

RESOLUTION No. 24-242

A RESOLUTION OF THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, APPROVING THE SITE PLAN FOR LITHIA MOTORS, INC., FOR THE PROPERTY LOCATED AT 9300 NW 13 STREET, DORAL, FLORIDA, PURSUANT TO SECTION 53-184(F) OF THE CITY'S LAND DEVELOPMENT CODE; AND PROVIDING FOR AN EFFECTIVE DATE

WHEREAS, Chapter 53 "Administration", Article III. Development Procedures, Sec. 53-184(f) of the City's Land Development Code, establishes the site plan review and approval procedures for the Mayor and City Council to review and approve the site plan; and

WHEREAS, Lithia Motors, Inc. c/o Golden Property Development (the "Applicant") is seeking site plan approval for the property located at 9300 NW 13th Street, further identified by the Miami-Dade County Property Appraiser by Folio No. 35-3033-003-0010 (the "Property"), as legally described in "Exhibit A" (the "Project"); and

WHEREAS, City staff finds that the proposed site plan, attached hereto as "Exhibit B," complies with the requirements and standards of the City's Land Development Code and Comprehensive Plan; and

WHEREAS, a zoning workshop was held on April 17, 2024, during which the public was afforded an opportunity to examine the Project and provide feedback; and

WHEREAS, the City Council reviewed the site plan application, the written and oral recommendations of the Planning and Zoning Department, including the recommended conditions, and hereby finds competent substantial evidence to find the site plan is in compliance with the City's Comprehensive Plan and Land Development Regulations, and that the site plan maintains the basic intent and purpose of the zoning, subdivision or other land use regulations, which is to protect the general welfare of the public, and further finds

that the site plan application should be granted.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND THE CITY COUNCIL OF THE CITY OF DORAL, FLORIDA, AS FOLLOWS:

Section 1. Recitals. The foregoing recitals are confirmed, adopted, and incorporated herein and made as part hereof by this reference.

Section 2. Findings and Conclusions. Based upon an analysis of the site plan application and standards for approval of a site plan under the City's Land Development Regulations, the City Council hereby finds and concludes that the Applicant's request for site plan, as more particularly set forth in "Exhibit B," is in compliance with the Comprehensive Plan and the Land Development Regulations of the City, and there is substantial competent evidence to support approval of the Application.

Section 3. Approval. The Mayor and City Council hereby approve the site plan for Subaru Dealership, for the property located at 9300 NW 13th Street, further identified by folio number 35-3033-003-0010, as legally described in "Exhibit A." The proposed site plan comprises of a 2-story auto dealership dedicated to auto retail, showroom, and service shop. A copy of the site plan is provided in "Exhibit B." The approval of the site plan is subject to the following conditions:

1. The Project shall be built in substantial compliance with the plans entitled "Subaru," prepared by Ingenium Enterprises, Inc., dated stamped received May 6, 2024.
2. The Project shall be landscaped in accordance with the landscape plan, signed by Michael Szura, LA, dated stamped received May 6, 2024, as amended, and included with the site plan submittal.
3. The Applicant shall comply with Ordinance No. 2015-09 "Public Arts Program," as amended, at the time of building permit (if applicable).

4. The Applicant shall comply with Chapter 63, "Green Building Incentives," of the City's Land Development Code at the time of building permit (if applicable).
5. The Applicant shall comply with the City's Floodplain Management regulations (Chapter 23, Article II, Floodplain Management) of the City's Code.
6. The Applicant shall provide the Building Department a certified drainage inspection report prior to the issuance of a certificate of occupancy.
7. The property owner shall maintain the landscaping within the public rights-of-way adjacent to the property. Maintenance includes trees, plants, sod, and other landscape material.
8. The Applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) at time of building permit. The Plan should provide guidelines for implementing an erosion and sedimentation control program before the site is cleared or graded, including areas where topsoil will be removed and contours of slopes will be cleared. The Plan shall also include location and type of erosion control measures, storm water and sediment management systems, and a vegetative plan for temporary and permanent stabilization. The Plan shall remain on-site for the duration of the construction activity.
9. If more than one (1) acre of land is disturbed during construction the Contractor/Developer is responsible to obtain NPDES Stormwater permit coverage through the Florida Department of Environmental Protection (FDEP), Construction Generic Permit (CGP). If the project is less than one (1) acre, but part of a larger common plan of development or sale that will ultimately disturb one or more acres, permit coverage is also required. Instruction to request and obtain a CGP can be found at: <http://www.dep.state.fl.us/water/stormwater/npdes/docs/cgp.pdf>. Contractor/Developer should submit the Notice of Intent (NOI) with the appropriate processing fees to the NPDES Stormwater Notices Center. Contractor/Developer must apply for permit coverage at least two (2) days before construction begins.
10. Construction shall be permitted only during the hours set forth in Ordinance No. 2011-01 "Noise Ordinance."
11. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Department of Regulatory and Economic Resources.
12. The Applicant shall comply with all applicable conditions and requirements of the Miami-Dade County Fire Rescue Department.

13. All applicable local, state and federal permits must be obtained before commencement of the development.
14. Issuance of this development permit by the City of Doral does not in any way create any right on the part of an Applicant to obtain a permit from a state or federal agency and does not create any liability on the part of the City of Doral for issuance of the permit if the applicant fails to obtain requisite approvals or fulfill the obligations imposed by a state or federal agency or undertakes actions that result in a violation of state or federal law.

Section 4. **Effective Date.** This Resolution shall become effective immediately upon its adoption.

The foregoing Resolution was offered by Councilmember Pineyro who moved its adoption. The motion was seconded by Councilmember Cabral and upon being put to a vote, the vote was as follows:

Mayor Christi Fraga	Yes
Vice Mayor Oscar Puig-Corve	Yes
Councilwoman Digna Cabral	Yes
Councilman Rafael Pineyro	Yes
Councilwoman Maureen Porras	Yes

PASSED AND ADOPTED this 9 day of October, 2024.



CHRISTI FRAGA, MAYOR

ATTEST:



CONNIE DIAZ, MMC
CITY CLERK

APPROVED AS TO FORM AND LEGAL SUFFICIENCY
FOR THE USE AND RELIANCE OF THE CITY OF DORAL ONLY:



LORENZO COBIELLA
GASTESI, LOPEZ & MESTRE, PLLC
CITY ATTORNEY

EXHIBIT “A”

EXHIBIT "A"

LEGAL DESCRIPTION

Tract 1, AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS, according to the Plat thereof as recorded in Plat Book 106, Page 4, of the Public Records of Miami-Dade County, Florida.

Folio #35-3033-003-0010

EXHIBIT “B”



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C01.DWG

THE CIVIL ENGINEER REGULARLY UPDATES ELECTRONIC FILES DURING THE DEVELOPMENT OF A PROJECT AS A RESULT. THE DATA INCLUDED IN ANY CAD FILE OR DRAWING PRIOR TO ITS FINAL RELEASE DOES NOT NECESSARILY REFLECT THE COMPLETE SCOPE OR CONTENT AS DEFINED IN THE CONTRACT. THE CONTENT IN THESE FILES MAY THEREFORE BE PRELIMINARY, INCOMPLETE, WORK IN PROGRESS, AND SUBJECT TO CHANGE. FURTHERMORE, THE INFORMATION CONTAINED HEREIN IS THE EXCLUSIVE PROPERTY OF THE CIVIL ENGINEER. THE ORIGINAL IDEAS REPRESENTED HERE BY THIS INFORMATION SHALL NOT BE USED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE CIVIL ENGINEER. THESE PLANS ARE SUBJECT TO FEDERAL COPYRIGHT LAWS. ANY USE OF SAME WITHOUT EXPRESSED WRITTEN PERMISSION OF THE CIVIL ENGINEER IS PROHIBITED.

CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH
STREET
DORAL,
FLORIDA 33172

REV. DATE DESCRIPTION

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JEREMY M. PETTIT, P.E., P.E. ON THE DATE ADJACENT TO THE SEAL ON THE COVER SHEET (C01.0).

PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.

SHEET NAME
COVER SHEET

SHEET NUMBER

24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

ISSUE FOR PERMIT

SITE DEVELOPMENT PLANS FOR:



NYSE:LAD

DORAL SUBARU
9300 NW. 13TH ST
DORAL, FLORIDA 33172
MIAMI-DADE COUNTY
SECTION 33, TOWNSHIP 53S, RANGE 40E

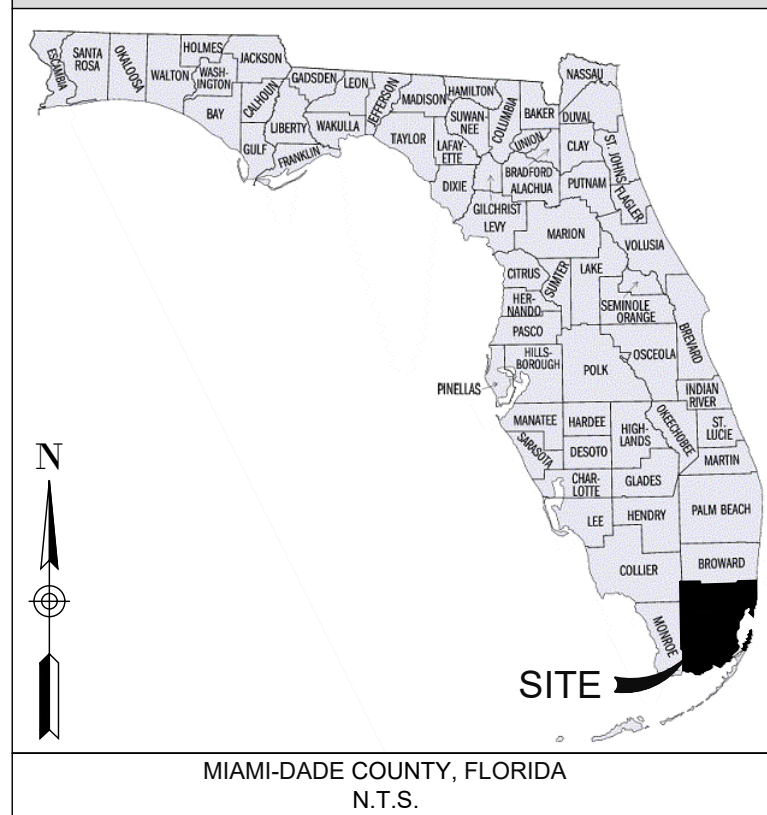
PREPARED BY:



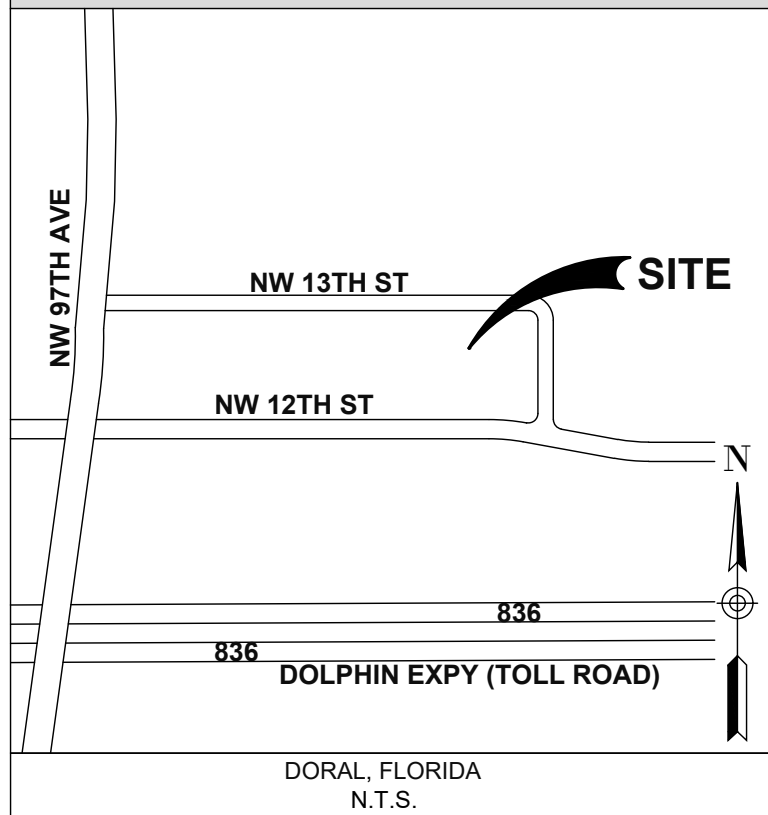
PREPARED FOR:

LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459

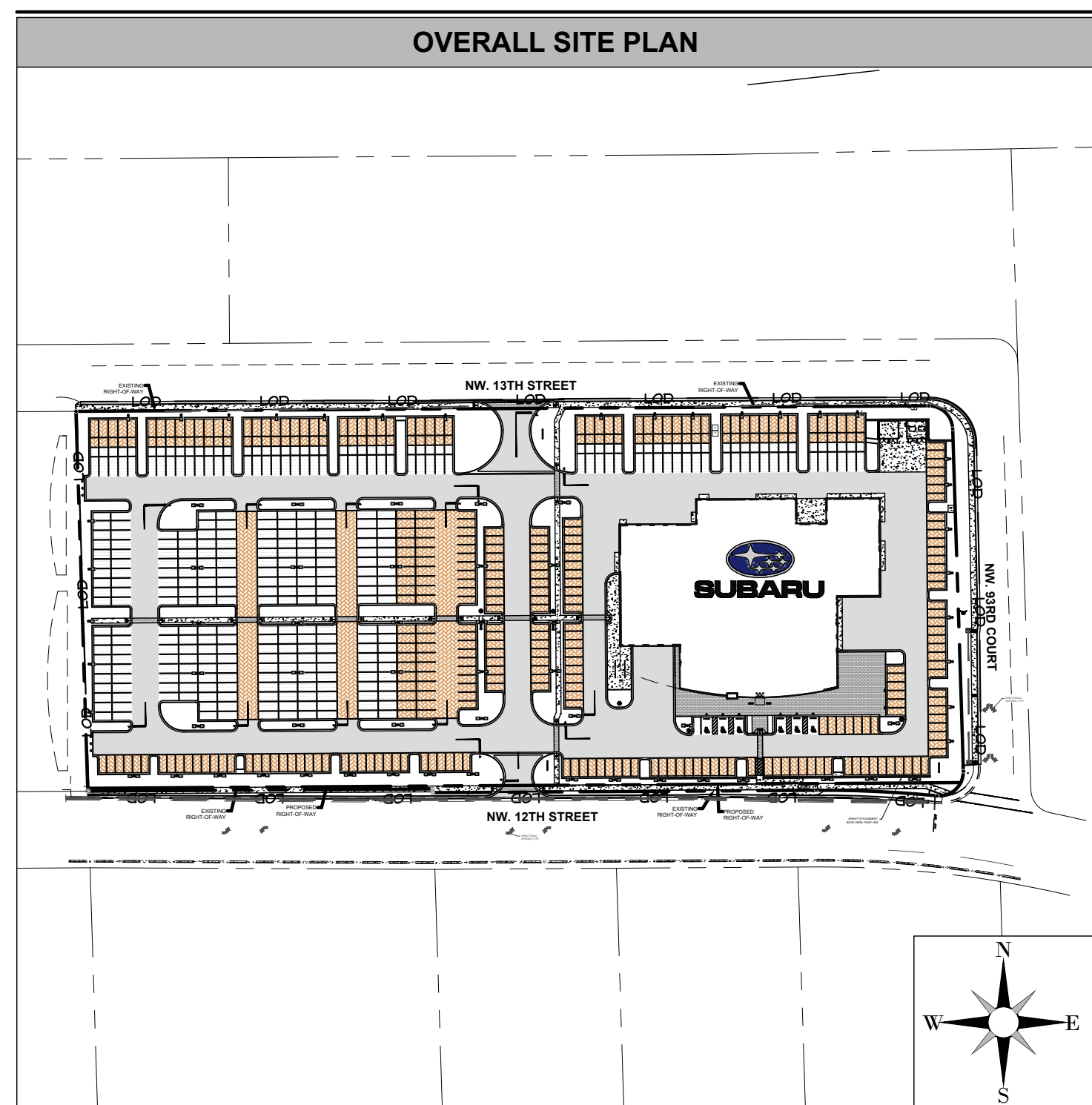
REGIONAL MAP



LOCATION MAP



OVERALL SITE PLAN



THE ENVIRONMENTAL REPORT PREPARED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, DATED 10/13/2023 AND ANY SUBSEQUENT ADDENDUMS ARE CONSIDERED PART OF THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE REPORT'S RECOMMENDATIONS AND FINDINGS WITH THE OWNER, ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION. IMPLEMENTATION OF THE REPORT'S RECOMMENDATIONS MAY REQUIRE THE CONTRACTOR TO PERFORM ADDITIONAL WORK NOT SHOWN ON THE CIVIL PLANS INCLUDING BUT NOT LIMITED TO EXCAVATION, REMEDIATION, DEWATERING, COMPACTION ETC.

THE GEOTECHNICAL INVESTIGATION PREPARED BY NV5, DATED 06/22/2023 AND ANY SUBSEQUENT ADDENDUMS ARE CONSIDERED PART OF THE CONTRACT DOCUMENTS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THE REPORT'S RECOMMENDATIONS AND FINDINGS WITH THE OWNER, ENGINEER AND ARCHITECT PRIOR TO CONSTRUCTION. IMPLEMENTATION OF THE REPORT'S RECOMMENDATIONS MAY REQUIRE THE CONTRACTOR TO PERFORM ADDITIONAL WORK NOT SHOWN ON THE CIVIL PLANS INCLUDING BUT NOT LIMITED TO EXCAVATION, REMEDIATION, DEWATERING, COMPACTION ETC.

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO, UTILITIES, EXISTING IMPROVEMENTS, ETC. CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY

PROJECT CONTACTS

SELLER/LANDLORD	DEVELOPER	CIVIL ENGINEER	LANDSCAPE ARCHITECT
FLORIDA SS, LLC 150 NORTH BARTLETT STREET MEDFORD, OR 97501	LITHIA MOTORS, INC. MRS. ANNE BRECK 150 NORTH BARTLETT STREET MEDFORD, OREGON 97501 EMAIL: ABRECK@LITHIA.COM PHONE: (541) 734-3043	JEREMY PETTIT 19445 SHUMARD OAK DRIVE SUITE 102 LAND O LAKES, FLORIDA 34638 EMAIL: JEREMY@INGENIUMENTERPRISES.COM PHONE: (813) 387-0084 EXT. 210	LANGAN MR. MICHAEL KIDDE 400 N. ASHLEY DRIVE SUITE 2175 TAMPA, FL 33602 EMAIL: MKIDDE@LANGAN.COM PHONE: (813) 439-6116
ARCHITECT	MEP	LAND SURVEYOR	SITE LIGHTING
GOREE MR. TOMMY CLEMENT 5151 SAN FELIPE ST. SUITE 1700 HOUSTON, TX 77056 EMAIL: T.CLEMENT@GOREE.COM PHONE: (832) 460-7705	JJA INC MR. LAUREN RUSH 8150 N. CENTRAL EXPRESSWAY SUITE M-2100 DALLAS, TX 75206 EMAIL: LAUREN.RUSH@JJAINC.COM PHONE: (214) 622-6423	BUREAU VERITAS MR. JASON MYERS 510 E. MEMORIAL ROAD SUITE A-1 OKLAHOMA CITY, OK 73114 EMAIL: JASON.MYERS@BUREAUVERITAS.COM PHONE: (415) 265-3638	LSI MS. JOANNA DUCKER 10000 ALLIANCE RD. CINCINNATI, OH 45242 EMAIL: JOANNA.DUCKER@LSICORP.COM PHONE: (513) 348-8715
MUNICIPAL SEWER AGENCY	MUNICIPAL WATER AGENCY	ELECTRIC	GAS
MIAMI-DADE WATER & SEWER DEPARTMENT MR. GIANCARLO ALONSO 3575 SOUTH LEJUENE ROAD MIAMI, FLORIDA 33146 EMAIL: GIANCARLO.ALONSO@MIAMIDADE.GOV PHONE: (786) 268-5159	MIAMI-DADE WATER & SEWER DEPARTMENT MR. GIANCARLO ALONSO 3575 SOUTH LEJUENE ROAD MIAMI, FLORIDA 33146 EMAIL: GIANCARLO.ALONSO@MIAMIDADE.GOV PHONE: (786) 268-5159	FLORIDA POWER AND LIGHT SEBASTIAN GARCIA 14250 SW 112TH STREET MIAMI, FLORIDA 33186 EMAIL: SEBASTIAN.GARCIA@FPL.COM PHONE: (305) 281-9537	FLORIDA CITY GAS ELDA MOYER 4045 NW 97TH AVENUE MIAMI, FLORIDA 33178 EMAIL: ELDA.MOYER@NEXTERAENERGY.COM PHONE: (786) 459-3814
TELEPHONE/CABLE	FIRE	ENVIRONMENTAL	
AT&T PHONE: (844) 602-5435	MIAMI-DADE WATER & SEWER DEPARTMENT MR. GIANCARLO ALONSO 3575 SOUTH LEJUENE ROAD MIAMI, FLORIDA 33146 EMAIL: GIANCARLO.ALONSO@MIAMIDADE.GOV PHONE: (786) 268-5159	LANGAN MR. MICHAEL L. SPIEVACK 1221 BRICKELL AVE. SUITE 1800 MIAMI, FL 33131 EMAIL: MSPIEVACK@LANGAN.COM PHONE: (786) 284-7241	

SITE INFORMATION

JURISDICTION: CITY OF DORAL ZONING: I (INDUSTRIAL DISTRICT) MAXIMUM 1ST FLOOR AREA SURFACE RATIO: 0.50 PROP. 1ST FLOOR AREA SURFACE RATIO: 0.14 MAXIMUM 2ND FLOOR AREA SURFACE RATIO: 0.25 PROP. 2ND FLOOR AREA SURFACE RATIO: 0.14 MAX HEIGHT: WIDTH OF R.O.W. 80' PROPOSED HEIGHT: 30' MINIMUM LOT AREA: 7,500SF ACTUAL LOT AREA: 388,777SF MINIMUM LOT WIDTH: 75' ACTUAL LOT WIDTH: 915' MAXIMUM BUILDING COVERAGE: 50% PROPOSED BUILDING COVERAGE: 13.66% MINIMUM OPEN SPACE: 15% PROPOSED OPEN SPACE: 32% REQUIRED BUILDING SETBACKS: FRONT: 20" SIDE: 5 (INTERIOR) / 15 (STREET) SIDE: 5 (INTERIOR) / 15 (STREET) REAR: 5" REQUIRED PARKING PER SECTION 34-608: OFFICE (1 SPACE / 300 SF)= 16 RETAIL (1 SPACE / 250 SF)= 53 SERVICE/OTHER (3 SPACES / 2500 SF)= 35 OPEN LOT (3 SPACES / 5000 SF)= 122 TOTAL: 225	PROPOSED PARKING: EMPLOYEE / CUSTOMER (9' X 19') = 82 INVENTORY (9' X 19') = 575 HANDICAP (12' X 19') = 6 TOTAL = 663 DRIVE AISLE: 24' SITE AREA CALCULATIONS: SITE: ±8.39 AC. PERVIOUS AREA: ±2.83 AC. HARDSCAPE: ±5.56 AC. PERVIOUS HARDSCAPE: ±1.63 AC. IMPERVIOUS AREA: ±4.30 AC. DISTURBED AREA: ±8.92 AC. FLOOD HAZARD: THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA (ZONE AH) AS PER F.I.R.M. MAP NO. 12086C0286L, DATED 9/11/2009 WITH A BASE FLOOD ELEVATION OF 8.0 (NGVD 1929). BASE INFORMATION: (1) PROVIDED BY BUREAU VERITAS, DATED 10/13/2022 (SEE SHEET C02.0). ELEVATION DATUM: NGVD 1929. (2) PROVIDED BY PULICE LAND SURVEYORS, INC., DATED 07/14/2022 (SEE SHEET C02.0). ELEVATION DATUM: NGVD 1929. (3) ADDITIONAL INFORMATION GATHERED FROM AMERICA INTERNATIONAL CENTER PLANS PROVIDED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC., DATED 02/25/2022. (4) ADDITIONAL INFORMATION GATHERED FROM NW 12TH STREET IMPROVEMENT PLANS PROVIDED BY MIAMI DADE COUNTY, DATED 08/11/2022. ELEVATION DATUM: NGVD 1929.
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SHEETS DENOTED WITH AN ASTERISK ("") ARE NOT INCLUDED IN THE DIGITAL/ELECTRONIC SEAL OF THE CIVIL ENGINEER (JEREMY M. PETTIT, P.E., P.E.) AND ARE INCLUDED FOR REFERENCE PURPOSES ONLY.

THIS ITEM HAS BEEN ELECTRONICALLY SIGNED AND SEALED BY JEREMY M. PETTIT, P.E. ON THE DATE ADJACENT TO THE SEAL USING A SHA AUTHENTICATION CODE.



24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

C01.0

ISSUE FOR PERMIT

GENERAL NOTES	
1.	INGENIUM ENTERPRISES, INC. (IE) REGULARLY UPDATES ELECTRONIC FILES DURING THE DEVELOPMENT OF A PROJECT. AS A RESULT, THE DATA INCLUDED IN ANY CAD FILE OR DRAWING PRIOR TO ITS FINAL RELEASE DOES NOT NECESSARILY REFLECT THE COMPLETE SCOPE OR CONTENT AS DEFINED IN THE CONTRACT. THE CONTENTS IN THESE FILES MAY THEREFORE BE PRELIMINARY, INCOMPLETE, WORK IN PROGRESS, AND SUBJECT TO CHANGE. FURTHERMORE, THE INFORMATION CONTAINED HEREIN IS THE EXCLUSIVE PROPERTY OF IE. THE ORIGINAL IDEAS REPRESENTED HERE BY THIS INFORMATION SHALL NOT BE USED, ALTERED, OR REPRODUCED IN ANY MANNER WITHOUT THE EXPRESSED WRITTEN CONSENT OF IE.
2.	CONSENT FROM THESE PLANS AND NOTES WITHOUT PRIOR CONSENT OF THE OWNER, HIS REPRESENTATIVE, OR THE ENGINEER MAY CAUSE THE WORK TO BE UNACCEPTABLE.
3.	THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO COVER A COMPLETE PROJECT, READY TO USE, AND ALL ITEMS NECESSARY FOR A COMPLETE AND WORKABLE JOB SHALL BE FURNISHED AND INSTALLED. THIS INCLUDES ALL STRIPING AND SIGNAGE.
4.	IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, THE CONTRACTOR WILL BE SOLELY AND COMPLETELY RESPONSIBLE FOR CONDITIONS OF THE JOB SITE, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY DURING PERFORMANCE OF THE WORK. THIS REQUIREMENT WILL APPLY CONTINUOUSLY AND WILL NOT BE LIMITED TO NORMAL WORKING HOURS. THE DUTY OF THE OWNER TO CONDUCT CONSTRUCTION REVIEW OF THE CONTRACTORS PERFORMANCE IS NOT INTENDED TO INCLUDE REVIEW OF THE ADEQUACY OF THE CONTRACTORS SAFETY MEASURES, IN, ON OR NEAR THE CONSTRUCTION SITE. CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING AND MAINTAINING ALL BARRICADES, WARNING SIGNS, FLASHING LIGHTS AND TRAFFIC CONTROL DEVICES DURING CONSTRUCTION. CONTRACTOR TO COMPLY WITH ALL OSHA REGULATIONS REQUIREMENTS AND SAFETY MEETING REQUIREMENTS.
5.	THE ENGINEER SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION, MEANS, METHODS, TECHNIQUES, OR PROCEDURES UTILIZED BY THE CONTRACTOR, NOR FOR THE SAFETY OF PUBLIC OR CONTRACTORS EMPLOYEES, OR FOR THE FAILURE OF THE CONTRACTOR TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
6.	THE CONTRACTOR IS RESPONSIBLE FOR MEETING ALL LOCAL, STATE, AND FEDERAL CERTIFICATION AND LICENSING REQUIREMENTS FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO: LAND DISTURBANCE PERMITS, BUILDING PERMITS, DEMOLITION PERMITS, NPDES PERMITS, DEWATERING PERMITS, ETC.

GRADING & DRAINAGE NOTES	
1.	SEE LANDSCAPE PLAN FOR REQUIRED TREES AND GROUND COVER.
2.	SLOPE OF SURFACE GRADE SHALL BE A MINIMUM OF 1.00%.
3.	MAXIMUM CUT OF FILL SLOPES IS 3:1 V.
4.	THE CONTRACTOR SHALL PROVIDE CLEAN, SUITABLE MATERIAL FOR REQUIRED FILL. SHOULD A SUFFICIENT QUANTITY OF SUITABLE MATERIAL NOT BE AVAILABLE FROM THE REQUIRED EXCAVATION ON THE SITE.
5.	ALL FILL SHOULD BE PLACED IN THIN, HORIZONTAL LOOSE LIFTS (MAXIMUM 6-INCH) AND COMPACTED TO AT LEAST 98 PERCENT OF THE STANDARD PROCTOR MAXIMUM DRY DENSITY (ASTM D 698). THE UPPER 8 INCHES OF SOIL BENEATH PAVEMENTS AND SLAB-ON-GRADE SHOULD BE COMPACTED TO AT LEAST 100 PERCENT. COMPACTION MUST BE CERTIFIED BY A FLORIDA REGISTERED PROFESSIONAL SOILS ENGINEER PRIOR TO THE INSTALLATION OF PAVEMENTS, CURBS, SIDEWALKS OR FOOTINGS OF ANY TYPE.
6.	DETENTION POND, DETENTION OUTLET STRUCTURES AND TEMPORARY SEDIMENT POND FEATURES ARE TO BE FULLY CONSTRUCTED AND OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
7.	LENGTH OF RIP-RAP PADS AT PIPE OUTLET STRUCTURES TO BE A MINIMUM LENGTH OF (6) SIX TIMES THE DIAMETER OF THE PIPE.
8.	JURISDICTIONAL LAND DISTURBANCE PERMIT MUST BE DISPLAYED ON SITE AT ALL TIMES DURING CONSTRUCTION AND IN PLAIN VIEW FROM A PUBLIC ROAD OR STREET.
9.	ALL PEDESTRIAN PATHS, SIDEWALKS AND BUILDING ACCESS POINTS SHALL BE A MAXIMUM OF 2% CROSS SLOPE AND MAXIMUM OF 5% RUNNING SLOPE.

GENERAL DEMOLITION NOTES	
1.	ALL ITEMS TO BE PROTECTED SHALL BE PROTECTED THROUGH ALL THE PHASES OF CONSTRUCTION UNTIL FINAL ACCEPTANCE BY CITY OF DORAL/MIAMI-DADE COUNTY IS RECEIVED.
2.	CONTRACTOR TO COMPLY WITH ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS WITH ALL DEMOLITION ACTIVITIES. IF ADDITIONAL REQUIREMENTS ARE REQUIRED FOR HAZARDOUS WASTE REMOVAL INCLUDING BUT NOT LIMITED TO ASBESTOS, SEPTIC FIELDS, LEAD, PCB, TCE, OR OTHER WASTE OR CONTAMINANT, IT IS THE CONTRACTORS RESPONSIBILITY TO COMPLY WITH MANDATES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3.	CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES CONCERNING THE ABANDONMENT, RELOCATION AND/OR DEMOLITION OF UTILITIES PRIOR TO CONSTRUCTION. NO WORK IS TO BE PERFORMED ON LIVE LINES UNLESS USE EXTREME CAUTION WHEN WORKING NEAR UTILITIES AND SHALL PROTECT THEM AT ALL TIMES.
4.	CONTRACTOR IS RESPONSIBLE FOR PROCUREMENT OF ALL NECESSARY PERMITS.
5.	DEMOLITION SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, HAULING, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO REMOVE AND PROPERLY DISPOSE OF ANY ITEM NECESSARY TO PERFORM THE REQUIRED DEMOLITION AS INDICATED ON THE PLANS.
6.	RELOCATION SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, HAULING, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO REMOVE, RELOCATE, AND INSTALL NEW ITEMS AS INDICATED ON THE PLANS.
7.	ABANDONMENT SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS, PERMITTING, FEES, AND COORDINATION WITH PUBLIC AND/OR PRIVATE UTILITY REQUIRED TO ADEQUATELY ABANDON ITEMS AS INDICATED ON THE PLANS.
8.	THE CONTRACTOR SHALL COORDINATE ALL TREE AND LANDSCAPE REMOVAL WITH THE LANDSCAPE PLANS. ANY DISCREPANCY BETWEEN THIS DEMOLITION PLAN AND THE LANDSCAPE PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER IMMEDIATELY.
9.	THE CONTRACTOR IS FULLY AND COMPLETELY RESPONSIBLE FOR LOCATION, VERIFICATION, PROTECTION, STORAGE, MAINTENANCE, DEMOLITION, REMOVAL, RELOCATION OR ALTERATION OF ALL EXISTING SITE UTILITIES. SITE IMPROVEMENTS, STRUCTURES, OR CONSTRUCTION ELEMENTS AS REQUIRED TO COMPLETE THE WORK THAT ARE SHOWN ON THE PLANS AND OR THAT ARE OBSERVABLE IN THE FIELD, WHETHER CONSPICUOUSLY VISIBLE OR NOT, THE CONTRACTOR SHALL VISIT THE SITE AND BECOME THOROUGHLY FAMILIAR WITH ALL EXISTING IMPROVEMENTS, UTILITIES, AND SITE CONDITIONS PRIOR TO BIDDING AND CONSTRUCTION.
10.	THIS DEMOLITION PLAN IS FOR GRAPHICAL REFERENCE ONLY. ITEMS NOT DEPICTED ON THESE PLANS MAY BE REQUIRED TO BE PROTECTED, REMOVED, OR RELOCATED. THE CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFYING THE LOCATIONS OF ALL EXISTING STRUCTURES, UTILITIES, AND APPURTENANCES WITHIN THE LIMITS OF CONSTRUCTION. DEMOLITION INCLUDES BUT IS NOT LIMITED TO THE ITEMS SHOWN ON THIS PLAN.
11.	THE CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR ANY EXISTING UNDERGROUND OR OVERHEAD UTILITIES.
12.	SAWCUT DIMENSIONS SHOWN ARE APPROXIMATE. CONTRACTOR SHALL FIELD STAKE AND CONSULT ENGINEER TO VERIFY PRIOR TO CONSTRUCTION.
13.	CONTRACTOR SHALL PROTECT ALL ITEMS OUTSIDE LIMITS OF CONSTRUCTION UNLESS OTHERWISE NOTED IN THE CONSTRUCTION PLANS OR SPECIFICATIONS.

GENERAL SITE NOTES	
1.	THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING IMPROVEMENTS AND TREES AND OTHER DEBRIS WITHIN THE LIMITS OF THE WORK FROM THE SITE. ON SITE BURIAL OF TREES AND OTHER DEBRIS WILL NOT BE ALLOWED. THERE ARE NO KNOWN HAZARDOUS MATERIALS ON THE SITE AND NONE WILL BE ALLOWED DURING CONSTRUCTION OF THE PROJECT.
2.	ALL WORK SHALL COMPLY WITH DORAL/MIAMI-DADE COUNTY, STATE OF FLORIDA, AND FEDERAL CODES AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER.
3.	ALL WORK SHALL BE PERFORMED IN A FINISHED AND WORKMANLIKE MANNER TO THE ENTIRE SATISFACTION OF THE OWNER, AND IN ACCORDANCE WITH THE BEST RECOGNIZED TRADE PRACTICES.
4.	ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER PRIOR TO USE.
5.	ALL WORK PERFORMED ON CITY, COUNTY, AND/OR STATE OR FEDERAL RIGHT-OF-WAY SHALL BE IN STRICT CONFORMANCE WITH APPLICABLE STANDARDS AND SPECIFICATIONS OF THE APPROPRIATE GOVERNING AGENCIES.
6.	BASE COURSE MATERIALS, EQUIPMENT, METHODS OF CONSTRUCTION AND WORKMANSHIP SHALL CONFORM TO "STATE OF FLORIDA" TRANSPORTATION STANDARD SPECIFICATIONS' CURRENT EDITION.
7.	ALL BUILDING DIMENSIONS SHALL BE CHECKED AND COORDINATED WITH THE ARCHITECTURAL PLANS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
8.	PHOTOMETRIC SURVEYING BY OTHERS. POLE LOCATIONS ARE SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL VERIFY FINAL LOCATION OF POLES WITH PHOTO METRIC PLAN AND OWNER PRIOR TO CONSTRUCTION.
9.	CONTRACTOR SHALL ENSURE 100% COVERAGE OF ALL LANDSCAPED AREAS WITHIN LIMITS OF WORK, INCLUDING POTENTIAL OFF-SITE AREAS. COVERAGE SHALL INCLUDE BOTH LANDSCAPING AND IRRIGATION.

DEFINITIONS	
"ISSUED FOR PERMITTING"	DRAWINGS ARE INTENDED FOR SUBMITTAL TO THE JURISDICTION(S) HAVING AUTHORITY FOR REVIEW, COMMENT, AND/OR APPROVAL. DRAWINGS ARE NOT INTENDED FOR PRICING, BID, OR CONSTRUCTION.
"NOT ISSUED FOR CONSTRUCTION"	DRAWINGS ARE INTENDED FOR SUBMITTAL TO THE JURISDICTION(S) HAVING AUTHORITY FOR REVIEW, COMMENT, AND/OR APPROVAL. DRAWINGS ARE NOT INTENDED FOR CONSTRUCTION.
"ISSUED FOR CONSTRUCTION"	DRAWINGS ARE INTENDED FOR PRICING, BID, AND/OR CONSTRUCTION.
"RM"	1. THROAT OR GRATE ELEVATION FOR CURB INLETS. 2. TOP OF STRUCTURE FOR JUNCTION BOXES/OCS 3. TOP OF STRUCTURE FOR SANITARY MANHOLES AND CLEANOUTS.
"M.E.E." (MATCH EXISTING ELEVATION)	IF A ELEVATION IS GIVEN, THEN THE ELEVATION IS INTERPOLATED BY THE EXISTING SURFACE PROVIDED BY THE SURVEYOR AND SHOULD BE FIELD VERIFIED PRIOR TO CONSTRUCTION. CONTRACTOR SHALL ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.
"M.F.E." (MATCH FUTURE ELEVATION)	IF A ELEVATION IS GIVEN, THEN THE ELEVATION IS PROVIDED IS CONSIDER THE DESIGNED ELEVATION PROVIDED BY THE DEVELOPER'S ENGINEER. THE ELEVATION SHALL BE FIELD VERIFIED PRIOR TO CONSTRUCTION BY THE CONTRACTOR AND ALERT THE ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.

BUILDING AREA NOTES	
1.	MAINTAIN ACCESS FOR EMERGENCY VEHICLES AROUND AND TO ALL BUILDINGS UNDER CONSTRUCTION. I.E. IN TIMES OF RAIN OR MUD, ROADS SHALL BE PASSABLE TO EMERGENCY VEHICLES BY BEING PAVED OR HAVING A CRUSHED STONE BASE ETC., WITH A MINIMUM WIDTH OF 20 FEET. THE ACCESS TO BUILDINGS HAVING SPRINKLER OR STANDPIPE SYSTEMS SHALL BE TO WITHIN 40 FEET OF THE FIRE DEPARTMENT CONNECTION (NFPA 1141 3-1).
2.	CONTRACTOR TO PROVIDE POSITIVE DRAINAGE AWAY FROM BUILDING IN ALL AREAS AROUND BUILDING.

GENERAL STAKING NOTES	
1.	ALL RADII ARE 3'0" UNLESS OTHERWISE NOTED.
2.	ALL DIMENSIONS ARE MEASURED TO FACE OF CURB UNLESS OTHERWISE NOTED.
3.	ALL SITE LIGHTING POLE DIMENSIONS ARE TO THE CENTERLINE OF THE POLE, UNLESS OTHERWISE NOTED.
4.	STAKING OF STRIPING IS TO THE CENTERLINE OF THE STRIPE, UNLESS OTHERWISE NOTED.
5.	ALL DIMENSIONS ARE MEASURED TO THE STRUCTURAL FACE OF THE BUILDING AND NOT THE FACADE UNLESS OTHERWISE NOTED.

GENERAL UTILITY NOTES	
1.	SEE MEP PLANS FOR CONTINUATION OF ALL UTILITIES INTO BUILDING.
2.	SANITARY LATERALS SHALL HAVE A MINIMUM FALL OF 1.00%.
3.	CONTRACTOR SHALL FIELD VERIFY ALL EXISTING UTILITIES AND THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY.
4.	THE FINAL LOCATION OF FIRE HYDRANTS, VALVES, WATER LINES, BACKFLOW PREVENTERS, ETC. SHALL BE DETERMINED DURING CONSTRUCTION. NOTIFY THE ENGINEER OF ANY CHANGES TO LOCATION OR CONFIGURATION. NFPA CODES SHALL BE ADHERED TO.
5.	THE CONTRACTOR SHALL CONTACT PUBLIC UTILITIES INSPECTIONS AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY.
6.	ALL WORK TO BE DONE IN STRICT ACCORDANCE WITH LOCAL GOVERNING CODES.
7.	UTILITY CONDUIT MATERIAL FOR ELECTRIC, TELEPHONE, AND CABLE SHALL BE INSTALLED PER UTILITY PROVIDER SPECIFICATIONS.
8.	CONTRACTOR TO BUILD CONCRETE TRANSFORMER PAD AND INSTALL SCHEDULE 80 PVC CONDUIT AND PULL STRINGS WITH SWEEPING BENDS.
9.	CONTRACTOR SHALL COORDINATE AND VERIFY LOCATION OF ALL SIGNAGE WITH OWNER PRIOR TO CONSTRUCTION.
10.	CONTRACTOR SHALL COORDINATE AND ADJUST LOCATION OF LOOP DETECTORS TO AVOID UTILITY CONFLICTS PRIOR TO CONSTRUCTION.
11.	CONTRACTOR SHALL INSTALL GENERAL UTILITY CONDUITS TO PLANTERS AROUND BUILDING AND PATIO. SEE ARCHITECTURAL/MEP PLANS FOR CONTINUATION.

ABBREVIATIONS	
ASPH	= ASPHALT
BC	= BOTTOM OF CURB
BFP	= BACKFLOW PREVENTER
BW	= SURFACE DIRT GRADE ELEVATION AT BOTTOM OF WALL
C&G	= CURB AND GUTTER
C.B.	= CHORD BEARING
CB	= CATCH BASIN
CF	= CUBIC FEET
CL	= CENTERLINE
CMP	= CORRUGATED METAL PIPE
Cu	= GENERAL CLEAN OUT
CONC	= CONCRETE
CW	= COLD WATER SUPPLY
CY	= CUBIC YARD
DOT	= DEPARTMENT OF TRANSPORTATION
DI	= DROP INLET
DS	= DOWN SPOUT
DIP	= DUCTILE IRON PIPE
E	= EAST
EL	= ELEVATION
EGL	= ENERGY GRADE LINE
EX.I.	= EXISTING
FDC	= FIRE DEPARTMENT CONNECTION
FES	= FLARED END SECTION
FFE	= FINISH FLOOR ELEVATION
FH	= FIRE HYDRANT
GC	= GENERAL CONTRACTOR
GSF	= GROSS SQUARE FOOT
GT	= GREASE TRAP
GV	= GATE VALVE
HDPE	= HIGH DENSITY POLYETHYLENE
HGL	= HEAD END GRADE LINE
HW	= HOT WATER SUPPLY
IA	= INTERNAL ANGLE
INV.	= INVERT
IRR	= IRRIGATION
LR	= LENGTH OF CURVE
L.C.	= LENGTH OF CHORD
LFFE	= LOWER FINISH FLOOR ELEVATION
LP	= LIGHT POLE/PICTURE
LS	= LANDSCAPE
M.E.E	= MATCH EXISTING ELEVATION
M.F.E	= MATCH FUTURE ELEVATION
MH	= MANHOLE
N	= NORTH
NTS	= NOT TO SCALE
PC	= POINT OF CURVATURE
PI	= POINT OF INTERSECTION
PVI	= POINT INDICATOR VALVE
PROP.	= PROPOSED
PT	= POINT OF TANGENCY
PVC	= POLYVINYL CHLORIDE PIPE
R	= RADIUS OF CURVE
RCP	= REINFORCED CONCRETE PIPE
RD	= ROOF DRAIN
RW	= RIGHT-OF-WAY
S	= SOUTH
SF	= SQUARE FEET
SSE	= SANITARY SEWER EASEMENT
STD	= STANDARD
SY	= SQUARE YARD
T	= TANGENT OF CURVE LENGTH
TC	= TOP OF CURB
TB	= THRUST BLOCKING
TW	= TOP OF WALL
TYP.	= TYPICAL
W	= WEST
WM	= WATER METER
W.S.	= WATER SURFACE
W.S.E	= WATER SURFACE ELEVATION
YR	= YEAR

SEE SURVEY/EXISTING CONDITIONS FOR ABBREVIATIONS SPECIFIC TO THAT SHEET

PROPOSED LEGEND	
GENERAL	LINETYPE/SYMBOL
RIGHT-OF-WAY / PROPERTY LINE	---
CENTERLINE	---
LIMITS OF CONSTRUCTION	---
LIMITS OF GRADING / DISTURBANCE	---
DETAIL REFERENCE	---
ADDENDUM AND/OR REVISION REFERENCE	---
SITE / HARDSCAPE	LINETYPE/SYMBOL
CHAIN LINK FENCE	---
RETAINING WALL	---
SCREEN WALL / DUMPSTER ENCLOSURE	---
CURB & GUTTER	---
HEADER CURB	---
RIBBON CURB	---
CONCRETE SIDEWALK	---
UTILITIES	LINETYPE/SYMBOL
DOMESTIC WATER LINE	--- DW ---
FIRE WATER LINE	--- FW ---
BUILDING FIRE SPRINKLER LINE	--- FWS ---
IRRIGATION WATER LINE	--- IRR ---
DOMESTIC WATER METER (WM)	---
IRRIGATION METER (IRR)	---
BACKFLOW PREVENTER (RPZ)	---
DC BACKFLOW PREVENTER	---
FIRE VAULT (DDC)	---
WATER TAP OR TEE	---
GATE VALVE (GV)	---
THRUST BLOCK (TB)	---
FIRE HYDRANT (FH)	---
FIRE DEPARTMENT CONNECTION (FDC)	---
SANITARY SEWER (SS)	--- SS ---
GREASE TRAP VENT LINE (GTV)	--- GTV ---
SANITARY MANHOLE (SSMH)	---
GENERAL CLEAN OUT (Co)	---
SANITARY STRUCTURE NUMBER	---
UNDERGROUND ELECTRIC LINE-PRIMARY	--- UGE-P ---
UNDERGROUND ELECTRIC LINE-SECONDARY	--- UGE-S ---
POINT INDICATOR VALVE	---
SITE LIGHTING POLE	---
TRANSFORMER PAD	---
METER/CT PEDESTAL	---
UNDERGROUND TELEPHONE LINE	--- UGT ---
GENERAL UTILITY CONDUIT	--- GU ---
GAS LINE	--- G ---
GAS METERS	---
** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS.	
GRADING / DRAINAGE	LINETYPE/SYMBOL
GRADE	---
PROPOSED SPOT ELEVATION	---
MATCH EXISTING SPOT	---
MATCH EXISTING SPOT W/ ESTIMATED EXISTING ELEVATION	---
STORM DRAIN	---
HEADWALL (HW) / FLARED END SECTION (FES)	---
DROP INLET (GRATE)	---
DROP INLET (GRATE AND HOOD)	---
JUNCTION BOX (JB) / OCS	---
CATCH BASIN (SINGLE WING)	---
CATCH BASIN (DOUBLE WING)	---
PEDESTAL TOP	---
STORM STRUCTURE NUMBER	---
ESPC / BMP	LINETYPE/SYMBOL
CONSTRUCTION EXIT (CO)	---
SILT FENCE - TYPE C (SF)	---
SILT FENCE - TYPE C DOUBLE (SF)	---
INLET PROTECTION (IP)	---
OUTLET PROTECTION (OP)	---
DUST CONTROL-DISTURBED AREAS	---
TEMPORARY SEEDING	---
PERMANENT SEEDING	---
MULCHING	---
SODDING	---
SLOPE STABILIZATION	---
TREE PROTECTION	---
SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS	



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O' LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370
INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C01.DWG

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CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (854) 244-3459



9300 NW 13TH STREET
DORAL,
FLORIDA 33172

REV.	DATE	DESCRIPTION

THIS SET HAS BEEN DIGITALLY SIGNED AND SEALED BY JEREMY M. PETTIT, P.E., PE. ON THE DATE ADJACENT TO THE SEAL ON THE COVER SHEET (C01.1).

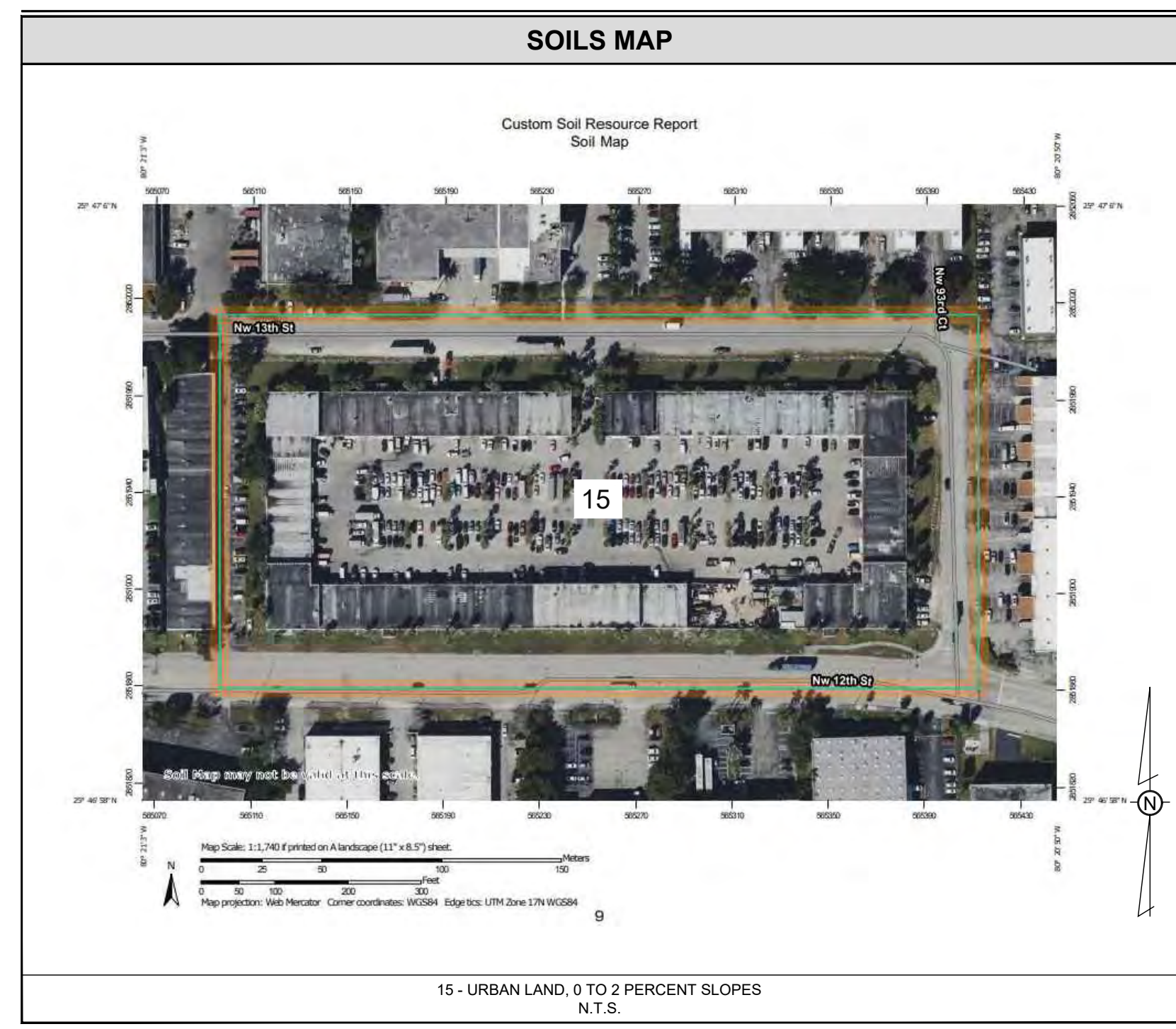
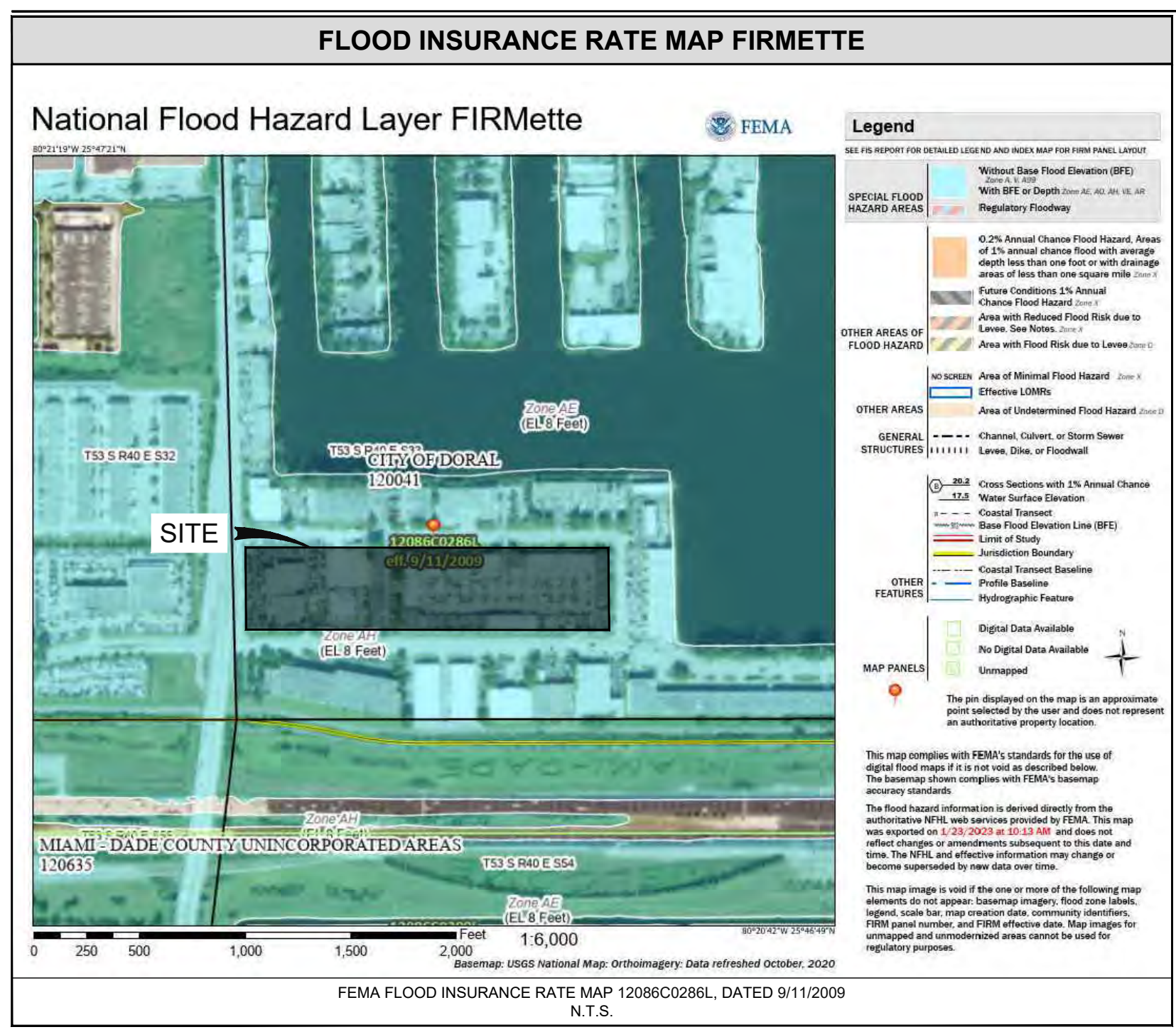
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SEAL

SHEET NAME
GENERAL NOTES

SHEET NUMBER
C01.1

ISSUE FOR PERMIT



EXISTING CONDITIONS LEGEND	
DESCRIPTION	SYMBOL
COMMUNICATION LINES	---
DATA LINES	---
ELECTRICAL LINES (OVERHEAD)	---
ELECTRICAL LINES (UNDERGROUND)	---
ELECTRICAL & TV LINES (OVERHEAD)	---
ELECTRICAL & TELEPHONE LINES (OVERHEAD)	---
FIBER LINES	---
GENERAL UTILITY LINES	---
GAS LINES	---
REUSE WATER LINES	---
SANITARY SEWER LINES	---
SANITARY SEWER FORCE MAIN LINES	---
TV LINES (OVERHEAD)	---
TV LINES (UNDERGROUND)	---
TELEPHONE LINES (OVERHEAD)	---
TELEPHONE LINES (UNDERGROUND)	---
TELEPHONE & TV LINES (OVERHEAD)	---
TELEPHONE & TV LINES (UNDERGROUND)	---
UNKNOWN UTILITY LINES	---
WETLANDS	---
WATER LINES	---
SEE SURVEY/EXISTING CONDITIONS FOR LEGEND SPECIFIC TO THOSE SHEETS	

RECORD LEGAL DESCRIPTION

Tract 1, AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS, according to the Plat thereof as recorded in Plat Book 106, Page 4, of the Public Records of Miami - Dade County, Florida.

TITLE COMMITMENT EXCEPTION NOTES

THE TITLE COMMITMENT ISSUED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, FILE NO. 10682973, WITH AN EFFECTIVE DATE OF JULY 28, 2022, CONTAINS THE FOLLOWING ITEMS:

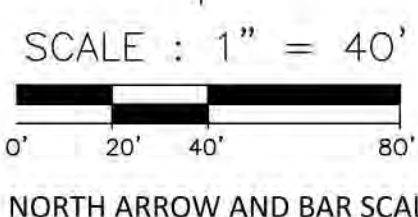
- 5. Restrictions, covenants, conditions, easements and other matters as contained on the Plat of AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS...
6. Declaration of Use Pharmaceutical Store 1 the IU Zones...
7. Grant of Easement for Public Bus Bench and Related Facilities...

Table with columns: LINE, BEARING, DISTANCE. Row 1: L1, N 01°47'27" W, 4.00'

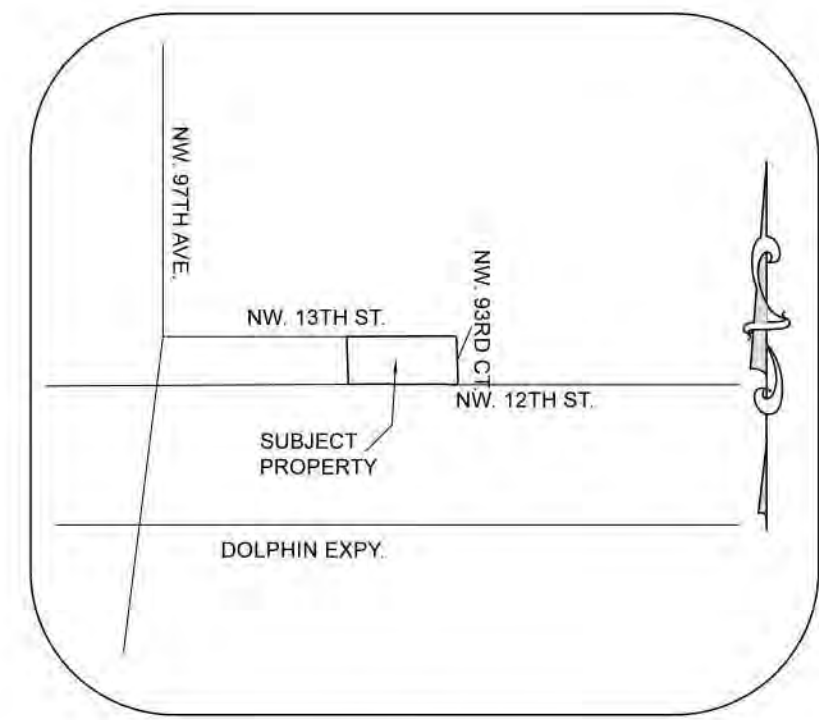
Table with columns: CURVE, ARC LENGTH, RADIUS, CHORD BEARING, CHORD LENGTH. Rows C1, C2, C3 with various measurements.

LEGEND & ABBREVIATIONS

- = Sanitary Sewer Manhole
= Water Meter
= Water Valve
= Telephone Riser
= Traffic Control Box
= Grate Inlet
= Mailbox
= Utility Pole
= Fire Hydrant
= Signal Pole
= Backflow Preventer
= Electric Switch Box
= Sewer Cleanout
= Cable Television Box
= Handicap Space
= Chainlink Fence Line

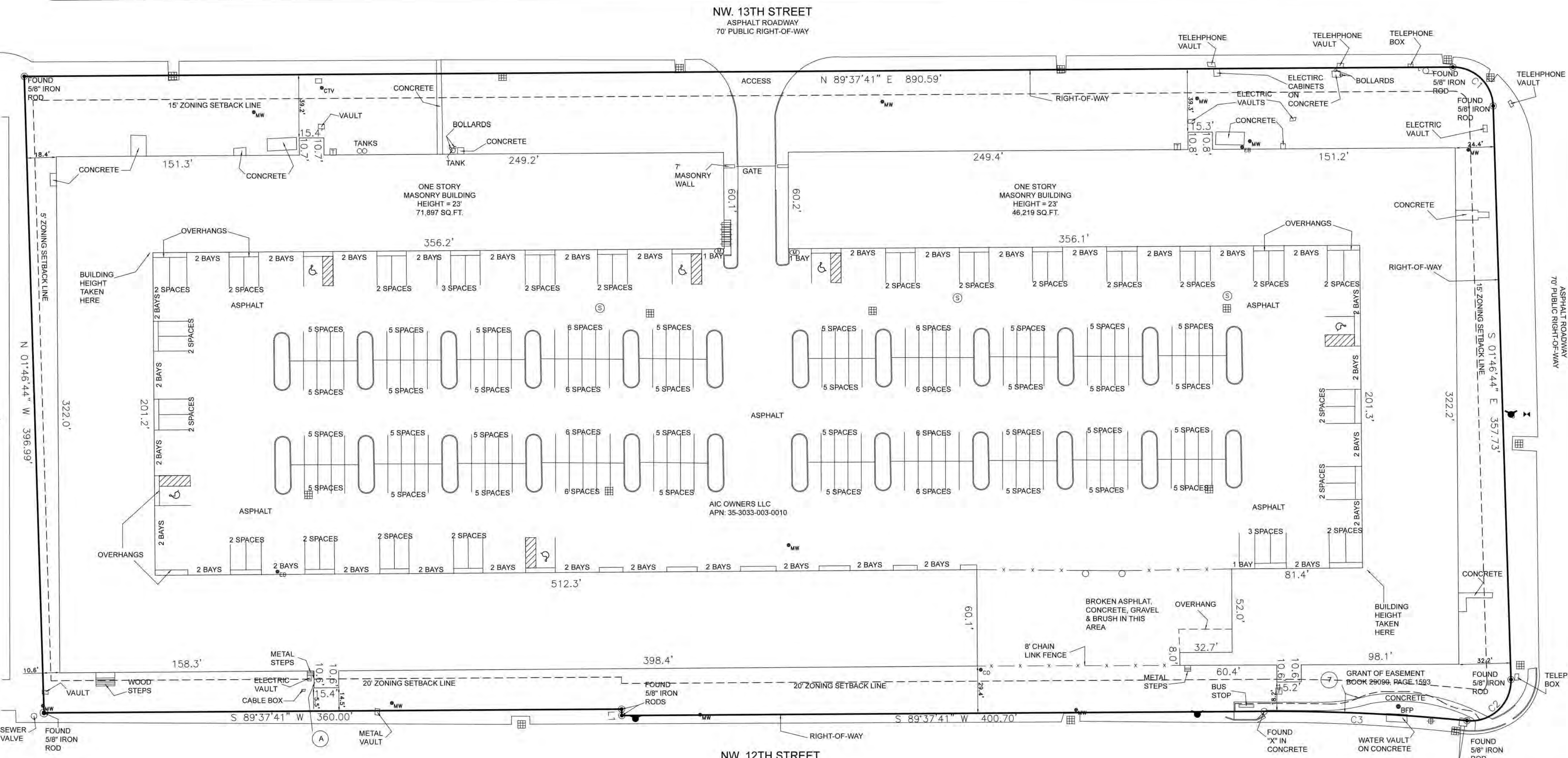


LAND AREA
365,546 SQ. FT.
8.302 ACRES



ZONING INFORMATION

ZONING DESIGNATION: (INDUSTRIAL DISTRICT)
SETBACKS: FRONT: 20 FEET, STREET SIDE: 15 FEET, INTERIOR SIDE: 5 FEET, REAR: 5 FEET
MINIMUM LOT SIZE: 7,500 SQ. FT.
REQUIRED WIDTH: 75 FEET
MAXIMUM FLOOR AREA RATIO: 0.5



GENERAL SURVEY NOTES:

- 1. THIS SURVEY WAS MADE IN ACCORDANCE WITH LAWS AND/OR MINIMUM STANDARDS OF THE STATE OF FLORIDA.
2. THE BASIS OF BEARING FOR THIS SURVEY IS THE NORTH RIGHT-OF-WAY LINE OF NW 12TH ST.
3. SAID DESCRIBED PROPERTY IS LOCATED WITHIN AN AREA HAVING A ZONE DESIGNATION 'AM' (FLOOD ELEVATION OF 8') BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) ON FLOOD INSURANCE RATE MAP NO. 22982C...

LIST OF POSSIBLE ENCROACHMENTS

- A BUILDING INTO ZONING SETBACK BY A MAXIMUM OF 5.5'

SURVEYOR'S CERTIFICATION

TO: LITHIA REAL ESTATE, INC., AN OREGON CORPORATION AND FIDELITY NATIONAL TITLE INSURANCE COMPANY.

This is to certify that this map or plat and the survey on which it is based were made in accordance with the 2021 Minimum Standard Detail Requirements for ALTA/NSPS Land Title Surveys...

The field work was completed on: 10-01-22
Date of Plat or Map: 10-13-22

EARL N. STROM
FLORIDA LICENSED SURVEYOR NO. 4462



Table with columns: NO., Description of Revisions, DATE

ALTA / NSPS LAND TITLE SURVEY

9300 NW. 13TH ST.
DORAL, FL. 33172

RESPONSIBLE SURVEYOR CONTACT INFORMATION
CSSI
Commercial Surveying Specialists, Inc.
357 6th Avenue West
Bradenton, FL 34205
(405) 202-3001

Survey Coordinated by:
Bureau Veritas
510 E. Memorial Road, Suite A-1
Oklahoma City, OK 73114
800-411-2010
ALTA@bvna.com
www.bvna.com



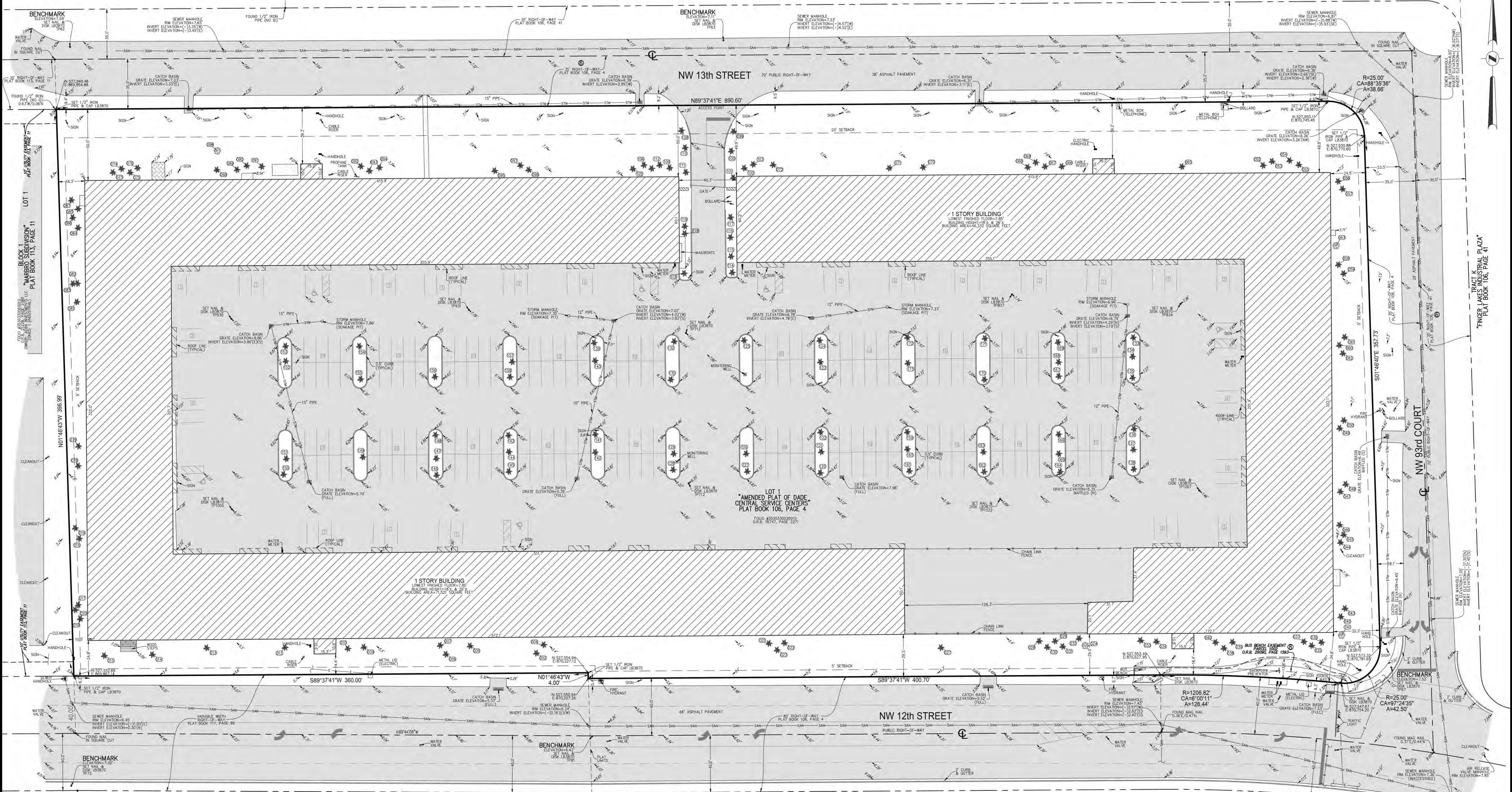
LEGAL DESCRIPTION:
TRACT 1 "AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS", ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 106, PAGE 4, OF THE PUBLIC RECORDS OF MIAMI-DADE COUNTY, FLORIDA.

NOTES:

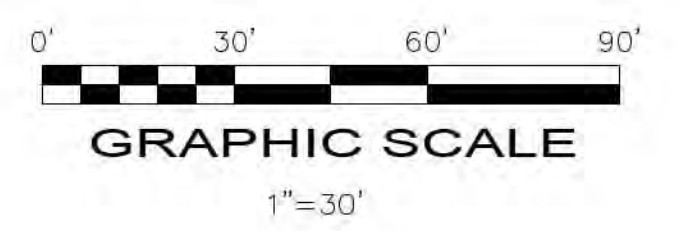
- THIS SITE CONTAINS 365,550 SQUARE FEET (8.3919 ACRES) MORE OR LESS.
- ELEVATIONS ARE BASED ON NATIONAL GEODETIC VERTICAL DATUM OF 1929, MIAMI-DADE COUNTY BENCHMARK N-910; ELEVATION: 8.22 FEET & BENCHMARK H-316; ELEVATION: 6.59 FEET.
- FLOOD ZONE: AH; BASE FLOOD ELEVATION: 8 FEET; PANEL #12086C0286L; COMMUNITY #12004I; MAP DATE: 9/11/09.
- THIS SITE LIES IN SECTION 33, TOWNSHIP 53 SOUTH, RANGE 40 EAST, MIAMI-DADE COUNTY, FLORIDA. BEARINGS ARE BASED ON AN ASSUMED MERIDIAN WITH THE CENTERLINE OF NW 13th STREET BEING N89°37'41"E.
- REASONABLE EFFORTS WERE MADE REGARDING THE EXISTENCE AND THE LOCATION OF UNDERGROUND UTILITIES. THIS FIRM, HOWEVER, DOES NOT ACCEPT RESPONSIBILITY FOR THIS INFORMATION. BEFORE EXCAVATION OR CONSTRUCTION CONTACT THE APPROPRIATE UTILITY COMPANIES FOR FIELD VERIFICATION.
- THE HORIZONTAL POSITIONAL ACCURACY OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.07'. THE VERTICAL ACCURACY OF ELEVATIONS OF WELL DEFINED IMPROVEMENTS ON THIS SURVEY IS ±0.07'.
- THIS SITE CONTAINS 258 TOTAL CLEARLY IDENTIFIABLE STRIPED PARKING SPACES (252 REGULAR & 6 DISABLED). THERE ARE OTHER AREAS BEING USED FOR PARKING WITHOUT STRIPING.
- THIS SURVEY WAS PREPARED WITH BENEFIT OF A COMMITMENT FOR TITLE INSURANCE, ORDER NO. 8163166, PREPARED BY FIDELITY NATIONAL TITLE INSURANCE COMPANY, DATED JANUARY 7, 2020 AT 5:00 PM; REVISION NO. APRIL 20, 2021. THE FOLLOWING ITEMS ARE EXCEPTIONS IN SCHEDULE B SECTION II OF SAID COMMITMENT:
 - ITEMS 1, 2, 3, 4 & 5: STANDARD EXCEPTIONS, NOT ADDRESSED.
 - ITEM 6: RESTRICTIONS, COVENANTS, CONDITIONS, EASEMENTS AND OTHER MATTERS IN PLAT BOOK 106, PAGE 4 APPLY TO THIS SITE. THERE ARE NOT PLATTED EASEMENTS. THE RIGHTS-OF-WAY DEDICATED BY THIS PLAT ARE DEPICTED HEREON.
 - ITEM 7: INTENTIONALLY DELETED.
 - ITEM 8: GRANT OF EASEMENT FOR PUBLIC BUS BENCH AND RELATED FACILITIES IN O.R.B. 29090, PAGE 1593 APPLIES TO THIS SITE AS DEPICTED HEREON.
- ALL RECORDED DOCUMENTS ARE PER MIAMI-DADE COUNTY RECORDS.
- STATE PLANE COORDINATES ARE BASED ON FIELD OBSERVATION AND ARE TO NORTH AMERICAN DATUM OF 1983 WITH THE 1990 ADJUSTMENT. FL-E ZONE. BEARINGS ARE NOT BASED ON STATE PLANE COORDINATES.
- THIS SITE IS ZONED I (INDUSTRIAL DISTRICT). SETBACK REQUIREMENTS: FRONT: 20', SIDE STREET: 15', INTERIOR SIDE/REAR: 5'. MAXIMUM BUILDING HEIGHT: RIGHT-OF-WAY WIDTH. REQUIRED PARKING: 131 SPACES.
- THERE WAS NO OBSERVABLE EVIDENCE OF EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS OBSERVED WITHIN RECENT MONTHS IN THE PROCESS OF CONDUCTING FIELDWORK.
- NO EVIDENCE OF POTENTIAL WETLANDS WERE OBSERVED ON THE SUBJECT PROPERTY AT THE TIME THE SURVEY WAS CONDUCTED, NOR HAVE WE RECEIVED ANY DOCUMENTATION OF ANY WETLANDS BEING LOCATED ON THE SUBJECT PROPERTY.
- THERE ARE NO ENCROACHMENTS INTO OR OFF THE PROPERTY.
- THERE WAS NO OBSERVABLE EVIDENCE NOR INFORMATION PROVIDED INDICATING CHANGES IN STREET RIGHT-OF-WAY LINES.
- THERE IS NO OBSERVABLE EVIDENCE OF RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS.
- THERE IS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, SANITARY LANDFILL OR CEMETERY.
- FROM A VISUAL INSPECTION ONLY, ALL UTILITIES APPEAR TO ENTER THE SUBJECT PROPERTY FROM A PUBLIC RIGHT-OF-WAY.
- FROM A VISUAL INSPECTION ONLY, THE SUBJECT PROPERTY APPEARS TO DRAIN INTO PUBLIC RIGHT-OF-WAY.
- ACCESS TO THE SUBJECT PROPERTY IS BY PUBLIC RIGHT-OF-WAY VIA NW 13th STREET, A PUBLIC RIGHT-OF-WAY.
- THE PROPERTY SURVEYED AND SHOWN HEREON IS THE SAME PROPERTY AS DESCRIBED IN THE ABOVEMENTIONED TITLE COMMITMENT.
- THERE ARE NO DISCREPANCIES BETWEEN THE BOUNDARY LINES SHOWN ON THIS SURVEY AND THE LEGAL DESCRIPTION CONTAINED IN THE TITLE COMMITMENT.
- THE BOUNDARY LINES OF THE SUBJECT PROPERTY ARE CONTIGUOUS WITH NO GAPS OR GORES WITH THE BOUNDARY LINES OF ALL ADJOINING STREETS, HIGHWAYS, RIGHTS-OF-WAYS AND EASEMENTS, PUBLIC OR PRIVATE. AS DESCRIBED IN THEIR MOST RECENT RESPECTIVE LEGAL DESCRIPTIONS OF RECORD.
- THE BOUNDARY LINE DIMENSIONS AS SHOWN ON THIS SURVEY MAP FORM A MATHEMATICALLY CLOSED FIGURE WITHIN +/- 0.1 FOOT.
- THERE ARE NO OBSERVABLE PARTY WALLS AND NO OBSERVABLE ABOVE GROUND ENCROACHMENTS EITHER (A) BY THE IMPROVEMENTS ON THE SUBJECT PROPERTY, UPON ADJOINING PROPERTIES, STREETS, ALLEYS, EASEMENTS OR RIGHTS-OF-WAY, OR (B) BY THE IMPROVEMENTS ON ANY ADJOINING PROPERTIES, STREETS OR ALLEYS UPON THE SUBJECT PROPERTY. EXCEPT AS OTHERWISE SHOWN HEREON.
 - THE CONCRETE WALK AT THE BUS BENCH EASEMENT EXTENDS BEYOND THE LIMITS OF EASEMENT INTO THE SUBJECT SITE.
 - THERE ARE VARIOUS UTILITY STRUCTURES WITHIN THE SUBJECT SITE THAT DO NOT HAVE BENEFIT OF EASEMENTS.
- THERE IS NO OBSERVABLE EVIDENCE OF EASEMENT OR RIGHTS OF WAY ON OR ACROSS THE SURVEYED PROPERTY, OR ON ANY ADJOINING PROPERTIES IF THEY APPEAR TO AFFECT THE SUBJECT PROPERTY, EXCEPT AS OTHERWISE SHOWN HEREON.
- THE SUBJECT PROPERTY DOES NOT APPEAR TO SERVE ANY ADJOINING PROPERTY FOR DRAINAGE, UTILITIES STRUCTURAL SUPPORT, INGRESS OR EGRESS.
- TREE TABLE PROVIDED BY CLIENT, M.J. NICHOLS AND ASSOCIATES LLC.

TREE TABLE

Tree #	Scientific Name	Common Name	DBH - in.	DBH - in. Lg'est Trunk	Height - ft. (Palms - CT)	Canopy Diameter (ft)	Condition	Notes	Tree #	Scientific Name	Common Name	DBH - in.	DBH - in. Lg'est Trunk	Height - ft. (Palms - CT)	Canopy Diameter (ft)	Condition	Notes
1	None								86	Washingtonia robusta	Washington fan palm	11		18		Good	
2	Washingtonia robusta	Washington fan palm	13		30		Good		87	Washingtonia robusta	Washington fan palm	14		30		Good	
3	None								88	Washingtonia robusta	Washington fan palm	13		30		Good	
4	Washingtonia robusta	Washington fan palm	13		30		Good		89	Washingtonia robusta	Washington fan palm	16		30		Good	
5	Washingtonia robusta	Washington fan palm	14		45		Good		90	Washingtonia robusta	Washington fan palm	11		30		Good	
6	Washingtonia robusta	Washington fan palm	15		30		Good		91	Washingtonia robusta	Washington fan palm	10.5		29		Good	
7	Washingtonia robusta	Washington fan palm	12.5		35		Good		92	Washingtonia robusta	Washington fan palm	19		25		Good	
8	None								93	Washingtonia robusta	Washington fan palm	22		30		Good	
9	Washingtonia robusta	Washington fan palm	11.5		30		Good		94	Washingtonia robusta	Washington fan palm	12		35		Good	
10	Washingtonia robusta	Washington fan palm	16		30		Good		95	Washingtonia robusta	Washington fan palm	11.5		35		Good	
11	None								96	Washingtonia robusta	Washington fan palm	16.5		30		Good	
12	Washingtonia robusta	Washington fan palm	13.5		28		Good		97	Washingtonia robusta	Washington fan palm	12.5		30		Good	
13	Washingtonia robusta	Washington fan palm	17		28		Good		98	Ficus microcarpa	Indian laurel	Multi (8.5)	4.5	24	20	Fair	
14	Washingtonia robusta	Washington fan palm	13.5		26		Good		99	Washingtonia robusta	Washington fan palm	14		32		Good	
15	Washingtonia robusta	Washington fan palm	14		24		Good		100	Washingtonia robusta	Washington fan palm	12		32		Good	
16	Washingtonia robusta	Washington fan palm	18.5		30		Good		101	Washingtonia robusta	Washington fan palm	13		17		Good	
17	Washingtonia robusta	Washington fan palm	16		30		Good		102	Washingtonia robusta	Washington fan palm	14		38		Good	
18	Washingtonia robusta	Washington fan palm	13		30		Good		103	Washingtonia robusta	Washington fan palm	17.5		34		Good	
19	Washingtonia robusta	Washington fan palm	13		30		Good		104	None							
20	Washingtonia robusta	Washington fan palm	13		23		Good		105	Washingtonia robusta	Washington fan palm	13.5		35		Good	
21	Washingtonia robusta	Washington fan palm	20		26		Good		106	Washingtonia robusta	Washington fan palm	11.5		38		Good	
22	Washingtonia robusta	Washington fan palm	15		32		Good		107	None							
23	Washingtonia robusta	Washington fan palm	15		17		Good		108	Washingtonia robusta	Washington fan palm	14		38		Good	
24	No tree found								109	Washingtonia robusta	Washington fan palm	17		30		Good	
25	No tree found								110	Washingtonia robusta	Washington fan palm	12.5		35		Good	
26	None								111	Washingtonia robusta	Washington fan palm	19.5		38		Good	
27	Washingtonia robusta	Washington fan palm	16		24		Good		112	Washingtonia robusta	Washington fan palm	11		18		Good	
28	Washingtonia robusta	Washington fan palm	12.5		30		Good		113	Washingtonia robusta	Washington fan palm	13		27		Good	
29	Washingtonia robusta	Washington fan palm	15		27		Good		114	Washingtonia robusta	Washington fan palm	14.5		30		Good	
30	Washingtonia robusta	Washington fan palm	17		19		Good		115	Washingtonia robusta	Washington fan palm	11.5		31		Good	
31	Washingtonia robusta	Washington fan palm	14		25		Good		116	Washingtonia robusta	Washington fan palm	14		29		Good	
32	Sabal palmetto	cabbage palm	17.5		14		Good		117	Washingtonia robusta	Washington fan palm	14		29		Good	
32A	Sabal palmetto	cabbage palm	22		8		Good		118	Washingtonia robusta	Washington fan palm	14		33		Good	
33	Washingtonia robusta	Washington fan palm	19		40		Good		119	Washingtonia robusta	Washington fan palm	13		34		Good	
34	Washingtonia robusta	Washington fan palm	12		32		Good		120	Washingtonia robusta	Washington fan palm	12.5		19		Good	
35	Washingtonia robusta	Washington fan palm	16		33		Good		121	Washingtonia robusta	Washington fan palm	11.5		18		Good	
36	Washingtonia robusta	Washington fan palm	16		23		Good		122	Washingtonia robusta	Washington fan palm	12		16		Good	
37	Washingtonia robusta	Washington fan palm	13.5		34		Good		123	Washingtonia robusta	Washington fan palm	10.5		11		Good	
38	Washingtonia robusta	Washington fan palm	13		35		Good		124	Washingtonia robusta	Washington fan palm	12.5		19		Good	
39	Washingtonia robusta	Washington fan palm	13		35		Good		125	Washingtonia robusta	Washington fan palm	14		19		Good	
40	Washingtonia robusta	Washington fan palm	14.5		38		Good		126	Washingtonia robusta	Washington fan palm	11		12		Good	
41	Melaleuca viminalis	bottlebrush	8		22	12	Poor		127	Washingtonia robusta	Washington fan palm	15.5		13		Good	
42	Washingtonia robusta	Washington fan palm	15.5		35		Good		128	Washingtonia robusta	Washington fan palm	12		20		Good	
43	Washingtonia robusta	Washington fan palm	13.5		24		Good		129	Washingtonia robusta	Washington fan palm	11.5		10		Good	
44	Washingtonia robusta	Washington fan palm	11		37		Good		130	Washingtonia robusta	Washington fan palm	13.5		24		Good	
45	Washingtonia robusta	Washington fan palm	14		30		Good		131	Dead							
46	Washingtonia robusta	Washington fan palm	11.5		27		Good		132	Washingtonia robusta	Washington fan palm	10.5		19		Good	
47	Washingtonia robusta	Washington fan palm	19		32		Good		133	Washingtonia robusta	Washington fan palm	13		19		Good	
48	Washingtonia robusta	Washington fan palm	13.5		23		Good		134	Washingtonia robusta	Washington fan palm	15		18		Good	
49	Washingtonia robusta	Washington fan palm	18.5		29		Good		135	Washingtonia robusta	Washington fan palm	11		18		Good	
50	Washingtonia robusta	Washington fan palm	21		14		Good		136	Washingtonia robusta	Washington fan palm	15		24		Good	
51	None								137	Washingtonia robusta	Washington fan palm	11.5		23		Good	
52	Washingtonia robusta	Washington fan palm	13.5		35		Good		138	Washingtonia robusta	Washington fan palm	14		21		Good	
53	Washingtonia robusta	Washington fan palm	13.5		34		Good		139	Washingtonia robusta	Washington fan palm	10		15		Good	
54	Washingtonia robusta	Washington fan palm	13		30		Good		140	Washingtonia robusta	Washington fan palm	12.5		6.5		Good	
55	Washingtonia robusta	Washington fan palm	14.5		26		Good		141	Washingtonia robusta	Washington fan palm	12		14		Good	
56	Washingtonia robusta	Washington fan palm	13.5		30		Good		142	Washingtonia robusta	Washington fan palm	17		19		Good	
57	Washingtonia robusta	Washington fan palm	16.5		35		Good		143	Washingtonia robusta	Washington fan palm	12.5		25		Good	
58	Washingtonia robusta	Washington fan palm	14.5		35		Good		144	Washingtonia robusta	Washington fan palm	15		14		Good	
59	Washingtonia robusta	Washington fan palm	14		35		Good		145	Washingtonia robusta	Washington fan palm	17		19		Good	
60	Washingtonia robusta	Washington fan palm	16		34		Good		146	Washingtonia robusta	Washington fan palm	13		25		Good	
61	Washingtonia robusta	Washington fan palm	15.5		32		Good		147	Washingtonia robusta	Washington fan palm	9		19		Good	
62	Washingtonia robusta	Washington fan palm	19.5		34		Good		148	Washingtonia robusta	Washington fan palm	10		25		Good	
63	Acca sellowiana	pineapple guava	Multi (9)	5	18		Good		149	Washingtonia robusta	Washington fan palm	13.5		15		Good	
64	Too small								150	Washingtonia robusta	Washington fan palm	15.5		8		Good	
65	Washingtonia robusta	Washington fan palm	16		34		Good		151	Washingtonia robusta	Washington fan palm	10.5		18		Good	
66	Washingtonia robusta	Washington fan palm	12		28		Good		152	Washingtonia robusta	Washington fan palm	12.5		23		Good	
67	Washingtonia robusta	Washington fan palm	11.5		34		Good		153	Washingtonia robusta	Washington fan palm	12.5		24		Good	
68	Washingtonia robusta	Washington fan palm	13		32		Good		154	Washingtonia robusta	Washington fan palm	12		10		Good	
69	Washingtonia robusta	Washington fan palm	11		24		Fair		155	Washingtonia robusta	Washington fan palm	13.5		23		Good	
70	Washingtonia robusta	Washington fan palm	12.5		34		Good		156	Washingtonia robusta	Washington fan palm	15.5		23		Good	
71	Washingtonia robusta	Washington fan palm	11		24		Good		157	Washingtonia robusta	Washington fan palm	15		21		Good	
72	Washingtonia robusta	Washington fan palm	16		24		Good		158	Washingtonia robusta	Washington fan palm	14.5		18		Good	
73	Washingtonia robusta	Washington fan palm	16		25		Good		159	Washingtonia robusta	Washington fan palm	14		18		Good	
74	Washingtonia robusta	Washington fan palm	11.5		30		Good		160	Washingtonia robusta	Washington fan palm	12		17		Good	
75	Washingtonia robusta	Washington fan palm	10.5		28		Good		161	Washingtonia robusta	Washington fan palm	12		17		Good	
76	Washingtonia robusta	Washington fan palm	10.5		22		Good		162	Washingtonia robusta	Washington fan palm	14.5		27		Good	
77	None								163	Washingtonia robusta	Washington fan palm	12		24		Good	
78	Washingtonia robusta	Washington fan palm	13		30		Good		164	Washingtonia robusta	Washington fan palm	14.5		21		Good	
79	Washingtonia robusta	Washington fan palm	12.5		30		Fair		165	Washingtonia robusta	Washington fan palm	13		18		Good	
80	Dead								166	Washingtonia robusta	Washington fan palm	13.5		21		Good	
81	Washingtonia robusta	Washington fan palm	11		26		Good		167	Washingtonia robusta	Washington fan palm	12		20		Good	
82	Washingtonia robusta	Washington fan palm	13		26		Good		168	Washingtonia robusta	Washington fan palm	10.5		16		Good	
83	Washingtonia robusta	Washington fan palm	10		26		Good		169	Washingtonia robusta	Washington fan palm	12		17		Good	
84	Washingtonia robusta	Washington fan palm	10		18		Good		170	Washingtonia robusta	Washington fan palm	12.5		19		Good	
85	Washingtonia robusta	Washington fan palm	10.5		24		Good		171	Washingtonia robusta	Washington fan palm	11.5		19		Good	
									172	Washingtonia robusta	Washington fan palm	14		21		Good	
		</															



- LEGEND**
- CONCRETE
 - ASPHALT PAVEMENT
 - ELEVATION
 - OVERHEAD WIRES
 - UNDERGROUND WATER LINE
 - UNDERGROUND STORM SEWER LINE
 - UNDERGROUND SANITARY SEWER LINE
 - CENTERLINE
 - O.R.B.
 - TP (FOR FIELD INFORMATION ONLY)
 - R
 - CA
 - A
 - FPL



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SHEET 2 OF 2
THIS DOCUMENT IS NEITHER FULL NOR COMPLETE WITHOUT SHEETS 1 AND 2

**BOUNDARY AND TOPOGRAPHIC SURVEY
ALTA/NSPS LAND TITLE SURVEY**

PULICE LAND SURVEYORS, INC.
5381 NOB HILL ROAD
SUNRISE, FLORIDA 33351
TELEPHONE: (954) 572-1777
FAX: (954) 572-1778
E-MAIL: surveys@pulicelandsurveyors.com
WEBSITE: www.pulicelandsurveyors.com
CERTIFICATE OF AUTHORIZATION LB#3870

DRAWN BY: L.S.
CHECKED BY: J.F.F.

SCALE: 1" = 30'

FILE: BOUNDARY COMMERCIAL

SURVEY DATE: 7/14/22

TRACT M
"FINGER LAKES INDUSTRIAL PLAZA"
PLAT BOOK 106, PAGE 41

TRACT L
"FINGER LAKES INDUSTRIAL PLAZA"
PLAT BOOK 106, PAGE 41

TRACT M
"FINGER LAKES INDUSTRIAL PLAZA"
PLAT BOOK 106, PAGE 41

TRACT L
"FINGER LAKES INDUSTRIAL PLAZA"
PLAT BOOK 106, PAGE 41

TRACT "A"
SUBARINO
PLAT BOOK 117, PAGE 99

TRACT 2
"AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS"
PLAT BOOK 106, PAGE 4

LOT 1
"AMENDED PLAT OF DADE CENTRAL SERVICE CENTERS"
PLAT BOOK 106, PAGE 4
FOID #S: 89330030010,
O.R.B. 16747, PAGE 2271

NW 93rd COURT

NW 12th STREET

NW 13th STREET

BENCHMARK
ELEVATION=7.59
SET NAIL &
DISK LB3870

BENCHMARK
ELEVATION=7.59
SET NAIL &
DISK LB3870

BENCHMARK
ELEVATION=7.59
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DISK LB3870

BENCHMARK
ELEVATION=7.59
SET NAIL &
DISK LB3870



INGENUITY ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370

INGENUITY PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C02.DWG

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CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

REV.	DATE	DESCRIPTION

THIS DRAWING HAS BEEN DIGITALLY SIGNED AND SEALED BY JEREMY M. PETTIT, P.E., P.E. ON THE DATE ADJACENT TO THE SEAL ON THE COVER SHEET (C01.0).
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SEAL

SHEET NAME
DEMOLITION PLAN

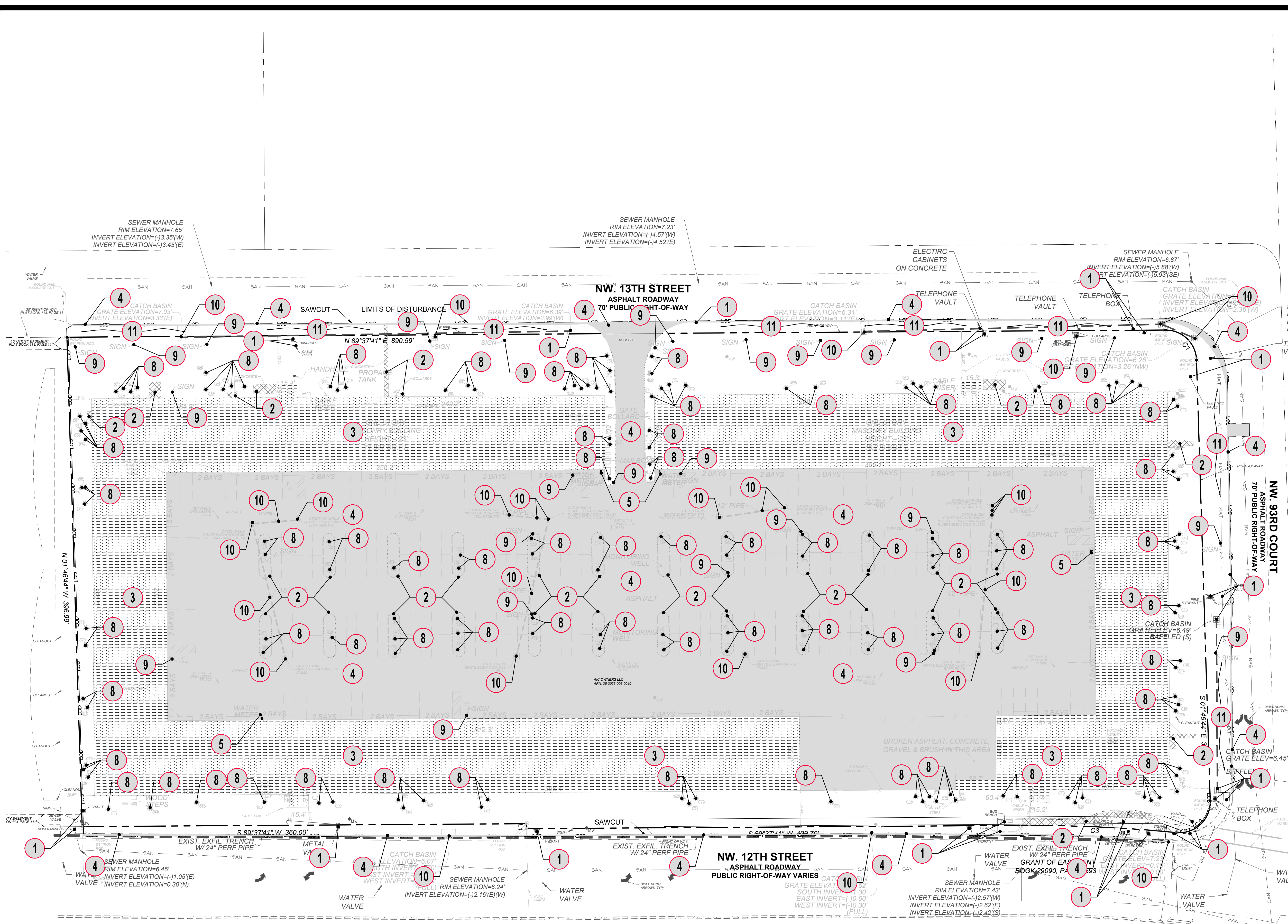
SHEET NUMBER

C02.3

ISSUE FOR PERMIT

DEMOLITION LEGEND

- 1 PROTECT ALL ITEMS DURING ALL PHASES OF CONSTRUCTION (SEE GENERAL DEMOLITION NOTE #1). THE CONTRACTOR SHALL ENSURE THE INTEGRITY OF ALL ITEMS DENOTED TO BE PROTECTED THAT ARE ADJACENT TO ITEMS DENOTED TO BE DEMOLISHED AND WILL SAFELY REPAIR ANY SUCH ITEMS TO THE REQUIRED JURISDICTIONAL STANDARDS. CONTRACTOR SHALL USE EXTREME CAUTION WHEN WORKING NEAR EXISTING OVERHEAD ELECTRICAL LINES.
- 2 SAWCUT AND REMOVE EXISTING CONCRETE PAD, SIDEWALK, CURB AND GUTTER, AND ALL ASSOCIATED APPURTENANCES INCLUDING, BUT NOT LIMITED TO, REINFORCEMENT AND STONE BASE.
- 3 DEMOLITION OF EXISTING BUILDINGS SHALL OCCUR UNDER SEPARATE PERMIT AND PLANS. CITY PERMIT NUMBER BDC-2309-1745, DERM PERMIT NUMBER UP23112193.
- 4 REMOVE EXISTING ASPHALT AND ALL ASSOCIATED APPURTENANCES INCLUDING, BUT NOT LIMITED TO, REINFORCEMENT AND STONE BASE.
- 5 CONTRACTOR SHALL COORDINATE WITH UTILITY PROVIDER TO DISCONNECT AND REMOVE EXISTING WATER LINE AND METERS TO THE LIMITS SHOWN AND CAP THE EXISTING LINE AT THE PROPERTY LINE. SEE GENERAL DEMOLITION NOTE #3 ON SHEET C01.1.
- 6 CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER TO DISCONNECT AND REMOVE SEWER LINES AND CLEANOUTS FROM THE EXISTING BUILDINGS. SEE GENERAL DEMOLITION NOTE #3 ON SHEET C01.1.
- 7 CONTRACTOR SHALL COORDINATE WITH THE UTILITY PROVIDER TO DISCONNECT ELECTRICAL AND TELEPHONE SERVICE FROM THE EXISTING BUILDINGS. SEE GENERAL DEMOLITION NOTE #3 ON SHEET C01.1.
- 8 CONTRACTOR SHALL REMOVE EXISTING LANDSCAPING AS NOTED, ITEMS INCLUDE, BUT ARE NOT LIMITED TO, ANY SHRUBS OR TREES, TRUNK, STUMP, BASE, AND ROOT STRUCTURE.
- 9 CONTRACTOR SHALL REMOVE EXISTING SIGN AND ALL ASSOCIATED APPURTENANCES INCLUDING, BUT NOT LIMITED TO, REINFORCEMENT AND CONCRETE BASE.
- 10 CONTRACTOR SHALL REMOVE EXISTING STORM STRUCTURE AND PIPE AND ALL ASSOCIATED APPURTENANCES INCLUDING, BUT NOT LIMITED TO, BEDDING AND BASE MATERIAL, EXFILTRATION TRENCHES WITHIN THE COUNTY RIGHT-OF-WAY SHALL REMAIN IN PLACE.
- 11 CONTRACTOR SHALL REMOVE EXISTING BOULDERS IN THIS AREA. CONTRACTOR SHALL CONSIDER THE POSSIBLE RE-USE OF THE BOULDERS AS A LANDSCAPE FEATURE ON-SITE WITH OWNER PRIOR TO CONSTRUCTION.

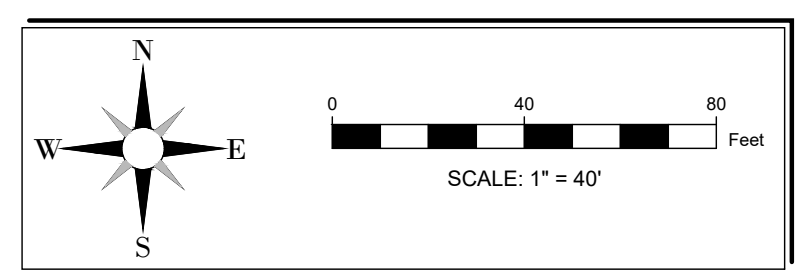


GENERAL NOTES SEE SHEET C01.1

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO, UTILITIES, EXISTING IMPROVEMENTS, ETC. CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY



24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845





INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C03.DWG

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MEDFORD, OREGON 97501
PHONE: (804) 244-3459



SITE LEGEND

- A** HEAVY DUTY ASPHALT PAVEMENT SECTION: DETAIL 02, SHEET C03.3
- B** LIGHT DUTY ASPHALT PAVEMENT SECTION: DETAIL 02, SHEET C03.3
- C** PERMEABLE PAVERS SECTION: DETAIL 01, SHEET C03.7
- D** CONCRETE SECTIONS: PARKING: DETAIL 01, SHEET C03.3 DUMPSTER ENCLOSURE: DETAIL 01, SHEET C03.3 SIDEWALKS: DETAIL 04, SHEET C03.3 STAMPED CONCRETE: DETAIL 01, SHEET C03.3
- E** ACCESSIBLE AREA & PAVEMENT MARKINGS: DETAIL 03, SHEET C03.3
- F** STRIPING & PAVEMENT MARKINGS: DETAIL 04, SHEET C03.4
- G** RIBBON CURB: DETAIL 01, SHEET C03.5
- H** 2" CURB & GUTTER (TYP.): DETAIL 02, SHEET C03.4
- I** CURB TRANSITIONS: DETAIL 03, SHEET C03.4
- J** SITE SIGNAGE: DETAIL 05, SHEET C03.4
- K** ON-SITE SIDEWALK RAMP: DETAIL 01, SHEET C03.4 OFF-SITE SIDEWALK RAMP: DETAIL 01, SHEET C03.8 & C03.9
- L** BOLLARD DETAIL: DETAIL 07, SHEET C03.4
- M** RETAINING WALL: SEE STRUCTURAL PLANS
- N** TRANSFORMER PAD: DETAIL 06, SHEET C03.4
- O** DUMPSTER ENCLOSURE: SEE ARCHITECTURAL PLANS.
- P** TIRE RECYCLE STORAGE: SEE ARCHITECTURAL PLANS.
- Q** ROLL-OVER 24" CURB & GUTTER: DETAIL 09, SHEET C03.4
- R** FLUME: DETAIL 08, SHEET C03.4
- S** HANDRAIL: DETAIL 02, SHEET C03.5 & DETAIL 01, SHEET C03.6
- T** EV CHARGERS: SEE ARCHITECTURAL PLANS
- U** BICYCLE RACKS: SEE ARCHITECTURAL PLANS
- V** CONCRETE SIDEWALK DRAIN DETAIL: DETAIL 02, SHEET C03.7
- W** BENCH: SEE ARCHITECTURAL PLANS.
- X** TRASH RECEPTACLE: SEE ARCHITECTURAL PLANS.

LOW IMPACT DEVELOPMENT (LID) SUMMARY

REQUIRED: PROJECT MUST INCORPORATE AT LEAST TWO (2) LOW IMPACT DEVELOPMENT TECHNIQUES (SECTION 74-881) PROVIDE A MINIMUM OF TWO (2) STRUCTURAL LID BEST MANAGEMENT PRACTICES (BMP). AT LEAST ONE (1) OF THE TWO (2) LID PRACTICES SHOULD PROVIDE THE FUNCTION/BENEFIT OF TREATMENT, AESTHETICS, AND/OR HABITAT.

PROVIDED:
(1) EXFILTRATION TRENCH - PROVIDED FOR FUNCTION/BENEFIT OF TREATMENT.
(2) PERMEABLE PAVERS - PROVIDED FOR AESTHETICS.

ALL INTERNAL ROADWAYS WILL BE PRIVATELY OWNED AND MAINTAINED

SITE & BUILDING AREA NOTES SEE SHEET C01.1

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO, UTILITIES, EXISTING IMPROVEMENTS, ETC. CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY

24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845



9300 NW 13TH STREET DORAL, FLORIDA 33172

REV.	DATE	DESCRIPTION

THIS TBM HAS BEEN DIGITALLY SIGNED AND SEALED BY JEREMY M. PETTIT, P.E., PE ON THE DATE ADJACENT TO THE SEAL ON THE COVER SHEET (C01.0).

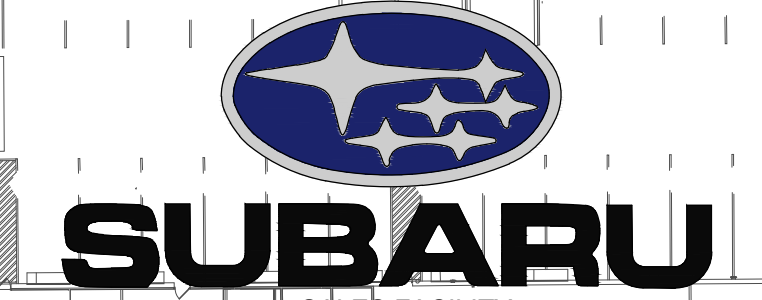
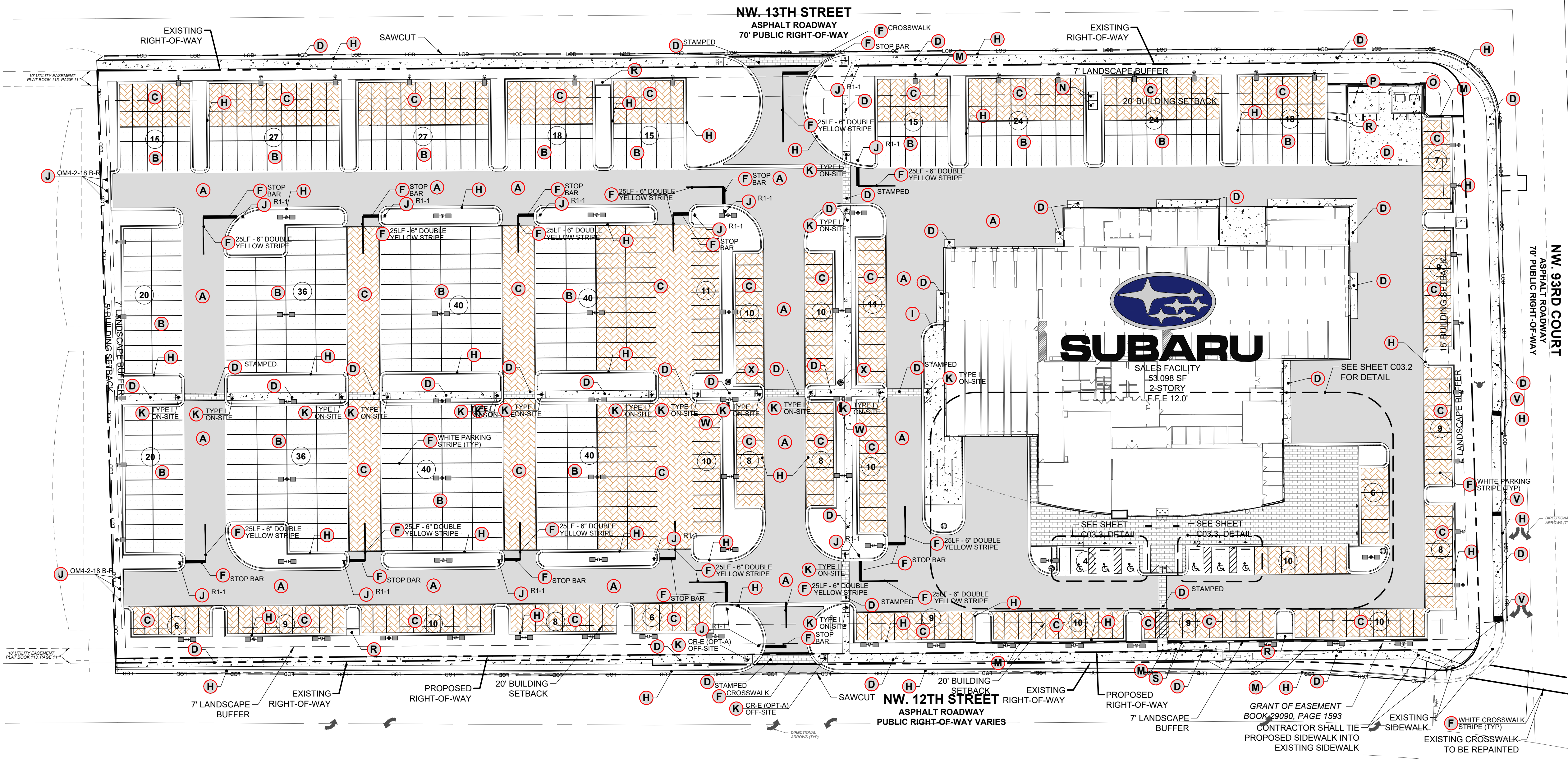
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SHEET NAME
SITE PLAN

SHEET NUMBER

C03.0

ISSUE FOR PERMIT



SALES FACILITY
53,098 SF
2-STORY
L.F.F.E 12.0'

SITE INFORMATION	
JURISDICTION: CITY OF DORAL	REQUIRED BUILDING SETBACKS: FRONT: 20' SIDE: 5 (INTERIOR) / 15 (STREET) SIDE: 5 (INTERIOR) / 15 (STREET) REAR: 5'
ZONING: I (INDUSTRIAL DISTRICT)	REQUIRED PARKING PER SECTION 34-608: OFFICE (1 SPACE / 300 SF)= 16 RETAIL (1 SPACE / 250 SF)= 53 SERVICE/OTHER (3 SPACES / 2500 SF)= 35 OPEN LOT (3 SPACES / 5000 SF)= 122 TOTAL: 225
MAXIMUM 1ST FLOOR AREA SURFACE RATIO: 0.50 PROP. 1ST FLOOR AREA SURFACE RATIO: 0.14	PROPOSED PARKING: EMPLOYEE / CUSTOMER (9' X 19') = 82 INVENTORY (9' X 19') = 575 HANDICAP (12' X 19') = 8 TOTAL = 663
MAXIMUM 2ND FLOOR AREA SURFACE RATIO: 0.25 PROP. 2ND FLOOR AREA SURFACE RATIO: 0.14	DRIVE AISLE: 24'
MAX HEIGHT: WIDTH OF R.O.W. 80' PROPOSED HEIGHT: 30'	SITE AREA CALCULATIONS: SITE: 48.39 AC. PERVIOUS AREA: 42.83 AC. HARDSCAPE: 45.56 AC. PERVIOUS HARDSCAPE: 41.63 AC. IMPERVIOUS AREA: 44.30 AC. DISTURBED AREA: 48.92 AC.
MINIMUM LOT AREA: 7,500SF ACTUAL LOT AREA: 388,777SF	FLOOD HAZARD: THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD HAZARD AREA (ZONE AH) AS PER F.I.R.M. MAP NO. 12086C0286L, DATED 9/11/2009 WITH A BASE FLOOD ELEVATION OF 8.0 (NGVD 1929).
MINIMUM LOT WIDTH: 75' ACTUAL LOT WIDTH: 915'	BASE INFORMATION: (1) PROVIDED BY BUREAU VERITAS, DATED 10/13/2022 (SEE SHEET C02.0). ELEVATION DATUM: NGVD 1929. (2) PROVIDED BY PULICE LAND SURVEYORS, INC., DATED 07/14/2022 (SEE SHEET C02.0). ELEVATION DATUM: NGVD 1929. (3) ADDITIONAL INFORMATION GATHERED FROM AMERICA INTERNATIONAL CENTER PLANS PROVIDED BY LANGAN ENGINEERING AND ENVIRONMENTAL SERVICES, INC., DATED 02/25/2022. (4) ADDITIONAL INFORMATION GATHERED FROM NW 12TH STREET IMPROVEMENT PLANS PROVIDED BY MIAMI DADE COUNTY, DATED 08/11/2022. ELEVATION DATUM: NGVD 1929.
MAXIMUM BUILDING COVERAGE: 50% PROPOSED BUILDING COVERAGE: 13.66%	
MINIMUM OPEN SPACE: 15% PROPOSED OPEN SPACE: 32%	



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C03.DWG

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CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

REV.	DATE	DESCRIPTION



24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

SHEET NAME
STAKING PLAN

SHEET NUMBER
C03.1

ISSUE FOR PERMIT

LINE TABLE				
LINE #	LENGTH	DIRECTION	START POINT	END POINT
L-1	60.50'	N89°37'41"E	527876.38, 869866.36	527876.78, 869926.86
L-2	107.00'	N89°37'41"E	527876.78, 869926.86	527877.47, 870033.86
L-3	104.00'	N89°37'41"E	527877.47, 870033.86	527878.15, 870137.86
L-4	104.00'	N89°37'41"E	527878.15, 870137.86	527878.82, 870241.85
L-5	74.00'	N89°37'41"E	527878.82, 870241.85	527879.30, 870315.85
L-6	80.22'	N89°37'41"E	527879.30, 870315.85	527879.82, 870396.07
L-7	336.34'	N89°37'41"E	527879.82, 870396.07	527882.01, 870732.41
L-8	273.87'	S00°22'19"E	527882.01, 870732.41	527808.15, 870734.18
L-9	275.08'	S89°37'41"W	527808.15, 870734.18	527606.36, 870459.11
L-10	20.00'	S89°37'41"W	527606.36, 870459.11	527606.23, 870439.11
L-11	9.00'	N00°22'19"W	527606.23, 870439.11	527615.23, 870439.06
L-12	41.27'	S89°37'41"W	527615.23, 870439.06	527614.96, 870397.79
L-13	80.22'	S89°37'41"W	527614.96, 870397.79	527614.44, 870317.57
L-14	54.00'	S89°37'41"W	527614.44, 870317.57	527614.09, 870263.57
L-15	2.00'	S00°22'19"E	527614.09, 870263.57	527612.09, 870263.59
L-16	20.00'	S89°37'41"W	527612.09, 870263.59	527611.96, 870243.59
L-17	104.00'	S89°37'41"W	527611.96, 870243.59	527611.28, 870139.59
L-18	104.00'	S89°37'41"W	527611.28, 870139.59	527610.61, 870035.59
L-19	107.00'	S89°37'41"W	527610.61, 870035.59	527609.91, 869928.59
L-20	55.00'	S89°37'41"W	527609.91, 869928.59	527609.56, 869873.59
L-21	266.87'	S00°22'19"E	527609.56, 869873.59	527609.91, 869928.59
L-22	266.87'	S00°22'19"E	527609.91, 869928.59	527610.61, 870035.59
L-23	266.87'	S00°22'19"E	527610.61, 870035.59	527611.28, 870139.59
L-24	266.87'	S00°22'19"E	527611.28, 870139.59	527611.96, 870243.59
L-25	80.50'	S00°22'19"E	527611.96, 870243.59	527611.28, 870139.59
L-26	264.87'	S00°22'19"E	527611.28, 870139.59	527614.44, 870317.57
L-27	55.50'	S00°22'19"E	527614.44, 870317.57	527558.04, 870317.93
L-28	264.87'	N00°22'19"W	527614.96, 870397.79	527879.82, 870396.07
L-29	105.31'	S00°22'19"E	527711.66, 870458.43	527606.36, 870459.11

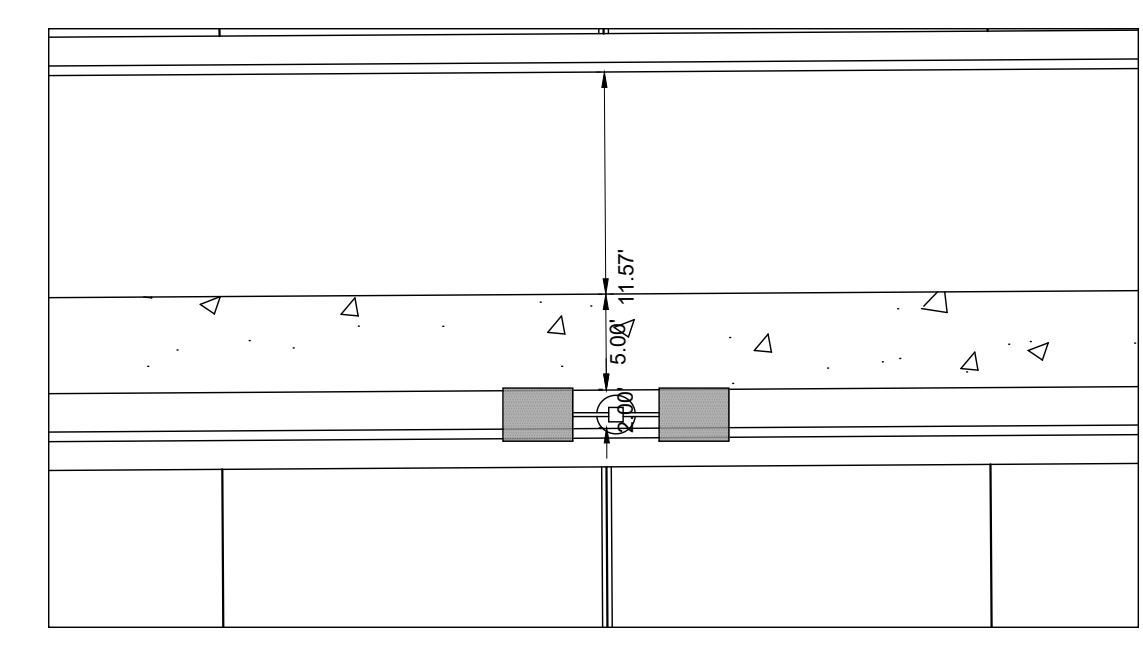
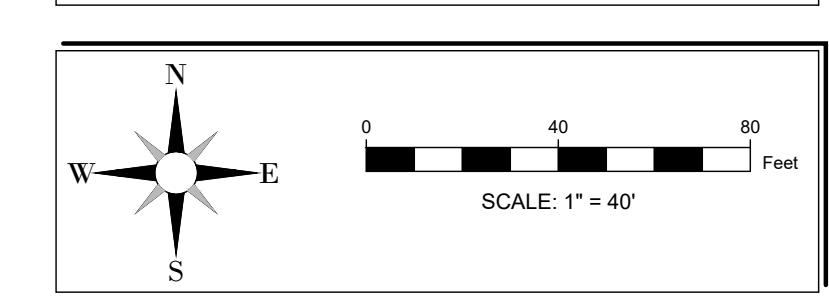
STAKING POINT TABLE			
POINT #	DESCRIPTION	NORTHING	EASTING
1	COLUMN LINE 2-D	527762.5458	870486.7653
2	COLUMN LINE 8-B	527709.2214	870623.1039
3	NW BUILDING FACE CORNER	527838.6654	870423.1136
4	NE BUILDING FACE CORNER	527866.2674	870695.4609
5	SE BUILDING FACE CORNER	527667.9123	870651.5968
6	SW BUILDING FACE CORNER	527666.8409	870486.5220
7	SOUTH DRIVEWAY & NW 12TH ST	527558.9415	870317.9316
8	NORTH DRIVEWAY & NW 13TH ST	527959.8003	870315.3296

SITE STAKING NOTES SEE SHEET C01.1

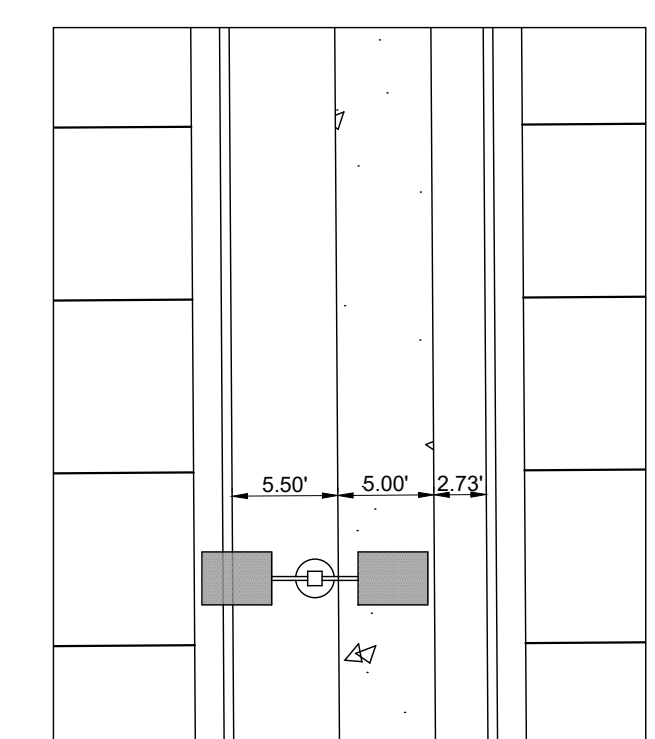
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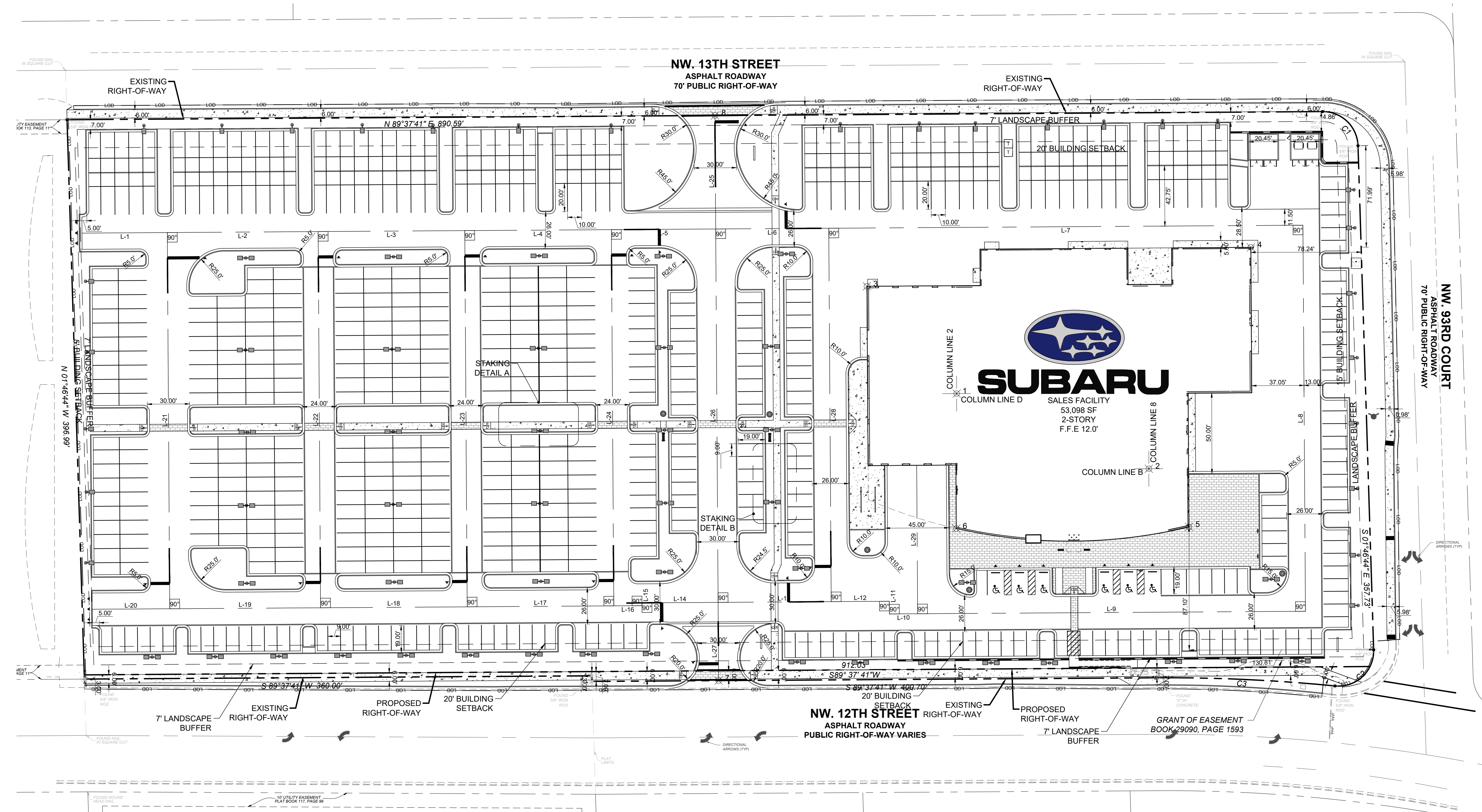
24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845



A STAKING DETAIL NTS



B STAKING DETAIL NTS





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9300 NW 13TH STREET
DORAL, FLORIDA 33172

REV.	DATE	DESCRIPTION

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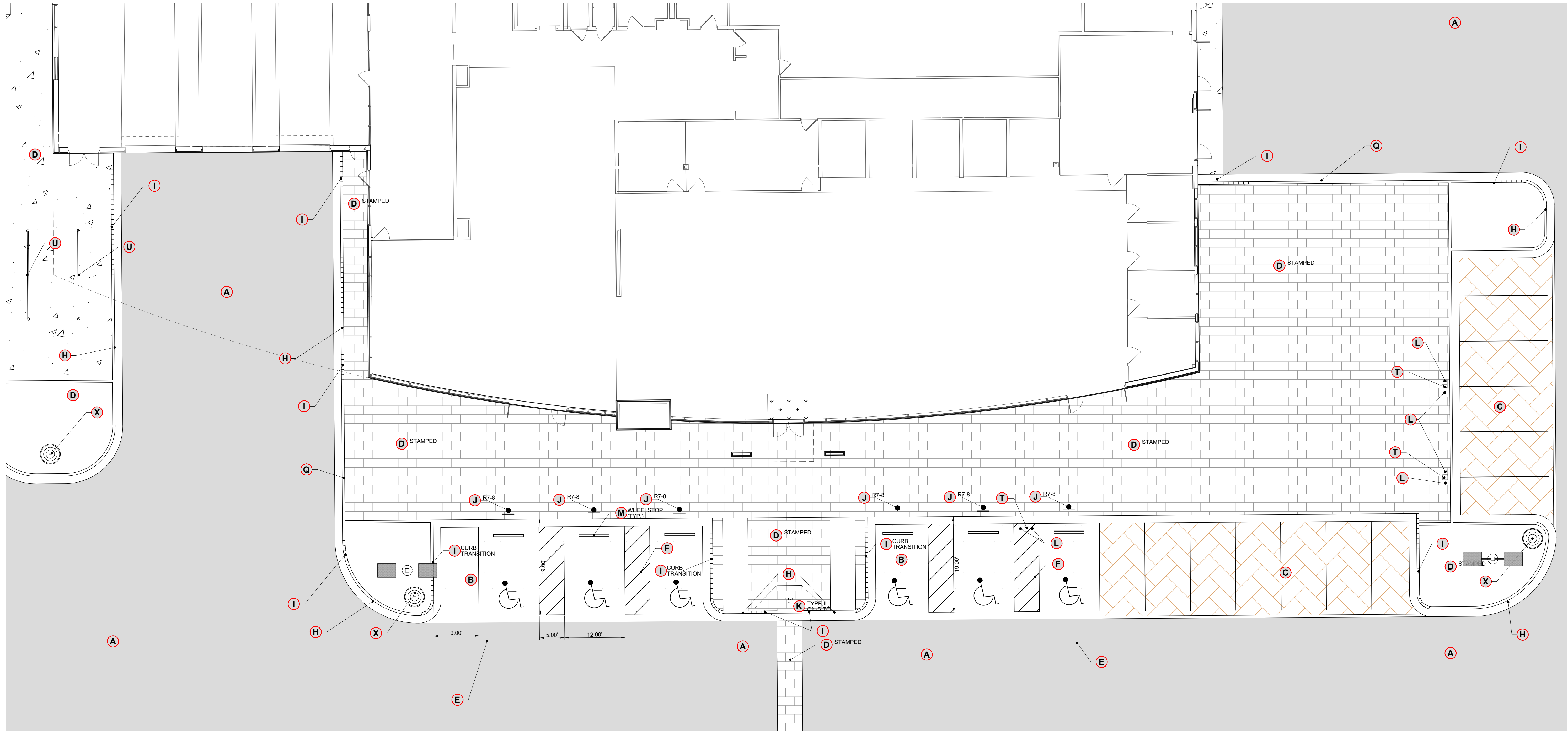
SEAL

SHEET NAME
DETAILED AREA PLAN

SHEET NUMBER

C03.2

ISSUE FOR PERMIT



SITE LEGEND

- A** HEAVY DUTY ASPHALT PAVEMENT SECTION: DETAIL 02, SHEET C03.3
- B** LIGHT DUTY ASPHALT PAVEMENT SECTION: DETAIL 02, SHEET C03.3
- C** PERMEABLE PAVERS SECTION: DETAIL 01, SHEET C03.5
- D** CONCRETE SECTIONS: PARKING: DETAIL 01, SHEET C03.3; DUMPSTER ENCLOSURE: DETAIL 01, SHEET C03.3; SIDEWALKS: DETAIL 04, SHEET C03.3; STAMPED CONCRETE: DETAIL 01, SHEET C03.3
- E** ACCESSIBLE AREA & PAVEMENT MARKINGS: DETAIL 03, SHEET C03.3
- F** STRIPING & PAVEMENT MARKINGS: DETAIL 04, SHEET C03.4
- G** RIBBON CURB: DETAIL 01, SHEET C03.5
- H** 24" CURB & GUTTER (TYP.): DETAIL 02, SHEET C03.4
- I** CURB TRANSITIONS: DETAIL 03, SHEET C03.4
- J** SITE SIGNAGE: DETAIL 05, SHEET C03.4
- K** SIDEWALK RAMP: DETAIL 01, SHEET C03.4
- L** BOLLARD DETAIL: DETAIL 07, SHEET C03.4
- M** RETAINING WALL: SEE STRUCTURAL PLANS
- N** TRANSFORMER PAD: DETAIL 06, SHEET C03.4
- O** DUMPSTER ENCLOSURE: SEE ARCHITECTURAL PLANS
- P** TIRE RECYCLE STORAGE: SEE ARCHITECTURAL PLANS
- Q** ROLLOVER 24" CURB & GUTTER: DETAIL 09, SHEET C03.4
- R** FLUME: DETAIL 08, SHEET C03.4
- S** HANDRAIL: DETAIL 02, SHEET C03.5 & DETAIL 01, SHEET C03.6
- T** EV CHARGERS: SEE ARCHITECTURAL PLANS
- U** BICYCLE RACKS: SEE ARCHITECTURAL PLANS
- V** CONCRETE SIDEWALK DRAIN DETAIL: DETAIL 02, SHEET C03.6
- W** BENCH: SEE ARCHITECTURAL PLANS
- X** TRASH RECEPTACLE: SEE ARCHITECTURAL PLANS

SITE INFORMATION

JURISDICTION: CITY OF DORAL
ZONING: I (INDUSTRIAL DISTRICT)

REQUIRED BUILDING SETBACKS:
FRONT: 20'
SIDE: 5 (INTERIOR) / 15 (STREET)
REAR: 5'

REQUIRED PARKING PER SECTION 34-608:
OFFICE (1 SPACE / 300 SF)= 16
RETAIL (1 SPACE / 250 SF)= 53
SERVICE/OTHER (3 SPACES / 2500 SF)= 35
OPEN LOT (3 SPACES / 5000 SF)= 122
TOTAL: 225

PROPOSED PARKING:
EMPLOYEE / CUSTOMER (9' X 19') = 88
INVENTORY (9' X 19') = 590
(HC) 12' X 19' = 6
TOTAL = 663

DRIVE AISLE: 24'

SITE AREA CALCULATIONS:
SITE: ±8.39 AC.
PERVIOUS AREA: ±2.83 AC.
HARDSCAPE: ±5.56 AC.
PERVIOUS HARDSCAPE: ±1.63 AC.
IMPERVIOUS AREA: ±4.30 AC.
DISTURBED AREA: ±8.92 AC.

FLOOD HAZARD:
NO PORTION OF THIS PROPERTY IS LOCATED IN A SPECIAL FLOOD AREA AS PER F.I.R.M. MAP NO. 12086C0286L, DATED 9/11/2009. WITH A BASE FLOOD ELEVATION OF 8.0 (NGVD 1929).

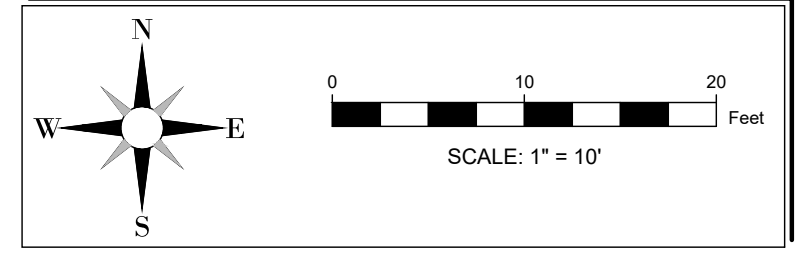
EXISTING INFORMATION:
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ALL INTERNAL ROADWAYS WILL BE PRIVATELY OWNED AND MAINTAINED

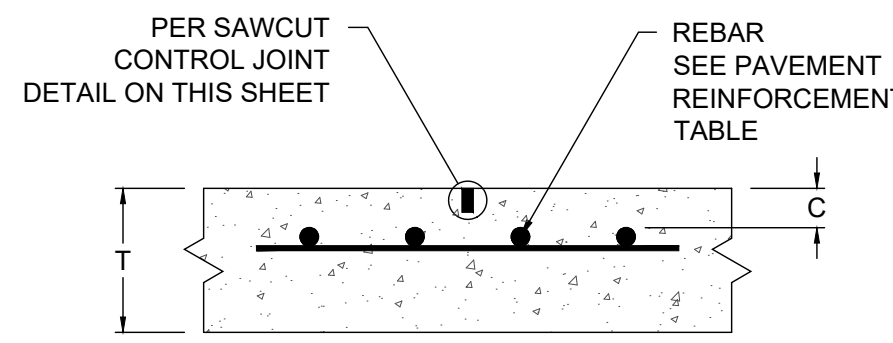
SITE & BUILDING AREA NOTES SEE SHEET C01.1

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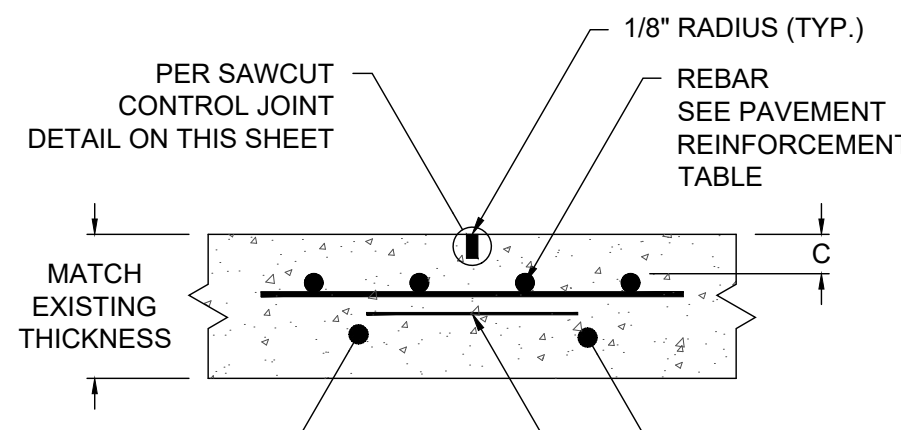
24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845



SAWCUT JOINT NTS

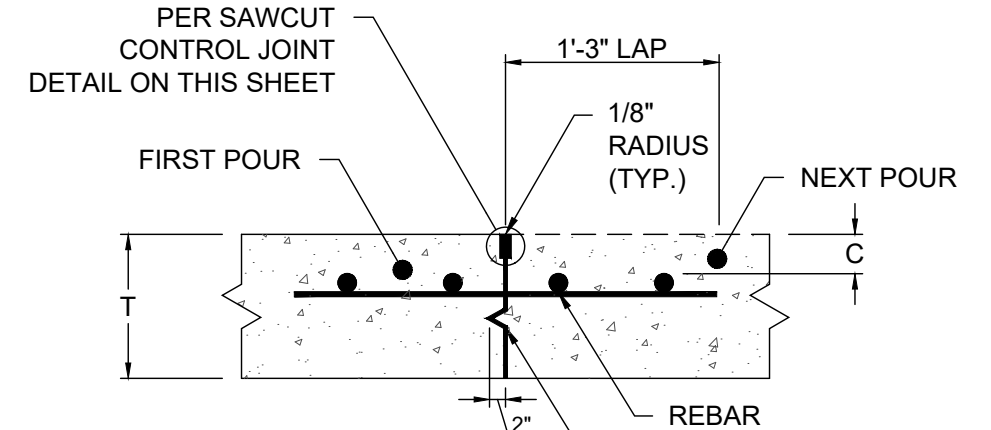


CONCRETE TO CONCRETE TIE IN NTS



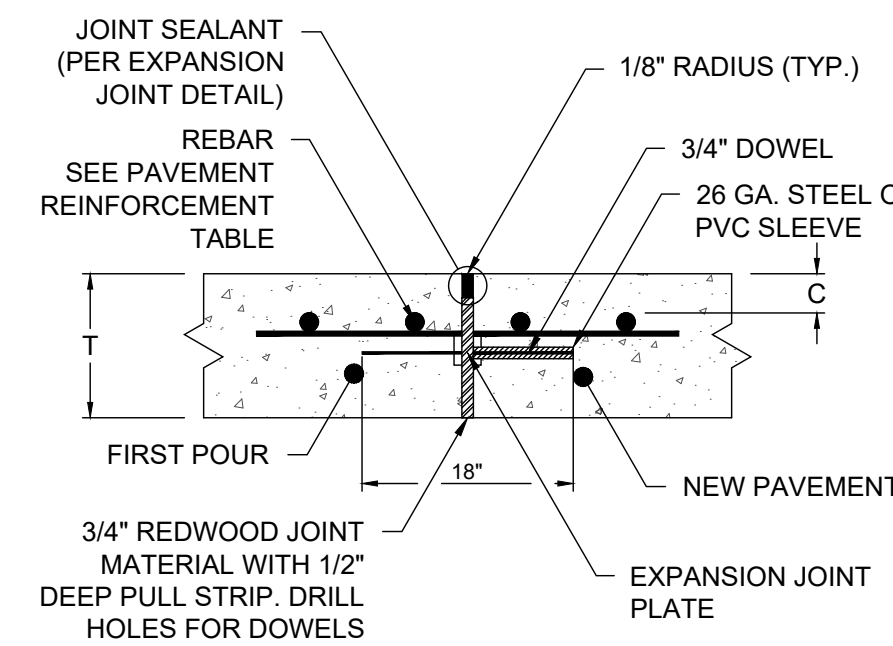
NOTE: CONSTRUCTION JOINT TO BE USED WHERE REQUIRED. (NOT TO REPLACE EXPANSION JOINT)

CONSTRUCTION JOINT NTS

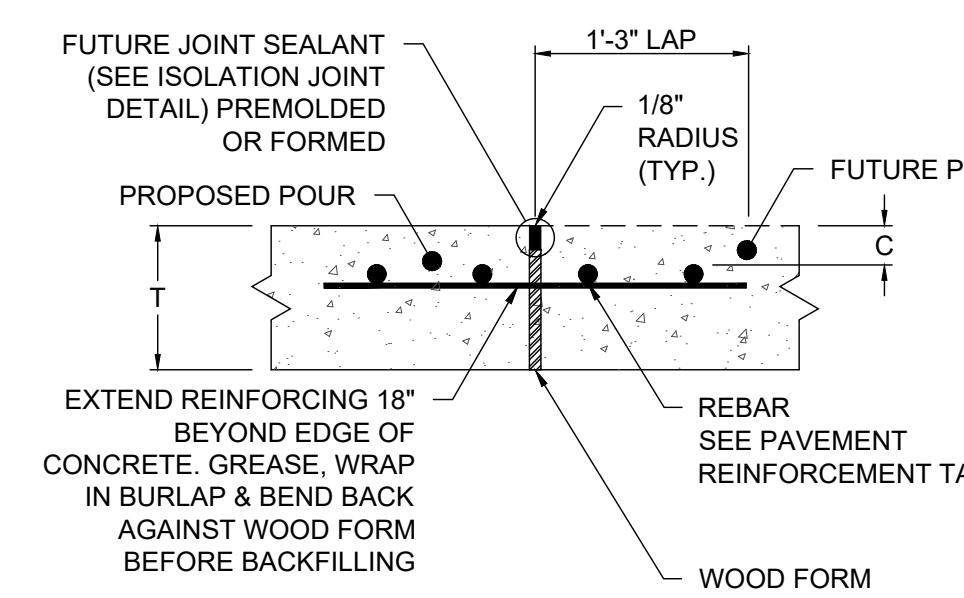


NOTE: CONSTRUCTION JOINT TO BE USED WHEN POURING OPERATION IS DELAYED. (NOT TO REPLACE EXPANSION JOINT)

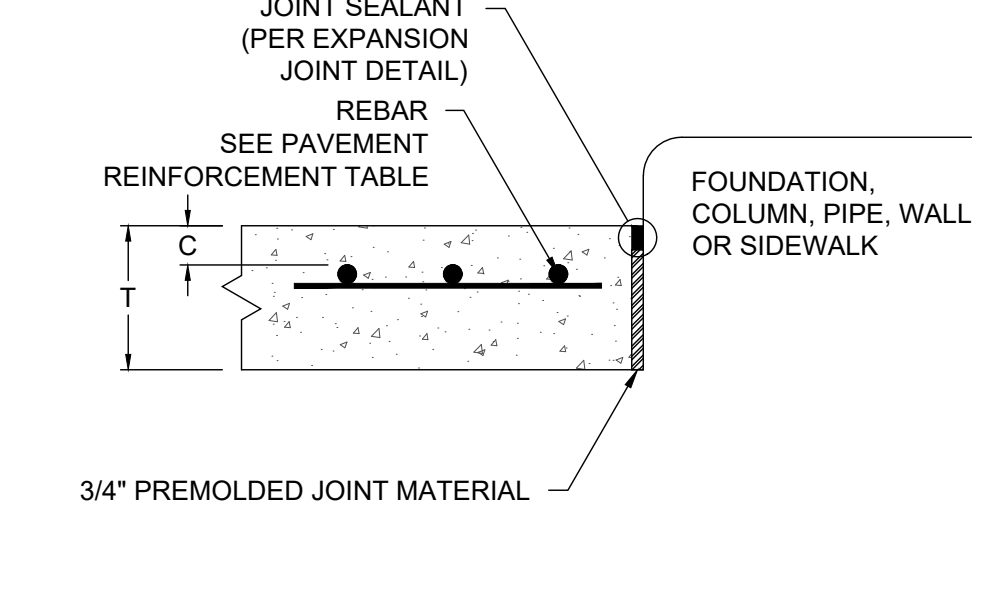
SAWCUT JOINT NTS



CONCRETE TO CONCRETE TIE IN NTS



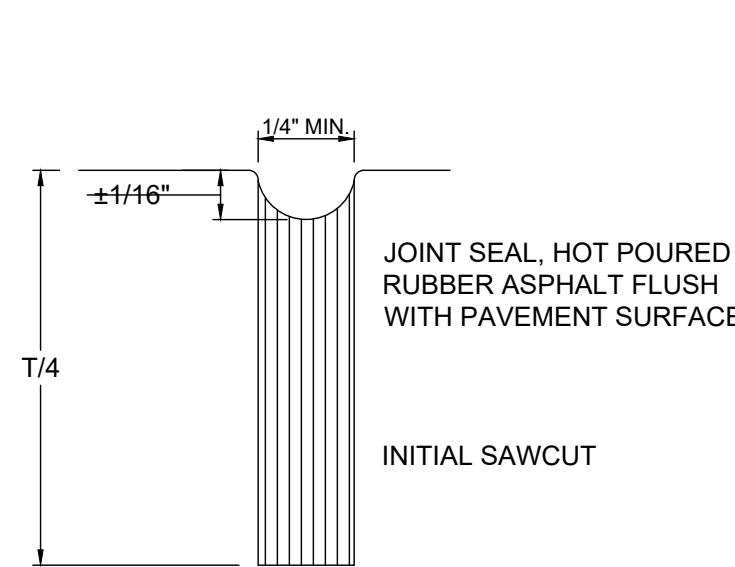
CONSTRUCTION JOINT NTS



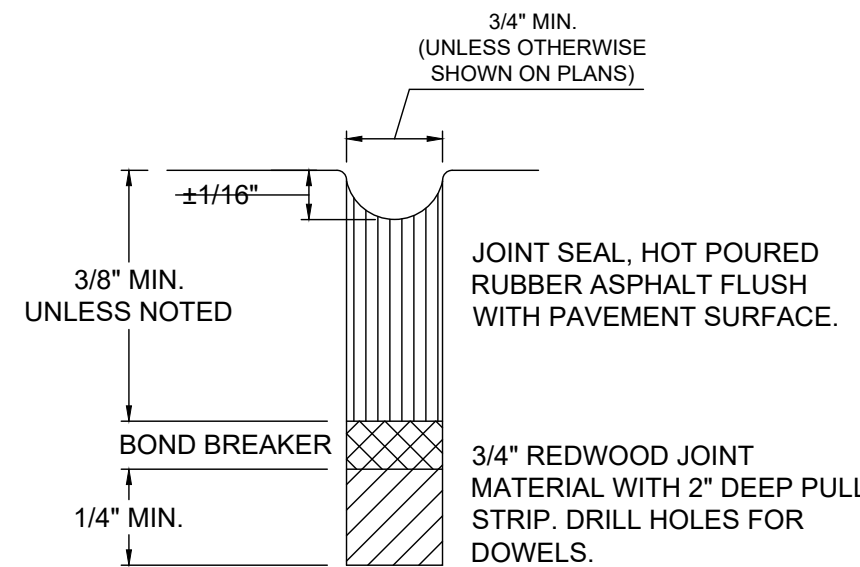
NOTES:

1. REINFORCING STEEL BAR SIZE/SPACING SPECIFICATIONS IN GEOTECH REPORT SHALL SUPERSEDE ABOVE TABLE.
2. REINFORCING STEEL SIZE/SPACING IS BASED ON MIN. 60,000 PSI TENSILE STRENGTH REINFORCING STEEL AS SHOWN.
3. CONCRETE PAVING MIX DESIGN SHALL HAVE MINIMUM 4000 PSI COMPRESSIVE STRENGTH AT 28 DAYS. GEOTECHNICAL REPORT CONCRETE PAVING MIX DESIGN SHALL SUPERSEDE VALUES HEREIN.
4. MAXIMUM JOINT SPACING SHALL BE PER JOINT LAYOUT PLAN (IF PROVIDED) BUT SHALL NOT EXCEED VALUES IN TABLE.
5. MAXIMUM JOINT SPACING IN GEOTECHNICAL REPORT SHALL SUPERSEDE VALUES IN ABOVE TABLE.
6. USE STATE DOT SUBBASE UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL REPORT.
7. ALL JOINTS IN PAVING SHALL BE REFLECTED IN CURBING AND SHALL HAVE ALL THEIR RESPECTIVE JOINTING MATERIALS PRESENT (I.E. EXPANSION JOINTS SHALL HAVE THEIR RESPECTIVE FILLER BOARD AND CAULK REPLACED).
8. CURB EXPANSION JOINTS - IF THERE IS AN EXPANSION JOINT IN THE PAVING, THE EXPANSION JOINT MUST FOLLOW THROUGH THE CURB. THE REINFORCING STEEL MUST ALSO BE CUT AT THE EXPANSION JOINT AND NOT ALLOWED TO RUN THROUGH THE JOINT CONTINUOUSLY. A SAW CUT EXPANSION JOINT IS NOT ACCEPTABLE BECAUSE NORMAL EXPANSION AND CONTRACTION WILL CAUSE THE CONCRETE TO PUSH AGAINST THE TWO SECTIONS AND ONE SIDE WILL EVENTUALLY FAIL. IF AN EXPANSION JOINT IS LEFT OUT AND MUST BE SAW CUT IN, THE CURB SHOULD BE CUT TWICE AND A 3/4" PIECE OF CONCRETE IS REMOVED. IN ALL CASES THE JOINT SHOULD BE CAULKED WITH NP1.
9. CONCRETE TOUCHING THE BACK OF CURBS - ANY CONCRETE THAT TOUCHES THE BACK OF A CURB INCLUDING SIDEWALKS, ISLAND NOSINGS AND PAYPHONE PADS SHALL BE ISOLATED FROM THE CURB USING 1/2" BLACK ASPHALT IMPREGNATED FIBERBOARD. CONTRACTOR SHALL USE A REMOVABLE STRIP OR A ZIP-STRIP AND SEAL THE JOINT WITH SL1. THE ONLY EXCEPTION IS IF THE ISLAND NOSINGS ARE POURED MONOLITHICALLY WITH THE CURB AND PARKING LOT.
10. CURBS AT THE BUILDING FOUNDATION - IF A CURB TOUCHES THE BUILDING FOUNDATION, IT NEEDS TO BE ISOLATED WITH EXPANSION JOINT MATERIAL JUST LIKE THE PAVING. IF AN EXPANSION JOINT IS LEFT OUT AND MUST BE SAW CUT IN, A 1/2" PIECE OF CONCRETE SHOULD BE REMOVED. THE JOINT SHOULD BE CAULKED WITH NP1.
11. EXPANSION JOINTS AT ISLAND NOSINGS - IF THE ISLAND NOSINGS ARE POURED MONOLITHICALLY WITH THE CURB AND PARKING LOT, THEN PAVING EXPANSION JOINTS SHOULD CONTINUE THROUGH THE NOSINGS.

SAW CUT CONTROL JOINT NTS

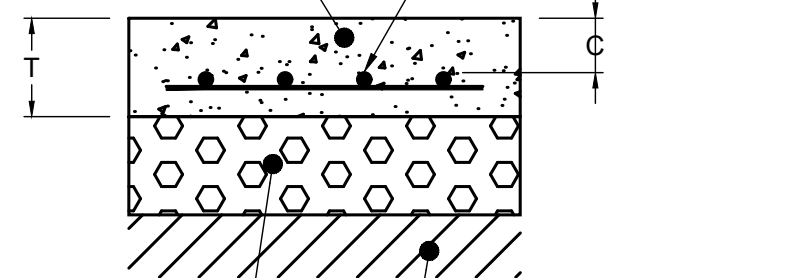


EXPANSION JOINT NTS



CONCRETE SECTION

6 INCHES OF UNREINFORCED PORTLAND CEMENT CONCRETE (TYPE 1) WITH A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 POUNDS PER SQUARE INCH FOR AREAS WHERE VEHICULAR TRAFFIC IS ANTICIPATED.



8 INCHES OF LIMEROCK BASE COURSE COMPACTED TO AT LEAST 98 PERCENT RELATIVE COMPACTION.

12 INCHES OF STABILIZED SUBGRADE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. THE SUBGRADE SHOULD HAVE A MINIMUM WITH A MINIMUM LBR OF 40 PERCENT AS SPECIFIED BY FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) REQUIREMENTS.

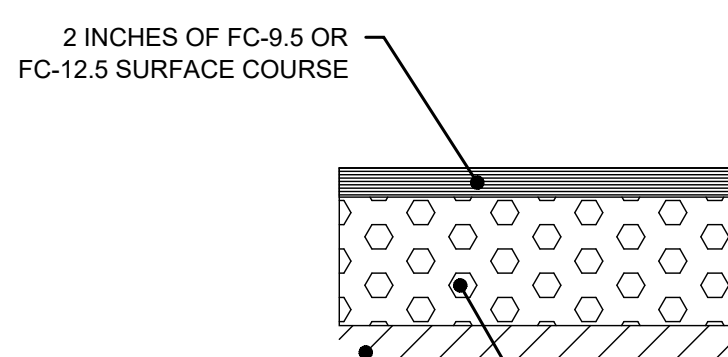
REINFORCEMENT TABLE

CONCRETE SECTION DESIGNATION	SLAB THICKNESS (T) (IN.)	COVER (IN.) (2" MIN)	MAX EXPANSION JOINT SPACING (FT)	REINFORCING STEEL BAR SIZE & SPACING
PARKING	6	2	14' x 14'	#3 @ 24" C.C
DUMPSTER APPROACH PAD	6	2	14' x 14'	#3 @ 24" C.C

1 CONCRETE SECTIONS NTS

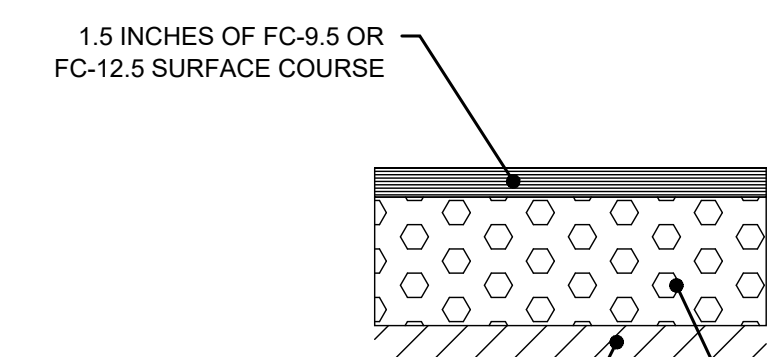
HEAVY DUTY ASPHALT

NOTE: THE ASPHALT SURFACE COURSE SHOULD CONFORM TO THE MOST RECENT EDITION OF THE FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION. FOR HOT MIX ASPHALTIC CONCRETE SURFACE COURSE. THE BASE COURSE SHOULD CONFORM TO THE FDOT STANDARDS FOR BASE COURSE COMPACTED TO 100 PERCENT OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY. TOP 12" OF SUBGRADE TO BE COMPACTED TO 95% OF THE MODIFIED PROCTOR (ASTM D-1557) MAXIMUM DRY DENSITY (OR AS RECOMMENDED, AS A MINIMUM).



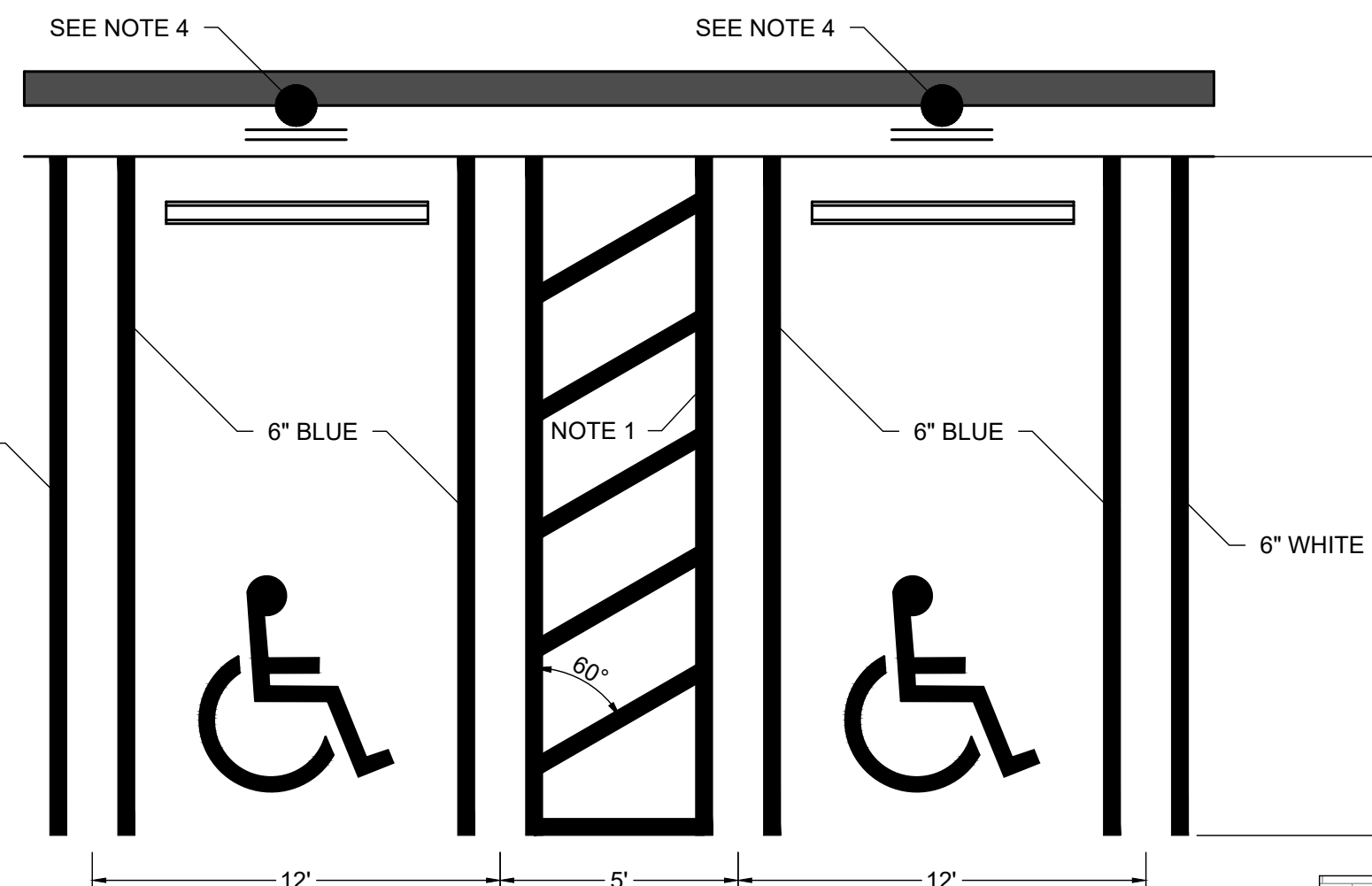
12 INCHES OF STABILIZED SUBGRADE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. THE SUBGRADE SHOULD HAVE A MINIMUM WITH A MINIMUM LBR OF 40 PERCENT AS SPECIFIED BY FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) REQUIREMENTS.

LIGHT DUTY ASPHALT

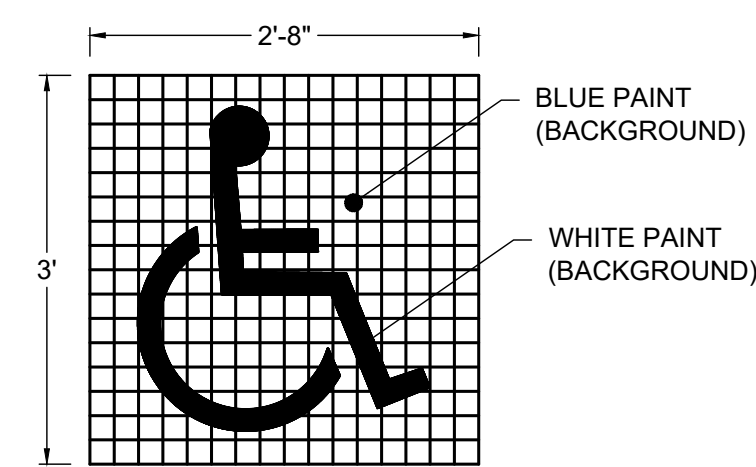


12 INCHES OF STABILIZED SUBGRADE COMPACTED TO AT LEAST 95 PERCENT RELATIVE COMPACTION. THE SUBGRADE SHOULD HAVE A MINIMUM WITH A MINIMUM LBR OF 40 PERCENT AS SPECIFIED BY FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT) REQUIREMENTS.

2 PAVEMENT SECTIONS NTS



TYPICAL ACCESSIBILITY PARKING LAYOUT & STRIPING (FLORIDA)

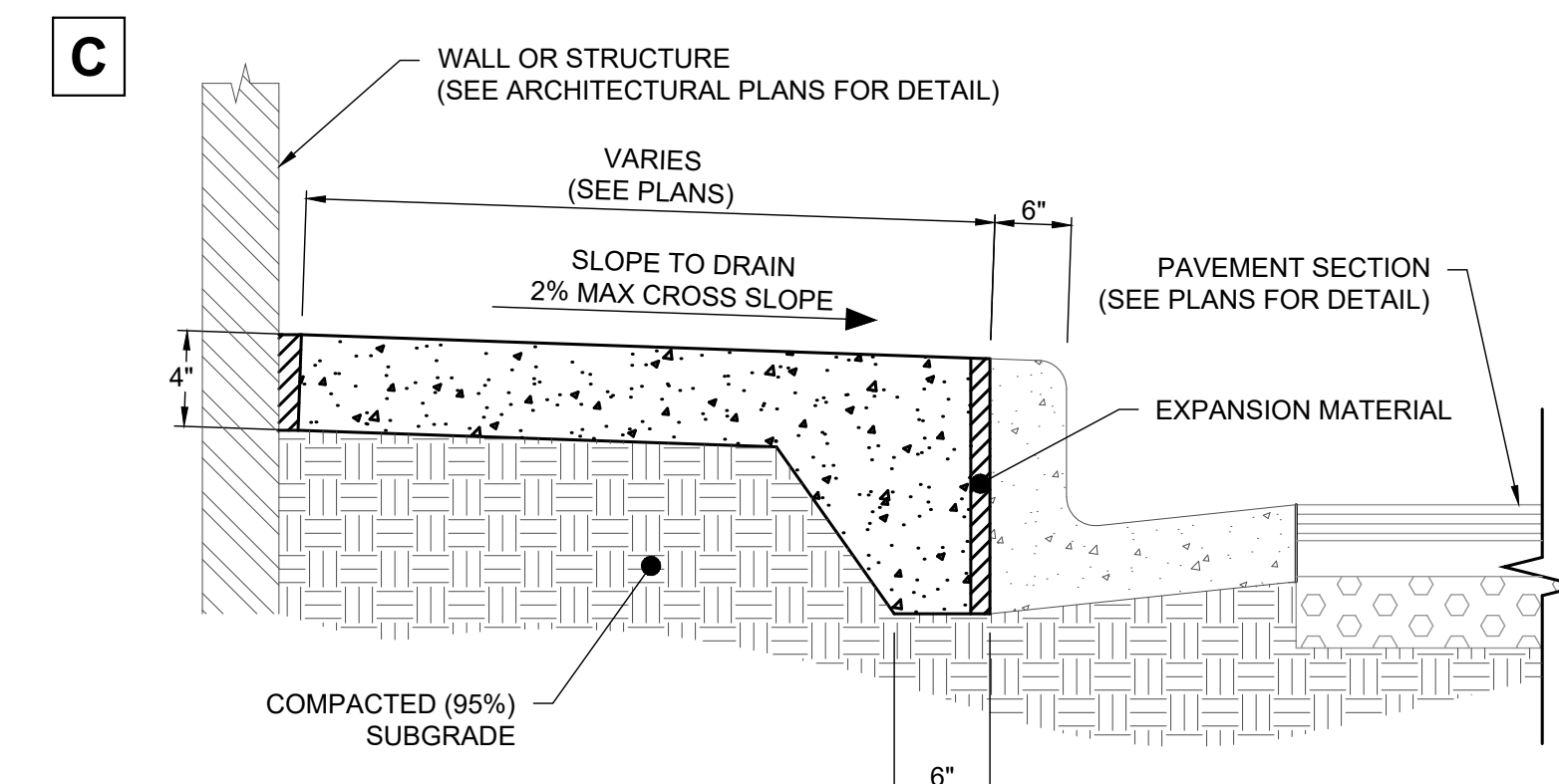
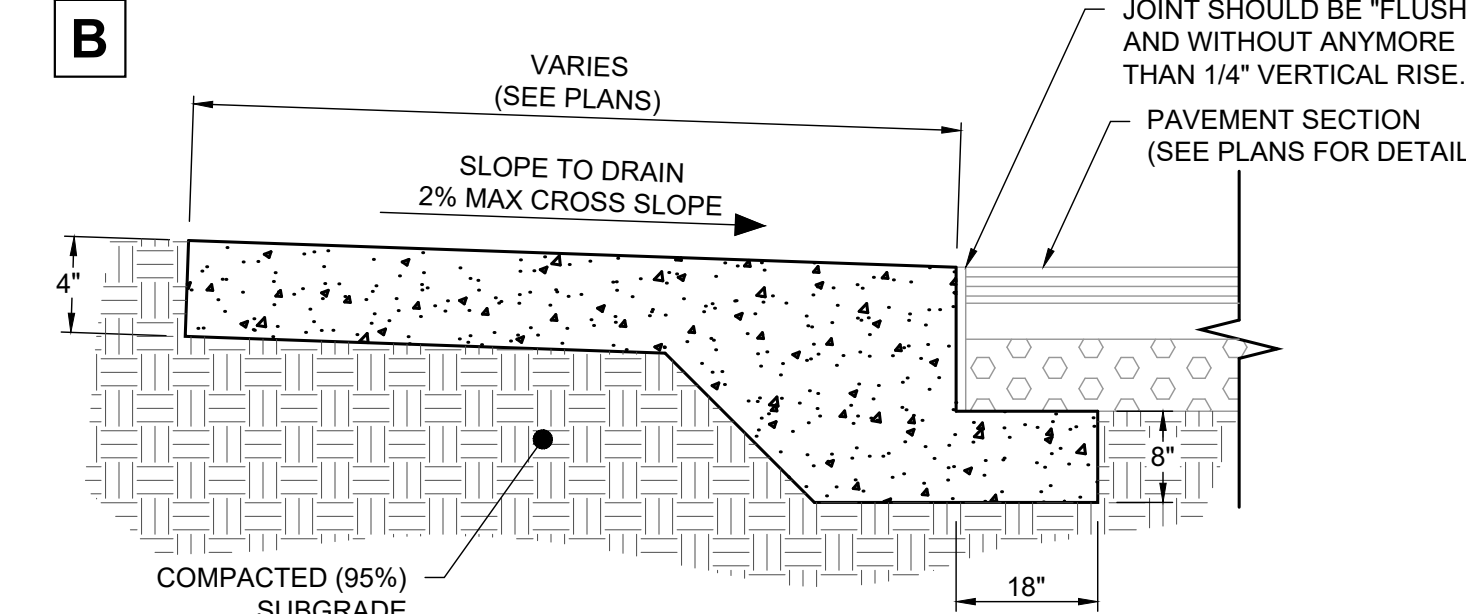
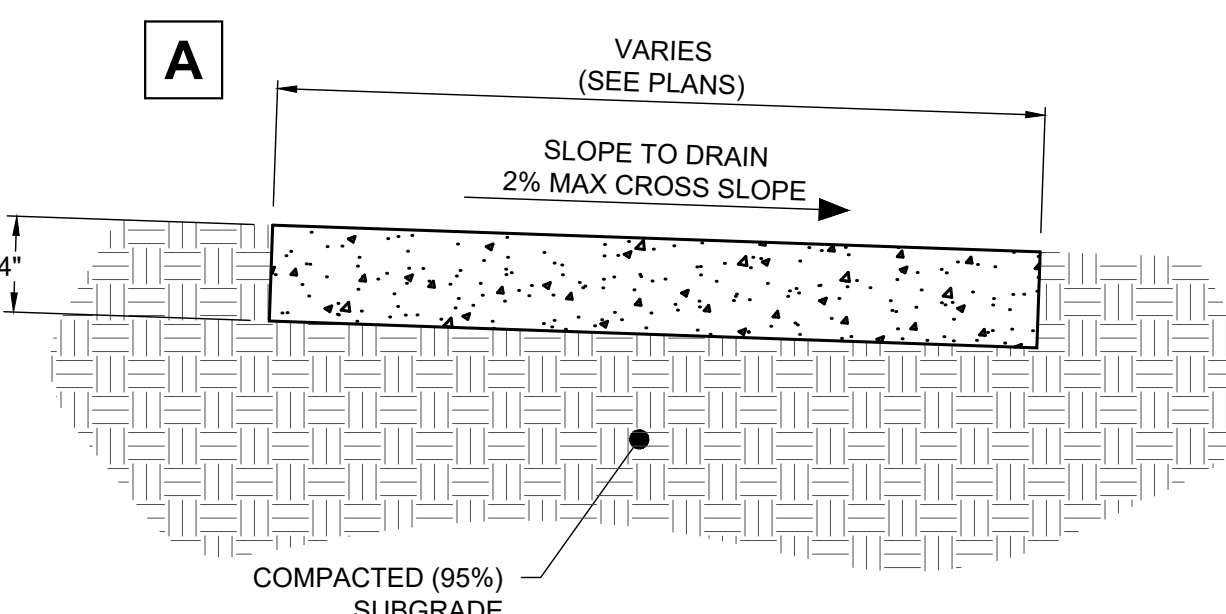


UNIVERSAL SYMBOL OF ACCESSIBILITY

NOTES:

1. ALL ADA PAVEMENT MARKINGS SHALL MATCH FDOT STANDARD PLAN 711-001 UNLESS OTHERWISE DIRECTED BY LOCAL JURISDICTION. DIMENSIONS ARE TO THE CENTERLINE OF MARKINGS.
2. CRITERIA FOR PAVEMENT MARKINGS ONLY. NOT PUBLIC SIDEWALK CURB RAMP LOCATIONS. FOR RAMP LOCATION REFER TO PLANS.
3. CONTRACTOR IS RESPONSIBLE TO PROVIDE AND INSTALL ALL ADA PARKING SIGNAGE PER LOCAL AND STATE REQUIREMENTS FOR SIZE, WORDING, AND FINE AMOUNT.

3 ADA PARKING NTS



CONCRETE NOTES:

- f_c = 4,000 PSI
- PROVIDE CONTROL JOINTS AT 5' O.C.
- PROVIDE EXPANSION JOINTS ONLY WHERE CONCRETE PAVEMENT ABUTS FIXED OBJECTS, CURB AND GUTTER, AND OTHER PAVEMENT TYPES.

4 SIDEWALK SECTIONS NTS



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FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190

PROJECT PM: AH

PROJECT RE: JH

ISSUE DATE: 04/30/2024

DWG NAME: 220190 C03.DWG

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PHONE: (804) 244-3459



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SEAL

SHEET NAME
HARDSCAPE DETAIL I

SHEET NUMBER

C03.3

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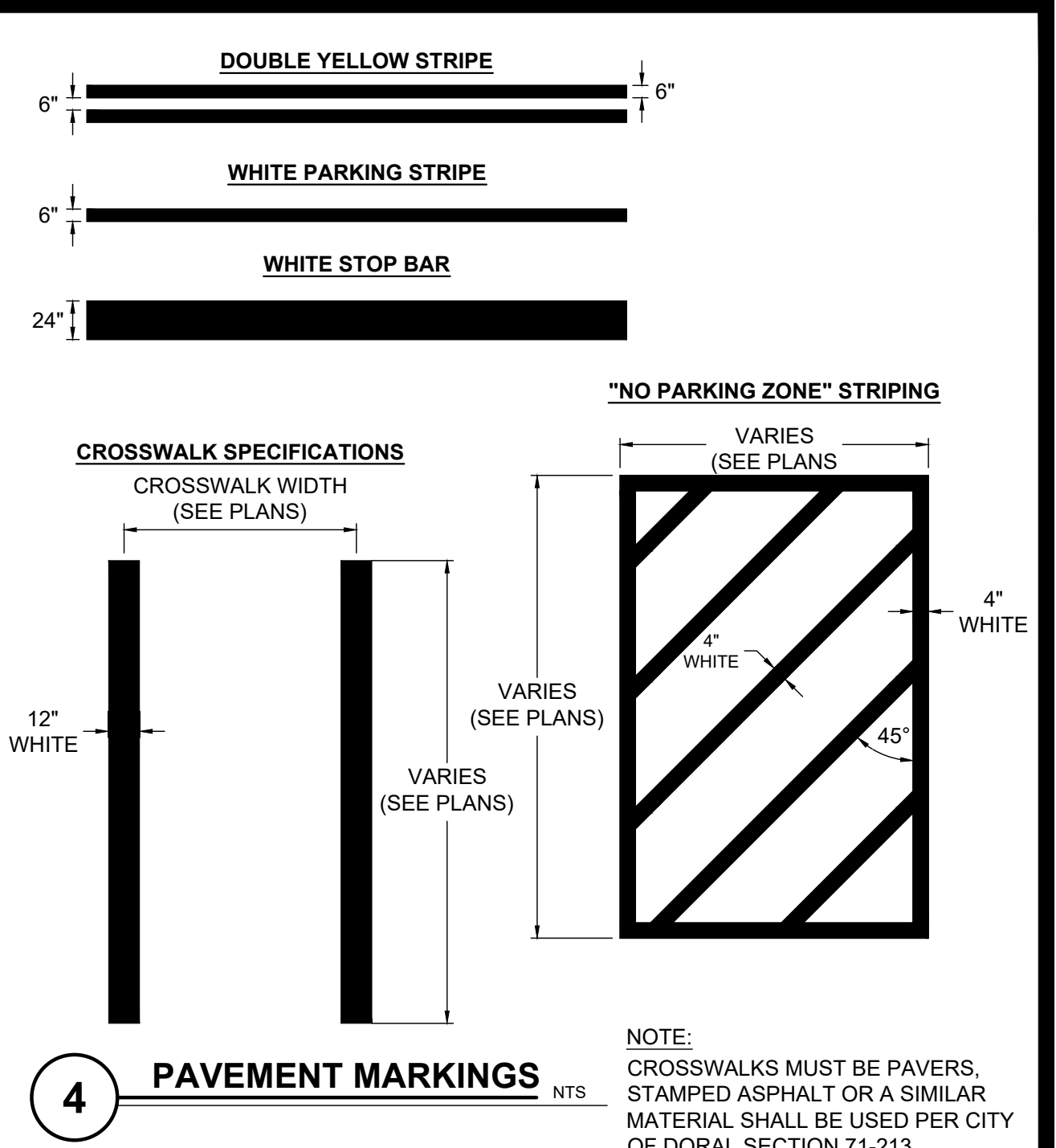
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SHEET NAME
HARDSCAPE DETAIL II

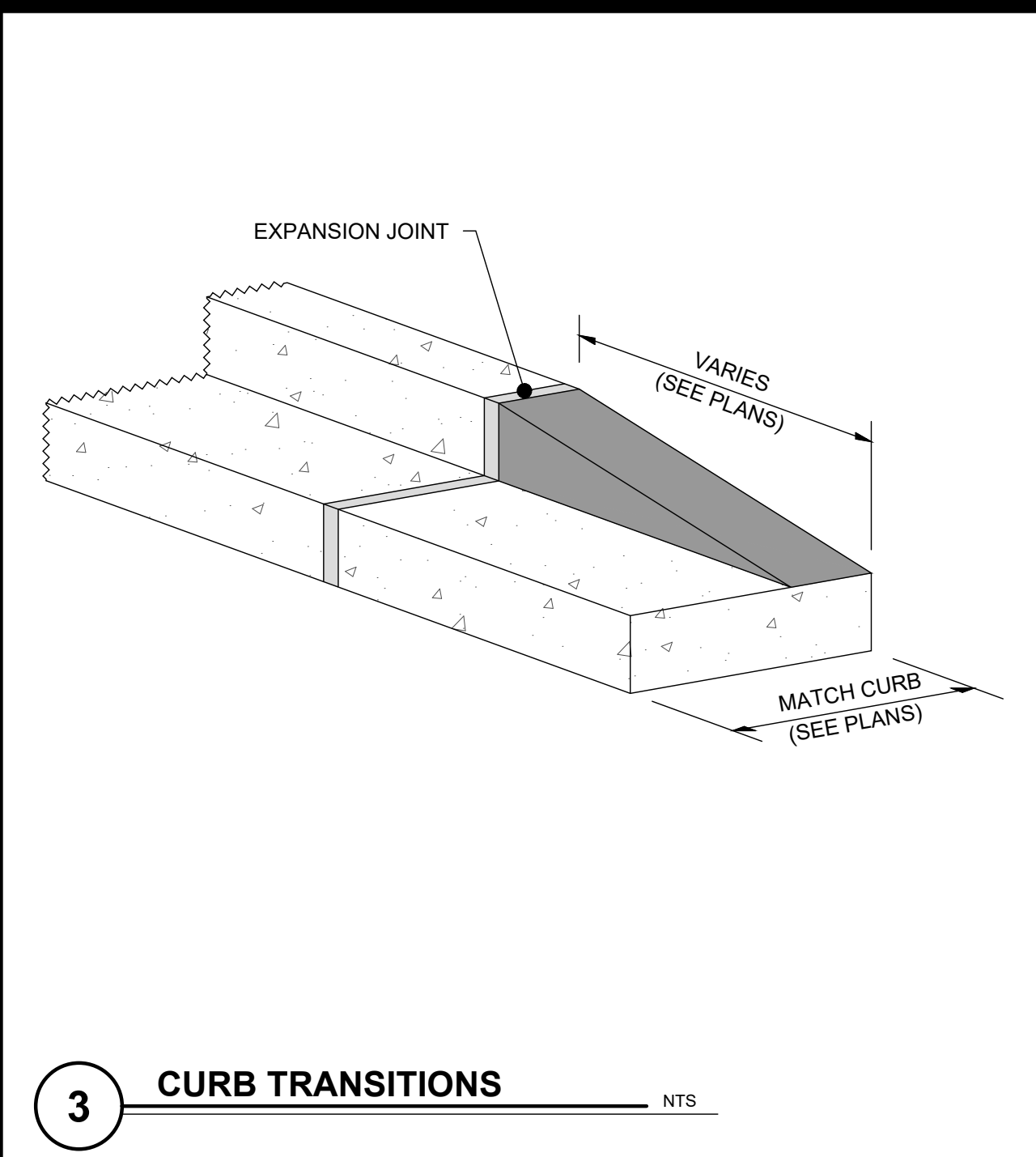
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C03.4

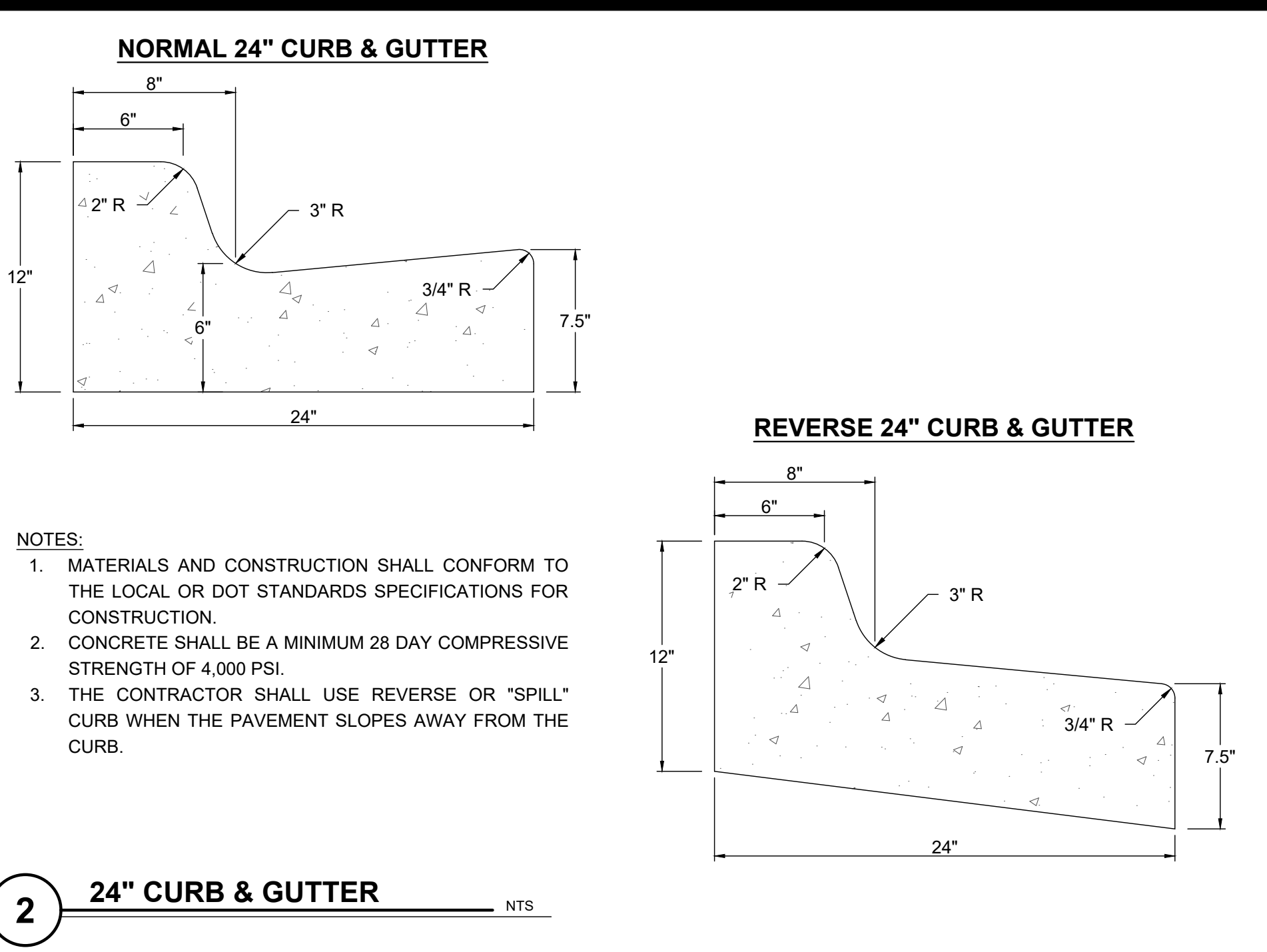
ISSUE FOR PERMIT



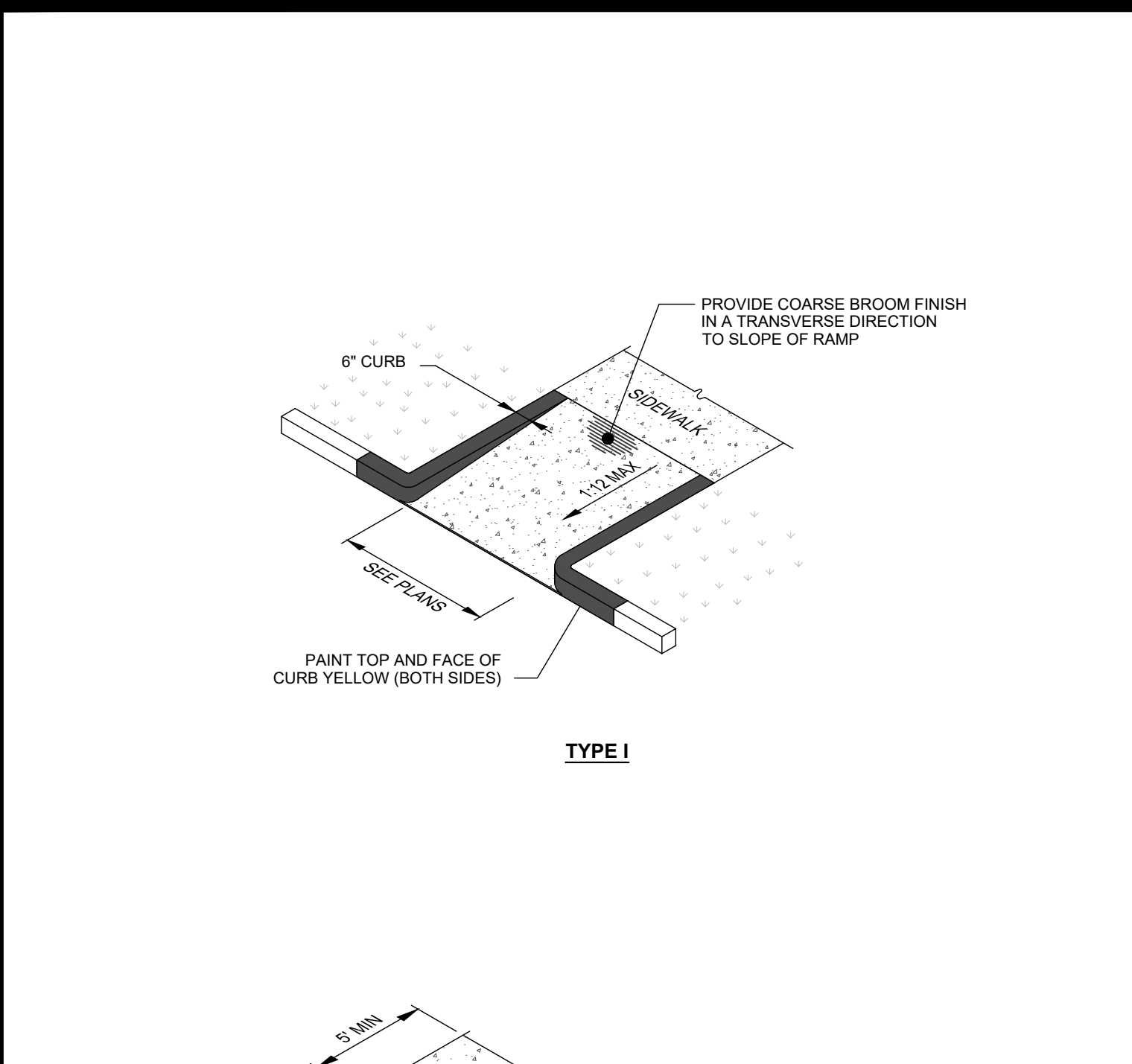
4 PAVEMENT MARKINGS NTS



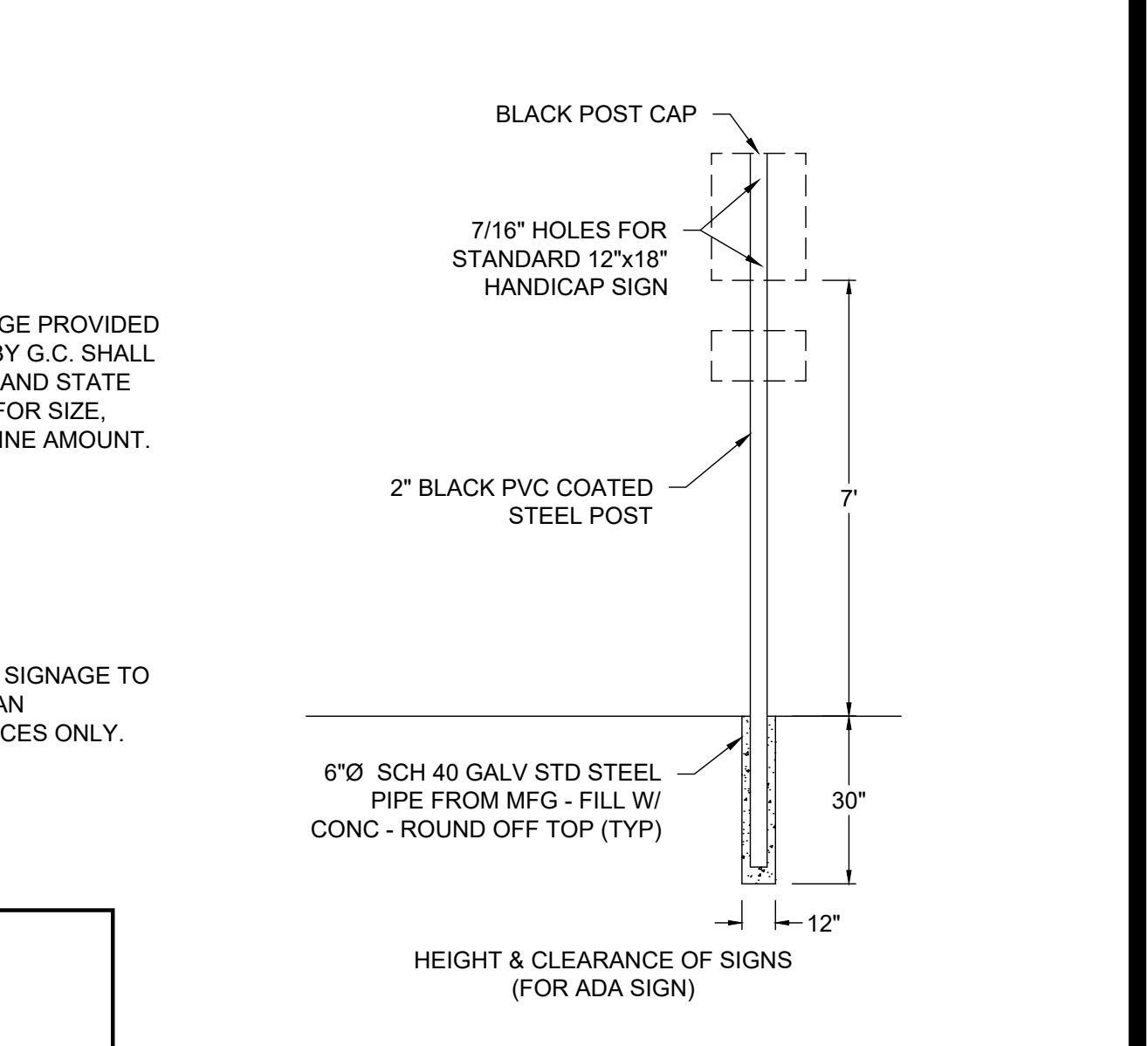
3 CURB TRANSITIONS NTS



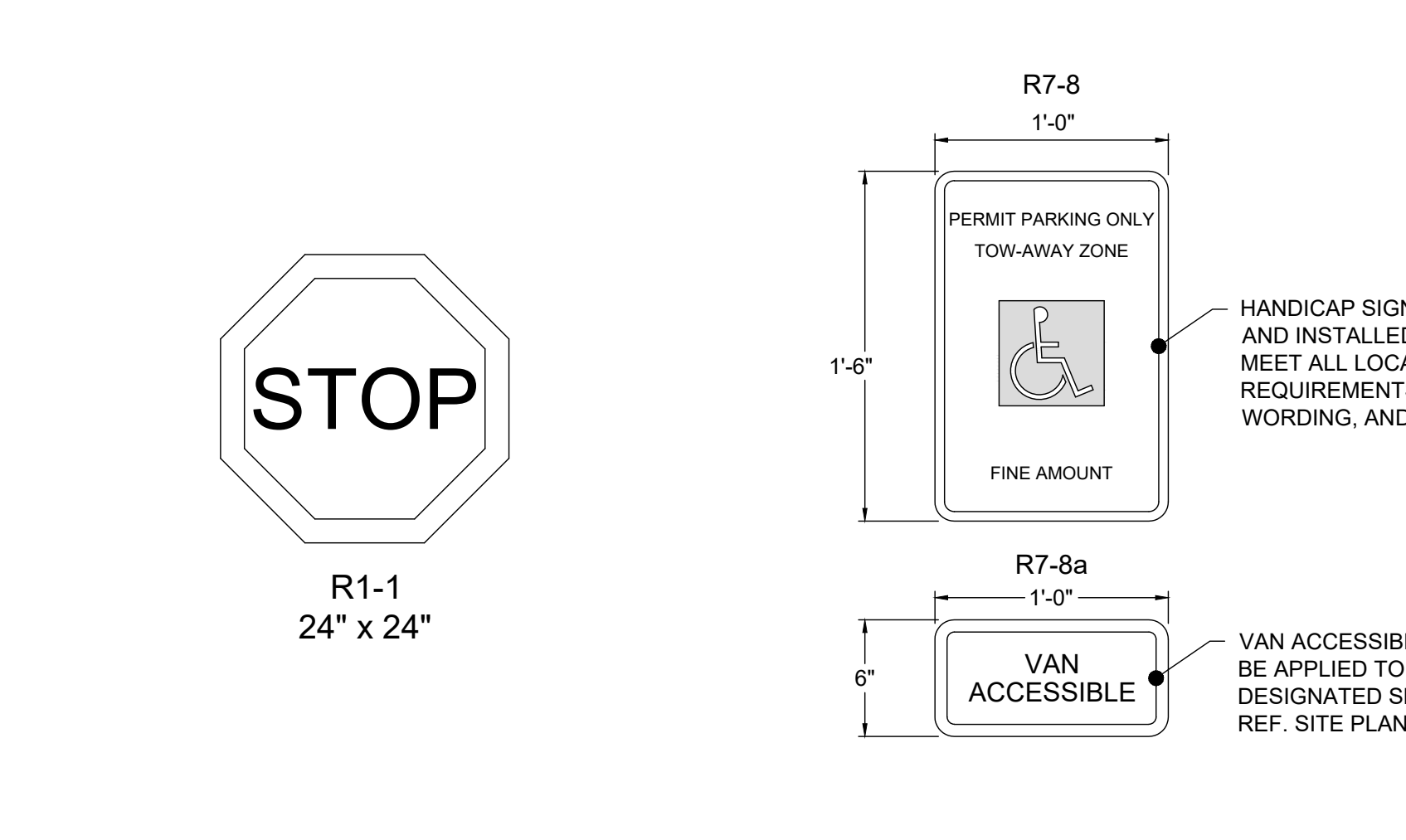
2 24" CURB & GUTTER NTS



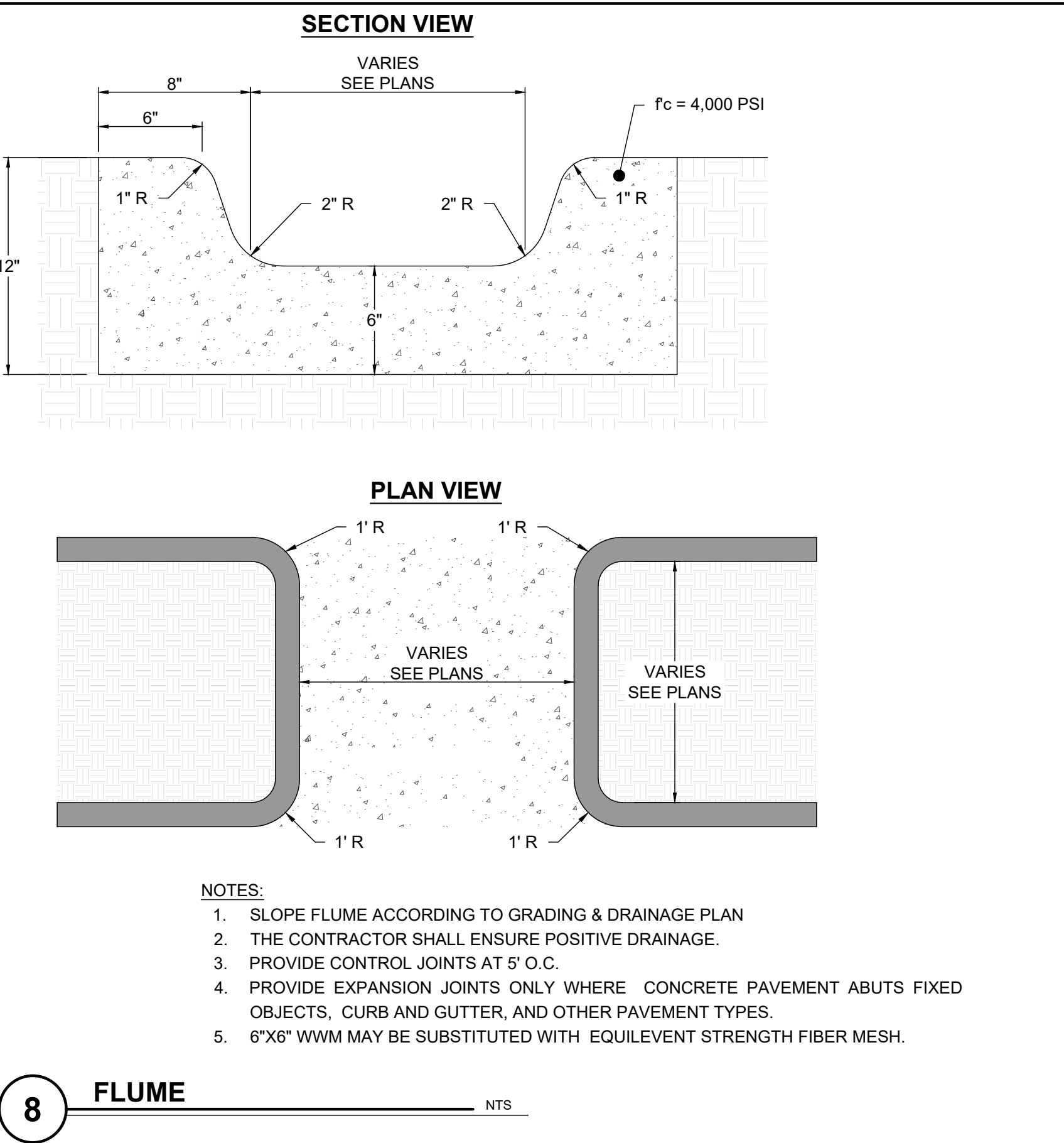
1 ON-SITE RAMPS NTS



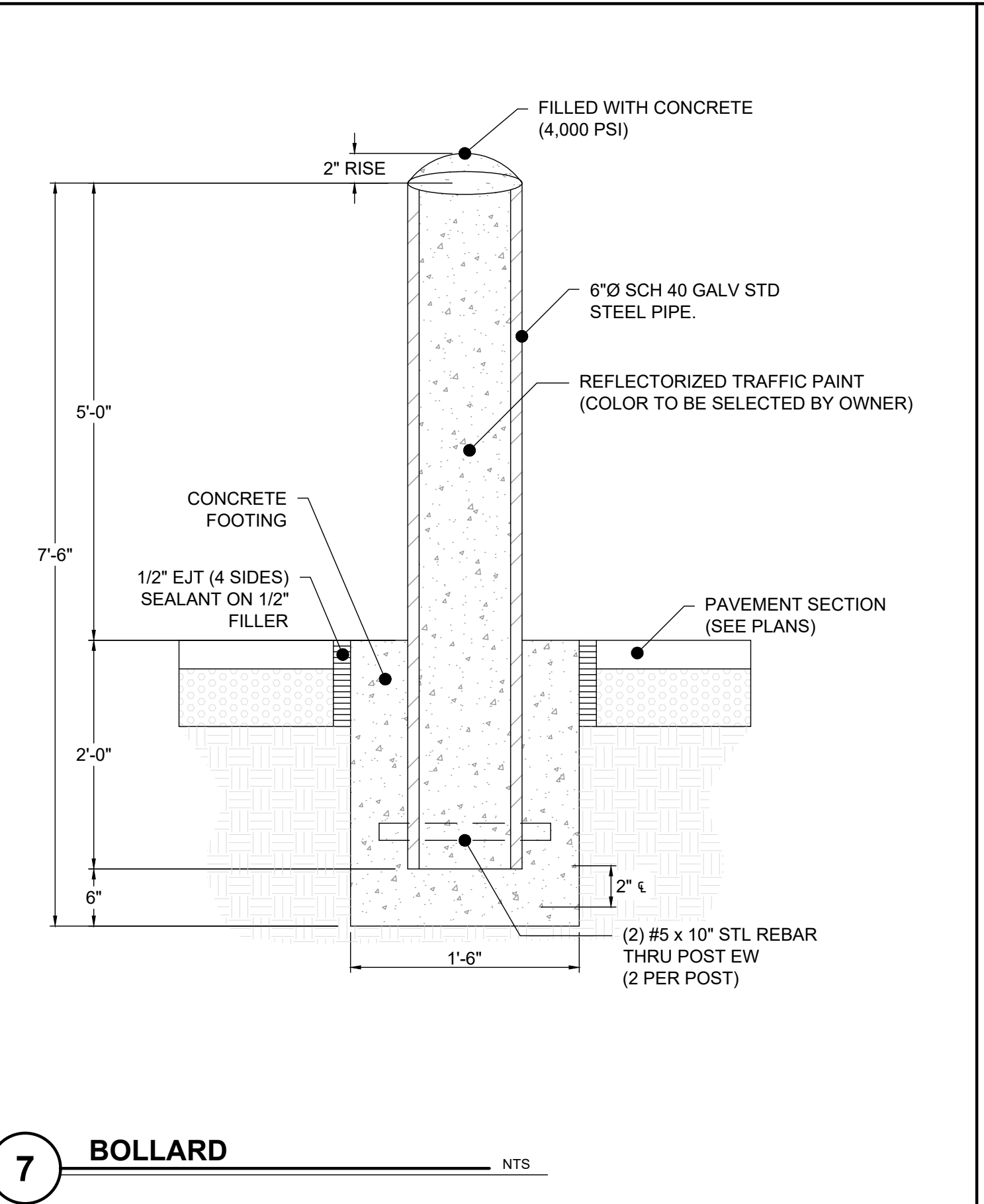
9 ROLLOVER CURB & GUTTER DETAIL NTS



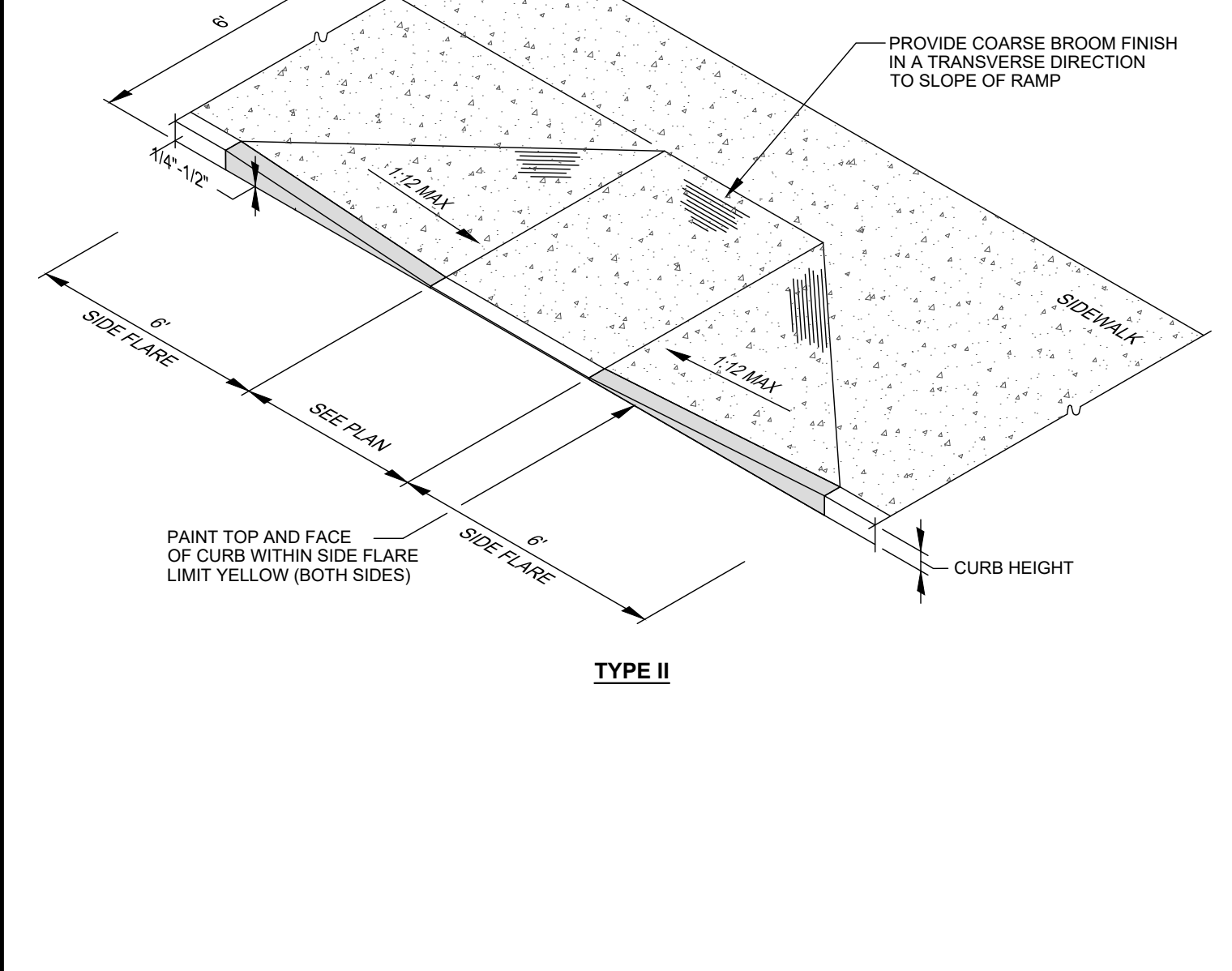
5 SIGNS NTS



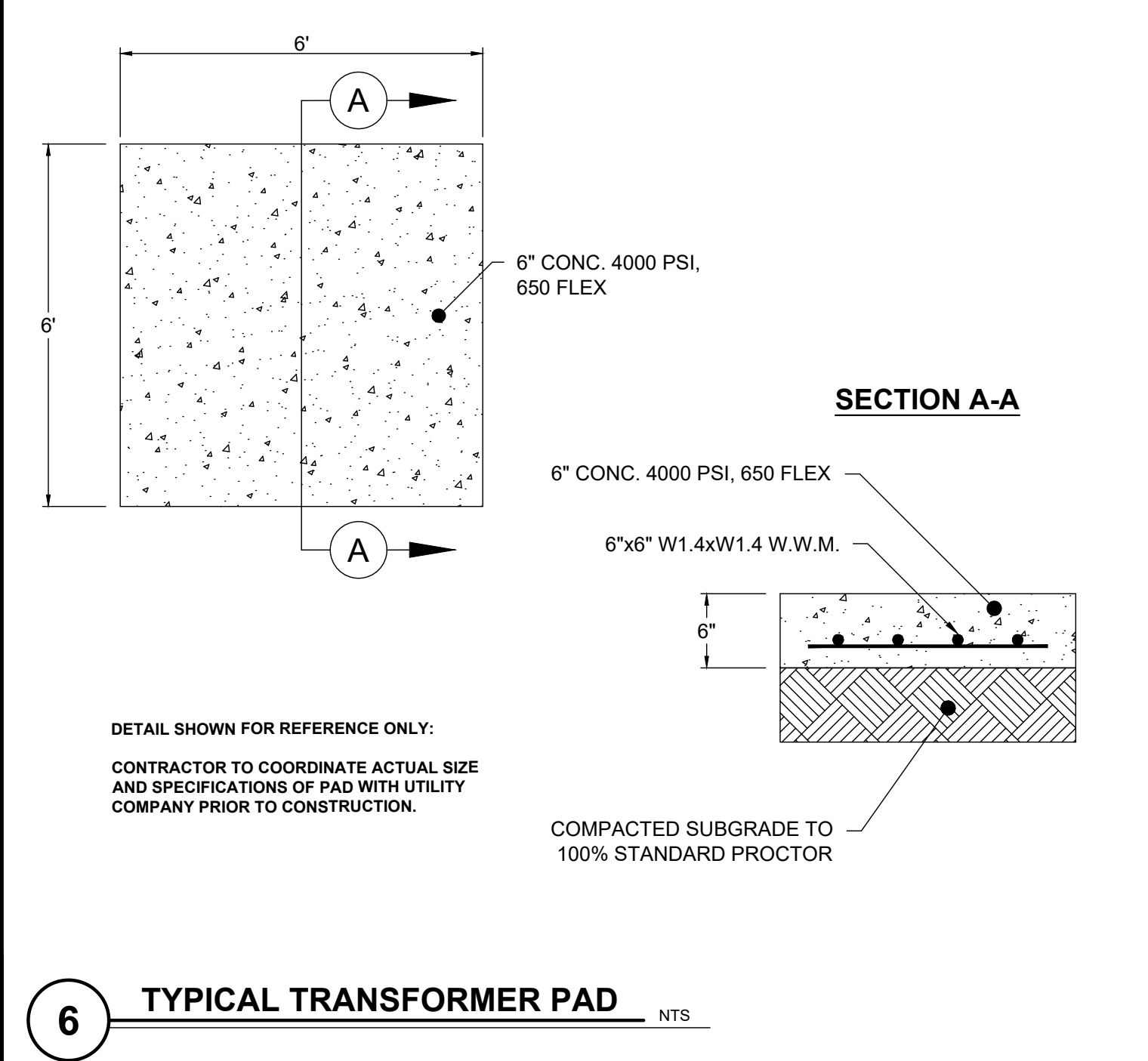
8 FLUME NTS



7 BOLLARD NTS



1 ON-SITE RAMPS NTS



6 TYPICAL TRANSFORMER PAD NTS



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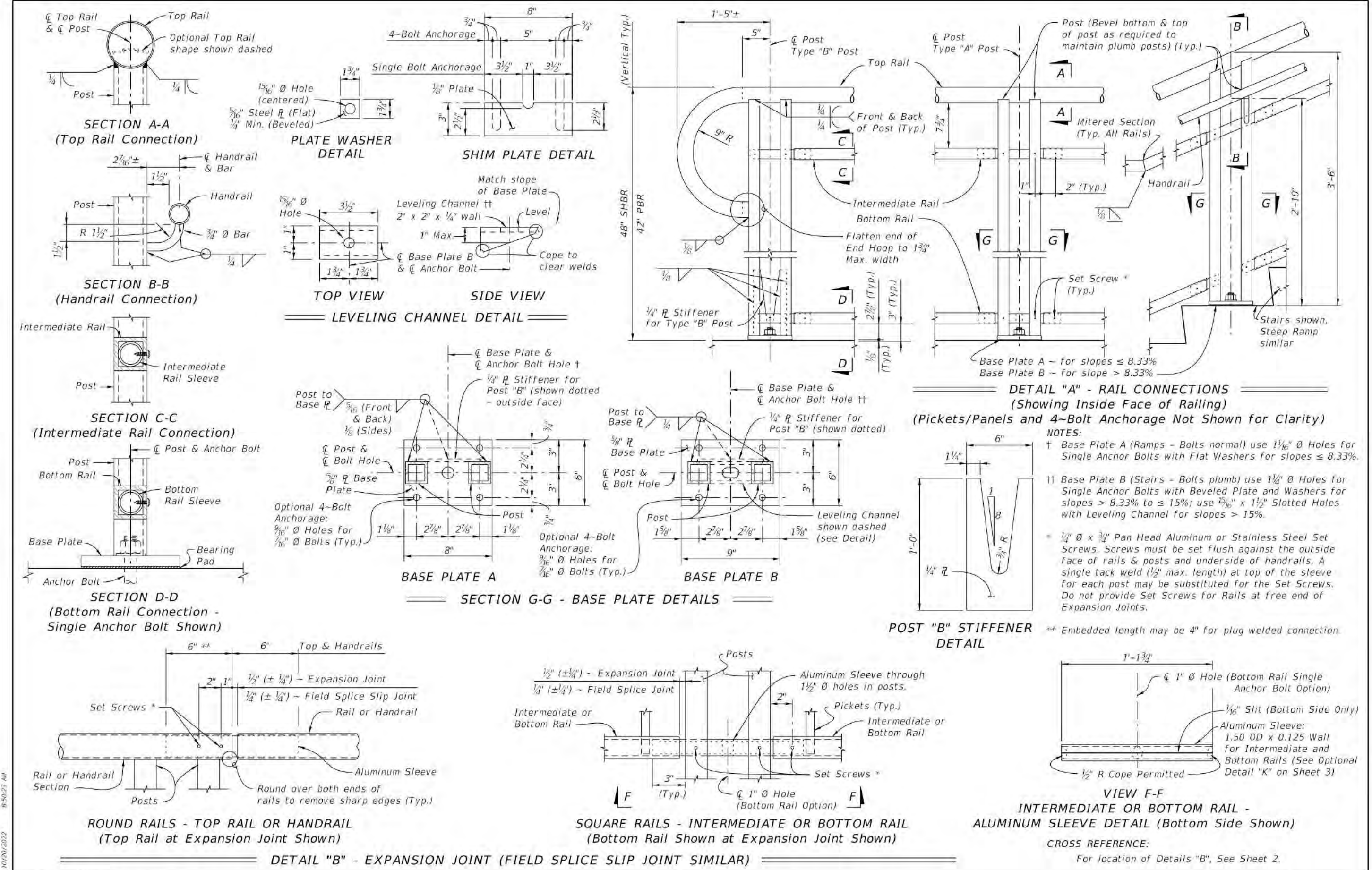
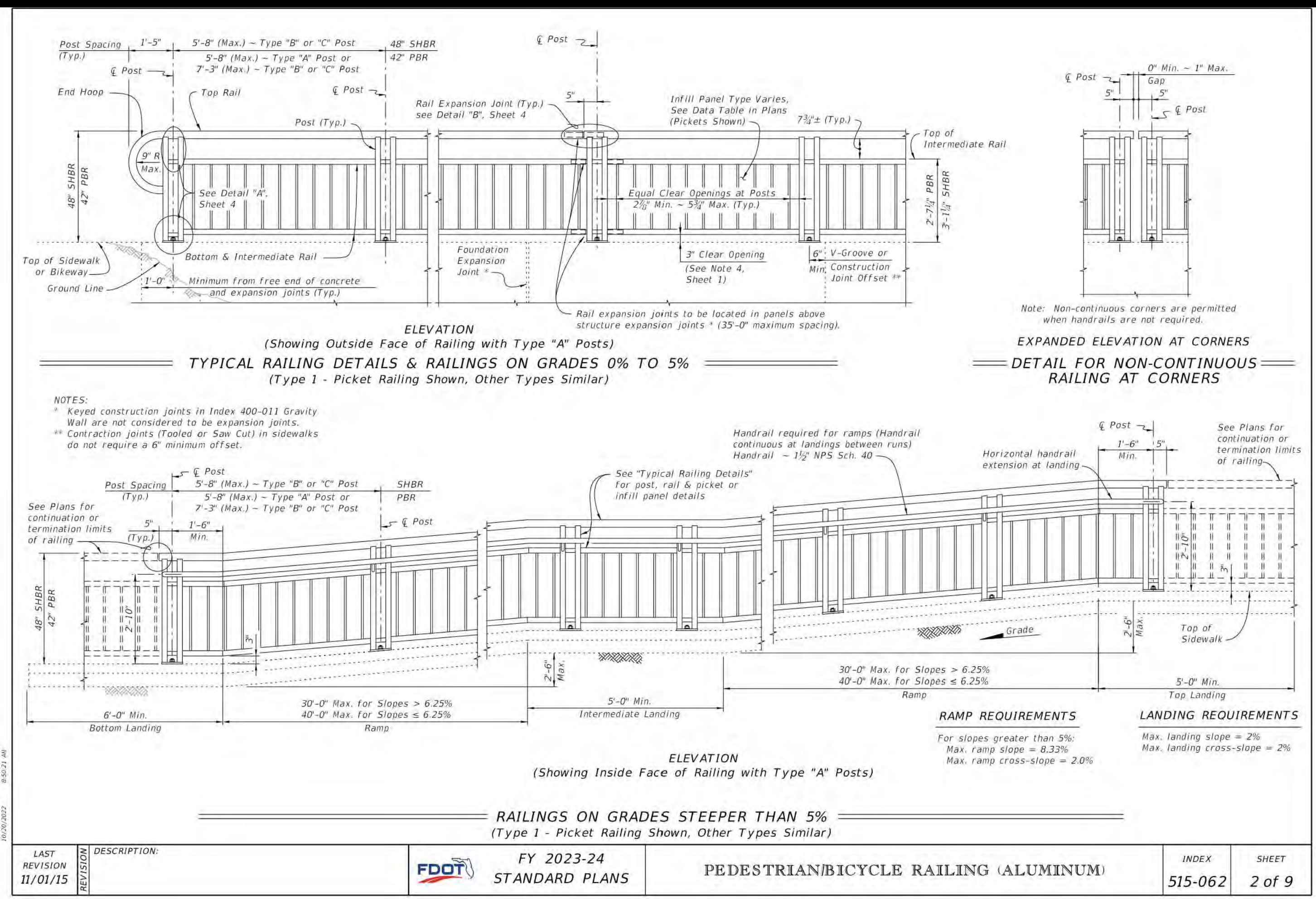
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SHEET NAME
HARDSCAPE DETAIL III

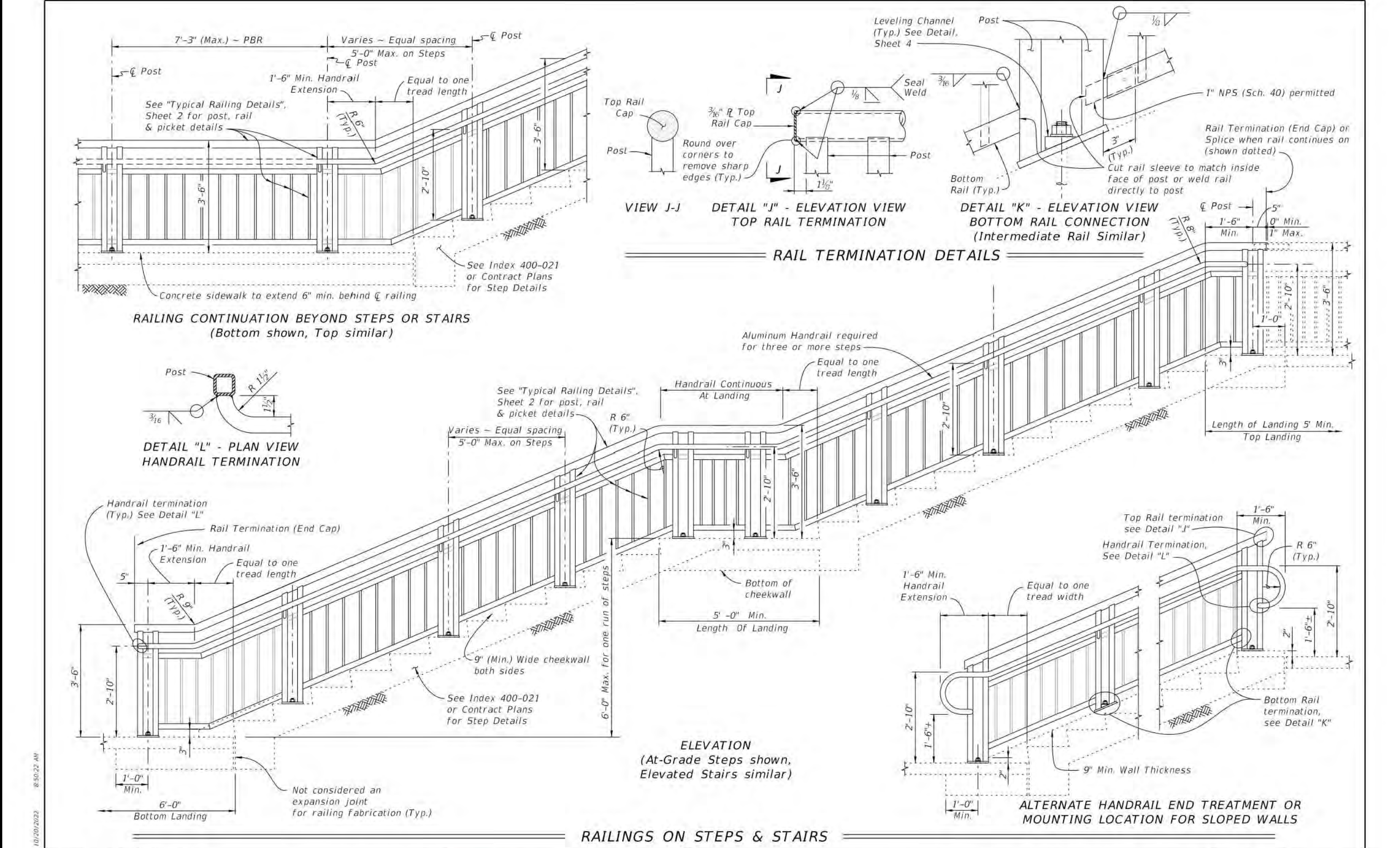
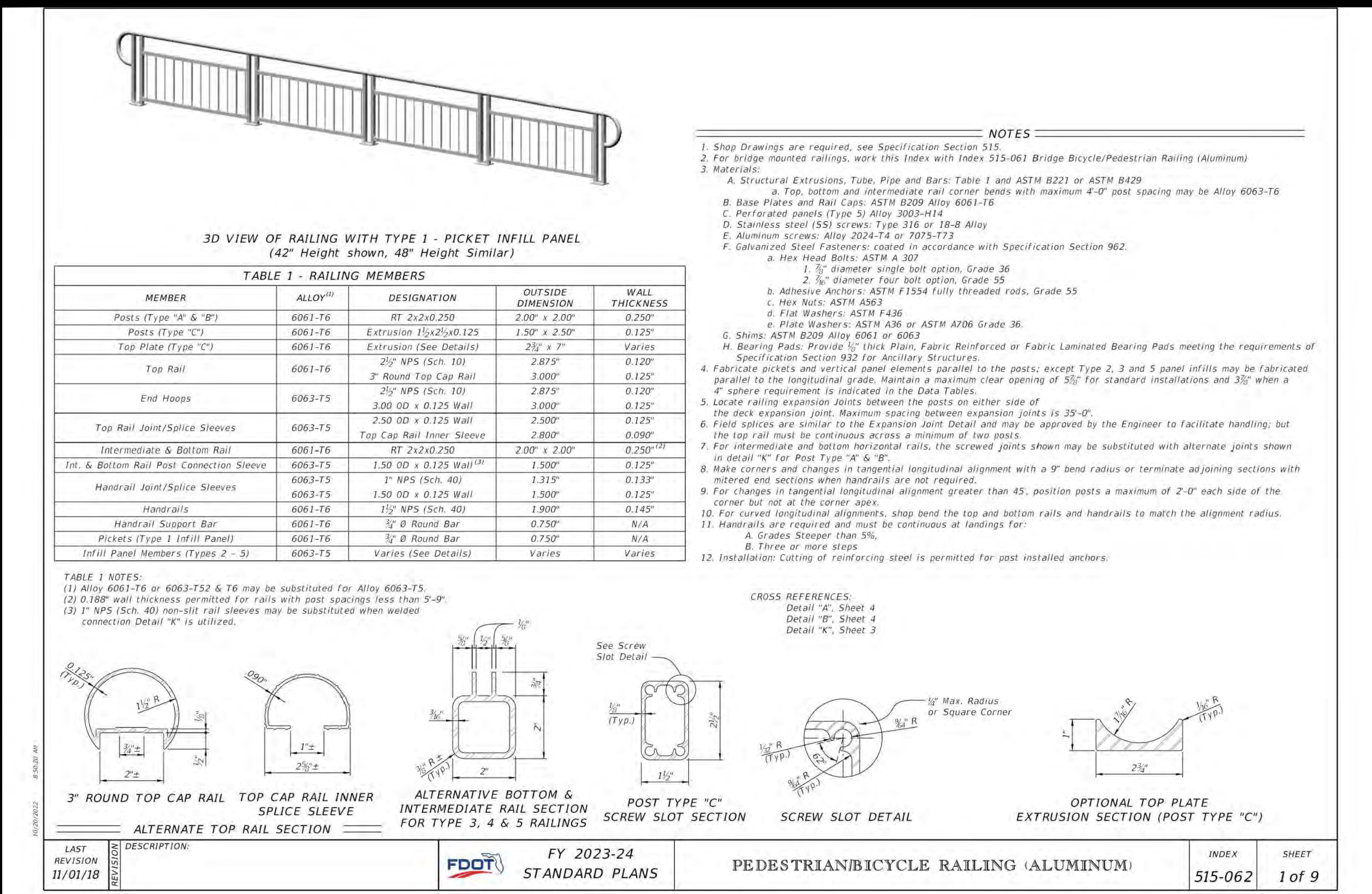
SHEET NUMBER

C03.5

ISSUE FOR PERMIT



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LAST REVISION	DESCRIPTION	INDEX	SHEET
11/01/16		515-062	3 of 9



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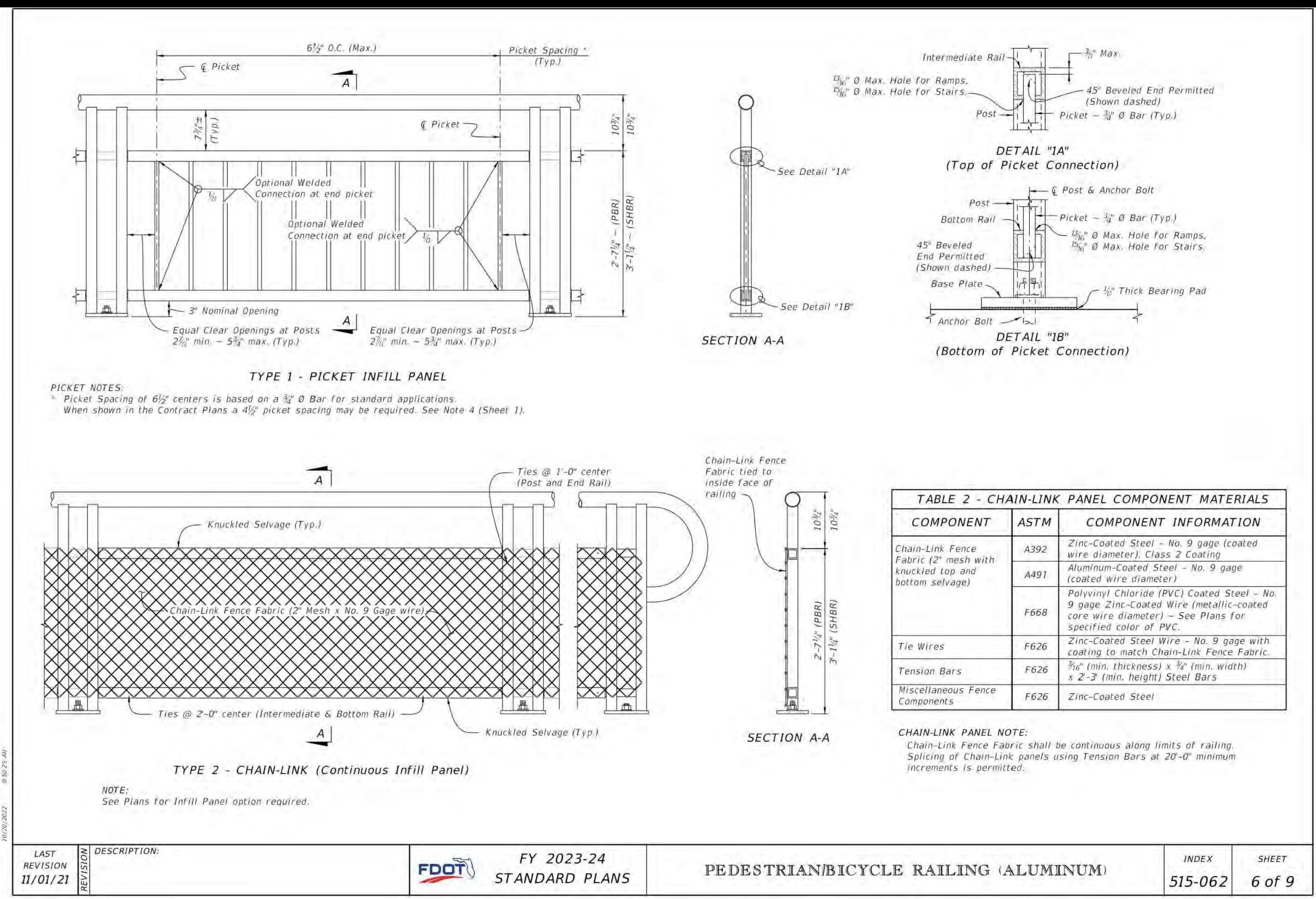
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SHEET NAME
HARDSCAPE DETAIL IV

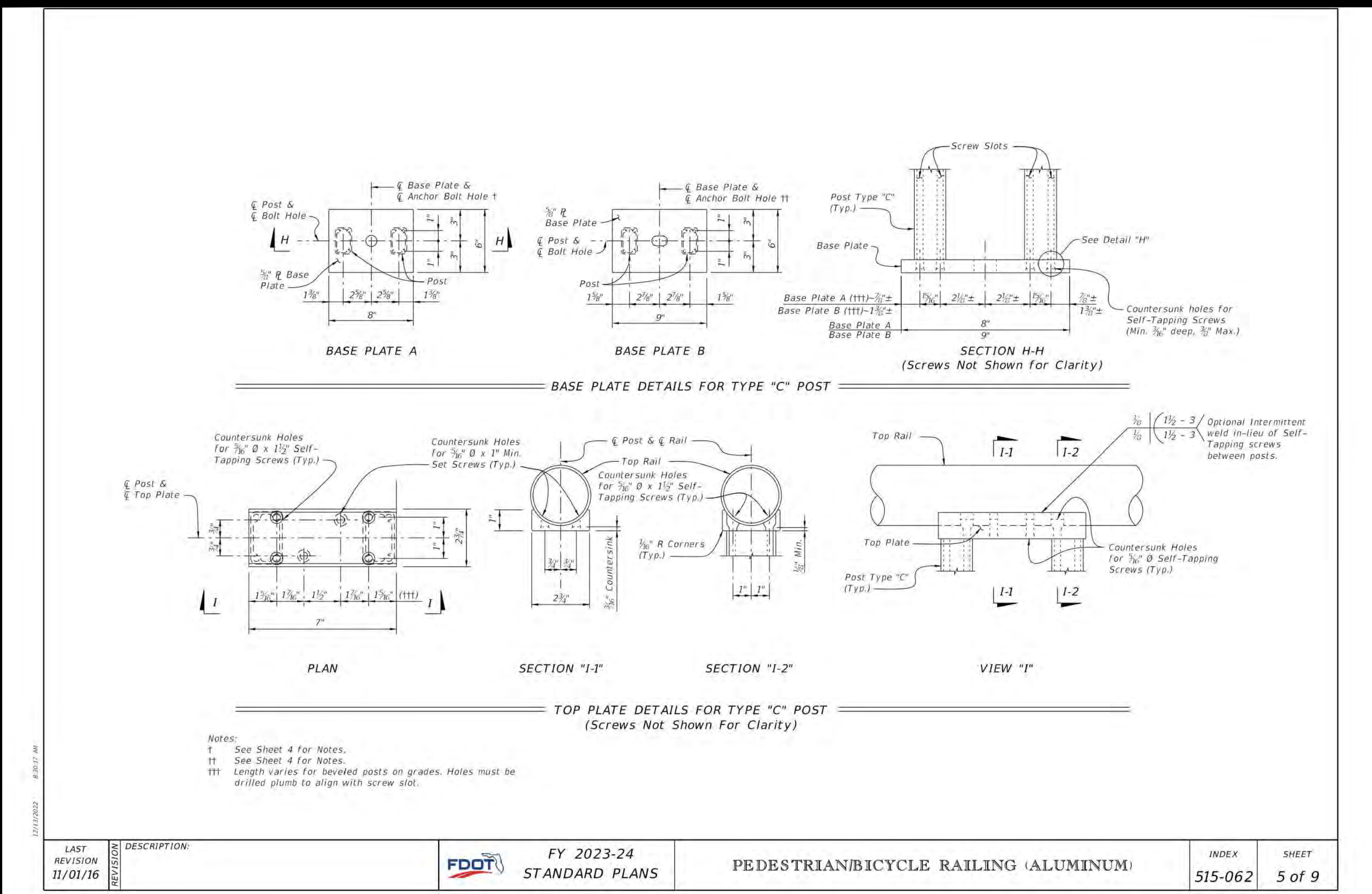
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C03.6

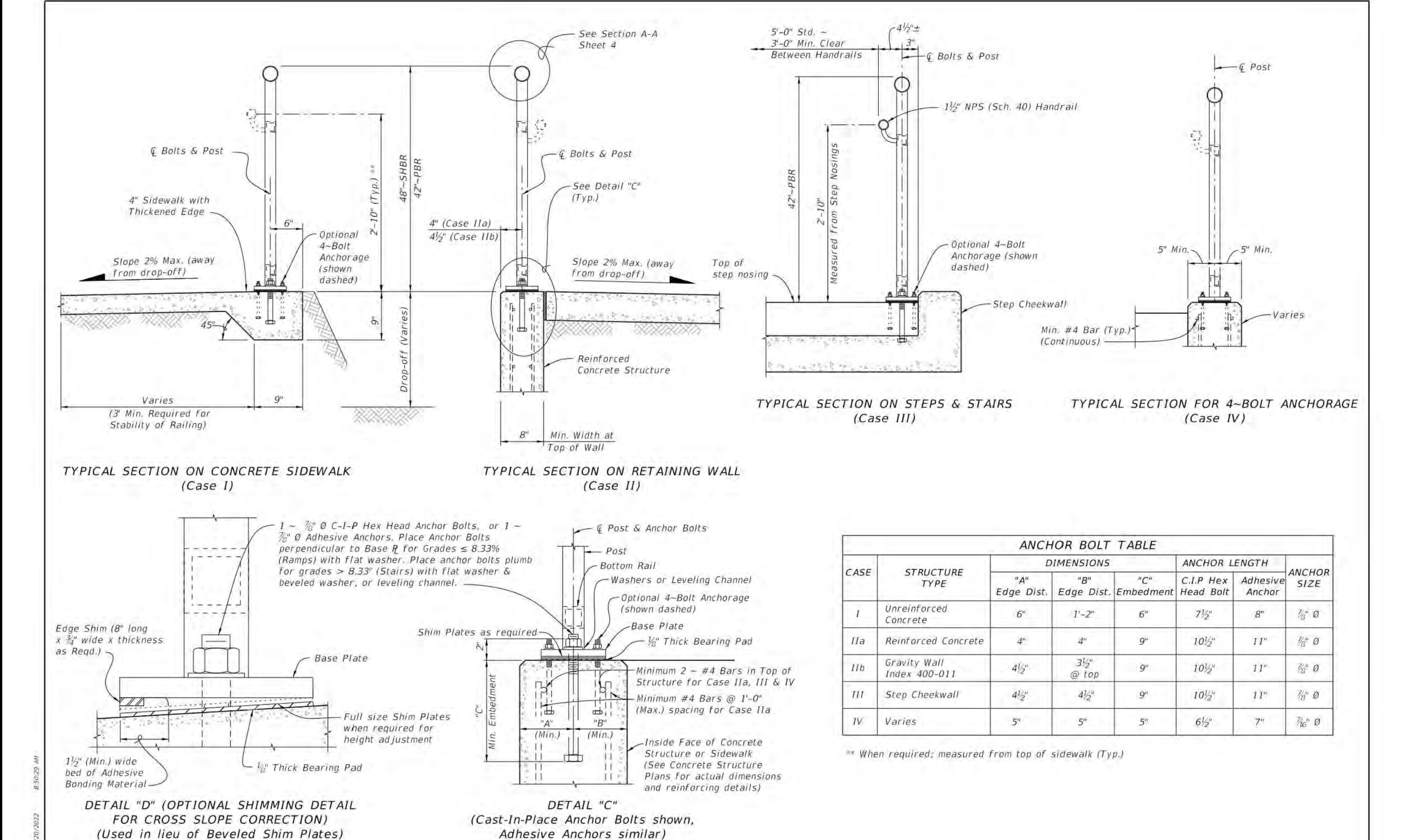
ISSUE FOR PERMIT



LAST REVISION	DESCRIPTION	INDEX	SHEET
11/07/21		515-062	6 of 9



LAST REVISION	DESCRIPTION	INDEX	SHEET
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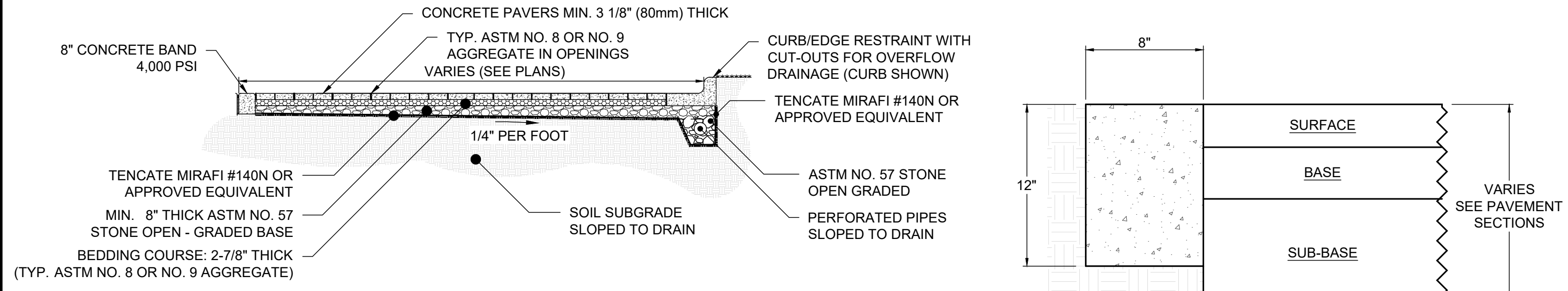
LAST REVISION	DESCRIPTION	INDEX	SHEET
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INSTALLATION NOTES:

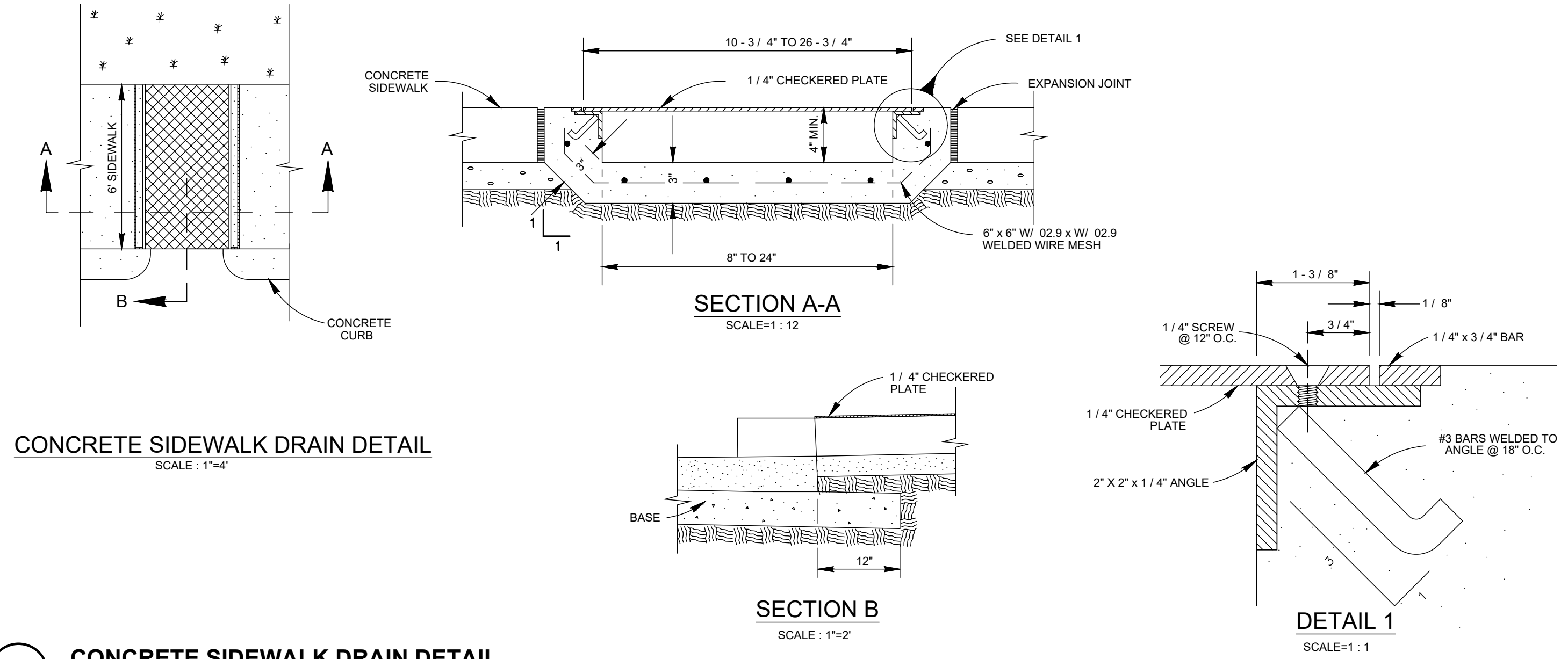
- EXCAVATE UNSUITABLE, UNSTABLE OR UNCONSOLIDATED SUBGRADE MATERIAL. COMPACT THE AREA, WHICH HAS BEEN CLEARED AS PER THE ENGINEER'S OF RECORD (EOR) REQUIREMENTS. BACKFILL AND LEVEL WITH OPEN GRADED AGGREGATES AS PER THE EOR'S STRUCTURAL AND HYDRAULIC DESIGN.
- PLACE BEDDING COURSE OF HARD AND ANGULAR MATERIAL CONFORMING TO THE GRADING REQUIREMENTS OF ASTM NO. 8 OR NO. 9 TO A UNIFORM MINIMUM DEPTH OF 1 1/2" - 2" (38mm) SCREEDED TO THE GRADE AND PROFILE REQUIRED.
- INSTALL ECO-PRIORA WITH JOINTS APPROXIMATELY 1/4" (7mm).
- WHERE REQUIRED, CUT PAVE STONES WITH AN APPROVED CUTTING DEVICE TO FIT ACCURATELY, NEATLY AND WITHOUT DAMAGED EDGES.
- TAMP PAVE STONES WITH A PLATE COMPACTOR, UNIFORMLY LEVEL, TRUE TO GRADE AND FREE OF MOVEMENT.
- SPREAD A THIN LAYER OF HARD ANGULAR MATERIAL CONFORMING TO THE GRADING REQUIREMENTS OF ASTM NO. 8 OR NO. 9 AGGREGATE OVER ENTIRE PAVING AREA.
- MAKE ONE MORE PASS WITH PLATE COMPACTOR TO NEST THE AGGREGATE AND FILL JOINTS TO THE TOP.
- SWEEP AND REMOVE SURPLUS JOINT MATERIAL.
- SEE THE MANUFACTURER'S PERMEABLE INTERLOCKING CONCRETE PAVING SPECIFICATION, SECTION 32 14 13.19 FOR SPECIFIC REQUIREMENTS.

PRODUCT INFORMATION:
(OR EQUIVALENT MATERIAL APPROVED BY OWNER)

MANUFACTURER:	PAVESTONE
DIMENSIONS:	4 3/4"W x 9 7/16"L x 3 1/8"H
WT/STONE:	11.5 LBS
STONES/PALLET:	280
APPROX. WT./PALLET:	3,255 LBS
SQ. FT./PALLET:	88
PRODUCT NUMBER:	699 (ECO-PRIORA)



1 PERMEABLE PAVERS NTS



2 CONCRETE SIDEWALK DRAIN DETAIL NTS



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SHEET NAME
HARDSCAPE DETAIL V

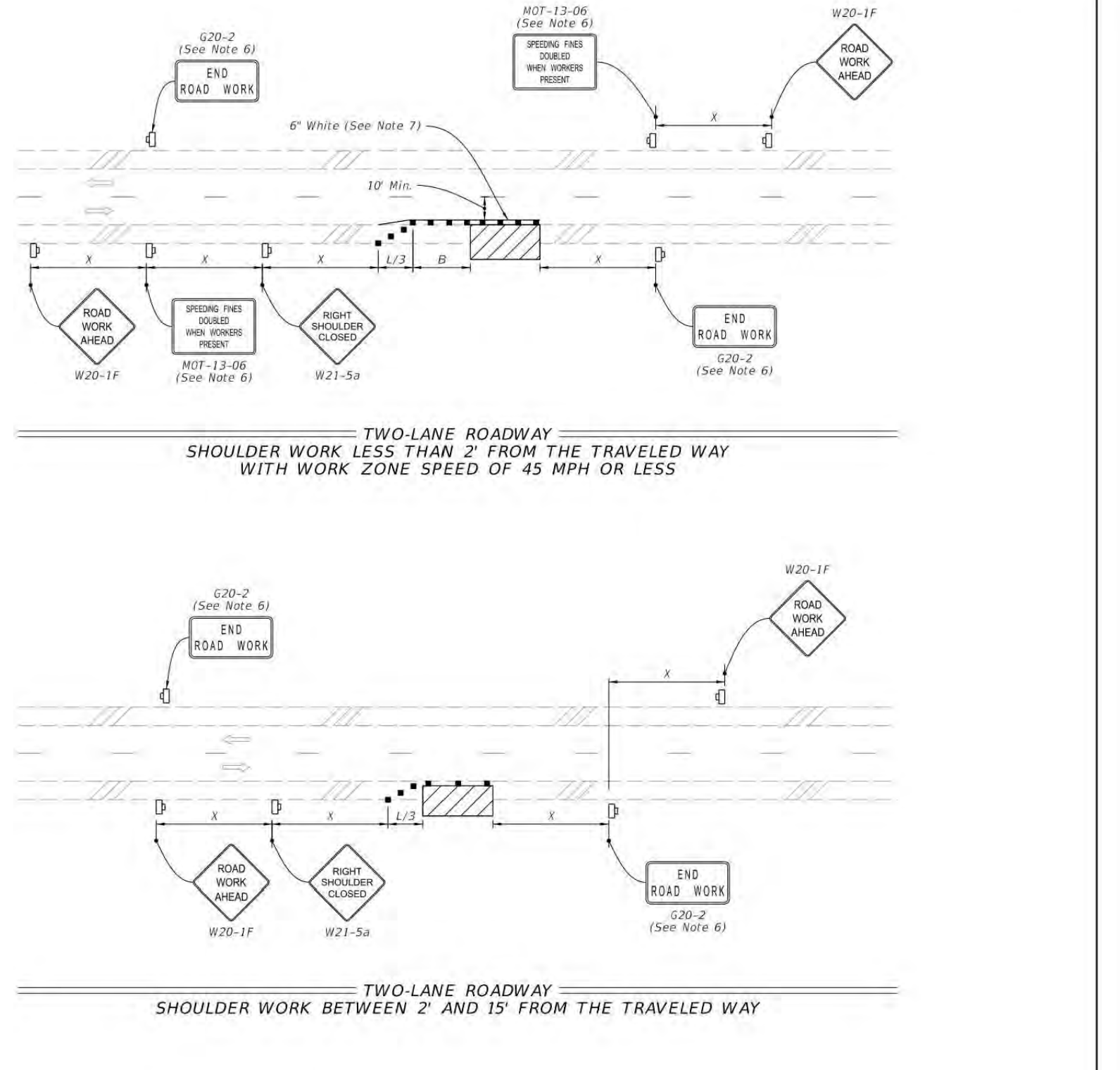
SHEET NUMBER
C03.7

ISSUE FOR PERMIT

NOTE:

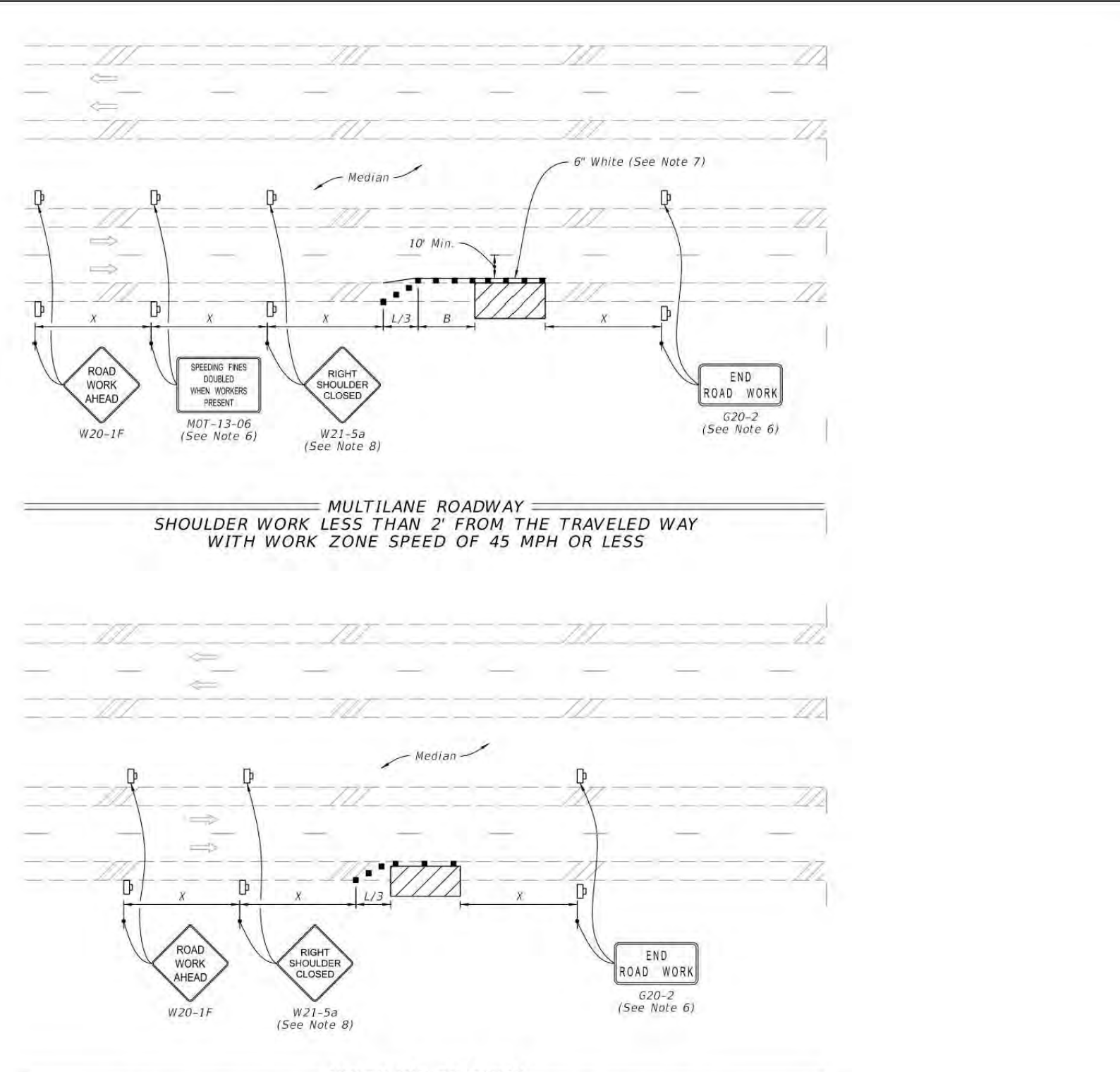
- This Index applies to Two-Lane, Two-Way and Multilane Roadways, including Medians of divided roadways, with work on the shoulder.
- L = Taper Length
X = Work Zone Sign Spacing
B = Buffer Length
See Index 102-600 for "L", "X", "B", and channelizing device spacing values.
- Where work activities are between 2' and 15' from the edge of traveled way, the Engineer may omit signs and channelizing devices for work operations 60 minutes or less.
- When four or more work vehicles enter the through traffic lanes in a one-hour period (excluding establishing and terminating the work area), use a flagger or lane closure to accommodate work vehicle ingress and egress.
- For work less than 2' from the traveled way and work zone speed is greater than 45 MPH, use a lane closure.
- The "Speeding Fines Doubled When Workers Present" signs (MOT-13-06) and "End Road Work" signs (G20-2) along with the associated work zone sign spacing distances may be omitted when the work operation is in place for 24 hours or less.
- Temporary pavement markings may be omitted when the work operation is in place for 3 days or less.
- Omit "Shoulder Closed" signs (W21-5a) along with associated work zone sign spacing distances for work on the median.
- When there is no paved shoulder, the "Work" sign (W21-1) may be used instead of the "Shoulder Closed" sign (W21-5a).

SYMBOLS:
 Work Area
 Channelizing Device (See Index 102-600)
 Work Zone Sign
 Lane Identification and Direction of Traffic



LAST REVISION 11/01/21	DESCRIPTION:	FY 2023-24 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX 102-602	SHEET 1 of 2
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SYMBOLS:
 Work Area
 Channelizing Device (See Index 102-600)
 Work Zone Sign
 Lane Identification and Direction of Traffic

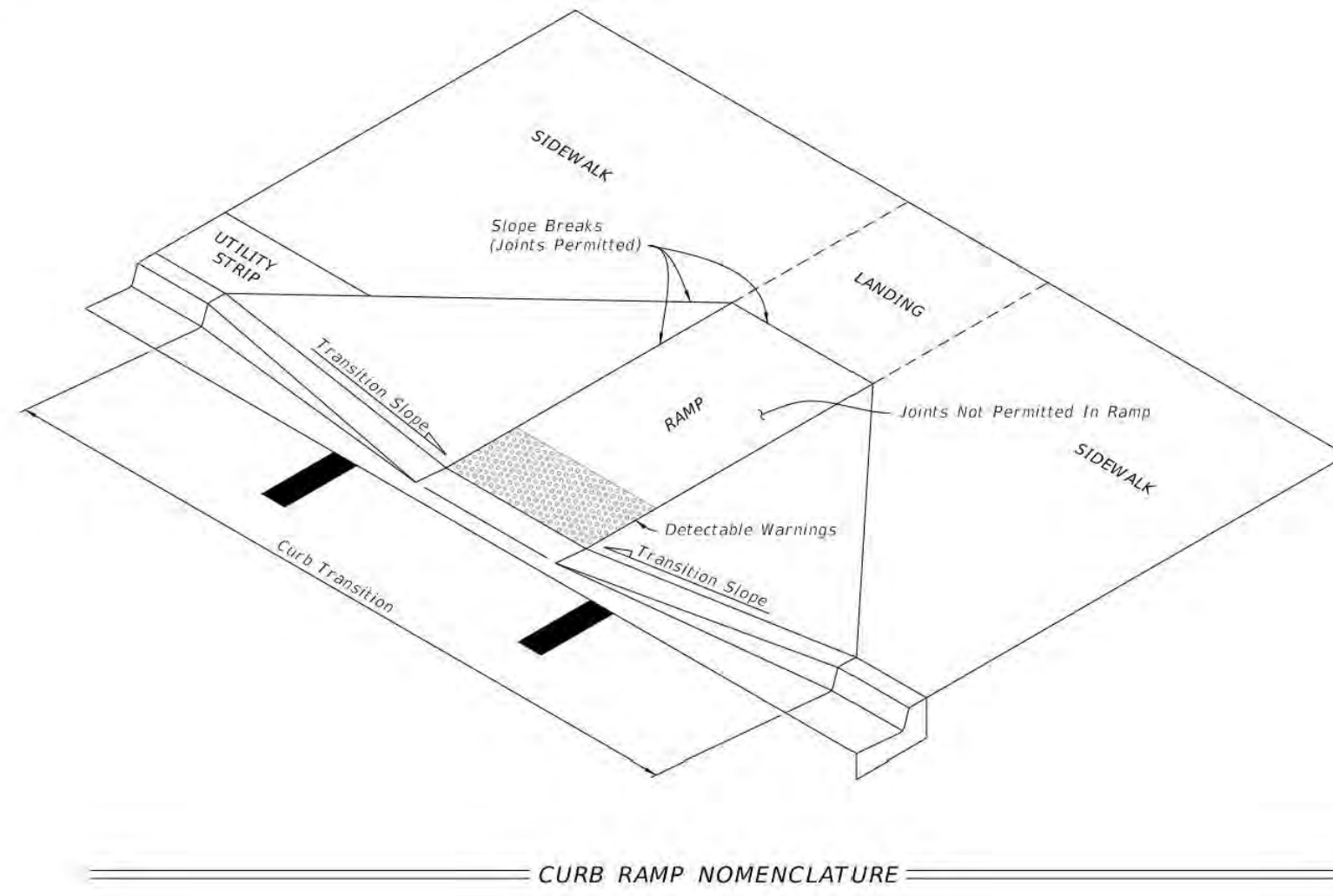


LAST REVISION 11/01/20	DESCRIPTION:	FY 2023-24 STANDARD PLANS	TWO-LANE AND MULTILANE, WORK ON SHOULDER	INDEX 102-602	SHEET 2 of 2
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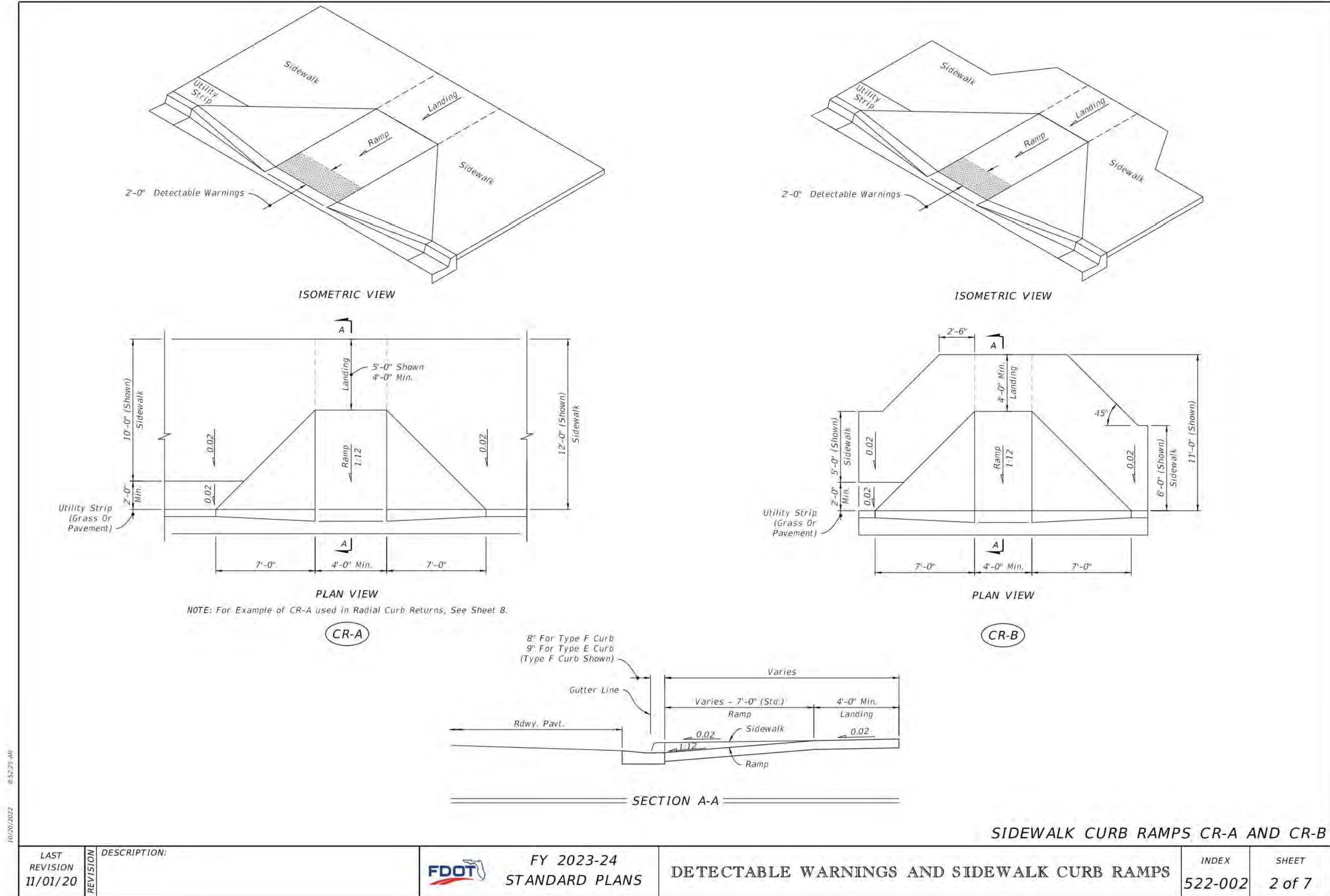
3 FDOT WORK ON SHOULDER NTS

GENERAL NOTES:

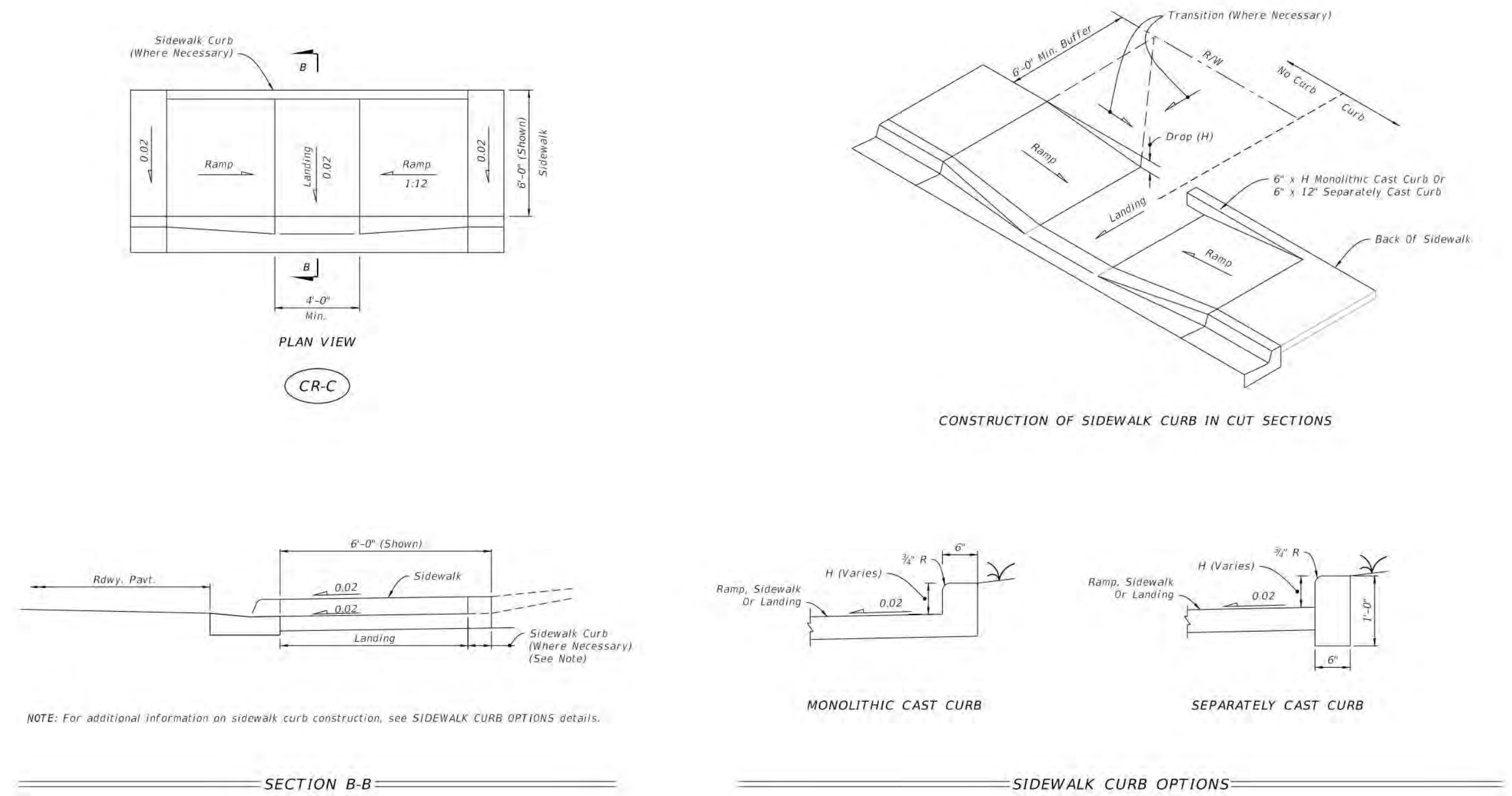
- Cross Slopes and Grades:**
 - Sidewalk, ramp, and landing slopes (i.e. 0.02, 0.05, and 1:12) shown in this Index are maximums. With approval of the Engineer, provide the minimum feasible slope where the requirements cannot be met.
 - Landings must have cross-slopes less than or equal to 0.02 in any direction.
 - Maintain a single longitudinal slope along each side of the curb ramp. Ramp slopes are not required to exceed 15 feet in length.
 - Joints permitted at the location of Slope Breaks. Otherwise locate joints in accordance with Index 522-001. No joints are permitted within the ramp portion of the Curb Ramp.
- Curb, Curb and Gutter and/or Sidewalks:**
 - Refer to Index 522-001 for concrete thickness and sidewalk details.
 - Remove any existing curb, curb and gutter, or sidewalk to the nearest joint beyond the curb transition or to the extent that no remaining section is less than 5 feet long.
 - Width of Curb Ramp is 4'-0" minimum. Match sidewalk or Shared Use Path width as shown in the Plans.
- Curb Ramp Alpha-Identification:**
 - Sidewalk curb ramp alpha-identifications (e.g. CR-A) are provided for reference purposes in the Plans.
 - Alpha-identifications CR-I and CR-J are intentionally omitted.
- Detectable Warnings:**
 - Install detectable warnings in accordance with Specification 527.
 - Place detectable warnings across the full width of the ramp or landing, to a minimum depth of 2 feet measured perpendicular to the curb line and no greater than 5 feet from the back of the curb or edge of pavement.
 - If detectable warnings are shown in the Plans on slopes greater than 5%, align the truncated domes with the centerline of the ramp, otherwise, the truncated domes are not required to be aligned.



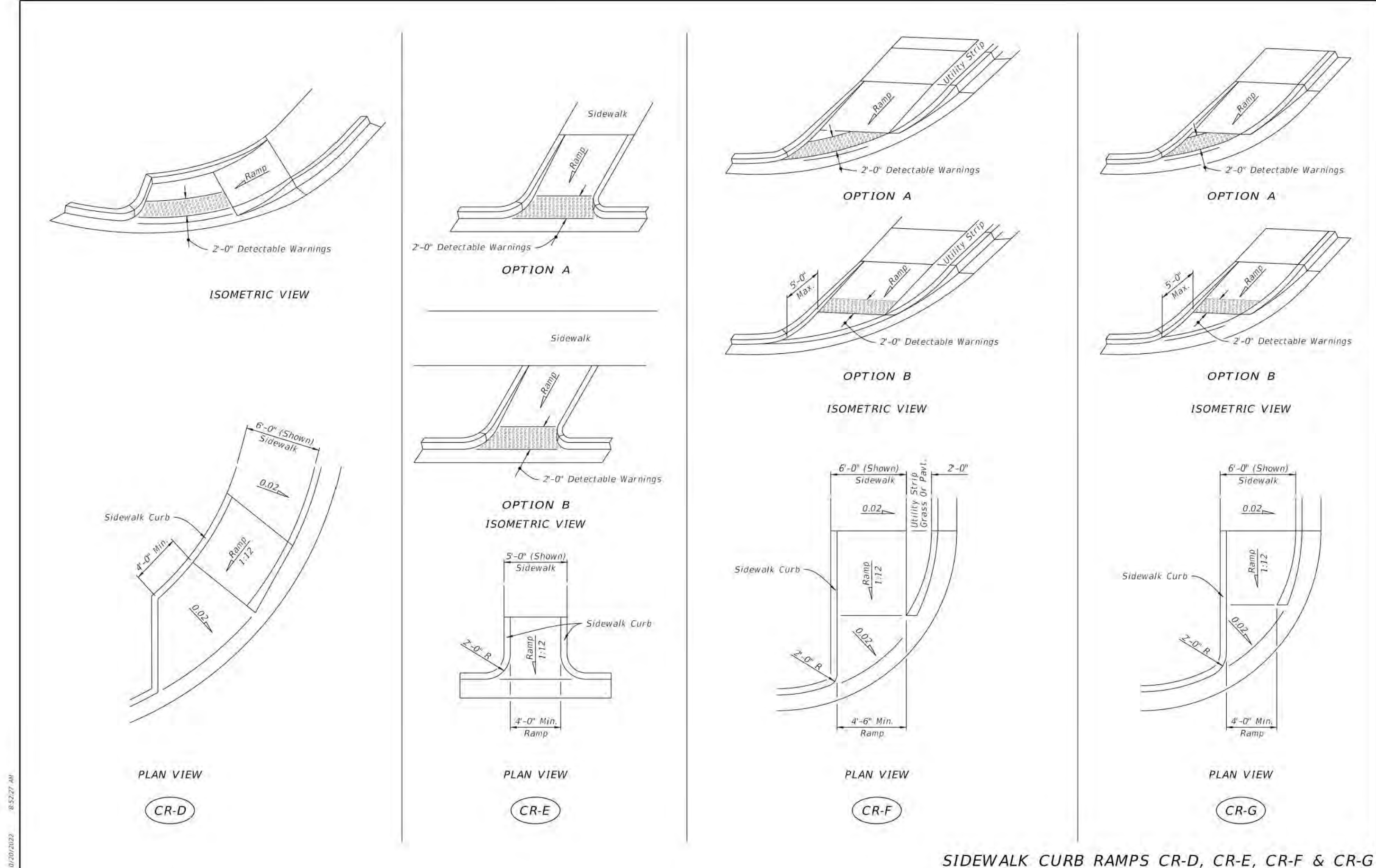
LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 1 of 7
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LAST REVISION 11/01/20	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 2 of 7
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LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 3 of 7
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LAST REVISION 11/01/21	DESCRIPTION:	FDOT FY 2023-24 STANDARD PLANS	DETECTABLE WARNINGS AND SIDEWALK CURB RAMPS	INDEX 522-002	SHEET 4 of 7
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INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370	
INGENIUM PROJECT:	220190
PROJECT PM:	AH
PROJECT RE:	JH
ISSUE DATE:	04/30/2024
DWG NAME:	220190 C03.DWG

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CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

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SHEET NAME
HARDSCAPE DETAIL VI

SHEET NUMBER

C03.8

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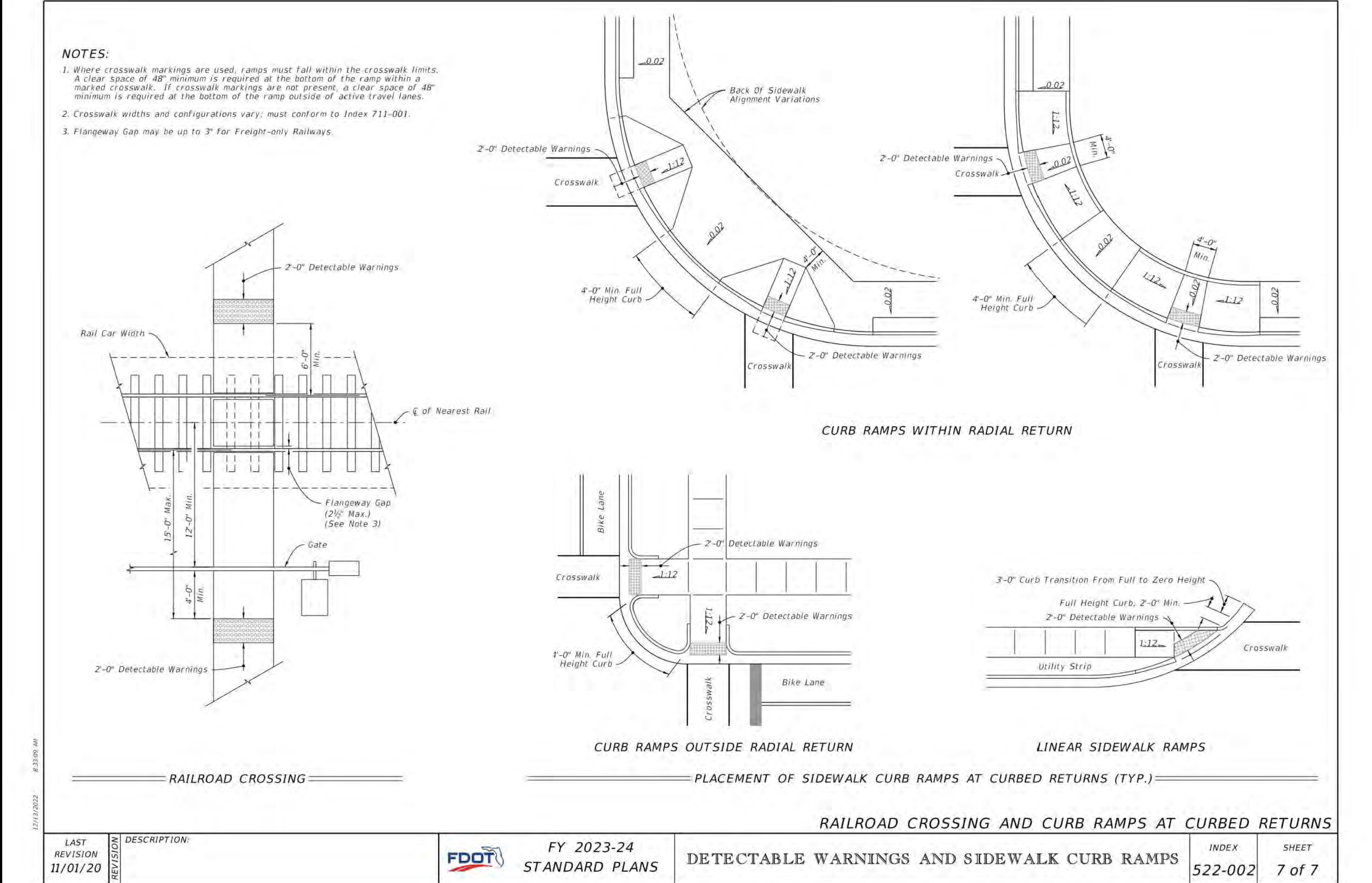
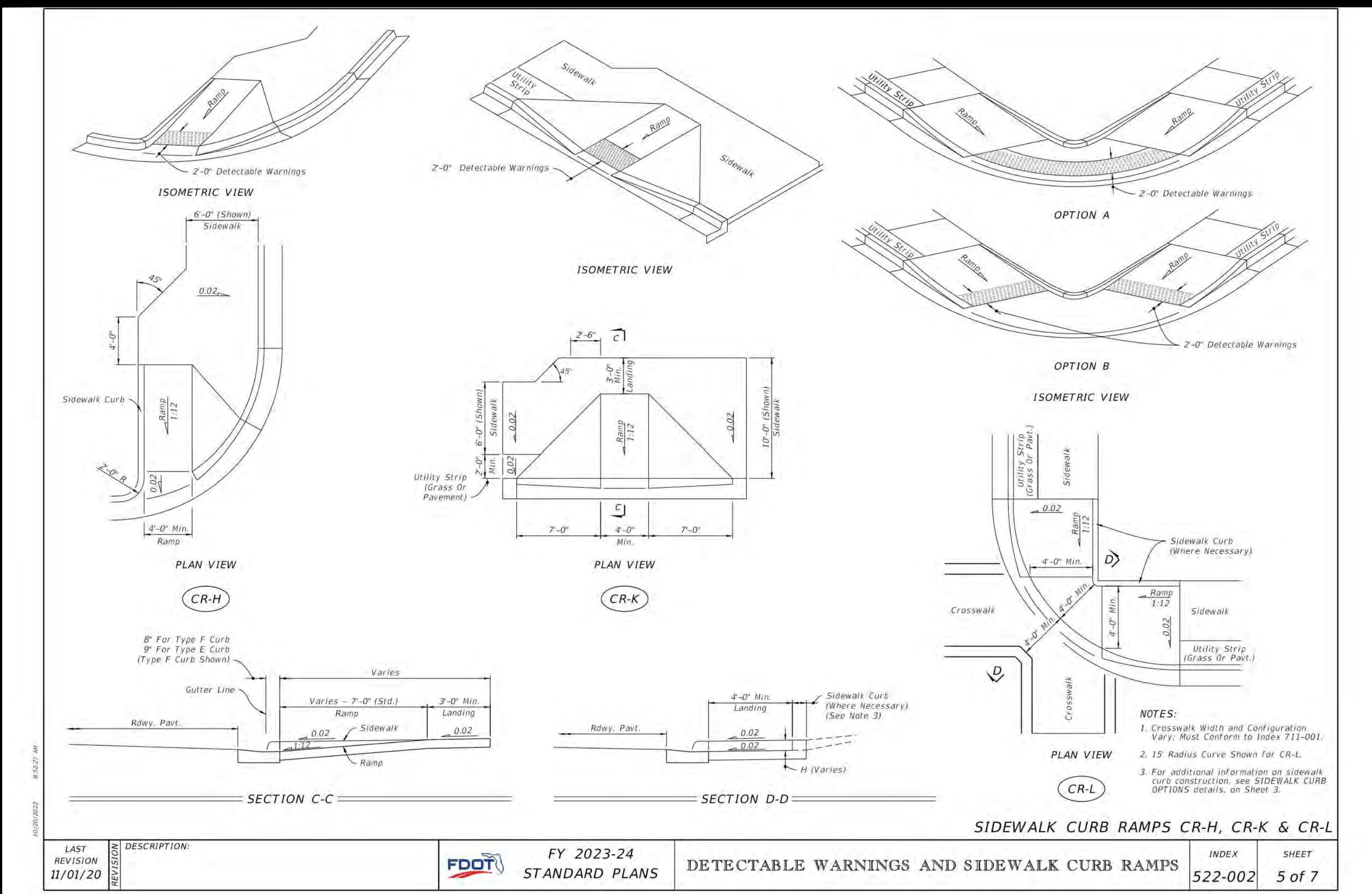
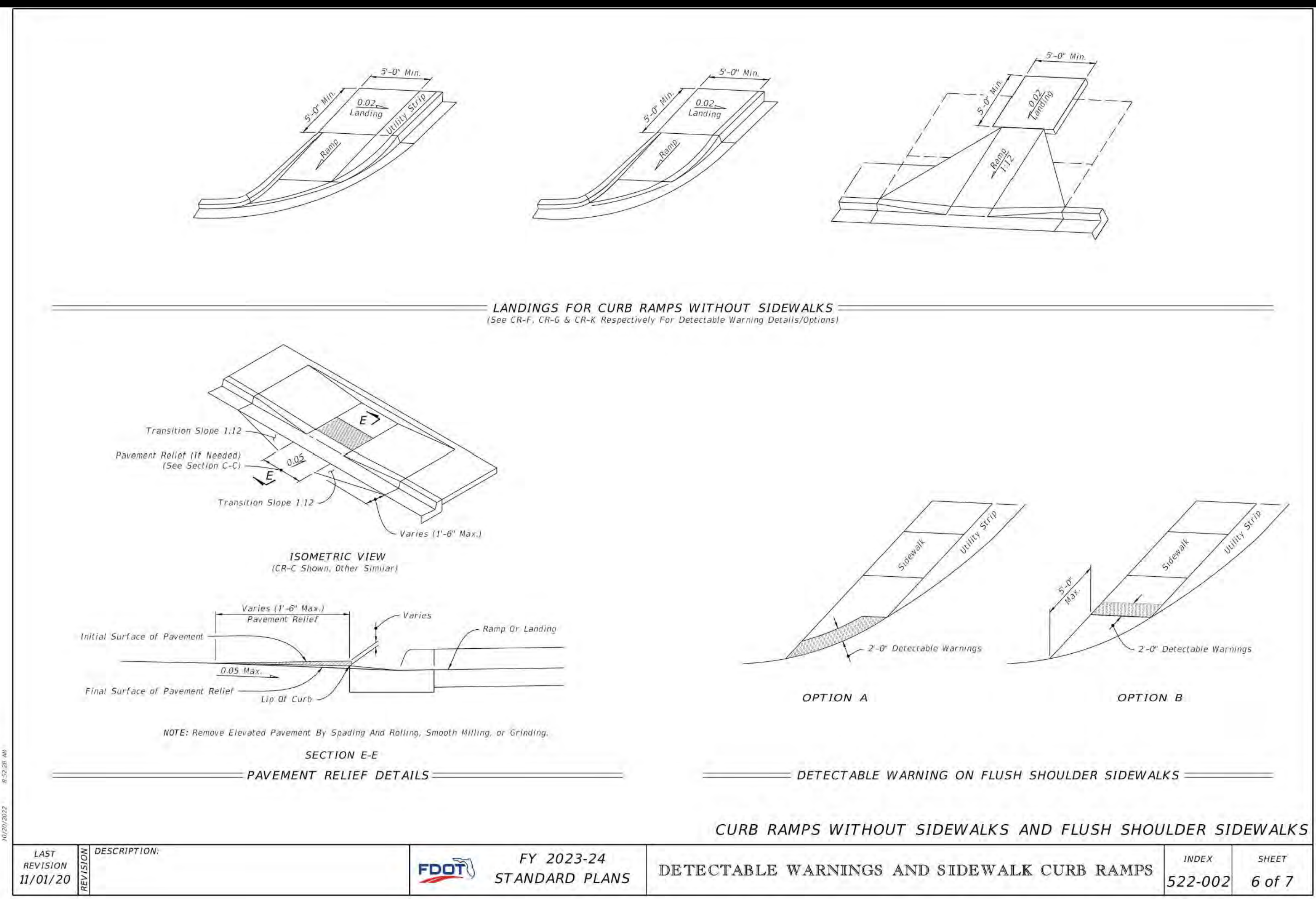
SEAL

SHEET NAME
HARDSCAPE DETAIL VII

SHEET NUMBER

C03.9

ISSUE FOR PERMIT





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ISSUE DATE: 04/30/2024

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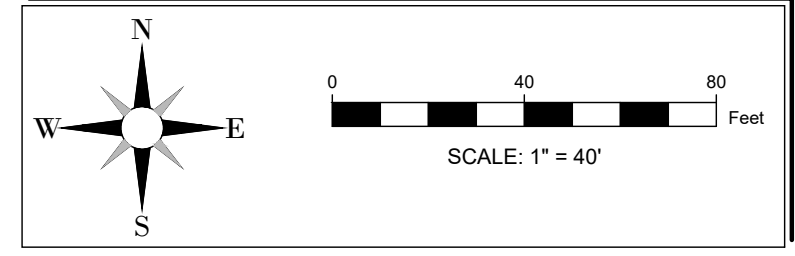
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24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

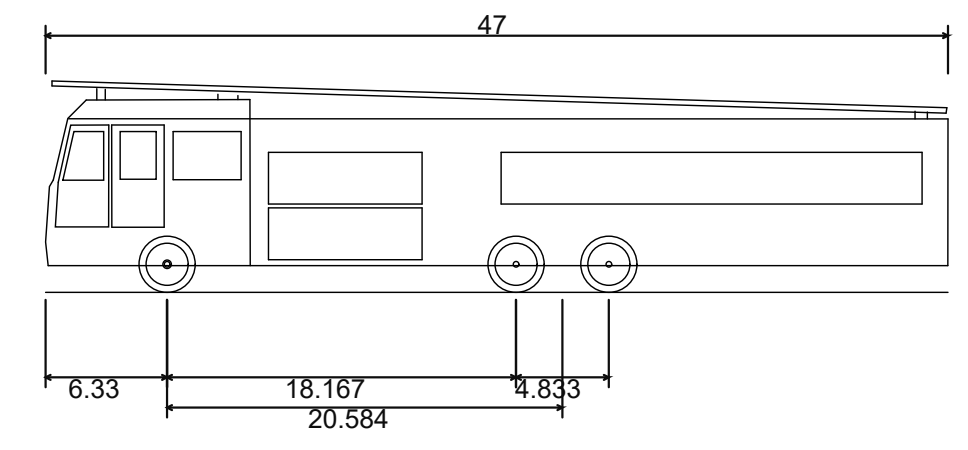


SHEET NAME
FIRE DEPARTMENT
SITE PLAN

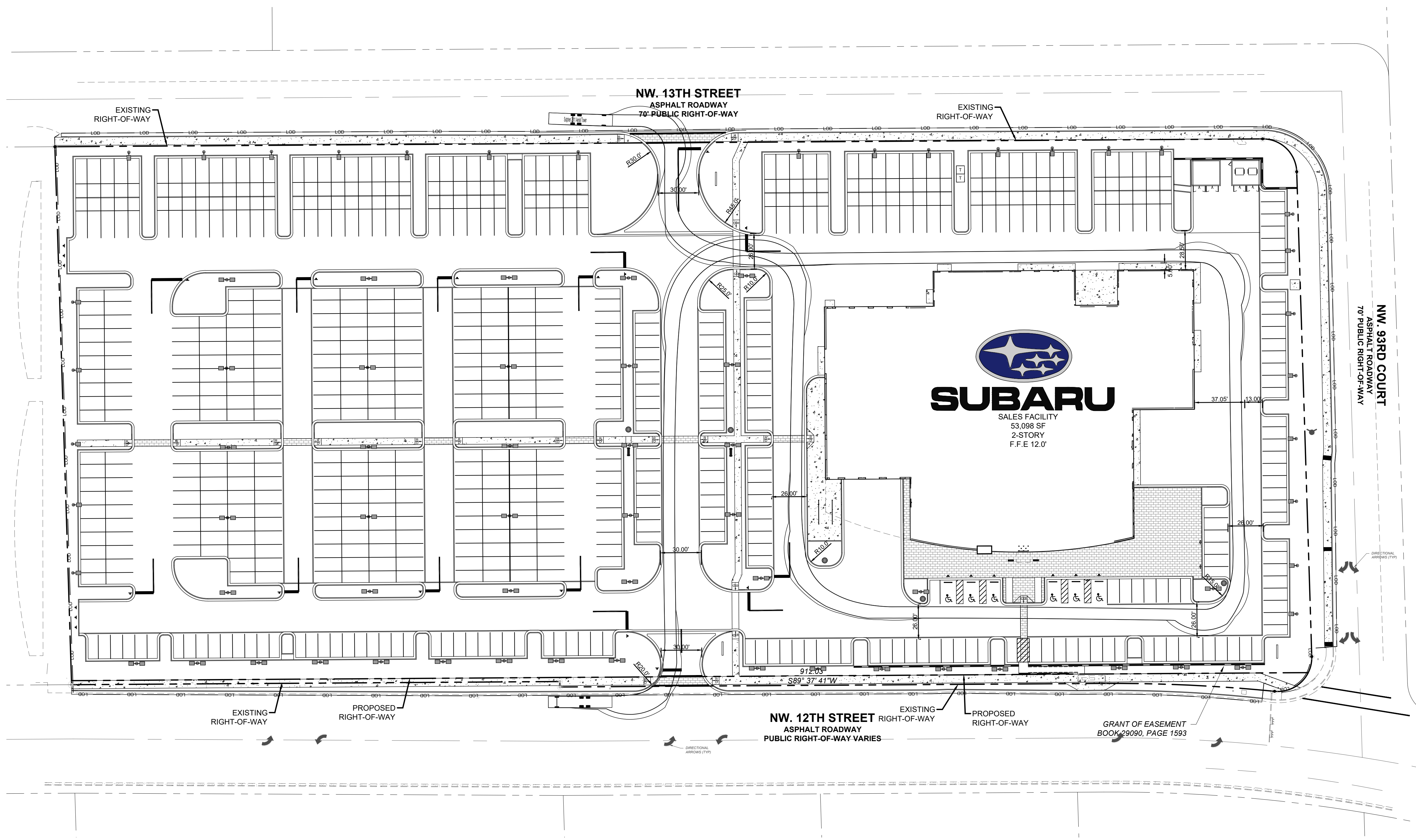
SHEET NUMBER

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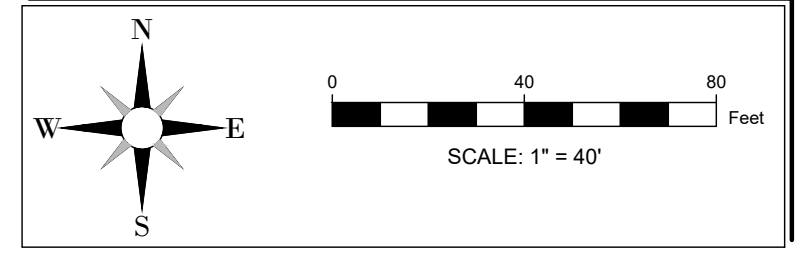
Sutphen 2011 Aerial Tower
Overall Length 47.000ft
Overall Width 8.333ft
Overall Body Height 11.000ft
Min Body Ground Clearance 1.393ft
Track Width 8.333ft
Lock-to-lock time 3.00s
Max Steering Angle (Virtual) 42.00°



SITE STAKING NOTES SEE SHEET C01.1

CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FEATURES, INCLUDING BUT NOT LIMITED TO, UTILITIES, EXISTING IMPROVEMENTS, ETC. CONTRACTOR SHALL VERIFY THEIR LOCATIONS AND ELEVATIONS PRIOR TO STARTING CONSTRUCTION AND ALERT ENGINEER TO ANY DISCREPANCIES IMMEDIATELY

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C03.10

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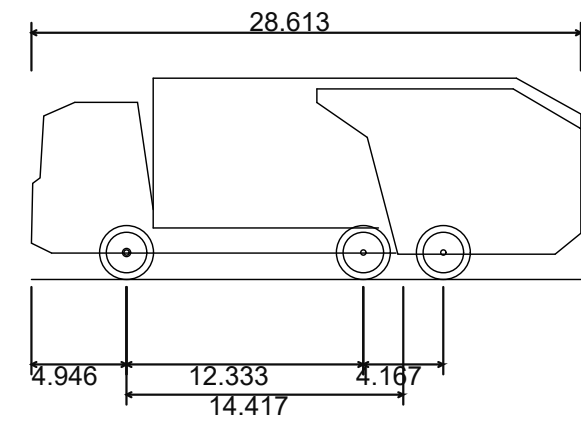
24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

SHEET NAME
GARBAGE COLLECTION
SITE PLAN

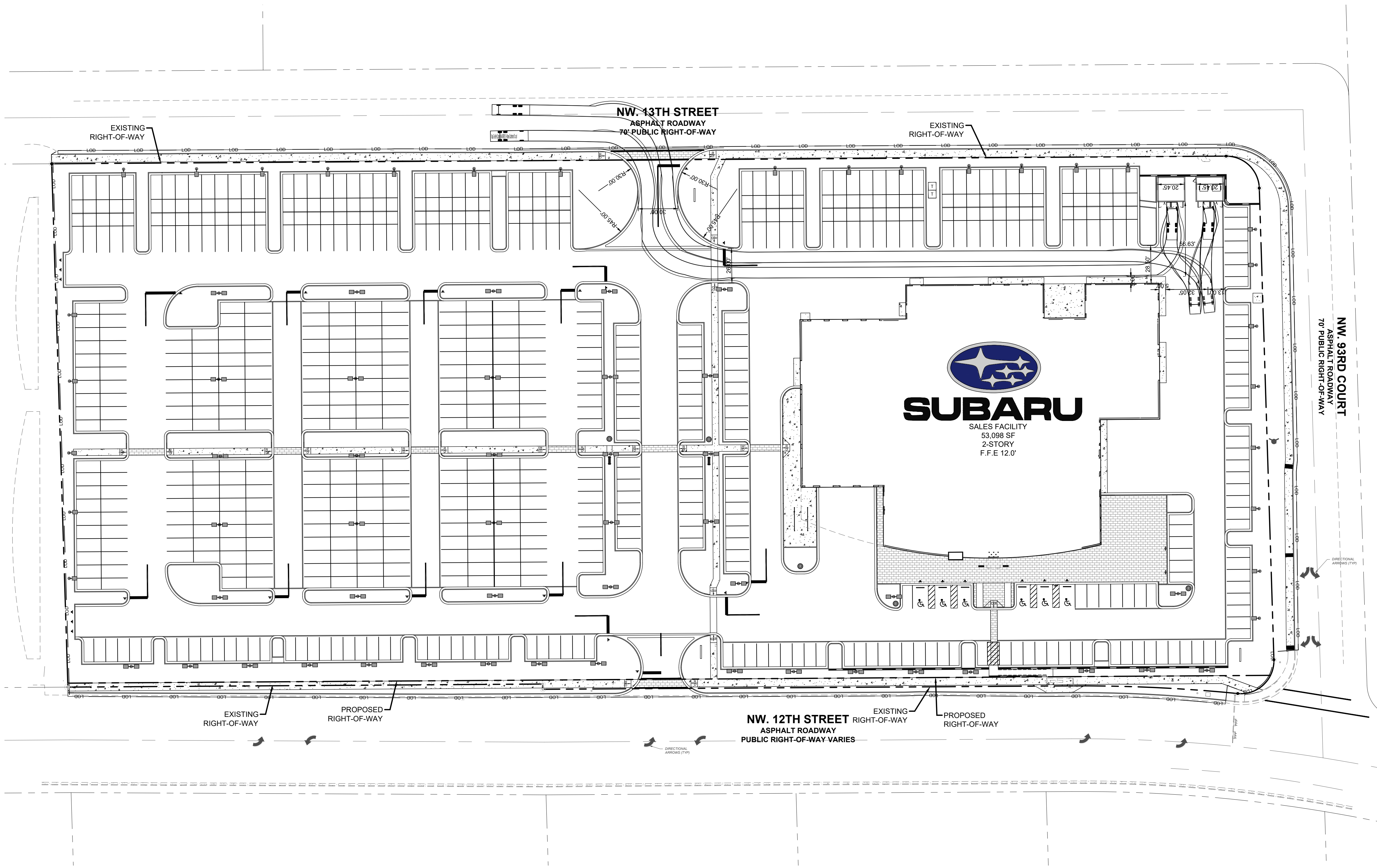
SHEET NUMBER

C03.11

ISSUE FOR PERMIT



Mack TerraPro Cabover 6x4 MRU613 + Wayne Curbtender 31cu yd
Overall Length 28.613ft
Overall Width 8.000ft
Overall Body Height 10.481ft
Min Body Ground Clearance 1.311ft
Track Width 8.000ft
Lock-to-lock time 6.00s
Curb to Curb Turning Radius 33.500ft

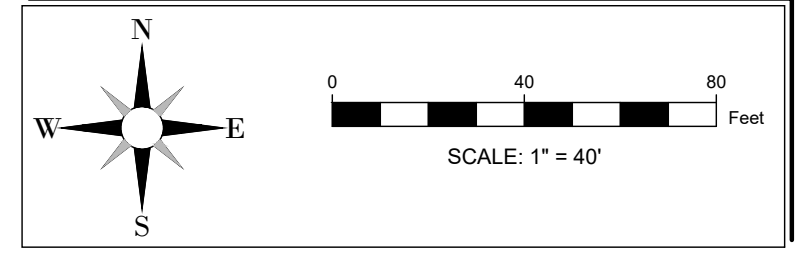


SITE STAKING NOTES SEE SHEET C01.1

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FBPE CERT. OF AUTHORITY #8370

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PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL,
FLORIDA 33172

REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION

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SEAL

SITE VISIBILITY TRIANGLE DETAIL

Safe Sight Distance Triangle Table

Functional Classification of Through Street	Required Visibility		Depth on Minor Street (ft.)**
	Left (ft.)*	Right (ft.)*	
Local (50 foot or less right-of-way)	0	0	0
Collector (60 foot-70 foot right-of-way)	190	40	7
Arterial (80 foot or over right-of-way)	260	40	7

*Visibility distances measured from center line of minor street, along right-of-way line of through street.
**Depth visibility on minor street measured from right-of-way line of through street, along center line of minor street (public or private street).
Table interpretations and waivers of the above requirements shall be made in writing by the Director of the Public Works Department.

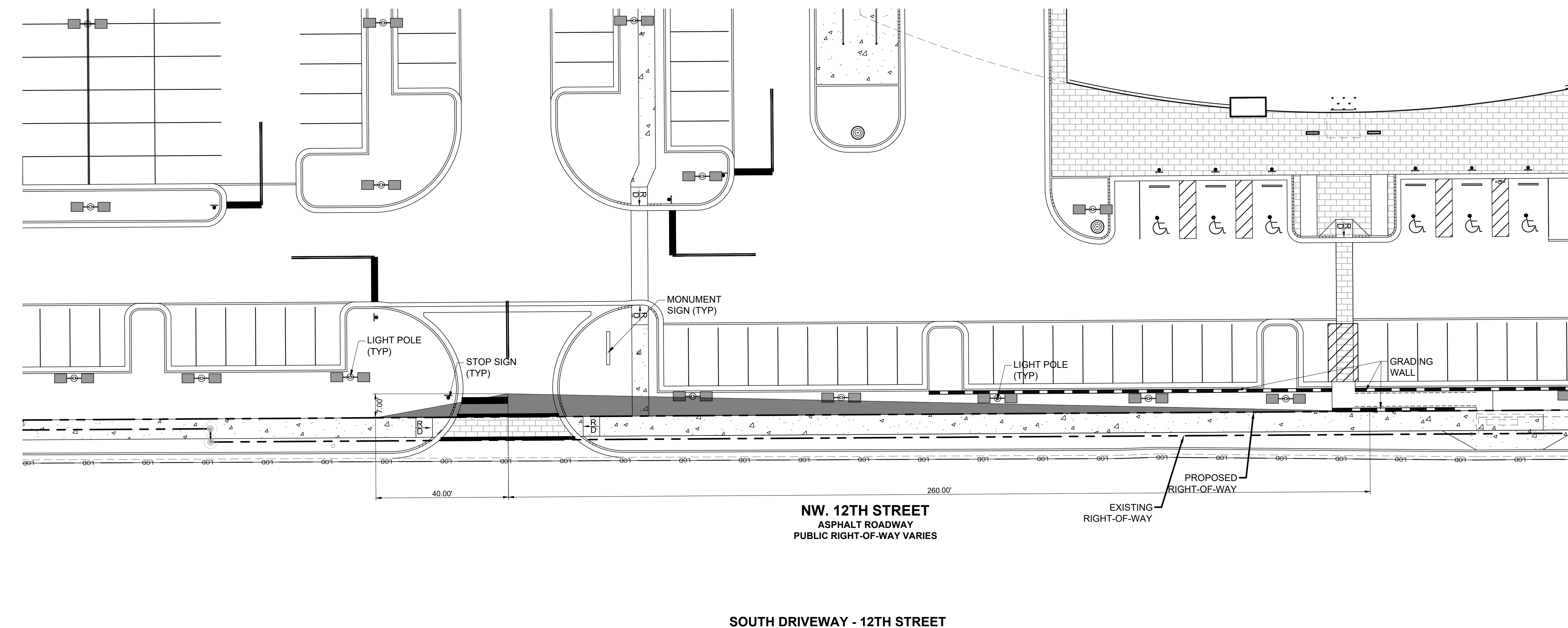
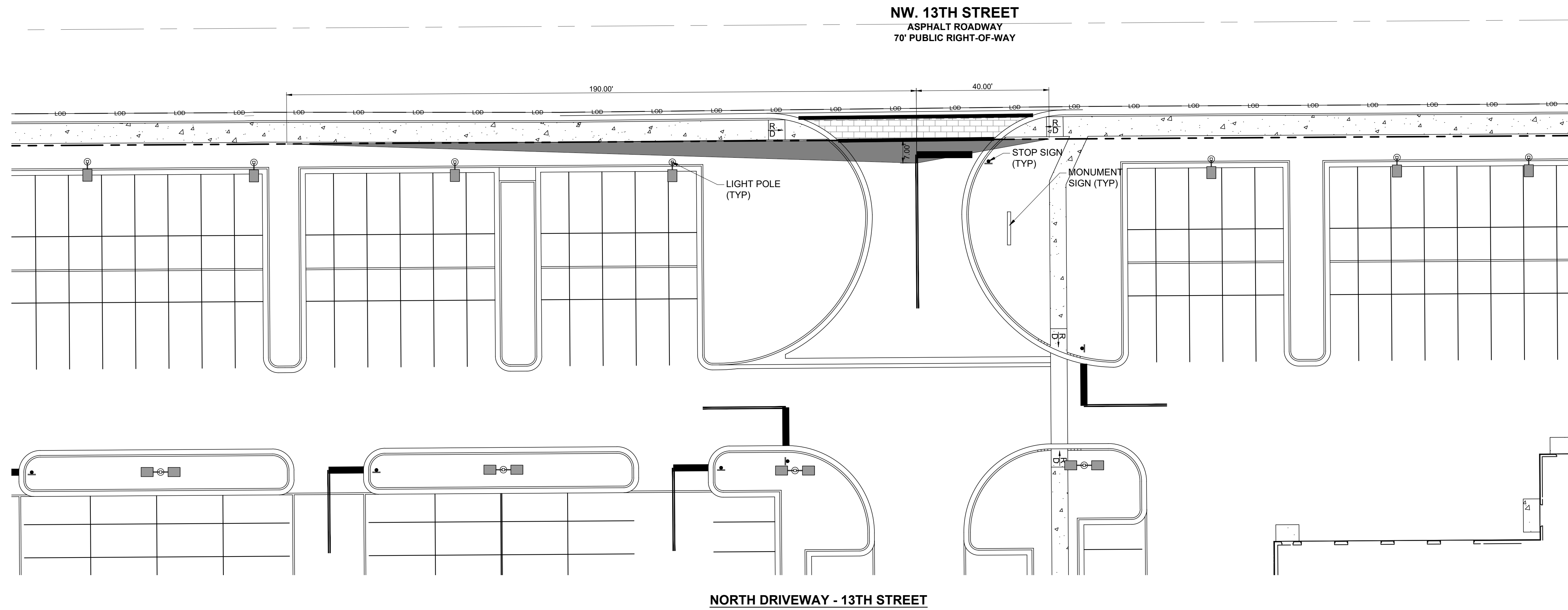
VISIBILITY TRIANGLE INFORMATION

NORTH DRIVEWAY - 13TH STREET (COLLECTOR)

LEFT REQUIRED/PROVIDED: 190'/190'
RIGHT REQUIRED/PROVIDED: 40'/40'
DEPTH REQUIRED/PROVIDED: 7'/7'

SOUTH DRIVEWAY - 12TH STREET (ARTERIAL)

LEFT REQUIRED/PROVIDED: 260'/260'
RIGHT REQUIRED/PROVIDED: 40'/40'
DEPTH REQUIRED/PROVIDED: 7'/7'



24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845



SHEET NAME
SITE VISIBILITY TRIANGLE EXHIBIT

SHEET NUMBER

C03.12

ISSUE FOR PERMIT



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19445 SHUMARD OAK DR.
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PHONE: (813) 387-0084

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INGENIUM PROJECT: 220190

PROJECT PM: AH

PROJECT RE: JH

ISSUE DATE: 04/30/2024

DWG NAME: 220190 C04.DWG

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24-HOUR CONTACT:
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SHEET NAME
UTILITY PLAN

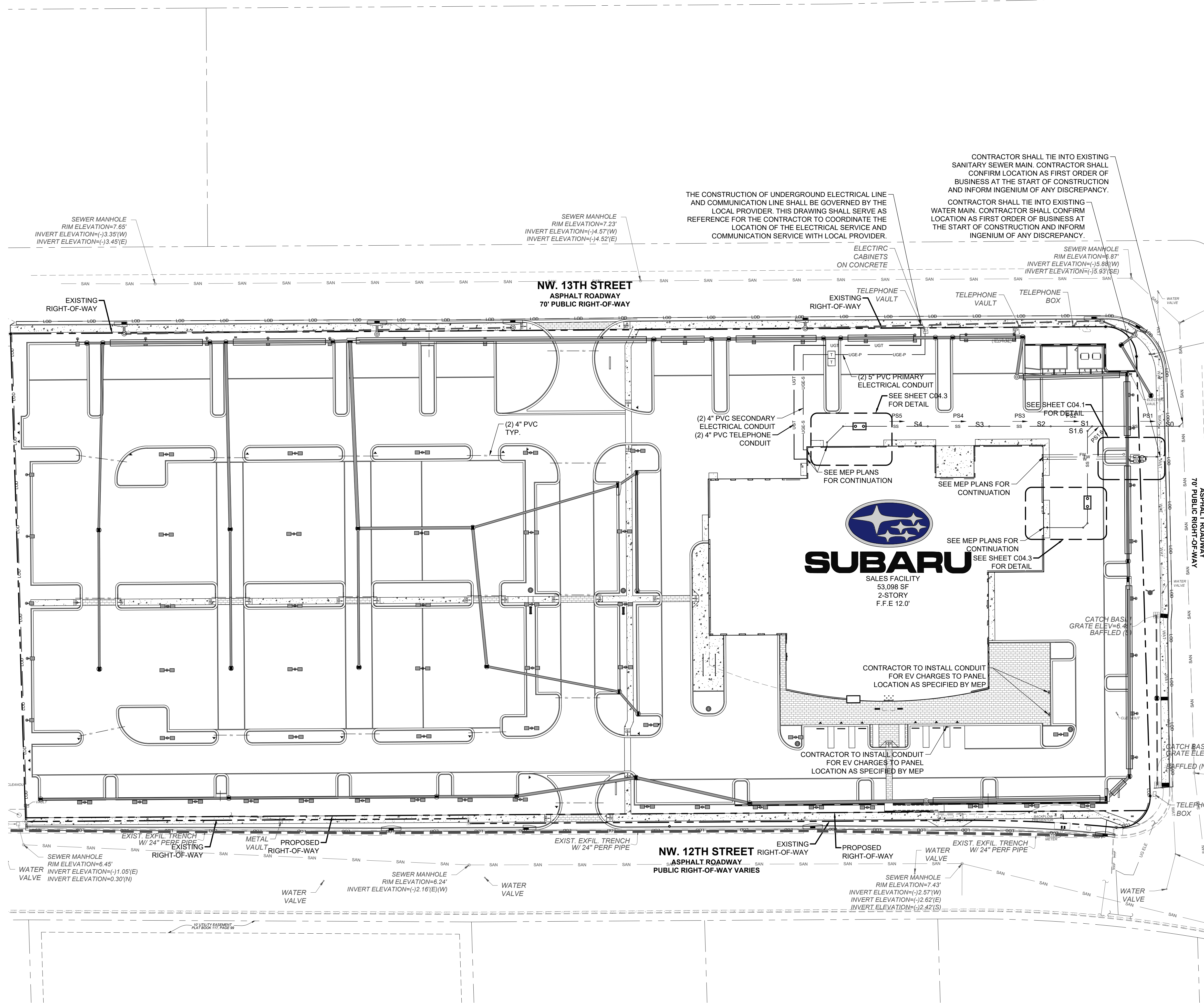
SHEET NUMBER
C04.0

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UTILITY LEGEND

UTILITIES	LINETYPE/SYMBOL
DOMESTIC WATER LINE	DW DW DW
FIRE WATER LINE	FW FW FW
BUILDING FIRE SPRINKLER LINE	FWS FWS FWS
IRRIGATION WATER LINE	IRR IRR IRR
DOMESTIC WATER METER (WM)	WM
IRRIGATION METER (IRR)	IRR
BACKFLOW PREVENTER (RPZ)	RPZ
DC BACKFLOW PREVENTER	DC
FIRE VAULT (DDC)	DDC
WATER TAP OR TEE	T
GATE VALVE (GV)	GV
THRUST BLOCK (TB)	TB
FIRE HYDRANT (FH)	FH
FIRE DEPARTMENT CONNECTION (FDC)	FDC
SANITARY SEWER (SS)	SS SS SS
GREASE TRAP VENT LINE (GTV)	GTV GTV GTV
SANITARY MANHOLE (SSMH)	SMH
GENERAL CLEAN OUT (Co)	Co
SANITARY STRUCTURE NUMBER	S2
UNDERGROUND ELECTRIC LINE-PRIMARY	UGE-P UGE-P UGE-P
UNDERGROUND ELECTRIC LINE-SECONDARY	UGE-S UGE-S UGE-S
POST INDICATOR VALVE	PIV
SITE LIGHTING POLE	SLP
TRANSFORMER PAD	T
METER/CT PEDESTAL	CT
UNDERGROUND TELEPHONE LINE	UGT UGT UGT
GENERAL UTILITY CONDUIT	GU GU GU
GAS LINE	G G G
GAS METERS	G

** ALL UTILITIES SHALL BE INSTALLED ACCORDING TO UTILITY PROVIDERS AND JURISDICTION STANDARDS AND SPECIFICATIONS.



CONTRACTOR SHALL TIE INTO EXISTING SANITARY SEWER MAIN. CONTRACTOR SHALL CONFIRM LOCATION AS FIRST ORDER OF BUSINESS AT THE START OF CONSTRUCTION AND INFORM INGENIUM OF ANY DISCREPANCY.

CONTRACTOR SHALL TIE INTO EXISTING WATER MAIN. CONTRACTOR SHALL CONFIRM LOCATION AS FIRST ORDER OF BUSINESS AT THE START OF CONSTRUCTION AND INFORM INGENIUM OF ANY DISCREPANCY.

THE CONSTRUCTION OF UNDERGROUND ELECTRICAL LINE AND COMMUNICATION LINE SHALL BE GOVERNED BY THE LOCAL PROVIDER. THIS DRAWING SHALL SERVE AS REFERENCE FOR THE CONTRACTOR TO COORDINATE THE LOCATION OF THE ELECTRICAL SERVICE AND COMMUNICATION SERVICE WITH LOCAL PROVIDER.

CONTRACTOR SHALL COORDINATE WITH EXISTING UTILITY PROVIDES TO ADJUST GRADES TO EXISTING TELEPHONE AND ELECTRICAL VAULTS AND BOXES AS NECESSARY.

UTILITY NOTES SEE SHEET C01.1

SEE SHEET C04.1 FOR THE UTILITY RESPONSIBILITY MATRIX

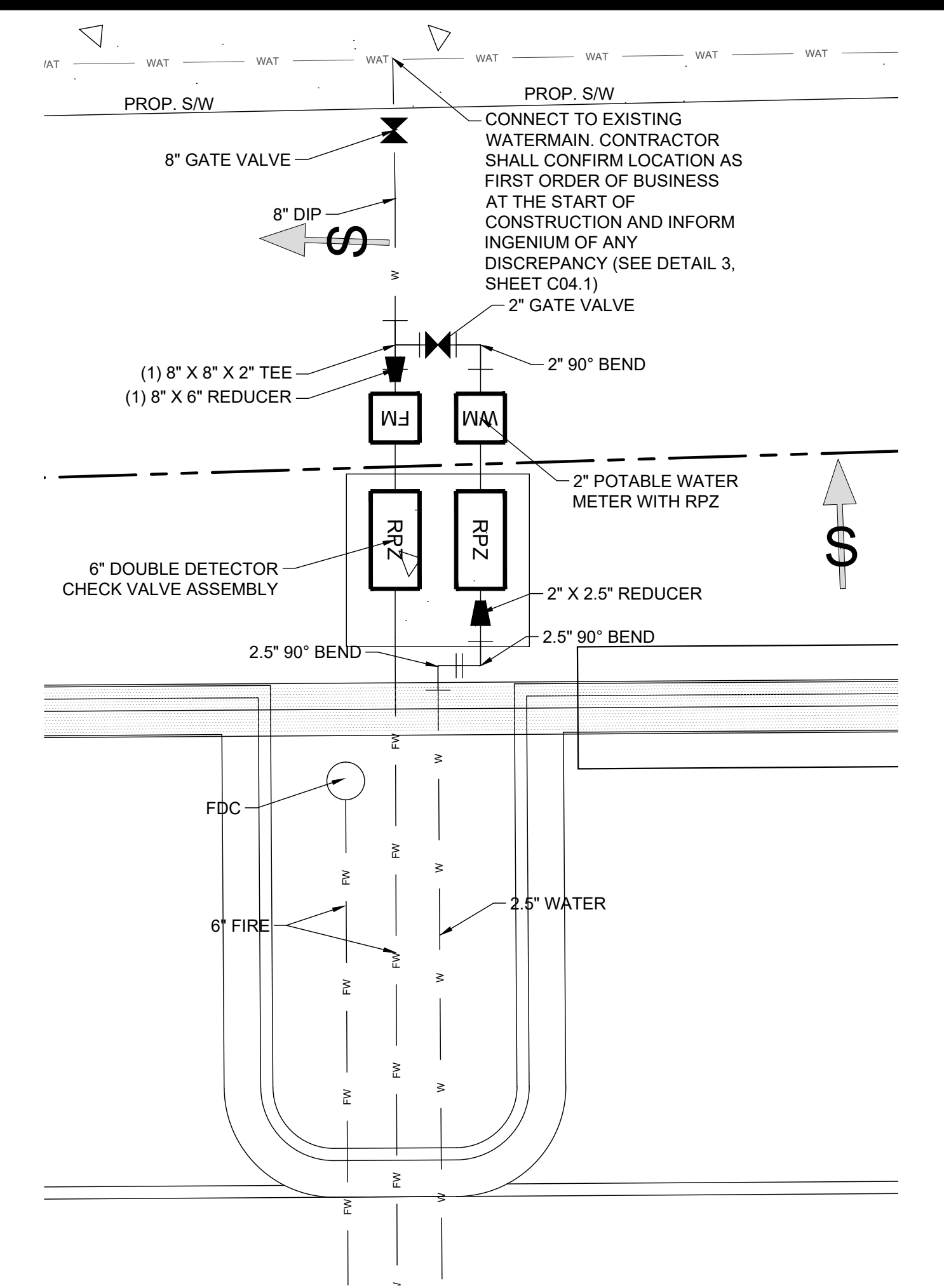
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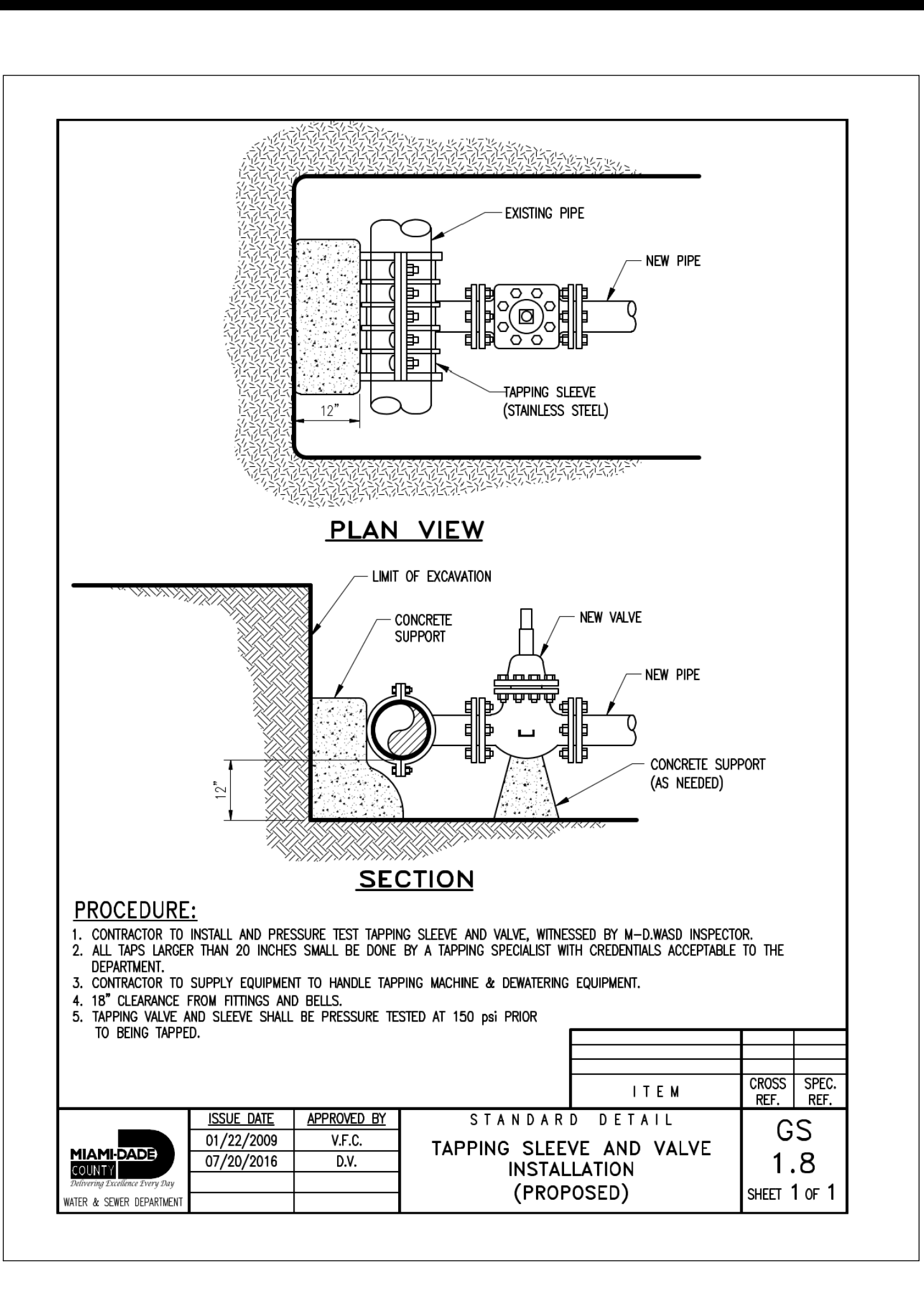
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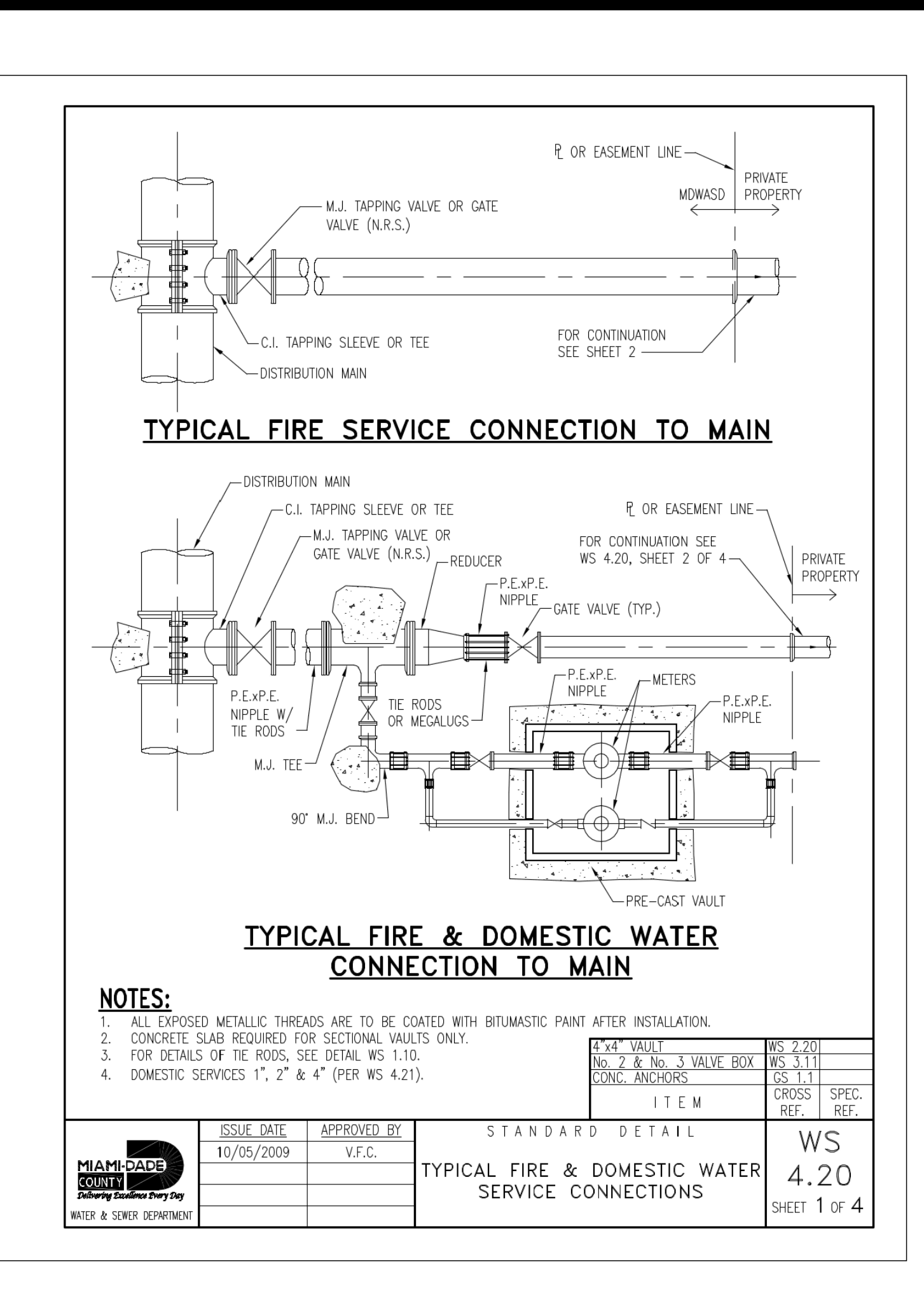
UTILITY INFORMATION					
WATER					
	GC	SELLER	OWNER	UTILITY	ADDITIONAL NOTES
LINE EXTENSION TO PROPERTY LINE	●				**
PIPEING FROM PROPERTY LINE TO BUILDING	●				**
TAPPING THE MAIN	●				**
WATER VAULT	●				**
WATER (METER) PIT	●				**
DOMESTIC METER				●	**
FIRE METER				●	**
IRRIGATION METER				●	**
DOMESTIC BFP	●				**
FIRE BFP	●				**
IRRIGATION BFP	●				**
OBTAINING EASEMENTS			●		**
OBTAINING ROW WORK PERMITS			●		**
SANITARY SEWER					
	GC	SELLER	OWNER	UTILITY	ADDITIONAL NOTES
LINE EXTENSION TO PROPERTY LINE	●				**
TAPPING THE MAIN	●				**
SERVICE LATERAL (INSIDE PROPERTY)	●				**
OBTAINING EASEMENTS			●		**
OBTAINING ROW WORK PERMITS			●		**
ELECTRIC					
	GC	SELLER	OWNER	UTILITY	ADDITIONAL NOTES
PRIMARY CONDUIT				●	**
PRIMARY CABLE				●	**
PRIMARY FINAL CONNECTION				●	**
TRANSFORMER				●	**
TRANSFORMER PAD	●				**
POLE					N/A
SECONDARY CONDUIT	●				**
SECONDARY CABLE	●				**
SECONDARY FINAL INSPECTION	●				**
METER				●	**
CT CABINET	●				**
CT METER CONDUIT	●				**
SOCKET	●				**
OBTAINING EASEMENTS			●		**
OBTAINING ROW WORK PERMITS			●		**
TELEPHONE					
	GC	SELLER	OWNER	UTILITY	ADDITIONAL NOTES
CONDUIT	●				**
TRENCH & BACKFILL	●				**
CABLE & WIRE				●	**
OBTAINING EASEMENTS			●		**
OBTAINING ROW WORK PERMITS			●		**



2 WATER METER INSERT

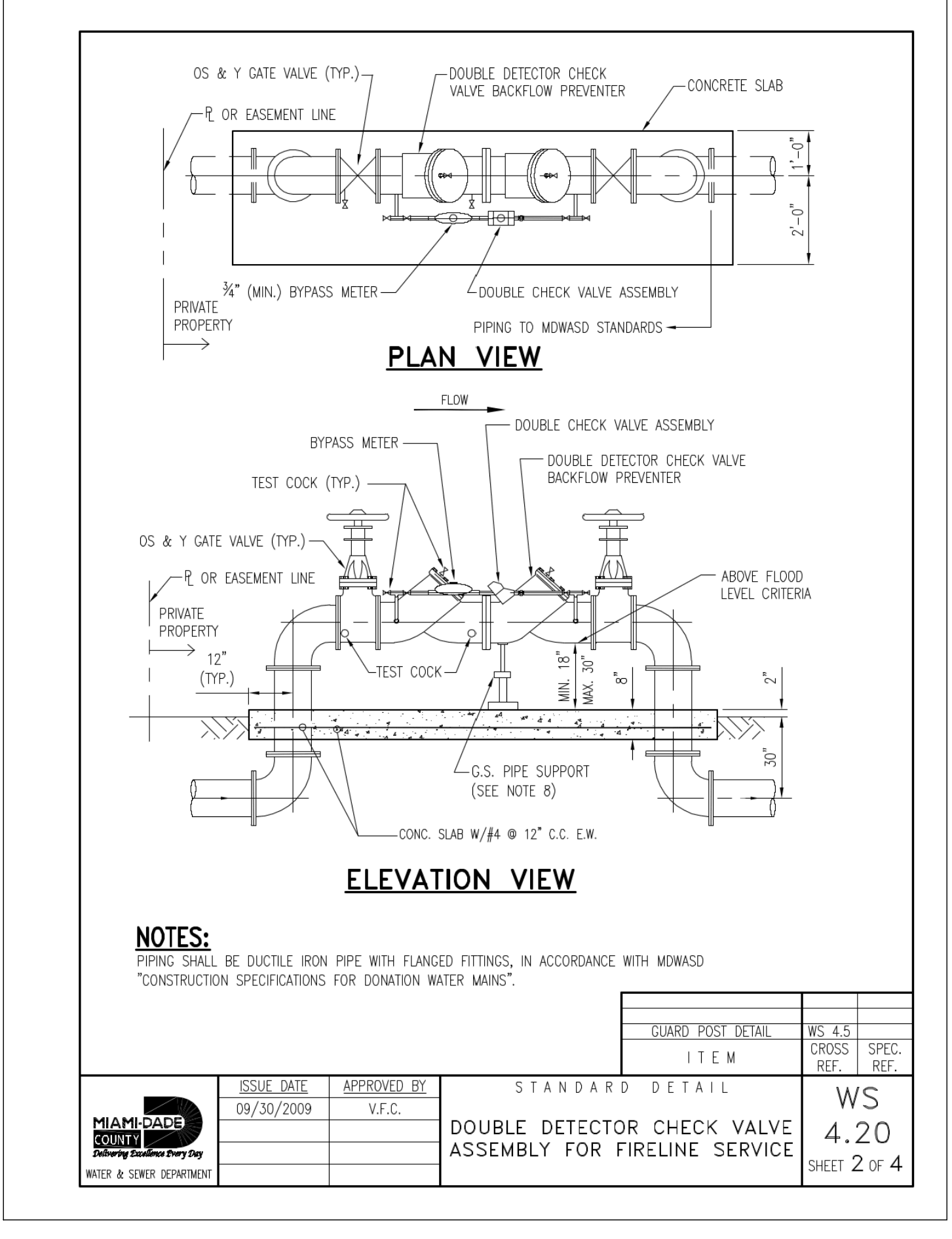


3 WATER CONNECTION DETAILS

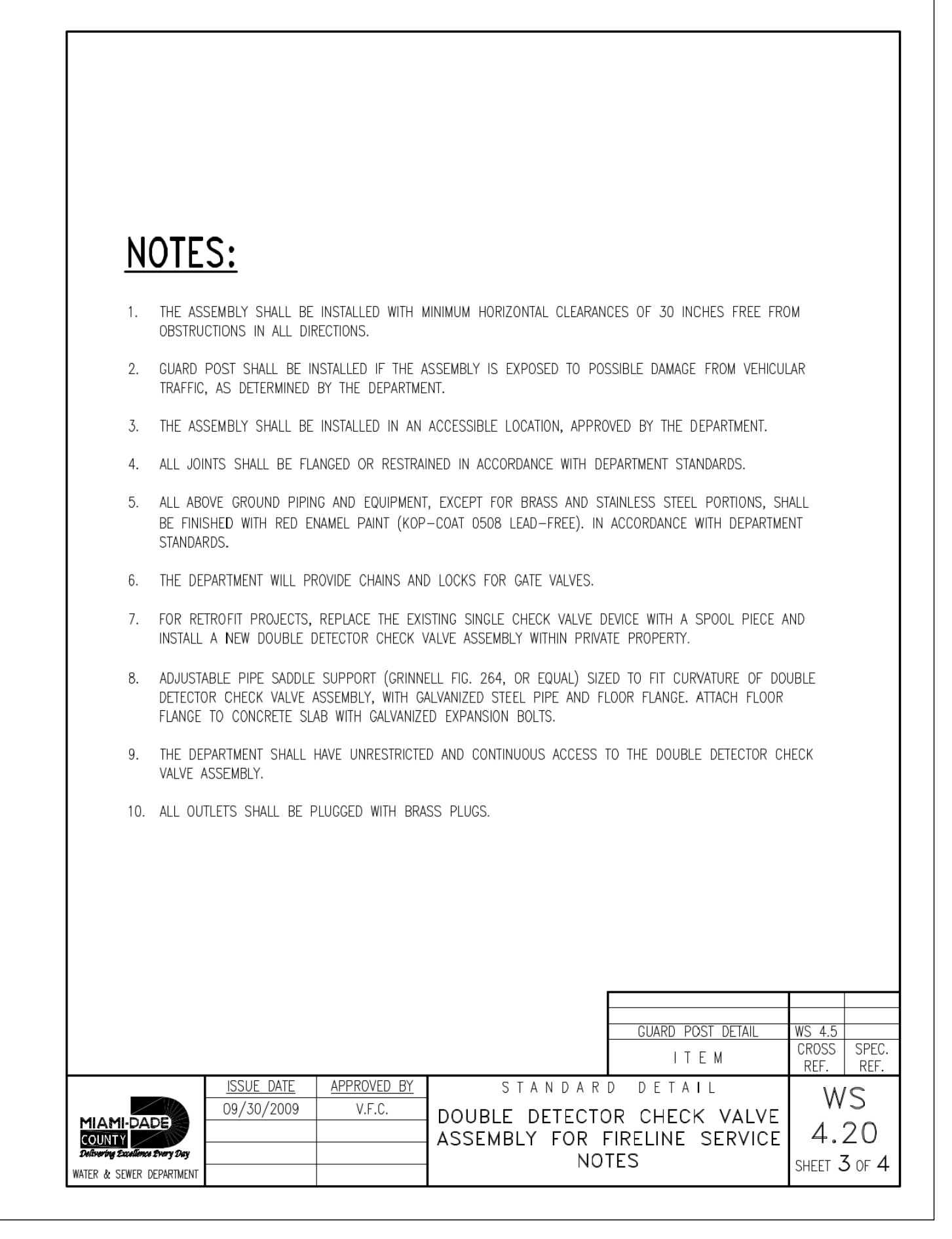


4 TYPICAL FIRE & DOMESTIC WATER SERVICE CONNECTIONS

1 UTILITY RESPONSIBILITY MATRIX



5 DOUBLE DETECTOR CHECK VALVE ASSEMBLY FOR FIRELINE SERVICE



6 DOUBLE DETECTOR CHECK VALVE ASSEMBLY FOR FIRELINE SERVICE NOTES



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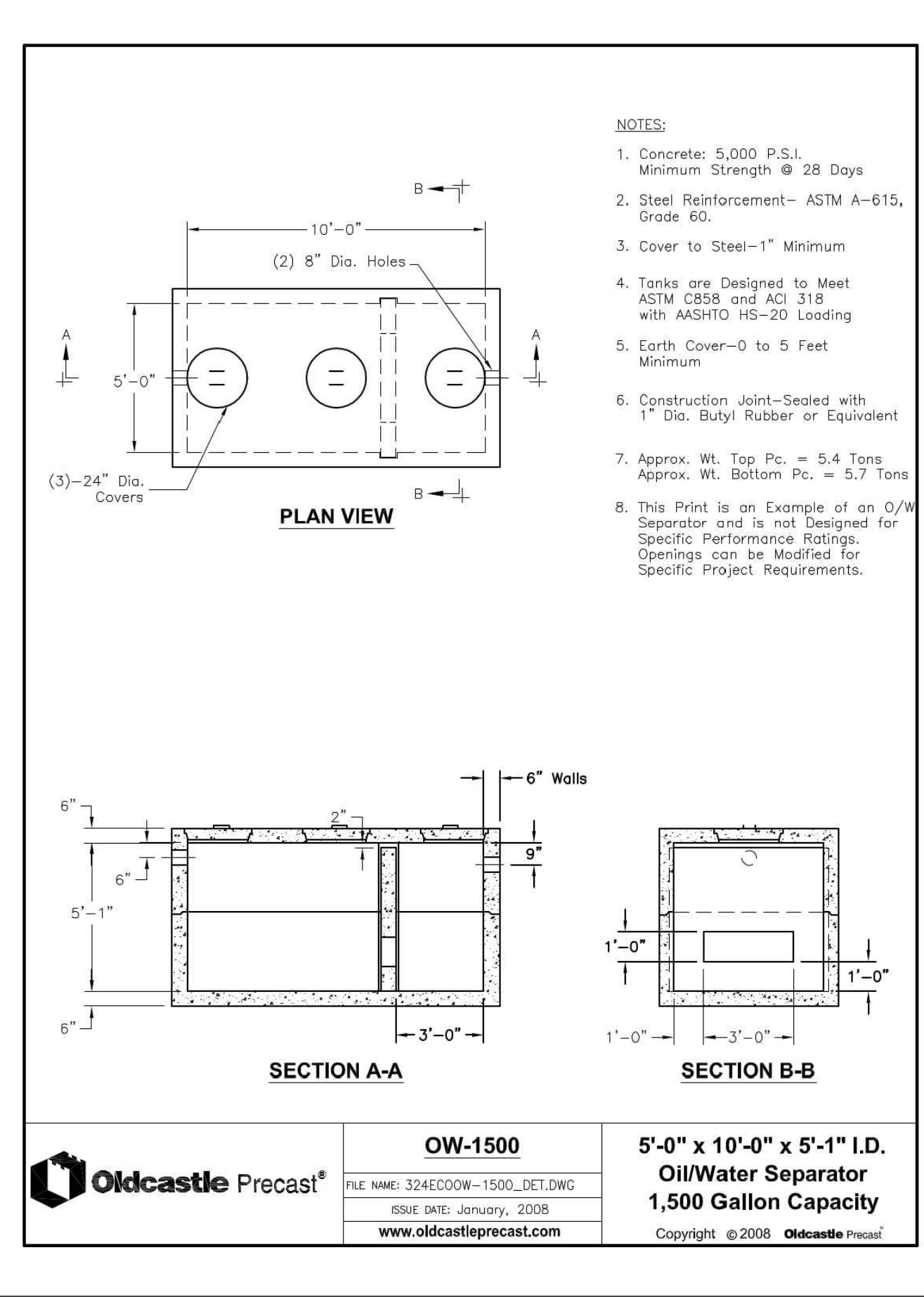
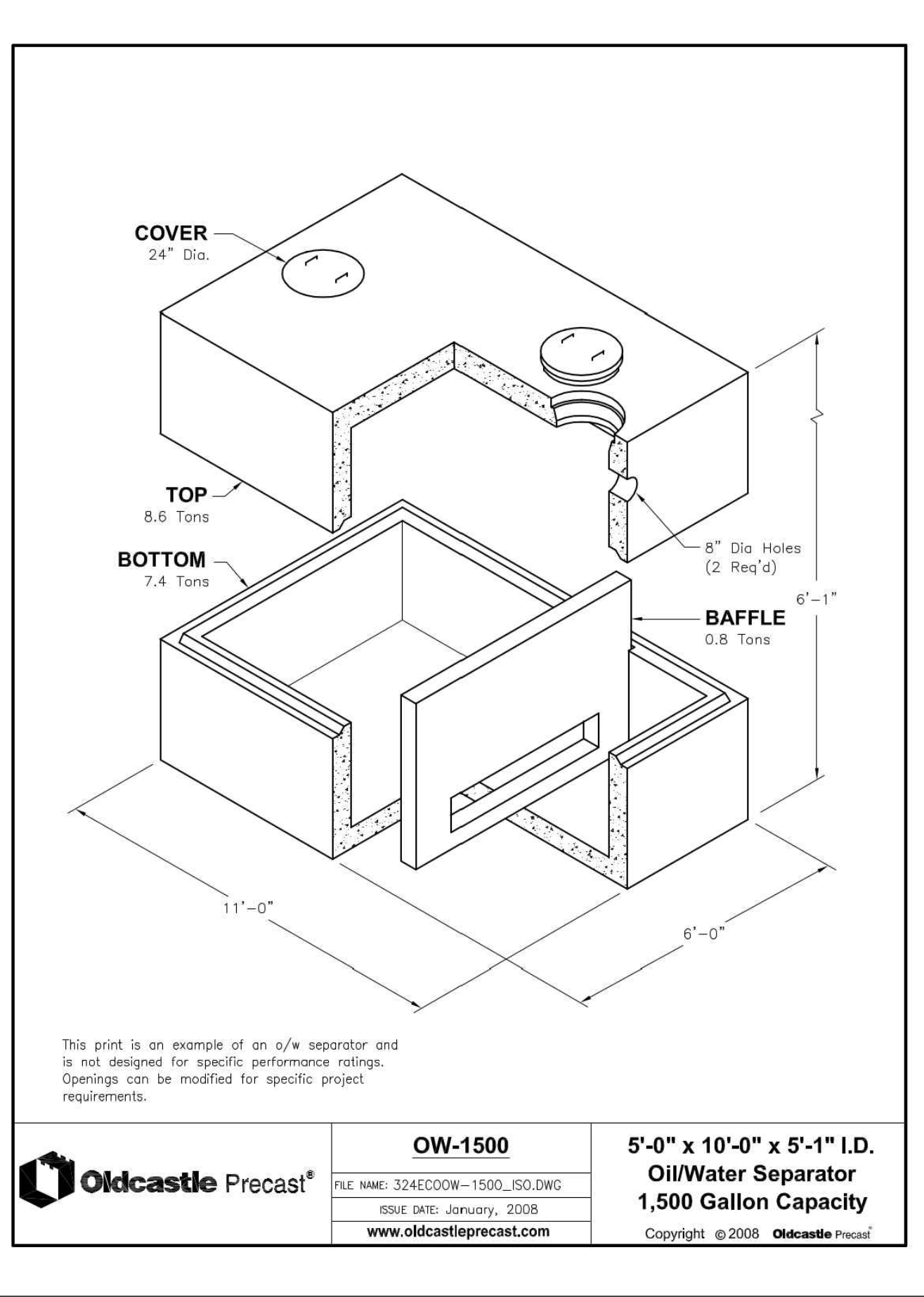
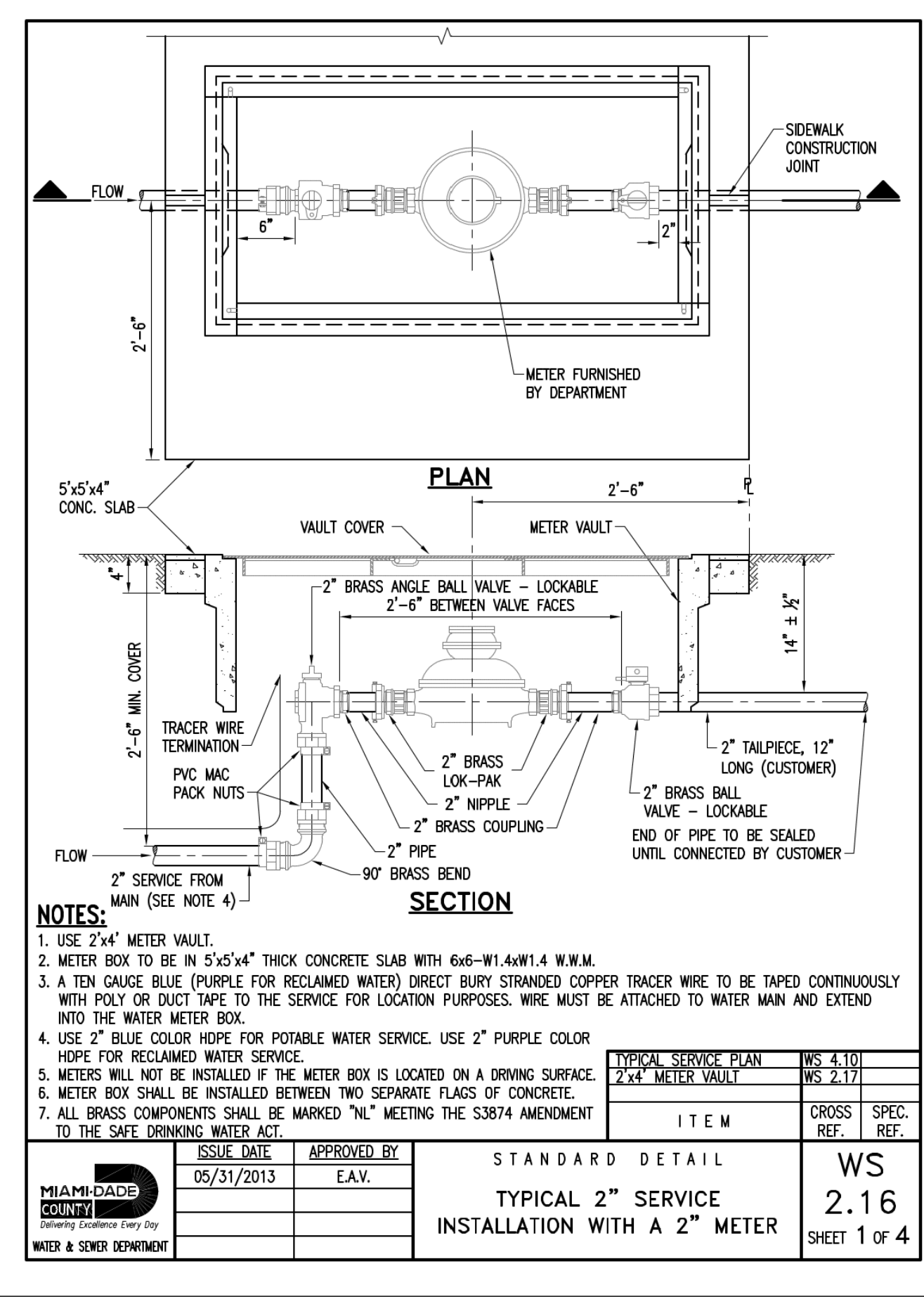
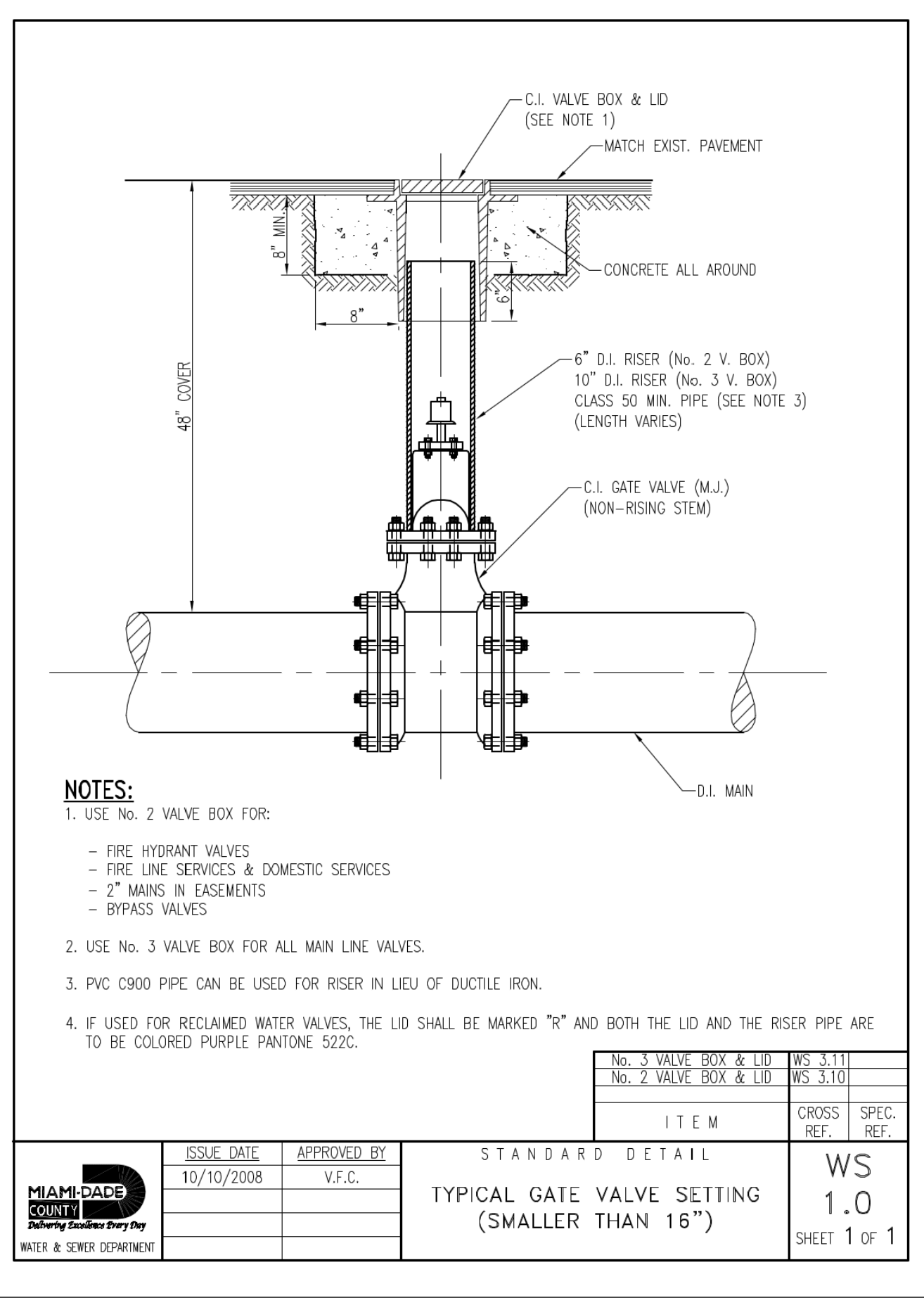
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SHEET NAME
UTILITY DETAILS I

SHEET NUMBER

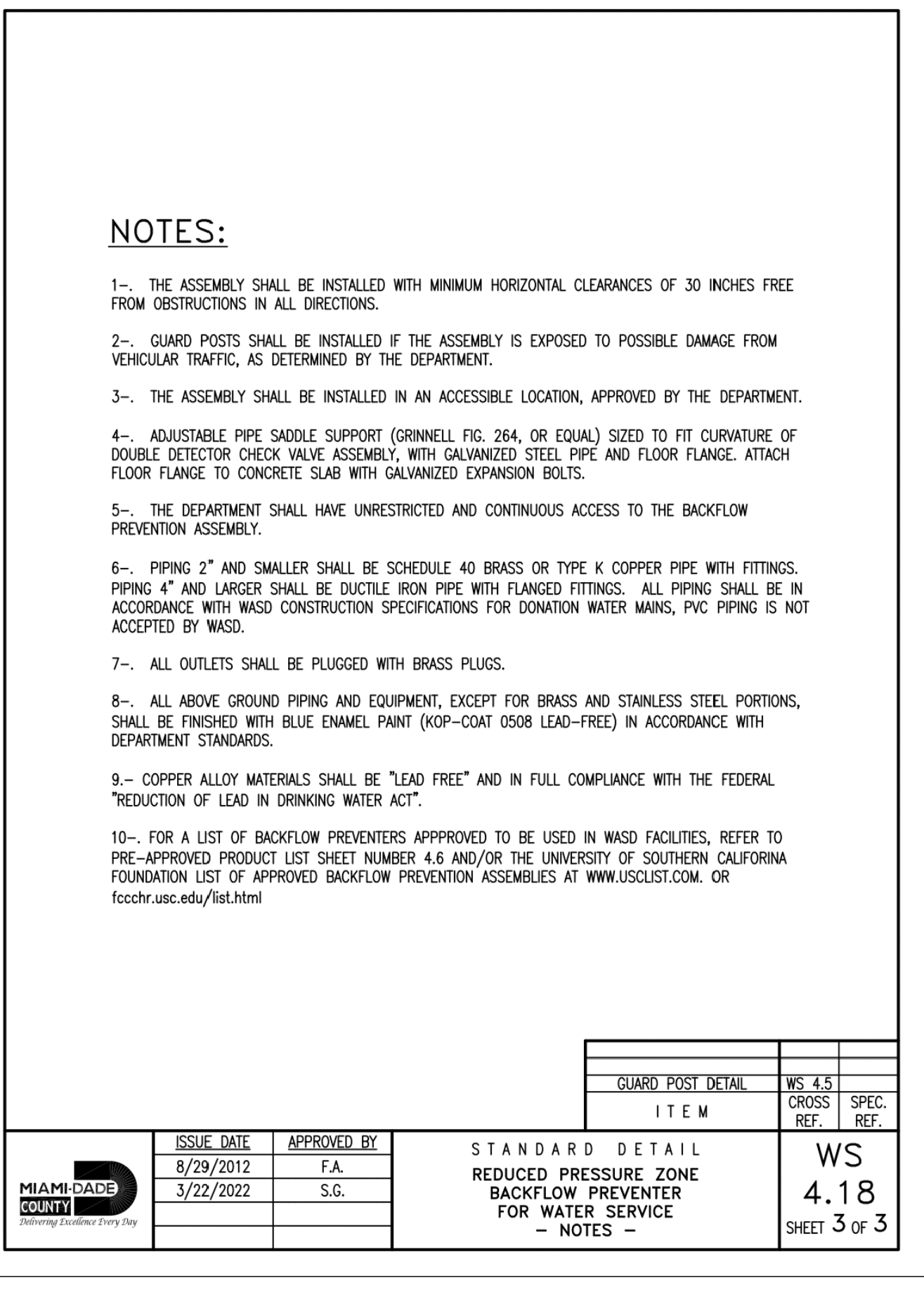
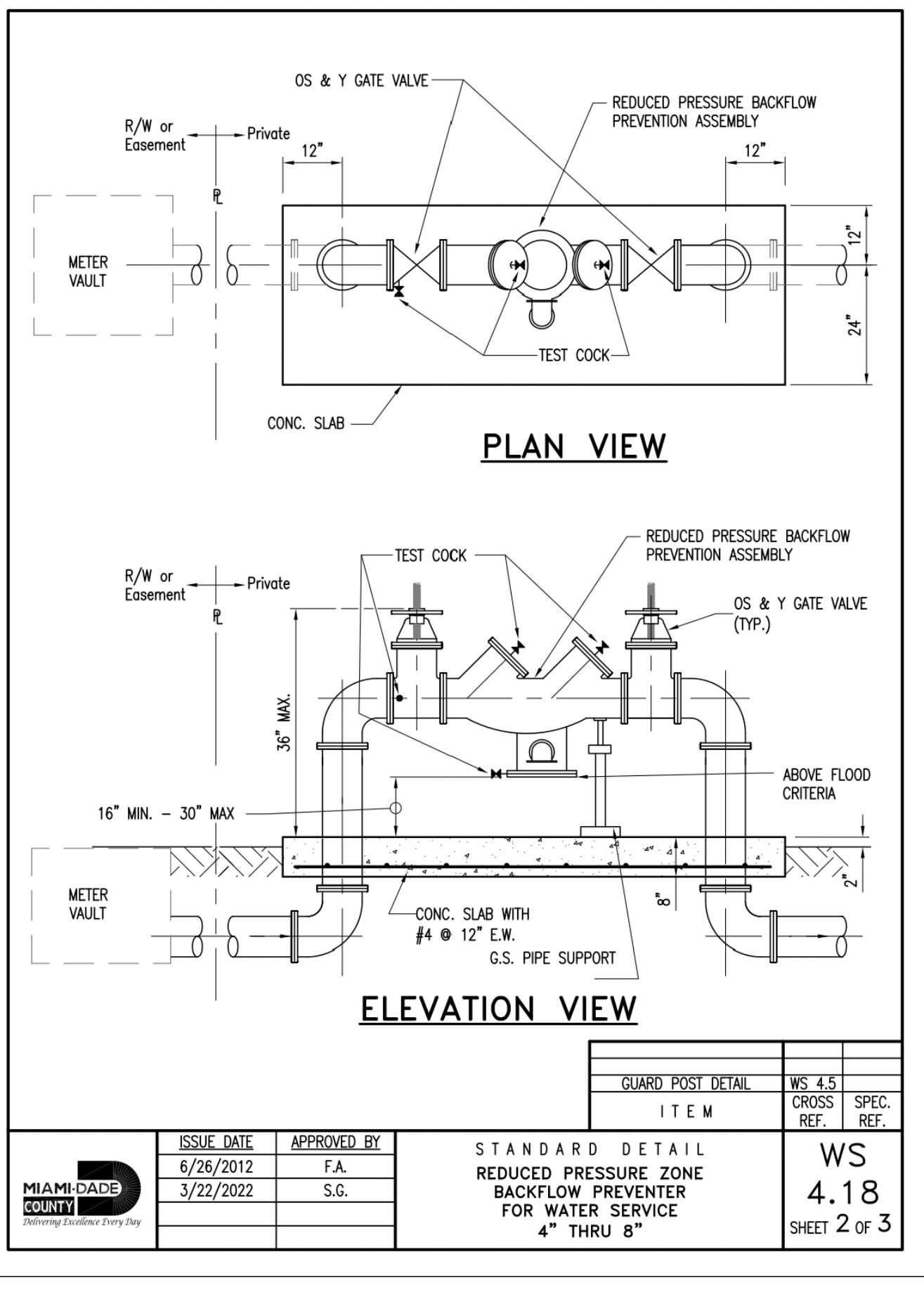
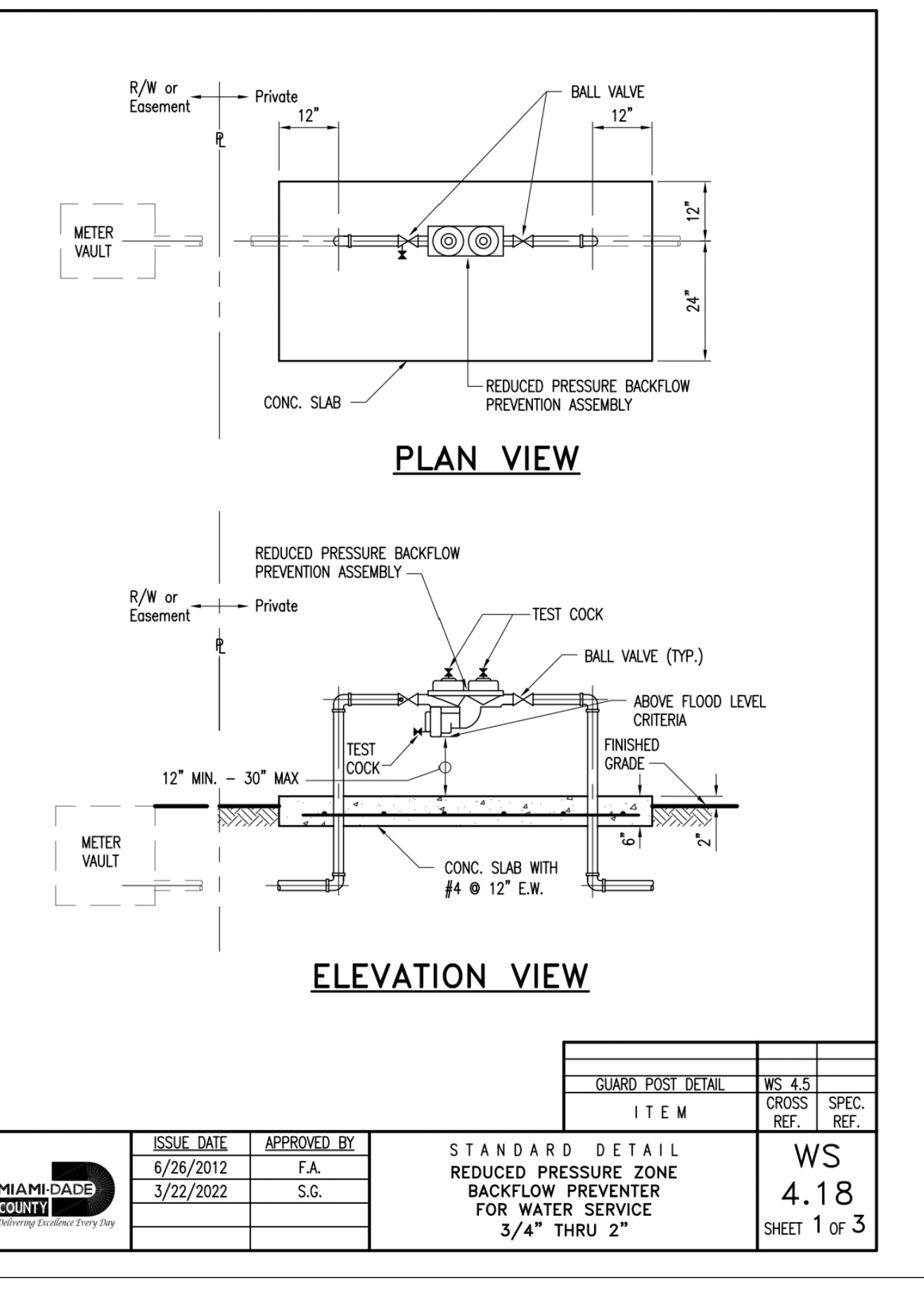
C04.1
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1 GATE VALVE DETAIL NTS

2 WATER METER INSERT 1" = 5"

3 1500 GAL OIL/WATER SEPARATOR NTS



4 RPZ BACKFLOW PREVENTER DETAILS NTS



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PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370
INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C04.DWG

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DORAL, FLORIDA 33172

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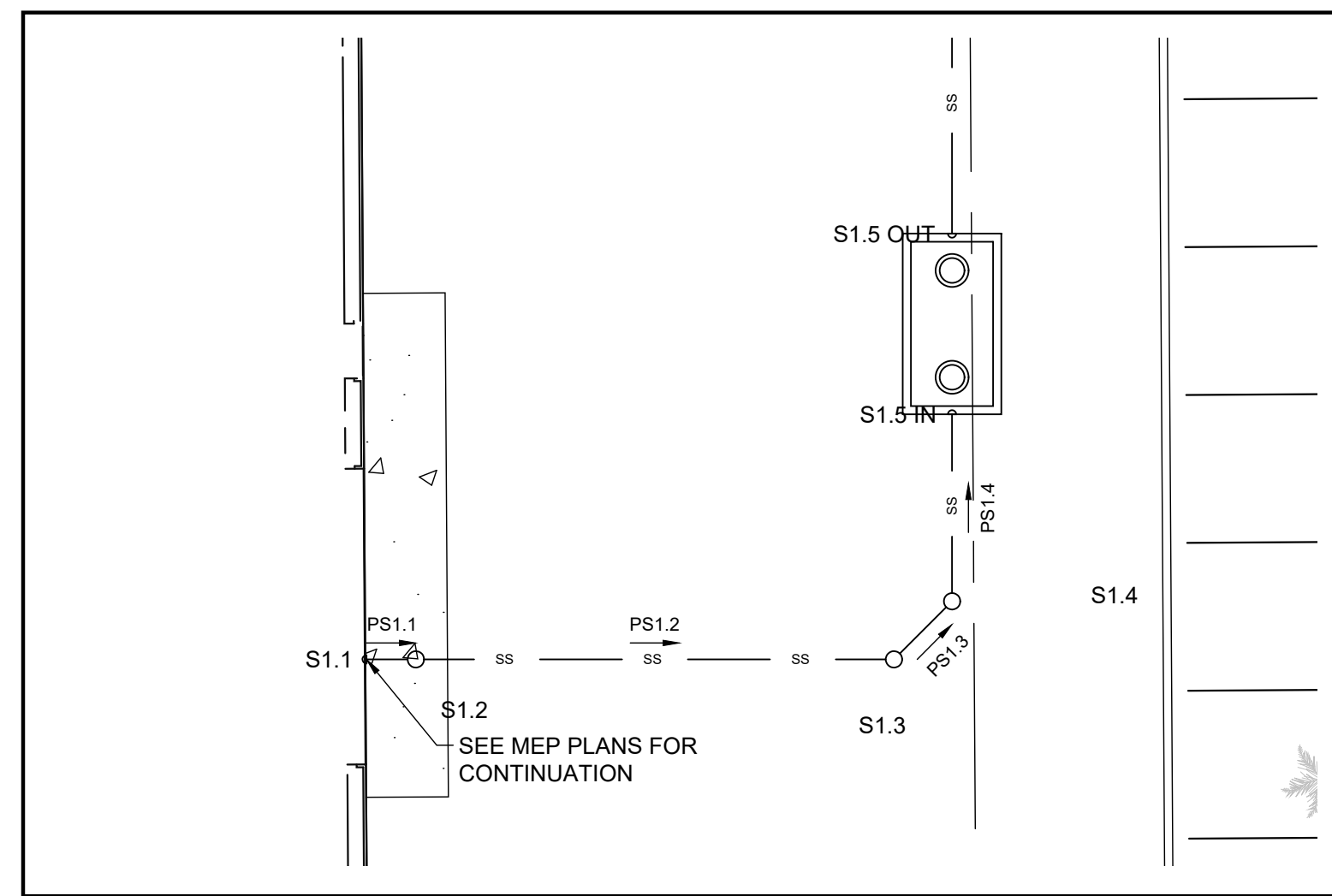
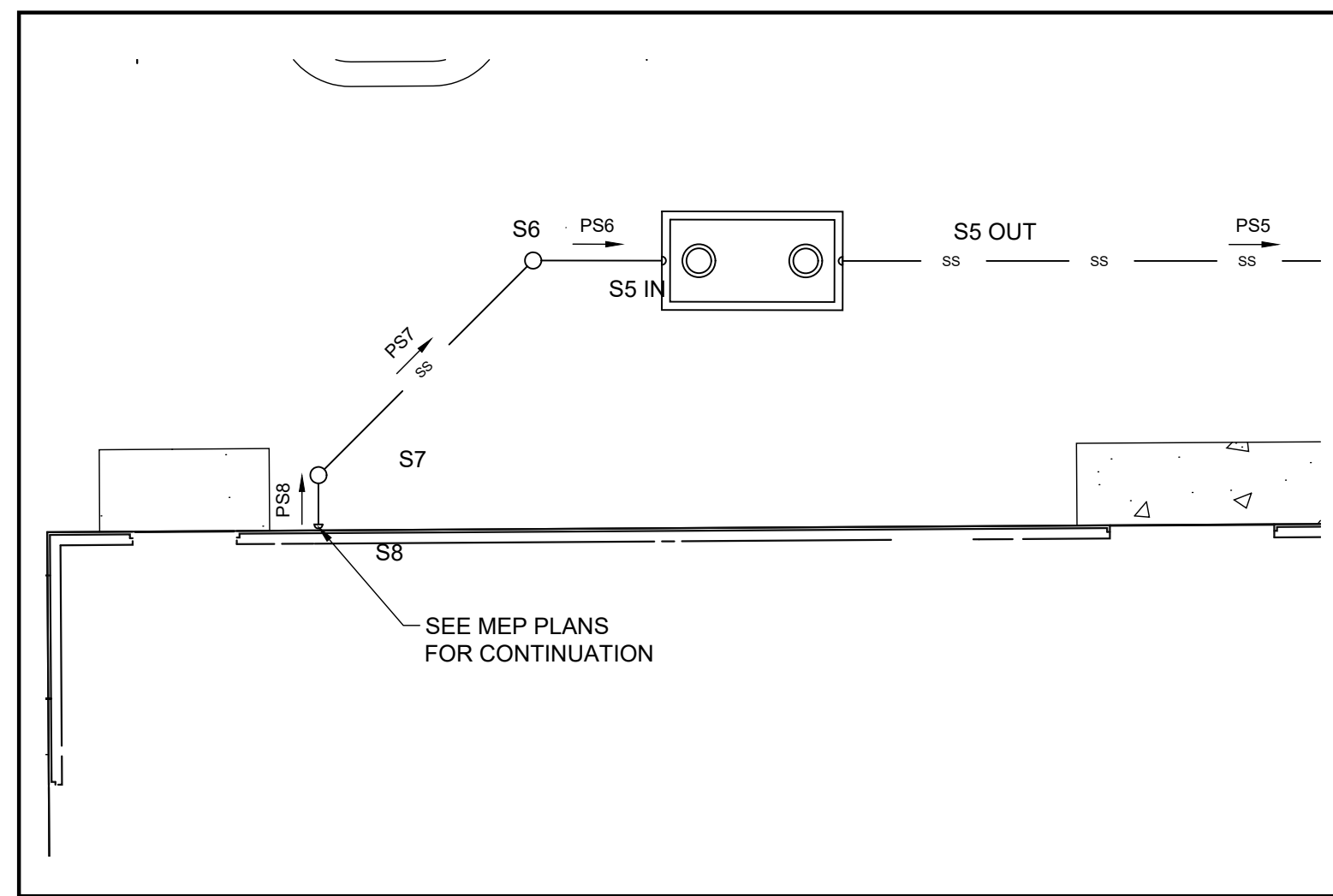
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SHEET NAME
UTILITY DETAILS II

SHEET NUMBER

C04.2

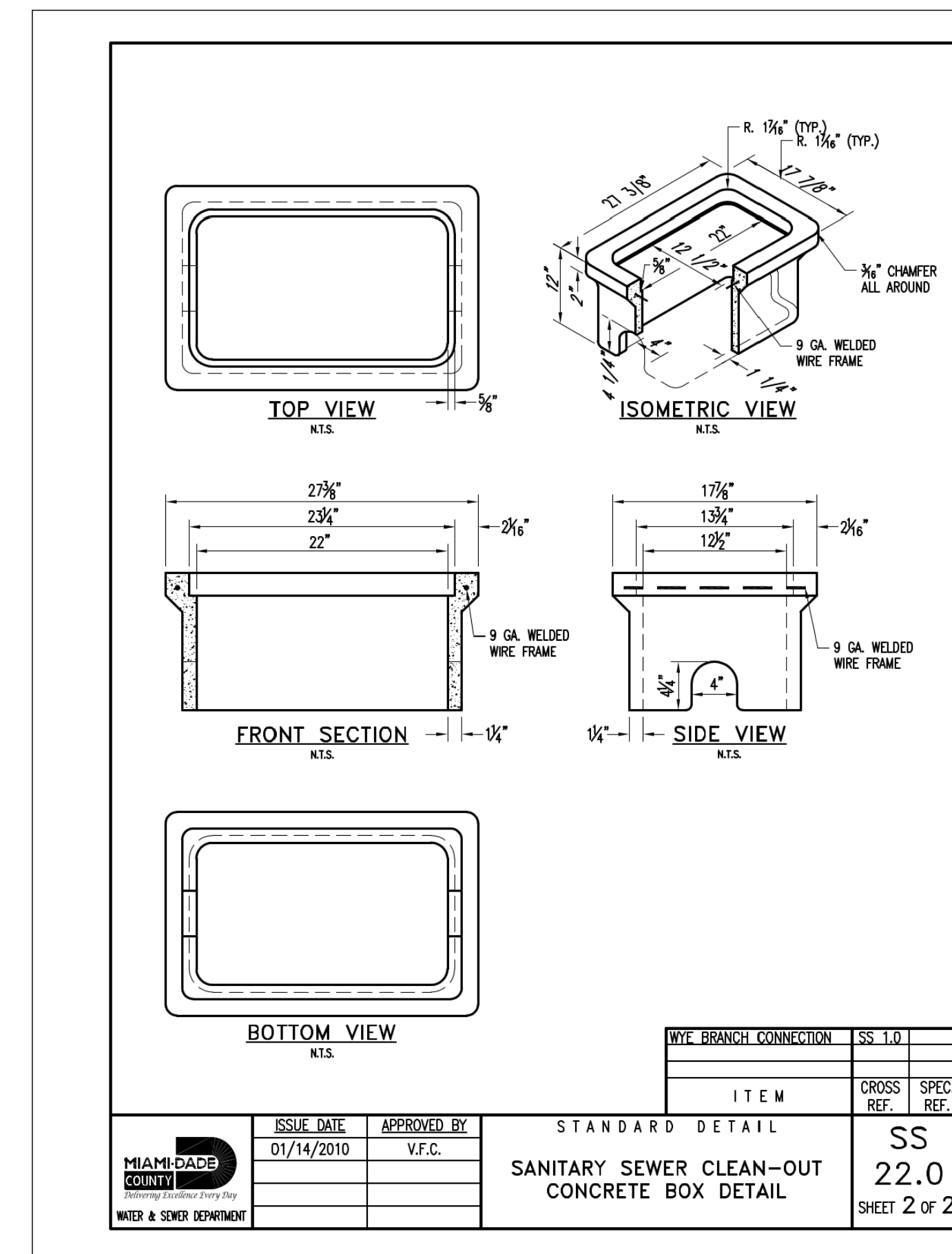
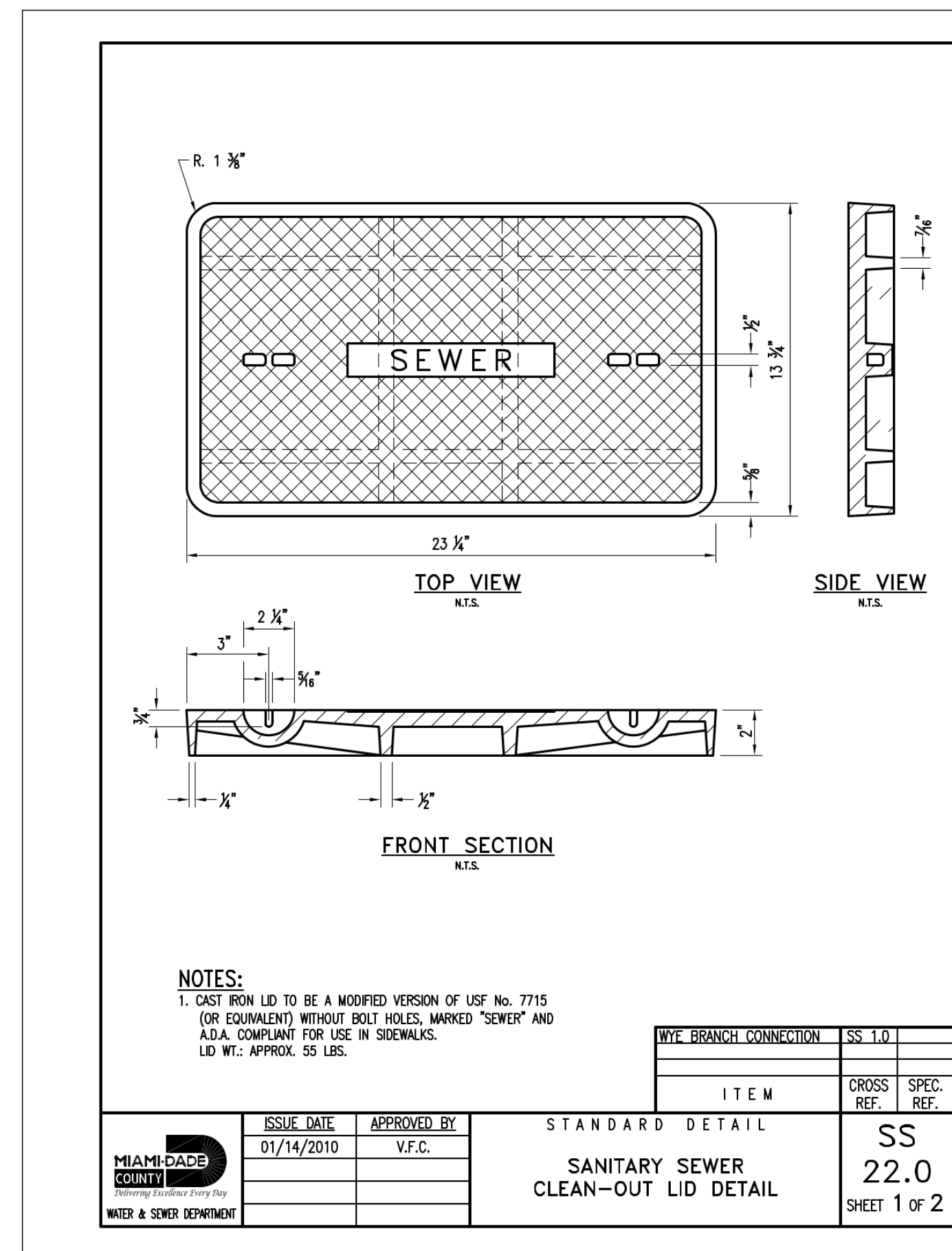
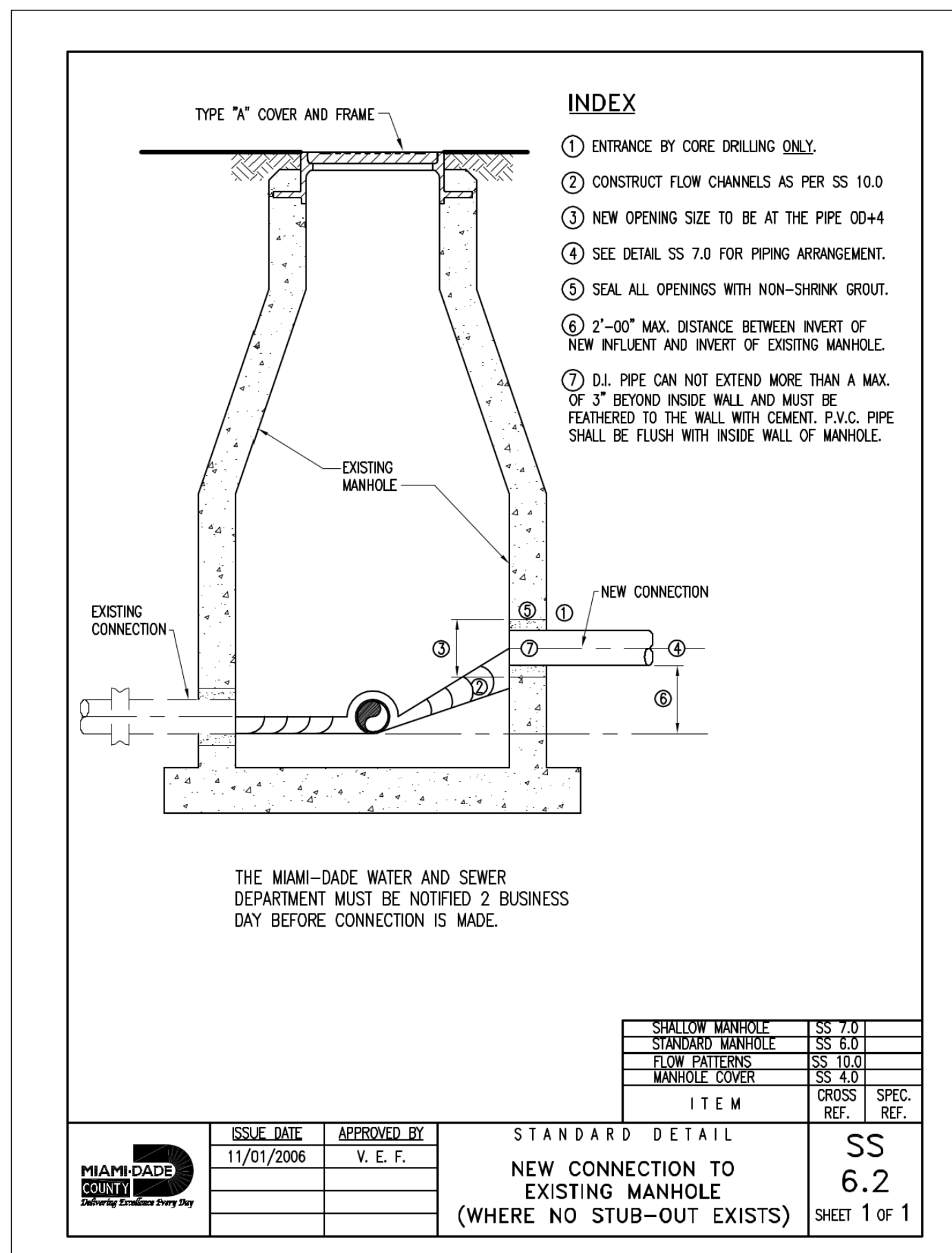
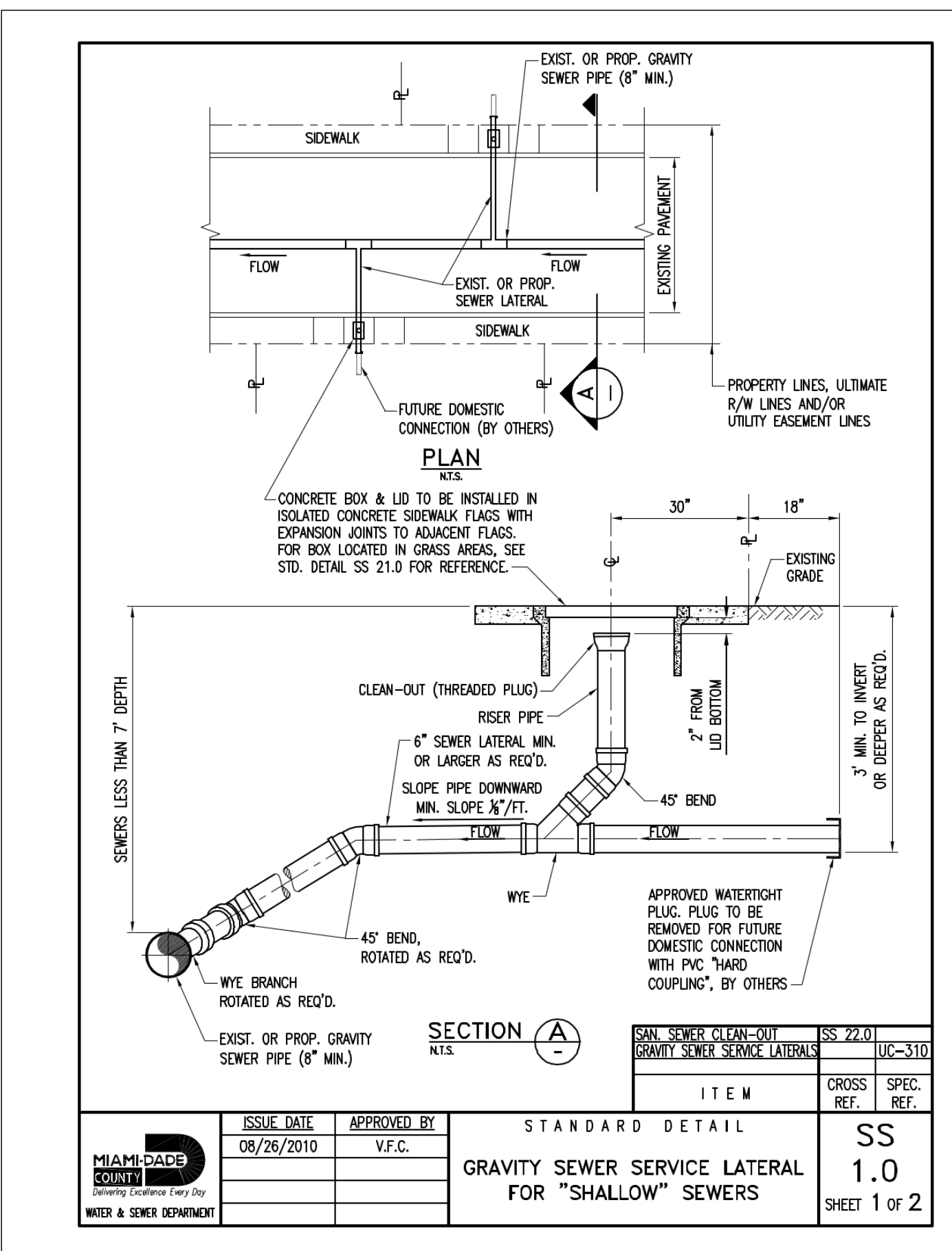
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SANITARY STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
S0	Cleanout Detail 4, Sheet C04.3	7.50	4.41 (PS1)	4.41 (PS1 (1))
S1	Cleanout Detail 4, Sheet C04.3	10.67	5.12 (PS1.6) 5.12 (PS2)	5.12 (PS1)
S1.1	BUILDING STUB	9.85		7.50 (PS1.1)
S1.2	Cleanout Detail 4, Sheet C04.3	11.83	7.47 (PS1.1)	7.47 (PS1.2)
S1.3	Cleanout Detail 4, Sheet C04.3	10.91	7.18 (PS1.2)	7.18 (PS1.3)
S1.4	Cleanout Detail 4, Sheet C04.3	10.85	7.13 (PS1.3)	7.13 (PS1.4)
S1.5 IN	GREASE TRAP STUB-IN	8.37	7.02 (PS1.4)	
S1.5 OUT	GREASE TRAP STUB-OUT	8.12		6.77 (PS1.5)
S1.6	Cleanout Detail 4, Sheet C04.3	10.83	5.23 (PS1.5)	5.23 (PS1.6)
S2	Cleanout Detail 4, Sheet C04.3	11.50	5.46 (PS3)	5.46 (PS2)
S3	Cleanout Detail 4, Sheet C04.3	11.20	5.96 (PS4)	5.96 (PS3)
S4	Cleanout Detail 4, Sheet C04.3	11.20	6.46 (PS5)	6.46 (PS4)
S5 IN	GREASE TRAP STUB-IN	8.56	7.21 (PS6)	
S5 OUT	GREASE TRAP STUB-OUT	8.31		6.96 (PS5)
S6	Cleanout Detail 4, Sheet C04.3	11.18	7.29 (PS7)	7.29 (PS6)
S7	Cleanout Detail 4, Sheet C04.3	11.80	7.47 (PS8)	7.47 (PS7)
S8	BUILDING STUB	8.85		7.50 (PS8)

San PIPE TABLE				
PIPE NAME	SIZE	LENGTH	SLOPE	MATERIAL
PS1	6"	70.91'	1.00%	PVC
PS1 (1)	6"	4.25'	0.80%	PVC
PS1.1	6"	3.00'	1.00%	PVC
PS1.2	6"	29.09'	1.00%	PVC
PS1.3	6"	5.00'	1.00%	PVC
PS1.4	6"	11.38'	1.00%	PVC
PS1.5	6"	52.73'	2.92%	PVC
PS1.6	6"	5.36'	2.00%	PVC
PS2	6"	33.71'	1.00%	PVC
PS3	6"	50.01'	1.00%	PVC
PS4	6"	50.00'	1.00%	PVC
PS5	6"	50.01'	1.00%	PVC
PS6	6"	7.84'	1.00%	PVC
PS7	6"	18.48'	1.00%	PVC
PS8	6"	3.00'	1.00%	PVC

1 SANITARY LATERAL BLOW-UP DETAILS 1" = 10'



2 GRAVITY SEWER SERVICE DETAIL NTS

3 MANHOLE CONNECTION DETAIL NTS

4 CLEAN-OUT DETAIL NTS



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FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190

PROJECT PM: AH

PROJECT RE: JH

ISSUE DATE: 04/30/2024

DWG NAME: 220190 C04.DWG

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SHEET NAME
UTILITY DETAILS III

SHEET NUMBER

C04.3

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PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C04.DWG

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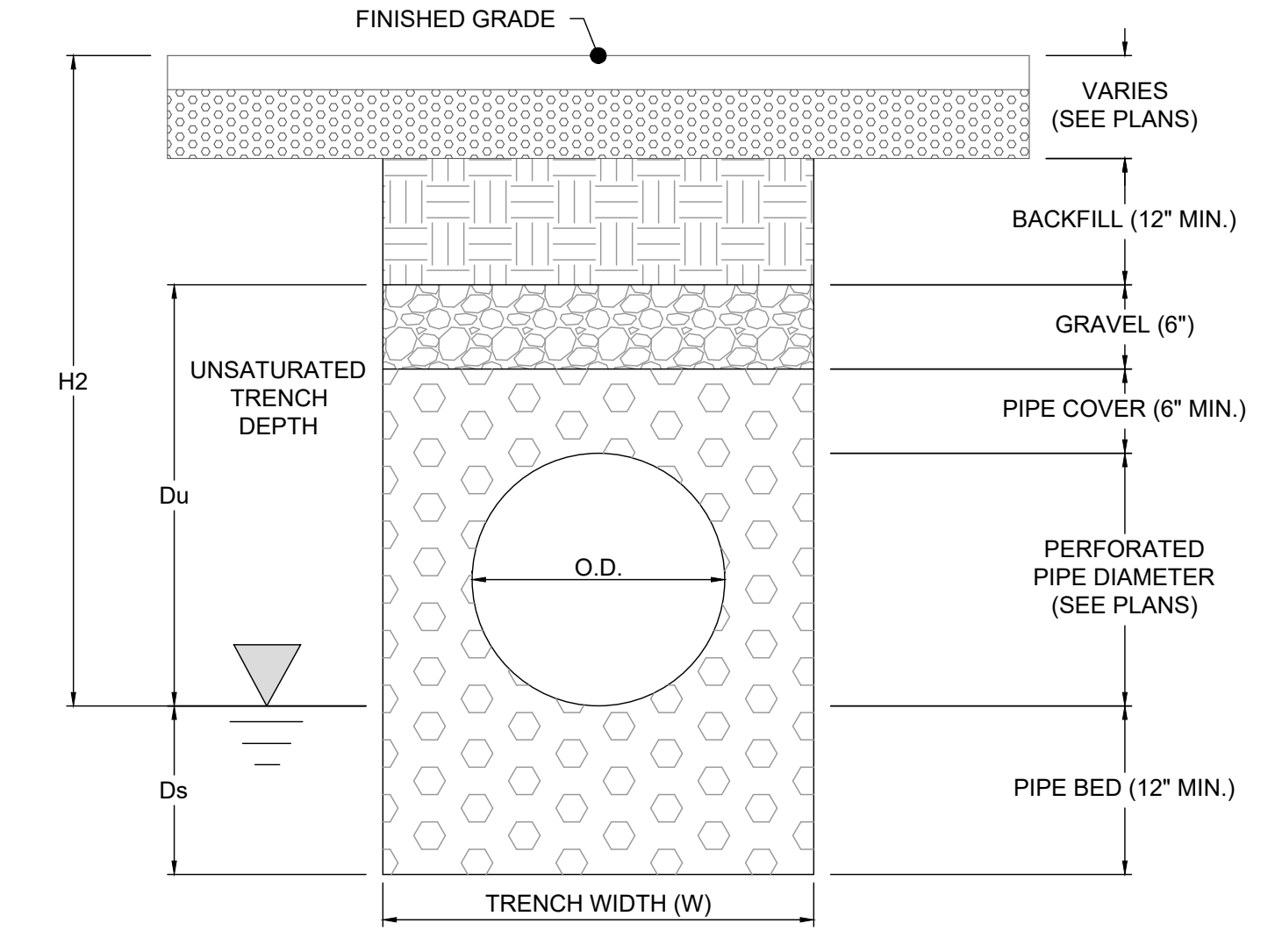
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SHEET NAME
UTILITY DETAILS IV

SHEET NUMBER
C04.4

ISSUE FOR PERMIT

TYPICAL EXFILTRATION TRENCH

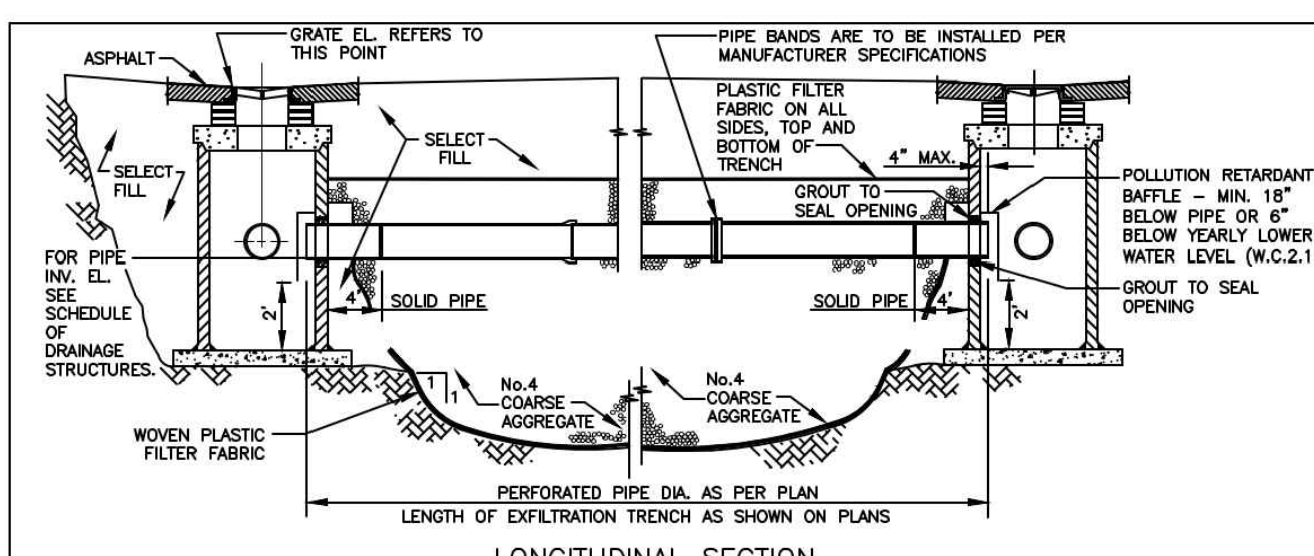


PROPOSED EXFILTRATION TRENCH DATA (NORTH)

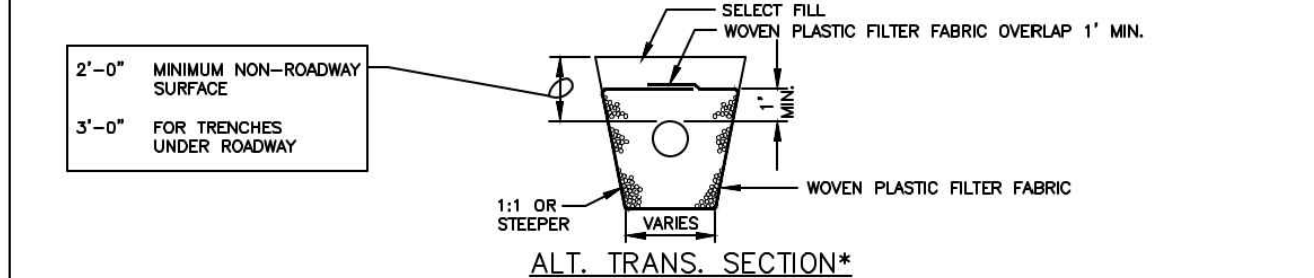
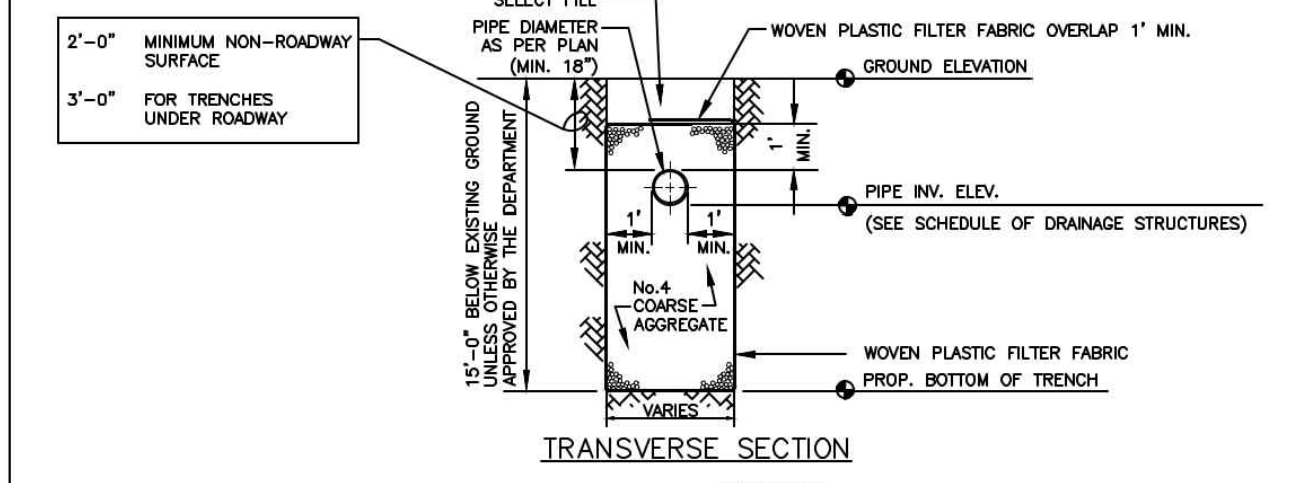
PERFORATED PIPE DIA.	24"
TOP ELEVATION OF TRENCH	5.43'
GWT ELEVATION	3.00'
INVERT OF PIPE	3.00'
BOTTOM ELEVATION OF TRENCH	1.00'
TRENCH WIDTH	5.00'
H2	4.60'
Du	2.43'
Ds	2.00'

PROPOSED EXFILTRATION TRENCH DATA (EAST)

PERFORATED PIPE DIA.	24"
TOP ELEVATION OF TRENCH	6.83'
GWT ELEVATION	3.00'
INVERT OF PIPE	3.00'
BOTTOM ELEVATION OF TRENCH	1.00'
TRENCH WIDTH	5.00'
H2	6.00'
Du	3.83'
Ds	2.00'



NOTE:
1. AFTER THE COARSE AGGREGATE HAS BEEN PLACED TO THE PROPER ELEVATION IT SHALL BE CAREFULLY WASHED DOWN WITH CLEAN WATER, OR TAMPEDED, TO ALLOW FOR INITIAL SETTLEMENT THAT MAY OCCUR. IF SETTLEMENT DOES TAKE PLACE, ADDITIONAL NO. 4 COARSE AGGREGATE SHALL BE ADDED TO RESTORE THE PROPER ELEVATION SO THAT THE EXFILTRATION TRENCH IS COMPLETED IN ACCORDANCE WITH THE DETAILS.



* MAY BE USED IN AREAS WHERE TRENCH WALLS WILL NOT STAND VERTICAL, OR WHERE CAVE-IN BELOW THE WATER TABLE IS LIKELY TO OCCUR. TO BE USED AT THE ENGINEER'S DISCRETION.

MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	APPROVED 04/16/2019	REVISED 02/28/2011 09/28/2012 10/19/2012	STANDARD STORM DRAINAGE DETAIL EXFILTRATION TRENCH (FRENCH DRAIN)	SD 1.1	SHEET 1 OF 2
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NOTES CONTINUED:
3. THE MINIMUM PIPE DIAMETER FOR DRAINAGE SYSTEM WITHIN THE ROADWAY RIGHT-OF-WAY SHALL BE 18 INCHES. 15 INCH PIPE MAY BE USED IN PRIVATE ROADWAYS.
4. NO TREES TO BE PLANTED WITHIN 5 FEET OF THE EDGE OF THE TRENCH.
5. TYPE 7\"/>

GENERAL NOTES FOR PIPE CULVERTS

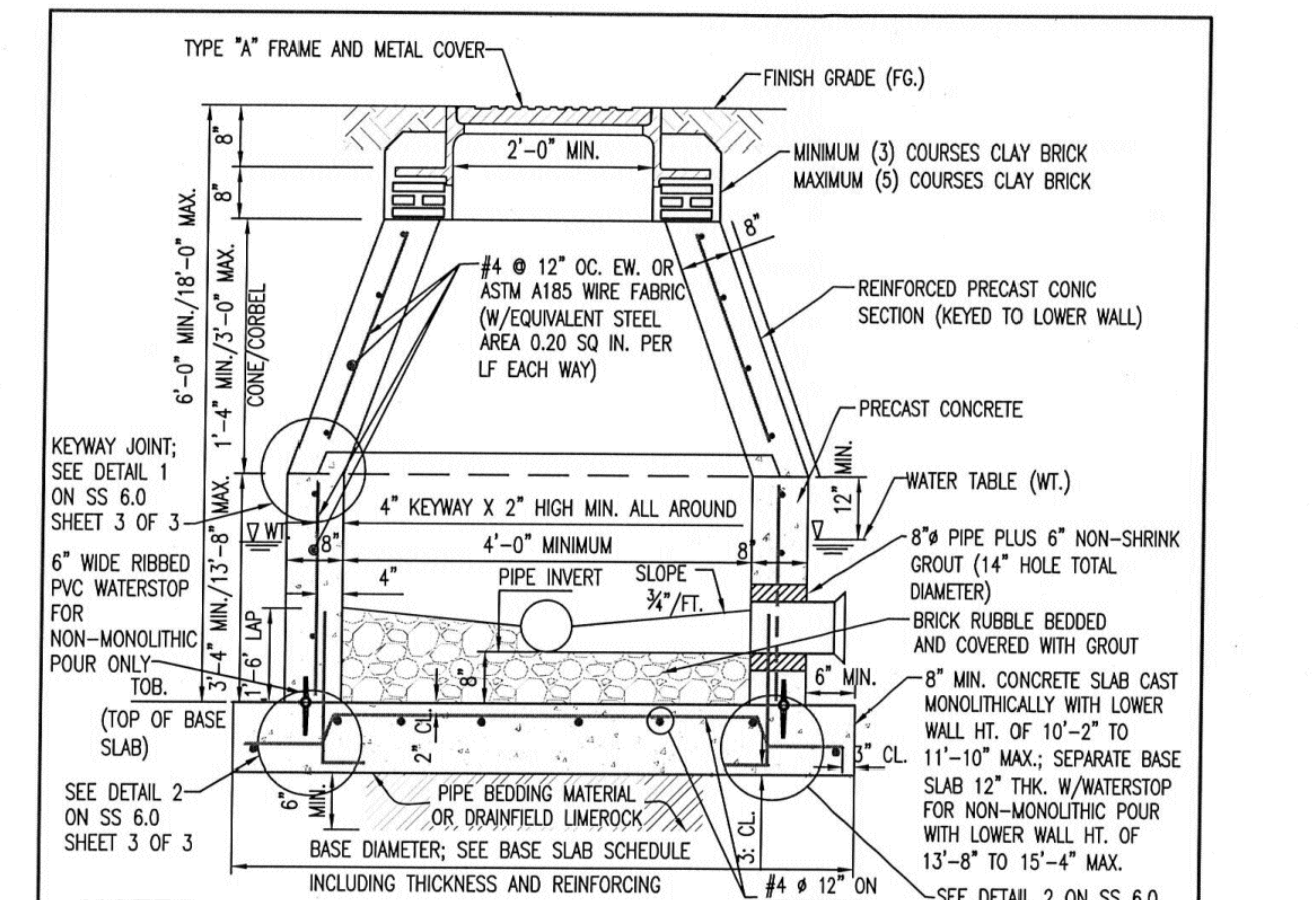
CONTRACTOR HAS THE OPTION OF INSTALLING ANY PIPE MEETING THE REQUIREMENTS OF SECTION 443-2 OF THE FDOT STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION AS LONG AS THE MANUFACTURER IS LISTED, AT THE TIME OF PIPE INSTALLATION, IN FDOT'S LIST OF PRODUCERS WITH ACCEPTED QUALITY CONTROL PROGRAMS. PIPES WITH LESS THAN A 100-YEAR CERTIFICATION CANNOT BE USED ON SECTION LINE, HALF SECTION LINE, COLLECTOR ROADWAYS, AND ARTERIALS. 50-YEAR PIPE CERTIFICATION REQUIRED FOR ALL OTHER MINOR/LOCAL ROADWAYS.

PIPE DIAMETER (inches)	MINIMUM NUMBER OF PERFORATION IN PIPE CULVERTS	
	OUTER SHELL	LINER
15	100	50
18	120	60
24	160	80
30	200	100
36	240	120
42	275	140
48	315	150
54	355	180
60	395	200
72	470	235
84	550	275

NOTES:
PERFORATIONS SHALL BE UNIFORMLY SPACED AROUND THE FULL PERIPHERY OF THE PIPE TO WITHIN 4\"/>

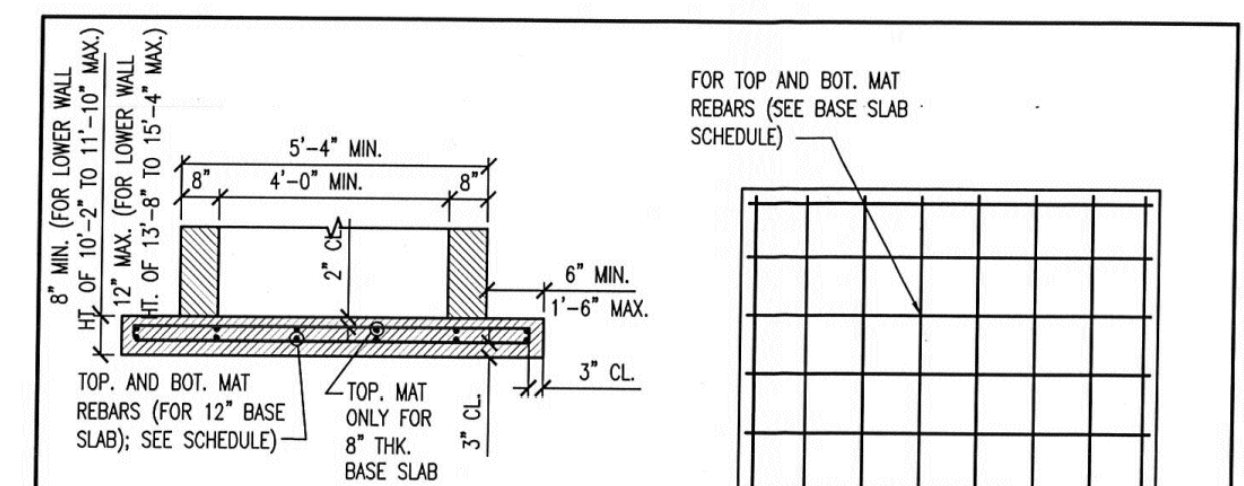
MIAMI-DADE COUNTY DEPARTMENT OF TRANSPORTATION AND PUBLIC WORKS	APPROVED 04/16/2019	REVISED 06-24-08 10-22-13 05-22-21	STANDARD STORM DRAINAGE DETAIL EXFILTRATION TRENCH (PIPE CULVERT NOTES)	SD 1.1	SHEET 2 OF 2
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EXFILTRATION TRENCH DETAIL NTS



NOTES:
1. BRICK MASONRY CONSTRUCTION TO BE STUCCOED WITH 3/4\"/>

MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT	ISSUE DATE 9-30-2014	APPROVED BY J.B.F.	STANDARD DETAIL STANDARD MANHOLE	SS 6.0	SHEET 1 OF 3
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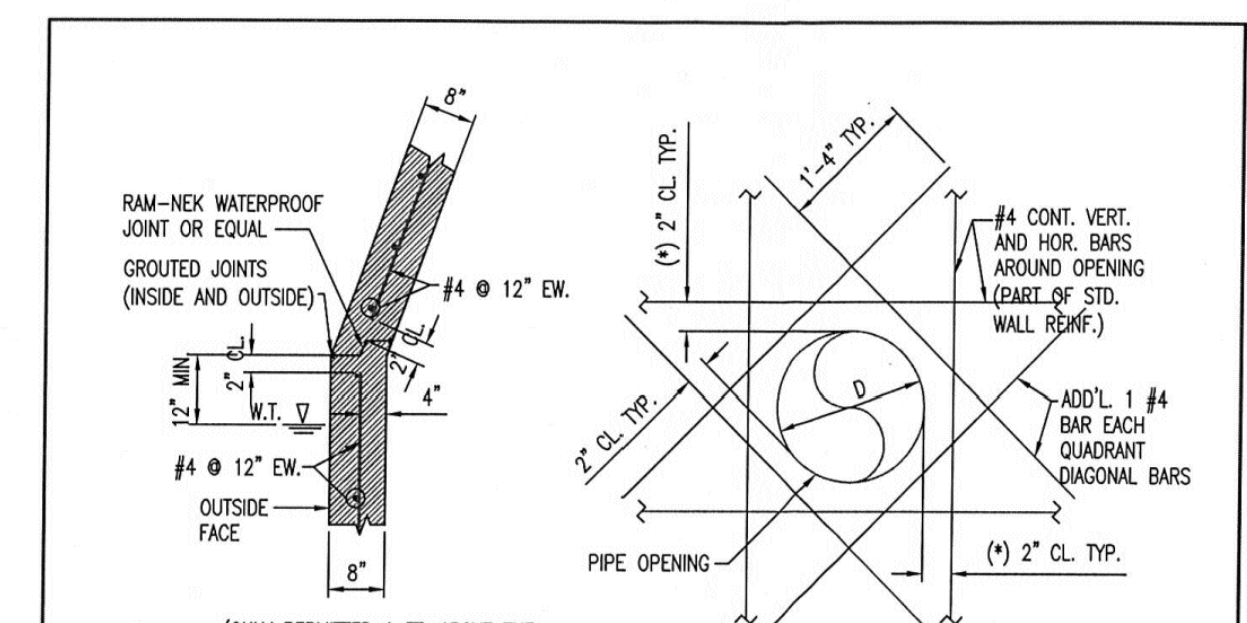


BASE SLAB DETAIL (PVC WATERSTOP NOT SHOWN FOR 12\"/>

MANHOLE BASE SLAB SCHEDULE

BASE SLAB DIA. THICKNESS	(*) MANHOLE OVERALL DEPTH	STEEL REINFORCEMENT	FLOW PATTERNS	MANHOLE COVER	ITEM	SS 7.0	SS 6.1	SS 4.0	CROSS REF.	SPEC. REF.
6'-4\"/>										

MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT	ISSUE DATE 9-30-2014	APPROVED BY J.B.F.	STANDARD DETAIL STANDARD MANHOLE	SS 6.0	SHEET 2 OF 3
--	----------------------	--------------------	----------------------------------	--------	--------------



DETAIL 1 (KEYWAY JOINT DETAIL)
NOTE: NOT REQUIRED FOR MONOLITHIC POUR OF LOWER WALL WITH CONE/CORBEL.
DETAIL 3 (TYPICAL ADDITIONAL WALL REINFORCING AROUND HOLE OPENINGS) (ROUND OR SQUARE)
NOTE: NOT REQUIRED FOR MONOLITHIC POUR OF LOWER WALL WITH CONE/CORBEL.

MIAMI-DADE COUNTY WATER & SEWER DEPARTMENT	ISSUE DATE 9-30-2014	APPROVED BY J.B.F.	KEYWAY JOINT DETAIL STANDARD MANHOLE	SS 6.0	SHEET 3 OF 3
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SANITARY SEWER MANHOLE NTS

C04.4

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SEAL

SHEET NAME
UTILITY DETAILS V

SHEET NUMBER

C04.5

ISSUE FOR PERMIT

GENERAL NOTES:

- Work this Index with Index 425-001 and Index 425-010.
- Grate with vanes directed toward predominant flow.
- Provide 1/2" minimum cover for steel in slab tops unless otherwise shown. Tops may be either cast-in-place or precast concrete.
- Place top slab openings such that 2 slopes of inlet frame will be located directly above bottom wall or riser wall for Alternate B applications.
- When used on a structure with dimensions larger than those detailed on Sheet 3 and risers are not applied, construct the top slab using Index 425-010 with the slab opening adjusted to 24" R.C. Top Slab on Index 425-010 is not permitted.
- Frame may be adjusted with one to six courses of brick.
- Frame grates with approximately equal openings that satisfy AASHTO M-93 loading are permitted. Provide reversible (right or left) grates.

Sheet	Description
1	General Notes and Contents
2	Frame and Grate Details
3	Top Slab Details

LAST REVISION: 11/01/20	DESCRIPTION: CURB INLET TYPE 9	FDOT	FY 2024-25 STANDARD PLANS	INDEX: 425-024	SHEET: 1 of 3
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RECOMMENDED MINIMUM TRENCH WIDTHS

PIPE DIAM.	MIN. TRENCH WIDTH
4"	21"
6"	23"
8"	25"
10"	27"
12"	29"
14"	31"
16"	33"
18"	35"
20"	37"
24"	43"
30"	51"
36"	59"
42"	67"
48"	75"
54"	83"
60"	91"
66"	99"
72"	107"
78"	115"
84"	123"
90"	131"
96"	139"
102"	147"
108"	155"
114"	163"
120"	171"
126"	179"
132"	187"
138"	195"
144"	203"
150"	211"

MINIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS*

PIPE DIAM.	SURFACE LEVEL LOADING CONDITION	
	H-20 (75T AXLE LOAD)	HEAVY CONSTRUCTION
12" - 48"	12"	48"
(300mm - 1200mm)	(305mm)	(1219mm)
60"	24"	60"
(1500mm)	(610mm)	(1524mm)

*VEHICLES IN EXCESS OF 70T MAY REQUIRE ADDITIONAL COVER
**SEE BACKFILL REQUIREMENTS IN NOTE 6

MAXIMUM RECOMMENDED COVER BASED ON VEHICLE LOADING CONDITIONS

PIPE DIAM.	CLASS I			CLASS II		CLASS III	
	COMPACTED	DUMPED	95%	90%	95%	90%	95%
4"	37	18	25	18	18	18	18
(100mm)	(11.3m)	(5.5m)	(7.6m)	(5.5m)	(5.5m)	(5.5m)	(5.5m)
6"	44	20	29	20	21	21	21
(150mm)	(13.4m)	(6.1m)	(8.8m)	(6.1m)	(6.4m)	(6.4m)	(6.4m)
8"	52	25	32	25	26	26	26
(200mm)	(15.8m)	(7.6m)	(9.8m)	(7.6m)	(7.9m)	(7.9m)	(7.9m)
10"	60	30	39	30	31	31	31
(250mm)	(18.3m)	(9.1m)	(11.9m)	(9.1m)	(9.4m)	(9.4m)	(9.4m)
12"	68	35	44	35	36	36	36
(300mm)	(20.7m)	(10.7m)	(13.4m)	(10.7m)	(11.0m)	(11.0m)	(11.0m)
14"	76	40	50	40	41	41	41
(375mm)	(23.1m)	(12.2m)	(15.2m)	(12.2m)	(12.5m)	(12.5m)	(12.5m)
16"	84	45	56	45	46	46	46
(400mm)	(25.6m)	(13.7m)	(17.0m)	(13.7m)	(14.0m)	(14.0m)	(14.0m)
18"	92	50	62	50	51	51	51
(450mm)	(28.0m)	(15.2m)	(18.9m)	(15.2m)	(15.5m)	(15.5m)	(15.5m)
20"	100	55	68	55	56	56	56
(250mm)	(30.5m)	(16.8m)	(20.7m)	(16.8m)	(17.1m)	(17.1m)	(17.1m)
24"	116	65	80	65	66	66	66
(600mm)	(35.3m)	(19.8m)	(24.4m)	(19.8m)	(20.1m)	(20.1m)	(20.1m)
30"	132	75	92	75	76	76	76
(750mm)	(40.2m)	(22.9m)	(28.0m)	(22.9m)	(23.2m)	(23.2m)	(23.2m)
36"	148	85	104	85	86	86	86
(900mm)	(45.1m)	(25.9m)	(31.6m)	(25.9m)	(26.2m)	(26.2m)	(26.2m)
42"	164	95	116	95	96	96	96
(1050mm)	(50.0m)	(28.9m)	(35.4m)	(28.9m)	(29.2m)	(29.2m)	(29.2m)
48"	180	105	128	105	106	106	106
(1200mm)	(54.9m)	(31.9m)	(39.1m)	(31.9m)	(32.2m)	(32.2m)	(32.2m)
60"	216	125	152	125	126	126	126
(1500mm)	(65.8m)	(38.1m)	(46.3m)	(38.1m)	(38.4m)	(38.4m)	(38.4m)

FILL HEIGHT TABLE GENERATED USING AASHTO SECTION 12, LOAD RESISTANCE FACTOR DESIGN (LRFD) PROCEDURE WITH THE FOLLOWING ASSUMPTIONS:
NO HYDROSTATIC PRESSURE.
UNIT WEIGHT OF SOIL (γ_s) = 120 PCF

COVER HEIGHT TO MATCH TYP 2-01	AGC	SPRINT	CMF
4"	1.0	1.0	1.0
6"	1.0	1.0	1.0
8"	1.0	1.0	1.0
10"	1.0	1.0	1.0
12"	1.0	1.0	1.0
14"	1.0	1.0	1.0
16"	1.0	1.0	1.0
18"	1.0	1.0	1.0
20"	1.0	1.0	1.0
24"	1.0	1.0	1.0
30"	1.0	1.0	1.0
36"	1.0	1.0	1.0
42"	1.0	1.0	1.0
48"	1.0	1.0	1.0
60"	1.0	1.0	1.0

TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)

NOTES:
1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL WHEN REQUIRED.
3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER, THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.
4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER, UNLESS OTHERWISE NOTED BY THE ENGINEER. MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4" (100mm-600mm), 6" (150mm) FOR 30" (750mm-1500mm).
5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6' ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT. FOR TRAFFIC APPLICATIONS WITH LESS THAN FOUR FEET OF COVER, EMBEDMENT OF THE PIPE SHALL BE USING ONLY A CLASS I OR CLASS II BACKFILL.

ADVANCED DRAINAGE SYSTEMS, INC. ("ADS") HAS PREPARED THIS DETAIL BASED ON INFORMATION PROVIDED TO ADS. THIS DRAWING IS INTENDED TO DETAIL THE COMPONENTS AS REQUESTED. ADS HAS NOT PERFORMED ANY ENGINEERING OR DESIGN SERVICES FOR THIS PROJECT. ADS HAS ALSO INDEPENDENTLY VERIFIED THE INFORMATION SUPPLIED. THE INSTALLATION DETAILS PROVIDED HEREIN ARE GENERAL RECOMMENDATIONS AND ARE NOT SPECIFIC FOR THIS PROJECT. THE DESIGN ENGINEER SHALL REVIEW THESE DETAILS PRIOR TO CONSTRUCTION. IT IS THE DESIGN ENGINEER'S RESPONSIBILITY TO ENSURE THE DETAILS PROVIDED HEREIN MEET OR EXCEED THE APPLICABLE NATIONAL, STATE, OR LOCAL REQUIREMENTS AND TO ENSURE THAT THE DETAILS PROVIDED HEREIN ARE ACCEPTABLE FOR THIS PROJECT.

LAST REVISION: 11/01/20	DESCRIPTION: TRENCH INSTALLATION DETAIL (N-12 PER AASHTO)	FDOT	FY 2024-25 STANDARD PLANS	INDEX: 425-024	SHEET: 2 of 3
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1 STORM PIPE BEDDING NTS

LAST REVISION: 11/01/20	DESCRIPTION: CURB INLET TYPE 9	FDOT	FY 2024-25 STANDARD PLANS	INDEX: 425-024	SHEET: 2 of 3
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2 FDOT TYPE 9 CURB INLET NTS

LAST REVISION: 11/01/20	DESCRIPTION: CURB INLET TYPE 9	FDOT	FY 2024-25 STANDARD PLANS	INDEX: 425-024	SHEET: 3 of 3
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FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190

PROJECT PM: AH

PROJECT RE: JH

ISSUE DATE: 04/30/2024

DWG NAME: 220190 C04.DWG

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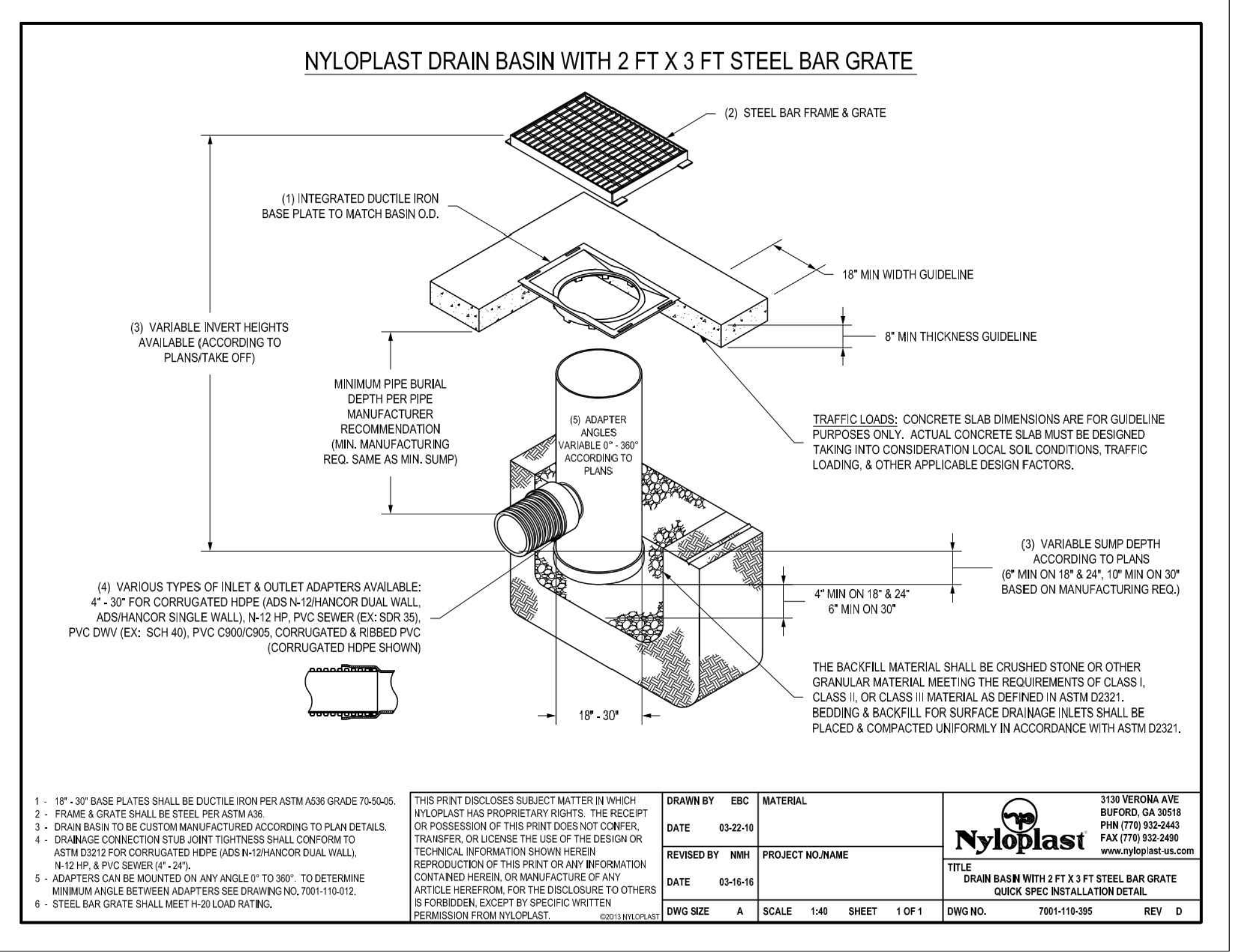
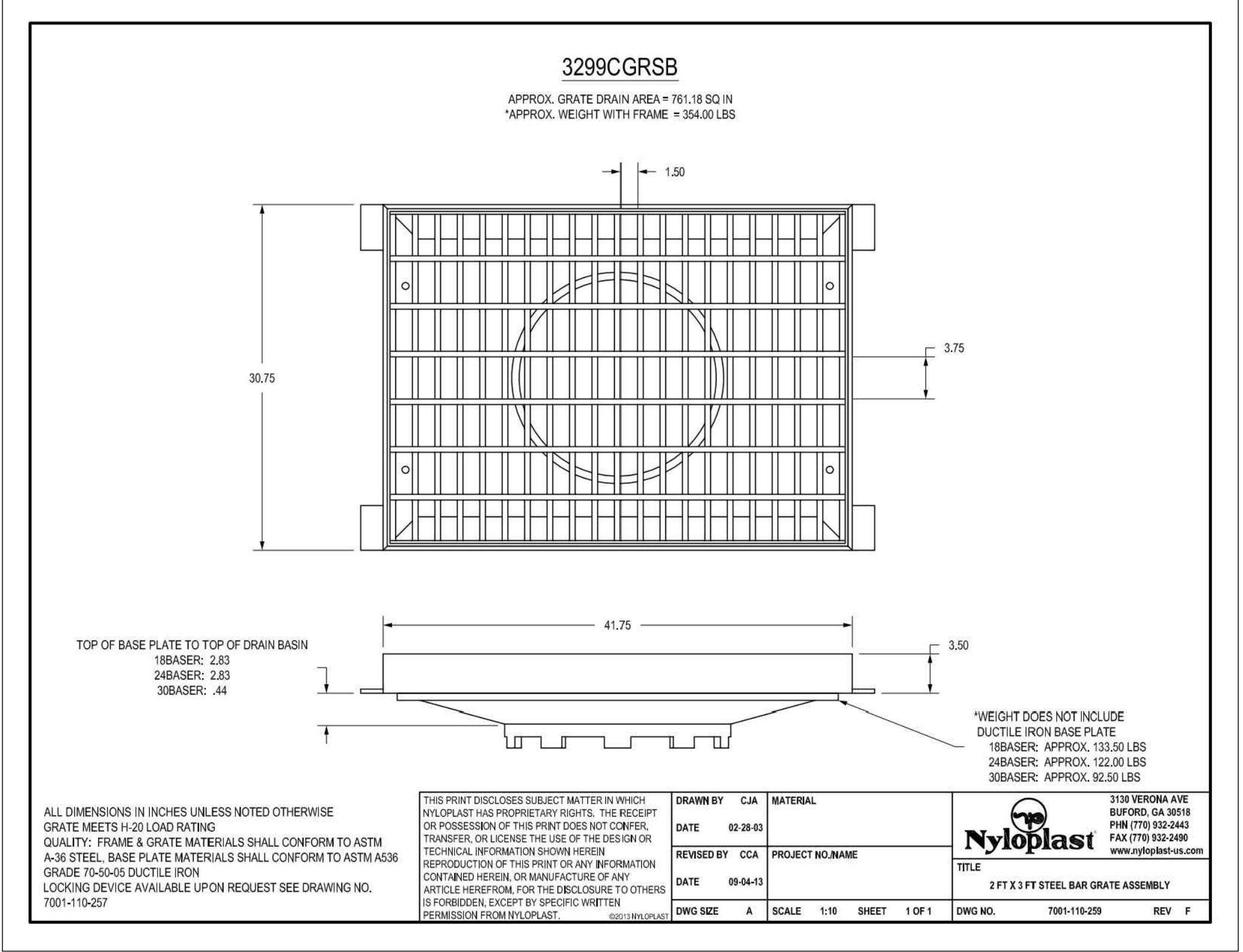
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SHEET NAME
UTILITY DETAILS VI

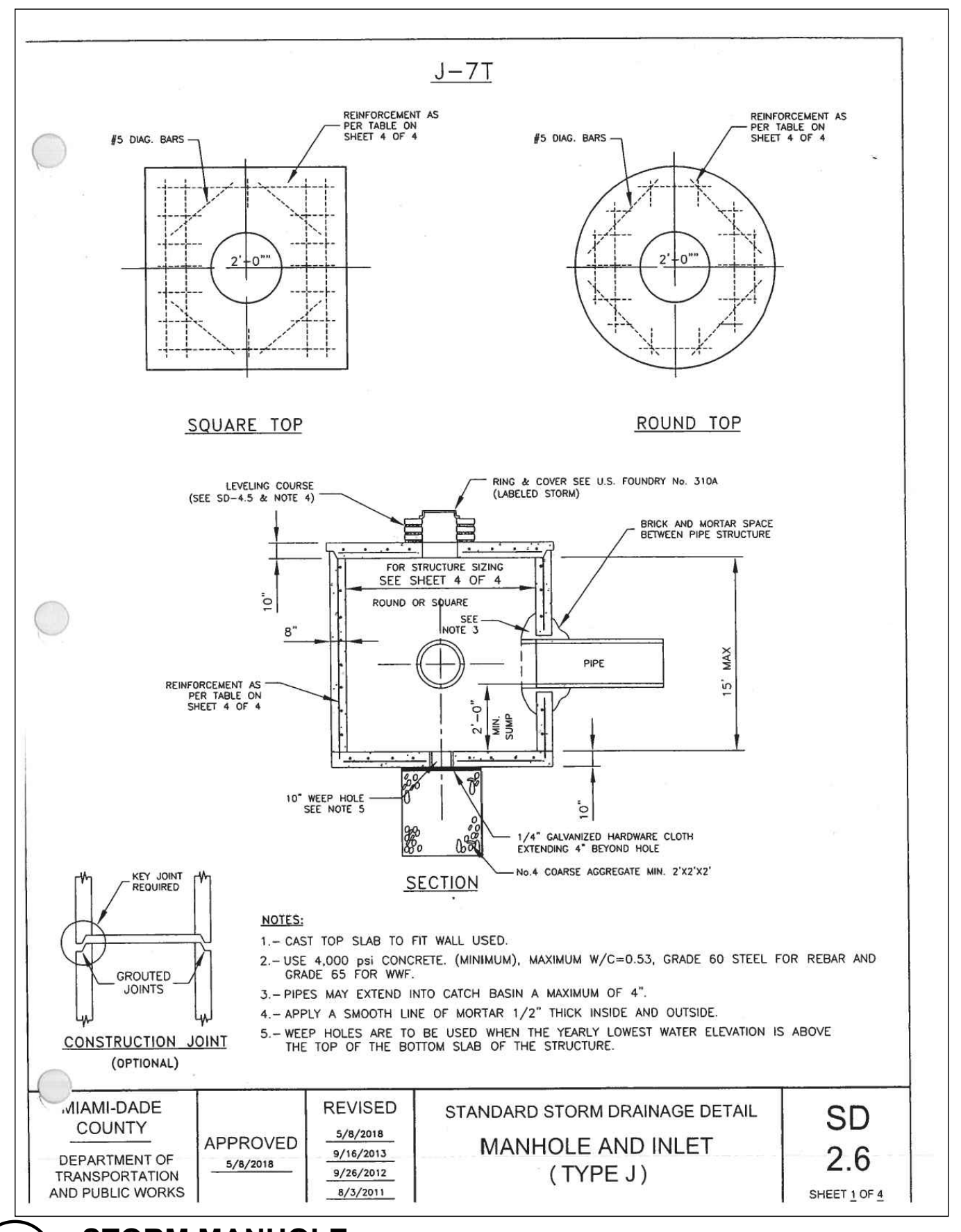
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C04.6

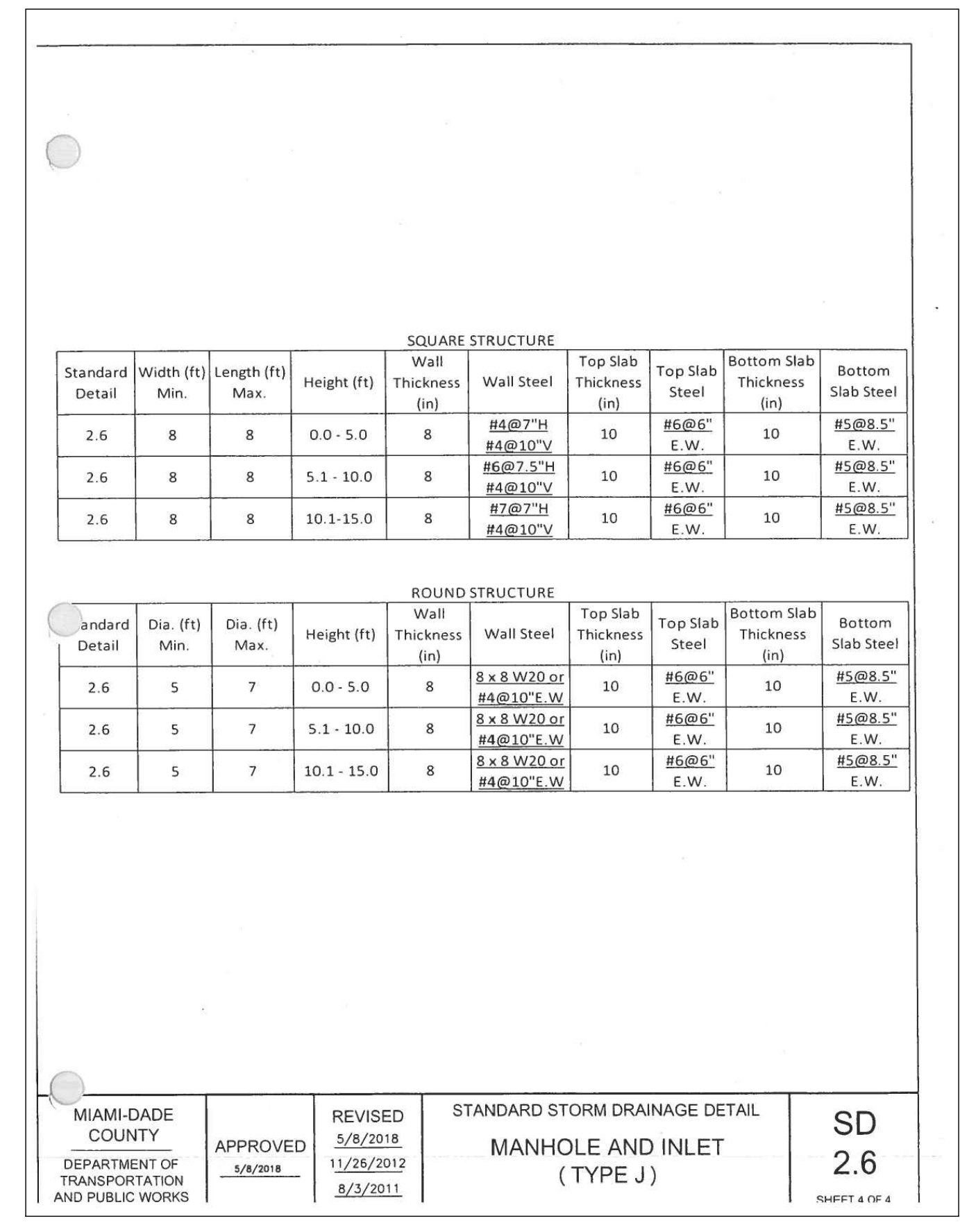
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1 NYLOPLAST GRATE INLET TOP NTS



2 STORM MANHOLE NTS





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SEAL

SHEET NAME

UTILITY DETAILS VII

SHEET NUMBER

C04.7

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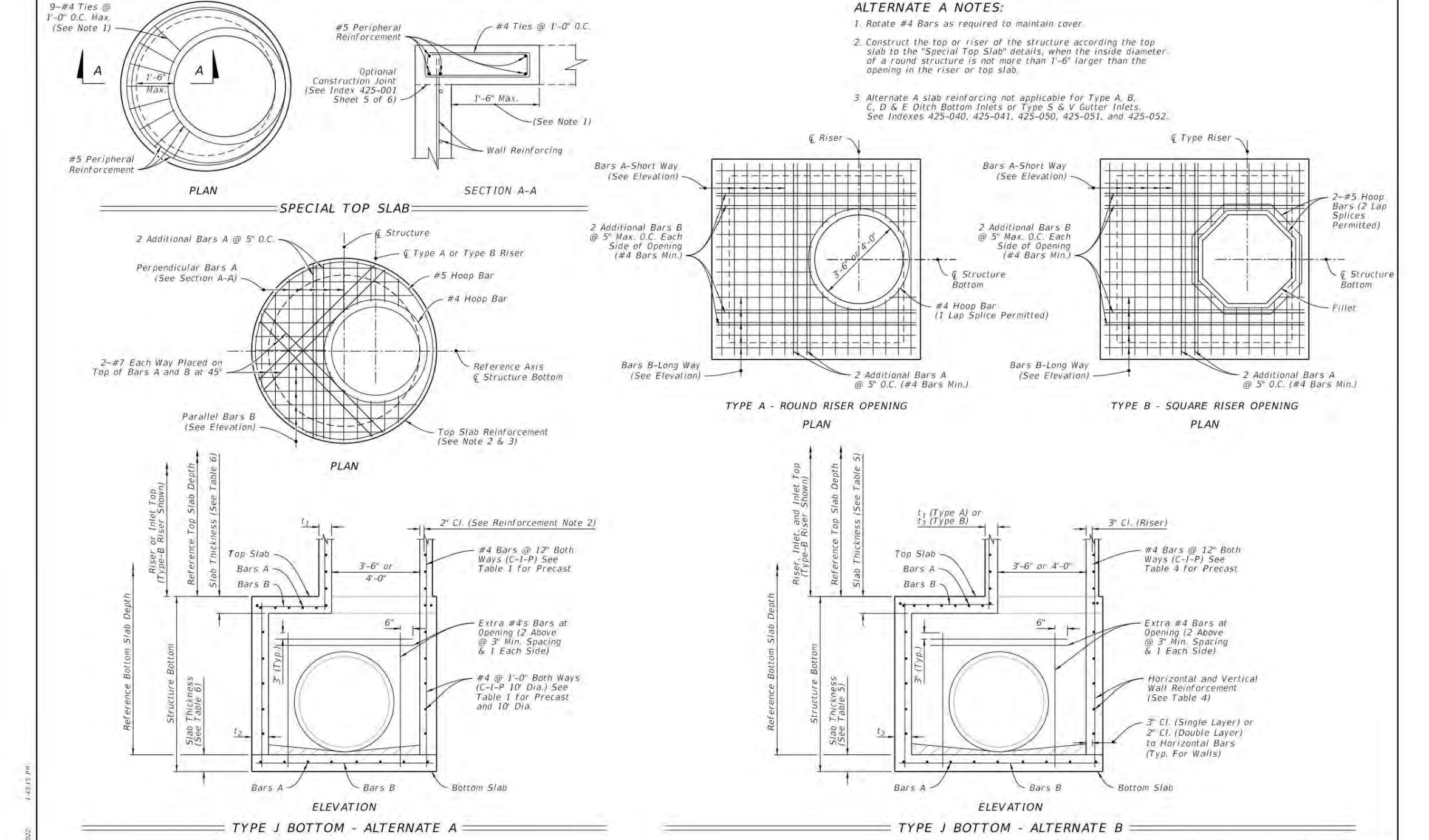
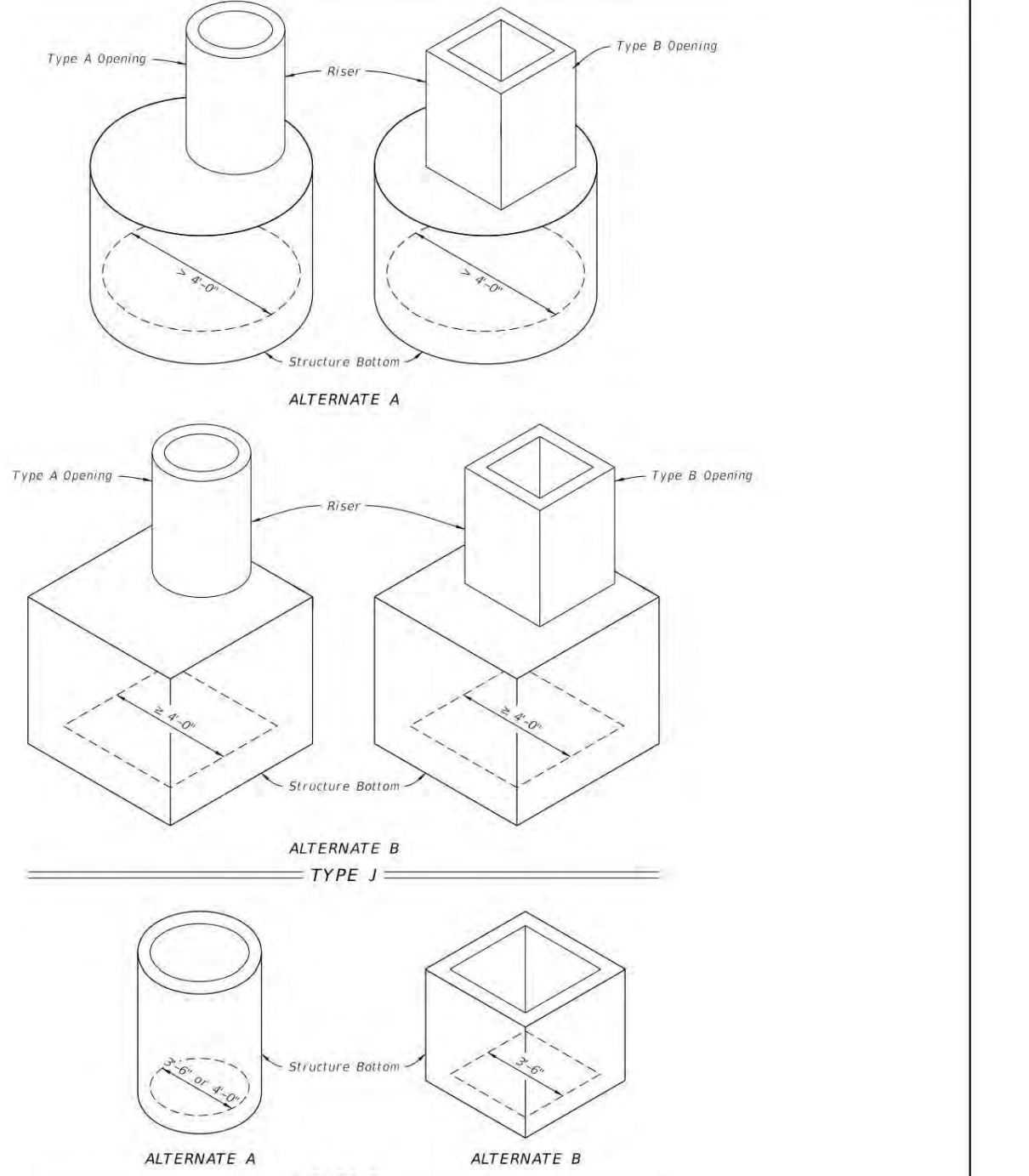
GENERAL NOTES:
1. Work in accordance with Specification 425 and Index 425-001.
2. Type P standard structure bottoms are 4'-0" diameter and smaller (A0). All are 3'-0" square (A1, B). Larger standard structure bottoms are designated Type J. Risers are permitted for all structures.
3. Walls of circular structures (A0) constructed in place may be of brick or reinforced concrete. Cast-in-place and rectangular structures (A1, B) with reinforced concrete only. Wall thickness and reinforcement are for either reinforced cast-in-place or precast units except that precast circular units may be furnished with walls in accordance with ASTM C90 (See Table 1).
4. Top and bottom slab thickness and reinforcement are for precast and cast-in-place construction. Use Class II concrete, except when Class IV concrete is shown in the Plans.
5. A0, A or A1, B structure bottoms may be used in conjunction with curb inlet Types 1, 2, 3, 4, 5, 6, 9, and 10, and any manhole or junction box. All B structure bottoms may be used in conjunction with curb inlet Types 1 & 8, or any ditch bottom inlet.
6. Rectangular structures may be rotated as directed by the Engineer in order to facilitate connections between the structure walls and pipes.
7. Use straight embedment reinforcement in top and bottom slabs, except when A1 hooks are specifically required.
8. Construct corner fillets as shown for rectangular structures used with circular risers and inlet throats, and when used on slope with rectangular risers, inlets, and inlet throats. Construct fillets in the top slab of the inlet structure bottoms when used with the Type B riser. Reinforce each fillet with two #5 bars.
9. Units larger than specified standards may be substituted at the contractor's option when these units will not cause or increase the severity of utility conflicts. Furnish such larger units at no additional cost to the Department. Larger A0: A units cannot replace A1: B units without approval of the Engineer. This note applies to this note only.

REINFORCEMENT NOTES:
1. Locate wall reinforcement in rectangular structures as shown in the WALL REINFORCEMENT SCHEDULE DETAILS in Index 425-001.
2. Provide a minimum 2" clear cover for all reinforcement unless otherwise noted and except for 3/8" diameter ASTM A476 units.
3. Additional bars used to restrain hole formers for precast structures with grouted pipe connections may be left flush with the hole surface.
4. Cut or bend reinforcement at pipe openings to maintain cover.
5. Remove exposed ends of reinforcing at precast pipe openings and grouted joints to 1" below the concrete surface and seal with a Type F epoxy meeting the requirements of Specification 926.
6. Equivalent area smooth or deformed welded wire reinforcement may be substituted in accordance with Index 425-001.

TABLE OF CONTENTS:

Sheet	Description
1	General Notes and Contents
2	Dimensional and Reinforcing Details
3	Tables 1, 2, 3, and 4
4	Tables 5 and 6

LAST REVISION 11/01/20	DESCRIPTION	FDOT FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 1 of 4
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LAST REVISION 11/01/20	DESCRIPTION	FDOT FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 2 of 4
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TABLE 1 - ALTERNATE A - STRUCTURES

TYPE	STRUCTURE/RISE/SLAB DIAMETER (FT)	CAST-IN-PLACE ITEMS						PRECAST ITEMS	
		WALL THICKNESS (IN)	WALL DEPTH (IN)	WALL DEPTH (IN)	WALL DEPTH (IN)	WALL DEPTH (IN)	WALL DEPTH (IN)	WALL THICKNESS (IN)	WALL DEPTH (IN)
A	4-0"	8	8	8	8	8	8	8	8
B	4-0"	8	8	8	8	8	8	8	8
J	4-0"	8	8	8	8	8	8	8	8
P	4-0"	8	8	8	8	8	8	8	8

TABLE 2 - ALTERNATE B SQUARE AND RECTANGULAR STRUCTURES

TYPE	WALL LENGTH (FT)	WALL DEPTH (FT)	WALL THICKNESS (IN)	PRECAST ITEMS	
				WALL DEPTH (IN)	WALL DEPTH (IN)
A	4-0"	4-0"	8	8	8
B	4-0"	4-0"	8	8	8
J	4-0"	4-0"	8	8	8
P	4-0"	4-0"	8	8	8

TABLE 3 - REINFORCING SCHEDULE

SCHEDULE	GRADE 60 BARS OR #5 E5 & #6 K51 WELDED WIRE REINFORCING	MAXIMUM SPACING	GRADE 60 TUBES, SQUARE, AREA	E5 K51 70 K51 (sq. in.)
A12	0.20	12	6	6
A6	0.20	6	5	46
B10	0.24	10	6	26
C5.5	0.24	5.5	3	4
D7	0.52	7	6	5
D9.5	0.52	9.5	4	36
E5	0.73	5	4	4
F3	1.06	3	3	3
G5	1.45	5	4	4
H4	1.75	4	3	3

TABLES 1, 2, 3, AND 4

LAST REVISION 11/01/20	DESCRIPTION	FDOT FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 3 of 4
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TABLE 4 - WALL DESIGNS - RECTANGULAR STRUCTURES

WALL DEPTH	SCHEDULE	VERTICAL REINFORCING		HORIZONTAL REINFORCING		WALL THICKNESS
		WALL DEPTH	SCHEDULE	WALL DEPTH	SCHEDULE	
12-17	A12	12-17	A12	12-17	A12	8
17-20	A12	17-20	A12	17-20	A12	8
20-24	A12	20-24	A12	20-24	A12	8
24-28	A12	24-28	A12	24-28	A12	8
28-32	A12	28-32	A12	28-32	A12	8
32-36	A12	32-36	A12	32-36	A12	8
36-40	A12	36-40	A12	36-40	A12	8

TABLE 5 - SLAB DESIGNS - SQUARE AND RECTANGULAR STRUCTURES

SLAB DEPTH	SCHEDULE	SHORTWAY		LONGWAY	
		SLAB DEPTH	SCHEDULE	SLAB DEPTH	SCHEDULE
8-10	A12	8-10	A12	8-10	A12
10-12	A12	10-12	A12	10-12	A12
12-14	A12	12-14	A12	12-14	A12
14-16	A12	14-16	A12	14-16	A12
16-18	A12	16-18	A12	16-18	A12
18-20	A12	18-20	A12	18-20	A12
20-22	A12	20-22	A12	20-22	A12
22-24	A12	22-24	A12	22-24	A12
24-26	A12	24-26	A12	24-26	A12
26-28	A12	26-28	A12	26-28	A12
28-30	A12	28-30	A12	28-30	A12
30-32	A12	30-32	A12	30-32	A12
32-34	A12	32-34	A12	32-34	A12
34-36	A12	34-36	A12	34-36	A12
36-38	A12	36-38	A12	36-38	A12
38-40	A12	38-40	A12	38-40	A12

TABLE 6 - SLAB DESIGNS ROUND STRUCTURES

SLAB DEPTH	SLAB THICKNESS	REIN (12WAY)	
		REIN (12WAY)	SCHEDULE
2-10	6"	6"	C6.5
10-20	6"	6"	C6.5
20-30	6"	6"	C6.5
30-40	6"	6"	C6.5
40-50	6"	6"	C6.5
50-60	6"	6"	C6.5
60-70	6"	6"	C6.5
70-80	6"	6"	C6.5
80-90	6"	6"	C6.5
90-100	6"	6"	C6.5
100-110	6"	6"	C6.5
110-120	6"	6"	C6.5
120-130	6"	6"	C6.5
130-140	6"	6"	C6.5
140-150	6"	6"	C6.5
150-160	6"	6"	C6.5
160-170	6"	6"	C6.5
170-180	6"	6"	C6.5
180-190	6"	6"	C6.5
190-200	6"	6"	C6.5

TABLES 5 AND 6

LAST REVISION 11/01/20	DESCRIPTION	FDOT FY 2023-24 STANDARD PLANS	STRUCTURE BOTTOMS TYPE J AND P	INDEX 425-010	SHEET 4 of 4
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REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION

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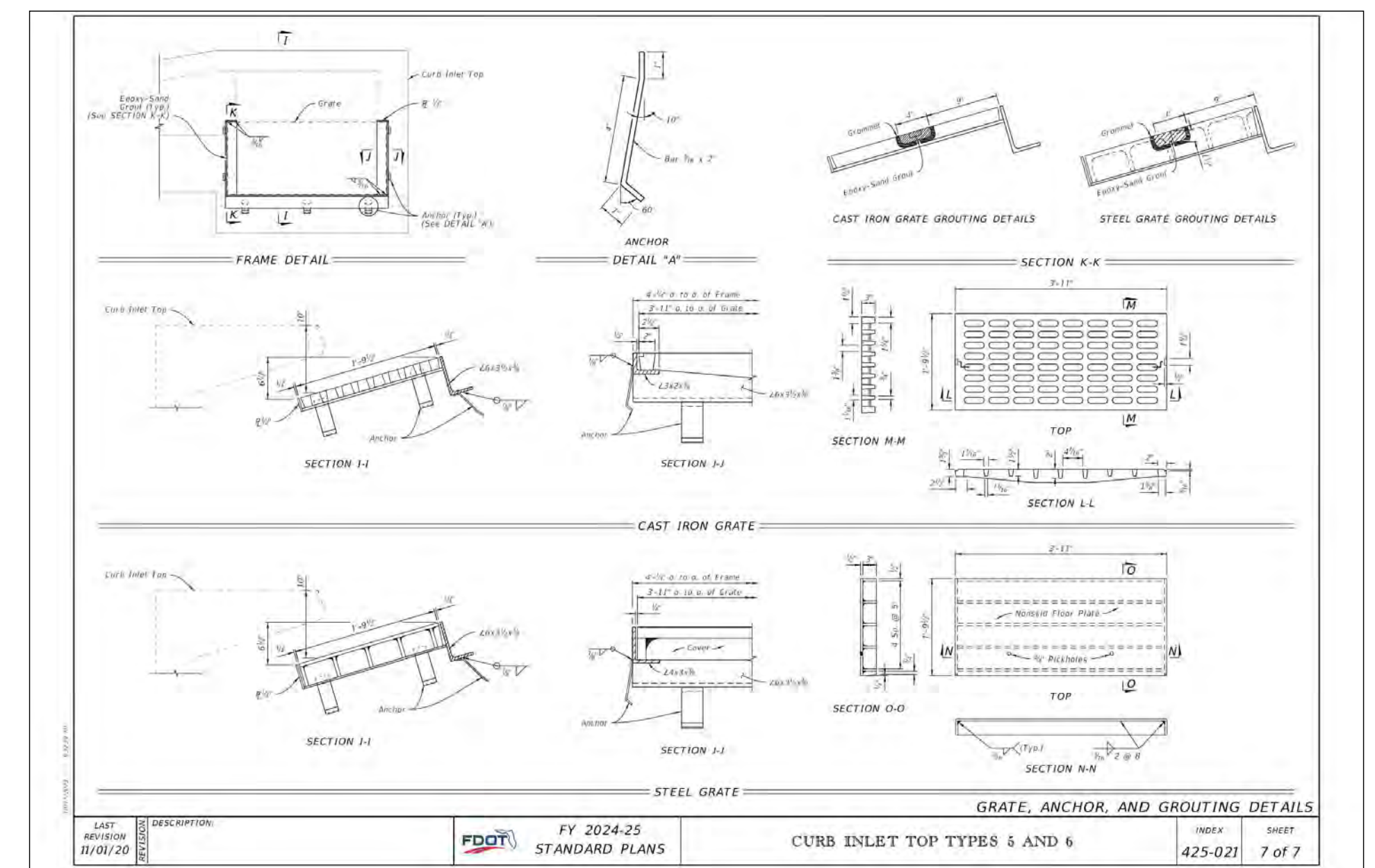
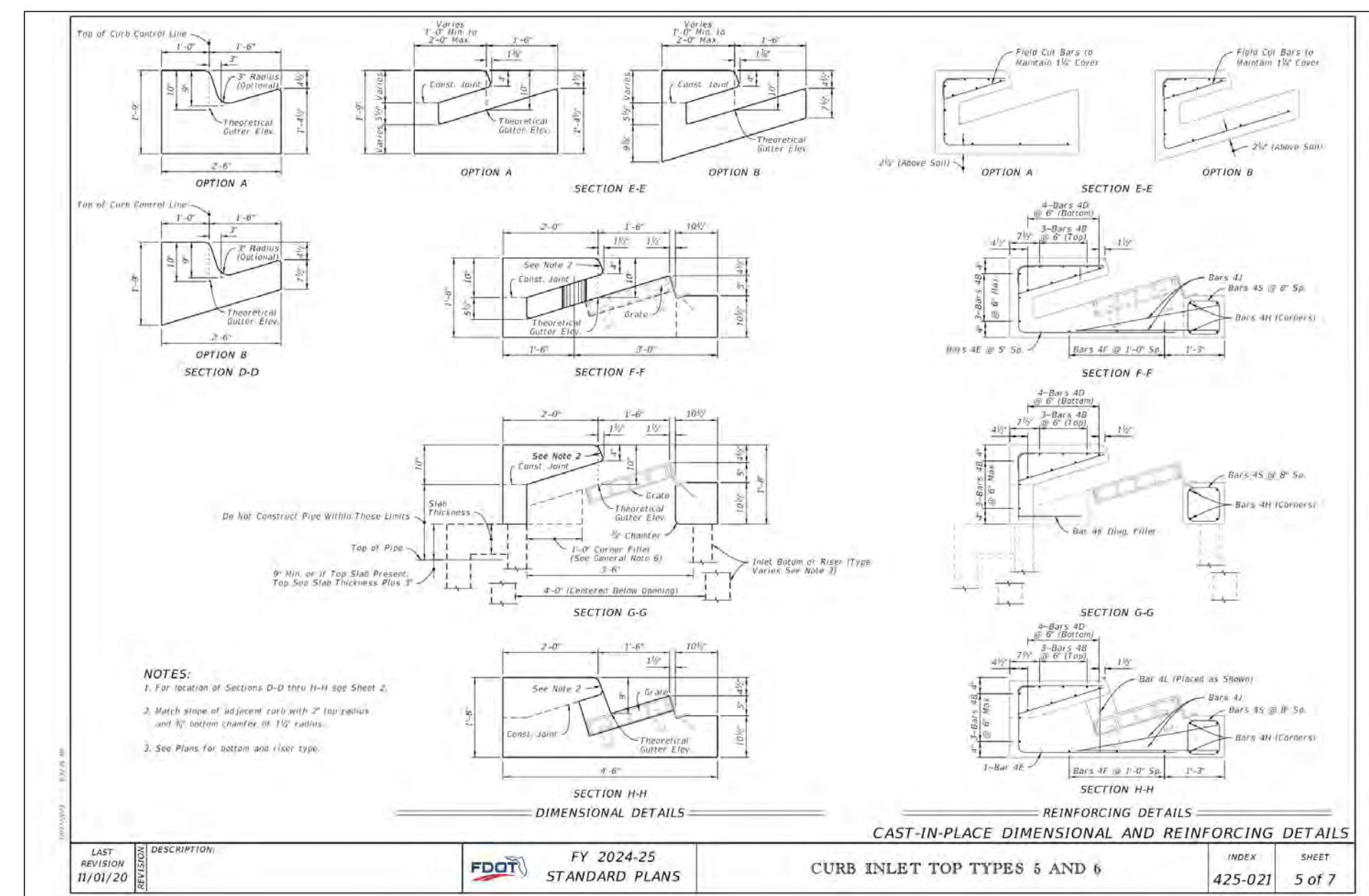
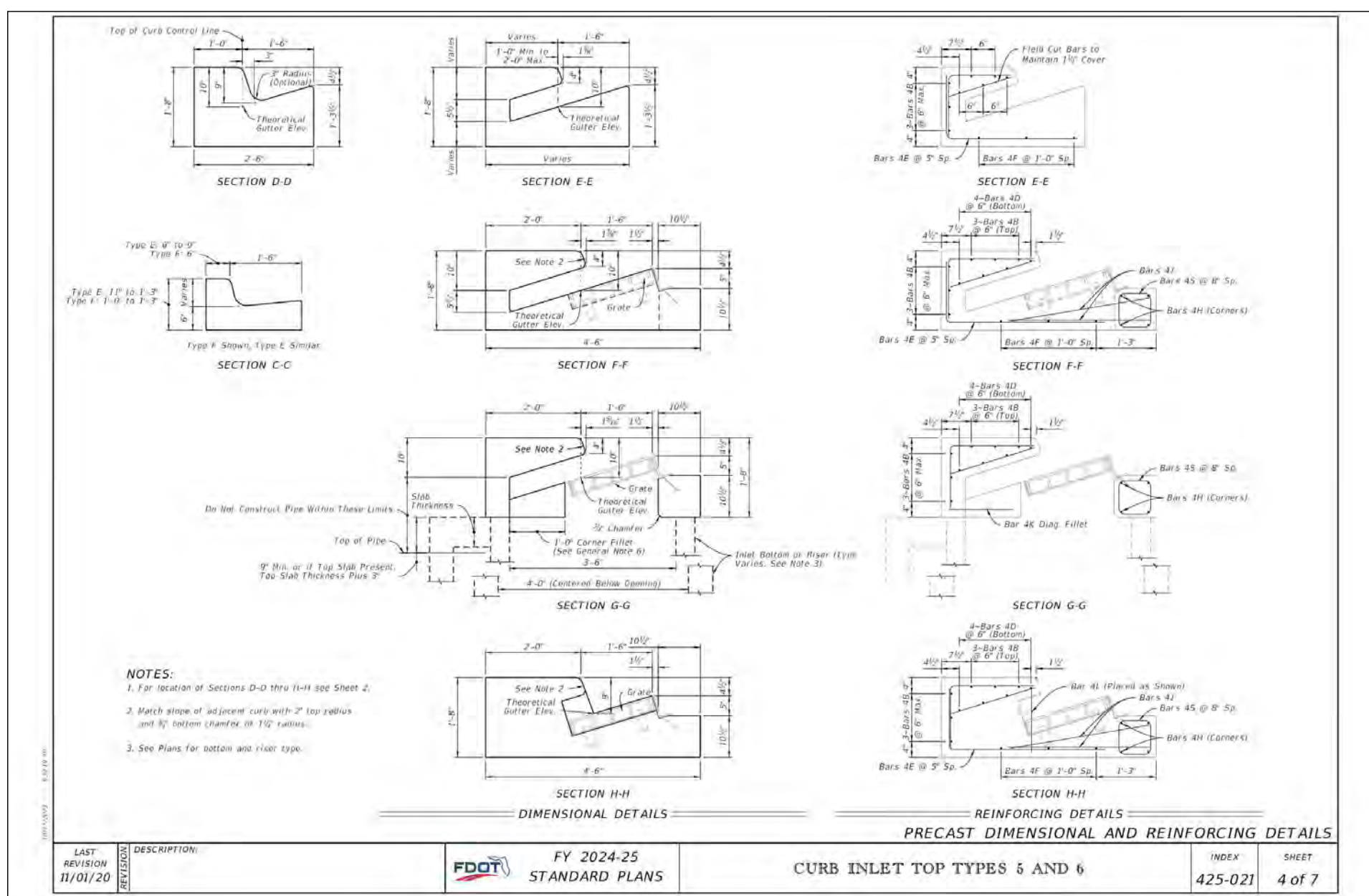
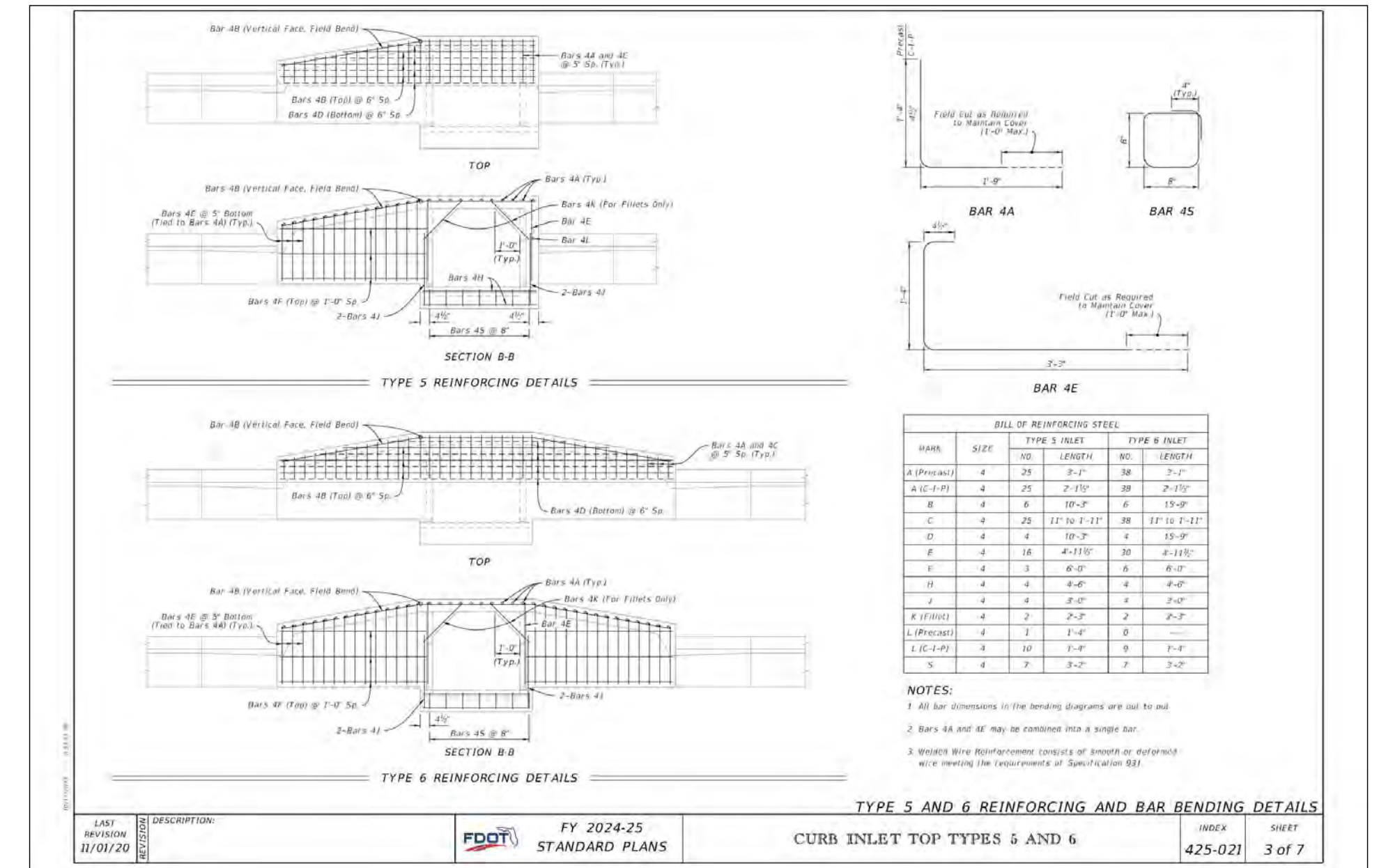
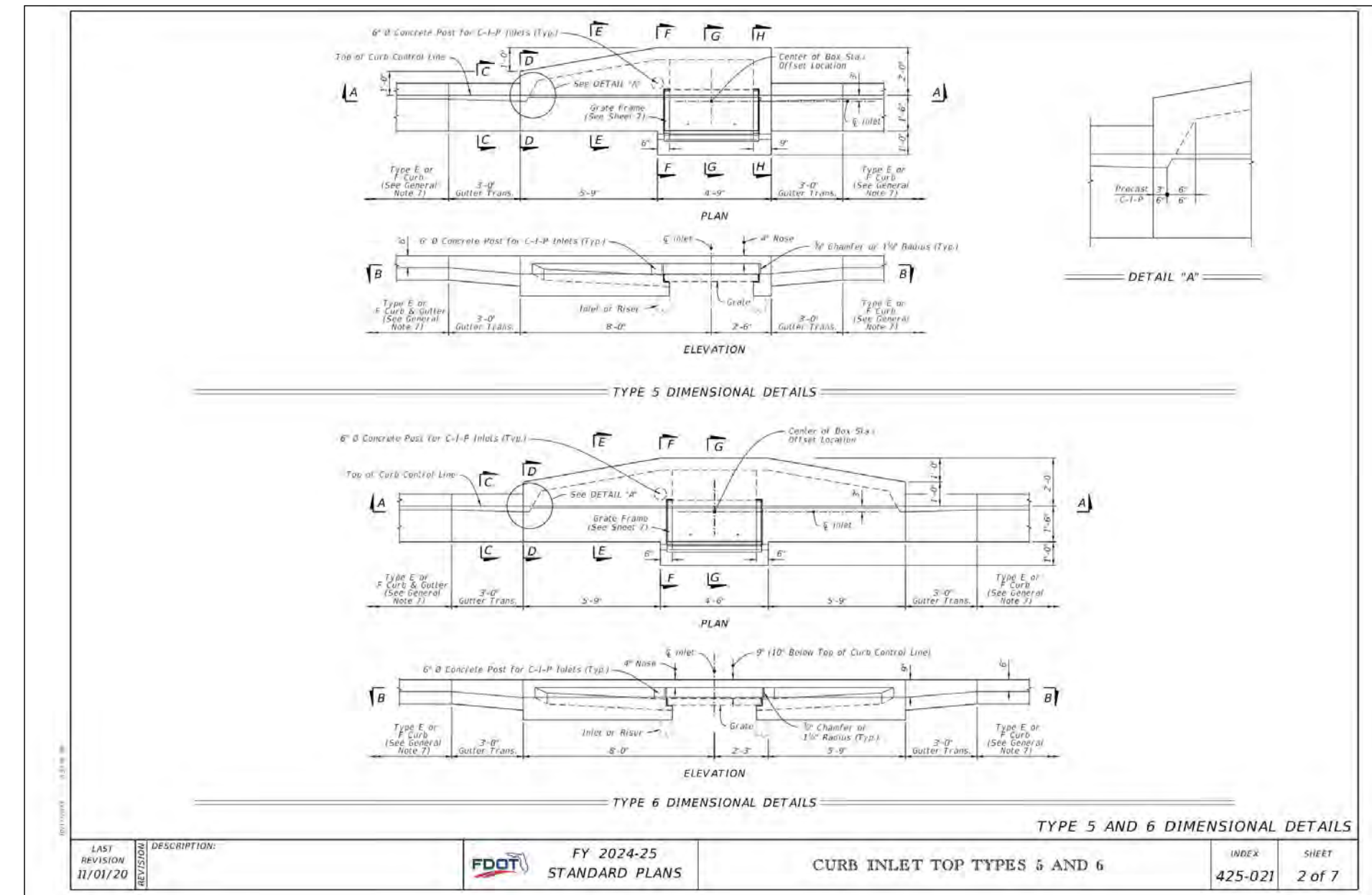
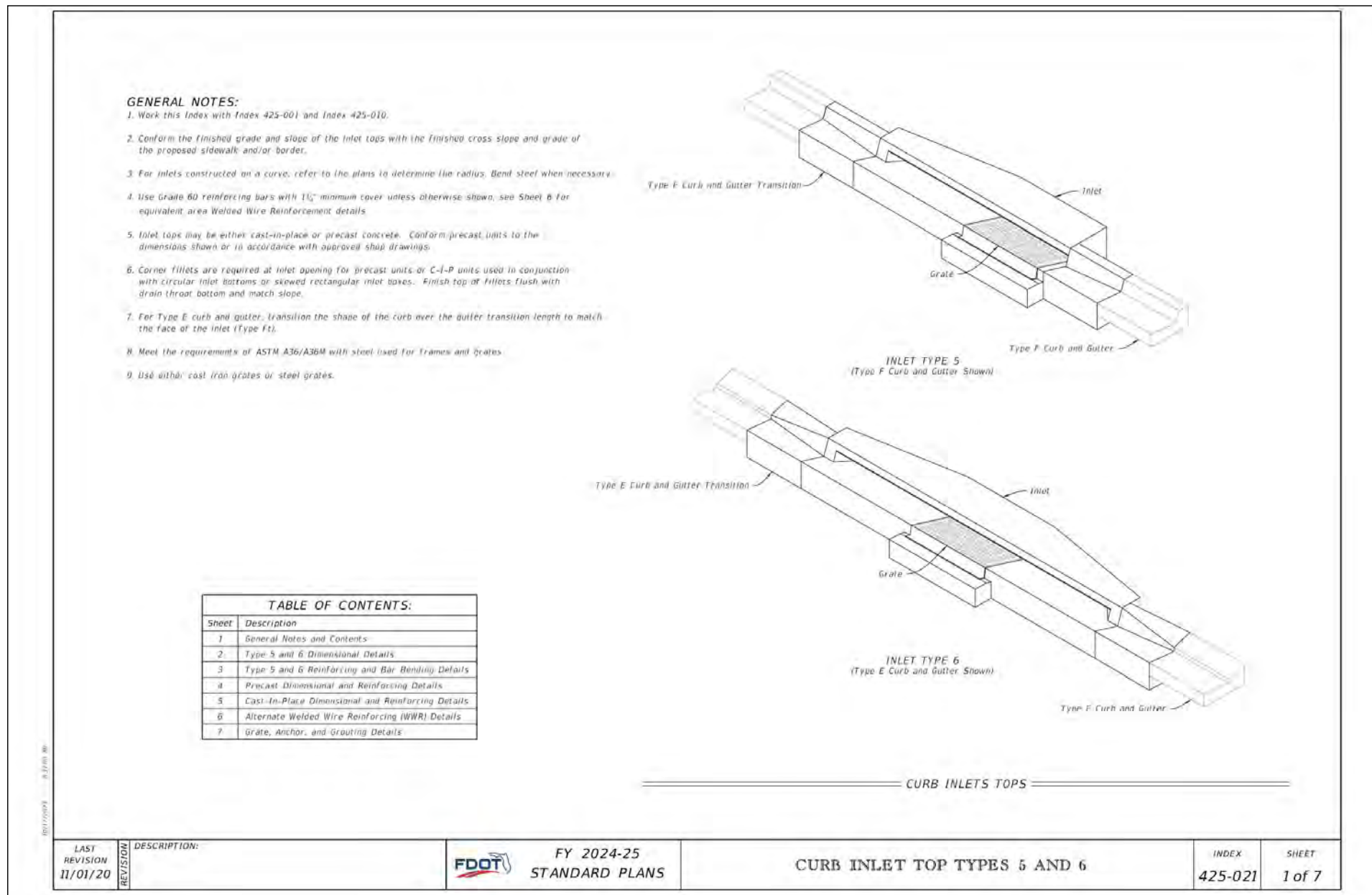
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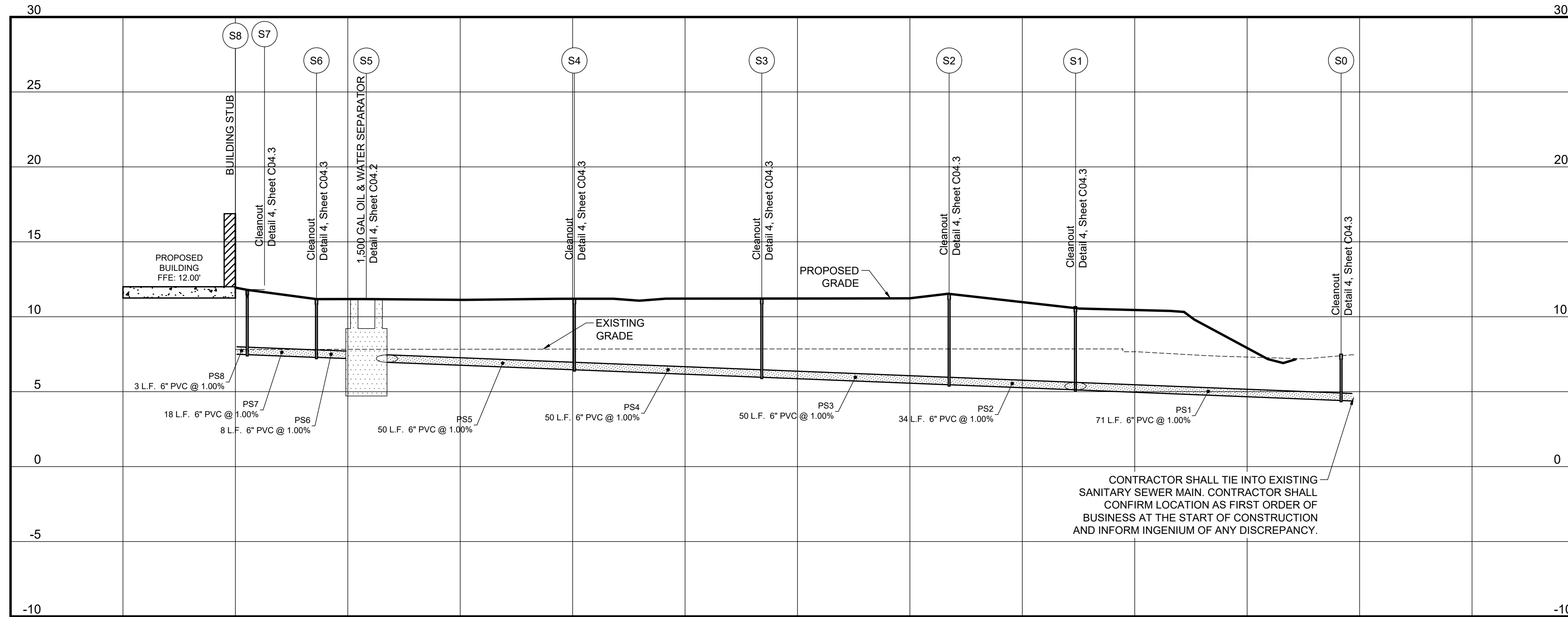
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SANITARY PROFILE S4 - S1



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

CONTRACTOR SHALL TIE INTO EXISTING SANITARY SEWER MAIN. CONTRACTOR SHALL CONFIRM LOCATION AS FIRST ORDER OF BUSINESS AT THE START OF CONSTRUCTION AND INFORM INGENIUM OF ANY DISCREPANCY.

PROFILE NOTES

- CONTROLLED BACK FILL TO BE PLACED IN 6" LOOSE LIFT AND COMPACTED TO 100% ASTM D698 PRIOR TO STORM AND SANITARY SEWER CONSTRUCTION. BACK FILL SHALL BE PLACED TO A MINIMUM OF 2' ABOVE THE CROWN ELEVATION OF THE PIPES.
- STORM DRAIN AND SANITARY SEWER LENGTHS ARE MEASURED FROM CENTER LINE OF STRUCTURE TO CENTERLINE OF STRUCTURE OR FACE OF HEADWALL.
- ALL PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT.
- ALL STORM DRAIN PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 1 ON SHEET C04.5 UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL SANITARY SEWER PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.3 UNLESS SPECIFICALLY NOTED OTHERWISE.
- UNFORESEEN SUBSURFACE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S AND ENGINEER'S ATTENTION IMMEDIATELY IMPLEMENTATION OF CORRECTIVE BEDDING MEASURES WITHOUT THE OWNER'S APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK AND AT NO ADDITIONAL COMPENSATION.
- EXISTING GRADES SHOWN ARE APPROXIMATE AND DO NOT REFLECT TOP SOIL REMOVAL, CLEARING, AND GRUBBING OPERATIONS. THE CONTRACTOR SHALL ASCERTAIN FOR HIMSELF THE EXTENT OF DISTURBANCE FOR THESE ACTIVITIES.
- EXCAVATIONS FOR STRUCTURES SHALL BE TAKEN AS A TRENCHING EXCAVATION WITHOUT FURTHER COMPENSATION.
- SEE SHEET C01.1 FOR GENERAL NOTES.
- SEE SHEET C04.17 FOR STRUCTURE TABLES.



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CLIENT:

LITHIA MOTORS
150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

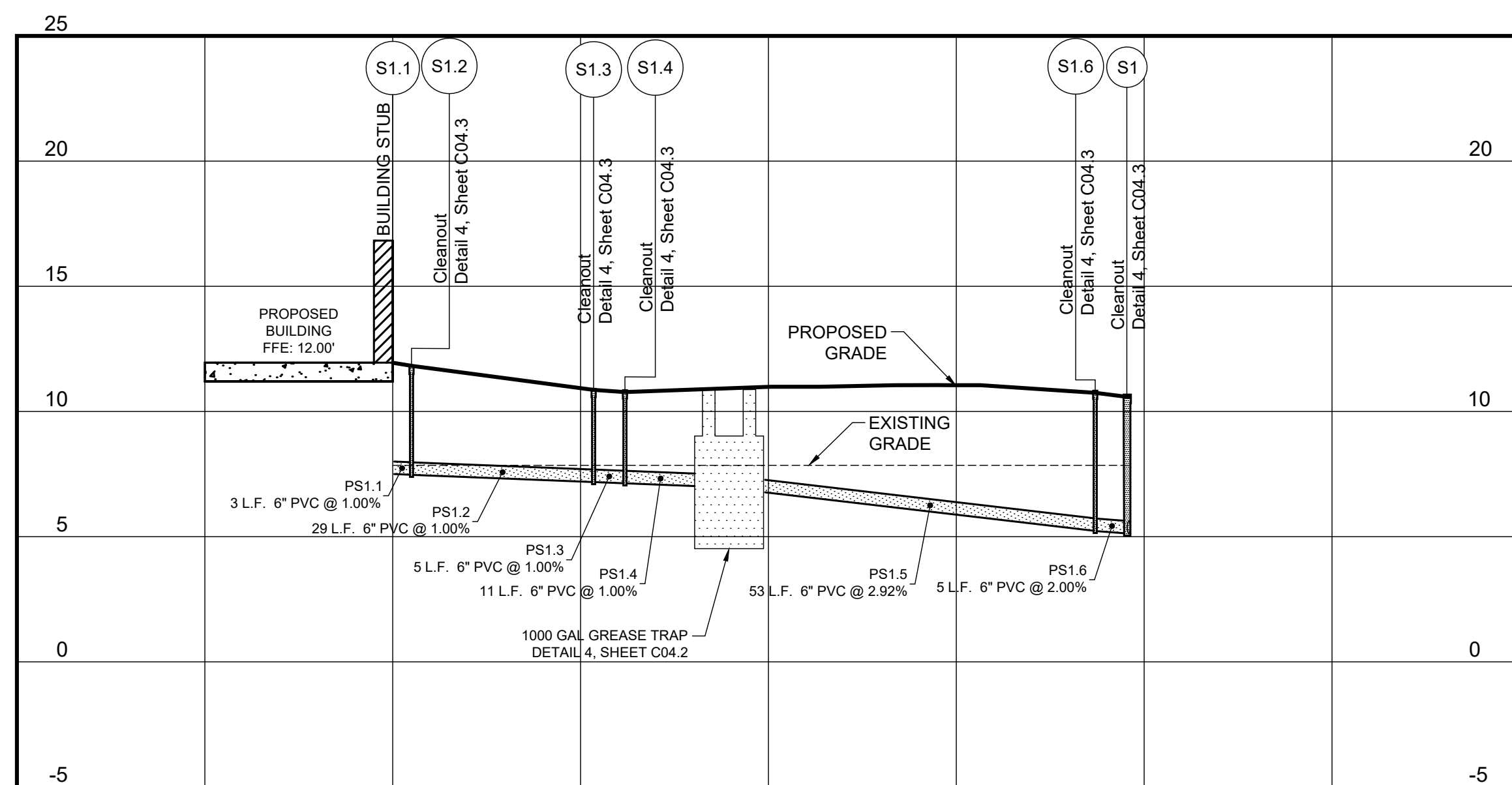
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SEAL

SANITARY PROFILE S1.1 - S1



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

SHEET NAME
PIPE PROFILES I

SHEET NUMBER

C04.9

ISSUE FOR PERMIT



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370

INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C04.DWG

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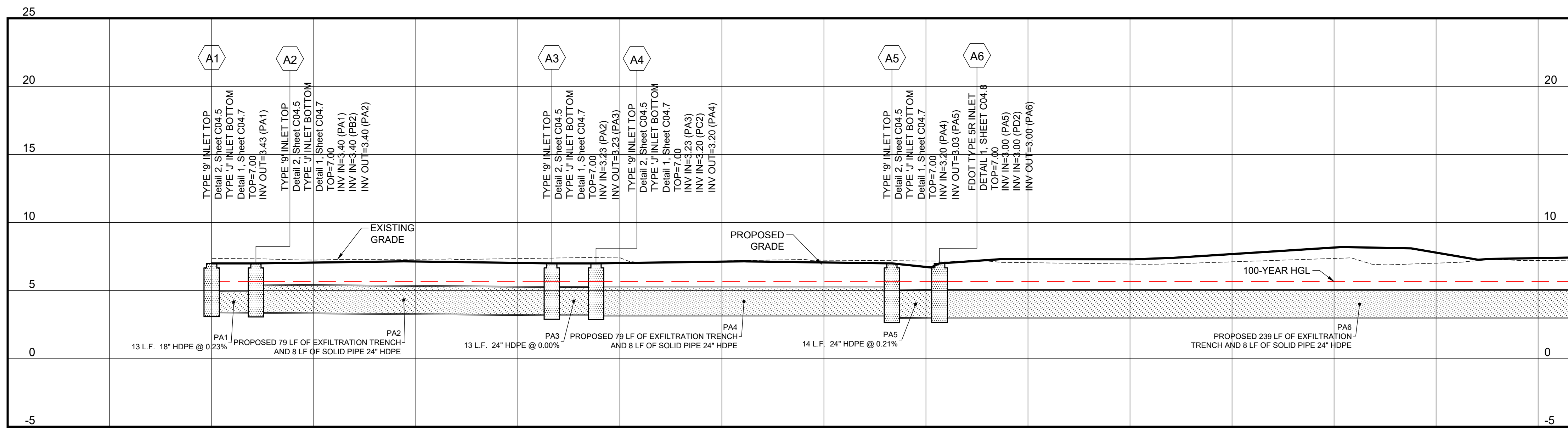
SHEET NAME
PIPE PROFILES II

SHEET NUMBER

C04.10

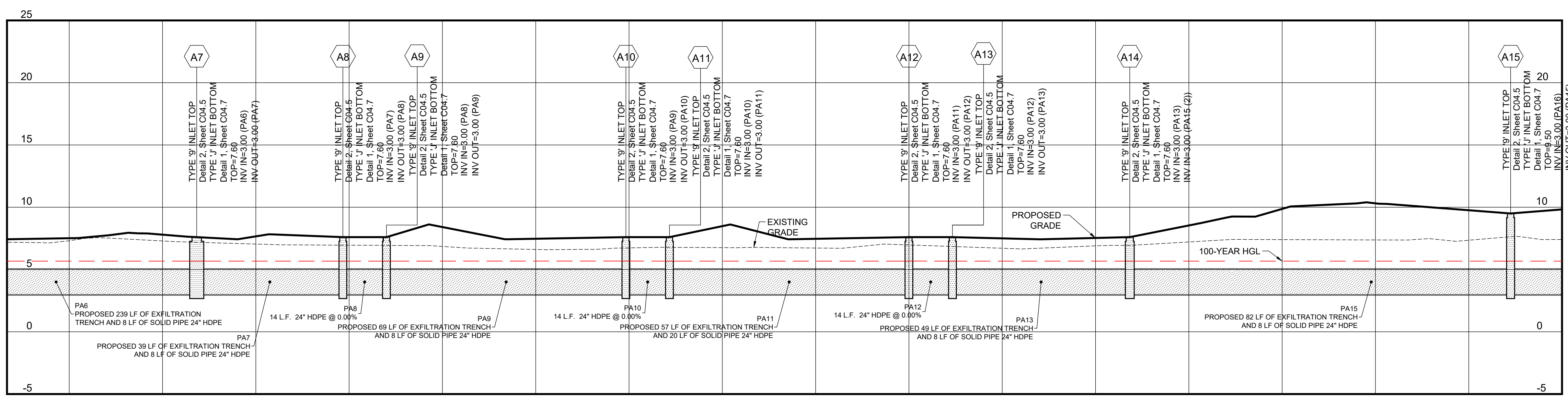
ISSUE FOR PERMIT

STORM PROFILE A1 - A6



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE A7 - A15



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'



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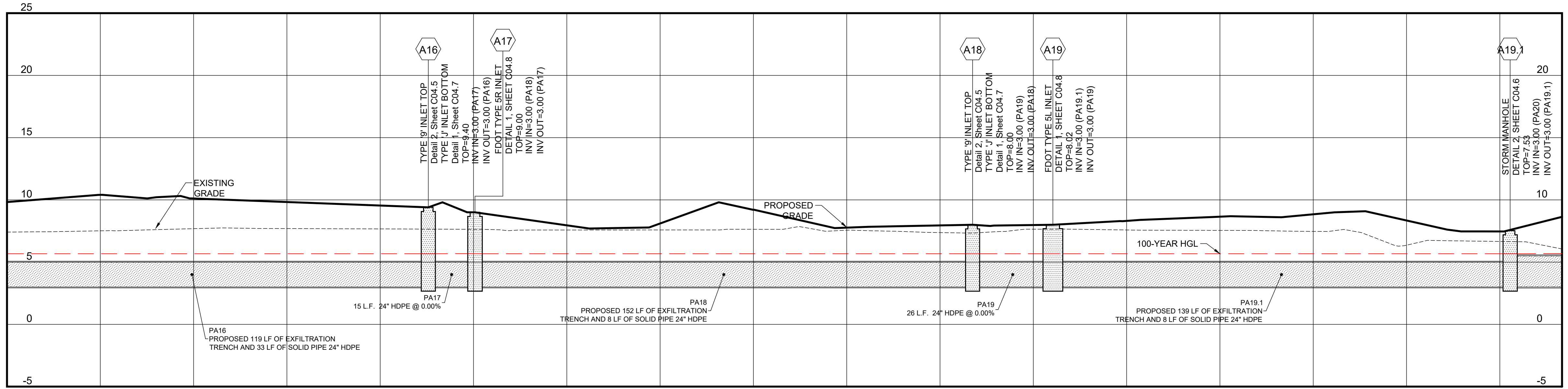
SHEET NAME
PIPE PROFILES III

SHEET NUMBER

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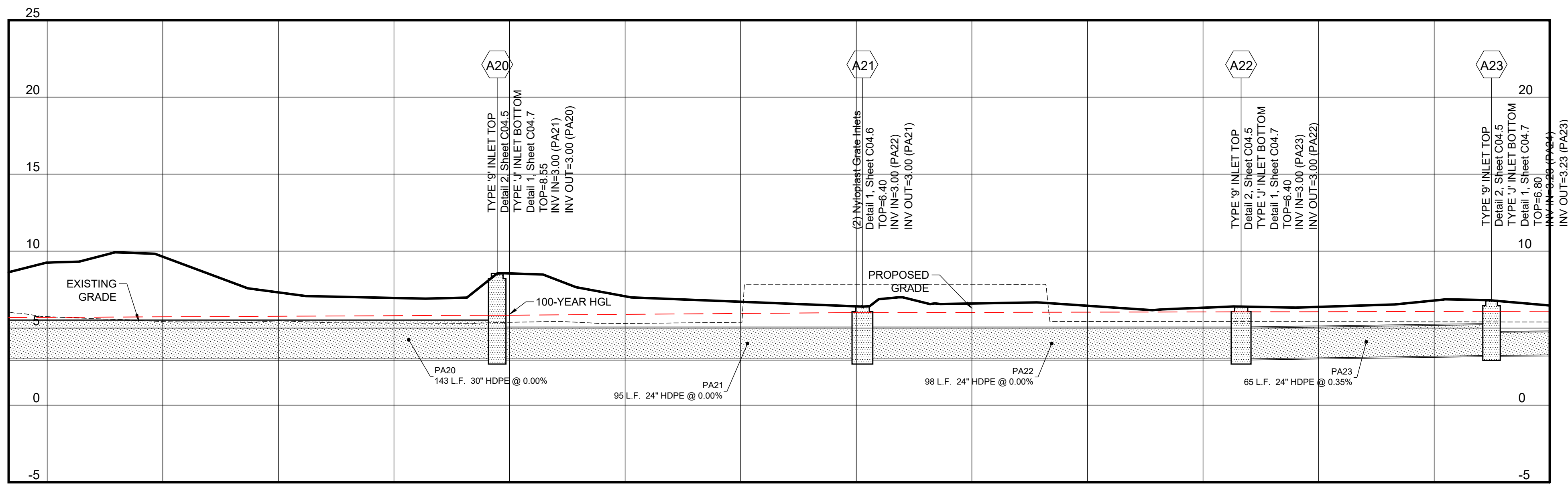
ISSUE FOR PERMIT

STORM PROFILE A16 - A19



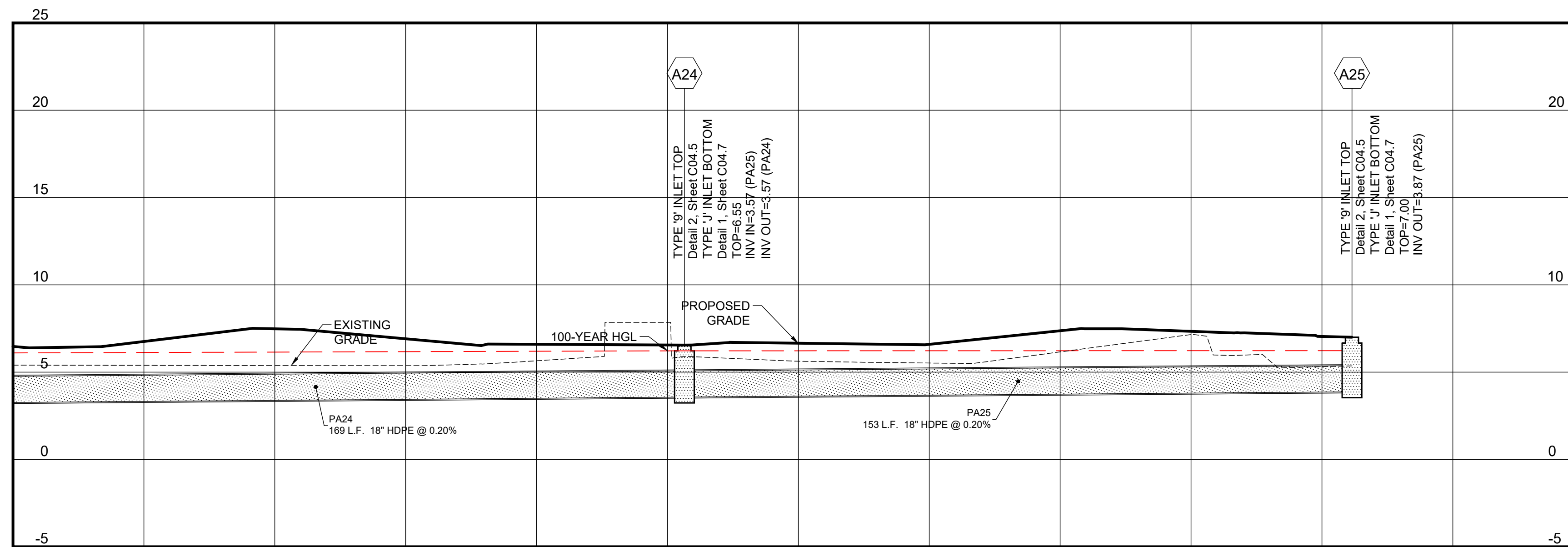
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE A20 - A23



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE A24 - A25



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PROFILE NOTES

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- STORM DRAIN AND SANITARY SEWER LENGTHS ARE MEASURED FROM CENTER LINE OF STRUCTURE TO CENTERLINE OF STRUCTURE OR FACE OF HEADWALL.
- ALL PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT.
- ALL STORM DRAIN PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 1 ON SHEET C04.5 UNLESS SPECIFICALLY NOTED OTHERWISE.
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- SEE SHEET C01.1 FOR GENERAL NOTES.
- SEE SHEET C04.17 FOR STRUCTURE TABLES.



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PROJECT RE: JH
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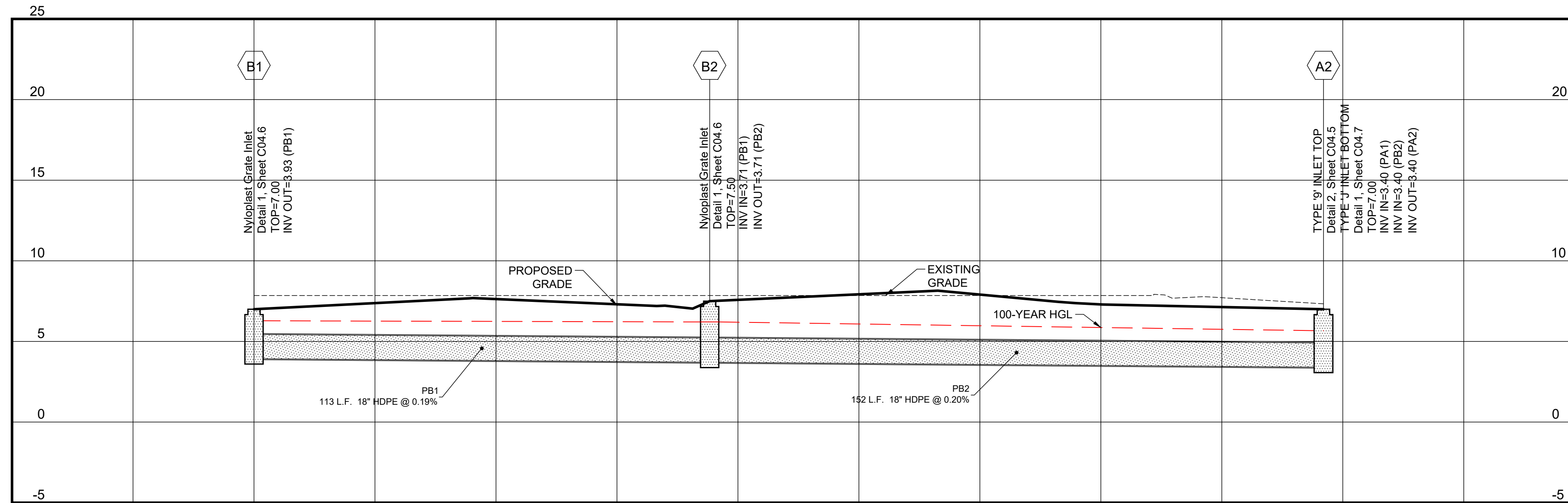
SHEET NAME
PIPE PROFILES IV

SHEET NUMBER

C04.12

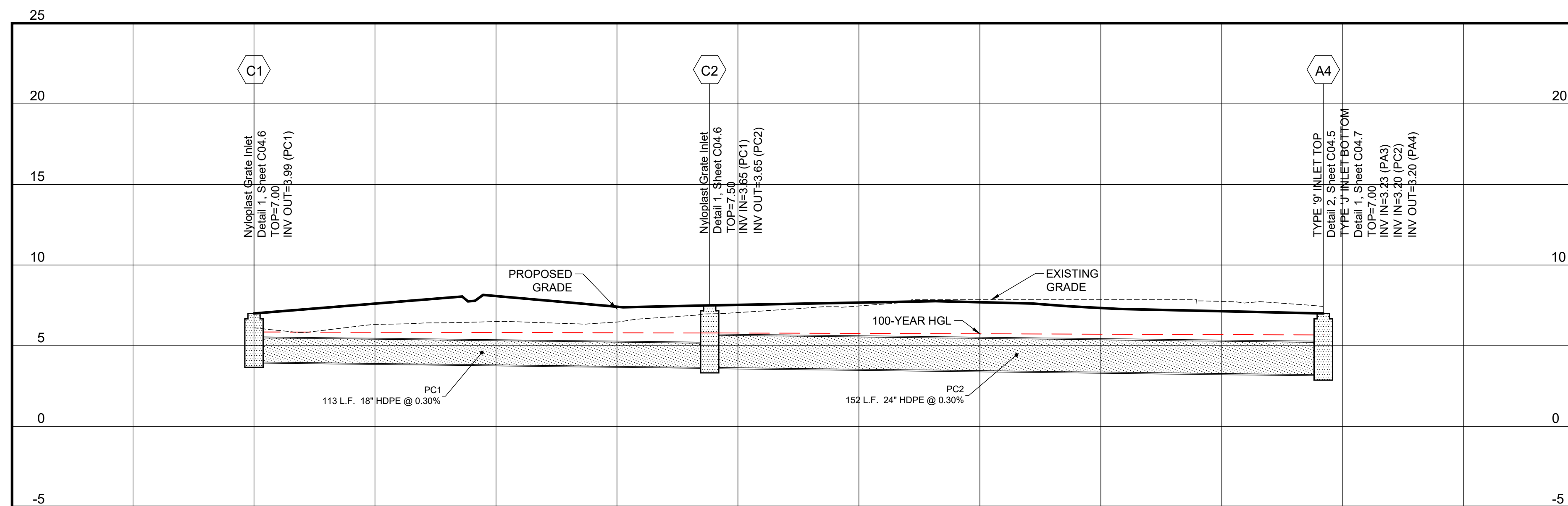
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STORM PROFILE B1 - A2



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE C1 - A4



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

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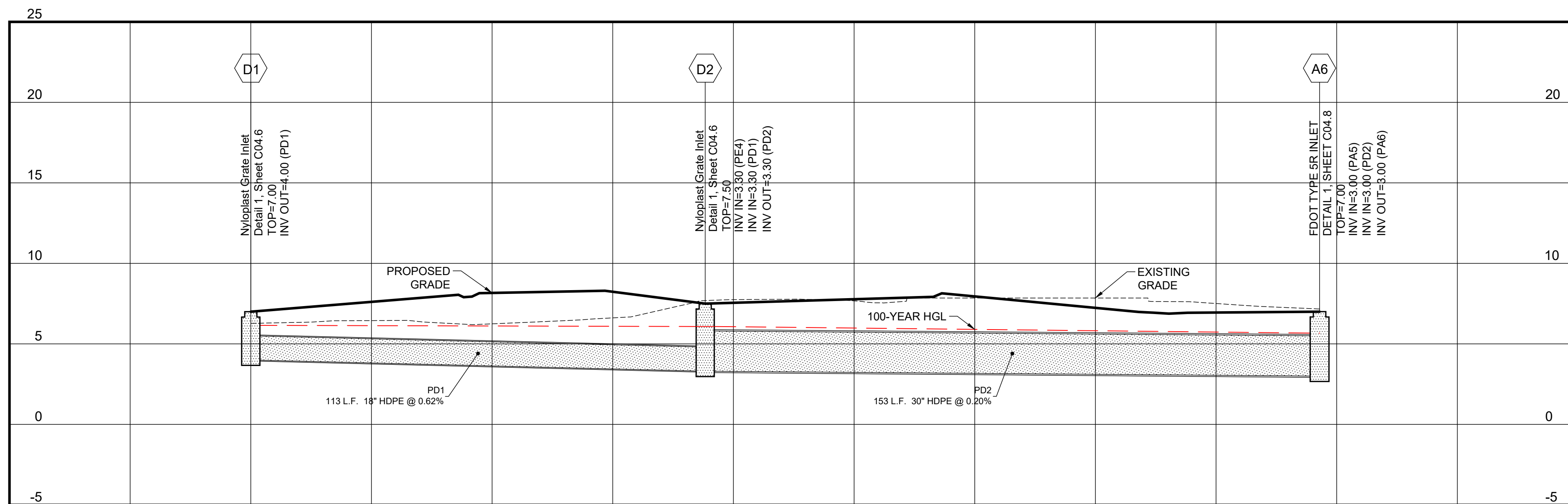
SHEET NAME
PIPE PROFILES V

SHEET NUMBER

C04.13

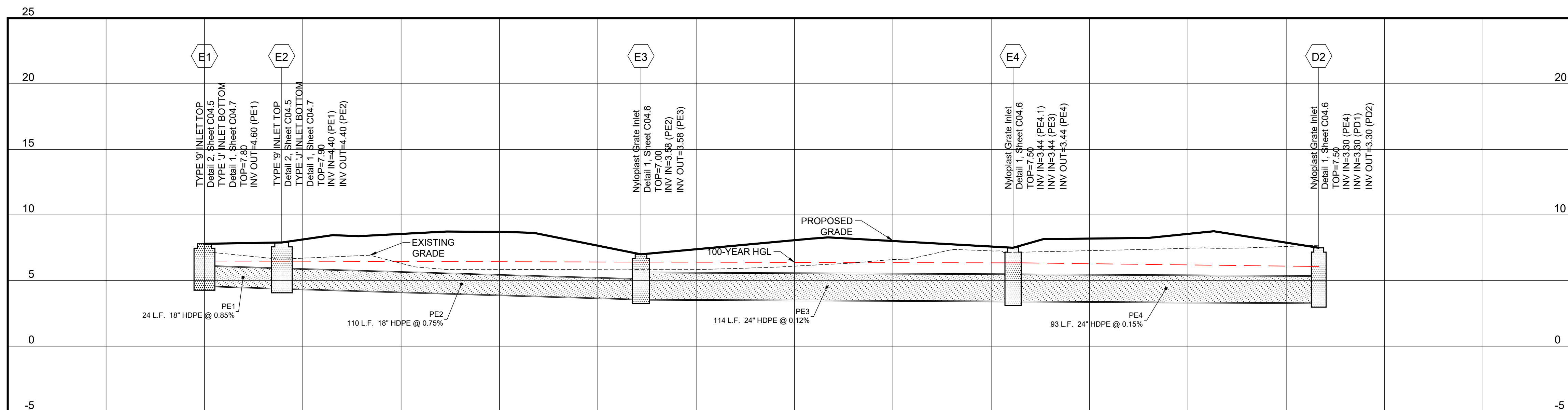
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STORM PROFILE D1 - A6



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE E1 - D2



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PROFILE NOTES

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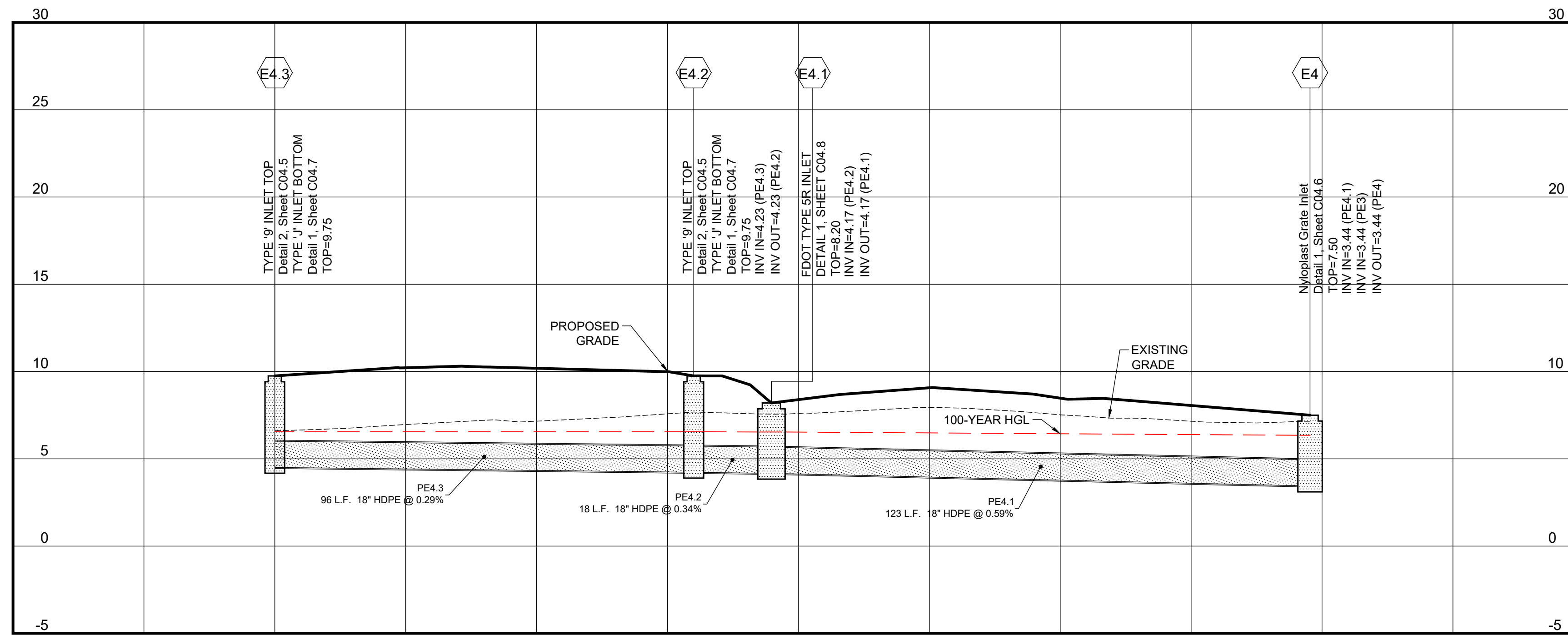
SHEET NAME
PIPE PROFILES VI

SHEET NUMBER

C04.14

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STORM PROFILE E4.3 - E4



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

- PROFILE NOTES**
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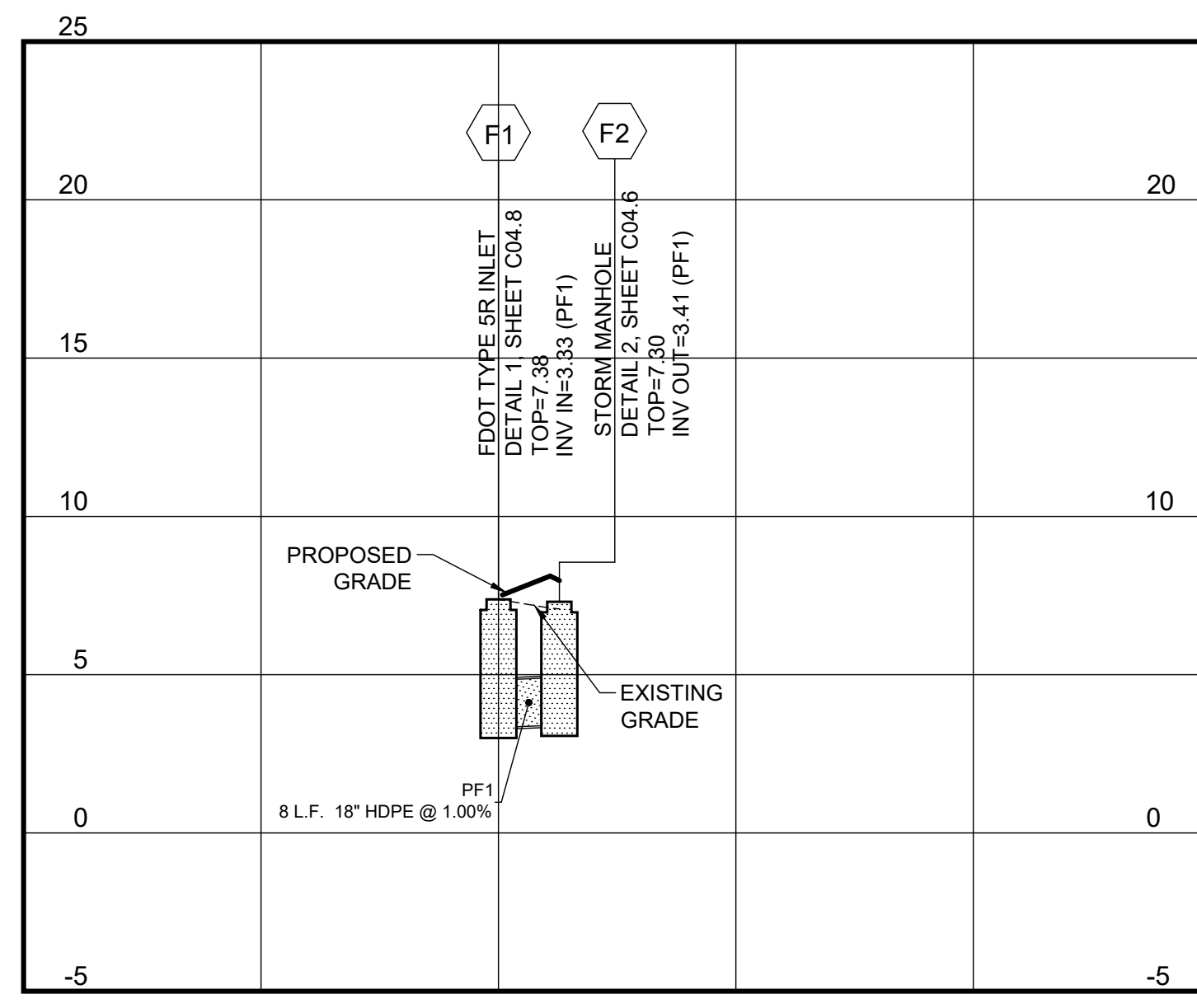
SHEET NAME
PIPE PROFILES VII

SHEET NUMBER

C04.15

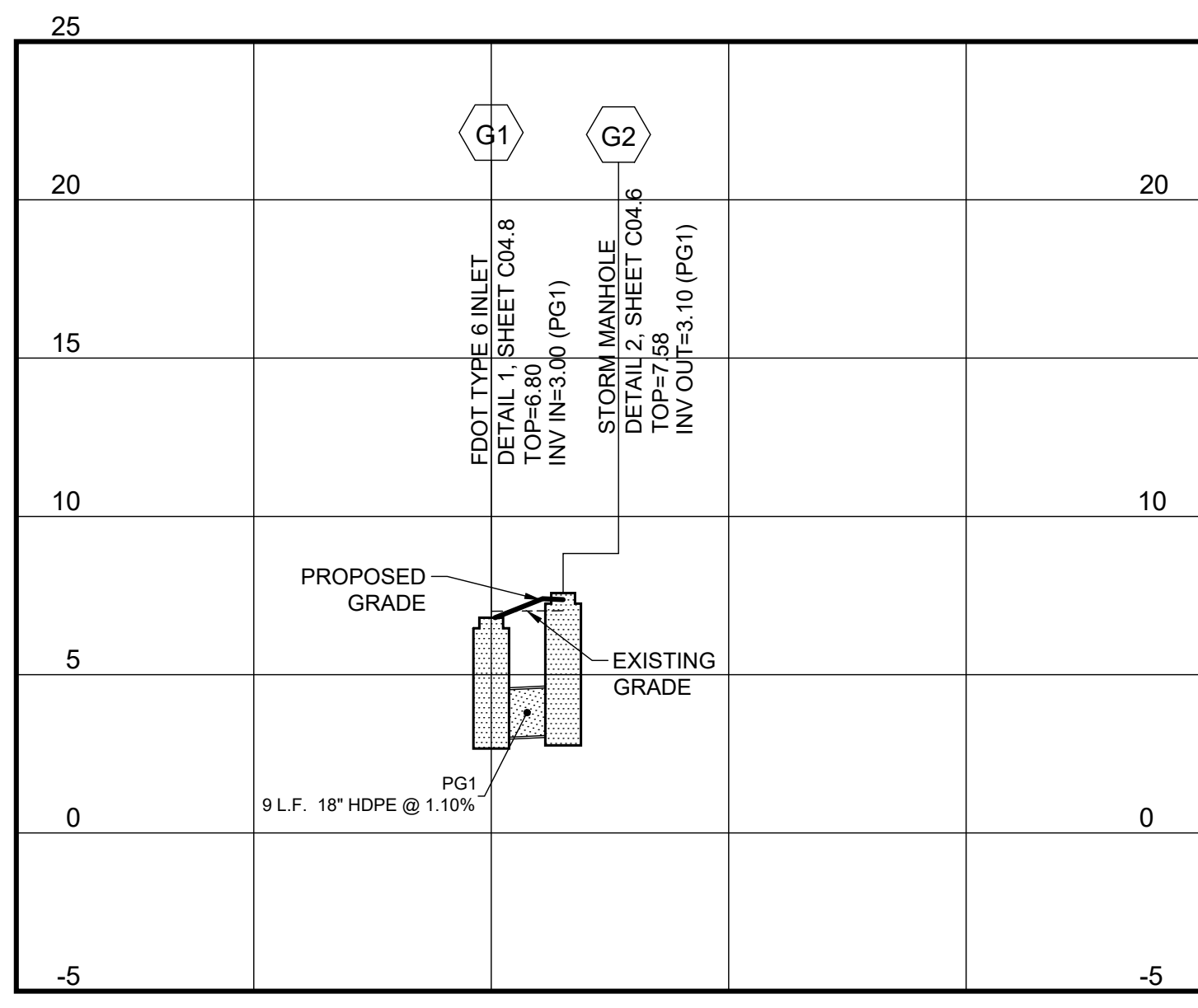
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STORM PROFILE F1 - F2



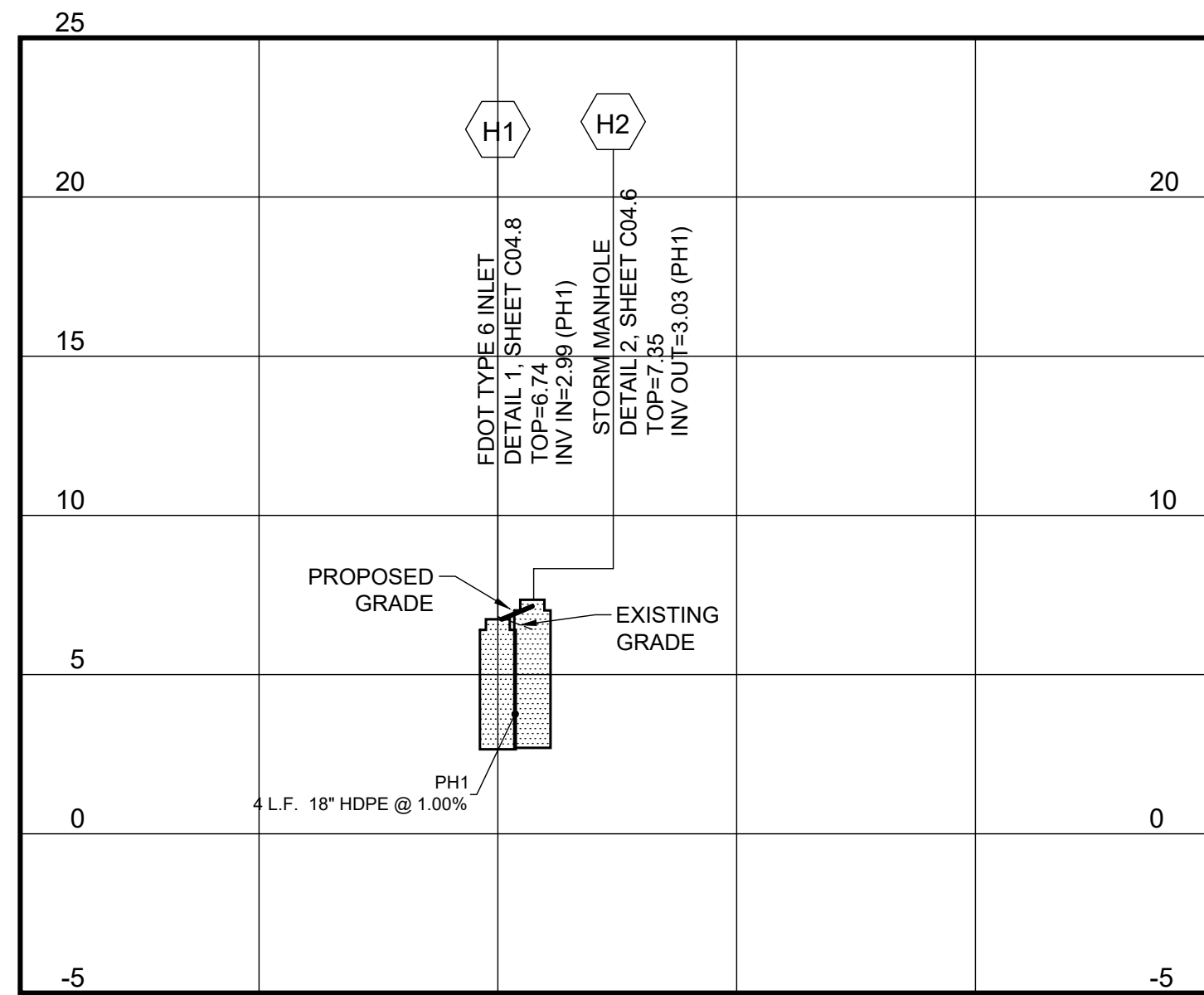
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE G1 - G2



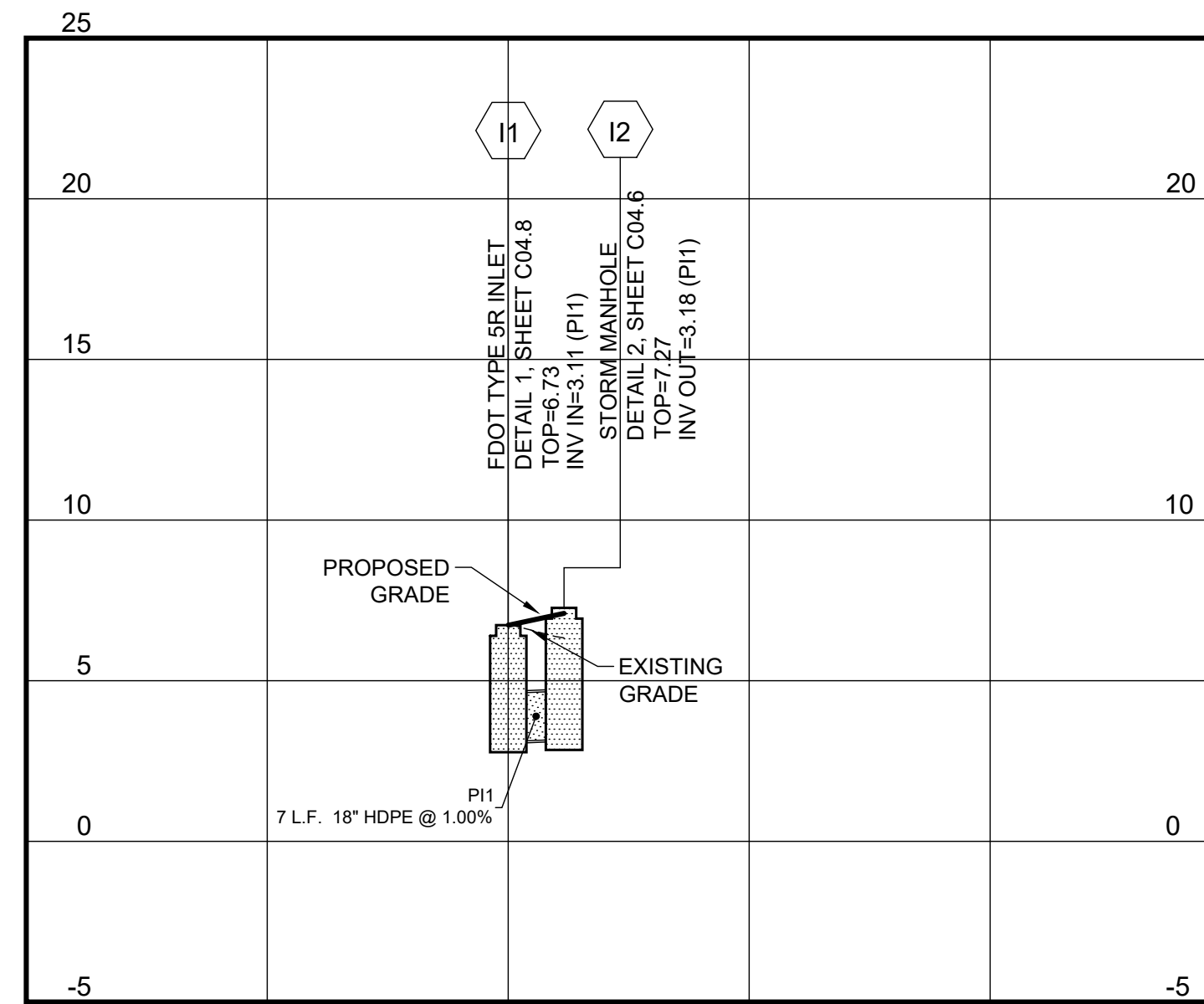
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE H1 - H2



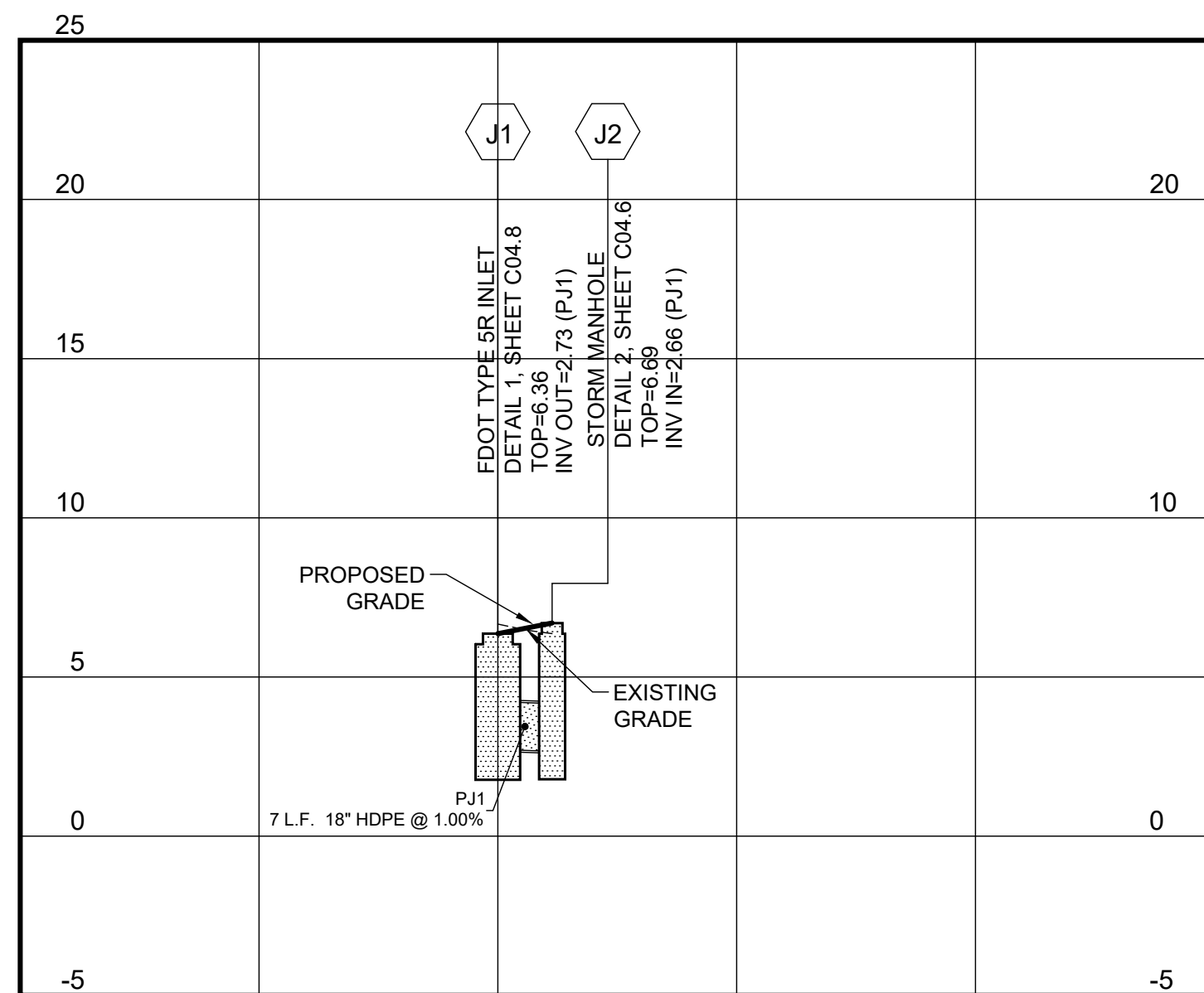
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE I1 - I2



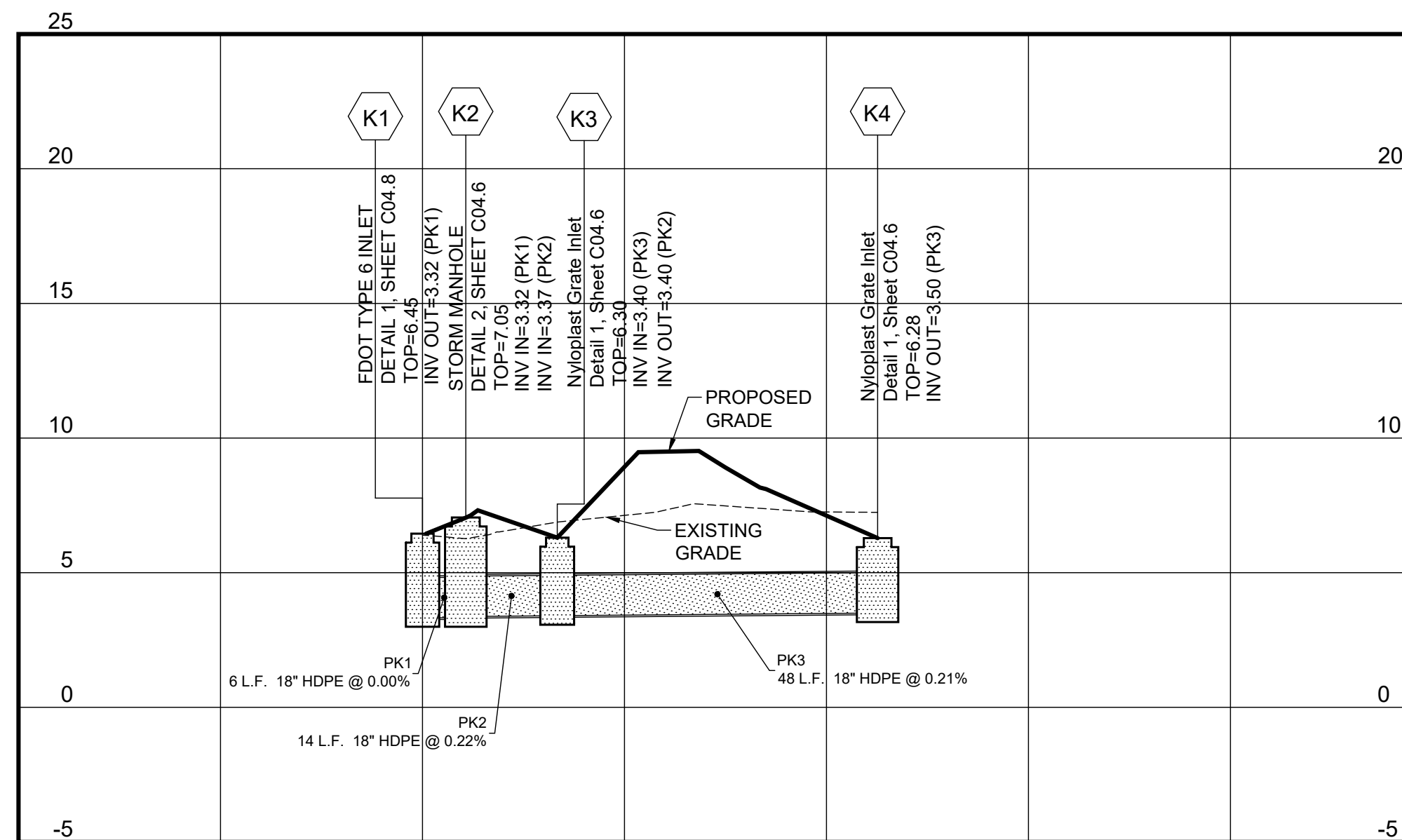
HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE J1 - J2



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

STORM PROFILE K1 - K4



HORIZONTAL SCALE: 1"=20'
VERTICAL SCALE: 1"=5'

PROFILE NOTES

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- STORM DRAIN AND SANITARY SEWER LENGTHS ARE MEASURED FROM CENTER LINE OF STRUCTURE TO CENTERLINE OF STRUCTURE OR FACE OF HEADWALL.
- ALL PIPE LENGTHS SHOWN ARE ROUNDED TO THE NEAREST FOOT.
- ALL STORM DRAIN PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 1 ON SHEET C04.5 UNLESS SPECIFICALLY NOTED OTHERWISE.
- ALL SANITARY SEWER PIPING SHALL BE TRENCHED, BEDDED AND BACK FILLED ACCORDING WITH DETAIL 2 ON SHEET C04.3 UNLESS SPECIFICALLY NOTED OTHERWISE.
- UNFORESEEN SUBSURFACE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S AND ENGINEER'S ATTENTION IMMEDIATELY IMPLEMENTATION OF CORRECTIVE BEDDING MEASURES WITHOUT THE OWNER'S APPROVAL SHALL BE AT THE CONTRACTOR'S OWN RISK AND AT NO ADDITIONAL COMPENSATION.
- EXISTING GRADES SHOWN ARE APPROXIMATE AND DO NOT REFLECT TOP SOIL REMOVAL, CLEARING, AND GRUBBING OPERATIONS. THE CONTRACTOR SHALL ASCERTAIN FOR HIMSELF THE EXTENT OF DISTURBANCE FOR THESE ACTIVITIES.
- EXCAVATIONS FOR STRUCTURES SHALL BE TAKEN AS A TRENCHING EXCAVATION WITHOUT FURTHER COMPENSATION.
- SEE SHEET C01.1 FOR GENERAL NOTES.
- SEE SHEET C04.17 FOR STRUCTURE TABLES.



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370
INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C04.DWG

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CLIENT:
LITHIA MOTORS
150 NORTH BARTLETT ST
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PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

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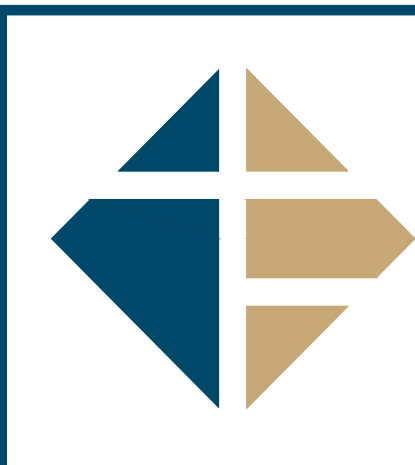
SEAL

SHEET NAME
PIPE PROFILES VIII

SHEET NUMBER

C04.16

ISSUE FOR PERMIT



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FBPE CERT. OF AUTHORITY #8370

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DORAL,
FLORIDA 33172

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SEAL

SHEET NAME
STRUCTURE TABLES

SHEET NUMBER

C04.17

ISSUE FOR PERMIT

SANITARY STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
S0	Cleanout Detail 4, Sheet C04.3	7.50	4.41 (PS1)	4.41 (PS1 (1))
S1	Cleanout Detail 4, Sheet C04.3	10.67	5.12 (PS1.6) 5.12 (PS2)	5.12 (PS1)
S1.1	BUILDING STUB	9.85		7.50 (PS1.1)
S1.2	Cleanout Detail 4, Sheet C04.3	11.83	7.47 (PS1.1)	7.47 (PS1.2)
S1.3	Cleanout Detail 4, Sheet C04.3	10.91	7.18 (PS1.2)	7.18 (PS1.3)
S1.4	Cleanout Detail 4, Sheet C04.3	10.85	7.13 (PS1.3)	7.13 (PS1.4)
S1.5 IN	GREASE TRAP STUB-IN	8.37	7.02 (PS1.4)	
S1.5 OUT	GREASE TRAP STUB-OUT	8.12		6.77 (PS1.5)
S1.6	Cleanout Detail 4, Sheet C04.3	10.83	5.23 (PS1.5)	5.23 (PS1.6)
S2	Cleanout Detail 4, Sheet C04.3	11.50	5.46 (PS3)	5.46 (PS2)
S3	Cleanout Detail 4, Sheet C04.3	11.20	5.96 (PS4)	5.96 (PS3)
S4	Cleanout Detail 4, Sheet C04.3	11.20	6.46 (PS5)	6.46 (PS4)
S5 IN	GREASE TRAP STUB-IN	8.56	7.21 (PS6)	
S5 OUT	GREASE TRAP STUB-OUT	8.31		6.96 (PS5)
S6	Cleanout Detail 4, Sheet C04.3	11.18	7.29 (PS7)	7.29 (PS6)
S7	Cleanout Detail 4, Sheet C04.3	11.80	7.47 (PS8)	7.47 (PS7)
S8	BUILDING STUB	8.85		7.50 (PS8)

San PIPE TABLE				
PIPE NAME	SIZE	LENGTH	SLOPE	MATERIAL
PS1	6"	70.91'	1.00%	PVC
PS1 (1)	6"	4.25'	0.80%	PVC
PS1.1	6"	3.00'	1.00%	PVC
PS1.2	6"	29.09'	1.00%	PVC
PS1.3	6"	5.00'	1.00%	PVC
PS1.4	6"	11.38'	1.00%	PVC
PS1.5	6"	52.73'	2.92%	PVC
PS1.6	6"	5.36'	2.00%	PVC
PS2	6"	33.71'	1.00%	PVC
PS3	6"	50.01'	1.00%	PVC
PS4	6"	50.00'	1.00%	PVC
PS5	6"	50.01'	1.00%	PVC
PS6	6"	7.84'	1.00%	PVC
PS7	6"	18.48'	1.00%	PVC
PS8	6"	3.00'	1.00%	PVC

STORM STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
A1	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00		3.43 (PA1)
A2	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00	3.40 (PA1) 3.40 (PB2)	3.40 (PA2)
A3	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00	3.23 (PA2)	3.23 (PA3)
A4	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00	3.23 (PA3) 3.20 (PC2)	3.20 (PA4)
A5	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00	3.20 (PA4)	3.03 (PA5)
A6	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	7.00	3.00 (PA5) 3.00 (PD2)	3.00 (PA6)
A7	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA6)	3.00 (PA7)
A8	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA7)	3.00 (PA8)
A9	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA8)	3.00 (PA9)
A10	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA9)	3.00 (PA10)
A11	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA10)	3.00 (PA11)
A12	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA11)	3.00 (PA12)

STORM STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
A13	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA12)	3.00 (PA13)
A14	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.60	3.00 (PA13) 3.00 (PA15 (2))	
A15	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	9.50	3.00 (PA16)	3.00 (PA15)
A16	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	9.40	3.00 (PA17)	3.00 (PA16)
A17	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	9.00	3.00 (PA18)	3.00 (PA17)
A18	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	8.00	3.00 (PA19)	3.00 (PA18)
A19	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	8.02	3.00 (PA19.1)	3.00 (PA19)
A20	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	8.55	3.00 (PA21)	3.00 (PA20)
A21	(2) Nyloplast Grate Inlets Detail 1, Sheet C04.6	6.40	3.00 (PA22)	3.00 (PA21)
A22	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	6.40	3.00 (PA23)	3.00 (PA22)
A23	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	6.80	3.23 (PA24)	3.23 (PA23)
A24	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	6.55	3.57 (PA25)	3.57 (PA24)
A25	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.00		3.87 (PA25)
B1	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.00		3.93 (PB1)
B2	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.50	3.71 (PB1)	3.71 (PB2)
C1	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.00		3.99 (PC1)
C2	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.50	3.65 (PC1)	3.65 (PC2)

STORM STRUCTURE TABLE				
STRUCTURE NAME	STRUCTURE TYPE	RIM ELEVATION	INVERT IN	INVERT OUT
D1	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.00		4.00 (PD1)
D2	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.50	3.30 (PE4) 3.30 (PD1)	3.30 (PD2)
E1	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.80		4.60 (PE1)
E2	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	7.90	4.40 (PE1)	4.40 (PE2)
E3	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.00	3.58 (PE2)	3.58 (PE3)
E4	Nyloplast Grate Inlet Detail 1, Sheet C04.6	7.50	3.44 (PE4.1) 3.44 (PE3)	3.44 (PE4)
E4.1	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	8.20	4.17 (PE4.2)	4.17 (PE4.1)
E4.2	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	9.75	4.23 (PE4.3)	4.23 (PE4.2)
E4.3	TYPE '9' INLET TOP Detail 2, Sheet C04.5 TYPE 'J' INLET BOTTOM Detail 1, Sheet C04.7	9.75		
F1	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	7.38	3.33 (PF1)	
F2	STORM MANHOLE DETAIL 2, SHEET C04.6	7.30		3.41 (PF1)
G1	FDOT TYPE 6 INLET DETAIL 1, SHEET C04.8	6.80	3.00 (PG1)	
G2	STORM MANHOLE DETAIL 2, SHEET C04.6	7.58		3.10 (PG1)
H1	FDOT TYPE 6 INLET DETAIL 1, SHEET C04.8	6.74	2.99 (PH1)	
H2	STORM MANHOLE DETAIL 2, SHEET C04.6	7.35		3.03 (PH1)
I1	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	6.73	3.11 (P11)	
I2	STORM MANHOLE DETAIL 2, SHEET C04.6	7.27		3.18 (P11)
J1	FDOT TYPE SR INLET DETAIL 1, SHEET C04.8	6.36		2.73 (PJ1)
J2	STORM MANHOLE DETAIL 2, SHEET C04.6	6.69	2.66 (PJ1)	
K1	FDOT TYPE 6 INLET DETAIL 1, SHEET C04.8	6.45		3.32 (PK1)
K2	STORM MANHOLE DETAIL 2, SHEET C04.6	7.05	3.32 (PK1) 3.37 (PK2)	
K3	Nyloplast Grate Inlet Detail 1, Sheet C04.6	6.30	3.40 (PK3)	3.40 (PK2)
K4	Nyloplast Grate Inlet Detail 1, Sheet C04.6	6.28		3.50 (PK3)



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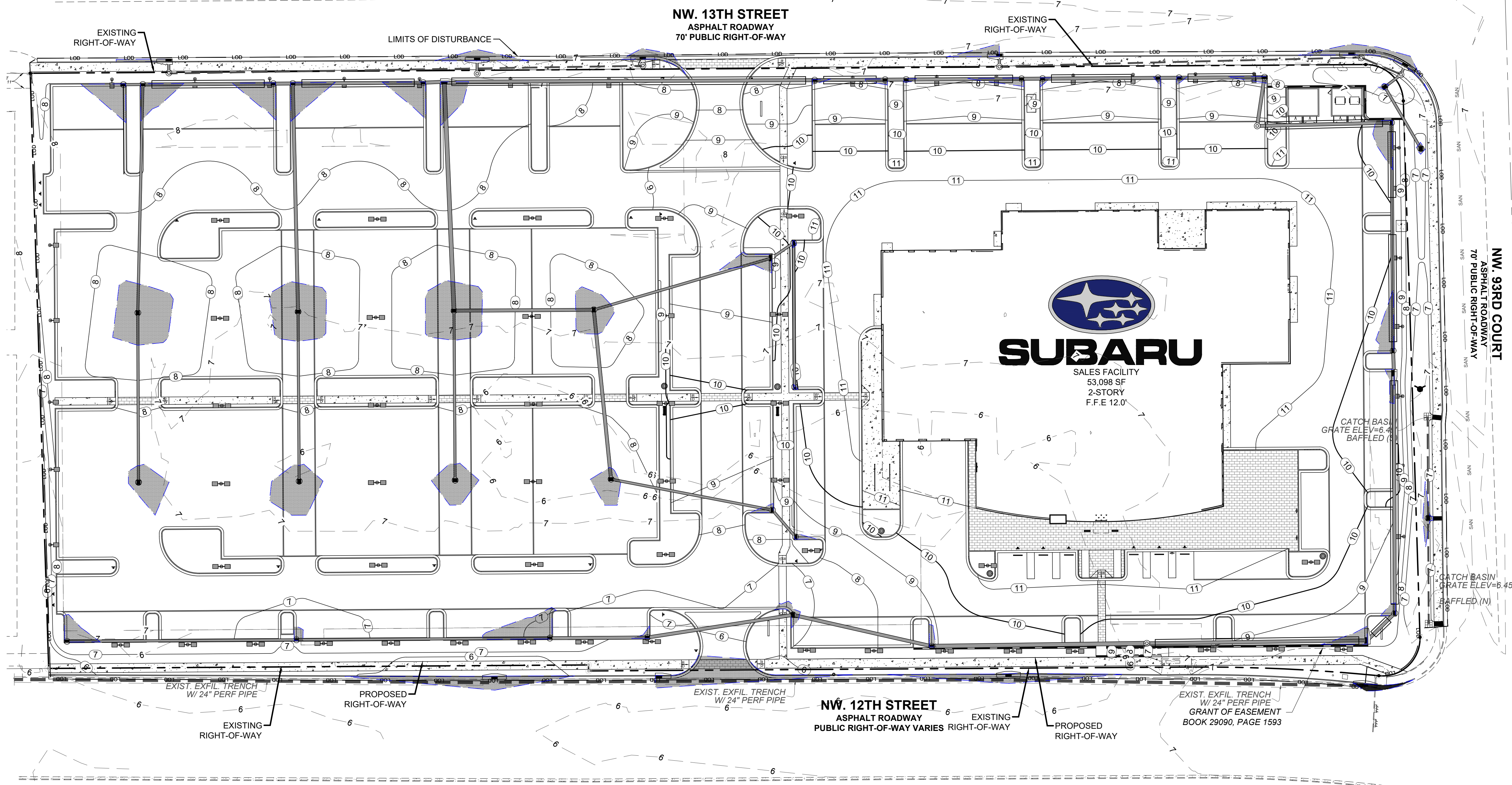
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SEAL

GRADING & DRAINAGE LEGEND

GRADING / DRAINAGE	LINETYPE/SYMBOL
GRADE	1000
PROPOSED SPOT ELEVATION	1000.00
MATCH EXISTING SPOT	M.E.E.
MATCH EXISTING SPOT W/ ESTIMATED EXISTING ELEVATION	M.E.E. 1000.00
STORM DRAIN	
HEADWALL (HW) / FLARED END SECTION (FES)	
DROP INLET (GRATE)	
DROP INLET (GRATE AND HOOD)	
JUNCTION BOX (JB) / OCS	
CATCH BASIN (SINGLE WING)	
CATCH BASIN (DOUBLE WING)	
PEDESTAL TOP	
STORM STRUCTURE NUMBER	A3
STORM INLET PONDING	

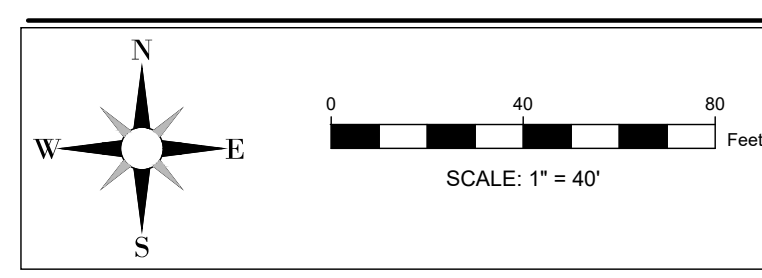


GRADING NOTES SEE SHEET C01.1

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24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845

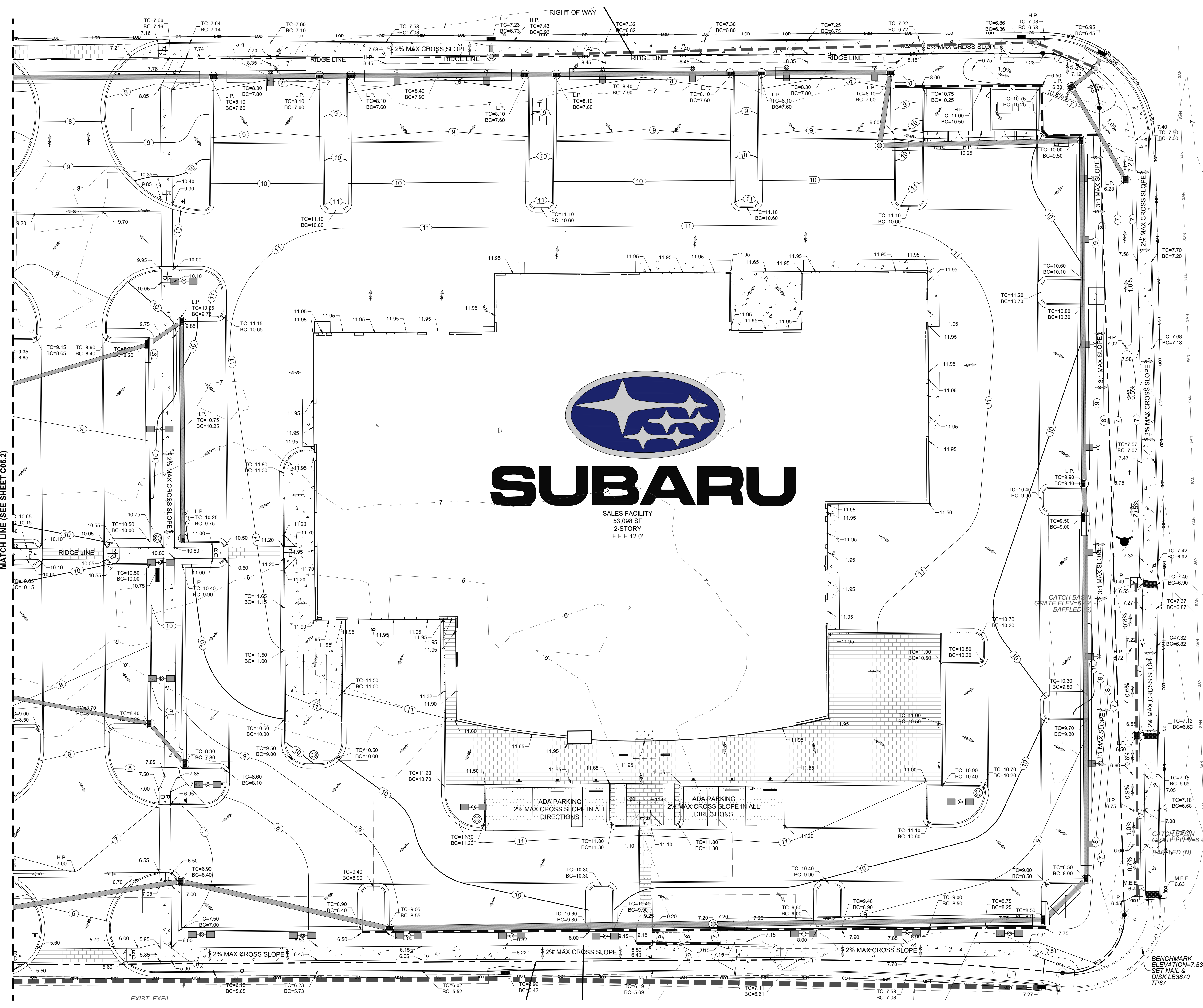


SHEET NAME
OVERALL GRADING AND DRAINAGE PLAN

SHEET NUMBER

C05.0

ISSUE FOR PERMIT



GRADING & DRAINAGE LEGEND

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GRADE	1000
PROPOSED SPOT ELEVATION	1000.00
MATCH EXISTING SPOT	M.E.E.
EXISTING ELEVATION	M.E.E. 1000.00
STORM DRAIN	(Symbol)
HEADWALL (HW) / FLARED END SECTION (FES)	(Symbol)
DROP INLET (GRATE)	(Symbol)
DROP INLET (GRATE AND HOOD)	(Symbol)
JUNCTION BOX (JB) / OCS	(Symbol)
CATCH BASIN (SINGLE WING)	(Symbol)
CATCH BASIN (DOUBLE WING)	(Symbol)
PEDESTAL TOP	(Symbol)
STORM STRUCTURE NUMBER	A3



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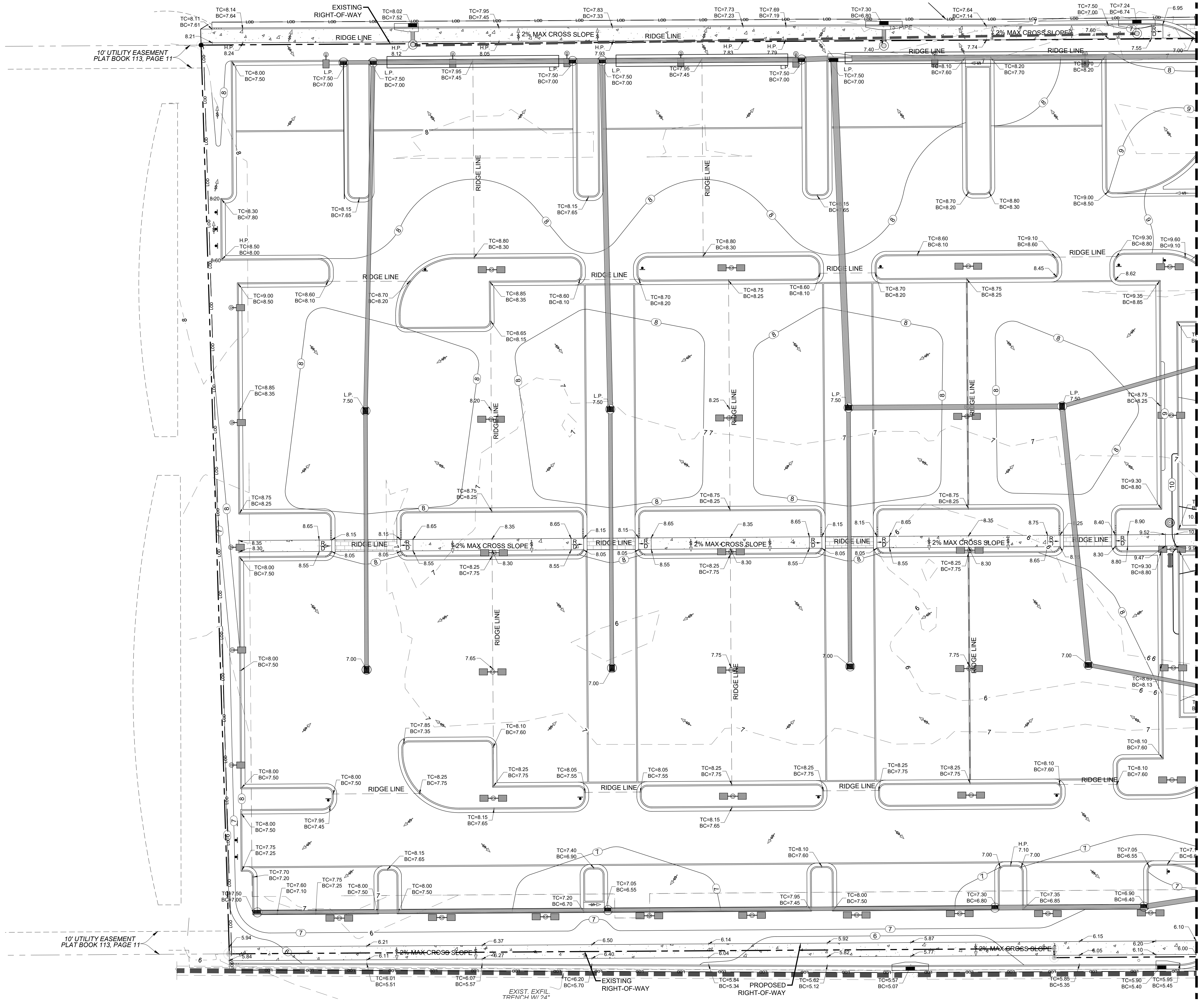


24-HOUR CONTACT:
RYAN WOFFORD
(785) 577-5845



SHEET NAME
GRADING DETAILED
PLAN 1

SHEET NUMBER
C05.1
ISSUE FOR PERMIT



GRADING & DRAINAGE LEGEND

GRADING / DRAINAGE	LINETYPE/SYMBOL
GRADE	1000
PROPOSED SPOT ELEVATION	1000.00
MATCH EXISTING SPOT	M.E.E.
MATCH EXISTING SPOT W/ ESTIMATED EXISTING ELEVATION	M.E.E. 1000.00
STORM DRAIN	(Symbol)
HEADWALL (HW) / FLARED END SECTION (FES)	(Symbol)
DROP INLET (GRATE)	(Symbol)
DROP INLET (GRATE AND HOOD)	(Symbol)
JUNCTION BOX (JB) / OCS	(Symbol)
CATCH BASIN (SINGLE WING)	(Symbol)
CATCH BASIN (DOUBLE WING)	(Symbol)
PEDESTAL TOP	(Symbol)
STORM STRUCTURE NUMBER	A3



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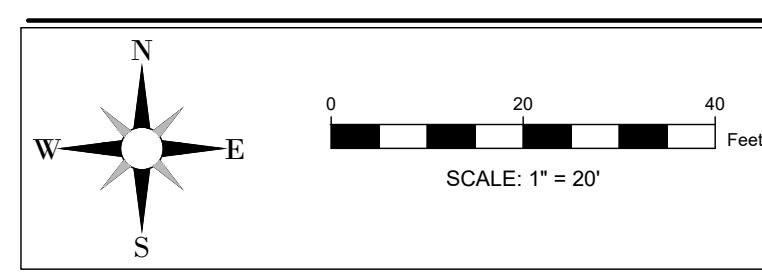
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RYAN WOFFORD
(785) 577-5845



SHEET NAME
GRADING DETAILED
PLAN 2

SHEET NUMBER

C05.2

ISSUE FOR PERMIT



INGENIUM ENTERPRISES, INC.
19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370
INGENIUM PROJECT: 220190
PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
DWG NAME: 220190 C05.DWG

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150 NORTH BARTLETT ST
MEDFORD, OREGON 97501
PHONE: (804) 244-3459



9300 NW 13TH STREET
DORAL, FLORIDA 33172

REV.	DATE	DESCRIPTION



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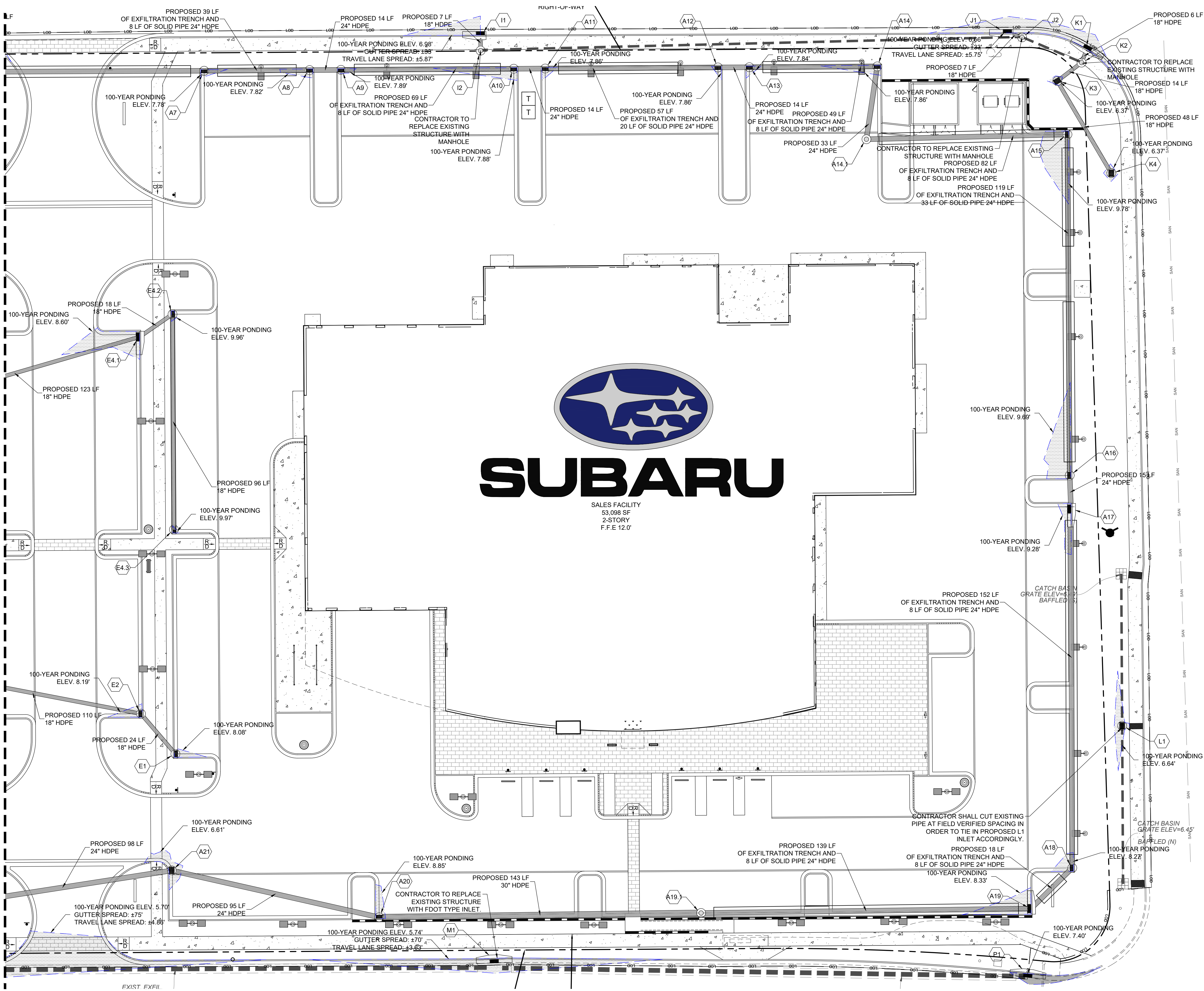
SHEET NAME
DRAINAGE DETAILED PLAN 1

SHEET NUMBER
C05.3

ISSUE FOR PERMIT

GRADING & DRAINAGE LEGEND

GRADING / DRAINAGE	LINETYPE/SYMBOL
GRADE	1000
PROPOSED SPOT ELEVATION	1000.00
MATCH EXISTING SPOT	M.E.E.
MATCH EXISTING SPOT W/ ESTIMATED EXISTING ELEVATION	M.E.E. 1000.00
STORM DRAIN	
HEADWALL (HW) / FLARED END SECTION (FES)	
DROP INLET (GRATE)	
DROP INLET (GRATE AND HOOD)	
JUNCTION BOX (JB) / OCS	
CATCH BASIN (SINGLE WING)	
CATCH BASIN (DOUBLE WING)	
PEDESTAL TOP	
STORM STRUCTURE NUMBER	A3
STORM INLET PONDING	



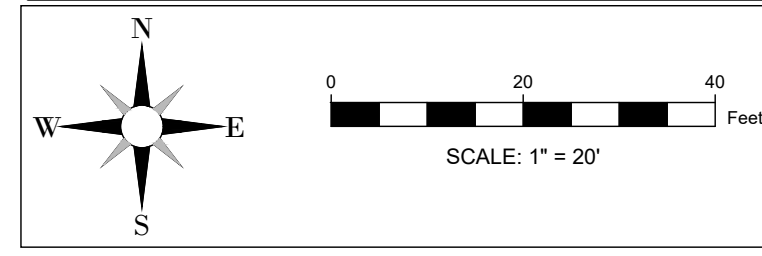
SALES FACILITY
53,098 SF
2-STORY
F.F.E 12.0'

GRADING NOTES SEE SHEET C01.1

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MATCH LINE (SEE SHEET C05.4)

EXIST EXFIL



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SEAL

GRADING & DRAINAGE LEGEND

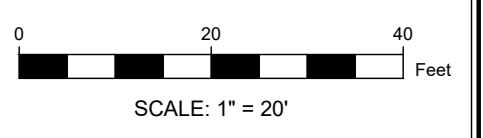
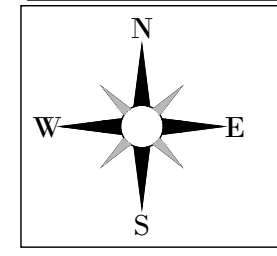
GRADING / DRAINAGE	LINETYPE/SYMBOL
GRADE	1000
PROPOSED SPOT ELEVATION	1000.00
MATCH EXISTING SPOT	M.E.E.
MATCH EXISTING SPOT W/ ESTIMATED EXISTING ELEVATION	M.E.E. 1000.00
STORM DRAIN	(Symbol)
HEADWALL (HW) / FLARED END SECTION (FES)	(Symbol)
DROP INLET (GRATE)	(Symbol)
DROP INLET (GRATE AND HOOD)	(Symbol)
JUNCTION BOX (JB) / OCS	(Symbol)
CATCH BASIN (SINGLE WING)	(Symbol)
CATCH BASIN (DOUBLE WING)	(Symbol)
PEDESTAL TOP	(Symbol)
STORM STRUCTURE NUMBER	A3
STORM INLET PONDING	(Symbol)

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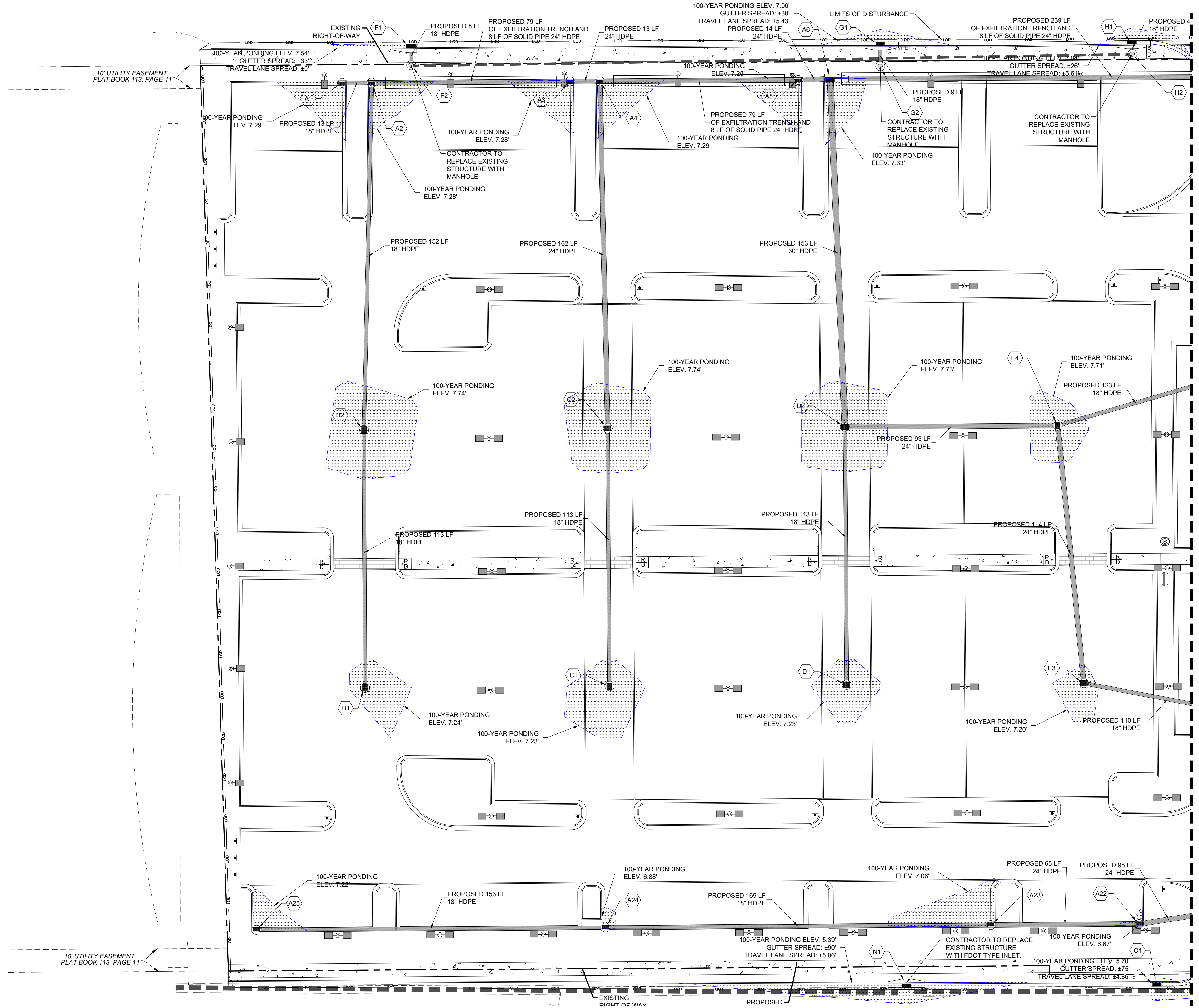
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SHEET NAME
DRAINAGE DETAILED PLAN 2

ISSUE FOR PERMIT

SHEET NUMBER
C05.4



MATCH LINE (SEE SHEET C05.3)

10' UTILITY EASEMENT
PLAT BOOK 113, PAGE 11

EXISTING
RIGHT OF WAY

PROPOSED



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FBPE CERT. OF AUTHORITY #8370

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SEAL

SHEET NAME
ESPC PLAN
CLEARING PHASE

SHEET NUMBER

C06.1

ISSUE FOR PERMIT

ESPC LEGEND

ESPC / BMP	LINETYPE/SYMBOL
CONSTRUCTION EXIT (CO)	
SILT FENCE - TYPE C (SF)	
SILT FENCE - TYPE C DOUBLE (SF)	
INLET PROTECTION (IP)	
OUTLET PROTECTION (OP)	
DUST CONTROL-DISTURBED AREAS	
TEMPORARY SEEDING	
PERMANENT SEEDING	
MULCHING	
SODDING	
SLOPE STABILIZATION	
TREE PROTECTION	

ESPC NOTES

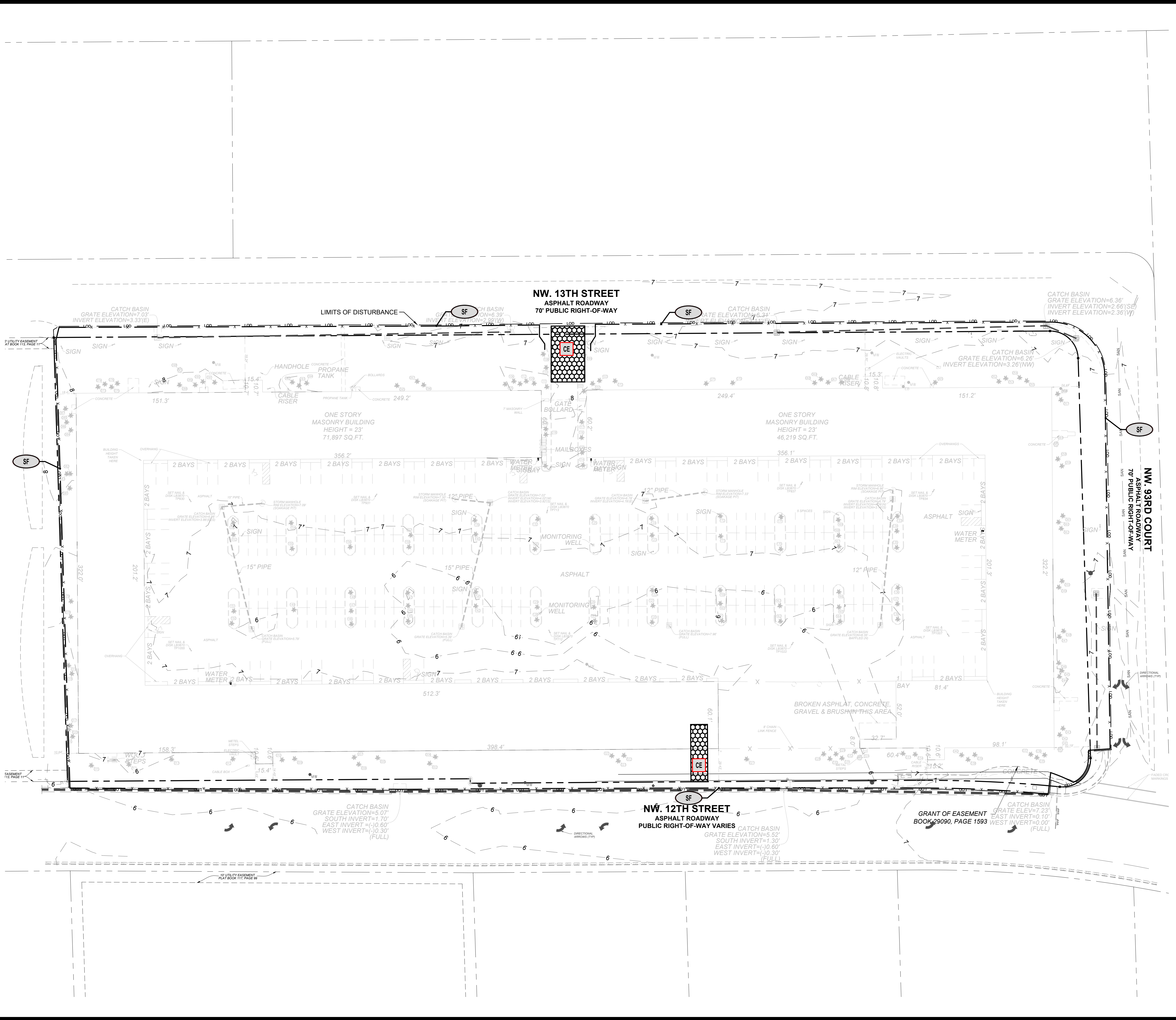
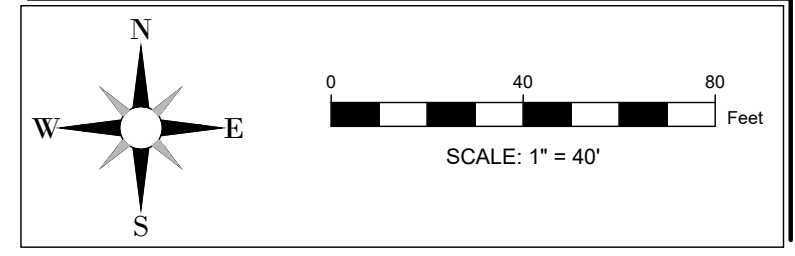
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 - THE ESCAPE OF SEDIMENT FROM THE SITE SHALL BE PREVENTED BY THE INSTALLATION OF EROSION AND SEDIMENT CONTROL MEASURES AND PRACTICES PRIOR TO LAND DISTURBING ACTIVITIES.
 - ANY DISTURBED AREA LEFT EXPOSED FOR A PERIOD GREATER THAN 14 DAYS SHALL BE STABILIZED WITH MULCH OR TEMPORARY SEEDING.
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- SLOPES AND DISTURBED AREA STABILIZATION
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 - WIRE MESH REINFORCED SEDIMENT BARRIERS SHALL BE PLACED AT THE TOE OF ALL FILL SLOPES.
- DRAINAGE
- ALL DRAINAGE STRUCTURES SHALL BE EROSION PROOFED.
- MAINTENANCE AND INSPECTIONS
- SEDIMENT CONTROL DEVICES MUST BE INSPECTED DAILY AND CHECKED AFTER EACH STORM EVENT AND CLEANED OR REPLACED WHEN THEY REACH 1/3 OF DESIGN CAPACITY.
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BASED IN THE WEB SOIL SURVEY INFORMATION, ALL SOILS AT THIS SITE ARE CLASSIFIED AS 15 - URBAN LAND, 0 TO 2 PERCENT SLOPES.

TOTAL DISTURBED AREA THIS PHASE: 8.92 AC.



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PHONE: (813) 387-0084

FBPE CERT. OF AUTHORITY #8370
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PROJECT PM: AH
PROJECT RE: JH
ISSUE DATE: 04/30/2024
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SEAL

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ESPC PLAN
GRADING PHASE

SHEET NUMBER

C06.2

ISSUE FOR PERMIT

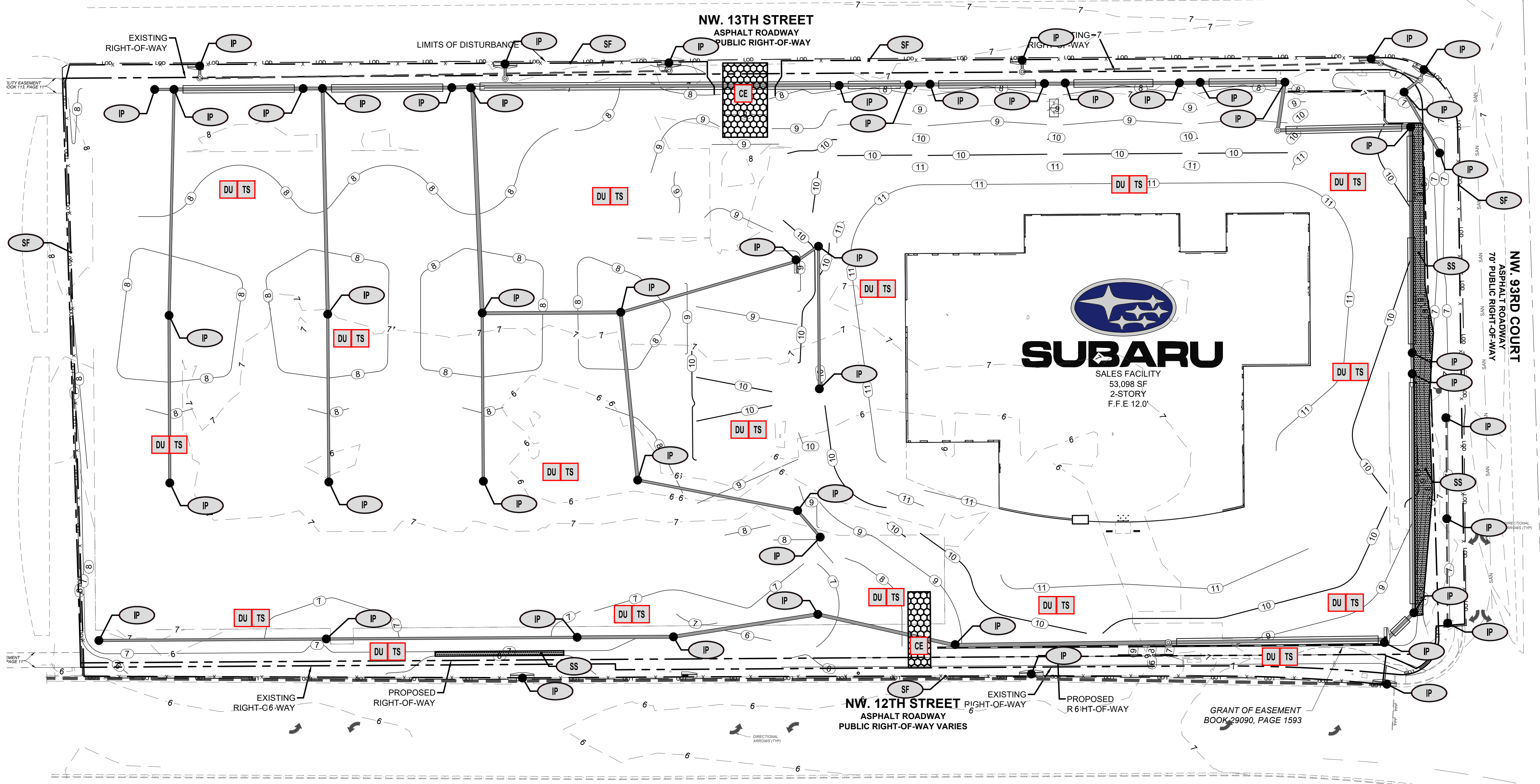
ESPC LEGEND

ESPC / BMP	LINETYPE/SYMBOL
CONSTRUCTION EXIT (CO)	
SILT FENCE - TYPE C (SF)	
SILT FENCE - TYPE C DOUBLE (SF)	
INLET PROTECTION (IP)	
OUTLET PROTECTION (OP)	
DUST CONTROL-DISTURBED AREAS	
TEMPORARY SEEDING	
PERMANENT SEEDING	
MULCHING	
SODDING	
SLOPE STABILIZATION	
TREE PROTECTION	

SEE LANDSCAPE/TREE PROTECTION PLANS FOR LEGEND SPECIFIC TO THOSE SHEETS

ESPC NOTES

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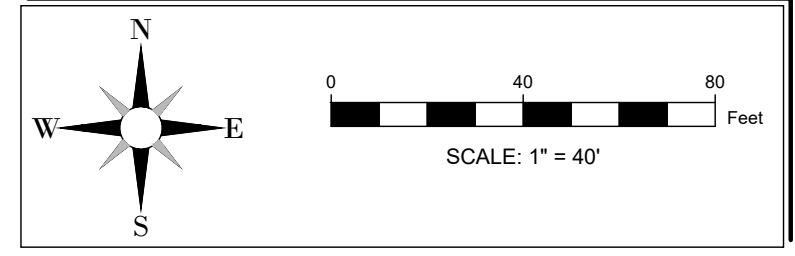


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REV. DATE DESCRIPTION

REV.	DATE	DESCRIPTION

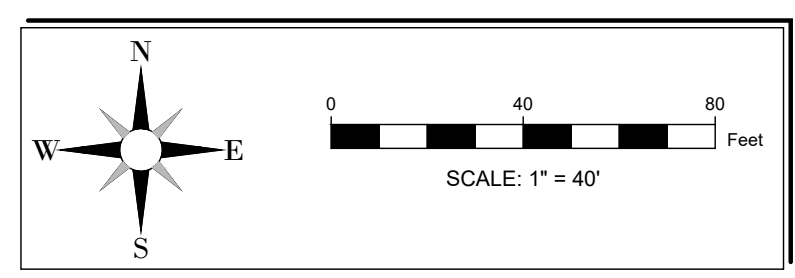
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SHEET NAME
ESPC PLAN
FINAL PHASE

SHEET NUMBER

C06.3

ISSUE FOR PERMIT

ESPC LEGEND

ESPC / BMP	LINETYPE/SYMBOL
CONSTRUCTION EXIT (CO)	
SILT FENCE - TYPE C (SF)	
SILT FENCE - TYPE C DOUBLE (SF)	
INLET PROTECTION (IP)	
OUTLET PROTECTION (OP)	
DUST CONTROL-DISTURBED AREAS	Du
TEMPORARY SEEDING	TS
PERMANENT SEEDING	PS
MULCHING	M
SODDING	SO
SLOPE STABILIZATION	
TREE PROTECTION	

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DRAINAGE

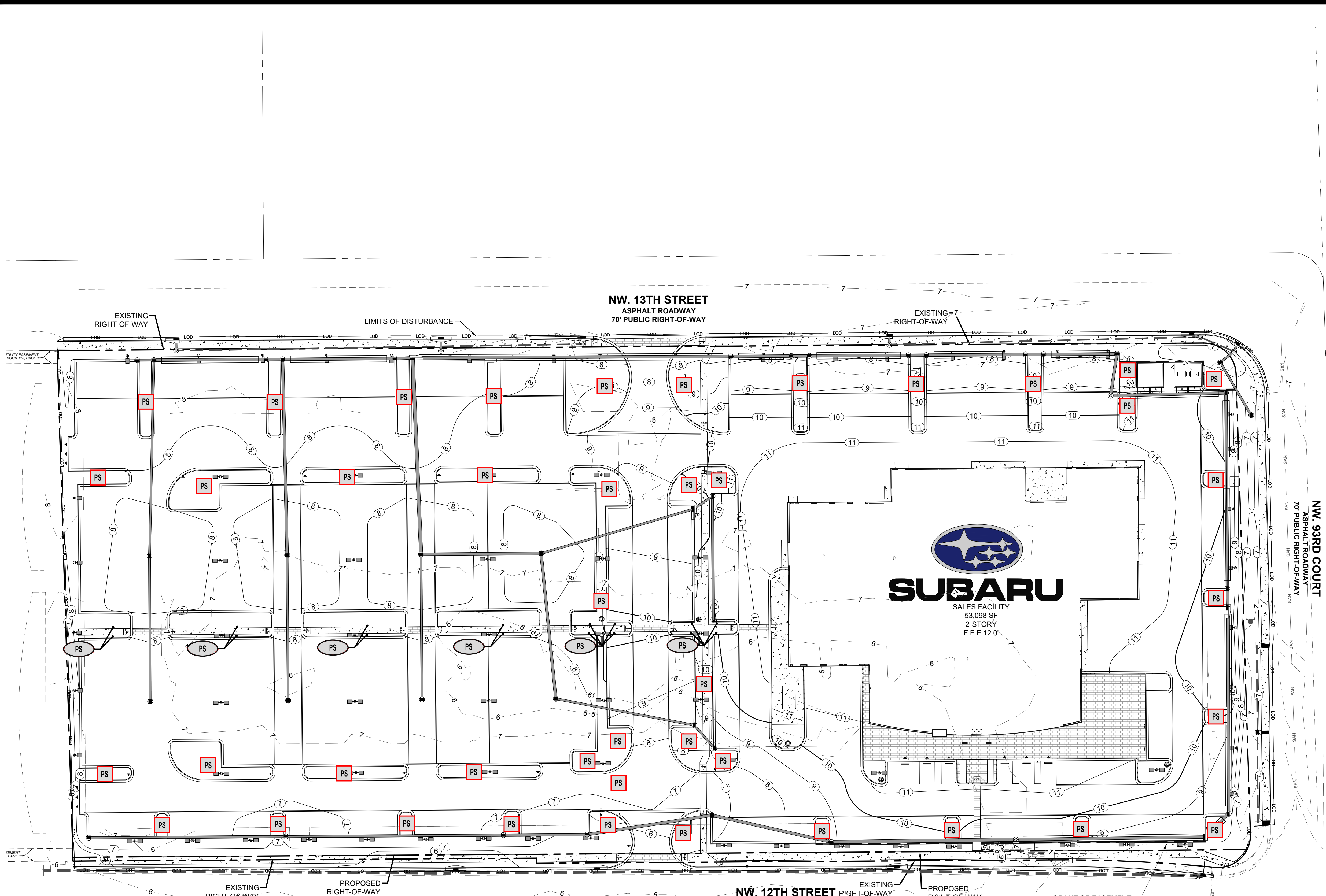
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MAINTENANCE AND INSPECTIONS

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NW 12TH STREET
ASPHALT ROADWAY
PUBLIC RIGHT-OF-WAY VARIES

GRANT OF EASEMENT
BOOK 29090, PAGE 1593

SEE EROSION CONTROL PLAN BOOK 111, PAGE 11

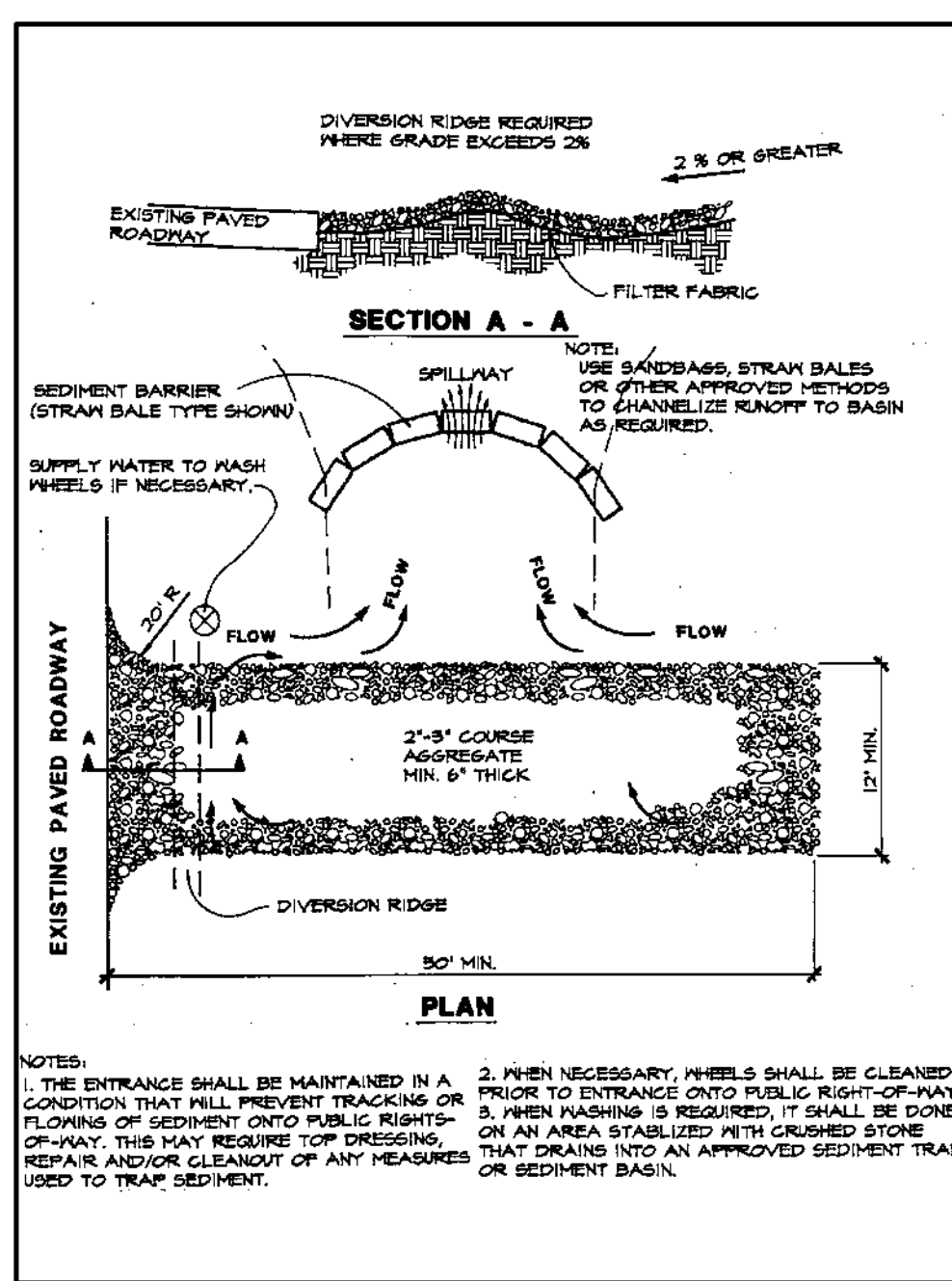


Figure 4.3a. Temporary Gravel Construction Entrance
Source: Erosion Draw

41

CO CONSTRUCTION EXIT NTS

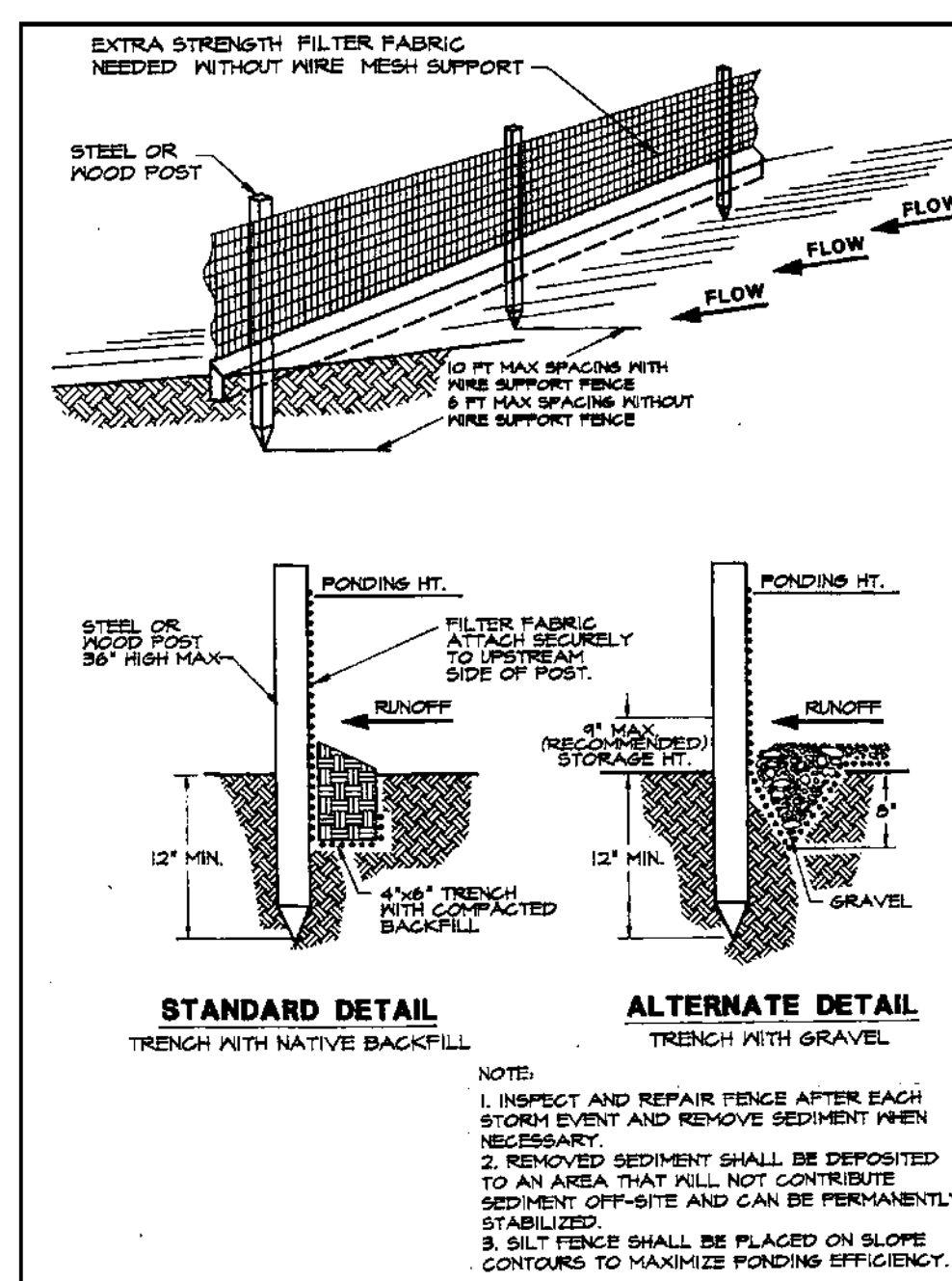


Figure 4.4a. Silt Fence
Source: Erosion Draw

47

SF SILT FENCE NTS

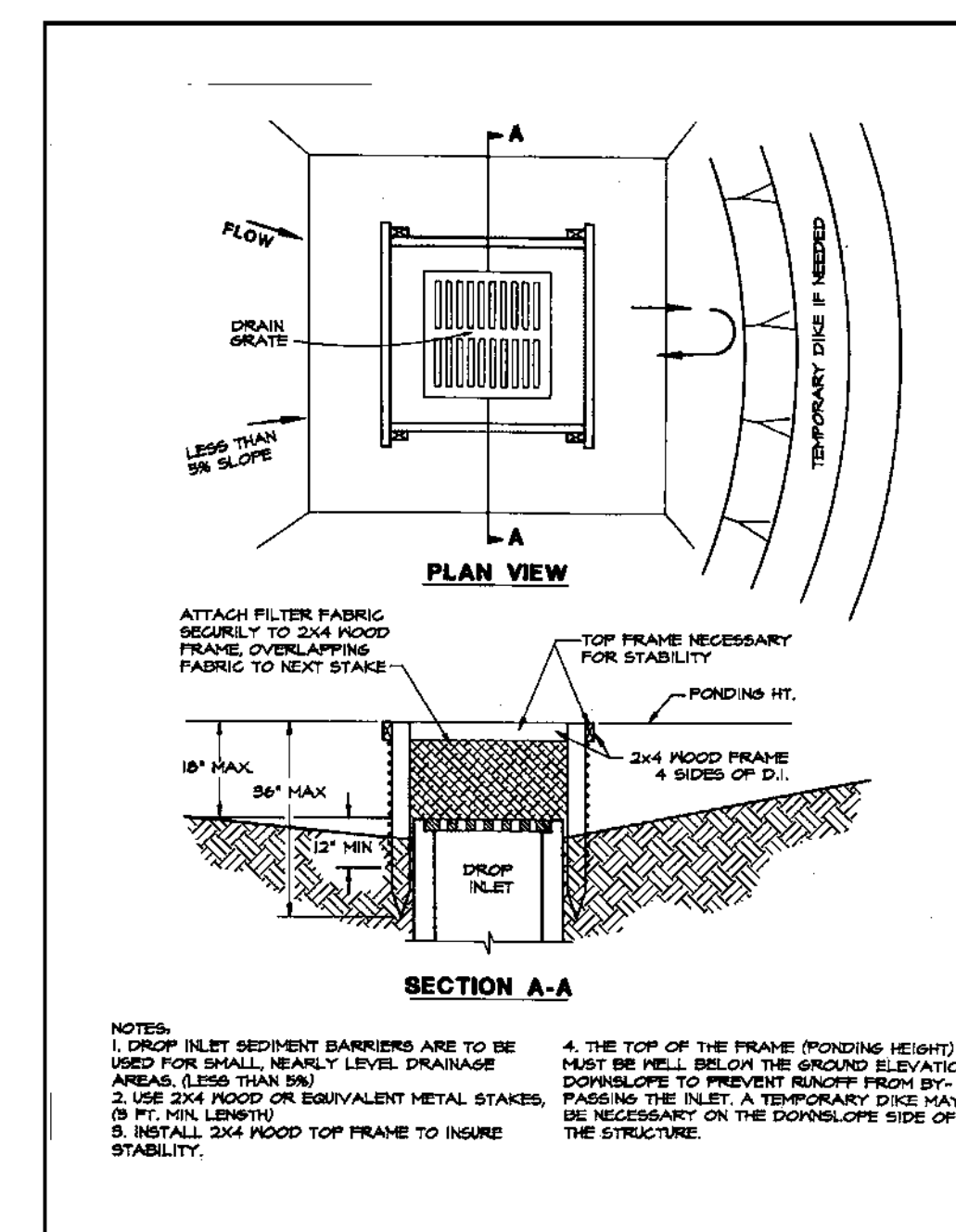


Figure 4.5a. Silt Fence Drop Inlet Sediment Barrier
Source: Erosion Draw

77

IP INLET PROTECTION NTS

7.4 Temporary Seeding

Definition

The establishment of temporary vegetative cover on disturbed areas by seeding with appropriate, rapidly growing annual plants.

Purposes

- To reduce erosion and sedimentation by stabilizing disturbed areas that will not be brought to final grade within 7 days or more.
- To reduce problems associated with mud and dust production from bare soil surfaces during construction.

Conditions Where Practice Applies

Where exposed soil surfaces are not to be fine graded for periods of 7 days or more. Such areas include denuded areas, soil stockpiles, berms, dams, the sides of sediment basins, and temporary road banks.

Specifications

Prior to seeding, install necessary erosion control practices such as berms, waterways, and basins.

Plant Selection

Select plants appropriate to the season, region, and site conditions. Consult with your local Agricultural Extension agent, county, FDEP, water management district, or FDOT office, or see Table 1.65a of the Florida Development Manual.

Seedbed Preparation

To control erosion on bare soil surfaces, plants must be able to germinate and grow. Seedbed preparation is essential. A soil test should be taken to determine liming and fertilization requirements. In the absence of a soil test, the following guidelines apply:

- Liming - Where soils are known to be highly acid (pH 6.0 and lower), lime should be applied at the rate of 2 tons of pulverized agricultural limestone per acre.
- Fertilizer - Shall be applied as 217.5 pounds per acre (5 pounds/1,000 square feet) (504 kg/ha) of 50% slow-release 10-20-20 or equivalent. Lime and fertilizer shall be incorporated into the top 2 to 4 inches (5 to 10 cm) of the soil. If quick-release nitrogen is used, apply 2 to 3 weeks after seed has sprouted.
- Surface Roughening - If the area has been recently loosened or disturbed, no further roughening is required. When the area is compacted, crusted, or hardened, the soil surface shall be loosened by disking, raking, harrowing, or other acceptable means (see SURFACE ROUGHENING in this chapter).

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- Tracking - Tracking with bulldozer cleats is most effective on sandy soils. This practice often causes the undue compaction of the soil surface, especially in clayey soils, and does not aid plant growth as effectively as other methods of surface roughening.

Seeding

Seed shall be evenly applied with a cyclone seeder, drill, cultipacker seeder, or hydroseeder. Small grains shall be planted no more than 1 inch deep. Grasses and legumes shall be planted no more than 1/4 inch (6 mm) deep.

Mulching

- Mulch should usually be applied to reduce damage from water runoff or wind erosion, and to improve moisture conditions for seedlings. Mulching without seeding should be considered for very short-term protection. The use of mulch is a judgment decision based on the time of seeding and conditions of individual sites. When used, mulch shall be applied according to MULCHING (in this chapter).
- Seedings made on slopes in excess of 3:1, or on adverse soil conditions, or during excessively hot or dry weather, shall be mulched according to MULCHING (in this chapter).
- Seedings made during optimum spring and summer seeding dates, with favorable soil and site conditions, may not require mulch.

Reseeding

Areas that fail to establish enough vegetative cover to prevent rill erosion will be filled in with proper topsoil and reseeded as soon as they are identified.

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19445 SHUMARD OAK DR.
SUITE 102
LAND O LAKES, FL 34638
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PROJECT PM: AH

PROJECT RE: JH

ISSUE DATE: 04/30/2024

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recommended rate, and use 10 times the recommended rate of inoculant when hydroseeding.

Mulching
All permanent seeding must be mulched immediately upon the completion of seed application (refer to the extended discussion in MULCHING below).

Maintenance of New Seedlings

- Irrigation** – New seedlings should be supplied with adequate moisture. Supply water as needed, especially late in the season, in abnormally hot or dry weather, or on adverse sites. Water application rates should be controlled to prevent runoff. Inadequate amounts of water may be more harmful than no water.
- Re seeding** – Inspect seeded areas for failure and make necessary repairs and reseedings within the same season, if possible:
 - If vegetative cover is inadequate to prevent rill erosion, overseed and fertilize in accordance with soil test results.
 - If a stand has less than 40% cover, re-evaluate the choice of plant materials and quantities of lime and fertilizer. Re-establish the stand following seedbed preparation and seeding recommendations, omitting lime and fertilizer in the absence of soil test results. NOTE: If vegetation has failed to grow, the soil must be tested to determine if acidity or nutrient imbalances are responsible.
- Fertilization** – Seedlings should be fertilized 1 year after planting to ensure proper stand density:
 - To established all-grass stands, apply 300 pounds per acre of 15-0-15 or 15-2-15 slow release (6.7 pounds per 1,000 square feet) between August 15 and November 15 (the first fall following seeding).
 - To legume-and-grass stands or pure legume stands, apply 150 pounds per acre of 0-20-20 (3.5 pounds per 1,000 square feet) in early May, or between August 15 and October 15.

GENERALLY, A STAND OF VEGETATION IS NOT DETERMINED TO BE FULLY ESTABLISHED UNTIL SOIL COVER HAS BEEN MAINTAINED FOR 1 FULL YEAR FROM PLANTING. DISTURBED AREAS THAT ARE TO BE ESTABLISHED WITH PERMANENT VEGETATION MUST BE SEEDED OR PLANTED WITHIN 15 DAYS AFTER FINAL GRADE IS REACHED, UNLESS TEMPORARY STABILIZATION IS APPLIED.

Soil Testing Laboratory is available from county extension agents. Under unusual conditions where it is not possible to obtain a soil test, the following soil amendments will be applied:

- LIME:** 2 tons per acre finely ground agricultural or dolomitic limestone (90 pounds per 1,000 square feet) (4.48 t/ha)
- FERTILIZER:** Mixed grasses and legumes: 150 pounds per acre of 5-25-10 (3.5 pounds per 1,000 square feet)
Legume stands only: 150 pounds per acre of 5-20-10 (3.5 pounds per 1,000 square feet)
Grass stands only: 870 pounds per acre of 5-5-10 (1.12 t/ha) and 57 pounds of 38-0-0 in spring (1.3 pounds per 1,000 square feet)
220 pounds per acre of 10-5-10 and 57 pounds of 38-0-0 in fall (1.3 pounds per 1,000 square feet)

Other fertilizer formulations may be used, provided they supply the same amounts and proportions of plant nutrients.

Lime and fertilizer shall be incorporated into the top 4 to 6 inches (10 to 15 cm) of the soil by discing or other means. When applying lime and fertilizer with a hydroseeder, apply to a rough, loose surface.

Seeding

- Certified seed should be used for all permanent seeding whenever possible.
- Legume seed should be inoculated with the inoculant appropriate to the species. The seed of lespedezas, crown vetch, and clovers should be scarified to promote uniform germination.
- Apply seed uniformly with a cyclone seeder, drill, cultipacker-seeder, or hydroseeder on a firm, friable seedbed. The maximum seeding depth should be ¼ inch.
- During hydroseeding, to avoid seed damage, it is recommended that if a machinery breakdown of 30 minutes to 2 hours occurs, 50% more seed be added to the tank, based on the proportion of the slurry remaining in the tank. Beyond 2 hours, a full rate of new seed may be necessary. Often hydroseeding contractors prefer not to apply lime in their rigs, as it is abrasive. In inaccessible areas, lime may have to be applied in pelletized or liquid form, separately. The rates of wood fiber should be at least 2,000 pounds per acre (2.24 t/ha). Surface roughening is particularly important when hydroseeding, as a roughened slope provides some natural coverage of lime, fertilizer, and seed.
- Legume inoculants should be used by the date indicated on the container. When dry seeding, use 4 times the manufacturer's

- Sufficient pore space to permit root penetration. A bulk density of 1.2 to 1.5 indicates that sufficient pore space is present. A fine granular or crumb-like structure is also favorable.
- Sufficient depth to provide an adequate root zone. The depth to rock or impermeable layers such as hardpans shall be 12 inches (30 cm) or more, except on slopes steeper than 2:1, where the addition of soil is not feasible.
- A favorable pH range for plant growth. If the soil is so acid that a pH range of 6.0 to 7.0 cannot be attained by the addition of pH-modifying materials, then the soil is unsuitable for plant roots.
- Freedom from toxic amounts of materials harmful to plant growth.
- Freedom from excessive quantities of roots, branches, large stones, large clods of earth, or trash of any kind. Clods and stones may be left on slopes steeper than 3:1 if they are to be hydroseeded.

If any of the above criteria cannot be met—i.e., if the existing soil is too coarse, dense, shallow, acid, or contaminated to foster vegetation—then topsoil should be applied in accordance with TOPSOILING (in this chapter). The necessary mechanical erosion and sediment control practices will be installed prior to seeding. Grading will be carried out according to the approved plan. Surfaces will be roughened in accordance with SURFACE ROUGHENING (in this chapter).

Soil Conditioners
To modify the texture, structure, or drainage characteristics of a soil, the following materials may be added to the soil:

- Peat shall be sphagnum moss peat, hyprum moss peat, reed-sedge peat, or peat humus, from freshwater sources. Peat shall be shredded and conditioned in storage piles for at least 6 months after excavation.
- Sand shall be clean and free of toxic materials.
- Vermiculite shall be horizontal grade and free of toxic substances.
- Composted manure shall be stable or cattle manure not containing undue amounts of straw or other bedding materials or toxic chemicals. Phosphorus shall be limited to soil test recommendations.
- Thoroughly rotted sawdust shall be 6 pounds of nitrogen added to each cubic yard (3.5 kg/m³) and shall be free of stones, sticks, and toxic substances.
- Where local ordinances permit, treated sewage sludge may be used in accordance with local, state, and federal regulations. The use of treated sewage sludge shall be limited to soil test recommendations.

Lime and Fertilizer
Lime and fertilizer needs should be determined by soil tests. Soil tests may be performed by the Cooperative Extension Service Soil Testing Laboratory at the University of Florida, or by a reputable commercial laboratory. Information on the state's

7.5 Permanent Seeding

Definition
The establishment of perennial vegetative cover on disturbed areas by planting seed.

- Purposes**
- To reduce erosion and decrease sediment yield from disturbed areas.
 - To permanently stabilize disturbed areas in a manner that is economical and adaptable to site conditions, and that allows the selection of the most appropriate plant materials.

- Conditions Where Practice Applies**
- Disturbed areas where permanent, long-lived vegetative cover is needed to stabilize the soil.
 - Rough-graded areas that will not be brought to final grade for a year or more.

Specifications

Selection of Plant Materials

- The selection of plant materials is based on climate, topography, soils, land use, and planting season. To determine which plant materials are best adapted to a specific site, see Tables 1.66b and 1.66c of the Florida Development Manual, which describe plant characteristics and list recommended varieties.
- Table 1.66a of the Florida Development Manual lists appropriate seeding mixtures for various site conditions in Florida. These mixtures are designed for general use and are known to perform well on the sites described. Adhere to these mixtures whenever feasible. Check Tables 1.66b and 1.66c for recommended varieties.

Seedbed Requirements
Vegetation should not be established on slopes that are unsuitable because of inappropriate soil texture, poor internal structure or internal drainage, a high volume of overland flow, or excessive steepness, until measures have been taken to correct these problems.

To maintain a good stand of vegetation, the soil must meet certain minimum requirements as a growth medium. The existing soil must meet the following criteria:

- Enough fine-grained material to maintain adequate moisture and nutrient supply.

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- Roll or tamp the strips thoroughly to create firm contact between roots and soil.
- Irrigate deeply enough that the underside of the strips and the soil 4 inches (10 cm) below the strips are wet.

Sodded Swales and Waterways

- Care should be taken to prepare the soil adequately in accordance with this specification. The sod type shall consist of plant materials able to withstand the designed velocity (see STORMWATER CONVEYANCE CHANNEL) (in Chapter 6).
- Sod strips in swales and waterways shall be laid perpendicular to the direction of flow. Care should be taken to butt the ends of the strips tightly.
- After rolling or tamping, sod shall be pegged or stapled to resist washout during the establishment period. Chicken wire, jute, or other netting may be pegged over the sod for extra protection in critical areas.
- All other specifications for this practice shall be adhered to when sodding a swale or waterway.

Maintaining Established Sod

- After the first week, sod shall be watered as necessary to maintain adequate moisture in the root zone and prevent dormancy.
- Apply lime and fertilizer under a regular program based on soil tests and on the use and general appearance of the vegetative cover. In the absence of a soil test, apply 1 to 2 tons per acre (45 to 90 pounds/1,000 square feet) (2.24 to 4.48 t/ha) of finely ground agricultural limestone every 3 years. Apply 300 pounds per acre (6.7 pounds/1,000 square feet) of 15-0-15 or 15-2-15 slow-release fertilizer in the spring and fall.
- Mow to control weeds, improve the appearance of the vegetative cover, and reduce fire hazard, as necessary. In general, the coarser the leaf texture of the grass, the higher it should be cut. Continuous, close mowing results in a loss of vigor and reduced stand. No more than one-third of the grass leaf should be removed in any mowing.

Spot Sodding

- Spot sodding is the planting of plugs or blocks, a minimum of 4 inches (10 cm) in diameter or square, of sod at measured intervals. The plugs or blocks should be placed 1 foot (30 cm) apart.
- Sod spots in a row should be placed alternately and not directly opposite sod spots in adjacent rows.
- Fit the plugs or blocks tightly into the prepared holes and tamp them firmly into place.
- Irrigate deeply enough that the underside of the sod spot and the soil 4 inches (10 cm) below the sod are thoroughly wet.

Strip Sodding

- Areas to be strip sodded should be fertilized, limed, prepared, and smoothed as in solid sodding.
- Lay the strips end to end in rows 1 to 1½ feet (30 to 45 cm) apart, with the strips a minimum of 2 to 4 inches (5 to 10 cm) wide.

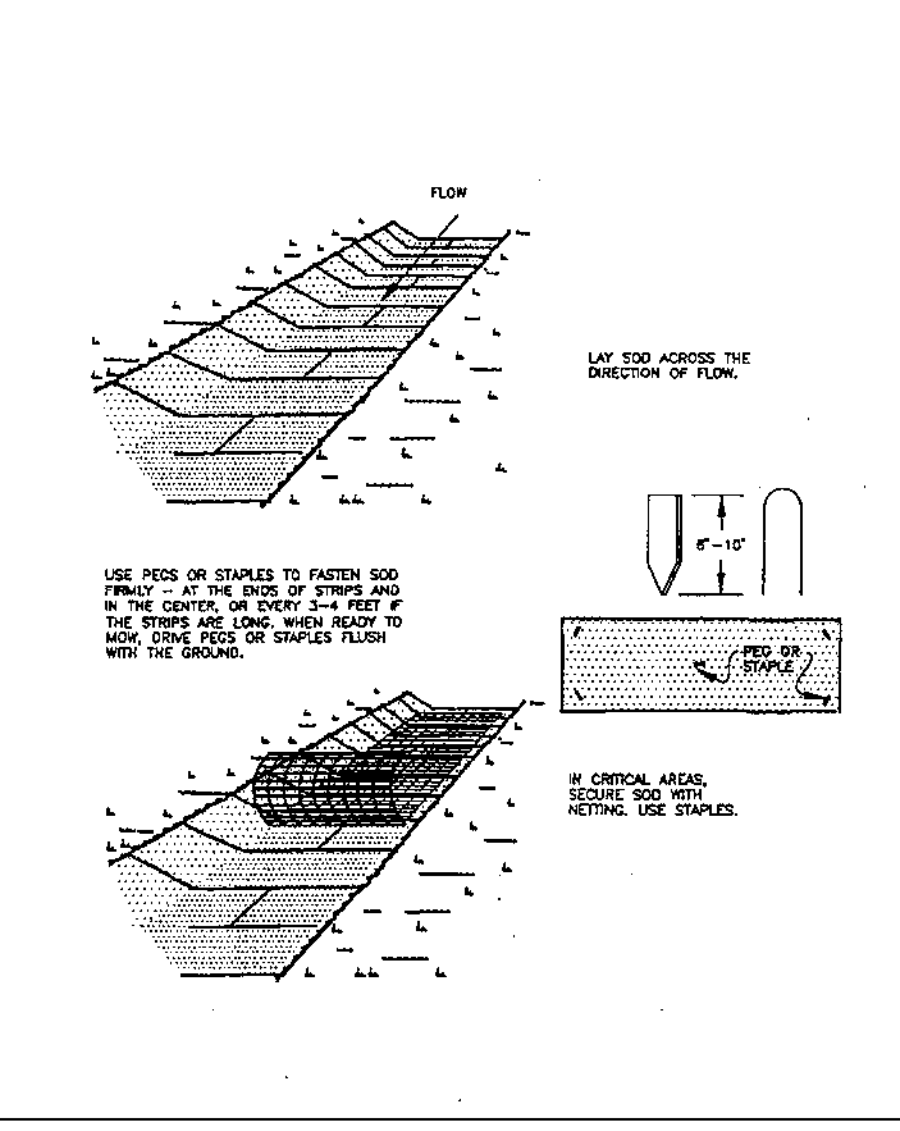


Figure 7.6b. Sodding Swales and Waterways
Source: Virginia DSWC

- Any irregularities in the soil surface resulting from topsoil or other operations shall be filled or leveled to prevent the formation of depressions or water pockets.
- Areas to be topsoiled and the topsoil used shall fulfill the requirements of TOPSOILING (in this chapter). No sod shall be spread on soil that has been treated with soil sterilants until enough time has elapsed to permit the dissipation of toxic materials.

Sod Quality

- Sod should be free of weeds and undesirable coarse weedy grasses. If possible, Certified or Approved turfgrass sod should be used.
- Sod shall be machine cut at a uniform soil thickness of ¾ inch (20 mm), plus or minus ¼ inch (6 mm), at the time of cutting. This thickness shall exclude shoot growth and thatch.
- Pieces of sod shall be cut to the supplier's standard width and length, with a maximum allowable deviation in any dimension of 5%. Torn or uneven pads are not acceptable.
- Standard-size sections of sod shall be strong enough to support their own weight and retain their size and shape when suspended from a firm grasp on one end of the section.
- Sod shall not be cut or laid in excessively wet or dry weather.
- Sod shall be harvested, delivered, and installed within 36 hours.

Installation

Solid Sodding

- Irrigate areas to be sodded with a minimum of ½ inch (13 mm) of water, unless recent rains have provided an equivalent amount of moisture (see Figure 7.6a).
- The first row of sod shall be laid in a straight line, with subsequent rows placed parallel to and butting tightly against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Care shall be exercised to ensure that the sod is not stretched or overlapped and that all joints are butted tightly to prevent voids that would dry out the roots.

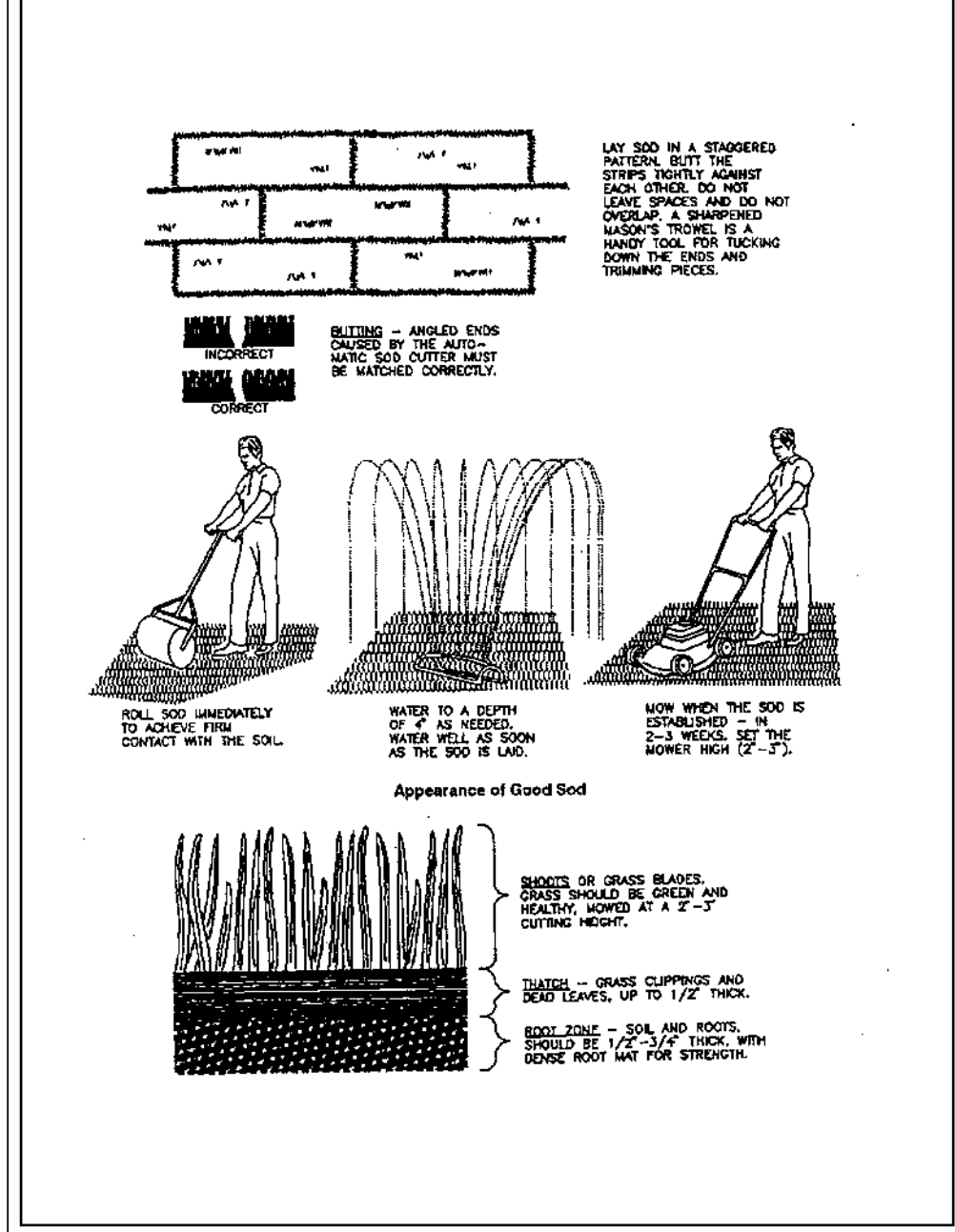


Figure 7.6a. Sodding
Source: Virginia DSWC

7.6 Sodding

Definition
Stabilizing fine-graded disturbed areas by establishing permanent grass stands with sod.

- Purposes**
- To establish permanent turf immediately.
 - To prevent erosion and damage from sediment and runoff by stabilizing the soil surface.
 - To reduce the production of dust and mud associated with bare soil surfaces.
 - To stabilize drainageways where concentrated overland flow will occur.

Conditions Where Practice Applies

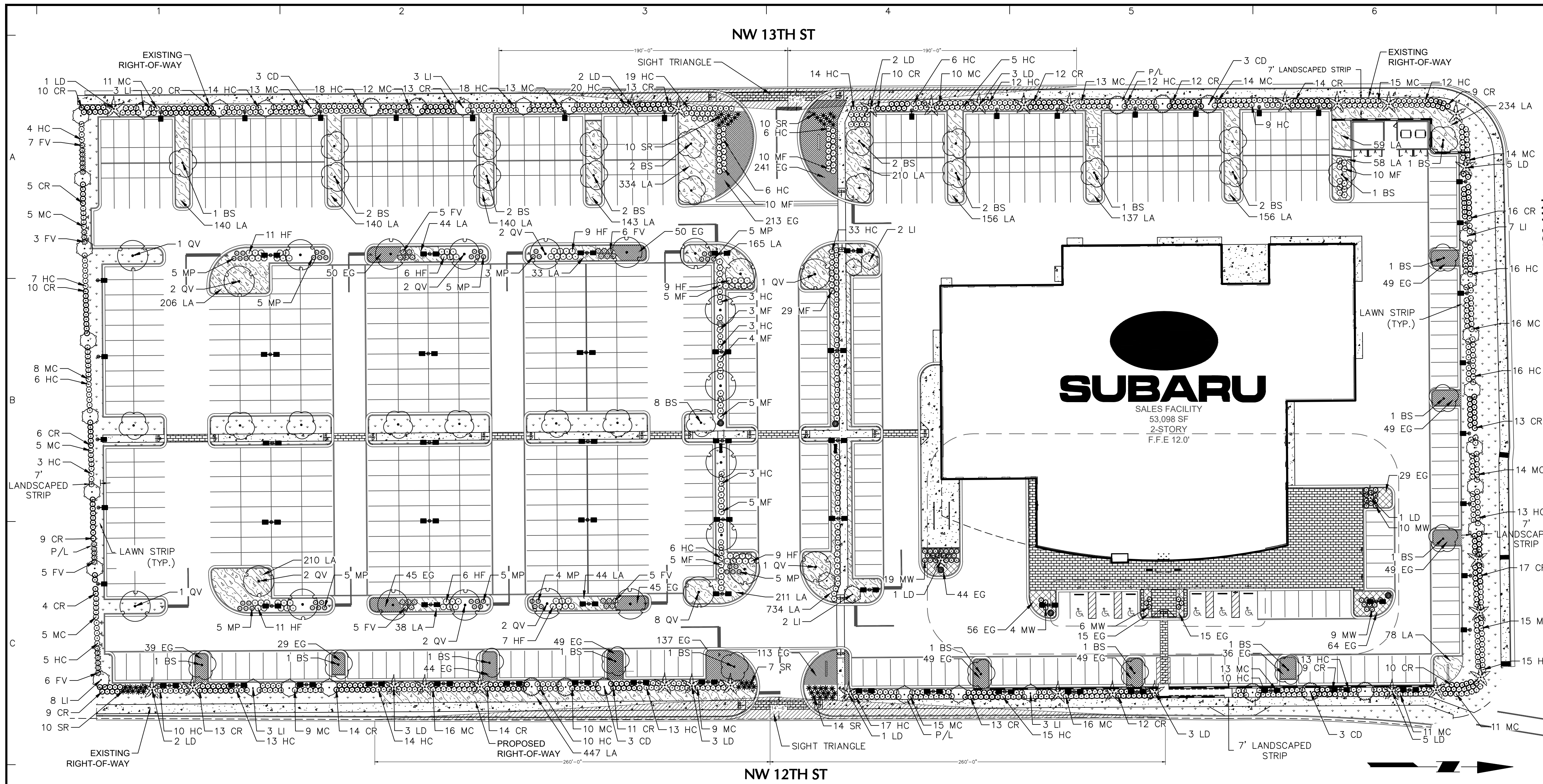
- Disturbed areas that require immediate vegetative covers, or where sodding is preferred to other means of grass establishment.
- The following locations are particularly suited to stabilization with sod:
 - Slopes and buffer strips.
 - Waterways and swales, especially around drop inlets.
 - Residential or commercial lawns where quick use or aesthetics are factors.

Specifications

Soil Preparation

- Prior to soil preparation, areas to be sodded shall be brought to final grade in accordance with the approved plan. These operations should leave as much topsoil as possible or replace the topsoil to a depth of 4 inches (10 cm) (see Figure 7.6a).
- Soil tests should be carried out to determine the exact requirements for lime. They may be conducted by the state Soil Testing Laboratory at the University of Florida or a reputable commercial laboratory. Information on state soil tests is available from county Cooperative Extension agents. When a soil test is not carried out, pulverized agricultural limestone may be added at a rate of 100 pounds per 1,000 square feet (2 tons/acre).
- Before sod is laid, the soil surface shall be clear of trash, debris, roots, branches, stones, and clods more than 2 inches (5 cm) in length or diameter. Sod shall not be applied to gravel or other non-soil surfaces.

SO SODDING NTS



COMPLIANCE CHART - CITY OF DORAL, FL LANDSCAPE ORDINANCE

SECTION	REQUIREMENT	PROPOSED	COMPLIANCE
SECTIONS 71-101, 71-102, 71-105 TREES AND STREET TREES	1. NON-STREET TREES: MIN 10' HT., 2-1/2" CAL. AT PLANTING (EXCEPTION: 30% OF TREES REQUIRED CAN BE NATIVE TREES WITH MIN HT 8' AND CAL. 1.5") 2. STREET TREES: MATURE TO HEIGHT OF 20', CLEAR TRUNK OF 4" HEIGHT OF 14" AND CAL. OF 2-1/2" AT PLANTING, MAX SPACING 35' O.C. (STREET TREES ARE NOT REQUIRED WHEN A COLONNADE OPEN TO THE PUBLIC IS LOCATED WITHIN 4' OF THE EDGE OF THE ROADWAY) 3. MUST BE PLANTED WITHIN 7' OF EDGE OF ROADWAY PAVEMENT OR SIDEWALK 4. MINIMUM NUMBER: 15 TREES/ ACRE (INDUSTRIAL LAND USE)	*REQUIRED: 15 X 8.39 ACRES = 126 TREES STREET TREES = 1290 LF / 35 = 37 STREET TREES *PROPOSED: 136 TREES, NOTABLY, 37 OF THESE TREES ARE DESIGNATED AS STREET TREES AND ARE STRATEGICALLY PLACED ALONG NW 12TH ST, NW 93RD CT, AND NW 13TH ST.	COMPLIES
SECTION 71-103 POWERLINES	MIN HT. 8' AND CAL. 1.5"; SINGLE TRUNK TREES CLEAR OF LATERAL BRANCHES TO 4' AND MULTI-TRUNK TREES OR SHRUBS CLEARED OF FOLIAGE TO A HEIGHT OF 4'; MAX SPACING 25' O.C., MATURING TO HEIGHT AND SPREAD NOT ENCRoACHING WITHIN 5' OF OVERHEAD POWER DISTRIBUTION LINES.	N/P	N/P
SECTION 71-104 AND 71-108 PALM TREES	1. PALMS WHICH MEET ALL OF THE FOLLOWING REQUIREMENTS SHALL COUNT AS A REQUIRED STREET TREE ON THE BASIS OF ONE (1) PALM PER TREE: MIN CANOPY 15' AT MATURITY, AVERAGE MAX SPACING 25' O.C., 14" MIN HEIGHT OR MIN CAL. 4" AT PLANTING (QUEEN PALMS NOT ALLOWED) 2. A 14' MINIMUM OVERALL HEIGHT OR MINIMUM CALIPER OF 4" AT TIME OF PLANTING. 3. PALM TREES OF A 10' MINIMUM OVERALL HEIGHT OR MINIMUM CALIPER OF 3" AT TIME OF PLANTING SHALL COUNT AS A REQUIRED TREE ON THE BASIS OF TWO PALMS PER TREE, EXCEPT AS PROVIDED HEREIN FOR PALM TREES USED AS STREET TREES. NO MORE THAN 30% OF THE MINIMUM TREE REQUIREMENTS MAY BE MET BY PALM TREES.	SEE LANDSCAPE PLAN AND PLANT SCHEDULE. PALM TREES HAVE BEEN PROPOSED ALONG THE STREET. *REQUIRED: 136 TREES X 30% = 41 PALMS *PROPOSED: 32 PALMS	COMPLIES
SECTION 71-109 EXISTING TREES	EXISTING TREES REQUIRED BY LAW TO BE PRESERVED ON SITE AND MAY BE COUNTED TOWARD FULFILLING THE MINIMUM TREE REQUIREMENTS.	N/P	N/P
SECTION 71-111 TREE SPECIES	MIN 50% SHALL BE NATIVE AND 80% LISTED IN MIAMI-DADE STREET TREE MASTER PLAN AND/OR THE UNIVERSITY OF FLORIDA'S LOW-MAINTENANCE LANDSCAPE PLANTS FOR SOUTH FLORIDA LIST.	100% OF TREES ARE LISTED IN MIAMI-DADE STREET TREE MASTER PLAN AND/OR THE UNIVERSITY OF FLORIDA'S LOW-MAINTENANCE LANDSCAPE PLANTS LIST.	COMPLIES
SECTION 71-144 AND 71-145 SHRUBS AND HEDGE	1. MIN 18" AT PLANTING, 10 PER REQUIRED TREE, MIN 50% SHALL BE NATIVE AND 80% LISTED IN MIAMI-DADE STREET TREE MASTER PLAN AND/OR THE UNIVERSITY OF FLORIDA'S LOW-MAINTENANCE LANDSCAPE PLANTS FOR SOUTH FLORIDA LIST. 2. WHEN USED AS A VISUAL SCREEN, BUFFER, OR HEDGE, SHRUBS SHALL BE PLANTED AT A MAXIMUM AVERAGE SPACING OF 30' O.C. OR IF PLANTED AT A MINIMUM HEIGHT OF 36", SHALL HAVE A MAXIMUM AVERAGE SPACING OF 48" O.C. AND SHALL BE MAINTAINED SO AS TO FORM A CONTINUOUS, UNBROKEN AND SOLID VISUAL SCREEN.	SEE LANDSCAPE PLAN AND PLANT SCHEDULE. *REQUIRED: 10 X 126 = 1260 SHRUBS *PROVIDED: 1260 SHRUBS	COMPLIES
SECTION 71-147 GROUND COVER	GROUND COVER PLANTS USED IN LIEU OF GRASS, IN WHOLE OR IN PART, SHALL BE PLANTED IN SUCH A MANNER AS TO PRESENT A FINISHED APPEARANCE AND REASONABLY COMPLETE COVERAGE WITHIN ONE (1) YEAR AFTER PLANTING. MAX LAWN AREA: 20% OF OPEN SPACE (VERY DROUGHT TOLERANT GRASSES AND LOW GROWING NATIVE PLANT SPECIES COULD BE COUNTED TOWARDS GROUNDCOVERS)	SEE LANDSCAPE PLAN AND PLANT SCHEDULE. *REQUIRED: LAWN AREA TO BE LESS THAN 20% OF OPEN SPACE ON SITE *PROPOSED: 10,450 SF / 52,749 SF = 19.8%	COMPLIES
SECTION 71-188 PARKING LOT	ALL PARKING LOTS ADJACENT TO A ROW OR PRIVATE STREET SHALL BE SCREENED BY A CONTINUOUS PLANTING AND/OR 3' HIGH WALL WITH A 7' LANDSCAPED STRIP INCORPORATING SAID PLANTING AND/OR WALL ON PRIVATE PROPERTY. PLANTING MATERIAL AT TIME OF PLANTING SHALL BE EITHER A MINIMUM HEIGHT OF 18" WITH A MAXIMUM AVERAGE SPACING OF 50' O.C. OR A MINIMUM HEIGHT OF 36" WITH A MAXIMUM AVERAGE SPACING OF 48" O.C.	REFER TO THE LANDSCAPE PLAN AND PLANT SCHEDULE. THE PARKING LOT ALONG NW 7TH ST. IS SCREENED BY A 7' LANDSCAPED STRIP CONSISTING OF THE WALL, HEDGES AND SHRUBS AT 30' INTERVALS.	COMPLIES
SECTION 71-188 PARKING LOT	10 SF OF LANDSCAPED AREA PER PARKING SPACE SHALL BE PROVIDED WITHIN A PARKING LOT. TREES SHALL BE PLANTED THROUGHOUT THE INTERIOR OF THE PARKING LOT AT A MINIMUM DENSITY OF 1 TREE / 80 SF OF LANDSCAPED AREA, EXCLUSIVE OF PARKING LOT BUFFERS. EACH ISLAND SHALL HAVE A MIN OF 1 TREE THAT IS 14" H WHEN PLANTING AT 4" CAL.; ONE TREE FOR EVERY 25' O.C.	*REQUIRED: FOR 766 PROPOSED PARKING SPACE X 10 SF = 7,660 SF OF LA AREAS 8,220 SF / 80 SF = 96 TREES *PROPOSED: MORE THAN 8,220 SF OF LANDSCAPED AREA ALONG WITH 96 TREES WITHIN THE PARKING AREA	COMPLIES

PLANT SCHEDULE

SYMBOL	KEY	QTY	BOTANICAL / COMMON NAME	SIZE	ROOT	HEIGHT / SPREAD
TREES						
BS	37	BURSERIA SIMARUBA / GUMBO LIMBO	2" CAL.	B&B	12' HT.	
CD	12	COCCOLOBA DIVERSIFOLIA / PIGEON PLUM	2" CAL.	B&B	10' HT.	
LI	31	LAGERSTROEMIA INDICA / CRAPE MYRTLE	2" CAL.	B&B	12' HT.	
LD	32	LIVISTONA DECIPENS / RIBBON PALM	14-18" HT	B&B		
QV	24	QUERCUS VIRGINIANA / SOUTHERN LIVE OAK	2" CAL.	B&B	12' HT.	
SHRUBS						
CR	299	CHRYSOBALANUS ICACO 'RED TIP' / RED TIP COCOPLUM	18-24"	3 GAL.		
FV	42	FEDUA SELLOWIANA / PINEAPPLE GUAVA	18-24"	3 GAL.		
HF	68	HAMELIA PATENS / FIREBUSH	18-24"	3 GAL.		
HC	420	HAMELIA PATENS 'COMPACTA' / DWARF FIREBUSH	18-24"	3 GAL.		
MF	86	MYRCIANTHES FRAGRANS / SIMPSON'S STOPPER	18-24"	3 GAL.		
MC	294	MYRICA CERIFERA / WAX MYRTLE	18-24"	3 GAL.		
SR	51	SERENOA REPENS / SAW PALMETTO	18-24"	3 GAL.		
ORNAMENTAL GRASS						
MP	47	MUHLENBERGIA CAPILLARIS 'PINK CLOUD' / PINK CLOUD PINK MUHLY GRASS	18-24"	3 GAL.		
MW	48	MUHLENBERGIA SERICEA 'WHITE CLOUD' / WHITE CLOUD DUNE HAIRGRASS	18-24"	3 GAL.		
SYMBOL KEY QTY BOTANICAL / COMMON NAME SIZE ROOT HEIGHT / SPREAD SPACING						
EG	1,608	EVOLVULUS GLOMERATUS / BLUE DAZE	1 GAL.	CONTAINER	24" o.c.	
LA	4,117	LIRIOPE MUSCARI 'AZTEC' / AZTEC LILYTURF	1 GAL.	CONTAINER	24" o.c.	
PA	28,480 SF	PASPALUM NOTATUM 'ARGENTINE' / ARGENTINE BAHAGRASS	---	---	---	

NOTES:
 1. IF ANY DISCREPANCIES OCCUR BETWEEN AMOUNTS SHOWN IN THE PLAN AND THE PLANT LIST, THE PLAN SHALL DICTATE.
 2. ALL LANDSCAPE AREAS ADJACENT TO BUILDINGS, WITHIN PARKING LOTS, AT PARKING PERIMETERS SHALL BE PERMANENTLY IRRIGATED VIA AUTOMATIC SYSTEM. CONTRACTOR SHALL PROVIDE ADD/ALTERNATE BID FOR REMAINING LANDSCAPE AREAS ON SITE FOR OWNER CONSIDERATION.
 3. TREE PLANTING MATERIALS SHALL BE FLORIDA GRADE NO. 1. TREES INSTALLED PURSUANT TO THIS LAND DEVELOPMENT CODE SHALL HAVE ONE PRIMARY VERTICAL TRUNK AND SECONDARY BRANCHES FREE OF INCLUDED BARK UP TO A HEIGHT OF SIX FEET ABOVE NATURAL.

NOTE:
 1. REFER TO SHEET LP501 FOR LANDSCAPE NOTES AND DETAILS.

Date	Description	No.
REVISIONS		

SIGNATURE: MICHAEL SZURA DATE SIGNED: _____
 FL. LICENSED LANDSCAPE ARCHITECT LICENSE NO. LA666752

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Project: **DORAL SUBARU**
 9467 NW 12TH STREET DORAL
 MIAMI-DADE COUNTY FLORIDA

Drawing Title: **LANDSCAPE PLAN**

Project No. **33006604**
 Date: **04/26/2024**
 Drawn By: **IZ/LL**
 Checked By: **SL**
 Drawing No. **LP101**
 Sheet 3 of 6

LANGAN PROJECT NO. 33006604

GENERAL LANDSCAPE PLANTING NOTES

PLANTING MATERIALS

- NAMES OF PLANTS AS DESCRIBED ON THIS PLAN CONFORM TO THOSE GIVEN IN "STANDARDIZED PLANT NAMES", 1942 EDITION PREPARED BY THE AMERICAN JOINT COMMITTEE ON HORTICULTURAL NOMENCLATURE. NAMES OF PLANT VARIETIES NOT INCLUDED THEREIN CONFORM TO NAMES GENERALLY ACCEPTED IN NURSERY TRADE.
- STANDARDS FOR NEW PLANT MATERIAL SHALL BE IN ACCORDANCE WITH THE "FLORIDA GRADES AND STANDARDS FOR NURSERY PLANTS 2015" PUBLISHED BY FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES. ALL PLANTS MUST MEET FLORIDA GRADE NO. 1 OR BETTER. PLANT MATERIAL SHALL HAVE NORMAL HABIT OF GROWTH AND BE HEALTHY, VIGOROUS, AND FREE FROM DISEASES AND INSECT INFESTATION.
- NEW PLANT MATERIAL SHALL BE NURSERY GROWN UNLESS SPECIFIED OTHERWISE. ALL PLANTS SHALL BE SET PLUMB AND SHALL BEAR THE SAME RELATIONSHIP TO FINISHED GRADE AS THE PLANT'S ORIGINAL GRADE BEFORE DIGGING. PLANT MATERIAL OF THE SAME SPECIES AND SPECIFIED AS THE SAME SIZE SHOULD BE SIMILAR IN SHAPE, COLOR AND HABIT. THE LANDSCAPE ARCHITECT HAS THE RIGHT TO REJECT PLANT MATERIAL THAT DOES NOT CONFORM TO THE TYPICAL OR SPECIFIED HABIT OF THAT SPECIES.
- THE CONTRACTOR SHALL NOT MAKE SUBSTITUTIONS. IF THE SPECIFIED LANDSCAPE MATERIAL IS NOT OBTAINABLE, THE CONTRACTOR SHALL SUBMIT PROOF OF NON-AVAILABILITY TO THE LANDSCAPE ARCHITECT AND OWNER TOGETHER WITH A WRITTEN PROPOSAL FOR USE OF AN EQUIVALENT MATERIAL.
- THE LANDSCAPE ARCHITECT MAY REVIEW PLANT MATERIALS AT THE SITE, BEFORE PLANTING, FOR COMPLIANCE WITH REQUIREMENTS FOR GENUS, SPECIES, VARIETY, SIZE, AND QUALITY. THE LANDSCAPE ARCHITECT RETAINS THE RIGHT TO FURTHER REVIEW PLANT MATERIALS FOR SIZE AND CONDITION OF BALLS AND ROOT SYSTEM, INSECTS, INJURIES, AND LATENT DEFECTS, AND TO REJECT UNSATISFACTORY OR DEFECTIVE MATERIAL AT ANY TIME DURING PROGRESS OF WORK. THE CONTRACTOR SHALL REMOVE REJECTED PLANT MATERIALS IMMEDIATELY FROM PROJECT SITE AS DIRECTED BY THE LANDSCAPE ARCHITECT OR OWNER.
- ALL PLANTS MUST MEET FLORIDA GRADE NO.1 OR BETTER AND SELECTED FROM THE FLORIDA FRIENDLY LANDSCAPE GUIDE AND THE INSTALLATION MUST FOLLOW THE FFL GUIDELINES AND BMS.

DELIVERY, STORAGE, AND HANDLING

- PACKAGED MATERIALS: PACKAGED MATERIALS SHALL BE DELIVERED IN CONTAINERS SHOWING WEIGHT, ANALYSIS, AND NAME OF MANUFACTURER. MATERIALS SHALL BE PROTECTED FROM DETERIORATION DURING DELIVERY, AND WHILE STORED AT SITE.
- TREES AND SHRUBS: THE CONTRACTOR SHALL PROVIDE TREES AND SHRUBS DUG FOR THE GROWING SEASON FOR WHICH THEY WILL BE PLANTED. DO NOT PRUNE PRIOR TO DELIVERY UNLESS OTHERWISE DIRECTED BY THE LANDSCAPE ARCHITECT. DO NOT BEND OR BEND THE TREES OR SHRUBS IN SUCH A MANNER AS TO DAMAGE BARK, BREAK BRANCHES, OR DESTROY NATURAL SHAPE. PROVIDE PROTECTIVE COVERING DURING TRANSPORT. DO NOT DROP OR BREAK BALLED STOCK DURING DELIVERY OR HANDLING.
- ALL PLANTS SHALL BE BALLED AND BURLAPPED OR CONTAINER GROWN AS SPECIFIED. NO CONTAINER GROWN STOCK WILL BE ACCEPTED IF IT IS ROOT BOUND. ALL ROOT BALL WRAPPING AND BINDING MATERIAL MADE OF SYNTHETICS OR PLASTICS SHALL BE REMOVED FROM THE TOP OF THE BALL AT THE TIME OF PLANTING. IF THE PLANT IS SHIPPED WITH A WIRE BASKET AROUND THE ROOT BALL, THE WIRE BASKET SHALL BE CUT AND FOLDED DOWN 8" INTO THE PLANTING HOLE. WITH CONTAINER-GROWN STOCK, THE CONTAINER SHALL BE REMOVED AND THE ROOT BALL SHALL BE CUT THROUGH THE SURFACE IN TWO LOCATIONS.
- THE CONTRACTOR SHALL HAVE TREES AND SHRUBS DELIVERED TO SITE AFTER PREPARATIONS FOR PLANTING HAVE BEEN COMPLETED AND PLANT IMMEDIATELY. IF PLANTING IS DELAYED MORE THAN 6 HOURS AFTER DELIVERY, THE CONTRACTOR SHALL SET TREES AND SHRUBS IN SHADE, PROTECT FROM WEATHER AND MECHANICAL DAMAGE AND KEEP ROOTS MOIST BY COVERING WITH MULCH, BURLAP OR OTHER ACCEPTABLE MEANS OF RETAINING MOISTURE.

INSTALLATION

- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITY AND SEWER LINES PRIOR TO THE START OF EXCAVATION ACTIVITIES BASED ON AVAILABLE SURVEY INFORMATION AND BY CALLING 811 IN ACCORDANCE WITH FLORIDA STATE UNDERGROUND FACILITY DAMAGE PREVENTION AND SAFETY ACT, CHAPTER 556 AT LEAST TWO FULL BUSINESS DAYS PRIOR TO PLANNED EXCAVATION OR DEMOLITION ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER AND OWNER.
- THE CONTRACTOR TO STAKE OUT PLANTING LOCATIONS, FOR REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT AND/OR OWNER BEFORE PLANTING WORK BEGINS. THE LANDSCAPE ARCHITECT AND/OR OWNER SHALL DIRECT THE CONTRACTOR IN THE FINAL PLACEMENT OF ALL PLANT MATERIAL AND LOCATION OF PLANTING BEDS TO ENSURE COMPLIANCE WITH DESIGN INTENT UNLESS OTHERWISE INSTRUCTED.
- NO PLANT SHALL BE PUT INTO THE GROUND BEFORE ROUGH GRADING HAS BEEN COMPLETED AND APPROVED BY THE PROJECT LANDSCAPE ARCHITECT OR PROJECT ENGINEER.
- ALL LANDSCAPED AREAS TO BE CLEARED OF ROCKS, STUMPS, TRASH AND OTHER UNSIGHTLY DEBRIS. ALL FINE GRADED AREAS SHOULD BE HAND RAKED SMOOTH ELIMINATING ANY CLUMPS AND UNEVEN SURFACES PRIOR TO PLANTING OR MULCHING.
- ALL PLANT MATERIAL SHALL BE INSTALLED AS PER DETAILS, NOTES AND CONTRACT SPECIFICATIONS. THE LANDSCAPE ARCHITECT MAY REVIEW INSTALLATION AND MAINTENANCE PROCEDURES.
- THE CONTRACTOR SHALL KEEP AREA CLEAN DURING DELIVERY AND INSTALLATION OF PLANT MATERIALS. REMOVE AND DISPOSE OF OFF-SITE ANY ACCUMULATED DEBRIS OR UNUSED MATERIALS. REPAIR DAMAGE TO ADJACENT AREAS CAUSED BY LANDSCAPE INSTALLATION OPERATIONS.
- AFTER PLANT IS PLACED IN TREE PIT LOCATION, ALL TWINE HOLDING ROOT BALL TOGETHER SHOULD BE COMPLETELY REMOVED AND THE BURLAP SHOULD BE PULLED DOWN SO 1/3 OF THE ROOT BALL IS EXPOSED. SYNTHETIC BURLAP SHOULD BE COMPLETELY REMOVED AFTER INSTALLATION.
- MAINTAIN A 2 TO 3" MULCH LAYER AROUND ESTABLISHED TREES, SHRUBS, AND BEDDING PLANTS. COARSE MATERIALS, SUCH AS PINE NUGGETS, MAY BE APPLIED TO A DEPTH OF 4", BUT DON'T ALLOW MULCH TO ACCUMULATE TO A GREATER DEPTH. CYPRESS MULCH WILL NOT BE ACCEPTED.
- ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24-HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL THEN BE WATERED WEEKLY OR AS REQUIRED BY SITE AND WEATHER CONDITIONS TO MAINTAIN VIGOROUS AND HEALTHY PLANT GROWTH.
- AFTER COMPLETION OF A PROJECT, ALL EXPOSED GROUND SURFACES THAT ARE NOT PAVED WITHIN THE CONTRACT LIMIT LINE, EXCEPT FOR THE AREA FROM THE BUILDING OUT TO THE SURROUNDING CURBS, AND THAT ARE NOT COVERED BY LANDSCAPE PLANTING OR SEEDING AS SPECIFIED, SHALL BE COVERED BY A SHREDDED HARDWOOD BARK OR APPROVED EQUAL MULCH THAT WILL PREVENT SOIL EROSION AND THE EMANATION OF DUST.
- TREES MAY BE STAKED AT LANDSCAPE CONTRACTOR'S DISCRETION. CURRENT HORTICULTURAL PRACTICE DOES NOT RECOMMEND STAKING TREES EXCEPT IN CONDITIONS WHERE TREES ARE SUBJECT TO BLOW DOWNS DUE TO SOIL CONDITIONS, HEAVY PREVAILING WINDS OR A HIGH RATIO OF TOP GROWTH TO ROOT BALL. IF STAKING IS DEEMED NECESSARY BY CONTRACTOR, STAKE AND GUYS SHOULD BE LOCATED AND FLAGGED IN A MANNER TO PREVENT TRIPPING HAZARDS. WIRES OR GUYS SHALL BE LOCATED AND COVERED SO AS NOT TO PULL OR DAMAGE BRANCHES AND SHALL BE REMOVED AT THE END OF THE GUARANTEE PERIOD.
- NEW TREES MAY HAVE TEMPORARY DEER PROTECTION MEASURES INSTALLED AROUND TRUNKS AT THE LANDSCAPE CONTRACTOR'S DISCRETION. SUBMIT MATERIAL CUT SHEETS FOR REVIEW PRIOR TO PURCHASE AND INSTALLATION.

GUARANTEE

- NEW PLANT MATERIAL SHALL BE GUARANTEED TO BE ALIVE AND IN VIGOROUS GROWING CONDITION FOR A PERIOD OF ONE YEAR FOLLOWING ACCEPTANCE BY THE OWNER. PLANT MATERIAL FOUND TO BE UNHEALTHY, DYING OR DEAD DURING THIS PERIOD, SHALL BE REMOVED AND REPLACED IN KIND BY THE CONTRACTOR AT NO EXPENSE TO THE OWNER.
- ALL SCREENING AND REQUIRED LANDSCAPE PLANTINGS SHALL BE MAINTAINED FOR THE LIFE OF THE USE AND SHALL BE REPLACED OR RESTORED AS NECESSARY IN ORDER TO MAINTAIN THEIR EFFECTIVENESS. ANY LOSSES DUE TO STORM DAMAGE, DISEASE OR OTHER FACTORS SHALL BE REPLACED IN KIND WITHIN A PERIOD OF NOT MORE THAN SIX MONTHS.

PLANTING SOIL SPECIFICATIONS

- PLANTING SOIL, ALTERNATELY MAY BE REFERRED TO AS TOPSOIL, SHOULD BE FRIABLE, FERTILE, WELL DRAINED, FREE OF DEBRIS, TOXINS, TRASH AND STONES OVER 1/2" DIA., IT SHOULD HAVE A HIGH ORGANIC CONTENT SUITABLE TO SUSTAIN HEALTHY PLANT GROWTH AND SHOULD LOOK AESTHETICALLY PLEASING HAVING NO NOXIOUS ODOORS.
- PLANTING SOIL:**
REUSE SURFACE SOILS STOCKPILED ON SITE, VERIFYING COMPLIANCE WITH PLANTING SOIL AND TOPSOIL CRITERIA IN THIS SPECIFICATION THROUGH TESTING. CLEAN SURFACE SOIL OF ALL ROOTS, PLANTS, SOD, AND GRAVEL OVER 1" IN DIAMETER AND DELETERIOUS MATERIALS. IF ON-SITE SOILS ARE TO BE USED FOR PROPOSED PLANTING, THE CONTRACTOR SHALL DEMONSTRATE, THROUGH SOIL TESTING, THAT ON-SITE SOILS MEET THE SAME CRITERIA AS INDICA IN THIS SPECIFICATION.
SUPPLEMENT WITH IMPORTED OR MANUFACTURED TOPSOIL FROM OFF SITE SOURCES WHEN TOPSOIL AND PLANTING SOIL QUANTITIES ARE INSUFFICIENT. OBTAIN SOIL DISPLACED FROM NATURALLY WELL-DRAINED SITES WHERE TOPSOIL OCCURS AT LEAST 4" DEEP. DO NOT OBTAIN FROM AGRICULTURAL LAND, BOGS, MARSHES OR CONTAMINATED SITES.
AT A MINIMUM, PLANTING SOILS MEETING THESE SPECIFICATIONS MAY BE OBTAINED FROM MECARE DENALI, P: 888-325-1522, OR APPROVED EQUAL.
CONTRACTOR SHALL TEST SOILS AND FURNISH SAMPLES UPON REQUEST. PACKAGED MATERIALS SHALL BE UNOPENED BAGS OR CONTAINERS, EACH BEARING A NAME, GUARANTEE, AND TRADEMARK OF THE PRODUCER, MATERIAL COMPOSITION, MANUFACTURER'S CERTIFIED ANALYSIS, AND THE WEIGHT OF THE MATERIALS. SOIL OR AMENDMENT MATERIALS SHALL BE STORED ON SITE TEMPORARILY IN STORAGE PILES PRIOR TO PLACEMENT AND SHALL BE PROTECTED FROM INTRUSION OF CONTAMINANTS AND EROSION. AFTER MIXING, SOIL MATERIALS SHALL BE COVERED WITH A TARP/AULIN UNTIL TIME OF ACTUAL USE.
ALL PLANTING SOILS SHALL BE SUBMITTED FOR TESTING TO COUNTY EXTENSION OFFICES OR THE UNIVERSITY OF FLORIDA/IFAS EXTENSION SOIL TESTING LABORATORY, OR APPROVED EQUAL, PRIOR TO DELIVERY TO THE SITE. CONTRACTOR SHALL FURNISH SOIL SAMPLES AND SOIL TEST RESULTS TO LANDSCAPE ARCHITECT OR OWNER AT A RATE OF ONE SAMPLE PER 500 CUBIC YARDS TO ENSURE CONSISTENCY ACROSS THE TOTAL VOLUME OF PLANTING SOIL REQUIRED. TEST RESULTS SHALL EVALUATE FOR ALL CRITERIA LISTED IN THIS SPECIFICATION. IF TESTING AGENCY DETERMINES THAT THE SOILS ARE DEFICIENT IN ANY MANNER AND MAY BE CORRECTED BY ADDING AMENDMENTS, THE CONTRACTOR SHALL FOLLOW STATED RECOMMENDATIONS FOR SOIL IMPROVEMENT AND FURNISH SUBMITTALS FOR ALL AMENDMENTS PRIOR TO DELIVERY OF SOIL TO THE PROJECT SITE.
- WHERE PLANTING AREAS ARE PROPOSED FOR FORMER PAVED OR GRAVEL AREAS, BEDS SHALL BE EXCAVATED TO A MINIMUM 30" DEPTH AND, AT A MINIMUM, BE BACKFILLED WITH BOTTOM LAYER OF SANDY LOAM (ORGANIC CONTENT LESS THAN 2%) OVER WHICH TOPSOIL AND PLANTING SOILS WILL BE PLACED AT DEPTHS INDICATED IN PLANS, DETAILS AND NOTES.
- CLEAN SOIL FILL IN LANDSCAPE AREAS:**
LANDSCAPE FILL MATERIAL, BELOW PLANTING SOILS, SHALL HAVE THE PHYSICAL PROPERTIES OF A SANDY LOAM WITH AN ORGANIC CONTENT OF LESS THAN 2% AND A PIH BETWEEN 5 - 7.
- SOIL PLACEMENT:**
A. IMPROVE ENTIRE DEPTH OF PLANTING BEDS RATHER THAN PROVIDING SELECT BACKFILL ONLY AROUND PLANTS. CONTRACTOR TO PROVIDE SIX INCHES (6") MINIMUM DEPTH PLANTING SOIL LAYER IN LAWN AREAS, TWELVE INCHES (12") MINIMUM DEPTH PLANTING SOIL LAYER IN GROUNDCOVER AND PERENNIAL AREAS, EIGHTEEN INCHES (18") MINIMUM DEPTH PLANTING SOIL LAYER IN SHRUB AREAS, AND THIRTY-SIX INCHES (36") MINIMUM DEPTH PLANTING SOIL LAYER IN TREE PLANTING AREAS.
B. SCARIFY AND/OR TILL COMPACTED SUBSOILS TO A MINIMUM DEPTH OF 6 INCHES. THOROUGHLY MIX A 6 INCH DEPTH LAYER OF PLANTING SOIL INTO THE SUBSOIL PRIOR TO PLACING PLANTING SOIL AT THE DEPTHS INDICATED ABOVE. PLANTING SOIL SHALL BE PLACED IN 12-18" LIFTS AND WATER THOROUGHLY BEFORE INSTALLING NEXT LIFT. REPEAT UNTIL DEPTHS AND FINISH GRADES HAVE BEEN ACHIEVED. NO SOILS SHALL BE PLACED IN A FROZEN OR MUDDY CONDITION.
C. PLANTING SOIL PRESENT AT THE SITE, IF ANY, MAY BE USED TO SUPPLEMENT TOTAL AMOUNT REQUIRED. CONTRACTOR TO FURNISH AN ANALYSIS OF ON-SITE PLANTING SOIL UTILIZED IN ALL PLANTING AREAS.
D. ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF AT THE CONTRACTOR'S EXPENSE.

LANDSCAPE MAINTENANCE NOTES

1. MAINTENANCE OPERATIONS BEFORE APPROVAL:

- PLANT CARE SHALL BEGIN IMMEDIATELY AFTER EACH PLANT IS SATISFACTORILY INSTALLED AND SHALL CONTINUE THROUGHOUT THE LIFE OF THE CONTRACT UNTIL FINAL ACCEPTANCE OF THE PROJECT.
 - CARE SHALL INCLUDE, BUT NOT BE LIMITED TO, REPLACING MULCH THAT HAS BEEN DISPLACED BY EROSION OR OTHER MEANS, REPAIRING AND RESHAPING WATER RINGS OR SAUCERS, MAINTAINING STAKES AND GUYS AS ORIGINALLY INSTALLED, WATERING WHEN NEEDED OR DIRECTED, AND PERFORMING ANY OTHER WORK REQUIRED TO KEEP THE PLANTS IN A HEALTHY CONDITION.
 - CONTRACTOR SHALL REMOVE AND REPLACE ALL DEAD, DEFECTIVE AND/OR REJECTED PLANTS AS REQUIRED BEFORE FINAL ACCEPTANCE.
- ## 2. MAINTENANCE DURING CONSTRUCTION:
- MAINTENANCE SHALL BEGIN IMMEDIATELY AFTER PLANTING. PLANTS SHALL BE WATERED, MULCHED, WEEDED, PRUNED, SPRAYED, FERTILIZED, CULTIVATED, AND OTHERWISE MAINTAINED AND PROTECTED UNTIL PROVISIONAL ACCEPTANCE. SETTLED PLANTS SHALL BE RESET TO PROPER GRADE AND POSITION, PLANTING SAUCER RESTORED AND DEAD MATERIAL REMOVED. STAKES AND WIRES SHALL BE TIGHTENED AND REPAIRED. DEFECTIVE WORK SHALL BE CORRECTED AS SOON AS POSSIBLE AFTER IT BECOMES APPARENT AND WEATHER AND SEASON PERMIT.
 - IF A SUBSTANTIAL NUMBER OF PLANTS ARE SICKLY OR DEAD AT THE TIME OF INSPECTION, ACCEPTANCE SHALL NOT BE GRANTED AND THE CONTRACTOR'S RESPONSIBILITY FOR MAINTENANCE OF ALL PLANTS SHALL BE EXTENDED FROM THE TIME REPLACEMENTS ARE MADE OR EXISTING PLANTS ARE DEEMED ACCEPTABLE BY THE LANDSCAPE ARCHITECT.
 - ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AND SIZE SPECIFIED ON THE PLANT LIST OR THAT WHICH WAS TO REMAIN OR BE RELOCATED. THEY SHALL BE FURNISHED AND PLANTED AS SPECIFIED. THE COST SHALL BE BORNE BY THE CONTRACTOR. REPLACEMENTS RESULTING FROM REMOVAL, LOSS, OR DAMAGE DUE TO OCCUPANCY OF THE PROJECT IN ANY PART, VANDALISM, PHYSICAL DAMAGE BY ANIMALS, VEHICLES, ETC., AND LOSSES DUE TO CURTAILMENT OF WATER BY LOCAL AUTHORITIES SHALL BE APPROVED AND PAID FOR BY THE OWNER.
 - PLANTS SHALL BE GUARANTEED FOR A PERIOD OF ONE YEAR AFTER INSPECTION AND PROVISIONAL ACCEPTANCE.
 - AT THE END OF THE ESTABLISHMENT PERIOD, INSPECTION SHALL BE MADE AGAIN. ANY PLANT REQUIRED UNDER THIS CONTRACT THAT IS DEAD OR UNSATISFACTORY TO THE LANDSCAPE ARCHITECT OR OWNER SHALL BE REMOVED FROM THE SITE AND REPLACED DURING THE NORMAL PLANTING SEASON.

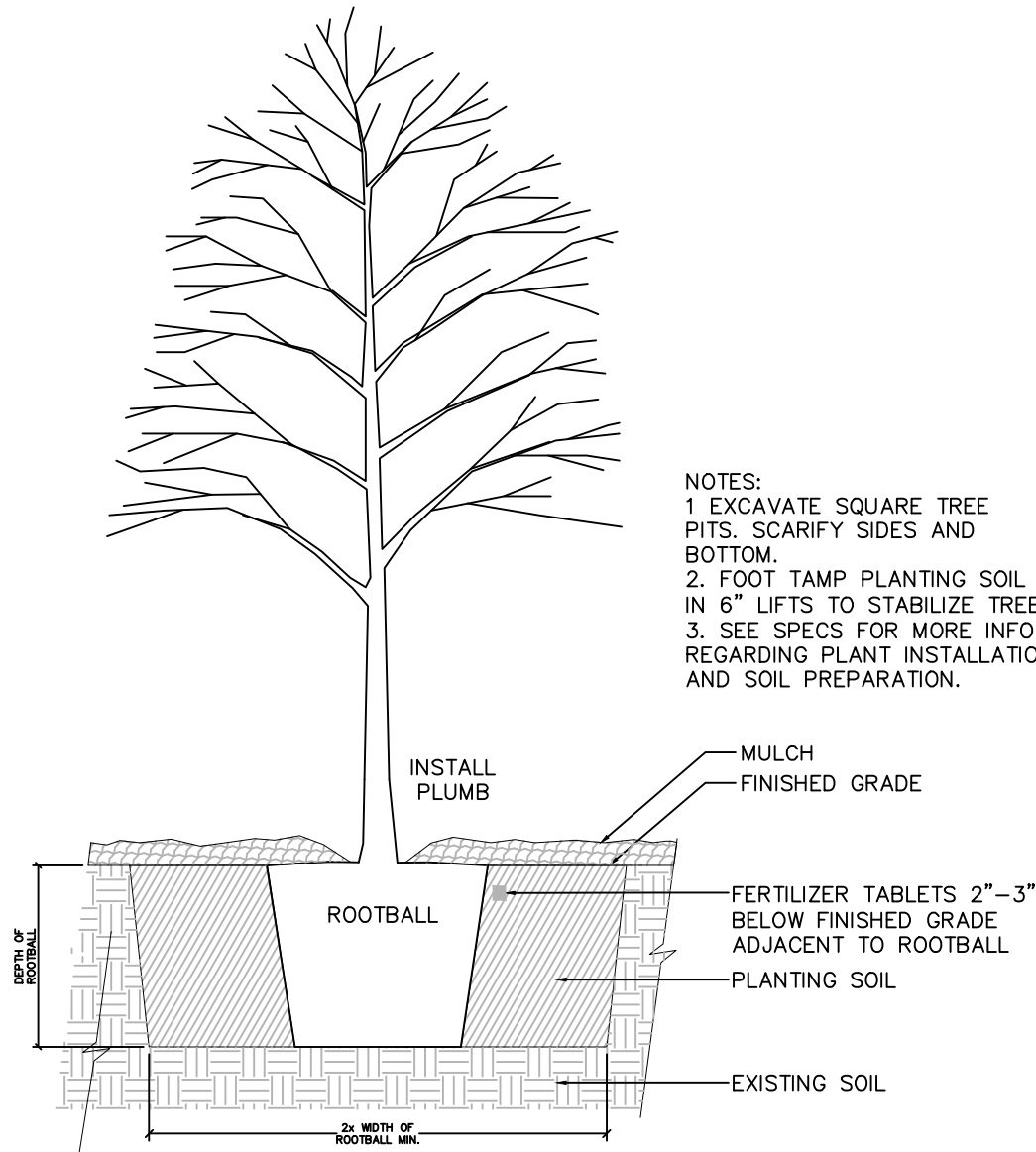
3. LAWN MAINTENANCE:

- BEGIN MAINTENANCE IMMEDIATELY AFTER EACH PORTION OF LAWN IS PLANTED AND CONTINUE FOR 8 WEEKS AFTER ALL LAWN PLANTING IS COMPLETED.
- WATER TO KEEP SURFACE SOIL MOIST, REPAIR WASHED OUT AREAS BY FILLING WITH TOPSOIL, LIMING, FERTILIZING AND RE-SEEDING.
- MOW AT THE HIGHEST RECOMMENDED HEIGHT FOR THE GRASS SPECIES:
BAHIA GRASS: 3.5 - 4"
BERMUDA GRASS: 1 - 2"
- NEVER REMOVE MORE THAN 1/3 OF THE LEAF BLADE. "SCALPING" (MOWING TOO LOW) CAN BADLY STRESS YOUR TURF, LEAVING IT VULNERABLE TO DISEASE, DROUGHT, AND INSECT OR WEED INVASION.
- LEAVE GRASS CLIPPINGS ON THE GROUND. THESE ACTUALLY ARE AS COMPOST, RETURNING VALUABLE NUTRIENTS TO THE LAWN. GRASS CLIPPINGS CAN REDUCE LAWN FERTILITY REQUIREMENTS AND ADD ORGANIC MATTER TO THE SOIL.
- KEEP MOWER BLADES SHARP. DULL MOWERS TEAR LEAF BLADES, STRESSING THE GRASS AND MAKING IT MORE VULNERABLE TO PESTS AND DISEASE.
- DO NOT MOW WHEN LAWN IS WET. WET GRASS CLIPPINGS PREVENT MOWER BLADES FROM MAKING THE CLEANEST POSSIBLE CUT.

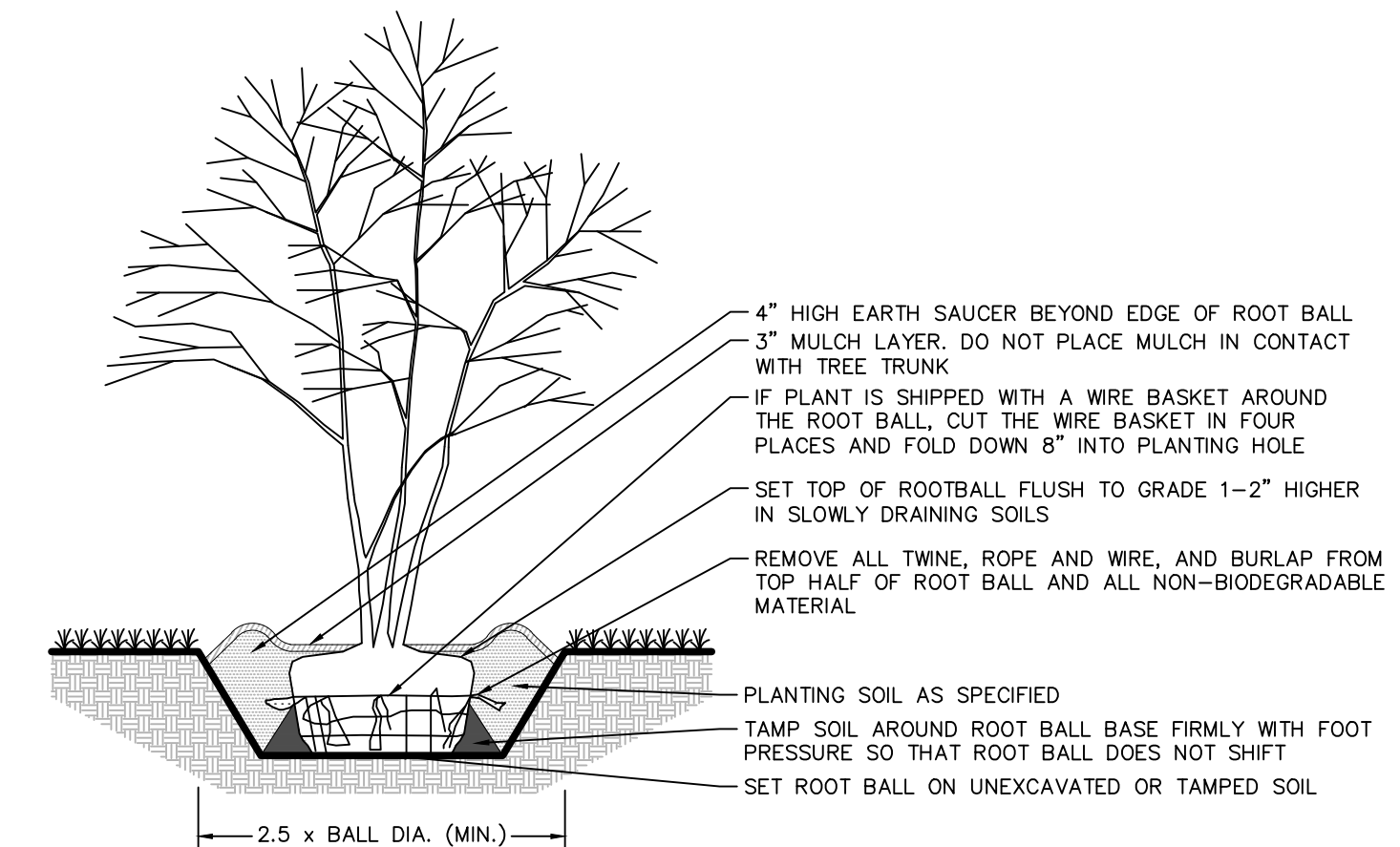
SOD SPECIFICATIONS

- SOD IS TO BE THE BAHIA GRASS (PASPALUM NOTATUM). SOD IS TO BE INDIGENOUS TO THE AREA AND BE FURNISHED BY A REPUTABLE GROWER WITH A MINIMUM 5 YEARS EXPERIENCE.
- PRIOR TO SODDING ALL AREAS ARE TO BE TOPSOILED, FINE GRADED, RAKED, WATERED LIGHTLY, AND FERTILIZED WITH A STARTER FERTILIZER.
- ALL STONES GREATER THAN 2" DIAMETER SHALL BE REMOVED.
- SOD TO BE INSTALLED PERPENDICULAR TO ALL SLOPED AREAS. SOD STRIPS TO BE LAID OUT SO JOINTS ARE NOT CLOSER THAN ONE FOOT (1'-0") FROM EACH OTHER.
- SOD IS TO BE WATERED AT A RATE OF AT LEAST ONE AND A HALF INCHES (1 1/2") PER WEEK UNTIL ROOT MASS MENDS WITH SOIL. AFTER THIS HAS OCCURRED NORMAL WATERING OF AT LEAST ONE INCH (1") PER WEEK IS TO COMMENCE.
- ALL SOD AREAS ARE TO BE ROLLED IF ANY HEAVING OR DEPRESSIONS OCCUR.

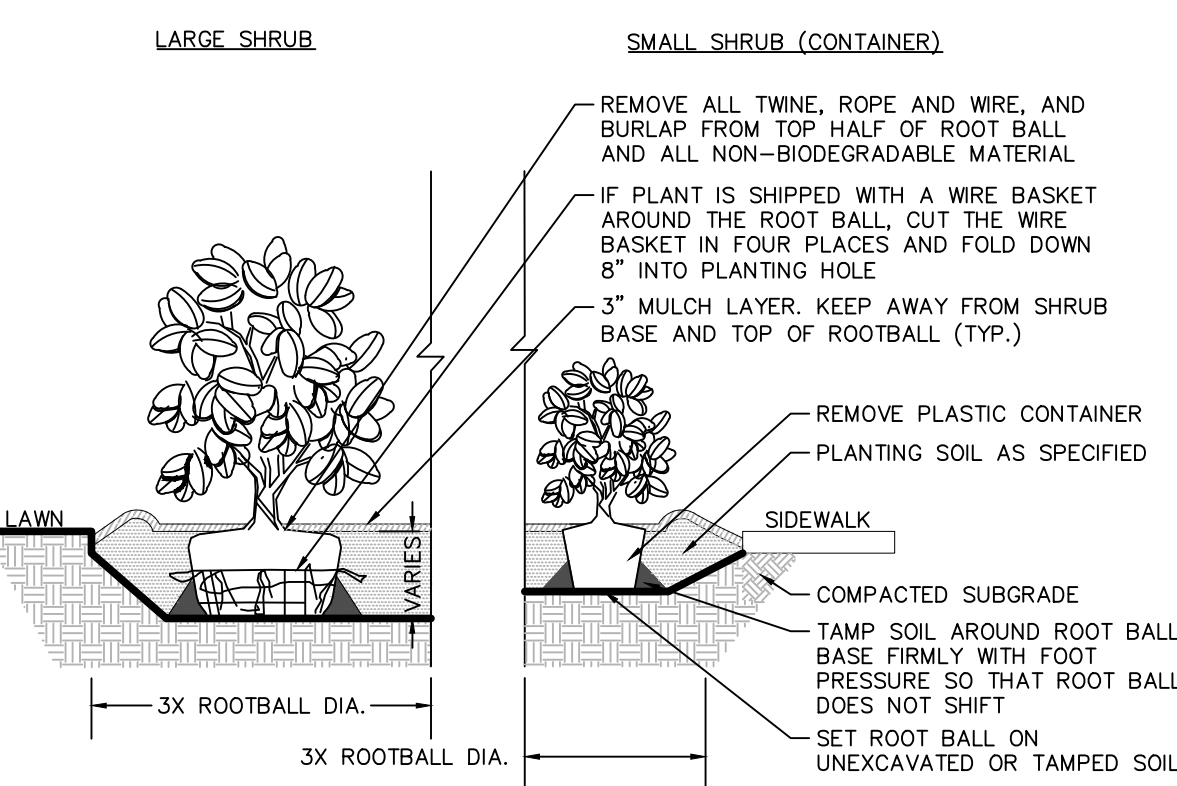
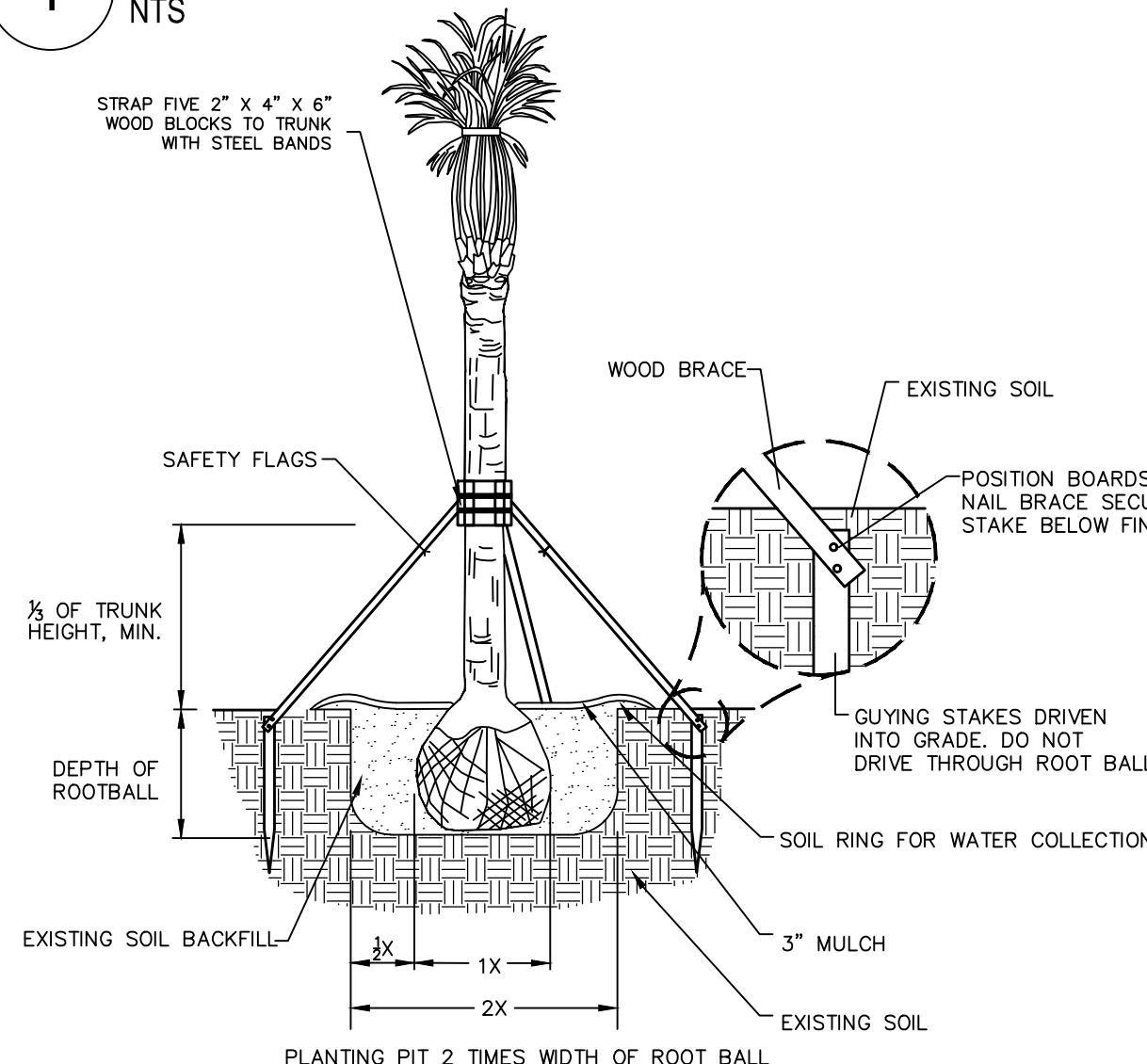
1 TREE PLANTING NTS



2 ORNAMENTAL TREE PLANTING NTS



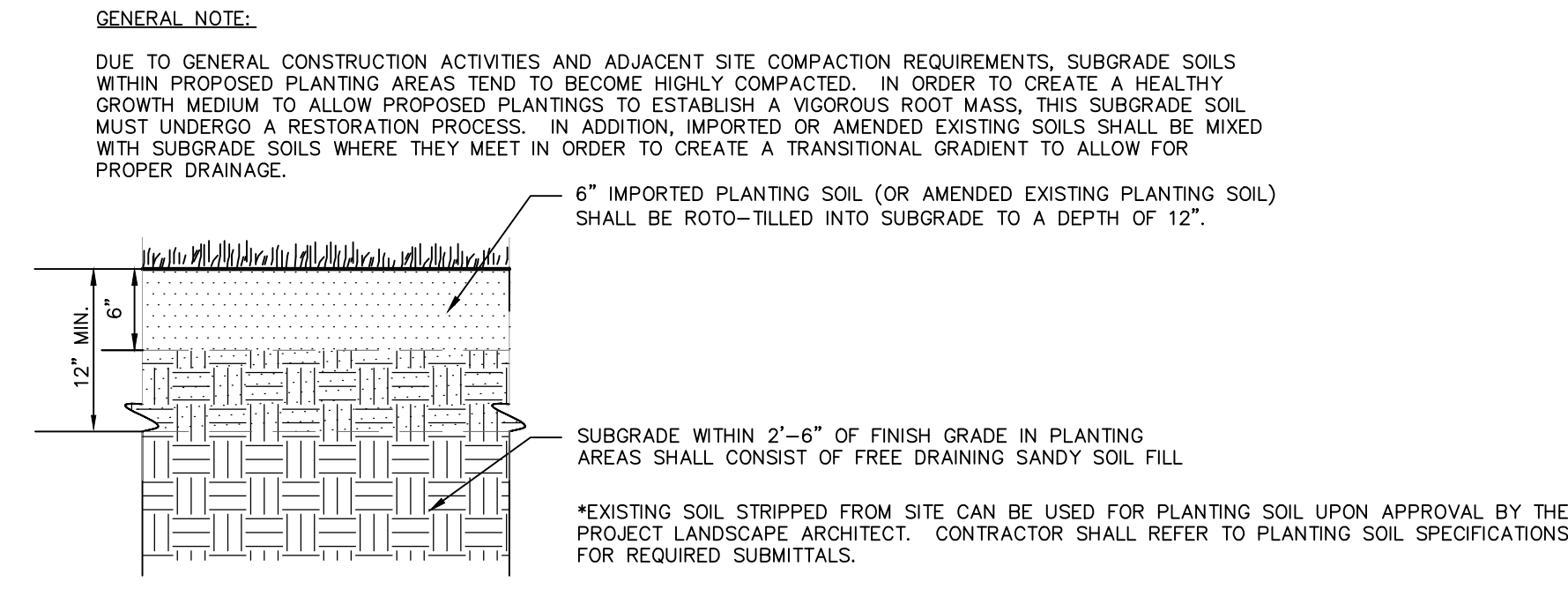
3 PALM TREE PLANTING NTS



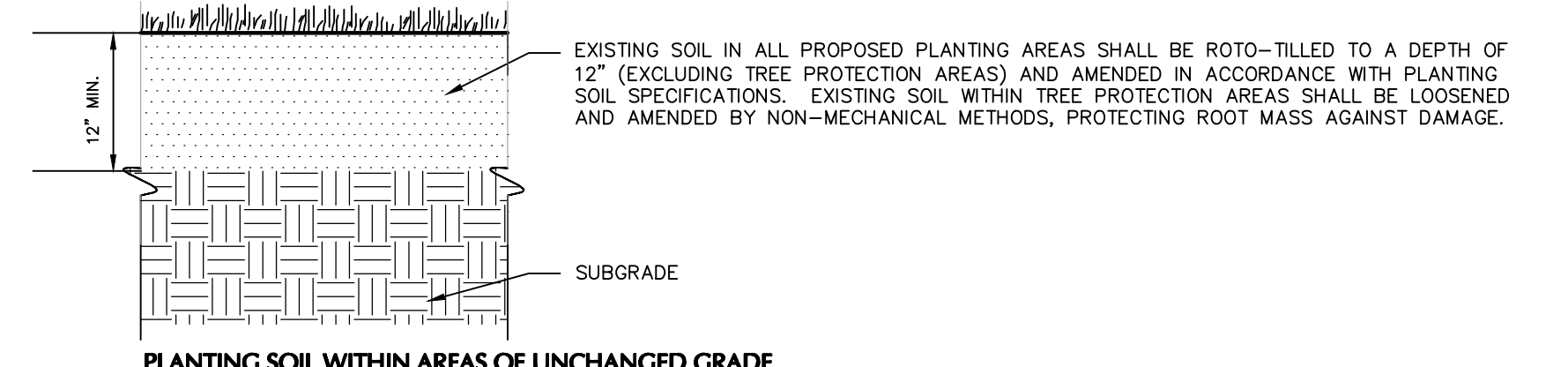
- NOTES:
- ALL SHRUBS TO BE SET PLUMB.
 - REFER TO LANDSCAPE PLAN FOR SPACING OF INDIVIDUAL PLANTS.
 - REMOVE ALL WIRE, PLASTIC, TAGS OR SYNTHETIC MATERIAL FROM PLANTS PRIOR TO PLANTING.

4 SHRUB PLANTING NTS

PLANTING SOIL WITHIN AREAS OF CUT OR RAISED GRADE



PLANTING SOIL WITHIN AREAS OF UNCHANGED GRADE



- NOTES:
- CONTRACTOR IS RESPONSIBLE TO SEND SAMPLES OF EXISTING SOILS INTENDED FOR USE IN PLANTING AREAS (1 PER 500 CY) TO TESTING LABORATORY OR UNIVERSITY COOPERATIVE EXTENSION FOR TESTING. ALL TESTING COSTS ARE AT THE CONTRACTOR'S EXPENSE.
 - RECYCLED CRUSHED CONCRETE AND ASPHALT MILLINGS SHALL NOT BE PLACED WITHIN 2'-6" OF FINISH GRADE IN PROPOSED LANDSCAPE AREAS.
 - IMPORTED FILL SHALL CONTAIN NO CONTAMINATION IN EXCESS OF THE APPLICABLE STATE ENVIRONMENTAL STANDARDS AND MEET THE ENVIRONMENTAL REQUIREMENTS FOR THE PROJECT. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION OF COMPLIANCE PRIOR TO DELIVERY OF ANY FILL TO THE SITE.
 - CONTRACTOR TO LIGHTLY COMPACT ALL PLACED PLANTING SOILS AND RAISE GRADES ACCORDINGLY TO ALLOW FOR FUTURE SETTLEMENT OF PLANTING SOILS (TYP.)
 - NO STONES, WOOD CHIPS, OR DEBRIS LARGER THAN 1/2" SHALL BE ACCEPTABLE WITHIN PLANTING AREAS.

5 PLANTING SOIL NTS

Date	Description	No.
REVISIONS		

SIGNATURE	MICHAEL SZURA	DATE SIGNED
FL. LICENSED LANDSCAPE ARCHITECT LICENSE NO. LA666752		

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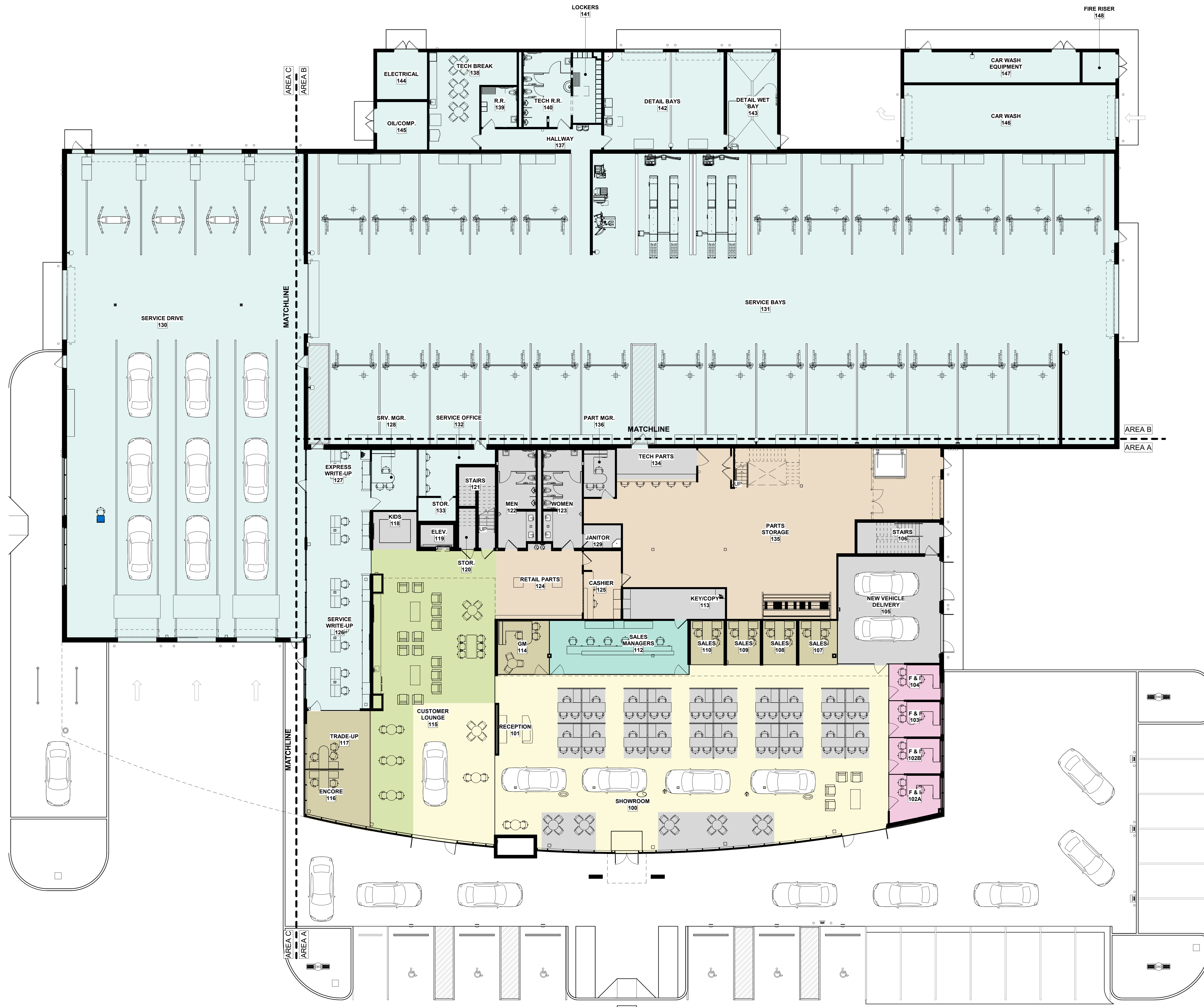
Project

DORAL SUBARU

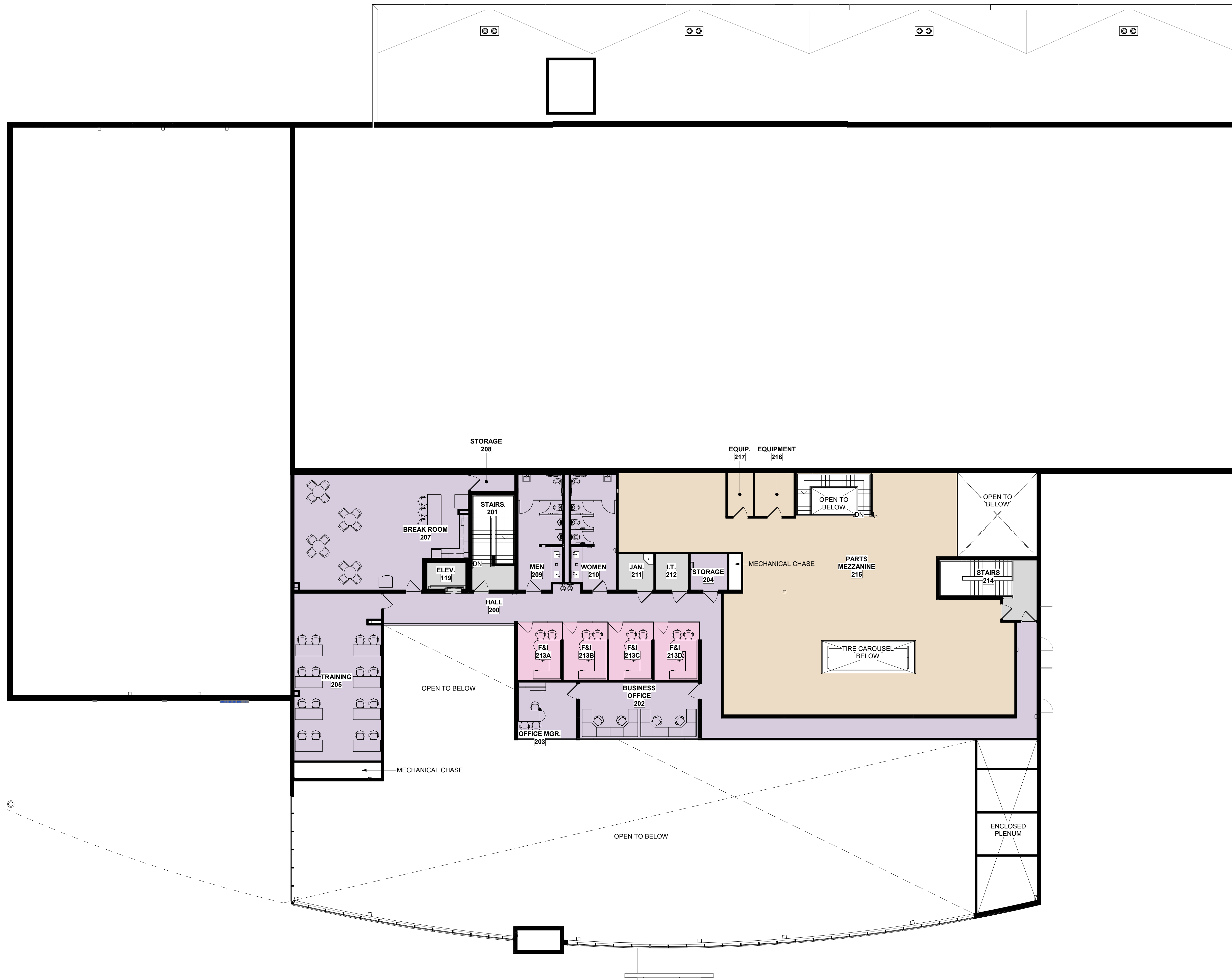
9467 NW 12TH STREET
DORAL

MIAMI-DADE COUNTY FLORIDA

Drawing Title	Project No.	Drawing No.
<h1>LANDSCAPE NOTES & DETAILS</h1>	330066604	LP501
Date	Drawn By	Sheet 4 of 6
04/26/2024	IZ/LL	
Checked By	Project No.	
SL	330066604	



PROGRAMMING		
PROGRAM TYPE	PROJECTED 2030 MIN. STANDARDS	PROPOSED SUBARU D.I.D.
SHOWROOM	1500 SF	3837 SF
SALES MANAGER	320 SF	515 SF
F&I LEVEL 1	240 SF	579 SF
F&I LEVEL 2	240 SF	532 SF
SALES	1140 SF	1,154 SF
CUSTOMER LOUNGE	300 SF	1,646 SF
		8,263 SF
PARTS LEVEL 1	N/A	3,320 SF
PARTS LEVEL 2	N/A	3,180 SF
	4,800 SF	6,500 SF
SERVICE	24 STALLS / 16 LIFTS	30 STALLS / 30 LIFTS
	N/A	29,953 SF
ADMIN LEVEL 1	N/A	0 SF
ADMIN LEVEL 2	N/A	4,161 SF
SUPPORT LEVEL 1 (NOT COUNTED BY SOA)	N/A	4,057 SF
SUPPORT LEVEL 2 (NOT COUNTED BY SOA)	N/A	374 SF
LEVEL 1 TOTAL	N/A	45,061 SF
LEVEL 2 TOTAL	N/A	8,247 SF
GROSS BUILDING AREA	N/A	53,308 SF



PROGRAMMING		
PROGRAM TYPE	PROJECTED 2030 MIN. STANDARDS	PROPOSED SUBARU D.I.D.
SHOWROOM	1500 SF	3837 SF
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PARKING

SITE AREA: 8.392 ACRES (365,546 SF)
PROPOSED BUILDING AREA: 53,847 SF
PROPOSED BIKE PARKING: 22 BIKES MINIMUM
PROPOSED PARKING: 663 SPACES

**FLORIDA GREEN BUILDING COMMISSION
 ITEM S8.01 BICYCLE STORAGE**

**MINIMUM BICYCLE PARKING = 2 BIKES/ 5000 SF OF RETAIL
 AND 5000 SF OF COMMERCIAL
 = 22 BICYCLES**

**FLORIDA GREEN BUILDING COMMISSION
 ITEM S4.05 ALTERNATIVE FUEL VEHICLES**

**10% OF TOTAL PARKING HAVE CONDUIT AND DEDICATED
 ELECTRICAL CAPACITY FOR FUTURE EV CHARGERS
 = 67 SPACES MINIMUM
 12 CHARGING SPACES PROVIDED
 55 FUTURE SPACES PROVIDED**

**1.5% OF TOTAL PARKING IS FOR EV CHARGING
 = 10 SPACES MINIMUM
 12 PROVIDED**

SITE WORK GENERAL NOTES:

- REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION AND SCOPE OF WORK REQUIREMENTS.
- REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS OF CURBS, PAVING AND PLANTERS ADJACENT TO BUILDINGS.
- CONTRACTOR SHALL EXECUTE THE WORK IN STRICT ACCORDANCE WITH THESE DRAWINGS, LOCAL GOVERNING BUILDING, FIRE, MECHANICAL AND PLUMBING CODES, THE CURRENT ACCESSIBILITY STANDARDS AND ALL OTHER AUTHORITIES HAVING JURISDICTION OVER THIS PROJECT. THE CONTRACTOR SHALL REPORT CONFLICTING REQUIREMENTS TO THE ARCHITECT FOR INTERPRETATION.
- DEALER SITE SIGNS AND THEIR REQUIRED FOUNDATIONS ARE NOT IN CONTRACT UNLESS NOTED OTHERWISE. GENERAL CONTRACTOR SHALL PROVIDE/COORDINATE POWER REQUIREMENTS CONDUITS, AND PROVIDE HOOK-UPS FOR POWER.
- PARKING AND CURB DIMENSIONS ARE TAKEN FROM FACE OF CURB UNLESS NOTED OTHERWISE.
- ACCESSIBLE PARKING SPACES SHALL COMPLY WITH APPLICABLE ACCESSIBILITY CODES. PROVIDE SIGNS SHOWING SYMBOL OF ACCESSIBILITY AT EACH SPACE. PROVIDE "VAN ACCESSIBLE" SIGN AT VAN SPACE. REFERENCE ACCESSIBILITY SHEETS FOR MOUNTING DETAILS.
- POST SITE ADDRESS DURING CONSTRUCTION AND AFTER THE BUILDING IS OCCUPIED IN ACCORDANCE WITH FIRE MARSHALL REQUIREMENTS.
- REFER TO CIVIL FOR FIRE AND SITE YARD HYDRANTS INFORMATION.
- REFER TO LANDSCAPE & IRRIGATION PLANS FOR APPROXIMATE LOCATIONS AND QUANTITIES.
- REFER TO ELECTRICAL PLANS FOR POWER.

SITE PLAN KEYNOTES

- 001 ADA PARKING STALL, REF: ACCESSIBILITY SHEETS
- 002 ADA PARKING SIGN, REF: ACCESSIBILITY SHEETS
- 003 NEW CONCRETE SIDEWALK, REF: CIVIL
- 004 4" PAINTED STRIPES, TYP. UNO. GC TO VERIFY COLOR WITH OWNER
- 006 NEW 6" CONCRETE CURB, REF: CIVIL
- 007 NEW CONCRETE PAVEMENT, REF: CIVIL
- 011 PEDESTAL MOUNT, LEVEL 2 EV CHARGING STATION PROVIDED BY OWNER'S VENDOR. G.C. TO COORDINATE EXACT LOCATION AND PROVIDE POWER REQUIREMENTS AND PAD AS NEEDED. REF: ELECTRICAL
- 012 PEDESTAL MOUNT, LEVEL 3 EV CHARGING STATION PROVIDED BY OWNER'S VENDOR. G.C. TO COORDINATE EXACT LOCATION AND PROVIDE POWER REQUIREMENTS AND PAD AS NEEDED. REF: ELECTRICAL
- 014 NEW LANDSCAPE, REF: LANDSCAPE
- 016 CONCRETE WHEEL STOPS
- 017 DUMPSTER ENCLOSURE, REF: SITE DETAILS
- 020 SITE LIGHT POLE, REF: ELECTRICAL AND SITE DETAILS
- 021 SUBARU PYLON SIGN BY VENDOR. G.C. TO COORDINATE WITH OWNER AND VENDOR. PROVIDE POWER AND HOOK UP. REF: ELECTRICAL
- 023 FIRE LANE PAVEMENT STRIPING, 6" WIDE
- 025 MULTIPLICITY BIKE RACK MANUFACTURED BY LANDSCAPE FORMS, INC. GC PROVIDED AND INSTALLED.
- 026 TRANSFORMER
- 027 BUILDING CANOPY AND ENTRY PORTAL
- 028 ACCESSIBLE PATH
- 029 MULTIPLICITY TRASH RESEPTACL MANUFACTURED BY LANDSCAPE FORMS, INCE. SINGLE UNIT, MULTI-USE OPENING. GC PROVIDED AND INSTALLED.
- 030 MULTIPLICITY BENCH MANUFACTURED BY LANDSCAPE FORMS, INC. STRAIGHT BACKED WITH END ARMS. GC PROVIDED AND INSTALLED.
- 031 CONCRETE APRON, REF: CIVIL

CONSULTANTS

**CONSULTANT #1 - CIVIL
 INGENIUM ENTERPRISES, INC.**
 19445 SHUMARD OAK DRIVE
 SUITE 102
 LAND O LAKES, FLORIDA 34638
 813-387-0084

**CONSULTANT #2 - STRUCTURAL
 DALLY + ASSOCIATES**
 9800 RICHMOND AVENUE
 SUITE 460
 HOUSTON, TEXAS 77042
 713-337-8881

**CONSULTANT #3 - MEP
 JJA, INC.**
 8150 NORTH CENTRAL EXPRESSWAY
 M-2100 CAMPBELL CENTRE
 DALLAS, TEXAS 75206
 214-759-8880

**CONSULTANT #4 - LANDSCAPE
 LANGAN**
 400 N. ASHLEY DRIVE
 SUITE 2175
 TAMPA, FLORIDA 33602
 813-439-6116

PROJECT NAME

DORAL SUBARU

PROJECT DESCRIPTION

A NEW FACILITY DESIGN

PROJECT ADDRESS

**9467 NW 12TH STREET, DORAL,
 FLORIDA 33172**

OWNER INFORMATION

**LITHIA MOTORS
 150 N BARTLETT STREET
 MEDFORD, OR 97501**

NOT FOR CONSTRUCTION

GOREE PROJECT NUMBER

A22080

STAMP / SIGNATURE

**FOR INTERIM REVIEW.
 NOT INTENDED FOR
 BIDDING, PERMITTING OR
 CONSTRUCTION PURPOSES.**

ISSUE DATE

06/12/2023

ISSUE HISTORY

DATE:	MARK:	DESCRIPTION:
06/12/2023	A	30% Lithia Review
07/25/2023	B	60% Lithia Review
11/22/2023	C	90% Lithia Review

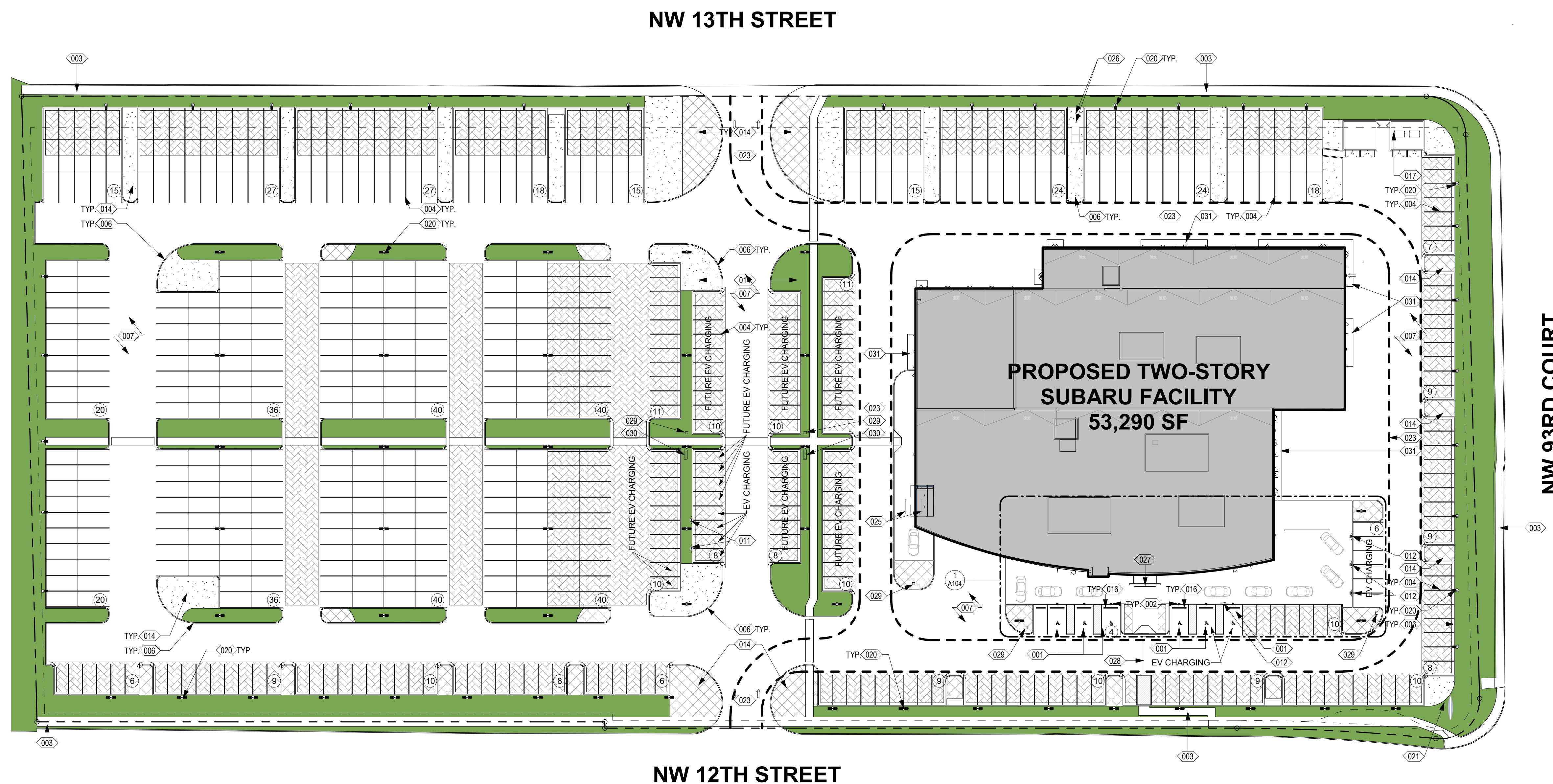
KEY PLAN

SHEET NAME

NOTED SITE PLAN

SHEET NUMBER

A102



SITE PLAN LEGEND

- NEW PARKING COUNT
- EXISTING PARKING COUNT
- ▨ PERMEABLE PAVERS, REF: CIVIL
- ▨ PLANTING - BLUE DAZE, REF: LANDSCAPE
- ▨ PLANTING - AZTEC LILYTURF, REF: LANDSCAPE
- ▨ SOD/GRASS

FOR ADDITIONAL INFORMATION:

- REFER TO A120 SERIES FOR DIMENSIONED FLOOR PLANS.
- REFER TO A130 SERIES FOR NOTED FLOOR PLANS.
- REFER TO A140 SERIES FOR POWER AND COMMUNICATIONS FLOOR PLANS.
- REFER TO A150 SERIES FOR FINISH FLOOR PLANS.
- REFER TO A160 SERIES FOR FURNITURE, FIXTURE, EQUIPMENT FLOOR PLANS.
- REFER TO A170 SERIES FOR GRAPHICS FLOOR PLANS.
- REFER TO A180 SERIES FOR REFLECTED CEILING PLANS.
- REFER TO A190 SERIES FOR ROOF PLAN.
- REFER TO A200 SERIES FOR BUILDING ELEVATIONS.
- REFER TO A300 SERIES FOR SECTIONS.
- REFER TO A400 SERIES FOR ENLARGED PLANS, ELEVATIONS, SECTIONS.
- REFER TO A500 SERIES FOR DETAILS.
- REFER TO A600 SERIES FOR SCHEDULES.

1 NOTED SITE PLAN
 1" = 40'-0"



ACM-1

M-1

M-2

MP-1

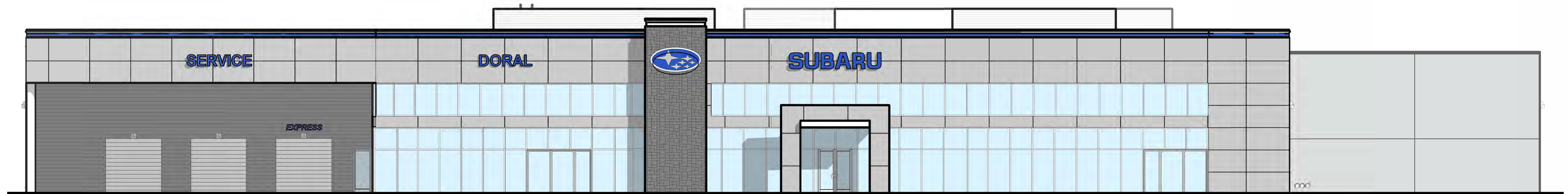
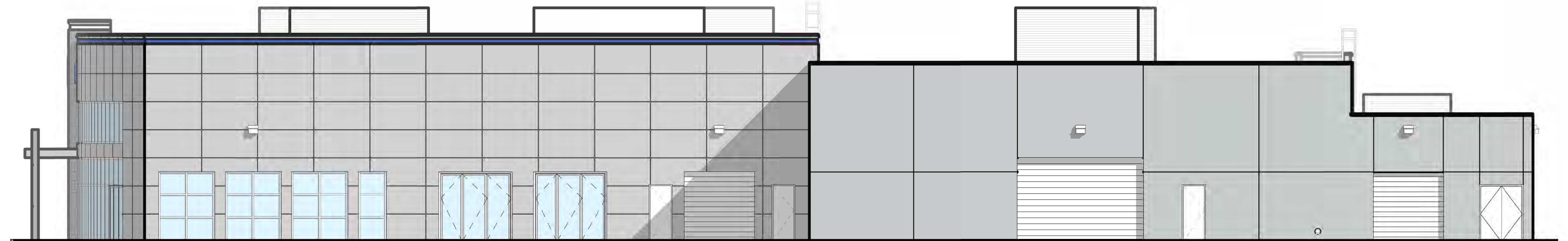
NS-2

PT-5

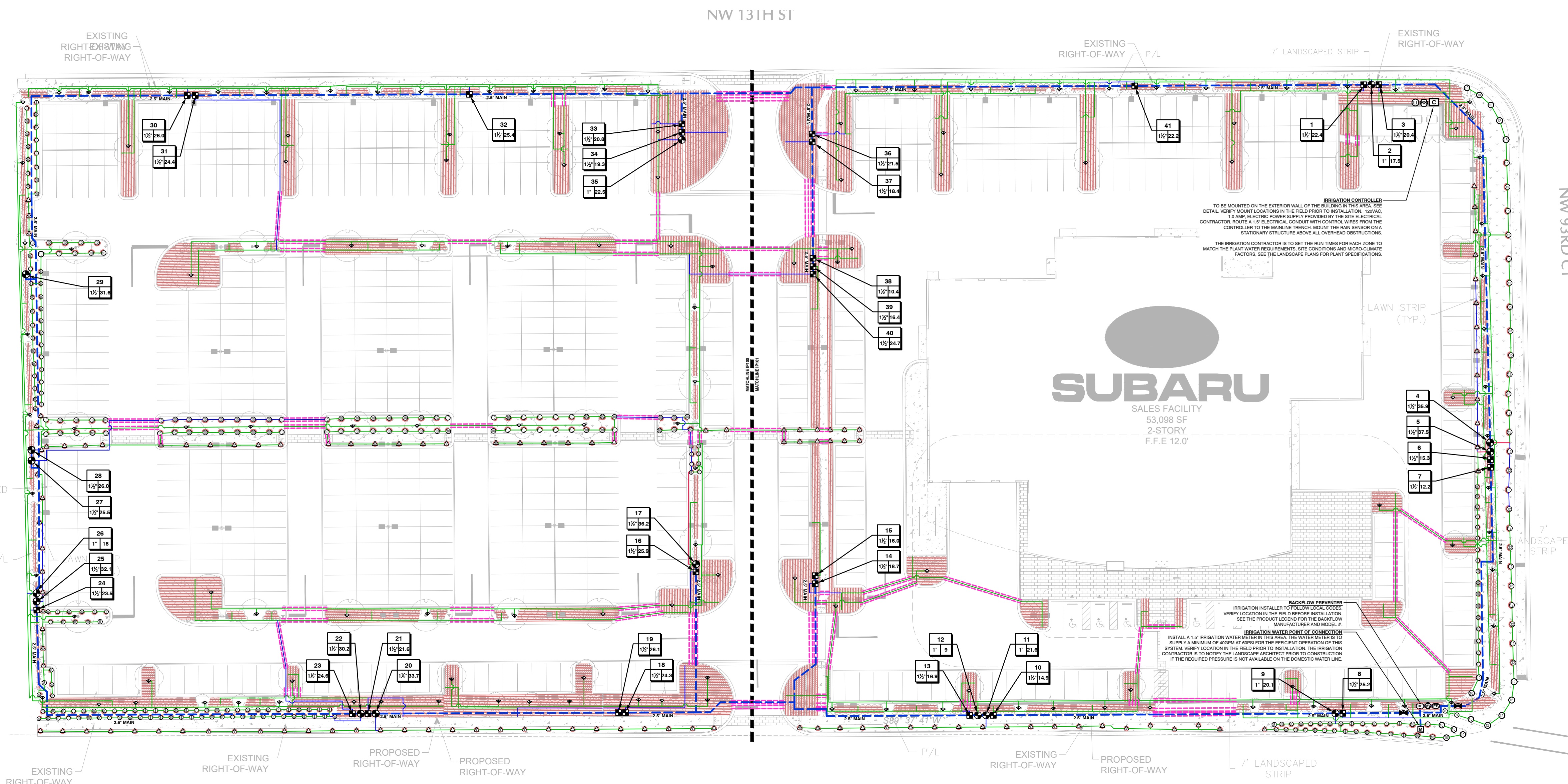
SIGNS TO BE PERMITTED SEPARATELY.

FINISH KEY:

- ACM-1** ALUMINUM COMPOSITE MATERIAL PANEL, SILVER METALLIC FLASHING, "AWARD BLUE"
- M-1** FLASHING, "SILVER METALLIC"
- M-2** FLASHING, "SILVER METALLIC"
- MP-1** CORRUGATED METAL PANEL, MBCI, 7.2 PANEL, CHARCOAL GRAY
- NS-2** STONE, SLATE, "SHADOW GRAY"
- PT-5** PAINT OVER EIFS, SW7071 "GRAY SCREEN"
- PT-6** PAINT OVER EIFS, SW7074 "SOFTWARE"



LANEAV PROJECT NO. 330066604



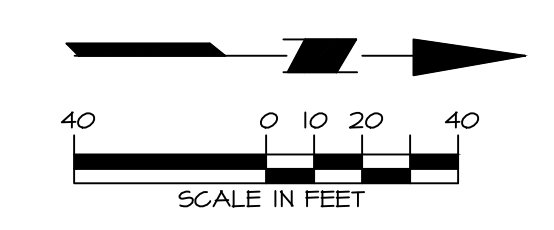
LATERAL LEGEND	
—	1"
—	1.5"
—	2"
—	2.5"

SLEEVE LEGEND	
LATERAL/MAINLINE SIZE	SLEEVE SIZE
1"	2"
1.5"	3"
2"	4"
2.5"	4"
3"	6"
4"	8"
CONTROL WIRE CONDUIT	2"

IRRIGATION EQUIPMENT MAY BE SHOWN OFFSET FOR GRAPHIC CLARITY. INSTALL ALL EQUIPMENT IN LANDSCAPED AREA.

IRRIGATION PLANS ARE TO BE VIEWED IN COLOR FOR MOST ACCURATE INTERPRETATION OF THE DESIGN.


INSTALL ALL THE IRRIGATION EQUIPMENT TO AVOID CONFLICTS WITH INSTALLED UTILITIES, TREE INSTALLATION AND EXISTING TREES TO REMAIN. THE IRRIGATION MAINLINE, LATERAL LINE, AND IRRIGATION SPRINKLER LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPED AREAS ARE TO RECEIVE 100% COVERAGE BY THE IRRIGATION SYSTEM (TYP.)



811 Know what's BELOW CALL before you dig
Call 811 two business days before digging

IDS
IRRI DESIGN STUDIO
IRRIGATION DESIGN & CONSULTING
CONNOR@IRRIDESIGNSTUDIO.COM
407-144-9556

Date	Description	No.
04/26/24	REVISED PER CITY COMMENTS	1
REVISIONS		

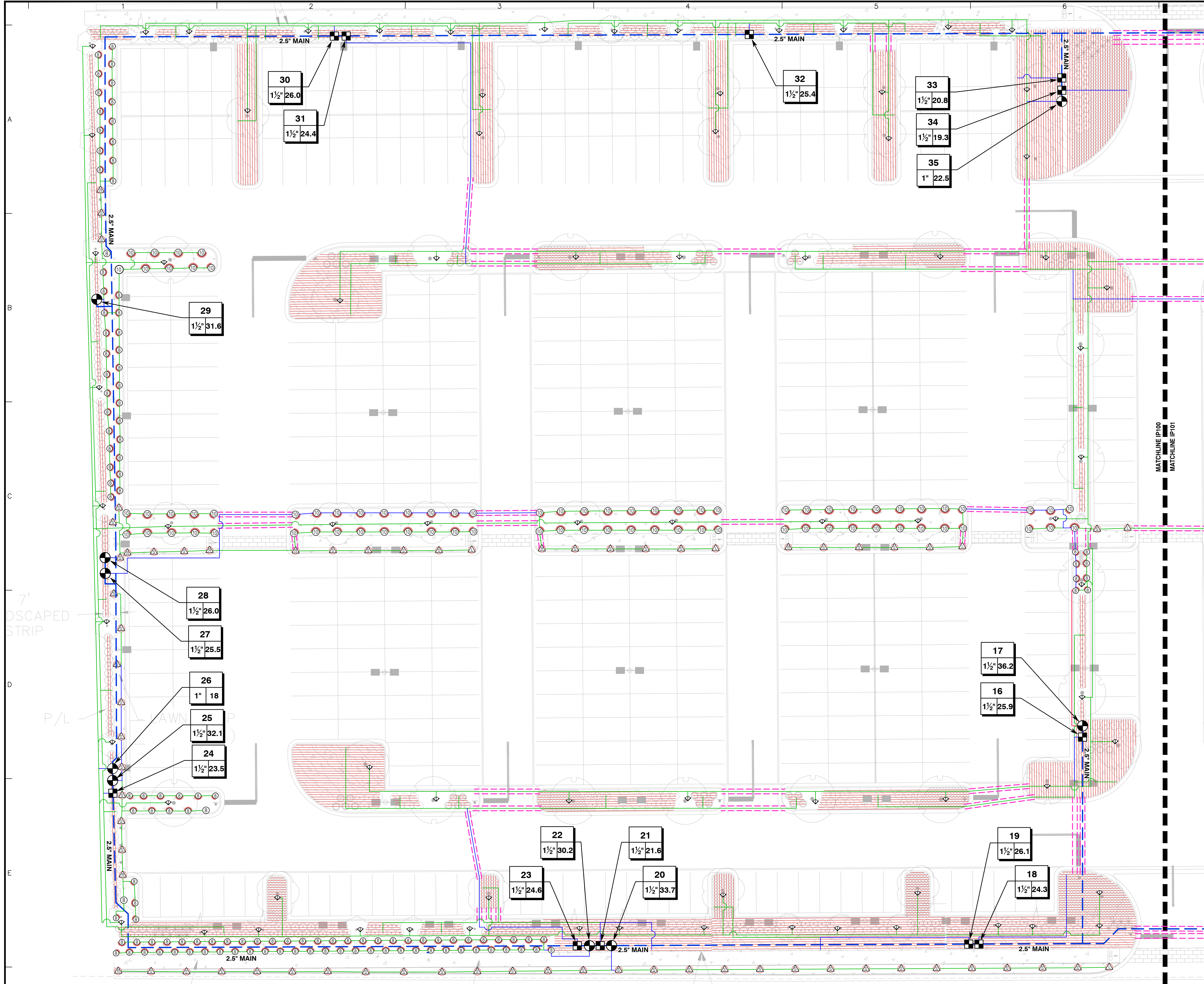

 SIGNATURE: THERSA WYMER DATE SIGNED: _____
 FL. LICENSED LANDSCAPE ARCHITECT
 LICENSE NO. LA6667363

LANGAN
 Langan Engineering and Environmental Services, Inc.
 1221 Brickell Ave, Suite 1800
 Miami, FL 33131
 T: 786.264.7200 F: 786.264.7201 www.langan.com
 FBPE Registry No. 00006011B8172L88198

Project: DORAL SUBARU
 MIAMI-DADE COUNTY FLORIDA

Drawing Title: OVERALL IRRIGATION PLAN

Project No.	330066604	Drawing No.	IP100
Date	04/26/2024		
Drawn By	IDS	Sheet 1 of 7	
Checked By	CZ		



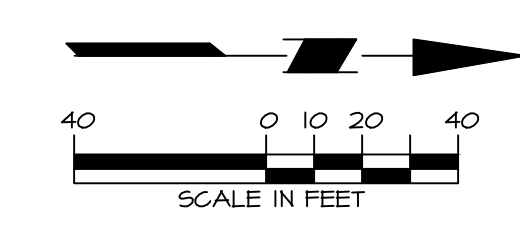
LATERAL LEGEND	
—	1"
—	1.5"
—	2"
—	2.5"

SLEEVE LEGEND	
LATERAL/MAINLINE SIZE	SLEEVE SIZE
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CONNOR@IRRIDESIGNSTUDIO.COM
407-144-9556

Date	Description	No.
04/26/24	REVISED PER CITY COMMENTS	1

SIGNATURE: THERSA WYMER DATE SIGNED: _____
FL. LICENSED LANDSCAPE ARCHITECT LICENSE NO. LA6667363

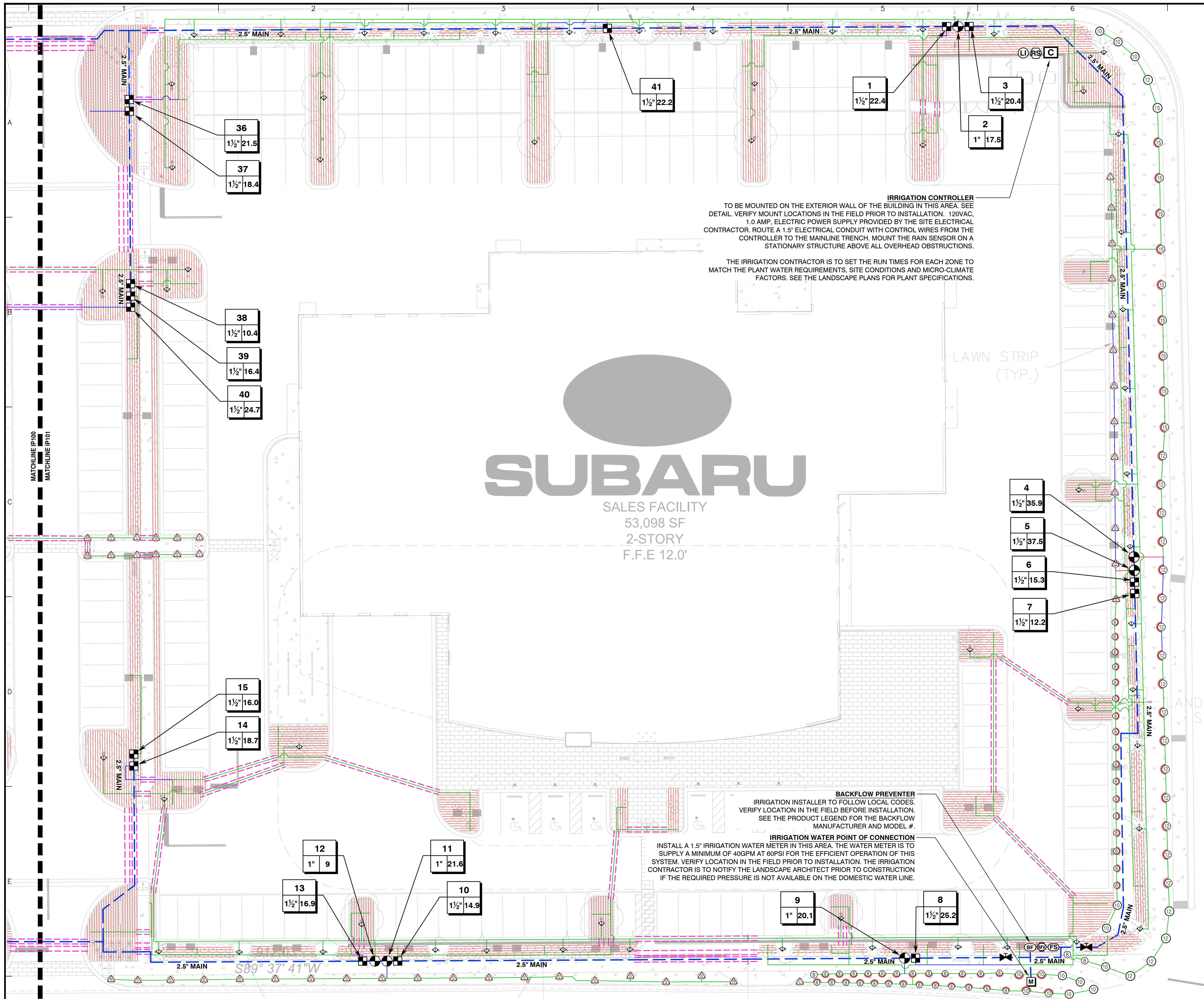


LANGAN
Langan Engineering and Environmental Services, Inc.
1221 Brickell Ave, Suite 1800
Miami, FL 33131
T: 786.264.7200 F: 786.264.7201 www.langan.com
FBPE Registry No. 0000601LBR172LBR196

Project: DORAL SUBARU
MIAMI-DADE COUNTY FLORIDA

Drawing Title: IRRIGATION PLAN

Project No.	33006604	Drawing No.	IP101
Date	04/26/2024		
Drawn By	IDS	Sheet 2 of 7	
Checked By	CZ		



LATERAL LEGEND	
—	1"
—	1.5"
—	2"
—	2.5"

SLEEVE LEGEND	
LATERAL/MAINLINE SIZE	SLEEVE SIZE
1"	2"
1.5"	3"
2"	4"
2.5"	4"
3"	6"
4"	8"
CONTROL WIRE CONDUIT	2"

IRRIGATION CONTROLLER
 TO BE MOUNTED ON THE EXTERIOR WALL OF THE BUILDING IN THIS AREA. SEE DETAIL. VERIFY MOUNT LOCATIONS IN THE FIELD PRIOR TO INSTALLATION. 120VAC, 1.0 AMP. ELECTRIC POWER SUPPLY PROVIDED BY THE SITE ELECTRICAL CONTRACTOR. ROUTE A 1.5" ELECTRICAL CONDUIT WITH CONTROL WIRES FROM THE CONTROLLER TO THE MAINLINE TRENCH. MOUNT THE RAIN SENSOR ON A STATIONARY STRUCTURE ABOVE ALL OVERHEAD OBSTRUCTIONS.

THE IRRIGATION CONTRACTOR IS TO SET THE RUN TIMES FOR EACH ZONE TO MATCH THE PLANT WATER REQUIREMENTS, SITE CONDITIONS AND MICRO-CLIMATE FACTORS. SEE THE LANDSCAPE PLANS FOR PLANT SPECIFICATIONS.

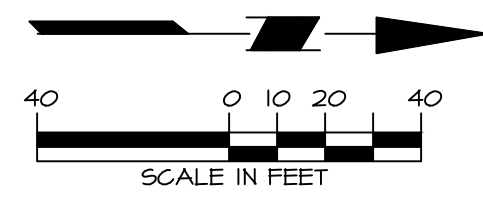
BACKFLOW PREVENTER
 IRRIGATION INSTALLER TO FOLLOW LOCAL CODES. VERIFY LOCATION IN THE FIELD BEFORE INSTALLATION. SEE THE PRODUCT LEGEND FOR THE BACKFLOW MANUFACTURER AND MODEL #.

IRRIGATION WATER POINT OF CONNECTION
 INSTALL A 1.5" IRRIGATION WATER METER IN THIS AREA. THE WATER METER IS TO SUPPLY A MINIMUM OF 40GPM AT 80PSI FOR THE EFFICIENT OPERATION OF THIS SYSTEM. VERIFY LOCATION IN THE FIELD PRIOR TO INSTALLATION. THE IRRIGATION CONTRACTOR IS TO NOTIFY THE LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION IF THE REQUIRED PRESSURE IS NOT AVAILABLE ON THE DOMESTIC WATER LINE.

IRRIGATION EQUIPMENT MAY BE SHOWN OFFSET FOR GRAPHIC CLARITY. INSTALL ALL EQUIPMENT IN LANDSCAPED AREA.

IRRIGATION PLANS ARE TO BE VIEWED IN COLOR FOR MOST ACCURATE INTERPRETATION OF THE DESIGN.

INSTALL ALL THE IRRIGATION EQUIPMENT TO AVOID CONFLICTS WITH INSTALLED UTILITIES, TREE INSTALLATION AND EXISTING TREES TO REMAIN. THE IRRIGATION MAINLINE, LATERAL LINE, AND IRRIGATION SPRINKLER LOCATIONS ARE SHOWN SCHEMATICALLY AND SHALL BE ADJUSTED BASED ON FIELD CONDITIONS. ALL LANDSCAPED AREAS ARE TO RECEIVE 100% COVERAGE BY THE IRRIGATION SYSTEM (TYP.)



Date	Description	No.
04/26/24	REVISED PER CITY COMMENTS	1

SIGNATURE: *Thersa Wymer* DATE SIGNED: _____
 FL. LICENSED LANDSCAPE ARCHITECT LICENSE NO. LA6667363

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 Langan Engineering and Environmental Services, Inc.
 1221 Brickell Ave, Suite 1800
 Miami, FL 33131
 T: 786.264.7200 F: 786.264.7201 www.langan.com
 FBPE Registry No. 00008601L8B172L8B198

Project: **DORAL SUBARU**
 MIAMI-DADE COUNTY FLORIDA

Drawing Title: **IRRIGATION PLAN**

Project No.: 330066604
 Date: 04/26/2024
 Drawn By: IDS
 Checked By: CZ
 Drawing No.: **IP102**
 Sheet 3 of 7

PROJECT NO. 330066604 LANEAN

IRRIGATION NOTES

- 1. THE PLANS AND DRAWINGS ARE DIAGRAMMATIC OF THE WORK TO BE PERFORMED. SOME COMPONENTS MAY BE SHOWN OUTSIDE THE WORK AREA FOR CLARITY. THE WORK SHALL BE EXECUTED IN A MANNER TO AVOID CONFLICTS WITH UTILITIES AND OTHER ELEMENTS OF CONSTRUCTION... 2. THE IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE PLANS, IRRIGATION SYSTEM SPECIFICATIONS AND ALL CONTRACT DOCUMENTS... 3. ALL IRRIGATION MAINLINE AND LATERAL LINES ARE TO NOT EXCEED A VELOCITY OF SFPS... 4. THE CONTRACTOR SHALL NOT WILLFULLY INSTALL ANY ASPECT OF THE IRRIGATION SYSTEM AS SHOWN ON THE PLANS AND DRAWINGS... 5. REFER TO THE LANDSCAPE PLANS WHEN TRENCHING TO AVOID TREE ROOT BALLS... 6. IRRIGATION CONTRACTOR SHALL VERIFY ALL SITE CONDITIONS... 7. VERIFY THE REQUIRED MINIMUM STATIC WATER PRESSURE IS AVAILABLE AT THE PROJECT SITE... 8. WHERE EXISTING OR NEW TREES, LIGHT FIXTURES, SIGNS, ELECTRONIC CONTROLLERS AND/OR OTHER OBJECTS ARE AN OBSTRUCTION... 9. 100% HEAD TO HEAD COVERAGE IS REQUIRED... 10. IRRIGATION CONTRACTOR SHALL ADJUST ALL SPRINKLERS TO AVOID OVER SPRAY... 11. ALL MATERIALS AND EQUIPMENT SHOWN SHALL BE NEW AND INSTALLED AS SHOWN ON THE PLANS... 12. THE LOCATION OF THE IRRIGATION MAINLINE SHALL BE IDENTIFIED IN THE FIELD AND APPROVED BY THE OWNER'S REPRESENTATIVE... 13. CONTRACTOR IS TO SUBMIT PRODUCT SPECIFICATION SHEETS FOR ALL IRRIGATION EQUIPMENT... 14. THE QUANTITIES SHOWN IN THE LEGEND SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES... 15. ALL TRENCHES SHALL BE BACKFILLED WITH CLEAN DEBRIS-FREE MATERIALS... 16. IRRIGATION CONTRACTOR IS TO INSTALL CHRISTY ZONE TAGS WITH THE CORRESPONDING CONTROLLER ZONE NUMBER... 17. AS BUILT DOCUMENTS ARE TO BE PROVIDED TO THE OWNER UPON COMPLETION... 18. IRRIGATION CONTRACTOR SHALL SECURE ANY AND ALL NECESSARY PERMITS... 19. A MAINLINE PRESSURE TEST IS TO BE CONDUCTED BEFORE BACKFILLING... 20. ALL IRRIGATION HEADS ARE TO BE INSTALLED AT THE END OF PARKING SPACES... 21. ALL SLEEVES ARE TO BE TWO TIMES THE SIZE OF THE PIPE... 22. ROUTE AN ELECTRICAL CONDUIT FROM THE CONTROLLER TO THE MAINLINE TRENCH... 23. THE IRRIGATION SYSTEM IS TO BE INSPECTED AND APPROVED BY THE PROJECT OWNER... 24. ANY PRODUCT SUBSTITUTIONS MADE BY THE IRRIGATION CONTRACTOR ARE TO BE REVIEWED AND APPROVED BY THE OWNER...

PRE-CONSTRUCTION MEETING

PRIOR TO INSTALLATION OF TWO-WIRE IRRIGATION SYSTEM, A PRE-CONSTRUCTION MEETING SHALL BE CONDUCTED WITH PROJECT OWNER'S REPRESENTATIVE, INSTALLING CONTRACTOR, AND IRRIGATION TWO-WIRE MANUFACTURER AT NO ADDITIONAL COST FROM MANUFACTURER. *CONTACT THE PRODUCT MANUFACTURER FOR TECHNICAL SUPPORT.

TWO-WIRE NOTES

- 1) EACH REMOTE CONTROL VALVE FOR EACH CONTROLLER SHALL BE INSTALLED WITH A LXVIMSOL INTEGRATED VALVE MODULE WITH 2-WIRE DECODER/SOLENOID. SYSTEM WIRE TO BE PAIGE ELECTRIC CABLE P7072D 14-2 AWG 2-CONDUCTOR CABLE DIRECT BURIAL WIRE LXVIMSD SURGE PROTECTION DEVICE SHALL BE INSTALLED AT THE END OF EACH 2-WIRE PATH AND ALONG THE 2-WIRE PATH AT AN ON CENTER SPACING NOT TO EXCEED 500 FEET OR EVERY 15 DEVICES... 2) PAIGE ELECTRIC - THE CONTROLLER SHALL BE GROUNDED USING A #1820000 5/8" X 8" COPPER CLAD GROUND ROD... *CONTACT THE PRODUCT MANUFACTURER FOR TECHNICAL SUPPORT.

VALVE SCHEDULE

Table with columns: NUMBER, MODEL, SIZE, TYPE, GPM, PRECIP. Lists various RAIN BIRD and RAIN BIRD PEB-IVM models with their specifications.

THE IRRIGATION CONTRACTOR IS TO SET THE RUN TIMES FOR EACH ZONE TO MATCH THE PLANT WATER REQUIREMENTS, SITE CONDITIONS AND MICRO-CLIMATE FACTORS. SEE THE LANDSCAPE PLANS FOR PLANT SPECIFICATIONS.

CRITICAL ANALYSIS

Generated: 2024-05-02 09:25

P.O.C. NUMBER: 01
Water Source Information: RECORDALL BADGER DISC METER OR EQUAL PROVIDED BY OTHERS.

FLOW AVAILABLE
Water Meter Size: 1-1/2"
Flow Available: 75 GPM

PRESSURE AVAILABLE
Static Pressure at POC: 60 PSI
Elevation Change: 0.00 ft
Service Line Size: 3"
Length of Service Line: 10 ft
Pressure Available: 60 PSI

DESIGN ANALYSIS
Maximum Station Flow: 37.45 GPM
Flow Available at POC: 75 GPM
Residual Flow Available: 37.55 GPM

Critical Station: 31
Design Pressure: 30 PSI
Friction Loss: 3.86 PSI
Fittings Loss: 0.39 PSI
Elevation Loss: 0 PSI
Loss through Valve: 5 PSI
Pressure Req. at Critical Station: 39.3 PSI
Loss for Fittings: 0.06 PSI
Loss for Main Line: 0.63 PSI
Loss for POC to Valve Elevation: 0 PSI
Loss for Backflow: 13.4 PSI
Loss for Master Valve: 3.77 PSI
Loss for Water Meter: 1.24 PSI
Critical Station Pressure at POC: 58.4 PSI
Pressure Available: 60 PSI
Residual Pressure Available: 1.65 PSI

Table with 3 columns: Date, Description, No. Contains one entry: 04/26/24, REVISED PER CITY COMMENTS, 1.

DRIP SPECIFICATIONS & NOTES:

DRIP TUBING; SPECIFICATION AS SHOWN ON THE PRODUCT SCHEDULE; DRIP GRID LAY-OUT IS BASED ON 30 PSI.

- 1. INSTALL DRIP SYSTEM IN THE FOLLOWING ORDER: A). WITH ALL MAINLINE AND IT'S ASSOCIATE EQUIPMENT (INCLUDING PRE-FILTERING 120 MESH FILTER AT P.O.C.) COMPLETELY INSTALLED, FLUSH MAINLINE TILL FREE AND CLEAR OF DEBRIS... 2. INSTALL OPERATION INDICATORS WITHIN 12-INCHES OF "FLUSH POINT" VALVE BOX... 3. PRESSURE TEST WITH OWNERS REPRESENTATIVE PRESENT; PER ZONE, TEMPORARY INSTALL (2) PRESSURE GAUGES (LIQUID FILLED PRESSURE GAUGES) ON (2) FLUSH POINTS... 4. PRESSURE TEST RESULTS SHALL BE NOTED AS-BUILT DRAWING BY THE "FLUSH POINT" WHERE TESTS WERE TAKEN...

THE FOLLOWING PRODUCTS ARE NOT SHOWN ON THE PLAN FOR GRAPHIC CLARITY BUT ARE TO BE INCLUDED DURING THE BIDDING PROCESS AND ARE TO BE INSTALLED BY THE IRRIGATION INSTALLATION CONTRACTOR. FOLLOW ALL MANUFACTURERS SPECIFICATIONS AND RECOMMENDATIONS.

- FLUSH VALVES (MANUAL OR AUTOMATIC).
- AIR RELIEF VALVES - LOCATE AT THE HIGHPOINT OF THE ZONE.
- DRIP INDICATOR HEAD - LOCATE IN AN INCONSPICUOUS AREA BUT ACCESSIBLE BY THE SITE MAINTENANCE TEAM.

IRRIGATION EQUIPMENT MAY BE SHOWN OFFSET FOR GRAPHIC CLARITY. INSTALL ALL EQUIPMENT IN LANDSCAPED AREA.

IRRIGATION PLANS ARE TO BE VIEWED IN COLOR FOR MOST ACCURATE INTERPRETATION OF THE DESIGN.

LATERAL LEGEND

Table with 2 columns: Color, Size. Lists 1", 1.5", 2", and 2.5" lateral sizes.

SLEEVE LEGEND

Table with 2 columns: LATERAL/MAINLINE SIZE, SLEEVE SIZE. Lists sleeve sizes from 2" to 8" and CONTROL WIRE CONDUIT 2".

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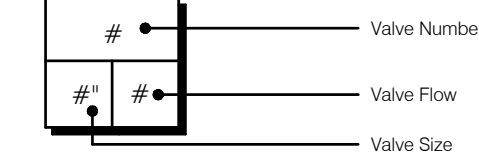
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Project: DORAL SUBARU, MIAMI-DADE COUNTY, FLORIDA

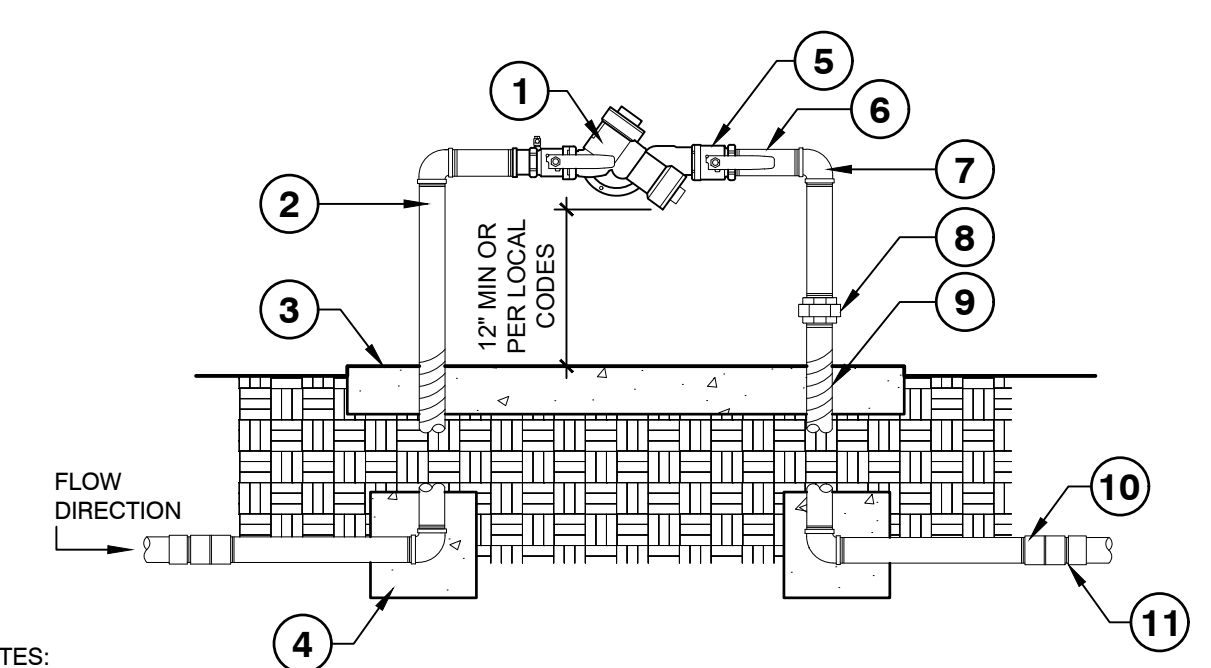
Drawing Title: IRRIGATION NOTES & SCHEDULES, Project No. 330066604, Date: 04/26/2024, Drawn By: IDS, Checked By: CZ, Drawing No. IP103, Sheet 4 of 7

IRRIGATION SCHEDULE

Table with 4 columns: SYMBOL, MANUFACTURER/MODEL/DESCRIPTION, QTY, PSI. Lists various RAIN BIRD models and their specifications.



THE QUANTITIES SHOWN IN THE LEGEND SHEETS SHALL NOT BE USED FOR BIDDING PURPOSES. THE CONTRACTOR WILL BE RESPONSIBLE FOR CONDUCTING A COMPREHENSIVE MATERIALS TAKEOFF TO DETERMINE THE ACTUAL QUANTITIES OF MATERIAL NECESSARY TO EXECUTE THE WORK DESCRIBED IN THE DOCUMENTS.

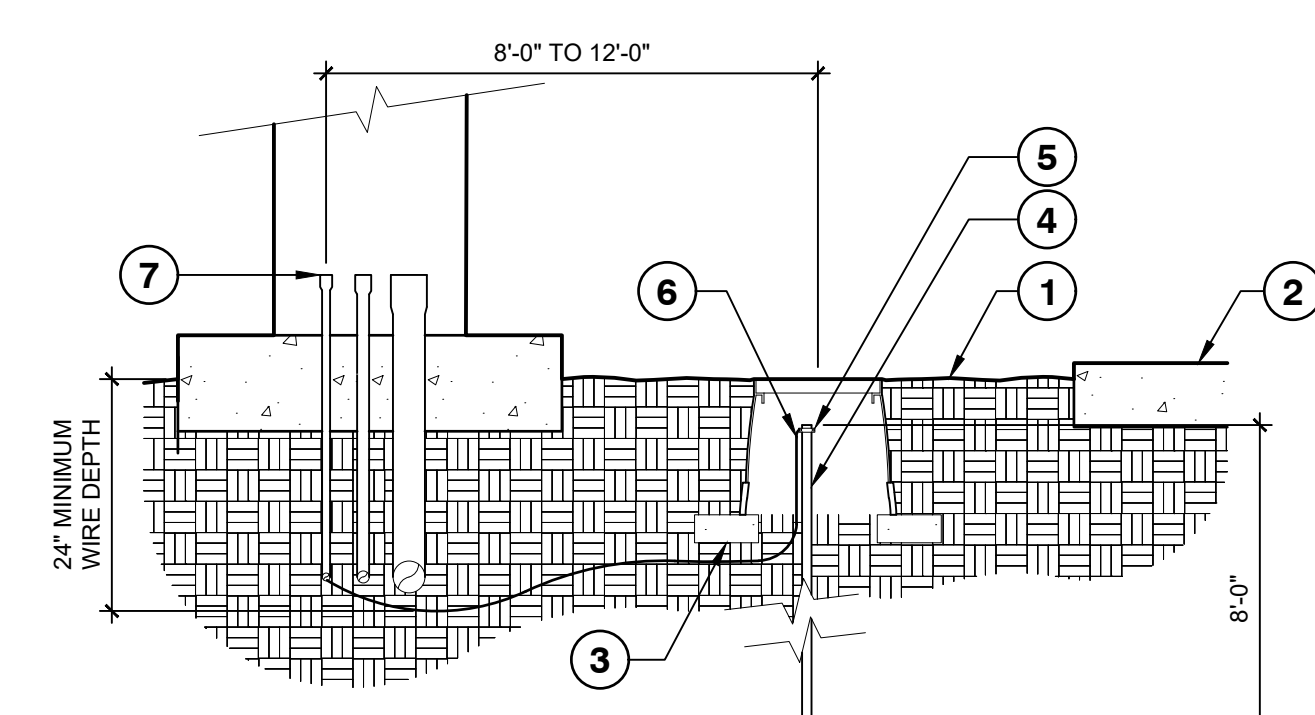


NOTES:

1. ALL ASSEMBLY PARTS (THREADED NIPPLES, FITTINGS, ETC.) SHALL BE GALVANIZED OR BRASS PER LOCAL CODES AND REQUIREMENTS.
2. GALVANIZED NIPPLE SHALL EXTEND 12" PAST THE EDGE OF THE CONCRETE FOOTING.
3. SCH. 80 PVC MALE ADAPTER SHALL BE USED IN CONNECTION FROM GALVANIZED TO THE MAINLINE.
4. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED AS CLOSE AS POSSIBLE TO THE LANDSCAPE METER.
5. BACKFLOW PREVENTION DEVICE SHALL BE LOCATED IN PLANTING AREA UNLESS APPROVED BY OWNER'S REPRESENTATIVE.
6. SEE DETAIL FOR BACKFLOW CAGE INSTALLATION.
7. ALL BACKFLOW PREVENTION DEVICES SHALL HAVE FREEZE BLANKET INCLUDED UPON INSTALLATION.
8. ALL GALVANIZED CONNECTIONS SHALL TO BE MADE USING PIPE THREAD SEALANT. ALL SCH. 80 PVC TO GALVANIZED CONNECTIONS TO BE MADE USING TEFLON TAPE.

- 1 BACKFLOW PREVENTION DEVICE (SEE IRRIGATION PLANS FOR MAKE AND MODEL). INSTALL DEVICE PER THE LOCAL WATER PURVEYORS STANDARDS AND SPECIFICATIONS
- 2 GALVANIZED NIPPLE
- 3 4" THICK CONCRETE PAD, 1" ABOVE FINISHED GRADE. SEE BACKFLOW CAGE DETAIL
- 4 CONCRETE THRUST BLOCKS REQUIRED ON BACKFLOW DEVICES 2-1/2" AND LARGER
- 5 BRASS BALL VALVE
- 6 THREADED GALVANIZED NIPPLE
- 7 GALVANIZED 90° (DEGREE) ELBOW
- 8 GALVANIZED UNION
- 9 WRAP 20 MIL TAPE TWICE AROUND GALVANIZED PIPE UNDER FINISHED GRADE AND THROUGH THE CONCRETE
- 10 GALVANIZED COUPLING
- 11 SCH. 80 PVC MALE ADAPTER

1 BACKFLOW PREVENTION DEVICE
3/4" = 1'-0" FX-IR-FX-BACK-02

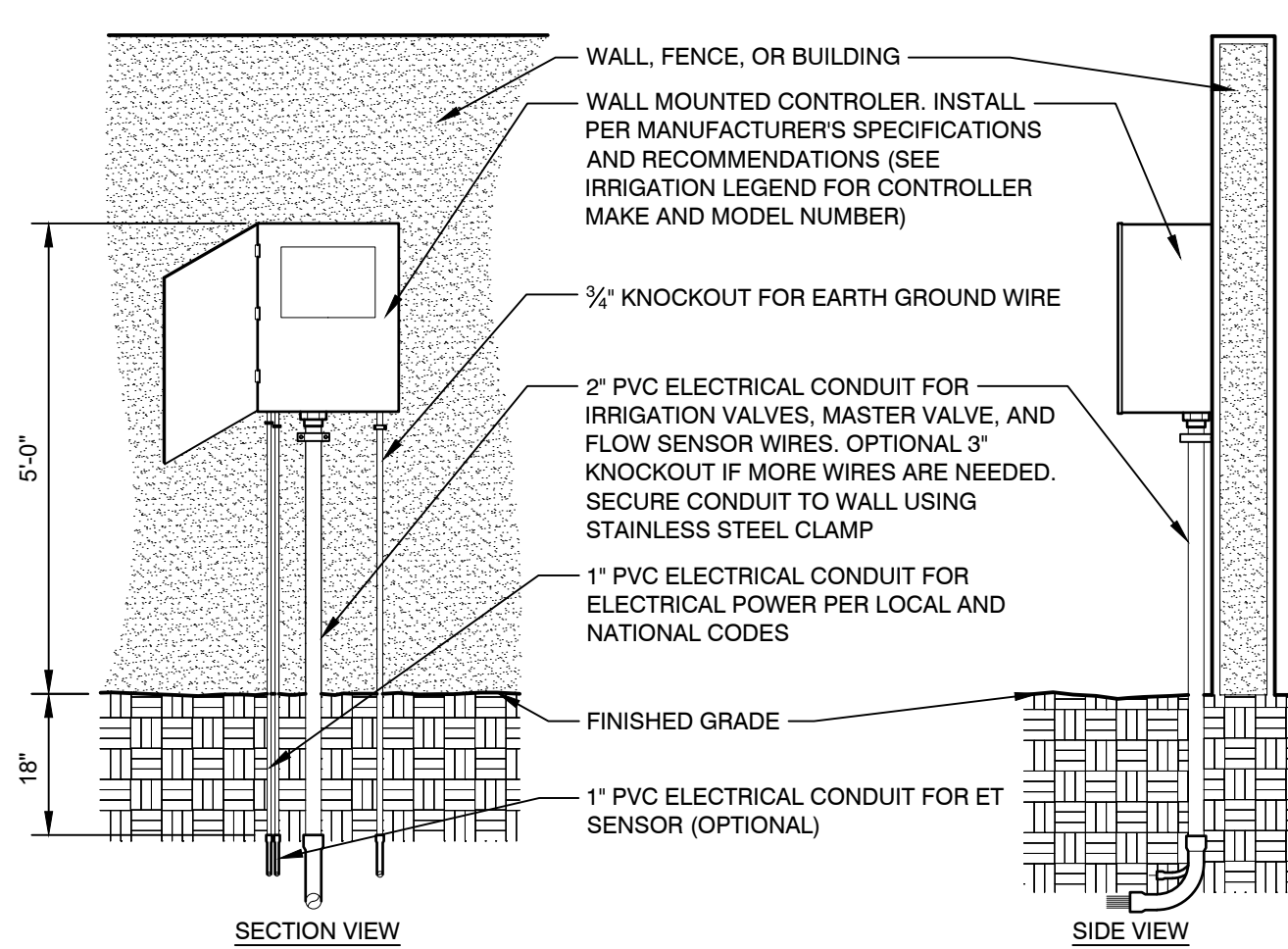


NOTES:

1. ALL GROUNDING REQUIREMENTS FOR CONTROLLERS SHALL CONFORM TO LOCAL ELECTRIC CODES.
2. GROUNDING ROD SHALL NOT BE LOCATED IN THE SAME TRENCH AS IRRIGATION MAINLINES OR LATERAL LINES.
3. VALVE BOX SHALL BE WRAPPED WITH A MINIMUM 3 MIL THICK PLASTIC AND SECURED TO THE VALVE BOX USING DUCT TAPE OR ELECTRICAL TAPE.
4. INSTALL GROUNDING ROD PER THE CONTROLLER MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

- 1 FINISH GRADE
- 2 PAVEMENT
- 3 THREE (3) 4" x 8" BRICKS
- 4 5/8" x 8'-0" COPPER GROUNDING ROD
- 5 GROUNDING ROD CLAMP
- 6 #6 AWG BARE COPPER WIRE
- 7 1/2" PVC ELECTRICAL CONDUIT AND SWEEP FOR EARTH GROUND

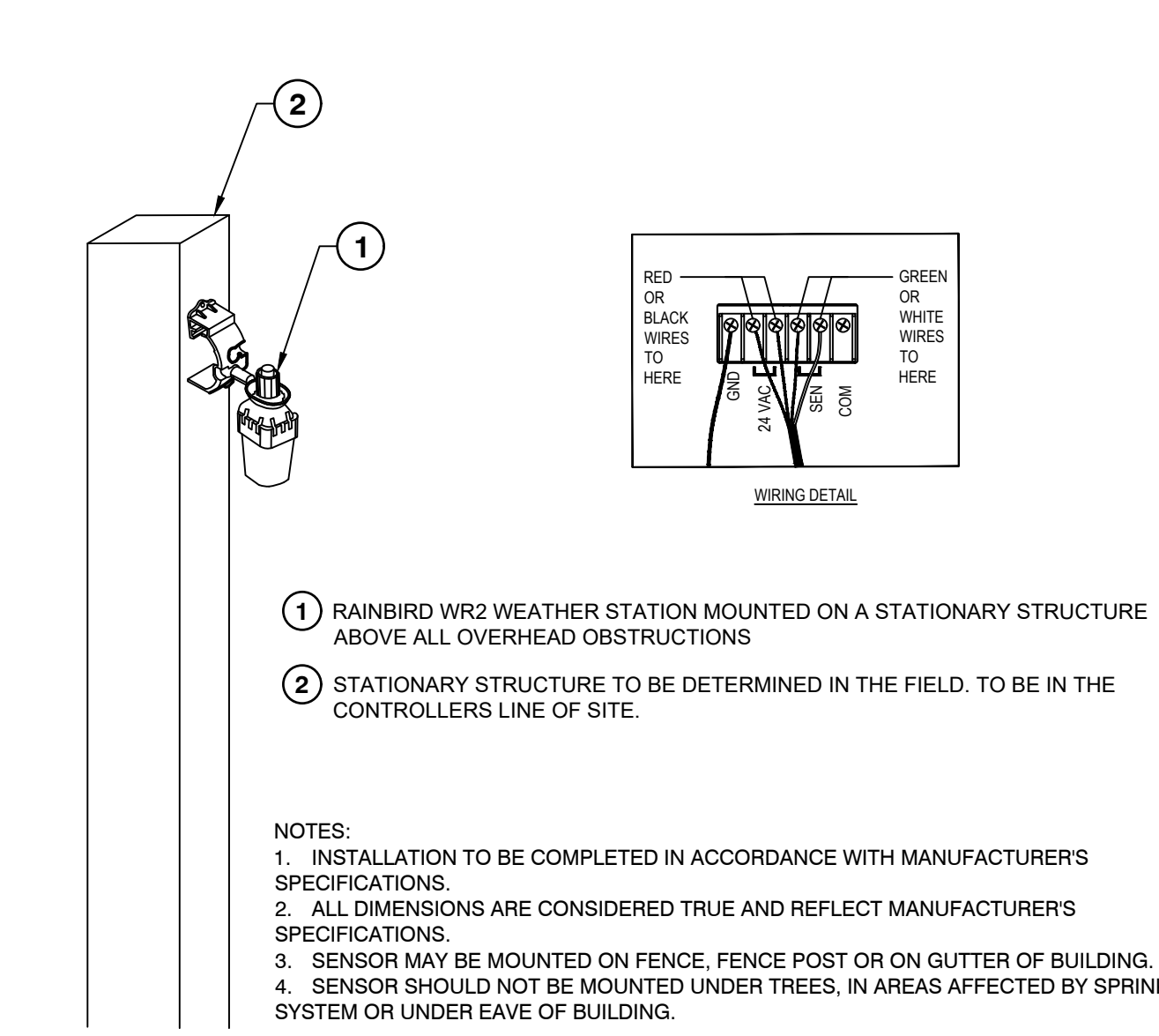
2 GROUNDING ROD
1" = 1'-0" FX-IR-FX-AUXEQ-01



NOTES:

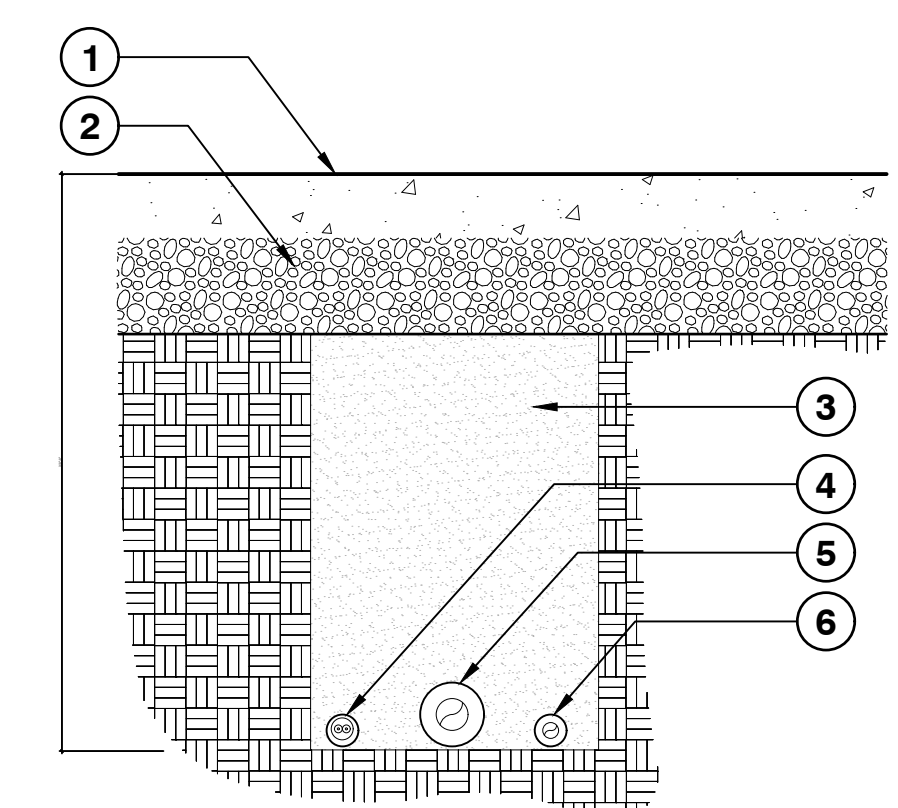
1. COMMON AND CONTROLLER WIRE TO BE BUNDLED USING ELECTRICAL TAPE 10'-0" ON CENTER.
2. GROUNDING RODS SHALL BE LOCATED BETWEEN 8'-0" TO 12'-0" AWAY FROM THE CONTROLLER. GROUNDING RODS SHALL BE 3/4" IN DIAMETER x 8' IN LENGTH. CONNECT THE GROUNDING ROD TO THE CONTROLLER USING 6 GAUGE BARE COPPER WIRE OR PER THE MANUFACTURER'S SPECIFICATIONS. SEE GROUNDING ROD DETAIL.
3. ET STATION SHALL BE INSTALLED NO FURTHER THAN 90° AWAY FROM THE CONTROLLER AND A MINIMUM OF 15' OFF THE GROUND, OUT FROM UNDER ANY OVERHEAD OBSTRUCTIONS SUCH AS, BUT NOT LIMITED TO, BUILDING OVERHANGS, TREES, OR UTILITIES.

3 WALL MOUNTED CONTROLLER
1/2" = 1'-0" FX-IR-FX-CONT-05



- NOTES:
1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. ALL DIMENSIONS ARE CONSIDERED TRUE AND REFLECT MANUFACTURER'S SPECIFICATIONS.
 3. SENSOR MAY BE MOUNTED ON FENCE, FENCE POST OR ON GUTTER OF BUILDING.
 4. SENSOR SHOULD NOT BE MOUNTED UNDER TREES, IN AREAS AFFECTED BY SPRINKLER SYSTEM OR UNDER EAVE OF BUILDING.

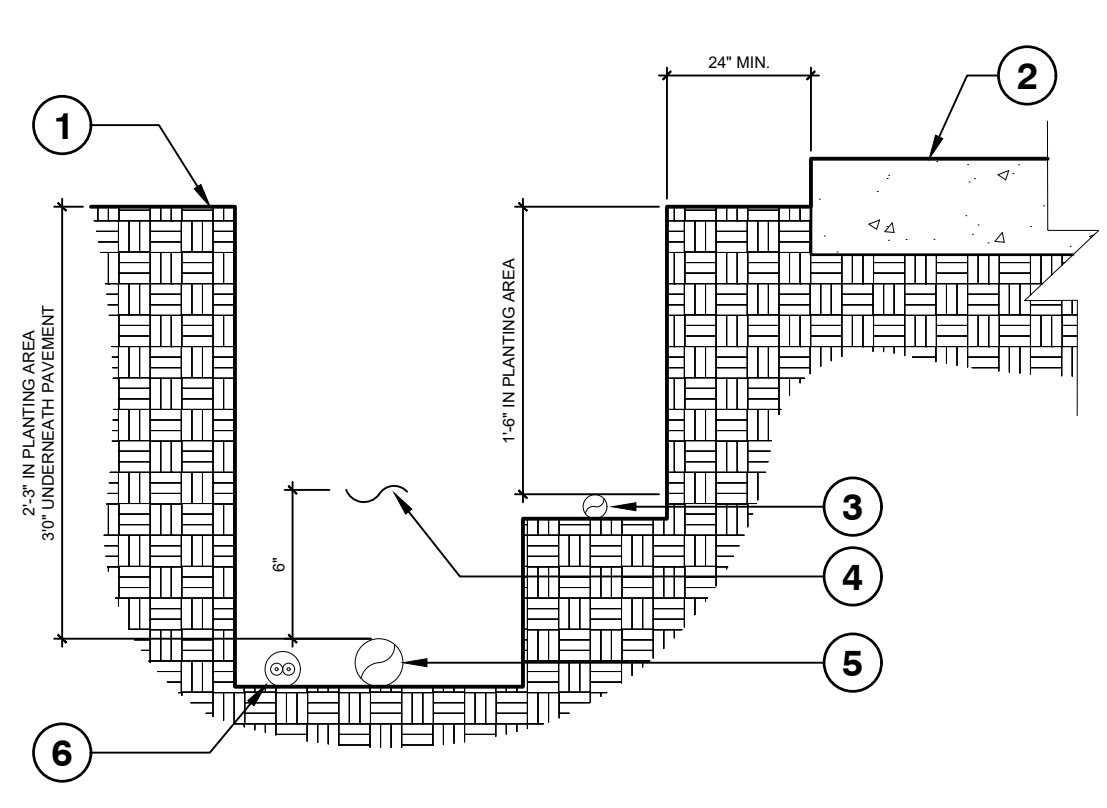
4 RAINBIRD WR2 WEATHER STATION
N.T.S. I-39



NOTES:

1. SEE IRRIGATION LEGEND FOR MAINLINE SIZE AND TYPE.
2. ALL SLEEVES SHALL BE SCH. 40 PVC PIPE.
3. ALL SLEEVES SHALL EXTEND 12" BEYOND THE EDGE OF PAVEMENT.
4. END OF SLEEVES SHALL BE LOCATED WITH A WOODEN STAKE OR PVC PIPE. LOCATORS SHALL RUN CONTINUOUSLY FROM THE END OF THE SLEEVE TO FINISHED GRADE.

5 PIPE BENEATH PAVEMENT - TWO WIRE
N.T.S. I-04

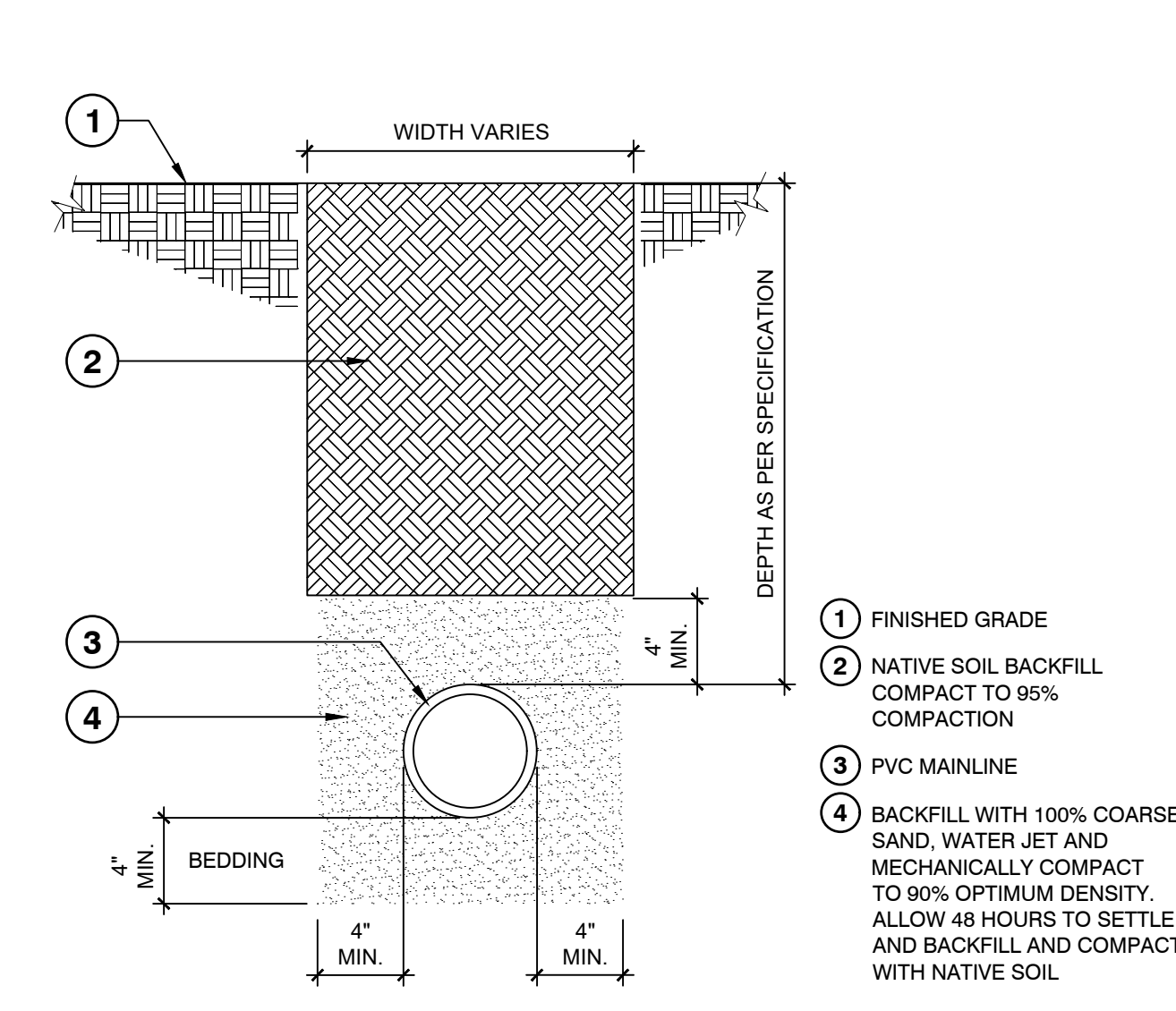


NOTES:

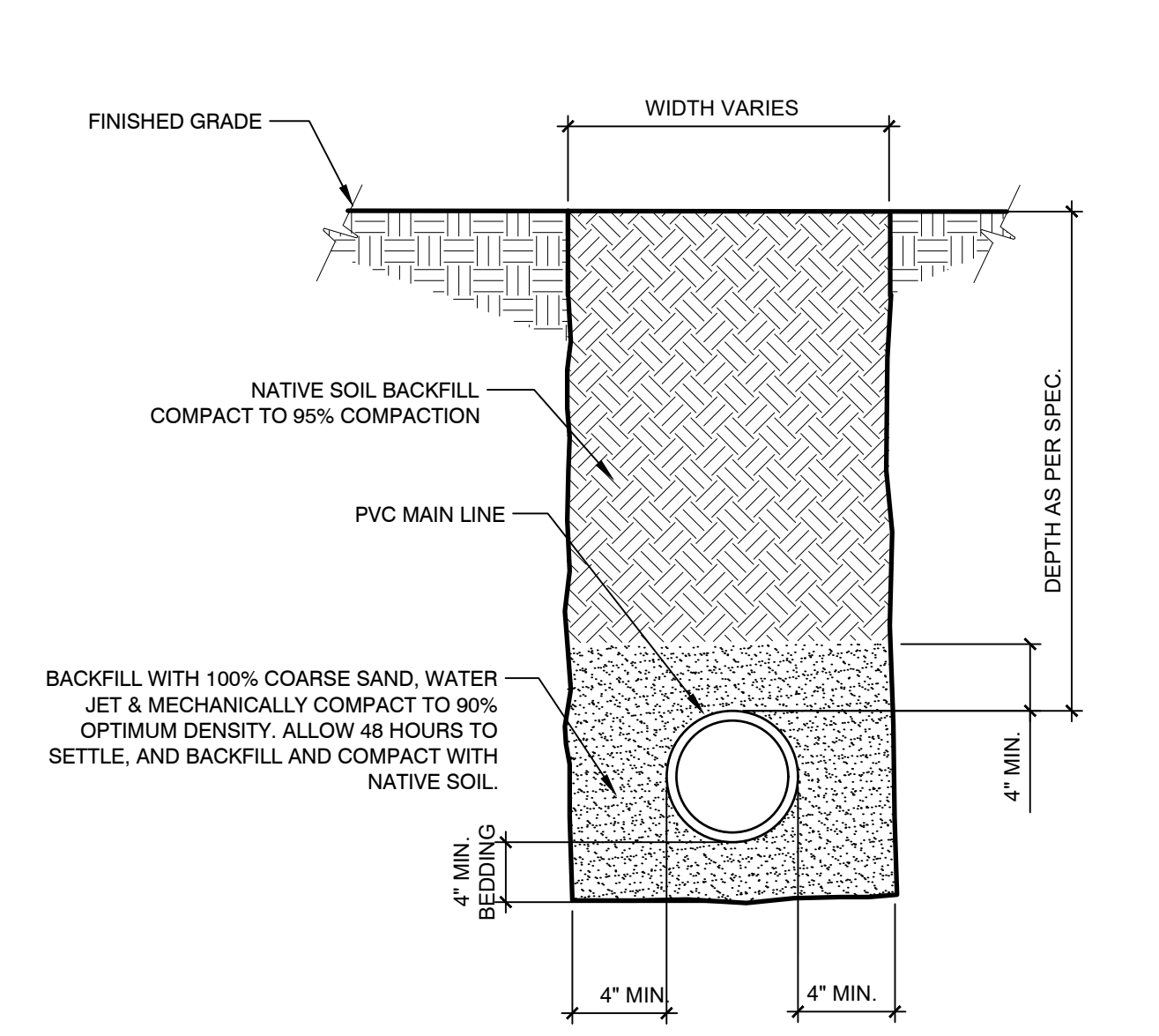
1. SEE IRRIGATION LEGEND FOR MAINLINE AND LATERAL LINE PIPE SIZE AND TYPE.
2. 2-WIRE IRRIGATION WIRE SHALL BE INSTALLED IN SCH. 40 PVC ELECTRICAL CONDUIT.
3. DETECTABLE LOCATOR TAPE SHALL BE LOCATED SIX INCHES (6") ABOVE THE ENTIRE MAINLINE RUN.

- 1 FINISHED GRADE
- 2 PAVEMENT
- 3 NON-PRESSURIZED LINE (LATERAL LINE)
- 4 DETECTABLE LOCATOR TAPE
- 5 PRESSURIZED LINE (MAINLINE)
- 6 TWO WIRE CONTROL WIRES IN CONDUIT

6 IRRIGATION TRENCHING - TWO WIRE
N.T.S. I-05



7 MAINLINE WITH SAND BEDDING
1 1/2" = 1'-0" FX-IR-FX-AUXEQ-13



8 SLEEVE AT ROAD
1 1/2" = 1'-0" FX-IR-FX-AUXEQ-15

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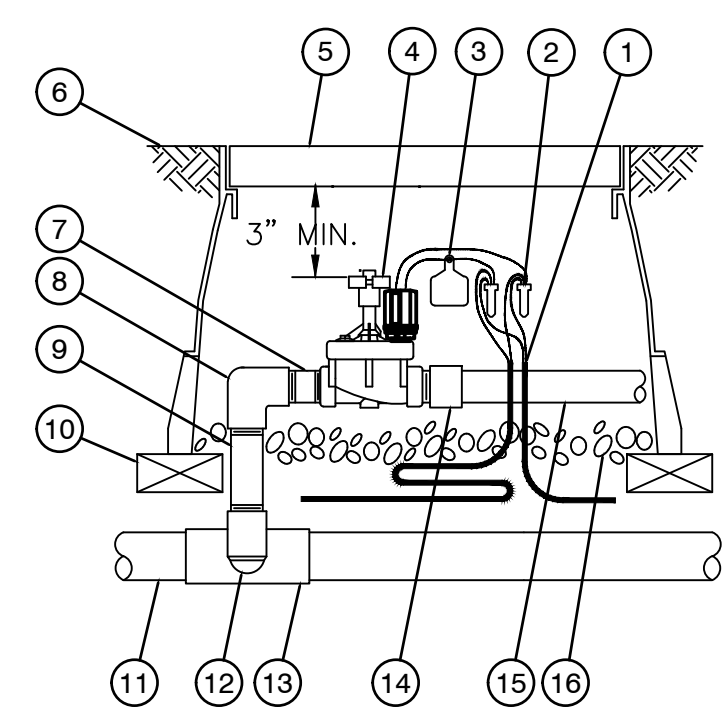
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Project
DORAL SUBARU
MIAMI-DADE COUNTY FLORIDA

Drawing Title
IRRIGATION DETAILS

Project No. 33006604
Date 04/26/2024
Drawn By IDS
Checked By CZ
Drawing No. **IP104**
Sheet 5 of 7

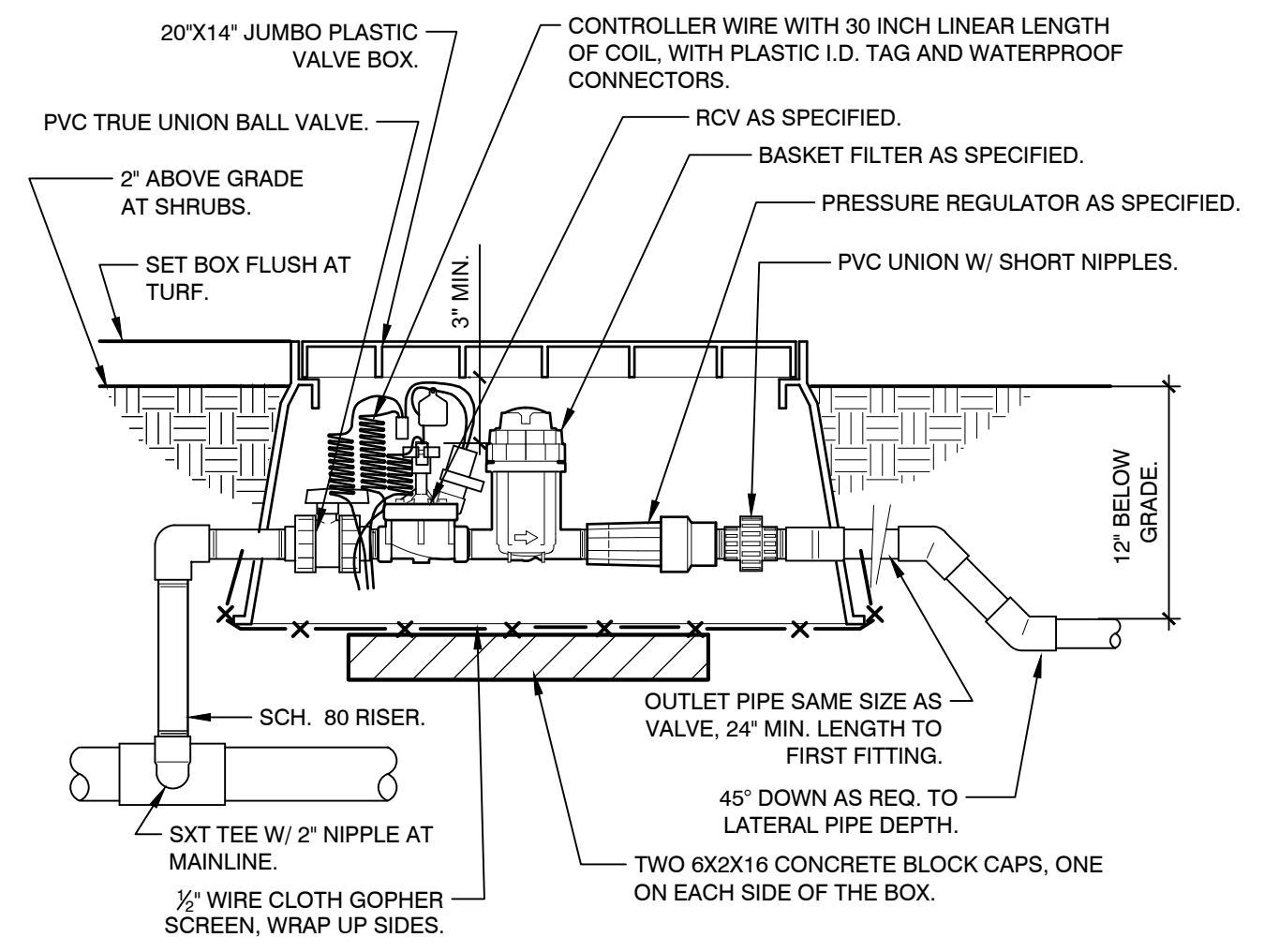




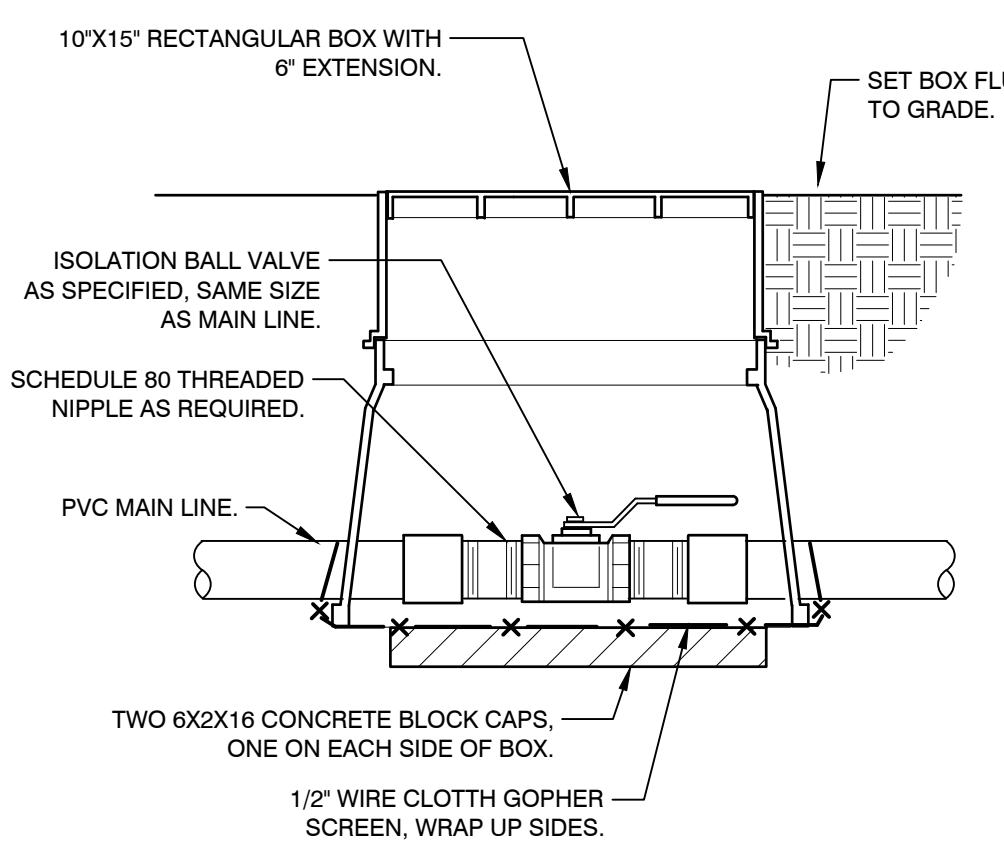
NOTE:
1. COIL AN ADDITIONAL 3- FEET OF TWO-WIRE CABLE IN VALVE BOX FOR EASY SERVICING.

- 1 TWO-WIRE CABLE
- 2 WATERPROOF SPLICE CONNECTION RAIN BIRD WC20 (TWO REQUIRED)
- 3 ID TAG
- 4 REMOTE CONTROL VALVE: RAIN BIRD PEB/PESB/PESB-R WITH IVM-SOL
- 5 VALVE BOX WITH COVER: RAIN BIRD VB-STD
- 6 FINISH GRADE/TOP OF MULCH
- 7 PVC SCH 80 CLOSE NIPPLE
- 8 PVC SCH 80 ELL
- 9 PVC SCH 80 NIPPLE (LENGTH AS REQUIRED)
- 10 BRICK (1 OF 4)
- 11 PVC MAINLINE PIPE
- 12 SCH 80 NIPPLE (2-INCH LENGTH, HIDDEN) AND SCH 80 ELL
- 13 PVC SCH 80 TEE OR ELL
- 14 PVC SCH 40 MALE ADAPTER
- 15 PVC LATERAL PIPE
- 16 3-INCH MINIMUM DEPTH OF 3/4-INCH WASHED GRAVEL

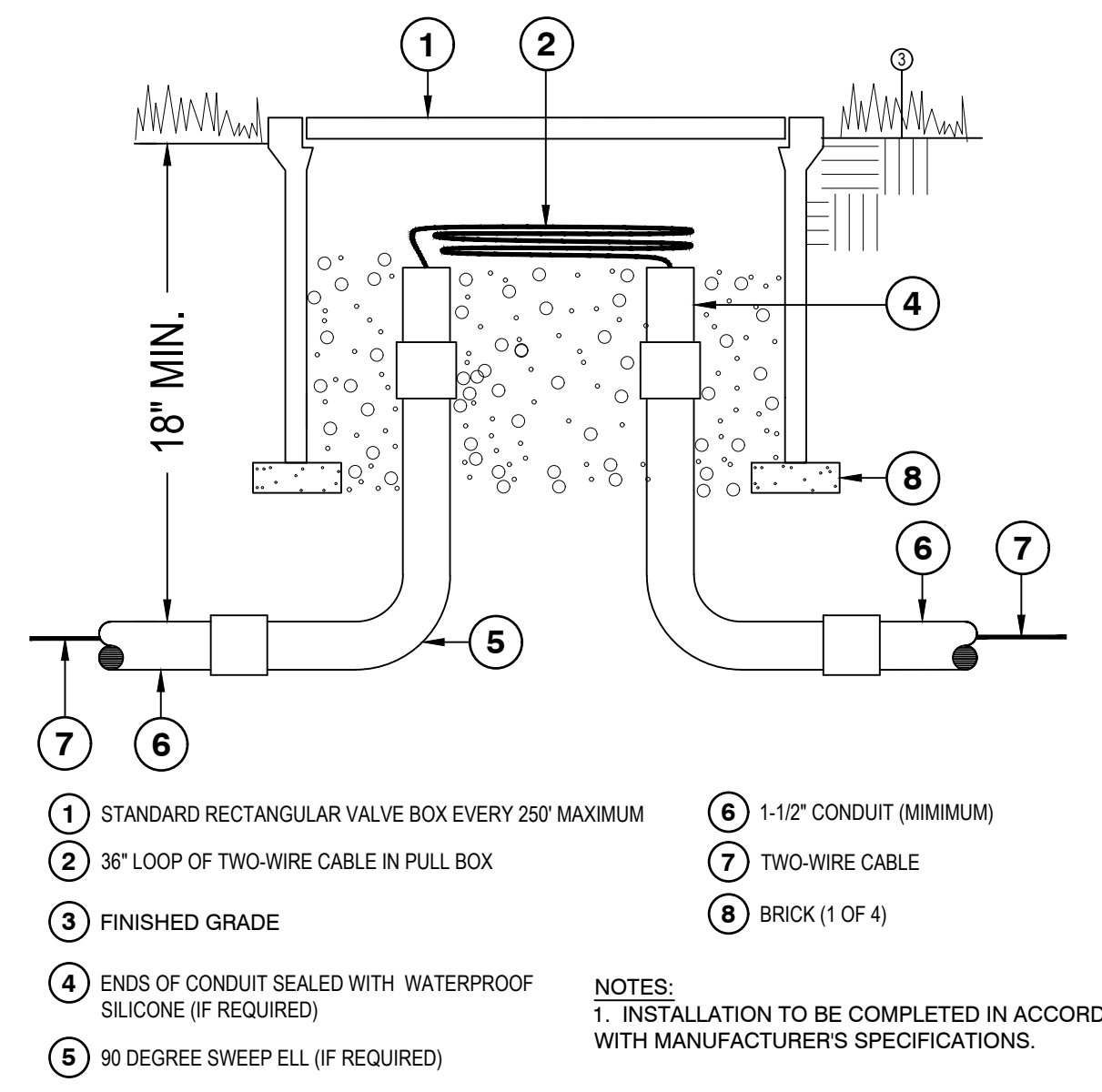
1 ELECTRIC REMOTE-CONTROL VALVE W/ IVM-SOL
N.T.S. I-03



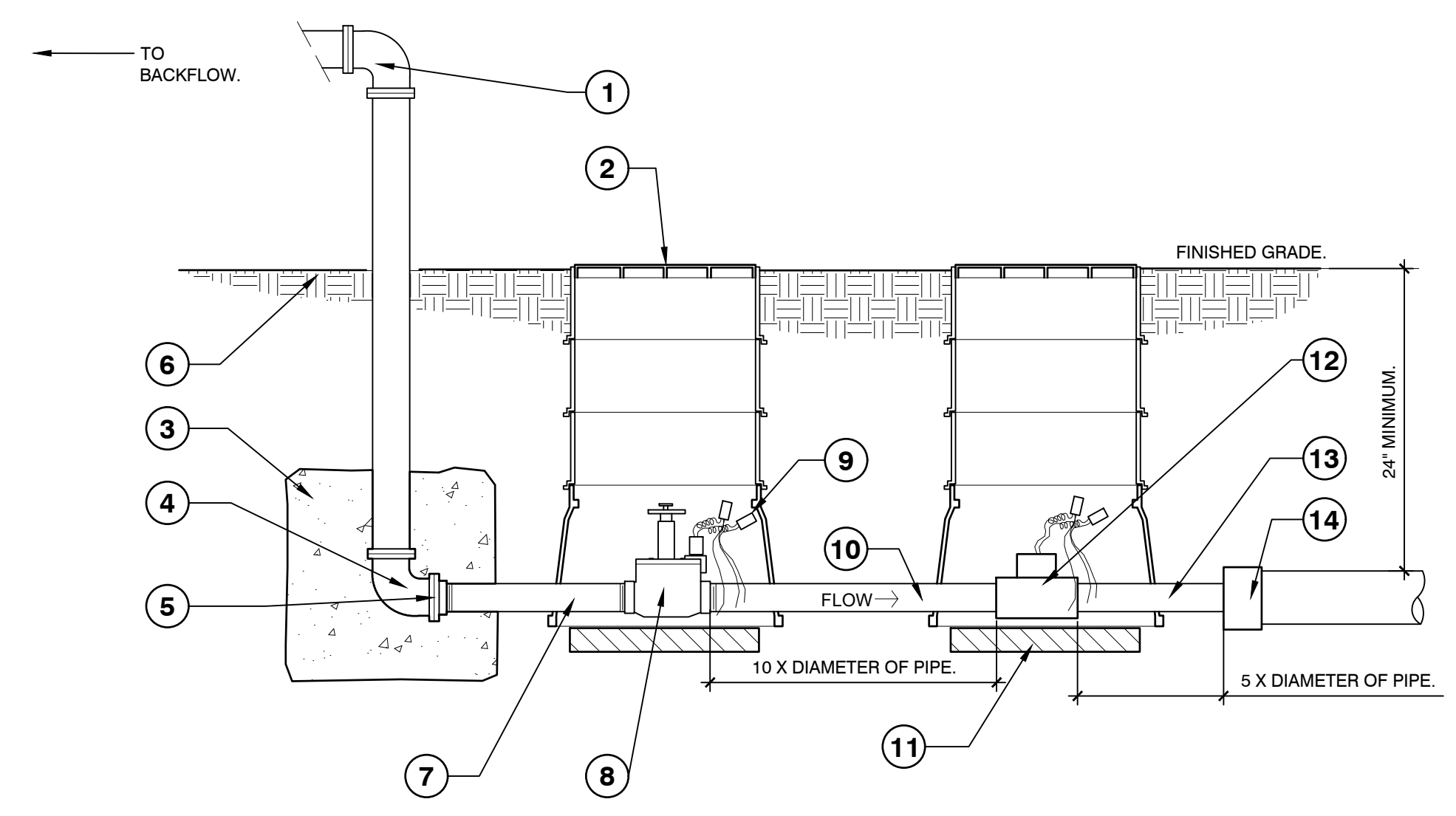
2 DRIP VALVE W/BASKET FILTER
1 1/2" = 1'-0" FX-IR-FX-DRIP-13



3 BRASS BALL ISOLATION VALVE
1 1/2" = 1'-0" FX-IR-FX-ISOV-02

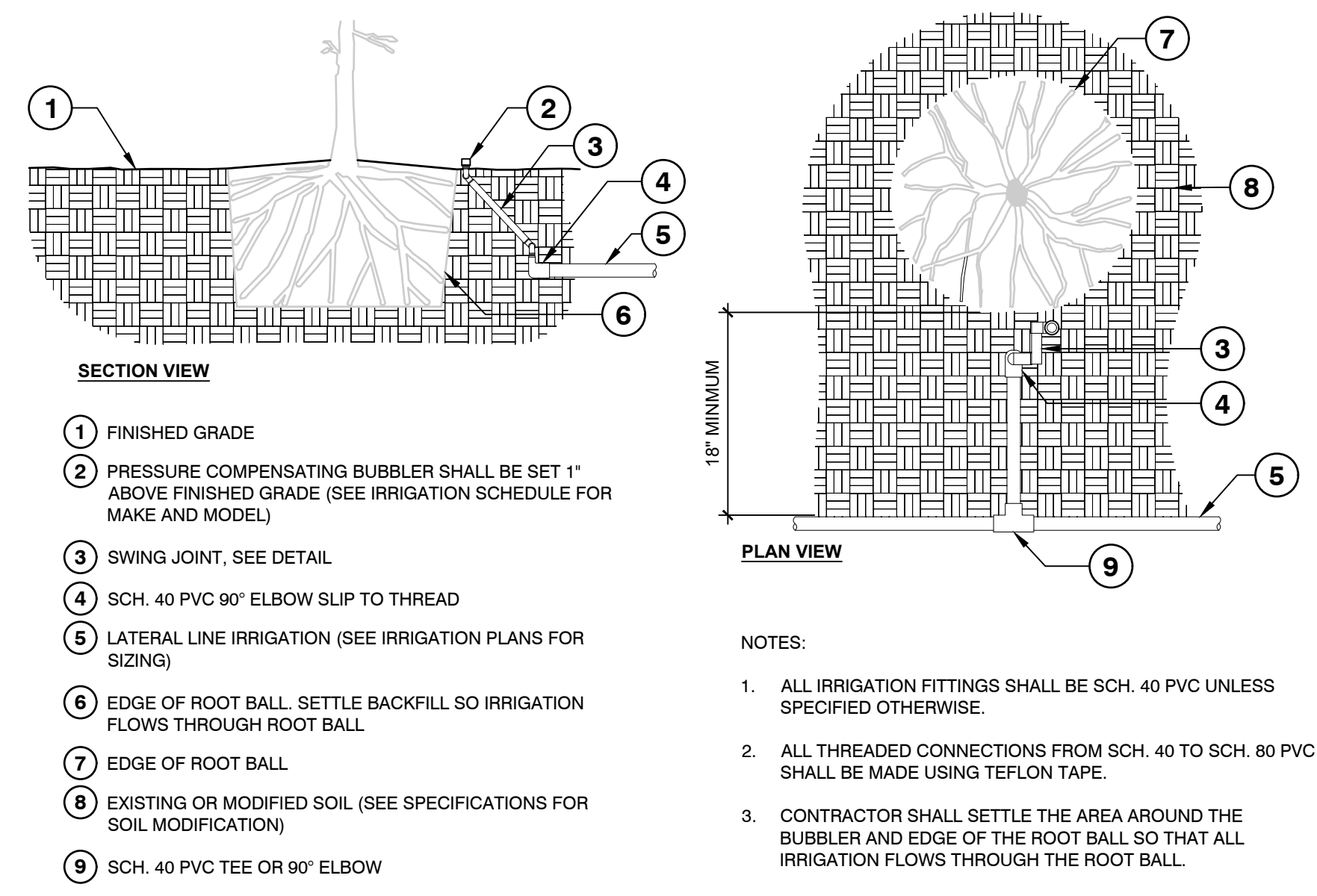


4 TWO-WIRE PULL BOX (LOW VOLTAGE)
I-31

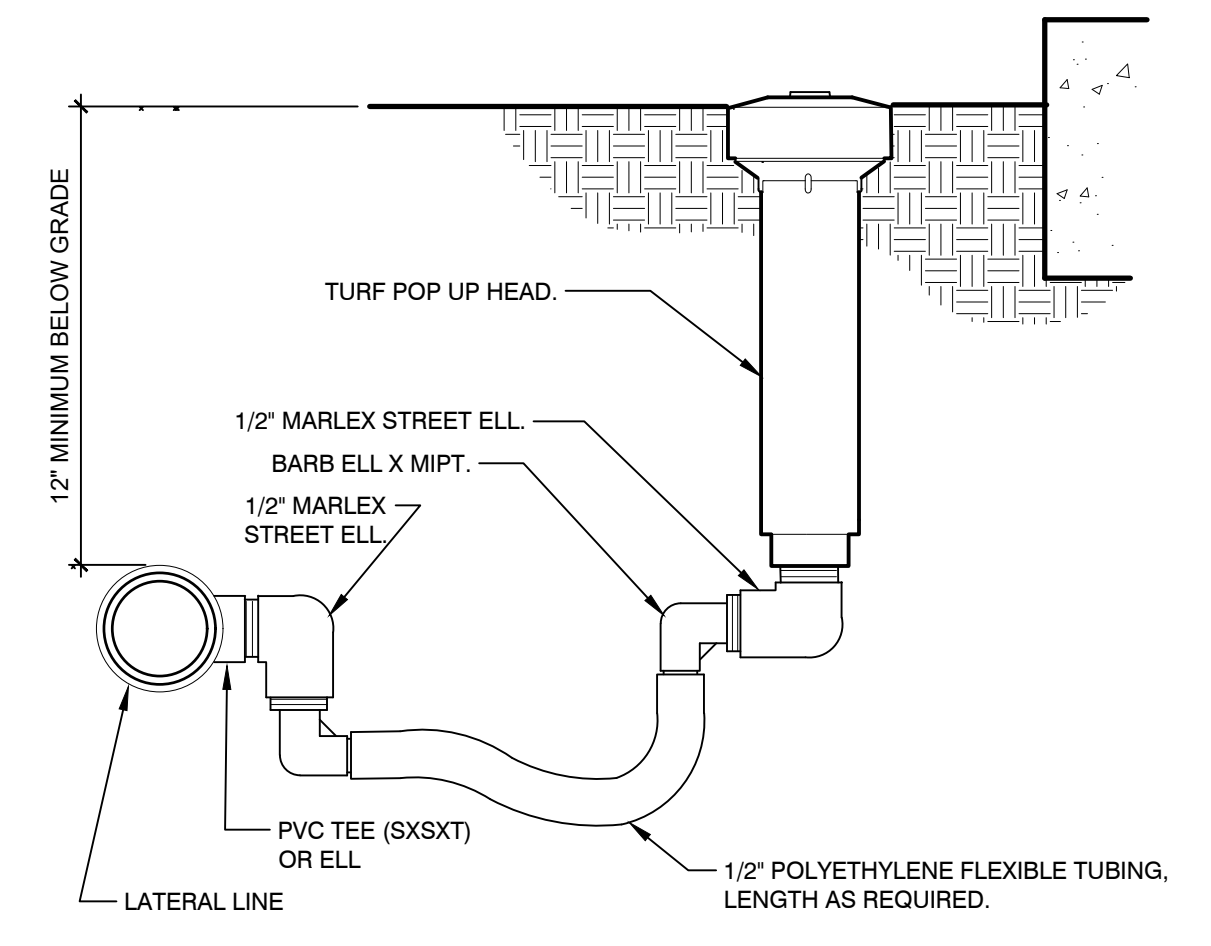


- 1 4" FLANGE ELBOW P.O.C.
- 2 SPECIFIED RECTANGULAR VALVE BOXES WITH EXTENSIONS AS NEEDED.
- 3 18"x18"x18" CONCRETE SUPPORT BLOCK.
- 4 4" FLANGED ELL.
- 5 2"x4" FLANGED REDUCER.
- 6 SOIL.
- 7 PVC SCH 80 2"x8" NIPPLE.
- 8 MASTER VALVE AS SPECIFIED.
- 9 WATER PROOF CONNECTORS.
- 10 2X24 PVC SCH 80 TOE PIPING.
- 11 2X8X16 CONCRETE WALL CAPS, TWO PER BOX, ONE EACH SIDE.
- 12 FLOW METER AS SPECIFIED (2 WIRES TO CONTROLLER).
- 13 2X12 PVC SCH 80 PIPING.
- 14 4" PVC MAIN LINE WITH 2" REDUCING BUSHING.

5 MASTER CONTROL VALVE AND FLOW SENSOR ASSEMBLY - NO REDUCER FROM BACKFLOW
1" = 1'-0" I-13




6 IRRIGATION BUBBLER W/ LAYOUT
3/4" = 1'-0" FX-IR-FX-BUBB-04



7 TURF SPRAY FLEX ASSEMBLY
3" = 1'-0" FX-IR-FX-HEAD-04

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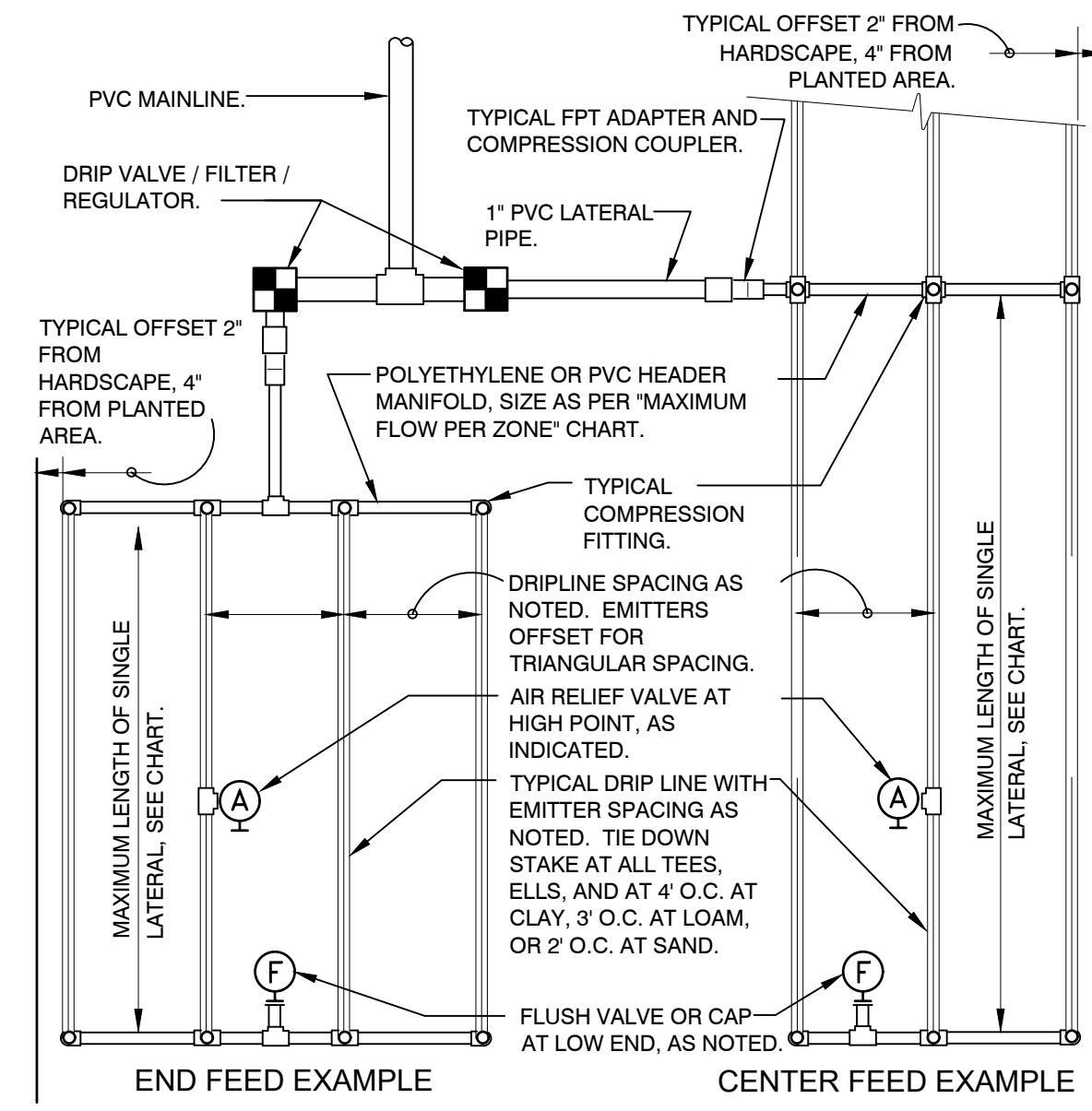
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Project: **DORAL SUBARU**
FLORIDA

Drawing Title: **IRRIGATION DETAILS**

Project No. 33006604
Date: 04/26/2024
Drawn By: IDS
Checked By: CZ
Drawing No. **IP105**
Sheet 6 of 7





PSI	MAXIMUM LATERAL LENGTH (FEET)		
	EMITTER FLOW RATE GPH		
	12" SPACING 0.6 0.9	18" SPACING 0.6 0.9	24" SPACING 0.6 0.9
10	125 96	175 135	218 171
20	249 191	350 171	442 340
30	307 236	434 333	550 422
40	350 268	495 380	627 171
50	125 96	175 135	218 171
60	125 96	175 135	218 171

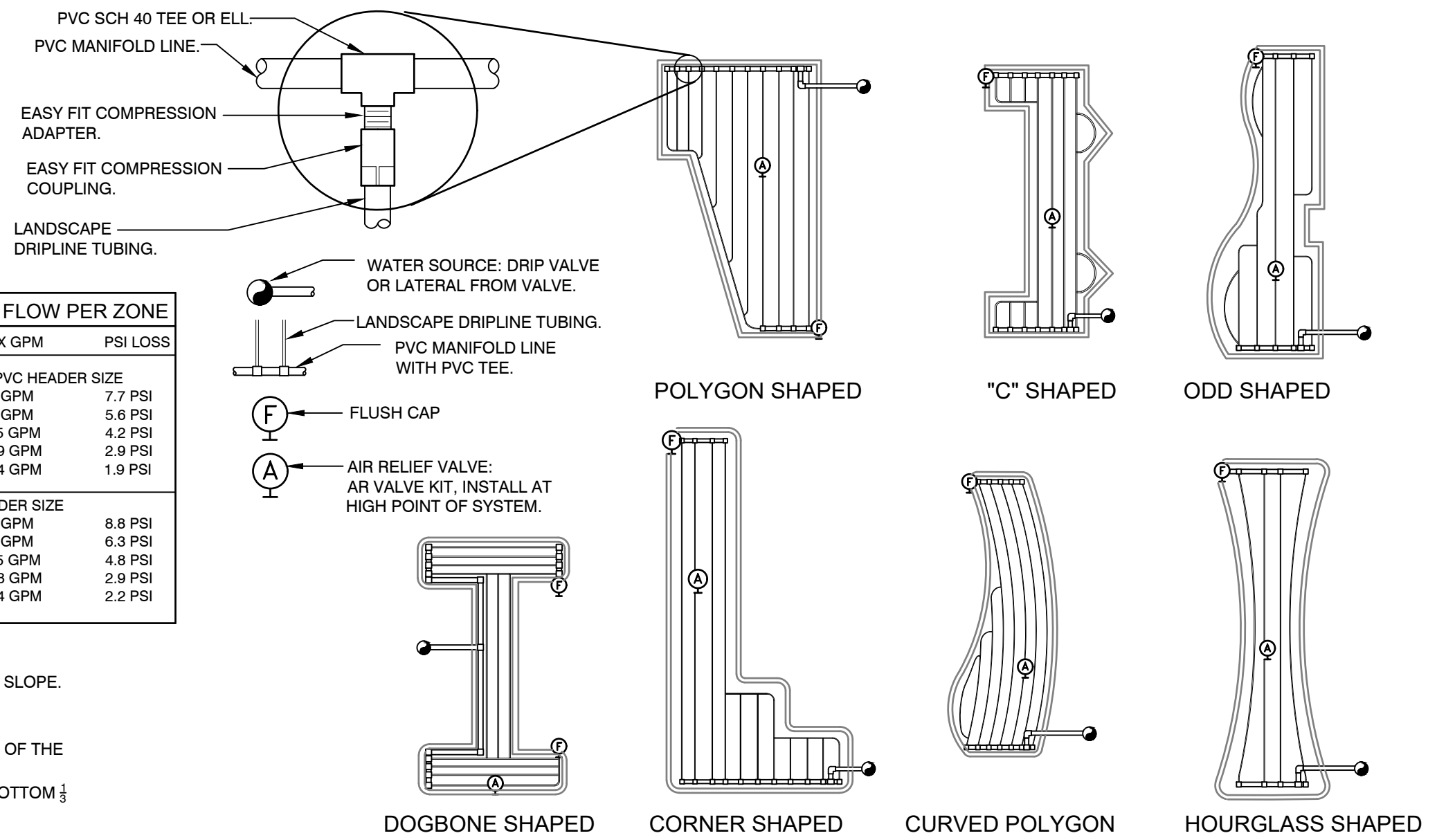
EMITTER SPACING	LATERAL SPACING	EMITTER FLOW RATE	
		0.6	0.9
12	12	0.96	1.44
18	18	0.69	1.03
24	24	0.28	0.41

EMITTER FLOW	LATERAL FLOW PER 100 FT (GPM)		
	12" SPACING	18" SPACING	24" SPACING
0.6 GPH	1.0 GPM	0.67 GPM	0.50 GPM
0.9 GPH	1.5 GPM	1.0 GPM	0.75 GPM

SCHEDULE 40 PVC HEADER SIZE	MAXIMUM FLOW PER ZONE	
	MAX GPM	PSI LOSS
1/2"	4.7 GPM	7.7 PSI
3/4"	8.3 GPM	5.6 PSI
1"	13.5 GPM	4.2 PSI
1-1/2"	33.9 GPM	2.9 PSI
2"	52.4 GPM	1.9 PSI

EMITTER FLOW	POLY PIPE HEADER SIZE	
	1/2"	3/4"
4.7 GPM	8.8 PSI	8.8 PSI
8.3 GPM	6.3 PSI	6.3 PSI
13.5 GPM	4.8 PSI	4.8 PSI
31.8 GPM	2.9 PSI	2.9 PSI
52.4 GPM	2.2 PSI	2.2 PSI

- SLOPED CONDITION NOTE:**
1. DRIPLINE LATERALS SHOULD FOLLOW THE CONTOURS OF THE SLOPE.
 2. INSTALL AIR RELIEF VALVE AT HIGHEST POINT.
 3. NORMAL SPACING WITHIN THE TOP 1/3 OF SLOPE.
 4. INSTALL DRIPLINE AT 25% GREATER SPACING AT THE BOTTOM 1/3 OF THE SLOPE.
 5. WHEN THE ELEVATION CHANGE IS 10FT OR MORE, ZONE THE BOTTOM 1/3 ON A SEPARATE VALVE.



4 TYPICAL DRIPLINE REQUIREMENTS
 N.T.S.



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Project: **DORAL SUBARU**
 MIAMI-DADE COUNTY FLORIDA

Drawing Title: **IRRIGATION DETAILS**

Project No. 33006604
 Date 04/26/2024
 Drawn By IDS
 Checked By CZ
 Drawing No. **IP106**
 Sheet 7 of 7