

August 9, 2024

PROJECT NAME: HUDSON DEVELOPMENT

PROJECT NUMBER: 1999001492

APPLICATION: MAJOR SITE PLAN #30968

- 1 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: 6.13.10.B - Copy of NPDES Permit or NOI
STATUS OF REVIEW: INFO
REMARKS: Please provide a copy of the NPDES permit or NOI prior to construction.
- 2 DEPARTMENT: ENGDRN - STORMWATER REVIEW
REVIEW ITEM: Copy of District Permit (County Interest)
STATUS OF REVIEW: INFO
REMARKS: Please provide a copy of the District permit prior to construction.
- 3 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: 2.12.4.K - List of approved waivers, their conditions, and the date of approval
STATUS OF REVIEW: INFO
REMARKS: 3/4/24-add waivers if requested in future - sk
- 4 DEPARTMENT: ENGIN - DEVELOPMENT REVIEW
REVIEW ITEM: Additional Development Review Comments
STATUS OF REVIEW: INFO
REMARKS: After approval, plans will be electronically stamped by the County. The applicant will receive an email indicating that approved plans are available for download and are located in the ePlans project Approved folder. For Development Review submittals, with the exception of Final Plats and Minor Site Plans, applicants are required to print, obtain required signatures, and sign and seal two 24"x 36" sets of the electronically stamped approved plan and deliver them to the Office of County Engineer, Development Review Section, located at 412 SE 25th Avenue Ocala, FL 34471. Upon receipt, a development order will be issued. Until such time as that development order is issued, the project does not have final approval and construction, if applicable, shall not commence. For plans requiring As-Builts, As-Builts and associated documentation shall be submitted on paper in accordance with current county requirements.
- 5 DEPARTMENT: DOH - ENVIRONMENTAL HEALTH
REVIEW ITEM: Additional Health comments
STATUS OF REVIEW: INFO
REMARKS: Central water/ Central sewer
- 6 DEPARTMENT: FRMSH - FIRE MARSHAL REVIEW
REVIEW ITEM: Additional Fire comments
STATUS OF REVIEW: INFO
REMARKS: Food vendor containers shall require kitchen suppression systems where there is commercial cooking that would produce grease-laden vapors.
- 7 DEPARTMENT: LSCAPE - LANDSCAPE DESIGN AND IRRIGATION
REVIEW ITEM: 6.9.5 - Irrigation system installation
STATUS OF REVIEW: INFO
REMARKS: Irrigation system to be installed by SOF Licensed professional

8 DEPARTMENT: ZONE - ZONING DEPARTMENT
REVIEW ITEM: 2.12.6 - Location of water and sewer. Does this need a special use permit?
STATUS OF REVIEW: INFO
REMARKS: Defer to MCU.



**Marion County
Board of County Commissioners**

AR 30968

Office of the County Engineer

412 SE 25th Ave.
Ocala, FL 34471
Phone: 352-671-8686
Fax: 352-671-8687

DEVELOPMENT REVIEW PLAN APPLICATION

Date: 12/19/2023
mm/dd/yyyy

A. PROJECT INFORMATION:

Project Name: Hudson Development
Parcel Number(s): 9022-0469-03 and 9022-0469-04
Section 31 Township 15 Range 23 Land Use Vacant Zoning Classification B4
Commercial Residential Industrial Institutional Mixed Use Other _____
Type of Plan: MAJOR SITE PLAN
Property Acreage 0.92 Number of Lots 2 Miles of Roads _____
Location of Property with Crossroads East side of SE 58th Ave 300' +/- north of Almond
Additional comments regarding this submittal Drive Run

B. CONTACT INFORMATION (fill in as applicable):

Engineer:

Firm Name: MCA Consulting Engineers, Inc Contact Name: Miles Anderson
Mailing Address: 2403 SE 17th St, Ste 502 City: Ocala State: FL Zip Code: 34471
Phone # 352-629-5591 Alternate Phone # _____
Email(s) for contact via ePlans: miles.anderson@mca-engineers.com

Surveyor:

Firm Name: _____ Contact Name: _____
Mailing Address: _____ City: _____ State: _____ Zip Code: _____
Phone # _____ Alternate Phone # _____
Email(s) for contact via ePlans: _____

Owner:

Owner: R&B Sound Investments LLC Contact Name: Kevin Hudson
Mailing Address: 3865 SE 58th Ave City: Ocala State: FL Zip Code: 34480
Phone # 352-207-0633 Alternate Phone # _____
Email address: khudson615@aol.com

Developer:

Developer: _____ Contact Name: _____
Mailing Address: _____ City: _____ State: _____ Zip Code: _____
Phone # _____ Alternate Phone # _____
Email address: _____

Revised 7/2017

GENERAL PURPOSE:
THE PROPOSED SITE AND DRAINAGE PLAN IN THIS SUBMITTAL INCLUDES A 0.92 ACRE SITE. THE SITE SHALL FUNCTION AS A COMMERCIAL ENTERTAINMENT FACILITY IN A B-4 ZONING

CONCURRENCY:
THIS PROJECT HAS NOT BEEN GRANTED CONCURRENCY APPROVAL AND/OR GRANTED AND/OR RESERVED ANY PUBLIC FACILITY CAPACITIES. FUTURE RIGHTS TO DEVELOP THE PROPERTY ARE SUBJECT TO A DEFERRED CONCURRENCY DETERMINATION, AND FINAL APPROVAL TO DEVELOP THE PROPERTY HAS NOT BEEN OBTAINED. THE COMPLETION OF CONCURRENCY REVIEW AND/OR APPROVAL HAS BEEN DEFERRED TO LATER DEVELOPMENT REVIEW STAGES, SUCH AS, BUT NOT LIMITED TO, BUILDING PERMIT REVIEW.

| | |
|---|--|
| SITE DATA: | |
| TOTAL SITE AREA (WITHIN BOUNDARY)=39954.96 SF (0.92 AC'S) | PARCEL NUMBER: 9022-0469-03, 9022-0469-04 |
| PROPOSED AREAS FOR TOTAL SITE: PROPOSED BUILDING = 4,000 SF | PROJECT ADDRESS: LOTS 3-4 ~STREET ADDRESS TO BE DETERMINED~ ZONING: B-4 FLU: COMMERCIAL |
| PROPOSED ON SITE IMPERVIOUS AREA TOTAL IMPERVIOUS AREA = 23,700 SF IMPERVIOUS PERCENT OF COVERAGE = 59% | OWNER: R&B SOUND INVESTMENTS LLC 3865 SE 58TH AVE OCALA, FL 34480-7457 |
| PERVIOUS AREA (OPEN AREA) = 16,254.96 SF PERVIOUS AREA PERCENT OF COVERAGE = 41% | |
| LANDSCAPED AREA PERCENT = 1,625 SF = 10% | |
| THIS PARCEL LIES WITHIN THE PRIMARY SPRINGS PROTECTION ZONE & URBAN GROWTH BOUNDARY OR EZOS OVERLAY ZONE | |

MAJOR SITE & DRAINAGE PLAN FOR HUDSON DEVELOPMENT

LOTS 3 & 4

MARION COUNTY, FL

PARCEL #: 9022-0469-03, 9022-0469-04

PROJECT AREA = 0.92 AC'S

| SITE LAND USE CHART | | | |
|----------------------------------|------------------|------------------|-----------------|
| IMPERVIOUS: | EXISTING (ACRES) | PROPOSED (ACRES) | PROPOSED (S.F.) |
| BUILDINGS | 0.00 | 0.09 | 4,000 |
| ASPHALT PAVING | 0.15 | 0.36 | 15,540 |
| CONCRETE PAVING | 0.00 | 0.05 | 2,027 |
| DRA BOTTOM | 0.00 | 0.05 | 2,133 |
| TOTAL IMPERVIOUS | 0.00 | 0.55 | 23,700 |
| PERVIOUS: | | | |
| RETENTION/ DETENTION (TOP - BTM) | 0.00 | 0.11 | 4,934 |
| OPEN AREA | 0.77 | 0.259 | 11,320.96 |
| TOTAL PERVIOUS | 0.77 | 0.369 | 16,254.96 |
| TOTAL SITE AREA | 0.92 | 0.92 | 39,954.96 |

| ZONING INFORMATION | | | | |
|--------------------|-----|------------|--------------|--|
| ZONING | FLU | ACTUAL USE | PARCEL # | |
| B-4 | COM | COMMERCIAL | 9022-0469-04 | |
| B-4 | COM | COMMERCIAL | 9022-0469-03 | |
| B-4 | COM | COMMERCIAL | 9022-0469-05 | |
| B-4 | COM | COMMERCIAL | 9022-0469-02 | |
| B-4 | COM | COMMERCIAL | 9022-0469-18 | |
| B-4 | COM | COMMERCIAL | 9022-0469-19 | |
| B-4 | COM | COMMERCIAL | 9022-0469-20 | |
| B-4 | COM | COMMERCIAL | 9022-0469-21 | |

| PARKING REQUIREMENTS | |
|---|--|
| PARKING SPACE CALCULATIONS ARE BASED MARION COUNTY LDC | |
| RESTAURANT (960 SQFT) SEATS 28 (EA. POD) - 1 SPACE/PER 4 SEATS = (28X2)/4 = 14 = 14 PARKING SPACES REQUIRED | |
| RETAIL SPACE (960 SQFT) 1 SPACE PER 100 SQFT = 960 X 2 = 1,920 SQFT/100 SQFT = 19.2 = 20 PARKING SPACES | |
| TOTAL PARKING SPACES REQUIRED = 34 | |
| TOTAL PARKING SPACES PROVIDED = 39 | |
| HANDICAP PARKING REQUIRED SPACES = (FOR 1-100 SPACES) 1 SPACE PER 25 SPACES = 2 SPACES | |
| PROVIDED SPACES = 2 SPACES | |

| ITE - TRIP GENERATION CALCULATIONS | |
|--|--|
| FIGURE 7 ITE 11TH EDITION | |
| WEEKDAY/PEAK HOUR - HIGH TURNOVER (SIT DOWN) RESTAURANT (960) | |
| ONE HOUR BETWEEN 7 & 9 AM = 1,920 S.F. @ 9.57/1,000 = 18.37 = 19 | |
| ONE HOUR BETWEEN 4 & 6 PM = 1,920 S.F. @ 9.05/1,000 = 17.38 = 18 | |
| WEEKDAY = 2016 S.F. @ 1072/1,000 = 232 | |
| PEAK HOUR VARIETY STORE (612) | |
| ONE HOUR BETWEEN 7 & 9 AM = 1,920 S.F. @ 3.04/1,000 = 5.8 = 6 | |
| ONE HOUR BETWEEN 4 & 6 PM = 1,920 S.F. @ 6.70/1,000 = 12.9 = 13 | |
| WEEKDAY - VARIETY STORE = 1,920 S.F. @ 63.68/1,000 = 122.3 = 123 | |
| TOTAL WEEKDAY TRIPS = 232 + 123 = 355 | |

CONSTRUCTION DISTURB AREA STATEMENT:

ALL AREAS DISTURBED BY THE CONSTRUCTION OF THIS PROJECT WHICH ARE NOT OTHERWISE PAVED SHALL BE IMMEDIATELY SODDED FOLLOWING FINAL GRADING. ALLOW FOR THICKNESS OF SOD WITH A 2-INCH UNDERCUT. SOD SHALL BE ARGENTINE BAHIA, AND SHALL BE REGULARLY WATERED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION DURATION.

PRE-CONSTRUCTION MEETING NOTE:

NO SITE WORK SHALL BE CONDUCTED PRIOR TO OBTAINING A SITE PERMIT FROM THE MARION COUNTY PUBLIC WORKS @ 352-671-8686 TO SCHEDULE THE PRE-CONSTRUCTION MEETING WHICH MUST BE HELD BEFORE INSTALLING ANY REQUIRED EROSION CONTROLS OR OBTAINING ANY SITE PERMIT.

| WAIVERS: | | |
|--------------|---------------|-----------|
| CODE SECTION | APPROVAL DATE | CONDITION |
| | | |
| | | |

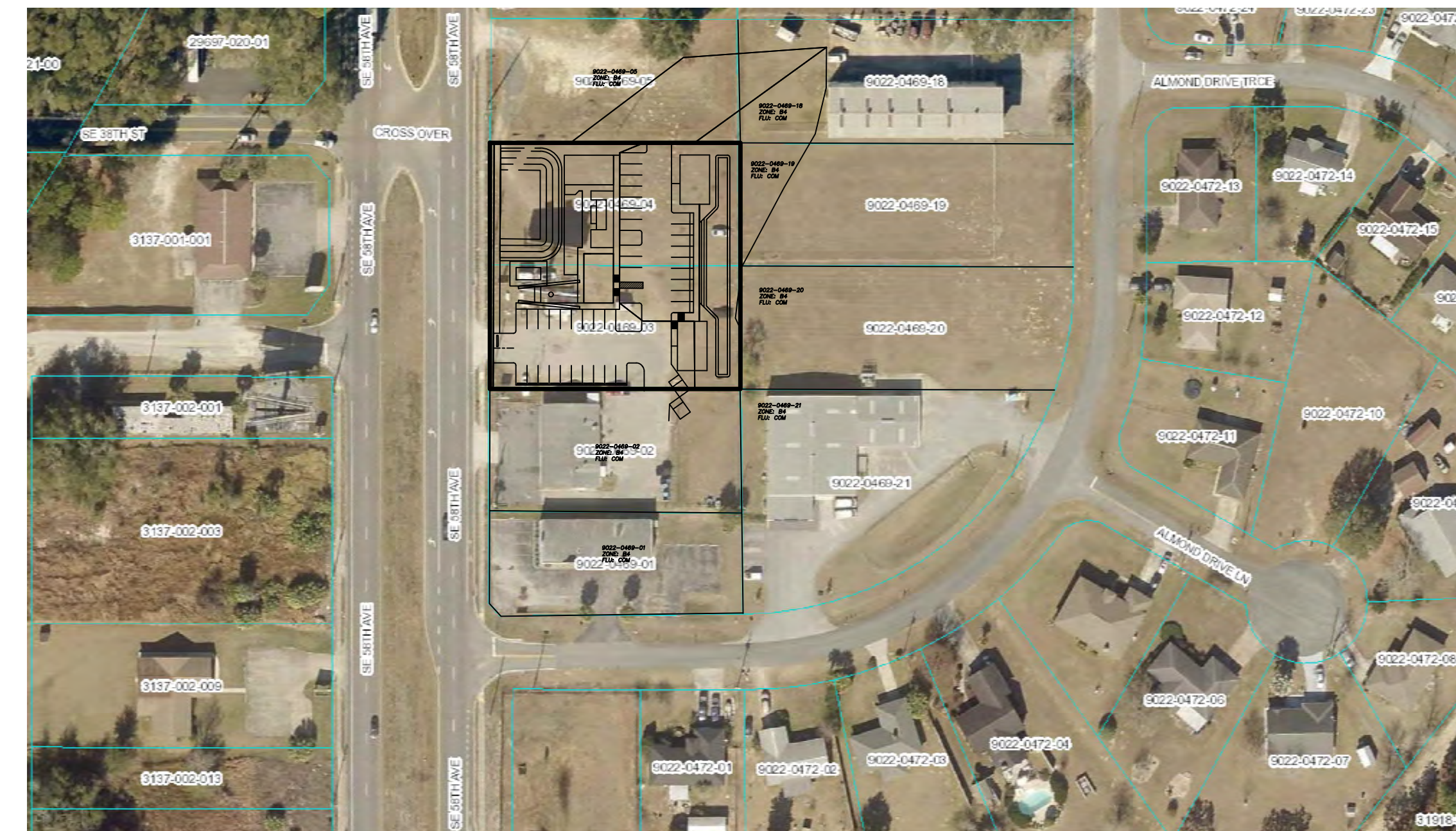
SITE MANAGEMENT STATEMENT:

ALL MATERIAL, MACHINERY AND VEHICLES SHALL BE STORED ON SITE IN AN ORDERLY FASHION.

OPERATION AND MAINTENANCE STATEMENT

I HEREBY CERTIFY THAT I, MY SUCCESSORS, AND ASSIGNS SHALL PERPETUALLY OPERATE AND MAINTAIN THE STORMWATER MANAGEMENT AND ASSOCIATED ELEMENTS IN ACCORDANCE WITH THE SPECIFICATIONS SHOW HEREIN AND ON THE APPROVED PLAN.

KEVIN HUDSON
R&B SOUND INVESTMENTS LLC
3865 SE 58TH AVE
OCALA, FL 34480-7457
Tele: 352-207-0633



LOCATION MAP
SECTION 31, TWP-15, RNG-23
OCALA, FL

FDOT DRIVEWAY STATEMENT:
IN THE EVENT THAT THE DRIVEWAY BECOMES OVERLY DAMAGED DURING CONSTRUCTION OF THE SITE WORK IT MAY BE NECESSARY TO HAVE THE DRIVEWAY REPLACED. THE DRIVEWAY PAVEMENT SHALL BE 6" THICK AND CONSTRUCTED WITH 3,000 PSI CONCRETE. PER INDEX 522-003.

FDOT SIDEWALK STATEMENT:
CONTRACTOR SHALL ASSURE THAT THE SIDEWALK STAYS CLEAN AND FREE OF DEBRIS.

FDOT- UTILITIES IN THE RAW SHOULDER:
CONTRACTOR SHALL PERFORM SHOULDER WORKS AS PER INDEX 102-602. IF IT BECOMES NECESSARY TO CLOSE OR REMOVE/REPAIR THE SIDEWALK USE INDEX 522-003, AND REPLACE THE SIDEWALK TO THE NEAREST CONSTRUCTION JOINT. USE INDEX 102-660 FOR PEDESTRIANS.

FDOT - DISTURBED SOD STATEMENT:
CONTRACTOR SHALL RE-SOD/SEED DISTURBED AREAS TO SPECIFICATION 570 AND 891.

OUT DOOR LIGHTING / EXTERIOR LIGHTING:

THE PROPOSED BUILDING CONSTRUCTION HAS AN OUTDOOR LIGHTING (EXTERIOR LIGHTING) ON THE FACE OF THE BUILDING NEXT TO EACH OF THE ENTRY DOORS. THE LIGHTS SHALL HAVE A 60 WATT BULB AND SHALL BE SHIELDED. THE PHOTOMETRIC LIGHT SPREAD SHALL NOT OVER SHADOW ONTO THE ADJACENT PROPERTIES, AND COMPLY WITH MARION COUNTY SECTIONS 6.19.3 AND 6.19.4 OF THE LDC.

MOI/TRAFFIC CONTROL STATEMENT
THE CONTRACTOR SHALL PROVIDE A MAINTENANCE OF TRAFFIC PLAN AND INCLUDE LANE CLOSURE RESTRICTION FROM 7:00 AM TO 9:00 PM. FDOT INDEX #613 SHEETS 1 AND 2. MAINTENANCE OF TRAFFIC TO BE SUPERVISED BY A CERTIFIED PERSON.

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT A MINIMUM OF TWO (2) BUSINESS DAYS PRIOR TO ANY LANE CLOSURES OR BEGINNING ANY CONSTRUCTION WITHIN THE FDOT RIGHT-OF-WAY.

STAKING NOTE:
ELECTRONIC PLANS SHALL BE PROVIDED TO FLORIDA LICENSED SURVEYOR FOR STAKING. STAKING FOR CONSTRUCTION SHALL TAKE PLACE AFTER PRE-CONSTRUCTION MEETING.

ADDRESS:
THE ADDRESS WILL BE VERIFIED AT THE PERMITTING STAGE AND INDIVIDUAL BUILDINGS WILL BE ISSUED UNIT NUMBERS AT THAT TIME OF PERMITTING.

ENGINEER:
MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
1515 E. SILVER SPRINGS BLVD., SUITE 132
OCALA, FLORIDA, 34470
TELE: 352 629-5591
CONTACT: MILES C. ANDERSON, P.E.

INDEX OF SHEETS:

- C001 COVER SHEET
- C002 SURVEY PLAN
- C003 SITE PLAN
- C004 DRAINAGE AND GRADING PLAN
- C005 UTILITY PLAN
- C006 UTILITY DETAILS
- C007 SWPPP
- C008 LANDSCAPE PLAN

ENGINEER'S CERTIFICATION:

I HEREBY CERTIFY THAT THE DRAINAGE FACILITIES ARE DESIGNED IN ACCORDANCE WITH APPLICABLE REQUIREMENTS OF THE MARION COUNTY LAND DEVELOPMENT REGULATIONS; THAT THE ADJACENT PROPERTIES WILL BE PROTECTED FROM STORM WATER DAMAGE AS A RESULT OF THIS PROPOSED DEVELOPMENT; THAT SIGHT DISTANCES COMPLY WITH THE AASHTO POLICIES; AND THAT THE APPROPRIATE APPLICATIONS HAVE BEEN SUBMITTED TO THE S.W.F.W.M.D.

MILES C ANDERSON PE
FLORIDA PROFESSIONAL ENGINEER # 38986
CA # 0009842
THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY MILES ANDERSON PE ON 6-22-24, 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.

NOI NOTE:
THE GENERAL CONTRACTOR SHALL PROVIDE COPY OF NOI SENT TO FDEP FOR NPDES GENERAL CONSTRUCTION PERMIT REQUIREMENTS FOR THIS PROJECT WHICH IS 2.50 ACRES IF APPLICABLE. (FOR CONSTRUCTION PROJECTS DISTURBING ONE OR MORE ACRE OF LAND).

STORMWATER CONSTRUCTION NOTE:
NO CLEARING OR GRUBBING IS TO TAKE PLACE UNTIL PERMIT DOCUMENTS HAVE BEEN APPROVED ALL STORM WATER MANAGEMENT SYSTEMS SHALL BE COMPLETED PRIOR TO THE CONSTRUCTION OF IMPERVIOUS AREAS.

PRE-CONSTRUCTION MEETING NOTE:
NO SITE WORK SHALL BE CONDUCTED PRIOR TO OBTAINING A "SITE PERMIT" FROM THE COUNTY & WMD.

MAINTENANCE & CONSTRUCTION NOTES:

- AREA AROUND ANY PROPOSED PIPE ENDS SHALL BE FINISH GRADED AND SODDED AS PER THESE PLANS. SWALE ELEVATION TRANSITIONS TO PIPE ENDS SHALL BE 25 FEET UNLESS OTHERWISE SHOWN ON PLAN-PROFILES.
- CONTRACTOR SHALL CLEAN OUT ALL PROPOSED CROSS DRAINS AFTER PLACEMENT OF SOD OR GRASS AND MULCH.
- ALL AREAS DISTURBED IN THE RW DURING CONSTRUCTION OF THIS PROJECT WHICH ARE NOT OTHERWISE PAVED SHALL BE IMMEDIATELY SODDED FOLLOWING FINAL GRADING. ALLOW FOR SOD WITH A 1-1/2" UNDERCUT. OTHER AREAS DISTURBED AFTER CONSTRUCTION SHALL BE GRASSED UNLESS SOD IS SPECIFICALLY PROPOSED. SOD SHALL BE ARGENTINE BAHIA, AND SHALL BE REGULARLY WATERED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION DURATION.
- SIGNAGE AND STRIPING WITHIN THIS SITE PLAN SHALL BE DIAMOND GRADE AND CONFORM TO F.D.O.T. T-1 SPECIFICATIONS. ALL SIGNAGE AND STRIPING TO BE INSTALLED FOR ENTRANCE ON US. HWY. 441 SHALL BE OF HIGH INTENSITY THERMOPLASTIC.

OPERATION AND MAINTENANCE (O&M)
PROPOSED MAINTENANCE PRACTICES AND SCHEDULES OF DRAINAGE FACILITIES AND SYSTEMS SHALL BE AS PER MARION COUNTY LDC. THIS SHOULD INCLUDE THE IDENTIFICATION OF THE ENTITY RESPONSIBLE FOR OPERATION AND MAINTENANCE, INCLUDING NAME, ADDRESS AND TELEPHONE NUMBER.

* SEE DRAINAGE PACKAGE FOR SIGNED O&M LETTER BY DEVELOPER.

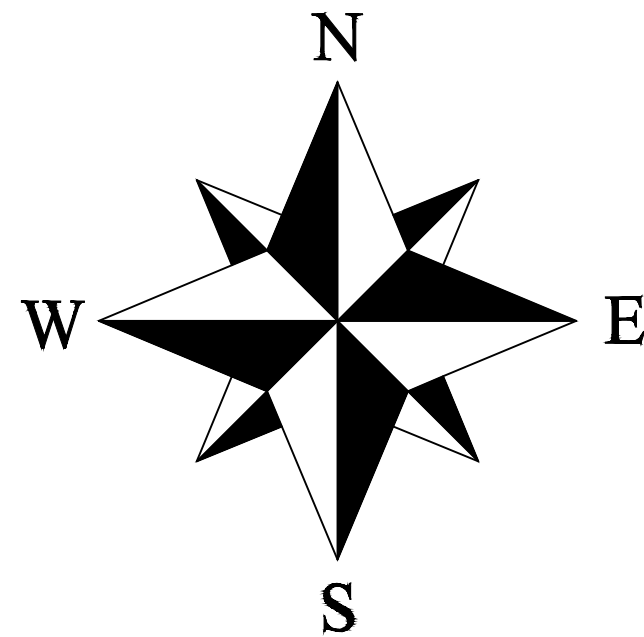
GENERAL NOTES:

- ALL CONSTRUCTION COVERED BY THESE PLANS SHALL COMPLY WITH THE MATERIAL REQUIREMENTS AND QUALITY CONTROL STANDARDS CONTAINED IN MARION COUNTY LAND DEVELOPMENT REGULATIONS.
- NO CHANGE TO THE WORK AS SHOWN ON THIS PLAN SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE COUNTY AND PROJECT ENGINEERS.
- BOUNDARY, TOPOGRAPHY AND TREE INFORMATION IS BASED ON A SURVEY BY PREECE LAND SURVEYORS.
- BUILDINGS SHALL BE HANDICAP ACCESSIBLE AS PER THE STATE OF FLORIDA REGULATIONS. THE ARCHITECT/ENGINEER SHALL PROVIDE BUILDING PLANS. CLEAN AND SUITABLE MATERIAL SHALL BE USED FOR CONSTRUCTION OF THE BUILDING FOUNDATION AND SHALL BE COMPACTED TO A 95% MAXIMUM DENSITY WITH THERMITE TREATMENT.
- ALL PARKING STALLS SHALL BE STRIPED WITH 6" WHITE LINES. HANDICAP SPACES SHALL BE SIGNED AND SHALL HAVE ADDITIONAL 6" BLUE LINES INSIDE EACH SPACE AT 2" FROM WHITE LINES. ALL WORK IS TO BE DONE IN ACCORDANCE WITH FDOT STANDARDS. ALL HANDICAP PARKING & ACCESS MUST COMPLY WITH FBC CHAPTER 11.
- A TYPE III SILT FENCE SHALL BE INSTALLED ALONG BOUNDARIES AS SHOWN ON SHEET C007 OF THE PROPOSED CONSTRUCTION. PRIOR TO ANY SITE DEVELOPMENT.
- THE SITE, ACCESS & R.O.W.'S ARE TO BE KEPT CLEAN & FREE OF EXCESS DUST AND DEBRIS AT ALL TIMES DURING CONSTRUCTION. ANY INCIDENCE OF EROSION, SEDIMENTATION, DUST OR DEBRIS OCCURRING OFF-SITE AS A RESULT OF CONSTRUCTION ACTIVITIES ON THIS DEVELOPMENT SHALL BE CORRECTED BY THE CONTRACTOR WITHIN 48 HOURS OF EACH OCCURRENCE.
- ALL RETENTION IMPROVEMENTS AND STORM SEWER SYSTEMS EXISTING AND PROPOSED MUST BE COMPLETE PRIOR TO CONSTRUCTION OF IMPERVIOUS AREAS.
- IF A SINKHOLE SHOULD FORM ON THIS SITE, ALL APPLICABLE PROCEDURES OUTLINED IN THE "APPLICANTS HANDBOOK-KARST SENSITIVE AREAS", SJRWMD, MAY 1988, SHALL BE FOLLOWED.
- MINIMUM STRENGTH FOR ALL CONCRETE ON SITE SHALL BE 3000 PSI AT 28 DAYS OR AS OTHERWISE NOTED. ALL VEHICLE PARKING AREAS SHALL BE PAVED W/ AUTO PAVEMENT (SEE PAVEMENT STRUCTURE THICKNESS TABLE ON C003). ALL OTHER PAVEMENT AREAS SHALL BE IN ACCORDANCE WITH TRUCK PAVEMENT AS PER PAVEMENT STRUCTURE THICKNESS TABLE ON C003. ALL CONCRETE TRUCK LOADING APRONS SHALL BE 3000 PSI CONCRETE UNO. GEO-TECH TO FIELD VERIFY DURING CONSTRUCTION.
- PEDESTRIAN AND VEHICULAR TRAFFIC SHALL BE MAINTAINED AND PROTECTED AT ALL TIMES.
- ALL PAVEMENT MARKINGS, MATERIALS, AND SIGNS SHALL CONFORM TO FDOT STANDARDS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES AND SAFE PRACTICES FOR STREET AND HIGHWAY AND UTILITY OPERATION. SEE MAINTENANCE AND CONSTRUCTION NOTE NUMBER 4.
- REPRODUCTIONS OF THESE PLANS ARE NOT VALID UNLESS SIGNED BY THE SURVEYOR AND ENGINEER IN RESPONSIBLE CHARGE AND SEALED WITH RAISED EMBOSSED SEALS.
- COPIES OF THESE PLANS AS DESIGNED BY THE PROFESSIONAL ENGINEER HAVE BEEN RETAINED BY THE PROFESSIONAL ENGINEER, AND HE WILL NOT BE RESPONSIBLE FOR ANY SUBSEQUENT CHANGES TO ANY REPRODUCIBLE ORIGINAL DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR ASSURING THAT ALL NECESSARY PERMITS HAVE BEEN OBTAINED PRIOR TO ANY CONSTRUCTION OF UTILITIES SHOWN ON THESE PLANS.
- ALL DESIGNED IMPROVEMENTS SHOWN ON THESE PLANS ARE BASED ON EXISTING DATA SUPPLIED BY THE SURVEYOR AND BORING DATA SUPPLIED BY GEOTECH, INC.
- FOR ANY CONSTRUCTION WITHIN THE STATE OF FLORIDA AND OR MARION COUNTY R/W THE CONTRACTOR SHALL OBTAIN THE REQUIRED RIGHT-OF-WAY PERMITS BEFORE COMMENCING WITH THIS CONSTRUCTION.
- ALL ACCESS AND PARKING SHALL COMPLY WITH 1997 FAC.
- AS BUILT DRAWINGS OR CERTIFICATION REQUIRED PRIOR TO C.O. ANY MODIFICATIONS TO THE PUBLIC RIGHT OF WAY SHALL BE APPROVED BY THE COUNTY OR FDOT ENGINEERS' OFFICE.
- AN APPROVED RIGHT OF WAY UTILIZATION PERMIT MUST BE OBTAINED FROM THE COUNTY OF FDOT, AT LEAST 5 BUSINESS DAYS BEFORE SCHEDULED WORK DATE, FOR ANY WORK TO BE DONE WITHIN THE RIGHT OF WAY.

MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
CIVIL — STRUCTURAL — LAND PLANNING — GOLF COURSE DESIGN
1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
OCALA, FLORIDA 34470 FAX (352) 629-4402

| COVER SHEET | | | | | |
|--|------------------------|---------|-----------|----------|---------------------------------|
| HUDSON DEVELOPMENT MARION COUNTY, FLORIDA SECTION 31, TWP-15, RNG-23 OCALA, FLORIDA | | | | | |
| 2 | COUNTY & FDOT COMMENTS | 6-25-24 | DATE: | 5-3-23 | DESIGN: MCA PROJ. HUDSON DEV... |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: MA FILE: 22-029 |
| No. | REVISION | DATE | APPROVED: | MCA | CHECK: MCA FILEP: HUDSON DEV... |

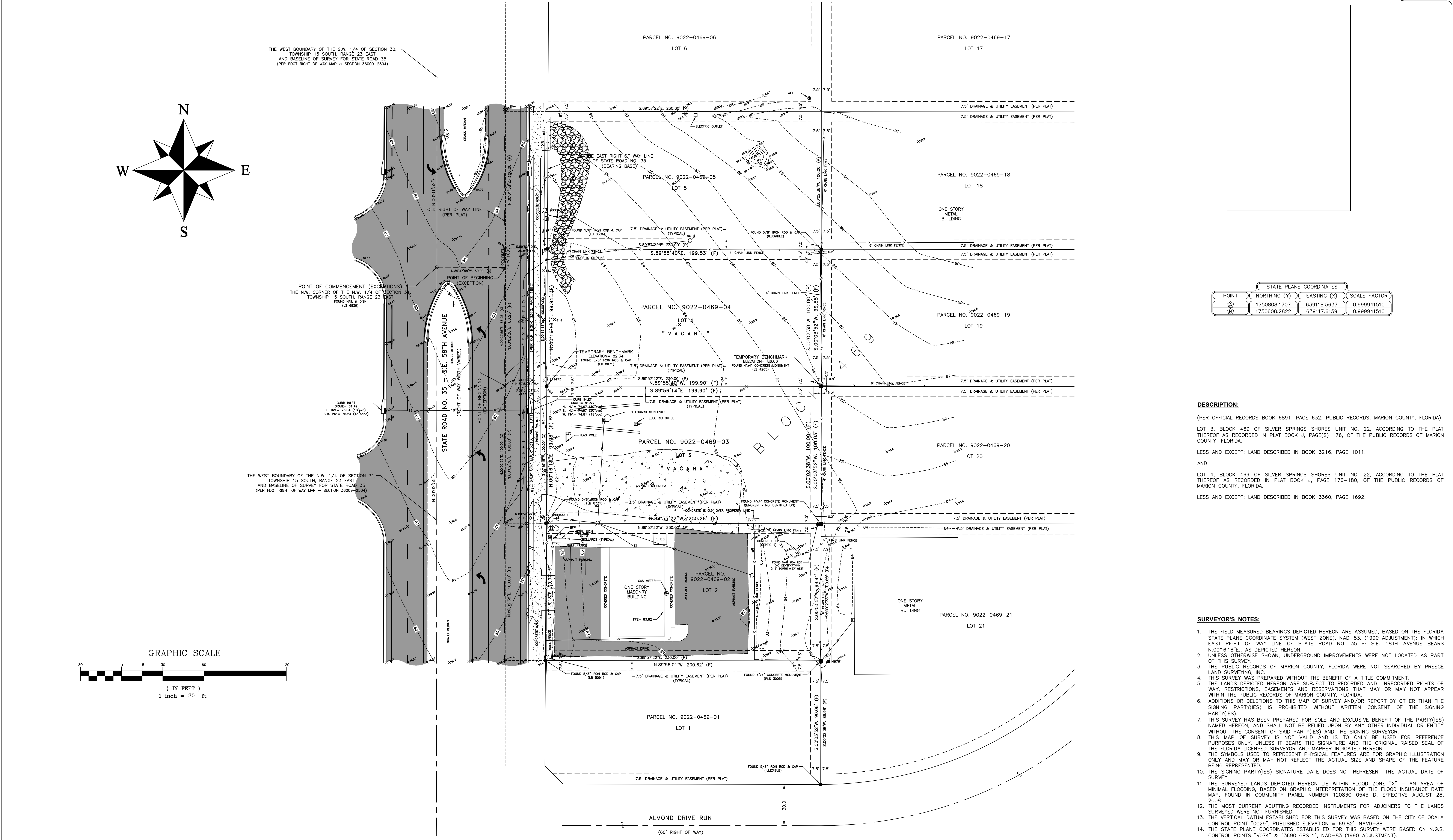
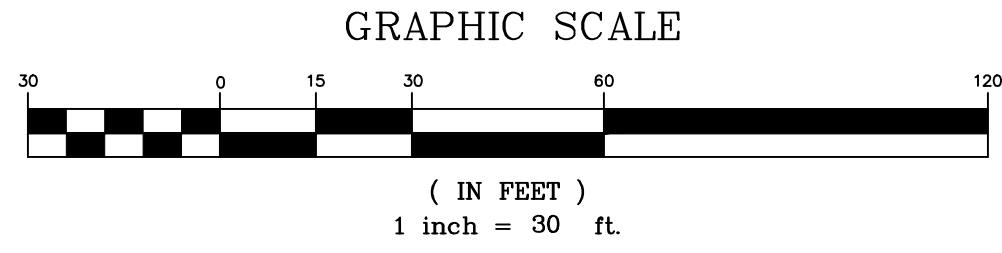
SHEET C001



THE WEST BOUNDARY OF THE S.W. 1/4 OF SECTION 30, TOWNSHIP 15 SOUTH, RANGE 23 EAST AND BASELINE OF SURVEY FOR STATE ROAD 35 (PER FDOT RIGHT OF WAY MAP - SECTION 3609-2504)

POINT OF COMMENCEMENT (EXCEPTION) THE N.W. CORNER OF THE N.W. 1/4 OF SECTION 3, TOWNSHIP 15 SOUTH, RANGE 23 EAST FOUND M.B. & D.S. (LS 6839)

THE WEST BOUNDARY OF THE N.W. 1/4 OF SECTION 31, TOWNSHIP 15 SOUTH, RANGE 23 EAST AND BASELINE OF SURVEY FOR STATE ROAD 35 (PER FDOT RIGHT OF WAY MAP - SECTION 3609-2504)



| STATE PLANE COORDINATES | | | |
|-------------------------|--------------|-------------|--------------|
| POINT | NORTHING (Y) | EASTING (X) | SCALE FACTOR |
| (A) | 1750808.1707 | 639118.5637 | 0.999941510 |
| (B) | 1750608.2822 | 639117.6159 | 0.999941510 |

DESCRIPTION:
(PER OFFICIAL RECORDS BOOK 6891, PAGE 632, PUBLIC RECORDS, MARION COUNTY, FLORIDA)
LOT 3, BLOCK 469 OF SILVER SPRINGS SHORES UNIT NO. 22, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK J, PAGE(S) 176, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.
LESS AND EXCEPT: LAND DESCRIBED IN BOOK 3216, PAGE 1011.
AND
LOT 4, BLOCK 469 OF SILVER SPRINGS SHORES UNIT NO. 22, ACCORDING TO THE PLAT THEREOF AS RECORDED IN PLAT BOOK J, PAGE 176-180, OF THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.
LESS AND EXCEPT: LAND DESCRIBED IN BOOK 3360, PAGE 1692.

- SURVEYOR'S NOTES:**
- THE FIELD MEASURED BEARINGS DEPICTED HEREON ARE ASSUMED, BASED ON THE FLORIDA STATE PLANE COORDINATE SYSTEM (WEST ZONE, NAD-83, (1990 ADJUSTMENT)); IN WHICH EAST RIGHT OF WAY LINE OF STATE ROAD NO. 35 ~ S.E. 58TH AVENUE BEARS N.00°16'18" E., AS DEPICTED HEREON.
 - UNLESS OTHERWISE SHOWN, UNDERGROUND IMPROVEMENTS WERE NOT LOCATED AS PART OF THIS SURVEY.
 - THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA WERE NOT SEARCHED BY PREECE LAND SURVEYING, INC.
 - THIS SURVEY WAS PREPARED WITHOUT THE BENEFIT OF A TITLE COMMITMENT.
 - THE LANDS DEPICTED HEREON ARE SUBJECT TO RECORDED AND UNRECORDED RIGHTS OF WAY, RESTRICTIONS, EASEMENTS AND RESERVATIONS THAT MAY OR MAY NOT APPEAR WITHIN THE PUBLIC RECORDS OF MARION COUNTY, FLORIDA.
 - ADDITIONS OR DELETIONS TO THIS MAP OF SURVEY AND/OR REPORT BY OTHER THAN THE SIGNING PARTY(IES) IS PROHIBITED WITHOUT WRITTEN CONSENT OF THE SIGNING PARTY(IES).
 - THIS SURVEY HAS BEEN PREPARED FOR SOLE AND EXCLUSIVE BENEFIT OF THE PARTY(IES) NAMED HEREON, AND SHALL NOT BE RELIED UPON BY ANY OTHER INDIVIDUAL OR ENTITY WITHOUT THE CONSENT OF SAID PARTY(IES) AND THE SIGNING SURVEYOR.
 - THIS MAP OF SURVEY IS NOT VALID AND IS TO ONLY BE USED FOR REFERENCE PURPOSES ONLY, UNLESS IT BEARS THE SIGNATURE AND THE ORIGINAL RAISED SEAL OF THE FLORIDA LICENSED SURVEYOR AND MAPPER INDICATED HEREON.
 - THE SYMBOLS USED TO REPRESENT PHYSICAL FEATURES ARE FOR GRAPHIC ILLUSTRATION ONLY AND MAY OR MAY NOT REFLECT THE ACTUAL SIZE AND SHAPE OF THE FEATURE BEING REPRESENTED.
 - THE SIGNING PARTY(IES) SIGNATURE DATE DOES NOT REPRESENT THE ACTUAL DATE OF SURVEY.
 - THE SURVEYED LANDS DEPICTED HEREON LIE WITHIN FLOOD ZONE "X" - AN AREA OF MINIMAL FLOODING, BASED ON GRAPHIC INTERPRETATION OF THE FLOOD INSURANCE RATE MAP, FOUND IN COMMUNITY PANEL NUMBER 12083C 0545 D, EFFECTIVE AUGUST 28, 2008.
 - THE MOST CURRENT ABUTTING RECORDED INSTRUMENTS FOR ADJOINERS TO THE LANDS SURVEYED WERE NOT FURNISHED.
 - THE VERTICAL DATUM ESTABLISHED FOR THIS SURVEY WAS BASED ON THE CITY OF OCALA CONTROL POINT "0029", PUBLISHED ELEVATION = 69.82', NAVD-88.
 - THE STATE PLANE COORDINATES ESTABLISHED FOR THIS SURVEY WERE BASED ON N.G.S. CONTROL POINTS "V074" & "3690 GPS 1", NAD-83 (1990 ADJUSTMENT).

LEGEND

| | | | |
|----------------------------------|---|---|-------------------------------------|
| (P) = PLAT DIMENSION | TBM = TEMPORARY BENCHMARK | ⊕ = WELL | ⊕ = HOSE BIBB |
| (F) = FIELD MEASUREMENT | RCP = REINFORCED CONCRETE PIPE | ⊕ = TRAFFIC CONTROL BOX | ⊕ = BURIED CABLE MARKER |
| (D) = DEED DIMENSION | CMP = CORRUGATED METAL PIPE | ⊕ = WATER METER | ⊕ = TELEPHONE RISER BOX |
| (C) = CALCULATED DIMENSION | VCP = VITRIFIED CLAY PIPE | ⊕ = GREASE TRAP | ⊕ = SANITARY MANHOLE |
| (X) = EXCEPTION DIMENSION | PVC = POLYVINYL CHLORIDE | ⊕ = CABLE TV RISER BOX | ⊕ = STORM DRAINAGE MANHOLE |
| R/W = RIGHT OF WAY LINE | HDPE = HIGH DENSITY POLYETHYLENE | ⊕ = IRRIGATION CONTROL BOX | ⊕ = TELEPHONE MANHOLE |
| CB = CHORD BEARING | OU = OVERHEAD UTILITY(ES) | ⊕ = WOOD POWER POLE | ⊕ = STORM INLET |
| ORB = OFFICIAL RECORDS BOOK | FDOT = FLORIDA DEPARTMENT OF TRANSPORTATION | ⊕ = GUY ANCHOR | ⊕ = CENTERLINE |
| PC = POINT OF CURVATURE | BFP = BACKFLOW PREVENTER | ⊕ = FIRE HYDRANT | ⊕ = UNDERGROUND GAS MARKER |
| PRC = POINT OF REVERSE CURVATURE | A/C = AIR CONDITIONER | ⊕ = FIRE DEPARTMENT CONNECTION | ⊕ = LIGHT POLE |
| PT = POINT OF TANGENCY | FOCM = FIBER OPTIC CABLE MARKER | ⊕ = WATER VALVE | ⊕ = SIGN POST |
| LB = LICENSED BUSINESS | PRM = PERMANENT REFERENCE MONUMENT | ⊕ = SEWER VALVE | ⊕ = MAILBOX |
| LS = LICENSED SURVEYOR | PCP = PERMANENT CONTROL POINT | ⊕ = SANITARY CLEAN-OUT | ⊕ = BROKEN LINE; NOT DRAWN TO SCALE |
| FTE = FINISHED FLOOR ELEVATION | PSM = PROFESSIONAL SURVEYOR & MAPPER | ⊕ = BROKEN LINE; NOT DRAWN TO SCALE | ⊕ = DEPICTS CONCRETE |
| TRB = TELEPHONE RISER BOX | PLS = PROFESSIONAL LAND SURVEYOR | ⊕ = SET 5/8" IRON ROD & CAP - LB 7389 | |
| WPP = WOOD POWER POLE | RLS = REGISTERED LAND SURVEYOR | ⊕ = FOUND 5/8" IRON ROD & CAP | |
| CPP = CONCRETE POWER POLE | I.D. = IDENTIFICATION | ⊕ = FOUND 4"x4" CONCRETE MONUMENT | |
| MPP = METAL POWER POLE | NO. = NUMBER | ⊕ = SET 4"x4" CONCRETE MONUMENT - LB 7389 | |
| | | ⊕ = FOUND 8" OCTAGONAL CONCRETE MONUMENT | |



BOUNDARY & TOPOGRAPHIC SURVEY
FOR:
R & B SOUND INVESTMENTS, LLC.

PREECE
LAND SURVEYING, INC.
(LICENSED BUSINESS NO. 7389)

BELLWETHER PROFESSIONAL PARK
2201 S.E. 30TH AVENUE, SUITE 102
OCALA, FL 34471
PHONE: (352) 351-0091
FAX: (352) 351-0093 FAX
EMAIL: glen@plsinc.us

SURVEYOR'S CERTIFICATION

THIS SURVEY WAS PREPARED IN ACCORDANCE WITH THE STANDARDS OF PRACTICE ESTABLISHED IN CHAPTER 5J-17, FLORIDA ADMINISTRATIVE CODE, FOR A BOUNDARY & TOPOGRAPHIC SURVEY.

DATE _____

GLEN H. PREECE, JR., P.S.M. - LS 5427

DATE OF FIELD SURVEY: DECEMBER 20, 2022

| DRAWN: | J.R.C. | REVISIONS | BY | DATE |
|-----------------|------------------|-----------------------------|--------|----------|
| CHECKED: | G.H.P. | ADD STORM STRUCTURE INVERTS | J.R.C. | 12/20/23 |
| F.B. PAGES | | | | |
| 118 4-6 | | | | |
| FILE INFO: | | | | |
| S.S.S. U-22 | | | | |
| SCALE: 1" = 30' | COPYRIGHT © 2023 | JOB ORDER # 22-161 (R) | | |

9022-0469-05
 ZONE: B4
 FLU: COM

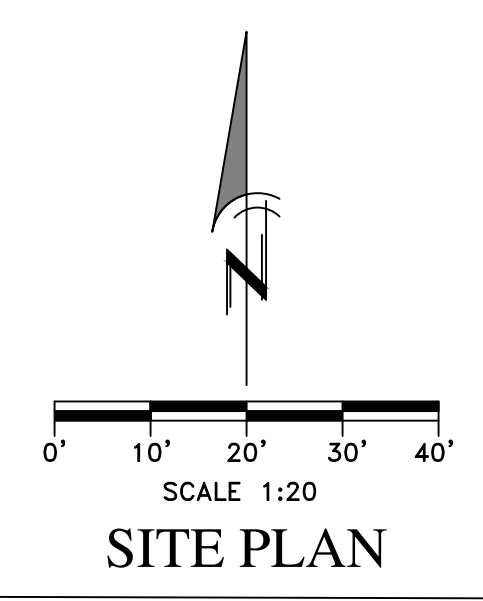
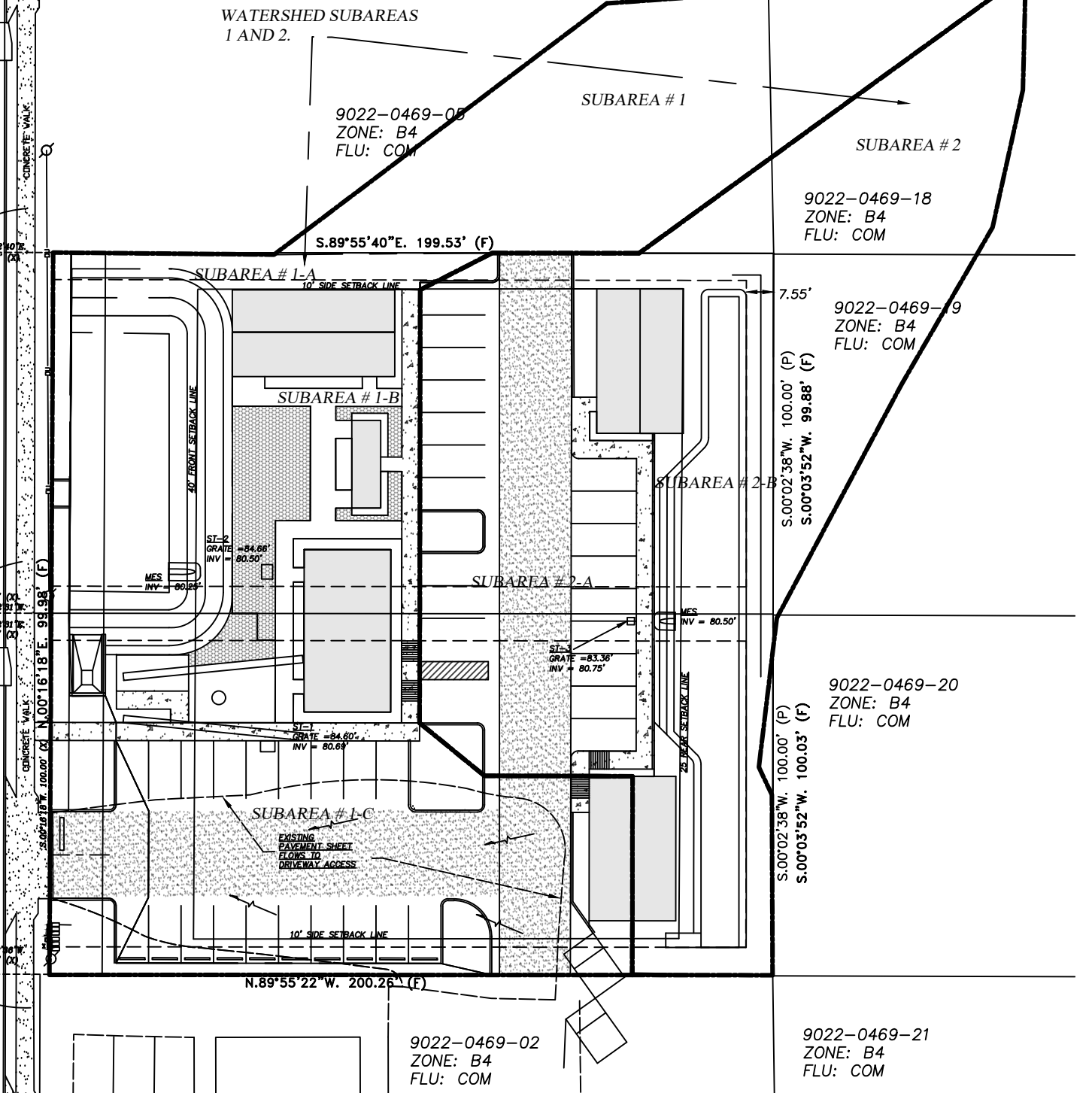
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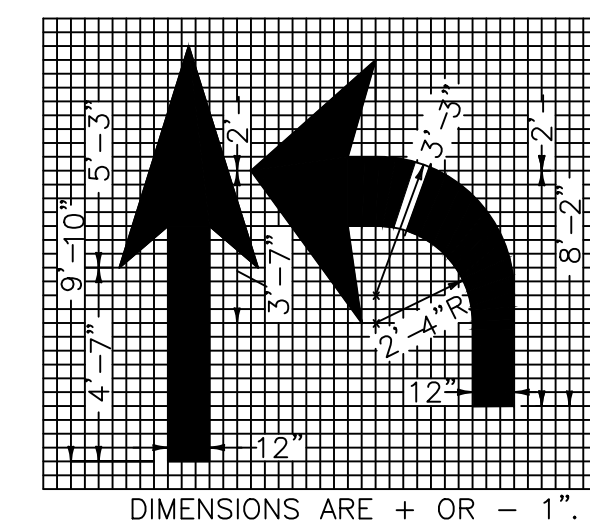
SUB AREA MAP
 SCALE: N.T.S.



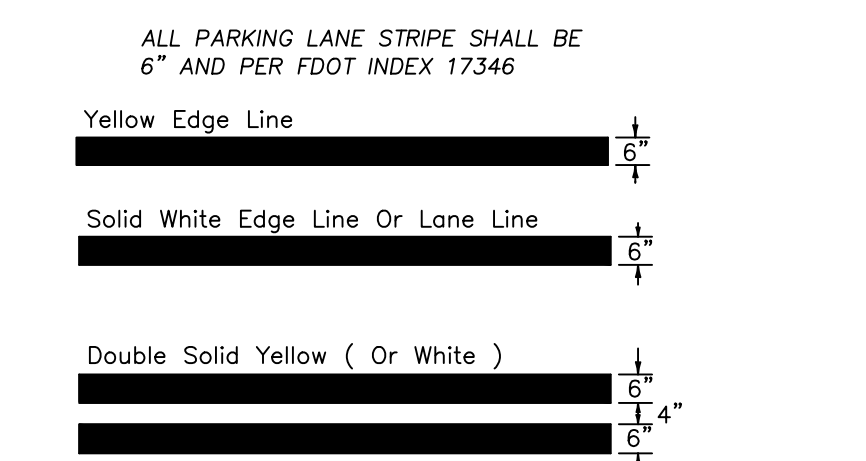
SITE PLAN

| SUB AREAS CHART | | | |
|-----------------|-----------------|-----------------------|--------------------------|
| SUB AREA | TOTAL AREA S.F. | IMPERVIOUS COVER S.F. | IMPERVIOUS COVER PERCENT |
| 1-A | 14,496 | 1,189 | 8% |
| 1-B | 8,548 | 7,661 | 89.62% |
| 1-C | 5,512 | 3,463 | 62.82% |
| 2-A | 8,808 | 8,073 | 91.66% |
| 2-B | 14,004 | 956 | 7% |

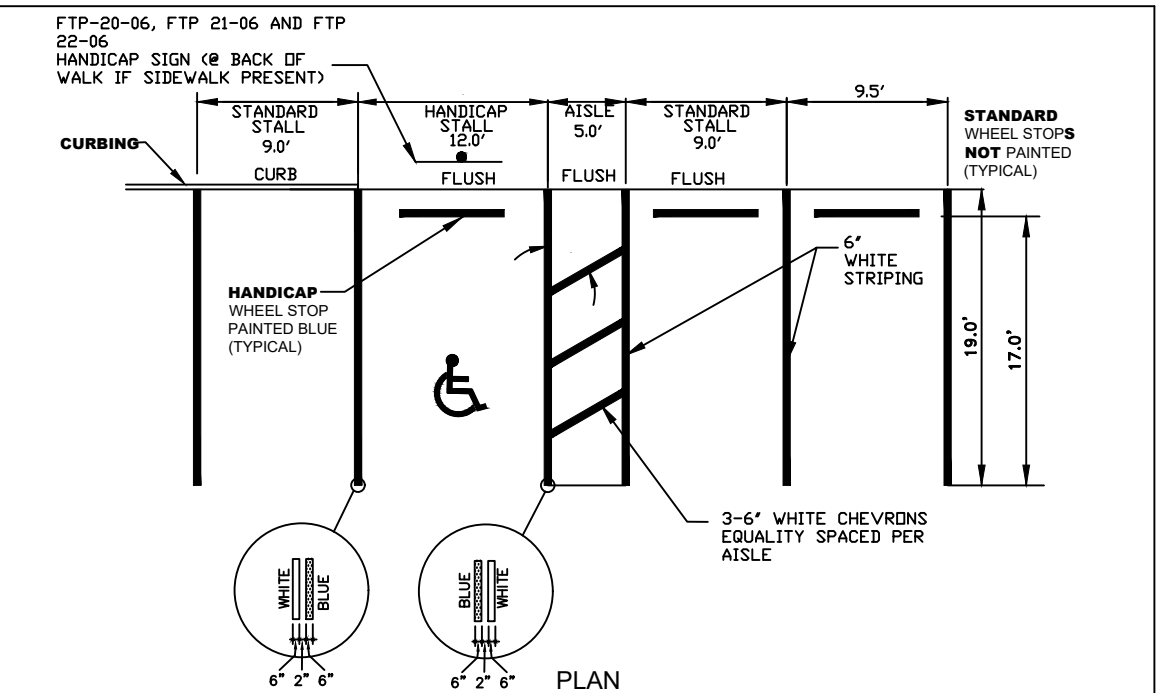
NOTE:
 TRAFFIC CONTROL SIGN SHEETING SHALL BE A MINIMUM OF DIAMOND GRADE STOP SIGN SHALL BE FURNISHED, AT A MINIMUM, 3M DIAMOND GRADE VIP REFLECTIVE SHEETING.
 SIGN POSTS SHALL BE 2X2 SQUARE MADE OF STEEL WITH ONE INCH ON CENTER, 3/8 HOLES.
 ALL STRIPING WITHIN FDOT R/W SHALL BE LEAD FREE THERMOPLASTIC.



PAVEMENT ARROW AND MESSAGE DETAILS



TYPES OF PERMANENT LONGITUDINAL LINES



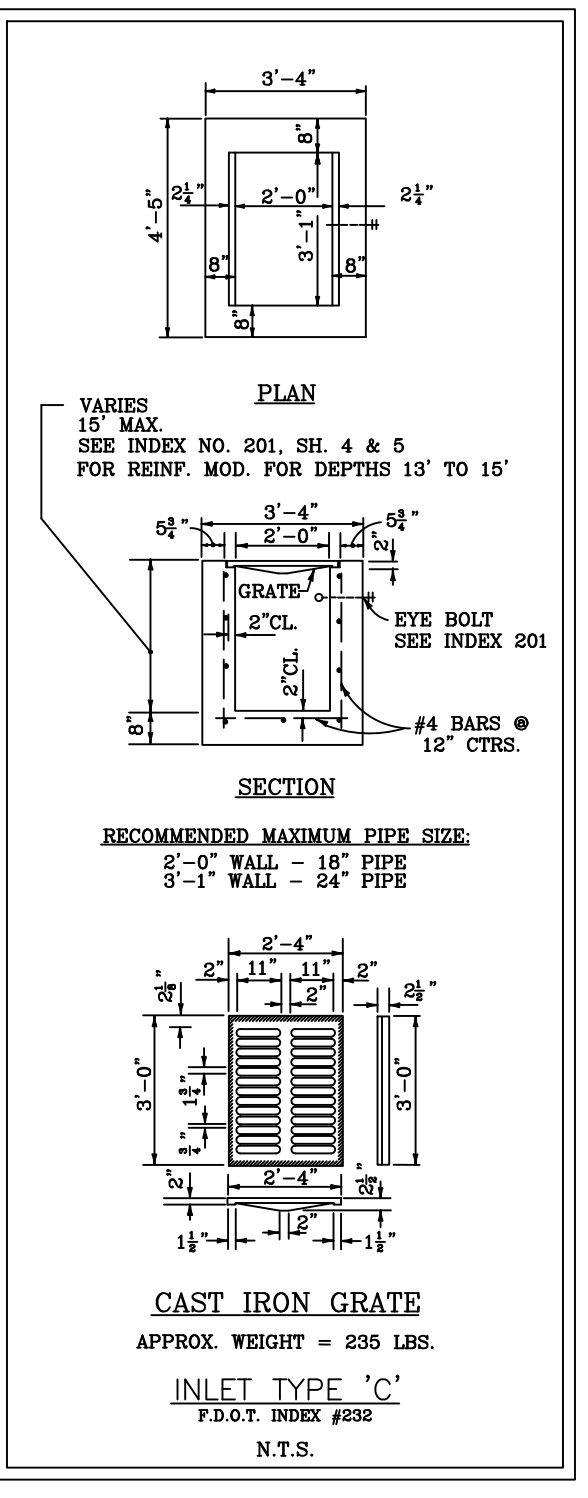
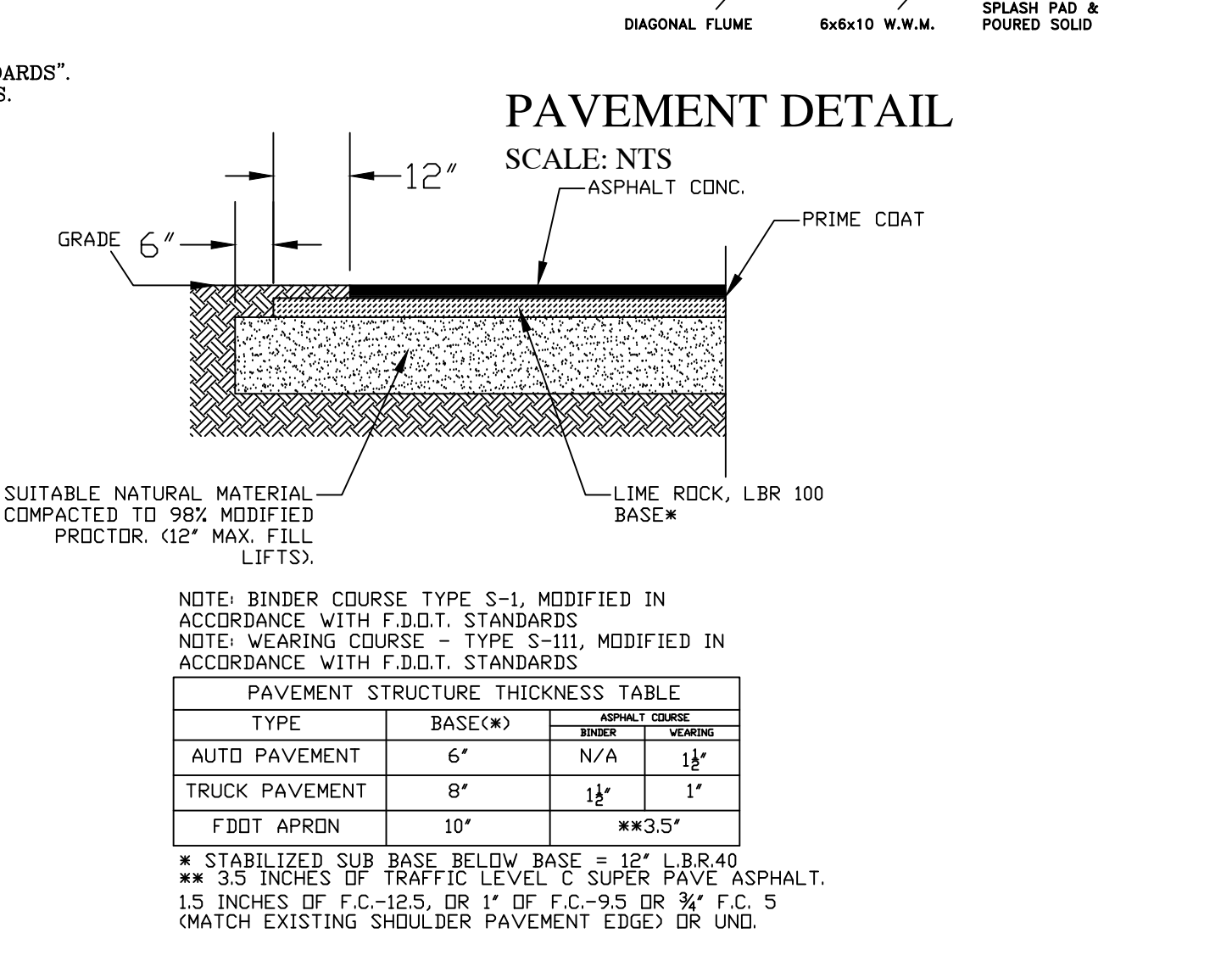
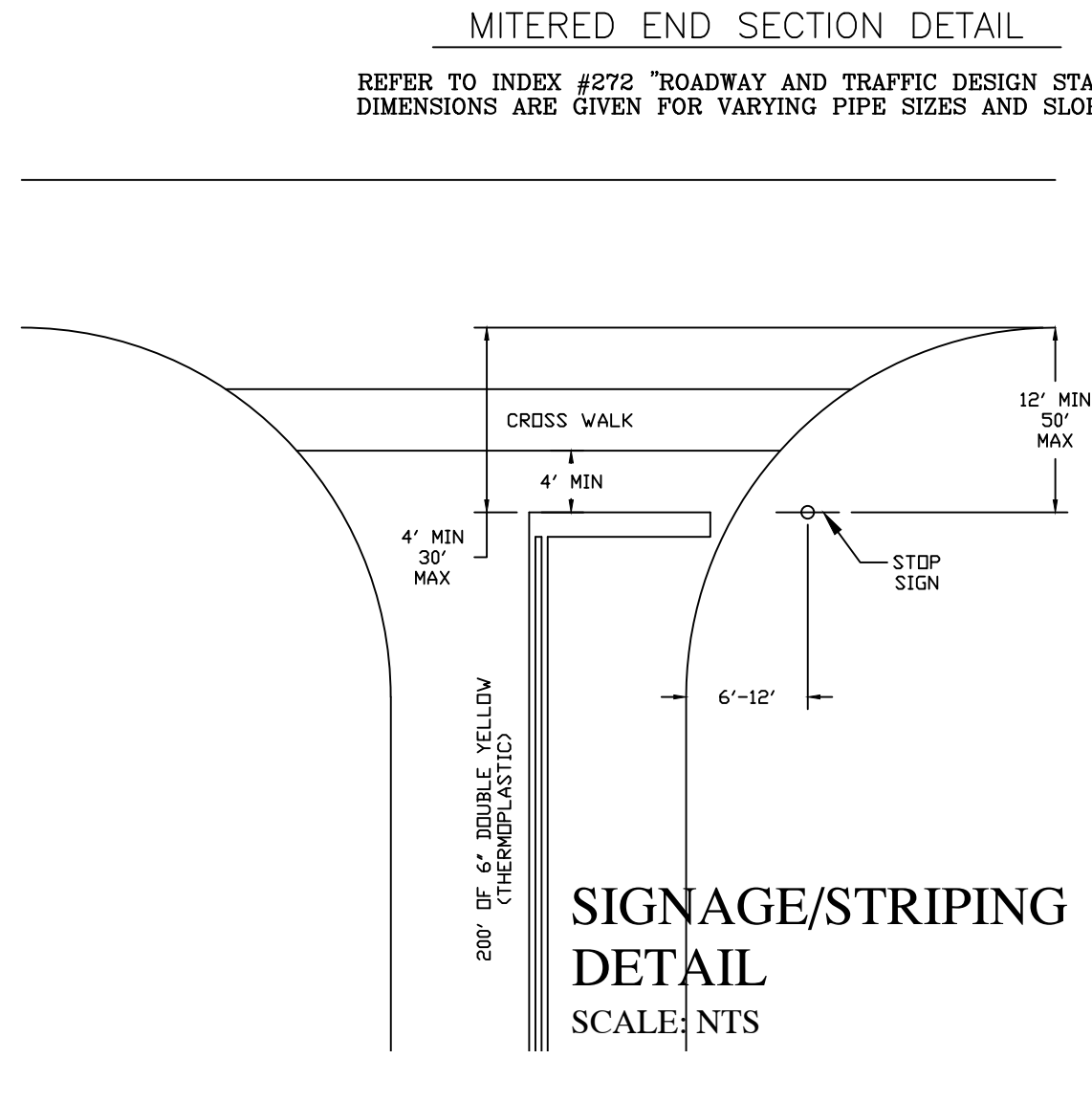
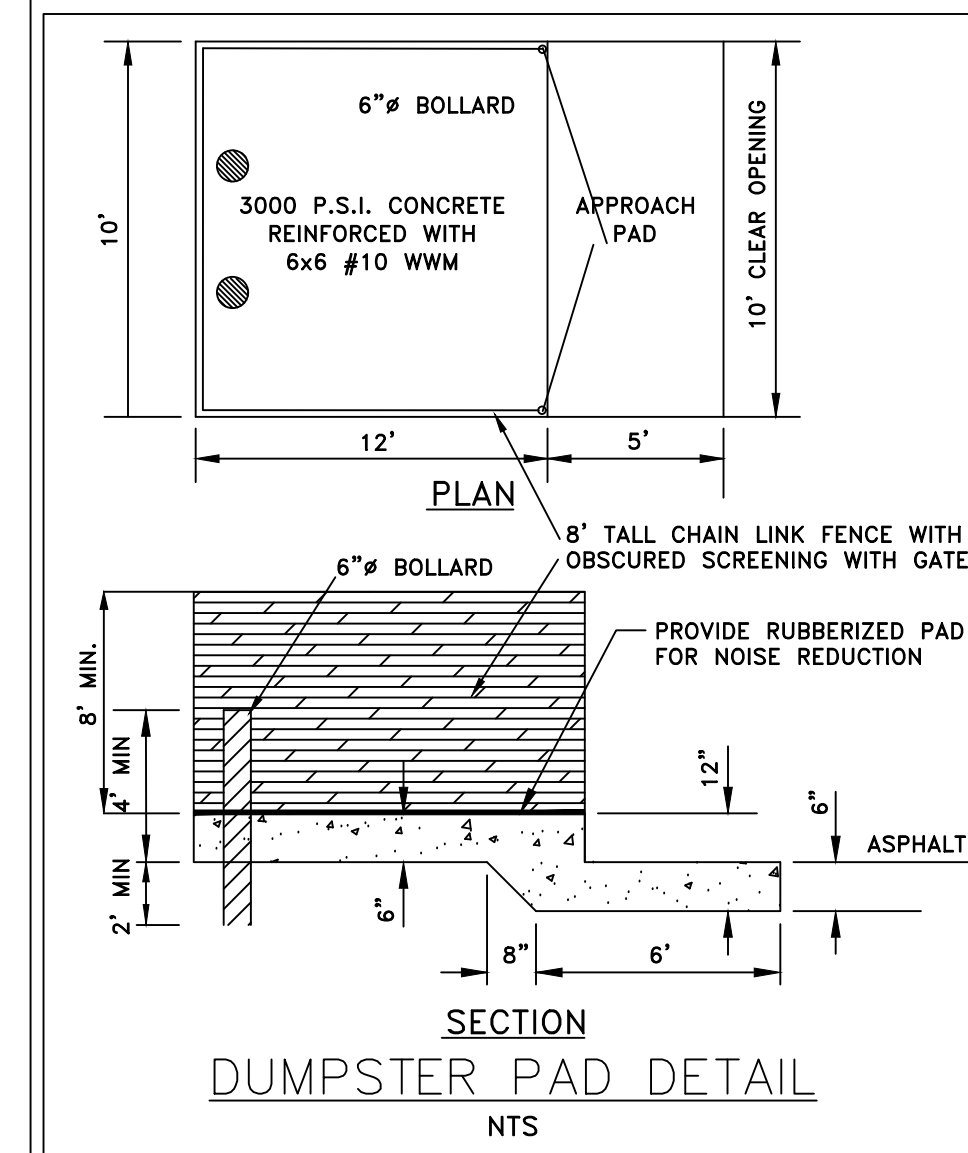
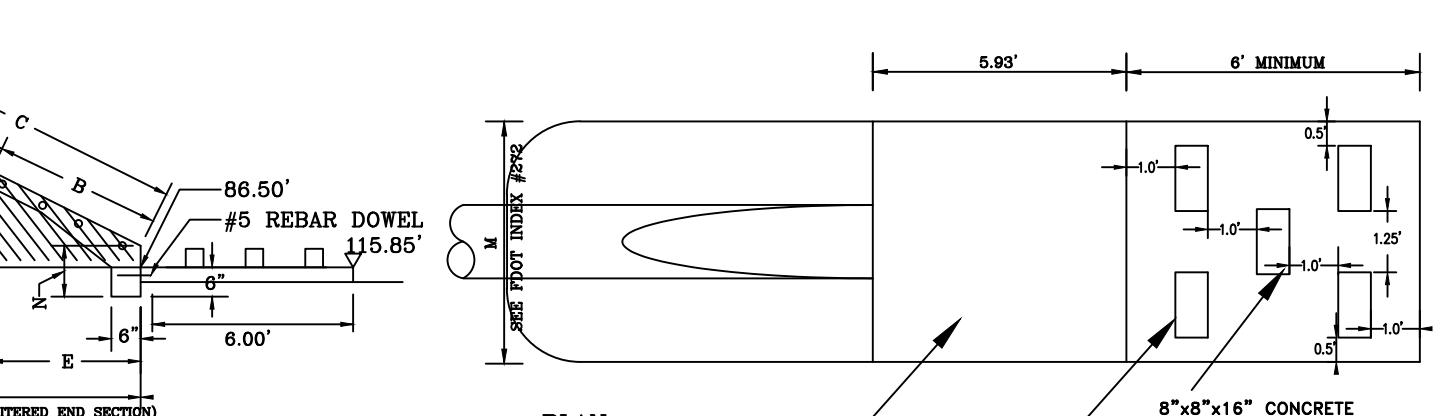
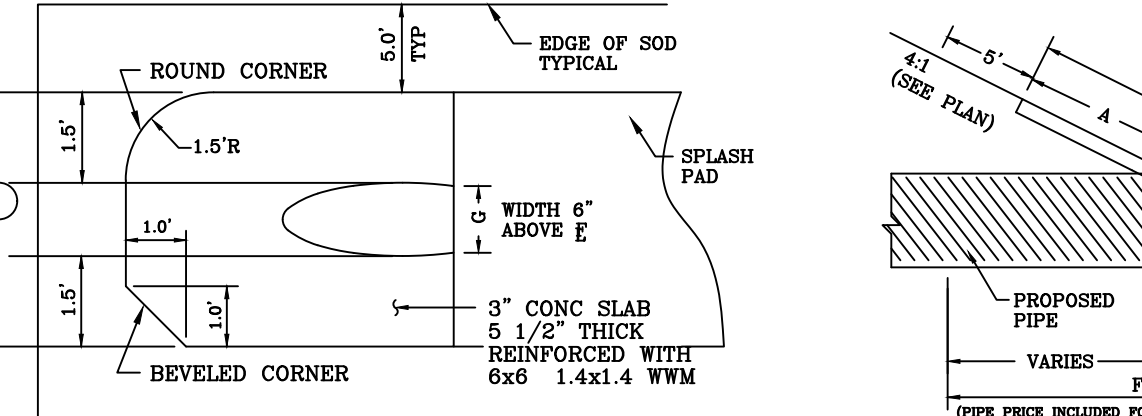
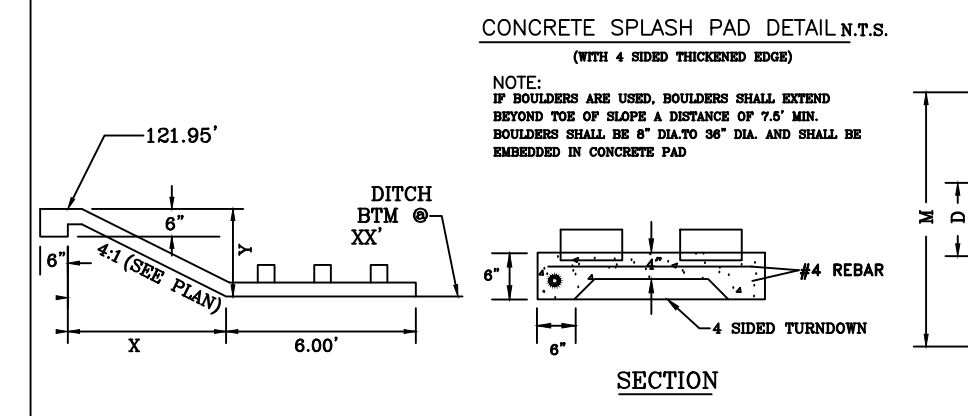
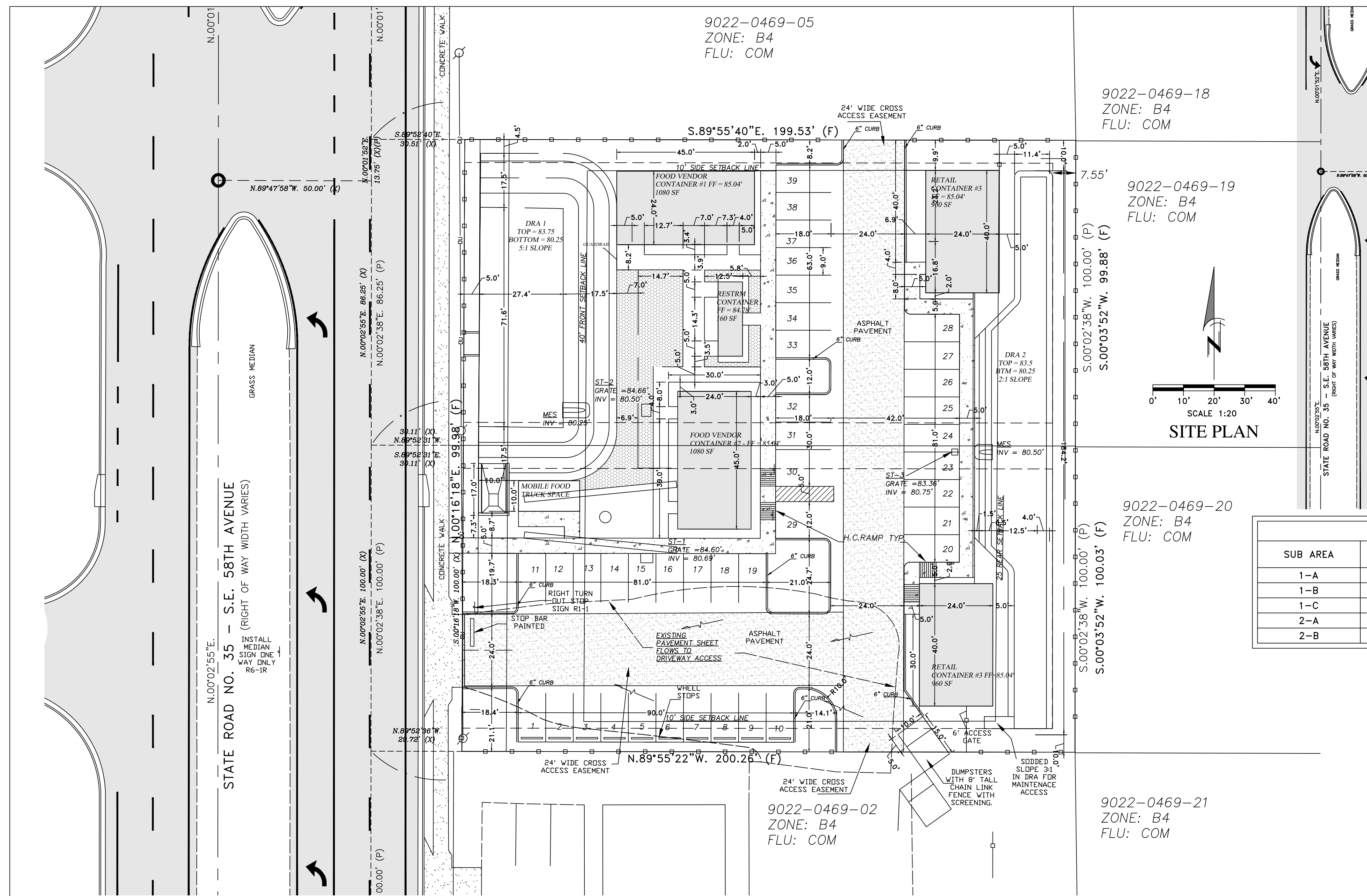
STANDARD & A.D.A. PARKING LAYOUT

SITE LIGHTING NOTE:
 SITE LIGHTING IS DESIGNED TO PREVENT DIRECT GLARE, LIGHT SPILLAGE AND HAZARDOUS INTERFERENCE WITH AUTOMOTIVE AND PEDESTRIAN TRAFFIC ON ADJACENT STREETS AND ALL ADJACENT PROPERTIES. (SEC. 122-216(G)(8))

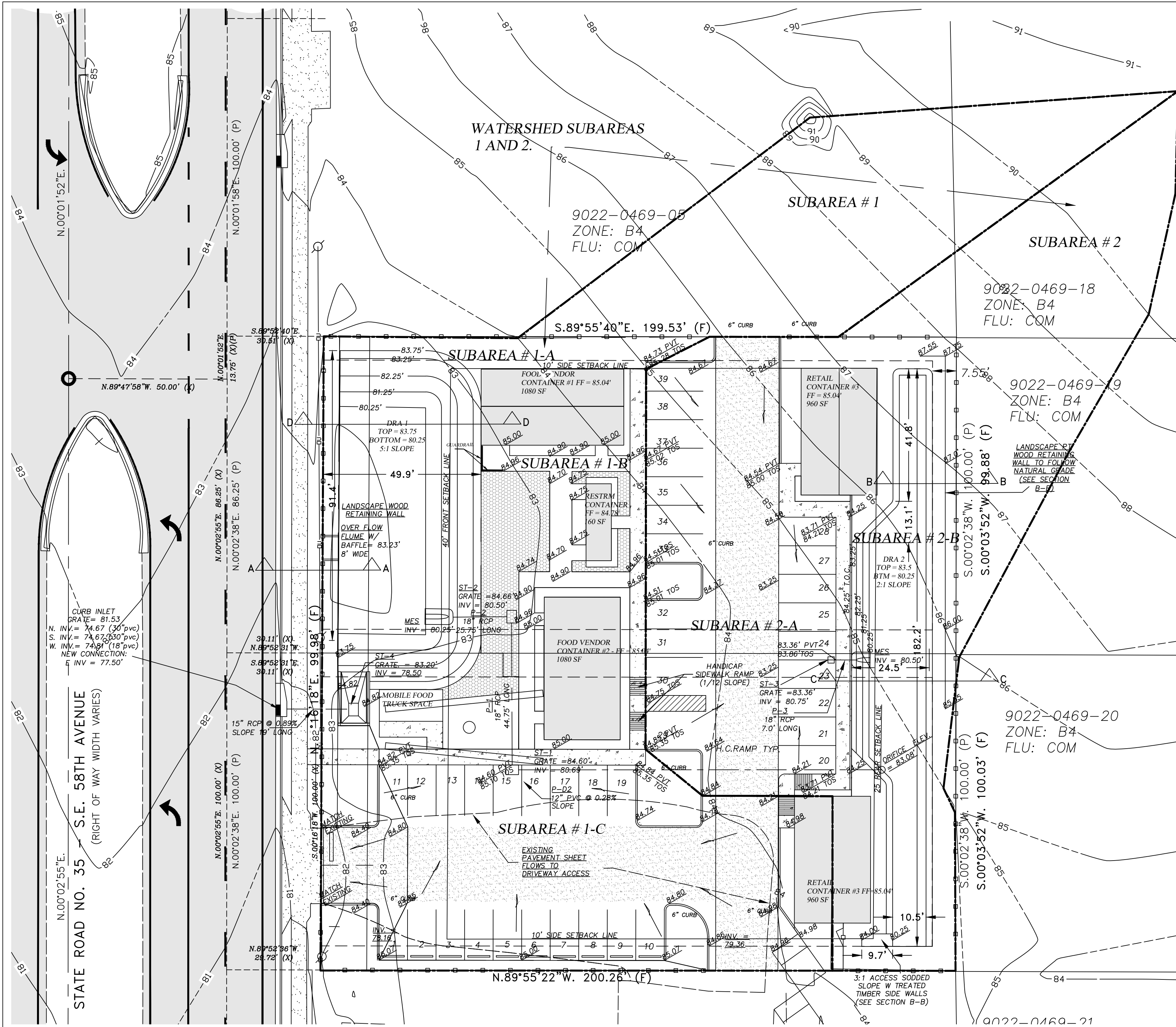
LANDSCAPE ISLAND NOTE:
 ALL LANDSCAPE ISLANDS SHALL CONFORM TO LDC SEC. 116-135(E) SEE PLAN FOR ISLAND SF.

MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
 CIVIL — STRUCTURAL — LAND PLANNING — GOLF COURSE DESIGN
 1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
 OCALA, FLORIDA 34470 FAX (352) 629-4402

| COUNTY COMMENTS | | DATE | | DESIGN | | PROJECT | |
|-----------------|------------------------|---------|-----------|--------|---------------------|---------|------------|
| 3 | COUNTY COMMENTS | 7-24-24 | | MCA | PROJ. HUDSON DEV... | | |
| 2 | COUNTY & FDOT COMMENTS | 6-25-24 | 5-3-23 | MCA | FILE: HUDSON DEV... | | |
| 1 | COUNTY COMMENTS | 6-12-24 | | MCA | FILE: HUDSON DEV... | 22-029 | SHEET CO03 |
| No. | REVISION | DATE | APPROVED: | CHECK: | FILE: | | |



MILES C ANDERSON PE
 FLORIDA PROFESSIONAL ENGINEER # 39085
 CA # 000846
 THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY MILES ANDERSON PE ON 7-25-24 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.



DRAINAGE NARRATIVE SUMMARY:

THE SITE DRAINAGE WATER SHED PLAN IS LOCATED IN THE MARION COUNTY AND CONSISTS OF 0.92 ACRES ON SITE WITH 0.33 AC'S OFF SITE, EQUALING 1.25 AC'S. THE PROPOSED DRAINAGE SYSTEM FOR THE SITE HAS BEEN DESIGNED TO ROUTE ALL GENERATED STORM WATER FROM THE ON AND OFF SITE AREA TO STORM STRUCTURES THAT SHALL CONVEY THE RUNOFF TO THE PROPOSED DRA#1 AND DRA#2. THE SITE WAS ANALYZED USING A 100YR/24HR FREQUENCY STORM TO QUANTIFY THE STORAGE VOLUMES THAT NEED TO BE RETAINED. THE STORAGE AREAS ARE DESIGNED TO MAINTAIN AND RECOVER THE ENTIRE POST 100 YR/24HR FREQUENCY STORM. SEE WATER SHED AND DRA TABLE ON THIS SHEET.

STAGE STORAGE TABLE
DRA 1 (FRONT DETENTION)

| STAGE | AREA (SF) | PERIMETER | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|-------|-----------|-----------|-----------|-------------|----------------|
| 83.75 | 4,217 | 269 | 0.097 | 10,044 | 0.23 |
| 83.25 | 3,797 | 256 | 0.087 | 8,040 | 0.18 |
| 82.25 | 3,000 | 229 | 0.069 | 4,642 | 0.11 |
| 81.25 | 2,301 | 203 | 0.053 | 1,991 | 0.05 |
| 80.25 | 1,681 | 178 | 0.039 | 0 | 0.00 |

STAGE STORAGE TABLE
DRA 2 (REAR DETENTION)

| STAGE | AREA (SF) | PERIMETER | AREA (AC) | VOLUME (CF) | VOLUME (AC-FT) |
|-------|-----------|-----------|-----------|-------------|----------------|
| 83.5 | 3,351 | 393 | 0.077 | 11,737 | 0.27 |
| 83.25 | 3,351 | 393 | 0.077 | 9,224 | 0.21 |
| 83.00 | 3,517 | 393 | 0.077 | 8,386 | 0.19 |
| 82.25 | 3,251 | 391 | 0.075 | 5,910 | 0.14 |
| 81.25 | 3,112 | 390 | 0.071 | 2,729 | 0.06 |
| 80.25 | 2,345 | 377 | 0.054 | 0 | 0.00 |

DRAINAGE CONSTRUCTION NOTES:

- CONTRACTOR MUST EXERCISE CAUTION AND CONSTRUCT DRAINAGE RETENTION AREA AND SWALES AT ALL BOUNDARIES TO CONTROL MITIGATION OF ADVERSE QUANTITY AND QUALITY IMPACT OFF-SITE DUE TO STORM WATER RUNOFF.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION AND SEDIMENTATION CONTROL. THE SWALE AND DRAINAGE AREAS ON THIS SITE SHALL BE CONSTRUCTED DURING THE EARTH MOVING PHASE OF CONSTRUCTION. THEY WILL BE LINED WITH STRAW DURING THE REMAINDER OF THE SITE CONSTRUCTION AND ACT AS TRAPS FOR ANY DEBRIS ORIGINATING FROM THE SITE. THE STRAW WILL AID IN EROSION AND SEDIMENTATION CONTROL.
- DRESSING OF THE SWALE AND DRAINAGE RETENTION OR CONVEYANCE EARTHEN EMBANKMENTS WILL OCCUR DURING THE FINAL PHASE OF CONSTRUCTION. THE STRAW WILL BE REMOVED AS WILL ANY FINES THAT MAY HAVE PASSED THROUGH THE STRAW FILTER. THE BANKS WILL THEN BE SODDED AND THE FLOOR OF THE FILTER POND WILL BE LEFT OPEN. ANY 2:1 OR STEEPER SLOPES SHALL BE SODDED AND STAKED.
- BASIN/DRA SLOPES AND BOTTOM TO BE FULLY VEGETATED. USE OF ST AUGUSTINE OR BERMUDA GRASS IS SUGGESTED.
- SEE SURVEY SHEET FOR BENCHMARK.
- FOR ALL PORTIONS OF THE PROPERTY PERIMETER NOT LINED WITH TYPE III SILT FENCE, A "CONSTRUCTION BARRIER" CONSISTING OF 2x4 POST @ 12' O.C. WITH 2x4 TOP & MIDDLE RAILS AND HEAVY DUTY HDPE ORANGE CONSTRUCTION FENCE SHALL BE INSTALLED.

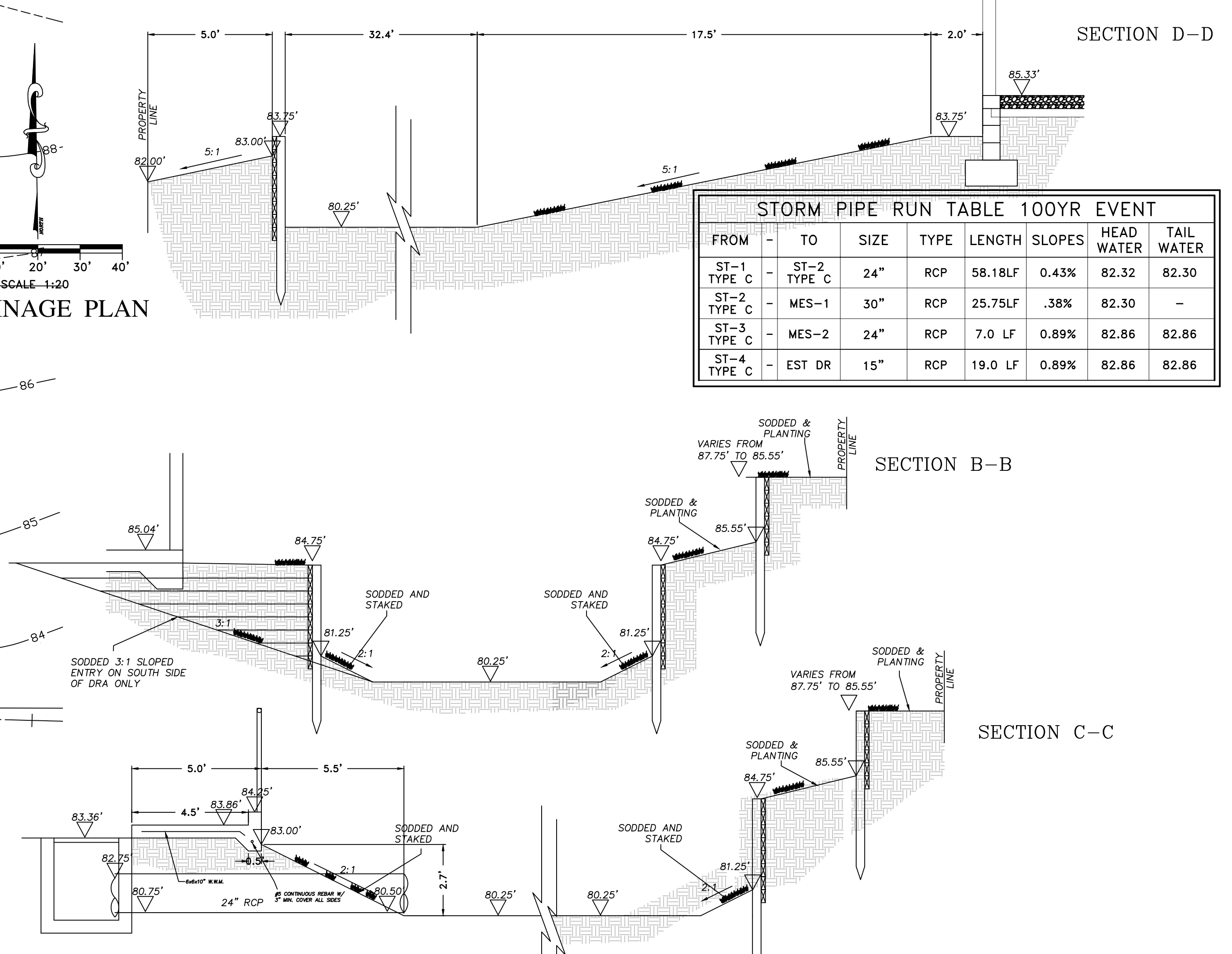
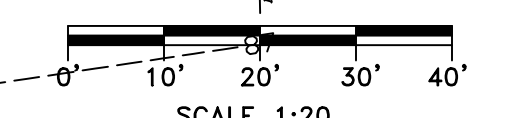
SUB AREAS 1 & 2 ON & OFF SITE CHART

| SUB AREA | TOTAL AREA S.F. | IMPERVIOUS COVER S.F. | IMPERVIOUS COVER PERCENT |
|--|-----------------|-----------------------|--------------------------|
| 1 | 31,517 | 16,177 | 51.33% |
| 2 | 22,890 | 9,274 | 40.21% |
| TOTAL AREAS 1 & 2 ON & OFF SITE CHART | 54,399 | 26,577 | 48.8% |

STORM PIPE RUN TABLE 100YR EVENT

| FROM | TO | SIZE | TYPE | LENGTH | SLOPES | HEAD WATER | TAIL WATER |
|-------------|-------------|------|------|---------|--------|------------|------------|
| ST-1 TYPE C | ST-2 TYPE C | 24" | RCP | 58.18LF | 0.43% | 82.32 | 82.30 |
| ST-2 TYPE C | MES-1 | 30" | RCP | 25.75LF | .38% | 82.30 | - |
| ST-3 TYPE C | MES-2 | 24" | RCP | 7.0 LF | 0.89% | 82.86 | 82.86 |
| ST-4 TYPE C | EST DR | 15" | RCP | 19.0 LF | 0.89% | 82.86 | 82.86 |

DRAINAGE PLAN



DISCHARGE PIPE LINE FROM DRA #1

| STATION | INVERT | PIPE SIZE | LENGTH | SLOPE |
|---------|--------|-----------|--------|-------|
| ST-4 | 83.20' | 12" | 19' | 0.43% |
| ST-1 | 84.60' | 12" | 19' | 0.43% |

DISCHARGE PIPE LINE FROM DRA #2

| STATION | INVERT | PIPE SIZE | LENGTH | SLOPE |
|---------|--------|-----------|--------|-------|
| ST-1 | 84.60' | 12" | 19' | 0.43% |
| ST-2 | 80.50' | 12" | 19' | 0.43% |

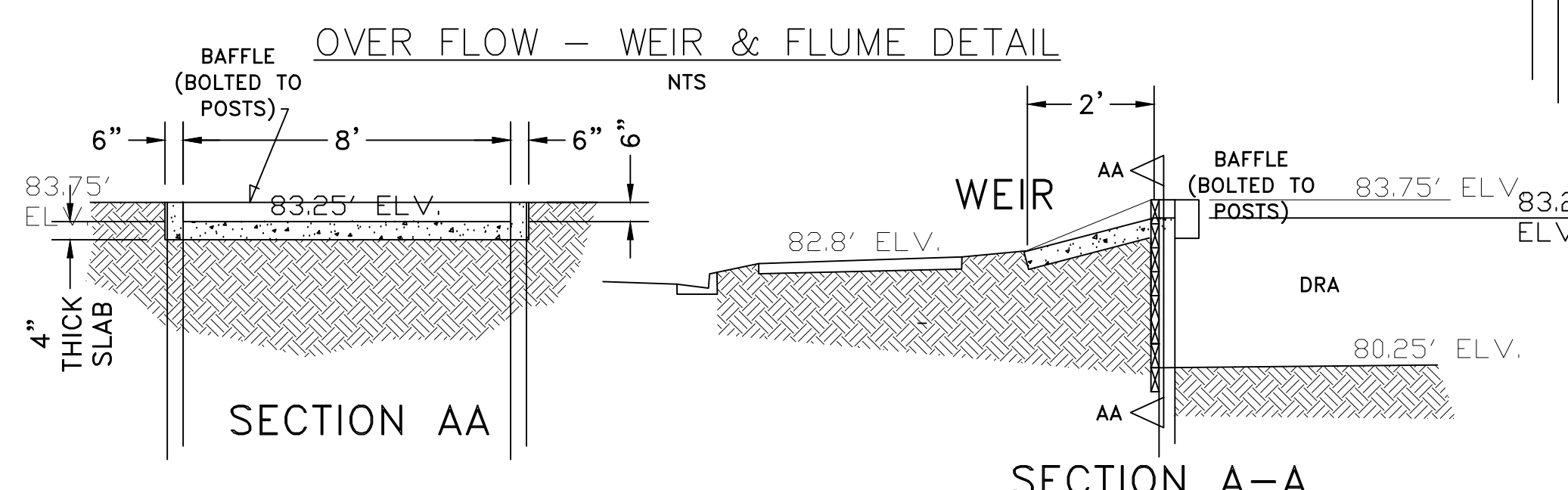
WATER SHED AND DRA TABLE 100YR-24HR

| WATER-SHEAD | DRA | CN | TOP A | MAX STAGE B | MAX STORAGE B | STORAGE TREATMENT VOLUME C | BOTTOM D | AVERAGE SHGWT E | CONFINING LAYER | | | | |
|-------------|------|-------|-----------|-------------|---------------|----------------------------|----------|-----------------|-----------------|-------|--------|--------|--------|
| 1 | 0.66 | DRA 1 | 82.5' +/- | 39 | 69.28 | 83.75' | 83.20' | 22,361.4 | 81.21' | 2,508 | 80.25' | 68.25' | 61.25' |
| 2 | 0.52 | DRA 2 | 85.7' +/- | 39 | 67.32 | 83.50' | 82.86' | 17,398.0 | 81.39' | 1,895 | 80.25' | 71.25' | 64.50' |

DISCHARGE TO OFFSITE

| PRE CONDITION | POST CONDITION |
|--------------------------|-------------------------|
| 25YR RATE = 2.63 CFS | 25YR RATE = 0.00 CFS |
| 25YR VOLUME = 6,344 cf | 25YR VOLUME 0.00 cf |
| 100YR RATE = 4.533 CFS | 100YR RATE = 1.653 CFS |
| 100YR VOLUME = 13,944 cf | 100YR VOLUME 2,144.3 cf |

MATCH EXISTING GROUND ELEVATION. CONTRACTOR SHALL CREATE BERM USING A-1 TO A-3 WELL DRAINING SOILS. BERM SHALL BE CONSTRUCTED AT A 4:1 SODDED SIDE SLOPE. SEE LANDSCAPE PLAN FOR MOUNDING AT DRA.



DRAINAGE STRUCTURE AND PIPE NOTE:
ALL DRAINAGE STRUCTURES AND STORM PIPES THAT ARE PLANNED FOR THIS SITE ARE SHOWN ON THE SITE PLAN. NO OFFSITE STRUCTURES EXIST OR ARE PROPOSED.

DRA FENCE NOTES:
SIDE SLOPES STEEPER THAN 4:1 MAY BE ALLOWED IF THE DRAINAGE RETENTION/DETENTION FACILITY IS ENCLOSED IN A CHAIN LINK FENCE WITH A MINIMUM HEIGHT OF FIVE FEET

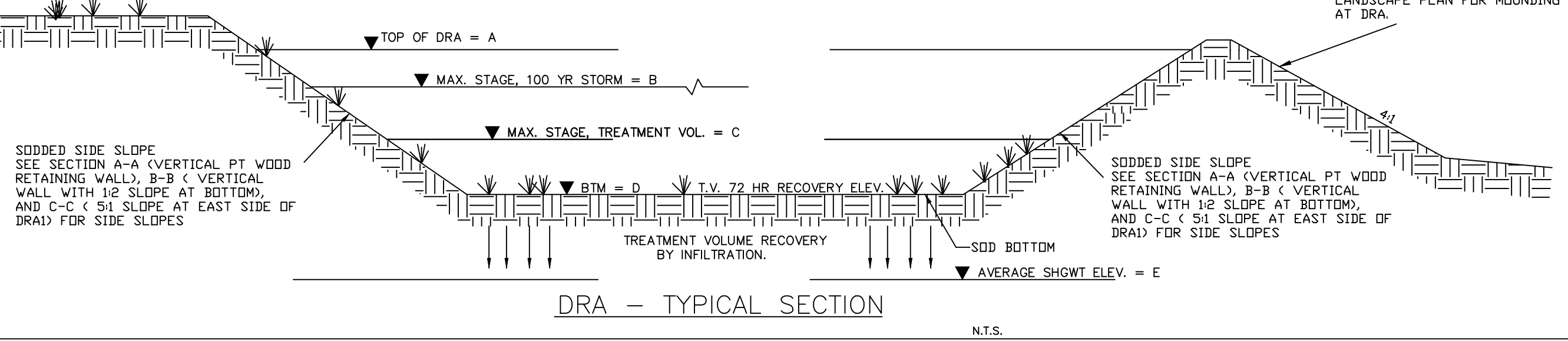
MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
CIVIL - STRUCTURAL - LAND PLANNING - GOLF COURSE DESIGN
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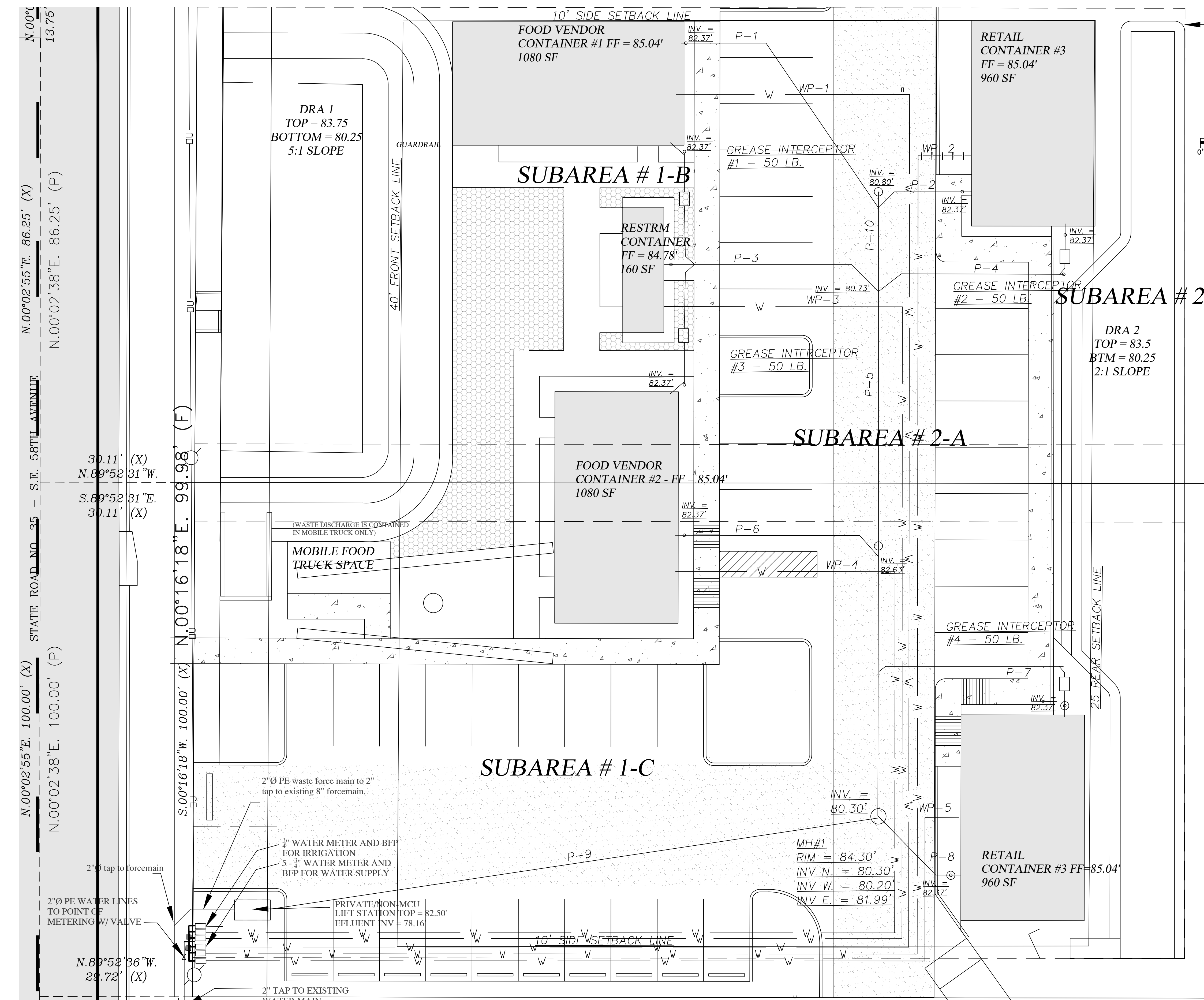
DRAINAGE PLAN

HUDSON DEVELOPMENT
MARION COUNTY, FLORIDA
SECTION 31, TWP-15, RNG-23
OCALA, FLORIDA

| No. | REVISION | DATE | APPROVED: | MCA | CHECK: | MCA | FILE: | HUDSON DEV... |
|-----|------------------------|---------|-----------|----------|---------|-----|---------------------|---------------|
| 3 | COUNTY & FDOT COMMENTS | 7-24-24 | DATE: | 5-3-23 | DESIGN: | MCA | PROJ. HUDSON DEV... | |
| 2 | COUNTY & FDOT COMMENTS | 6-25-24 | DATE: | 6-25-24 | DATE: | MCA | PROJ. HUDSON DEV... | |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: | MCA | FILE: | 22-029 |

SHEET C004

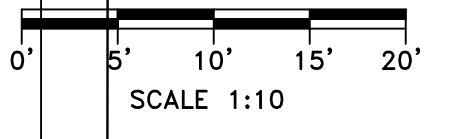




UTILITY NOTES:

1. THE SITE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN. CONTACT WITH THE UTILITY COMPANIES. CONTACT SHALL BE MAINTAINED THROUGHOUT THE LIFE OF THE PROJECT. ANY UTILITIES OBSTRUCTIVE TO THE CONTRACTOR'S OPERATION ARE TO BE RELOCATED BY OTHERS PRIOR TO CONSTRUCTION.
2. IT SHALL BE THE RESPONSIBILITY OF THE SITE CONTRACTOR TO COORDINATE ANY UNDERGROUND ELECTRIC AND/OR TELEPHONE PAVEMENT CROSSINGS TO ASSURE THAT THE DEPTH OF CONDUITS SHALL NOT CONFLICT WITH OTHER UNDERGROUND UTILITIES.
3. WATER SUPPLY SHALL BE PROVIDED BY CITY UTILITIES, AND THE DISTRIBUTION SYSTEM AS COVERED BY THE IMPROVEMENT PLANS, SHALL BE INSTALLED AT THE DEVELOPER'S EXPENSE. THE DESIGN SHALL INCLUDE ADEQUATE FIRE FLOW PROTECTION.
4. THE UTILITIES CONTRACTORS SHALL BE RESPONSIBLE FOR ACQUIRING ANY CONSTRUCTION PERMITS NECESSARY PRIOR TO CONSTRUCTION. UTILITY COMPANIES SHALL SUBMIT TO THE PROJECT ENGINEER FOR APPROVAL, A WRITTEN REQUEST TO UTILIZE ANY EASEMENTS SHOWN ON THESE PLANS OR IN AREAS NOT PRESENTLY DESIGNATED AS A UTILITY EASEMENT PRIOR TO CONSTRUCTION.
5. EXISTING TREES TO REMAIN SHALL HAVE ANY LOW LIMBS TRIMMED TO ALLOW AERIAL CLEARANCE FOR VEHICLES AND/OR AERIAL UTILITIES. REFER TO FDOT "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", SECTIONS 110-2.3 AND 110-3. AERIAL TRIMMING SHALL BE 18" MINIMUM ABOVE CENTERLINE GRADE OF ROAD. TRIMMING TO BE SUPERVISED BY A CERTIFIED ARBORIST.
6. ALL WATER SERVICE SHALL BE INSTALLED BY CONTRACTOR. BACK FLOW PREVENTORS SHALL BE INSTALLED ON THE CUSTOMER'S SIDE OF THE WATER METER BOX AT A MINIMUM OF 18" FROM FINAL GRADE TO BOTTOM OF BACKFLOW.
7. ANY MAIN OR WATER SERVICE 2 INCH OR ABOVE IN SIZE ARE TO HAVE GATE VALVES INSTALLED. ANY 2 INCH OR LARGER VALVE IS REQUIRED TO HAVE A VALVE TIE SHEET SUPPLIED WITH THE ASBUILT.
8. A DOUBLE SWEEP CLEAN-OUT IS TO BE INSTALLED AT PROPERTY LINE WHERE A MANHOLE IS NOT AVAILABLE. A CLEAN-OUT IS TO BE INSTALLED EVERY 75 FEET FROM THE POINT OF CONNECTION AND AT EACH BEND IN SEWER SERVICE.

UTILITY PLAN



SEWER CONSTRUCTION NOTES

- (SEWER DEMAND SEE CALCULATION FOR GPD)
1. ALL SEWER CONSTRUCTION SHALL CONFORM TO CURRENT WATER AND SEWER CONSTRUCTION FDEP OR FDOT STANDARDS.
 2. ALL OTHER SEWER SYSTEMS AND COMPONENTS SHALL COMPLY WITH THE REQUIREMENTS SHOWN BELOW. PROVIDE MINIMUM 48" COVER TO TOP OF PIPES FOR FORCE MAINS.
 3. PERFORM ALL WORK IN COMPLIANCE WITH THE STANDARD PLUMBING CODE AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 4. PIPE MATERIALS SHALL COMPLY WITH THE REQUIREMENTS AND STANDARDS SHOWN IN THE TABLE OF "WATER AND SEWER PIPE AND JOINT SPECIFICATIONS" IN THESE PLANS.
 5. INSTALL PVC PIPE PER PROCEDURES OUTLINED IN ASTM D2321. "UNDERGROUND INSTALLATION OF FLEXIBLE THERMOPLASTIC SEWER PIPE", AND UNI-BELL SPECIFICATION B-5.
 6. SLOPED PIPE AND FITTINGS IN THE TRENCH TRUE TO LINE AND GRADE AND WITH THE PIPE BOTTOM UNIFORMLY AND CONTINUOUSLY SUPPORTED BY A FIRM FOUNDATION AND BEDDING. LAY PIPE WITH THE BELLS UPSTREAM.
 7. REMOVE BURRS AND SMOOTHLY BEVEL ALL CUT ENDS OF PIPE.
 8. INSTALL 14 GA. COPPER LOCATING WIRE ON ALL NONMETALLIC FORCE MAINS.
 9. LAMP TEST COMPLETELY ALL SEWER MAINS. REFUSE ANY PIPE SHOWING LESS THAN FULL ROUND SECTION.
 10. TEST ALL PIPES FOR LEAKAGE IN ACCORDANCE WITH VOLUME III CITY WATER AND SEWER UTILITIES, "RECOMMENDED PRACTICE FOR LOW PRESSURE AIR TESTING." CORRECT ANY SECTION HAVING A PRESSURE DROP FROM 3.5 TO 3.0 PSI IN LESS THAN 5 MINUTES.
 11. TEST ALL NEWLY INSTALLED SEWER FORCE MAINS IN ACCORDANCE WITH SECTION 4, "HYDROSTATIC TESTING" OF AWWA C-600. PRESSURE TEST AT 150 PSI MINIMUM FOR A MINIMUM DURATION OF TWO HOURS.
 12. RECORD (ON RECORD DRAWINGS) THE DISTANCE TO ALL WYES AND TERMINAL POINTS FROM CENTER OF MANHOLE IMMEDIATELY DOWNSTREAM.
 13. SEE FORCE MAIN THRUST BLOCK DETAILS.
 14. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS THE MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND SANITARY SEWER MAINS SHALL COMPLY WITH RULES 62-604.400(2)(g) - (f), F.A.C. AND 62-604.400 (3), F.A.C. SEE SEPARATION NOTE ON THIS PAGE.
 15. NO LIVE OAK TREES OR AGGRESSIVELY ROOTED LANDSCAPING SHALL BE INSTALLED WITHIN 30 FEET OF SEWER APPURTENANCES.

WATER CONSTRUCTION NOTES:

- (WATER DEMAND SEE CALCULATIONS FOR GPD)
1. ALL WATER CONSTRUCTION SHALL CONFORM TO CURRENT WATER AND SEWER CONSTRUCTION FDEP STANDARDS.
 2. PERFORM ALL WORK IN COMPLIANCE WITH STANDARD PLUMBING CODE AND IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
 3. PIPE MATERIALS SHALL COMPLY WITH THE REQUIREMENTS AND STANDARDS SHOWN IN THE TABLE OF "WATER AND SEWER PIPE AND JOINT SPECIFICATIONS" IN THESE PLANS.
 4. PROVIDE A MINIMUM OF 36" COVER TO TOP OF PIPE FOR ALL MAINS.
 5. PROVIDE A MINIMUM OF 48" COVER FOR ALL SERVICE LINES WITHIN THE R/W AND 36" OUTSIDE THE R/W.
 6. GATE VALVES SHALL BE RESILIENT-SEALED GATE VALVES COMPLYING WITH AWWA C-509.
 7. JOIN SOLVENT-WELD PIPE AND FITTING IN ACCORDANCE WITH ASTM D2855 "MAKING SOLVENT CEMENTED JOINTS WITH PVC AND FITTINGS" SO THAT MATING SURFACES ARE TIGHTLY FUSED.
 8. INSTALL THRUST BLOCKING AT ALL DIRECTION CHANGES OR DEAD ENDS.
 9. INSTALL 14 GA. COPPER LOCATING WIRE ON ALL NON-METALLIC WATER MAINS AND SERVICES.
 10. ALL PVC SHALL COMPLY WITH THE REQUIREMENTS OF NSF 14 AND SHALL BE LABELED WITH THE LOGO "NSF - POTABLE WATER".
 11. PROVIDE MANUAL AIR RELEASE VALVES AT ALL LOCATIONS SHOWN, AND AT ANY OTHER HIGH POINTS IN LINE.
 12. ALL NEW AND RELOCATED WATER MAINS, FITTINGS, AND SERVICES SHALL CONTAIN NO MORE THAN EIGHT PERCENT LEAD. ALL SOLDERERS AND FLUX FOR NEW AND RELOCATED WATER LINES SHALL CONTAIN NO MORE THAN 8.2 PERCENT LEAD.
 13. TEST ALL NEWLY INSTALLED WATER MAINS IN ACCORDANCE WITH SECTION 4, "HYDROSTATIC TESTING" OF AWWA C-805. PRESSURE TEST AT 150 PSI MINIMUM FOR A MINIMUM TWO HOUR DURATION.
 14. DISINFECT SYSTEM PER AWWA C-851. FOLLOWING COMPLETION OF THE SYSTEM, OBTAIN SATISFACTORY BACTERIOLOGICAL TESTS FOR TWO CONSECUTIVE DAYS AT SAMPLE POINTS INDICATED ON THE PLANS. SUBMIT COPIES OF BACTERIOLOGICAL TEST RESULTS TO ENGINEER AND TO APPROPRIATE FDEP DISTRICT OFFICE WITHIN 30 DAYS OF TESTS. REFERENCE PERMIT NUMBER ON COVER SHEET OF THIS PLAN.
 15. THE CONTRACTOR SHALL PROVIDE AND KEEP IN OPERATION ENOUGH SUITABLE PUMPING EQUIPMENT WHENEVER NECESSARY OR WHENEVER DIRECTED TO DO SO BY THE ENGINEER, FOR DE-WATERING OF EXCAVATIONS, WHENEVER PIPE LAYING IS NOT IN PROGRESS. CLOSE THE OPEN ENDS OF THE PIPE EITHER WITH A WATER TIGHT PLUG OR BY OTHER MEANS APPROVED BY THE ENGINEER. IF THERE IS WATER IN A TRENCH, LEAVE THIS SEAL IN PLACE UNTIL THE TRENCH HAS BEEN PUMPED COMPLETELY DRY. TAKE EVERY PRECAUTION TO KEEP WATER OR FOREIGN MATERIAL FROM GETTING INTO THE PIPE WHILE IT IS BEING PLACED IN THE TRENCH.
 16. SEE PLAN/PROFILES FOR STATION OF HIGH POINT FOR LOCATING AIR RELEASE VALVES.
 17. WHERE POTABLE WATER AND SANITARY SEWER MAINS CROSS THE MINIMUM VERTICAL AND HORIZONTAL SEPARATION BETWEEN POTABLE WATER AND SANITARY SEWER MAINS SHALL COMPLY WITH RULES 62-604.400(2)(g) - (f), F.A.C. AND 62-604.400 (3), F.A.C. SEE SEPARATION NOTE ON THIS PAGE.
 18. THIS SITE MUST MEET THE MINIMUM ISO FIRE HYDRANT COUNT AND PRESSURE REQUIREMENTS.
 19. IRRIGATION LINES AND SYSTEMS SHALL BE IN COMPLIANCE WITH THE MARION COUNTY LDC.
 20. NO LIVE OAKS TREES OR AGGRESSIVELY ROOTED LANDSCAPING SHALL BE INSTALLED WITHIN 30 FEET OF EXISTING OR PROPOSED WATER APPURTENANCES.

SEPARATION NOTE:

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 AT LEAST 6 INCHES ABOVE THE TOP OF THE SEWER, NEW OR RELOCATED, UNDERGROUND WATER MAIN CROSSING ANY EXISTING OR PROPOSED GRAVITY- OR VACUUM-TYPE SANITARY SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST 6 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 STORM WATER 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. AT THE UTILITY CROSSINGS DESCRIBED 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 CROSSINGS, THE PIPES SHALL BE ABANDONED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III 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.

| GREASE INTERCEPTOR CALCULATION | | | | | | |
|--------------------------------|-------|----|----|-------|-----|---------------|
| MARK | SEATS | GS | HR | HR/12 | LF | TOTAL |
| A | 28 | 10 | 10 | 0.83 | .75 | 174.3 GALLONS |

INTERCEPTOR EQUATION: (GS)(HR/12)(LF) = TOTAL GALLONS
 MARK A = SINGLE SERVICE (PAPER, PLASTIC, NO CUTLERY OR DISHES)
 MAX GPM = 2.4 ; PEAK FLOW FACTOR = 4 = 9.6 GPM/CONTAINER SET UP.

SANITARY PIPE TABLE

| MARK | DIA. | LENGTH | SLOPE (MIN) | TYPE |
|------|------|--------|-------------|------------|
| P-1 | 4" | 54' | 1/4" PER FT | SCH 40 PVC |
| P-2 | 4" | 19' | 1/4" PER FT | |
| P-3 | 6" | 37' | 1/4" PER FT | |
| P-4 | 4" | 38' | 1/4" PER FT | |
| P-5 | 8" | 120' | 0.42% | |
| P-6 | 4" | 35' | 1/4" PER FT | |
| P-7 | 4" | 38' | 1/4" PER FT | |
| P-8 | 4" | 20' | 1/4" PER FT | |
| P-9 | 8" | 118' | 0.42% | |
| P-10 | | | | |
| P-11 | | | | |
| P-12 | | | | |
| P-13 | | | | |
| P-14 | | | | |
| P-15 | | | | |
| P-16 | | | | |

WATER MAIN PIPE TABLE

| MARK | DIA. | LENGTH | TYPE |
|------|------|--------|------------|
| WP-1 | 2" | 346' | SCH 40 PVC |
| WP-2 | 2" | 304' | |
| WP-3 | 2" | 304' | |
| WP-4 | 2" | 249' | |
| WP-5 | 2" | 174' | |

INTERCEPTOR SERVICE LINES:

INSTALL 3" SCH 40 PVC DIA. SERVICE LINES TO & FROM INTERCEPTORS TO 4" LATERALS. SEE ARCHITECTURAL & MEP PLANS FOR COLLECTION LINES UNITS.

MILES C ANDERSON PE
 FLORIDA PROFESSIONAL ENGINEER # 93885
 CA # 000949
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WATER PIPE AND JOINT SPECIFICATIONS

| FUNCTION | DIA. | MAT'L | PIPE | JOINTS | GASKETS | FITTINGS |
|---------------|-------------------|--------|--|--|------------------------------------|--|
| WATER MAIN | LESS THAN 4" | PVC | SCHEDULE 40 ASTM D-1784 ASTM D-1785 | SOLVENT - WELD SOCKET TYPE ASTM D-2466 | SOLVENT CEMENT FOR PVC ASTM D-2564 | SOLVENT - WELD SOCKET TYPE ASTM D-2466 |
| WATER MAIN | 4" AND LARGER | D.I.P. | PRESSURE CLASS DIP CAST IRON O.D. | PUSH ON ASTM F-3139 | RUBBER ASTM F-477 | M.J. DUCTILE IRON AWWA C-111 AND AWWA C-110 OR C-153 |
| WATER SERVICE | 1/2" TO 2" LARGER | PVC | PE3408, SDR-9 200 PSI, CTS-00 AWWA C-901 ASTM D-2737 | N/A | N/A | CTS-00 COMPRESSION FITTINGS |

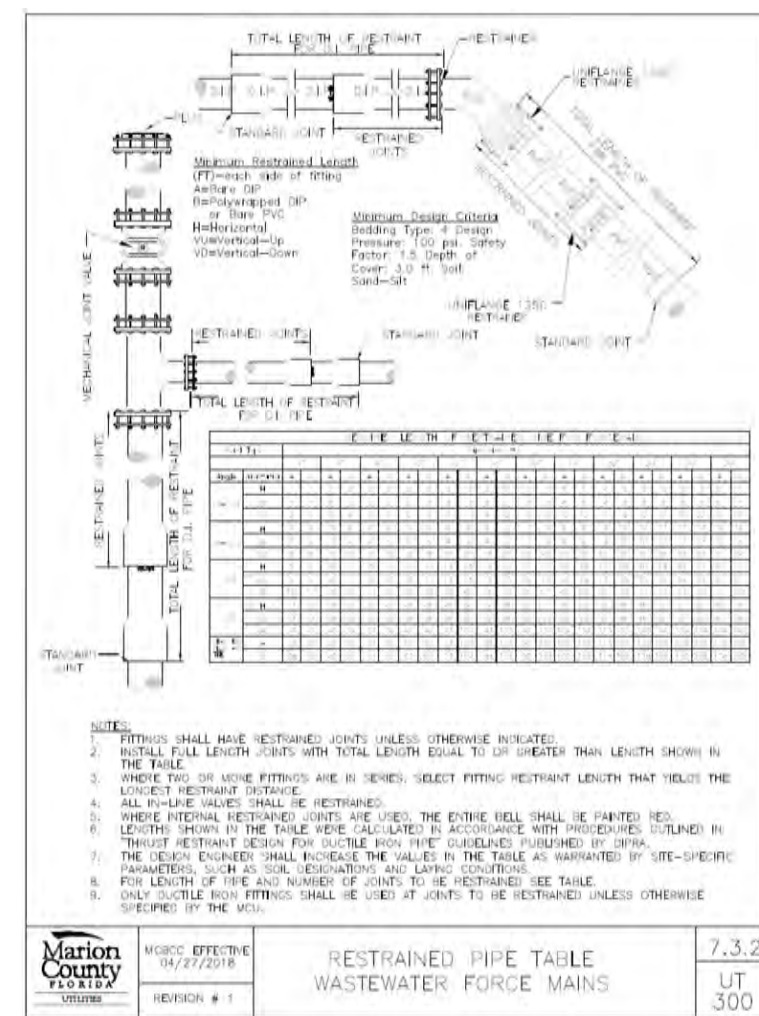
SEWER PIPE AND JOINT SPECIFICATIONS

| FUNCTION | DIA. | MAT'L | PIPE | JOINTS | GASKETS | FITTINGS |
|---------------------|---------------|-------|---|--|------------------------------------|--|
| SEWER MAIN | 6" AND LARGER | PVC | ASTM D-3034 (UNI-BELL) B-4 SDR 58 | PUSH ON ASTM D-3212 | RUBBER ASTM F-477 | MOLDED PVC ASTM D-4034 |
| SEWER SERVICE | 6" | PVC | ASTM D-3034 (UNI-BELL) B-4 SDR 58 | PUSH ON ASTM D-3212 | RUBBER ASTM F-477 | MOLDED PVC ASTM D-4034 |
| SANITARY FORCE MAIN | LESS THAN 6" | PVC | AWWA C-900 (DR18) ASTM D-1784 (UNI-BELL) B-4 SDR 58 | SOLVENT - WELD SOCKET TYPE ASTM D-2466 | SOLVENT CEMENT FOR PVC ASTM D-2564 | SOLVENT - WELD SOCKET TYPE ASTM D-2466 |
| SANITARY MAIN | 4" AND LARGER | PVC | AWWA C-900 (DR18) ASTM D-2941 SDR 21 | PUSH ON ASTM D-3139 | RUBBER ASTM F-477 | M.J. DUCTILE IRON AWWA C-110 OR C-153 |

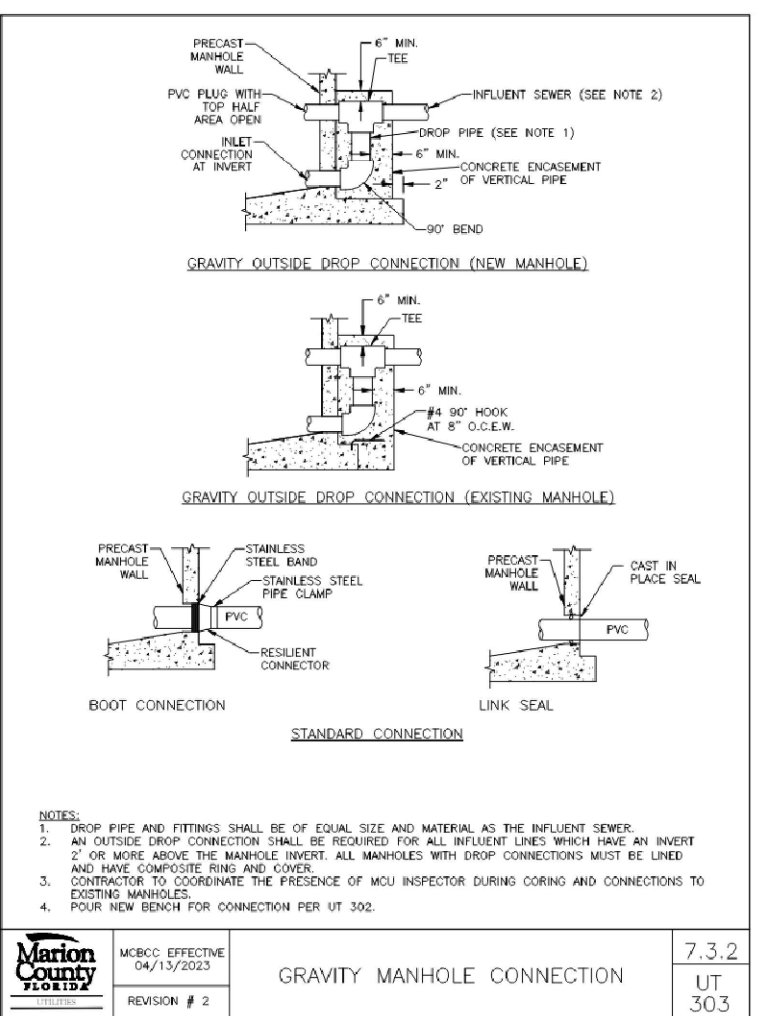
MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
 CIVIL - STRUCTURAL - LAND PLANNING - GOLF COURSE DESIGN
 1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
 OCALA, FLORIDA 34470 FAX (352) 629-4402

UTILITY PLAN

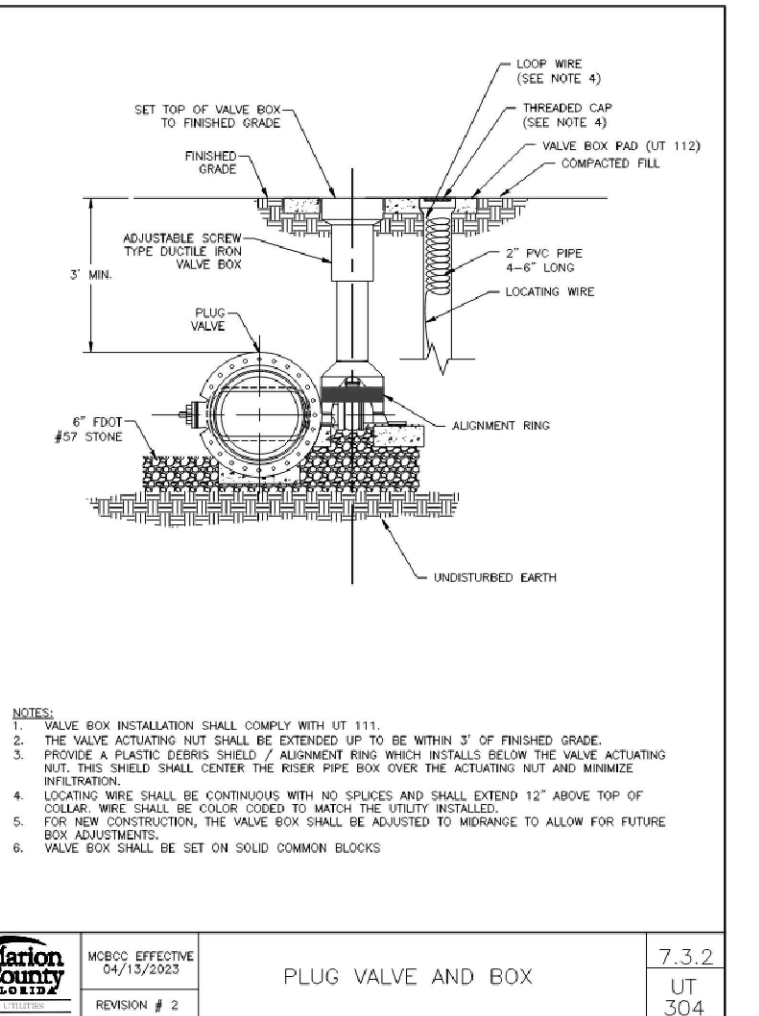
| HUDSON DEVELOPMENT MARION COUNTY, FLORIDA SECTION 31, TWP-15, RNG-23 OCALA, FLORIDA | | | | | | |
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| No. | REVISION | DATE | APPROVED: | MCA CHECK: | FILE: | SHEET |
| 2 | COUNTY & FDOT COMMENTS | 6-25-24 | DATE: | 5-3-23 | DESIGN: MCA | PROJ. HUDSON DEV... |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAWN: MCA | 22-029 |
| No. | REVISION | DATE | APPROVED: | MCA CHECK: | FILE: | HUDSON DEV... |



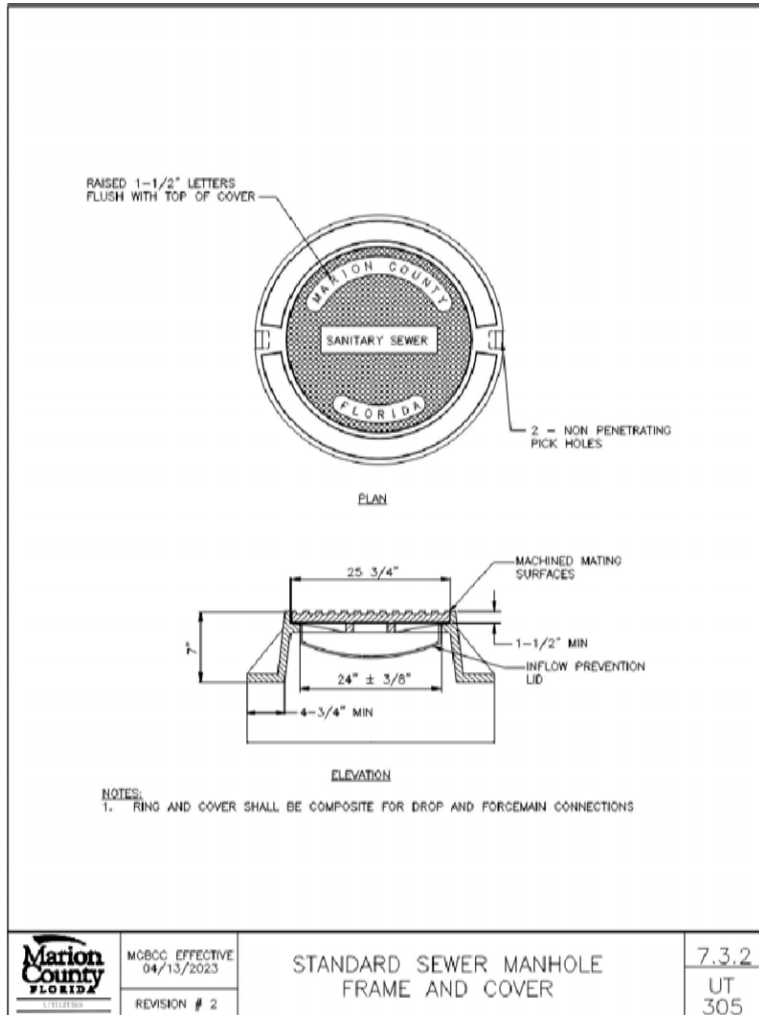
RESTRAINED PIPE TABLE
WASTEWATER FORCE MAINS
MISC. EFFECTIVE 04/15/2023
REVISION # 1
UT 300



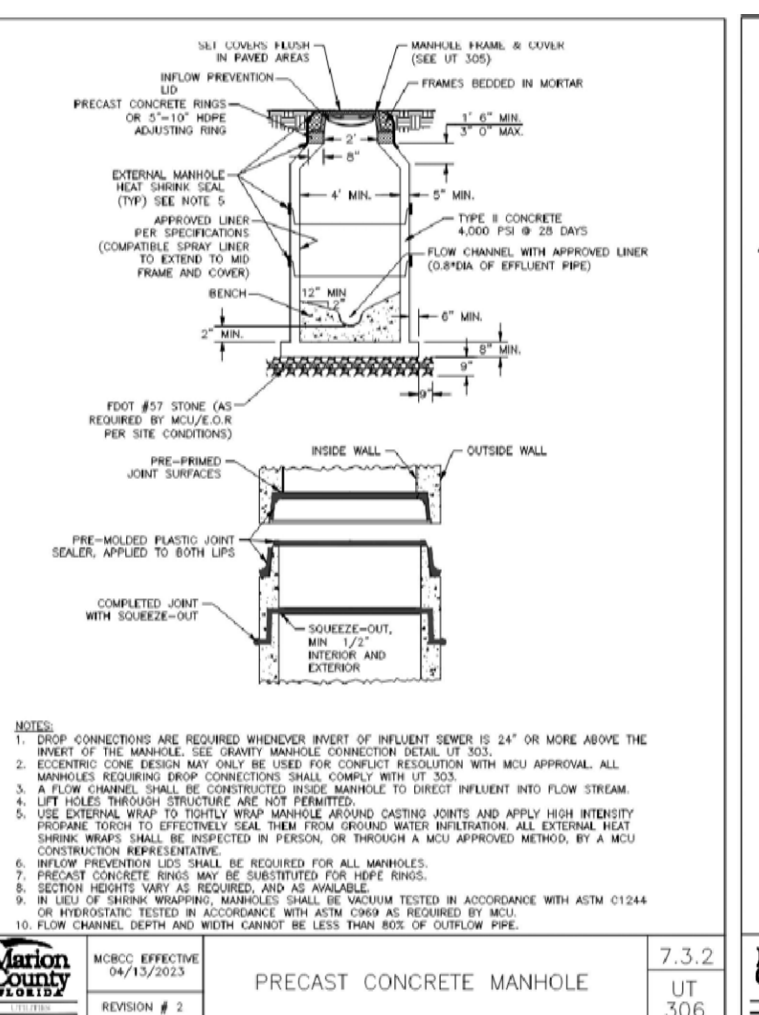
GRAVITY MANHOLE CONNECTION
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 303



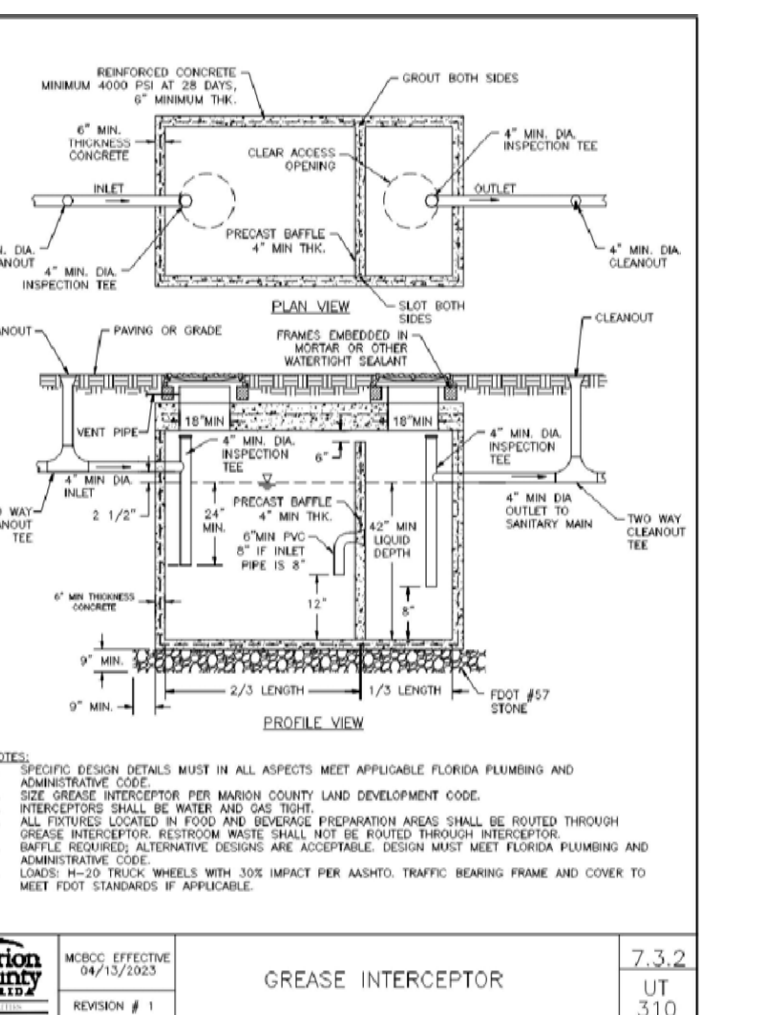
PLUG VALVE AND BOX
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REVISION # 1
UT 304



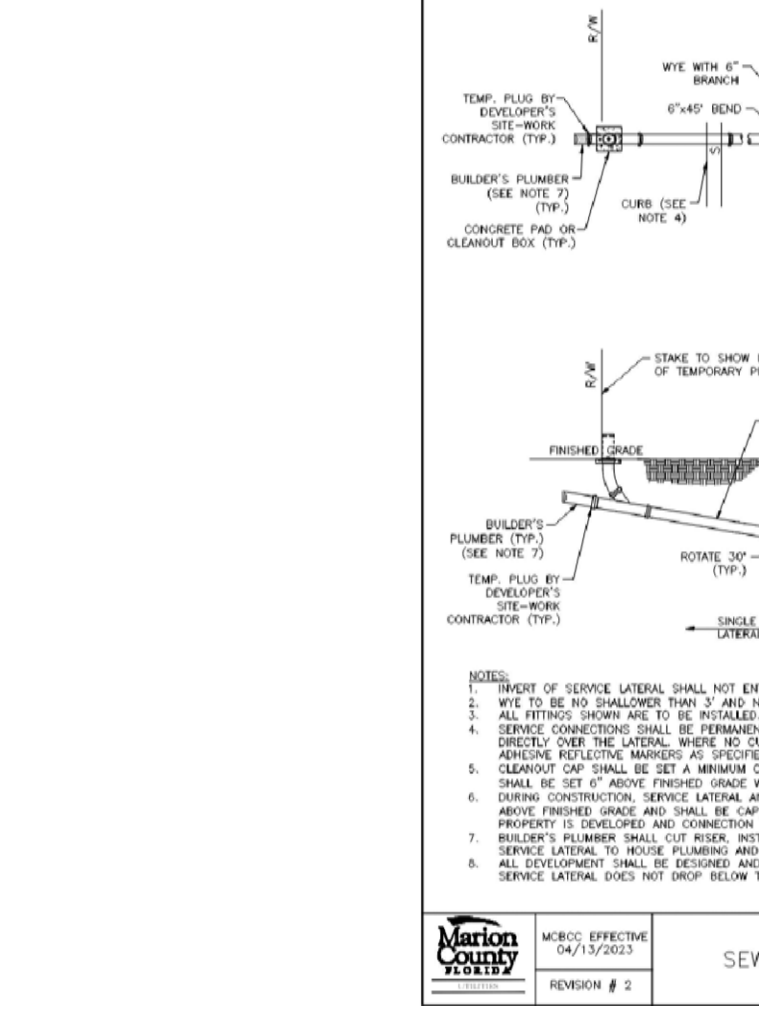
STANDARD SEWER MANHOLE
FRAME AND COVER
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 305



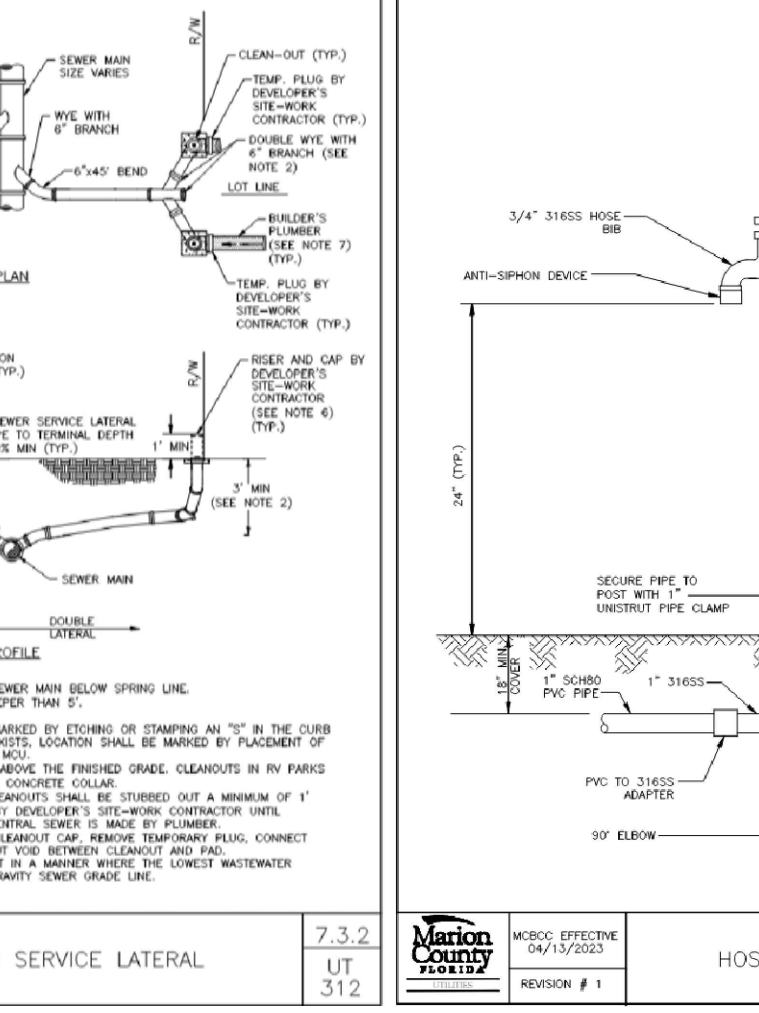
PRECAST CONCRETE MANHOLE
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 306



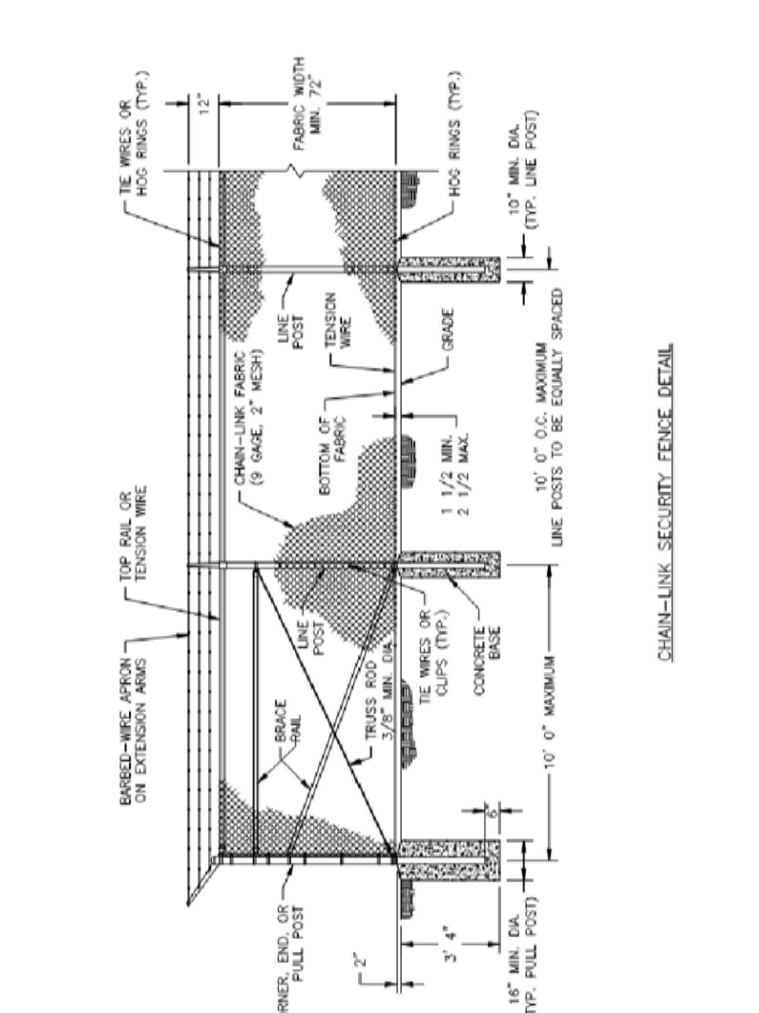
GREASE INTERCEPTOR
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REVISION # 1
UT 310



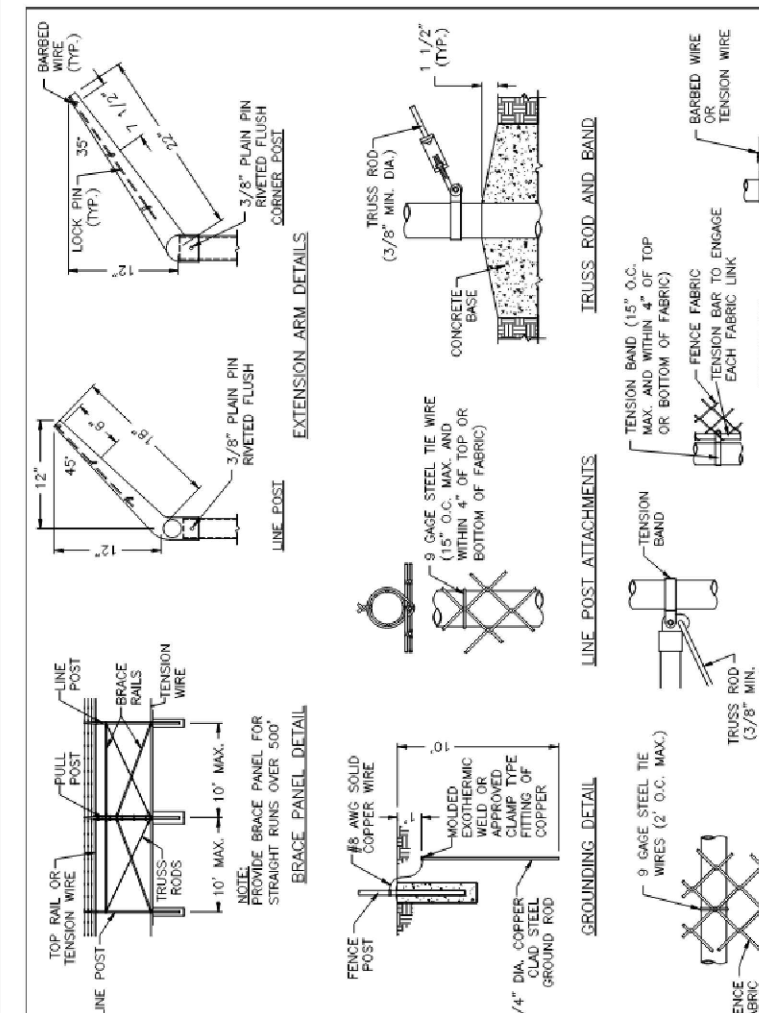
SEWER SERVICE LATERAL
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 312



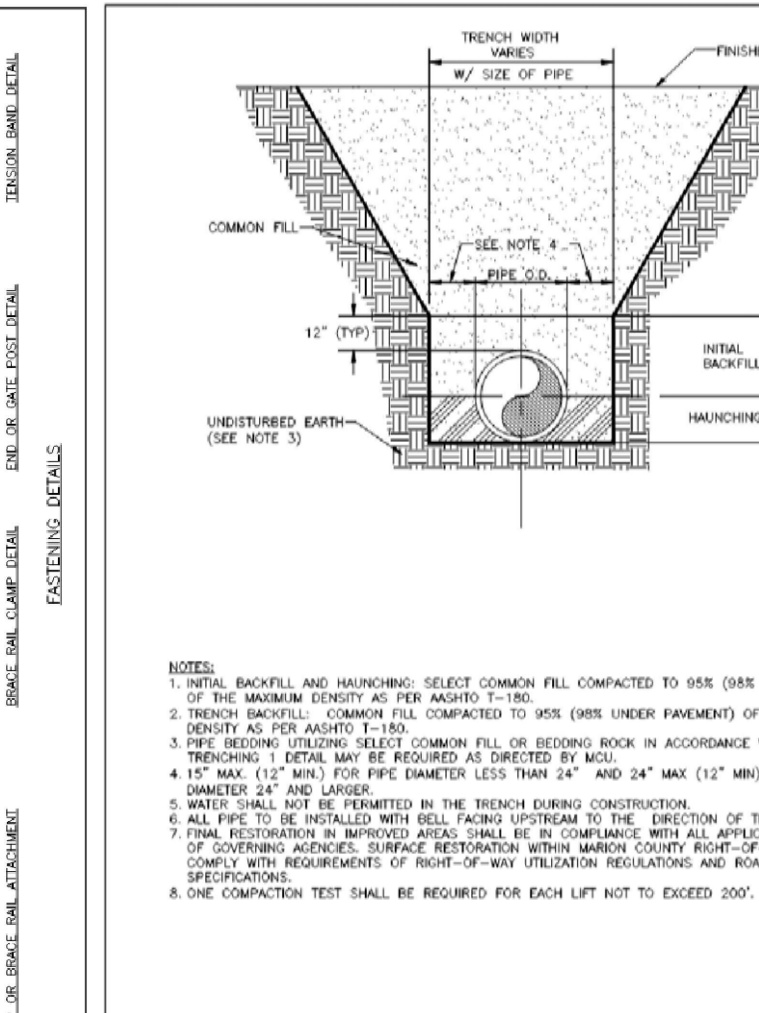
HOSE BIBB ASSEMBLY
MISC. EFFECTIVE 04/15/2023
REVISION # 1
UT 508



CHAIN LINK FENCE
MISC. EFFECTIVE 04/15/2023
REVISION # 1A
UT 100



CHAIN LINK FENCE ACCESSORIES
MISC. EFFECTIVE 04/15/2023
REVISION # 1A
UT 101



BEDDING AND TRENCHING 2
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 103

WATER & SEWER CONSTRUCTION AND MAINTENANCE NOTE:
THE UNDERGROUND WATER AND SEWER SYSTEMS CONSTRUCTED ON THIS SITE SHALL BE CONSTRUCTED, TESTED AND INSPECTED IN ACCORDANCE WITH THE FOLLOWING:

SEWER SYSTEM:
MARION COUNTY UTILITIES LAND DEVELOPMENT CODE FOR CONSTRUCTION OF STREETS, STORMWATER, TRAFFIC, WATER AND SEWER INFRASTRUCTURE.
CONSTRUCT ALL GRAVITY SEWER 8" OR ABOVE SEWER MAIN TO COUNTY STANDARDS. INSPECTIONS WILL BE PERFORMED BY THE COUNTY WATER AND SEWER DEPARTMENT.

STATE OF FLORIDA "STANDARD PLUMBING CODE"
ALL GRAVITY SEWER SERVICES 6" OR LESS FROM THE FIRST CLEANOUT UPSTREAM FROM THE 8" OR ABOVE GRAVITY SEWER MAIN WILL BE CONSTRUCTED TO FLORIDA STANDARD PLUMBING CODE REQUIREMENTS. INSPECTION AND TESTING WILL BE PERFORMED BY THE COUNTY BUILDING DEPARTMENT. THESE FACILITIES WILL BE MAINTAINED BY THE DEVELOPMENT.

WATER SYSTEM:
MARION COUNTY UTILITIES LAND DEVELOPMENT CODE FOR CONSTRUCTION OF STREETS, STORMWATER, TRAFFIC, WATER AND SEWER INFRASTRUCTURE.
CONSTRUCT ALL POTABLE WATER MAINS AND SERVICES, UP TO THE POINT OF METERING, TO COUNTY STANDARDS.
INSPECTIONS WILL BE PERFORMED BY THE COUNTY WATER AND SEWER DEPARTMENT.
ALL FIRE MAINS AND HYDRANTS, FROM THE COUNTY WATER MAIN TO WITHIN FIRE FEET (5') OF THE BUILDING, SHALL BE CONSTRUCTED TO COUNTY STANDARDS OR NFPA 234 AS REQUIRED. INSPECTION AND TESTING WILL BE PERFORMED BY THE CITY WATER AND SEWER DEPARTMENT.

STATE OF FLORIDA "STANDARD PLUMBING CODE"
ALL WATER SERVICES DOWNSTREAM FROM THE POINT OF METERING SHALL BE CONSTRUCTED TO FLORIDA STANDARD PLUMBING CODE REQUIREMENTS. INSPECTION AND TESTING WILL BE PERFORMED BY THE COUNTY BUILDING DEPARTMENT. THESE FACILITIES WILL BE MAINTAINED BY THE DEVELOPMENT.

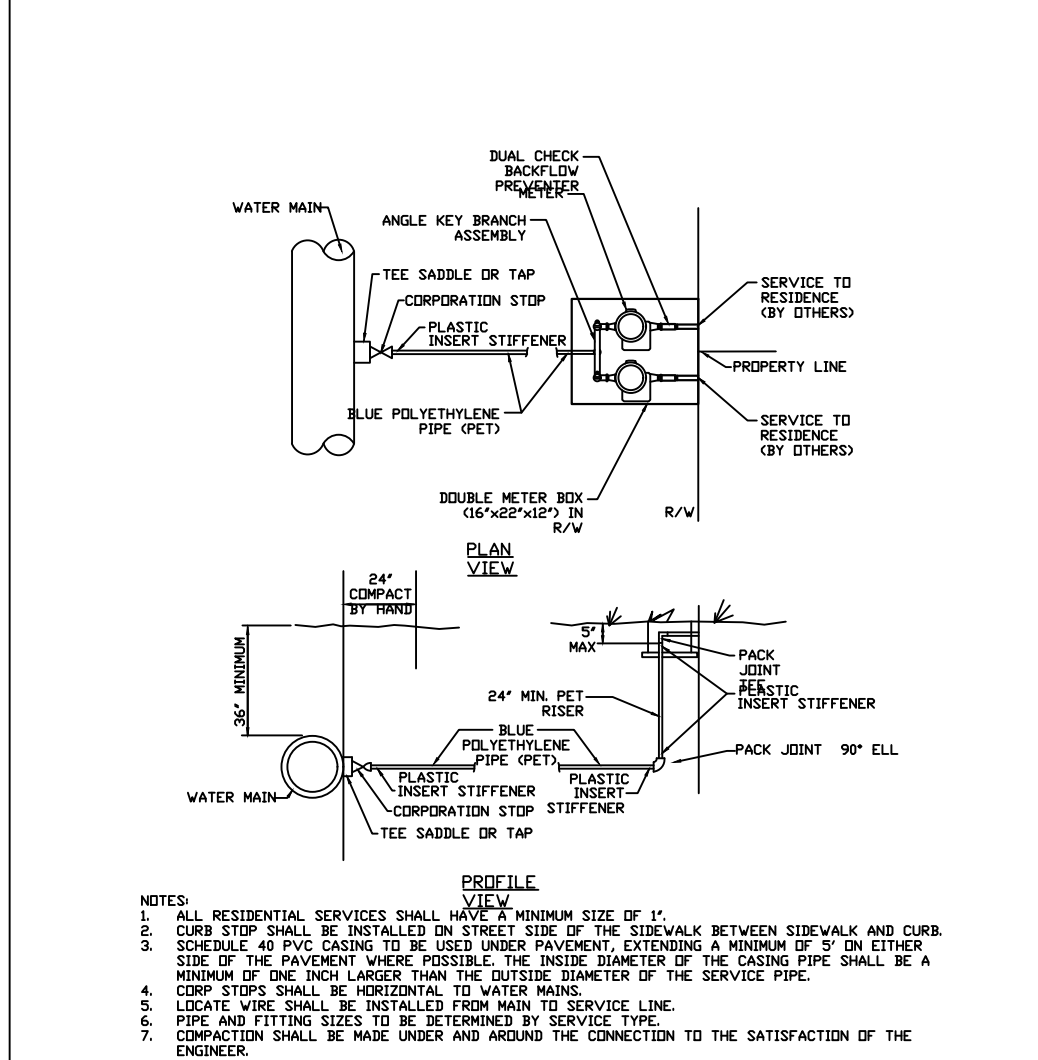
REUSE SYSTEM:
MARION COUNTY UTILITIES LAND DEVELOPMENT CODE FOR CONSTRUCTION OF STREETS, STORMWATER, TRAFFIC, WATER AND SEWER INFRASTRUCTURE.
CONSTRUCT ALL REUSE MAINS AND SERVICES, UP TO THE POINT OF METERING, TO COUNTY STANDARDS. INSPECTIONS WILL BE PERFORMED BY THE COUNTY WATER AND SEWER DEPARTMENT.

STATE OF FLORIDA "STANDARD PLUMBING CODE"
ALL REUSE SERVICES DOWNSTREAM FROM THE POINT OF METERING SHALL BE CONSTRUCTED TO FLORIDA STANDARD PLUMBING CODE REQUIREMENTS. INSPECTION AND TESTING WILL BE PERFORMED BY THE COUNTY BUILDING DEPARTMENT. THESE FACILITIES WILL BE MAINTAINED BY THE DEVELOPMENT.

PRE-CONSTRUCTION MEETING REQUIRED:
PRIOR TO ANY UNDERGROUND WATER, SEWER OR REUSE CONSTRUCTION ON THIS SITE THE CONTRACTOR SHALL SET UP AN ON-SITE MEETING WITH THE MARION COUNTY PROJECT INSPECTORS (352) 307-6000 TO DISCUSS SHOP DRAWINGS, INSTALLATION, INSPECTION, TESTING AND AS-BUILT REQUIREMENTS.

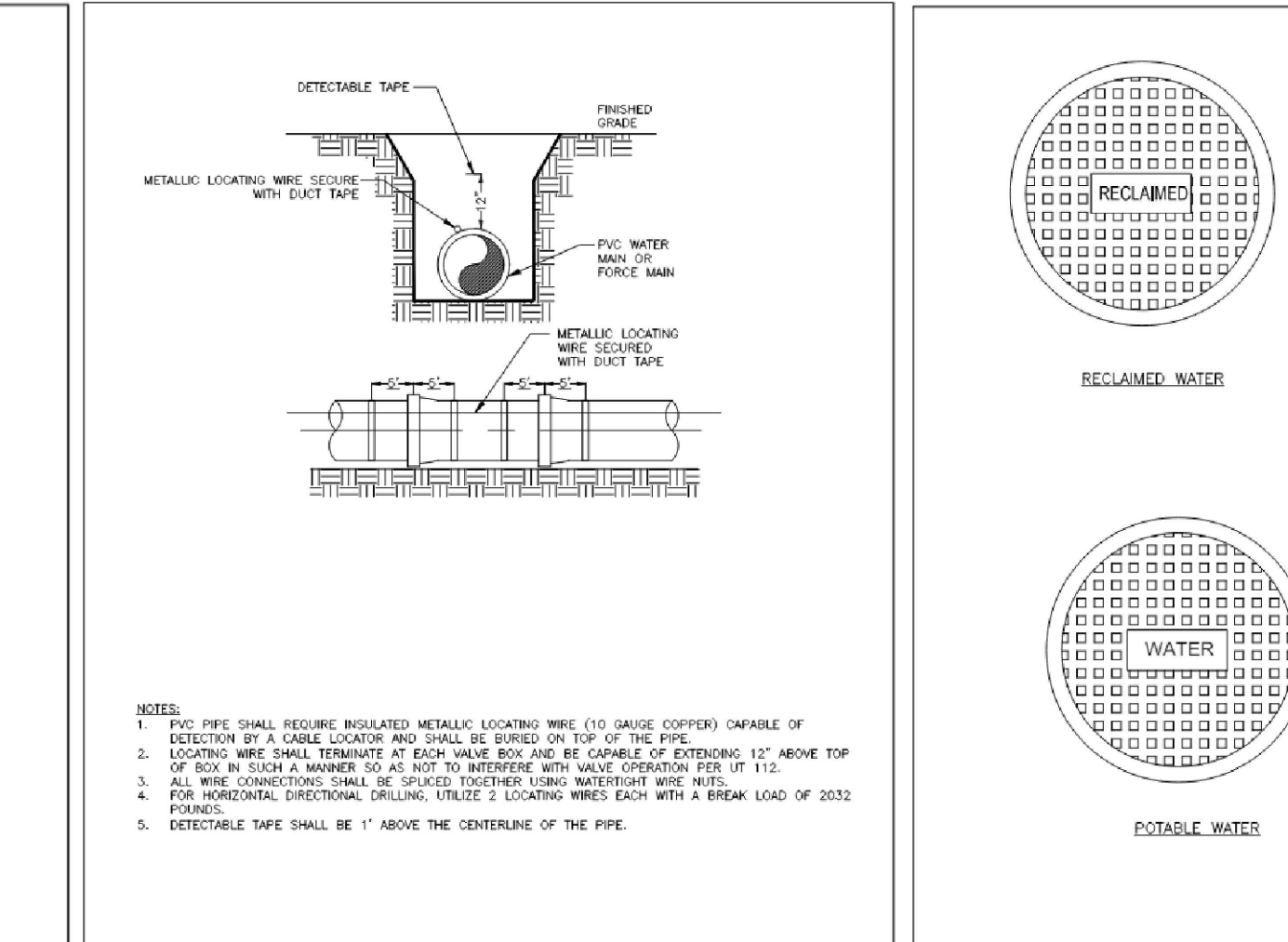
WATER & SEWER NOTE:
1. AS-BUILT MEETING THE MARION COUNTY WATER AND SEWER CONSTRUCTION MANUAL REQUIREMENTS ARE TO BE SUPPLIED TO THE MCU PRIOR TO ISSUANCE OF THE C.O.
2. ALL WATER AND/OR SEWER CONSTRUCTION SHALL CONFORM TO THE CURRENT WATER AND SEWER CONSTRUCTION MANUAL.
3. ALL EXISTING OR PROPOSED WATER, SEWER OR REUSE APPURTENANCES AFFECTED BY THE DEVELOPMENT OF THIS SITE ARE TO BE RAISED TO THE FINAL GRADE PRIOR TO THE ISSUANCE OF THE C.O.
4. COMMERCIAL WATER SERVICES ARE TO HAVE A MINIMUM SIZE OF 2 INCH PIPING.
5. WATER SERVICE PIPING PRIOR TO THE WATER METER BOX IS TO BE SHOWN AS POLYETHYLENE (PE) MATERIAL.

COMMERCIAL IMPACT FEE NOTE:
1. THE COMMERCIAL SOLID WASTE IMPACT FEE SHALL BE CALCULATED, DUE AND PAYABLE PRIOR TO MCU PERMITTING ISSUING THE BUILDING PERMIT.

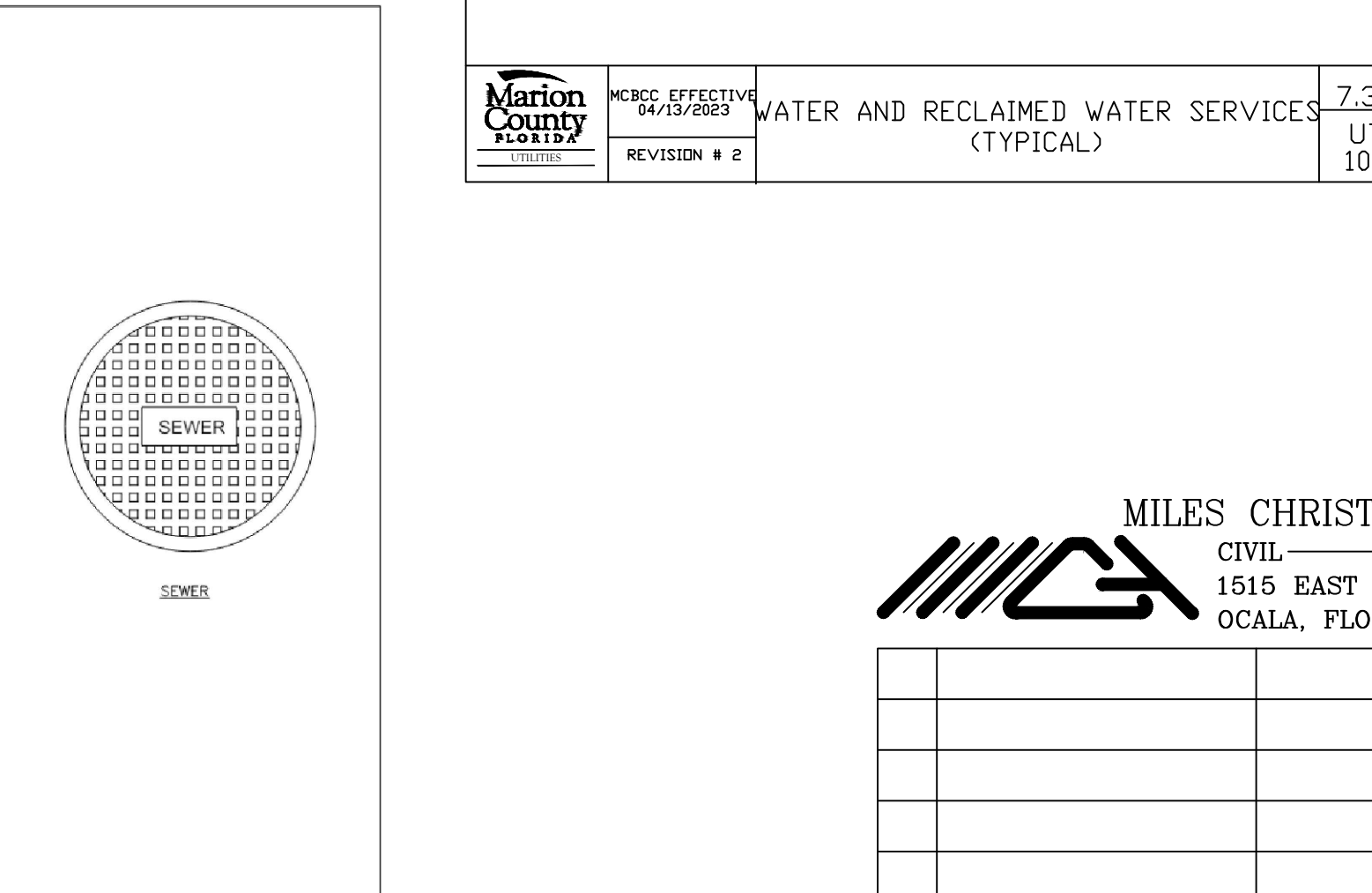


TEMPORARY JUMPER CONNECTION
MISC. EFFECTIVE 04/15/2023
REVISION # 1
UT 203

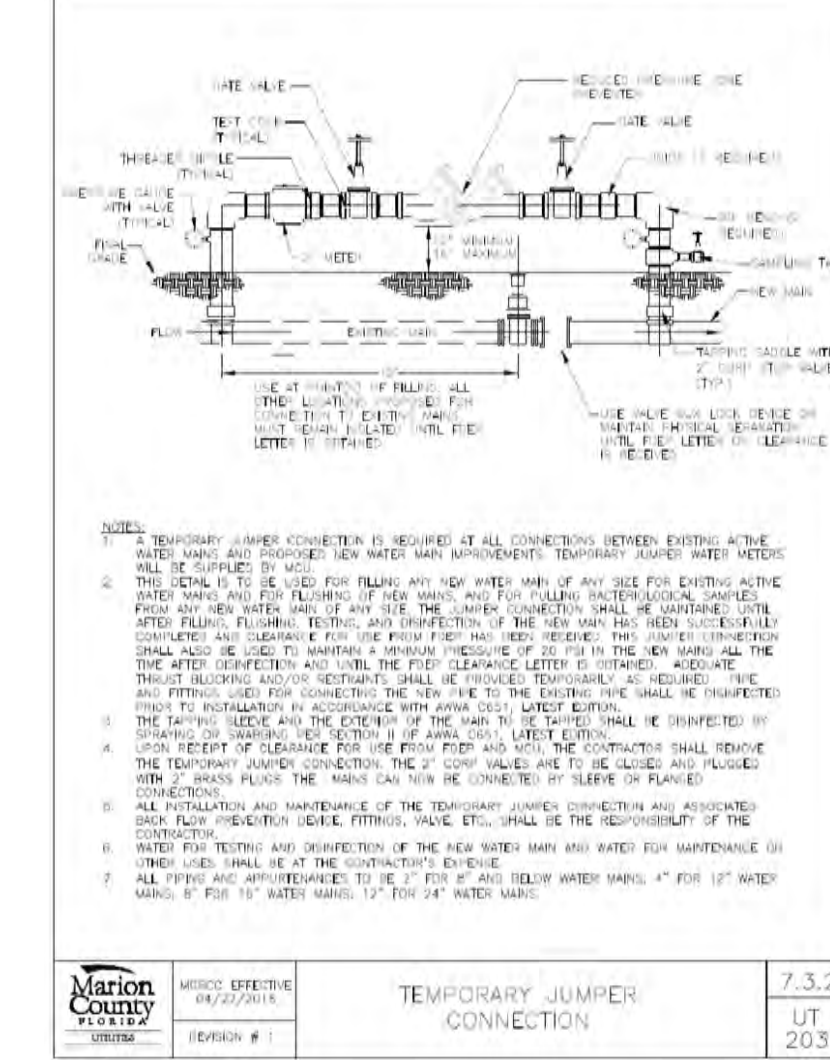
WATER AND RECLAIMED WATER SERVICES (TYPICAL)
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 107



PIPE LOCATING WIRE AND DETECTABLE TAPE
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 104



TYPICAL VALVE BOX COVER
MISC. EFFECTIVE 04/15/2023
REVISION # 1A
UT 110



SEWER SERVICE LATERAL
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 312

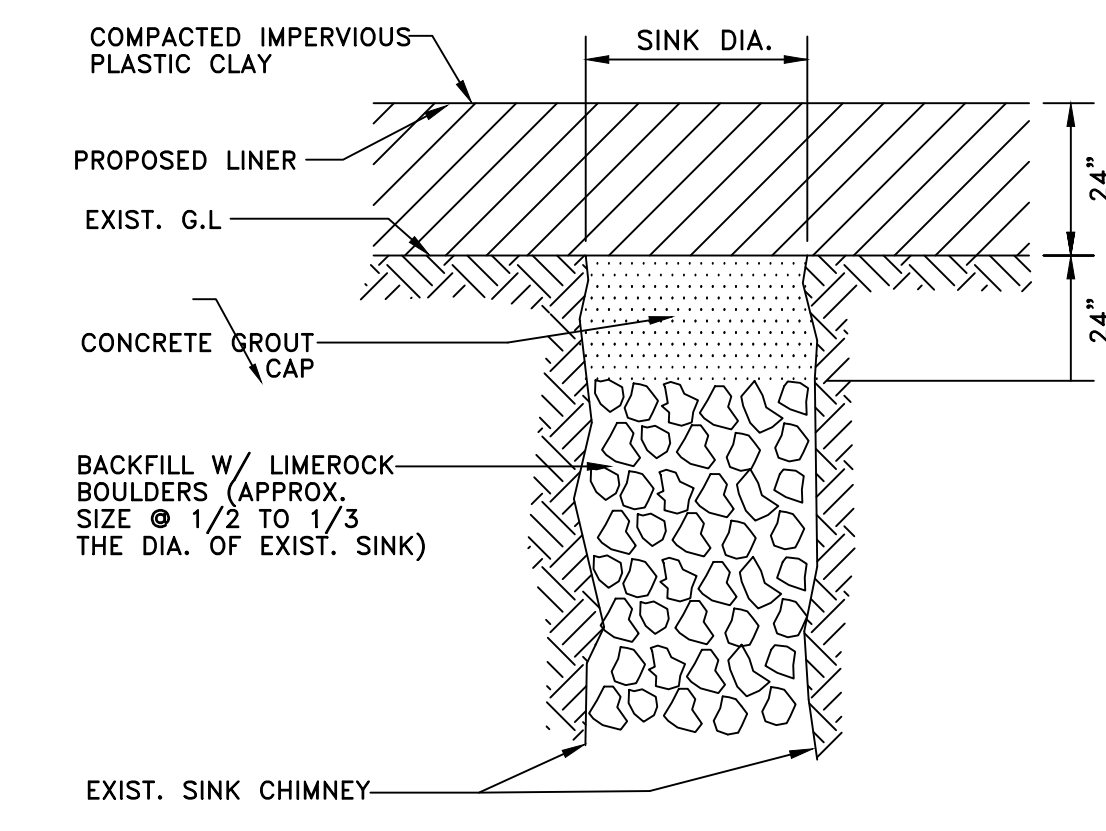
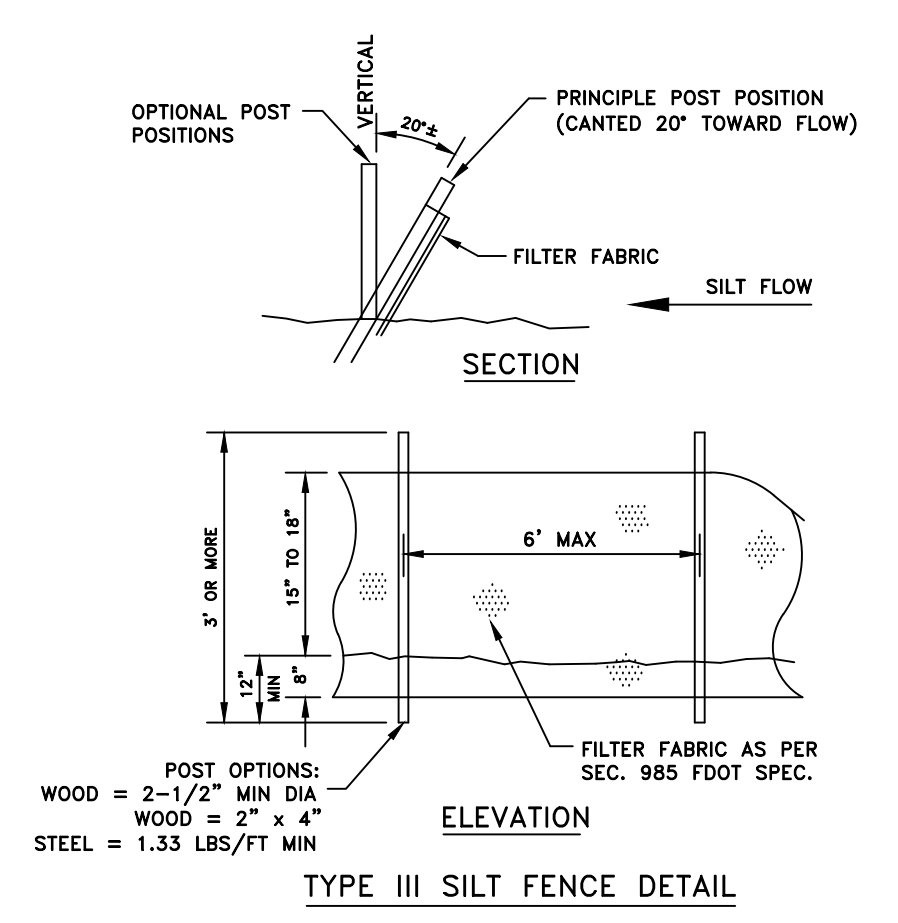
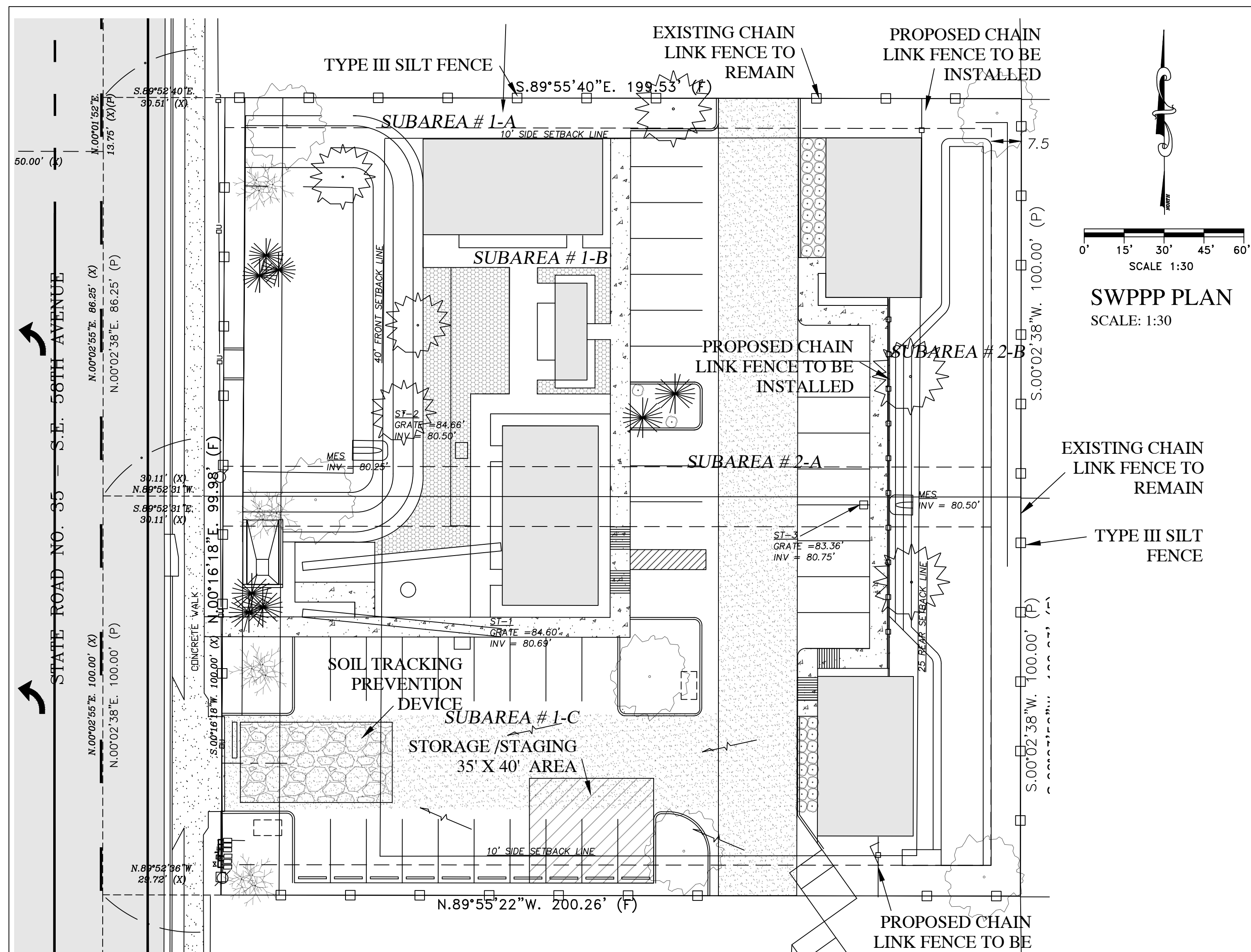
WATER AND RECLAIMED WATER SERVICES (TYPICAL)
MISC. EFFECTIVE 04/15/2023
REVISION # 2
UT 107

MILES C ANDERSON PE
FLORIDA PROFESSIONAL ENGINEER # 39985
CA # 00009848
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1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
OCALA, FLORIDA 34470 FAX (352) 629-4402

UTILITY DETAILS
HUDSON DEVELOPMENT
MARION COUNTY, FLORIDA
SECTION 31, TWP-15, RNG-23
OCALA, FLORIDA

| | | | | | | | | |
|-----|------------------------|---------|-----------|----------|---------|-----|---------------------|-------|
| 2 | COUNTY & PDOT COMMENTS | 6-25-24 | DATE: | 5-3-23 | DESIGN: | MCA | PROJ. HUDSON DEV... | SHEET |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: | MA | FILE: 22-029 | COO6 |
| No. | REVISION | DATE | APPROVED: | MCA | CHECK: | MCA | FILE: HUDSON DEV... | |



STORM INLET PROTECTION NOTE: (IF APPLICABLE)
 ALL STORM INLET PROTECTION SOCK SHALL BE GUTTERBUDDY, SS-300 SILT SAVER, DANDY BAG II OR SIMILAR DEVICE FOR EACH EXISTING AND PROPOSED CURBED STORM INLETS, WHERE APPLICABLE.

ALL STORM INLET GRATE PROTECTION SHALL BE FILTER FABRIC WRAP, DANDYBAG II OR SIMILAR DEVICE FOR EACH EXISTING AND PROPOSED NON-CURBED STORM INLETS

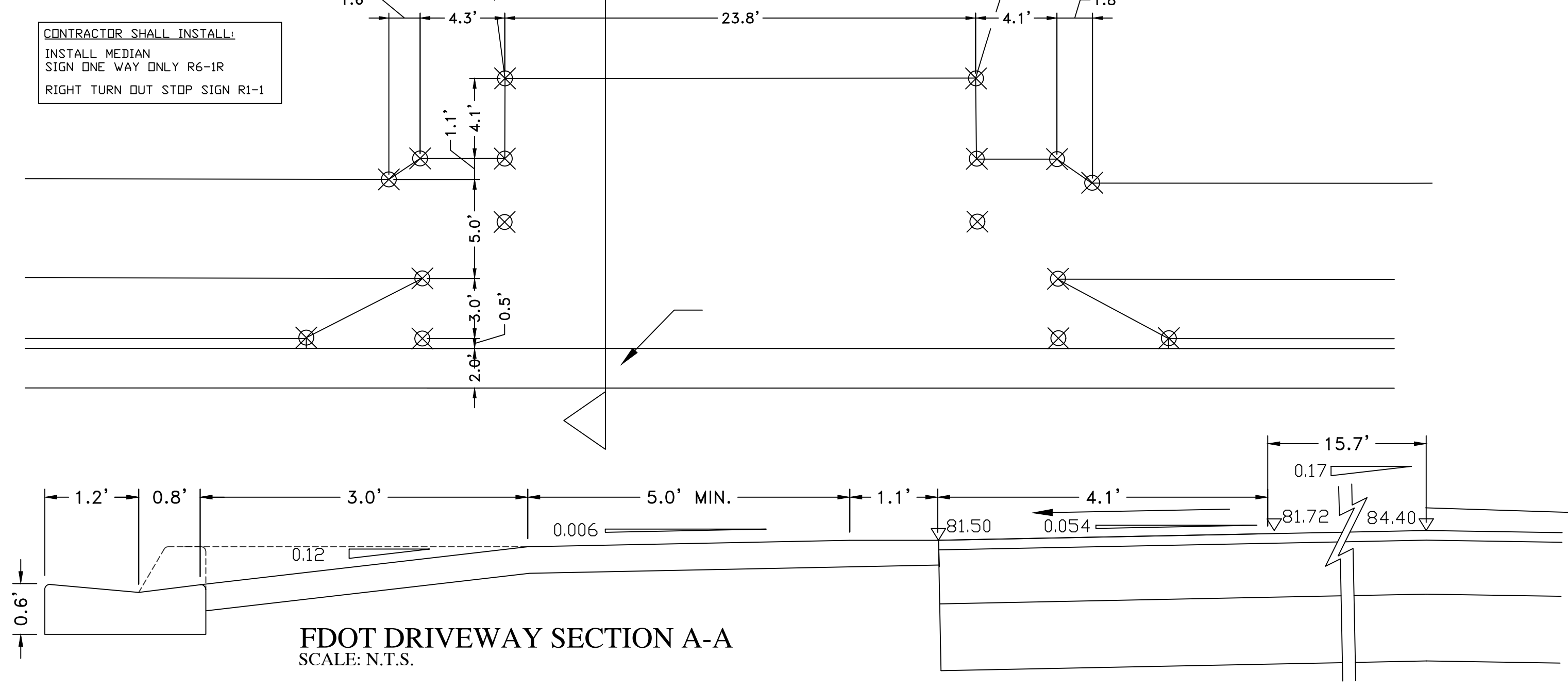
SWEEEPING OF PAVED SURFACES NOTE:

CONTRACTOR SHALL PERIODICALLY SWEEP EXISTING ON-SITE PAVED SURFACES AS WELL AS ALL ABUTTING CITY STREETS, COUNTY ROADS AND STATE HIGHWAYS (AS APPROPRIATE FOR THE PARTICULAR PROJECT) TO KEEP THOSE SURFACES IN A SUBSTANTIALLY SEDIMENT-FREE CONDITION. SWEEPING SHALL BE DONE ON A PERIODIC, AS-NEEDED BASIS THROUGHOUT THE WORK WEEK INCLUDING, MOST IMPORTANTLY, AFTER EVERY RAIN EVENT AND EVERY FRIDAY AFTERNOON PRIOR TO CEASING WORK FOR THE WEEK.

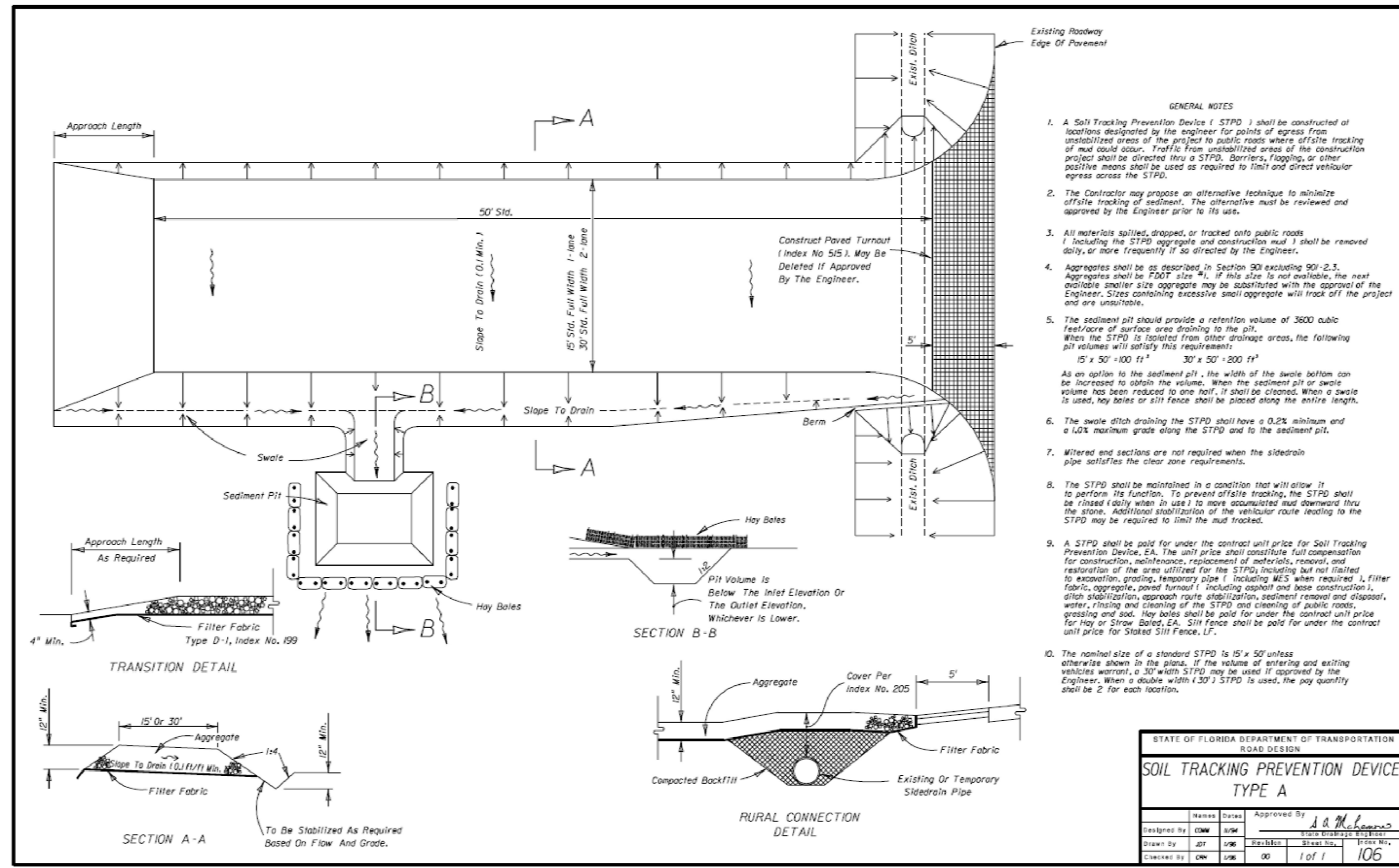
NOTE:
 THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE COPY OF NOI SENT TO FDEP FOR NPDES GENERAL CONSTRUCTION PERMIT REQUIREMENTS FOR PROJECTS THAT EXCEED 1.00 ACRES

WASTE NOTE:
 CONTRACTOR SHALL DEVELOP AND IMPLEMENT A PLAN TO ASSURE THAT ALL WASTE, SUCH AS DISCARDED BUILDING MATERIALS, CONCRETE TRUCK WASH OUT, CHEMICALS, LITTER AND SANITARY WASTE, ARE PROPERLY CONTROLLED WHILE ON-SITE AND TRANSPORTED AND DISPOSED OF (OFF-SITE) IN ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS. NO WASTE MATERIALS OF ANY KIND ARE PERMITTED TO BE BURIED ON-SITE OR DISCHARGED TO SURFACE WATERS OF THE STATE OR TO THE CITY STORM WATER SYSTEMS.

FDOT - EXISTING DRIVEWAY - INDEX 522-003
 SCALE: 1:5



***EXISTING DRIVEWAY - NOT TO BE DISTURBED**



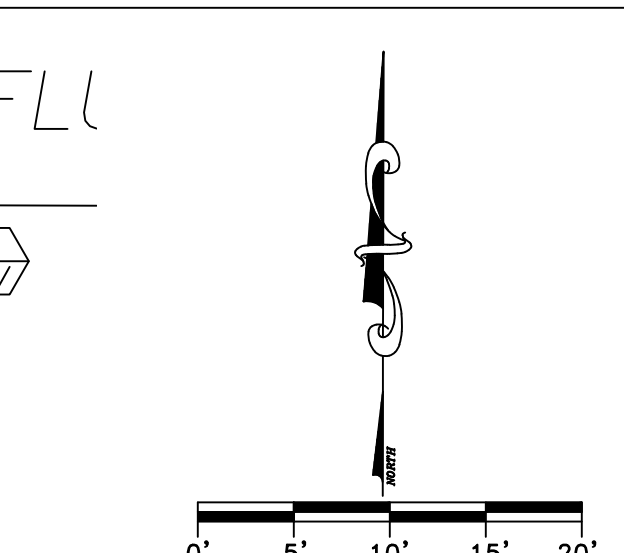
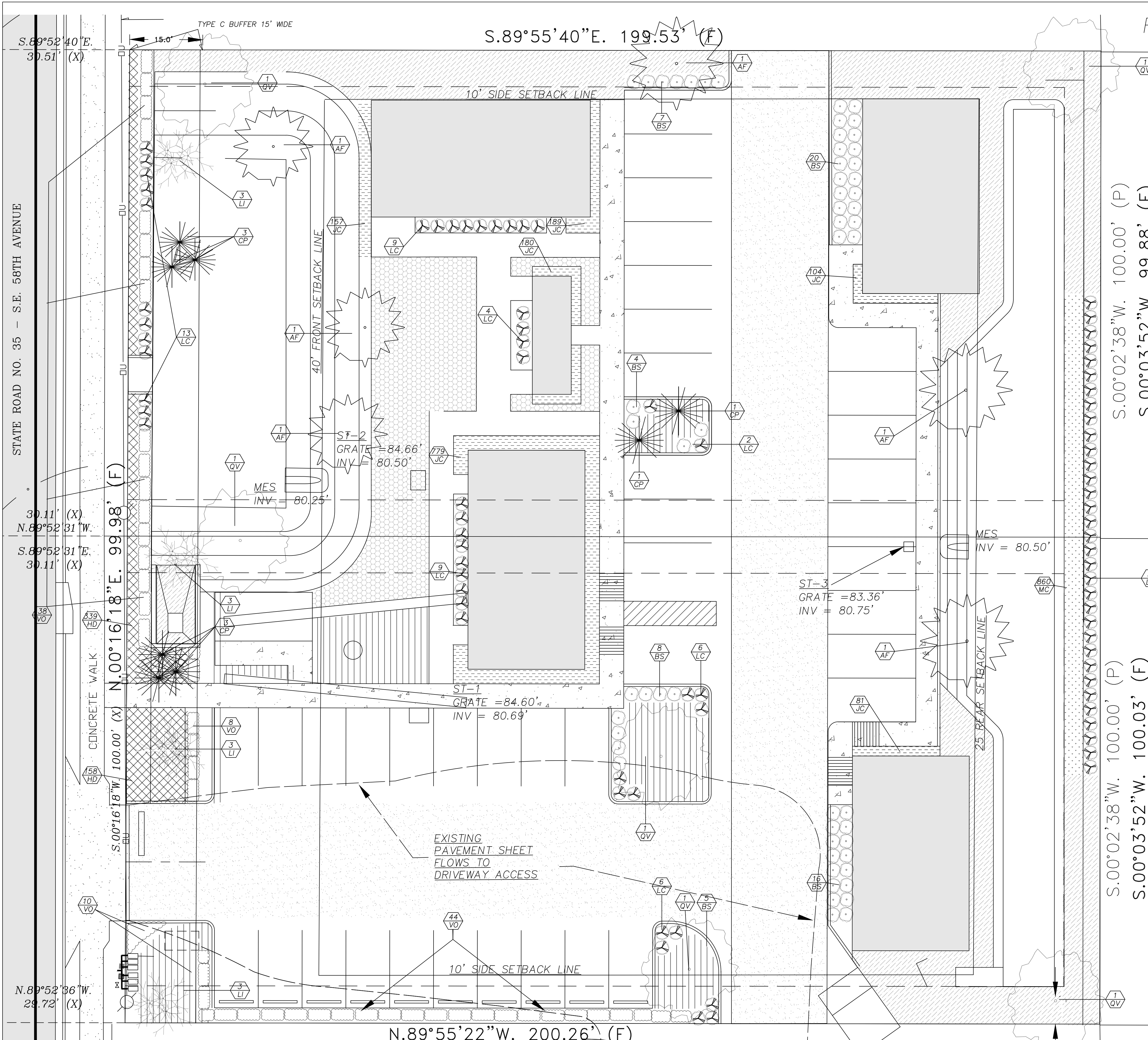
MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
 CIVIL — STRUCTURAL — LAND PLANNING — GOLF COURSE DESIGN
 1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
 OCALA, FLORIDA 34470 FAX (352) 629-4402

SWPPP & FDOT DRIVEWAY DETAIL

HUDSON DEVELOPMENT
 MARION COUNTY, FLORIDA
 SECTION 31, TWP-15, RNG-23
 OCALA, FLORIDA

| | | | | | | | |
|-----|------------------------|---------|-----------|----------|---------|-----|---------------------|
| 2 | COUNTY & FDOT COMMENTS | 6-25-24 | DATE: | 6-3-23 | DESIGN: | MCA | HUDSON DEV... |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: | MA | FILE: 22-029 |
| No. | REVISION | DATE | APPROVED: | MCA | CHECK: | MCA | FILE: HUDSON DEV... |

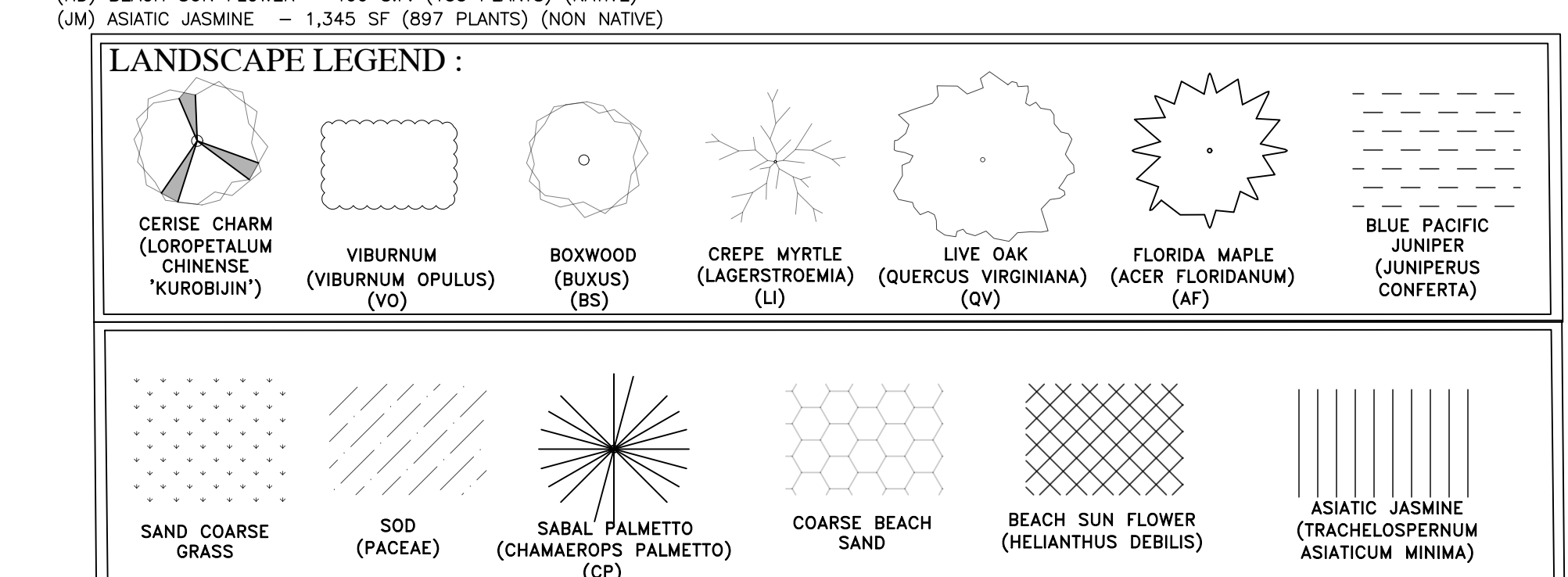
MILES C ANDERSON PE
 FLORIDA PROFESSIONAL ENGINEER # 39285
 CA # 0000848
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LANDSCAPING PLAN
SCALE: 1:10

- LANDSCAPE NOTES**
- ALL MATERIAL SHALL BE FLORIDA #1 GRADE OR BETTER.
 - ALL LANDSCAPED AREAS SHALL BE MULCHED WITH CYPRESS BARK MULCH.
 - FINE STRAW SHALL NOT BE USED.
 - MULCH SHALL NOT BE INSTALLED ON TOP OF THE ROOT BALLS OF ANY SHADE OR ORNAMENTAL TREES.
 - ALL MATERIAL INSTALLED SHALL MEET THE 2020 GRADES AND STANDARDS FOR LANDSCAPE INSTALLATION.
 - ALL NEW TREES MUST BE GUYED OR STAKED AS DETAILED.
 - EXISTING TREES THAT ARE TO REMAIN MUST BE PROTECTED THROUGHOUT CONSTRUCTION.
 - ALL LANDSCAPE MATERIAL MUST BE INSTALLED WITH NATIVE PEAT AND SLOW-RELEASE NITROGEN FERTILIZER.
 - DURING THE ESTABLISHMENT PERIOD (FIRST 30 DAYS) THE LANDSCAPE CONTRACTOR SHALL APPLY A MINIMUM OF 60-80 GPD TO ALL NEW TREES.
 - LANDSCAPE CONTRACTOR MUST LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY INSTALLATION.
 - NO PLANTINGS OR OTHER OBSTRUCTIONS MAY BE WITHIN THE 2' VEHICULAR OVERHANG AREA.
 - SEED AND MULCH SHALL BE INSTALLED IN ALL DISTURBED AREAS.
 - REMOVE ANY TREE WRAP FROM AROUND THE TRUNK OF NEW TREES TO BE INSTALLED.
 - ALL NEW TREES AND SHRUBS MUST MEET THE "AMERICAN STANDARDS FOR NURSERY STOCK" (ANSI 260.1).
 - PLANT MATERIAL MUST MEET ALL SIZE SPECIFICATIONS, NOT JUST CONTAINER SIZE.
 - THE PRELIMINARY AND FINAL INSPECTIONS AS OUTLINED IN SECTION 6.7.12 SHALL BE COMPLIED WITH. NO CERTIFICATE OF OCCUPANCY OR CERTIFICATION OF COMPLETION SHALL BE ISSUED UNTIL THESE INSPECTIONS HAVE BEEN COMPLETED AND APPROVAL GRANTED.
 - TREE PROTECTION SHALL CONTINUE DURING THE COURSE OF CONSTRUCTION. ALL REQUIREMENTS OUTLINED IN SECTION 6.7.3 E SHALL BE COMPLIED WITH BY ALL CONTRACTORS OPERATING ON SITE.
 - THE PRELIMINARY AND FINAL INSPECTIONS AS OUTLINED IN SECTION 6.7.12 SHALL BE COMPLIED WITH. NO CERTIFICATE OF OCCUPANCY OR CERTIFICATION OF COMPLETION SHALL BE ISSUED UNTIL THESE INSPECTIONS HAVE BEEN COMPLETED AND APPROVAL GRANTED.
 - NOTES HAVE BEEN SHOWN REGARDING LICENSING (6.18.15 & 6.9.10), TREE PROTECTION (6.7.3), MAINTENANCE (6.8.13 & 6.9.9), FERTILIZER USE (6.8.4) AND WATERING (6.9.9).
 - ALL REQUIREMENTS OUTLINED IN SECTION 6.8.4 REGARDING FERTILIZER AND OTHER LANDSCAPE BUILDING FRONTAGE LANDSCAPING CHEMICALS SHALL BE COMPLIED WITH BY THE OWNER AND/OR OTHER LANDSCAPE PROFESSIONALS.
 - UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL REQUIRE AN INSPECTION BY THE DESIGN PROFESSIONAL. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE MARION COUNTY LANDSCAPE ARCHITECT PRIOR TO ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
 - ALL REQUIREMENTS OUTLINED IN SECTION 6.8.13 REGARDING LANDSCAPE MAINTENANCE SHALL BE COMPLIED WITH BY THE OWNER AND/OR OTHER MAINTENANCE PROFESSIONALS.
 - ALL REQUIREMENTS OUTLINED IN SECTION 6.8.15 REGARDING LANDSCAPE INSTALLATION AND MAINTENANCE LICENSING AND CERTIFICATION SHALL BE COMPLIED WITH.
- LANDSCAPE CALCULATIONS**
- NATIVE TREE CALCULATIONS**
- | | | |
|-----------------------|---|-----------|
| TOTAL NEW TREES | = | 32 |
| NATIVE TREES REQUIRED | = | 16 (50%) |
| NATIVE TREES PROVIDED | = | 32 (100%) |
- NATIVE MATERIAL CALCULATIONS**
- | | | |
|---------------------------|---|----------------------|
| TOTAL PLANT MATERIAL USED | = | 3,455 |
| NATIVE MATERIAL REQUIRED | = | 864 (25% INSIDE UGB) |
| NATIVE MATERIAL PROVIDED | = | 1,896 (55%) |
- INCHES DBH REQUIRED CALCULATIONS**
- | | | |
|-----------------------------------|---|-----------------------|
| TOTAL REQUIRED | = | 100 INCHES / AC = 92" |
| EXISTING INCHES PRESERVED | = | 0 |
| REPLACEMENT INCHES | = | 92 INCHES REQUIRED |
| TOTAL PROVIDED: | | |
| OAK - 6 X 3.5" = 21" | | |
| FLORIDA MAPLE - 6 X 3.5" = 21" | | |
| SABAL PALMETTO - 8 X 6 = 48" | | |
| CREPE MYRTLE - 12 (4 X 3.5) = 14" | | |
| Total | = | 104" |
- FLORIDA-FRIENDLY MATERIAL CALCULATIONS**
- | | | |
|---------------------------|---|--------------|
| TOTAL PLANT MATERIAL USED | = | 3,455 |
| FF MATERIAL REQUIRED | = | 1,728 (50%) |
| FF MATERIAL PROVIDED | = | 3,455 (100%) |
- SHADE TREE CALCULATIONS**
- | | | |
|---|---|-----------------------|
| TOTAL PROJECT AREA | = | 40,075 SF (0.92 AC) |
| SHADE TREES REQUIRED | = | 14 |
| EXISTING TREES | = | 0 |
| NEW TREES REQUIRED | = | 14 (3.5 CAL. MIN.) |
| NEW TREES PROVIDED | = | 16 (6 QV, 6 AF, 4 LI) |
| ORNAMENTAL TREES IN LIEU OF SHADE TREES SHALL BE 3:1 MINIMUM ORNAMENTAL TREES DBH = 1.25' | | |
- OPEN SPACE REQUIRED:**
- | | | |
|--------------------------------------|---|-------------------------------|
| TOTAL PROJECT AREA | = | 40,075.2 SF (0.92 AC) |
| REQUIRED OPEN SPACE | = | 40,075.2 X 0.20 = 8,015.04 SF |
| TOTAL OPEN SPACE PROVIDED | = | 16,254.96 SF |
| TOTAL LANDSCAPED OPEN SPACE PROVIDED | = | 8,332 SF |
- TYPE C - BUFFER CALCULATIONS**
- | | |
|---|--|
| TYPE 'C' BUFFER (15' WIDE) | TOTAL LENGTH = 200 LF LESS DRIVEWAY = 176 LF |
| SHADE TREES REQUIRED | = (2/100 LF) PROVIDE 4 TREES |
| SHADE TREES PROVIDED | = 0.00 DUE TO POWER LINE, SEE 9 ORNAMENTAL TREES & 6 SABAL PALMS PROVIDED. |
| ORNAMENTAL TREES REQUIRED | = 5.25 (100 LF) PROVIDE 6 TREES |
| ORNAMENTAL TREES PROVIDED | = 6 (12 LI) (6 CP) |
| TOTAL BUFFER AREA | = 2,640 SF (176 X 15) |
| LANDSCAPE/PLANT MATERIAL AREA REQUIRED | = 1,320 SF (50%) |
| LANDSCAPE /PLANT MATERIAL AREA PROVIDED | = 1,325 SF |
| PLANT MATERIAL AREA PROVIDED | = 12 LC, 62 VO, & 497 HD. |
- *NO BUFFER REQUIRED TO THE NORTH, SOUTH, OR EAST (SIMILAR ZONING)

- LANDSCAPING TOTALS**
- (VO) VIBURNUM - 100 PLANTS (NATIVE)
 - (LC) CERISE CHARM - 81 PLANTS (NON NATIVE)
 - (BS) BOXWOODS - 53 PLANTS (NATIVE)
 - (LI) CREPE MYRTLES - 12 PLANTS (NATIVE)
 - (QV) LIVE OAK - 8 PLANTS (NATIVE)
 - (AF) FLORIDA MAPLE - 6 PLANTS (NATIVE)
 - (CP) SABAL PALMETTO - 8 PLANTS (NATIVE)
 - (SP) SOD - 4,179 S.F.
 - (JC) BLUE PACIFIC JUNIPER - 862 S.F. (221 PLANTS) (NON NATIVE)
 - (SO) SAND COARSE GRASS - 382 S.F. (128 PLANTS) (NATIVE)
 - (HD) BEACH SUN FLOWER - 400 S.F. (133 PLANTS) (NATIVE)
 - (JM) ASIATIC JASMINE - 1,345 SF (897 PLANTS) (NON NATIVE)
- SHRUBS SHALL PLANTED AT 3' ON CENTER OR AS APPROPRIATE TO THE TYPE OF SHRUB SPECIES. GROUND COVER GROWN TO 24" TALL SHALL BE SPACED AT 2'-3".**
- *ALL LANDSCAPE BEDS SHALL BE MULCH USING NUGGET STYLE MULCH**
****ALL DRAS SHALL BE SODDED SEE DRAINAGE PLANS**



HUDSON DEVELOPMENT BUFFER DESCRIPTION

BUFFER TYPE:

C.- C-TYPE BUFFERS SHALL CONSIST OF A 15-FOOT WIDE LANDSCAPE STRIP WITHOUT A BUFFER WALL. THE BUFFER SHALL CONTAIN AT LEAST TWO SHADE TREES AND THREE ACCENT/ORNAMENTAL TREES FOR EVERY 100 LINEAL FEET OR FRACTIONAL PART THEREOF. SHRUBS AND GROUNDCOVERS, EXCLUDING TURFGRASS, SHALL COMPRISE AT LEAST 50 PERCENT OF THE REQUIRED BUFFER AND FORM A LAYERED LANDSCAPE SCREEN WITH A MINIMUM HEIGHT OF THREE FEET ACHIEVED WITHIN ONE YEAR.

EXISTING TREE COVERAGE:
CURRENTLY THERE ARE NO TREES ON THIS SITE. SEE LANDSCAPE PLAN FOR NEW TREES HEDGES AND PLANT MATERIALS.

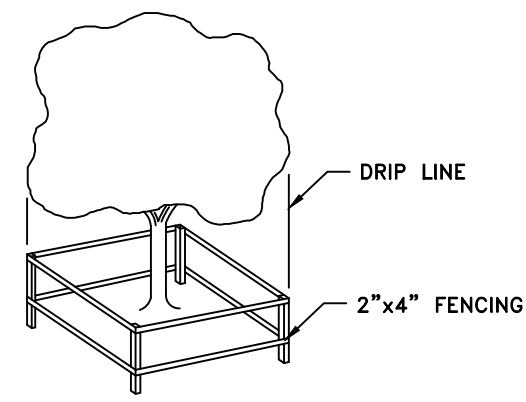
MILES C ANDERSON PE
FLORIDA PROFESSIONAL ENGINEER # 99385
CA # 0000848
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MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
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OCALA, FLORIDA 34470 FAX (352) 629-4402

| LANDSCAPE PLAN | | HUDSON DEVELOPMENT | |
|------------------------|------------------------|------------------------|---|
| MARION COUNTY, FLORIDA | | MARION COUNTY, FLORIDA | |
| SEC 31, TWP 15, RGE 23 | | OCALA, FLORIDA | |
| 3 | COUNTY COMMENTS | 7-24-24 | |
| 2 | COUNTY & PDOT COMMENTS | 6-25-24 | DATE: 5-24-23 DESIGN: MCA PROJ: HUDSON DEV... |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: AS SHOWN DRAW: MA FILE: 22-029 |
| No. | REVISION | DATE | APPROVED: MCA CHECK: MCA FILE: HUDSON DEV... |

SHEET
COOB

LANDSCAPE PROTECTION:



TYPICAL TREE PROTECTION AT TIME OF CONSTRUCTION

APPROPRIATE PROTECTIVE MEASURES SHALL BE TAKEN TO PREVENT THE DESTRUCTION OR DAMAGE OF ALL TREES TO BE RETAINED ON THE SITE. NO PLACEMENT OF MATERIALS, MACHINERY, TEMPORARY SOIL DEPOSITS, OR ADDITIONAL FILL OR ASPHALT PAVEMENT FOR VEHICULAR CIRCULATION SHALL BE PLACED ANY CLOSER TO ANY TREE THAN THE DRIP LINE. NO ATTACHMENTS OF WIRES, EXCEPTING PROTECTIVE GUIDE WIRES, SHALL BE ATTACHED TO ANY TREE. NO CHANGE OF GRADE MORE OR LESS THAN 6 INCHES MAY BE MADE WITHIN THE DRIP LINE OF A TREE UNLESS SHOWN ON THE APPROVED SITE DEVELOPMENT PLAN.

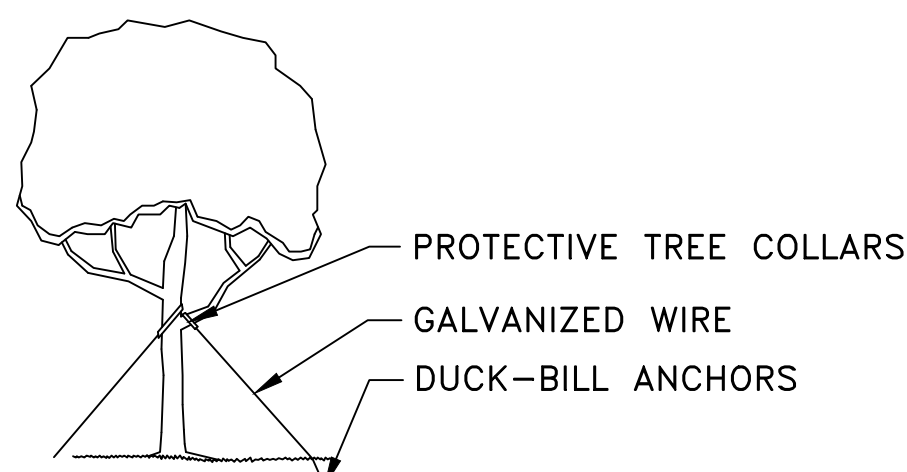
*****PLEASE USE EXTREME CARE & CAUTION WHEN WORKING IN THE AREAS SURROUNDING THE TREES TO BE SAVED. DO NOT ROOT RAKE. IF ROOT CUTTING IS NECESSARY, PLEASE CUT ROOTS SHARPLY AND COVER WITH 6 TO 12 INCHES TOPSOIL. NO WORK SHALL BE DONE WITHIN THE 2"x4" TREE PROTECTION FENCE LINE.

TREE PROTECTION DETAIL

TREE PROTECTION NOTES

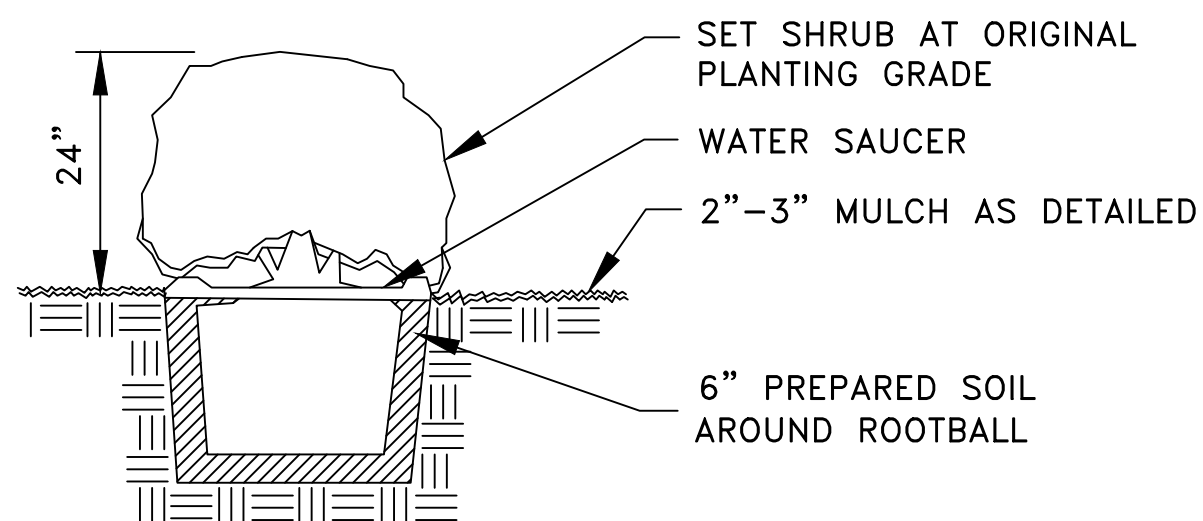
1. THE CLEANING OF CONSTRUCTION EQUIPMENT OR MATERIAL OR THE DISPOSAL OF WASTE MATERIALS INCLUDING BUT NOT LIMITED TO PAINT, OIL, SOLVENTS, ASPHALT, CONCRETE, AND MORTAL WITHIN THE TPZ OF ANY TREE WHICH IS PROTECTED IS NOT ALLOWED.
2. THE MOVEMENT OF EQUIPMENT OR THE STORAGE OF EQUIPMENT, MATERIALS, DEBRIS, OR FILL WITHIN THE TPZ OF ANY TREE WHICH IS BEING PROTECTED IS NOT ALLOWED.
3. THE CONTRACTOR SHALL INSPECT ALL TREE PROTECTION BARRICADES AND SIGNS ON A WEEKLY BASIS DURING THE COURSE OF CONSTRUCTION. ANY BARRICADE OR SIGN WHICH HAS BEEN DAMAGED OR IS MISSING SHALL BE REPLACED IMMEDIATELY.
4. IF ANY TREE WHICH HAS NOT BEEN APPROVED TO BE REMOVED IS DESTROYED, OR RECEIVES MAJOR DAMAGE DURING CONSTRUCTION, WITH THE EXCEPTION OF NATURAL EVENTS, SO AS TO PLACE ITS LONG TERM SURVIVAL IN QUESTION, THE TREE(S) MUST BE REPLACED AT AN INCH-FOR-INCH BASIS OF THE TOTAL (COMBINED) DBH OF THE TREE(S) SO DESTROYED OR DAMAGED. THE REPLACEMENT TREE(S) SHALL BE OF COMPARABLE SPECIES TO THE DESTROYED OR DAMAGED TREE(S) WITH A MINIMUM REPLACEMENT SIZE OF 3.5 INCH CALIPER. THE COUNTY RESERVES THE RIGHT TO ESTABLISH A REPLACEMENT VALUE FOR SUCH TREES AND PAYMENT INTO THE TREE MITIGATION FUND MAY BE AUTHORIZED BY THE COUNTY'S LANDSCAPE ARCHITECT.

LANDSCAPE PLANTING DETAILS:



TYPICAL TREE GUYING DETAIL

THE SAME PLANTING TECHNIQUES SHOULD BE USED ON ALL SHRUB & GROUND COVER PLANTINGS



TYPICAL SHRUB INSTALLATION DETAIL

IRRIGATION DETAILS & NOTES

IRRIGATION NOTES

1. THE OWNER SHALL BE RESPONSIBLE FOR IRRIGATING ALL NEW LANDSCAPE MATERIAL UNTIL ESTABLISHED.
2. ALL NEW IRRIGATION SHALL BE MICRO-SPRAY HEADS, DRIP-IRRIGATION, AND/OR BUBBLER HEADS.
3. A MINIMUM OF TWO (2) BUBBLER HEADS SHALL BE INSTALLED AT EACH NEW TREE PLANTING.
4. IRRIGATION SHALL BE SET SO THERE IS NO OVERSPRAY ONTO ANY PAVED AREAS.
5. THE OWNER SHALL BE RESPONSIBLE FOR WATERING THE SEEDED AREAS UNTIL ESTABLISHMENT.
6. "RAIN-CHECK" MONITOR SHALL BE INSTALLED ON ANY PERMANENT IRRIGATION SYSTEM.
7. BACK-FLOW PREVENTION DEVICE SHALL BE INSTALLED AT THE CONNECTION OF ANY WELL OR METER.
8. UPON COMPLETION OF THE IRRIGATION SYSTEM INSTALLATION AND THE ACCEPTANCE OF THE AS-BUILT DIAGRAM AND OPERATIONAL INFORMATION, A FINAL INSPECTION AND LANDSCAPE/IRRIGATION RELEASE SHALL BE SIGNED AND SEALED BY THE IRRIGATION DESIGN PROFESSIONAL AND SUBMITTED TO THE MARION COUNTY LANDSCAPE ARCHITECT. ALL REQUIREMENTS OUTLINED IN SECTION 6.9.6 SHALL BE COMPLIED WITH BY THE IRRIGATION INSTALLATION PROFESSIONALS.
9. ALL REQUIREMENTS IN SECTION 6.9.8 REGARDING SYSTEM INSTALLATION, SCHEDULING, OPERATION, AND MAINTENANCE SHALL BE COMPLIED WITH. SYSTEM SHALL BE OPERATED AND MAINTAINED IN ACCORDANCE WITH FLORIDA-FRIENDLY BEST MANAGEMENT PRACTICES FOR PROTECTION OF WATER RESOURCES BY THE GREEN INDUSTRIES OF THE FLORIDA YARDS AND NEIGHBORHOOD PROGRAM.
10. ALL REQUIREMENTS OUTLINED IN SECTION 6.9.9 REGARDING THE IRRIGATION SCHEDULING SHALL BE COMPLIED WITH BY THE IRRIGATION INSTALLATION PROFESSIONALS.
11. ALL REQUIREMENTS OUTLINED IN SECTION 6.9.10 REGARDING LICENSING AND CERTIFICATION OF THE IRRIGATION INSTALLATION AND MAINTENANCE PROFESSIONALS SHALL BE COMPLIED WITH.
12. NOTES HAVE BEEN SHOWN REGARDING CLOSE-OUT REQUIREMENTS (6.9.6) WATERING INSTALLATION (6.9.9) AND INSTALLATION LICENSING REQUIREMENTS (6.9.10).
13. BUBBLERS FOR TREES SHALL BE STAKED IN THEIR PROPERTY LOCATIONS.

LANDSCAPE/IRRIGATION PERMIT NOTES:

A PERMIT WILL BE ISSUED FROM MARION COUNTY BUILDING DIVISION PRIOR TO INSTALLATION OF IRRIGATION SYSTEMS. UPON COMPLETION OF THE LANDSCAPE AND/OR IRRIGATION INSTALLATION, THE CONTRACTOR SHALL REQUEST AN INSPECTION BY THE DESIGN PROFESSIONAL. PRIOR TO THE INSPECTION, THE CONTRACTOR MUST PROVIDE A CLEAR AND LEGIBLE AS-BUILT DIAGRAM OF THE IRRIGATION SYSTEM. A LANDSCAPE AND IRRIGATION AS-BUILT CERTIFICATION SHALL BE SIGNED AND SEALED BY THE DESIGN PROFESSIONAL AND SUBMITTED TO THE COUNTY LANDSCAPE ARCHITECT PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. AS PER MARION COUNTY LAND DEVELOPMENT CODE SECTION 6.8.12 & 6.9.9

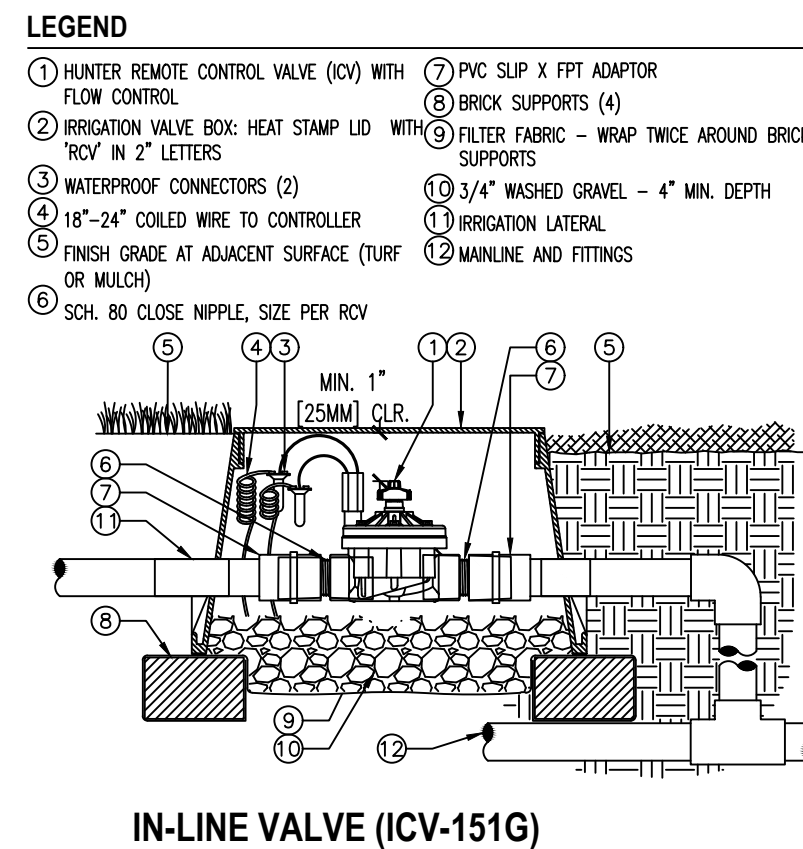
NOTE: CONTRACTOR RESPONSIBLE FOR HIS OWN TAKE-OFFS.

THE IRRIGATION PLAN IS DIAGRAMMATIC IN NATURE. LOCATIONS OF PIPING AND OTHER APPURTENANCES ARE SHOWN FOR CLARITY. FIELD CHANGES MAY BE REQUIRED TO ACHIEVE PROPER IRRIGATION COVERAGE.

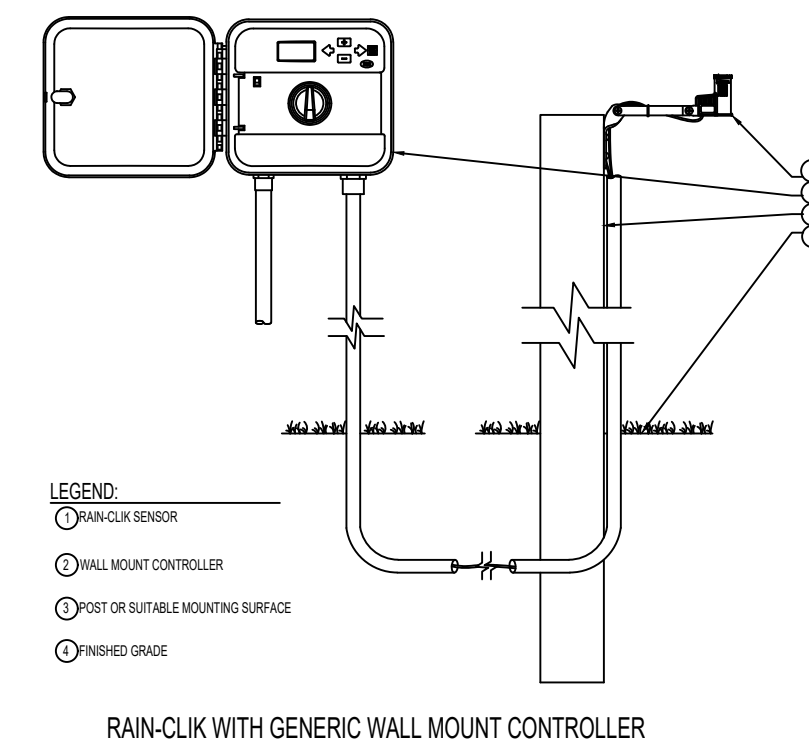
ALL PIPE SHALL BE LOCATED WITHIN PROPERTY BOUNDARIES.

| LAND USE TABLE | | | | | | |
|----------------|--|--|--|--|--|--|
| AG | AGRICULTURE, RURAL LANDS, NATURAL RESERVATION | | | | | |
| SFR | SINGLE FAMILY, DUPLEX RESIDENTIAL | | | | | |
| MF | MULTI-FAMILY RESIDENTIAL | | | | | |
| COM | COMMERCIAL, RV PARKS, COMMERCIAL RECREATION | | | | | |
| IND | INDUSTRIAL USES | | | | | |
| PUB | PUBLIC USE (INCLUDING GOVERNMENT, INSTITUTIONAL, AND RELATED PROFESSIONAL OFFICES) | | | | | |
| ROW | ARTERIAL OR COLLECTOR RIGHT-OF-WAY OR ROAD EASEMENT | | | | | |

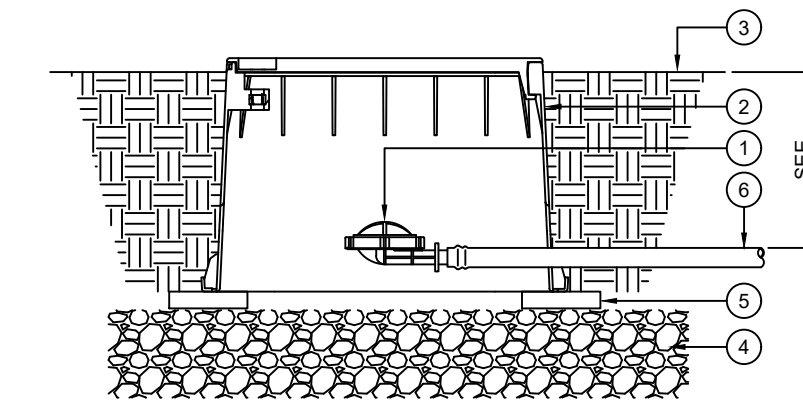
| PROPOSED USE | LAND USE TABLE PERMITTED OR EXISTING USE | | | | | |
|--------------|--|-----|----|-----|-----|-----|
| | AG | SFR | MF | COM | IND | PUB |
| AG | - | - | - | - | - | - |
| SFR | E | - | C | A | B | C |
| MF | E | A | - | A | B | C |
| COM | D | B | B | - | B | C |
| IND | B | B | B | B | - | B |
| PUB | E | B | C | C | C | C |



IN-LINE VALVE (ICV-151G)

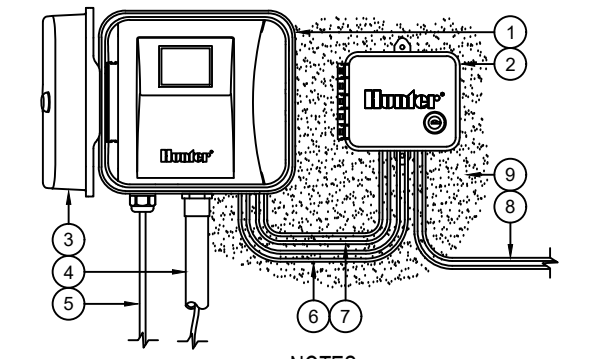


RAIN-CLICK WITH GENERIC WALL MOUNT CONTROLLER



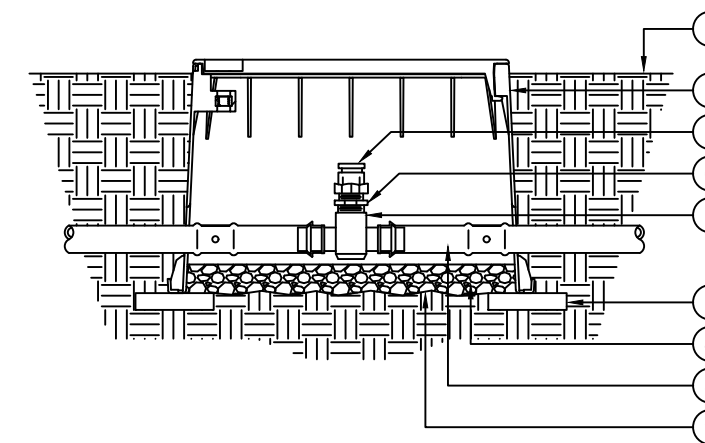
- DETAIL LEGEND:
- 1 HUNTER AUTOMATIC FLUSH VALVE (AFV-B) WITH 5/8" (17 mm) BARB CONNECTION
 - 2 HUNTER RECTANGULAR PLASTIC VALVE BOX AND LID (MB-0811). LID COLORS: STANDARD BLACK, PURPLE FOR RECYCLED WATER USE, AND OTHER COLORS AVAILABLE. SEE HUNTER CATALOG.
 - 3 FINISHED GRADE
 - 4 GRAVEL BASE, DEPTH AS SPECIFIED
 - 5 COMMON HALF BRICK, 2 TOTAL, INSTALL ONE ON EACH SHORT SIDE OF BOX.
 - 6 HUNTER BLANK TUBING (PLD-BLANK) TO DRIPLINE ZONE, 5/8" (17 mm)

EMITTER ZONE AUTOMATIC FLUSH VALVE WITH BARB CONNECTION



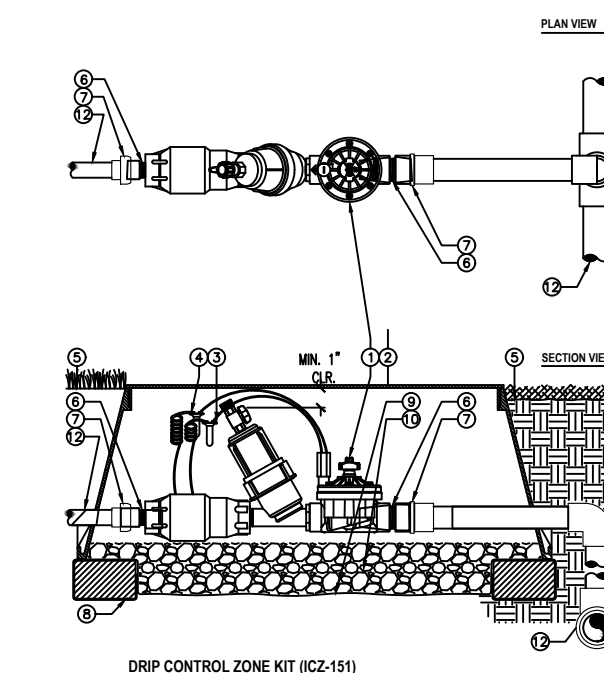
- DETAIL LEGEND:
- 1 IRRIGATION CONTROLLER, INDOOR/OUTDOOR WALL MOUNT, PER PLAN
 - 2 FLOW-CLICK MODULE AND PROVIDED CABLE
 - 3 PLASTIC CONTROLLER DOOR
 - 4 CONTROL WIRE CONDUIT TO PLANTER, SIZE AS REQUIRED
 - 5 120 VAC CABLE FOR CONNECTION TO GROUNDING 120 VAC POWER SOURCE (230 VAC FOR INTERNATIONAL MODELS)
 - 6 TWO (2) WIRES TO SENSOR TERMINALS IN CONTROLLER - WHITE
 - 7 TWO (2) WIRES TO 24 VAC TERMINALS IN CONTROLLER - YELLOW
 - 8 TWO (2) WIRES TO FLOW-CLICK SENSOR - BLACK, RED
 - 9 SURFACE TO MOUNT CONTROLLER PER PLAN
- NOTES:
- A. COMPLETE INSTALLATION IN ACCORDANCE WITH HUNTERS SPECIFICATIONS. REFER TO PRODUCT INSTALLATION GUIDE PRIOR TO INSTALLATION.
 - B. CONTROLLER ACCEPTS 120 VOLTS A.C. OR 230 VOLTS A.C. (INTERNATIONAL MODEL). HARD WIRE OR PLUG INTO A GROUNDING POWER SOURCE.
 - C. MODEL NUMBER AND SPECIFICATIONS PER PLAN.
 - D. MOUNT CONTROLLER LCD SCREEN AT EYE LEVEL WHEN FEASIBLE.

IRRIGATION CONTROLLER, WALL MOUNT WITH FLOW-CLICK

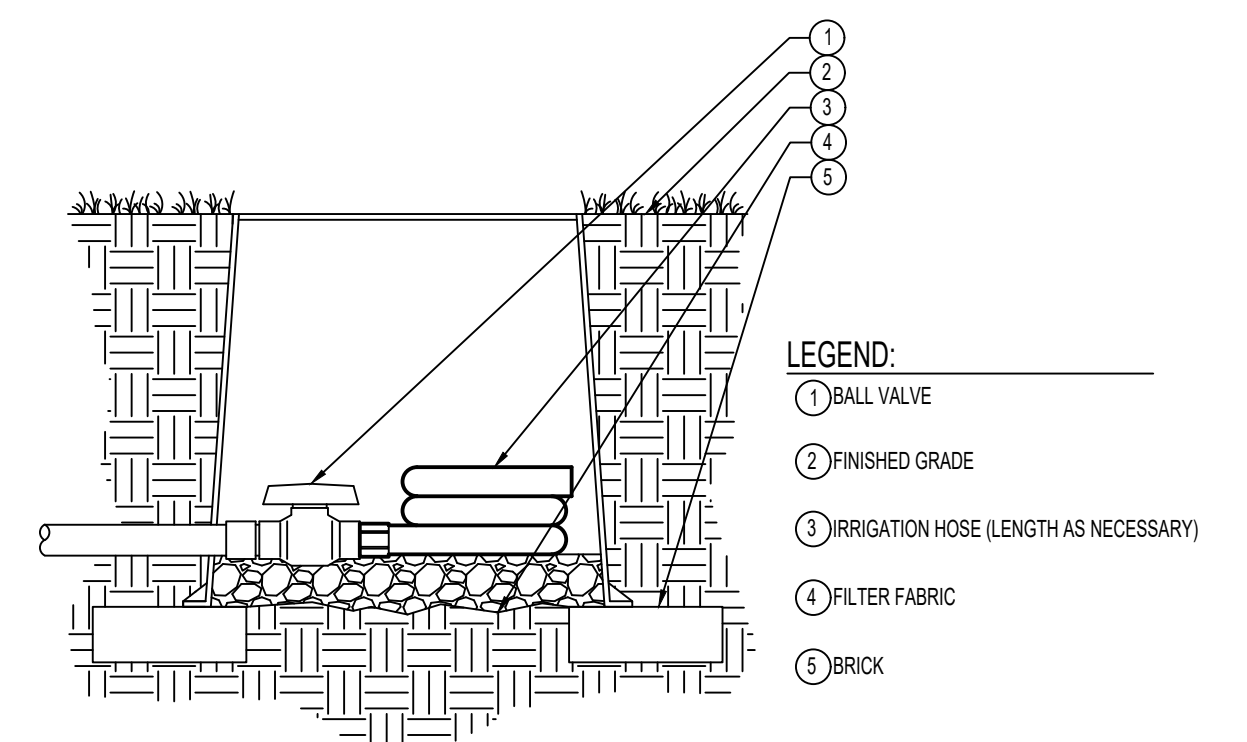


- DETAIL LEGEND:
- 1 HUNTER AIR RELIEF VALVE
 - 2 HUNTER RECTANGULAR PLASTIC VALVE BOX AND LID (MB-0811). LID COLORS: STANDARD BLACK, PURPLE FOR RECYCLED WATER USE, AND OTHER COLORS AVAILABLE. SEE HUNTER CATALOG.
 - 3 FINISHED GRADE
 - 4 GRAVEL BASE, DEPTH AS SPECIFIED
 - 5 COMMON HALF BRICK, 2 TOTAL, INSTALL ONE ON EACH SHORT SIDE OF BOX.
 - 6 3/4" MPT X 1/2" FPT BUSHING
 - 7 PLD-075-TBTEE FITTING
 - 8 PROFESSIONAL LANDSCAPE DRIPLINE
 - 9 FILTER FABRIC

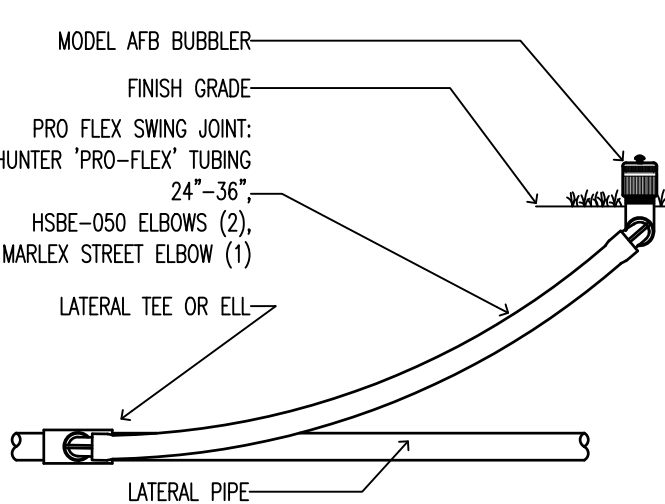
AIR RELIEF VALVE - TUBING



- LEGEND:
- 1 HUNTER REMOTE CONTROL VALVE (RCV) WITH FILTER RELEASE
 - 2 IRRIGATION VALVE BOX, HEAT STAMP LID WITH 1/2" LETTERS
 - 3 WATERPROOF CONNECTORS (2)
 - 4 1/4" COILED WIRE TO CONTROLLER
 - 5 FINISHED GRADE AT ADJACENT SURFACE (TURF OR MULCH)
 - 6 1/2" COILED WIRE, WITH SIZE TO VALVE
 - 7 RC ADAPTOR SLIP x FPT BRICK SUPPORTS (4)
 - 8 FILTER FABRIC - WRAP TREE TRUNK BRICK SUPPORTS
 - 9 3/4" WASHED GRAVEL - 4" MIN. DEPTH
 - 10 IRRIGATION LATERAL AND FITTINGS



FLUSH POINT - BALL VALVE



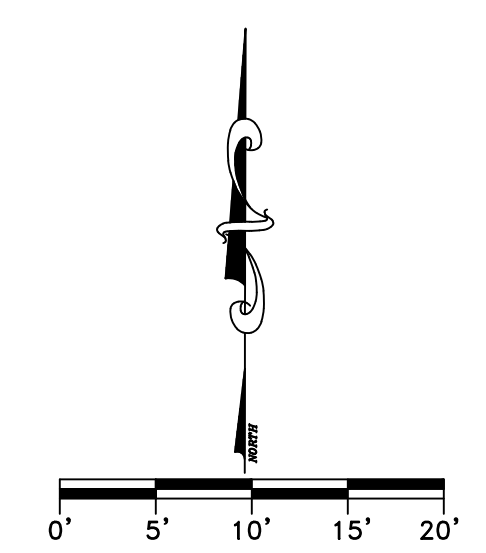
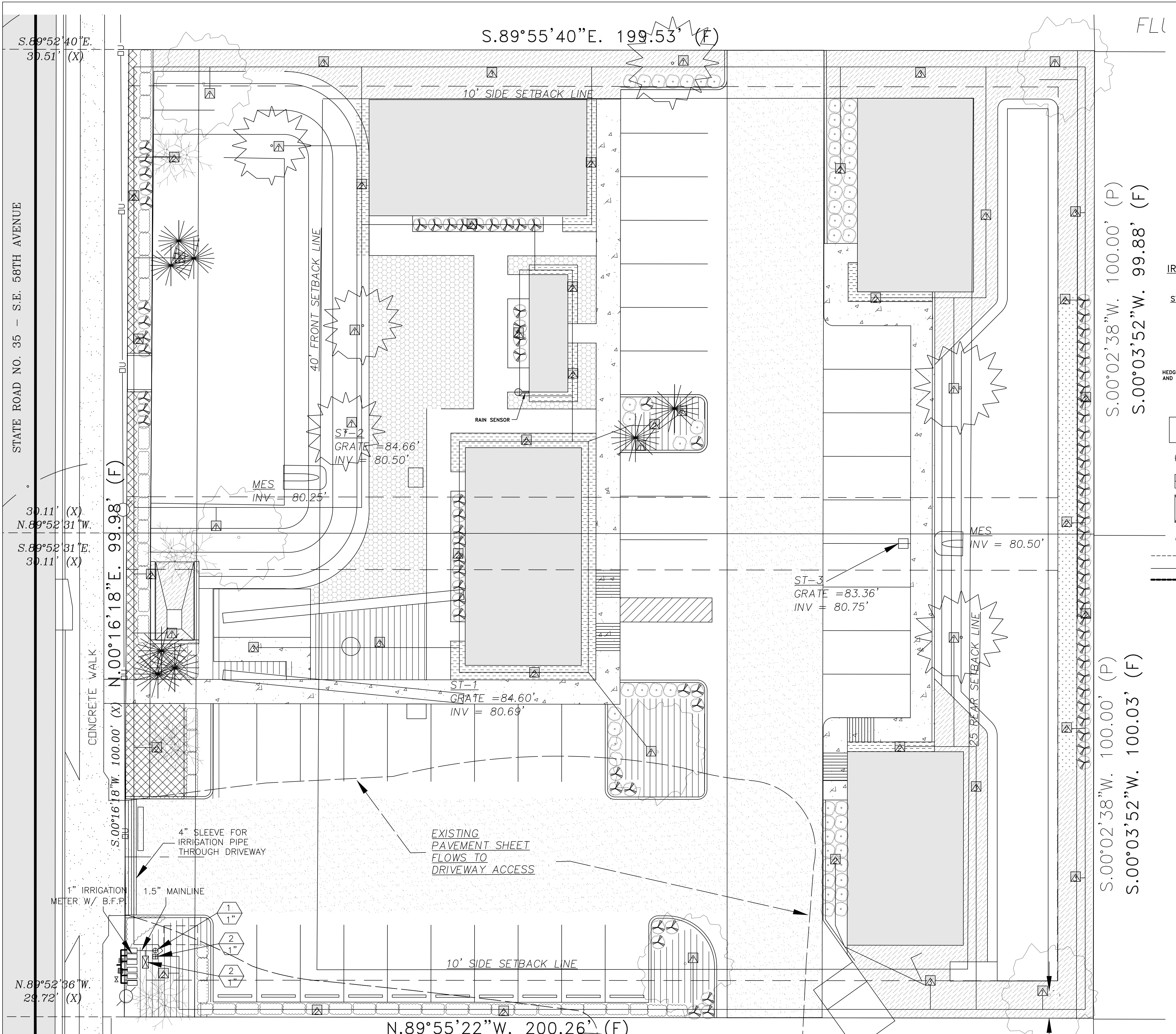
AFB BUBBLER

MILES C ANDERSON PE
FLORIDA PROFESSIONAL ENGINEER # 39385
CA # 00008485
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MILES CHRISTIAN ANDERSON CONSULTING ENGINEERS, INC.
CIVIL — STRUCTURAL — LAND PLANNING — GOLF COURSE DESIGN
1515 EAST SILVER SPRINGS BLVD. SUITE 132 (352) 629-5591
OCALA, FLORIDA 34470 FAX (352) 629-4402

| TREE PROTECTION AND IRRIGATION | | | | | | |
|--|-----------------|---------|-----------|----------|---------|-------------------------|
| HUDSON DEVELOPMENT MARION COUNTY, FLORIDA SEC 31, TWP 15, RGE 23 OCALA, FLORIDA | | | | | | |
| 2 | COUNTY COMMENTS | 7-24-24 | DATE: | 5-24-23 | DESIGN: | MCA PROJ. HUDSON DEV... |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: | MA FILE: 22-029 |
| No. | REVISION | DATE | APPROVED: | MCA | CHECK: | MCA FILE: HUDSON DEV... |

SHEET
CO08A



IRRIGATION PLAN
SCALE: 1:10

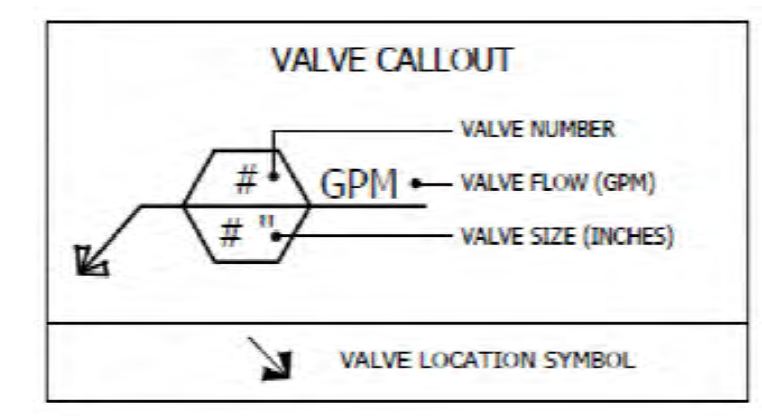
IRRIGATION SCHEDULE

| SYMBOL | MANUFACTURER / MODEL | TYPE | ARC | PSI / GPM | RADIUS |
|--|--|------|-----------|--------------|---------------|
| | HUNTER PCB-50 (1 BUBBLER PER TREE) | TREE | 15-70 GAL | 1 @ 0.50 GPM | SIZED BY AREA |
| | HUNTER PCZ-101 (DRIP CONTROLLER @ 2' O.C.) | | | | |
| BED PLANTING AREA TO RECEIVE POINT SOURCE IRRIGATION | | | | | |
| HUNTER HE POINT SOURCE EMITTERS AT EACH PLANT: HE-10-B (BLACK; 1GPH) = 1 ASSIGNED TO EACH #1 PLANT HE-20-B (RED; 2GPH) = 1 ASSIGNED TO EACH #3 PLANT HE-20-B (RED; 2GPH) = 2 ASSIGNED TO EACH #7+ PLANT | | | | | |
| LATERAL LINE TO EMITTERS = HUNTER BLANK TUBING PLD-BLANK 17mm | | | | | |
| NOTES: PIERCE BLANK TUBING WITH EMITTERS AT EACH PLANT | | | | | |
| 1" IRRIGATION METER, BACKFLOW PREVENTION PER COUNTY CODE | | | | | |
| HUNTER ICV=101 - 1" ELECTRIC GLOBE VALVE W/ FLOW CONTROL HUNTER ICV=151 - 1.5" ELECTRIC GLOBE VALVE W/ FLOW CONTROL HUNTER ICV=201 - 2" ELECTRIC GLOBE VALVE W/ FLOW CONTROL | | | | | |
| HUNTER PCZ-101 DRIP CONTROLLER (FLOW 0.5-1.5 GPM) W/ FILTER SYSTEM. JUMBO VALVE BOX REQUIRED. | | | | | |
| HUNTER PRO-C MODULAR STATION CONTROLLER MODEL: PC OUTDOOR PROVIDE PCM MODULES AS REQUIRED | | | | | |
| HUNTER RAIN-CLICK SENSOR MOUNT IN LOCATION WITH OPEN VIEW TO SKY. | | | | | |
| IRRIGATION MAINLINE: 1.5" PVC CLASS 200 SDR 21 | | | | | |
| IRRIGATION LATERAL LINE: PVC CLASS 160 SDR 26 (NOT SHOWN, SIZE PER CHART) | | | | | |
| SCH 40 IRRIGATION SLEEVE | | | | | |

VALVE SIZING

PRESSURE LOSS NOT TO EXCEED 5 PSI:

| PGV PRESSURE LOSS IN PSI | Flow 1" GPM | 1.5" Globe | 2" Globe |
|--------------------------|-------------|------------|----------|
| 1 | 1.1 | | |
| 5 | 1.9 | | |
| 10 | 1.9 | | |
| 15 | 1.6 | | |
| 20 | 3.3 | 3 | 1 |
| 30 | 9.1 | 3 | 1 |
| 35 | 16 | 3 | 2 |
| 40 | 20 | 3 | 2 |
| 50 | | 4 | 1 |
| 60 | | 5 | 2 |
| 80 | | 5.5 | 3 |
| 100 | | 9 | 5 |
| 120 | | 11.5 | 6 |
| 135 | | | 8 |
| 150 | | | 10 |



ZONE SCHEDULE

| | |
|--|------------------|
| | -TREE BUBBLER |
| | -DRIP ZONE |
| | -IRRIGATION HEAD |

PLD EMITTER LINE MAXIMUM LENGTH

EMITTER LINE LENGTH IN FEET (FOR 1.0 GPH EMITTERS)

| PSI | EMITTER SPACING | | |
|-----|-----------------|-----|-----|
| | 12" | 18" | 24" |
| 15 | 126 | 176 | 222 |
| 20 | 169 | 235 | 295 |
| 25 | 197 | 276 | 346 |
| 30 | 218 | 308 | 390 |
| 35 | 240 | 337 | 425 |
| 40 | 263 | 362 | 452 |
| 45 | 271 | 384 | 486 |
| 50 | 288 | 401 | 503 |

(LENGTH ON 0% SLOPE)
SEE MNR'S SPECS

HUDSON DEVELOPMENT BUFFER DESCRIPTION
BUFFER TYPE:

C.- C-TYPE BUFFERS SHALL CONSIST OF A 15-FOOT WIDE LANDSCAPE STRIP WITHOUT A BUFFER WALL. THE BUFFER SHALL CONTAIN AT LEAST TWO SHADE TREES AND THREE ACCENT/ORNAMENTAL TREES FOR EVERY 100 LINEAL FEET OR FRACTIONAL PART THEREOF. SHRUBS AND GROUNDCOVERS, EXCLUDING TURFGRASS, SHALL COMPRISE AT LEAST 50 PERCENT OF THE REQUIRED BUFFER AND FORM A LAYERED LANDSCAPE SCREEN WITH A MINIMUM HEIGHT OF THREE FEET ACHIEVED WITHIN ONE YEAR.

EXISTING TREE COVERAGE:
CURRENTLY THERE ARE NO TREES ON THIS SITE. SEE LANDSCAPE PLAN FOR NEW TREES HEDGES AND PLANT MATERIALS.

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CA # 0000848
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| IRRIGATION PLAN | | | | | | |
|--|-----------------|---------|-----------|----------|------------|-------------------------|
| HUDSON DEVELOPMENT MARION COUNTY, FLORIDA | | | | | | |
| SEC 31, TWP 15, RGE 23 OCALA, FLORIDA | | | | | | |
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SHEET
CO08E

BARNEY'S PUMPS, INC.

PO BOX 3529, LAKE LAND, FL 33802

PHONE: (863) 665-8500 FAX: (863) 666-3858

DUPLEX FIBERGLASS GRINDER LIFT STATION

GENERAL NOTES

PUMPS SHALL BE OF THE SUBMERSIBLE TYPE (MANUFACTURED BY HYDROMATIC OR HOMA). EACH PUMP SHALL BE MOUNTED ON A 02" RAIL SYSTEM. THE RAIL SYSTEM SHALL BE SELF ENGAGING RESULTING IN A LEAKPROOF COUPLING. THE RAIL SYSTEM SHALL INCLUDE THE BASE ELBOW, DISCHARGE FLANGE ASSEMBLY, 316SS GUIDE RAILS, 316SS UPPER GUIDE BRACKET, 316SS LIFTING BAIL AND CABLE, AND A SIX-HOOK 316SS CABLE HOLDER. THE RAIL SYSTEM SHALL BE MOUNTED AND PRE-PIPED BY THE PUMP SUPPLIER.

PUMP CONSTRUCTION
THE PUMP VOLUTE, MOTOR AND SEAL HOUSING SHALL BE CONSTRUCTED OF CAST IRON. ALL EXTERNAL FASTENERS SHALL BE SERIES 300 STAINLESS STEEL. THE PUMP SHAFT SHALL BE CONSTRUCTED OF SERIES 416 STAINLESS STEEL.

IMPELLER
THE IMPELLER SHALL BE OF MULTI-VANE, SEMI-OPEN CONSTRUCTION. THE IMPELLER SHALL BE STATICALLY AND HYDRAULICALLY BALANCED.

CUTTERS
A CUTTER ASSEMBLY SHALL BE MOUNTED ON THE SUCTION SIDE OF THE PUMP WITH DIRECT DISCHARGE INTO THE PUMP IMPELLER. THE GRINDER SHALL BE CAPABLE OF GRINDING MATERIALS FOUND IN NORMAL, DOMESTIC SEWAGE. BOTH THE STATIONARY AND ROTATING CUTTERS SHALL BE CONSTRUCTED OF HARDENED STEEL.

MOTOR
THE MOTOR SHALL BE MOUNTED IN A SEALED, SUBMERSIBLE TYPE HOUSING. THE STATOR SHALL BE SECURELY HELD IN PLACE WITH A REMOVABLE END RING AND THREADED FASTENERS FOR EASE OF REMOVAL WITHOUT THE USE OF HEAT OR A PRESS. THE MOTOR WILL HAVE TWO HEAVY-DUTY BALL BEARINGS; ONE UPPER (RADIAL) AND ONE LOWER (THRUST), TO SUPPORT THE SHAFT. THE MOTOR SHALL BE EQUIPPED WITH A WINDING THERMOSTAT THAT IS WIRED TO SHUT THE MOTOR OFF IN CASE OF MOTOR OVERHEATING.

SEAL CHAMBER
THE PUMP SHALL HAVE TWO MECHANICAL SEALS, MOUNTED IN TANDEM WITH AN OIL CHAMBER BETWEEN THE SEALS. THE PUMP SHALL BE EQUIPPED WITH A SEAL LEAK DETECTION PROBE AND WARNING SYSTEM BY USING A SEAL FAILURE SENSOR INSTALLED IN THE SEAL CHAMBER.

WET WELL
THE PUMP SUPPLIER SHALL PROVIDE THE WET WELL. THIS GLASS FIBER-REINFORCED POLYESTER BASIN SHALL BE CONSTRUCTED OF A COMMERCIAL GRADE OF GLASS FIBER AND SHALL BE PROVIDED WITH FILLET AND AN ANTI-FLOTATION RING WITH A MINIMUM DIAMETER OF THREE INCHES LARGER THAN THE BASIN DIAMETER. THE RAIL SYSTEM, INTERNAL PIPING AND DISCHARGE CONNECTIONS SHALL BE PRE-INSTALLED BY THE PUMP SUPPLIER. WET WELL SHALL MEET ASTM STANDARD NO. D3753.

HATCH COVER
THE HATCH COVER SHALL BE 2/3 HINGED TO ALLOW FOR MAXIMUM ACCESS TO THE WET WELL. THE HATCH COVER SHALL BE ALUMINUM WITH STAINLESS STEEL HARDWARE, RATED FOR 300 PSF OR GREATER. THE HATCH COVER SHALL INCLUDE A SINGLE OR DUAL DOOR OF DIMENSIONS SPECIFIED BY THE PUMP MANUFACTURER FOR PROPER PUMP CLEARANCE. THE COVER SHALL BE MANUFACTURED BY USF FABRICATION, OR EQUAL.

VALVE BOX
THE VALVE BOX IS FIBERGLASS WITH ALUMINUM LOCKABLE COVER. STANDARD SIZE VALVE BOX IS 32"x30"x25".

VALVES
VALVES SHALL BE SEWAGE SWING CHECK WITH CLEAN-OUT PORTS AND BRASS GATE VALVES.

FLOATS
FLOATS SHALL BE ANCHOR SCIENTIFIC ROTO-FLOATS OR EQUAL.

CONTROLS
THE CONTROL PANEL SHALL BE UL508 LISTED. ENCLOSURE SHALL BE PROVIDED IN 4X POLYCARBONATE. THE PANEL SHALL INCLUDE AN ALTERNATING CONTROL SCHEME (DUPLEX AND ABOVE), MAIN CIRCUIT BREAKER, GENERATOR RECEPTACLE, HIGH LEVEL ALARM LIGHT AND HORN, ELAPSED TIME METERS, VOLTAGE OR PHASE MONITOR, SEAL FAILURE AND OVERLOAD SENSORS. THE LIGHTNING ARRESTOR SHALL BE PROVIDED BY BARNEY'S PUMPS AND INSTALLED BY CONTRACTOR.

ELECTRICAL
ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES.

SUPPLIER
PUMP SUPPLIER SHALL PROVIDE SUBMERSIBLE PUMPS, SLIDE RAIL ASSEMBLIES, FIBERGLASS BASIN AND VALVE BOX, CONTROL PANEL, FLOAT SWITCHES, ALUMINUM HATCHES AND ACCESSORIES TO INSURE PROPER OPERATIONS AND WARRANTY. THE COMPLETE PACKAGE PUMPING STATION SHALL HAVE PUMP BASES, RAIL ASSEMBLIES, AND DISCHARGE PIPING ASSEMBLED BY BARNEY'S PUMPS INC. READY FOR FIELD INSTALLATION.

PUMP PACKAGE SHALL BE SUPPLIED BY BARNEY'S PUMPS INC. IN LAKE LAND (863-665-8500), CORAL SPRINGS (954-346-0669), OR JACKSONVILLE (904-260-0669), FL.

FDEP REQUIREMENTS
PROVIDE 3/4" WATER LINE WITH A 3/4" RPZ. ALL ELECTRICAL PANELS SHALL BE ABOVE THE 100 YEAR FLOOD ELEVATION.

SIGN SUPPLIED BY CONTRACTOR. SIGN TO BE MADE OF ALUMINUM AND BE ATTACHED TO COVER BY RIVETS. THREE ON TOP AND THREE ON BOTTOM.

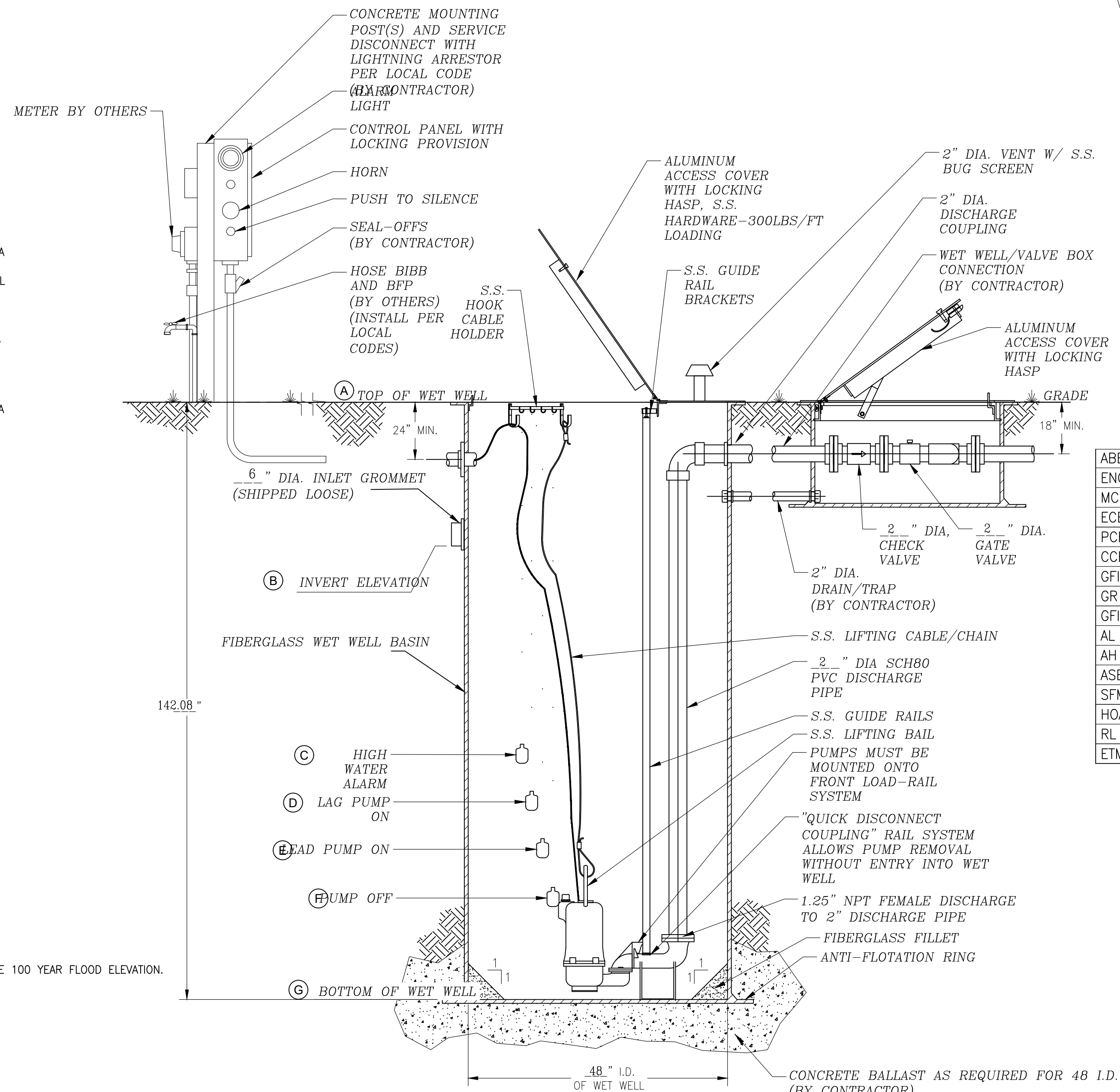
WHITE LETTER RED BACKGROUND EMERGENCY CONTACT INFORMATION SIGN TO BE PLACED ON THE FRONT COVER OF CONTROL PANEL. SIGN LETTERS TO BE 2" MIN. HEIGHT.

HOSE BIB DETAIL (LOCAL CODES PREVAIL)
N.T.S. (SUPPLIED BY CONTRACTOR)

EMERGENCY NOTICE SIGN
CONTRACTOR IS TO PROVIDE AND POST AN UNOBSTRUCTED SIGN (12"x12" WITH 2" LETTERING) MADE OF DURABLE WEATHER RESISTANT MATERIAL AT A LOCATION VISIBLE TO THE PUBLIC WITH A TELEPHONE NUMBER FOR A POINT OF CONTACT IN CASE OF EMERGENCY AS SHOWN ABOVE.

| PUMP DATA TABLE | |
|----------------------|----------------|
| PUMP MODEL | HVS200 |
| IMPELLER DIAMETER | 316 SST / VF8M |
| PUMP DESIGN CAPACITY | 32 GPM |
| PUMP DESIGN TDH | 26 FT |
| HORSEPOWER | 2 HP |
| VOLTAGE | 230 V |
| PHASE | 1 PH |
| DISCHARGE SIZE | 2" |
| NOTES: | |

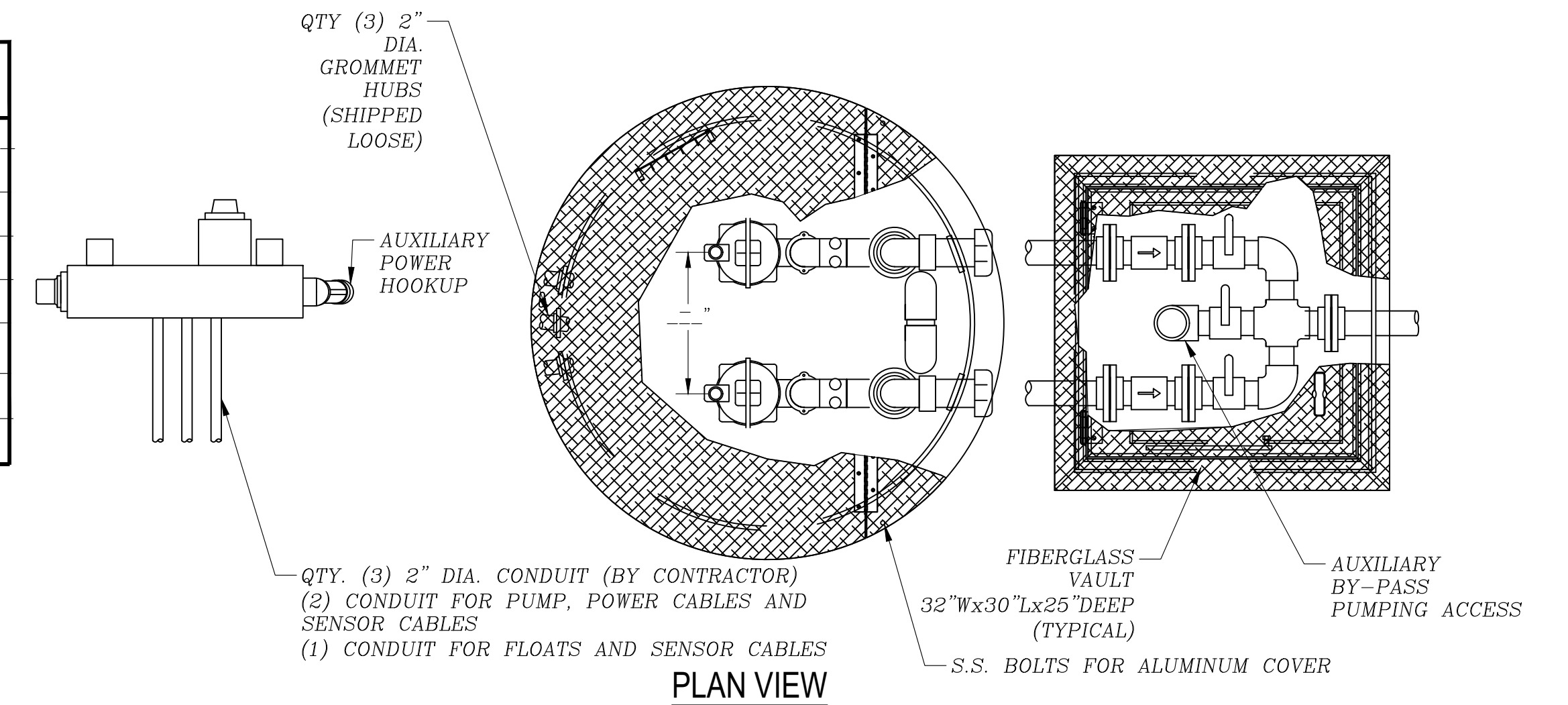
| ELEVATIONS | |
|------------------------|------------|
| (A) TOP OF WET WELL | 82.50' +/- |
| (B) INLET INVERT | 78.16' +/- |
| (C) HIGH WATER ALARM | 77.66' +/- |
| (D) LAG PUMP ON | 76.66' +/- |
| (E) LEAD PUMP ON | 74.16' +/- |
| (F) PUMP OFF | 71.66' +/- |
| (G) BOTTOM OF WET WELL | 70.66' +/- |



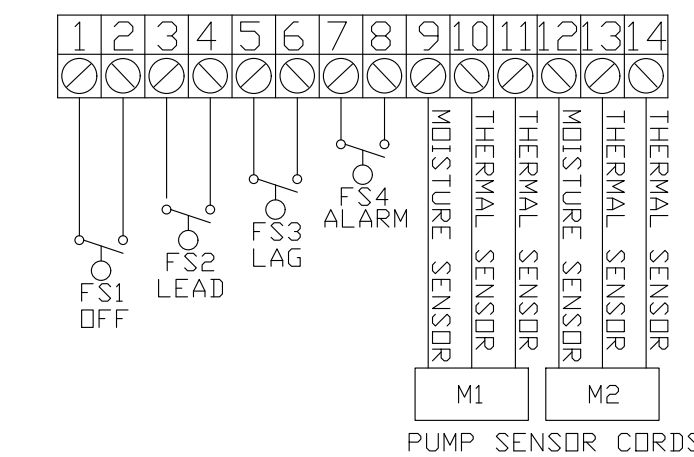
SECTION VIEW

DEPTH = CONCRETE = 4000 LBS/YD
 6FT = 1.5 YDS (6000 LBS)
 8FT = 2 YDS (8000 LBS)
 10FT = 2.5 YDS (10000 LBS)
 12FT = 3 YDS (12000 LBS)
 14FT = 3.5 YDS (14000 LBS)

WET WELL/VALVE BOX LAYOUT



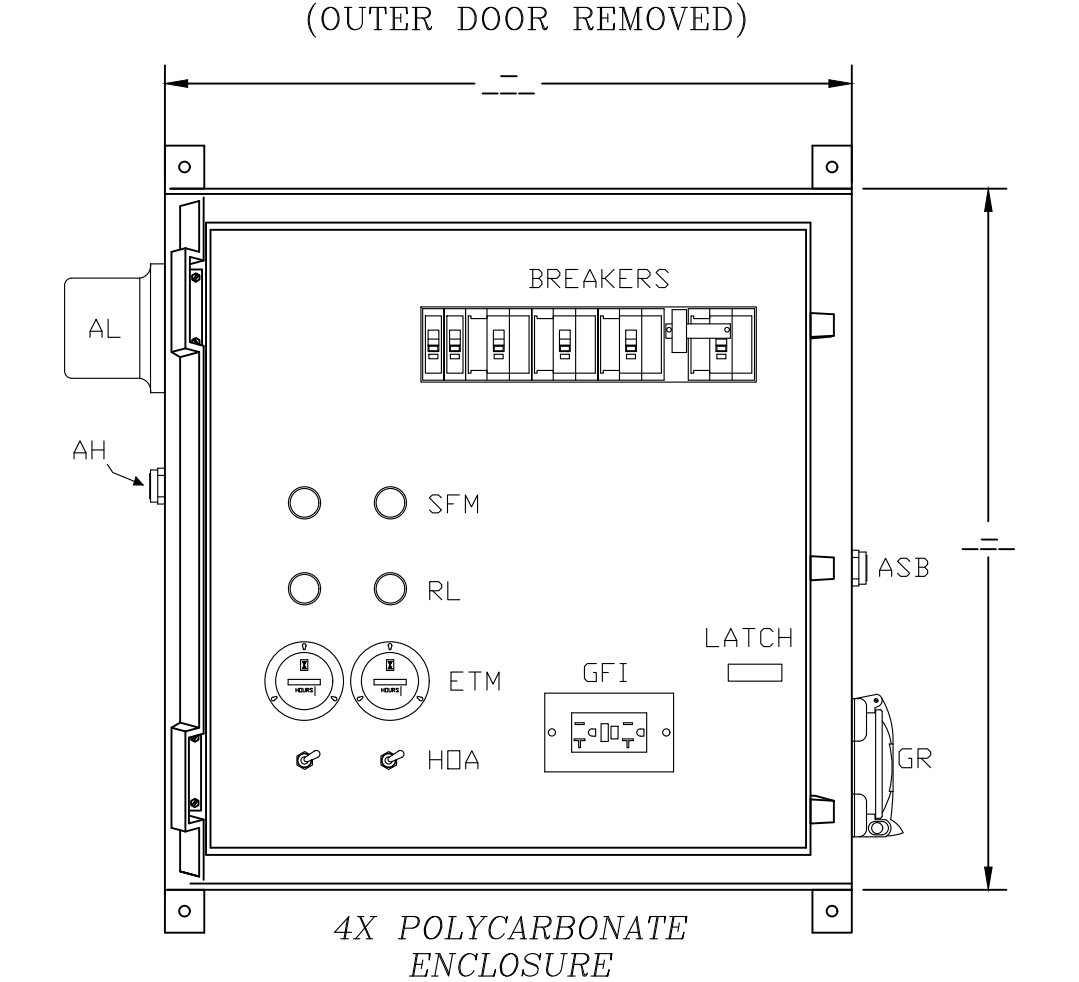
FIELD TERMINALS



LEGEND

| ABBR. | DESCRIPTION |
|--------|-----------------------------------|
| ENC | ENCLOSURE, POLYCARBONATE, NEMA 4X |
| MCB | MAIN CIRCUIT BREAKER |
| ECB | EMERGENCY CIRCUIT BREAKER |
| PCB1,2 | PUMP CIRCUIT BREAKER |
| CCB | CONTROL CIRCUIT BREAKER |
| GFICB | GFI CIRCUIT BREAKER |
| GR | GENERATOR RECEPTACLE |
| GFI | GFI RECEPTACLE |
| AL | ALARM LIGHT |
| AH | ALARM HORN |
| ASB | ALARM SILENCE BUTTON |
| SFM | SEAL FAIL MODULE |
| HOA | HAND OFF AUTO SWITCH |
| RL | RUN LIGHT, GREEN |
| ETM | ELAPSED TIME METER |

ENCLOSURE AND DEADFRONT LAYOUT (TYPICAL)



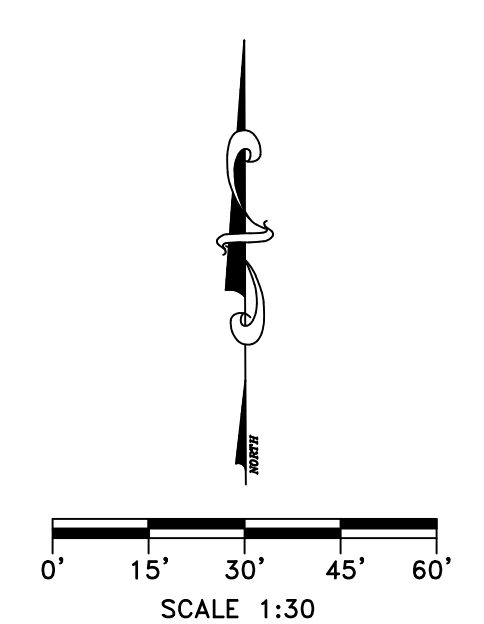
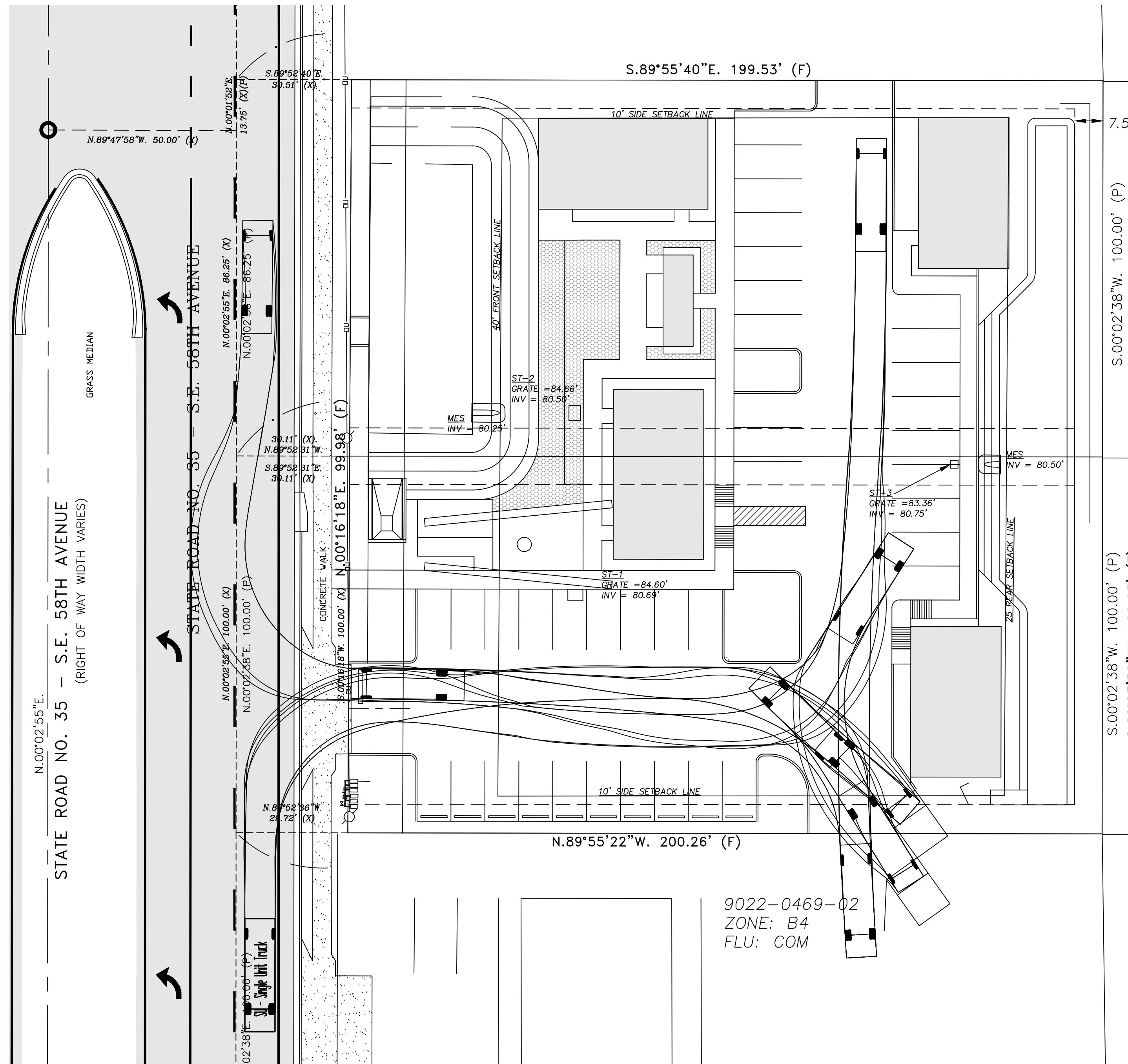
PANEL NOTES

- ALL PANELS SHALL BE UL LISTED AND CONFORM TO FLORIDA DEP 62-604
- 1) GENERATOR RECEPTACLE WITH INTERLOCK FOR EMERGENCY POWER CONNECTION.
 - 2) SURGE AND LIGHTNING PROTECTION SHALL BE PROVIDED BY CONTRACTOR AND MOUNTED EXTERNAL TO THE CONTROL PANEL.
 - 3) PHASE OR VOLTAGE MONITOR SHALL BE PROVIDED IN CONTROL PANEL.
 - 4) ALL PANELS, WET WELL, VALVE BOX, AND ACCESS DOORS SHALL HAVE LOCKABLE MECHANISMS. CONTRACTOR TO PROVIDE KEYS TO LOCKS.
 - 5) POST UNOBSTRUCTED SIGN MADE OF DURABLE WEATHER RESISTANT MATERIAL WITH THE FOLLOWING: PUBLIC NOTICE: IN CASE OF EMERGENCY CONTACT: 6) THE CONTROL PANEL SHALL BE SUITABLY INSTALLED TO PREVENT SETTLING OR TIPPING.
 - 7) FLOAT SWITCHES SHALL BE UL LISTED.
 - 8) SHAFT SEAL FAIL DETECTION

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 OCALA, FLORIDA 34470 FAX (352) 629-4402

| LIFT STATION | | Hudson Development | | MARION COUNTY, FLORIDA | |
|------------------------|----------|--------------------|-----|------------------------|--------|
| SEC 31, TWP 15, RGE 23 | | OCALA, FLORIDA | | | |
| DATE: | 5-24-23 | DESIGN: | MCA | PROJ. HUDSON DEV... | SHEET |
| SCALE: | AS SHOWN | DRAW: | MA | FILE: | 22-029 |
| APPROVED: | MCA | CHECK: | MCA | FILEP: HUDSON DEV... | COO9 |

MILES C ANDERSON PE
 FLORIDA PROFESSIONAL ENGINEER # 99385
 CA # 00009842
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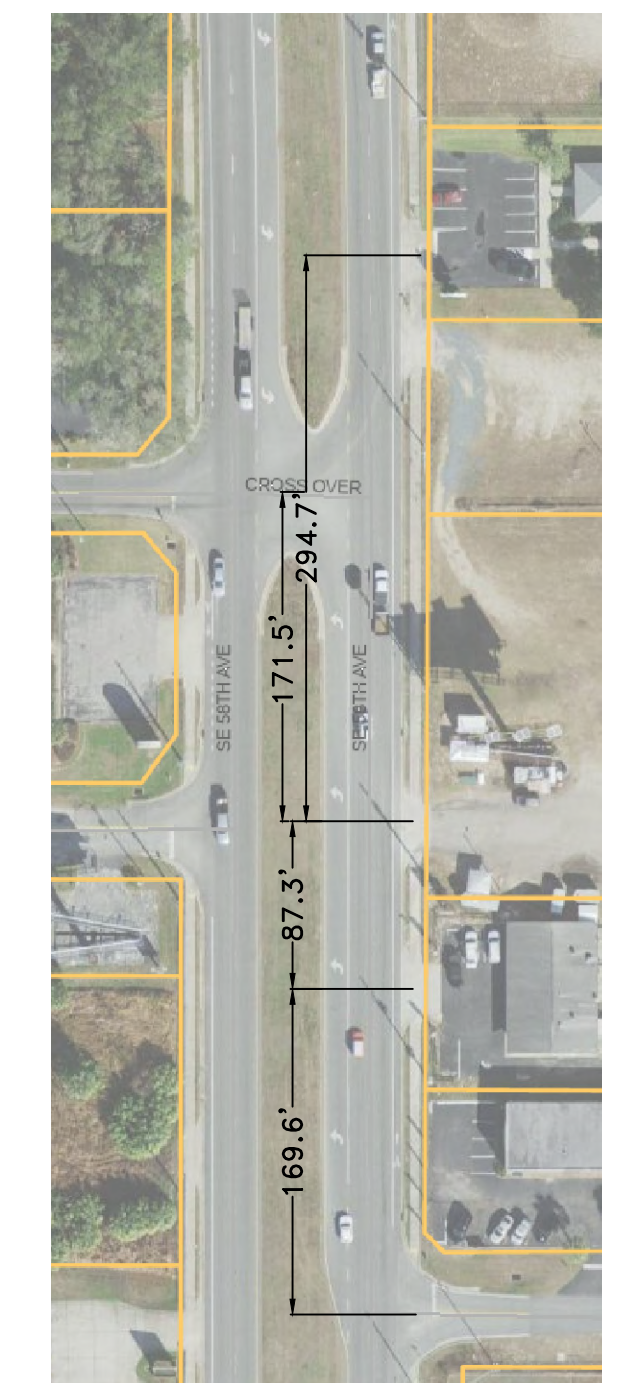
WHEEL TRACKING PLAN
SCALE: 1:30

FDOT DRIVEWAY STATEMENT:
IN THE EVENT THAT THE DRIVEWAY BECOMES OVERLY DAMAGED DURING CONSTRUCTION OF THE SITE WORK IT MAY BE NECESSARY TO HAVE THE DRIVEWAY REPLACED. THE DRIVEWAY PAVEMENT SHALL BE 6" THICK AND CONSTRUCTED WITH 3,000 PSI CONCRETE, PER INDEX 522-003.

FDOT SIDEWALK STATEMENT:
CONTRACTOR SHALL ASSURE THAT THE SIDEWALK STAYS CLEAN AND FREE OF DEBRIS.

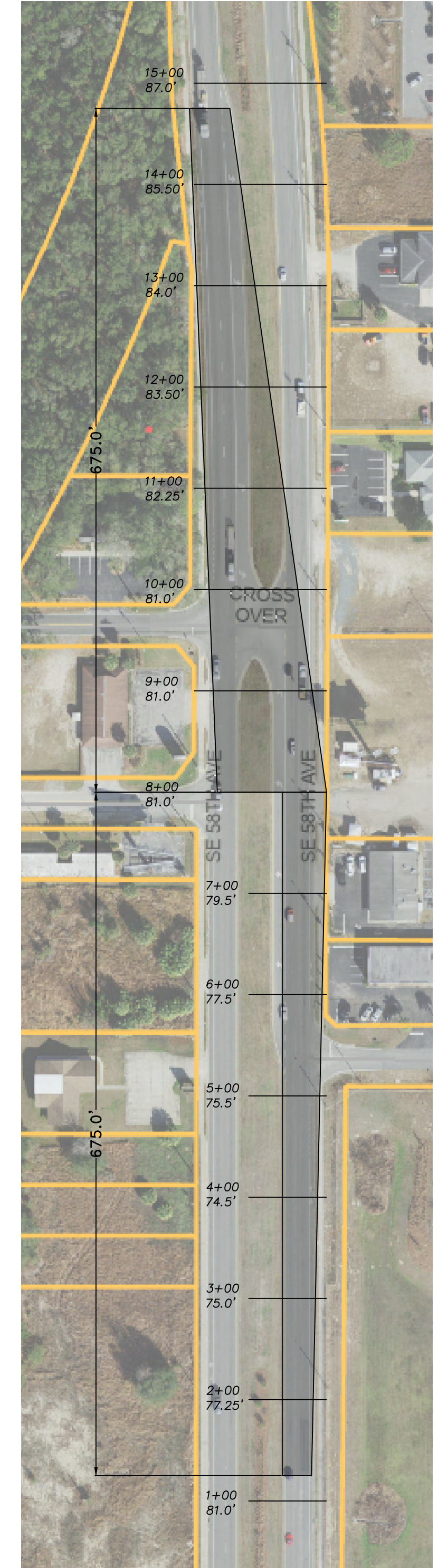
FDOT - UTILITIES IN THE R/W SHOULDER:
CONTRACTOR SHALL PERFORM SHOULDER WORK AS PER INDEX 102-602. IF IT BECOMES NECESSARY TO CLOSE OR REMOVE/REPAIR THE SIDEWALK USE INDEX 522-003, AND REPLACE THE SIDEWALK TO THE NEAREST CONSTRUCTION JOINT, USE INDEX 102-660 FOR PEDESTRIANS.

FDOT - DISTURBED SOD STATEMENT:
CONTRACTOR SHALL RE-SOD/DSEED DISTURBED AREAS TO SPECIFICATION 570 AND 981.

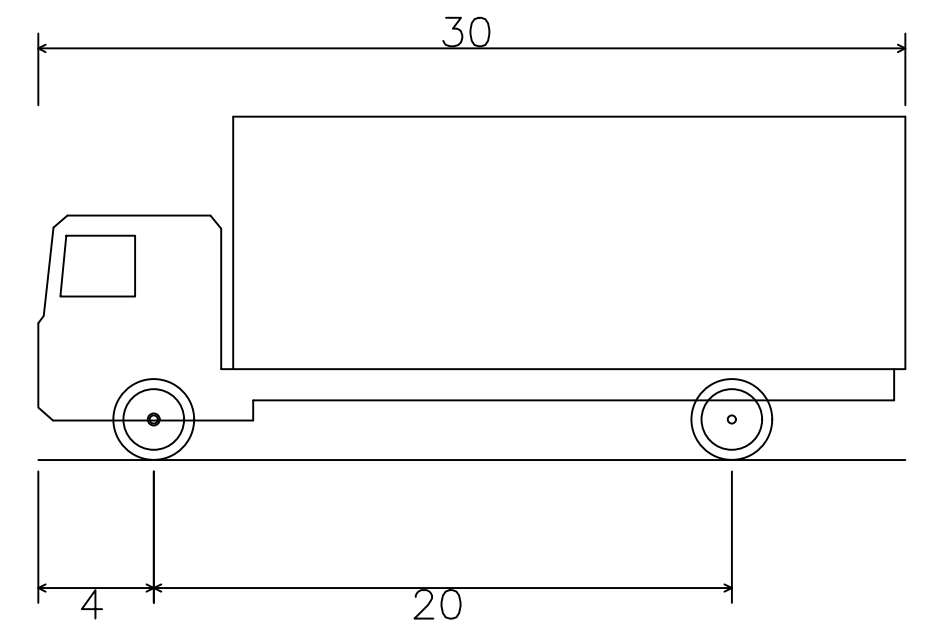


FDOT - DRIVEWAY CONNECTION SPACINGS
SCALE: 1:100

FDOT-PRE APPLICATION:
PRE-APPLICATION WAS CONDUCTED AND ACKNOWLEDGEMENT WAS MADE THAT NO ALTERATIONS TO THE EXISTING DRIVEWAY SHALL TAKE PLACE, NO OBJECTION TO IT REMAINING AS EXISTING.



FDOT SIGHT DISTANCE PLAN
SCALE: 1:100



SU – Single Unit Truck
 Overall Length 30.000ft
 Overall Width 8.000ft
 Overall Body Height 11.881ft
 Min Body Ground Clearance 1.367ft
 Track Width 8.000ft
 Lock-to-lock time 5.00s
 Curb to Curb Turning Radius 42.000ft

9022-0469-02
 ZONE: B4
 FLU: COM

MILES C ANDERSON PE
 FLORIDA PROFESSIONAL ENGINEER # 39385
 CA # 00009646
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| FDOT DATA PLAN | | | | | | |
|--|-----------------|---------|-----------|---------------|--------|------------|
| HUDSON DEVELOPMENT MARION COUNTY, FLORIDA SECTION 31, TWP-15, RNG-23 OCALA, FLORIDA | | | | | | |
| DATE: | 5-3-23 | DESIGN: | MCA | HUDSON DEV... | | |
| 1 | COUNTY COMMENTS | 6-12-24 | SCALE: | AS SHOWN | DRAW: | MA |
| No. | REVISION | DATE | APPROVED: | MCA | CHECK: | MCA |
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