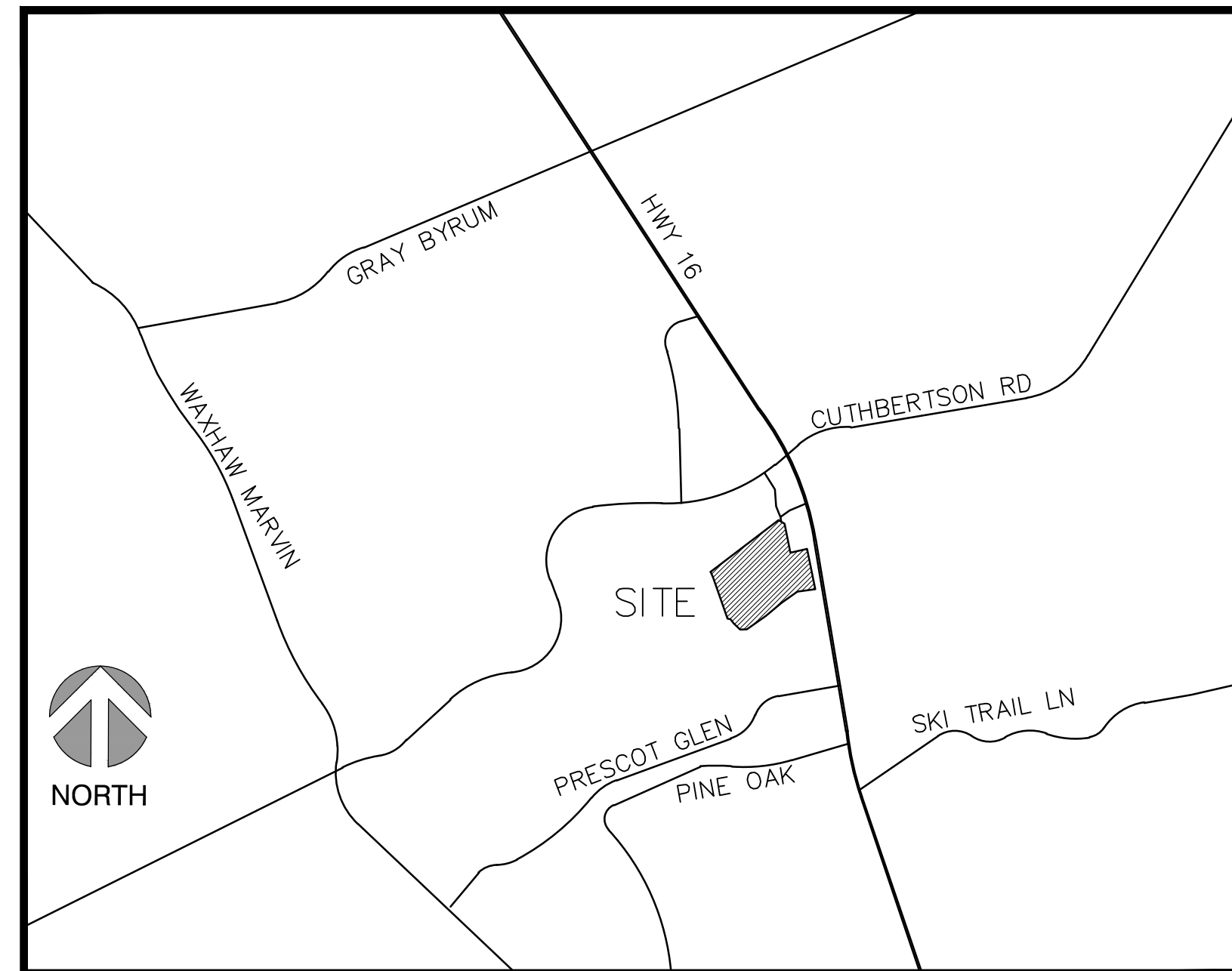


MADISON PARK OUTPARCEL 2

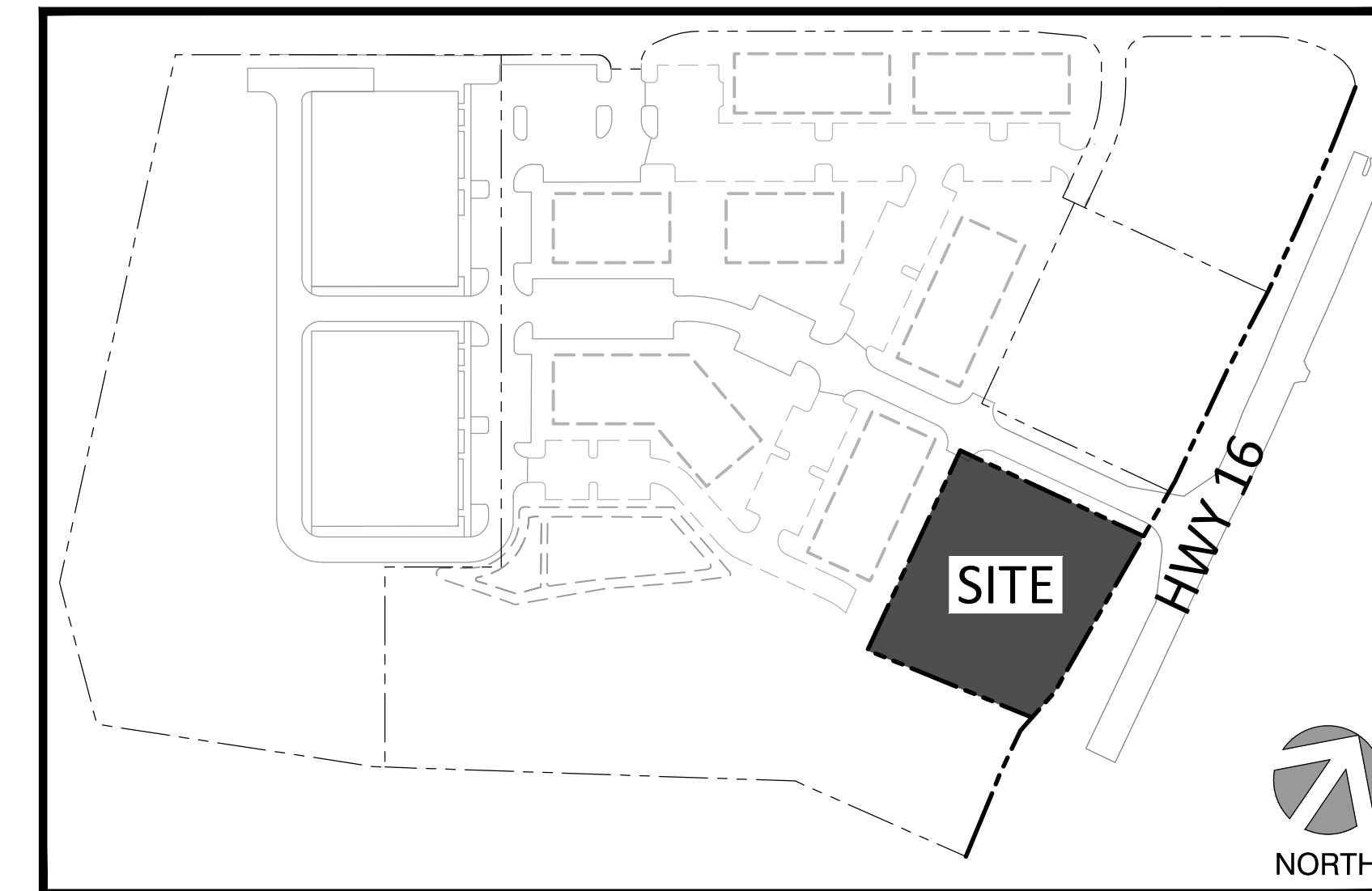
WAXHAW, NORTH CAROLINA



VICINITY MAP
NOT TO SCALE



605 LEXINGTON AVENUE , SUITE 301
CHARLOTTE, NC 28203
P) 704-749-1432
www.orsborn-eng.com



MADISON PARK MAP
NOT TO SCALE

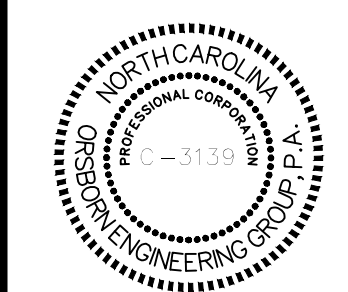
SHEET INDEX

- C2.1 SITE PLAN
- C2.2 SITE DETAILS
- C2.3 SITE DETAILS
- C2.4 TURNING MANEUVERS
- C3.1 GRADING & DRAINAGE PLAN
- C3.2 STORM PROFILES

- C4.1 UTILITY PLAN
- C4.2 UTILITY DETAILS
- C5.1 EROSION CONTROL PLAN
- L1.1 LANDSCAPE PLAN
- L1.2 LANDSCAPE DETAILS

ABBREVIATIONS

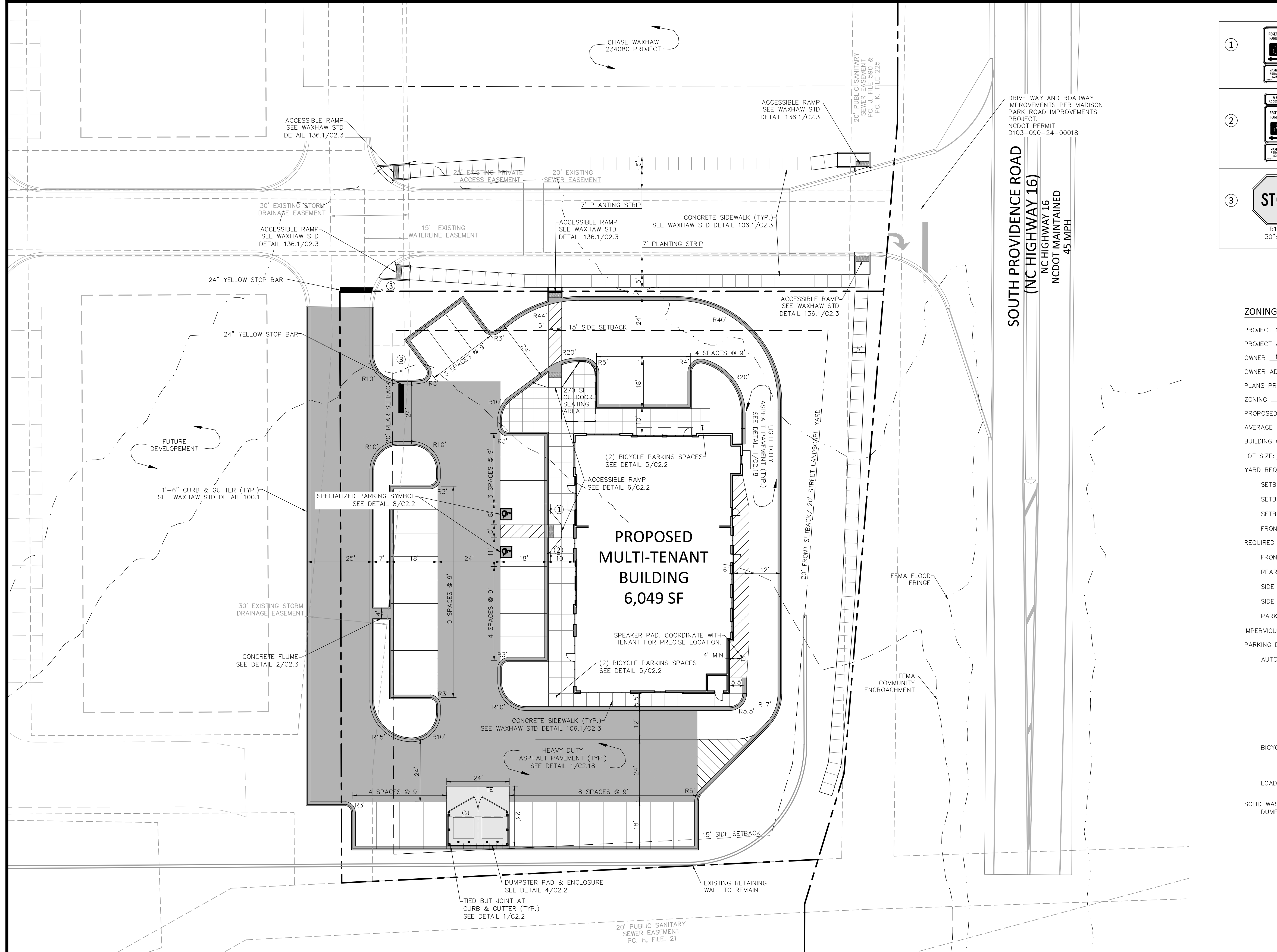
AC	ACRES
AC/FT	ACRE FOOT/FEET
ALT	ALTERNATE
APPROX	APPROXIMATE
ASPH	ASPHALT
AVE	AVENUE
AVG	AVERAGE
BFP	BACKFLOW PREVENTER
BLD	BUILDING
BLVD	BOULEVARD
BM	BENCHMARK
BO	BLOWOFF
BOC	BACK OF CURB
BOT	BOTTOM
CATV	CABLE TELEVISION
CB	CATCH BASIN
CDOT	CHARLOTTE DEPARTMENT OF TRANSPORTATION
CF	CUBIC FEET
C&G	CURB AND GUTTER
CJ	CONSTRUCTION JOINT
CLDSM	CHARLOTTE LAND DEVELOPMENT STANDARDS MANUAL
CMP	CORRUGATED METAL PIPE
CO	CLEANOUT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCT(ION)
CY	CUBIC YARD
DBL	DOUBLE
DEPT	DEPARTMENT
DET	DETAIL
DI	DROP INLET
DIM	DIMENSION
DIP	DUCTILE IRON PIPE
DWG	DRAWING
E	EAST
ELEC	ELECTRIC
ELEV	ELEVATION
EOP	EDGE OF PAVEMENT
EQUIP	EQUIPMENT
EW	EACH WAY
EXIST	EXISTING
EJ	EXPANSION JOINT
FG	FINISHED GRADE
FH	FIRE HYDRANT
FM	FORCE MAIN
FT	FOOT/FEET
GALV	GALVANIZED
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE
HW	HEADWALL
HWY	HIGHWAY
HORIZ	HORIZONTAL
ID	INSIDE DIAMETER
IN	INCHES
INV	INVERT
JB	JUNCTION BOX
JCT	JUNCTION
L	LENGTH
LB	POUND
LF	LINEAR FOOT/FEET
LP	LIGHT POLE
LT	LEFT
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MJ	MECHANICAL JOINT
MPH	MILES PER HOUR
N	NORTH
NIC	NOT IN CONTRACT
NO OR #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
OD	OUTSIDE DIAMETER
OEG	ORSBORN ENGINEERING GROUP
OVHD	OVERHEAD
PED	PEDESTAL
PI	POINT OF INTERSECTION
P/L	PROPERTY LINE
POB	POINT OF BEGINNING
PP	POWER POLE
PROJ	PROJECT
PROP	PROPOSED
PVC	POLYVINYL CHLORIDE
PVMT	PAVEMENT
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RD	ROAD
REQD	REQUIRED
REV	REVISION
RJP	RESTRAINED JOINT PIPE
RR	RAILROAD
RT	RIGHT
R/W	RIGHT-OF-WAY
S	SOUTH
SAN	SANITARY SEWER
SCH	SCHEDULE
SECT	SECTION
SPEC	SPECIFICATION
STD	STANDARD
STS	STORM SEWER
TC	TIME OF CONCENTRATION
TCE	TEMPORARY CONSTRUCTION EASEMENT
TDH	TOTAL DYNAMIC HEAD
TEMP	TEMPORARY
TOB	TOP OF BANK
TOS	TOP OF SLAB
TYP	TYPICAL
UD	UNDERDRAIN
UG	UNDERGROUND
VERT	VERTICAL
YR	YEAR
&	AND
@	AT
Δ	DELTA



DATE	DATE	DATE

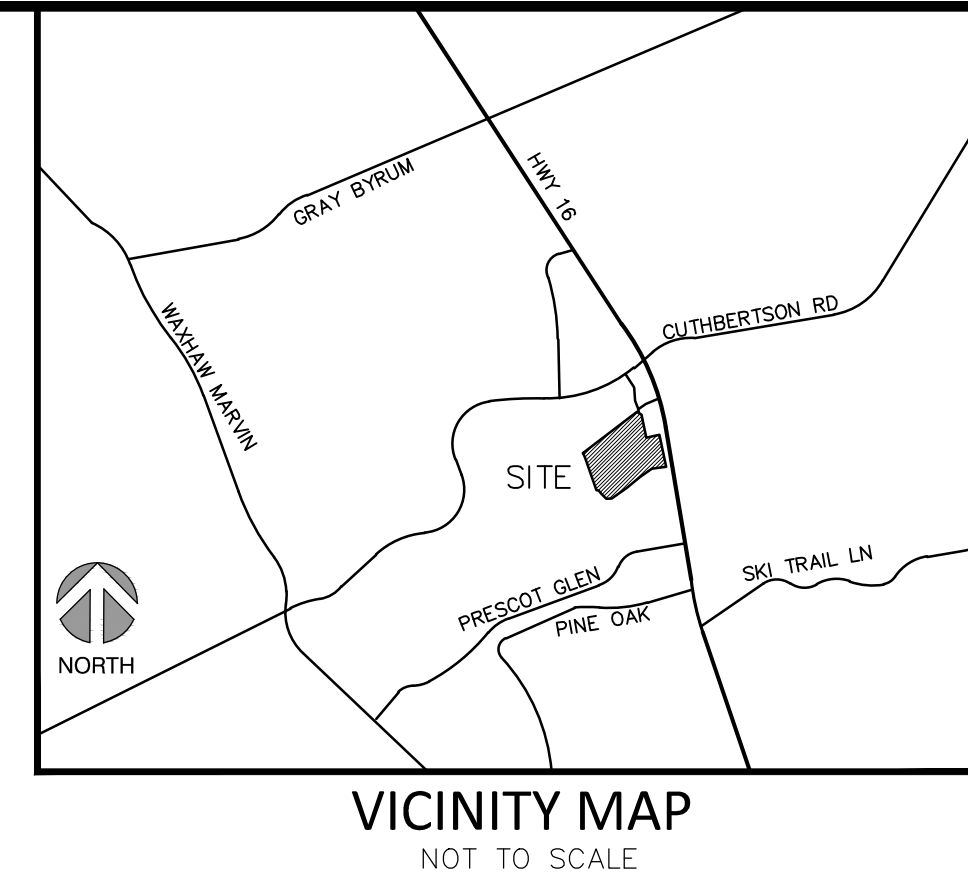
JOB # 23052 DATE: 4/01/24

COVER



SIGN LEGEND

1		R7-8 R7-8D	ACCESSIBLE PARKING SIGNAGE & STRIPING
2		R7-8a R7-8D	ACCESSIBLE PARKING SIGNAGE & STRIPING
3		R1-1 30"x30"	STOP



SITE PLAN FOR
MADISON PARK OUTPARCEL 2
 WAXHAW, NORTH CAROLINA

ZONING CODE SUMMARY

PROJECT NAME: MADISON PARK - OUTPARCEL 2
 PROJECT ADDRESS: 3218 S. PROVIDENCE ROAD TAX PARCEL: 06162005W
 OWNER: MADISON WAXHAW OWNER LLC PHONE # -
 OWNER ADDRESS: 6805 MORRISON BLVD STE 250, CHARLOTTE NC, 28211
 PLANS PREPARED BY: ORSBORN ENGINEERING GROUP PHONE # (704) 749-1432
 ZONING: CC (COMMERCIAL CORRIDOR) JURISDICTION: WAXHAW
 PROPOSED USE: COMMERCIAL MIXED USE

AVERAGE BUILDING HEIGHT: 21 (54 MAXIMUM) FEET STORIES: 1
 BUILDING COVERAGE: 6,049 SQ. FT. GROSS FLOOR AREA: 6,049 SQ.FT. RATIO: 0.14
 LOT SIZE: 1.01 SQ. FT. (ACRES) NUMBER OF BUILDINGS: 1
 YARD REQUIREMENTS:

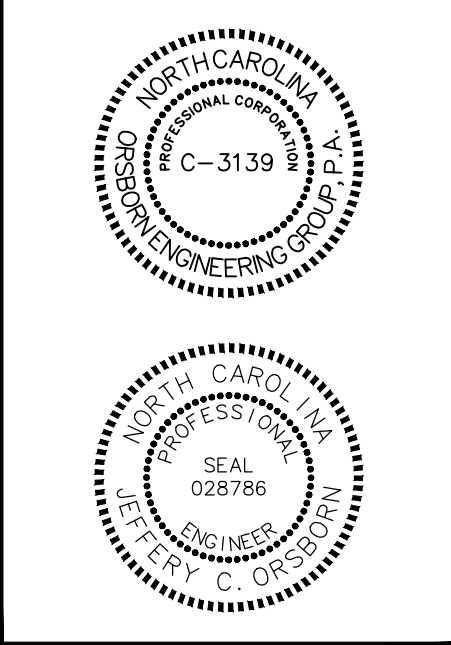
REQUIRED BUFFERS:
 SETBACK (FRONT): 20 FT. FROM R/W FRONT: NO / YES _ FT.
 SETBACK (SIDE): 10 FT. REAR: NO / YES _ FT.
 SETBACK (REAR): 20 FT SIDE (L): NO / YES _ FT.
 FRONT YARD: 20 FT. SIDE (R): NO / YES _ FT.

REQUIRED SCREENING:
 FRONT NO / YES
 REAR NO / YES
 SIDE (L) NO / YES
 SIDE (R) NO / YES
 PARKING ONLY NO / YES
 IMPERVIOUS COVERAGE: 31,739 SQ. FT. / ACRES

PARKING DATA:
 AUTOMOBILE: 10 SPACES / 1000 SQ. FT. OF FLOOR AREA INCLUDING ANY OUTDOOR SEATING AREA * 20% REDUCTION (DRIVE-THROUGH) + 4 SPACES / 1000 SQ. FT. * 20% REDUCTION (MEDICAL OFFICE)
 REQUIRED:
 MEDICAL OFFICE: 12 SPACES (REDUCED FROM 15 SPACES)
 DRIVE-THROUGH: 20 SPACES (REDUCED FROM 25 SPACES)
 TOTAL: 32 SPACES (REDUCED FROM 40 SPACES)
 PROVIDED:
 TOTAL: 37 SPACES (INCLUDING 2 ACCESSIBLE SPACES)
 BICYCLE:
 TOTAL: 235 SPACES PROVIDED (16 HANDICAP, 8 VAN ACCESSIBLE)
 REQUIRED: 2 SPACES (1 BIKE PARKING SPACE PER 20 PARKING SPACES)
 PROVIDED: 4 SPACES
 LOADING:
 REQUIRED: NO LOADING SPACES REQUIRED
 SOLID WASTE:
 DUMPSTER LOCATIONS FOR TRASH/RECYCLING SHOWN ON PLANS.

- SITE NOTES**
- PLANIMETRIC AND TOPOGRAPHIC INFORMATION WERE DERIVED FROM CONSTRUCTION DRAWINGS BY GEOSCIENCE.
 - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING BENCHMARKS AND OTHER REFERENCE POINTS THROUGHOUT THE CONSTRUCTION PERIOD.
 - PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE, LOCATE ALL EXISTING UTILITIES, AND REVIEW THE COMPLETENESS OF THE SURVEY. CONTRACTOR SHALL REPORT TO ENGINEER AND OWNER ANY DISCREPANCIES FOUND BETWEEN ACTUAL FIELD CONDITIONS AND THESE PLANS.
 - CONTRACTOR SHALL REVIEW COMPLETE SET OF PLANS FOR COORDINATION BETWEEN CIVIL, ARCHITECTURAL, LANDSCAPE, MEP, ETC. AT ALL TIMES PRIOR TO AND DURING CONSTRUCTION.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR LAYOUT OF ALL CONSTRUCTION ELEMENTS. ANY DISCREPANCIES IN DIMENSIONING SHALL BE REPORTED TO THE ENGINEER AND OWNER IMMEDIATELY.
 - DIMENSIONS ARE TO FACE OF CURB AND FACE OF BUILDING UNLESS OTHERWISE SHOWN. REFER TO ARCHITECTURAL PLANS FOR BUILDING DIMENSIONS.
 - WHEN DETAILS ARE PROVIDED, CONTRACTOR SHALL CONSTRUCT JOB PER SPECIFIC DETAILS AND NOT BY SCALING FROM THESE PLANS. ALL WRITTEN DIMENSIONS SHALL PREVAIL.
 - ALL IMPROVEMENTS AND WORK SHALL BE IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE STATE AND LOCAL STANDARDS. IN THE ABSENCE OF SPECIFIC PRODUCT SPECIFICATIONS OR CONSTRUCTION PROCEDURE, CONTRACTOR SHALL REFER TO THE 2018 NCDOT STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES, AND SHALL SUBMIT THE DETAIL/SPECIFICATIONS TO THE ENGINEER FOR APPROVAL.
 - IF A CONFLICT EXISTS BETWEEN SPECIFICATIONS ON THESE PLANS, SPECIFICATIONS REFERENCED ON THESE PLANS, DETAILS ON THESE PLANS, AND MANUFACTURERS RECOMMENDATIONS, THE CONTRACTOR WILL BE HELD TO THE STRICTER SPECIFICATION.
 - CONTRACTOR SHALL ADHERE TO ALL CONDITIONS AND PROVISIONS OF THE PROJECT PERMITS AND APPROVALS INCLUDING BUT NOT LIMITED TO "APPROVED AS NOTED" COMMENTS. CONTRACTOR SHALL IMMEDIATELY REPORT ANY DISCREPANCIES BETWEEN CONDITIONS/PROVISIONS AND THESE PLANS TO THE ENGINEER AND OWNER.
 - IF DEPARTURES FROM THESE PLANS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES SHALL BE SUBMITTED IN WRITING TO THE ENGINEER AND OWNER FOR REVIEW. NO DEPARTURES FROM THESE PLANS OR SPECIFICATIONS SHALL BE MADE WITHOUT EXPRESS WRITTEN PERMISSION FROM THE ENGINEER AND OWNER. APPROVAL OF SHOP DRAWINGS OR MATERIAL AND PRODUCT DATA SUBMITTALS SHALL NOT CONSTITUTE WRITTEN APPROVAL TO DEVIATE FROM THESE PLANS OR SPECIFICATIONS.
 - CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE SITE IN A MANNER SUCH THAT WORKERS, OWNER REPRESENTATIVES, AND THE GENERAL PUBLIC IS PROTECTED FROM HARM. CONTRACTOR MAY INSTALL TEMPORARY PERIMETER FENCING AS APPROVED BY THE OWNER. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL NECESSARY PERMITS ARE OBTAINED PRIOR TO INSTALLATION OF FENCING.
 - EXISTING IMPROVEMENTS NOT SCHEDULED TO BE DEMOLISHED THAT ARE DAMAGED BY THE CONTRACTOR AS A RESULT OF DEMOLITION OR CONSTRUCTION ACTIVITIES SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER AT THE CONTRACTOR'S EXPENSE. RECORD PRE-CONSTRUCTION VIDEO OR PHOTOGRAPHS TO SHOW NO DAMAGES OCCURRED.
 - CONTACT THE UTILITY COMPANY TO RELOCATE ANY EXISTING UTILITY POLES. ALL EXISTING FACILITIES WHICH CONFLICT WITH THE IMPROVEMENTS UNDER THE SCOPE OF THIS PROJECT MUST BE RELOCATED AT THE EXPENSE OF THE APPLICANT.
 - ROADWAY MARKING, STRIPING, SIGNS AND OTHER TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS" (MUTCD) AND SUBSEQUENT REVISIONS AND ADDENDUMS, AS PUBLISHED BY FHWA AND NCDOT REQUIREMENTS.
 - UNLESS OTHERWISE INDICATED, ALL PAVEMENT MARKINGS SHALL BE THERMOPLASTIC REFLECTIVE PAINT INSTALLED PER NCDOT STD. SPEC. SECTION 1205.
 - UNLESS OTHERWISE INDICATED, PARKING STALLS SHALL BE 4" WHITE LINES.
 - CONTRACTOR SHALL INSTALL PVC SLEEVES UNDER PAVED AREAS FOR UTILITIES AND IRRIGATION LINES BEING INSTALLED AFTER PAVING OPERATIONS COMPLETE. COORDINATE WITH EACH UTILITY AND IRRIGATION INSTALLER FOR NUMBER OF SLEEVES, LOCATION, AND SIZE REQUIRED.
 - ALL WALKS AND OTHER PEDESTRIAN AREAS SHALL COMPLY WITH ADA CODE FOR LONGITUDINAL SLOPE AND CROSS SLOPE. LONGITUDINAL SLOPES SHALL NOT EXCEED 5% AND CROSS SLOPES SHALL NOT EXCEED 2% UNLESS OTHERWISE NOTED. ADA PARKING SPACES AND AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.
 - IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, SECTIONS 1012 AND 1014, RAMPS SHALL HAVE A MAXIMUM RUNNING SLOPE OF 1:12 AND A MAXIMUM CROSS SLOPE OF 2%. HANDRAILS SHALL BE PROVIDED ON BOTH SIDES OF RAMP WHERE THE VERTICAL RISE EXCEEDS 6". RAMPS SHALL NOT HAVE A VERTICAL RISE GREATER THAN 30" WITHOUT A 5' LANDING.
 - IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, SECTION 1015, GUARDRAILS SHALL BE PROVIDED ALONG OPEN-SIDED WALKING SURFACES WHERE THE GRADE ELEVATION DIFFERENCE EXCEEDS 30". GUARDRAILS SHALL BE AT LEAST 42" HIGH AND SHALL NOT HAVE OPENINGS THAT ALLOW PASSAGE OF A SPHERE 4" IN DIAMETER. A SEALED CONTINUOUS EXPANSION JOINT SHALL BE PROVIDED BETWEEN BACK OF CURB AND ADJOINING CONCRETE WALKWAY, AND WHERE CONCRETE PAVEMENT ABUTS ANY FOUNDATION.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR RETAINING THE SERVICES OF A QUALIFIED ENGINEER TO COMPLETE THE DESIGN OF ALL PROPOSED RETAINING WALLS AND REINFORCED SLOPES SHOWN ON THE DRAWINGS. THE DESIGN OF ALL RETAINING WALLS IS TO BE CONDUCTED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, SECTION 1807.2. DETAILED RETAINING WALL AND REINFORCED SLOPE DESIGN DRAWINGS, SEALED BY A LICENSED NORTH CAROLINA ENGINEER, SHALL BE SUBMITTED TO THE LOCAL PLAN REVIEW AUTHORITY PRIOR TO CONSTRUCTION. A NORTH CAROLINA LICENSED ENGINEER MUST PERFORM CONSTRUCTION OBSERVATION, IF REQUIRED BY THE LOCAL PERMITTING AUTHORITY, VERIFYING IN A SEALED LETTER TO THE LOCAL INSPECTION AUTHORITY THAT THE RETAINING WALLS AND REINFORCED SLOPES WERE CONSTRUCTED IN ACCORDANCE WITH THE APPROVED ENGINEERED DRAWINGS, IN COMPLIANCE WITH SECTION 1807.2 OF THE NORTH CAROLINA BUILDING CODE.

MADISON WAXHAW OWNER, LLC
 6805 MORRISON BLVD
 CHARLOTTE NC 28211

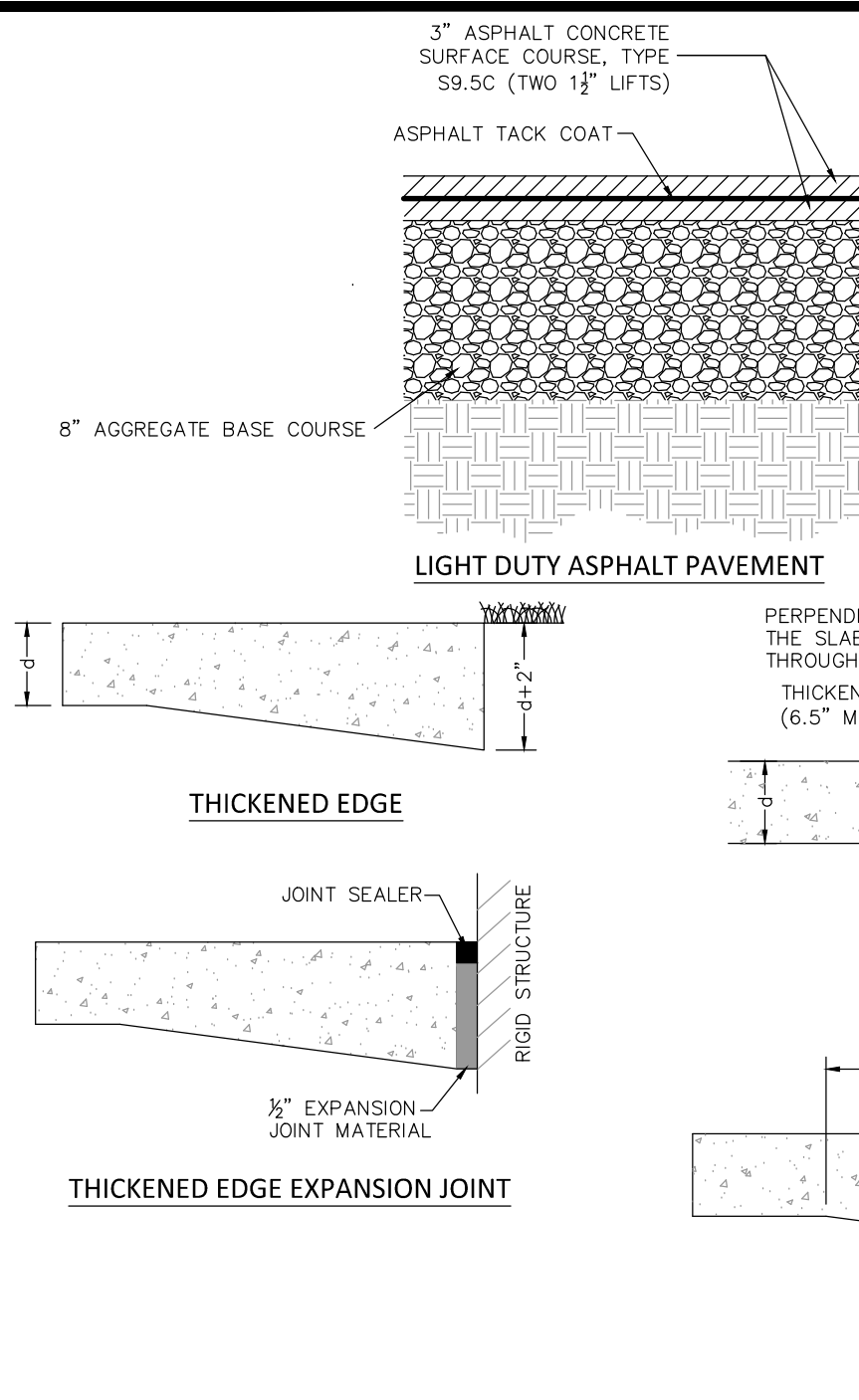


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DRAWN BY:	DJS
APPROVED BY:	JCO

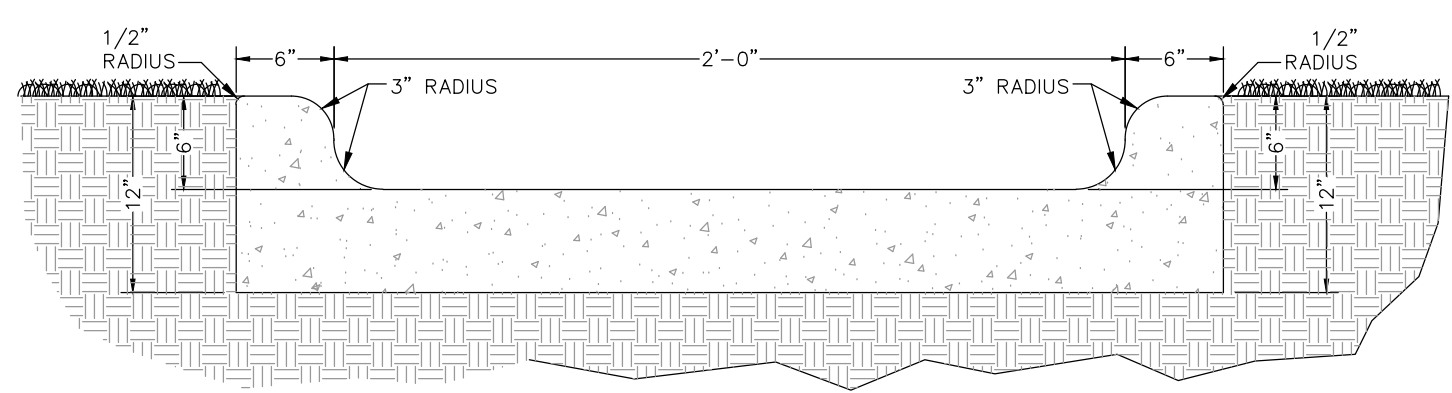
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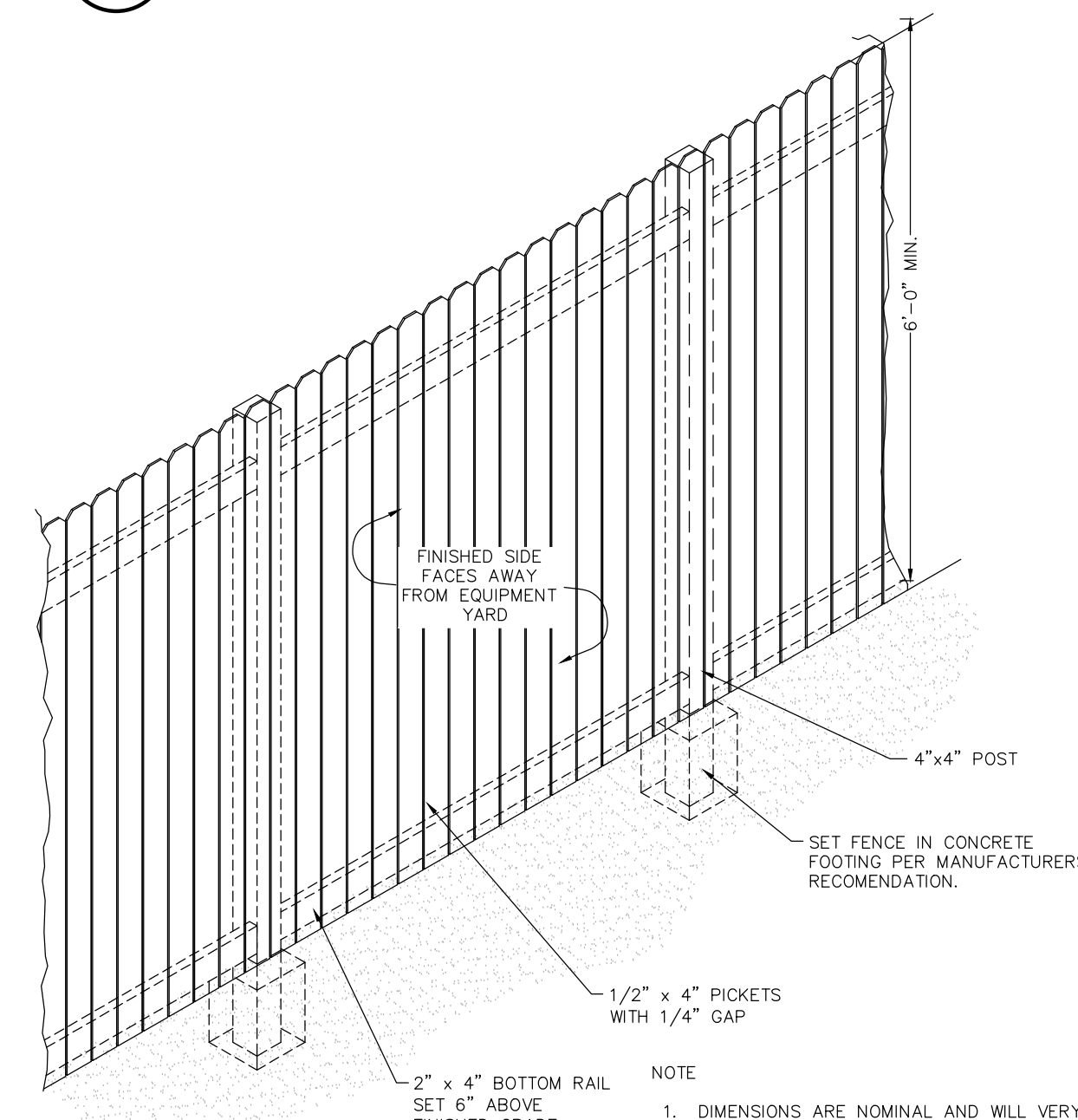


NOTE
1. REFER TO NCDOT SPECIFICATION SECTION 500 FOR SUBGRADE PREPARATIONS.
2. REFER TO NCDOT SPECIFICATION SECTION 520 FOR AGGREGATE BASE COURSE.
3. REFER TO NCDOT SPECIFICATION SECTION 605 FOR ASPHALT TACK COAT.
4. REFER TO NCDOT SPECIFICATION SECTION 610 FOR ASPHALT CONCRETE PLANT MIX PAVEMENT.
5. REFER TO A03 330.1-03 FOR CONCRETE PAVEMENT

1 STANDARD PAVEMENTS
NTS

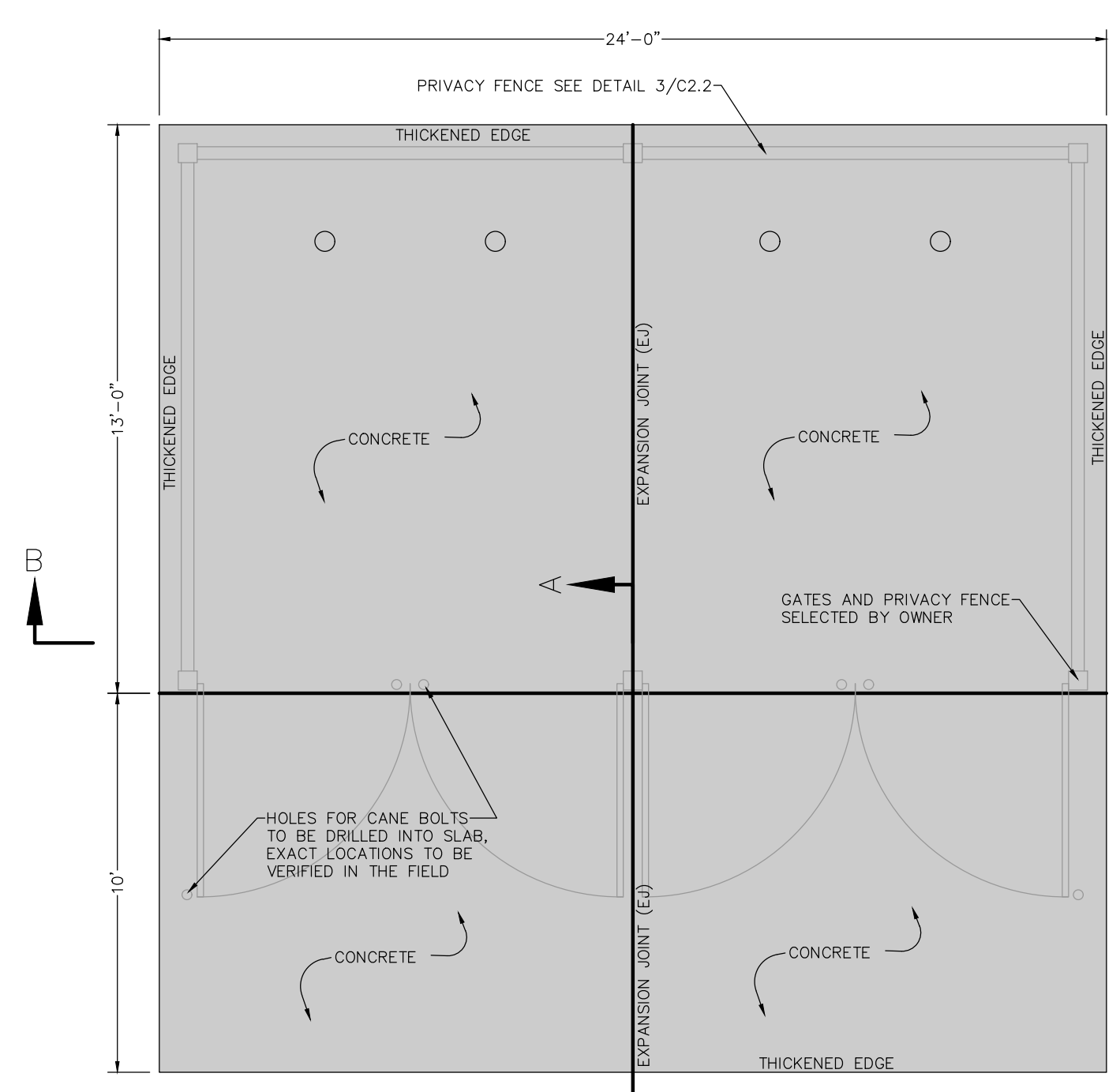


2 CONCRETE FLUME SECTION
NTS

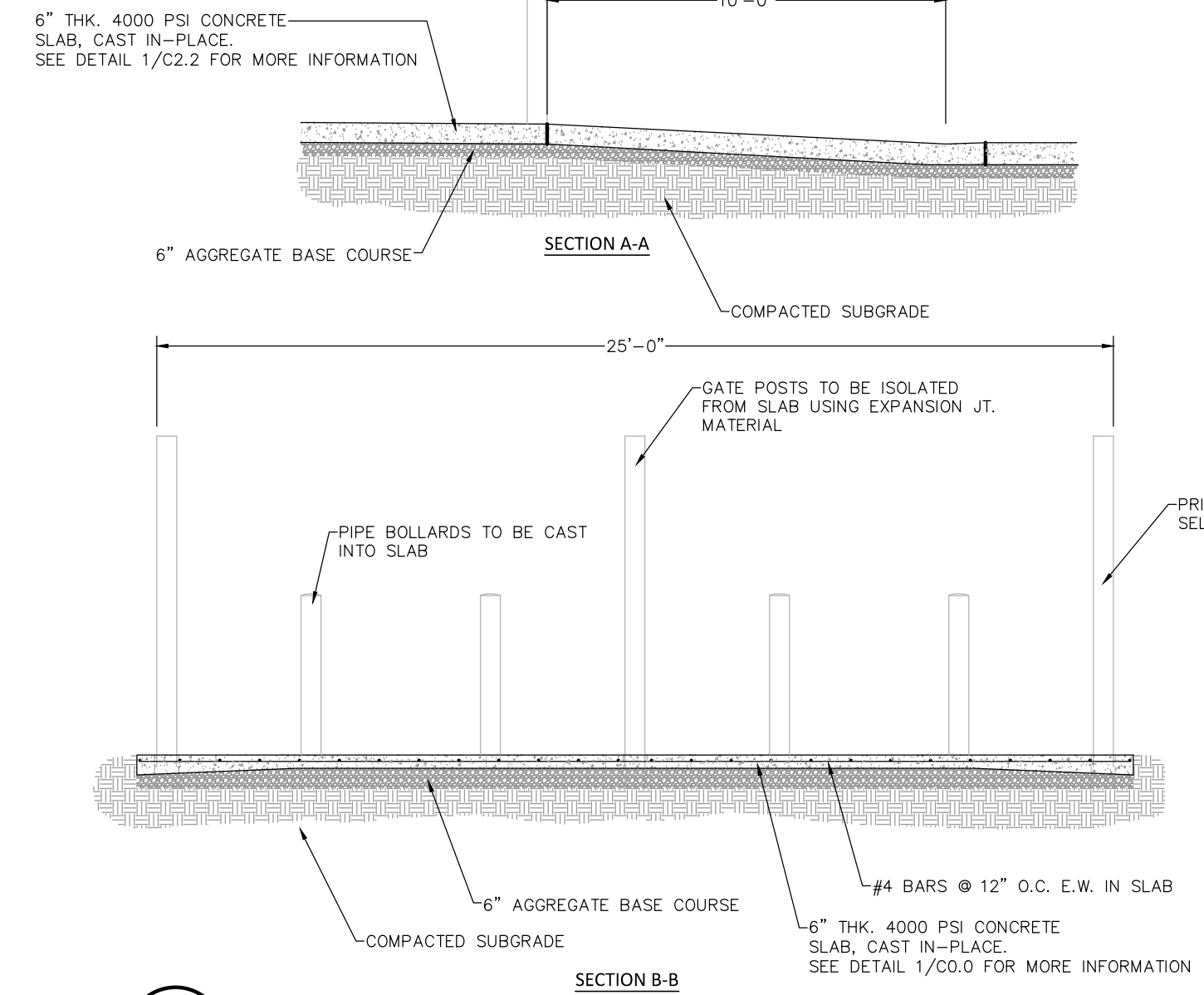


3 WOOD FENCE
NTS

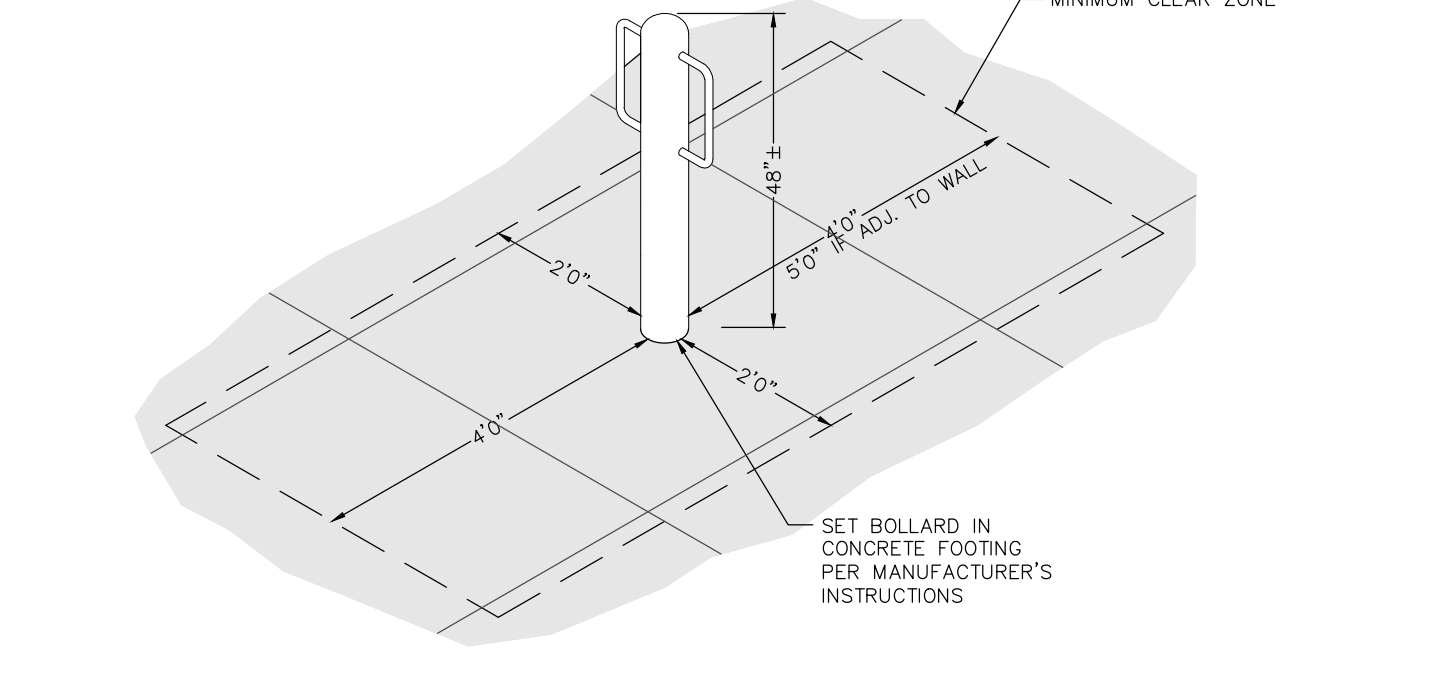
NOTE
1. DIMENSIONS ARE NOMINAL AND WILL VARY WITH ACTUAL PRODUCT SELECTED.
2. FENCE SHALL BE PRESSURE TREATED WOOD STAINED WITH MAX 25% OPEN.



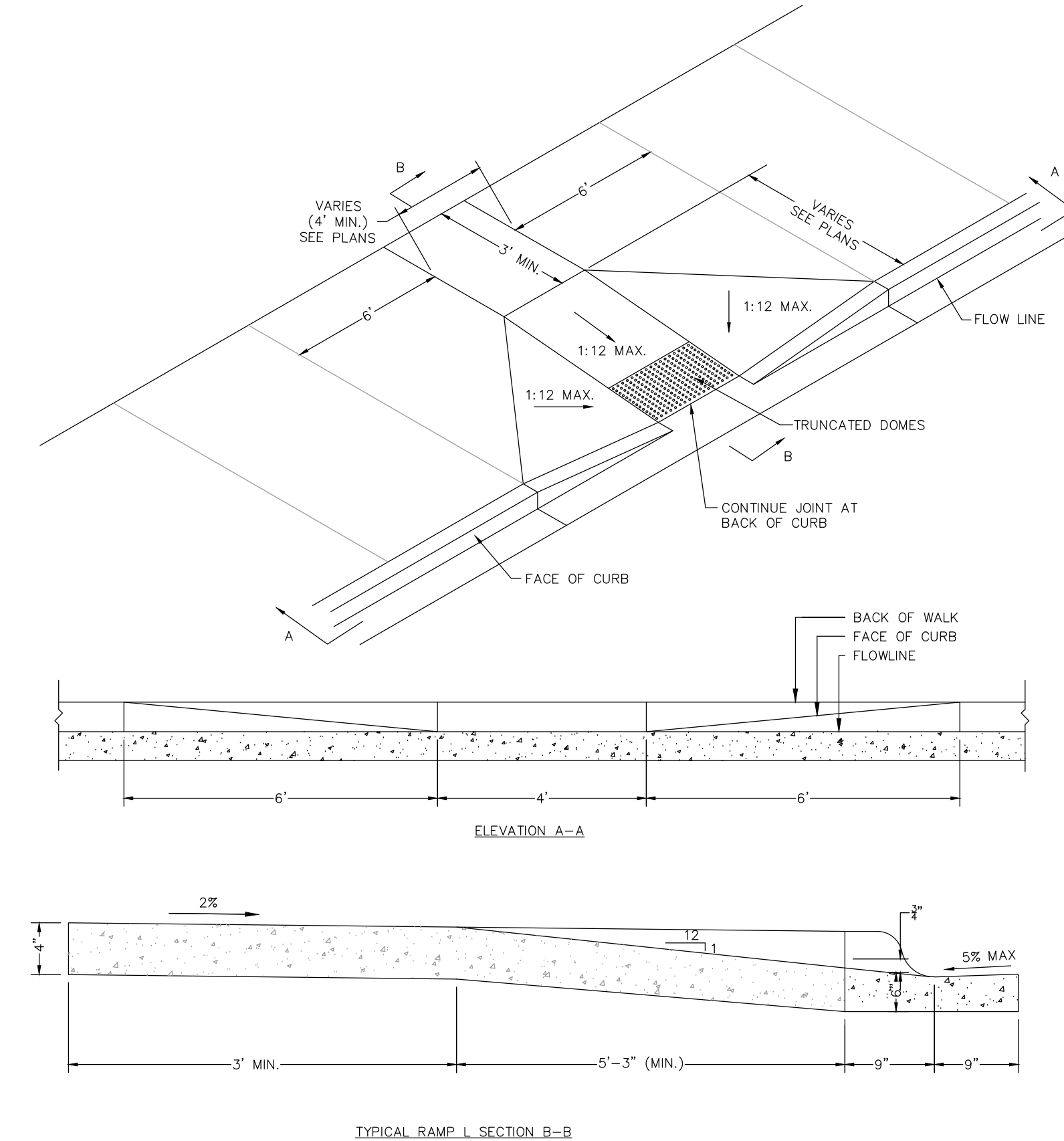
4 DUMPSTER PAD
NTS



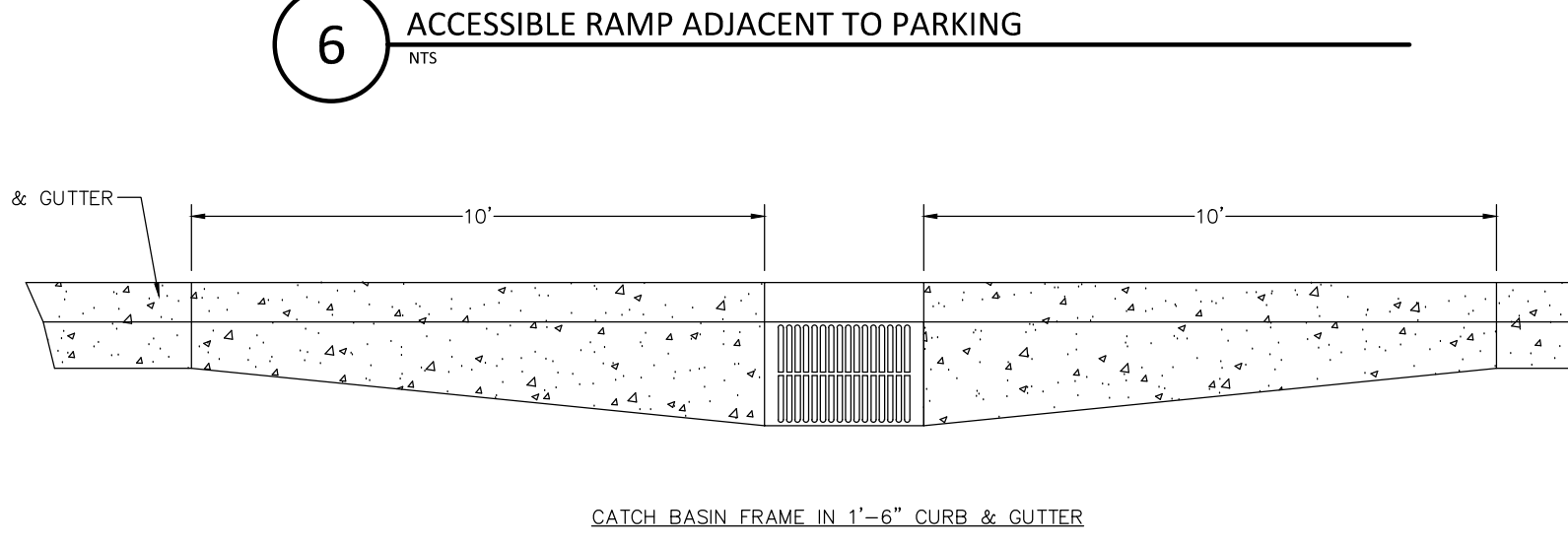
5 BIKE BOLLARDS
NTS



6 ACCESSIBLE RAMP ADJACENT TO PARKING
NTS



7 1'-6" CURB AND GUTTER AT CATCH BASIN
NTS



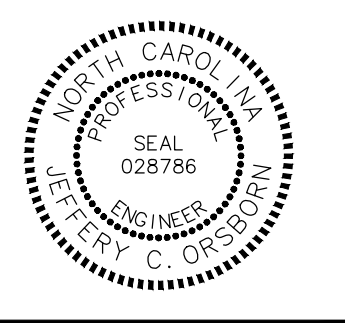
8 SPECIALIZED PARKING SYMBOL DETAIL
NTS

NOTES:
1. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER.
2. BOLLARD SHALL BE 4" SCH. 40 STEEL PIPE W/ 3/4" STEEL ROUND ATTACHMENT BARS.
3. POWDER COATING: BLACK.

PROJECT INFORMATION:

MADISON WAXHAW
 OWNER, LLC
 6805 MORRISON BLVD
 CHARLOTTE NC 28211

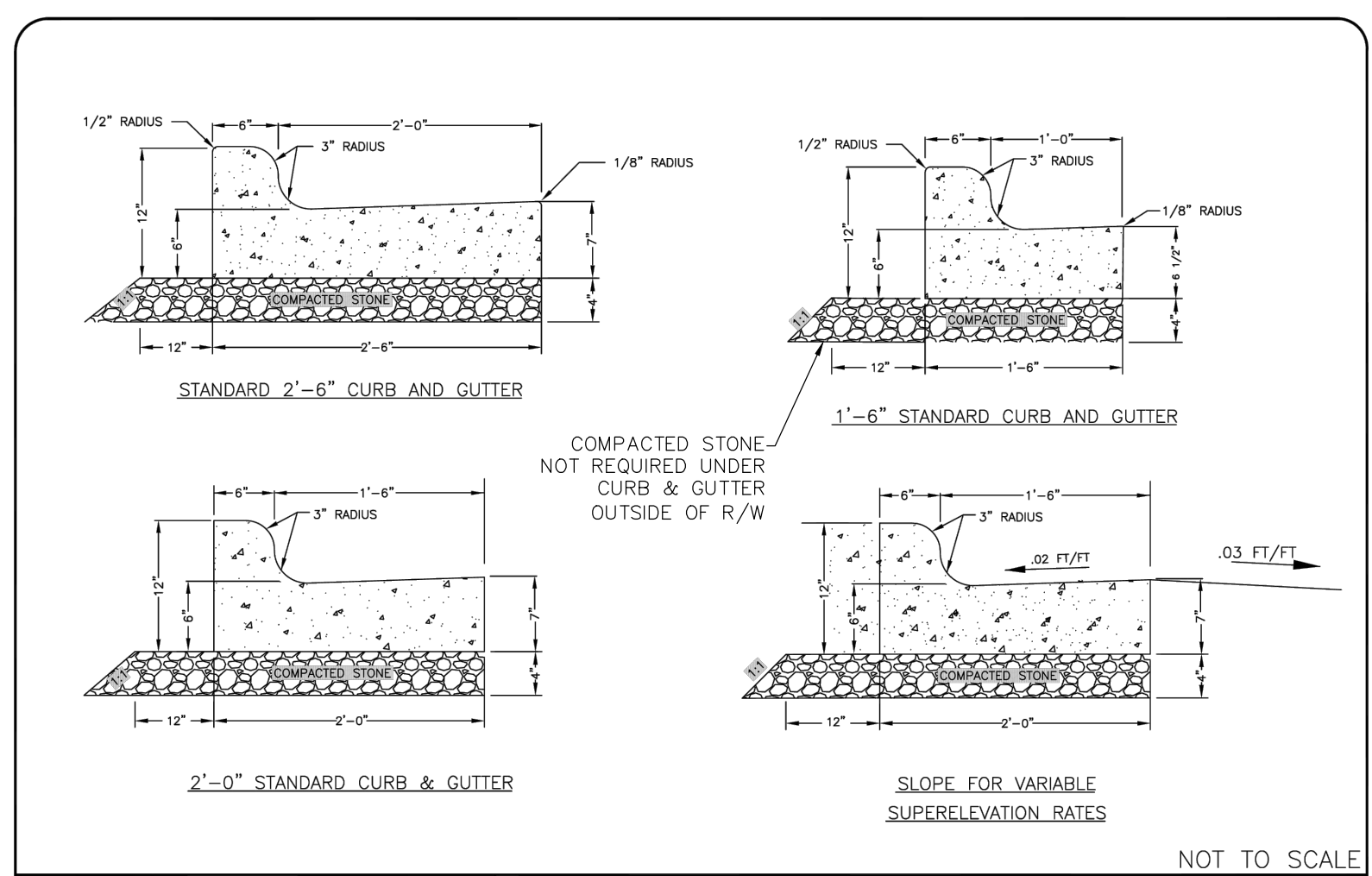
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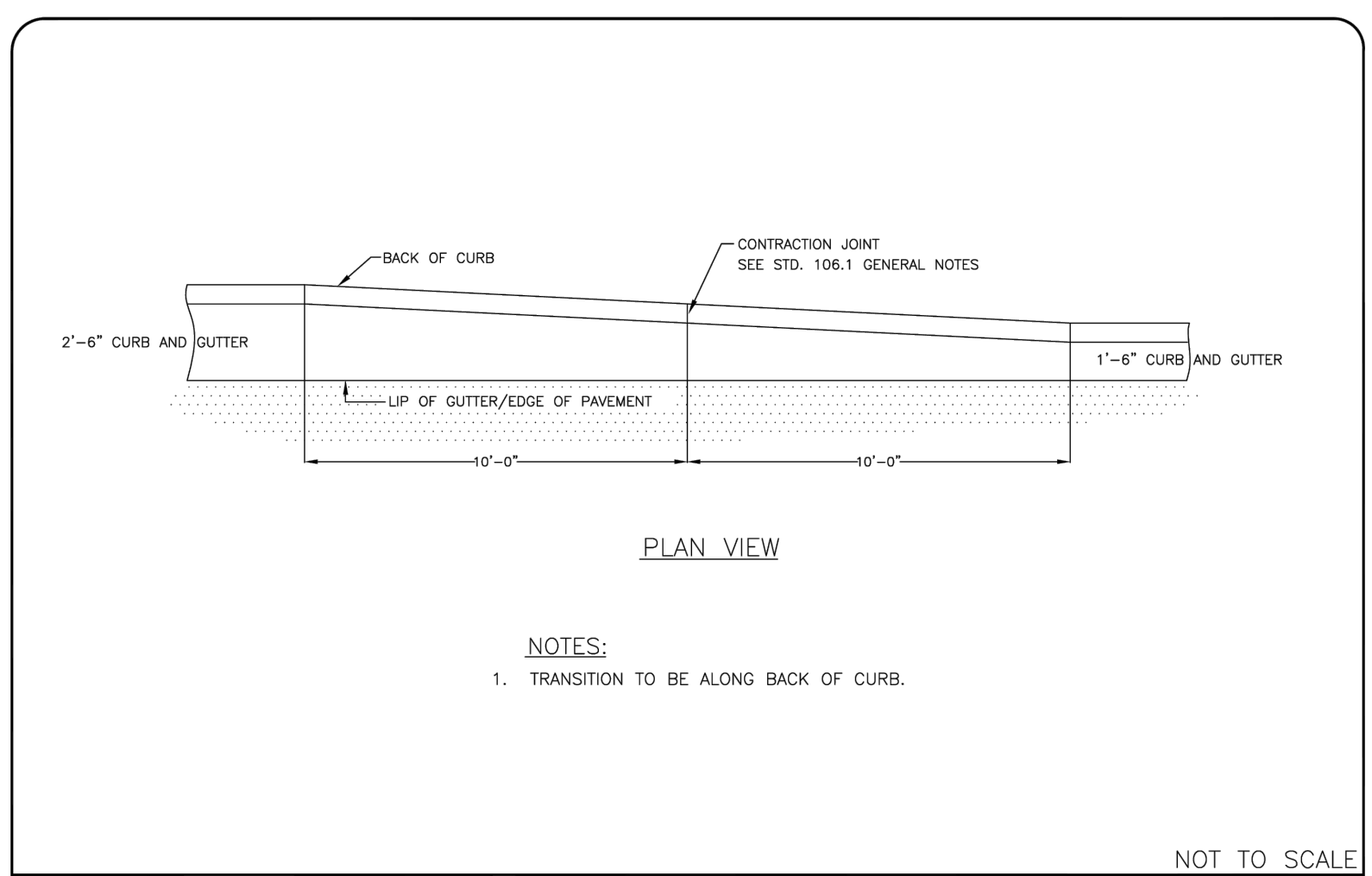
NO.	REVISIONS	DATE

JOB #	23052
DATE	04/01/24
SCALE	NTS
DRAWN BY	DJS
APPROVED BY	JCO

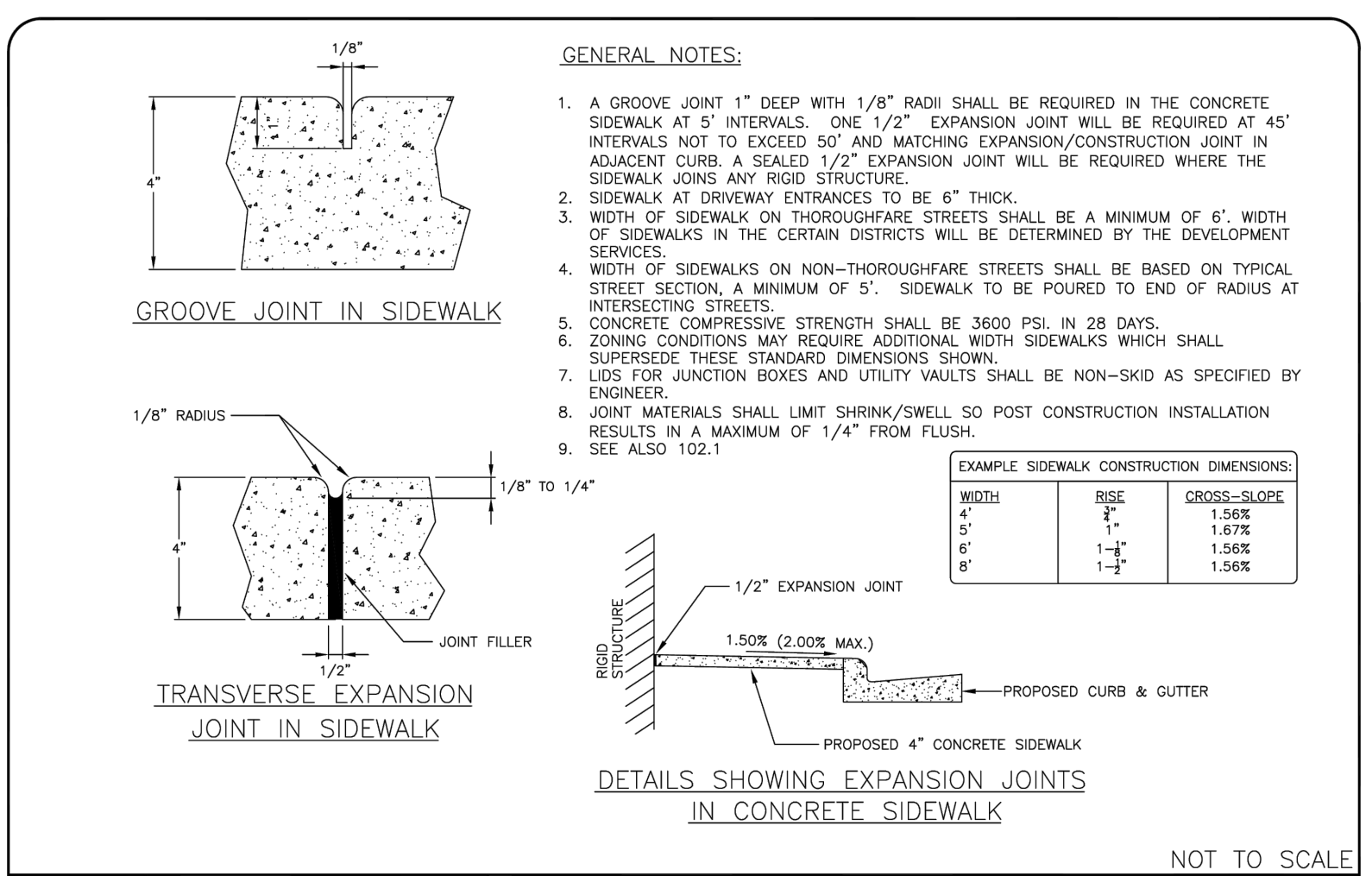
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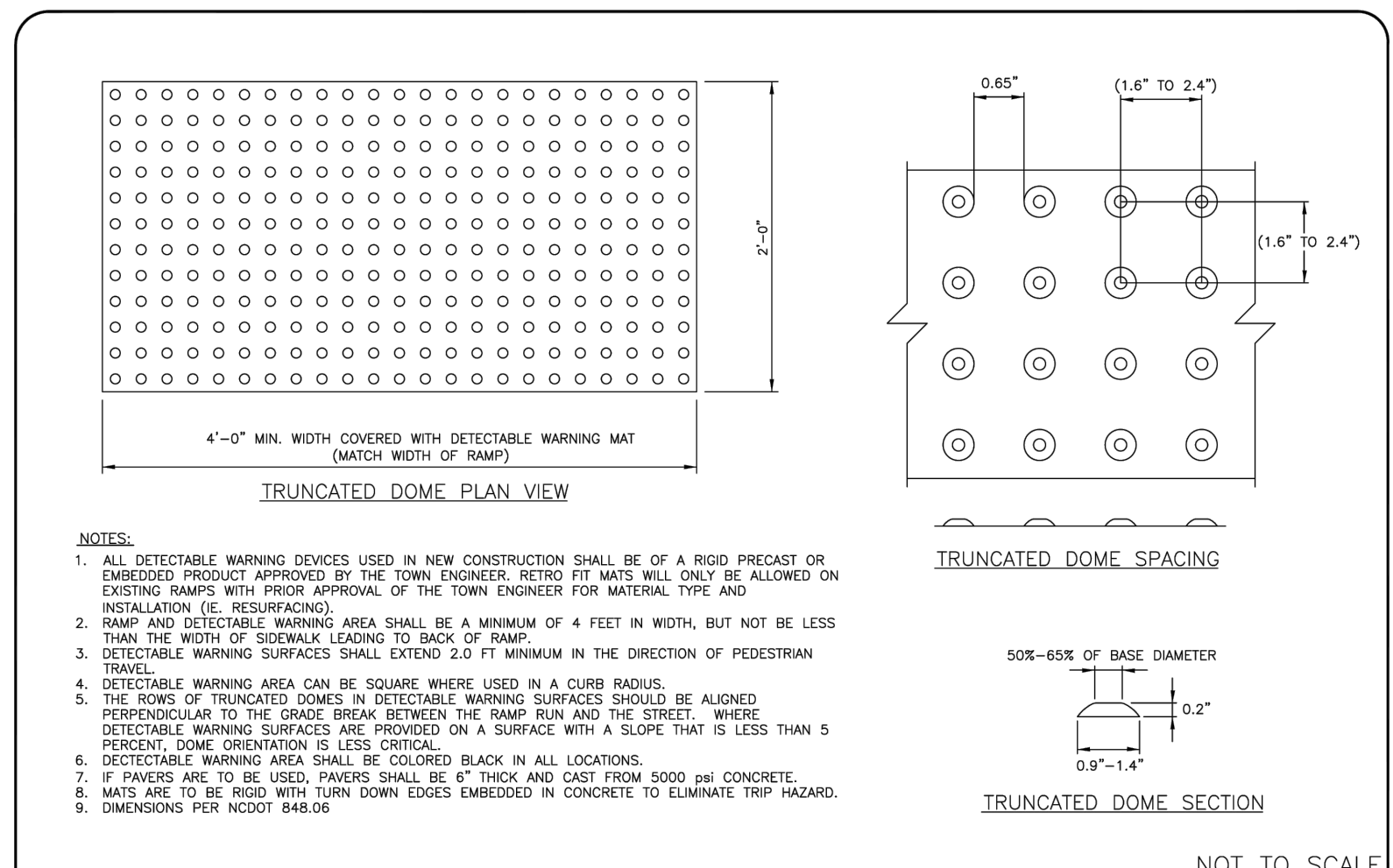
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 STANDARD CURB AND GUTTER
 STD. NO. | REV. | 100.1 | 1/22



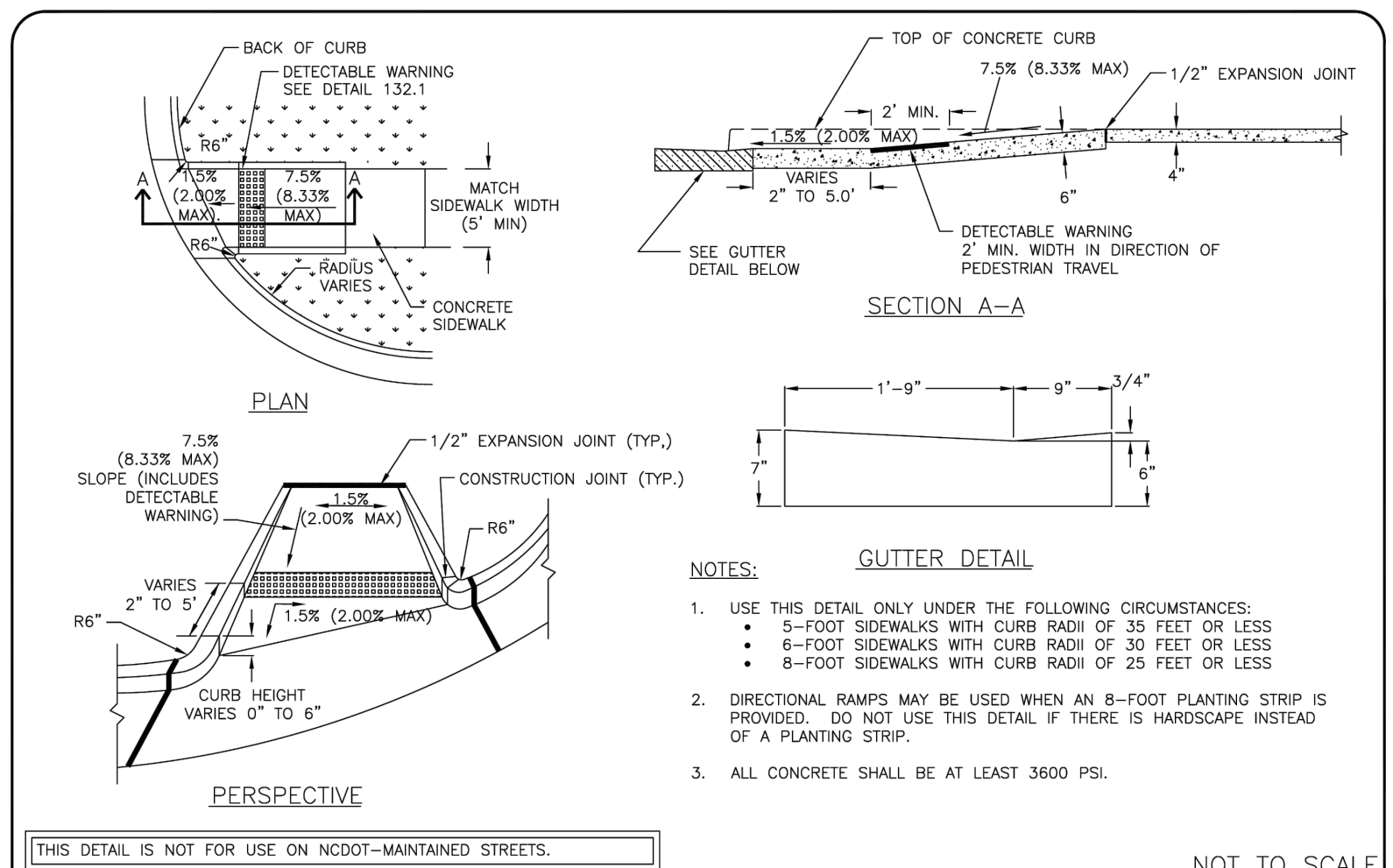
TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 CURB TRANSITION 2'-6\"/>



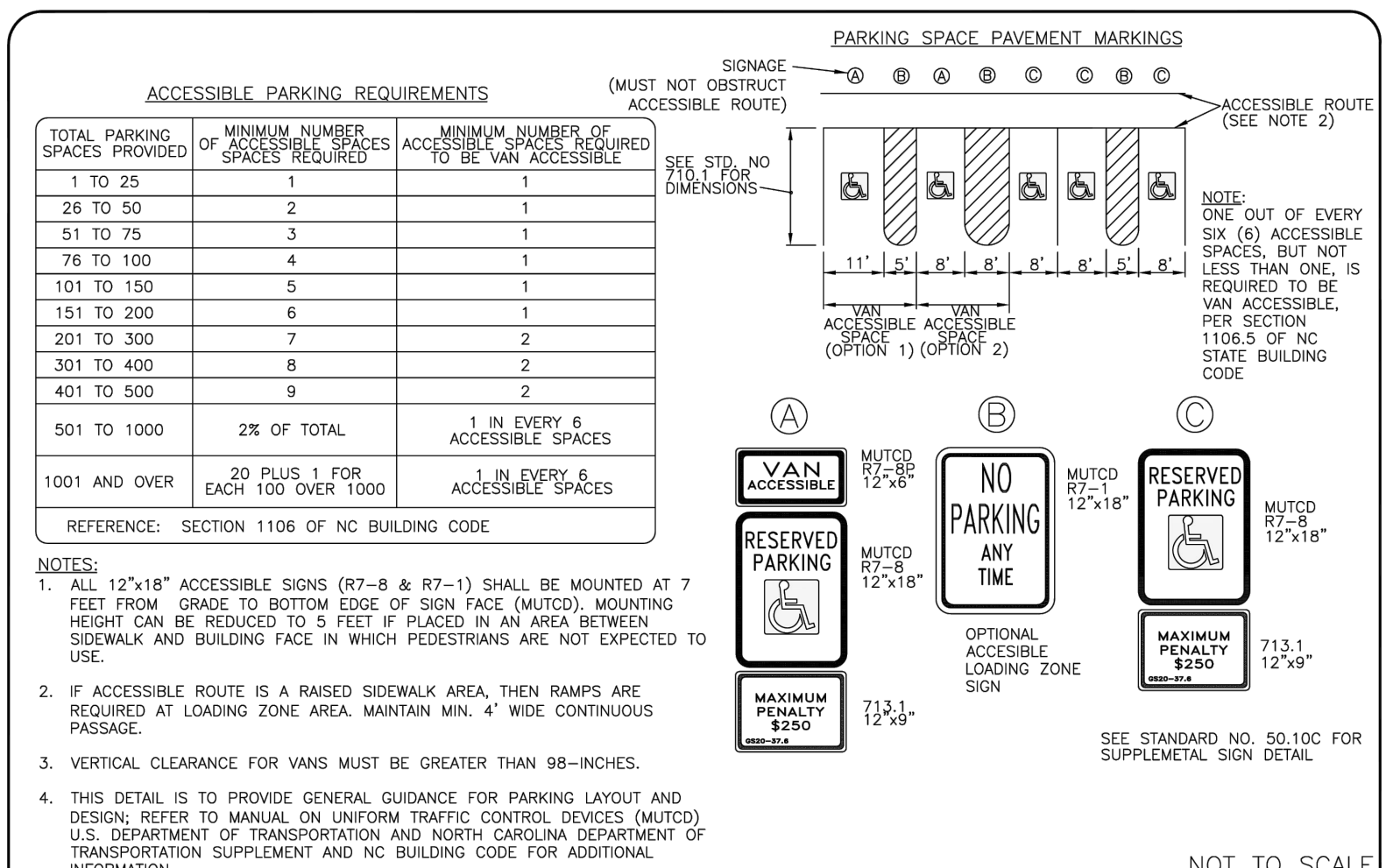
TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 CONCRETE SIDEWALKS
 STD. NO. | REV. | 106.1 | B/19



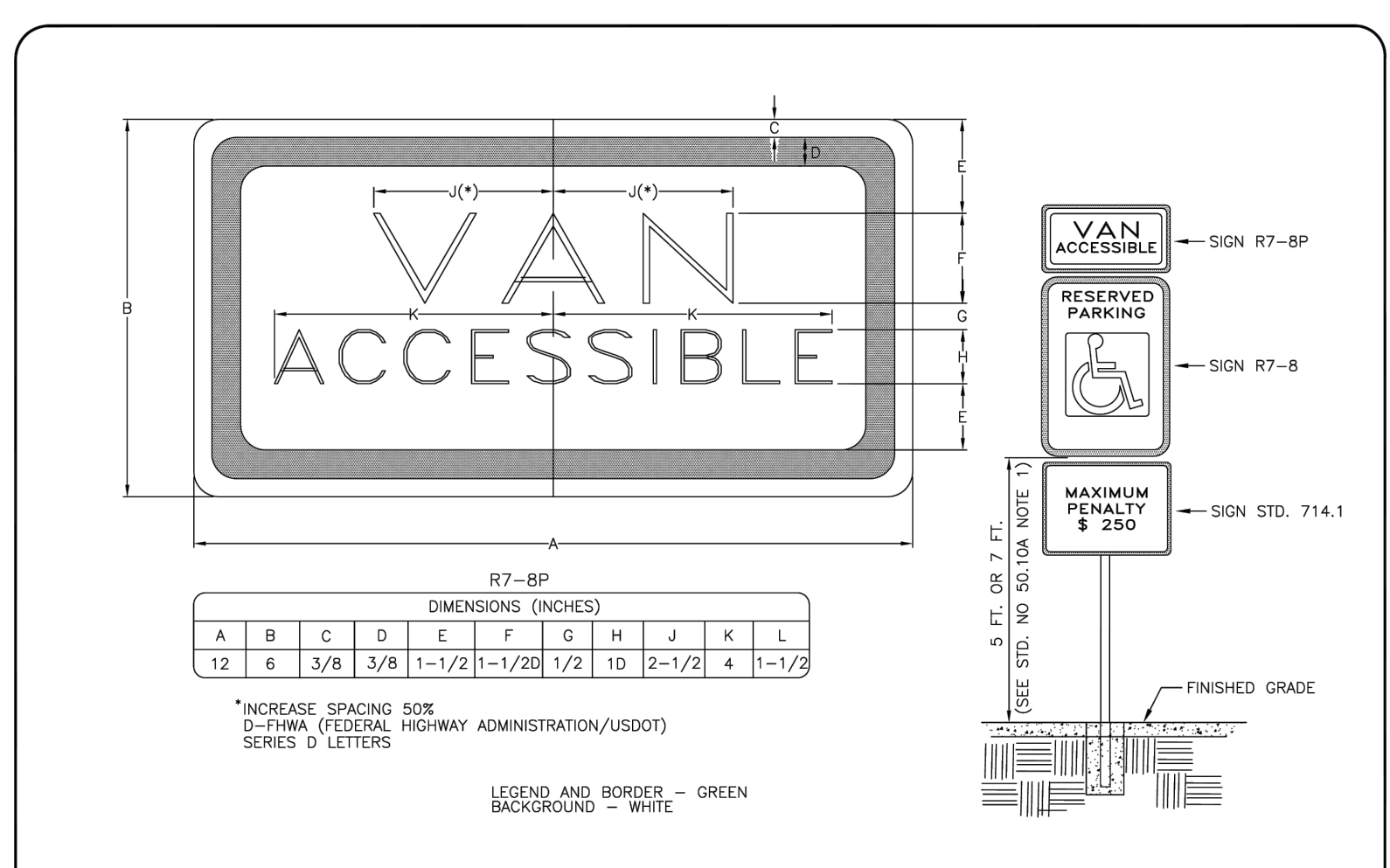
TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 TRUNCATED DOMES PLAN AND CROSS-SECTION
 STD. NO. | REV. | 132.1 | 8/19



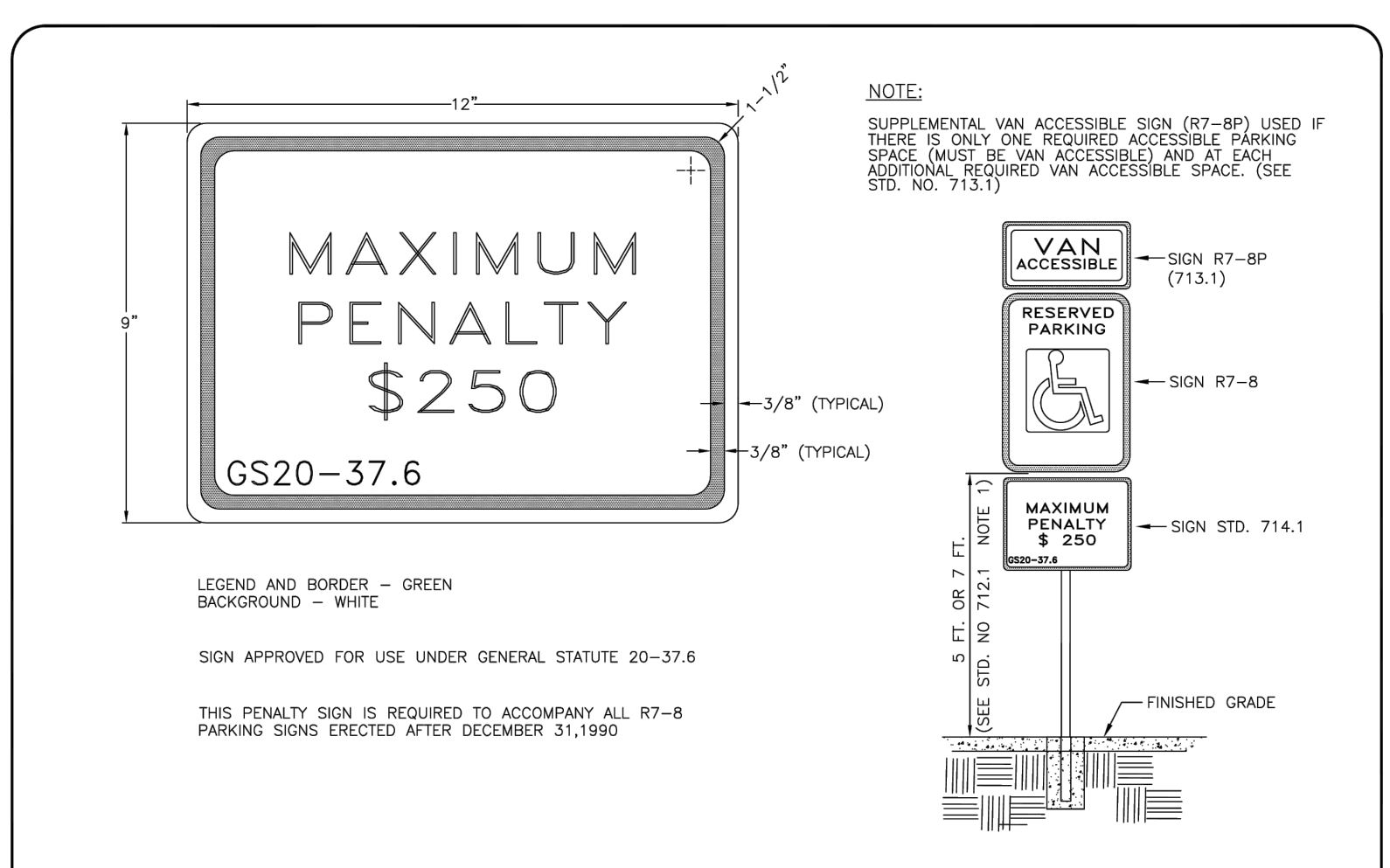
TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 DIRECTIONAL ACCESSIBLE RAMP WITH SMALL/MEDIUM CURB RADII
 STD. NO. | REV. | 136.1



TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 ACCESSIBLE PARKING AND SIGNAGE STANDARDS
 STD. NO. | REV. | 712.1

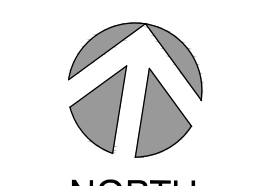
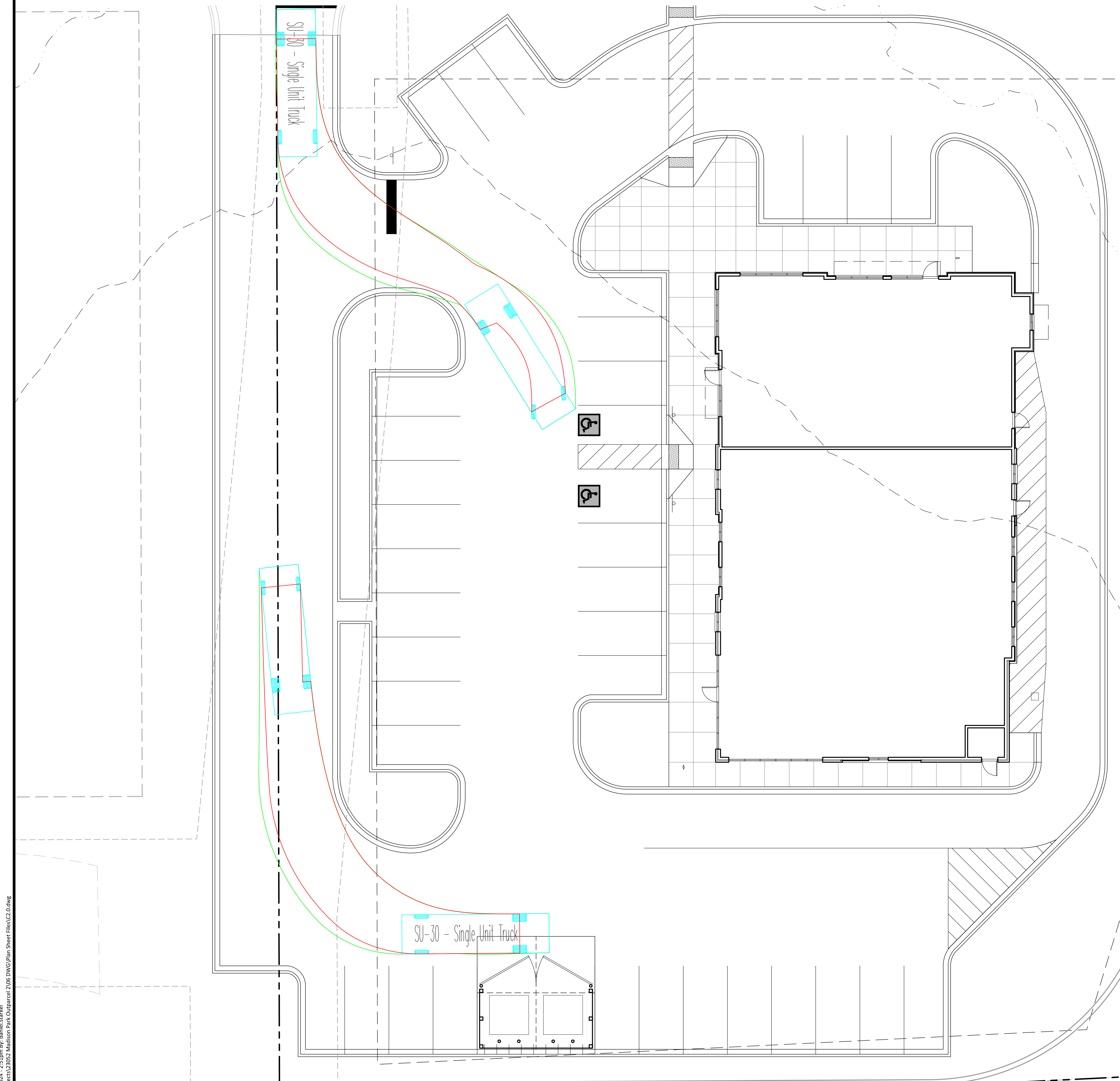


TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 SUPPLEMENTAL VAN ACCESSIBLE SIGN (R7-8P)
 STD. NO. | REV. | 713.1

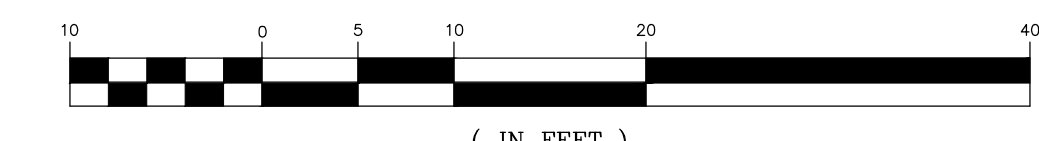


TOWN OF WAXHAW ENGINEERING DESIGN STANDARDS
 SUPPLEMENTAL ACCESSIBLE PENALTY SIGN
 STD. NO. | REV. | 714.1

March 29, 2024, 2:45pm Br-detailed.mxd
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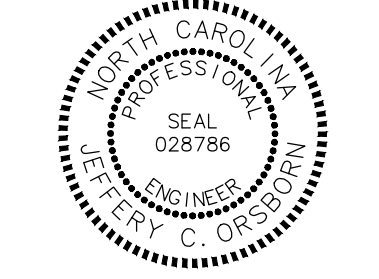
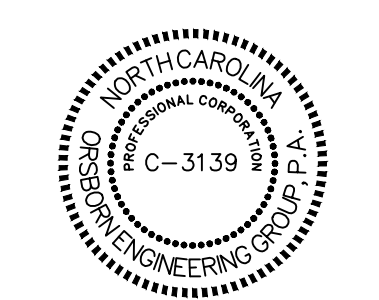


NORTH
GRAPHIC SCALE



PROJECT INFORMATION:
TURNING MANEUVERS
FOR
**MADISON PARK
OUTPARCEL 2**
WAXHAW, NORTH CAROLINA

OWNER INFORMATION:
**MADISON WAXHAW
OWNER, LLC**
6805 MORRISON BLVD
CHARLOTTE NC 28211

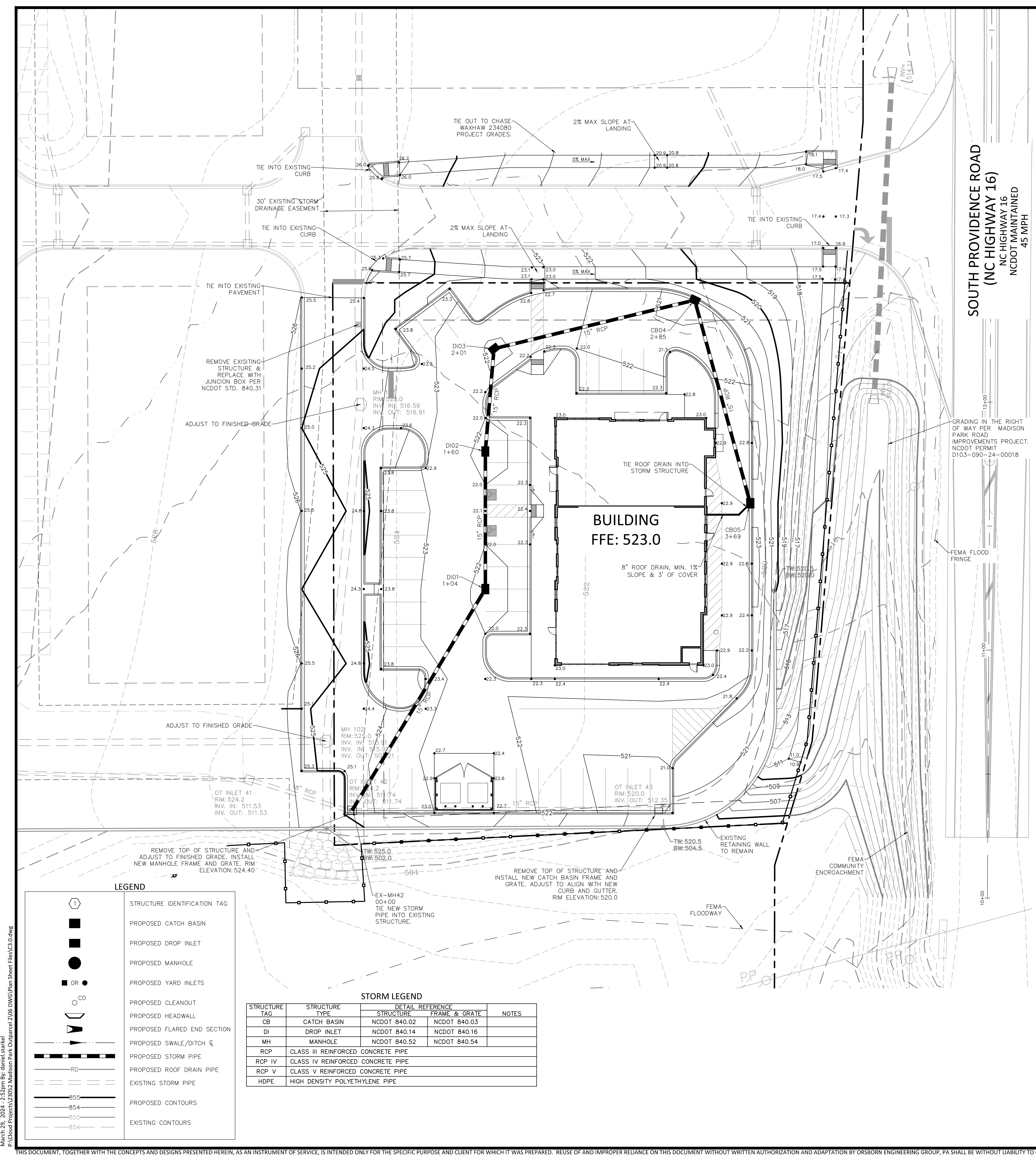


REVISIONS		
NO.	DATE	DESCRIPTION

JOB # 23052
DATE: 04/01/24
SCALE: 1" = 10'
DRAWN BY: DJL
APPROVED BY: JCO

C2.4

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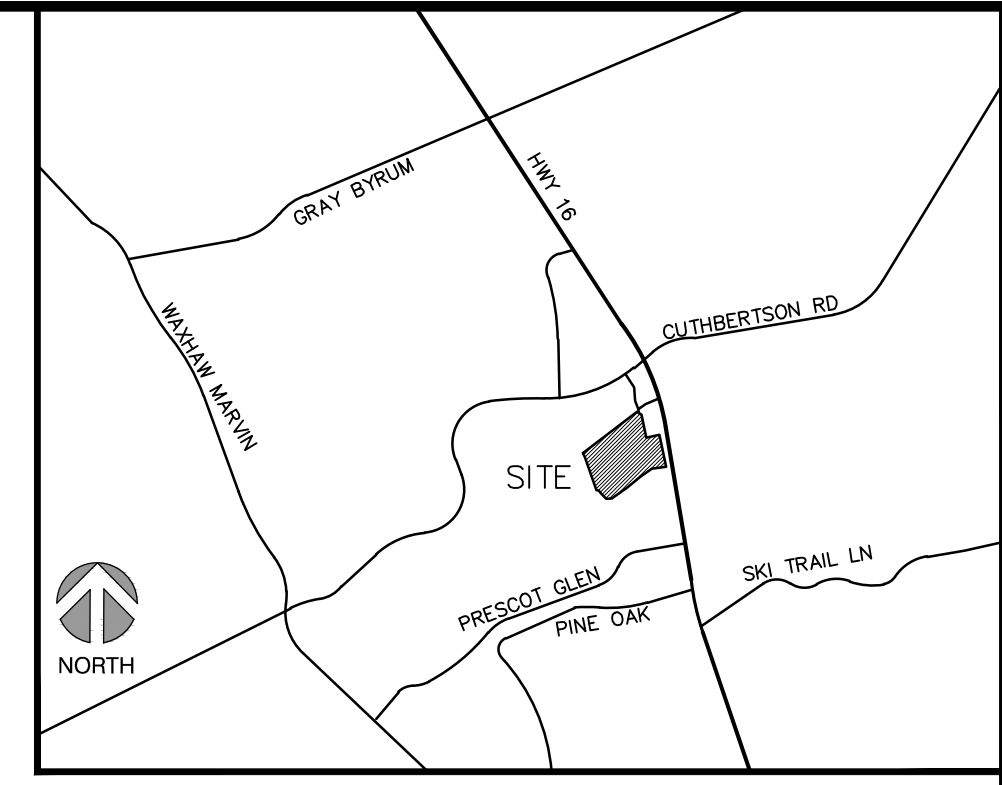


PRECAST STRUCTURE NOTES

1. ALL STORM DRAINAGE STRUCTURES SHALL BE PRECAST CONCRETE CONFORMING TO NCDOT STANDARDS AND SPECIFICATIONS. PROVIDE BUTYL MASTIC JOINTS (ASTM C990).
2. STRUCTURAL DESIGN OF ALL PRECAST STRUCTURES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR STANDARD PRECAST CONCRETE STRUCTURES SHOWING COMPLIANCE WITH NCDOT STANDARD DETAILS. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR EACH NON-STANDARD STRUCTURE (I.E. STRUCTURES WITH DIMENSIONS THAT DO NOT CONFORM TO THE NCDOT STANDARD DETAILS).
3. SHOP FABRICATION DRAWINGS FOR EACH STANDARD STRUCTURE ARE NOT REVIEWED BY OEG. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ALL DIMENSIONS AND INVERTS WITH THE MOST CURRENT SET OF DESIGN PLANS.
4. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR POND OUTLET CONTROL STRUCTURES.
5. CATCH BASINS DEEPER THAN 16" SHALL CONFORM TO GENERAL STANDARDS AND DIMENSIONS OF NCDOT STD DWG 840.02. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR EACH NON-STANDARD STRUCTURE.
6. CATCH BASINS FOR PIPE LARGER THAN 54" SHALL CONFORM TO GENERAL STANDARDS AND CONFIGURATION OF NCDOT STD DWG 840.02 WITH INCREASED BASE SECTION TO ACCOMMODATE LARGER PIPE. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR EACH NON-STANDARD STRUCTURE.
7. DROP INLETS FOR PIPE LARGER 30" SHALL UTILIZE NCDOT STD DWG 840.02. REFER TO NOTES 5 AND 6 WHERE APPLICABLE.
8. MANHOLES DEEPER THAN 30" SHALL CONFORM TO GENERAL STANDARDS AND DIMENSIONS OF NCDOT STD DWG 840.52. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR EACH NON-STANDARD STRUCTURE.
9. MANHOLES FOR PIPE LARGER THAN 48" SHALL CONFORM TO GENERAL STANDARDS AND CONFIGURATION OF NCDOT STD DWG 840.52 WITH INCREASED DIAMETER BASE SECTION TO ACCOMMODATE LARGER PIPE. CONTRACTOR SHALL SUBMIT ENGINEER SEALED SHOP DRAWINGS FOR EACH NON-STANDARD STRUCTURE.
10. DROP INLETS IN TRAFFIC AREAS SHALL UTILIZE TRAFFIC BEARING GRATES IN LIEU OF NCDOT 840.16. PROVIDE EAST JORDAN IRONWORKS V-5660 OR SIMILAR.
11. CONTRACTOR SHALL USE TRAFFIC BEARING PRECAST DRAINAGE STRUCTURES COMPLYING WITH NCDOT 840.46 FOR ALL STRUCTURES LOCATED WITHIN PAVED AREAS. CONTRACTOR SHALL USE PRECAST DRAINAGE STRUCTURES COMPLYING WITH 840.45 FOR ALL STRUCTURES LOCATED OUTSIDE OF PAVED AREAS.
12. UNDER NO CIRCUMSTANCES SHALL A PRECAST STRUCTURE BE CUT OR ALTERED WITHOUT A PROFESSIONAL ENGINEER'S CERTIFICATION OF ADEQUATE LOAD BEARING STRENGTH FOLLOWING THE ALTERATION OF THE STRUCTURE, EXCEPT WHERE KNOCK-OUT PANELS ARE PROVIDED.
13. DRAINAGE STRUCTURES GREATER THAN 3'-6" DEEP SHALL BE REQUIRED TO HAVE STEPS PLACED AT 1'-2" ON CENTER. REFER TO NCDOT 840.66.

GRADING & DRAINAGE NOTES

1. ALL ELEVATIONS ARE IN REFERENCE TO THE BENCHMARK INDICATED ON THE SITE SURVEY. CONTRACTOR SHALL VERIFY BENCHMARK PRIOR TO BEGINNING CONSTRUCTION.
2. CONTRACTOR SHALL REPORT ANY GRADE DISCREPANCIES TO THE ENGINEER AND OWNER IMMEDIATELY.
3. CONTOURS AND ELEVATIONS SHOWN ON THESE DRAWINGS REPRESENT FINISHED GRADE. CONTRACTOR SHALL ALLOW FOR PAVEMENT THICKNESS, TOPSOIL THICKNESS, SOD THICKNESS, FLOOR SLABS, ETC. WHEN GRADING TO SUBGRADE.
4. DURING CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE PROPER SOIL AND EROSION CONTROL MEASURES FOR THE PROTECTION OF ALL ADJACENT LANDS AND ROADS. CONTRACTOR SHALL PROVIDE EROSION AND SEDIMENT CONTROL DURING THE CONSTRUCTION PHASE PER NCDOT REQUIREMENTS AND THESE PLANS.
5. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ANY AND ALL SOILS REPORTS PREPARED FOR THE SITE. SOIL BORINGS AND SOIL ENGINEERING SERVICES HAVE BEEN PROVIDED BY GEOSCIENCE. ORSBORN ENGINEERING GROUP ASSUMES NO LIABILITY FOR THE CORRECTNESS, ACCURACY, AND COMPLETENESS OF THEIR WORK. CONTRACTOR SHALL PERFORM ALL EARTHWORK OPERATIONS INCLUDING SUBSURFACE REMEDIATION, SUBGRADE PREPARATION, GRADING, FILL PLACEMENT, COMPACTION, ETC. PER RECOMMENDATIONS OF THE SOILS REPORT. IF A CONFLICT EXISTS BETWEEN THE SOILS REPORT AND THESE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL SUBMIT A REQUEST FOR CLARIFICATION TO THE ENGINEER AND OWNER FOR REVIEW.
6. THE OWNER WILL ENGAGE A QUALIFIED GEOTECHNICAL ENGINEER TO PERFORM SOIL TESTING AND INSPECTIONS DURING CONSTRUCTION. THE TESTING FIRM WILL BE RESPONSIBLE FOR SUBGRADE INSPECTION, SOIL MATERIAL CLASSIFICATION, IN-PLACE DENSITY TESTING, BACKFILL OBSERVATION, ETC. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING WITH THE TESTING FIRM.
7. SUBGRADES SHALL BE TESTED PRIOR TO PLACING BACKFILL. SOFT SPOTS OR AREAS WITH EXCESSIVE PUMPING OR RUTTING SHALL BE UNDERCUT OR OTHERWISE ADDRESSED AS DIRECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL.
8. ALL MATERIAL USED FOR BACKFILL SHALL MEET THE REQUIREMENTS OF THE SPECIFICATIONS. REQUIRED IMPORTED FILL MATERIAL MUST BE OBTAINED FROM OFF-SITE, TESTED & APPROVED FOR IMPORT BY THE GEOTECHNICAL ENGINEER.
9. UNLESS OTHERWISE SPECIFIED IN THESE PLANS OR SPECIFICATIONS OR SUGGESTED IN THE SOILS REPORT, CONTRACTOR SHALL PERFORM ALL EARTHWORK OPERATIONS IN ACCORDANCE WITH NCDOT STANDARD SPECIFICATIONS, DIVISION 2. ALL EARTHWORK OPERATIONS UNDER BUILDING PADS SHALL BE PERFORMED IN ACCORDANCE WITH THE NORTH CAROLINA BUILDING CODE, SECTION 1804.
10. PLACE FILL MATERIALS ON SUBGRADES FREE OF MUD, FROST, SNOW, OR ICE IN LAYERS NOT MORE THAN 8" THICK FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT AND NOT MORE THAN 4" THICK FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. PLACE FILL EVENLY IN UNIFORM LIFTS.
11. UNLESS OTHERWISE SPECIFIED IN THESE PLANS OR SPECIFICATIONS OR SUGGESTED IN THE SOILS REPORT, FILL IN LAWN, LANDSCAPE, AND GRAVEL AREAS SHALL BE COMPACTED TO AT LEAST 98% STD. PROCTOR. FILL IN PAVEMENT AND BUILDING AREAS SHALL BE COMPACTED TO AT LEAST 98% STD. PROCTOR.
12. UNLESS OTHERWISE SPECIFIED IN THESE PLANS OR SPECIFICATIONS OR SUGGESTED IN THE SOILS REPORT, FILL IN THE UPPER 24" IN PAVEMENT AND BUILDING AREAS SHALL BE COMPACTED TO 100% STD. PROCTOR. CONTRACTOR SHALL ENSURE THIS EXTRA COMPACTIVE EFFORT DOES NOT DAMAGE SUBSURFACE PIPE AND STRUCTURES.
13. FILL IN THE UPPER 24" IN LAWN AND LANDSCAPE AREAS, NOT INCLUDING SLOPES, SHALL BE COMPACTED TO 85% - 92% STD. PROCTOR.
14. PIPE BACKFILL SHALL BE COMPACTED TO 98% STD. PROCTOR AND SHALL MEET MANUFACTURER RECOMMENDED MAXIMUM FILL HEIGHT REQUIREMENTS.
15. SOIL MATERIAL SHALL BE WITHIN 3 PERCENT OF OPTIMUM MOISTURE CONTENT AT TIME OF COMPACTION UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
16. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 2.5 HORIZONTAL TO 1 VERTICAL, UNLESS OTHERWISE SPECIFIED OR APPROVED BY GEOTECHNICAL ENGINEER.
17. BENCH SLOPED AREAS STEEPER THAN 4 HORIZONTAL TO 1 VERTICAL SO FILL MATERIAL WILL BOND WITH EXISTING MATERIAL.



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PROJECT INFORMATION:
 GRADING & DRAINAGE PLAN
 FOR
MADISON PARK OUTPARCEL 2
 WAXHAW, NORTH CAROLINA

OWNER INFORMATION:
MADISON WAXHAW OWNER, LLC
 6805 MORRISON BLVD
 CHARLOTTE NC 28211

Professional Engineer Seal:
 NORTH CAROLINA
 PROFESSIONAL ENGINEERING
 License No. C-3139
 SEAL 028786
 ENGINEER
 C. ORSBORN

NO.	REVISIONS	DATE

LEGEND

- STRUCTURE IDENTIFICATION TAG
- PROPOSED CATCH BASIN
- PROPOSED DROP INLET
- PROPOSED MANHOLE
- PROPOSED YARD INLETS
- PROPOSED CLEANOUT
- PROPOSED HEADWALL
- PROPOSED FLARED END SECTION
- PROPOSED SWALE/DITCH
- PROPOSED STORM PIPE
- PROPOSED ROOF DRAIN PIPE
- EXISTING STORM PIPE
- PROPOSED CONTOURS
- EXISTING CONTOURS

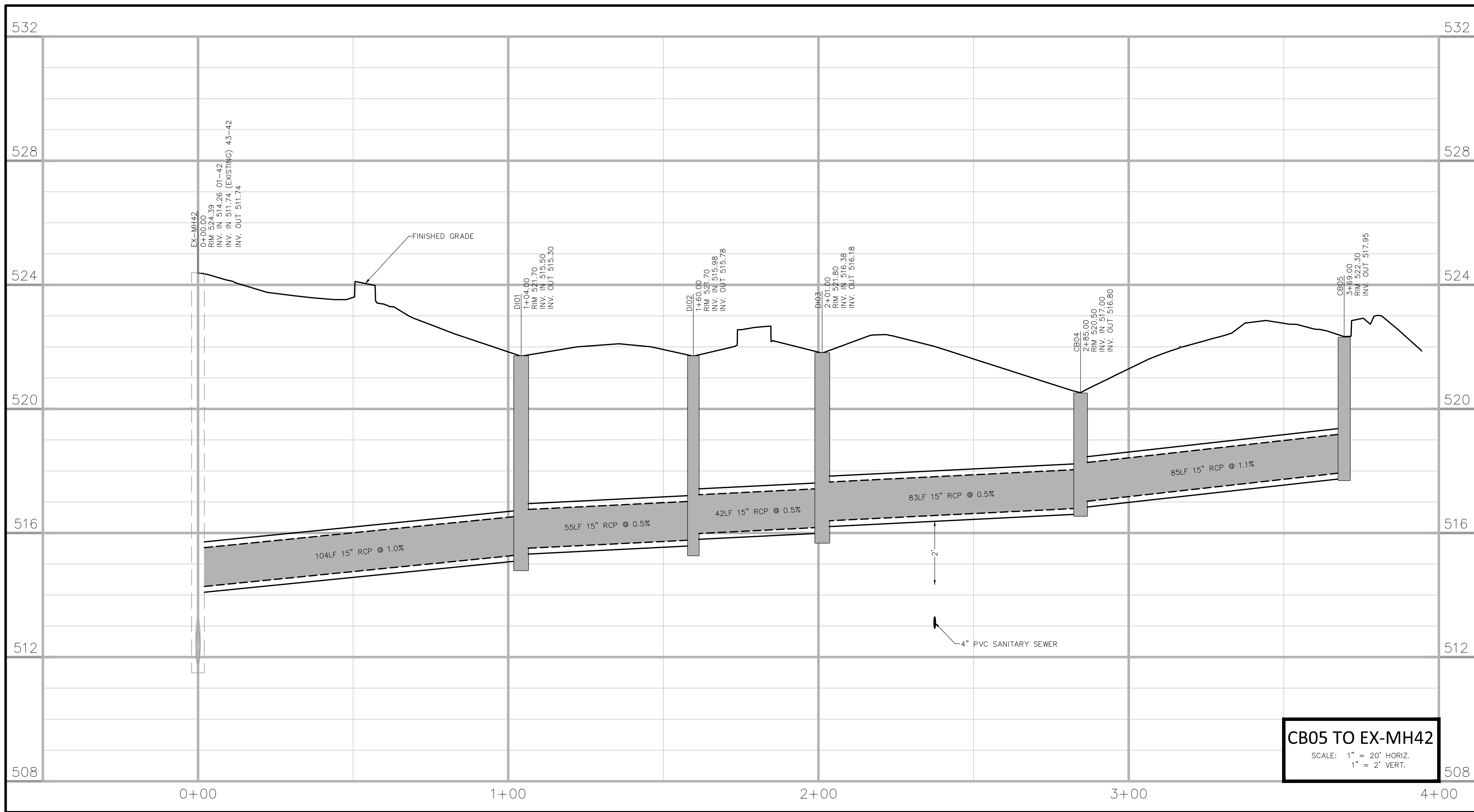
STORM LEGEND

STRUCTURE TAG	STRUCTURE TYPE	STRUCTURE	DETAIL REFERENCE	FRAME & GRATE	NOTES
CB	CATCH BASIN	NCDOT 840.02	NCDOT 840.03		
DI	DROP INLET	NCDOT 840.14	NCDOT 840.16		
MH	MANHOLE	NCDOT 840.52	NCDOT 840.54		
RCP	CLASS III REINFORCED CONCRETE PIPE				
RCP IV	CLASS IV REINFORCED CONCRETE PIPE				
RCP V	CLASS V REINFORCED CONCRETE PIPE				
HDPE	HIGH DENSITY POLYETHYLENE PIPE				

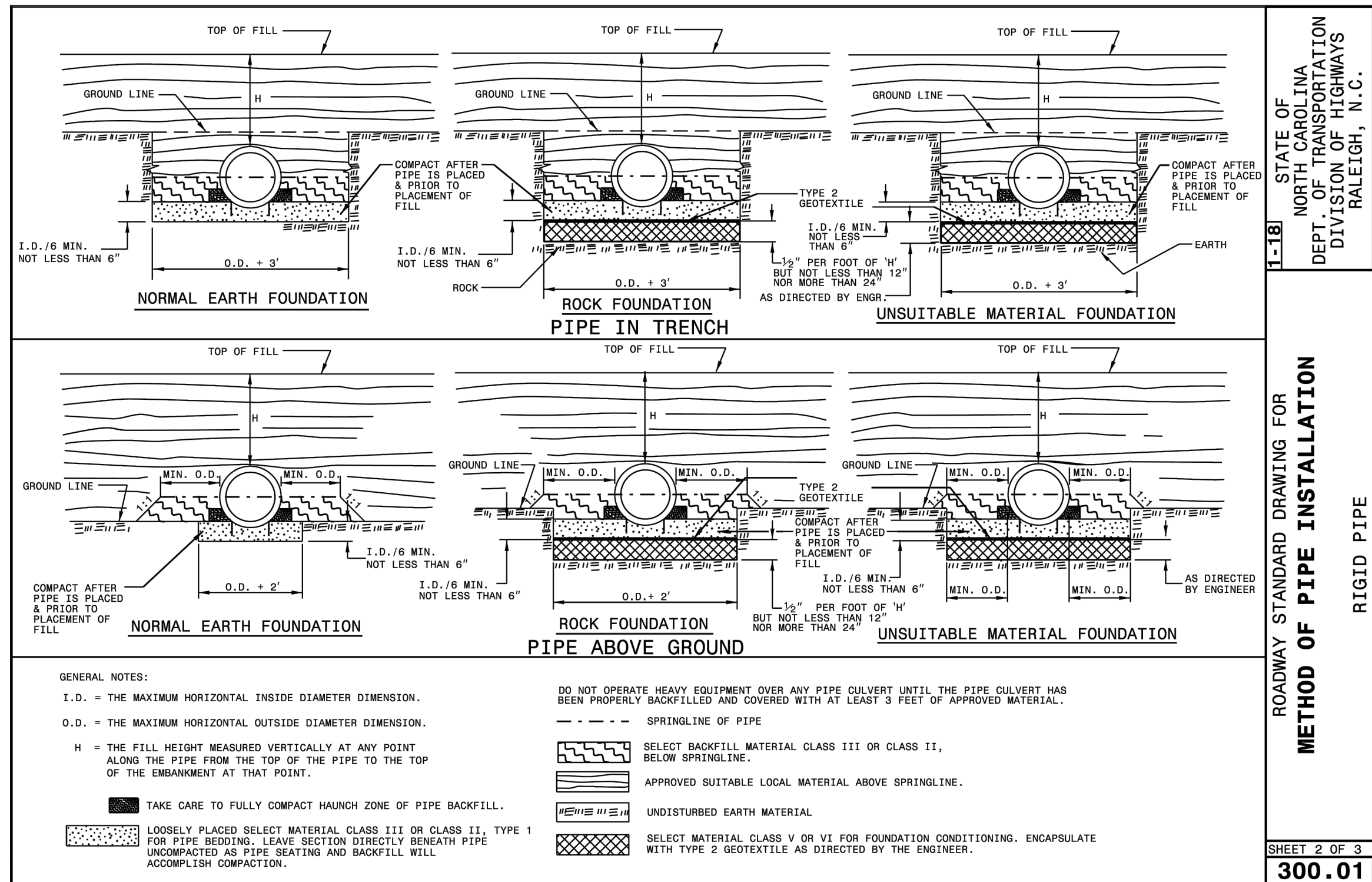
GRAPHIC SCALE
 NORTH
 (IN FEET)
 1 inch = 20 ft.

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JOB # 23052
 DATE 04/01/24
 SCALE: 1" = 20'
 DRAWN BY: DJS
 APPROVED BY: JCO
C3.1



CB05 TO EX-MH42
 SCALE: 1" = 20' HORIZ.
 1" = 2' VERT.



STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

1-181

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
 RIGID PIPE

SHEET 2 OF 3
300.01

1 PIPE BEDDING
 NTS

ORSBORN
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STORM PROFILES
 FOR
 MADISON PARK
 OUTPARCEL 2
 WAXHAW, NORTH CAROLINA

MADISON WAXHAW
 OWNER, LLC
 6805 MORRISON BLVD
 CHARLOTTE NC 28211

STATE OF NORTH CAROLINA
 PROFESSIONAL SEAL
 C-3139

STATE OF NORTH CAROLINA
 PROFESSIONAL SEAL
 028786
 JEFFREY C. ORSBORN

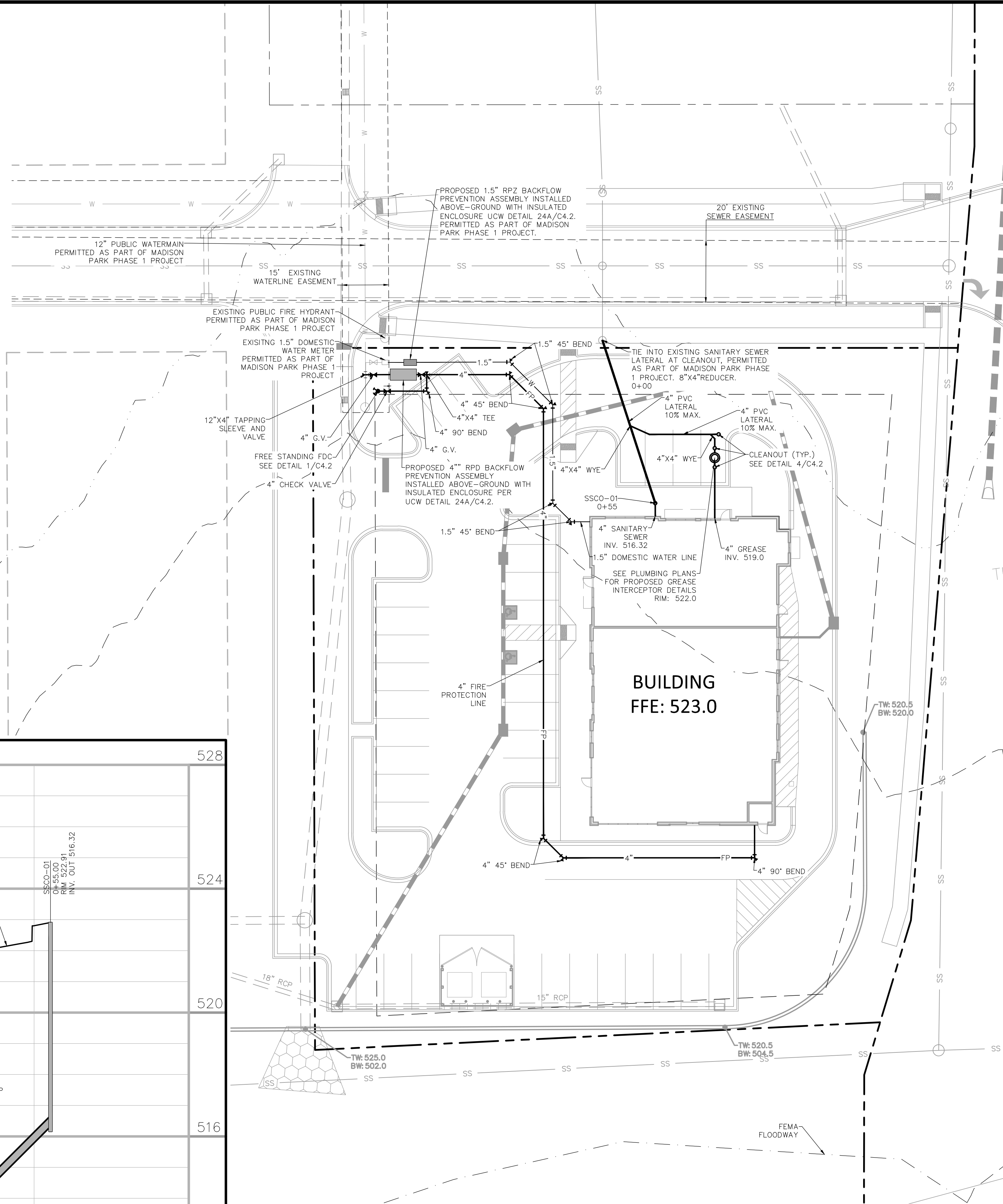
NO.	DATE	REVISIONS

JOB # 23052
 DATE: 04/01/24
 SCALE: 1" = 40'
 DRAWN BY: DJ5
 APPROVED BY: JCO

C3.2

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LEGEND	
	PROPOSED SANITARY SEWER MANHOLE
	PROPOSED FIRE HYDRANT
	PROPOSED WATER TEE
	PROPOSED THRUST BLOCK
	PROPOSED REDUCER
	PROPOSED WATER VALVE
	PROPOSED CHECK VALVE
	PROPOSED CLEANOUT
	PROPOSED STORM PIPE
	PROPOSED SANITARY SEWER PIPE
	PROPOSED WATER LINE
	EXISTING WATER LINE
	EXISTING SANITARY SEWER PIPE
	EXISTING UNDERGROUND POWER
	EXISTING OVERHEAD POWER
	EXISTING COMMUNICATION LINE
	EXISTING NATURAL GAS LINE
	EXISTING OVERHEAD TELEPHONE
	EXISTING UNDERGROUND TELEPHONE



UTILITY NOTES

- ALL MATERIALS AND CONSTRUCTION REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE LATEST CODES, REGULATIONS AND/OR STANDARDS AND REQUIREMENTS OF THE UNION COUNTY WATER DEPARTMENT, AND NFPA 24.
- CONTRACTOR SHALL VERIFY AND MARK LOCATION OF ALL UNDERGROUND UTILITIES IN THE PROJECT AREA BEFORE COMMENCING WORK IN THAT AREA. CALL NORTH CAROLINA ONE CALL AT LEAST 48 HOURS PRIOR TO THE START OF WORK TO HAVE EXISTING UTILITIES LOCATED. ANY DAMAGES TO ANY UTILITIES SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
- THE LOCATIONS OF EXISTING UTILITIES SUCH AS WATER MAINS, SEWER, GAS LINES, ETC. AS SHOWN ON THESE PLANS HAVE BEEN DETERMINED FROM THE BEST AVAILABLE INFORMATION, AND ARE PROVIDED FOR THE CONVENIENCE OF THE CONTRACTOR. HOWEVER, THE ENGINEER AND OWNER DO NOT ASSUME RESPONSIBILITY FOR THE SIZES AND LOCATIONS SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION OF THE SIZE, LOCATION, AND DEPTHS OF ALL EXISTING UTILITIES SHOWN AND NOT SHOWN ON THESE PLANS PRIOR TO COMMENCEMENT OF WORK. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES 48 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION TO HAVE THEIR FACILITIES LOCATED IN THE FIELD.
- UNLESS OTHERWISE SPECIFIED, ALL UTILITIES SHOWN ON THESE CIVIL PLANS TERMINATE APPROXIMATELY FIVE FEET OUTSIDE THE BUILDING. REFER TO THE PLUMBING, ELECTRICAL, MECHANICAL, AND FIRE PROTECTION PLANS FOR CONTINUATION.
- FIRE SERVICE MAINS SHALL TERMINATE AT A FLANGE, CAP, PLUG, OR VALVE INSIDE THE BUILDING, ONE FOOT ABOVE THE FINISHED FLOOR. SEE DETAIL 3/C4.2.
- STORM SEWER SHOWN FOR REFERENCE ONLY. REFER TO C3.1 FOR MORE INFORMATION.
- REFER TO ELECTRICAL PLANS FOR ALL SITE ELECTRICAL WORK.
- ELECTRIC POWER PROVIDER WILL INSTALL, REGULATE AND MAINTAIN THE PROPOSED POWER DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE ELECTRIC POWER PROVIDER TO ENSURE PROPER CONSTRUCTION PHASING. ENSURE PROPER PLACEMENT OF TRANSFORMERS AND POLES, ELIMINATE CONFLICTS IN THE WORK, AND AVOID UNNECESSARY DELAYS.
- CONTRACTOR WILL INSTALL SITE LIGHTING AND SHALL BE RESPONSIBLE FOR SURVEY STAKING LOCATION OF PROPOSED LIGHT POLES ILLUSTRATED ON THESE PLANS.
- THE TELEPHONE UTILITY PROVIDER WILL INSTALL THE PROPOSED TELEPHONE DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE TELEPHONE UTILITY PROVIDER TO ENSURE PROPER CONSTRUCTION PHASING. ELIMINATE CONFLICTS IN THE WORK, AND AVOID UNNECESSARY DELAYS.
- THE NATURAL GAS PROVIDER WILL INSTALL, REGULATE, AND MAINTAIN THE PROPOSED NATURAL GAS DISTRIBUTION SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING HIS WORK WITH THE NATURAL GAS PROVIDER TO ENSURE PROPER CONSTRUCTION PHASING. ELIMINATE CONFLICTS IN THE WORK, AND AVOID UNNECESSARY DELAYS.
- CONTRACTOR SHALL INSTALL ALL WATER LINES A MINIMUM OF THREE (3) FEET BELOW FINISHED GRADE, TO THE TOP OF THE PIPE.
- WHERE WATER LINES CONFLICT WITH STORM AND SANITARY SEWER, THE WATER LINE SHALL BE LOWERED DURING CONSTRUCTION. INSTALL 45° BENDS AS NECESSARY TO OBTAIN A MINIMUM CLEARANCE OF 18" INCHES.
- CONTRACTOR SHALL INSTALL THRUST BLOCKS PER UCPW STANDARD DETAIL 16 ON ALL WATER LINES 4" AND LARGER AT ALL TEES AND BENDS, SUCH THAT THRUST BLOCKS BEAR ON UNDISTURBED TRENCH WALL. LOCATIONS IN WHICH THIS CAN NOT BE ACCOMPLISHED SHALL BE RESTRAINED JOINT DUCTILE IRON PIPE. CONTACT ENGINEER FOR REQUIRED LENGTH.
- UNLESS OTHERWISE INDICATED, SANITARY SEWER LATERALS SHALL BE INSTALLED AT 1% SLOPE MINIMUM WITH CLEANOUTS SPACED 80' ON CENTER. MAXIMUM, SANITARY SEWER CLEANOUTS IN PAVED AREAS SHALL BE HEAVY DUTY TRAFFIC BEARING CASTINGS.
- SEWER LINES UNDER CONSTRUCTION SHALL BE PROTECTED FROM DIRT, DEBRIS, INFLOW OF WATER, OR OTHER CONTAMINANTS ENTERING THE NEW SYSTEM. A MECHANICAL PLUG SHALL BE INSTALLED AT THE FIRST MANHOLE DOWNSTREAM IN THE EXISTING SYSTEM AND MAINTAINED UNTIL THE NEW SYSTEM IS CERTIFIED BY THE ENGINEER AND AUTHORIZED FOR ACTIVATION BY UCPW.
- LOCAL PLUMBING INSPECTOR SHALL INSPECT ALL SEWER LATERALS AND WATER SERVICES BEHIND THE METER.
- CONTRACTOR SHALL CONDUCT APPLICABLE TESTING ON ALL NEWLY INSTALLED WATER DISTRIBUTION SYSTEM PRESSURE PIPE AND APPURTANCES PER NCEC AND NFPA 24 REQUIREMENTS. TESTS INCLUDE FLUSHING OF PIPES, HYDROSTATIC TESTS, AND OPERATIONAL TESTS. CONTRACTOR SHALL PROVIDE DOCUMENTATION IN COMPLIANCE WITH NFPA 24.
- DISINFECTION OF THE WATER DISTRIBUTION SYSTEM SHALL BE PERFORMED IN ACCORDANCE WITH ALL NCEC STANDARDS AND REGULATIONS. CONTRACTOR SHALL SUBMIT WATER SAMPLES TO AN INDEPENDENT LABORATORY AND PROVIDE RESULTS TO ENGINEER.
- ALL UNDERGROUND LINES, EXCEPT LAWN IRRIGATION LINES, SHALL HAVE A TRACER WIRE AND WARNING TAPE INSTALLED IN THE BACKFILL ABOVE THE PIPE.
- UNLESS OTHERWISE INDICATED, DOMESTIC WATER LINES AND COMBINATION FIRE/DOMESTIC WATER LINES 1-1/2" - 8" IN DIAMETER SHALL BE PVC 1120 IN ACCORDANCE WITH ASTM D-2241. THE PIPE SHALL BE MINIMUM PRESSURE CLASS 200 AND A SDR OF 21 OR LESS. PIPE JOINTS SHALL BE SOLVENT WELD.
- UNLESS OTHERWISE INDICATED, FIRE PROTECTION LINES 4" - 12" IN DIAMETER SHALL BE PVC 1120 IN ACCORDANCE WITH AWWA C-900. THE PIPE SHALL BE MINIMUM PRESSURE CLASS 200 AND A DR OF 14 OR LESS. PIPE JOINTS SHALL CONFORM TO AWWA C-900.
- UNLESS OTHERWISE INDICATED, SANITARY SEWER PIPE 6" IN DIAMETER AND SMALLER SHALL BE PVC DWV SOLID CORE, SCHEDULE 40, IN ACCORDANCE WITH ASTM D-2665. PIPE JOINTS SHALL BE SOLVENT WELD.
- DUCTILE IRON PIPE SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C-151, PRESSURE CLASS 350, AND SHALL HAVE CEMENT-MORTAR LINING OF STANDARD THICKNESS IN ACCORDANCE WITH AWWA C-104. UNLESS OTHERWISE NOTED, DIP SHALL BE FURNISHED WITH PUSH-ON JOINTS IN ACCORDANCE WITH AWWA C-111. DUCTILE IRON FITTINGS SHALL CONFORM TO THE REQUIREMENTS OF AWWA STANDARD C-153.



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UCPW UTILITY NOTES

- REFER TO UNION COUNTY SPECIFICATIONS, UNION COUNTY WATER & SEWER EXTENSION POLICY AND UNION COUNTY WATER & SEWER EXTENSION ORDINANCE.
- WATER AND SEWER TAPS, MATERIALS AND INSTALLATION TO BE BY THE DEVELOPER. METER TO BE SET BY UCPW AT PREVAILING RATE.
- ENGINEER TO CERTIFY THAT DESIGN HAS BEEN VERIFIED BY GROUND SURVEY.
- A UNION COUNTY WATER'S UTILITY RIGHT-OF-WAY SHALL EXIST ON ALL SANITARY SEWER LATERALS, WATER METERS, AND FIRE HYDRANTS. THE UTILITY RIGHT-OF-WAY IS LOCATED 5 FEET ALL SIDES FROM THE CLEANOUT, WATER METER, OR FIRE HYDRANT TO THE PUBLIC OR PRIVATE ROAD RIGHT-OF-WAY.
- THE PROPERTY OWNER SHALL NOT CONSTRUCT OR PERMIT CONSTRUCTION OR PLACEMENT OF ANY TYPE STRUCTURE, PLANT TREES, OR MAKE USE OF THE EASEMENT AREA IN ANY MANNER THAT WILL RESULT IN INTERFERENCE, INTERRUPTION, OR IMPEDIMENT OF UNION COUNTY WATER EASEMENT AND INGRESS/EGRESS.
- ANY CHANGES MADE TO THE PLANS FOR OTHER DISCIPLINES (STORM WATER, EROSION, TREES, LANDSCAPING, ETC.) MUST BE SHOWN AND IDENTIFIED BY REVISION NUMBER AND CLOUDING. FAILURE TO DO SO WILL DELAY THE APPROVAL OF THIS PROJECT.
- DESIGN ENGINEER SHALL CONFIRM THAT WATER AND SEWER MAINS AS WELL AS SERVICE LINES, METER BOXES, FIRE HYDRANTS AND LATERALS WILL NOT BE IN CONFLICT WITH ANY PROPOSED UTILITY INSTALLATION, LANDSCAPING AND/OR DRIVEWAYS. ANY CONFLICTS SHALL BE AT THE DEVELOPER'S EXPENSE TO COORDINATE AND RESOLVE AND COULD RESULT IN DELAY OF WATER METERS BEING SET.
- ONLY UCPW PERSONNEL WILL OPERATE THE ACTIVE VALVES WHICH INCLUDED THE TAPPING VALVE.
- FIRE HYDRANT PLACEMENT (FIRE HYDRANTS SHALL BE PLACED A MINIMUM DISTANCE OF 6 FEET BACK OF CURB AND GUTTER SECTIONS AND BACK OF DITCH IN ROADWAY SECTIONS) & HAVE A CLEAR SPACE OF 5 FEET FROM ANY PERMANENT STRUCTURES.
- METERS WILL NOT BE SET IF WATER METER BOXES, SEWER CLEAN-OUTS, VALVE BOXES OR THEIR APPURTENANCES ARE DAMAGED OR IMPROPERLY POSITIONED.
- 2" GATE VALVES SHALL BE AWWA C515 COMPLIANT
- 2" GATE VALVES SHALL BE NSF 61 COMPLIANT
- 3" OR LARGER GATE VALVES SHALL BE AWWA C500 AND C509 COMPLIANT
- AIR RELEASE VALVES SHALL BE AWWA C512 COMPLIANT
- VERIFICATION HAS BEEN MADE BY ORSBORN ENGINEERING THAT EACH LOT IS CAPABLE OF HAVING GRAVITY SEWER SERVICE TO THE CENTER OF THE LOT AT THE FRONT SETBACK
- ALL PROPOSED SEWER CONNECTIONS TO THE EXISTING SEWER SYSTEM BY STRADDLE MANHOLE SHALL NOT CUT INTO THE EXISTING SEWER PIPE UNTIL THE PROPOSED SEWER LINE HAS BEEN ACCEPTED BY UCPW. ALSO, ALL CORE CONNECTIONS TO EXISTING MANHOLES MUST BE PLUGGED WITH A CONCRETE PLUG IN THE INVERT OUT AT THE 1ST PROPOSED MH UPSTREAM OF THE TIE IN THE SEWER PLUG SHALL NOT BE REMOVED UNTIL THE PROPOSED SEWER LINE HAS BEEN ACCEPTED BY UCPW. IF PLUG IS REMOVED PREMATURELY OR EXISTING PIPE IS DAMAGED THE CONTRACTOR MAY BE LIABLE FOR CLEANING ALL DOWNSTREAM SEWER MAIN AT UCPW DISCRETION.
- THE CONTRACTOR SHALL AT ALL TIMES PROVIDE AND MAINTAIN AMPLE MEANS AND EQUIPMENT WITH WHICH TO REMOVE AND PROPERLY DISPOSE OF ANY AND ALL WATER EXTERING THE EXCAVATION OR OTHER PARTS OF THE WORK AND KEEP ALL EXCAVATIONS DRY UNTIL SUCH TIME AS PIPE LAYING AND GRADING IS COMPLETED AND STRUCTURES TO BE BUILT THEREIN ARE COMPLETED. NO WATER SHALL BE ALLOWED TO RISE AROUND THE PIPE IN UN-BACKFILLED TRENCHES NOR SHALL IT BE ALLOWED TO RISE OVER MASONRY UNTIL THE CONCRETE OR MORTAR HAS SET (MINIMUM 24 HOURS). ALL WATER PUMPED OR DRAINED FROM THE WORK SHALL BE DISPOSED OF IN SUCH A MANNER AS TO PREVENT SILTATION AND EROSION TO ADJACENT PROPERTY OR OTHER CONSTRUCTION.
- IF WELL AND/OR SEPTIC SYSTEMS ARE ENCOUNTERED, THEN CONTACT DAVID FINLEY (704.283.3879) WITH ENVIRONMENTAL HEALTH FOR THEIR SEQUENCE OF EVENTS AND OTHER PERTINENT INFORMATION.
- UCPW IS NOT RESPONSIBLE FOR THE MAINTENANCE OF THE WALKING TRAIL AND WILL NOT BE RESPONSIBLE FOR REPAIRS OF THE WALKING TRAIL DUE TO MAINTENANCE OF THE SEWER LINE.
- THE CONTRACTOR SHALL CONTACT UNION COUNTY WATER PERSONNEL AFTER MATERIALS HAVE BEEN APPROVED BY UNION COUNTY WATER AND AT LEAST 48 HOURS BEFORE BEGINNING CONSTRUCTION TO SCHEDULE A PRECONSTRUCTION MEETING. PLEASE REACH OUT TO LEE DILLON AT LEEDILLON@UNIONCOUNTYNC.GOV TO SCHEDULE THE MEETING.
- ANY WORK OR TEST PERFORMED WITHOUT NOTIFICATION AND CONTACT WITH FIELD INSPECTORS SHALL BE INSTALLED AT THE CONTRACTOR'S RISK AND SUBJECT TO REMOVAL.

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UTILITY PLAN FOR MADISON PARK OUTPARCEL 2 WAXHAW, NORTH CAROLINA

MADISON WAXHAW OWNER, LLC
6805 MORRISON BLVD
CHARLOTTE NC 28211

Professional Engineer Seal for North Carolina, License No. C-3139, State Seal No. 028786.

NO.	DATE	REVISIONS

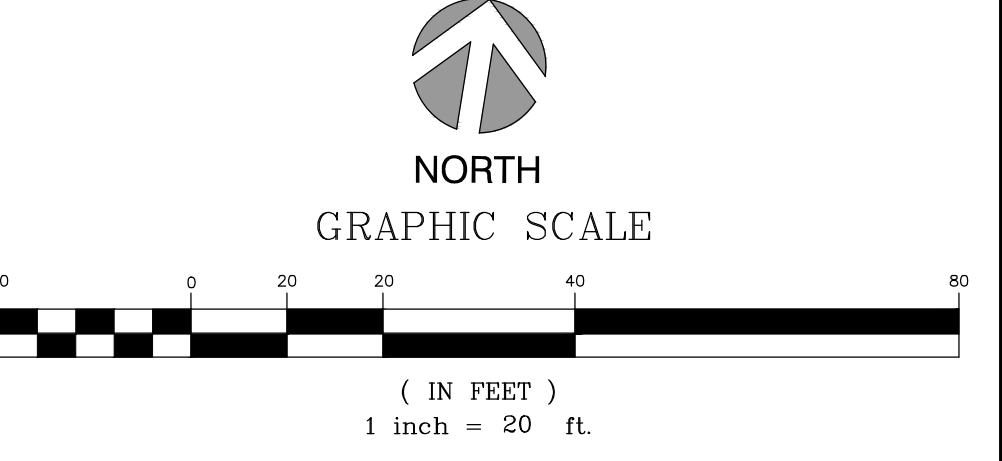
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APPROVED BY: JCO

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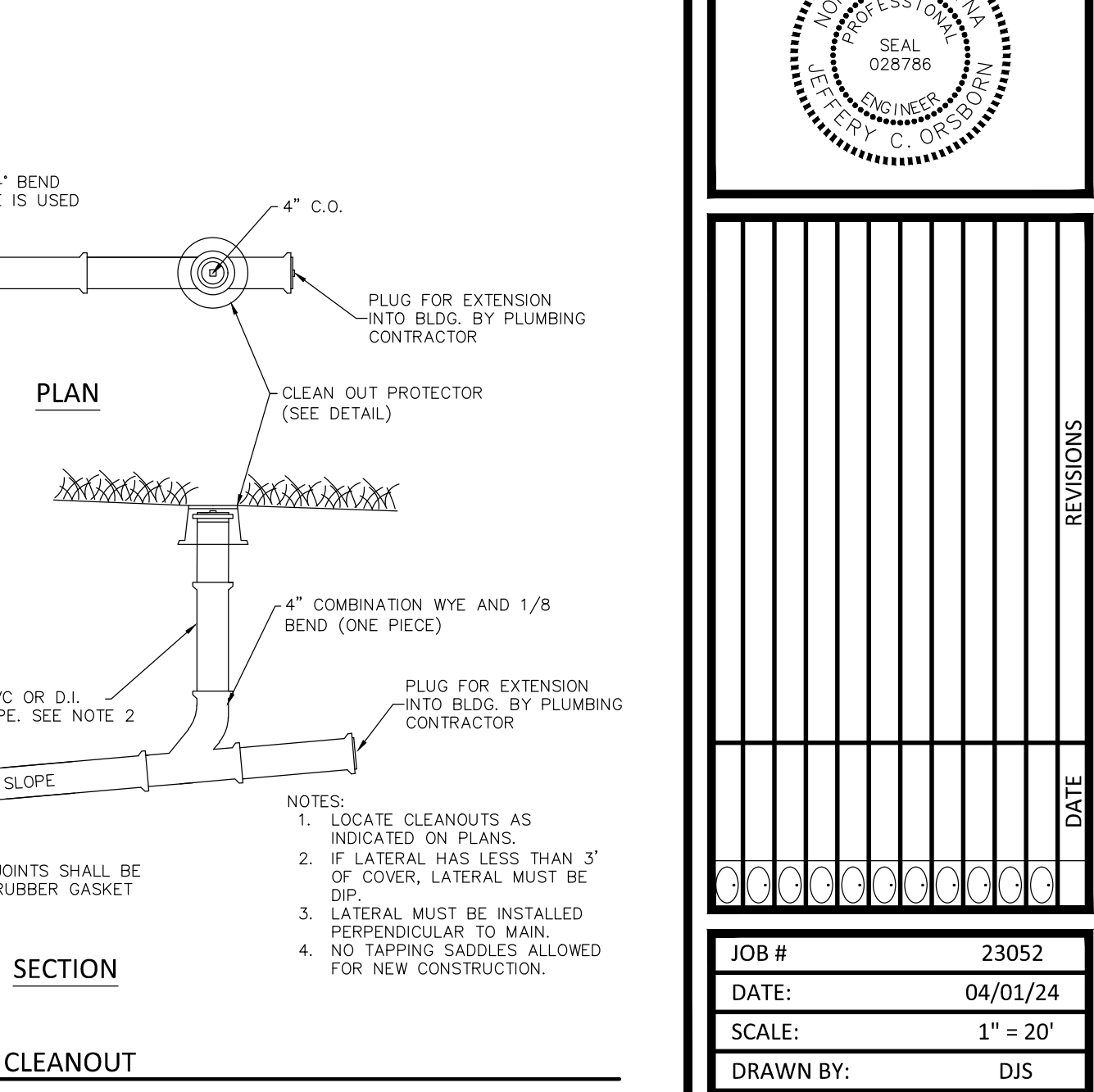
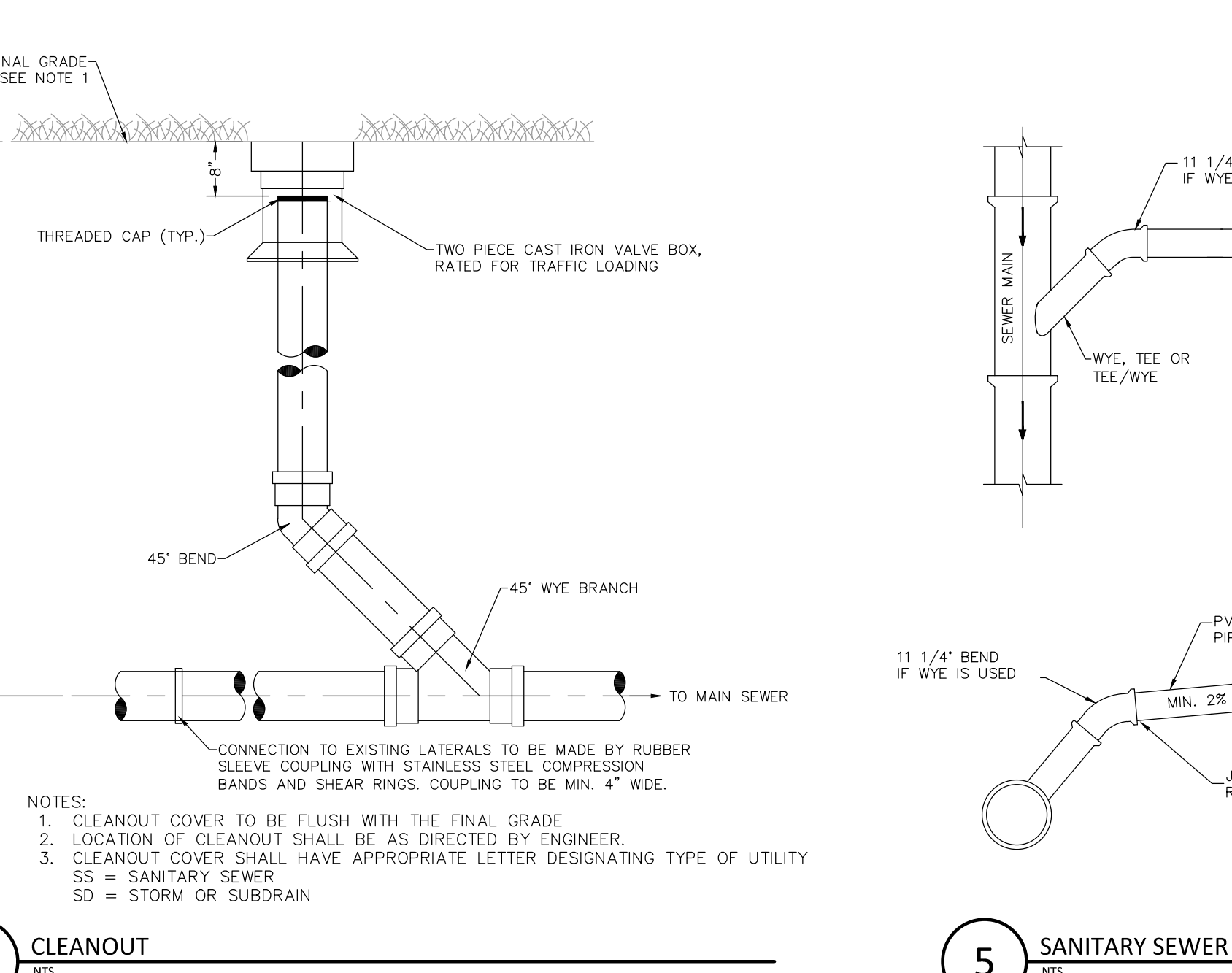
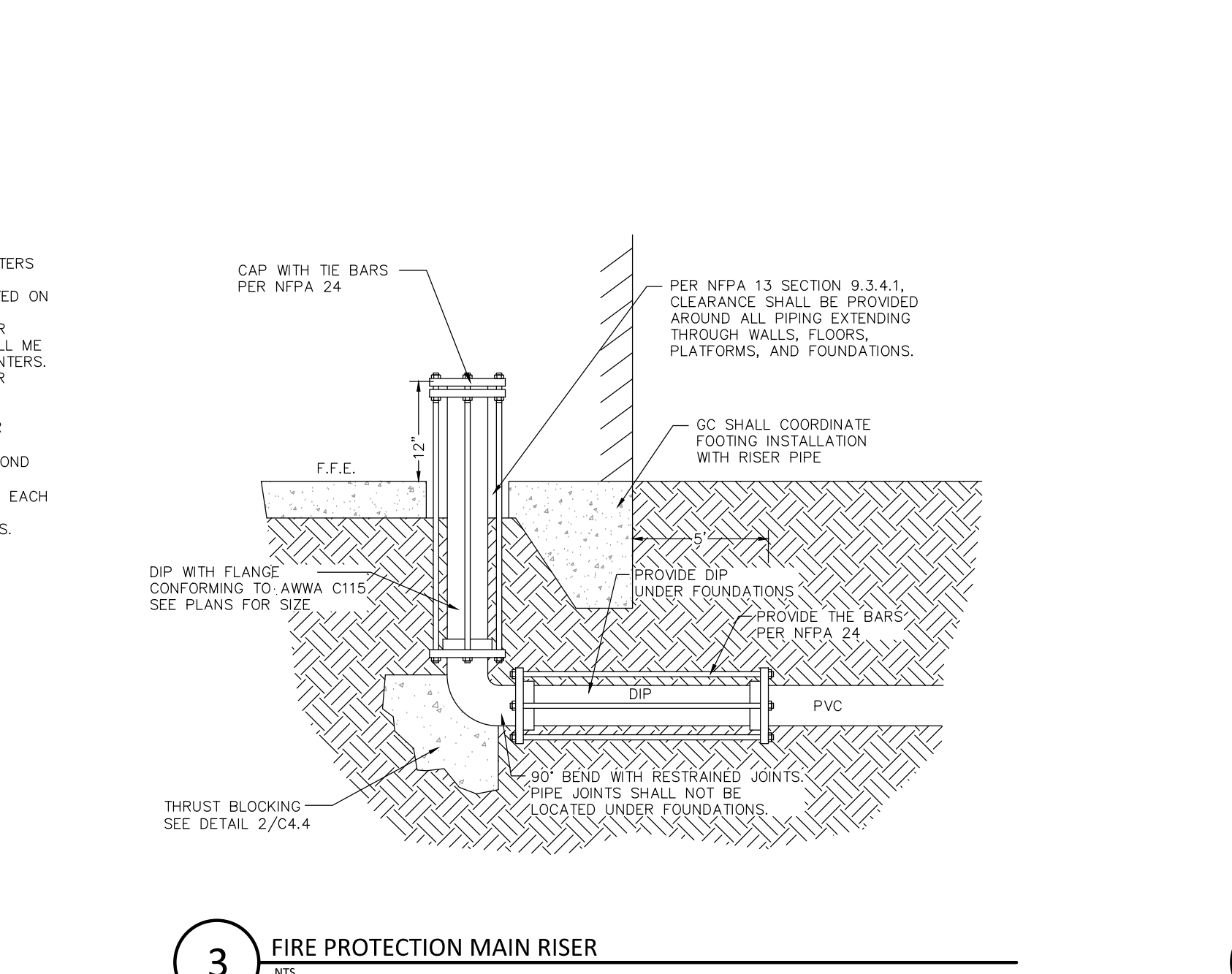
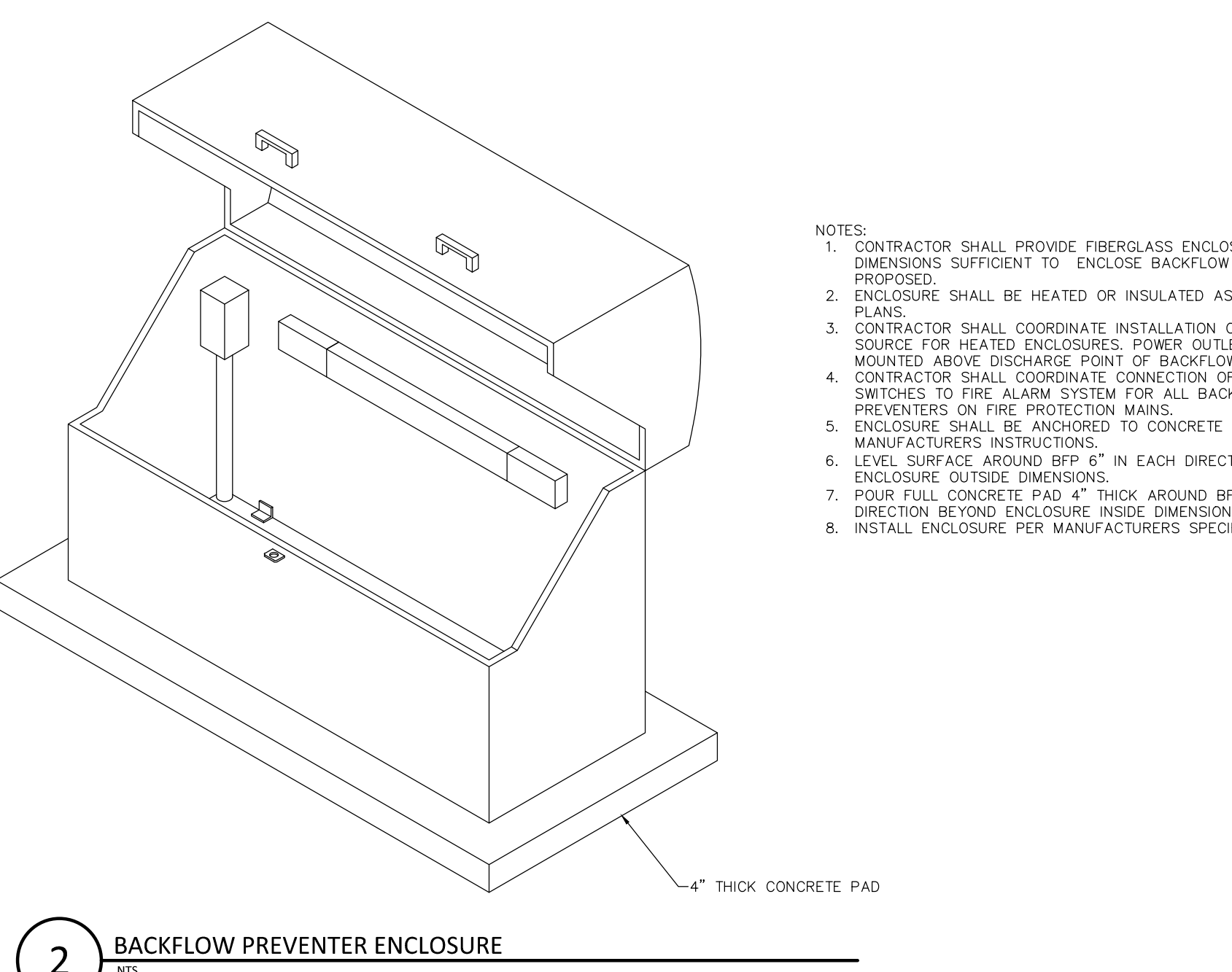
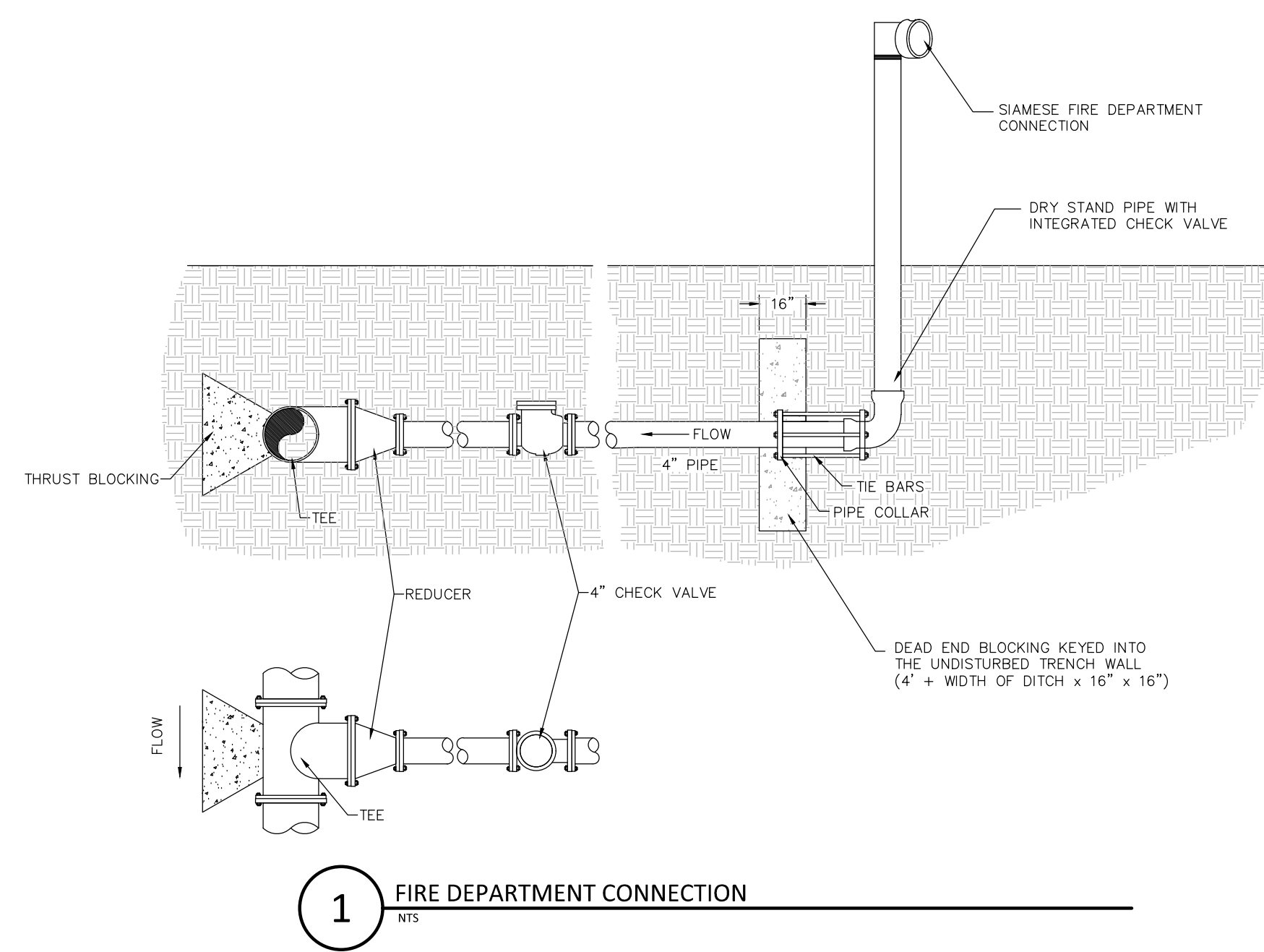
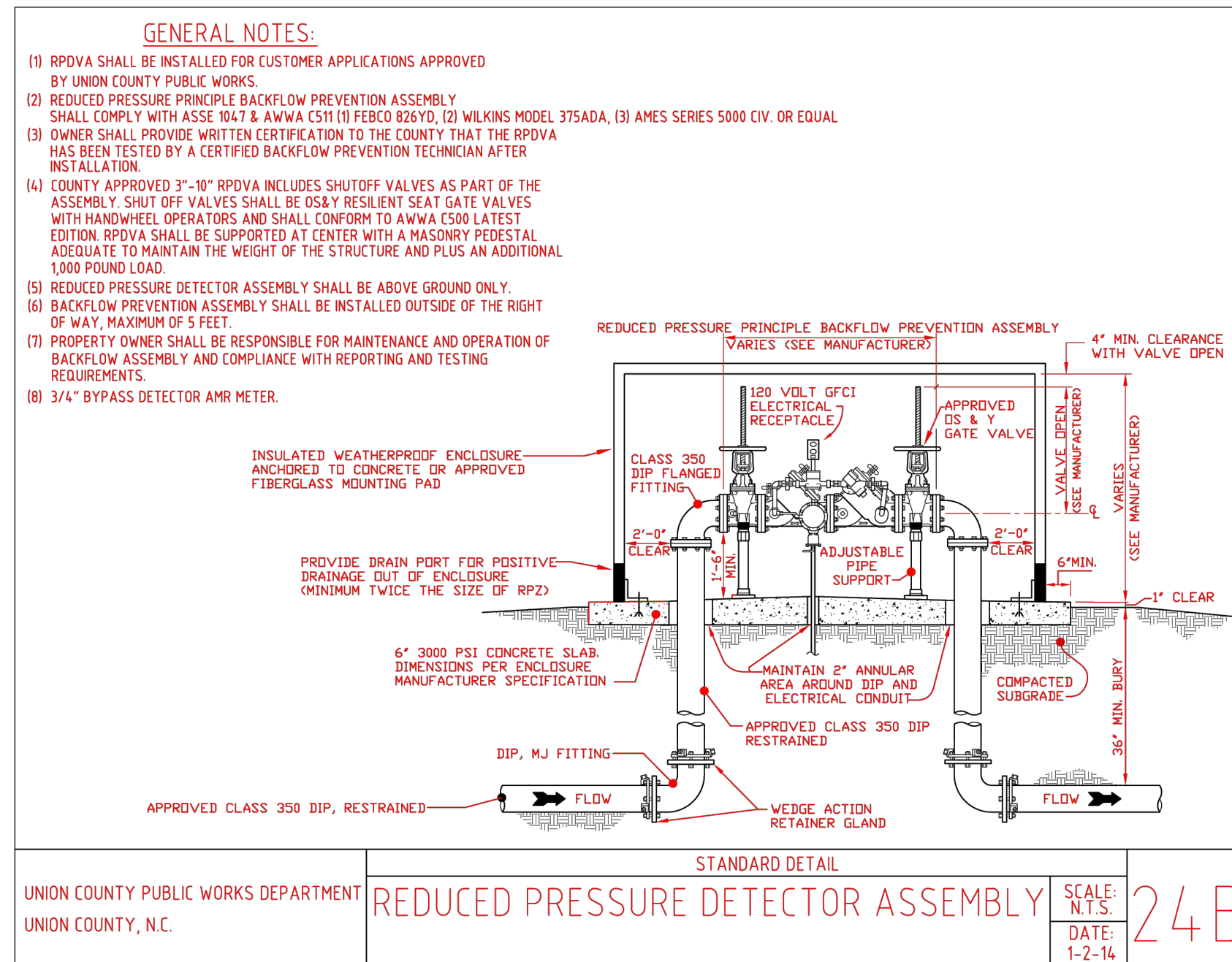
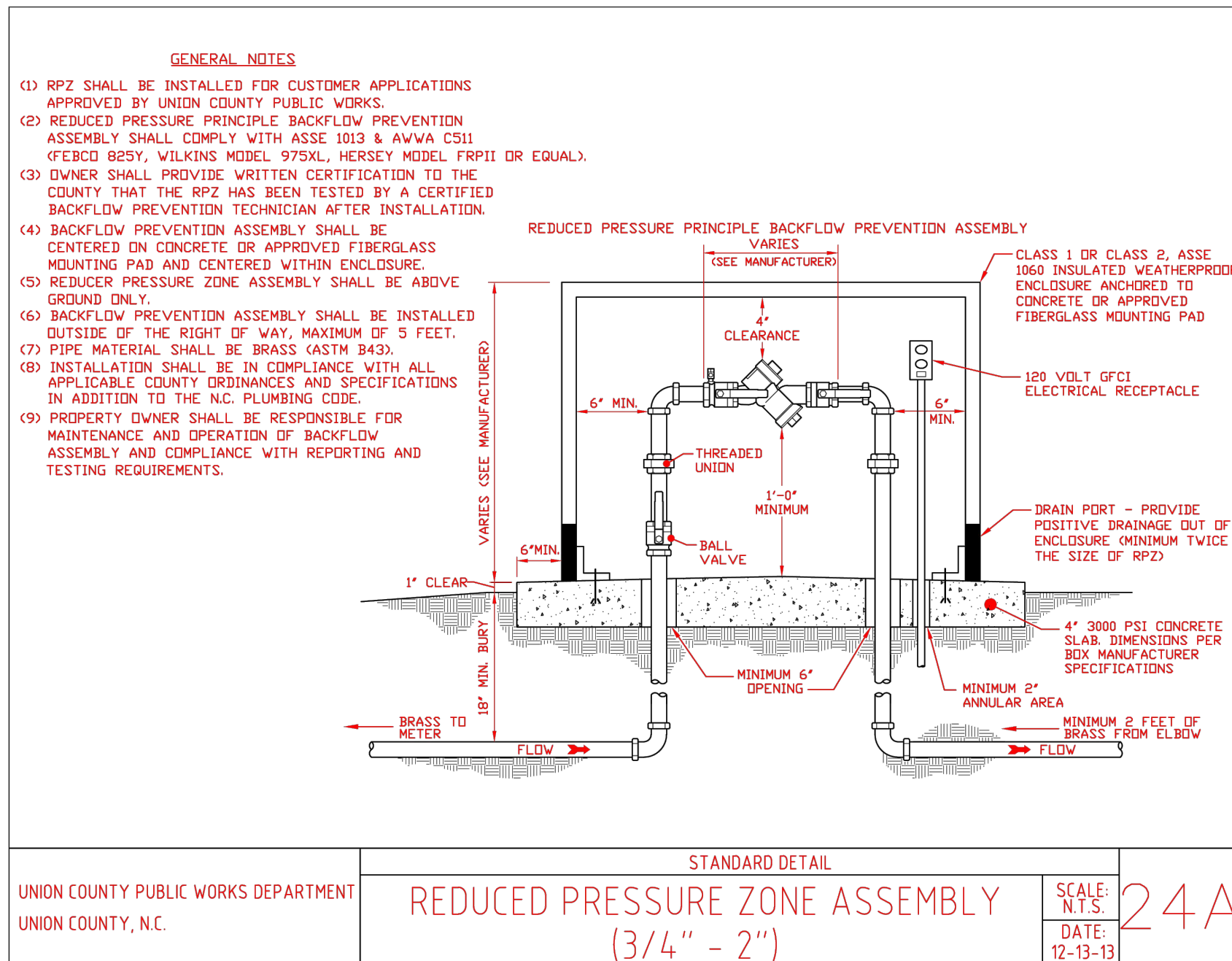
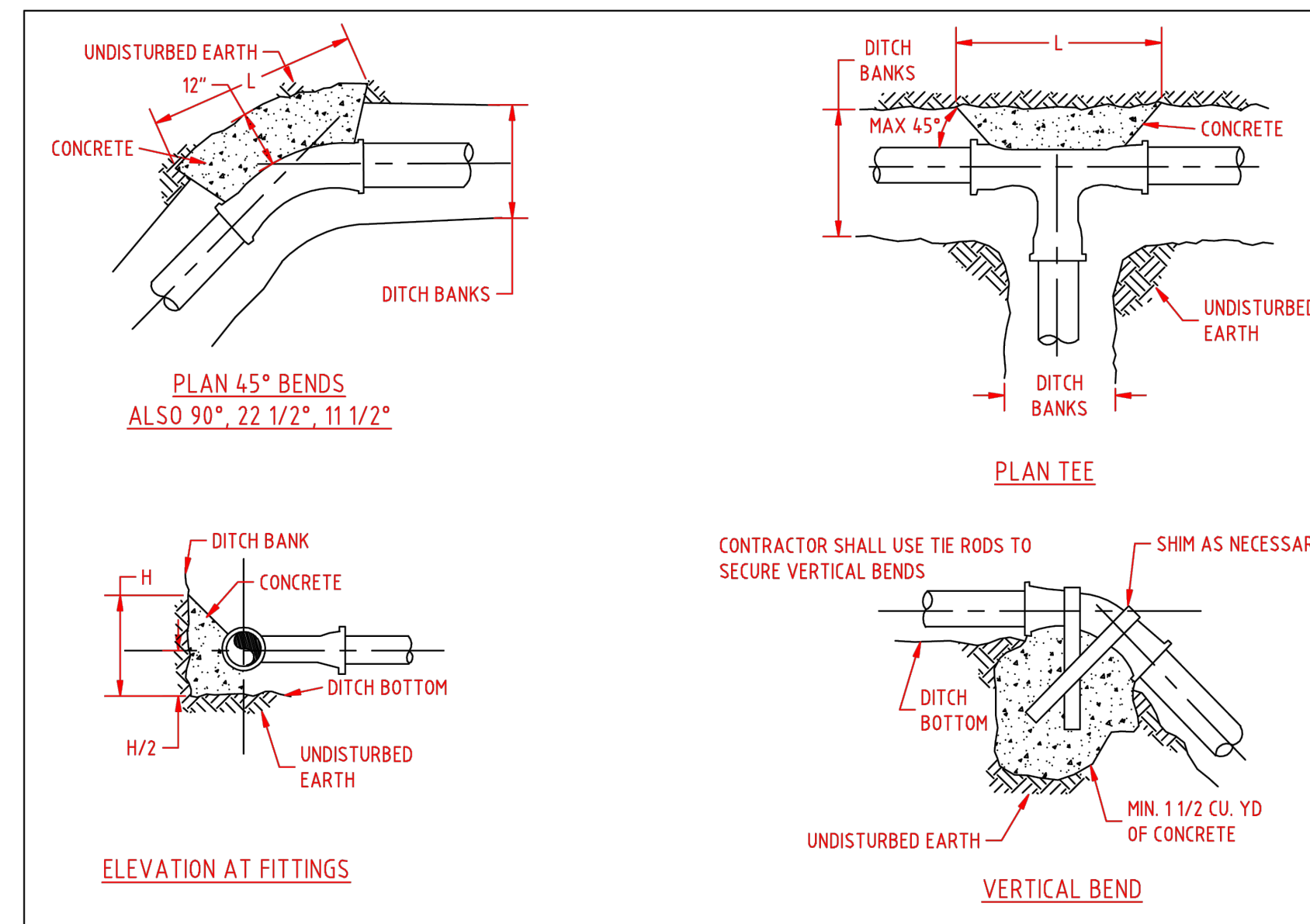
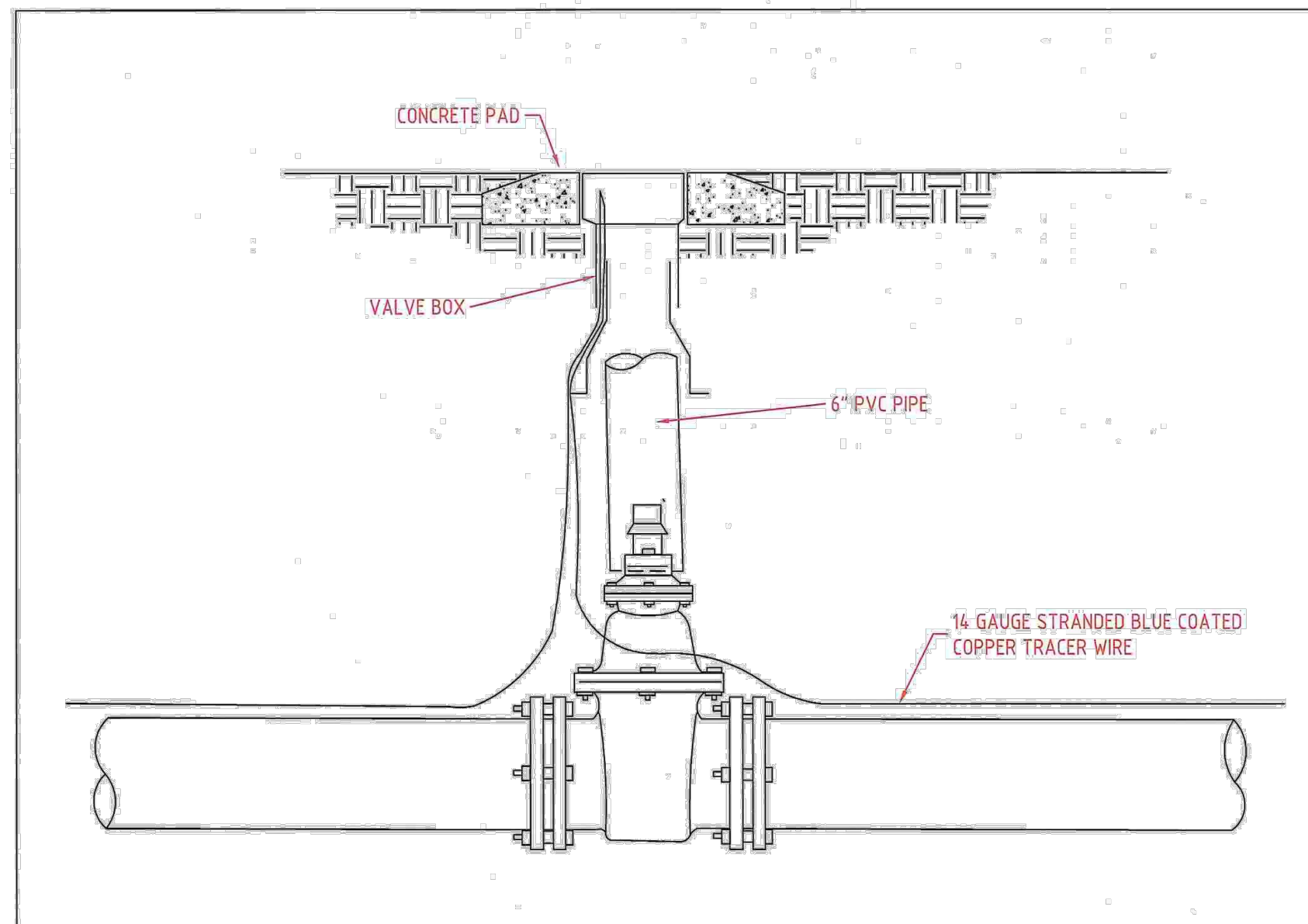
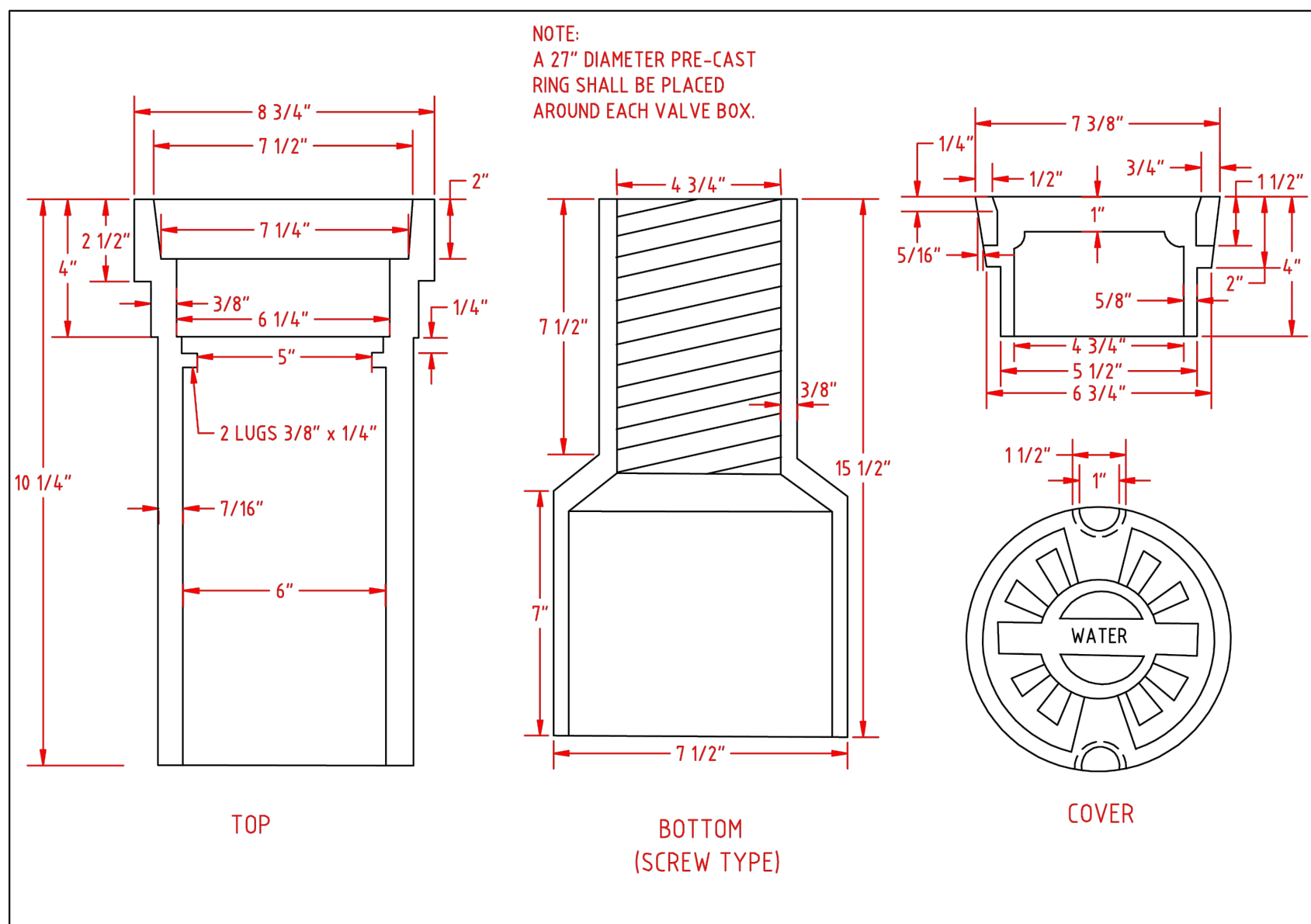
ESTIMATED CONSUMPTION CALCULATIONS (ESTIMATIONS DONE AS PART OF MADISON PARK PHASE 1)

WATER:
RESTURANT = 20 GPD PER SEAT
50 SEATS X 20 GPD = 1000GPD
MEDICAL OFFICE = 250 GPD PER PRACTITIONER
4 PRACTITIONERS X 250 GPD = 1000GPD

SEWER:
RESTURANT = 20 GPD PER SEAT
50 SEATS X 20 GPD = 1000GPD
MEDICAL OFFICE = 250 GPD PER PRACTITIONER
4 PRACTITIONERS X 250 GPD = 1000GPD



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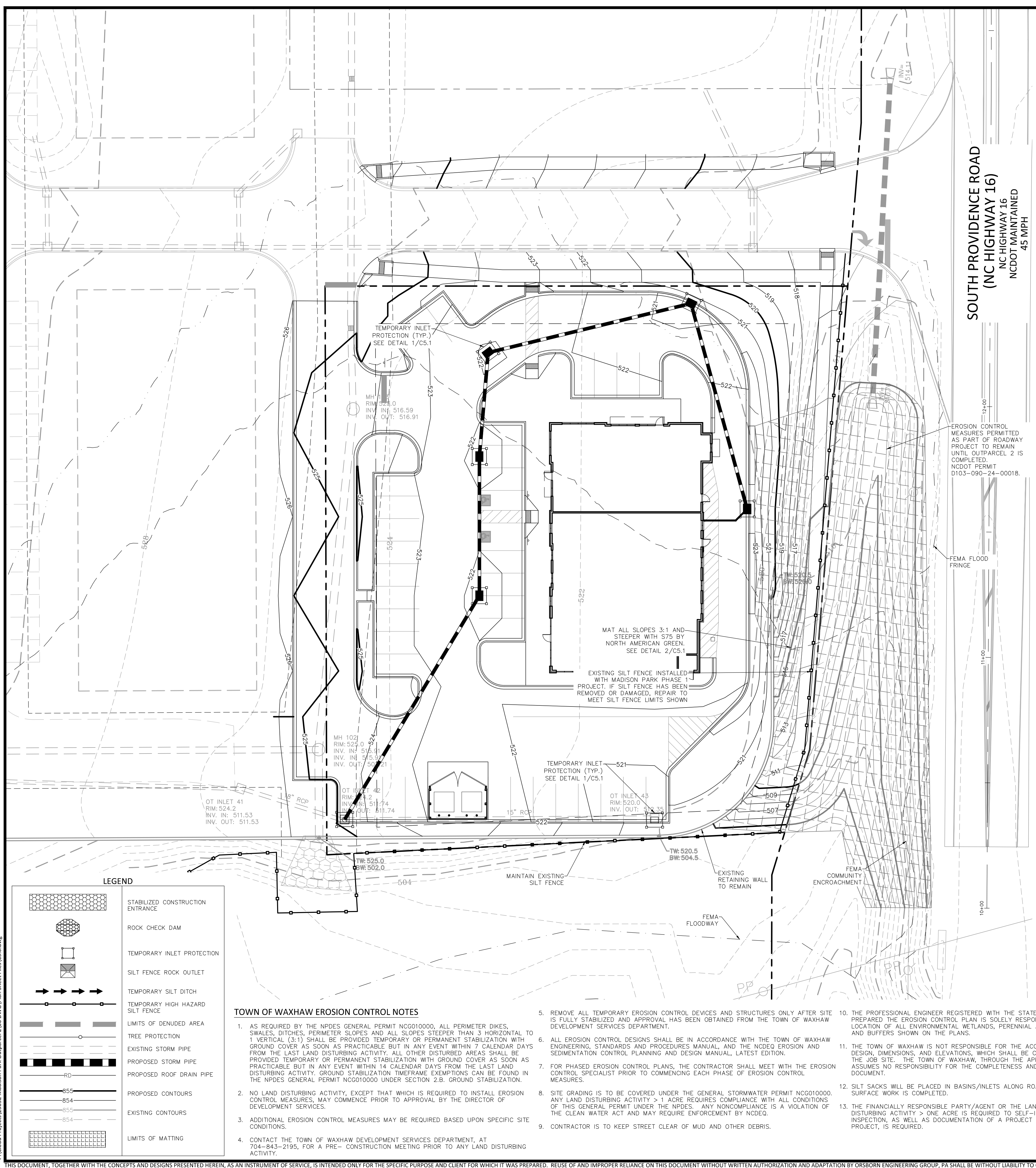
NO.	REVISIONS	DATE

JOB # 23052
DATE: 04/01/24
SCALE: 1" = 20'
DRAWN BY: DJS
APPROVED BY: JCO

C4.2

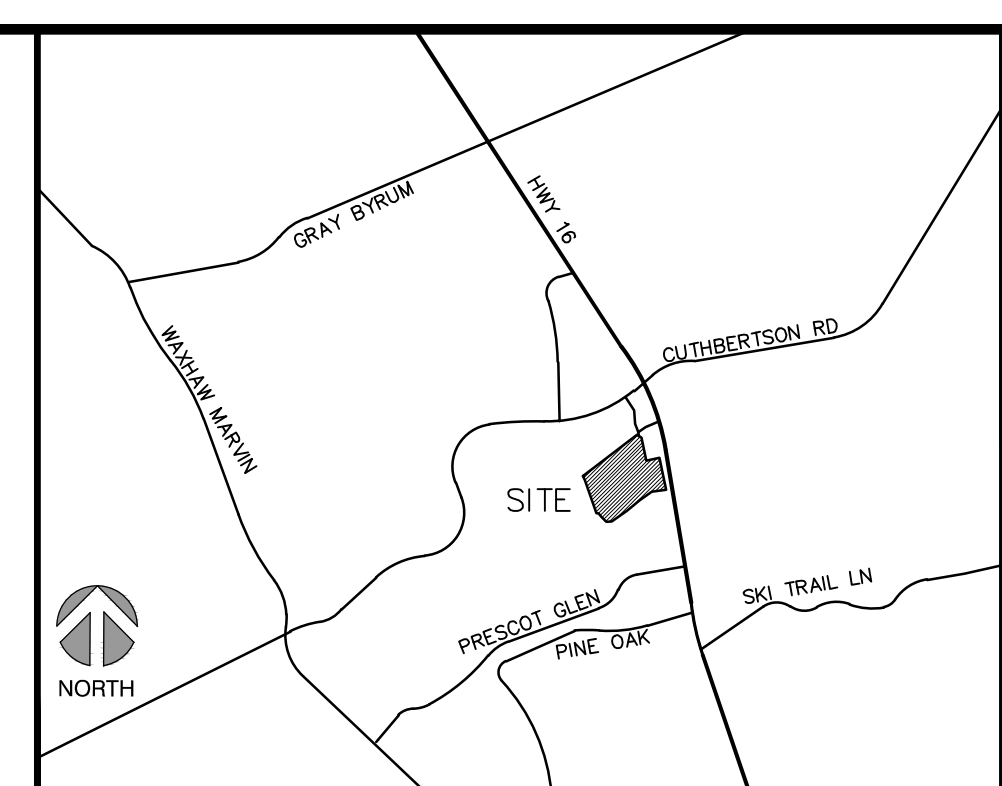
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March 29, 2024 2:45pm Br: daniel.mahel
P:\Civil\Projects\23052 Madison Park Outparcel 2\106 DWG\Plan Sheet Files\C5.Dwg



EROSION CONTROL CONSTRUCTION SEQUENCE

- CLEARING AND MASS GRADING OF THIS SITE HAS BEEN COMPLETED WITH THE MADISON PARK PHASE 1 PLANS, AS SUCH, THIS PROJECT PROPOSES ONE PHASE OF EROSION CONTROL. ALL EROSION CONTROL MEASURES FROM THE MADISON PARK PHASE 1 PROJECT TO REMAIN.
- AS GRADING OPERATIONS ALTER SITE DRAINAGE PATTERNS, CONTRACTOR SHALL INSTALL PROPOSED STORM PIPE AND STRUCTURES PER GRADING AND DRAINAGE PLANS AND ADDITIONAL TEMPORARY DIVERSION DITCHES TO DIRECT RUNOFF TO SEDIMENT BASINS.
 - THE CONTRACTOR SHALL DILIGENTLY AND CONTINUOUSLY MAINTAIN ALL EROSION CONTROL DEVICES AND STRUCTURES.
 - FOR PHASED EROSION CONTROL PLANS, CONTRACTOR SHALL MEET WITH EROSION CONTROL INSPECTOR PRIOR TO COMMENCING WITH EACH PHASE OF EROSION CONTROL MEASURES.
 - STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE.
 - COORDINATE WITH EROSION CONTROL INSPECTOR PRIOR TO REMOVAL OF EROSION CONTROL MEASURES.
 - ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE N.C. EROSION AND SEDIMENT CONTROL PLANNING AND DESIGN MANUAL.



ORSBORN
ENGINEERING GROUP

605 LEXINGTON AVENUE, SUITE 301
CHARLOTTE, NC 28203
P) 704-749-1432
www.orsborn-eng.com

PROJECT INFORMATION:
EROSION CONTROL PLAN
FOR
MADISON PARK
OUTPARCEL 2
WAXHAW, NORTH CAROLINA

OWNER INFORMATION:
MADISON WAXHAW
OWNER, LLC
6805 MORRISON BLVD
CHARLOTTE NC 28211

REVISIONS	
NO.	DATE

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DRAWN BY:	DJS
APPROVED BY:	JCO

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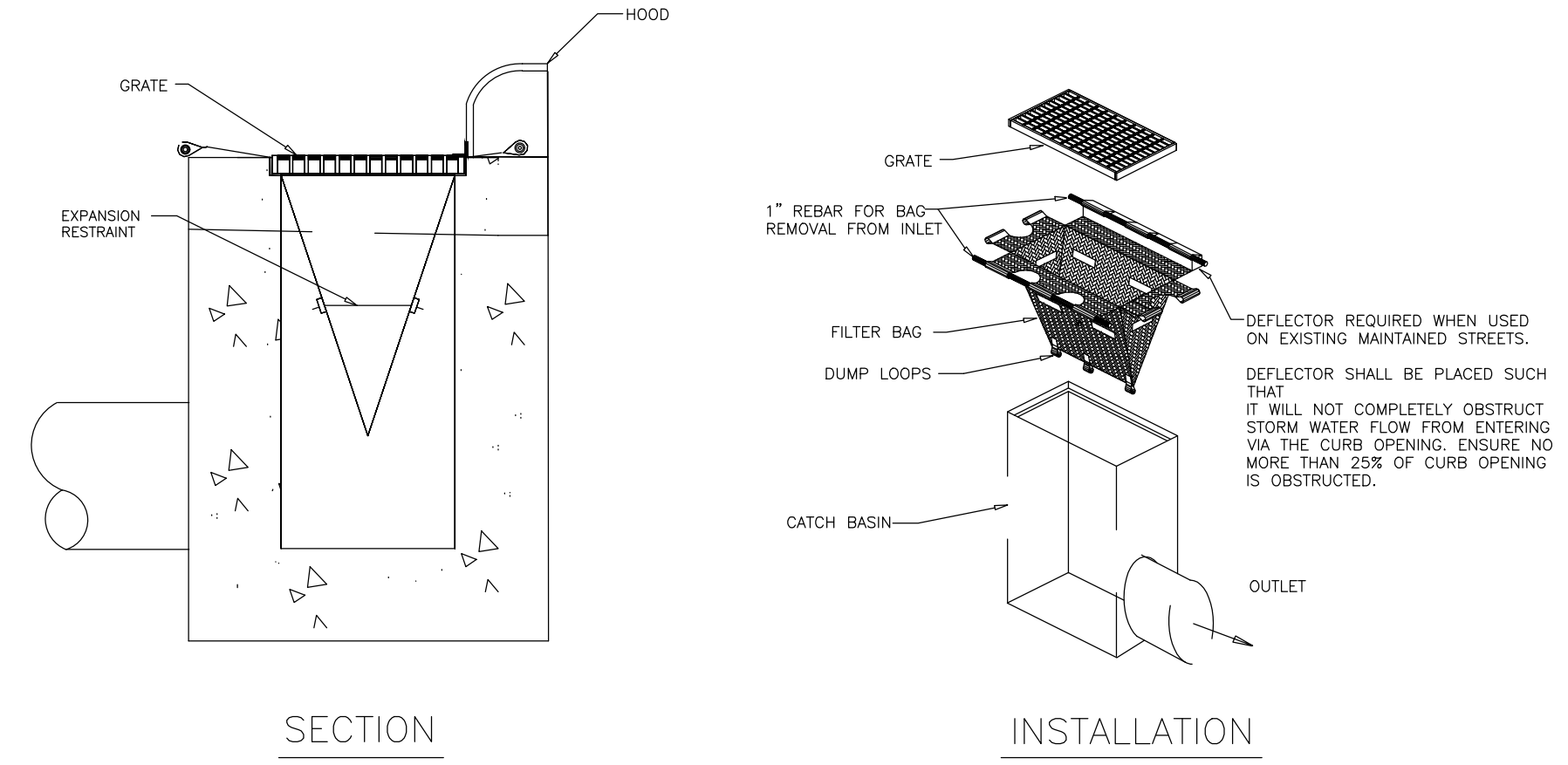
LEGEND

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[Symbol]	ROCK CHECK DAM
[Symbol]	TEMPORARY INLET PROTECTION
[Symbol]	SILT FENCE ROCK OUTLET
[Symbol]	TEMPORARY SILT DITCH
[Symbol]	TEMPORARY HIGH HAZARD SILT FENCE
[Symbol]	LIMITS OF DENUDED AREA
[Symbol]	TREE PROTECTION
[Symbol]	EXISTING STORM PIPE
[Symbol]	PROPOSED STORM PIPE
[Symbol]	PROPOSED ROOF DRAIN PIPE
[Symbol]	PROPOSED CONTOURS
[Symbol]	EXISTING CONTOURS
[Symbol]	LIMITS OF MATTING

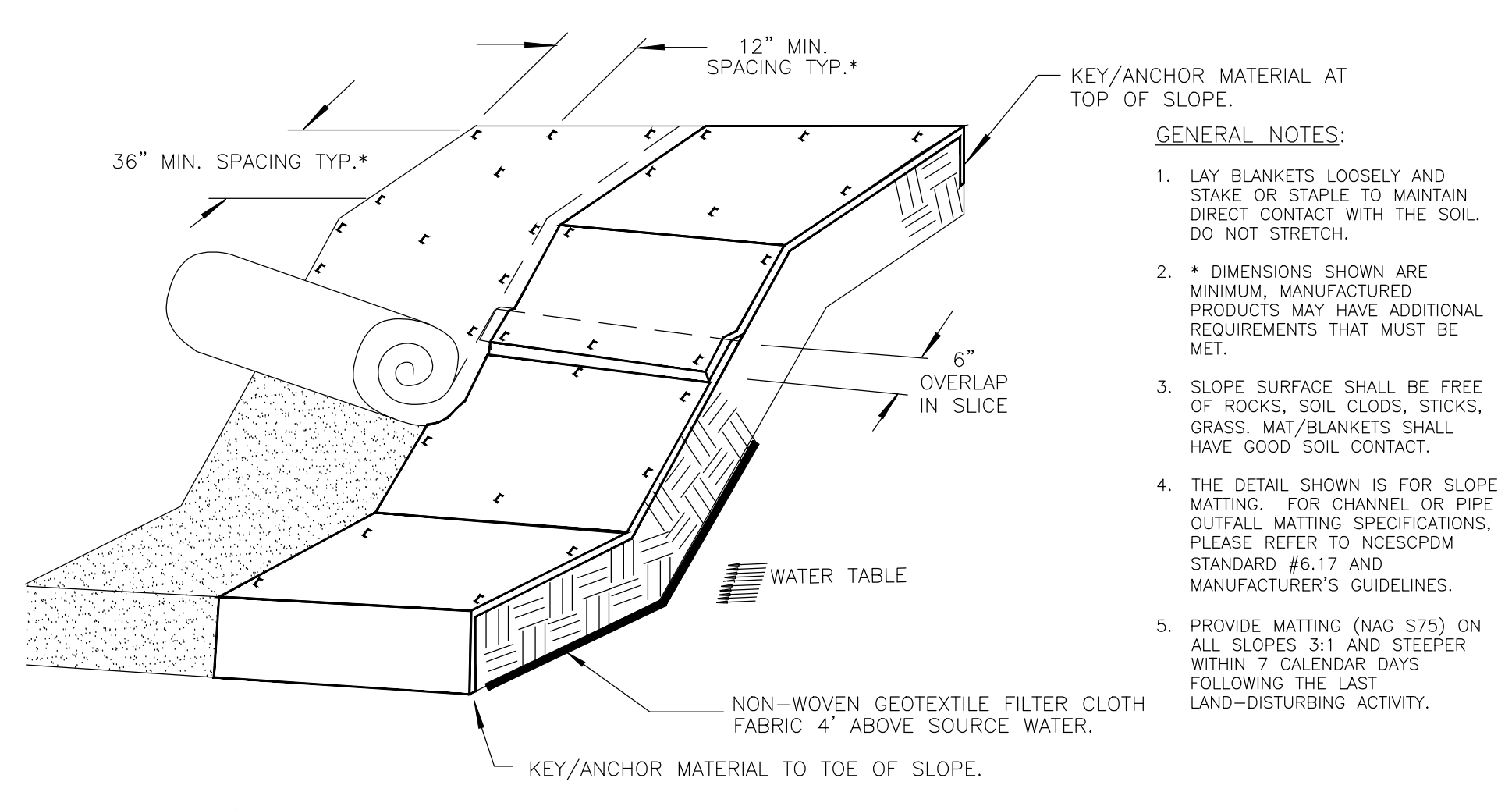
- #### TOWN OF WAXHAW EROSION CONTROL NOTES
- AS REQUIRED BY THE NPDES GENERAL PERMIT NCG010000, ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1) SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 7 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. ALL OTHER DISTURBED AREAS SHALL BE PROVIDED TEMPORARY OR PERMANENT STABILIZATION WITH GROUND COVER AS SOON AS PRACTICABLE, BUT IN ANY EVENT WITHIN 14 CALENDAR DAYS FROM THE LAST LAND DISTURBING ACTIVITY. GROUND STABILIZATION TIMEFRAME EXEMPTIONS CAN BE FOUND IN THE NPDES GENERAL PERMIT NCG010000 UNDER SECTION 2.B, GROUND STABILIZATION.
 - NO LAND DISTURBING ACTIVITY, EXCEPT THAT WHICH IS REQUIRED TO INSTALL EROSION CONTROL MEASURES, MAY COMMENCE PRIOR TO APPROVAL BY THE DIRECTOR OF DEVELOPMENT SERVICES.
 - ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED BASED UPON SPECIFIC SITE CONDITIONS.
 - CONTACT THE TOWN OF WAXHAW DEVELOPMENT SERVICES DEPARTMENT, AT 704-843-2195, FOR A PRE-CONSTRUCTION MEETING PRIOR TO ANY LAND DISTURBING ACTIVITY.
 - REMOVE ALL TEMPORARY EROSION CONTROL DEVICES AND STRUCTURES ONLY AFTER SITE IS FULLY STABILIZED AND APPROVAL HAS BEEN OBTAINED FROM THE TOWN OF WAXHAW DEVELOPMENT SERVICES DEPARTMENT.
 - ALL EROSION CONTROL DESIGNS SHALL BE IN ACCORDANCE WITH THE TOWN OF WAXHAW ENGINEERING, STANDARDS AND PROCEDURES MANUAL, AND THE NCEQE EROSION AND SEDIMENTATION CONTROL PLANNING AND DESIGN MANUAL, LATEST EDITION.
 - FOR PHASED EROSION CONTROL PLANS, THE CONTRACTOR SHALL MEET WITH THE EROSION CONTROL SPECIALIST PRIOR TO COMMENCING EACH PHASE OF EROSION CONTROL MEASURES.
 - SITE GRADING IS TO BE COVERED UNDER THE GENERAL STORMWATER PERMIT NCG010000. ANY LAND DISTURBING ACTIVITY > 1 ACRE REQUIRES COMPLIANCE WITH ALL CONDITIONS OF THIS GENERAL PERMIT UNDER THE NPDES. ANY NONCOMPLIANCE IS A VIOLATION OF THE CLEAN WATER ACT AND MAY REQUIRE ENFORCEMENT BY NCEQE.
 - CONTRACTOR IS TO KEEP STREET CLEAR OF MUD AND OTHER DEBRIS.
 - THE PROFESSIONAL ENGINEER REGISTERED WITH THE STATE OF NORTH CAROLINA WHO PREPARED THE EROSION CONTROL PLAN IS SOLELY RESPONSIBLE FOR IDENTIFICATION AND LOCATION OF ALL ENVIRONMENTAL WETLANDS, PERENNIAL AND INTERMITTENT STREAMS AND BUFFERS SHOWN ON THE PLANS.
 - THE TOWN OF WAXHAW IS NOT RESPONSIBLE FOR THE ACCURACY AND ADEQUACY OF THE DESIGN, DIMENSIONS, AND ELEVATIONS, WHICH SHALL BE CONFIRMED AND CORRELATED AT THE JOB SITE. THE TOWN OF WAXHAW, THROUGH THE APPROVAL OF THIS DOCUMENT, ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS AND/OR ACCURACY OF THIS DOCUMENT.
 - SILT SACKS WILL BE PLACED IN BASINS/INLETS ALONG ROADWAYS AFTER INITIAL ASPHALT SURFACE WORK IS COMPLETED.
 - THE FINANCIALLY RESPONSIBLE PARTY/AGENT OR THE LANDOWNER/AGENT OF A LAND DISTURBING ACTIVITY > ONE ACRE IS REQUIRED TO SELF-INSPECT THE PROJECT. A SELF INSPECTION, AS WELL AS DOCUMENTATION OF A PROJECT AFTER EACH PHASE OF THE PROJECT, IS REQUIRED.

NOTES:

- INLET MAINTENANCE SHALL BE DOCUMENTED IN PROJECT LOG BOOK.
- FILTER TYPES SHALL BE APPROVED BY THE CITY INSPECTOR PRIOR TO INSTALLATION.
- FILTER BAGS MAY BE REMOVED WHEN SITE IS STABILIZED AT THE DIRECTION OF THE ENGINEER.
- FILTER BAGS SHALL BE REMOVED PRIOR TO STREET ACCEPTANCE AND/OR CLOSE OUT OF GRADING PERMIT.
- FILTER BAGS SHALL BE CLEANED OR REPLACED ON A REGULAR BASIS (NOT BE MORE THAN HALF FULL AT ANY TIME).
- FILTER BAGS MAY BE INSTALLED IN EXISTING CITY OR NCDOT ROADS AS LONG AS STORM DRAINAGE IS NOT IMPEDED.



1 TEMPORARY INLET PROTECTION

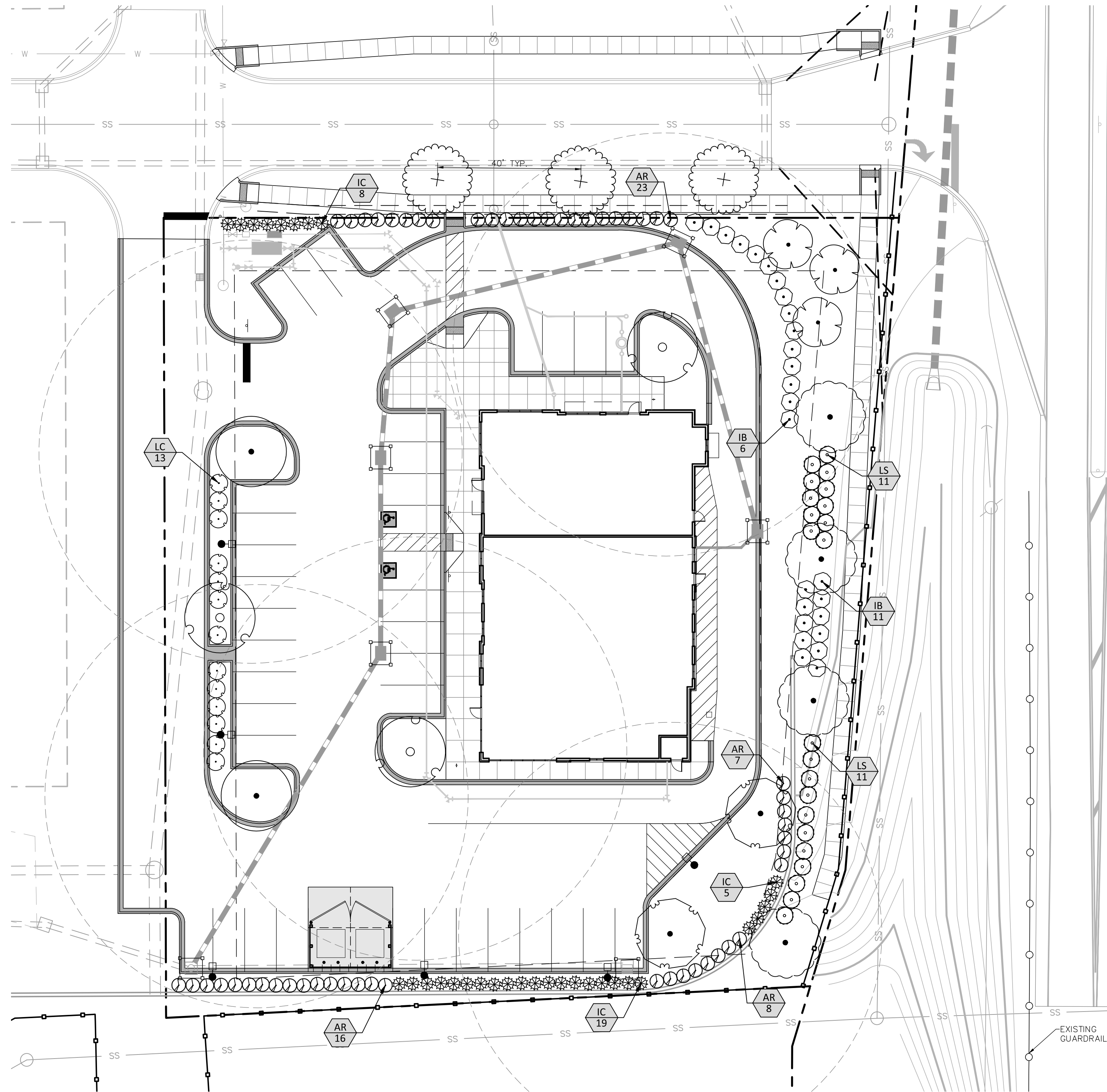


2 EMBANKMENT MATTING DETAIL



GRAPHIC SCALE
(IN FEET)
1 inch = 20 ft.

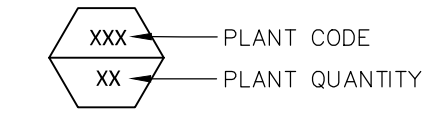
THIS DOCUMENT, TOGETHER WITH THE CONCEPTS AND DESIGNS PRESENTED HEREIN, AS AN INSTRUMENT OF SERVICE, IS INTENDED ONLY FOR THE SPECIFIC PURPOSE AND CLIENT FOR WHICH IT WAS PREPARED. REUSE OF AND IMPROPER RELIANCE ON THIS DOCUMENT WITHOUT WRITTEN AUTHORIZATION AND ADAPTATION BY ORSBORN ENGINEERING GROUP, PA SHALL BE WITHOUT LIABILITY TO ORSBORN ENGINEERING GROUP, PA.



PLANT SCHEDULE

SYMBOL	CODE	QTY	BOTANICAL / COMMON NAME	CAL.	HEIGHT
TREES					
(LI)	LI	3	Lagerstroemia indica x fauriei 'Sarah's Favorite' / Sarah's Favorite Crape Myrtle Mult-Trunk	2" Cal.	8-10'
(NG)	NG	4	Nyssa sylvatica 'NSUHH' / Green Gable™ Tupelo	2" Cal.	10-12'
(PC)	PC	3	Pistacia chinensis / Chinese Pistache	2" Cal.	10-12'
(QL)	QL	3	Quercus lyrata / Overcup Oak	2" Cal.	10-12'
(QP)	QP	2	Quercus phellos / Willow Oak	2" Cal.	10-12'
(UP)	UP	2	Ulmus parvifolia 'Allee' / Allee Chinese Elm	2" Cal.	10-12'
SHRUBS					
(AR)	AR	54	Abelia x 'Rose Creek' / Rose Creek Abelia	18-24" ht	
(IB)	IB	17	Ilex cornuta 'Burfordii Nana' / Dwarf Burford Holly	18-24" ht	
(AC)	AC	32	Ilex cornuta 'Carissa' / Carissa Chinese Holly	24-30" ht	
(LC)	LC	13	Loropetalum chinense 'Shang-white' / Emerald Snow® Loropetalum	24-30" ht	
(LS)	LS	22	Loropetalum chinense 'Snow Panda' / Snow Panda Fringe Flower	24-30" ht	

* PLANT COUNTS PROVIDED FOR CONVENIENCE ONLY AND MAY DIFFER FROM QUANTITY DEPICTED ON PLAN. CONTRACTOR WILL BE HELD TO THE STRICTER STANDARD.



AMENDED SOIL DEPTH NOTES:

CONTRACTOR SHALL AMEND SOILS IN AREAS WITH TURF TO DEPTH OF 6"
CONTRACTOR SHALL AMEND SOILS IN LANDSCAPE BED AREAS TO DEPTH OF 12"
CONTRACTOR SHALL AMEND SOILS IN LANDSCAPE BED AREAS AND AT TREES NOT IN LANDSCAPE BEDS TO DEPTH OF 18".

EXISTING SOIL MODIFICATIONS (AMENDED SOILS):

- CONTRACTOR SHALL REMOVE ALL ROCK AND DEBRIS FROM PLANTED AREAS.
- CONTRACTOR SHALL REMOVE EXCESS SOIL.
- CONTRACTOR SHALL TILL SOIL IN PLANTED AREAS TO DEPTH SPECIFIED.
- CONTRACTOR SHALL AMEND SOIL AND TILL.

TREE PLANTING SUMMARY

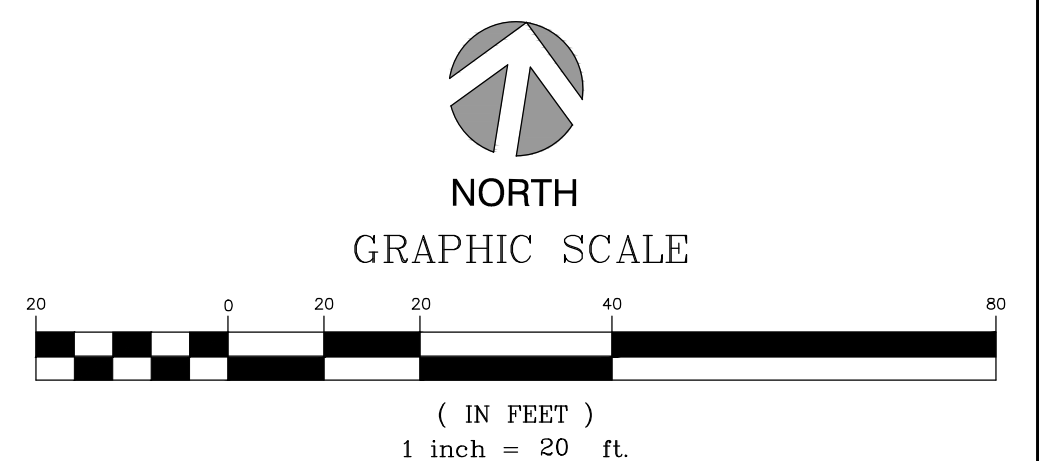
TOTAL SITE AREA = 1.01 ACRES

LANDSCAPING YARD REQUIREMENTS:

WITHIN RIGHT-OF-WAY: ONE MEDIUM TO LARGE TREE SPACED 40-65 FT O.C. IN DESIGNATED PLANTING STRIP.
PRIVATE UNNAMED ROAD: 3 LARGE TREES PROVIDED @ 40' O.C.
SOUTH PROVIDENCE ROAD: REQUIREMENT CANNOT BE FULFILLED DUE TO CURRENT SITE CONDITIONS.
FRONT YARD: ONE MEDIUM TO LARGE MATURING TREE WITHIN 25 FT OF SIDEWALK SPACED 40-65 FT O.C.
SHRUBS MAY BE USED TO ENHANCE THE AESTHETICS OF THE STREETScape AREA AND PROVIDE SEPARATION BETWEEN DEVELOPMENT AND ROADWAY.
PROVIDED: 7 TREES, 99 SHRUBS

PARKING LOT LANDSCAPING REQUIREMENTS:

ALL PARKING SPACES SHALL BE WITH 60 FT OF A TREE. SEE PLAN FOR COMPLIANCE.
ONE TREE AND 10 SHRUBS SHALL BE PLANTED AN AVERAGE OF EVERY 50 FT ALONG THE PERIMETER OF OFF STREET PARKING AREAS THAT DO NOT ADJUT A BUILDING OR PUBLIC STREET.
PROVIDED: 6 TREES WITHIN 60' OF EACH PARKING SPACE, 48 SCREENING AND INTERIOR ISLAND SHRUBS

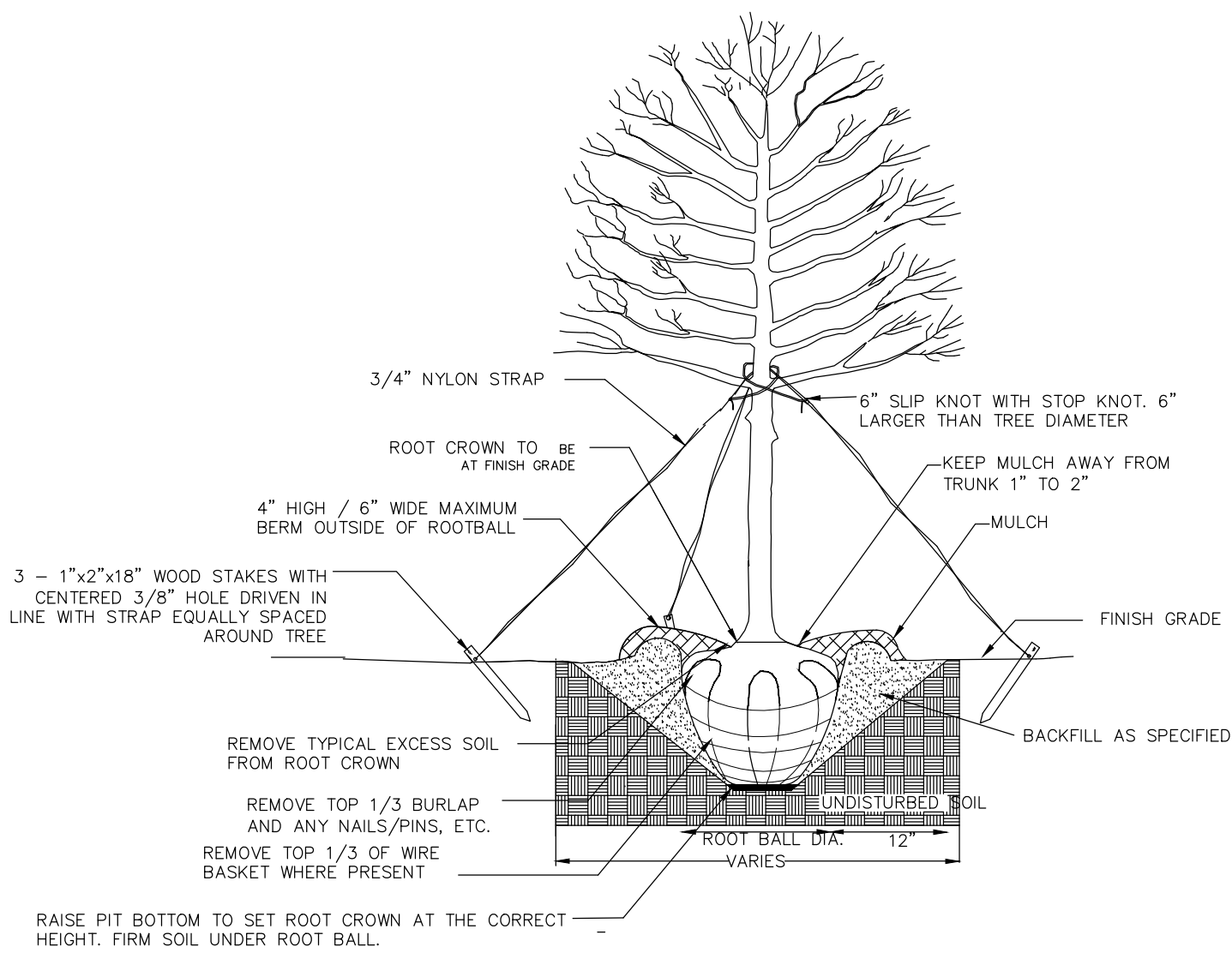


REVISIONS	
NO.	DATE

JOB #	23052
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SCALE	1" = 20'
DRAWN BY:	LWL
APPROVED BY:	LWL

L1.1

- NOTES:**
1. REMOVE WIRE AND NYLON TWINE FROM BALL AND CANOPY.
 2. SOAK ROOT BALL AND PLANT PIT IMMEDIATELY AFTER INSTALLATION.
 3. STAKING IS REQUIRED FOR ALL TREES IN R.O.W. OR UPON REQUEST OF ARBORIST.
 4. REMOVE EXCESS SOIL FROM SITE AND DISPOSE OF IN A LEGAL MANNER.
 5. RESEED UNMULCHED, DISTURBED AREAS.

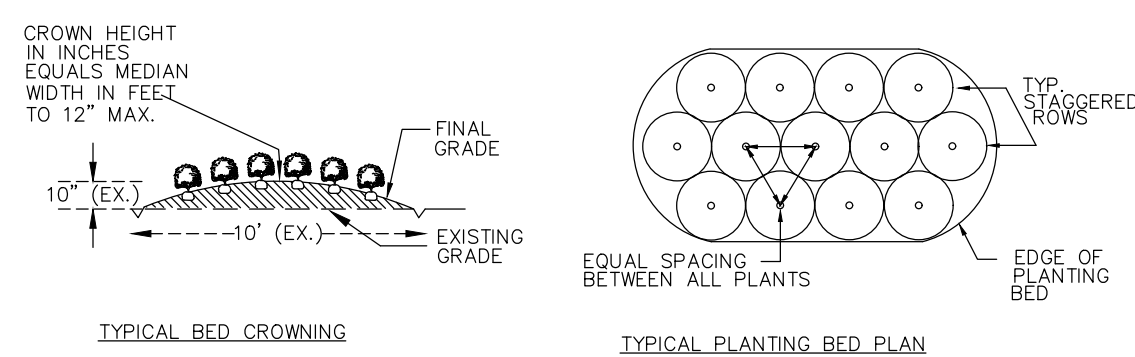
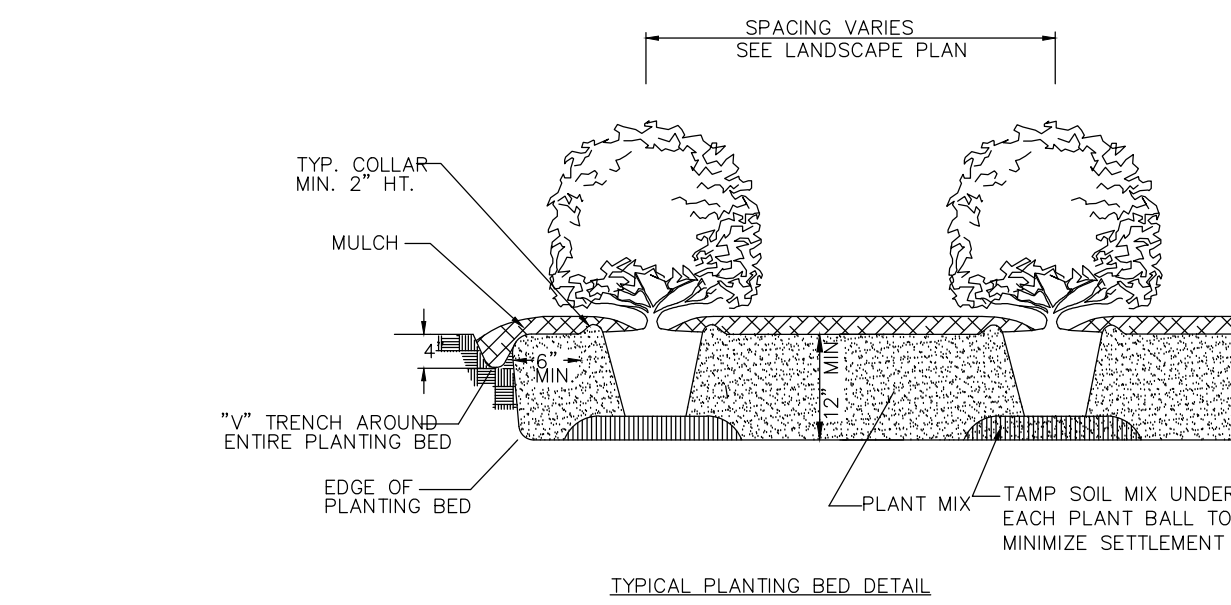


ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI Z60.1-2004)
FOR EXAMPLE:

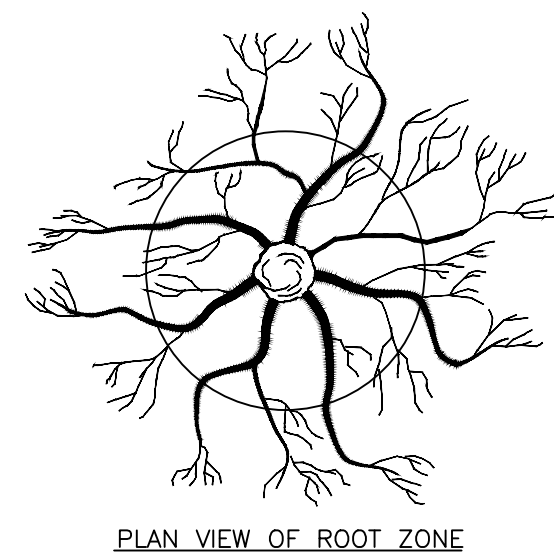
CALIPER	HEIGHT (RANGE) MAX.	HEIGHT MIN.	ROOT BALL DIA. MIN.	ROOT BALL DEPTH
2"	12-14'	16'	2 1/2'	18"
4"	14-16'	18'	3 1/2'	21"

1 TREE PLANTING (FOR SINGLE AND MULTI-STEM TREES)
N.T.S.

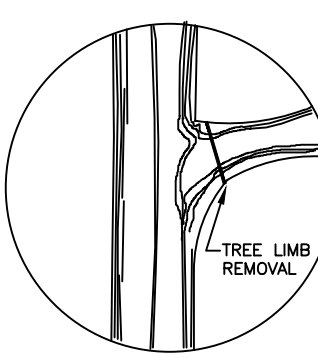
- NOTES:**
1. SCARIFY ROOT MASS OF CONTAINERIZED PLANT MATERIAL.
 2. INSTALL CONTAINERIZED PLANTS AT FINISHED GRADE.
 3. TAMP PLANTING MIX FIRMLY AS PIT IS FILLED AROUND EACH PLANT BALL.
 4. OMIT COLLAR AROUND EACH SHRUB WHEN IRRIGATION SYSTEM IS PRESENT.
 5. SOAK EACH PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.



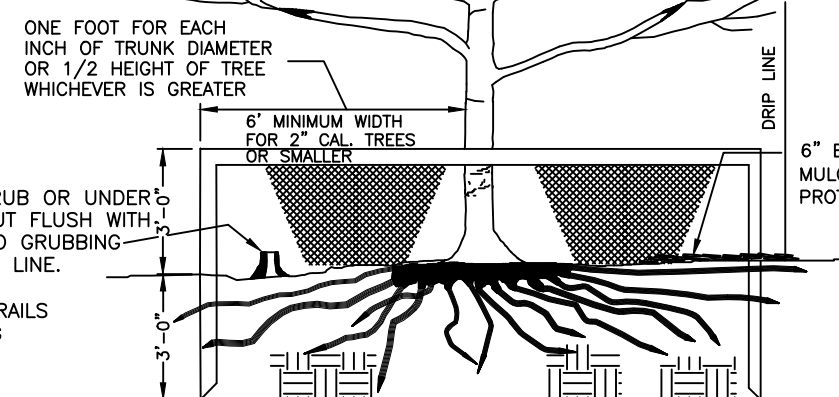
2 SHRUB PLANTING BED
N.T.S.



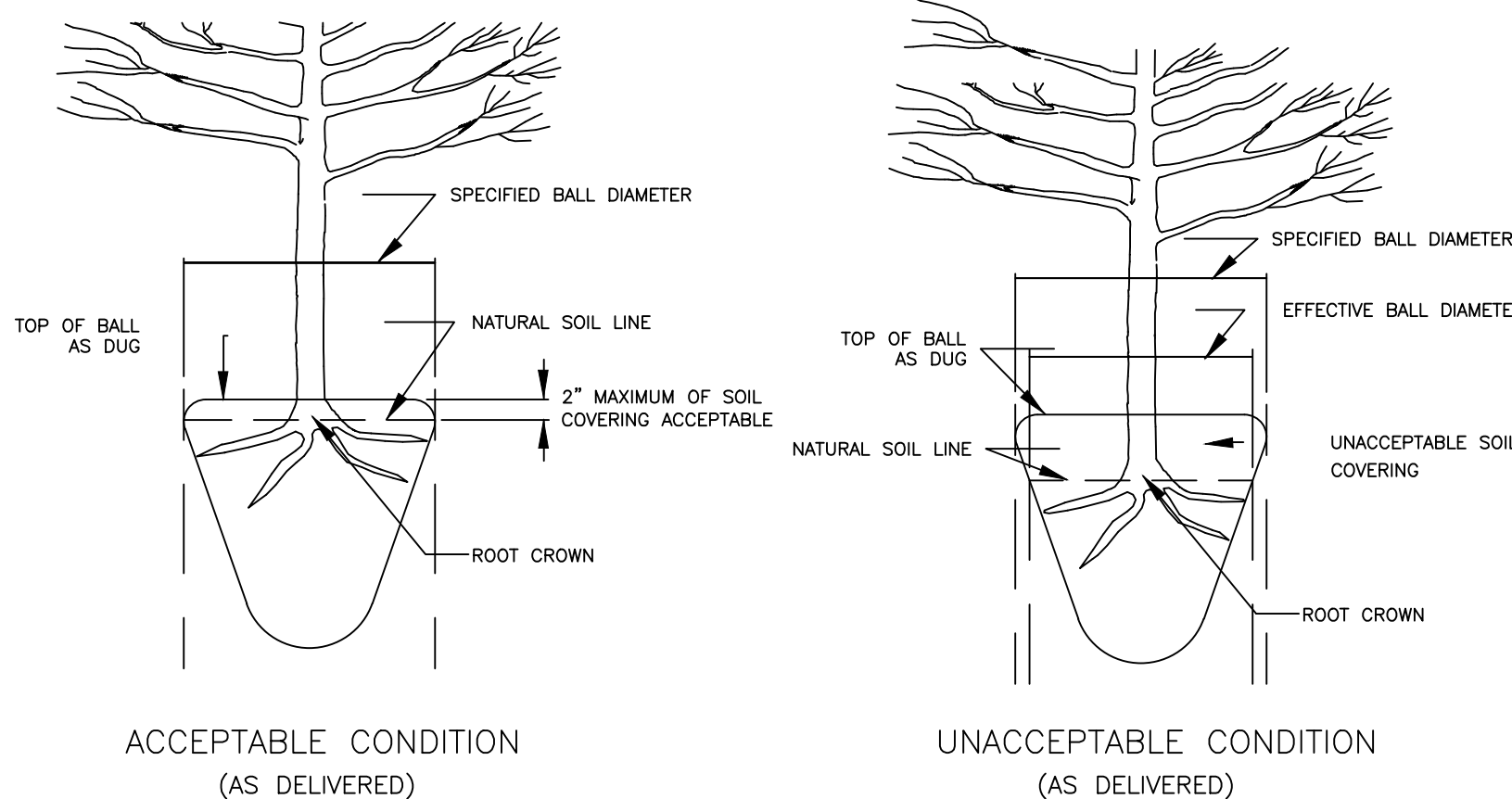
- NOTES:**
1. REMOVE ALL BARRIERS UPON COMPLETION OF PROJECT.
 2. LANDSCAPING PLANS SHALL SHOW THE LOCATIONS OF ALL TREE PROTECTION FENCES.
 3. REFER TO CITY OF CHARLOTTE LANDSCAPE CONSTRUCTION STANDARDS SECTION 01000 FOR GENERAL SPECIFICATION REGARDING TREE PROTECTION.



FOR PRUNING SEE INTERNATIONAL SOCIETY OF ARBORICULTURE SPECS.
DEAD TREES AND SCRUB OR UNDER-GROWTH SHALL BE CUT FLUSH WITH ADJACENT GRADE. NO GRUBBING ALLOWED UNDER DRIP LINE.
2"x4" STANDARDS + 1"x4" RAILS OR ORANGE SAFETY FENCING MAY BE USED.



3 TREE PROTECTION
N.T.S.



NOTE:
A ROOT COLLAR EXCAVATION FOR ALL TREES SPECIFIED WILL BE INSPECTED BY THE INSPECTOR TO ENSURE THAT TREES WERE NOT PLANTED/GROWN TOO DEEPLY AT SOURCE (NURSERY). LANDSCAPE CONTRACTOR SHALL HAVE SUPPLIER MARK GROUND LEVEL LINE ABOVE ROOT BALL. IF INSPECTOR DETERMINES THAT THERE IS EXCESSIVE SOIL OVER THE ROOT CROWN, THESE TREES WILL BE REJECTED.

4 ROOT CROWN DEPTHS
N.T.S.

GENERAL LANDSCAPE NOTES

1. LANDSCAPE WORK SHALL BE COMPLETED BY A QUALIFIED CONTRACTOR TO THE TOWN OF WAXHAW SPECIFICATIONS AND AMERICAN STANDARD FOR NURSERY STOCK, LATEST EDITION, AMERICAN ASSOCIATION OF NURSERYMEN.
2. PRIOR TO BEGINNING WORK, LANDSCAPE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND PERFORM SOIL TESTS IN EACH PLANTING AREA. PERFORM A MINIMUM OF 2 SOIL TESTS IN EACH GENERAL AREA.
3. MIX SOIL AMENDMENTS AND FERTILIZERS WITH EXISTING SOIL IN ACCORDANCE WITH SOIL RECOMMENDATIONS FOR PLANT TYPE AND BASED ON SOIL TEST RESULTS.
4. FOR NEW PLANTING AREAS, REMOVE ALL PAVEMENT, GRAVEL SUB-BASE AND CONSTRUCTION DEBRIS. REMOVE COMPACTED SOIL AND ADD 6" NEW TOPSOIL-OR-UNCOMPACT AND AMEND THE TOP 12" OF EXISTING SOIL TO MEET TOPSOIL/PLANTING MIX STANDARDS. AMEND ENTIRE PLANTING BED OR A MINIMUM OF 300 SF FOR INDIVIDUAL TREES.
5. LARGE MATURING TREES MAY NOT BE PLANTED UNDER OVERHEAD DISTRIBUTION OR TRANSMISSION LINES. IF TREES CONFLICT WITH POWER LINES OR SIGNS, CONTACT ENGINEER TO RESOLVE BEFORE PLANTING.
6. IF REQUIRED, ADJUST TREE PLANTING LOCATIONS TO AVOID UNDERGROUND UTILITIES.
7. THE INITIAL 2/3 OF BACKFILL AROUND PLANTED MATERIAL SHALL BE TAMPED AND WATERED THOROUGHLY TO SETTLE THE SOIL. AFTER SOIL SETTLES, FILL REMAINING PIT. WATER AND SHAPE SURFACE SO THAT IT SLOPES TO DRAIN FROM TRUNK AND MATCHES GROUND AT EDGE OF PLANTING PIT.
8. MULCH ALL TREE PITS, SHRUBS, GROUND COVER, AND PERENNIAL BEDS WITH A 2" LAYER OF MULCH IMMEDIATELY AFTER PLANTING. ALL BED LINES SHALL BE CUT WITH A SMOOTH CONSISTENT EDGE TO A MINIMUM DEPTH OF 3 INCHES.
9. PLANTING MAY OCCUR AT TIMES WHEN WATER IS NOT AVAILABLE ON SITE. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR BRINGING ADEQUATE WATER TO THE SITE TO COMPLETE HIS WORK.
10. ALL PLANTING AREAS SHALL CONFORM TO FINISHED GRADES AFTER FULL SETTLEMENT HAS OCCURRED AND MULCH HAS BEEN APPLIED.

PLANTING MIX

1. PLANTING MIX MAY BE DEVELOPED BY AMENDING THE EXISTING SOIL OR REMOVING THE EXISTING SOIL AND REPLACING WITH NEW PLANTING MIX. IT SHALL BE UNIFORM COMPOSITION THROUGHOUT, WITH A MIXTURE OF SUBSOIL, LIME, PLANTS AND THEIR ROOTS, STICKS, AND OTHER EXTRANEOUS MATTER. IT SHALL CONTAIN NO MAN-MADE MATERIALS UNLESS OTHERWISE SPECIFIED. PLANTING MIX SHALL NOT BE USED WHILE IN A FROZEN OR MUDDY CONDITION, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT.
2. DOCUMENT THE PLANTING MIX SHALL CONTAIN THE FOLLOWING SPECIFIED PERCENTAGES OF CONSTITUENTS:

CLAY	MINIMUM 10% - MAXIMUM 40%
SAND	MINIMUM 20% - MAXIMUM 50%
SILT	MINIMUM 20% - MAXIMUM 50%
ORGANIC MATERIAL	MINIMUM 5% - MAXIMUM 10%
3. ORGANIC MATERIAL IS DEFINED AS COMPOST/HUMUS SUCH AS SAWDUST OR LEAF MOLD THAT HAS COMPLETED THE DECOMPRESSION PROCESS. PERCENTAGE OF ORGANIC MATTER SHALL BE DETERMINED BY LOSS ON IGNITION, OF MOISTURE FREE SAMPLES DRIED AT 65 DEGREES.
4. PLANTING MIX SHALL HAVE AN ACIDITY RANGE OF PH 5.5 TO 7.0.

SEEDING SCHEDULE

GENERAL NOTES

1. GROUND COVER - PROTECTIVE COVER MUST BE ESTABLISHED ON ALL DISTURBED AREAS WITHIN 21 CALENDAR DAYS AFTER AND DISTURBING ACTIVITY IS COMPLETED OR HAS TEMPORARILY CEASED.
2. GRADED SLOPES AND FILLS - PROTECTIVE COVER MUST BE ESTABLISHED ON ALL GRADED SLOPES AND FILLS WITHIN 21 CALENDAR DAYS AFTER AND DISTURBING ACTIVITY IS COMPLETED OR HAS TEMPORARILY CEASED.

SEEDBED PREPARATION

1. INSTALL NECESSARY MECHANICAL EROSION AND SEDIMENTATION CONTROL PRACTICES BEFORE SEEDING, AND COMPLETE GRADING ACCORDING TO THE APPROVED PLAN.
2. SPREAD TOPSOIL AT A DEPTH OF 4". WORK TOPSOIL INTO TOP 1-3" OF SUBGRADE (TOTAL PREPARED DEPTH = 4-6") BREAKING UP LARGE CLODS AND RAKING INTO A SMOOTH, UNIFORM SURFACE (SLOPES LESS THAN 3:1). LOOSE ROCKS, ROOTS, AND OTHER OBSTRUCTIONS SHALL BE REMOVED FROM THE SURFACE SO THAT THEY WILL NOT INTERFERE WITH THE ESTABLISHMENT AND MAINTENANCE OF VEGETATION. FILL IN OR LEVEL DEPRESSIONS THAT CAN COLLECT WATER.
3. IF REQUIRED, APPLY LIME AND FERTILIZER EVENLY AND INCORPORATE INTO THE TOP 4-6 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. OPERATE MACHINERY ON THE CONTOUR. WHEN USING A HYDROSEDER, APPLY LIME AND FERTILIZER TO A ROUGH, LOOSE SURFACE PREPARATION SHALL BE AT FINAL GRADES SHOWN.
4. BROADCAST SEED INTO A FRESHLY LOOSENED SEEDBED THAT HAS NOT BEEN SEALED BY RAINFALL. SURFACE FOR FINAL SEEDBED PREPARATION SHALL BE AT FINAL GRADES SHOWN.
5. LIME AND FERTILIZER NEEDS SHOULD BE DETERMINED BY SOIL TESTS. SOIL TESTING IS PERFORMED FREE OF CHARGE BY THE NORTH CAROLINA DEPARTMENT OF AGRICULTURE, SOIL TESTING LABORATORY, DIRECTIONS, SAMPLE CARTRONS, AND INFORMATION SHEETS ARE AVAILABLE THROUGH COUNTY AGRICULTURAL EXTENSION OFFICES OR FROM NCDAS. BECAUSE THE NCDAS SOIL TESTING LAB REQUIRES 1-6 WEEKS FOR SAMPLE TURN-AROUND, SAMPLING MUST BE PLANNED WELL IN ADVANCE OF FINAL GRADING. TESTING IS ALSO DONE BY COMMERCIAL LABORATORIES.
6. WHEN SOIL TESTS ARE NOT AVAILABLE, FOLLOW RATES SUGGESTED ON THE INDIVIDUAL SPECIFICATION SHEET FOR THE SEEDING MIX CHOSEN. APPLICATION RATES USUALLY FALL INTO THE FOLLOWING RANGES AS SHOWN BELOW.
7. CONTRACTOR SHALL ADJUST RATE OF APPLICATION FOR SEED, LIME, AND FERTILIZER TO MEET ACTUAL SITE CONDITIONS AND SOIL TESTS.

SEEDING SCHEDULE CONT.

SEEDING RATES

MAY 1 - AUG. 15	---	40 LBS/ACRE GERMAN MILLET AND 80 LBS/ACRE TALL FESCUE
		APPLY LIME AND FERTILIZER PER SOIL TEST, OR 2000 LBS/ACRE LIMESTONE AND 750 LBS/ACRE 10-10-10 FERTILIZER. REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE.
		APPLY 4000 LBS/ACRE STRAW OR EQUIVALENT HYDROSEEDING.
AUG. 25 - OCT. 15	---	GENTLE SLOPES 80 LBS/ACRE TALL FESCUE STEEP SLOPES 100 LBS/ACRES TALL FESCUE AND 30 LBS/ACRE SERICEA LESPEDEZA (UNSCARIFIED AFTER AUG. 15) 10 LBS/ACRE KOBE LESPEDEZA
		APPLY LIME AND FERTILIZER PER SOIL TESTS, OR 4000 LBS/ACRE LIMESTONE AND 1000 LBS/ACRE 10-10-10 FERTILIZER. OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE.
OCT. 25 - DEC. 30	---	120 LBS/ACRE RYE (GRAIN) AND 80 LBS/ACRE TALL FESCUE
		APPLY LIME AND FERTILIZER PER SOIL TEST, OR 2000 LBS/ACRE LIMESTONE AND 750 LBS/ACRE 10-10-10 FERTILIZER. BETWEEN DEC. 30 - FEB. 15, AD 50 LBS/ACRE OF ANNUAL KOBE LESPEDEZA.
		APPLY 4000 LBS/ACRE STRAW OR EQUIVALENT HYDROSEEDING.
FEB. 15 - APR. 15	---	GENTLE SLOPES 80 LBS/ACRE TALL FESCUE STEEP SLOPES 100 LBS/ACRES TALL FESCUE AND 30 LBS/ACRE SERICEA LESPEDEZA (UNSCARIFIED AFTER AUG. 15) 10 LBS/ACRE KOBE LESPEDEZA
		APPLY LIME AND FERTILIZER PER SOIL TESTS, OR 4000 LBS/ACRE LIMESTONE AND 1000 LBS/ACRE 10-10-10 FERTILIZER. TO EXTEND SPRING SEEDING INTO JUNE, ADD 15 LBS/ACRE HULLED BERMUDAGRASS.
		OVERSEEDING OF KOBE LESPEDEZA OVER FALL-SEEDED TALL FESCUE IS VERY EFFECTIVE.

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PLANTING DETAILS
FOR
MADISON PARK OUTPARCEL 2
WAXHAW, NORTH CAROLINA

MADISON WAXHAW OWNER, LLC
6805 MORRISON BLVD
CHARLOTTE NC 28211

NORTH CAROLINA PROFESSIONAL ENGINEER
C-3139
NORTH CAROLINA PROFESSIONAL ENGINEER
SEAL 028786
JEFFREY C. ORSBORN

NO.	REVISIONS	DATE

JOB # 23052
DATE: 04/01/24
SCALE: 1" = 20'
DRAWN BY: LWL
APPROVED BY: LWL
L1.2