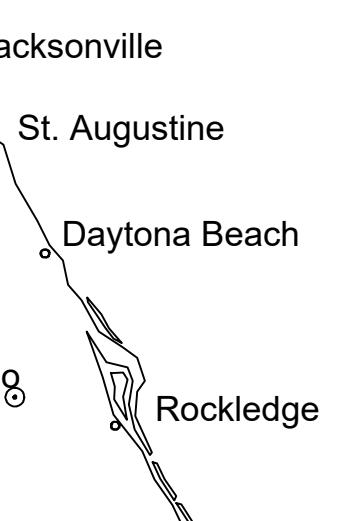
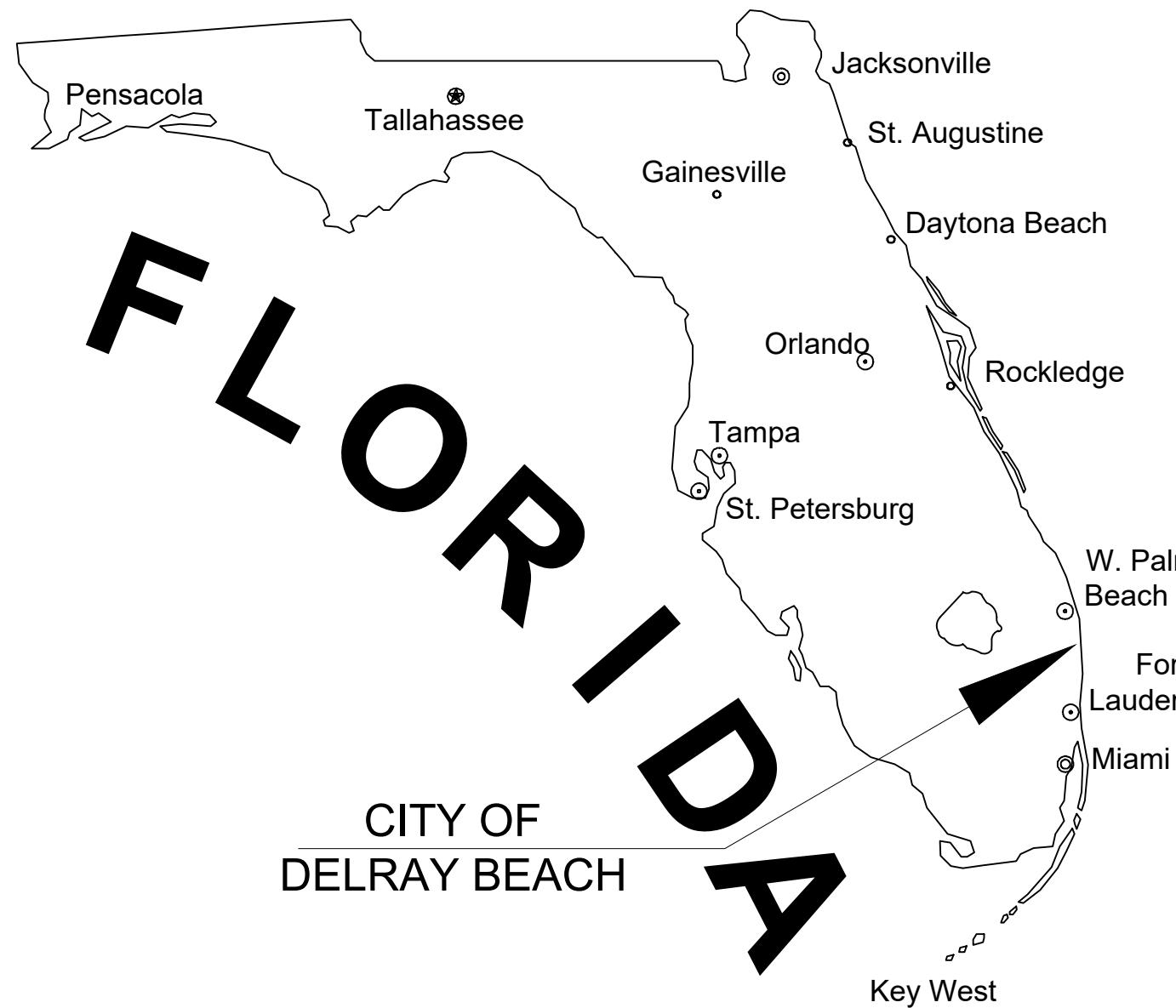


# PRELIMINARY ENGINEERING PLANS



## FOR

109 SE 5TH AVENUE  
DELRAY BEACH, FLORIDA 33483



## SITE LOCATION



## LOCATION MAP

SECTION 16, TOWNSHIP 46 S, RANGE 43 E  
FOLIO #12-43-46-16-F1-000-0010

## **FEMA FLOOD ZONE:**

THE PROPERTY IS LOCATED WITHIN FLOOD ZONE X,  
AS SHOWN ON F.I.R.M. NUM. 12099C0979F, BEARING A  
MAP EFFECTIVE DATE OF 10/5/2017.

THESE PLANS MAY HAVE BEEN  
REDUCED IN SIZE BY REPRODUCTION.  
THIS MUST BE CONSIDERED WHEN  
OBTAINING SCALED DATA.



PREPARED FOR:  
NETTA ARCHITECTS  
ONE PARK PLACE  
621 NW 53RD ST., SUITE 270  
BOCA RATON, FL 33487



PROJECT No. 13190.00 09/18/2025

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JORGE VALLE-PELLOT, P.E.  
FLORIDA REG. NO. 77039  
(FOR THE FIRM)

דרכם של מילדי אסיה ומרכז אסיה בתקופה המודרנית – מושגים ותאוריות

## GENERAL SYMBOLS

SYMBOL	DESCRIPTION
	PROPOSED SECTION MARKER INDICATING THE SECTION LETTER AND THE SHEET ON WHICH THE SECTION VIEW APPEARS.
	DETAIL REFERENCE CALL OUT INDICATING THE DETAIL NUMBER AND THE SHEET ON WHICH THE DETAIL VIEW APPEARS.
	REVISION TRIANGLE NUMBER
	MISC BREAK LINES
	PHOTO LOCATION AND CORRESPONDING PICTURE NUMBER.
N: 623025.4322 E: 850262.1786	COORDINATE VALUES SHOWN ON PROPOSED IMPROVEMENTS ARE RELATIVE TO THE COORDINATE VALUES INDICATED ON THE RIGHT-OF-WAY, PROPERTY CORNERS OR REFERENCE MONUMENT

## GEN SITE &amp; PMS

SYMBOL	DESCRIPTION
	PAVEMENT MARKING ARROWS
	STOP BAR
	ADA PARKING
	CONCRETE CAR STOP
	BICYCLE
	BICYCLE RACK
	AUTOMOBILE
	POST MOUNTED SIGNS 1,2, DOUBLE POST & 4 WAY
	PARKING SPACE NUMBER
	BASELINE, CENTER, PROPERTY, FLOW & MONUMENT LINE
	BUILDING ACCESS (ADA) / (NON-ADA)

## PAVING &amp; GRADING

SYMBOL	DESCRIPTION
	FLOW DIRECTIONAL ARROW
	ELEVATION CHANGE
	MAJOR / MINOR CONTOUR ELEVATION
	GRADE ELEVATION
	TOP OF CURB / PAVEMENT ELEVATION
	MATCH EXISTING GRADE
	SLOPE BANK
	DRIVEWAY TURNOUT IDENTIFICATION (FDOT INDEX 522-003) W/ DRIVE WIDTH
	SIDEWALK CURB RAMP (PER FDOT INDEX 522-002)
	SEAWALL

## UTILITY PIPES

SYMBOL	DESCRIPTION
	PIPE FITTINGS: TEE, 90, 45, 22.5, 11, CAP,
	CAP W/FVO, REDUCER, VERTICAL, PLUG
	VALVES: GATE, BUTTERFLY, DOUBLE BTRFLY, BFP, DDCV, VACUUM BREAKER
	MAN/AUTO BLOWOFF, ARV, PIV, FLUSH VLV, CORP STOP
	SAMPLE PNT, HYDRANT, FDC, WATER WELL
	TAPPING SADDLE
	EXFILTRATION TRENCH
	PIPE CASING
	VENT PIPE BOX
	UTILITY CROSSING

## HATCH PATTERNS

SYM	DESCRIPTION	SYM	DESCRIPTION
	CONCRETE AREA		BRICK PAVERS
	JOGGING PATH		SOIL TRACKING PREVENTION DEVICE
	PAVEMENT AREA		SAND (DETAIL / ELEVATION)
	BUILDING HATCH		EARTH (DETAIL / ELEVATION)
	MILLING AND RESURFACING		GRAVEL (DETAIL / ELEVATION)
	DETECTABLE WARNING PER FLORIDA CODE		GRASS AREA
	DEMOLITION AREA		ADA STRIPING

## UTILITY STRUCTURES

SYMBOL	DESCRIPTION	
	FDOT C,D,E,F,G & FABRIC CATCH BASIN	
	NON-FDOT ROUND CB'S & MANHOLES, MDC STRUCTURE	
	FDOT CURB INLETS TYPE1-TYPE10	
	TRENCH DRAIN	
	PIPE CULVERT - MITERED END SECTION	
	STRAIGHT ENDWALL	
	PUMP STATION LOCATION AND NUMBER	
	GREASE TRAP SINGLE AND DOUBLE	
	SEPTIC TANK	
	SEPTIC DRAIN FIELD	
	DRAINAGE WELL, DRAIN C.B., CONTROL STRUCTURE	
	MONITORING WELL	
	WATER WELL	
	METER BOX WATER AND IRRIGATION	
	YARD DRAIN / 9" DECK DRAIN ROUND & SQUARE	
	CLEAN OUT 6", 4" & BOX	
	STORM STRUCTURE TABLE REFERENCE NUMBER	
	SEWER STRUCTURE CALLOUT (SHOWN AS A CIRCLE CIRCUMSCRIBING THE STRUCTURE NUMBER.) RIM EL = 10.00 (N) INV. EL = 4.00 - XX" DIP (E) INV. EL = 4.00 - XX" DIP (S) INV. EL = 4.00 - XX" DIP (W) INV. EL = 4.00 - XX" DIP	INDICATES STRUCTURE NUMBER, STATION & OFFSET, STRUCTURE SIZE & TYPE, RIM/GRATE ELEVATION, PIPE INVERT ELEVATIONS & DIRECTION, PIPE SIZE & MATERIAL AS WELL AS ANY SPECIAL NOTES.
	STORM STRUCTURE CALLOUT (SHOWN AS A HEXAGON CIRCUMSCRIBING THE STRUCTURE NUMBER.) RIM EL = 10.50 (N) INV. EL = 4.50 - XX" HDPE (E) INV. EL = 4.50 - XX" HDPE (S) INV. EL = 4.50 - XX" HDPE (W) INV. EL = 4.50 - XX" HDPE	

## LINE TYPES

PROPOSED UTILITIES	PAVEMENT MARKING
	STRIPE SKIP 2-4
	STRIPE SKIP 3-9
	STRIPE SKIP 6-10
	STRIPE SKIP 10-30
	STRIPE SKIP 10-20
	STRIPE SKIP 2-2

TOPO	GENERAL SITE
	DEMOLITION
	TURBIDITY BARRIER
	PARKING STRIPING (SINGLE)
	FIRE TRUCK PATH
	SIGHT TRIANGLE
	BUILDING FOOTPRINT
	VEHICLE OVERHANG
	CONSTRUCTION LIMITS
	SILT FENCE
	SUPER SILT FENCE
	PARKING STRIPING (DOUBLE)

PROPOSED ENCUMBRANCES	
	PROPERTY LINE
	ROW LINE
	BUILDING SETBACK LINE
	BUFFER LINE
	EASEMENT LINE

DESCRIPTION	ABBREVIATION
AADT	ANNUAL AVERAGE DAILY TRAFFIC
ABAN	ABANDON
ADJ	ADJUST
APPROX.	APPROXIMATE
A.C.	ASPHALT CONCRETE
ACCM PIPE	ASPHALT COATED CORRUGATED METAL
BIT.	BITUMINOUS
BC	BACK OF CURB
BD.	BOUND
BL	BASELINE
BLDG	BUILDING
BM	BENCHMARK
BO	BY OTHERS
BOS	BOTTOM OF SLOPE
BR.	BRIDGE
CAP	CORRUGATED ALUMINUM PIPE
CB	CATCH BASIN
CBCI	CATCH BASIN WITH CURB INLET
CC	CEMENT CONCRETE
CCM	CEMENT CONCRETE MASONRY
CEM	CEMENT
CI	CURB INLET
CIP	CAST IRON PIPE
CLF	CHAIN LINK FENCE
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CO.	COUNTY
CONC	CONCRETE
CONT	CONTINUOUS
CONST	CONSTRUCTION
CR GR	CROWN GRADE
DDCV	DOUBLE DETECTOR CHECK VALVE
DDCVA	DOUBLE DETECTOR CHECK VALVE ASSEMBLY
DHV	DESIGN HOURLY VOLUME
DI	DROP INLET
DIA	DIAMETER
DIP	DUCTILE IRON PIPE
DWY	DRIVEWAY
ELEV (OR EL.)	ELEVATION
EMB	EMBANKMENT
EOP	EDGE OF PAVEMENT
EOW	EDGE OF WATER
EXIST (OR EX)	EXISTING
EXC	EXCAVATION
F&C	FRAME AND COVER
F&G	FRAME AND GRATE
FDC	FIRE DEPARTMENT CONNECTION
FDN.	FOUNDATION
FH	FIRE HYDRANT
FLDSTN	FIELDSTONE
GAR	GARAGE
GD	GROUND
GI	GUTTER INLET
GIP	GALVANIZED IRON PIPE
GRAN	GRANITE
GRAV	GRAVEL
GRD	GUARD
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HDW	HEADWALL
HMA	HOT MIX ASPHALT
HOR	HORIZONTAL
HYD	HYDRANT
INV	INVERT
JCT	JUNCTION
L	LENGTH OF CURVE
LB	LEACH BASIN
LP	LIGHT POLE
LT	LEFT
MAX	MAXIMUM
MB	MAILBOX
MEG	MATCH EXISTING GRADE
MH	MANHOLE
MIN	MINIMUM
NIC	NOT IN CONTRACT

DESCRIPTION	ABBREVIATION



<tbl\_r cells

**GENERAL NOTES**  
 THIS CONSTRUCTION PROJECT MAY OR MAY NOT INCLUDE ALL ITEMS COVERED BY THESE NOTES AND SPECIFICATIONS, I.E. PAVING, GRADING, DRAINAGE LINES, WATER LINES, OR SANITARY SEWER LINES. SEE PLANS FOR DETAILED PROJECT SCOPE. NOTES AND SPECIFICATIONS ON THIS SHEET REFER TO PAVING, GRADING, DRAINAGE, WATER, AND SANITARY SEWER, AND ARE INTENDED FOR THIS PROJECT'S SCOPE OF WORK AND FOR REFERENCE PURPOSES FOR OTHER WORK ITEMS THAT MAY BE REQUIRED DUE TO UNFORESEEN EXISTING CONDITIONS OR REQUIRED REMEDIAL WORK.

**1. SPECIFIC SITE NOTES**

1.1. COUNTY AND "CITY" IN THESE NOTES REFERS TO COUNTY AND CITY IN WHICH PROJECT RESIDES.

1.2. STATE IN THESE NOTES REFERS TO THE STATE OF FLORIDA.

1.3. EXISTING TOPOGRAPHIC INFORMATION IN THE PLANS IS BASED ON SURVEY DATA AND BEST AVAILABLE INFORMATION. SEE PROJECT SURVEY AND NOTES ON PLAN SHEETS REGARDING THE SOURCE OF THE TOPOGRAPHIC INFORMATION.

**2. APPLICABLE CODES**

2.1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY, COUNTY, AND ALL OTHER JURISDICTIONAL, STATE AND NATIONAL CODES WHERE APPLICABLE.

2.2. IN THE EVENT OF A CONFLICT BETWEEN THE GENERAL NOTES AND CONSTRUCTION SPECIFICATIONS IN THESE PLANS, AND THE CONTRACT DOCUMENTS AND SPECIFICATIONS IN THE SPECIFICATION BOOKLET, THE CONTRACTOR SHALL SUBMIT WRITTEN REQUEST FOR CLARIFICATION.

2.3. ALL CONSTRUCTION SHALL BE DONE IN A SAFE MANNER AND IN STRICT COMPLIANCE WITH ALL THE REQUIREMENTS OF THE FEDERAL OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, AND ALL STATE AND JURISDICTIONAL SAFETY AND HEALTH REGULATIONS.

2.4. THE CONTRACTOR SHALL BE REQUIRED TO COMPLY WITH FEDERAL, STATE, COUNTY, AND CITY LAWS, CODES, AND REGULATIONS.

2.5. ALL HANDICAP ACCESSIBLE AREAS TO CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT (ADA), STATE ADA CODES, AND FLORIDA BUILDING CODE ADA CODES LATEST EDITION.

2.6. TRENCH SAFETY ACT

2.6.1. ALL TRENCH EXCAVATION SHALL BE PERFORMED IN ACCORDANCE WITH CHAPTER 90-96 OF THE LAWS OF FLORIDA (THE TRENCH SAFETY ACT).

2.6.2. ALL TRENCH EXCAVATION IN EXCESS OF 5 FEET IN DEPTH SHALL BE UNDERTAKEN IN ACCORDANCE WITH O.S.H.A. STANDARD 29 CFR, SECTION 1926.650 SUBPART P.

2.6.3. THE CONTRACTOR SHALL SUBMIT WITH HIS CONTRACT A COMPLETED, SIGNED, AND NOTARIZED COPY OF THE TRENCH SAFETY ACT COMPLIANCE STATEMENT. THE CONTRACTOR SHALL ALSO SUBMIT A SEPARATE COST ITEM IDENTIFYING THE COST OF COMPLIANCE WITH THE APPLICABLE TRENCH SAFETY CODES.

2.6.4. A TRENCH SAFETY SYSTEM, IF REQUIRED, SHALL BE DESIGNED BY THE EXCAVATION CONTRACTOR UTILIZING A SPECIALTY ENGINEER AS REQUIRED.

**3. CONSTRUCTION NOTES:**

3.1. CONTRACTOR SHALL TIE TO EXISTING GRADE BY EVENLY SLOPING FROM CLOSEST PROPOSED GRADE PROVIDED TO EXISTING GRADE AT LIMITS OF CONSTRUCTION, UNLESS OTHERWISE NOTED ON THE PLANS. IF NO LIMIT OF WORK LINE IS INDICATED, SLOPE TO ADJACENT PROPERTY LINE OR RIGHT-OF-WAY LINE, AS APPLICABLE.

3.2. UNLESS OTHERWISE INDICATED ON THE PLANS, ALL EXISTING MANHOLES, CATCH BASINS, METERS AND OTHER STRUCTURES, WHETHER INDICATED ON THE PLANS OR NOT SHALL BE ADJUSTED TO MATCH THE NEW GRADE, BY THE CONTRACTOR.

3.3. THE CURB SHALL BE SLOPED TO ACCOMMODATE THE NEW PAVEMENT, CATCH BASIN AND GRATE, AND THE SURFACE FLOW PATTERN.

3.4. THE CONTRACTOR SHALL USE CARE WHEN CUTTING THE EXISTING ASPHALT PAVEMENT AND DURING EXCAVATIONS, SO THAT THE EXISTING CATCH BASINS AND GRATES THAT ARE TO REMAIN WILL NOT BE DAMAGED.

3.5. THE CONTRACTOR SHALL MAINTAIN THE ROADWAY SLOPE WHEN RESURFACING THE ROADWAY. THE EDGE OF PAVEMENT SHALL MATCH THE NEW GUTTER LIP PER FDOT INDEX 520-001.

3.6. THE NEW SIDEWALK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE GIVEN ELEVATIONS AND AT THE PROPER SLOPES DEPICTED IN THE SPECIFICATIONS, DETAILS AND STANDARDS. EXISTING DRIVEWAYS AND OTHER FEATURES SHALL BE MATCHED WHEN POSSIBLE AS DIRECTED BY THE ENGINEER.

3.7. RADII SHOWN ARE TO THE EDGE OF PAVEMENT.

3.8. ALL BENCH MARK MONUMENTS WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AND REFERENCED BY THE CONTRACTOR IN THE SAME WAY AS PUBLIC LAND CORNERS.

3.9. ALL EXCESS MATERIAL IS TO BE DISPOSED BY THE CONTRACTOR WITHIN 72 HOURS.

3.10. IN AREAS WHERE THE BASE IS EXPOSED BY THE MILLING OPERATION, THE CONTRACTOR SHALL RESTORE THE BASE TO ITS ORIGINAL THICKNESS AND STRUCTURAL CAPACITY BEFORE PAVING OVER SUCH AREAS. THIS INCLUDES BUT IS NOT LIMITED TO RESTORING ORIGINAL DEGREE OF COMPACTION, MOISTURE CONTENT, COMPOSITION, STABILITY, AND INTENDED SLOPE. IF PAVING WILL NOT TAKE PLACE THE SAME DAY THE BASE IS EXPOSED AND REWORKED, THE BASE SHALL BE SEALED ACCORDING TO THE GOVERNING STANDARDS AND SPECIFICATIONS. ANY ADDITIONAL WORK RESULTING FROM THE CONTRACTOR'S FAILURE TO PROTECT THE EXPOSED BASE AS STATED ABOVE IN ORDER TO RESTORE THE ORIGINAL STRUCTURAL CAPACITY SHALL BE THE CONTRACTOR'S COST.

3.11. THE CONTRACTOR IS TO MAINTAIN EXISTING SIGNAGE DURING CONSTRUCTION OPERATIONS, IN ORDER TO FACILITATE EMERGENCY VEHICLE TRAFFIC.

3.12. THE TOPOGRAPHIC SURVEY INCLUDED WITH THIS SET OF PLANS REFLECTS PRE-DEMOLITION CONDITIONS AND DOES NOT REFLECT THE SITE CONDITIONS AFTER DEMOLITION. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE IN DETERMINING THE REQUIRED EARTHWORK FOR THE PROPOSED DEVELOPMENT OF THE SITE. THIS INCLUDES, BUT IS NOT LIMITED TO, ANY EXCAVATION/DREDGE AND FILL ACTIVITIES REQUIRED AT ANY PHASE OF THE PROJECT. THE CONTRACTOR SHALL USE THE FINAL APPROVED (RELEASED FOR CONSTRUCTION) PLANS, SURVEYS, GEOTECHNICAL REPORTS, AND ANY OTHER AVAILABLE INFORMATION FOR DETERMINING THE AMOUNT OF EXCAVATION/DREDGING AND FILLING REQUIRED. ANY QUANTITIES INCLUDED IN THE APPROVED PERMITS WERE ESTIMATED BY THE ENGINEER FOR PURPOSES OF OBTAINING THE PERMIT AND UNDER NO CIRCUMSTANCES SHALL BE USED BY THE CONTRACTOR IN LIEU OF PERFORMING THEIR OWN EARTHWORK CALCULATIONS REQUIRED FOR COST ESTIMATING AND BIDDING THE PROJECT.

3.13. THE CONTRACTOR SHALL BE RESPONSIBLE FOR READING AND FAMILIARIZING THEMSELVES WITH ANY AND ALL AVAILABLE GEOTECHNICAL REPORTS PREPARED BY OTHERS AND/OR ANY RECOMMENDATIONS WRITTEN OR IMPLIED BY THE GEOTECHNICAL ENGINEER FOR THIS PROJECT. THE GEOTECHNICAL CONDITIONS AND RECOMMENDATIONS OUTLINED IN THESE REPORTS ARE IN FORCE AND IN FULL EFFECT AS PART OF THE PROPOSED IMPROVEMENTS. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ALL THE WORK ASSOCIATED WITH THIS PROJECT IS IN COMPLIANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS. KEITH AND ASSOCIATES, INC. IS NOT RESPONSIBLE FOR THE SUITABILITY OR UNSUITABILITY OF THE SOILS ENCOUNTERED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE MEANS AND METHODS OF CONSTRUCTION USED CAN AND WILL ALLOW FOR THE SUCCESSFUL COMPLETION OF THE REQUIRED SITE IMPROVEMENTS.

3.14. THE CONTRACTOR SHALL ENSURE THAT THE AVAILABLE GEOTECHNICAL INFORMATION IS SUFFICIENT FOR HIS COMPLETE UNDERSTANDING OF THE SOIL CONDITIONS FOR THE SITE. IF ADDITIONAL GEOTECHNICAL INVESTIGATION IS REQUIRED BY THE CONTRACTOR, THIS ADDITIONAL WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE ALLOWED.

3.15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR AND RESTORATION OF EXISTING PAVEMENT, PIPES, CONDUITS, SPRINKLER HEADS, CABLES, ETC., AND LANDSCAPED AREAS DAMAGED AS A RESULT OF THE CONTRACTOR'S OPERATIONS AND/OR THOSE OF HIS SUBCONTRACTORS AND SHALL RESTORE AT NO ADDITIONAL COST.

3.16. THE CONTRACTOR SHALL NOT BRING ANY HAZARDOUS MATERIALS ONTO THE PROJECT. SHOULD THE CONTRACTOR REQUIRE SUCH FOR PERFORMING THE CONTRACTED WORK, THE CONTRACTOR SHALL REQUEST, IN WRITING, PERMISSION FROM THE OWNER, CITY AND ENGINEER. THE CONTRACTOR SHALL PROVIDE THE OWNER, CITY AND ENGINEER WITH A COPY OF THE MATERIAL SAFETY DATA SHEET (MSDS) FOR EACH HAZARDOUS MATERIAL PROPOSED FOR USE. THE PROJECT ENGINEER SHALL COORDINATE WITH THE OWNER AND CITY PRIOR TO ISSUING WRITTEN APPROVAL TO THE CONTRACTOR.

3.17. ANY KNOWN OR SUSPECTED HAZARDOUS MATERIAL FOUND ON THE PROJECT BY THE CONTRACTOR SHALL BE IMMEDIATELY REPORTED TO THE CITY AND/OR ENGINEER, WHO SHALL DIRECT THE CONTRACTOR TO PROTECT THE AREA OF KNOWN OR SUSPECTED CONTAMINATION FROM FURTHER ACCESS. THE CITY AND/OR ENGINEER ARE TO NOTIFY THE OWNER/ENGINEER OF THE DISCOVERY. THE OWNER/ENGINEER WILL ARRANGE FOR INVESTIGATION, IDENTIFICATION, AND REMEDIATION OF THE HAZARDOUS MATERIAL. THE CONTRACTOR SHALL NOT RETURN TO THE AREA OF CONTAMINATION UNTIL APPROVAL IS PROVIDED BY THE ENGINEER.

3.18. THE CONTRACTOR SHALL CONTACT THE APPROPRIATE CITY ENGINEERING INSPECTOR AND ENGINEER 48 HOURS IN ADVANCE OF THE EVENT TO NOTIFY THE CITY OF CONSTRUCTION START UP, OR TO SCHEDULE ALL REQUIRED TESTS AND INSPECTIONS INCLUDING FINAL WALK-THROUGHS.

**4. PRECONSTRUCTION RESPONSIBILITIES**

4.1. ALL UTILITY / ACCESS EASEMENTS TO BE SECURED PRIOR TO CONSTRUCTION.

4.2. NO CONSTRUCTION MAY COMMENCE UNTIL THE APPROPRIATE PERMITS HAVE BEEN OBTAINED FROM ALL MUNICIPAL, STATE, COUNTY, AND FEDERAL AGENCIES AND A PRE-CONSTRUCTION MEETING HAS BEEN CONDUCTED.

4.3. ALL REQUIRED GOVERNMENTAL AGENCY BUILDING PERMITS TO BE OBTAINED BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY.

4.4. CONTRACTOR TO COORDINATE CONSTRUCTION SCHEDULING FOR CONNECTION TO THE EXISTING WATER AND SEWER LINES WITH THE UTILITY DEPARTMENT THAT OWNS AND/OR MAINTAINS THE WATER AND SEWER LINES.

4.5. PRIOR TO THE START OF CONSTRUCTION, THE OWNER SHALL SUBMIT AN NPDES CONSTRUCTION GENERAL PERMIT (CGP) "NOTICE OF INTENT (N.O.I.) TO USE GENERIC PERMIT FOR STORM WATER DISCHARGE FROM CONSTRUCTION ACTIVITIES FORM (DEP FORM 62-621.3004(B)) TO FDEP NOTICES CENTER. THE CONTRACTOR WILL BE RESPONSIBLE FOR (1) IMPLEMENTATION OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) THAT WAS REQUIRED TO BE DEVELOPED PRIOR TO NOI SUBMITTAL, AND (2) RETENTION OF RECORDS REQUIRED BY THE PERMIT, INCLUDING RETENTION OF A COPY OF THE SWPPP AT THE CONSTRUCTION SITE FROM THE DATE OF PROJECT INITIATION TO THE DATE OF FINAL SITE STABILIZATION. A "NOTICE OF TERMINATION (N.O.T.) OF GENERIC PERMIT COVERAGE" FORM (DEP FORM 62-621.3006) MUST BE SUBMITTED TO FDEP TO DISCONTINUE PERMIT COVERAGE, SUBSEQUENT TO COMPLETION OF CONSTRUCTION. FOR ADDITIONAL INFORMATION SEE FDEP WEBSITE: [HTTP://FLORIDADEPT.GOV/WATER/STORMWATER](http://FLORIDADEPT.GOV/WATER/STORMWATER).

4.6. PRIOR TO CONSTRUCTION OR INSTALLATION, 5 SETS OF SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AS REQUIRED FOR THE FOLLOWING ITEMS LISTED BELOW, BUT NOT LIMITED TO:

- DRAINAGE: CATCH BASINS, MANHOLES, HEADWALLS, GRATES/TOPS, YARD DRAINS.
- WATER: FIRE HYDRANTS, VALVES, BACKFLOW PREVENTER, DDCV, METER BOX.
- SEWER: MANHOLES, LIFT STATIONS (WETWELL, HATCHES, VALVES, PUMP DATA, ELECTRICAL PANEL)

4.6.1. CATALOGUE LITERATURE SHALL BE SUBMITTED FOR DRAINAGE, WATER AND SEWER PIPES, FITTINGS, AND APPURTENANCES.

4.6.2. PRIOR TO SUBMITTING SHOP DRAWINGS TO THE ENGINEER, THE CONTRACTOR SHALL REVIEW AND APPROVE THE DRAWINGS, AND SHALL NOTE IN RED ANY DEVIATIONS FROM THE ENGINEER'S PLANS OR SPECIFICATIONS.

4.6.3. INDIVIDUAL SHOP DRAWINGS FOR ALL PRECAST STRUCTURES ARE REQUIRED. CATALOGUE LITERATURE WILL NOT BE ACCEPTED FOR PRECAST STRUCTURES.

4.7. CONTRACTOR TO SUBMIT MAINTENANCE OF TRAFFIC PLAN(S) IN ACCORDANCE WITH FOOT AND COUNTY REQUIREMENTS, AND SUBMIT FOR APPROVAL PRIOR TO BEGINNING CONSTRUCTION.

**5. INSPECTIONS / TESTING:**

5.1. THE CONTRACTOR SHALL NOTIFY IN WRITING THE OWNER, CITY, COUNTY, ENGINEER OF RECORD, AND ANY OTHER GOVERNMENTAL AGENCIES HAVING JURISDICTION AT LEAST 48 HOURS PRIOR TO BEGINNING CONSTRUCTION AND PRIOR TO REQUIRED INSPECTIONS OF THE FOLLOWING ITEMS, WHERE APPLICABLE:

- CLEARING AND EARTHWORK
- STORM DRAINAGE SYSTEMS
- SANITARY SEWER SYSTEMS
- WATER DISTRIBUTION SYSTEMS
- SUBGRADE
- LIMEROCK BASE
- ASPHALT OR CONCRETE PAVEMENT
- SIDEWALKS, CONCRETE FLATWORK/CURBING
- LANDSCAPING
- PAVEMENT MARKING AND SIGNAGE
- SIGNALIZATION
- SITE LIGHTING
- ELECTRICAL AND COMMUNICATION LINES
- UTILITY CONDUITS
- IRRIGATION
- FINAL

5.2. THE OWNER, ENGINEER, AND JURISDICTIONAL PERMITTING AGENCIES MAY MAKE INSPECTIONS OF THE WORK AT ANY TIME. THE CONTRACTOR SHALL COOPERATE FULLY WITH ALL INSPECTIONS.

5.3. TESTING - ALL TESTING REQUIRED BY THE PLANS AND SPECIFICATIONS SHALL BE PERFORMED BY A LICENSED / FDOT QUALIFIED TESTING COMPANY. REQUIRED TEST FOR ASPHALT AND LIMEROCK SHALL BE TAKEN AT THE DIRECTION OF THE ENGINEER OR THE JURISDICTIONAL GOVERNMENTAL AGENCY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.

**6. TEMPORARY FACILITIES**

6.1. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR OR SUPPLY TEMPORARY WATER SERVICE, SANITARY FACILITIES, COMMUNICATIONS, AND ELECTRICITY, FOR HIS OPERATIONS AND WORKS, COST INCLUDED UNDER MOBILIZATION.

6.2. CONTRACTOR SHALL CONSTRUCT TEMPORARY FENCING TO SECURE CONSTRUCTION AREAS AT ALL TIMES, COST INCLUDED IN MOBILIZATION.

6.3. CONTRACTOR TO OBTAIN A SECURE STAGING AREA AND OBTAIN ALL NECESSARY APPROVALS FROM THE OWNER.

6.4. CONTRACTOR SHALL CONSTRUCT AND MAINTAIN TEMPORARY LIGHTING AS REQUIRED TO LIGHT THE CONSTRUCTION PROJECT LIMITS AT ALL TIMES, TO AT LEAST THE SAME LIGHTING INTENSITY LEVELS AS THE EXISTING CONDITIONS.

6.5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ADJACENT PROPERTIES AT ALL TIMES.

**7. PROJECT PROGRESS AND CLOSEOUT**

7.1. DURING CONSTRUCTION, THE PROJECT SITE AND ALL ADJACENT AREAS SHALL BE MAINTAINED IN A NEAT AND CLEAN MANNER, AND UPON FINAL CLEAN-UP, THE PROJECT SITE SHALL BE LEFT CLEAR OF ALL SURPLUS MATERIAL OR TRASH. THE PAVED AREAS SHALL BE BROOM SWEEP CLEAN.

7.2. THE CONTRACTOR SHALL RESTORE OR REPLACE ANY PUBLIC OR PRIVATE PROPERTY (SUCH AS HIGHWAY, DRIVEWAY, WALKWAY, AND LANDSCAPING), DAMAGED BY HIS WORK, EQUIPMENT, OR EMPLOYEES, TO A CONDITION AT LEAST EQUAL TO THAT EXISTING IMMEDIATELY PRIOR TO THE BEGINNING OF CONSTRUCTION. SUITABLE MATERIALS AND METHODS SHALL BE USED FOR SUCH RESTORATION.

7.3. MATERIAL OR DEBRIS SHALL BE HAULED IN ACCORDANCE WITH NPDES PERMIT AND JURISDICTIONAL LAWS.

7.4. ALL LAND SURVEY PROPERTY MONUMENTS OR PERMANENT REFERENCE MARKERS, REMOVED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED BY A STATE OF FLORIDA REGISTERED LAND SURVEYOR AT THE CONTRACTOR'S EXPENSE.

7.5. ALL UNPAVED SURFACES DISTURBED AS A RESULT OF CONSTRUCTION ACTIVITIES SHALL BE GRADED, SODDED, & RESTORED TO A CONDITION EQUAL TO OR BETTER THAN THAT WHICH EXISTED BEFORE THE CONSTRUCTION.

**8. PROJECT RECORD DOCUMENTS:**

8.1. DURING THE DAILY PROGRESS OF THE JOB, THE CONTRACTOR SHALL RECORD ON HIS SET OF CONSTRUCTION DRAWINGS THE LOCATION, LENGTH, MATERIAL AND ELEVATION OF ANY FACILITY NOT BUILT ACCORDING TO PLANS. THIS COPY OF THE "AS-BUILT" SHALL BE SUBMITTED TO ENGINEER FOR PROJECT RECORD.

8.2. UPON COMPLETION OF DRAINAGE IMPROVEMENTS AND LIMEROCK BASE CONSTRUCTION (AT LEAST 48 HOURS BEFORE PLACING

ASPHALT PAVEMENT) THE CONTRACTOR SHALL FURNISH THE ENGINEER OF RECORD "AS-BUILT" PLANS FOR THESE IMPROVEMENTS, SHOWING THE LOCATIONS AND PERTINENT GRADES OF ALL DRAINAGE INSTALLATIONS AND THE FINISHED ROCK GRADES OF THE ROAD CROWN AND EDGES OF PAVEMENT AT 50 FOOT INTERVALS, INCLUDING LOCATIONS AND ELEVATIONS OF ALL HIGH AND LOW POINTS.

8.3. UPON COMPLETION OF CONSTRUCTION, AND PRIOR TO FINAL ACCEPTANCE, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER OF RECORD ONE COMPLETE SET OF ALL "AS-BUILT" CONTRACT DRAWINGS. THESE DRAWINGS SHALL BE MARKED TO SHOW "AS-BUILT" CONSTRUCTION CHANGES, DIMENSIONS, LOCATIONS, AND ELEVATIONS OF ALL IMPROVEMENTS.

8.4. "AS-BUILT" DRAWINGS OF WATER LINES AND FORCE MAINS SHALL INCLUDE THE FOLLOWING INFORMATION:

- 8.4.1. TOP OF PIPE ELEVATIONS EVERY 100 LF.
- 8.4.2. LOCATIONS AND ELEVATIONS OF ALL FITTINGS INCLUDING BENDS, TEES, GATE VALVES, DOUBLE DETECTOR CHECK VALVES, FIRE HYDRANTS, AND APPURTENANCES.
- 8.4.3. ALL CONNECTIONS TO EXISTING LINES.
- 8.4.4. ENDS OF ALL WATER SERVICES AT THE BUILDINGS WHERE THE WATER SERVICE TERMINATES.
- 8.5. "AS-BUILT" DRAWINGS OF GRAVITY SANITARY SEWER LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
- 8.5.1. RIM ELEVATIONS, INVERT ELEVATIONS, LENGTH OF PIPING BETWEEN STRUCTURES, AND SLOPES.
- 8.5.2. THE STUB ENDS AND CLEANOUTS OF ALL SEWER LATERALS SHALL BE LOCATED HORIZONTALLY AND VERTICALLY.
- 8.6. "AS-BUILT" DRAWINGS OF ALL DRAINAGE LINES SHALL INCLUDE THE FOLLOWING INFORMATION:
- 8.6.1. RIM ELEVATION, INVERT ELEVATION, LENGTH OF PIPING BETWEEN STRUCTURES, AND CONTROL STRUCTURE ELEVATIONS IF APPLICABLE.
- 8.6.2. THE SIZE OF THE LINES.
- 8.6.3. DRAINAGE WELL STRUCTURE SHALL INCLUDE, BUT NOT BE LIMITED TO, TOP OF CASING ELEVATION, TOP AND BOTTOM ELEVATIONS OF THE STRUCTURE AND BAFFLE WALLS, RIM ELEVATIONS AND PIPE INVERTS.
- 8.7. "AS-BUILT" DRAWINGS OF CONSTRUCTION AREAS SHALL INCLUDE THE FOLLOWING:
- 8.7.1. ROCK ELEVATIONS AT ALL HIGH, AND LOW POINTS, AND AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY.
- 8.7.2. ROCK ELEVATIONS AND CONCRETE BASE ELEVATIONS SHALL BE TAKEN AT ALL LOCATIONS WHERE THERE IS A FINISH GRADE ELEVATION SHOWN ON THE DESIGN PLANS.
- 8.7.3. ALL CATCH BASIN AND MANHOLE RIM ELEVATIONS.
- 8.7.4. FINISH GRADE ELEVATIONS IN ISLAND AREAS.
- 8.7.5. "AS-BUILT" ELEVATIONS SHALL BE TAKEN ON ALL PAVED AND UNPAVED SWALES, AT ENOUGH INTERMEDIATE POINTS TO CONFIRM SLOPE CONSISTENCY AND CONFORMANCE TO THE PLAN DETAILS.
- 8.7.6. LAKE AND CANAL BANK "AS-BUILT" DRAWINGS SHALL INCLUDE A KEY SHEET OF THE LAKE FOR THE LOCATION OF CROSS SECTIONS. LAKE AND CANAL BANK CROSS SECTIONS SHALL BE PLOTTED AT A MINIMUM OF EVERY 100 LF, UNLESS OTHERWISE SPECIFIED. "AS-BUILT" DRAWINGS SHALL CONSIST OF THE LOCATION AND ELEVATION OF THE TOP OF BANK, EDGE OF WATER, AND THE DEEP CUT LINE, WITH THE DISTANCE BETWEEN EACH SHOWN ON THE DRAWING.
- 8.7.7. RETENTION AREA "AS-BUILT" ELEVATIONS SHALL BE TAKEN AT THE BOTTOM OF THE RETENTION AREA AND AT THE TOP OF BANK. IF THERE ARE CONTOURS INDICATED ON THE DESIGN PLANS, THEN THEY SHALL BE INCLUDED IN "AS-BUILT" DRAWINGS AS WELL.
- 8.8. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL PREPARE "AS-BUILT" DRAWINGS ON FULL SIZE, 24" X 36" SHEETS. ALL "AS-BUILT" INFORMATION SHALL BE PUT ON THE LATEST ENGINEERING DRAWINGS. EIGHT (8) SETS OF BLUE OR BLACK LINE DRAWINGS SHALL BE SUBMITTED. THESE DRAWINGS SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED PROFESSIONAL ENGINEER OR LAND SURVEYOR.
- 8.9. AN ELECTRONIC COPY OF THESE "AS-BUILT" DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER OF RECORD IN AUTOCAD, VERSION 2008 OR LATER.
- 9. UTILITY NOTES**
- 9.1. CONTRACTOR IS RESPONSIBLE FOR UTILITY VERIFICATION PRIOR TO FABRICATION.
- 9.2. THE CONTRACTOR IS ADVISED THAT PROPERTIES ADJACENT TO THE PROJECT HAVE ELECTRIC, TELEPHONE, GAS, WATER AND/OR SEWER SERVICE LATERALS WHICH MAY NOT BE SHOWN IN PLANS. THE CONTRACTOR MUST REQUEST THE LOCATION OF THESE LATERAL SERVICES FROM THE UTILITY COMPANIES.
- 9.3. THE CONTRACTOR SHALL USE HAND DIGGING WHEN EXCAVATING NEAR EXISTING UTILITIES. EXTREME CAUTION SHALL BE EXERCISED BY THE CONTRACTOR WHILE EXCAVATING, INSTALLING, BACKFILLING OR COMPACTING AROUND THE UTILITIES.
- 9.4. THE CONTRACTOR SHALL NOTIFY AND OBTAIN AN UNDERGROUND CLEARANCE FROM ALL UTILITY COMPANIES AND GOVERNMENTAL AGENCIES AT LEAST 48 HOURS PRIOR TO BEGINNING ANY CONSTRUCTION. THE CONTRACTOR SHALL OBTAIN A SUNSHINE911.COM CERTIFICATION CLEARANCE NUMBER AND FIELD MARKINGS AT LEAST 48 HOURS PRIOR TO BEGINNING ANY EXCAVATION.
- 9.5. FOR STREET EXCAVATION OR CLOSING OR FOR ALTERATION OF ACCESS TO PUBLIC OR PRIVATE PROPERTY, THE CONTRACTOR SHALL NOTIFY:

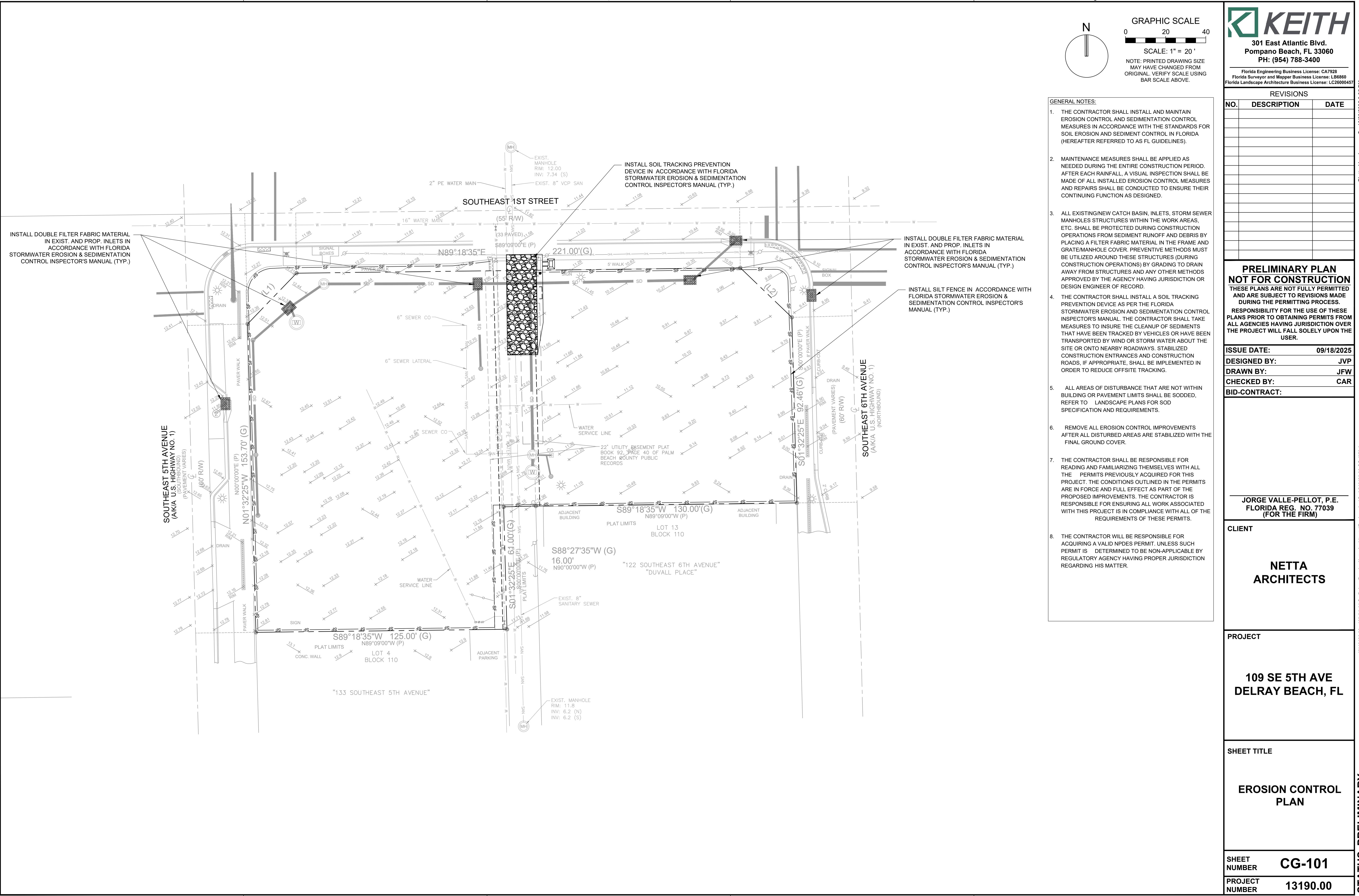
  - ROADWAY JURISDICTIONAL ENGINEERING / PUBLIC WORKS AUTHORITY.
  - COUNTY TRANSIT AUTHORITY
  - SCHOOL BOARD TRANSPORTATION AUTHORITY
  - JURISDICTIONAL FIRE DEPARTMENT DISPATCH
  - JURISDICTIONAL POLICE DEPARTMENT(S)

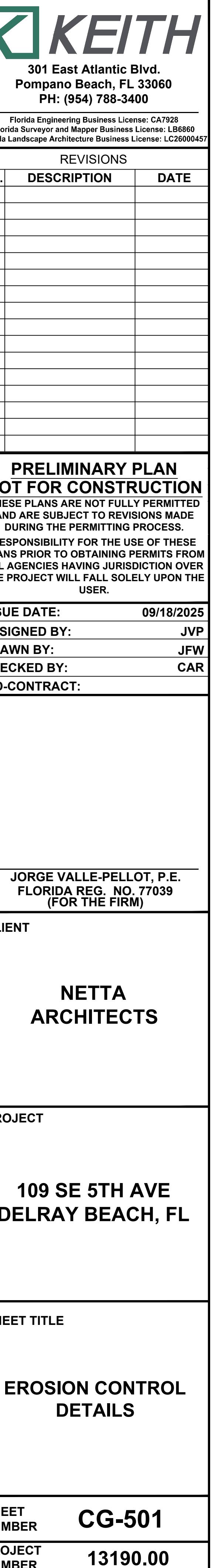
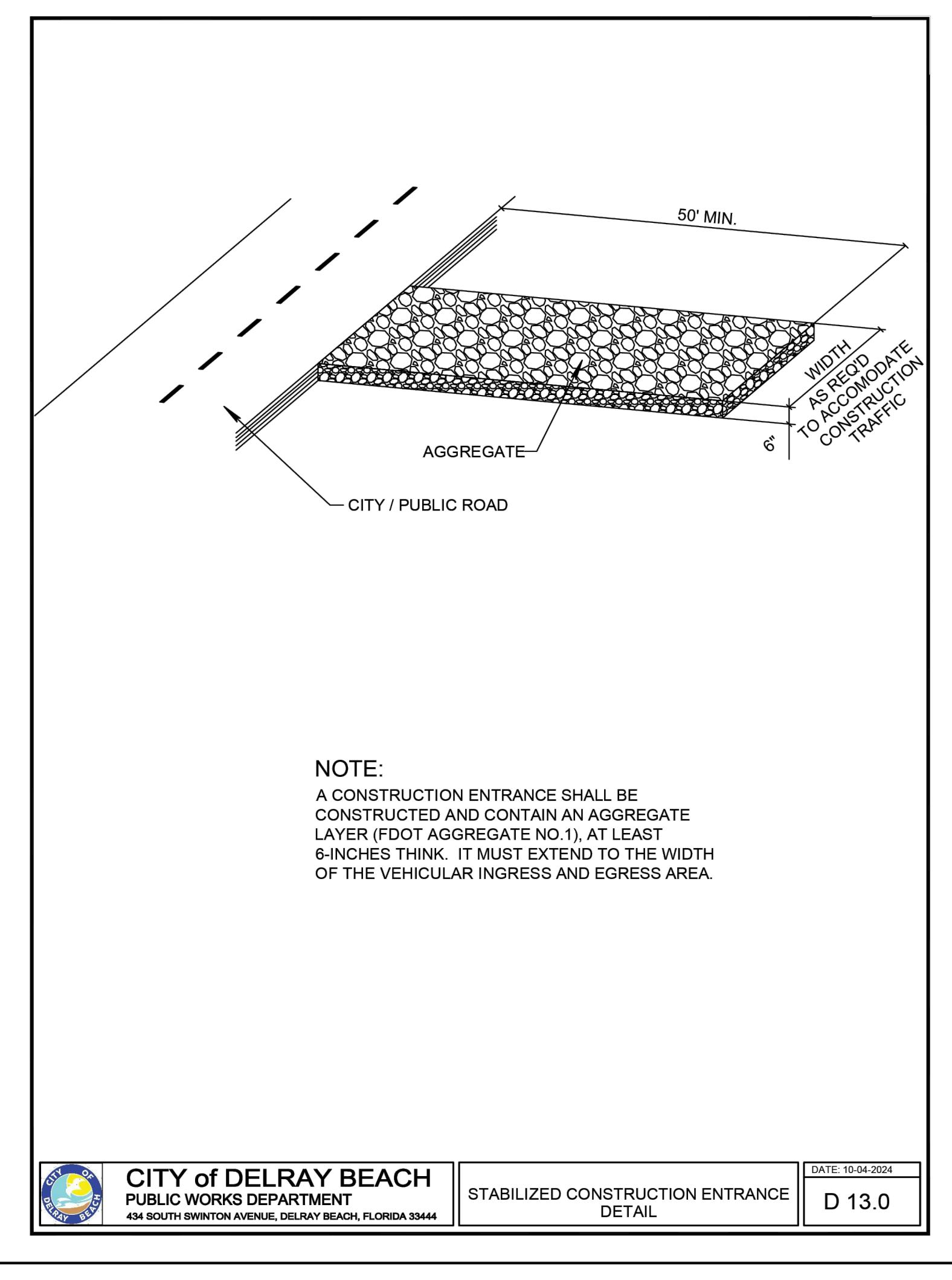
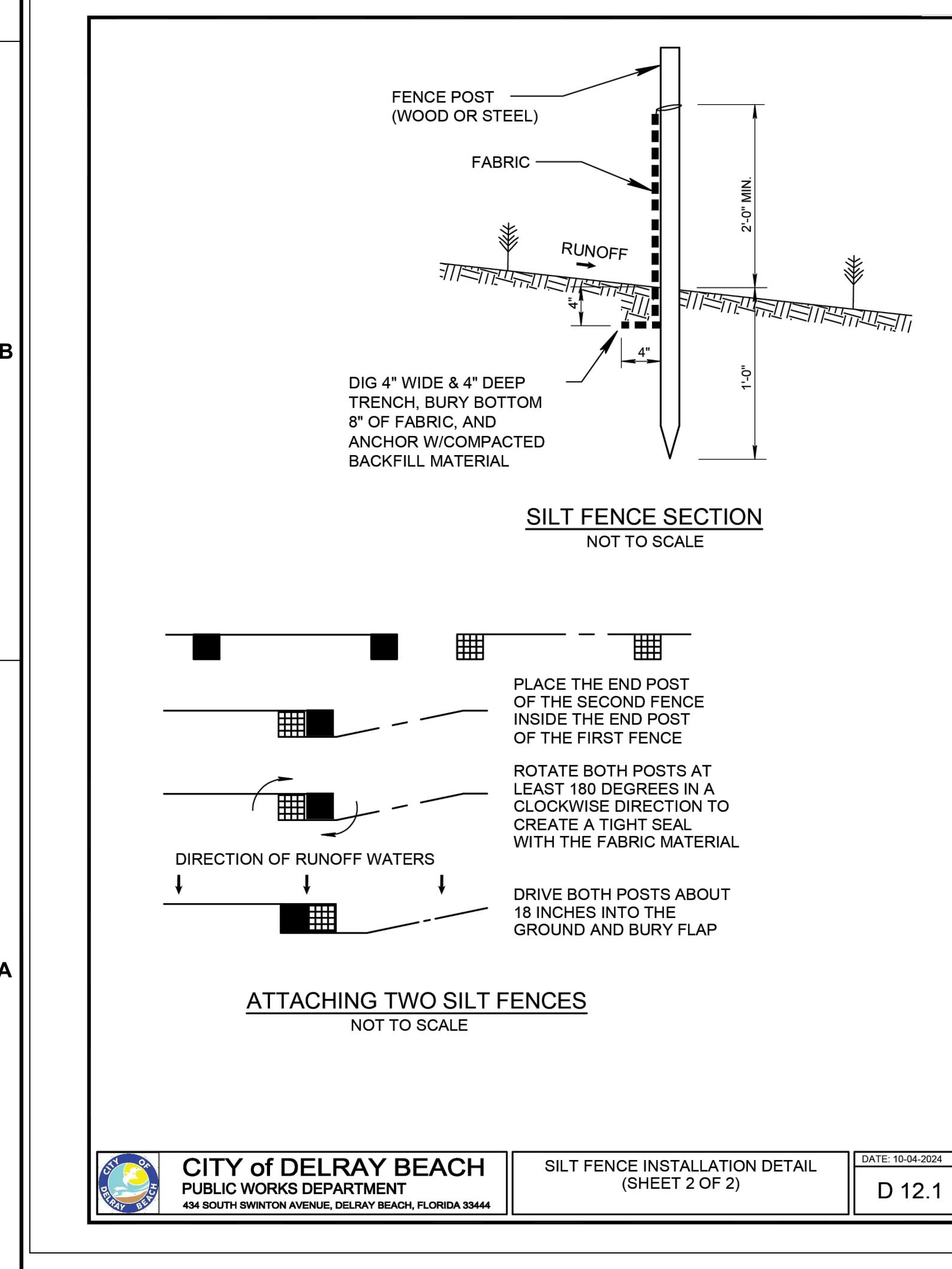
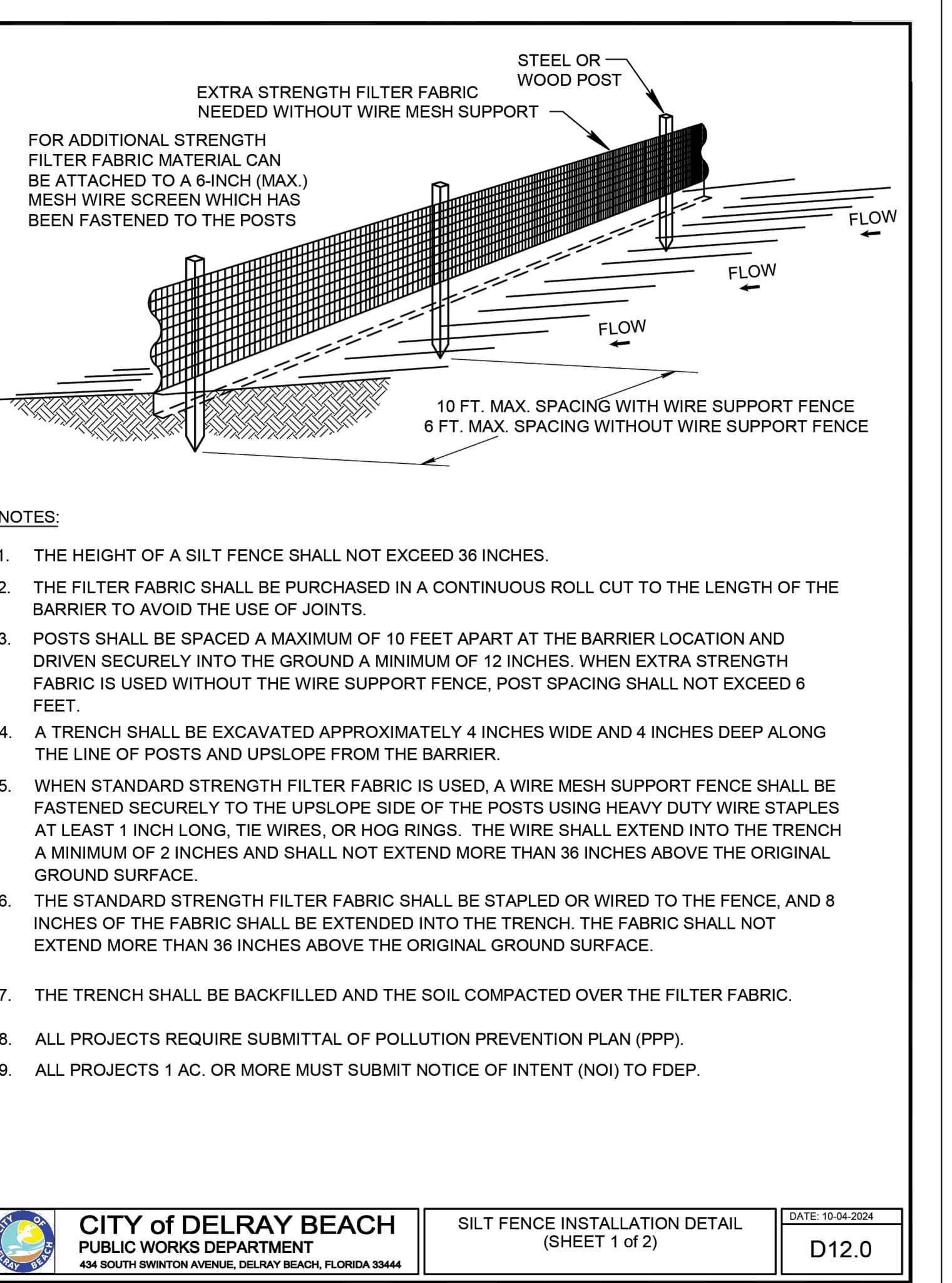
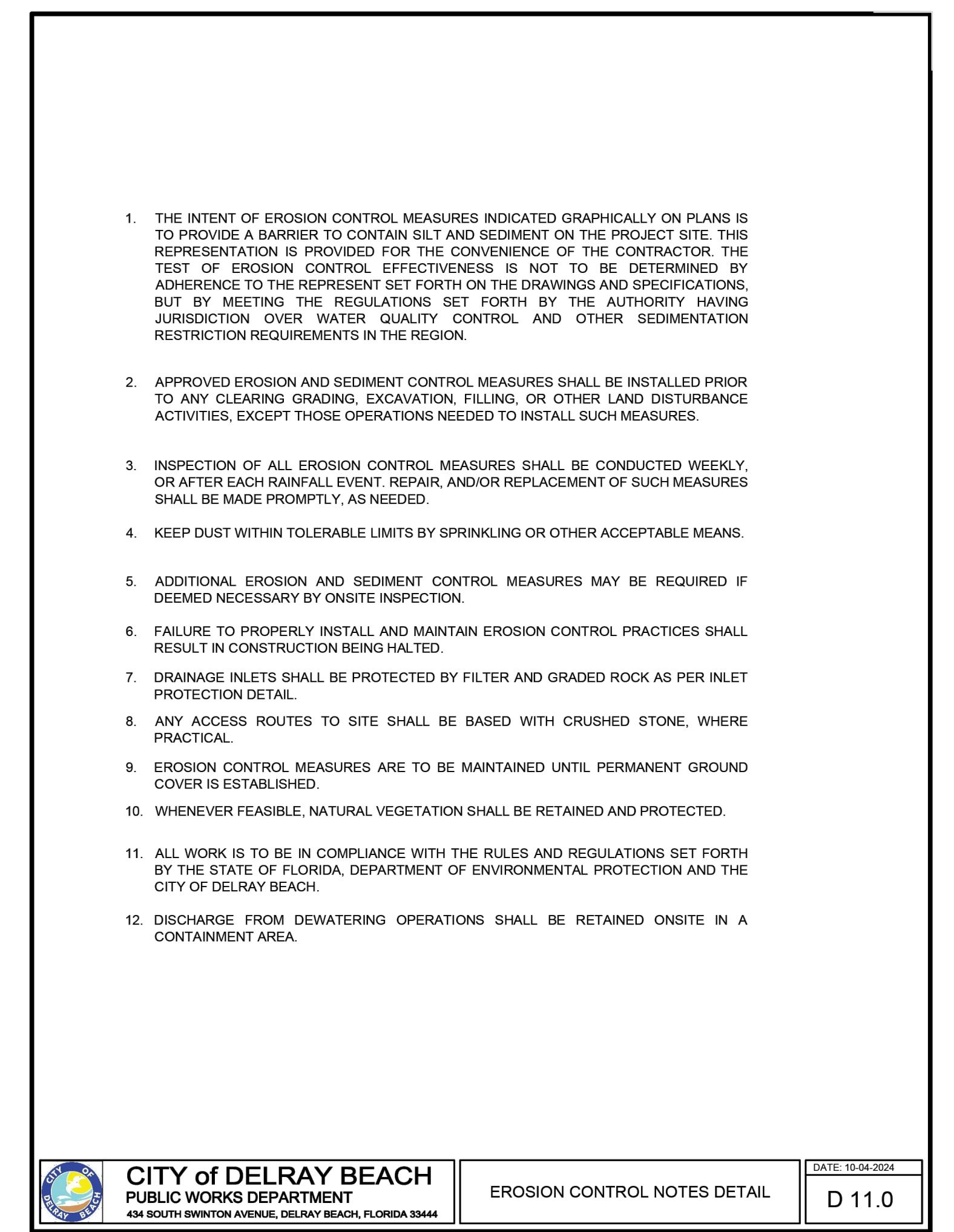
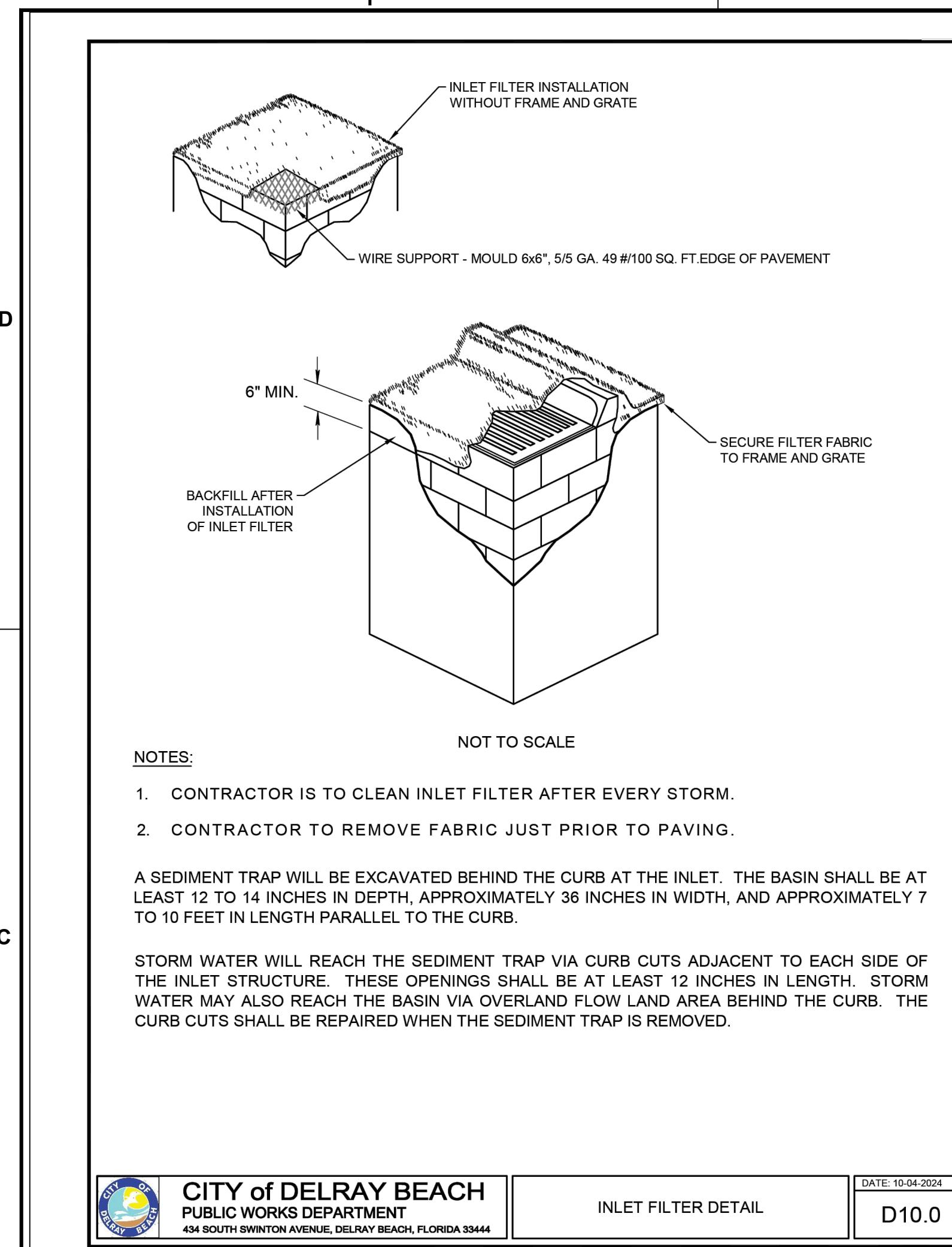
- 9.6. THE CONTRACTOR SHALL USE EXTREME CAUTION WORKING UNDER, OVER, AND AROUND EXISTING ELECTRIC LINES. THE CONTRACTOR SHALL CONTACT THE ELECTRIC PROVIDER COMPANY TO VERIFY LOCATIONS, VOLTAGE, AND REQUIRED CLEARANCES, ON SITE, IN RIGHT-OF-WAYS, AND IN EASEMENTS, PRIOR TO ANY CONSTRUCTION IN THE VICINITY OF EXISTING LINES.
- 9.7. LOCATION AND SIZE OF ALL EXISTING UTILITIES AND TOPOGRAPHY (FACILITIES) AS SHOWN ON CONSTRUCTION DRAWINGS ARE DRAWN FROM AVAILABLE RECORDS. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF THE FACILITIES SHOWN OR FOR ANY FACILITY NOT SHOWN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION (VERTICAL & HORIZONTAL) OF ANY EXISTING UTILITIES AND TOPOGRAPHY PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL VERIFY THE ELEVATIONS AND LOCATIONS OF ALL EXISTING FACILITIES, IN COORDINATION WITH ALL UTILITY COMPANIES, PRIOR TO BEGINNING ANY CONSTRUCTION OPERATIONS. IF AN EXISTING FACILITY IS FOUND TO CONFLICT WITH THE PROPOSED CONSTRUCTION, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER SO THAT APPROPRIATE MEASURES CAN BE TAKEN TO RESOLVE THE CONFLICT.
- 9.8. THE CONTRACTOR SHALL COORDINATE THE WORK WITH OTHER CONTRACTORS IN THE AREA AND ANY OTHER UNDERGROUND UTILITY COMPANIES REQUIRED. THE CONTRACTOR SHALL COORDINATE RELOCATION OF ALL EXISTING UTILITIES WITH APPLICABLE UTILITY COMPANIES.
- 10. SIGNING AND PAVEMENT MARKINGS**
- 10.1. ALL SIGNING AND PAVEMENT MARKINGS INSTALLED AS PART OF THESE PLANS SHALL CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA)'S MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), COUNTY TRAFFIC DESIGN STANDARDS AND FDOT DESIGN STANDARDS AS A MINIMUM CRITERIA.
- 10.2. MATCH EXISTING PAVEMENT MARKINGS AT THE LIMITS OF CONSTRUCTION.
- 10.3. REMOVAL OF THE EXISTING PAVEMENT MARKINGS SHALL BE ACCOMPLISHED BY WATER BLASTING OR OTHER APPROVED METHODS DETERMINED BY THE ENGINEER.
- 10.4. INCORRECTLY PLACED PAINT OR THERMOPLASTIC PAVEMENT MARKINGS OVER FRICTION COURSE WILL BE REMOVED BY MILLING AND REPLACING THE FRICTION COURSE A MINIMUM WIDTH OF 18 IN AT THE CONTRACTOR'S EXPENSE. THE ENGINEER MAY APPROVE AN ALTERNATIVE METHOD IF IT CAN BE DEMONSTRATED TO COMPLETELY REMOVE THE MARKINGS WITHOUT DAMAGING THE ASPHALT.
- 10.5. PLACE ALL RETRO-REFLECTIVE PAVEMENT MARKERS IN ACCORDANCE WITH FDOT STANDARD INDEX 706-001 AND / OR AS SHOWN IN THE PLANS.
- 10.6. CAUTION SHOULD BE EXERCISED WHILE RELOCATING EXISTING SIGNS TO PREVENT UNNECESSARY DAMAGE TO SIGNS. IF THE SIGN IS DAMAGED BEYOND USE, AS DETERMINED BY THE ENGINEER, SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT HIS EXPENSE.
- 10.7. ALL EXISTING SIGNS THAT CONFLICT WITH CONSTRUCTION OPERATIONS SHALL BE REMOVED, STOCKPILED, AND RELOCATED BY THE CONTRACTOR. SIGN REMOVAL SHALL BE DIRECTED BY THE ENGINEER.
- 10.8. RELOCATED SIGN SUPPORT SYSTEM MUST MEET THE CURRENT DESIGN STANDARD.
- 10.9. THE CONTRACTOR SHALL PROVIDE AN INVENTORY OF EXISTING SIGNS TO REMAIN OR TO BE RELOCATED PRIOR TO STARTING THE JOB AND FORWARD THIS LIST TO THE ENGINEER. CONTRACTOR SHALL NOTIFY IF THERE ARE ANY MISSING OR DAMAGE SIGNS THAT THE PLANS SHOW TO REMAIN OR TO BE RELOCATED.
- 10.10. ALL ROADWAY PAVEMENT MARKINGS SHALL BE THERMOPLASTIC IN ACCORDANCE WITH FDOT SPECIFICATIONS SECTION 711.
- 10.11. HAND DIG THE FIRST FOUR FEET OF SIGN FOUNDATION.
- 10.12. ALL SIGNS SHALL MEET ALL OF THE FOLLOWING:

  - MEET THE CRITERIA OUTLINED IN SECTION 2A.08 OF THE 2009 MUTCD
  - MEET THE SPECIFICATIONS OUTLINED IN SECTION 700 AND 994 OF THE LATEST FDOT STANDARD SPECIFICATIONS.
  - CONSIST OF MATERIALS CERTIFIED TO MEET THE RETROREFLECTIVE SHEETING REQUIREMENTS OUTLINED IN THE CURRENT VERSION OF ASTM D4956 FOR TYPE-XI RETROREFLECTIVE SHEETING MATERIALS MADE WITH PRISMS, EXCEPT FOR SCHOOL ZONE AND PEDESTRIAN SIGNS WHICH SHALL BE COMPRISED OF RETROREFLECTIVE FLUORESCENT YELLOW-GREEN SHEETING CERTIFIED TO MEET ASTM D4956 TYPE IV RETROREFLECTIVE SHEETING MATERIALS.
  - CONSIST OF RETROREFLECTIVE SHEETING MATERIALS THAT HAVE A VALID FDOT APPROVED PRODUCT LIST (APL) CERTIFICATION FOR SPECIFICATION 700 HIGHWAY SIGNING FOR FDOT SHEETING TYPE XI (OR TYPE IV FOR SCHOOL AND PEDESTRIAN SIGNS).

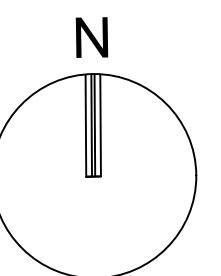
- 10.13. PATCH ATTACHMENT HARDWARE, SUCH AS COUNTERSUNK SCREWS OR RIVET HEADS, WITH RETRO REFLECTIVE BUTTONS THAT MATCH THE COLOR AND SHEETING MATERIAL OF THE FINISHED SIGN PANEL INCLUDING THE BACKGROUND, LEGEND OR BORDER.
- 10.14. ENSURE THE OUTSIDE CORNER OF SIGN IS CONCENTRIC WITH BORDER. ENSURE WHITE BORDERS ARE MOUNTED PARALLEL TO THE EDGE OF THE SIGN. ENSURE BLACK BORDERS ARE RECESSED FROM THE EDGE OF THE SIGN.
- 10.15. LAYOUT PERMANENT FINAL

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<p><b>CONSTRUCTION SPECIFICATIONS</b></p> <p><b>SECTION 20 - GENERAL SPECIFICATIONS PAVING GRADING DRAINAGE AND EARTHWORK</b></p> <p>20.1. IT IS THE INTENT OF THESE SPECIFICATIONS TO DESCRIBE THE MINIMUM ACCEPTABLE TECHNICAL REQUIREMENTS FOR THE MATERIALS AND WORKMANSHIP FOR CONSTRUCTION OF SITE IMPROVEMENTS FOR THIS PROJECT. SUCH IMPROVEMENTS MAY GENERALLY INCLUDE, BUT NOT TO BE LIMITED TO, CLEARING, GRADING, PAVING, REMOVAL OF EXISTING PAVEMENT, STORM DRAINAGE, WATER LINES AND SANITARY SEWERS.</p> <p>20.2. IT IS THE INTENT THAT THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION: (CURRENT EDITION) TOGETHER WITH "SUPPLEMENTAL SPECIFICATIONS TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" (CURRENT EDITION), AND THE FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS (CURRENT EDITION) BE USED WHERE APPLICABLE FOR THE VARIOUS WORK, AND THAT WHERE SUCH WORDING THEREIN REFERS TO THE STATE OF FLORIDA AND ITS DEPARTMENT OF TRANSPORTATION AND PERSONNEL, SUCH WORDING IS INTENDED TO BE REPLACED WITH THE WORDING WHICH WOULD PROVIDE PROPER TERMINOLOGY; THEREBY MAKING SUCH "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" TOGETHER WITH THE "FDOT ROADWAY AND TRAFFIC DESIGN STANDARDS" AS THE "STANDARD SPECIFICATIONS" FOR THIS PROJECT. IF WITHIN A PARTICULAR SECTION, ANOTHER SECTION, ARTICLE OR PARAGRAPH IS REFERRED TO, IT SHALL BE PART OF THE STANDARD SPECIFICATIONS ALSO.</p> <p>THE CONTRACTOR SHALL ABBIDE BY ALL LOCAL AND STATE LAWS, REGULATIONS AND BUILDING CODES WHICH HAVE JURISDICTION IN THE AREA.</p> <p>20.3. THE CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT AND PERFORM ALL OPERATIONS REQUIRED TO COMPLETE THE CONSTRUCTION OF A PAVING AND DRAINAGE SYSTEM AS SHOWN ON THE PLANS, SPECIFIED HEREIN OR BOTH. IT IS THE INTENT TO PROVIDE A COMPLETE AND OPERATING FACILITY IN ACCORDANCE WITH THESE SPECIFICATIONS AND THE CONSTRUCTION DRAWINGS. THE MATERIAL AND EQUIPMENT SHOWN OR SPECIFIED SHALL NOT BE TAKEN TO EXCLUDE ANY OTHER INCIDENTALS NECESSARY TO COMPLETE THE WORK.</p> <p>20.4. ALL LABOR, MATERIALS, AND METHODS OF CONSTRUCTION SHALL BE IN STRICT ACCORDANCE WITH THE PLANS AND CONSTRUCTION SPECIFICATIONS AND THE MINIMUM ENGINEERING AND CONSTRUCTION STANDARDS ADOPTED BY THE UNIT OF GOVERNMENT WHICH HAS JURISDICTION AND RESPONSIBILITY FOR THE CONSTRUCTION. WHERE CONFLICTS OR OMISSIONS EXIST, THE JURISDICTIONAL GOVERNMENT ENGINEERING DEPARTMENT'S STANDARDS SHALL GOVERN. SUBSTITUTIONS AND DEVIATIONS FROM PLANS AND SPECIFICATIONS SHALL BE PERMITTED ONLY WHEN WRITTEN APPROVAL HAS BEEN ISSUED BY THE ENGINEER.</p> <p>20.5. GUARANTEE - ALL MATERIALS AND EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR UNDER THIS CONTRACT, SHALL BE GUARANTEED FOR A PERIOD OF (L) ONE YEAR FROM THE DATE OF FINAL ACCEPTANCE THEREOF, AGAINST DEFECTIVE MATERIALS, DESIGN AND WORKMANSHIP, UPON RECEIPT OF NOTICE FROM THE OWNER OF FAILURE OF ANY PART OF THE GUARANTEED EQUIPMENT OR MATERIALS, DURING THE GUARANTEE PERIOD, THE AFFECTED PART OR MATERIALS SHALL BE REPLACED PROMPTLY WITH NEW PARTS OR MATERIALS BY THE CONTRACTOR, AT NO EXPENSE TO THE OWNER. IN THE EVENT THE CONTRACTOR FAILS TO MAKE NECESSARY REPLACEMENT OR REPAIRS WITHIN (7) SEVEN DAYS AFTER NOTIFICATION BY THE OWNER, THE OWNER MAY ACCOMPLISH THE WORK AT THE EXPENSE OF THE CONTRACTOR.</p> <p>21. EARTHWORK</p> <p>21.1. ALL AREAS WITHIN THE PROJECT LIMITS SHALL BE CLEARED AND GRUBBED PRIOR TO CONSTRUCTION. THIS SHALL CONSIST OF THE COMPLETE REMOVAL AND DISPOSAL OF ALL TREES, BRUSH, STUMPS, ROOTS, GRASS, WEEDS, RUBBISH AND ALL OTHER OBSTRUCTIONS RESTING ON OR PROTRUDING THROUGH THE SURFACE OF THE EXISTING GROUND TO A DEPTH OF 1'. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 110 OF THE STANDARD SPECIFICATIONS.</p> <p>21.2. NONE OF THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT IS TO BE INCORPORATED IN THE NEW LIMEROCK BASE, UNLESS NOTED IN PLANS. THE EXISTING LIMEROCK MATERIAL FROM DEMOLISHED PAVEMENT MAY BE INCORPORATED INTO THE STABILIZED SUBGRADE / SUBBASE, OR STABILIZED SHOULDER.</p> <p>21.3. FILL MATERIAL SHALL BE CLASSIFIED AS A-L, A-3, OR A-24 IN ACCORDANCE WITH AASHTO M-145 AND SHALL BE FREE FROM VEGETATION AND ORGANIC MATERIAL. NOT MORE THAN 12% BY WEIGHT OF FILL MATERIAL SHALL PASS THE NO. 200 SIEVE.</p> <p>21.4. ALL FILL MATERIAL IN AREAS NOT TO BE PAVED SHALL BE COMPAKTED TO 95% OF THE MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99.</p> <p>21.5. ALL MATERIAL OF CONSTRUCTION SHALL BE SUBJECT TO INSPECTION AND TESTING TO ESTABLISH CONFORMANCE WITH THE SPECIFICATIONS AND SUITABLY FOR THE USES INTENDED. THE CONTRACTOR SHALL NOTIFY THE ENGINEER AT LEAST 24 HOURS PRIOR TO THE TIME HE WILL BE READY FOR AN INSPECTION OR TEST. THE CONTRACTOR SHALL FOLLOW CITY AND COUNTY INSPECTION PROCEDURES. THE CONTRACTOR SHALL NOT PROCEED WITH ANY PHASE OF WORK DEPENDENT ON AN INSPECTION OR TEST OF AN EARLIER PHASE OF WORK, PRIOR TO THAT TEST OR INSPECTION PASSING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING CERTIFIED MATERIAL TEST RESULTS TO THE ENGINEER OF RECORD PRIOR TO THE RELEASE OF FINAL CERTIFICATION BY THE ENGINEER. TEST RESULTS MUST INCLUDE, BUT MAY NOT BE LIMITED TO, DENSITIES FOR SUBGRADE AND LIMEROCK, UTILITIES, EXCAVATION, ASPHALT GRADATION REPORTS, CONCRETE CYLINDERS, ETC.</p> <p>21.6. WHEN MUCK, CLAY, ROCK, OR ANY OTHER MATERIAL THAT IS UNSUITABLE IN ITS ORIGINAL POSITION ARE ENCOUNTERED BEHNEATH PROPOSED PAVEMENT AND SIDEWALK AREAS, THE UNSUITABLE MATERIALS SHALL BE COMPLETELY REMOVED FROM BEHNEATH THE PAVEMENT AND SIDEWALK AREAS AND (10) TEN FEET BEYOND THE EDGE OF PAVEMENT. ALL SUCH UNSUITABLE MATERIAL REMOVED BY THE SUBSOIL EXCAVATION, SHALL BE REPLACED WITH ACCEPTABLE EMBANKMENT MATERIAL, AS SPECIFIED IN THE STANDARD SPECIFICATIONS.</p> <p>21.7. WHEN MUCK, CLAY, HARDPAN OR ANY OTHER MATERIAL THAT IS UNSUITABLE IN ITS ORIGINAL POSITION, ARE ENCOUNTERED BEHNEATH PROPOSED DRAINAGE SWALES OR DRY RETENTION AREAS, THE UNSUITABLE MATERIALS SHALL BE COMPLETELY REMOVED FROM BEHNEATH THE DRAINAGE SWALES AND DRY RETENTION AREAS. ALL SUCH UNSUITABLE MATERIAL REMOVED BY THE SUBSOIL EXCAVATION, SHALL BE REPLACED WITH COARSE SAND, OR OTHER SUITABLE GRANULAR MATERIAL, AS SPECIFIED IN THE STANDARD SPECIFICATIONS.</p> <p>21.8. ALL UNDERGROUND UTILITIES AND DRAINAGE INSTALLATIONS SHALL BE IN PLACE PRIOR TO SUBGRADE COMPAKCTION AND PAVEMENT CONSTRUCTION.</p> <p>21.9. GROUND ADJACENT TO ROADWAY/PAVEMENT HAVING RUNOFF SHALL BE GRADED (2) TWO INCHES LOWER THAN THE EDGE OF PAVEMENT TO ALLOW</p> <p>FOR THE PLACEMENT OF SOD.</p> <p>21.10. SITE GRADING ELEVATIONS SHALL BE WITHIN 0.1' OF THE REQUIRED ELEVATION FOR NON PAVED AREAS AND ALL AREAS SHALL BE GRADED TO DRAIN WITHOUT PONDING.</p> <p>21.11. THE CONTRACTOR SHALL PERFORM ALL EXCAVATION, FILL, EMBANKMENT AND GRADING TO ACHIEVE THE PROPOSED PLAN GRADES INCLUDING TYPICAL ROAD SECTIONS, SIDE SLOPES AND CANAL SECTIONS. ALL WORK SHALL BE IN ACCORDANCE WITH SECTION 120 OF THE STANDARD SPECIFICATIONS. IF FILL MATERIAL IS REQUIRED IN EXCESS OF THAT GENERATED BY THE EXCAVATION, THE CONTRACTOR SHALL SUPPLY THIS MATERIAL AS REQUIRED FROM OFF-SITE.</p> <p>21.12. A 2" BLANKET OF TOP SOIL SHALL BE PLACED OVER ALL AREAS TO BE SODDED OR SEDED AND MULCHED WITHIN THE PROJECT LIMITS UNLESS OTHERWISE INDICATED ON THE PLANS.</p> <p>21.13. SOD SHALL BE ST. AUGUSTINE UNLESS OTHERWISE INDICATED ON THE PLANS, AND SHALL BE PLACED ON THE GRADED TOP SOIL AND WATERED TO INSURE SATISFACTORY CONDITION UPON FINAL ACCEPTANCE OF THE PROJECT.</p> <p>22. DRAINAGE</p> <p>22.1. INLETS - ALL INLETS SHALL BE THE TYPE DESIGNATED ON THE PLANS, AND SHALL BE CONSTRUCTED IN ACCORDANCE WITH SECTION 425 OF THE STANDARD SPECIFICATIONS. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF TEMPORARY PLUGS AND PLYWOOD OR PLASTIC COVERS OVER THE INLETS. THE ENTIRE DRAINAGE SYSTEM SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.</p> <p>22.2. PIPE SPECIFICATIONS: THE MATERIAL TYPE IS SHOWN ON THE DRAWINGS BY ONE OF THE FOLLOWING DESIGNATIONS:</p> <ul style="list-style-type: none"> <li>• RCP = REINFORCED CONCRETE PIPE, ASTM DESIGNATION C-76, SECTION 941 OF THE STANDARD SPECIFICATIONS.</li> <li>• CMP = CORRUGATED METAL (ALUMINUM) PIPE, ASTM DESIGNATION M-196.</li> <li>• CMP (SMOOTH LINED) = CORRUGATED METAL ALUMINUM PIPE, (SMOOTH LINED) ASTM DESIGNATION M-196.</li> <li>• SCP = SLOTTED CONCRETE PIPE, SECTIONS 941 AND 942, OF THE STANDARD SPECIFICATIONS.</li> <li>• PVC = POLYVINYL CHLORIDE PIPE.</li> <li>• PCMP = PERFORATED CMP, SECTION 945, OF THE STANDARD SPECIFICATIONS</li> <li>• CORRUGATED HIGH DENSITY POLYETHYLENE PIPE (HDPE) (12 INCHES TO 60 INCHES), SHALL MEET THE REQUIREMENTS OF FDOT SPECIFICATION SECTION 948-2.3.</li> </ul> <p>22.3. PIPE BACKFILL - REQUIREMENTS FOR PIPE BACKFILL CROSSING ROADS OR PARKING AREAS SHALL BE AS DEFINED IN THE SECTION 125-8, OF THE STANDARD SPECIFICATIONS. PIPELINE BACKFILL SHALL BE PLACED IN 6 INCH LIFTS AND COMPAKTED TO 100% OF THE STANDARD PROCTOR (AASHTO T-99 SPECIFICATIONS)</p> <p>22.4. LOCATION OF DRAINAGE STRUCTURES SHALL GOVERN, AND PIPE LENGTH MAY HAVE TO BE ADJUSTED TO ACCOMPLISH CONSTRUCTION AS SHOWN ON THESE PLANS.</p> <p>22.5. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE INNER WALLS OF STRUCTURES.</p> <p>22.6. FILTER FABRIC SHALL BE MIRAFI, TYPAR OR EQUAL CONFORMING TO SECTION 985 OF THE STANDARD SPECIFICATIONS.</p> <p>23. ASPHALT PAVING</p> <p>23.1. WHERE NEW ASPHALT MEETS EXISTING ASPHALT, THE EXISTING ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE. PRIOR TO REMOVING CURB OR GUTTER, THE ADJACENT ASPHALT SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE.</p> <p>23.2. INTERNAL ASPHALT PAVING CONSTRUCTED ON EXISTING SANDY SOILS SHALL BE CONSTRUCTED WITH A 12" SUBGRADE, COMPAKTED TO A MINIMUM DENSITY OF 100% MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99. THE COMPACTED SUBGRADE SHALL BE CONSTRUCTED IN THE LIMITS SHOWN ON THE PLANS. ALL SUBGRADE SHALL HAVE AN LBR OF 40 UNLESS OTHERWISE NOTED.</p> <p>23.3. ASPHALT CONCRETE SURFACE COURSE SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE SURFACE COURSE SHALL CONSIST OF THE THICKNESS AND TYPE ASPHALTIC CONCRETE AS SPECIFIED IN THE PLANS. ALL ASPHALTIC CONCRETE SHALL BE IN ACCORDANCE WITH SECTIONS 320, 327, 330, 334, 336, 337, 337, 338, 339 AND 341 OF THE STANDARD SPECIFICATIONS.</p> <p>23.4. LIMEROCK BASE SHALL BE PREPARED, COMPAKTED AND GRADED AND SHALL BE IN ACCORDANCE WITH SECTION 200 OF THE STANDARD SPECIFICATIONS. ALL LIMEROCK SHALL BE COMPAKTED TO 98% PER AASHTO T-180 AND HAVE NOT LESS THAN 70% OF CARBONATES OF CALCIUM AND MAGNESIUM UNLESS OTHERWISE DESIGNATED. THE ENGINEER SHALL INSPECT THE COMPLETED BASE COURSE AND THE CONTRACTOR SHALL CORRECT ANY DEFICIENCIES AND CLEAN THE BASE COURSE PRIOR TO THE PLACEMENT OF THE PRIME COAT. A TACK COAT WILL ALSO BE REQUIRED IF THE ENGINEER FINDS THAT THE PRIMED BASE HAS BECOME EXCESSIVELY DIRTY OR THE PRIME COAT HAS CURED TO THE EXTENT OF LOSING BOUNDING EFFECT PRIOR TO PLACEMENT OF THE ASPHALTIC CONCRETE SURFACE COURSE. THE PRIME AND TACK COATS SHALL BE IN ACCORDANCE WITH SECTION 300 OF THE STANDARD SPECIFICATIONS.</p> <p>23.5. LIMEROCK BASE MATERIAL SHALL BE PLACED IN MAXIMUM 6" LIFTS. BASES GREATER THAN 6" SHALL BE PLACED IN TWO EQUAL LIFTS. IF, THROUGH FIELD TESTS, THE CONTRACTOR CAN DEMONSTRATE THAT THE COMPAKTION EQUIPMENT CAN ACHIEVE DENSITY FOR THE FULL DEPTH OF A THICKER LIFT, AND IF APPROVED BY THE ENGINEER, THE BASE MAY BE CONSTRUCTED IN SUCCESSIVE COURSES OF NOT MORE THAN 8 INCHES (200 MM) COMPAKTED THICKNESS.</p> <p>23.6. ASPHALT EDGES THAT ARE NOT CURBED SHALL BE SAW CUT TO PROVIDE A STRAIGHT EVEN LINE TO THE DIMENSIONS SHOWN ON PLANS.</p> <p>24. CONCRETE CONSTRUCTION</p> <p>24.1. CONCRETE SIDEWALK SHALL BE IN ACCORDANCE WITH SECTION 522 OF THE STANDARD SPECIFICATIONS AND IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 310. CONCRETE SIDEWALK SHALL BE 4" THICK, UNLESS OTHERWISE NOT AND CONSTRUCTED ON COMPACTED SUBGRADE, WITH 1/2" EXPANSION JOINTS PLACED AT A MAXIMUM OF 75', UNLESS OTHERWISE NOTED ON PLANS. CRACK CONTROL JOINTS SHALL BE 5' ON CENTER. ALL CONCRETE SIDEWALKS THAT CROSS DRIVEWAYS SHALL BE 6" THICK, UNLESS OTHERWISE NOTED ON PLANS.</p> <p>24.2. SIDEWALK CURB RAMPS HALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 304.</p> <p>24.3. CONCRETE CURB SHALL BE CONSTRUCTED TO THE LIMITS SHOWN ON THE PLANS. THE CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS AND SHALL BE IN ACCORDANCE WITH SECTION 520 OF THE STANDARD SPECIFICATIONS. CONCRETE CURBING SHALL BE IN ACCORDANCE WITH F.D.O.T. ROADWAY AND TRAFFIC DESIGN STANDARDS, INDEX NO. 300.</p> <p>30.13. TAPPING SLEEVES SHALL BE MUELLER H615, CLOW F- 2505 OR APPROVED EQUAL.</p> <p>30.14. VALVE BOXES SHALL BE U.S. FOUNDRY 7500 OR APPROVED EQUAL PAINTED BLUE WITH THE DESIGNATION "WATER".</p> <p>30.15. RETAINER GLANDS FOR DIP SHALL CONFORM TO ANSI/AWWA C11/A21.11 LATEST REVISION. ALL GLANDS SHALL BE MANUFACTURED FROM DUCTILE IRON AS LISTED BY UNDERWITERS LABORATORIES FOR 250 PSI MINIMUM WATER PRESSURE RATING. CLOW CORPORATION MODEL F-1058, STANDARD FIRE PROTECTION EQUIPMENT COMPANY OR APPROVED EQUAL.</p> <p>30.16. DRESSER COUPLINGS SHALL BE REGULAR BLACK COUPLINGS WITH PLAIN GASKETS FOR GALVANIZED STEEL PIPE. THEY SHALL BE DRESSER STYLE 90. NO SUBSTITUTIONS ALLOWED.</p> <p>30.17. FIRE HYDRANTS SHALL BE MUELLER CENTURION TRAFFIC TYPE A-423 WITH 5 1/4" INTERNAL VALVE OPENING OR APPROVED EQUAL. PUMPER NOZZLE TO BE 18" FROM FINISHED GRADE. ALL HYDRANTS TO BE INSTALLED WITH CONTROL VALVE. RETAINER GLANDS ARE PREFERRED FOR RESTRAINING. FIRE HYDRANT SHALL COMPLY WITH ANSI/AWWA C502 LATEST REVISION. FIRE HYDRANTS SHALL BE PAINTED IN ACCORDANCE WITH NFPA #291 OR PER AGENCY STANDARDS HAVING JURISDICTION. BLUE RAISED REFLECTIVE PAVEMENT MARKER (RPM) SHALL BE USED TO IDENTIFY FIRE HYDRANT LOCATION. THE PLACEMENT OF THE RPM TO BE AT THE CENTERLINE OF THE OUTSIDE ROADWAY LANE.</p> <p>30.18. SEWAGE FORCE MAIN VALVES SHALL BE PLUG VALVES WHICH SHALL BE OF THE NON-LUBRICATED, ECCENTRIC TYPE WITH RESILIENT FACED PLUGS, PORT AREAS FOR VALVES 20 INCHES AND SMALLER SHALL BE AT LEAST 80% OF FULL PIPE AREA. PORT AREA OF VALVES 24 INCHES AND LARGER SHALL BE AT LEAST 70% OF FULL PIPE AREA. THE BODY SHALL BE OF SEMI-STEEL (ASTM A-128 C.1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.</p> <p>30.19. PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.</p> <p>30.20. PLUG VALVES ARE TO BE INSTALLED WITH THE SEAT POINTED TOWARDS THE UPSTREAM FLOW, WHEN SPECIFIED.</p> <p>30.21. SWING CHECK VALVES FOR WATER, SEWAGE, SLUDGE, AND GENERAL SERVICE SHALL BE OF THE OUTSIDE LEVER AND SPRING OR WEIGHT TYPE, IN ACCORDANCE WITH ANSI/AWWA C 508 LATEST REVISION. SWING-CHECK VALVES FOR WATERWORKS SERVICE, 2" THROUGH 24" NPS, UNLESS OTHERWISE INDICATED, WITH FULL-OPENING PASSAGES, DESIGNED FOR A WATER-WORKING PRESSURE OF 150 PSI THEY SHALL HAVE A FLANGED COVER PIECE TO PROVIDE ACCESS TO THE DISC.</p> <p>30.22. HIGH DENSITY POLYETHYLENE PIPE (HDPE) FOR WATER DISTRIBUTION MAINS SHALL CONFORM TO AWWA C906 STANDARD, LATEST REVISION. PIPES SHALL BE COLOR-CODED BLUE, MINIMUM 40 FEET STANDARD LENGTHS.</p> <p>31. SERVICE CONNECTION:</p> <p>31.1. SERVICE SADDLES SHALL BE FUSION BONDED PLASTIC COATED DUCTILE IRON (ASTM A536) WITH STAINLESS STEEL STRAPS, SADDLES SHALL BE DOUBLE STRAP TYPE.</p> <p>31.2. SERVICE LINES SHALL BE POLYETHYLENE (PE 3408), 200 P.S.I RATED, DR9. PIPE JOINTS SHALL BE OF THE COMPRESSION TYPE TOTALLY CONFINED GRIP SEAL AND COUPLING NUT.</p> <p>31.3. CORPORATION STOPS SHALL BE MANUFACTURED OF BRASS ALLOY IN ACCORDANCE WITH ASTM B-62 WITH THREADED ENDS, AS MANUFACTURED BY FORD BALLCORP, CATALOG # 110 OR APPROVED EQUAL.</p> <p>31.4. CURB STOPS SHALL BE FORD V63-44W-X" LATEST REVISION OR APPROVED EQUAL.</p> <p>31.5. METER STOPS SHALL BE 90 DEGREE LOCKWING TYPE AND SHALL BE OF BRONZE CONSTRUCTION IN ACCORDANCE WITH FV63-77W" LATEST REVISION WITH ASTM B-62. METER STOPS SHALL BE CLOSED BOTTOM DESIGN AND RESILIENT "O" RING SEALED AGAINST EXTERNAL LEAKAGE AT THE TOP. STOPS SHALL BE EQUIPPED WITH A METER COUPLING NUT ON THE OUTLET SIDES, AS MANUFACTURED BY FORD OR APPROVED EQUAL.</p> <p>32. INSTALLATION:</p> <p>32.1. WHERE RESTRAINED PIPE JOINTS ARE REQUIRED DUE TO FITTINGS, APPURTENANCES, ETC., PIPE MATERIAL SHALL BE DIP.</p> <p>32.2. ALL PVC PIPE SHALL BE INSTALLED IN ACCORDANCE WITH THE UNI-BELL PLASTIC PIPE ASSOCIATION "GUIDE FOR INSTALLATION OF PVC PRESSURE PIPE FOR MUNICIPAL WATER DISTRIBUTION SYSTEM," AND ANSI/AWWA C605-XX LATEST REVISION STANDARD.</p> <p>32.3. ALL DIP SHALL BE INSTALLED IN ACCORDANCE WITH ANSI/C 600-XX LATEST REVISION.</p> <p>32.4. ALL WATER MAINS SHALL TYPICALLY BE LAID WITH A MINIMUM 36" COVER FOR PVC AND 30" COVER FOR DIP.</p> <p>32.5. DETECTOR TAPE SHALL BE LAID 18 INCHES ABOVE ALL WATER AND SEWER LINES. A 14 GAUGE MULTI-STRAND WIRE SHALL BE ATTACHED TO ALL NONCONDUCTIVE WATER MAINS TO FACILITATE LOCATION. AN EXTRA 4 FEET OF WIRE SHALL BE PROVIDED AT ALL VALVES, BLOW-OFFS, HYDRANTS, ETC. THE WIRE SHALL BE TESTED FOR CONTINUITY AT THE PRESSURE TEST.</p> <p>32.6. PIPE DEFLECTION SHALL NOT EXCEED 50% OF THE MAXIMUM DEFLECTION RECOMMENDED BY THE MANUFACTURER.</p> <p>32.7. A CONTINUOUS AND UNIFORM BEDDING SHALL BE PROVIDED. BACKFILL MATERIAL SHALL BE PLACED IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS.</p> <p>32.8. ALL VALVES SHALL BE INSTALLED WITH ADJUSTABLE CAST IRON VALVE BOXES WITH THE WORD "WATER" OR "SEWER", AS APPLICABLE, CAST IN THE COVER, U.S. FOUNDRY OR APPROVED EQUAL.</p> <p>33. TESTING:</p> <p>33.1. BEFORE ANY PHYSICAL CONNECTIONS AND ACCEPTANCE FOR OPERATION TO THE EXISTING WATER MAINS ARE MADE, THE COMPLETE WATER SYSTEM SHALL BE FLUSHED, PRESSURE TESTED AND DISINFECTED. COPIES OF PASSING BACTERIOLOGICAL RESULTS AND PRESSURE TEST RESULTS MUST BE SUBMITTED TO, AND APPROVED BY, THE ENGINEER, UTILITY OWNER, AND HEALTH DEPARTMENT. HYDROSTATIC TESTING OF NEW MAINS SHALL BE PERFORMED AT A MINIMUM STARTING PRESSURE OF 150 PSI FOR TWO HOURS IN ACCORDANCE WITH ANSI/AWWA C600-05 (HYDROSTATIC TEST). THE PRESSURE TEST SHALL NOT VARY MORE THAN 5 PSI DURING THE</p> <p>TEST. THE ALLOWABLE LEAKAGE DURING THE PRESSURE TEST SHALL BE LESS THAN THE NUMBER OF GALLONS PER HOUR AS DETERMINED BY THE FORMULA:  <math display="block">L = (SD(P)/2)^2/148,000.</math> </p> <p>IN WHICH L EQUALS THE ALLOWABLE LEAKAGE IN GALLONS PER HOUR. S EQUALS LENGTH OF PIPE (LINEAR FEET), D EQUALS NOMINAL DIAMETER OF PIPE (INCHES) AND P EQUALS THE AVERAGE TEST PRESSURE (POUNDS PER SQUARE INCH GAUGE). MAXIMUM LENGTH OF TEST PIPE SECTION SHOULD BE 2000 FEET. THE WATER SYSTEM SHALL BE DISINFECTED IN ACCORDANCE WITH THE ANSI/AWWA C651-05 (WATER MAIN BACTERIOLOGICAL TESTS).</p> <p>33.2. THE PRESSURE TEST SHALL BE WITNESSED BY A REPRESENTATIVE OF THE UTILITY OWNER AND THE ENGINEER OF RECORD.</p> <p>33.3. FOR WATER DISTRIBUTION PIPES, SAMPLING POINTS SHALL BE PROVIDED BY THE CONTRACTOR AT THE LOCATIONS SHOWN ON THE PLANS.</p> <p>33.4. FOR WATER DISTRIBUTION PIPES, DISINFECTION AND BACTERIOLOGICAL TESTING SHALL BE IN ACCORDANCE WITH ANSI/AWWA C651-14 (WATER MAIN BACTERIOLOGICAL TESTS). MAXIMUM DISTANCE BETWEEN SAMPLING POINTS SHALL BE AS FOLLOWS:</p> <ul style="list-style-type: none"> <li>• TRANSMISSION MAINS: EVERY 1200 FEET</li> <li>• BRANCH MAINS: EVERY 1000 FEET</li> <li>• ISOLATED MAINS &lt; 1000 FEET: 2 SAMPLE POINTS</li> <li>• ISOLATED MAINS &gt; 1000 FEET: 3 SAMPLE POINTS</li> </ul> <p>SECTION 40 - GRAVITY SANITARY SEWER COLLECTION SYSTEM</p> <p>40. GENERAL:</p> <p>40.1. MANHOLE, VALVE BOX, METER BOX AND OTHER STRUCTURE RIM ELEVATIONS WITHIN THE LIMITS OF CONSTRUCTION ARE TO BE ADJUSTED TO CONFORM TO PLAN GRADES PROPOSED IN THESE PLANS. IF NO OTHER INDIVIDUAL COST ITEM IS INCLUDED IN THE CONTRACT SCHEDULE FOR A PARTICULAR STRUCTURE ADJUSTMENT.</p> <p>40.2. DISTANCE AND LENGTHS SHOWN ON PLANS AND PROFILE DRAWINGS ARE REFERENCED TO THE CENTER OF STRUCTURES.</p> <p>41. MATERIALS:</p> <p>NOTE: IF MATERIALS LIST HERE ON ARE IN CONFLICT WITH UTILITY OWNER, MATERIAL OWNER REQUIREMENTS SHALL GOVERN.</p> <p>41.1. ALL PVC SEWER PIPE AND FITTINGS SHALL BE NON-PRESSURE POLYVINYL CHLORIDE (PVC) PIPE CONFORMING TO ASTM D 3034, SDR 26, WITH PUSH-ON RUBBER GASKET JOINTS.</p> <p>41.2. DUCTILE IRON PIPE SHALL CONFORM TO ANSI/AWWA C151/A21.51-XX LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS WITH WALL THICKNESS CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE CEMENT LINED AND SEAL COATED IN ACCORDANCE WITH ANSI/AWWA STANDARD C104/A21.4 LATEST REVISION. THE PIPE SHALL BE ADAPTED FOR USE WITH CLASS 250 FITTINGS FOR ALL SIZES. WATER MAIN SHALL BE COLORED BLUE IN ACCORDANCE WITH FLORIDA STATE STATUTES.</p> <p>41.3. DUCTILE IRON PIPE FOR SEWAGE FORCE MAINS SHALL CONFORM TO ANSI/AWWA STANDARD C151/A21.51 LATEST REVISION, "DUCTILE IRON PIPE CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS" WITH A MINIMUM WALL THICKNESS OF CLASS 51 (PRESSURE CLASS 350) UNLESS OTHERWISE NOTED IN THE PLANS. DUCTILE IRON PIPE SHALL BE SEMI-STEEL (ASTM A-128 C.1.B) AND SHALL HAVE BOLTED BONNET WHICH GIVES ACCESS TO THE INTERNALS OF THE VALVE. SEATS SHALL BE WELDED OVERLAY OF HIGH NICKEL CONTENT OR A STAINLESS STEEL PLATE LOCKED IN THE BODY CAVITY. IF A PLATE IS USED, IT SHALL BE REPLACEABLE THROUGH THE BONNET ACCESS. BEARINGS SHALL BE PERMANENTLY LUBRICATED OF STAINLESS STEEL, BRONZE OR TEFON LINED, FIBER GLASS BACKED DURALON. BEARING AREAS SHALL BE ISOLATED FROM THE FLOW WITH GRIT SEALS. VALVES SHALL HAVE PACKING BONNETS WHERE THE SHAFT PROTRUDES FROM THE VALVE AND THE PACKING SHALL BE SELF-ADJUSTING CHEVRON TYPE WHICH CAN BE REPLACED WITHOUT REMOVING THE BONNET. ALL NUTS, BOLTS, SPRINGS AND WASHERS SHALL BE STAINLESS STEEL.</p> <p>41.4. PLUG VALVES SHALL BE DESIGNED FOR A WORKING PRESSURE OF 150 PSI THE VALVE AND ACTUATOR SHALL BE CAPABLE OF SATISFACTORY OPERATION IN EITHER DIRECTION OF FLOW AGAINST PRESSURE DROPS UP TO AND INCLUDING 100 PSI (FOR PLUG VALVES OVER 12" IN DIAMETER). VALVES SHALL BE BUBBLE TIGHT IN BOTH DIRECTIONS AT 100 PSI DIFFERENTIAL. PLUG VALVES OVER 12" IN DIAMETER SHALL HAVE WORM GEAR OPERATORS. THE OPERATING MECHANISM SHALL BE FOR BURIED SERVICE WITH A 2 INCH SQUARE OPERATING NUT.</p> <p>41.5. ALL DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C110/A21.10-XX LATEST REVISION. ALL FITTINGS AND ACCESSORIES SHALL BE EPOXY LINED AND COATED WITH THE MANUFACTURER'S COATING SYSTEM AS APPROVED BY THE ENGINEER OF RECORD AND THE LOCAL MUNICIPALITY OR UTILITY OWNER. IN EITHER CASE, THE ENGINEER'S REVIEW AND APPROVAL IS REQUIRED FOR EITHER ALTERNATIVE PRIOR TO CONSTRUCTION. CEMENT MORTARED LININGS ARE NOT APPROPRIATE FOR THIS APPLICATION.</p> <p>41.6. ALL DUCTILE IRON FITTINGS SHALL CONFORM TO ANSI/AWWA STANDARD C111/A</p>				









GRAPHIC SCALE

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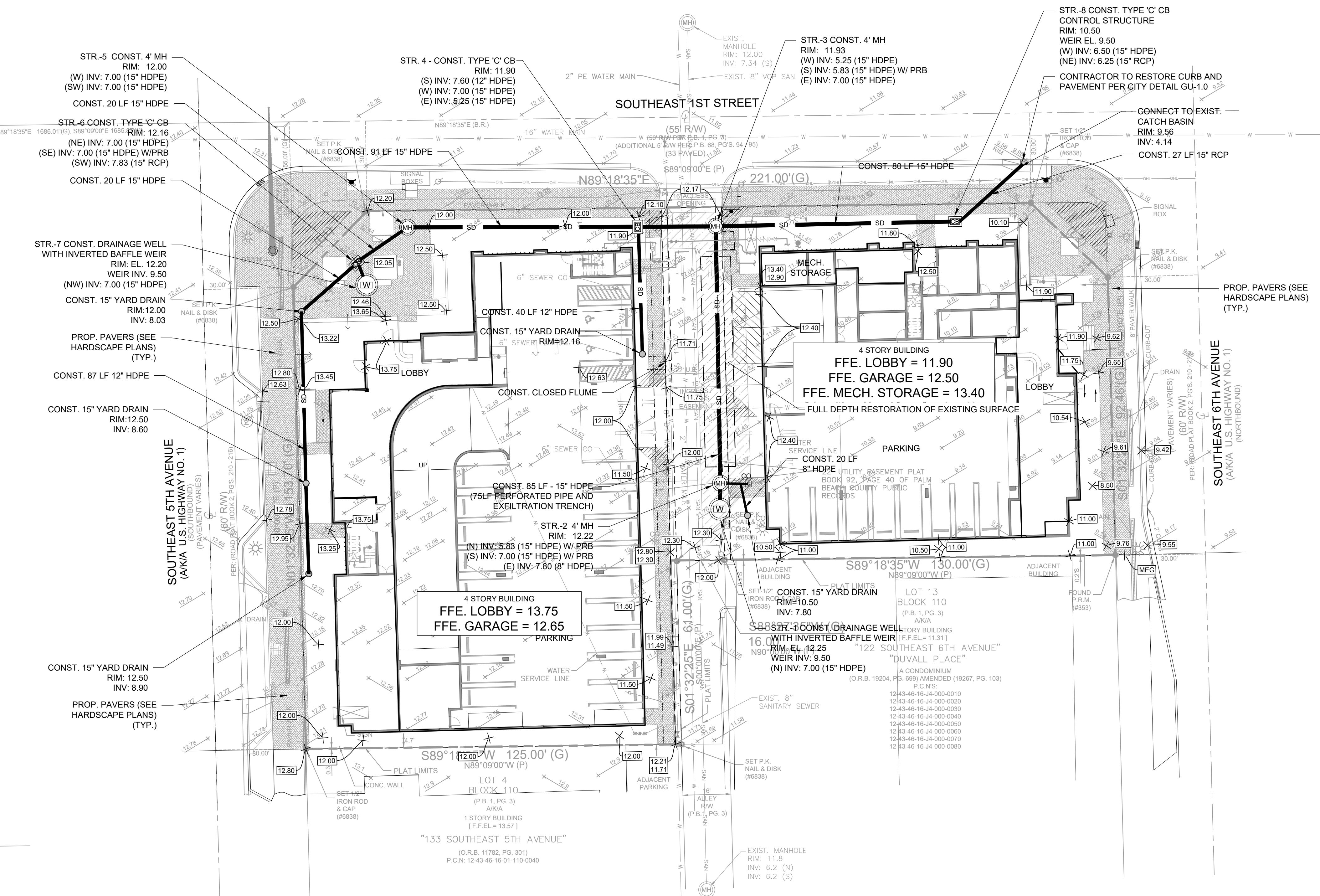
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NOTE: PRINTED DRAWING SIZE  
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Plotted by: jweaver On 10/28/2025 2:04 PM

**NOTE:**

1. ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER, OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS; LD 1.0 & LD 2.0



SOUTHWEST  
SECTION CORNER  
SECTION 16,  
TOWNSHIP 46 S,  
RANGE 43 E

A

# PAVING, GRADING, AND DRAINAGE PLAN

LEVEL ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED  
ON THE NORTH AMERICAN VERTICAL DATUM OF 1988  
(NAVD 88)

**SHEET  
NUMBER**

PROJECT  
NUMBER

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13190.00

## **STATUS: PRELIMINARY**

Drawing name: K:\13190.00 - 109 5th LLC - Delray Beach - Netta Architects\Engineering\Cadd\d13190.00-CP-1XX.dwg





ISSUE DATE:	09/18/2025
SIGNED BY:	JVP
AWN BY:	JFW
ECKED BY:	CAR
CO-CONTRACT:	

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**JORGE VALLE-PELLOT, P.E.  
FLORIDA REG. NO. 77039  
(FOR THE FIRM)**

## CLIENT

# NETTA ARCHITECTS

## PROJECT

# 109 SE 5TH AVE DELRAY BEACH, FL

MEET TITLE

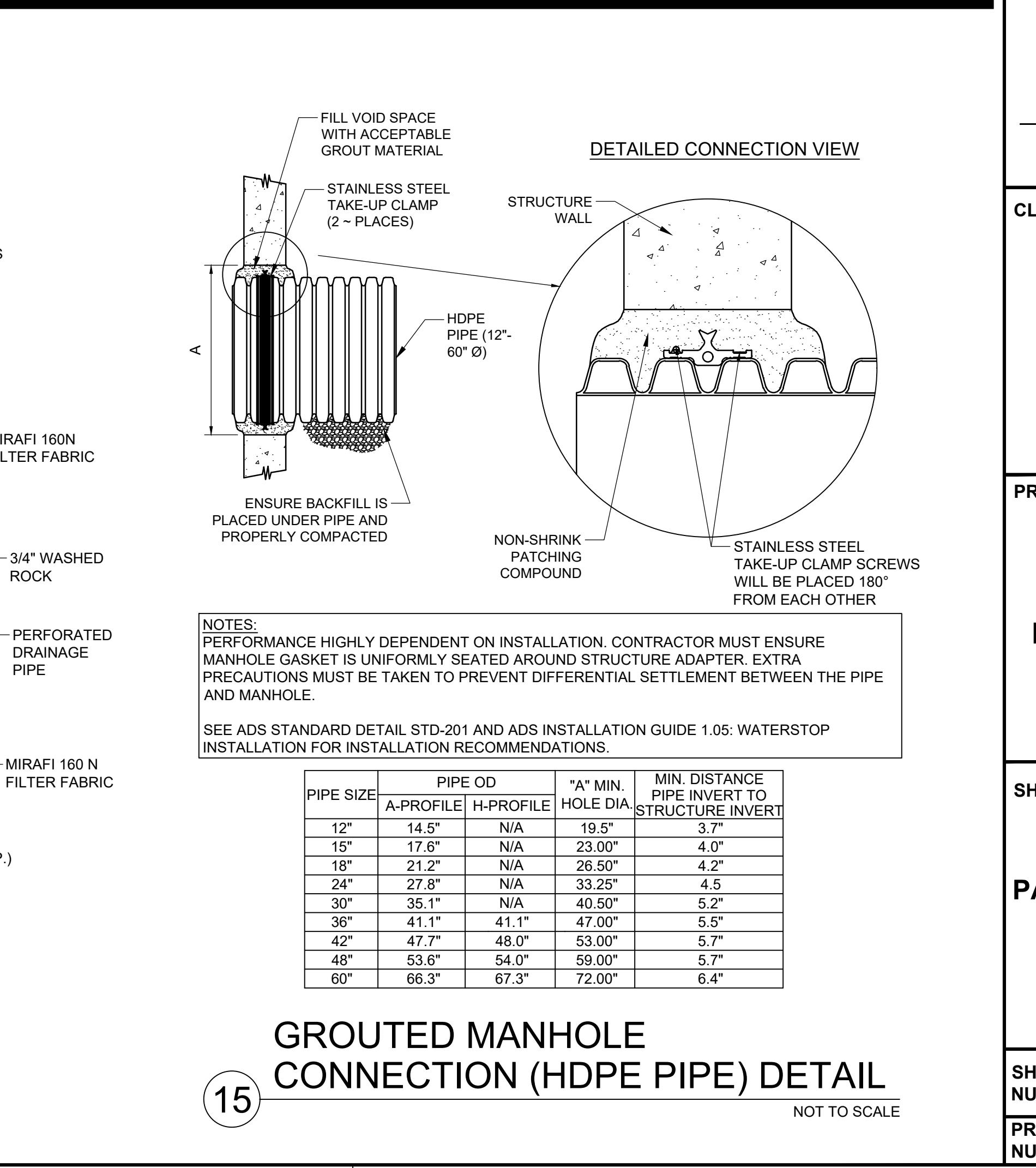
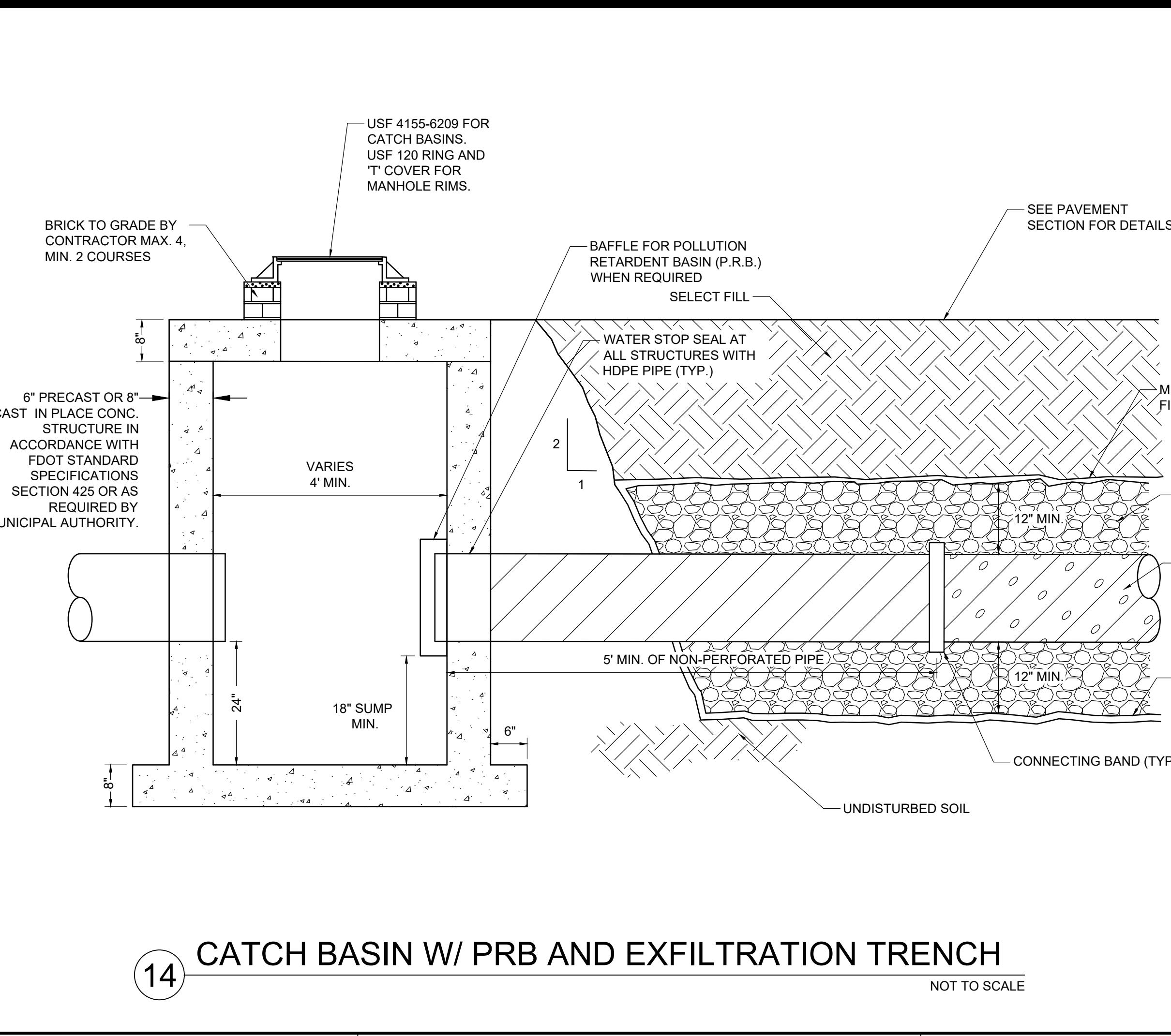
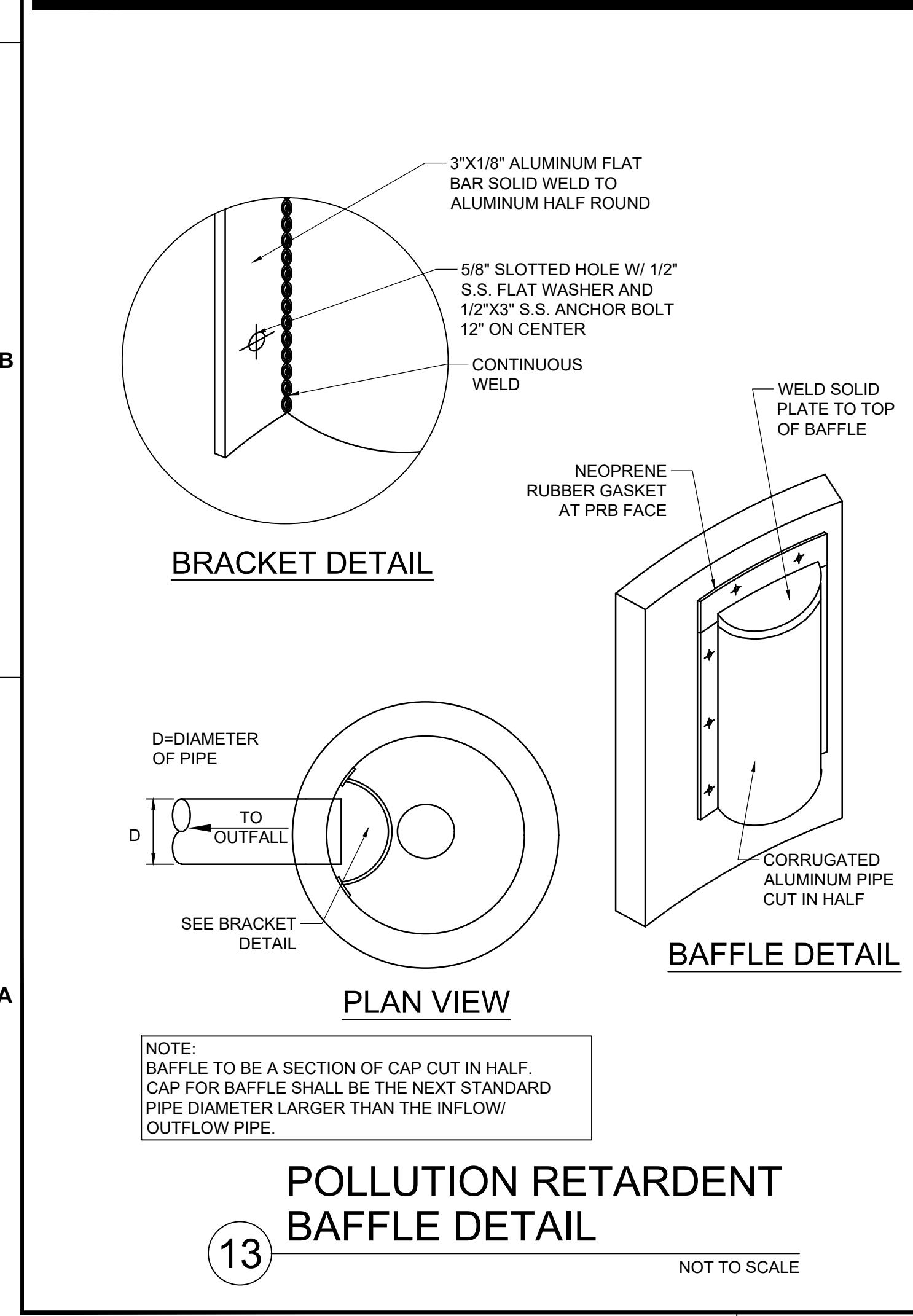
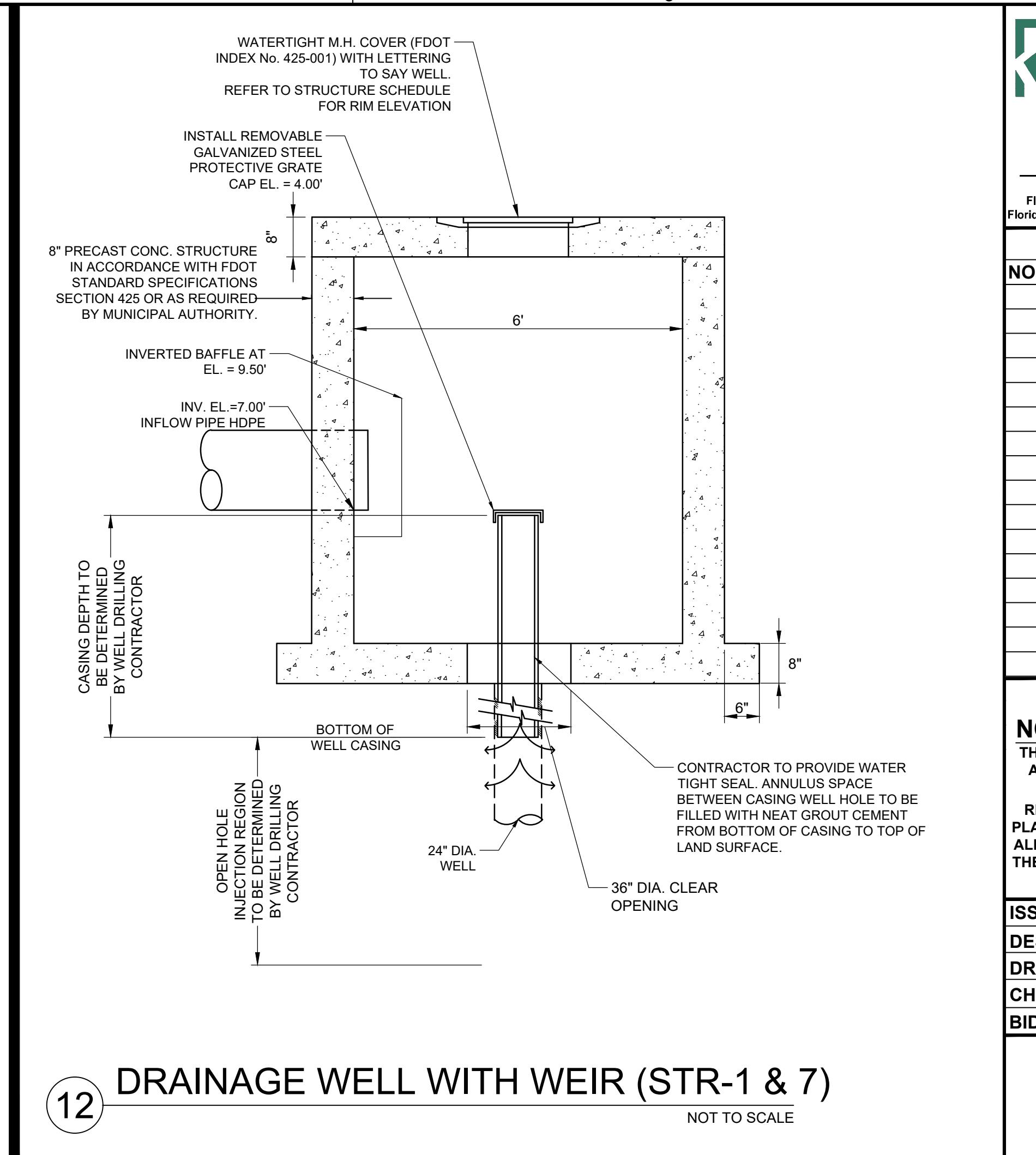
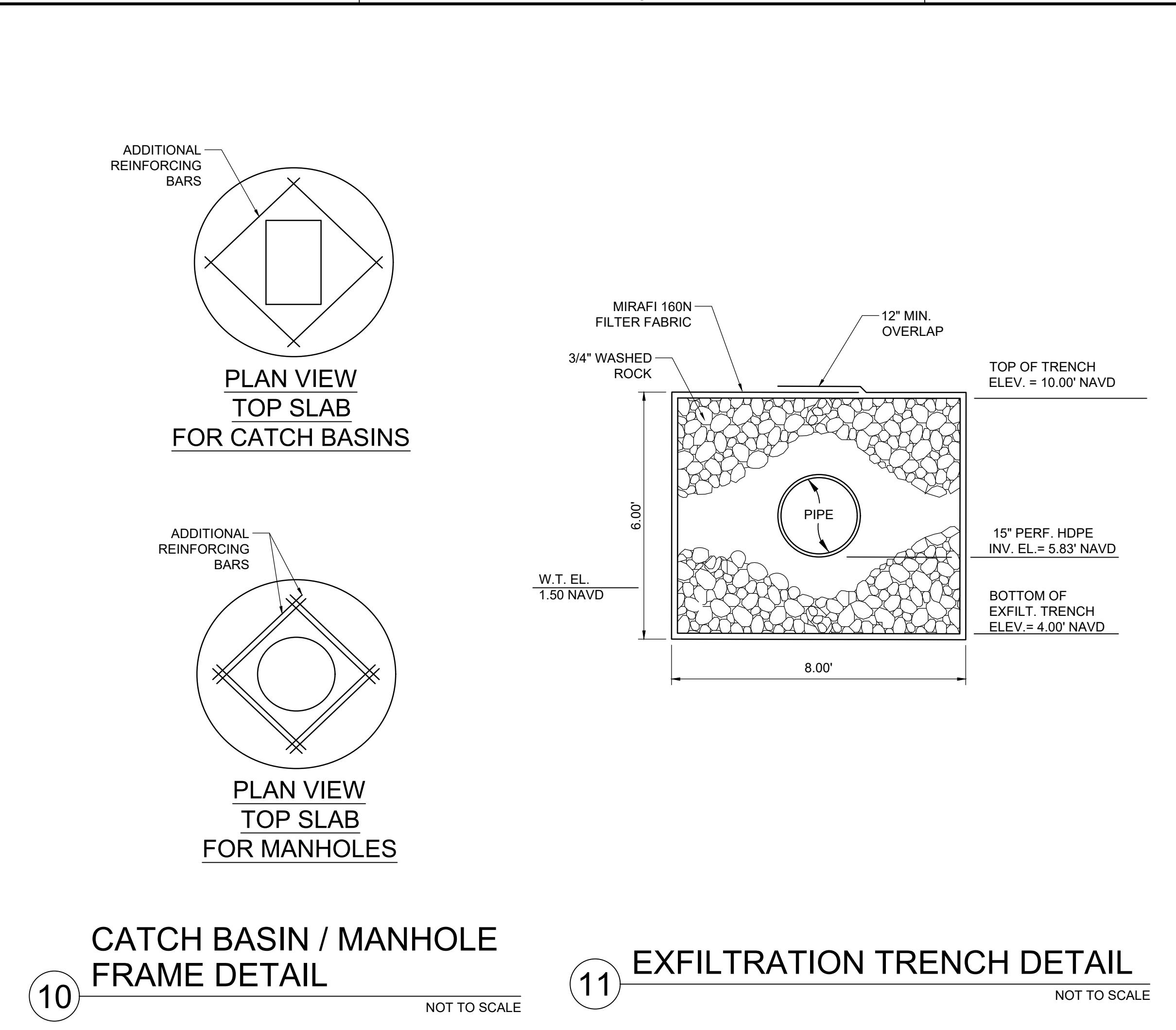
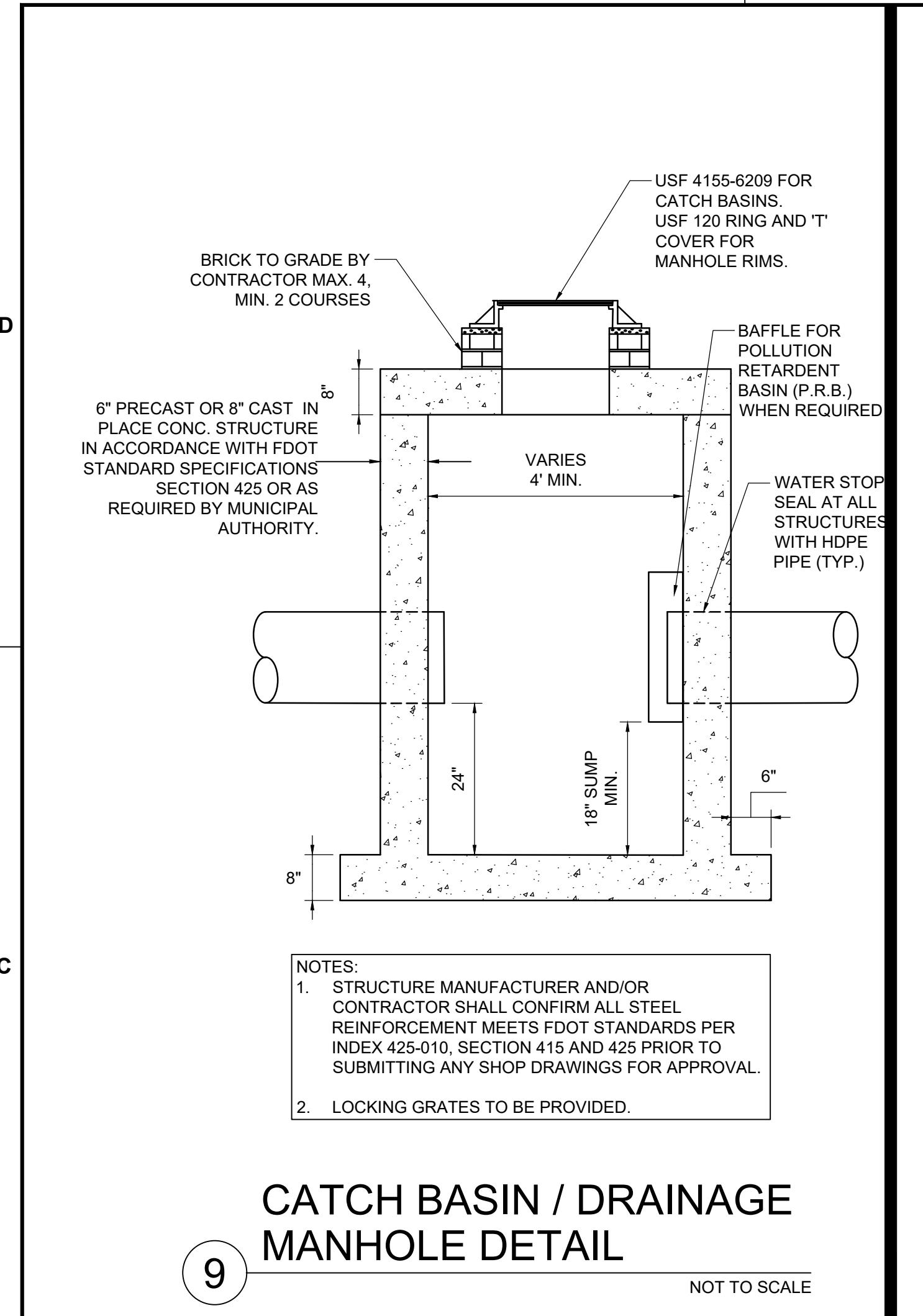
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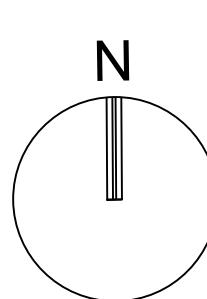
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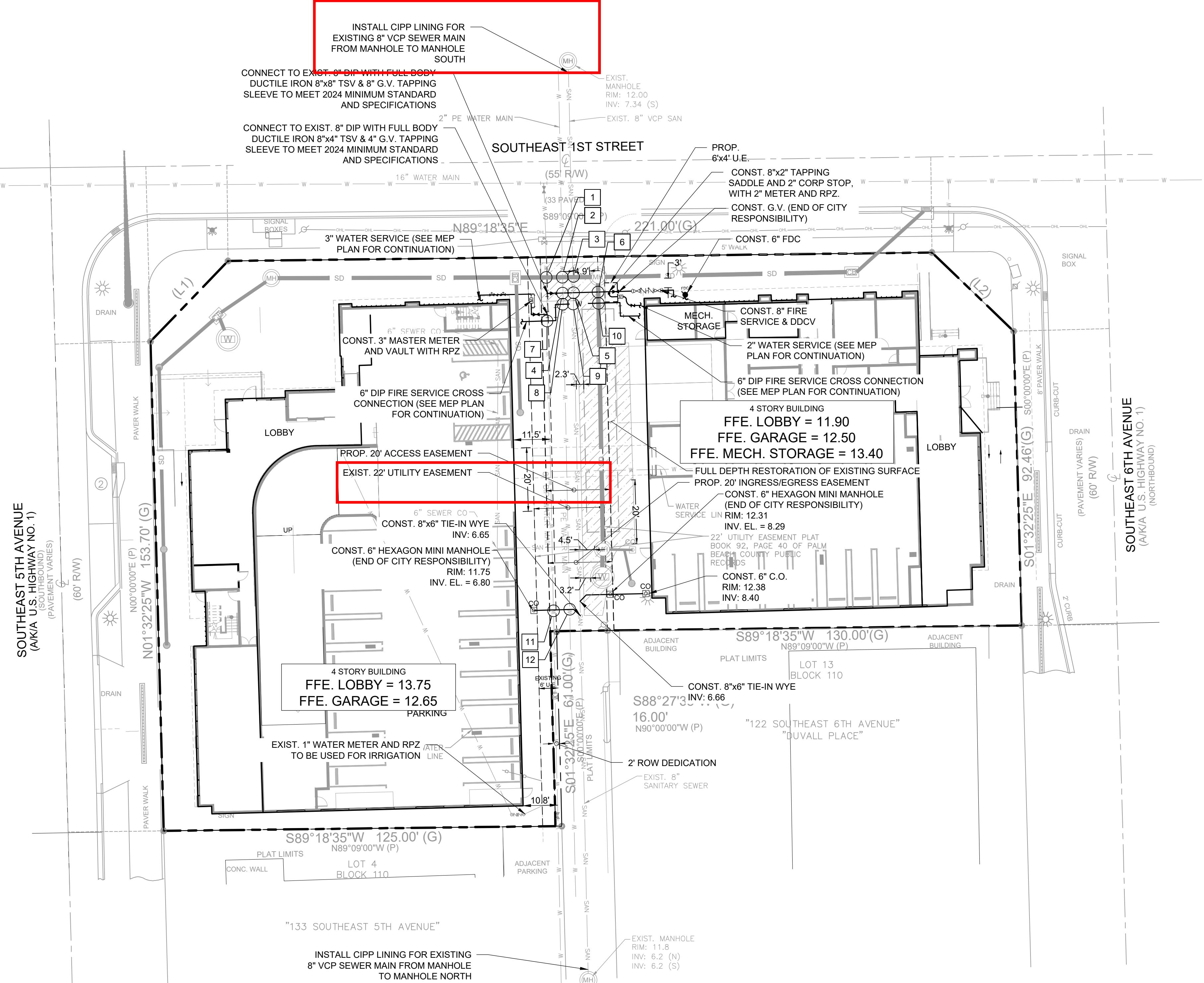
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SCALE: 1" = 20'  
NOTE: PRINTED DRAWING SIZE  
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REVISIONS

NO.	DESCRIPTION	DATE

Plotted by: jweaver On 10/18/2025 2:28 PM



- NOTE:
1. ANY TREES OR SHRUBS PLACED WITHIN WATER, SEWER, OR DRAINAGE EASEMENTS SHALL CONFORM TO THE CITY OF DELRAY BEACH STANDARD DETAILS: LD 1.0 & LD 2.0
  2. TV INSPECTION TO BE PERFORMED ON GRAVITY SEWER MAIN PRIOR TO AND AFTER CONSTRUCTION ACTIVITIES.
  3. CIPP LINE IN GRAVITY SEWER MAIN TO BE INSTALLED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ACTIVITIES.

UTILITY CROSSING #1 EXIST. 8" DIP WATER OVER PROP. 15" HDPE STORM FG = 12.15'	UTILITY CROSSING #2 EXIST. 2" PE WATER OVER PROP. 15" HDPE STORM FG = 12.15'
BOT OF WATER = 8.46' TOP OF STORM = 8.98' TOP OF WATER = 6.50' CLR = 1.96'	BOT OF WATER = 8.98' TOP OF STORM = 6.50' CLR = 2.48'
UTILITY CROSSING #3 EXIST. 8" VCP SEWER OVER PROP. 15" HDPE STORM FG = 12.15' BOT OF WATER = 7.08' TOP OF STORM = 6.50' CLR = 0.58'	UTILITY CROSSING #4 EXIST. 2" PE WATER OVER PROP. 8" DIP WATER FG = 12.00' BOT OF WATER = 8.33' TOP OF WATER = 5.56' CLR = 2.77'
UTILITY CROSSING #5 EXIST. 8" VCP SEWER OVER PROP. 15" HDPE STORM FG = 12.25' BOT OF SEWER = 7.06' TOP OF WATER = 5.56' TOP OF STORM = 7.08' CLR = 1.50'	UTILITY CROSSING #6 EXIST. 8" DIP WATER OVER PROP. 15" HDPE STORM FG = 12.25' BOT OF WATER = 8.58' TOP OF STORM = 7.08' CLR = 1.50'
UTILITY CROSSING #7 EXIST. 8" DIP WATER OVER PROP. 6" DIP WATER FG = 11.95' BOT OF WATER = 8.28' TOP OF WATER = 7.78' CLR = 0.50'	UTILITY CROSSING #8 EXIST. 2" PE WATER OVER PROP. 6" DIP WATER FG = 12.10' BOT OF WATER = 8.93' TOP OF WATER = 7.78' CLR = 1.15'
UTILITY CROSSING #9 PROP. 8" DIP WATER OVER EXIST. 8" VCP SEWER FG = 12.15' BOT OF WATER = 8.75' TOP OF SEWER = 7.70' TOP OF SEWER = 7.08' CLR = 1.05'	UTILITY CROSSING #10 PROP. 8" DIP WATER OVER PROP. 15" HDPE STORM FG = 12.25' BOT OF WATER = 8.75' TOP OF SEWER = 7.70' TOP OF SEWER = 7.08' CLR = 1.65'
UTILITY CROSSING #11 EXIST. 8" DIP WATER OVER PROP. 6" PVC SEWER FG = 12.16' BOT OF WATER = 8.50' TOP OF SEWER = 7.24' TOP OF SEWER = 7.19' CLR = 1.25'	UTILITY CROSSING #12 EXIST. 2" PE WATER OVER PROP. 6" PVC SEWER FG = 12.16' BOT OF WATER = 9.00' TOP OF SEWER = 7.24' TOP OF SEWER = 7.19' CLR = 1.81'

**PRELIMINARY PLAN  
NOT FOR CONSTRUCTION**  
THESE PLANS ARE NOT FULLY PERMITTED  
AND ARE SUBJECT TO REVISIONS MADE  
DURING THE PERMITTING PROCESS.  
RESPONSIBILITY FOR THE USE OF THESE  
PLANS PRIOR TO OBTAINING PERMITS FROM  
ALL AGENCIES HAVING JURISDICTION OVER  
THE PROJECT WILL FALL SOLELY UPON THE  
USER.

ISSUE DATE: 09/18/2025  
DESIGNED BY: JVP  
DRAWN BY: JFW  
CHECKED BY: CAR  
BID-CONTRACT:

JORGE VALLE-PELLOT, P.E.  
FLORIDA REG. NO. 77039  
(FOR THE FIRM)

CLIENT

**NETTA  
ARCHITECTS**

PROJECT

**109 SE 5TH AVE  
DELRAY BEACH, FL**

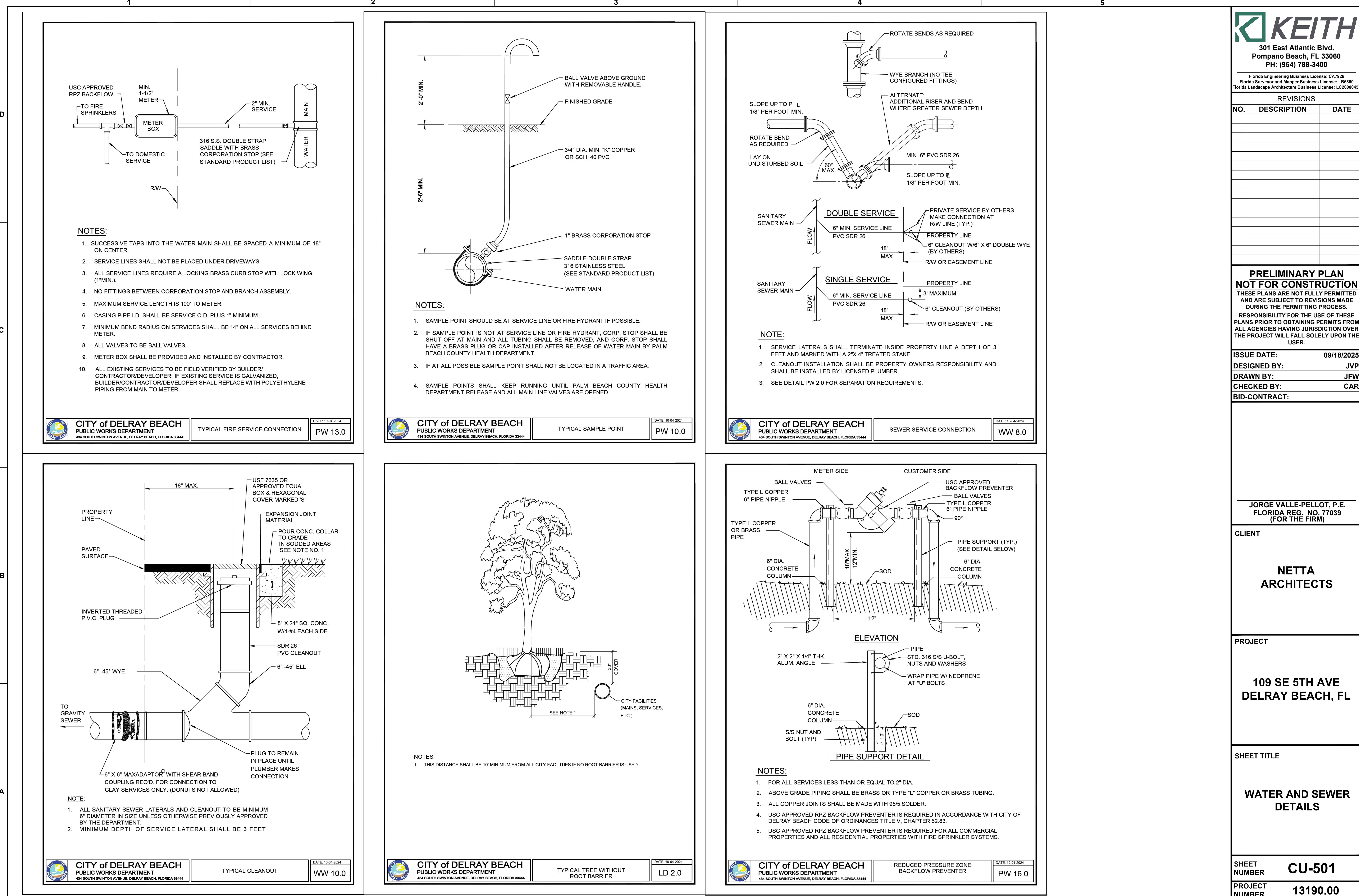
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**WATER AND SEWER  
PLAN**

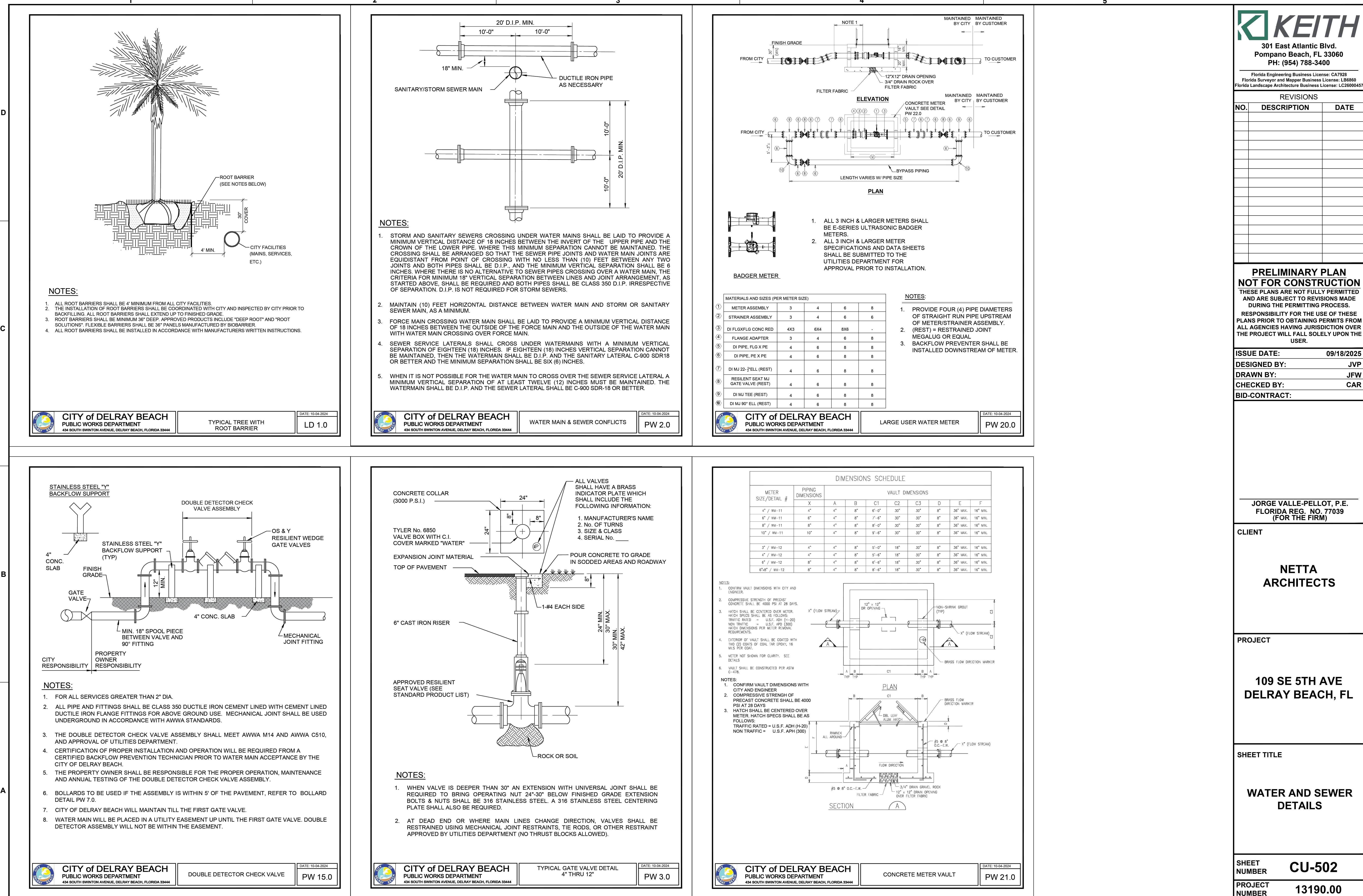
SHEET NUMBER **CU-101**  
PROJECT NUMBER **13190.00**

STATUS: PRELIMINARY

ELEVATIONS SHOWN HEREON ARE IN FEET AND BASED  
ON THE NORTH AMERICAN VERTICAL DATUM OF 1988  
(NAVD 88)

109 SE 5th LLC - Delray Beach - Netta Architects Engineering Cadd13190.00-CU-101-X.dwg





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Florida Surveyor and Mapper Business License: LB6860  
Florida Landscape Architecture Business License: LC26000457

**REVISIONS**

NO.	DESCRIPTION	DATE
1		10/04/2024
2		10/04/2024
3		10/04/2024
4		10/04/2024
5		10/04/2024

Plotted by: jweaver On 10/04/2024 2:05 PM

**PRELIMINARY PLAN  
NOT FOR CONSTRUCTION**

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**ISSUE DATE:** 09/18/2025  
**DESIGNED BY:** JVP  
**DRAWN BY:** JFW  
**CHECKED BY:** CAR  
**BID-CONTRACT:**

**JORGE VALLE-PELLOT, P.E.**  
FLORIDA REG. NO. 77039  
(FOR THE FIRM)

**CLIENT**

**NETTA ARCHITECTS**

**PROJECT**

**109 SE 5TH AVE  
DELRAY BEACH, FL**

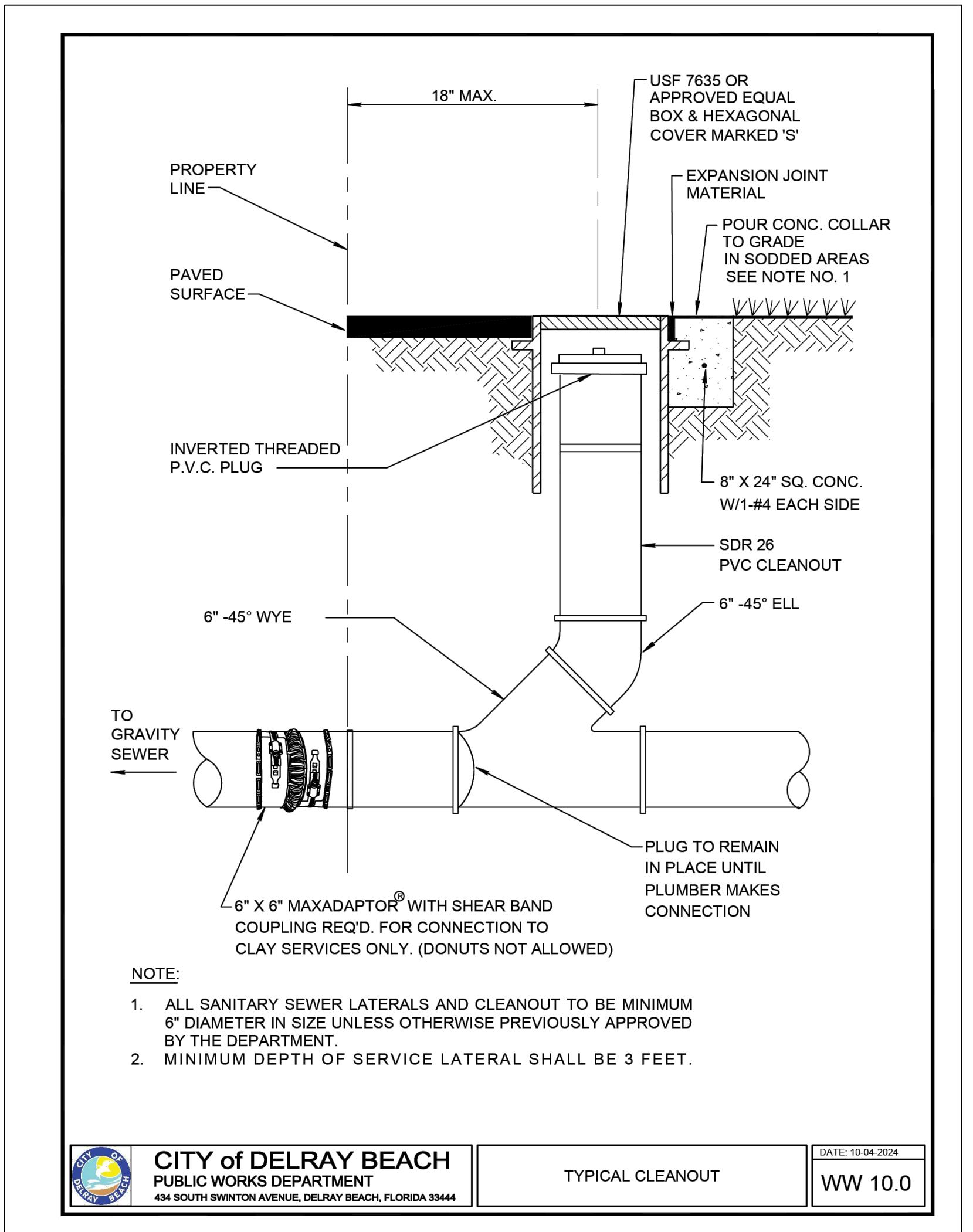
**SHEET TITLE**

**WATER AND SEWER DETAILS**

**SHEET NUMBER** CU-502  
**PROJECT NUMBER** 13190.00

**STATUS: PRELIMINARY**

Drawing name: K13190.00 - 109 SE 5TH AVE - Delray Beach - Netta ArchitectsEngineeringCadd13190.00-CU-502.dwg



**KEITH**

 301 East Atlantic Blvd.  
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 Florida Engineering Business License: CA7928  
 Florida Surveyor and Mapper Business License: LB6860  
 Florida Landscape Architecture Business License: LC26000457

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 NO. DESCRIPTION DATE  
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 ALL AGENCIES HAVING JURISDICTION OVER  
 THE PROJECT WILL FALL SOLELY UPON THE  
 USER.

 ISSUE DATE: 09/18/2025  
 DESIGNED BY: JVP  
 DRAWN BY: JFW  
 CHECKED BY: CAR  
 BID-CONTRACT:

 JORGE VALLE-PELLOT, P.E.  
 FLORIDA REG. NO. 77039  
 (FOR THE FIRM)

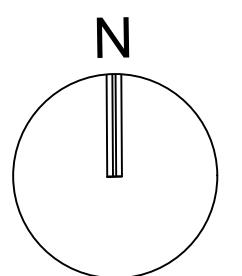
 CLIENT  
**NETTA  
ARCHITECTS**

 PROJECT  
**109 SE 5TH AVE  
DELRAY BEACH, FL**

 SHEET TITLE  
**WATER AND SEWER  
DETAILS**

 SHEET  
NUMBER **CU-503**  
 PROJECT  
NUMBER **13190.00**

Drawing name: KC13190.00 - 109 5th LLC - Delray Beach - Netta ArchitectsEngineeringCadd13190.00-CU-503X.dwg



GRAPHIC SCALE

0 20 40

SCALE: 1" = 20'

NOTE: PRINTED DRAWING SIZE  
MAY HAVE CHANGED FROM  
ORIGINAL. VERIFY SCALE USING  
BAR SCALE ABOVE.


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REVISIONS

NO. DESCRIPTION DATE

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Drawing name: KCM-101.dwg - 109 5th LLC - Delray Beach - Netta Architects Engineering C:\add13190.00\CM-1XX\dwg3

STATUS: PRELIMINARY

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PLANS PRIOR TO OBTAINING PERMITS FROM  
ALL AGENCIES HAVING JURISDICTION OVER  
THE PROJECT WILL FALL SOLELY UPON THE  
USER.

ISSUE DATE: 09/18/2025  
DESIGNED BY: JVP  
DRAWN BY: JFW  
CHECKED BY: CAR  
BID-CONTRACT:

JORGE VALLE-PELLOT, P.E.  
FLORIDA REG. NO. 77039  
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**NETTA  
ARCHITECTS**

PROJECT  
**109 SE 5TH AVE  
DELRAY BEACH, FL**

SHEET TITLE  
**PAVEMENT MARKING  
AND SIGNAGE PLAN**

SHEET  
NUMBER **CM-101**

PROJECT  
NUMBER **13190.00**

