESIRED VEGETATION COVER.
7. THE CONTRACTOR SHALL PLACE SYNTHETIC HAY BALES AROUND ALL EXISTING AND NEWLY CONSTRUCTED INLETS TO CONTROL EROSION DURING CONSTRUCTION. NATURAL HAY BALES ARE NOT ALLOWED.
8. MAINTENANCE – ALL FEATURES OF THE PROJECT DESIGNED AND CONSTRUCTED TO PREVENT EROSION AND SEDIMENT SHALL BE MAINTAINED DURING THE LIFE OF THE CONSTRUCTION SO AS TO FUNCTION AS THEY WERE ORIGINALLY DESIGNED AND CONSTRUCTED.

B. PERMANENT EROSION CONTROL

THE EROSION CONTROL FACILITIES OF THE PROJECT SHOULD BE DESIGNED TO MINIMIZE THE IMPACT ON OFF-SITE FACILITIES. ALL STORMWATER DISCHARGE FROM THE PROJECT LIMITS SHALL BE ROUTED THROUGH DETENTION BASINS TO TRAP SUSPENDED SEDIMENTS AND DISCHARGE FACILITIES FROM THESE BASINS SHALL BE PROVIDED WITH A SKIMMER DEVICE TO TRAP FLOATABLE DEBRIS.

1. PERMANENT SEEDING – ALL AREAS WHICH HAVE BEEN DISTURBED BY THE CONSTRUCTION WILL, AT A MINIMUM, BE FERTILIZED AND SEEDED.
2. PERMANENT SEEDING AND MULCHING – SLOPES OF 6:1 TO 4:1 INCLUSIVE WILL BE MULCHED WITH A UNIFORM THICKNESS OF APPROXIMATELY TWO INCHES, LOOSE MEASURE, OF MULCH MATERIAL INCORPORATED INTO THE SOIL BY MIXING TO A DEPTH OF FOUR INCHES.
3. PERMANENT SODDING – ALL RETENTION/DETENTION BASINS SHALL BE SODDED WITHIN THEIR LIMITS. ALL EXPOSED AREAS WITHIN PUBLIC RIGHT-OF-WAYS WILL BE SODDED. ANY AREAS WITH SLOPES STEEPER THAN 4:1 WILL BE SODDED.
4. STRIP SODDING – STRIP SOD SHALL BE PLACED ADJACENT TO ALL CURBS, WALKS AND PAVEMENTS.
5. REGRASSING – ALL GRASSED AREAS WILL BE MAINTAINED TO ASSURE A GOOD STAND AND SUFFICIENT GROUND COVER TO MINIMIZE EROSION. IF, AFTER 60 DAYS, ADEQUATE GROUND COVER HAS NOT BEEN ESTABLISHED, THE AREA WILL BE REGRASSED.
6. ADDITIONAL FERTILIZATION – GRASSED AREAS NOT ACCEPTED WITHIN 90 DAYS OF THEIR COMPLETION SHALL BE FERTILIZED.
7. FOR ADDITIONAL SODDING REQUIREMENTS, REFER TO THE LANDSCAPE PLANS.
8. FERTILIZATION TO COMPLY WITH LOCAL JURISDICTIONAL REQUIREMENTS.



Faber Engineering, Inc.
3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427 REGISTRY #29459
FABER ENGINEERING, INC

EROSION CONTROL PLAN

LESTER OAKS

APOPKA, FL

PROJECT PHASE::

CONSTRUCTION PLANS

APPLICANT:

CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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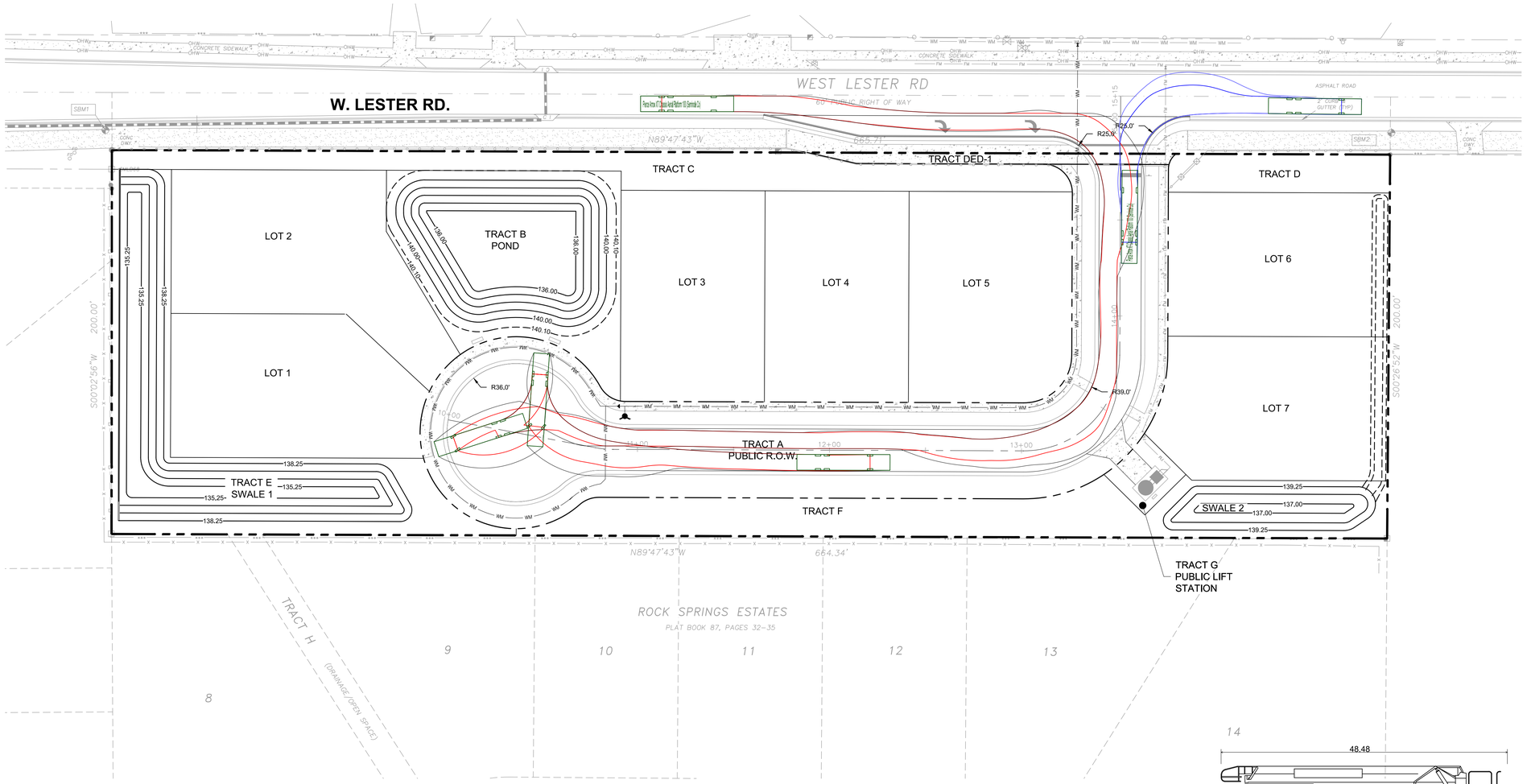
JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

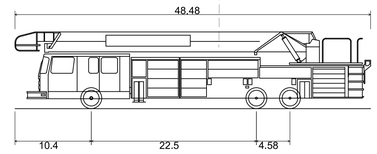
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GRAPHIC SCALE
30 0 15 30 60
FEET
1 Inch = 30 Ft.

N





Pierce Arrow XT Chassis Aerial Platform 100

LENGTH – OVERALL:	48.48'
WIDTH – EXCLUDING MIRROR:	8.17'
WIDTH – WHEEL BASE:	22.5'
WIDTH – MIRROR TO MIRROR:	10.17'
LADDER REACH SIDE:	63'
LOCK-TO-LOCK TIME:	6.00S
TURNING RADIUS – WALL TO WALL:	48.50'

FIRE TRUCK VEHICLE PROFILE
N.T.S.

Faber Engineering, Inc.
3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC
REGISTRY #29409

FIRE TRUCK CIRCULATION PLAN

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

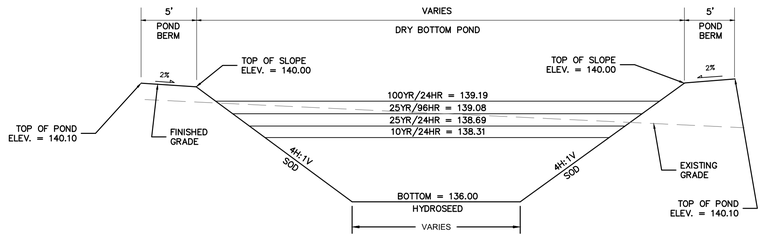
CHRIS WILLIAMS
550 W LESTER RD,
APOPKA, FL 32712

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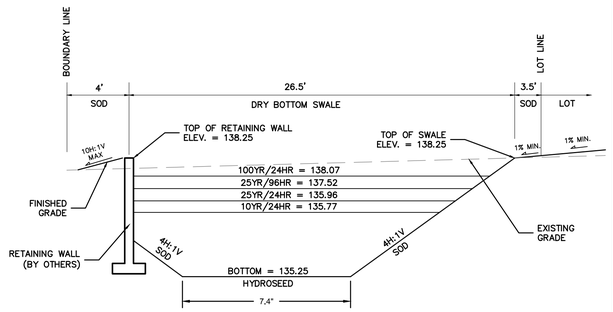
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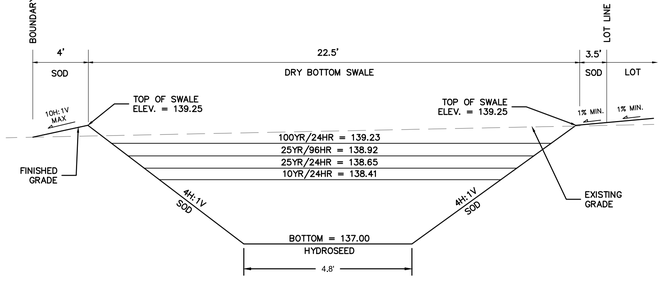
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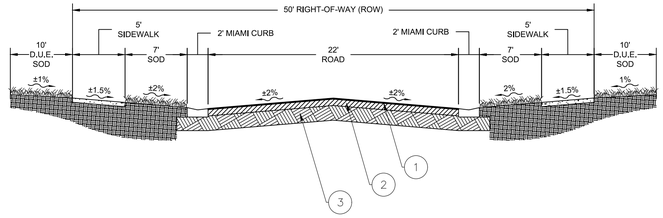
PD1 — DRY POND SECTION
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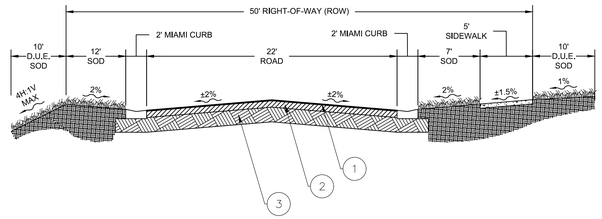
SW1 — SWALE 1 SECTION TYP.
N.T.S.



SW2 — SWALE 2 SECTION TYP.
N.T.S.



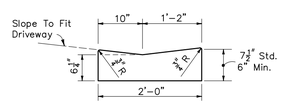
AA — TYPICAL ROADWAY SECTION
N.T.S.



BB — TYPICAL ROADWAY SECTION
N.T.S.

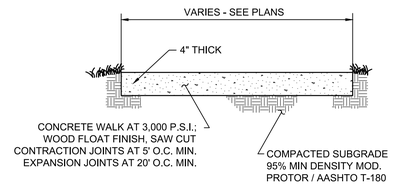
ON-SITE PAVEMENT SPECIFICATIONS:

1. 1.5-INCHES OF FLORIDA DOT ASPHALTIC CONCRETE MIX OF TYPE SP-9.5 PLACED AND COMPACTED IN ACCORDANCE WITH FLORIDA DEPARTMENT OF TRANSPORTATION SPECIFICATIONS.
2. 6-INCHES OF CRUSHED CONCRETE BASE FROM AN FDOT APPROVED MATERIAL PROVIDER, MEETING THE MINIMUM LBR AND GRADUATION REQUIREMENTS OF SECTION 911, AND COMPACTED TO A DENSITY OF NOT LESS THAN 98 PERCENT OD THE MATERIAL'S MODIFIED PROCTOR DENSITY VALUE AS DETERMINED BY AASHTO T-180 TEST METHOD.
3. 12 INCHES OF STABILIZED SUBGRADE, MINIMUM LBR EQUAL TO 40, AND COMPACTED TO A MINIMUM DENSITY EQUIVALENT TO 98 PERCENT OF THE SOIL'S MODIFIED PROCTOR DENSITY VALUE AS DETERMINED BY AASHTO T-180 TEST METHOD.

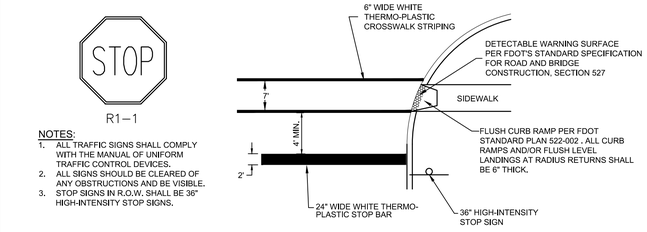


For curb, gutter, curb and gutter and traffic separators provide ½"-¾" contraction joints at 10' centers (max.). Contraction joints adjacent to concrete pavement on tangents and flat curves are to match the pavement joints, with intermediate joints not to exceed 10' centers.

MC — MIAMI CURB
N.T.S.

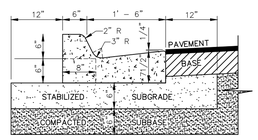


SW — CONCRETE SIDEWALK
N.T.S.



NOTES:
1. ALL TRAFFIC SIGNS SHALL COMPLY WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES.
2. ALL SIGNS SHOULD BE CLEARED OF ANY OBSTRUCTIONS AND BE VISIBLE.
3. STOP SIGNS IN R.O.W. SHALL BE 36" HIGH-INTENSITY STOP SIGNS.

ST — CROSSWALK, STOP SIGN, AND STOP BAR DETAIL
N.T.S.



FC — FDOT TYPE F CURB
N.T.S.

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ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC
REGISTRY #29459

CONSTRUCTION DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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GENERAL NOTES

1. Governing standards and specifications on this project are considered the Florida Department of Transportation (FDOT) Design Standards (2013 Edition), FDOT Standard Specifications for Road and Bridge Construction (2013 Edition), and City of Apopka Utilities Design and Construction Standards Manual (2014 Edition).
2. All personal property, except mail boxes located within the public right-of-way (not relocated by the property owner), shall be removed by the Contractor as necessary to construct the project in accordance with the Construction Plans. Mail boxes shall be relocated by the Contractor in accordance with FDOT Index No. 532.
3. The disposal of excess earthwork materials shall be the responsibility of the Contractor. Approval of disposal sites shall be obtained from the City of Apopka prior to disposal.
4. All existing trees and stumps within the right-of-way and limit of the project are to be removed as clearing and grubbing unless otherwise directed.
5. Seed and mulch all disturbed areas not covered by sod unless otherwise directed.
6. All pavement offsets shown are to the proposed centerline of construction, as where radius dimensions are to the edge of pavement, unless otherwise noted.
7. Turnout locations and widths shown in the Construction Plans are approximate and may be adjusted as necessary or as directed by the Engineer. All turnouts shall be constructed in accordance with FDOT Index No. 515.
8. The various permits included in the bid specifications payment are included in the bid price for Section 104. The Contractor shall perform his work in accordance with the requirements of "Prevention, Control, and Abatement of Erosion and Water Pollution", excluding items specified elsewhere. Environmental controls shall be used at locations designated in the plans and/or designated by the Engineer.
9. The information shown on these drawings concerning type and location of underground and other utilities are based on available records and surveys, but is not guaranteed to be accurate or all inclusive. The Contractor shall make his own determination as to the type and location of utilities as may be necessary to avoid damage there to, and is responsible for coordinating utility relocation.
10. Prior to ordering drainage structures, the Contractor shall determine if drainage utility conflicts exist. Information about possible conflicts shall be submitted to the Engineer as soon as possible after discovery of such for resolution.
11. The Contractor shall notify all gas utility companies a minimum of two working days prior to excavation as required by Chapter 77-153 of the Florida Statutes.
12. All inlet/manhole - pipe joints shall be filled with non-shrink grout, covered with an asphaltic mastic coating, and wrapped with a filter fabric material per Section 13.03.03 of the Orange County Road Construction Specifications.
13. All curb inlets, ditch bottom inlets, and manholes shall have traffic bearing frames and covers or grates meeting AASHTO-20 loading requirements.
14. Changes of pipe inverts not exceeding plus or minus one foot will not be considered as a basis for additional compensation for the pertinent pipe bid item or for modification of precast structures.
15. All benchmarks (irons and monuments) shown in the Construction Plans, or found, shall be preserved. Those shown in proposed pavement shall be protected with a cast iron valve box.
16. Public land corners within the limits of construction shall be protected. If a corner monument is in danger of being destroyed or disturbed, the Contractor shall notify the Engineer, without delay, by telephone. The Contractor shall provide written follow up confirmation within 48-hours of telephone notification.
17. Prior to beginning of any construction, the Contractor shall submit to the Engineer a set of field notes verifying the benchmark elevations and the reference point connections on the plan and profile view sheets, and/or a set of field notes for all additional benchmark and reference point connections proposed to be used in constructing the project with their location, description and elevation, based on North American Vertical Datum (NAVD88). All submittals shall be signed and sealed by a Professional Land Surveyor registered in the State of Florida.
18. Within 21 calendar days after notice to proceed, the Contractor shall stake the public right-of-way at 50 foot intervals and the right-of-way breaks with corresponding stations shown on the stakes. No invoice for payment for mobilization (Pay Item No. 101-1) will be processed until the right-of-way has been staked to the satisfaction of the Engineer.
19. Any United States Code (USC) and National Geodetic Survey (NGS) monuments within the limits of construction shall be protected. If in danger of damage, the Contractor shall notify the Engineer, and both shall notify:
    State Geodetic Advisor, NOAA
    3900 Commonwealth Blvd. - MS105
    Tallahassee, FL Phone (850) 245-2606
20. It shall be the responsibility of the Contractor to acquire all necessary right-of-way and maintenance of traffic permits. The City will waive all permits required for construction activities within the limits of public right-of-way owned and maintained by the City of Apopka. For construction activity within the limits of public right-of-way maintained by the City but owned by Orange County or the State of Florida, the Contractor shall acquire the required permits from the agencies. It shall be the responsibility of the Contractor to insure that all required permits are obtained and in-hand before beginning any construction.
21. The location of all existing utilities, storm drainage systems, and topographic features shown on the plans have been determined from the best available information and are provided for the convenience of the Contractor. The Engineer assumes no responsibility for their inaccuracy. Should a discrepancy arise between these plans and actual field conditions, which would appreciably affect the execution of these plans, the Contractor shall halt construction and notify the Engineer immediately.
22. The Contractor shall be responsible for notifying the City within 48 hours before any inspections. Also, the Contractor shall be responsible for meeting all inspection criteria, schedules and signing said inspections.
23. The Contractor shall not excavate, remove or otherwise disturb any material, structure or part of a structure which is located outside the lines, grades or grading section, established for this project, except where such excavations or removal is provided or in the Contract Construction Plans or Technical Specifications.
24. All work and all materials furnished shall be in conformity with the lines, grades, grading sections, cross sections, dimensions, material requirements, and testing requirements that are specified in the Contract Construction Plans or Technical Specifications.
25. All work shall be accomplished in strict accordance with all applicable federal, state and local codes, ordinances and regulations.
26. Apparent errors, discrepancies or omissions in the Construction Plans shall be brought to the Engineer's attention before bidding.
27. After completion of construction, the Contractor shall provide to the City a completed as-built plan one week prior to the final inspection. Before the final acceptance it shall be the Contractor's responsibility to perform a site cleanup for the removal of trash, debris, excess materials, and equipment to present the project site clean and in good order.
28. No extra payments shall be allowed for any work required due to misunderstanding of job or site conditions affecting the work as described in the Technical Specifications or shown on the Construction Plans. The Contractor shall not take advantage of any apparent error or omission in the Construction Plans or Technical Specifications and the Engineer shall be permitted to make corrections and interpretation as may be deemed necessary for the fulfillment of the intent of the Contract Documents. By entering the bidding process the bidders acknowledge acceptance of these conditions.
29. The Contractor shall submit four (4) sets of detailed shop drawings of all major items proposed for this project to the Engineer prior to ordering any of the equipment or material. Two (2) copies of the shop drawings will be returned to the Contractor. Upon the Contractor's receipt of approved shop drawings from the Engineer, the Contractor may proceed with the work.
30. The Contractor shall comply with the legal load restrictions in hauling of materials in public roads beyond the limits of construction work. A special permit will not relieve the Contractor of liability for damage which may result from the moving of material and equipment.
31. During construction, no direct discharge of water to downstream receiving waters will be allowed. The Contractor is responsible for maintaining water quality and route discharge water in such a manner as to adequately remove silt prior to runoff from the site.
32. Connection to existing lines to which utility pipe of the Contract must connect, the following work shall be performed:
    A. Expose buried lines to confirm or determine end connection, pipe material and diameter.
    B. Furnishing and installing piping and making proper connections.

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. GN

Faber Engineering, Inc.
3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC. REGISTRY #29409

UTILITY DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

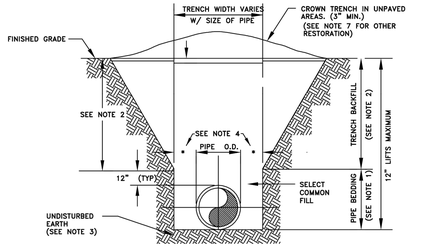
APPLICANT:
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

REV #	DATE
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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.
8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100

PROPOSED UTILITY	HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS									
	POTABLE WATER		RECLAIMED WATER*		SANITARY SEWER FORCE MAIN		SANITARY SEWER GRAVITY MAIN		STORM SEWER	
	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.	HORIZ.	VERT.
POTABLE WATER	–	–	3'	12"	6'	12"	6'	6"ABOVE 12"BELOW	3'	6"
RECLAIMED* WATER	3'	12"	–	–	3'	12"	3'	12"	–	–
SANITARY SEWER FORCE MAIN	6'	12"	3'	12"	–	–	–	–	–	–
SANITARY SEWER GRAVITY MAIN	6'	6"ABOVE, 12"BELOW	3'	12"	–	–	–	–	–	–

GENERAL NOTES:

1. THE TABLE REPRESENTS THE MINIMUM SEPARATION REQUIREMENTS AS DESCRIBED IN F.D.E.P. RULES OF THE FLORIDA ADMINISTRATION CODE (F.A.C.). THESE SEPARATION REQUIREMENTS SHALL APPLY BETWEEN NEWLY PROPOSED UTILITY LINES AND EXISTING OR PROPOSED UTILITY LINES.
2. * FOR THE PURPOSE OF THIS TABLE, RECLAIMED WATER SHALL MEAN UNRESTRICTED PUBLIC ACCESS REUSE WATER AS DEFINED BY F.A.C. 17-610. OTHER TYPES OF RECLAIMED WATER ARE CONSIDERED RAW SEWAGE AND SEPARATIONS LISTED FOR SANITARY SEWER SHALL APPLY.
3. ALL SEPARATION DISTANCES ARE FROM OUTSIDE OF PIPE TO OUTSIDE OF PIPE UNLESS OTHERWISE SPECIFIED. CRITERION PRODUCING GREATER CLEARANCE SHALL BE USED.

   C/C – DENOTES CENTER OF PIPE TO CENTER OF PIPE.

   O/O – DENOTES OUTSIDE OF PIPE TO OUTSIDE OF PIPE.
4. ACCEPTABLE VARIANCES:
   A. WHERE HORIZONTAL SEPARATION IS NOT ATTAINABLE, PVC-C-900 SDR-14 OR CONCRETE ENCASEMENT MUST BE USED FOR THE SANITARY SEWER LINE FOR AT LEAST ONE OF THE PIPES. PVC-C-900 SDR 14 OR CONCRETE ENCASEMENT MUST BE USED UNTIL MINIMUM CLEARANCE IS REGAINED.
   B. WHERE 18 INCH VERTICAL SEPARATION IS NOT ATTAINABLE AT CROSSINGS, USE ONE FULL LENGTH OF PVC-C-900 SDR-14 FOR SANITARY SEWERS OR ENCASED PIPE CENTERED AT THE POINT OF CROSSING SPECIAL SUPPORT MAY BE REQUIRED.
5. NO WATER PIPE SHALL PASS THROUGH OR COME IN CONTACT WITH ANY PART OF A SANITARY OR STORM WATER MANHOLE OR STRUCTURE.
6. CONCRETE ENCASEMENT SHALL NOT BE USED UNLESS APPROVED BY PUBLIC SERVICES DIRECTOR OR HIS DESIGNEE.

HORIZONTAL & VERTICAL SEPARATION REQUIREMENTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 104

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *											
	PIPE SIZE										
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND	33	43	51	60							
45° BEND	14	18	22	25							
22-1/2° BEND	7	9	11	12							
11-1/4° BEND	4	5	6	6							
TEE**	1	7	24	44							
REDUCER (ONE SIZE SMALLER)		41	39	40							
DEAD END	74	96	115	136							

* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

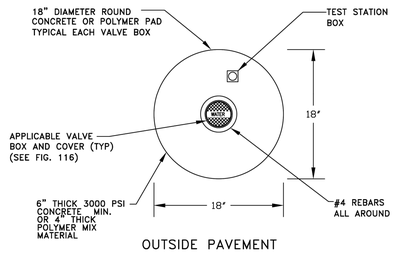
NOTES:

1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:

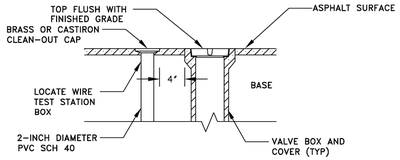
   TYPE OF PIPE: PVC
   WORKING PRESSURE: 150 P.S.I.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: S
6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105



OUTSIDE PAVEMENT

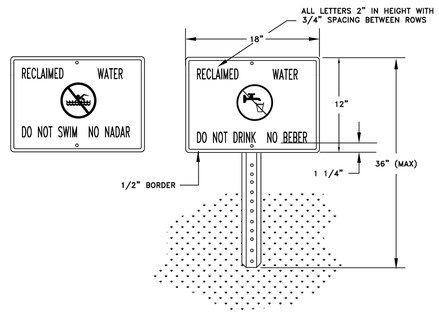


INSIDE PAVEMENT

VALVE IDENTIFICATION TAG TO BE INSTALLED BY CITY & PAID FOR BY DEVELOPER

VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109

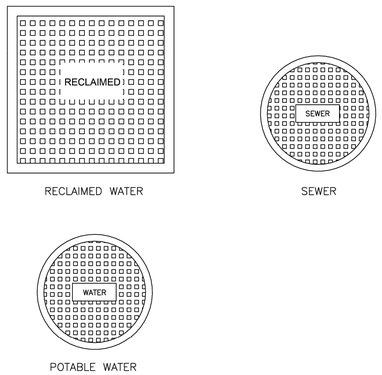


NOTES:

1. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
2. BACKGROUND SHALL BE WHITE, LETTERS AND FIGURES SHALL BE BLACK. PROHIBITIVE SYMBOL SHALL BE RED.
3. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
4. POST SHALL BE U CHANNEL 12 FT, 2 LB. HOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, HOT DIP GALVANIZED PER ASTM A-123.
5. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
6. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY PUBLIC SERVICES DEPARTMENT.

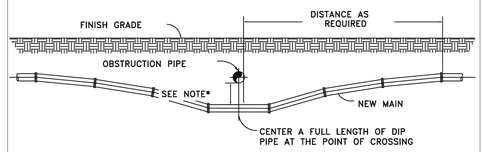
RECLAIMED WATER ADVISORY SIGN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 115



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116



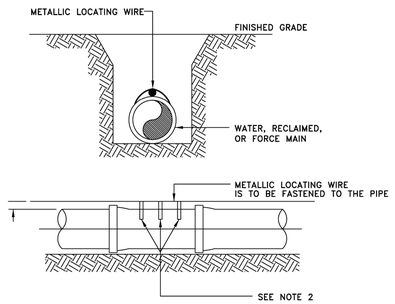
NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

UTILITY CROSSING PIPE DEFLECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 117



NOTES:

1. ALL PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE – 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

PIPE LOCATING WIRE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118

Faber Engineering, Inc.
3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427 REGISTRY #29409
FABER ENGINEERING, INC

UTILITY DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

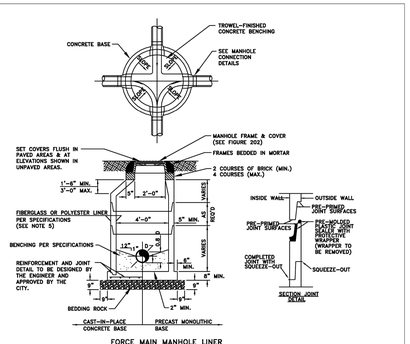
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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FORCE MAIN MANHOLE LINER

DIAMETER (INCHES)	THICKNESS (INCHES) HEIGHT (FEET) 3–6	7–12	13–17	MATERIAL	MANUFACTURER
48					
60					
72					

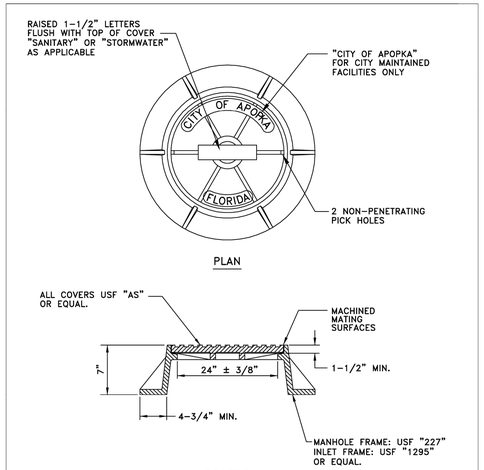
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED WITH HDPE OR FIBERGLASS AS DIRECTED BY THE CITY.

TYPICAL MANHOLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 200

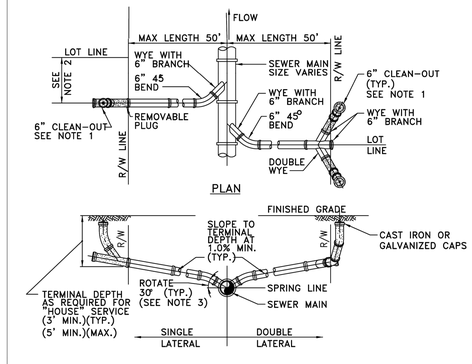


NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC BEARING RATED H–20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 202

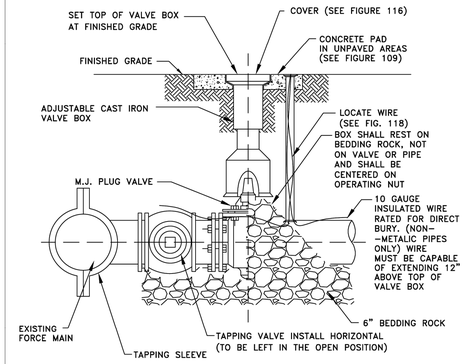


NOTES:

1. CLEAN–OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON–RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN–OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

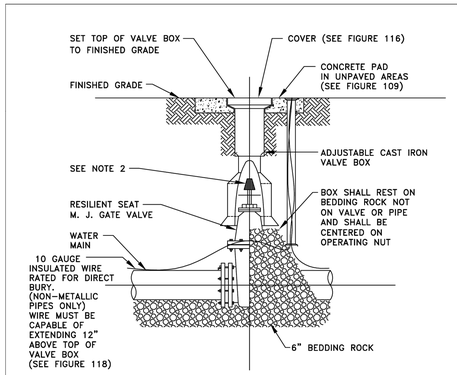
SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204



FORCE MAIN WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 206

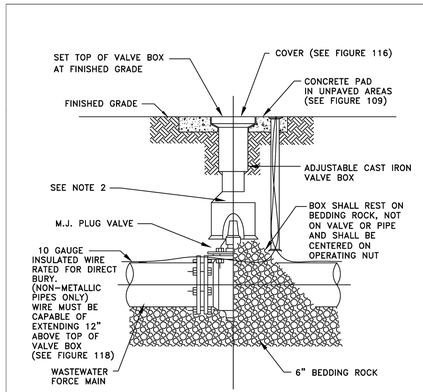


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400

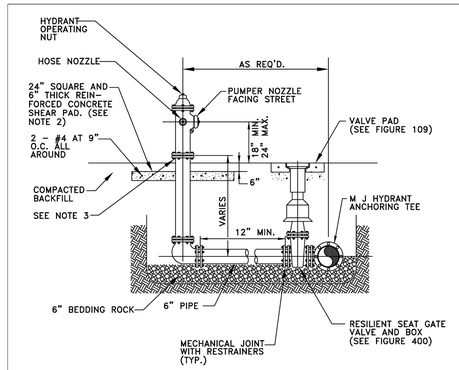


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN 3 FEET BELOW FINISHED GRADE.

PLUG VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400 A

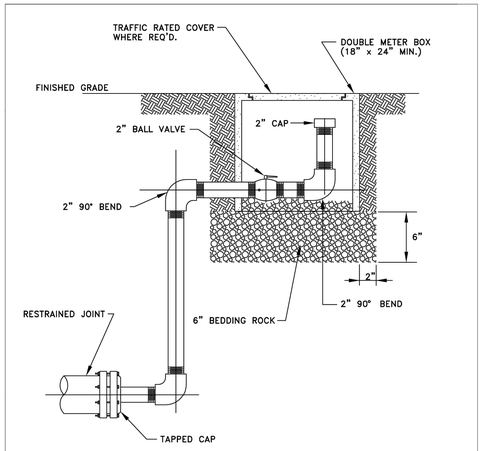


NOTES:

1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA CONSTRUCTION DESIGN STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 402



NOTES:

1. ALL 2 INCH PIPE AND FITTINGS SHALL BE SCHEDULE 40 GALVANIZED STEEL OR BRASS WITH THREADED (NPT) JOINTS. USE TEFLON TAPE ON JOINTS.
2. COLOR SHALL BE APPROPRIATE FOR USE.

BLOWOFF VALVE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 403

Faber Engineering, Inc.
3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC
REGISTRY #30439

UTILITY DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

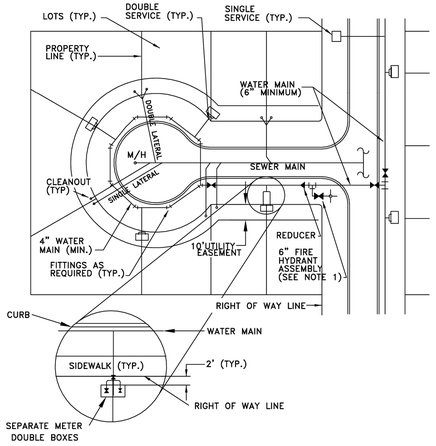
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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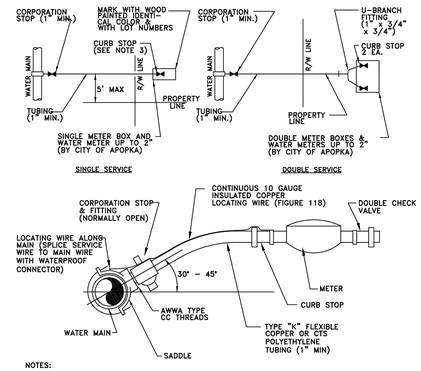


NOTES:

1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRUCTION WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. POTABLE WATER AND RECLAIMED WATER MAINS SHALL BE LOOPED THROUGHOUT CUL-DE SAC.

TYPICAL SERVICE LOCATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 404

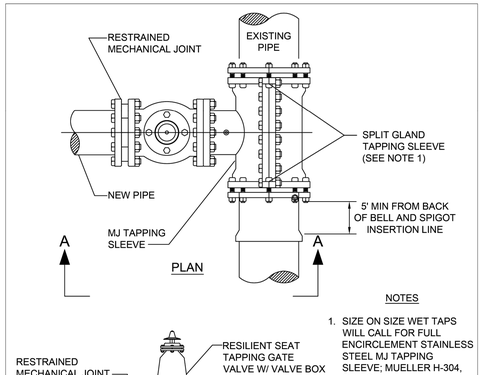


NOTES:

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

WATER SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 405



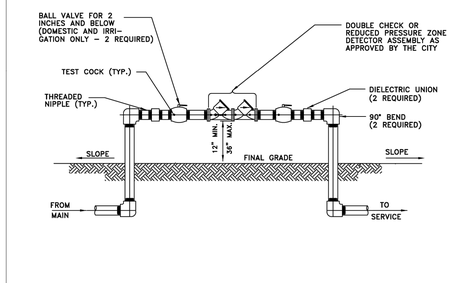
NOTES

1. SIZE ON SIZE WET TAPS WILL CALL FOR FULL ENCIRCLEMENT STAINLESS STEEL MJ TAPPING SLEEVE; MUELLER H-304, OR EQUAL.
2. ALL NEWLY INSTALLED TAPPING SLEEVES & TAPPING VALVES SHALL BE PNEUMATICALLY TESTED AT A TEST PRESSURE OF 150PSI FOR A PERIOD OF THIRTY MINUTES.

SECTION A - A

WATER AND RECLAIMED WATER MAINS WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 406



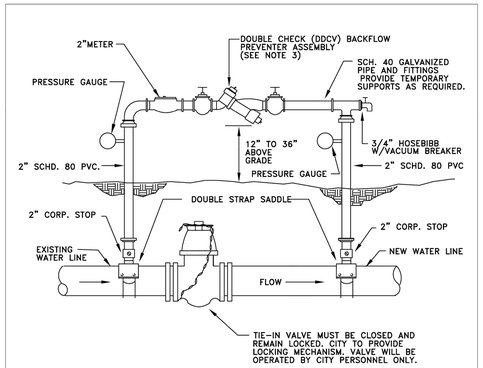
NOTES:

1. ALL PIPE FITTINGS, MATERIALS, LABOR, AND APPURTENANCES SHALL BE SUPPLIED BY THE CONTRACTOR.
2. ALL PIPE AND FITTINGS TWO (2) INCHES AND SMALLER SHALL BE THREADED SCHEDULE 40 GALVANIZED STEEL.

DOUBLE CHECK OR REDUCED PRESSURE ZONE DETECTOR ASSEMBLY

2 INCH AND BELOW ASSEMBLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 500 A



NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, ASSEMBLY, AND THE INSTALLATION OF THE DEVICE.
2. SEE FIGURE 504C FOR PROCEDURES.
3. DDCV IS MINIMUM PROTECTION REQUIRED. A RPZ DEVICE MAY BE REQUIRED DEPENDING ON PROJECT. PROVIDE COPY OF LATEST CERTIFICATION TEST RESULTS.

TEMPORARY JUMPER CONNECTION

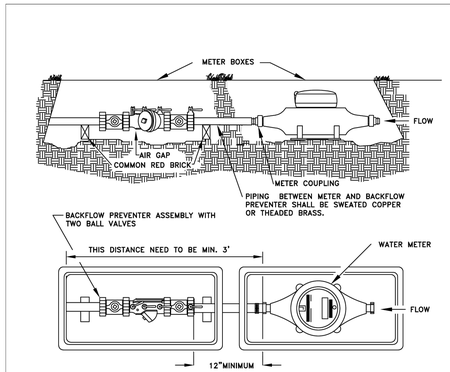
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 A

TEMPORARY JUMPER CONNECTION NOTES:

1. A temporary jumper connection is required at all connections between existing active water mains and proposed new water main improvements.
2. Figures 504 A and 504 B to be used for filling any new water main of any size from existing active water mains and for flushing of new mains up to 8 inches in diameter (2.5 FPS minimum velocity) and for pulling bacteriological samples from any new water main of any size. The jumper connection shall be maintained until after filling, flushing testing and disinfection of the new main has been successfully completed and cleared for use from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies have been received. The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains after disinfection and until the FDEP clearence letter is obtained. Thrust blocking and/or restraints shall be provided temporarily, as required. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, 2005 edition. The tapping sleeve and the exterior of the main to be tapped shall be disinfected by spraying or swabbing per section II of AWWA C651-05.
3. Flushing of 10 inches in diameter and larger water mains may be done through the tie-in valve under very controlled conditions. The following procedures shall be followed:
   - A. The tie-in valves shall be operated and pressure tested in the presence of the City engineer to verify water tightness prior to tie-in. Valves which are not water tight shall be replaced with a new valve installed immediately adjacent to the leaking valve.
   - B. The temporary jumper connection shall be constructed as detailed. The jumper connection shall be used to fill the new water main and for providing water for bacteriological sampling of the new main as required by the FDEP permit.
   - * Flushing shall not be attempted during peak demand hours of the existing water mains.
   - * All downstream valves in the system must be open prior to opening the tie-in valve.
   - * Provide for and monitor the pressure in the tie-in point. The pressure in the existing main must not drop below 35 psi.
   - * The tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.
   - C. The tie-in valve shall be locked closed by the City personel until flushing begins.
   - D. The tie-in valve shall be opened only for flushing of the new main. The procedure shall be directed by the City and observed by the engineer.
   - E. After flushing, the tie-in valve shall be closed and locked in the closed position by the City personel.
4. The contractor shall provide documentation demonstrating that the double check backflow prevention device has been tested and is in good working order at the time of installation.
5. Except as required to flush lines of greater than 8 inches in diameter, the tie-in valve shall remain closed and shall be locked in the closed position by the City. The tie-in valve shall remain locked closed until the new system has been cleared for use by FDEP and all other pertinent agencies.
6. Upon receipt of clearance for use from FDEP and all other pertinent agencies, the contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2 inch brass plugs.
7. All installation and maintenance of the temporary jumper connection and associated backflow prevention device, fittings, valve, etc. shall be the responsibility of the contractor.

PROCEDURES FOR TEMPORARY JUMPER CONNECTION

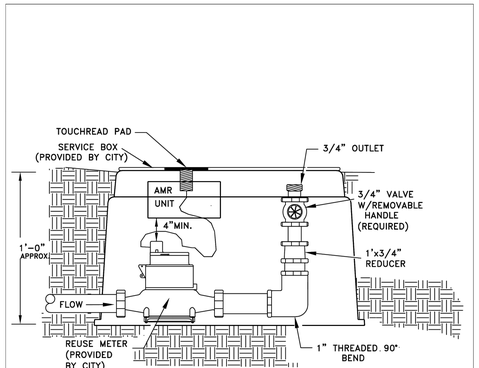
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 C



1. A 3' PIECE OF STRAIGHT PIPE MUST BE CONNECTED TO METER USING THE DESIGNATED HOLES IN THE METER BOX BEFORE ANY ANGLES ARE CONNECTED. THE SAME RULES APPLY FOR DOUBLE METER HOOK-UPS.
2. BACKFLOW DEVICE AND METER ARE TO BE SET BY THE CITY FOR METERS 2-INCH OR LESS IN SIZE.

POTABLE WATER SERVICE DETAIL FOR LOTS SERVED WITH RECLAIMED WATER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 505



RECLAIMED WATER SERVICE CONNECTION

(FOR SERVICES W/O AN IRRIGATION SYSTEM)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 506

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3165 MCCRORY PLACE, STE. 151
ORLANDO, FL 32803
(407) 595-1566

SEAL:

THOMAS FABER, P.E. #87427 — REGISTRY #29459
FABER ENGINEERING, INC

UTILITY DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:

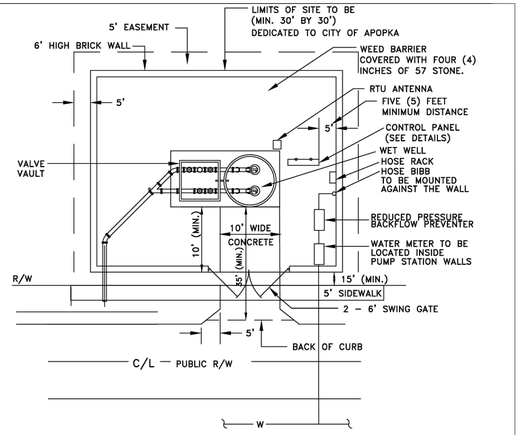
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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JOB #: 25021
DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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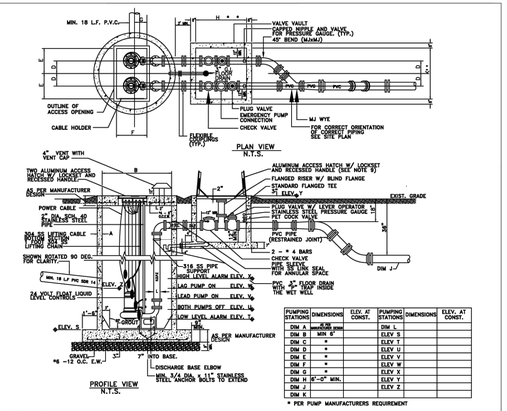


NOTES:

1. DRIVEWAY AND APRON SHALL BE SIX (6) INCH THICK, 3000 P.S.I. CONCRETE. WITH No.6X6 WIRE MESH OR FIBER MESH.
2. POWER TO THE PUMP STATION SHALL BE THROUGH UNDERGROUND CONDUIT FROM SUPPLY SOURCE IN RIGHT-OF-WAY.
3. GATE TO BE DECORATIVE BLACK POWDER COATED ALUMINUM W/PICKET SPACING = OR < 4"
4. WALLS ARE TO BE BRICK OR DECORATIVE STONE.
5. WET WELL LID MUST OPEN TOWARD CONTROL PANEL (HINGE SIDE TOWARD PANEL).
6. LIFT STATION WALL TO BE PLACED AT LEAST 15FT. BEHIND THE R/W LINE.

PUMP STATION TYPICAL SITE PLAN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 300



PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.	PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.
DIM A	AS PER MANUFACTURER DESIGN		DIM L	4"	
DIM B	MIN 6"	6"	ELEV S	126.55	
DIM C	*		ELEV T	128.05	
DIM D	*		ELEV U	128.55	
DIM E	*		ELEV V	128.75	
DIM F	*		ELEV W	129.25	
DIM G	*		ELEV X	129.75	
DIM H	6'-0" MIN.		ELEV Y	140.60	
DIM J			ELEV Z	129.75	
DIM K					

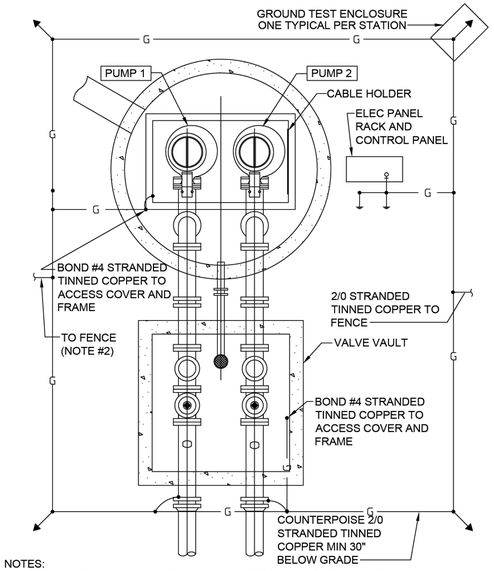
* PER PUMP MANUFACTURERS REQUIREMENT

GENERAL NOTES:

1. VALVE VAULT AND WET WELL LIDS SHALL BE COATED WITH 1 COAT OF THEMEC SERIES 66, COLOR ENGS, (2-3 MILS), FOLLOWED BY TOP COAT OF THEMEC SERIES 73, COLOR ENGS, (2-3 MILS) OR EQUAL.
2.A THE WET WELL SHALL BE CONSTRUCTED OF FIBERGLASS REINFORCED POLYESTER (RPP) AND MANUFACTURED FROM COMMERCIAL GRADE POLYESTER RESIN OR VINYL ESTER RESIN, WITH FIBERGLASS REINFORCEMENTS. THE WET WELL SHALL BE A ONE PIECE UNIT AND MANUFACTURED BY L.F. MANUFACTURE, INC. OR EQUAL.
2.B IN LIEU OF RPP THE WET WELL MAY BE CONSTRUCTED OF PRECAST CONCRETE HAVING A MINIMUM WALL THICKNESS OF 8 INCHES. THE INTERIOR WALLS SHALL BE COATED WITH A HIGH DENSITY POLYETHYLENE PRODUCT AS MANUFACTURED BY AGRU SUNO, INC. OR EQUAL.
3. PIPING TO THE WET WELL TO BE HDPE WITH FUSED 45 DEGREES FITTINGS FROM WET WELL TO VALVE VAULT.
4. INTERIOR OF THE VALVE VAULT AND PIPING IN THE VALVE VAULT WITH ConSeal CS-55 (OR EQUAL), TWO COATS, 4 MILS EACH. PIPING SHALL BE COATED AFTER INSTALLATION.
5. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND SMALLER. CLEARANCES SHALL INCREASE AS REQUIRED FOR LARGER PIPE SIZES.
6. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
7. ALL LOCATIONS WHERE PIPES ENTER OR LINK THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE AND STAINLESS STEEL LINK SEAL.
8. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
9. WET WELL AND VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURER AND APPROVED BY THE CITY.
10. FLEXIBLE COUPLING SHALL BE SLEEVE TYPE, EPOXY COATED.
11. PUMPS SHALL BE:
MANUFACTURER: _____; MODEL: _____; DIA: _____; SPEED: _____; DISCHARGE SIZE: _____ IN.;
VOLTAGE: _____; HZ.: _____; PHASE: _____; H.P.: _____; MIN. SOLID SIZE: _____ IN.
12. OPERATING CONDITIONS SHALL BE _____ GPM AT _____ FEET TDH.
13. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE 316 STAINLESS STEEL.
14. "P" TRAP TO BE INSTALLED IN WET WELL.
15. ALL PUBLIC LIFT STATIONS SHALL BE EQUIPPED WITH SCADA SYSTEM.THE DEVELOPER SHALL PAY THE CITY COST OF THE UNIT.THE CITY WILL BE RESPONSIBLE FOR INSTALLATION.
16. ALL LIFT STATIONS SHALL BE FENCED WITH DECORATIVE STONE OR BRICK OR AS DIRECTED BY THE CITY.
17. ALL LIFT STATIONS SHALL HAVE A 10 FEET WIDE CONCRETE ACCESS DRIVEWAY, 35' LONG FROM EDGE OF WET WELL TO BACK OF CURB.
18. ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.

PUMP STATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 301

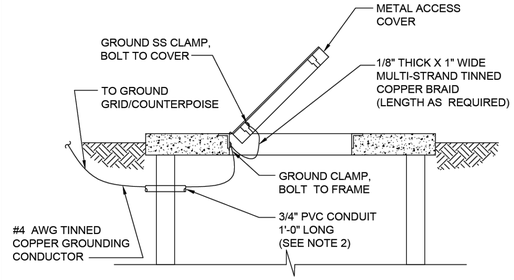


NOTES:

1. DETAIL IS GENERIC. SPECIFIC LOCATIONS OF EQUIPMENT MAY VARY.
2. TIE TO FENCE, MINIMUM 2 LOCATIONS. NOT REQUIRED WHERE PVC COATED OR BLOCK FENCE IS INSTALLED.
3. PROVIDE EXOTHERMIC WELDS UNLESS NOTED OTHERWISE.

PUMP STATION GROUNDING (TYPICAL)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307



NOTES:

1. ON COVERS WITH MULTIPLE DOORS, PROVIDE BRAID FROM FRAME TO DOOR ON EACH DOOR. PROVIDE WATERPROOF CAULKING WHERE GROUND CABLE AND CONDUIT PENETRATES WETWELL TO PREVENT INTRUSION OF GROUNDWATER AND ESCAPE OF VAPORS FROM WETWELL.
2. INSTALL GROUND WIRE SO THAT IT WILL NOT CROSS CLEAR OPENING OR PREVENT OR IMPEDE NORMAL METHOD OF REMOVING FLOATS OR PUMPS.

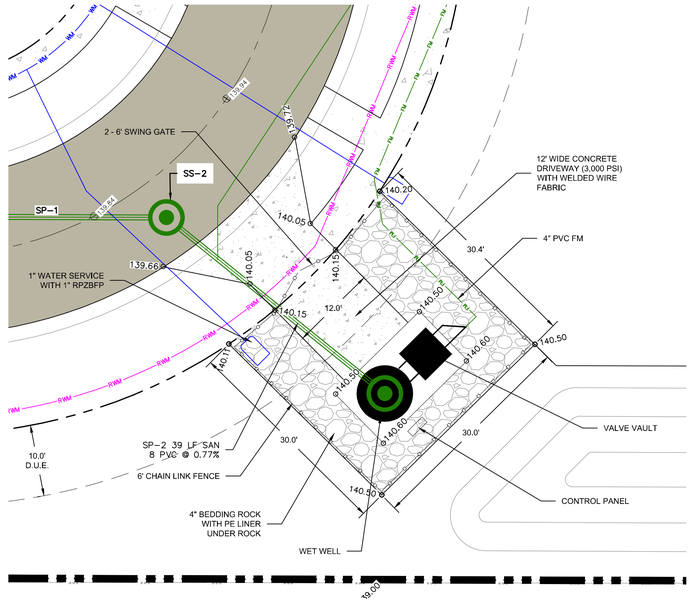
COVER AND DOOR GROUNDING

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 C

PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.	PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.
DIM A	AS PER MANUFACTURER DESIGN	6"	DIM L	4"	
DIM B	MIN 6"	6'	ELEV S	126.55	
DIM C	*		ELEV T	128.05	
DIM D	*		ELEV U	128.55	
DIM E	*		ELEV V	128.75	
DIM F	*		ELEV W	129.25	
DIM G	*		ELEV X	129.75	
DIM H	6'-0" MIN.		ELEV Y	140.60	
DIM J			ELEV Z	129.75	
DIM K					

* PER PUMP MANUFACTURERS REQUIREMENT

11. PUMPS SHALL BE:
MANUFACTURER: ABS; MODEL: XFP 80C CB1; DIA: 7 1/16"; SPEED: 1730 RPM; DISCHARGE SIZE: 3.0 IN.;
VOLTAGE: 230; HZ.: 60; PHASE: 3; H.P.: 4.7; MIN. SOLID SIZE: 3.0 IN.
12. OPERATING CONDITIONS SHALL BE 175 GPM AT 40 FEET TDH.



GRAPHIC SCALE

10 0 5 10 20

FEET

1 Inch = 10 Ft.

N

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SEAL:

THOMAS FABER, P.E. #87427
REGISTRY #26459
FABER ENGINEERING, INC

LIFT STATION PLAN AND DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

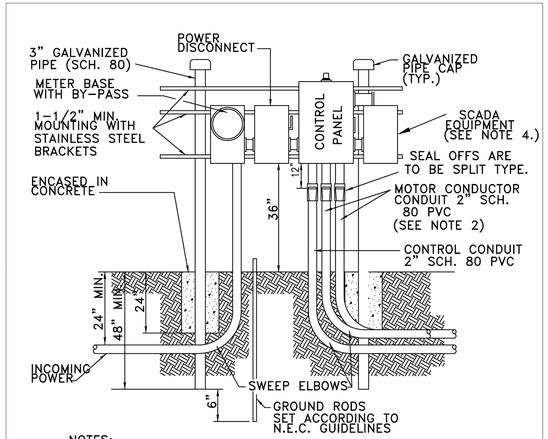
APPLICANT:
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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DATE: 03/30/26
DESIGNED BY: TRF
APPROVED BY: TRF

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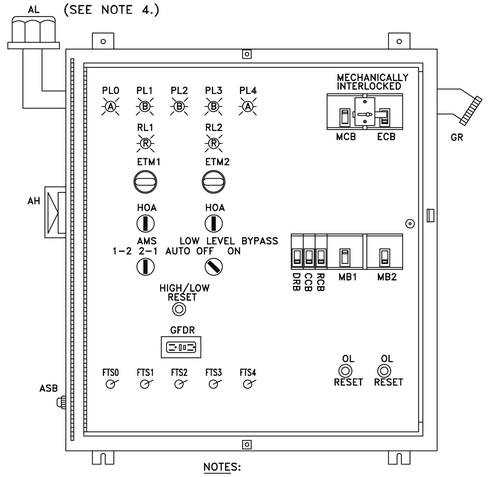
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NOTES:
1. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
2. WHEN TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO THREE (3) INCH.
3. POWER SUPPLY SHALL BE UNDERGROUND TO THE PUMP STATION AND SHALL BE THREE (3) PHASE FROM A THREE (3) PHASE SOURCE ONLY.
4. STUB OUT UNISTRUT LONG ENOUGH TO ACCOMODATE A 24"x24" SCADA EQUIPMENT CABINET. CITY TO INSTALL SCADA EQUIPMENT CABINET.

DUPLEX PUMP STATION CONTROL PANEL INSTALLATION DETAIL

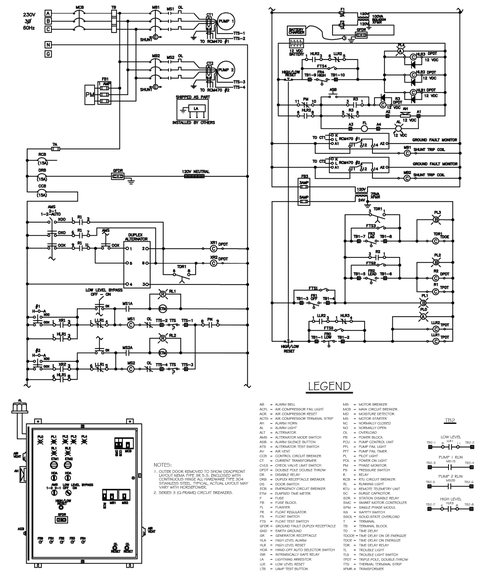
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 302



NOTES:
1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 3R 304 S.S. ENCL. WITH CONTINUOUS HINGE ALL HARDWARE STAINLESS STEEL TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER
2. SERIES 3 (Q-FRAME) CIRCUIT BREAKERS
3. GENERATOR OUTLET FOR 230V - PYLE NATIONAL MODEL JRE4100/460V - CROUSE HINDS MODEL AR 2042.
4. THE HEIGHT OF THE ALARM LIGHT WILL NEED TO BE MADE VISIBLE FROM OUTSIDE THE LIFT STATION.

DUPLEX PUMP STATION CONTROL PANEL FRONT LAYOUT

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 303



DUPLEX PUMP CONTROL PANEL GENERAL LAYOUT & SCHEMATIC

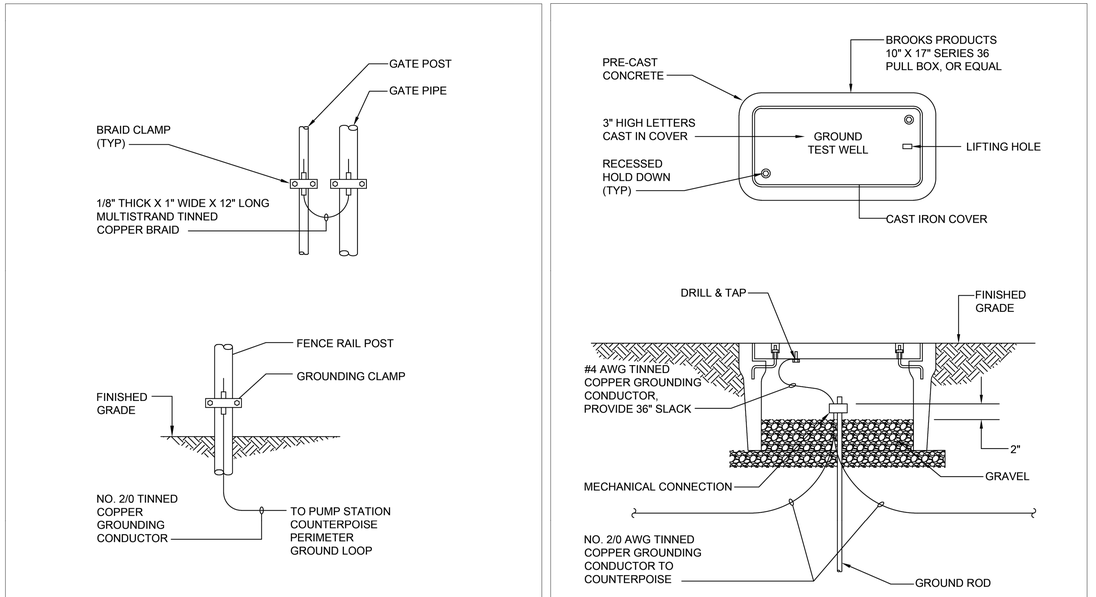
(230V-3PH)
WITHOUT GENERATOR RECEPTACLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 305 B

AB	– ALARM BELL	MB	– MOTOR BREAKER
ACFL	– AIR COMPRESSOR FAIL LIGHT	MCB	– MAIN CIRCUIT BREAKER
ACR	– AIR COMPRESSOR RESET	MD	– MOISTURE DETECTOR
ACTS	– AIR COMPRESSOR TERMINAL STRIP	MS	– MOTOR STARTER
AH	– ALARM HORN	NC	– NORMALLY CLOSED
AL	– ALARM LIGHT	NO	– NORMALLY OPEN
ALT	– ALTERNATOR	OL	– OVERLOAD
AMS	– ALTERNATOR MODE SWITCH	PB	– POWER BLOCK
ASB	– ALARM SILENCE BUTTON	PCU	– PUMP CONTROL UNIT
ATS	– ALTERNATOR TEST SWITCH	PFL	– PUMP FAIL LIGHT
AV	– AIR VENT	PFT	– PUMP FAIL TIMER
CCB	– CONTROL CIRCUIT BREAKER	PL	– PILOT LIGHT
CT	– CURRENT TRANSFORMER	POL	– POWER ON LIGHT
CVLS	– CHECK-VALVE LIMIT SWITCH	PM	– PHASE MONITOR
DPDT	– DOUBLE-POLE, DOUBLE-THROW	PS	– PRESSURE SWITCH
DR	– DISABLE RELAY	R	– RELAY
DRB	– DUPLEX RECEPTACLE BREAKER	RCB	– RTU CIRCUIT BREAKER
DS	– DOOR SWITCH	RL	– RUNNING LIGHT
ECB	– EMERGENCY CIRCUIT BREAKER	RTU	– REMOTE TELEMETRY UNIT
ETM	– ELAPSED TIME METER	SC	– SURGE CAPACITOR
F	– FUSE	SDR	– STATION DISABLE RELAY
FB	– FUSE BLOCK	SMC	– SMART MOTOR CONTROLLER
FL	– FLASHER	SPM	– SINGLE PHASE MODULE
FR	– FLOAT REGULATOR	SS	– SAFETY SWITCH
FS	– FLOW SWITCH	SSOL	– SOLID-STATE OVERLOAD
FTS	– FLOAT TEST SWITCH	T	– TERMINAL
GFDR	– GROUND FAULT DUPLEX RECEPTACLE	TB	– TERMINAL BLOCK
GND	– EARTH GROUND	TD	– TIME DELAY
GR	– GENERATOR RECEPTACLE	TDODE	– TIME DELAY ON DE-ENERGIZE
HLA	– HIGH LEVEL ALARM	TDOE	– TIME DELAY ON ENERGIZE
HLR	– HIGH LEVEL RESET	TDR	– TIME DELAY RELAY
HOA	– HAND-OFF-AUTO SELECTOR SWITCH	TL	– TROUBLE LIGHT
ISR	– INTRINSICALLY SAFE RELAY	TLS	– TROUBLE LIGHT SWITCH
LA	– LIGHTNING ARRESTOR	TPDT	– TRIPLE-POLE, DOUBLE-THROW
LLR	– LOW LEVEL RESET	TTS	– THERMAL TERMINAL STRIP
LTB	– LAMP TEST BUTTON	XFMR	– TRANSFORMER

COMPONENT LEGEND

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 306



FENCE POST GROUNDING (TYPICAL)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 A

GROUND TEST WELL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 B

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SEAL:

THOMAS FABER, P.E. #87427
FABER ENGINEERING, INC
REGISTRY #29459

LIFT STATION PLAN AND DETAILS

LESTER OAKS
APOPKA, FL

PROJECT PHASE::
CONSTRUCTION PLANS

APPLICANT:
CHRIS WILLIAMS
550 W LESTER RD.
APOPKA, FL 32712

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JOB #: 25021
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DESIGNED BY: TRF
APPROVED BY: TRF

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Construction Plans
for
Sheeler Park

City of Apopka, FL

Utilities Summary:

POTABLE WATER:	RECLAIMED WATER:	SANITARY SEWER:	FORCE MAIN:
8" PVC = 5,431 LF	8" PVC = 4,840 LF	8" PVC = 4,263 LF	6" PVC = 1,522 LF
8" GV = 14	8" GV = 10	MANHOLE = 22	6" GV = 2

Legal Description:

THE WEST 693 FEET OF THE NORTHEAST 1/4 OF THE SOUTHEAST 1/4, SECTION, 22, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA

AND

THE SOUTH 1/2 OF THE SOUTHEAST 1/4 OF THE NORTHEAST 1/4, SECTION, 22, TOWNSHIP 21 SOUTH, RANGE 28 EAST, ORANGE COUNTY, FLORIDA, LESS EXCEPT THE EAST 33 FEET FOR ROAD RIGHT OF WAY AS SET FORTH IN THAT CERTAIN DEED RECORDED IN DEED BOOK 338, PAGE 19, PUBLIC RECORDS OF ORANGE COUNTY, FLORIDA.

CONTAINING 40.319 ACRES MORE OR LESS.

Project Narrative

LOCATED IN THE CITY OF APOPKAS'S RTF ZONING DISTRICT, THE SHEELER PARK PROJECT IS A PROPOSED SINGLE FAMILY DEVELOPMENT. THIS MASTER DEVELOPMENT PLAN IS FOR A SINGLE PHASE AND INCLUDES 115 SINGLE FAMILY LOTS WITH ASSOCIATED PARKS, OPEN SPACE, STREETS, DRAINS AND UTILITIES NECESSARY TO SUPPORT THE DEVELOPMENT.

Parcel Id. No.:
22-21-28-0000-00-073
22-21-28-0000-00-227

Owner:
Marvin & Susan Reid
1920 Sheeler Ave
Apopka, FL 32703-8241

Developer/Applicant:
KB Home Orlando, LLC
9102 Southpark Center Loop, Suite #100
Orlando, FL 32819

Utility Providers

Electric:
Duke Energy
452 E. Crown Point Rd.
Winter Garden FL 34787
407.629.1010

Telephone:
AT&T
1227 S. Division Ave
Orlando, FL 34805
407.351.7100

Water, Sewer and Reuse:
City of Apopka
748 E. Cleveland St
Apopka, FL 3270
407.703.1731

CATV:
Spectrum Network
100 Gordon St.
Sanford, FL 3277
321.805.3081

Gas:
Lake Apopka Natural Gas
38 N. Park Avenue
Apopka, FL 32703
407.656.2734

Solid Waste, Fire and Police Protection:
City of Apopka
748 E. Cleveland St
Apopka, FL 3270
407.703.1731

Consultants

Civil Engineer:
Pape-Dawson
2602 E. Livingston St.
Orlando, FL 32803
407.487.2594

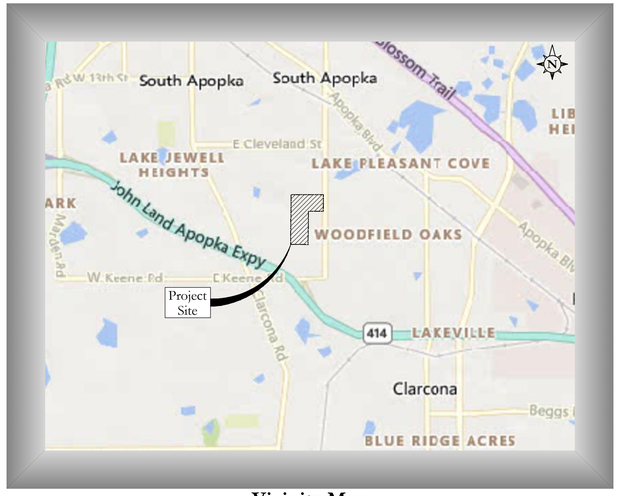
Surveyor:
Pape-Dawson
2602 E. Livingston St.
Orlando, FL 32803
407.487.2594

Environmental:
Bio-Tech Consulting Inc.
3025 East South Street
Orlando, FL 32803
407.894.5969

Geotechnical Engineer:
Universal Engineering Sciences
3532 Maggie Boulevard
Orlando, FL 32811
407.423.0504

Landscape Architect:
Catalyst Design Group
1085 W. Morse Blvd
Winter Park, FL 32789
615.622.7200

Transportation:
TMC Traffic & Mobility Consultants
3101 Maguire Boulevard, Suite 265
Orlando, FL 32803
407.531.5332



Vicinity Map
Scale: 1" = 3,000'

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E301			Site Lighting Plan	■						

	Date	Description
-	4/15/2026	Submit To City Of Apopka, Orange County & SJRWMD

NOTES:
1. CONSTRUCTION PLANS WERE PREPARED IN ACCORDANCE WITH THE LATEST MANUAL OF UNIFORM STANDARDS FOR DESIGN, CONSTRUCTION, AND MAINTENANCE FOR STREETS AND HIGHWAYS, FDOT GREEN BOOK, CITY OF APOPKA AND ORANGE COUNTY REGULATIONS AND SPECIFICATIONS.
2. IF YOU REQUIRE FURTHER CLARIFICATION OF WHAT THIS DOCUMENT REPRESENTS, PLEASE CONTACT THE ADA COORDINATOR OF CITY OF APOPKA AT 407-703-1700.

Construction Plans for Sheeler Park



This item has been electronically signed and sealed 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.

PAPE–DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

Pape-Dawson Project No.: 24-198

Date: Apr 15, 2026, 9:50am User ID: jessicaberry
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\C513622-01.dwg

GENERAL NOTES:

1. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. CONTRACTOR SHALL ABIDE BY ALL CONDITIONS CONTAINED THEREIN. PERMITS INCLUDED (BUT NOT NECESSARILY LIMITED TO) ARE:
   - WATER MANAGEMENT DISTRICT CONSUMPTIVE USE (WATER USE) FOR CONSTRUCTION DEWATERING (CUP)
   - WATER MANAGEMENT DISTRICT ENVIRONMENTAL RESOURCE PERMIT (ERP) OR MSSW
   - WATER MANAGEMENT DISTRICT WETLAND RESOURCE PERMIT
   - FDEP WATER DISTRIBUTION
   - FDEP SANITARY SEWER COLLECTION AND TRANSMISSION
   - FDEP REUSE
   - LOCAL RIGHT OF WAY USE
   - LOCAL UNDERGROUND UTILITIES
   - FDEP & EPA NPDES STORMWATER
   - FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION TORTOISE INCIDENTAL TAKE
2. CONTRACTOR IS ADVISED THAT THE UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REQUIRES THAT OPERATORS FILE A NOTICE OF INTENT (NOI) FOR STORMWATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY UNDER THE NPDES GENERAL PERMIT PRIOR TO BEGINNING WORK. IN THE STATE OF FLORIDA THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION IS THE PERMITTING AGENCY. IT IS CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN SAME. A COPY SHALL BE SENT TO OWNER.
3. FLORIDA LAW (F.S. 556 - THE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT) PROTECTION OF UNDERGROUND PIPELINES MANDATES THAT "NO EXCAVATOR SHALL COMMENCE OR PERFORM ANY EXCAVATION IN ANY PUBLIC OR PRIVATE STREET, ALLEY, RIGHT-OF-WAY DEDICATED TO THE PUBLIC USE, OR GAS UTILITY EASEMENT WITHOUT FIRST OBTAINING INFORMATION CONCERNING THE POSSIBLE LOCATION OF GAS PIPELINES IN THE AREA OF THE PROPOSED EXCAVATION." THIS INCLUDES ANY OPERATION UTILIZING HAND TOOLS OR POWER TOOLS WHICH MOVES OR REMOVES ANY STRUCTURE, EARTH, ROCK, OR OTHER MASS OF MATERIAL BY SUCH METHODS as DIGGING, BACKFILLING, DEMOLITION, GRADING, DITCHING, DRILLING, BORING AND CABLE PLOWING. THE EXCAVATOR MUST NOTIFY THE GAS UTILITY A MINIMUM OF 48 HOURS AND A MAXIMUM OF 5 DAYS PRIOR TO EXCAVATING (EXCLUDING SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS).
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SECURE THE PROJECT SITE DURING CONSTRUCTION, TO PREVENT TRESPASSING OF UNAUTHORIZED PEDESTRIANS AND/OR VEHICLES IN ALL WORK AREAS. THE CONTRACTOR SHALL POST SIGNS, CONSTRUCT BARRIERS OR IMPLEMENT OTHER METHODS NECESSARY TO CONTROL ACCESS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR TRESPASSING ON THE CONSTRUCTION SITE OR DAMAGES TO ANY WORK RELATED THERETO.
5. CONTRACTOR SHALL CONTACT SUNSHINE STATE ONE-CALL OF FLORIDA, INC. PRIOR TO COMMENCEMENT OF WORK IN ACCORDANCE WITH THEIR STANDARD REQUIREMENTS; INCLUDING BUT NOT LIMITED TO WATER, RECLAIMED WATER, SEWER, POWER, TELEPHONE, GAS AND CABLE TV COMPANIES.
6. PRIOR TO COMMENCEMENT, CONTRACTOR SHALL PROVIDE PAPE-DAWSON WITH CONSTRUCTION SCHEDULE FOR VARIOUS SITE WORK ELEMENTS SO THAT PERIODIC SITE VISITS MAY BE COORDINATED TO ENSURE TIMELY CERTIFICATION OF COMPLETION TO AGENCIES AND AVOID DELAYS IN ISSUANCE OF CERTIFICATES OF OCCUPANCY/COMPLETION.
7. ALL CONSTRUCTION TO BE IN ACCORDANCE WITH THE LATEST STANDARDS OF ALL APPLICABLE AGENCIES.
8. THE LOCATIONS OF EXISTING UTILITIES AND STORM DRAINAGE SHOWN ON THE PLANS HAVE BEEN DETERMINED FROM THE INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. ENGINEER ASSUMES NO RESPONSIBILITY FOR INACCURACY. PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO MAKE ARRANGEMENTS FOR FIELD LOCATIONS AND FOR ANY RELOCATIONS OF THE VARIOUS EXISTING UTILITIES WITH THE UTILITY OWNERS, WHICH SHALL BE DONE IN A TIMELY FASHION TO MINIMIZE IMPACT ON THE CONSTRUCTION SCHEDULE. ANY DELAY OR INCONVENIENCE CAUSED THE CONTRACTOR BY THE RELOCATION OF THE VARIOUS UTILITIES SHALL BE INCIDENTAL TO THE CONTRACT AND NO EXTRA COMPENSATION WILL BE ALLOWED.

   ANY DIFFERING SITE CONDITIONS FROM THAT WHICH IS REPRESENTED HEREON, WHETHER ABOVE, ON OR BELOW THE SURFACE OF THE GROUND, SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE ENGINEER AND OWNER IN WRITING. NO CLAIM FOR EXPENSES INCURRED BY THE CONTRACTOR DUE TO DIFFERING SITE CONDITIONS WILL BE ALLOWED IF CONTRACTOR FAILS TO PROVIDE THE REQUIRED WRITTEN NOTIFICATION OF SUCH CONDITIONS FOR REVIEW BY THE ENGINEER AND OWNER.
9. AS PART OF THE CLEARING AND GRUBBING OPERATION, THE CONTRACTOR IS TO REMOVE ALL FENCING AND/OR EXISTING FACILITIES FROM THE SITE. CONTRACTOR IS RESPONSIBLE FOR CONDUCTING SITE VISIT TO UNDERSTAND THE EXISTING CONDITIONS OF THE SITE. IF REMOVAL OF EXISTING FACILITIES IS NOT INCLUDED IN THE BASE BID, THEN IT SHALL BE SPECIFICALLY IDENTIFIED.
10. CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTIES FROM DAMAGE BY SEDIMENTATION OR OTHER POTENTIAL CONSTRUCTION RELATED CAUSES.
11. IF AN EAGLE MANAGEMENT PLAN HAS BEEN FILED AND APPROVED BY FLORIDA GAME AND FRESHWATER FISH COMMISSION AND THE U.S. DEPARTMENT OF THE INTERIOR FISH AND WILDLIFE SERVICE. CONTRACTOR SHALL ABIDE BY THE PERMIT.
12. MAINTAIN MINIMUM 3' COVER OVER PROPOSED GRAVITY SANITARY, FORCE MAIN, WATER AND REUSE LINES, UNLESS OTHERWISE NOTED.
13. CONCRETE SIDEWALKS (AS SPECIFIED BY APPROPRIATE ROADWAY SECTION) ADJACENT TO ALL LOTS TO BE INSTALLED BY HOME BUILDER. SIDEWALKS ADJACENT TO PONDS, PARKS, AND OPEN SPACE, AS SHOWN ON PLANS, ARE TO BE CONSTRUCTED WITH INFRASTRUCTURE. ALL POND ACCESS TRACT SIDEWALK SHALL BE 6" MINIMUM.
14. DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE FIRE DEPARTMENT SHALL BE PROVIDED.
15. ALL RECOMMENDATIONS AND REQUIREMENTS OF INSPECTION PERSONNEL OTHER THAN OWNER'S SHALL BE REPORTED TO ENGINEER/OWNER/OWNERS REPRESENTATIVE PRIOR TO IMPLEMENTATION. COMPENSATION WILL NOT BE ALLOWED FOR WORK WHICH IS NOT AUTHORIZED BY ENGINEER/OWNER.
16. CONTRACTOR SHALL BE EXTREMELY CAUTIOUS WHEN WORKING NEAR TREES WHICH ARE TO BE SAVED, WHETHER SHOWN IN THE PLANS OR DESIGNATED IN THE FIELD. CONTRACTOR SHALL BECOME FAMILIAR WITH AND CONFORM WITH ALL TREE PROTECTION/PRESERVATION PROVISIONS OF THE CONTRACT DOCUMENTS AND LOCAL GOVERNMENT. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACEMENT AND MITIGATION COSTS FOR ANY TREES REMOVED THAT WERE DESIGNATED TO BE PRESERVED.
17. ALL WORK SHALL BE OPEN TO AND SUBJECT TO INSPECTION BY AUTHORIZED PERSONNEL OF THE CITY, COUNTY, OWNER, INVOLVED UTILITY COMPANIES, PROJECT ENGINEER AND REGULATORY AGENCIES.
18. CONTRACTOR SHALL CONFIRM COMPATIBILITY OF PIPE SLOPES AND INVERTS DURING SHOP DRAWING AND MATERIALS ORDERING PHASE OF PROJECT AND ADVISE ENGINEER OF ANY DISCREPANCIES.
19. NO EXISTING MATERIAL SHALL BE USED IN NEW CONSTRUCTION UNLESS APPROVED DURING THE SHOP DRAWING APPROVAL PROCESS OR AS APPROVED BY ENGINEER/OWNER IN WRITING.
20. ALL FDOT DESIGN INDICES ARE HEREBY INCORPORATED AS PLAN REFERENCES HEREIN. CONTRACTOR IS RESPONSIBLE FOR OBTAINING COMPLETE COPIES OF ALL APPLICABLE INDEX DRAWINGS AND CONSTRUCTING ALL WORKS IN CONFORMANCE WITH THE FDOT ROADWAY AND TRAFFIC STANDARD PLANS, LATEST EDITION.
21. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO COMPLETELY STAKE AND CHECK ALL IMPROVEMENTS TO ENSURE ADEQUATE POSITIONING, BOTH HORIZONTAL AND VERTICAL PRIOR TO THE INSTALLATION OF ANY IMPROVEMENT.
22. CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL EXISTING SURVEY MONUMENTATION. DISTURBED MONUMENTATION SHALL BE RESTORED BY A FLORIDA-LICENSED LAND SURVEYOR SELECTED BY THE OWNER AT CONTRACTOR'S SOLE EXPENSE.
23. IMMEDIATELY AT ONSET OF CONSTRUCTION, CONTRACTOR SHALL FIELD VERIFY HORIZONTAL AND VERTICAL LOCATIONS OF ALL EXISTING UTILITIES CRITICAL TO COMPLETING THE PROJECT (INCLUDING WATER, REUSE, SEWER, POWER, TELEPHONE, GAS, AND CABLE TV) AND SHALL EVALUATE POTENTIAL CONFLICTS. ALL SUCH CONFLICTS SHALL BE REPORTED TO ENGINEER/OWNER IMMEDIATELY UPON DISCOVERY.
24. CONTRACTOR SHALL INSTRUCT THE GEOTECHNICAL TESTING LABORATORY PROVIDING CONSTRUCTION TESTING TO PROVIDE PAPE-DAWSON WITH COPIES OF ALL SITE-WORK TEST REPORTS AS THEY ARE GENERATED. CONTRACTOR SHALL MAINTAIN THE RESPONSIBILITY OF CONSTRUCTING THE PROJECT IN STRICT ACCORDANCE WITH THE PROJECT PLANS, SPECIFICATIONS AND REQUIREMENTS. RECEIPT OF COPIES OF GEOTECHNICAL REPORTS BY PAPE-DAWSON IN NO WAY OBLIGATES PAPE-DAWSON TO ANY REVIEW, COMMENTS OR ACTIONS REGARDING THE WORK.
25. DEWATERING IS ANTICIPATED FOR THIS PROJECT. THEREFORE, THE DISCHARGE OF GROUNDWATER FROM DEWATERING OPERATIONS REQUIRES APPROVAL FROM CITY OF APOPKA, FDEP AND THE APPLICABLE WATER MANAGEMENT DISTRICT. THE CONTRACTOR(S) SHALL BE RESPONSIBLE FOR OBTAINING ALL DEWATERING PERMITS. IT IS THE RESPONSIBILITY OF THE CONTRACTOR(S) TO ENSURE THAT ALL REQUIRED PERMITS ARE OBTAINED AND ARE IN HAND AT THE JOB SITE PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
26. WORK SHALL BE DONE IN COMPLIANCE WITH THE OCCUPATIONAL HEALTH AND SAFETY ACT THROUGH THE U.S. DEPARTMENT OF LABOR AND THE FLORIDA TRENCH SAFETY ACT.
27. ALL PERSONAL PROPERTY, EXCEPT MAIL BOXES, WITHIN THE RIGHT-OF-WAY THAT IS NOT RELOCATED BY THE PROPERTY OWNER SHALL BE REMOVED BY THE CONTRACTOR AS NECESSARY TO CONSTRUCT THE PROJECT IN ACCORDANCE WITH THE PLANS. MAIL BOXES SHALL BE RELOCATED BY THE CONTRACTOR IN ACCORDANCE WITH FDOT DESIGN STANDARD 532.
28. THE INFORMATION SHOWN ON THESE DRAWINGS CONCERNING TYPE AND LOCATION OF UNDERGROUND AND OTHER UTILITIES IS BASED ON AVAILABLE RECORDS AND SURVEYS BUT IS NOT GUARANTEED TO BE ACCURATE OR ALL-INCLUSIVE. THE CONTRACTOR SHALL MAKE HIS OWN DETERMINATION AS TO THE TYPE AND LOCATION OF UTILITIES AS MAY BE NECESSARY TO AVOID DAMAGE THERETO AND PROTECT EXISTING FACILITIES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING UTILITY RELOCATION WITH UTILITY OWNERS AND ENGINEER SHOULD SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THE PLANS.
29. CONTRACTOR IS TO MAINTAIN UNINTERRUPTED ACCESS TO ALL DRIVEWAYS AT ALL TIMES AND IS TO NOTIFY PROPERTY OWNERS FIVE DAYS PRIOR TO STARTING CONSTRUCTION.
30. SHOULD AGGRESSIVE SOILS BE ENCOUNTERED CONTRACTOR SHALL NOTIFY ENGINEER FOR REMEDIAL ACTION.
31. IMPACTS TO OFFSITE ROADWAYS, IF ANY, WILL NEED TO BE REPAIRED IN ACCORDANCE WITH CITY/COUNTY REQUIREMENTS. IF REQUIRED, CONTRACTOR SHALL OBTAIN SURETY BOND.
32. NO EQUIPMENT EXTENDING HIGHER THAN 15 FT. ABOVE EXISTING GRADE SHALL BE USED WITHIN POWER EASEMENTS.
33. THE EXISTENCE AND LOCATION OF ANY OVERHEAD OR UNDERGROUND UTILITY LINES, PIPES, OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A RESEARCH OF THE AVAILABLE RECORDS. THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO AVOID DAMAGE TO SAME. THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR OVERHEAD UTILITIES SO AS TO SAFELY PROTECT ALL PERSONNEL AND EQUIPMENT AND SHALL BE RESPONSIBLE FOR ALL COST AND LIABILITY IN CONNECTION THEREWITH.
34. ANY WELLS SHOWN HEREON ARE THE WELLS LOCATED TO DATE AND DO NOT NECESSARILY REPRESENT ALL WELLS ON THE PROPERTY. THE ENGINEER SHALL BE NOTIFIED OF ANY WELLS ENCOUNTERED DURING CONSTRUCTION. ALL WELLS NOT DESIGNATED TO REMAIN OR FUNCTION SHALL BE PROPERLY SEALED AND ABANDONDED PER APPLICABLE AGENCY REQUIREMENTS.
35. VIBRATORY COMPACTION METHODS SHALL NOT BE USED WITHIN ANY EXISTING GAS EASEMENTS.
36. ALL LIGHT POLES AND STRUCTURES TO BE LOCATED IN THE FIELD BY SURVEYOR RETAINED BY CONTRACTOR.
37. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE RESTORATION OF ANY TRAFFIC EQUIPMENT, INCLUDING BUT NOT LIMITED TO, FIBER, LOOP SENSORS, PULL BOXES, CONDUIT, TRAFFIC SIGNALS AND CABINETS. ANY ITEMS DAMAGED BY THE CONTRACTOR WILL BE RESTORED TO THEIR ORIGINAL CONDITION UNLESS OTHERWISE AGREED UPON BY THE STATE AND/OR LOCAL ENGINEER.
38. ALL EXCAVATED AREAS TO BE SEEDED AND/OR SODDED AFTER FINISH GRADING UNLESS OTHERWISE NOTED. ALL NEWLY SEEDED/SODDED AREAS SHALL HAVE A MINIMUM OF 4" OF TOPSOIL. HOLD SOIL DOWN 1" FROM PAVEMENT ELEVATION. CONTRACTOR TO SUPPLY STRAW MULCH WHERE GRASS SEED HAS BEEN PLANTED.
39. ALL EXISTING EASEMENTS, RIGHTS-OF-WAY, AND LOT LINES MAY NOT BE SHOWN. REFER TO THE ALTA/NSPS LAND TITLE SURVEY, BOUNDARY SURVEY OR TITLE WORK FOR ASSOCIATED ENCUMBRANCES.
40. SURROUNDING DEVELOPMENT AND ELEVATIONS WERE DETERMINED FROM DESIGN DRAWINGS AS LISTED IN THE SURVEYOR SECTION. CONTRACTOR TO FIELD VERIFY ALL ELEVATIONS PRIOR TO CONSTRUCTION AND NOTIFY ENGINEER IF DIFFERENT.
41. SIGHT LINES SHOWN ON THE PLANS SHALL BE MAINTAINED WITHIN THE TRIANGLES BOTH HORIZONTALLY AND VERTICALLY FROM 30 INCHES TO EIGHT FEET IN HEIGHT. ALL VERTICAL SITE IMPROVEMENTS SHALL BE REMOVED OR KEPT CLEAR FROM TRIANGLES.
42. MAINTENANCE OF TRAFFIC DURING CONSTRUCTION SHALL BE IN CONFORMANCE WITH THE APPROVED M.O.T. PLAN ON FILE.
43. CONTRACTOR TO MAINTAIN ALL EXISTING SIDEWALKS OPEN DURING CONSTRUCTION, OR A SAFE, ADA COMPLIANT, TEMPORARY APPROVED PEDESTRIAN PATH SHALL BE PROVIDED UNTIL THE SIDEWALK CAN BE REOPENED.
44. RETAINING WALLS SHOWN HEREON ARE TO BE DESIGNED BY OTHERS. ENGINEER ASSUMES NO LIABILITY FOR DAMAGE OR FAILURE OF CIVIL IMPROVEMENTS CAUSED BY FAILURE OF WALLS WHETHER DIRECTLY OR INDIRECTLY. ENGINEER RECOMMENDS GEOTECHNICAL CONSULTANT REVIEW SITE CONDITIONS TO DETERMINE IF A GLOBAL STABILITY ANALYSIS FOR RETAINING WALLS IS APPROPRIATE.
45. MANHOLE LIDS, VALVE COVERS AND CLEAN-OUTS LOCATED IN TRAVEL LANES SHALL BE TRAFFIC BEARING RATED.
46. PRIOR TO THE START OF LAND DISTURBING ACTIVITIES, WHICH INCLUDES DEMOLITION, EARTHWORK AND/OR CONSTRUCTION, THE DEVELOPER/CONTRACTOR SHALL PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP) A NOTICE OF INTENT (NOI) TO OBTAIN COVERAGE UNDER THE NPDES GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES (CGP) PURSUANT TO THE REQUIREMENTS OF 62-621.300(4)(A) F.A.C. A COPY OF THE NOI SHALL BE SUBMITTED TO THE OPERATOR(S) OF THE MS4. COPIES OF THE SWPPP, NOI, AND FDEP ACKNOWLEDGEMENT LETTER ARE TO BE KEPT ON THE PROJECT SITE AND MADE AVAILABLE UPON REQUEST. UPON COMPLETION OF ALL LAND DISTURBING ACTIVITIES AND AFTER FINAL STABILIZATION OF THE SITE IS COMPLETE, THE DEVELOPER/CONTRACT SHALL SUBMIT TO FDEP A NOTICE OF TERMINATION (NOT) TO END THEIR COVERAGE UNDER THE CGP AND PROVIDE A COPY OF THE NOT TO THE OPERATOR(S) OF THE MS4.

AS-BUILT NOTES:

1. THE CONTRACTOR SHALL SUBMIT A CERTIFIED SET OF RECORD DRAWINGS TO THE ENGINEER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RECORDING INFORMATION ON THE APPROVED PLANS CONCURRENTLY WITH CONSTRUCTION PROGRESS. RECORD DRAWINGS SUBMITTED TO THE ENGINEER AS PART OF THE PROJECT ACCEPTANCE SHALL COMPLY WITH MUNICIPALITY REQUIREMENTS AND THE FOLLOWING REQUIREMENTS.
   1.1. THE VERTICAL AND HORIZONTAL DATUMS USED SHALL BE AS STATED ON THE DRAWINGS.
   1.2. DRAWINGS SHALL BE LEGIBLY MARKED TO RECORD ACTUAL CONSTRUCTION.
   1.3. DRAWINGS SHALL SHOW ACTUAL LOCATION OF ALL UNDERGROUND AND ABOVE GROUND STORM DRAINAGE, POTABLE WATER AND WASTEWATER PIPING, AND RELATED APPURTENANCES. ALL CHANGES TO PIPING LOCATION INCLUDING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES AND APPURTENANCES SHALL BE CLEARLY SHOWN AND REFERENCED TO PERMANENT SURFACE IMPROVEMENTS. DRAWINGS SHALL ALSO SHOW ACTUAL INSTALLED PIPE MATERIAL, CLASS, ETC.
   1.4. DRAWINGS SHALL CLEARLY INDICATE VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER MAIN AND STORM DRAINAGE/SANITARY SEWER/RECLAIMED WATER MAINS AT POINTS OF CROSSING IN ACCORDANCE WITH FDEP CRITERIA AND UTILITY PROVIDER REQUIREMENTS.
   1.5. DRAWINGS SHALL CLEARLY SHOW ALL FIELD CHANGES OF DIMENSION AND DETAIL INCLUDING CHANGES MADE BY FIELD ORDER OR BY CHANGE ORDER.
   1.6. DRAWINGS SHALL CLEARLY SHOW ALL DETAILS NOT ON ORIGINAL CONTRACT DRAWINGS, BUT CONSTRUCTED IN THE FIELD. ALL EQUIPMENT AND PIPING RELOCATION SHALL BE CLEARLY SHOWN.
   1.7. LOCATION OF ALL INLETS, MANHOLES, HYDRANTS, VALVES, AND VALVE BOXES SHALL BE SHOWN. ALL VALVES SHALL BE REFERENCED FROM AT LEAST TWO AND PREFERABLY THREE PERMANENT POINTS OR BY STATE PLANE COORDINATES OR OTHER UTILITY PROVIDER ACCEPTABLE REFERENCE.
   1.8. DIMENSIONS BETWEEN ALL INLETS AND MANHOLES SHALL BE FIELD VERIFIED, AND THE INVERTS AND GRADE ELEVATIONS OF ALL INLETS AND MANHOLES SHALL BE SHOWN.
   1.9. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR POND GRADING. AS-BUILT POND CONTOURS SHALL BE PROVIDED AT TOP OF BANK, POND BOTTOM, AND ALL GRADE BREAKS AND ELEVATIONS SPECIFIED ON THE PLANS. CONTRACTOR SHALL BE RESPONSIBLE FOR RE-GRADING POND SLOPES THAT ARE STEEPER THAN REQUIRED PER PLAN (HORIZONTAL:VERTICAL) TO A DEPTH OF 2 FT MINIMUM BELOW THE SLWT.
   1.10. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE CONSTRUCTED ELEVATIONS, ALONG WITH PHOTOGRAPHS OF EACH CROSSING, IN SUCH A WAY THAT THE VERTICAL SEPARATION BETWEEN THE WATER MAIN AND OTHER UTILITIES MAY BE VERIFIED BY THE ENGINEER. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT THE CONTRACTOR'S SOLE EXPENSE.
   1.11. WHERE THE POTABLE WATER MAIN CROSSES OTHER UTILITIES (STORM, GRAVITY SEWER, FORCEMAIN AND RECLAIMED WATER), THE CERTIFIED AS-BUILT DRAWINGS SHALL CLEARLY INDICATE THE LOCATIONS OF PIPE JOINTS IN SUCH A MANNER AS TO DEMONSTRATE THE PIPE IS CENTERED AT ALL THE CROSSINGS. FAILURE TO PROVIDE THIS INFORMATION WILL RESULT IN THE CONTRACTOR EXCAVATING AND SURVEYING THE UTILITIES AT THE CONTRACTOR'S SOLE EXPENSE.
   1.12. WHERE UPGRADED PIPE MATERIALS ARE SHOWN IN THE PLANS OR AS DIRECTED IN THE FIELD BY THE ENGINEER OR MUNICIPALITY, THE LENGTH, LOCATIONS, FITTINGS, ETC. FOR UPGRADED PIPE SHALL BE SHOWN ON THE AS-BUILT DRAWINGS, RECORD DRAWINGS OR PHOTOS.
   1.13. CONTRACTOR SHALL PROVIDE AS-BUILT SURVEY FOR ALL PARK AND OPEN SPACE TRACTS GRADING. ENGINEER WILL CONFIRM COMPLIANCE WITH AGENCY REQUIREMENTS AND NOTIFY CONTRACTOR IF REMEDIAL ACTION IS NECESSARY.
2. COMPLETE CERTIFIED AS-BUILT DRAWINGS SHALL BE PROVIDED TO THE ENGINEER PRIOR TO BACTERIOLOGICAL TESTING. FAILURE TO PROVIDE ACCURATE DRAWINGS MAY RESULT IN EXPIRED TEST RESULTS AND REQUIRE ADDITIONAL TESTING AT THE CONTRACTOR'S SOLE EXPENSE.
3. AS-BUILT DRAWINGS SHALL BE PREPARED IN ACCORDANCE WITH PAPE-DAWSON CAD STANDARDS.
4. POTABLE WATER CROSSINGS - PAPE-DAWSON REQUIRES THAT AT LEAST TEN PERCENT (10%) OF THE POTABLE WATER CROSSINGS AND INSTALLATIONS BE FIELD VERIFIED BY PAPE-DAWSON STAFF. THE 10% TO BE FIELD VERIFIED WILL BE IDENTIFIED BY PAPE-DAWSON PRIOR TO CONSTRUCTION AND PROVIDED TO THE SITE CONTRACTOR.
5. IN CITY OF APOPKA COMPLETE AS-BUILTS AND ASSET TABLES, MEETING OCU MANUAL OF STANDARD AND CONSTRUCTION SPECIFICATIONS (DATED APRIL 2011), SHALL BE PROVIDED TO PAPE-DAWSON FOR REVIEW AND APPROVAL. PAY APPLICATIONS REQUESTING PAYMENT BEYOND 80% OF CONTRACT AMOUNT, PER SYSTEM, MAY BE HELD AT THE DISCRETION OF THE OWNER UNTIL THE AS-BUILTS AND ASSET TABLES ARE DEEMED COMPLETE BY PAPE-DAWSON.
6. CONTRACTOR SHALL PROVIDE ELEVATIONS OF THE ADA RAMPS, LANDINGS AND CROSS-WALKS AT SUFFICIENT LOCATIONS TO DETERMINE ADHERANCE TO THE ADA GUIDELINES.

SURVEY AND CONTROL:

1. EXISTING TOPOGRAPHY AND CONTOURS BASED ON THE FOLLOWING:

   SURVEYOR: PAPE-DAWSON
   DRAWING NO.: SHEELER AVENUE TOPOGRAPHIC AND TREE SURVEY
   DATED: 10/06/2025

2. SURVEYOR'S REFERENCE VERTICAL BENCHMARK:

   DESCRIPTION: BENCHMARK NUMBER L1360006
   NORTHING: 1568584.4
   EASTING: 498132.4
   ELEVATION: 86.4636 FEET (NAVD 1988)

   DESCRIPTION: BENCHMARK NUMBER L1360008
   NORTHING: 1569196.5
   EASTING: 498117.0
   ELEVATION: 89.7321 FEET (NAVD 1988)

   BENCHMARK LOCATION AND ELEVATION ARE AS REPRESENTED BY SURVEYOR AT THE TIME OF THE SURVEY. CONTRACTOR SHALL VERIFY ITS CORRECTNESS AT TIME OF CONSTRUCTION.

PAVING, DRAINAGE AND GRADING:

1. THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. REQUIREMENTS.
2. CONTRACTOR IS RESPONSIBLE FOR OBTAINING FDEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY IN ACCORDANCE OF FLORIDA ADMINISTRATIVE CODE 62-621.300 (2), 62-620, AND FLORIDA STATUTES CHAPTER 403.
3. DURING CONSTRUCTION, THE GEOTECHNICAL ENGINEER PROVIDING PROJECT TESTING SHALL MONITOR CONSTRUCTION CONDITIONS AND PROVIDE RECOMMENDATIONS FOR ADDITIONAL ROADWAY UNDERDRAINS AS NEEDED. ENGINEER SHALL BE NOTIFIED OF ANY SUCH RECOMMENDATIONS.
4. ALL UPLAND DEVELOPMENT ONSITE AREA, EXCLUDING LANDSCAPE AREAS, SHALL, AT A MINIMUM, BE COMPACTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-180 TEST METHOD. THIS REQUIREMENT APPLIES TO ALL WORK PREPARED BY THE GENERAL CONTRACTOR AND SUB-CONTRACTORS PERFORMING WORK ONSITE. ENGINEER RESERVES RIGHT TO WITHHOLD PAYMENT FOR ANY AREA THAT DOES NOT MEET DENSITY AS SPECIFIED.
5. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL FIELD STAKE AND ROPE OFF CONSERVATION AREA LINES. OWNER RESERVES THE RIGHT TO CHECK THE STAKING AND ROPING AND REQUIRE IT TO BE RELOCATED IF NECESSARY. IT SHALL REMAIN IN PLACE UNTIL ADJACENT CONSTRUCTION IS COMPLETE.
6. ALL SIGNAGE, PAVEMENT MARKING AND TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH FDOT "STANDARD PLANS" AND FHWA "MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES"; LATEST EDITIONS.
7. REGULATORY SIGNS (STOP, ETC.) SHALL BE IN PLACE PRIOR TO FINAL INSPECTION OF PAVING AND DRAINAGE IMPROVEMENTS. UNLESS SIGNAGE IS PROVIDED BY THE MUNICIPALITY
8. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCE BETWEEN CENTERLINES OF DRAINAGE STRUCTURES AND FROM INVERTS OF ENDWALLS AND/OR MITERED END SECTIONS. BIDDERS SHALL ADJUST FOR PIPE LENGTHS WHEN BIDDING MITERED END SECTIONS.
9. CONTRACTOR SHALL NOT COMPACT, STABILIZE, OR CONSTRUCT BASE COURSE WITHIN LANDSCAPE ISLANDS, TRACTS OR MEDIANS. WHERE SUCH TREATMENT DOES OCCUR, IT SHALL BE REMOVED AND REPLACED WITH SUITABLE PLANTING SOILS ACCEPTABLE TO OWNER'S LANDSCAPE ARCHITECT.
10. ALL PAVEMENT RETURN RADII SHALL BE 25' AND MEASURED FROM THE INTERFACE TO THE CONCRETE CURB AND PAVEMENT SURFACE UNLESS OTHERWISE NOTED.
11. SITE GRADING, PAVING AND DRAINAGE MATERIALS AND CONSTRUCTION SHALL CONFORM TO FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
12. STORM DRAINS SHALL BE REINFORCED CONCRETE PIPE, PER ASTM C-76 CLASS III, UNLESS OTHERWISE SPECIFIED. LIFTING HOLES ARE PROHIBITED.
13. UNDERDRAIN, IF ANY, SHALL BE HEAVY-DUTY CORRUGATED POLYETHLENE PIPE WITH FACTORY-INSTALLED FILTER FABRIC AS MANUFACTURED BY ADVANCED DRAINAGE SYSTEMS (ADS), OR APPROVED EQUAL
14. UNDERDRAIN DISCHARGE PIPE, IF ANY, SHALL BE PVC PER ASTM D3034 SDR 35 WITH ELASTOMERIC JOINTS, NON-PERFORATED.
15. YARD DRAINS, IF ANY, SHALL BE NYOPLAST INLINE DRAINS AND DRAIN BASINS AS APPLICABLE WITH CAST IRON GRATES AND WATERTIGHT ADAPTER CONNECTIONS (OR APPROVED EQUAL).
16. YARD DRAIN PIPING: PVC CONFORMING TO ASTM D3034, SDR35 SHALL BE USED FOR ALL PIPE RUNS IN WHICH ANY PART LIES UNDER PAVED AREAS. SAID PVC OR HEAVY DUTY CORRUGATED POLYETHYLENE MAY BE USED FOR ALL OTHER RUNS. MATERIAL SELECTION SHALL BE CONSISTENT THROUGHOUT THE PROJECT.
17. DITCH BOTTOM AND CONTROL STRUCTURE INLET GRATES SHALL BE SECURED WITH CHAIN AND EYEBOLT.
18. FIVE (5) FEET OF SOD IS REQUIRED AROUND ALL DITCH BOTTOM INLETS, MANHOLES, HEADWALLS AND MITERED END SECTIONS.
19. THE LIMITS OF THE POND TRACTS SHALL BE SODDED FROM TRACT LIMITS TO 2' BELOW NCL. IN THE CASE OF DRY BOTTOM PONDS, THE BOTTOM WILL BE SEEDED AND MULCHED UNLESS OTHERWISE SPECIFIED.
20. BLUE REFLECTIVE PAVEMENT MARKERS FOR ALL FIRE HYDRANTS SHALL BE PLACED IN THE CENTER OF THE NEAREST TRAVELED LANE TO MARK THEIR LOCATIONS.
21. CONCRETE SIDEWALKS (AS SPECIFIED BY APPROPRIATE ROADWAY SECTION) ADJACENT TO ALL LOTS TO BE INSTALLED BY HOME BUILDER. SIDEWALKS ADJACENT TO PONDS, PARKS, AND OPEN SPACE, AS WELL AS TRACT ACCESS APRONS AS SHOWN ON PLANS, ARE TO BE CONSTRUC

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOT INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

POTABLE WATER NOTES:

1. ALL CONSTRUCTION AND MATERIALS SHALL BE IN COMPLIANCE WITH AWWA STANDARDS AND IN ACCORDANCE WITH LOCAL GOVERNMENT STANDARDS.
2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN FITTINGS OF BRANCHES AND MAINS.
3. DEFLECTIONS AT PIPE JOINTS SHALL NOT EXCEED THOSE RECOMMENDED BY THE PIPE MANUFACTURER.
4. ALL GATE VALVES SHALL BE EQUIPPED WITH AN ADJUSTABLE CAST IRON VALVE BOX WITH COVER, WITH THREADED CAST BRONZE EXTENSIONS WHERE NEEDED.
5. 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 AND WILL BE MARKED WITH THE NSF SEAL OF APPROVAL.
6. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL BE COLOR CODED IN ACCORDANCE WITH SUB PARAGRAPH 62-555.320(21)(B)3, F.A.C. USING BLUE AS A PREDOMINANT COLOR. ALL DUCTILE IRON WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE BLUE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION. FOR PIPE WITH AN INTERNAL DIAMETER OF 24" OR GREATER, TAPE OR PAINT SHALL BE APPLIED IN CONTINUOUS LINES A LONG EACH SIDE OF THE PIPE AS WELL AS ALONG THE TOP OF THE PIPE.
7. ALL NON-METALLIC WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC WATER MAINS SHALL BE A SOLID BLUE COLOR. ALL LETTERING SHALL APPEAR LEGIBLY ON PIPE AND SHALL RUN THE ENTIRE LENGTH OF THE PIPE. LETTERING SHALL READ AS IS ACCEPTABLE FOR THE INTENDED USE.
8. HYDROSTATIC TESTING AND THE DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND C-605 FOR PVC PIPE. DISINFECTING AND BACTERIOLOGICAL EVALUATION TO BE DONE IN ACCORDANCE WITH AWWA C-651 AND RULE 62-555.340 F.A.C.
9. MARK SERVICES WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED BLUE WITH LOT NUMBER CLEARLY MARKED AND A 'W' IMPRESSED IN THE CURB. IT IS THE INTENT THAT EVERY LOT IS CONSISTENT WITH A WATER SERVICE; THEREFORE IT IS THE CONTRACTORS RESPONSIBILITY TO INSTALL A WATER SERVICE TO EACH LOT.
10. PIPE MATERIALS:

    PVC - ALL PIPE, PIPE FITTINGS, PIPE JOINT PACKING AND JOINTING MATERIALS, VALVES, FIRE HYDRANTS, AND METERS INSTALLED UNDER THIS PROJECT SHALL CONFORM TO APPLICABLE AWWA STANDARDS AND SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900, LATEST EDITION. PVC SHALL BE MANUFACTURED IN ACCORDANCE WITH AWWA STANDARD C900. THE PVC SHALL HAVE A MINIMUM WORKING PRESSURE OF 150 P.S.I. AND SHALL HAVE A DIMENSION RATIO (DR) OF 18. PIPE SHALL BE THE SAME O.D. AS DUCTILE IRON PIPE.

    PVC JOINT - SHALL BE IN ACCORDANCE WITH ASTM D3139.

    DUCTILE IRON - SHALL CONFORM TO ANSI/AWWA C150/C151. A MINIMUM OF CLASS 50 PIPE SHALL BE SUPPLIED.

    DUCTILE IRON JOINT - SHALL BE IN ACCORDANCE WITH ANSI A21.11 AND AWWA C111.

    SERVICES - SHALL BE IN ACCORDANCE WITH AWWA C901/C800 STANDARDS FOR POLYETHYLENE TUBING, CLASS 160.
11. WATER MAIN CONNECTION SHALL BE MADE UNDER THE SUPERVISION OF CITY OF APOPKA. ALL VALVES SHALL BE OPERATED BY LOCAL GOVERNMENT PERSONNEL ONLY. WATERMAINS ARE TO BE DISINFECTED PER ANSI/AWWA C651-92 AND LOCAL GOVERNMENT STANDARDS
12. VERTICAL SEPARATION BETWEEN UNDERGROUND POTABLE WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, AND RECLAIMED WATER PIPELINES:

    NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST SIX INCHES, AND PREFERABLY 12 INCHES, ABOVE OR AT LEAST 12 INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.

    NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 12 INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
13. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS (A) AND (B) ABOVE, ONE FULL LENGTH OF WATER MAIN PIPE SHALL BE CENTERED ABOVE OR BELOW THE OTHER PIPELINE SO THE WATER MAIN JOINTS WILL BE AS FAR AS POSSIBLE FROM THE OTHER PIPELINE. ALTERNATIVELY, AT SUCH CROSSING, THE PIPES SHALL 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.
14. HORIZONTAL SEPARATION BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAINS, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS:

    NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL 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 STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.

    NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST THREE FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.

    NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST SIX FEET, AND PREFERABLY TEN FEET, BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED GRAVITY- OR PRESSURE-TYPE SANITARY SEWER, WASTEWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. THE MINIMUM HORIZONTAL SEPARATION DISTANCE BETWEEN WATER MAINS AND GRAVITY-TYPE SANITARY SEWERS SHALL BE REDUCED TO THREE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST SIX INCHES ABOVE THE TOP OF THE SEWER.

    NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE 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" AS DEFINED IN SECTION 381.0065(2), F.S., AND RULE 64E-6.002, F.A.C.
15. A MINIMUM OF 3 FEET OF COVER SHALL BE MAINTAINED OVER WATERMAINS, UNLESS OTHERWISE NOTED.
16. ALL PIPE AND PIPE FITTINGS INSTALLED UNDER THIS PROJECT SHALL CONTAIN NO MORE 8.0% LEAD, AND ANY SOLDER OR FLUX USED IN THIS PROJECT SHALL CONTAIN NO MORE THAN 0.2% LEAD.
17. NEW OR ALTERED DEAD-END WATER MAINS INCLUDED IN THIS PROJECT SHALL BE PROVIDED WITH A FIRE OR FLUSHING HYDRANT OR BLOW-OFF FOR FLUSHING PURPOSES.
18. NEW OR ALTERED FIRE HYDRANT LEADS SHALL HAVE A MINIMUM INSIDE DIAMETER OF 6" AND SHALL INCLUDE AN AUXILIARY VALVE.
19. IF AGGRESSIVE SOIL CONDITIONS ARE FOUND DURING CONSTRUCTION, WATER MAINS SHALL BE PROTECTED THROUGH THE USE OF CORROSION RESISTANT MATERIALS, THROUGH ENCASEMENT OF THE WATER MAINS IN POLYETHYLENE, OR THROUGH PROVISION OF CATHODIC PROTECTION.
20. 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 AND TO A SUFFICIENT HEIGHT ABOVE THE PIPE TO ADEQUATELY 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 A LEAST SIX INCHES BELOW THE BOTTOM OF UNDERGROUND PIPE INSTALLED UNDER THIS PROJECT.
21. CONTRACTOR SHALL NOT ACTIVATE WATER SERVICE UNTIL THE FDEP HAS CLEARED THE SYSTEM FOR USE AND THE CLEARANCE LETTER HAS BEEN RECEIVED BY THE OWNER.
22. CONTRACTOR SHALL COORDINATE ALL UTILITIES SYSTEMS TEST SCHEDULING TO ALLOW ENGINEER'S ATTENDANCE PROVIDING MINIMUM NOTICE OF FIVE (5) WORKING DAYS. CONTRACTOR'S FAILURE TO PROPERLY NOTIFY ENGINEER MAY RESULT IN RETESTING AT ENGINEER'S OPTION AND AT CONTRACTOR'S EXPENSE.
23. ENGINEER RESERVES THE RIGHT TO WITHHOLD AUTHORIZATION OF PAYMENT FOR ANY PORTION OF THE UTILITIES PIPE WORK WHICH HAS NOT BEEN TESTED (OBSERVED BY ENGINEER) AND REPORTED TO CONFORM TO PROJECT SPECIFICATIONS.
24. SITE CONTRACTOR SHALL COORDINATE AND VERIFY ALL UTILITY SERVICES WITH FINAL ARCHITECTURAL DRAWINGS AND BUILDING CONTRACTOR.
25. CONTRACTOR SHALL VERIFY SIZE AND TYPE OF EXISTING MAIN PRIOR TO ORDERING TAPPING MATERIALS FOR TIE-INS.
26. CONCRETE CURBS SHALL BE CHISELED OR IMPRINTED TO SHOW LOCATIONS OF WATER AND SEWER SERVICE LINES/LATERALS. MARKING SHALL CONFORM WITH LOCAL STANDARDS. WHERE NO STANDARDS EXIST, USE "R" FOR RECLAIMED WATER, "W" FOR WATER, AND "S" FOR SANITARY.
27. FIRE HYDRANTS WHICH ARE GRAPHICALLY SHOWN ON OR NEAR LOT LINES AND NOT OTHERWISE LOCATED BY STATIONING OR DIMENSIONING SHALL BE CENTERED ON THE LOT LINE.

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOT INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

SANITARY SEWER NOTES:

1. ALL MANHOLES SHALL HAVE A MINIMUM DIAMETER OF 48 INCHES AND A MINIMUM ACCESS DIAMETER OF 22 INCHES.
2. PIPE LENGTHS SHOWN REPRESENT SCALED DISTANCES BETWEEN MANHOLE CENTERLINE.
3. ALL SANITARY SERVICE LATERALS SHALL BE 6 INCH DIAMETER PVC. LATERALS SHALL END WITH A CLEAN OUT AT RIGHT-OF-WAY LINE.
4. INVERTS OF SANITARY SERVICE LATERALS AT THEIR CONNECTION TO SANITARY MANHOLES SHALL BE NO MORE THAN ONE (1) FOOT ABOVE THE MANHOLE INVERT.
5. PRIOR TO PAVING, CONTRACTOR SHALL VERIFY THE AS-BUILT SANITARY SEWER PIPE SLOPES. MINIMUM SHALL BE IN ACCORDANCE WITH FDEP MINIMUM CRITERIA BUILT FOR 8" PVC SEWER LINE SLOPE WILL BE 0.28%, FOR 12" PVC WILL BE 0.17% AND FOR 15" PVC WILL BE 0.12%. ANY LINE NOT MEETING MINIMUM SLOPE WILL BE RELAYED BY CONTRACTOR TO MEET THE MINIMUM SLOPE REQUIREMENT AT NO ADDITIONAL COST.
6. MARK LATERALS WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED ORANGE W/ LOT NUMBER CLEARLY MARKED AND A 'S' IMPRESSED IN THE CURB.
7. LEAKAGE TESTS ARE SPECIFIED REQUIRING THAT:

    THE LEAKAGE EXFILTRATION OR INFILTRATION DOES NOT EXCEED 200 GALLONS PER INCH OF PIPE DIAMETER PER MILE PER DAY FOR ANY SECTION OF THE SYSTEM.

    EXFILTRATION OR INFILTRATION TESTS BE PERFORMED WITH A MINIMUM POSITIVE HEAD OF 2 FEET.

    AIR TESTS, AS A MINIMUM, CONFORM TO THE TEST PROCEDURE DESCRIBED IN ASTM C-828 FOR CLAY PIPE, ASTM C924 FOR CONCRETE PIPE, ASTM F-1417 FOR PLASTIC PIPE, AND FOR OTHER MATERIALS APPROPRIATE TEST PROCEDURES. AIR TESTING, IF SPECIFIED FOR CONCRETE SEWER MANHOLES, CONFORMS TO THE TEST PROCEDURES DESCRIBED IN ASTM C-1244.
8. MANHOLE LIFT HOLES AND GRADE ADJUSTMENT RINGS BE SEALED WITH NON-SHRINKING MORTAR OR OTHER APPROPRIATE MATERIAL.
9. INLET AND OUTLET PIPES BE JOINED TO THE MANHOLE WITH A GASKETED FLEXIBLE WATER-TIGHT CONNECTION OR ANOTHER WATER-TIGHT CONNECTION ARRANGEMENT THAT ALLOWS DIFFERENTIAL SETTLEMENT OF THE PIPE AND MANHOLE WALL.
10. WATER-TIGHT MANHOLE COVERS BE USED WHEREVER THE MANHOLE TOPS MAY BE FLOODED BY STREET RUNOFF OF HIGH WATER.
11. MINIMUM SEPARATION BETWEEN POTABLE WATER LINES AND SANITARY HAZARDS (SANITARY SEWER, FORCE MAIN, STORM SEWER, REUSE WATER) SHALL BE MAINTAINED. A HORIZONTAL CLEARANCE OF TEN (10) FEET IN PARALLEL INSTALLATION AND 12 INCHES VERTICALLY AT CROSSINGS. SHALL A VERTICAL SEPARATION OF LESS THAN THAT STIPULATED BE REQUIRED, THE WATER LINE SHALL BE CONSTRUCTED OF 20 FEET OF PRESSURE TIGHT JOINT DUCTILE IRON PIPE. IF THE REQUIRED 10 FT. HORIZONTAL CLEARANCE CANNOT BE MAINTAINED, THE SEWER MAIN SHALL BE PLACED IN A D.I.P. SLEEVE OR ENCASED IN CONCRETE IN ACCORDANCE WITH FDEP SPECIFICATIONS.
12. PVC GRAVITY SEWER PIPE SHALL MEET ASTM D3034, SDR35.
13. ALL SANITARY SEWER PIPE SHALL BE COLORED GREEN.
14. FIBERGLASS LINE ALL MANHOLES WHICH RECEIVE DISCHARGE FROM A FORCEMAIN.
15. CONTRACTOR IS RESPONSIBLE FOR PROVIDING SERVICES AT EACH LOT. SERVICES SHALL HAVE 3' MIN. AND 4' MAX. COVER AT LOT CLEAN OUT.

THE UTILITY NOTES BELOW ARE PROVIDED AS MINIMUM REQUIREMENTS AND ARE NOTE INTENDED TO SUPERCEDE LOCAL GOVERNMENT AND AGENCY REQUIREMENTS

RECLAIMED WATER NOTES:

1. ALL RECLAIMED WATER PIPES SHALL BE INSTALLED USING WATER PIPE CRITERIA. MAINS SHALL BE CLASS 52 DIP IF 24"-30" OF COVER IS PROVIDED AND CLASS 51 IF 30"-36" COVER IS PROVIDED.
2. PROVIDE 6" MINIMUM SEPARATION BETWEEN RECLAIMED WATER AND STORM PIPES AND A MINIMUM OF 3' OF COVER OVER THE RECLAIMED WATER MAIN. RECLAIMED WATER WHEN LESS THAN 3' OF COVER IS ACHIEVED SHALL BE D.I.P. (COVER LESS THAN 3' IS ONLY ALLOWED AT SPECIFIC CROSSINGS APPROVED BY ENGINEER) PROVIDE MECHANICAL JOINTS AND FITTINGS AS NECESSARY FOR THE VERTICAL TRANSITIONS.
3. EXCEPT FOR PVC PIPE, MAXIMUM DEFLECTIONS AT PIPE JOINTS, FITTINGS AND LAYING RADIUS FOR THE VARIOUS PIPE LENGTHS SHALL NOT EXCEED 75% OF THE PIPE MANUFACTURER'S RECOMMENDATION. A MINIMUM VERTICAL CLEARANCE OF 18" SHALL BE MAINTAINED. WHERE 18" CLEARANCE IS NOT POSSIBLE, WATER AND RECLAIMED WATER WILL BE UPGRADED TO D.I.P.
4. MARK LATERALS WITH 6' HIGH PIECE OF 2" X 4" PLANK PAINTED PURPLE, AND AN R IMPRESSED IN THE CURB.
5. CASINGS WILL BE PROVIDED FOR SERVICES LOCATED UNDER LANDSCAPE MEDIANS.
6. ALL PVC RECLAIMED WATER PIPE SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS, MARKED WITH THE SEAL OF APPROVAL OF THE NATIONAL SANITATION FOUNDATION (NSF) AND BE PURPLE IN COLOR.
7. ALL DUCTILE IRON RECLAIMED WATER MAINS SHALL BE MARKED WITH A CONTINUOUS STRIPE LOCATED WITHIN THE TOP 90 DEGREES OF THE PIPE. SAID STRIPE SHALL BE A MINIMUM 2 INCHES IN WIDTH AND SHALL BE PURPLE IN COLOR. BACKFILL SHALL NOT BE PLACED FOR 30 MINUTES FOLLOWING PAINT APPLICATION.
8. ALL NON-METALLIC RECLAIMED WATER MAINS SHALL BE INSTALLED WITH A CONTINUOUS, INSULATED 10 GAUGE COPPER WIRE INSTALLED DIRECTLY ON TOP OF THE PIPE FOR LOCATION PURPOSES. SEE STANDARD DRAWINGS. IN ADDITION, ALL PVC RECLAIMED WATER MAINS SHALL BE SOLID, PANTONE PURPLE COLOR.
9. HYDROSTATIC TESTING OF THE RECLAIMED WATER DISTRIBUTION SYSTEM SHALL BE DONE IN ACCORDANCE WITH THE AWWA STANDARDS. HYDROSTATIC TESTING TO BE DONE IN ACCORDANCE WITH AWWA C-600 FOR DUCTILE IRON PIPE AND M23 FOR PVC PIPE.
10. ALL RECLAIMED WATER HOSE BIBBS, HAND-OPERATED CONNECTIONS AND OUTLETS SHALL BE CONTAINED IN UNDERGROUND SERVICE VAULTS AND SHALL BE APPROPRIATELY TAGGED OR LABELED TO WARN THE PUBLIC AND EMPLOYEES THAT THE WATER IS NOT INTENDED FOR DRINKING. ALL PIPING, PIPELINES, VALVES AND OUTLETS SHALL BE COLOR CODED PANTONE 522C PURPLE AND MARKED PER LOCAL AND STATE CODES TO DIFFERENTIATE RECLAIMED WATER FROM POTABLE OR OTHER WATER.
11. VAULTS FOR RECLAIMED WATER HOSE BIBBS AND OUTLETS SHALL BE LOCKED OR REQUIRE A SPECIAL TOOL FOR OPERATION OF HOSE BIBBS AND OUTLETS.
12. LOW TRAJECTORY NOZZLES ARE REQUIRED WITHIN 100 FEET OF ANY OUTDOOR PUBLIC EATING, DRINKING OR BATHING FACILITIES.
13. A RESIDENTIAL DUAL CHECK VALVE OR OTHER BACKFLOW PREVENTION DEVICE AS SPECIFIED BY THE SEWER/RECLAIMED WATER UTILITY COMPANY IS REQUIRED ON ALL POTABLE WATER LINES AT EACH RESIDENTIAL SITE WHICH IS SERVICED WITH RECLAIMED WATER.
14. SIGNS SHALL BE POSTED IN THE VICINITY OF PUBLIC RECLAIMED WATER IRRIGATION SYSTEMS, ADVISING THE PUBLIC THAT RECLAIMED WATER IS PRACTICED.
15. BOX COVERS FOR RECLAIMED WATER SYSTEM ELEMENTS (VALVES, METER, BFP's, ETC.) SHALL, TO THE EXTENT REASONABLE, NOT BE INTERCHANGEABLE WITH BOX COVERS FOR WATER SYSTEM ELEMENTS.
16. RECLAIMED WATER SYSTEMS AND POTABLE WATER SYSTEMS SHALL NOT BE CROSS-CONNECTED. AN AIR GAP OF TWO PIPE DIAMETERS IS REQUIRED BETWEEN SUCH WATERS.
17. THE WETTED EDGE OF AREAS IRRIGATED WITH RECLAIMED WATER SHALL NOT BE CLOSER THAN 75 FEET TO ANY PUBLIC OR PRIVATE POTABLE WATER WELL.
18. NO RECLAIMED WATER TRANSMISSION FACILITY/MAIN SHALL BE WITHIN 75 FEET OF ANY PUBLIC WATER SUPPLY WELL.

DEMOLITION NOTES:

1. CONTRACTOR SHALL REMOVE ALL WASTE MATERIAL FOR DISPOSAL OFF-SITE. DISPOSAL SHALL CONFORM TO ALL APPLICABLE REGULATIONS.
2. EXISTING UNDERGROUND UTILITIES, UNLESS OTHERWISE NOTED, MAY BE CAPPED/PLUGGED AND ABANDONED IN PLACE EXCEPT WITHIN 30 FT. OF BUILDING. CAPPED AND PLUGGED PIPE ENDS SHALL BE ENCASED IN CONCRETE, 6" MINIMUM THICKNESS AROUND PIPE. MANHOLE BASES MAY BE LEFT IN PLACE PROVIDED THAT PIPE OPENINGS ARE PLUGGED AND REMAINING BASES ARE FILLED WITH CONCRETE 6" MINIMUM ABOVE HIGHEST INVERT.
3. ANY MATERIALS CLAIMED AS SALVAGE BY OWNER EITHER IN THE FIELD OR IN THE DRAWINGS SHALL BE STOCKPILED FOR OWNER'S REMOVAL.
4. CONTRACTOR SHALL BE KNOWLEDGEABLE OF THE CONSTRUCTION DOCUMENTS AND BE RESPONSIBLE FOR PROTECTING ANY EXISTING FACILITY SO DESIGNATED OR DESIGNATED TO BE USED IN THE WORK.
5. CONTRACTOR SHALL REMOVE ALL FOUNDATIONS, CONCRETE SLABS, AND UNDERGROUND STRUCTURES EXISTING ON THE SITE AT THE TIME OF BIDDING UNLESS OTHERWISE DIRECTED.
6. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES AND BE RESPONSIBLE FOR THE TERMINATION, CAPPING-OFF AND REMOVAL OF ALL UNDERGROUND AND ABOVE-GROUND UTILITY SERVICES EXISTING AT THE TIME OF BIDDING UNLESS DIRECTED TO BID OTHERWISE.
7. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING AND DISPOSING ALL WASTE MATERIALS CONSISTENT WITH ALL RULES AND REGULATIONS APPLICABLE TO THE SPECIFIC MATERIAL FOUND.

ADA NOTES:

1. THE CONTRACTOR SHALL INSTALL, AS PART OF THE INFRASTRUCTURE AND PRIOR TO CERTIFICATE OF COMPLETION, DROP CURBS, STRIPING AND HANDICAP RAMPS AT ALL INTERSECTIONS OF SIDEWALK WITH THE PROPOSED PAVEMENT TO MEET STATE OF FLORIDA ACCESSIBILITY CODE AND FEDERAL A.D.A. SPECIFICATIONS.
2. PAVEMENT GRADES OVER HANDICAPPED PARKING SPACES SHALL NOT EXCEED 2% IN ANY DIRECTION EXCEPT AT RAMPS. (NOTE: RAMP LENGTHS MAY EXCEED 6 FEET.)
3. PROPOSED AND EXISTING SIDEWALKS SHALL BE RAMPED FLUSH WITH PAVEMENT. RAMPS SHALL NOT EXCEED SLOPES OF 12 HORIZONTAL TO 1 VERTICAL. (NOTE: RAMP LENGTHS REQUIRED MAY EXCEED 6 FT.)
4. WHERE SIDEWALK RAMPS CONNECT TO MIAMI CURB, THE SLOPE OF THE MIAMI CURB SHALL BE NO STEEPER THAN 12:1 TO CONFORM WITH FLORIDA/FEDERAL REGULATORY REQUIREMENTS. TWO FT. LONG CURB TRANSITIONS SHALL BE USED AT EACH SIDE OF THE RAMP.
5. WHERE RAMPS ARE POURED ADJACENT TO EXISTING MIAMI CURB, THE CURB SHALL BE REMOVED, FOR A DISTANCE EXTENDING TWO FT. BEYOND EACH END OF THE WALK AND RECONSTRUCTED.
6. SIDEWALK RAMPS SHALL INCLUDE DETECTABLE WARNINGS THAT ARE TEXTURED IN CONFORMANCE WITH FDOT STANDARDS EXCEPT WHERE LOCAL CODES DICTATE OTHERWISE. CONTRACTOR SHALL COORDINATE WITH LOCAL AUTHORITY FOR PRE-POUR INSPECTION PRIOR TO ANY SIDEWALK AND/OR RAMP CONCRETE POURS. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO ENSURE THAT ALL RAMP TEXTURED SURFACES AND SIDEWALK LONGITUDINAL AND CROSS SLOPES ARE IN CONFORMANCE WITH LOCAL, STATE AND FEDERAL ADA AND FAIR HOUSING ACT STANDARDS.
7. CONTRACTOR SHALL COORDINATE WITH ENGINEER FOR PRE-POUR INSPECTION PRIOR TO ANY SIDEWALK AND/OR CURB RAMP CONCRETE POURS.
8. ALL MANHOLE, PULL BOX, UTILITY VAULT, VALVE, OR OTHER COVERS LOCATED WITHIN SIDEWALKS AND CROSSWALKS SHALL BE ADA COMPLIANT.

FIRE PROTECTION NOTES:

1. MAINS DESIGNATED AS FIRE PROTECTION SHALL BE INSTALLED BY A FLORIDA LICENSED FIRE PROTECTION CONTRACTOR AND REVIEWED FOR CONFORMANCE BY A LICENSED FIRE PROTECTION ENGINEER.
2. FIRE HYDRANTS SHALL BE INSTALLED AND IN SERVICE PRIOR TO THE ACCUMULATION OF COMBUSTIBLES.
3. IN INSTANCES WHERE THERE ARE NO FIRE HYDRANTS IN CLOSE PROXIMITY TO PROVIDE FIRE PROTECTION, PER THE NATIONAL FIRE PROTECTION ASSOCIATION, NFPA-1, 16.4.3.1.3, UNDERGROUND WATER MAINS AND HYDRANTS ARE REQUIRED TO BE PROVIDED SHALL BE INSTALLED, COMPLETED AND IN SERVICE PRIOR TO CONSTRUCTION WORK.
4. PER NFPA-1, 18.3.4.1, DURING CONSTRUCTION, CLEARANCES OF 7.5 FEET IN FRONT OF AND TO THE SIDES OF THE FIRE HYDRANT WITH A 4-FOOT CLEARANCE TO THE REAR MUST BE PROVIDED AND MAINTAINED AT ALL TIMES.

ADS HDPE GENERAL NOTES:

1. SHOULD CONSTRUCTION PLANS INDICATE ADS PIPE MAY BE USED, ENGINEER SHALL BE NOTIFIED OF SUCH BY CONTRACTOR PRIOR TO MATERIAL ORDERING. ENGINEER SHALL BE PROVIDED WITH SPECIFICATIONS AND INSTALLATION METHODS PRIOR TO INSTALLATION.
2. WHERE ADS PIPE IS USED AS AN ALTERNATE TO REINFORCED CONCRETE PIPE, CONTRACTOR SHALL SUBMIT BIDS TO ENGINEER IN WRITING FOR REVIEW AND APPROVAL OF MATERIAL COST SAVINGS TO OWNER.
3. ADS PIPE SHALL NOT BE USED IN AREAS OF HIGH GROUNDWATER UNLESS PROPER ADS APPROVED METHODS ARE USED TO MITIGATE FOR POTENTIAL FLOTATION AND ALIGNMENT SHIFTS. AN AUTHORIZED ADS REPRESENTATIVE SHALL INSPECT ALL SUCH AREAS.
4. PIPE SHALL MEET ALL GOVERNING LOCAL AUTHORITY REQUIREMENTS AS WELL AS THE FLORIDA DEPARTMENT OF TRANSPORTATION. CONTRACTOR SHALL PROVIDE WRITTEN PROOF OF ACCEPTANCE BY LOCAL GOVERNMENT FOR PIPE USE.
5. ADS PIPE PREVIOUSLY STORED IN OUTDOOR CONDITIONS SHALL BE DISCLOSED TO ENGINEER FOR THIRD PARTY REVIEW OF PIPE PRIOR TO ACCEPTANCE FOR USE.
6. ALL INSTALLED PIPE IS SUBJECT TO MANDREL TESTING PRIOR TO ACCEPTANCE.
7. IN MUNICIPALITIES WHERE ADS PIPE IS NOT ALLOWED IN THE PUBLIC RIGHTS-OF-WAY, THE CONTRACTOR MAY USE ADS PIPE IN PRIVATE, NON-PUBLIC AREAS WITH ENGINEER'S PERMISSION.
8. PIPE 4" TO 48" (WHERE DESIGNATED) SHALL BE ADS HDPE N-12 SMOOTH INTERIOR POLYETHYLENE PIPE. PIPE AND FITTINGS SHALL BE MADE OF VIRGIN PE COMPOUNDS WHICH CONFORM WITH THE REQUIREMENTS OF CELL CLASS 324420C AND DEFINED AND DESCRIBED IN ASTM D3350.
9. THE HDPE FITTINGS SHALL NOT REDUCE OR IMPAIR THE OVERALL INTEGRITY OR FUNCTION OF THE PIPE LINE. FITTINGS MAY BE EITHER MOLDED OR FABRICATED. THE FITTINGS MAY BE INSTALLED BY VARIOUS METHODS, SUCH AS SNAP-ON, SCREW-ON, BELL & SPIGOT AND WRAP AROUND. COUPLINGS SHALL PROVIDE SUFFICIENT LONGITUDINAL STRENGTH TO PRESERVE PIPE ALIGNMENT AND PREVENT SEPARATION AT THE JOINTS. ONLY FITTINGS SUPPLIED OR RECOMMENDED BY THE PIPE MANUFACTURER SHALL BE USED. WHERE DESIGNATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER IN THE FIELD, A NEOPRENE OR RUBBER GASKET SHALL BE SUPPLIED.
10. PIPE SHALL BE INSTALLED BY A CONTRACTOR WHO HAS BEEN CERTIFIED BY ADS OR SHALL BE INSTRUCTED BY A CERTIFIED ADS REPRESENTATIVE TO DO SO.
11. A REPRESENTATIVE OF ADS SHALL INSPECT FROM TIME TO TIME THE INSTALLATION OF THE PIPE.
12. HP MANHOLE STRUCTURES WILL NOT BE ALLOWED FOR USE WITHOUT ENGINEERS PRE-AUTHORIZATION.
13. GENERAL SPECIFICATIONS:

    SCOPE

    THIS SPECIFICATION DESCRIBES 12- THROUGH 60-INCH (300 TO 1500 MM) ADS HP STORM PIPE FOR USE IN GRAVITY- FLOW STORM DRAINAGE APPLICATIONS.

    PIPE REQUIREMENTS

    12- THROUGH 30-INCH (300 TO 750 MM) PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS AND MEET OR EXCEED ASTM F2736 AND AASHTO M330

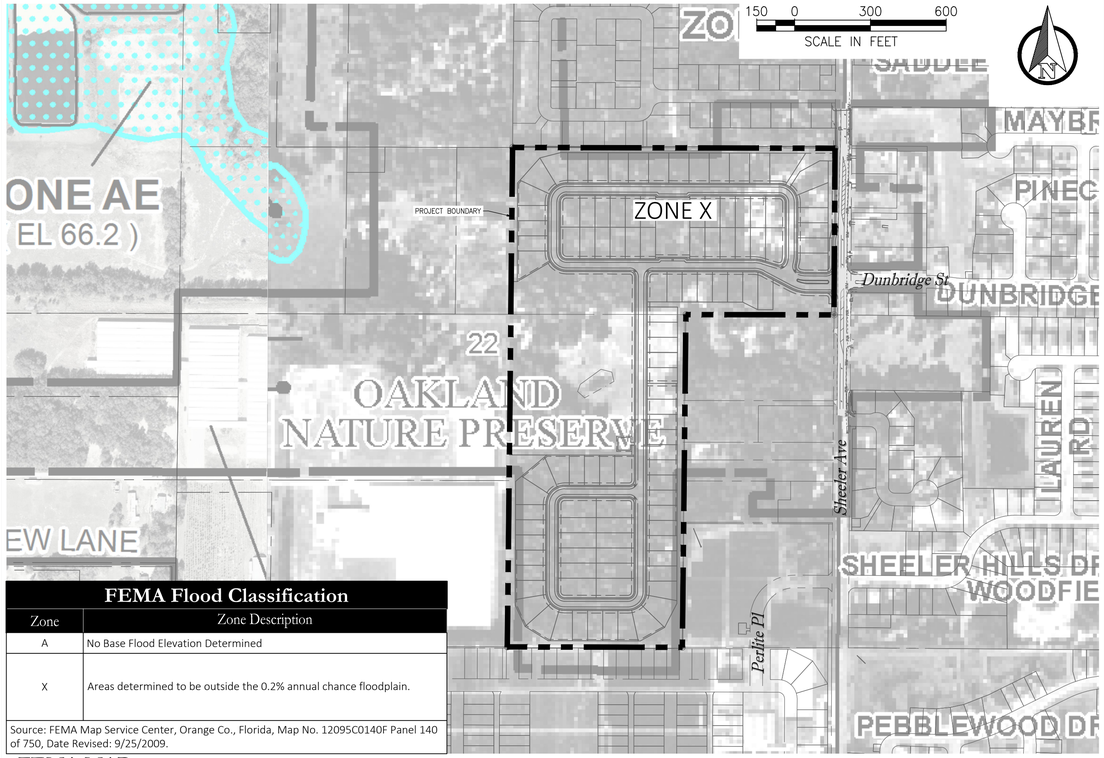
    36- THROUGH 60-INCH (900 TO 1500 MM) PIPE SHALL HAVE A SMOOTH INTERIOR AND ANNULAR EXTERIOR CORRUGATIONS AND MEET OR EXCEED ASTM F2881 AND AASHTO M330

    MANNING'S "N" VALUE FOR USE IN DESIGN SHALL BE 0.012

    JOINT PERFORMANCE

    PIPE SHALL BE JOINED WITH A GASKETED INTEGRAL BELL & SPIGOT JOINT MEETING THE REQUIREMENTS OF ASTM F2736 OR F2881, FOR THE RESPECTIVE DIAMETERS.

    12- THROUGH 60-INCH (300 TO 1500 MM) SHALL BE WATERTIGHT ACCORDING TO THE REQUIREMENTS OF ASTM D3212. SPIGOTS SHALL HAVE GASKETS MEETING THE REQUIREMENTS OF ASTM F477. GASKET SHALL BE INSTALLED BY THE PIPE MANUFACTURER AND COVERED WITH A REMOVABLE, PROTECTIVE WRAP TO ENSURE

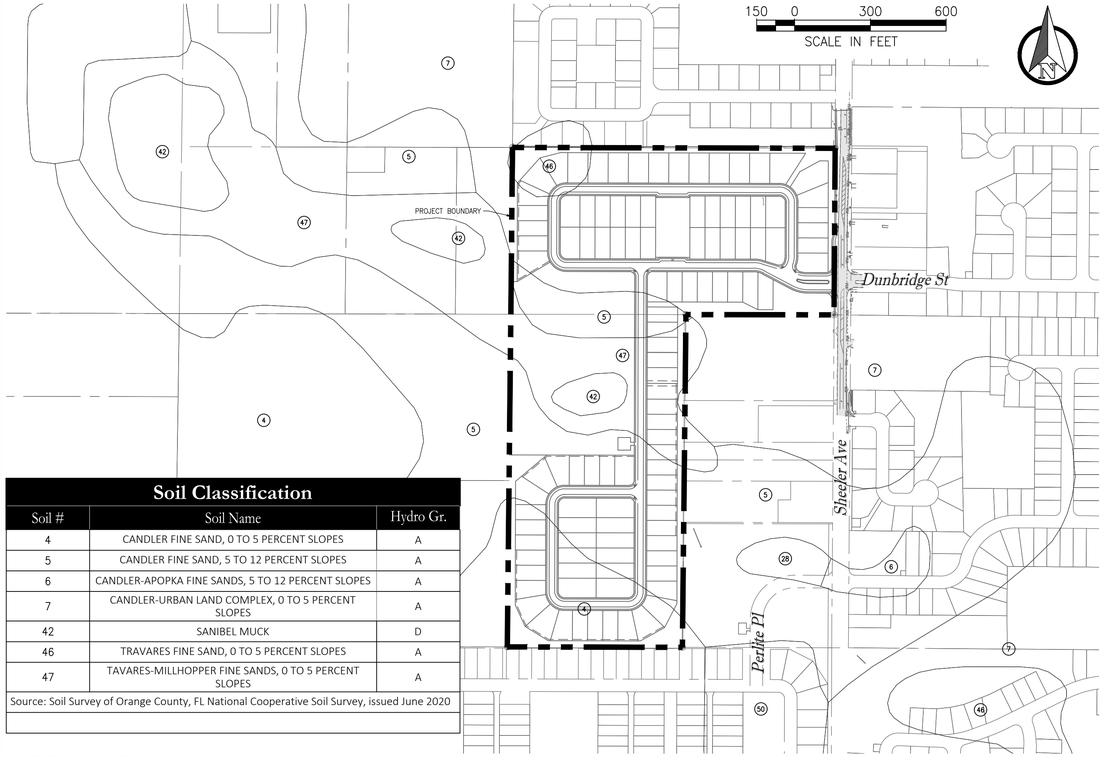


FEMA Flood Classification	
Zone	Zone Description
A	No Base Flood Elevation Determined
X	Areas determined to be outside the 0.2% annual chance floodplain.

Source: FEMA Map Service Center, Orange Co., Florida, Map No. 12095C0140F Panel 140 of 750, Date Revised: 9/25/2009.

FEMA MAP

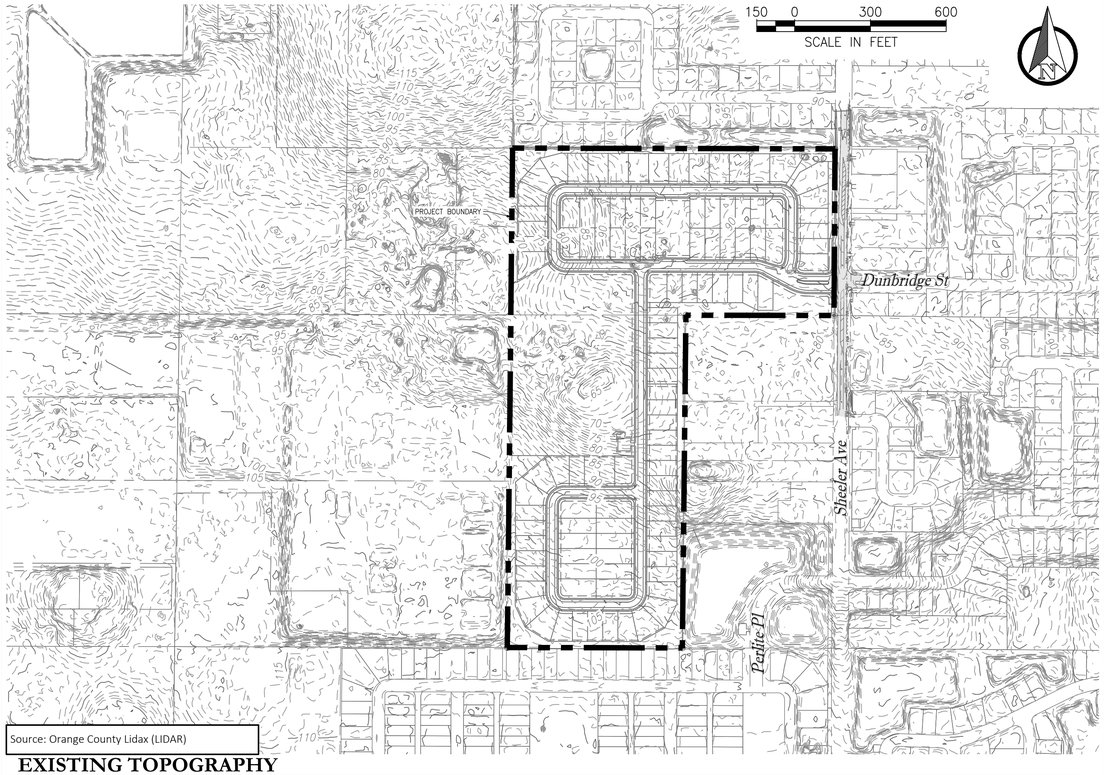
SCALE: 1" = 300'



Soil Classification		
Soil #	Soil Name	Hydro Gr.
4	CANDLER FINE SAND, 0 TO 5 PERCENT SLOPES	A
5	CANDLER FINE SAND, 5 TO 12 PERCENT SLOPES	A
6	CANDLER-APOPKA FINE SANDS, 5 TO 12 PERCENT SLOPES	A
7	CANDLER-URBAN LAND COMPLEX, 0 TO 5 PERCENT SLOPES	A
42	SANIBEL MUCK	D
46	TRAVARES FINE SAND, 0 TO 5 PERCENT SLOPES	A
47	TAVARES-MILLHOPPER FINE SANDS, 0 TO 5 PERCENT SLOPES	A
Source: Soil Survey of Orange County, FL National Cooperative Soil Survey, issued June 2020		

SOILS MAP

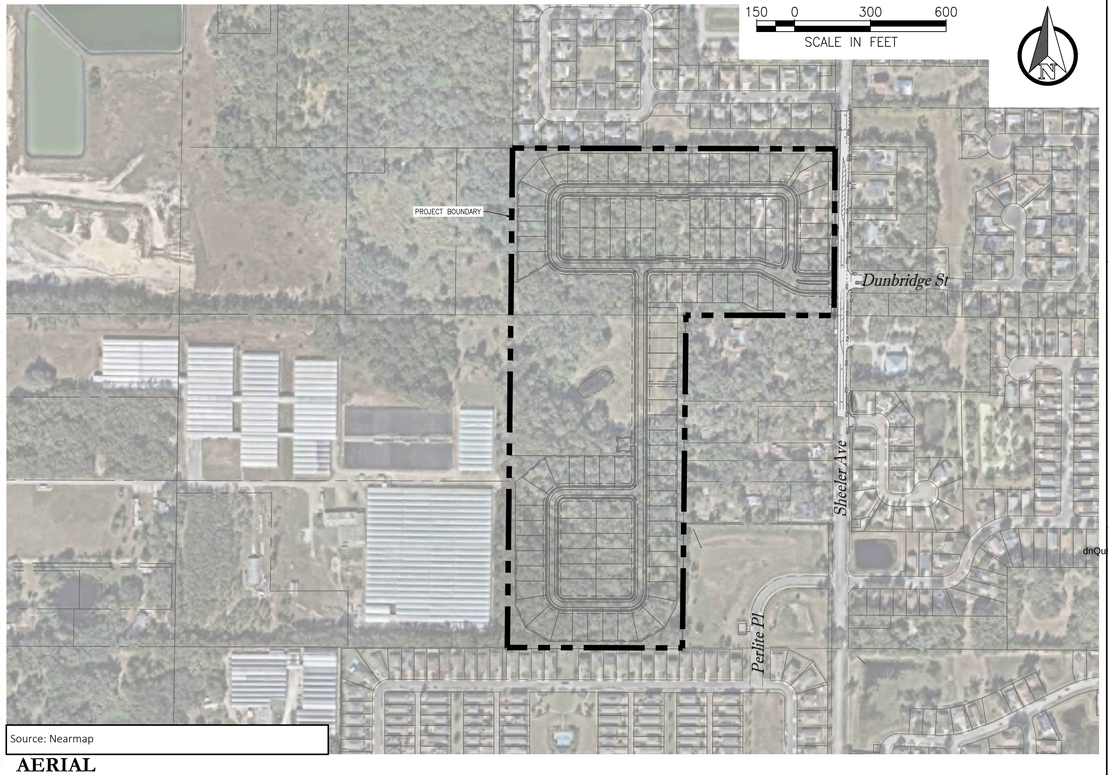
SCALE: 1" = 300'



Source: Orange County Lidax (LIDAR)

EXISTING TOPOGRAPHY

SCALE: 1" = 300'



Source: Nearmap

AERIAL

SCALE: 1" = 300'

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 300'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

EXISTING CONDITIONS PLAN

Sheet No.:

C0.03

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARC DANIEL STEHLI P.E. NO. 065278

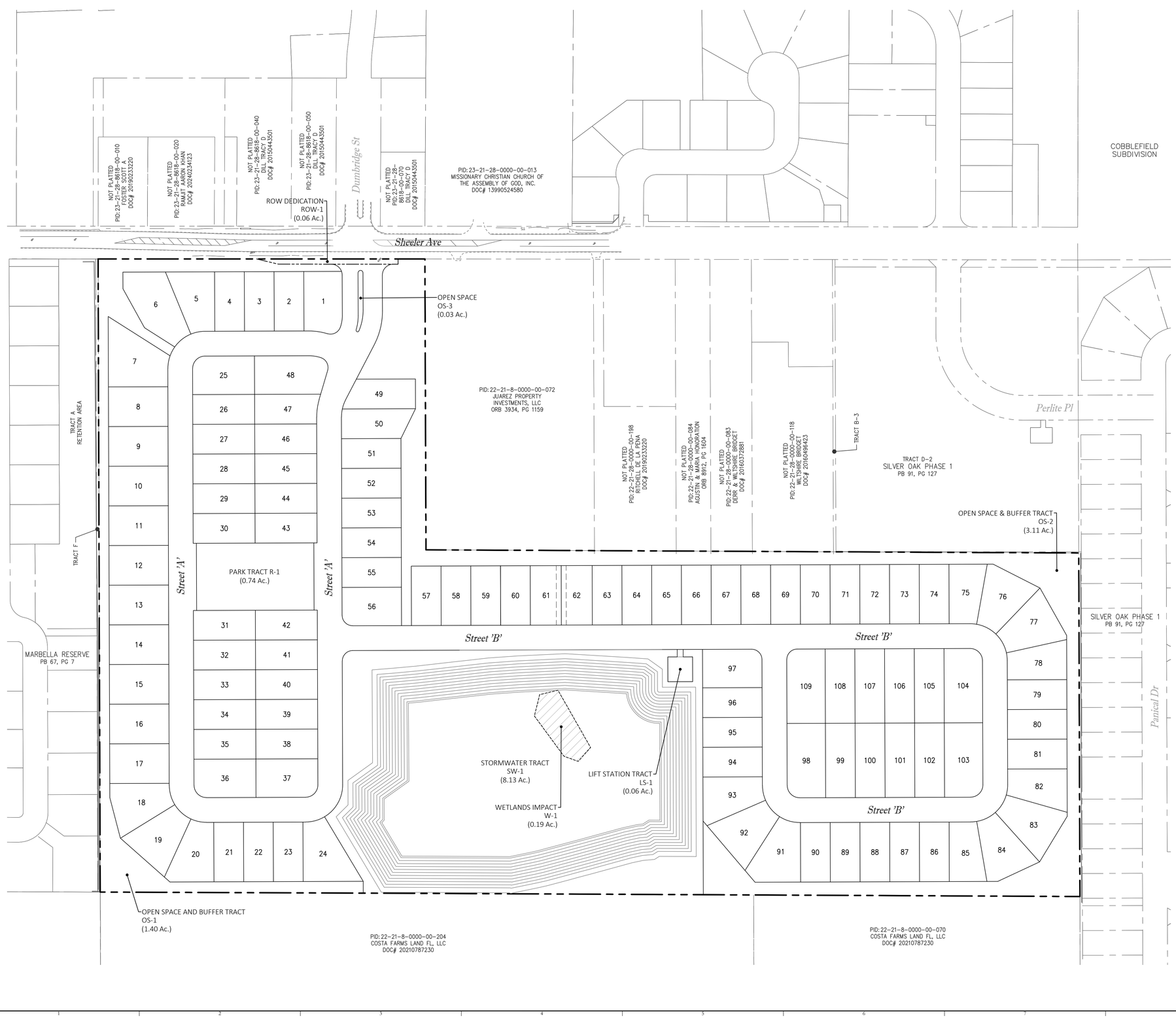
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410C000001B9FE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:23-04'00'

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PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB0664

Date: Apr 10, 2026, 8:55am User ID: Arenaga
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\EC13622-01.dwg



Key Map:

Consultant:

0	4/15/2026 SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
NO.	DATE: DESCRIPTIONS:
SUBMISSIONS/REVISIONS	
VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

WETLANDS

TRACT ID	ACREAGE
W-1	0.19
TOTAL	**0.19**

WETLAND IMPACTS

TRACT ID	ACREAGE
W-1	0.19
TOTAL	**0.19**

SECONDARY WETLAND IMPACTS

TRACT ID	ACREAGE
TOTAL	**0.00**

PRESERVE WETLANDS

TRACT ID	ACREAGE
TOTAL	**0.00**

SURFACE WATERS

TRACT ID	ACREAGE
TOTAL	**0.00**

SURFACE WATER IMPACTS

TRACT ID	ACREAGE
TOTAL	**0.00**

SECONDARY SURFACE WATER IMPACTS

TRACT ID	ACREAGE
TOTAL	**0.00**

PRESERVED SURFACE WATERS

TRACT ID	ACREAGE
TOTAL	**0.00**

WETLANDS

EXISTING WETLANDS	0.19
WETLAND IMPACTS	0.19
PRESERVED WETLANDS	0.00

SURFACE WATERS

EXISTING SURFACE WATERS	0.00
SURFACE WATER IMPACTS	0.00
PRESERVED SURFACE WATERS	0.00

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

WETLAND IMPACT PLAN

Sheet No.:

C0.10

Seal:

MARC DANIEL STEHLI
LICENSE
No.
STATE OF
FLORIDA
REGISTERED
PROFESSIONAL ENGINEER
MARC DANIEL STEHLI
P.E. NO. 065781
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B6FFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:25-04'00'

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FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8664

Date: Apr 10, 2026, 8:51am User ID: Areynaga
File: P:\36\22\03\Design\Civil_Final Engineering Construction Plans\WCP136220I.dwg



50 0 100 200
SCALE IN FEET

LEGEND

- Property Boundary
- 80' x 120' Min. Lot
- 60' x 120' Min. Lot
- Open Space
- Park
- Stormwater
- Impacted Wetland
- Paved Emergency Access
- Full Access Point

Development Data

Jurisdiction	City of Apopka
Future Land Use	RL
Zoning	RTF
Max. Density Permitted	5 DU/Ac

Site Details

Total Site Area	40.32 Acres
Row Dedication	0.06 Acres
Developable Area	40.26 Acres
Open Space Required (20%)	8.05 Acres
Open Space Provided [2]	10.64 Acres

Proposed Development

Total Number of Dwelling Units	109 Units
60' x 120' Minimum Lot Size	98 Units
80' x 120' Minimum Lot Size	11 Units
Proposed Density [3]	2.71 DU/Ac

Notes:

[1] Open Space Requirement is 20% of the developable area
[2] Open Space Provided includes 75% of Stormwater Retention area with Parks & Buffers
[3] Proposed Density is based on Developable Area

Lot Size Requirements

Min. Lot Width	60 Feet
Min. Lot Depth	N/A
Min. Lot Area	7,000 SF

Setbacks

Front	25 Feet
Side (Interior Lot)	7.5 Feet
Side (Corner Lot)	25 Feet
Rear	20 Feet

Ownership/Maintenace Table

Name	Operation & Maintenance	Public/Private	Area (Ac.)
ROW-1	TO BE OWNED AND MAINTAINED BY ORANGE COUNTY	PUBLIC	0.06
ROW	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA	PUBLIC	5.88
SW-1	TO BE OWNED AND MAINTAINED BY HOA WITH DRAINAGE EASEMENT DEDICATION TO CITY OF APOPKA	PRIVATE	8.13
LS-1	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA	PUBLIC	0.06
OS-1	TO BE OWNED AND MAINTAINED BY HOA	PRIVATE	1.40
OS-2	TO BE OWNED AND MAINTAINED BY HOA	PRIVATE	3.11
OS-3	TO BE OWNED AND MAINTAINED BY HOA	PRIVATE	0.03
R-1	TO BE OWNED AND MAINTAINED BY HOA	PRIVATE	0.74
LOTS	PRIVATE	PRIVATE	20.91
TOTAL:			40.32

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
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SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

SITE PLAN

Sheet No.:

C1.00

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARC DANIEL STEHLI
P.E. NO. 065278
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B6FF033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:27-04'00'

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Date: Apr 13, 2026, 3:25pm User ID: Areynaga
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OWNERSHIP / MAINTENANCE

ROADWAYS	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
DRAINAGE TRACTS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE CDD OR HOA WITH EASEMENT DEDICATED TO CITY OF APOPKA FOR MAINTENANCE.
DRAINAGE EASEMENTS (D.E)	PUBLIC	TO BE DEDICATED TO CDD OR HOA. DRAINAGE FACILITIES WITHIN EASEMENTS ARE TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA.
PRIVATE DRAINAGE EASEMENTS (P.D.E)	PRIVATE	TO BE DEDICATED TO CDD OR HOA. DRAINAGE FACILITIES WITHIN EASEMENTS ARE TO BE OWNED AND MAINTAINED BY THE CDD OR HOA.
UTILITY EASEMENTS	PUBLIC	TO BE DEDICATED TO THE CITY OF APOPKA. UTILITIES WITHIN THE EASEMENTS ARE TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA.
WATER, RECLAIMED WATER AND SANITARY SEWER UTILITIES	PUBLIC	TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA UP TO METERS/CLEAN-OUTS
LIFT STATION TRACTS	PUBLIC	TO BE OWNED AND MAINTAINED BY THE CITY OF APOPKA
PARK/OPEN SPACE TRACTS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE CDD OR HOA
SIDEWALKS IN RIGHT OF WAY	PUBLIC	TO BE OWNED AND MAINTAINED BY CITY OF APOPKA
STORMWATER & STREET LIGHTING	PUBLIC	AN MSBU WILL BE ESTABLISHED FOR ROUINE MAINTENANCE OF STORMWATER SYSTEM FUCTIONALITY AND STANDARD OPERTAION MAINTENANCE OF STREET LIGHTING
SIDEWALK/TRAIL OUTSIDE ROW	PRIVATE	TO BE OWNED AND MAINTAINED BY THE HOA
STREET TREES IN PUBLIC ROW	PRIVATE	TO BE OWNED AND MAINTAINED BY THE HOA
RETAINING WALLS	PRIVATE	TO BE OWNED AND MAINTAINED BY THE HOA
PARKING SPACE STRIPING IN PUBLIC ROW	PRIVATE	TO BE MAINTAINED BY THE HOA

PHASING

SHEELER PARK WILL BE DEVELOPED IN A SINGLE PHASE

SIGNAGE

ONSITE SIGNAGE WILL BE IN ACCORDANCE WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE SECTION 5.10-SIGNS.

LANDSCAPE

1. LANDSCAPE MATERIALS WILL BE CHOSEN FROM THE FLORIDA FRIENDLY PLANT DATABASE (CENTRAL FLORIDA REGION).
2. A TWENTY-FIVE (25) FOOT BUFFER IS PROVIDED ADJACENT TO SHEELER AVE. IN ACCORDANCE WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE SEC. 5.2.5 - LANDSCAPING AND BUFFER STANDARDS.

GARBAGE PICKUP

FRONT LOADED SINGLE FAMILY UNITS TO BE PICKED UP AT FRONT RIGHT OF WAY.

PARKING REQUIREMENTS

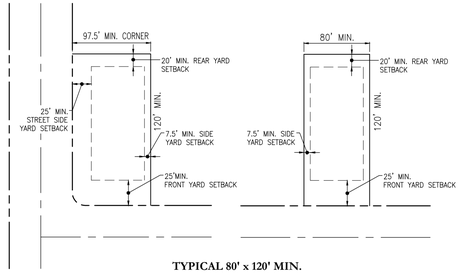
OFF-STREET PARKING WILL BE PROVIDED IN ACCORDANCE WITH THE CITY OF APOPKA LAND DEVELOPMENT CODE SECTION 5./.6- OFF-STREET VEHICULAR PARKING SPACE STANDARDS.

STREET LIGHTING

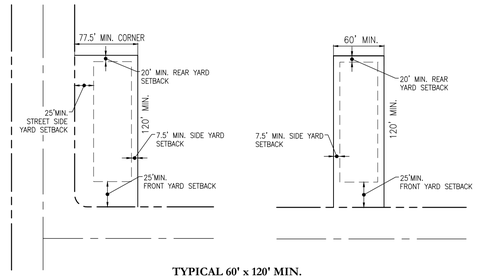
LIGHTING PHOTOMETRIC PLAN WILL BE PROVIDED AT THE TIME OF CONSTRUCTION PLAN SUBMITTAL. LIGHTING REQUIREMENTS SHALL MEET ALL APPLICABLE CITY OF APOPKA AND ELECTRIC PROVIDERS REGULATIONS AT THE TIME OF ANY CONSTRUCTION PLAN SUBMITTAL AND ANY SUBSEQUENT APPROVALS

NOTIFICATION

THE HOMEOWNER'S ASSOCIATION COVENANTS AND RESTRICTIONS SHALL INCLUDE A STATEMENT NOTIFYING RESIDENTS OF THE PROJECT'S CLOSE PROXIMITY TO THE CITY OF APOPKA POLICE'S GUN RANGE LOCATED OFF OF EAST CLEVELAND STREET.



TYPICAL 80' x 120' MIN. LOT LAYOUT
N.T.S.



TYPICAL 60' x 120' MIN. LOT LAYOUT
N.T.S.

TYPICAL LOTS

N.T.S.

DRAINAGE TRACT

TRACT ID	ACREAGE
SW-1	8.13

LIFT STATION TRACTS

TRACT ID	ACREAGE
LS-1	0.06

OPEN SPACE TRACTS

TRACT ID	ACREAGE
OS-1	1.40
OS-2	3.11
OS-3	0.03
TOTAL	**4.54**

PARK TRACT

TRACT ID	ACREAGE
R-1	0.74

UNITS COUNT

TYPE	COUNT	ACRES
60X120	98	18.42
80X120	11	2.49
TOTAL	109	20.91

ROW DEDICATION

TRACT ID	ACREAGE
ROW-1	0.06
ROW	5.88
TOTAL	**5.94**

DEVELOPMENT STANDARDS

MIN. LIVING AREA	1,500 SF
MIN. BUILDING HEIGHT	N/A
MAX. BUILDING HEIGHT	35 FT
MIN. ADDITIONAL FLOOR HEIGHT	N/A
MIN. FRONT/ STREET SIDE	25 FT
MAX. FRONT/ STREET SIDE	N/A
MIN. SIDE	SINGLE-FAMILY (INTERIOR LOT)-7.5 FT SINGLE-FAMILY (CORNER LOT) -25 FT
MIN. REAR	20 FT
DENSITY	
MIN. DENSITY	N/A
MAX. DENSITY	5 DU/AC
OPEN SPACE	
MIN. OPEN SPCE	20%

SUSTAINABILITY

Per LDC section 5.11.4.A.1.B, residential developments of 30 or more dwelling units shall obtain a minimum of 4 points from the green building point system, Table 5.11.4.B. this development shall satisfy this requirements as follows

GREEN BUILDING STANDARD	POINTS EARNED	NOTES
Use central air conditioners that are energy star qualified	0.50	All HVAC's installed on site will be energy star qualified
Use vegetation or vegetated structures to shade HVAC units	0.25	2 shrubs per A/C unit will be shown on the final landscape plans
Orient a minimum of 25 percent of residential dwelling units or lots in the development within 20 percent of east-west axis for maximum passive solar exposure	1.00	At least 29 lots (25%) are oriented east-west lots
Create a soil management plan for development site that promotes stormwater infiltration through improved organic matter content, reduced compaction levels, and increased infiltration capacity	0.50	The entire site is designed to drain to an on-site retention pond that will fully recover thought infiltration
Preserve large, non-exotic trees on site (large tree defined as 20 feet or greater in height and 24 inches or greater DBH)	1.00	A minimum of Large trees are being preserved. Please see landscape plans for the tree locations.
Install operable windows to allow for natural ventilation in the event of power failures	0.25	All windows will be operable
Elevate new and/or existing structures more than 3 feet above base flood elevation (BFE)	0.50	All structures will be constructed at least 3 feet above BFE
TOTAL	**4.00**	

(1) SEE LANDSCAPE PLAN SHEETS FOR IDENTIFICATION OF LARGE & NON-EXOTIC SPECIMEN TREES TO BE PRESERVED.

OPEN SPACE & PARK REQUIREMENTS

TOTAL SITE AREA	40.32 Ac.
ROW DEDICATION	0.06 Ac.
DEVELOPABLE AREA	40.26 Ac.
OPEN SPACE REQUIRED	8.05 Ac. (20.0%)
OPEN SPACE PROPOSED	10.64 Ac. (26.4%)
OPEN SPACE	4.54 Ac. (11.3%)
PARK	0.74 Ac. (1.8%)
DRAINAGE TRACT	6.10 Ac. (15.2%)

1) OPEN SPACE REQUIREMENTS= 20%
2) OPEN SPACE AND PARK TRACTS COUNT TOWARDS OPEN SPACE REQUIREMENTS
3) PROPOSED OPEN SPACE ACREAGE INCLUDES THE MAXIMUM 75% (6.10 Ac.) OF TRACT SW-1 WHICH INCLUDES AN AMENITY TRAIL AS REQUIRED BY LDC SEC 5.4.

ACTIVE RECREATIONAL REQUIREMENTS

ACTIVE RECREATIONAL SPACE REQUIRED (35% OF REQUIRED OPEN SPACE)	2.82 Ac.
ACTIVE RECREATIONAL SPACE PROVIDED	9.82 Ac.
-PARK AREA	0.74 Ac. (8%)
-JOGGING TRAIL AREA	9.08 Ac. (92%)

STUDENT GENERATION TABLE

		Generation Rate				
Use	Units	ES	MS	HS	TOTAL RATE	STUDENTS
SINGLE FAMILY	109	0.178	0.094	0.133	0.405	45
						45

SOURCE: ORANGE COUNTY PUBLIC SCHOOLS STUDENT GENERATION RATES EFFECTIVE JUNE 22, 2021

NOTES

1. LOT AREAS, EASEMENT LINES AND TRACT AREAS ON THE FINAL PLAT MAY VARY FROM THAT SHOWN DUE TO FINAL ENGINEERING DESIGN CRITERIA AND CONTRAINTS.
2. THIS COMMUNITY IS NOT PROPOSED TO BE GATED. ALL RIGHTS OF WAY SHALL BE PUBLIC.
3. PARKS SHALL HAVE ADEQUATE LIGHTING ON AUTOMATIC TIMERS WITHOUT PROJECTING A GLARE ONTO ADJACENT PROPERTIES.
4. SIGNAGE SHALL BE IN ACCORDANCE WITH LDC SECTION 5.10 AND BE REVIEWED VIA THE BUILDING PERMIT REVIEW PROCESS.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

SITE DATA TABLE

Sheet No.:

C1.01

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA PROFESSIONAL ENGINEER

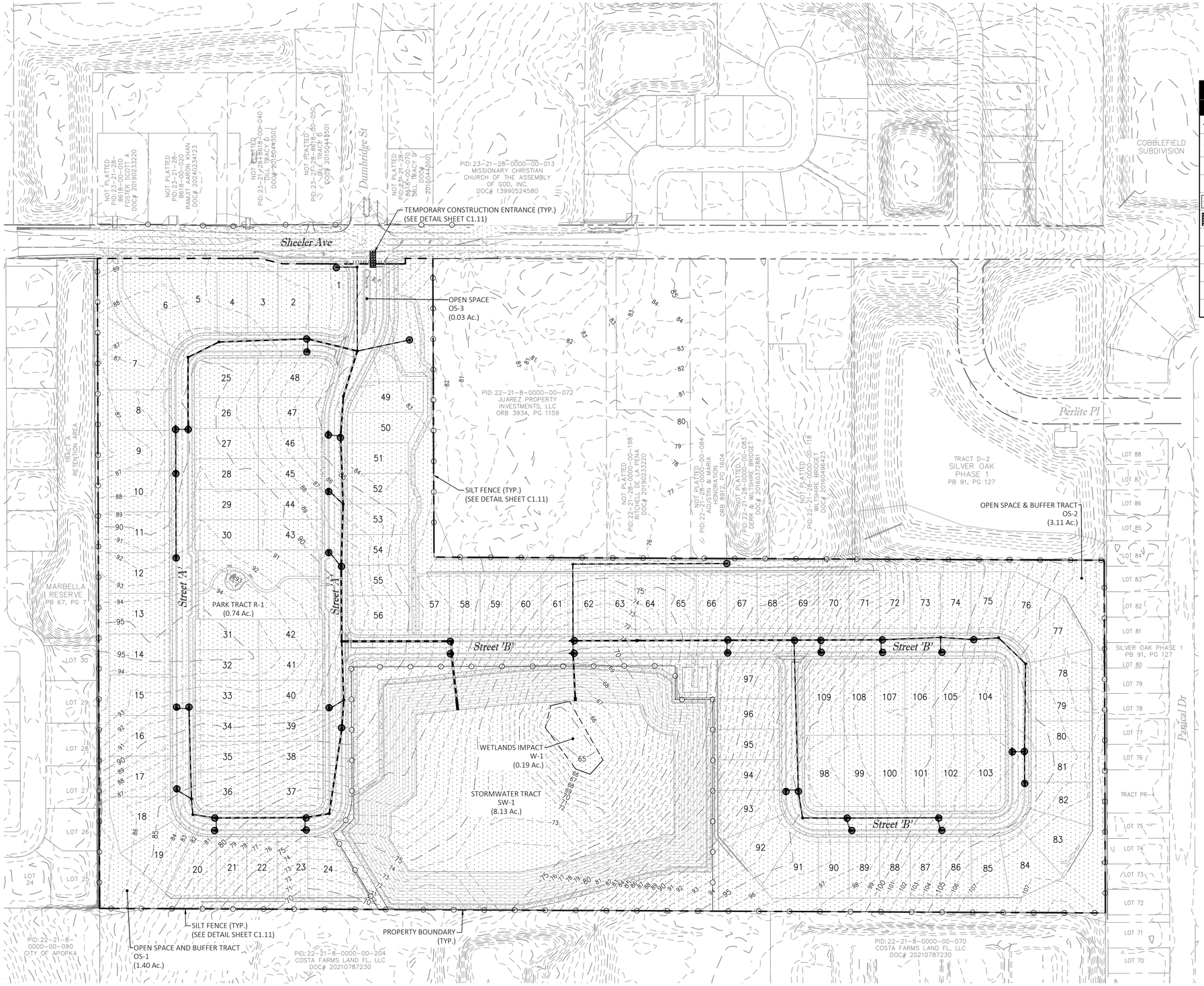
MARC DANIEL STEHLI
P.E. NO. 065278
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B9AFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:29-04'00'

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FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 10:42am User ID: Aryeaga
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\SD713622-01.dwg



50 0 100 200

SCALE IN FEET

Erosion Legend

Symbol	Description
	PROPERTY BOUNDARY
	SILT FENCE (SILT FENCE TO BE INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITIES)
80	MAJOR CONTOUR
79	MINOR CONTOUR
	PROPOSED DISTURBED AREA
	CONSTRUCTION ENTRANCE
	INLET PROTECTION
	STORM PIPE
	STORM MANHOLE
	INLET
	MITERED END SECTION

DISTURBED AREA
40.32 Ac.

NOTES

1. LOCATION OF SILT FENCE IS GRAPHICAL IN NATURE. THE CONTRACTOR SHALL INSTALL SILT FENCE ONSITE AND IN LOCATION THAT ALLOWS FOR SITE GRADING. RELOCATION OF SILT FENCE, AS MAY BE NEEDED, SHALL BE THE CONTRACTORS RESPONSIBILITY AND PERFORMED AS PART OF THE PROJECT EXECUTION AT NO ADDITIONAL COST TO OWNER.

Key Map:

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DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

EROSION CONTROL PLAN

Sheet No.:

C1.10

Seal:

MARC DANIEL STEHLI LICENSE No. 85278 STATE OF FLORIDA

MARC DANIEL STEHLI P.E. NO. 0052781

DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B6AFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:31-04'00'

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Date: Apr 13, 2026, 3:56pm User ID: Areynoso
File: P:\136\v2\01\Design\Civil_Final Engineering Construction Plans\ECP136Z2-01.dwg

EROSION CONTROL NOTES:

1. DURING CONSTRUCTION, THE CONTRACTOR SHALL TAKE ALL REASONABLE MEASURES TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT AS TO CAUSE AN INCREASE IN TURBIDITY TO THE EXISTING SURFACE WATERS, SUCH MEASURES SHALL BE APPROVED BY THE PROJECT ENGINEER AND MAY INCLUDE, BUT NOT LIMITED TO, CONSTRUCTION OF TEMPORARY EROSION CONTROL STRUCTURES, SUCH AS SEDIMENT BASINS, SEDIMENT CHECKS, OR SILT BARRIERS.
2. SODDING OF DETENTION PONDS AND OTHER AREAS DESIGNATED FOR SOD, SHOULD BE ACCOMPLISHED WITHIN SEVEN (7) DAYS FOLLOWING COMPLETION OF GRADING TO MINIMIZE EROSION POTENTIAL.
3. AT A MINIMUM, THE RETENTION/DETENTION STORAGE AREA MUST BE EXCAVATED TO ROUGH GRADE PRIOR TO BUILDING CONSTRUCTION OR PLACEMENT OF IMPERVIOUS SURFACE WITHIN THE AREA TO BE SERVED BY THOSE FACILITIES TO PREVENT REDUCTION IN STORAGE VOLUME AND PERCOLATION RATES. ALL ACCUMULATED SEDIMENT MUST BE REMOVED FROM THE STORAGE AREA PRIOR TO FINAL GRADING AND STABILIZATION.
4. IF DURING CONSTRUCTION, THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORILY, ALTERNATIVES AND ADDITIONAL METHODS OF PROTECTION SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH S.J.R.W.M.D. AND CITY OF APOPKA EROSION PROTECTION STANDARDS.
5. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A DETAILED EROSION CONTROL PLAN TO THE CITY OF APOPKA FOR REVIEW AND APPROVAL A MINIMUM OF 2 WORKING DAYS PRIOR TO THE PRECONSTRUCTION MEETING. THE EROSION CONTROL PLAN SHALL PROPOSE SILT SCREEN OR SYNTHETIC HAY BALES AND TURBIDITY BARRIERS, IN ACCORDANCE WITH THE CONSTRUCTION PLANS.
6. ALL PERMANENT EROSION CONTROL MEASURES SHALL BE COMPLETED WITHIN 7 DAYS OF FINAL GRADING. ALL TEMPORARY EROSION CONTROL SHALL BE MAINTAINED UNTIL PERMANENT MEASURES ARE COMPLETED AND ESTABLISHED.
7. AT A MINIMUM SILT BARRIERS SHALL BE PLACED AS SHOWN ON THE CONSTRUCTION PLANS TO INSURE AGAINST POLLUTING, SILTING OR DISTURBING TO SUCH AN EXTENT TO CAUSE AN INCREASE IN TURBIDITY, OR DISCHARGE OF MATERIAL OFFSITE OR TO EXISTING WETLANDS. IF DURING CONSTRUCTION THE PROPOSED EROSION CONTROL SYSTEM DOES NOT PERFORM SATISFACTORY ALTERNATIVES AND ADDITIONAL MEASURES SHALL BE IMPLEMENTED BY THE CONTRACTOR IN ORDER TO COMPLY WITH CITY OF APOPKA AND S.J.R.W.M.D. EROSION PROTECTION STANDARDS.
8. CONTRACTOR IS ULTIMATELY RESPONSIBLE FOR ALL EROSION CONTROL COSTS, INCLUDING ANY COST ASSOCIATED WITH COMPLIANCE ISSUES AND ENFORCEMENT ACTIONS.
9. CONTRACTOR IS RESPONSIBLE FOR PREPARING AND ADHERING TO A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) IN ACCORDANCE WITH THE FLORIDA STORMWATER, EROSION, AND SEDIMENTATION CONTROL INSPECTORS MANUAL PUBLISHED BY FDEP.
10. CONTRACTOR SHALL STAKE IN ALL SOD ON SLOPES 4:1 OR STEEPER UNTIL SUCH TIME THAT GROUND IS STABILIZED IN ORDER TO PREVENT EROSION.
11. WORK SHALL BE DONE IN ACCORDANCE WITH EPA, FDEP, SJRWMD, AND CITY OF APOPKA BEST MANAGEMENT PRACTICES AND EROSION CONTROL SPECIFICATIONS.
12. THE SITE SHALL BE STABILIZED FOLLOWING GRUBBING, CLEARING, EARTH WORK OR MASS GRADING TO ESTABLISH A DENSE STAND OF GRASS, OR SHALL INCORPORATE OTHER APPROVED BEST MANAGEMENT PRACTICES, ON ALL DISTURBED AREAS IF DEVELOPMENT DOES NOT BEGIN WITHIN 7 DAYS. FINAL STABILIZATION SHALL ACHIEVE A MINIMUM OF 70% COVERAGE OF THE DISTURBED LAND AREA AND SHALL INCLUDE A MAINTENANCE PROGRAM TO ENSURE MINIMUM COVERAGE SURVIVAL AND OVERALL SITE STABILIZATION UNTIL SITE DEVELOPMENT.

DUST CONTROL PROVISIONS

1. CONTRACTOR SHALL PRE-WATER THE SITE AND ALL WORK WILL BE PHASED TO REDUCED THE AMOUNT OF DISTURBED SURFACE AREA AT ANY ONE TIME ACTIVE OPERATIONS.
   - 1.1. WATER TO BE APPLIED TO DRY AREAS DURING LEVELING, GRADING, TRENCHING, AND EARTHMOVING ACTIVITIES.
   - 1.2. WATER TO BE APPLIED ON DISTURBED SURFACE AREAS TO FORM A VISIBLE CRUST.
   - 1.3. VEHICULAR ACCESS TO BE RESTRICTED AND WATER OR DUST SUPPRESSANTS TO BE APPLIED AND MAINTAINED AT ALL UN-VEGETATED AREAS.
2. CONTRACTOR SHALL PREVENT DUST FROM WIND EVENTS.
   - 2.1. WATER TO BE APPLIED TO VEHICULAR TRAFFIC AND EQUIPMENT STORAGE AREAS.
   - 2.2. WATER APPLICATION EQUIPMENT WILL APPLY WATER TO CONTROL FUGITIVE DUST DURING WIND EVENTS, UNLESS UNSAFE TO DO SO.
   - 2.3. OUTDOOR CONSTRUCTION ACTIVITIES THAT DISTURB THE SOIL TO BE CEASED WHENEVER VISIBLE DUST EMISSIONS CANNOT BE EFFECTIVELY CONTROLLED.
3. CONTRACTOR SHALL HANDLE BULK MATERIAL.
   - 3.1. WATER TO BE APPLIED WHEN HANDLING BULK MATERIALS.
   - 3.2. WATER TO BE APPLIED TO STORAGE PILES.
   - 3.3. VEHICLE SPEED TO BE LIMITED ON THE WORK SITE.
   - 3.4. ALL HAUL TRUCKS TO BE LOADED SUCH THAT THE FREEBOARD IS NOT LESS THAN SIX INCHES WHEN TRANSPORT USING A CHUTE OR CONVEYOR.
4. CONTRACTOR SHALL DO DAILY CLEANUPS:
   - 4.1. MINIMUM CLEANUP FREQUENCY TO BE DONE AT THE END OF THE WORK DAY AND REMOVED IMMEDIATELY IF CARRYOUT AND TRACK OUT EXTENDS BEYOND 50 FEET.
   - 4.2. CLEAN UP METHODS:
   - 4.2.1. MANUALLY SWEEPING AND PICKING UP.
   - 4.2.2. MECHANICAL SWEEPING WITH A ROTARY BRUSH OR BROOM ACCOMPANIED BY WATER SPRAYER ON BROOM.

SWPPP NOTES

1. CONSTRUCTION ACTIVITY PERTAINS TO CONSTRUCTION OF A SHARED PARK AND ASSOCIATED UTILITIES, AND SIDEWALKS. EXISTING ON-SITE SOILS: REFER TO NPDES TABLE.
2. ALL PROPOSED INLETS/OUTFALLS, ONCE INSTALLED, SHALL BE PROTECTED FROM EROSION AND SEDIMENT RUNOFF USING PROPERLY INSTALLED FILTER FABRICS. DISTURBED PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED SHALL BE STABILIZED WITH SOD. SILT FENCE SHALL BE INSTALLED AROUND PERIMETER OF THE SITE. A DOUBLE ROW OF SILT FENCE, REINFORCED WITH FIELD FENCING, SHALL BE PLACED AROUND VEGETATIVE BUFFERS AND WETLAND AREAS. ALL AREAS DISTURBED MORE THAN 7 DAYS SHALL BE STABILIZED WITH RYE GRASS OR OTHER APPROPRIATE TEMPORARY VEGETATION APPLIED AT MANUFACTURER'S RECOMMENDATION.
3. THE TEMPORARY AND PERMANENT STABILIZATION PRACTICES INCLUDE SODDING ALL DISTURBED AREAS FOR STABILIZATION.
4. SILT FENCE AND INLET/OUTLET PROTECTION SHALL BE INSTALLED PER BEST MANAGEMENT PRACTICES, SEE SECTION 8.
5. CONTROL DETAILS OF POTENTIAL POLLUTANTS AS FOLLOWS:
   - 5.1. WASTE DISPOSAL - ALL CONSTRUCTION MATERIALS AND DEBRIS WILL BE PLACED IN DUMPSTER AND HAULED OFF SITE TO A LANDFILL OR OTHER DISPOSAL SITE. NO MATERIALS SHALL BE BURIED ON SITE.
   - 5.2. PROPER APPLICATION RATES OF ALL FERTILIZERS, HERBICIDES AND PESTICIDES AT CONSTRUCTION SITE - FLORIDA FRIENDLY FERTILIZERS AND PESTICIDES WILL BE USED AT A MINIMUM AND IN ACCORDANCE WITH MANUFACTURER'S SUGGESTED APPLICATION RATES. THE FERTILIZERS AND PESTICIDES WILL BE STORED IN A COVERED SHED. USE OF FERTILIZERS MUST ADHERE TO THE CITY OF APOPKA FERTILIZER ORDINANCE. USE MUST BE IN COMPLIANCE WITH LOCAL ORDINANCES, SOME OF WHICH ARE MORE STRINGENT THAN CITY OF APOPKA. FOR INFORMATIONAL PURPOSES, SOME GENERAL FACTS ON THE COUNTY'S ORDINANCE INCLUDE:
     - NO MORE THAN 1 LB. OF FERTILIZER CONTAINING %50 SLOW RELEASE NITROGEN SHALL BE APPLIED PER 1,000 SQ. FT.
     - NO P CAN BE APPLIED WITHOUT A VALID SOIL DEFICIENCY TEST FROM IFAS. IF THEY PLAN TO APPLY P, PLEASE PROVIDE COPY OF SOIL TEST INDICATING P DEFICIENCY.
     - NO FERTILIZER CAN BE APPLIED WITHIN 15 FT. OF WATER BODIES.
     - FERTILIZER RELEASED ON TO IMPERVIOUS SURFACES MUST BE IMMEDIATELY CLEANED UP OR APPLIED PER CODE.
     - JUNE 1 - SEPTEMBER 30 IS THE SUMMER APPLICATION RESTRICTED PERIOD. APPLICATORS MUST SHOW PROOF OF TRAINING TO APPLY NITROGEN AND PHOSPHORUS FERTILIZER DURING THIS PERIOD.
   - 6.3 STORAGE, APPLICATION, GENERATION AND MIGRATION OF ALL TOXIC SUBSTANCES - ALL PAINTS AND OTHER CHEMICALS WILL BE STORED IN A LOCKED COVERED SHED.
   - 6.4 OTHER - PORT-O-LETS WILL BE PLACED AWAY FROM STORM SEWER SYSTEMS, STORM INLETS, SURFACE WATER AND WETLANDS. NO VEHICLE MAINTENANCE SHALL BE CONDUCTED ON-SITE. A WASHDOWN AREA SHALL BE DESIGNATED AT ALL TIMES AND WILL NOT BE LOCATED IN ANY AREA ALLOWING FOR OF POLLUTED RUNOFF. A SMALL VEGETATED BERM SHALL BE PLACED AROUND THE WASHDOWN AREA.
7. MAINTENANCE FOR ALL STRUCTURAL AND NON-STRUCTURAL CONTROLS SHALL BE AS FOLLOWS:
   - 7.1. SILT FENCE SHALL BE INSPECTED AT LEAST WEEKLY. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
   - 7.2. MAINTENANCE SHALL BE PERFORMED ON THE ROCK ENTRANCE WHEN ANY VOID SPACES ARE FULL OF SEDIMENTS.
   - 7.3. INLETS/OUTLETS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAIN EVENT AND ANY REQUIRED REPAIRS TO THE FILTER FABRIC ON INLETS AND SILT FENCE SHALL BE PERFORMED IMMEDIATELY.
   - 7.4. BARE AREAS OF THE SITE THAT WERE PREVIOUSLY SEEDED SHALL BE RE-SEEDED PER MANUFACTURER'S INSTRUCTIONS.
   - 7.5. MULCH AND SOD THAT HAS BEEN WASHED OUT SHALL BE REPLACED IMMEDIATELY.
   - 7.6. MAINTAIN ALL OTHER AREAS OF THE SITE WITH PROPER CONTROLS AS NECESSARY.
8. QUALIFIED PERSONNEL WILL INSPECT ALL POINTS OF DISCHARGES, ALL DISTURBED AREAS OF CONSTRUCTION NOT STABILIZED, CONSTRUCTION AREAS, INGRESS/EGRESS AND ALL BMPs DAILY AND WITHIN 24 HOURS OF A RAINFALL EVENT THAT IS 0.5 INCHES OR GREATER. WHERE SITES HAVE BEEN FINALLY STABILIZED, SAID INSPECTIONS SHALL BE CONDUCTED AT LEAST ONCE A MONTH UNTIL NOTICE OF TERMINATION IS FILED.
9. NON-STORMWATER DISCHARGES MAY OCCUR FROM CONSTRUCTION ACTIVITIES SUCH AS WATERLINE FLUSHING, PAVEMENT WASH WATER (WHERE NO SPILLS OR LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE OCCURRED) AND UNCONTAMINATED GROUNDWATER (DEWATERING EXCAVATION). DEWATERING SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE DEP GENERIC PERMIT FOR THE DISCHARGE OF PRODUCED GROUND WATER FROM ANY NON-CONTAMINATED SITE ACTIVITY. IF SAID DISCHARGES DO OCCUR, THEY WILL BE DIRECTED TO THE TEMPORARY SEDIMENT BASIN PRIOR TO DISCHARGE. TURBID WATER FROM STORMWATER POND SHALL NOT BE PUMPED DIRECTLY INTO ANY RECEIVING WATERS. TREATMENT CAN INCLUDE SILT FENCES, SETTLING PONDS, PROPER USE OF FLOCCULATING AGENTS OR OTHER APPROPRIATE MEANS.
10. DRY RETENTION POND TO BE PROTECTED FROM SILT DURING CONSTRUCTION ACTIVITIES. IF IT IS DETERMINED THAT THE POND BOTTOM HAS BECOME SILTED THEN 6 INCHES OF POND BOTTOM SHALL BE REMOVED & REPLACED WITH CLEAN BACKFILL.

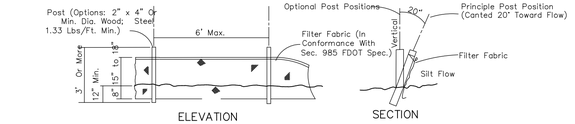
NPDES Information

Address	1920 Sheeler Ave.
Latitude	28°38'53.80"N
Longitude	81°29'37.80"W
Jurisdictional Authority	City Of Apopka
Total Area (Per Survey)	40.32 ac
Total Project (Disturbed) Area	40.32 ac
Area Operator	N/A
MS4 Operator	N/A
Receiving Water Name	Onsite depressional area
Soils (USDA NCRS "Web Soil Survey")	No. 4 Candler fine sand, 0 to 5 percent slopes
	No. 5 Candler Fine Sand, 5 To 12 Percent Slopes
	No. 6 Candler-Apopka Fine Sands 5 To 12 Percent Slopes
	No. 7 Candler-Urban Fine Sands 0 To 12 Percent Slopes
	No. 42 Sanibel Muck
	No. 46 Travares Fine Sand, 0 To 5 Percent Slopes
	No. 47 Tavares-Millhopper Complex, O To 5 Percent Slopes

NOTE: FOR PROJECTS WITH DISTURBED AREAS LESS THAN 1 ACRE NPDES PERMITTING IS NOT REQUIRED.

NPDES PERMIT

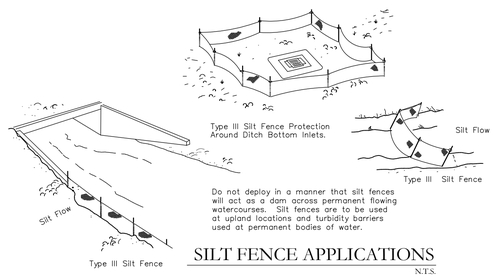
CONTRACTOR SHALL PREPARE AND SUBMIT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION THE "NOTICE OF INTENT" AND "NOTICE OF TERMINATION" FOR "STORMWATER DISCHARGE FROM CONSTRUCTION ACTIVITIES," PER FLORIDA ADMINISTRATIVE CODE 62-621.300(4) IN ACCORDANCE WITH FDEP REQUIREMENTS. THE CONTRACTOR SHALL PREPARE AND SUBMIT WITH THE APPLICATION, AN APPROVED "STORMWATER POLLUTION PREVENTION PLAN" AND PERFORM/CERTIFY ALL INSPECTIONS AND RETAIN ALL. INSPECTION REPORTS AND DOCUMENTATION ON FILE AS REQUIRED FOR FDEP REVIEW. ALL FEES SHALL BE PAID BY THE CONTRACTOR, AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PENALTIES OR FINES FDEP MAY LEVY FOR FAILURE TO COMPLY WITH THE PERMITTING REQUIREMENTS.



Note: Silt Fence to be paid for under the contract unit price for Staked Silt Fence (LF).

TYPE III SILT FENCE

N.T.S.

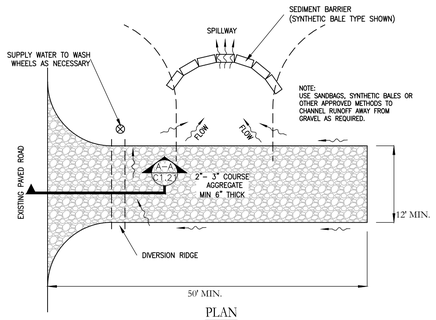


SILT FENCE APPLICATIONS

N.T.S.



SECTION A-A

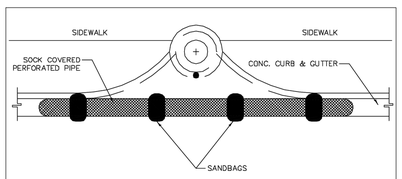


PLAN

NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY.
3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.
4. TEMPORARY ACCESS TO BE CONSTRUCTED TO SUPPORT THE LOAD OF A FIRE APPARATUS.

TEMPORARY CONSTRUCTION ENTRANCE

N.T.S.



PLAN VIEW

NOTES:
1. PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
2. SANDBAGS OF EITHER BURLAP OR WOVEN GEOTEXTILE FABRIC ARE FILLED WITH GRAVEL LAYERED AND PACKED TIGHTLY.
3. LEAVE A ONE SANDBAG GAP IN THE TOP ROW TO PROVIDE A SPILLWAY FOR OVERFLOW.
4. INSPECT BARRIERS AND REMOVED SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.
5. AT THE END OF EACH WORKDAY, SWEEP OR SCRAPE UP SOIL TRACKED ONTO THE STREET.

CURB AND GUTTER SEDIMENT BARRIER

N.T.S.

Key Map:

Consultant:

0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
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Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

EROSION CONTROL DETAILS

Sheet No.:

C1.11

Seal:

MARC DANIEL STEHLI LICENSE NO. 69527 STATE OF FLORIDA PROFESSIONAL ENGINEER

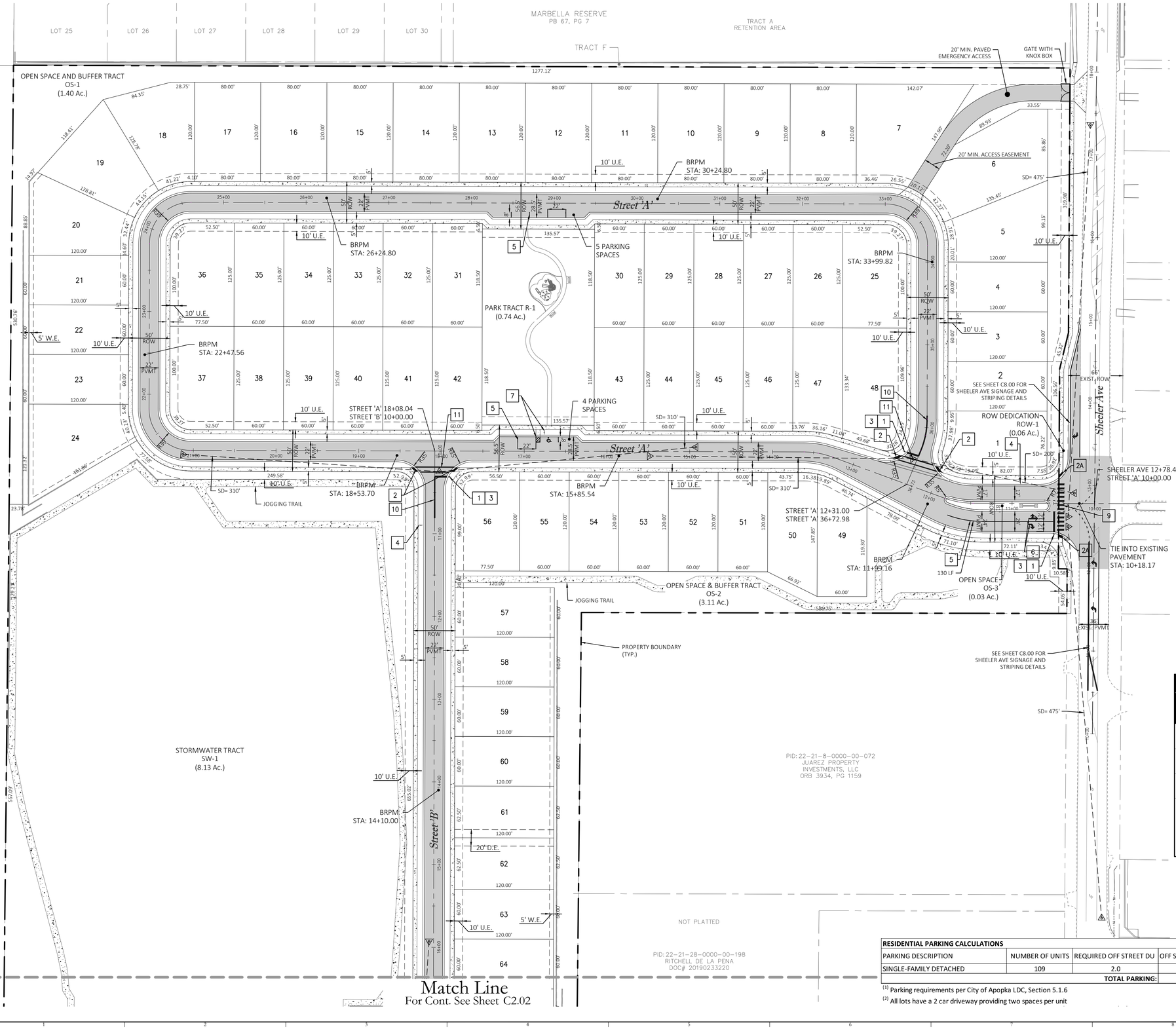
MARC DANIEL STEHLI P.E. NO. 69527 DATE: April 15, 2026

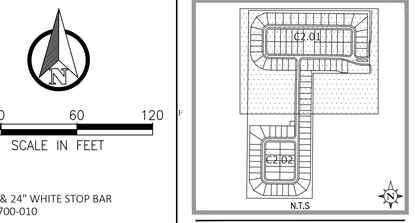
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Date: 2026.04.17 09:56:33-04'00'

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2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #29101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 13, 2026, 4:02pm User ID: Arevnaga
File: P:\135\22\01\Design\Civil_Final Engineering Construction Plans\ECP13622-01.dwg





SIGN & STRIPING LEGEND:

1. 30" STOP SIGN (R1-1) & 24" WHITE STOP BAR PER FDOT INDEX NO. 700-010
2. CAST IN PLACE DETECTABLE WARNINGS PER FDOT INDEX NO. 522-002 WITH DROP CURB ACROSS SIDEWALK AT CROSSING
2A. CURB RAMP (CR-F) AND CAST IN PLACE DETECTABLE WARNINGS PER FDOT INDEX NO. 522-002
3. STREET NAME SIGN (D3-1)
4. SPEED LIMIT SIGN (25 MPH) (R2-1)
5. 6" SOLID WHITE PER FDOT INDEX NO. 711-001
6. TURN LANE ARROW PER FDOT INDEX NO. 711-001
7. ACCESSIBLE PARKING SIGN & STRIPING PER FDOT INDEX NO. 711-001
8. 30" X 30" PEDESTRIAN CROSSING SIGN (W11-2) W/ 24"X12" DOWNWARD POINTING ARROW SIGN (W16-7P) PER MUTCD
9. 8' SPECIAL EMPHASIS CROSSWALK, PER FDOT INDEX 711-001
10. 50' LF-6" SOLID DOUBLE YELLOW PER FDOT INDEX NO. 711-001
11. SIDEWALK STANDARD CROSSWALK, 6' PER FDOT INDEX 711-001

NOTES:

1. ALL STRIPING & SIGNAGE PER FDOT STANDARDS & SPECIFICATIONS MANUAL LATEST EDITION, MUTCD &CITY OF APOPKA ROAD CONSTRUCTION SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED.
2. ALL STRIPING SHALL BE THERMOPLASTIC UNLESS OTHERWISE SPECIFIED.
3. ALL PAVEMENT MARKINGS MUST COMPLY WITH FDOT INDEX 711-001.
4. SIGNS WILL NOT BE INSTALLED WITH CONCRETE.
5. HANDICAP (HC) RAMPS AND DETECTABLE WARNING SURFACE WILL BE CONSTRUCTED AT THE STREET INTERSECTION(S) AND DRIVEWAY CONNECTION(S) TO COMPLY WITH THE AMERICANS WITH DISABILITY ACT (ADA) AND WILL MEET FDOT DESIGN STANDARDS.
6. STREET SIGNS POSTS TO BE SQUARE GALVANIZED STEEL AND HOLES SHALL BE CORED. 2 INCH SQUARE GALVANIZED POLES SHALL BE PRE-SCORED OR QUICK PUNCH.
7. ALL TRAFFIC CONTROL SIGNS WITHIN THE RIGHT-OF-WAY SHALL BE MANUFACTURED USING DIAMOND GRADE REFLECTIVE SHEETING. ALL SIGNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH MUTCD AND CITY OF APOPKA CRITERIA FOR SIGN SIZE AND SHAPE AND LETTERING DIMENSIONS.
8. SIGHT DISTANCE FOR RESIDENTIAL STREETS IS 310', UNLESS OTHERWISE NOTED, PER F.D.O.T. GREENBOOK, CHAPTER 16 BASED ON 30 MPH DESIGN SPEED.
9. SIGHT DISTANCE FOR SHEELER AVE IS 475' PER THE F.D.O.T. DESIGN MANUAL, SECTION 212 BASED ON 40 MPH DESIGN SPEED FOR PASSENGER VEHICLES.

Sign Legend

Id.	M.U.T.C.D. Number	Dimensions		Symbol
		Width	Height	
1	R1-1	30"	30"	STOP
3	D3-1	VARIES	12"	E Main St
4	R2-1	24"	30"	SPEED LIMIT 25
8	W11-2	30"	30"	
	W16-7P	24"	12"	

RESIDENTIAL PARKING CALCULATIONS				
PARKING DESCRIPTION	NUMBER OF UNITS	REQUIRED OFF STREET DU	OFF STREET REQUIRED	OFF STREET PROVIDED (2)
SINGLE-FAMILY DETACHED	109	2.0	218	227
		TOTAL PARKING:	218	227

(1) Parking requirements per City of Apopka LDC, Section 5.1.6

(2) All lots have a 2 car driveway providing two spaces per unit

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 60'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

SIGNAGE, STRIPING, & GEOMETRY PLAN

Sheet No.:

C2.01

Seal:

MARC DANIEL STEHLI LICENSE No. 90527 STATE OF FLORIDA PROFESSIONAL ENGINEER

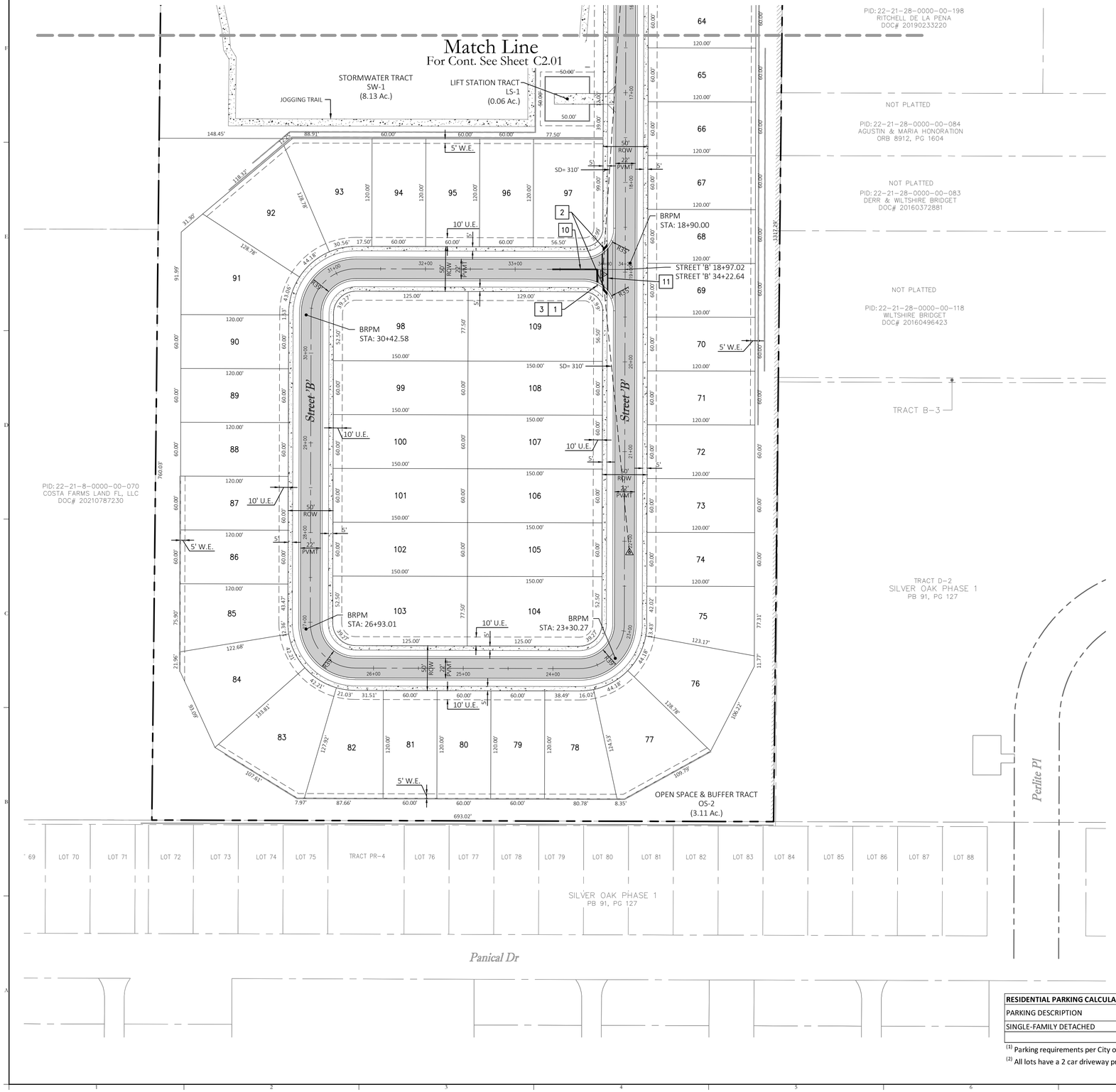
MARC DANIEL STEHLI
P.E. NO. 90527
DATE: April 15, 2026

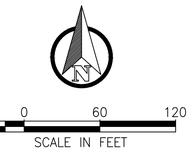
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Date: 2026.04.17 09:56:35-04'00'

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FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 13, 2026, 4:09pm User ID: Areynoso
File: P:\136\v2\01\Design\Civil_Final Engineering Construction Plans\SSP136122-01.dwg





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Sign Legend

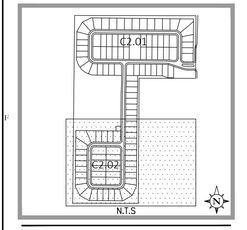
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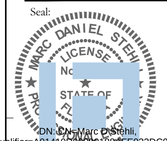
Sheet Title:

SIGNAGE, STRIPING, & GEOMETRY PLAN

Sheet No.:

C2.02

Seal:



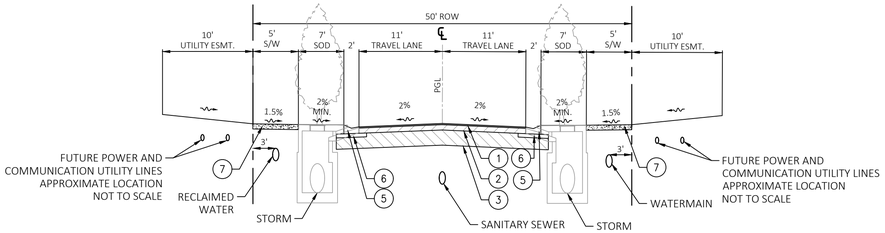
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001864FE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:37-04'00'

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2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

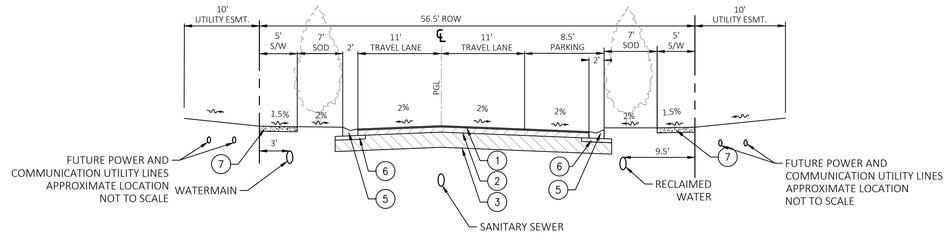
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1 INTERNAL ROAD SECTION (50' ROW)

N.T.S.

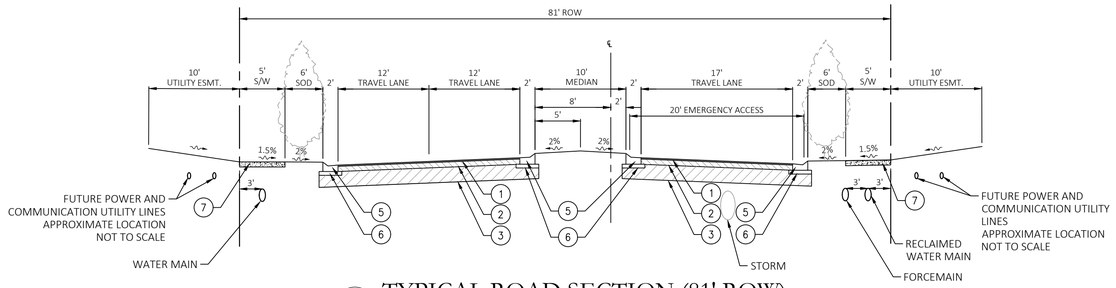
1. STREET TREES SHALL NOT BE ROOT AGGRESSIVE AND SHALL BE INSTALLED WITH ROOT BARRIERS TO PREVENT ROOTS FROM ADVERSELY AFFECTING UTILITIES, CURBS AND/OR SIDEWALK
2. HOA DOCUMENTS SHALL INDICATE THAT THE HOA IS RESPONSIBLE FOR MAINTENANCE OF STREET TREES



2 INTERNAL ROAD SECTION W/ PARKING (56.5' ROW)

N.T.S.

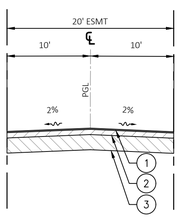
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2. HOA DOCUMENTS SHALL INDICATE THAT THE HOA IS RESPONSIBLE FOR MAINTENANCE OF STREET TREES
3. PARKING SPACE STRIPING WITHIN CITY MAINTAINED PUBLIC RIGHT OF WAY SHALL BE MAINTAINED BY THE HOA



3 TYPICAL ROAD SECTION (81' ROW)

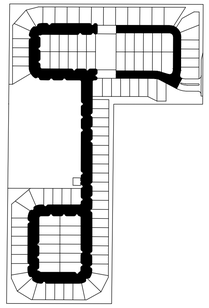
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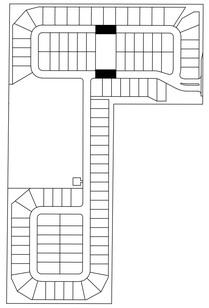
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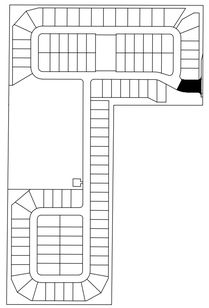


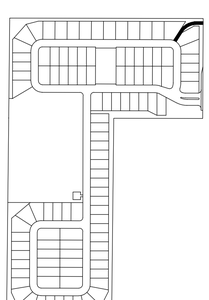
EMERGENCY ACCESS DRIVE (20' ESMT)

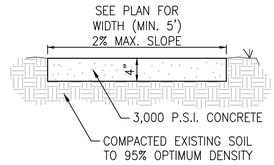
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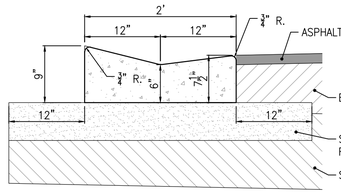
SIDEWALK DETAIL

NTS

Pavement Legend	
Symbol Id.	Description
1	1.25" (IN.) TYPE SP-9.5 ASPHALT (SEE NOTE 1)
2	6" (IN.) LIMEROCK BASE (LBR) COMPACTED TO A MIN. DENSITY OF 98% OF MODIFIED PROCTOR DRY DENSITY A MIN. LBR OF 100. THE LIMEROCK MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE CONSTRUCTION SPECIFICATIONS.
3	12" (IN.) COMPACTED SUBGRADE TO 98% MODIFIED PROCTOR MAXIMUM DRY DENSITY (ASTM D 1557) VALUE. THE SUBGRADE SHALL BE STABILIZED TO A MIN. LBR OF 40 AS SPECIFIED BY FDOT.
4	TYPE 'F' CONC. CURB & GUTTER
5	MIAMI CURB
6	6" (IN.) STABILIZED SUBGRADE IN CURB AREA TO EXTEND 12" (IN.) EACH SIDE TO 50 FBV
7	4" (IN.) THICK CONC. SIDEWALK (3000 P.S.I.)

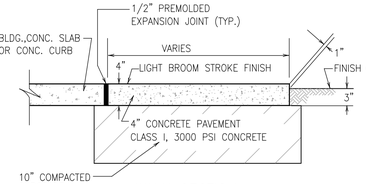
NOTES:

1. ASPHALT MIX WILL REQUIRE A MIX DESIGN APPROVAL BY CITY OF APOPKA.
2. THE ABOVE PAVEMENT THICKNESS IS THE MINIMUM REQUIRED THICKNESS. CONTRACTORS SHALL BE RESPONSIBLE FOR REPAIR AND/OR REPLACEMENT WHERE TESTING RESULTS DO NOT MEET THE MINIMUM REQUIRED THICKNESS.
3. CONTRACTOR SHALL INSTALL A 2' STRIP OF SOD ALONG THE BACK OF ALL ROADWAY CURBING.
4. SEE UNIVERSAL ENGINEERING SCIENCES REPORT NO. 2163359 DATED MARCH 19, 2026 FOR PAVEMENT RECOMMENDATIONS.
5. AT THE TIME OF PLATTING A 10' WIDE UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

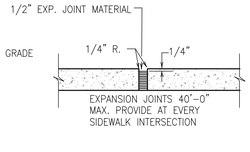


MIAMI CURB DETAIL

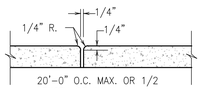
1" = 10'



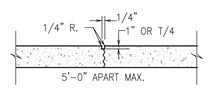
WALK SECTION



EXPANSION JOINT



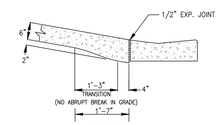
CONSTRUCTION JOINT



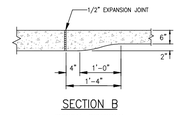
TOOL JOINT

SIDEWALK JOINT DETAIL

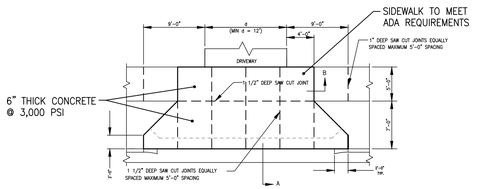
N.T.S.



SECTION A



SECTION B
TYPICAL SIDEWALK DRIVEWAY APRONS



PLAN VIEW

ALL MEASUREMENTS ARE IN ENGLISH UNLESS OTHERWISE SPECIFIED.

TYPICAL DRIVEWAY APRONS

N.T.S.

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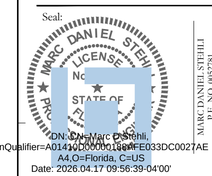
Sheet Title:

TYPICAL ROAD SECTIONS

Sheet No.:

C3.00

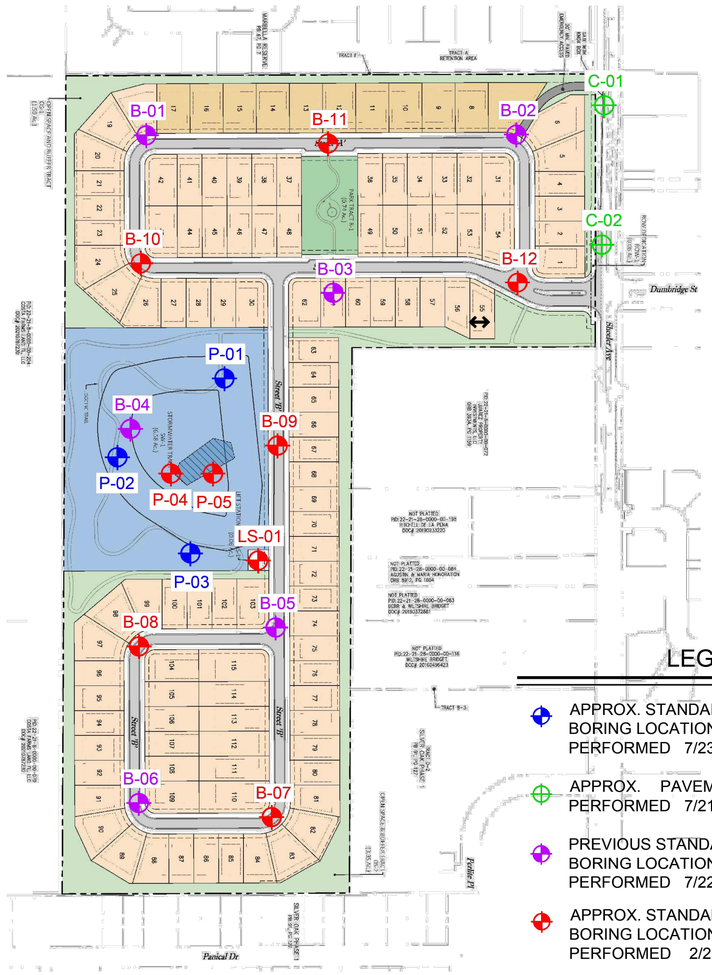
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Date: Apr 13, 2026, 2:53pm User ID: GKillebrew
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\TRS13622-01.dwg



LEGEND

- APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 7/23/2025
- APPROX. PAVEMENT CORE LOCATION PERFORMED 7/21/2025
- PREVIOUS STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 7/22/2024 - 7/23/2024
- APPROX. STANDARD PENETRATION TEST BORING LOCATION (SPT) PERFORMED 2/26/2026 - 3/3/2026

THIS DRAWING CREATED USING PLAN PROVIDED BY CLIENT.

24-0491-03

GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, ORANGE COUNTY, FLORIDA

BORING LOCATION PLAN

DRAWN BY:	N.F.	**DATE:**	3 - 12 - 2026	**CHECKED BY:**	L.S.	**DATE:**	3 - 18 - 2026
SCALE:	AS SHOWN	**PROJECT NO:**	A25139.02958.001	**REPORT NO:**	2163359	**PAGE NO:**	B-1

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.1

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-01** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/23/21
WATER TABLE (ft): NE DATE FINISHED: 7/23/21
DATE OF READING: 7/23/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 12.5 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Very loose light brown fine SAND [SP]						
		1-1-1	2									
		1-0-1	1			-- light grey brown						
5		1-1-1	2									
		1-1-2	3			-- loose						
		3-2-3	5									
10		4-4-6	10									
				▽								
15		26-33-40	73			Very dense grey brown silty fine SAND [SM]						
						Medium dense orange brown fine SAND [SP]						
20		10-12-17	29			BORING TERMINATED AT 20.0 FEET						

WI-15566 (GPJ)

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.2

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-02** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/22/21
WATER TABLE (ft): NE DATE FINISHED: 7/22/21
DATE OF READING: 7/22/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 10+ TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Loose brown fine SAND [SP]						
		4-3-3	6			-- very loose						
		2-2-1	3			-- tan brown						
5		2-1-1	2			-- orange						
		2-1-2	3			-- loose, light tan	1	3				
		2-2-3	5									
10		2-3-3	6	▽								
						-- medium denses						
15		5-7-7	14									
20		12-15-14	29			BORING TERMINATED AT 20.0 FEET						

WI-15566 (GPJ)

NOTE: THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL REFER TO UES REPORT NO. 2163359, DATED MARCH 19, 2026, FOR ADDITIONAL SOIL INFORMATION.

Key Map:

Consultant:

0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
NO.	DATE:	DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

BORING LOCATION MAP & SOIL BORINGS

Sheet No.:

C3.10

DATE: April 15, 2026

PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB0664

Date: Apr 15, 2026, 5:07pm User ID: ewindham
File: Z:\2024_24-198 KB Homes - Sheeler Avenue\CORRESPONDENCE\Pape-Dawson\INCOMING\Project Handoff\Design\Civil_Final Engineering Construction Plans\SB136220I.dwg

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.3

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-03** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/23/21
WATER TABLE (ft): NE DATE FINISHED: 7/23/21
DATE OF READING: 7/23/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 10+ TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Very loose brown fine SAND [SP]						
		1-1-1	2									
		1-1-1	2			-- light brown						
5		1-1-2	3			-- light grye brown						
		1-1-1	2			-- loose						
		2-3-3	6									
10		2-3-3	6	▽		-- light brown						
15		3-4-5	9									
20		4-4-4	8			BORING TERMINATED AT 20.0 FEET						

W-13506.GPJ

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.4

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-04** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/23/21
WATER TABLE (ft): NE DATE FINISHED: 7/23/21
DATE OF READING: 7/23/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 10+ TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Loose dark brown fine SAND [SP]						
		2-2-2	4			-- very loose						
		1-1-2	3			-- brown						
5		2-2-3	5			-- loose						
		2-3-3	6			-- light brown	2	4				
		3-4-4	8									
10		4-7-7	14	▽		Medium dense light brown fine SAND with silt [SP-SM]						
15		3-5-6	11									
20		2-4-6	10			-- loose, gery BORING TERMINATED AT 20.0 FEET						

W-13506.GPJ

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.5

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-05** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/23/21
WATER TABLE (ft): NE DATE FINISHED: 7/23/21
DATE OF READING: 7/23/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 8 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Very loose orange brown fine SAND [SP]						
		1-1-1	2									
		1-1-1	2			-- loose						
5		1-1-1	2									
		2-2-2	4			-- very loose						
		1-1-2	3	▽		-- light brown						
10		3-2-2	4			-- loose Loose grey brown clayey fine SAND [SC]	18	12				
15		3-4-4	8			Loose dark brown silty fine SAND [SM]						
20		6-9-10	19			-- medium dense BORING TERMINATED AT 20.0 FEET						

W-13506.GPJ

UES
BORING LOG

PROJECT NO.:	0130.2400217.0000
REPORT NO.:	2101931
PAGE:	B-2.6

PROJECT: GEOTECHNICAL EXPLORATION
SHEELER AVENUE
APOPKA, FLORIDA

BORING I.D.: **B-06** SHEET: **1 of 1**
SECTION: 22 TOWNSHIP: 21 S RANGE: 28 E

CLIENT: KB HOMES
LOCATION: SEE BORING LOCATION PLAN
REMARKS: SHGWT = SEASONAL HIGH GROUNDWATER TABLE, N.S. = NOT SURVEYED, NE = NOT ENCOUNTERED

G.S. ELEVATION (ft): N.S. DATE STARTED: 7/23/21
WATER TABLE (ft): 10.0 DATE FINISHED: 7/23/21
DATE OF READING: 7/23/2021 DRILLED BY: ORL - JB/DM/JP
EST. SHGWT (ft): 8 TYPE OF SAMPLING: ASTM D 1586

DEPTH (FT.)	SAMPLE	BLOWS PER 6" INCREMENT	N BLOWS / FT	W.T.	SYMBOL	DESCRIPTION	-200 (%)	MC (%)	ATTERBERG LIMITS LL	ATTERBERG LIMITS PI	K (FT/ DAY)	ORG. CONT. (%)
0						Very loose light brown orange fine SAND [SP]						
		1-0-1	1									
		1-0-1	1									
5		1-1-1	2				4	5				
		2-1-2	3									
		2-3-2	5	▽		Loose grey brown fine SAND with silt [SP-SM]						
10		3-2-2	4	▼		-- grey brown orange						
15		3-3-3	6									
20		4-4-6	10			BORING TERMINATED AT 20.0 FEET						

W-13506.GPJ

UES

BORING NO: B-07
Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 03/03/2026 **DATE COMPLETED** 03/03/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 03/03/2026 **EST. S.H.G.W.T (FT.)** >8
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
0		WOH-WOH-1-1	1			Very loose brown fine **SAND** [**SP**]						
		1-1-WOH-1	1				3	3				
5		1-1-2-1	3									
		2-2-3-2	5	▽		Loose 8						
10		3-2-3-2	5			Loose brown fine **SAND** with silt [**SP-SM**] 10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-07

Page 1 of 1

UES

BORING NO: B-08
Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 03/03/2026 **DATE COMPLETED** 03/03/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) 7.5' **DATE** 03/03/2026 **EST. S.H.G.W.T (FT.)** 5.5'
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
0		1-WOH-1-1	1			Very loose brown fine **SAND** [**SP**]						
		1-2-1-2	3									
5		2-2-1-2	3	▽								
		3-2-3-1	5	▼		Loose light brown fine **SAND** with silt [**SP-SM**] 6						
10		2-3-3-4	6			10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-08

Page 1 of 1

UES

BORING NO: B-09
Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 02/26/2026 **DATE COMPLETED** 02/26/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 02/26/2026 **EST. S.H.G.W.T (FT.)** >8
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Brown grey fine **SAND** with silt, & roots [**SP-SM**] 2						
5		3-4-4-4	8			Brown fine **SAND**, with roots [**SP**]						
		3-4-3-4	7	▽		Loose	3	3				
10		4-4-5-4	9			10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-09

Page 1 of 1

UES

BORING NO: B-10
Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 02/26/2026 **DATE COMPLETED** 02/26/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 02/26/2026 **EST. S.H.G.W.T (FT.)** 7'
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Brown fine **SAND**, with roots [**SP**]						
5		2-2-2-2	4									
		3-3-4-5	7	▽		Loose Light brown 8						
10		6-7-7-10	14			Medium dense brown Clayey fine **SAND** [**SC**] 10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-10

Page 1 of 1

NOTE: THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL REFER TO UES REPORT NO. 2163359, DATED MARCH 19, 2026, FOR ADDITIONAL SOIL INFORMATION.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:
SHEELER PARK

Submittal To:
CITY OF APOPKA, FL

Sheet Title:
SOIL BORINGS

Sheet No.:
C3.11

DATE: April 15, 2026

PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 5:07pm User ID: ewindham
File: Z:\2024\24-198 KB Homes - Sheeler Avenue\CORRESPONDENCE\Pape-Dawson\INCOMING\Project Handoff\Design\Civil_Final Engineering Construction Plans\SB136220l.dwg

BORING NO: B-11

Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 03/03/2026 **DATE COMPLETED** 03/03/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 03/03/2026 **EST. S.H.G.W.T (FT.)** >8
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		1-WOH-1-1	1			Very loose brown fine **SAND** [**SP**]						
		1-1-2-1	3									
5		1-1-WOH-1	1				2	3				
		1-WOH-1-1	1	▽								
		3-2-3-2	5			Loose						
10						10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-11

Page 1 of 1

BORING NO: B-12

Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 03/03/2026 **DATE COMPLETED** 03/03/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 03/03/2026 **EST. S.H.G.W.T (FT.)** >8
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
		1-WOH-1-1	1			Very loose brown fine **SAND** [**SP**]						
		1-2-1-1	3									
5		2-1-1-2	2									
		2-2-3-2	5	▽		Loose						
		2-2-3-3	5									
10						10						
						End of boring at 10'						
15												
20												
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: B-12

Page 1 of 1

BORING NO: LS-01

Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 02/26/2026 **DATE COMPLETED** 02/26/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) NE **DATE** 02/26/2026 **EST. S.H.G.W.T (FT.)** >8
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Brown fine **SAND**, with roots [**SP**]						
5		3-2-3-3	5			Loose						
		2-2-2-2	4	▽		Light brown						
10		3-3-4-3	7									
15		4-4-4	8				1	14				
20		6-8-8	16			Medium dense, brown						
						23.5						
25		6-5-6	11			Medium dense brown fine **SAND** with silt [**SP-SM**]						
30		5-5-7	12			30						
						End of boring at 30'						
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: LS-01

Page 1 of 1

BORING NO: P-01

Page 1 of 1

PROJECT SHEELER AVENUE STORMWATER
PROJECT ADDRESS SHEELER AVENUE
PROJECT CITY, COUNTY, STATE APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME CENTRAL FLORIDA **PROJECT NO** A25139.02958.000 **REPORT NO.** 2101931
LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 07/23/2025 **DATE COMPLETED** 07/23/2025
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - DM/JP/KR/AI / LS
WATER TABLE (FT.) N.E. **DATE** 07/23/2025 **EST. S.H.G.W.T (FT.)** 6' **BORING DEPTH** 20.0'
COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose tan fine SAND [SP]						
		2-2-2	4									
		2-2-2	4									
5		2-2-4	6									
		2-4-5	9	▽		Light grey	3.4	4.7				16
						Very light grey 7.0						
		6-6-8	14			Medium dense orange brown Clayey fine SAND [SC]	23.0	15.3				
		5-7-7	14			Grey brown						
10												
15		9-11-11	22			Orange						
20		21-19-16	35			Dense, grey brown						
						20.0						
						End of boring at 20'						

REMARKS

FIGURE NUMBER: B-2
PROJECT: SHEELER AVENUE STORMWATER

BORING NO: P-02

Page 1 of 1

PROJECT SHEELER AVENUE STORMWATER
PROJECT ADDRESS SHEELER AVENUE
PROJECT CITY, COUNTY, STATE APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME CENTRAL FLORIDA **PROJECT NO** A25139.02958.000 **REPORT NO.** 2101931
LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 07/23/2025 **DATE COMPLETED** 07/23/2025
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - DM/JP/KR/AI / LS
WATER TABLE (FT.) N.E. **DATE** 07/23/2025 **EST. S.H.G.W.T (FT.)** 10' **BORING DEPTH** 20.0'
COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Loose very dark grey fine SAND [SP]						
		2-2-2	4									
		1-2-3	5									
5		3-2-4	6			Light brown						
		3-3-4	7				1.5	4.1				26
		3-4-5	9									
		5-5-6	11			Medium dense						
10				▽		Grey brown						
15		5-9-13	22			Brown						
20		10-13-12	25			Grey brown						
						20.0						
						End of boring at 20'						

REMARKS

FIGURE NUMBER: B-2
PROJECT: SHEELER AVENUE STORMWATER

BORING NO: P-03

Page 1 of 1

PROJECT SHEELER AVENUE STORMWATER
PROJECT ADDRESS SHEELER AVENUE
PROJECT CITY, COUNTY, STATE APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME CENTRAL FLORIDA **PROJECT NO** A25139.02958.000 **REPORT NO.** 2101931
LOCATION SEE BORING LOCATION PLAN **DATE STARTED** 07/23/2025 **DATE COMPLETED** 07/23/2025
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** ORL - DM/JP/KR/AI / LS
WATER TABLE (FT.) N.E. **DATE** 07/23/2025 **EST. S.H.G.W.T (FT.)** 10' **BORING DEPTH** 20.0'
COMMENTS -

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Very loose tan brown fine SAND [SP]						
		1-2-1	3									
		1-1-1	2			Tan grey brown						
5		2-3-3	6			Loose						
		2-2-3	5				2.0	3.1				29
		3-4-3	7									
		4-4-6	10	▽		Grey						
10												
15		8-8-10	18			Medium dense, tan grey						
20		24-24-22	46			Dense, light grey						
						20.0						
						End of boring at 20'						

REMARKS

FIGURE NUMBER: B-2
PROJECT: SHEELER AVENUE STORMWATER

BORING NO: P-04

Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 02/26/2026 **DATE COMPLETED** 02/26/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) 4.5' **DATE** 02/26/2026 **EST. S.H.G.W.T (FT.)** 2.5'
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
				▽		Dark brown fine **SAND** [**SP**]						
						Brown	5	14				20
5		2-1-WOH-WOH	1			Very loose						
		1-WOH-1-1	1									
10		2-2-4-5	6			Loose light brown	1	21				29
15		5-6-9	15			Medium dense						
		7-9-11	20			20						
20						End of boring at 20'						
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: P-04

Page 1 of 1

BORING NO: P-05

Page 1 of 1

PROJECT SHEELER AVENUE
PROJECT ADDRESS SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL
CLIENT NAME KB HOME **PROJECT NO** A25139.02958.001 **REPORT NO.** 2163359
LOCATION SHEELER AVENUE, APOPKA, ORANGE COUNTY, FL **DATE STARTED** 02/26/2026 **DATE COMPLETED** 02/26/2026
SAMPLE METHOD ASTM D-1586 **ELEV.** N/A **DRILLER/PM** SEE BORING LOCATION PLAN
WATER TABLE (FT.) 8.5' **DATE** 02/26/2026 **EST. S.H.G.W.T (FT.)** 6.5'
COMMENTS NE = NOT ENCOUNTERED

DEPTH (FT)	SAMPLE TYPE	BLOW COUNTS/6"	N-VALUE	W.T.	SYMBOL	MATERIALS DESCRIPTION	-200 (%)	MC (%)	LL	PI	OC (%)	K (ft/day)
						Brown fine **SAND** with silt [**SP-SM**]						
						Dark brown 2						
						Brown fine **SAND**, with roots [**SP**]						
5		3-3-4-4	7	▽		Loose, light brown	2	4				20
		3-3-3-4	6									
10		3-4-4-5	8				2	23				17
15		6-8-7	15			Medium dense						
		5-7-8	15			20						
20						End of boring at 20'						
25												
30												
35												
40												
45												

REMARKS

FIGURE NUMBER: B-2
LOG NAME: P-05

Page 1 of 1

NOTE: THIS PLAN IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. CONTRACTOR SHALL REFER TO UES REPORT NO. 2163359, DATED MARCH 19, 2026, FOR ADDITIONAL SOIL INFORMATION.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

SOIL BORINGS

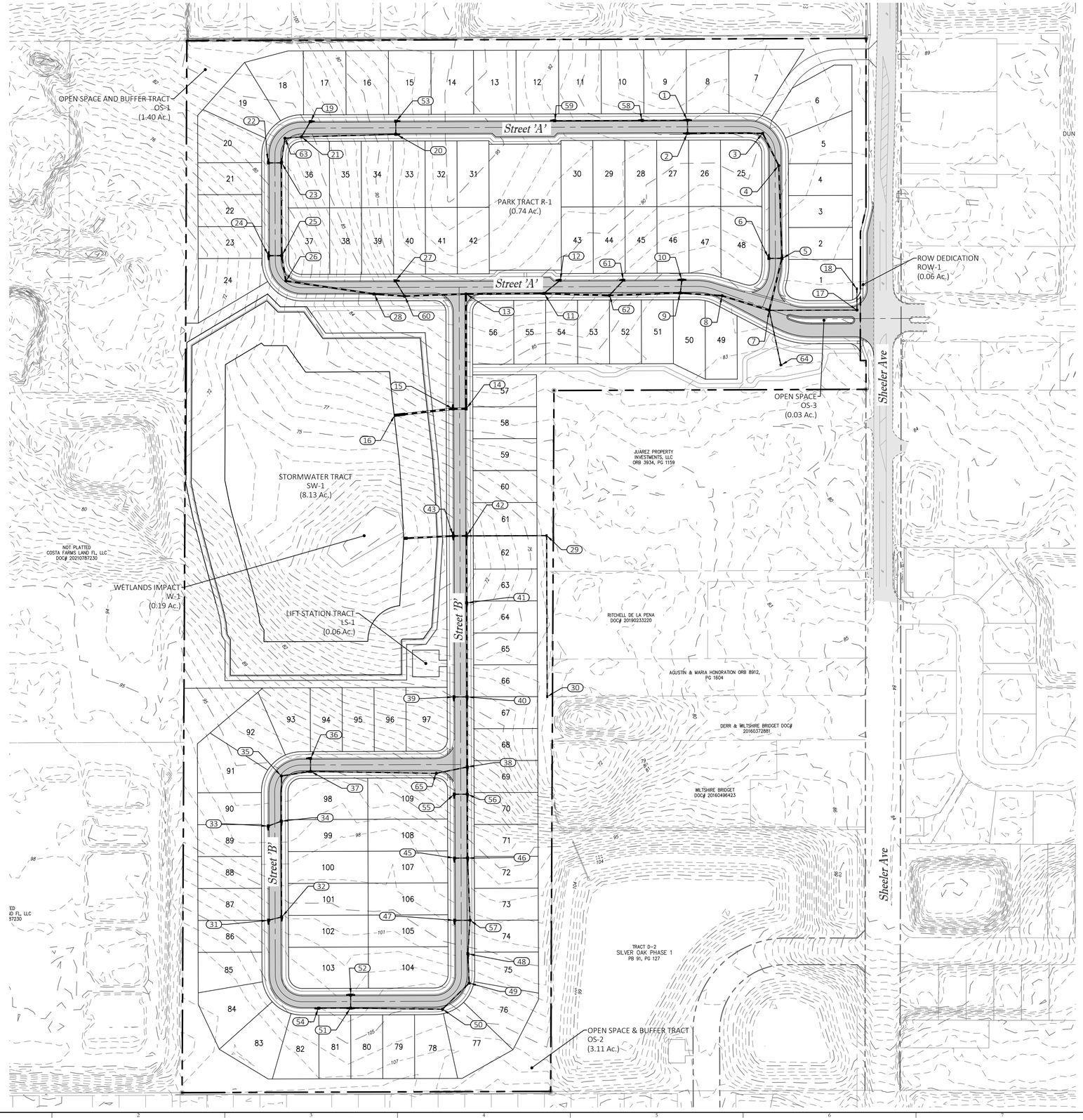
Sheet No.:

C3.12

DATE: April 15, 2026

PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 5:08pm User ID: ewindham
File: Z:\2024\24-198 KB Homes - Sheeler Avenue\CORRESPONDENCE\Pape-Dawson\INCOMING\Project Handoff\Design\Civil_Final Engineering Construction Plans\SB136220l.dwg



10 0 200 400

SCALE IN FEET

Drainage Legend

Existing	Utility Type	Proposed
	STORM PIPE	
	STORM MANHOLE	
	P-1/P-2 INLET	
	MITERED END	
	DRAINAGE FLOW ARROW	

1. City of Apopka Stormwater Criteria

   a. Water Quality Criteria - Dry Retention

   Pursuant to City of Apopka Land Development Code, Article 6, Section 6.7.2.(B), pollution abatement volume shall be in accordance with the SJRWMD criteria.

   b. Water Quality Recovery - Dry Retention

   Pursuant to City of Apopka Land Development Code, Article 6, Section 6.7.2.(B), pollution abatement volume recovery shall be in accordance with the SJRWMD criteria.

   c. Water Quantity Criteria

   Pursuant to Section 6.7.2 (A), the post development peak rate of discharge shall not exceed the pre-development peak rate of discharge for the 25-year, 24-hour storm.

   Pursuant of Section 6.7.2.(3)(b) and (c), where a project discharges to a landlocked basin that has no positive outfall which are adjacent to properties of more than one ownership, the onsite stormwater management system shall be designed to accommodate the 100-year/24-hour design storm event.

   d. Water Quantity Recovery Criteria

   The pond shall be designed to be dry within 11 days following the storm event.

   e. Flood Protection

   Pursuant of Section 6.7.2.C. finished floor slab elevations of all habitable structures shall be constructed at least two feet above the 100-year storm elevation.

2. St. Johns River Water Management District Criteria

   a. Water Quality Criteria

   For dry retention systems, the design treatment volume is the greater of the following:

   i. One-half inch of runoff over the drainage area; or

   ii. 1.25 inches of runoff from the impervious area

   Plus an additional one-half inch of runoff over the drainage area

   b. Water Quality Recovery

   Pond shall be designed to recover the required treatment volume within 72 hours following a storm event.

   c. Water Quantity Criteria

   District criteria requires pre-development versus post development peak discharge rate attenuation for the mean annual and the 25-year/24-hour storm event for new construction with greater than 50% impervious coverage.

   i. Mean Annual storm event

   ii. 25-year/24-hour storm event

   In addition for projects within a closed drainage basin, District criteria requires the system shall be designed to retain the pre vs post development volumetric difference for the 25-yr/96-hr design storm.

   d. Water Quantity Recovery

   Where basins are designed for reducing post-development peak rate discharge and volume, the outlet and regulation schedule should be designed to provide necessary design detention and retention storage within 14 days following any storm event.

OWNERSHIP, OPERATION AND MAINTENANCE:

ALL STORMWATER MANAGEMENT PONDS SHALL BE OWNED, OPERATED AND MAINTAINED BY THE HOA/CDD. A DRAINAGE EASEMENT SHALL BE GRANTED OVER ALL STORMWATER POND TRACTS TO THE CITY OF APOPKA WHO HAVE THE ABILITY, NOT THE OBLIGATION, TO MAINTAIN.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 200'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

MASTER DRAINAGE PLAN

Sheet No.:

C4.00

Seal:

MARC DANIEL STEHLI LICENSE NO. 0052781 STATE OF FLORIDA

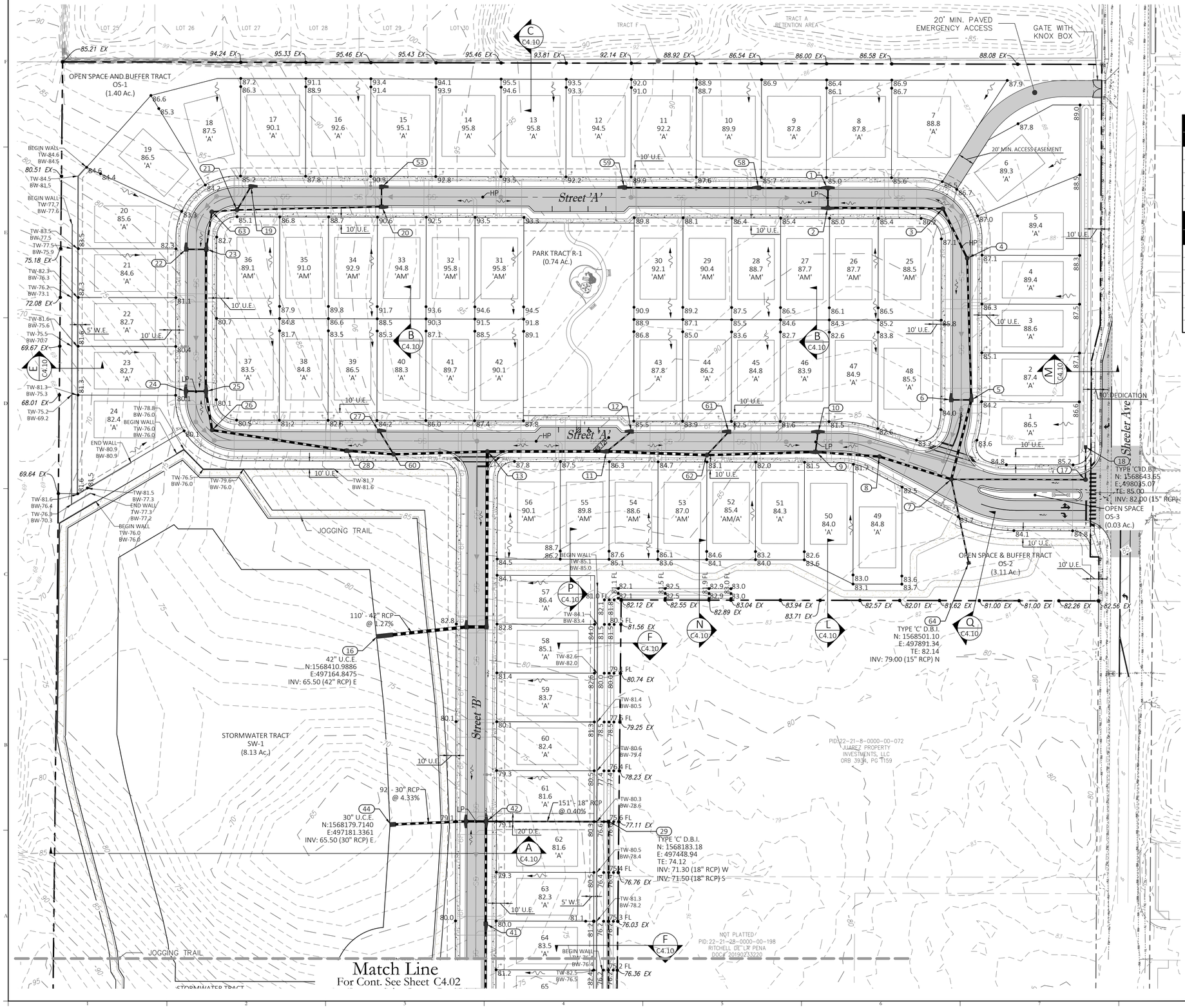
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

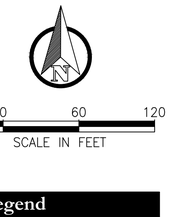
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FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 5:06pm User ID: ewindham
File: Z:\2024\24-198 KB Homes - Sheeler Avenue\CORRESPONDENCE\Pape-Dawson\INCOMING\Project Handoff\Design\Civil_Final Engineering Construction Plans\WDP-PROP 1362201.dwg





30 0 60 120

SCALE IN FEET

Drainage Legend

Existing	Utility Type	Proposed
	STORM PIPE	
	STORM MANHOLE	
	STORM CURB INLETS	
	MITERED END	
	DRAINAGE FLOW ARROW	

Grading Legend

Symbol	Description
× 100.00 EX	EXISTING SPOT GRADE
⊠ 104.00	PROPOSED SPOT GRADE
⊠ 101.00 FL	PROPOSED SWALE/DITCH FLOW LINE ELEV.
	FLOW ARROW
	DRAINAGE CONVEYANCE SWALE
—74—	EXISTING CONTOUR
—74—	PROPOSED CONTOUR

NOTES:

1. ELEVATIONS SHOWN WITHIN EACH HOUSE PAD REPRESENT THE DESIGNED FINISH FLOOR ELEVATION. CONTRACTOR TO SET FINISHED DIRT GRADE 8" BELOW THE FINISHED FLOOR ELEVATION AND COMPACTED TO 95% OF MODIFIED PROCTOR AASHTO T-180.

2. THE SIZE AND LOCATION OF THE HOUSE PADS SHOWN ARE ONLY SCHEMATIC AND SHOULD NOT BE USED FOR FINAL HOME BUILDING LAYOUT AND CONSTRUCTION.

3. INDIVIDUAL HOMES ARE TO BE CONSTRUCTED WITHIN THE SETBACKS SHOWN AND TO THE DESIGN FINISHED FLOOR ELEVATION. IF THE BUILDER DESIRES TO BUILD THE HOUSE IN AN ALTERNATE LOCATION OR BUILD A HOUSE LARGER THAN THE ENVELOPE PROVIDED; THE PROPOSED CHANGES MUST BE RE-SUBMITTED TO CITY OF APOPKA FOR APPROVAL. INDIVIDUAL HOME BUILDERS PROPOSING BUILDINGS INCONSISTENT WITH THE BUILDING PAD LOCATIONS AND FINISHED FLOOR ELEVATIONS SHOWN WILL BE RESPONSIBLE FOR PROVIDING FINAL LOT GRADING THAT PROVIDES POSITIVE DRAINAGE AWAY FROM THE HOUSE AND DOES NOT HAVE ADVERSE IMPACTS ON ADJACENT LOTS.

4. ALL LOTS HAVE BEEN DESIGNED UTILIZING A 1.0% MINIMUM SLOPE. MINIMUM HOUSE PADS HAVE BEEN SET AT THE GREATER OF 18" ABOVE THE FRONTING CENTERLINE OF THE ROADWAY/ALLEY OR 1-FT ABOVE THE 100-YR/24-HR STORM ELEVATION FOR THE RESPECTIVE BASIN.

5. ALL BACKYARD AND ENVIRONMENTAL SWALES LOCATED WITHIN PHASE SHALL BE CONSTRUCTED AS PART OF THE MASTER SURFACE WATER MANAGEMENT SYSTEM, NOT BY INDIVIDUAL LOT OWNERS.

6. SIDEWALKS AND CURB RAMPS AS SHOWN ARE REQUIRED FOR THE CITY OF APOPKA CERTIFICATION OF COMPLETION FOR INFRASTRUCTURE. CURB RAMPS SHALL BE PROVIDED AT EVERY INTERSECTION AND SIDEWALKS SHALL BE PROVIDED PER ROADWAY CROSS SECTIONS ADJACENT TO ALL RIGHT-OF-WAYS AND SHALL BE INSTALLED WITH SITE INFRASTRUCTURE WHEN ADJACENT TO COMMON AREAS OR DURING VERTICAL CONSTRUCTION OF HOMES WHEN ADJACENT TO LOTS. HANDICAP RAMPS AT ALL INTERSECTIONS OF THE SIDEWALK AND PAVEMENT SHALL MEET CITY OF APOPKA AND A.D.A. SPECIFICATIONS.

7. THE SECONDARY STORM SEWER HAS BEEN DESIGNED TO PROVIDE A MINIMUM OF 6" SEPARATION BETWEEN THE CURB GUTTER ELEVATION AND THE STORM WATER HYDRAULIC GRADE LINE.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 60'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

GRADING & DRAINAGE PLAN

Sheet No.:

C4.01

Seal:

MARC DANIEL STEHLI
LICENSE
NO. 0052781
STATE OF FLORIDA
PROFESSIONAL ENGINEER

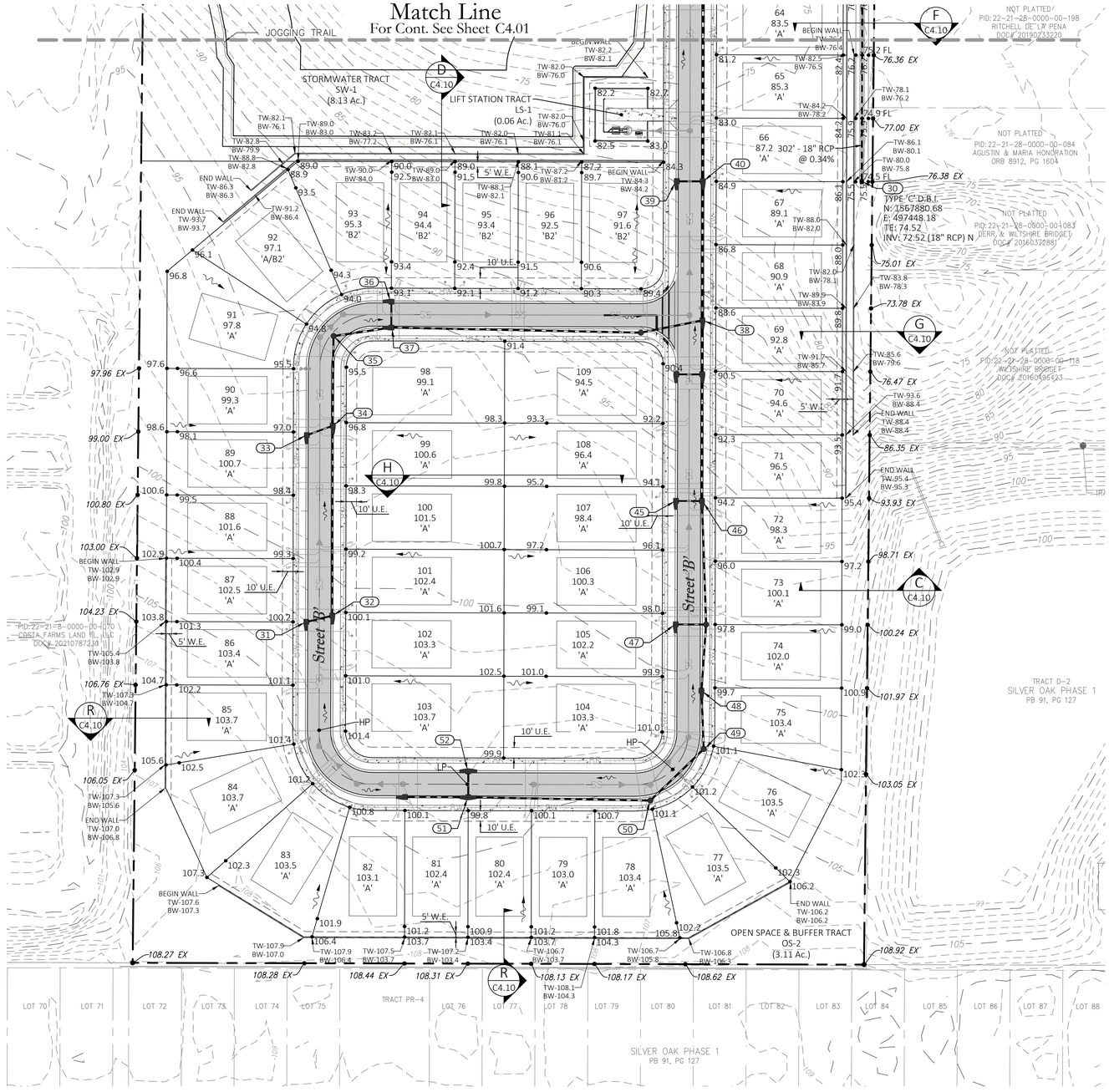
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

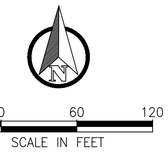
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Date: Apr 15, 2026, 8:24am User ID: Areynoso
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Key Map:

30 0 60 120

SCALE IN FEET

Drainage Legend

Existing	Utility Type	Proposed
	STORM PIPE	
	STORM MANHOLE	
	STORM CURB INLETS	
	MITERED END	
	DRAINAGE FLOW ARROW	

Grading Legend

Symbol	Description
× 100.00 EX	EXISTING SPOT GRADE
⊠ 104.00	PROPOSED SPOT GRADE
⊠ 101.00 FL	PROPOSED SWALE/DITCH FLOW LINE ELEV.
	FLOW ARROW
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Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 60'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

GRADING & DRAINAGE PLAN

Sheet No.:

C4.02

Seal:

MARC DANIEL STEHLI LICENSE No. 80527 STATE OF FLORIDA

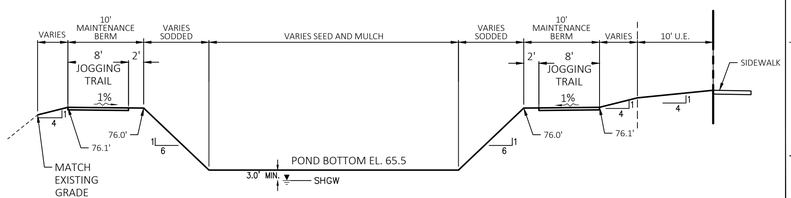
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P.E. NO. 0052781
DATE: April 15, 2026

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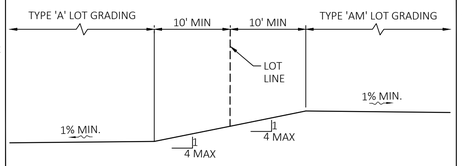
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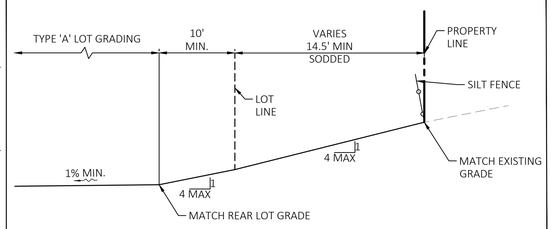
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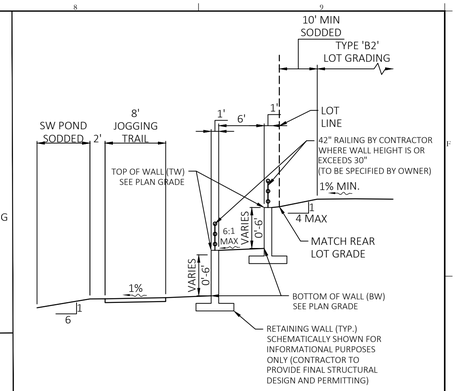
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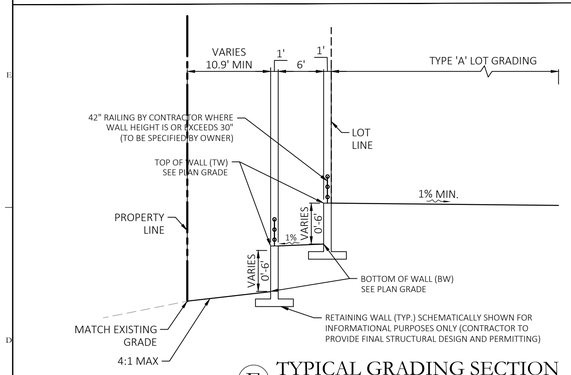
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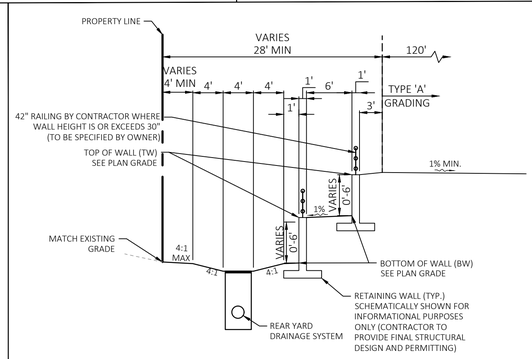
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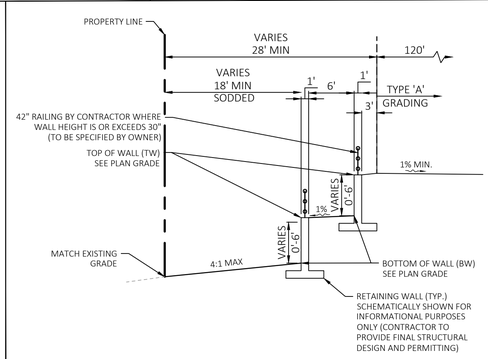
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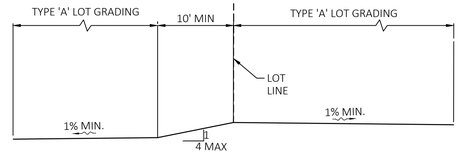
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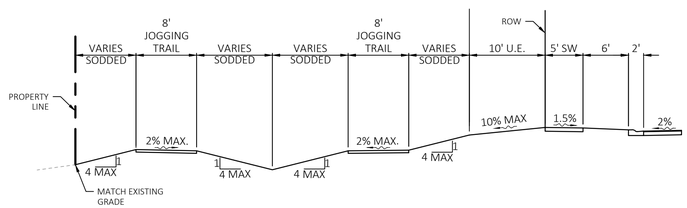
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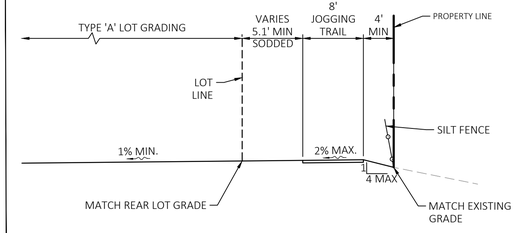
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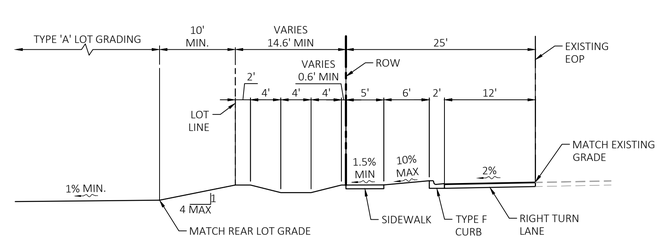
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LOTS 98-109
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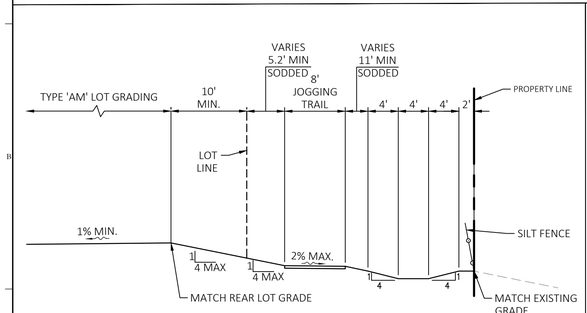
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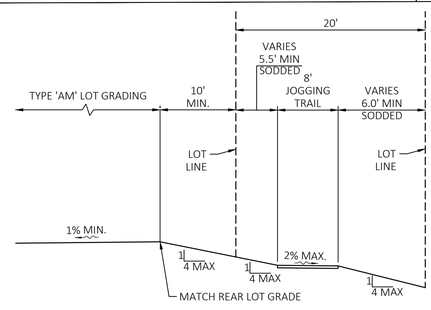
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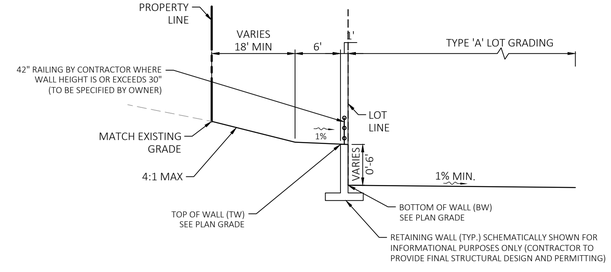
M TYPICAL GRADING SECTION
LOTS 1-6
N.T.S.



N TYPICAL GRADING SECTION
LOTS 52-54
N.T.S.



P TYPICAL GRADING SECTION
LOTS 55-56
N.T.S.



R TYPICAL GRADING SECTION
LOTS 77-83, 85-87
N.T.S.

Key Map:

Consultant:

0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
NO.	DATE:	DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

GRADING SECTIONS & DETAILS

Sheet No.:

C4.10

Seal:

MARC DANIEL STEHLI
LICENSE
No. 65278
STATE OF FLORIDA
PROFESSIONAL ENGINEER

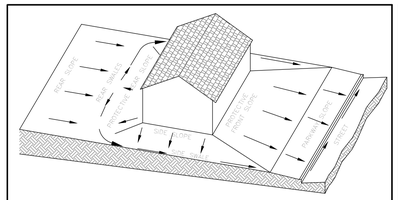
MARC DANIEL STEHLI
P.E. NO. 065278
DATE: April 15, 2026

Marc Daniel Stehli
DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B6FF033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:47-04'00'

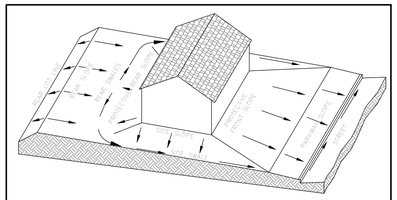
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2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8664

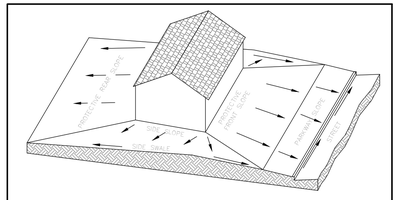
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TYPE 'A' LOT GRADING
N.T.S.



TYPE 'AM' LOT GRADING



TYPE 'B2' LOT GRADING
N.T.S.

TYPICAL LOT GRADE TYPE DETAILS
N.T.S.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

GRADING SECTIONS & DETAILS

Sheet No.:

C4.11

Seal:

MARC DANIEL STEHLI
LICENSE
No.
STATE OF
PROFESSIONAL ENGINEER

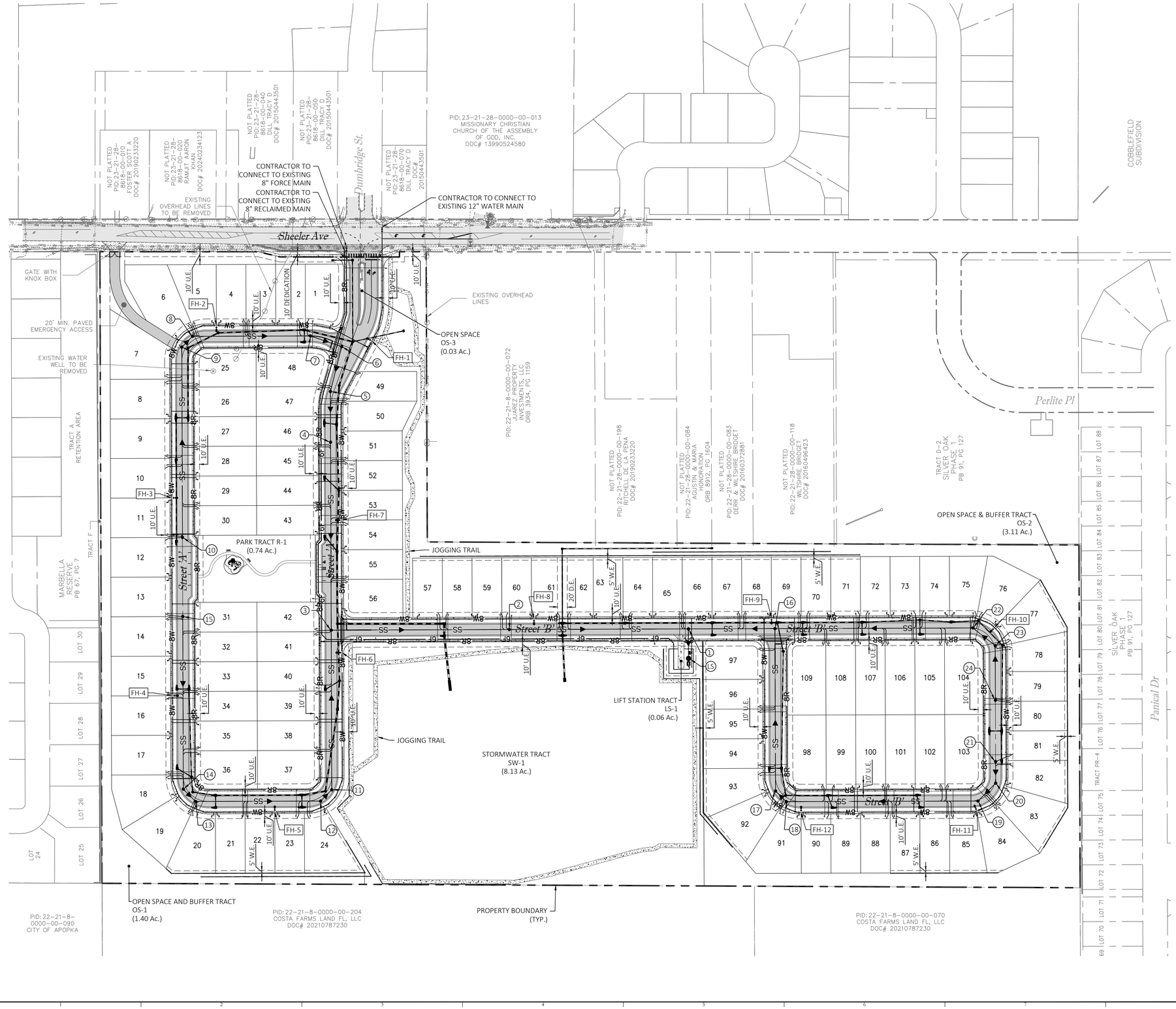
MARC DANIEL STEHLI
P.E. NO. 065781
DATE: April 15, 2026

DN: C=Marc Daniel Stehli, dnQualifier=A01410C000001B4FEE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:49-04'00'

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FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB0694

Date: Mar 20, 2026, 9:25am User ID: cgillis
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\GDTLS13622-01.dwg



Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.

3. UTILITY SYMBOLS ARE GRAPHICAL REPRESENTATIONS OF PROPOSED FACILITIES AND SHALL BE INSTALLED PER THE UTILITY PROVIDERS STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.

4. ALL WATERMAIN, FORCEMAIN AND RECLAIM WATERMAIN TO BE PVC MATERIAL UNLESS OTHERWISE SPECIFIED ON THE PLAN.

5. ALL VALVES ARE TO BE LOCATED WITHIN CLOSE PROXIMITY OF TEE/CROSS WHENEVER POSSIBLE (WITHIN 24" PREFERRED). VALVES ARE NOT TO BE LOCATED WITHIN DETECTABLE WARNING MAT, SIDEWALK RAMP, OR CURB.

Key Map:

Consultant:

0 4/15/2026 SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

NO.	DATE:	DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

MASTER UTILITY PLAN

Sheet No.:

C5.00

Seal:

MARC DANIEL STEHLI LICENSE NO. 0052781 STATE OF FLORIDA

MARC DANIEL STEHLI P.E. NO. 0052781

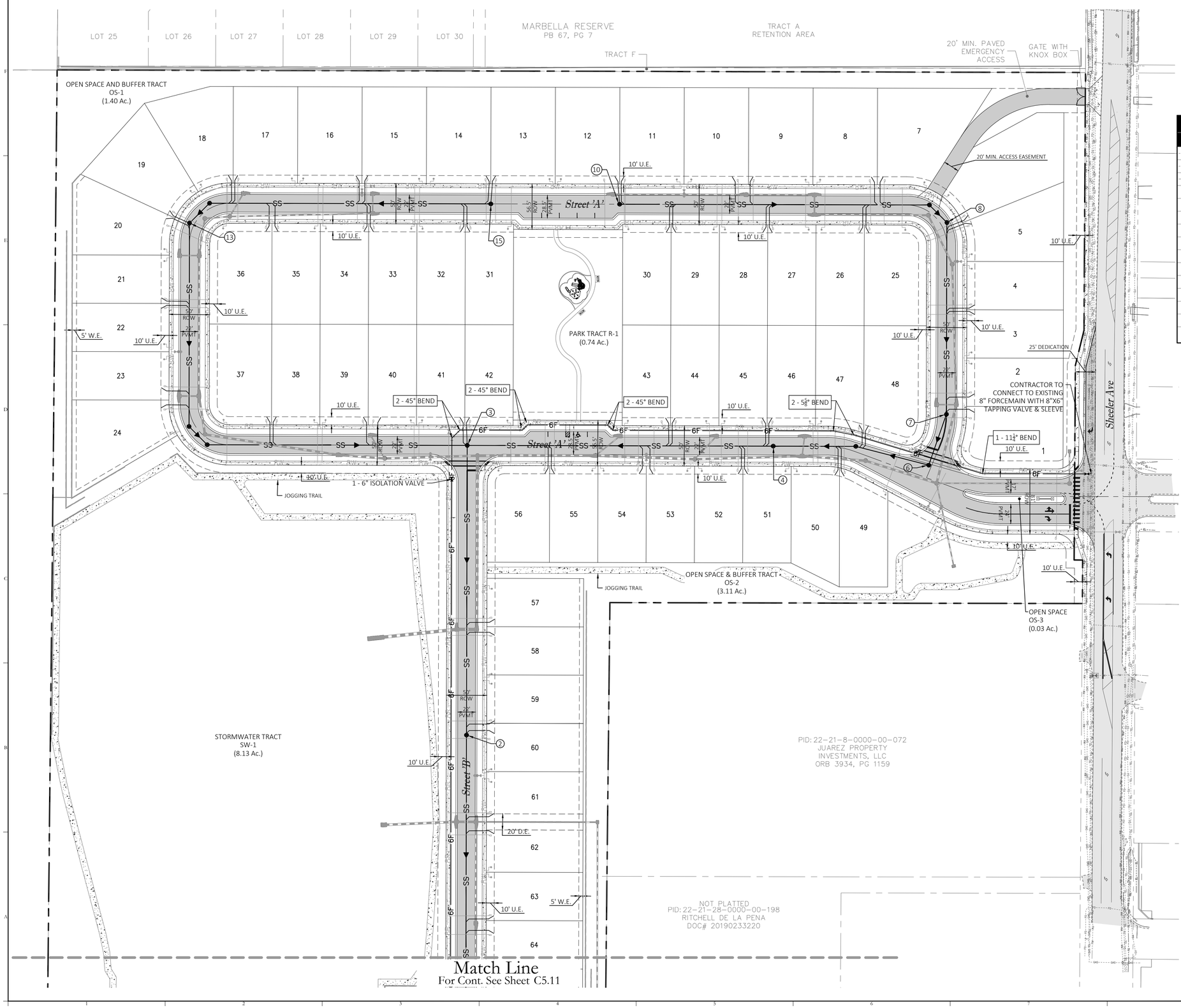
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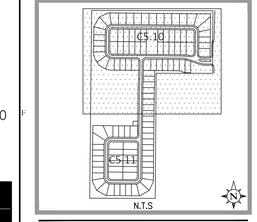
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Date: 2026.04.17 09:56:51-04'00'

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FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 2:29pm User ID: jessicaberry
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Key Map:

30 0 60 120

SCALE IN FEET

Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

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Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

WASTEWATER COLLECTION PLAN

Sheet No.:

C5.10

Seal:

MARC DANIEL STEHLI LICENSE NO. 0052781 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARC DANIEL STEHLI
P.E. NO. 0052781

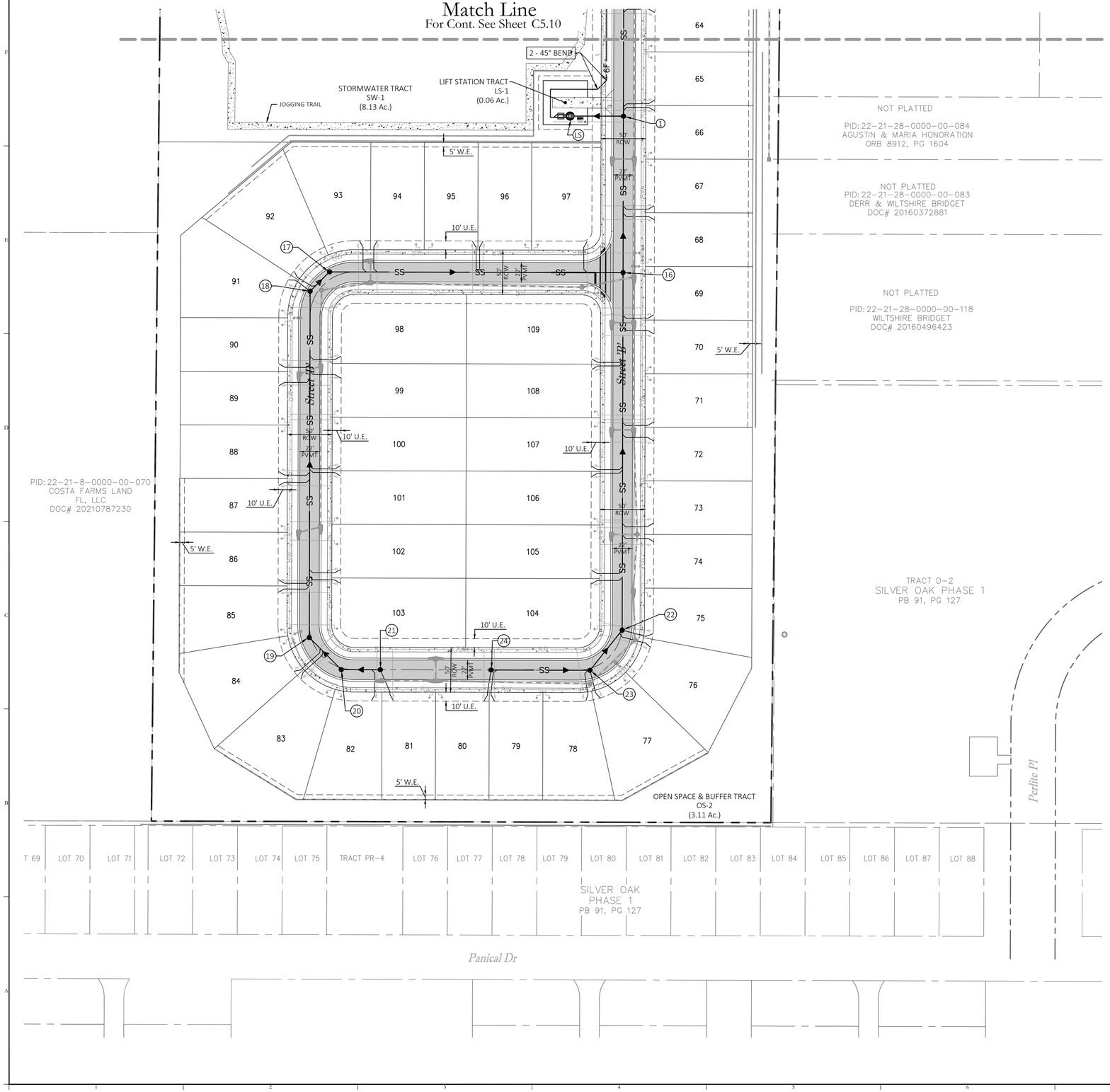
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Date: 2026.04.17 09:56:53-04'00'

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FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 1:38pm User ID: areynoga
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\WWCP136220-01.dwg





30 0 60 120

SCALE IN FEET

Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

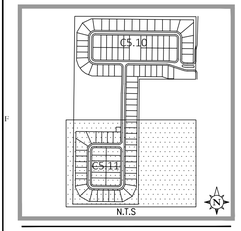
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.

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Key Map:



Consultant:

0 4/15/2026 SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

NO.	DATE:	DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

WASTEWATER COLLECTION PLAN

Sheet No.:

C5.11

Seal:



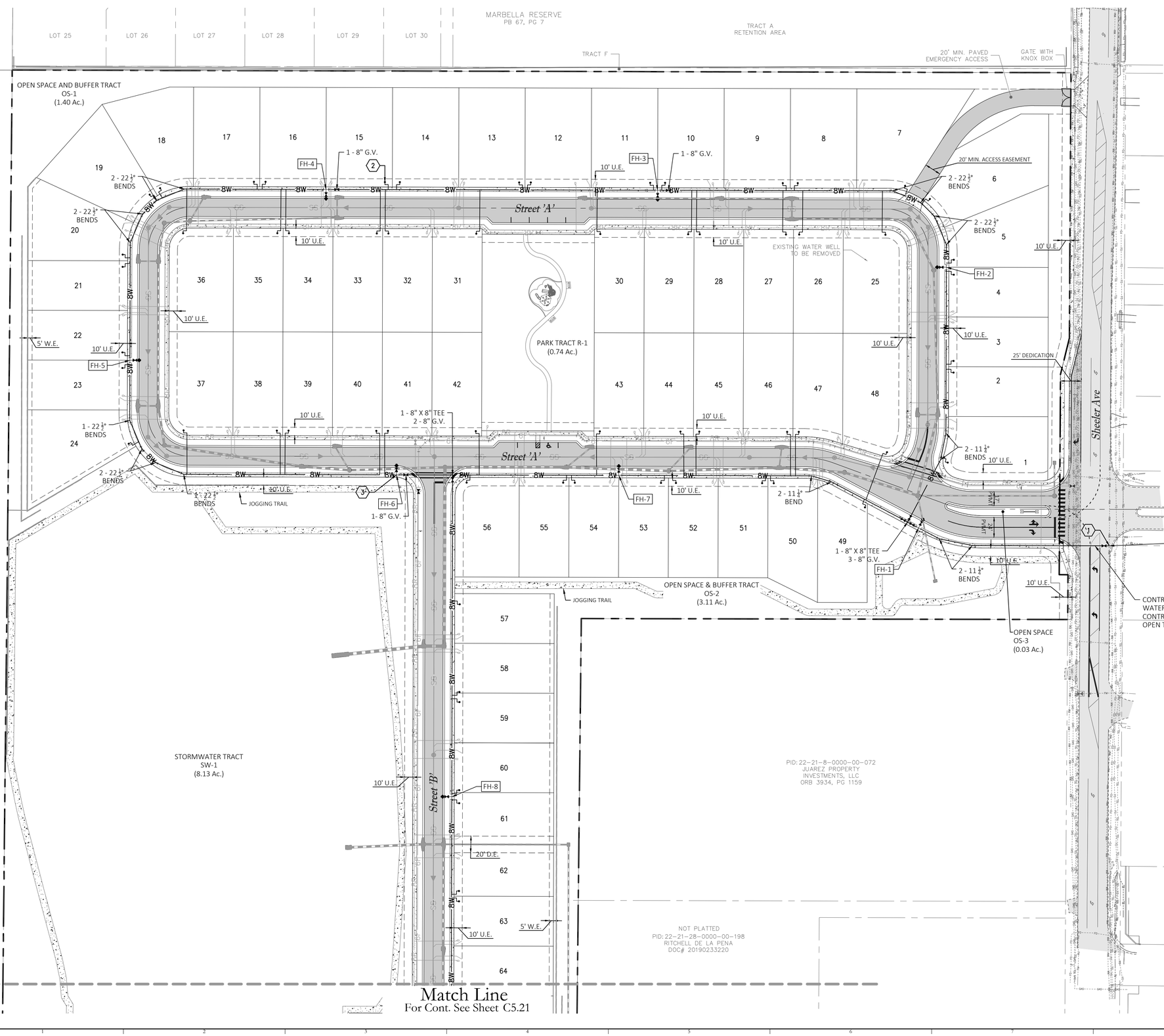
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

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Date: 2026.04.17 09:56:55-04'00'

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FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 2:31pm User ID: jessicaberry
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\WWCP136220-01.dwg



30 0 60 120
SCALE IN FEET

Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

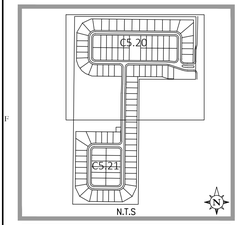
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.

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Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

WATER DISTRIBUTION PLAN

Sheet No.:

C5.20

Seal:

MARC DANIEL STEHLI
LICENSE
No.
STATE OF
FLORIDA

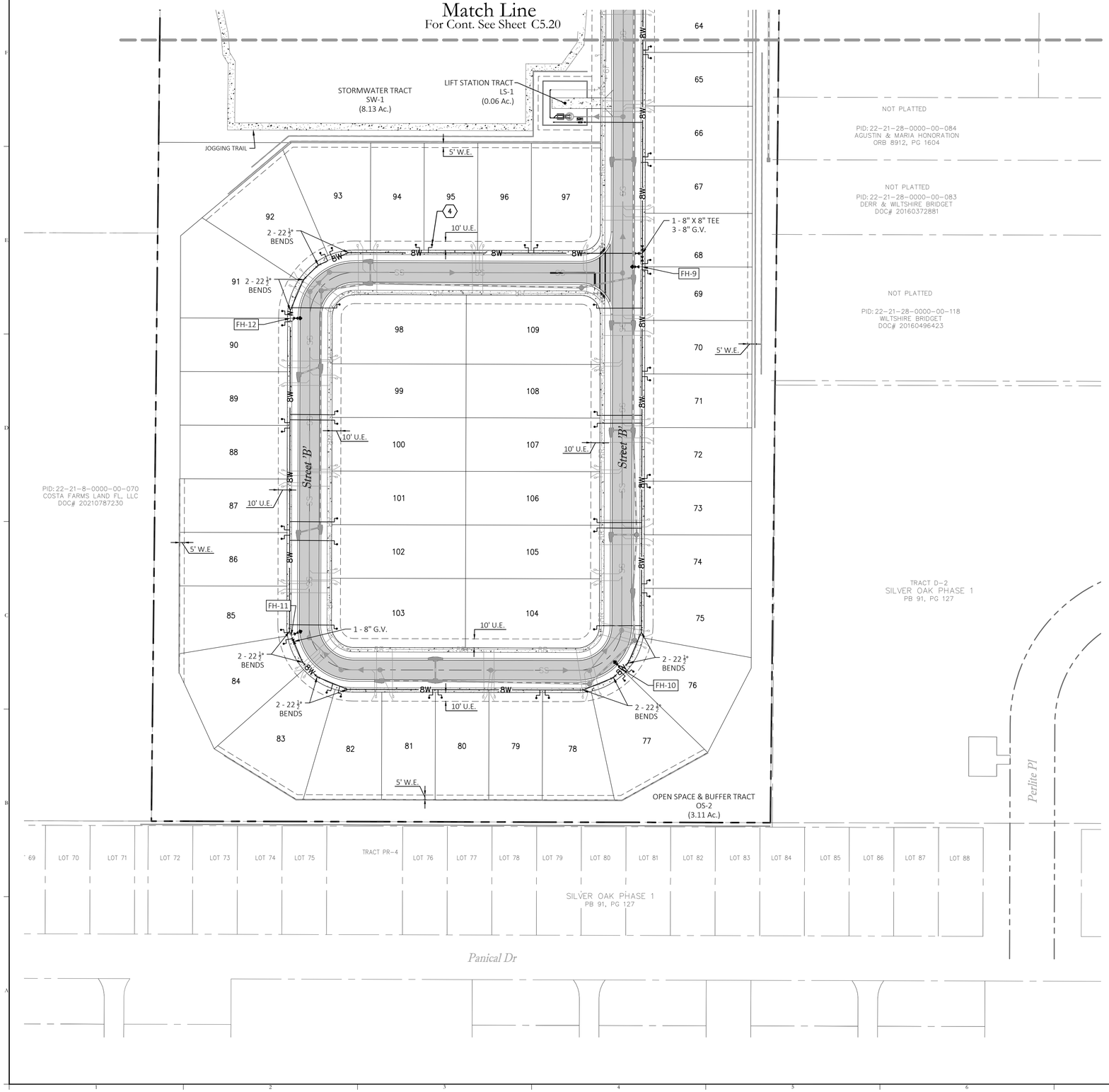
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B6AFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:57-04'00'

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FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 1:41pm User ID: oreynoso
File: P:\136\v2\01\Design\Civil_Final Engineering Construction Plans\WDP136226-01.dwg



30 0 60 120
SCALE IN FEET

Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

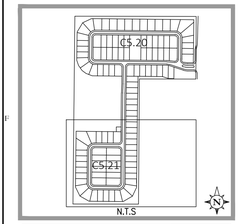
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.

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Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

WATER DISTRIBUTION PLAN

Sheet No.:

C5.21

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA

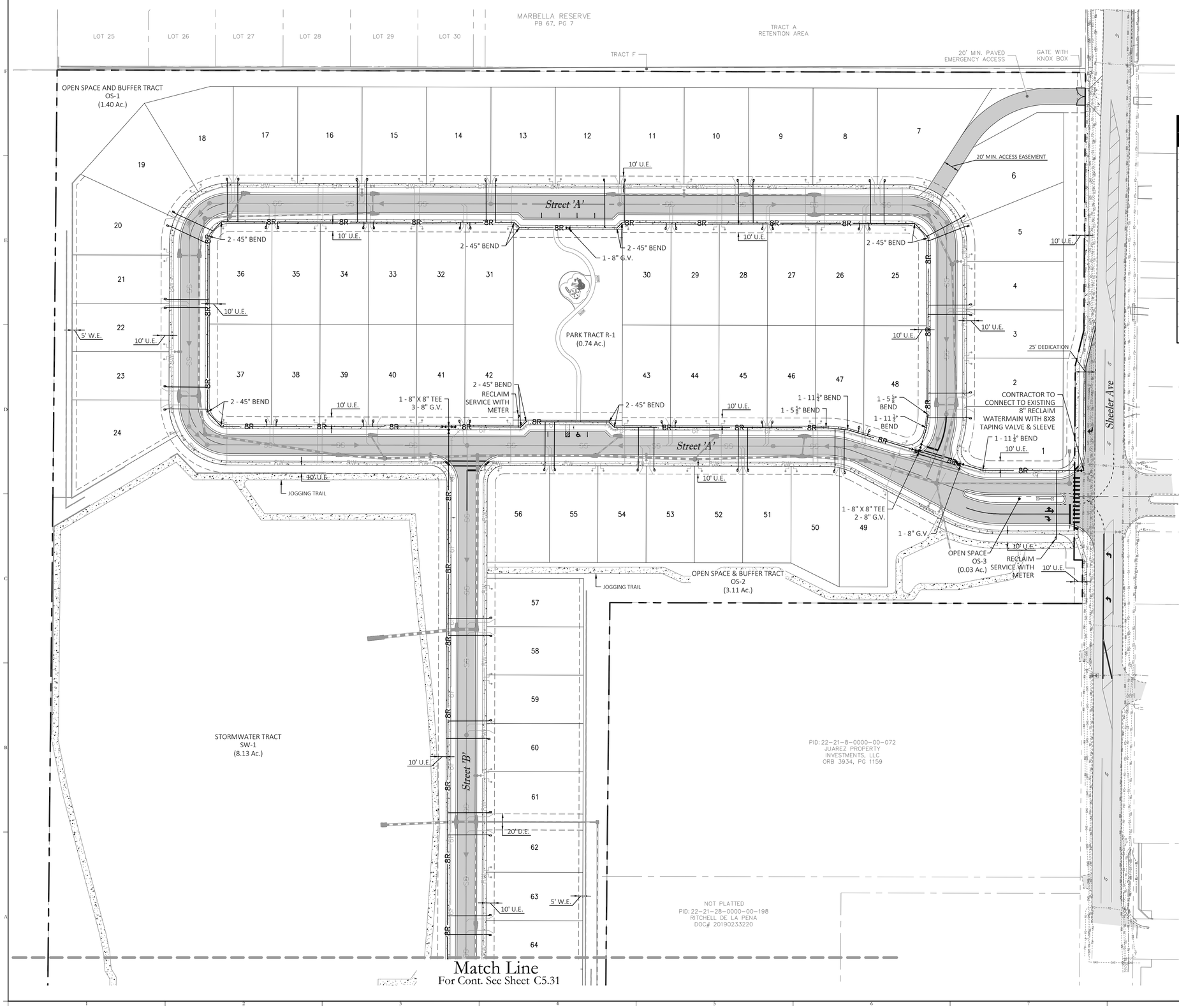
MARC DANIEL STEHLI
P.E. NO. 065278
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B4FE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:56:59-04'00'

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PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 2:27pm User ID: jessicaberry
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\WDP13622-01.dwg



30 0 60 120
SCALE IN FEET

Utility Legend

Existing	Utility Type	Proposed
WM WM	WATER MAIN (WM)	WM
RW RW	RECLAIM WATER MAIN (RW)	RW
SS SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
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	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

1. AT THE TIME OF PLATTING A 10' WIDE DRAINAGE & UTILITY EASEMENT WILL BE PROVIDED ADJACENT TO ALL RIGHT-OF-WAY.

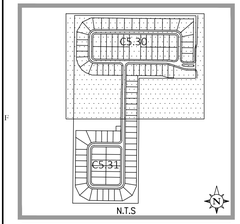
2. MAINTAIN A MINIMUM OF 3 FEET OF COVER OVER ALL PROPOSED WATER, WASTEWATER, AND RECLAIMED WATER LINES.

3. UTILITY SYMBOLS ARE GRAPHICAL REPRESENTATIONS OF PROPOSED FACILITIES AND SHALL BE INSTALLED PER THE UTILITY PROVIDERS STANDARD DETAILS AND SPECIFICATIONS, LATEST EDITION.

4. ALL WATERMAIN, FORCEMAIN AND RECLAIM WATERMAIN TO BE PVC MATERIAL UNLESS OTHERWISE SPECIFIED ON THE PLAN.

5. ALL VALVES ARE TO BE LOCTED WITHIN CLOSE PROXIMITY OF TEE/CROSS WHENEVER POSSIBLE (WITHIN 24" PREFERRED). VALVES ARE NOT TO BE LOCATED WITHIN DETECTABLE WARNING MAT, SIDEWALK RAMP, OR CURB.

Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

RECLAIMED WATER DISTRIBUTION PLAN

Sheet No.:

C5.30

Seal:

MARC DANIEL STEHLI LICENSE No. 0052781 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARC DANIEL STEHLI
P.E. NO. 0052781

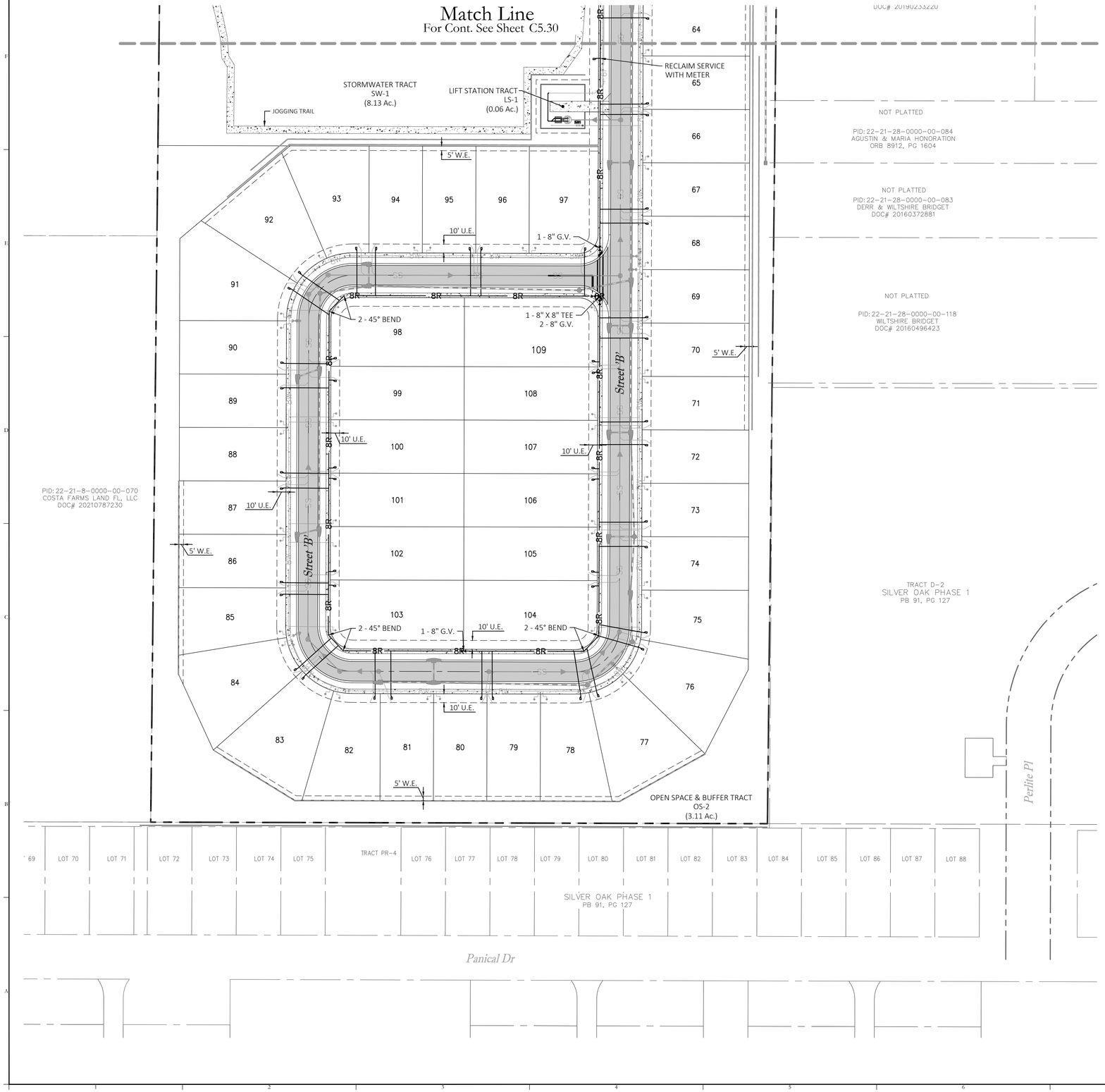
DATE: April 15, 2026

DN: CN=Marc DaStehli, dnQualifier=A01410D000001B9FE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:01-04'00'

This item has been electronically signed and sealed by Marc Daniel Stehli on the date adjacent to the seal using a SHA authentication code. Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 1:45pm User ID: areynoso
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\RWDP136221-01.dwg





Utility Legend

Existing	Utility Type	Proposed
WM	WATER MAIN (WM)	WM
RW	RECLAIM WATER MAIN (RW)	RW
SS	SANITARY SEWER (SS)	SS
	STORMWATER INLET	
	STORMWATER INLET	
	WATER SERVICE	
	RECLAIM WATER SERVICE	
	SANITARY SEWER LATERAL	
	GATE VALVE (G.V.)	
	TEE	
	BEND	
	REDUCER (RED.)	
	FIRE HYDRANT ASSEMBLY	
	ASSET I.D.	WGV-1
	BT SAMPLE POINT	1

NOTES:

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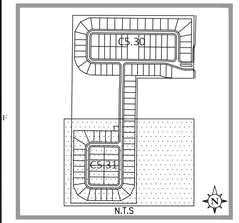
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Key Map:



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SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

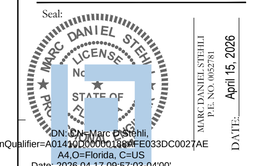
Sheet Title:

RECLAIMED WATER DISTRIBUTION PLAN

Sheet No.:

C5.31

Seal:

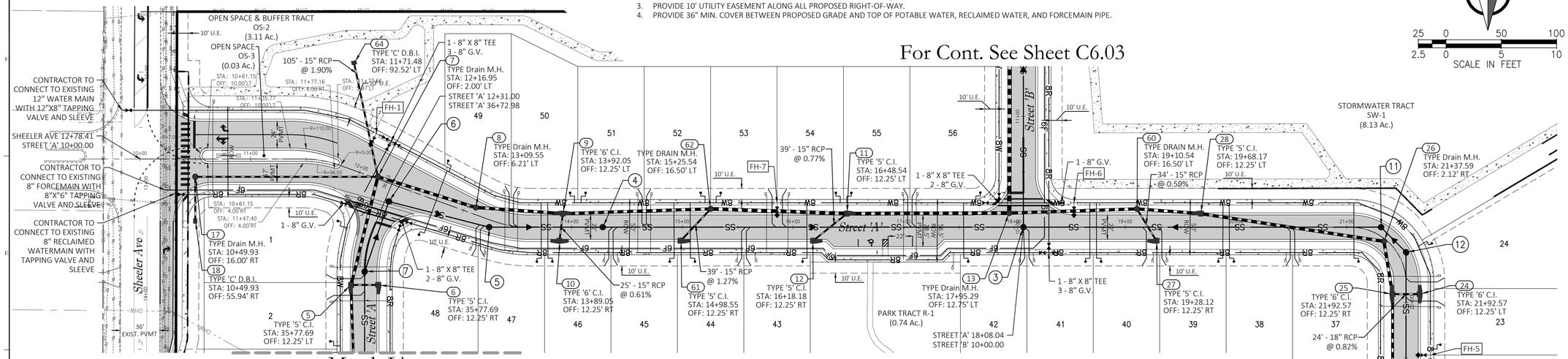


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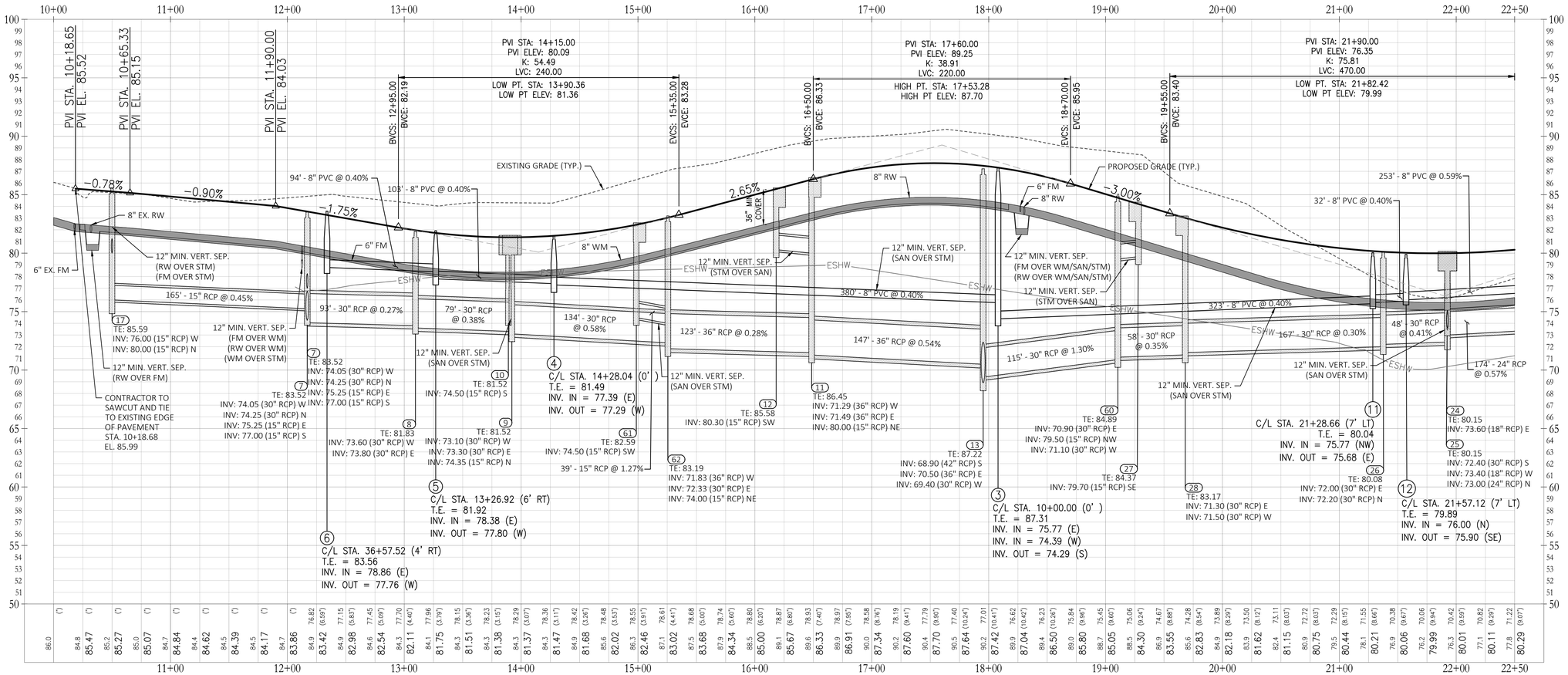
PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 14, 2026, 2:33pm User ID: jessicaberry
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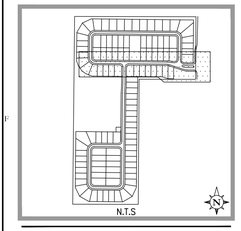
NOTES:
1. PROVIDE 3' MIN. HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND EDGE OF PAVEMENT.
2. PROVIDE 3' MIN HORIZONTAL SEPARATION BETWEEN WATERMAIN / RECLAIMED WATERMAIN AND STORMWATER DRAINAGE STRUCTURES.
3. PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.
4. PROVIDE 36" MIN. COVER BETWEEN PROPOSED GRADE AND TOP OF POTABLE WATER, RECLAIMED WATER, AND FORCEMAIN PIPE.



Street 'A'



Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET A PLAN AND PROFILE

Sheet No.:

C6.00

Seal:

MARC DANIEL STEHLI LICENSE No. 85278 STATE OF FLORIDA PROFESSIONAL ENGINEER

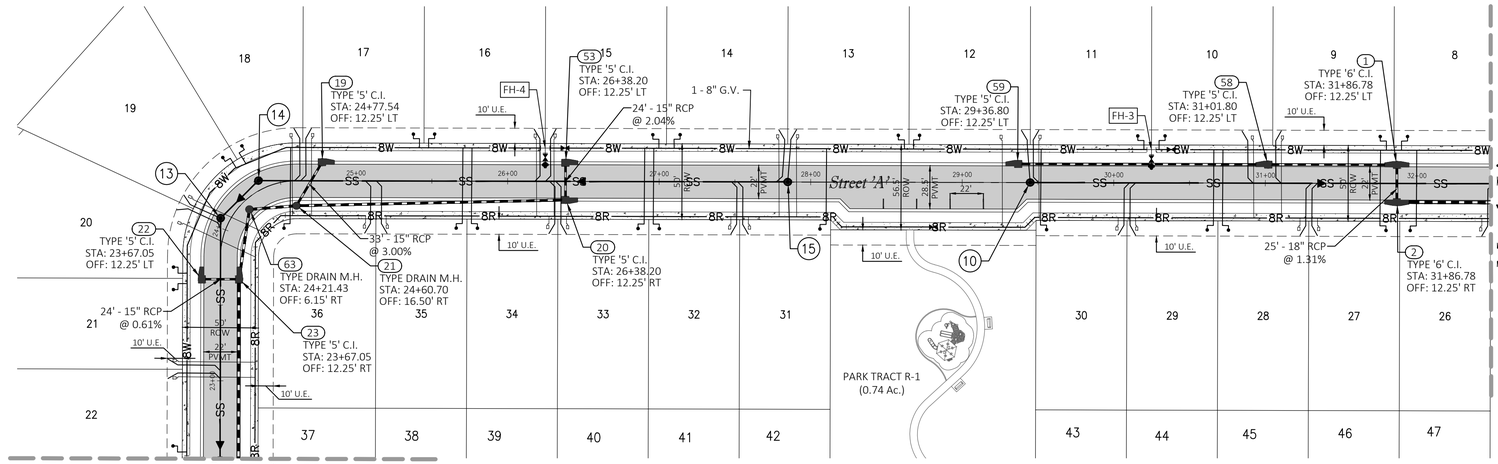
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B9AFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:04-04'00'

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PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8694

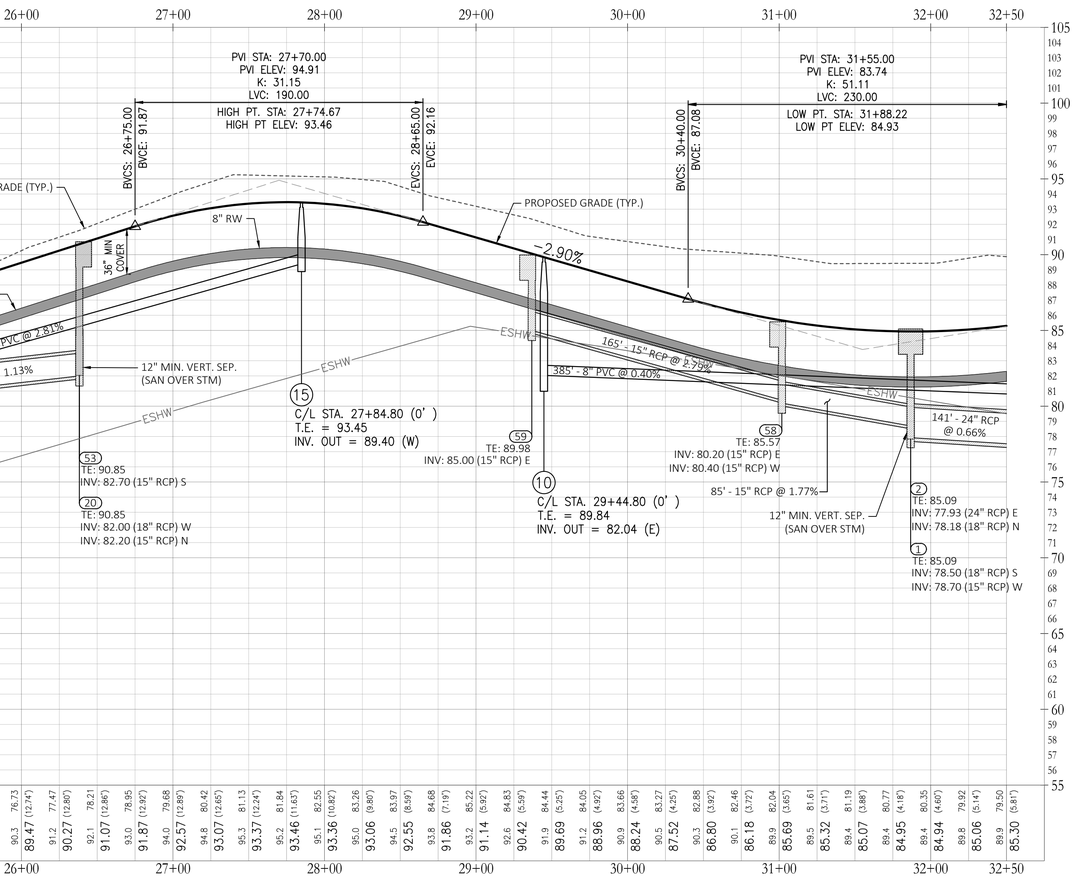
Date: Apr 15, 2026, 1:33pm User ID: GKllebrew
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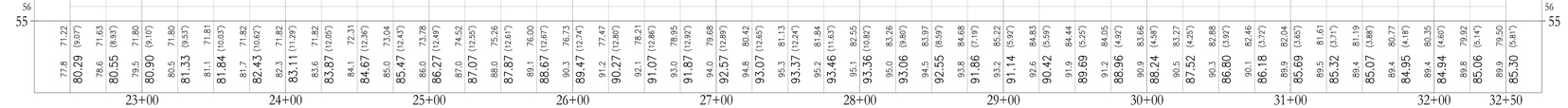


Street 'A'

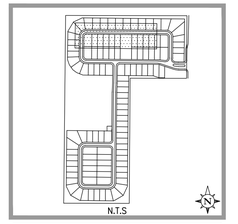
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25 0 50 100 HOR.
2.5 0 5 10 VERT.
SCALE IN FEET





Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET A
PLAN AND PROFILE

Sheet No.:

C6.01

Seal:

MARC DANIEL STEHLI
LICENSE
No. 0052781
STATE OF FLORIDA
PROFESSIONAL ENGINEER

MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

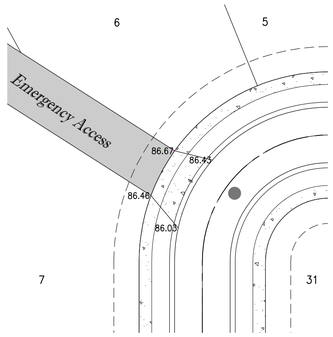
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Date: 2026.04.17 09:57:07-04'00'

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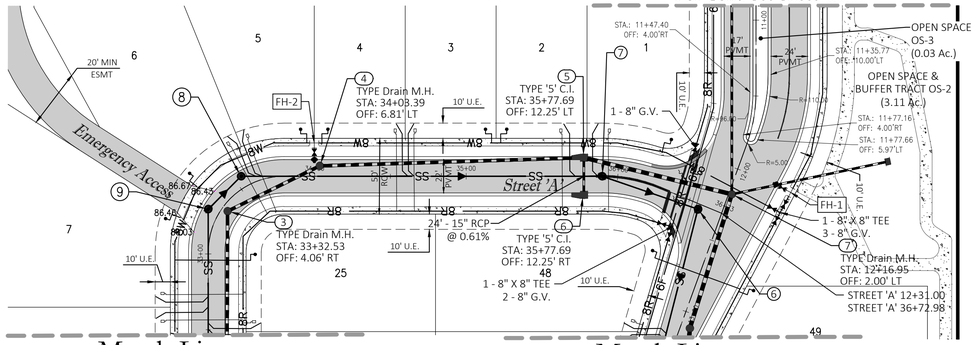
PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #39101 I FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 1:20pm User ID: DKillebrew
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\STREET A 13622-01.dwg

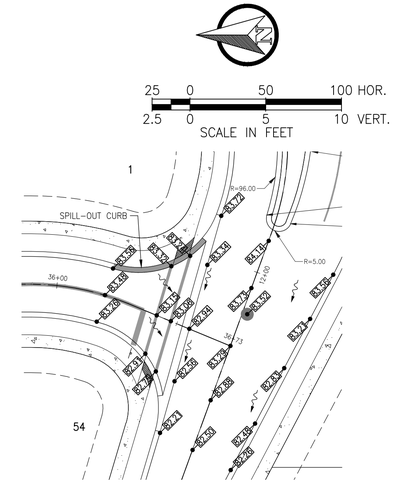
NOTES:
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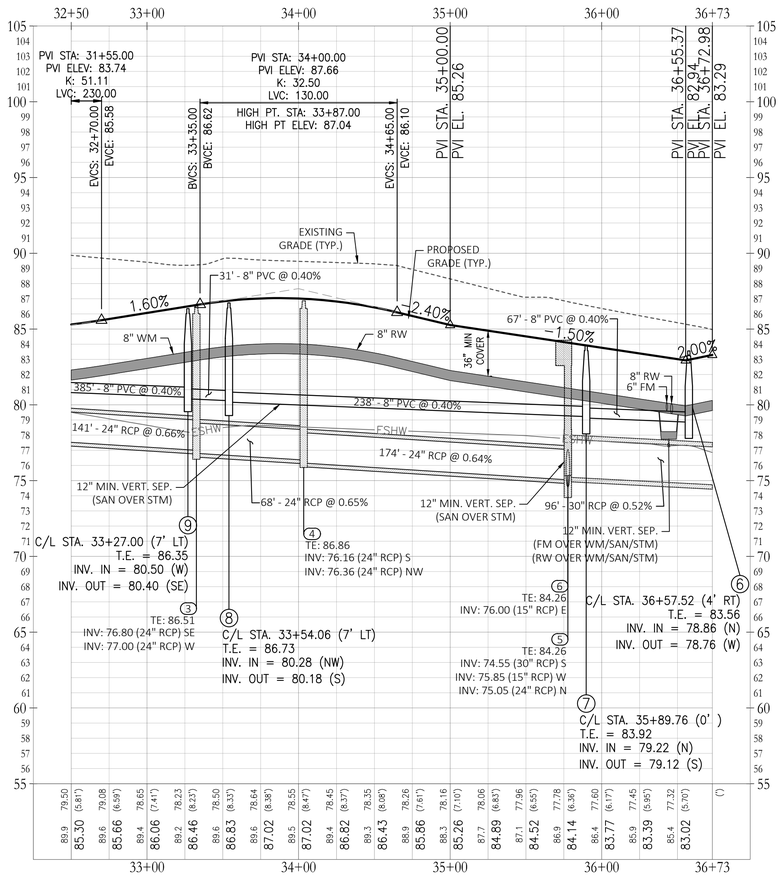
Emergency Access Intersection
1"=30'



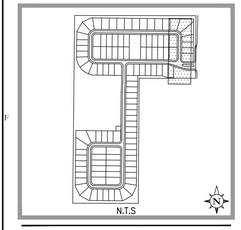
Street 'A'



Street A Intersection
1"=30'



Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET A
PLAN AND PROFILE

Sheet No.:

C6.02

Seal:

MARC DANIEL STEHLI LICENSE NO. 0052781 STATE OF FLORIDA PROFESSIONAL ENGINEER

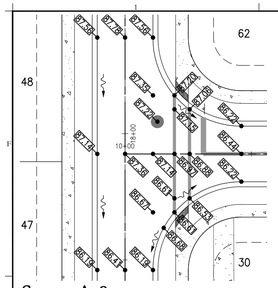
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

DN: CN=Marc DaStehli, dnQualifier=A01410D000001C6AFE033DC0021AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:08-04'00'

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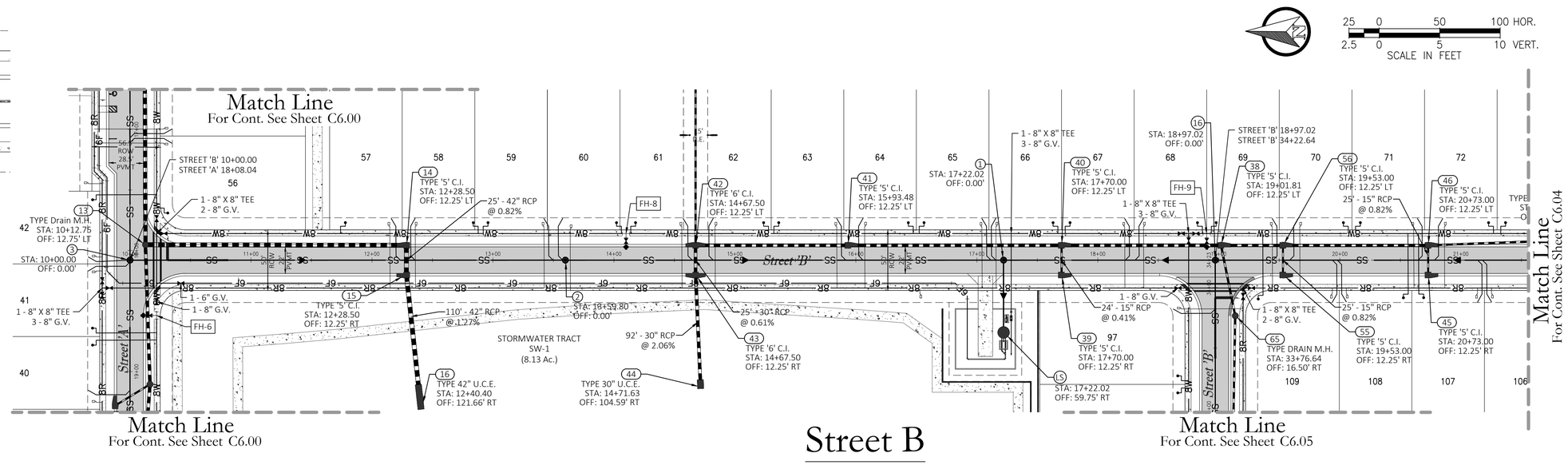
PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB8694

Date: Apr 15, 2026, 1:19pm User ID: GKillebrew
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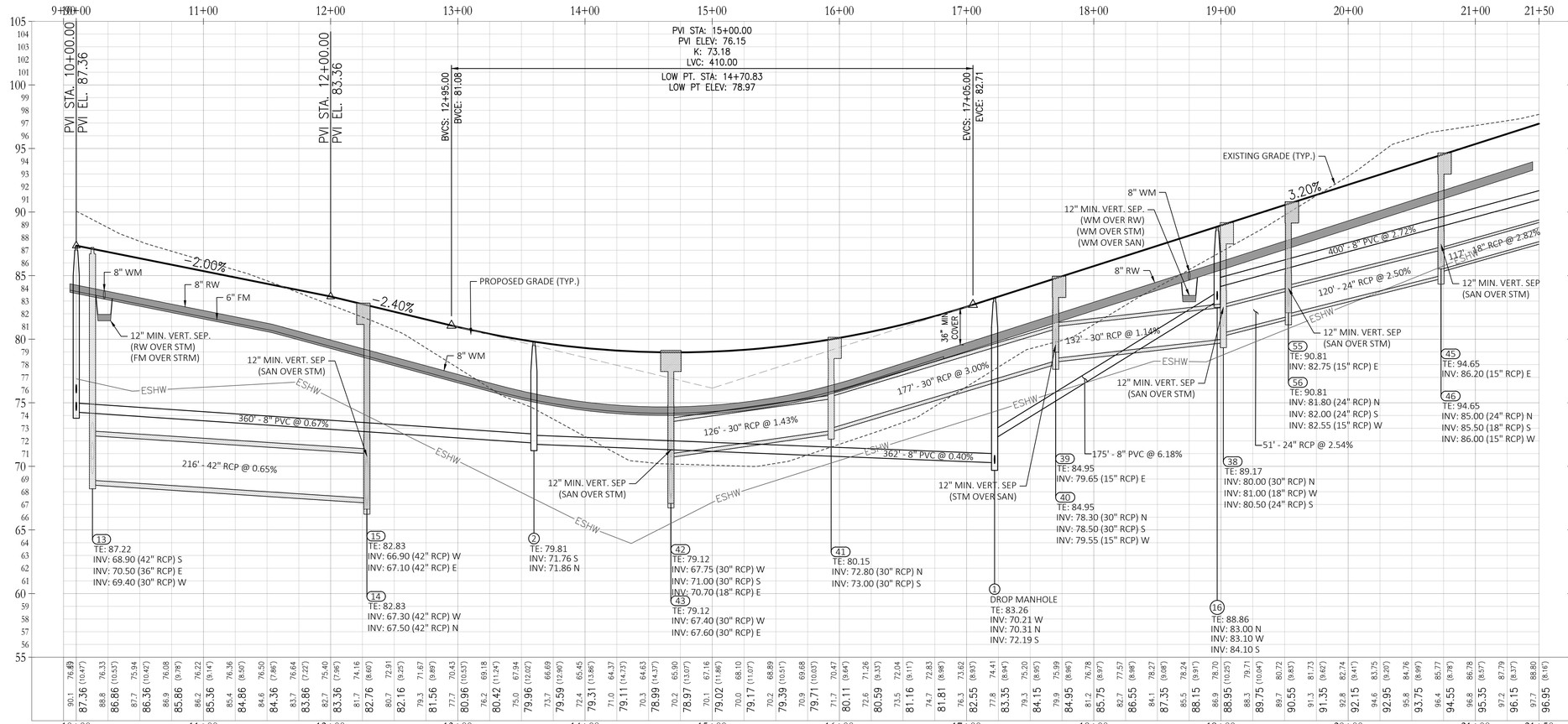


Street A &
Street B Intersection
1"=30'

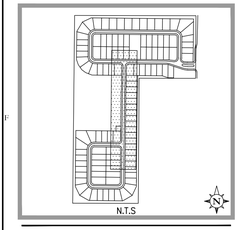
NOTES:
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Street B



Key Map:



Consultant:

0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
NO.	DATE:	DESCRIPTIONS:

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET B
PLAN AND PROFILE

Sheet No.:

C6.03

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA PROFESSIONAL ENGINEER

MARC DANIEL STEHLI P.E. NO. 065278

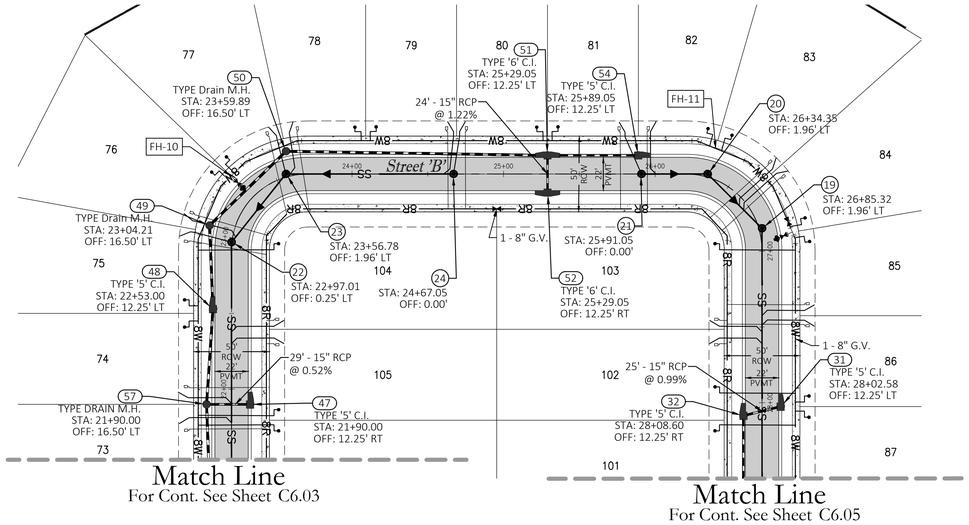
DATE: April 15, 2026

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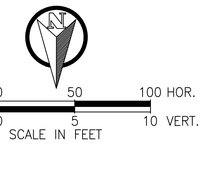
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PAPE-DAWSON
2602 E. LIVINGSTON ST | ORLANDO, FL 32803 | 407.487.2594
FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB0694

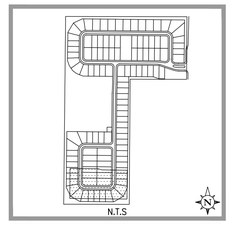
Date: Apr 15, 2026, 1:16pm User ID: GKillebrew
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\STREET B 13622-01.dwg



Street B

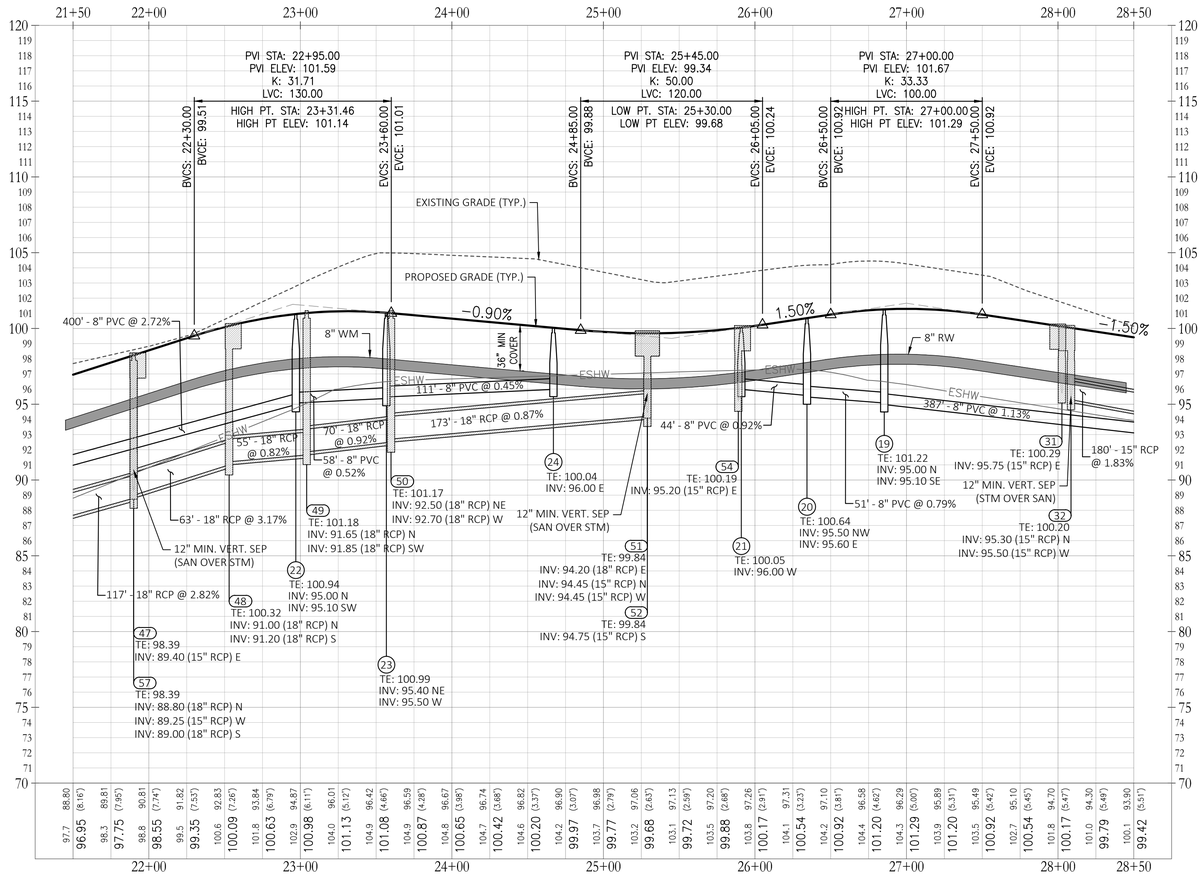


NOTES:
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Key Map:

Consultant:



NO.	DATE:	DESCRIPTIONS:
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VERTICAL DATUM:	NAVD88
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SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET B
PLAN AND PLOFILE

Sheet No.:

C6.04

Seal:

MARC DANIEL STEHLI
LICENSE
No.
STATE OF
FLORIDA
PROFESSIONAL
ENGINEER

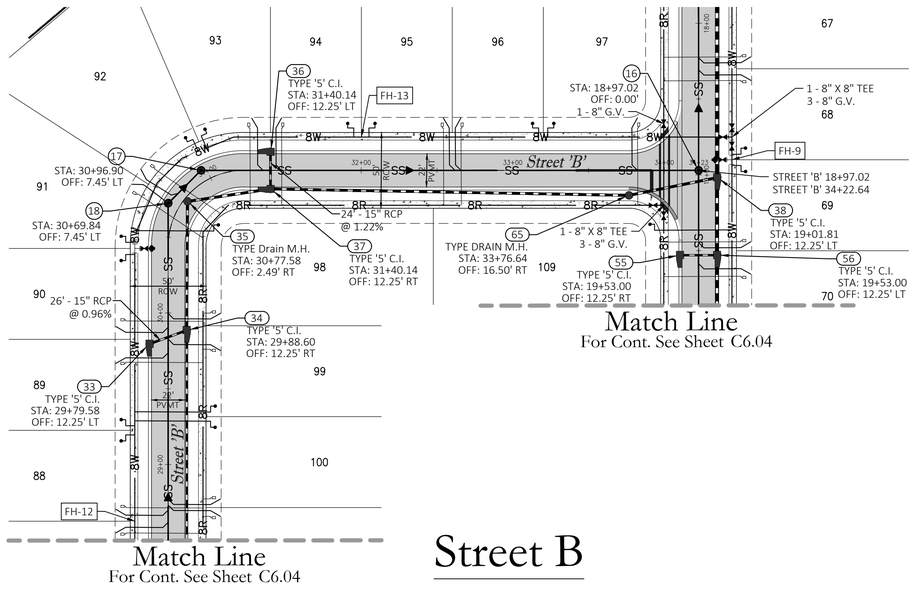
MARC DANIEL STEHLI
P.E. NO. 0052781
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DN: CN=Marc Daniel Stehli, dnQualifier=A01410D000001B9AFE033DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:12-04'00'

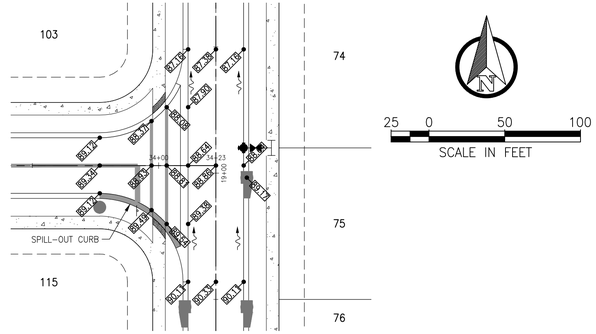
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Files: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\STREET B 13622-01.dwg



Street B

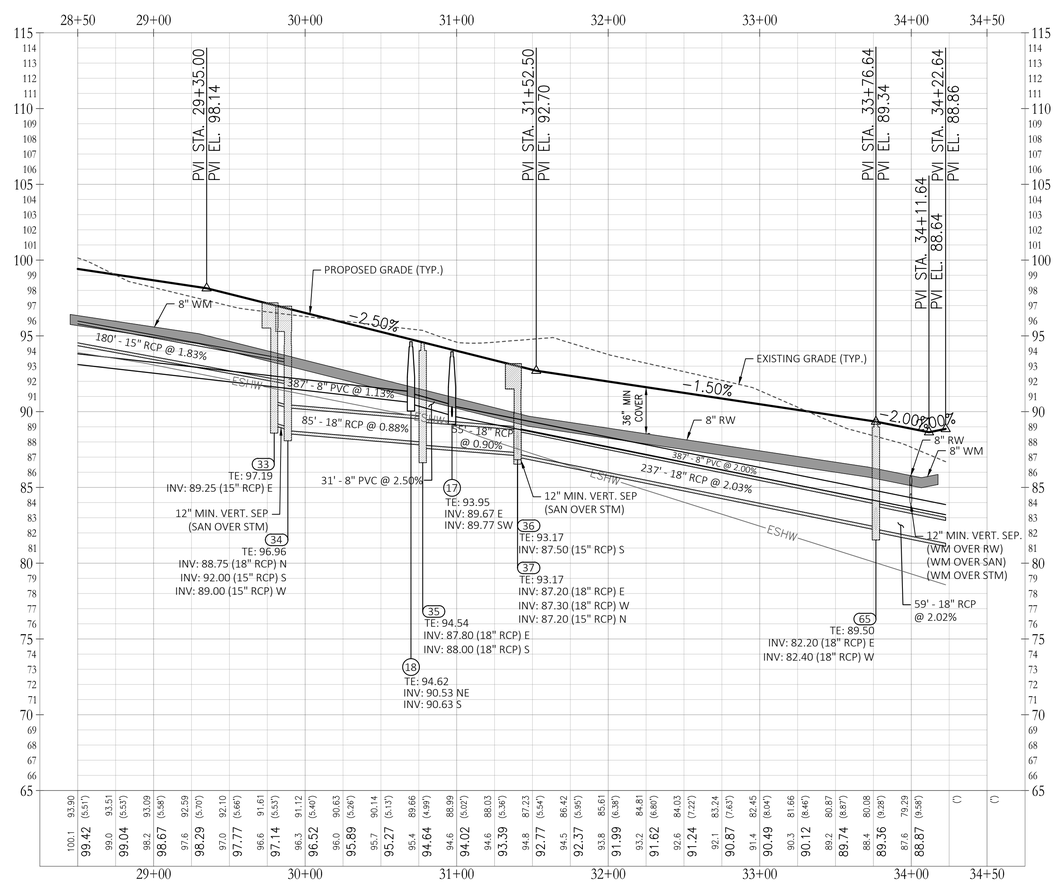


Street B Intersection

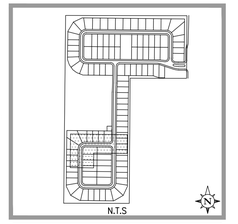
1"=30'

NOTES:

1. PROVIDE 3' MIN. HORIZONTAL SEPARATION BETWEEN SANITARY SEWER AND EDGE OF PAVEMENT.
2. PROVIDE 3' MIN HORIZONTAL SEPARATION BETWEEN WATERMAIN / RECLAIMED WATERMAIN AND STORMWATER DRAINAGE STRUCTURES.
3. PROVIDE 10' UTILITY EASEMENT ALONG ALL PROPOSED RIGHT-OF-WAY.
4. ALL UTILITIES (INCLUDING PUMP STATION IF APPLICABLE) LOCATED OUTSIDE PUBLIC RIGHT-OF-WAYS AND PUBLIC EASEMENTS SHALL BE PRIVATELY OWNED AND MAINTAINED.
5. PROVIDE 36" MIN. COVER BETWEEN PROPOSED GRADE AND TOP OF POTABLE WATER, RECLAIMED WATER, AND FORCEMAIN PIPE.



Key Map:



Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD
		SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

STREET B PLAN AND PROFILE

Sheet No.:

C6.05

Seal:

MARC DANIEL STEHLI LICENSE No. 65278 STATE OF FLORIDA PROFESSIONAL ENGINEER

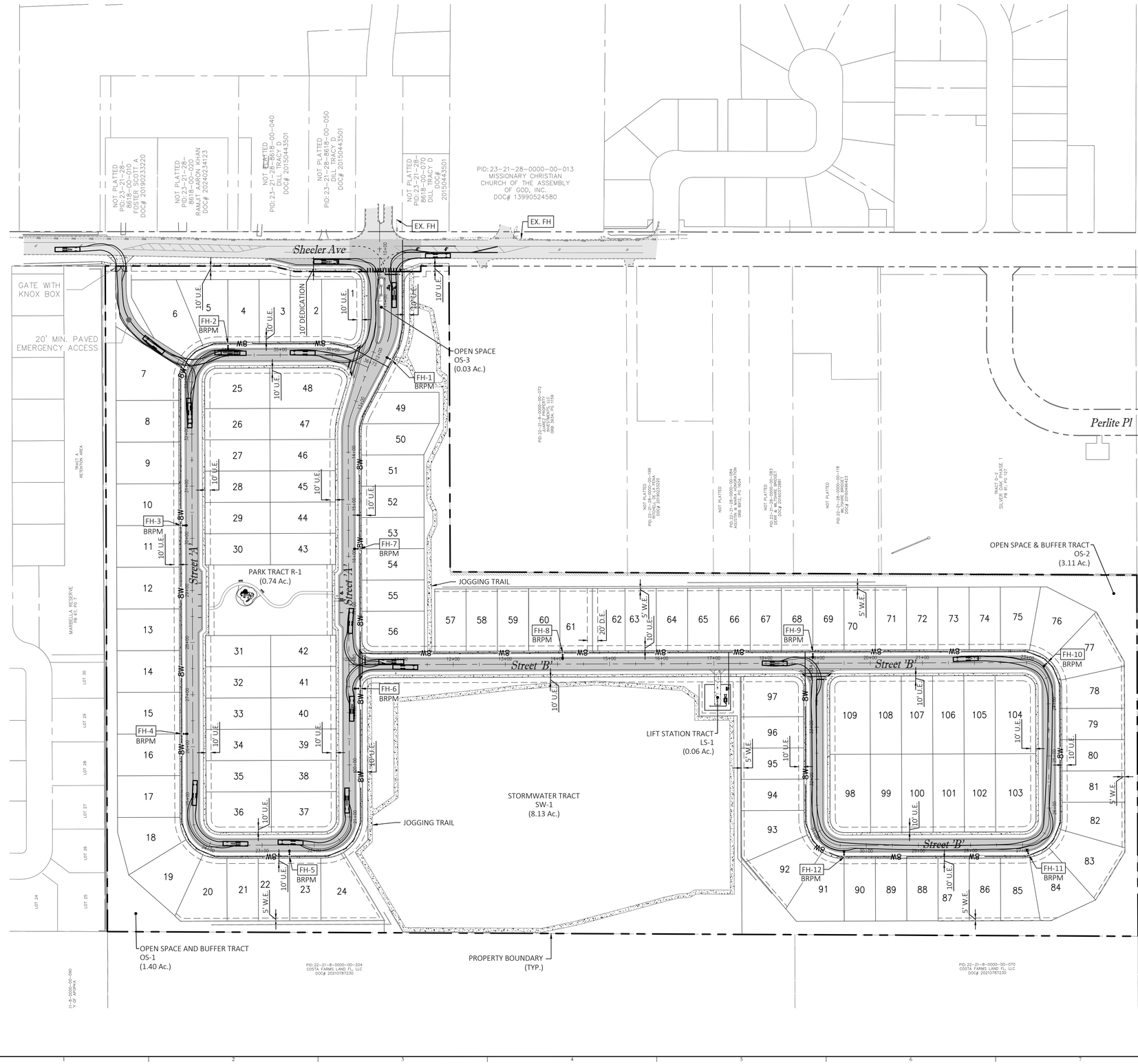
MARC DANIEL STEHLI P.E. NO. 065278 DATE: April 15, 2026

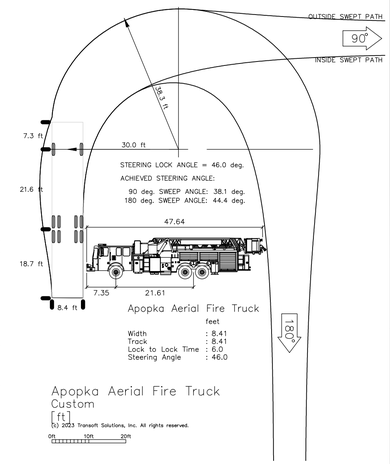
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File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\STREET B 13622-01.dwg







50 0 100 200
SCALE IN FEET

NOTES:

1. FIRE HYDRANTS SHALL BE INSTALLED SO THAT THE DESIGN AND CALCULATIONS MEET THE REQUIREMENTS IN THE CITY OF APOPKA SUBDIVISION REGULATIONS AND THE FFPC 7TH EDITION AND NFPA
2. FIRE ACCESS SHALL BE FROM THE FRONT OF THE PROPOSED DWELLING UNITS. ALLEYS HAVE BEEN DESIGNED FOR FIRE ACCESS WHERE REQUIRED. ACCESS SHALL BE IN ACCORDANCE WITH CHAPTER 18 OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS.
3. FIRE HYDRANTS SHALL BE PROVIDED FOR DETACHED ONE- AND TWO- FAMILY DWELLINGS IN ACCORDANCE WITH BOTH OF THE FOLLOWING:
   3.1 THE MAXIMUM DISTANCE TO A FIRE HYDRANT FROM THE CLOSEST POINT ON THE BUILDING SHALL NOT EXCEED 250 FEET
   3.2 THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 500 FEET.
4. FIRE HYDRANTS SHALL BE PROVIDED FOR BUILDINGS OTHER THAN DETACHED ONE- AND TWO-FAMILY DWELLINGS IN ACCORDANCE WITH BOTH OF THE FOLLOWING:
   4.1 THE MAXIMUM DISTANCE TO A FIRE HYDRANT FROM THE CLOSEST POINT ON THE BUILDING SHALL NOT EXCEED 250 FEET.
   4.2 THE MAXIMUM DISTANCE BETWEEN FIRE HYDRANTS SHALL NOT EXCEED 500 FEET.
5. NEEDED FIRE FLOW FOR SINGLE FAMILY DWELLINGS SHALL BE AS FOLLOWS: HOMES 5,000 S.F. OR LESS 1,000 GPM; HOMES EXCEEDING 5,000 S.F. SHALL PROVIDE FIRE FLOW IN ACCORDANCE WITH TABLE 18.4.5.2. 1OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS. REDUCTION OF FIRE FLOW MAY BE PERMITTED IF DWELLING IS EQUIPPED WITH AN AUTOMATIC SPRINKLER SYSTEM OR SEPARATED FROM OTHER STRUCTURES BY 30 FEET BUT IN NO CASE SHALL THE FIRE FLOW BE LESS THAN 500 GPM PER 18.4.5 FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS.
6. DURING CONSTRUCTION, WHEN COMBUSTIBLES ARE BROUGHT ON TO THE SITE, ACCESS ROADS AND A SUITABLE TEMPORARY OR PERMANENT SUPPLY OF WATER ACCEPTABLE TO THE WIRE DEPARTMENT SHALL BE PROV I DED AN D MAINTAINED PER FFPC 7TH EDITION AND N GPA 1(2018) WITH FLORI DA AMEN DMENTS.
7. ALL PRIMARY BUILDING STRUCTURES SHALL BE LOCATED ON LOTS SUCH THAT THE FIRE DEPARTMENT ACCESS ROAD IS WITHIN 50 FT. OF AN EXTERIOR DOOR IN ACCORDANCE WITH 18.2.3.2. 1OF THE FFPC 7TH EDITION AND NFPA 1(2018) WITH FLORIDA AMENDMENTS
8. STREET DESIGN CAN ACCOMODATE LARGE TRUCKS, FIRE TRUCKS, MOVING COMPANY SEMITRUCKS WB-40 AND GARBAGE TRUCKS AND BASED ON THE CENTERLINE MINIMUM RADIUS OF 50.0'.
9. FIRE HYDRANTS SHALL BE LOCATED 5 FEET TO 7 FEET FROM THE EDGE OF PAVEMENT TO CENTER OF HYDRANTS
10. CONTRACTOR SHALL INSTALL BLUE REFLECTIVE PAVEMENT MARKING IN THE CENTER OF THE ADJACENT TRAVEL LANE IN FRONT OF ALL FIRE HYDRANTS.

Key Map:

Consultant:

NO.	DATE:	DESCRIPTIONS:
0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 100'

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

FIRE PROTECTION PLAN

Sheet No.:

C7.00

Seal:

MARC DANIEL STEHLI LICENSE No. 0052781 STATE OF FLORIDA

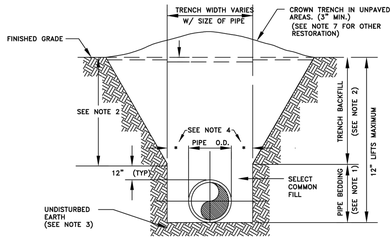
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

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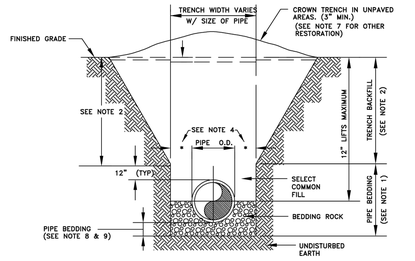


NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS TO AASHTO T-180.
3. PIPE BEDDING UTILIZING SELECT COMMON FILL OR BEDDING ROCK IN ACCORDANCE WITH TYPE A BEDDING AND TRENCHING DETAIL MAY BE REQUIRED AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETERS LESS THAN 24", AND 24" FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF GOVERNING AGENCIES.
8. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.

TYPE "B" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 100



NOTES:

1. PIPE BEDDING: SELECT COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
2. TRENCH BACKFILL: COMMON FILL COMPACTED TO 98% UNDER PAVEMENT OF THE MAXIMUM DENSITY AS PER AASHTO T-180.
3. USE OF TYPE A BEDDING TO BE DETERMINED IN THE FIELD AS DIRECTED BY THE CITY.
4. (*): 15" MAX. FOR PIPE DIAMETER LESS THAN 24", AND 24" MAX. FOR PIPE DIAMETER 24" AND LARGER.
5. WATER SHALL NOT BE PERMITTED IN THE TRENCH DURING CONSTRUCTION.
6. ALL PIPE TO BE INSTALLED WITH BELL FACING UPSTREAM TO THE DIRECTION OF THE FLOW.
7. GRAVITY SEWERS SHALL UTILIZE TYPE A BEDDING IF REQUIRED BY THE CITY. BEDDING DEPTH SHALL BE 4" MINIMUM FOR PIPE DIAMETER LESS THAN 15" AND 6" MINIMUM FOR PIPE DIAMETER 16" AND LARGER.
8. DEPTH FOR REMOVAL OF UNSUITABLE MATERIAL SHALL GOVERN DEPTH OF BEDDING ROCK BELOW THE PIPE. THE CITY SHALL DETERMINE IN THE FIELD IF REMOVAL OF UNSUITABLE MATERIAL IS REQUIRED TO REACH A SUITABLE FOUNDATION.
9. ALL UNPAVED DISTURBED AREAS SHALL BE SODDED TO MATCH ADJACENT DOMINATE GRASS SPECIES.
10. FINAL RESTORATION IN IMPROVED AREAS SHALL BE IN COMPLIANCE WITH ALL APPLICABLE REGULATIONS OF THE GOVERNING AGENCIES. SURFACE RESTORATION WITHIN CITY RIGHT-OF-WAY, SHALL COMPLY WITH REQUIREMENTS OF RIGHT-OF-WAY UTILIZATION REGULATIONS.

TYPE "A" BEDDING AND OPEN-CUT DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 101

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *											
	PIPE SIZE										
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND	33	43	51	60							
45° BEND	14	18	22	25							
22-1/2° BEND	7	9	11	12							
11-1/4° BEND	4	5	6	6							
TEE**	1	7	24	44							
REDUCER (ONE SIZE SMALLER)		41	39	40							
DEAD END	74	96	115	136							

* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

NOTES:

1. FITTINGS SHALL BE DUCTILE IRON RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, FOR PVC WITH THE FOLLOWING ASSUMPTIONS:
   TYPE OF PIPE: PVC
   WORKING PRESSURE: 150 P.S.I.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: B
6. FOR PIPE ENCASED IN POLYETHYLENE INCREASE THE GIVEN VALUE BY A FACTOR OF 1.5.
7. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (PVC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 105

MINIMUM LENGTH (FT) TO BE RESTRAINED ON EACH SIDE OF FITTING(S). *											
	PIPE SIZE										
	6"	8"	10"	12"	16"	18"	20"	24"	30"	36"	48"
90° BEND					61	67	73	84	100	114	
45° BEND					26	28	31	35	42	48	
22-1/2° BEND					13	14	15	17	20	23	
11-1/4° BEND					6	7	8	9	10	12	
TEE**					52	62	74	95	124	152	
REDUCER (ONE SIZE SMALLER)					48	25	25	47	66	66	
DEAD END					111	123	135	157	188	218	

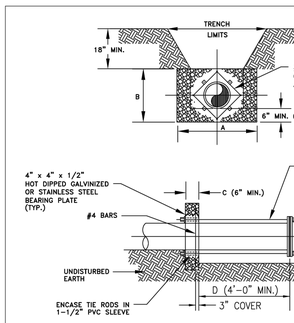
* ONLY RESTRAIN BRANCH PIPE FOR TEES. ONLY RESTRAIN LARGER PIPE FOR REDUCERS
** LENGTH ALONG RUN ASSUMED TO BE 18'

NOTES:

1. FITTINGS SHALL BE RESTRAINED JOINT TYPE. FM FITTINGS TO BE LINED WITH PROTECTO 401.
2. INSTALL FULL LENGTHS OF PIPE WITH TOTAL LENGTH CONTAINING ONLY RESTRAINED JOINTS EQUAL TO OR GREATER THAN LENGTH SHOWN IN TABLE.
3. WHERE TWO OR MORE FITTINGS ARE TOGETHER, USE FITTING WHICH YIELDS GREATEST LENGTH OF RESTRAINED PIPE.
4. IN LINE VALVES AND THROUGH RUN OF TEES OUTSIDE LIMITS OF RESTRAINED JOINTS FROM OTHER FITTINGS NEED NOT BE RESTRAINED UNLESS OTHERWISE INDICATED.
5. LENGTHS SHOWN IN THE TABLE HAVE BEEN CALCULATED IN ACCORDANCE WITH THE PROCEDURE OUTLINED IN "THRUST RESTRAINT DESIGN FOR DUCTILE IRON PIPE" AS PUBLISHED BY DIPRA, WITH THE FOLLOWING ASSUMPTIONS:
   TYPE OF PIPE:
   WORKING PRESSURE: 150 P.S.I.** ** FM = 100 P.S.I. / WM OR RWM = 150 P.S.I.
   SOIL DESIGNATION: SM(SAND SILT)
   LAYING CONDITIONS: B
6. VALUES NOT LISTED IN THE TABLE TO BE COMPLETED BY THE ENGINEER.

RESTRAINED PIPE TABLE (DI)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JAUARY 2014	FIG. 106



NOTES:

1. ADDITIONAL REINFORCEMENTS SHALL BE AS SPECIFIED BY THE ENGINEER.
2. MINIMUM COMPRESSIVE STRENGTH FOR CONCRETE SHALL BE 2500 P.S.I.
3. BEDDING, BACKFILL, AND COMPACTION SHALL BE AS SPECIFIED ELSEWHERE IN THE STANDARD DRAWINGS.
4. ALL FORM BOARDS SHALL BE REMOVED PRIOR TO BACKFILL.
5. NO ALLOWANCE SHALL BE MADE FOR FRICTION BETWEEN THE PIPE WALL AND THE THRUST COLLAR.
6. DESIGN PRESSURE: 150 P.S.I.

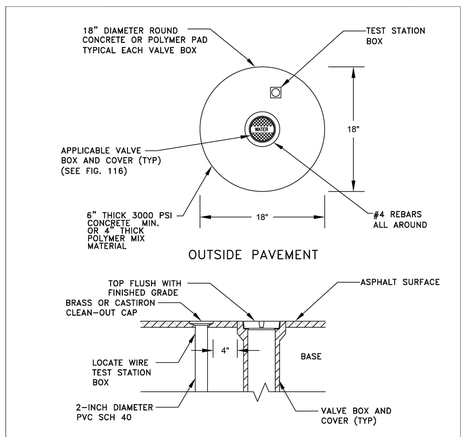
SCHEDULE OF DIMENSIONS AND MATERIALS *

PIPE SIZE (INCHES)	DIMENSIONS (FT.) A	B	C	D	TIE RODS REQ'D DIA.	NO.
6	2.0	2.0	1.0		3/4	2
8	2.5	2.5	1.0		3/4	2
10	3.5	3.0	1.0		3/4	4
12	5.0	3.0	1.0		3/4	4
16	6.0	4.0	1.5		3/4	4
20	8.0	5.0	1.5		3/4	6
24	9.0	6.0	1.5		3/4	8

NOTE: THRUST BLOCK AREAS TO BE COMPUTED ON BASIS OF ____2,000 LBS. PER SQ. FT. SOIL RESTRAINT BEARING. (1,500 MIN) SEE NOTE 5
* TO BE COMPLETED BY ENGINEER.

WATER MAIN THRUST COLLAR DETAIL

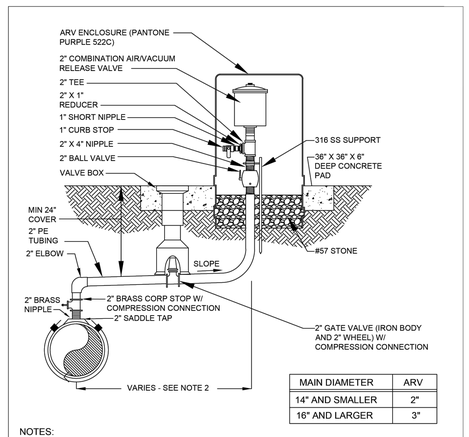
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 107



VALVE IDENTIFICATION TAG TO BE INSTALLED BY CITY & PAID FOR BY DEVELOPER

VALVE BOX

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 109

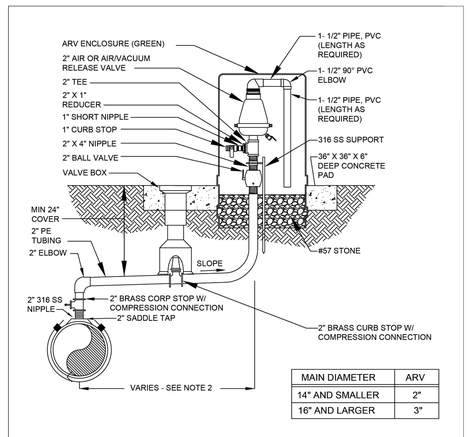


MAIN DIAMETER	ARV
14" AND SMALLER	2"
16" AND LARGER	3"

NOTES:
1. FOR RECLAIMED WATER USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE R/W LINE AS POSSIBLE
3. ADJUST HORIZONTAL LOCATION OF SIDEWALK, AS REQUIRED TO AVOID ARV ENCLOSURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF R/W LINE.
5. ASSEMBLY PIPE, FITTINGS, AND APPURTENANCES TO MATCH ARV SIZE..

OFFSET COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - RECLAIMED WATER ONLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 113



MAIN DIAMETER	ARV
14" AND SMALLER	2"
16" AND LARGER	3"

NOTES:
1. FOR WASTEWATER USE ONLY.
2. OFFSET DISTANCE TO BE FIELD DETERMINED AND AS CLOSE TO THE R/W LINE AS POSSIBLE
3. ADJUST HORIZONTAL LOCATION OF SIDEWALK, AS REQUIRED TO AVOID ARV ENCLSOURE.
4. LOCATE ARV ENCLOSURE WITHIN 6" OF R/W LINE.

OFFSET AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - WASTEWATER ONLY

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 114

Key Map:

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SUBMISSIONS/REVISIONS

VERTICAL DATUM:	NAVD88
JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

APOPKA CONSTRUCTION DETAILS

Sheet No.:

C9.10

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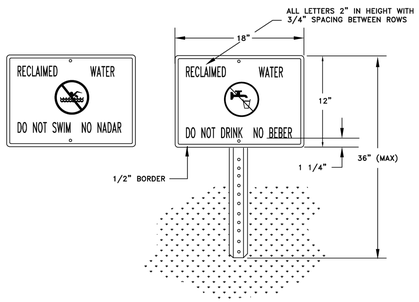
MARC DANIEL STEHLI
LICENSE
No.
STATE OF
FLORIDA
P.E. NO. 0052781
DATE: April 15, 2026

DN: C=US, E=Marc.Stehli, dnQualifier=A01410D000001B9FED33DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:18-04'00'

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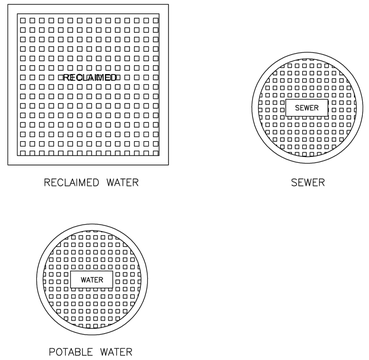


NOTES:

1. HEIGHT OF SIGN WILL DEPEND ON LOCATION AND SURROUNDING LANDSCAPE PLANT TYPES. IN ALL CASES, THE SIGN SHALL BE VISIBLE TO THE PUBLIC.
2. BACKGROUND SHALL BE WHITE. LETTERS AND FIGURES SHALL BE BLACK. PROHIBITIVE SYMBOL SHALL BE RED.
3. ENGINEERING GRADE REFLECTIVE MATERIALS SHALL BE USED.
4. POST SHALL BE U CHANNEL 12 FT. 2 LB. HOT ROLLED HIGH TENSILE RAIL OR BILLET STEEL, HOT DIP GALVANIZED PER ASTM A-123.
5. MOUNTING HARDWARE SHALL BE STAINLESS STEEL.
6. SIGNS SHALL BE PLACED BY THE CONTRACTOR IN ACCORDANCE WITH THE CITY APPROVED ENGINEERING PLANS AND/OR AS APPROVED BY PUBLIC SERVICES DEPARTMENT.

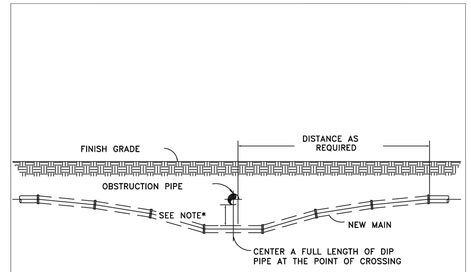
RECLAIMED WATER ADVISORY SIGN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 115



TYPICAL VALVE BOX COVER DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 116



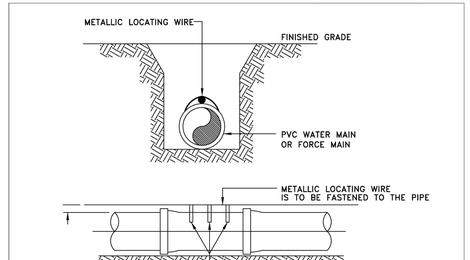
NOTES:

1. 18" MINIMUM CLEARANCE FOR WATER, SEWER AND RECLAIMED WATER MAIN CROSSINGS
2. 12" MINIMUM CLEARANCE REQUIRED FOR OTHER TYPE UTILITY CROSSINGS.
3. SEE ENCASEMENT DETAIL IF MINIMUM CLEARANCE CANNOT BE OBTAINED.

* CONSTRUCT UNIFORM PIPE DEFLECTION NOT TO EXCEED 75% OF MANUFACTURER RECOMMENDED MAXIMUM DEFLECTION PER PIPE JOINT

UTILITY CROSSING PIPE DEFLECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 117

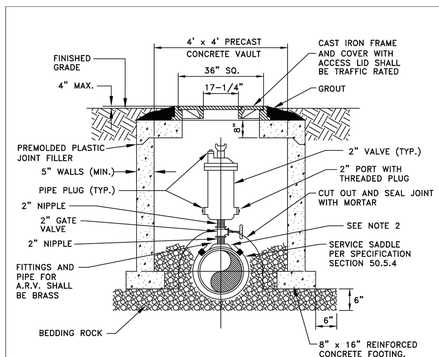


NOTES:

1. PVC PIPE SHALL REQUIRE INSULATED METALLIC LOCATING WIRE (10 AWG-SOLID CCS REINFORCED TRACER WIRE-INSULATED 30 MIL HDPE - 30 VOLT MFG. BY COPPERHEAD INDUSTRIES, LLC OR EQUAL) CAPABLE OF DETECTION BY A CABLE LOCATOR.
2. SHALL BE BURIED DIRECTLY ABOVE THE CENTERLINE OF THE PIPE AND ATTACHED WITH DUCT TAPE OR NYLON STRAPS AT 3 LOCATIONS PER JOINT. LOCATING WIRE SHALL TERMINATE AT THE TEST STATION BOX AS SHOWN IN FIG. 109.
3. BE CAPABLE OF EXTENDING 12" ABOVE TOP OF TEST STATION BOX IN SUCH A MANNER SO AS NOT TO INTERFERE WITH VALVE OPERATION.
4. SPLICES SHOULD BE MADE USING STANDARDS AND PRODUCTS DESIGNED FOR DIRECT BURIAL CONDUCTORS.
5. WIRE INSULATION SHALL BE COLOR CODED FOR THE TYPE OF PIPE BEING INSTALLED.

PVC PIPE LOCATING WIRE DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 118

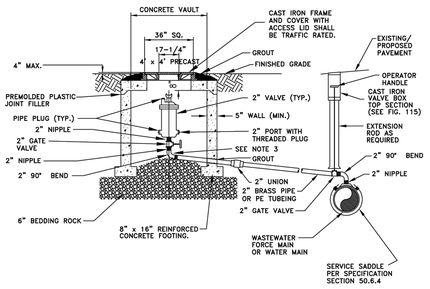


NOTES:

1. ABOVE DETAIL IS BASED ON 2 INCH COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM TOP OF PIPE TO FINISHED GRADE SHALL BE 4.0 FEET.
3. ALL STRUCTURES TO BE TRAFFIC BEARING RATED.

AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - UNDERGROUND

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 119

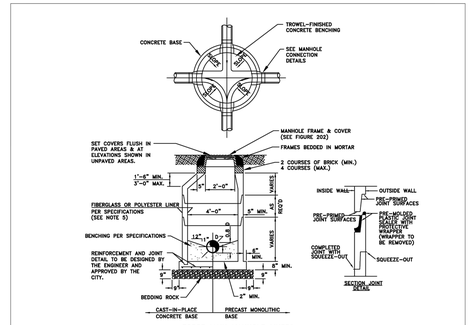


NOTES:

1. ABOVE DETAIL IS BASED ON 2 INCH COMBINATION AIR/VACUUM RELEASE VALVE. CHANGE PIPE AND FITTINGS ACCORDINGLY FOR OTHER VALVE SIZES AND TYPES. VALVE SIZES TO BE DETERMINED BY THE ENGINEER AND APPROVED BY THE CITY PRIOR TO INSTALLATION.
2. THE MINIMUM DIMENSION FROM ELBOW INVERT TO FINISHED GRADE SHALL BE 4.0 FEET.
3. THE AIR RELEASE VALVE SHALL BE ADEQUATELY SUPPORTED.
4. ALL FITTINGS ARE TO BE BRASS.

OFFSET AIR OR COMBINATION AIR/VACUUM RELEASE VALVE DETAIL - UNDERGROUND

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 120



FORCE MAIN MANHOLE LINER*

THICKNESS (INCHES)					
DIAMETER (INCHES)	HEIGHT (FEET) 3-6	7-12	13-17	MATERIAL	MANUFACTURER
48					
60					
72					

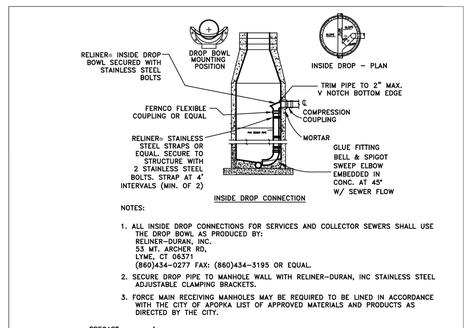
* TO BE COMPLETED BY THE ENGINEER

NOTES:

1. MANHOLE SHOWN IS FOR SEWER SIZE 8" THRU 24". SEE SECTION 20.4 OF THE MANUAL FOR MANHOLE DIAMETER FOR SEWERS LARGER THAN 24".
2. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE. SEE MANHOLE CONNECTION DETAILS.
3. THE THICKNESS OF THE LINER SHALL BE 3/8" MINIMUM.
4. EACH BENCH WALL SHALL BE A MINIMUM OF 18 INCHES LONG FROM THE WALL OF THE MANHOLE TOWARD THE CENTER.
5. SANITARY SEWER MANHOLES MAY BE REQUIRED TO BE LINED IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.

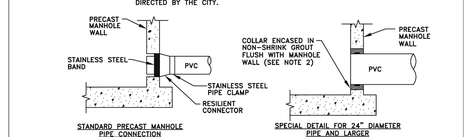
TYPICAL MANHOLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 200



NOTES:

1. ALL INSIDE DROP CONNECTIONS FOR SERVICES AND COLLECTOR SEWERS SHALL USE THE DROP BOWL AS PRODUCED BY:
   RELINER-DURAN, INC.
   53 MT. ARCHER RD,
   LYME, CT 06371
   (860)434-0277 FAX: (860)434-3195 OR EQUAL.
2. SECURE DROP PIPE TO MANHOLE WALL WITH RELINER-DURAN, INC STAINLESS STEEL ADJUSTABLE CLAMPING BRACKETS.
3. FORCE MAIN RECEIVING MANHOLES MAY BE REQUIRED TO BE LINED IN ACCORDANCE WITH THE CITY OF APOPKA LIST OF APPROVED MATERIALS AND PRODUCTS AS DIRECTED BY THE CITY.



NOTES:

1. DROP PIPE AND FITTINGS SHALL BE OF EQUAL SIZE AND MATERIAL AS THE INFLUENT SEWER.
2. THE CITY MAY APPROVE ALTERNATE WATERTIGHT CONNECTION DETAILS FOR CONNECTION OF 24" DIAMETER PIPES AND LARGER.
3. AN INSIDE DROP CONNECTION SHALL BE REQUIRED FOR ALL INFLUENT WHICH HAVE AN INVERT 24" OR MORE ABOVE THE OUTFLOW PIPE INVERT.
4. CONCRETE TO BE MINIMUM OF 3000 PSI.

MANHOLE CONNECTION DETAILS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 201

Key Map:

Consultant:

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0	4/15/2026	SUBMIT TO CITY OF APOPKA, ORANGE COUNTY & SJRWMD

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JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

APOPKA CONSTRUCTION DETAILS

Sheet No.:

C9.11

Seal:

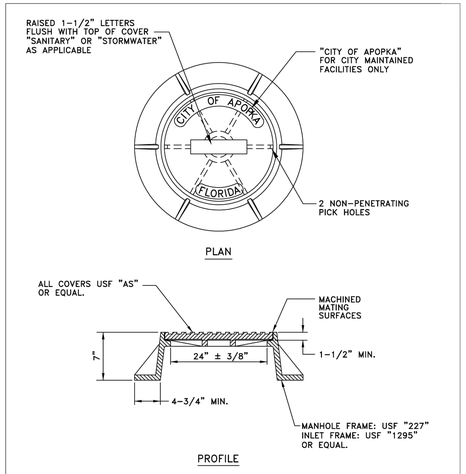
MARC DANIEL STEHLI
LICENSED
No. 0
STATE OF FLORIDA
PROFESSIONAL ENGINEER
P.E. NO. 0052781
DATE: April 15, 2026

DN: C=US, E=marc.stehli, dnQualifier=A01410D000001B9EED33DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:20-04'00'

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FLORIDA ENGINEERING FIRM #30101 | FLORIDA SURVEYING FIRM #LB0664

Date: Mar 13, 2026, 8:42am User ID: cgillis
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\CDTL513622-01.dwg

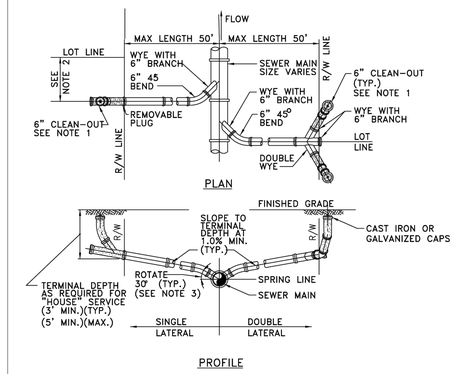


NOTES:

1. MANHOLE FRAME AND COVER ARE TO BE TRAFIC BEARING RATED H-20, CLASS 30 MEETING ASTM A 48.

STANDARD MANHOLE FRAME AND COVER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 202

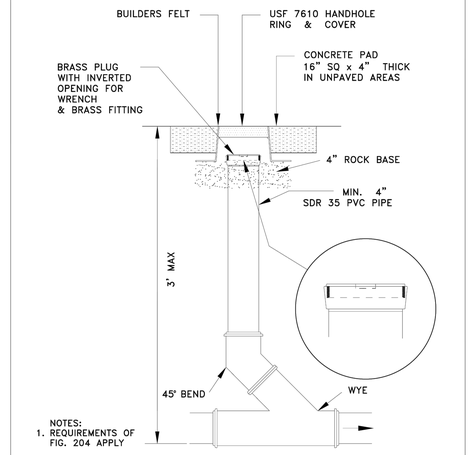


NOTES:

1. CLEAN-OUT (SHOWN SHADED) SHALL BE INSTALLED BY THE BUILDER IN ACCORDANCE WITH STANDARD PLUMBING CODE.
2. LOCATE SINGLE LATERAL AS CLOSE TO LOT LINE AS POSSIBLE.
3. INVERT OF SERVICE LATERAL SHALL NOT ENTER SEWER MAIN BELOW SPRING LINE.
4. RESIDENTIAL SERVICES SHALL BE 4 INCHES & NON-RESIDENTIAL SERVICES SHALL BE 6 INCHES IN DIAMETER AS A MINIMUM.
5. GALVANIZED, OR CAST IRON CLEAN-OUT CAP SHALL BE USED ON THE STUBOUT FOR EACH SERVICE.
6. LATERAL SHALL BE MARKED WITH AN "S" STAMPED OR CUT IN THE CURB.

SERVICE LATERAL DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 204



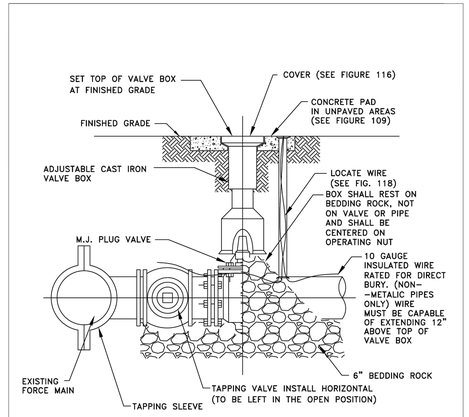
NOTES:

1. REQUIREMENTS OF FIG. 204 APPLY

SANITARY SEWER SERVICE TRAFFIC RATED CLEAN-OUT DETAIL

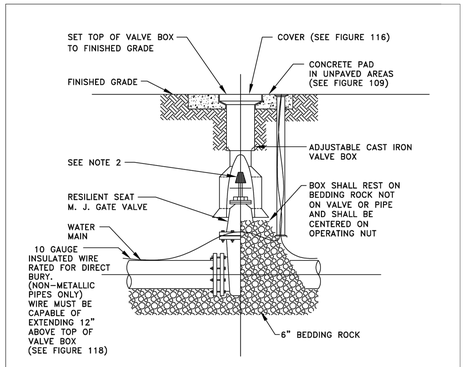
NTS

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 205



FORCE MAIN WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 206

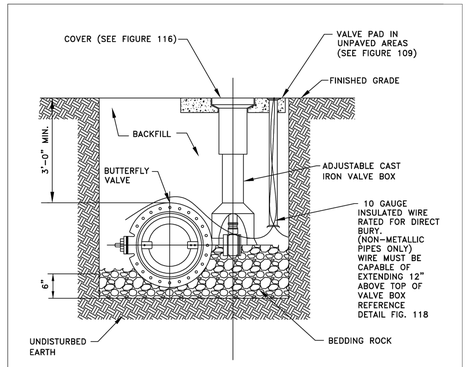


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN A 3 FEET BELOW FINISHED GRADE.

GATE VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 400

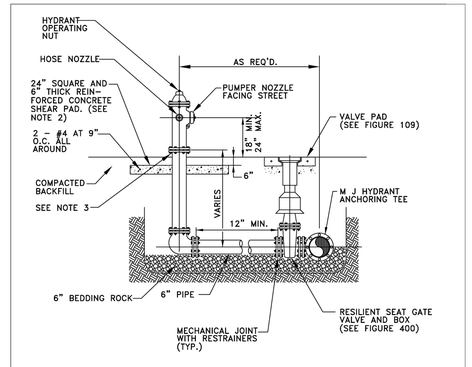


NOTES:

1. PVC EXTENSIONS MAY BE USED ON VALVE BOX INSTALLATION.
2. ALL WATER SHUT-OFF VALVES SIXTEEN (16) INCHES AND LARGER SHALL BE BUTTERFLY VALVES.
3. THE ACTUATING NUT FOR DEEPER VALVES SHALL BE EXTENDED TO WITHIN 3 FEET BELOW FINISHED GRADE.

BUTTERFLY VALVE AND BOX DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 401

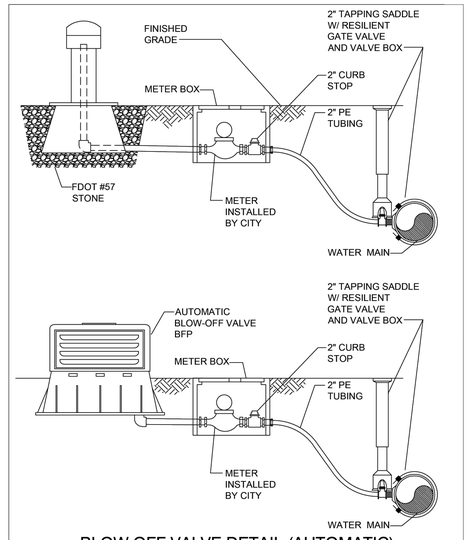


NOTES:

1. FIRE HYDRANT SHALL BE SUPPLIED WITHOUT A WEEP HOLE, OR WITH A PERMANENTLY PLUGGED WEEP HOLE.
2. THE SHEAR PAD SHALL BE RECESSED SIX (6) INCHES BELOW THE FINISHED GRADE AND THE RECESSED SECTION SODDED.
3. CLEARANCE BETWEEN BOTTOM OF BOLTS AND TOP OF SHEAR PAD SHALL BE A TWELVE (12) INCH MINIMUM.
4. FIRE HYDRANTS SHALL BE IDENTIFIED IN ACCORDANCE WITH THE CITY OF APOPKA UTILITIES DESIGN CONSTRUCTION STANDARDS MANUAL.

FIRE HYDRANT ASSEMBLY DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 402



BLOW OFF VALVE DETAIL (AUTOMATIC)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 403 A

Key Map:

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SUBMISSIONS/REVISIONS

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JOB NO.:	24-198
DESIGNED BY:	BR
DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

Submittal To:

CITY OF APOPKA, FL

Sheet Title:

APOPKA CONSTRUCTION DETAILS

Sheet No.:

C9.12

Seal:



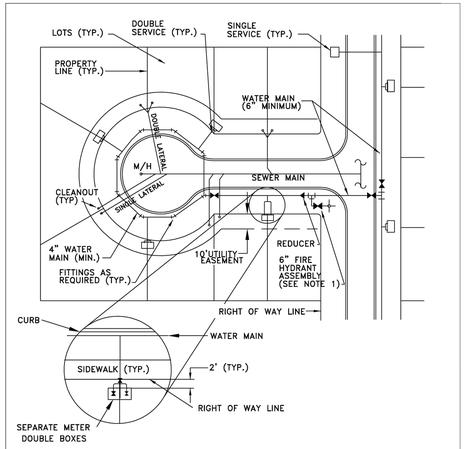
MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

DN: C=Marc Daniel Stehli, dnQualifier=A01410C000001B9AFED33DC0027AE A4,O=Florida, C=US
Date: 2026.04.17 09:57:22-04'00'

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Date: Mar 13, 2026, 8:42am User ID: cgillis
File: P:\136\22\01\Design\Civil_Final Engineering Construction Plans\CDTL\13622-01.dwg

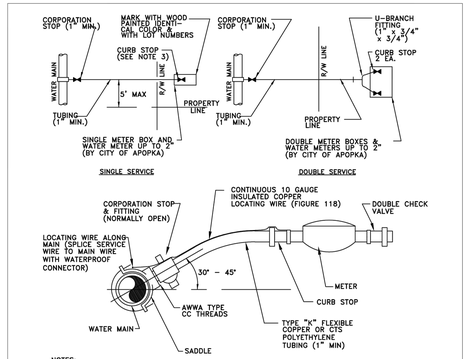


NOTES:

1. ANCHORING TYPE 90° BEND SHALL ONLY BE USED WHERE RIGHT-OF-WAY CONSTRUCTION WILL NOT ALLOW INSTALLATION OF A STRAIGHT ASSEMBLY.
2. POTABLE WATER AND RECLAIMED WATER MAINS SHALL BE LOOPED THROUGHOUT CUL-DE SAC.

TYPICAL SERVICE LOCATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 404

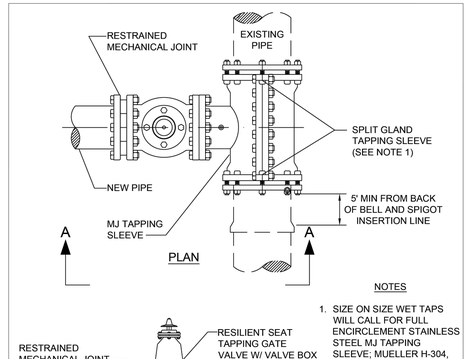


NOTES:

1. ALL FITTINGS SHALL BE BRASS WITH COMPRESSION/PACK JOINT TYPE CONNECTIONS.
2. NO SERVICE LINE SHALL TERMINATE UNDER A DRIVEWAY.
3. EACH SERVICE SHALL TERMINATE AT A CURB STOP(S) WHICH SHALL BE BURIED APPROXIMATELY 3" BELOW FINAL GRADE AND SHALL BE CLEARLY MARKED WITH A 2" x 2" x 18" STAKE WITH THE TOP PAINTED BLUE FOR POTABLE WATER AND PURPLE FOR RECLAIMED WATER, AND MARKED WITH THE NUMBER OF THE LOT(S) TO BE SERVED.
4. RECLAIMED WATER SERVICES SHALL USE PURPLE COLORED CTS POLYETHYLENE TUBING.
5. POTABLE WATER SERVICES SHALL USE BLUE COLORED CTS POLYETHYLENE TUBING.
6. ALL SERVICE UNDER EXISTING OR PROPOSED PAVEMENT SHALL BE INSTALLED IN A MINIMUM 2" PVC SLEEVE.

WATER SERVICE CONNECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 405



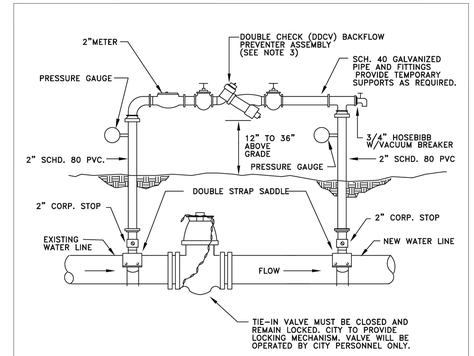
NOTES

1. SIZE ON SIZE WET TAPS WILL CALL FOR FULL ENCIRCLEMENT STAINLESS STEEL MJ TAPPING SLEEVE: MUELLER H-304, OR EQUAL.
2. ALL NEWLY INSTALLED TAPPING SLEEVES & TAPPING VALVES SHALL BE PNEUMATICALLY TESTED AT A TEST PRESSURE OF 150PSI FOR A PERIOD OF THIRTY MINUTES.

SECTION A - A

WATER AND RECLAIMED WATER MAINS
WET TAP TIE-IN DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 406

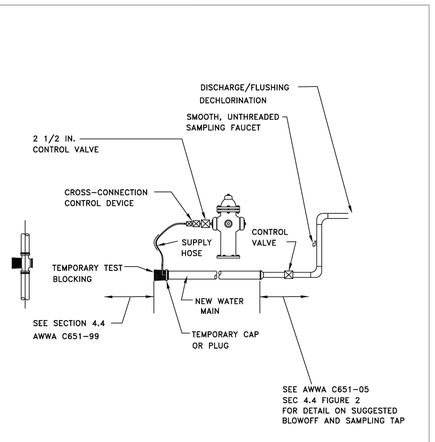


NOTE:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL MATERIALS, ASSEMBLY, AND THE INSTALLATION OF THE DEVICE.
2. SEE FIGURE 504C FOR PROCEDURES.
3. DDCV IS MINIMUM PROTECTION REQUIRED. A RPZ DEVICE MAY BE REQUIRED DEPENDING ON PROJECT. PROVIDE COPY OF LATEST CERTIFICATION TEST RESULTS.

TEMPORARY JUMPER CONNECTION

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 A



NOTE:

1. SEE FIGURE 504C FOR PROCEDURES.

TEMPORARY JUMPER CONNECTION FROM FIRE HYDRANT

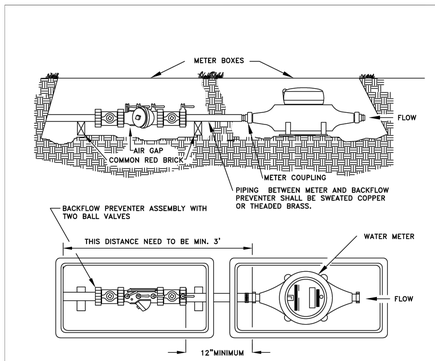
CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 B

TEMPORARY JUMPER CONNECTION NOTES:

1. A temporary jumper connection is required at all connections between existing active water mains and proposed new water main improvements.
2. Figures 504 A and 504 B to be used for filling any new water main of any size from existing active water mains and for flushing of new mains up to 8 inches in diameter (2.5 FPS minimum velocity) and for pulling bacteriological samples from any new water main of any size. The jumper connection shall be maintained until after filling, flushing testing and disinfection of the new main has been successfully completed and cleared for use from the Florida Department of Environmental Protection (FDEP) and other pertinent agencies have been received. The jumper connection shall also be used to maintain a minimum pressure of 20 psi in the new mains after disinfection and until the FDEP clearance letter is obtained. Thrust blocking and/or restraints shall be provided temporarily, as required. Pipe and fittings used for connecting the new pipe to the existing pipe shall be disinfected prior to installation in accordance with AWWA C651, 2005 edition. The tapping sleeve and the exterior of the main to be tapped shall be disinfected by spraying or swabbing per section II of AWWA C651-05.
3. Flushing of 10 inches in diameter and larger water mains may be done through the tie-in valve under very controlled conditions. The following procedures shall be followed:
   A. The tie-in valves shall be operated and pressure tested in the presence of the City engineer to verify water tightness prior to tie-in. Valves which are not water tight shall be replaced with a new valve installed immediately adjacent to the leaking valve.
   B. The temporary jumper connection shall be constructed as detailed. The jumper connection shall be used to fill the new water main and for providing water for bacteriological sampling of the new main as required by the FDEP permit.
   * Flushing shall not be attempted during peak demand hours of the existing water mains.
   * All downstream valves in the system must be open prior to opening the tie-in valve.
   * Provide for and monitor the pressure in the tie-in point. The pressure in the existing main must not drop below 35 psi.
   * The tie-in valve shall be opened a few turns only, ensuring a pressure drop across the valve is greater than 10 psi.
   C. The tie-in valve shall be locked closed by the City personel until flushing begins.
   D. The tie-in valve shall be opened only for flushing of the new main. The procedure shall be directed by the City and observed by the engineer.
   E. After flushing, the tie-in valve shall be closed and locked in the closed position by the City personel.
4. The contractor shall provide documentation demonstrating that the double check backflow prevention device has been tested and is in good working order at the time of installation.
5. Except as required to flush lines of greater than 8 inches in diameter, the tie-in valve shall remain closed and shall be locked in the closed position by the City. The tie-in valve shall remain locked closed until the new system has been cleared for use by FDEP and all other pertinent agencies.
6. Upon receipt of clearance for use from FDEP and all other pertinent agencies, the contractor shall remove the temporary jumper connection. The corporation stops are to be closed and plugged with 2 inch brass plugs.
7. All installation and maintenance of the temporary jumper connection and associated backflow prevention device, fittings, valve, etc. shall be the responsibility of the contractor.

PROCEDURES FOR TEMPORARY JUMPER CONNECTION

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 504 C

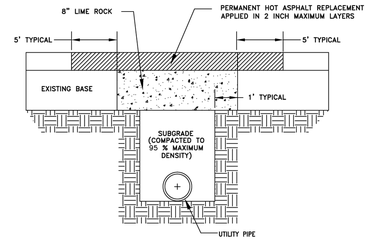


1. A 3' PIECE OF STRAIGHT PIPE MUST BE CONNECTED TO METER USING THE DESIGNATED HOLES IN THE METER BOX BEFORE ANY ANGLES ARE CONNECTED. THE SAME RULES APPLY FOR DOUBLE METER HOOK-UPS.
2. BACKFLOW DEVICE AND METER ARE TO BE SET BY THE CITY FOR METERS 2-INCH OR LESS IN SIZE.

POTABLE WATER SERVICE DETAIL FOR LOTS SERVED WITH RECLAIMED WATER

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 505

NOTE:
SUB-GRADE TO BE COMPACTED TO 95% MAX. DENSITY AS DETERMINED BY AASTHO T-180 CUT TO BE REPLACED WITH 8" LIME ROCK AND COMPACTED TO 98% MAX. DENSITY TO TOP OF EXISTING BASE. CUT AREA TO BE PLATED OR PROTECTED ON THE DAY OF POUR. EXISTING SURFACE TO BE SAW CUT TO AN AREA OF FIVE FEET (5') BEYOND BASE CUT.



GENERAL NOTES:

1. BASE REPLACEMENT SHALL BE 8" LIME ROCK COMPACTED TO 98% MAX. DENSITY.
2. ASPHALTIC CONCRETE SURFACE MATERIAL SHALL BE REPLACED WITH THE SAME TYPE OF MATERIAL AT THE TIME OF REMOVAL.
3. MINIMUM ASPHALTIC CONCRETE SURFACE OVERLAY THICKNESS SHALL BE ONE (1) INCH.
4. ALL JOINT CUTS SHALL BE MECHANICALLY SAW CUT.

PAVEMENT RESTORATION:

1. LONGITUDINAL CUTS MAY REQUIRE OVERLAY/RESURFACING OF THE COMPLETE WIDTH OF THE TRAVELED WAY.
2. CUTS AT INTERSECTIONS OF STREETS GENERALLY MAY REQUIRE A COMPLETE OVERLAY/RESURFACING TO THE END OF ALL RETURN RADII, AND ALSO TO A POINT TEN FEET (10') BEYOND THE CUT WHICHEVER IS GREATER.
3. ACTUAL REQUIREMENTS WILL BE AS STATED ON THE APPROVED PERMIT.

LIME ROCK

HOT PATCH

OPEN-CUT CROSS SECTION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2015	FIG. 702

Key Map:

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DRAWN BY:	AR
CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	N.T.S.

Project Name:

SHEELER PARK

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APOPKA CONSTRUCTION DETAILS

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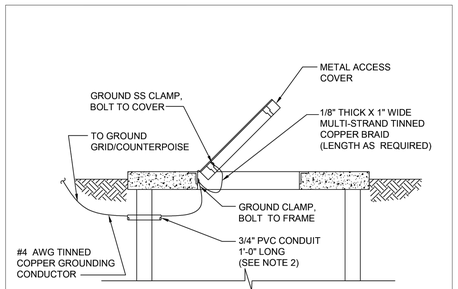
MARC DANIEL STEHLI
LICENSE
No. 65278
STATE OF FLORIDA
PROFESSIONAL ENGINEER
MARC DANIEL STEHLI
P.E. NO. 065278
DATE: April 15, 2026

dnQualifier=A01410C000010B6FE033DC0027AE
A4,O=Florida, C=US
Date: 2026.04.17 09:57:25-04'00'

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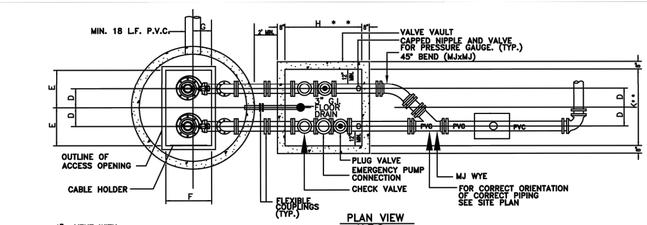
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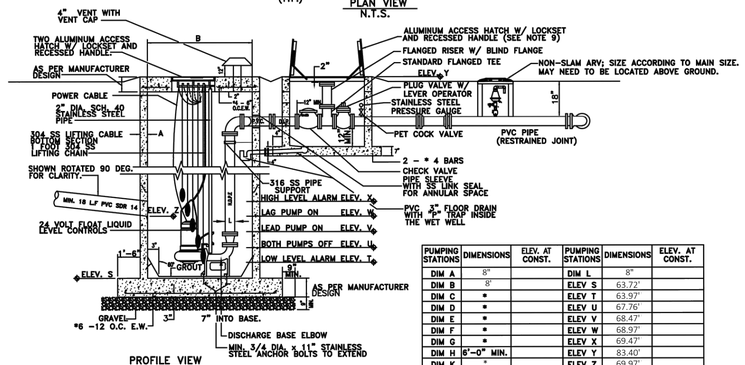


NOTES:
1. ON COVERS WITH MULTIPLE DOORS, PROVIDE BRAID FROM FRAME TO DOOR ON EACH DOOR. PROVIDE WATERPROOF CAULKING WHERE GROUND CABLE AND CONDUIT PENETRATES WETWELL TO PREVENT INTRUSION OF GROUNDWATER AND ESCAPE OF VAPORS FROM WETWELL.
2. INSTALL GROUND WIRE SO THAT IT WILL NOT CROSS CLEAR OPENING OR PREVENT OR IMPEDE NORMAL METHOD OF REMOVING FLOATS OR PUMPS.

COVER AND DOOR GROUNDING

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 C





PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.	PUMPING STATIONS	DIMENSIONS	ELEV. AT CONST.
DIM A	8"		DIM L	8"	
DIM B	8"		ELEV S	63.72'	
DIM C	*		ELEV T	63.97'	
DIM D	*		ELEV U	67.76'	
DIM E	*		ELEV V	68.47'	
DIM F	*		ELEV W	68.97'	
DIM G	*		ELEV X	69.47'	
DIM H	6'-0" MIN.		ELEV Y	83.40'	
DIM K	*		ELEV Z	69.97'	

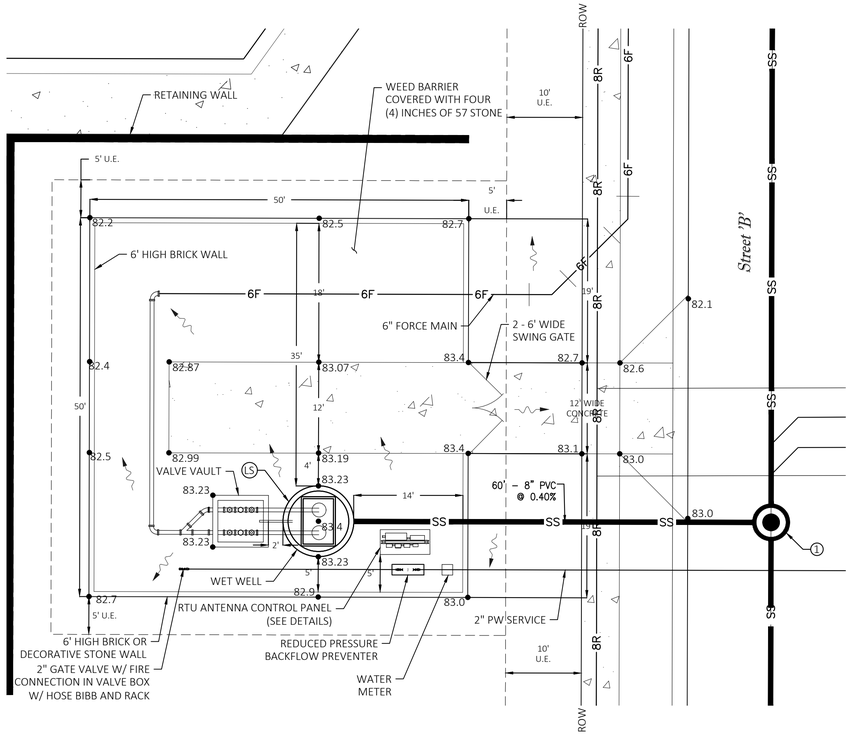
* PER PUMP MANUFACTURERS REQUIREMENT

GENERAL NOTES:
1. VALVE VAULT AND WET WELL LIDS SHALL BE COATED WITH 1 COAT OF TNEMEC SERIES 66, COLOR EN03, (2–3 MILS), FOLLOWED BY TOP COAT OF TNEMEC SERIES 73, COLOR EN05, (2–3 MILS) OR EQUAL.
2.A THE WET WELL SHALL BE CONSTRUCTED OF FIBERGLASS REINFORCED POLYESTER (RFP) AND MANUFACTURED FROM COMMERCIAL GRADE POLYESTER RESIN OR VINYL ESTER RESIN, WITH FIBERGLASS REINFORCEMENTS. THE WET WELL SHALL BE A ONE PIECE UNIT AND MANUFACTURED BY L.F. MANUFACTURE, INC. OR EQUAL.
2.B IN LIEU OF RFP THE WET WELL MAY BE CONSTRUCTED OF PRECAST CONCRETE HAVING A MINIMUM WALL THICKNESS OF 8 INCHES. THE INTERIOR WALLS SHALL BE LINED USING A HIGH DENSITY POLYETHYLENE PRODUCT AS MANUFACTURED BY AGRU SURE GRIP, OR EQUAL.
3. PIPING IN THE WET WELL TO BE HOPE WITH FUSED 45 DEGREES FITTINGS FROM WET WELL TO VALVE VAULT.
4. INTERIOR OF THE VALVE VAULT AND PIPING IN THE VALVE VAULT WITH ConSeal CS-55 (OR EQUAL), TWO COATS, 4 MILS EACH. PIPING SHALL BE COATED AFTER INSTALLATION.
5. VALVE VAULT SHALL BE SIZED TO PERMIT EASY REMOVAL OF CHECK VALVE SPINDLES WITH MINIMUM CLEARANCES AS SHOWN FOR 6" DIAMETER PIPE AND SMALLER. CLEARANCES SHALL INCREASE AS REQUIRED FOR LARGER PIPE SIZES.
6. VALVE VAULT SHALL HAVE SEALED FLOOR AND DRAIN.
7. ALL LOCATIONS WHERE PIPES ENTER OR LEAVE THE WET WELL OR VALVE VAULT SHALL BE MADE WATERTIGHT WITH WALL SLEEVE AND STAINLESS STEEL LINK SEAL.
8. THERE SHALL BE NO VALVES OR ELECTRICAL JUNCTION BOXES IN WET WELL.
9. WET WELL AND VALVE VAULT COVERS SHALL BE ALUMINUM WITH 316 S.S. HARDWARE LOCK BRACKET. SIZE AS REQUIRED BY PUMP MANUFACTURER AND APPROVED BY THE CITY.
10. FLEXIBLE COUPLING SHALL BE SLEEVE TYPE, EPOXY COATED.
11. PUMPS SHALL BE:
MANUFACTURER: FLYGT ; MODEL: NP 3127 SH3 ; DIA: 155 MM ; SPEED: 3495 RPM ; DISCHARGE SIZE: 3 IN.;
VOLTAGE: 460 ; HZ.: 60 ; PHASE: 3 ; H.P.: 11 ; MIN. SOLID SIZE: 3 IN.
12. OPERATING CONDITIONS SHALL BE (120.00 GPM AT 117.90) FEET TDH.
13. ALL HARDWARE IN WET WELL AND VALVE BOX TO BE 316 STAINLESS STEEL.
14. "P" TRAP TO BE INSTALLED IN WET WELL.
15. ALL PUBLIC LIFT STATIONS SHALL BE EQUIPPED WITH SCADA SYSTEM.THE DEVELOPER SHALL PAY THE CITY COST OF THE UNIT.THE CITY WILL BE RESPONSIBLE FOR INSTALLATION.
16. ALL LIFT STATIONS SHALL BE FENCED WITH DECORATIVE STONE OR BRICK OR AS DIRECTED BY THE CITY.
17. ALL LIFT STATIONS SHALL HAVE A 10 FEET WIDE CONCRETE ACCESS DRIVEWAY, 35' LONG FROM EDGE OF WET WELL TO BACK OF CURB.
18. ENGINEER SHALL PROVIDE A SCALED (1" = 20' MIN.) SITE SPECIFIC DETAIL.

PUMP STATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	MAY 2022	FIG. 301

NOTE: WILL BE COMPLETED UPON APPROVAL OF MASTER UTILITY PLAN



NOTES:
1. DRIVEWAY AND APRON SHALL BE SIX (6) INCH THICK, 3000 P.S.I. CONCRETE. WITH NO. 6X6 WIRE MESH OR FIBER MESH.
2. POWER TO THE PUMP STATION SHALL BE THROUGH UNDERGROUND CONDUIT FROM SUPPLY SOURCE IN RIGHT-OF-WAY.
3. GRATE TO BE DECORATIVE BLACK POWDER COATED ALUMINUM W/ PICKET SPACING = OR < 4".
4. MEASUREMENT SHALL BE EQUAL TO OR GREATER THAN THE DEPTH OF THE WET WELL.
5. WET WELL LID MUST BE OPEN TOWARD CONTROL PANEL (HINGE SIDE TOWARD PANEL).
6. LIFT STATION WALL TO BE PLACED AT LEAST 15FT. BEHIND R/W LINE.
7. TOP WET WELL/VALVE VAULT ELEV= 77.00'. FINISHED GRADE IMMEDIATELY ADJACENT TO WET WELL/VALVE VAULT SHALL BE 2" LOWER.

Key Map:



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CHECKED BY:	JB
APPROVED BY:	MDS
SCALE IN FEET:	1" = 50'

Project Name:

SHEELER PARK

Submittal To:

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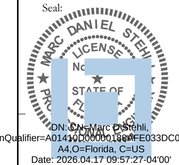
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LIFT STATION SITE PLAN AND DETAILS

Sheet No.:

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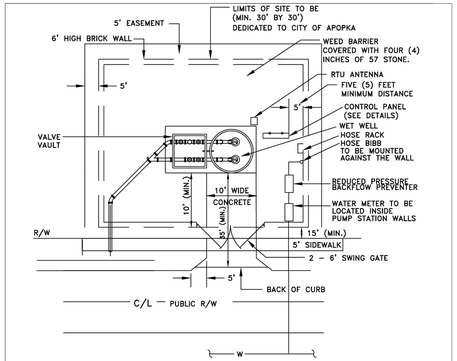
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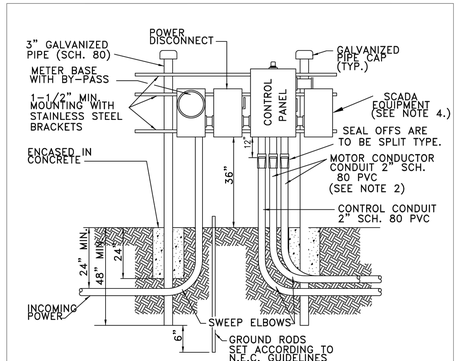


NOTES:

1. DRIVEWAY AND APRON SHALL BE SIX (6) INCH THICK, 3000 P.S.I. CONCRETE. WITH No.6X6 WIRE MESH OR FIBER MESH.
2. POWER TO THE PUMP STATION SHALL BE THROUGH UNDERGROUND CONDUIT FROM SUPPLY SOURCE IN RIGHT-OF-WAY.
3. GATE TO BE DECORATIVE BLACK POWDER COATED ALUMINUM W/PICKET SPACING = OR < 4".
4. WALLS ARE TO BE BRICK OR DECORATIVE STONE.
5. WET WELL LID MUST OPEN TOWARD CONTROL PANEL (HINGE SIDE TOWARD PANEL).
6. LIFT STATION WALL TO BE PLACED AT LEAST 15FT. BEHIND THE R/W LINE.

PUMP STATION TYPICAL SITE PLAN

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 300

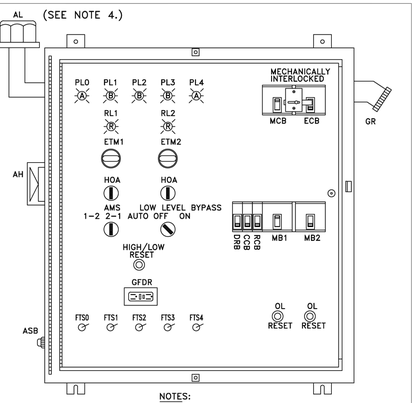


NOTES:

1. DRAWING IS SHOWN FOR 230 VOLT POWER SUPPLY. THE LOCATION OF METER AND MAIN POWER DISCONNECT SHALL BE REVERSED FOR 480 VOLT SUPPLY.
2. WHEN TWO (2) SEPARATE CONDUCTOR-TYPE MOTORS ARE USED, CONDUIT SHALL BE INCREASED TO THREE (3) INCH.
3. POWER SUPPLY SHALL BE UNDERGROUND TO THE PUMP STATION AND SHALL BE THREE (3) PHASE FROM A THREE (3) PHASE SOURCE ONLY.
4. STUB OUT UNISTRUT LONG ENOUGH TO ACCOMODATE A 24"x24" SCADA EQUIPMENT CABINET. CITY TO INSTALL SCADA EQUIPMENT CABINET.

DUPLEX PUMP STATION CONTROL PANEL INSTALLATION DETAIL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 302

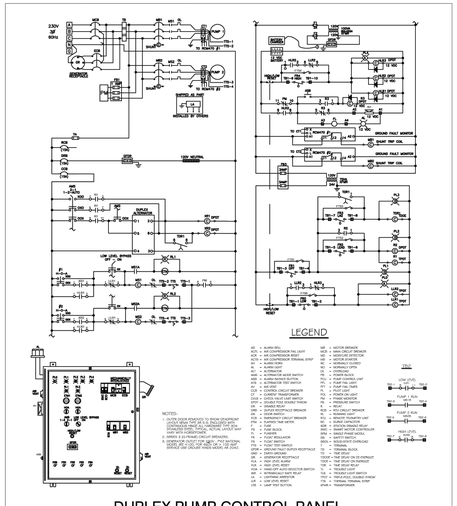


NOTES:

1. OUTER DOOR REMOVED TO SHOW DEADFRONT LAYOUT NEMA TYPE 3R 304 S.S. ENCL. WITH CONTINUOUS HINGE ALL HARDWARE STAINLESS STEEL TYPICAL, ACTUAL LAYOUT MAY VARY WITH HORSEPOWER
2. SERIES 3 (Q-FRAME) CIRCUIT BREAKERS
3. GENERATOR OUTLET FOR 230V - PYLE NATIONAL MODEL JRE4100/460V - CROUSE HINDS MODEL AR 2042.
4. THE HEIGHT OF THE ALARM LIGHT WILL NEED TO BE MADE VISIBLE FROM OUTSIDE THE LIFT STATION.

DUPLEX PUMP STATION CONTROL PANEL FRONT LAYOUT

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 303



DUPLEX PUMP CONTROL PANEL GENERAL LAYOUT & SCHEMATIC

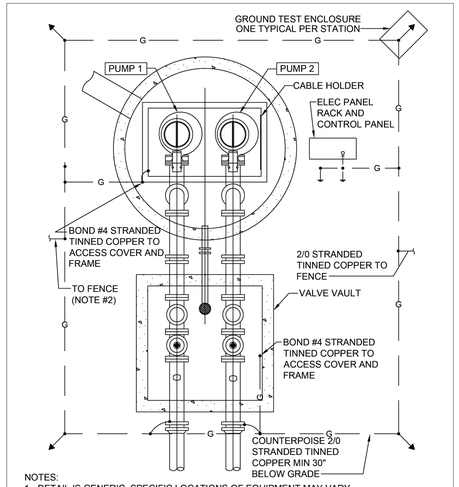
(230V-3PH)
WITH GENERATOR RECEPTACLE

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 305 A

AB	- ALARM BELL
ACFL	- AIR COMPRESSOR FAIL LIGHT
ACR	- AIR COMPRESSOR RESET
ACTS	- AIR COMPRESSOR TERMINAL STRIP
AH	- ALARM HORN
AL	- ALARM LIGHT
ALT	- ALTERNATOR
AMS	- ALTERNATOR MODE SWITCH
ASB	- ALARM SILENCE BUTTON
ATS	- ALTERNATOR TEST SWITCH
AV	- AIR VENT
CCB	- CONTROL CIRCUIT BREAKER
CT	- CURRENT TRANSFORMER
CVLS	- CHECK VALVE LIMIT SWITCH
DPDT	- DOUBLE-POLE, DOUBLE-THROW
DR	- DISABLE RELAY
DRB	- DUPLEX RECEPTACLE BREAKER
DS	- DOOR SWITCH
ECB	- EMERGENCY CIRCUIT BREAKER
ETM	- ELAPSED TIME METER
F	- FUSE
FB	- FUSE BLOCK
FL	- FLASHER
FR	- FLOAT REGULATOR
FS	- FLOW SWITCH
FTS	- FLOAT TEST SWITCH
GFDR	- GROUND FAULT DUPLEX RECEPTACLE
GND	- EARTH GROUND
GR	- GENERATOR RECEPTACLE
HLA	- HIGH LEVEL ALARM
HLR	- HIGH LEVEL RESET
HOA	- HAND-OFF-AUTO SELECTOR SWITCH
ISR	- INTRINSICALLY SAFE RELAY
LA	- LIGHTNING ARRESTOR
LLR	- LOW LEVEL RESET
LTB	- LAMP TEST BUTTON
MB	- MOTOR BREAKER
MCB	- MAIN CIRCUIT BREAKER
MD	- MOISTURE DETECTOR
MS	- MOTOR STARTER
NC	- NORMALLY CLOSED
NO	- NORMALLY OPEN
OL	- OVERLOAD
PB	- POWER BLOCK
PCU	- PUMP CONTROL UNIT
PFL	- PUMP FAIL LIGHT
PFT	- PUMP FAIL TIMER
PL	- PILOT LIGHT
POL	- POWER ON LIGHT
PM	- PHASE MONITOR
PS	- PRESSURE SWITCH
R	- RELAY
RCB	- RTU CIRCUIT BREAKER
RL	- RUNNING LIGHT
RTU	- REMOTE TELEMETRY UNIT
SC	- SURGE CAPACITOR
SDR	- STATION DISABLE RELAY
SMC	- SMART MOTOR CONTROLLER
SPM	- SINGLE PHASE MODULE
SS	- SAFETY SWITCH
SSOL	- SOLID-STATE OVERLOAD
T	- TERMINAL
TB	- TERMINAL BLOCK
TD	- TIME DELAY
TDODE	- TIME DELAY ON DE-ENERGIZE
TDOE	- TIME DELAY ON ENERGIZE
TDR	- TIME DELAY RELAY
TL	- TROUBLE LIGHT
TLS	- TROUBLE LIGHT SWITCH
TPDT	- TRIPLE-POLE, DOUBLE-THROW
TTS	- THERMAL TERMINAL STRIP
XFMR	- TRANSFORMER

COMPONENT LEGEND

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 306

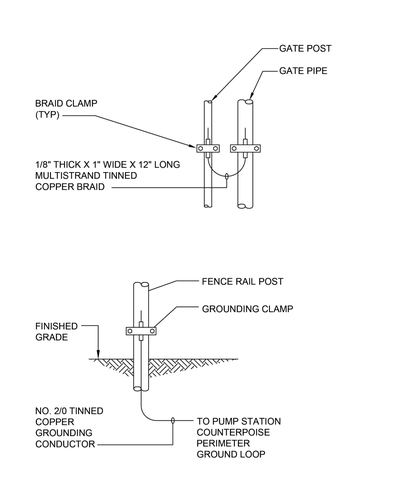


NOTES:

1. DETAIL IS GENERIC. SPECIFIC LOCATIONS OF EQUIPMENT MAY VARY.
2. TIE TO FENCE, MINIMUM 2 LOCATIONS. NOT REQUIRED WHERE PVC COATED OR BLOCK FENCE IS INSTALLED.
3. PROVIDE EXOTHERMIC WELDS UNLESS NOTED OTHERWISE.

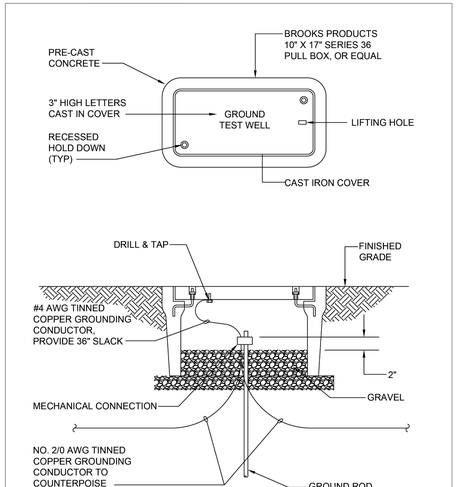
PUMP STATION GROUNDING (TYPICAL)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307



FENCE POST GROUNDING (TYPICAL)

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 A



GROUND TEST WELL

CITY OF APOPKA DESIGN ENGINEERING DIVISION	JANUARY 2014	FIG. 307 B

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MARC DANIEL STEHLI
P.E. NO. 0052781
DATE: April 15, 2026

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