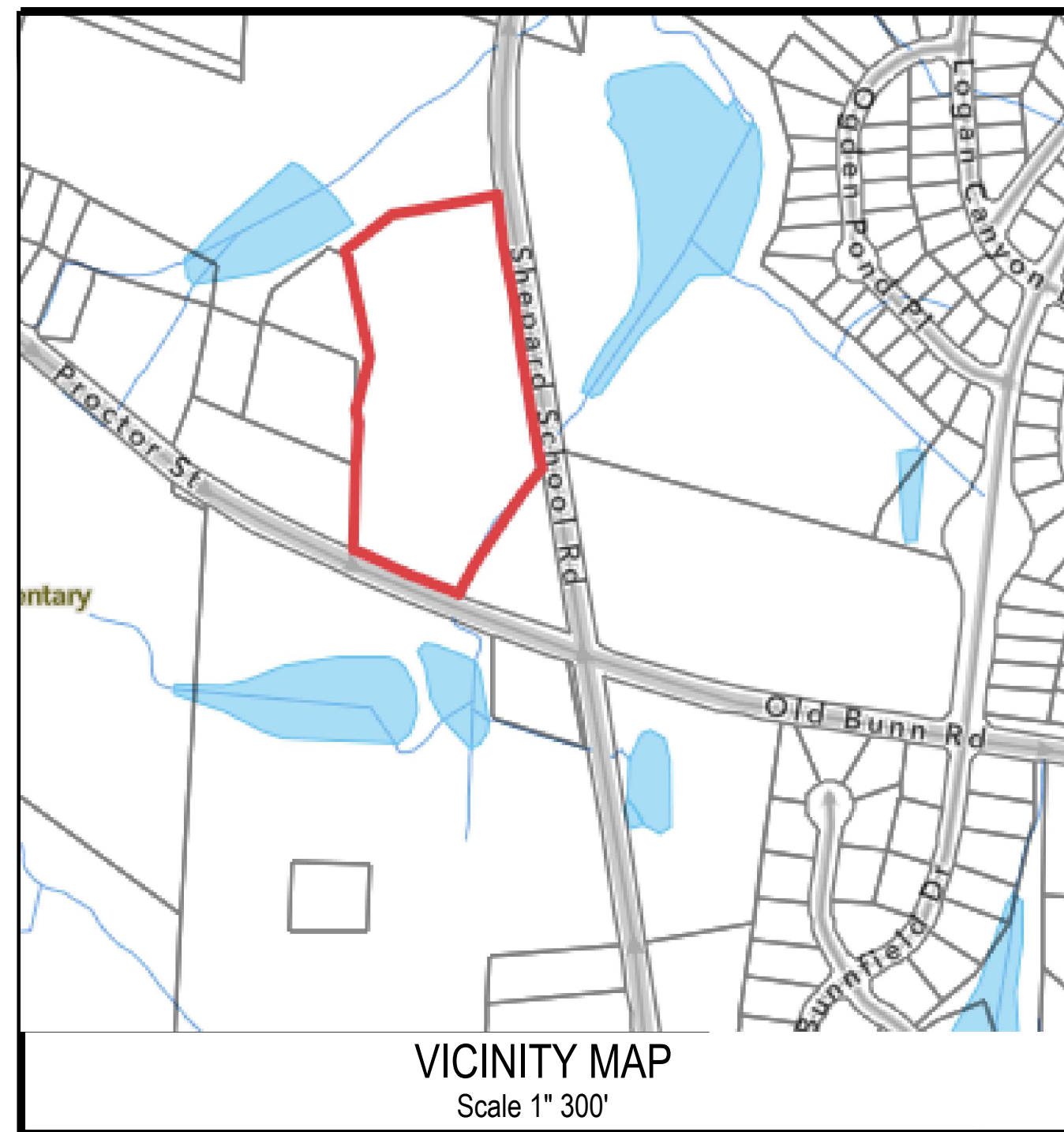


Construction Plan StorageMax

Town of Zebulon
Wake County, North Carolina

Project 1098359
SUP - 2023 -02



SITE DATA:

SITE ADDRESS:	901 PROCTOR STREET, ZEBULON NC
PN:	2706217463
CURRENT USE:	VACANT
PROPOSED USE:	SELF STORAGE FACILITY
SITE AREA (GROSS):	6.75 ac (294,161 sf)
ROW DED. SHEPARD SCHOOL:	0.29 ac (12,756 sf)
ROW DED. PROCTOR:	0.06 ac (2,569 sf)
SITE AREA (NET):	6.40 ac (278,836 sf)
ZONING DISTRICT:	HC (HEAVY COMMERCIAL)
FUTURE LAND USE:	SUBURBAN COMMERCIAL
PROPOSED BUILDING SIZE:	105,106 sf
BUILDING HEIGHT (MAX):	50'
MAX LOT COVERAGE (ALLOWED) - HC:	80% x 6.40 = (5.12 ac)
MAX LOT COVERAGE (PROVIDED) - HC:	3.64 ac / 6.40 ac = 57 %
BUILDING SETBACKS:	30' (STREET ROW) 0', 5' (SIDE) 25' (REAR)
PARKING (REQUIRED: 1 SPACE / 5000 sf):	105,106 / 5000 = 21 SPACES
PARKING (PROVIDED) :	21 SPACES
LATITUDE:	35.840297
LONGITUDE:	-78.315683
BIKE PARKING (REQUIRED)	1 per Bldg
BIKE PARKING (PROVIDED)	2
WATERSHED:	MOCCASIN CREEK
RIVER BASIN:	NEUSE
HUC:	03020203
DENUDED AREA ON SITE :	258,310.80 SF (5.93 AC)
DENUDED AREA ROW:	27,878.40 SF (64 AC)
DENUDED AREA TOTAL :	286,076 SF (6.57 AC)

OPEN SPACE (PASSIVE) SUMMARY

REQUIRED: 3% X 6.5 AC = .19AC
PROVIDED: BIORETENTION AREA WITH PEDESTRAIN ACCESS .72 AC / 6.6 AC = 11%
OPEN AREA AT THE BMP TO COMPLY WITH UDO 5.7.5

PUBLIC IMPROVEMENT QUANTITIES

PHASE NUMBER(S)	PHASE 1
NUMBER OF LOT (S)	1
LOT NUMBERS BY PHASE	1
NUMBER OF UNITS	1
LIVABLE OF UNITS	0
OPEN SPACE (YES/NO)	YES
NUMBER OF OPEN SPACE LOTS	0
PUBLIC WATER (LF)	0
PUBLIC 8" PVC SEWER	0
WATER SERVICE STUBS	1
WATER SERVICE ABANDONED	1
SEWER SERVICE STUBS (NEW)	0
SEWER SERVICE REMOVED	0

LEGEND

	NEW	EXISTING
DRAINAGE STRUCTURE		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT		
WATER VALVE		
FIRE HYDRANT		
OVERHEAD UTILITY LINE	OH	XOH
UNDERGROUND ELECTRIC LINE	E	XE
UNDERGROUND TELECOM/DATA LINE	TD	XTD
FIBER OPTIC CABLE	FO	XFO
GAS LINE	G	XG
STORM DRAINAGE PIPE	SD	XSD
SANITARY SEWER LINE	SS	XSS
WATER LINE	W	XW
SURFACE ELEVATION CONTOUR	400	400
SURFACE SPOT ELEVATION	356.44	356.44
CLEARING LIMIT/TREE LINE		
LIMIT OF DISTURBANCE		
ELECTRICAL TRANSFORMER PAD		
TOWNHOME PARKING (NUMBER)	71	



SHEET	DESCRIPTION
C0	Cover Sheet
C1	Existing Conditions Survey
C2	Existing Conditions & Tree Survey
C3	Site Plan - Overall
C4	Site Plan - Enlarged North
C5	Site Plan - Enlarged South
C6	Grading Plan - Overall
C7	Grading Plan - Enlarged North
C8	Grading Plan - Enlarged South
C9	Utility Plan - Overall
C10	Utility Plan - Enlarged North
C11	Utility Plan - Enlarged South
C12	Shepard School - Widening and Striping
C13	Shepard School - Plan and Profile
C14	Shepard School - Cross-Sections
D1	Easement Plan
D2	Standard Site Details
D3	Stormwater Details
D4	BMP Bioretention Detail
D5	Water and Sanitary Sewer Details
EC1	NCDOT Roadway Details
EC2	Phase 1 - Erosion Control Plan
EC3	Phase 2 - Erosion Control Plan
EC4	Phase 3 - Erosion Control Plan
EC5	Phase 4 - Erosion Control Plan
EC6	Erosion Control Details
EC7	Erosion Control Details
ES101	NGO1 Requirements
ES001	Site Photometric Plan
LS1	Exterior Lighting Cut Sheets
LS2	Planting Plan - North
LS3	Planting Plan - South
	Planting Details
	Architectural

PROJECT INFORMATION:

PROJECT: STORAGE MAX COMMERCIAL
OWNER / DEVELOPER: SHEPARD SCHOOL, LLC
2700 GRESHAM LAKE RD.
RALEIGH, NC 27615
CONTACT: ALLEN MASSEY
(919) 604-0505
EMAIL: STORIT@AOL.COM
ENGINEER: KEITH P. GETTLE, PE
GETTLE ENGINEERING AND DESIGN, PLLC
LICENSE: P-2538
3616 WAXWING CT.
WAKE FOREST, NC 27587
PHONE: (919) 210-3934
EMAIL: KPGETTLE@GMAIL.COM
SURVEYOR: CAWTHORNE MOSS AND PANCIERA P.C.
333 SOUTH WHITE STREET
WAKE FOREST NORTH CAROLINA 27588
PHONE: (919) 556- 3148
OVERLAY: NONE
FLOOD ZONE: NO FLOOD HAZARDS AREAS PER FEMA FIRM 3720270600K

ATTENTION CONTRACTORS
The Construction Contractor responsible for the extension of water, sewer, and/or gas, as approved in these plans, is responsible for contacting the Public Works Department at (919) 996-2409, and the Public Utilities Department at (919) 996-1540 at least twenty four hours prior to beginning any of their construction.
Failure to notify both City Departments in advance of beginning construction, will result in the issuance of monetary fines, and require remediation of any water or sewer facilities not inspected as a result of this notification failure.
Failure to call for inspection, install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a Fine and Possible Exclosure from future work in the City of Raleigh.

EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

APPROVED

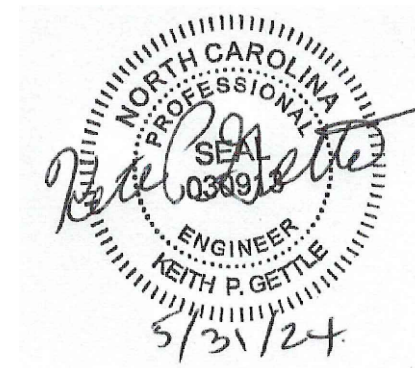
EROSION CONTROL SEC- _____

STORMWATER MGMT. SWF- _____

FLOOD STUDY SWF- _____

DATE _____

ENVIRONMENTAL CONSULTANT SIGNATURE _____



GENERAL NOTES

- BOUNDARY AND TOPO INFORMATION TAKEN FROM CAWTHORNE, MOSS & PANCIERA, P.C., SURVEYING, TITLED TOPOGRAPHIC SURVEY FOR STORAGE MAX LLC, DATED DECEMBER 22, 2022.
- CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES & SHALL BE RESPONSIBLE FOR ANY DAMAGE RESULTING FROM HIS ACTIVITIES. CALL UTILITY LOCATOR SERVICE AT LEAST 48 HOURS PRIOR TO DIGGING.
- ALL CONSTRUCTION WILL BE IN STRICT CONFORMANCE TO THE TOWN OF ZEBULON, CITY OF RALEIGH, WAKE COUNTY AND NCDOT STANDARDS AND SPECIFICATIONS.
- NO CHANGES MAY BE MADE TO THE APPROVED DRAWINGS WITHOUT WRITTEN PERMISSION FROM THE ISSUING AUTHORITY.
- THE PARCEL IS NOT LOCATED WITHIN A FLOOD ZONE AS NOTED PER FEMA MAP 372020600J, DATED MAY 2, 2006.
- BUILDING AND ENTRANCE SIGNAGE TO COMPLY WITH THE TOWN OF ZEBULON UDO SECTION 5.11.
- EMERGENCY COMMUNICATION WITHIN THE BUILDINGS, AND ON SITE, SHALL BE EVALUATED DURING DETAILED SITE PLAN DEVELOPMENT; DETERMINATION IF BIDIRECTIONAL REPEATERS ARE REQUIRED.
- ROAD WORK ON SHEPARD AND PROCTOR STREETS TO BE CONSISTENT WITH THE TRANSPORTATION PLAN IMPROVEMENTS. SHEPARD IS PROPOSED TO HAVE A 4 LANE DIVIDED ROADWAY, AND PROCTOR ST. TO HAVE A 2 LANE DIVIDED ROADWAY. THE PROJECT IS RESPONSIBLE FOR 1/2 OF ROADWAY IMPROVEMENTS AND THE CENTER MEDIAN WILL BE CONSIDERED FEE-IN-LEU.
- SOLID WASTE DISPOSAL TO BE PROVIDED BY A ROLL TYPE REFUSE BIN AND STORED AT THE OFFICE BUILDING. THE CONTAINER TO BE ROLLED OUT TO PROCTOR STREET ON SCHEDULED DATES OF WASTE PICKUP.

Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

NO	DATE	REVISION/DESCRIPTION	BY
1	01-05-2024	Per Town Comment	KPG
2	03-08-2024	Per Town Comment	KPG
3	05-31-2024	Per Town, Raleigh and Wake County Comment	KPG
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY
NO	DATE	REVISION/DESCRIPTION	BY

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

City of Raleigh Development Approval _____
City of Raleigh Review Officer _____

Cover Sheet
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. C0

I, L. JORDAN PARKER, JR. CERTIFY THAT THIS PLAT WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL GLOBAL POSITIONING SYSTEM (GPS) SURVEY MADE UNDER MY SUPERVISION AND THE FOLLOWING INFORMATION WAS USED TO PERFORM THE SURVEY: SURVEY TYPE: REAL TIME KINEMATICS (RTK); BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION SHOWN IN THE REFERENCES; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS GREATER THAN 1:10000; THIS SURVEY IS NOT TO BE RECORDED WITHOUT THE WRITTEN CONSENT OF THE SURVEYOR.



CLASS OF SURVEY: AA
POSITIONAL ACCURACY: HORIZONTAL 0.005 US SURVEY FEET
TYPE OF GPS FIELD PROCEDURE: REAL TIME KINEMATICS
NETWORK (VRS):
DATE OF SURVEY:
DATUM/EPOCH: NAD 83/2011.1, 2010.00
PUBLISHED/PRINT CONTROL USE: BOUNDARY CONTROL APP
LAT: 35°45'19.50795"
LONG: 78°3'44.39448"
GEOID MODEL: GEOID12B
COMBINED GEO FACTORS: 1.5000841568206
UNITS: US SURVEY FOOT

THIS 13TH DAY OF DECEMBER, A.D. 2023.

Surveyed by: **Larry Jordan Parker, Jr.**
PROFESSIONAL LAND SURVEYOR LICENSE NUMBER: L-4686

Table with 4 columns: Point, Northing, Easting, Description. Lists tree species and sizes (e.g., SWEET GUM-26, OAK-13, CHINA BERRY-19) and their locations on the site.

LINE TABLE with columns: LINE, BEARING, DISTANCE. Lists utility lines such as N 82°24'56" W 1.50' and S 23°32'24" W 1.50'.

CURVE TABLE with columns: CURVE, ARC LENGTH, RADIUS, CHORD LENGTH, CHORD BEARING. Lists curve data for C-1 through C-5.

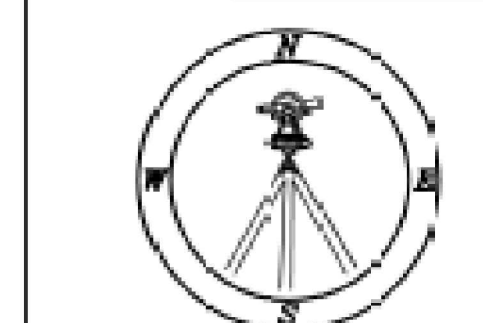
- LEGEND: Symbols for existing iron pipe, iron bar, iron pipe, iron bar, concrete monument, existing iron nail, set iron nail, new iron pipe set, right of way, cable tv box, electric box, telephone pedestal, primer pole, crossroad line, light pole, water meter, water valve, sewer clean-out, manhole, catch basin, manhole, fire hydrant, retaining wall, D.A.T. 98% field located.

- NOTES: 1. THIS PLAT SUBJECT TO ALL EASEMENTS, AGREEMENTS AND RIGHTS OF WAY OF RECORD PRIOR TO THE DATE OF THIS PLAT. 2. UNDERGROUND UTILITIES HAVE BEEN MARKED OR LOCATED FOR THIS PLAT BY GC MAPPING SERVICE, INC. 3. ALL BEARINGS AND DISTANCES ARE HORIZONTAL (GROUNDED) MEASUREMENTS. 4. ALL ELEVATIONS ARE BASED ON NAVD 88. 5. ALL CONTOURS ARE 1' INTERVALS HIGHLIGHTED EVERY 5'. 6. THERE IS NO MONUMENT WITHIN 2000' OF THIS PROPERTY. 7. NORTH ROTATION WAS OBTAINED VIA NC-VRS.

- LINE TYPE LEGEND: Symbols for property line (line surveyed), right-of-way, adjoining line (line not surveyed), overhead line, building setback, easement, barrier, flood hazard soils, electric line, gas line, water line, sewer line, communication, tree line.

REVISION BOX table with columns: NO., DATE, DESCRIPTION. Shows revisions for added MM location and utility line.

TOPOGRAPHIC SURVEY FOR STORAGE MAX
901 PROCTOR STREET
OWNER: SHEPARD SCHOOL, LLC
REF: D.B. 19275, PAGE 2208
TOWN OF ZEBULON
LITTLE RIVER TOWNSHIP
WAKE COUNTY, NORTH CAROLINA
SCALE 1"=60'
DECEMBER 21, 2022
ZONED HC
PIN #2706.18-21-7463



Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

Table with 4 columns: NO., DATE, COMMENT, BY. Lists revision entries for the plat.

Existing Conditions Survey
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No.

TREE SPECIES & SIZE(N) TABLE			
Point	Northing	Easting	Description
6174	761085.096	2202622.318	SWEET GUM-26
6175	761031.969	2202655.727	SWEET GUM-22
6178	761224.598	2202568.487	OAK-8
6179	761215.598	2202574.439	BRADFORD PEAR-5
6180	761204.663	2202566.320	OAK-13
6181	761214.357	2202566.790	CHERRY-9
6182	761216.192	2202564.746	CEDAR-8
6183	761191.087	2202568.571	CEDAR-8
6184	761193.251	2202574.966	CEDAR-10
6185	761181.572	2202575.734	PRIVET-4X3
6186	761176.699	2202573.424	PRIVET-4
6187	761163.074	2202581.026	SWEET GUM-7
6188	761164.004	2202575.940	SWEET GUM-9
6189	761128.633	2202563.736	CHINABERRY-6
6190	761136.190	2202564.997	SWEET GUM-8X2
6191	761145.027	2202581.485	BRADFORD PEAR-7
6192	761143.632	2202585.004	CHINABERRY-8
6193	761143.133	2202580.059	CHINABERRY-4
6194	761252.133	2202572.561	CHERRY-4
6195	761243.993	2202578.908	CHINABERRY-4X2
6196	761272.803	2202570.394	ELM-4
6197	761267.266	2202567.289	OAK-7
6198	761265.382	2202575.248	CHINABERRY-6
6199	761308.967	2202569.211	OAK-21
6200	761317.252	2202569.247	SWEET GUM-8X2
6201	761320.654	2202569.341	OAK-7
6202	761327.774	2202569.191	CHERRY-6
6203	761324.010	2202570.176	CHERRY-5
6204	761327.806	2202575.451	BRADFORD PEAR-10
6205	761323.604	2202574.384	PINE-4
6206	761332.163	2202567.391	OAK-4
6207	761340.449	2202572.910	OAK-11
6208	761345.444	2202569.132	OAK-11
6209	761343.307	2202569.635	CEDAR-4
6210	761333.508	2202569.611	CEDAR-4
6211	761355.945	2202568.262	SWEET GUM-9
6212	761355.480	2202573.304	OAK-8
6213	761361.833	2202569.043	CEDAR-5
6214	761367.997	2202572.061	OAK-11
6215	761373.555	2202575.169	OAK-5
6216	761373.510	2202573.973	BRADFORD PEAR-8
6217	761383.379	2202574.540	CEDAR-8
6218	761388.348	2202577.079	CHERRY-7
6219	761390.696	2202575.970	CEDAR-8
6220	761393.644	2202575.338	CEDAR-8
6221	761405.925	2202584.009	SWEET GUM-13X3
6222	761410.462	2202581.325	CHERRY-10
6223	761409.734	2202584.910	CEDAR-7
6224	761423.946	2202584.696	CHERRY-4
6225	761438.719	2202589.790	CHERRY-4
6226	761435.986	2202590.244	SWEET GUM-8
6227	761429.364	2202589.024	SWEET GUM-11
6228	761428.331	2202586.395	SWEET GUM-8
6229	761435.469	2202596.321	BRADFORD PEAR-4
6230	761433.636	2202593.164	OAK-8
6231	761454.539	2202594.369	OAK-27
6232	761462.670	2202595.652	OAK-18
6233	761467.122	2202594.529	OAK-7
6234	761485.052	2202596.549	SWEET GUM-8
6235	761492.602	2202595.089	SWEET GUM-6
6236	761494.097	2202594.909	CEDAR-5
6237	761503.809	2202590.908	CEDAR-7
6238	761507.456	2202590.338	CHERRY-5
6239	761512.563	2202590.286	SWEET GUM-7
6240	761525.096	2202587.000	OAK-18
6241	761527.229	2202585.513	SWEET GUM-4
6242	761529.155	2202586.475	CEDAR-6
6243	761540.840	2202584.408	BRADFORD PEAR-7
6244	761542.150	2202583.434	OAK-6
6245	761534.401	2202583.939	SWEET GUM-8
6246	761538.972	2202584.218	OAK-9
6247	761670.783	2202552.404	OAK-7
6248	761764.823	2202555.858	OAK-4
6249	761764.804	2202558.175	SWEET GUM-5
6250	761768.543	2202558.236	OAK-5
6251	761775.244	2202570.541	OAK-4
6252	761775.351	2202568.119	CHINABERRY-7X2
6253	761774.528	2202564.391	OAK-4
6254	761801.910	2202600.836	OAK-5
6255	761808.215	2202611.799	CHINABERRY-11
6256	761803.777	2202611.937	CHINABERRY-19
6257	761807.115	2202618.437	CHINABERRY-7
6258	761805.711	2202616.515	CHINABERRY-4
6259	761816.433	2202623.170	OAK-11
6260	761819.156	2202622.737	OAK-8
6261	761816.162	2202618.452	OAK-4
6262	761822.666	2202632.380	OAK-12
6263	761831.660	2202641.175	CHINABERRY-12X3
6264	761837.183	2202643.970	CHINABERRY-11X2
6265	761839.450	2202647.234	CHINABERRY-11X3
6266	761814.819	2202631.253	CHINABERRY-10
6267	761816.300	2202635.425	CHINABERRY-5
6268	761822.055	2202641.536	CHINABERRY-5

LINE TABLE		
LINE	BEARING	DISTANCE
L-1	N 14°32'48" E	122.39'
L-2	S 67°30'28" E	51.06'

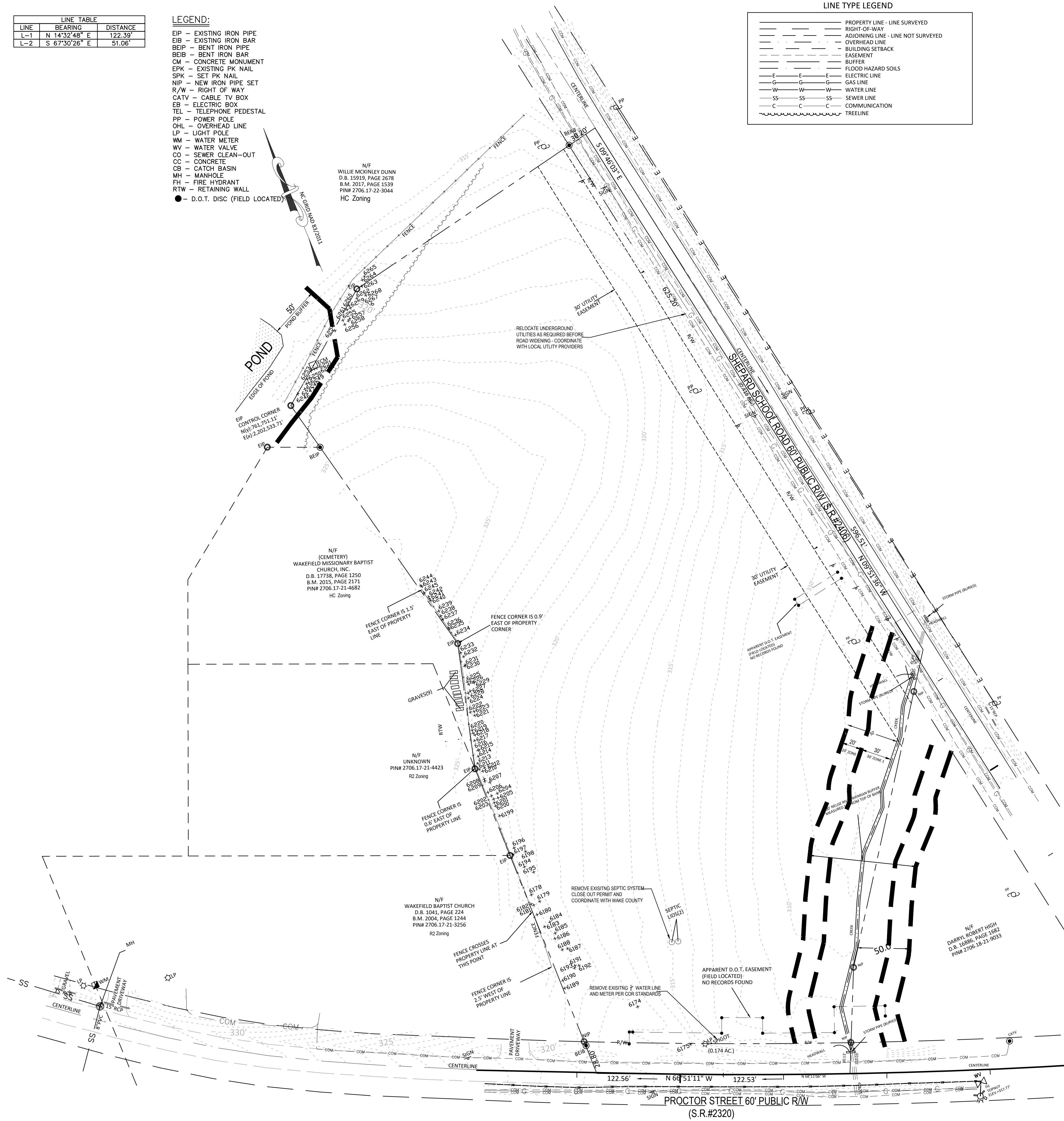
LEGEND:

- EIP - EXISTING IRON PIPE
- EIB - EXISTING IRON BAR
- BEIP - BENT IRON PIPE
- BEIB - BENT IRON BAR
- CM - CONCRETE MONUMENT
- EPK - EXISTING PK NAIL
- SPK - SET PK NAIL
- NIP - NEW IRON PIPE SET
- R/W - RIGHT OF WAY
- CATV - CABLE TV BOX
- EB - ELECTRIC BOX
- TEL - TELEPHONE PEDESTAL
- PP - POWER POLE
- OHL - OVERHEAD LINE
- LP - LIGHT POLE
- WM - WATER METER
- WV - WATER VALVE
- CO - SEWER CLEAN-OUT
- CC - CONCRETE
- CB - CATCH BASIN
- MH - MANHOLE
- FH - FIRE HYDRANT
- RTW - RETAINING WALL
- - D.O.T. DISC (FIELD LOCATED)

LINE TYPE LEGEND	
---	PROPERTY LINE - LINE SURVEYED
---	RIGHT-OF-WAY
---	ADJOINING LINE - LINE NOT SURVEYED
---	OVERHEAD LINE
---	BUILDING SETBACK
---	EASEMENT
---	BUFFER
---	FLOOD HAZARD SOILS
E - E	ELECTRIC LINE
G - G	GAS LINE
W - W	WATER LINE
SS - SS	SEWER LINE
C - C	COMMUNICATION
---	TRELLINE

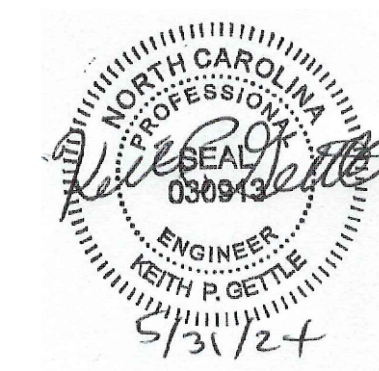
DEMOLITION NOTES

- DO NOT INTERRUPT EXISTING UTILITIES SERVING FACILITIES OCCUPIED BY THE OWNER OR OTHERS EXCEPT WHEN PERMITTED UNDER THE FOLLOWING CONDITIONS AND THEN ONLY AFTER ARRANGING TO PROVIDE ACCEPTABLE TEMPORARY UTILITY SERVICES. (1) NOTIFY OWNER NOT LESS THAN ONE WEEK IN ADVANCE OF PROPOSED UTILITY INTERRUPTIONS. (2) DO NOT PROCEED WITH UTILITY INTERRUPTIONS WITHOUT RECEIVING OWNER WRITTEN PERMISSION. (3) COORDINATE ALL UTILITY RELOCATION WITH APPROPRIATE UTILITY PROVIDER.
- SUBSURFACE FEATURES ARE SHOWN IN APPROXIMATE LOCATION. CONTRACTOR IS RESPONSIBLE FOR SUBSURFACE UTILITY EXPLORATION TO DETERMINE UTILITY LOCATIONS AND DEPTHS.
- VERIFY LOCATIONS AND SIZES OF ALL EXISTING FEATURES PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- LOCATE EXISTING UTILITIES PRIOR TO CONSTRUCTION, AND REPAIR OR REPLACE ANY DAMAGES TO EXISTING UTILITIES RESULTING FROM CONSTRUCTION.
- THIS PLAT SUBJECT TO ALL EASEMENTS, AGREEMENTS AND RIGHTS OF WAY OF RECORD PRIOR TO THE DATE OF THIS PLAT.
- UNDERGROUND UTILITIES HAVE BEEN MARKED OR LOCATED FOR THIS PLAT BY GC MAPPING SERVICE, INC.
- ALL BEARINGS AND DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS
- ALL ELEVATIONS ARE BASED ON NAVD 88
- ALL CONTOURS ARE AT 1' INTERVALS HIGHLIGHTED EVERY 5'
- THERE IS NO NCGS MONUMENT WITHIN 2000' OF THIS PROPERTY.
- NORTH ROTATION WAS OBTAINED VIA NC-VRS.



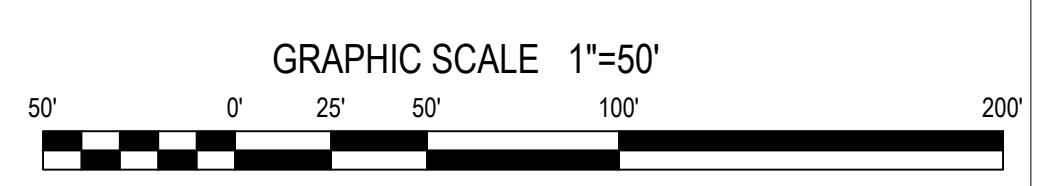
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
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 (919) 210-3934 Firm License P-2538

NO.	DATE	BY	REVISION/DESCRIPTION
1	07-05-2024	PHI Town Comment	
2	03-08-2024	PHI Town Comment	
3	05-31-2024	PHI Town Comment	
4	DATE	COMMENT	
5	DATE	COMMENT	
6	DATE	COMMENT	
8	Dwg	Comment	



Existing Conditions / Tree Survey
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C1**



Legend

Open Space

Sidewalk

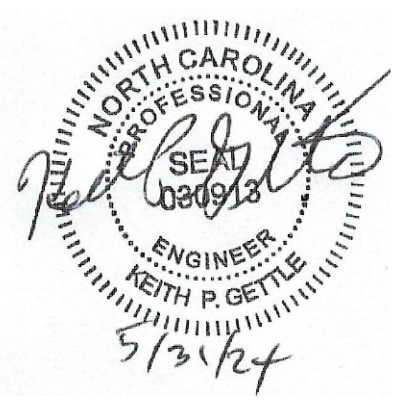
Stamped Concrete

SITE NOTES

- WHERE NEW CURB AND GUTTER IS INSTALLED IN A PUBLIC STREET RIGHT-OF-WAY, USE 30" CURB AND GUTTER. IN OTHER LOCATIONS, USE 24" CURB AND GUTTER.
- ALL CURB DIMENSIONS ARE MEASURED TO BACK OF CURB, AND ALL CURB RADI ARE 3 FEET, UNLESS INDICATED OTHERWISE.
- USE REVERSE-PITCH CURB AND GUTTER WHERE ADJACENT PAVEMENT SLOPES AWAY FROM CURB, AND STANDARD-PITCH CURB AND GUTTER ELSEWHERE, UNLESS OTHERWISE NOTED. PROVIDE POSITIVE DRAINAGE ALONG AND FROM ALL GUTTERS.
- ALL SITE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE INDICATED.
- ALL BASE AND PAVING WORK SHALL COMPLY WITH LOCAL STANDARDS. INDICATED PAVEMENT THICKNESSES REFER TO COMPACTED THICKNESS.
- INSTALL ALL PAVEMENT WITH POSITIVE SURFACE DRAINAGE.
- ALL HANDICAPPED PARKING SPACES, AISLES, RAMPS, SIGNAGE, PAVEMENT MARKINGS, CROSSWALKS, AND ACCESSIBLE ROUTES SHALL MEET APPLICABLE REQUIREMENTS OF THE NORTH CAROLINA ACCESSIBILITY CODE.
- ALL HANDICAP ACCESSIBLE PARKING SPACES SHALL HAVE AN R7-8 AND R7-8D SIGN. ALL SIGNS FOR VAN ACCESSIBLE SPACES SHALL ALSO INCLUDE A "VAN ACCESSIBLE" SIGN.
- CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES DURING THE COURSE OF PROJECT WORK IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, THE N.C. SUPPLEMENT TO THE MUTCD, ANY REGULATORY AGENCY REQUIREMENTS, AND PROJECT-SPECIFIC SAFETY CONSIDERATIONS.
- TIE-INS TO EXISTING PAVEMENT, CURBS, WALKS, ETC. SHALL BE MADE WITH NEAT EDGES AND SMOOTH, GRADUAL TRANSITIONS THAT ARE SAFE, FUNCTIONAL, DURABLE, AND VISUALLY ACCEPTABLE TO THE OWNER AND REVIEW AUTHORITIES.
- BUILDING SIZE, CONFIGURATION, ARCHITECTURAL ELEMENTS, UTILITY STUBS, AND OTHER BUILDING FEATURES SHOWN ON THESE DRAWINGS ARE TAKEN FROM INFORMATION PROVIDED BY OTHERS. BUILDING LINES SHOWN GENERALLY REPRESENT THE EXTERIOR FACE OF THE BUILDING, BUT SHOULD NOT BE USED FOR BUILDING STAKING OR CONSTRUCTION. REFER TO BUILDING PLANS FOR ACTUAL BUILDING DIMENSIONS, DOOR LOCATIONS, COLUMN AND FOOTING LOCATIONS, WALL THICKNESSES, OVERHANGS, ROOF LINES, AND OTHER FEATURES. CONTRACTOR SHALL COORDINATE UTILITY AND DRAINAGE LOCATIONS, ELEVATIONS, MATERIALS, AND SIZES WITH INFORMATION SHOWN ON THE BUILDING DRAWINGS; AND SHALL VERIFY THAT BUILDING ELEMENTS WILL NOT ENCRoACH INTO REQUIRED SETBACKS.

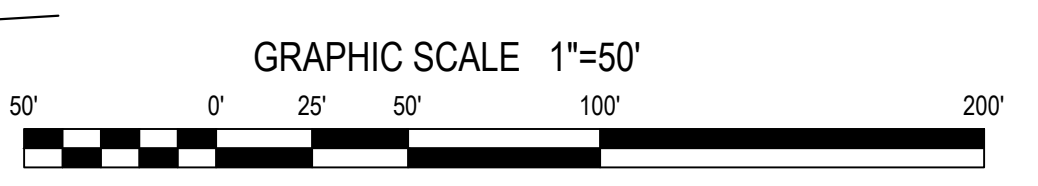
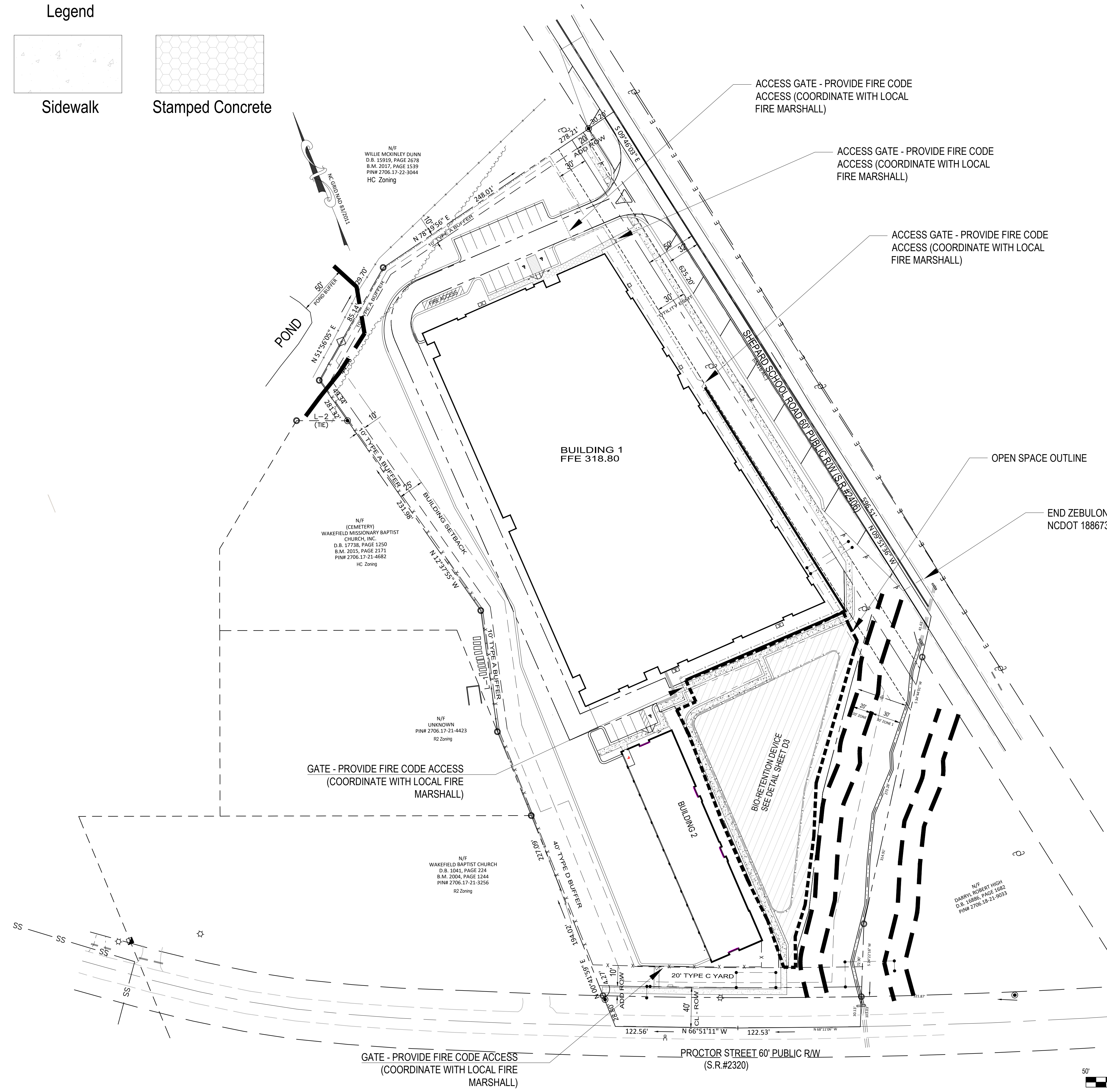
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO.	DATE	BY	REVISION/DESCRIPTION
1	01-05-2024		PRELIMINARY
2	03-08-2024		REVISED PER COMMENTS
3	05-01-2024		REVISED PER COMMENTS
4			
5			
6			
7			
8			



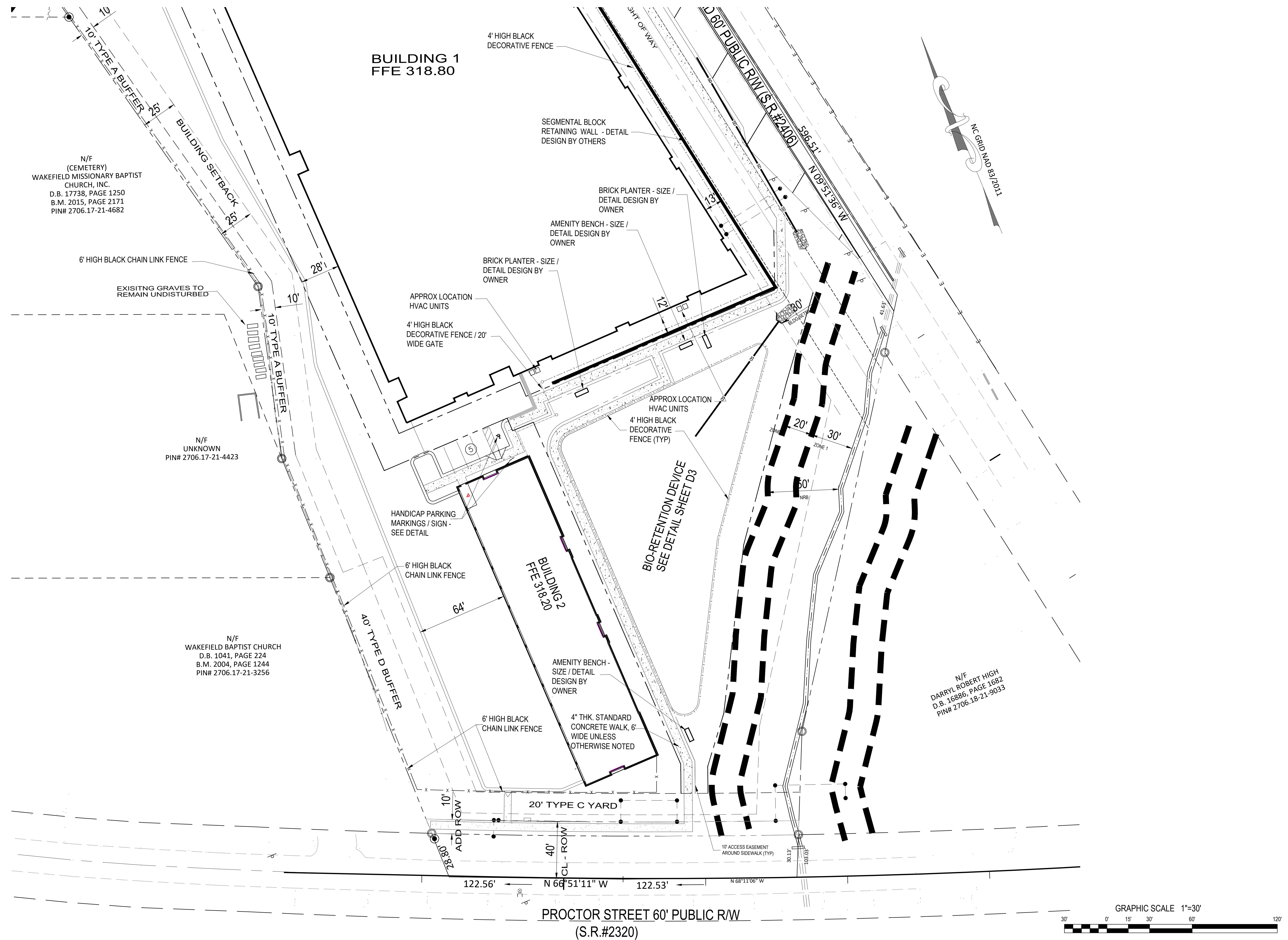
OPEN SPACE (PASSIVE) SUMMARY

REQUIRED: 3% X 6.5 AC = .19AC
 PROVIDED: BIORETENTION AREA WITH PEDESTRAIN ACCESS .72 AC / 6.6 AC = 11%
 OPEN AREA AT THE BMP TO COMPLY WITH UDO 5.7.5



Site Plan - Overall
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C2**



N/F
(CEMETERY)
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
D.B. 17738, PAGE 1250
B.M. 2015, PAGE 2171
PIN# 2706.17-21-4682

N/F
UNKNOWN
PIN# 2706.17-21-4423

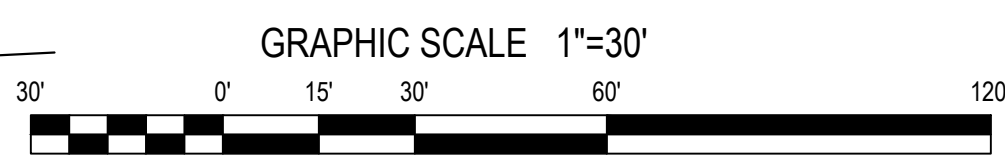
N/F
WAKEFIELD BAPTIST CHURCH
D.B. 1041, PAGE 224
B.M. 2004, PAGE 1244
PIN# 2706.17-21-3256

N/F
DARRYL ROBERT HIGH
D.B. 16886, PAGE 1682
PIN# 2706.18-21-9033

BUILDING 1
FFE 318.80

BUILDING 2
FFE 318.20

PROCTOR STREET 60' PUBLIC R/W
(S.R.#2320)



Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

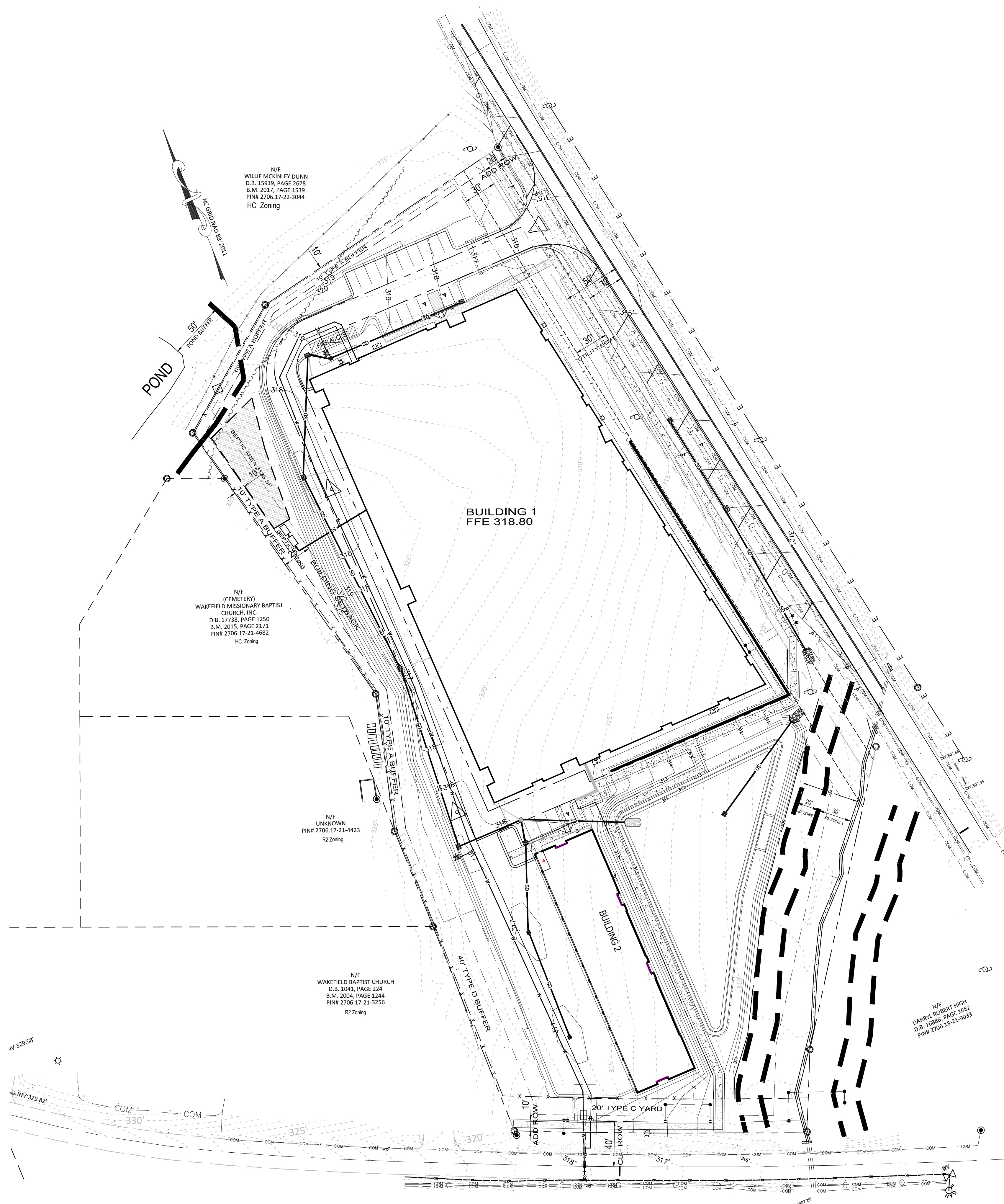
NO.	DATE	REVISION DESCRIPTION	BY
1	01-05-2024	Per Town Comment	KPG
2	05-08-2024	Per Town, COB AND Wake County Comment	KPG
3	05-31-2024	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY



Site Plan - Enlarged South
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001

Dwg No. **C4**



N/F
WILLIE MCKINLEY DUNN
D.B. 15919, PAGE 2678
B.M. 2017, PAGE 1539
PIN# 2706.17-22-3044
HC Zoning

N/F
CEMETERY
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
D.B. 17738, PAGE 1250
B.M. 2015, PAGE 3171
PIN# 2706.17-21-4682
HC Zoning

N/F
UNKNOWN
PIN# 2706.17-21-4423
R2 Zoning

N/F
WAKEFIELD BAPTIST CHURCH
D.B. 1041, PAGE 224
B.M. 2004, PAGE 1244
PIN# 2706.17-21-3256
R2 Zoning

N/F
DARRYL ROBERT HIGH
D.B. 18989, PAGE 1982
PIN# 2706.18-21-8093

GENERAL GRADING AND STORM DRAINAGE SPECIFICATIONS

EXISTING CONDITIONS

- INFORMATION ABOUT EXISTING UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS NOT BASED ON AN EXHAUSTIVE INVESTIGATION OF SUCH FACILITIES OR CONDITIONS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PARTY REGARDING THEM. EXISTING UTILITY LINE LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE, AND ACTUAL UTILITIES AND CONDITIONS MAY DIFFER FROM THOSE INDICATED. IF DIFFERING UTILITIES OR CONDITIONS EXIST, THEY MAY BE ENCOUNTERED DURING THE COURSE OF THE PROJECT WORK, AND MAY IMPACT THE PROJECT SCOPE AND TIME REQUIREMENTS.

PROTECTION AND SAFETY

- PRIOR TO BEGINNING WORK, AND AS NEEDED DURING THE COURSE OF PROJECT WORK, CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY LOCATION SERVICES AND UTILITY PROVIDERS TO REASONABLY VERIFY THE LOCATION OF ALL KNOWN OR SUSPECTED UTILITIES, IN ACCORDANCE WITH STATE REGULATIONS. CONTRACTOR IS ADVISED THAT SOME UTILITY PROVIDERS DO NOT SUBSCRIBE TO ONE-CALL SERVICES, AND MUST BE CONTACTED SEPARATELY.
- CONTRACTOR SHALL PROVIDE ADEQUATE MEANS AND METHODS FOR PROTECTION OF ALL EXISTING UTILITIES AND SITE FEATURES WHICH ARE INTENDED TO REMAIN IN SERVICE OR IN PLACE.
- CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES DURING THE COURSE OF PROJECT WORK IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, THE N.C. SUPPLEMENT TO THE MUTCD, ANY REGULATORY AGENCY REQUIREMENTS, AND PROJECT-SPECIFIC SAFETY CONSIDERATIONS.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY PROGRAMS AND MEASURES ON THE PROJECT SITE OR OTHERWISE RELATING TO THE PROJECT WORK, AND SHALL COMPLY WITH ALL SAFETY CODES AND REGULATIONS APPLICABLE THERETO, FOR THE PROTECTION OF WORKERS, VISITORS, AND THE GENERAL PUBLIC.

COMPLIANCE

- ALL WORK SHALL BE IN ACCORDANCE WITH APPLICABLE STANDARDS AND REQUIREMENTS OF THE CITY OF RALEIGH, TOWN OF ZEBULON, WAKE COUNTY SEDIMENTATION AND EROSION CONTROL OFFICE, AND THE N.C. STATE BUILDING CODES.

NOTIFICATIONS

- NOTIFY THE ENGINEER AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING ANY STORM DRAINAGE OR STORMWATER IMPOUNDMENT BASIN WORK.
- NOTIFY THE APPLICABLE LOCAL GOVERNMENT AUTHORITIES IN ACCORDANCE WITH THEIR REQUIREMENTS PRIOR TO BEGINNING ANY WORK.
- NOTIFY THE GEOTECHNICAL ENGINEER AND TESTING SERVICE AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING ANY GRADING OR STORMWATER IMPOUNDMENT BASIN WORK.

QUALITY CONTROL

- ALL EARTHWORK OPERATIONS, INCLUDING TOPSOIL STRIPPING, STOCKPILING, EXCAVATION, FILLING, COMPACTING, TRENCHING, BACKFILLING, RETAINING WALLS, AND FINE-GRADING, SHALL BE PERFORMED IN ACCORDANCE WITH THE RECOMMENDATIONS OF A GEOTECHNICAL ENGINEER, WHO SHALL VERIFY THE SUITABILITY OF SOIL MATERIALS, MONITOR EARTHWORK ACTIVITIES, DIRECT AND OBSERVE PROOFROLLING, AND PROVIDE COMPACTION AND STABILITY TESTING DURING THE PROGRESS OF THE WORK.
- NO SOIL SHALL BE PLACED IN A PERMANENT LOCATION UNLESS IT HAS BEEN APPROVED BY THE GEOTECHNICAL ENGINEER FOR THE INTENDED USE AND LOCATION.
- PRIOR TO PLACEMENT OF ANY FILL, THE SUBGRADE OR PREVIOUS LIFT OF FILL SHALL BE SUCCESSFULLY TESTED OR OTHERWISE APPROVED, AND DETERMINED TO BE READY FOR SUBSEQUENT WORK.
- PRIOR TO PLACEMENT OF ANY AGGREGATE, PAVING, SLABS, STRUCTURES, FOOTINGS, PIPING, OR OTHER WORK, SUBGRADES AND OTHER BEARING SURFACES SHALL BE SUCCESSFULLY TESTED OR OTHERWISE APPROVED, AND DETERMINED TO BE READY FOR SUBSEQUENT WORK.
- CONTRACTOR SHALL ALLOW AND PARTICIPATE IN SOIL TESTING ACTIVITIES, INCLUDING ACTIVE COORDINATION WITH THE GEOTECHNICAL ENGINEER AND FURNISHING PROOFROLLING EQUIPMENT, MATERIALS, AND MANPOWER AS NEEDED.

CLEARING & GRUBBING

- ALL VEGETATIVE MATERIAL DISLOCATED BY CLEARING AND GRUBBING ACTIVITIES SHALL BE COMPLETELY REMOVED FROM THE PROJECT SITE AND LEGALLY DISPOSED. NO ONSITE BURNING OF CLEARING WASTE SHALL OCCUR.
- ALL PAVEMENT, CURB, PIPE, STRUCTURES AND OTHER PHYSICAL SITE FEATURES THAT ARE INDICATED OR REQUIRED TO BE REMOVED SHALL BE LEGALLY DISPOSED IN AN OFFSITE LOCATION.

GRADING

- STRUCTURAL FILL IS DEFINED AS SOIL CLASSIFIED AS SM, SC, ML, AND CL, FREE OF VEGETATIVE MATTER, DEBRIS OR OTHER UNSUITABLE MATTER, FREE OF ROCKS LARGER THAN 3 INCHES IN ANY DIMENSION, CAPABLE OF BEING COMPACTED TO THE REQUIRED DENSITY, AND WHICH HAS BEEN APPROVED FOR USE BY THE GEOTECHNICAL ENGINEER.
- OTHER SOIL NOT MEETING THE DEFINITION FOR STRUCTURAL FILL MAY BE APPROVED BY THE GEOTECHNICAL ENGINEER FOR USE UNDER LIMITED CONDITIONS OR IN LIMITED AREAS.
- STRUCTURAL FILL SHALL GENERALLY BE PLACED AND COMPACTED WHEN THE SOIL'S MOISTURE CONTENT IS WITHIN 4 PERCENTAGE POINTS OF THE SOIL'S OPTIMUM MOISTURE CONTENT, IN LIFTS NOT TO EXCEED 8 INCHES LOOSE THICKNESS. THE IN-PLACE COMPACTED DENSITY SHALL BE AT LEAST 90 PCF. TIGHTER SPECIFICATIONS MAY BE REQUIRED FOR CERTAIN AREAS, SOIL TYPES, OR COMPACTION METHODS.
- STRUCTURAL ZONES SHALL INCLUDE ALL AREAS SUBJECT TO DIRECT BEARING PRESSURE PLUS 10 FEET HORIZONTAL PLUS A 1:1 DOWNWARD SLOPE IN ANY AREAS OF FILL.
- ALL SOIL UNDER PAVEMENTS, BUILDINGS, AND WALKWAYS, OR IN STRUCTURAL ZONES ASSOCIATED WITH THESE AREAS SHALL BE APPROVED IN-SITU SOIL OR STRUCTURAL FILL, COMPACTED TO AT LEAST 95% OF THE SOIL'S MAXIMUM DRY DENSITY (MDD) PER ASTM D-698. TIGHTER REQUIREMENTS MAY APPLY FOR CERTAIN AREAS.
- IN THE BUILDING AREA, THE REQUIRED DENSITY OF FILL SHALL BE 100% MDD, EXCEPT THE TOP 12 INCHES OF FILL SHALL BE AT LEAST 98% MDD. WHERE THE BUILDING WILL BE PLACED ON IN-SITU SOIL, THE SOIL SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND COMPACTED TO AT LEAST 98% MDD.
- ALL EXCESS OR UNSUITABLE SOIL SHALL BE LEGALLY DISPOSED IN AN OFFSITE OR APPROVED ONSITE LOCATION.
- WHERE LANDSCAPED OR YARD AREAS ADJACENT TO EXTERIOR BUILDING WALLS, FINISHED GROUND ELEVATIONS ADJACENT TO THE WALL SHALL BE AT LEAST 3 INCHES BELOW THE FINISHED FLOOR ELEVATION, AND SHALL SLOPE AWAY FROM THE BUILDING WITH POSITIVE DRAINAGE.

TRENCHING AND BACKFILLING

- WHERE ROCK OR OTHER HARD MATERIAL OCCURS AT THE DESIGNED TRENCH BOTTOM, OVEREXCAVATE TRENCH DEPTH 6 INCHES AND REPLACE OVEREXCAVATION MATERIAL WITH #67 STONE BEDDING.
- WHERE THE DESIGNED TRENCH BOTTOM CONSISTS OF UNSTABLE BEARING SOIL, UNDERCUT TRENCH BOTTOM AND REPLACE UNDERCUT MATERIAL IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- BACKFILL SOIL SHALL BE STRUCTURAL FILL, PLACED AND COMPACTED IN ACCORDANCE WITH REQUIREMENTS FOR THE SPECIFIC AREA OF WORK, WITHOUT DAMAGING OR DISPLACING PIPE OR STRUCTURES

STORM DRAINAGE SYSTEM

- STORM DRAINAGE STRUCTURES SHALL CONFORM TO ZEBULON AND NCDOT STANDARDS, AND MAY BE CONSTRUCTED OF EITHER SOLID MASONRY OR PRE-CAST CONCRETE. "KNOCK-OUT" TYPE PRE-CAST STRUCTURES SHALL NOT BE USED WHERE THE DESIGNED PIPE CONFIGURATION WOULD REQUIRE REMOVAL OF STRUCTURAL CORNERS OR ALTERATION OF DESIGNED PIPE ENTRY ANGLES.
- STORM DRAINAGE PIPE LENGTHS SHOWN ARE APPROXIMATE, AS MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND TO THE END OF ANY FLARED END SECTION (FES), AS APPLICABLE.
- CONTRACTOR SHALL VERIFY AND COORDINATE EXACT POSITIONING OF STORM DRAINAGE PIPING AND STRUCTURES, AND SHALL MAKE ADJUSTMENTS AS NEEDED TO PROVIDE PROPER CONNECTIONS, STRUCTURE LOCATIONS, ORIENTATIONS, DIMENSIONS, ELEVATIONS, FRAME PLACEMENT, AND SURFACE DRAINAGE. REFER TO STORM DRAINAGE STRUCTURE DETAILS FOR DIMENSIONS, OFFSETS, CLEARANCES, SETBACKS FROM CURB, AND OTHER REQUIREMENTS. MODIFY STRUCTURES AS NEEDED TO ACCOMMODATE LARGE-DIAMETER PIPING, MULTIPLE PIPE PENETRATIONS, AND PIPE CONNECTION ANGLES.
- STORM DRAINAGE PIPING SHALL BE REINFORCED CONCRETE PIPE (RCP), CLASS III, CONFORMING TO ASTM C76, UNLESS OTHERWISE SPECIFIED. ALL JOINTS SHALL BE FULLY SEALED USING PREFORMED FLEXIBLE BUTYL RUBBER SEALING COMPOUND.

SURFACE DRAINAGE

- ALL SPOT ELEVATIONS SHOWN ARE FINISHED SURFACE ELEVATIONS. SPOT ELEVATIONS SHALL TAKE PRECEDENCE OVER ELEVATION CONTOURS. ALL ELEVATIONS SHOWN ON CURB AND GUTTER REFER TO TOP OF CURB, UNLESS OTHERWISE INDICATED.
- ALL FINISHED PAVEMENT AND YARD SURFACES SHALL BE FINE-GRADED AND FINISHED TO HAVE POSITIVE SURFACE DRAINAGE TO A FREE-FLOWING DRAINAGE OUTLET, WITH NO IRREGULARITIES OR DEPRESSIONS THAT WOULD CAUSE UNINTENDED WATER PONDING.
- USE REVERSE-PITCH CURB AND GUTTER WHERE ADJACENT PAVEMENT SLOPES AWAY FROM CURB, AND STANDARD-PITCH CURB AND GUTTER ELSEWHERE, UNLESS OTHERWISE NOTED. PROVIDE POSITIVE DRAINAGE ALONG AND FROM ALL GUTTERS.
- TIE-INS TO EXISTING PAVEMENT, CURBS, WALKS, ETC. SHALL BE MADE WITH NEAT EDGES AND SMOOTH, GRADUAL TRANSITIONS THAT ARE SAFE, FUNCTIONAL, DURABLE, AND VISUALLY ACCEPTABLE TO THE OWNER AND REVIEW AUTHORITIES.

ACCESSIBILITY

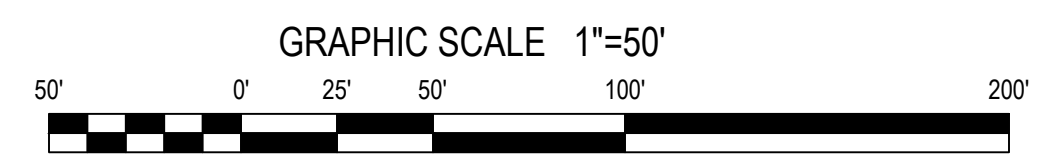
- FINISHED WALKWAY ELEVATIONS ABUTTING EXTERIOR DOORWAY THRESHOLDS SHALL BE ONE-FOURTH INCH BELOW THE ADJOINING FINISHED FLOOR ELEVATION. EXTERIOR PADS AND WALKWAYS SHALL SLOPE AWAY FROM THE BUILDING AT A SLOPE NO LESS THAN 1.0% AND NO GREATER THAN 2.0%. SIDEWALKS, CROSSWALKS, AND OTHER WALKWAYS SHALL NOT EXCEED 2.0% CROSS-SLOPE.
- NO PORTION OF ANY HANDICAP ACCESSIBLE ROUTE SHALL EXCEED 2.0% CROSS-SLOPE OR 5.0% LONGITUDINAL SLOPE.
- NO PORTION OF ANY HANDICAP PARKING SPACE OR ADJOINING ACCESS AISLE SHALL EXCEED 2.0% SLOPE IN ANY DIRECTION.

BMP NOTES

- SEE THE DETAIL SHEET FOR SPECIFICS REGARDING THE BIORETENTION DEVICE.

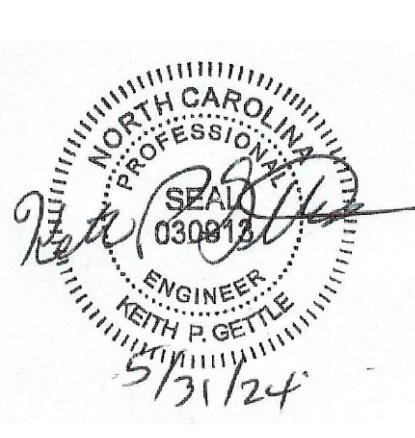
NOTES

- SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.



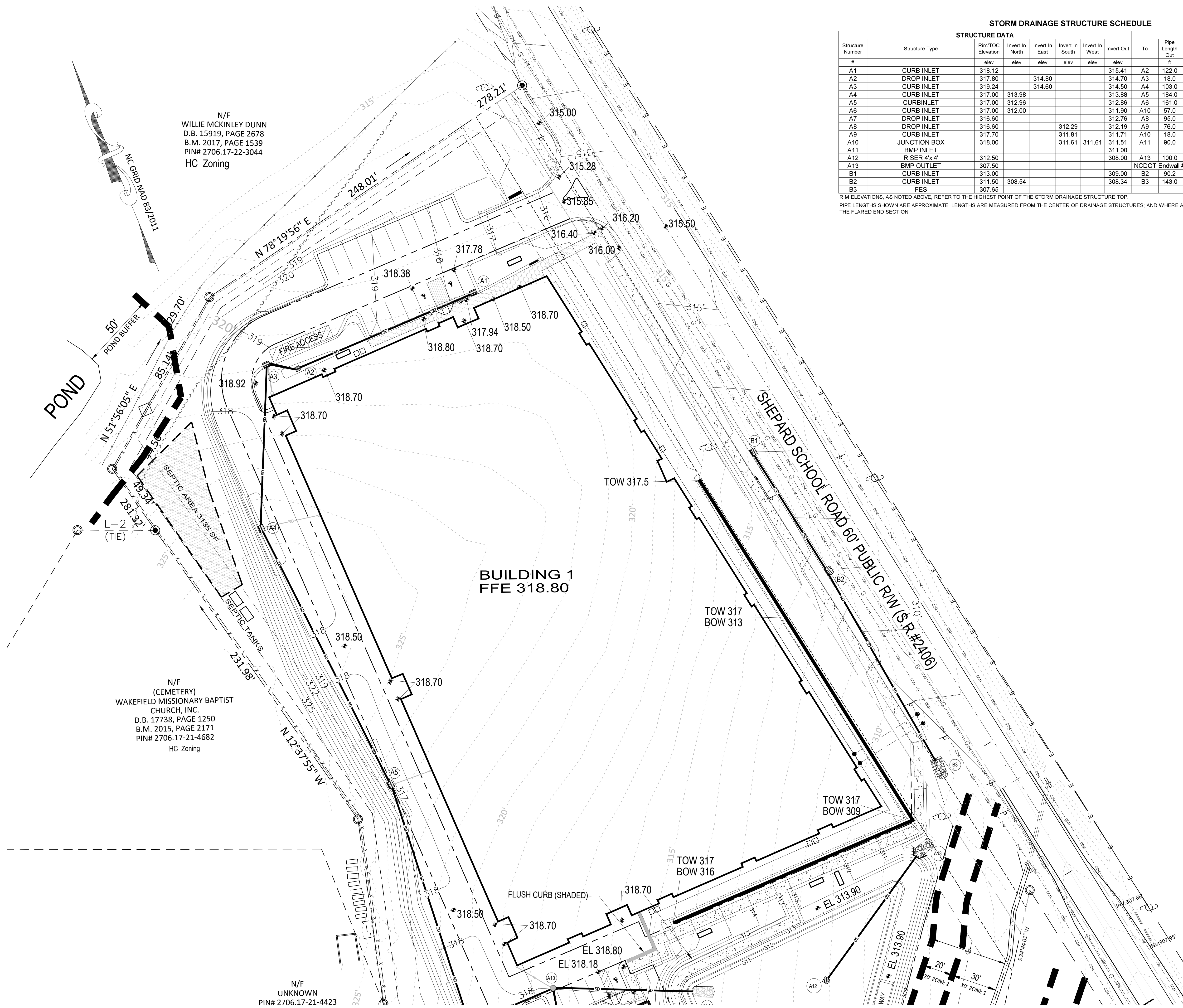
Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

NO.	DATE	REVISION DESCRIPTION	BY
1	01/26/2024	Per Town Comment	RF
2	03/05/2024	Per Town Comment	RF
3	05/27/2024	Per Town Comment, COR AND Wake County Comment	RF
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY



Grading Overall
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. **C5**



N/F
WILLIE MCKINLEY DUNN
D.B. 15919, PAGE 2678
B.M. 2017, PAGE 1539
PIN# 2706.17-22-3044
HC Zoning

N/F
(CEMETERY)
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
D.B. 17738, PAGE 1250
B.M. 2015, PAGE 2171
PIN# 2706.17-21-4682
HC Zoning

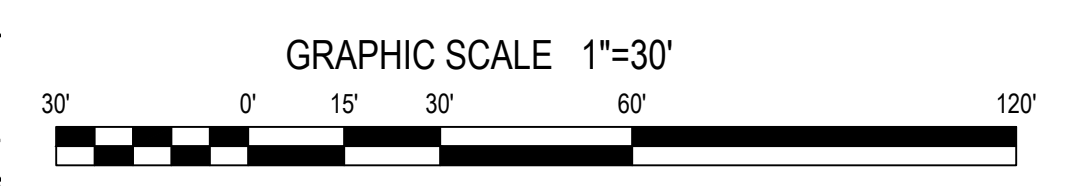
N/F
UNKNOWN
PIN# 2706.17-21-4423

STORM DRAINAGE STRUCTURE SCHEDULE

Structure Number	Structure Type	STRUCTURE DATA						PIPE DATA				REMARKS	
		Rim/TOC Elevation	Invert In North	Invert In East	Invert In South	Invert In West	Invert Out	To	Pipe Length	Pipe Slope	Design Diameter		Pipe Material
A1	CURB INLET	318.12					315.41	A2	122.0	0.50%	12	RCP Class III	Town of Zebulon Detail #33
A2	DROP INLET	317.80		314.80			314.70	A3	18.0	0.50%	15	RCP Class III	Town of Zebulon Detail #34
A3	CURB INLET	319.24		314.60			314.50	A4	103.0	0.50%	18	RCP Class III	Town of Zebulon Detail #33
A4	CURB INLET	317.00	313.98				313.88	A5	184.0	0.50%	18	RCP Class III	Town of Zebulon Detail #33
A5	CURBINLET	317.00	312.96				312.86	A6	161.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A6	CURB INLET	317.00	312.00				311.90	A10	57.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A7	DROP INLET	316.60					312.76	A8	95.0	0.50%	18	RCP Class III	Town of Zebulon Detail #34
A8	DROP INLET	316.60			312.29		312.19	A9	76.0	0.50%	24	RCP Class III	Town of Zebulon Detail #34
A9	CURB INLET	317.70			311.61		311.71	A10	18.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A10	JUNCTION BOX	318.00			311.61	311.61	311.51	A11	90.0	0.60%	24	RCP Class III	Town of Zebulon Detail #37
A11	BMP INLET						311.00				24	RCP Class III	Class B Rip Rap Apron L= 12', W=6.8', T=18"
A12	RISER 4'x 4'	312.50					308.00	A13	100.0	0.50%	24	RCP Class III	Class B Rip Rap Apron L= 12', W=6.8', T=18"
A13	BMP OUTLET	307.50						NCDOT Endwall # 838.80					NCDOT 840.02
B1	CURB INLET	313.00					309.00	B2	90.2	0.50%	15	RCP Class III	NCDOT 840.02
B2	CURB INLET	311.50	308.54				308.34	B3	143.0	0.50%	15	RCP Class III	NCDOT 840.02
B3	FES	307.65											Class A Rip Rap Apron L= 5', W=3.75', T=12"

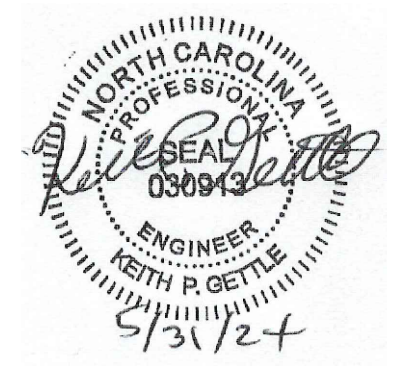
RIM ELEVATIONS, AS NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE STORM DRAINAGE STRUCTURE TOP.
PIPE LENGTHS SHOWN ARE APPROXIMATE. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND WHERE APPLICABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

NOTES
1. SEE SHEET C5 FOR GRADING NOTES.



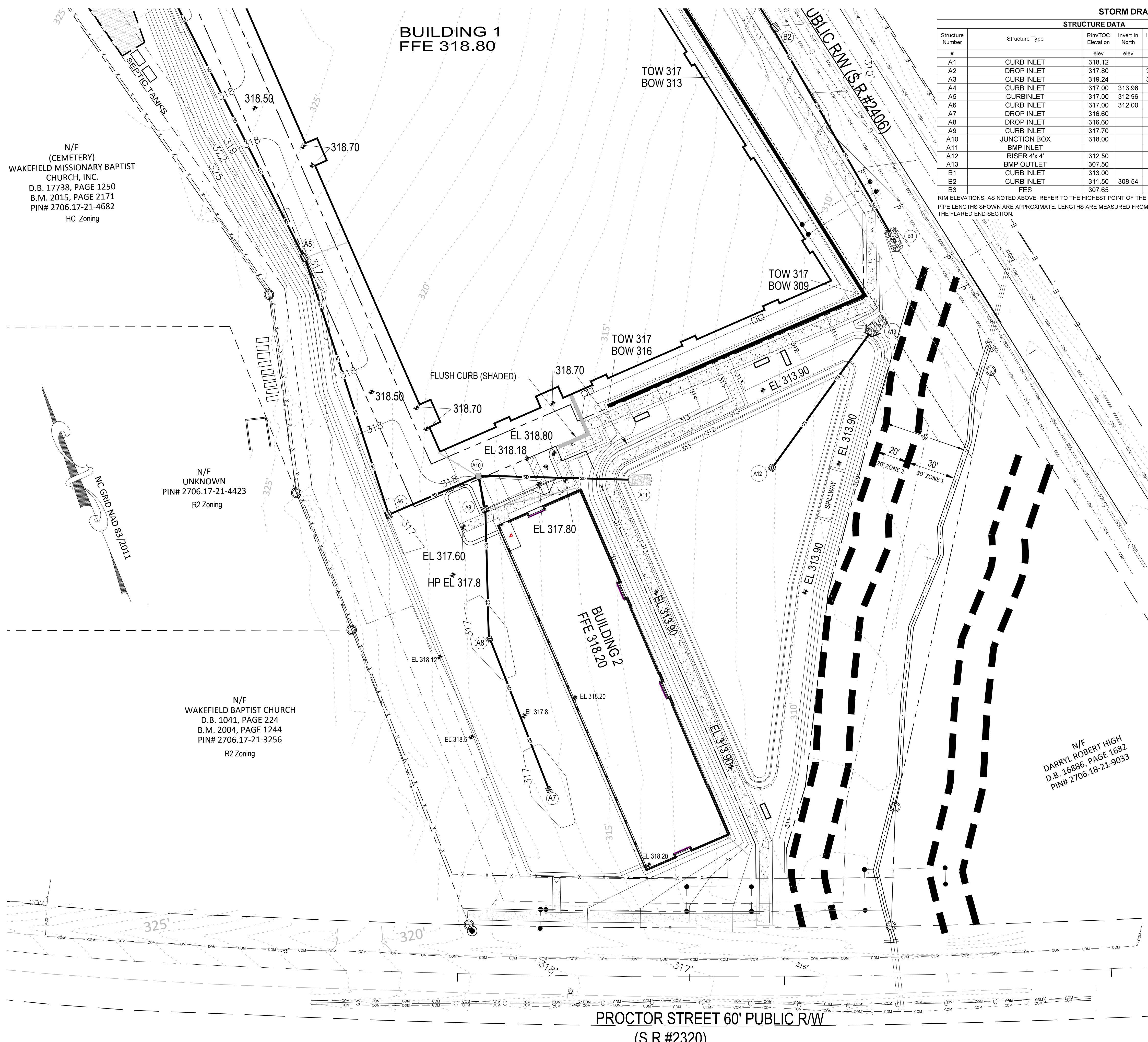
Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

NO.	DATE	REVISION DESCRIPTION	BY
1	01/26/2024	Per Town Comment	
2	03/08/2024	Per Town Comment	
3	05/15/2024	Per Town Comment	
4	05/15/2024	Per Town Comment	
5	05/15/2024	Per Town Comment	
6	05/15/2024	Per Town Comment	
7	05/15/2024	Per Town Comment	
8	05/15/2024	Per Town Comment	
9	05/15/2024	Per Town Comment	
10	05/15/2024	Per Town Comment	



Grading - Enlarged North StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. **C6**



STORM DRAINAGE STRUCTURE SCHEDULE												
Structure Number	Structure Type	STRUCTURE DATA					PIPE DATA				REMARKS	
		Rim/TOC Elevation	Invert In North	Invert In East	Invert In South	Invert In West	Invert Out	To	Pipe Length	Pipe Slope		Design Diameter
#		elev	elev	elev	elev	elev		ft	%	in		
A1	CURB INLET	318.12				315.41	A2	122.0	0.50%	12	RCP Class III	Town of Zebulon Detail #33
A2	DROP INLET	317.80		314.80		314.70	A3	18.0	0.50%	15	RCP Class III	Town of Zebulon Detail #34
A3	CURB INLET	319.24		314.60		314.50	A4	103.0	0.50%	18	RCP Class III	Town of Zebulon Detail #33
A4	CURB INLET	317.00	313.98			313.88	A5	184.0	0.50%	18	RCP Class III	Town of Zebulon Detail #33
A5	CURBINLET	317.00	312.96			312.86	A6	161.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A6	CURB INLET	317.00	312.00			311.90	A10	57.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A7	DROP INLET	316.60				312.76	A8	95.0	0.50%	18	RCP Class III	Town of Zebulon Detail #34
A8	DROP INLET	316.60			312.29	312.19	A9	76.0	0.50%	24	RCP Class III	Town of Zebulon Detail #34
A9	CURB INLET	317.70				311.81	A10	18.0	0.50%	24	RCP Class III	Town of Zebulon Detail #33
A10	JUNCTION BOX	318.00			311.61	311.51	A11	90.0	0.60%	24	RCP Class III	Town of Zebulon Detail #37
A11	BMP INLET					311.00				24	RCP Class III	Class B Rip Rap Apron L= 12', W=6.8', T=18"
A12	RISER 4'x 4'	312.50				308.00	A13	100.0	0.50%	24	RCP Class III	
A13	BMP OUTLET	307.50						NCDOT Endwall # 838.80				Class B Rip Rap Apron L= 12', W=6.8', T=18"
B1	CURB INLET	313.00				309.00	B2	90.2	0.50%	15	RCP Class III	NCDOT 840.02
B2	CURB INLET	311.50	308.54			308.34	B3	143.0	0.50%	15	RCP Class III	NCDOT 840.02
B3	FES	307.65										Class A Rip Rap Apron L= 5', W=3.75', T=12"

RIM ELEVATIONS, AS NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE STORM DRAINAGE STRUCTURE TOP.
 PIPE LENGTHS SHOWN ARE APPROXIMATE. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES; AND WHERE APPLICABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

N/F
 (CEMETERY)
 WAKEFIELD MISSIONARY BAPTIST
 CHURCH, INC.
 D.B. 17738, PAGE 1250
 B.M. 2015, PAGE 2171
 PIN# 2706.17-21-4682
 HC Zoning

N/F
 UNKNOWN
 PIN# 2706.17-21-4423
 R2 Zoning

N/F
 WAKEFIELD BAPTIST CHURCH
 D.B. 1041, PAGE 224
 B.M. 2004, PAGE 1244
 PIN# 2706.17-21-3256
 R2 Zoning

N/F
 DARRYL ROBERT HIGH
 D.B. 16886, PAGE 1682
 PIN# 2706.18-21-9033

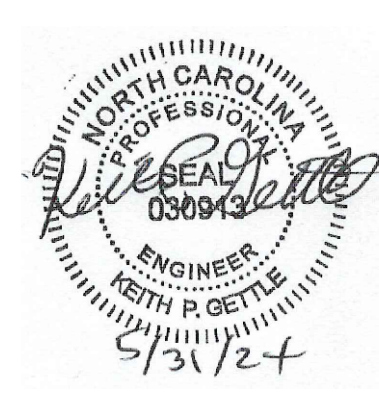
PROCTOR STREET 60' PUBLIC R/W
 (S.R.#2320)

NOTES
 1. SEE SHEET C5 FOR GRADING NOTES.



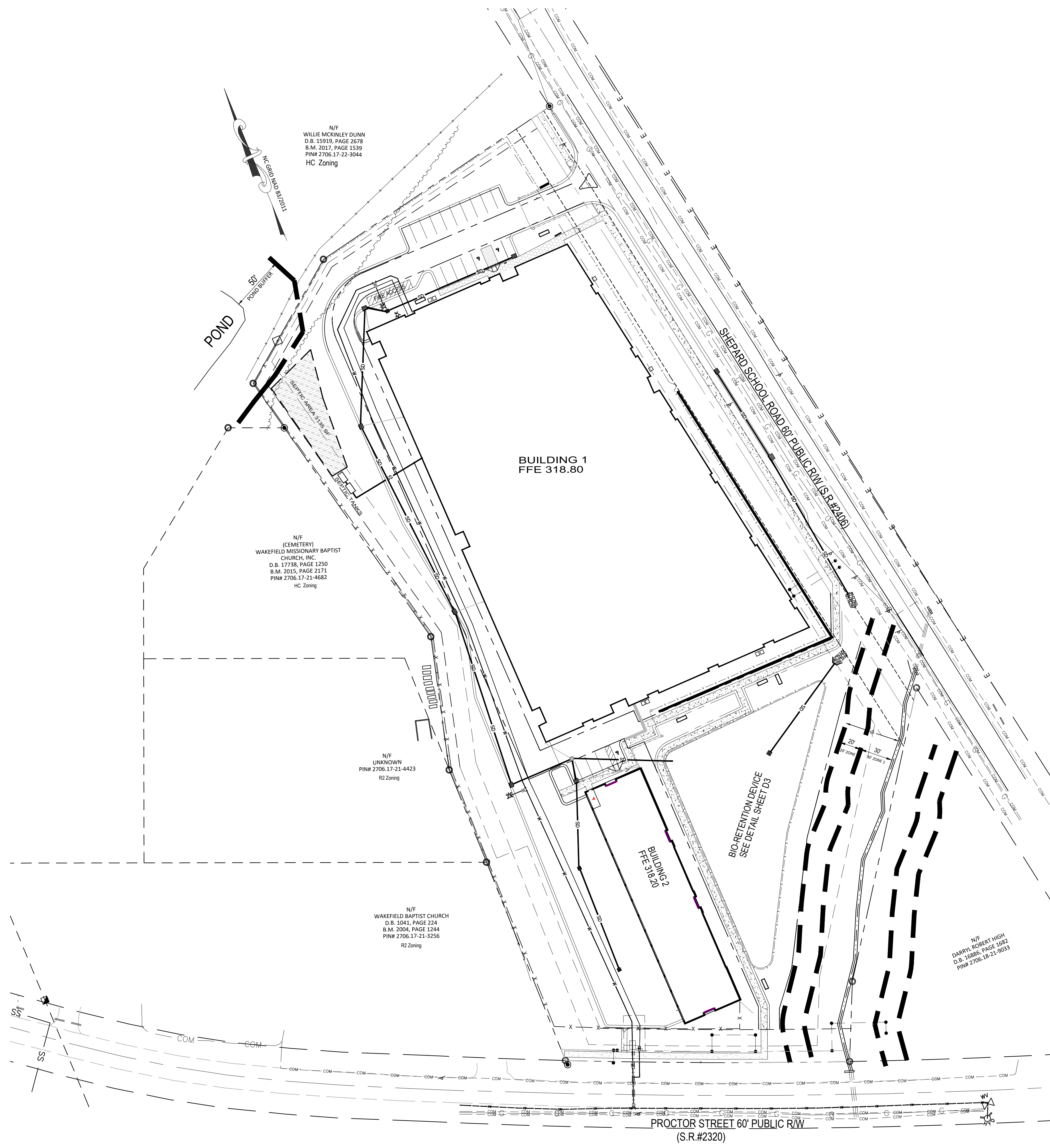
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO.	DATE	REVISION DESCRIPTION	BY
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2	03/06/2024	Per Town Comment	
3	05/15/2024	Per Town Comment, COR AND Wake County Comment	
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
7	DATE	COMMENT	BY



Grading - Enlarged South
 StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C7**



UTILITY SPECIFICATIONS

EXISTING CONDITIONS

- INFORMATION ABOUT EXISTING UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS NOT BASED ON AN EXHAUSTIVE INVESTIGATION OF SUCH FACILITIES OR CONDITIONS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PARTY REGARDING THEM. EXISTING UTILITY LINE LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE, AND ACTUAL UTILITIES AND CONDITIONS MAY DIFFER FROM THOSE INDICATED. IF DIFFERING UTILITIES OR CONDITIONS EXIST, THEY MAY BE ENCOUNTERED DURING THE COURSE OF THE PROJECT WORK, AND MAY IMPACT THE PROJECT SCOPE AND TIME REQUIREMENTS.

PROTECTION AND SAFETY

- PRIOR TO BEGINNING WORK, AND AS NEEDED DURING THE COURSE OF PROJECT WORK, CONTRACTOR SHALL NOTIFY ALL APPLICABLE UTILITY LOCATION SERVICES AND UTILITY PROVIDERS TO REASONABLY VERIFY THE LOCATION OF ALL KNOWN OR SUSPECTED UTILITIES, IN ACCORDANCE WITH STATE REGULATIONS. CONTRACTOR IS ADVISED THAT SOME UTILITY PROVIDERS DO NOT SUBSCRIBE TO ONE-CALL SERVICES, AND MUST BE CONTACTED SEPARATELY.
- CONTRACTOR SHALL PROVIDE ADEQUATE MEANS AND METHODS FOR PROTECTION OF ALL EXISTING UTILITIES AND SITE FEATURES WHICH ARE INTENDED TO REMAIN IN SERVICE OR IN PLACE.
- CONTRACTOR SHALL PROVIDE ADEQUATE TRAFFIC CONTROL MEASURES DURING THE COURSE OF PROJECT WORK IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, THE N.C. SUPPLEMENT TO THE MUTCD, ANY REGULATORY AGENCY REQUIREMENTS, AND PROJECT SPECIFIC SAFETY CONSIDERATIONS.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR SAFETY PROGRAMS AND MEASURES ON THE PROJECT SITE OR OTHERWISE RELATING TO THE PROJECT WORK, AND SHALL COMPLY WITH ALL SAFETY CODES AND REGULATIONS APPLICABLE THERETO, FOR THE PROTECTION OF WORKERS, VISITORS, AND THE GENERAL PUBLIC.

COMPLIANCE

- ALL WATER SYSTEM AND SANITARY SEWER WORK SHALL BE IN ACCORDANCE WITH THE FOLLOWING:
 - REQUIREMENTS OF THE CITY OF RALEIGH INCLUDING THE LATEST EDITION CONSTRUCTION STANDARDS AND SPECIFICATIONS, CONSTRUCTION DETAILS, POLICIES AND PROCEDURES, AND FIELD DIRECTIVES BY THE UTILITY INSPECTOR.
 - REGULATIONS OF NCDENR DIVISION OF WATER QUALITY, INCLUDING NCAC 2T REGULATIONS AND MINIMUM DESIGN CRITERIA FOR THE PERMITTING OF GRAVITY SEWERS.
 - REGULATIONS OF NCDENR-PUBLIC WATER SUPPLY, RULES GOVERNING PUBLIC WATER SYSTEMS.
 - STREET RIGHT-OF-WAY ENCROACHMENT PERMIT REQUIREMENTS, AS APPLICABLE.
 - OSHA REQUIREMENTS RELATED TO SAFETY.
 - REQUIREMENTS OF THE N.C. PLUMBING CODE.

NOTIFICATIONS

- NOTIFY THE ENGINEER AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING WATERLINE OR SANITARY SEWER WORK, THE ENGINEER SHALL OBSERVE CONNECTIONS, INSTALLATION, BACKFILLING, AND TESTING WORK, IN ORDER TO PROVIDE NECESSARY PROJECT CERTIFICATIONS AND CLOSE-OUT DOCUMENTS.
- NOTIFY THE APPLICABLE UTILITY AND ROADWAY AUTHORITIES IN ACCORDANCE WITH THEIR REQUIREMENTS PRIOR TO BEGINNING UTILITY WORK.
- NOTIFY THE GEOTECHNICAL ENGINEER AND TESTING SERVICE AT LEAST TWO BUSINESS DAYS PRIOR TO BEGINNING OR RESUMING TRENCHING OR BACKFILLING WORK.

TRENCHING AND BACKFILLING

- WHERE ROCK OR OTHER HARD MATERIAL OCCURS AT THE DESIGNED TRENCH BOTTOM, OVEREXCAVATE TRENCH DEPTH 6 INCHES AND REPLACE OVEREXCAVATION MATERIAL WITH #67 STONE BEDDING.
- WHERE THE DESIGNED TRENCH BOTTOM CONSISTS OF UNSUITABLE BEARING SOIL, UNDERCUT TRENCH BOTTOM AND REPLACE UNDERCUT MATERIAL IN ACCORDANCE WITH THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
- BACKFILL SOIL SHALL BE SUITABLE MATERIAL AS RECOMMENDED BY THE GEOTECHNICAL ENGINEER.
- BACKFILL SOIL SHALL BE PLACED IN LOOSE LIFTS OF 4 INCH MAXIMUM THICKNESS AND COMPACTED TO 98% OF THE SOIL'S MAXIMUM DRY DENSITY, WITHOUT DAMAGING OR DISPLACING PIPE.
- INSTALL MARKING TAPE OR TRACER WIRE OVER UTILITY LINES AS REQUIRED BY THE LOCAL UTILITY AUTHORITY.

STORAGE AND HANDLING

- PIPING, FITTINGS, GASKETS, AND OTHER MATERIALS SHALL BE KEPT CLEAN WHILE BEING STORED AND DURING CONSTRUCTION ACTIVITIES. PIPE BUNDLES SHALL BE STORED ON FLAT SURFACES WITH UNIFORM SUPPORT, AND PROTECTED FROM PROLONGED EXPOSURE TO SUNLIGHT WITH A COVERING ALLOWING AIR FLOW UNDERNEATH. GASKETS SHALL NOT BE EXPOSED TO OIL, GREASE, OZONE, EXCESSIVE HEAT OR DIRECT SUNLIGHT. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR STORAGE AND HANDLING OF ALL MATERIALS.

WATER SYSTEM

- PROVIDE ALL WATER SYSTEM MATERIALS IN ACCORDANCE WITH LOCAL WATER AUTHORITY REQUIREMENTS.
- INSTALL WATERLINES TO PROVIDE 36" COVER TO FINISHED GRADE, UNLESS OTHERWISE SHOWN OR APPROVED BY THE ENGINEER AND INSPECTOR.
- ALL WATERLINE BENDS, CROSSES, TEES, AND ENDS SHALL BE RESTRAINED USING CONCRETE BLOCKING OR A MECHANICAL JOINT WEDGE-ACTION RESTRAINT SYSTEM RATED FOR 350 PSI.
- DO NOT OPERATE WATER SYSTEM VALVES WITHOUT PERMISSION OF THE WATER AUTHORITY.
- CONTRACTOR SHALL COORDINATE EXACT FIRE HYDRANT, WATER METER, AND BACKFLOW PREVENTER LOCATIONS WITH WATER AUTHORITY INSPECTOR PRIOR TO INSTALLATION.

BACKFLOW PREVENTION

- BACKFLOW PREVENTER ASSEMBLIES AND ENCLOSURES SHALL CONFORM TO ALL LOCAL WATER AUTHORITY REQUIREMENTS, AND SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL PROVIDE INITIAL TESTING AND CERTIFICATIONS AS REQUIRED FOR ACCEPTANCE.

FIRE PROTECTION

- WATER MAINS SHALL BE INSTALLED AND MADE OPERATIONAL AS SOON AS PRACTICAL TO PROVIDE ACTIVE FIRE HYDRANT SERVICE DURING BUILDING CONSTRUCTION.
- COORDINATE TYPE AND LOCATION OF HYDRANTS, FIRE DEPARTMENT CONNECTIONS, AND OTHER FIRE PROTECTION SYSTEM COMPONENTS WITH LOCAL FIRE CODE OFFICIAL PRIOR TO INSTALLATION.

UTILITY SPECIFICATIONS (cont.)

SANITARY SEWER

- SANITARY SEWER MAIN PIPING SHALL BE DUCTILE IRON PIPE PER AWWA C151, PRESSURE CLASS 350, WITH INTERIOR EPOXY LINING AND EXTERIOR BITUMINOUS SEAL. JOINTS SHALL BE PUSH-ON TYPE WITH RUBBER GASKETS PER AWWA C111.
- SANITARY SEWER MAIN PIPING SHALL BE PVC PIPE PER ASTM D3034, SDR 35. JOINTS SHALL BE PUSH-ON TYPE WITH RUBBER GASKETS PER ASTM F417.
- SANITARY SEWER MAINS SHALL BE INSTALLED WITH 36 INCHES MINIMUM COVER TO FINISHED GRADE, EXCEPT AS OTHERWISE SPECIFIED.
- SANITARY SEWER SERVICE LINES AND CLEANOUTS SHALL BE INSTALLED IN ACCORDANCE WITH THE N.C. PLUMBING CODE, AND HAVE 24 INCHES MINIMUM COVER TO FINISHED GRADE. SERVICE LINES SHALL MAINTAIN MAXIMUM SERVICE DEPTH USING A 2.1% SLOPE UNLESS OTHERWISE SPECIFIED.
- SERVICE PIPE AND FITTINGS WITHIN PUBLIC STREET RIGHTS-OF-WAY SHALL BE CAST IRON WITH GASKETED JOINTS, AND IN OTHER AREAS SHALL BE SCHEDULE 40 PVC WITH SOLVENT WELDED JOINTS, EXCEPT ALL CLEANOUTS SHALL BE FITTED WITH THREADED BRONZE PLUGS.
- SERVICE LINE CLEANOUTS IN VEHICULAR AREAS SHALL BE TRAFFIC BEARING CLEANOUTS.

CONNECTIONS

- FOR CONNECTIONS TO EXISTING UTILITY AND DRAINAGE LINES, CONTRACTOR SHALL VERIFY EXISTING PIPE SIZE AND MATERIAL, AND PROVIDE APPROPRIATE CONNECTION FITTINGS.
- ANY CONNECTION TO EXISTING UTILITIES, OR ANY UTILITY SERVICE INTERRUPTION, SHALL BE FIRST COORDINATED WITH THE GOVERNING UTILITY AUTHORITY, AND PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THAT AUTHORITY.

TESTING AND ACCEPTANCE

- THE GEOTECHNICAL ENGINEER SHALL PROVIDE MATERIAL AND DENSITY TESTING DURING THE COURSE OF THE WORK. PRIOR TO PLACEMENT OF ANY BASE OR PAVEMENT, CONTRACTOR SHALL PROVIDE PROOF-ROLLING OF ALL TRENCH AREAS TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
- PRIOR TO ANY SANITARY SEWER OR WATER SYSTEM IMPROVEMENTS BEING PLACED INTO SERVICE:
 - CONTRACTOR SHALL SUCCESSFULLY TEST ALL WATER MAINS FOR WATER LEAKAGE AND WATER QUALITY IN ACCORDANCE WITH CITY OF RALEIGH AND NCDENR REQUIREMENTS.
 - CONTRACTOR SHALL SUCCESSFULLY TEST ALL SANITARY SEWER MAINS FOR DEFLECTION AND LEAKAGE, AND TEST ALL SANITARY MANHOLES FOR LEAKAGE, IN ACCORDANCE WITH CITY OF RALEIGH AND NCDENR REQUIREMENTS.
 - CONTRACTOR SHALL PERFORM VIDEO INSPECTION OF INSTALLED SANITARY SEWER MAINS AND PROVIDE DOCUMENTATION PER LOCAL REQUIREMENTS.
 - CONTRACTOR SHALL PROVIDE TO ENGINEER A SET OF MARKED UP DRAWINGS SHOWING UTILITY CHANGES, DIMENSIONAL ADJUSTMENTS, DISCOVERED SUBSURFACE UTILITIES, AND OTHER AS-BUILT INFORMATION.
 - CONTRACTOR SHALL PROVIDE DOCUMENTATION OF ALL TESTING RESULTS TO ENGINEER.
 - ALL IMPROVEMENTS SHALL PASS FINAL INSPECTION BY ENGINEER AND THE UTILITY AUTHORITY.
 - ENGINEER SHALL SUBMIT ALL CERTIFICATIONS AND OTHER CLOSE-OUT DOCUMENTS TO APPLICABLE LOCAL AND STATE AUTHORITIES.

OTHER

- CONTRACTOR SHALL PROVIDE PRIMARY COORDINATION WITH UTILITY SERVICE PROVIDERS FOR BUILDING UTILITY SERVICES. THIS WORK SHALL INCLUDE MAKING APPLICATIONS FOR SERVICE, COORDINATING AND SCHEDULING WORK BY OTHERS, VERIFYING ROUTINGS AND EQUIPMENT LOCATIONS, FURNISHING AND INSTALLING CONDUIT AND PADS, AND RELATED WORK AS NEEDED.
- CONTRACTOR SHALL PROVIDE PROPER RESTORATION AND CLEAN-UP OF ALL AREAS DISTURBED BY UTILITY CONSTRUCTION.

- STANDARD UTILITY NOTES:**
- All materials & construction methods shall be in accordance with City of Raleigh design standards, details & specifications (reference: CORPUD Handbook, current edition)
 - Utility separation requirements:
 - A distance of 100' shall be maintained between sanitary sewer & any private or public water supply source such as an impounded reservoir used as a source of drinking water. If adequate lateral separation cannot be achieved, ferrous sanitary sewer pipe shall be specified & installed to watertight specifications. However, the minimum separation shall not be less than 25' from a private well or 50' from a public well
 - When installing water &/or sewer mains, the horizontal separation between utilities shall be 10'. If this separation cannot be maintained due to existing conditions, the variation allowed is the water main in a separate trench with the elevation of the water main at least 18" above the top of the sewer & must be approved by the Public Utilities Director. All distances are measured from outside diameter to outside diameter
 - Where it is impossible to obtain proper separation, or anytime a sanitary sewer passes over a watermain, DIP materials or steel encasement extended 10' on each side of crossing must be specified & installed to watertight specifications
 - 5.0' minimum horizontal separation is required between all sanitary sewer & storm sewer facilities, unless DIP material is specified for sanitary sewer
 - Maintain 18" min. vertical separation at all watermain & RCP storm drain crossings; maintain 18" min. vertical separation at all sanitary sewer & RCP storm drain crossings. Where adequate separations cannot be achieved, specify DIP materials & a concrete cradle having 6" min. clearance (per CORPUD details W-41 & S-49)
 - Any necessary field revisions are subject to review & approval of an amended plan &/or profile by the City of Raleigh Public Utilities Department prior to construction
 - Developer shall provide 30 days advance written notice to owner for any work required within an existing City of Raleigh Utility Easement traversing private property
 - Contractor shall maintain continuous water & sewer service to existing residences & businesses throughout construction of project. Any necessary service interruptions shall be preceded by a 24 hour advance notice to the City of Raleigh Public Utilities Department
 - 3.0' minimum cover is required on all water mains & sewer forcemains. 4.0' minimum cover is required on all reuse mains
 - It is the developer's responsibility to abandon or remove existing water & sewer services not being used in redevelopment of a site unless otherwise directed by the City of Raleigh Public Utilities Department. This includes abandoning tap at main & removal of service from ROW or easement per CORPUD Handbook procedure
 - Install "2" copper" water services with meters located at ROW or within a 2 x 2" Waterline Easement immediately adjacent. *NOTE: It is the applicant's responsibility to properly size the water service for each connection to provide adequate flow & pressure.*
 - Install "4" PVC" sewer services @ 1.0% minimum grade with cleanouts located at ROW or easement line & spaced every 75 linear feet maximum
 - Pressure reducing valves are required on all water services exceeding 80 psi. backwater valves are required on all sanitary sewer services having building drains lower than 1.0' above the next upstream manhole
 - All environmental permits applicable to the project must be obtained from NCDWQ, USACE &/or FEMA for any riparian buffer, wetland &/or floodplain impacts (respectively) prior to construction
 - NCDOT / Railroad Encroachment Agreements are required for any utility work (including main extensions & service taps) within state or railroad ROW prior to construction
 - Grease Interceptor / Oil Water Separator sizing calculations & installation specifications shall be approved by the RW FOG Program Coordinator prior to issuance of a UC / Bldg Permit. Contact (919) 996-4516 or fog@raleighnc.gov for more information
 - Cross-connection control protection devices are required based on degree of health hazard involved as listed in Appendix-B of the Rules Governing Public Water Systems in North Carolina. These guidelines are the minimum requirements. The devices shall meet American Society of Sanitary Engineering (ASSE) standards or be on the University of Southern California approval list. The devices shall be installed and tested (both initial and periodic testing thereafter) in accordance with the manufacturer's recommendations or the local cross-connection control program, whichever is more stringent. A Certificate of Compliance shall also be obtained from the RW Cross-Connection Coordinator for each device prior to issuance of a UC / Bldg Permit. Contact (919) 996-5923 or cross.connection@raleighnc.gov for more information

Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 Firm License P-2538
 (919) 210-3934

NO	DATE	REVISION/DESCRIPTION	BY
1	01-05-2024	REV Town Comment	PCG
2	03-08-2024	REV Town, COR AND Wake County Comment	PCG
3	05-31-2024	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	Date	Comment	BY



Utility Plan - Overall
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

- NOTES**
- SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractor are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All construction must be in accordance with all Local, State, and Federal Rules and Regulations.

Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans shown on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.

GRAPHIC SCALE 1"=50'

N/F
 WILLIE MCKINLEY DUNN
 D.B. 15919, PAGE 2678
 B.M. 2017, PAGE 1539
 PIN# 2706.17-22-3044
 HC Zoning

NC GRID NAD 83/2011

POND

50' POND BUFFER

N 51°56'05" E
 281.32'

SEPTIC AREA 3-135 SF

SEPTIC TANKS

231.98'

N 78°19'56" E
 248.01'

BUILDING 1
 FFE 318.80

278.21'

SHEPARD SCHOOL ROAD 60' PUBLIC RM (S.R)

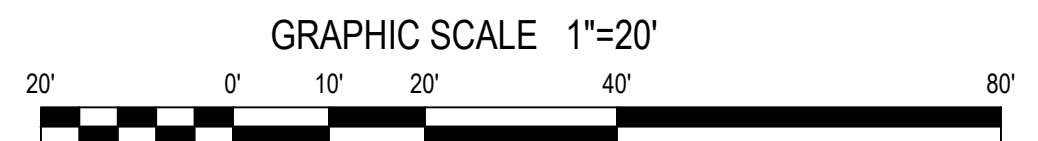
- KEY**
- 1 12" EXISTING WATER LINE LOCATION SHOWN IS APPROXIMATE. COORDINATE WITH CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO STARTING WATERLINE CONSTRUCTION. CONFORM TO ALL WATER AUTHORITY STANDARDS AND REQUIREMENTS, AND TO ALL RIGHT-OF-WAY ENCROACHMENT CONDITIONS. VERIFY EXISTING PIPE SIZE AND MATERIAL, AND NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES.
 - 2 2" CORPORATION STOP.
 - 3 2" COPPER SERVICE LINE
 - 4 90 DEGREE, OR 45 DEGREE, OR 22.5 DEGREE MJ BEND AND RESTRAINT.
 - 5 16" CASING PIPE FOR WATER SERVICE LINE - BORE AND JACK
 - 6 EXISTING WATER METER TO BE REMOVED / ABANDONED
 - 7 6" BACKFLOW PREVENTER DEVICE (RPDA), RALEIGH APPROVED, LOCATED IN AN 'ABOVE GROUND' HEATED ENCLOSURE.
 - 8 6"x6" TAPPING SLEEVE AND 6" GATE VALVE
 - 9 2" WATER METER - SEE COR DETAIL
 - 10 2" RP BACKFLOW ASSEMBLIES BY WATTS OR APPROVED EQUAL
 - 11 PVC DOWNSPOUT PIPE HEADER. TIE INTO STORM DRAIN STRUCTURE. FIELD VERIFY LOCATION / ELEVATION
 - 12 4" PVC, SDR-35, PRIVATE SANITARY SEWER LATERAL TO SEPTIC SYSTEM
 - 13 SANITARY SEWER SEPTIC TANKS
 - 14 FIRE DEPARTMENT CONNECTION TYPE SHALL BE 5 INCH STORZ, WITH MJ FITTINGS AS NEEDED.
 - 15 6" DUCTILE IRON PIPE WATER LINE, 36" BELOW FINISH GRADE
 - 16 FIRE HYDRANT ASSEMBLY WITH 6" VALVE AND BOX. SEE COR DETAIL W4.
 - 17 WATER SERVICE LINE - BORE AND JACK
 - 18 20' x 30' BORE PIT

- NOTES**
1. SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.
 2. SEE SHEET C8 FOR UTILITY NOTES.

NO	DATE	REVISION DESCRIPTION	BY
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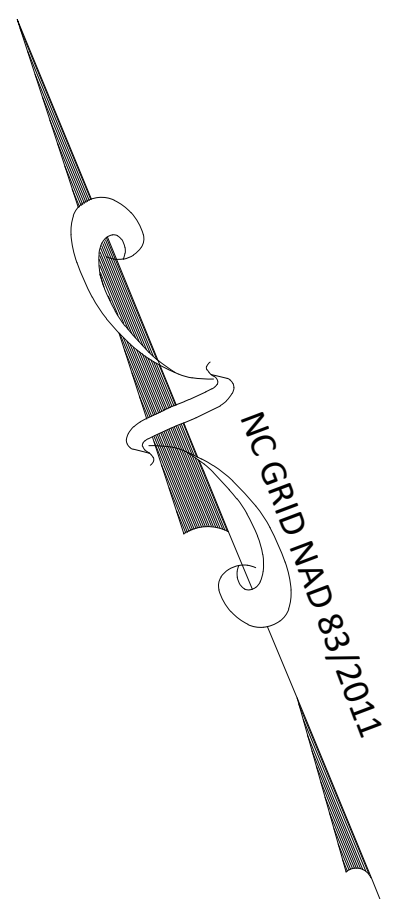
City of Raleigh Development Approval _____
 City of Raleigh Review Officer _____

N/F
 (CEMETERY)
 WAKEFIELD MISSIONARY BAPTIST
 CHURCH, INC.
 D.B. 17738, PAGE 1250

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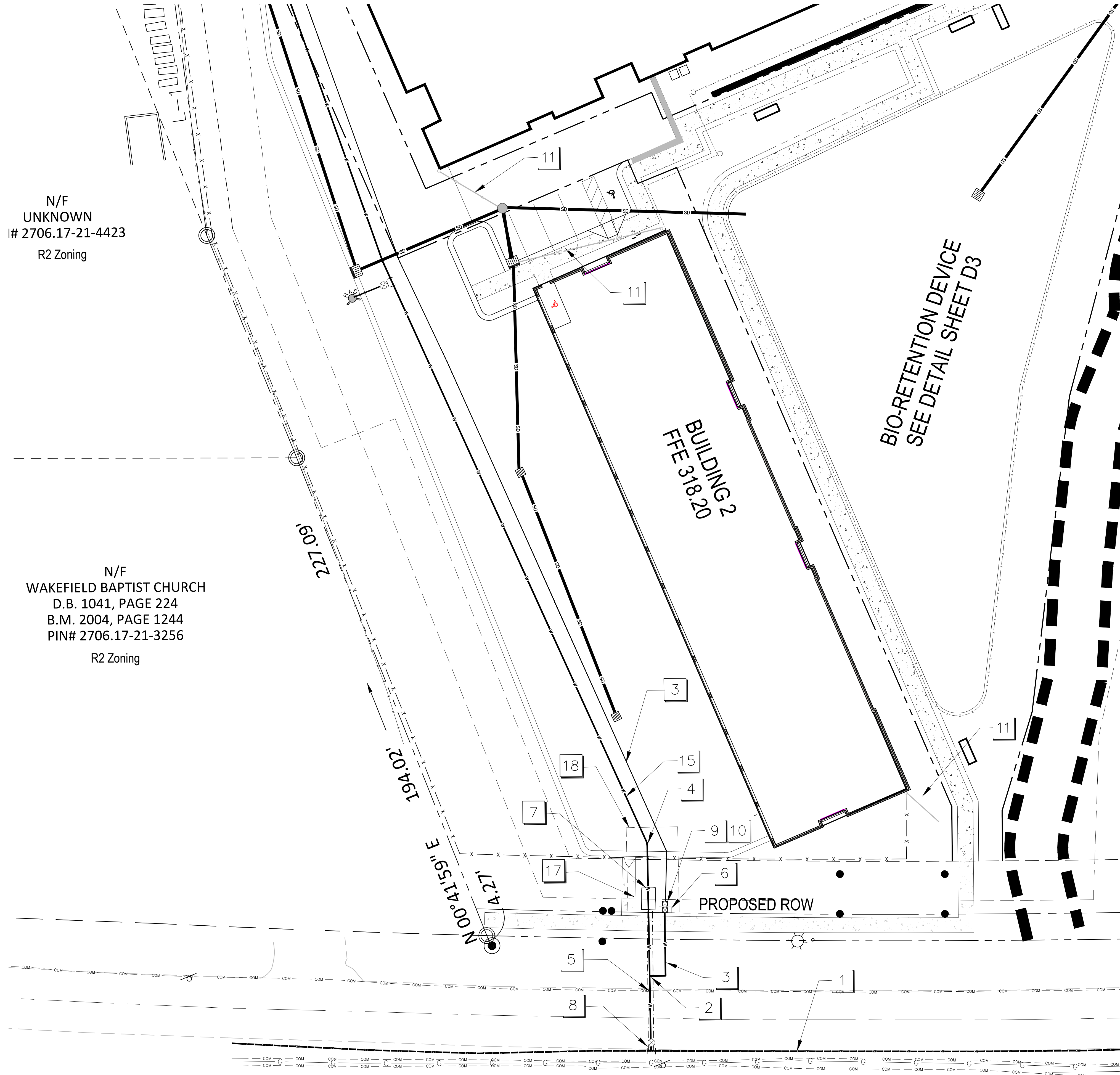
Utility Plan-Enlarged North
 StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C9**



N/F
UNKNOWN
2706.17-21-4423
R2 Zoning

N/F
WAKEFIELD BAPTIST CHURCH
D.B. 1041, PAGE 224
B.M. 2004, PAGE 1244
PIN# 2706.17-21-3256
R2 Zoning



- KEY**
- 1 12" EXISTING WATER LINE LOCATION SHOWN IS APPROXIMATE. COORDINATE WITH CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PRIOR TO STARTING WATERLINE CONSTRUCTION. CONFORM TO ALL WATER AUTHORITY STANDARDS AND REQUIREMENTS, AND TO ALL RIGHT-OF-WAY ENCROACHMENT CONDITIONS. VERIFY EXISTING PIPE SIZE AND MATERIAL, AND NOTIFY THE PROJECT ENGINEER OF ANY DISCREPANCIES.
 - 2 1" CORPORATION STOP.
 - 3 1" COPPER SERVICE LINE
 - 4 90 DEGREE, OR 45 DEGREE, OR 22.5 DEGREE MJ BEND AND RESTRAINT.
 - 5 16" CASING PIPE FOR WATER SERVICE LINE - BORE AND JACK
 - 6 CITY OF RALEIGH WATER LINE EASEMENT. A PLAT WILL NEED TO BE RECORDED TO DEDICATE THE WATERLINE EASEMENT. ALTERNATIVELY, A LOCKED DEED TEMPLATE CAN BE USED TO DEDICATE THE WATERLINE EASEMENT BY DEED.
 - 7 6" BACKFLOW PREVENTER DEVICE (RPDA), RALEIGH APPROVED, LOCATED IN AN "ABOVE GROUND" HEATED ENCLOSURE.
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 - 17 WATER SERVICE LINE - BORE AND JACK
 - 18 20' x 30' BORE PIT

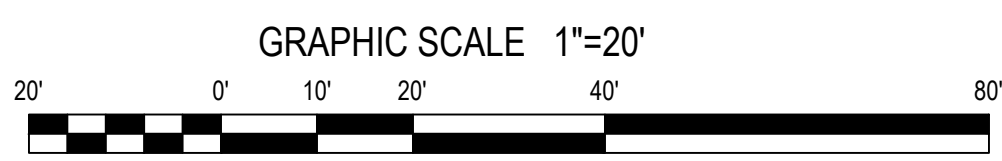
- NOTES**
1. SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.
 2. SEE SHEET C8 FOR UTILITY NOTES.

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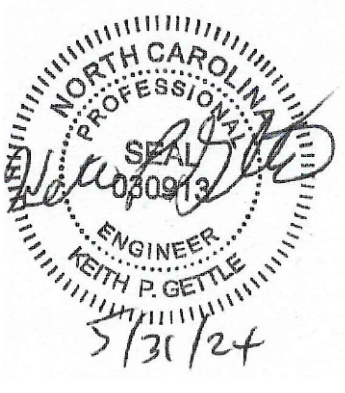
City of Raleigh Development Approval _____
City of Raleigh Review Officer



PROCTOR STREET 60' PUBLIC R/W
(S.R.#2320)

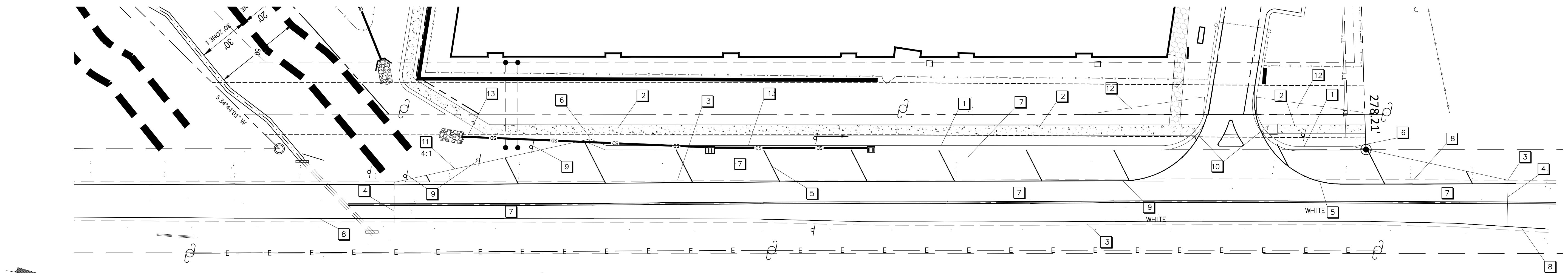
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3616 Waxwing Court,
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NO	DATE	COMMENT	BY
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3	05-31-2024	COMMENT	
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5	DATE	COMMENT	
6	DATE	COMMENT	
8	DATE	COMMENT	
		REVISION DESCRIPTION	

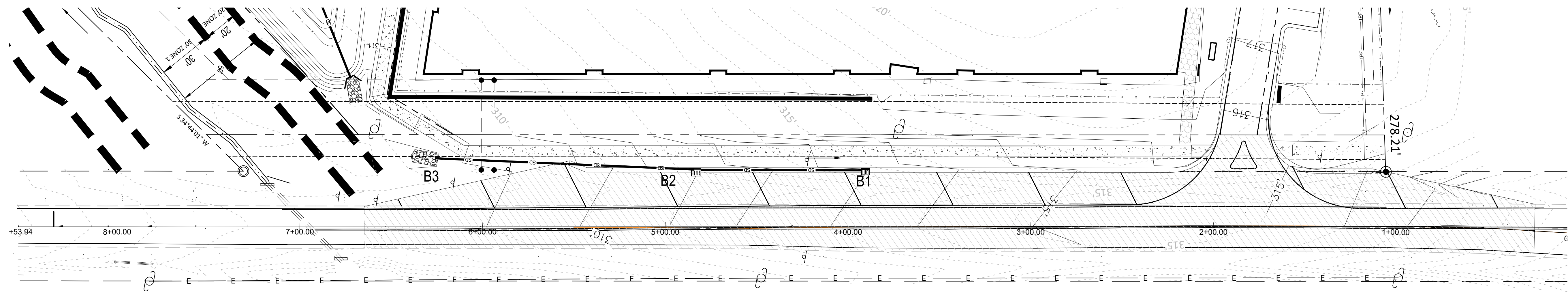
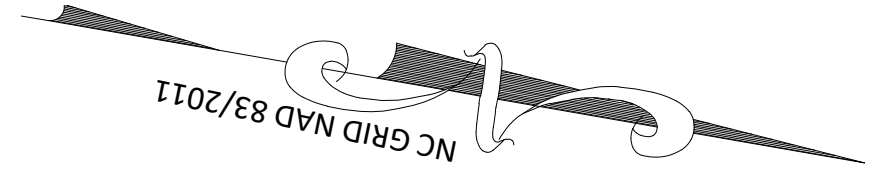
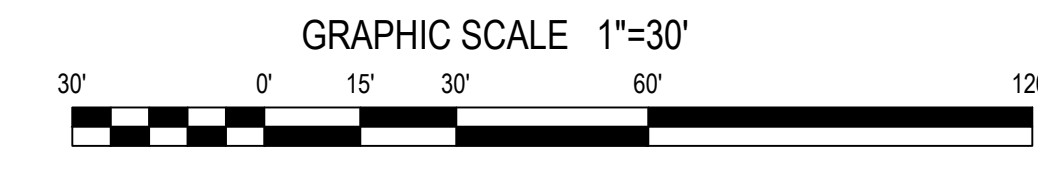


Utility Plan - South Enlarged StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. **C10**

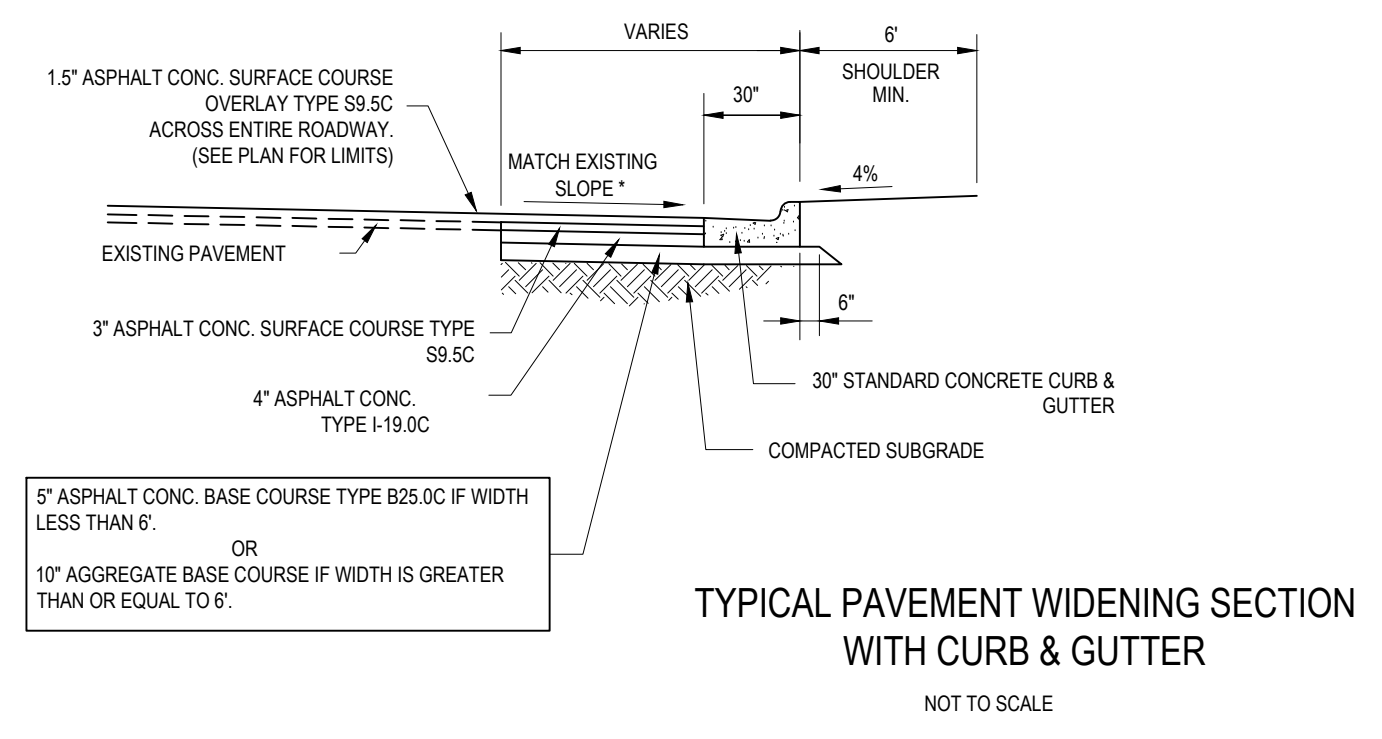


STRIPING PLAN - SHEPARD SCHOOL ROAD
SCALE 1"=30'

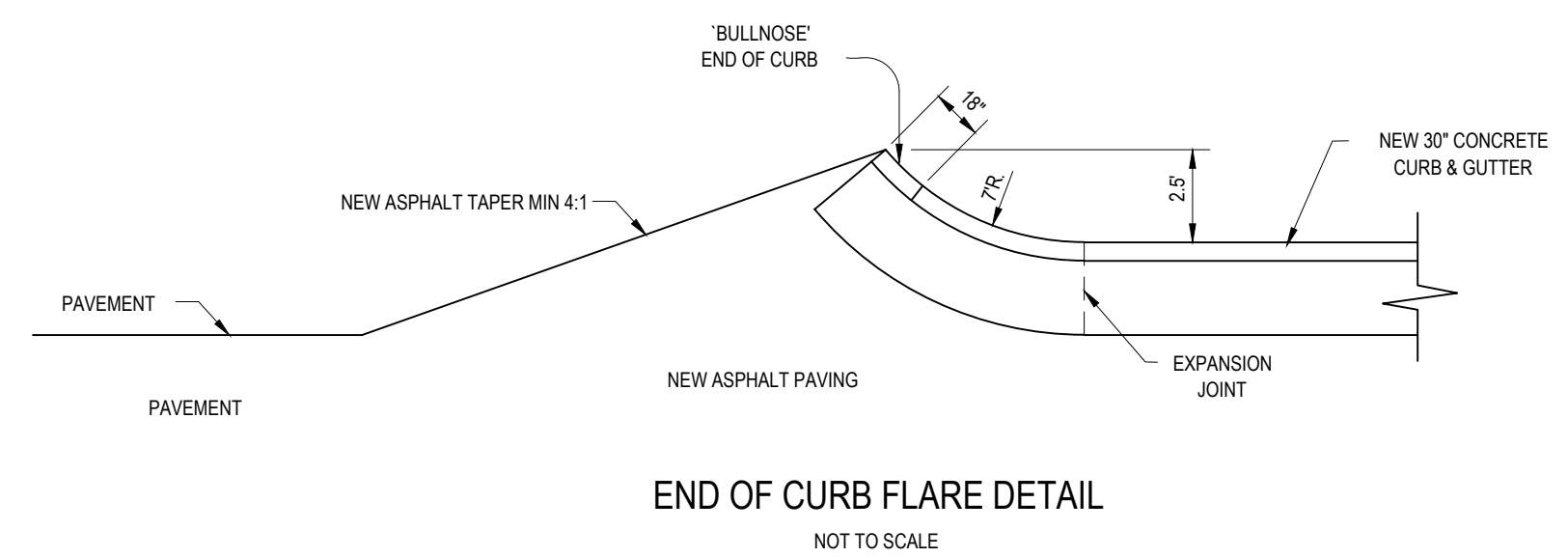
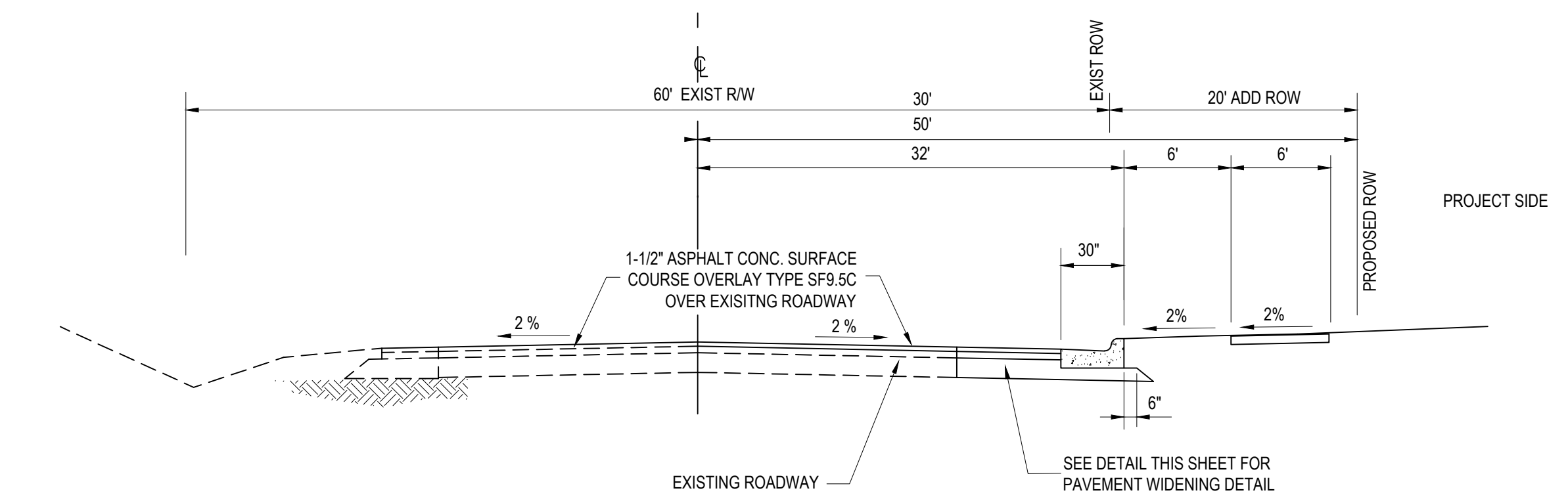


GRADING PLAN - SHEPARD SCHOOL ROAD
SCALE 1"=30'

- KEY** **KEYED NOTES ROAD WIDENING PLAN**
- 1 30" STANDARD CURB AND GUTTER WITHIN PUBLIC RIGHT-OF-WAY.
 - 2 4" THICK CONCRETE 6' WIDE SIDEWALK
 - 3 EXISTING EDGE OF PAVEMENT
 - 4 TIE INTO EXISTING PAVEMENT - 25' MILL LIMITS WITH A BUTT JOINT
 - 5 4" THERMOPLASTIC PAVEMENT MARKING - SEE NCDOT DETAIL 1205.09
 - 6 FLARE OUT END OF CURB AND TAPER ASPHALT TO BACK OF CURB. SEE DETAIL
 - 7 1.5" THICK BITUMINOUS PAVEMENT OVERLAY, NCDOT TYPE SF9.5C. OVER ENTIRE ROADWAY SEE TYPICAL SECTION.
 - 8 EXISTING PAVEMENT EDGE MARKING
 - 9 TYPE 3 OBJECT MARKER (OM3-R). SEE NCDOT DETAIL 1264.01
 - 10 NCDOT TYPE 1 STANDARD HANDICAP ACCESS RAMP - SEE DETAIL
 - 11 EDGE OF PAVEMENT - ASPHALT TAPER RATIO MIN 4:1
 - 12 NCDOT / TOWN OF ZEBULON 10x70' SIGHT TRIANGLE
 - 13 STORM DRAINAGE SYSTEM - SEE SCHEDULE



TYPICAL SECTION - SHEPARD SCHOOL ROAD
NOT TO SCALE



STORM DRAINAGE STRUCTURE SCHEDULE

Structure Number	Structure Type	STRUCTURE DATA					PIPE DATA				REMARKS	
		Rim/TOC Elevation	Invert In North	Invert In East	Invert In South	Invert In West	Invert Out	To	Pipe Length Out	Pipe Slope		Design Diameter
#		elev	elev	elev	elev	elev		ft	%	in		
B1	CURB INLET	313.00				309.00	B2	90.2	0.50%	15	RCP Class III	NCDOT 840.02
B2	CURB INLET	311.50	308.54			308.34	B3	143.0	0.50%	15	RCP Class III	NCDOT 840.02
B3	FES	307.65										Class A Rip Rap Apron L=5', W=3.75', T=12"

RIM ELEVATIONS, AS NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE STORM DRAINAGE STRUCTURE TOP.
PIPE LENGTHS SHOWN ARE APPROXIMATE. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND WHERE APPLICABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

GENERAL NOTES

1. ALL WORK IN SHEPARD ROAD (SR 2406) SHALL COMPLY WITH NCDOT AND TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
2. SEE SHEET D5 FOR TRAFFIC CONTROL DURING CONSTRUCTION.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST NCDOT SPECIFICATIONS, DETAILS, AND PERMIT REQUIREMENTS.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK WITHIN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE SUPPLEMENT TO THE MUTCD AND LOCAL INSPECTORS DIRECTION.
6. ALL PERMANENT PAVEMENT MARKINGS AND STRIPING WITHIN SHEPARD ROAD RIGHT-OF-WAY SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE LATEST EDITION OF NCDOT SPECIFICATIONS SECTION 1205. ALL ONSITE MARKINGS AND STRIPING SHALL BE RETROREFLECTIVE PAINT.
7. ALL DIMENSIONS TO PAVEMENT MARKING LINES ARE TO THE CENTER OF SINGLE LINES OR TO THE CENTER BETWEEN DOUBLE LINES.
8. THE CONTRACTOR SHALL VERIFY ALL LANE MARKINGS WITH NCDOT PRIOR TO INSTALLATION.

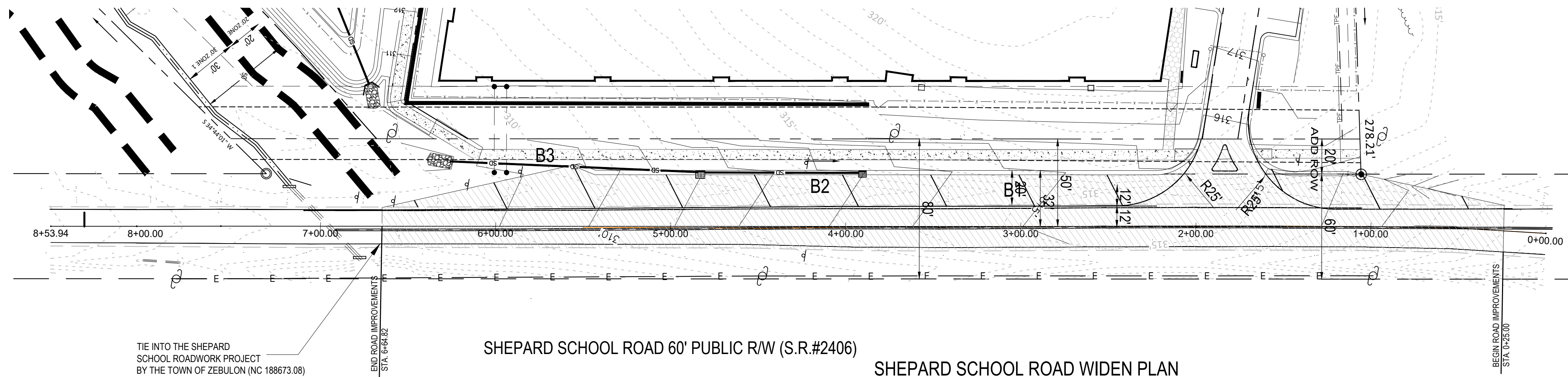
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 Firm License P-2538
 (919) 210-3934

NO.	DATE	BY	REVISION/DESCRIPTION
1	01-15-2024	PKT	Per Town Comment
2	03-08-2024	PKT	Per Town Comment
3	05-13-2024	PKT	Per Town, CDR AND Wake County Comment
4	DATE	BY	COMMENT
5	DATE	BY	COMMENT
6	DATE	BY	COMMENT
NO.	DATE	BY	REVISION/DESCRIPTION

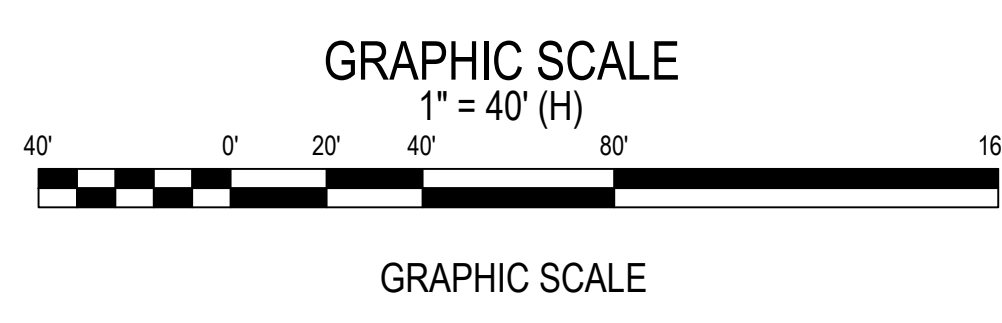


Road Widen - Shepard School
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

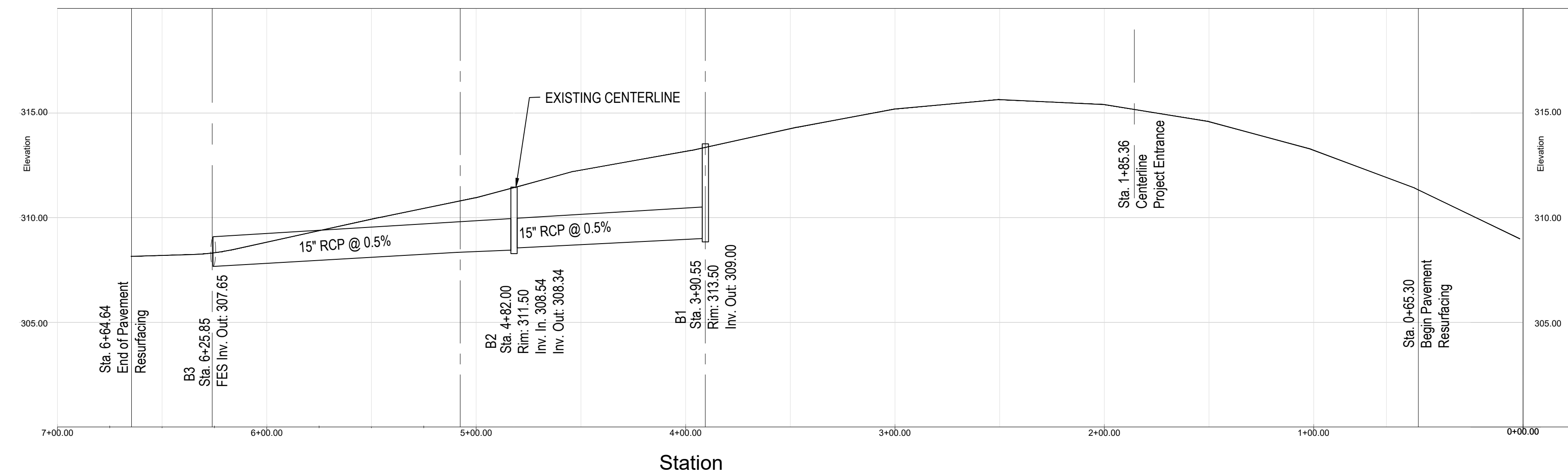
Project No. 23001
 Dwg No. **C11**



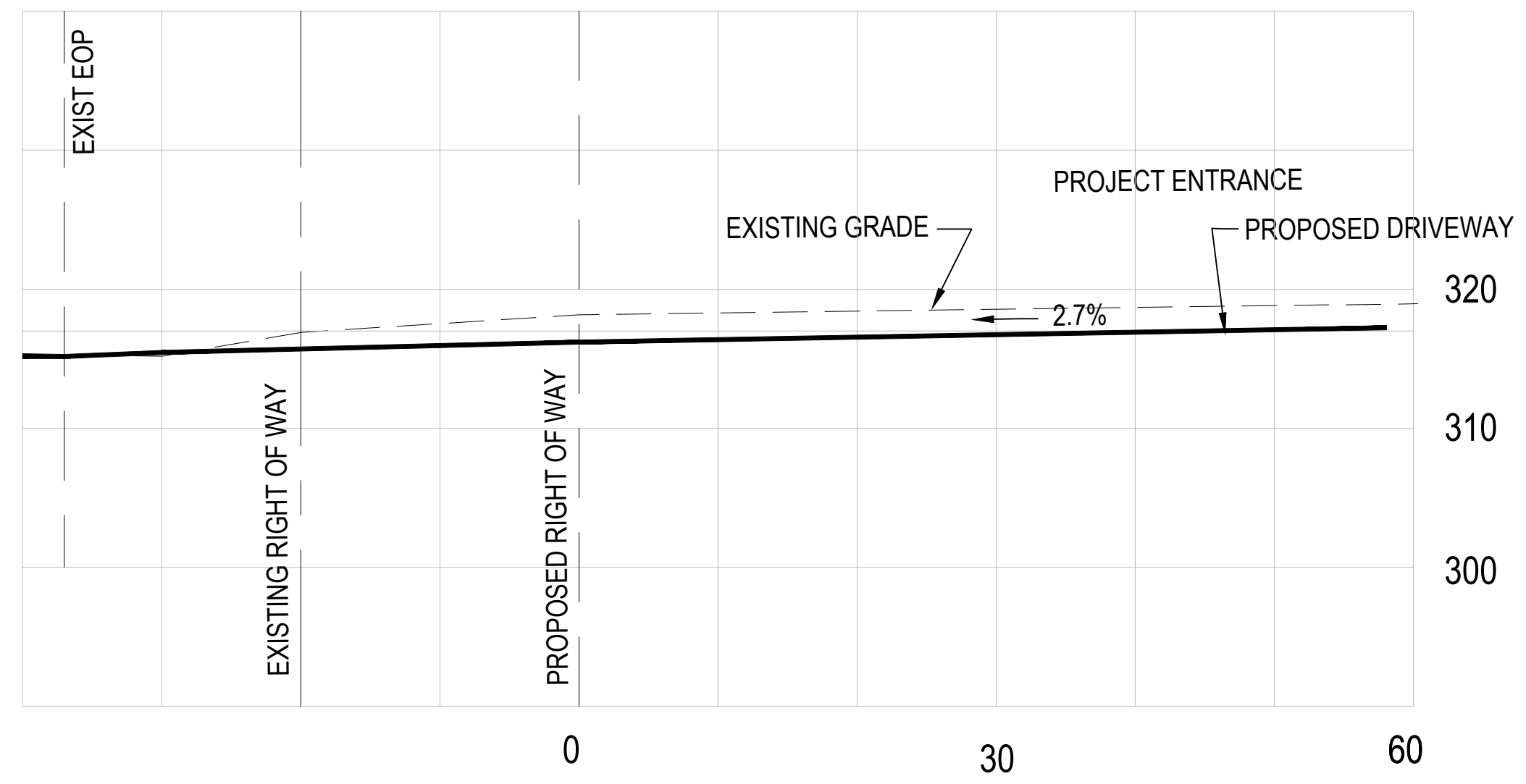
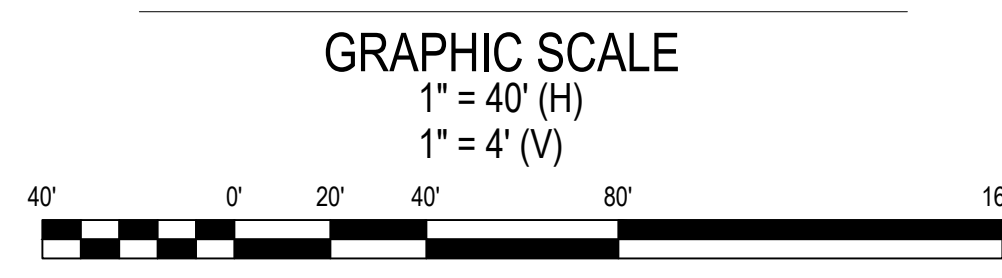
SHEPARD SCHOOL ROAD 60' PUBLIC R/W (S.R.#2406)
SHEPARD SCHOOL ROAD WIDEN PLAN



- GENERAL NOTES**
1. ALL WORK IN SHEPARD ROAD (SR 2406) SHALL COMPLY WITH NCDOT AND TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
 2. SEE SHEET D5 FOR TRAFFIC CONTROL DURING CONSTRUCTION.
 4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST NCDOT SPECIFICATIONS, DETAILS, AND PERMIT REQUIREMENTS.
 5. CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL MEASURES FOR ALL WORK WITHIN PUBLIC R/W PER THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS AND THE SUPPLEMENT TO THE THE MUTCD AND LOCAL INSPECTORS DIRECTION.
 6. ALL PERMANENT PAVEMENT MARKINGS AND STRIPING WITHIN SHEPARD ROAD RIGHT-OF-WAY SHALL BE THERMOPLASTIC IN ACCORDANCE WITH THE LATEST EDITION OF NCDOT SPECIFICATIONS SECTION 1205. ALL ONSITE MARKINGS AND STRIPING SHALL BE RETROREFLECTIVE PAINT.
 7. ALL DIMENSIONS TO PAVEMENT MARKING LINES ARE TO THE CENTER OF SINGLE LINES OR TO THE CENTER BETWEEN DOUBLE LINES.
 8. THE CONTRACTOR SHALL VERIFY ALL LANE MARKINGS WITH NCDOT PRIOR TO INSTALLATION.



SHEPARD SCHOOL ROAD PROFILE



DRIVEWAY STEM PROFILE



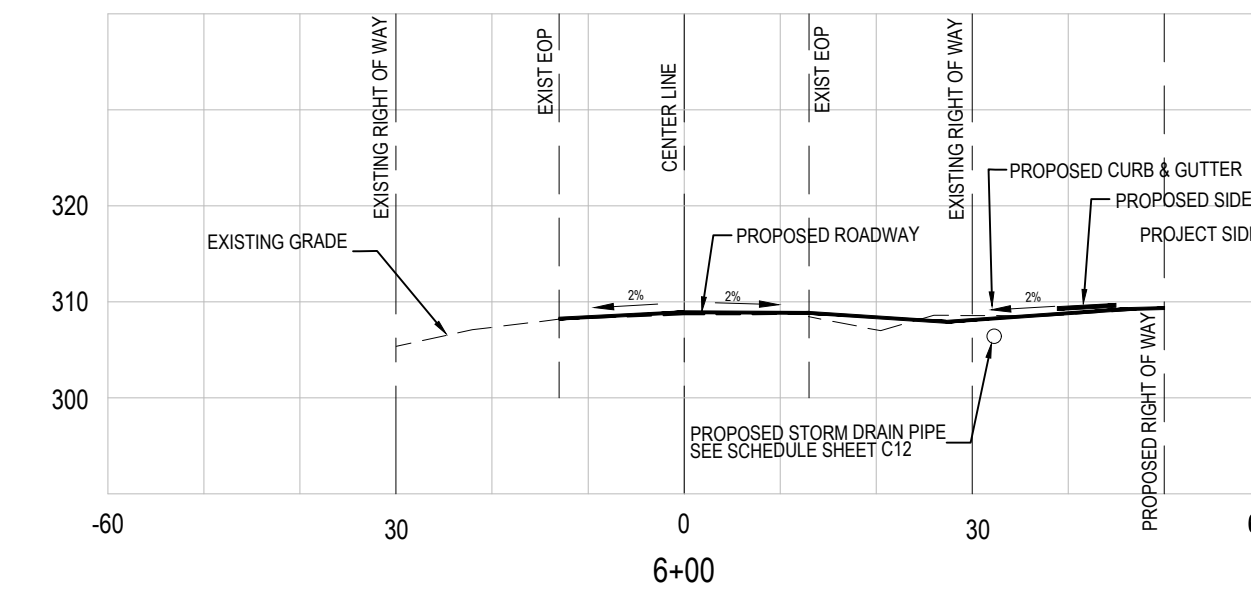
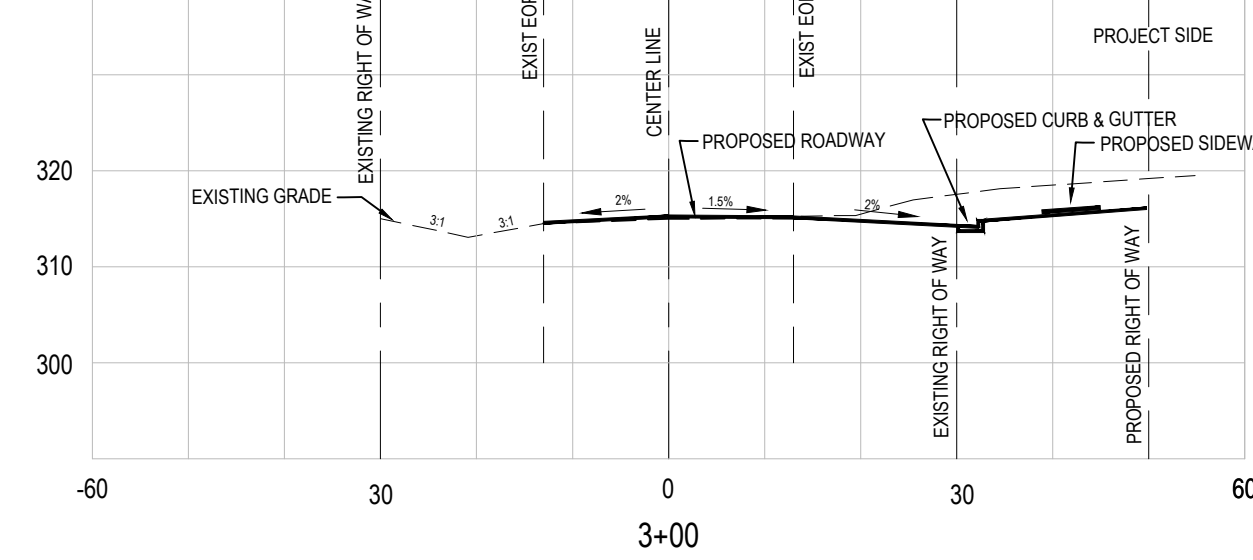
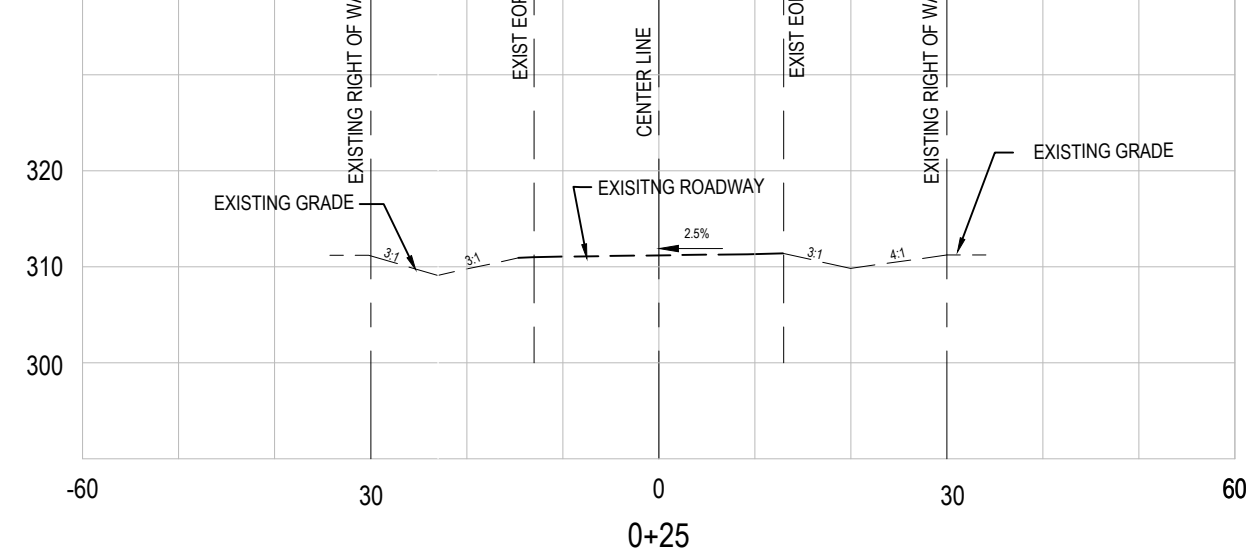
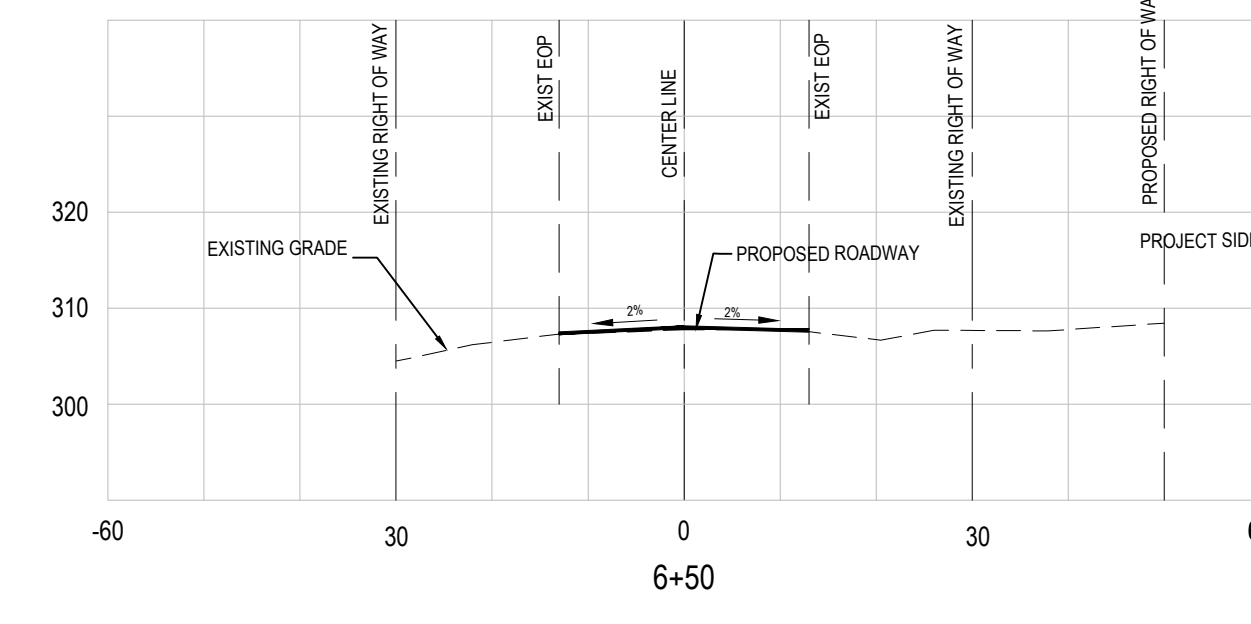
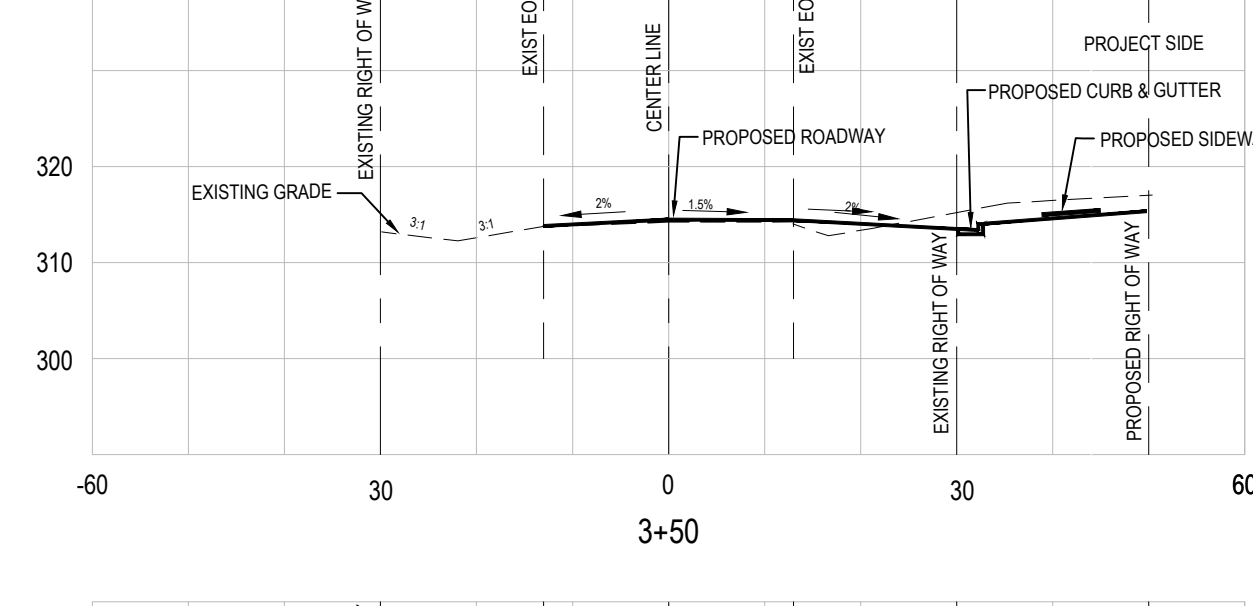
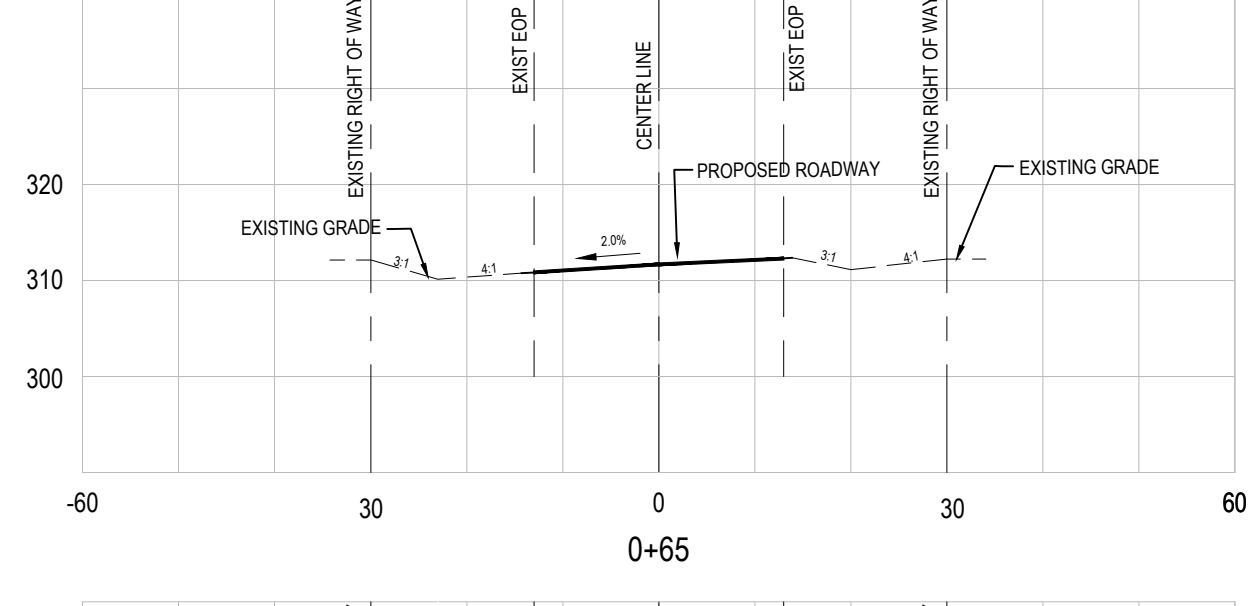
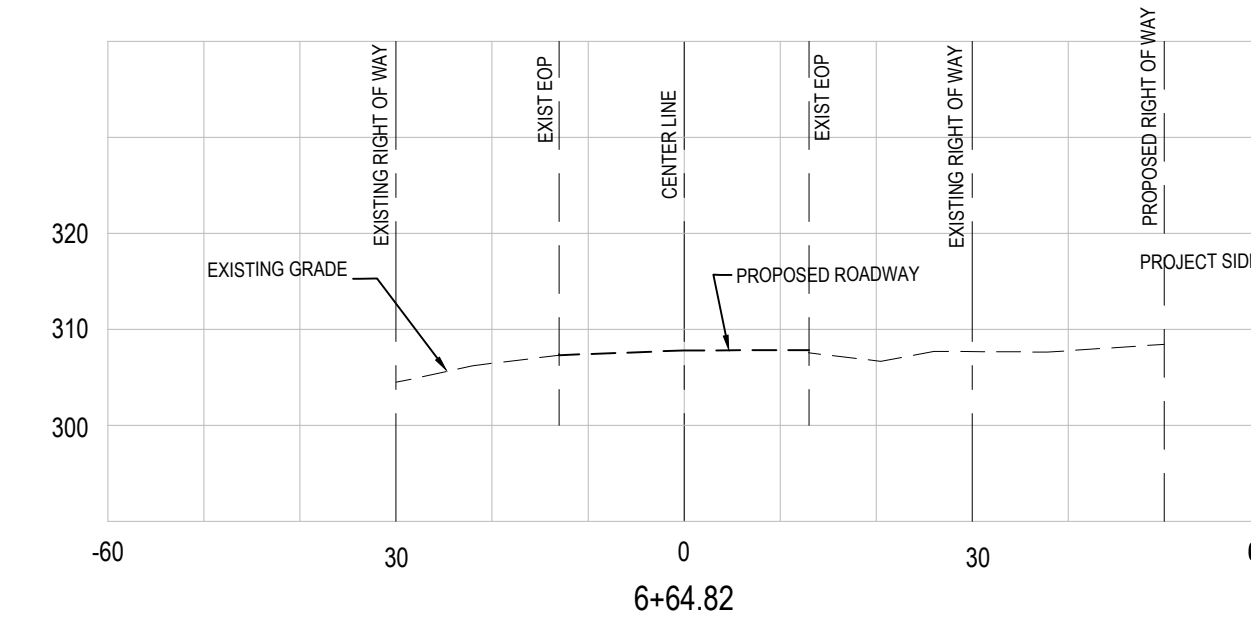
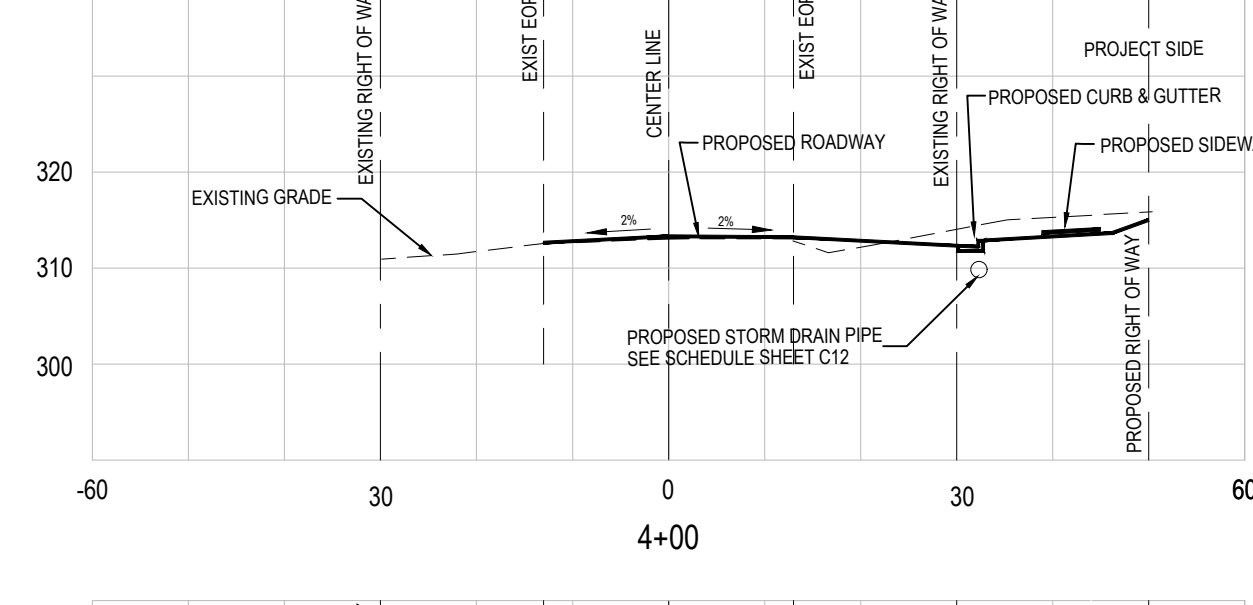
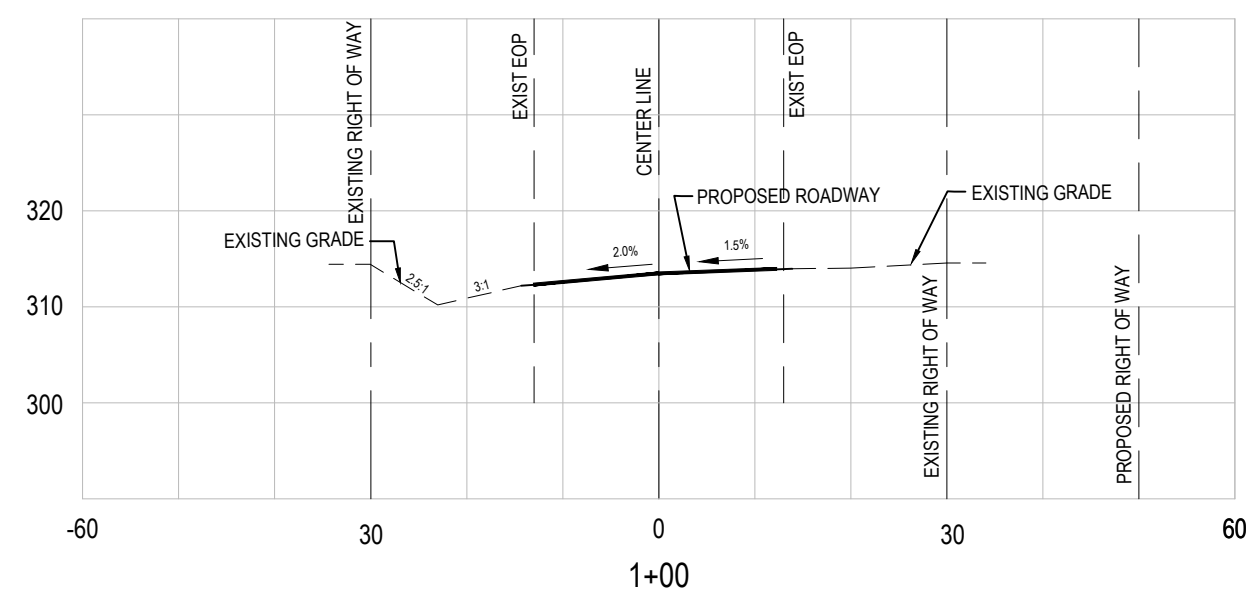
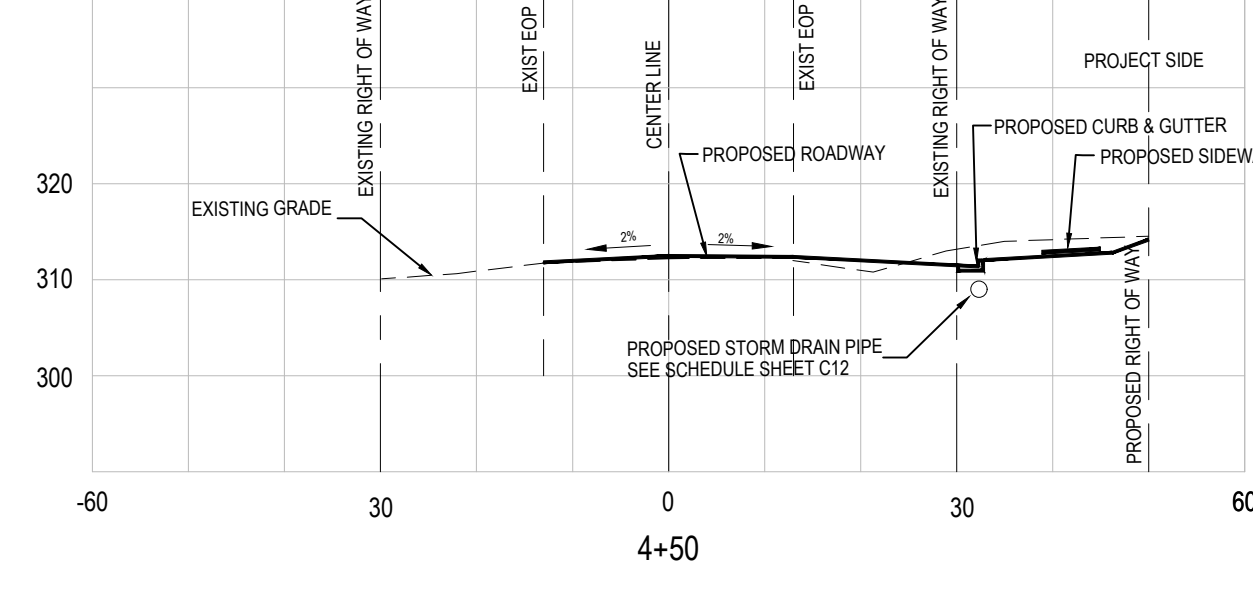
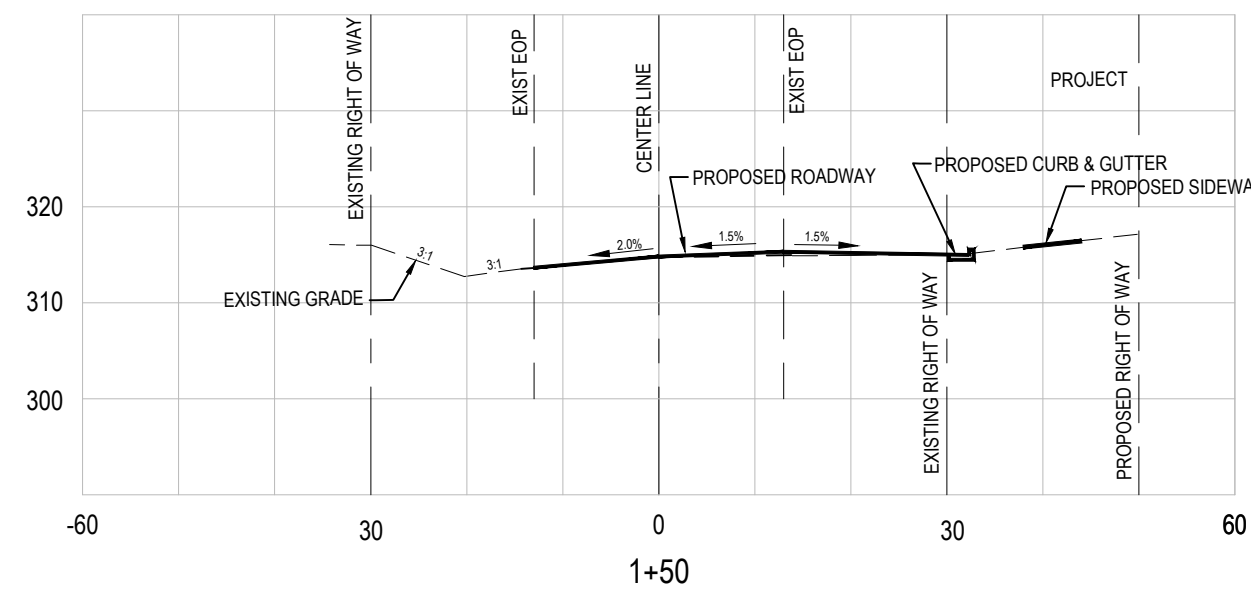
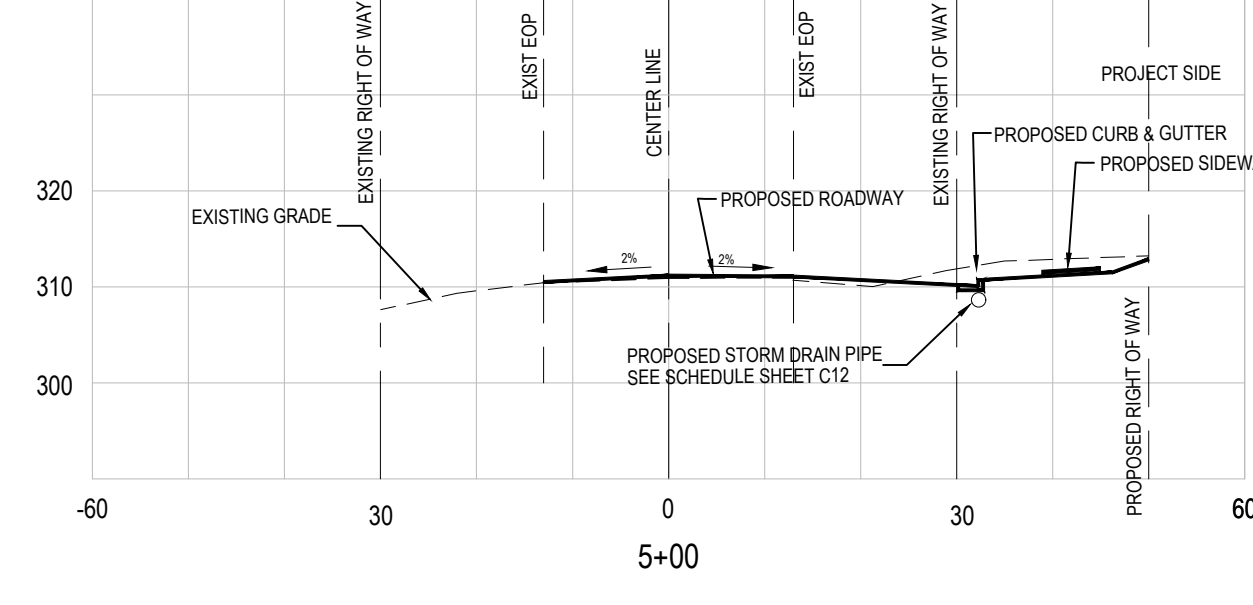
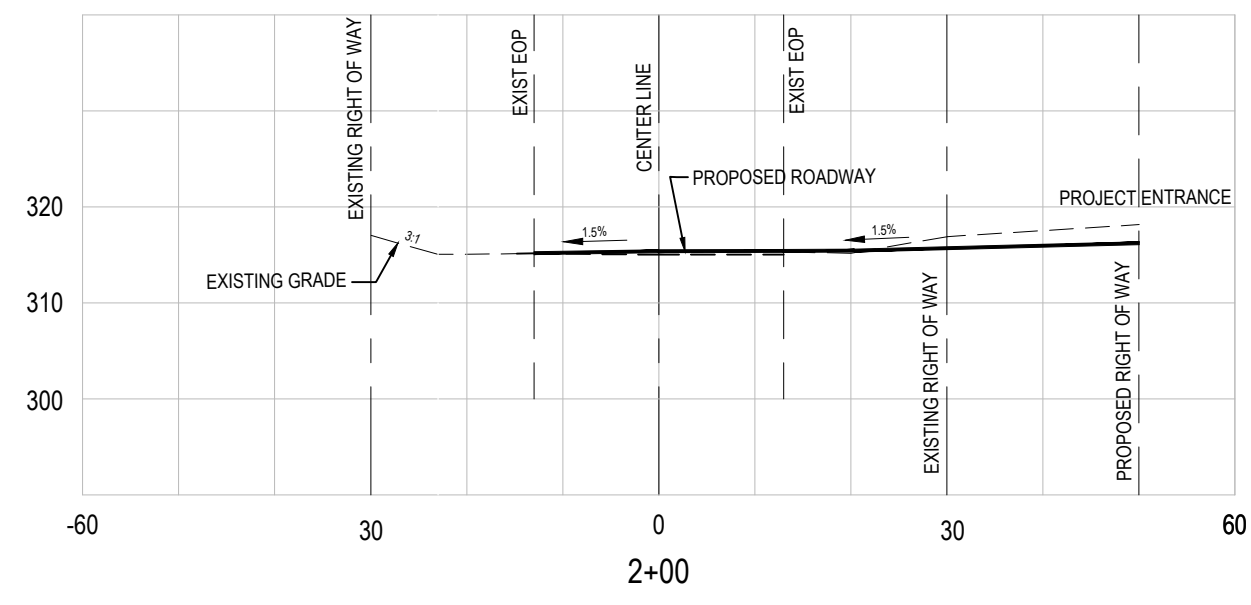
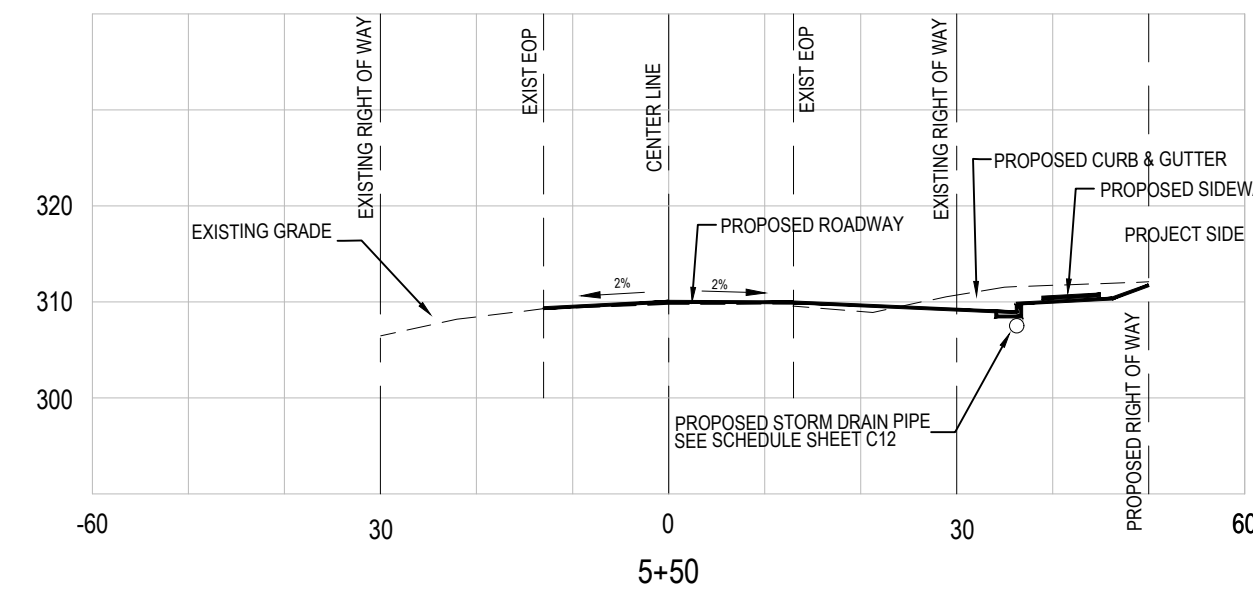
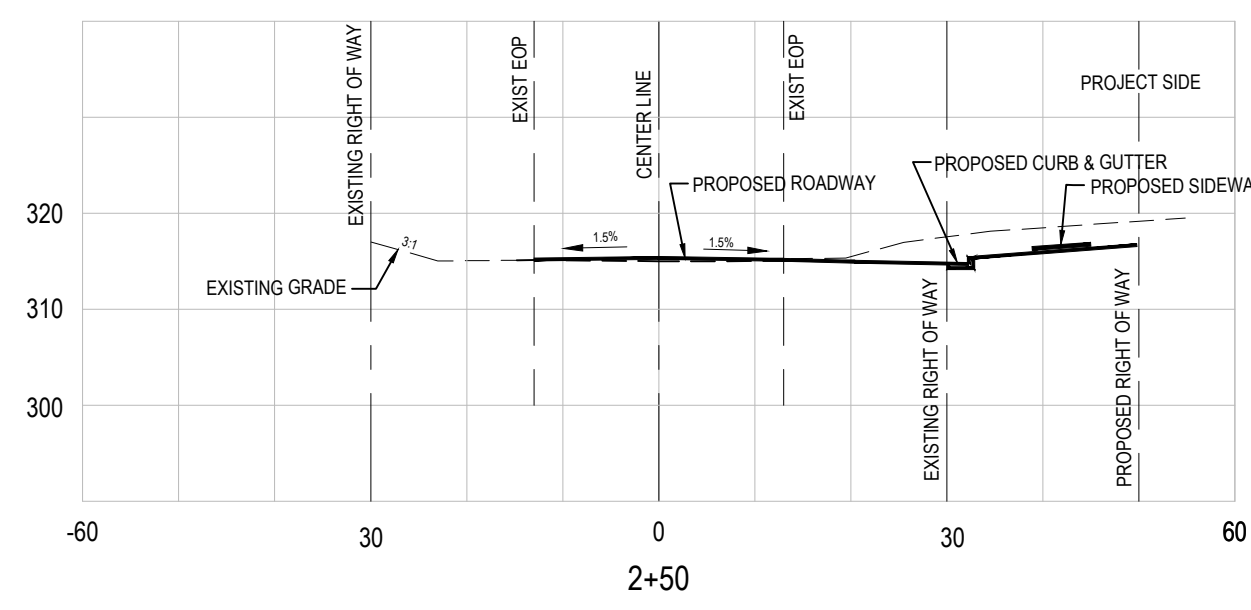
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO.	DATE	BY	COMMENT	REVISION DESCRIPTION
1	01-16-2024		Per Town Comment	
2	03-08-2024		Per Town Comment	
3	05-31-2024		Per Town, CDR AND Wake County Comment	
4			COMMENT	
5			COMMENT	
6			COMMENT	



Shepard School - Plan & Profile
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C12**



NOTES
 1. SEE SHEET C11 AND C12 FOR STANDARD NCDOT NOTES.

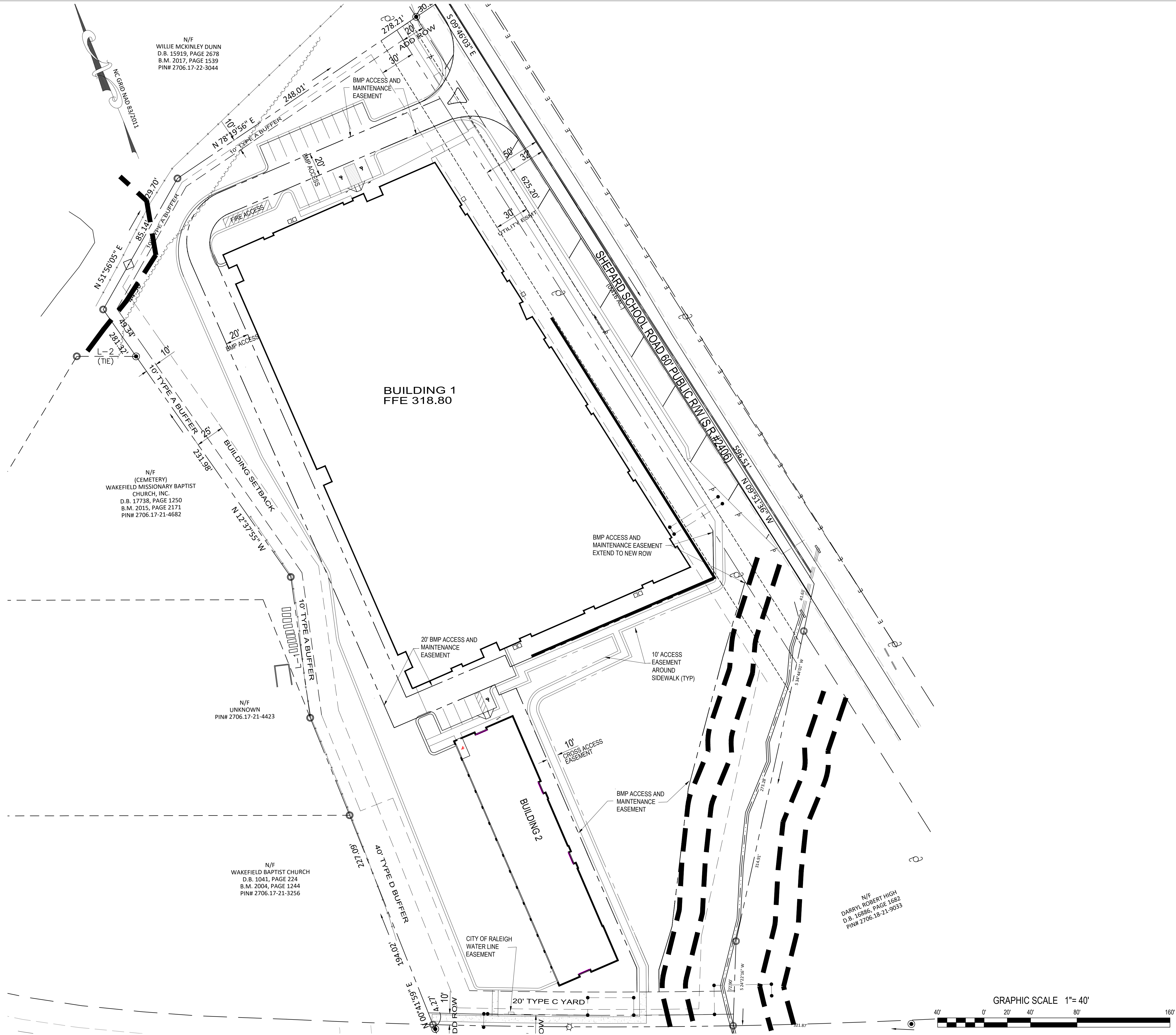
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO	DATE	BY	REVISION DESCRIPTION
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2	03-08-2024	RFQ	RFQ
3	05-31-2024	RFQ	RFQ
4			
5			
6			



Shepard School - Cross-Sections
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **C13**



N/F
WILLIE MCKINLEY DUNN
D.B. 15919, PAGE 2678
B.M. 2017, PAGE 1539
PIN# 2706.17-22-3044

N/F
(CEMETERY)
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
D.B. 17738, PAGE 1250
B.M. 2015, PAGE 2171
PIN# 2706.17-21-4682

N/F
UNKNOWN
PIN# 2706.17-21-4423

N/F
WAKEFIELD BAPTIST CHURCH
D.B. 1041, PAGE 224
B.M. 2004, PAGE 1244
PIN# 2706.17-21-3256

N/F
DARRYL ROBERT HIGH
D.B. 16886, PAGE 1682
PIN# 2706.18-21-9033

BUILDING 1
FFE 318.80

BUILDING 2

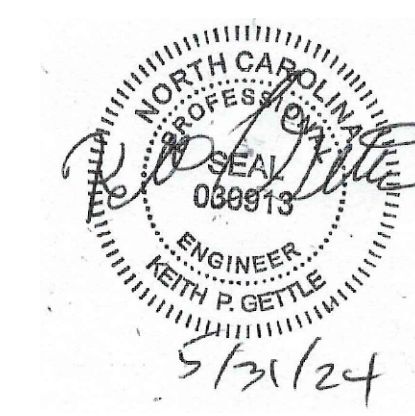
GRAPHIC SCALE 1"= 40'



Gettle Engineering and Design, PLLC

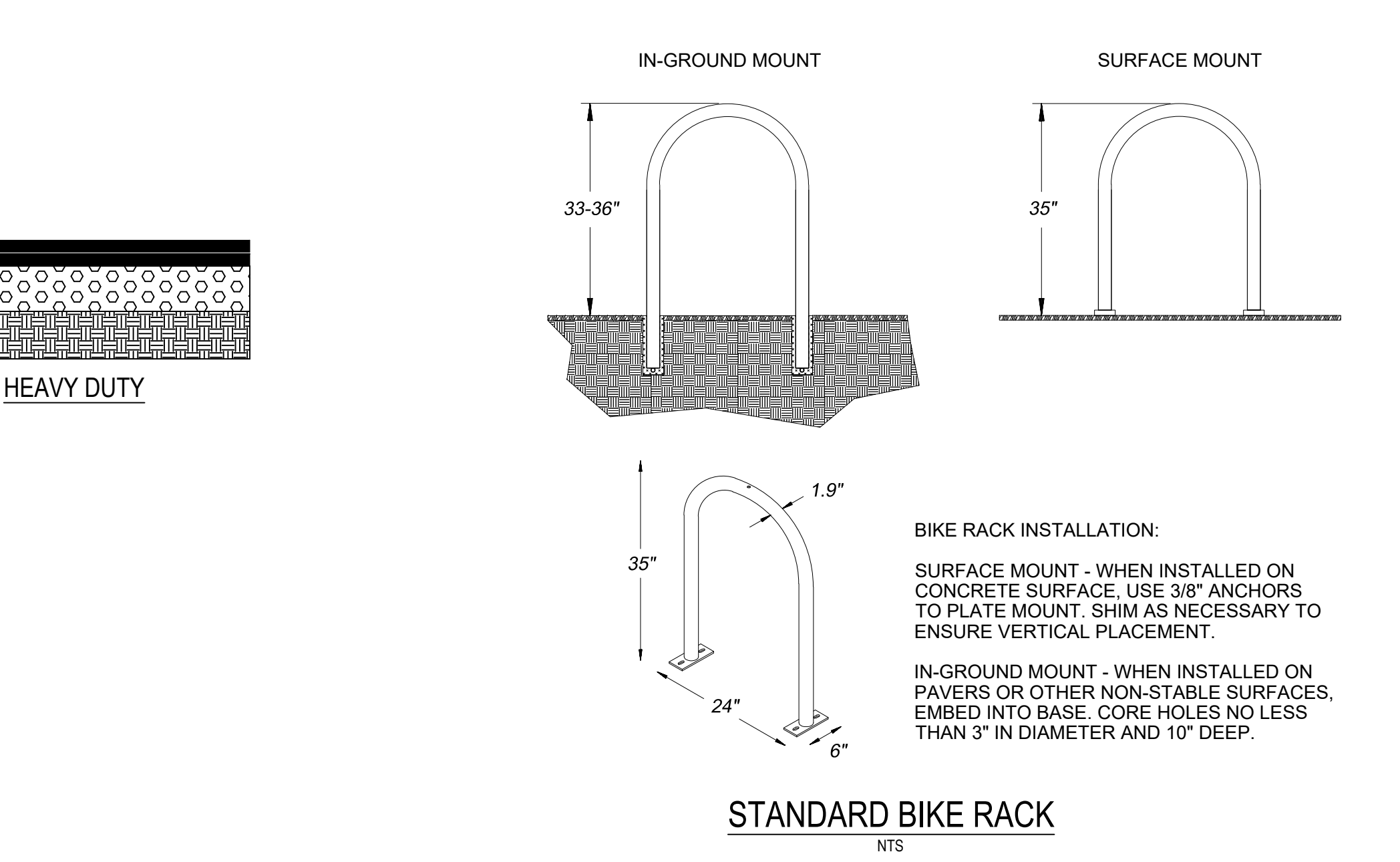
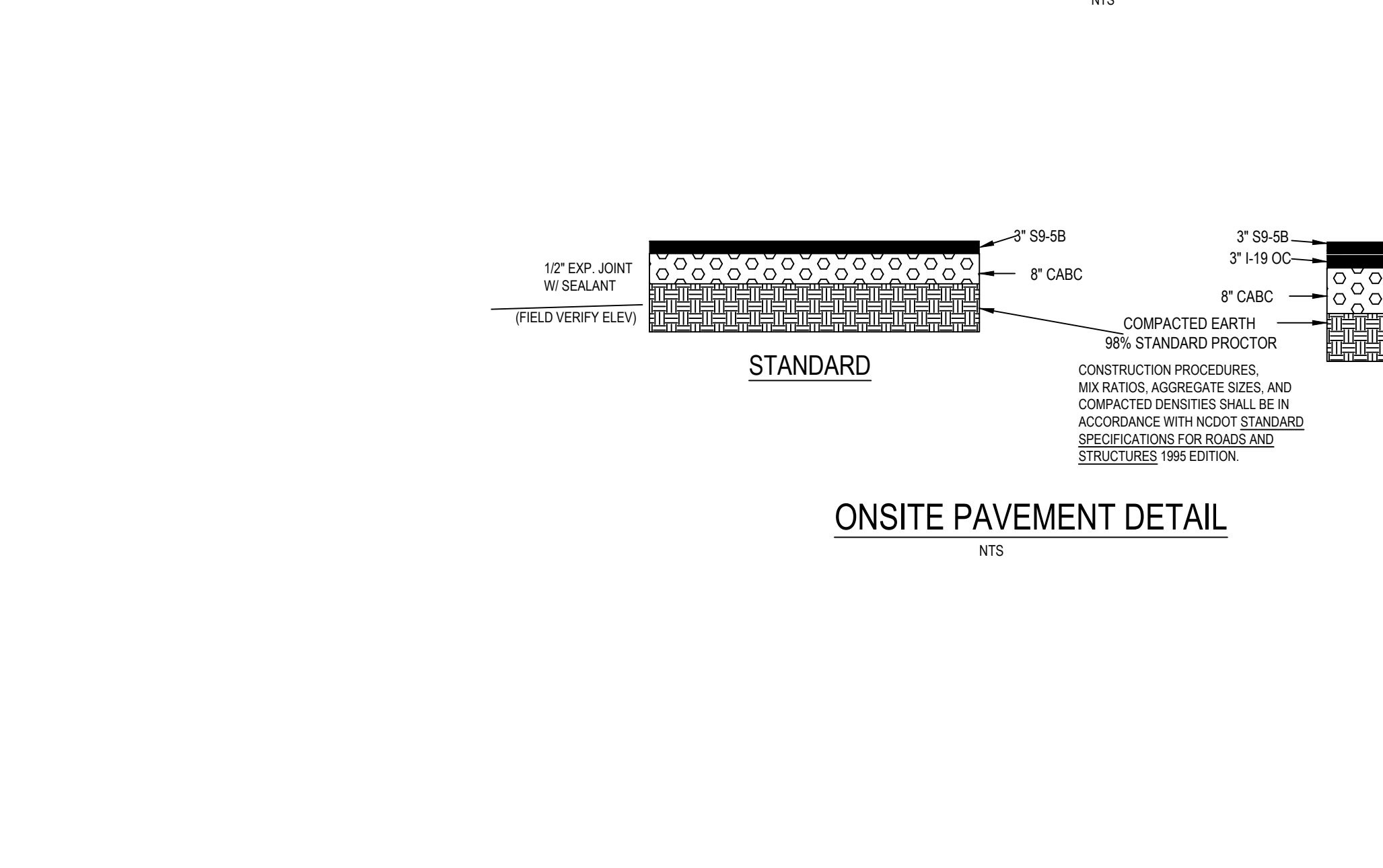
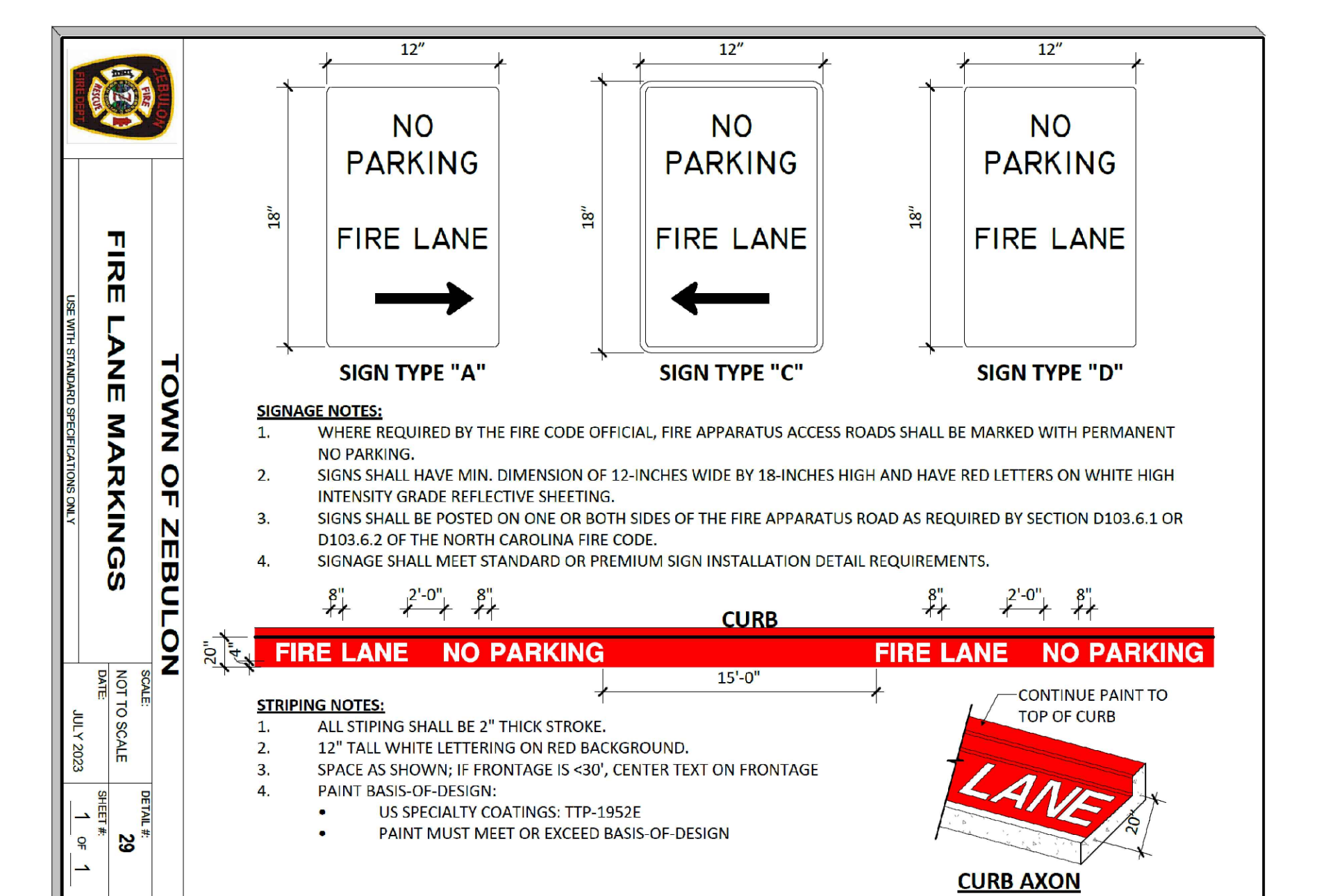
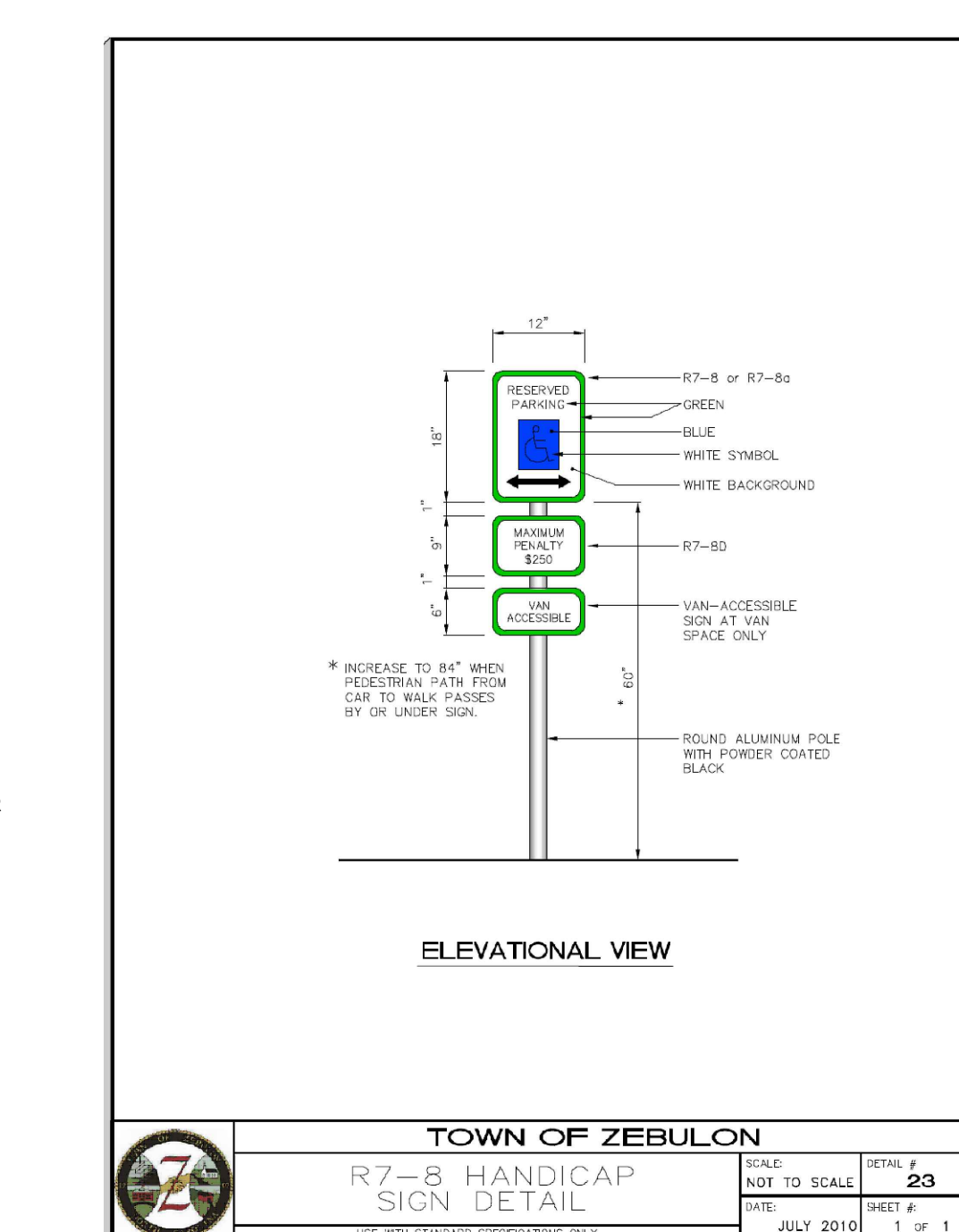
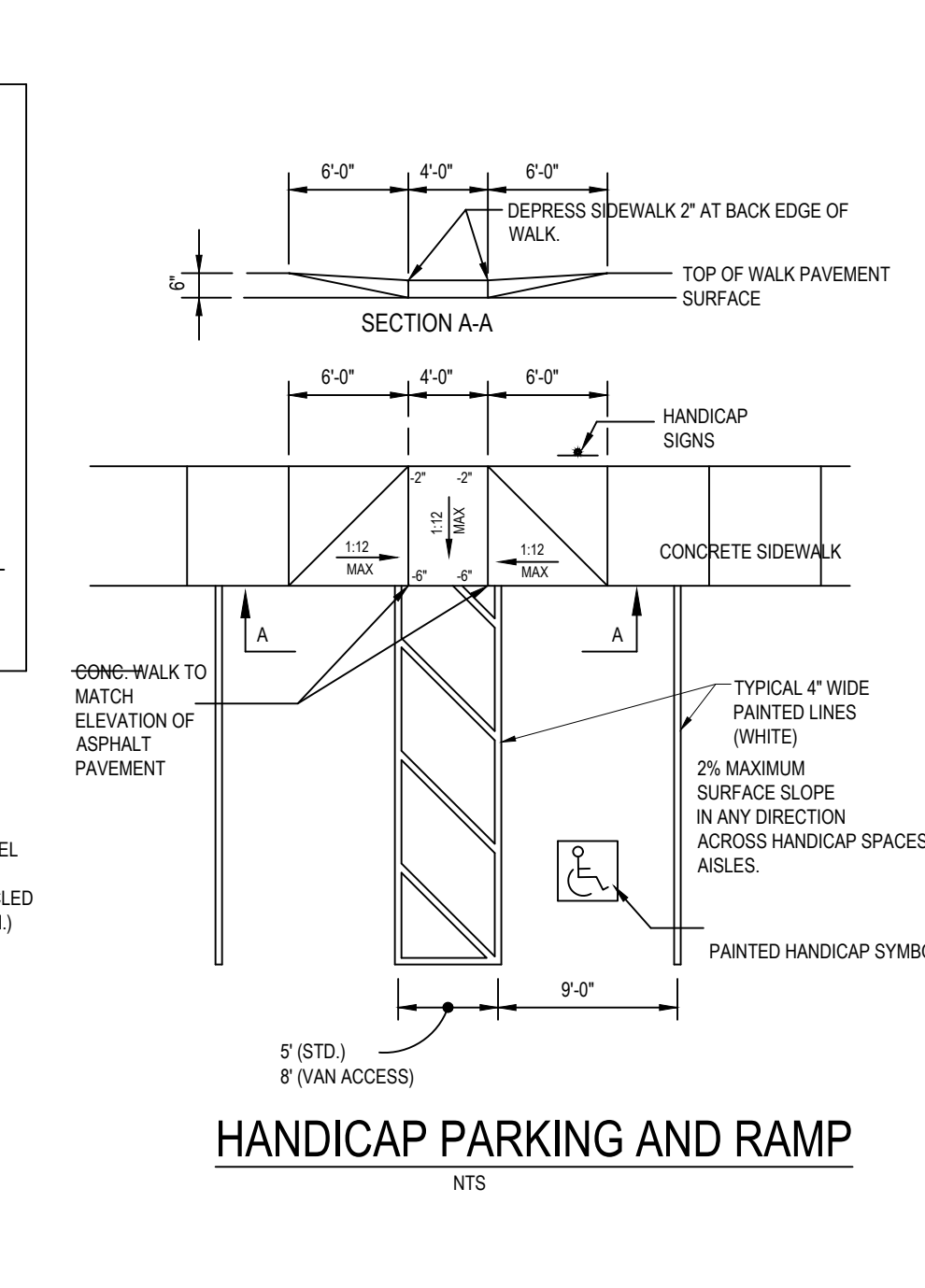
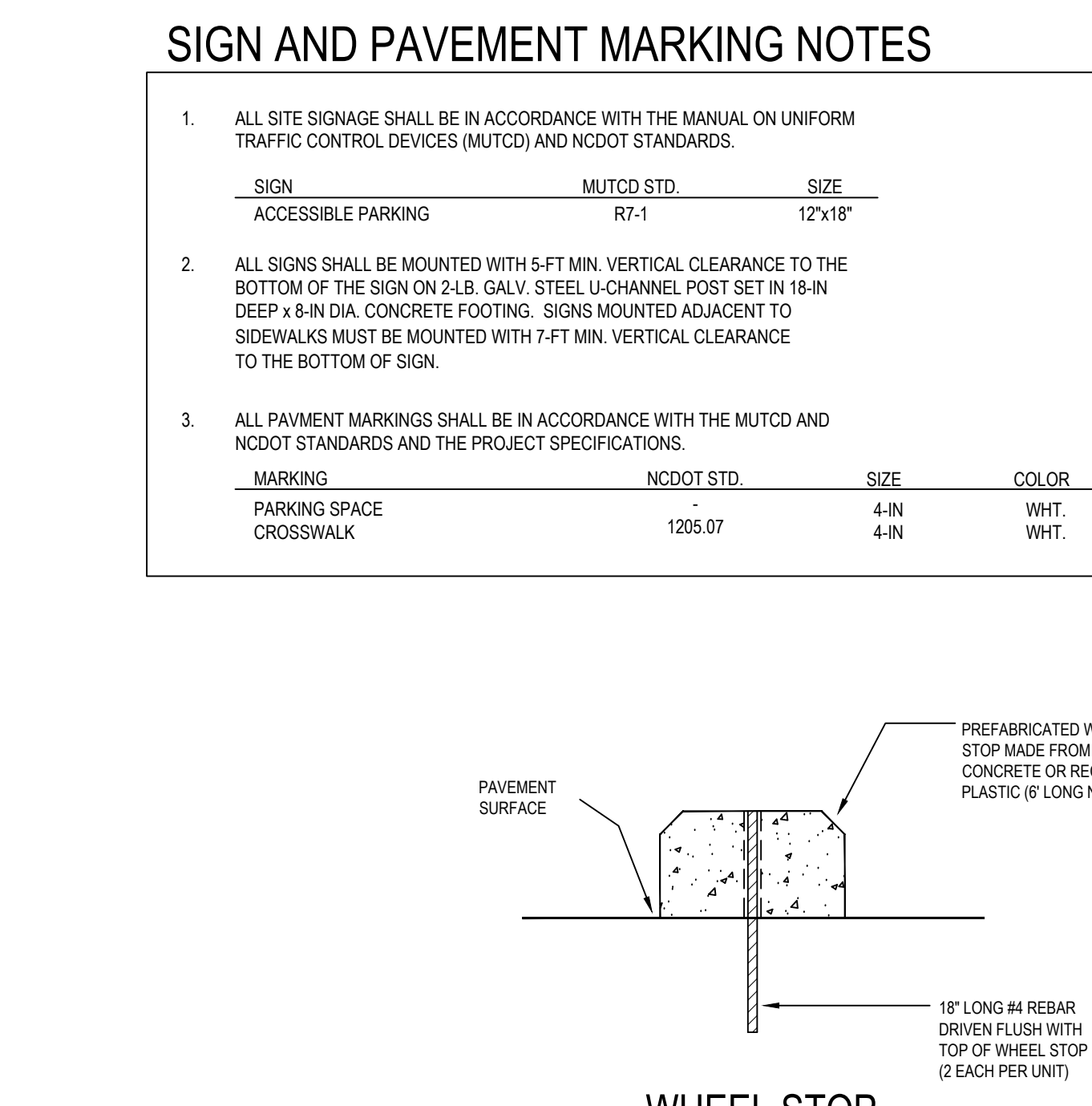
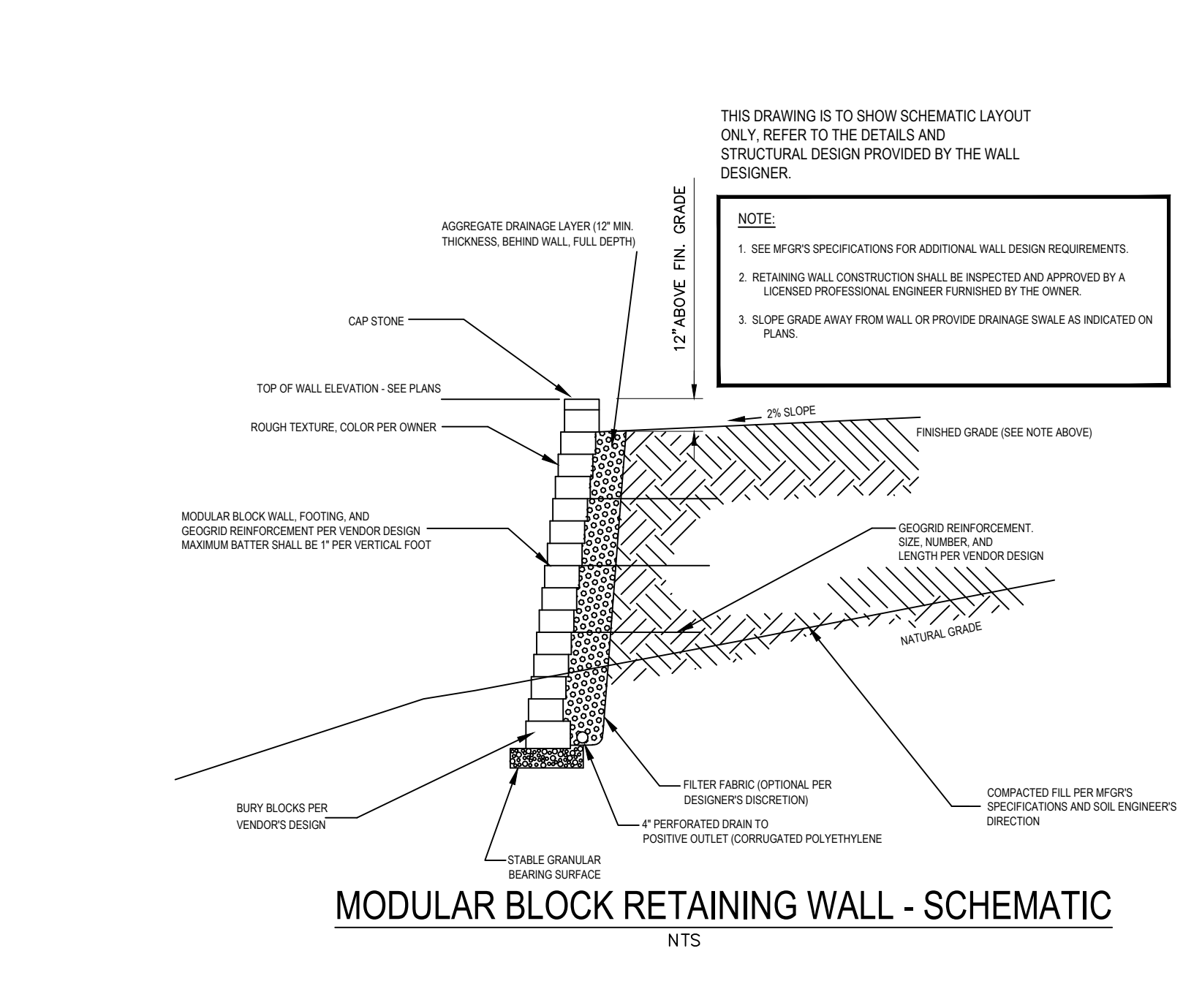
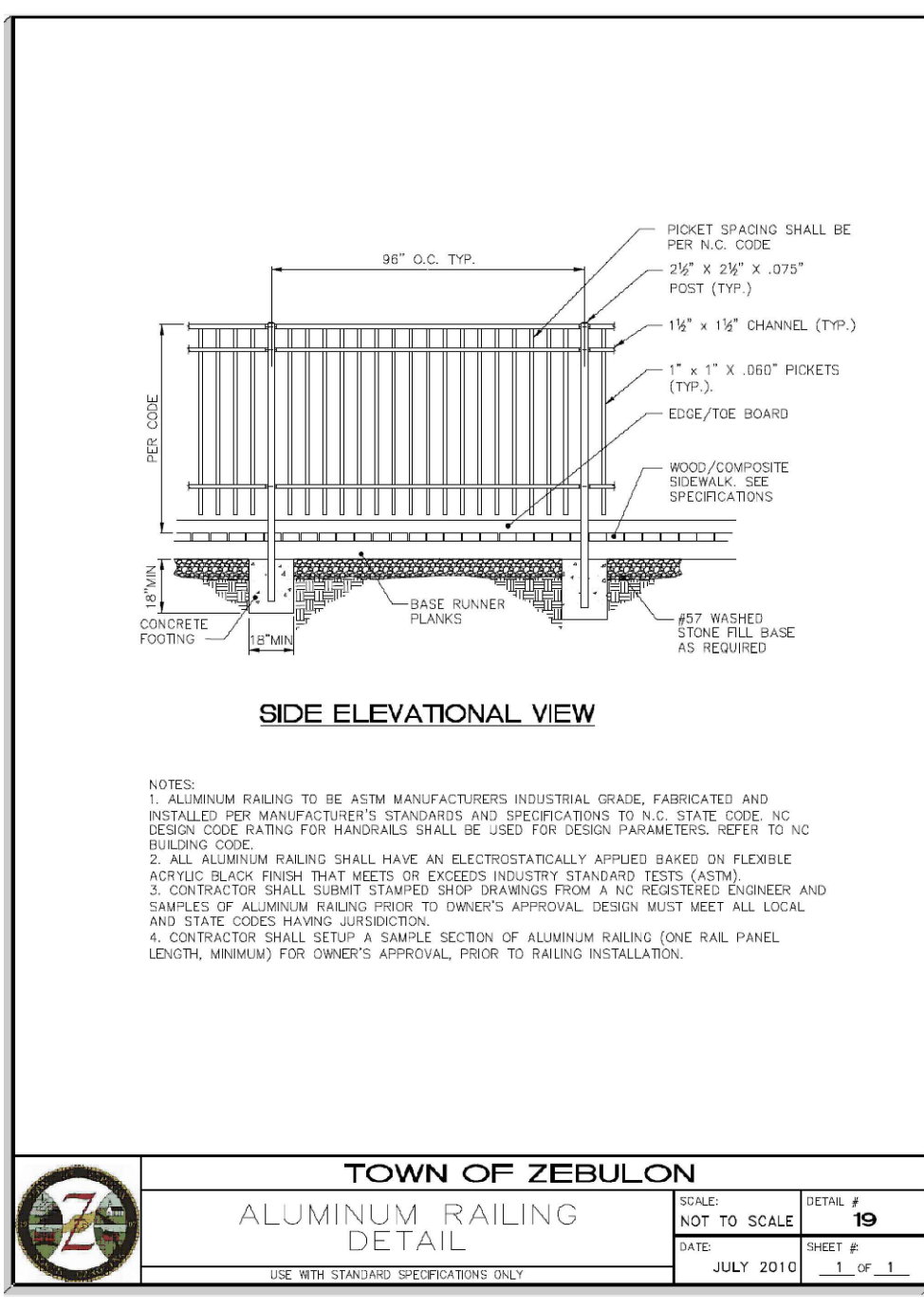
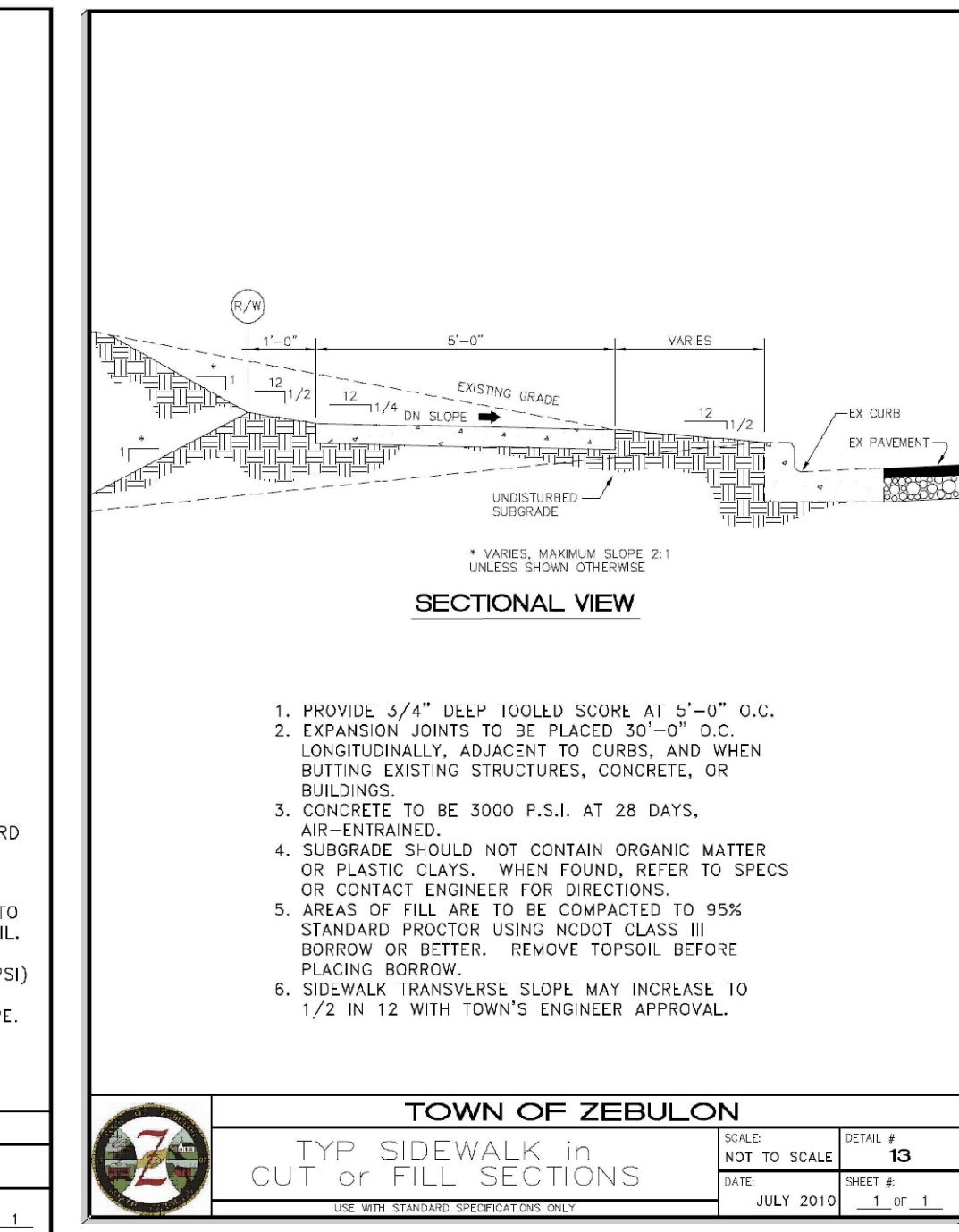
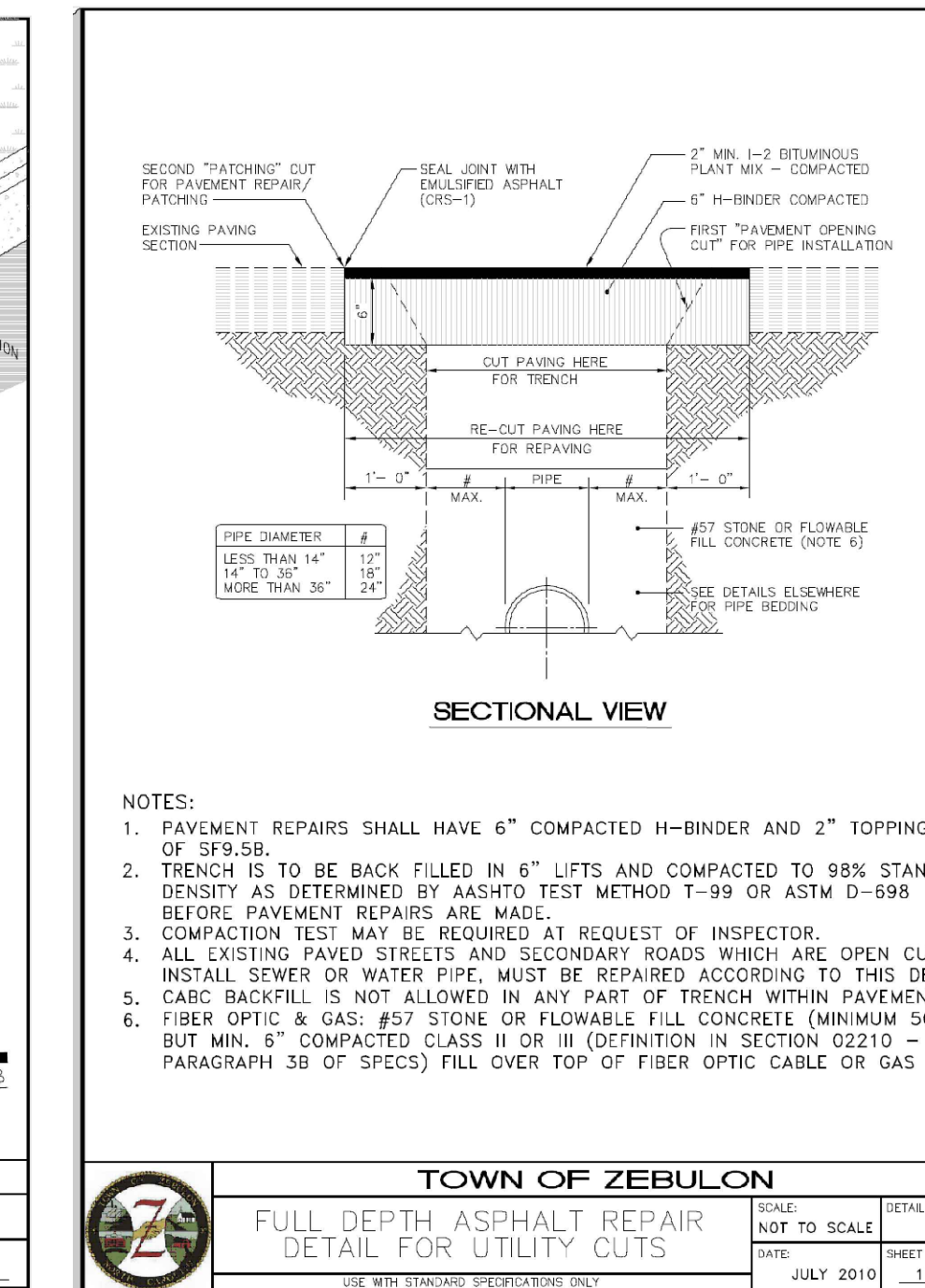
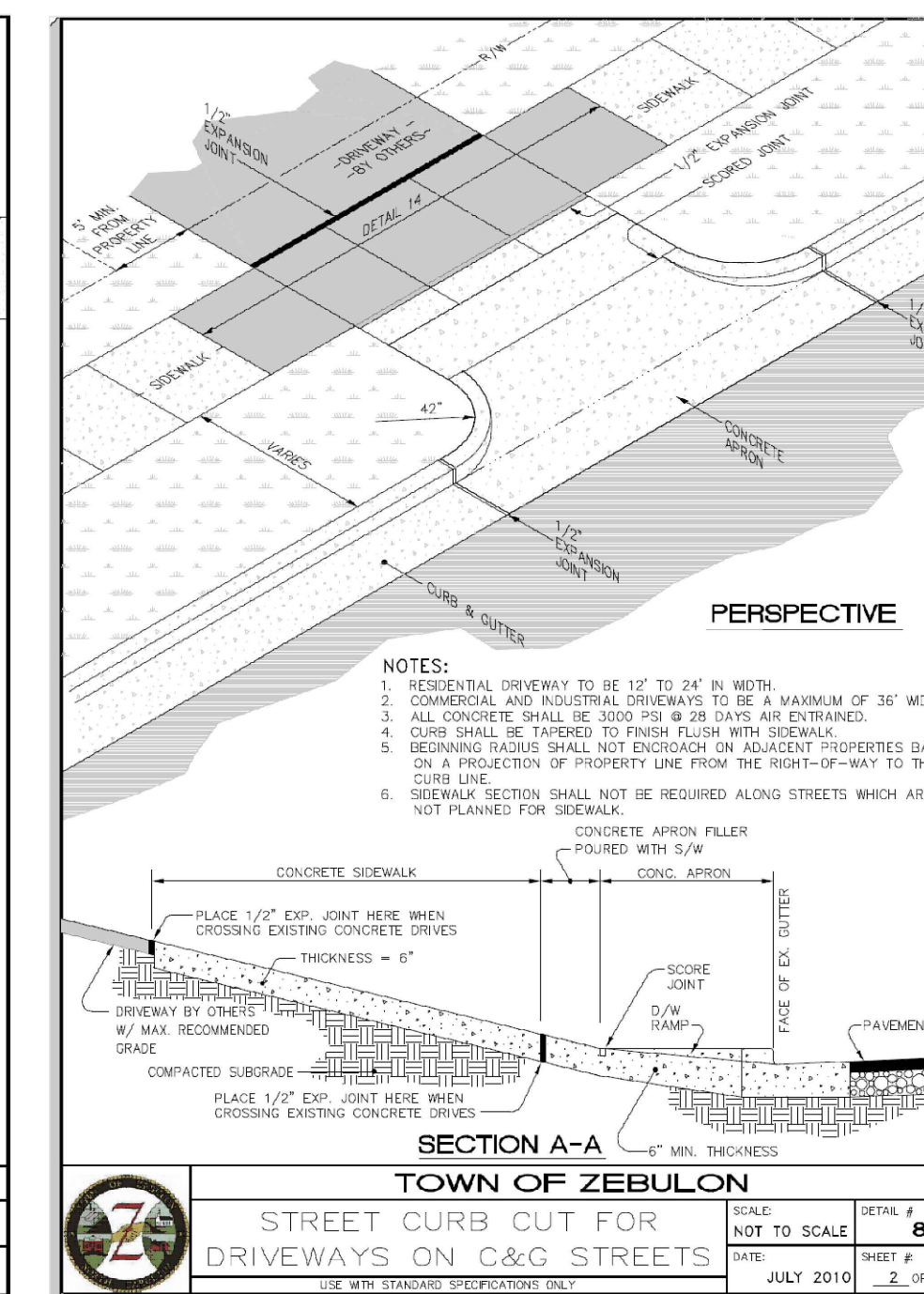
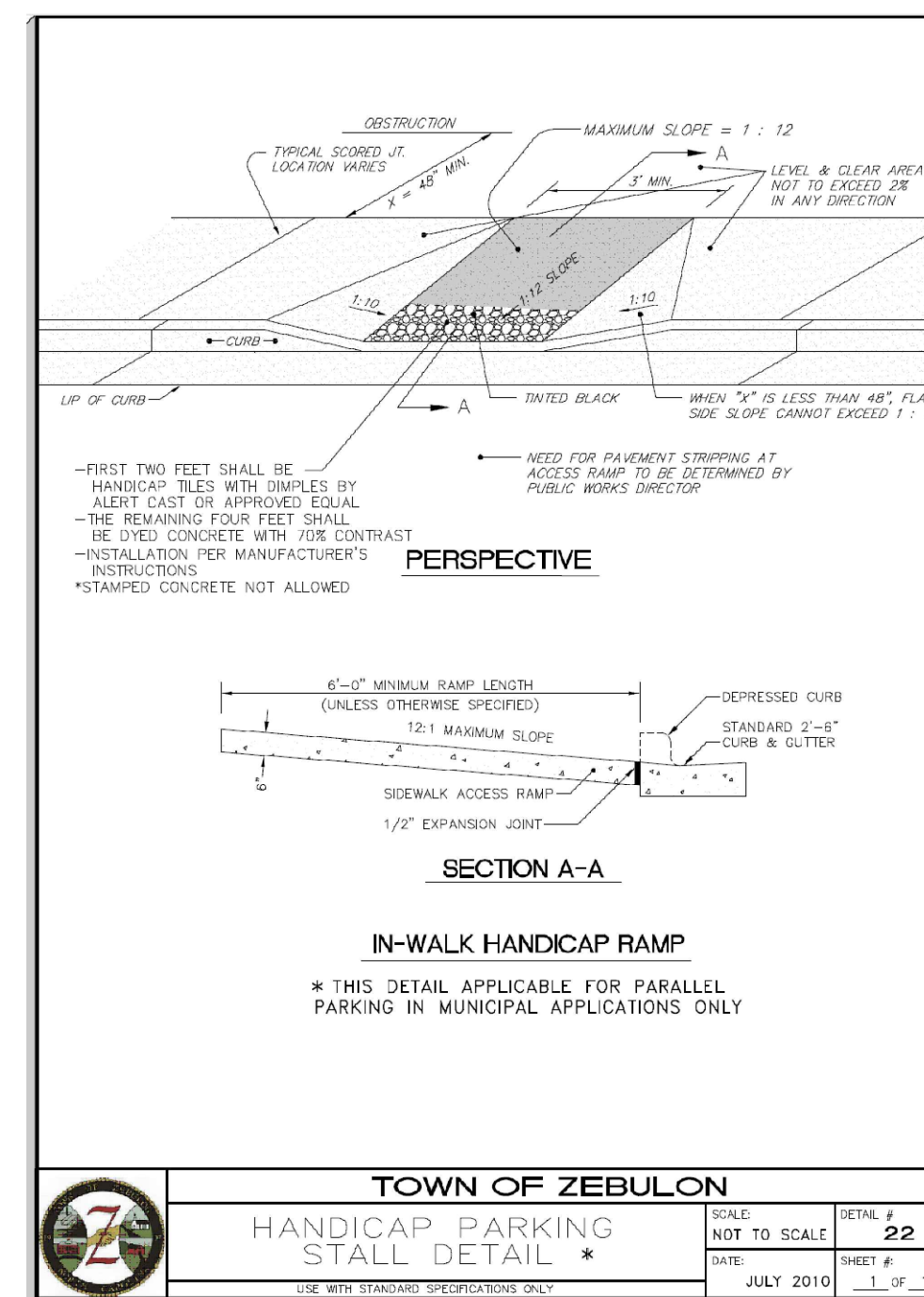
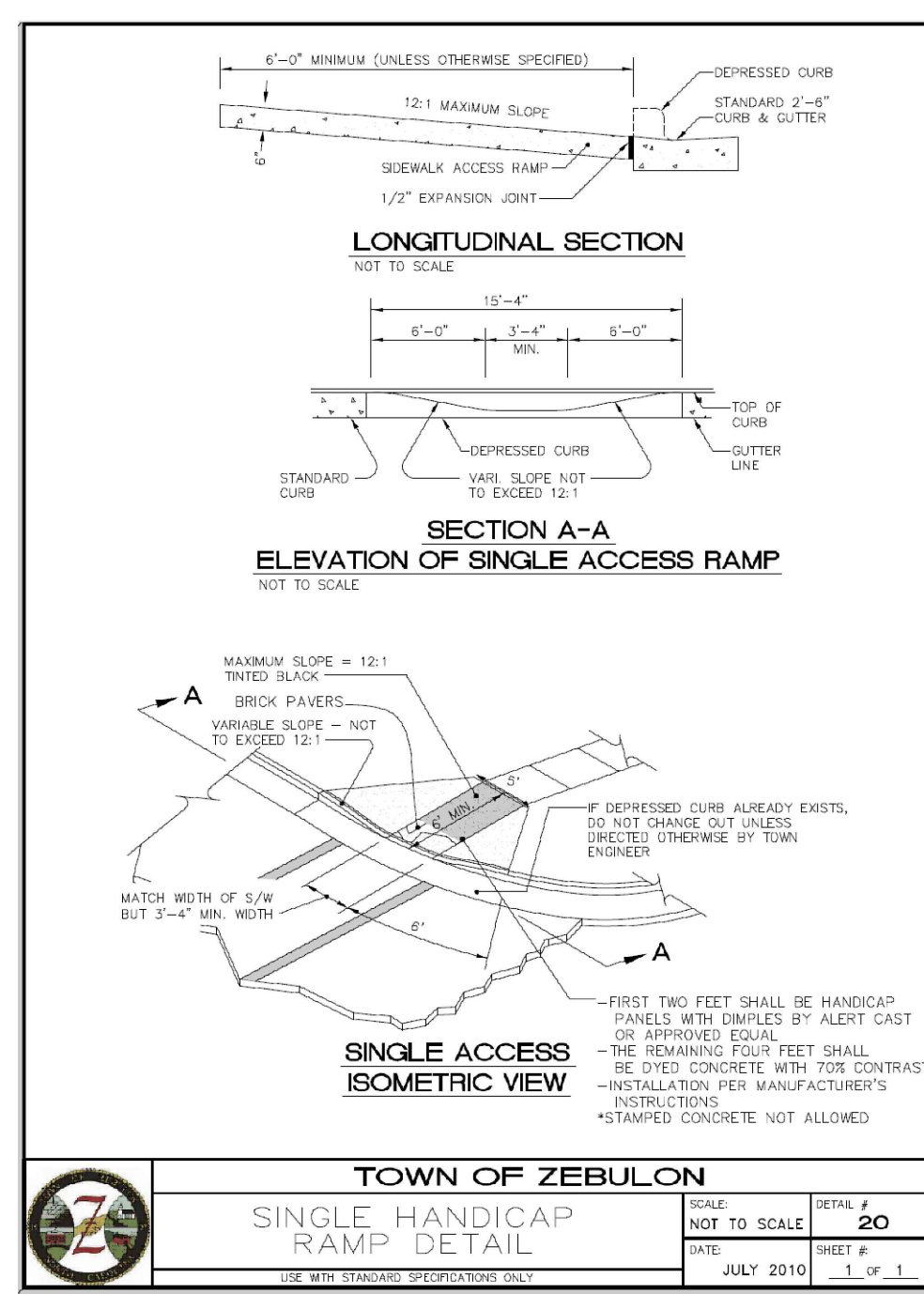
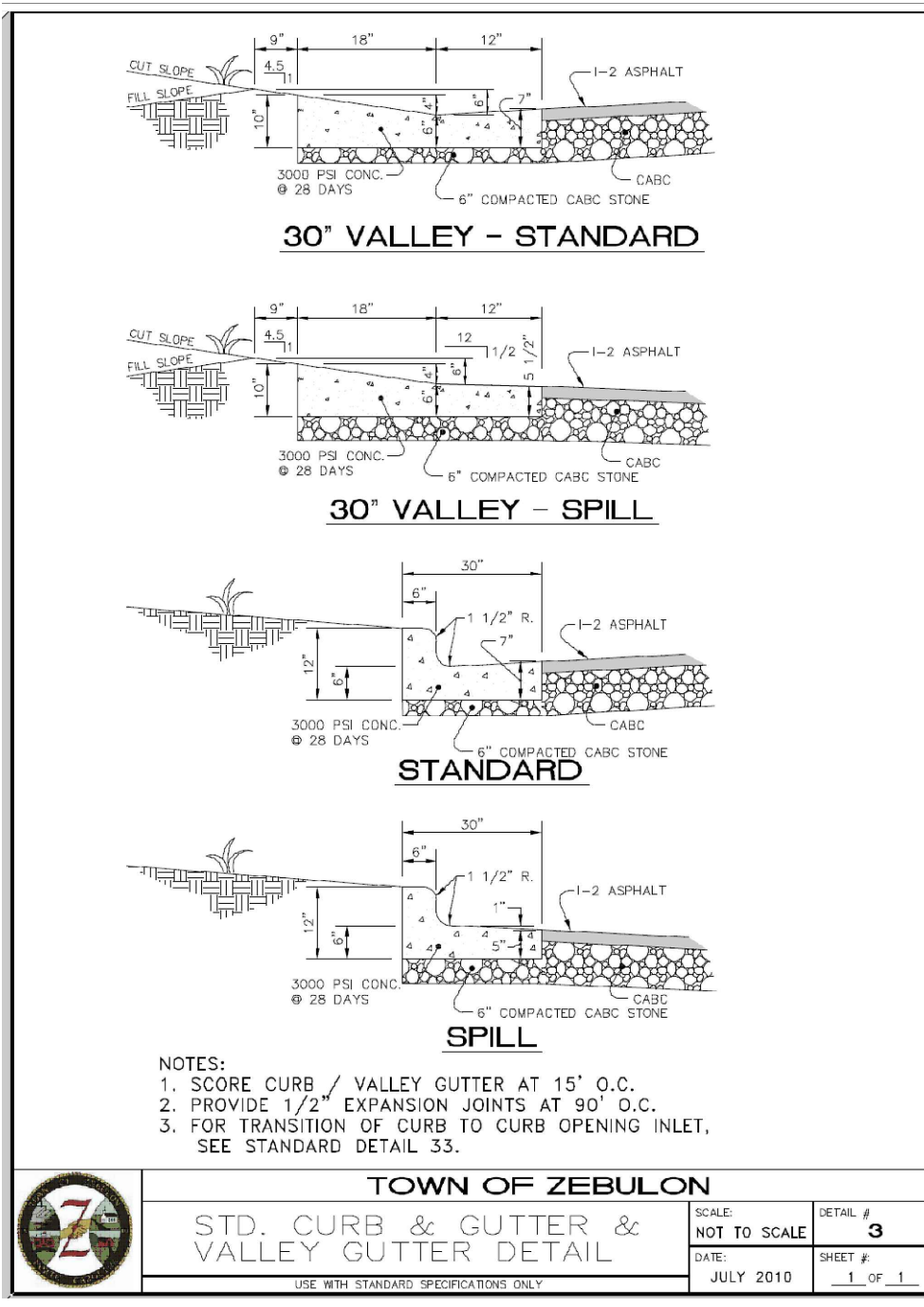
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

NO	DATE	REVISION DESCRIPTION	BY
1	01-05-2024	Per Town Comment	KPS
2	03-08-2024	Per Town, CDR AND Wake County Comment	KPS
3	05-01-2024	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY



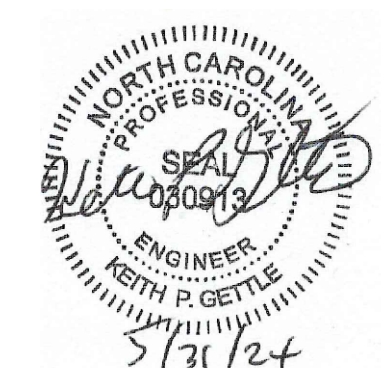
Easement Plan
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. **C14**



Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934
Firm License P-2538

NO.	DATE	BY	REVISION/DESCRIPTION
1	01-08-2024	Per Town Comment	
2	03-08-2024	Per Town, COB, AND Wake County Comment	
3	05-31-2024	COMMENT	
4	DATE	BY	COMMENT
5	DATE	BY	COMMENT
6	DATE	BY	COMMENT
8	DATE	BY	COMMENT
NO.	DATE	BY	REVISION/DESCRIPTION



Standard Site Details
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. D1

END SECTION DIMENSIONS					
DIA.	A	B	C	D	E
15"	7"	2'-3 1/4"	3'-11 1/2"	6'-2 3/4"	2'-6"
18"	9"	2'-3"	3'-11 3/4"	6'-2 3/4"	3'-0"
24"	9"	3'-7"	3'-1"	6'-8"	3'-11 3/4"
30"	1'-0"	4'-6 1/2"	1'-10 1/2"	6'-5"	5'-0"
36"	1'-4"	5'-0"	3'-1 1/2"	8'-1 1/2"	5'-11"
42"	1'-10 1/4"	5'-1 3/8"	3'-1"	8'-2 3/8"	6'-5 1/4"

NOTES:
 1. DESIGN OF END-SECTION SHALL CONFORM TO STANDARD REINFORCED SECTIONAL CONCRETE CULVERT PIPE.
 2. ANY TWIN BARREL SYSTEM GREATER THAN 42" RCP REQUIRES A HEADWALL.
 3. ANY SYSTEM OF MORE THAN 2 PIPES REQUIRES A HEADWALL.
 4. SEE NCDOT "ROADWAY STANDARD DRAWINGS" FOR HEADWALL CONSTRUCTION DETAILS.

TOWN OF ZEBULON
 STD. FLARED END SECTIONS DESIGN AID DETAIL
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 1 OF 1
 DETAIL # 35

TOWN OF ZEBULON
 2x3 DROP INLET
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 1 OF 1
 DETAIL # 34

U.S. FOUNDRY 5181 CURB & GUTTER INLET FRAME (SHOWN WITH 6420 GRATE)
 HEAVY DUTY FRAME, COVER & HOOD
 FRAME, COVER & HOOD WEIGHT = 550 LBS.
 WEIGHT MAY NOT DEVIATE BY MORE THAN -5.0%.

TOWN OF ZEBULON
 STD. C&G INLET W/HOOD DETAIL
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 2 OF 4
 DETAIL # 33

TOWN OF ZEBULON
 STD. C&G INLET W/HOOD DETAIL
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 1 OF 4
 DETAIL # 33

PIPE D _i	MAX. BURY D _o	MAX. BURY H CLASS III (0.01 CRACK)	MAX. BURY H CLASS IV (0.01 CRACK)
15"	4'	9.5'	14.5'
18"	4'	9.5'	13.0'
24"	4'	12.0'	23.5'
30"	5.5'	10.0'	17.0'
36"	6'	10.5'	18.0'
42"	6.5'	13.0'	19.0'
48"	7'	13.5'	22.0'
54"	8'	13.0'	18.5'
60"	9'	11.0'	18.0'
72"	10'	13.0'	19.0'

THIS TABLE ASSUMES TYPE 4 INSTALLATION & NO STONE BEDDING

TOWN OF ZEBULON
 STD. TRENCH INSTALLATION FOR CONCRETE PIPE (FOR CONTRACTOR'S USE)
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 1 OF 5
 DETAIL # 36

TOWN OF ZEBULON
 STD. M.H. J.B. VARIABLE LENGTH
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 1 OF 3
 DETAIL # 37

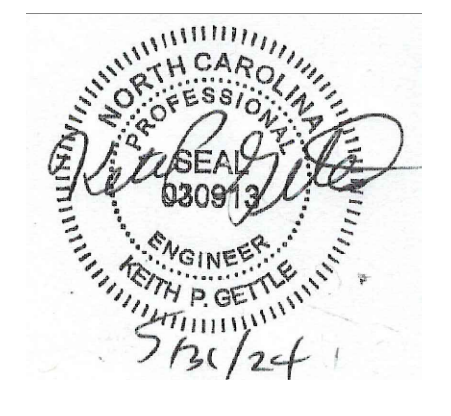
RISE	PART NO.	F
1 1/2"	V-1984-05	3 1/4"
1 1/2"	V-1984-10	3 3/4"
1 1/2"	V-1984-15	4 1/4"
2"	V-1984-20	4 3/4"
2 1/2"	V-1984-25	5 1/4"
3"	V-1984-30	5 3/4"
3 1/2"	V-1984-35	6 1/4"
4"	V-1984-40	6 3/4"

TOWN OF ZEBULON
 STANDARD MANHOLE COVER & RING ADJUSTABLE - EAST JORDAN IRON WORKS V-1984
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 2 OF 3
 DETAIL # 37

TOWN OF ZEBULON
 STANDARD MANHOLE & RING US FOUNDRY 700 KL
 SCALE: NOT TO SCALE
 DATE: JULY 2010
 SHEET # 3 OF 3
 DETAIL # 37

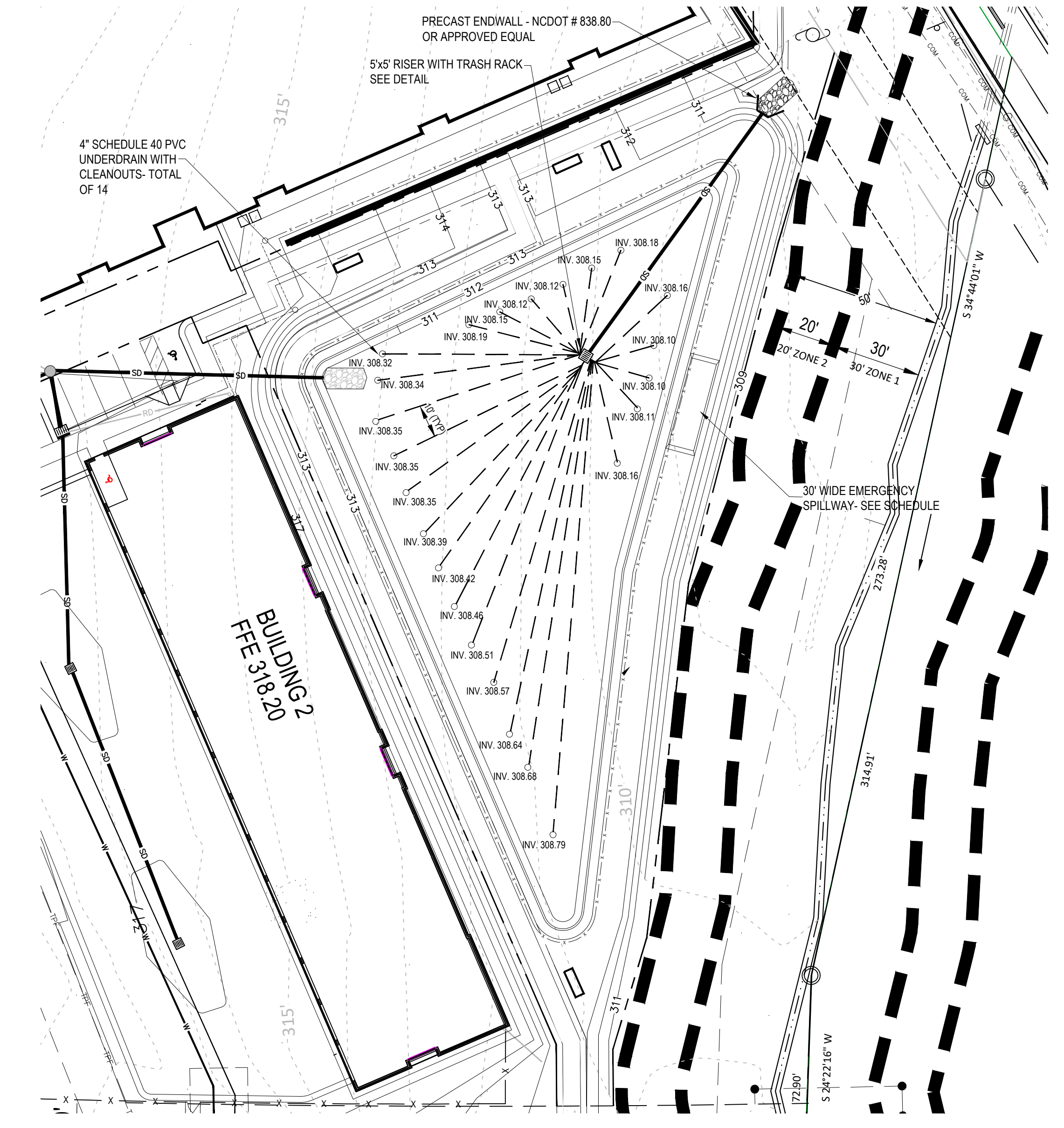
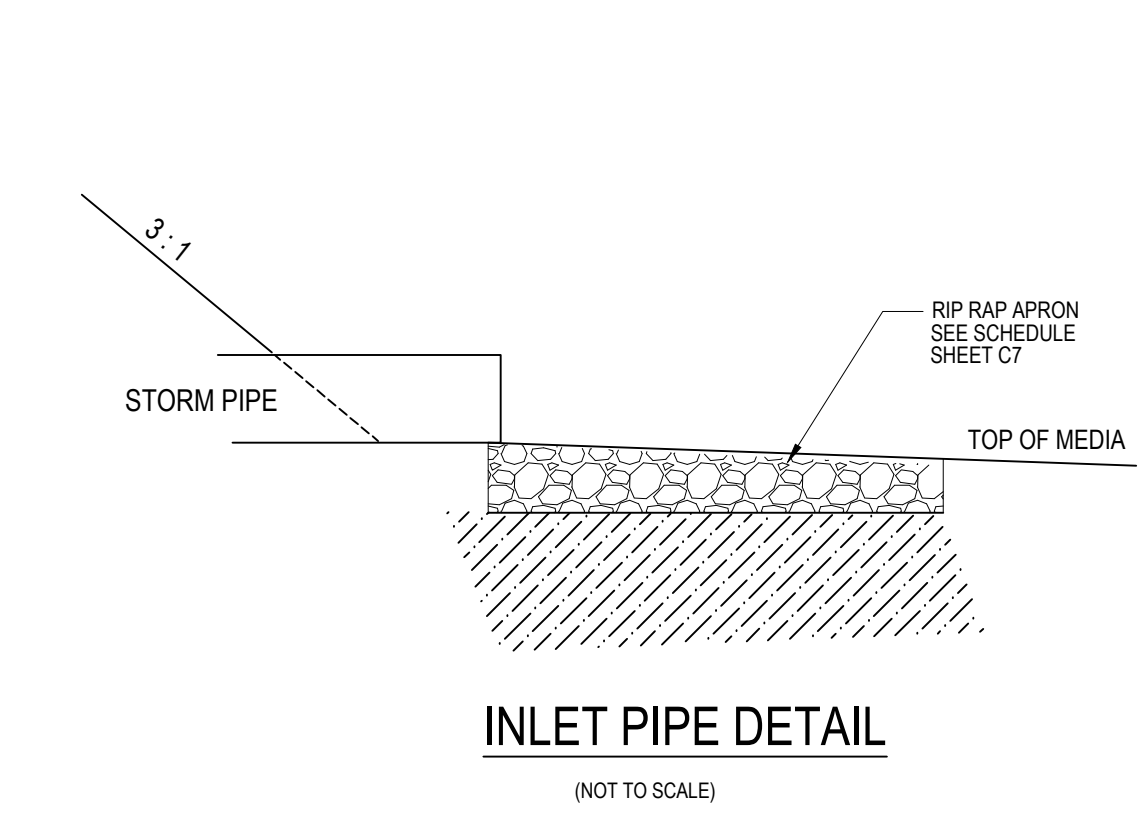
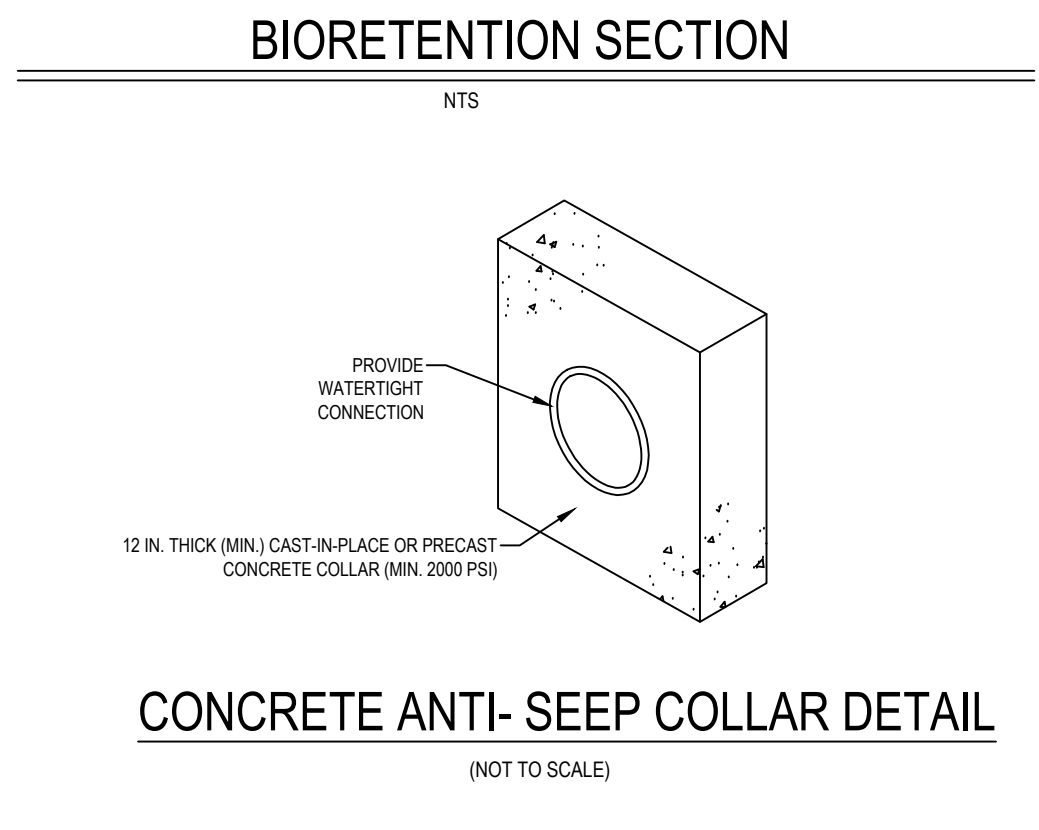
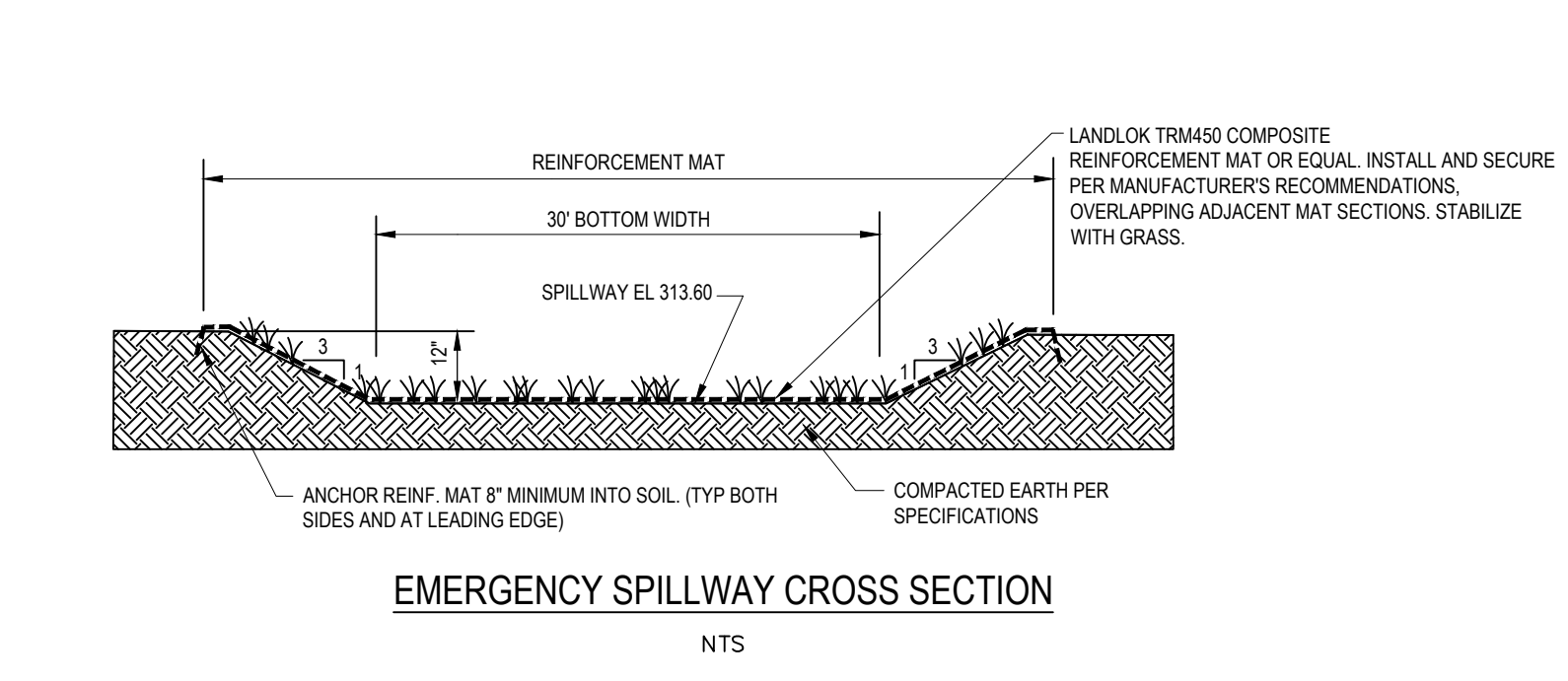
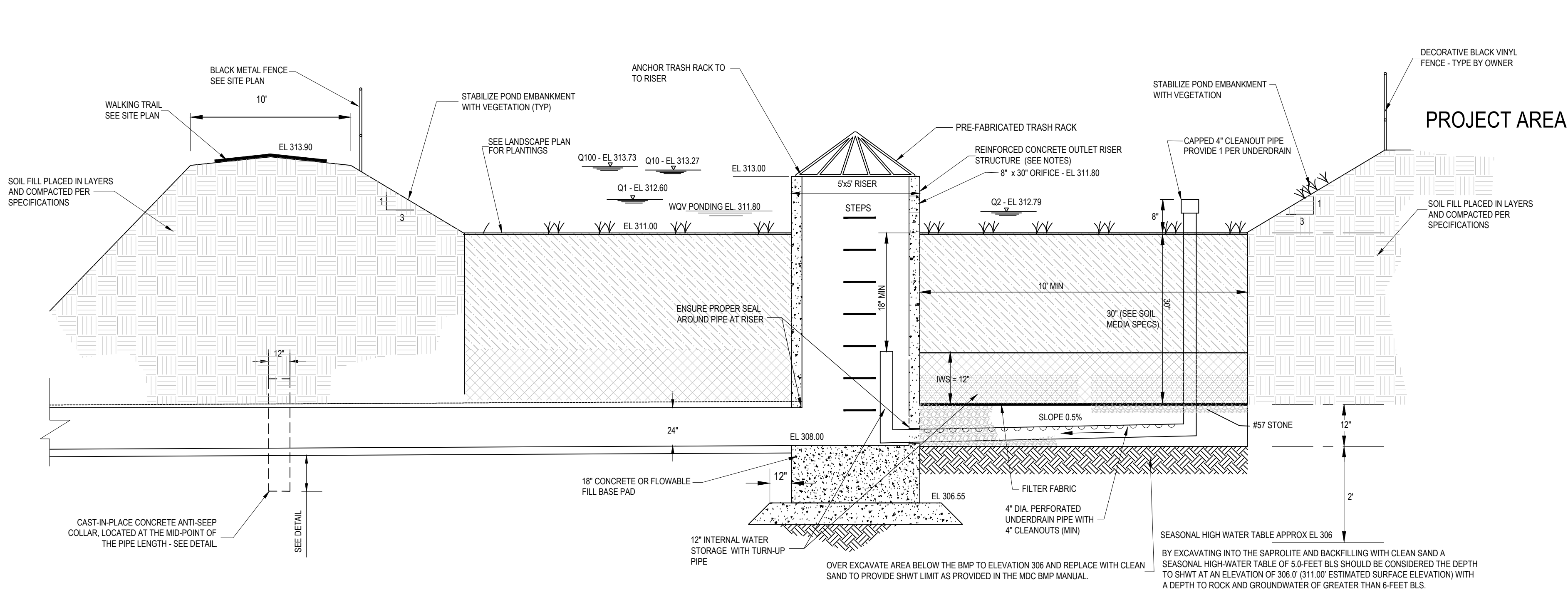
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO.	DATE	BY	REVISION/DESCRIPTION
1	01-05-2024	PLD	PLD Town Comment
2	03-08-2024	PLD	PLD Town Comment
3	05-31-2024	BY	PLD Town, CDR AND Wake County Comment
4	DATE	BY	COMMENT
5	DATE	BY	COMMENT
6	DATE	BY	COMMENT



Stormwater Details
 StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. D2



PLAN VIEW BIORETENTION DEVICE
SCALE: 1"=30'

BIORETENTION FACILITY OPERATION AND MAINTENANCE:

- * WATERING: WATERING SHOULD NOT BE REQUIRED AFTER GRASS / LANDSCAPING IS ESTABLISHED. HOWEVER, WATERING MAY BE REQUIRED DURING PROLONGED DRY PERIODS.
- * EROSION CONTROL: INSPECT FLOW ENTRANCES, PONDING AREA, AND SURFACE OVERFLOW AREAS PERIODICALLY. REPLACE MATERIAL WHERE EROSION HAS OCCURRED. IF SEDIMENT IS DEPOSITED, DETERMINE THE SOURCE, REMOVE EXCESS DEPOSITS, AND CORRECT THE PROBLEM.
- * VEGETATION: ROUTINE MAINTENANCE WILL BE NECESSARY TO ENSURE THAT THE VEGETATION IS HEALTHY AND TO REMOVE ANY WEEDS.

- * NUTRIENTS AND PESTICIDES: NUTRIENTS AND PESTICIDES SHOULD NOT BE REQUIRED. IF NECESSARY, USE SPARINGLY.

- * SOIL MEDIA: THE SOIL MEDIA SHOULD NOT NEED REPLACING. IF PROBLEMS OCCUR IN THE SOIL MEDIA, CONSULT A SOIL SPECIALIST.

BIORETENTION FACILITY NOTES:

- * THE BIORETENTION FACILITY SHALL BE PLANTED AS SHOWN ON THE LANDSCAPE PLAN.
- * ALL CONSTRUCTION, MONITORING, AND MAINTENANCE GUIDELINES IN THE NCDCEQ STORM WATER BMP MANUAL SHALL BE FOLLOWED.

BIORETENTION GENERAL NOTES:

OUTLET STRUCTURE AND PIPING

- THE RISER STRUCTURE SHALL CONSIST OF PRECAST CONCRETE BASE AND RISER SECTIONS OF THE TYPE AND DIMENSIONS SHOWN. SQUARE OR RECTANGULAR SECTIONS SHALL BE SOLID-WALL CATCH BASIN TYPE STRUCTURES, AND APPROVED FOR USE BY NCDOT. ALL RISER JOINTS SHALL BE SEALED WATERTIGHT USING FLEXIBLE BUTYL RUBBER JOINT MATERIAL, RUBBER GASKETS, OR OTHER SUITABLE MATERIAL. ALL PIPE CONNECTIONS TO THE RISER SHALL BE MADE WITH A WATER TIGHT FLEXIBLE CONNECTOR BOOT PER ASTM C923.

CONCRETE

- CONCRETE WORK SHALL CONFORM TO PROJECT CONCRETE SPECIFICATIONS.

FLOWABLE FILL

- FLOWABLE FILL SHALL CONSIST OF A MIXTURE OF PORTLAND CEMENT, AGGREGATE NOT GREATER THAN 3/8 INCH DIAMETER, WATER, AND OTHER APPROVED COMPONENTS, WITH A MINIMUM PH OF 4.0, AND A 28-DAY COMPRESSIVE STRENGTH OF AT LEAST 150 PSI. THE MIXTURE SHALL BE SUFFICIENTLY FLOWABLE TO BE SELF-LEVELING, FILLING ALL VOIDS UNDER THE PIPE AND PIPE HAUNCHES WITHOUT REQUIRING VIBRATION.

FINAL SURFACE STABILIZATION

- STABILIZE ALL SURFACES OF THE EMBANKMENT, SPILLWAY, SLOPES, SPOIL AND BORROW AREAS THAT ARE NOT COVERED BY OTHER SPECIFIED MATERIALS WITH GRASS IN ACCORDANCE WITH PROJECT SPECIFICATIONS.

BIORETENTION NOTES (CONT):

- ALL DRAINAGE AREAS TO A BIORETENTION FACILITY ARE TO BE STABILIZED PRIOR TO INSTALLATION OF AMENDED SOILS, MULCH OR PLANTINGS.

BIORETENTION PLANTING SOIL MEDIA SPECIFICATIONS:

- THE PLANTING SOIL SHALL BE A UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER SIMILAR OBJECTS LARGER THAN ONE-HALF INCH IN DIAMETER. NO OTHER MATERIALS OR SUBSTANCES SHALL BE MIXED OR DUMPED WITHIN THE BIORETENTION AREA THAT MAY BE HARMFUL TO PLANT GROWTH, OR PROVE A HINDRANCE TO THE PLANTING OR MAINTENANCE OPERATIONS. THE PLANTING SOIL SHALL BE FREE OF BERMUDA GRASS, JOHNSON GRASS, QUACK GRASS, MUGWORT, NUTSEDGE, POISON IVY, CANADA THISTLE, OR OTHER NOXIOUS WEEDS.

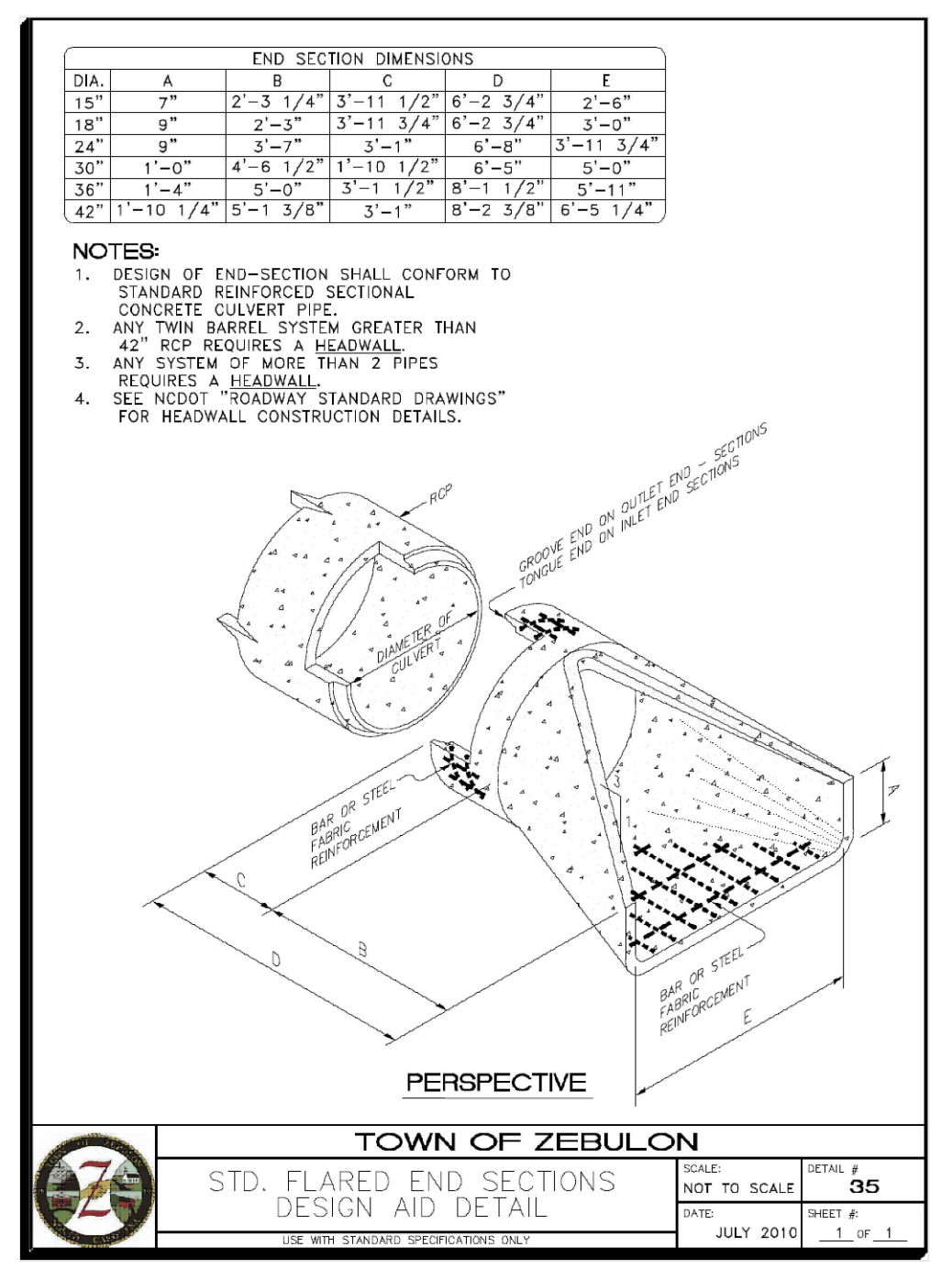
- PLANTING MIX FOR BIORETENTION CELL - UNIFORM SOIL MIXTURE FREE OF STUMPS, STONES, OR LARGE ROOTS, CONTAINING THE FOLLOWING TYPES AND RATIOS (BY WEIGHT) OF COMPONENTS:
75-85% MEDIUM TO COARSE SAND (ASTM C-33)
8%-15% FINE SOIL MATERIAL (INCLUDES BOTH SILT OR CLAY)
5%-15% ORGANICS / PINE BARK FINES

- PHOSPHOROUS INDEX SHALL NOT EXCEED 30
- GRADING - CLEARING, STRIPPING, EXCAVATION, FILLING, TRENCHING, BACKFILLING, COMPACTION AND FINE-GRADING WORK SHALL BE IN ACCORDANCE WITH APPLICABLE SECTIONS OF PROJECT SPECIFICATIONS.

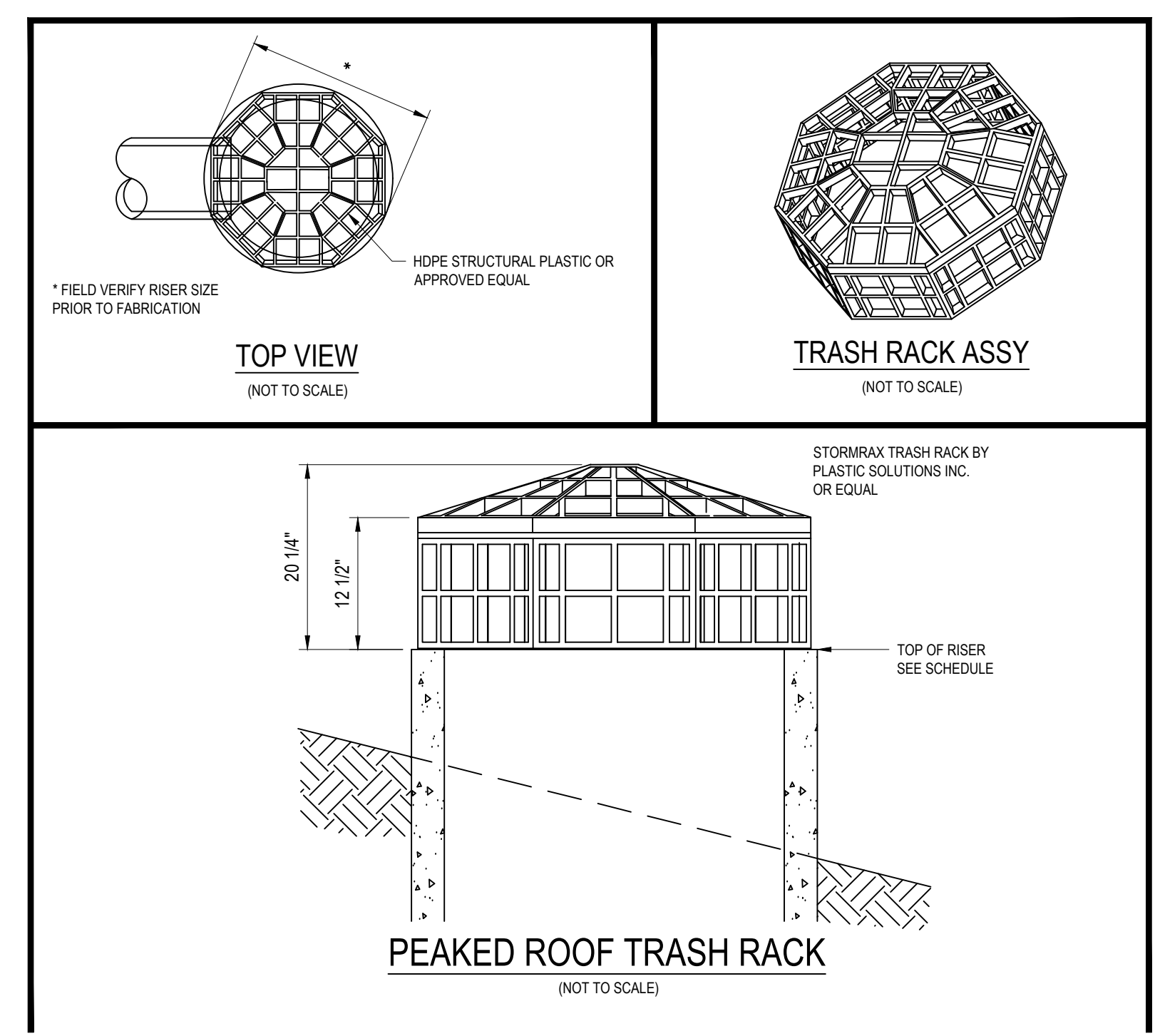
- UNDERDRAIN GRAVEL - CLEAN, HARD, ANGULAR GRAVEL CONFORMING TO NCDOT DESIGNATION # 57 OR # 8 AS APPROPRIATE.

- GEOFILTER FABRIC - NON-WOVEN, NEEDLE-PUNCHED GEOTEXTILE WITH 135 LBS. PUNCTURE STRENGTH (ASTM D-4833); 220 LBS. TENSILE STRENGTH (ASTM D-4632); AND APPARENT OPENING SIZE OF U.S. STD. #80 SIEVE (ASTM D-4751).

- UNDERDRAIN PIPING - NOMINAL 4" DIAMETER SCHEDULE 40 PVC, WITH 3/8" DIAMETER PERFORATIONS SPACED EQUALLY AROUND THE FULL PIPE PERIMETER. CLEANOUT PIPE AND FITTINGS SHALL BE SOLVENT-WELDED SCHEDULE 40 PVC PER THE DETAIL SHOWN AND EXTEND AT LEAST 8" ABOVE THE MULCH LAYER. MINIMUM 1 CLEANOUT PER 1000 SQUARE FEET OF SURFACE AREA OF THE DEVICE.



OUTLET PIPE DETAIL
(NOT TO SCALE)



BMP Schedule		
Top of Dam		313.90
Emergency Spillway (30' Wide)		313.60
Top of Riser		313.00
Bottom of Riser (Inv)		308.00
Orifice (8"x30")		311.80
Media Surface		311.00
Discharge Pipe Dia.		24"
Discharge Length		100'
Discharge Inv Out		307.50
WQV Elevation		311.80
Q1 Elevation		312.60
Q2 Elevation		312.79
Q10 Elevation		313.27
Q100 Elevation		313.73
Seasonal High Water Table		306.00

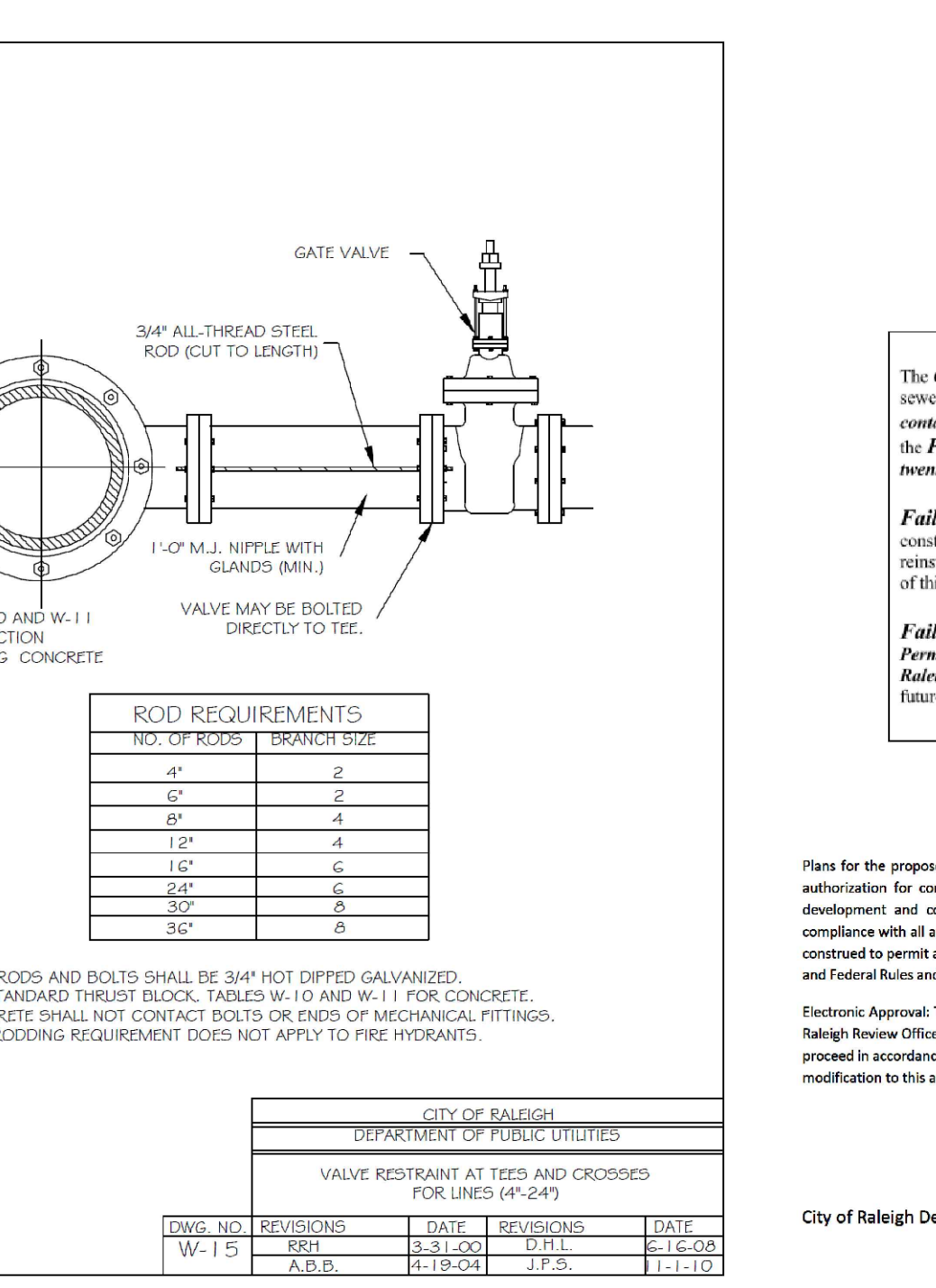
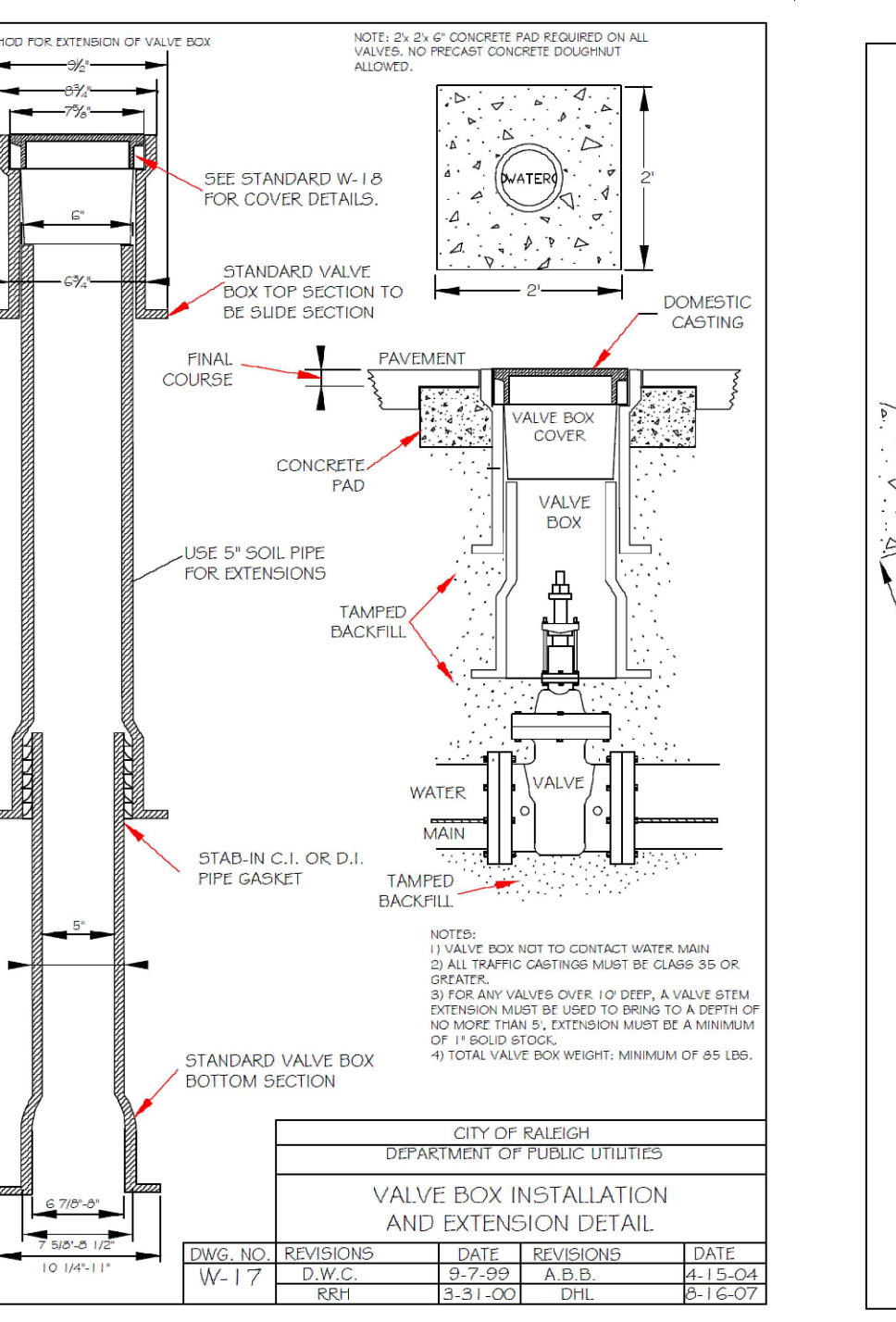
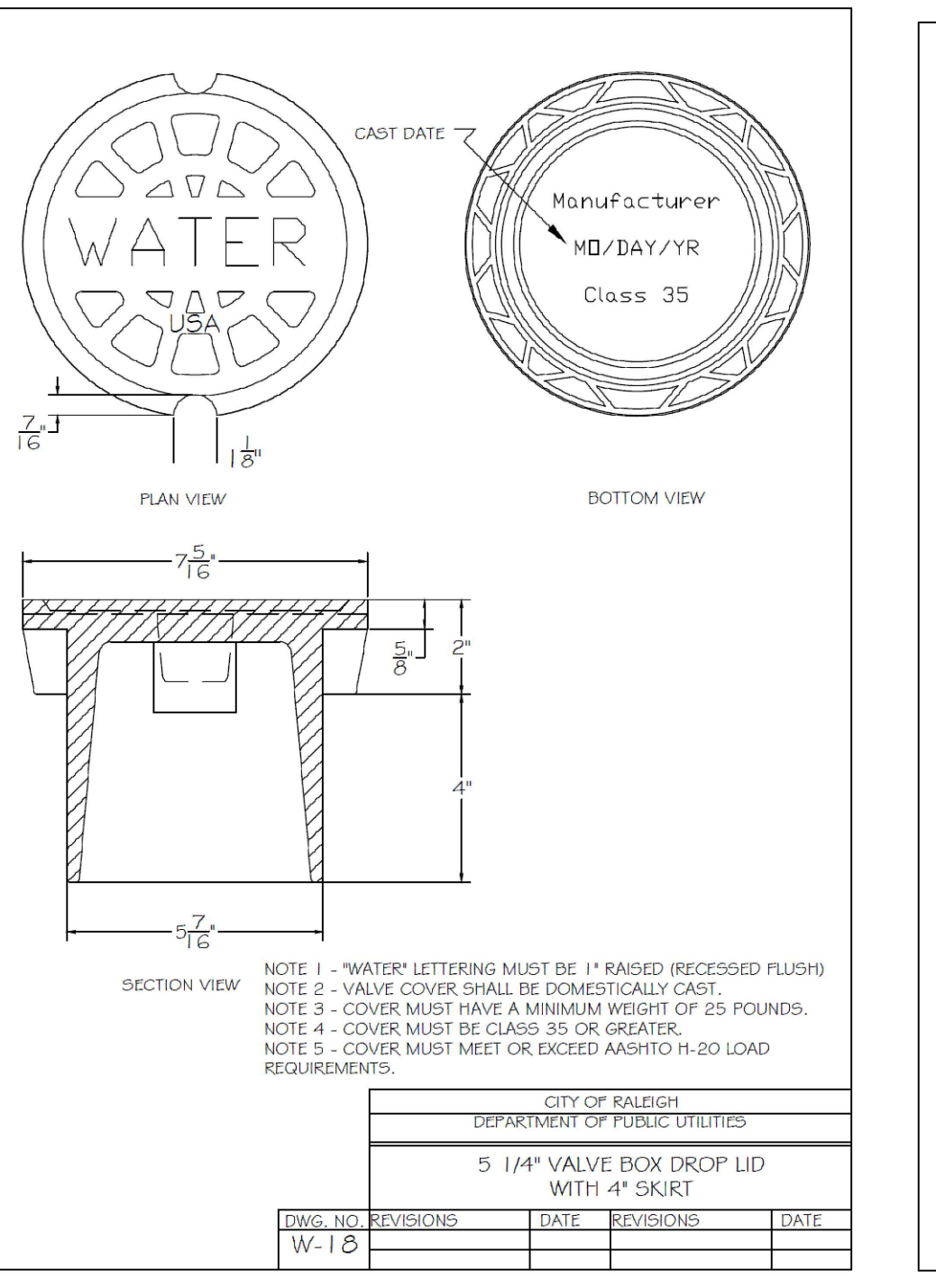
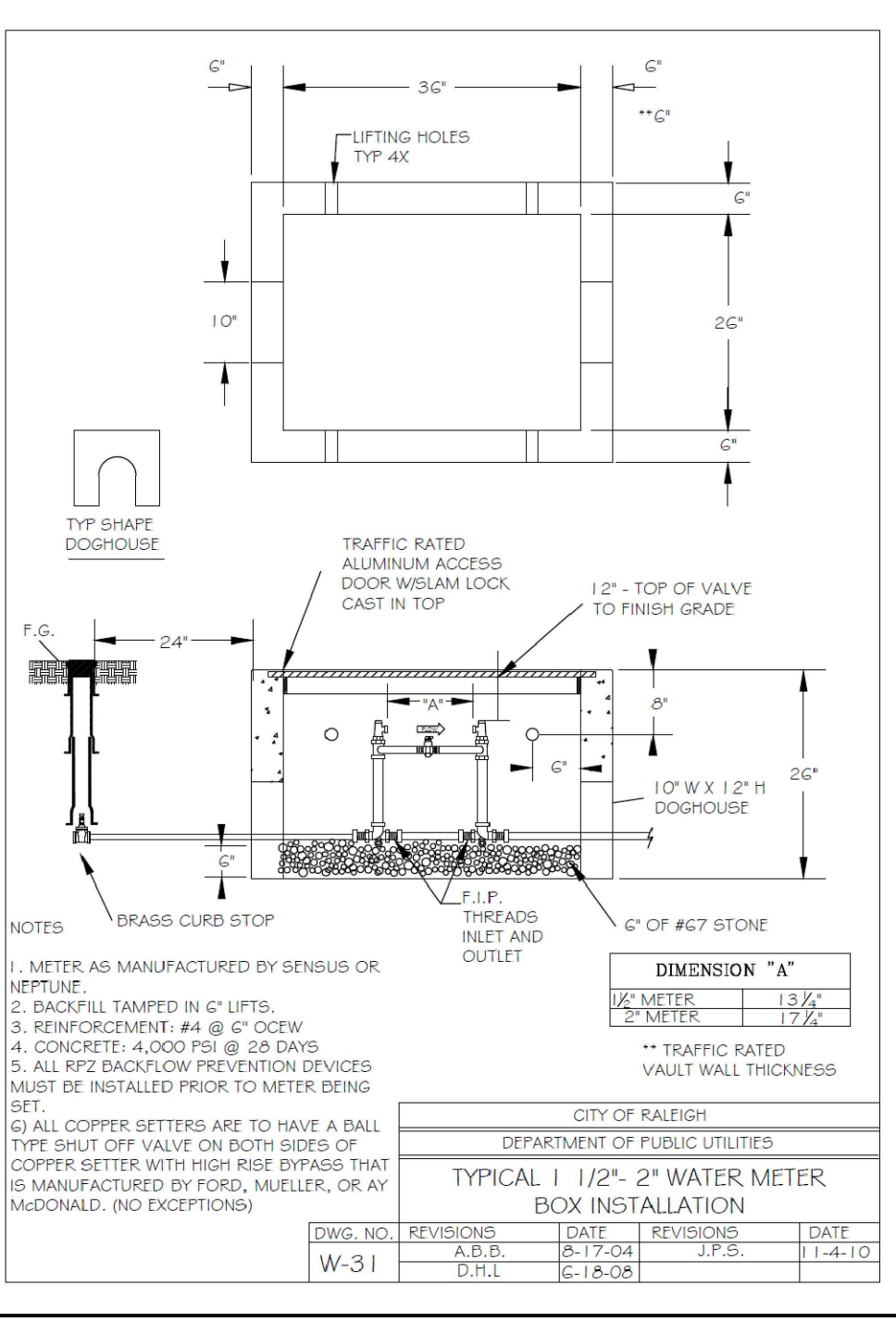
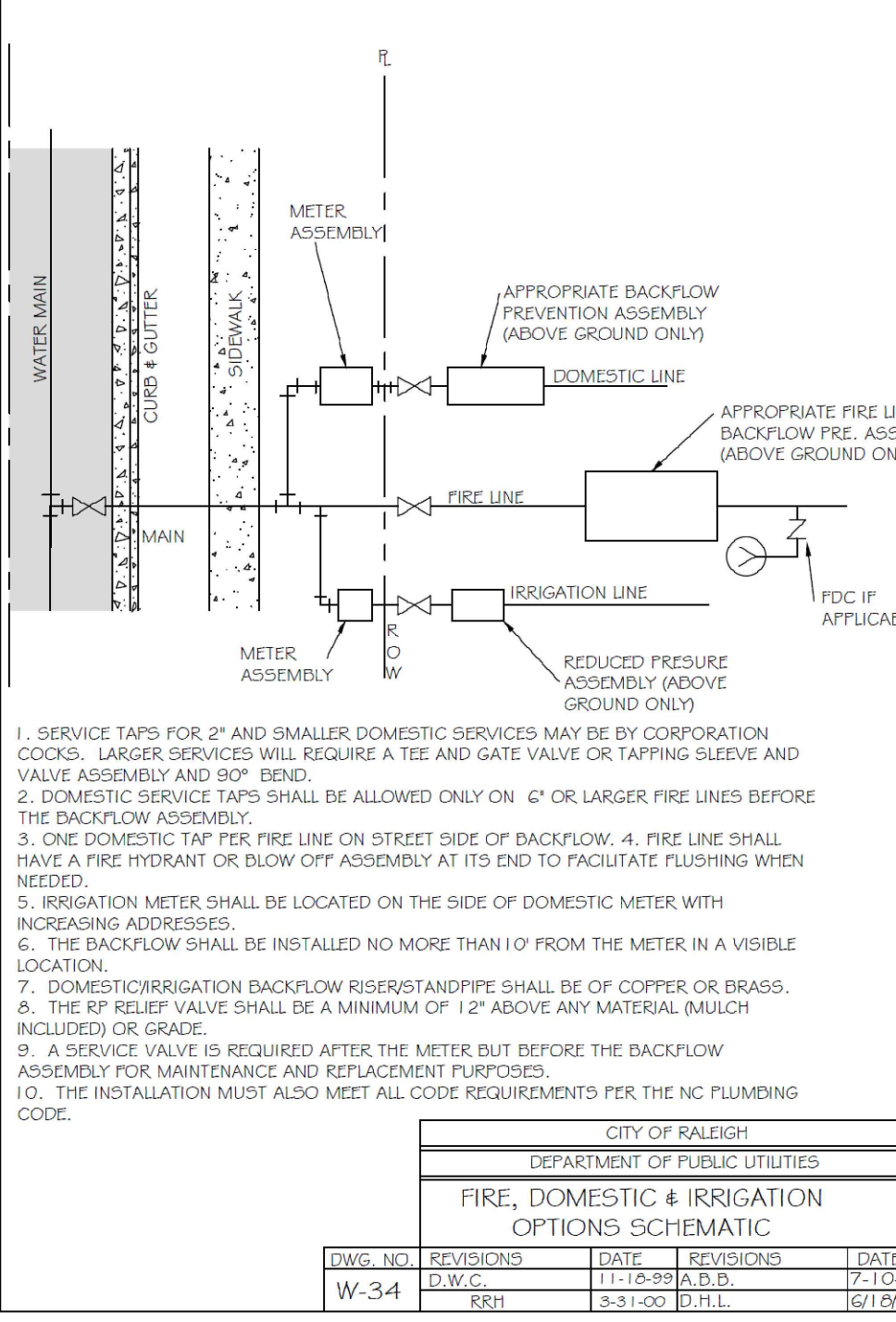
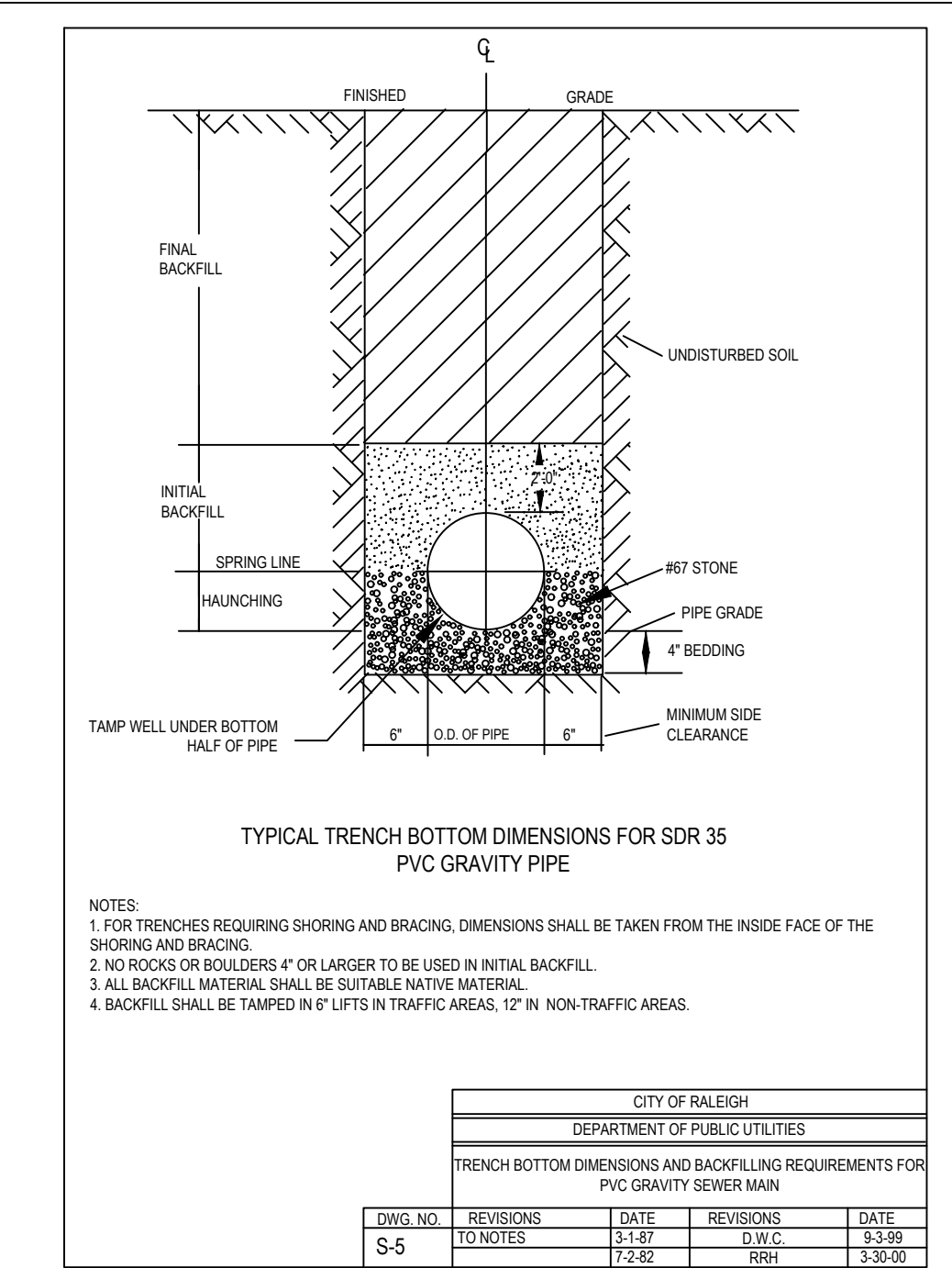
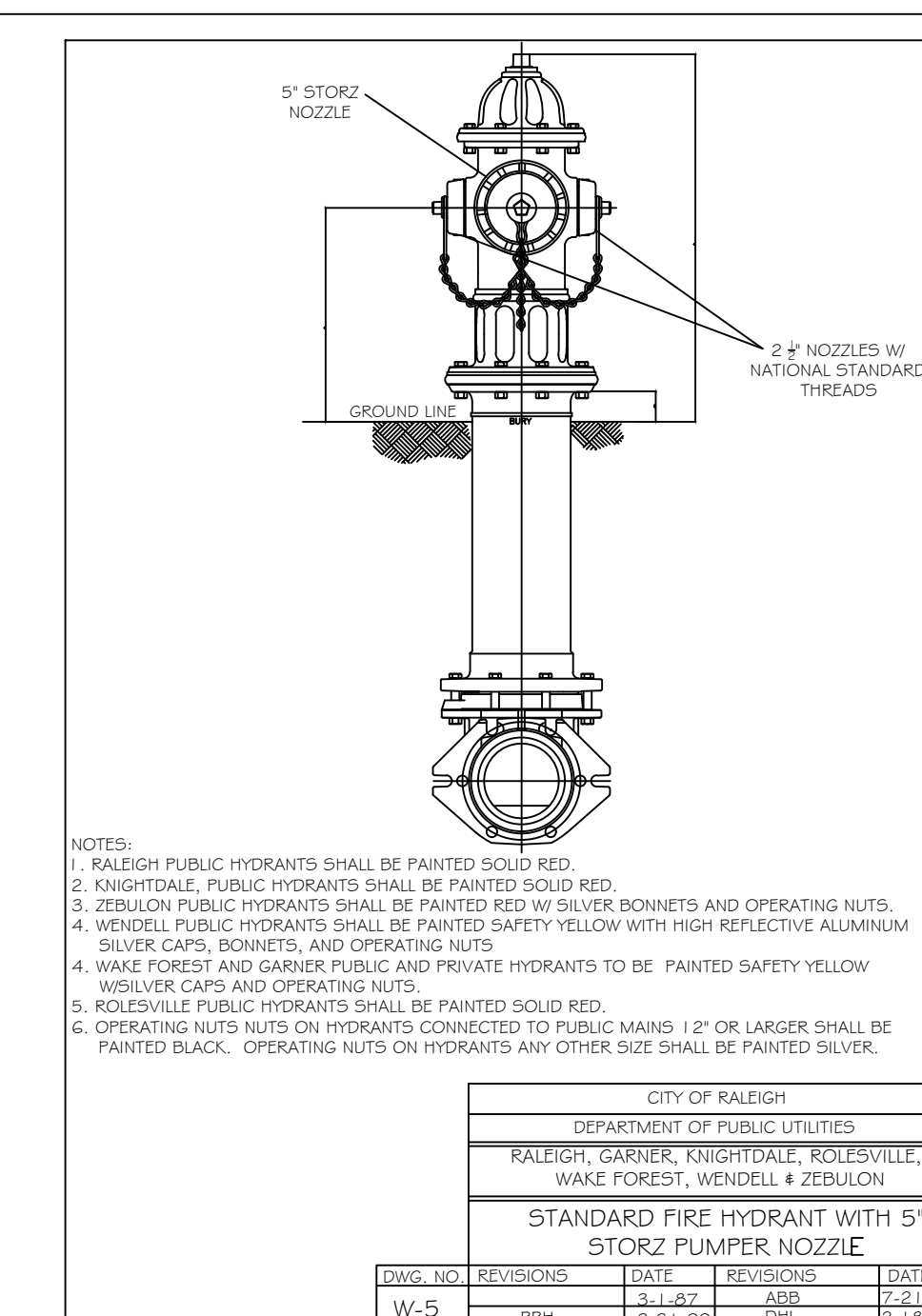
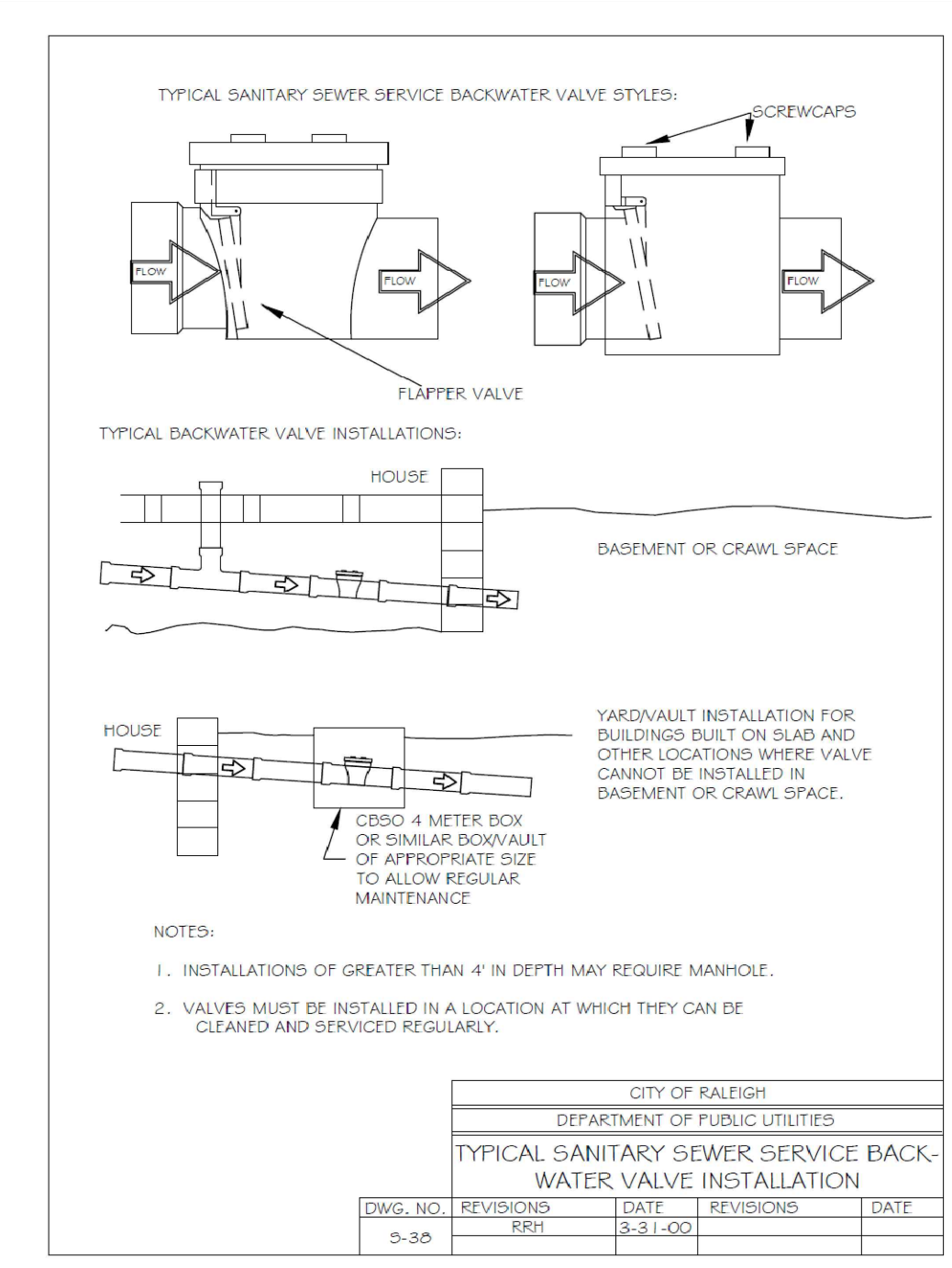
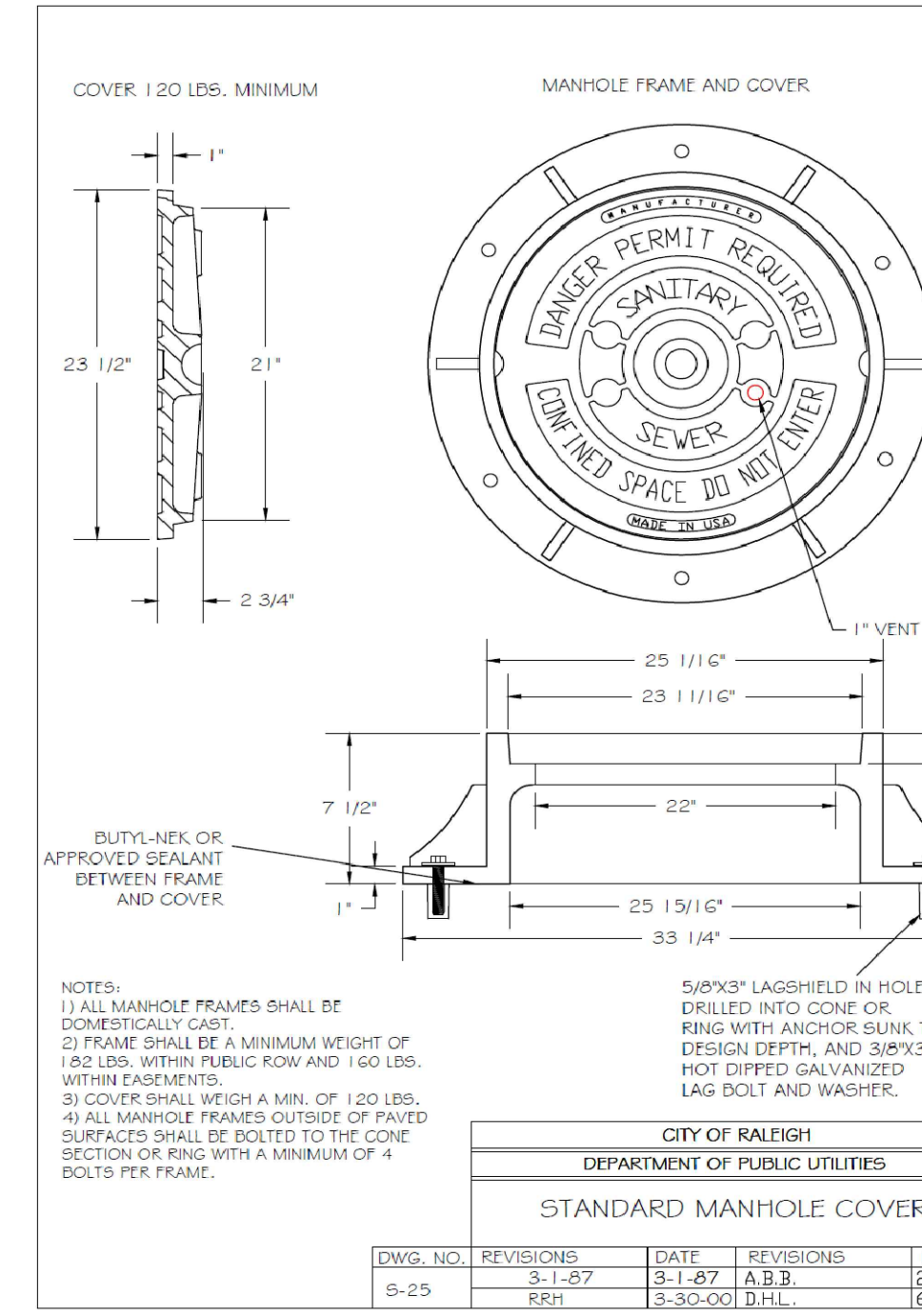
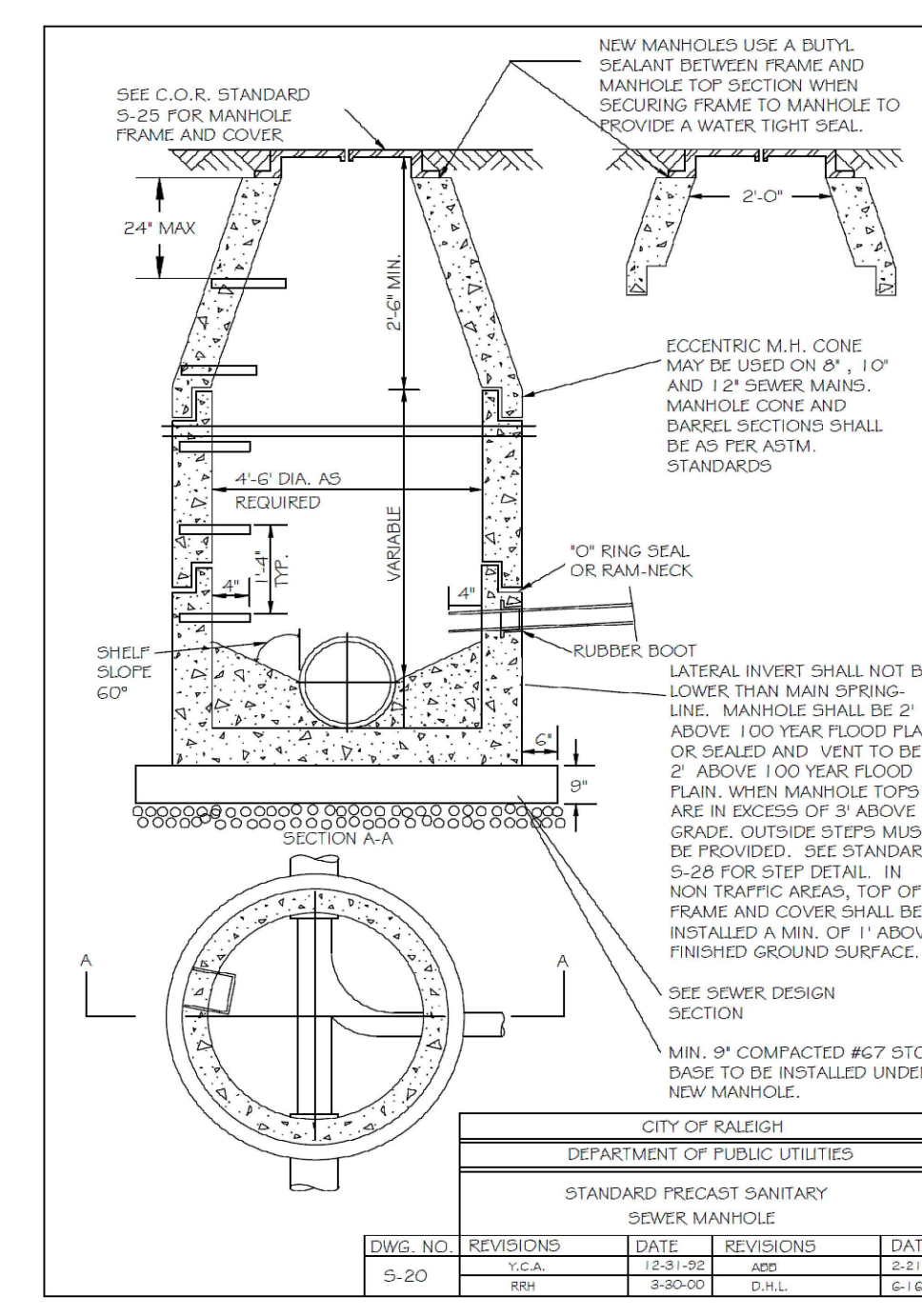
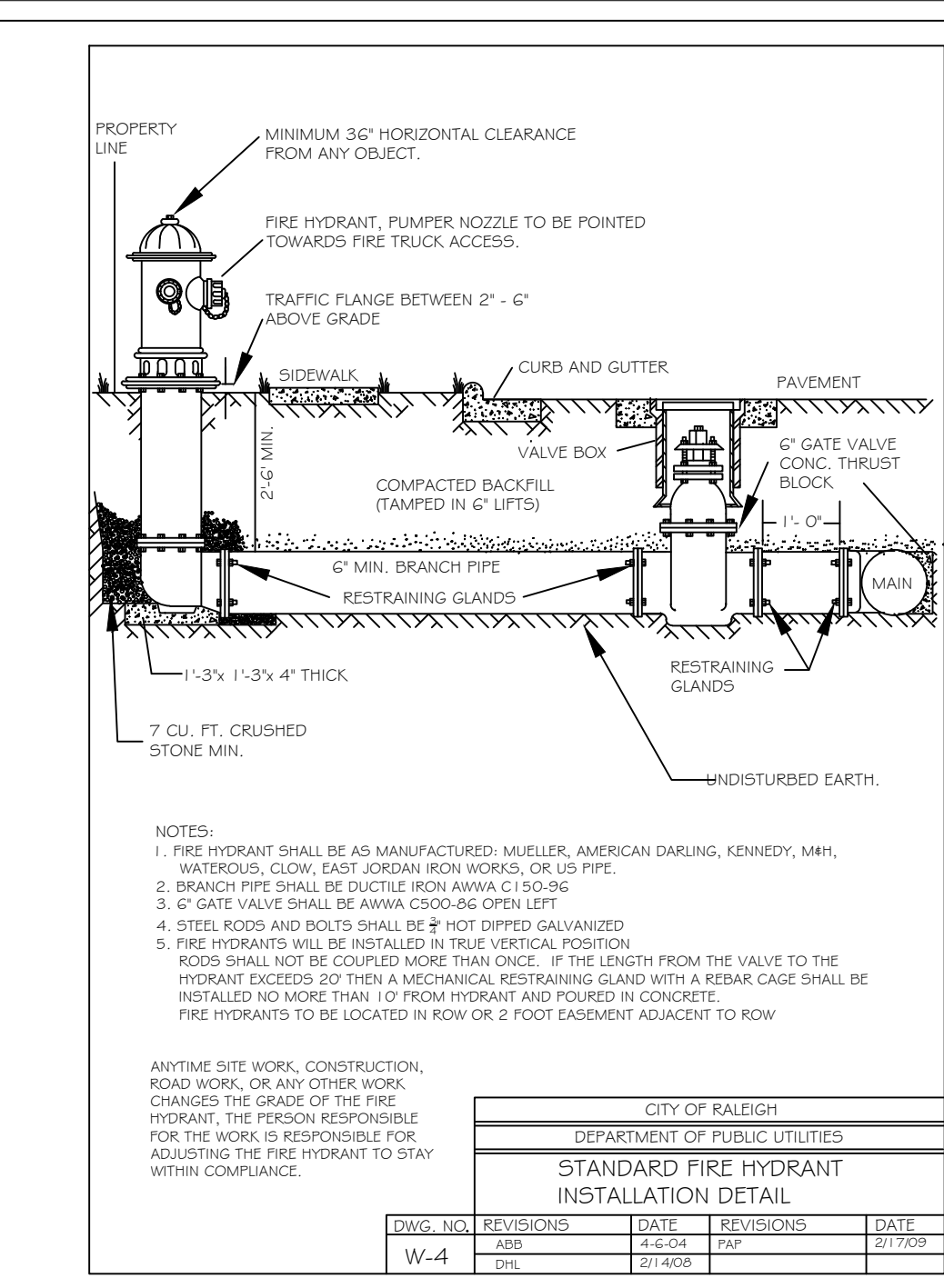
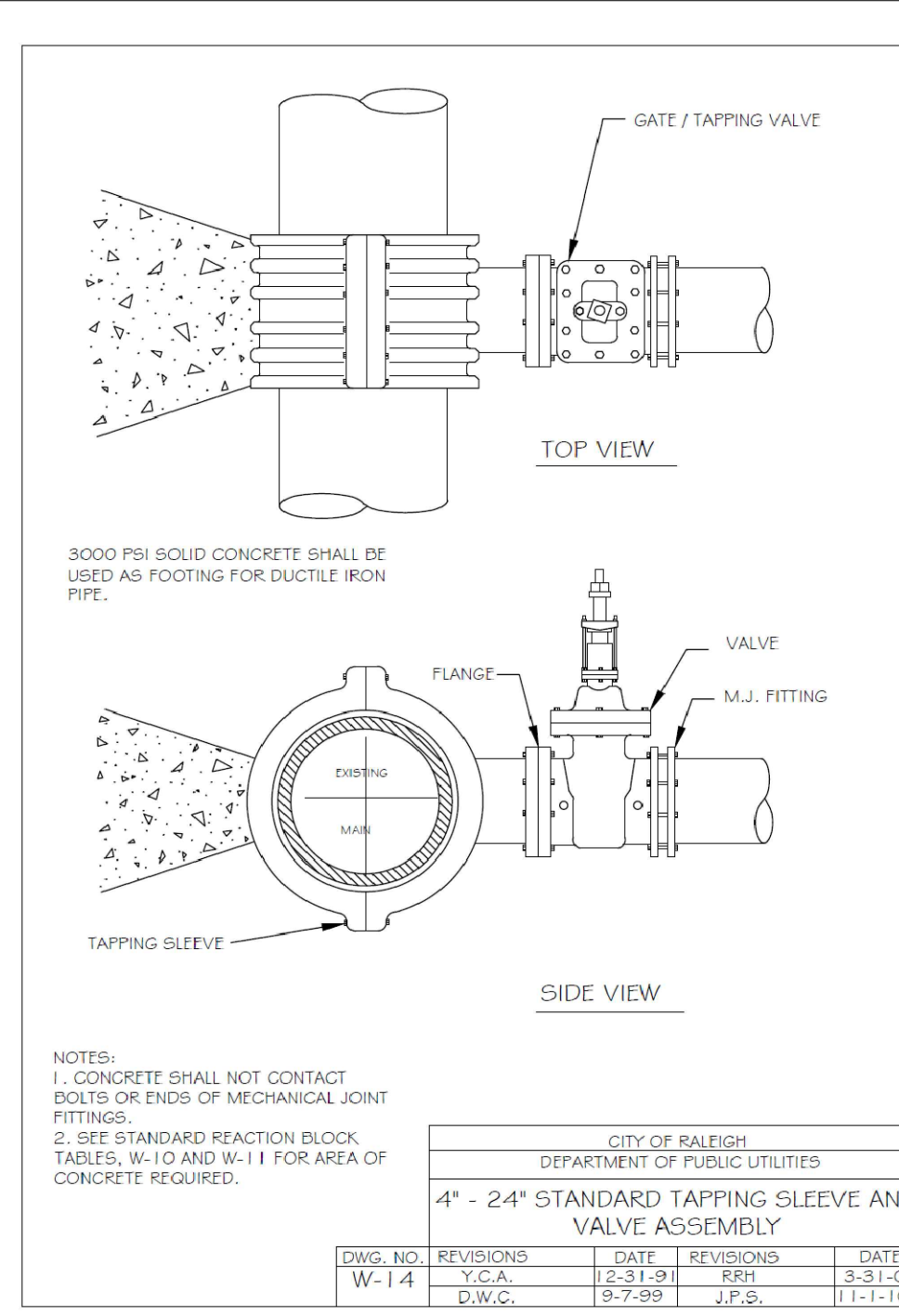
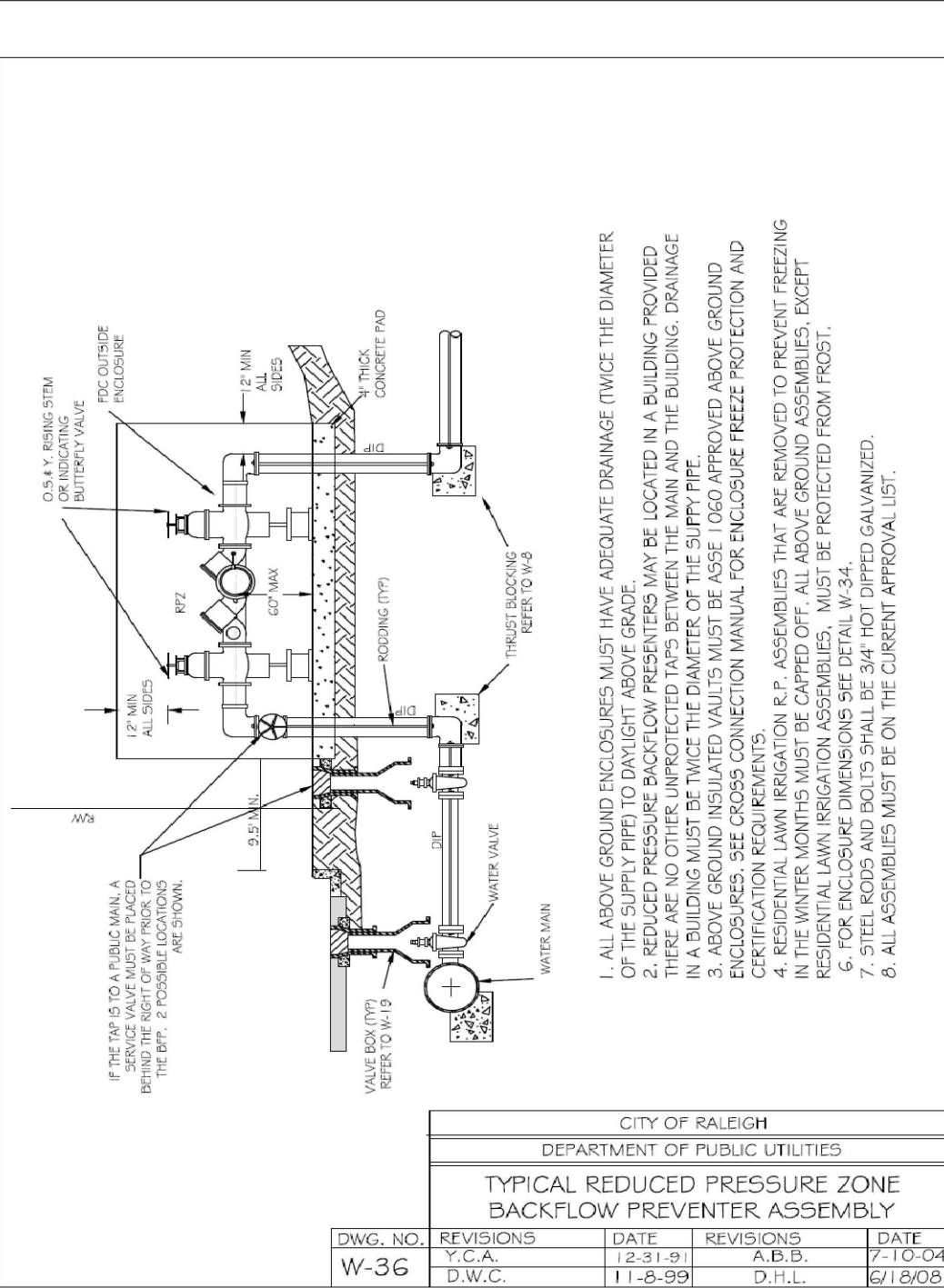
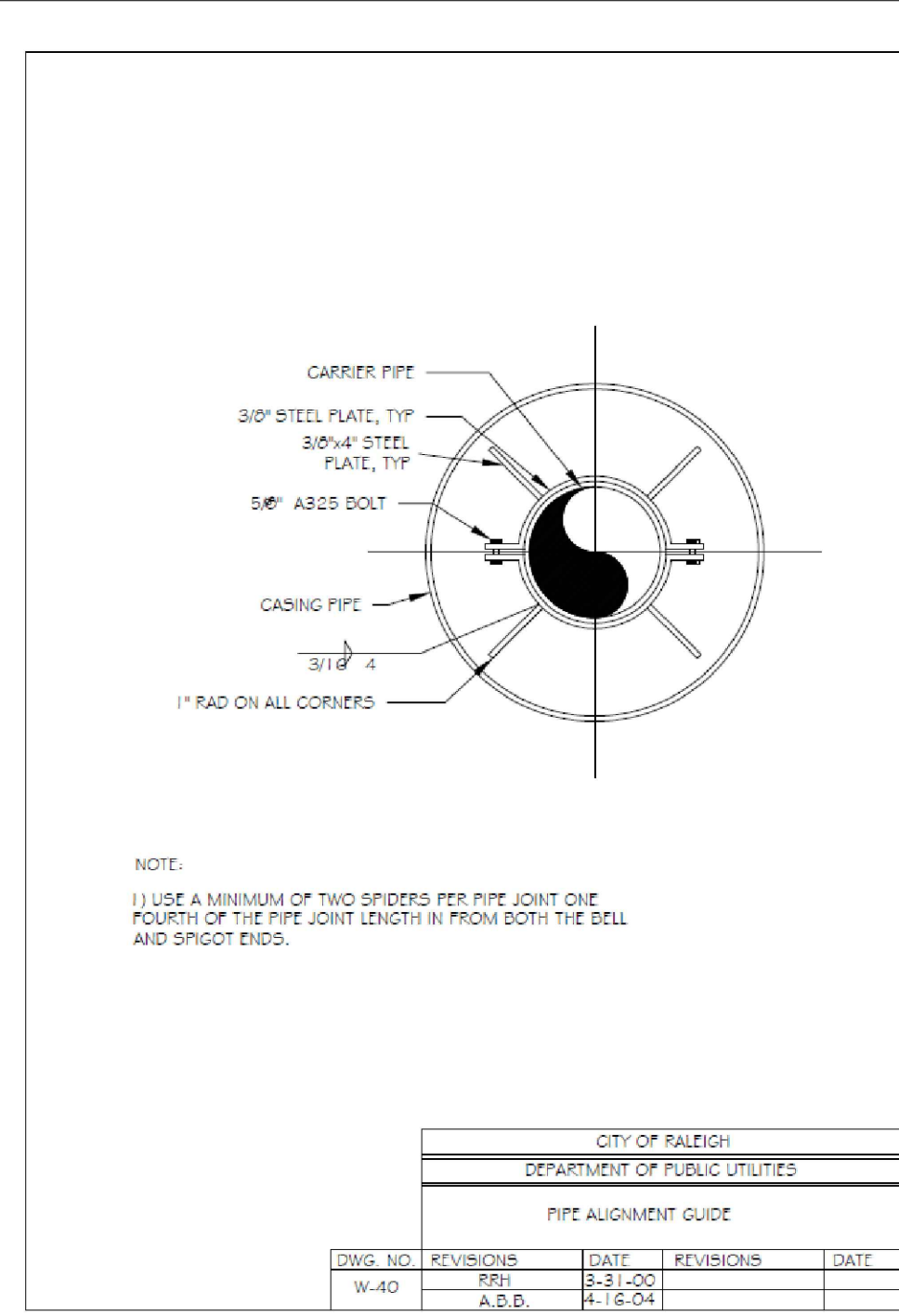
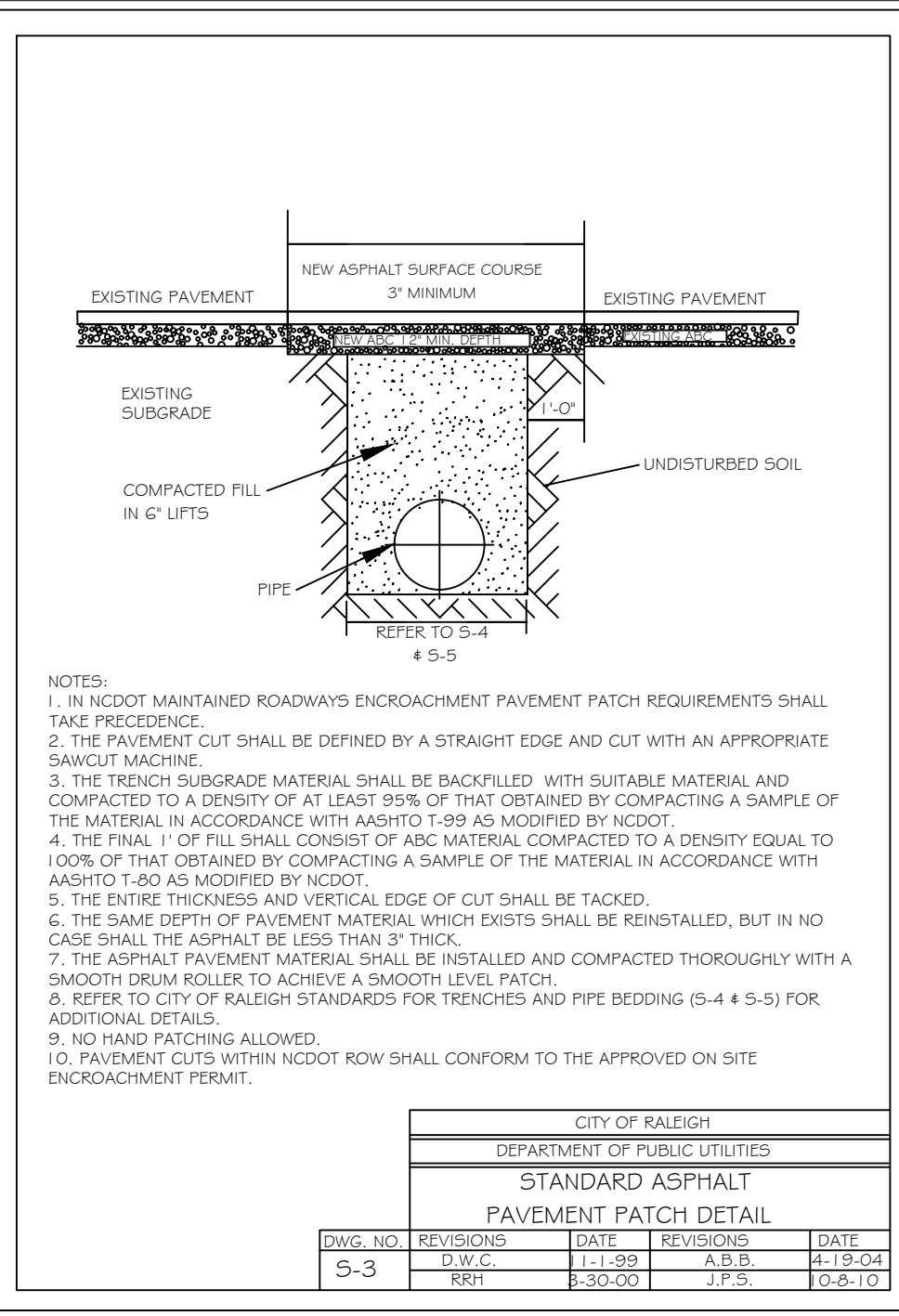
Gettle Engineering and Design, PLLC
3616 Waxwing Court,
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(919) 210-3934 Firm License P-2538

NO	DATE	REVISION DESCRIPTION	BY
1	01-06-2024	Per Town Comment	KPS
2	03-06-2024	Per Town, CDOT AND Wake County Comment	KPS
3	05-11-2024	COMMENT	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY



BMP Bioretention Detail
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No. D3



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 Wake Forest, North Carolina 27587
 (919) 210-3934
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NO	DATE	REVISION DESCRIPTION	BY
1	01-05-2024	Per Town Comment	RFG
2	03-08-2024	Per Town Comment	RFG
3	05-31-2024	Per Town, CDR AND Wake County Comment	BY
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
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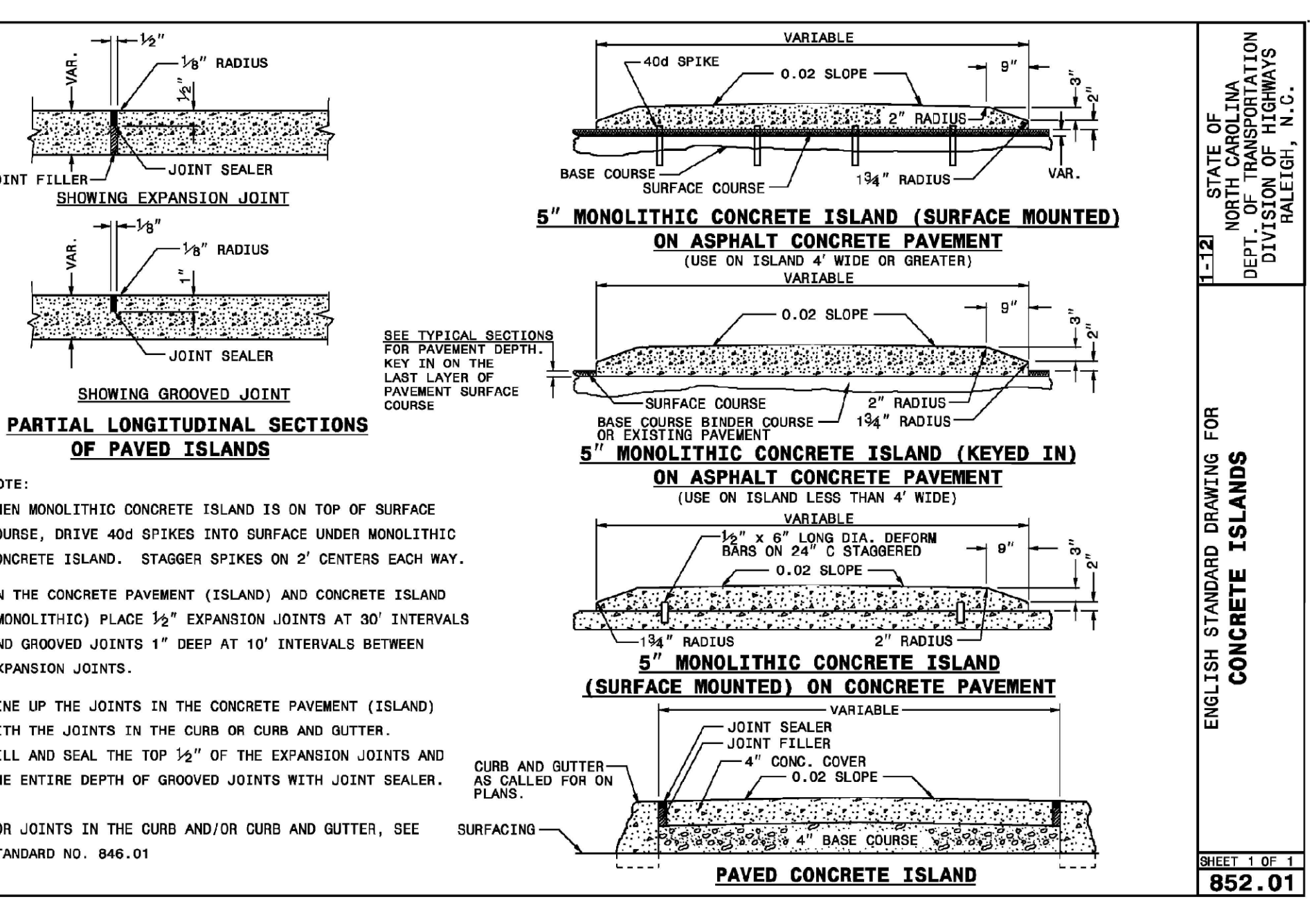
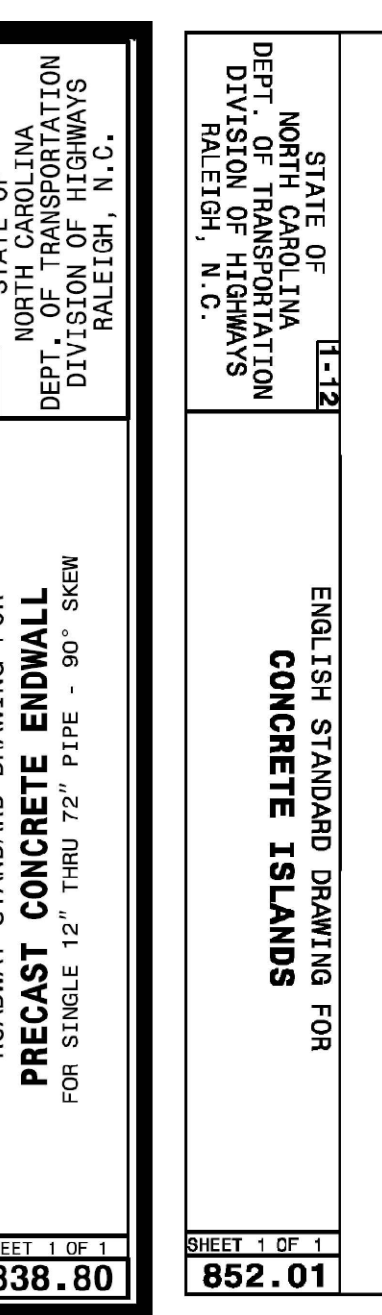
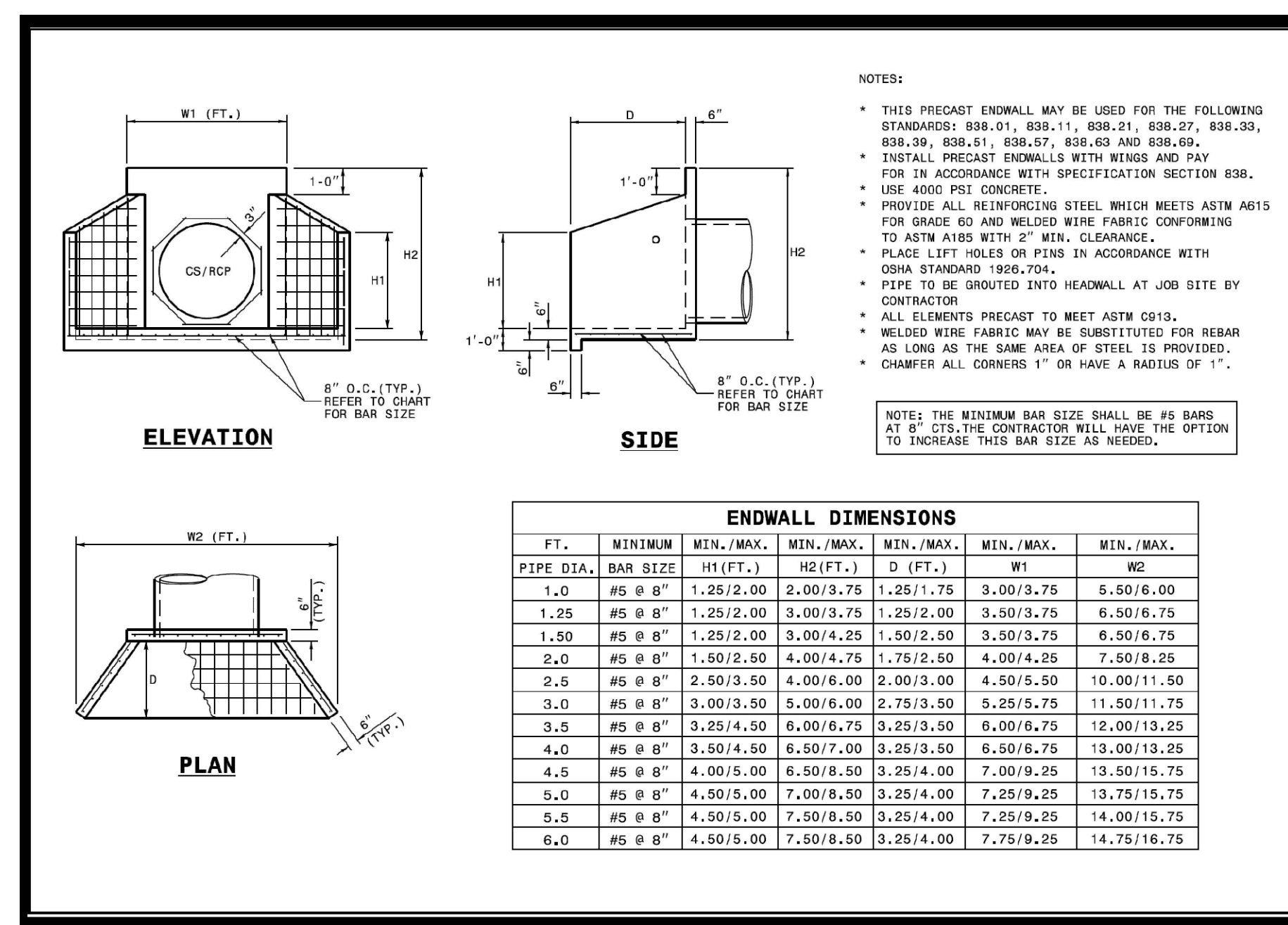
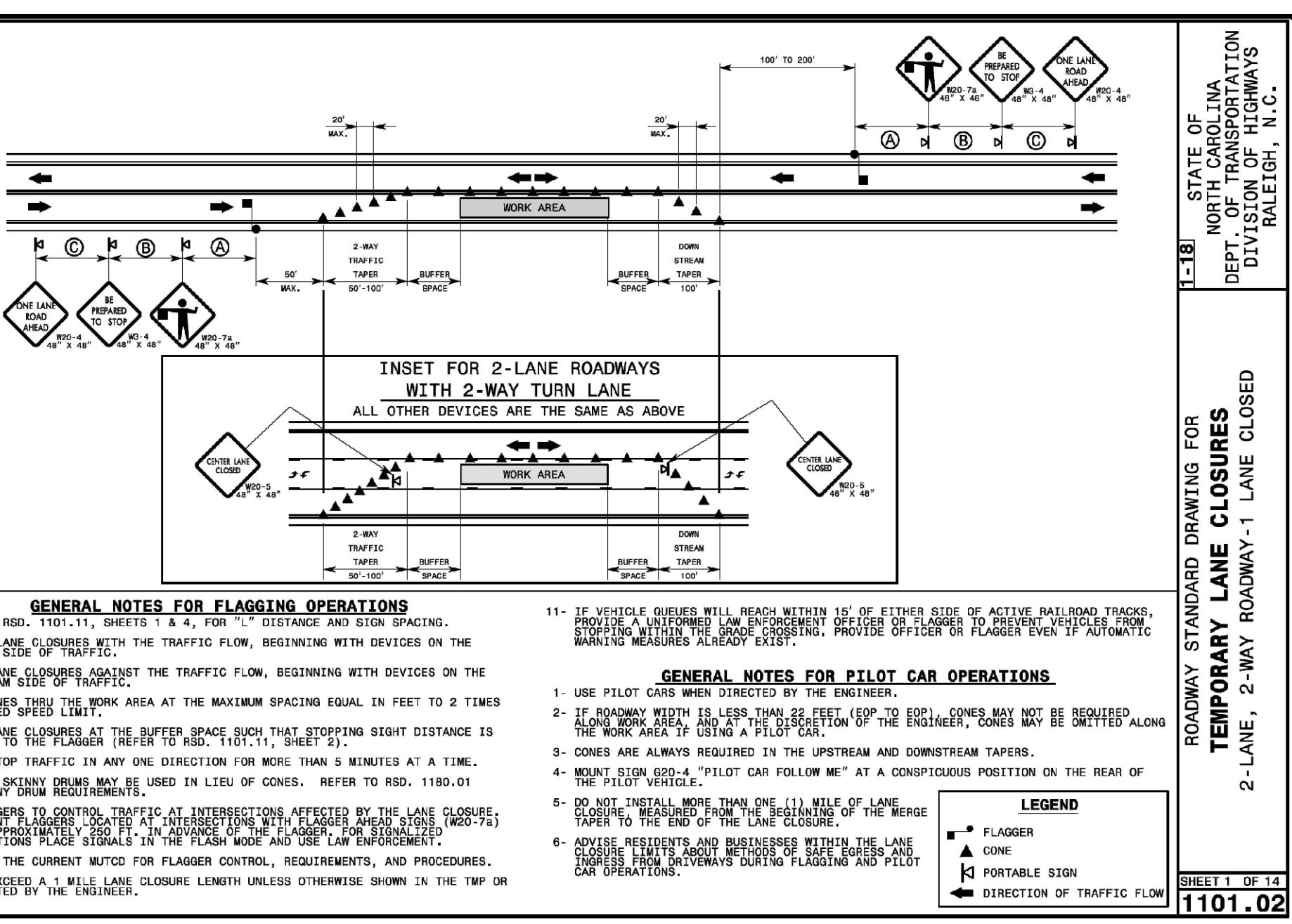
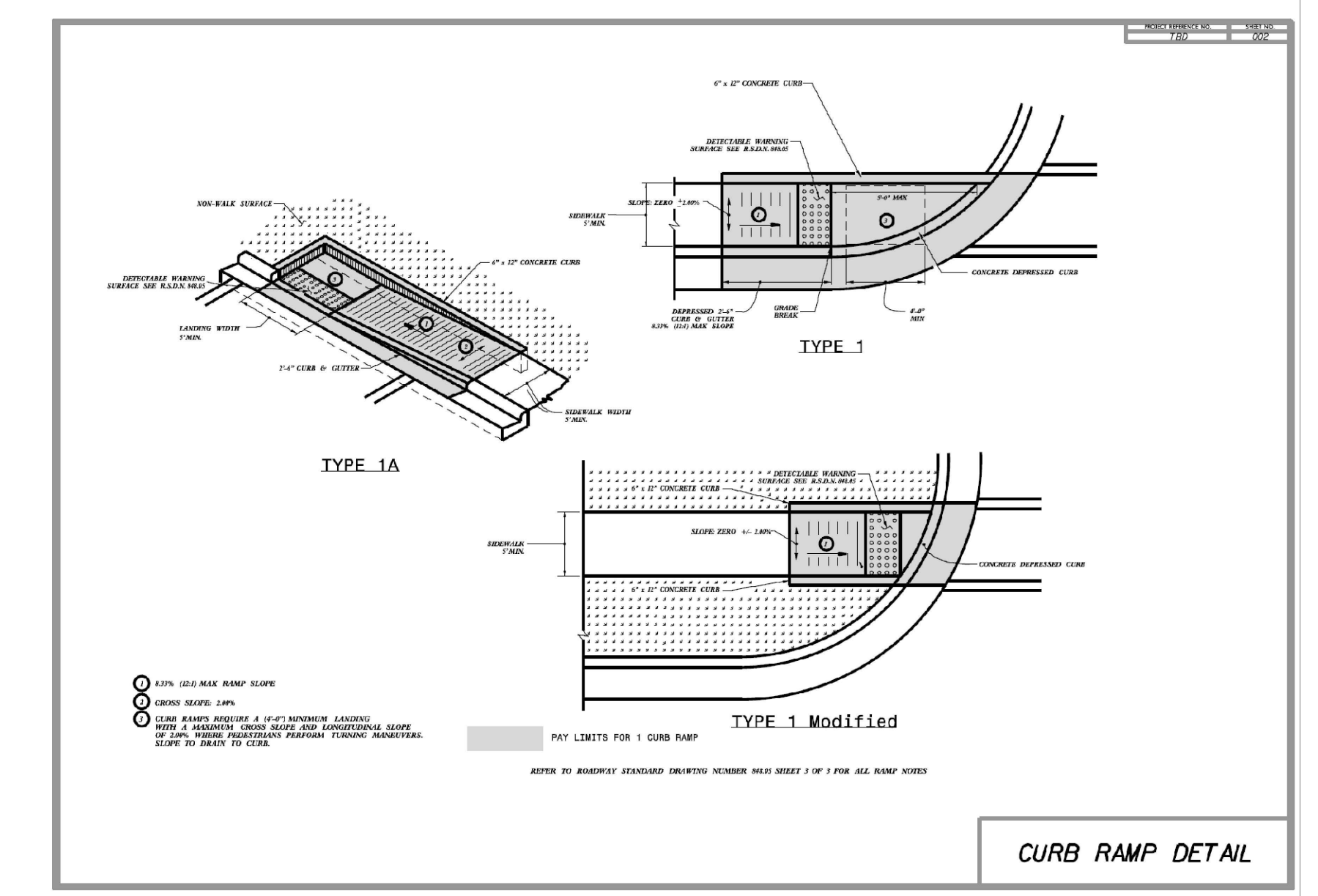
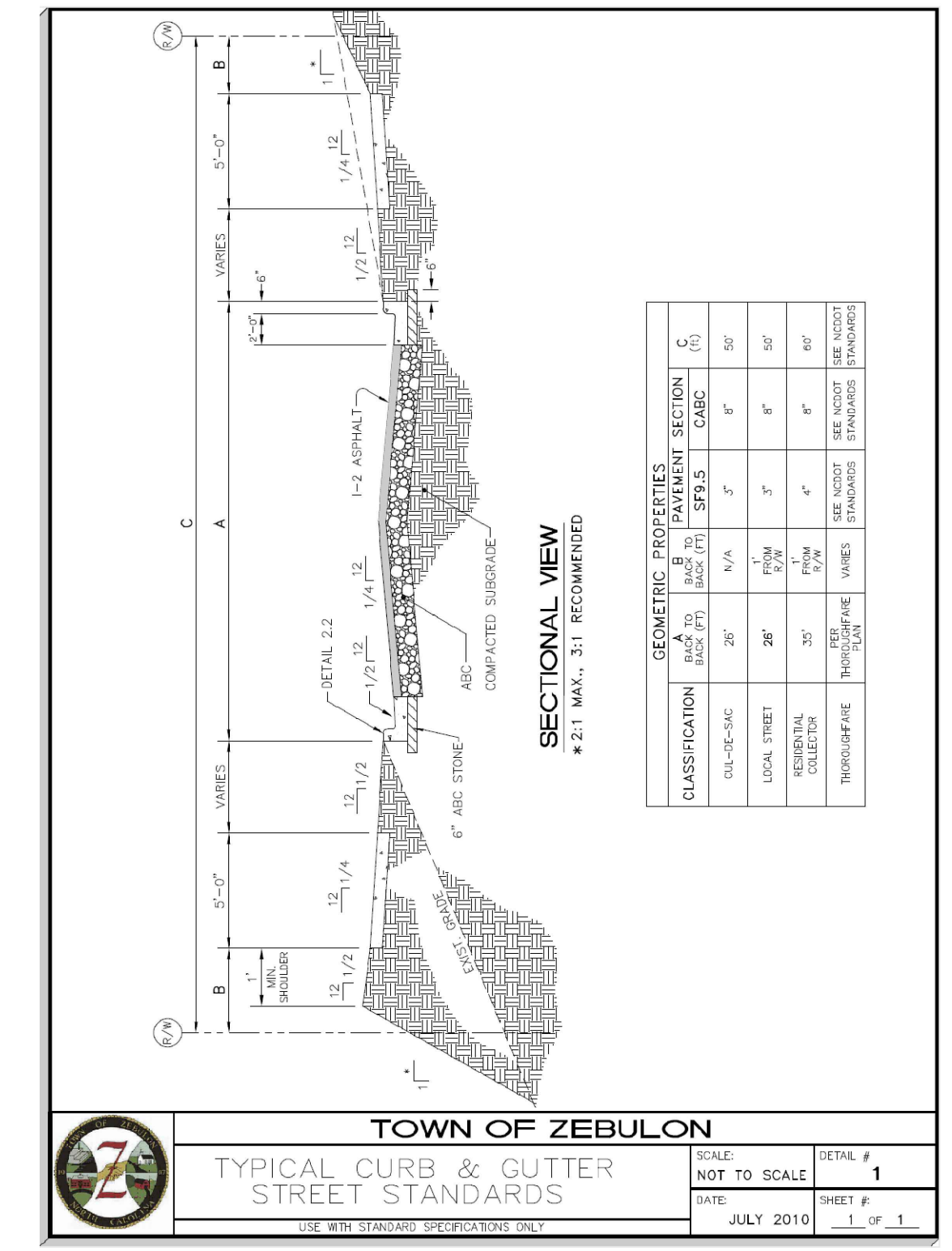
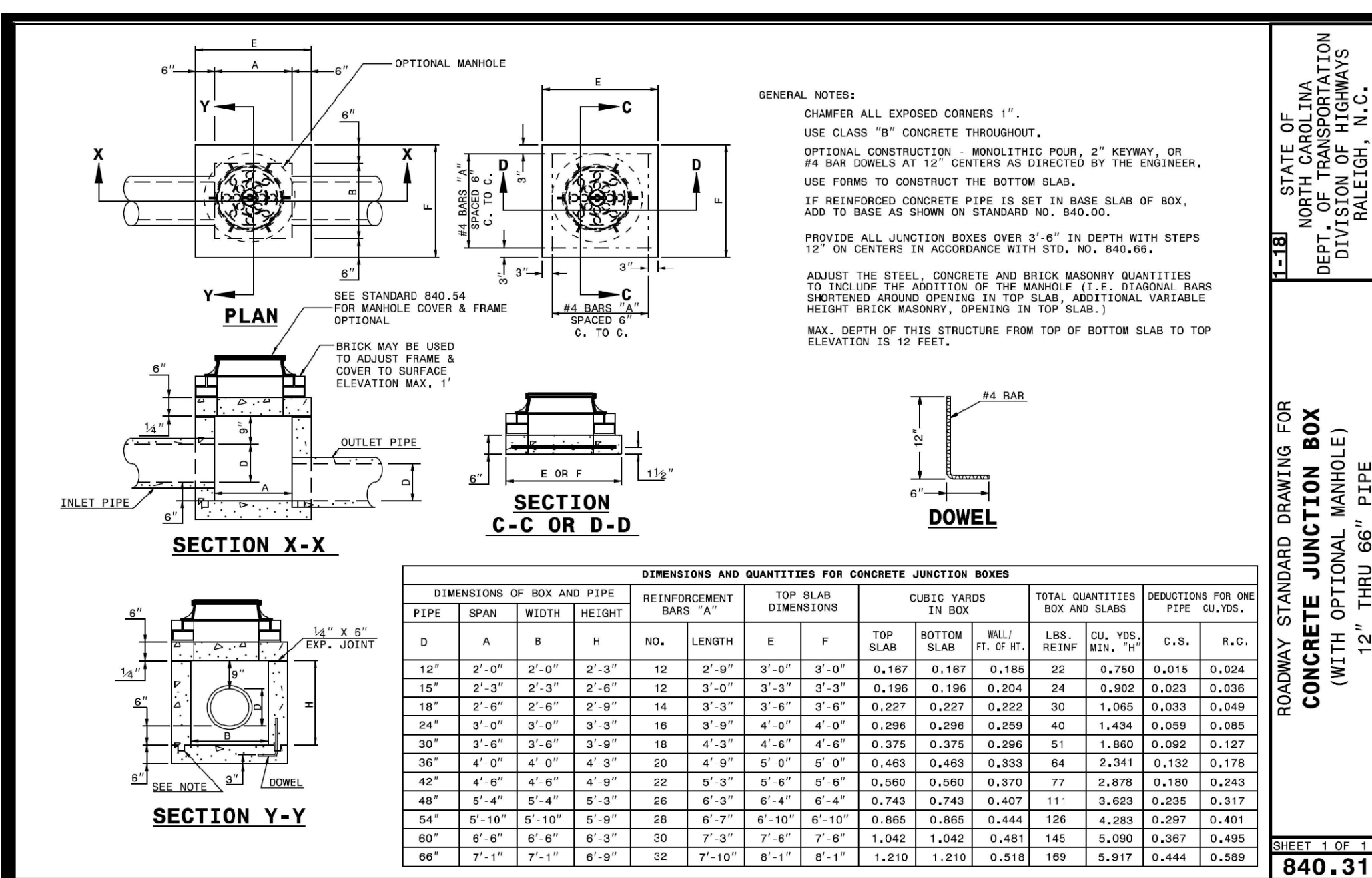
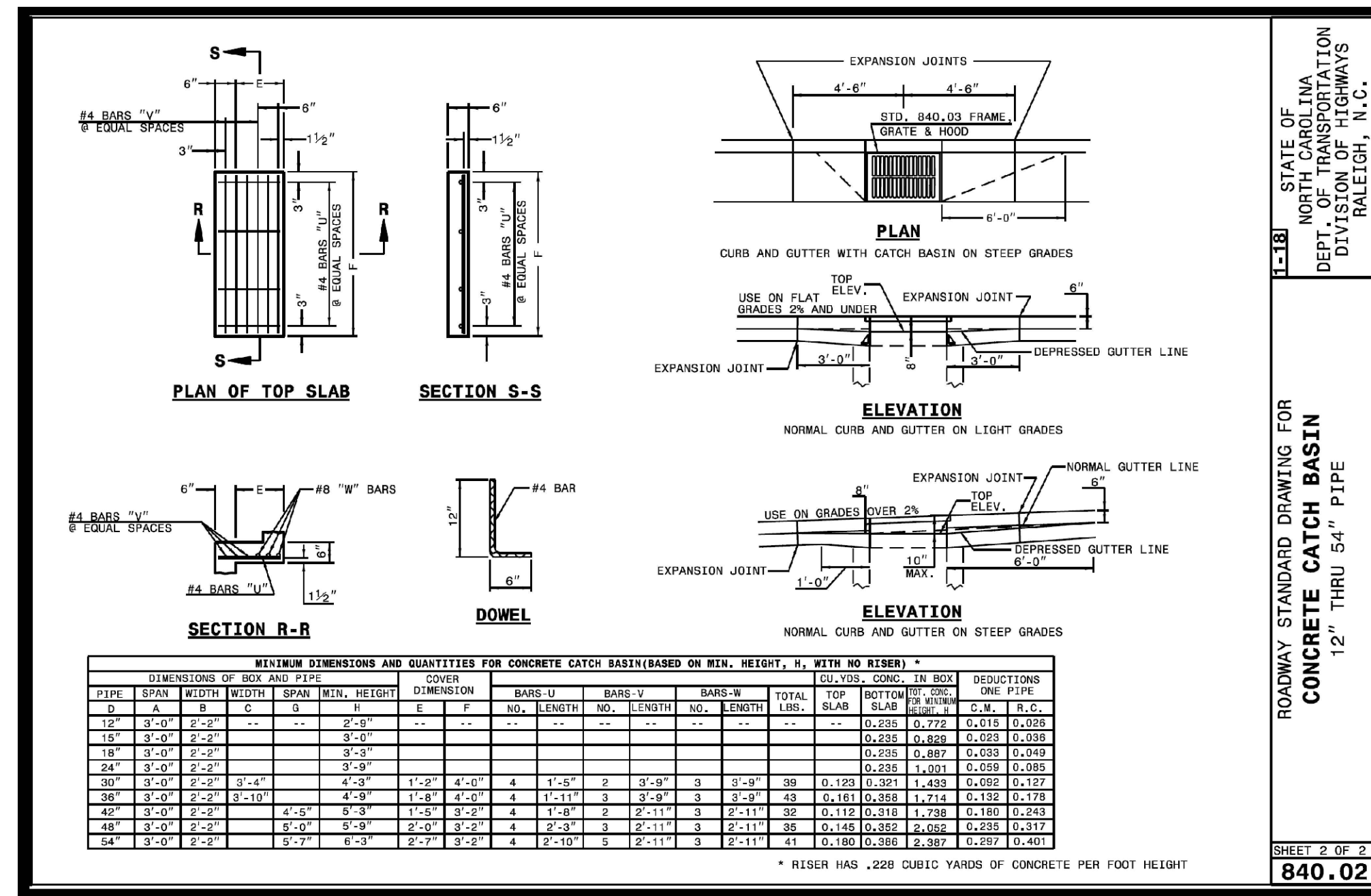
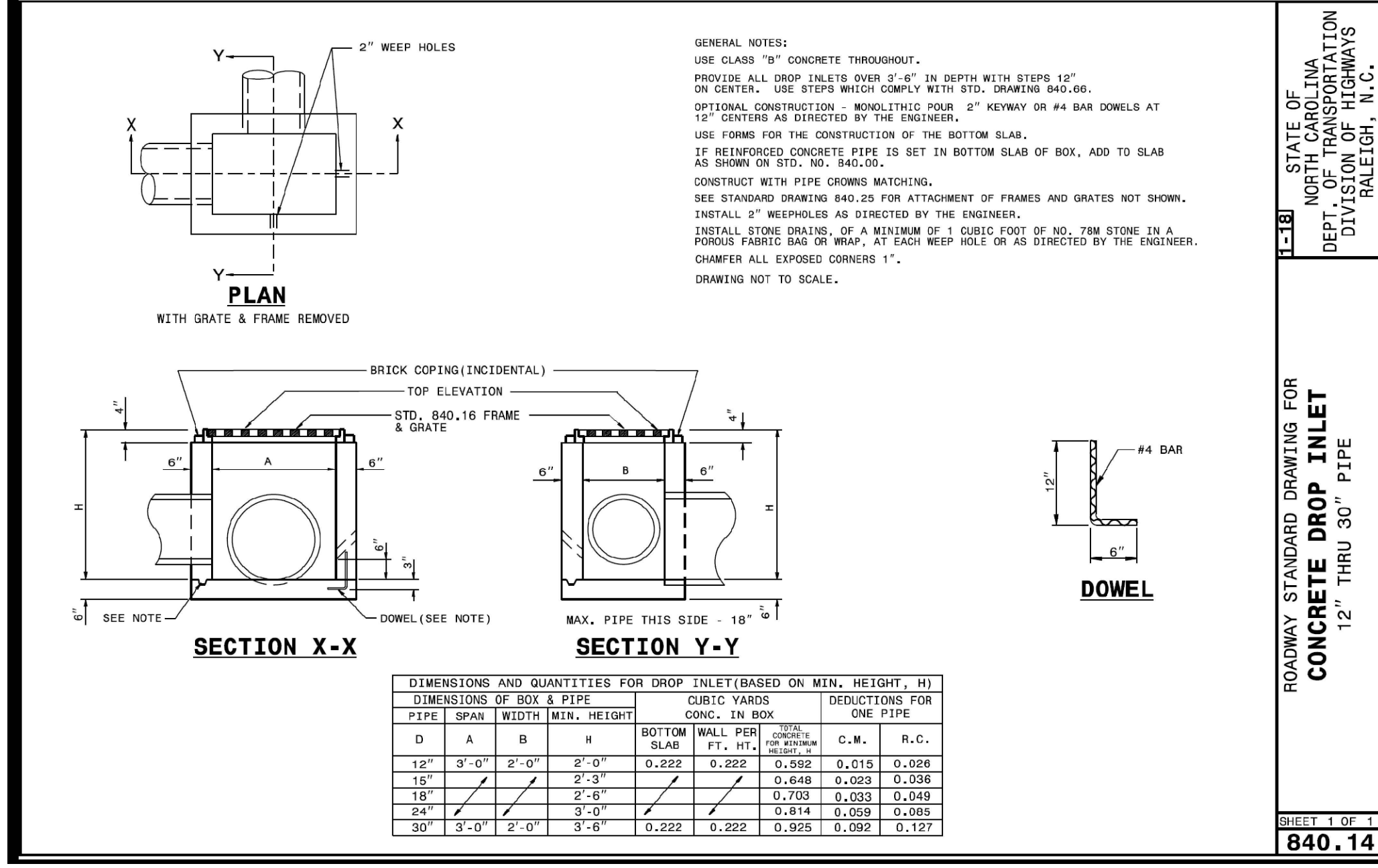
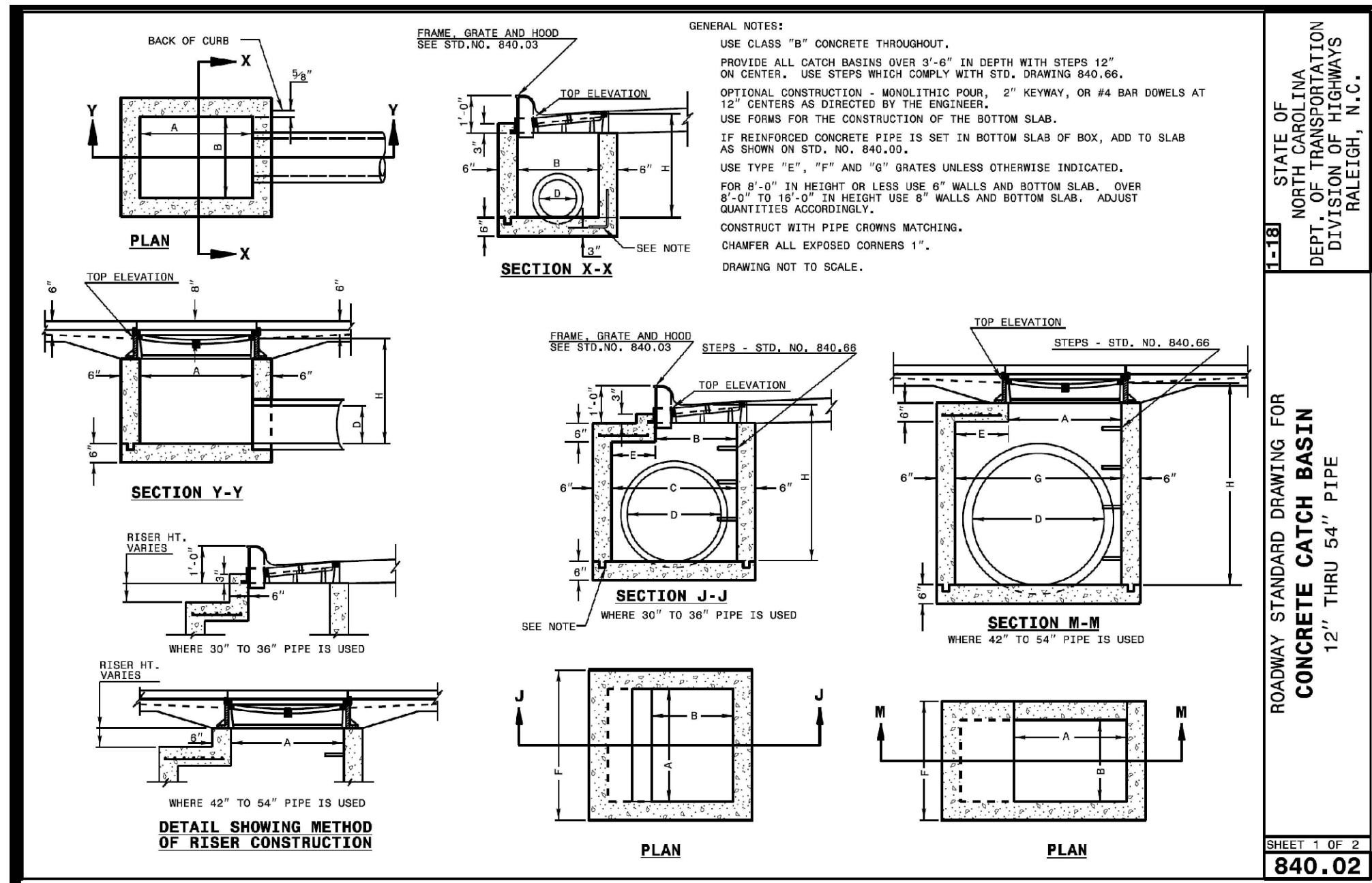


Water and Sewer Details
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg. No. **D4**

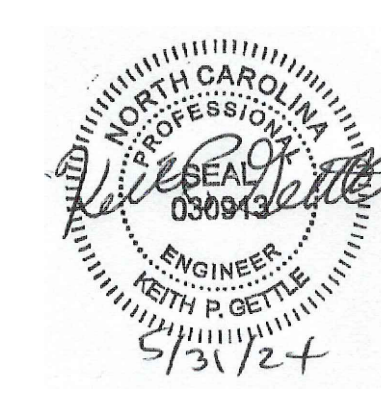
ATTENTION CONTRACTORS
 The Construction Contractor responsible for the construction of water, sewer, and/or gas, as approved in these plans, is responsible for obtaining all necessary permits, and for the installation of any water or sewer facilities not specified as a result of this rectification failure.
 Failure to notify both City Departments in advance of beginning construction, will result in the issuance of a *mandatory fine*, and require installation of any water or sewer facilities not specified as a result of this rectification failure.
 Failure to call for Inspection, Install a Downstream Plug, have Permitted Plans on the Jobsite, or any other Violation of City of Raleigh Standards will result in a *Fine and Possible Exclusion* from future work in the City of Raleigh.

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION
 Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, and contractors are each responsible for compliance with all applicable City, State and Federal laws. This specific authorization below is not a permit, nor shall it be construed to permit any violation of City, State or Federal Law. All Construction must be in accordance with all local, State, and Federal Rules and Regulations.
 Electronic Approval: This approval is being issued electronically. This approval is valid only upon the signature of a City of Raleigh Review Officer below. The City will retain a copy of the approved plans. Any work authorized by this approval must proceed in accordance with the plans kept on file with the City. This electronic approval may not be edited once issued. Any modification to this approval once issued will invalidate this approval.
 City of Raleigh Development Approval
 City of Raleigh Review Officer



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5	DATE	COMMENT	
6	DATE	COMMENT	



NC DOT Roadway Details
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **D5**

BASIN NUMBER	DRAIN AREA(ACRES)	BASIN SIZE	Q10 FLOW(CFS)	BASIN SURFACE AREA(SF)	REQUIRED SURFACE AREA(SF)	BASIN VOLUME (CF)	REQUIRED BASIN VOLUME (CF)	SPILLWAY LENGTH (FT)	SKIMMER / ORIFICE DIAMETER (IN.)	TOP OF BERM ELEV.	EMERGENCY SPILLWAY ELEV.	BOTTOM OF BASIN
1	4.83	52' x 82'	5.38	4264	1749	9068	8694	10	2 / 1.5	310	311.5	307.5
2	1.1	68' x 35'	5.38	2380	2344	3620	1980	10	2 / 1	319	*	317
3	0.44	60' x 40'	5.38	2400	2344	4043	1584	10	*	310	309.5	308

Channel Design Calculations													
Channel	Drain Area, ac	Channel Length, ft	Channel Drop, ft	C	Q10 I, in/hr	Flow cfs	Channel Slope, ft/ft	n	Side Slope:1	Bottom Width, ft	Depth of Flow, ft	Velocity fps	Liner
TD1	1.26	290	8	0.55	5.38	3.7	0.0276	0.024	3.00	0.0	0.55	4.18	Jute Mesh
TD2	1.25	155	1	0.55	5.38	9.1	0.0065	0.020	3.00	0.0	0.93	3.47	Jute Mesh
TD3	1.12	211	2	0.55	5.38	3.3	0.0095	0.020	3.00	0.0	0.60	3.11	Jute Mesh
TD4	0.68	229	4	0.55	5.38	2.0	0.0175	0.020	3.00	0.0	0.44	3.46	Jute Mesh
TD5	0.45	306	6	0.55	5.38	1.3	0.0196	0.020	3.00	0.0	0.37	3.26	Jute Mesh

Skimmer Basin 1

Okay

4.83	Area (Acres)
5.38	Peak Flow from 10-year Storm (cfs)
8694	Required Volume ft ³
1749	Required Surface Area ft ²
29.6	Suggested Width ft
59.1	Suggested Length ft
82	Trial Top Width at Spillway Invert ft
52	Trial Top Length at Spillway Invert ft
2	Trial Side Slope Ratio Z:1
2.5	Trial Depth ft (2 to 3.5 feet above gr.)
72	Bottom Width ft
42	Bottom Length ft
3024	Bottom Area ft ²
9068	Actual Volume ft ³
4264	Actual Surface Area ft ²
Okay	
Okay	
10	Trial Weir Length ft
0.5	Trial Depth of Flow ft
10.6	Spillway Capacity cfs
Okay	
2	Skimmer Size (inches)
0.2	Head on Skimmer (feet)
1.5	Orifice Size (1/4 inch increments)
3.74	Dewatering Time (days)
Suggest about 3 days	

Temporary Sediment Basin 2

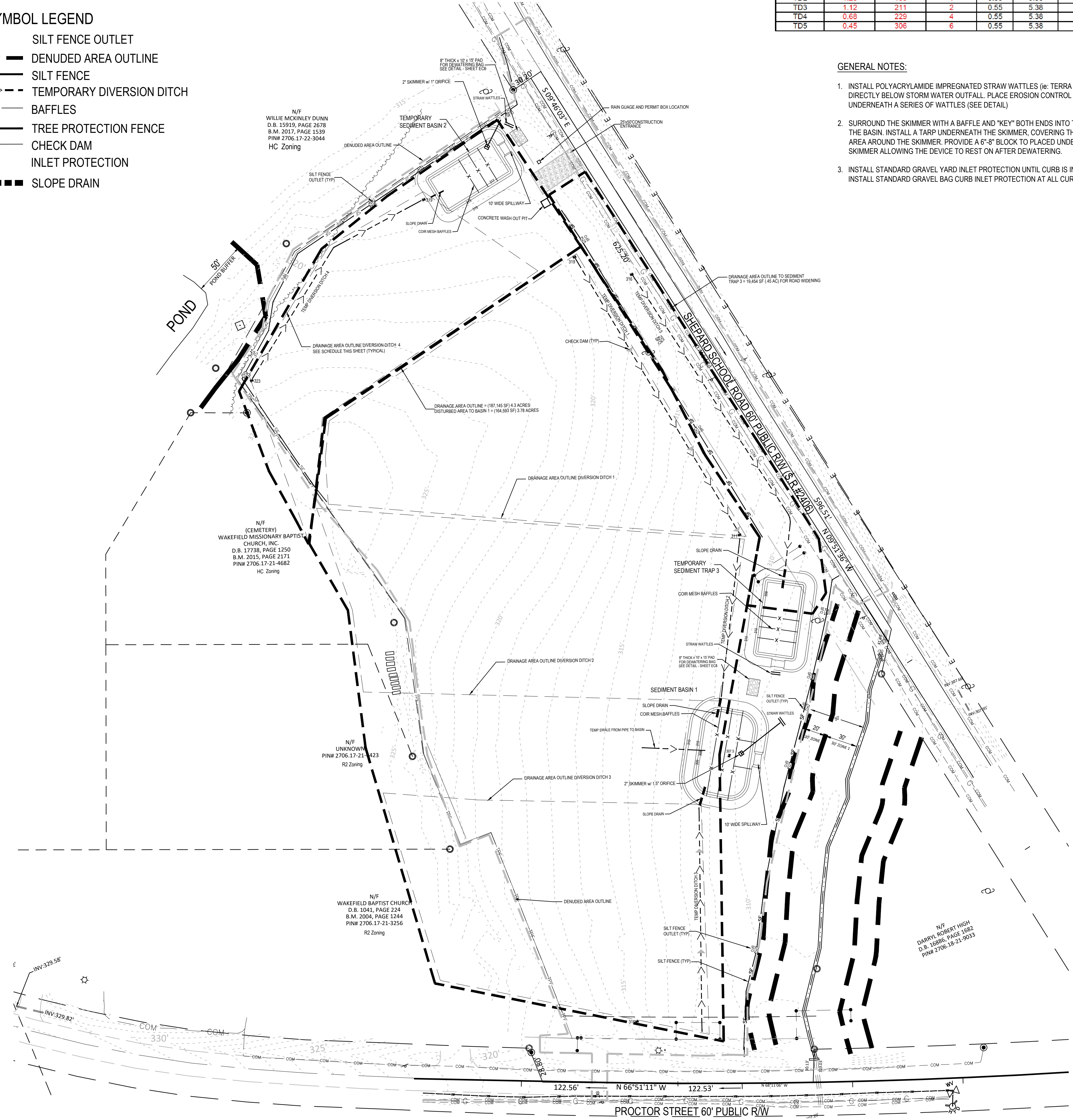
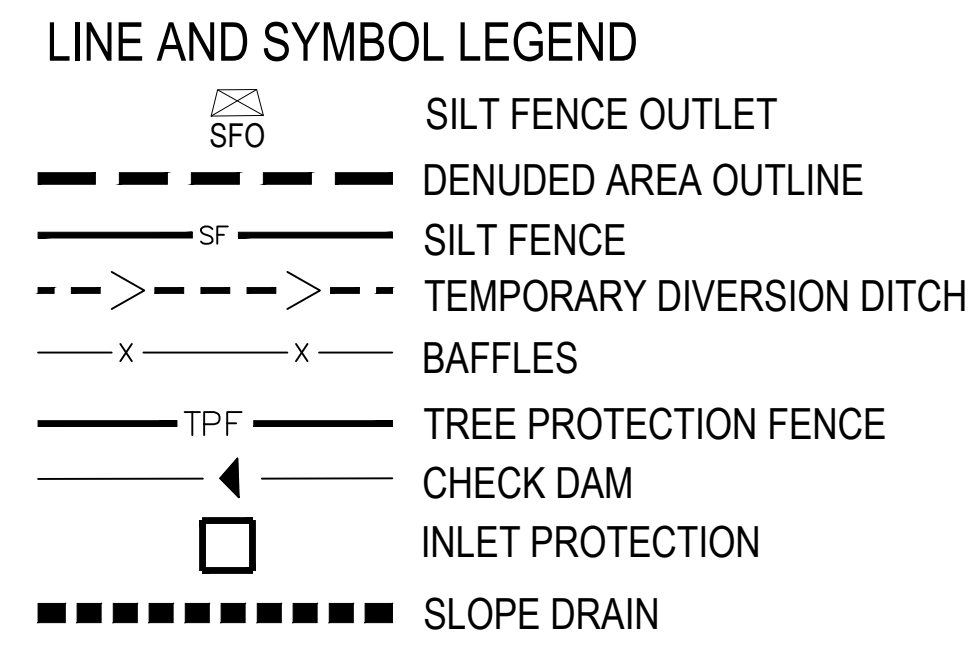
Okay

1.1	Area (Acres)
5.38	Peak Flow from 10-year Storm (cfs)
1980	Required Volume ft ³
2344	Required Surface Area ft ²
34.2	Suggested Width ft
68.5	Suggested Length ft
35	Trial Top Width at Spillway Invert ft
68	Trial Top Length at Spillway Invert ft
2	Trial Side Slope Ratio Z:1
2	Trial Depth ft (2 to 13 feet above gr.)
23	Bottom Width ft
56	Bottom Length ft
1288	Bottom Area ft ²
3620	Actual Volume ft ³
2380	Actual Surface Area ft ²
Okay	
Okay	
2	Skimmer Size (inches)
0.05	Head on Skimmer (feet)
1	Orifice Size (1/4 inch increments)
3.83	Dewatering Time (days)
Suggest about 3 days	

Temporary Sediment Trap 3

Okay

0.44	Area (Acres)
5.38	Peak Flow from 10-year Storm (cfs)
1584	Required Volume ft ³
2344	Required Surface Area ft ²
34.2	Suggested Width ft
68.5	Suggested Length ft
40	Trial Top Width at Spillway Invert ft
60	Trial Top Length at Spillway Invert ft
2	Trial Side Slope Ratio Z:1
2	Trial Depth ft (1.5 feet below grade + 2 to 3.5 feet above grade)
32	Bottom Width ft
52	Bottom Length ft
1664	Bottom Area ft ²
4043	Actual Volume ft ³
2400	Actual Surface Area ft ²
Okay	
Okay	
10	Trial Weir Length ft
0.5	Trial Depth of Flow ft
10.6	Spillway Capacity cfs
Okay	



GENERAL NOTES:

- INSTALL POLYACRYLAMIDE IMPREGNATED STRAW WATTLES (w/ TERRA TUBES) DIRECTLY BELOW STORM WATER OUTFALL. PLACE EROSION CONTROL LINER UNDERNEATH A SERIES OF WATTLES (SEE DETAIL).
- SURROUND THE SKIMMER WITH A BAFFLE AND "KEY" BOTH ENDS INTO THE SIDE OF THE BASIN. INSTALL A TARP UNDERNEATH THE SKIMMER, COVERING THE ENTIRE AREA AROUND THE SKIMMER. PROVIDE A 6"-8" BLOCK TO BE PLACED UNDER THE SKIMMER ALLOWING THE DEVICE TO REST ON AFTER DEWATERING.
- INSTALL STANDARD GRAVEL YARD INLET PROTECTION UNTIL CURB IS INSTALLED. INSTALL STANDARD GRAVEL BAG CURB INLET PROTECTION AT ALL CURB INLETS.

EROSION CONTROL GENERAL NOTES

- CONTACT THE NCDEMR RALEIGH REGIONAL OFFICE AT LEAST 48 HOURS PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITY ENVIRONMENTAL SPECIALIST (919) 791-4200.
- PER NPDES REQUIREMENTS, A RAIN GAUGE, SELF INSPECTION RECORDS, PERMIT, CERTIFICATE OF COVERAGE, AND S&E PLANS ARE REQUIRED TO BE MAINTAINED ON SITE AND ACCESSIBLE DURING INSPECTION. IT IS RECOMMENDED THESE ITEMS ARE TO BE PLACED IN A PERMIT BOX AT THE ENTRANCE OF THE PROJECT. (NCG01 PART III SECTIONS A AND B, 15A NCAC 04B 0131)
- THE CONTRACTOR SHALL CONDUCT SELF-INSPECTIONS OF THE EROSION AND SEDIMENTATION CONTROL MEASURES AND COMPLETE THE FOLLOWING COMBINED SELF-INSPECTION FORM FOUND ON THE DEMLR WEBSITE [HTTPS://DEQ.NC.GOV/ABOUT/DIVISIONS/ENERGY-MINERAL-LAND-RESOURCES/EROSION-SEDIMENT-CONTROL/FORMS](https://deq.nc.gov/about/divisions/energy-mineral-land-resources/erosion-sediment-control/forms). TWELVE MONTHS OF COMPLETED INSPECTION FORMS SHALL BE KEPT ON-SITE AND AVAILABLE FOR INSPECTION AT ALL TIMES. IT IS RECOMMENDED A COPY BE KEPT IN A PERMIT BOX. (GS 113A-54.1 (E), 15A NCAC 04B 0131, NCG01 PART III SECTIONS A AND B).
- STOCKPILES, LAYDOWN OR WASTE AREAS, CONCRETE WASHOUTS, PORTABLE TOILETS, AND FUELS MUST BE LOCATED AT LEAST 50 FEET AWAY FROM ANY OPEN WATER CONVEYANCES, SUCH AS BASINS, DITCHES, STORM DRAIN INLETS, ETC. THE LOCATION OF THESE ACTIVITIES MAY BE FIELD ADJUSTED IF THE DISTANCE REQUIREMENTS ARE MET. (GS 113A-57(3), 15A NCAC 04B 0105, 15A NCAC 04B 0106(5), GS113A-57(4), NCG01 SECTION II.F)
- PERIMETER MEASURES MUST BE LEFT IN PLACE UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED. AFTER SITE IS PERMANENTLY STABILIZED, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES AND PROVIDE PERMANENT SEEDING WHERE TEMPORARY MEASURES HAVE BEEN REMOVED AND GROUND COVER IS NOT ADEQUATE. SEDIMENT BASINS MAY NOT BE REMOVED OR CONVERTED TO PERMANENT SCMS UNTIL ALL UPLAND AREAS ARE PERMANENTLY STABILIZED.
- NCDEQ SHOULD BE NOTIFIED 10-DAYS PRIOR TO REMOVAL OF A BASIN. (GS 113A-57(3), 15A NCAC 04B 0113). GROUND STABILIZATION WILL BE APPLIED WITHIN 14 CALENDAR DAYS FROM LAST LAND DISTURBING ACTIVITY. FOR STEEP SLOPES, THAT AREA MUST BE STABILIZED WITHIN 7 CALENDAR DAYS. (15A NCAC 04B 0106, NCG01 PART II SECTION E (1)).
- SILT BAG(S) WILL BE CONTINUOUSLY MONITORED DURING OPERATION. (GS 113A-57(3), 15A NCAC 04B 0113).
- SELF-INSPECTIONS FOR EROSION AND SEDIMENTATION CONTROL MEASURES ARE TO BE PERFORMED AT LEAST ONCE EVERY SEVEN CALENDAR DAYS AND WITHIN 24 HOURS OF EVERY RAIN EVENT OF GREATER THAN 1 INCH. ANY NEEDED REPAIRS SHALL BE MADE IMMEDIATELY TO MAINTAIN MEASURES AS DESIGNED. ALL ESC MEASURES SHALL BE MAINTAINED AS SPECIFIED IN THE CONSTRUCTION DETAILS ON THIS PLAN. A RAIN GAUGE SHALL BE INSTALLED AT THE PROJECT SITE FOR MONITORING. (GS 113A-54.1 (E), 15A NCAC 04B 0131, NCG01 PART III SECTIONS A AND B)

EROSION CONTROL CONSTRUCTION SEQUENCE - PAHSE 1

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL WATERSHED MANAGER. OBTAIN A LAND DISTURBING PERMIT.
- INSTALL TREE PROTECTION FENCE (TPF).
- INSTALL EROSION CONTROL MEASURES INCLUDING GRAVEL CONSTRUCTION ENTRANCE / EXIT, SEDIMENT TRAPPING MEASURES (BASINS 1, 2 AND 3), AND OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES. SEED TEMPORARY DIVERSIONS, BERMS AND BASINS IMMEDIATELY AFTER CONSTRUCTION.
- CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT, KARYN PAGEAU (919) 796-8769, FOR AN ONSITE INSPECTION TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. PERFORM ROUGH GRADING, INSTALLING AND MAINTAINING TEMPORARY DIVERSIONS AS NECESSARY. SEED AND MULCH PERIMETER SLOPES AS SOON AS POSSIBLE.
- STABILIZE DISTURBED AREAS WITHIN 14 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
- REGULARLY INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY.
- KEEP MUD AND DEBRIS OFF THE PUBLIC STREETS AT ALL TIMES. IF MUD OR DEBRIS IS TRACKED FROM THE SITE, USE A SHOVEL AND BROOM TO REMOVE IT IMMEDIATELY. IF MUD AND DEBRIS ARE NOT KEPT OFF THE STREET, ENFORCEMENT ACTION (REVOKING THE GRADING PERMIT AND/OR STOP WORK ORDER) MAY BE TAKEN.
- IF IT IS DETERMINED DURING THE COURSE OF CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE APPROVED EROSION CONTROL PLAN, THE PERSON RESPONSIBLE FOR THE LAND-DISTURBING ACTIVITY IS OBLIGATED TO TAKE ADDITIONAL PROTECTIVE ACTION.
- CONTINUE TO PHASE 2 EROSION CONTROL ACTIVITIES.

REFERENCE DRAWINGS:

- SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.
- SEE SHEET C5 FOR SITE GRADING NOTES.

DENUDED AREA ON SITE = 258,310.80 SF (5.93 AC)
 DENUDED AREA ROW = 27,878.40 SF (.64 AC)
 DENUDED AREA TOTAL = 286,076 SF (6.57 AC)

GRAPHIC SCALE 1"=50'



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 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
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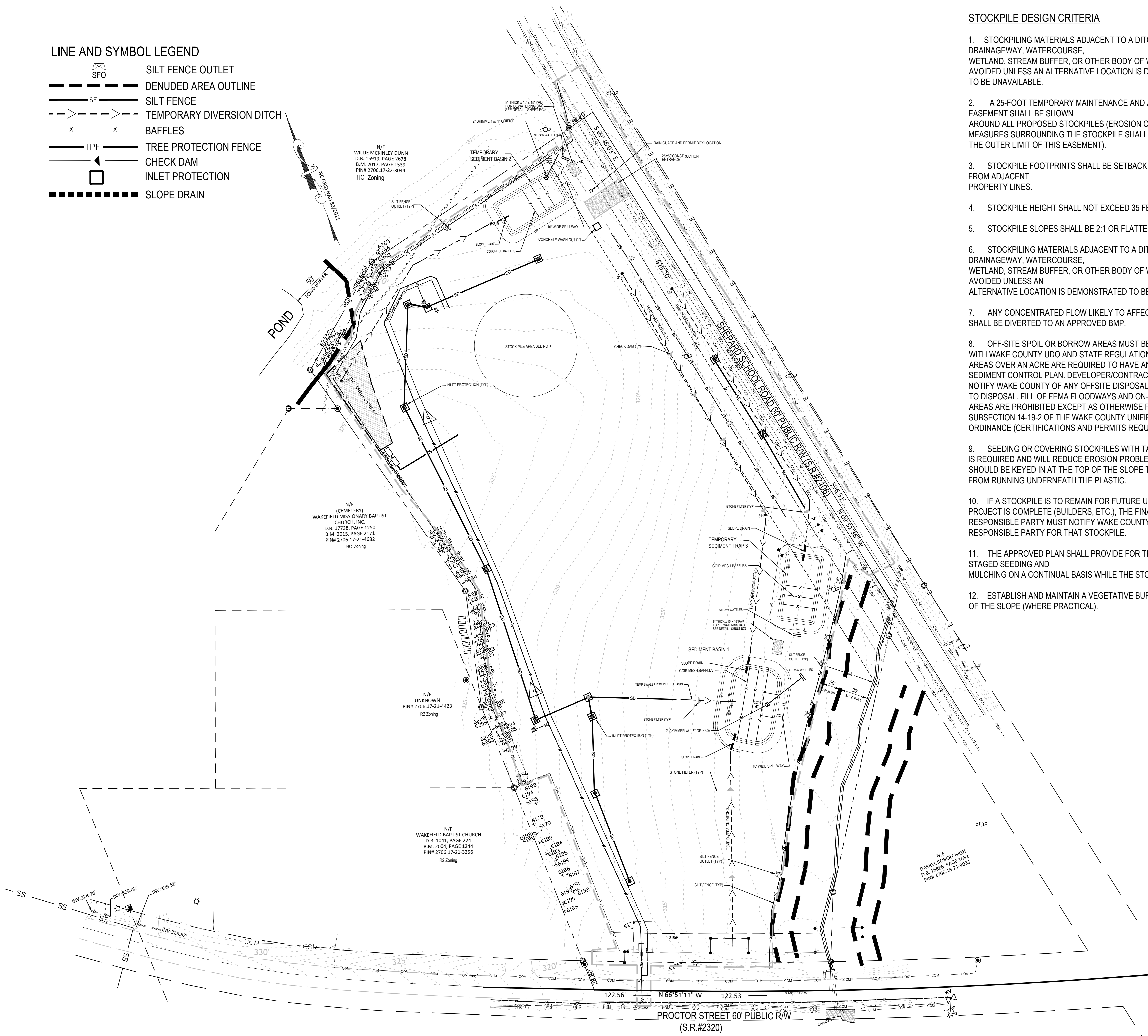


Phase 1 - Erosion Control Plan
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. **EC1**

LINE AND SYMBOL LEGEND

- SILT FENCE OUTLET
- DENUDE AREA OUTLINE
- SILT FENCE
- TEMPORARY DIVERSION DITCH
- BAFFLES
- TREE PROTECTION FENCE
- CHECK DAM
- INLET PROTECTION
- SLOPE DRAIN



STOCKPILE DESIGN CRITERIA

1. STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
2. A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
3. STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
4. STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
5. STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
6. STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
7. ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
8. OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY UDO AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN. DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL, FILL OF FEMA FLOODWAYS AND ON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).
9. SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEYS IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
10. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE (BUILDERS, ETC.), THE FINANCIAL RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY OF A NEW RESPONSIBLE PARTY FOR THAT STOCKPILE.
11. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
12. ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

EROSION CONTROL CONSTRUCTION SEQUENCE - PHASE 2

1. INSTALL THE STORM DRAINAGE SYSTEM AND INLET PROTECTION, PROTECTING PIPE OPENINGS AND UNCOVERED STRUCTURES AS SHOWN.
2. INSTALL SANITARY SEWER SYSTEM SEPTIC FIELD / TANKS AND WATER LINE PIPING PER UTILITY PLAN. ENSURE EXISTING UTILITIES ARE PROTECTED DURING CONSTRUCTION ACTIVITIES.
3. BEGIN ROADWORK IN SHEPARD SCHOOL ROAD. CONTACT NCDOT FOR INSPECTIONS AS REQUIRED.
4. STABILIZE DISTURBED AREAS WITHIN 14 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
5. REGULARLY INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY.
6. KEEP MUD AND DEBRIS OFF THE PUBLIC STREETS AT ALL TIMES. IF MUD OR DEBRIS IS TRACKED FROM THE SITE, USE A SHOVEL AND BROOM TO REMOVE IT IMMEDIATELY. IF MUD AND DEBRIS ARE NOT KEPT OFF THE STREET, ENFORCEMENT ACTION (REVOKING THE GRADING PERMIT AND/OR STOP WORK ORDER) MAY BE TAKEN.
7. IF IT IS DETERMINED DURING THE COURSE OF CONSTRUCTION THAT SIGNIFICANT SEDIMENT IS LEAVING THE SITE DESPITE PROPER IMPLEMENTATION AND MAINTENANCE OF THE APPROVED EROSION CONTROL PLAN, THE PERSON RESPONSIBLE FOR THE LAND DISTURBING ACTIVITY IS OBLIGATED TO TAKE ADDITIONAL PROTECTIVE ACTION.
8. CONTINUE TO PHASE 3 ACTIVITIES.

REFERENCE DRAWINGS:

1. SEE SHEETS C6 AND C7 FOR STORM DRAIN SCHEDULE.
2. SEE SHEET C5 FOR DETAILED SITE GRADING NOTES.
3. SEE SHEETS C8, C9 AND C10 FOR THE UTILITY PLAN.

Gettle Engineering and Design, PLLC

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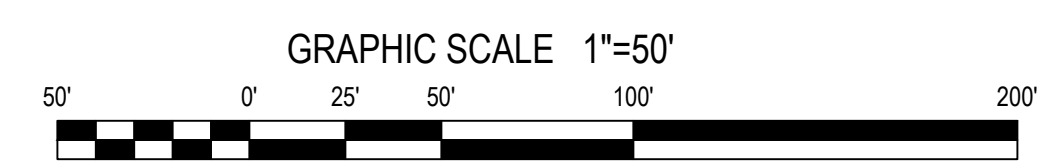
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3	05-31-2024	Rev. Town, COR AND Wake County Comment	RPG
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6	DATE	COMMENT	BY
7	DATE	COMMENT	BY






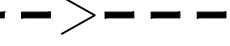

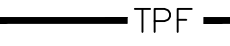



Phase 2 - Erosion Control Plan
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

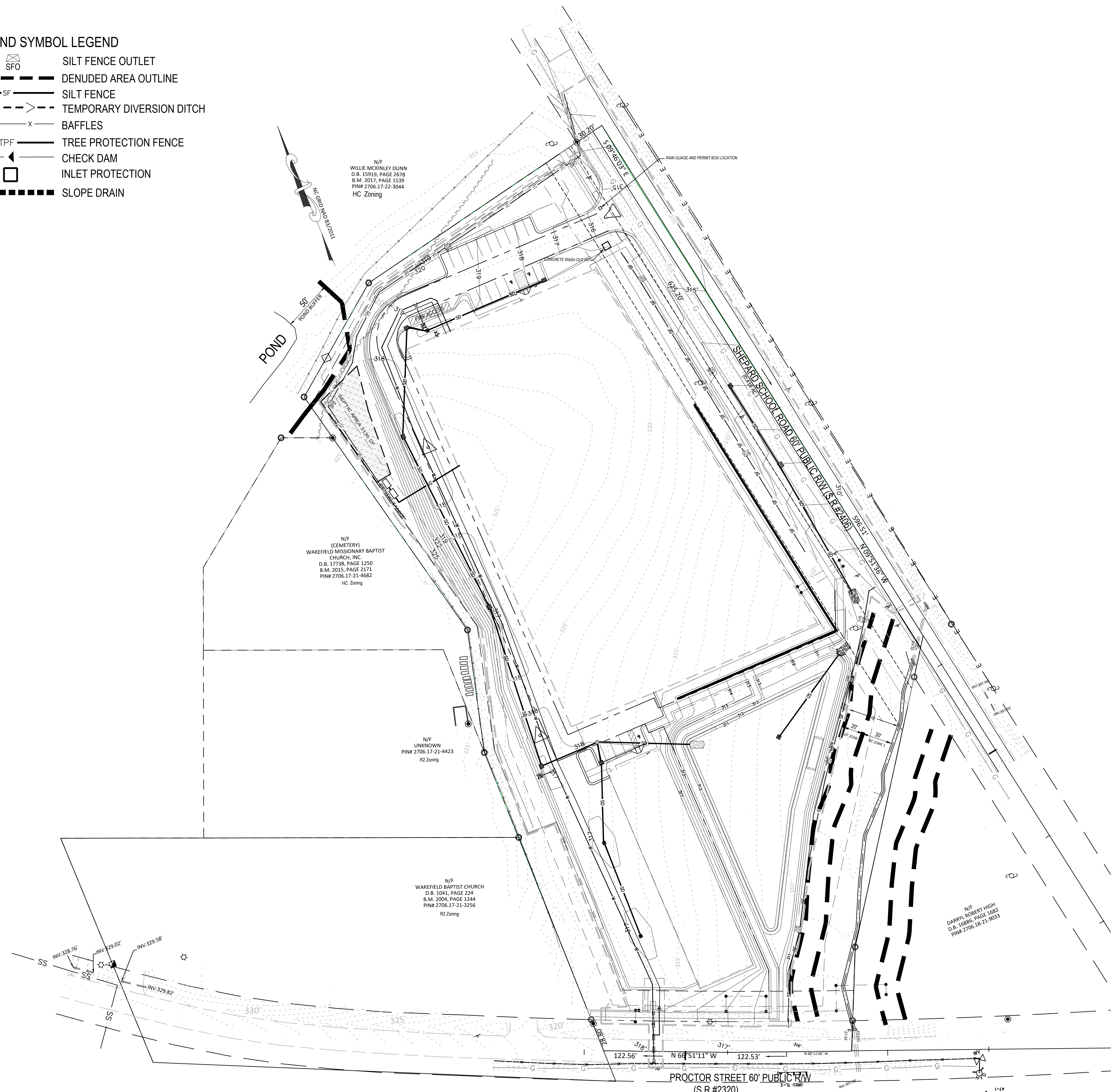
Project No. 23001
Dwg No.

EC2



LINE AND SYMBOL LEGEND

-  SILT FENCE OUTLET
-  DENUDED AREA OUTLINE
-  SILT FENCE
-  TEMPORARY DIVERSION DITCH
-  BAFFLES
-  TREE PROTECTION FENCE
-  CHECK DAM
-  INLET PROTECTION
-  SLOPE DRAIN



N/F
WILLIE MCKINLEY DUNN
D.B. 25919, PAGE 2678
B.M. 2017, PAGE 1539
PIN# 2706.17-22-3044
HC Zoning

N/F
(CEMETERY)
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
D.B. 17738, PAGE 1250
B.M. 2015, PAGE 2171
PIN# 2706.17-21-4682
HC Zoning

N/F
UNKNOWN
PIN# 2706.17-21-4423
R2 Zoning

N/F
WAKEFIELD BAPTIST CHURCH
D.B. 1041, PAGE 224
B.M. 2004, PAGE 1244
PIN# 2706.17-21-3256
R2 Zoning

N/F
DARRYL HOBERT HIGH
D.B. 16886, PAGE 5882
PIN# 2706.18-21-9033

CONSTRUCTION SEQUENCE - PHASE 3

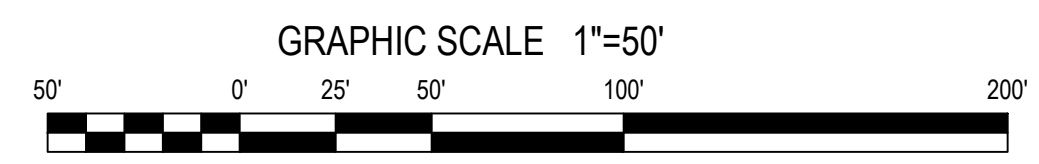
1. CONSTRUCT CONCRETE CURB IN ROADWAYS AND PARKING LOT. PLACE AND COMPACT STONE IN THE ROADWAYS AND PARKING LOT. REMOVE THE GRAVEL ENTRANCE.
2. INSTALL SILT BAGS AT CURB AND DROP INLETS.
3. COMPLETE FINE GRADING AND STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
4. ONCE THE SITE IS STABILIZED AND APPROVAL FROM STORMWATER INSPECTIONS TO SCHEDULE THE REMOVAL OF THE SEDIMENT BASINS (SEE NOTES BELOW), DEWATER SEDIMENT BASIN USING A SILT BAG AND MUCK OUT REMAINING SEDIMENT.
5. BEGIN INSTALLATION OF THE BMP RISER AND DISCHARGE PIPE TO INCLUDE RIRAP APRON. CONTACT PROJECT ENGINEER TO INSPECT DURING INSTALLATION PROCESS. SURVEY INVERT ELEVATIONS FOR AS-BUILT INFORMATION REQUIRED BY THE TOWN OF ZEBULON AND WAKE COUNTY.
6. GRADE ANY REMAINING AREAS TO FINAL GRADE. UPON COMPLETION THE GROUND COVER SHALL BE PROVIDED AS FOLLOWS:
 - A. STABILIZE BASINS WITH GROUND COVER IMMEDIATELY AFTER INSTALLATION.
 - B. STABILIZE DIVERSION DITCHES INTENDED TO BE IN SERVICE FOR 30 DAYS OR MORE WITH TEMPORARY SEEDING AND EROSION CONTROL NETTING.
 - C. FOR ALL AREAS OF MODERATE AND/OR STEEP SLOPES, PROVIDE TEMPORARY GROUND COVER IF THE SLOPE HAS NOT BEEN DISTURBED FOR A PERIOD OF FOURTEEN (14) DAYS.
 - D. PROVIDE GROUND COVER SUFFICIENT TO RESTRAIN EROSION ON ANY PORTION OF THE SITE UPON WHICH FURTHER LAND-DISTURBING ACTIVITY IS NOT BEING UNDERTAKEN WITHIN FOURTEEN (14) CALENDAR DAYS OF TEMPORARILY OR PERMANENTLY SUSPENDING LAND DISTURBING ACTIVITY.
 - E. ESTABLISH PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION WITHIN FOURTEEN (14) CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION OR DEVELOPMENT AND/OR PRIOR TO FINAL INSPECTION.
7. ONCE THE BMP INSTALLATION IS COMPLETE, TEMPORARY MEASURES ARE REMOVED, THE SITE IS STABILIZED, CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT, KARYN PAGEAU AT (919) 796-8769, TO SCHEDULE A STORMWATER INSPECTION.

REQUIRED WAKE COUNTY BASIN REMOVAL SEQUENCE

1. SCHEDULE A SITE MEETING WITH THE WAKE COUNTY ENVIRONMENTAL, KARYN PAGEAU AT (919) 796-8769, TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF THE BASIN.
2. CONTACT NCDEQ - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ON SITE. THE EMAIL SHOULD INCLUDE: E&SC JURISDICTION: WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A) REASON FOR CONVERSION, B) BASIN #, C) DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCG01. (KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION)
3. AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER, REMOVE BASINS) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
5. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
6. WHEN SITE IS FULLY STABILIZED, CALL WAKE COUNTY ENVIRONMENTAL CONSULTANT, JEEVAN NEUPANE AT (919) 819-8907, FOR APPROVAL OF REMOVING REMAINING TEMPORARY EROSION CONTROL MEASURES AND ADVICE ON WHEN SITE CAN BE ISSUED A CERTIFICATE OF COMPLETION. NOTE: A MEETING SHOULD ALSO BE SCHEDULED WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE WHEN A BASIN MAY BE CONVERTED FOR STORMWATER USE.

REFERENCE DRAWINGS:

1. SEE SHEET C6 AND C7 FOR STORM DRAIN SCHEDULE.
2. SEE SHEET C5 FOR DETAILED SITE GRADING NOTES.
3. SEE SHHETS C8, C9 AND C10 FOR THE UTILITY PLAN.
4. SEE SHEET D3 FOR BMP DETAILS.



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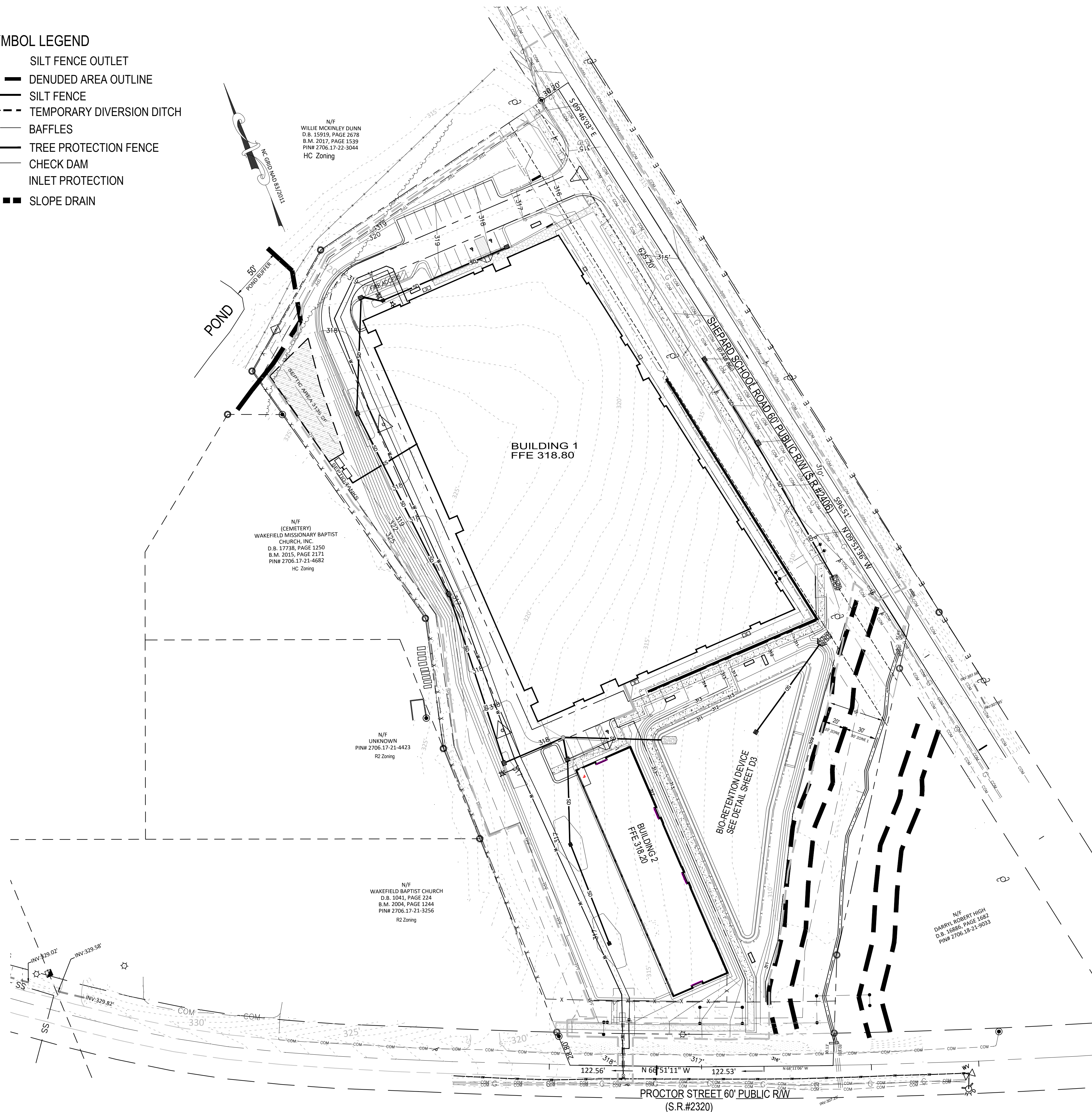
Phase 3 - Erosion Control Plan
StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001

Dwg No.

EC3

- LINE AND SYMBOL LEGEND**
- SILT FENCE OUTLET
 - DENUDED AREA OUTLINE
 - SILT FENCE
 - TEMPORARY DIVERSION DITCH
 - BAFFLES
 - TREE PROTECTION FENCE
 - CHECK DAM
 - INLET PROTECTION
 - SLOPE DRAIN



CONSTRUCTION SEQUENCE - PHASE 4

1. ENSURE THE SITE IS COMPLIANT WITH THE NCG01 SELF INSPECTION AND GROUND STABILIZATION AND MATERIAL HANDLING.
2. FOR ALL AREAS OF MODERATE AND / OR STEEP SLOPES, PROVIDE TEMPORARY GROUND COVER IF THE SLOPE HAS NOT BEEN DISTURBED FOR A PERIOD OF FOURTEEN (14) DAYS.
3. PROVIDE GROUND COVER SUFFICIENT TO RESTRAIN EROSION ON ANY PORTION OF THE SITE UPON WHICH FURTHER LAND-DISTURBING ACTIVITY IS NOT BEING UNDERTAKEN WITHIN FOURTEEN (14) CALENDAR DAYS OF TEMPORARILY OR PERMANENTLY SUSPENDING LAND DISTURBING ACTIVITY.
4. REMOVE SILT FENCE AND TREE PROTECTION FENCING WHEN GRADING ACTIVITIES ARE COMPLETE AND THE PROJECT SITE IS STABILIZED.
5. ONCE THE BMP INSTALLATION IS COMPLETE, TEMPORARY MEASURES ARE REMOVED, THE SITE IS STABILIZED, CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT KARYN PAGEAU AT (919) 796-8769 TO SCHEDULE A STORMWATER FINAL INSPECTION. BMP CERTIFICATIONS AND AS-BUILT PLANS MUST BE PROVIDED TO WAKE COUNTY / TOWN OF ZEBULON PRIOR TO FINAL PLATTING.
6. ONCE THE STORMWATER FINAL INSPECTION IS APPROVED, CLOSE THE GRADING PERMIT AND OBTAIN A CERTIFICATE OF COMPLETION.

NPDES NOTES

1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
2. THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
4. THE CITY / COUNTY IS NOT AUTHORIZED TO ENFORCE THIS PAGE OF THE PLANS AND IT IS NOT A PART OF THE APPROVED PLANS FOR PURPOSES OF ENFORCEMENT ACTION UNDER THE CITY / COUNTY CODE.
5. DOCUMENTATION REQUIRED UNDER THE SITE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY SHALL BE SUBMITTED TO WAKE COUNTY.

NPDES GROUND STABILIZATION SCHEDULE

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	APPLICABLE AREA ON THIS SITE
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE	NONE
HIGH QUALITY WATER (HQW) ZONES	7 DAYS	NONE	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED	NONE
SLOPES 3:1 OR FLATTER	14 DAYS	7-DAYS FOR SLOPES GREATER THAN 50 FEET IN LENGTH	AS SHOWN
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)	REMAINDER OF SITE

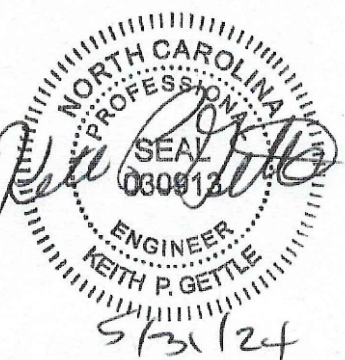
REFERENCE DRAWINGS:

1. SEE SHEET C6 AND C7 FOR STORM DRAIN SCHEDULE.
2. SEE SHEET C5 FOR DETAILED SITE GRADING NOTES.
3. SEE SHEETS C8, C9 AND C10 FOR THE UTILITY PLAN.
4. SEE SHEET D3 FOR BMP DETAILS.

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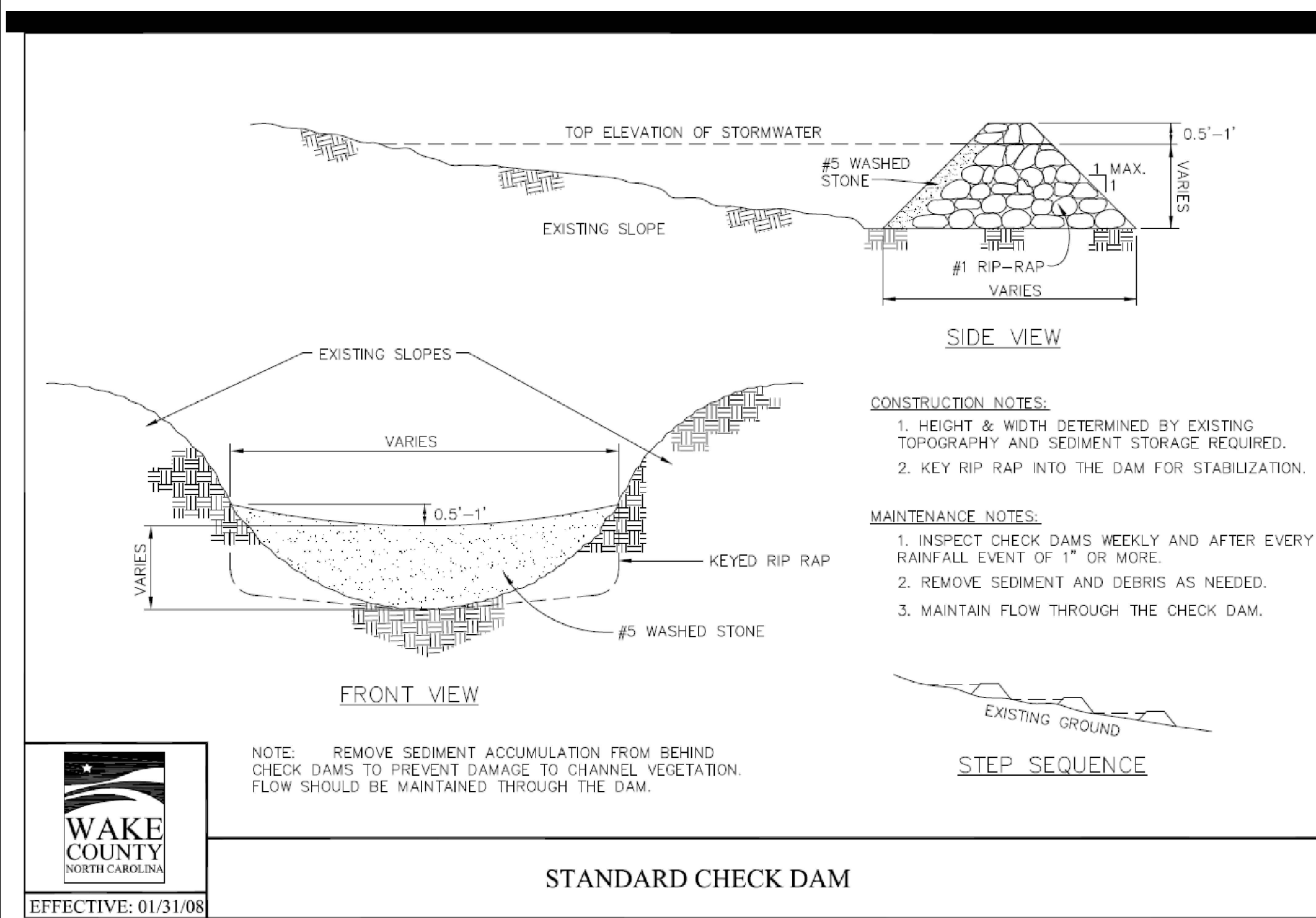
Phase 4 - Erosion Control Plan
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001

Dwg No. C4

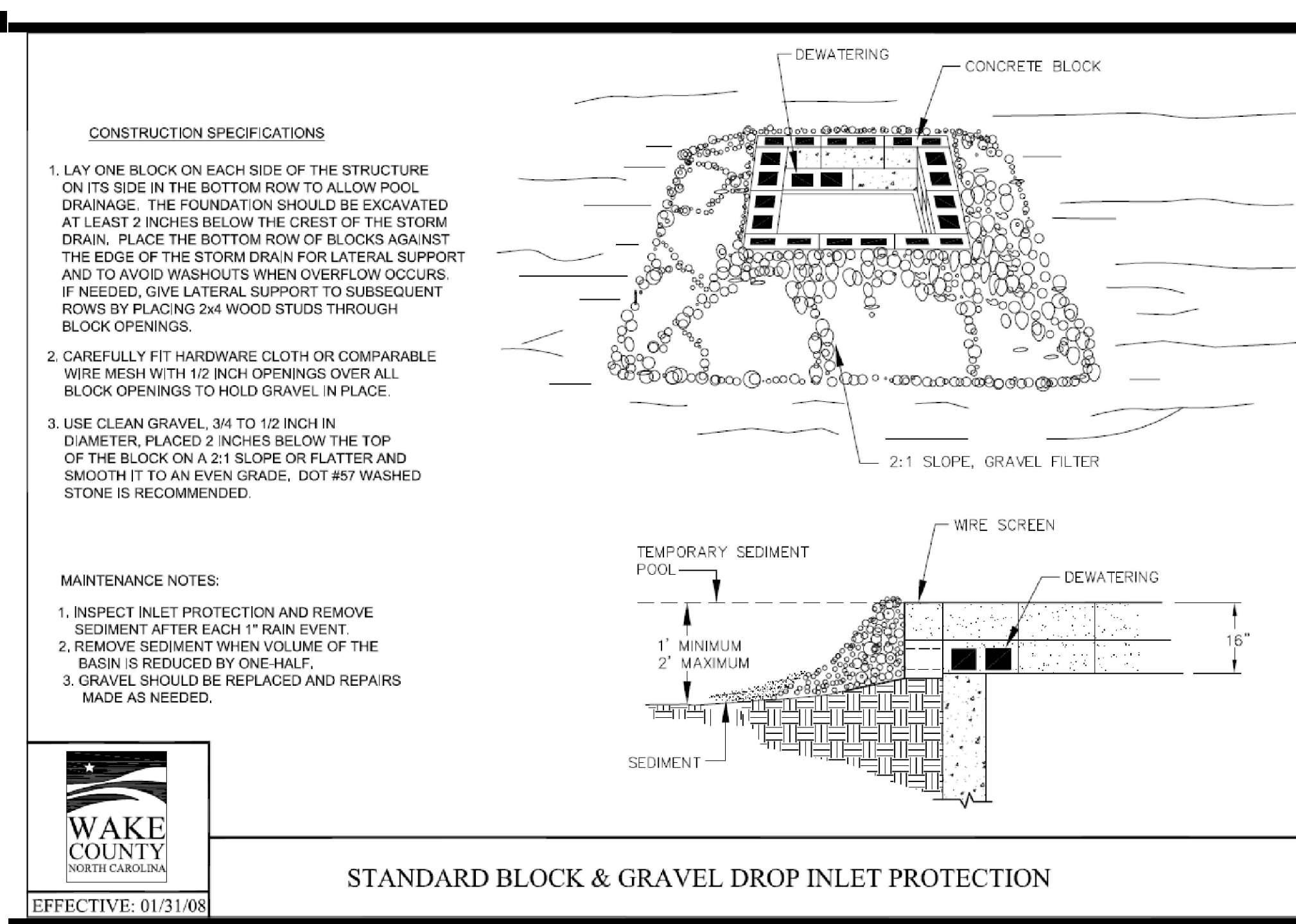
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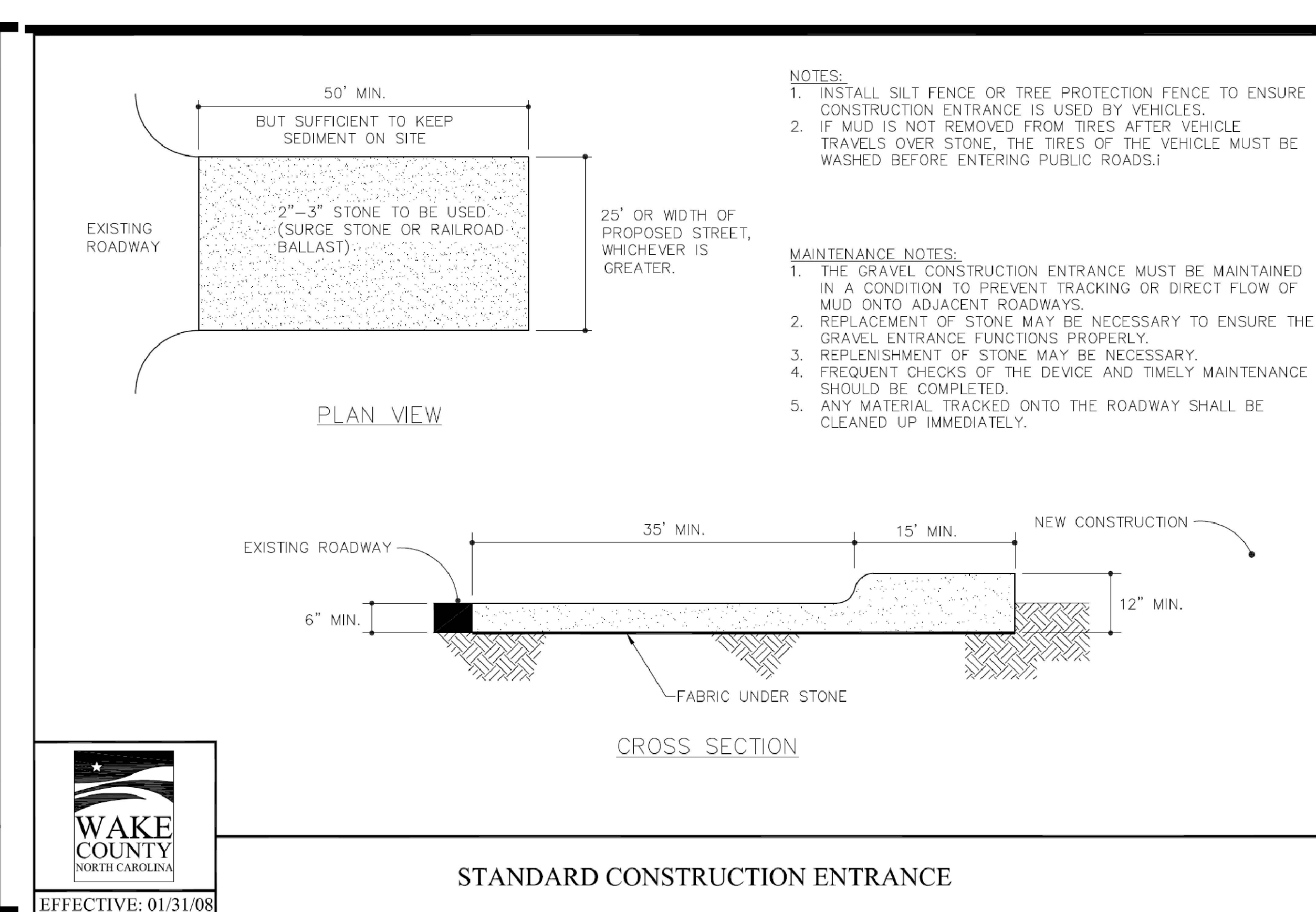
STANDARD CHECK DAM

EFFECTIVE: 01/31/08



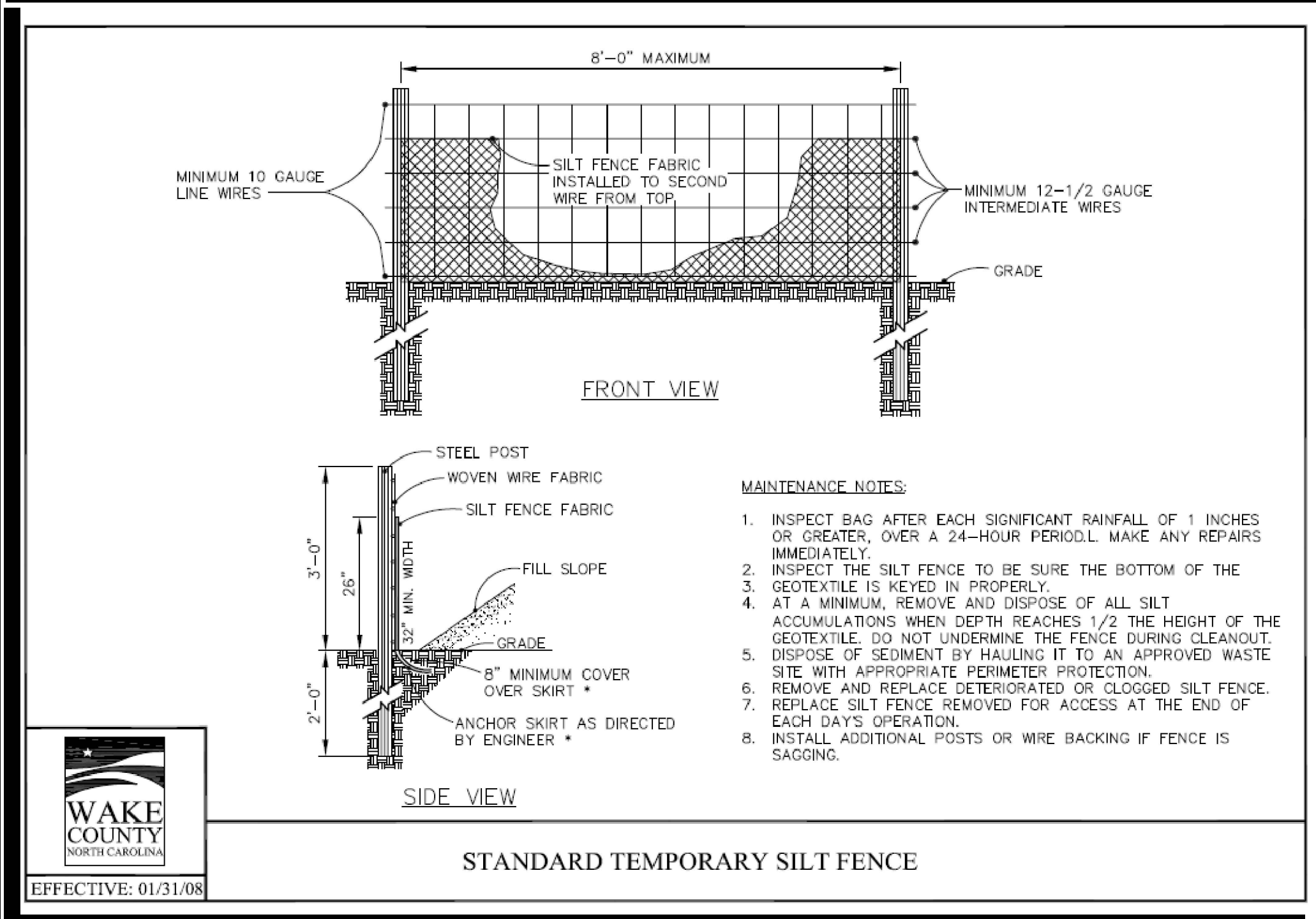
STANDARD BLOCK & GRAVEL DROP INLET PROTECTION

EFFECTIVE: 01/31/08



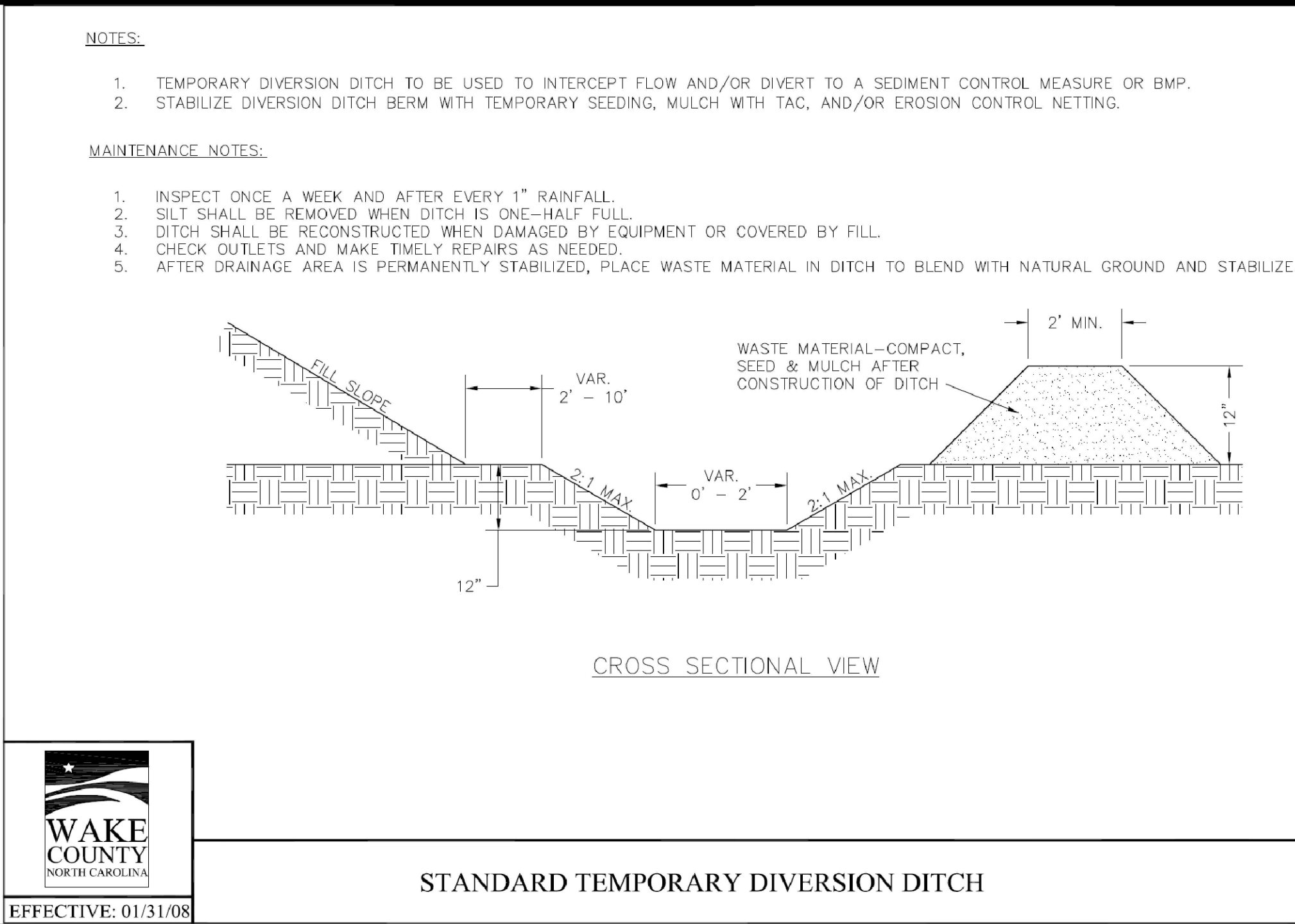
STANDARD CONSTRUCTION ENTRANCE

EFFECTIVE: 01/31/08



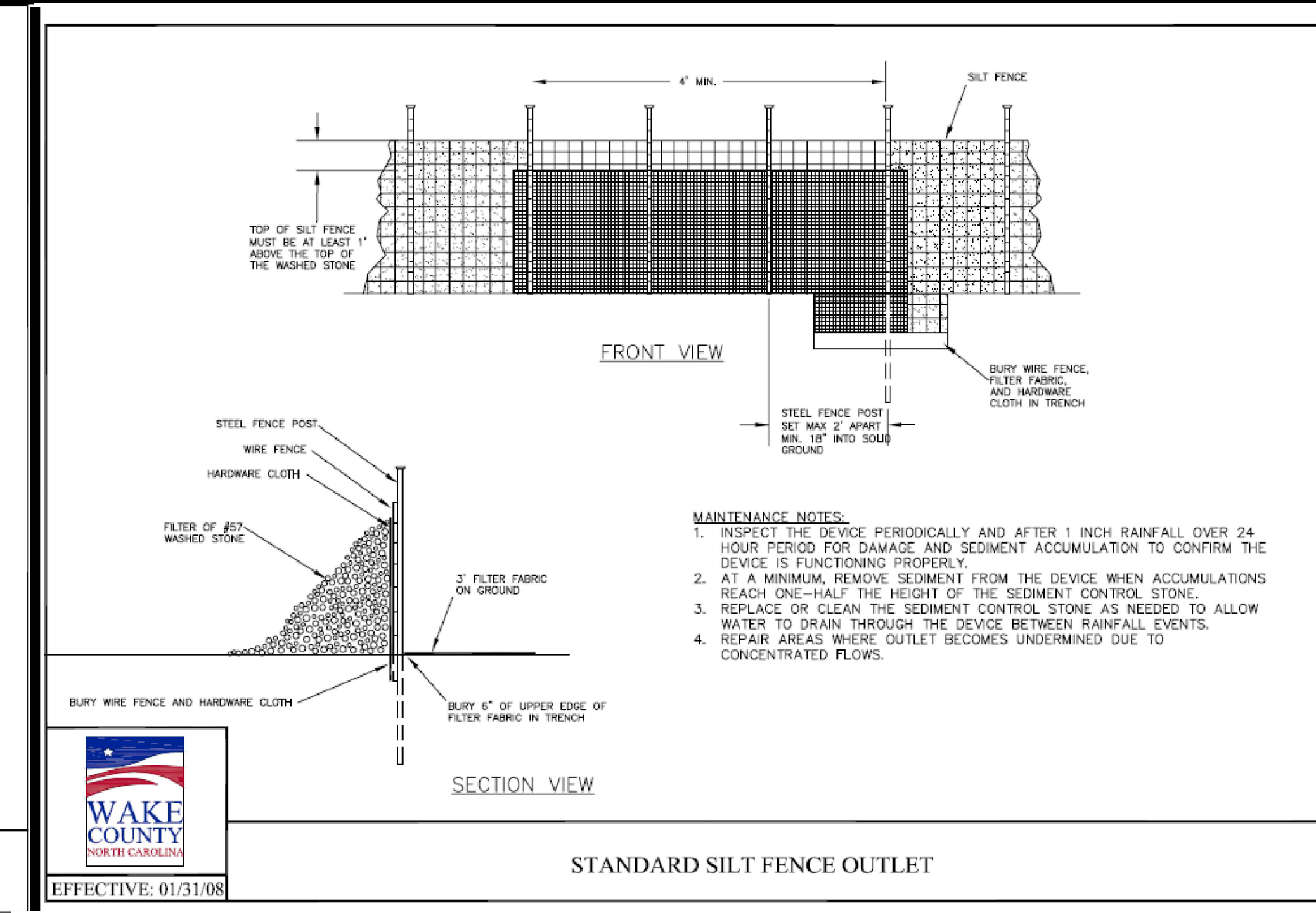
STANDARD TEMPORARY SILT FENCE

EFFECTIVE: 01/31/08



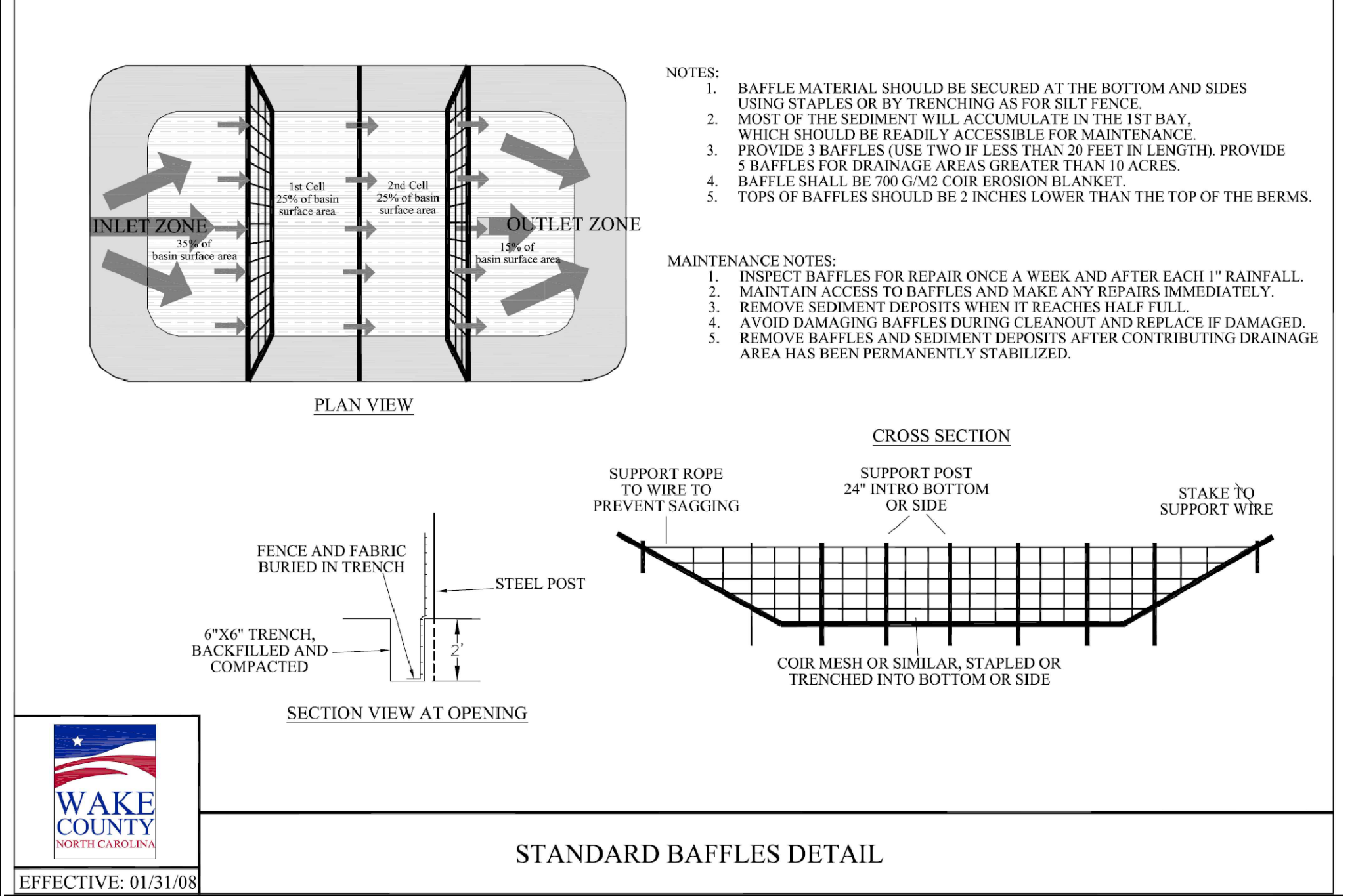
STANDARD TEMPORARY DIVERSION DITCH

EFFECTIVE: 01/31/08



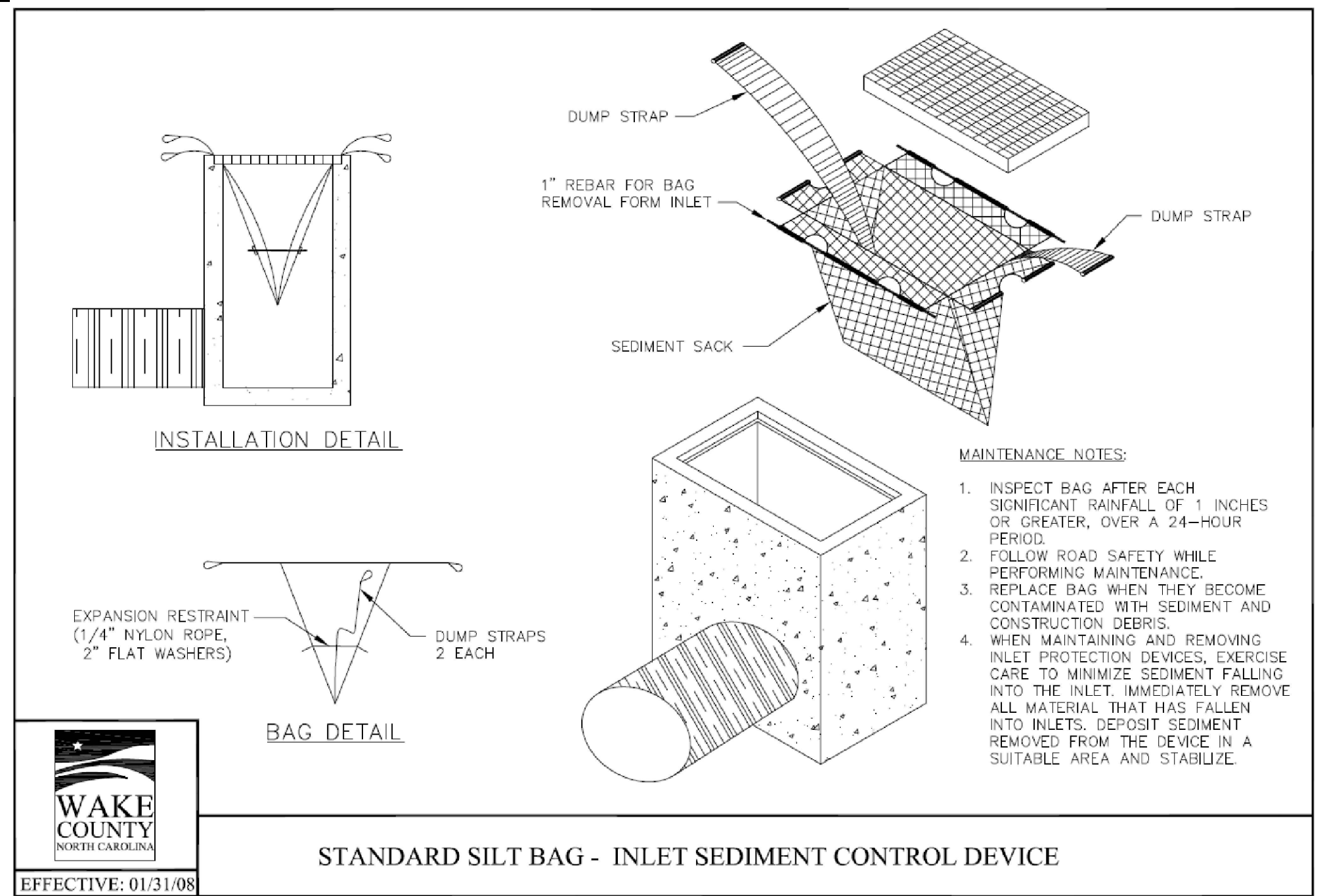
STANDARD SILT FENCE OUTLET

EFFECTIVE: 01/31/08



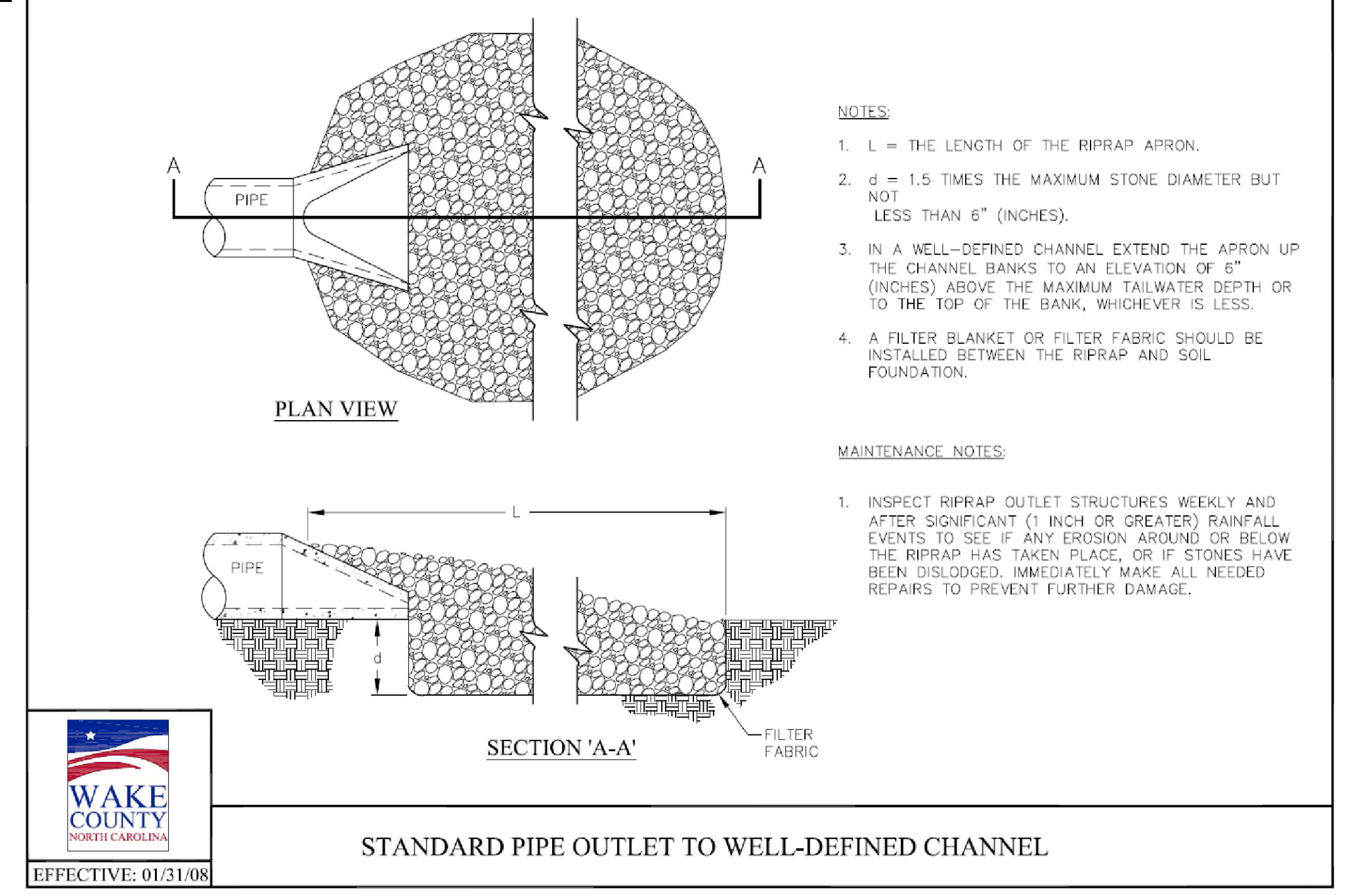
STANDARD BAFFLES DETAIL

EFFECTIVE: 01/31/08



STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE

EFFECTIVE: 01/31/08

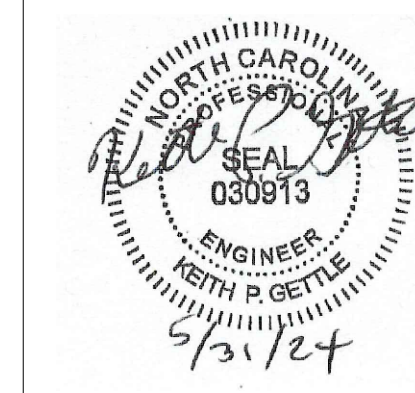


STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL

EFFECTIVE: 01/31/08

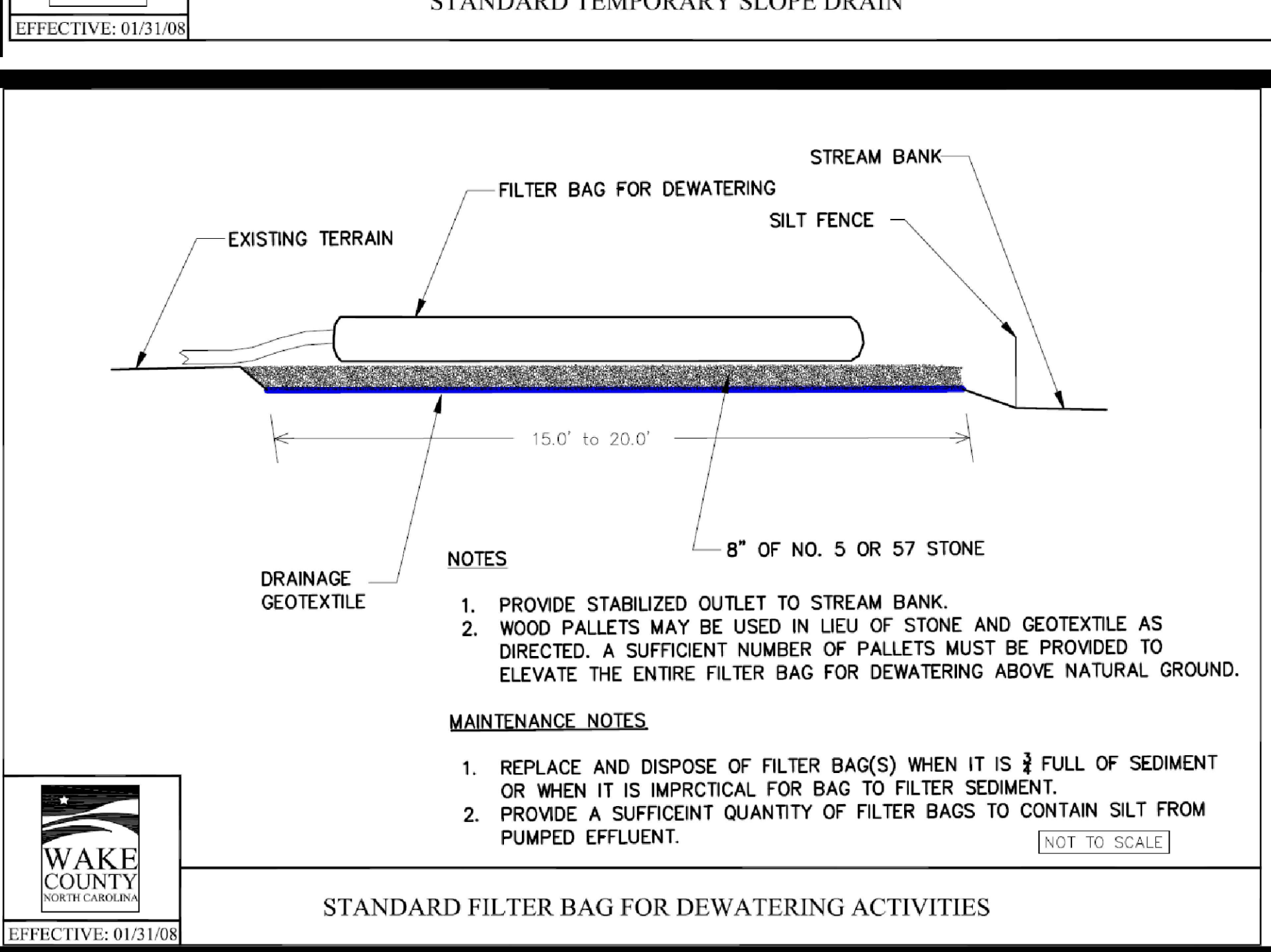
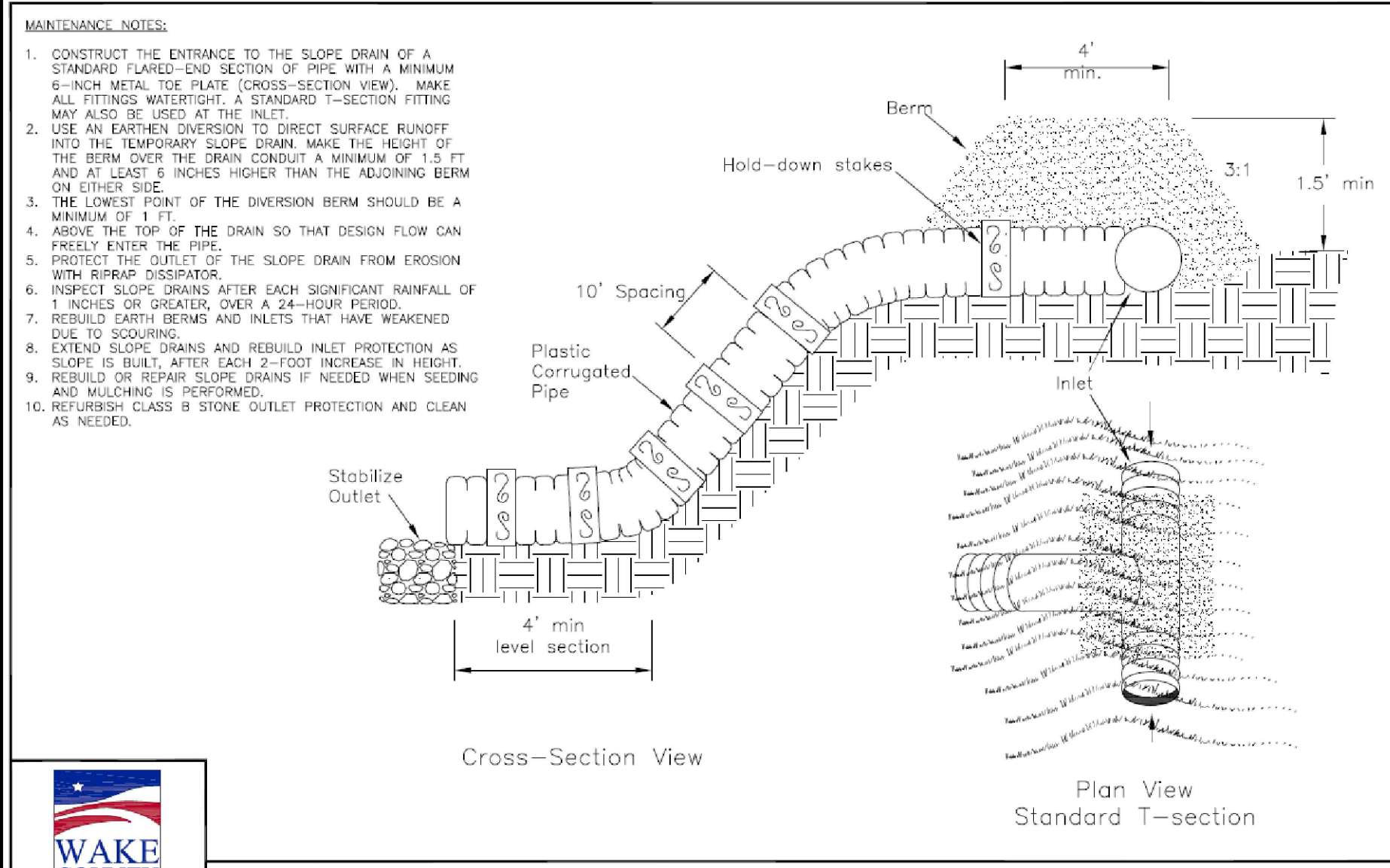
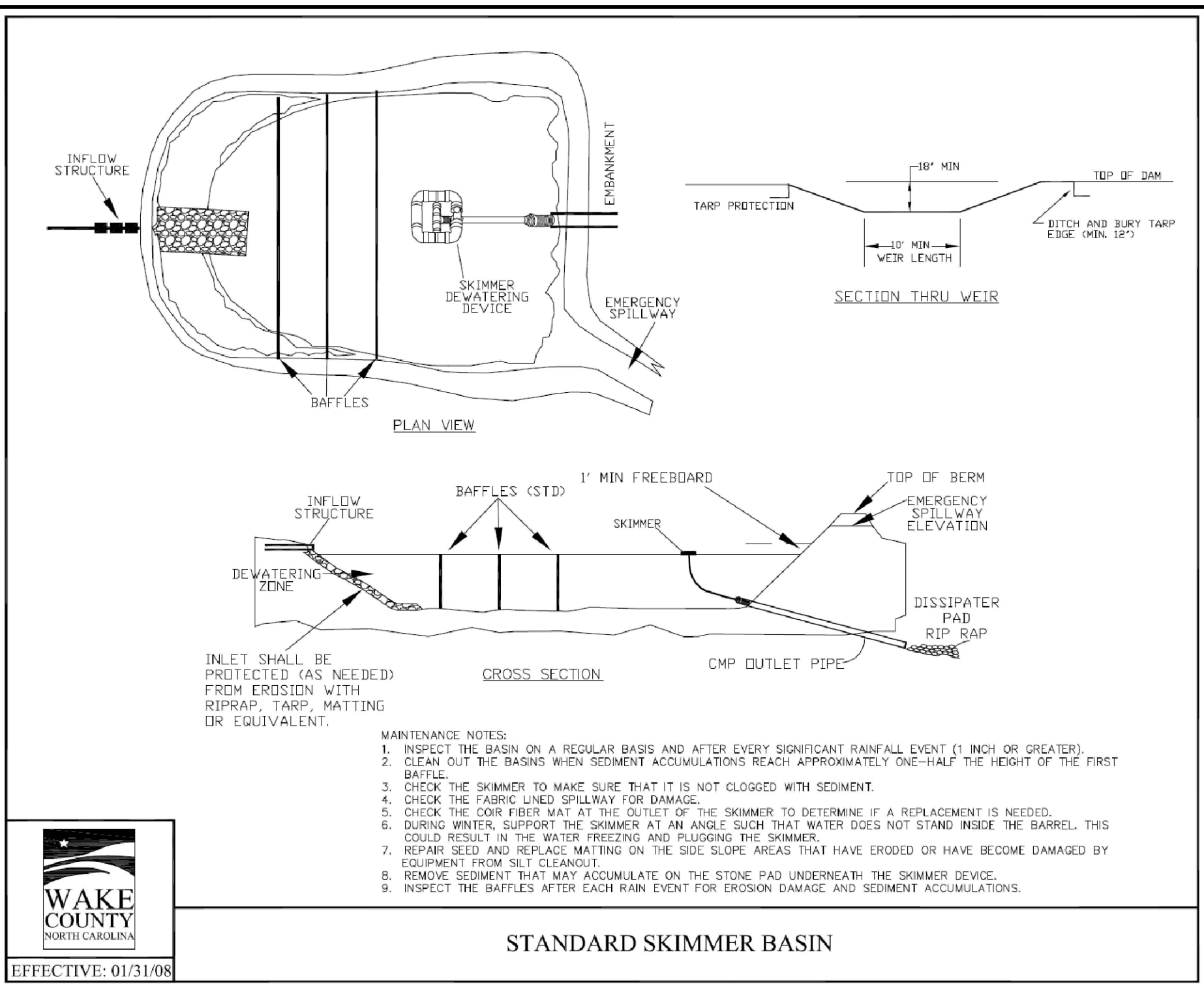
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO	DATE	REVISION/DESCRIPTION	BY
1	01-05-2024	Per Town Comment	BY
2	03-08-2024	Per Town, COB AND Wake County Comment	BY
3	05-31-2024	DATE COMMENT	BY
4	DATE COMMENT	BY	BY
5	DATE COMMENT	BY	BY
6	DATE COMMENT	BY	BY
8	DATE COMMENT	BY	BY



Erosion Control Details
 StorageMax (1098359)
 901 Proctor Street
 Zebulon, Wake County, North Carolina

Project No. 23001
 Dwg No. EC5

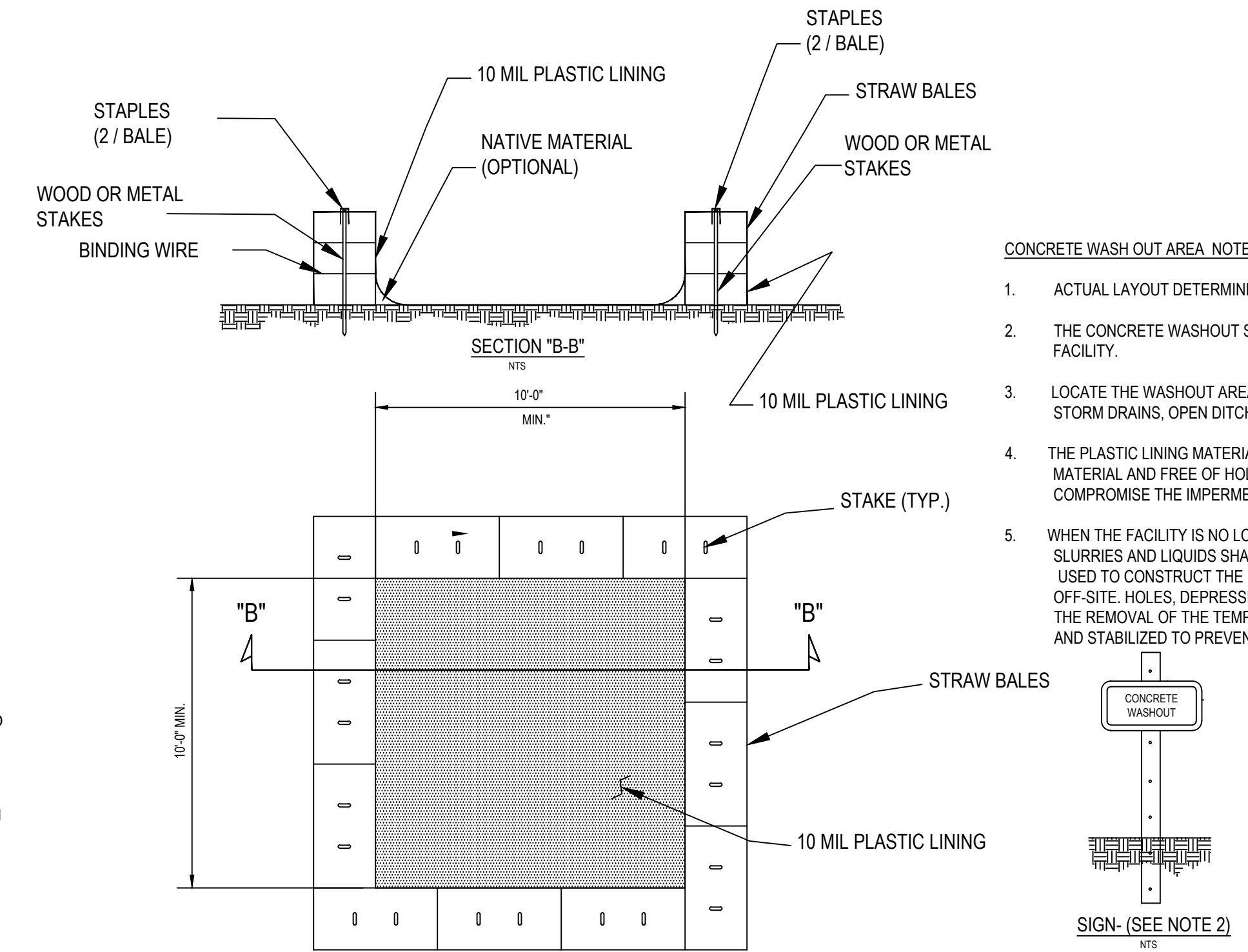
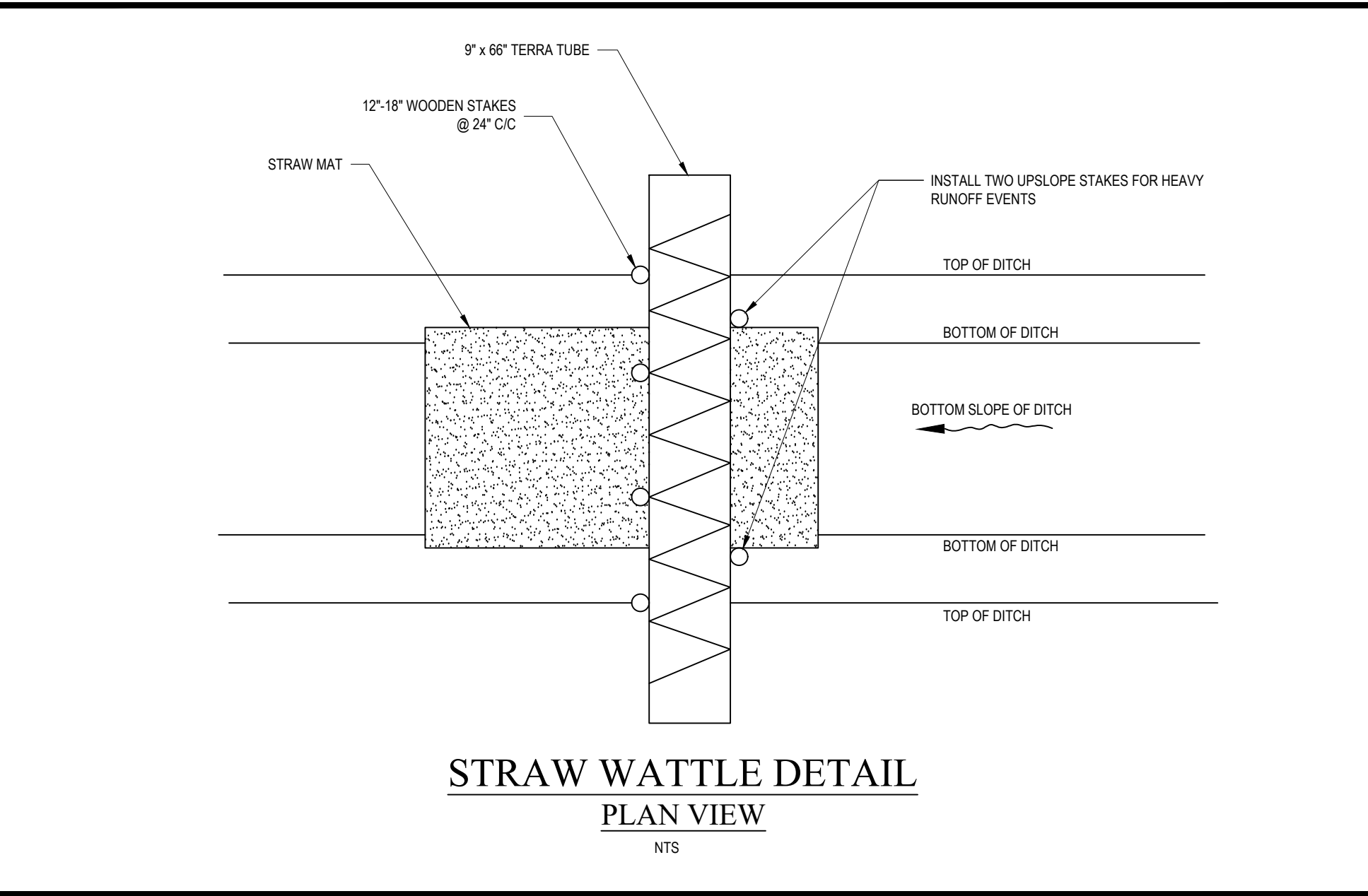


BASIN CONSTRUCTION SPECIFICATIONS

- SITE PREPARATIONS:** CLEAR, GRUB, AND STRIP TOPSOIL FROM AREAS UNDER THE EMBANKMENT TO REMOVE TREES, VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. DELAY CLEARING THE POOL AREA UNTIL THE DAM IS COMPLETE AND THEN REMOVE BRUSH, TREES, AND OTHER OBJECTIONABLE MATERIALS TO FACILITATE SEDIMENT CLEANOUT. STOCKPILE ALL TOPSOIL OR SOIL CONTAINING ORGANIC MATTER FOR USE ON THE OUTER SLOPE OF THE EMBANKMENT TO FACILITATE VEGETATIVE ESTABLISHMENT. PLACE TEMPORARY SEDIMENT CONTROL MEASURES BELOW THE BASIN AS NEEDED.
- CUT-OFF TRENCH:** EXCAVATE A CUT-OFF TRENCH ALONG THE CENTER LINE OF THE EARTH FILL EMBANKMENT. CUT THE TRENCH TO STABLE SOIL MATERIAL, BUT IN NO CASE MAKE IT LESS THAN 2 FEET DEEP. THE CUT-OFF TRENCH MUST EXTEND INTO BOTH ABUTMENTS TO AT LEAST THE ELEVATION OF THE RISER CREST. MAKE THE MINIMUM BOTTOM WIDTH WIDE ENOUGH TO PERMIT OPERATION OF EXCAVATION AND COMPACTION EQUIPMENT, BUT IN NO CASE LESS THAN 2 FEET. MAKE SIDE SLOPES OF THE TRENCH NO STEEPER THAN 1:1. COMPACTION REQUIREMENTS ARE THE SAME AS THOSE FOR THE EMBANKMENT. KEEP THE TRENCH DRY DURING BACKFILLING AND COMPACTION OPERATIONS.
- EMBANKMENT:** TAKE FILL MATERIAL FROM THE APPROVED AREAS SHOWN ON THE PLANS. IT SHOULD BE CLEAN MINERAL SOIL, FREE OF ROOTS, WOODY VEGETATION, ROCKS, AND OTHER OBJECTIONABLE MATERIAL. SCARIFY AREAS ON WHICH FILL IS TO BE PLACED BEFORE PLACING FILL. THE FILL MATERIAL MUST CONTAIN SUFFICIENT MOISTURE SO IT CAN BE FORMED BY HAND INTO A BALL WITHOUT CRUMBLING. IF WATER CAN BE SQUEEZED OUT OF THE BALL, IT IS TOO WET FOR PROPER COMPACTION. PLACE FILL MATERIAL IN 8 TO 10 INCH CONTINUOUS LAYERS OVER THE ENTIRE LENGTH OF THE FILL AREA AND COMPACT IT. COMPACTION MAY BE OBTAINED BY ROUTING THE CONSTRUCTION HAULING EQUIPMENT OVER THE FILL SO THAT THE ENTIRE SURFACE OF EACH LAYER IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF HEAVY EQUIPMENT, OR A COMPACTOR MAY BE USED. CONSTRUCT THE EMBANKMENT TO AN ELEVATION 10 PERCENT HIGHER THAN THE DESIGN HEIGHT TO ALLOW FOR SETTLING.
- CONDUIT SPILLWAYS:** SECURELY ATTACH THE RISER TO THE BARREL OR BARREL STUB TO MAKE A WATERTIGHT STRUCTURAL CONNECTION. SECURE ALL CONNECTIONS BETWEEN BARREL SECTIONS BY APPROVED WATERTIGHT ASSEMBLIES. PLACE THE BARREL AND RISER ON A FIRM, SMOOTH FOUNDATION OF IMPERVIOUS SOIL. DO NOT USE PERVIOUS MATERIAL SUCH AS SAND, GRAVEL, OR CRUSHED STONE AS BACKFILL AROUND THE PIPE OR ANTI-SEEP COLLARS. PLACE THE FILL MATERIAL AROUND THE PIPE SPILLWAY IN 4-INCH LAYERS, AND COMPACT IT UNDER AND AROUND THE PIPE TO AT LEAST THE SAME DENSITY AS THE ADJACENT EMBANKMENT. CARE MUST BE TAKEN NOT TO RAISE THE PIPE FROM FIRM CONTACT WITH ITS FOUNDATION WHEN COMPACTING UNDER THE PIPE HAUNCHES. PLACE A MINIMUM DEPTH OF 2 FEET OF COMPACTED BACKFILL OVER THE PIPE SPILLWAY BEFORE CROSSING IT WITH CONSTRUCTION EQUIPMENT. ANCHOR THE RISER IN PLACE BY CONCRETE OR OTHER SATISFACTORY MEANS TO PREVENT FLotation. IN NO CASE SHOULD THE PIPE CONDUIT BE INSTALLED BY CUTTING A TRENCH THROUGH THE DAM AFTER THE EMBANKMENT IS COMPLETE.
- EMERGENCY SPILLWAY:** INSTALL THE EMERGENCY SPILLWAY IN UNDISTURBED SOIL. THE ACHIEVEMENT OF PLANNED ELEVATIONS, GRADE, DESIGN WIDTH, AND ENTRANCE AND EXIT CHANNEL SLOPES ARE CRITICAL TO THE SUCCESSFUL OPERATION OF THE EMERGENCY SPILLWAY.
- INLETS:** DISCHARGE WATER INTO THE BASIN IN A MANNER TO PREVENT EROSION. USE DIVERSIONS WITH OUTLET PROTECTION TO DIVERT SEDIMENT-LADEN WATER TO THE UPPER END OF THE POOL AREA TO IMPROVE BASIN TRAP EFFICIENCY (REFERENCES: RUNOFF CONTROL MEASURES AND OUTLET PROTECTION).
- EROSION CONTROL:** CONSTRUCT THE STRUCTURE SO THAT THE DISTURBED AREA IS MINIMIZED. DIVERT SURFACE WATER AWAY FROM BARE AREAS. COMPLETE THE EMBANKMENT BEFORE THE AREA IS CLEARED. STABILIZE THE EMERGENCY SPILLWAY EMBANKMENT AND ALL OTHER DISTURBED AREAS ABOVE THE CREST OF THE PRINCIPAL SPILLWAY IMMEDIATELY AFTER CONSTRUCTION (REFERENCES: SURFACE STABILIZATION).
- INSTALL POROUS BAFFLES.**
- SAFETY:** SEDIMENT BASINS MAY ATTRACT CHILDREN AND CAN BE DANGEROUS. AVOID STEEP SIDE SLOPES, AND FENCE AND MARK BASINS WITH WARNING SIGNS IF TRESPASSING IS LIKELY. FOLLOW ALL STATE AND LOCAL REQUIREMENTS.

BASIN DEWATERING SPECIFICATIONS

- SEDIMENT FILTER BAG**
- SEDIMENT FILTER BAGS ARE SPECIFICALLY DESIGNED TO CONTROL PUMPED WATER AND CONNECT DIRECTLY TO THE PUMP DISCHARGE LINE.
 - BAGS SHOULD BE PLACED ON A LEVEL, STABLE SURFACE THAT IS PREPARED WITH MULCH, STRAW, SMALL AGGREGATE, OR OTHER MATERIAL AS RECOMMENDED BY THE MANUFACTURER. THE BAG SHOULD BE MADE OF A NON-WOVEN, NEEDLE-PUNCHED, GEOTEXTILE THAT MEETS THE FOLLOWING MINIMUM CRITERIA: 205 LBS MINIMUM TENSILE STRENGTH USING ASTM D4632 TEST METHOD FOR GRAB BREAKING LOAD AND ELONGATION OF GEOTEXTILES.
 - 130 LBS MINIMUM PUNCTURE STRENGTH USING ASTM D4833 TEST METHOD FOR INDEX PUNCTURE RESISTANCE OF GEOTEXTILES, GEOMEMBRANES, AND RELATED PRODUCTS.
 - 400 PSI MINIMUM MULLEN BURST STRENGTH USING ASTM D3786 STANDARD TEST METHOD FOR HYDRAULIC BURSTING STRENGTH OF TEXTILE FABRICS-DIAPHRAGM BURSTING STRENGTH TESTER METHOD.
 - MINIMUM 70 PERCENT AT 500 HOURS ULTRAVIOLET RESISTANCE USING ASTM D4355 STANDARD TEST METHOD FOR DETERIORATION OF GEOTEXTILES BY EXPOSURE TO LIGHT, MOISTURE, AND HEAT IN A XENON ARC TYPE APPARATUS.
 - 45 TO 110 GPM/FT² WATER FLOW RATE USING ASTM D4491 STANDARD TEST METHODS FOR WATER PERMEABILITY OF GEOTEXTILES BY PERMITIVITY.
- DEWATERING PUMP**
- THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/4 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHOULD BE FLOATING AND SCREENED. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.



CONCRETE WASH OUT AREA NOTES:

- ACTUAL LAYOUT DETERMINED IN THE FIELD - SEE EC1 PLAN FOR LOCATION.
- THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30 FEET OF THE FACILITY.
- LOCATE THE WASHOUT AREA AT LEAST 50 FEET FROM SENSITIVE AREAS SUCH AS STORM DRAINS, OPEN DITCHES OR WATER BODIES, INCLUDING WETLANDS.
- THE PLASTIC LINING MATERIAL SHOULD BE A MIN OF 10 MIL POLYETHYLENE MATERIAL AND FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT MAY COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
- WHEN THE FACILITY IS NO LONGER REQUIRED THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE PROPERLY DISPOSED OF OFF-SITE. MATERIAL USED TO CONSTRUCT THE FACILITY SHALL BE PROPERLY DISPOSED OF OFF-SITE. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY FACILITY SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.

SEEDING

SEEDBED PREPARATION:

- CHISEL, COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
- RIP THE ENTIRE AREA TO SIX INCHES DEEP.
- REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE BELOW).
- CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
- SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
- MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
- INSPECT ALL SEEDING AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON. IF POSSIBLE, IF STAND SHOULD BE MORE THAN 80% DAMAGED, RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- CONSULT ENGINEER OR LANDSCAPE ARCHITECT ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

MIXTURE:

AGRICULTURAL LIMESTONE:	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
FERTILIZER:	1,000 LBS/ACRE - 10-10-10
SUPERPHOSPHATE:	500 LBS/ACRE - 20% ANALYSIS
MULCH:	2 TONS/ACRE - SMALL GRAIN STRAW
ANCHOR:	ASPHALT EMULSION AT 300 GAL/ACRE

SEEDING SCHEDULE

FOR SHOULDERS, SIDE DITCHES, SLOPES (MAX 3:1):

DATE	TYPE	PLANTING RATE
AUG 15 - NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1 - MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1 - APR 15	TALL FESCUE	300 LBS/ACRE
APR 15 - JUN 30	HULLED COMMON BERMOUDAGRASS	25 LBS/ACRE
JUL 1 - AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	125 LBS/ACRE (TALL FESCUE); 36 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

FOR SHOULDERS, SIDE DITCHES, SLOPES (3:1 TO 2:1):

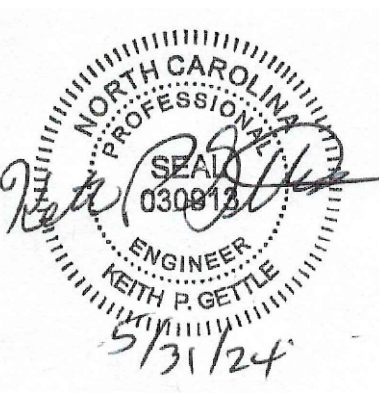
DATE	TYPE	PLANTING RATE
MAR 1 - JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND USE THE FOLLOWING COMBINATIONS:	50 LBS/ACRE (SERICEA LESPEDEZA)
MAR 1 - APR 15	ADD TALL FESCUE	120 LBS/ACRE
MAR 1 - JUN 30	OR ADD WEEPING LOVE GRASS	10 LBS/ACRE
MAR 1 - JUN 30	OR ADD HULLED COMMON BERMOUDAGRASS	25 LBS/ACRE
JUN 1 - SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	120 LBS/ACRE (TALL FESCUE); 36 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)
SEPT 1 - MAR 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE (SERICEA LESPEDEZA); 120 LBS/ACRE (TALL FESCUE)
NOV 1 - MAR 1	AND ABRUZZI RYE	25 LBS/ACRE

CONSULT ENGINEER OR LANDSCAPE ARCHITECT FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENuded AREAS. THE ABOVE VEGETATION RATES ARE THOSE THAT DO WELL UNDER LOCAL CONDITIONS, OTHER SEEDING RATE COMBINATIONS ARE POSSIBLE.

*** TEMPORARY. RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT BEFORE MOWING; OTHERWISE, FESCUE MAY BE SHADed OUT.

Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2538

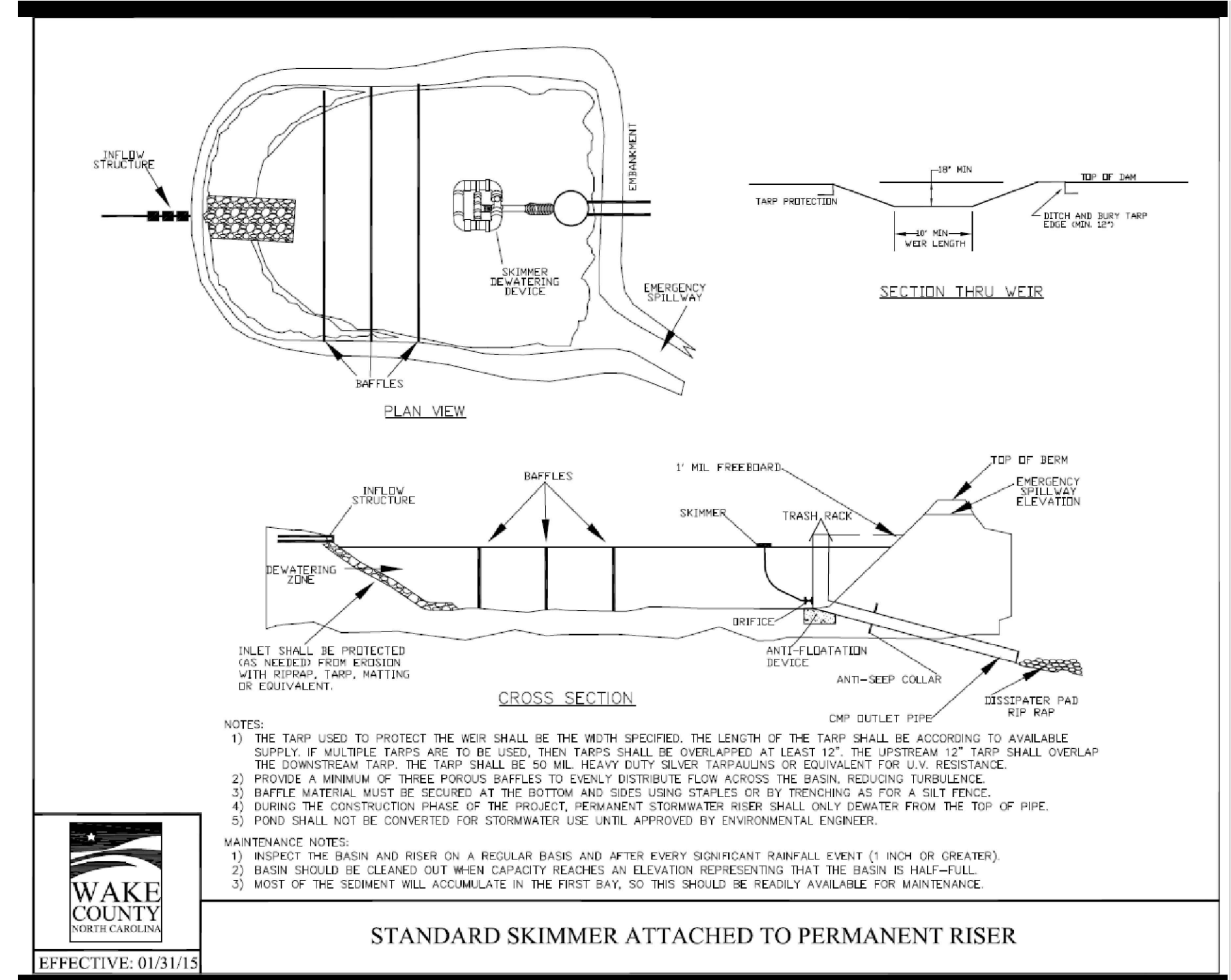
NO	DATE	BY	REVISION/DESCRIPTION
1	01/31/2024	RF	Per Town Comment
2	03/08/2024	RF	Per Town Comment
3	05/13/2024	RF	Per Town, COR AND Wake County Comment
4		BY	COMMENT
5		BY	COMMENT
6		BY	COMMENT
		DATE	DATE

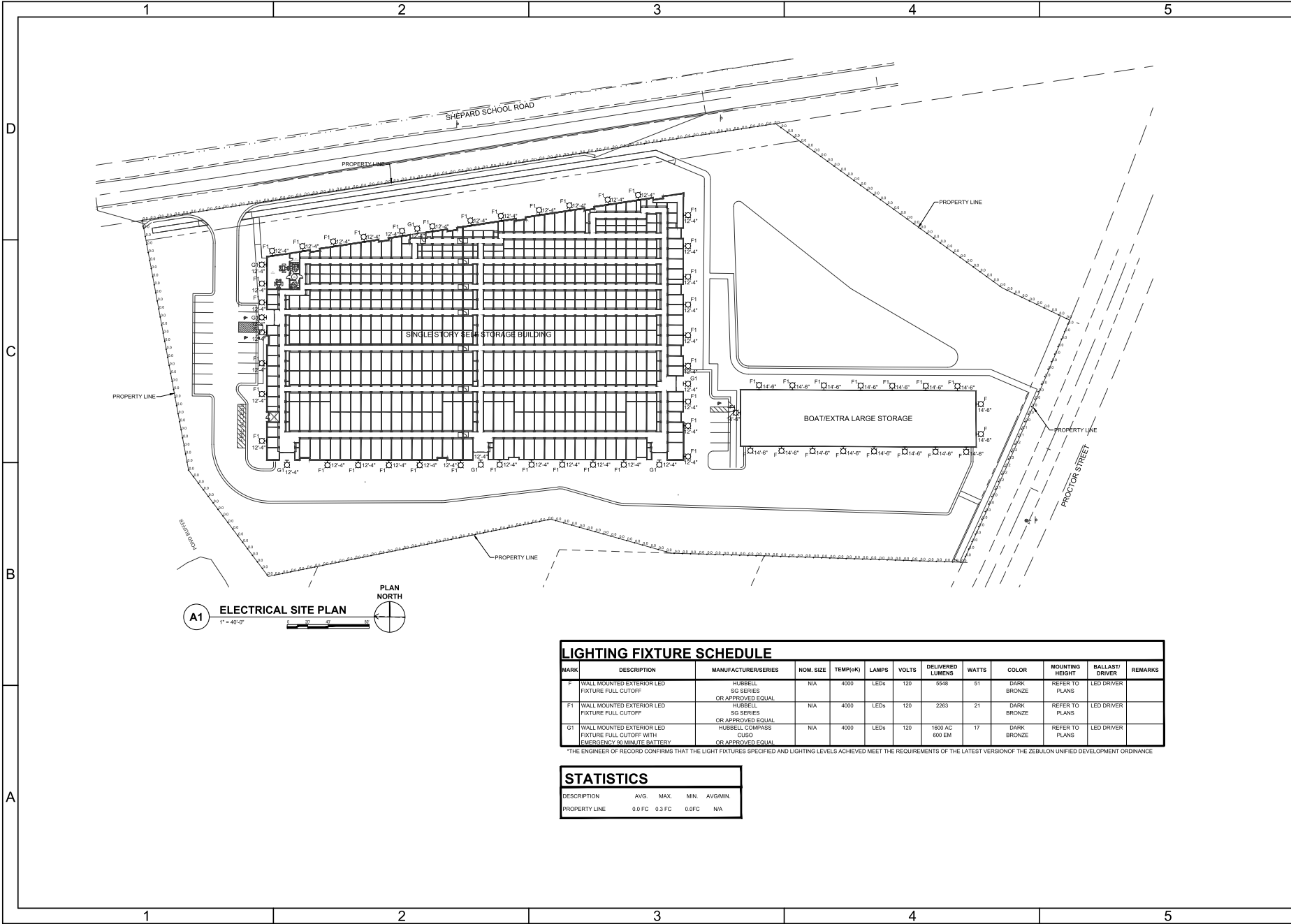


Erosion Control Details
StorageMax (1098359)
901 Proctor Street
Zebulon, Wake County, North Carolina

Project No. 23001
Dwg No.

EC6





A1 ELECTRICAL SITE PLAN
1" = 40'-0"

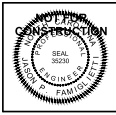
MARK	DESCRIPTION	MANUFACTURER/SERIES	NOM. SIZE	TEMP.(°K)	LAMPS	VOLTS	DELIVERED LUMENS	WATTS	COLOR	MOUNTING HEIGHT	BALLAST/ DRIVER	REMARKS
F	WALL MOUNTED EXTERIOR LED FIXTURE FULL CUTOFF	HUBBELL SG SERIES OR APPROVED EQUAL	NA	4000	LEDs	120	5548	51	DARK BRONZE	REFER TO PLANS	LED DRIVER	
F1	WALL MOUNTED EXTERIOR LED FIXTURE FULL CUTOFF	HUBBELL SG SERIES OR APPROVED EQUAL	NA	4000	LEDs	120	2263	21	DARK BRONZE	REFER TO PLANS	LED DRIVER	
G1	WALL MOUNTED EXTERIOR LED FIXTURE FULL CUTOFF WITH EMERGENCY 90 MINUTE BATTERY	HUBBELL COMPASS CUSO OR APPROVED EQUAL	NA	4000	LEDs	120	1800 AC 600 EM	17	DARK BRONZE	REFER TO PLANS	LED DRIVER	

*THE ENGINEER OF RECORD CONFIRMS THAT THE LIGHT FIXTURES SPECIFIED AND LIGHTING LEVELS ACHIEVED MEET THE REQUIREMENTS OF THE LATEST VERSION OF THE ZEBULON UNIFIED DEVELOPMENT ORDINANCE

STATISTICS				
DESCRIPTION	AVG.	MAX.	MIN.	AVG/MIN.
PROPERTY LINE	0.5 FC	0.3 FC	0 FC	N/A

DESIGNED BY: [Signature]
DATE: [Date]
SCALE: [Scale]
PROJECT NO.: [Project No.]
JOB NO.: [Job No.]

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Wilmington, NC 28401
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STORAGEMAX
SELF STORAGE FACILITY
901 PROCTOR STREET
ZEBULON, WAKE COUNTY, NORTH CAROLINA
ELECTRICAL
SITE PHOTOMETRIC PLAN

JOB NO.: CBHF 22233-REV-22-002
DRAWN: [Signature]
CHECKED: [Signature]
DATE: [Date]

DRAWING NO.: **ES101**

REVISION: 0

HUBBELL
Outdoor Lighting

DATE: _____ LOCATION: _____
TYPE: **F** PROJECT: _____
CATALOG #: _____

SLING Series
SLENDER WALLPACK

tradeSELECT

FEATURES

- Two sizes for a variety of applications.
- Ranges from 2'W to 8'W with up to 8000 Lumens.
- SLG Series replaces from 100W SGM HG-52 Series replaces from 150W SGM HG-52.
- Comfort was available as an option or accessory provides glare control and enhanced uniformity.
- Knuckle and turnon accessory mounting kits available for food applications.
- IP65 and certified to UL 1598 for use in wet locations up to 4'0" ambient.
- ULC (DesignLights Consortium Qualified) - see www.designlights.org

RELATED PRODUCTS

- # UNCL3000
- # UNCL3000
- # UNCL3000
- # G60P62

CERTIFICATIONS

- UL 1598 for use in wet locations up to 4'0" ambient.
- ULC (DesignLights Consortium Qualified) - see www.designlights.org

INSTALLATION

- See page 107 for mounting details for surface mount.

KEY DATA

Lumen Range	2363-8076
Wattage Range	21-80
Efficiency Range (LPW)	100-110
Fixture Projected Life (Hours)	1,700-50K
Weight (lb. @ 6'W)	4.31 (D.S.S.)

Page 18 of 18
HUBBELL
WHL00100

C2 FIXTURE TYPE F CUTSHEET
NOT TO SCALE

HUBBELL
Outdoor Lighting

DATE: _____ LOCATION: _____
TYPE: **F1** PROJECT: _____
CATALOG #: _____

SLING Series
SLENDER WALLPACK

tradeSELECT

FEATURES

- Two sizes for a variety of applications.
- Ranges from 2'W to 8'W with up to 8000 Lumens.
- SLG Series replaces from 100W SGM HG-52 Series replaces from 150W SGM HG-52.
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- # UNCL3000
- # UNCL3000
- # UNCL3000
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Fixture Projected Life (Hours)	1,700-50K
Weight (lb. @ 6'W)	4.31 (D.S.S.)

Page 18 of 18
HUBBELL
WHL00100

A2 FIXTURE TYPE F1 CUTSHEET
NOT TO SCALE

HUBBELL
Outdoor Lighting

DATE: _____ LOCATION: _____
TYPE: _____ PROJECT: _____
CATALOG #: _____

SLING SERIES
SLENDER WALLPACK

tradeSELECT

ORDERING GUIDE
Example: 500-20-30X17-UNCL001-PCU

ORDERING INFORMATION

Coloring Number	CCT/CR	Wattage	Mounting Height	Color	Color	Delivered Lumens	LPW	Weight (lb. @ 6'W)
500-20-PCU	5000/70	1W	8-21	50-27V	Dark Bronze	169	92	4.3(2)
500-20-PCU	4000/70	1W	8-21	50-27V	Dark Bronze	164	92	4.3(2)
500-20-PCU	5000/70	2W	8-21	50-27V	Dark Bronze	2363	98	4.3(2)
500-20-PCU	4000/70	2W	8-21	50-27V	Dark Bronze	2300	98	4.3(2)
500-20-PCU	5000/70	2W	10-55	50-27V	Dark Bronze	3170	98	4.3(2)
500-20-PCU	4000/70	2W	10-55	50-27V	Dark Bronze	3060	98	4.3(2)
500-40-PCU	5000/70	2W	10-55	50-27V	Dark Bronze	4028	98	4.3(2)
500-40-PCU	4000/70	2W	10-55	50-27V	Dark Bronze	4070	98	4.3(2)
500-40-PCU	5000/70	3W	10-55	50-27V	Dark Bronze	5548	98	5.5(2)
500-40-PCU	4000/70	3W	10-55	50-27V	Dark Bronze	5488	98	5.5(2)
500-40-PCU	5000/70	4W	10-55	50-27V	Dark Bronze	6903	98	5.5(2)
500-40-PCU	4000/70	4W	10-55	50-27V	Dark Bronze	6803	98	5.5(2)

Page 18 of 18
HUBBELL
WHL00100

C4 FIXTURE TYPE G1 CUTSHEET
NOT TO SCALE

HUBBELL
Outdoor Lighting

DATE: _____ LOCATION: _____
TYPE: _____ PROJECT: _____
CATALOG #: _____

SLING Series
SLENDER WALLPACK

tradeSELECT

ORDERING GUIDE
Example: 500-20-30X17-UNCL001-PCU

ORDERING INFORMATION

Coloring Number	CCT/CR	Wattage	Mounting Height	Color	Color	Delivered Lumens	LPW	Weight (lb. @ 6'W)
500-20-PCU	5000/70	1W	8-21	50-27V	Dark Bronze	169	92	4.3(2)
500-20-PCU	4000/70	1W	8-21	50-27V	Dark Bronze	164	92	4.3(2)
500-20-PCU	5000/70	2W	8-21	50-27V	Dark Bronze	2363	98	4.3(2)
500-20-PCU	4000/70	2W	8-21	50-27V	Dark Bronze	2300	98	4.3(2)
500-20-PCU	5000/70	2W	10-55	50-27V	Dark Bronze	3170	98	4.3(2)
500-20-PCU	4000/70	2W	10-55	50-27V	Dark Bronze	3060	98	4.3(2)
500-40-PCU	5000/70	2W	10-55	50-27V	Dark Bronze	4028	98	4.3(2)
500-40-PCU	4000/70	2W	10-55	50-27V	Dark Bronze	4070	98	4.3(2)
500-40-PCU	5000/70	3W	10-55	50-27V	Dark Bronze	5548	98	5.5(2)
500-40-PCU	4000/70	3W	10-55	50-27V	Dark Bronze	5488	98	5.5(2)
500-40-PCU	5000/70	4W	10-55	50-27V	Dark Bronze	6903	98	5.5(2)
500-40-PCU	4000/70	4W	10-55	50-27V	Dark Bronze	6803	98	5.5(2)

Page 18 of 18
HUBBELL
WHL00100

A2 FIXTURE TYPE F1 CUTSHEET
NOT TO SCALE

COMPASS
CUSO
SLIM RECHARGEABLE OUTDOOR LIGHT

DATE: _____ LOCATION: _____
TYPE: **G1** PROJECT: _____
CATALOG #: _____

tradeSELECT

FEATURES

- Includes self-diagnostic/low-battery feature to monitor proper operation.
- Quick installation.
- Universal 50-27V AC, 60Hz.
- Includes rechargeable 2.2V Nickel Cadmium battery for UL, unregulated 90 minute re-charge.
- Full re-charge within 24 hours.
- Powered with water proof 700 switch and AC On indicator.
- OTC to 5'0" Standard Model. 2'0" to 5'0" with optional heater.
- UL609 and 609-Listed models.

RELATED PRODUCTS

- # F62
- # F62
- # F62
- # F62
- # F62

CERTIFICATIONS

- UL609 and 609-Listed models.

DESCRIPTION

The CUSO Series is an architectural, low-profile outdoor light offering "warmway" DUV AC and emergency lighting with optional LED illumination.

The housing is fully rated and gasketed, and has an IP65 rating.

Designed for wall-mounting with universal AC power in back panel for easy installation to most standard wall junction boxes.

Includes a single 1" NPT cord entry in the top center of the housing.

Illuminator provided by 8 high power LEDs which exceed 1000 lumens at AC and 600 lumens in emergency.

Available in 3000K or 4000K color temperature.

APPLICATION

The CUSO Series can be applied in areas that are inaccessible to wire and cannot maintain the parking deck, and outdoor commercial applications to meet all of our Egress requirements.

COMPLIANCES

- UL609 listed for Wet Location.
- NFPA 101.
- NFPA 101.
- OSHA.

WARRANTY

- 3 year full warranty.
- See 14 Standard Warranty for additional information.

ENERGY CONSUMPTION

	Max.	Max with Heater
3000K, 60Hz	1.35W	3.47W
4000K, 60Hz	1.35W	3.47W

DIMENSIONS

Single Center Weight 4.8 lbs.
Master Center Quantity 6 each.

Page 18 of 18
HUBBELL
WHL00100

C4 FIXTURE TYPE G1 CUTSHEET
NOT TO SCALE

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Hubbell Outdoor Lighting, Inc. 2246 Vaupen Drive, Wilmington, NC 28401
Phone: 910.781.4000
Fax: 910.781.5266
www.hubbell.com

CBHF
Engineers, PLLC
2246 Vaupen Drive
Wilmington, NC 28401
Phone: 910.781.4000
Fax: 910.781.5266
www.cbhf.com



STORAGEMAX
SELF STORAGE FACILITY
901 PROCTOR STREET
ZEBULON, WAKE COUNTY, NORTH CAROLINA
ELECTRICAL
EXTERIOR LIGHTING CUTSHEETS

JOB NO.: CBHF-2223-PRD-20-002
DRAWN: RFP
CHECKED: RFP
DATE: 08/20/2023

DRAWING NO.:
ES001

REVISION:
0

N/F
WILLIE MCKINLEY DUNN
DB 15194, PAGE 2678
BM 2017, PAGE 1539
PIN# 2706.17-22-3844
ZONING - HC

PRELIMINARY FOR CONSTRUCTION



ALISON A. POCKAT, ASLA
LANDSCAPE ARCHITECT
LAND PLANNER
(919) 363-4415
106 STEEPBANK DRIVE
CARY, NC 27518

DESIGNED: AAP
DRAWN:
APPROVED: AAP



PROJECT 23003

STORAGE MAX PLANTING PLAN
STORAGE MAX
901 PROCTOR ST., ZEBULON
WAKE COUNTY, NORTH CAROLINA

1	12-28-23	COMMENT, RESP., LAYOUT, REVISION
2	3-12-24	REV. WATERLINE LOCATION
REVISIONS		

SCALE: 1"=20'

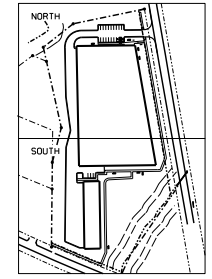
DATE: JULY 17, 2023

SHEET NO. 1

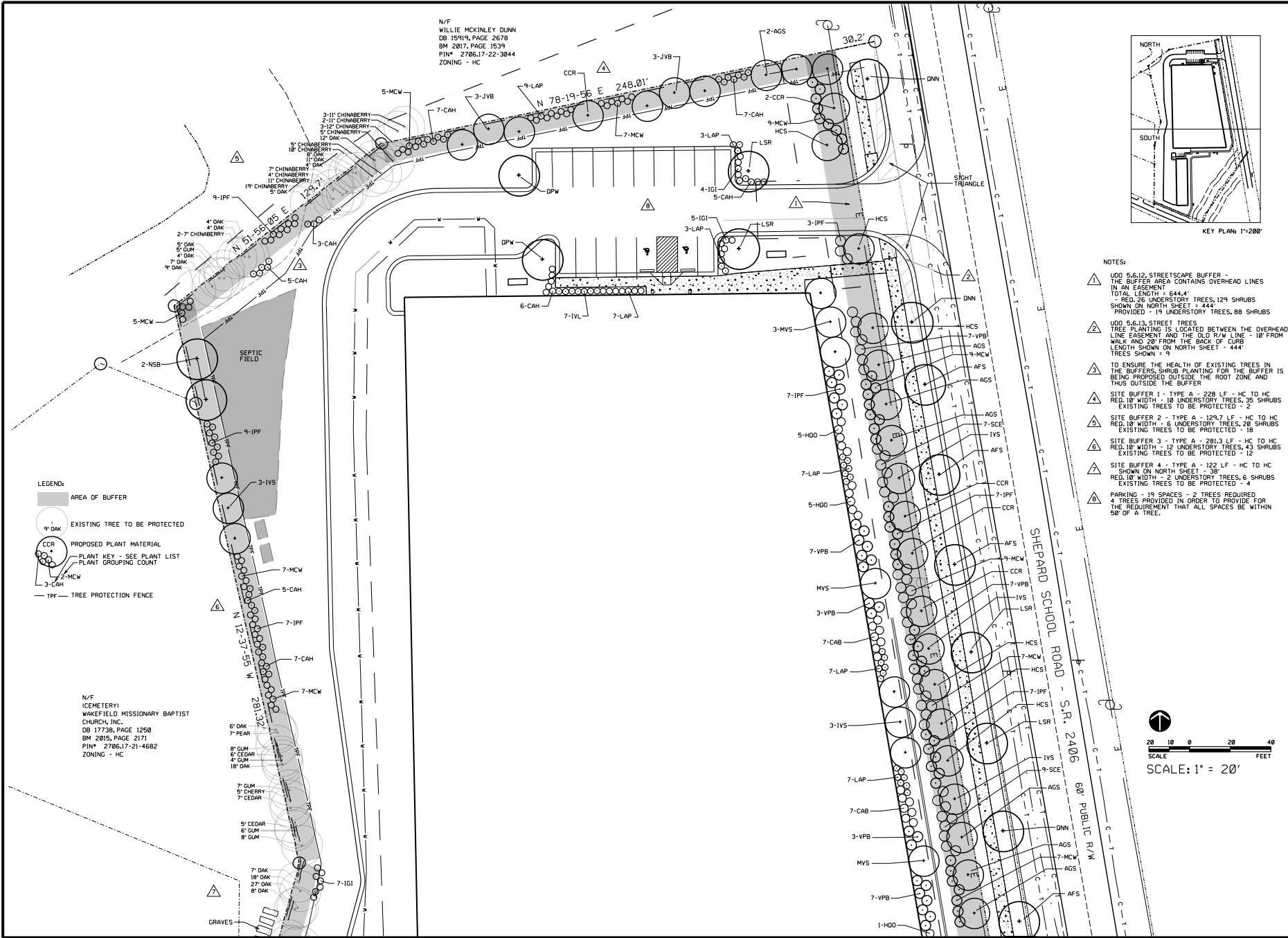
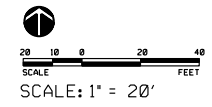
PLANTING PLAN - NORTH

LS-1

SEQUENCE NO. OF



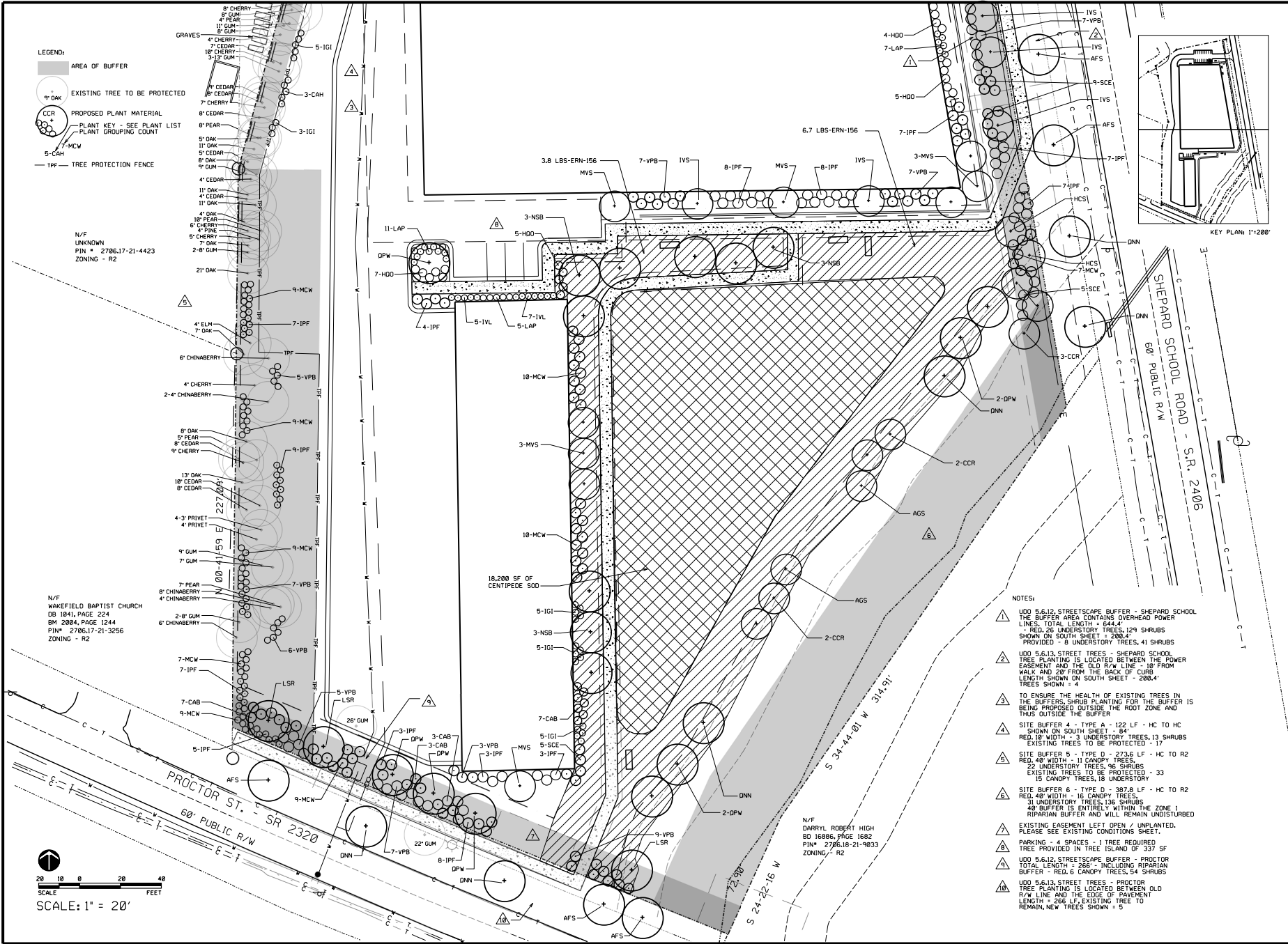
- NOTES:
- ▲ UDD 5.6.12, STREETSCAPE BUFFER - THE BUFFER AREA CONTAINS OVERHEAD LINES IN AN EASEMENT TOTAL LENGTH = 844.4' - REQ. 26 UNDERSTORY TREES, 129 SHRUBS SHOWN ON NORTH SHEET - 4444' PROVIDED - 19 UNDERSTORY TREES, 80 SHRUBS
 - ▲ UDD 5.6.13, STREET TREES - TREE PLANTING IS LOCATED BETWEEN THE OVERHEAD LINE EASEMENT AND THE OLD R/W LINE - 10' FROM WALK AND 20' FROM THE BACK OF CURB LENGTH SHOWN ON NORTH SHEET - 4444' TREES SHOWN = 9
 - ▲ TO ENSURE THE HEALTH OF EXISTING TREES IN THE BUFFERS, SHRUB PLANTING FOR THE BUFFER IS BEING PROPOSED OUTSIDE THE ROOT ZONE AND THUS OUTSIDE THE BUFFER
 - ▲ SITE BUFFER 1 - TYPE A - 228 LF - HC TO HC RED. BY WIDTH - 18 UNDERSTORY TREES, 20 SHRUBS EXISTING TREES TO BE PROTECTED - 2
 - ▲ SITE BUFFER 2 - TYPE A - 129.7 LF - HC TO HC RED. BY WIDTH - 6 UNDERSTORY TREES, 20 SHRUBS EXISTING TREES TO BE PROTECTED - 18
 - ▲ SITE BUFFER 3 - TYPE A - 281.3 LF - HC TO HC RED. BY WIDTH - 12 UNDERSTORY TREES, 43 SHRUBS EXISTING TREES TO BE PROTECTED - 12
 - ▲ SITE BUFFER 4 - TYPE A - 122 LF - HC TO HC SHOWN ON NORTH SHEET - 35' RED. BY WIDTH - 2 UNDERSTORY TREES, 6 SHRUBS EXISTING TREES TO BE PROTECTED - 4
 - ▲ PARKING - 19 SPACES - 2 TREES REQUIRED 4 TREES PROVIDED IN ORDER TO PROVIDE FOR THE REQUIREMENT THAT ALL SPACES BE WITHIN 50' OF A TREE.



- LEGEND:
- AREA OF BUFFER
 - EXISTING TREE TO BE PROTECTED
 - PROPOSED PLANT MATERIAL
 - PLANT KEY - SEE PLANT LIST
 - PLANT GROUPING COUNT
 - TREE PROTECTION FENCE

N/F
(CEMETERY)
WAKEFIELD MISSIONARY BAPTIST
CHURCH, INC.
DB 17738, PAGE 1250
BM 2015, PAGE 2171
PIN# 2706.17-21-4682
ZONING - HC

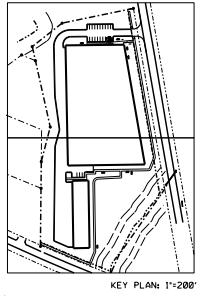
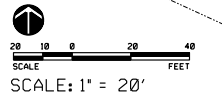
GRAVES



- LEGEND:**
- AREA OF BUFFER
 - EXISTING TREE TO BE PROTECTED
 - PROPOSED PLANT MATERIAL
 - PLANT KEY - SEE PLANT LIST
 - PLANT GROUPING COUNT
 - MCW
 - 5-CAH
 - TPF - TREE PROTECTION FENCE

N/F UNKNOWN
 PIN # 2706.17-21-4423
 ZONING - R2

N/F WAKEFIELD BAPTIST CHURCH
 DB 1841, PAGE 224
 BM 2004, PAGE 1244
 PIN# 2706.17-21-3256
 ZONING - R2



- NOTES:**
- △ UDD 5.6.12, STREETSCAPE BUFFER - SHEPARD SCHOOL THE BUFFER AREA CONTAINS OVERHEAD POWER LINES. TOTAL LENGTH = 644.4' RED, 26 UNDERSTORY TREES, 124 SHRUBS SHOWN ON SOUTH SHEET = 200.4' PROVIDED - 8 UNDERSTORY TREES, 41 SHRUBS
 - △ UDD 5.6.13, STREET TREES - SHEPARD SCHOOL TREE PLANTING IS LOCATED BETWEEN THE POWER EASEMENT AND THE OLD R/W LINE - 18' FROM WALK AND 20' FROM THE BACK OF CURB LENGTH SHOWN ON SOUTH SHEET = 200.4' TREES SHOWN = 4
 - △ TO ENSURE THE HEALTH OF EXISTING TREES IN THE BUFFERS, SHRUB PLANTING FOR THE BUFFER IS BEING PROPOSED OUTSIDE THE ROOT ZONE AND THUS OUTSIDE THE BUFFER
 - △ SITE BUFFER 4 - TYPE A - 122 LF - HC TO HC SHOWN ON SOUTH SHEET = 84' RED, 18' UNDERSTORY TREES, 13 SHRUBS EXISTING TREES TO BE PROTECTED = 17
 - △ SITE BUFFER 5 - TYPE D - 273.6 LF - HC TO R2 RED, 40' WIDTH - 11 CANOPY TREES, 22 UNDERSTORY TREES, 96 SHRUBS EXISTING TREES TO BE PROTECTED - 33 IS CANOPY TREES, 18 UNDERSTORY
 - △ SITE BUFFER 6 - TYPE D - 387.8 LF - HC TO R2 RED, 40' WIDTH - 16 CANOPY TREES, 31 UNDERSTORY TREES, 136 SHRUBS 40' BUFFER IS ENTIRELY WITHIN THE ZONE 1 RIPARIAN BUFFER AND WILL REMAIN UNDISTURBED
 - △ EXISTING EASEMENT LEFT OPEN / UNPLANTED. PLEASE SEE EXISTING CONDITIONS SHEET.
 - △ PARKING - 4 SPACES - 1 TREE REQUIRED TREE PROVIDED IN TREE ISLAND OF 337 SF
 - △ UDD 5.6.12, STREETSCAPE BUFFER - PROCTOR TOTAL LENGTH = 266' INCLUDING RIPARIAN BUFFER - RED, 6 CANOPY TREES, 54 SHRUBS
 - △ UDD 5.6.13, STREET TREES - PROCTOR TREE PLANTING IS LOCATED BETWEEN OLD R/W LINE AND THE EDGE OF PAVEMENT LENGTH = 266 LF, EXISTING TREE TO REMAIN, NEW TREES SHOWN = 5

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ALISON A. POCKAT, ASLA
 LANDSCAPE ARCHITECT
 LAND PLANNER

(919) 363-4415
 106 STEEPBANK DRIVE
 CARY, NC 27518

DESIGNED: AAP
DRAWN: AAP
APPROVED: AAP

PROJECT 23003

STORAGE MAX PLANTING PLAN

1	12-28-23	COMMENT, RESP., & REV. LAYOUT
2	13-13-24	ISSUE, REV. & REVIEW COMMENTS
3	15-02-24	DISCUSSION, ISO

STORAGE MAX
 901 PROCTOR ST., ZEBULON
 WAKE COUNTY, NORTH CAROLINA

REVISIONS

SCALE: 1"=20'
DATE: JULY 17, 2023
SHEET NO.:
PLANTING PLAN - SOUTH
 LS-2

SOURCE NO. OF

PLANT LIST - TREE PLANTING

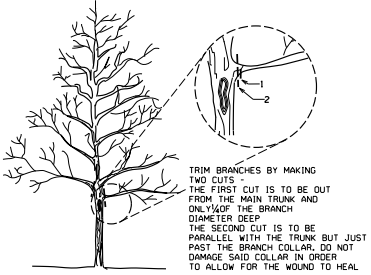
KEY	COUNT	PLANT NAME	SIZE & SPR.	SPACING	FOLIAGE
AFS	9	ACER FLORIDANUM, SOUTHERN SUGAR MAPLE	2.5'B&B, 8'HT	20'	DEC
LSR	7	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA', FRUITLESS SWEETGUM	2.5'B&B, 8'HT	20'	DEC
NSB	11	NYSSA SYLVATICA, BLACK GUM	2.5'B&B, 8'HT	20'	DEC
DNN	9	QUERCUS NUTTALLI, NUTTAL OAK	2.5'B&B, 8'HT	20'	DEC
DPW	10	QUERCUS PHELLOS, WILLOW OAK	2.5'B&B, 8'HT	20'	DEC
AGS	10	AMELANCHIER GRANDIFLORA, SERVICEBERRY	1.5'CAL, 6'HT	15'	DEC
CCR	13	CERCIS CANADENSIS, REDBUD	1.5'CAL, 6'HT	15'	DEC
HCS	8	HALESIA CAROLINA, SILVERBELL	1.5'CAL, 6'HT	15'	DEC
IVS	14	ILEX VOMITORIA 'SHADOW'S FEMALE', YAUPON HOLLY	6'HT, CONT.	15'	EVER
JBV	6	JUNIPER VIRGINIANA 'BURKII', BURKII CEDAR	6'HT, CONT.	15'	EVER
MVS	14	MAGNOLIA VIRGINIANA 'AUSTRALIS', SWEET BAY	6'HT, CONT.	15'	EVER

PLANT LIST - SHRUB PLANTING

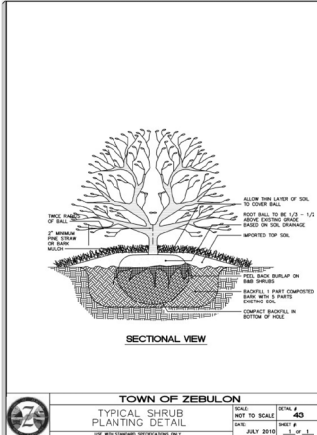
KEY	COUNT	PLANT NAME	SIZE & SPR.	SPACING*	FOLIAGE
IPF	135	ILICIMUM PARVIFLORUM 'FOREST GREEN', ANISE	3GAL, 24"HT	3/5'	EVER
MCW	151	MYRICA CERIFERA, WAX MYRTLE	3GAL, 24"HT	3/5'	EVER
SCE	35	SAMBUCUS CANADENSIS, ELDERBERRY	3GAL, 24"HT	5'	DEC
VPB	97	VIBURNUM PRUNIFOLIUM, BLACKHAW	3GAL, 24"HT	3/5'	EVER
CAB	27	CALLICARPA AMERICANA 'ATROPURPUREA', BEAUTYBERRY	3GAL, 24"HT	4/5'	DEC
HOO	32	HYDRANGEA QUERCIFOLIA 'ALICE', OAKLEAF HYDRANGEA	3GAL, 18"HT	4'	DEC
CAH	48	CLETHRA ALNIFOLIA 'HUMMINGBIRD', CLETHRA	3GAL, 18"HT	3'	DEC
IGI	39	ILEX GLABRA 'SHAMROCK', INKBERRY	3GAL, 24"HT	3'	EVER
IVL	19	ITEA VIRGINICA 'LITTLE HENRY', SWEETSPIRE	3GAL, 18"HT	3'	DEC
LAP	66	LEUCOTHOE POPULIFOLIA, FLORIDA LEUCOTHOE	3GAL, 15"HT	3'	EVER
ERN-156	10.5	ERNST CONSERVATION SEED MIX - ERNMX-156	BY POUND	25 LBS/ACRE	
SOD	18,200	SF EREMOCHLOA OPHIUROIDES, CENTIPEDE	BY SF		

NOTE: ALL PLANT MATERIAL SPECIFIED IS CONSIDERED TO BE A LOCAL NC NATIVE WITH THE FOLLOWING EXCEPTIONS:
 LSR, AGS, IVS, MVS - ARE HYBRIDS OF NATIVE PLANT MATERIAL
 CCR, JBV, HOO, CAH, IPF - ARE CULTIVARS OF NATIVE PLANT MATERIAL
 * O/C SPACING LISTED X/Y REFERS TO BUFFER USE / STREETScape USE
 CONTRACTOR IS TO ENSURE THAT ALL PLANT COUNTS ARE CORRECT BEFORE INSTALLATION.

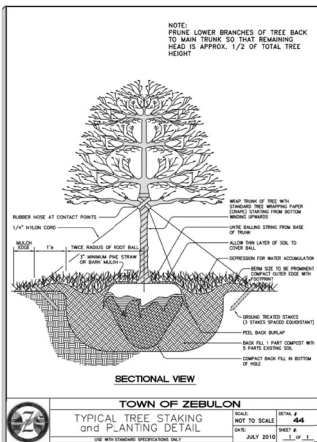
- MAINTENANCE NOTES:**
- FERTILIZE TREES TWICE PER YEAR - EARLY SPRING WITH HIGH NITROGEN FERTILIZER (A RATIO OF 4-1-1 OR MULTIPLES THEREOF), AND EARLY FALL WITH HIGH POTASSIUM AND PHOSPHORUS FERTILIZER (A RATIO OF 14-4-4 OR MULTIPLES THEREOF). ENSURE THAT FERTILIZER IS WATERED IN. REMOVE STAKES SIX MONTHS AFTER TREES ARE PLANTED.
 - PRUNING / TRIMMING OF SHRUBS SHOULD BE DONE IN EARLY SPRING JUST PRIOR TO LEAFING OUT. HEAD LIMBS WITH EXCESSIVE HEIGHT - REMOVE LIMB BACK TO THE CROTCH IN THE MAIN STEM. DO NOT HEDGE! REMOVE ALL DEAD WOOD OR BRANCHES.
 - HAND WEED UNLESS WEED NUMBERS BECOME EXCESSIVE. TREAT EXCESSIVE BROADLEAF WEEDS WITH AN APPLICATION OF 2-4-D AS DIRECTED ON PACKAGE. TREAT EXCESSIVE WEED GRASS PROBLEMS WITH ROUNDUP.
 - MINOR PEST INFESTATIONS CAN GO UNTREATED. EXCESSIVE INSECT AND GRUB INFESTATIONS NEED TO BE TREATED AS DIAGNOSED WITH AN APPROPRIATE PESTICIDE. EXCESSIVE FUNGAL INFESTATIONS NEED TO BE TREATED IN TWO TO THREE SUCCESSIVE TREATMENTS OVER A PERIOD OF TWO TO THREE WEEKS WITH AN APPROPRIATE FUNGICIDE.
 - PROVIDE A HALF INCH ANNUAL APPLICATION OF YARD WASTE COMPOST TO ALL LAWN AND BEDDED AREAS IN THE EARLY SPRING. RAKE OUT EVENLY BUT DO NOT TILL IN. FERTILIZE GRASS IN EARLY FALL WITH A RATIO OF 4-3-1 OR MULTIPLES THEREOF.
 - REFURBISH MULCH TWICE PER YEAR - SPRING AND FALL. DO NOT EXCEED 2" OF MULCH AND COMPOST COMBINED AT ANY ONE TIME.
 - MOWING OF GRASS SHOULD BE DONE AS NEEDED. GENERALLY HYBRID BERMUDA GRASS SHOULD BE MOWN EVERY 5-7 DAYS AT A HEIGHT OF 1".
 - EVALUATE SOIL PH AND IRON LEVELS ANNUALLY. APPLY AMENDMENTS AS NEEDED ACCORDING TO SOIL ANALYSIS.
 - PROTECT EXISTING PLANTINGS - AVOID EXCESSIVE TRAFFIC INTO THE ZONE OF THE EXISTING PLANT MATERIAL.
 - MOW BIORETENTION SEEDED AREAS AND WILDFLOWER SEEDED AREAS ONCE A YEAR IN EARLY SPRING TO A HEIGHT OF 6" - 8". DO NOT MOW WITH A LAWN MOWER.
- NOTE: FAILURE TO MAINTAIN ALL PLANTINGS IN ACCORDANCE WITH THIS PLAN MAY CONSTITUTE A VIOLATION OF THE LAND DEVELOPMENT ORDINANCE AND MAY RESULT IN FINES.



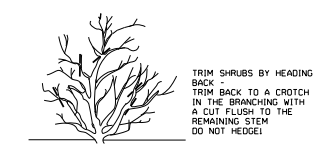
TREE PRUNING NTS



TOWN OF ZEBULON TYPICAL SHRUB PLANTING DETAIL (SEE 98-236-24 SUBSECTION SDD)



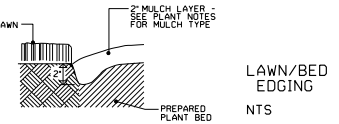
TOWN OF ZEBULON TYPICAL TREE STAKING and PLANTING DETAIL (SEE 98-236-24 SUBSECTION SDD)



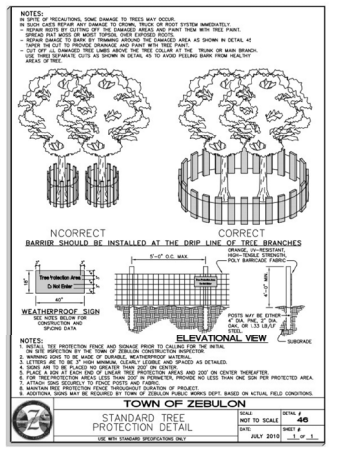
SHRUB PRUNING NTS

PLANT NOTES

- THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE DETERMINED AND VERIFIED IN THE FIELD BY THE LANDSCAPE CONTRACTOR. PLANTINGS SHALL BE ADJUSTED TO AVOID CONTACT WITH SAID UTILITIES AND WITH SITE FEATURES LIKE WALLS AND PAVING.
- SUBSOIL CONDITIONS AND SUBSURFACE DRAINAGE REQUIREMENTS OF ALL PLANT MATERIALS SHALL BE DETERMINED IN THE FIELD BY THE LANDSCAPE CONTRACTOR.
- ALL PLANT MATERIAL SHALL BEAR THE SAME RELATIONSHIP TO THE NEW GRADE THAT THEY BORE TO THE PREVIOUS GRADE.
- THE LANDSCAPE CONTRACTOR SHALL STAKE THE LOCATION OF ALL TREES AND SHRUBS AND CHECK FOR CORRECT SPACING PRIOR TO PLANTING.
- ALL PLANT MATERIALS ARE AS STATED. NO SUBSTITUTIONS WITHOUT THE CONSENT OF THE LANDSCAPE ARCHITECT.
- ALL NYLON OR POLYESTER TREATED BURLAP AND SYNTHETIC ROPING SHALL BE REMOVED ENTIRELY PRIOR TO PLANTING. ALL WIRES, ROPES AND HOSES USED TO STAKE THE TREES SHALL BE REMOVED NO LATER THAN 18 MONTHS AFTER PLANTING.
- IN AREAS TO BE GRASSED, FINISH GRADE AND RAKE SOIL SURFACE. APPLY A 2" LAYER OF LEAF OR COMPARABLE COMPOST AND TILL TO A DEPTH OF 6 INCHES. SEED WITH HULLED PRINCESS 77 HYBRID BERMUDAGRASS OR LIKE HYBRID BERMUDA AT A RATE OF 2-4 LBS OF SEED PER 1000 SQUARE FEET. THE OPTIMUM SEEDING TIME IS APRIL 1 - JUNE 1. IF PLANTING AFTER JUNE, CONTACT THE LANDSCAPE ARCHITECT FOR GRASSING ALTERNATIVES. ALL SEED SHALL BE CERTIFIED GIBLETAGI MEETING ALL STANDARDS OF PURITY AS REQUIRED BY THE U.S.D.A. FERTILIZER SHALL BE APPLIED TO ALL AREAS TO BE GRASSED AT A RATE OF 48 LBS PER 1,000 SQ.FT. WITH A FORMULA OF 2-8-8 OR SIMILAR COMBINATION. COVER ALL SEED WITH CLEAN GRAIN STRAW MULCH.
- THE OPTIMUM PLANTING SEASON IS OCTOBER 1 - MARCH 31 UNLESS AN ALTERNATIVE WATER SOURCE CAN BE PROVIDED. ALL PLANTS ARE TO MEET OR EXCEED THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS FOR THE SIZES SPECIFIED. ONE WEEK PRIOR TO PLANTING, BEDDED AREAS ARE TO BE WATERED AND TREATED WITH ROUNDUP FINALE OR AN EQUALLY EFFECTIVE COMPLETE HERBICIDE. BEDS SHALL BE TILLED TO A DEPTH OF 6" AND AMENDED WITH A 2" LAYER OF LEAF OR COMPARABLE COMPOST MATERIAL ALONG WITH 0-9-8 FERTILIZER (AT A RATE OF 25 LBS PER 5,000 SQ. FT.) AND DOLOMITIC LIME (AT A RATE OF 10 LBS PER 5,000 SQ. FT.). THESE RATES ARE TO BE ADJUSTED AS PER SOIL TESTING RESULTS AS NEEDED. ALL BEDS SHALL BE MULCHED WITH A 2" THICK LAYER OF TRIPLE SHREDED HARDWOOD MULCH. PLANTS SHALL BE WATERED THOROUGHLY IMMEDIATELY UPON INSTALLATION.
- ALL BARE AREAS OF SOIL NOT SPECIFIED FOR PLANT MATERIAL IN BEDS OR SEED MIXES ARE TO BE GRASSED. ALL SOIL SURFACES ARE TO BE COVERED WITH PLANTS, MULCH, BUILDING OR PAVING.
- ALL SOIL BARE, ALL PLANTINGS SHALL BE BEDDED AND MULCHED.
- THE CONTRACTOR SHALL PROVIDE AN 18 MONTH GUARANTEE ON ALL PLANT MATERIAL AND WORK.
- SEED MIXES AVAILABLE FROM ERNST CONSERVATION SEEDS - 1-800-873-3321.



LAWN / BED EDGING NTS



TOWN OF ZEBULON STANDARD TREE PROTECTION DETAIL (SEE 98-236-24 SUBSECTION SDD)

ALISON A. POCKAT, ASLA
 LANDSCAPE ARCHITECT
 LAND PLANNER
 (919) 363-4415
 106 STEEPBANK DRIVE
 CARY, NC 27513

PRELIMINARY - NOT FOR CONSTRUCTION

DESIGNED: AAP
 DRAWN:
 APPROVED: AAP



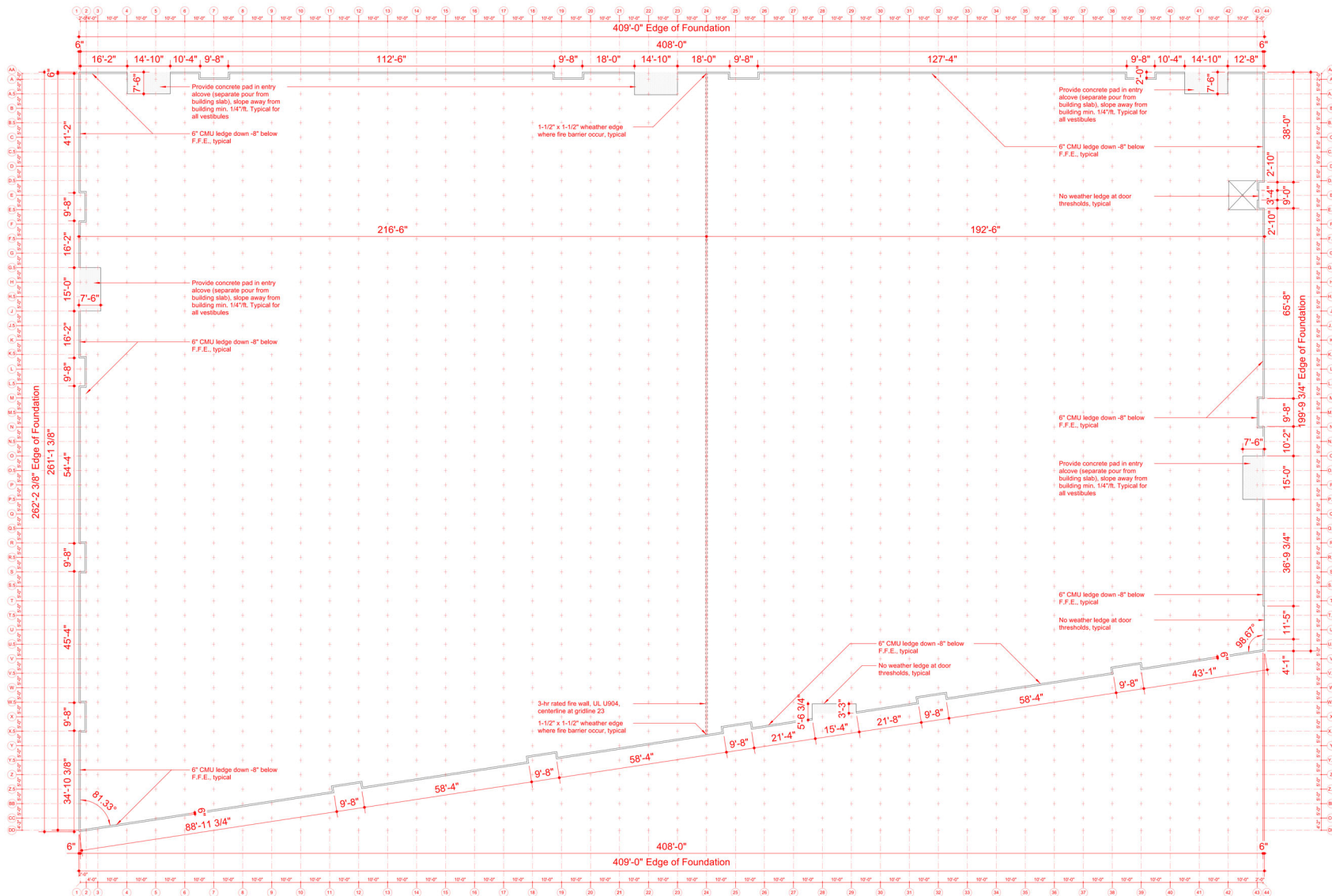
PROJECT 23003

STORAGE MAX
 PLANTING NOTES AND DETAILS
 STORAGE MAX
 901 PROCTOR ST., ZEBULON
 WAKE COUNTY, NORTH CAROLINA

NO.	DATE	REVISION	BY	CHKD.
1	12-28-24	COMPLETION RESP.		
2	01-22-24	REVISIONS SDD		

SCALE: 1"=20'
 DATE: JULY 17, 2023
 SHEET NO. PLANTING DETAILS
 LS-3

REVISIONS

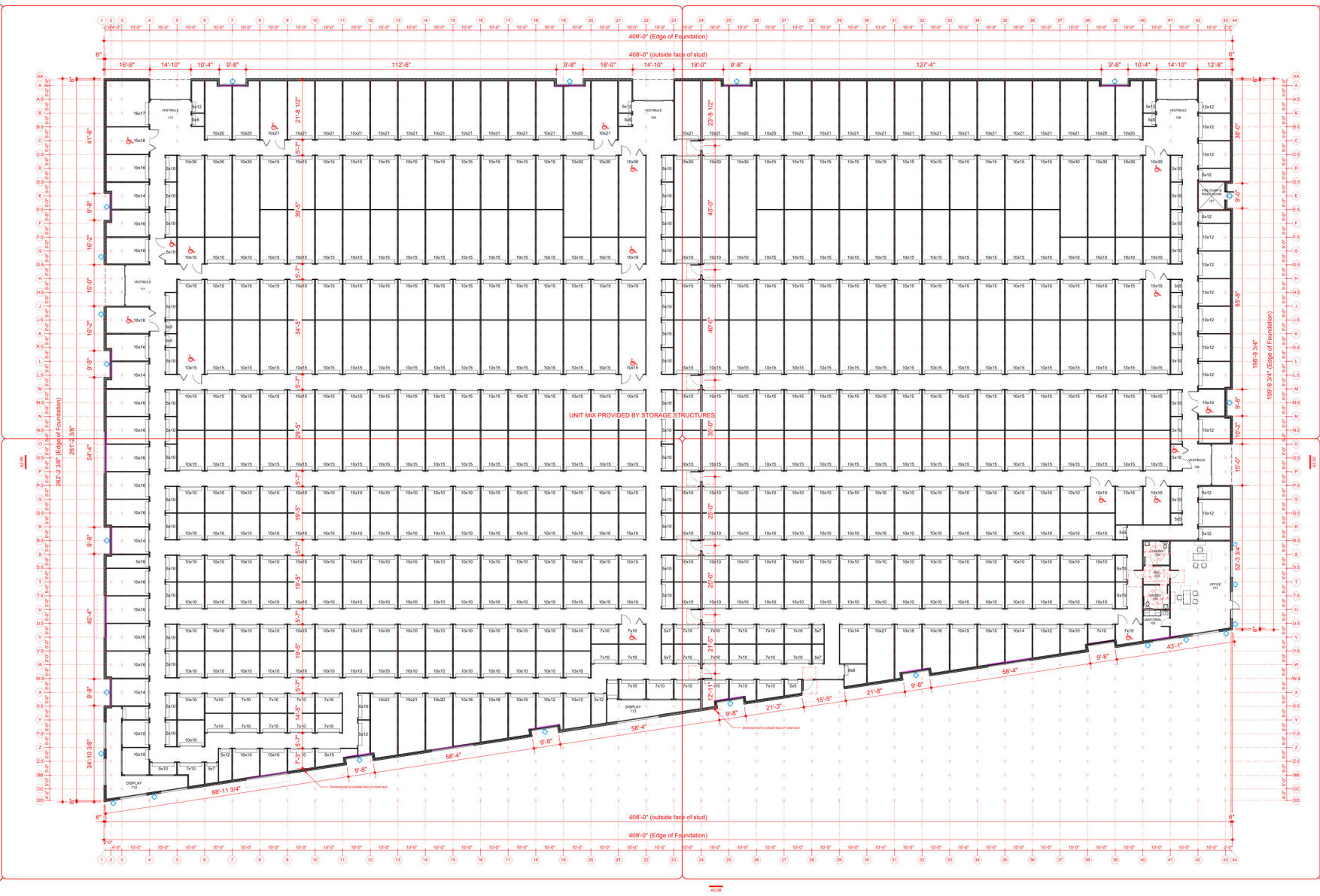


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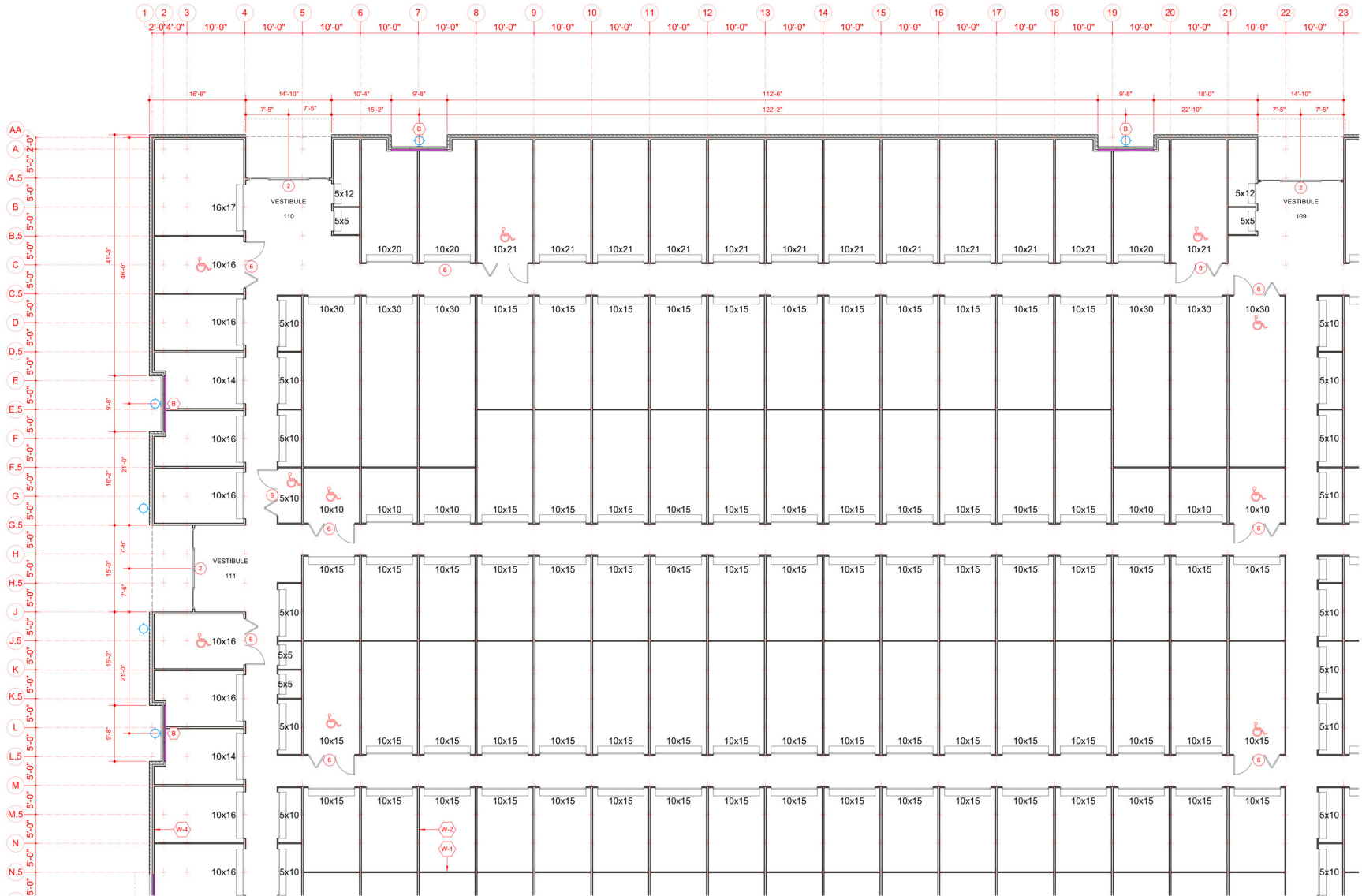
SLAB EDGE PLAN

A0.09 1/16"=1'-0"

PROJECT NORTH



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WALL LEGEND

	2" metal stud wall
	4" metal stud wall
	8" CMU - 3 hr rated wall or barrier
	4" metal stud wall with brick veneer

BUILDING KEY PLAN

FLOOR PLAN

A1.19

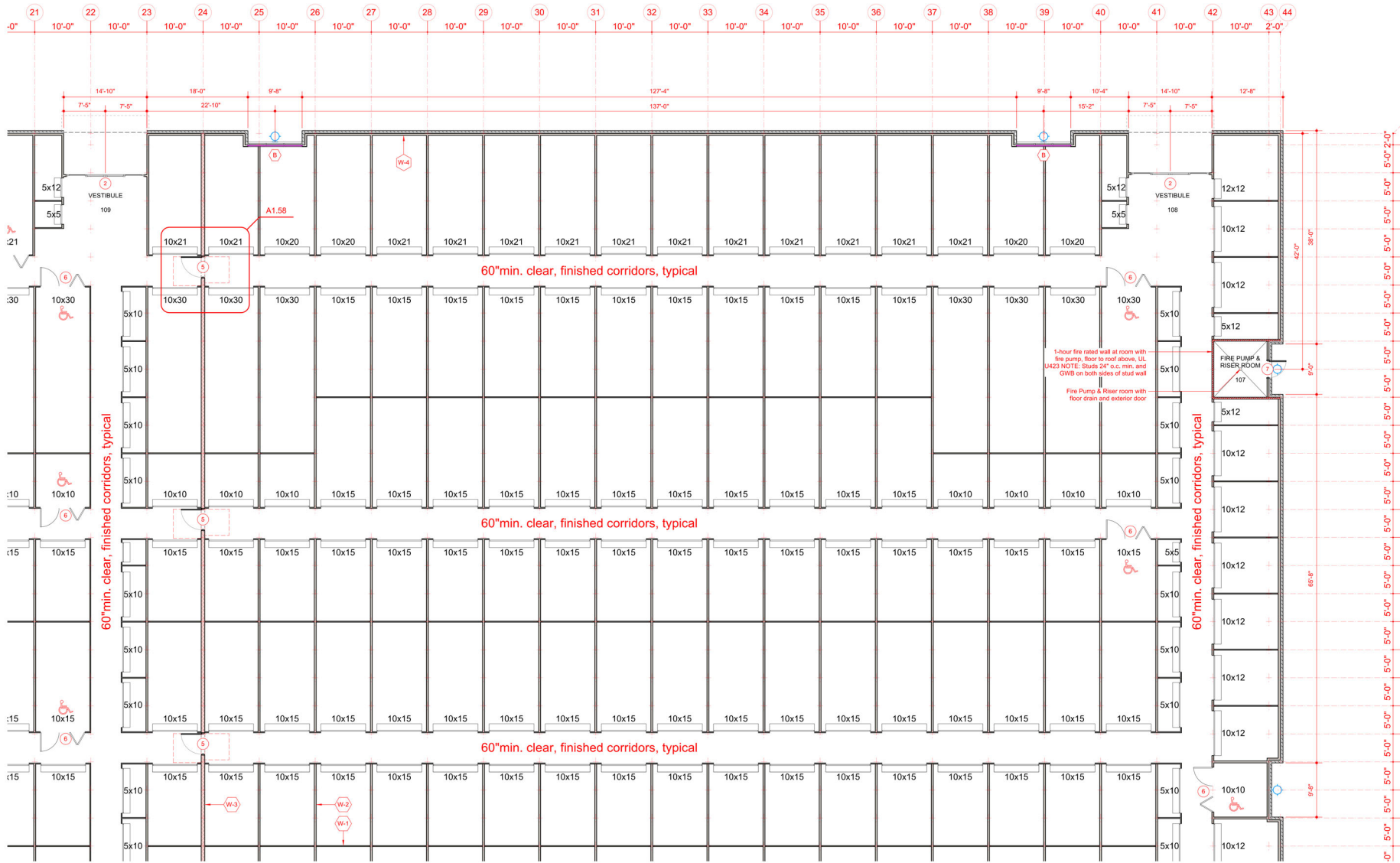
1/8"=1'-0"



PARTIAL FLOOR PLAN 1 STORAGE MAX SELF STORAGE BLDG 1
PHASE I SELF-STORAGE
ROBERT HIGH DEVELOPMENT
901 PROCTOR STREET
ZEBULON, NC

A1.1
WITH C.A. & L. NEEDS-DEWEE

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AA
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H.5
J
J.5
K
K.5
L
L.5
M
M.5
N
N.5



BUILDING KEY PLAN

WALL LEGEND

⊕(W-1)	2" metal stud wall
⊕(W-2)	4" metal stud wall
⊕(W-3)	6" CMU - 3 hr rated wall or barrier
⊕(W-4)	4" metal stud wall with brick veneer

FLOOR PLAN

A1.29

1/8"=1'-0"



Owner acknowledges and agrees that Robert High Development, LLC (RHD) (and its architect Cottrhan Harris Architecture and engineers) have retained all copyrights and other legal rights and claims in and to all intellectual property and the drawings (including without limitation architectural and engineering drawings, plans, and specifications, and any model of the project) and all other information in or related to the project. RHD understands that the drawings, plans, and specifications are prepared for the use of the contractor and are not to be used for any other purpose without the prior written permission of Cottrhan Harris Architecture and engineers. The drawings, plans, and specifications and any model of the project are the property of Cottrhan Harris Architecture and engineers and shall remain their property. RHD agrees to indemnify Cottrhan Harris Architecture and engineers from and against all claims, damages, and expenses, including reasonable attorneys' fees, in connection with the use of the drawings, plans, and specifications for any purpose other than that intended by Cottrhan Harris Architecture and engineers.

UNIT MIX CALCULATIONS			
Building	Unit Size	Total	# of Accessible Units
Interior	5x5	9	
	5x7	5	
	5x10	46	2 ADA compliant hardware
	5x12	10	
	5x15	1	
	5x16	1	
	7x10	34	2 ADA compliant hardware
	8x8	1	
	10x10	183	4 ADA compliant hardware
	10x12	13	
	10x14	6	
	10x15	189	4 ADA compliant hardware
	10x16	15	2 ADA compliant hardware
	10x18	4	
	10x20	8	
	10x21	28	2 ADA compliant hardware
	10x30	23	2 ADA compliant hardware
12x12	1		
15x17	1		
TOTAL		578	18
			17.6% = 10-2% units over 200

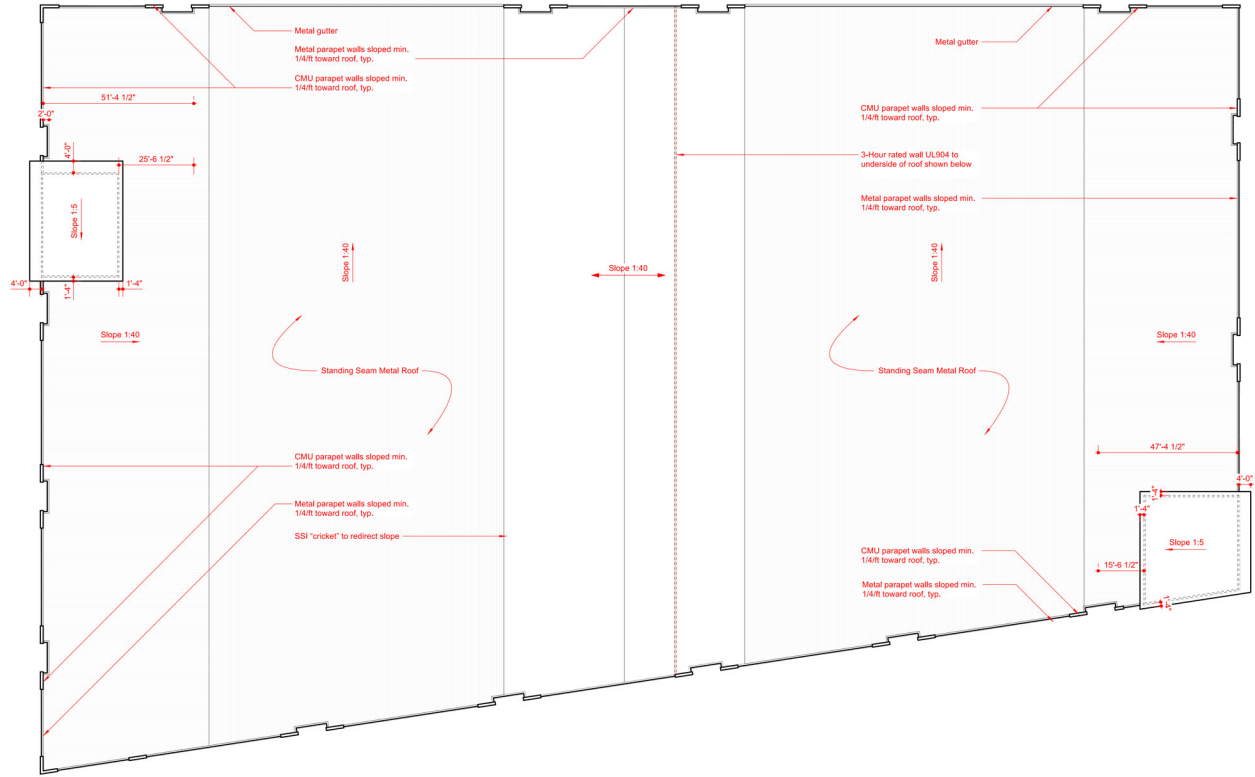
Sizes listed for individual storage units are nominal and center to center of partition walls. There may be adjustments to any such unit to allow for site constraints, structural tolerances, mechanical systems, vertical transportation and other issues encountered both during design and in the field.

5ft wide handicapped units are equipped with 3'-0" wide swing doors with ADA compliant lever hardware, typical. 10ft wide handicapped units are equipped double 3'-0" wide swing doors with ADA compliant lever hardware, typical. In all handicapped unit locations where a swing door cannot be provided, the roll-up door must be equipped with an electronically operating door opener with a battery backup in case of power failure.

UNIT MIX CALCULATIONS

A1.51

N/A

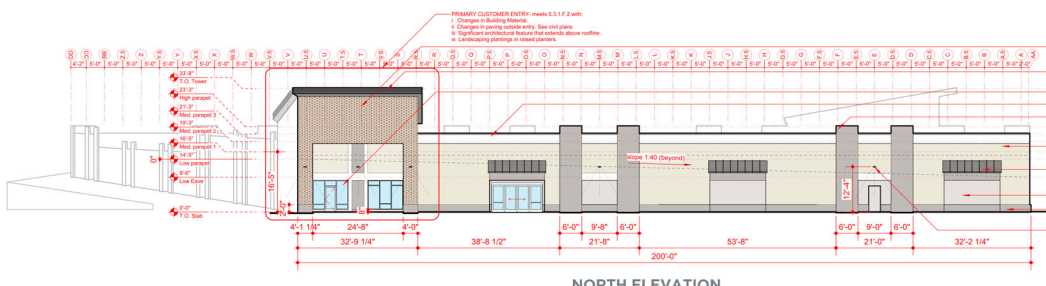


ROOF PLAN
A1.56 1"=20'-0" PROJECT NORTH

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Material Legend

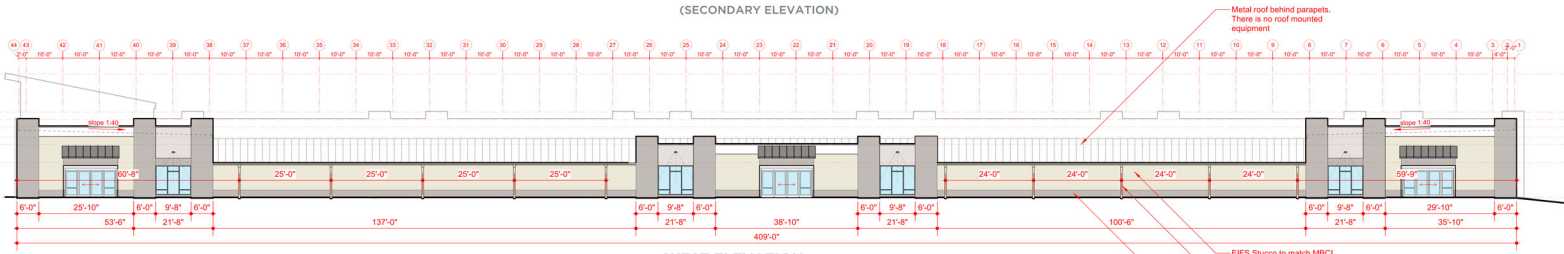
- EIFS #1 - Color to match MBCI "Light Stone"
- EIFS #2 - Color to match MBCI "Ash Gray"
- Metal coping gutters, downspouts - MBCI Signature 200 "Light Stone"
- MBCI Metal Panel Signature 200 - "Polar White"
- Standing seam metal awnings - MBCI "Charcoal Grey"
- Triangle Brick veneer - "Northampton WB"



- TYPICAL ELEVATION MATERIALS**
- Brick veneer, Triangle Brick "Northampton WB"
 - MBCI Shadow Rib, installed horizontally, Signature 200 "Burnished Slate"
 - Storefront glass, All glass to be clear.
 - Smooth metal panel cornice MBCI "Polar White"
 - Fay Block Split CMU veneer "Thunder Grey" @ 2' building recess typical.
 - Typical EIFS wall finish to match MBCI "Light Stone"
 - Metal awning @ windows and faux windows on secondary elevations, MBCI "Charcoal Grey"
 - Accent color EIFS panel @ faux windows.
 - Z high Fay Block Split CMU veneer "Thunder Grey", typical at base
 - Light fixture, 12'-4" A.F.F., typical for all

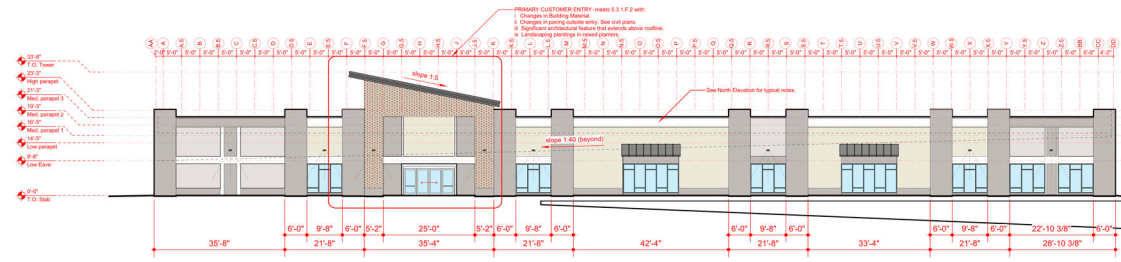
NORTH ELEVATION

A2.02 1/16"
 (SECONDARY ELEVATION)



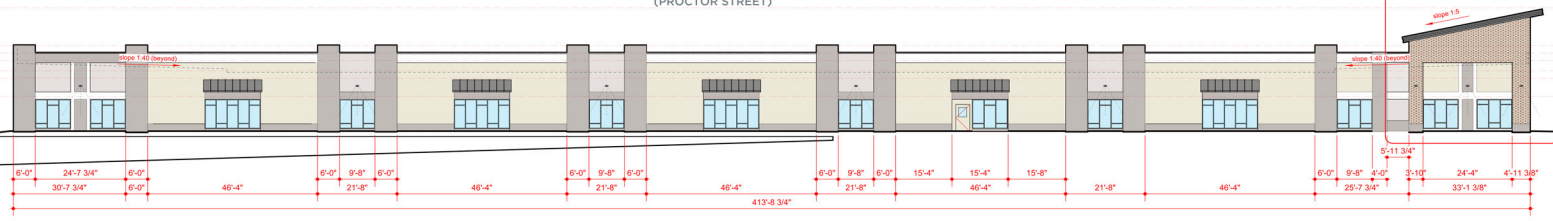
WEST ELEVATION

A2.04 1/16"
 (SECONDARY ELEVATION)



SOUTH ELEVATION

A2.06 1/16"
 (PROCTOR STREET)



EAST ELEVATION

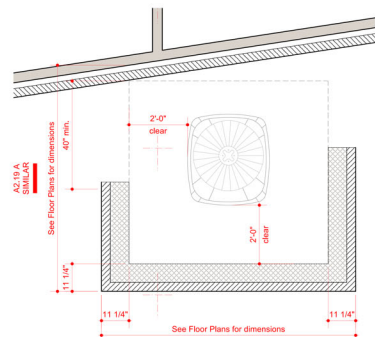
A2.08 1/16"
 (SHEPARD SCHOOL ROAD)

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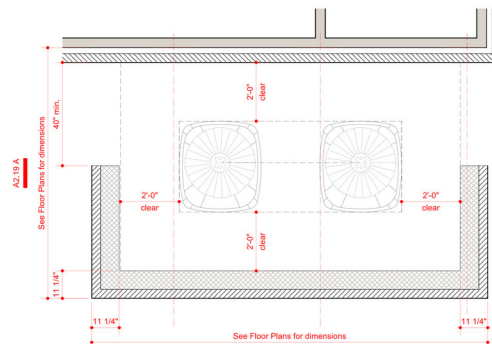


**COTHMAN
HARRIS**
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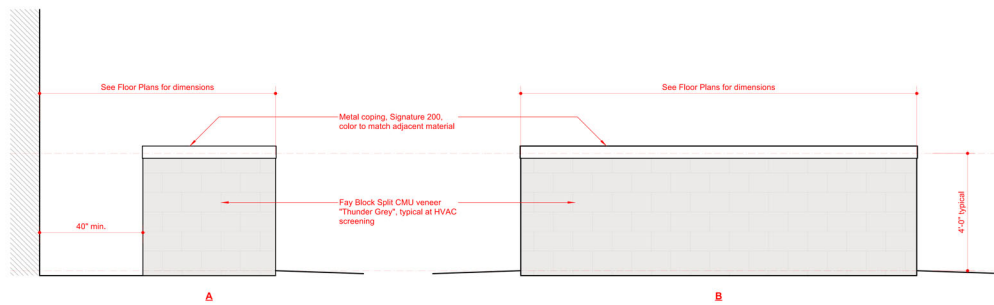
ENLARGED SCREEN PLAN (1)

A2.12 1/2"



ENLARGED SCREEN PLAN (2)

A2.13 1/2"



ENLARGED SCREEN ELEVATION

A2.19 1/2"

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STORAGEMAX BLDG 1
PHASE I SELF-STORAGE
ROBERT HIGH DEVELOPMENT
901 PROCTOR STREET
ZEBULON, NC

SCREENING PLANS & ELEVATIONS

COORDINATION
MAY 2024

A2.1

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