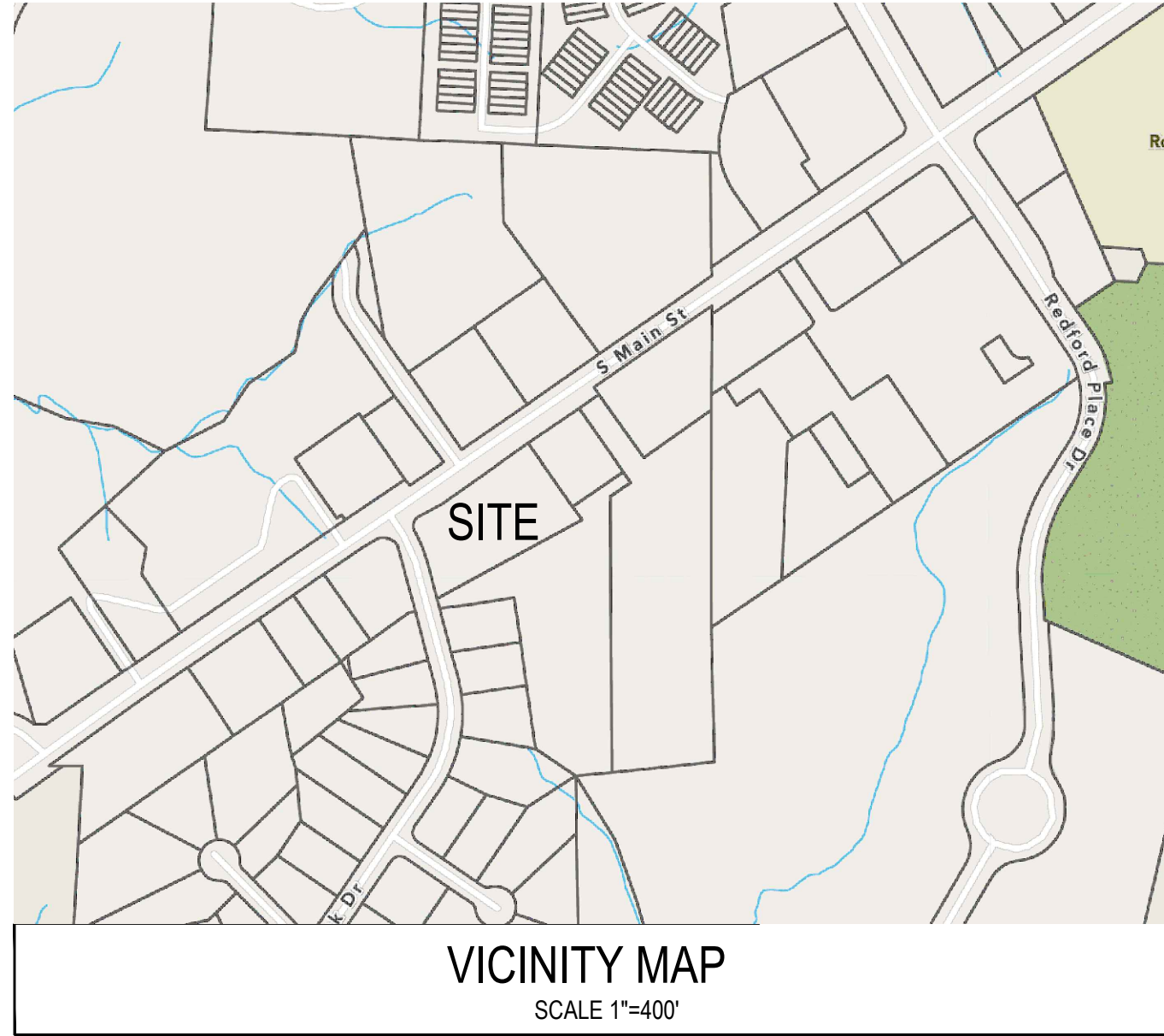


Administrative Site Plan South Main - Commercial

Town of Rolesville
Wake County, North Carolina

Case # SP22-06
Rezoning Case # MA22-07



SITE DATA:	
SITE ADDRESS:	503 SOUTH MAIN
PIN:	1758784708
SITE AREA:	1.80 AC (78,408 SF)
AREA FROM ADJACENT PARCEL:	23 AC (10,197 SF)
ADJACENT PARCEL PIN:	1758.08-78-5571
TOTAL SITE AREA:	2.03 AC (89,427 SF)
IMPERVIOUS PROPOSED:	1.19 ACRES (51,836 SF)
IMPERVIOUS PERCENT (%):	58.6%
WATERSHED:	LOWER NEUSE
HUC:	0302020107
LATITUDE:	35.916120
LONGITUDE:	-78.468430
ZONING DISTRICT:	GC
FUTURE LAND USE:	COMMERCIAL
OPEN SPACE SIZE REQ'D:	4421 SF (5%)
OPEN SPACE SIZE PROVIDED:	4425 SF (5.1%)
SUMMARY:	ACTIVE OPEN AREA 1 = 2525 SF ACTIVE OPEN AREA 2 = 1900 SF TOTAL = 4425 SF
BUILDING SETBACKS:	20' (FRONT) 15' (SIDE) 35' (REAR)
BUILDING COMMERCIAL (SF):	13,500
BUILDING RESIDENTIAL (SF):	9,675
BUILDING HEIGHT (MAX):	35'
BUILDING HEIGHT (PROVIDED):	35'
PARKING SUMMARY:	
RESIDENTIAL UPPER STORY: MIN 1 / UNIT:	11/1 = 11 SPACES
COMMERCIAL: MIN 2.5 SPACE / 1000 SF:	13,500 / 1000 * 2.5 = 34 SPACES
PARKING MIN REQUIRED:	45 SPACES
PARKING PROVIDED:	64 SPACES
BIKE PARKING (REQUIRED):	1 PER BLDG
BIKE PARKING (PROVIDED):	2
TOTAL DENUDED AREA:	87,654 SF (2.01 ACRES)

PEDESTRAIN AMENITIES - 4 REQUIRED

PATIO SEATING IN OPEN AREA 1
PUBLIC ART MURAL ON WALL CREEK RD SIDE OF THE BUILDING
PAVERS IN OPEN AREA 1
POCKET PARK - ACTIVE AREA 2

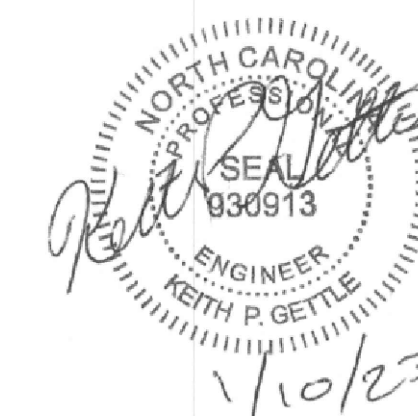
SHEET	DESCRIPTION
	Cover Sheet
	Existing Conditions Survey
C1	Existing Conditions & Demolition Plan
C2	Demo and Erosion SS Extension
C3	Site Plan
C4	Grading Plan
C5	Utility Plan
C6	Utility Plan and Profile
LS1	Preservation Plan
LS2	Landscape Plan
LS3	Landscape Details
SL1	Site Lighting Plan
SL2	Site Lighting Fixtures
D1	Standard Site Details
D-2	Site and Stormwater Details
D-3	BMP Device Detail
D-4	Water and Sanitary Sewer Details
EC1	Phase 1 - Erosion Control Plan
EC2	Phase 2 - Erosion Control Plan
EC3	Phase 3 - Erosion Control Plan
EC4	Phase 4 - Erosion Control Plan
EC5	Erosion Control Details
EC6	Erosion Control Details
EC7	NCGO1 Requirements
	Architectural Plans and Elevations

	NEW	EXISTING
DRAINAGE STRUCTURE		
SANITARY SEWER MANHOLE		
SANITARY SEWER CLEANOUT		
WATER VALVE		
FIRE HYDRANT		
OVERHEAD UTILITY LINE		
UNDERGROUND ELECTRIC LINE		
UNDERGROUND TELECOM/DATA LINE		
FIBER OPTIC CABLE		
GAS LINE		
STORM DRAINAGE PIPE		
SANITARY SEWER LINE		
WATER LINE		
SURFACE ELEVATION CONTOUR		
SURFACE SPOT ELEVATION		
CLEARING LIMIT/TREE LINE		
LIMIT OF DISTURBANCE		
ELECTRICAL TRANSFORMER PAD		
TOWHOMER PARKING (NUMBER)		



PUBLIC IMPROVEMENT QUANTITIES

PHASE NUMBER(S)	PHASE 1
NUMBER OF LOT (S)	1
LOT NUMBERS BY PHASE	1
NUMBER OF UNITS	9 MAX
LIVABLE OF UNITS	11 UNITS
OPEN SPACE (YES/NO)	YES
NUMBER OF OPEN SPACE LOTS	0
PUBLIC WATER (LF)	0
PUBLIC 8" PVC SEWER	389 LF
WATER SERVICE STUBS	2
WATER SERVICE ABANDONED	2
SEWER SERVICE STUBS (NEW)	1
SEWER SERVICE REMOVED	0



EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT	
APPROVED	
EROSION CONTROL <input type="checkbox"/> S-	
STORMWATER MGMT. <input type="checkbox"/> S-	
FLOOD STUDY <input type="checkbox"/> S-	
DATE	
ENVIRONMENTAL CONSULTANT SIGNATURE	

GENERAL NOTES

- BOUNDARY AND TOPO INFORMATION TAKEN FROM CAWTHORNE, MOSS & PANCIERA, P.C., SURVEYING, TITLED TOPOGRAPHIC SURVEY FOR TOY STORAGE LLC, DATED MARCH 3, 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 ROLESVILLE, 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.

PROJECT INFORMATION:

PROJECT:	SOUTH MAIN - COMMERCIAL
OWNER / DEVELOPER:	TOY STORAGE, LLC 2700 GRESHAM LAKE RD. RALEIGH, NC 27615 (919) 604-0505
PHONE:	ALLEN MASSEY
CONTACT:	STORIT@AOL.COM
EMAIL:	
ENGINEER:	KEITH P. GETTLE, PE GETTLE ENGINEERING AND DESIGN, PLLC LICENSE: P-2538 3616 WAXWING CT. WAKE FOREST, NC 27587 (919) 210-3934 KPGETTLE@GMAIL.COM
PHONE:	
EMAIL:	
SURVEYOR:	CAWTHORNE MOSS AND PANCIERA P.C. 333 SOUTH WHITE STREET WAKE FOREST NORTH CAROLINA 27588 (919) 556-3148
PHONE:	
PROJECT ADDRESS:	503 SOUTH MAIN STREET, ROLESVILLE NC
PIN:	1758784708
ZONING:	GC
EXIST USE:	VACANT
OVERLAY:	NONE
FLOOD ZONE:	NO FLOOD HAZARDS AREAS PER FEMA FIRM 3720175800K
IMPERVIOUS:	EXISTING: 4195 SF (.1 ACRES)

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____.

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____.

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City of Raleigh Public Utilities Department Permit # _____

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

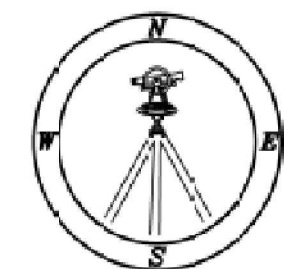
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, 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 relied upon once issued. Any modification to this approval once issued will invalidate this approval.

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

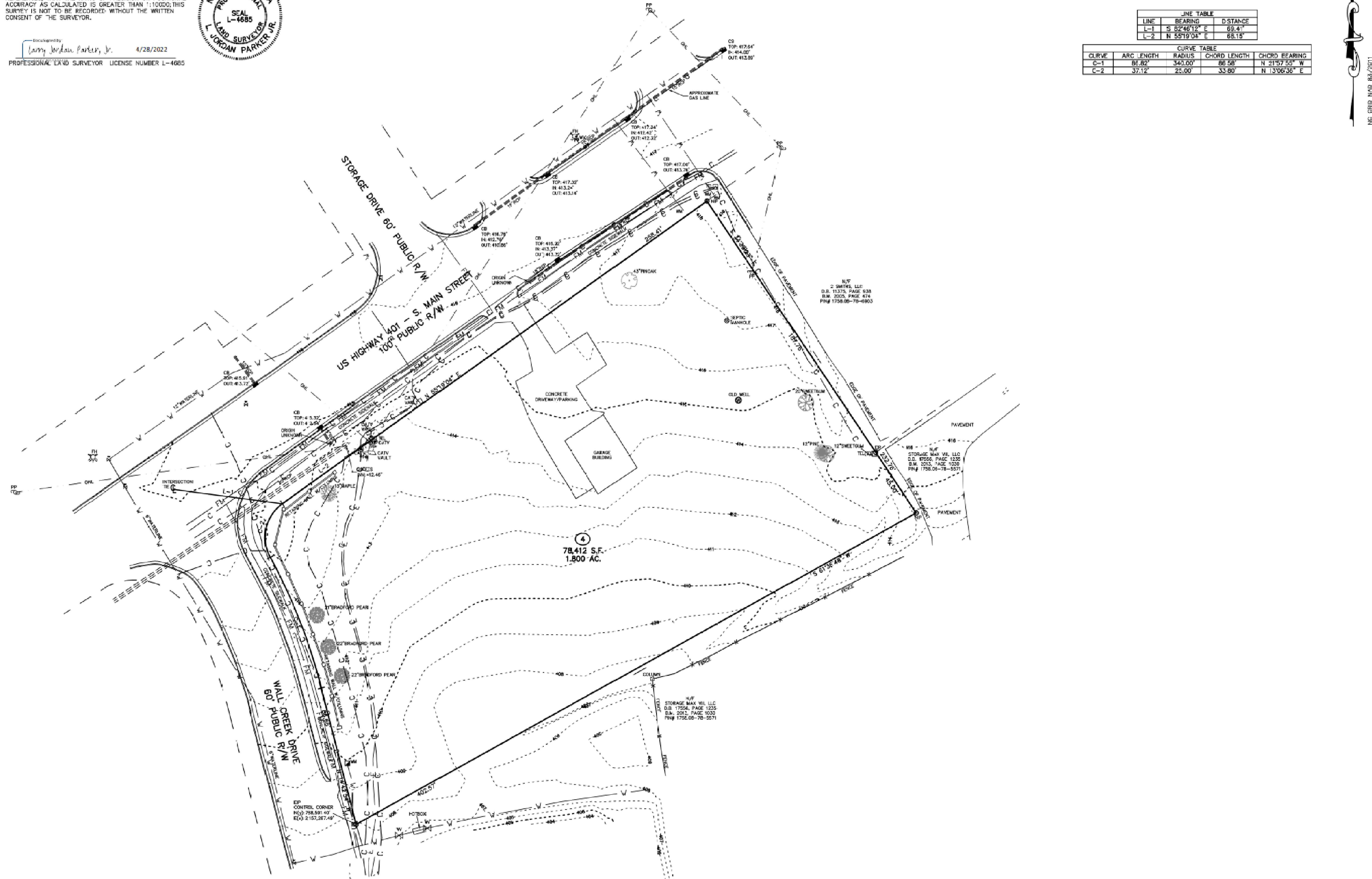
I, CERTIFY THAT THIS PLAN WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY PERFORMED UNDER MY SUPERVISION FROM REFERENCES AS NOTED HERE ON; THAT THE BOUNDARIES NOT SURVEYED ARE CLEARLY INDICATED AS DRAWN FROM INFORMATION SHOWN IN THE REFERENCES; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY AS CALCULATED IS GREATER THAN 1:10000; THIS SURVEY IS NOT TO BE RECORDED WITHOUT THE WRITTEN CONSENT OF THE SURVEYOR.

Surveyed by: Larry Jordan Parker, Jr. 4/28/2022
 PROFESSIONAL LAND SURVEYOR LICENSE NUMBER L-4685



CMP

CAWTHORNE, MOSS & PANCIERA, P.C. PROFESSIONAL LAND SURVEYORS, C-1525, 333 S. WHITE STREET, P.O. BOX 1253, WAKE FOREST N.C., 27588, (919) 556-3148



LINE TABLE			
LINE	BEARING	DISTANCE	
L-1	S 82°42'17" E	69.47'	
L-2	N 59°10'04" E	68.15'	

CURVE TABLE				
CURVE	ARC LENGTH	RADIUS	CHORD LENGTH	CHORD BEARING
C-1	86.80'	340.50'	80.58'	N 21°57'25" W
C-2	37.12'	22.00'	33.80'	N 13°56'36" E



VICINITY MAP

- LEGEND:**
- EP - EXISTING IRON PIPE
 - EB - EXISTING IRON BAR
 - BP - BENT IRON PIPE
 - BB - BENT IRON BAR
 - EM - EXISTING MONUMENT
 - EN - EXISTING NAIL
 - CP - CONCRETE MONUMENT
 - NP - NEW IRON PIPE SET
 - RPW - RIGHT OF WAY
 - CAVY - CABLE TV BOX
 - ES - ELECTRIC SIDE
 - TEL - TELEPHONE PEDESTAL
 - EP - ELECTRIC SIDE
 - OAL - OVERHEAD JUNE
 - LP - LIGHT POLE
 - WM - WATER METER
 - WV - WATER VALVE
 - CCO - CEMENT
 - CS - CONCRETE
 - CB - CATCH BASIN
 - MANH - MANHOLE
 - FH - FIRE HYDRANT

- NOTES:**
- THIS PLAN SUBJECT TO ALL EASEMENTS, AGREEMENTS AND RIGHTS OF WAY OF RECORD PRIOR TO THE DATE OF THIS PLAN.
 - UNDERGROUND UTILITIES HAVE BEEN MARKED OR LOCATED FOR THIS PLAN BY 20' MAPPING FILE.
 - ALL BEARINGS AND DISTANCES ARE HORIZONTAL GROUND MEASUREMENTS.
 - ALL ELEVATIONS ARE BASED ON NAVD 88.
 - ALL CONTOURS ARE AT 1' INTERVALS HIGHLIGHTED EVERY 5'.

LINE TYPE LEGEND

---	PROPERTY LINE - LINE SURVEYED
---	RIGHT-OF-WAY
---	ADJOINING LINE - LINE NOT SURVEYED
---	CHORDING LINE
---	BUILDING SETBACK
---	EASEMENT
---	SETBACK
---	FLOOD HAZARD ZONE
---	ELECTRIC LINE
---	PHONE LINE (ELEV)
---	WATER LINE
---	COMBINATION
---	GAS

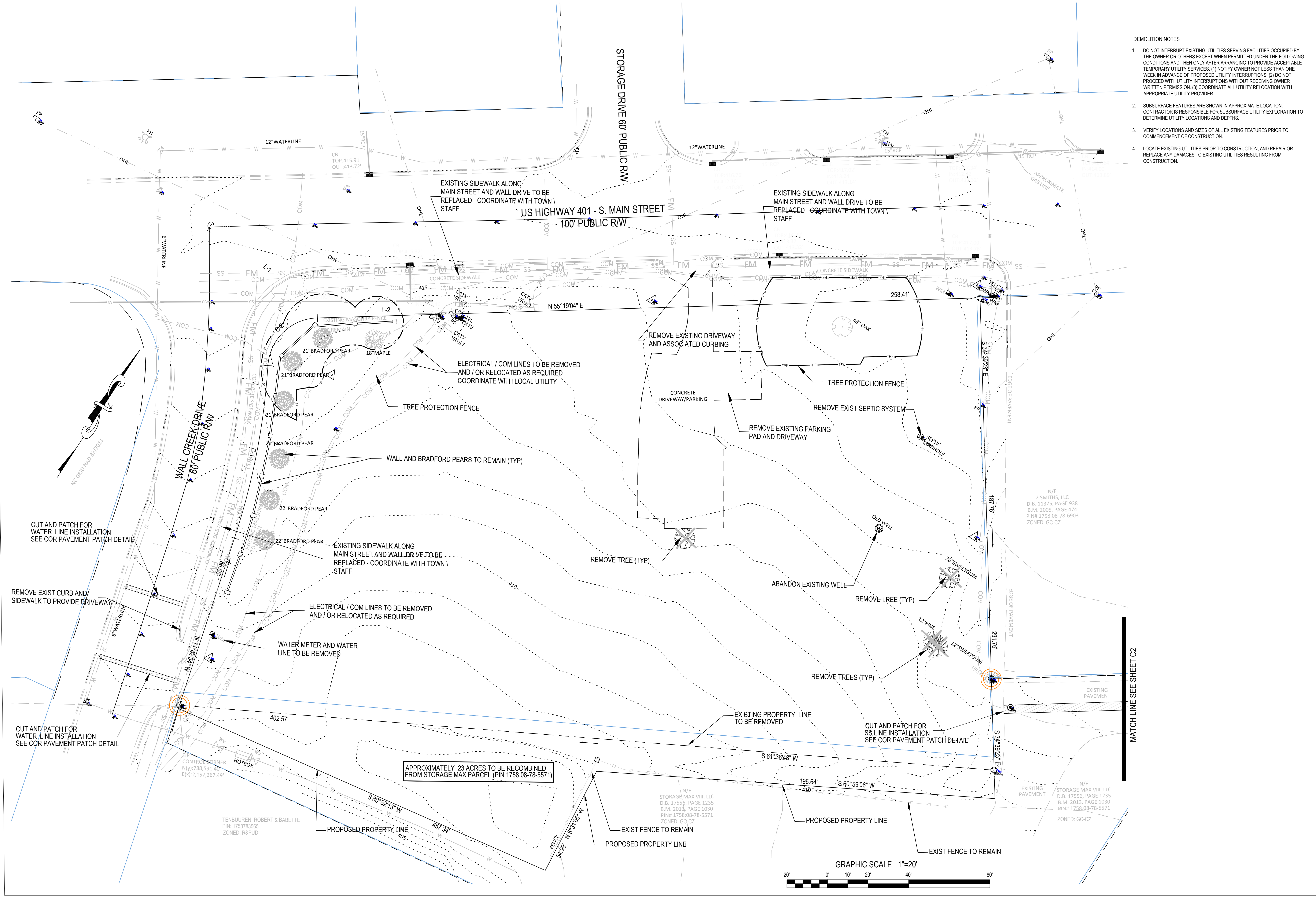
TOPOGRAPHIC SURVEY FOR
TOY STORAGE, LLC
 503 S. MAIN STREET
 LOT 4, HESS INC.
 OWNER: TOY STORAGE, LLC
 REF: D.B. 18244, PAGE 2611
 TOWN OF ROLESVILLE
 WAKE COUNTY, NORTH CAROLINA
 SCALE 1"=30'
 MARCH 3, 2022
 REVISED APRIL 22, 2022
 ZONED R-1
 PIN #1758.07-78-4708

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	07-26-2022	INITIAL SUBMITTAL	KFG
2	10-3-2022	Revised per Town/CDR Comment	KFG
3	01-10-2023	Revised per Town/CDR/Wake Co Comment	KFG
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY

Existing Conditions Survey
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No.



- 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.

Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
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NO	DATE	BY	REVISION DESCRIPTION
1	07/26/2022	KFG	INITIAL SUBMITTAL
2	10/3/2022	KFG	Revised per Town / COR Comment
3	01/10/2023	BY	Revised per Town / COR / Wake Co Comment
4	DATE	BY	COMMENT
5	DATE	BY	COMMENT
6	DATE	BY	COMMENT
7	DATE	BY	COMMENT
8	DATE	BY	COMMENT



Existing Conditions / Demolition Plan
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

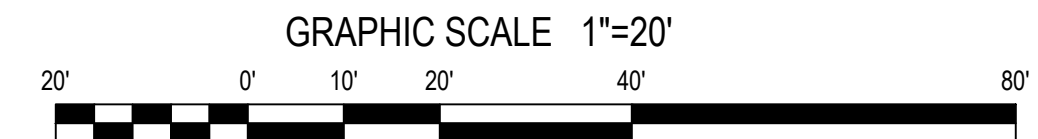
Project No. 22003
 Dwg No. **C1**

N/F
 2 SMITHS, LLC
 D.B. 11375, PAGE 938
 B.M. 2005, PAGE 474
 PIN# 1758.08-78-6903
 ZONED: GC-CZ

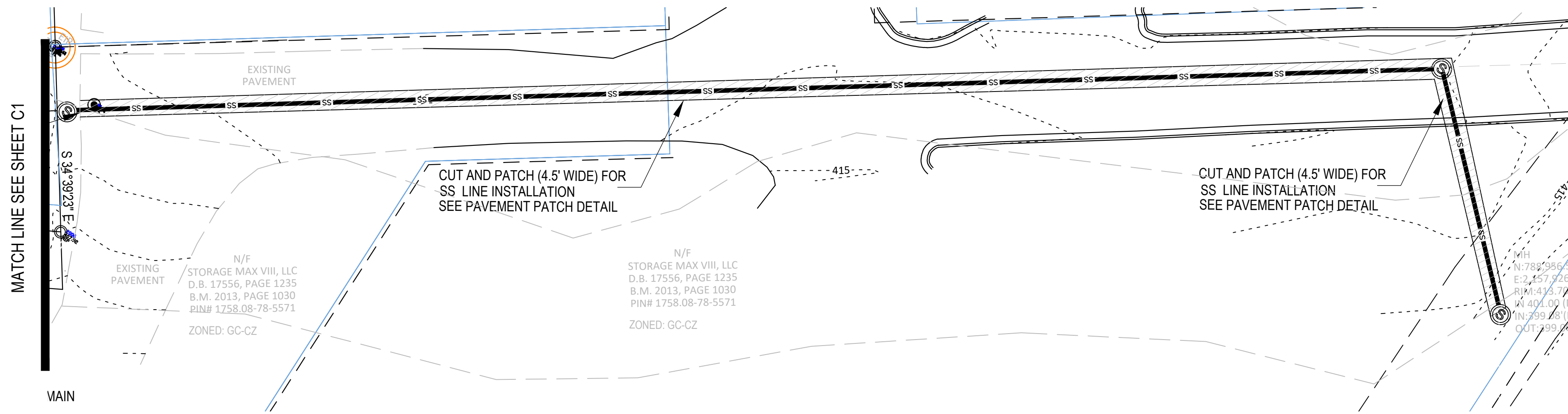
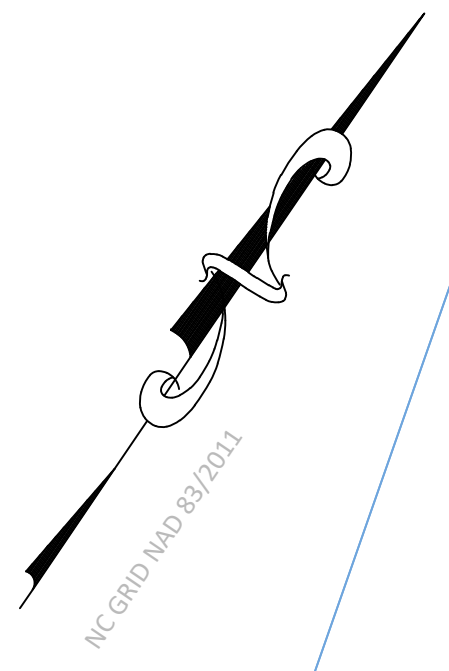
N/F
 STORAGE MAX VIII, LLC
 D.B. 17556, PAGE 1235
 B.M. 2013, PAGE 1030
 PIN# 1758.08-78-5571
 ZONED: GC-CZ

TENBUUREN, ROBERT & BABETTE
 PIN: 1758783565
 ZONED: R&PUD

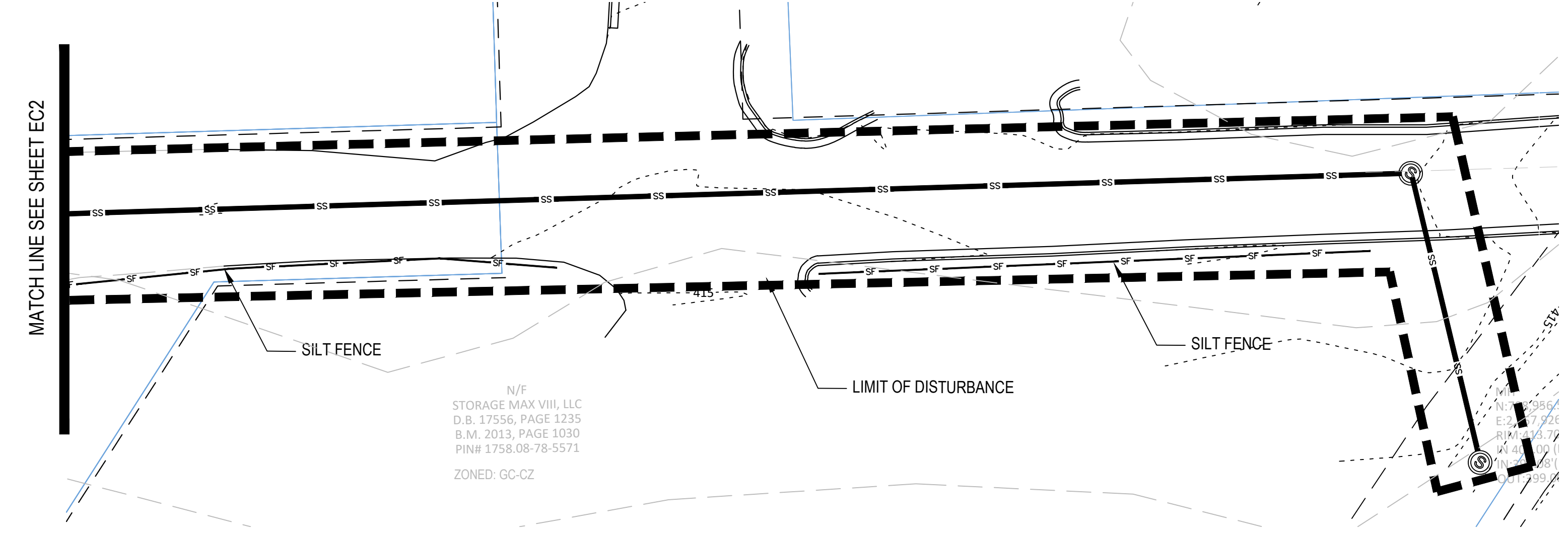
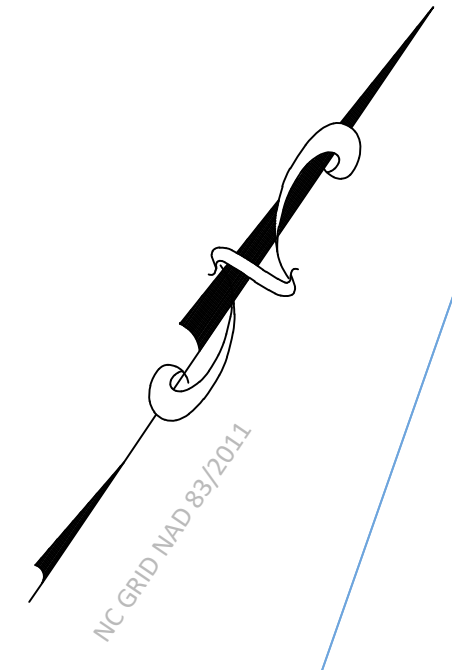
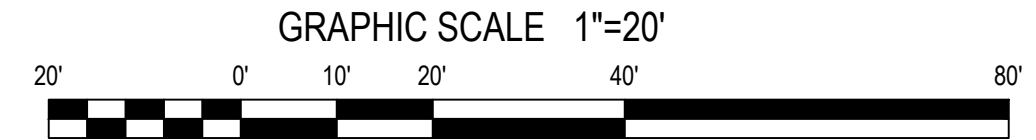
APPROXIMATELY .23 ACRES TO BE RECOMBINED
 FROM STORAGE MAX PARCEL (PIN 1758.08-78-5571)



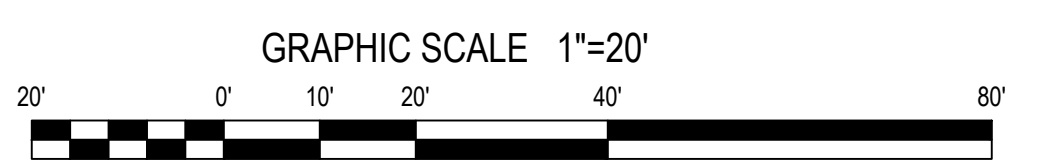
MATCH LINE SEE SHEET C2



SS Extension - Existing Conditions and Demo



SS Extension - Erosion Control



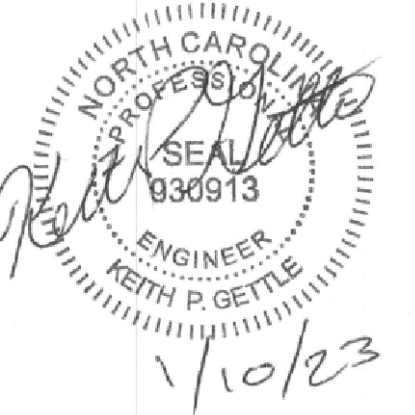
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3616 Waxwing Court,
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NO.	DATE	REVISION DESCRIPTION	BY
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2	10/3/2022	Revised per Town CGR Comment	
3	01/10/2023	Revised per Town CGR / Wake Co Comment	
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY



NOTES

- SEE SHEET C6 FOR UTILITY NOTES.

SITE PERMITTING APPROVAL

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City of Raleigh Public Utilities Department Permit # _____

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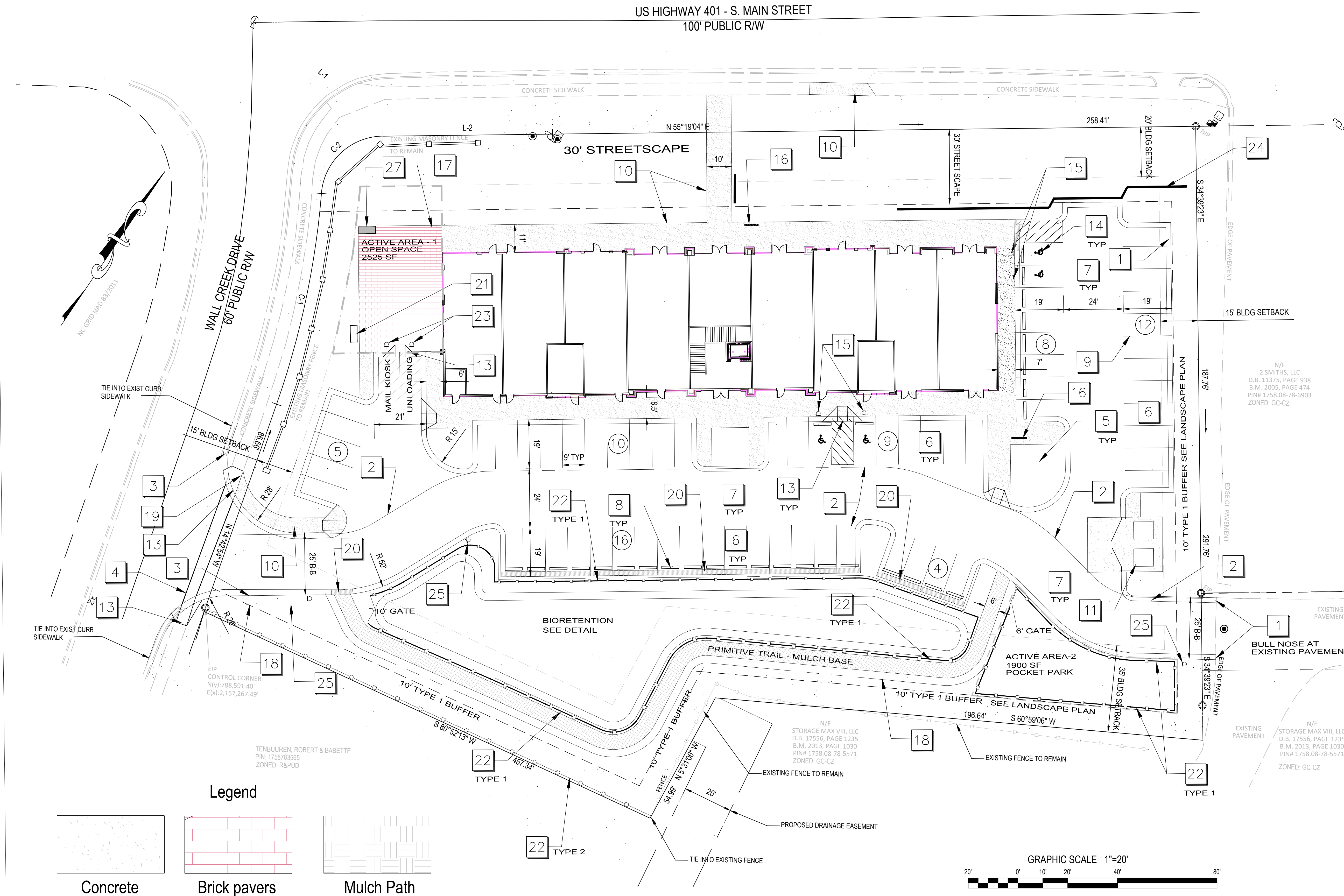
City of Raleigh Development Approval _____
City of Raleigh Review Officer

Demo & Erosion SS Extension
South Main
503 South Main Street
Rolesville, Wake County, North Carolina

Project No. 22003

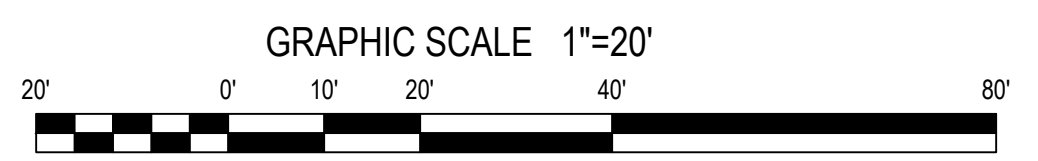
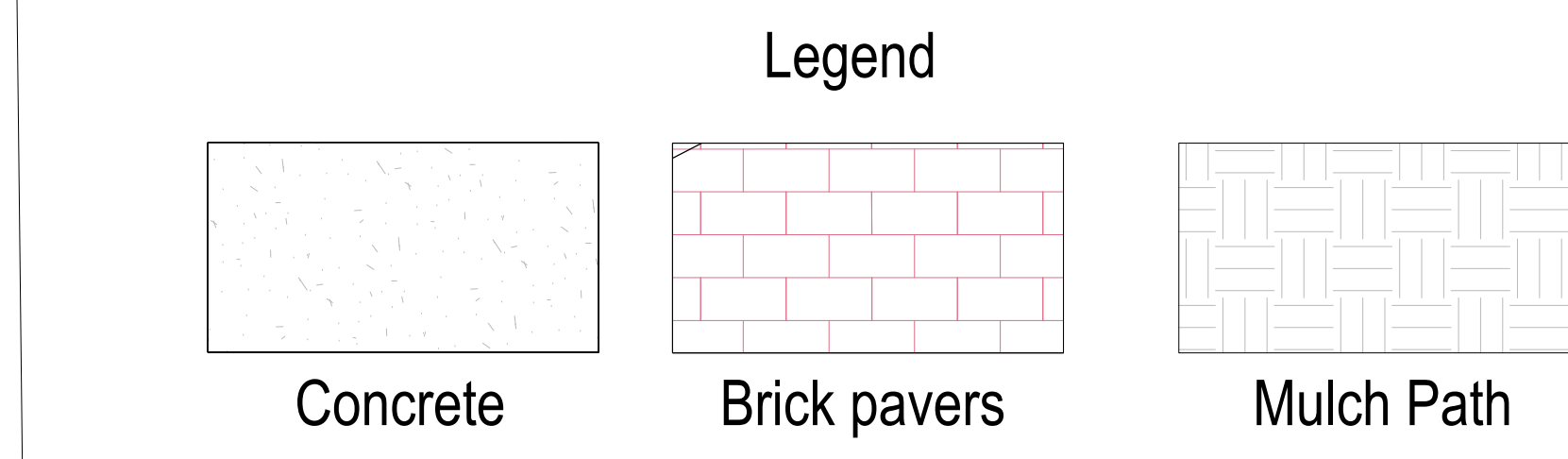
Dwg No. **C2**

Stormwater Summary		
	Square Feet	Acres
Overall Site	88,427.00	2.03
Impervious Summary		
	Square Feet	Acres
Pre		
Parking Lot	435.60	0.01
Managed Pervious	77,972.00	1.79
Total		1.80
Post		
Parking Lot	38,332.80	0.88
Roof	13,503.60	0.31
Open Landscape	17,859.60	0.41
Managed Pervious	8,712.00	0.20
Total		1.80



- KEY** **KEYED NOTES - SITE PLAN**
- 1 24" STANDARD CONCRETE CURB AND GUTTER - ON SITE
 - 2 25' CROSS ACCESS EASEMENT WITH 24" WIDE DRIVE
 - 3 TRANSITION FROM 30" CURB & GUTTER TO 24" CURB & GUTTER AT CURB TURNOUT. TIE INTO EXISTING CURB PAINTED STRIPING FOR CROWSLAK
 - 4 LANDSCAPE ISLAND - SEE LANDSCAPE PLAN
 - 5 STANDARD-DUTY BITUMINOUS PAVING - PRIMARILY IN PARKING AREAS
 - 6 HEAVY-DUTY BITUMINOUS PAVING - PRIMARILY IN DRIVE AISLES - SEE DETAIL
 - 7 WHEEL STOP - SET 24" CLEAR FROM EDGE OF SPACE AT HANDICAP PARKING
 - 8 PAINTED PARKING SPACE STRIPING USING 4" WIDE WHITE STRIPES
 - 9 4" THK. STANDARD CONCRETE WALK, 6' WIDE UNLESS OTHERWISE NOTED
 - 10 DUMPSTER ENCLOSURE & PAD - SEE DETAIL
 - 11 LIGHT POLE AND FIXTURE - SEE LIGHTING PLAN
 - 12 HANDICAP RAMP, SEE DETAIL. UPDATE EXISTING AS NEEDED
 - 13 PAINTED UNIVERSAL HANDICAPPED SYMBOL AND HANDICAPPED ACCESS AISLE STRIPING
 - 14 HANDICAP PARKING SIGNAGE - SEE DETAIL TYPICAL AT HANDICAP PARKING SPACES
 - 15 BICYCLE PARKING RACK - SEE DETAIL
 - 16 PAVERS AT OPEN AREA - MATCH ARCHITECTURAL
 - 18 BMP STORMWATER EASEMENT
 - 19 TIE INTO EXISTING SIDEWALK
 - 20 24" CONCRETE EDGE FLUSH TO PAVEMENT (AREA SHADED)
 - 21 MAIL KIOSK - SEE DETAIL
 - 22 FENCE - SEE DETAILS (SHEET D1)
 - 23 MAIL KIOSK AND UNLOADING PARKING SIGNS
 - 24 SEGMENTAL BLOCK RETAINING WALL SEE DETAIL (SHEET D2)
 - 25 "NO PARKING - FIRE LANE" SIGN
 - 27 BRICK PLANTER - SIZE / DETAIL DESIGN BY OWNER

- SITE NOTES**
1. 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.
 2. ALL CURB DIMENSIONS ARE MEASURED TO BACK OF CURB, AND ALL CURB RADII ARE 5 FEET, UNLESS INDICATED OTHERWISE.
 3. 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.
 4. ALL SITE CONCRETE SHALL HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI UNLESS OTHERWISE INDICATED.
 5. ALL BASE AND PAVING WORK SHALL COMPLY WITH LOCAL STANDARDS. INDICATED PAVEMENT THICKNESSES REFER TO COMPACTED THICKNESS.
 6. INSTALL ALL PAVEMENT WITH POSITIVE SURFACE DRAINAGE.
 7. ALL HANDICAPPED PARKING SPACES, AISLES, RAMPS, SIGNAGE, PAVEMENT MARKINGS, CROSSWALKS, AND ACCESSIBLE ROUTES SHALL MEET APPLICABLE REQUIREMENTS OF THE NORTH CAROLINA ACCESSIBILITY CODE.
 8. 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.
 9. 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.
 10. 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.
 11. 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 ENDOURCH INTO REQUIRED SETBACKS.



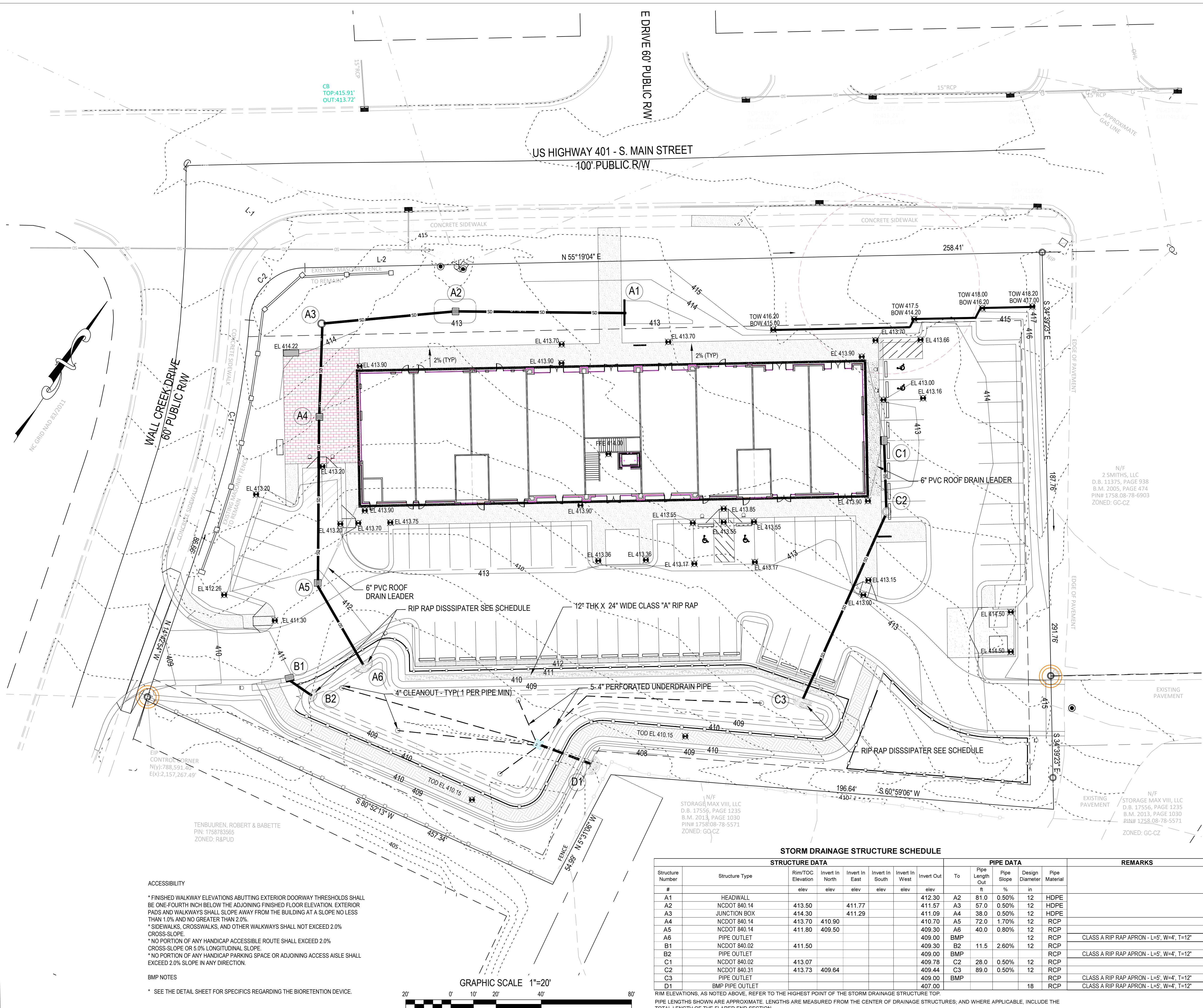
Gettle Engineering and Design, PLLC
 3616 Waxwing Court,
 Wake Forest, North Carolina 27587
 (919) 210-3934 Firm License P-2538

NO.	DATE	REVISION/DESCRIPTION	BY
1	07-28-2022	INITIAL SUBMITTAL	RF
2	10-3-2022	Revised per Town CGR Comment	RF
3	01-10-2023	Revised per Town CGR / Wake Co Comment	RF
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
7	DATE	COMMENT	BY



Site Plan
 South Main Street
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **C3**



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 ROLESVILLE, 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 PROOFLING, AND PROVIDE COMPACTON 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, SUBGRADE 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 PROOFLING 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 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, BUT 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 COMPACTON 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 ROLESVILLE 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 CURBS AND GUTTER WHERE ADJACENT PAVEMENT SLOPES AWAY FROM CURB, AND STANDARD-PITCH CURBS AND GUTTER ELSEWHERE, UNLESS OTHERWISE NOTED. PROVIDE POSITIVE DRAINAGE ALONG AND FROM ALL GUTTERS.
- 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.
- THE-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.

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	
#		elev	elev	elev	elev	elev	ft	%	in				
A1	HEADWALL					412.30	A2	81.0	0.50%	12	HDPE		
A2	NCDOT 840.14	413.50		411.77		411.57	A3	57.0	0.50%	12	HDPE		
A3	JUNCTION BOX	414.30		411.29		411.09	A4	38.0	0.50%	12	HDPE		
A4	NCDOT 840.14	413.70	410.90			410.70	A5	72.0	1.70%	12	RCP		
A5	NCDOT 840.14	411.80	409.50			409.30	A6	40.0	0.80%	12	RCP		
A6	PIPE OUTLET					409.00	BMP			12	RCP		
B1	NCDOT 840.02	411.50				409.30	B2	11.5	2.60%	12	RCP		
B2	PIPE OUTLET					409.00	BMP			12	RCP		
C1	NCDOT 840.02	413.07				409.78	C2	28.0	0.50%	12	RCP		
C2	NCDOT 840.31	413.73	409.64			409.44	C3	89.0	0.50%	12	RCP		
C3	PIPE OUTLET					409.00	BMP			12	RCP		
D1	BMP PIPE OUTLET					407.00				18	RCP		

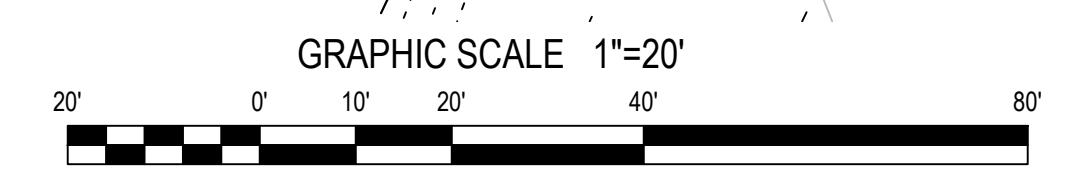
RIM ELEVATIONS, AS NOTED ABOVE, REFER TO THE HIGHEST POINT OF THE STORM DRAINAGE STRUCTURE TOP. PIPE LENGTHS SHOWN ARE APPROXIMATE. LENGTHS ARE MEASURED FROM THE CENTER OF DRAINAGE STRUCTURES, AND WHERE APPLICABLE, INCLUDE THE TOTAL LENGTH OF THE FLARED END SECTION.

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 OF 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.



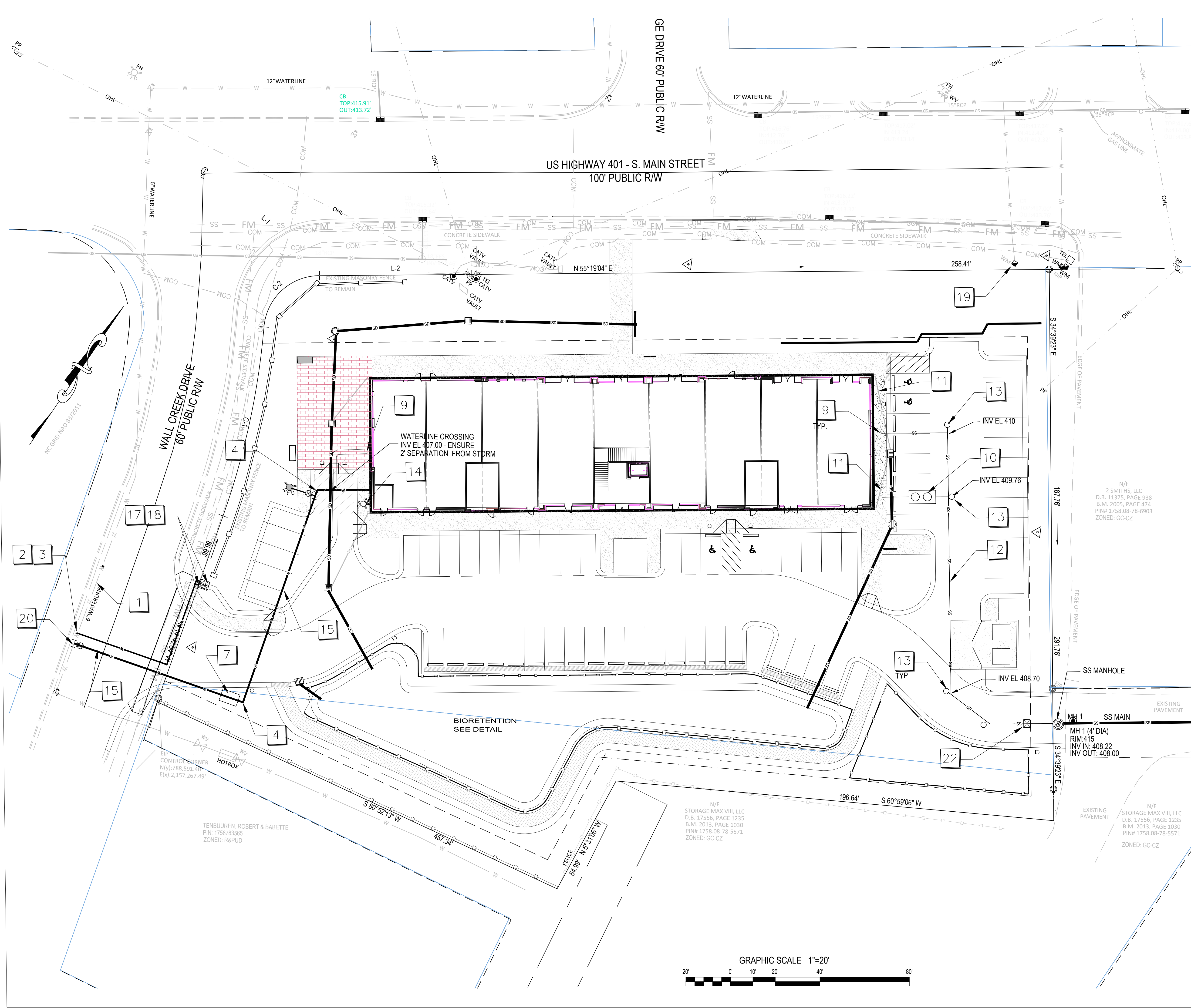
Gettle Engineering and Design, PLLC
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Grading \ Storm Drainage
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **C4**

NO.	DATE	REVISION DESCRIPTION	BY
1	03-26-2023	INITIAL SUBMITTAL	PCS
2	03-26-2023	Revised per Town Code Values Comment	PCS
3	03-26-2023	Revised per Town Code Values Comment	PCS
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY

ENGINEER
 NORTH CAROLINA
 936913
 1/10/23
 NORTH P. GETTLE



- KEY**
- 1 6" 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 MU BEND AND RESTRAINT.
 - 5 CONTRACTOR SHALL MAKE APPLICATION FOR ELECTRIC SERVICE, COORDINATE INSTALLATION, AND PROVIDE ALL MATERIALS AND WORK NOT PROVIDED BY THE ELECTRIC COMPANY. VERIFY ROUTE AND LOCATIONS WITH ARCHITECT AND SERVICE PROVIDER.
 - 6 ELECTRIC METER LOCATION ON BUILDING - VERIFY EXACT LOCATION WITH ARCHITECT AND SERVICE PROVIDER.
 - 7 6" BACKFLOW PREVENTER DEVICE (RPDA), RALEIGH APPROVED, LOCATED IN AN "ABOVE GROUND" HEATED ENCLOSURE.
 - 8 INSTALL SITE LIGHTING CIRCUIT IN BUILDING ELECTRICAL PANEL AND ROUTE TO SITE LIGHTING FIXTURES. PROVIDE AND INSTALL CONDUIT AS NEEDED. VERIFY DETAILS WITH OWNER AND ARCHITECT, AND SERVICE PROVIDER.
 - 9 EXTEND SITE UTILITIES TO A POINT WITHIN 5 FEET OF THE BUILDING WALL(S). BUILDING PLUMBER SHALL MAKE ALL UTILITY CONNECTIONS.
 - 10 1500 GALLON GREASE INTERCEPTOR w/ TRAFFIC RATED ACCESS LIDS
 - 11 PVC DOWNSPOUT PIPE HEADER. TIE INTO STORM DRAIN STRUCTURE. FIELD VERIFY LOCATION / ELEVATION
 - 12 6" PVC, SDR-35, PRIVATE SANITARY SEWER LATERAL WITH CLEANOUTS AT ALL BENDS AND A MAX SPACING OF 75 FEET-MIN 1% SLOPE.
 - 13 SANITARY SEWER CLEANOUT (SEE DETAIL AND NOTES). USE TRAFFIC BEARING CLEANOUT IN PAVEMENT AREAS.
 - 14 FIRE DEPARTMENT CONNECTION TYPE SHALL BE 5 INCH STORZ, WITH MU FITTINGS AS NEEDED.
 - 15 6" DUCTILE IRON PIPE WATER LINE, 38" BELOW FINISH GRADE
 - 16 FIRE HYDRANT ASSEMBLY WITH 6" VALVE AND BOX. SEE COR DETAIL W4.
 - 17 2" GANG METER ASSEMBLY - SEE COR DETAIL W26
 - 18 2" RP BACKFLOW ASSEMBLY BY WATTS OR APPROVED EQUAL
 - 19 EXISTING WATER METER TO BE REMOVED / ABANDONED
 - 20 6"x6" TAPPING SLEEVE AND 6" GATE VALVE
 - 21 20' PRIVATE SANITARY SEWER EASEMENT
 - 22 SANITARY SEWER BACKWATER VALVE - SEE COR DETAIL S-38

- NOTES**
1. SEE SHEET C4 FOR STORM DRAIN SCHEDULE.
 2. SEE SHEET C6 FOR SANITARY SEWER PLAN AND PROFILE.

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

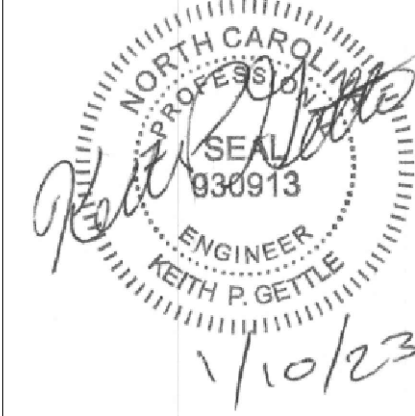
Plans for the proposed use have been reviewed for general compliance with applicable codes. This limited review, and authorization for construction is not to be considered to represent total compliance with all legal requirements for development and construction. The property owner, design consultants, 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 _____

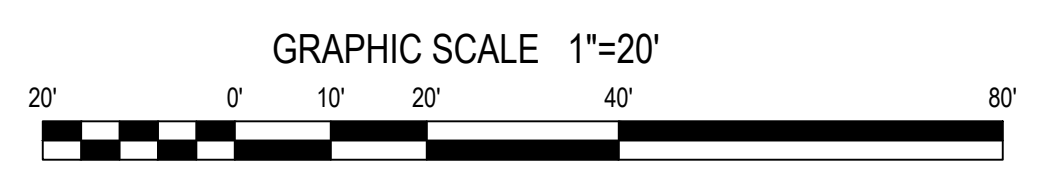
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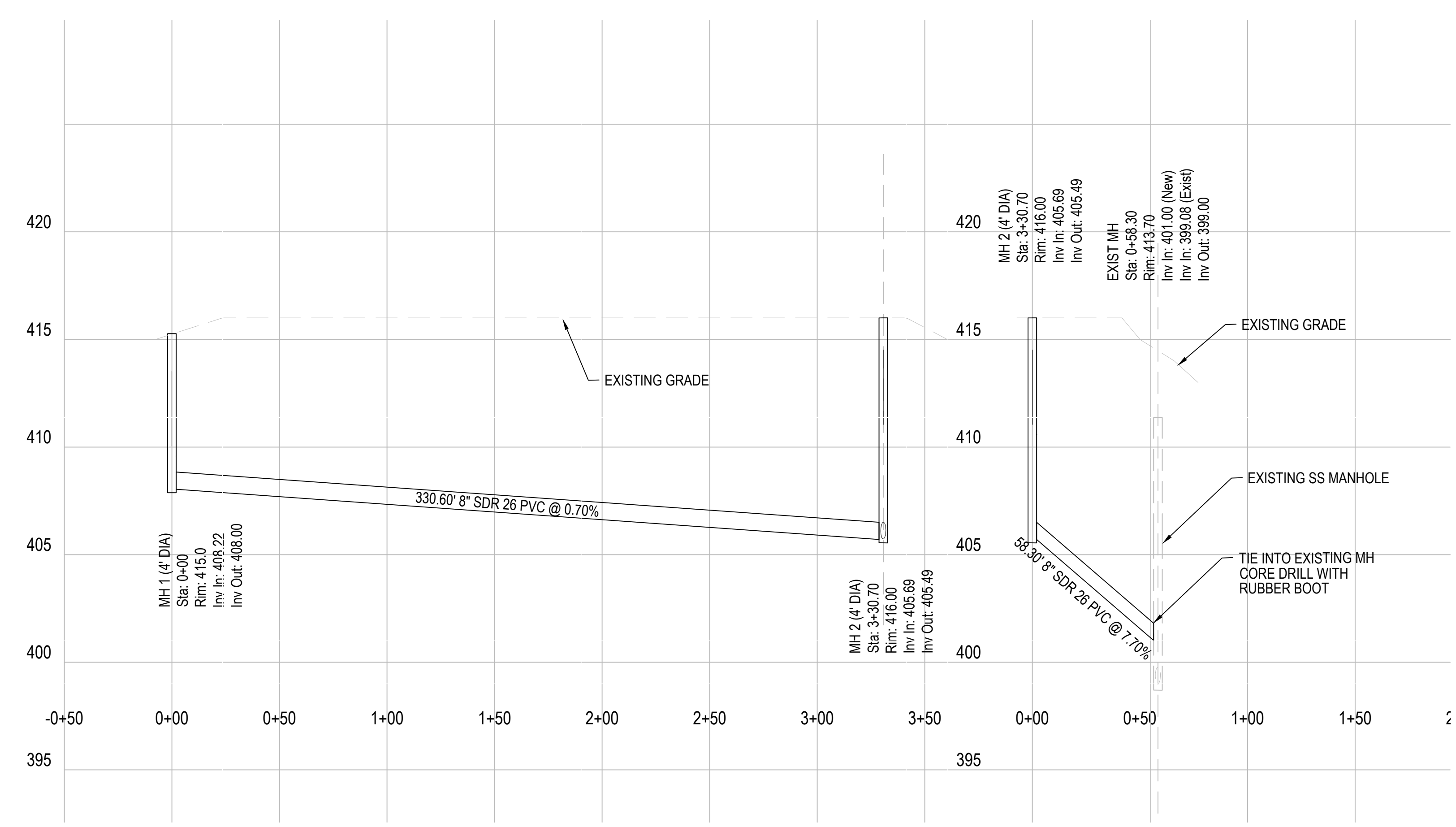
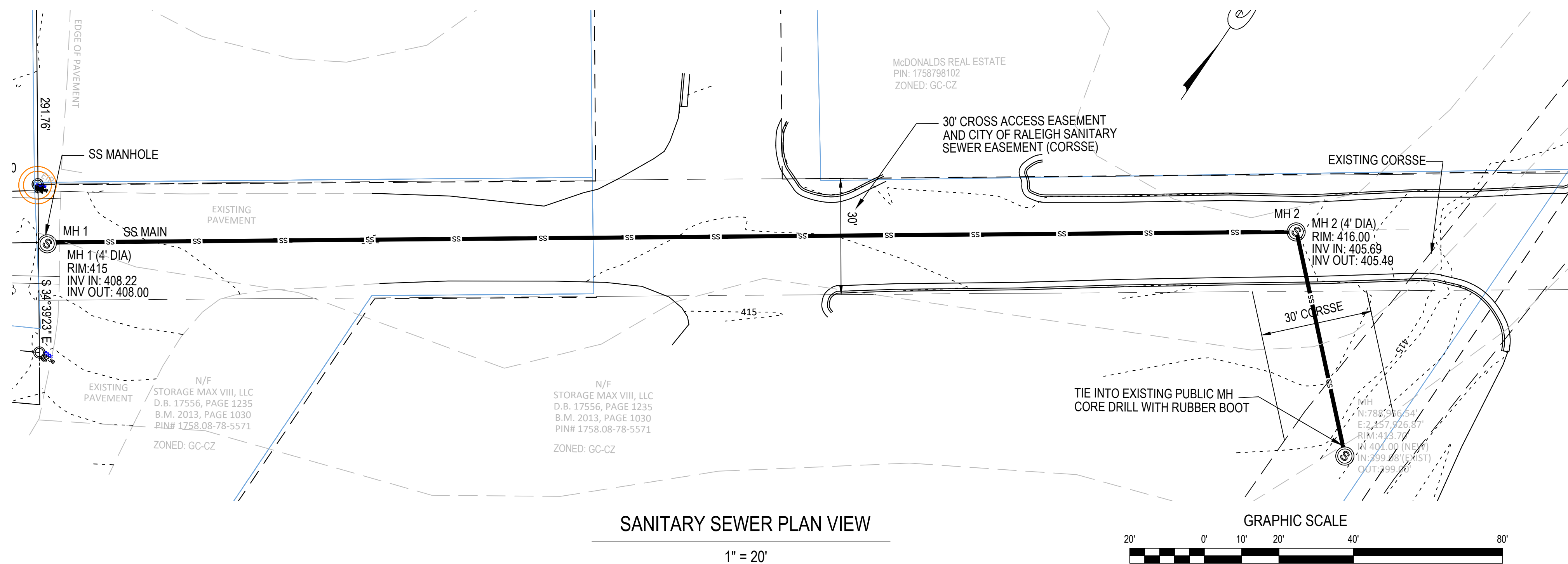
NO.	DATE	REVISION/DESCRIPTION	BY
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6	DATE	COMMENT	BY
8	DATE	COMMENT	BY



Utility Plan
South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **C5**





- 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 OF CONSTRUCTION STANDARDS AND SPECIFICATIONS, CONSTRUCTION DETAILS, POLICIES AND PROCEDURES, AND FIELD DIRECTIVES BY THE UTILITY INSPECTOR.
 - REGULATIONS OF NC DENR-DIVISION OF WATER QUALITY, INCLUDING NCAC 27 REGULATIONS AND MINIMUM DESIGN CRITERIA FOR THE PERMITTING OF GRAVITY SEWERS.
 - REGULATIONS OF NC DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES, INCLUDING THE N.C. 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 MUST 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 8 INCH MAXIMUM THICKNESS AND COMPACTED TO 98% OF THE SOIL'S MAXIMUM DRY DENSITY, WITHOUT DAMPING 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, CROSSINGS, 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 F477.
 - 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 NC DENR 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 NC DENR 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.

- CITY OF RALEIGH UTILITY NOTES:**
- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: COR PUD 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 WATERLINE SPECIFICATIONS. HOWEVER, THE MINIMUM SEPARATION SHALL NOT BE LESS THAN 25' FROM A PRIVATE WELL OR 50' FROM A PUBLIC WELL.
 - WHEN INSTALLING WATER & COR 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 CROSSINGS MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
 - 5' 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 24" 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).
 - ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
 - 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.
 - CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER 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' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS. 4' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
 - IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER AND 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'X2' WATERLINE EASEMENT IMMEDIATELY ADJACENT. (NOTE: IT IS THE APPLICANT'S RESPONSIBILITY TO PROPERLY SIZE THE WATER SERVICE FOR EACH CONNECTION TO PROVIDE ADEQUATE FLOW AND PRESSURE.)
 - INSTALL 4" PVC SEWER SERVICES AT 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE AND SPACED EVERY 75 LINEAR FEET MAXIMUM.
 - PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI. BACKFLOW VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1' ABOVE THE NEXT UPSTREAM MANHOLE.
 - ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NC DOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
 - NC DOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS AND SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
 - GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS AND INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919)996-2334 OR TIMOTHY.BEASLEY@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 CHECKER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 212-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.
- NOTES**
- SEE SHEET C5 FOR UTILITY PLAN.

ATTENTION CONTRACTORS

The Construction Contractor responsible for the extension of water, sewer, and/or reuse, as approved in these plans, is responsible for contacting the **Public Works Department** at (919) 996-2499, and the **Public Utilities Department** at (919) 996-2540 at least **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 reinstallation 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 Exclusion** from future work in the City of Raleigh.

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Form # **S-7777**.

The City of Raleigh consents to the connection and extension of the City's Public Water System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Form # **S-7777**.

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Form # _____

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 does not 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 Laws 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 create 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 _____

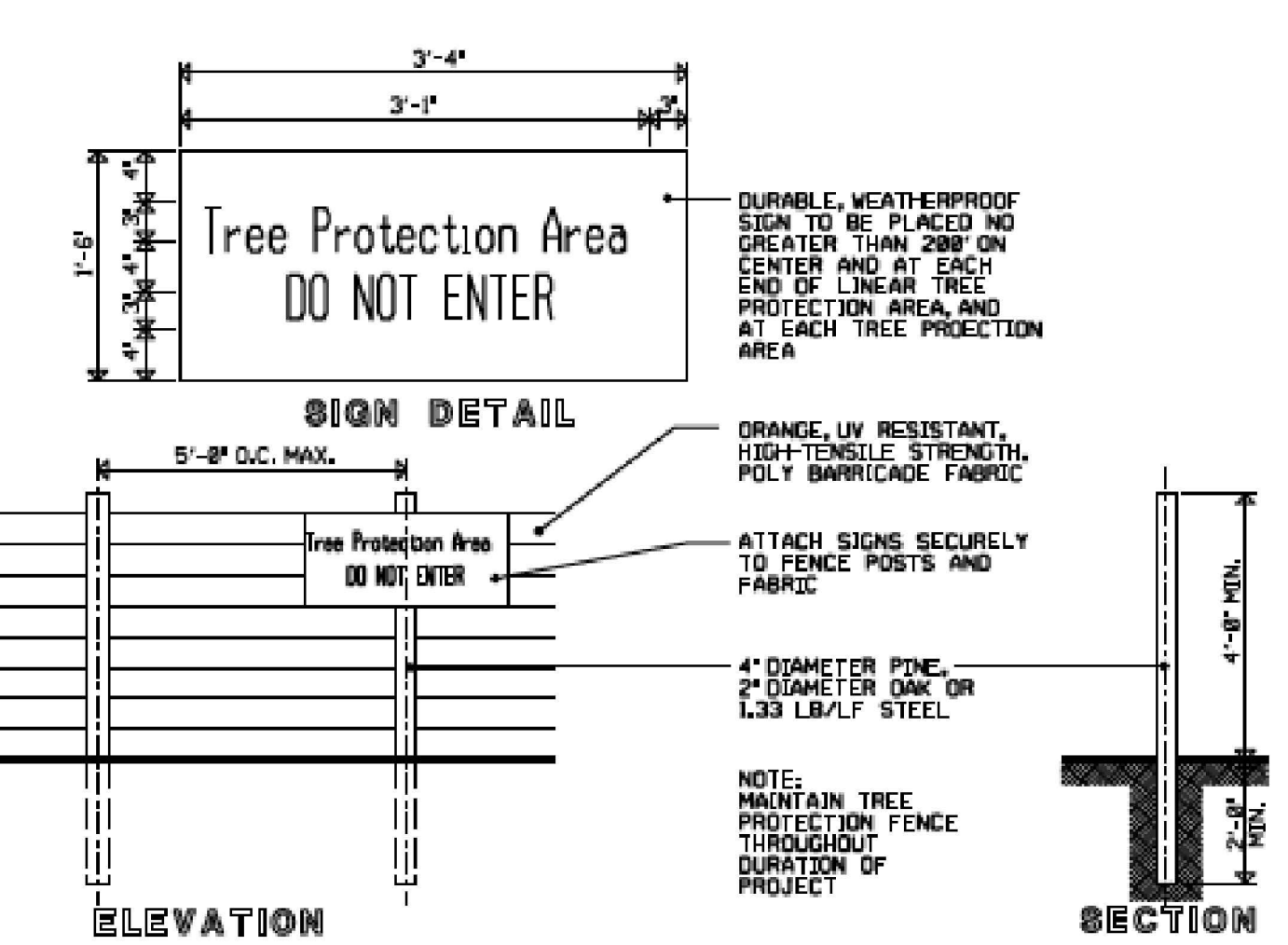
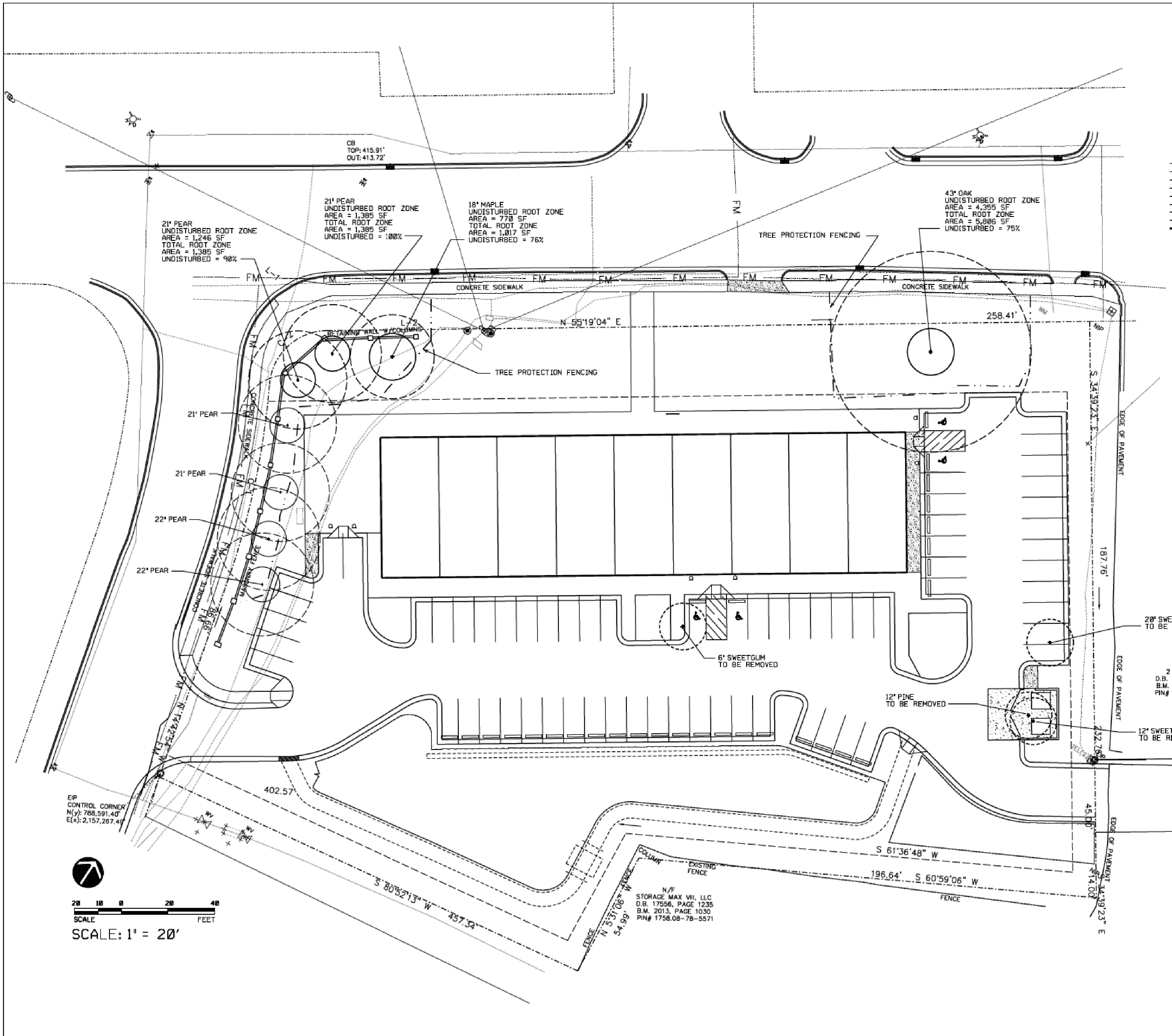
Gettle Engineering and Design, PLLC
3616 Waxwing Court,
Wake Forest, North Carolina 27587
Firm License P-2538
(919) 210-3934

NO	DATE	REVISION/DESCRIPTION
1	07-08-2022	INITIAL SUBMITTAL
2	10-2-2022	Revised per Town / COR Comment
3	01-10-2023	Revised per Town / COR / Wake Co. Comment
4		BY
5		DATE
6		COMMENT
7		BY
8		DATE
9		COMMENT
10		BY
11		DATE
12		COMMENT

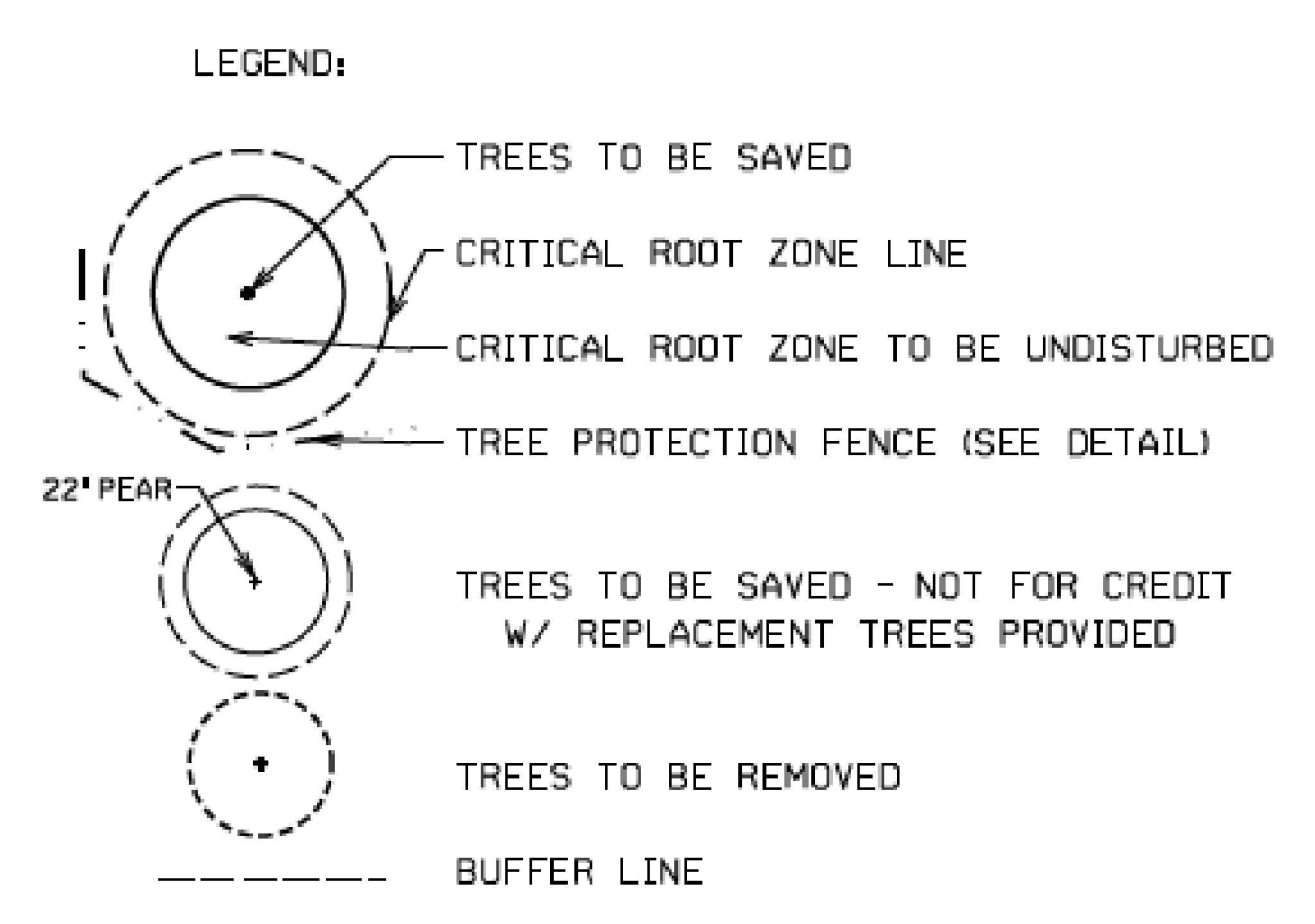


Plan and Profile - Sanitary Sewer
South Main
503 South Main Street
Rolesville, Wake County, North Carolina

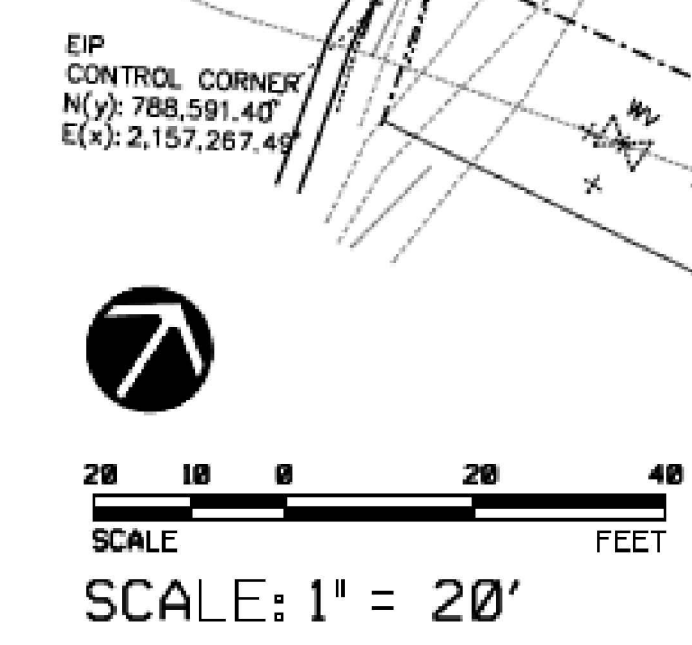
Project No. 22003
Dwg No. **C6**



TREE PROTECTION FENCE NOTES



- NOTE:**
- LOCATE AND INSTALL TREE PROTECTION FENCING PRIOR TO ANY CLEARING OR LAND DISTURBANCE. TREE PROTECTION FENCE TO REMAIN IN PLACE FOR THE DURATION OF CONSTRUCTION AND UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED.
 - CRITICAL ROOT ZONE AREAS - AREAS WITHIN THE TREE PROTECTION FENCING - SHALL REMAIN FREE OF ANY DISTURBANCE AND OF ALL BUILDING MATERIALS AND DEBRIS.



N/F
STORAGE MAX VII, LLC
D.B. 17556, PAGE 1235
B.M. 2013, PAGE 1030
PIN# 1758.08-78-5571

N/F
2 SMITHS, LLC
D.B. 11375, PAGE 938
B.M. 2005, PAGE 474
PIN# 1758.08-78-6903

ALISON A. POCKET, ASLA
LANDSCAPE ARCHITECT
LAND PLANNER

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



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3616 Waxwing Court,
Wake Forest, North Carolina 27587
(919) 210-3934 Firm License P-2638

NO.	DATE	REVISION/DESCRIPTION	BY
1	07/26/2022	INITIAL SUBMITTAL	KPS
2	10/3/2022	Revised per Town COB Comment	KPS
3	01/10/2023	Revised per Town COB (Wake Co Comment)	KPS
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
7	DATE	COMMENT	BY
8	DATE	COMMENT	BY

Preservation Plan
South Main
503 South Main Street
Rolesville, Wake County, North Carolina

Project No. 22003
Dwg No. **LS1**

PLANT LIST

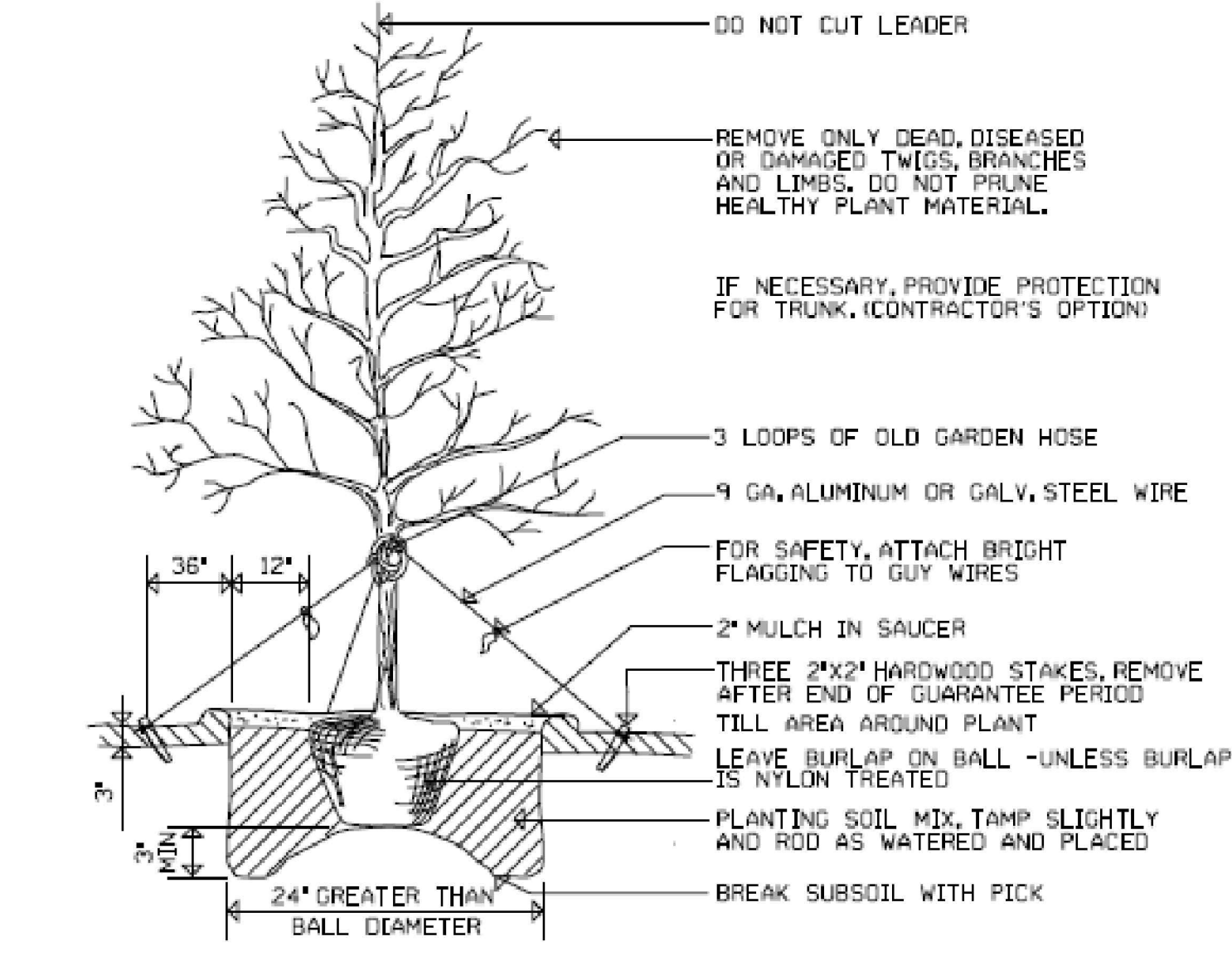
KEY	COUNT	PLANT NAME	SIZE	ON / CENTER SPACING	PLANTING REQUIREMENT			
					6.2.2.2.B STREET	6.2.4.4.G BUFFER	6.2.4.5.B.3 PARKING	6.2.4.5.B.3 MITIGATION
SHADE TREES								
LS	13	LIQUIDAMBAR STYRACIFLUA 'ROTUNDILOBA', FRUITLESS SWEETGUM	2.5'CAL, 8-10'HT	20'	X	X	X	X
NS	12	NYSSA SYLYATICA, BLACK GUM	2.5'CAL, 8-10'HT	20'	X	X	X	
OC	10	QUERCUS COCCINEA, SCARLET OAK	2.5'CAL, 8-10'HT	20'	X	X	X	
UNDERSTORY TREES								
CC	4	CERCIS CANADENSIS, EASTERN REDBUD	#10, 8'HT	15'			X	
CV	4	CHIONANTHUS VIRGINICUS, FRINGE TREE	#10, 8'HT	15'	X	X	X	
ID	3	ILEX OPACA 'TINGA', TINGA AMERICAN HOLLY	8'HT, B&B	15'		X	X	
JV	3	JUNIPERUS VIRGINIANA, EASTERN RED CEDAR	8'HT, B&B	15'	X	X	X	
SHRUBS								
HF	64	HYPERICUM FRONDOSUM 'SUNBURST', ST JOHN'S WORT	#03, 15-18'HT	3'		X	X	
IF	44	ILLCIUM FLORIDANUM 'MISS SCARLET', ANISE	#03, 18-24'HT	3'		X	X	
IG	89	ILEX GLABRA 'SHAMROCK', SHAMROCK INKBERRY	#03, 24-30'HT	4'		X	X	
IV	19	ITEA VIRGINICA 'LITTLE HENRY', SWEETSPIRE	#03, 15-18'HT	3'		X	X	
LP	43	LEUCOTHOE POPULIFOLIA, FLORIDA LEUCOTHOE	#03, 24-30'HT	5'		X	X	
MC	50	MYRICA CERIFERA, WAX MYRTLE	#03, 24-30'HT	5'		X		
RG	32	RHUS X 'GROW LOW', GROW LOW SUMAC	#03, 15-18'HT	3'			X	
VO	70	VIBURNUM OBOVATUM 'MRS SCHILLER'S DELIGHT', VIBURNUM	#03, 18-24'HT	4'		X	X	
GRASSES								
MU	28	MUHLENBERGIA CAPILLARIS, PINK MUHLY GRASS	#03	3'				

SEEDED AREAS

ERNMX 306 - NC PIEDMONT UPL MEADOW MIX - 1 LB
 PANICUM RIGIDULUM - REDTOP PANIC GRASS - 2 LB

NOTES:

- SEED LISTED ON THE PLAN CAN BE OBTAINED THROUGH ERNST SOUTHERN NATIVE SEEDS - www.ernstseed.com - PHONE NUMBER 1-800-873-3321.



NOTE: GUYING IS REQUIRED ONLY ON TREES OVER 10' HIGH. SET TREE AT IT'S ORIGINAL GRADE. COLLAR LINE MUST MATCH THE NEW SOIL LINE.

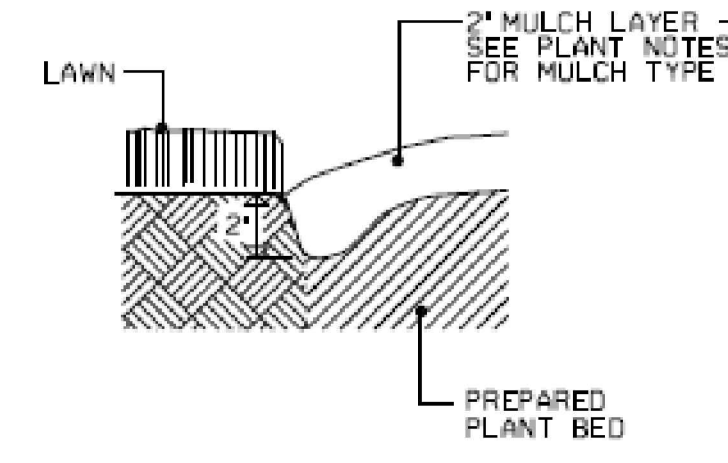
TREE PLANTING DETAIL NTS

NOTES FOR THE ENHANCED PROTECTION OF THE 42' OAK

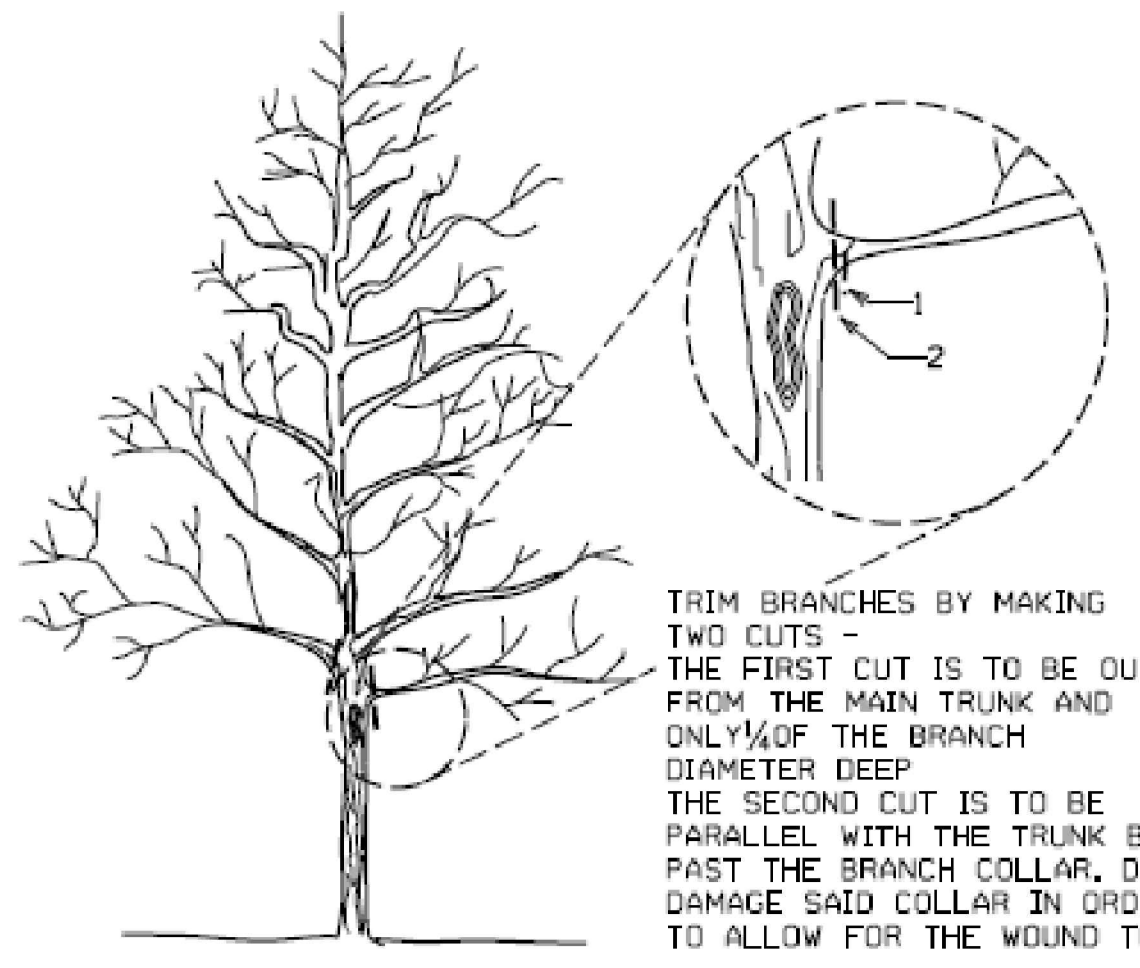
- PLACE TREE PROTECTION FENCING AS SHOWN ON PLAN.
- MULCH THE AREA WITHIN THE TREE PROTECTION FENCING WITH 1 - 3" OF WOOD OR BARK CHIPS, SELECTION TO BE MADE BASED ON THE MATERIAL BEING LIGHT WEIGHT BUT ABLE TO ACT AS A MOISTURE BARRIER.
- PROVIDE SUPPLEMENTAL IRRIGATION AS NEEDED DURING THE DURATION OF CONSTRUCTION DURING DRY PERIODS. ENSURE THAT IRRIGATION IS NOT EXCESSIVE TO THE POINT OF CREATING EXCESSIVE WET AREAS AROUND THE TREE. A GOOD OPTION FOR THIS WATERING IS THE USE OF 'LEAKY PIPE'.
- OBTAIN A SOIL TEST FROM A SOIL SAMPLE TAKEN FROM THE AREA WITHIN THE TREE PROTECTION FENCING. FERTILIZE IN THE SPRING PRIOR TO LEAF OUT AND IN THE FALL AS PER THE RECOMMENDATIONS FROM THE SOIL TEST FOR NUTRIENT AND PH REQUIREMENTS.
- ENSURE THAT NO FOOT OR VEHICLE TRAFFIC IS ALLOWED WITHIN THE TREE PROTECTION FENCING AREA AND THE NOTHING IS DUMPED IN THIS AREA.
- PRUNE AND LIMBS THAT GET DAMAGED DURING THE CONSTRUCTION. USE A CERTIFIED ARBORIST TO PROVIDE THIS PRUNING.

MAINTENANCE NOTES:

- 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.
- 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.
- PRUNING / TRIMMING OF SHRUBS SHOULD BE DONE IN EARLY SPRING JUST PRIOR TO LEAFFING OUT. HEAD LIMBS WITH EXCESSIVE HEIGHT - REMOVE LIMB BACK TO THE CROTCH IN THE MAIN STEM. DO NOT HEDGE!
- MOWING OF LAWN GRASS SHOULD BE DONE AS NEEDED TO KEEP NEAT AND PASSABLE. MOW TO A HEIGHT OF 2.5 - 3".
- MOW ORNAMENTAL GRASSES AND SEEDING AREAS - MUHLY GRASS, PANIC GRASS, ERNMX 306 - ANNUALLY IN LATE FALL OR EARLY SPRING TO A HEIGHT OF 6" TO KEEP DOWN WEED TREES..

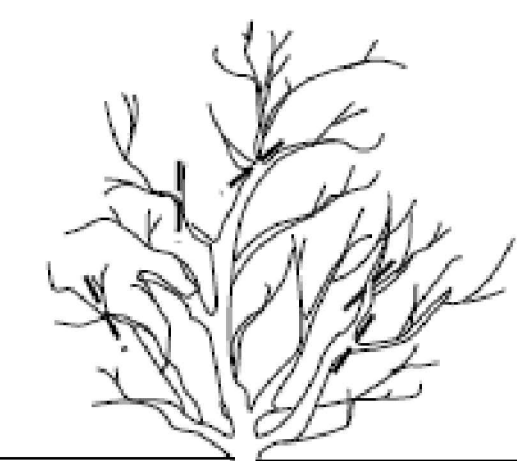


LAWN/BED EDGING NTS



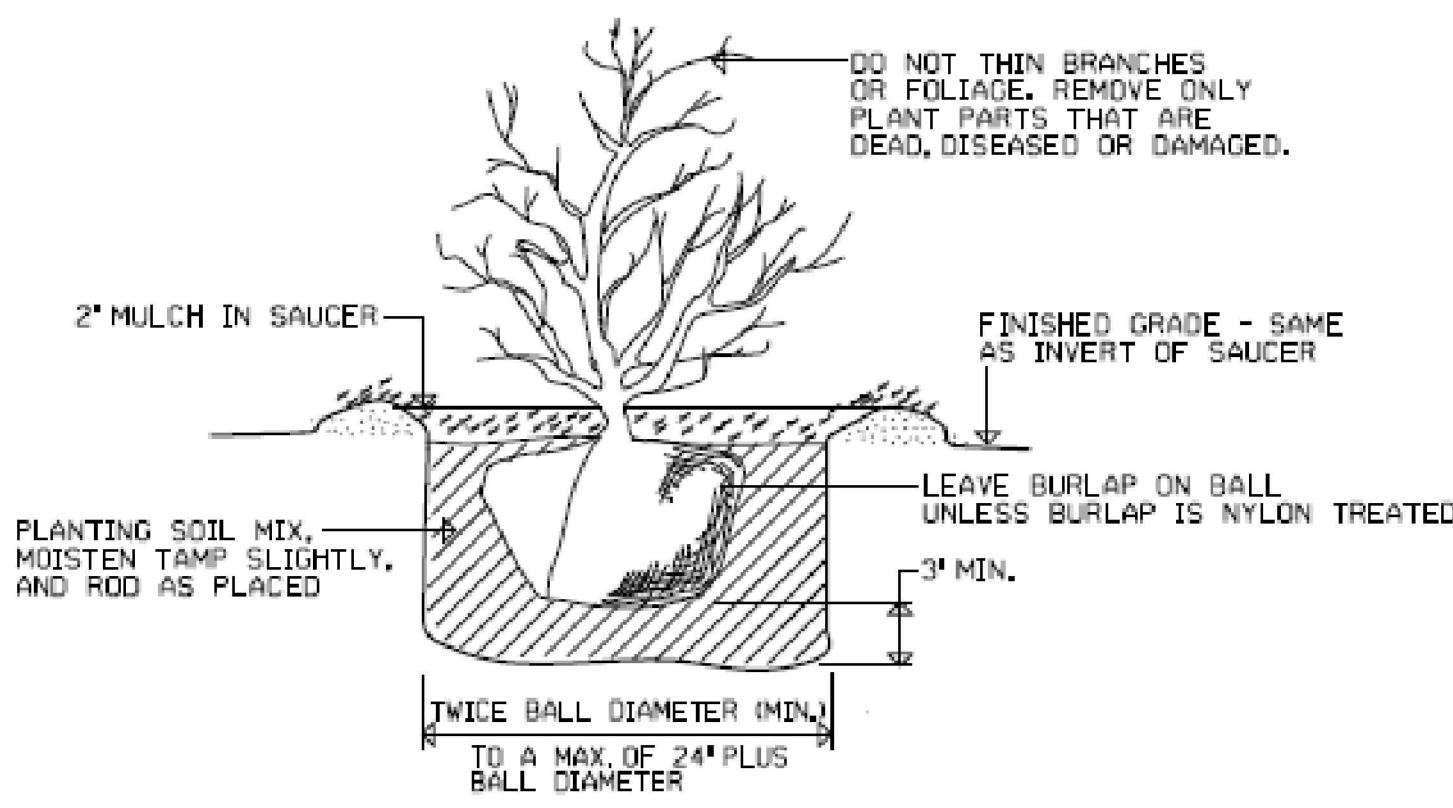
TRIM BRANCHES BY MAKING TWO CUTS - THE FIRST CUT IS TO BE OUT FROM THE MAIN TRUNK AND ONLY 1/4 OF THE BRANCH DIAMETER DEEP. THE SECOND CUT IS TO BE PARALLEL WITH THE TRUNK BUT JUST PAST THE BRANCH COLLAR. DO NOT DAMAGE SAID COLLAR IN ORDER TO ALLOW FOR THE WOUND TO HEAL

TREE PRUNING NTS



TRIM SHRUBS BY HEADING BACK - TRIM BACK TO A CROTCH IN THE BRANCHING WITH A CUT FLUSH TO THE REMAINING STEM DO NOT HEDGE!

SHRUB PRUNING NTS



SHRUB PLANTING DETAIL NTS

NO.	DATE	REVISION DESCRIPTION	BY
1	07/26/2022	INITIAL SUBMITTAL	IPS
2	10/23/2022	Revised per Town COR Comment	IPS
3	01/10/2023	Revised per Town COR / Wake Co Comment	IPS
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5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
6	Date	Comment	By

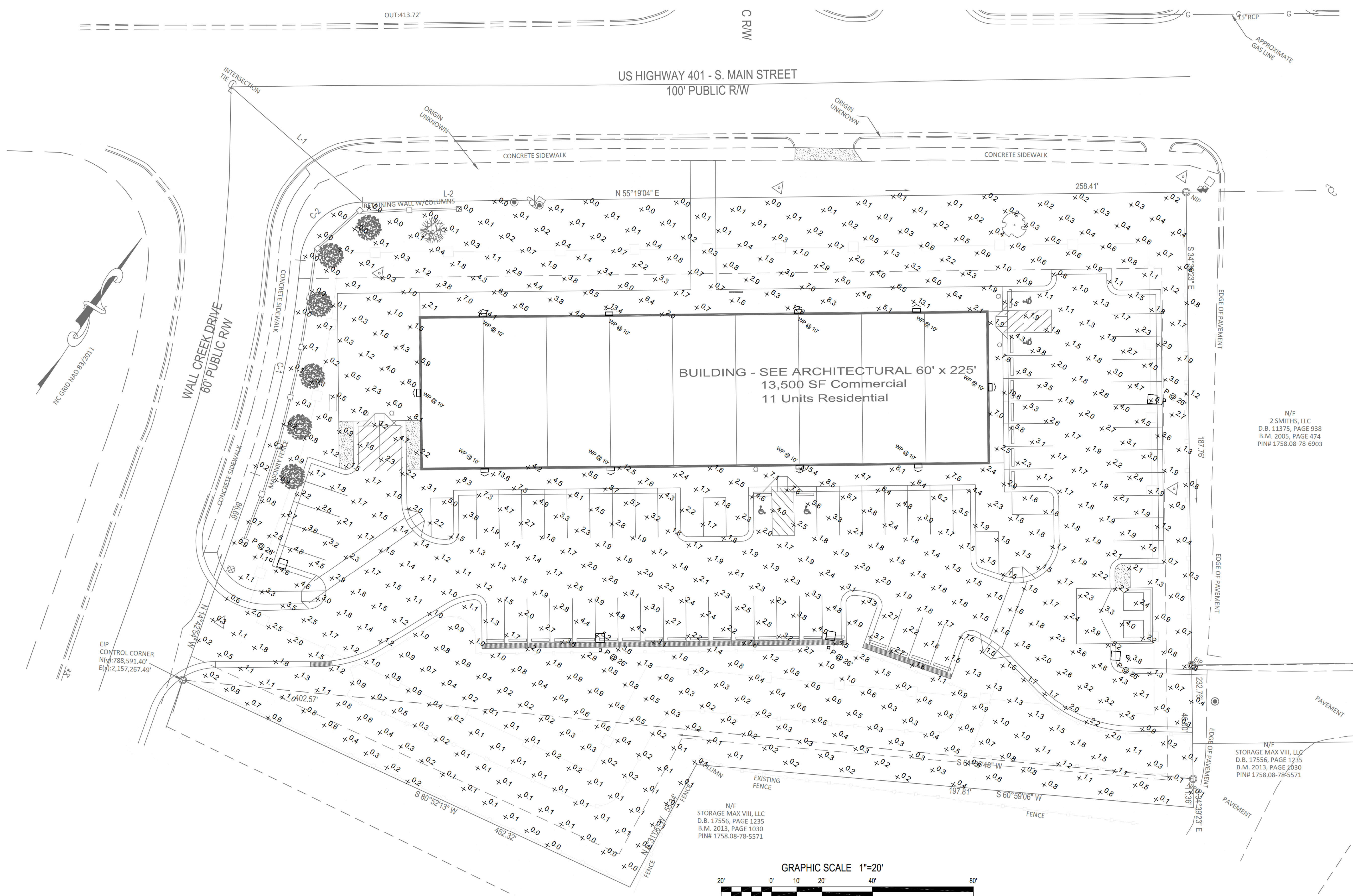
ALISON A. POKKAT, ASLA
 LANDSCAPE ARCHITECT
 LAND PLANNER



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 CARY, NC 27518

Schedule											
Symbol	Label	Image	QTY	Manufacturer	Catalog	Description	Number Lamps	Lamp Output	LLF	Input Power	Notes
	P		5	Lithonia Lighting	RSX2 LED P2 40K R4	RSX Area Fixture Size 2 P2 Lumen Package 4000K CCT Type R4 Distribution	1	17427	1	114.07	26' POLE MOUNTED
	WP		10	Lithonia Lighting	WDGE3 LED P1 70CRI R3 40K	WDGE3 LED WITH P1 - PERFORMANCE PACKAGE, 4000K, 70CRI, TYPE 3 OPTIC	1	7523	1	51.1717	MOUNTING HEIGHT AS NOTED ON PLAN.

Statistics					
Description	Symbol	Avg	Max	Min	Avg/Min
PARKING LOT	+	2.5 fc	7.0 fc	1.0 fc	2.5:1
PROPERTY LINE	+	0.2 fc	1.3 fc	0.0 fc	N/A



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NO.	DATE	REVISION DESCRIPTION	BY
1	10/28/2022	INITIAL SUBMITTAL	

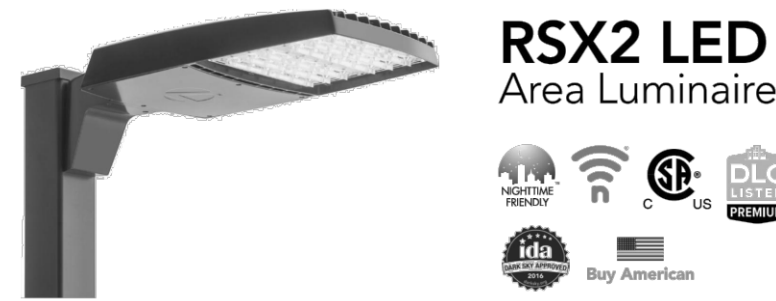


Site Lighting Plan
South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

ANGUS CLARK
ENGINEERING PC
 NCBEES #C-2726
 543 KEISLER DRIVE
 SUITE 101
 CARY NORTH CAROLINA 27518
 919 859.2674
 919 859.2675 FAX

Project No. XXXXX
 Dwg No. **SL1**

FIXTURE TYPE "P"



RSX2 LED Area Luminaire



Catalog Number
Notes
Type

Specifications

EPA (ft²@0°): 0.69 ft² (0.06 m²)
 Length: 29.3" (74.4 cm) (SPA mount)
 Width: 13.4" (34.0 cm)
 Height: 3.0" (7.6 cm) Main Body, 7.2" (18.3 cm) Arm (SPA mount)
 Weight: 30.0 lbs (13.6 kg)

Ordering Information

EXAMPLE: RSX2 LED P6 40K R3 MVOLT SPA DDBXD

Series	Performance Package	Color Temperature	Distribution	Voltage	Mounting
RSX2 LED	P1	30K 3000K	R2 Type 2 Wide	MVOLT (120V-277V) ¹	SPA Square pole mounting (3.0" min. SQ pole for 1 at 90°, 3.5" min. SQ pole for 2, 3, 4 at 90°)
	P2	40K 4000K	R3 Type 3 Wide	MVOLT (347V-480V) ¹	RPA Round pole mounting (3.2" min. dia. RND pole for 2, 3, 4 at 90°, 3.0" min. dia. RND pole for 1 at 90°, 2 at 90°, 3 at 10°)
	P3	50K 5000K	R5 Type 5 Short	XVOLT (277V-480V) ¹	MA Mast arm adaptor (fits 2-3/8" OD horizontal tenon)
	P4		R4 Type 4 Wide		IS Adjustable slipfitter (fits 2-3/8" OD tenon) ¹
	P5		R5 Type 4 Short		WSA Wall bracket ¹
	P6		RS Type 5 Wide ¹	120 ¹ 277 ¹	WBASC Wall bracket with surface conduit box
			R5 Type 5 Short ¹	208 ¹ 347 ¹	AASP Adjustable tilt arm square pole mounting ¹
			AFR Automatic Front Row	240 ¹ 480 ¹	AARP Adjustable tilt arm round pole mounting ¹
			AFRRR Automatic Front Row Right Rotated		AMWB Adjustable tilt arm with wall bracket ¹
			AFRLR Automatic Front Row Left Rotated		AMWSC Adjustable tilt arm wall bracket and surface conduit box ¹

Options

Option	Description	Finish
HS	House-side shield ¹	DDBD Dark Bronze
PE	Photocontrol, button style ¹⁰	DNBD Black
PEP	Photocontrol, external threaded, adjustable ^{10,11}	DNAXD Natural Aluminum
PIRB	Screen-wire photo-cell recessed only (no controls) ^{10,11,12}	DWRD White
CE34	Conduit entry 3/4" NPT (Dry 2)	DNBBD Textured Dark Bronze
SF	Single fuse (120, 277, 347) ¹	DNBDD Textured Black
DF	Double fuse (208, 240, 480) ¹	DNAXD Textured Natural Aluminum
SFD2KV	20KV Surge sack (10KV standard)	DWWD Textured White
FAD	Field adjustable output ¹³	
DMG	0-10V dimming control and back of housing for external control (control ordered separately) ¹³	
DS	Dim switching ¹⁴	

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FIXTURE TYPE "WP"



WDGE3 LED Architectural Wall Sconce



Catalog Number
Notes
Type

Specifications

Depth (D1): 8"
 Depth (D2): 1.5"
 Height: 9"
 Width: 18"
 Weight: (without options) 19.5 lbs

WDGE3 LED Family Overview

Luminaire	Standard EM, 0°C	Cold EM, -20°C	Sensor	P1	P2	P3	P4	P5	P6
WDGE1 LED	4W	--	--	1,200	2,000	--	--	--	--
WDGE2 LED	10W	18W	Standalone / nLight	1,200	2,000	3,000	4,500	6,000	--
WDGE3 LED	15W	18W	Standalone / nLight	7,500	8,500	10,000	12,000	--	--
WDGE4 LED	--	--	Standalone / nLight	12,000	16,000	18,000	20,000	22,000	25,000

Ordering Information

EXAMPLE: WDGE3 LED P3 40K 70CRI R3 MVOLT SRM DDBXD

Series	Package	Color Temperature	CRI	Distribution	Voltage	Mounting	Shipped Included	Shipped Separately
WDGE3 LED	P1	30K 3000K	70CRI	R2 Type 2	MVOLT	SRM	Surface mounting bracket	AW5 3-Branch Architectural wall spacer
	P2	40K 4000K	80CRI	R3 Type 3	347 ¹	PBBW	Surface-mounted back box (top, left, right conduit entry). Use when there is no junction box available.	
	P3	50K 5000K	--	R4 Type 4	480 ¹	ICW	Indirect Canopy/Ceiling Washer Bracket (dry/damp location only) ¹	
	P4	--	--	RFT Forward Throw	--	--	--	

Accessories

Accessories	Description
WDGEWS DDBXD	WDGE3 1-Branch Architectural Wall Spacer (specify finish)
WDGEPSWB DDBXD	WDGE3 wall surface-mounted back box (specify finish)

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Ordering Information

Accessories

Accessories	Description
RS2HS	RS2 House Side Shield (includes 2x shield)
RS2HSF PRRH01	External glare shield (specify finish)
RS2HSF PRRH02	RS2 House side shield for 48V recessed optics (includes 2x shield)
RS2HSF PRRH03	External glare shield (specify finish)
RS2HSF PRRH04	RS2 Universal mast arm adaptor plate (specify finish)
RS2HSF PRRH05	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH06	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH07	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH08	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH09	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH10	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH11	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH12	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH13	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH14	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH15	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH16	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH17	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH18	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH19	RS2 Mast arm adaptor plate (specify finish)
RS2HSF PRRH20	RS2 Mast arm adaptor plate (specify finish)

External Shields



Pole/Mounting Information

Accessories including bullhorns, cross arms and other adapters are available under the accessories tab at Lithonia's Outdoor Poles and Arms product page. Click here to visit Accessories.

Round Tenon Mount - Pole Top Slipfitters

Tenon dia.	Fit	Height	2.0" Tenon	2.5" Tenon	3.0" Tenon	3.5" Tenon	4.0" Tenon
2-3/8"	RPL AMP	AS3-196	AS3-200	AS3-204	AS3-208	AS3-212	AS3-216
2-7/8"	RPL AMP	AS3-196	AS3-200	AS3-204	AS3-208	AS3-212	AS3-216
4"	RPL AMP	AS3-196	AS3-200	AS3-204	AS3-208	AS3-212	AS3-216

Drill/Side Location by Configuration Type

Drilling template	Mounting Options	Single	2-1/8"	3-1/8"	4-1/8"	5-1/8"	6-1/8"
Handhole Orientation	Head Location	Side B	Side B & D	Side B & C	Round Pole Only	Side B, C & D	Side A, B, C & D
	Drill Nomenclature	DM18AS	DM28AS	DM29AS	DM32AS	DM35AS	DM45AS

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Performance Data

Lumen Output

Performance Package	System Data	EMC Type	30K (3000K, 70 CRI)	40K (4000K, 70 CRI)	50K (5000K, 70 CRI)												
P1	52W	R2	7,037	136	1	7,649	148	2	0	1	7,649	148	2	0	1		
		R3	6,922	134	1	0	2	7,524	145	1	0	2	7,524	145	1	0	2
		R4	7,133	138	1	0	2	7,753	150	1	0	2	7,753	150	1	0	2
		RFT	6,985	135	1	0	2	7,592	147	1	0	2	7,592	147	1	0	2
		R2	7,968	135	2	0	1	8,661	147	2	0	1	8,661	147	2	0	1

Electrical Load

Performance Package	System Data	120V	208V	240V	277V	347V	480V
P1	52W	0.437	0.246	0.213	0.186	0.150	0.110
P2	59W	0.498	0.287	0.251	0.220	0.175	0.126
P3	71W	0.598	0.344	0.300	0.262	0.210	0.152
P4	88W	0.727	0.424	0.373	0.333	0.260	0.190

Lumen Output in Emergency Mode (4000K, 70 CRI)

System	Lumens
E1SWH	R2 3,185
	R3 3,133
	R4 3,229
	RFT 3,162
E2DWC	R2 3,669
	R3 3,609
	R4 3,719
	RFT 3,642

Lumen Multiplier for 80CRI

CCT	Multiplier
30K	0.891
40K	0.906
50K	0.906

Lumen Ambient Temperature (LAT) Multipliers

Ambient	Lumen Multiplier
0°C	1.05
10°C	1.03
20°C	1.01
25°C	1.00
30°C	0.99
40°C	0.97

Projected LED Lumen Maintenance

Operating Hours	0	25,000	50,000	100,000
Lumen Maintenance Factor	1.0	>0.98	>0.97	>0.92

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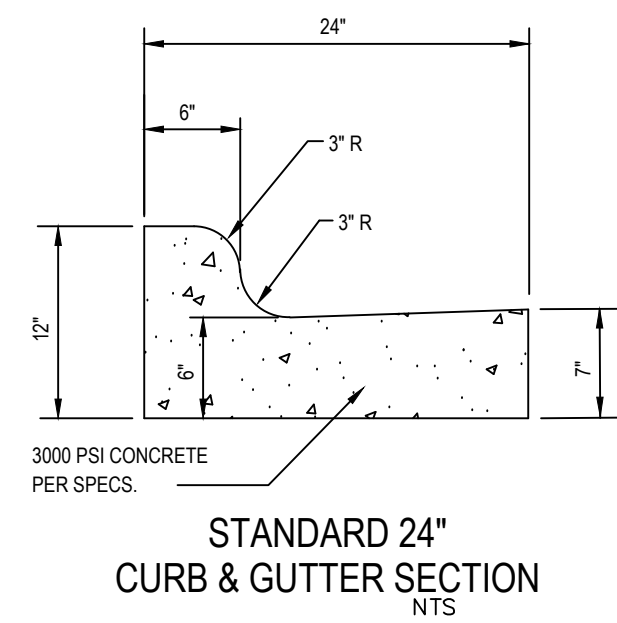
NO.	DATE	REVISION/DESCRIPTION	BY
1	10/26/2022	INITIAL SUBMITTAL	KPS



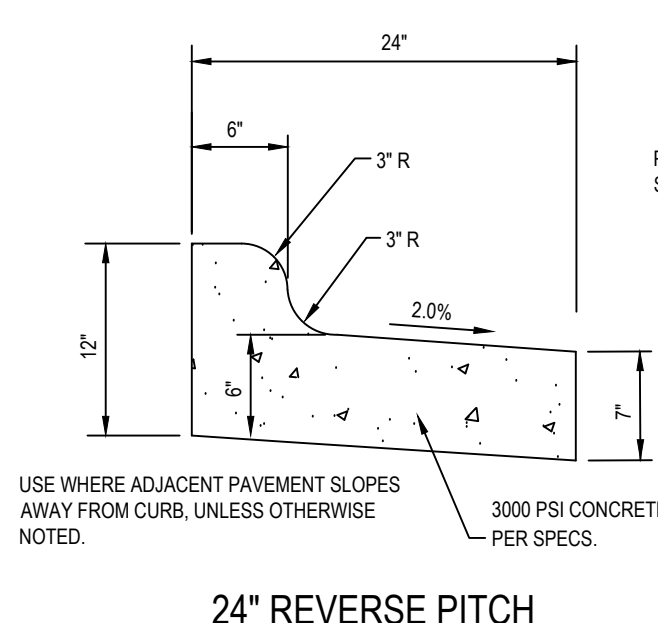
Site Lighting Fixtures
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

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 543 KEISLER DRIVE
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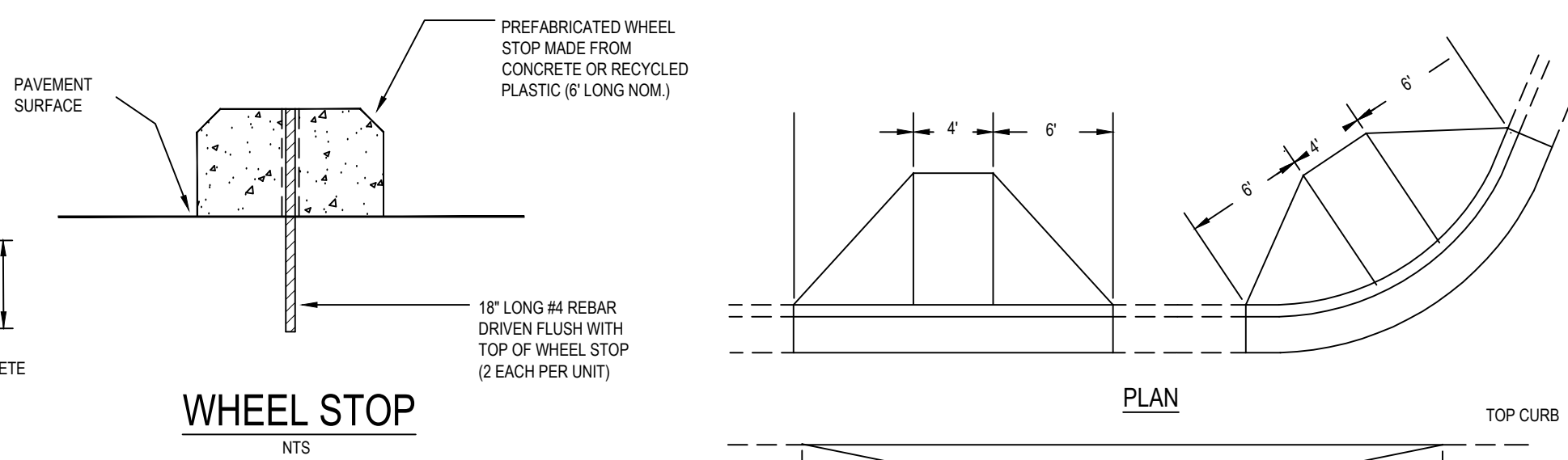
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 Dwg No.
SL2



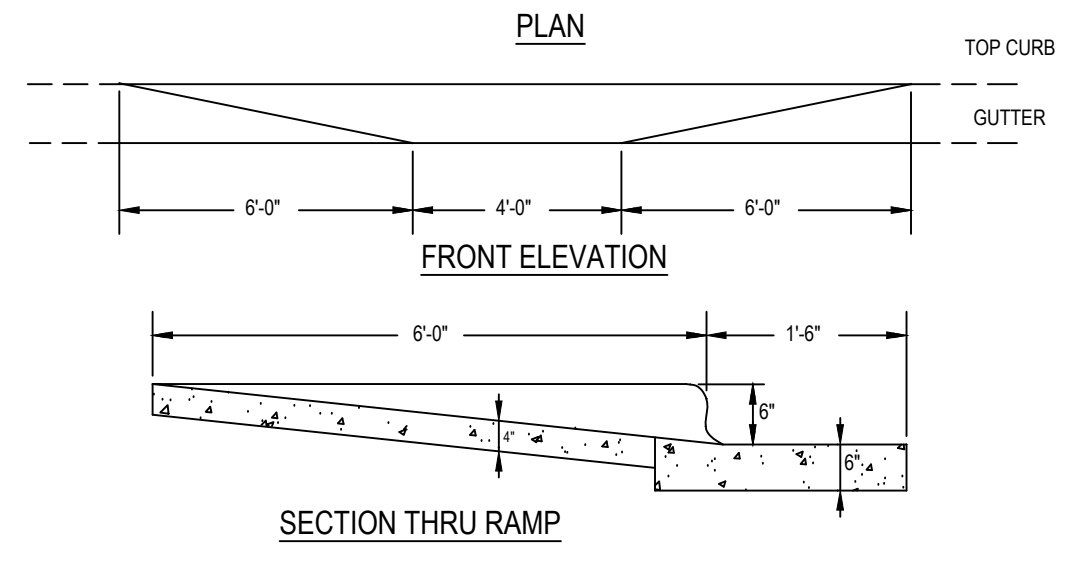
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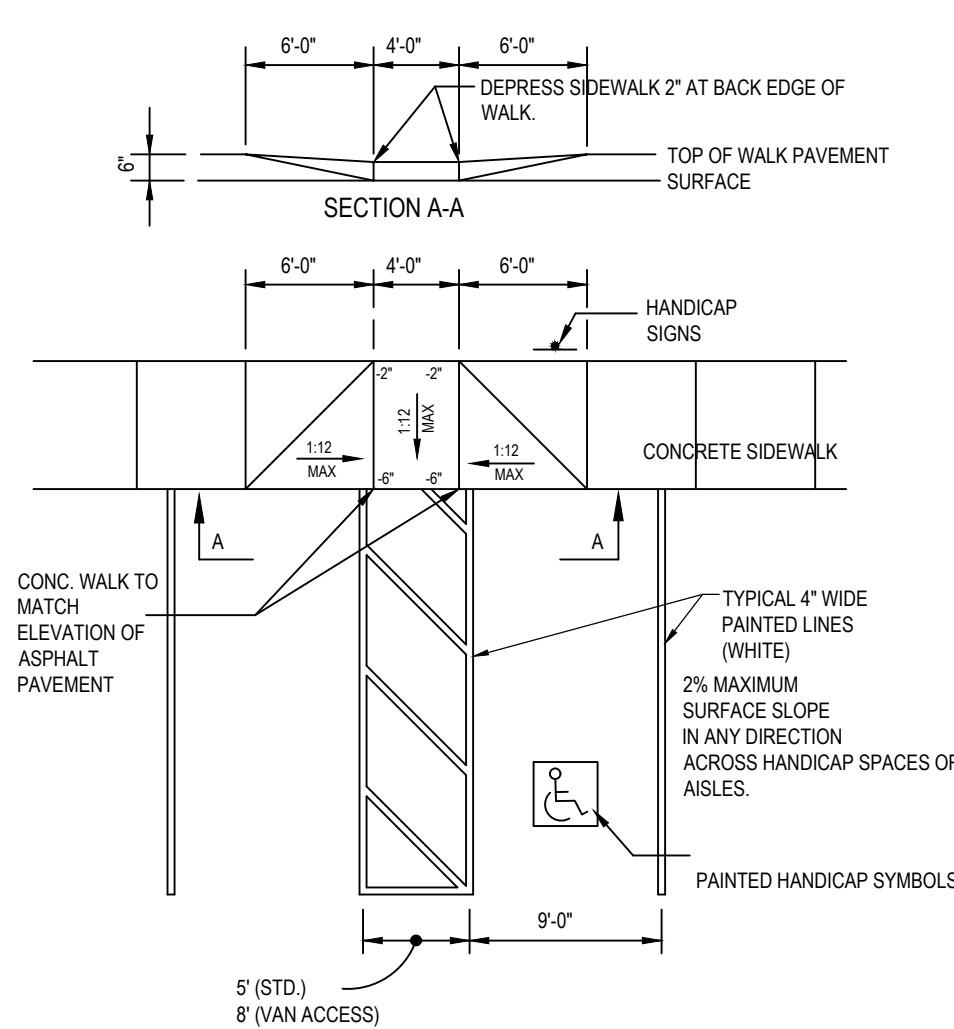
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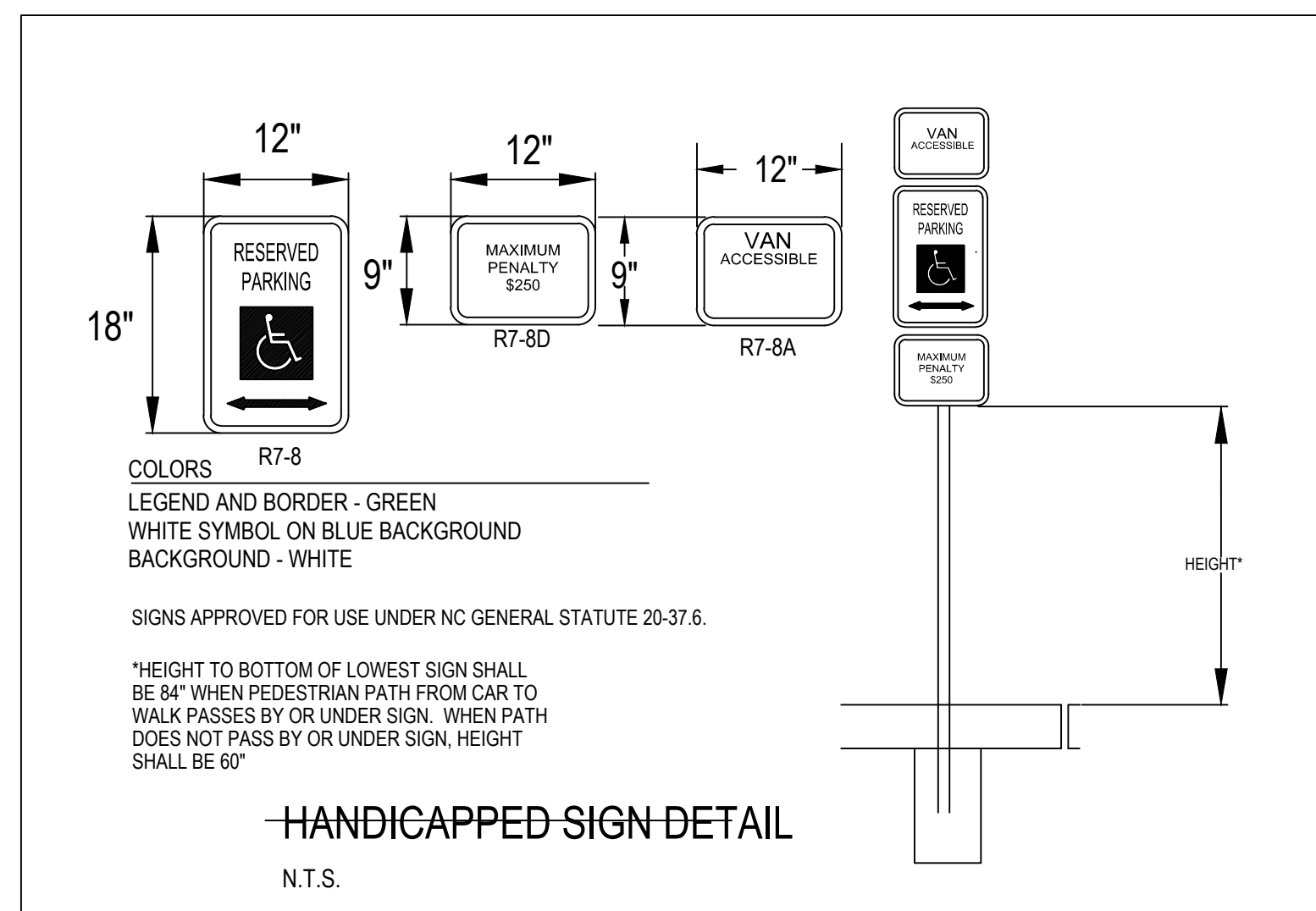
WHEEL STOP
NTS



HANDICAP RAMP CURB CUT
NTS

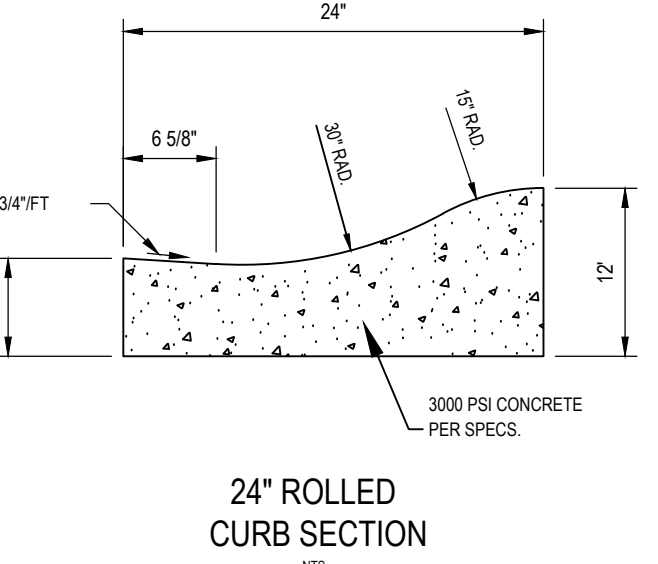


HANDICAP PARKING AND RAMP
NTS



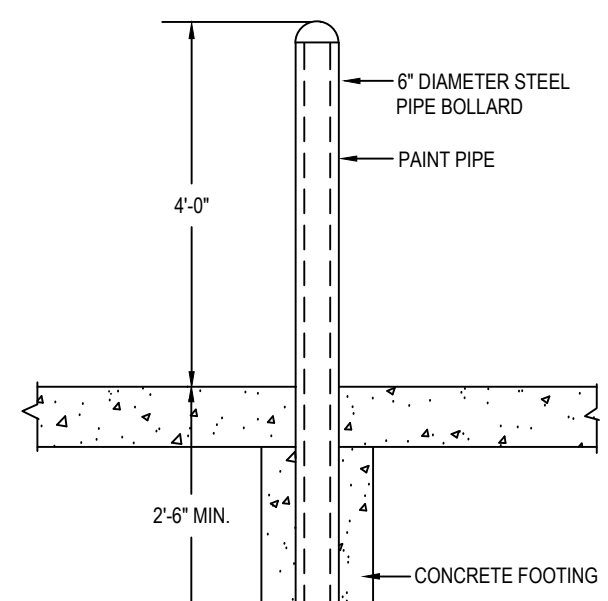
HANDICAPPED SIGN DETAIL
N.T.S.

- NOTES:**
- 10' MAXIMUM BETWEEN CONSTRUCTION JOINTS.
 - 15' MAXIMUM BETWEEN CONSTRUCTION JOINTS TO SCALE ON MACHINE POURS.
 - 1/2" EXPANSION JOINT EVERY 90'.
 - 3000 PSI CONCRETE MINIMUM, 4" SLUMP MAXIMUM.
 - LIQUID MEMBRANE CURING COMPOUND SHALL MEET THE REQUIREMENTS OF SECTION 1028-2 OF NCDOT STANDARDS & SPECIFICATIONS FOR ROADS AND STRUCTURES.
 - ALL CONSTRUCTION JOINTS SHALL BE FILLED WITH JOINT FILLER AND SEALER IN ACCORDANCE WITH NCDOT ROADWAY STANDARD DETAIL 946.01. THE JOINT MATERIAL SHALL CONFORM TO SECTION 1028-2 OF NCDOT'S STANDARD SPECIFICATIONS FOR ROADS AND STRUCTURES.
 - ABC STONE REQUIRED UNDER ALL CURB & GUTTER.

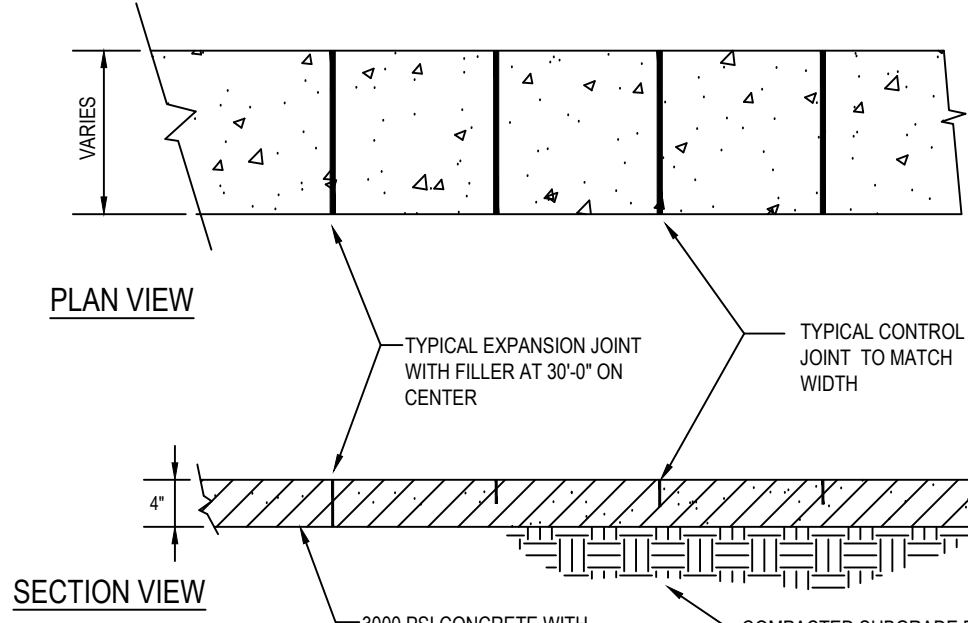


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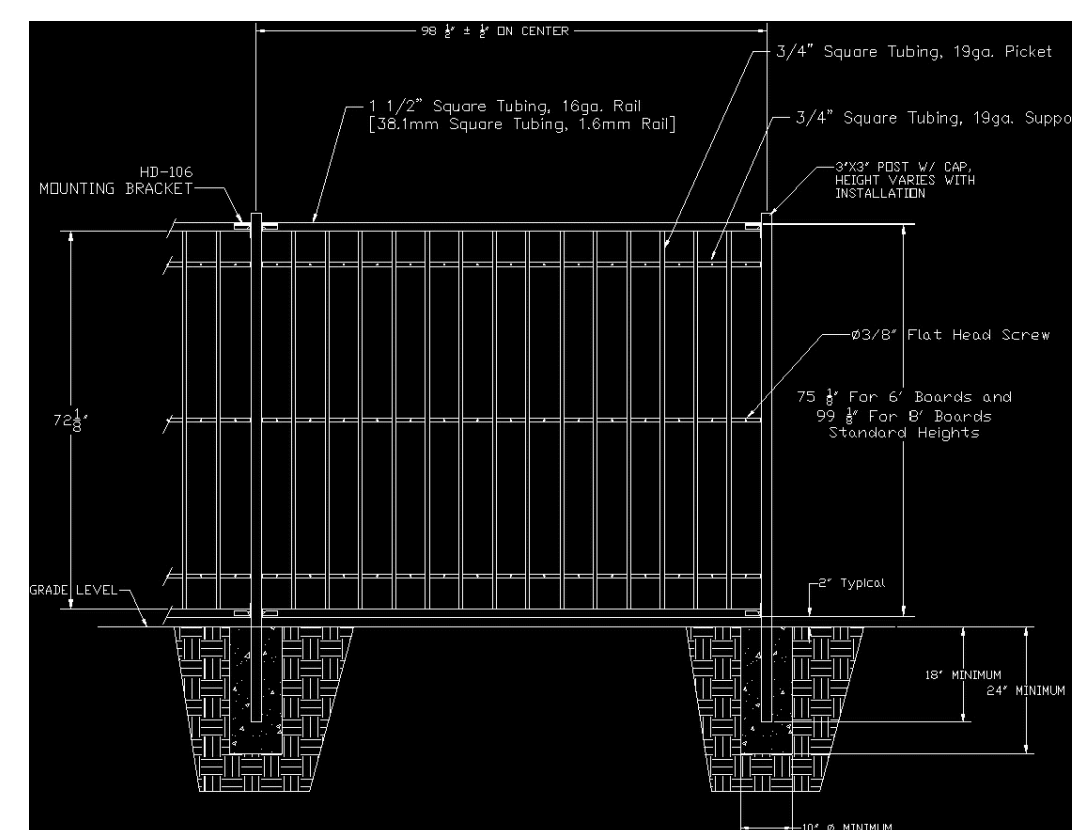
STEEL PIPE BOLLARD (TYPICAL) (TO BE CONCRETE FILLED)
NTS



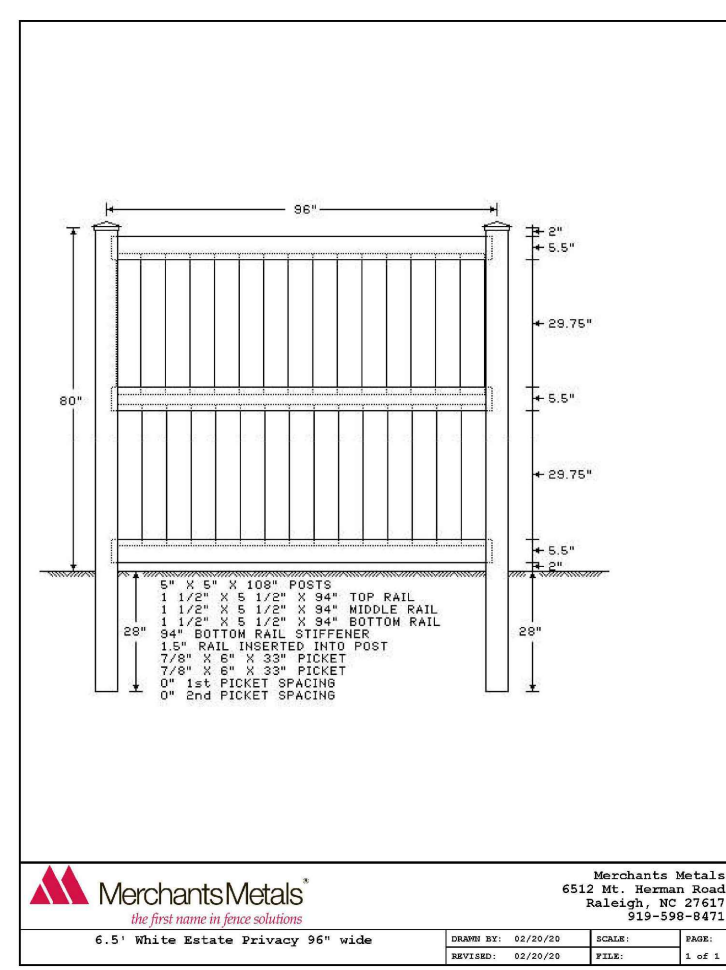
- SPECIFICATIONS FOR ALL CAST-IN-PLACE PORTLAND CEMENT CONCRETE**
1. NOTIFY THE ENGINEER AND ANY AGENCY HAVING JURISDICTION OVER THE CONCRETE AT LEAST TWO BUSINESS DAYS PRIOR TO PLACEMENT OF ANY CONCRETE.
 2. ENSURE THAT SUBGRACES COMPLY WITH PROJECT REQUIREMENTS FOR ELEVATION, SLOPE, SOIL CHARACTERISTICS AND SLOPE PRIOR TO PLACING ANY FORMS, BASE MATERIAL, OR CONCRETE.
 3. VERIFY THAT CURRENT AND FORECASTED WEATHER CONDITIONS ARE APPROPRIATE FOR CONCRETE PLACEMENT.
 4. CONCRETE MATERIALS AND WORK SHALL COMPLY WITH THE LATEST EDITION OF THE FOLLOWING STANDARDS, AS APPLICABLE:
- | STANDARD | NUMBER | TITLE | REVISIONS |
|--------------------|------------|-----------------|-----------|
| READY-MIX CONCRETE | ASTM C94 | CONCRETE | |
| CONCRETE | ASTM C1191 | TESTING METHODS | |
| CONCRETE | ASTM C1192 | TESTING METHODS | |
| CONCRETE | ASTM C1193 | TESTING METHODS | |
| CONCRETE | ASTM C1194 | TESTING METHODS | |
| CONCRETE | ASTM C1195 | TESTING METHODS | |
| CONCRETE | ASTM C1196 | TESTING METHODS | |
| CONCRETE | ASTM C1197 | TESTING METHODS | |
| CONCRETE | ASTM C1198 | TESTING METHODS | |
| CONCRETE | ASTM C1199 | TESTING METHODS | |
| CONCRETE | ASTM C1200 | TESTING METHODS | |
| CONCRETE | ASTM C1201 | TESTING METHODS | |
| CONCRETE | ASTM C1202 | TESTING METHODS | |
| CONCRETE | ASTM C1203 | TESTING METHODS | |
| CONCRETE | ASTM C1204 | TESTING METHODS | |
| CONCRETE | ASTM C1205 | TESTING METHODS | |
| CONCRETE | ASTM C1206 | TESTING METHODS | |
| CONCRETE | ASTM C1207 | TESTING METHODS | |
| CONCRETE | ASTM C1208 | TESTING METHODS | |
| CONCRETE | ASTM C1209 | TESTING METHODS | |
| CONCRETE | ASTM C1210 | TESTING METHODS | |
| CONCRETE | ASTM C1211 | TESTING METHODS | |
| CONCRETE | ASTM C1212 | TESTING METHODS | |
| CONCRETE | ASTM C1213 | TESTING METHODS | |
| CONCRETE | ASTM C1214 | TESTING METHODS | |
| CONCRETE | ASTM C1215 | TESTING METHODS | |
| CONCRETE | ASTM C1216 | TESTING METHODS | |
| CONCRETE | ASTM C1217 | TESTING METHODS | |
| CONCRETE | ASTM C1218 | TESTING METHODS | |
| CONCRETE | ASTM C1219 | TESTING METHODS | |
| CONCRETE | ASTM C1220 | TESTING METHODS | |



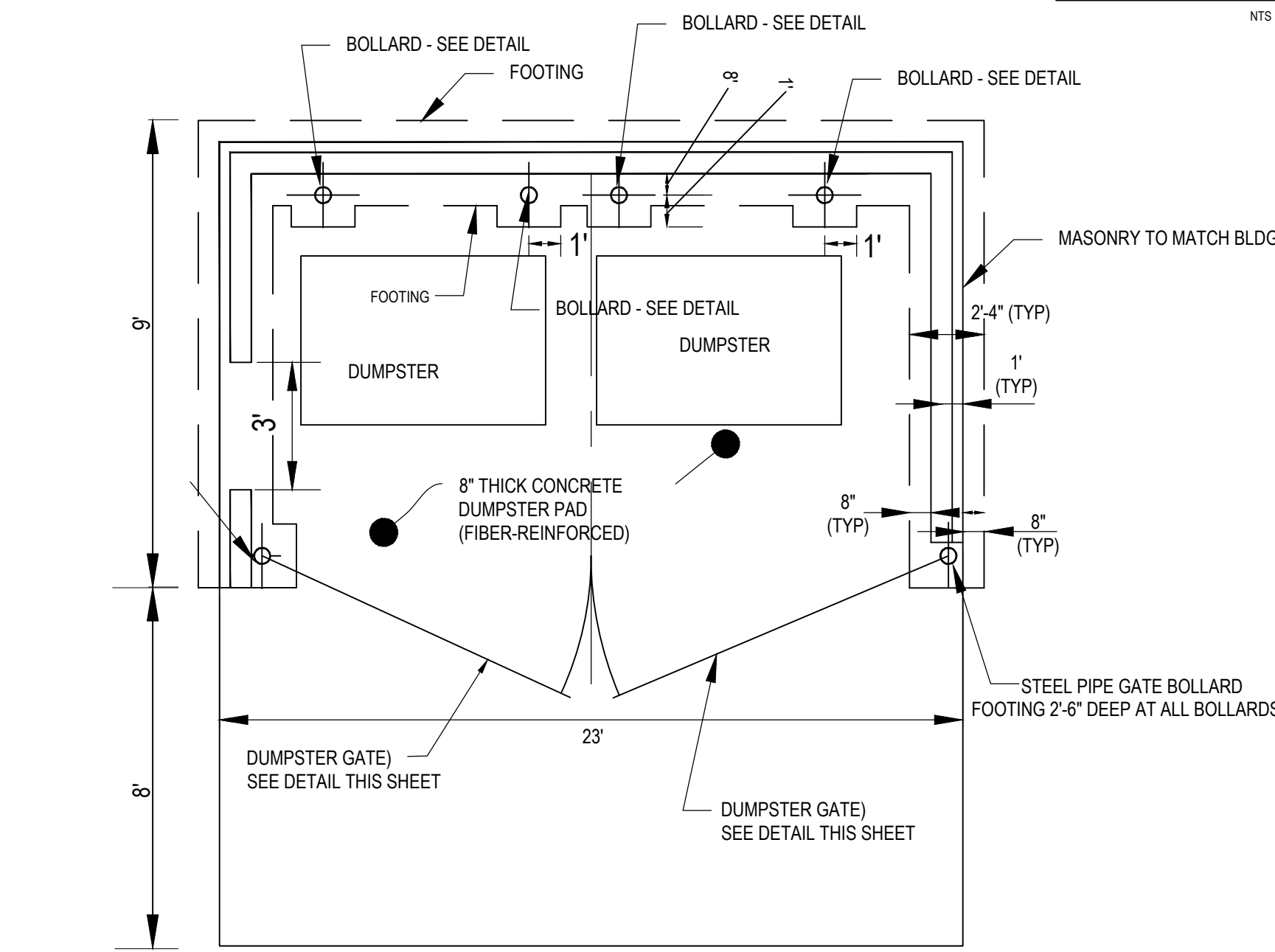
CONCRETE WALK
NTS



FENCE DETAIL TYPE 1

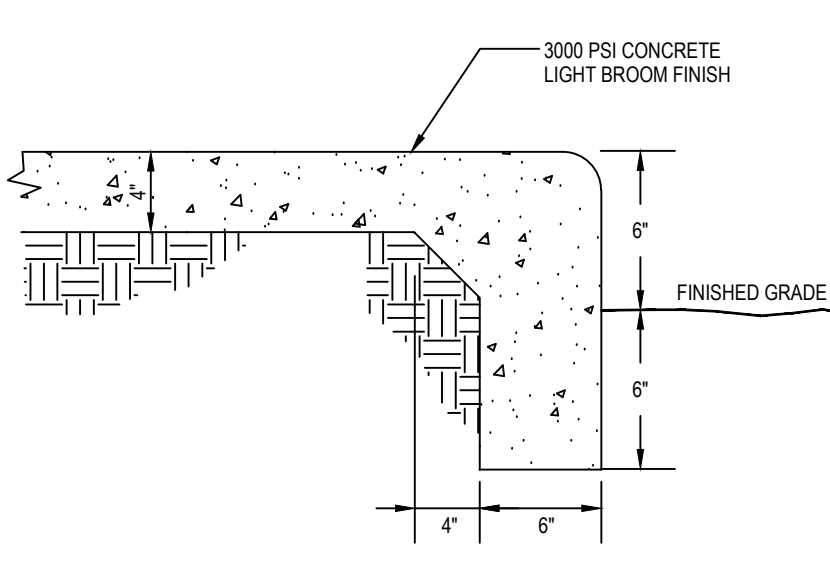


FENCE DETAIL TYPE 2

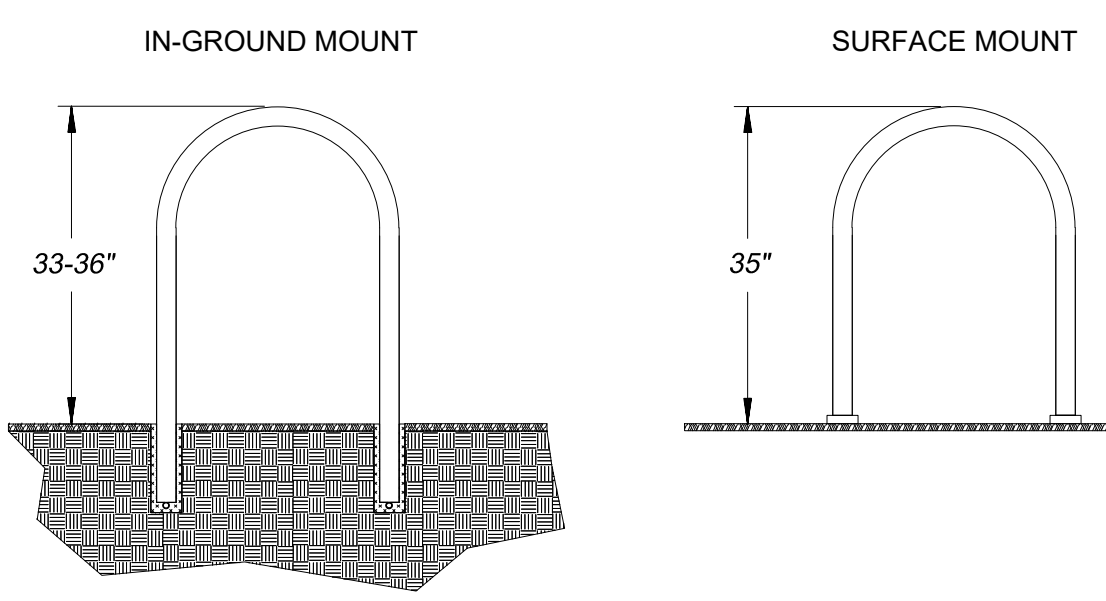


PLAN VIEW - DUMPSTER ENCLOSURE & PAD
NTS

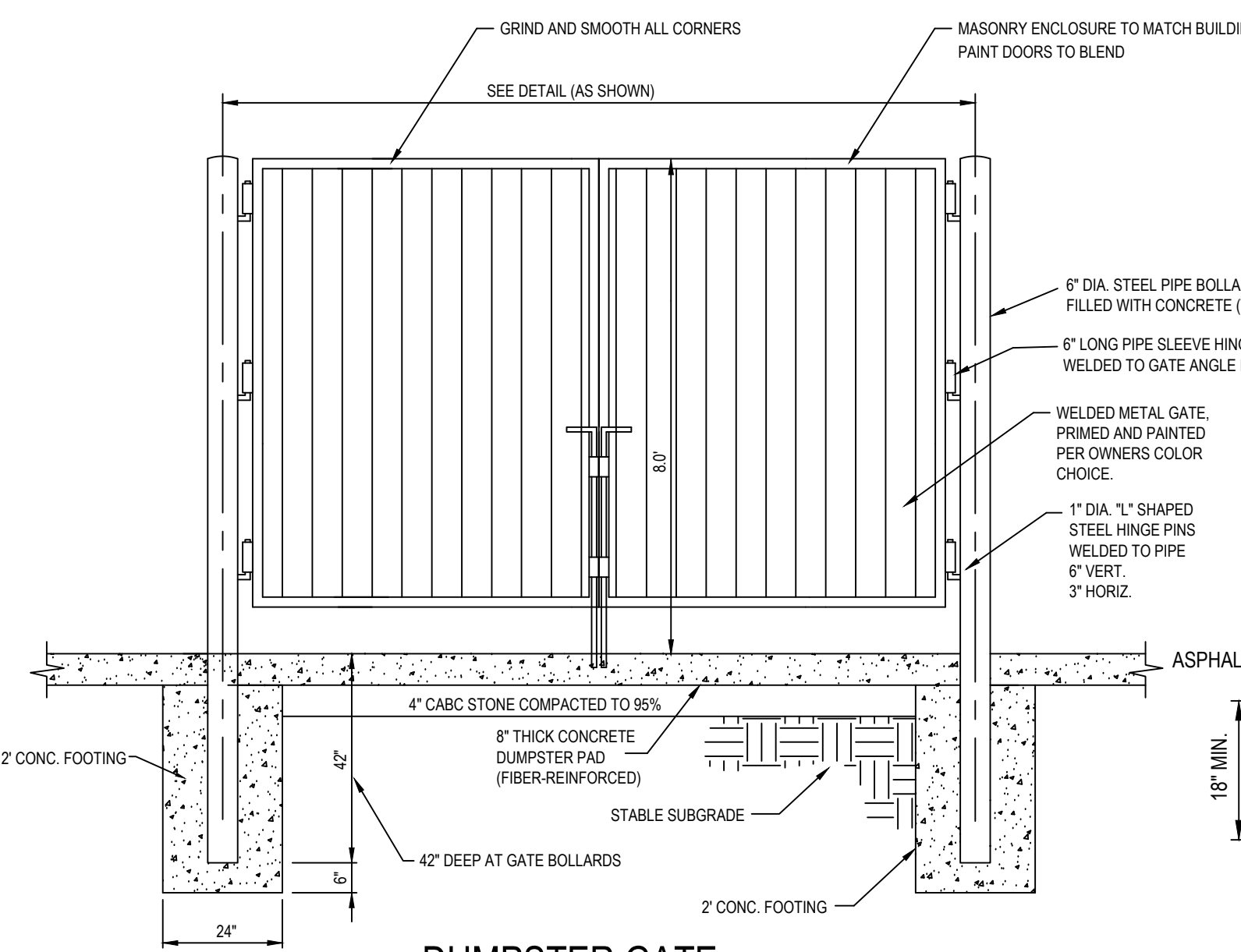
SPECIFICATION FOR CAST IN PLACE CEMENT



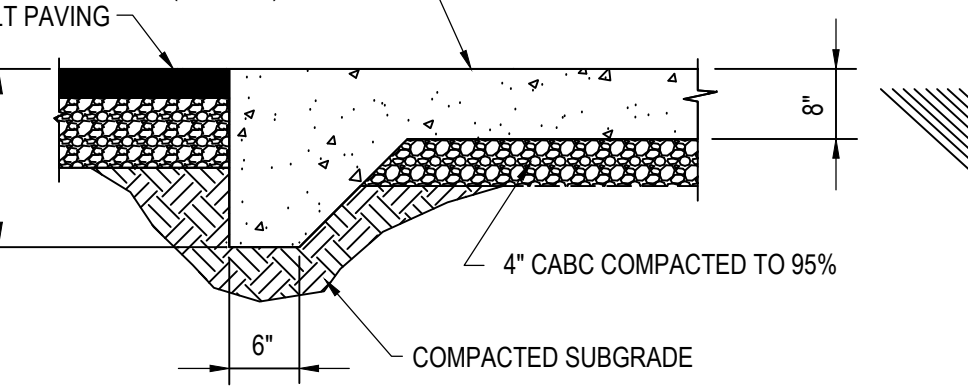
TURNDOWN SIDEWALK
NTS



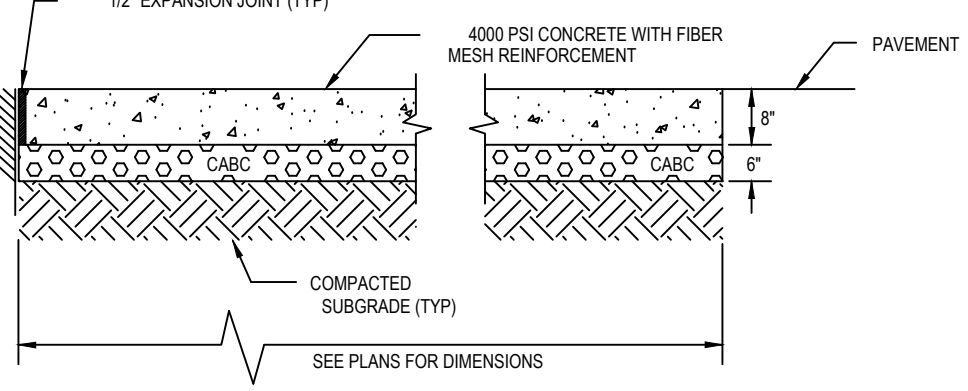
STANDARD BIKE RACK



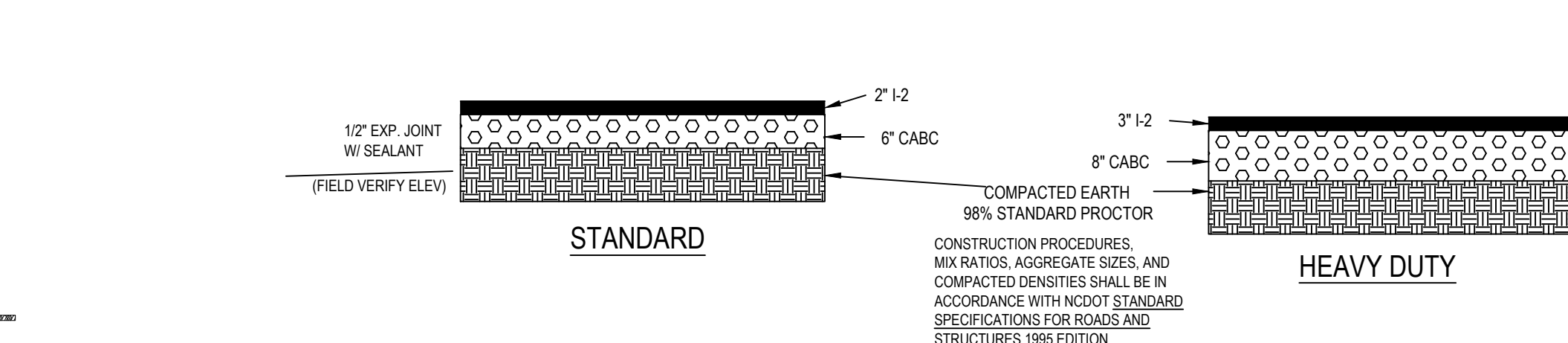
DUMPSTER GATE
NTS



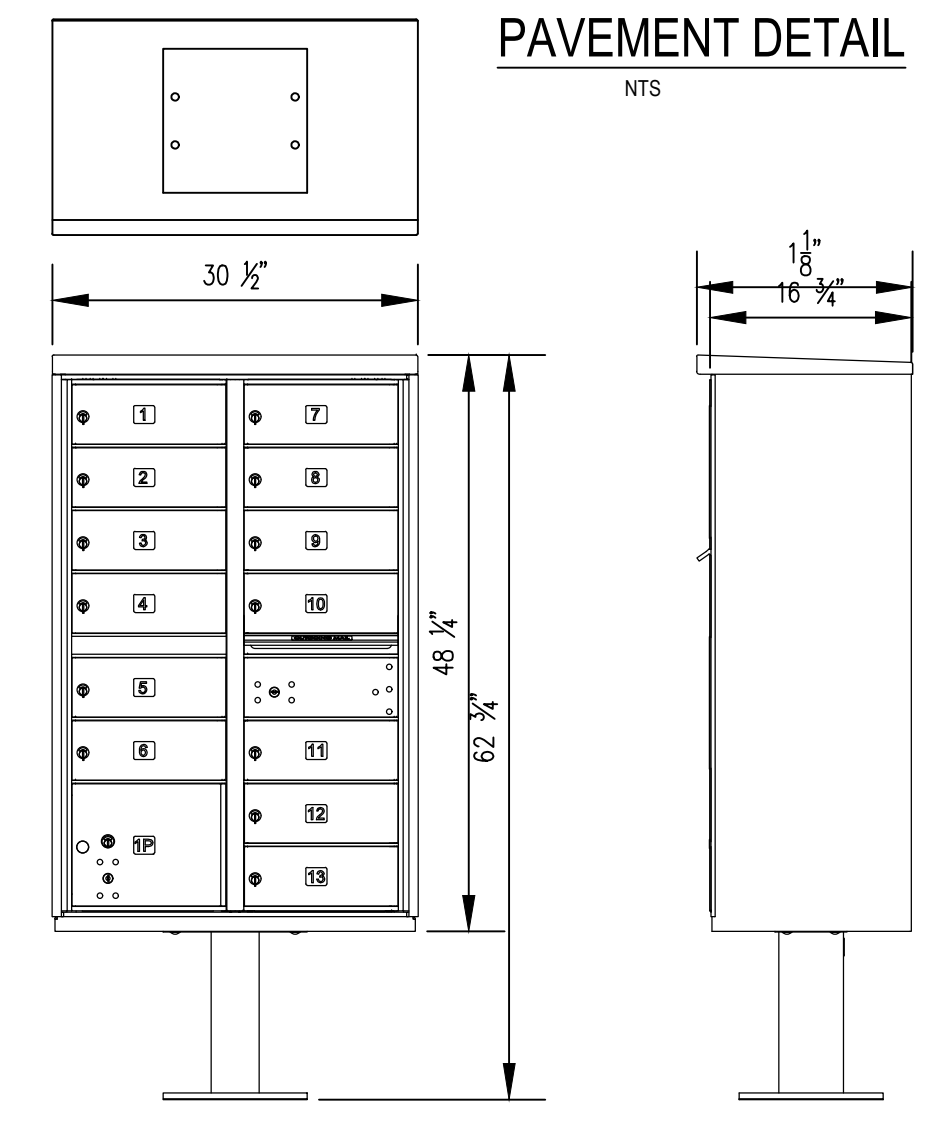
TURNDOWN AT DUMPSTER PAD
NTS



CONCRETE PAVING DETAIL
NTS



MAIL BOX KIOSK
NTS



PAVEMENT DETAIL
NTS

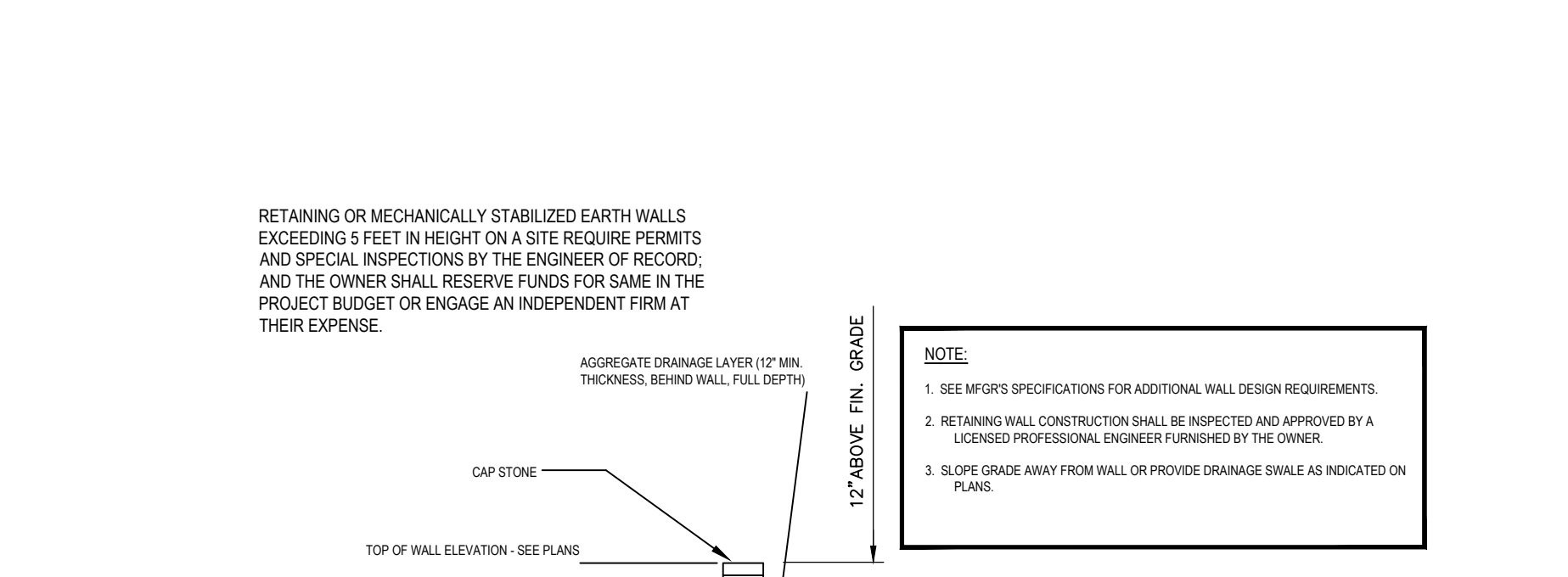
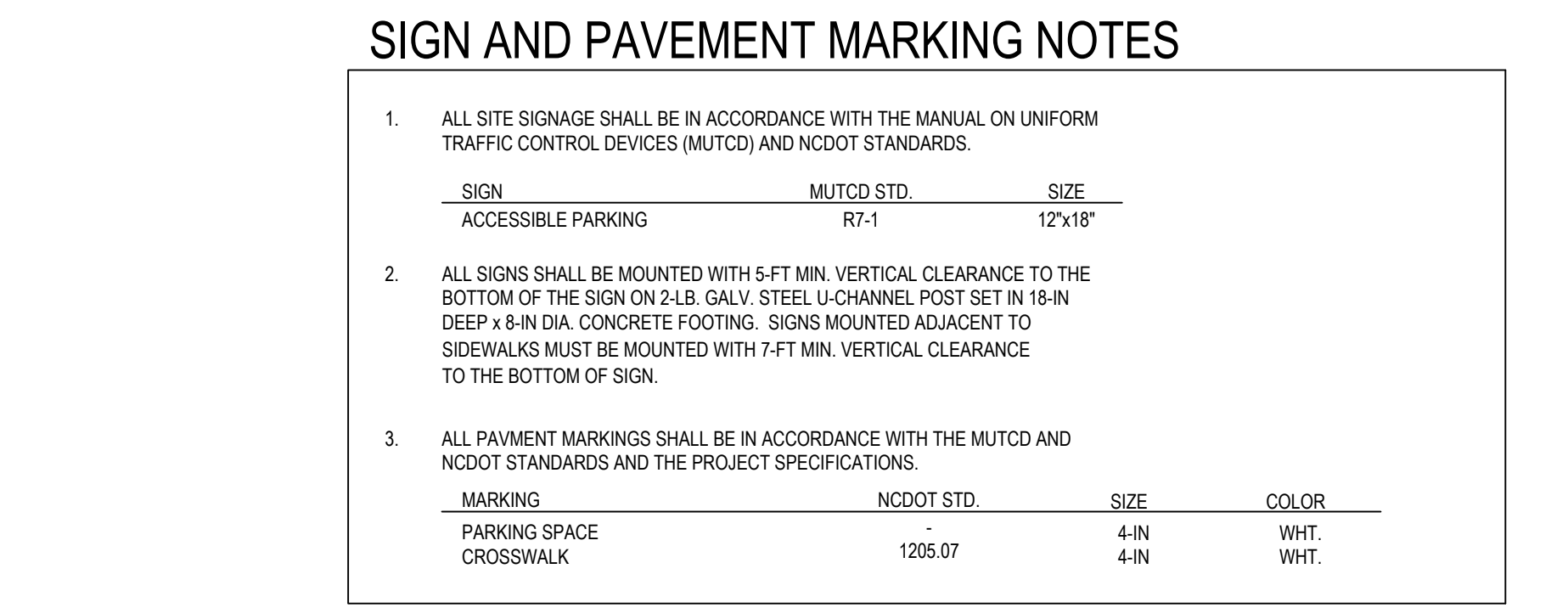
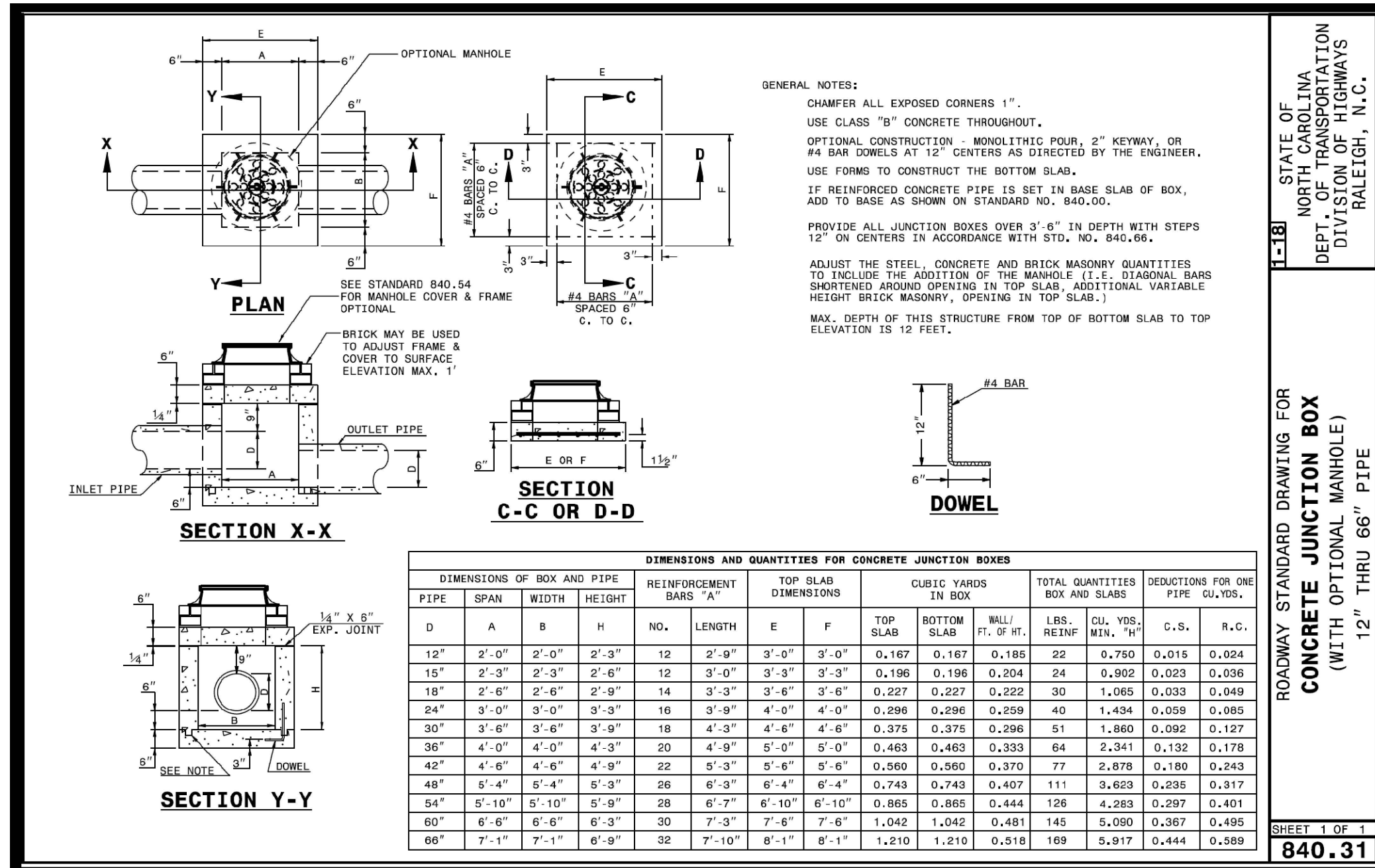
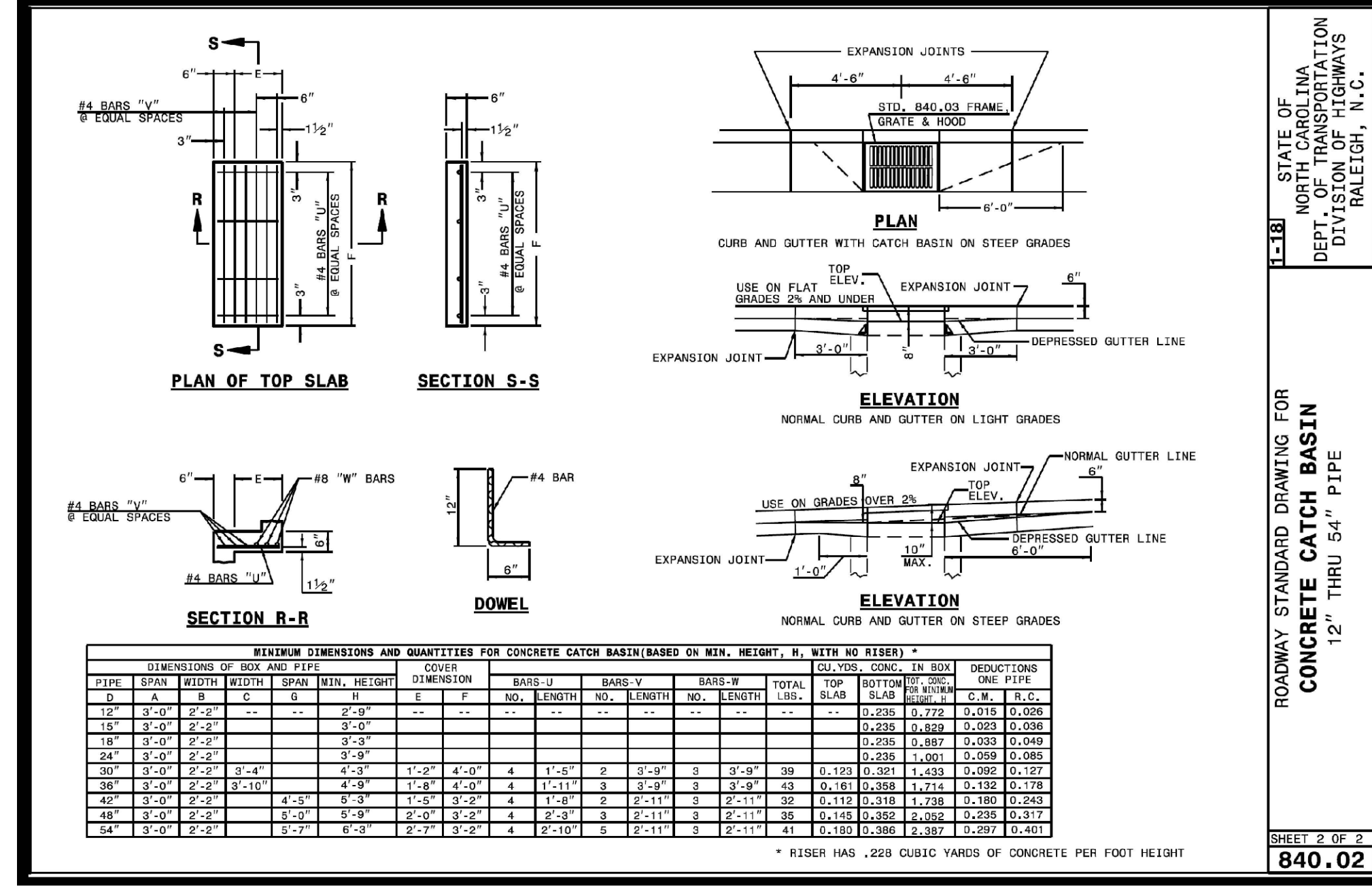
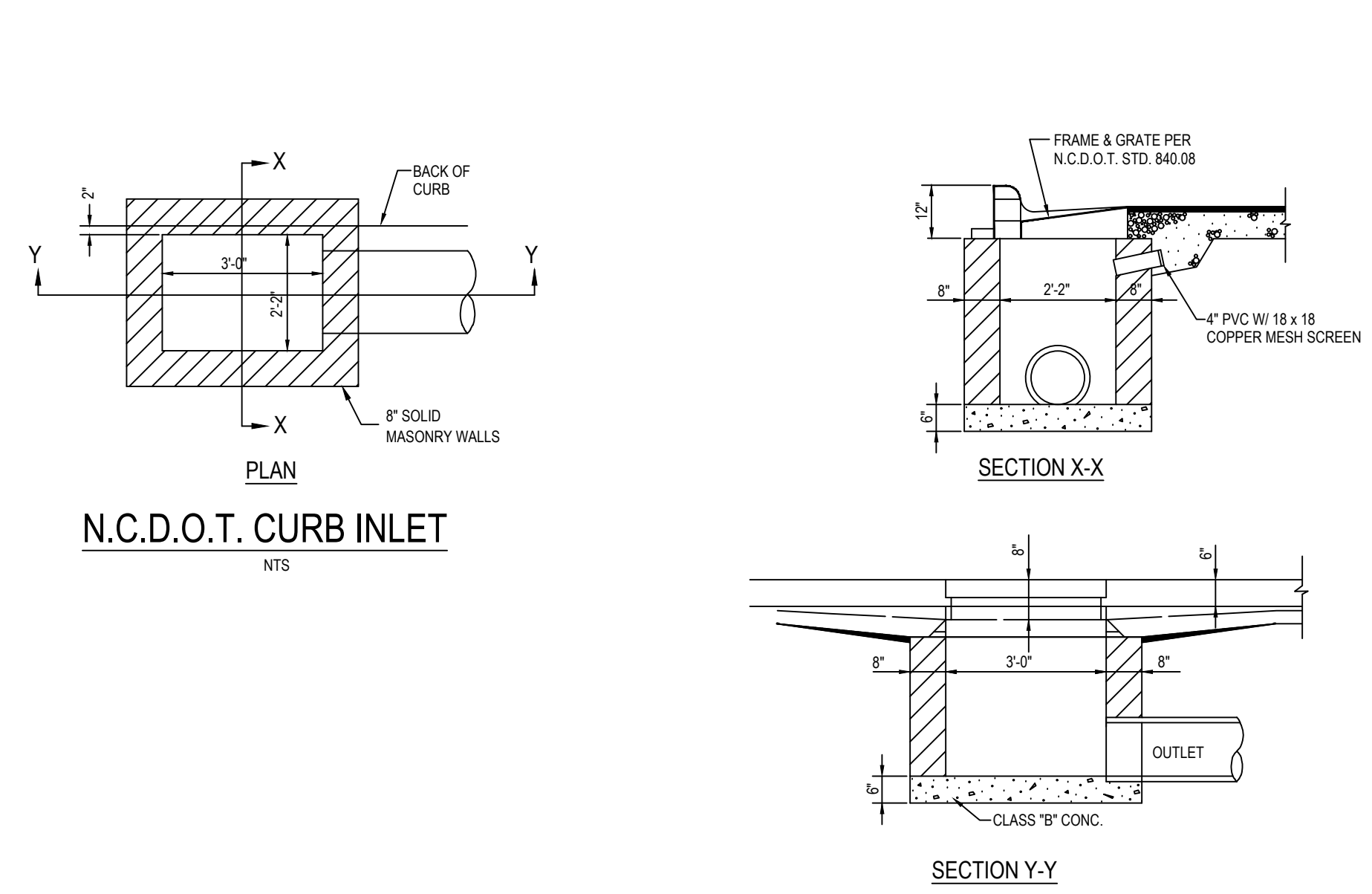
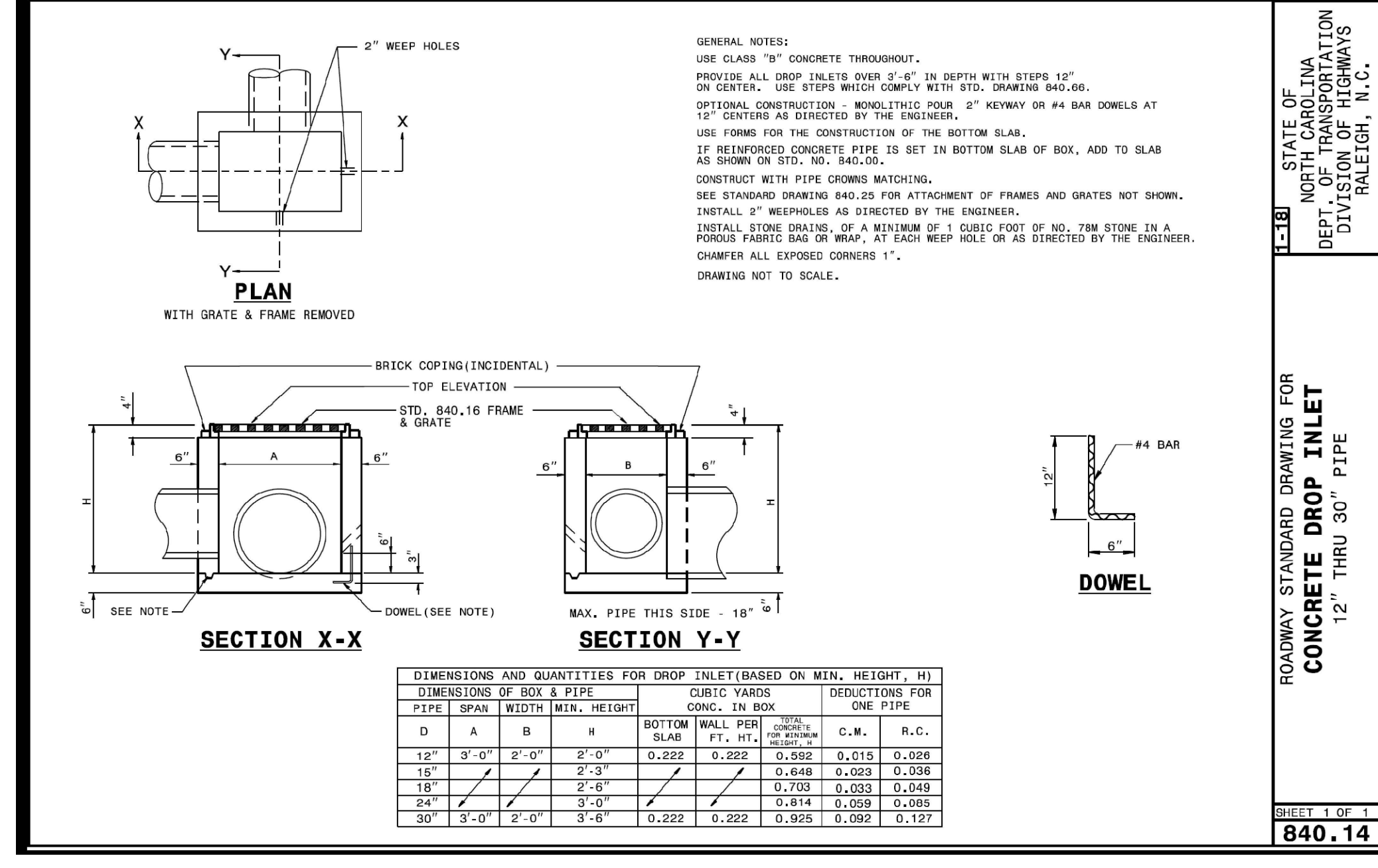
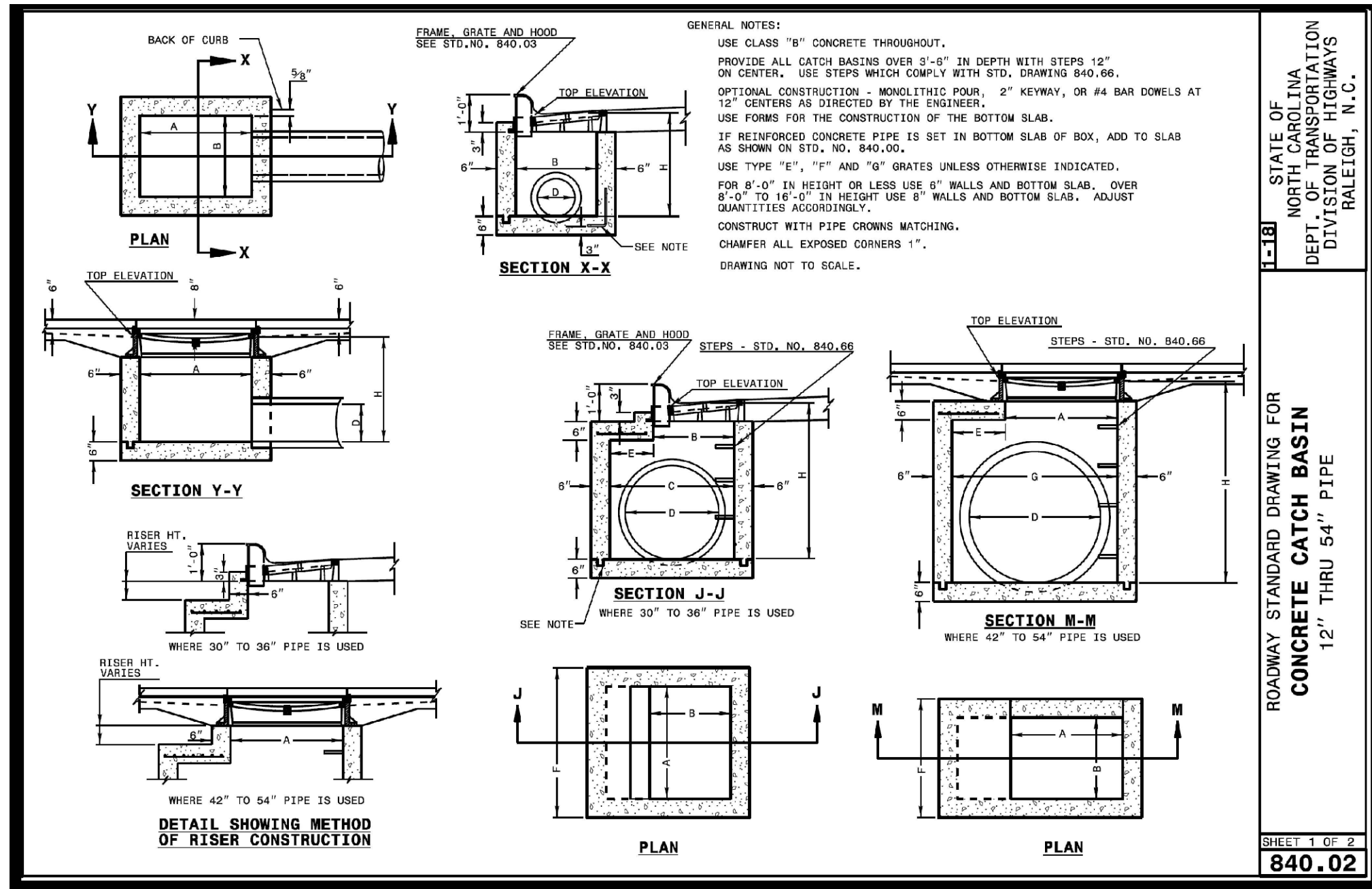
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Wake Forest, North Carolina 27587
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NO	DATE	BY	REVISION/DESCRIPTION
1	07/28/2022	NTS	INITIAL SUBMITTAL
2	10/13/2022	NTS	Revised per Town COR Comment
3	01/10/2023	NTS	Revised per Town COR/Walk Co Comment
4	DATE	BY	COMMENT
5	DATE	BY	COMMENT
6	DATE	BY	COMMENT
NO	DATE	BY	REVISION/DESCRIPTION



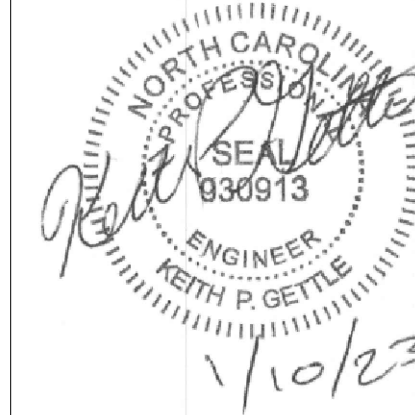
Standard Site Details
South Main
503 South Main Street
Rolesville, Wake County, North Carolina

Project No. 22003
Dwg No. **D1**

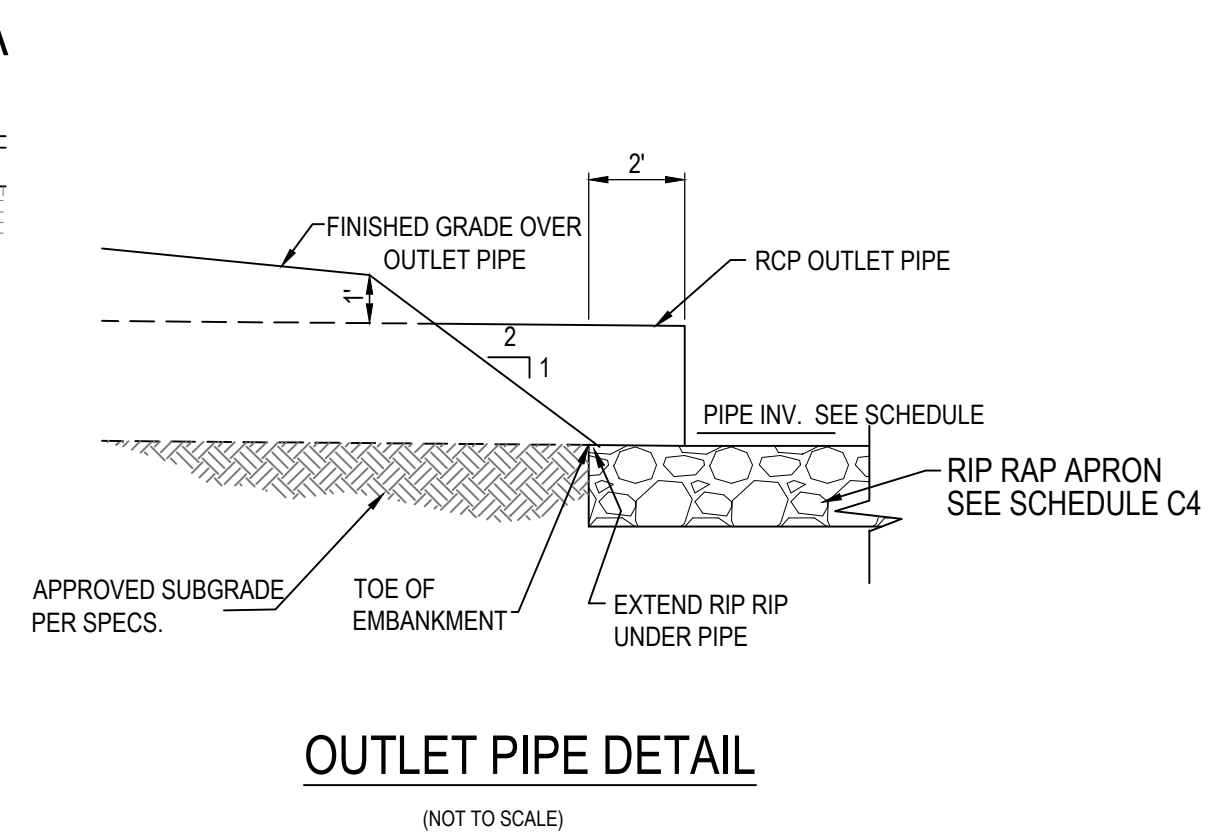
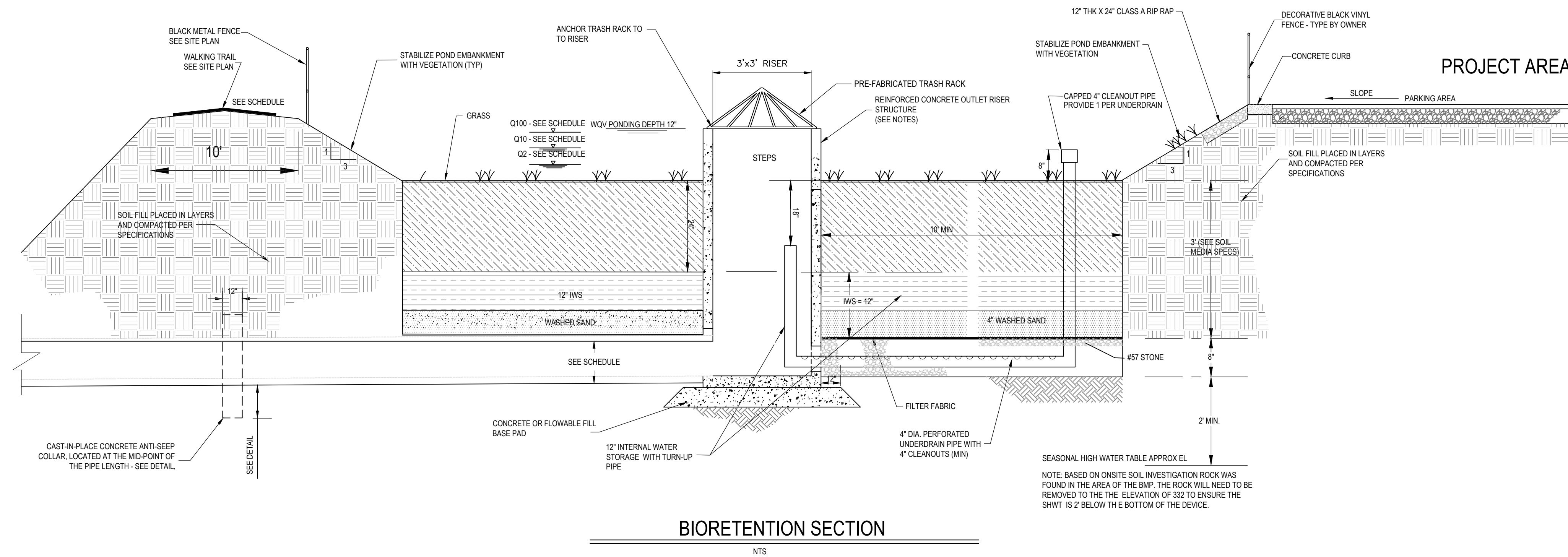


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NO.	DATE	REVISION/DESCRIPTION	BY
1	07/26/2023	INITIAL SUBMITTAL	PCS
2	08/03/2023	Revised per Owner Comments	PCS
3	08/10/2023	Revised per Owner Comments	PCS
4	08/17/2023	Revised per Owner Comments	PCS
5	08/24/2023	Revised per Owner Comments	PCS
6	09/07/2023	Revised per Owner Comments	PCS



Site and Stormwater Details
South Main
503 South Main Street
Rolesville, Wake County, North Carolina



BIORETENTION SECTION

INLET PIPE DETAIL

CONCRETE ANTI-SEEP COLLAR DETAIL

BIORETENTION FACILITY OPERATION AND MAINTENANCE:

- * WATERING: WATERING SHOULD NOT BE REQUIRED AFTER GRASS 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 GRASS 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:

- * A 2.5-FOOT DEEP, HOMOGENOUS SOIL MIXTURE OF 85 TO 88 PERCENT CONSTRUCTION SAND, 8 TO 12 PERCENT FINES (SILT AND CLAY), AND 3 TO 5 PERCENT ORGANIC MATTER SHALL BE USED. SOIL MEDIA SHOULD BE SENT TO THE NCDA LABS TO BE ANALYZED. P-INDEX FOR THESE SOIL MEDIA SHOULD RANGE BETWEEN 10 AND 30. THE INFILTRATION RATE OF THE SOIL SHALL BE BETWEEN 3.85 AND 6 IN/HR. SOIL CHARACTERISTICS SHALL BE VERIFIED BY A GEOTECHNICAL ENGINEER.
- * THE BIORETENTION FACILITY SHALL BE PLANTED WITH GRASS. GRASS SHALL BE SODDED AND SHALL NOT BE GROWN IN AN IMPERMEABLE LAYER SUCH AS CLAY. HYBRID BERMUDA, CENTIPEDE, OR FESCUE/BUEGRASS ARE RECOMMENDED.
- * ALL CONSTRUCTION, MONITORING, AND MAINTENANCE GUIDELINES IN THE NCDQW 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:
 - 85-88% SAND (ASTM C-33)
 - 8%-10% FINE SOIL MATERIAL (INCLUDES BOTH SILT OR CLAY)
 - 3%-5% ORGANICS / PINE BARK MULCH
 - * SOIL SHALL HAVE A HYDRAULIC CONDUCTIVITY OF BETWEEN 1 IN/HR AND 6 IN/HR, WITH A 2 IN/HR RATE BEING OPTIMAL. PHOSPHOROUS INDEX SHALL BE BETWEEN 10 AND 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. #60 SIEVE (ASTM D-4751).
- * UNDERDRAIN PIPING - NOMINAL 6" 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.

BMP Schedule	
BMP (Elevations)	Bio
Top of Dam	410.15
Spillway	n/a
Top of Riser	410.00
Bottom Riser (invert)	407.20
Drawdown Orifice	n/a
Orifice Invert	n/a
Perm Pool or Media Surface	409.00
Forebay Bottom	n/a
Main Pond Bottom	n/a
Discharge Pipe (Dia)	18"
8" Drain Pipe	n/a
Discharge Pipe Length (feet)	25.00
Discharge Pipe Invert Out	407.00
Q2 Elevation	409.54
Q10 Elevation	409.68
Q100 Elevation	409.91

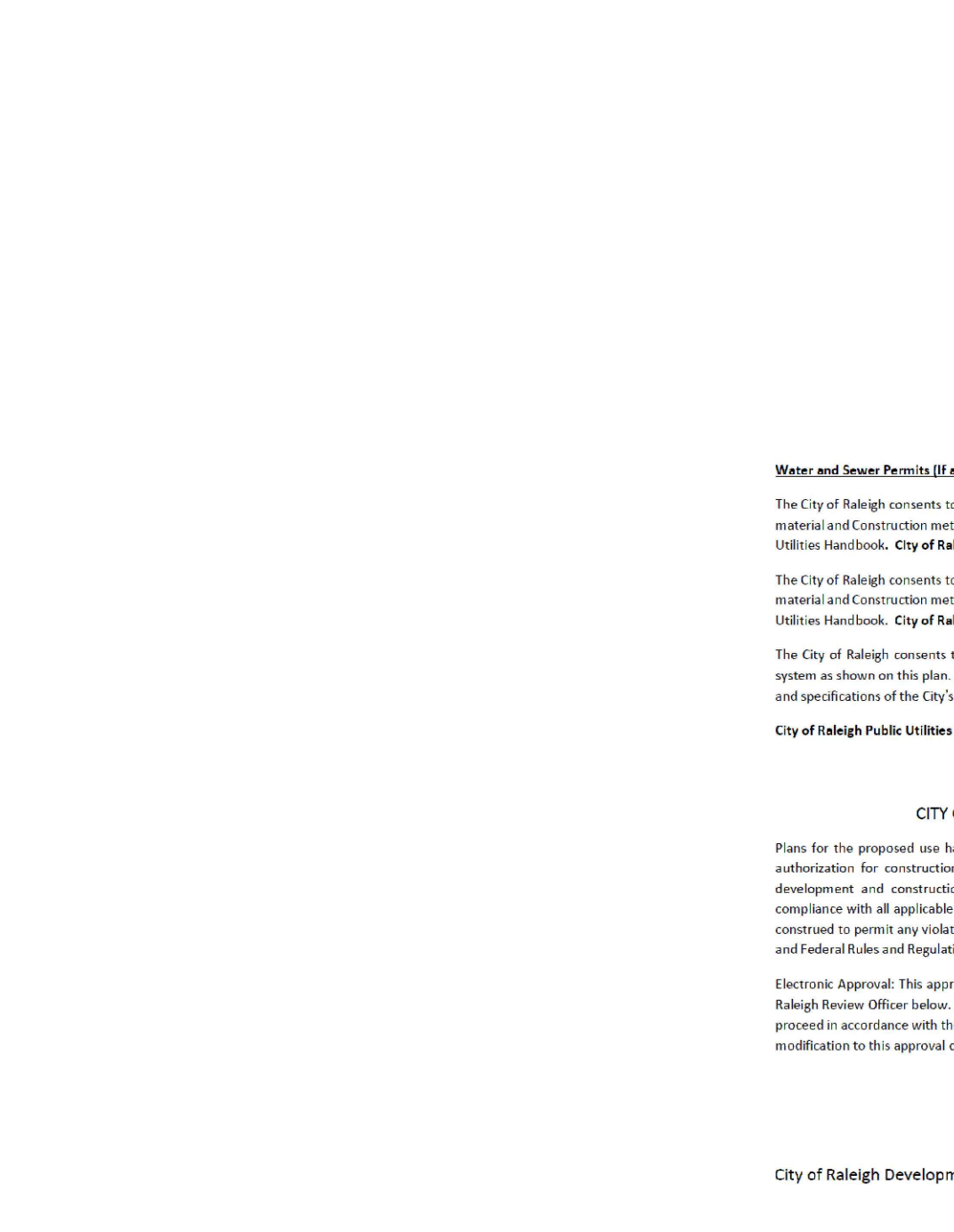
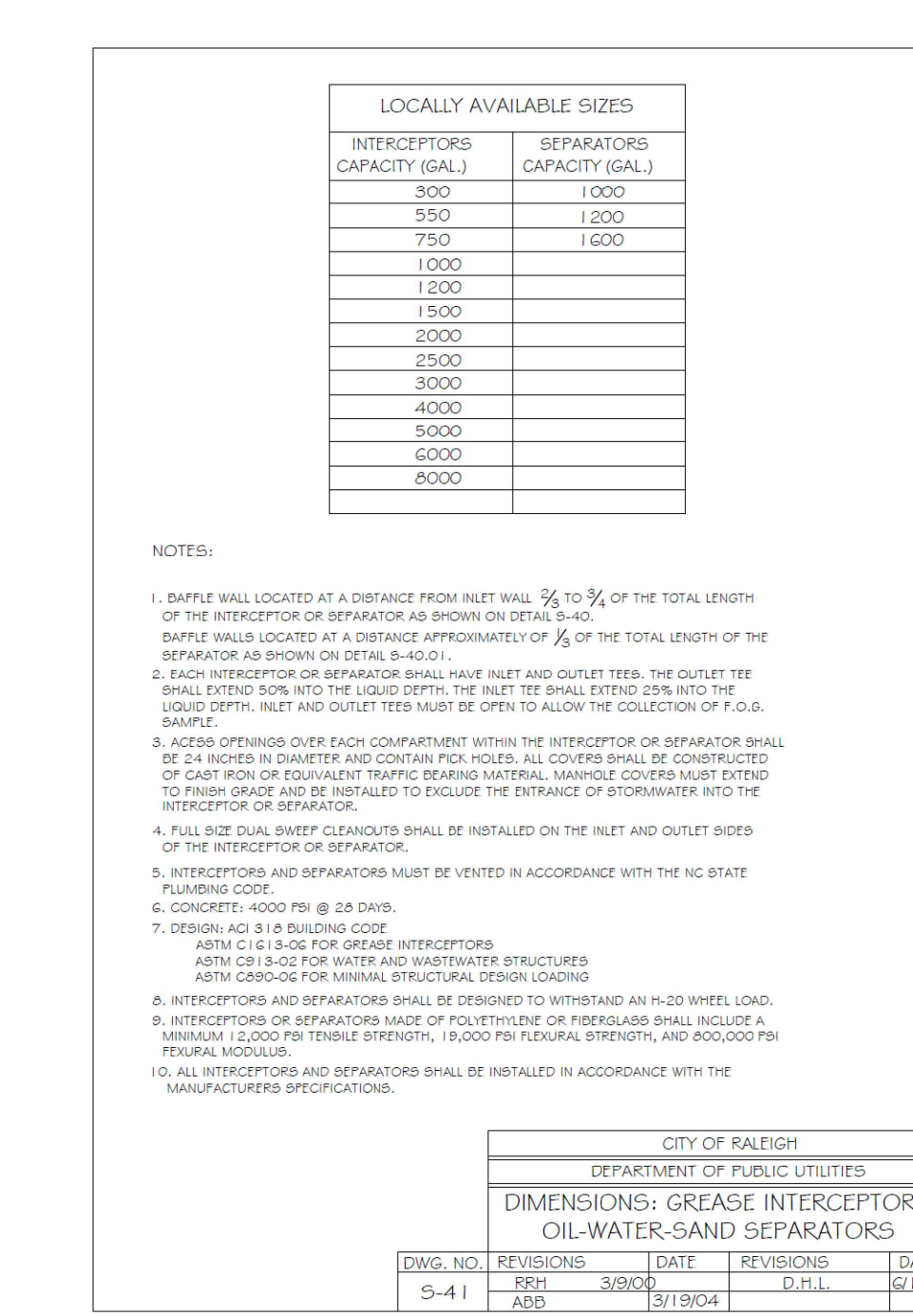
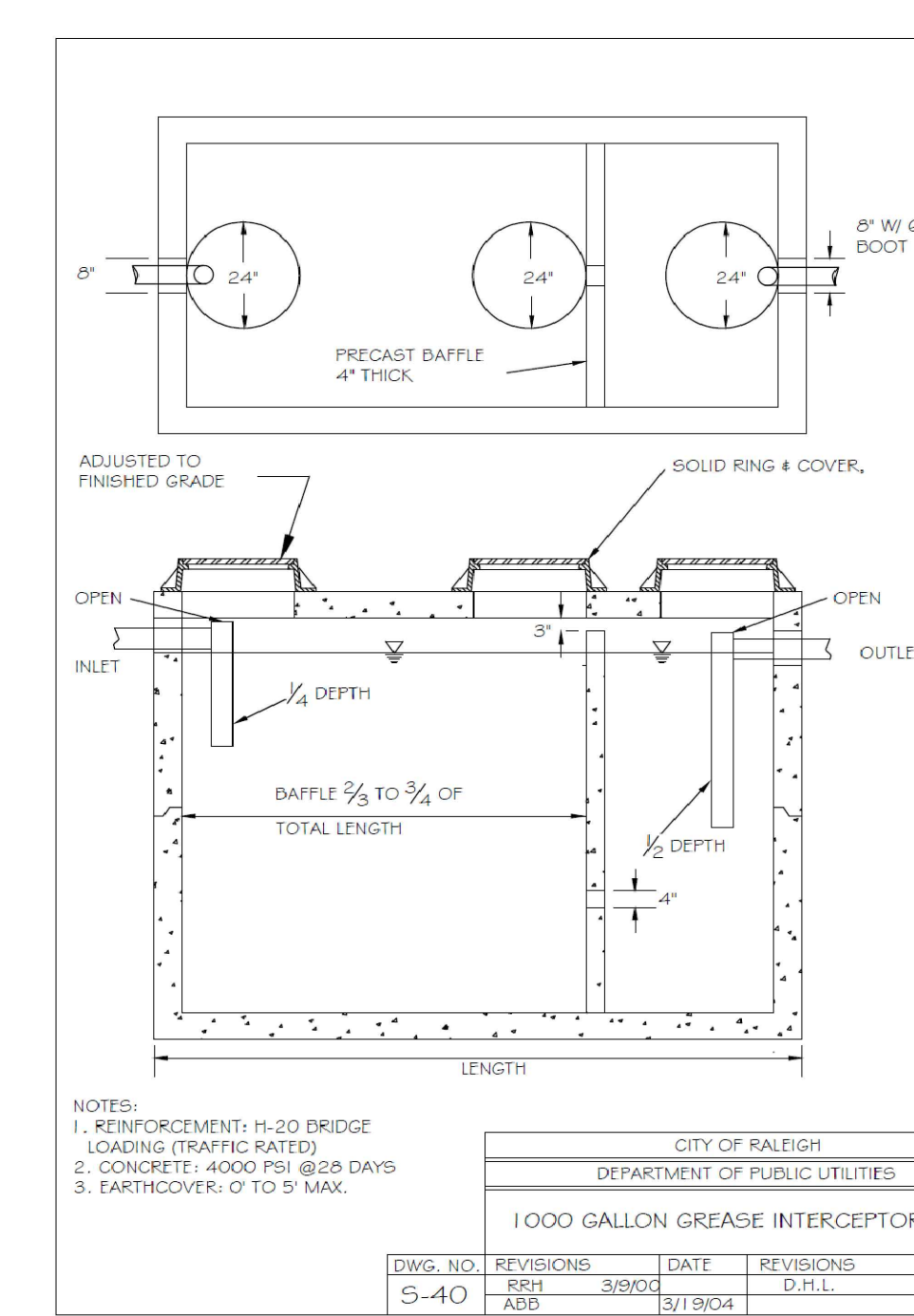
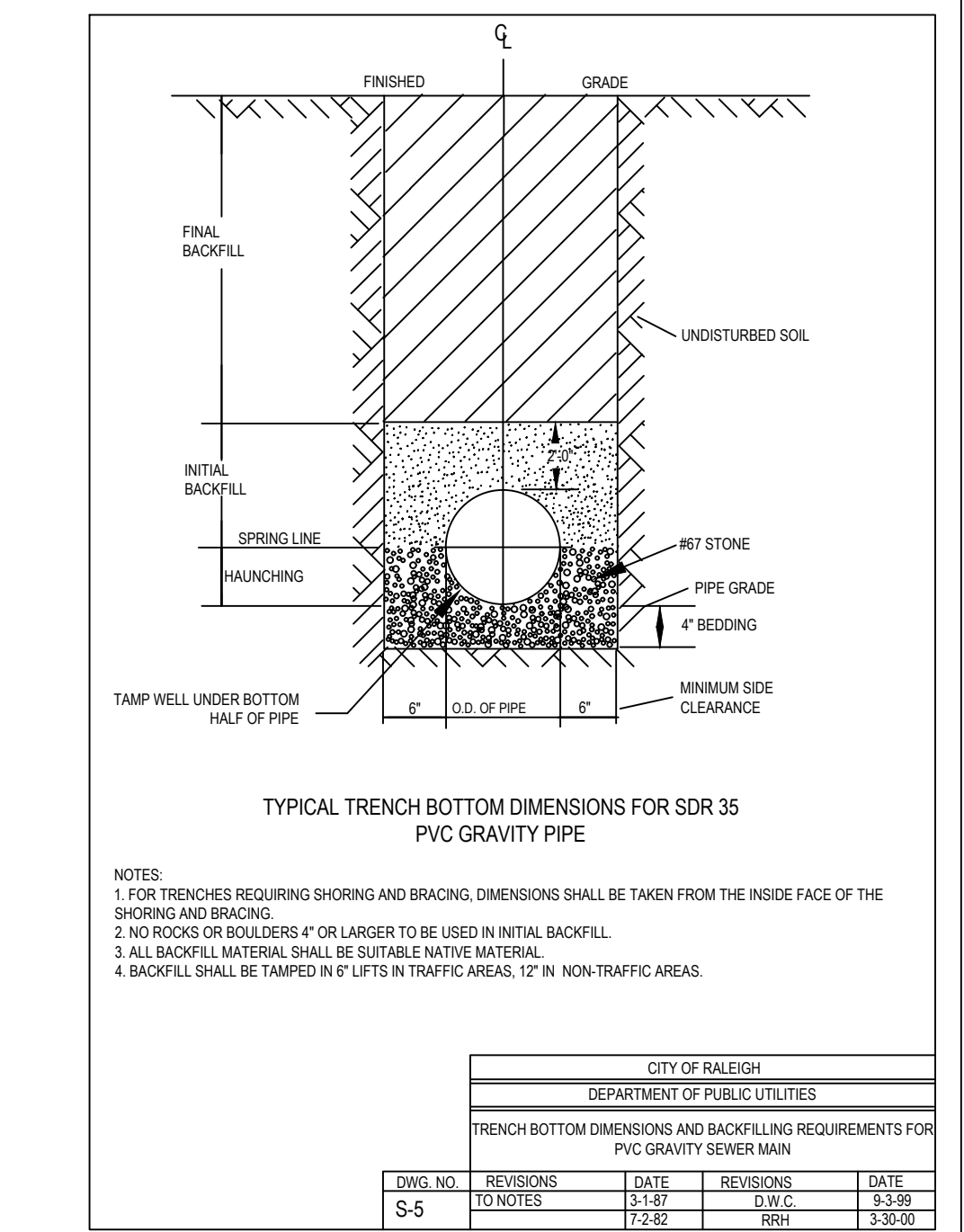
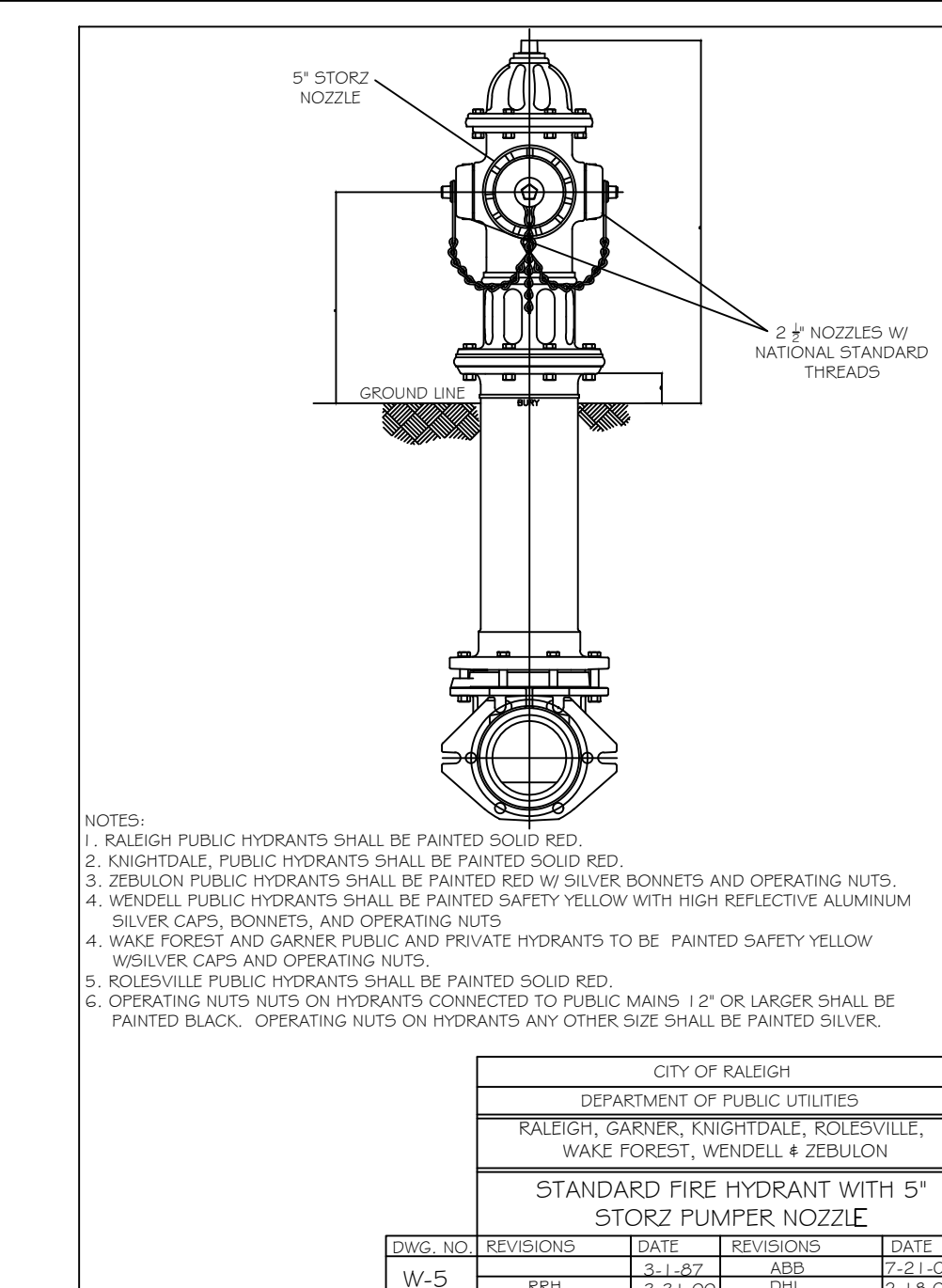
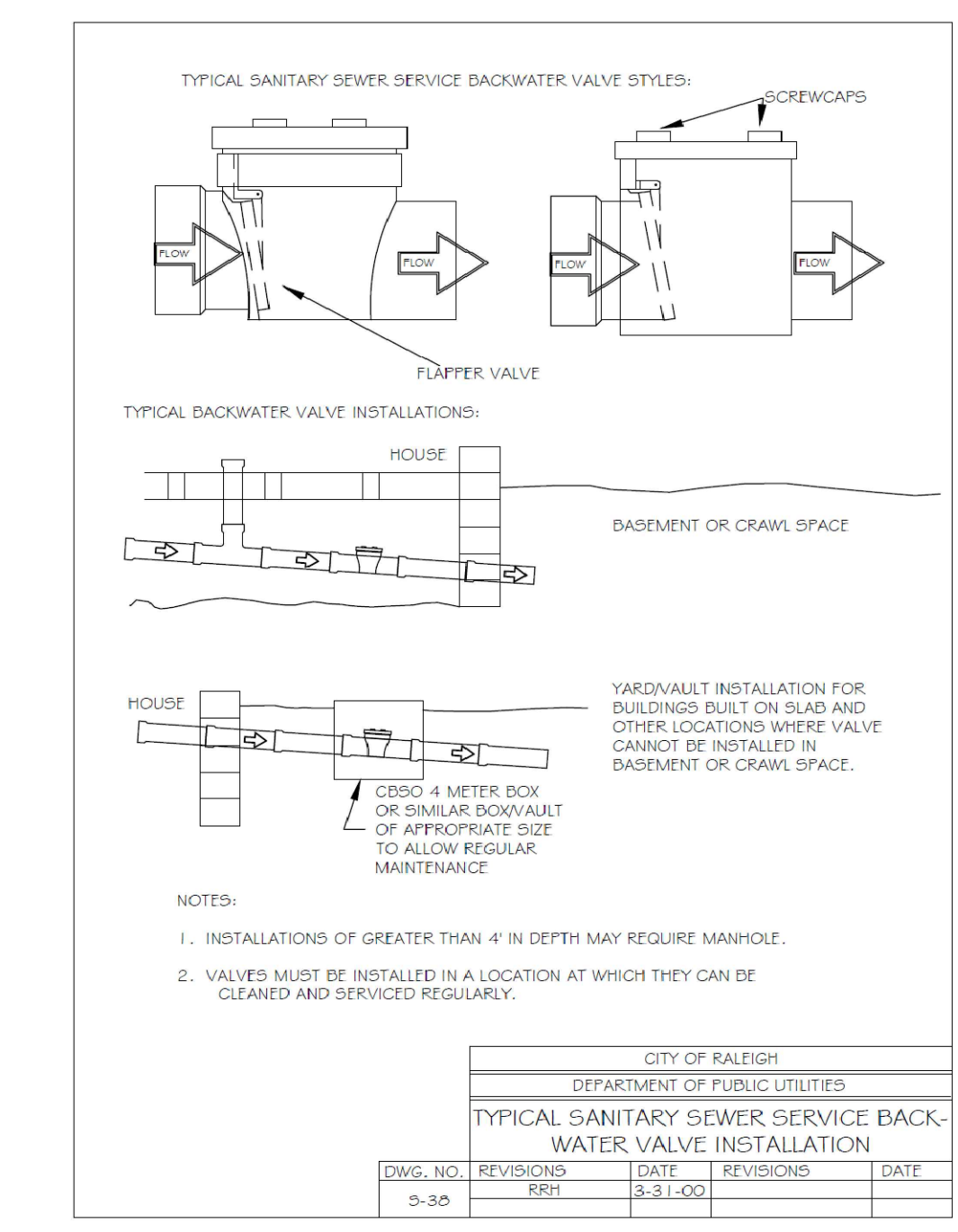
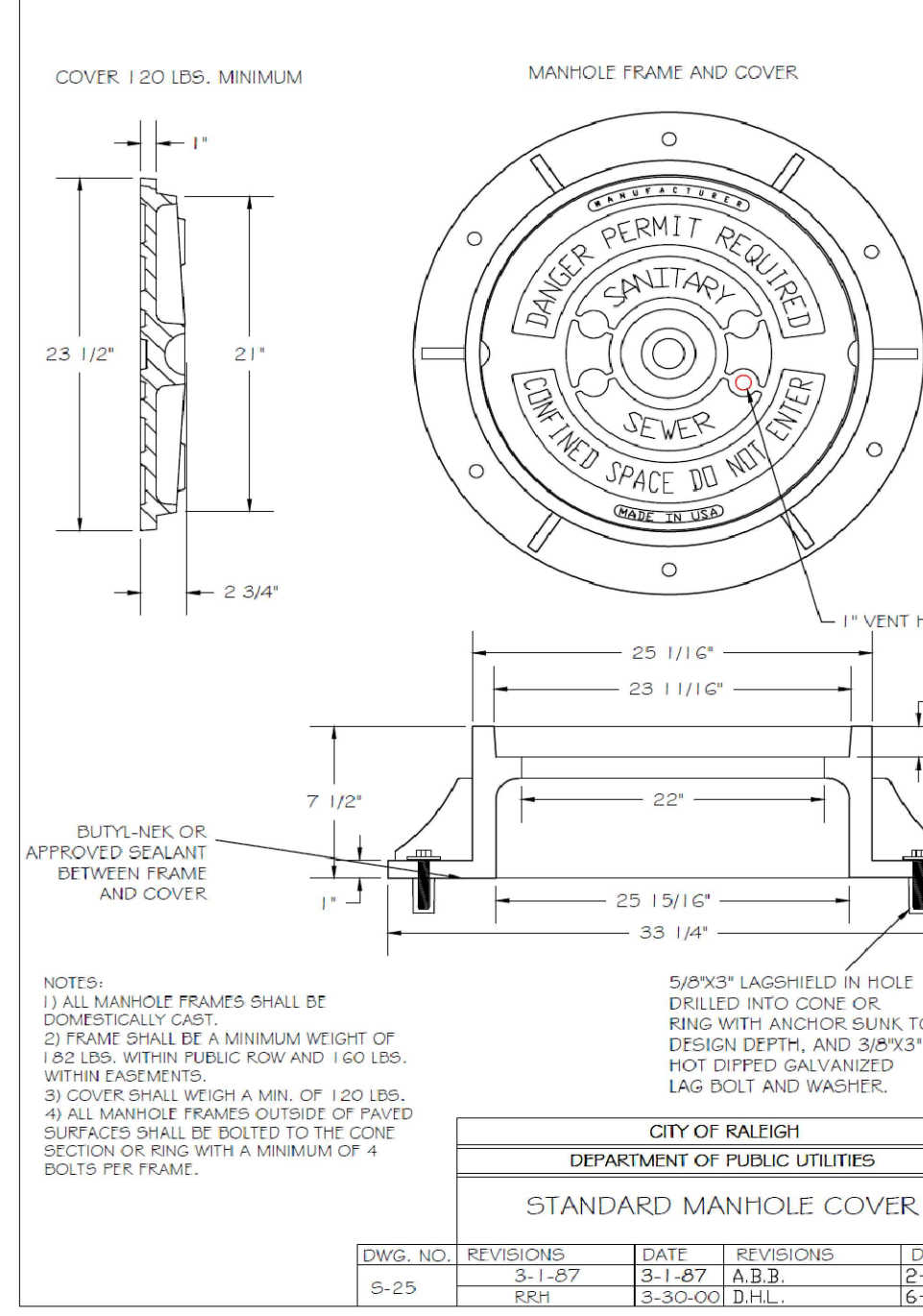
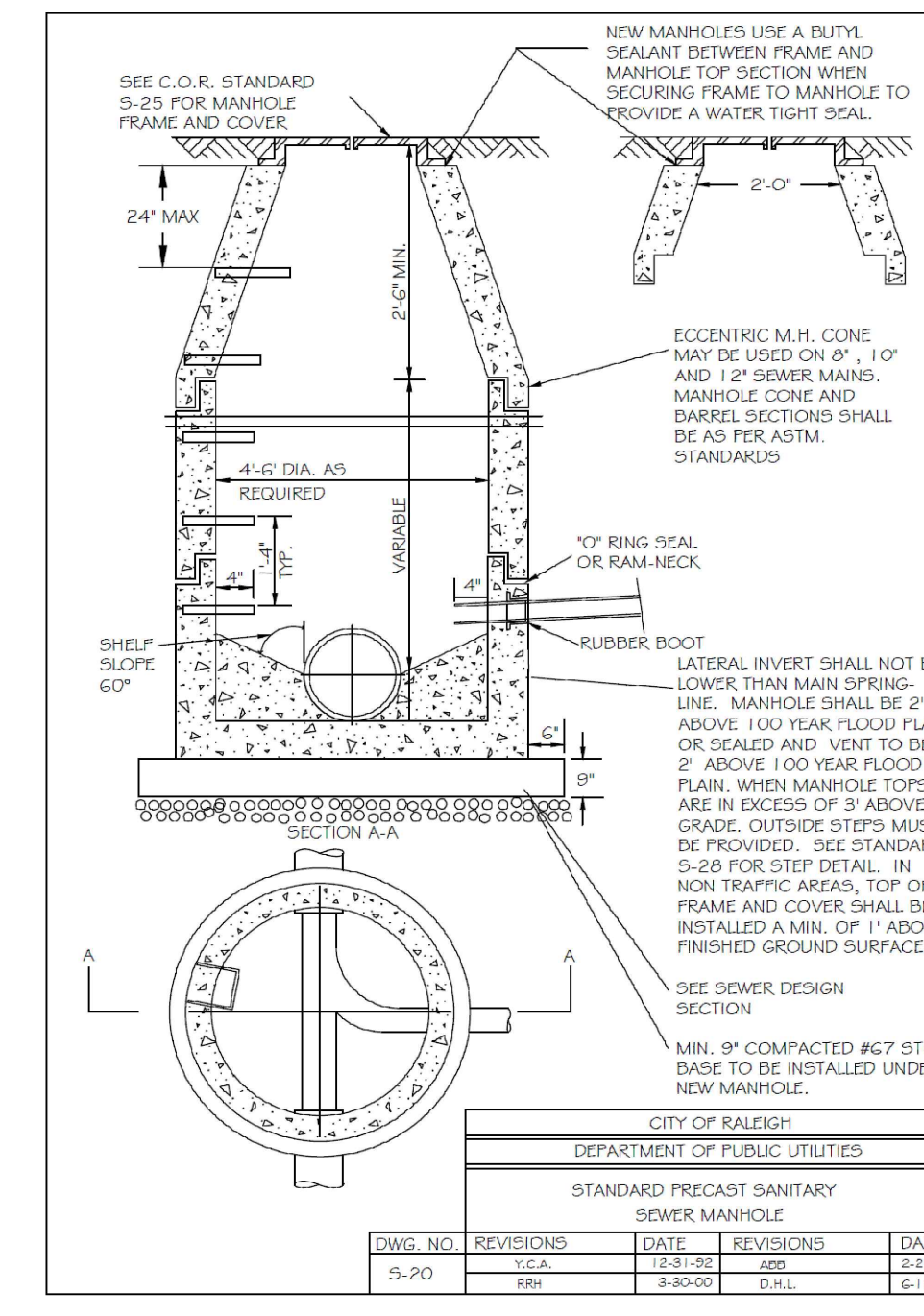
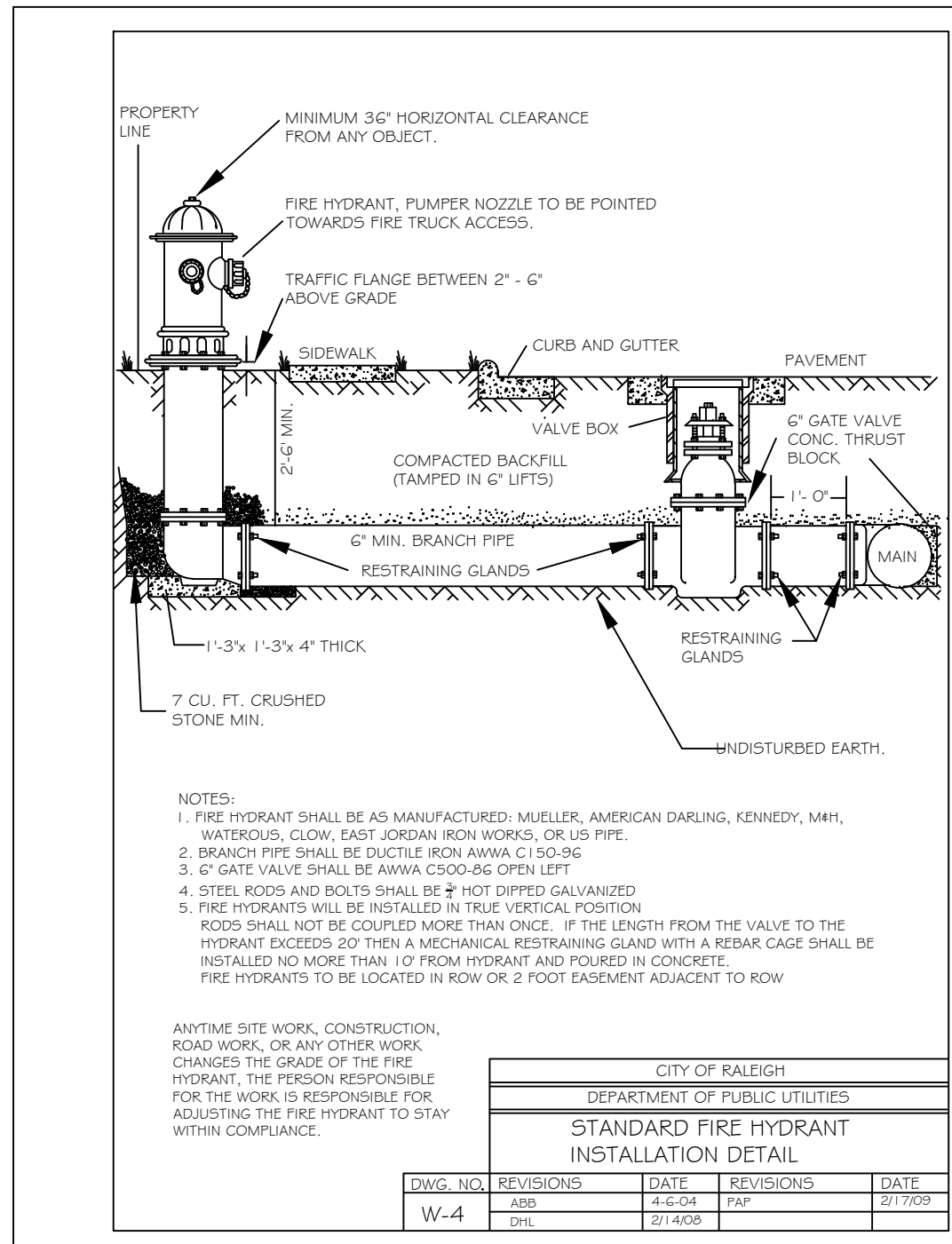
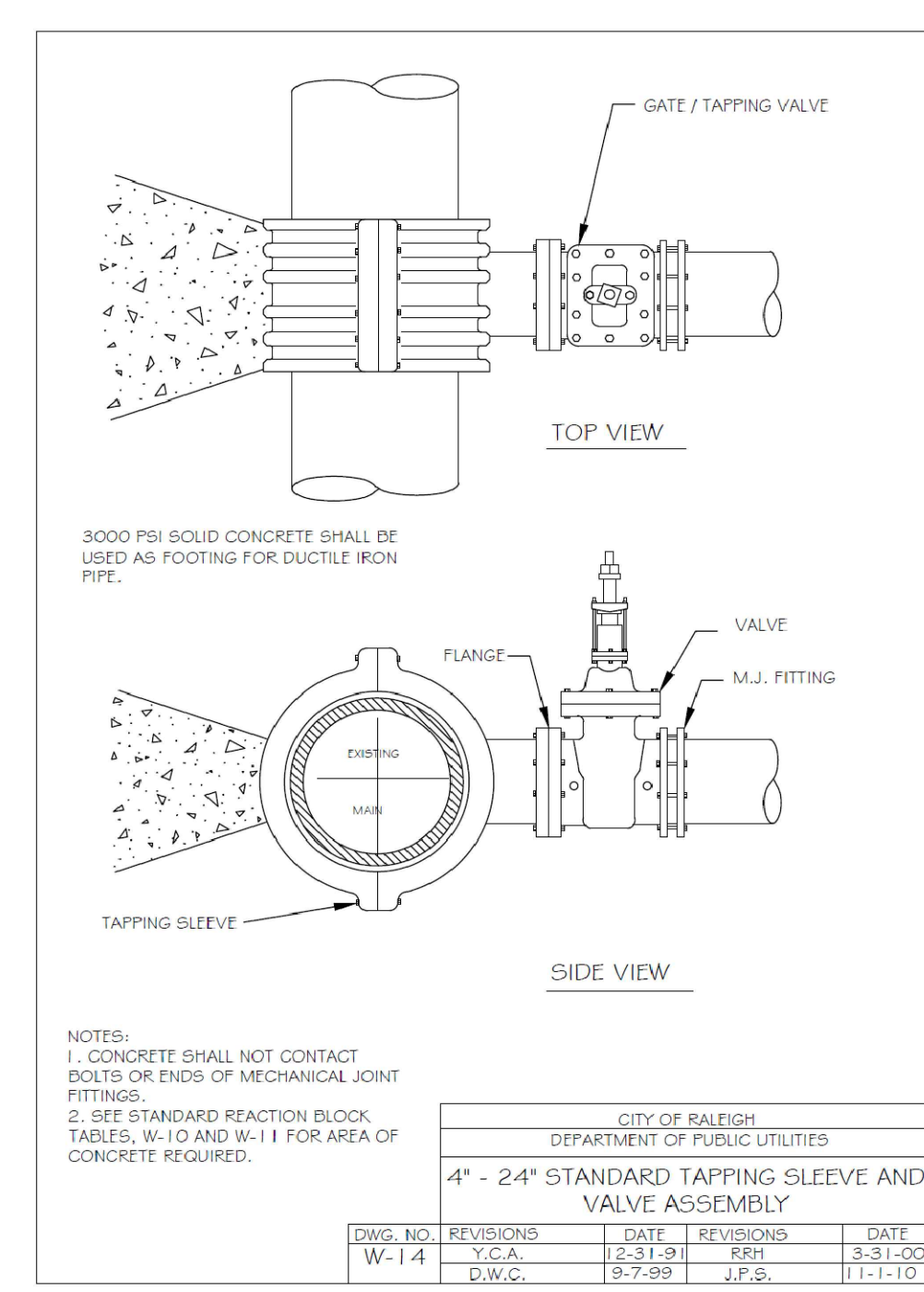
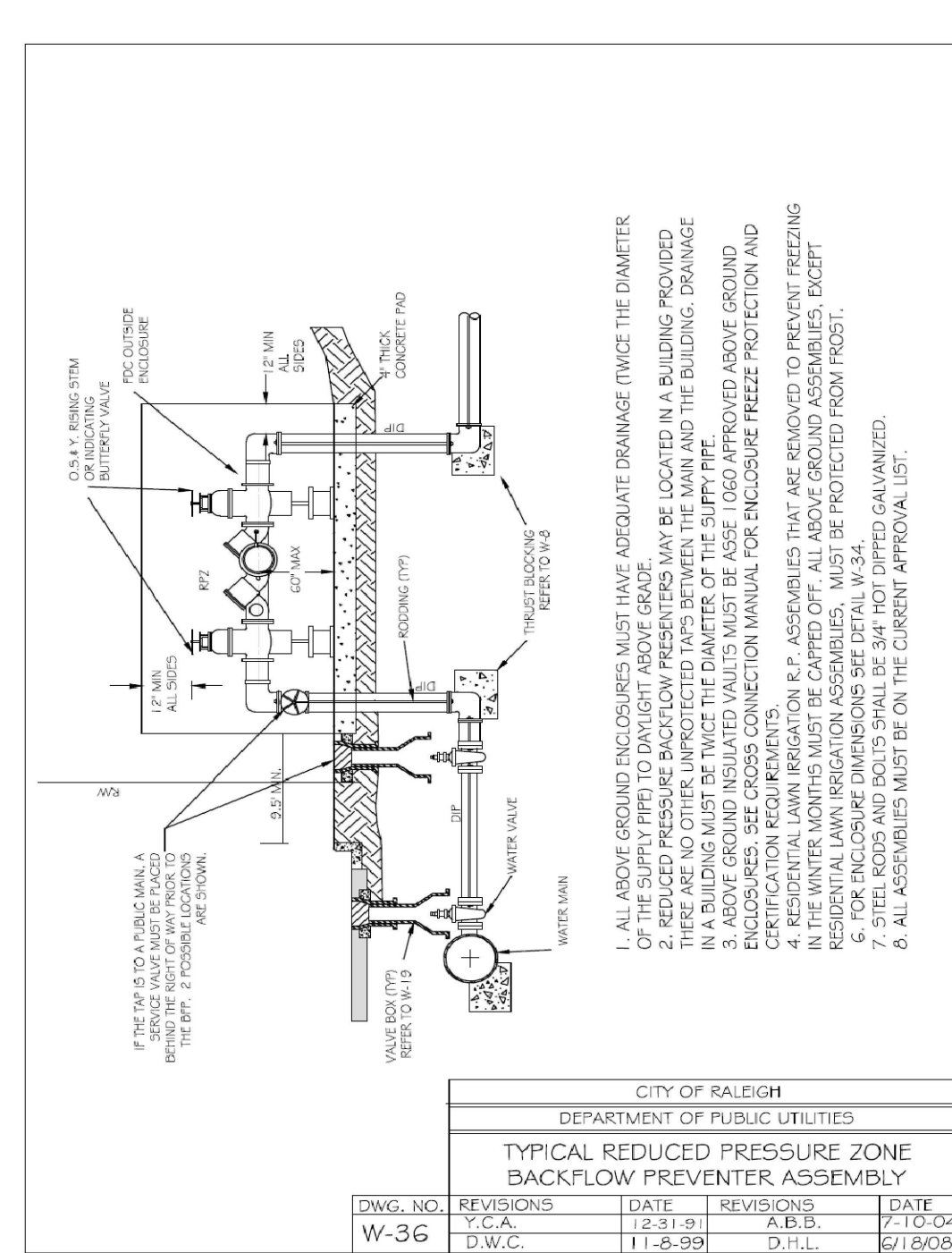
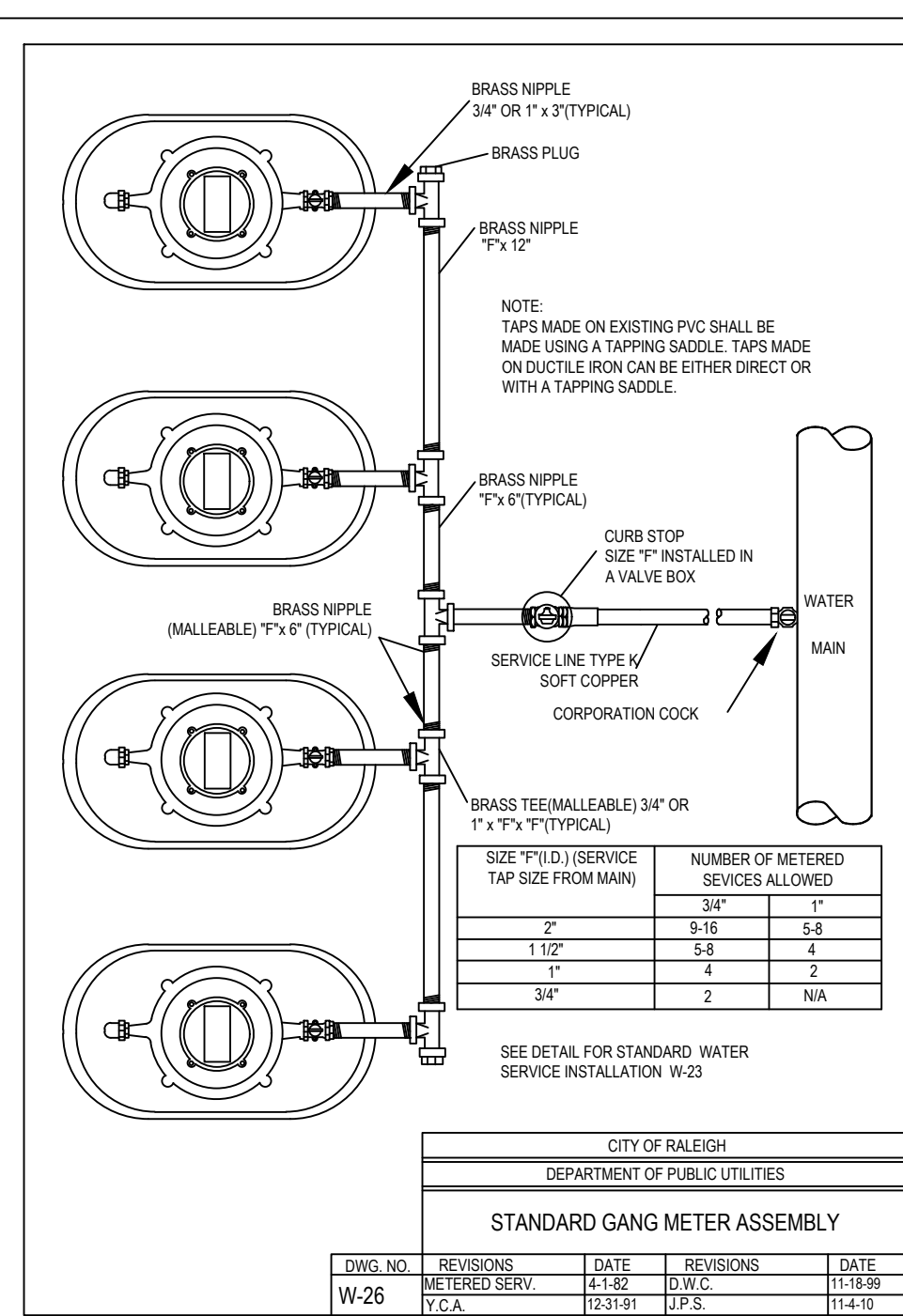
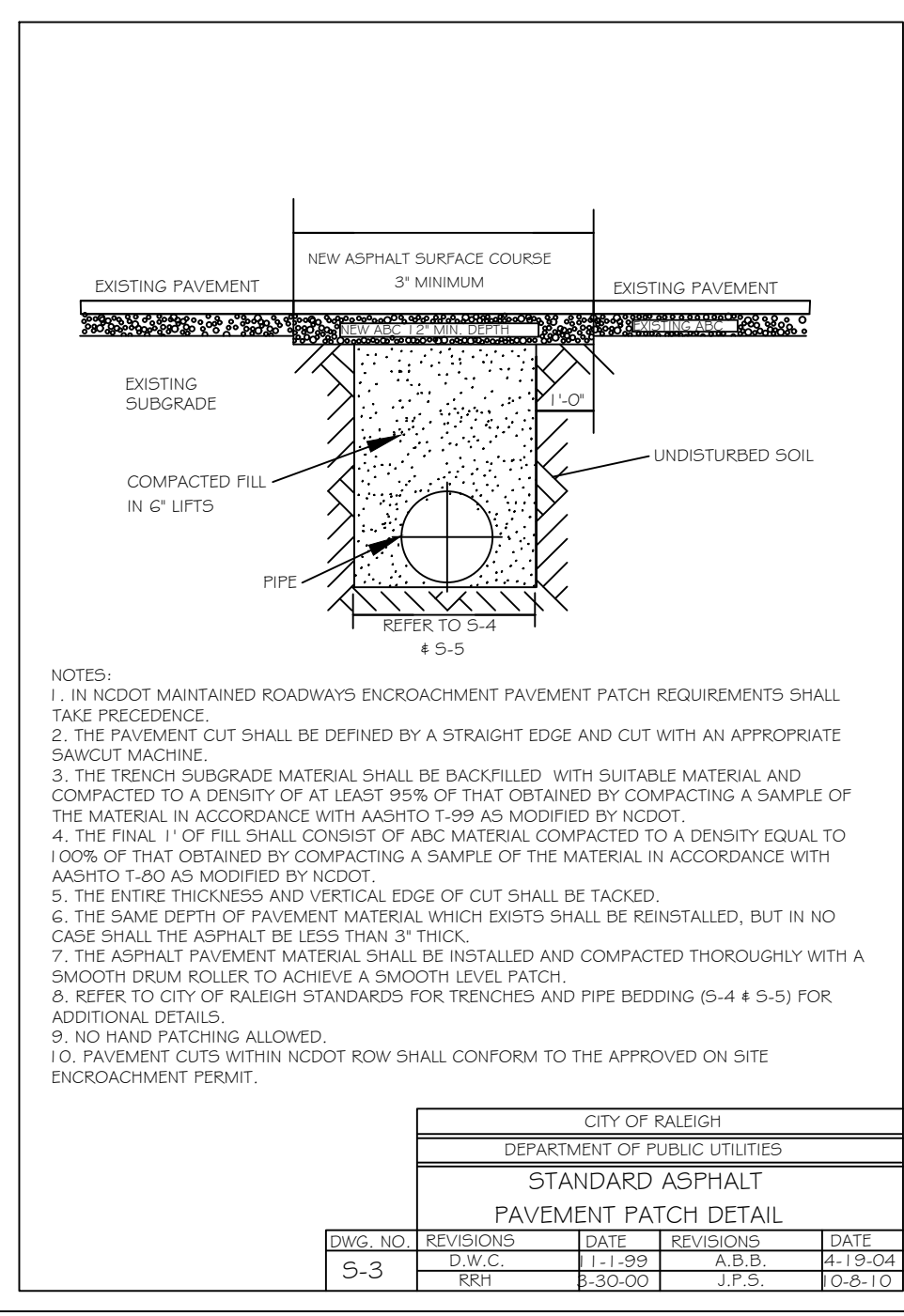
Gettle Engineering and Design, PLLC
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 (919) 210-3934 Firm License P-2538

NO.	DATE	REVISION DESCRIPTION
1	07/26/2012	INITIAL SUBMITTAL
2	10/12/2012	Revised per Town Code Comment
3	01/12/2013	Revised per Town Code / NHA/CO Comment
4	DATE	COMMENT
5	DATE	COMMENT
6	DATE	COMMENT
7	DATE	COMMENT
8	DATE	COMMENT



BMP Device Detail
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **D3**



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NO.	DATE	REVISION/DESCRIPTION	BY
1	07-26-02	INITIAL SUBMITTAL	RRH
2	10-30-02	Revised per Town CDR Comment	RRH
3	01-02-03	Revised per Town CDR (Wake Co) Comment	RRH
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY



11/10/23

Water and Sewer Details
South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **D4**

SITE PERMITTING APPROVAL

Water and Sewer Permits (if applicable)

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____.

The City of Raleigh consents to the connection and extension of the City's Public Sewer System as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook, City of Raleigh Public Utilities Department Permit # _____.

The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.

City of Raleigh Public Utilities Department Permit # _____

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 grant 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 Reviewer Office 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 Reviewer Office _____

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	1.83	44' x 74'	5.06	4264	2201	7499	3294	10	1.5 / 1	408.5	408	406

SEE SHEET EC6 FOR DESIGN CALCULATIONS

LINE AND SYMBOL LEGEND

- SILT FENCE OUTLET
- LIMITS OF DISTURBANCE
- SILT FENCE
- TEMPORARY DIVERSION
- TREE PROTECTION FENCE
- STONE FILTER

EROSION CONTROL CONSTRUCTION SEQUENCE - PHASE 1

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL WATERSHED MANAGER. OBTAIN A LAND DISTURBING PERMIT.
- INSTALL TREE PROTECTION FENCE.
- INSTALL EROSION CONTROL MEASURES INCLUDING GRAVEL CONSTRUCTION ENTRANCE/EXIT, SEDIMENT TRAPPING MEASURES, STABILIZATION AT PIPE OUTLETS, 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, JEEVAN NEUPANE (919) 819-8907, 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.

STOCKPILE DESIGN CRITERIA

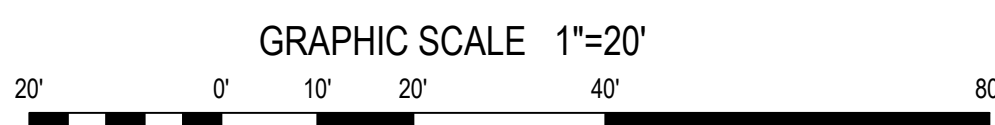
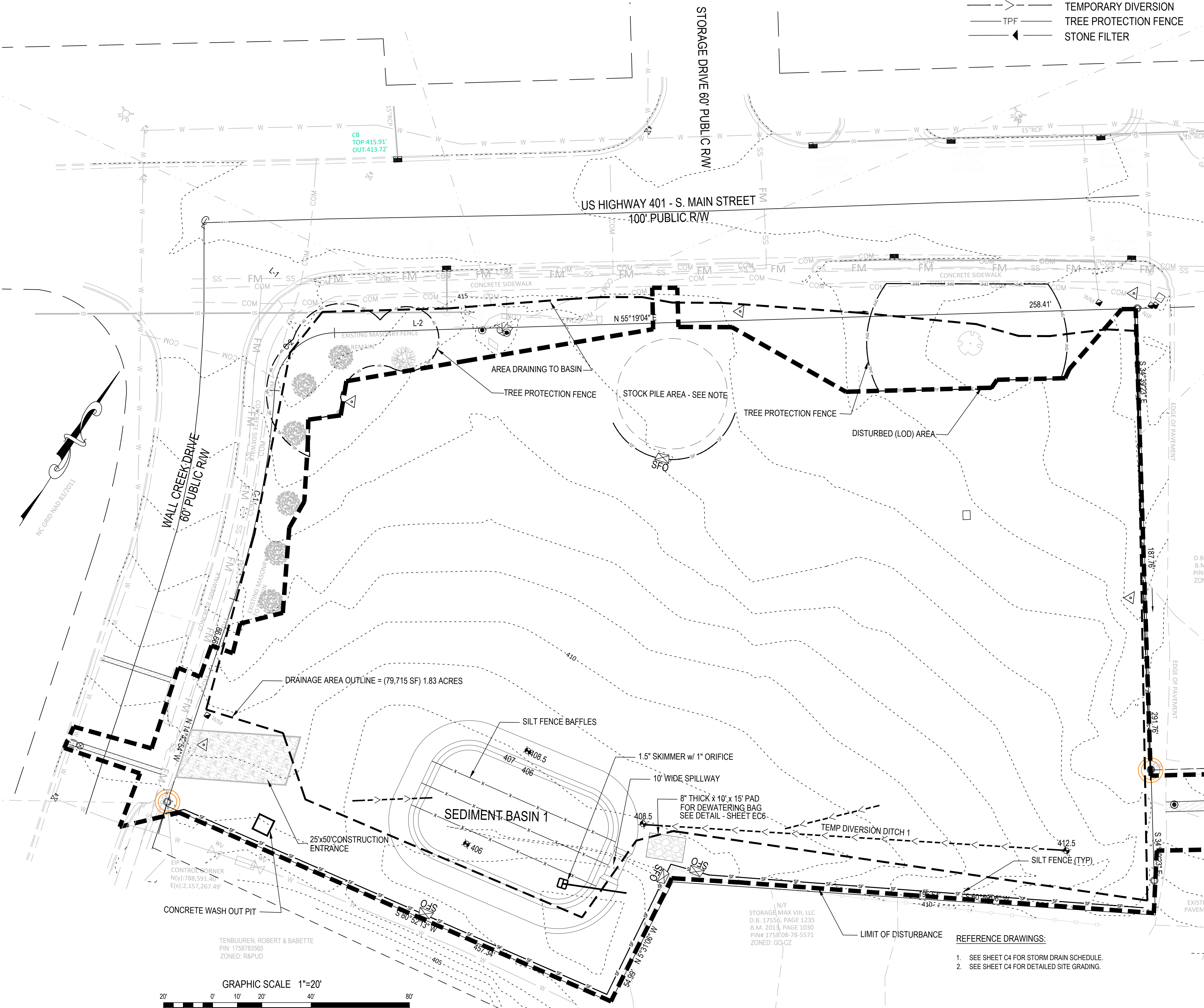
- STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE SHOWN AROUND ALL PROPOSED STOCKPILES (EROSION CONTROL MEASURES SURROUNDING THE STOCKPILE SHALL BE SHOWN AT THE OUTER LIMIT OF THIS EASEMENT).
- STOCKPILE FOOTPRINTS SHALL BE SETBACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
- STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
- STOCKPILE SLOPES SHALL BE 2:1 OR FLATTER.
- 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.
- ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
- 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).
- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED AND WILL REDUCE EROSION PROBLEMS. TARPS SHOULD BE KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
- 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.
- THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL BASIS WHILE THE STOCKPILE IS IN USE.
- ESTABLISH AND MAINTAIN A VEGETATIVE BUFFER AT THE TOE OF THE SLOPE (WHERE PRACTICAL).

GENERAL NOTES:

- INSTALL POLYACRYLAMIDE IMPREGNATED STRAW WATTLES (ie: 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" BLOCK TO 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.

REFERENCE DRAWINGS:

- SEE SHEET C4 FOR STORM DRAIN SCHEDULE.
- SEE SHEET C4 FOR DETAILED SITE GRADING.



TENBUUREN, ROBERT & BABETTE
 PIN: 1758783565
 ZONED: R8/PUD

N/F
 STORAGE MAX VIII, LLC
 D.B. 17556, PAGE 1235
 B.M. 2013, PAGE 1030
 PIN# 17588-08-78-5571
 ZONED: GO-CZ

DRAINAGE AREA TO BASIN = 79,558 SF (1.83 AC)

TOTAL DENUDED AREA 94,016 SF (2.16 AC)

Gettle Engineering and Design, PLLC

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 Wake Forest, North Carolina 27587
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NO.	DATE	BY	REVISION/DESCRIPTION
1	07-26-2022	INITIAL SUBMITTAL	
2	10-3-2022	Revised per Town CDR Comment	
3	01-10-2023	Revised per Town CDR / Wake Co Comment	
4	DATE	COMMENT	
5	DATE	COMMENT	
6	DATE	COMMENT	

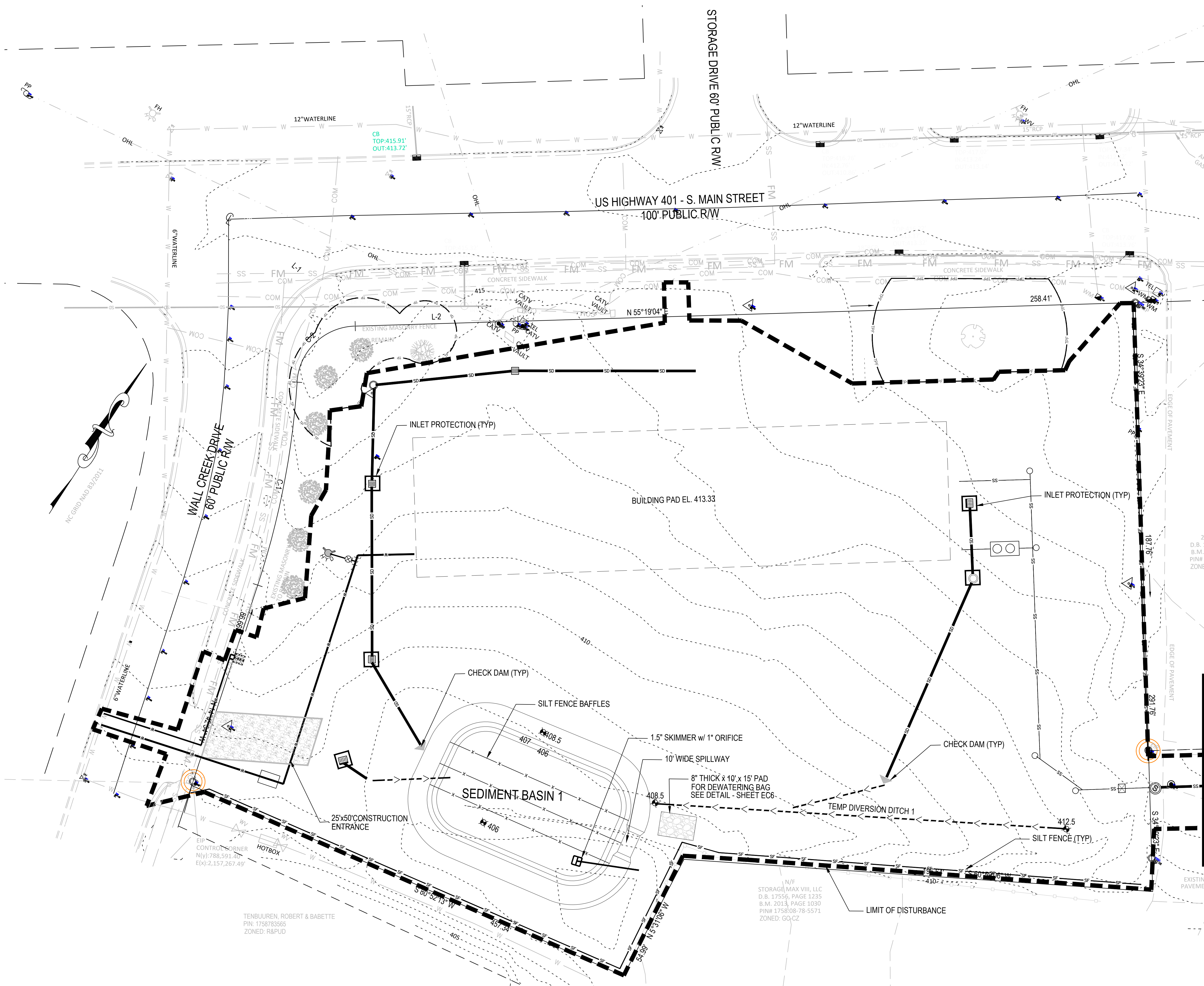


Phase 1 - Erosion Control Plan
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003

Dwg No.

EC1



EROSION CONTROL CONSTRUCTION SEQUENCE - PHASE 2

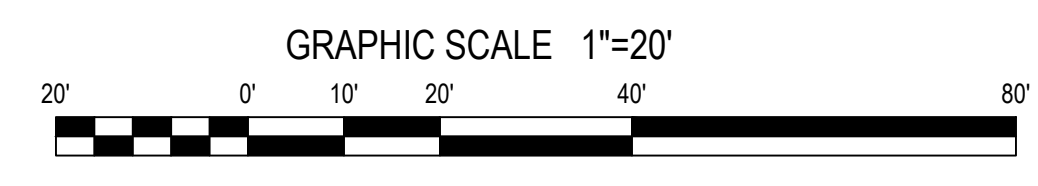
1. INSTALL THE STORM DRAINAGE SYSTEM AND INLET PROTECTION. PROTECTING PIPE OPENINGS AND UNCOVERED STRUCTURES AS SHOWN.
2. INSTALL SANITARY SEWER SYSTEM AND WATER LINE PIPING PER UTILITY PLAN. ENSURE EXISTING UTILITIES ARE PROTECTED DURING CONSTRUCTION ACTIVITIES.
3. STABILIZE DISTURBED AREAS WITHIN 14 WORKING DAYS AFTER COMPLETION OF ANY PHASE OF GRADING. STABILIZATION CONSISTS OF EITHER TEMPORARY MULCHING OR PERMANENT VEGETATION ON AREAS THAT ARE NOT PAVED.
4. REGULARLY INSPECT AND MAINTAIN THE EROSION CONTROL DEVICES SO THEY CONTINUE TO FUNCTION PROPERLY.
5. 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.
6. 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.
7. CONTINUE TO PHASE 3 ACTIVITIES.

LINE AND SYMBOL LEGEND

- SILT FENCE OUTLET
- LIMITS OF DISTURBANCE
- SILT FENCE
- TEMPORARY DIVERSION
- TREE PROTECTION FENCE
- STONE FILTER

REFERENCE DRAWINGS:

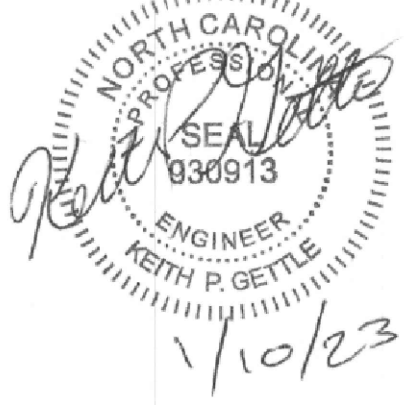
1. SEE SHEET C4 FOR STORM DRAIN SCHEDULE.
2. SEE SHEETS C4 FOR DETAILED SITE GRADING.



Channel	Drain Area, ac	Channel Length, ft	Channel Drop, ft	C	Q2 I, in/hr	Flow cfs	Channel Slope, ft/ft	n	Side Slope:1	Bottom Width, ft	Depth of Flow, ft	Velocity fps	Liner
TD1	0.78	171	4	0.55	5.76	2.5	0.0234	0.024	3.00	2.0	0.27	3.28	Jute Mesh

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NO.	DATE	REVISION DESCRIPTION	BY
1	07-26-2022	INITIAL SUBMITTAL	RF
2	10-12-2022	Revised per Town CD# Comment	RF
3	01-10-2023	Revised per Town CD# / Wake Co Comment	RF
4	DATE	COMMENT	BY
5	DATE	COMMENT	BY
6	DATE	COMMENT	BY
8	DATE	COMMENT	BY
NO.	DATE	REVISION DESCRIPTION	BY



Phase 2 - Erosion Control Plan
South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

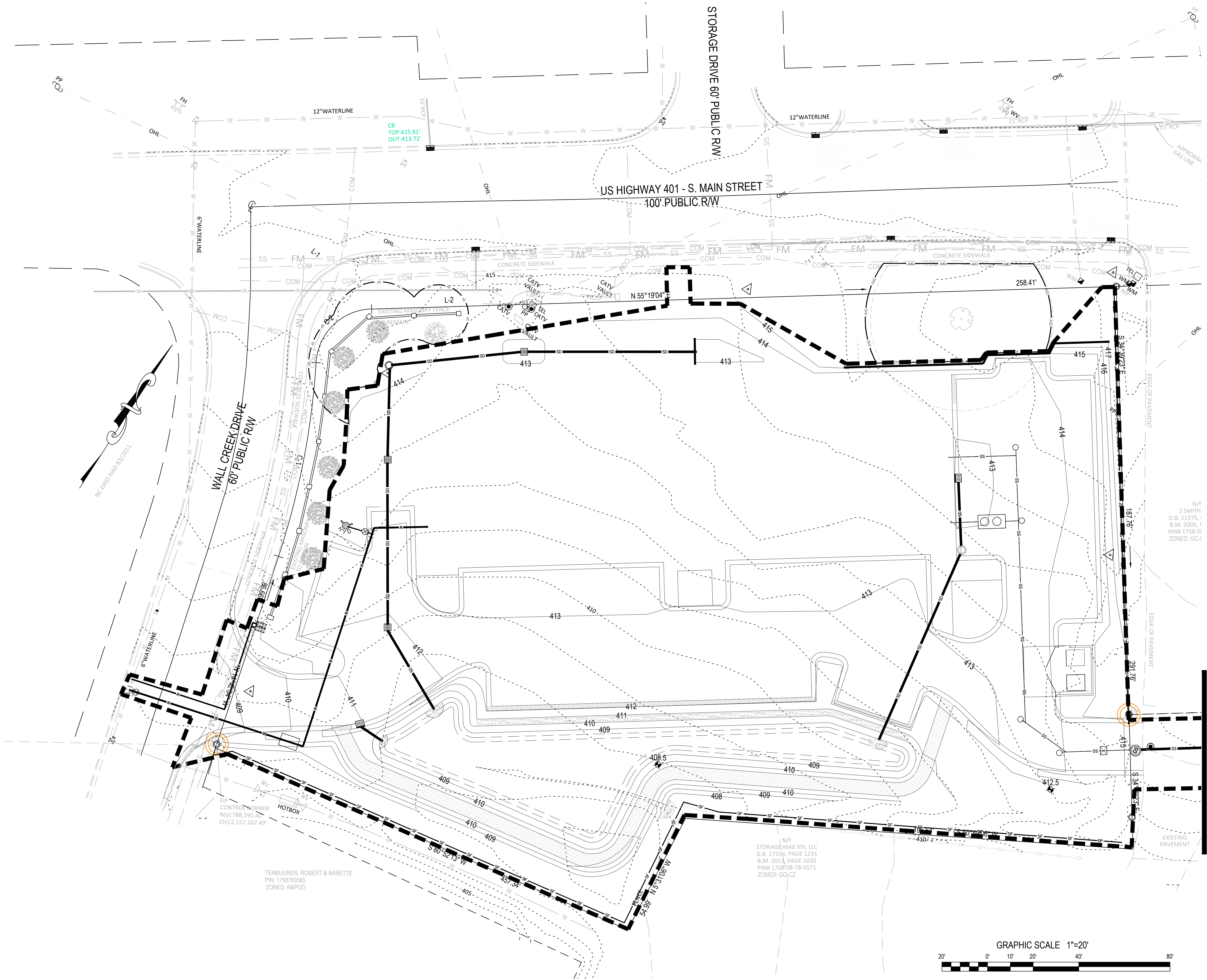
Project No. 22003
 Dwg No. **EC2**

TENBUUREN, ROBERT & BABBETTE
 PIN: 1758/783565
 ZONED: R&PUD

N/F
 STORAGE MAX VIII, LLC
 D.B. 17556, PAGE 1235
 B.M. 2013, PAGE 1030
 PIN# 1758/08-78-5571
 ZONED: GO-C2

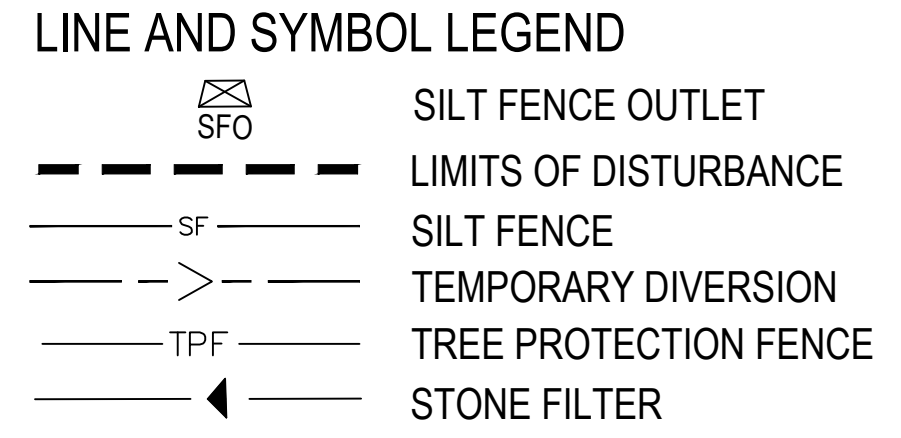
2
 D.B. 1
 B.M.
 PIN#
 ZONE

MATCH LINE SEE SHEET C2



- CONSTRUCTION SEQUENCE - PHASE 3
- CONSTRUCT CONCRETE CURB IN ROADWAYS AND PARKING LOT. PLACE AND COMPACT STONE IN THE ROADWAYS AND PARKING LOT. REMOVE THE GRAVEL ENTRANCE.
 - COMPLETE FINE GRADING AND STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE.
 - ONCE THE SITE IS STABILIZED AND APPROVAL FROM STORMWATER INSPECTIONS TO SCHEDULE THE REMOVAL OF THE SEDIMENT BASIN (SEE NOTES BELOW), DEWATER SEDIMENT BASIN USING A SILT BAG AND MUCK OUT REMAINING SEDIMENT.
 - BEGIN INSTALLATION OF THE BMP AND ASSOCIATED STRUCTURES. CONTACT PROJECT ENGINEER TO INSPECT DURING INSTALLATION PROCESS. SURVEY INVERT ELEVATIONS FOR AS-BUILT INFORMATION REQUIRED BY THE TOWN OF ROLESVILLE AND WAKE COUNTY.
 - GRADE ANY REMAINING AREAS TO FINAL GRADE. UPON COMPLETION THE GROUND COVER SHALL BE PROVIDED AS FOLLOWS:
 - STABILIZE BASINS WITH GROUND COVER IMMEDIATELY AFTER INSTALLATION.
 - STABILIZE DIVERSION DITCHES INTENDED TO BE IN SERVICE FOR 30 DAYS OR MORE WITH TEMPORARY SEEDING AND EROSION CONTROL NETTING.
 - 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.
 - 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.
 - 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.
 - ONCE THE BMP INSTALLATION IS COMPLETE, TEMPORARY MEASURES ARE REMOVED, THE SITE IS STABILIZED, CONTACT THE WAKE COUNTY ENVIRONMENTAL CONSULTANT, JEEVAN NEUPANE AT (919) 819-8907, TO SCHEDULE A STORMWATER INSPECTION.

- REQUIRED WAKE COUNTY BASIN REMOVAL SEQUENCE
- SCHEDULE A SITE MEETING WITH THE WAKE COUNTY ENVIRONMENTAL, JEEVAN NEUPANE AT (919) 819-8907 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.
 - CONTACT NCEQ - 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 NCEQ-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)
 - AFTER RECEIVING POSITIVE CONFIRMATION FROM NCEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER, REMOVE BASIN(S) AND ASSOCIATED TEMPORARY DIVERSION DITCHES. IF PIPES NEED TO BE EXTENDED, PERFORM THIS OPERATION AT THIS TIME. FINE GRADE AREA IN PREPARATION FOR SEEDING.
 - PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
 - INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
 - 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:
- SEE SHEET C4 FOR STORM DRAIN SCHEDULE.
 - SEE SHEETS C4 FOR DETAILED SITE GRADING.

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

NO	DATE	BY	COMMENT	REVISION DESCRIPTION
1	07-08-2022		INITIAL SUBMITTAL	
2	10-12-2022		Revised per Town / COR Comment	
3	01-10-2023		Revised per Town / COR / Wake Co. Comment	
4	DATE	BY	COMMENT	
5	DATE	BY	COMMENT	
6	DATE	BY	COMMENT	



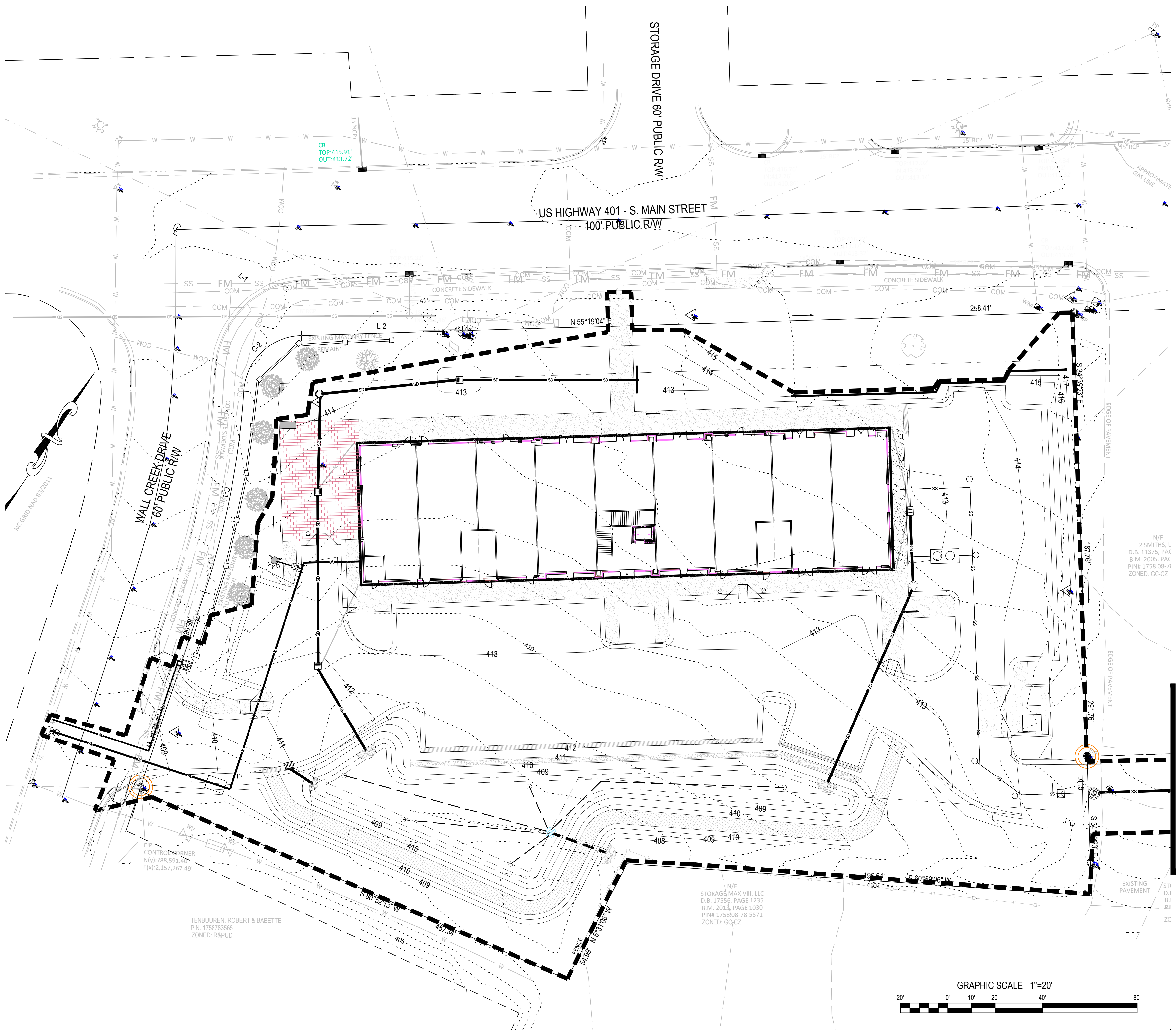
Phase 3 - Erosion Control Plan
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

Project No. 22003
 Dwg No. **EC3**

TENBUUREN, ROBERT & BABETTE
 PIN: 1758783565
 ZONED: R&PUD

N/F
 STORAGE MAX VIII, LLC
 D.B. 17556, PAGE 1235
 B.M. 2013, PAGE 1030
 PIN# 175808-78-5571
 ZONED: GO-CZ

N/F
 D.B. 11375, I
 B.M. 2005, I
 PIN# 1758.01
 ZONED: GC-4



- 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 JEEVAN NEUPANE AT (919) 819-8807 TO SCHEDULE A STORMWATER FINAL INSPECTION. BMP CERTIFICATIONS AND AS-BUILT PLANS MUST BE PROVIDED TO WAKE COUNTY / TOWN OF ROLESVILLE 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 ONLY.
 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

- LINE AND SYMBOL LEGEND**
- SFO SILT FENCE OUTLET
 - LIMITS OF DISTURBANCE
 - SF SILT FENCE
 - TEMPORARY DIVERSION
 - TPF TREE PROTECTION FENCE
 - STONE FILTER

- REFERENCE DRAWINGS:**
1. SEE SHEET C4 FOR STORM DRAIN SCHEDULE.
 2. SEE SHEET C4 FOR DETAILED SITE GRADING.

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NO	DATE	BY	

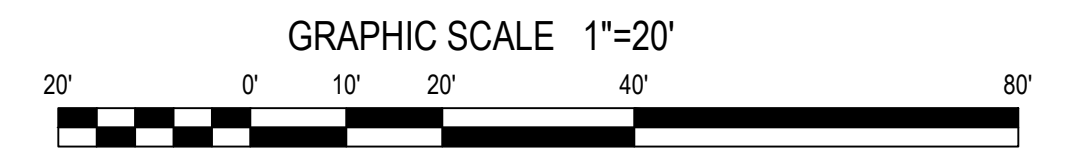


Phase 4 - Erosion Control Plan
 South Main
 503 South Main Street
 Rolesville, Wake County, North Carolina

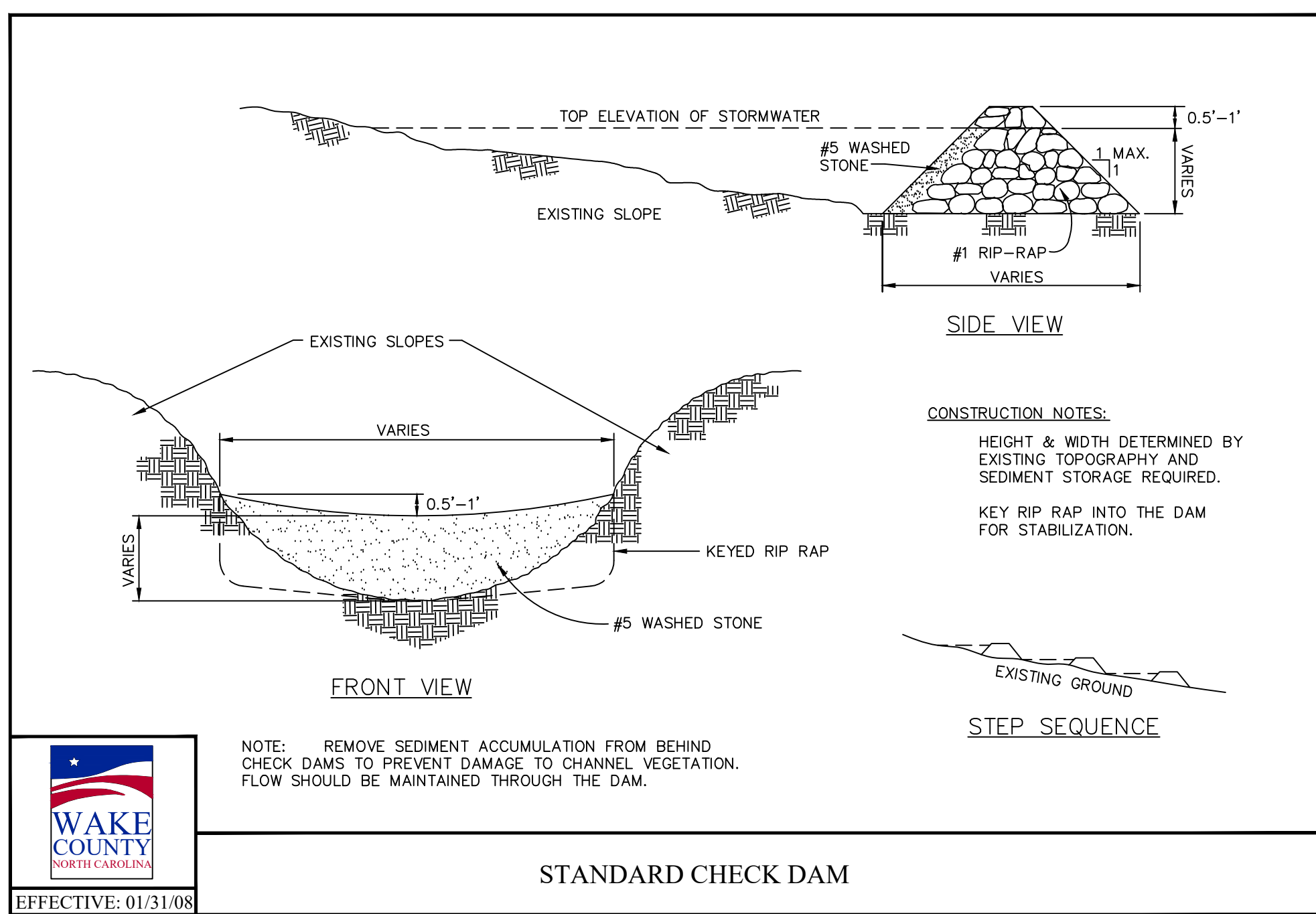
Project No. 22003
 Dwg No. **EC4**

TENBUUREN, ROBERT & BABBETTE
 PIN: 1758783565
 ZONED: R&PUD

N/F
 STORAGE MAX VIII, LLC
 D.B. 17556, PAGE 1235
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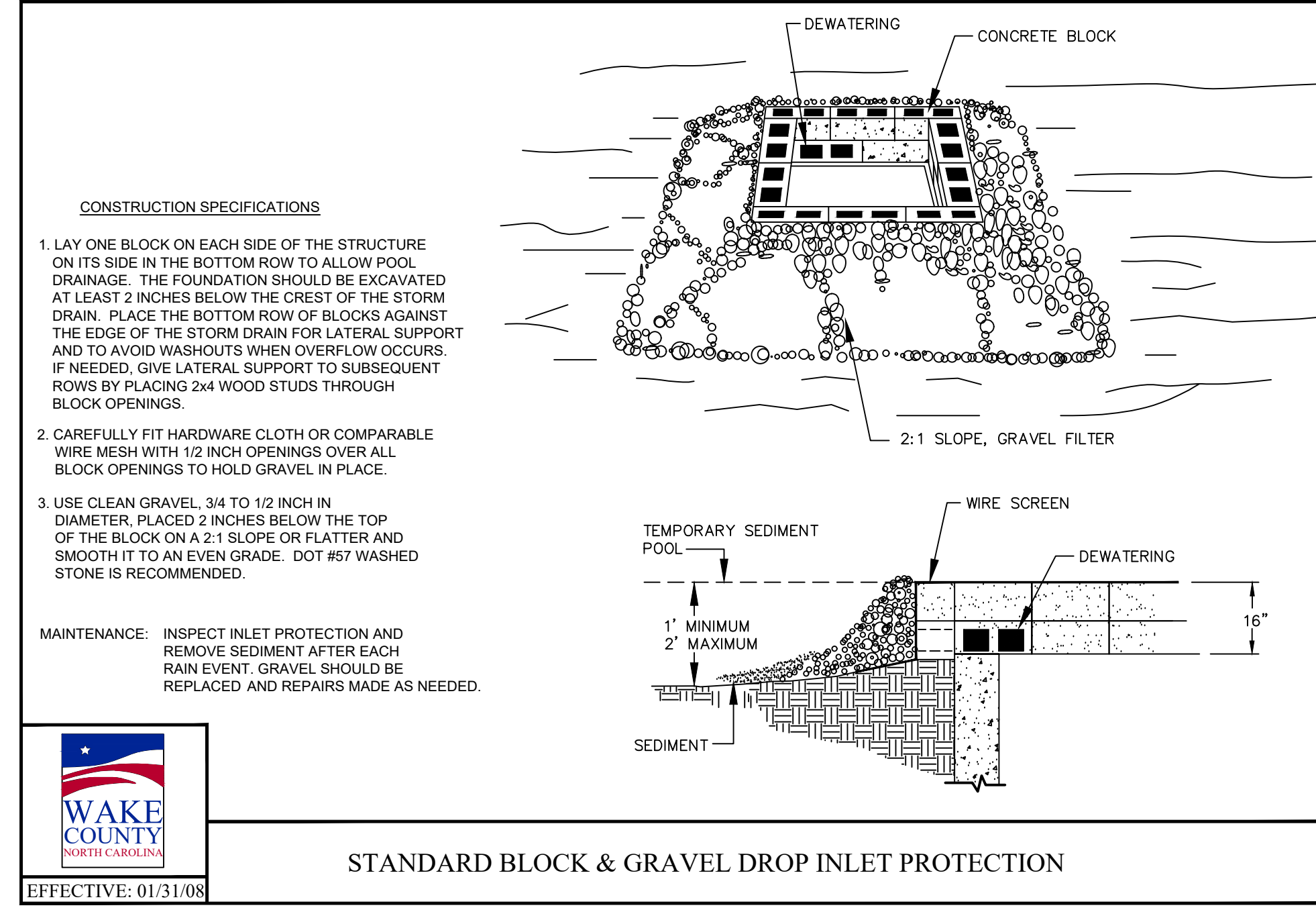


MATCH LINE SEE SHEET C2



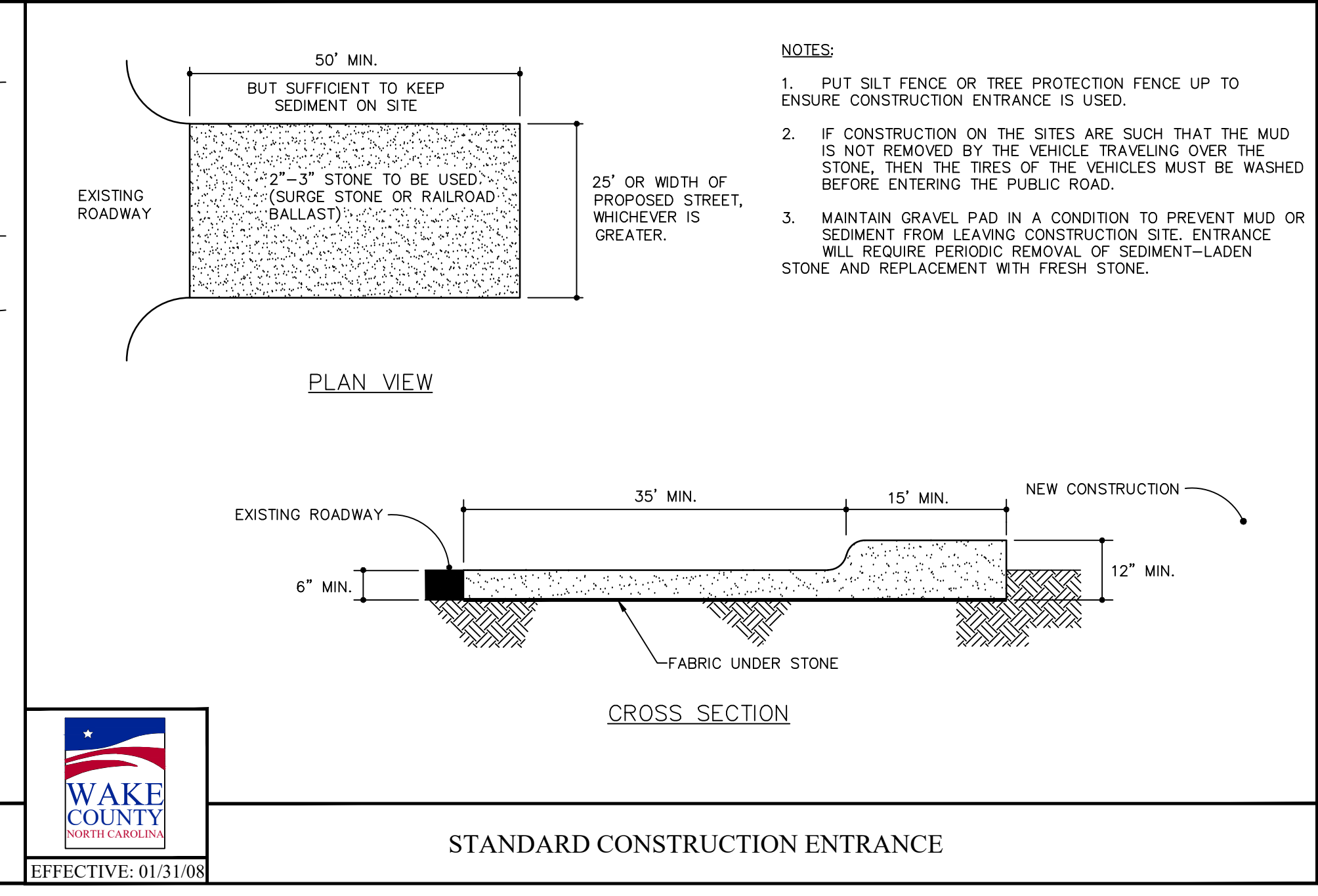
STANDARD CHECK DAM

EFFECTIVE: 01/31/08



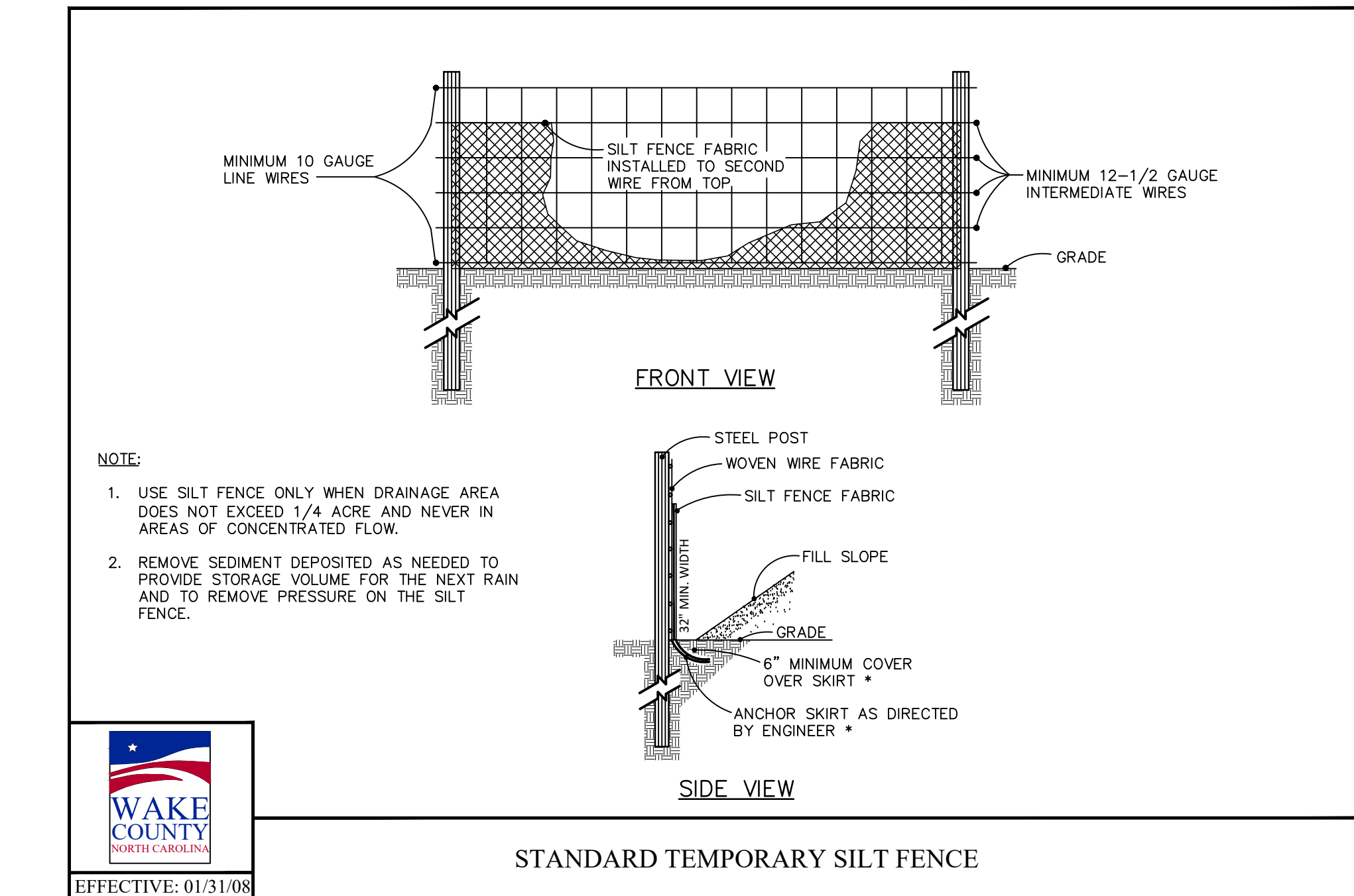
STANDARD BLOCK & GRAVEL DROP INLET PROTECTION

EFFECTIVE: 01/31/08



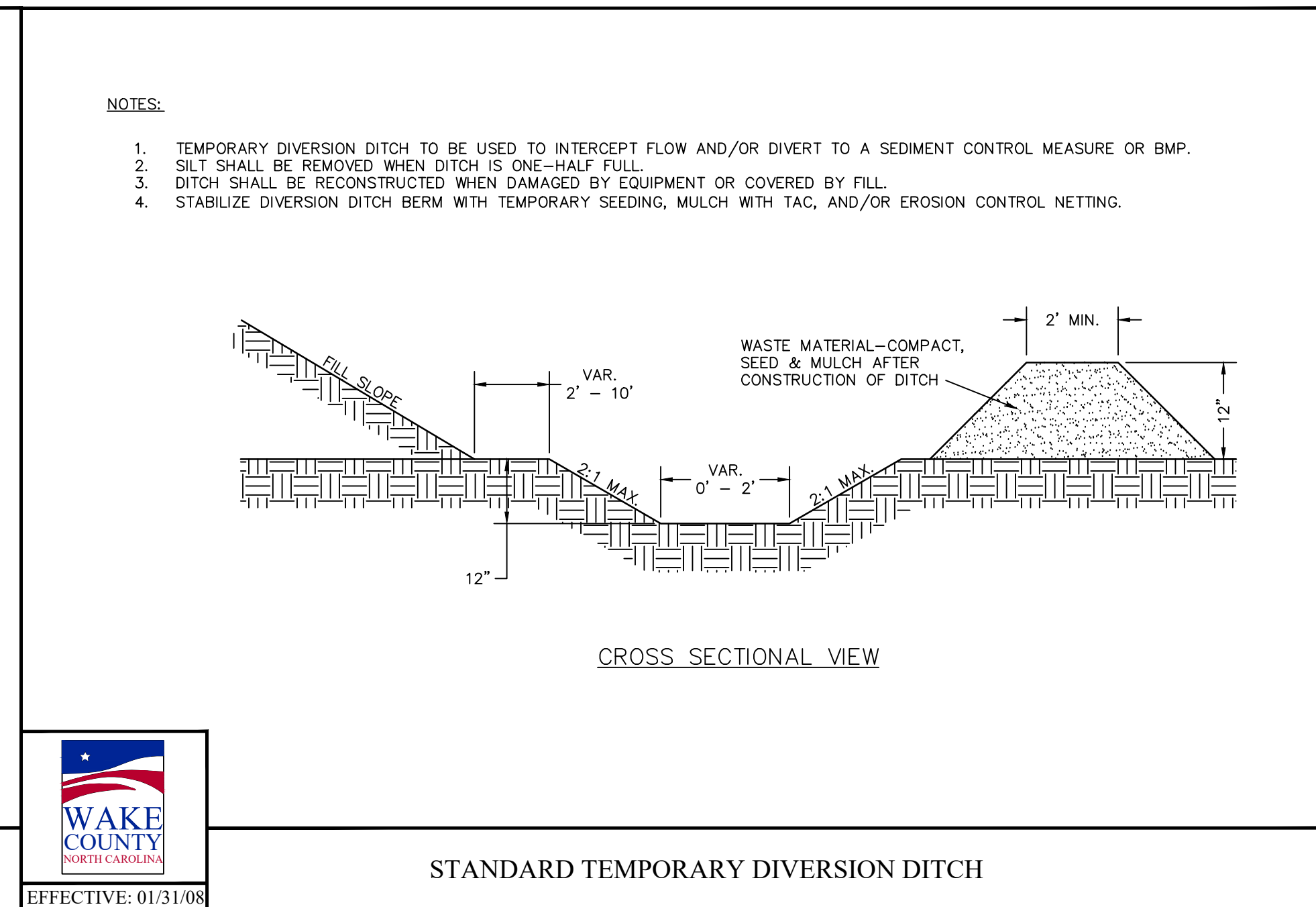
STANDARD CONSTRUCTION ENTRANCE

EFFECTIVE: 01/31/08



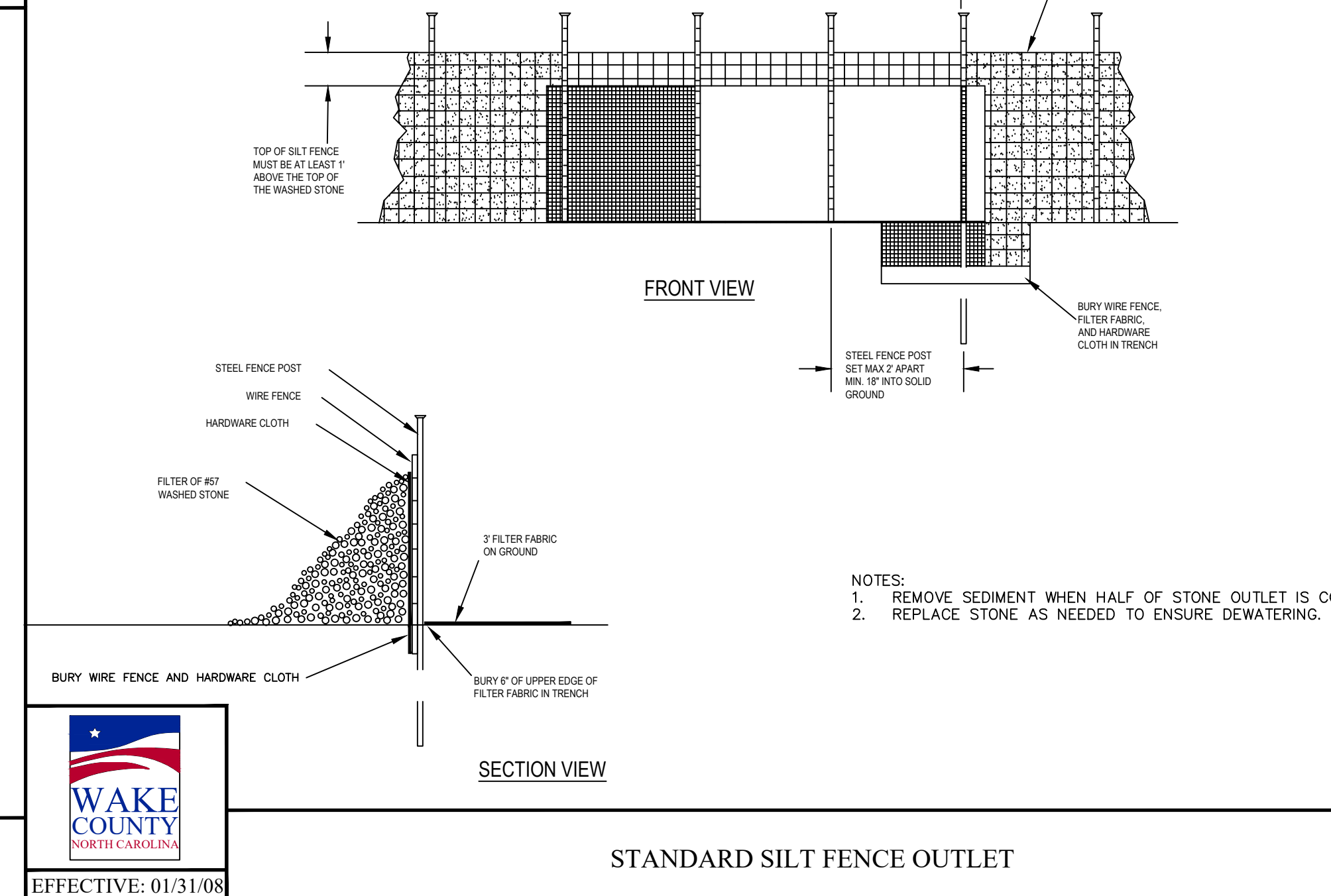
STANDARD TEMPORARY SILT FENCE

EFFECTIVE: 01/31/08



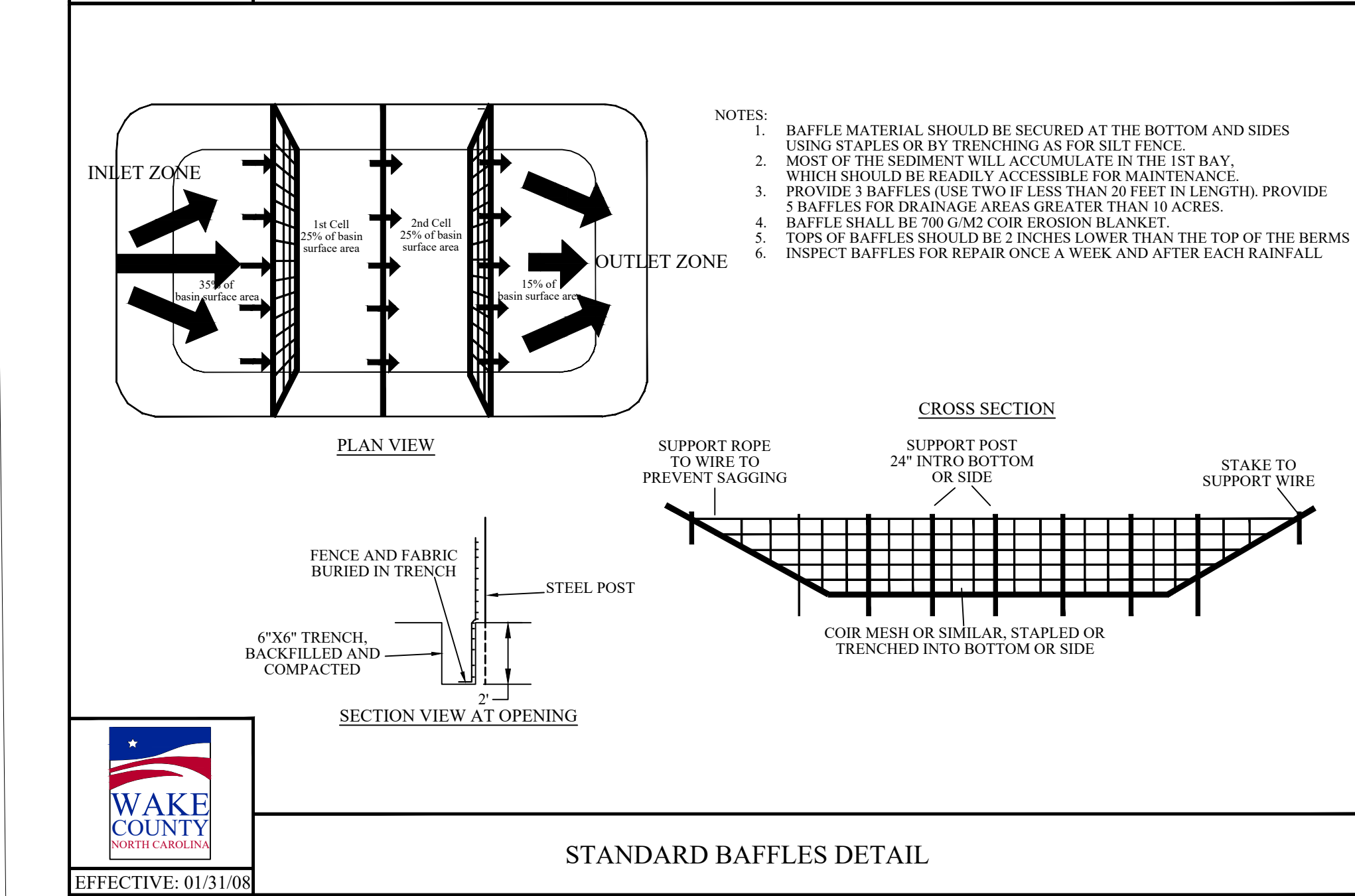
STANDARD TEMPORARY DIVERSION DITCH

EFFECTIVE: 01/31/08



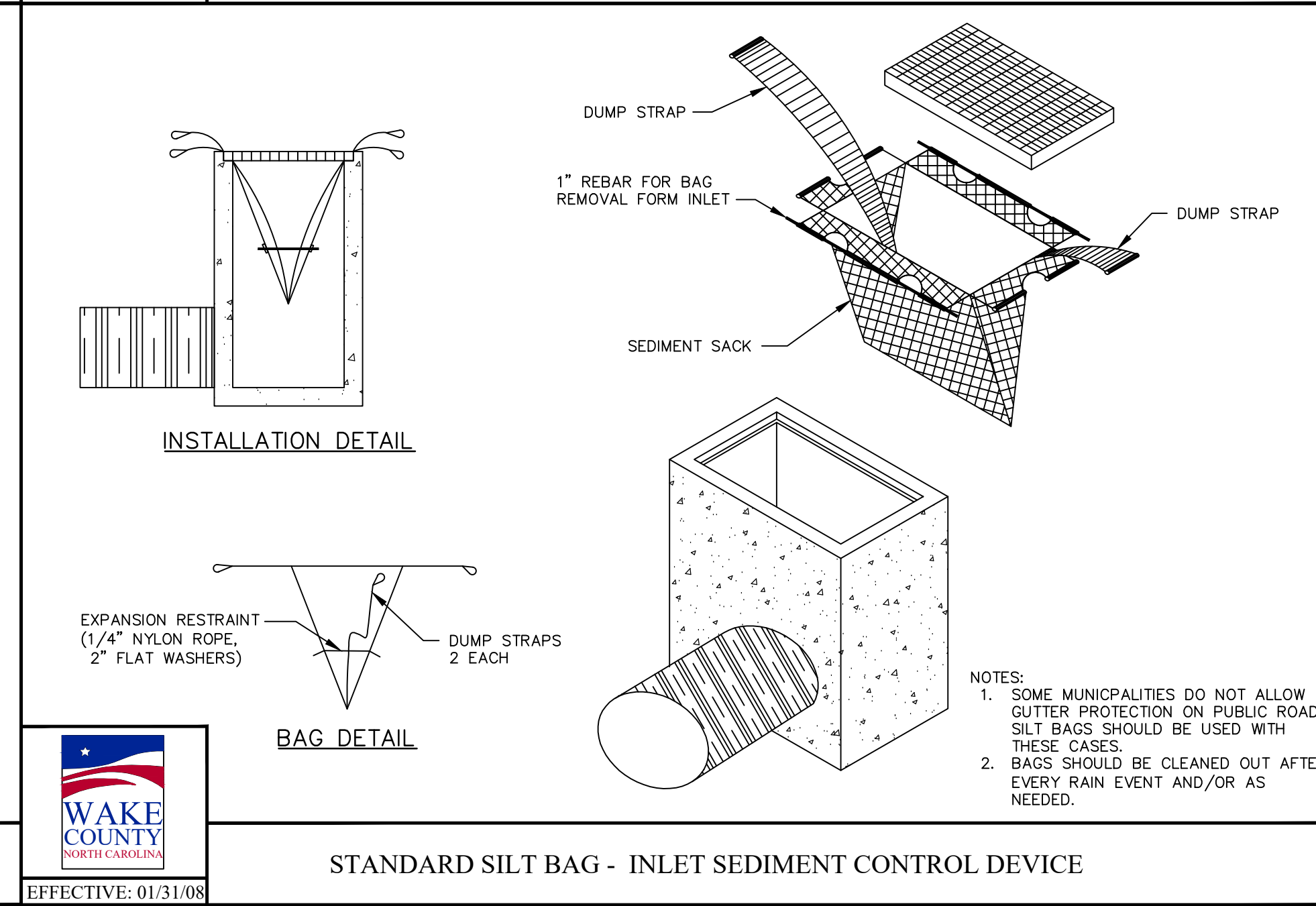
STANDARD SILT FENCE OUTLET

EFFECTIVE: 01/31/08



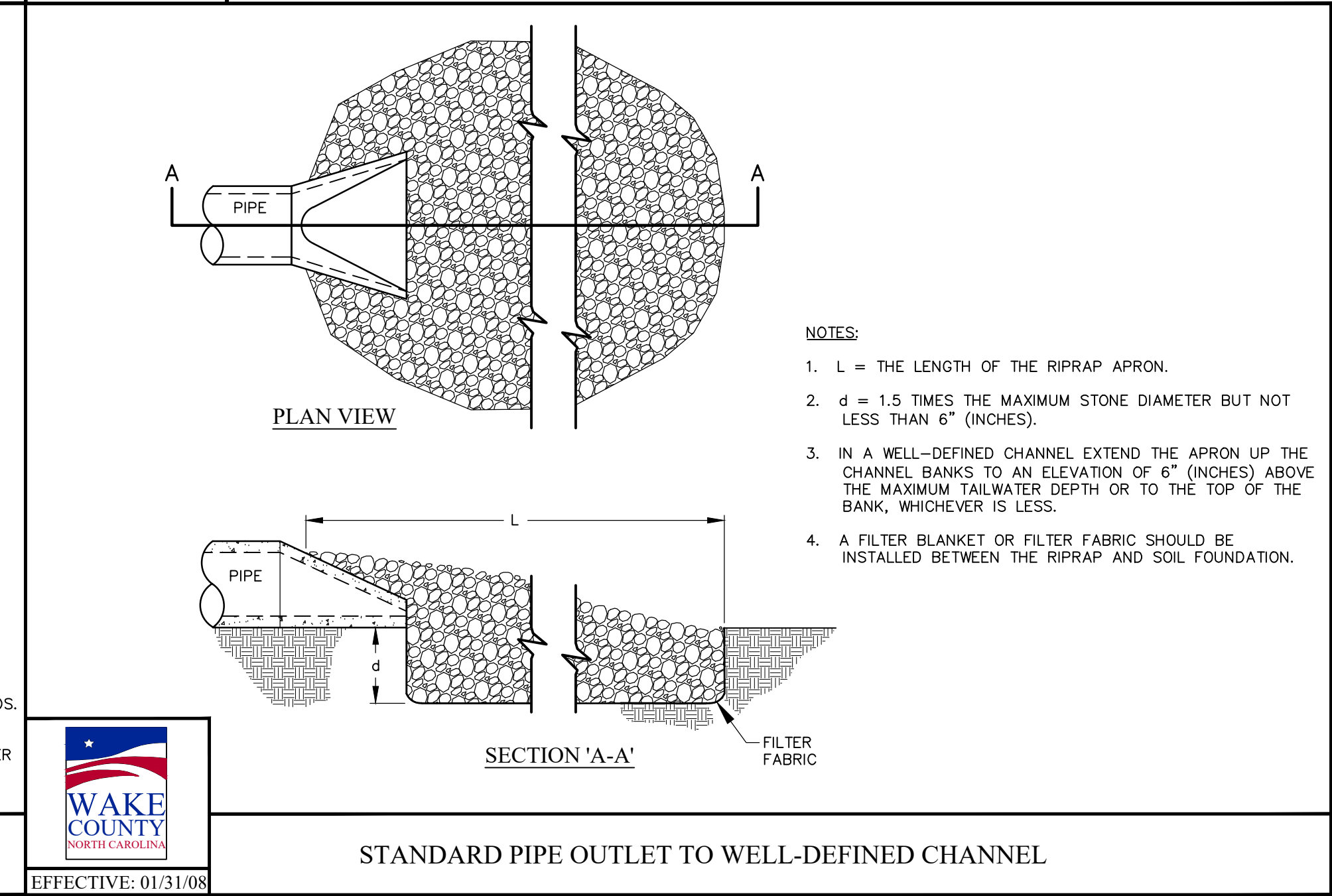
STANDARD BAFFLES DETAIL

EFFECTIVE: 01/31/08



STANDARD SILT BAG - INLET SEDIMENT CONTROL DEVICE

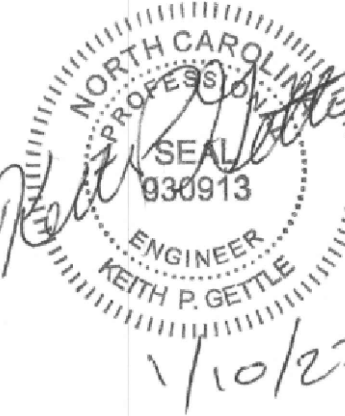
EFFECTIVE: 01/31/08



STANDARD PIPE OUTLET TO WELL-DEFINED CHANNEL

EFFECTIVE: 01/31/08

NO.	DATE	REVISION DESCRIPTION	BY
1	07-26-2022	INITIAL SUBMITTAL	KJG
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6	DATE	COMMENT	BY
8	DATE	COMMENT	BY



GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT
Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

Temporary and Permanent Groundcover*

STABILIZATION TIMEFRAMES (Effective Aug. 3, 2019)		
SITE AREA DESCRIPTION	STABILIZATION	TEMPERALE EXCEPTIONS
Perimeter ditches, swales, ditches, slopes	7 days	None
High Quality Water (HQW) Zones	7 days	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.
Slopes 3:1 or flatter	14 days	7 days for slopes greater than 60' in length.
All other areas with slopes flatter than 4:1	14 days	None, except for perimeter and HQW Zones.

*For Falls Lake watershed, in disturbed areas where grading activities are incomplete, provide temporary groundcover no later than seven (7) days for slopes steeper than 3:1; ten (10) days for slopes equal to or flatter than 3:1; fourteen (14) days for areas with no slope.

GROUND STABILIZATION SPECIFICATION
Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below.

Temporary Stabilization	Permanent Stabilization
<ul style="list-style-type: none"> Temporary grass seed covered with straw or other mulches and tackifiers Hydroseeding Roller erosion control products with or without temporary grass seed Appropriately applied straw or other mulch Plastic sheeting 	<ul style="list-style-type: none"> Permanent grass seed covered with straw or other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting Hydroseeding Straw or other permanent plantings covered with mulch Uniform and evenly distributed ground cover sufficient to restrain erosion Structural methods such as concrete, asphalt or retaining walls

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

- Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
- Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
- Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
- Provide ponding area for containment of treated stormwater before discharging offsite.
- Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.



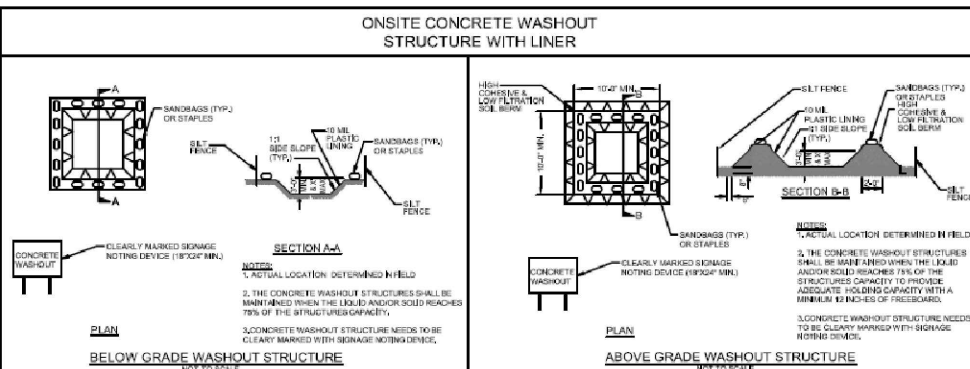
- EQUIPMENT AND VEHICLE MAINTENANCE**
- Maintain vehicles and equipment to prevent discharge of fluids.
 - Provide drip pans under any stored equipment.
 - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
 - Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
 - Remove leaking vehicles and construction equipment from service until the problem has been corrected.
 - Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**
- Never bury or burn waste. Place litter and debris in approved waste containers.
 - Provide a sufficient number of waste containers on site to manage the quantity of waste produced.
 - Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
 - Cover waste containers at the end of each workday and before storm events. Repair or replace damaged waste containers.
 - Anchor all lightweight items in waste containers during times of high winds.
 - Empty waste containers as needed to prevent overflow.
 - Dispose waste off-site at an approved disposal facility.

- PAINT AND OTHER LIQUID WASTE**
- Do not dump paint and other liquid waste into storm drains, streams or wetlands.
 - Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Contain liquid wastes in a controlled area.
 - Containment must be labeled, sized and placed appropriately for the needs of site.
 - Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

- PORTABLE TOILETS**
- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
 - Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
 - Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating units.

- EARTHEN STOCKPILE MANAGEMENT**
- Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
 - Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
 - Provide stable stone access point when feasible.
 - Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



- CONCRETE WASHOUTS**
- Do not discharge concrete or cement slurry from the site.
 - Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
 - Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
 - Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
 - Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
 - Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
 - Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
 - Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
 - Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
 - At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

- HERBICIDES, PESTICIDES AND RODENTICIDES**
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
 - Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
 - Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
 - Do not stockpile these materials onsite.

- HAZARDOUS AND TOXIC WASTE**
- Create designated hazardous waste collection areas on-site.
 - Place hazardous waste containers under cover or in secondary containment.
 - Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 03/01/19

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PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include [40 CFR 122.41]:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero". The permittee may use another rain-measuring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Corrective actions taken, and 7. Date of actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, inch in 24 hours, 5. Indication of visible sediment leaving the site, 6. Actions taken to correct/prevent sedimentation, and 7. Date of actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Date of actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands outside or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Evidence and actions taken to reduce sediment contribution, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(A) of this permit of this permit.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation
The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be documented in the manner described:

Item to Document	Documentation Requirements
(a) Each E&SC Measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC Plan.	Initial and date each E&SC Measure on a copy of the approved E&SC Plan or complete, date and sign an inspection report that lists each E&SC Measure shown on the approved E&SC Plan. This documentation is required upon the initial installation of the E&SC Measures or if the E&SC Measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC Plan.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC Measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC Measures.	Initial and date a copy of the approved E&SC Plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation
In addition to the E&SC Plan documents above, the following items shall be kept on the site and available for agency inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This general permit as well as the certificate of coverage, after it is received.
- Records of inspections made during the previous 30 days. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- All data used to complete the Notice of Intent and older inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that must be reported

Permittees shall report the following occurrences:

- Visible sediment deposition in a stream or wetland.
- Oil spills if:
 - They are 25 gallons or more,
 - They are less than 25 gallons but cannot be cleaned up within 24 hours,
 - They cause sheen on surface waters (regardless of volume), or
 - They are within 100 feet of surface waters (regardless of volume).

- Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.65.

- Anticipated bypasses and unanticipated bypasses.

- Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements
After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per item (1b)-(c) above	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated Bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> A report at least ten days before the date of the bypass, if possible. The report shall include an evaluation of the anticipated quality and effect of the bypass. Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.
(d) Unanticipated Bypasses [40 CFR 122.41(m)(3)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(f)(6). Division staff may waive the requirement for a written report on a case-by-case basis.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment [40 CFR 122.41(j)(7)]	<ul style="list-style-type: none"> Within 24 hours, an oral or electronic notification. Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. [40 CFR 122.41(f)(6). Division staff may waive the requirement for a written report on a case-by-case basis.



NCG01 REQUIREMENTS
South Main
503 South Main Street
Rolesville, Wake County, North Carolina

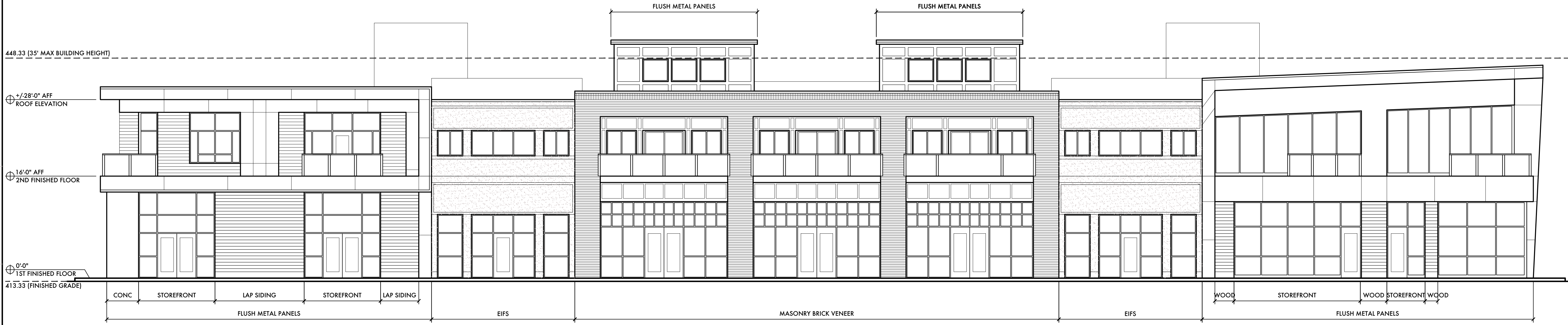


NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 03/01/19

Project No. 22003
Dwg No. **EC7**

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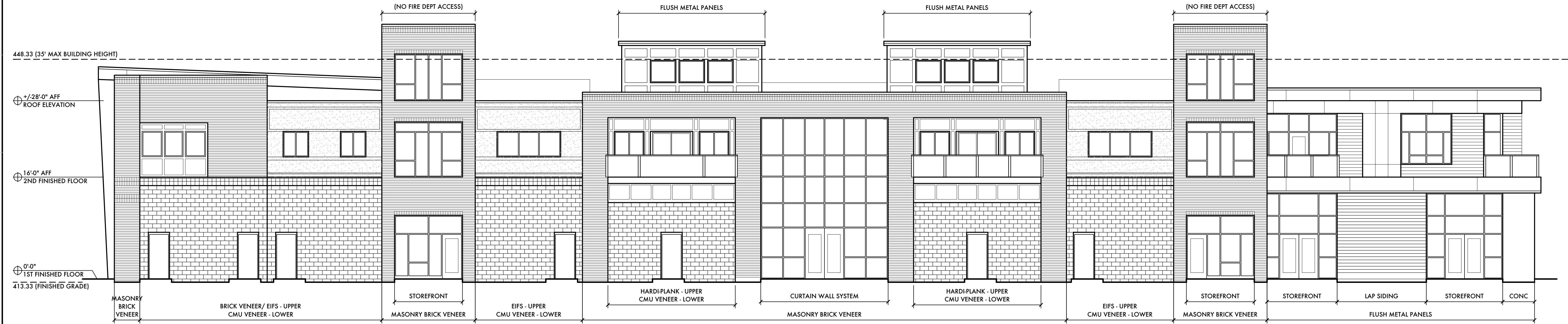


B1 NORTHWEST EXTERIOR ELEVATION (SOUTH MAIN ST)

A-3.01 SCALE: 1/8"=1'-0"

"C" - BLOCK

"D" - BLOCK



D1 SOUTHEAST EXTERIOR ELEVATION (WALL CREEK SUB.)

A-3.01 SCALE: 1/8"=1'-0"



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Consultants:

No.	Revision	Date

B Site Plan Approval Submittal 01/15/2023
 A Administrative Site Plan Review 10/03/2022
 No. Issued Date

xxxx.dwg J. Armistead
 File Name: Drawn By

Client/Project:
 MASONRY
 SOUTH MAIN
 MIXED USE
 DEVELOPMENT
 Raleigh, North Carolina

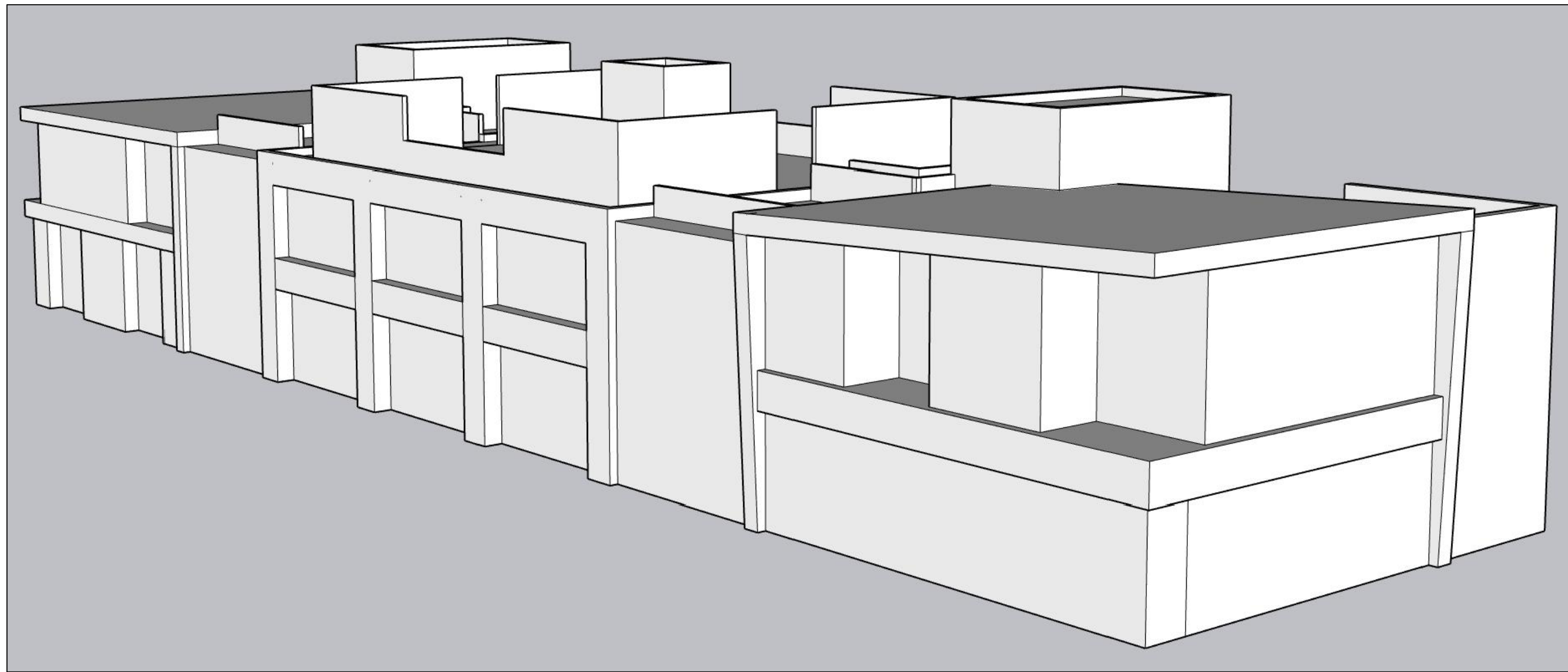
Sheet Title:
**EXTERIOR
 ELEVATIONS**

Project No.:
22034

Revision:
B

Sheet No.:
A-3.01

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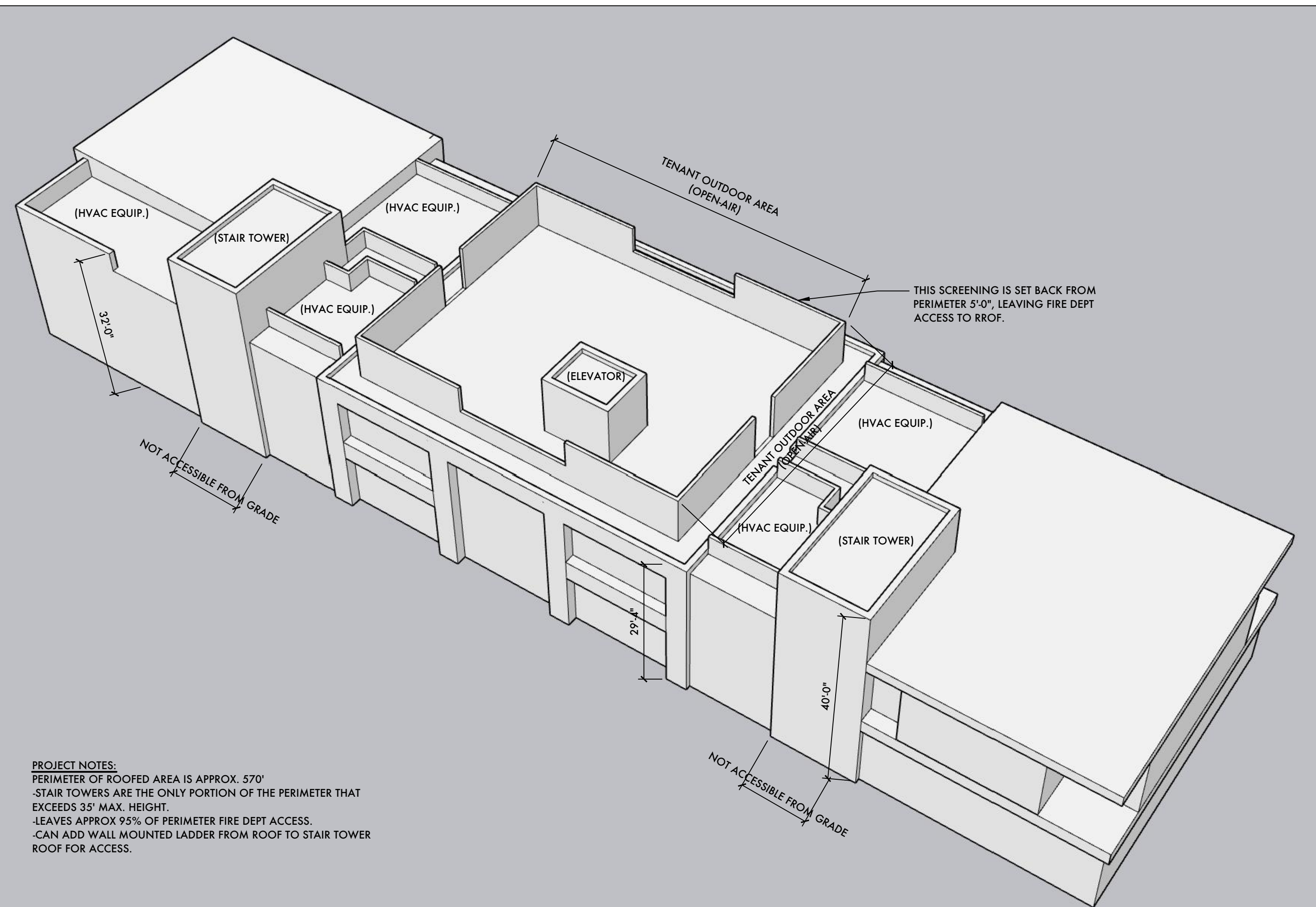
B1 3D MASSING DIAGRAM (FRONT BIRD'S EYE VIEW)
 A-3.02 SCALE: NOT TO SCALE

"B" - BLOCK



B3 NORTHEAST EXTERIOR ELEVATION (PETE SMITH)
 A-3.02 SCALE: 1/8"=1'-0"

"C" - BLOCK



D1 3D MASSING DIAGRAM (REAR BIRD'S EYE VIEW)
 A-3.02 SCALE: NOT TO SCALE

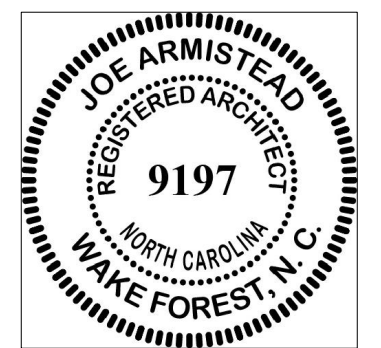
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D3 SOUTHWEST EXTERIOR ELEVATION (WALL CREEK DRIVE)
 A-3.02 SCALE: 1/8"=1'-0"



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Consultants:

No.	Revision	Date

B	Site Plan Approval Submittal	01/15/2023
A	Administrative Site Plan Review	10/03/2022

xxxx.dwg J. Armistead
 File Name: Drawn By

Client/Project
 SOUTH MAIN
 MIXED USE
 DEVELOPEMENT
 Raleigh, North Carolina

Sheet Title
 EXTERIOR
 ELEVATIONS

Project No.:
22034

Revision:
B

Sheet No.:
A-3.02

COLUMN - 1

COLUMN - 2

COLUMN - 3

COLUMN - 4

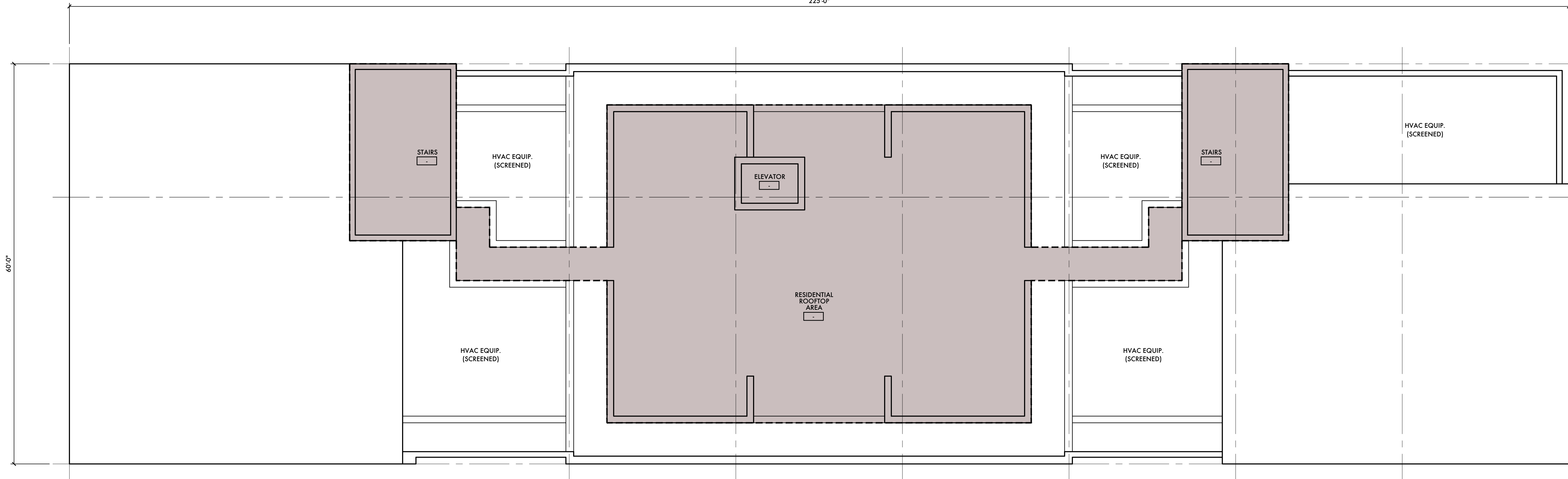
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"B" - BLOCK

"C" - BLOCK

"D" - BLOCK

225'-0"



B1 ROOF PLAN
 A4.01 SCALE: 1/8"=1'-0"



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Consultants:

No.	Revision	Date

xxxx.dwg J. Armistead
 File Name: Drawn By

Client/Project:
 Maceo/
 SOUTH MAIN
 MIXED USE
 DEVELOPEMENT
 Raleigh, North Carolina

Sheet Title:
ROOF PLAN

Project No.: 22034
 Revision: B

Sheet No.: **A-4.01**

File Location:

COLUMN - 1

COLUMN - 2

COLUMN - 3

COLUMN - 4