

CONSTRUCTION PLANS AND SPECIFICATIONS
FOR
LOWE'S
OF
WESTLAKE, FLORIDA

CONTACTS

PROPERTY OWNER
PBLH, LLC
4400 WEST SAMPLE RD. SUITE 200
COCONUT CREEK, FLORIDA 33073
954-973-4490
954-978-5330

CIVIL ENGINEER
CREECH CONSULTING, INC.
PO BOX 327
STUART FLORIDA 34995

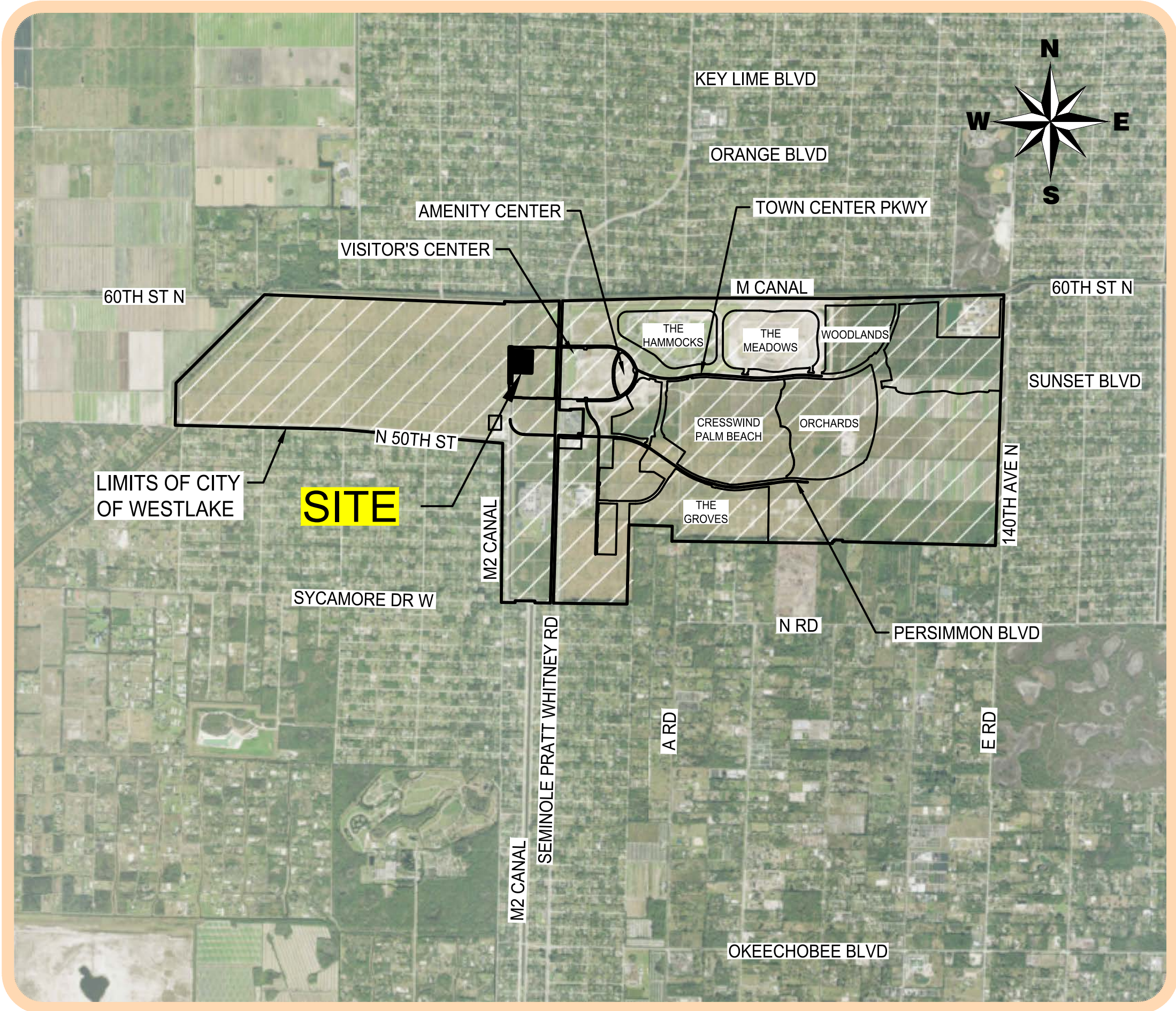
LANDSCAPE ARCHITECT
COTLEUR & HEARING
1934 COMMERCE LANE, SUITE 1
JUPITER, FLORIDA 33458
561-747-6336
561-747-1377

BOUNDARY SURVEYOR
CAULFIELD & WHEELER, INC
7900 GLADES ROAD, SUITE 100
BOCA RATON, FLORIDA 33434
561-392-1991

TOPOGRAPHICAL SURVEYOR
BSM & ASSOCIATES, INC
80 SE 31st Lane
Okeechobee, FL 34974
863-484-8324

TRAFFIC ENGINEER
PINDER TROUTMAN CONSULTING, INC.
2005 VISTA PARKWAY, SUITE 111
WEST PALM BEACH, FLORIDA 561-296-9698

SEMINOLE IMPROVEMENT DISTRICT ENGINEER
7900 GLADES ROAD, SUITE 100
BOCA RATON, FLORIDA 33434
561-392-1991



LOCATION MAP
NOT TO SCALE

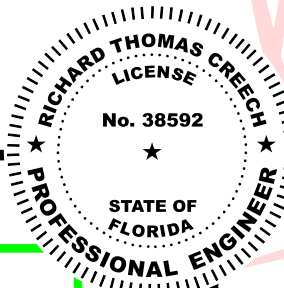
SHEET INDEX

SHEET NO.	SHEET TITLE
C0	COVER SHEET
1-2	BOUNDARY & TOPOGRAPHIC SURVEY
C1	MASTER SITE PLAN
C2	EROSION & SEDIMENTATION CONTROL PLAN
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PH1.00	SITE PHOTOMETRIC PLAN
D1-D2	SITE DETAILS
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D4-D5	SEDIMENT EROSION CONTROL DETAILS AND NOTES
D6-D8	WATER AND WASTE WATER DETAILS
LS 1	LIFT STATION DETAILS AND NOTES

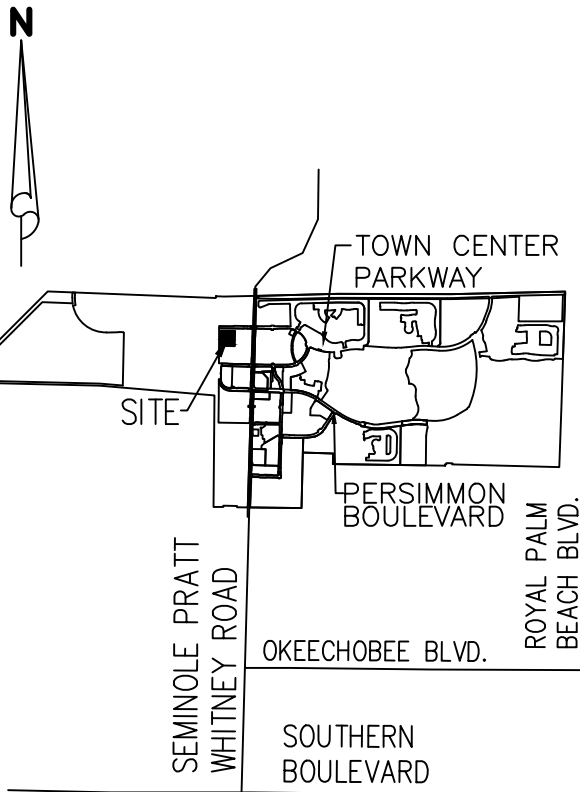
City of Westlake Site Plan Re-Submittal 2025-07-11
SID Plan Re-Submittal 2025-07-09
SID Plan Re-Submittal 2025-06-16
City of Westlake Site Plan Re-Submittal 2025-05-23
City of Westlake Site Plan Submittal 2025-03-21

CREECH
CONSULTING, INC.
CIVILIZATION ENGINEERS
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER 5139
PROFESSIONAL SURVEYORS AND MAPPERS, AMENDED CERTIFICATE NO. LB-0006705



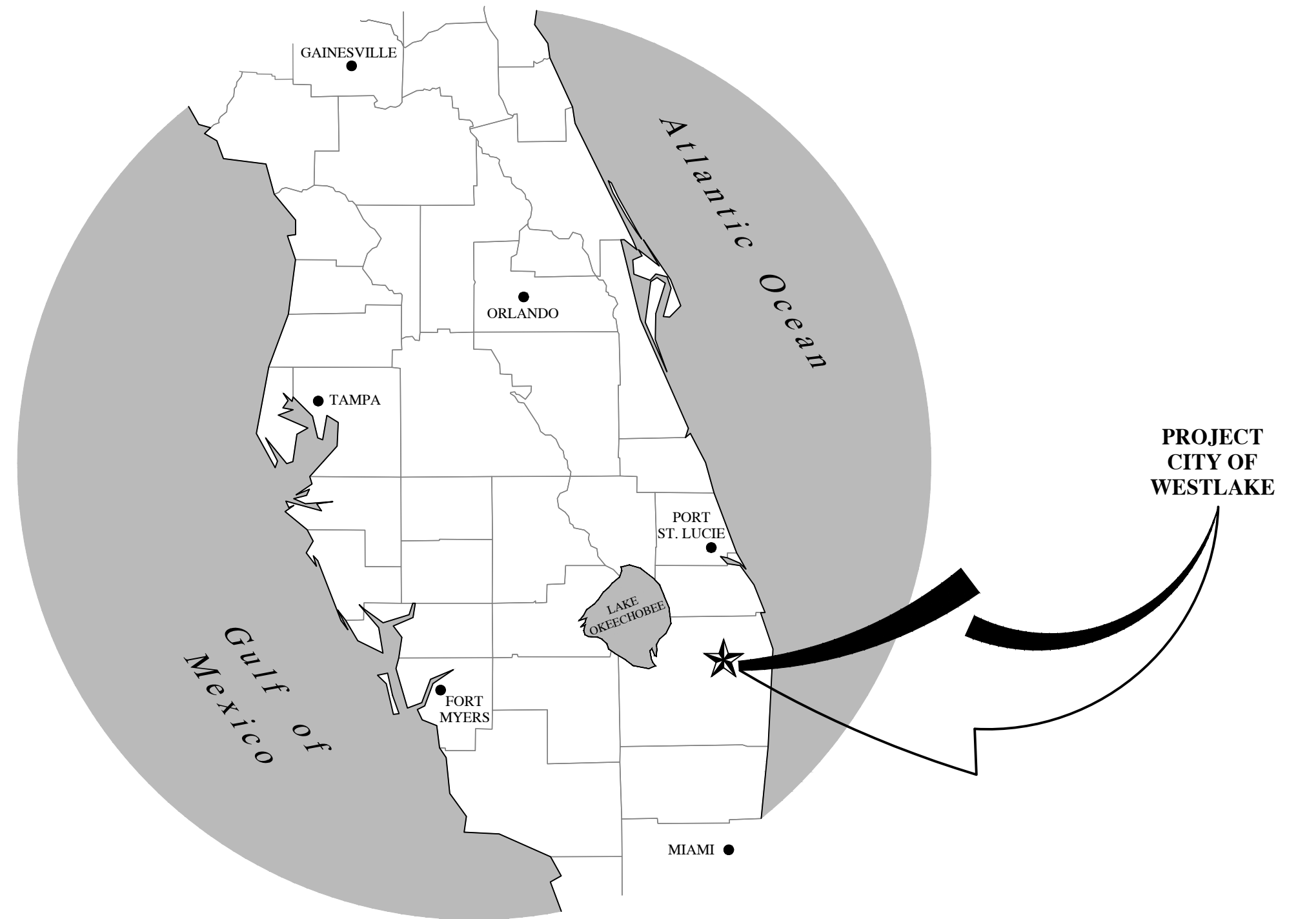
Digitally signed by Richard T Crech
Date: 2025.07.22 13:42:59
Richard T Crech
EL 0400 38592



A PORTION OF LOT 1, WESTLAKE POD G - NORTH, AS RECORDED IN PLAT BOOK 138, PAGES 3 THROUGH 5, INCLUSIVE, AND ALL OF PARCEL C, WESTLAKE POD G - NORTH - PARCEL C, AS RECORDED IN PLAT BOOK 139, PAGES 124 AND 125, BOTH OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA AND LYING IN SECTION 1, TOWNSHIP 43 SOUTH, RANGE 40 EAST, CITY OF WESTLAKE, FLORIDA, AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

CONTAINING: 554,142 SQUARE FEET OR 12.721 ACRES, MORE OR LESS

- 1) BEARINGS SHOWN HEREON ARE BASED ON THE NORTH LINE OF LOT 1, WESTLACE POD G - NORTH, AS RECORDED IN PLAT BOOK 138, PAGES 3 THROUGH 5, INCLUSIVE, OF THE PUBLIC RECORDS OF PALM BEACH COUNTY, FLORIDA, HAVING A GRID BEARING OF S.89°22'48"E. THE GRID BEARINGS AS SHOWN HEREON REFER TO THE STATE PLANE COORDINATE SYSTEM, NORTH AMERICAN HORIZONTAL DATUM OF 1983 (NAD 83-2011 ADJUSTMENT) FOR THE EAST ZONE OF FLORIDA.
- 2) ALL DIMENSIONS, UNLESS OTHERWISE NOTED, ARE SURVEY DIMENSIONS.
- 3) THIS DESCRIPTION SKETCH IS INTENDED TO BE DISPLAYED AT 1" = 100' OR SMALLER.
- 4) ELEVATIONS SHOWN HEREON ARE IN FEET AND ARE REFERENCED TO NAVD88.
- 5) TOPOGRAPHIC ELEVATIONS ARE BASED FROM SURVEY PREPARED BY GEOPoint SURVEYING, INC. DATED FEBRUARY 9, 2024.

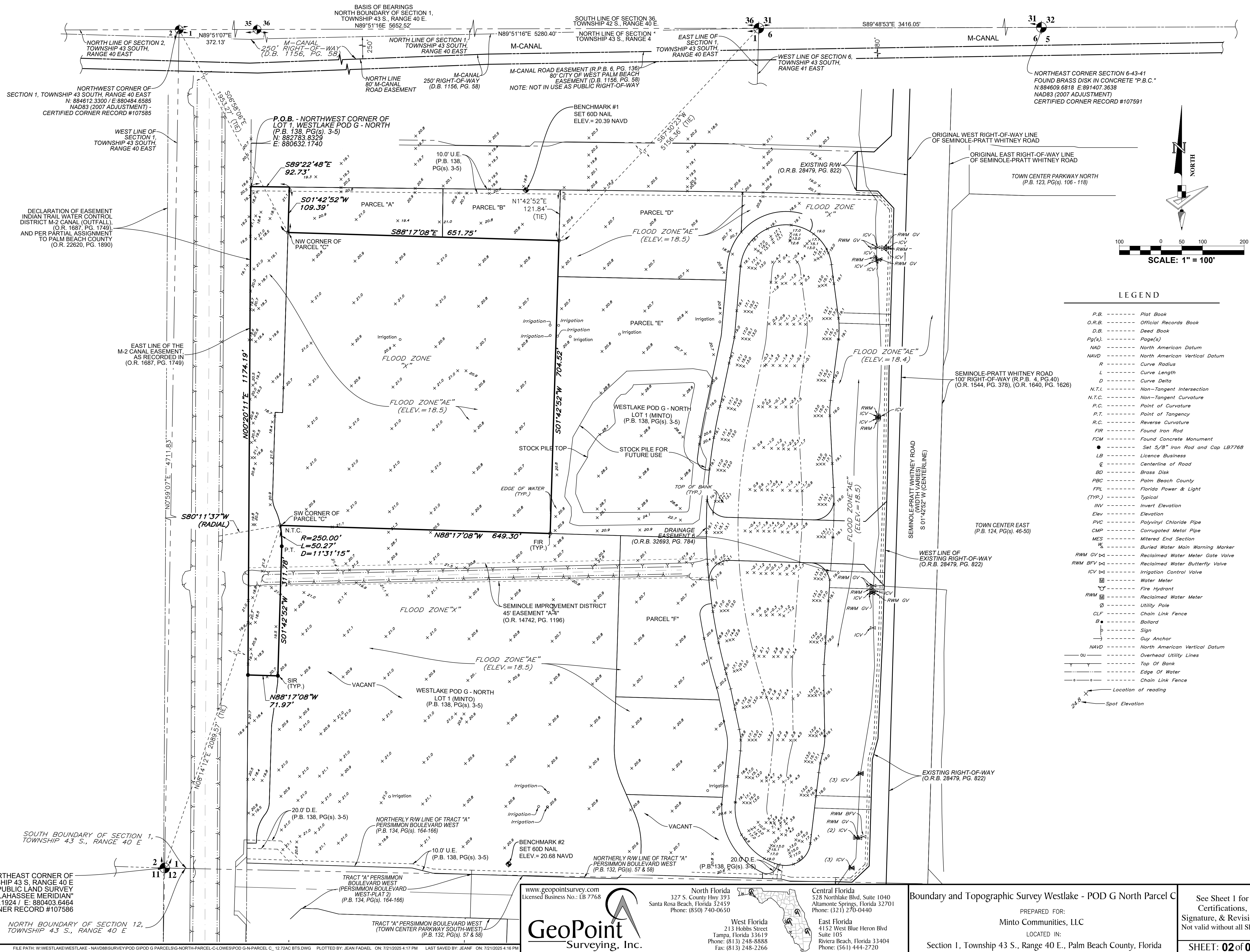


P.B. -----	Plot Book	CMP -----	Corrugated Metal Pipe
O.R.B. -----	Official Records Book	MES -----	Mitered End Section
D.B. -----	Deed Book	W ₀ -----	Buried Water Main Warning Marker
Pg(s). -----	Page(s)	RWM GV ∇ -----	Reclaimed Water Meter Gate Valve
NAD -----	North American Datum	RWM BV ∇ -----	Reclaimed Water Butterfly Valve
NAVD -----	North American Vertical Datum	ICV ∇ -----	Irrigation Control Valve
R -----	Curve Radius	∇ -----	Water Meter
L -----	Curve Length	∇ -----	Fire Hydrant
D -----	Curve Delta	RWM ∇ -----	Reclaimed Water Meter
N.T.I. -----	Non-Tangent Intersection	\emptyset -----	Utility Pole
N.T.C. -----	Non-Tangent Curvature	CLF -----	Chain Link Fence
P.C. -----	Point of Curvature	B \bullet -----	Bollard
P.T. -----	Point of Tangency	\downarrow -----	Sign
FIR -----	Found Iron Rod	\downarrow -----	Guy Anchor
FCM -----	Found Concrete Monument	NAVD -----	North American Vertical Datum
SIR -----	Set Iron Rod	$\overline{00}$ -----	Overhead Utility Lines
\bullet -----	Set 5/8" Iron Rod and Cap LB7768	$\overline{1}$ -----	Top Of Bank
LB -----	Licence Business	$\overline{1}$ -----	Edge Of Water
$\overline{0}$ -----	Centerline of Road	$\overline{0} \text{ } \overline{0}$ -----	Chain Link Fence
BD -----	Brass Disk		
PBC -----	Palm Beach County		
FPL -----	Florida Power & Light		
(TYP.) -----	Typical		
INV -----	Invert Elevation		
Elev -----	Elevation		
PVC -----	Polyvinyl Chloride Pipe		

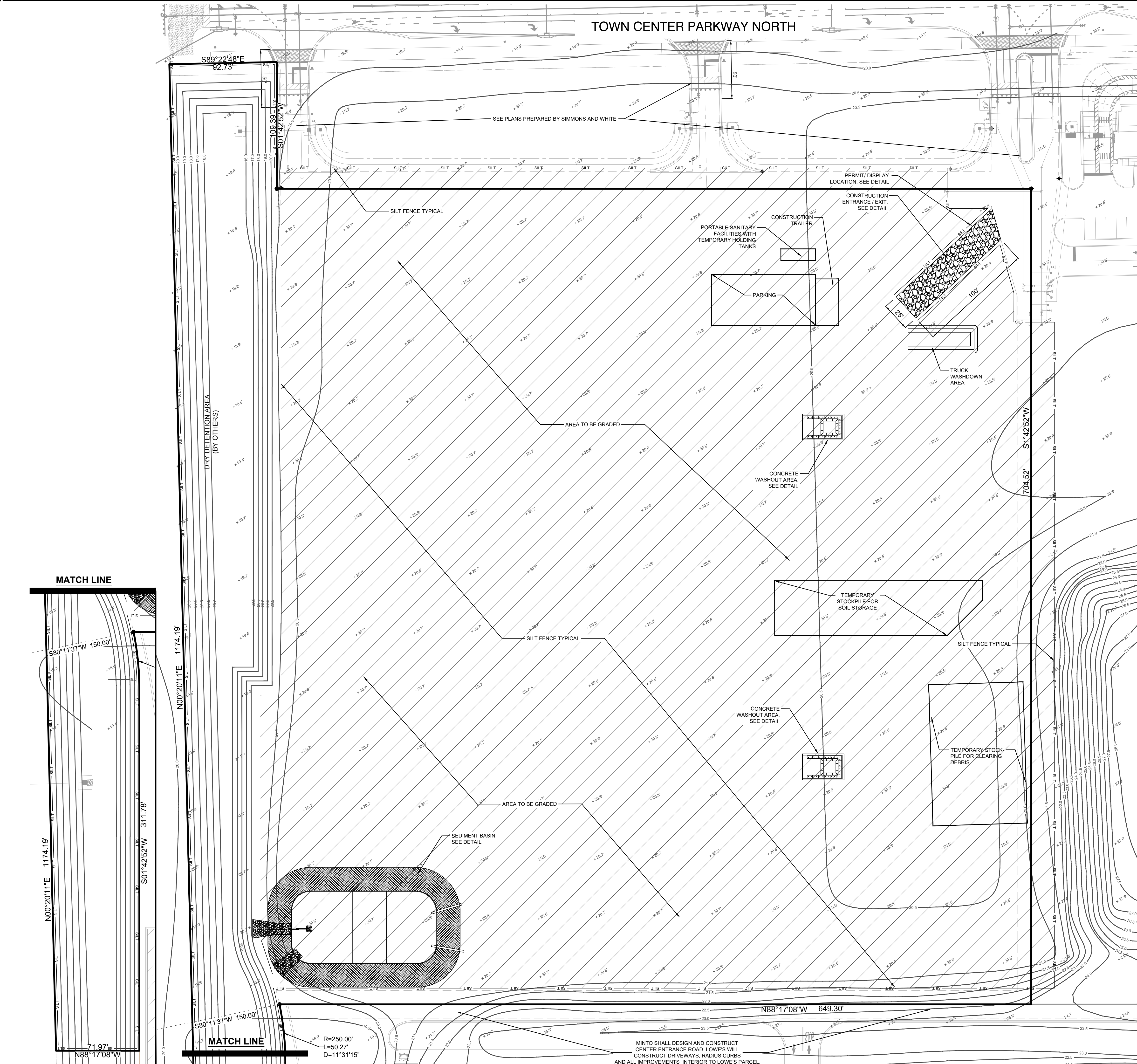
$\overline{2A \ B}$ \swarrow X \nearrow Location of reading
 \nwarrow Spot Elevation

Printed copies of this document are not considered signed and sealed and the SHA authentication code must be verified on any electronic copies.

CREW #1 PARTY CHIEF: ED G. DATA BOOK: 3223-47W58 DATA FILE: PRM US88 8 01-23-24		DATE 7-21-25		DESCRIPTION UPDATE BOUNDARY & LEGAL DESCRIPTION		DRAWN JLF		P.CHIEF		Surveyor's Certification I do hereby certify that this survey was made under my supervision and meets the "Standards of Practice" set forth by the Florida Board of Professional Surveyors and Mapmakers in Rules 6J-17.061, 6J-17.052, and 6J-17.063, Florida Administrative Code, pursuant to section 427.027 of the Florida Statutes.		THIS SURVEY IS VALID ONLY WITH A SIGNATURE & ORIGINAL SEAL. IN HARD COPY FORM, OR A DIGITAL SEAL IN ELECTRONIC FORM, PURSUANT TO RULES 6J-17.060 AND 6J-17.062, SECTION 427.027 OF THE FLORIDA STATUTES.		Survey is Certified To: MINTO COMMUNITIES, LLC		www.geopointsurvey.com Licensed Business No.: LB 7768		North Florida 327 S. County Hwy 393 Santa Rosa Beach, Florida 32459 Phone: (850) 740-0650				Central Florida 528 Northlake Blvd, Suite 1040 Altamonte Springs, Florida 32701 Phone: (321) 270-0440		Boundary and Topographic Survey Westlake - POD G North Parcel C		JOB #POD G N-Par C BS-1P DRAWN BY: SWMD date:09/27/2024 LDATE CREW: N/A DATE:N/A SURFACE BY: N/A H.DATUM: FL-East NAD(83)-2011 V.DATUM: NAVD (1988) OFC CHECK: GARF FILE CHECK: GR3	
CREW #2 PARTY CHIEF: DATA FILE:		7-21-25		UPDATE BOUNDARY & LEGAL DESCRIPTION		JLF				FIELD SURVEY DATE: July 21, 2025		GARY A. RAGER LS4828										PREPARED FOR: Minto Communities, LLC LOCATED IN:		Section 1, Township 43 S., Range 40 E., Palm Beach County, Florida		SHEET: 01 of 02	
CREW #3 PARTY CHIEF: DATA FILE:										FILE PATH: W:\WESTLAKE\WESTLAKE - NAVD83\SURVEY\POD G\POD G PARCELS\G-NORTH-PARCEL-C\LOWES\POD G-N-PARCEL C - 12.72AC BTS.DWG		PLOTTED BY: JEAN FADAEU ON: 7/21/2025 4:17 PM		LAST SAVED BY: JEANF ON: 7/21/2025 4:16 PM													



ORIGINAL	
SECOND	
FINAL	



LEGEND	
	LIMITS OF CONSTRUCTION
	CONSTRUCTION ENTRANCE
	PROPOSED SILT FENCE
	EASEMENT
	PROPERTY LINE

EROSION CONTROL NOTES:

1. INSPECTIONS ARE REQUIRED BY CONTRACTOR AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM EVENT THAT IS 0.50 INCHES OR GREATER.
2. THE CONTRACTOR WILL BE THE OPERATOR AND SHALL PREPARE, SUBMIT AND OBTAIN THE "NOTICE OF INTENT TO USE NPDES GENERIC PERMIT" FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" FROM THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP).
3. THE CONTRACTOR SHALL PREPARE AND SUBMIT THE "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) STORMWATER NOTICE OF TERMINATION" TO THE FDEP AT THE CONCLUSION OF THE PROJECT ONCE THE SITE HAS BEEN DEEMED COMPLETE AND FULLY STABILIZED.
4. THE CONTRACTOR SHALL PREPARE, SUBMIT, AND OBTAIN ALL REQUIRED PERMITS FOR ANY ASBESTOS THAT IS FOUND AT THE SITE.
5. THE CONTRACTOR SHALL IMPLEMENT THE WORK IN A MANNER SO AS TO MINIMIZE ANY ADVERSE IMPACTS OF THE WORK ON NATURAL ENVIRONMENTAL FEATURES AND WATER QUALITY. THE CONTRACTOR SHALL INSTITUTE NECESSARY MEASURES DURING CONSTRUCTION TO REDUCE EROSION, TURBIDITY, NUTRIENT LOADING, AND SEDIMENTATION IN THE RECEIVING WATERS.
6. OFF-SITE DISCHARGES DURING CONSTRUCTION AND DEVELOPMENT SHALL NOT BE PERMITTED.
7. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT ADVERSE OFF-SITE WATER-RELATED IMPACTS DO NOT OCCUR DURING CONSTRUCTION.
8. CONTRACTOR SHALL BE RESPONSIBLE FOR PERIODIC INSPECTION AND REMOVAL OF DEBRIS AND SILT BEHIND EROSION CONTROL DEVICES. TRAPPED MATERIAL SHALL NOT EXCEED 1/2 HEIGHT OF DEVICES.
9. ALL INLETS AND PIPE SHALL BE PROTECTED DURING CONSTRUCTION TO PREVENT SILTATION IN THE DRAINAGE SYSTEMS BY WAY OF THE TEMPORARY PLUGS AND PLYWOOD OR GEOTEXTILE FABRIC OVER THE INLETS. THE DRAINAGE SYSTEM THAT HAS BEEN IMPACTED BY THE PROPOSED MODIFICATIONS SHALL BE CLEANED OF ALL DEBRIS PRIOR TO FINAL ACCEPTANCE.
10. ALL OFF-SITE AREAS DISTURBED DURING CONSTRUCTION ACTIVITY SHALL BE IMMEDIATELY RESTORED TO PRIOR CONDITION UPON COMPLETION OF WORK.
11. SOILS ARE TO BE STABILIZED BY WATER OR OTHER MEANS DURING CONSTRUCTION. THIS IS INTENDED TO REDUCE SOIL EROSION, BLOWING SAND, AND THE IMPACT TO NEIGHBORING COMMUNITIES.
12. ANY TOPSOIL OR EXCAVATED SOIL THAT IS TO REMAIN ON THE SITE MUST BE STOCKPILED. THE STOCKPILE MUST BE ENCLOSED IN SILT FENCE AND TEMPORARILY SEEDED OR OTHERWISE STABILIZED AGAINST EROSION. THE STOCKPILES SHALL BE A MAXIMUM 2:1 (H:V) SLOPE AND A MAXIMUM HEIGHT OF 20 FEET OR A HEIGHT ALLOWED BY PHYSICAL CONSTRAINTS, WHICHEVER IS LESS. CONSTRUCTION SHALL BE SEQUENCED SUCH THAT AREAS WHERE THE STOCKPILES EXIST SHALL BE BUILT AFTER SAID STOCKPILES ARE USED OR MOVED AND PROTECTED AT A DIFFERENT APPROVED LOCATION.
13. DATUM IS BASED ON N.A.V.D. 1988.

DEMOLITION NOTES:

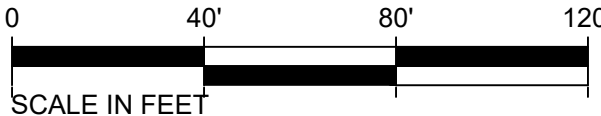
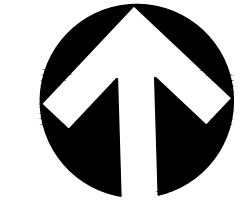
1. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING OF THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
2. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
3. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON-SITE LOCATIONS OF EXISTING UTILITIES. CONTRACTOR TO VERIFY EXISTING UTILITIES & LOCATIONS PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY THE ENGINEER & OWNER IMMEDIATELY IF ANY DISCREPANCIES ARE IDENTIFIED.
4. ALL EXISTING SEWERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. CONTRACTOR SHALL VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. CONTRACTOR SHALL GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK. UTILITIES DETERMINED TO BE ABANDONED AND LEFT IN PLACE SHALL BE GROUTED IF UNDER BUILDING.
5. CONTRACTOR SHALL COORDINATE ALL ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED WITH THE AFFECTED UTILITY COMPANY. CONTRACTOR TO PROVIDE ADEQUATE TIME FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IN ORDER TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.
6. CONTRACTOR MUST PROTECT THE PUBLIC AT ALL TIMES WITH FENCING, BARRICADES, ENCLOSURES, (AND OTHER APPROPRIATE BEST MANAGEMENT PRACTICES), THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
7. PRIOR TO DEMOLITION OCCURRING, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED.
8. SHOULD REMOVAL AND/OR RELOCATION ACTIVITIES DAMAGE FENCING, LIGHTING AND/OR EXISTING STRUCTURES, THE CONTRACTOR SHALL PROVIDE NEW MATERIALS/STRUCTURES IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. EXCEPT FOR MATERIALS DESIGNED TO BE RELOCATED ON THIS DRAWING, ALL OTHER CONSTRUCTION MATERIALS SHALL BE NEW.
9. IF ANY DAMAGE IS INCURRED ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR.
10. THE CONTRACTOR SHALL COORDINATE WATER MAIN WORK WITH THE FIRE DEPT. AND SEMINOLE IMPROVEMENT DISTRICT (SID) TO PLAN PROPOSED IMPROVEMENTS AND TO ENSURE ADEQUATE FIRE PROTECTION IS CONSTANTLY AVAILABLE TO EXISTING USERS AND SITE THROUGHOUT ALL PHASES OF CONSTRUCTION. CONTRACTOR WILL BE RESPONSIBLE FOR ARRANGING/PROVIDING ANY REQUIRED WATER MAIN SHUT OFFS WITH SID UTILITIES DURING CONSTRUCTION. ANY COSTS ASSOCIATED WITH WATER MAIN SHUT OFFS WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND NO EXTRA COMPENSATION WILL BE PROVIDED.
11. DAMAGE TO ANY EXISTING IMPROVEMENTS THAT ARE TO REMAIN WILL BE REPLACED AT CONTRACTOR'S EXPENSE.
12. CONTRACTOR SHALL PROTECT ALL AREAS OUTSIDE OF LIMIT OF CLEARING AND DEMOLITION.
13. PROPERTY CORNERS SHALL BE LOCATED BY A LICENSED LAND SURVEYOR AND CLEARLY MARKED IN THE FIELD PRIOR TO THE ENGINEERING DEPARTMENT'S PRE-CONSTRUCTION MEETING FOR SITE DEVELOPMENT.
14. NO ADDITIONAL LAND CLEARING SHALL COMMENCE UNTIL A SATISFACTORY INSPECTION OF THE REQUIRED EROSION CONTROL BARRICADES HAS BEEN OBTAINED.
15. ALL CONSTRUCTION BARRICADES AND SILT FENCES WILL REMAIN IN PLACE AND BE MONITORED FOR COMPLIANCE BY PERMIT HOLDER DURING THE PERMITTED DEVELOPMENT ACTIVITIES.
16. PRIOR TO SCHEDULING A FINAL INSPECTION FOR THE INFRASTRUCTURE, ALL BARRICADES AND EROSION CONTROL DEVICES SHALL BE REMOVED, SITE SHALL BE STABILIZED AND DISPOSED OF BY THE CONTRACTOR.
17. DISTURBED AREAS ON THE SITE WHERE CONSTRUCTION ACTIVITIES ARE STOPPED SHALL BE SEEDED, SODDED OR VEGETATED NO LATER THAN 7 DAYS AFTER THE LAST CONSTRUCTION ACTIVITY. VEGETATION SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT.
18. AUTHORIZATION TO INSTALL EROSION CONTROL DEVICES AND BARRICADES WILL BE GRANTED AT THE PRE-CONSTRUCTION MEETING. THIS AUTHORIZATION SHALL BE POSTED ON THE SITE, IN THE PERMIT BOX.

SUGGESTED EROSION CONTROL CONSTRUCTION SEQUENCE:

1. FLAG AND FENCE ALL WORK LIMITS.
2. NOTIFY SEDIMENT CONTROL INSPECTOR (24) HOURS PRIOR TO START OF CONSTRUCTION.
3. PERFORM CLEARING AND GRADING REQUIRED FOR INSTALLATION OF PERIMETER CONTROLS.
4. INSTALL PERIMETER RUNOFF CONTROLS; NOTIFY SEDIMENT INSPECTOR AND OBTAIN APPROVAL BEFORE PROCEEDING FURTHER.
5. COMPLETE ALL REQUIRED STOCKPILING, SITE CLEARING, AND GRADING. STOCKPILE ANY EXCESS TOPSOIL OR OTHER EXCAVATED SOIL IN APPROVED STOCKPILES OR REMOVE FROM SITE.
6. REMOVE AND DISPOSE HARDPAN LAYER BENEATH DRY DETENTION BOTTOM.
7. SOD AND STABILIZE EMBANKMENT SLOPES. CONSTRUCT PARKING SUBGRADE AND BUILDING PAD SUBGRADE, AND INSTALL SITE UTILITIES AND DRAINAGE PIPES AND INLETS.
8. COMPLETE PARKING LOT CONSTRUCTION.
9. COMPLETE FINAL GRADING, STABILIZATION, AND LANDSCAPING. REMOVE ANY EXCESS MATERIAL FROM THE SITE AND DISPOSE OF AT A PERMITTED SITE.
10. NOTIFY SEDIMENT CONTROL INSPECTOR AND OBTAIN APPROVAL TO REMOVE SEDIMENT AND EROSION CONTROL.

Always call 811 two full business days before you dig

Sunshine811.com



REVISIONS	
DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SUBMITTAL
06/16/25	SID RE-SUBMITTAL
07/05/25	SID RE-SUBMITTAL
07/17/25	SITE PLAN REVIEW
	RE-SUBMITTAL

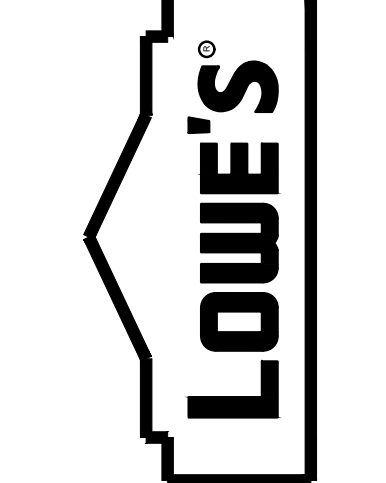
CREECH CONSULTING, INC.
ENGINEERS
PO BOX 327, STUART, FLORIDA 34994 (772) 465-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF A LICENSE NUMBER 5199
PROFESSIONAL SURVEYORS AND MAPS AMENDS CERTIFICATE NO. 18-00000

RICHARD CREECH
FL P.E. NO. 36592

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)

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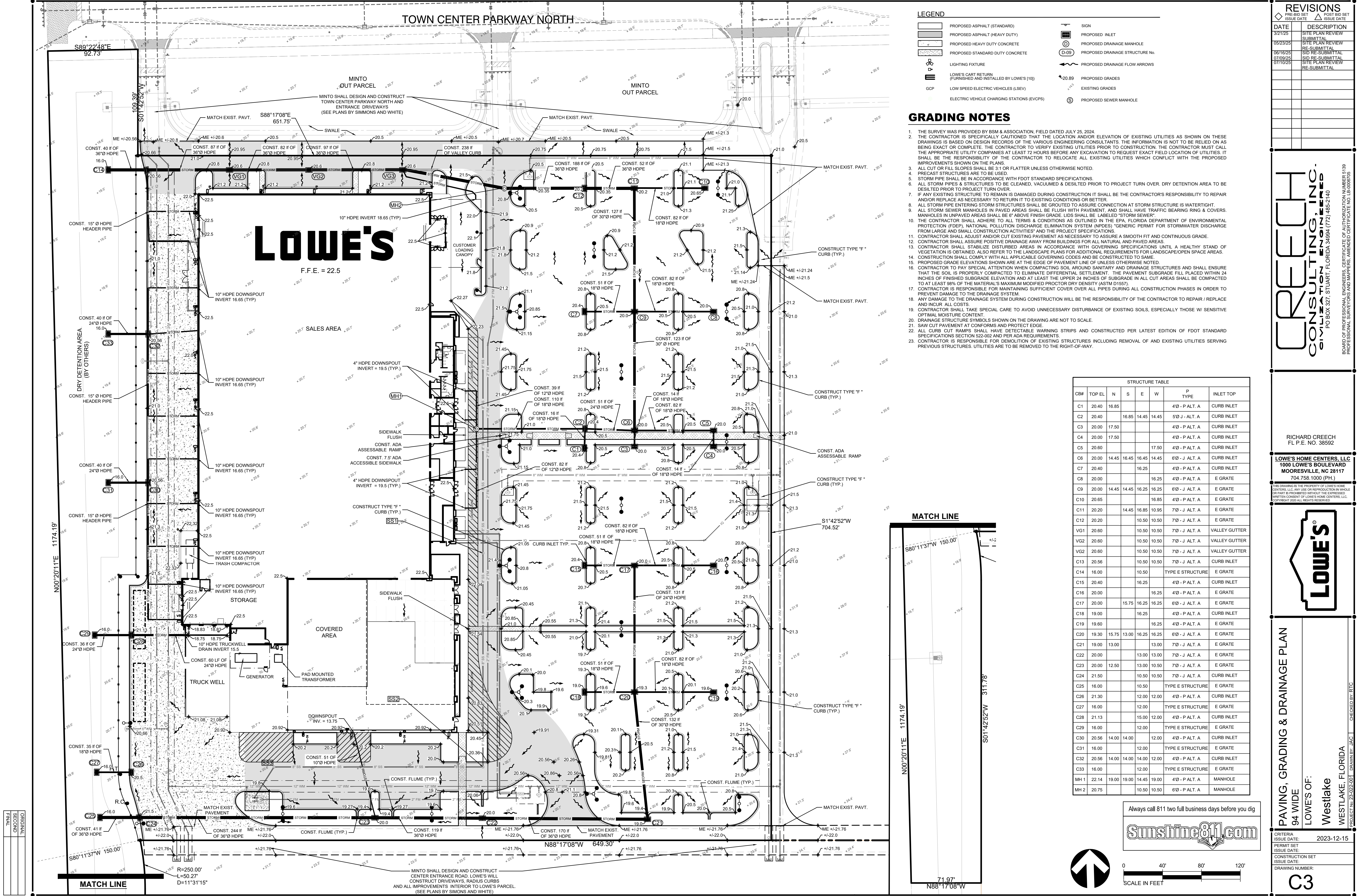
Erosion & Sedimentation Control Plan
94 WIDE

LOWE'S OF:
Westlake
WESTLAKE, FLORIDA

PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA	
ISSUE DATE:	2023-12-15
PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

C2



LEGEND

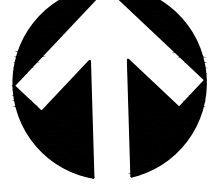
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[Symbol]	PROPOSED ASPHALT (HEAVY DUTY)	[Symbol]	PROPOSED INLET
[Symbol]	PROPOSED HEAVY DUTY CONCRETE	[Symbol]	PROPOSED DRAINAGE MANHOLE
[Symbol]	PROPOSED STANDARD DUTY CONCRETE	[Symbol]	PROPOSED DRAINAGE STRUCTURE No.
[Symbol]	LIGHTING FIXTURE	[Symbol]	PROPOSED DRAINAGE FLOW ARROWS
[Symbol]	LOWE'S CART RETURN (FURNISHED AND INSTALLED BY LOWE'S (10))	[Symbol]	PROPOSED GRADES
[Symbol]	GCP	[Symbol]	EXISTING GRADES
	ELECTRIC VEHICLE CHARGING STATIONS (EVCPs)	[Symbol]	PROPOSED SEWER MANHOLE

GRADING NOTES

- THE SURVEY WAS PROVIDED BY BSM & ASSOCIATION, FIELD DATED JULY 25, 2024.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE DRAWINGS IS BASED ON DESIGN RECORDS OF THE VARIOUS ENGINEERING CONSULTANTS. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR TO VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL CUT OR FILL SLOPES SHALL BE 3:1 OR FLATTER UNLESS OTHERWISE NOTED.
- PRECAST STRUCTURES ARE TO BE USED.
- STORM PIPE SHALL BE IN ACCORDANCE WITH FDOT STANDARD SPECIFICATIONS.
- ALL STORM PIPES & STRUCTURES TO BE CLEANED, VACUUMED & DESILTED PRIOR TO PROJECT TURN OVER. DRY DETENTION AREA TO BE DESILTED PRIOR TO PROJECT TURN OVER.
- IF ANY EXISTING STRUCTURE TO REMAIN IS DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER.
- ALL STORM PIPE ENTERING STORM STRUCTURES SHALL BE GROUDED TO ASSURE CONNECTION AT STORM STRUCTURE IS WATERTIGHT.
- ALL STORM SEWER MANHOLES IN PAVED AREAS SHALL BE FLUSH WITH PAVEMENT, AND SHALL HAVE TRAFFIC BEARING RING & COVERS. MANHOLES IN UNPAVED AREAS SHALL BE 6" ABOVE FINISH GRADE. LIDS SHALL BE LABELED "STORM SEWER".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA, FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (FDEP), NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM (NPDES) "GENERIC PERMIT FOR STORMWATER DISCHARGE FROM LARGE AND SMALL CONSTRUCTION ACTIVITIES" AND THE PROJECT SPECIFICATIONS.
- CONTRACTOR SHALL ADJUST AND/OR CUT EXISTING PAVEMENT AS NECESSARY TO ASSURE A SMOOTH FIT AND CONTINUOUS GRADE.
- CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL STABILIZE DISTURBED AREAS IN ACCORDANCE WITH GOVERNING SPECIFICATIONS UNTIL A HEALTHY STAND OF VEGETATION IS OBTAINED. ALSO REFER TO THE LANDSCAPE PLANS FOR ADDITIONAL REQUIREMENTS FOR LANDSCAPE/OPEN SPACE AREAS.
- CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE UNLESS OTHERWISE NOTED.
- PROPOSED GRADE ELEVATIONS SHOWN ARE AT THE EDGE OF PAVEMENT LINE OF CONSTRUCTED STRUCTURES AND SHALL ENSURE TO AT LEAST 98% OF THE MATERIALS MAXIMUM MODIFIED PROCTOR DRY DENSITY (ASTM D1557).
- CONTRACTOR IS RESPONSIBLE FOR MAINTAINING SUFFICIENT COVER OVER ALL PIPES DURING ALL CONSTRUCTION PHASES IN ORDER TO PREVENT DAMAGE TO THE DRAINAGE SYSTEM.
- ANY DAMAGE TO THE DRAINAGE SYSTEM DURING CONSTRUCTION WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR / REPLACE AND INCUR ALL COSTS.
- CONTRACTOR SHALL TAKE SPECIAL CARE TO AVOID UNNECESSARY DISTURBANCE OF EXISTING SOILS, ESPECIALLY THOSE W/ SENSITIVE OPTIMAL MOISTURE CONTENT.
- DRAINAGE STRUCTURE SYMBOLS SHOWN ON THE DRAWING ARE NOT TO SCALE.
- SAW CUT PAVEMENT AT CONFORMS AND PROTECT EDGE.
- ALL CURB CUT RAMP SHALL HAVE DETECTABLE WARNING STRIPS AND CONSTRUCTED PER LATEST EDITION OF FDOT STANDARD SPECIFICATIONS SECTION 522-002 AND PER ADA REQUIREMENTS.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF AND EXISTING UTILITIES SERVING PREVIOUS STRUCTURES. UTILITIES ARE TO BE REMOVED TO THE RIGHT-OF-WAY.

STRUCTURE TABLE							
CB#	TOP EL	N	S	E	W	P TYPE	INLET TOP
C1	20.40	16.85				4'0" - P.A.L.T. A	CURB INLET
C2	20.40		16.85	14.45	14.45	5'0" J - ALT. A	CURB INLET
C3	20.00	17.50				4'0" - P.A.L.T. A	CURB INLET
C4	20.00	17.50				4'0" - P.A.L.T. A	CURB INLET
C5	20.60				17.50	4'0" - P.A.L.T. A	CURB INLET
C6	20.00	14.45	16.45	16.45	14.45	6'0" - J ALT. A	CURB INLET
C7	20.40			16.25		4'0" - P.A.L.T. A	CURB INLET
C8	20.00			16.25		4'0" - P.A.L.T. A	E GRATE
C9	20.00	14.45	14.45	16.25	16.25	6'0" - J ALT. A	E GRATE
C10	20.65				16.85	4'0" - P.A.L.T. A	E GRATE
C11	20.20		14.45	16.85	10.95	7'0" - J ALT. A	E GRATE
C12	20.20			10.50	10.50	7'0" - J ALT. A	E GRATE
VG1	20.60			10.50	10.50	7'0" - J ALT. A	VALLEY GUTTER
VG2	20.60			10.50	10.50	7'0" - J ALT. A	VALLEY GUTTER
VG3	20.60			10.50	10.50	7'0" - J ALT. A	VALLEY GUTTER
C13	20.56			10.50	10.50	7'0" - J ALT. A	CURB INLET
C14	16.00				10.50	TYPE E STRUCTURE	E GRATE
C15	20.40				16.25	4'0" - P.A.L.T. A	CURB INLET
C16	20.00				16.25	4'0" - P.A.L.T. A	E GRATE
C17	20.00	15.75	16.25	16.25		6'0" - J ALT. A	E GRATE
C18	19.00			16.25		4'0" - P.A.L.T. A	CURB INLET
C19	19.60				16.25	4'0" - P.A.L.T. A	E GRATE
C20	19.30	15.75	13.00	16.25	16.25	6'0" - J ALT. A	E GRATE
C21	19.00				13.00	7'0" - J ALT. A	E GRATE
C22	20.00			13.00	13.00	7'0" - J ALT. A	E GRATE
C23	20.00	12.50		13.00	10.50	7'0" - J ALT. A	E GRATE
C24	21.50		10.50	10.50		7'0" - J ALT. A	CURB INLET
C25	16.00				10.50	TYPE E STRUCTURE	E GRATE
C26	21.30		12.00	12.00		4'0" - P.A.L.T. A	CURB INLET
C27	16.00			12.00		TYPE E STRUCTURE	E GRATE
C28	21.13			12.00		4'0" - P.A.L.T. A	CURB INLET
C29	16.00				12.00	TYPE E STRUCTURE	E GRATE
C30	20.56	14.00	14.00		12.00	4'0" - P.A.L.T. A	CURB INLET
C31	16.00			12.00		TYPE E STRUCTURE	E GRATE
C32	20.56	14.00	14.00	14.00	12.00	4'0" - P.A.L.T. A	CURB INLET
C33	16.00				12.00	TYPE E STRUCTURE	E GRATE
MH1	22.14	19.00	19.00	14.45	19.00	4'0" - P.A.L.T. A	MANHOLE
MH2	20.75			10.50	10.50	6'0" - P.A.L.T. A	MANHOLE

Always call 811 two full business days before you dig



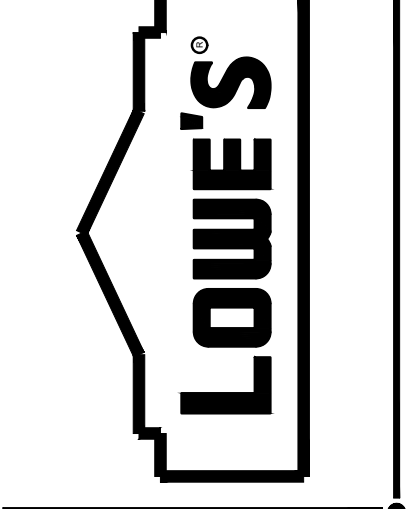
REVISIONS	
DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SUBMITTAL
06/16/25	SID RE-SUBMITTAL
07/09/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
07/10/25	RE-SUBMITTAL

CREECH CONSULTING, INC.
CONSULTING ENGINEERS
PO BOX 3271, STUART, FLORIDA 34994 (772) 485-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORITY NO. 1539
PROFESSIONAL SERVICES AND IMPROVEMENTS CERTIFICATE NO. 153900

RICHARD CREECH
FL P.E. NO. 38592

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)



PAVING, GRADING & DRAINAGE PLAN
94 WIDE

LOWE'S OF:
Westlake
WESTLAKE, FLORIDA

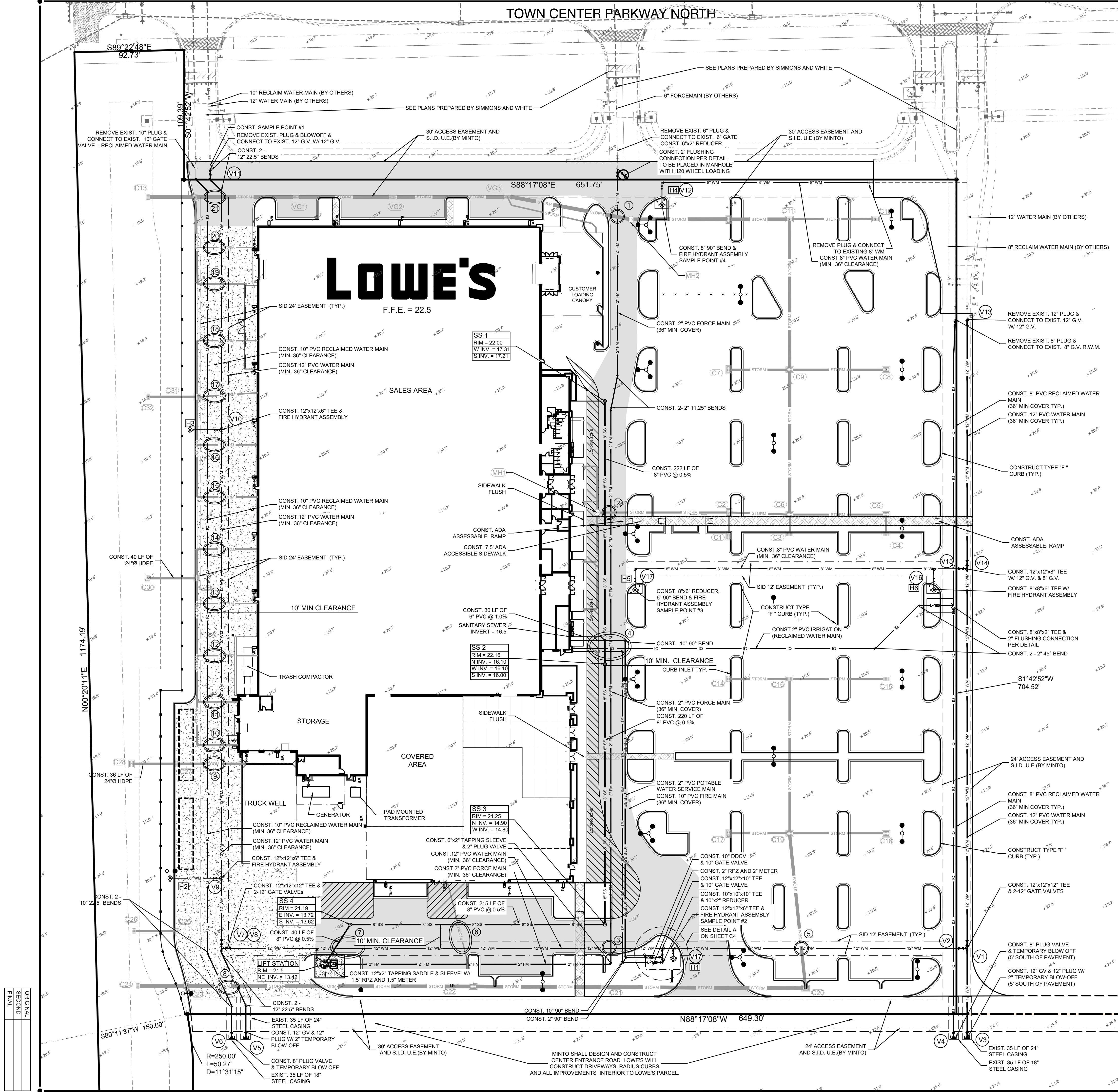
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA
ISSUE DATE: 2023-12-15

PERMIT SET
ISSUE DATE:

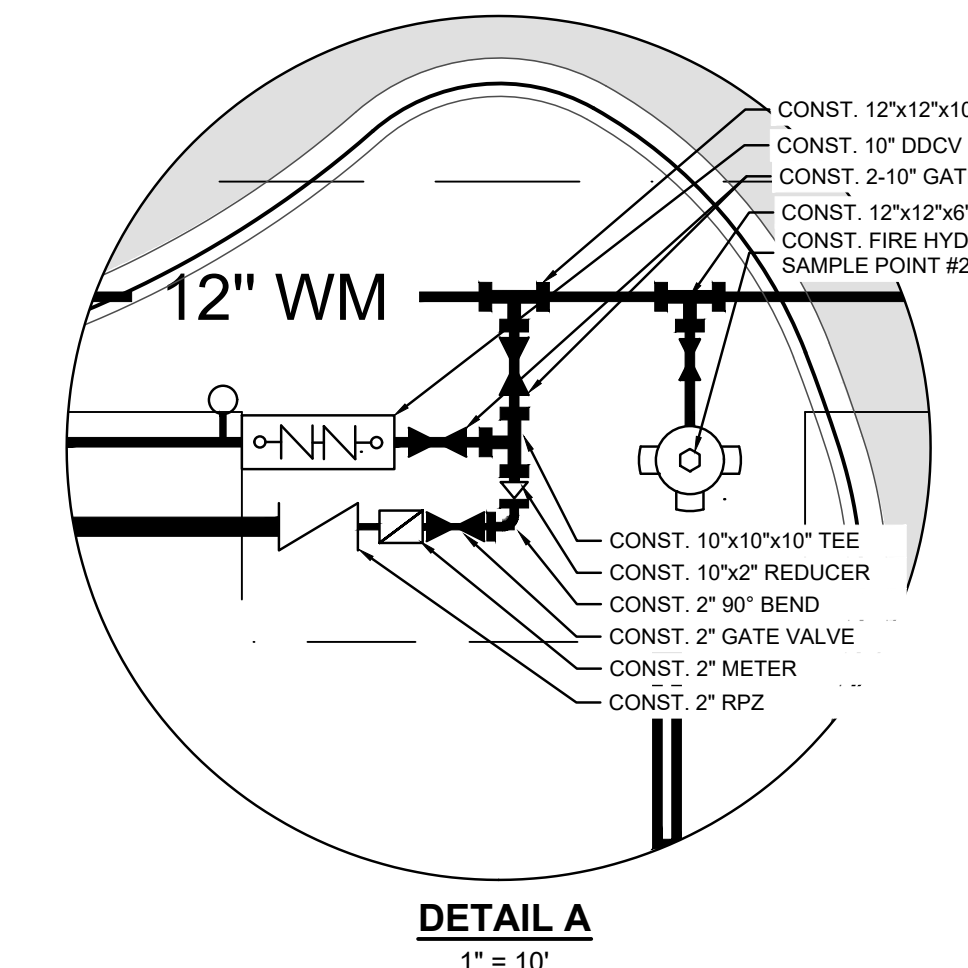
CONSTRUCTION SET
ISSUE DATE:

DRAWING NUMBER:
C3



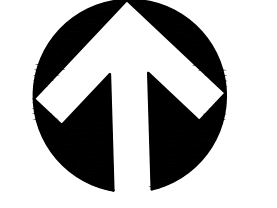
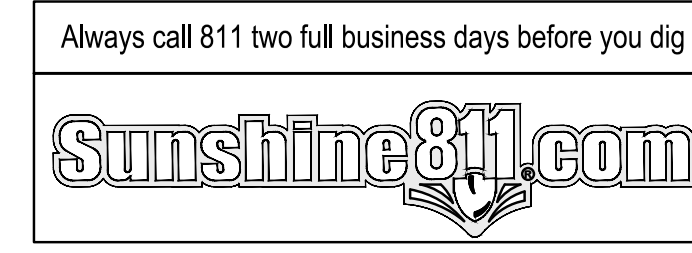
LEGEND

- PROPOSED ASPHALT (STANDARD)
- PROPOSED ASPHALT (HEAVY DUTY)
- PROPOSED HEAVY DUTY CONCRETE
- PROPOSED STANDARD DUTY CONCRETE
- LIGHTING FIXTURE
- LOWE'S CART RETURN (FURNISHED AND INSTALLED BY LOWE'S (10))
- GCP
- LOW SPEED ELECTRIC VEHICLES (LSEV)
- ELECTRIC VEHICLE CHARGING STATIONS (EVCS)
- PROPOSED WATER SERVICE
- PROPOSED 8" WATER MAIN
- PROPOSED 12" WATER MAIN
- PROPOSED 6" GRAVITY SANITARY SEWER
- PROPOSED 8" GRAVITY SANITARY SEWER
- PROPOSED 10" FIRE MAIN
- PROPOSED 2" FORCE MAIN
- PROPOSED 6" FORCE MAIN
- PROPOSED RECLAIMED WATER (BY OTHERS)
- SIGN
- PROPOSED INLET
- PROPOSED DRAINAGE MANHOLE
- PROPOSED DRAINAGE STRUCTURE No.
- PROPOSED DRAINAGE FLOW ARROWS
- PROPOSED GRADES
- EXISTING GRADES
- PROPOSED SEWER MANHOLE
- CONFLICTS (SHEET C5)
- WATER MAIN VALVE NUMBER
- FIRE HYDRANT NUMBER



UTILITY NOTES

- EXISTING UTILITIES SHALL BE VERIFIED BY THE CONTRACTOR IN THE FIELD PRIOR TO INSTALLATION OF ANY NEW LINES.
- THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF SEMINOLE IMPROVEMENT DISTRICT (SID), AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITIES INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- SANITARY SEWER PIPE SHALL BE AS FOLLOWS:
 - 6" PVC SDR26 PER ASTM D 3034
 - 8" PVC SDR26 PER ASTM D 3034
- WATER LINES SHALL BE AS FOLLOWS:
 - 2" AND SMALLER, POLYETHYLENE AS DEFINED BY ASTM D2737 SDR9 COPPER TUBE SIZE
 - 4"-12" PVC DR-18 C-900
- DUCTILE IRON PIPE (DIP) SHALL BE REQUIRED WHEN WITHIN SIX (6) FEET HORIZONTALLY OF SEWAGE FACILITIES OR PIPES.
- DUCTILE IRON PIPE (DIP) SHALL BE A MINIMUM OF PRESSURE CLASS 350 AND CONFORM TO THE LATEST STANDARDS OF ANSIA/AWWA C150/A21.50 FOR THE THICKNESS DESIGN OF DIP.
- ALL UTILITIES SHOULD HAVE A MINIMUM HORIZONTAL SEPARATION OF 3' TO POWER POLES, LIGHT POLES, OR OTHER UTILITIES, 15' TO BUILDINGS, TOP OF BANKS OF LAKES & CANALS AND OTHER STRUCTURES, OR ABSOLUTE MINIMUM OF 10' WITH DIP.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" COVER ON ALL WATER LINES, 8" OR SMALLER, IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATER LINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE WATER LINE SHALL HAVE APPROPRIATE RESTRAINTS AS REQUIRED BY SID, A MINIMUM OF 6" CLEARANCE (12" PREFERRED).
- LINES UNDERGROUND SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
- TOPS OF EXISTING MANHOLES SHALL BE RAISED AS NECESSARY TO BE FLUSH WITH PROPOSED PAVEMENT ELEVATIONS, AND TO BE ONE FOOT ABOVE FINISHED GROUND ELEVATIONS WITH WATERTIGHT LIDS WHEN LOCATED IN UNPAVED AREAS.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING TO THE SPECIFICATIONS OF THE LOCAL AUTHORITIES REGARDING TO MATERIALS AND INSTALLATION OF THE WATER AND SEWER LINES.
- ALL EXISTING VALVES TO BE ADJUSTED TO FINAL FINISHED GRADE.
- CONTRACTOR IS RESPONSIBLE FOR ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES. THIS AND THE FINAL CONNECTIONS OF THE SERVICE SHALL BE COMPLETED AT LEAST 30 DAYS PRIOR TO C.O.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS.
- CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
- SEE SID MINIMUM DESIGN & CONSTRUCTION STANDARDS FOR BACKFILLING AND COMPACTION REQUIREMENTS ON UTILITY TRENCHES.
- CONTRACTOR SHALL COMPLY WITH SEMINOLE IMPROVEMENT DISTRICT MINIMUM DESIGN & CONSTRUCTION STANDARDS, LATEST EDITION.
- CONTRACTOR SHALL GROUT ALL PIPE ENTRANCES AND PIPE REMOVALS TO/FROM MANHOLES TO ASSURE WATER TIGHT CONNECTIONS AND PLUGS.
- CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND SPECIFICATIONS FOR ACTUAL LOCATION OF ALL UTILITY ENTRANCES TO INCLUDE SANITARY SEWER, LATERALS, DOMESTIC AND FIRE PROTECTION WATER SERVICE, ELECTRICAL, TELEPHONE, FIBER OPTIC, AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH SID REQUIREMENTS AS TO LOCATION AND SCHEDULING FOR TIE-INS, CONNECTIONS AND INSPECTIONS PRIOR TO CONNECTING TO EXISTING UTILITIES.
- CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY COMPANIES AND THE OWNER'S INSPECTING AUTHORITIES.
- CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF OSHA DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING AND ANY OTHER MEANS OF PROTECTION. THIS INCLUDES, BUT IS NOT LIMITED TO, ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR OSHA.
- THE INSTALLATION OR REPAIR OF ANY UNDERGROUND FACILITIES OF PIPING WHICH CONNECTS TO OR FURNISHES WATER FOR THE FIRE PROTECTION SPRINKLER SYSTEM SHALL BE PERFORMED ONLY BY A LICENSED UTILITY CONTRACTOR. FIRE PROTECTION SPRINKLER CONTRACTOR OR LICENSED PLUMBER. SEE O.C.G.A. TITLE 25-11-7(a). A COPY OF THE LICENSE OR CERTIFICATE OF COMPETENCY SHALL BE PROVIDED TO THE INSPECTOR AT THE FINAL INSPECTION.
- ALL FIRE HYDRANTS SHALL BE BETWEEN 5 FEET AND 12 FEET FROM BACK OF CURB. IN SITUATIONS THAT CAN NOT BE ARCHIVED A MINIMUM OF 2 BOLLARDS ARE TO BE USED ON THE TRAFFIC SIDE OF THE FIRE HYDRANT WITHOUT BLOCKING THE FIRE DEPARTMENTS ABILITY TO CONNECT TO THE FIRE HYDRANT.



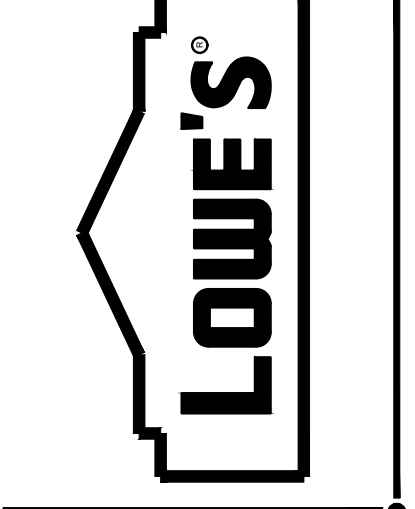
REVISIONS	
DATE	DESCRIPTION
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05/23/25	SITE PLAN REVIEW
06/16/25	SID RE-SUBMITTAL
07/09/25	SID RE-SUBMITTAL
07/17/25	SITE PLAN REVIEW
	RE-SUBMITTAL

CREECH CONSULTING, INC.
CONSULTING ENGINEERS
PO BOX 321, STUART, FLORIDA 34994 (772) 465-2140

BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF AUTHORIZATION NUMBER: 51399
PROFESSIONAL SERVICES AND IMPROVEMENTS CERTIFICATE (NO. 18) 00000000

RICHARD CREECH
FL P.E. NO. 38592

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)



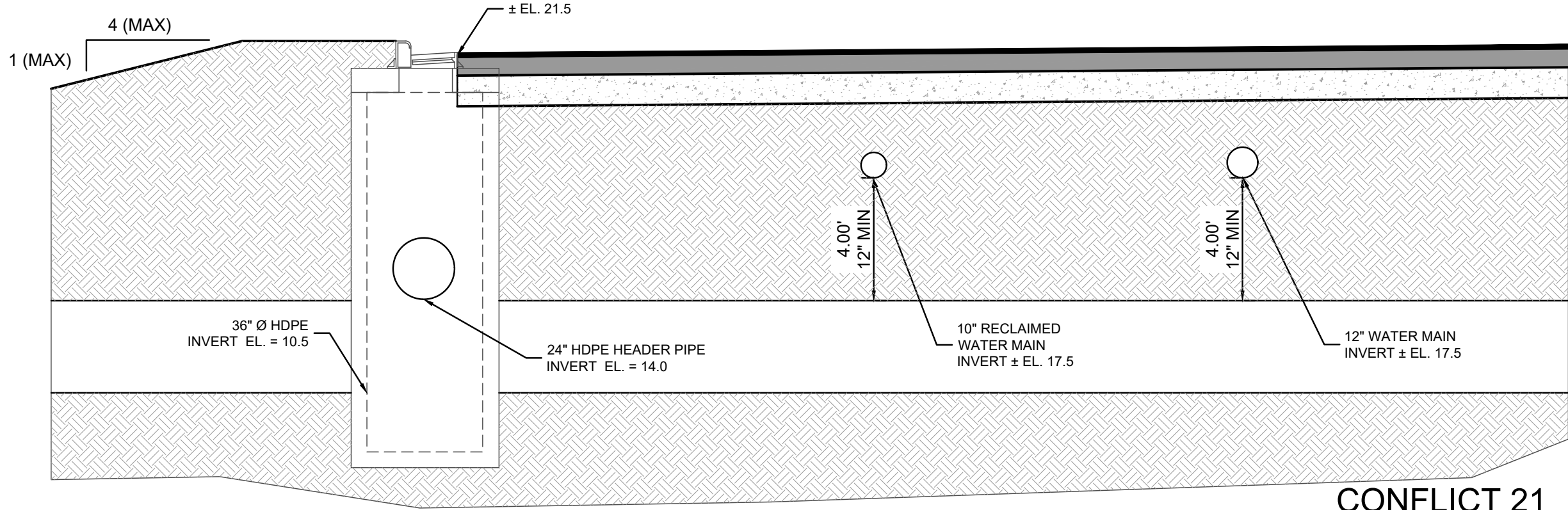
WATER AND SEWER PLAN
94 WIDE

LOWE'S OF:
Westlake
WESTLAKE, FLORIDA

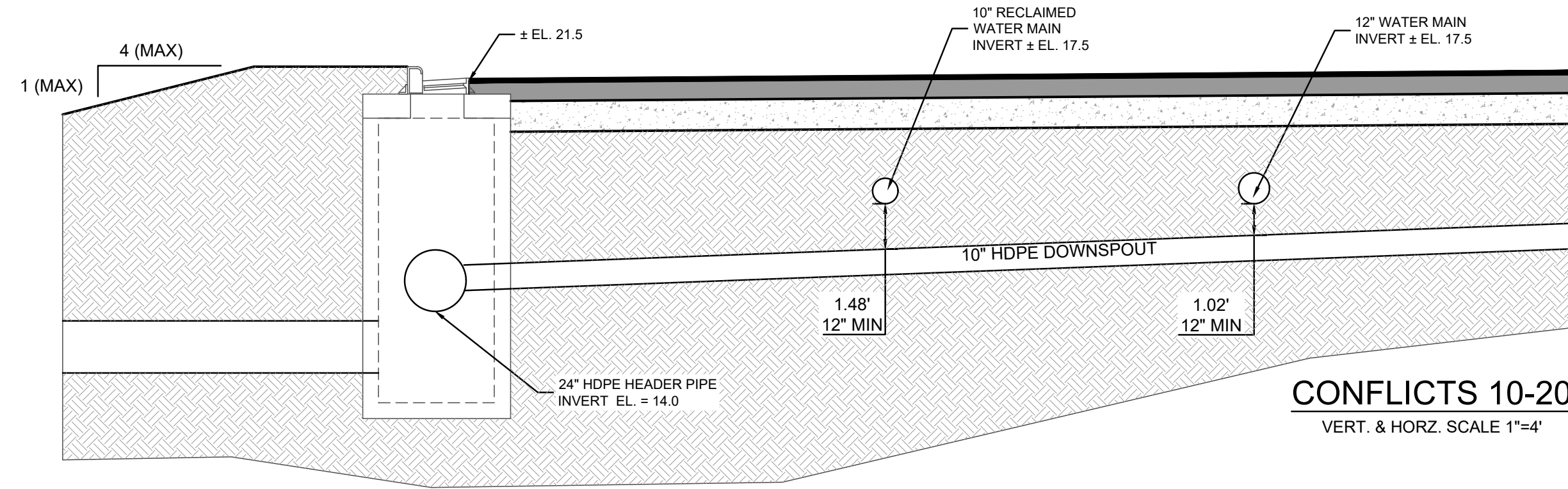
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

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PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	C4

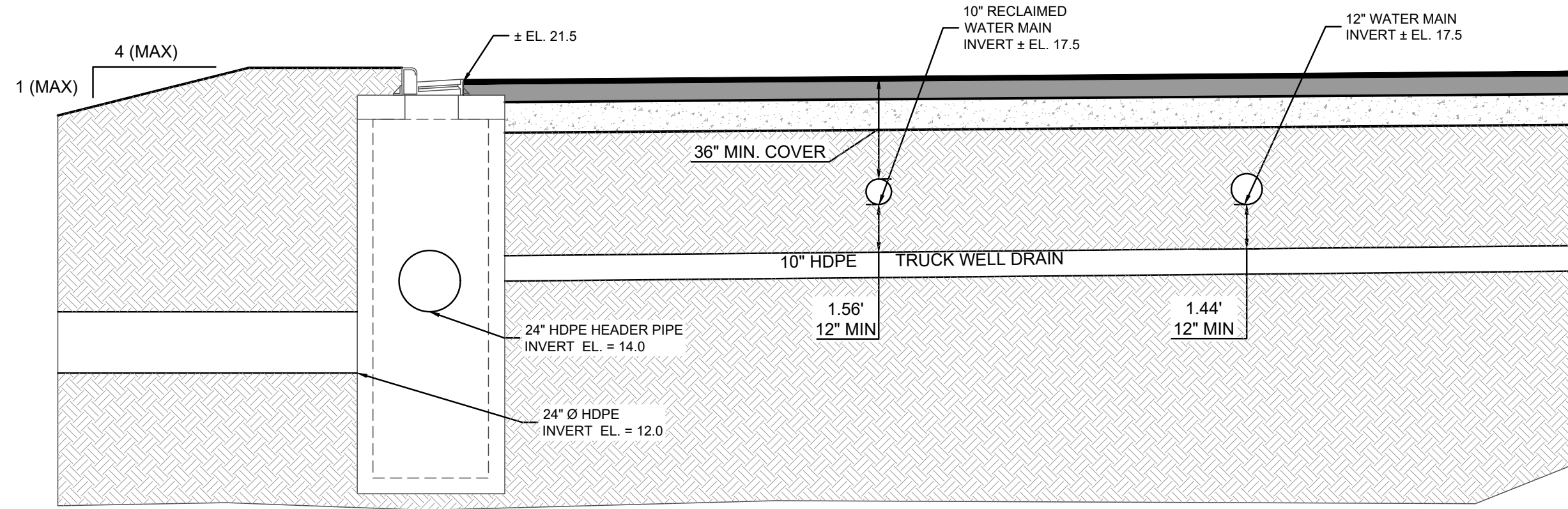
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FINAL	



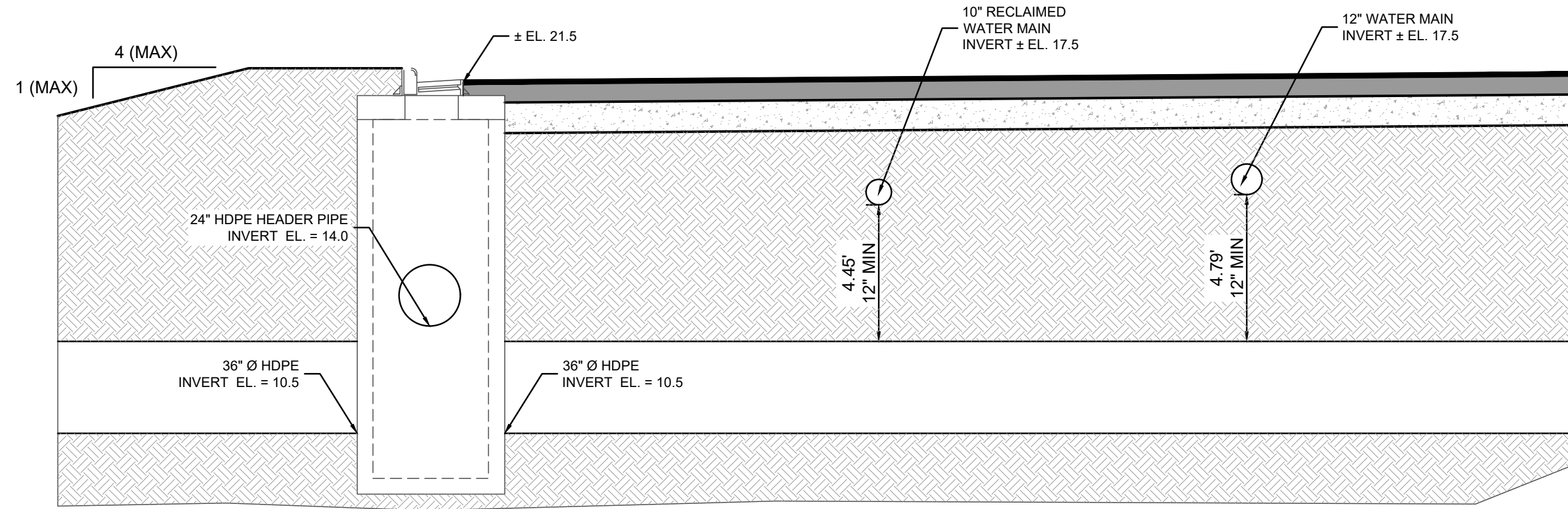
CONFLICT 21
VERT. & HORZ. SCALE 1"=4'



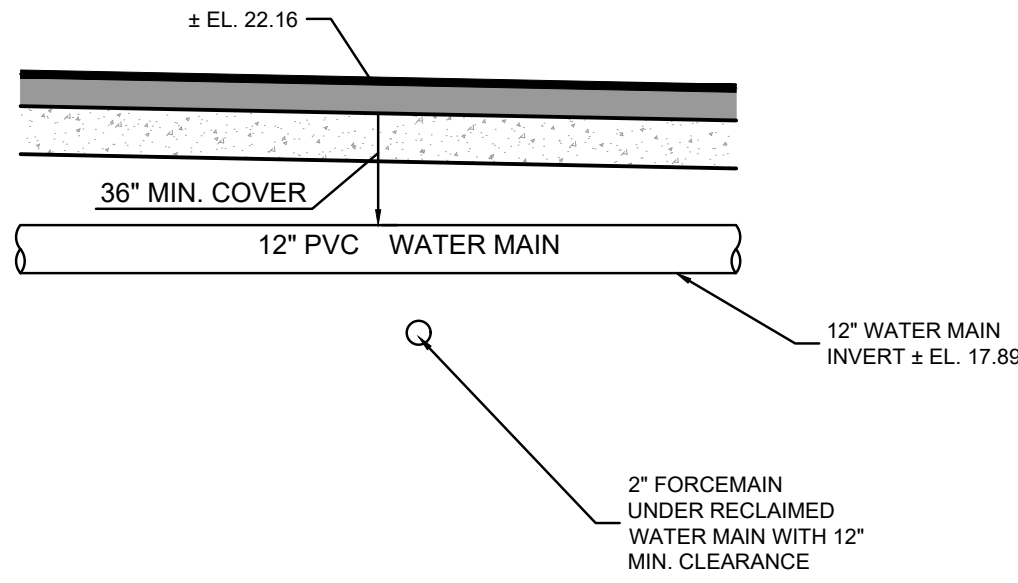
CONFLICTS 10-20
VERT. & HORZ. SCALE 1"=4'



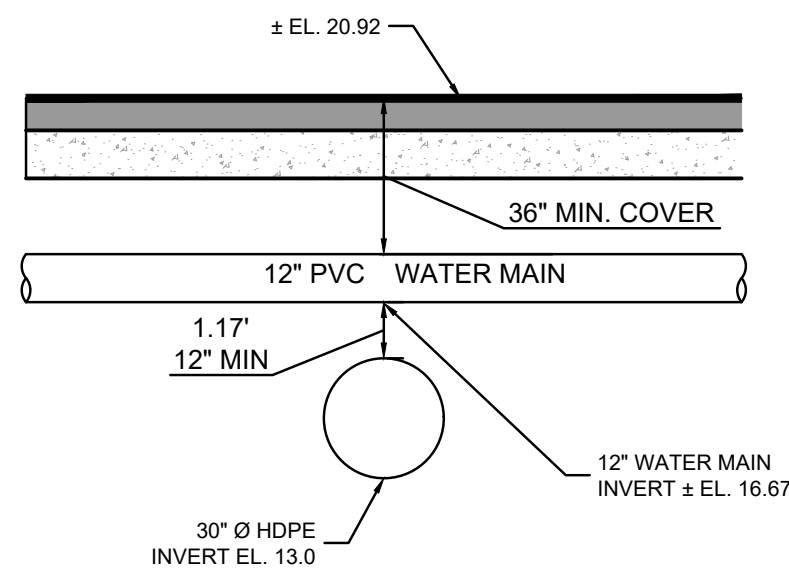
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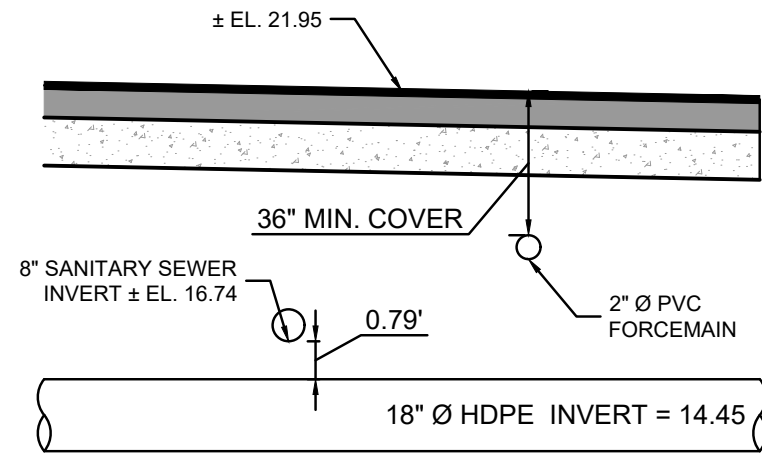
CONFLICT 8
VERT. & HORZ. SCALE 1"=4'



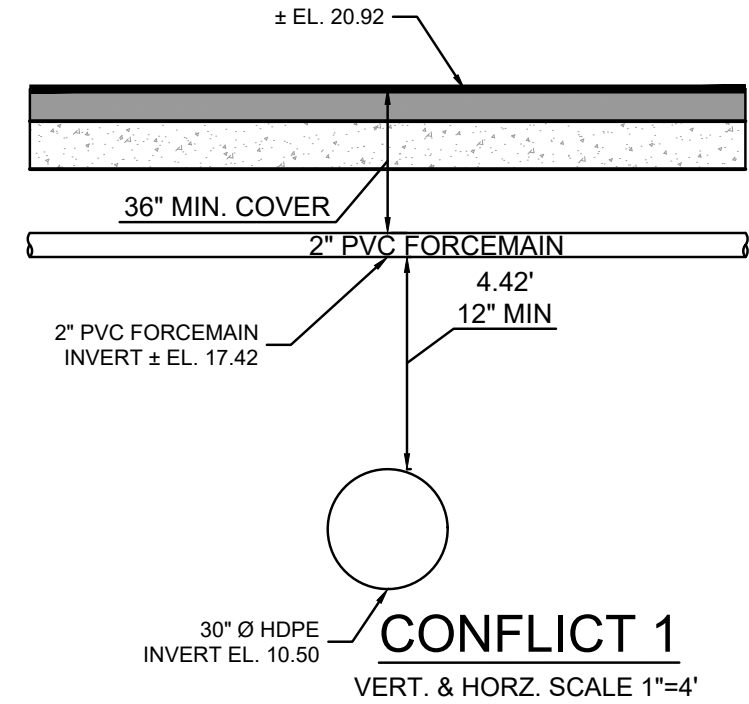
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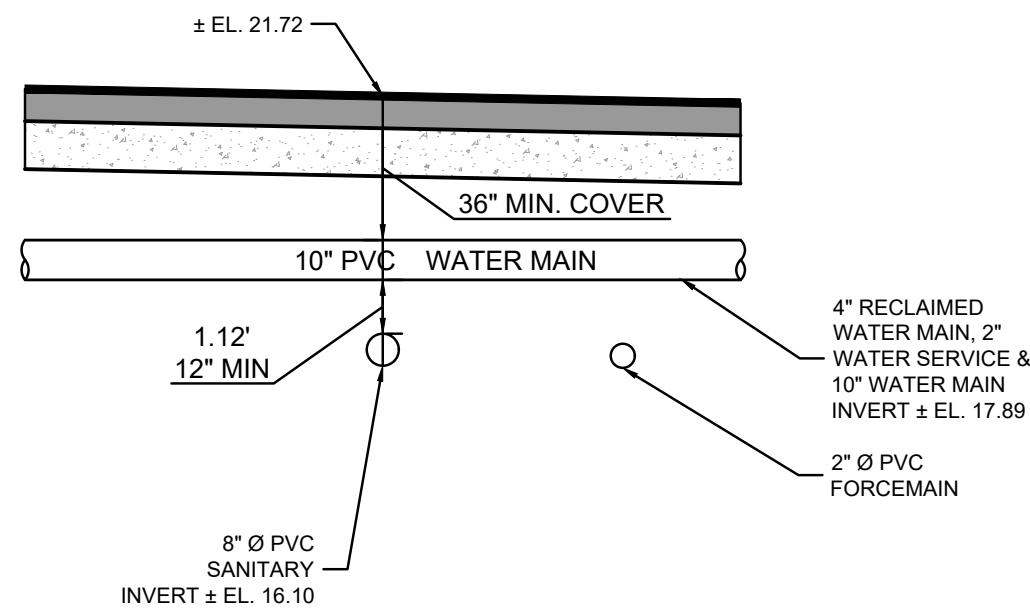
CONFLICT 5
VERT. & HORZ. SCALE 1"=4'



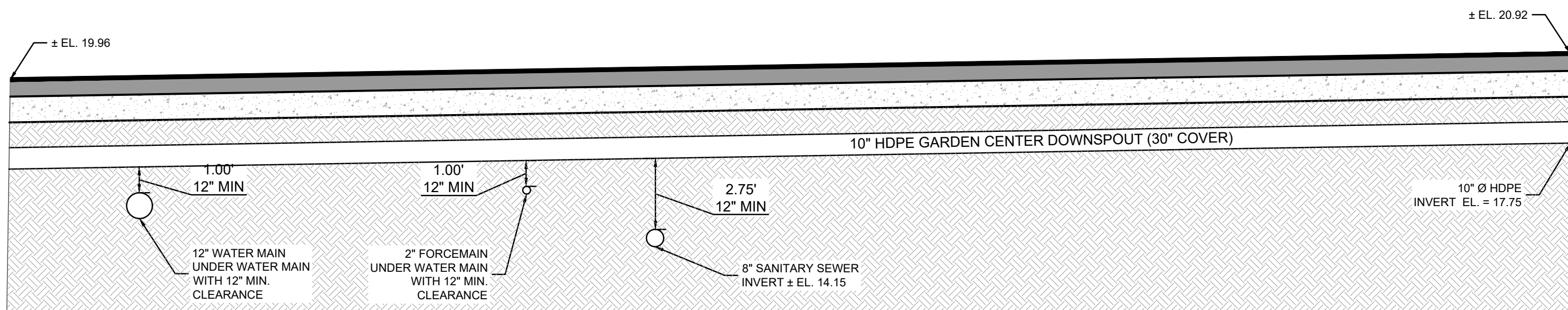
CONFLICT 2
VERT. & HORZ. SCALE 1"=4'



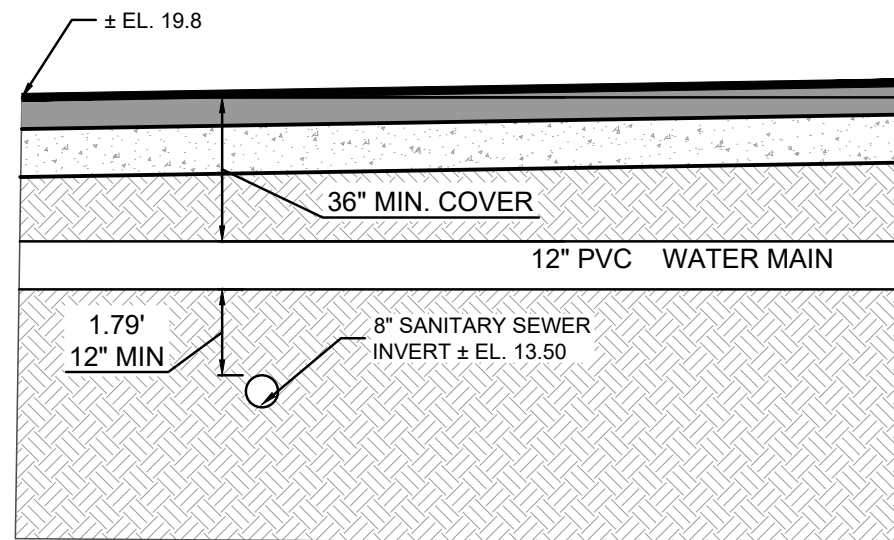
CONFLICT 1
VERT. & HORZ. SCALE 1"=4'



CONFLICT 4
VERT. & HORZ. SCALE 1"=4'



CONFLICT 6
VERT. & HORZ. SCALE 1"=4'



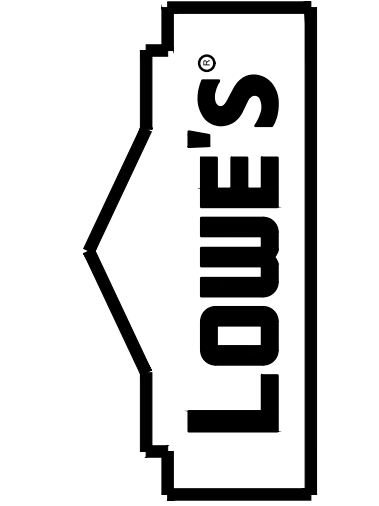
CONFLICT 7
VERT. & HORZ. SCALE 1"=4'

DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SITE PLAN REVIEW
06/16/25	SID RE-SUBMITTAL
07/06/25	SID RE-SUBMITTAL
07/16/25	SITE PLAN REVIEW
	RE-SUBMITTAL

CREECH CONSULTING, INC.
REGISTERED PROFESSIONAL ENGINEER
PO BOX 321, STUART, FLORIDA 34994 (772) 465-2140
BOARD OF PROFESSIONAL ENGINEERS, CERTIFICATE OF ACHIEVEMENT NUMBER 61399
PROFESSIONAL SURVEYORS AND MAPS AMENDED CERTIFICATE NO. 18140

RICHARD CREECH
FL P.E. NO. 38592
LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)

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WATER AND SEWER PLAN
94 WIDE
LOWE'S OF:
Westlake
WESTLAKE, FLORIDA
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA	2023-12-15
ISSUE DATE:	
PERMIT SET:	
ISSUE DATE:	
CONSTRUCTION SET:	
ISSUE DATE:	
DRAWING NUMBER:	

C5

EXCEPTION:

1. AREAS WHERE PROPERTY LINE FC LEVEL EXCEED LOWE'S REQUIRED MAXIMUM IS ADJACENT TO COMMERCIAL PROPERTY.
2. AREA OF REAR DRIVE BELOW TARGET MINIMUM IS BEYOND PROPERTY LINE TO BE ILLUMINATED BY OTHERS.

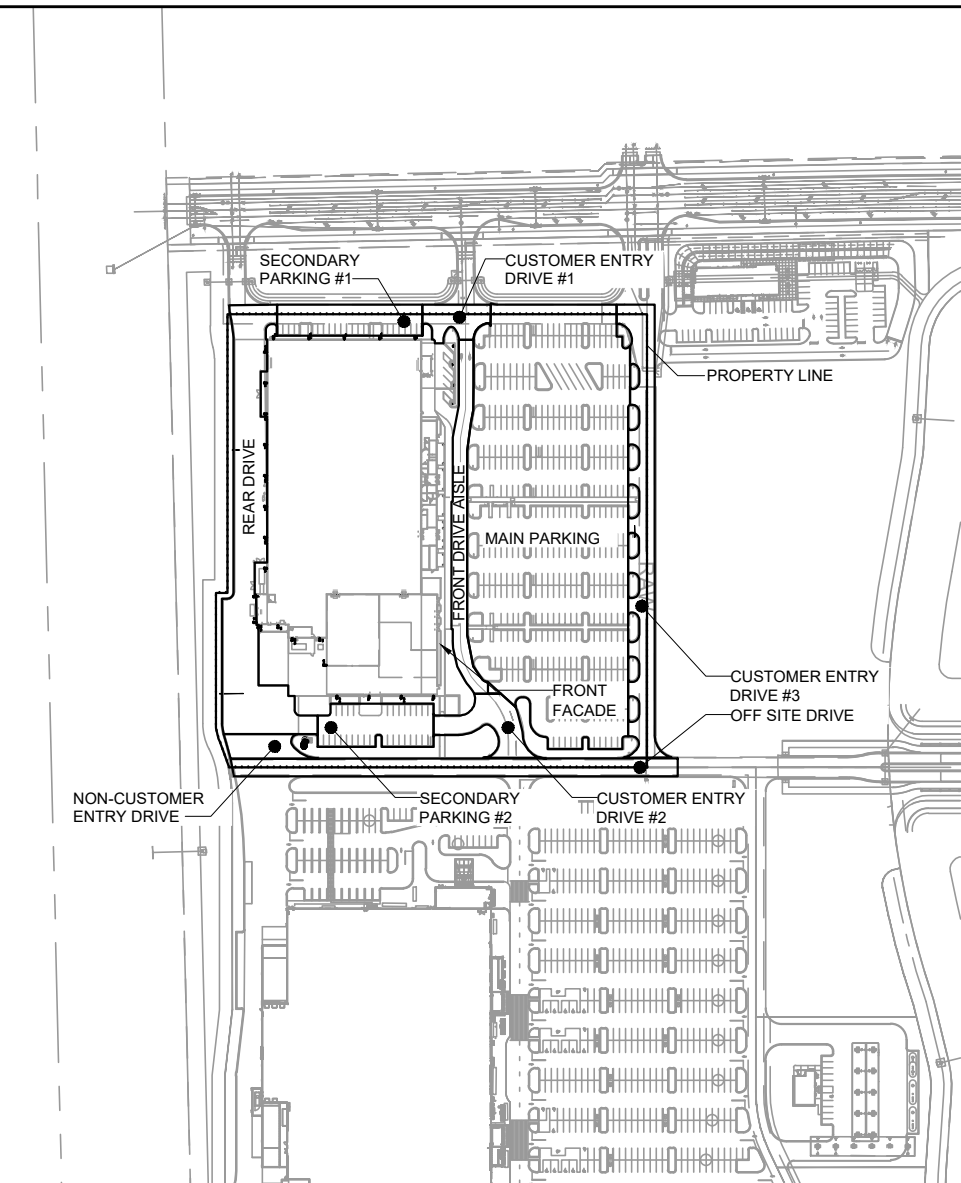
NOTE:
SITE PHOTOMETRIC PLANS SHALL NOT BE SUBMITTED TO
ANY REVIEWING AUTHORITY PRIOR TO APPROVAL BY
LOWE'S ENGINEERING MANAGER.

NOTE:
THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS TO PAGE INTERWORKS, PA. SITE DETAILS PROVIDED HEREON ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC.) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.

NOTE:
LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LED ARRAY, DRIVER, AND LUMINAIRE MAY AFFECT FIELD RESULTS.

NOTE:
THIS LIGHTING DESIGN IS PROVIDED AS A BASIS OF DESIGN.
ANY DEVIATION FROM SITE LIGHTING FIXTURES SPECIFIED
WILL REQUIRE A PHOTOMETRIC PLAN TO BE SUBMITTED TO
LOWES ENGINEERING MANAGER AND ENGINEER OF
RECORD FOR APPROVAL.

LOWE'S CALCULATION TARGET VALUES				
Label	Avg	Max	Min	Max/Min
CUSTOMER ENTRY DRIVE #1	1.25	N/A	N/A	10.0
CUSTOMER ENTRY DRIVE #2	1.25	N/A	N/A	10.0
CUSTOMER ENTRY DRIVE #3	1.25	N/A	N/A	10.0
FRONT DRIVE AISLE	2.50	N/A	1.0	5.0
FRONT FACADE	1.25	N/A	N/A	N/A
MAIN PARKING	2.00	N/A	0.75	5.0
NON-CUSTOMER ENTRY DRIVE	1.25	N/A	N/A	10.0
OFF SITE DRIVE	N/A	N/A	N/A	N/A
PROPERTY LINE	N/A	0.8	N/A	N/A
REAR DRIVE	N/A	N/A	0.6	10.0
SECONDARY PARKING #1	2.00	N/A	0.75	10.0
SECONDARY PARKING #2	2.00	N/A	0.75	10.0



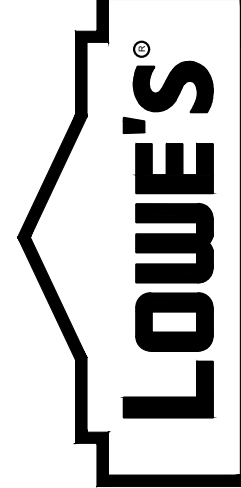
PRE-BID SET ISSUE DATE		POST BID SET ISSUE DATE	
DATE		DATE	

CREED CONSULTING, INC.
ONE ZOO AVENUE
PO BOX 327 STUART, FLORIDA 34994 (772) 485-2140

FOR
REFERENCE
ONLY

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)

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SITE PHOTOMETRIC PLAN AND CALCULATIONS

Westlake
WESTLAKE, FLORIDA

PROJECT No: 25040	DRAWN BY: J.M.P	CHECKED BY: CARP
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CRITERIA	
ISSUE DATE:	2023-12-15
PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

DRAWING NUMBER:
PH1.00

SITE PHOTOMETRIC PLAN

01

AREA MAP

02

PAGE
INTERWORKS, P.A.

ENGINEERS & CONSULTANTS
923 MAIN STREET, NORTH WILKESBORO, NC 28659 TX - FIRM REG. #F-5738
PHONE: 336-667-4225 JANUARY 31, 2025

SCALE: 1"=60'-0"

SCALE:	N.T.S
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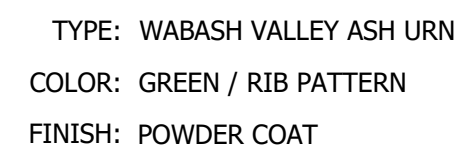
NOTES

NOTES:

Diagram of a Golf Cart Parking Only sign. The sign is rectangular with rounded corners, a white background, and a thick red border. It features the text "GOLF CART" at the top, a silhouette of a golf cart in the center, and "PARKING ONLY" at the bottom in large, bold, red capital letters. Below the main text, it reads "VIOLATORS WILL BE TOWED" in smaller red capital letters. Two mounting holes are indicated by small circles, one above and one below the sign. Dimensions are shown: the width is 12 inches and the height is 18 inches.

NOTES

1. INSTALL AT EACH GOLF CART PARKING SPACE. WHERE GOLF CART PARKING SPACES FACE ONE ANOTHER, THERE SHALL BE ONE POST WITH SIGNS MOUNTED ON BOTH SIDES.
2. TO BE MOUNTED ON GALVANIZED SIGN POST WITH BOLLARD BASE. SEE HANDICAP SIGN DETAIL (SHEET SP-3) FOR SIGN POST AND BOLLARD CONSTRUCTION DETAILS.



Technical drawing showing the dimensions of a circular pile cap and a vertical pile.

Pile Cap Dimensions:

- Overall Diameter: $\varnothing 24 \frac{3}{4}$ [Ø629]
- Overall Height: $27 \frac{1}{4}$ [692]
- Cap Thickness: $4 \frac{1}{4}$ "
- Embedment Depth: 6"
- Ground Level: GRADE

Pile Dimensions:

- Pile Diameter: $\varnothing 1 \frac{1}{2}$ [38] TUBING

www.landscapeforms.com Ph: 800.521.2546

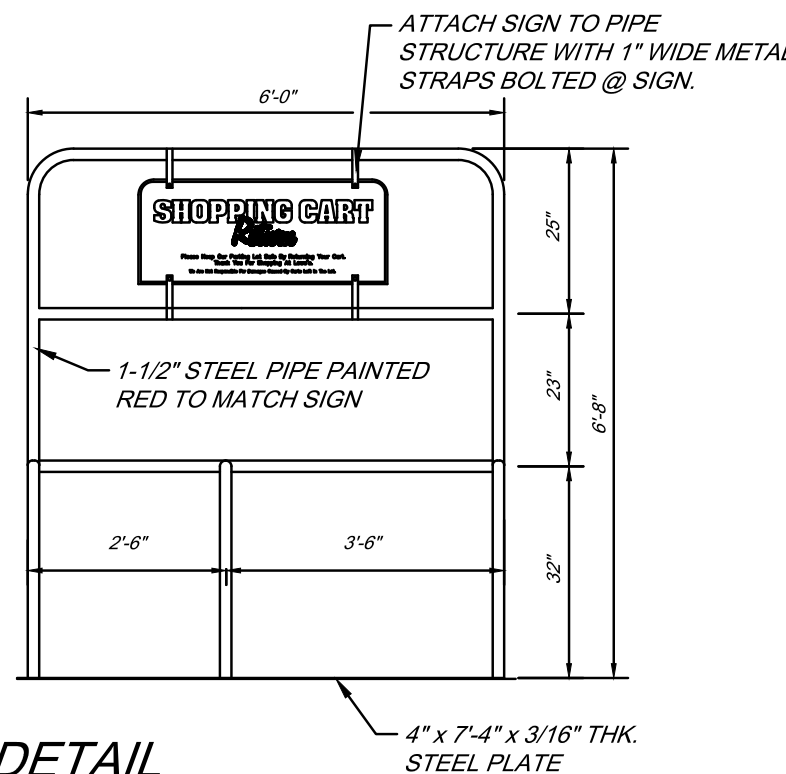
NTS



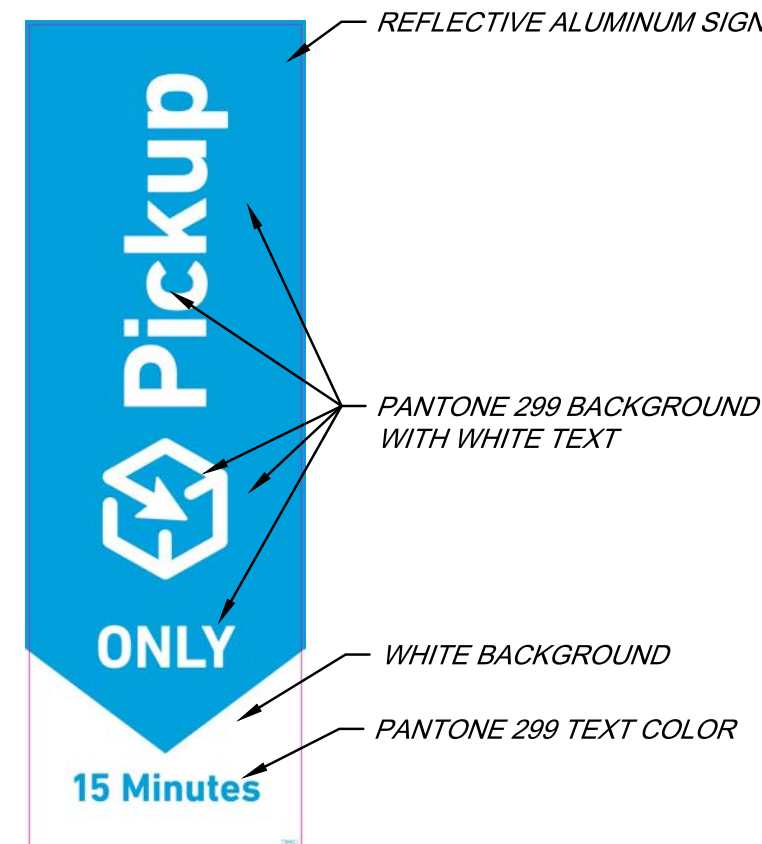
Manufacture: DuMor, INC
195 Series, 6-Foot, Backless, Surface Mount.
Frame Powder Coat Finish
w/ Textured Silver
Color: White
Or approved by Landscape Architect

Contact Information:
repservices.com
sales@repservices.com
 Phone: 866.232.8532

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E: FURNISHED AND INSTALLED BY LOWE'S



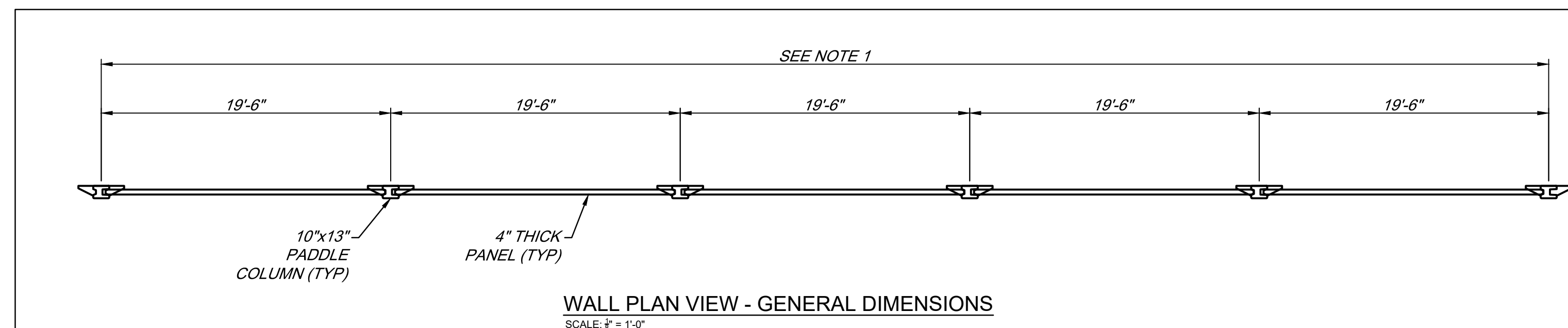
NOTES

1. INSTALL AT EACH PICKUP PARKING SPACE. WHERE PICKUP SPACES FACE ONE ANOTHER, THERE SHALL BE ONE POST WITH SIGNS MOUNTED ON BOTH SIDES.
2. TO BE MOUNTED ON GALVANIZED SIGN POST WITH BOLLARD BASE. SEE HANDICAP SIGN DETAIL (SHEET SP-3) FOR SIGN POST AND BOLLARD CONSTRUCTION DETAILS.



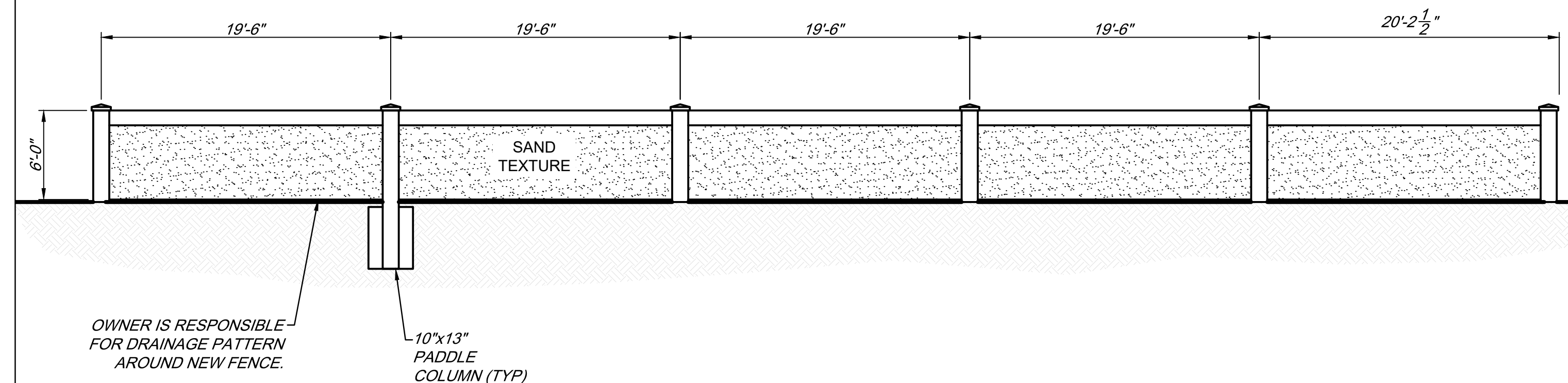
NOTES:

1. INSTALL AT EACH VETERAN PARKING SPACE. WHERE VETERAN SPACES FACE ONE ANOTHER, THERE SHALL BE ONE POST WITH SIGN MOUNTED ON BOTH SIDES.
2. TO BE MOUNTED ON GALVANIZED SIGN POST WITH BOLLARD BASE. SEE HANDICAP SIGN DETAIL (SHEET SP-3) FOR SIGN POST AND



WALL PLAN VIEW - GENERAL DIMENSIONS

SCALE: $\frac{3}{8}" = 1'-0"$



TYPICAL 6' x 2.0 WALL ELEVATION - GENERAL DIMENSIONS

SCALE: $\frac{1}{4}" = 1'-0"$

NOTES:

1. COLUMN CENTER-TO-CENTER SPACING VARIES BASED ON COLUMN KEYWAY(S).
 - 1.a. LARGE KEYWAY TO LARGE KEYWAY: 19'-5"
 - 1.b. SMALL KEYWAY TO LARGE KEYWAY: 19'-6"
 - 1.c. SMALL KEYWAY TO SMALL KEYWAY: 19'-7"
2. CONTRACTOR SHALL REFER TO CIVIL DRAWINGS FOR OVERALL WALL LAYOUT.

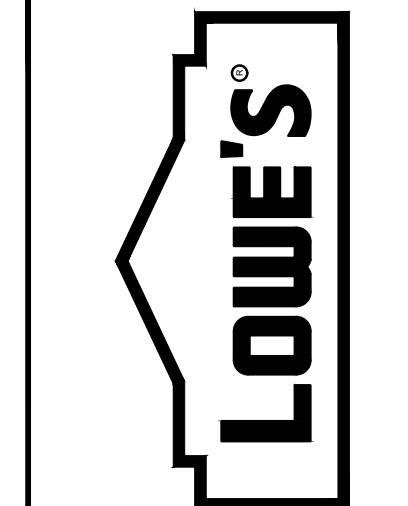
[illegible]

CREECH
CONSULTING, INC.
201 W. FLORISSANT AVE.
PO BOX 327, STUART, FLORIDA 34994 (772) 485-2140

RICHARD CREECH
FL P.E. NO. 38592

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
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SITE DEVELOPMENT DETAILS

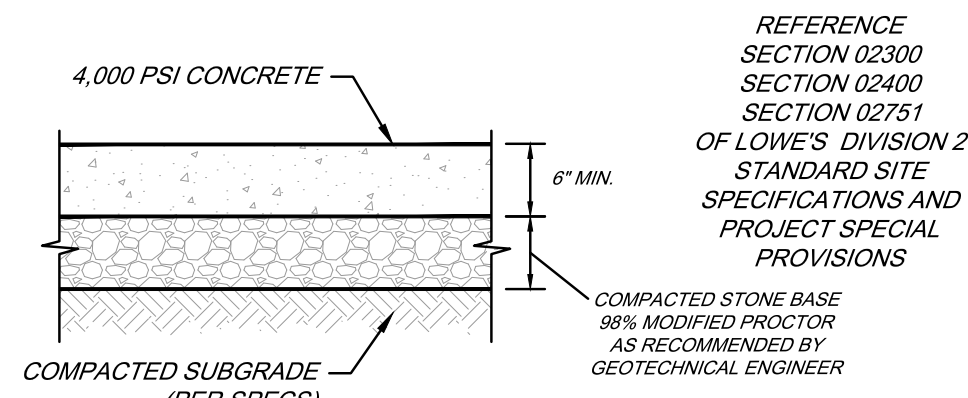
94 WIDE
LOWE'S OF:

Westlake
WESTLAKE, FLORIDA

CRITERIA	
ISSUE DATE:	2023-12-15
PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

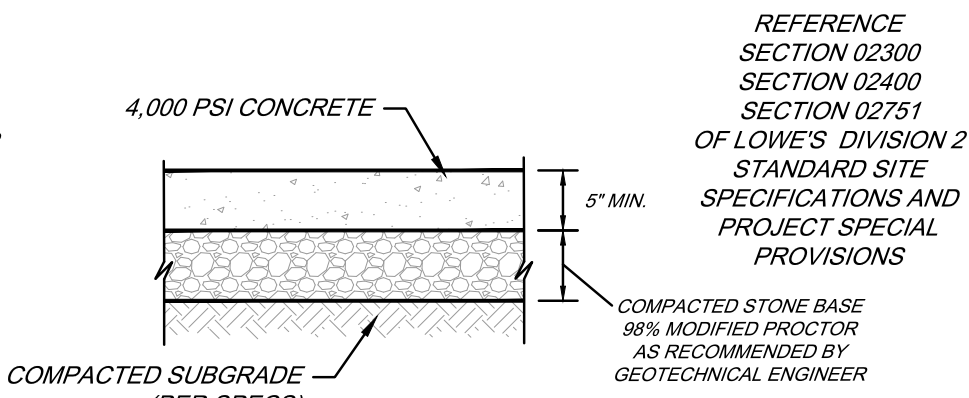
D1

ORIGINAL	
SECOND	
FINAL	



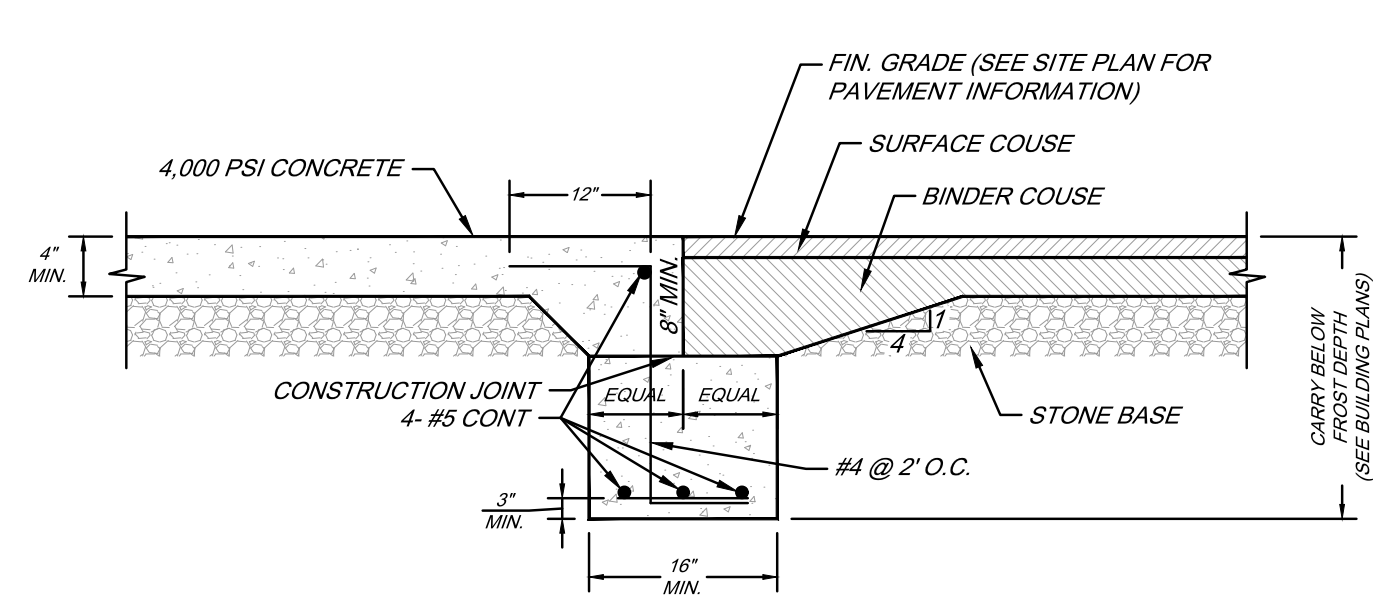
HEAVY DUTY CONCRETE PAVEMENT SECTION

NOTE: USE LOWE'S MINIMUM PAVEMENT SECTION IF GREATER THAN GEOTECHNICAL ENGINEERS RECOMMENDATION

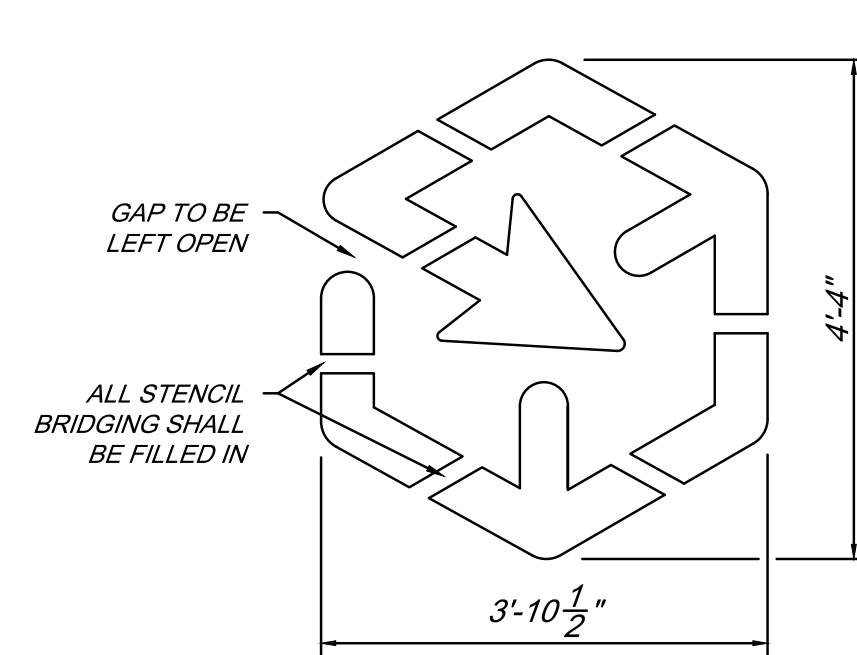


STANDARD DUTY CONCRETE PAVEMENT SECTION

NOTE: USE LOWE'S MINIMUM PAVEMENT SECTION IF GREATER THAN GEOTECHNICAL ENGINEERS RECOMMENDATION

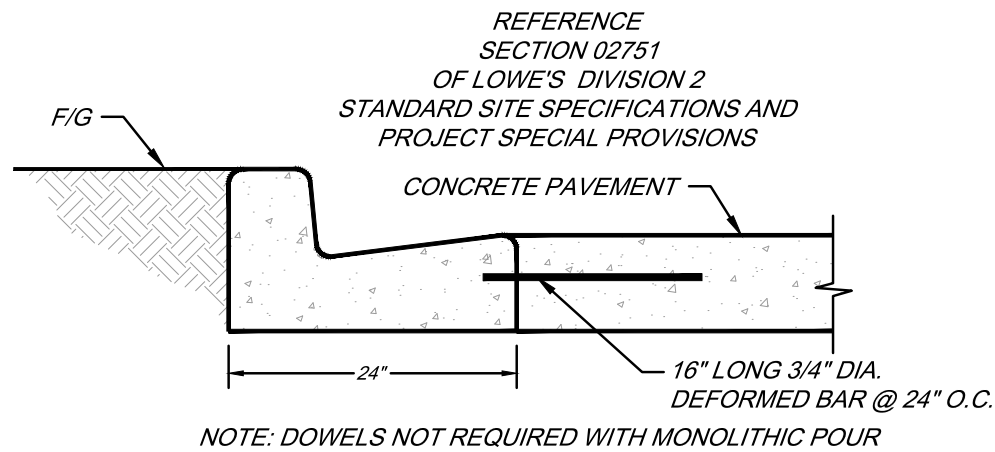
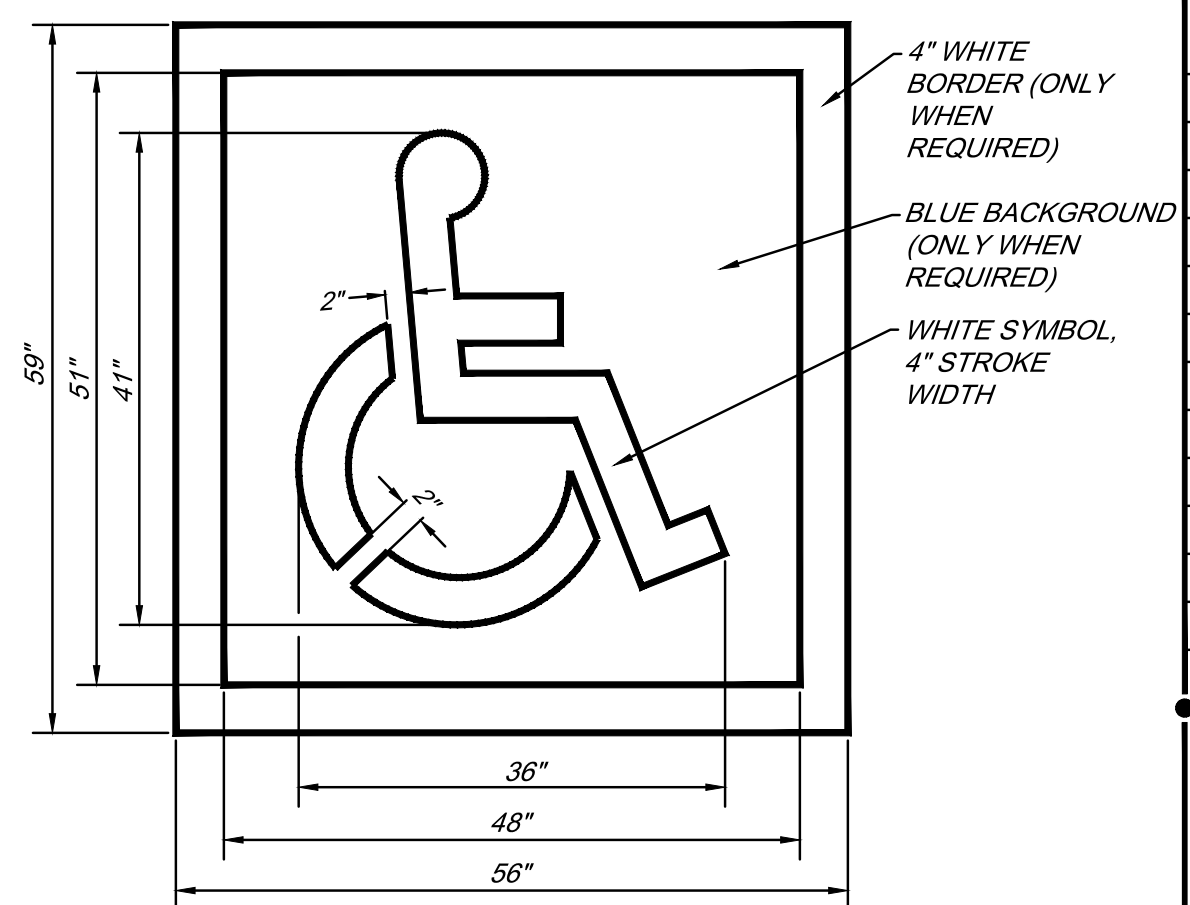


CONCRETE/ASPHALT PAVEMENT JOINT DETAIL

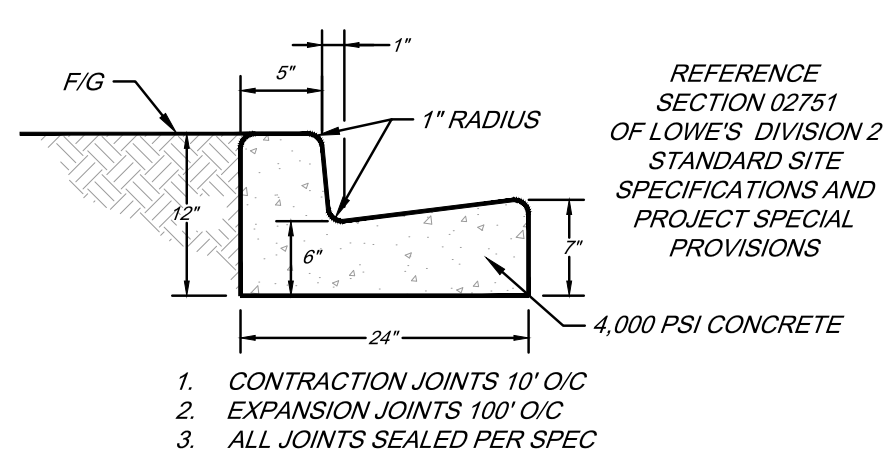


- NOTES:
- MARKING SHALL MATCH EXACT DIMENSIONS.
 - MARKING SHALL BE PAINTED SOLID WHITE PER LOWE'S SECTION 2745 SPECIFICATIONS.
 - STENCIL BRIDGING SHALL BE FILLED IN.

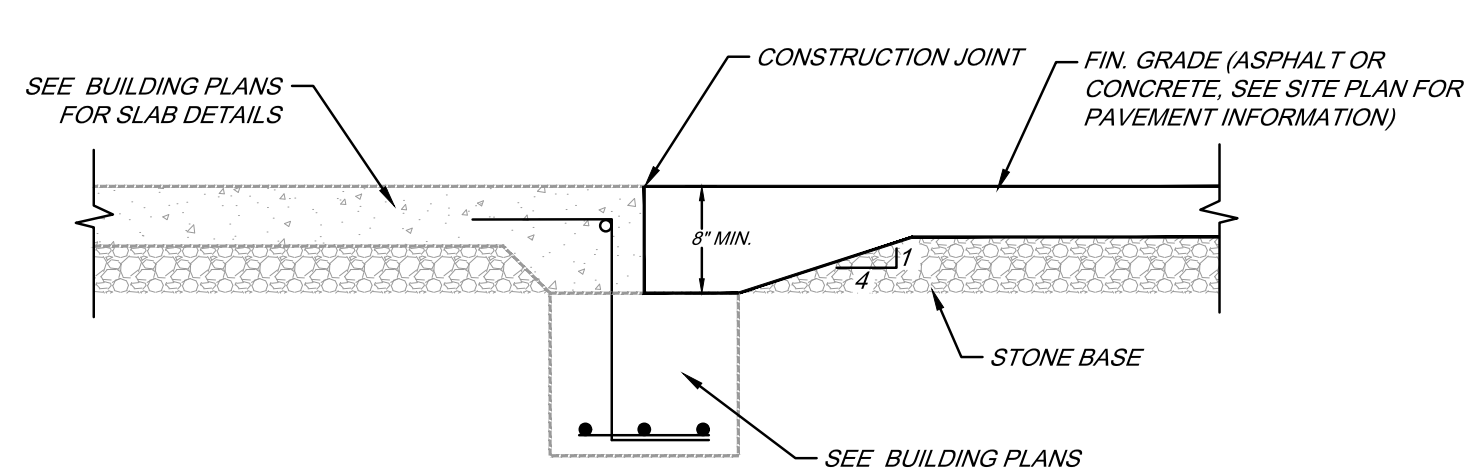
PICKUP PARKING SPACE MARKING



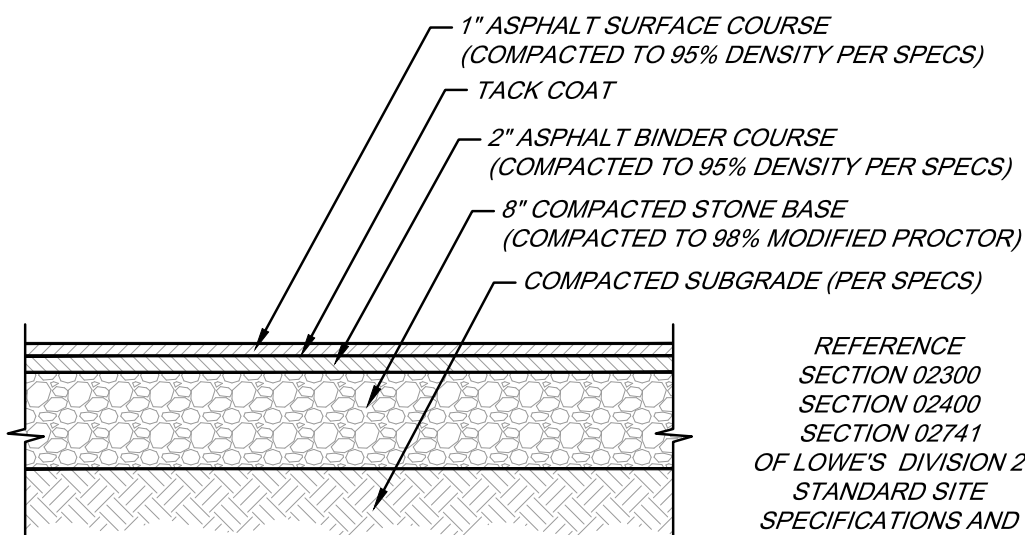
CONCRETE CURB & GUTTER DOWELED JOINT DETAIL



24" CONCRETE CURB & GUTTER DETAIL

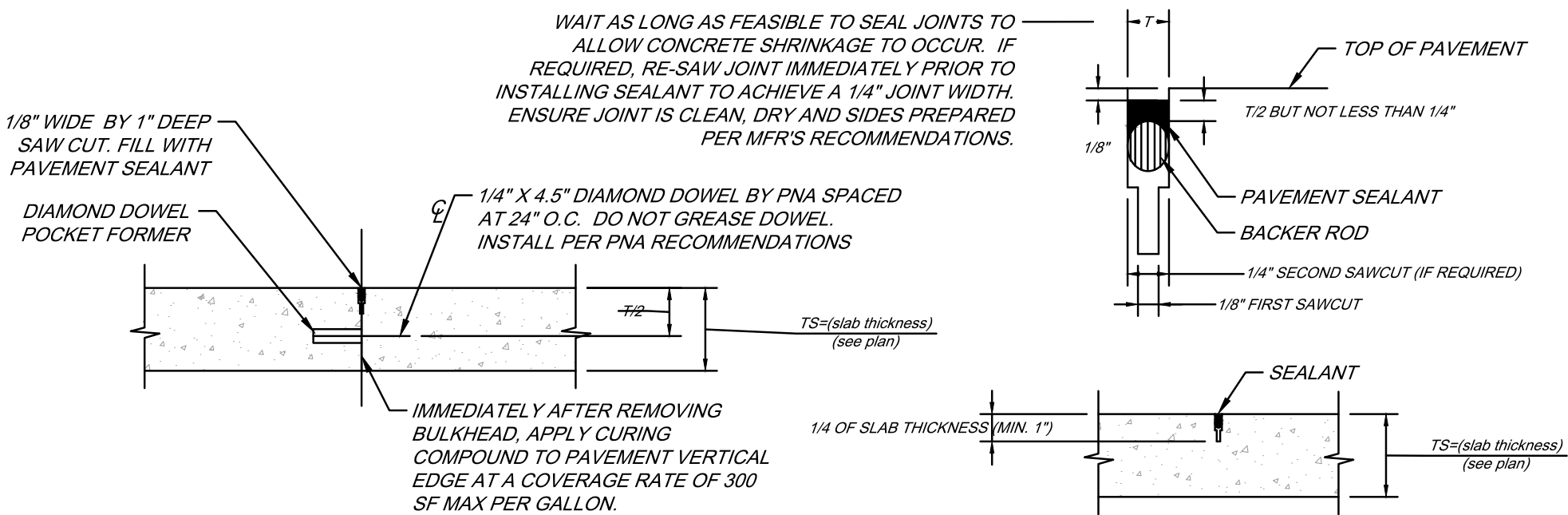


BUILDING SLAB/ PAVEMENT JOINT DETAIL



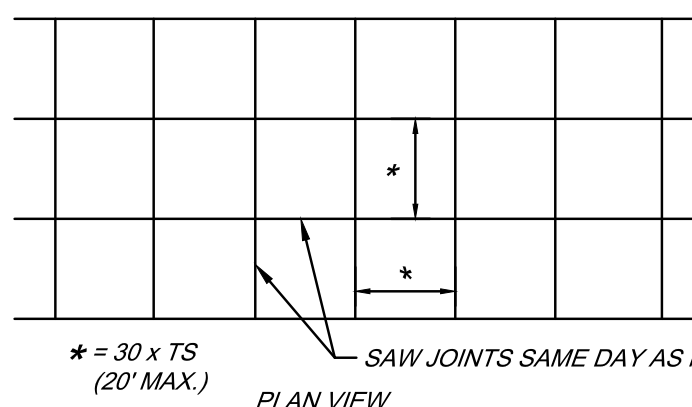
HEAVY DUTY ASPHALT PAVEMENT SECTION

WAIT AS LONG AS FEASIBLE TO SEAL JOINTS TO ALLOW CONCRETE SHRINKAGE TO OCCUR. IF REQUIRED, RE-SAW JOINT IMMEDIATELY PRIOR TO INSTALLING SEALANT TO ACHIEVE A 1/4" JOINT WIDTH. ENSURE JOINT IS CLEAN, DRY AND SIDES PREPARED PER MFR'S RECOMMENDATIONS.



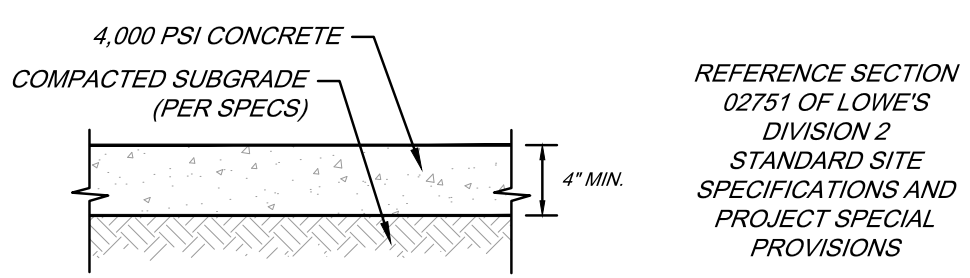
CONSTRUCTION JOINT

SAW JOINT



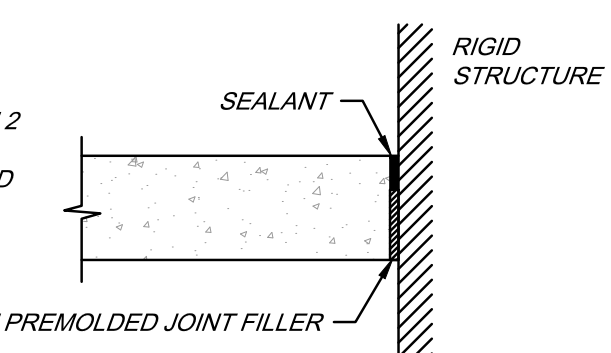
CONCRETE PAVEMENT

CONCRETE PAVEMENT JOINT DETAIL

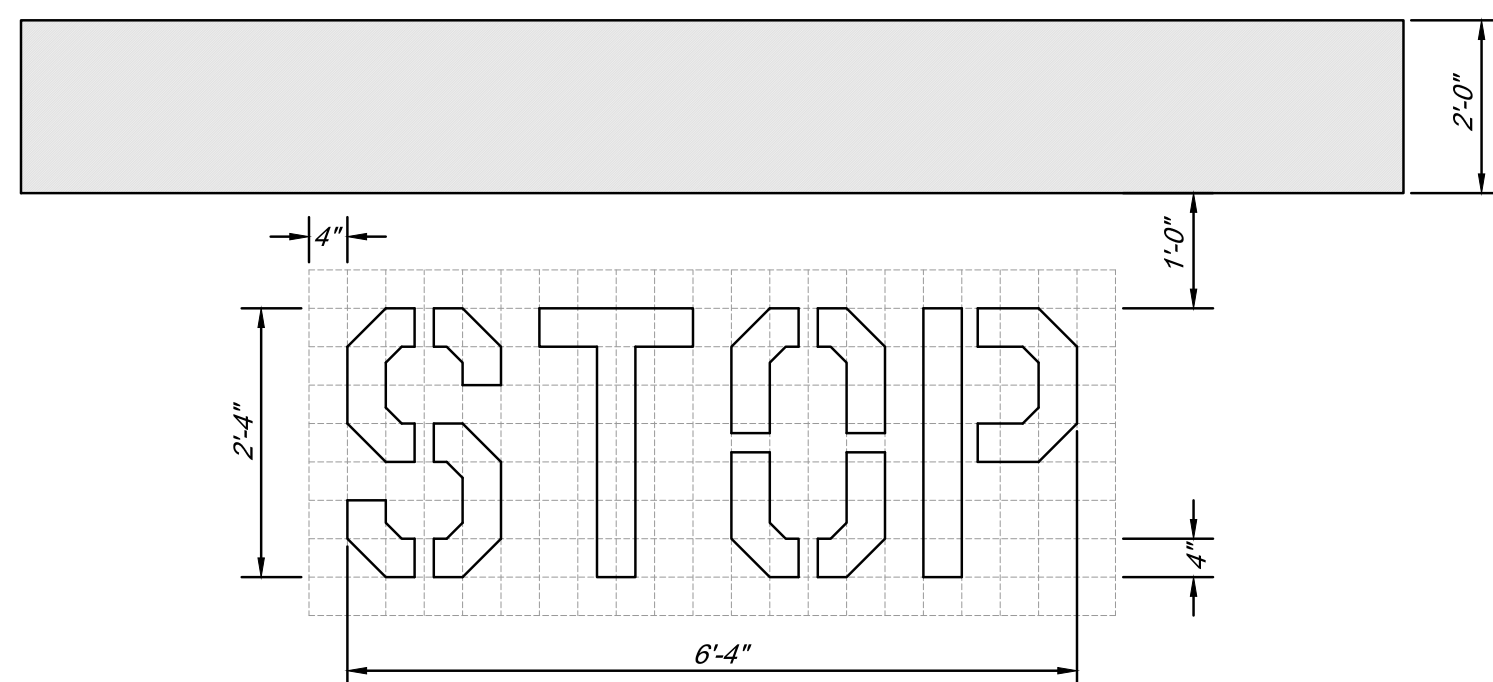


- CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH
- EXPANSION JOINTS 100' O/C
- ALL JOINTS SEALED PER SPEC

SIDEWALK DETAIL



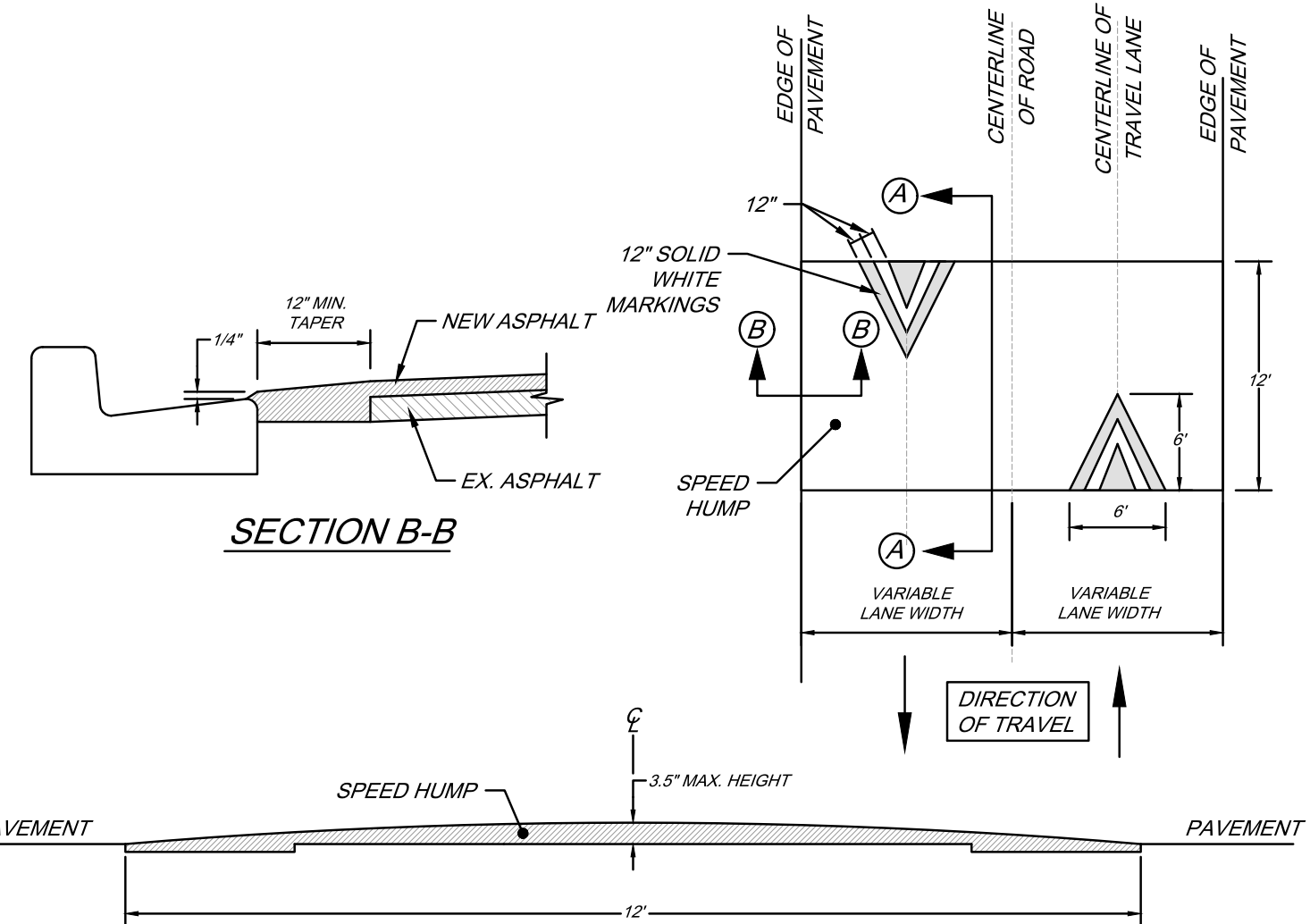
ISOLATION JOINT



STOP BAR AND STOP TEXT*

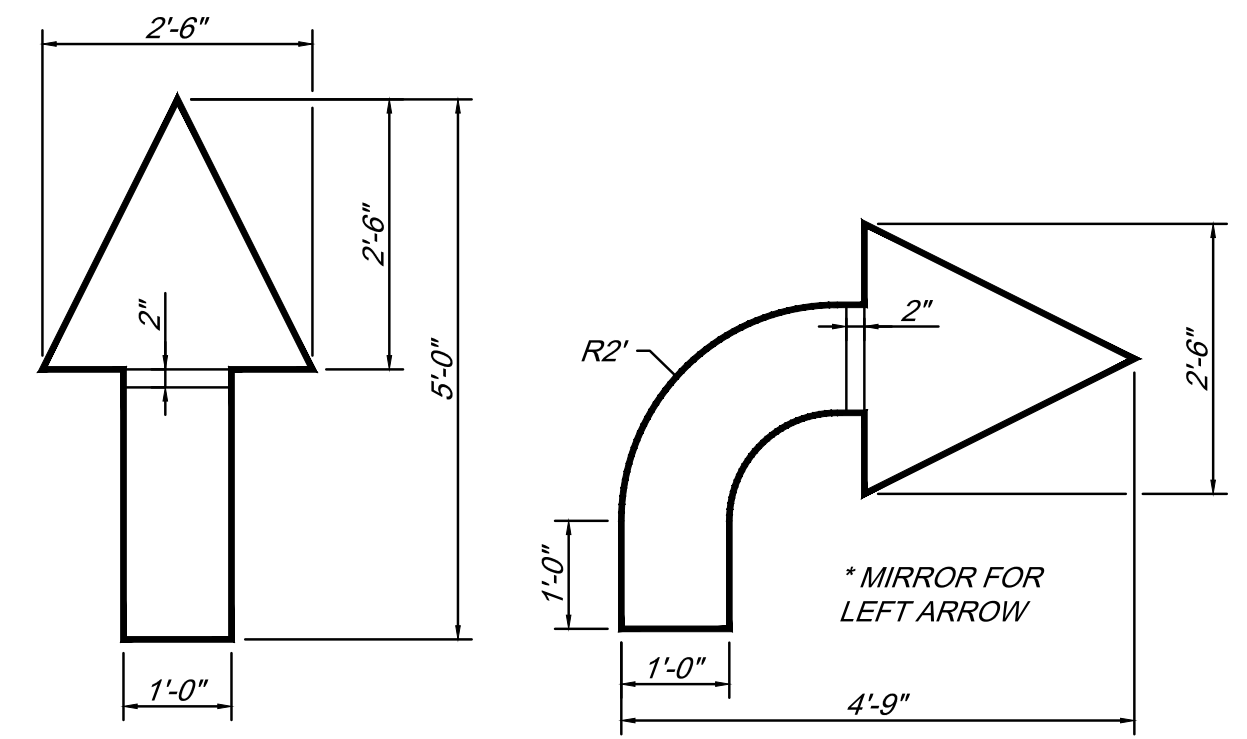
*STOP TEXT SHALL ONLY BE USED AT LUMBER CANOPY EXIT LINES AND NOT WHEN STOP BARS ARE ACCOMPANIED BY A STOP SIGN

- NOTES:
- SECTION A-A FINISHED SURFACE DIMENSIONS ARE DISTANCES FROM THE SURFACE OF THE EXISTING ROADWAY. CONSTRUCTION TOLERANCE FOR THESE CROSS SECTION DIMENSIONS IS $\pm 1/4"$.
 - SPEED HUMPS THAT DO NOT COMPLY WITH CONSTRUCTION TOLERANCES SHALL BE REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
 - CONTRACTOR SHALL WARRANT THAT THE MID-POINT HEIGHT TO BE AT LEAST 3 INCHES FOR 12 MONTHS. IF MID-POINT HEIGHT IS LESS THAN 3" AT 12 MONTH WARRANTY REVIEW, THE SPEED HUMP SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
 - TACK COAT SHALL BE APPLIED PRIOR TO PAVING.
 - FOR EXISTING ASPHALT PAVEMENTS: SAWCUT AND REMOVE A 24 INCH WIDTH AT THE MATCHING SPEED HUMP EDGE. REPLACE THE FULL DEPTH OF TOP SURFACE COURSE WITH SPEED HUMP ASPHALT AS A SINGLE OPERATION DURING CONSTRUCTION OF THE SPEED HUMP.
 - CONTRACTOR SHALL VERIFY THAT PROPOSED LOCATION OF SPEED HUMP WILL NOT CREATE PONDING DURING A RAINFALL EVENT.
 - LONGITUDINAL EDGE JOINTS (ALONG LIP OF GUTTER); REMOVE THE EXISTING SURFACE COURSE OF PAVEMENT A MINIMUM OF 12". NEW SPEED HUMP PAVEMENT SHALL TAPER A DISTANCE OF 12" FROM THE SPEED HUMP PROFILE GRADE TO MATCH 1/4" ABOVE THE LIP OF GUTTER.



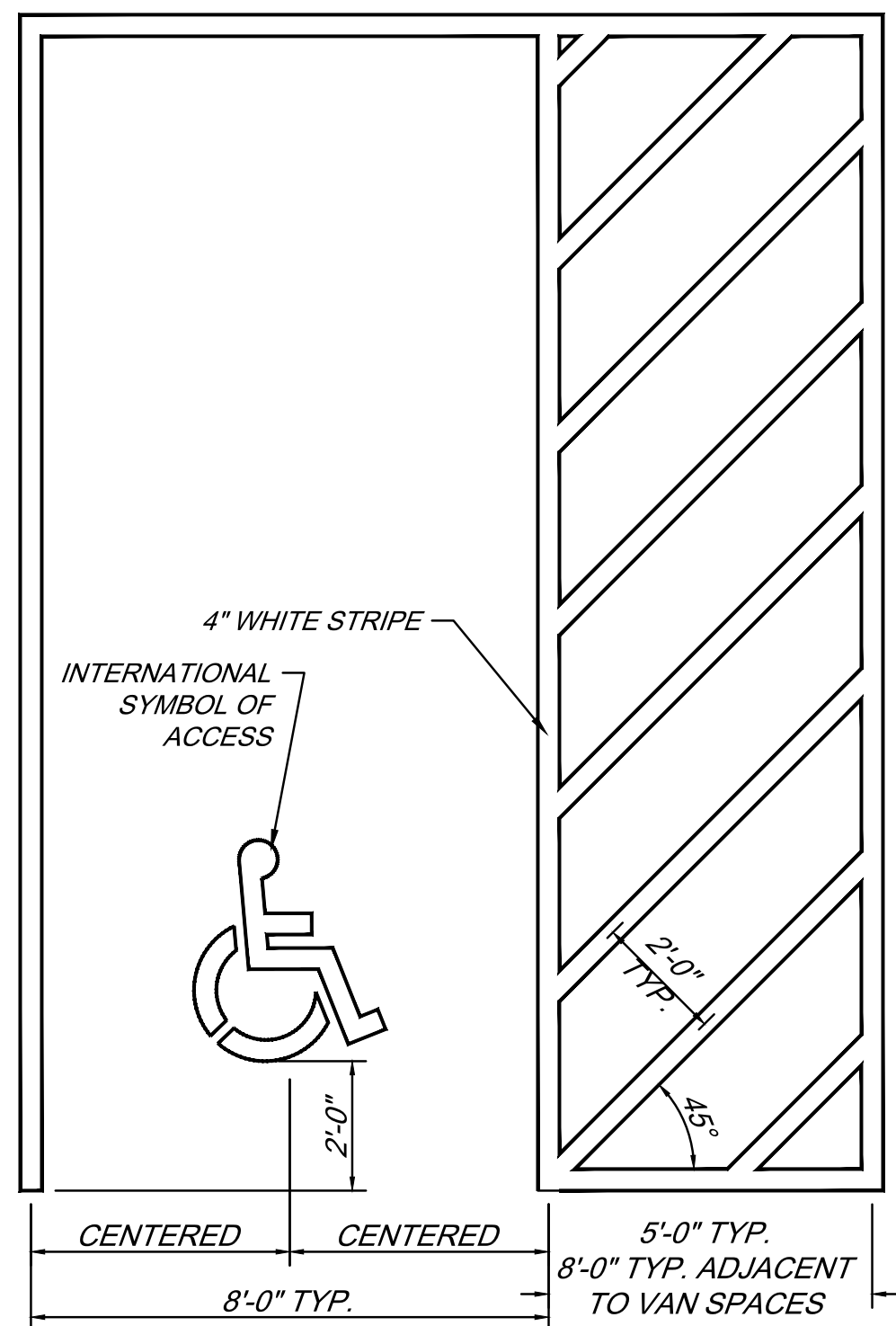
SPEED HUMP (PARABOLIC)

(TO BE USED ONLY AS REQUIRED OR REQUESTED BY OWNER)



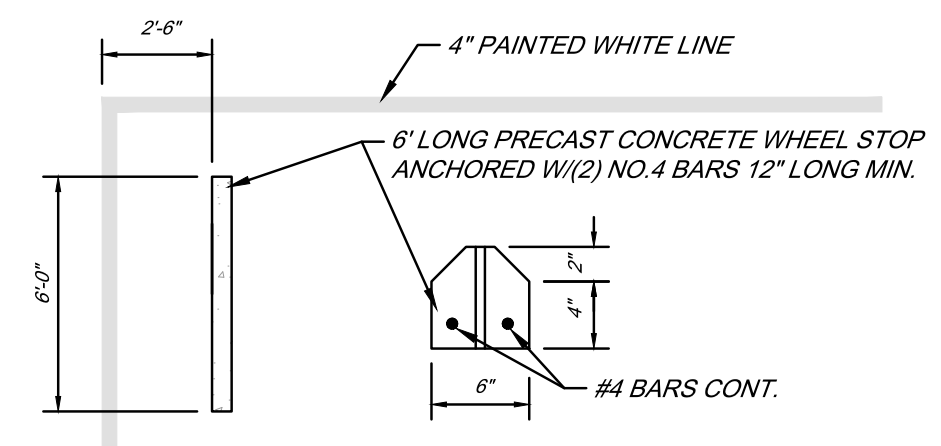
- NOTES:
- ALL ARROWS SHALL MATCH EXACT DIMENSIONS, UNLESS REQUIRED BY AHJ.
 - ARROWS SHALL BE PAINTED SOLID WHITE PER LOWE'S SECTION 2741 SPECIFICATIONS.
 - STENCIL BRIDGING SHALL BE FILLED IN ON ALL ARROWS.

PAVEMENT MARKING ARROWS



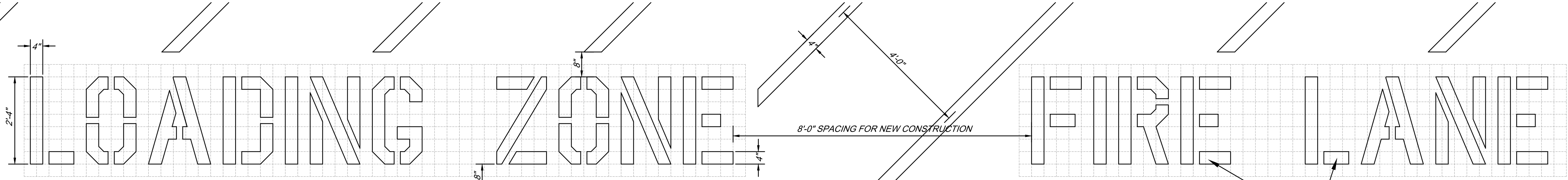
- NOTES:
- BLUE BACKGROUND AND/OR WHITE BORDER SHALL ONLY BE INSTALLED WHERE REQUIRED BY AHJ.
 - ALL PAVEMENT MARKINGS SHALL MATCH THE EXACT DIMENSIONS AND COLOR SHOWN ON THIS DETAIL UNLESS REQUIRED OTHERWISE BY AHJ.

ACCESSIBLE PARKING PAVEMENT MARKINGS



NOTE: SEE SITE PLAN FOR PARKING SPACE SIZE AND FOR WHEEL STOP LOCATIONS.

CONCRETE WHEEL STOP DETAIL



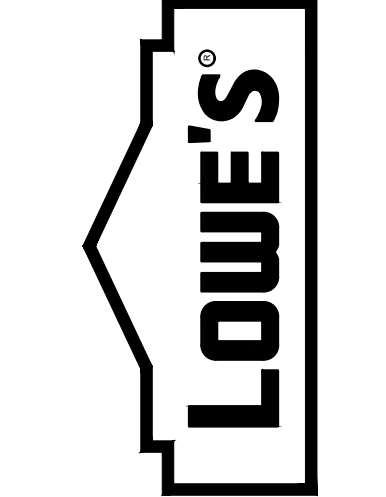
LOADING ZONE PAVEMENT MARKINGS

FIRE LANE TEXT SHALL ONLY BE MARKED WHEN REQUIRED BY LOCAL/STATE JURISDICTION

REVISIONS	
PRE-BID SET	POST-BID SET
DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SUBMITTAL
06/16/25	SID RE-SUBMITTAL
07/02/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
	RE-SUBMITTAL

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ENGINEER
PO BOX 321, STUART, FLORIDA 34994 (772) 465-2140
BOARD OF PROFESSIONAL ENGINEERS: CERTIFICATE OF AUTHORITY NUMBER 5199
PROFESSIONAL SURVEYORS AND MAPPERS: LICENSED CERTIFICATE NO. 18400

RICHARD CREECH
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1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
704.758.1000 (PH.)



SITE DEVELOPMENT DETAILS
94 WIDE
LOWE'S OF:
Westlake
WESTLAKE, FLORIDA
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA	2023-12-15
ISSUE DATE:	
PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

D2

SITE NOTES:

1. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
2. ALL BACK OF CURB RADI SHALL BE 4" UNLESS OTHERWISE NOTED.
3. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.

GRADING AND DRAINAGE NOTES:

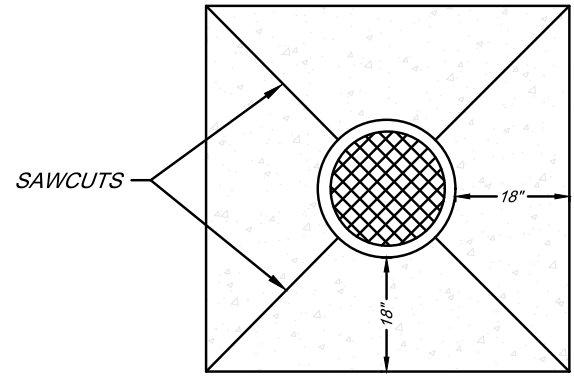
1. ALL EXISTING STRUCTURES, FENCING, TREES, & ETC. WITHIN CONSTRUCTION AREA SHALL BE REMOVED & DISPOSED OF OFF SITE (UNLESS OTHERWISE SPECIFIED TO REMAIN). ANY BURNING ON SITE SHALL BE SUBJECT TO LOCAL ORDINANCES & LOWE'S SPECIFICATIONS.
2. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST CONCRETE.
3. ALL DRAINAGE STRUCTURES AND STORM DRAINAGE PIPES SHALL MEET HEAVY DUTY TRAFFIC (H20) LOADING AND BE INSTALLED ACCORDINGLY.
4. GENERAL CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES HAVING UNDERGROUND UTILITIES ON SITE OR IN RIGHT-OF-WAY PRIOR TO EXCAVATION. CONTRACTOR SHALL CONTACT UTILITY LOCATING COMPANY AND LOCATE ALL UTILITIES PRIOR TO GRADING START.
5. SITE GRADING SHALL NOT PROCEED UNTIL APPROPRIATE SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
6. AFTER PERMITS HAVE BEEN OBTAINED & SEDIMENT CONTROL MEASURES INSTALLED, THE CONTRACTOR SHALL GRADE BUILDING PAD, GARDEN CENTER & APRONS TO 0" - 1/2" OF SUBGRADE AS PER SECTION 02300, DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.
7. IMMEDIATELY INSTALL & COMPACT STONE BASE FOR BUILDING PAD TO +/- 1/2" PRIOR TO EXCAVATING INTERIOR & PERIMETER FOOTINGS.
8. FRENCH DRAIN SHALL BE INSTALLED IF DIRECTED BY THE GEOTECHNICAL ENGINEER OR AS SHOWN ON PLANS.
9. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.
10. ALL ROOF DRAINS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END.
11. AREAS DESIGNATED AS PERMANENT (POST-CONSTRUCTION) INFILTRATION BMPs SHALL NOT BE COMPACTED DURING SITE GRADING OPERATION.

SITE UTILITY NOTES:

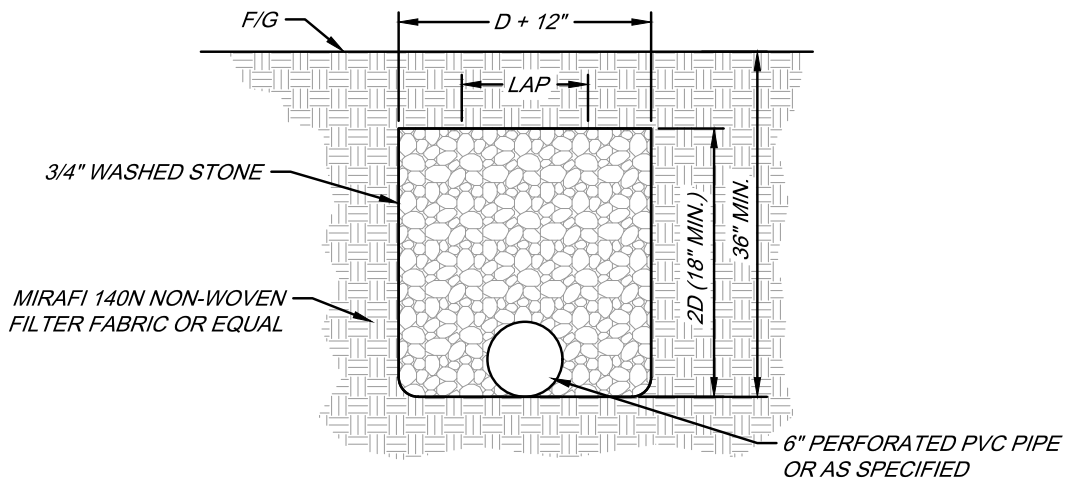
1. LOCATION OF SITE UTILITIES SHALL BE VERIFIED BY GENERAL CONTRACTOR AND THE UTILITY COMPANY PROVIDING SERVICE.
2. GENERAL CONTRACTOR SHALL PROVIDE 2' x 2' x 6" THICK CONCRETE APRON AT ALL CLEANOUTS, VALVES, AND METERS OUTSIDE OF BUILDING.
3. GENERAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL TAP AND TIE ON FEES REQUIRED, AS WELL AS COST OF UNDERGROUND SERVICE CONNECTIONS TO THE BUILDING.
4. ELECTRICAL SERVICE TO PAD MOUNTED TRANSFORMER SHALL BE RUN UNDERGROUND, FROM ROAD RIGHT-OF-WAY TO TRANSFORMER LOCATION. ASSOCIATED COST BY GENERAL CONTRACTOR.
5. GENERAL CONTRACTOR SHALL FURNISH (2) - 4" TELEPHONE CONDUIT(S) AS SHOWN ON PLAN, VERIFY LOCATION OF TIE IN AT TELEPHONE COMPANY'S SERVICE LINE. PROVIDE NYLON PULL CORDS INSIDE CONDUIT.
6. THRUST BLOCKS SHALL BE PROVIDED AT ALL BENDS, TEES, AND FIRE HYDRANTS.
7. DIMENSIONS SHOWN ARE TO CENTERLINE OF PIPE OR FITTING.
8. ALL WATER AND SANITARY LEADS TO BUILDING SHALL END 5' OUTSIDE THE BUILDING LIMITS AS SHOWN ON PLAN AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END.
9. ALL FIRE HYDRANTS SHALL BE PROVIDED WITH AN APPROVED GATE VALVE A MAXIMUM OF 5'-0" FROM HYDRANT.
10. ALL TRENCHING, PIPE LAYING, AND BACKFILLING SHALL BE IN ACCORDANCE WITH FEDERAL OSHA REGULATIONS.
11. GENERAL CONTRACTOR SHALL HAVE APPROVAL OF ALL GOVERNING AGENCIES HAVING JURISDICTION OVER THIS SYSTEM PRIOR TO INSTALLATION.
12. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.
13. REFER TO FIRE PROTECTION SHEETS FOR LOCATION AND DETAIL OF FIRE LINE LEAD IN.
14. FIRE LINE SHALL BE STUBBED UP 1' ABOVE FFE IN SPRINKLER ROOM.
15. REFER TO PLUMBING SHEETS FOR LOCATION OF SEWER, DOMESTIC, AND IRRIGATION CONNECTIONS.

LANDSCAPE NOTES:

1. ALL PLANT BEDS SHALL RECEIVE A 3" LAYER OF SHREDDED HARDWOOD BARK MULCH.
2. ALL DISTURBED AREAS NOT RECEIVING PLANTINGS (INCLUDING RIGHT-OF-WAYS) SHALL BE SEEDED, SODDED OR OTHERWISE STABILIZED PER SPECIFICATIONS.
3. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.

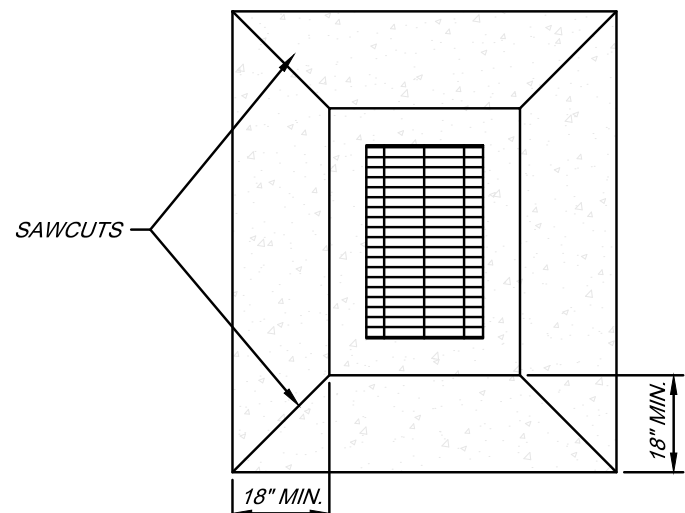


STORM / SANITARY
MANHOLE APRON

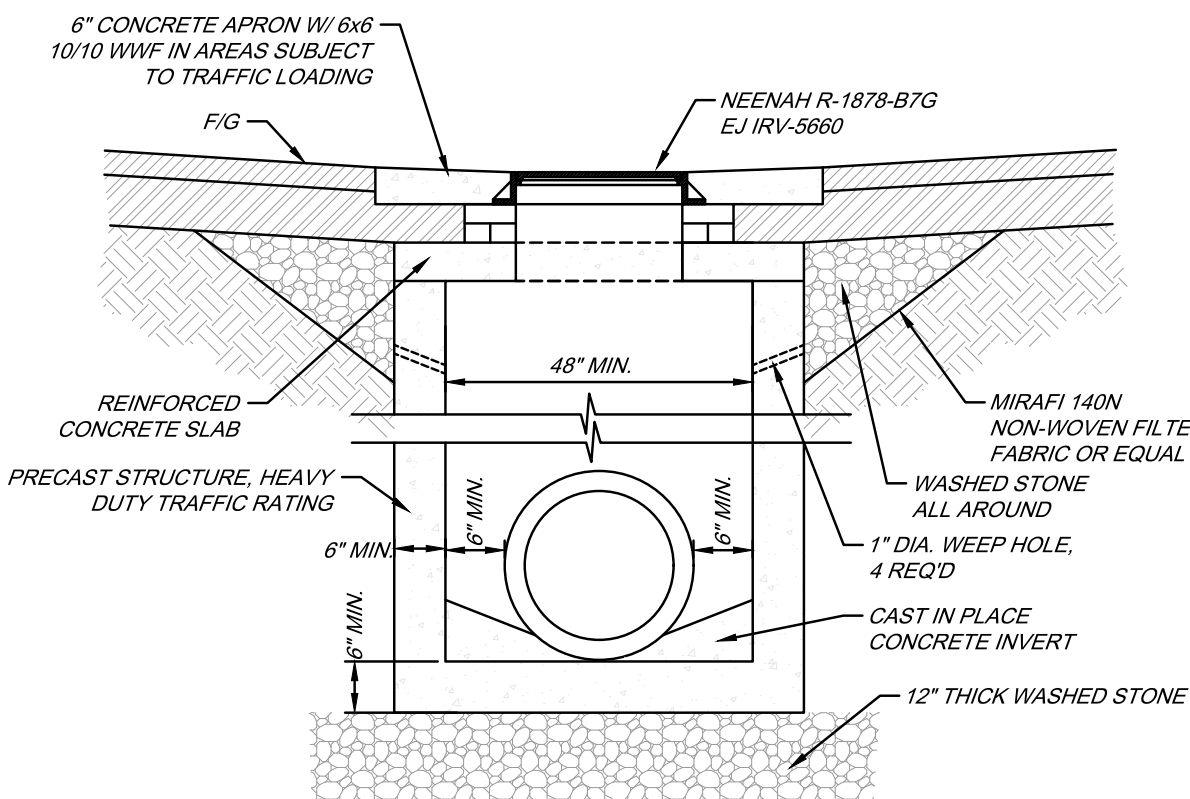


FRENCH DRAIN

TO BE UTILIZED AS DIRECTED BY THE GEOTECHNICAL ENGINEER AND/OR AS SHOWN ON THE PLANS.

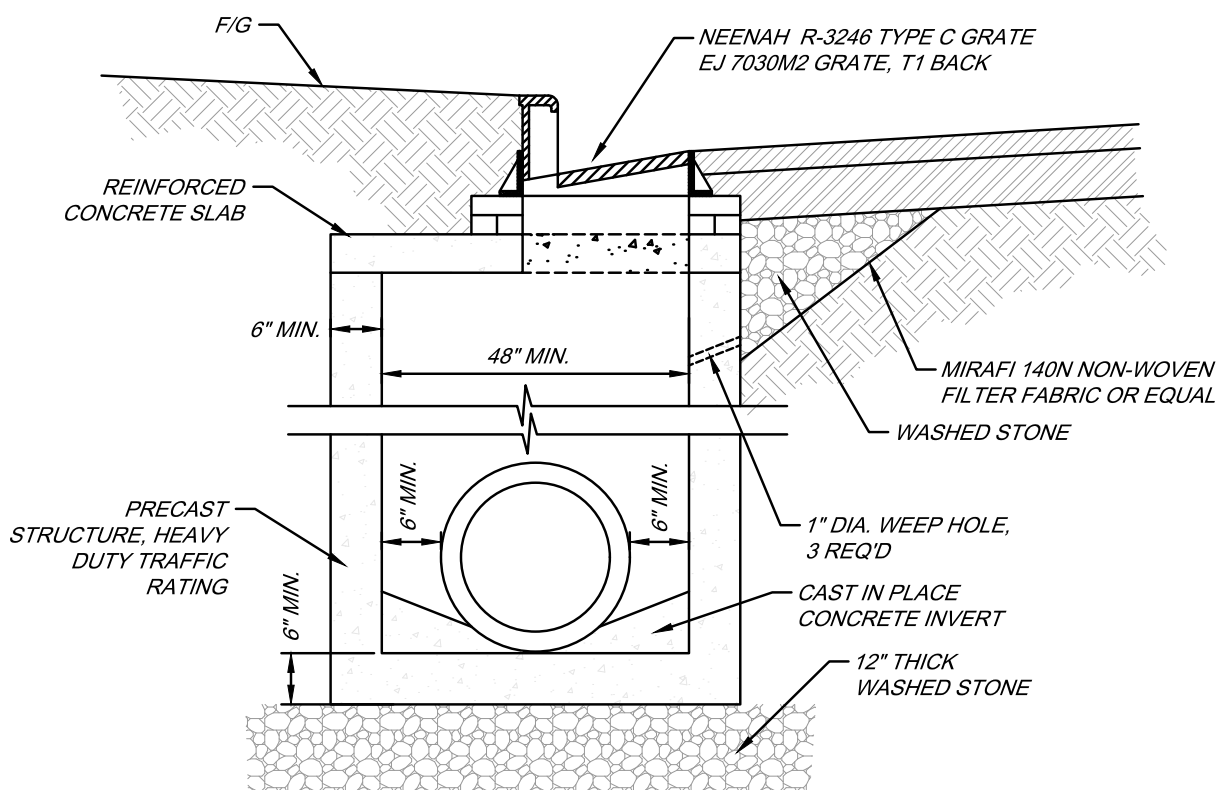


INLET APRON



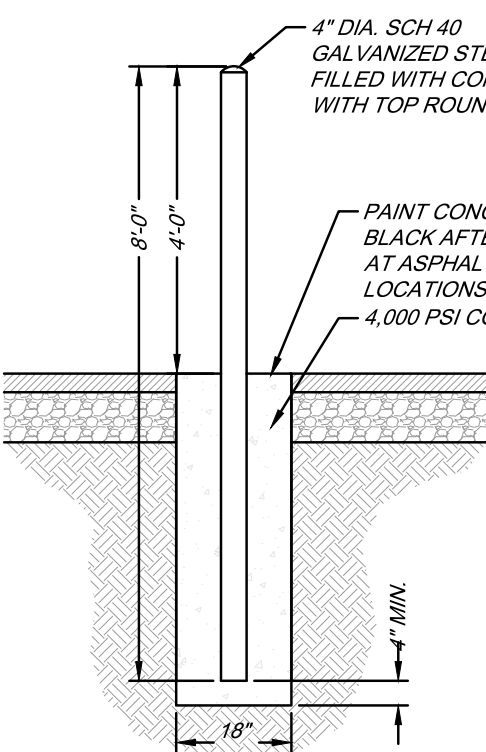
DROP INLET

- NOTES:
1. CONCRETE SHALL BE 4,000PSI MINIMUM FOR ALL PRECAST CONCRETE STORM STRUCTURES.
 2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
 3. BRICK MAY BE USED TO ADJUST FRAME, GRATE, & HOOD TO SURFACE ELEVATION A MAXIMUM OF 12 INCHES.



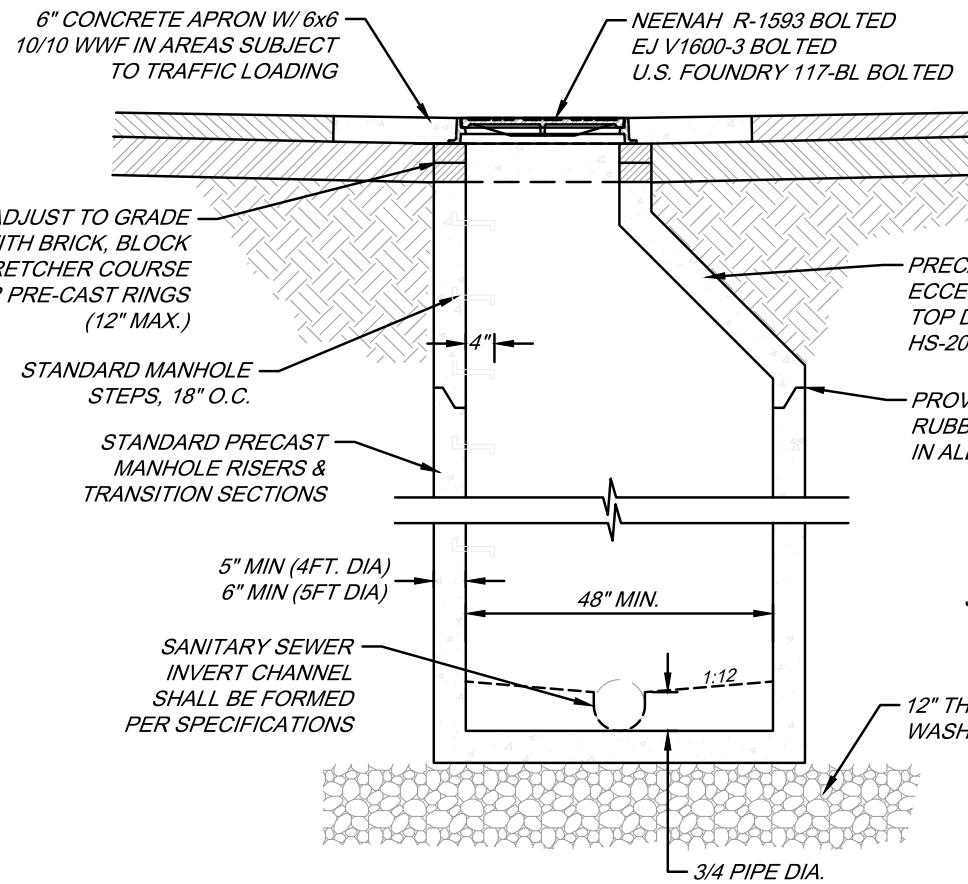
CURB INLET

- NOTES:
1. CONCRETE SHALL BE 4,000PSI MINIMUM FOR ALL PRECAST CONCRETE STORM STRUCTURES.
 2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
 3. BRICK MAY BE USED TO ADJUST FRAME, GRATE, & HOOD TO SURFACE ELEVATION A MAXIMUM OF 12 INCHES.



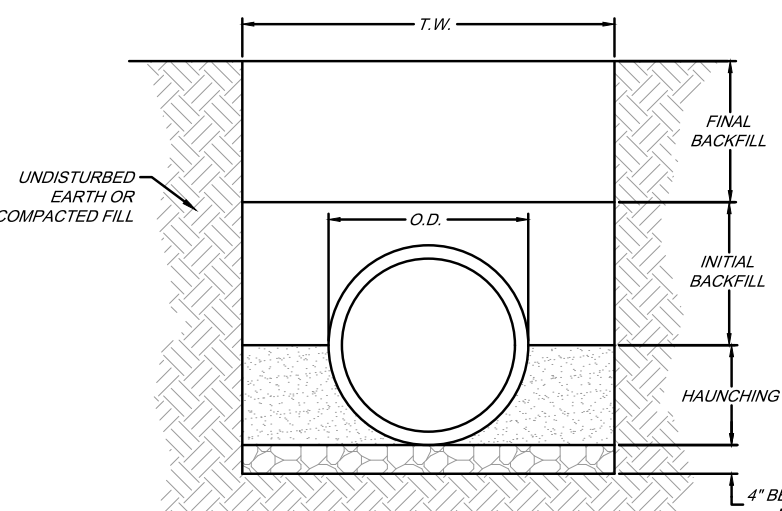
WATER-TIGHT PIPE TO MANHOLE
CONNECTION DETAIL

- NOTES:
1. HOLE SHALL BE A MIN. 4" LARGER THAN PIPE OUTSIDE DIAMETER
 2. HOLES SHALL BE PRECAST OR CORED.

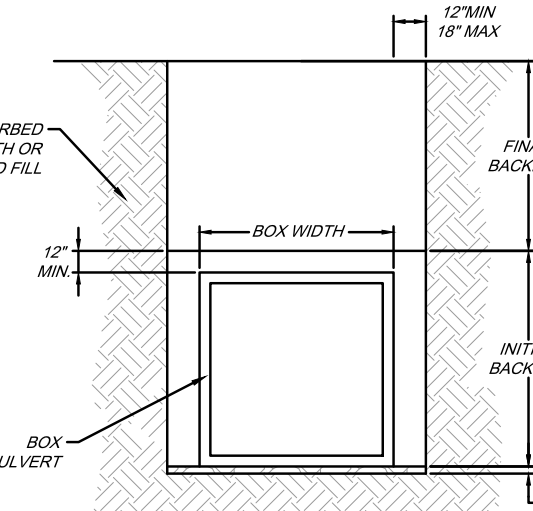


STORM MANHOLE

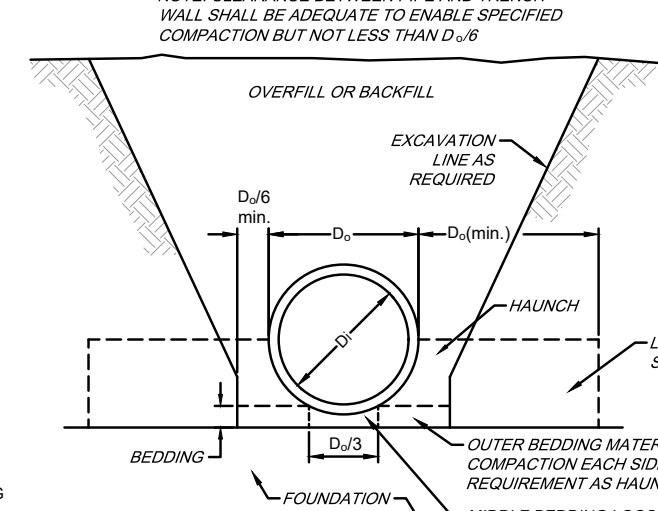
- NOTES:
1. CONCRETE SHALL BE 4,000PSI MINIMUM FOR ALL PRECAST CONCRETE STORM STRUCTURES.
 2. PRECAST CONCRETE STRUCTURES MAY ONLY BE INSTALLED TO DEPTHS CERTIFIED AS ACCEPTABLE BY THE MANUFACTURER.
 3. BRICK MAY BE USED TO ADJUST FRAME, GRATE, & HOOD TO SURFACE ELEVATION A MAXIMUM OF 12 INCHES.



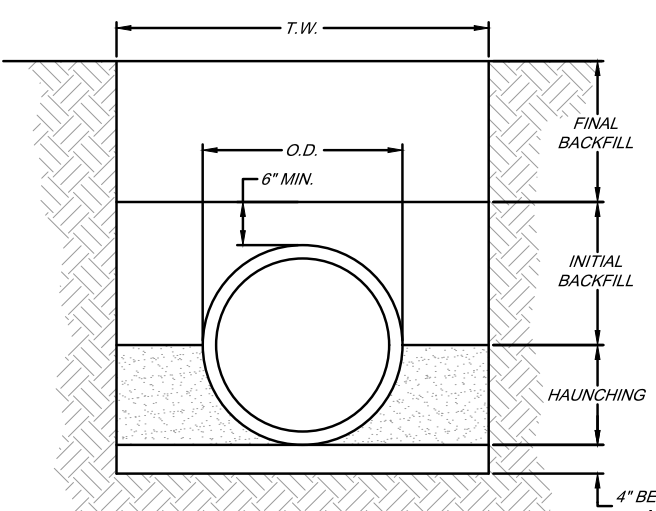
WATER & SANITARY SEWER LINES
N.T.S.



CONCRETE BOX CULVERT
N.T.S.



RIGID PIPE
N.T.S.



FLEXIBLE PIPE
N.T.S.

NOTE: MINIMUM TRENCH WIDTH (T.W.) SHALL BE THE GREATER OF (1.25 O.D. + 12") OR (O.D. + 16")

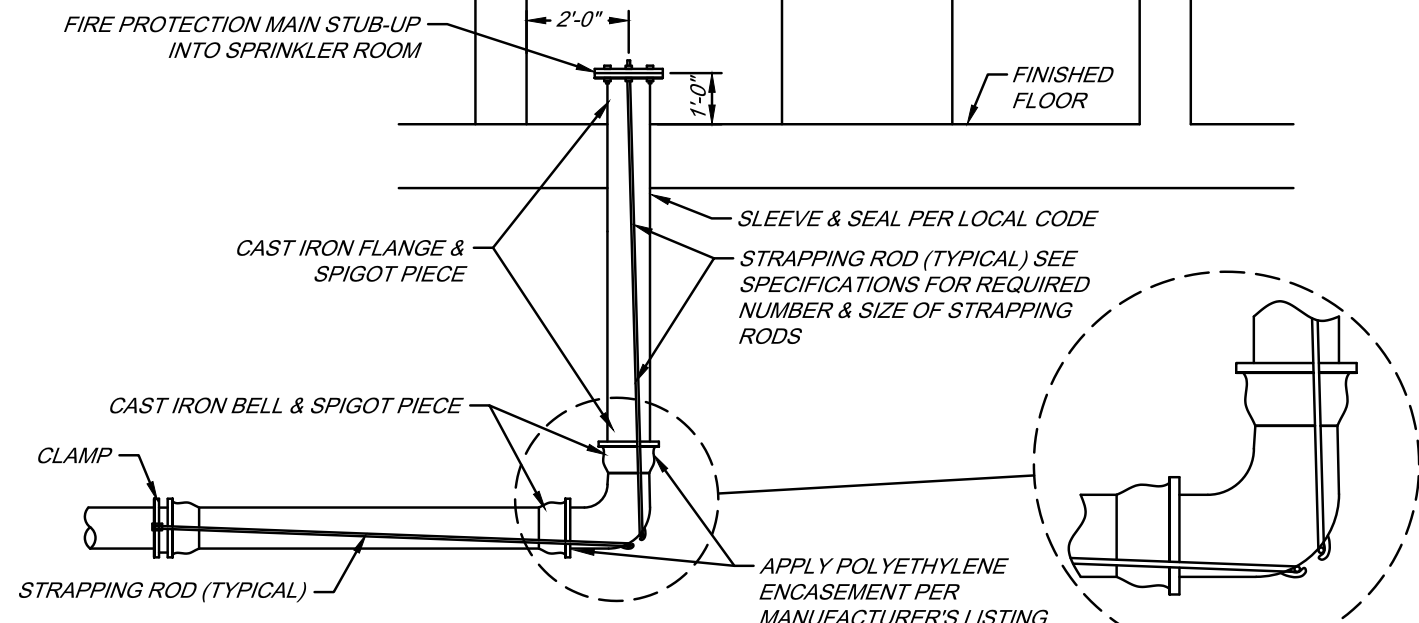
GENERAL NOTES

1. BEDDING SHALL BE DUMPED CLASS I-A WORKED BY HAND, OR CLASS I-B COMPACTED TO 95% STANDARD PROCTOR. LOCAL CODE PERMITTING WITH GEOTECHNICAL ENGINEER AND OWNER APPROVAL, NATIVE SOIL MAY BE USED FOR BEDDING PROVIDED IT MEETS THE EMBEDMENT AND BACKFILL MATERIALS IN TABLE 1 EXCLUDING CLASS IV-A.
2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A, OR CLASS I-B OR CLASS II COMPACTED TO 95% STANDARD PROCTOR. PEA GRAVEL SHALL NOT BE USED AS A HAUNCHING MATERIAL. CLASS III MATERIAL SHALL BE ALLOWED FOR RIGID PIPE COMPACTED AT 95% STANDARD PROCTOR.
3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 90% STANDARD PROCTOR, OR CLASS III COMPACTED 95% STANDARD PROCTOR, CLASS I & II MATERIAL SHALL BE USED FOR FLEXIBLE PIPE WHEN FILL HEIGHTS EXCEED 8'.
4. FINAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 90% STANDARD PROCTOR, OR CLASS III COMPACTED TO 95% STANDARD PROCTOR.
5. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS IV-A COMPACTED TO 95% STANDARD PROCTOR.
6. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321. (SEE TABLE 1)
7. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE
8. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
9. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.
10. DESIGN ENGINEER SHALL DESIGNATE ON THE PLANS WHERE WATERTIGHT JOINTS ARE TO BE REQUIRED.
11. REPLACE WET OR UNSUITABLE SOIL AS NECESSARY TO
12. WHERE GROUND WATER IS PRESENT CLASS I-A MATERIAL SHALL BE WRAPPED WITH A NON-WOVEN GEO-TEXTILE, EXCLUDING BEDDING MATERIAL BETWEEN 4" & 6" THICK.
13. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR SOIL TYPE AND CLASSIFICATIONS FOR THIS PROJECT.
14. CONTRACTOR SHALL REFER TO THE LATEST VERSION OF ASTM STANDARDS PRIOR TO CONSTRUCTION AND SHALL COMPLY WITH THESE STANDARDS DURING CONSTRUCTION.

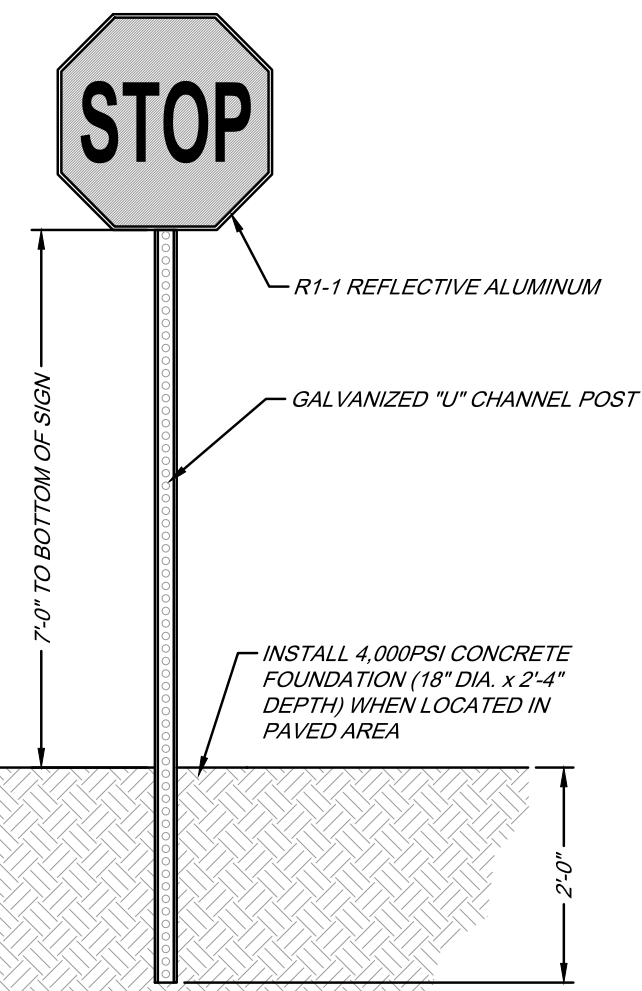
TABLE 1: CLASSES OF EMBEDMENT AND BACKFILL MATERIALS

ASTM D 2321 MATERIAL CLASS	ASTM D 2487 USCS SOIL GROUP	MATERIAL TYPE	% PASSING			ATTERBERG LIMITS	
			1 1/2 IN.	NO. 4	NO. 200	LL	PI
IA	NONE	MANUFACTURED OPEN GRADED AGGREGATES	100%	≤10%	<5%	NON PLASTIC	
IB	NONE	MANUFACTURED DENSE GRADED AGGREGATES	100%	≤50%	<5%	NON PLASTIC	
II	GW	COARSE-GRAINED SOILS, CLEAN	100%	<50% OF "COARSE FRACTION"	<5%	NON PLASTIC	
	GP						
	SW						
	SP						
III	GM	COARSE-GRAINED SOILS W/ FINES	100%	<50% OF "COARSE FRACTION"	12% TO 50%	<4 OR <"A" LINE <7 OR >"A" LINE >4 OR <"A" LINE >7 OR >"A" LINE	
	GC						
	SM						
	SC						
IV-A	ML	FINE-GRAINED SOILS	100%	100%	>50%	<4 OR <"A" LINE >7 OR >"A" LINE	
	CL						

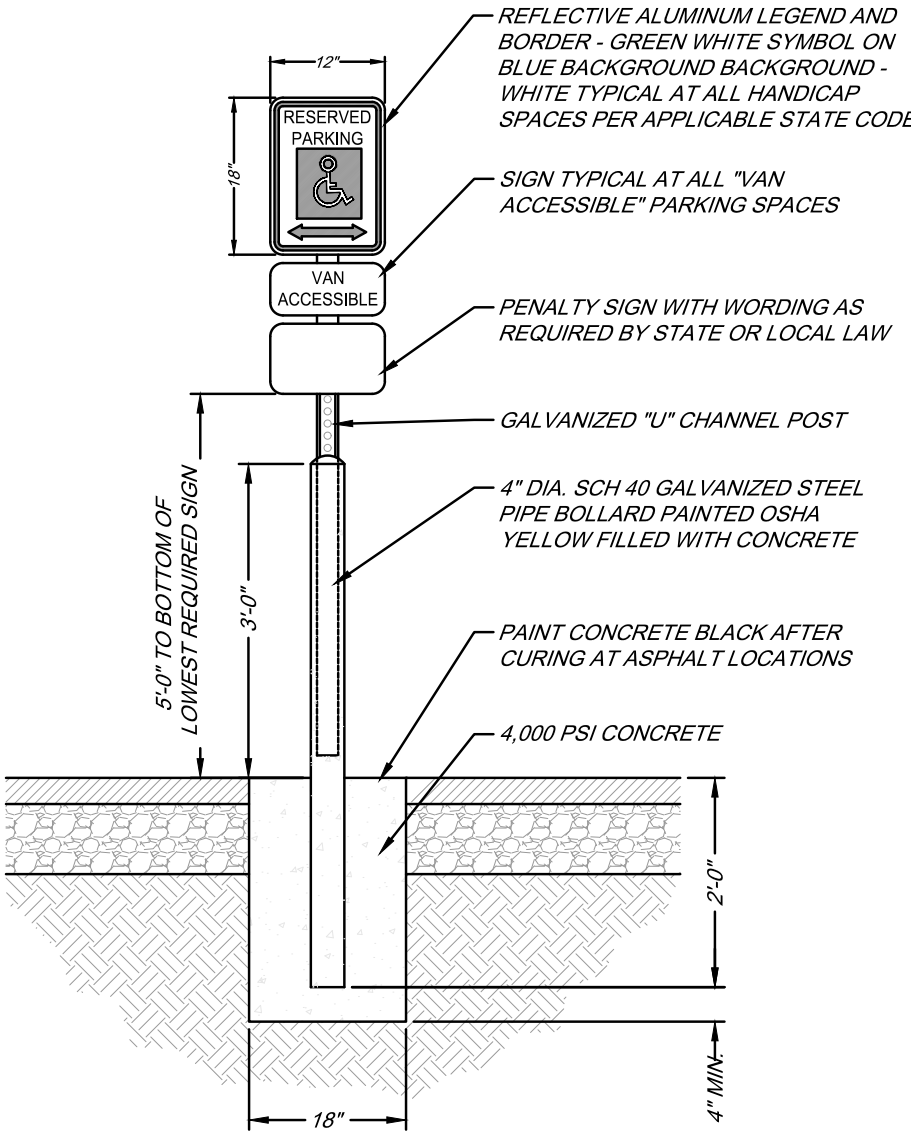
TRENCH AND BEDDING DETAILS



UNDERGROUND RESTRAINT DETAIL



STOP SIGN DETAIL



HANDICAP PARKING SIGN

REVISIONS	
DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SITE PLAN REVIEW
06/16/25	SID RE-SUBMITTAL
07/02/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
	RE-SUBMITTAL

CREECH CONSULTING, INC.
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PROFESSIONAL SURVEYORS AND MAPS AMENDED CERTIFICATE NO. 18-000000

RICHARD CREECH
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LOWE'S

SITE DEVELOPMENT DETAILS
94 WIDE
LOWE'S OF:
Westlake
WESTLAKE, FLORIDA
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA
ISSUE DATE: 2023-12-15
PERMIT SET
ISSUE DATE:
CONSTRUCTION SET
ISSUE DATE:
DRAWING NUMBER:

D3

EROSION AND SEDIMENT CONTROL NOTES

1. LAND DISTURBING ACTIVITIES SHALL NOT COMMENCE UNTIL APPROVAL TO DO SO HAS BEEN RECEIVED BY GOVERNING AUTHORITIES.
2. THE GENERAL CONTRACTOR SHALL STRICTLY ADHERE TO THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) DURING CONSTRUCTION OPERATIONS.
3. NO LAND CLEARING OR GRADING SHALL BEGIN UNTIL ALL PHASE I AND PERIMETER SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
4. ALL EXPOSED AREAS SHALL BE STABILIZED OR SEEDED IMMEDIATELY WHEN GRADING OR EXCAVATING ACTIVITIES HAVE PERMANENTLY CEASED.
5. SHOULD GRADING OR EXCAVATION CONSTRUCTION STOP FOR LONGER THAN 14 DAYS (OR SHORTER DURATION IF REQUIRED BY GOVERNING NPDES PERMIT), THE SITE SHALL BE SEEDED AS SPECIFIED.
6. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF 0.5 INCHES RAINFALL OR GREATER DURING A 24-HOUR PERIOD OR MORE FREQUENTLY IF REQUIRED BY GOVERNING NPDES GENERAL PERMIT. ALL MAINTENANCE REQUIRED BY INSPECTION SHALL COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 48 HOURS OF REPORT.
7. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE. IT SHALL BE THE GENERAL CONTRACTOR'S RESPONSIBILITY TO TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SEDIMENT FROM LEAVING THE SITE.
8. GENERAL CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
9. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AS DEEMED NECESSARY BY SITE INSPECTIONS.
10. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
11. COMPACT & MAINTAIN 24" WIDE DRIVE FROM ACCESS ROAD TO 30,000 S.F. LAY DOWN AREA AND 24" WIDE DRIVE FROM LAY DOWN AREA TO BUILDING PAD. DRIVE AND LAY DOWN AREA TO BE CONSTRUCTED OF 6" COMPACTED STONE. COORDINATE LOCATION OF LAY DOWN AREA WITH LOWE'S PROJECT MANAGER.
12. GENERAL CONTRACTOR SHALL TAKE WHATEVER MEANS NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.
13. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASIN AND SEDIMENT FENCE WHEN IT IS 25% FULL.
14. ALL WORK SHALL BE DONE IN STRICT ACCORDANCE WITH DIVISION 2 OF LOWE'S STANDARD SITE SPECIFICATIONS.

SEEDING SPECIFICATION

GENERAL
SEEDING CAN BE USED FOR TEMPORARY OR PERMANENT STABILIZATION. DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS (OR LESS DURATION IF REQUIRED BY THE STATE NPDES PERMIT) SHALL BE TEMPORARILY SEEDED AND WATERED. AREAS WHERE FINAL GRADING HAS BEEN COMPLETED SHALL RECEIVE PERMANENT STABILIZATION IMMEDIATELY. TEMPORARY SEED MIXTURES ARE SPECIFIED BELOW. PERMANENT SEED MIXTURES SHALL BE SEEDED DURING SEASON SPECIFIED.

SEEDING MIXTURES
(APPROPRIATE SEED MIXTURE SHALL BE SELECTED BY THE SITE DESIGN CONSULTANT. IF POSSIBLE CONSULT WITH LANDSCAPE ARCHITECT OR LOCAL NATURAL RESOURCE CONSERVATION SERVICE (NRCS) CONSERVATIONIST OR COUNTY EXTENSION AGENT FOR ASSISTANCE)

3:1 SLOPES OR FLATTER
APPLY AGRICULTURAL LIME AT A RATE OF _____ PER ACRE. APPLY _____ COMMERCIAL ORGANIC FERTILIZER AT A RATE OF _____ PER ACRE. SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDING PLANTING DATES MONTH/DAY TO MONTH/DAY	SEED VARIETY X	APPLICATION RATE LBS/1,000 SF
MONTH/DAY TO MONTH/DAY	X	LBS/1,000 SF

PERMANENT SEEDING PLANTING DATES MONTH/DAY TO MONTH/DAY	SEED VARIETY X	APPLICATION RATE LBS/1,000 SF
MONTH/DAY TO MONTH/DAY	X	LBS/1,000 SF

MULCH SEEDED AREA WITH 2 TONS PER ACRE (ONE TON PER ACRE IF LOCAL ANNUAL RAINFALL IS LESS THAN 10") CLEAN GRASS STRAW. ANCHOR STRAW WITH HYDRAULIC WOOD FIBER MULCH AT THE RATE OF 1000 LBS PER ACRE. OR 150-200 POUNDS OF ORGANIC MULCH TACKIFIER PER ACRE. OR USE NETTING. OR USE A MULCH ANCHORING TOOL.

SLOPES STEEPER THAN 3:1
APPLY AGRICULTURAL LIME AT A RATE OF _____ PER ACRE. APPLY _____ COMMERCIAL ORGANIC FERTILIZER AT A RATE OF _____ PER ACRE. AND SEED IN ACCORDANCE WITH THE FOLLOWING SCHEDULE:

TEMPORARY SEEDING PLANTING DATES MONTH/DAY TO MONTH/DAY	SEED VARIETY X	APPLICATION RATE LBS/1,000 SF
MONTH/DAY TO MONTH/DAY	X	LBS/1,000 SF

PERMANENT SEEDING PLANTING DATES MONTH/DAY TO MONTH/DAY	SEED VARIETY X	APPLICATION RATE LBS/1,000 SF
MONTH/DAY TO MONTH/DAY	X	LBS/1,000 SF

MULCH SEEDED AREA WITH 2 TONS PER ACRE (ONE TON PER ACRE IF LOCAL ANNUAL RAINFALL IS LESS THAN 10") CLEAN GRASS STRAW. ANCHOR STRAW WITH HYDRAULIC WOOD FIBER MULCH AT THE RATE OF 1000 LBS PER ACRE. OR 150-200 POUNDS OF ORGANIC MULCH TACKIFIER PER ACRE. OR USE NETTING. (OR TACKIFIER NOT PERMITTED)

SEED BED PREPARATION (PERMANENT SEEDING)

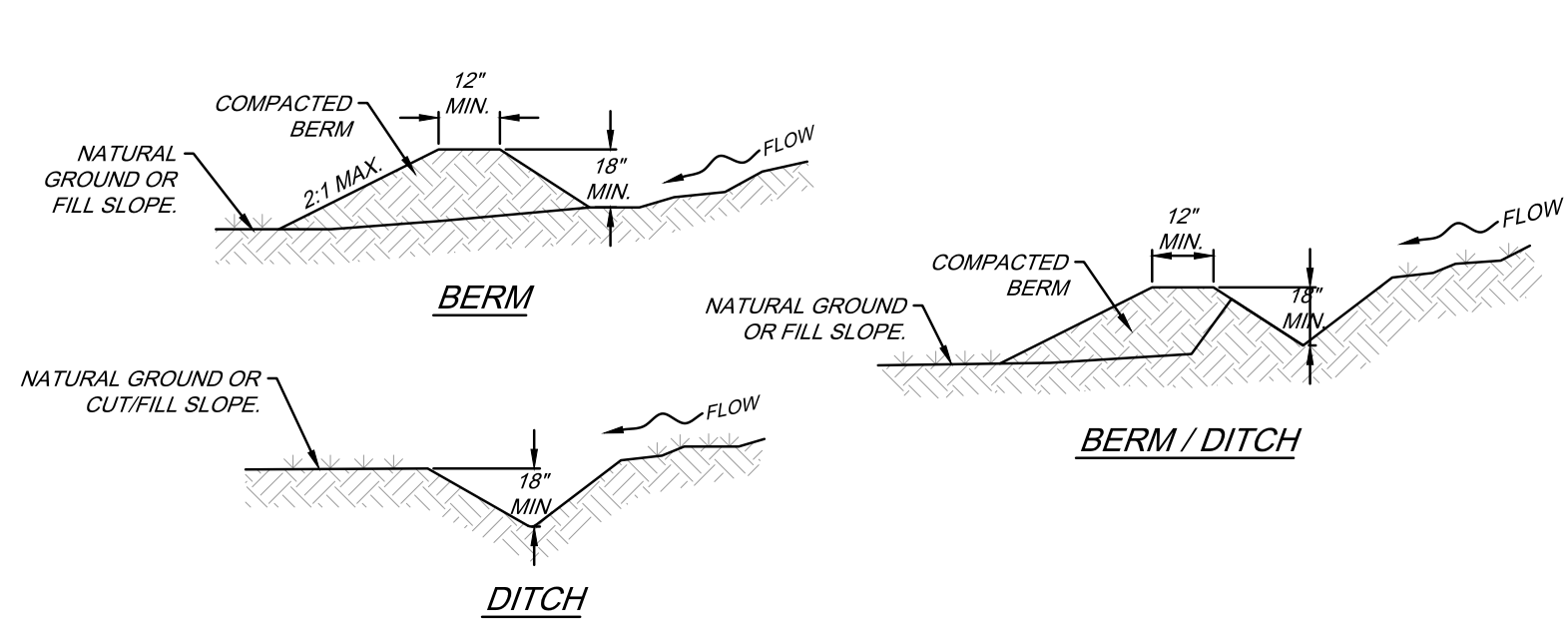
SURFACE WATER CONTROL MEASURES SHALL BE IN PLACE. AREA TO BE SEEDED SHALL BE RIPPED AND SPREAD WITH AVAILABLE TOPSOIL. TOTAL SEEDBED PREPARED DEPTH SHOULD BE AT LEAST 6 INCHES. LOOSE ROCKS, ROOTS AND OTHER OBSTRUCTIONS SHALL TO BE REMOVED FROM THE SURFACE TO NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION. SURFACE FOR FINAL SEEDBED PREPARATION SHOULD BE AT FINISH GRADE AND BE REASONABLY SMOOTH AND UNIFORM.

IF NO SOIL TEST IS TAKEN, FERTILIZER AND LIME SHOULD BE ACCORDING TO SEEDING SPECIFICATIONS. IF SOIL TEST IS TAKEN, APPLY FERTILIZER AND LIME ACCORDING TO SOIL TEST REPORT. FERTILIZER AND LIME SHALL BE APPLIED UNIFORMLY AND MIXED WITH THE SOIL DURING SEEDBED PREPARATION. WEIGHTS, SEED SPECIES AND RATE AS A PERCENTAGE OF PLUITY AND GERMINATION MUST BE CHECKED PRIOR TO SEEDING.

SEEDING SHALL BE ACCOMPLISHED IN TWO DIRECTIONS AND AT RIGHT ANGLES TO EACH OTHER. LAWN AREAS SHALL BE SEEDED AT THE RATE INDICATED ON THE DRAWINGS BY SOWING EVENLY WITH AN APPROVED MECHANICAL CULT-PACKER SEEDER TO COVER THE SEED AND FORM THE SEEDBED IN ONE OPERATION. IF BROADCAST SEEDER IS USED THE SEEDING RATE SHALL BE TWO (2) TIMES THE DRILL RATE. IN INACCESSIBLE AREAS, THE SEED SHALL BE LIGHTLY RAKED WITH FLEXIBLE RAKES AND ROLLED WITH A WATER BALLAST ROLLER. AFTER ROLLING SEEDED AREAS ARE TO BE MULCHED ACCORDING TO SPECIFICATION. IF HYDROSEED OPERATION IS USED, SEEDING RATE SHALL BE FIVE (5) TIMES THE DRILL RATE INDICATED ON THE DRAWINGS.

IF SEEDING CAN NOT BE ACCOMPLISHED DUE TO SEASONAL CONSTRAINTS, APPLY STRAW MULCH AND TACKIFIER TO ALL SLOPES AND DISTURBED AREAS UNTIL PERMANENT SEEDING IS ALLOWED. IN THE EVENT SEEDING OCCURS OUT OF SEASON, MAINTENANCE SHALL OCCUR AND CONTINUE INTO THE FOLLOWING GROWING SEASON OR UNTIL A UNIFORM STAND OF THE SPECIFIED PERMANENT GRASSES HAVE BEEN ESTABLISHED AND THE SITE HAS REACHED 85% STABILIZATION. PERMANENT AND TEMPORARY SEEDING SHALL BE ACCOMPLISHED THROUGHOUT THE CONSTRUCTION PROCESS.

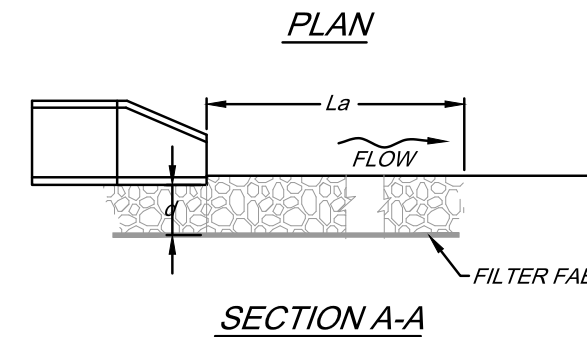
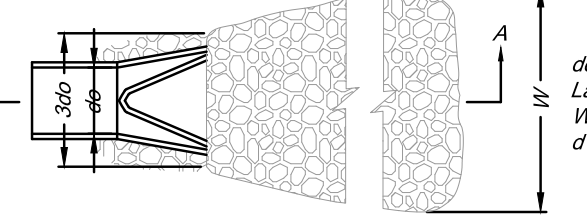
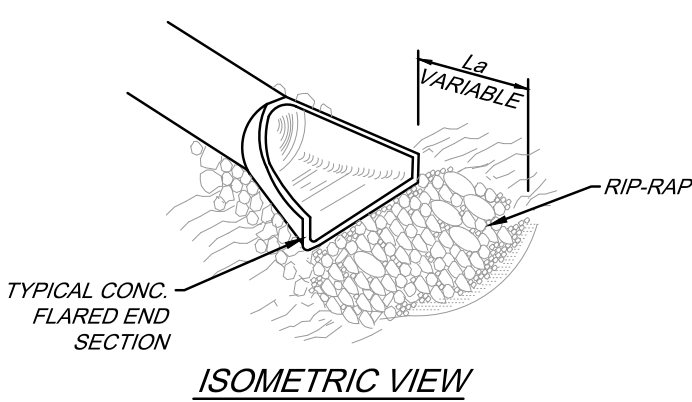
INSPECTION
INSPECT SEEDED AREAS FREQUENTLY. IF SEEDED AREAS FAIL TO GERMINATE, OR TO PROVIDE ADEQUATE GROUND COVERAGE, THE AREA SHALL BE RE-SEEDED UNTIL FINAL STABILIZATION IS ACHIEVED. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSPECTED AT MINIMUM EVERY SEVEN (7) CALENDAR DAYS AND WITHIN 24 HOURS OF A RAINFALL EVENT OF 5 INCHES AND GREATER OR RAIN DURING A 24-HOUR PERIOD (OR MORE FREQUENTLY IF REQUIRED BY THE STATE NPDES GENERAL PERMIT) THROUGHOUT CONSTRUCTION UNTIL FINAL STABILIZATION IS ACHIEVED OR MORE FREQUENTLY IF REQUIRED BY STATE NPDES GENERAL PERMIT.



NOTES:

- POSITIVE GRADE MUST BE PROVIDED TO ASSURE DRAINAGE 2:1 MAX. SIDE SLOPE. IF SLOPE EXCEEDS 2% OR CHANNEL IS CONSTRUCTED IN FILL, PROVIDE CHANNEL LINER PER DETAIL. (C.S. TRY NOT TO EXCEED 5% (HIGH RUNOFF VELOCITIES RESULT). MAXIMUM DRAINAGE AREA IS 5.00 ACRES WITHOUT SUPPORTING CALCULATIONS FOR PERMANENT CHANNEL. DIVERSIONS AT THE TOPS OF SLOPES MUST BE EMPTY INTO AN APPROVED SLOPE DRAIN (SEE DETAIL 3). THE BERM DITCH IS THE MOST COMMONLY USED DIVERSION.
- MACHINE COMPACTING OF ALL FILL IS REQUIRED.
- DIVERSIONS SUFFICIENT TO DIRECT ALL SEDIMENT-LADEN STORMWATER INTO SEDIMENT CONTROL DEVICE MUST BE INSTALLED PRIOR TO CLEARING AND GRUBBING OF AREA (OR IN CONJUNCTION WITH THIS OPERATION IF SEDIMENT CONTROLS AND DIVERSIONS ARE INSTALLED AT EACH CRITICAL POINT AS INDICATED).
- DIVERSIONS SHOULD BE LOCATED AS SHOWN ON THE PLANS AND TO MINIMIZE DAMAGES BY CONSTRUCTION OPERATIONS.
- DIVERSIONS SHOULD BE SEEDED AND LINED WITH STRAW MAT IF THEY ARE TO REMAIN IN PLACE OVER 14 DAYS.
- CHECK DIVERSIONS AFTER EACH RAIN, AND ONCE PER SEVEN CALENDAR DAYS OR MORE FREQUENTLY IF REQUIRED BY REGULATORY AGENCY. REPAIR AS NEEDED TO MAINTAIN FUNCTION.

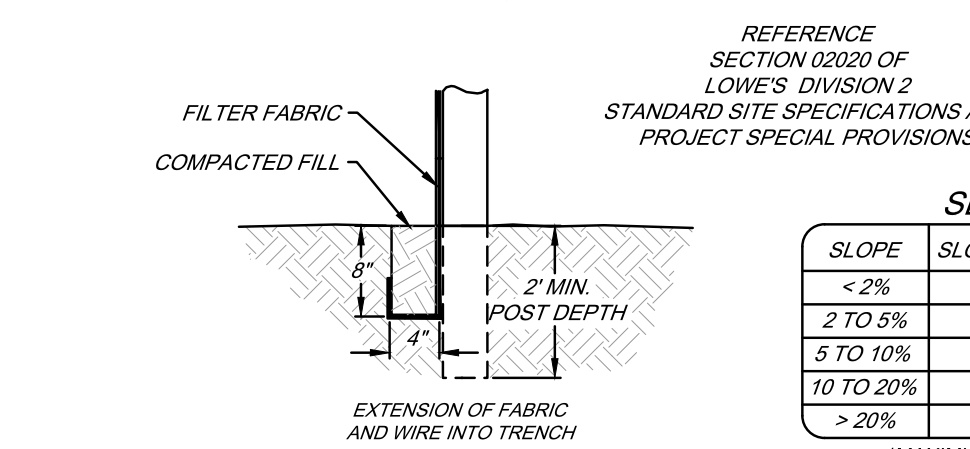
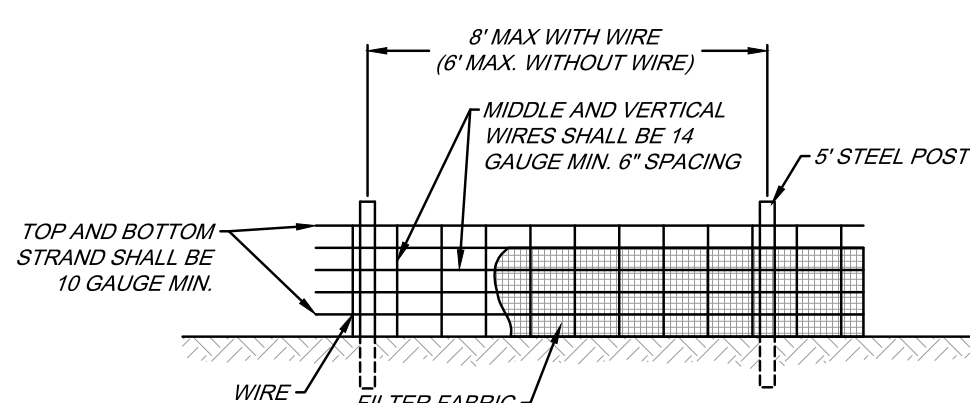
TEMPORARY DIVERSION BERM/DITCH



NOTES:

- SEE APPROPRIATE PLAN OR SCHEDULE FOR DIMENSIONS
- Lb IS THE LENGTH OF THE RIP RAP APRON.
- d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
- A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP-RAP AND SOIL FOUNDATION.

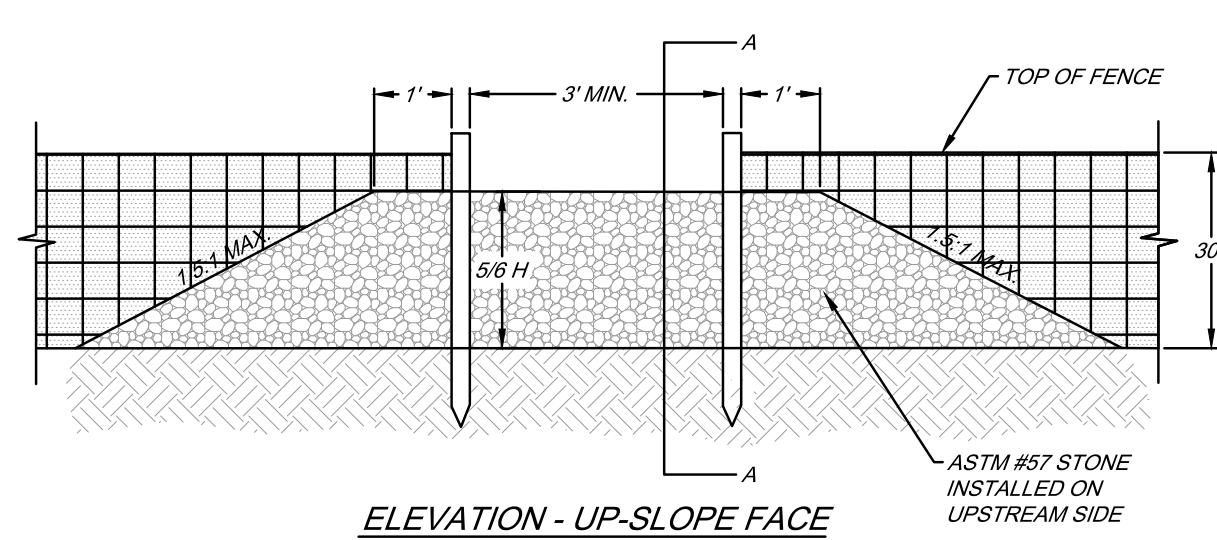
RIP RAP APRON - OUTLET CHANNEL



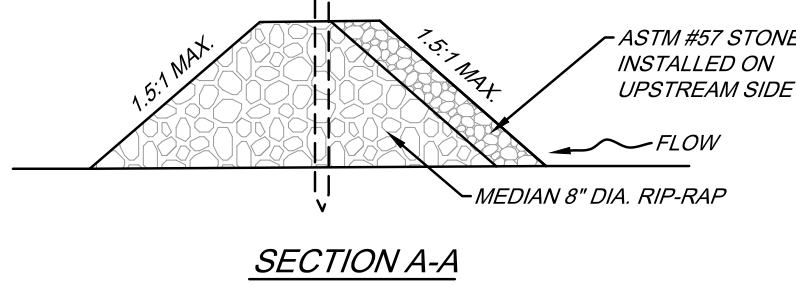
NOTES:

- W/M MINIMUM 32" WIDTH WITH A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
- FILTER FABRIC SHALL BE 36" WIDE AND SHALL BE FASTENED ADEQUATELY TO THE WIRE.
- STEEL POST SHALL BE 5'-0" IN LENGTH AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
- SUPPORT POSTS SHALL BE INSTALLED ON THE DOWNHILL SIDE OF THE SEDIMENT FENCE (DOWNSTREAM FROM EXPECTED FLOWS)
- ACCUMULATED SEDIMENT SHALL REMOVED WHEN 25% THE HEIGHT OF FENCE.
- MAXIMUM DRAINAGE AREA 10,000 SF PER 100' OF FENCE.
- MAXIMUM LENGTH UPSLOPE FROM FENCE PER CHART

SEDIMENT FENCE DETAIL



ELEVATION - UP-SLOPE FACE

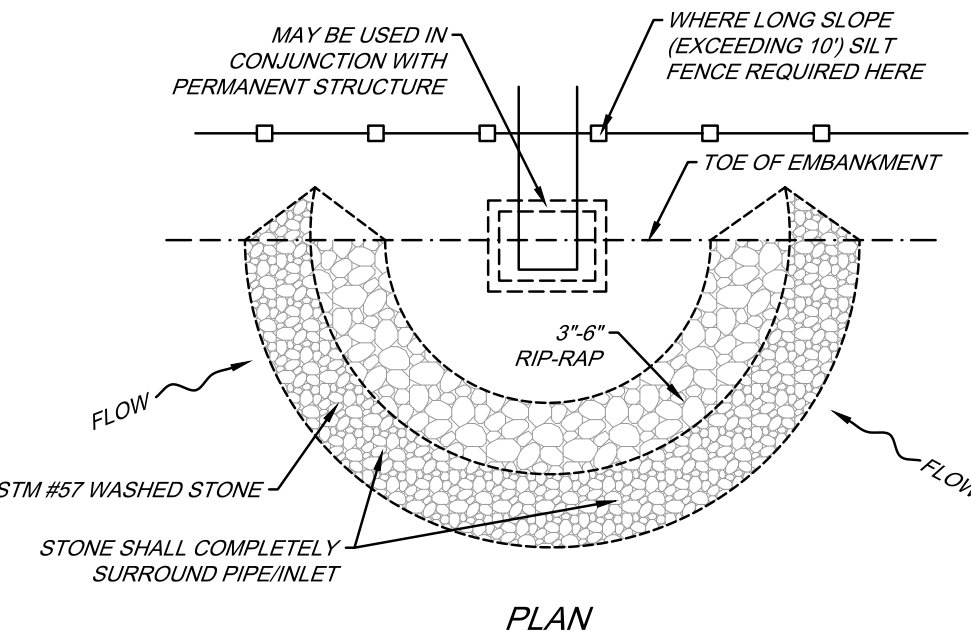


SECTION A-A

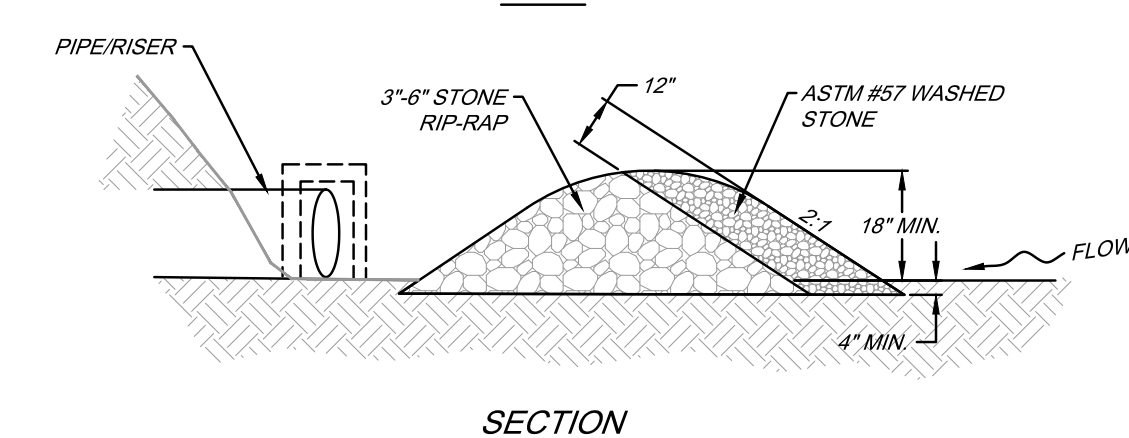
NOTES:

- SEDIMENT TO BE REMOVED WHEN ACCUMULATIONS REACH 25% CAPACITY.
- WASHED STONE TO BE REMOVED AND REPLACED ONCE IT BECOMES CLOGGED WITH SEDIMENT.

ROCK OUTLET DETAIL

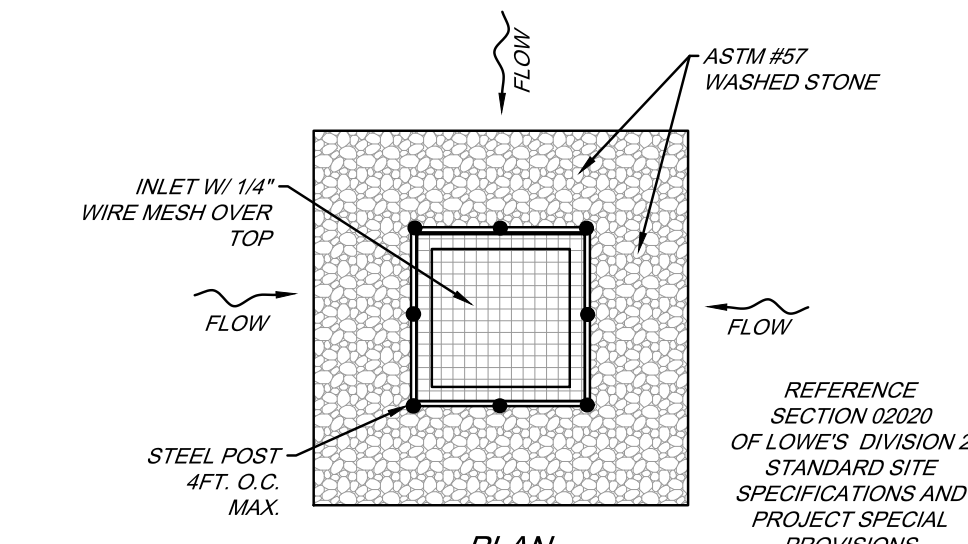


PLAN

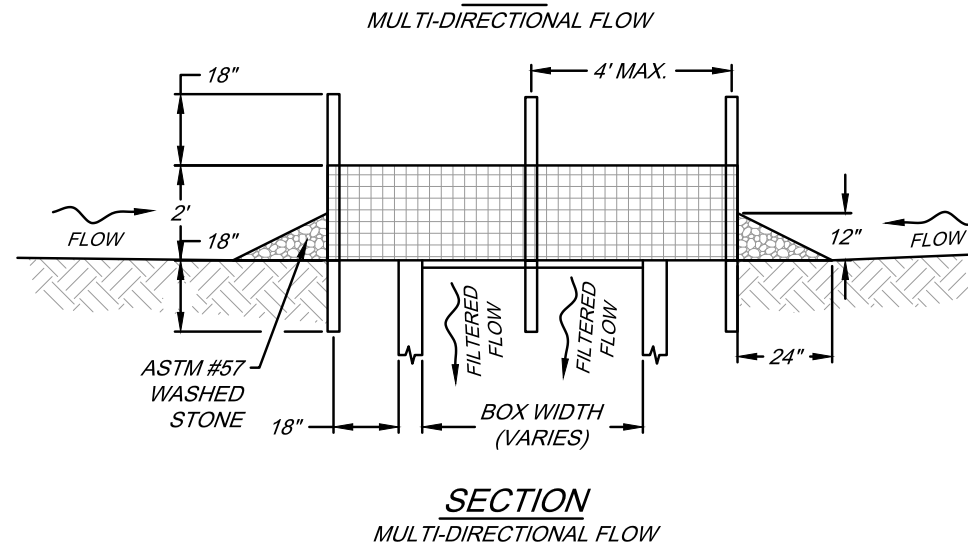


SECTION

PIPE / RISER INLET PROTECTION



PLAN

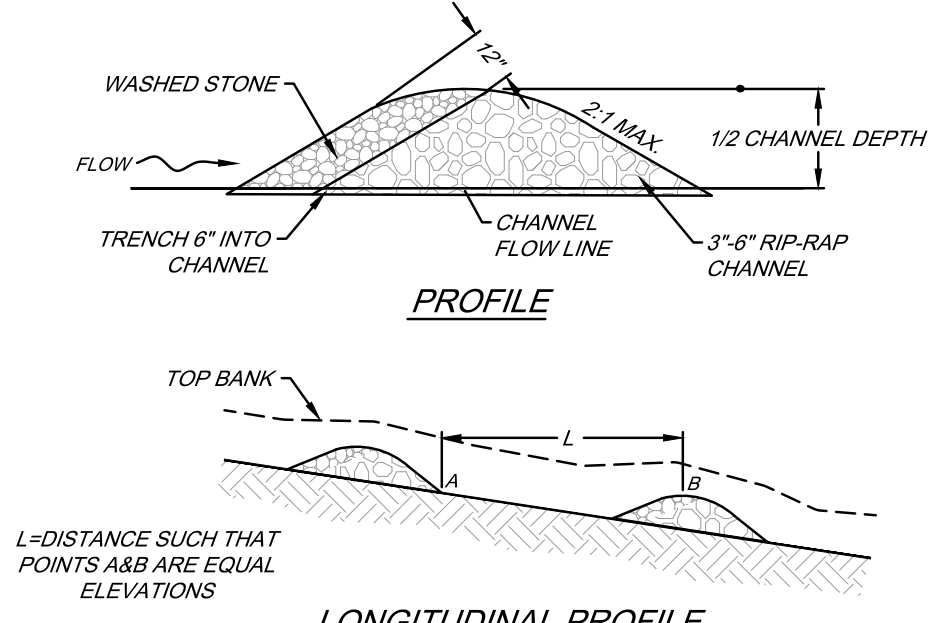


SECTION

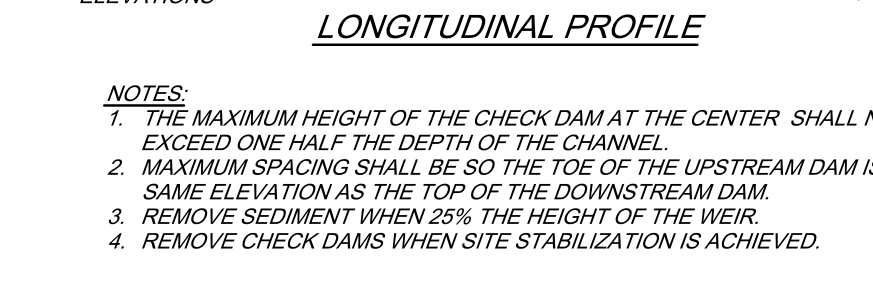
NOTES:

- SEDIMENT CONTROL STONE SHALL BE 3/4" WASHED STONE.
- WIRE MESH SHALL BE HARDWARE CLOTH 23 GAUGE MIN. AND SHALL HAVE 1/4 INCH MESH.
- TOP OF WIRE MESH SHALL BE A MINIMUM OF ONE FOOT BELOW THE SHOULDER OR ANY DIVERSION POINT.
- STEEL POST SHALL BE 5'-0" IN LENGTH, BE INSTALLED 1.5 FT. DEEP MINIMUM, AND BE OF THE SELF-FASTENER ANGLE STEEL TYPE.
- WOOD POST SHALL BE 5 FT. IN HEIGHT, BE INSTALLED TO 1.5 FT. DEEP MINIMUM, AND BE 3 INCHES IN DIAMETER.
- POST SPACING SHALL BE A MAXIMUM OF 4 FT.

HARDWARE CLOTH INLET PROTECTION



PROFILE

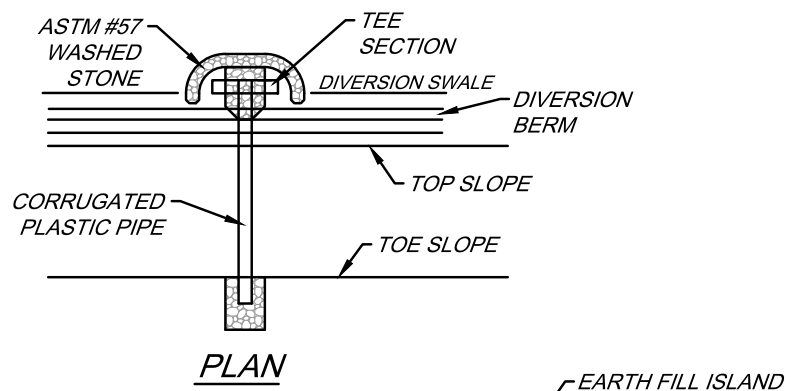


LONGITUDINAL PROFILE

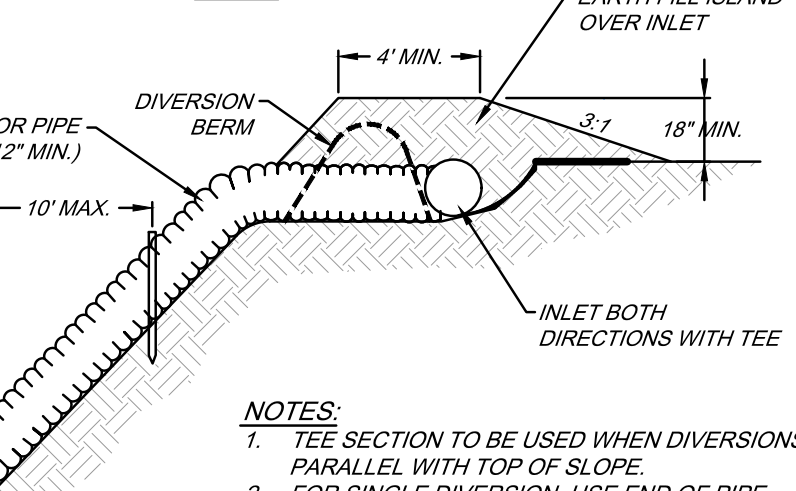
NOTES:

- THE MAXIMUM HEIGHT OF THE CHECK DAM AT THE CENTER SHALL NOT EXCEED ONE HALF THE DEPTH OF THE CHANNEL.
- MAXIMUM SPACING SHALL BE SO THE TOE OF THE UPSTREAM DAM IS THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM DAM.
- REMOVE SEDIMENT WHEN 20% THE HEIGHT OF THE WEIR.
- REMOVE CHECK DAMS WHEN SITE STABILIZATION IS ACHIEVED.

ROCK CHECK DAM DETAIL



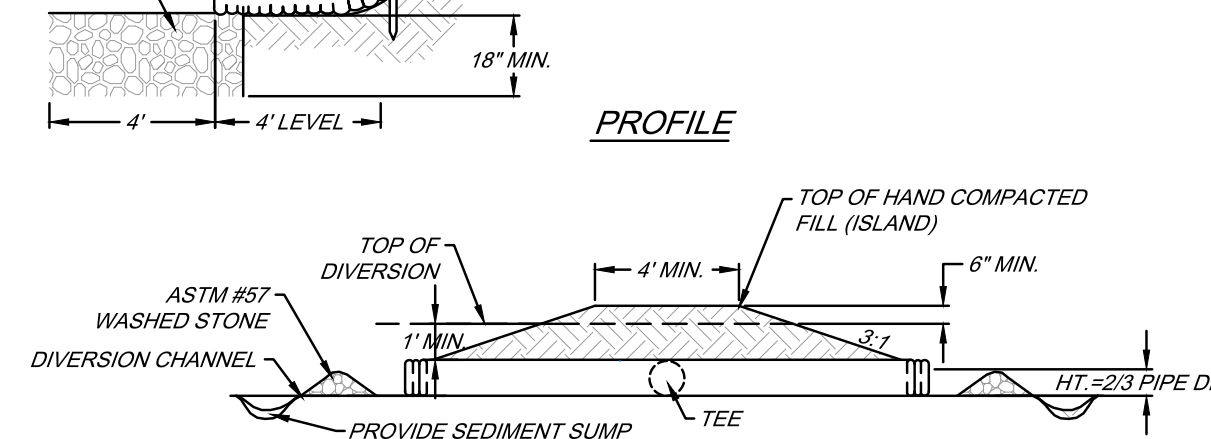
PLAN



PROFILE

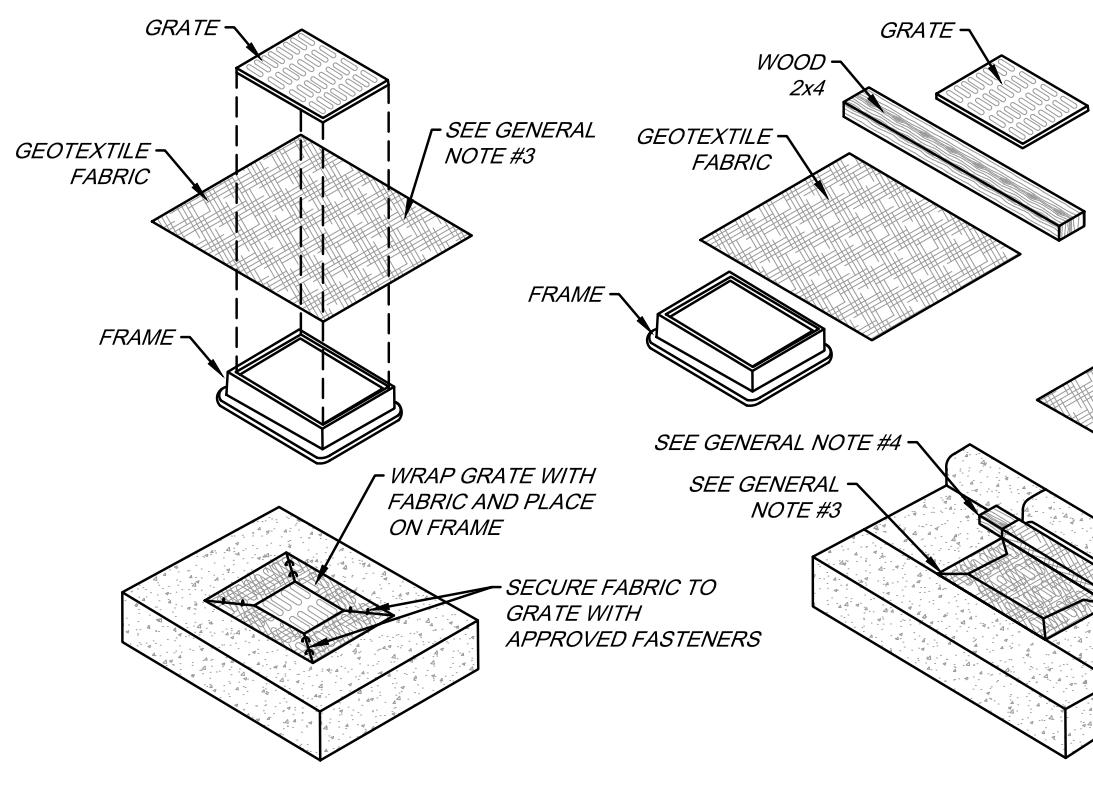
NOTES:

- TEE SECTION TO BE USED WHEN DIVERSIONS RUN PARALLEL WITH TOP OF SLOPE.
- FOR SINGLE DIVERSION, USE END OF PIPE.



TEE PROFILE

TEMPORARY SLOPE DRAIN



YARD INLET PROTECTION

CAN BE INSTALLED AT ANY INLET WITHOUT HOOD

CURB INLET PROTECTION

GENERAL NOTES:

- GEOTEXTILE TO BE MIRAFI FILTERWEAVE 402 OR GEOTEX 111F. ALTERNATIVES INCLUDE APPROVED EQUAL ASTM D4491 OR 100 TO 150 GALLON PER MINUTE PER SQUARE FOOT.
- WHEN REMOVING OR MAINTAINING INLET PROTECTION, CARE SHALL BE TAKEN SO THAT THE SEDIMENT TRAPPED ON THE GEOTEXTILE FABRIC DOES NOT FALL INTO THE INLET. ANY MATERIAL FALLING INTO THE INLET SHALL BE REMOVED IMMEDIATELY.
- FINISHED SIZE, INCLUDING FLAP POCKETS WHERE REQUIRED, SHALL EXTEND A MINIMUM OF 10" AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- FOR CURB INLET PROTECTION AN ADDITIONAL 18" OF FABRIC IS WRAPPED AROUND THE WOOD AND SECURED WITH STAPLES. THE WOOD SHALL NOT BLOCK THE ENTIRE HEIGHT OF THE CURB BOX OPENING.
- TRIM EXCESS FABRIC IN THE FLOW LINE TO WITHIN 3" OF THE GRATE.
- THE CONTRACTOR SHALL DEMONSTRATE A METHOD OF MAINTENANCE, USING A SEWN FLAP, HAND HOLDS, OR OTHER METHOD TO PREVENT ACCUMULATED SEDIMENT FROM ENTERING THE INLET.

GEOTEXTILE FABRIC INLET PROTECTION

DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SUBMITTAL
06/16/25	SID RE-SUBMITTAL
07/01/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
	RE-SUBMITTAL

LOWE'S
CONSULTING, INC.
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DESIGN
PO BOX 3271, STUART, FLORIDA 34994 (772) 465-2140

BOARD OF PROFESSIONAL ENGINEERS: CERTIFICATE OF AUTHORITY NO. 1599
PROFESSIONAL ENGINEERS AND SURVEYORS AND PROFESSIONAL LAND SURVEYORS

RICHARD CREECH
FL P.E. NO. 38592

LOWE'S HOME CENTERS, LLC
1000 LOWE'S BOULEVARD
MOORESVILLE, NC 28117
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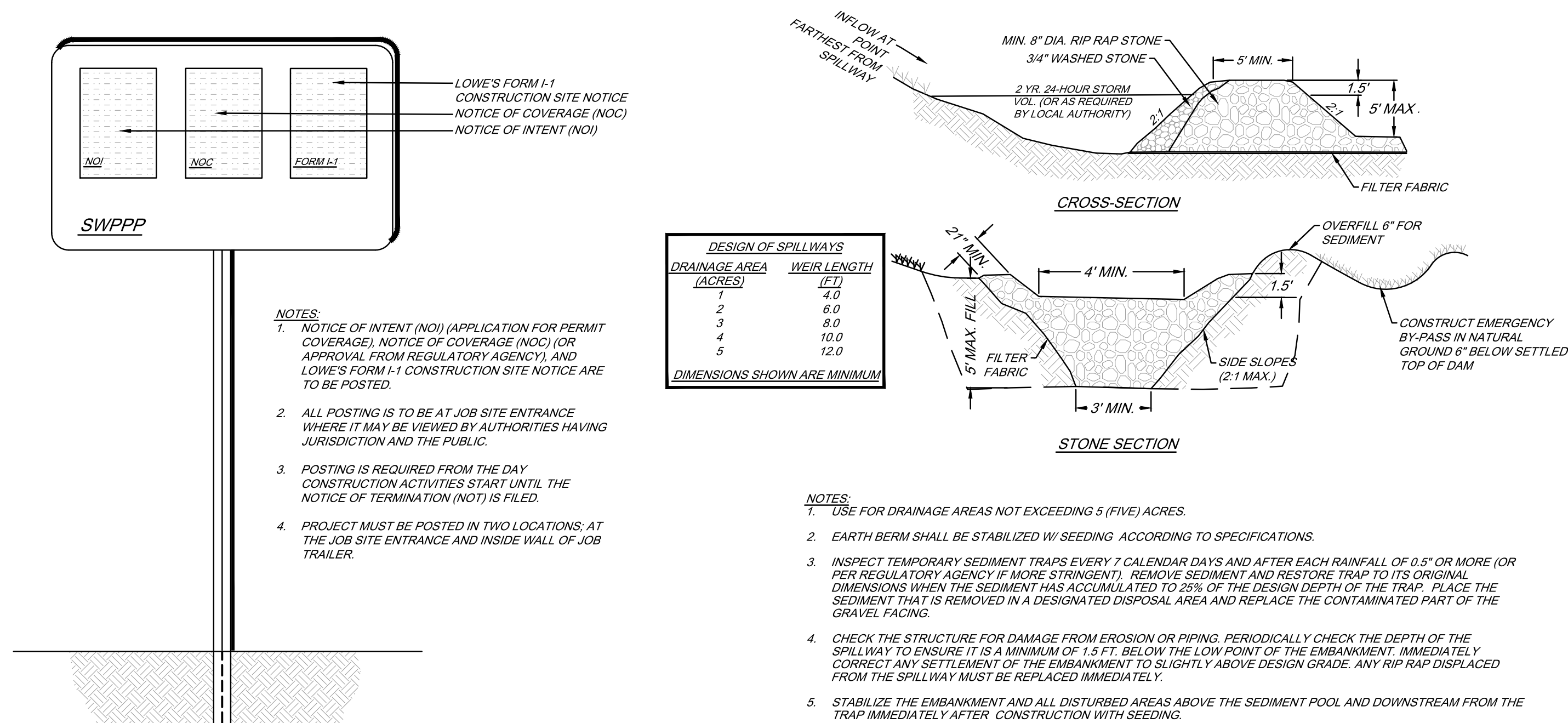
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LOWE'S

SEDIMENT EROSION CONTROL DETAILS AND NOTES
94 WIDE
LOWE'S OF:
Westlake
WESTLAKE, FLORIDA
PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

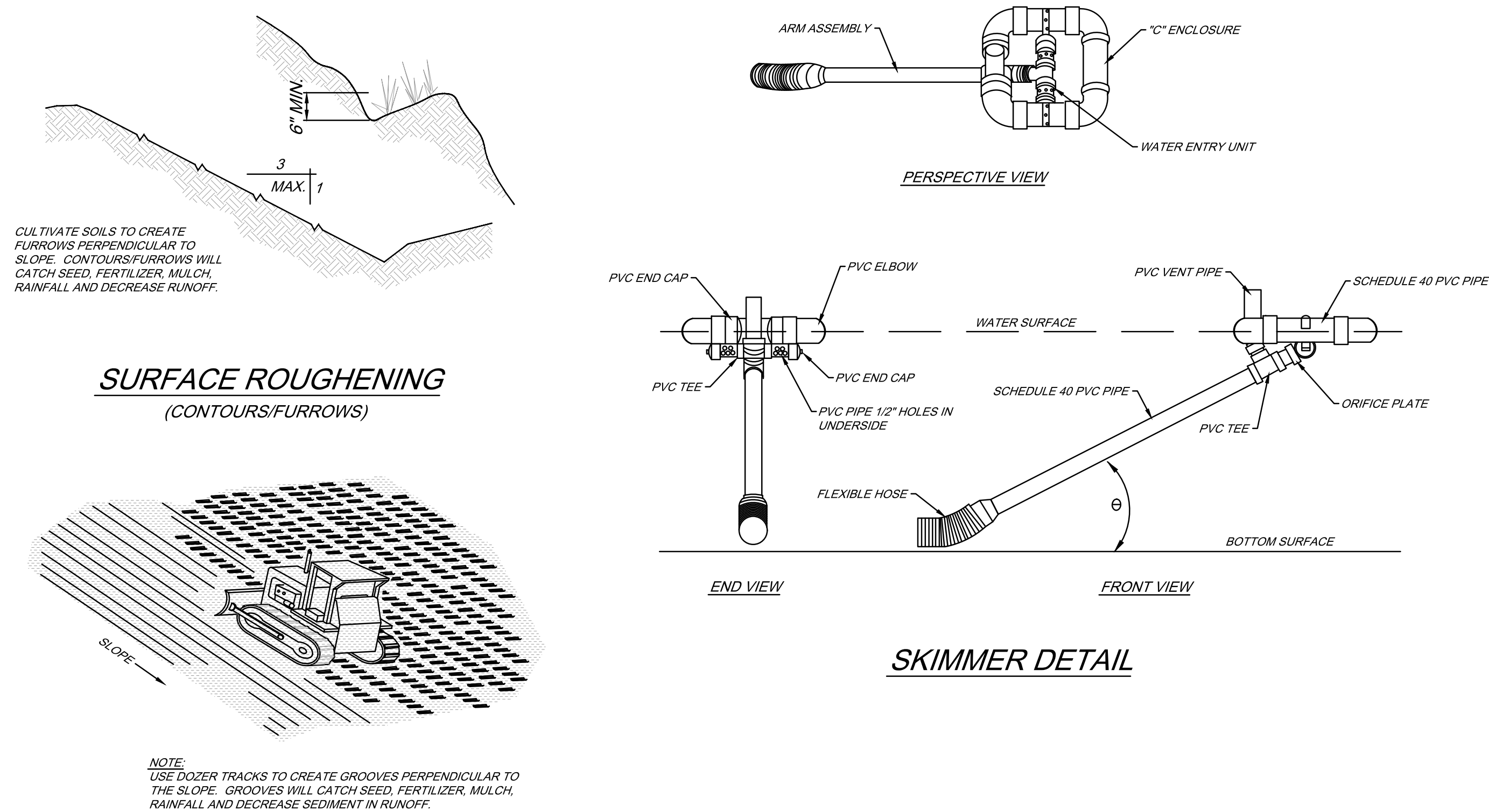
CRITERIA	2023-12-15
PERMIT SET	
ISSUE DATE	
CONSTRUCTION SET	
ISSUE DATE	
DRAWING NUMBER:	

D4



GRAVEL & RIP RAP SEDIMENT TRAP

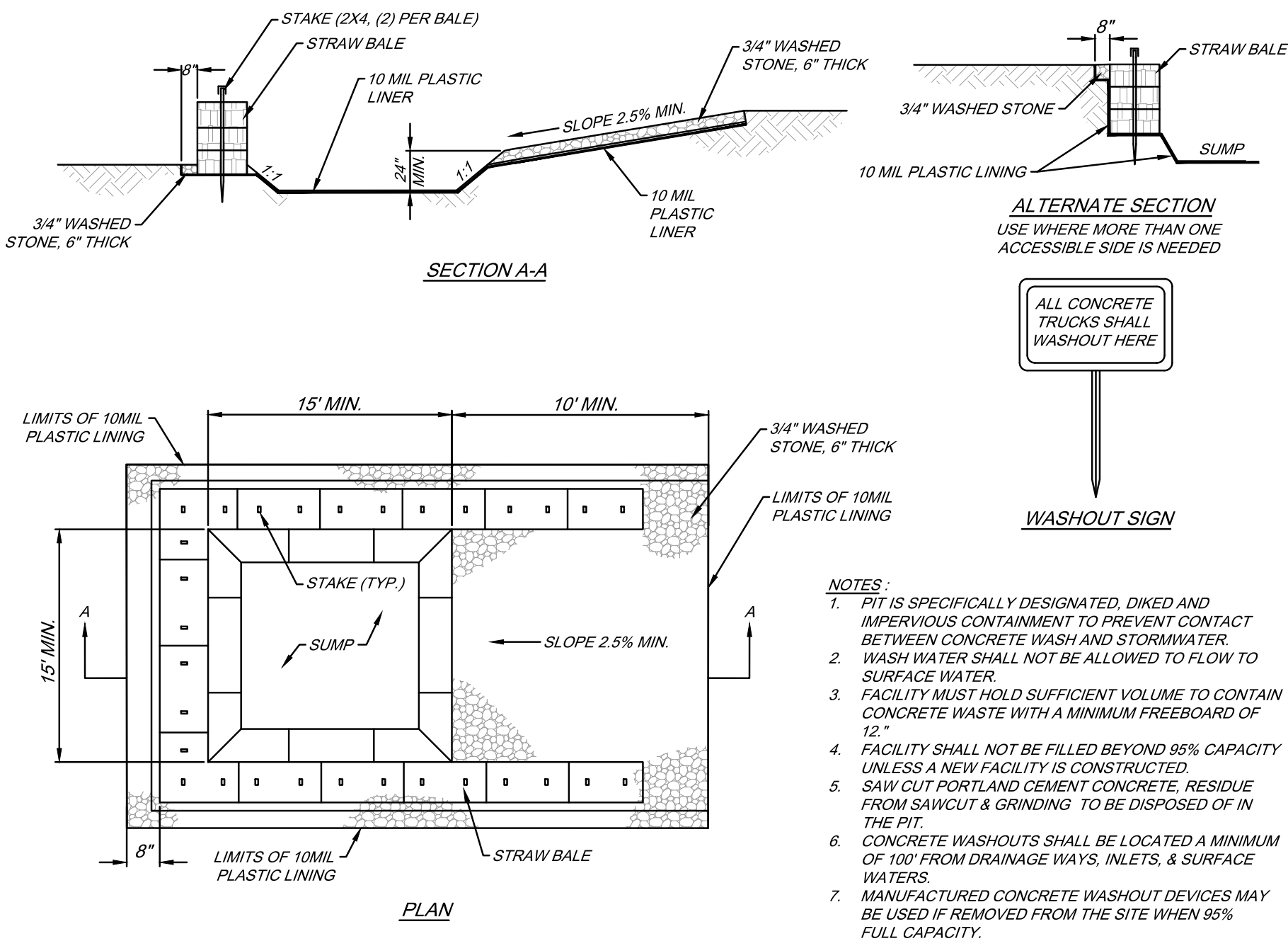
JOB SITE PERMIT POSTING DETAIL



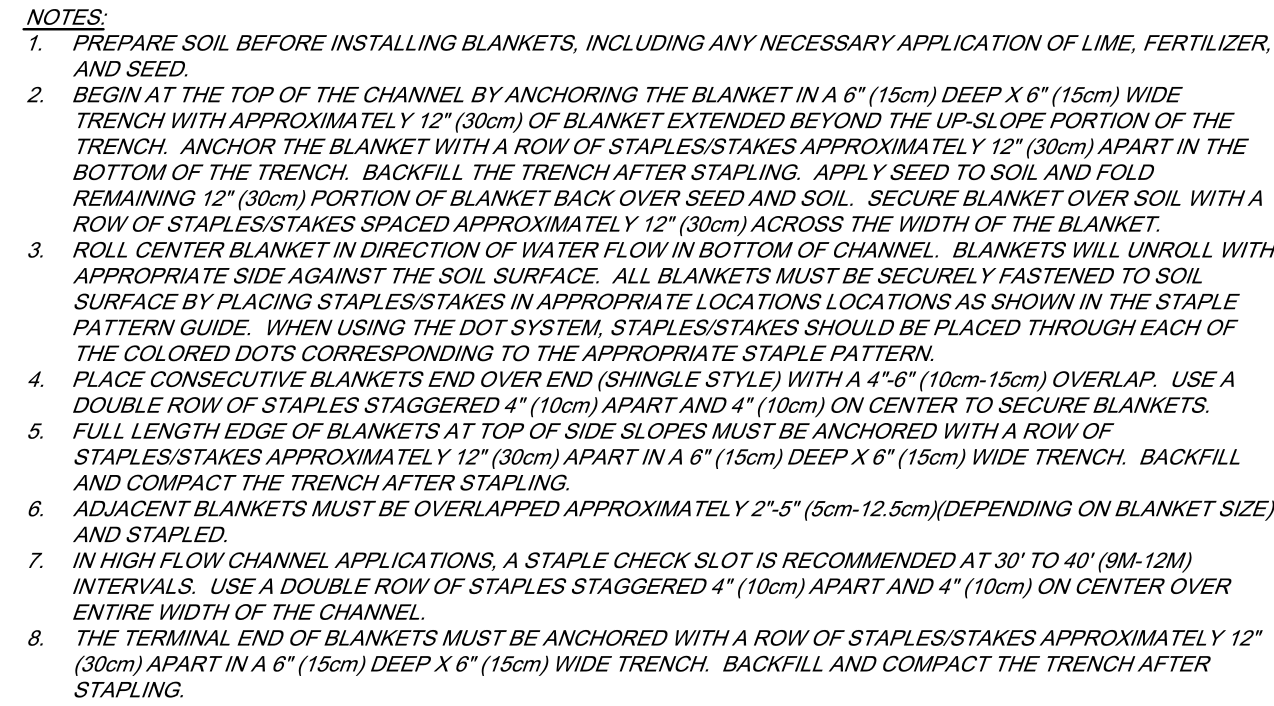
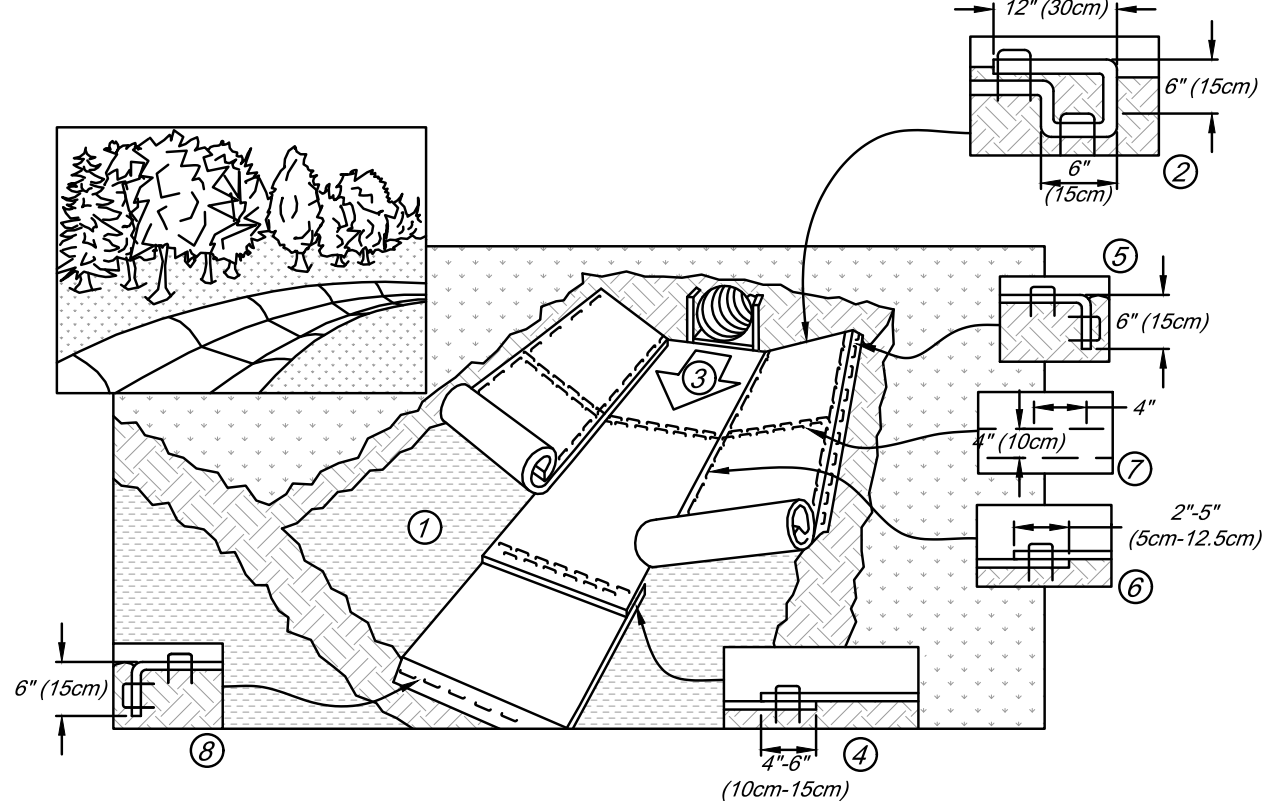
TRACKING DETAIL

EROSION CONTROL BLANKET DETAIL FOR SLOPE INSTALLATION

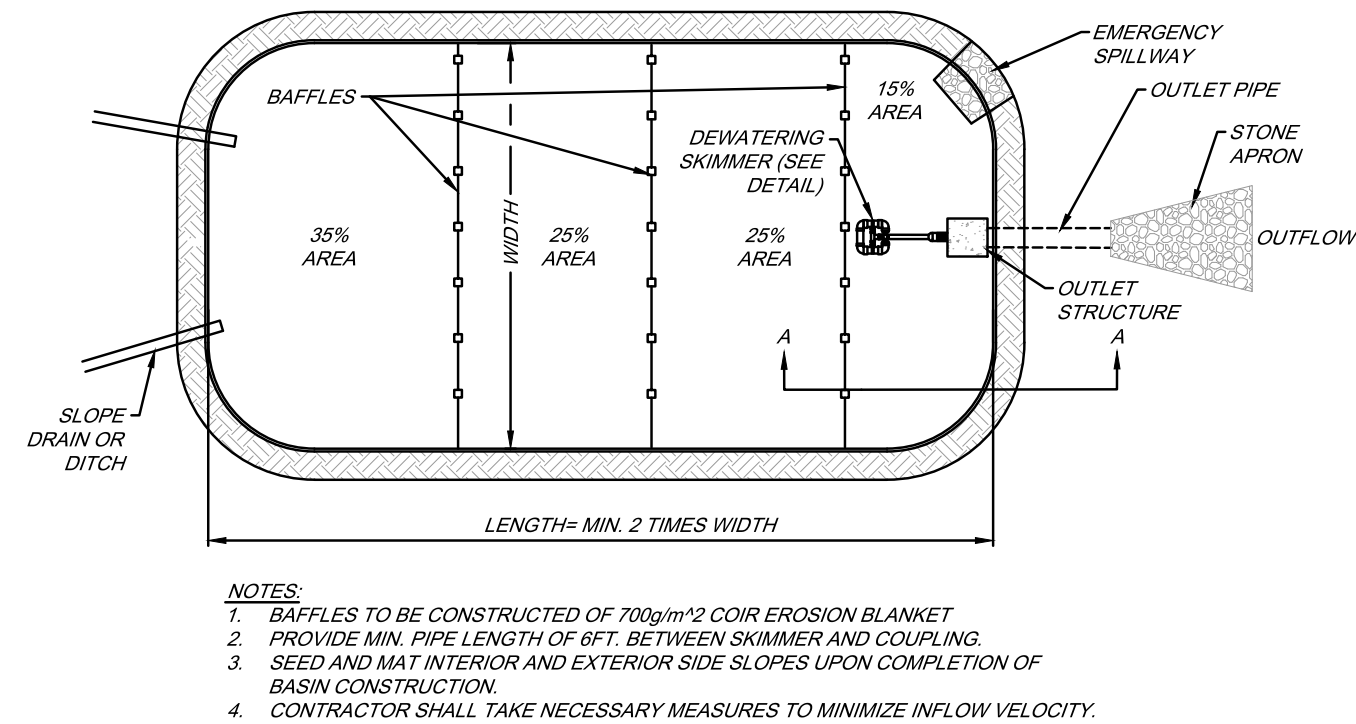
EROSION CONTROL BLANKET DETAIL FOR CHANNEL INSTALLATION



CONCRETE WASHOUT AREA



SKIMMER SEDIMENT BASIN WITH RISER



DATE	DESCRIPTION
3/21/25	SITE PLAN REVIEW
05/23/25	SUBMITTAL
06/16/25	SITE PLAN REVIEW
07/09/25	RE-SUBMITTAL
07/10/25	SID RE-SUBMITTAL
07/10/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
07/10/25	RE-SUBMITTAL

REVISIONS

PRE-BID SET ISSUE DATE POST-BID SET ISSUE DATE

REVISIONS

DATE DESCRIPTION

3/21/25 SITE PLAN REVIEW

05/23/25 SUBMITTAL

06/16/25 SITE PLAN REVIEW

07/09/25 RE-SUBMITTAL

07/10/25 SID RE-SUBMITTAL

07/10/25 SID RE-SUBMITTAL

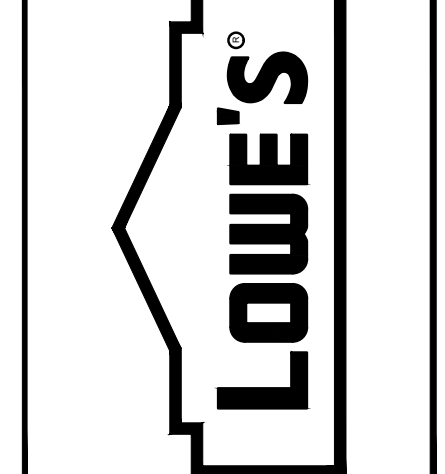
07/10/25 SITE PLAN REVIEW

07/10/25 RE-SUBMITTAL

RICHARD CREECH
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SEDIMENT EROSION CONTROL DETAILS AND NOTES

94 WIDE

LOWE'S OF: Westlake

WESTLAKE, FLORIDA

PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA	2023-12-15
ISSUE DATE:	
PERMIT SET	
ISSUE DATE:	
CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

D5

GENERAL WATER NOTES

1. WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, TESTED, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555, FLORIDA ADMINISTRATIVE CODE.
2. ALL PIPE SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
3. WATER MAINS SHALL BE BLUE PVC CONFORMING TO AWWA C-900, DR 18. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION FOR LAYING, SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S LATEST RECOMMENDATIONS.
4. DEPTH OF WATER LINES FROM CROWN OF PIPE TO FINISHED GRADE SHALL BE 36".
5. WATER MAINS TO BE LOCATED 3' FROM RIGHT OF WAY, UNLESS OTHERWISE NOTED.
6. WHEN POOL EQUIPMENT IS TO BE INSTALLED AN AIR-GAP OF 3" MINIMUM SHALL BE MAINTAINED BETWEEN EQUIPMENT AND WATER AND SANITARY SYSTEMS.
7. ALL POTABLE WATER MAINS THAT ARE NOT BLUE PVC SHALL BE INSTALLED WITH IDENTIFIER TAPE LOCATED ON TOP OF PIPE & SECURED TAPE SHALL BE 3" VINYL BLUE IN COLOR WITH LETTERING INDICATING "POTABLE WATER" AT TWO FOOT INTERVALS ALONG TAPE.

LATEST REVISION DATE : 04/14/2021

NOT TO SCALE



POTABLE WATER NOTES (1 of 3)



PW-01

FILE NAME: 07_S0 POTABLE WATER DETAILS (PW)

POTABLE WATER CLEARANCE REQUIREMENTS

HORIZONTAL SEPARATION: BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAIN, RECLAIMED WATER PIPELINES, AND ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEMS.

1. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST FIVE FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
2. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE HORIZONTAL DISTANCE OF TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED VACUUM-TYPE SANITARY SEWER.
3. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND THE OUTSIDE OF ANY EXISTING OR PROPOSED STORM SEWER, STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER 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 FIVE FEET WHERE THE BOTTOM OF THE WATER MAIN IS LAID AT LEAST TWELVE INCHES ABOVE THE TOP OF THE SEWER.
4. NEW OR RELOCATED, UNDERGROUND WATER MAINS SHALL BE LAID TO PROVIDE A HORIZONTAL DISTANCE OF AT LEAST TEN FEET BETWEEN THE OUTSIDE OF THE WATER MAIN AND ALL PARTS OF ANY EXISTING OR PROPOSED "ON-SITE SEWAGE TREATMENT AND DISPOSAL SYSTEM" AS DEFINED IN SECTION 381.006(5)(2), F.S., AND RULE 64E-6002, F.A.C.
5. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THE REQUIRED MINIMUM HORIZONTAL DISTANCE FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND JOINTS IN THE WATER MAIN ARE BEING LOCATED LESS THAN THE REQUIRED MINIMUM DISTANCE FROM JOINTS IN OTHER PIPELINE:
 - A. USE OF PRESSURE-RATED PIPE CONFORMING TO THE AMERICAN WATER WORKS ASSOCIATION STANDARDS INCORPORATED INTO RULE 62-555.330, F.A.C., FOR THE OTHER PIPELINE IF IT IS GRAVITY-OR VACUUM-TYPE PIPELINE;
 - B. USE WELDED, FUSED OR OTHERWISE RESTRAINED JOINTS FOR EITHER WATER MAIN OR THE OTHER PIPELINE; OR
 - C. USE OF WATERTIGHT CASING PIPE OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR EITHER THE WATER MAIN OR THE OTHER PIPELINE.

LATEST REVISION DATE : 9/05/18

NOT TO SCALE



POTABLE WATER NOTES (2 of 3)



PW-02

FILE NAME: 07_S0 POTABLE WATER DETAILS (PW)

POTABLE WATER CLEARANCE REQUIREMENTS

VERTICAL SEPARATION: BETWEEN UNDERGROUND WATER MAINS AND SANITARY OR STORM SEWERS, WASTEWATER OR STORMWATER FORCE MAIN, RECLAIMED WATER PIPELINES.

1. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED GRAVITY-OR VACUUM-TYPE SANITARY SEWER OR STORM SEWER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST TWELVE INCHES, AND PREFERABLY EIGHTEEN INCHES, ABOVE OR AT LEAST EIGHTEEN INCHES BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
2. NEW OR RELOCATED, UNDERGROUND WATER MAINS CROSSING ANY EXISTING OR PROPOSED PRESSURE-TYPE SANITARY SEWER, WASTEWATER OR STORMWATER FORCE MAIN, OR PIPELINE CONVEYING RECLAIMED WATER SHALL BE LAID SO THE OUTSIDE OF THE WATER MAIN IS AT LEAST EIGHTEEN INCHES ABOVE OR BELOW THE OUTSIDE OF THE OTHER PIPELINE. HOWEVER, IT IS PREFERABLE TO LAY THE WATER MAIN ABOVE THE OTHER PIPELINE.
3. AT THE UTILITY CROSSINGS DESCRIBED IN PARAGRAPHS 1 AND 2 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 ARRANGED SO THAT ALL WATER MAIN JOINTS ARE AT LEAST THREE FEET FROM ALL JOINTS IN VACUUM-TYPE SANITARY SEWERS, STORMSEWERS, STORMWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C. AND AT LEAST SIX FEET FROM ALL JOINTS IN GRAVITY-OR PRESSURE-TYPE SANITARY SEWERS, WASTEWATER FORCE MAINS, OR PIPELINES CONVEYING RECLAIMED WATER NOT REGULATED UNDER PART III OF CHAPTER 62-610, F.A.C.
4. SEPARATION BETWEEN WATER MAINS AND SANITARY OR STORM SEWER MANHOLES.
 - A. NO WATER MAIN SHALL PASS THROUGH, OR COME IN CONTACT WITH, ANY PART OF A SANITARY MANHOLE.
 - B. WATER MAINS SHALL NOT BE CONSTRUCTED OR ALTERED TO PASS THROUGH, OR COME INTO CONTACT WITH ANY PART OF A STORM SEWER MANHOLE OR INLET STRUCTURE.
5. WHERE AN UNDERGROUND WATER MAIN IS BEING LAID LESS THAN THREE FEET HORIZONTALLY FROM ANOTHER PIPELINE AND WHERE AN UNDERGROUND WATER MAIN IS CROSSING ANOTHER PIPELINE AND IS BEING LAID LESS THAN THE REQUIRED MINIMUM VERTICAL DISTANCE FROM THE OTHER PIPELINE:
 - A. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE WATER MAIN; AND
 - B. USE OF PIPE, OR CASING PIPE, HAVING HIGH IMPACT STRENGTH (I.E., HAVING AN IMPACT STRENGTH AT LEAST EQUAL TO THAT OF 0.25-INCH-THICK DUCTILE IRON PIPE) OR CONCRETE ENCASEMENT AT LEAST FOUR INCHES THICK FOR THE OTHER PIPELINE IF IT IS NEW AND IS CONVEYING WASTEWATER OR RECLAIMED WATER.

LATEST REVISION DATE : 9/05/18

NOT TO SCALE

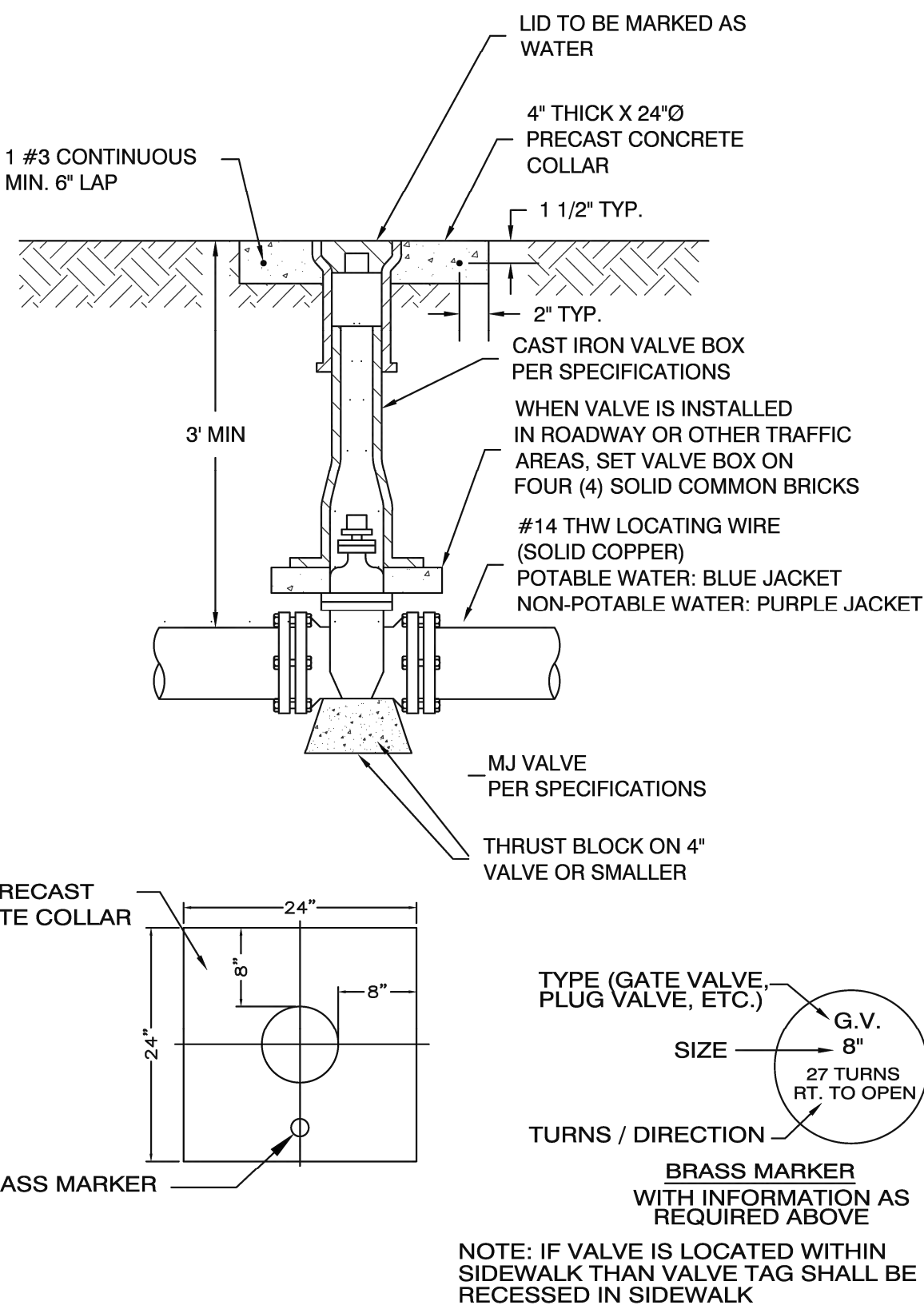


POTABLE WATER NOTES (3 of 3)



PW-03

FILE NAME: 07_S0 POTABLE WATER DETAILS (PW)



LATEST REVISION DATE : 05/04/2021

NOT TO SCALE



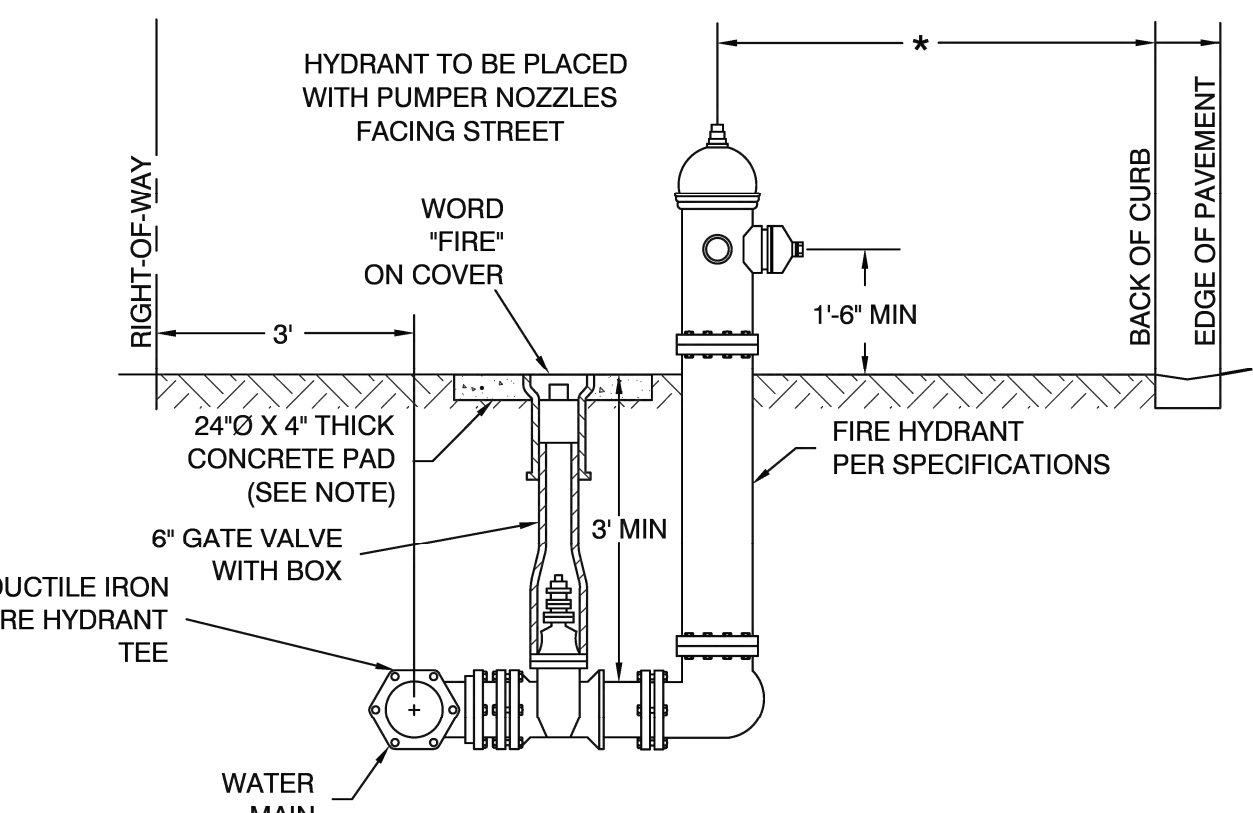
PRESSURE MAIN GATE VALVE & BOX DETAIL



GU-05

FILE NAME: 04_S0 GENERAL UTILITY DETAILS (GU) (DWG)

* FIRE HYDRANTS TO BE LOCATED NO LESS THAN 5' FROM EDGE OF PAVEMENT BEHIND RAISED CURB, NO LESS THAN 6' FROM EDGE OF PAVEMENT WITHOUT RAISED CURB, AND IN EITHER CASE, NO MORE THAN 12' FROM EDGE OF PAVEMENT.



- SPECIFICATIONS**
1. AWWA SPECIFICATIONS C-502
 2. TWO 2-1/2" HOSE NOZZLE DISCHARGE
 3. ONE 4-1/2" PUMPER NOZZLE DISCHARGE
 4. ONE 1-1/2" OPERATING NUT, LEFT

NOTE: TWO INCH (2") DIAMETER BRASS DISCS SHALL BE GLUED TO THE CLOSEST CURB INDICATING THE DIRECTION TO THE VALVE. GENERALLY, 2 DISCS SHALL BE REQUIRED FOR EACH VALVE (90° APART).

LATEST REVISION DATE : 04/14/2021

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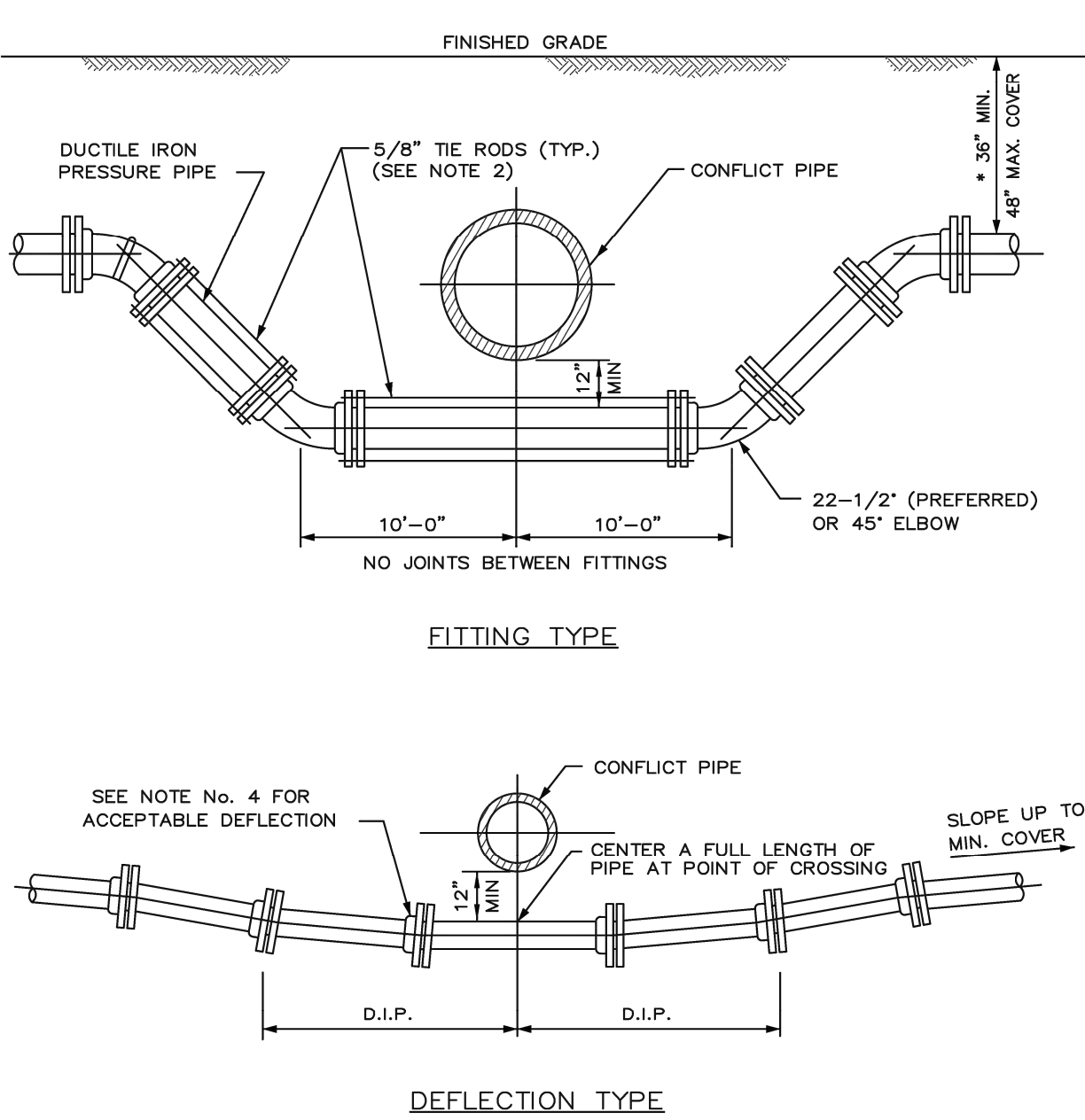


FIRE HYDRANT ASSEMBLY DETAIL



PW-09

FILE NAME: 07_S0 POTABLE WATER DETAILS (PW)



NOTES:

1. THESE METHODS ARE TO BE USED WHEN INSUFFICIENT COVER EXISTS TO ALLOW PRESSURE PIPE TO CROSS ABOVE CONFLICT PIPE WITH 6" VERTICAL SEPARATION AND MAINTAIN 30" COVER TO FINISHED GRADE.
 2. FITTINGS SHALL BE RESTRAINED WITH MECHANICAL RESTRAINTS OR TIE RODS.
 3. THE DEFLECTION TYPE CROSSING IS PREFERRED.
 4. DO NOT EXCEED 75% OF MANUFACTURERS RECOMMENDED MAXIMUM JOINT DEFLECTION.
 5. MECHANICALLY RESTRAIN ALL FITTINGS, AS PER MANUFACTURERS RECOMMENDATION.
- 36" MIN IN STATE ROAD R/W AND UNDER ASPHALT

LATEST REVISION DATE : 9/13/18

NOT TO SCALE



PRESSURE PIPE CONFLICT DETAIL



GU-06

FILE NAME: 04_S0 GENERAL UTILITY DETAILS (GU) (DWG)

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3/21/25	SITE PLAN REVIEW
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06/16/25	SITE PLAN REVIEW
07/09/25	RE-SUBMITTAL
07/10/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
07/10/25	RE-SUBMITTAL

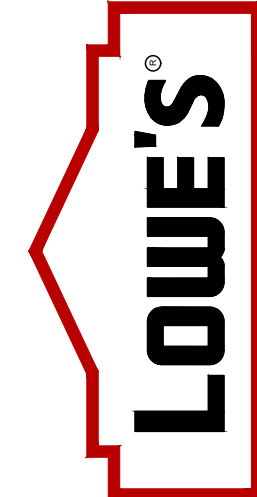
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CONSULTING, INC.
ENGINEERING
PO BOX 321, STUART, FLORIDA 34994 (772) 465-2140

BOARD OF PROFESSIONAL ENGINEERS: CERTIFICATE OF AUTHORITY NO. 1389
PROFESSIONAL SERVICES AND IMPROVEMENTS LICENSE NO. 1389

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WATER AND WASTEWATER DETAILS
94 WIDE

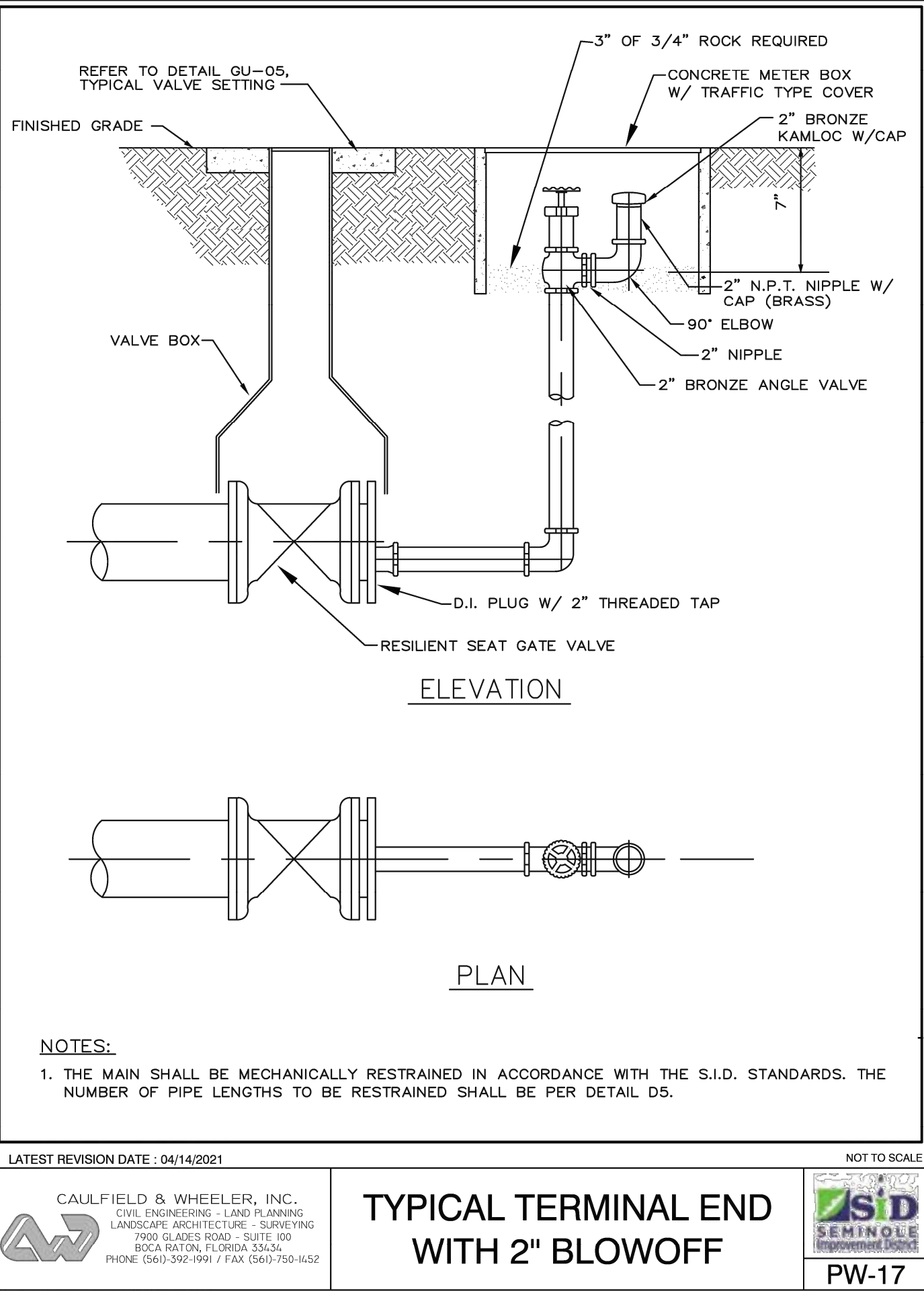
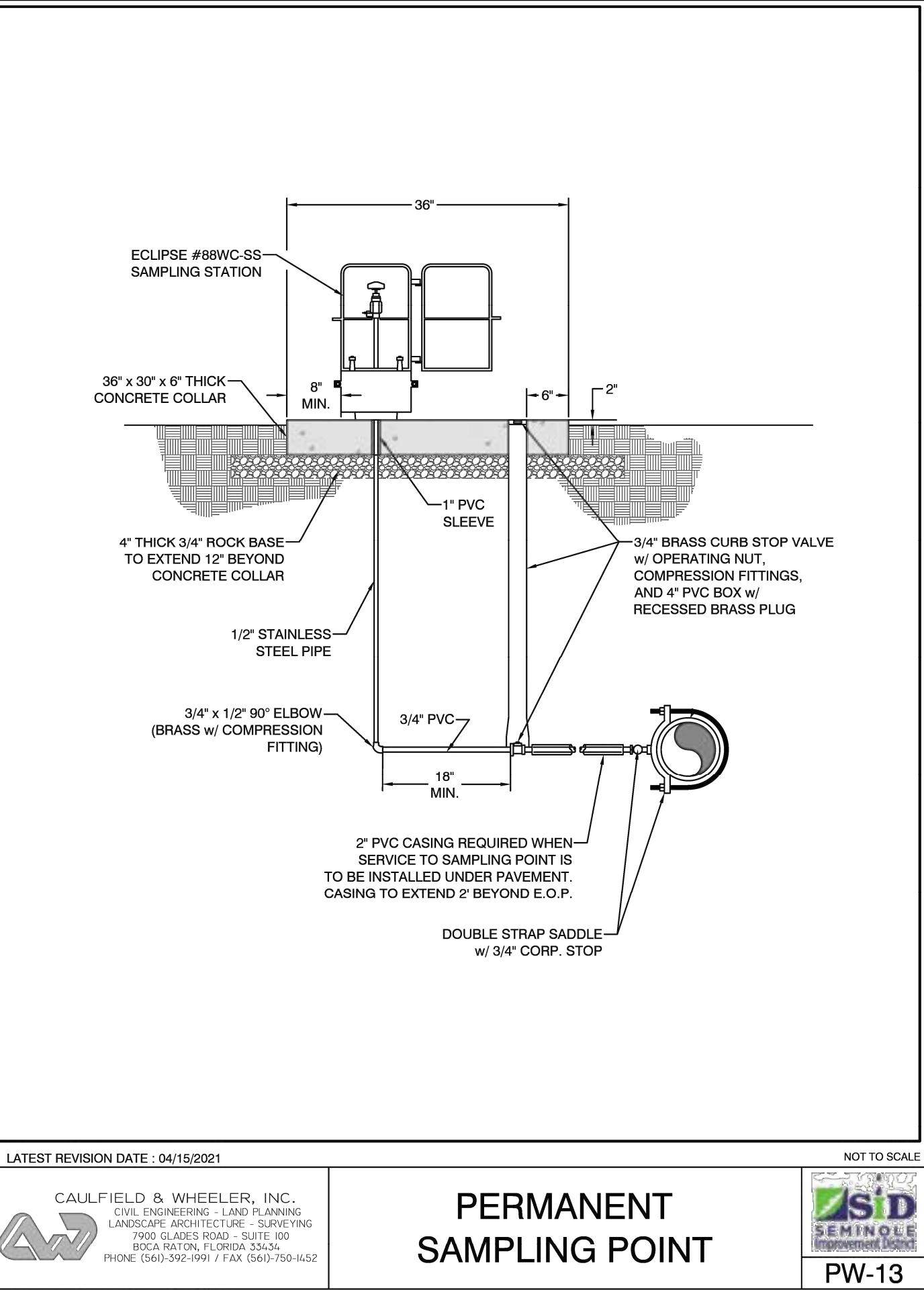
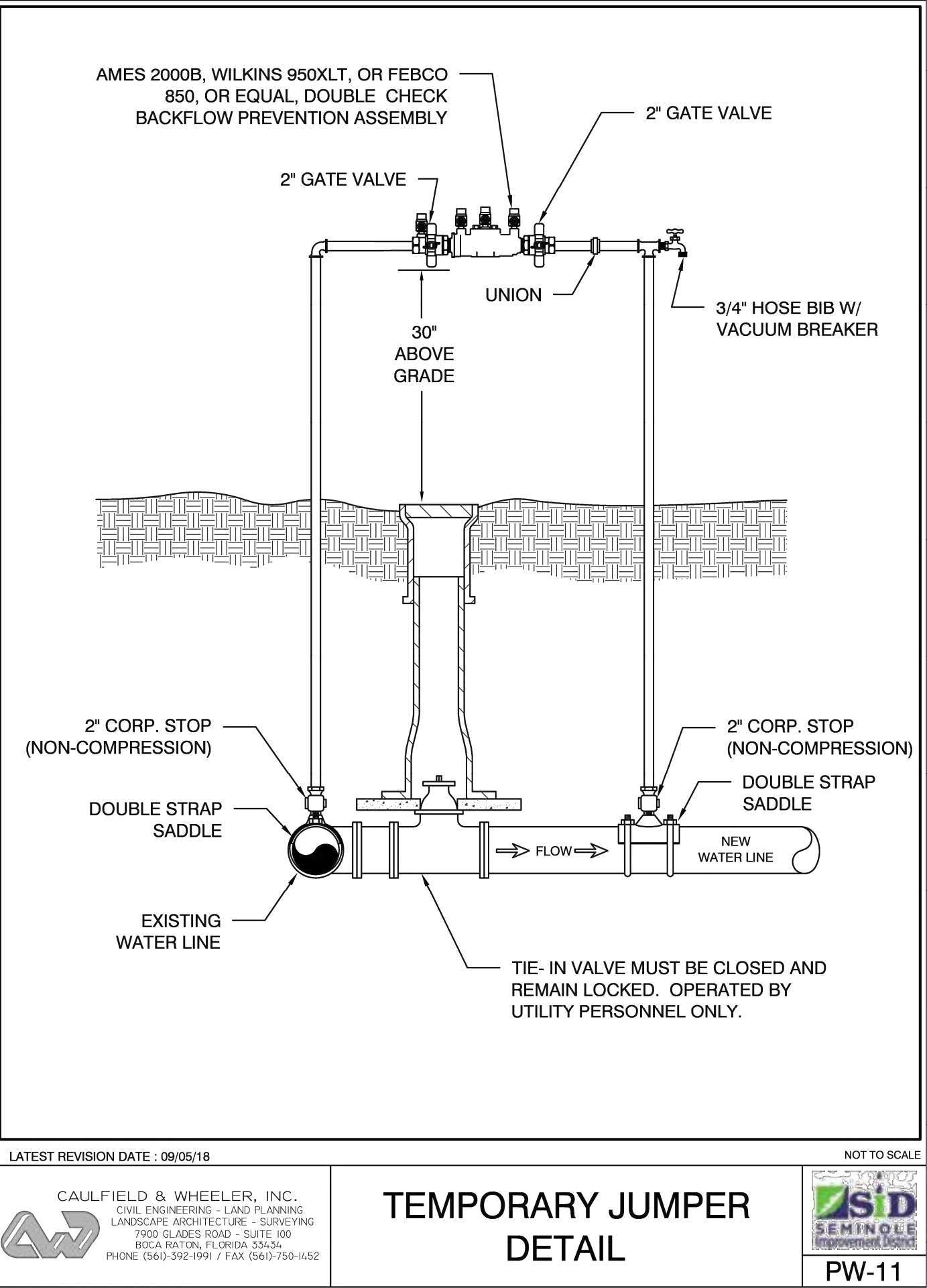
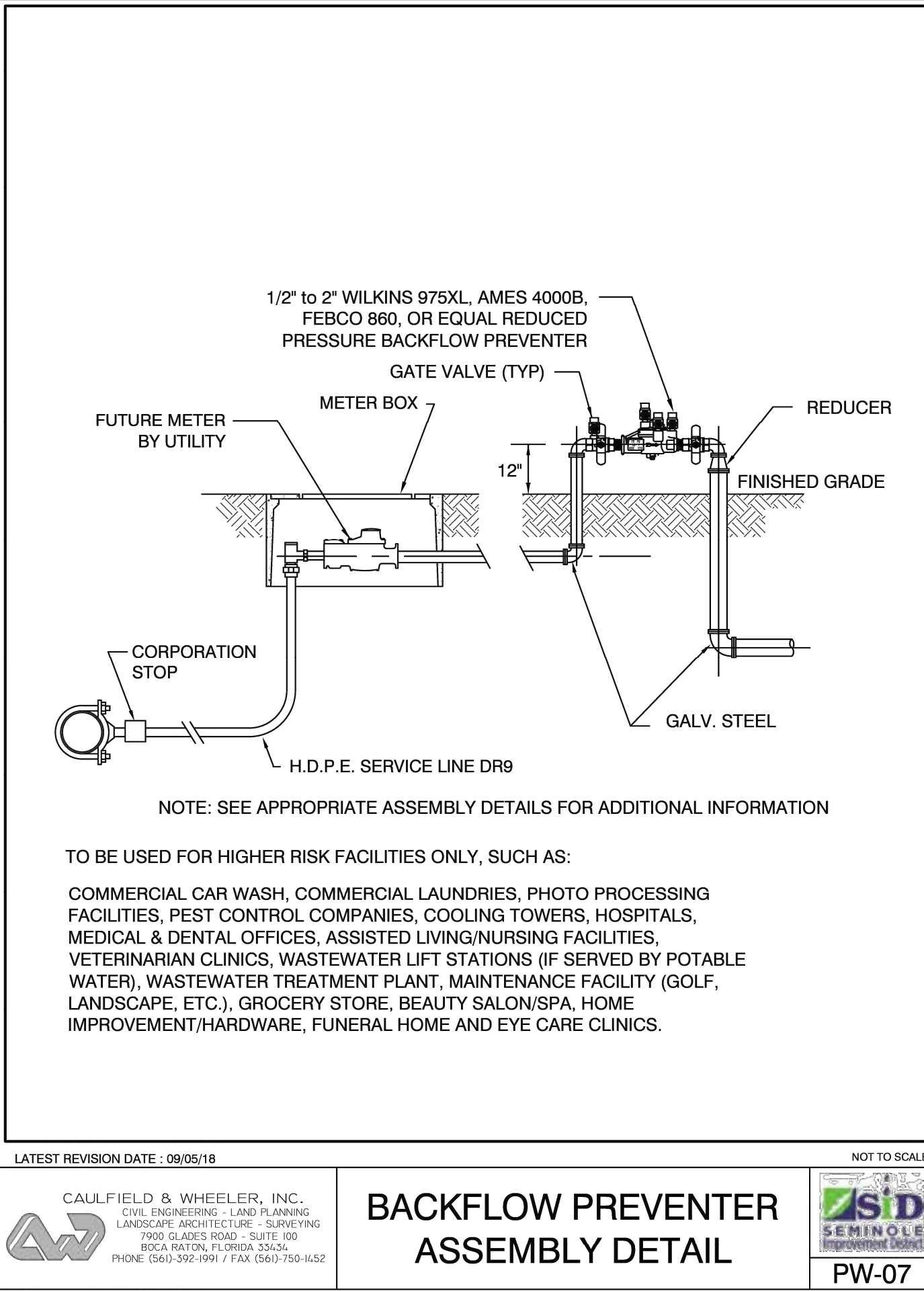
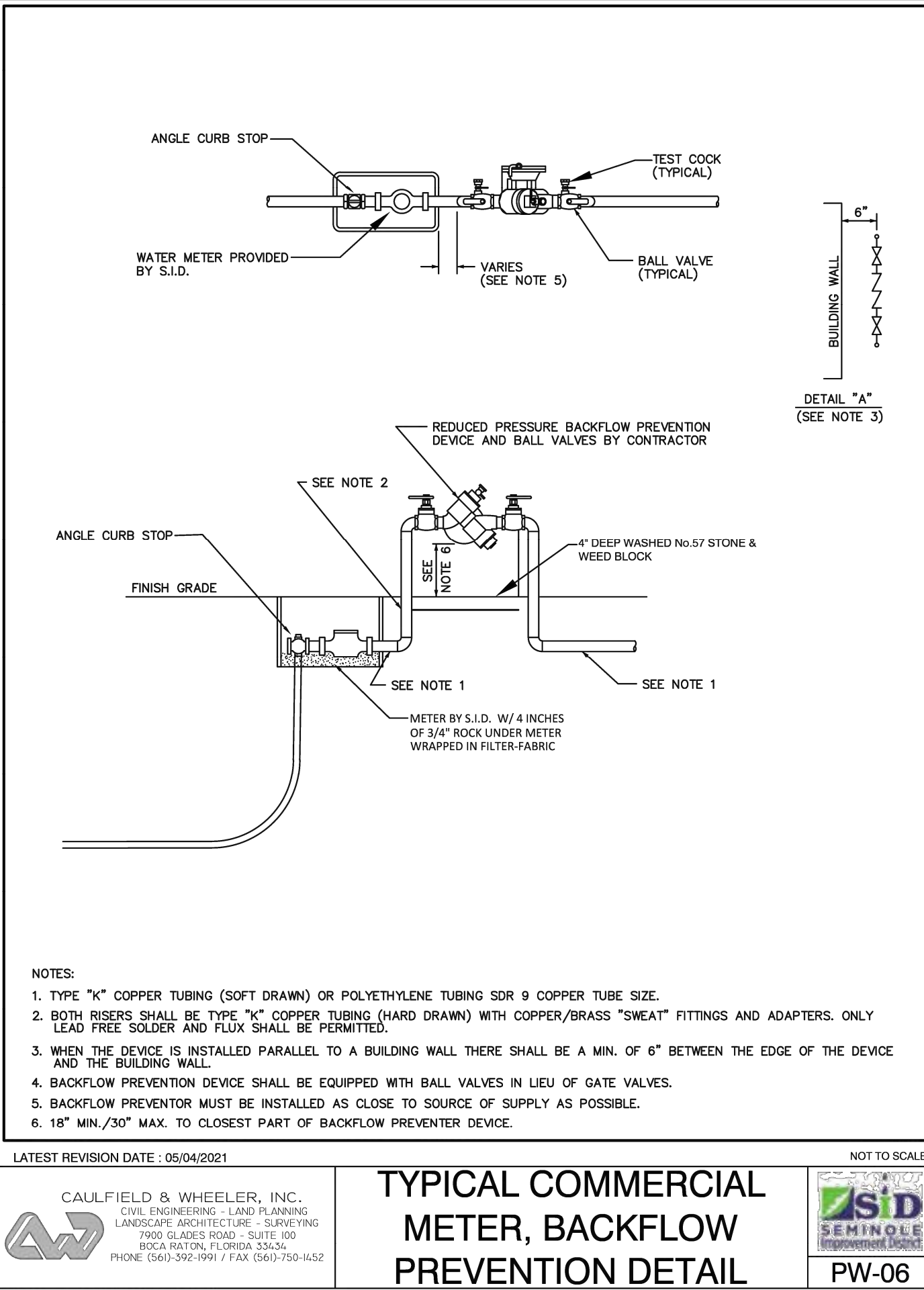
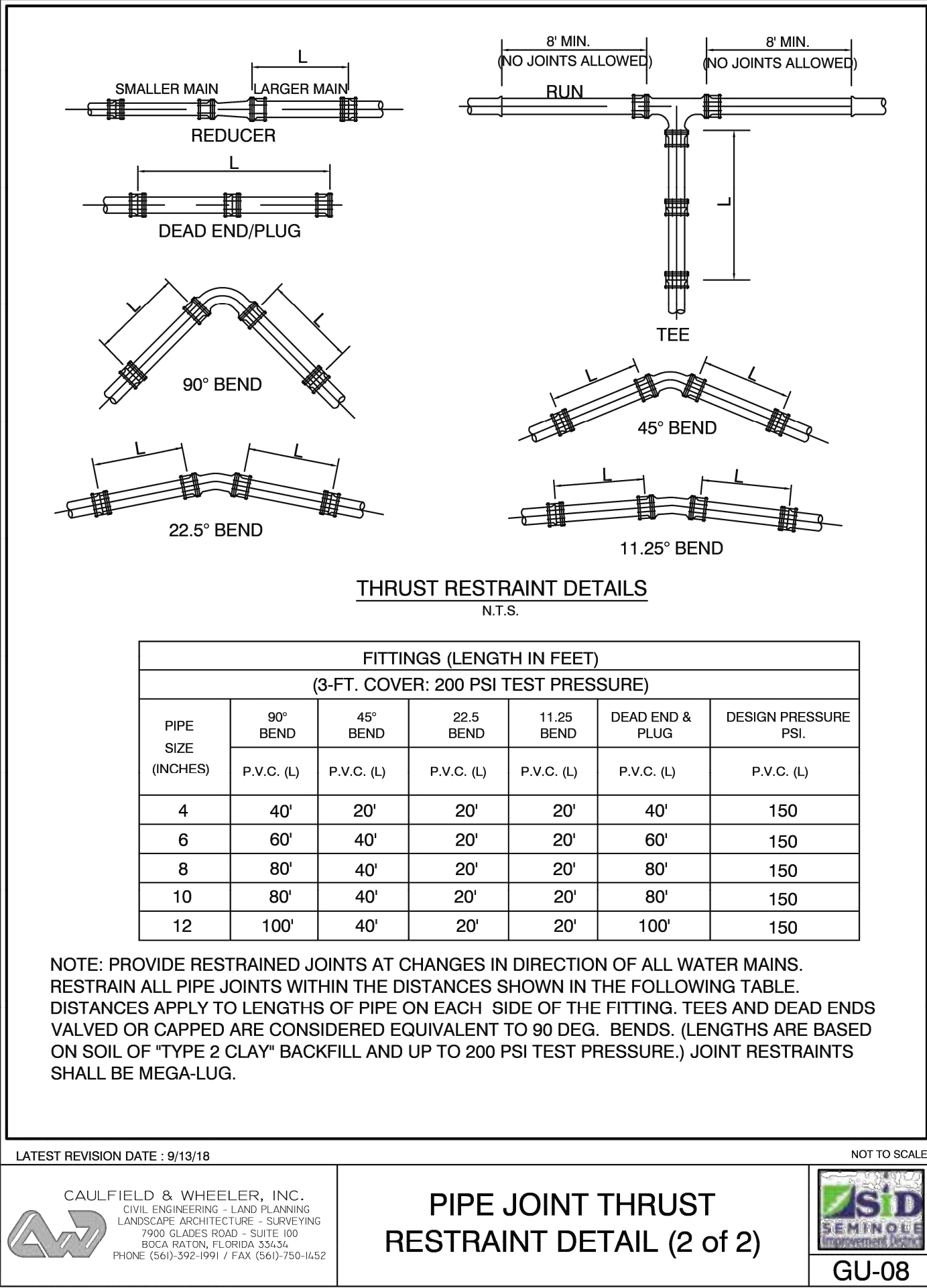
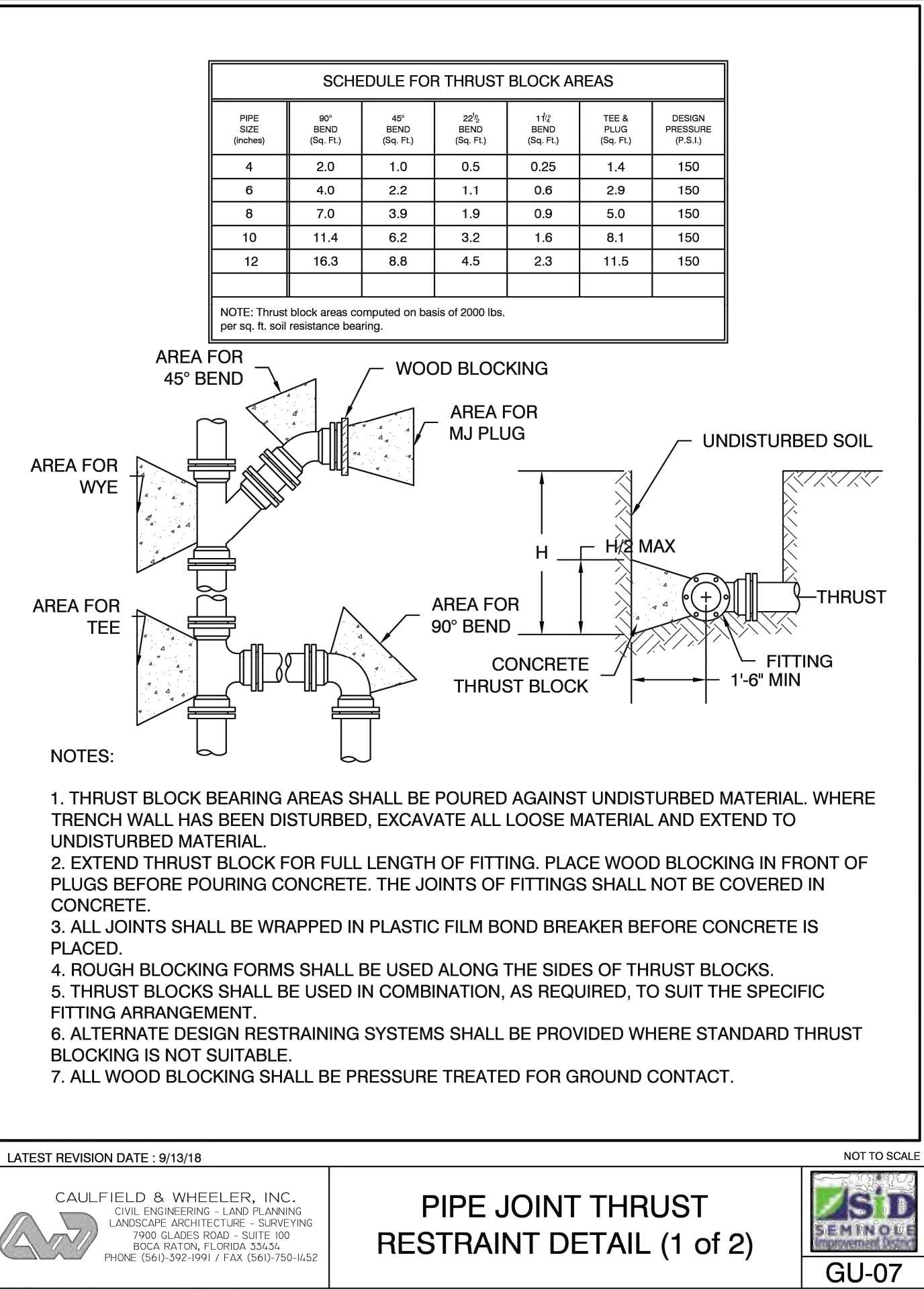
LOWE'S OF:
Westlake

WESTLAKE, FLORIDA

PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

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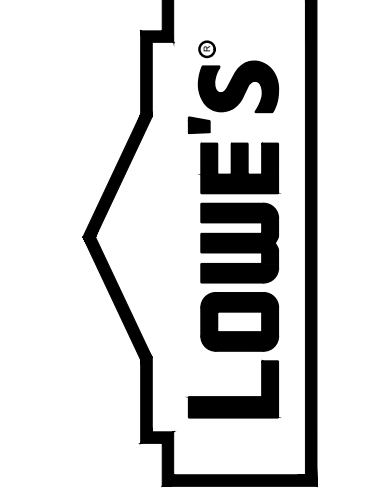
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DATE	DESCRIPTION
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05/23/25	SITE PLAN REVIEW
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07/09/25	SID RE-SUBMITTAL
07/10/25	SITE PLAN REVIEW
	RE-SUBMITTAL

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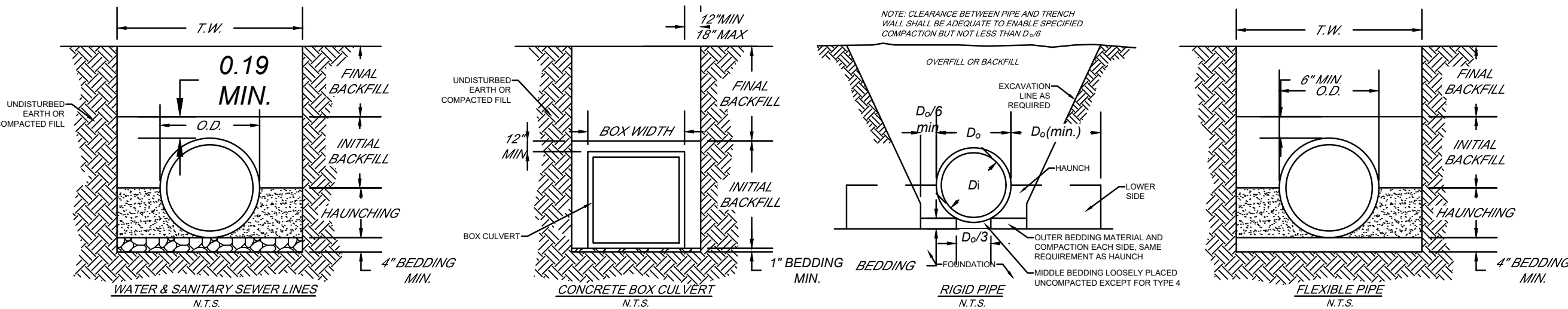
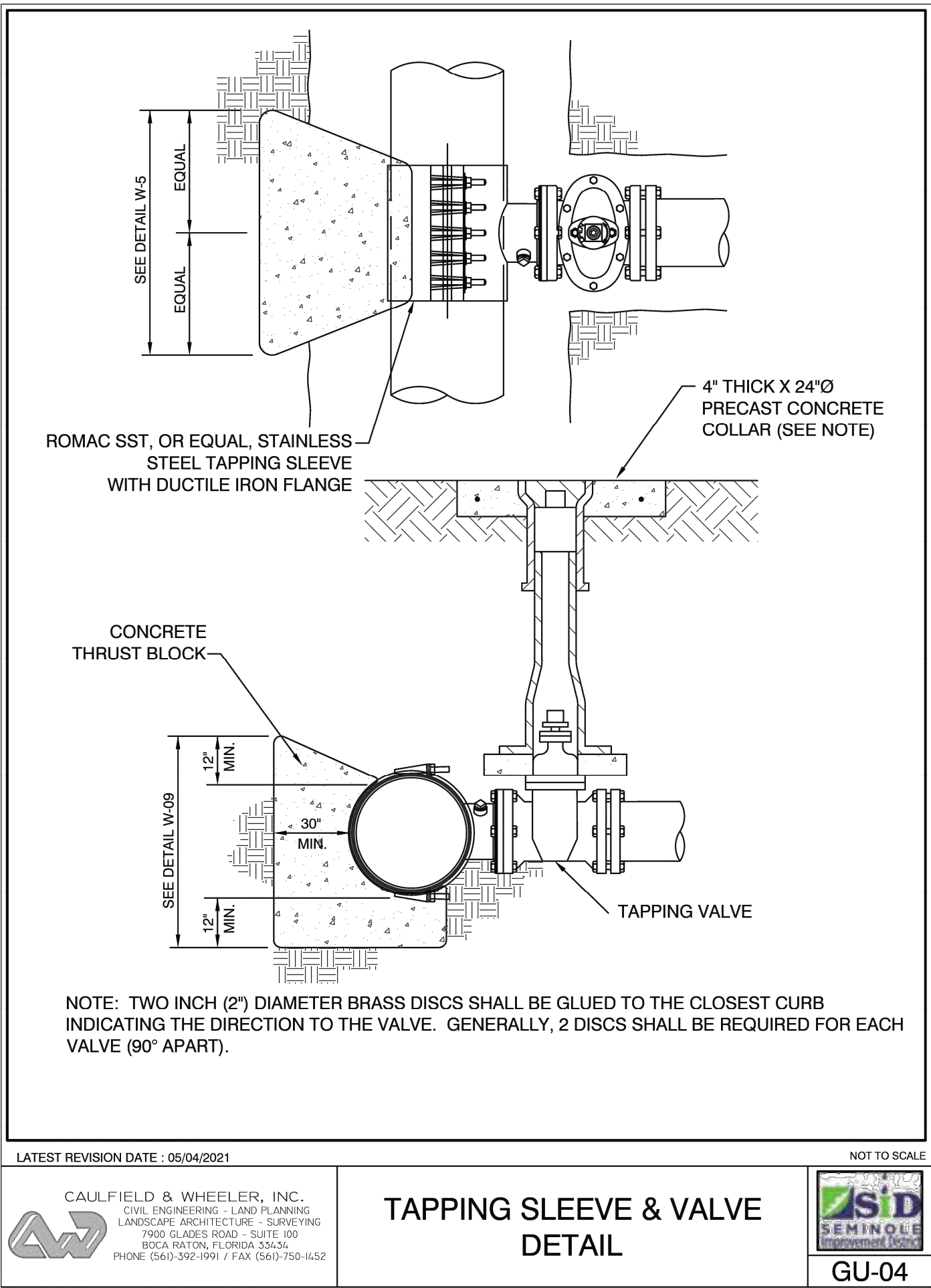
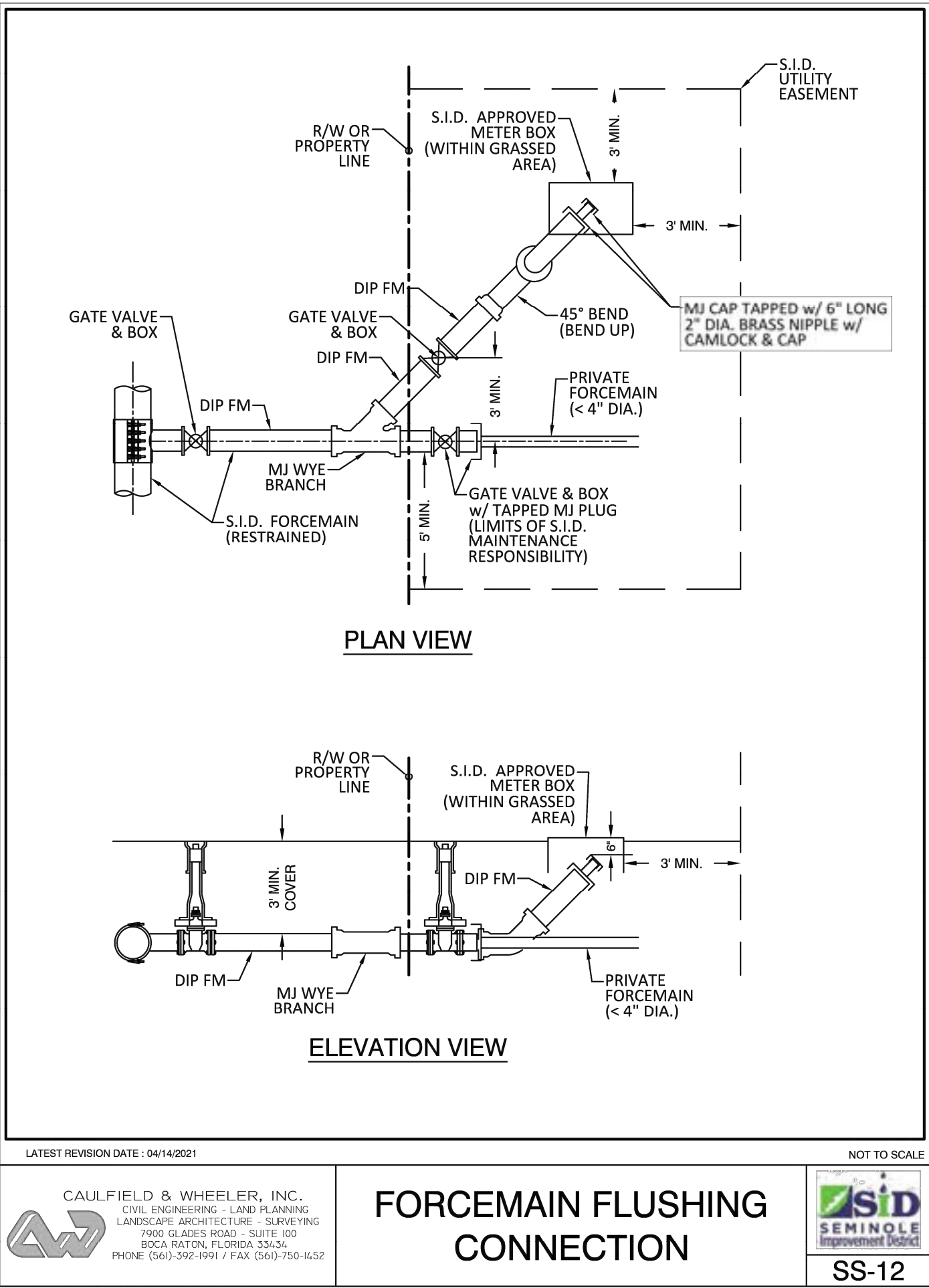
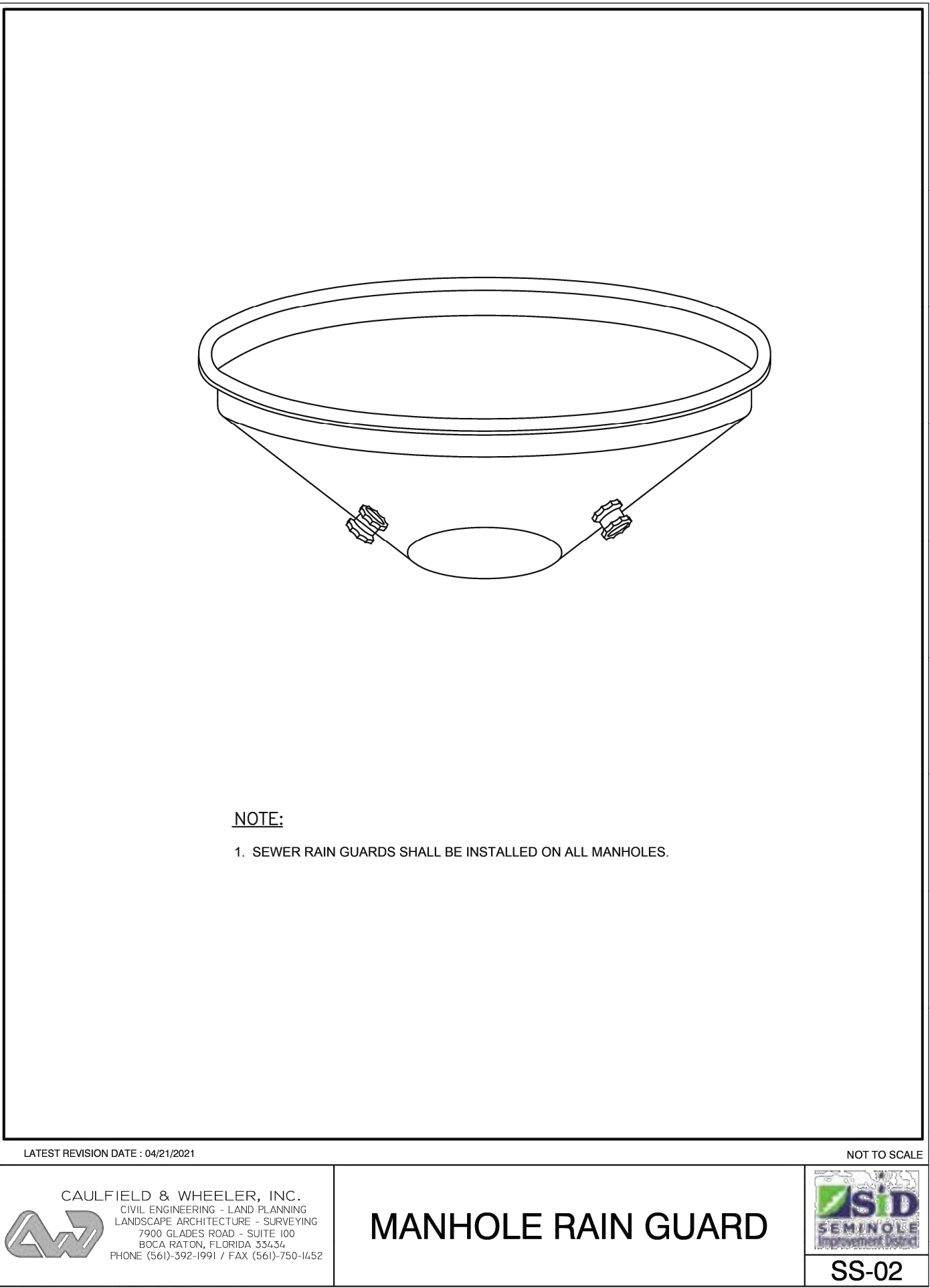
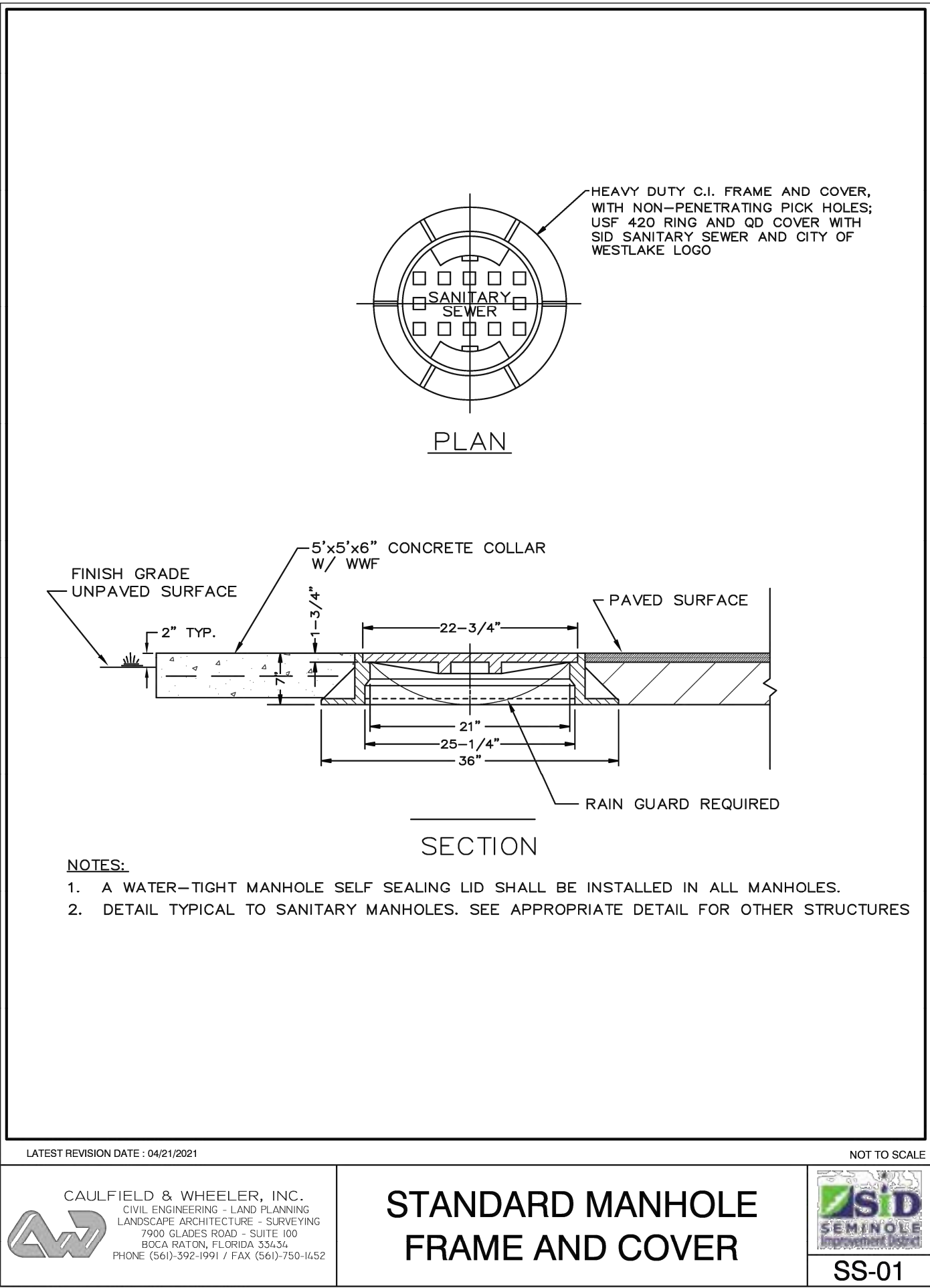
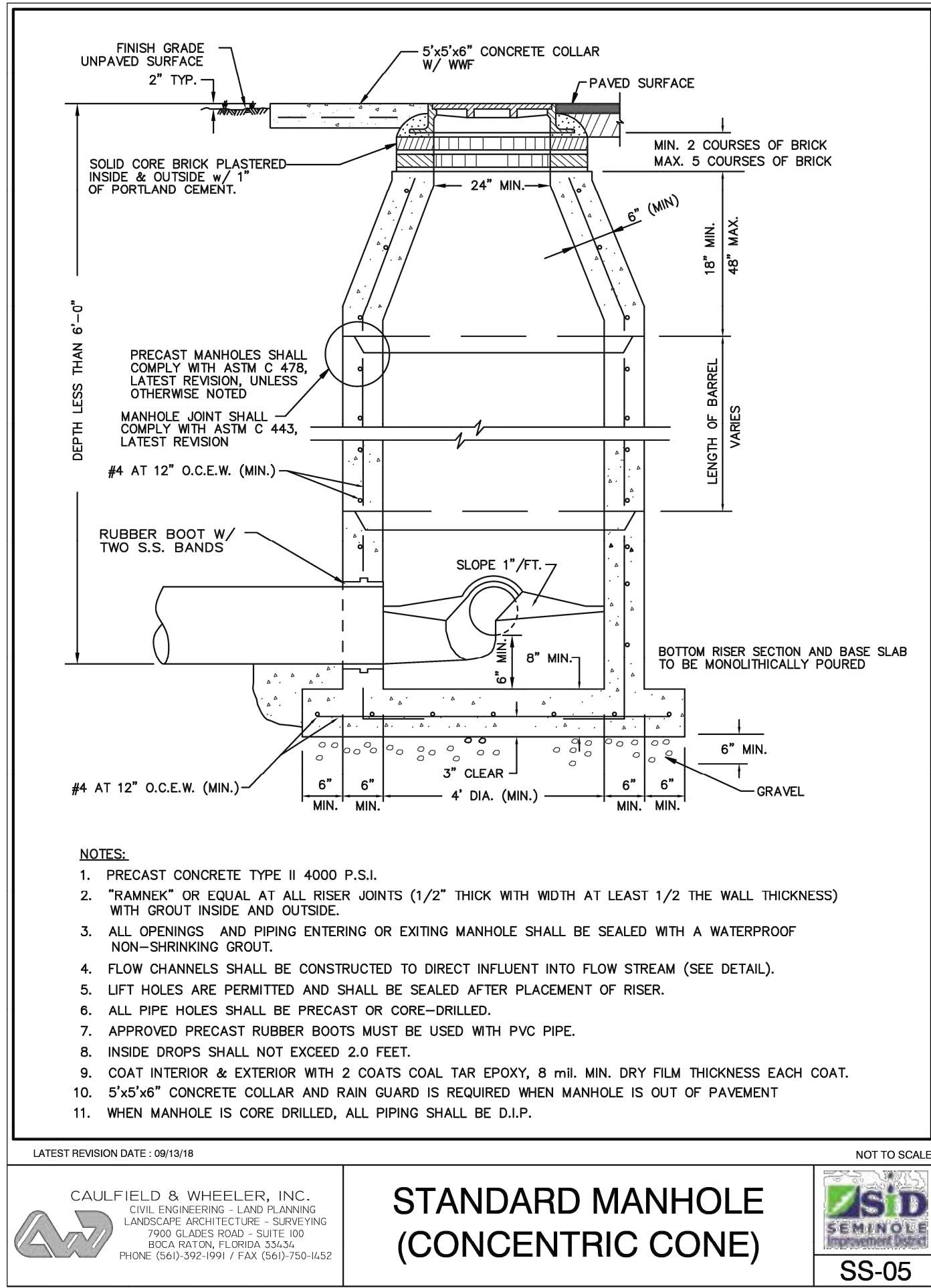
WATER AND WASTEWATER DETAILS
94 WIDE

LOWE'S OF:
Westlake
WESTLAKE, FLORIDA

PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

CRITERIA	2023-12-15
ISSUE DATE:	
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D7



- GENERAL NOTES
1. BEDDING SHALL BE DUMPED CLASS I-A WORKED BY HAND, OR CLASS I-B COMPACTED TO 95% STANDARD PROCTOR. LOCAL CODE PERMITTING WITH GEOTECHNICAL ENGINEER AND OWNER APPROVAL, NATIVE SOIL MAY BE USED FOR BEDDING PROVIDED IT MEETS THE EMBEDMENT AND BACKFILL MATERIALS IN TABLE 1 EXCLUDING CLASS II-A.
 2. HAUNCHING SHALL BE WORKED AROUND THE PIPE BY HAND TO ELIMINATE VOIDS AND SHALL BE CLASS I-A, OR CLASS I-B OR CLASS II COMPACTED TO 95% STANDARD PROCTOR. PEA GRAVEL SHALL NOT BE USED AS A HAUNCHING MATERIAL. CLASS III MATERIAL SHALL BE ALLOWED FOR RIGID PIPE COMPACTED AT 85% STANDARD PROCTOR.
 3. INITIAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 90% STANDARD PROCTOR, OR CLASS III COMPACTED 95% STANDARD PROCTOR.
 4. FINAL BACKFILL SHALL BE CLASS I-A WORKED BY HAND, OR CLASS I-B OR CLASS II COMPACTED TO 90% STANDARD PROCTOR, OR CLASS III COMPACTED TO 95% STANDARD PROCTOR.
 5. FINAL BACKFILL NOT UNDER PAVED AREAS CAN BE CLASS I-A COMPACTED TO 95% STANDARD PROCTOR.
 6. ALL MATERIALS ARE CLASSIFIED IN ACCORDANCE WITH ASTM D 2321. (SEE TABLE 1)
 7. ALL MATERIALS SHALL BE INSTALLED IN MAXIMUM 8" LOOSE.
 8. FILL SALVAGED FROM EXCAVATION SHALL BE FREE OF DEBRIS, ORGANICS AND ROCKS LARGER THAN 3".
 9. ALL TRENCH EXCAVATIONS SHALL BE SLOPED, SHORED, SHEETED, BRACED, OR OTHERWISE SUPPORTED IN COMPLIANCE WITH OSHA REGULATIONS AND LOCAL ORDINANCES.
 10. DESIGN ENGINEER SHALL DESIGNATE ON THE PLANS WHERE WATERTIGHT JOINTS ARE TO BE REQUIRED.
 11. REPLACE WET OR UNSUITABLE SOIL AS NECESSARY TO PROVIDE A SUITABLE BASE, AS DIRECTED BY GEOTECHNICAL ENGINEER OR OWNER.
 12. WHERE GROUND WATER IS PRESENT CLASS I-A MATERIAL SHALL BE WRAPPED WITH A NON WOVEN GEO-TEXTILE, EXCLUDING BEDDING MATERIAL BETWEEN 4" & 4" THICK.
 13. CONTRACTOR SHALL REFER TO GEOTECHNICAL REPORT FOR SOIL TYPE AND CLASSIFICATIONS FOR THIS PROJECT.
 14. CONTRACTOR SHALL REFER TO THE LATEST VERSION OF ASTM STANDARDS PRIOR TO CONSTRUCTION AND SHALL COMPLY WITH THESE STANDARDS DURING CONSTRUCTION.

ASTM D 2321 MATERIAL CLASS	ASTM D 2487 USCS SOIL GROUP	MATERIAL TYPE	% PASSING			ATTERBERG LIMITS	
			1 1/2 IN.	NO. 4	NO. 200	LL	PI
IA	NONE	MANUFACTURED OPEN GRADED AGGREGATES	100%	≤10%	<5%	NON PLASTIC	
IB	NONE	MANUFACTURED DENSE GRADED AGGREGATES	100%	≤50%	<5%	NON PLASTIC	
II	GW	COARSE-GRAINED SOILS, CLEAN	100%	<50% OF "COARSE FRACTION"	<5%	NON PLASTIC	
	GP						
	SW						
	SP						
III	GM	COARSE-GRAINED SOILS W/ FINES	100%	<50% OF "COARSE FRACTION"	12% TO 50%	<4 OR <"A" LINE <7 OR >"A" LINE >4 OR <"A" LINE >7 OR >"A" LINE	
	GC						
	SM						
	SC						
IV-A	ML	FINE-GRAINED SOILS	100%	100%	>50%	<4 OR <"A" LINE >7 OR >"A" LINE	
	CL						

TRENCH AND BEDDING DETAILS

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DATE	DESCRIPTION
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07/10/25	SITE PLAN REVIEW
07/10/25	RE-SUBMITTAL

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PROFESSIONAL SURVEYORS AND MAPPERS: AVERED CERTIFICATE NO. 15-000000

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LOWE'S

WATER AND WASTEWATER DETAILS
94 WIDE

LOWE'S OF:

Westlake

WESTLAKE, FLORIDA

PROJECT No: 23-022-001 DRAWN BY: JAC CHECKED BY: RTC

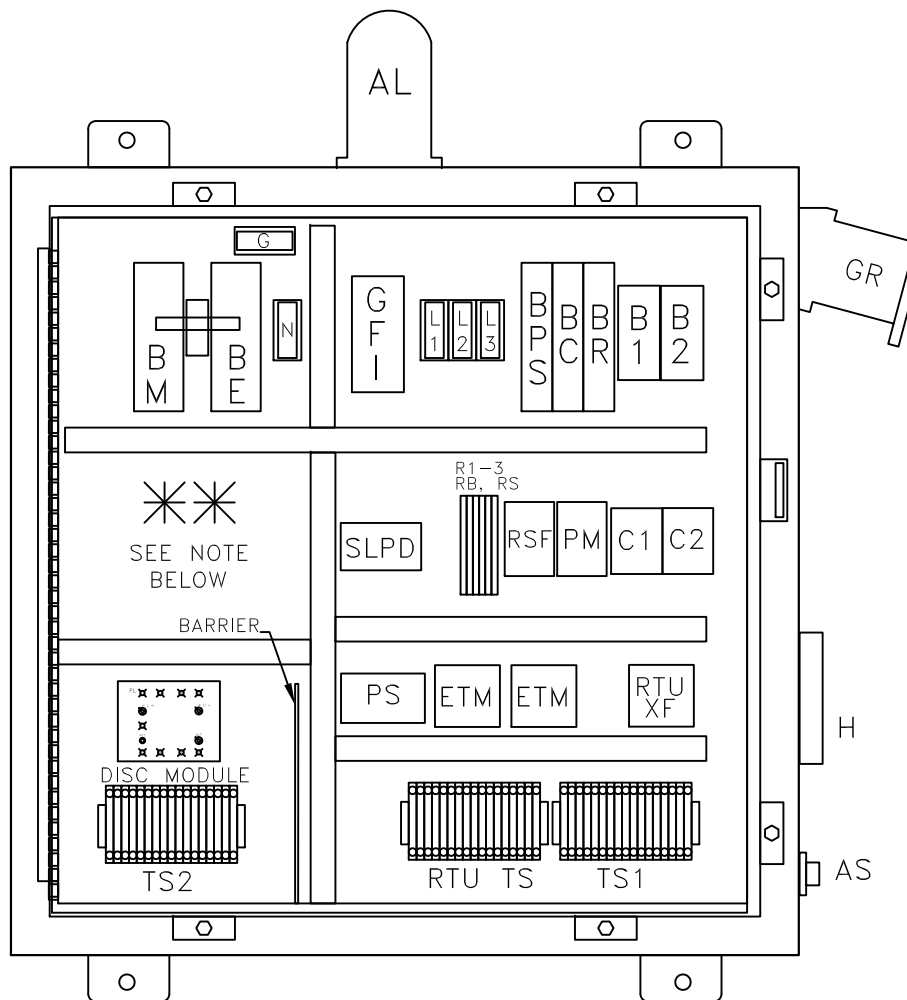
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CONSTRUCTION SET	
ISSUE DATE:	
DRAWING NUMBER:	

D8

CONTROL CENTER DESIGNED
& MANUFACTURED TO MEET
ALL D.E.P. REQUIREMENTS

MOPS CONTROL CENTER

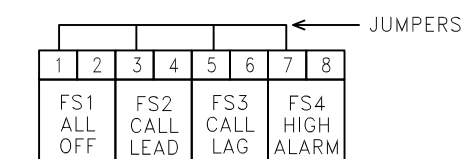
SEE SCHEDULE FOR
ELECTRICAL SERVICE REQUIREMENTS



INTERIOR LAYOUT
(DOOR NOT SHOWN FOR CLARITY)

27	NEU	NEL	120	130	4	1	ON	CON	SP	1	2	TS	1	2	P	1	2	PI	1	2	TS	1	2	P	1	2	P	2
2	NEU	120V	RTU	TERMINALS	(IF USED)																							

TS1 TERMINAL SCHEDULE



TS2 TERMINAL SCHEDULE

PANEL COMPONENTS

- AL ALARM LIGHT
AS ALARM SILENCE SWITCH
B1-2 MOTOR BREAKERS
BC CONTROL BREAKER
BE EMERGENCY BREAKER
BM MAIN BREAKER
BPS POWER SUPPLY BREAKER
BR RECEPTACLE BREAKER
C1-2 CONTACTOR, MOTOR START
GFI CONVENIENCE RECEPTACLE
DISC DUPLEX INTRINSICALLY SAFE CONTROLLER
ETM ELAPSED TIME METER
G GROUND BLOCK
GR GENERATOR RECEPTACLE
H HORN
HOA HAND-OFF-AUTO SWITCH (ON DISC)
L1,2,3 POWER DISTRIBUTION BLOCK
N NEUTRAL BLOCK
PL PILOT LIGHT (ON DISC)
PM PHASE MONITOR
PS POWER SUPPLY
R1-3 RELAYS
RB BATTERY RELAY
RS SILENCE RELAY
RSF SEAL FAIL RELAY
RTUXF RTU TRANSFORMER
SLPD SURGE/LIGHTNING PROTECTION DEV.
TS1 TERMINAL STRIP FOR PUMPS
TS2 TERMINAL STRIP FOR FLOATS

ENCLOSURE

NEMA 4X Stainless Steel
Single Door w/ Padlock Hasp
30"H x 30"W x 8"D

NOTES:

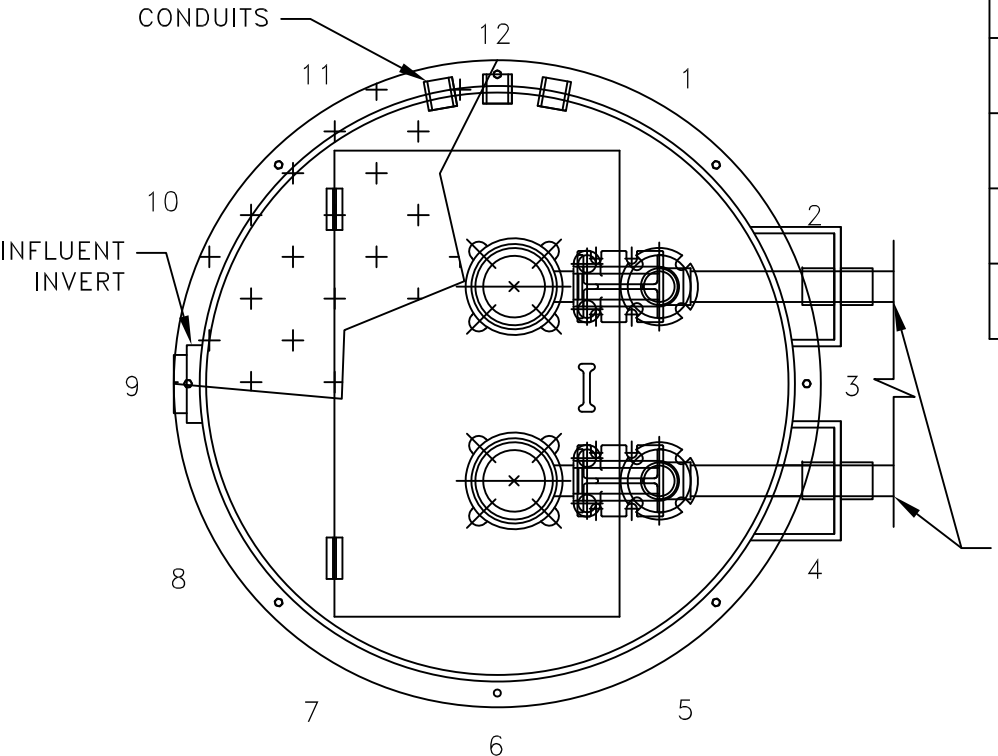
- PANEL LABELED FOR U.L. 508A "MOTOR CONTROL CENTERS" AND U.L. 698A "HAZARDOUS LOCATION PANELS" (INTRINSICALLY SAFE)
- COMPLETE BACK-UP, SELF-CHARGING BATTERY, WITH VISUAL/AUDIO ALARM SYSTEM PER RSWF-45.
- SEE CONTROL CENTER DETAIL SHEET FOR ANY ADDITIONAL NOTES.

THIS SPACE AVAILABLE FOR CAPACITORS FOR SINGLE PHASE OR TRANSFORMER FOR 460V.

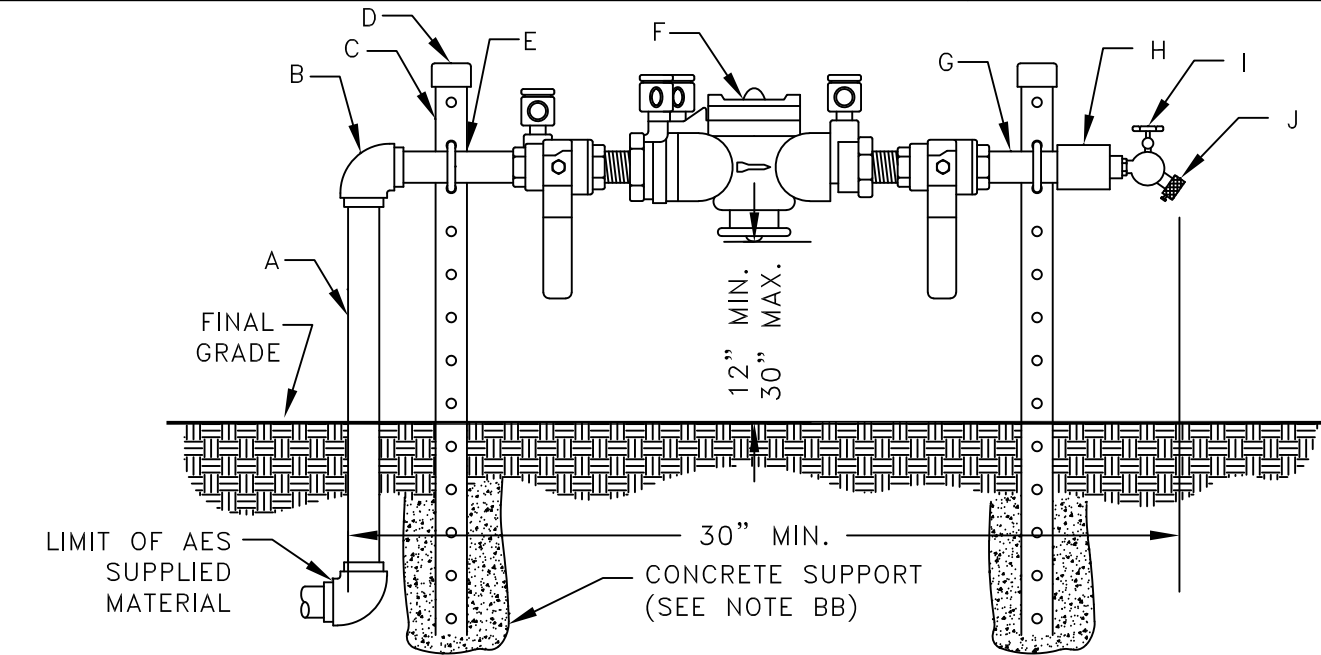
HUB AND INVERT LOCATION

ITEMS	CLOCK POSITION
DISCHARGE LINES	3:00
PRIMARY INVERT	9:00
SECONDARY INVERT	N/A
LOCATION OF CONTROL PANEL	12:00

NOTE: BACKFILL AROUND LIFT STATION FROM ANTI-FLOATATION RING UP TO FINISHED GRADE SHALL BE COMMON FILL COMPACTED IN 12-INCH MAX. LIFTS TO 98% DENSITY PER AASHTO T-180. CONTRACTOR SHALL EXERCISE CARE NOT TO DAMAGE WETWELL DURING COMPACTION.



SCHEMATIC BASED ON THE STATION'S DISCHARGE BEING LOCATED AT THE #3 CLOCK POSITION. SEE SCHEDULE FOR LOCATION OF INVERTS AND CONTROL PANEL. LOCATIONS SUBJECT TO CHANGE.



ITEM	QTY.	DESCRIPTION
A	1	3/4" x 36" S.S. NIPPLE
B	1	3/4" S.S. 90° ELBOW
C	2	1-5/8"x1-5/8"x40" ALUM. SUPPORT BRACKET
D	2	SUPPORT BRACKET CAPS P/N 2323
E	2	3/4" S.S. PIPE BOLTS

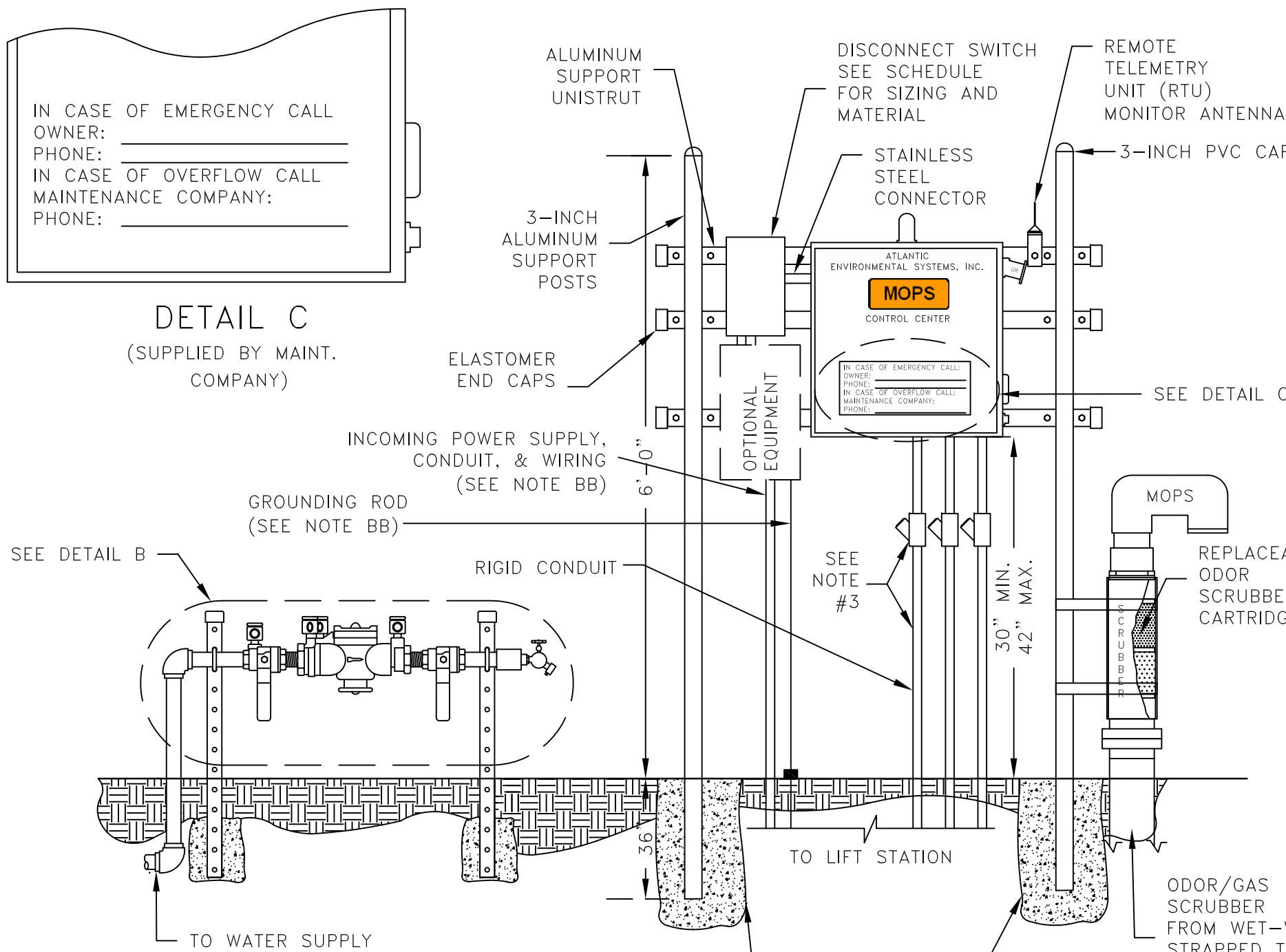
ITEM	QTY.	DESCRIPTION
F	1	3/4" APP. BACKFLOW PREVENTER
G	2	3/4" x 3" S.S. NIPPLE
H	1	3/4" x 3/4" S.S. COUPLING
I	1	3/4" BRONZE HOSE BIB
J	1	3/4" VACUUM BREAKER

DETAIL B

R.P.Z. BACKFLOW PREVENTER ASSEMBLY DETAIL

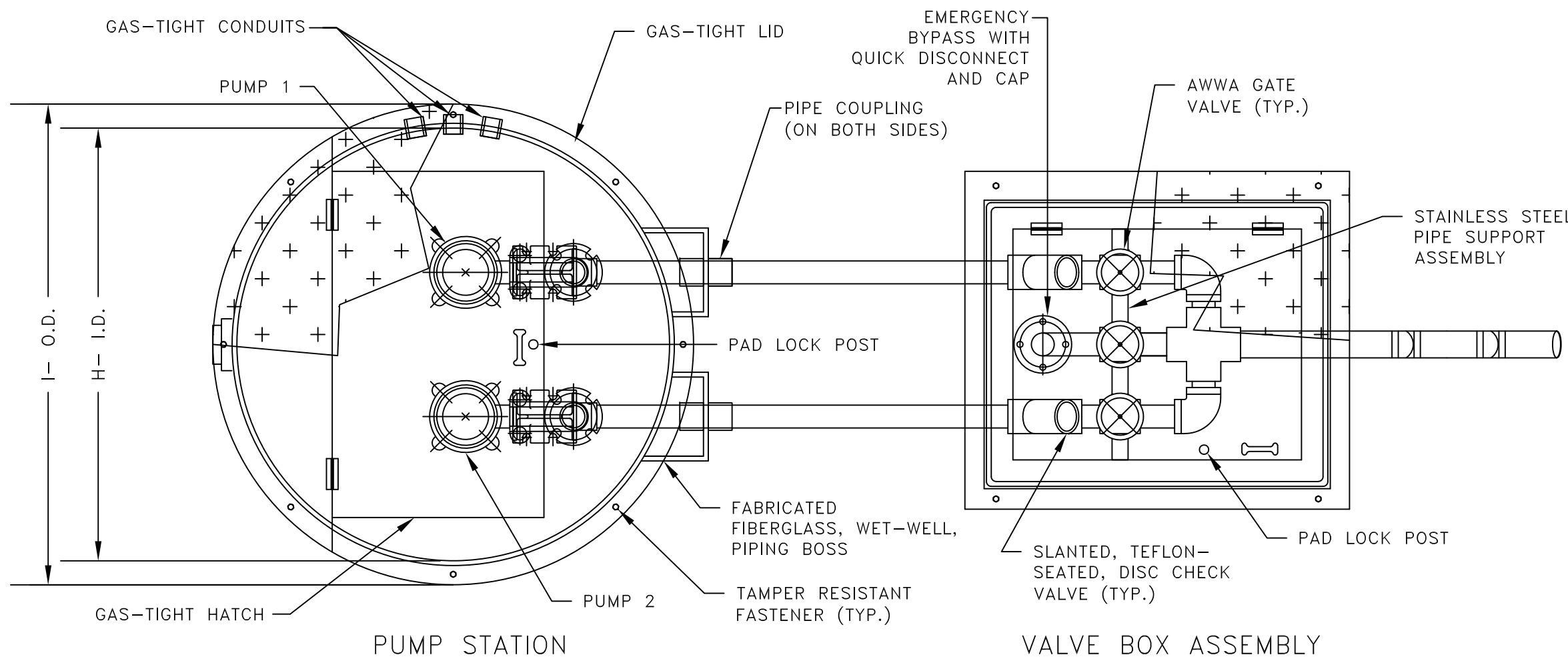
U.S.C. AND A.S.S.E. APPROVED

N.T.S.



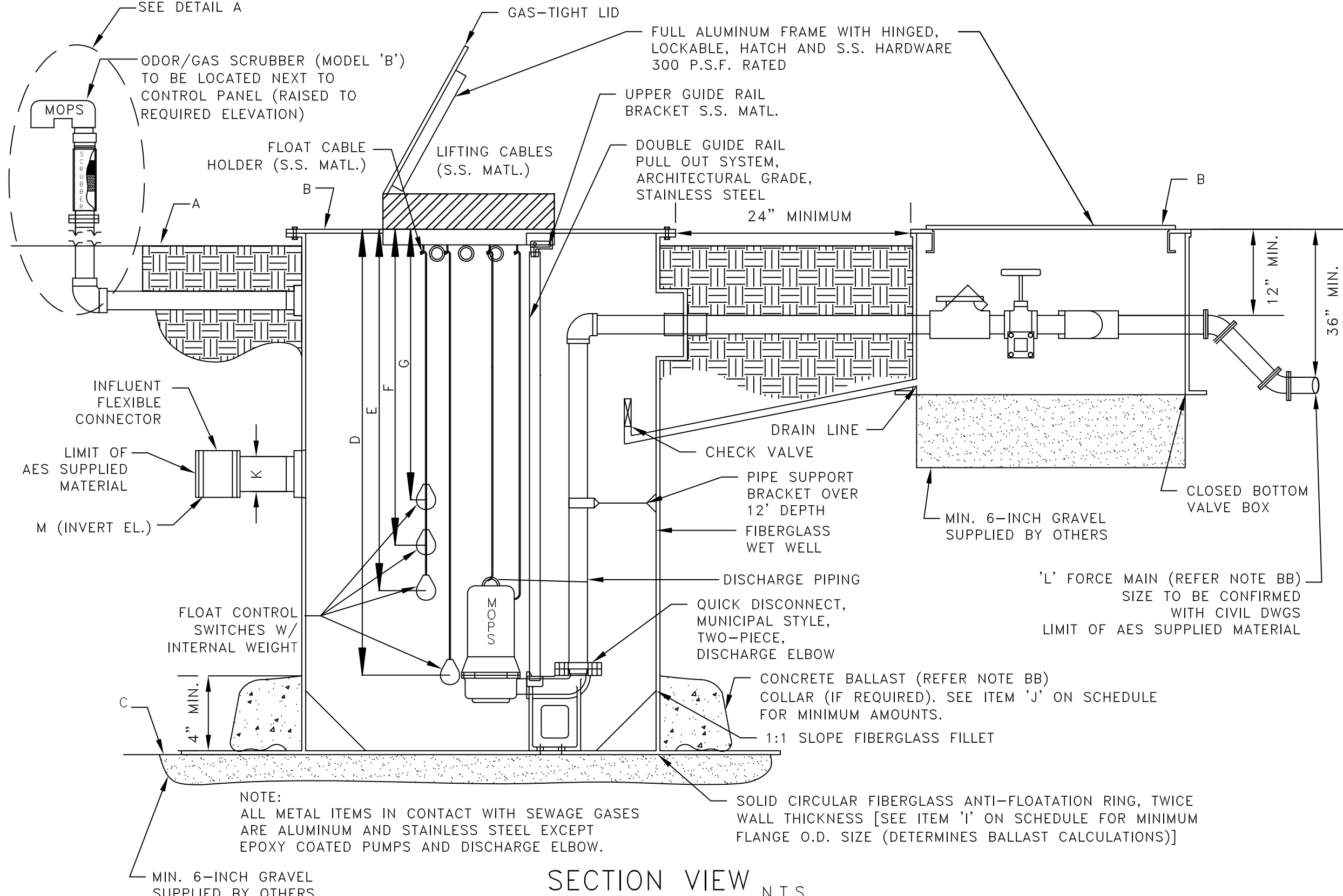
CONTROL CENTER ASSEMBLY AND INSTALLATION

N.T.S.



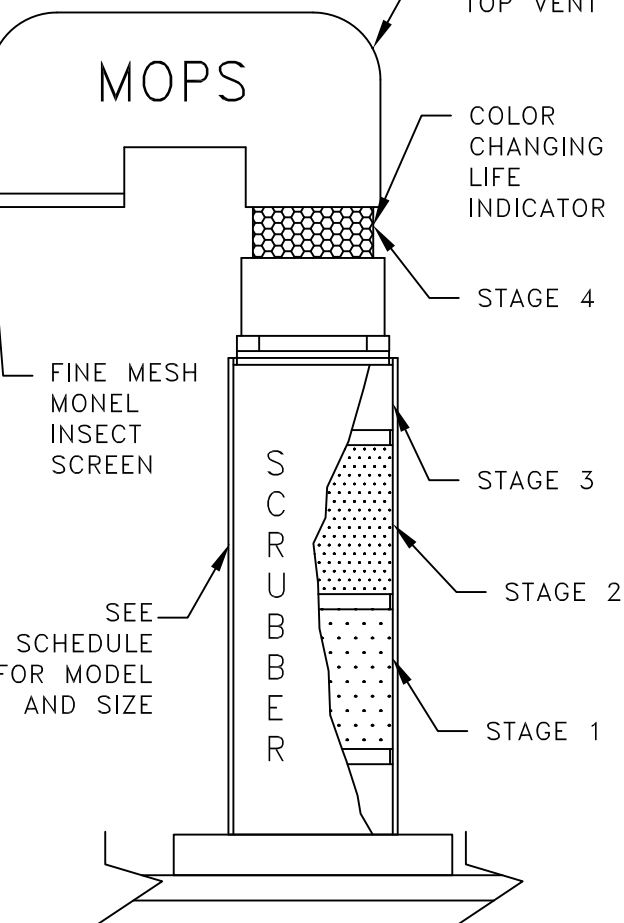
TOP VIEW

N.T.S.



SECTION VIEW

N.T.S.



DETAIL A

MOPS ODOR/GAS SCRUBBER

NOTES:

- SCRUBBER DESIGNED TO REMOVE TOXIC SEWAGE GASES, H₂S, AND OFFENSIVE ODORS SUCH AS SKATOLES AND MERCAPTANS.
- SCRUBBER'S LIFE EXPECTANCY CALCULATIONS ARE INCLUDED IN SHOP DRAWING SUBMITTALS. SCRUBBER UNIT CAN BE MOUNTED INSIDE WET-WELL OR TOP MOUNTED.
- MODEL 'B' SHOWN.

MOPS

MANUFACTURED ODORLESS PUMP STATION ATLANTIC ENVIRONMENTAL SYSTEMS, INC.

LAKE WORTH, FL 33461

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PRIVATE SERIES

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MOPS PUMP STATION SCHEDULE

MOPS SERIES		ITEM DESCRIPTION	
INITIAL DESIGN FLOW (G.P.M.)	43	100 YEAR FLOOD ELEVATION	19.80'
INITIAL DESIGN HEAD (T.D.H.)	161'	25 YEAR FLOOD ELEVATION	18.70'
SECONDARY DESIGN FLOW (G.P.M.)	56	A GRADE ELEVATION	20.00'
SECONDARY DESIGN HEAD (T.D.H.)	145'	B TOP ELEVATION OF WET WELL	20.00'
RATED PERFORMANCE SPEED	3450 RPM	C BOTTOM ELEVATION OF WET WELL	6.00'
RATED MOTOR HORSEPOWER	10	D ALL PUMPS OFF ELEVATION	10.50'
SUBMERSIBLE PUMP TYPE (P-1,P-2)	GRINDER	E LEAD PUMP ON ELEVATION	11.50'
PUMP MODEL NUMBER	MOPS	F LAG PUMP ON ELEVATION	12.00'
SERVICE ENTRANCE VOLTAGE	208	G HIGH ALARM ELEVATION	12.50'
SERVICE ENTRANCE PHASE	3	H INSIDE DIAMETER OF WET-WELL	48"
CONTROL CENTER FULL LOAD AMPS	65	I OUTSIDE DIAMETER OF ANTI-FLOATATION RING	84"
NEMA 3R PAINTED STEEL DISCONNECT SWITCH, RATED AMPS	100	J MINIMUM CUBIC FEET OF CONCRETE BALLAST (CU YDS)	000/(0)
WET WELL SCOURER SYSTEM	N/A	K INVERT PIPE DIAMETER	8"
REMOTE STATION MONITOR (TELEMETRY)	W/SA	L FORCE MAIN DIAMETER	2"
ON-SITE GENERATOR SYSTEM	N/A	M PRIMARY INVERT ELEVATION	13.42'
		N SECONDARY INVERT ELEVATION	N/A

MOPS EQUIPMENT IDENTIFICATION	QTY.	MODEL DESIGNATION
MOPS PUMP STATION	1	B22-48168-C-10.0
MOPS VALVE BOX ASSEMBLY (VBA)	1	VBA-22
MOPS ODOR/GAS SCRUBBER (OGS)	1	OGS-B
MOPS R.P.Z. ASSEMBLY	1	75
MOPS CONTROL CENTER	1	PSC-222-10.0
MOPS DISCONNECT SWITCH	1	FDS-100-3-2-PS
MOPS CONTROL CENTER MOUNTING ASSEMBLY	1	CCMA-32AL
MOPS WET WELL SCOURER SYSTEM	0	N/A
MOPS REMOTE STATION MONITOR	1	PROVIDED WITH SERVICE AGREEMENT
1st YEAR SERVICE/MAINTENANCE CONTRACT	1	LEVEL 1 WITH REMOTE MONITOR
MOPS ON-SITE GENERATOR SYSTEM	0	N/A
MOPS FIELD SERVICE WORK	1	CONTROL INSTALLATION & START-UP

MOPS PUMP STATION COMPLIANCE NOTES:

THIS PUMP STATION DESIGN COMPLIES WITH THE FOLLOWING REQUIRED STANDARDS:

- STATE OF FLORIDA ENVIRONMENTAL PROTECTION STANDARDS
- FLORIDA ADMINISTRATIVE CODE (F.A.C.): 62-640.400- COLLECTION AND TRANSMISSION SYSTEMS
- NATIONAL ELECTRIC CODE (NEC) CLASS 1, DIVISION 1, GROUP D- HAZARDOUS LOCATIONS
- UNDERWRITER'S LABORATORIES (U.L.) 508A-MOTOR CONTROL CENTERS AND U.L. 698A-INSTRINSICALLY SAFE CONTROL CENTERS
- RECOMMENDED STANDARDS FOR WASTEWATER FACILITIES (2014 EDITION).

- PUMPS ARE RATED BY FACTORY MUTUAL FOR CLASS 1, DIVISION 1, GROUP D ATMOSPHERES AS REQUIRED BY NEC.
- THE CONTROL CENTER INCORPORATES INTRINSICALLY SAFE RELAYS AND IS LISTED TO UL 698A INTRINSICALLY SAFE FOR CLASS 1, DIVISION 1 ATMOSPHERES.
- THE CONDUIT PROVIDED, ALONG WITH CONDUIT GAS-SEAL-OFFS, ARE RATED FOR CLASS 1, DIVISION 1 LOCATIONS.
- THE WASTEWATER PUMPS AND THE CONTROL CENTER INCORPORATE A MECHANICAL SEAL FAILURE DETECTION AND NOTIFICATION SYSTEM.
- THE CONTROL CENTER INCLUDES EITHER A REMOTE TELEMETRY UNIT (RTU) OR A SELF-CHARGING, BACK-UP ALARM SYSTEM TO OPERATE ON POWER FAILURE.
- THE PUMP STATION INCORPORATES AN ODORLESS DESIGN WITH A SCRUBBER SYSTEM TO CONTROL TOXIC GASES AND ODORS FOR COMPLIANCE TO F.A.C. 62-604.400.
- THE BOTTOM OF THE TOP RIM ELEVATION OF PUMP STATION MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 25 YEAR FLOOD ELEVATION. THE LISTED 25 YEAR FLOOD ELEVATION PROVIDED BY SITE CIVIL ENGINEER.
- THE BOTTOM ELEVATION OF THE MOPS CONTROL CENTER MUST BE LOCATED AT A HIGHER ELEVATION THAN THE 100 YEAR FLOOD ELEVATION. THE LISTED 100 YEAR FLOOD ELEVATION PROVIDED BY THE SITE CIVIL ENGINEER.

MOPS ENGINEERING NOTES:

- AA. THE HORSEPOWER SHOWN ON THE SCHEDULE IS A MINIMUM HORSEPOWER REQUIREMENT BASED ON THE STATION'S DESIGN CRITERIA AND THE REQUIRE TORQUE. (LOWER RATED HORSEPOWER EQUIPMENT WILL NOT BE ACCEPTABLE.)
- BB. THESE ITEMS ARE NOT SUPPLIED BY A.E.S. WITH THE MOPS STATION.
- CC. INVERT ELEVATIONS BASED ON INSIDE BOTTOM OF PIPE.
- DD. THE MOPS CONTROL ASSEMBLY CONSISTS OF THE FOLLOWING: CONTROL CENTER DISCONNECT SWITCH, MOUNTING ASSEMBLY, ELECTRICAL CONDUITS, AND SEAL-OFF. THESE ITEMS MUST BE SUPPLIED AND INSTALLED BY THE MOPS PUMP STATION MANUFACTURER TO VALIDATE MOPS WARRANTY PROGRAM.
- EE. FOR STATIONS IN MIAMI-DADE COUNTY, THE MOPS PUMP STATION IS SUPPLIED WITH A REMOTE TELEMETRY MONITORING UNIT AND A.E.S. MAINTENANCE SERVICE. THE R.T.U. ALLOWS FOR MONITORING OF LAG ALARM, HIGH ALARM, AND POWER FAILURE PER CHAPTER 24.42.2(5). THE R.T.U. IS EQUIPPED WITH A BATTERY BACK UP AND IS INSTALLED ABOVE THE 100 YEAR FLOOD ELEVATION.
- THE MOPS WASTEWATER PUMP STATION DESIGN AND EQUIPMENT SHOWN ON THIS DRAWING HAS BEEN REVIEWED, PERMITTED, AND CERTIFIED AS COMPLYING WITH ALL THE STATE OF FLORIDA D.E.P. AND LOCAL REQUIREMENTS. ANY SUBSTITUTION FROM THIS DESIGN MAY REQUIRE NEW PERMITS, APPLICATION FEES, AND ENGINEERING SERVICES FOR RE-CERTIFICATION AND DESIGN REVIEW.

P.E. CERTIFICATION:

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DATE	---/---/---
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