

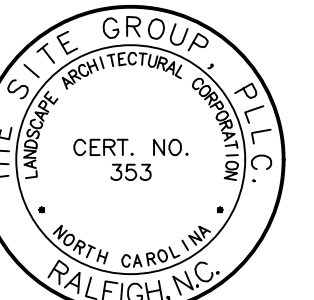
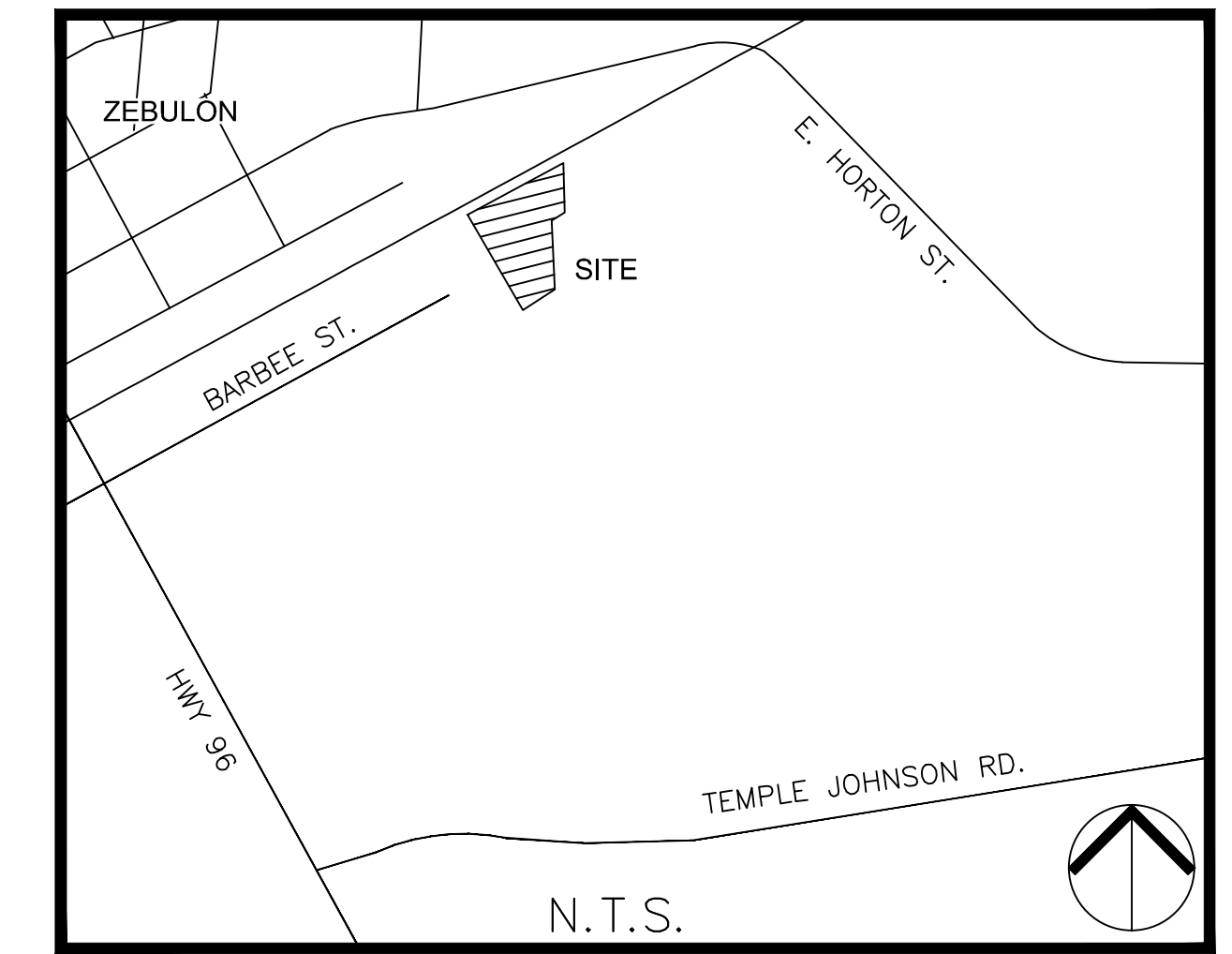
# PARKVIEW TOWNES

## 0 EAST BARBEE STREET

### ZEBULON, NORTH CAROLINA

# CONSTRUCTION DRAWINGS

TOWN OF ZEBULON PROJECT # 895911



NC ENGINEERING  
LICENSE NO. P-0803

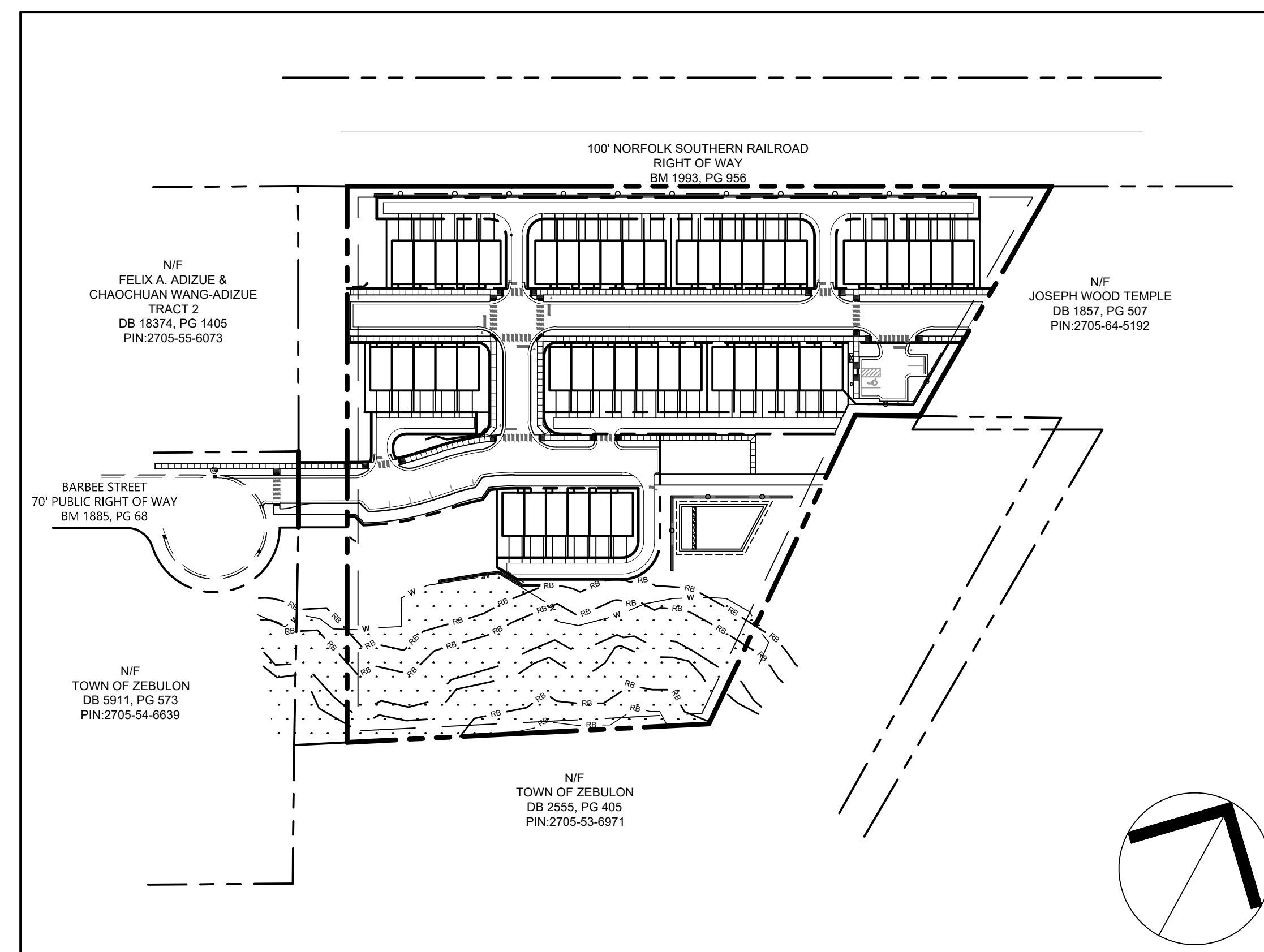


11/21/2023

**THE SITE GROUP**  
CIVIL ENGINEERS • LANDSCAPE ARCHITECTS  
THE SITE GROUP, PLLC  
111 W. GORDON ST.  
RALEIGH, NC 27605-1136 USA  
Office: 919.835.4787  
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#### GENERAL NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF ZEBULON, WAKE COUNTY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (811) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- BOUNDARY AND SURVEY INFORMATION IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
- ALL CONSTRUCTION SHALL CONFORM TO A.D.A. STANDARDS.
- NO PORTION OF THE PROPERTY IS LOCATED WITHIN A FEMA AE FLOOD ZONE BASED ON THE MAP #3720270500K MAP REVISED JULY 19, 2022.
- THE ROAD CLASSIFICATIONS FOR THIS PROJECT CONSIST OF LOCAL AND ALLEY.
- CONSTRUCTION WILL FOLLOW ALL USE SPECIFIC GUIDELINES LAID OUT IN CHAPTER 4 OF TOWN OF ZEBULON UNIFIED DEVELOPMENT ORDINANCE THAT PERTAIN TO THIS PROJECT.



#### SITE DATA SUMMARY

PROJECT NAME:	BARBEE ST. SUBDIVISION
PIN(S):	2705-55-0231 2705-55-0707
SITE ADDRESS:	PORTION OF 2705-55-6073 0 E. BARBEE STREET 413 E. BARBEE STREET
JURISDICTION:	TOWN OF ZEBULON
ZONING:	DTP (6 PTS ZEBULON UTILITY ALLOCATION POLICY)
RIVER BASIN:	NEUSE
TOTAL EXISTING ACREAGE:	240,598 SF / 5.52 ACRES
PROPOSED USE:	VACANT
PROPOSED USE:	SINGLE-FAMILY ATTACHED DWELLING
BUILDING SETBACKS:	
STREET:	NONE
SIDE:	5 FT
REAR:	15 FT
TOTAL NUMBER OF UNITS:	47 UNITS (6 PTS ZEBULON UTILITY ALLOCATION POLICY)
MINIMUM LOT AREA:	3,000 SF
AVERAGE LOT AREA:	
PROVIDED PARKING:	104 RESIDENT
DISTURBED AREA:	202,373 SF / 4.65 AC.
IMPERVIOUS AREA:	
DWELLINGS:	50,008 SF
ROADWAY/PARKING:	46,765 SF
SIDEWALKS:	13,647 SF
TOTAL:	116,490 SF
IMPERVIOUS LIMIT/LOT:	1,064 SF
PUBLIC IMPROVEMENT QUANTITIES:	
WATER PIPE:	1,155 FT.
WATER STUB:	2
SANITARY SEWER PIPE:	812 FT.
SANITARY SEWER STUB:	2
STORMWATER:	1,648 FT.
OPEN SPACE REQUIREMENT:	
URBAN:	12,030 SF / 10,827 SF W/ 10% ADMIN. ADJUST.
ACTIVE:	12,030 SF / 10,827 SF W/ 10% ADMIN. ADJUST.
OPEN SPACE PROVIDED:	
ACTIVE:	12,268 SF (5.1%)
URBAN:	12,072 SF (5.0%)
PASSIVE:	37,225 SF (15.1%)

\*NOTE: PER SECTION 5.8.3. OF THE TOWN OF ZEBULON UDO. THIS DEVELOPMENT WITHIN THE DTP IS EXEMPT FROM MINIMUM OFF STREET PARKING REQUIREMENTS.

#### EROSION CONTROL, STORMWATER AND FLOODPLAIN MANAGEMENT

**APPROVED**  
EROSION CONTROL  S-  
STORMWATER MGMT.  S-  
FLOOD STUDY  S-  
DATE \_\_\_\_\_

WAKE COUNTY ENVIRONMENTAL CONSULTANT SIGNATURE

**Public Water Distribution / Extension System**  
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 # W-4078  
Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_

**Public Sewer Collection / Extension System**  
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 # S-5390  
Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_

#### 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 Utilities Department** at (919) 996-4540 at least **twenty four hours** prior to beginning any of their construction.

**Failure** to notify both City Departments in advance of beginning construction, will result in the issuance of *monetary fines*, and require 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*.

**Private Sewer Collection / Extension System**  
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.

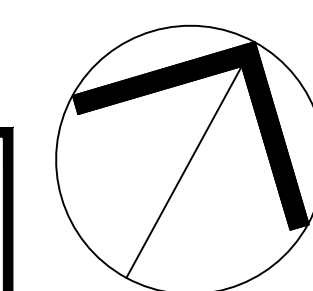
City of Raleigh  
Public Utilities Department Permit # S-5391(P)  
Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_

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SITE 301	WET DETENTION POND PLAN
SITE 302	INITIAL EROSION CONTROL PLAN PHASE 1
SITE 302A	INITIAL EROSION CONTROL PLAN PHASE 2
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SITE 304	NPDES PLAN
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23-0401	DUKE ENERGY LIGHTING PLAN
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SITE 705	SITE DETAILS
SITE 706	SITE DETAILS
SITE 707	SITE DETAILS
SITE 708	SITE DETAILS

CONTACT/CIVIL ENGINEER:  
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ATTN: SAMUEL R. NYE, P.E.  
1111 OBERLIN ROAD  
RALEIGH, NC 27605  
PHONE: (919) 835-4787  
FAX: (919) 839-2255  
EMAIL: srm@thesitegroup.net

CLIENT:  
MERIDIAN PROPERTIES GROUP, LLC  
ATTN: SHERRY CASE  
4030 WAKE FOREST RD. STE 100  
RALEIGH, NC 27609  
PHONE: 919-621-4648  
EMAIL: sherry@meridianrealestate.com



NORTH  
COVER SHEET

SCALE: 1" = 100' (DRAWING SCALED FOR 24x36 INCH PLOTS)



#### FLOODPLAIN NOTE:

THIS SITE IS NOT IN ANY SPECIAL FLOOD HAZARD AREAS OR FUTURE CONDITIONS FLOOD HAZARD AREAS, AS SHOWN ON FIRM PANEL 3720270500K DATED JULY 19, 2022.



Call before you dig. Dial 811 or visit www.nc811.org for more details.

THIS PROJECT MUST FOLLOW ALL USE SPECIFIC GUIDELINES LAID OUT IN CHAPTER 4 OF THE TOWNS UDO WHICH PERTAIN TO THIS PROJECT.

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By **WRR**  
Checked By **SRN**

DATE:  
07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023  
24 AUG 2023  
21 NOV 2023

CONSTRUCTION DRAWINGS

COVER SHEET

Job Code **SCBSZ**

Dwg No.  
**SITE 001**



GENERAL NOTES

- 1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF ZEBULON, WAKE COUNTY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (811) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
4. BOUNDARY AND SURVEY INFORMATION IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
5. ALL CONSTRUCTION SHALL CONFORM TO A.D.A. STANDARDS.
6. NO PORTION OF THE PROPERTY IS LOCATED WITHIN A FEMA AE FLOOD ZONE BASED ON THE MAP #3720270500K MAP REVISED JULY 19, 2022.
7. THE ROAD CLASSIFICATIONS FOR THIS PROJECT CONSIST OF LOCAL AND ALLEY.

GRADING NOTES:

- 1. ALL CONSTRUCTION SHALL COMPLY WITH TOWN OF ZEBULON AND WAKE COUNTY STANDARDS AND SPECIFICATIONS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
3. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
5. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
6. THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
7. TO MINIMIZE DAMAGE TO EXISTING TREES NEAR THE INTERIOR EDGE OF BUFFERS AND STREETSCAPES, THE CONTRACTOR SHALL CUT MIN. 2' TRENCHES ALONG THE LIMITS OF DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR, THE TREE ROOTS. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL THE SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY(CO) IS SCHEDULED. THE FENCING SHALL BE REMOVED PRIOR TO FINAL SITE INSPECTION FOR THE CO.
8. ALL STORM DRAIN FRAMES GRATES & HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF ZEBULON STANDARDS.
9. ALL RISER STRUCTURES AND BARRELS MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
10. THIS PROJECT WILL REQUIRE A PRE-CONSTRUCTION CONFERENCE BEFORE THE GRADING PERMIT IS ISSUED.
11. ALL CUT AND FILL SLOPE THAT IS (2:1) OR GREATER SHALL BE STABILIZED WITH PERMANENT SLOPE RETENTION DEVICES OR A SUITABLE COMBINATION OF PLANTINGS AND RETENTION DEVICES. SLOPES GREATER THAN THREE TO ONE (3:1) SHALL NOT BE STABILIZED WITH TURF GRASS BUT MUST BE STABILIZED WITH VEGETATION THAT REQUIRES MINIMAL MAINTENANCE. WEEPING LOVE GRASS, RED FESCUE OR OTHER APPROVED VARIETY. (CHAPTER 7, PART 2, SECTION 4, (G) LDO).
12. THE ESTABLISHMENT OF PERMANENT GROUND COVER WILL BE ESTABLISHED IN 15 WORKING DAYS OR 90 CALENDAR DAYS, WHICH EVER IS SHORTER. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
13. THE TREE PROTECTION FENCING ON THIS PROJECT WILL BE INSTALLED AND INSPECTED BEFORE THE GRADING PERMIT IS ISSUED. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
14. THE PROJECT WILL MEET ALL OF THE REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE TOWN OF ZEBULON UNIFIED DEVELOPMENT ORDINANCE. (CHAPTER 4, PART 4.6, LDO).
15. ALL LEVEL SPREADERS ON THE PROJECT MUST BE LOCATED ON COMMON OPEN SPACE, HAVE AN ACCESS AND MAINTENANCE EASEMENTS LOCATED AROUND THEM AND INCLUDE AN OPERATIONS AND MAINTENANCE MANUAL AND A MAINTENANCE AGREEMENT.
16. NO TIEBACKS FOR RETAINING WALLS WILL BE ALLOWED TO ENCROACH INTO THE CITY OF RALEIGH PUBLIC UTILITY EASEMENT.
17. RETAINING WALLS WILL REQUIRE A SEPARATE PERMIT FROM THE TOWN OF ZEBULON INSPECTIONS AND PERMITS DEPARTMENT.
18. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
19. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. (CO)
20. CURB INLET RIM ELEVATIONS REFER TO FLOW LINE. ADD 6" FOR TOP OF CURB ELEVATION.
21. ALL STORM DRAIN FRAMES, GRATES AND HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF ZEBULON STANDARDS.
22. RISER STRUCTURES AND BARRELS MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.

SCM CONSTRUCTION NOTES:

- 1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ZEBULON AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
2. THE PROJECT WILL MEET ALL REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE NCDCE STORMWATER DESIGN MANUAL.
3. THE CONTRACTOR SHALL WARRANTY ALL PLANTED MATERIALS FOR A PERIOD OF 2 YEARS FROM DATE OF INSTALLATION. AT THE END OF THE FIRST YEAR AND AT THE END OF THE SECOND YEAR, THE CONTRACTOR SHALL REPLACE ALL PLANTS WHICH DO NOT SURVIVE. ANY HEALTHY PLANTS DAMAGED DURING PLANT REPLACEMENT SHALL ALSO BE REPLACED.
4. LANDSCAPING PLANTINGS SHOWN HEREON SHALL BE INSTALLED DURING FALL SEASON OR EARLY WINTER IF POSSIBLE FOR MAXIMUM PLANT SURVIVABILITY.
5. THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OR THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR BASINS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS-BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.

EROSION CONTROL NOTES

- 1. ALL CONSTRUCTION SHALL COMPLY WITH TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
2. EXISTING CONDITION INFORMATION SHOWN IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OR ANY DISCREPANCIES OR CONFLICTS.
4. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
6. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
7. THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
8. THE STREETS IN FRONT OF THE PROJECT WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
9. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
10. TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREAS) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF. ANY ACTIVITY (LANDSCAPING, FENCING, OR UTILITY INSTALLATION) SHOWN ON THE APPROVED PLANS IN A TREE PROTECTION AREA, SHALL ALSO NOT OCCUR WITHOUT WRITTEN AUTHORIZATION FROM THE TOWN'S ZONING COMPLIANCE STAFF. ANY UNAUTHORIZED ENCROACHMENT OR DISTURBANCE WITHIN THE BOUNDARIES OF A TREE PROTECTION AREA SHALL AUTOMATICALLY RESULT IN FINES AND THE REPLACEMENT OF ANY DAMAGED VEGETATION IN ACCORDANCE WITH THE LAND DEVELOPMENT ORDINANCE.

NPDES PLAN NOTES

- 1. THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
2. THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.
3. THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.

STANDARD UTILITY NOTES

- 1. ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)
2. UTILITY SEPARATION REQUIREMENTS:
A) 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.
B) WHEN INSTALLING WATER &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
C) WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASEMENT EXTENDED 10" ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
D) 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
E) 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)
F) ALL OTHER UNDERGROUND UTILITIES SHALL CROSS WATER & SEWER FACILITIES WITH 18" MIN. VERTICAL SEPARATION REQUIRED.
3. 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
4. DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
5. CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT, ANY NECESSARY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT
6. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS
7. IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE
8. INSTALL 1/2" 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 & PRESSURE
9. INSTALL 4" PVC SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75 LINEAR FEET MAXIMUM
10. PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE
11. ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (PRIOR TO CONSTRUCTION).
12. NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION
13. GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG PROGRAM COORDINATOR PRIOR TO ISSUANCE OF A BUILDING PERMIT. CONTACT TIM BEASLEY AT (919) 996-2334 OR TIMOTHY.BEASLEY@RALEIGHNC.GOV FOR MORE INFORMATION
14. 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 (HEREINAFTER) GUIDELINES ARE THE MINIMUM REQUIREMENTS. THE DEVICES SHALL MEET AMERICAN SOCIETY OF SANITARY ENGINEERING (ASSE) STANDARDS OR BE ON THE UNIVERSITY OF SOUTHERN CALIFORNIA APPROVAL LIST. THE DEVICES SHALL BE INSTALLED AND TESTED (BOTH INITIAL AND PERIODIC TESTING THEREAFTER) IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS OR THE LOCAL CROSS-CONNECTION CONTROL PROGRAM, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION

PLANTING NOTES:

LOCATE PLANTS AND PLANTING BEDS BY USING SCALED DIMENSIONS FROM STREET, PROPERTY LINES, BACK OF CURB, BUILDINGS, WALLS, ETC. ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM STANDARDS SET BY THE U.S.D.A. FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERMEN, INC., WASHINGTON, D.C. NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND/OR THE LANDSCAPE ARCHITECT.
SYMBOLS: B&B = BALLED & BURLAPPED; B.R. = BARE ROOT; CONT. = CONTAINER, O.C. = ON-CENTER, (R) = TO REMAIN
MULCH: MULCH ALL BED AREAS WITH HARDWOOD MULCH TO A DEPTH OF 3".
NOTE:
1. ANY TREES IN SIGHT TRIANGLES WILL BE LIMBED UP TO A HEIGHT OF 8'. ALL SHRUBS LOCATED IN SIGHT TRIANGLES WILL BE MAINTAINED BELOW 2'.
2. ALL SHRUB SPECIES SHALL REACH A MINIMUM OF 36" WITHIN THREE YEARS OF INSTALLATION.

LANDSCAPE REQUIREMENTS:

- 1. THE SITE SHALL BE STABILIZED AND SEEDED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
2. ALL MECHANICAL EQUIPMENT, WASTE DISPOSAL FACILITIES, AND VEHICULAR USE AREAS (DRIVES AND PARKING) SHALL BE SCREENED FROM PUBLIC VIEW.
3. ALL ABOVE GROUND UTILITY EQUIPMENT AND FACILITIES ASSOCIATED WITH ON-SITE ELECTRIC, CABLE, TELEPHONE, GAS OR OTHER SIMILAR UTILITY SHALL BE LOCATED IN THE SIDE OF REAR YARD AREA OF THE SITE AND SCREENED, TO THE EXTENT POSSIBLE, WITH EVERGREEN PLANTINGS. PLANTINGS SHALL ALLOW FOR A MINIMUM OF 5' CLEARANCE AROUND THE STRUCTURE TO ALLOW FOR ACCESS. ADDITIONALLY, ANY SIDE OF THE STRUCTURE HAVING A DOOR OR LOCK, THE PLANTINGS SHALL ALLOW FOR A 10' CLEARANCE. THE AMOUNT OF CLEARANCE SHALL ACCOUNT FOR THE SIZE OF THE PLANT MATERIAL AT MATURITY.
4. THE SIZE OF THE PLANTING AREA AND SIZE OF PLANT MATERIAL AT MATURITY SHALL ALLOW FOR A 2.5' BUMPER OVERHANG FROM THE BACK OF CURB.
5. NO TREE SHALL BE LOCATED WITHIN A ROADWAY RIGHT OF WAY OR WITHIN 5' OF A SIDEWALK AND WITHIN 20' OF A LIGHTING LOCATION.
6. ALL SHRUBS INSTALLED AS VEHICULAR USE SCREENING WILL BE MAINTAINED AS A CONTINUOUS HEDGE AT A MINIMUM HEIGHT OF 36 INCHES.
7. WHERE EXISTING OR PROPOSED VEGETATION FAILS TO FUNCTION ADEQUATELY AS REQUIRED, THE TOWN OF ZEBULON SITE INSPECTOR RESERVES THE RIGHT TO REQUIRE SUPPLEMENTAL PLANTINGS IN ADDITION TO THOSE SHOWN ON THE LANDSCAPE PLAN BASED ON ACTUAL FIELD CONDITIONS.
8. UPON ESTABLISHMENT OF FINISHED GRADES AND PRIOR TO BEGINNING INSTALLATION OF ANY TREES, A SOIL AMENDMENT SCHEDULE FOR ALL TREE PLANTINGS SHALL BE PREPARED BY A CERTIFIED LANDSCAPE ARCHITECT AND BE PROVIDED TO THE TOWN OF ZEBULON PLANNING DEPARTMENT.
9. PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, A CERTIFIED STATEMENT SHALL BE PROVIDED TO CITY STAFF SITE INSPECTOR ATTESTING TO THE FACT THAT THE SOIL AMENDMENT SCHEDULE WAS FOLLOWED AS SPECIFIED IN THE APPROVED SITE AND/OR SUBDIVISION PLAN. THIS STATEMENT SHALL BE CERTIFIED BY A REGISTERED LANDSCAPE ARCHITECT, CERTIFIED ARBORIST, OR OTHER SPECIALIST AS DETERMINED ACCEPTABLE BY THE PLANNING DIRECTOR.
10. THE PROPERTY OWNER OR DEVELOPER SHALL PROVIDE FOR CONTINUOUS MAINTENANCE OF THE LANDSCAPE AREAS AFTER OCCUPANCY OF THE BUILDING. THE PROPERTY OWNER SHALL ENSURE THAT PERFORMANCE CRITERIA WITHIN THIS ORDINANCE AND/OR INCLUDED ON THE APPROVED SITE AND/OR SUBDIVISION PLAN ARE MET. FAILURE TO CORRECT DEFICIENCIES IN A TIMELY MANNER SHALL RESULT IN A CITATION FOR VIOLATION OF THIS ORDINANCE IN ACCORDANCE WITH CHAPTER 11.
11. ALL FOUNDATION PLANTINGS SHALL BE DESIGNED TO TOWN OF ZEBULON UDO SECTION REQUIREMENTS. THE TOWN OF ZEBULON SITE INSPECTOR RESERVES THE RIGHT TO REQUIRE ADDITIONAL PLANTINGS BASED ON ACTUAL FIELD CONDITIONS.
12. ALL PLANTINGS WITHIN THE SIGHT DISTANCE TRIANGLES MUST BE 30 INCHES OR LESS IN HEIGHT OR MUST BE LIMBED UP TO PROVIDE 8' FROM THE LOWEST LIMBS TO THE CURB LINE ELEVATION OR THE NEAREST TRAVEL WAY IF NO CURBING EXISTS.

LANDSCAPE MAINTENANCE PLAN:

- THE OWNERS OF THE PROPERTY AND THEIR AGENTS, HEIRS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTINGS AND PHYSICAL FEATURES SHOWN ON THIS PLAN. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF THE VEGETATION TO INCLUDE BUT NOT LIMITED TO:
A. FERTILIZATION: FERTILIZE LAWNS TWICE PER YEAR (FEBRUARY 15-MARCH 15 AND AGAIN SEPTEMBER 1-OCTOBER 31) ACCORDING TO SOIL TEST. FERTILIZE WARM SEASON GRASSES ONCE DURING THE GROWING SEASON PER SOIL TEST.
B. PRUNING: PRUNING SHALL BE LIMITED TO REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DISTANCES/SAFETY REASONS. THE ANSI A300 STANDARDS SHOULD BE ADHERED TO. THE PRUNING OF SHRUBS SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.
C. PEST CONTROL: PRE-EMERGENT WEED CONTROL FOR SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE PROBLEM.
D. MULCHING: MULCHING SHALL BE MAINTAINED AT A DEPTH OF 2-3" IN SHRUB BEDS. MULCH SHALL BE REAPPLIED EVERY TWO YEARS. AS NECESSARY TO MAINTAIN THE AVERAGE DEPTH OF THE PLANT BED.
E. MOWING: PRIMARY FESCUE LAWNS SHALL BE MAINTAINED AT A HEIGHT OF 3" AND SHALL BE MOWED APPROXIMATELY 30 TIMES PER YEAR. SECONDARY TURF AREAS MAY BE MAINTAINED HIGHER AND LESS FREQUENTLY. WARM SEASON GRASSES SHALL BE MOWED AS NEEDED DURING THE GROWING SEASON TO MAINTAIN THE RECOMMENDED HEIGHT OF THE SPECIES OF TURF GRASS.
F. PLANT PROTECTION: AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.
G. WATERING: IF ANY IRRIGATION SYSTEM IS UTILIZED, THE SYSTEM SHALL BE REGULATED TO PROVIDE APPROXIMATELY 1" OF RAINFALL PER WEEK DURING THE GROWING SEASON. (PENDING TOWN OF ZEBULON WATER/IRRIGATION SUPPLIES.)
H. PLANT REPLACEMENT: ANY REQUIRED PLANTING, WHICH IS REMOVED OR DIES AFTER DATE OF PLANTING SHALL BE REPLACED DURING THE NEXT PLANTING SEASON. ALSO, ANY TREE IN A TREE PRESERVATION AREA WHICH IS REMOVED OR DIES SHALL BE REPLACED DURING THE NEXT PLANTING SEASON.
REMOVAL OF DISEASE INFESTED MATERIAL SHALL BE ALLOWED SO LONG AS REQUIRED SHRUBS ARE REPLACED AT THE REQUIRED RATES AND SIZES.
FAILURE TO MAINTAIN REQUIRED LANDSCAPE AREAS SHALL CONSTITUTE A VIOLATION OF THIS UDO ENFORCEABLE UNDER THE PROVISIONS OF SECTION 10-ENCROACHMENT.



NO ENGINEERING LICENSE NO. P-0803



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Fax: 919.839.2255
E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:
PARKVIEW TOWNES
0 E. BARBEE STREET
ZEBULON, NORTH CAROLINA

Drawn By WRR
Checked By SRN

DATE: 03 FEB 2023
REVISED: 09 MAY 2023

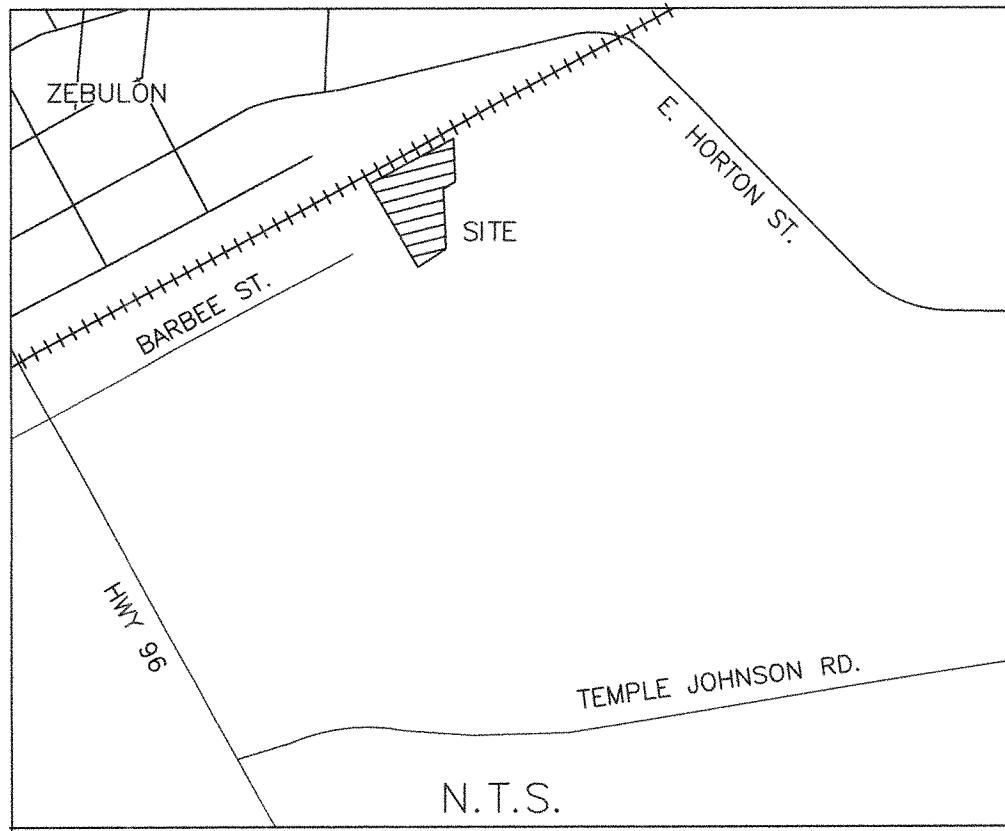
CONSTRUCTION DRAWINGS

PROJECT NOTES

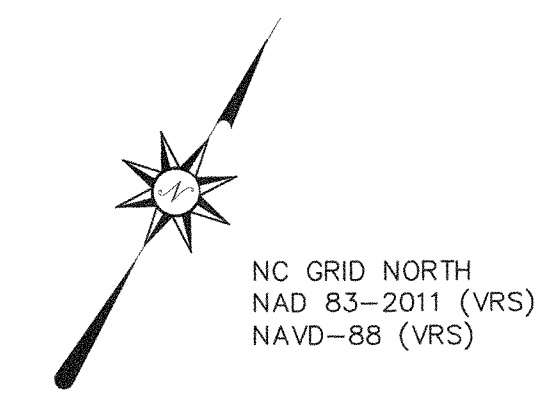
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Dwg No. SITE 002





REFERENCES:  
 DB 2279, PG 269  
 DB 4246, PG 470  
 DB 14827, PG 1322  
 BM 1991, PG 1078  
 BM 1981, PG 9801  
 BM 1993, PG 956  
 BM 1885, PG 68  
 BM 2011, PG 472  
 OTHERS AS NOTED



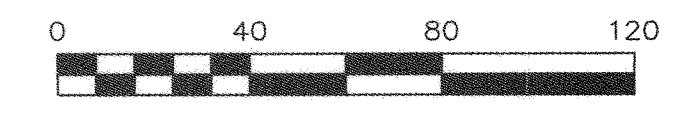
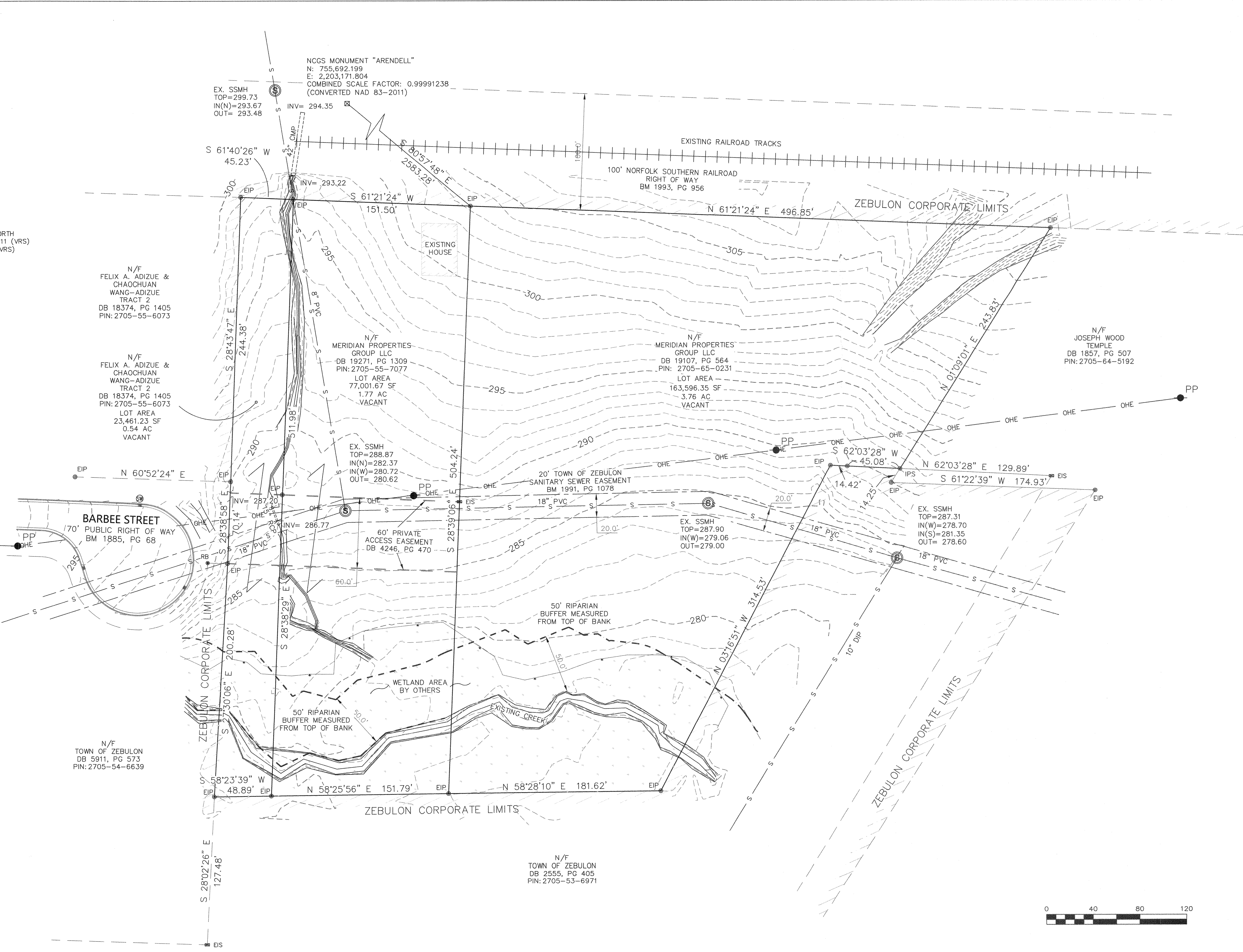
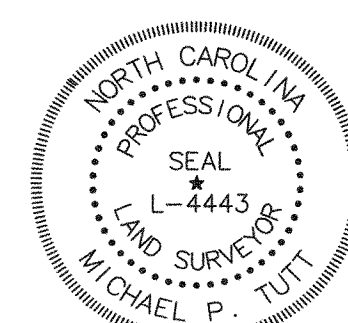
**LEGEND**

- ⊙ EIP EXIST. IRON PIPE
- ⊠ ECM EXIST. MONUMENT
- ⊙ RB EXIST. REBAR
- ⊠ EIS EXIST. IRON STAKE
- PP POWER POLE
- ⊠ W WATER METER
- ⊠ EXISTING SIGN
- ⊠ G GAS METER
- ⊠ E ELECTRIC METER
- ⊠ W VALVE
- EXISTING LINK FENCE
- POWER LINE
- ⊙ GAS LINE MARKER
- ⊙ FIBER OPTIC MARKER
- ⊙ SEWER MANHOLE
- ⊠ TELE PEDESTAL
- #### ADDRESS

NOTE:  
 1. THIS PROPERTY IS NOT WITHIN A FEMA AE FLOOD ZONE BASED ON FEMA MAP #3720270500K MAP REVISED JULY 19, 2022.  
 2. HORIZONTAL DATUM IS NAD 83/2011 (VRS), VERTICAL DATUM NAVD-88 (VRS).  
 3. ALL DASHED LINES HAVE NOT BEEN SURVEYED.  
 4. ALL DISTANCES ARE HORIZONTAL GROUND DISTANCES UNLESS NOTED OTHERWISE.  
 5. THIS PROPERTY IS SUBJECT TO ALL EASEMENTS OF RECORD THAT MAY OR MAY NOT BE SHOWN. SURVEY CONDUCTED WITHOUT BENEFIT OF TITLE REPORT.  
 6. AREA DETERMINED BY COORDINATE METHOD.

THIS SURVEY IS OF AN EXISTING PARCEL OF LAND AND DOES NOT CHANGE A STREET OR CREATE A NEW STREET.

I CERTIFY THAT THIS MAP WAS DRAWN UNDER MY SUPERVISION FROM AN ACTUAL SURVEY MADE UNDER MY SUPERVISION; THAT THE BOUNDARIES NOT SURVEYED ARE INDICATED AS DRAWN FROM INFORMATION AS NOTED; THAT THE RATIO OF PRECISION OR POSITIONAL ACCURACY IS 1:20,860 AND THAT THIS MAP MEETS THE REQUIREMENTS OF THE STANDARDS OF PRACTICE FOR LAND SURVEYING IN NORTH CAROLINA (21 NCAC 56. 1600); THAT THE GLOBAL POSITIONING SYSTEM OBSERVATIONS WERE PERFORMED USING THE FOLLOWING INFORMATION:  
 (1) CLASS OF SURVEY: CLASS A  
 (2) POSITIONAL ACCURACY: 0.05"  
 (3) TYPE OF GPS FIELD PROCEDURE: NC VRS  
 (4) DATES OF SURVEY: 5-31-22  
 (5) DATUM/EPOCH: NAD 83, 2011/2010  
 (6) PUBLISHED/FIXED-CONTROL USE: ARENDELL (NCGS MON)  
 (7) GEOID MODEL: GEOID18  
 (8) COMBINED GRID FACTOR(S): 0.999912238  
 (9) UNITS: US SURVEY FEET  
 THIS 14TH DAY OF JUNE, 2023.  
 Michael P. Tutt  
 PROFESSIONAL LAND SURVEYOR: MICHAEL P. TUTT, L-4443



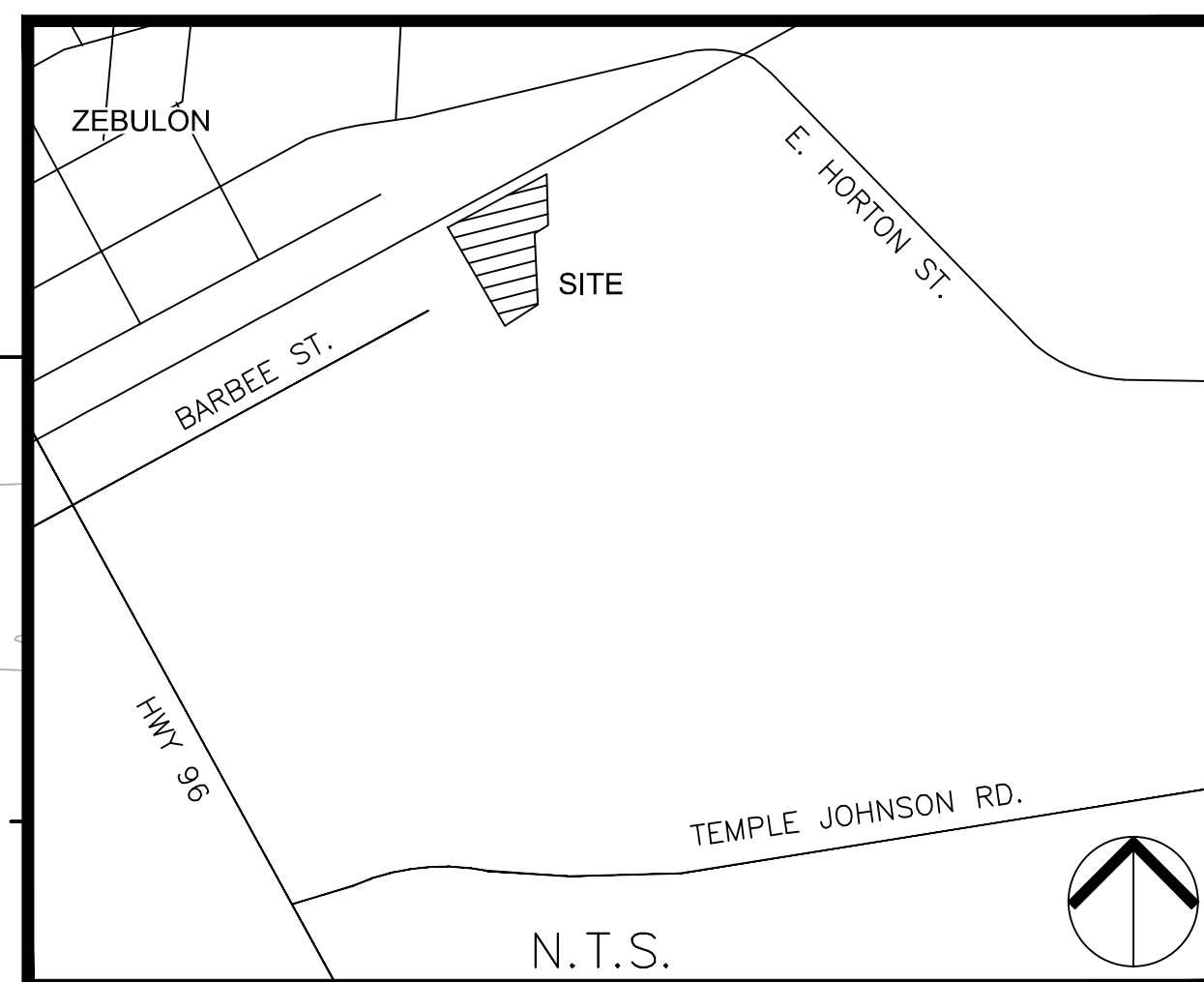
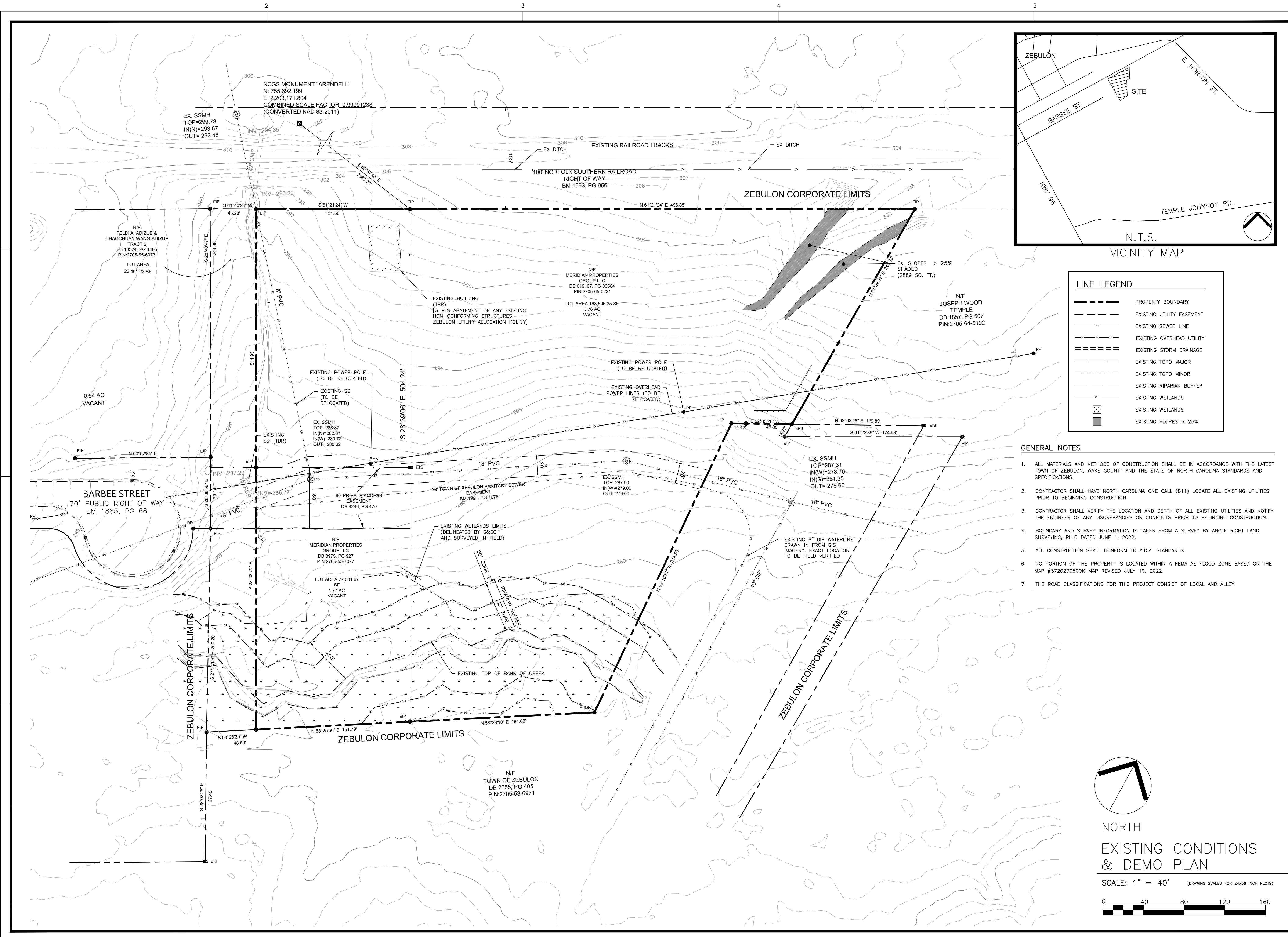
**ANGLE RIGHT LAND SURVEYING, PLLC**  
 SURVEYING THE PAST AND THE FUTURE TODAY  
 919-810-4324  
 P-0446 LIC#  
 3008 ANDERSON DRIVE, SUITE 160 RALEIGH, NC 27609

REV.	DESCRIPTION	DATE
1	ADDED OFF-SITE SEWER MANHOLE INFORMATION	3-23-23
2	REVISED FEMA MAP REFERENCE AND ISSUE DATE.	5-1-23
3	REVISED PIPE FROM 8" TERRACOTA TO 8" PVC	6-14-23
4	UPDATED NEW OWNER INFORMATION ON INDIVIDUAL LOTS	6-14-23

BOUNDARY & TOPOGRAPHIC SURVEY OF:  
**0 E. BARBEE STREET**  
 LITTLE RIVER TOWNSHIP, TOWN OF ZEBULON, WAKE COUNTY, NC  
 OWNERS: MERIDIAN PROPERTIES GROUP LLC

SURVEYOR: ANGLE RIGHT LAND SURVEYING  
 SCALE: 1" = 40'  
 ZONING: DTP  
 DATE OF SURVEY: 6-1-22, 9-12-22  
 JOB NUMBER: 22\_195  
 PAGE 1 OF 1

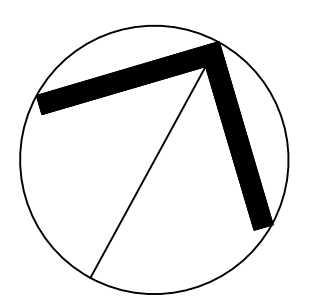




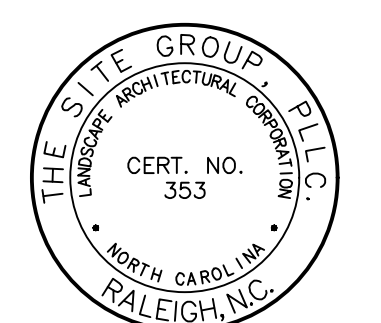
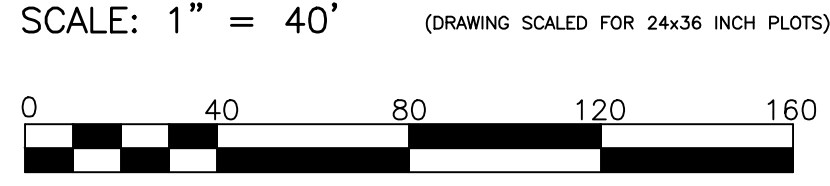
**LINE LEGEND**

	PROPERTY BOUNDARY
	EXISTING UTILITY EASEMENT
	EXISTING SEWER LINE
	EXISTING OVERHEAD UTILITY
	EXISTING STORM DRAINAGE
	EXISTING TOPO MAJOR
	EXISTING TOPO MINOR
	EXISTING RIPARIAN BUFFER
	EXISTING WETLANDS
	EXISTING WETLANDS
	EXISTING SLOPES > 25%

- GENERAL NOTES**
1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF ZEBULON, WAKE COUNTY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
  2. CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (811) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
  3. CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
  4. BOUNDARY AND SURVEY INFORMATION IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
  5. ALL CONSTRUCTION SHALL CONFORM TO A.D.A. STANDARDS.
  6. NO PORTION OF THE PROPERTY IS LOCATED WITHIN A FEMA AE FLOOD ZONE BASED ON THE MAP #3720270500K MAP REVISED JULY 19, 2022.
  7. THE ROAD CLASSIFICATIONS FOR THIS PROJECT CONSIST OF LOCAL AND ALLEY.



NORTH  
 EXISTING CONDITIONS  
 & DEMO PLAN



NC ENGINEERING LICENSE NO. P-0803



**THE SITE GROUP**  
 CIVIL ENGINEERS • LANDSCAPE ARCHITECTS  
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 E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE:  
 07 NOV 2022  
 REVISED:  
 03 FEB 2023  
 09 MAY 2023  
 24 AUG 2023  
 21 NOV 2023

CONSTRUCTION DRAWINGS

EXISTING CONDITIONS & DEMO PLAN

Job Code: **SCBSZ**

Dwg No.  
**SITE 100**

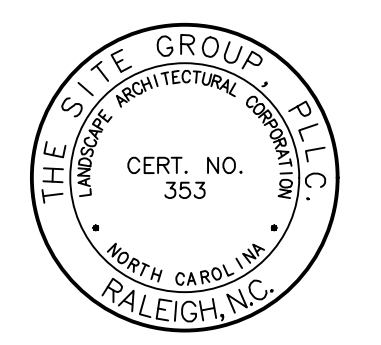
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**SITE DATA SUMMARY**

PROJECT NAME:	BARBEE ST. SUBDIVISION
PIN(S):	2705-55-0231 2705-55-7077
SITE ADDRESS:	PORTION OF 2705-55-6073 0 E. BARBEE STREET 413 E. BARBEE STREET
JURISDICTION:	TOWN OF ZEBULON
ZONING:	(8 PTS ZEBULON UTILITY ALLOCATION POLICY) DTP
RIVER BASIN:	NEUSE
TOTAL EXISTING ACREAGE:	240.598 SF / 5.52 ACRES
CURRENT USE:	VACANT
PROPOSED USE:	SINGLE-FAMILY ATTACHED DWELLING
BUILDING SETBACKS:	
STREET:	NONE
SIDE:	5 FT
REAR:	15 FT
TOTAL NUMBER OF UNITS:	(8 PTS ZEBULON UTILITY ALLOCATION POLICY) 47 UNITS
MINIMUM LOT AREA:	3,000 SF
AVERAGE LOT AREA:	
PROVIDED PARKING:	104 RESIDENT
DISTURBED AREA:	202,373 SF / 4.65 AC.
IMPERVIOUS AREA:	
DWELLINGS:	50,008 SF
ROADWAY/PARKING:	46,768 SF
SIDEWALKS:	13,647 SF
TOTAL:	116,490 SF
IMPERVIOUS LIMIT/LOT:	1,064 SF
PUBLIC IMPROVEMENT QUANTITIES:	
WATER PIPE:	1,155 FT.
WATER STUB:	2
SANITARY SEWER PIPE:	812 FT.
SANITARY SEWER STUB:	2
STORMWATER:	1,648 FT.
OPEN SPACE REQUIREMENT:	
URBAN:	12,030 SF / 10,827 SF W/ 10% ADMIN. ADJUST.
ACTIVE:	12,030 SF / 10,827 SF W/ 10% ADMIN. ADJUST.
OPEN SPACE PROVIDED:	
ACTIVE:	12,268 SF (5.1%)
URBAN:	12,072 SF (5.0%)
PASSIVE:	37,225 SF (15.1%)

\*NOTE: PER SECTION 5.8.3. OF THE TOWN OF ZEBULON UDO. THIS DEVELOPMENT WITHIN THE DTP IS EXEMPT FROM MINIMUM OFF STREET PARKING REQUIREMENTS



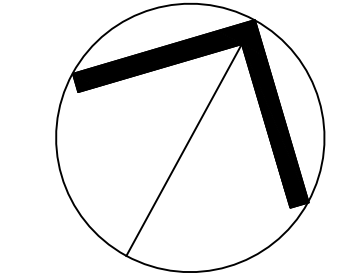
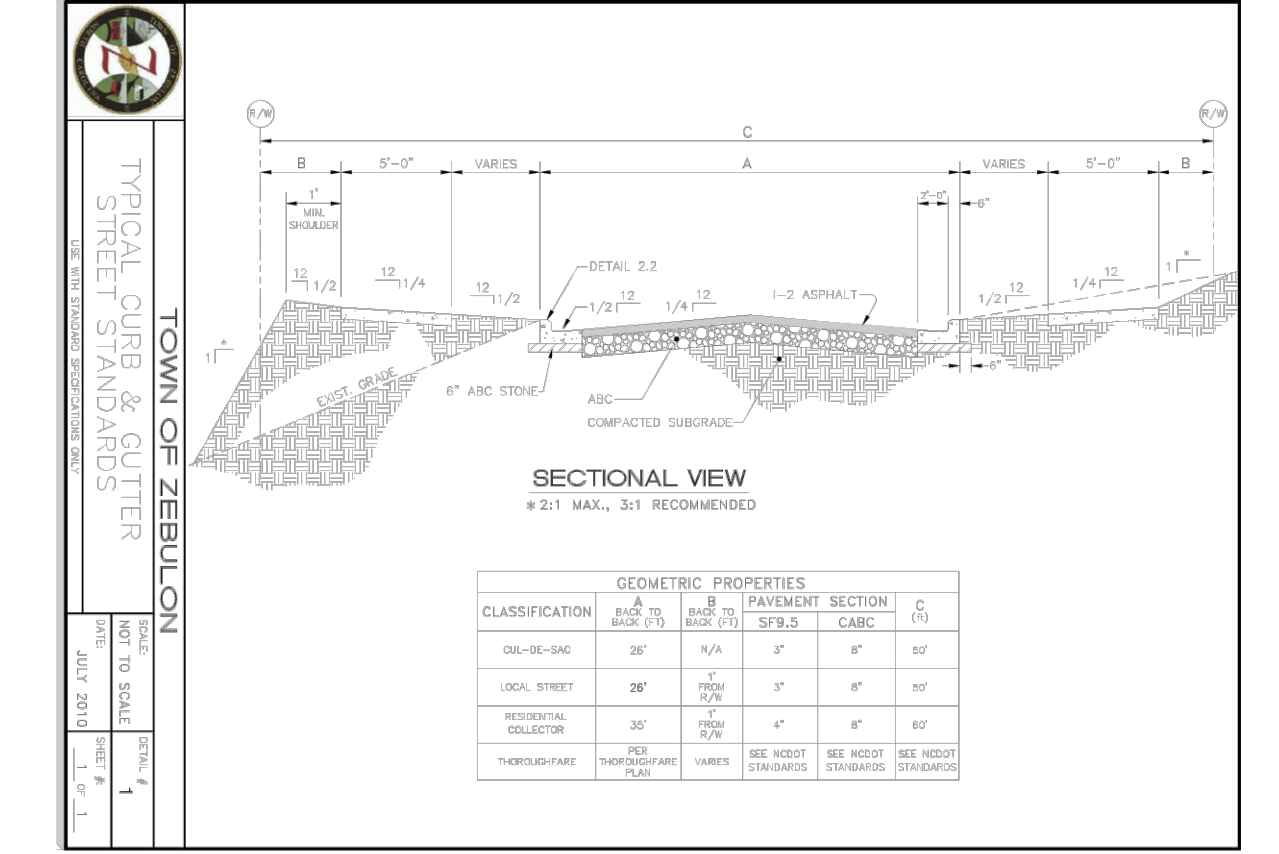
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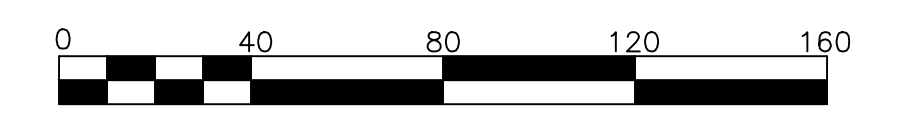
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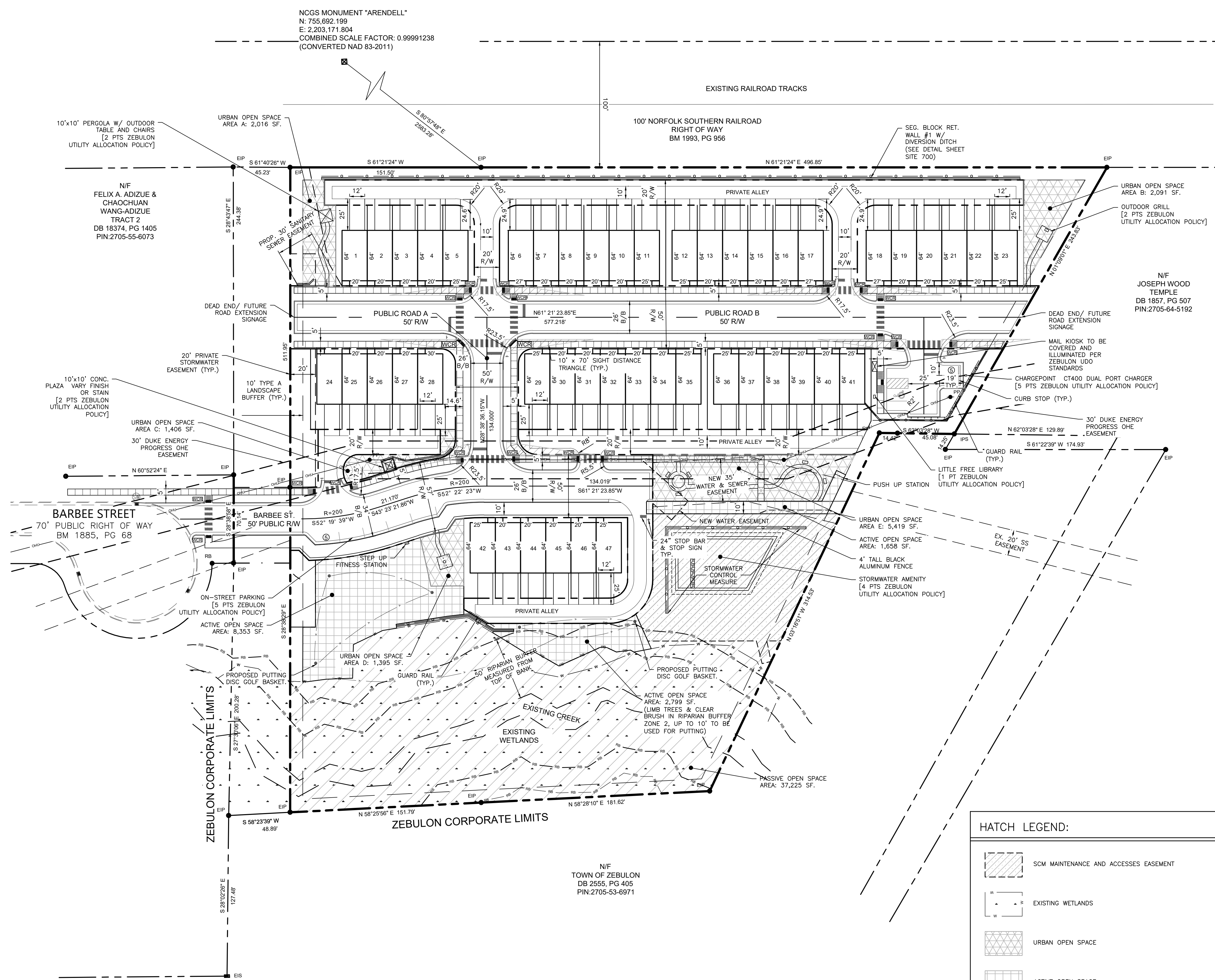
**NORTH**  
SUBDIVISION  
LAYOUT  
PLAN

SCALE: 1" = 40' (DRAWING SCALED FOR 24x36 INCH PLOTS)



**HATCH LEGEND:**

	SCM MAINTENANCE AND ACCESSES EASEMENT
	EXISTING WETLANDS
	URBAN OPEN SPACE
	ACTIVE OPEN SPACE
	PASSIVE OPEN SPACE



N/T  
TOWN OF ZEBULON  
DB 2555, PG 405  
PIN: 2705-53-6971

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE:  
07 NOV 2022  
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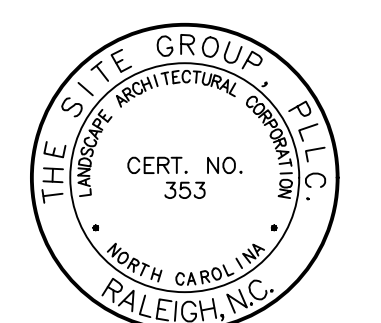
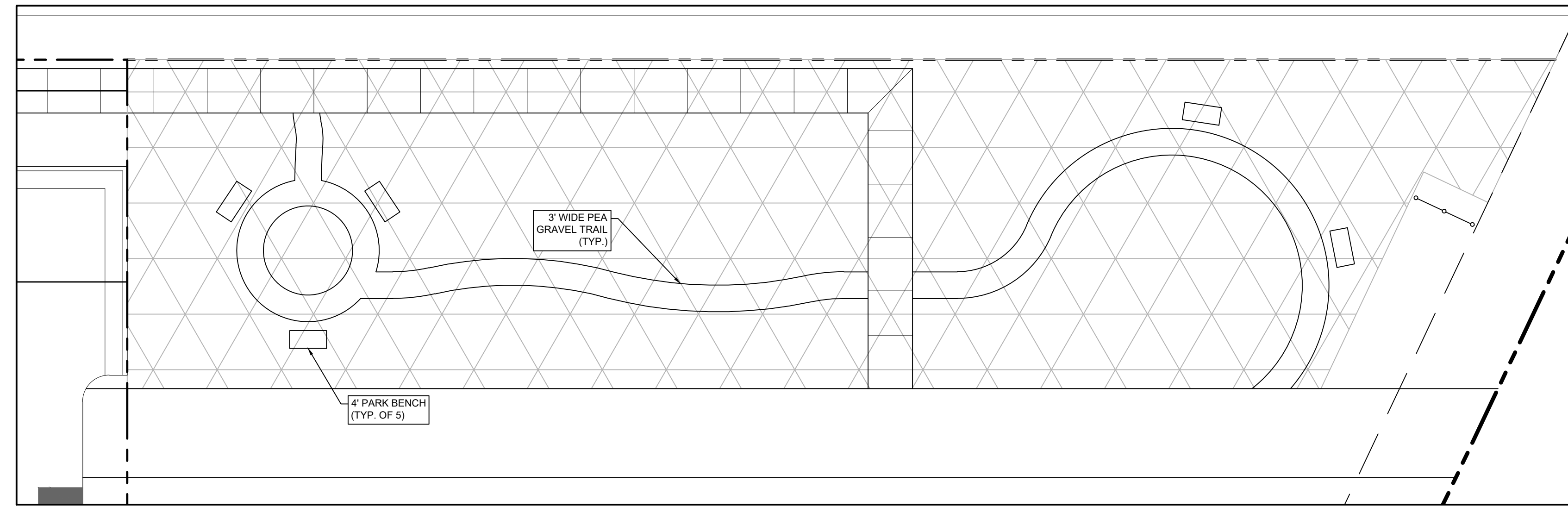
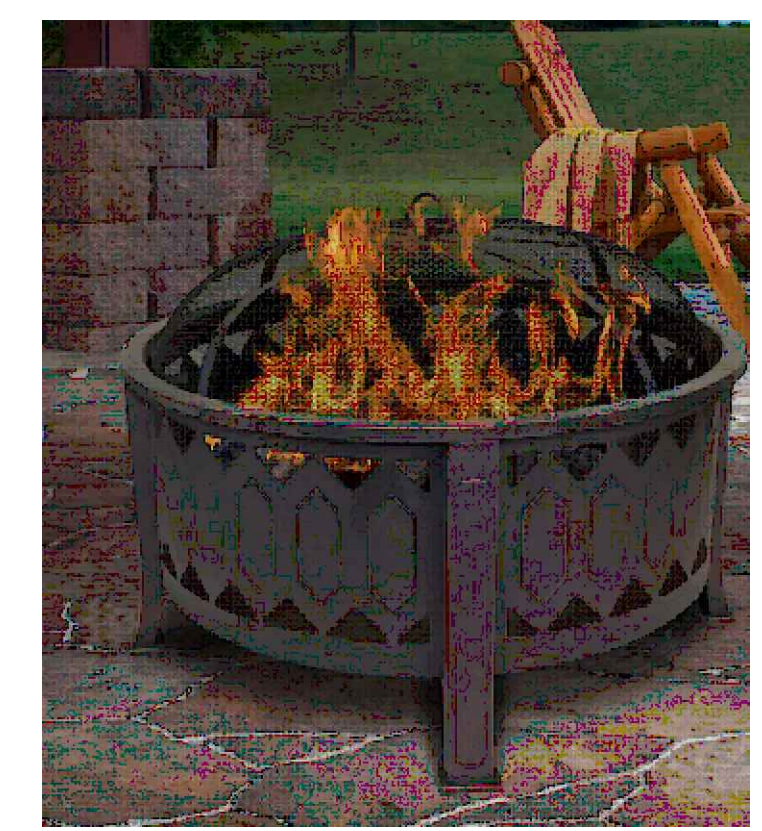
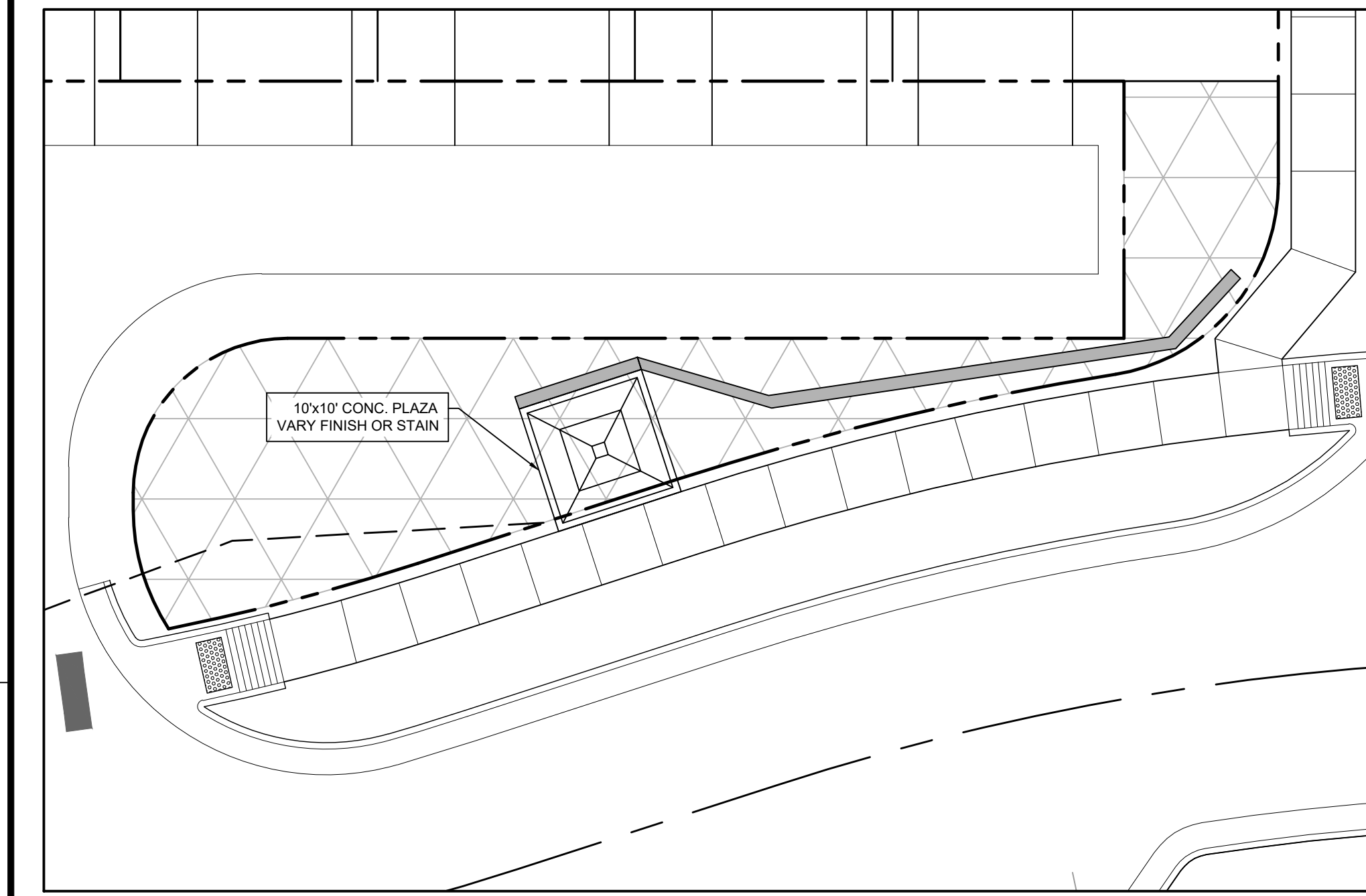
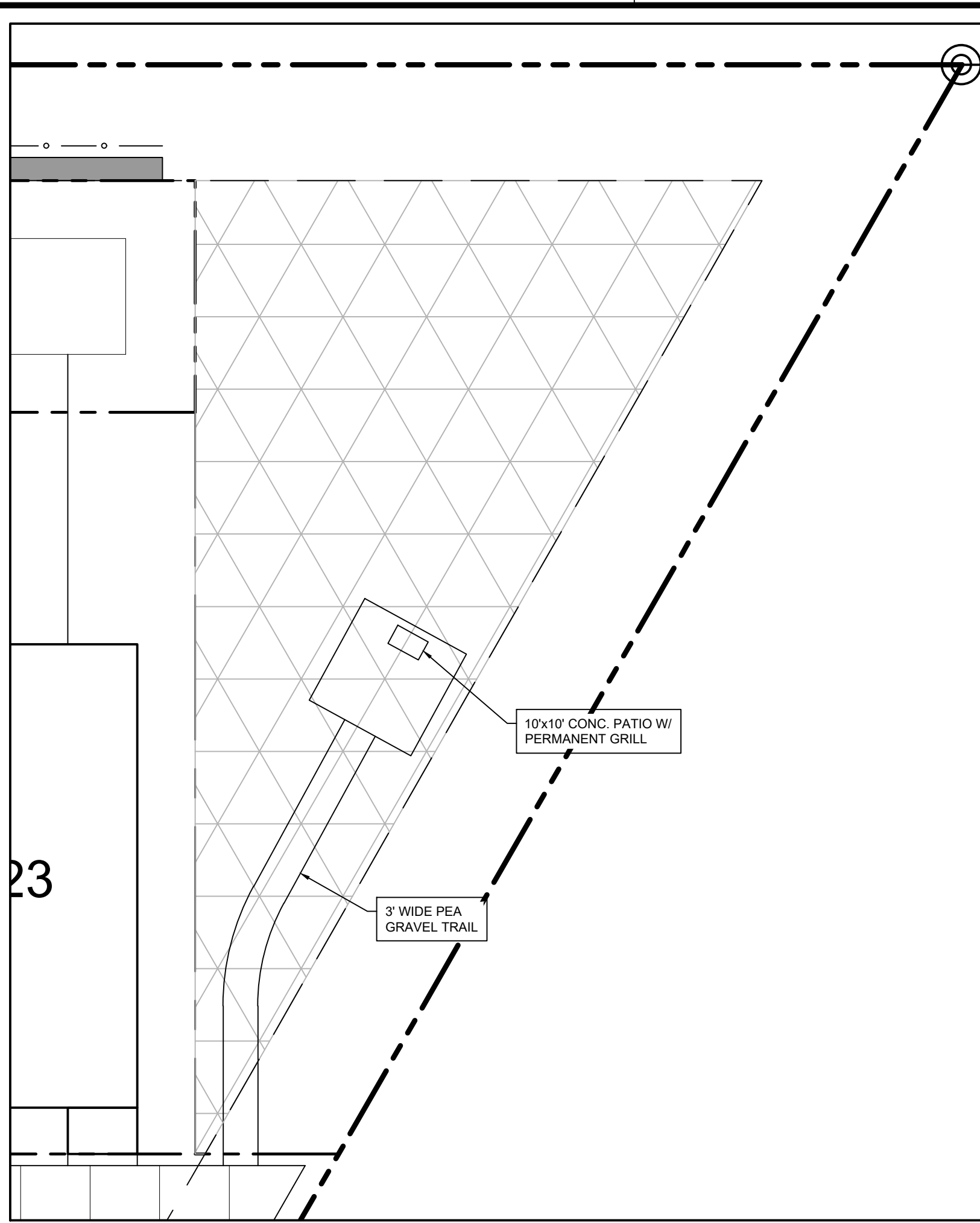
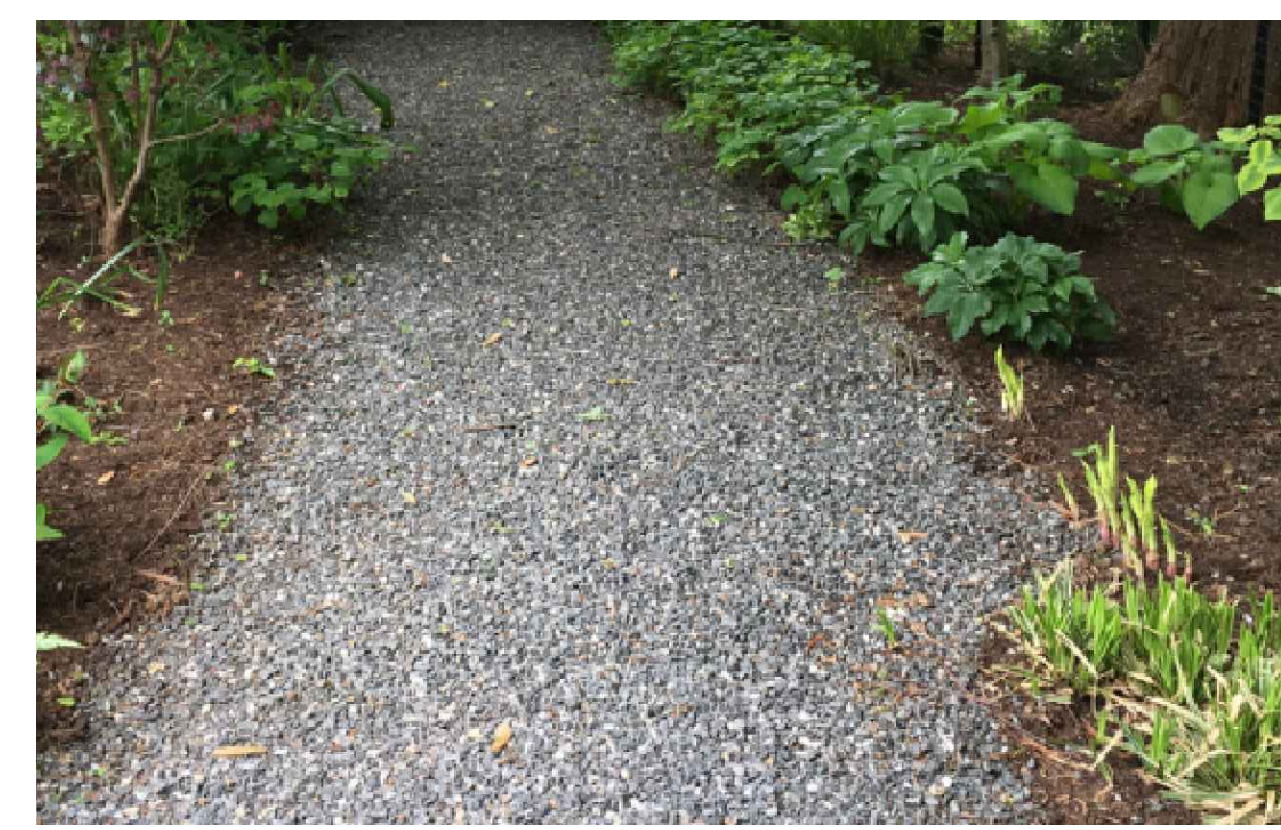
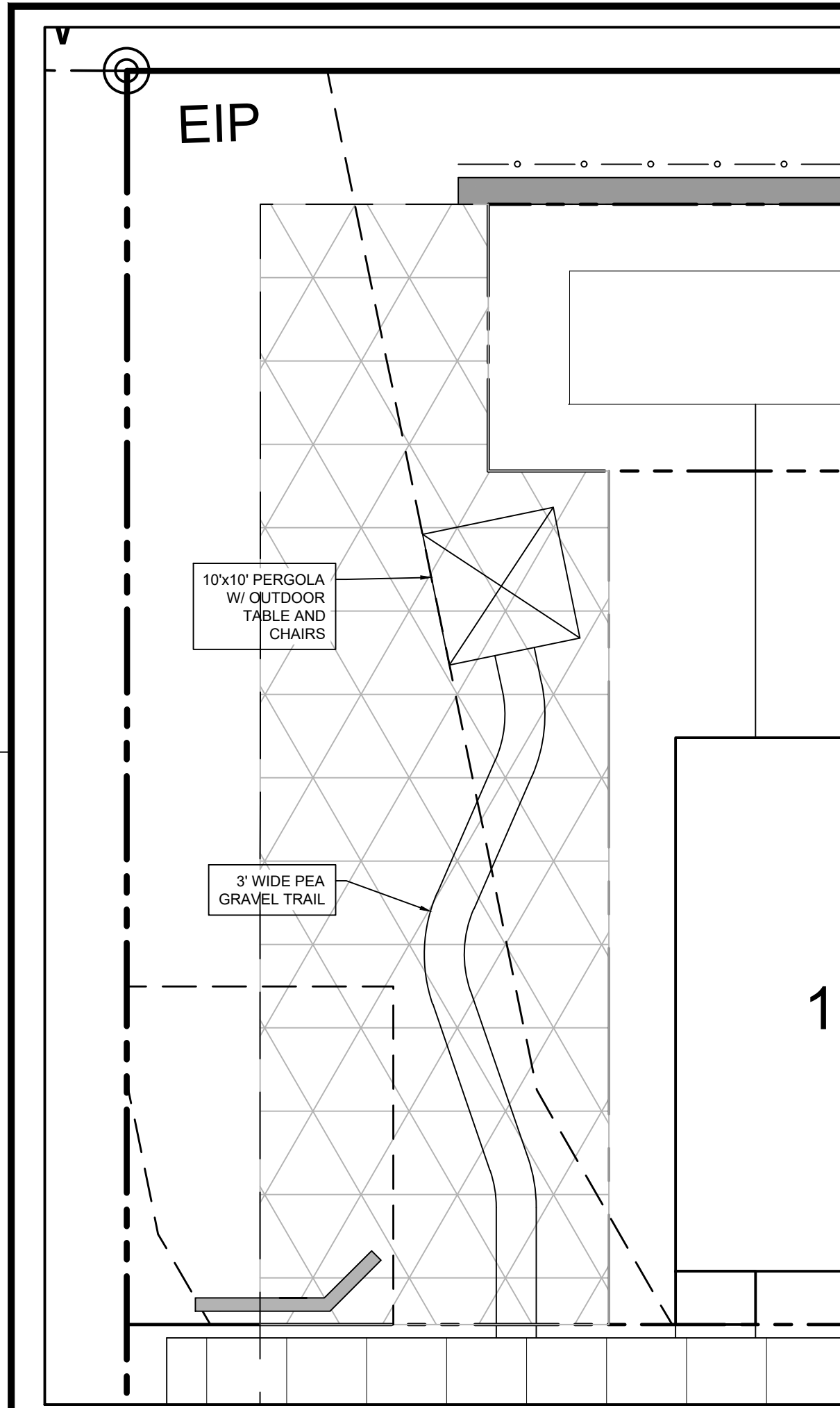
CONSTRUCTION DRAWINGS

SUBDIVISION LAYOUT PLAN

Job Code: **SCBSZ**

Dwg No. **SITE 200**





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CONSTRUCTION DRAWINGS FOR:  
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 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE: 09 MAY 2023  
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 ▲ 21 NOV 2023

CONSTRUCTION DRAWINGS

URBAN OPEN SPACE PLAN

Job Code: **SCBSZ**

Dwg No. **SITE 201**

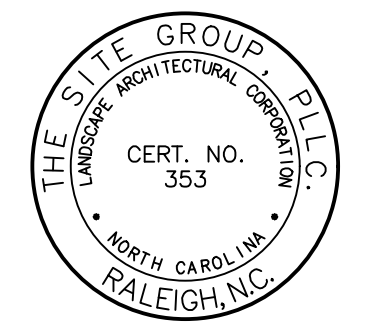
PLAN: 1"=10'

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GRADING NOTES:

- ALL CONSTRUCTION SHALL COMPLY WITH TOWN OF ZEBULON AND WAKE COUNTY STANDARDS AND SPECIFICATIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OF ANY DISCREPANCIES OR CONFLICTS.
- EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
- IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFOR SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
- THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- TO MINIMIZE DAMAGE TO EXISTING TREES NEAR THE INTERIOR EDGE OF BUFFERS AND STREETSCAPES, THE CONTRACTOR SHALL CUT MIN. 2' TRENCHES ALONG THE LIMITS OF DISTURBANCE, SO AS TO CUT, RATHER THAN TEAR, THE TREE ROOTS. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL THE SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION PRIOR TO CERTIFICATE OF OCCUPANCY (CO) IS SCHEDULED. THE FENCING SHALL BE REMOVED PRIOR TO FINAL SITE INSPECTION FOR THE CO.
- ALL STORM DRAIN FRAMES GRATES & HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF ZEBULON STANDARDS.
- ALL RISER STRUCTURES AND BARRELS MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.
- THIS PROJECT WILL REQUIRE A PRE-CONSTRUCTION CONFERENCE BEFORE THE GRADING PERMIT IS ISSUED.
- ALL CUT AND FILL SLOPE THAT IS (2:1) OR GREATER SHALL BE STABILIZED WITH PERMANENT SLOPE RETENTION DEVICES OR A SUITABLE COMBINATION OF PLANTINGS AND RETENTION DEVICES. SLOPES GREATER THAN THREE TO ONE (3:1) SHALL NOT BE STABILIZED WITH TURF GRASS BUT MUST BE STABILIZED WITH VEGETATION THAT REQUIRES MINIMAL MAINTENANCE. WEeping LOVE GRASS, RED FESCUE OR OTHER APPROVED VARIETY.
- THE ESTABLISHMENT OF PERMANENT GROUND COVER WILL BE ESTABLISHED IN 15 WORKING DAYS OR 90 CALENDAR DAYS, WHICH EVER IS SHORTER. THE SITE SHALL BE STABILIZED AND SEEDING PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
- THE TREE PROTECTION FENCING ON THIS PROJECT WILL BE INSTALLED AND INSPECTED BEFORE THE GRADING PERMIT IS ISSUED. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
- THE PROJECT WILL MEET ALL OF THE REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE TOWN OF ZEBULON UNIFIED DEVELOPMENT ORDINANCE.
- NO TIEBACKS FOR RETAINING WALLS WILL BE ALLOWED TO ENCRoACH INTO THE CITY OF RALEIGH PUBLIC UTILITY EASEMENT.
- RETAINING WALLS WILL REQUIRE A SEPARATE PERMIT FROM THE TOWN OF ZEBULON INSPECTIONS AND PERMITS DEPARTMENT.
- THE SITE SHALL BE STABILIZED AND SEEDING PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO).
- CURB INLET RIM ELEVATIONS REFER TO FLOW LINE. ADD 6" FOR TOP OF CURB ELEVATION.
- ALL STORM DRAIN FRAMES, GRATES AND HOODS SHALL BE STAMPED WITH "DRAINS TO RIVER" IN ACCORDANCE WITH TOWN OF ZEBULON STANDARDS.
- RISER STRUCTURES AND BARRELS MUST BE ON SITE BEFORE THE GRADING PERMIT IS ISSUED.



NC ENGINEERING LICENSE NO. P-0803



**THE SITE GROUP**  
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 E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

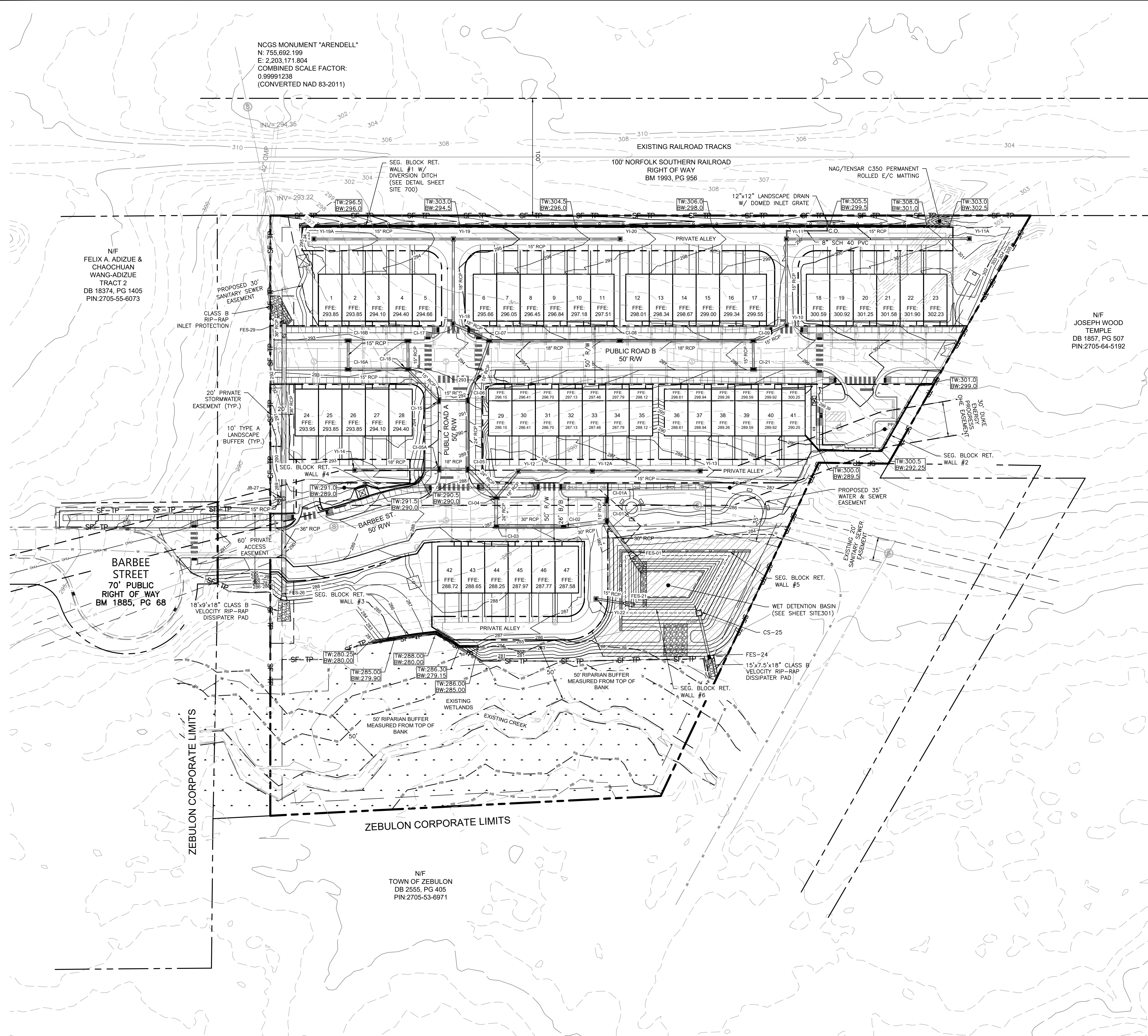
DATE: 07 NOV 2022  
 REVISED:  
 ▲ 03 FEB 2023  
 ▲ 09 MAY 2023  
 ▲ 24 AUG 2023  
 ▲ 21 NOV 2023

CONSTRUCTION DRAWINGS

GRADING PLAN

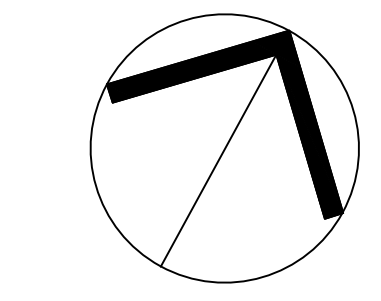
Job Code: SCBSZ

Dwg No. **SITE 300**



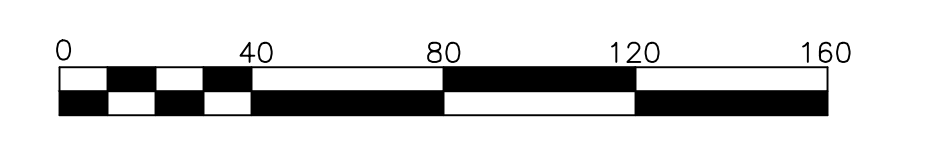
**HATCH LEGEND:**

	SCM MAINTENANCE AND ACCESS EASEMENT
	EXISTING WETLANDS
	ROLLED E/C MATTING



NORTH  
GRADING  
PLAN

SCALE: 1" = 40' (DRAWING SCALED FOR 24x36 INCH PLOTS)



NGCS MONUMENT "ARENDELL"  
 N: 755,892.199  
 E: 2,203,171.804  
 COMBINED SCALE FACTOR:  
 0.99991238  
 (CONVERTED NAD 83-2011)

N/F  
 FELIX A. ADIZUE &  
 CHAOCHUAN  
 WANG-ADIZUE  
 TRACT 2  
 DB 18374, PG 1405  
 PIN:2705-55-6073

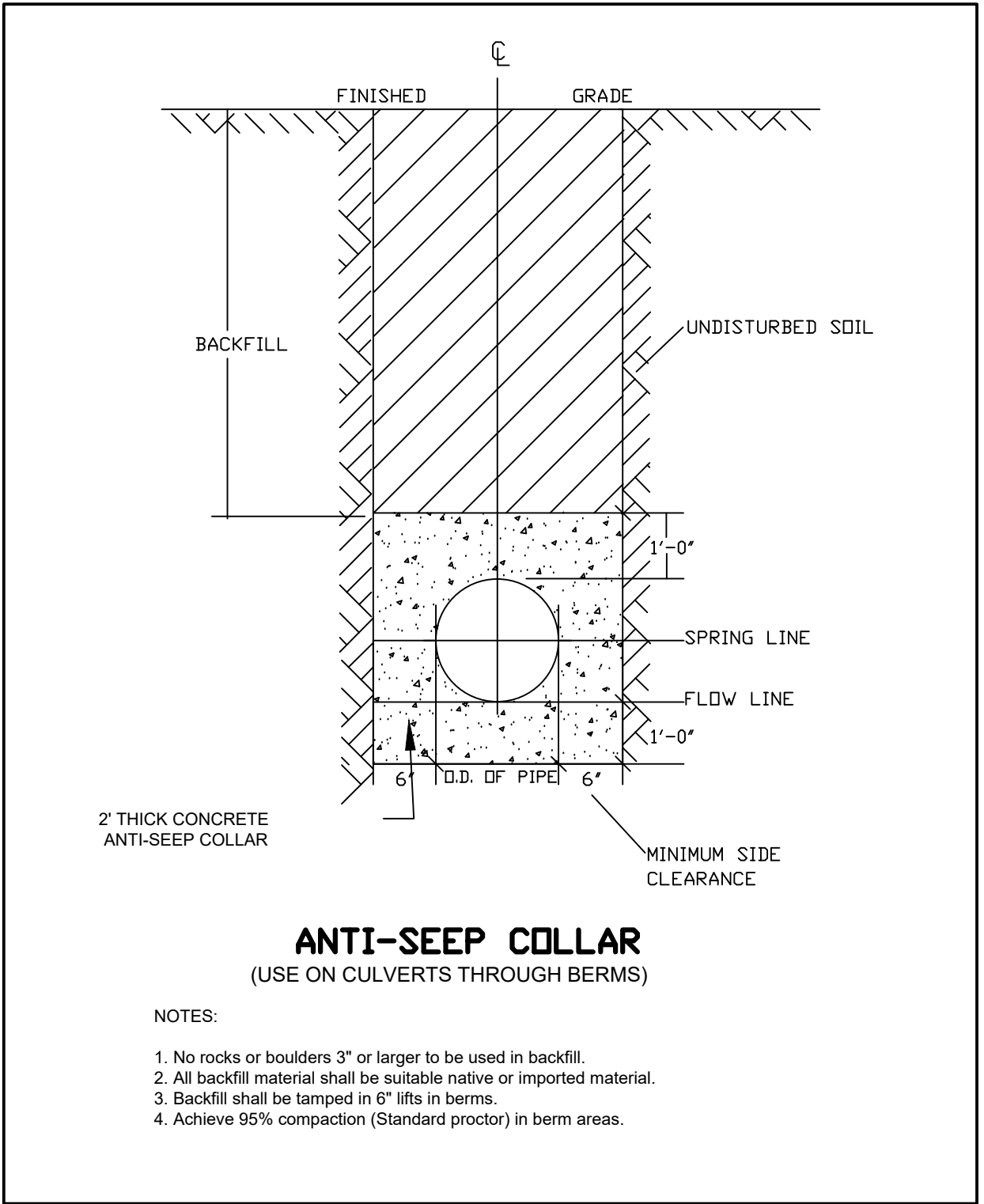
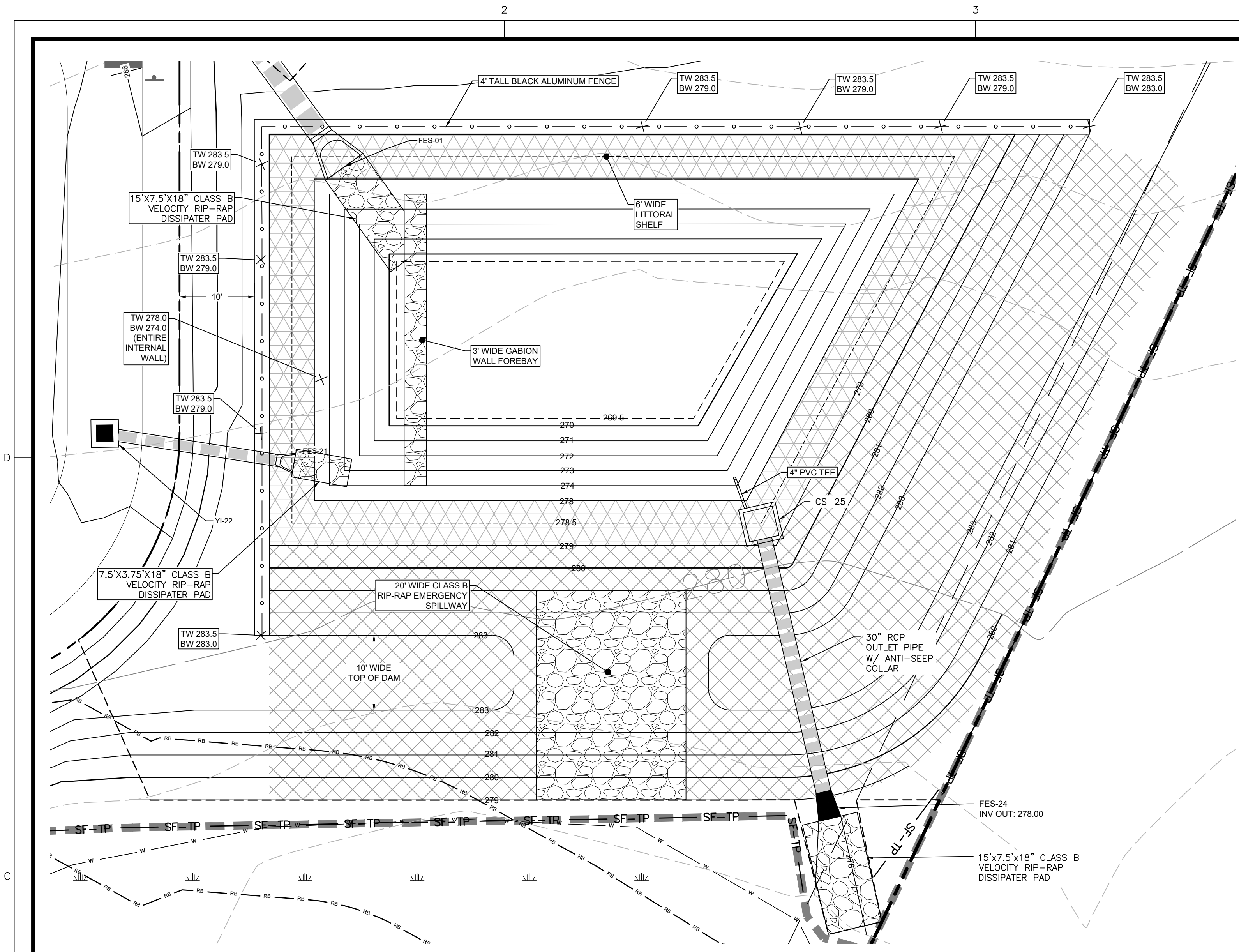
N/F  
 JOSEPH WOOD  
 TEMPLE  
 DB 1857, PG 507  
 PIN:2705-64-5192

BARBEE STREET  
 70' PUBLIC  
 RIGHT OF WAY  
 BM 1885, PG 68

ZEBULON CORPORATE LIMITS

N/F  
 TOWN OF ZEBULON  
 DB 2555, PG 405  
 PIN:2705-53-6971





**ANTI-SEEP COLLAR**  
(USE ON CULVERTS THROUGH BERMS)

NOTES:  
 1. No rocks or boulders 3" or larger to be used in backfill.  
 2. All backfill material shall be suitable native or imported material.  
 3. Backfill shall be tamped in 6" lifts in berms.  
 4. Achieve 95% compaction (Standard proctor) in berm areas.

**WET POND STAGE-STORAGE & DESIGN SUMMARY**

**SCM #1 - WETPOND SIZING CALCULATIONS**  
(Drainage Area #1)

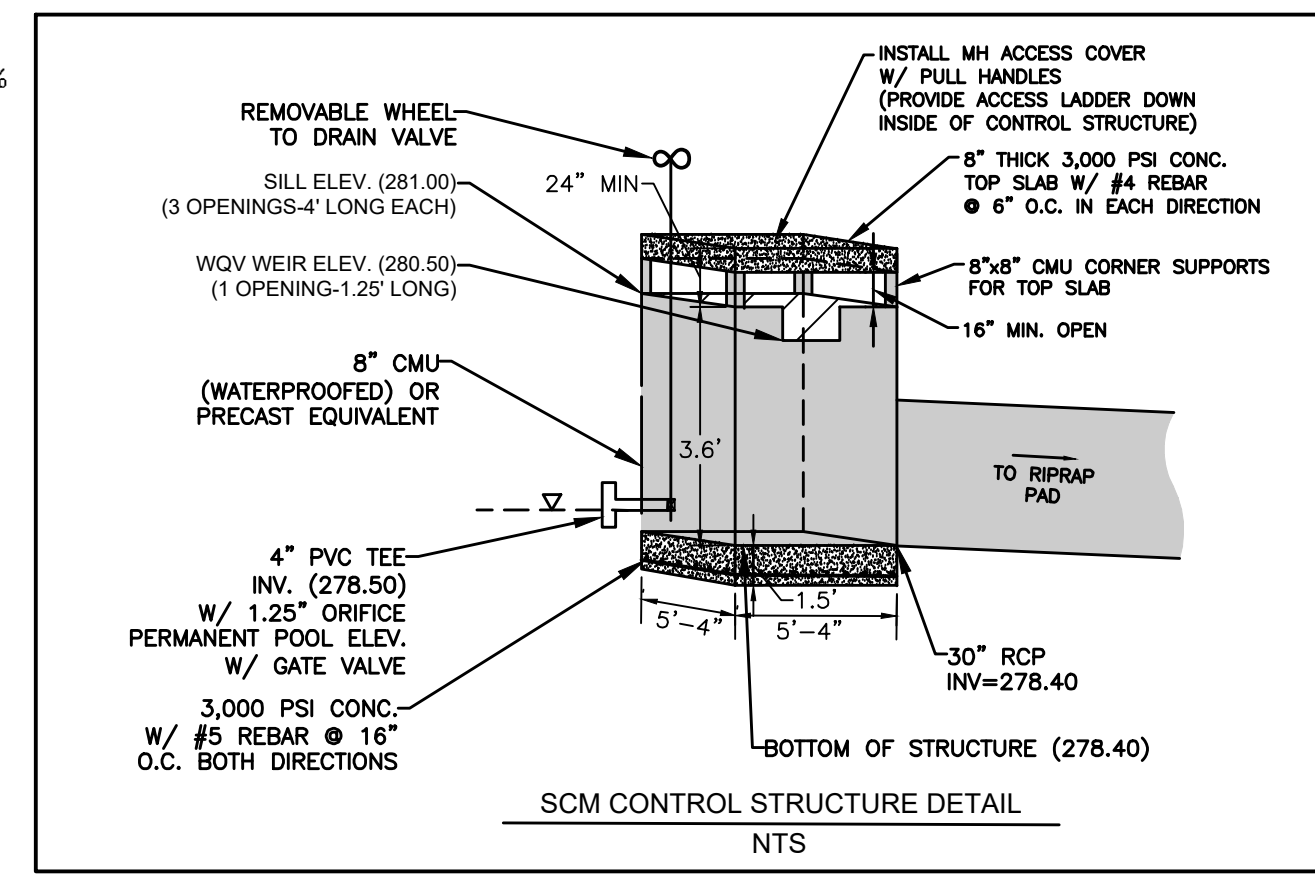
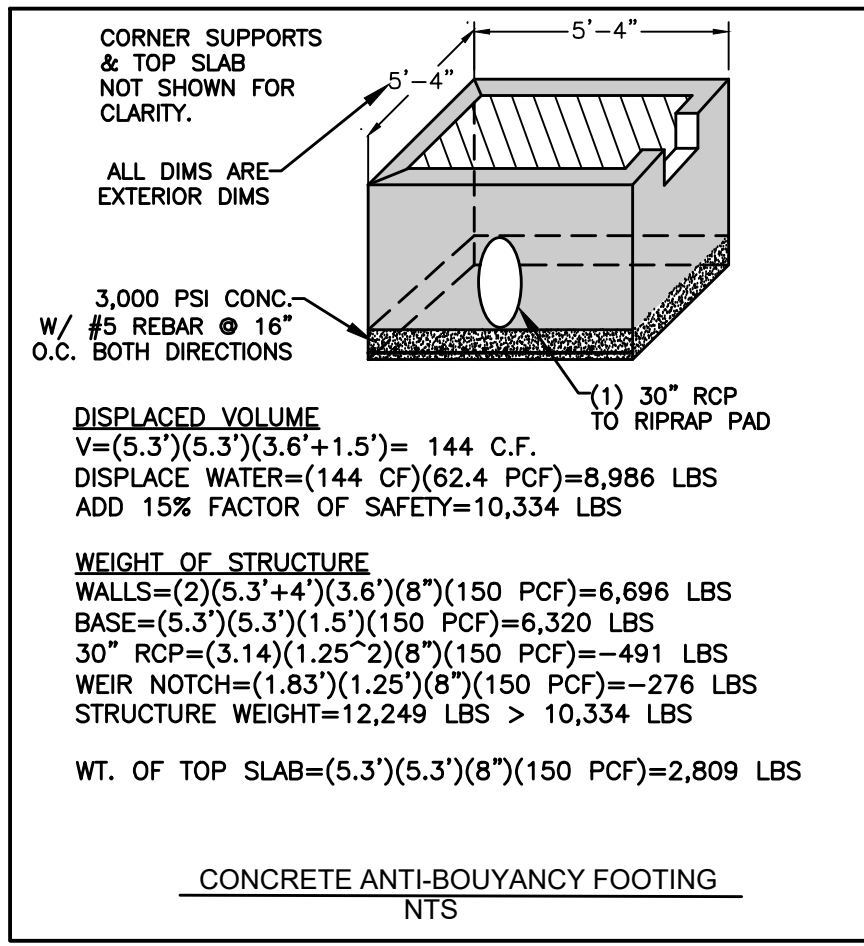
Total Impervious Landcover: 2.630  
 Total Drainage Area (DA): 3.900  
 Percent of Impervious in Drainage Area (I): 67%  
 Calculate the required storage volume (Rv) for the 1" first flush storm event:  
 $Rv = 0.05 + (0.009)I$  Where I = Percent of impervious from above.  
 $Rv = 0.653$   
 Calculate the required drainage volume from the 1" storm to be controlled:  
 $WQv = (\text{design rainfall})(Rv)(\text{Drainage Area})$   
 $WQv = 3630 * Rv * A$   
 Required WQv = 9,245 C.F.  
 Provided WQv = 9,269 C.F.

Calculate the Wet Pond Dimensions:

Elev.	Tot. Inc. SA	Forebay	Mainpool	FB Inc. Vol.	MP Inc. Vol.	Disc.	Inc. Vol.	Total Vol.
283	6176	1306	4870	1277	4590		5866	38942
282	5738	1247	4491	1218	4309		5527	33076
281	5316	1189	4127	587	2020		2507	27549
280.5	5111	1160	3951	573	1932	WQv	2505	24942
280	4909	1131	3778	1102	3609		4710	22437
279	4511	1072	3439	470	1584	A-top shelf	2054	17727
278.5	3704	807	2897	347	1324	A-perm pool	1670	15673
278	2977	580	2397	485	2212	A-bot shelf	2697	14003
277	2417	390	2027	390	2027		2417	11306
276	2417	390	2027	390	2027		2417	8889
275	2417	390	2027	390	2027		2417	6472
274	2417	390	2027	335	1883		2218	4055
273	2019	280	1739	233	1604		1837	1837
272	1655	186	1469	147	1344		0	0
271	1326	108	1218	77	1102		0	0
270	1032	46	986	0	0	0 Sed Cleanout	0	0
269.5						A-bot pond		
								2794
								15549
								18% Forebay to Main Pool Volume
								11,306 V-perm pool
								9,269 V-water quality pool
								Ave Depth Calcs
								Davg with shelf 5.37 d-ave
								Davg w/o shelf 6.40 d-ave
								Ave Depth 6.40
								(use greater)
								6 (rounded down to nearest 0.5')
								SA/DA 1.49

Required SA 2,531 S.F.  
 Provided SA 2,897 S.F.

- SCM CONSTRUCTION NOTES:**
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH TOWN OF ZEBULON AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
  - THE PROJECT WILL MEET ALL REQUIREMENTS RELATIVE TO BEST MANAGEMENT PRACTICES AND ENGINEERED STORMWATER CONTROL STRUCTURES AS OUTLINED IN THE NCEQ STORMWATER DESIGN MANUAL.
  - THE CONTRACTOR SHALL WARRANTY ALL PLANTED MATERIALS FOR A PERIOD OF 2 YEARS FROM DATE OF INSTALLATION. AT THE END OF THE FIRST YEAR AND AT THE END OF THE SECOND YEAR, THE CONTRACTOR SHALL REPLACE ALL PLANTS WHICH DO NOT SURVIVE. ANY HEALTHY PLANTS DAMAGED DURING PLANT REPLACEMENT SHALL ALSO BE REPLACED.
  - SOIL BELOW ELEVATION 345.00 SHALL BE TESTED BY THE USDA AGRICULTURAL EXTENSION OFFICE FOR pH, WHICH MUST FALL BETWEEN 5.5 AND 7.0. TESTS SHALL ALSO BE PERFORMED FOR NUTRIENTS SUCH AS NITROGEN, PHOSPHORUS, AND POTASSIUM, AND FOR MINERALS SUCH AS CHELATED IRON AND LIME. AMENDMENTS TO SOIL RECOMMENDED BY USDA SHALL BE INCORPORATED INTO SOIL TO PROMOTE VIGOROUS VEGETATION AND PLANT GROWTH. RECORDS OF TESTS AND AMENDMENTS PROVIDED BY CONTRACTOR SHALL BE PROVIDED TO THE ENGINEER.
  - LANDSCAPING PLANTINGS SHOWN HEREON SHALL BE INSTALLED DURING FALL SEASON OR EARLY WINTER IF POSSIBLE FOR MAXIMUM PLANT SURVIVABILITY.
  - THE CONTRACTOR OR OWNER SHALL EMPLOY A GEOTECHNICAL ENGINEER TO TEST ALL EMBANKMENTS AND FILL PLACEMENT FOR PROPER COMPACTION. PROPER COMPACTION SHALL BE PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS OF THESE PLANS, WHICHEVER IS MORE STRINGENT. EMBANKMENTS FOR BASINS SHALL BE PLACED IN 6 INCH LOOSE LAYERS AND SHALL BE COMPACTED TO A DENSITY OF NO LESS THAN 95% OF THE STANDARD PROCTOR MAXIMUM DENSITY AT A MOISTURE CONTENT OF + OR - TWO PERCENTAGE POINTS OF THE OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D698. THE CONTRACTOR SHALL TAKE PHOTOGRAPHS OF THE OUTLET STRUCTURE AT ALL PHASES OF INSTALLATION AND SHALL RETAIN WITH GEOTECHNICAL TESTING DATA. THE CONTRACTOR SHALL ALSO RETAIN ALL SHIPPING RECORDS AND SPECIFICATIONS FOR THE OUTLET STRUCTURE MATERIALS AND STRUCTURES. ALL OF THE ABOVE DATA MAY BE REQUIRED AS PART OF THE MUNICIPALITY AS-BUILT PROCESS AND SHALL BE MADE AVAILABLE TO THE ENGINEER UPON REQUEST. THE CONTRACTOR AND OWNER SHALL HAVE DOCUMENTATION OF THESE TESTS AVAILABLE UPON REQUEST.



**Table 1: Clay Liner Specifications (Source: VADCR, 1999).**

Property	Test Method	Unit	Specification
Permeability	ASTM D-2434	Cm/sec	$1 \times 10^{-6}$
Plasticity Index of Clay	ASTM D-423/424	%	Not less than 15
Liquid Limit of Clay	ASTM D-2216	%	Not less than 30
Clay Particles Passing	ASTM D-422	%	Not less than 30
Clay Compaction	ASTM D-2216	%	95% of standard proctor density

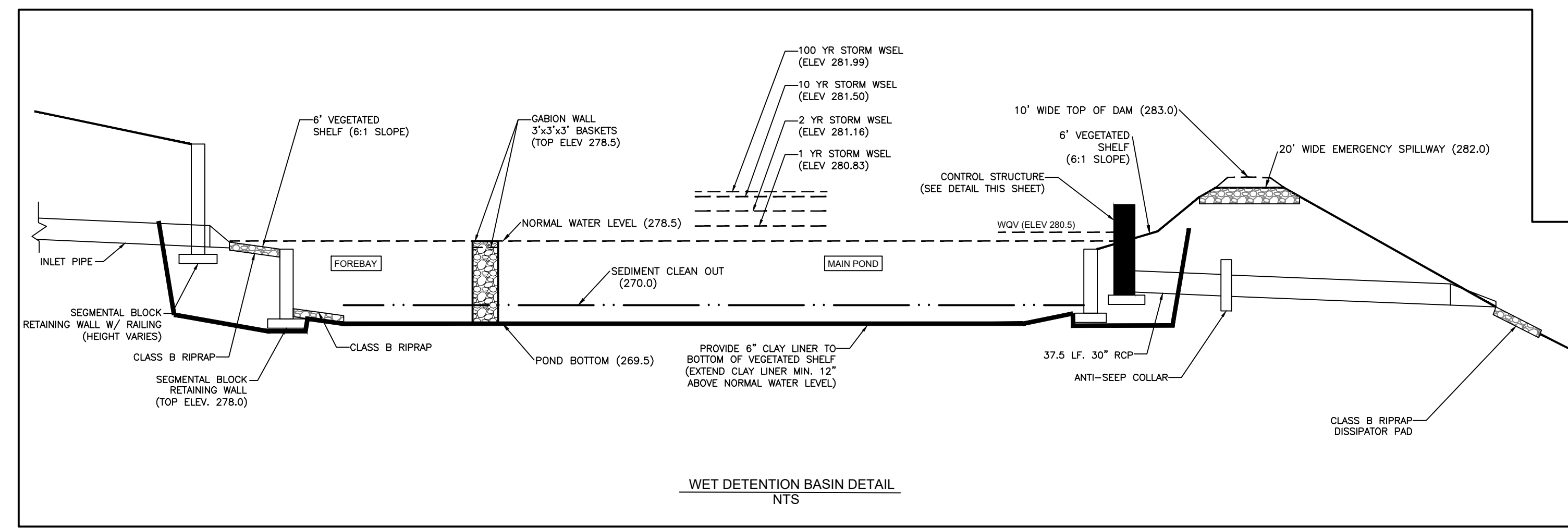
GRADING CONTRACTOR MUST DOCUMENT CLAY LINER AND VERIFY MATERIAL WITH GEOTECHNICAL ENGINEER DURING CONSTRUCTION TO ENSURE POND HOLDS WATER. STRUCTURAL ENGINEER FOR RETAINING WALLS AND GEOTECHNICAL ENGINEER TO DESIGN CLAY LINER LOCATION SUCH THAT SEGMENTAL WALL BACKFILL DOES NOT DRAIN POND.

**WET POND PLANTING LEGEND**

CENTIPEDE GRASS (4,371 SF.)	
LITTORAL SHELF PLANTINGS (1,535 SF.)	

**WET POND PLANT LIST**

KEY	QTY	BOTANICAL NAME	COMMON NAME	REMARKS
WET POND LITTORAL SHELF - 1,535 SF (200 x 50 = 384 PLUGS REQUIRED)				
CT	96	Carex tenera*	Quill Sedge	3" x 2.5" SQUARE PLUGS (MIN)
EM	96	Eupatoriadelphus maculatus	Spotted trumpetweed	3" x 2.5" SQUARE PLUGS (MIN)
PV	96	Peltandra virginica	Arrow arum	3" x 2.5" SQUARE PLUGS (MIN)
SA	96	Schoenoplectus americanus	Three-square bulrush	3" x 2.5" SQUARE PLUGS (MIN)
SLOPE STABILIZATION GRASSES				
CENTIPEDE GRASS	4,371 SF	Eremochloa ophiuroides		SEED AT 50 LBS. PER ACRE



**SCM PLAN**

SCALE: 1" = 10' (DRAWING SCALED FOR 24x36 INCH PLOTS)

0 10 20 30 40

**THE SITE GROUP**  
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**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: WRR  
 Checked By: SRN

DATE: 07 NOV 2022  
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CONSTRUCTION DRAWINGS

SCM PLAN

Job Code: SCBSZ

Dwg No. 301

**THE SITE GROUP, PLLC.**  
 LICENSE NO. P-0803

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**CONSTRUCTION DRAWINGS FOR:**  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

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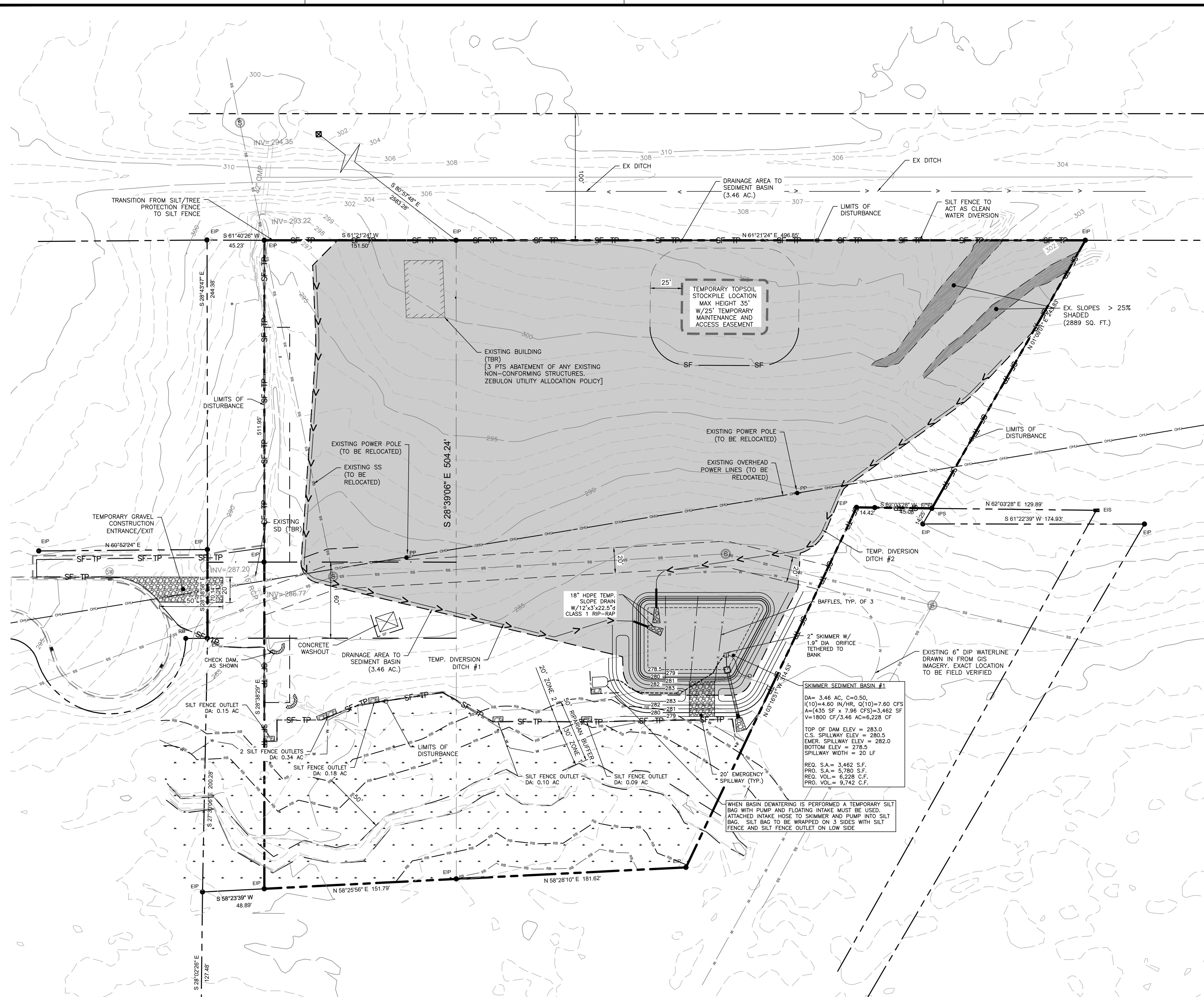
CONSTRUCTION DRAWINGS

SCM PLAN

Job Code: SCBSZ

Dwg No. 301





**EROSION CONTROL NOTES**

- ALL CONSTRUCTION SHALL COMPLY WITH WAKE COUNTY STANDARDS AND SPECIFICATIONS.
- EXISTING CONDITION INFORMATION SHOWN IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OR ANY DISCREPANCIES OR CONFLICTS.
- EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
- IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFOR SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
- THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- THE STREETS IN FRONT OF THE PROJECT WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
- THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
- TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREA(S) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF. ANY ACTIVITY (LANDSCAPING, FENCING, OR UTILITY INSTALLATION) SHOWN ON THE APPROVED PLANS IN A TREE PROTECTION AREA, SHALL ALSO NOT OCCUR WITHOUT WRITTEN AUTHORIZATION FROM THE TOWN'S ZONING COMPLIANCE STAFF. ANY UNAUTHORIZED ENCROACHMENT OR DISTURBANCE WITHIN THE BOUNDARIES OF A TREE PROTECTION AREA SHALL AUTOMATICALLY RESULT IN FINES AND THE REPLACEMENT OF ANY DAMAGED VEGETATION IN ACCORDANCE WITH THE LAND DEVELOPMENT ORDINANCE.

**CONSTRUCTION SEQUENCE (PHASE 1):**

- OBTAIN A LAND DISTURBING PERMIT.
- PRIOR TO BEGINNING CONSTRUCTION, CALL THE STORMWATER INSPECTOR TO SCHEDULE AN ON-SITE PRECONSTRUCTION MEETING.
- CLEAR ONLY AS NECESSARY TO INSTALL ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE INITIAL EROSION CONTROL PLAN (PHASE 1):
  - INSTALL CONSTRUCTION ENTRANCE.
  - INSTALL SILT FENCING AND SILT FENCE OUTLETS.
  - INSTALL TEMPORARY DITCHES.
  - INSTALL SEDIMENT SKIMMER BASIN.
- MAINTAIN EROSION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
- STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY ON PROJECT SITE.
- SCHEDULE A SITE INSPECTION THROUGH WAKE COUNTY.
- UPON APPROVAL OF THE STORMWATER SITE INSPECTION, DEMOLISH EXISTING STRUCTURES AS DETAILED ON EXISTING CONDITION AND DEMOLITION PLAN.
- PROCEED TO PHASE 2 OF THE EROSION CONTROL SEQUENCE. SEE SITE 302A

**REQUIRED WAKE COUNTY CONSTRUCTION SEQUENCE**

- SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY ENVIRONMENTAL CONSULTANT. OBTAIN A LAND DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR 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.
- CALL ENVIRONMENTAL CONSULTANT FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENUDEED AREAS PER GROUND STABILIZATION TIME FRAMES.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ENVIRONMENTAL CONSULTANT FOR AN INSPECTION.
- IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC. AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

**NPDES GROUND STABILIZATION**

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND 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 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)

**STOCKPILE MAINTENANCE REQUIREMENTS:**

- 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).

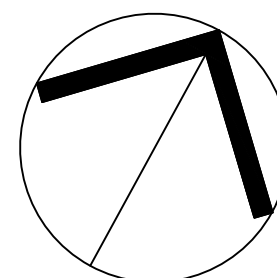
**EROSION CONTROL LEGEND**

	EXISTING MINOR TOPO		SILT FENCE
	EXISTING MAJOR TOPO		TEMPORARY CHECK DAM
	EXISTING GAS LINE		TEMPORARY CONSTRUCTION ENTRANCE
	EXISTING STORM DRAINAGE		SILT FENCE OUTLET
	EXISTING RIPARIAN BUFFER		INLET PROTECTION
	PROPOSED SILT/TREE PROTECTION FENCE		
	PROPOSED LIMITS OF DISTURBANCE		
	TREE PROTECTION FENCE		

**DRAINAGE SWALE CHART**

Swale Number	Swale Bottom Width (ft)	Side Slope	Depth of Swale (ft)	Channel Slope (ft/ft)	Depth of Flow Q10 (in)	Velocity Q10 (fps)	Temporary Liner	Permanent Liner
1	1	2	1	0.0280	7.0	4.3	S75	N/A
2	1	2	1	0.0530	5.9	5.4	SC150	N/A

**DISTURBED AREA**  
202,385 SF / 4.65 AC



**INITIAL EROSION CONTROL PLAN - PH 1**

SCALE: 1" = 40' (DRAWING SCALED FOR 24x36 INCH PLOTS)



NC ENGINEERING LICENSE NO. P-6803



**THE SITE GROUP**  
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Raleigh, NC 27605-1136 USA  
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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: WRR  
Checked By: SRN

DATE:  
07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023  
24 AUG 2023  
21 NOV 2023

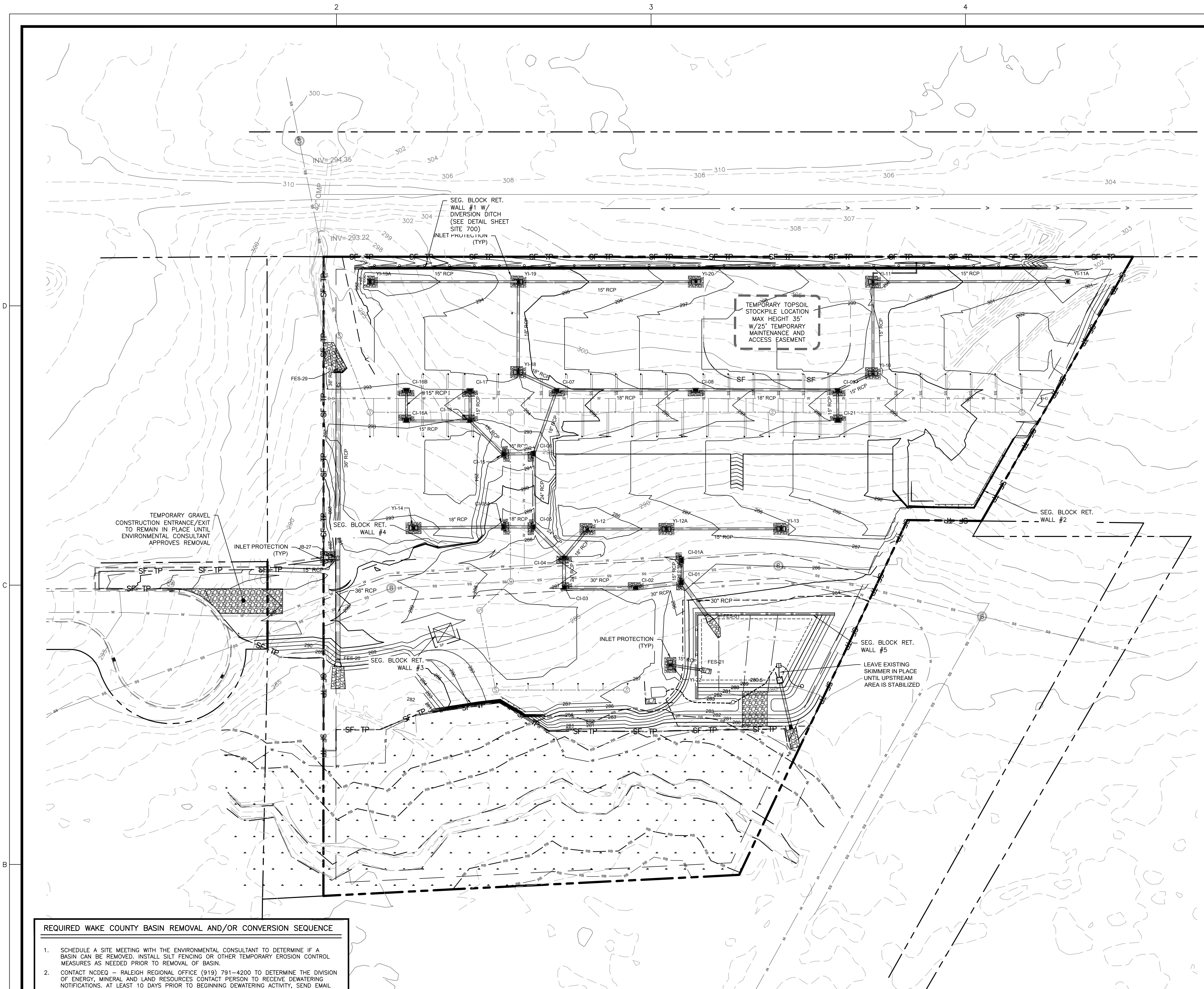
CONSTRUCTION DRAWINGS

INITIAL EROSION CONTROL PLAN PHASE 1

Job Code: SCBSZ

Dwg No.  
**SITE 302**





**EROSION CONTROL NOTES**

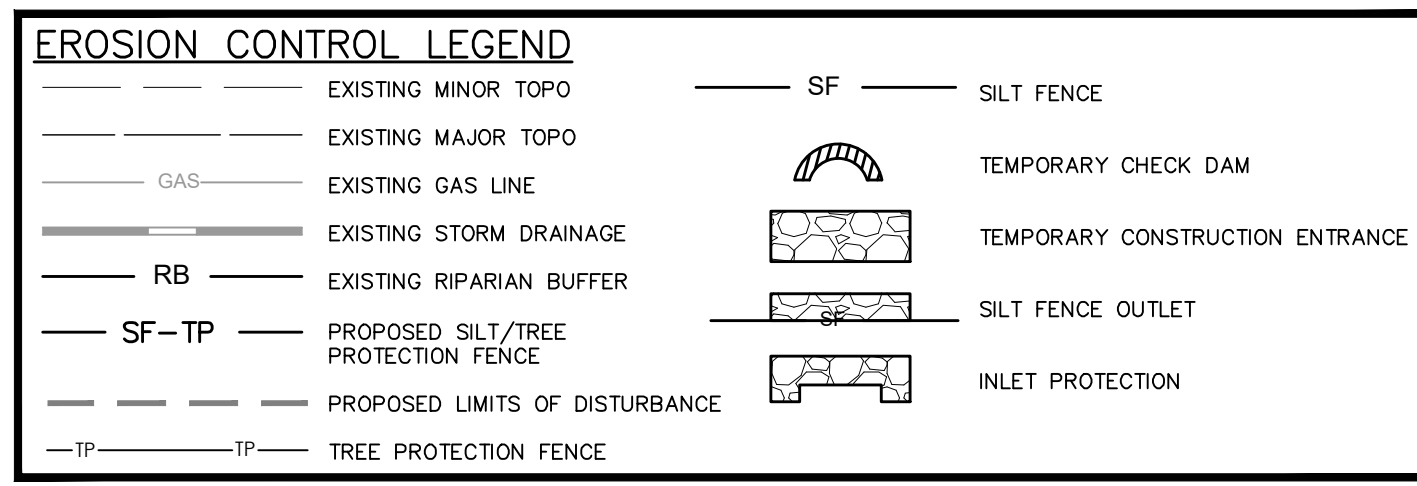
1. ALL CONSTRUCTION SHALL COMPLY WITH TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
2. EXISTING CONDITION INFORMATION SHOWN IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OR ANY DISCREPANCIES OR CONFLICTS.
4. EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
6. IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
7. THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
8. THE STREETS IN FRONT OF THE PROJECT WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
9. THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
10. TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREA(S) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF. ANY ACTIVITY (LANDSCAPING, FENCING, OR UTILITY INSTALLATION) SHOWN ON THE APPROVED PLANS IN A TREE PROTECTION AREA, SHALL ALSO NOT OCCUR WITHOUT WRITTEN AUTHORIZATION FROM THE TOWN'S ZONING COMPLIANCE STAFF. ANY UNAUTHORIZED ENCROACHMENT OR DISTURBANCE WITHIN THE BOUNDARIES OF A TREE PROTECTION AREA SHALL AUTOMATICALLY RESULT IN FINES AND THE REPLACEMENT OF ANY DAMAGED VEGETATION IN ACCORDANCE WITH THE LAND DEVELOPMENT ORDINANCE.

**CONSTRUCTION SEQUENCE (PHASE 2):**

- CONTINUED FROM SITE 302
1. COMMENCE PERMITTED LAND DISTURBING ACTIVITY.
  2. PROCEED WITH CLEARING, GRUBBING AND GRADING. ADJUST TEMPORARY DIVERSIONS AS REQUIRED.
  3. MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN GOOD WORKING ORDER. SILT FENCE, INLET PROTECTION AND OTHER SIMILAR MEASURES MUST BE CLEANED OUT BEFORE THEY ARE HALF FULL. CLOGGED STONE FILTERS MUST BE REFRESHED/REPLACED. SILT FENCE CAN NOT HAVE HOLES OR TEARS.
  4. INSTALL ALL UTILITIES, STORMWATER PIPES, INLETS, ROAD BEDS, CURB AND GUTTER AND RETAINING WALLS #1-#5. SEE PHASE 3 FOR RETAINING WALL #6.
  5. STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY ON PROJECT SITE.
  6. SUBMIT DOCUMENTATION REQUIRED UNDER THE SITE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY (NCG010000) TO STORMWATER INSPECTIONS THROUGHOUT THE PROJECT.
  7. SCHEDULE A SITE INSPECTION THROUGH WAKE COUNTY.
  8. UPON APPROVAL OF THE STORMWATER SITE INSPECTION, PROCEED TO PHASE 3 OF THE EROSION CONTROL SEQUENCE. SEE SITE 303.

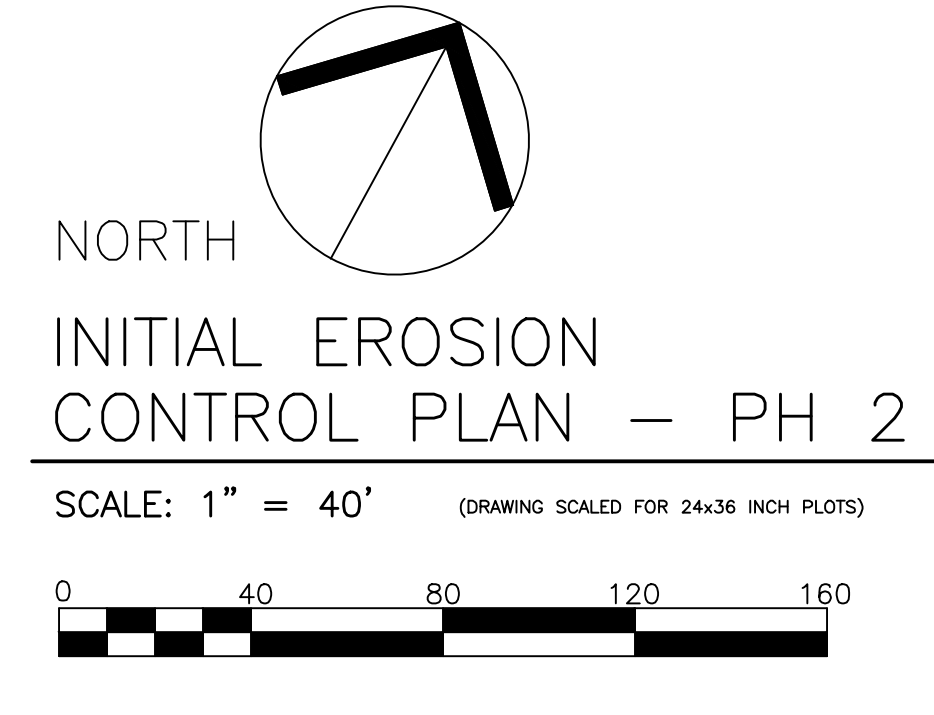
**REQUIRED WAKE COUNTY BASIN REMOVAL AND/OR CONVERSION SEQUENCE**

1. SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF BASIN.
2. CONTACT NCDEQ - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ON SITE. THE EMAIL SHOULD INCLUDE: E&S JURISDICTION; WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING: A)REASON FOR CONVERSION, B)BASIN #, C)DEWATERING METHOD, AND D) ALL OTHER NECESSARY INFO FROM PART II, SECTION G, ITEM 4 OF THE NCG01. (KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION)
3. AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDEQ-DEMLR THAT YOU MAY REMOVE THE BASIN OR ON > DAY 11, WHICHEVER IS SOONER, REMOVE 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
4. PERFORM SEEDBED PREPARATION, SEED, MULCH AND ANCHOR ANY RESULTING BARE AREAS IMMEDIATELY.
5. INSTALL VELOCITY DISSIPATORS AND/OR LEVEL SPREADERS AS REQUIRED ON THE EROSION CONTROL PLAN.
6. WHEN SITE IS FULLY STABILIZED, CALL ENVIRONMENTAL CONSULTANT 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. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.

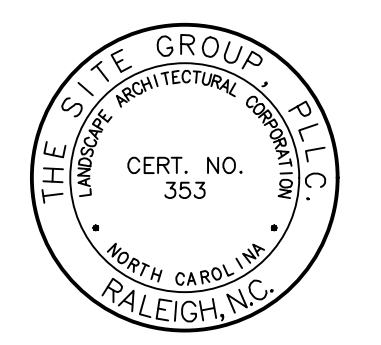


**NPDES GROUND STABILIZATION**

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) 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 50 FEET IN LENGTH
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HOW ZONES)



**DISTURBED AREA**  
202,385 SF / 4.65 AC



NO ENGINEERING LICENSE NO. P-0803



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E Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE:  
21 NOV 2023

CONSTRUCTION DRAWINGS  
INITIAL EROSION CONTROL PLAN  
PHASE 2

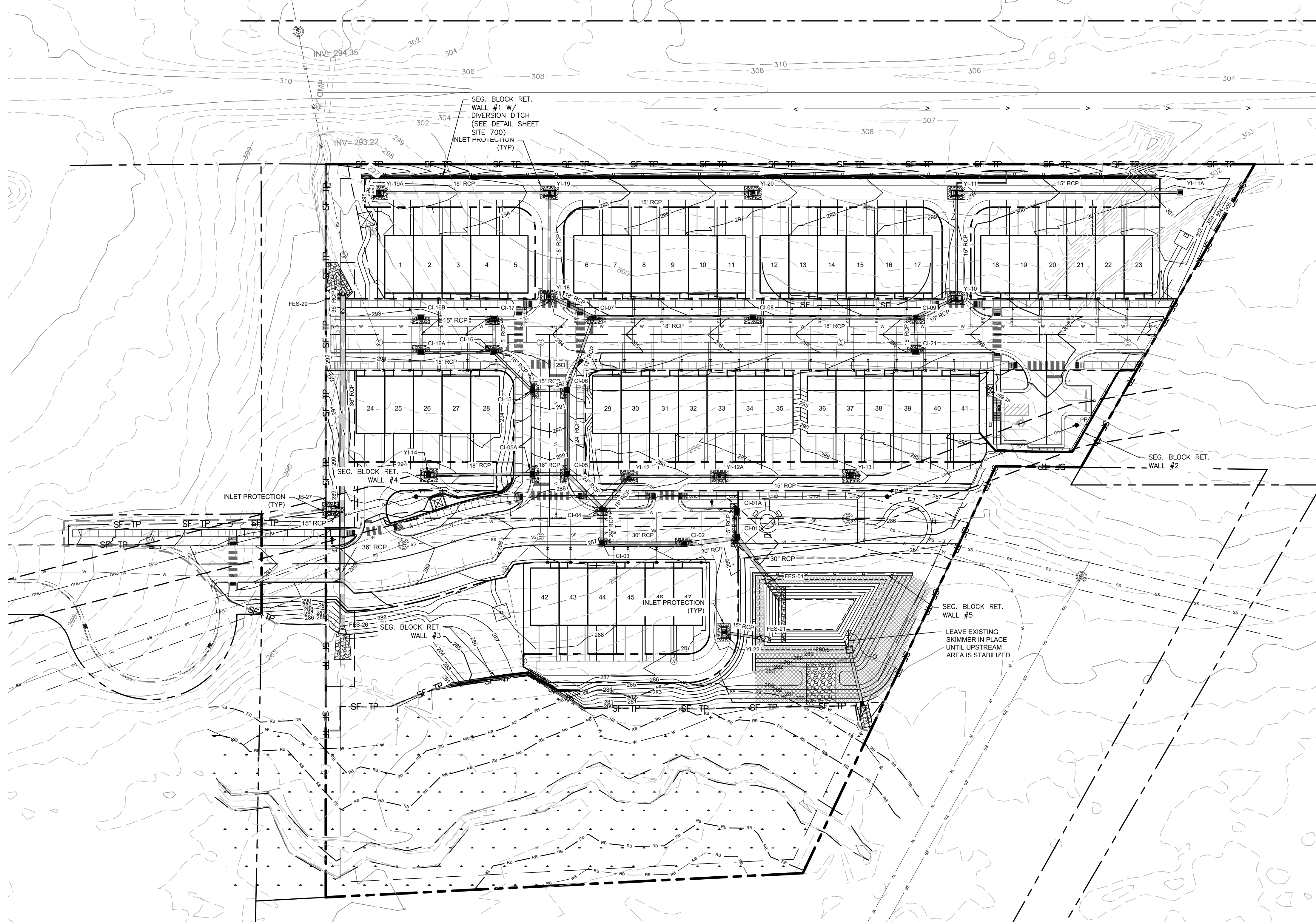
Job Code: **SCBSZ**

Dwg No.  
**SITE 302A**

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Swale Number	Swale Bottom Width (ft)		Side Slope	Depth of Swale (ft)		Channel Slope (ft/ft)	Depth of Flow Q10 (in)	Velocity Q10 (fps)	Temporary Liner	Permanent Liner
	A	B		C	D					
1	1	2	1	1	1	0.0318	8.3	2.6	S75	N/A
2	1	2	1	1	1	0.0479	7.2	6.4	SC150	N/A



**EROSION CONTROL NOTES**

- ALL CONSTRUCTION SHALL COMPLY WITH TOWN OF ZEBULON STANDARDS AND SPECIFICATIONS.
- EXISTING CONDITION INFORMATION SHOWN IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING, COORDINATING, AND PAYMENT FOR ALL NECESSARY LOCATING SERVICES INCLUDING INDEPENDENT LOCATING SERVICES. THE CONTRACTOR SHALL HAVE ALL EXISTING UTILITIES LOCATED AT LEAST 48 HOURS PRIOR TO BEGINNING DEMOLITION, EXCAVATION, OR ANY OTHER FORM OF CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER'S REPRESENTATIVE OR ANY DISCREPANCIES OR CONFLICTS.
- EXISTING IMPROVEMENTS DAMAGED OR DESTROYED BY THE CONTRACTOR DURING CONSTRUCTION SHALL BE RESTORED OR REPLACED TO ORIGINAL CONDITION AND TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING ALL PERMITS, INSPECTIONS, CERTIFICATIONS, AND OTHER REQUIREMENTS WHICH MUST BE MET UNDER THIS CONTRACT ARE OBTAINED.
- IF DEPARTURES FROM THE PROJECT DRAWINGS OR SPECIFICATIONS ARE DEEMED NECESSARY BY THE CONTRACTOR, DETAILS OF SUCH DEPARTURES AND REASONS THEREFORE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR REVIEW PRIOR TO CONSTRUCTION. NO DEPARTURES FROM THE CONTRACT DOCUMENTS SHALL BE MADE WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE OWNER'S REPRESENTATIVE.
- THE ENGINEER DISCLAIMS ANY ROLE IN THE CONSTRUCTION MEANS AND/OR METHODS ASSOCIATED WITH THE PROJECT AS SET FORTH IN THESE PLANS.
- THE STREETS IN FRONT OF THE PROJECT WILL BE KEPT CLEAN AT ALL TIMES OR A WASH STATION WILL BE REQUIRED.
- THE TREE PROTECTION FENCE SHALL BE MAINTAINED ON THE SITE UNTIL ALL SITE WORK IS COMPLETED AND THE FINAL SITE INSPECTION IS SCHEDULED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY (CO). THE FENCING SHALL BE REMOVED IMMEDIATELY PRIOR TO THE FINAL SITE INSPECTION FOR THE SITE.
- TREE PROTECTION FENCING SHALL NOT BE MOVED AND THERE SHALL BE NO ENCROACHMENT INTO SUCH PROTECTED AREA(S) WITHOUT WRITTEN AUTHORIZATION OF THE TOWN'S ZONING COMPLIANCE STAFF. ANY ACTIVITY (LANDSCAPING, FENCING, OR UTILITY INSTALLATION) SHOWN ON THE APPROVED PLANS IN A TREE PROTECTION AREA, SHALL ALSO NOT OCCUR WITHOUT WRITTEN AUTHORIZATION FROM THE TOWN'S ZONING COMPLIANCE STAFF. ANY UNAUTHORIZED ENCROACHMENT OR DISTURBANCE WITHIN THE BOUNDARIES OF A TREE PROTECTION AREA SHALL AUTOMATICALLY RESULT IN FINES AND THE REPLACEMENT OF ANY DAMAGED VEGETATION IN ACCORDANCE WITH THE LAND DEVELOPMENT ORDINANCE.

**CONSTRUCTION SEQUENCE (PHASE 3):**

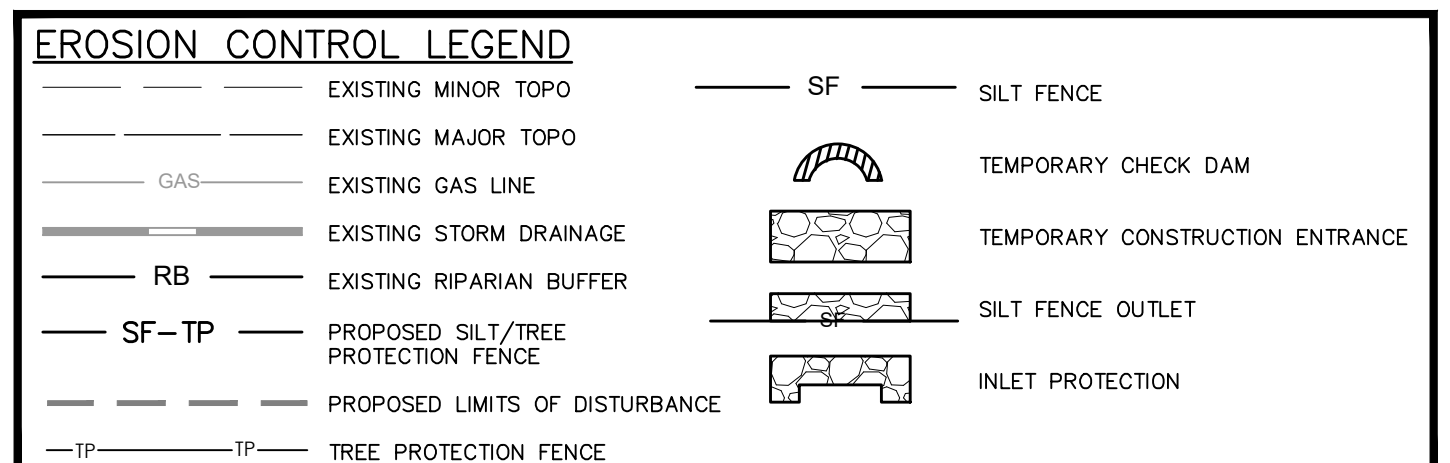
- CONTINUED FROM SITE 302A
- INSTALL RESIDENTIAL CONSTRUCTION ENTRANCES AT EACH BUILDING.
  - INSTALL SILT FENCE WITH SILT FENCE OUTLETS AROUND EACH BUILDING.
  - PROTECT ALL INLETS AS INSTALLED.
  - MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES IN GOOD WORKING ORDER. SILT FENCE, INLET PROTECTION AND OTHER SIMILAR MEASURES MUST BE CLEANED OUT BEFORE THEY ARE HALF FULL. CLOGGED STONE FILTERS MUST BE REFRESHED/REPLACED. SILT FENCE CAN NOT HAVE HOLES OR TEARS.
  - WHEN AREA TRIBUTARY TO SEDIMENT BASIN #1 HAS BEEN STABILIZED, CONVERT SEDIMENT BASIN #1 TO FINAL CONFIGURATION.
    - DEWATER BASIN AND REMOVE ACCUMULATED SEDIMENT. UTILIZE SILT BAG FOR DEWATERING.
    - INSTALL INTERIOR RETAINING WALL.
    - REMOVE TEMPORARY SLOPE DRAIN AND INSTALL FES #1, FES#21 & RIP-RAP DISSIPATER PAD
    - SET GRADES TO FINAL ELEVATIONS.
    - REMOVE SKIMMER AND SET OUTLET STRUCTURE WEIRS/ORIFICES TO FINAL CONFIGURATION.
  - CALL S&W NYE AT 919-835-4787 FOR SITE INSPECTION A MINIMUM TWO WEEKS PRIOR TO REQUESTING TOWN FINAL INSPECTION.
  - ONCE APPROVED, SURVEY EXISTING SCM TOPO AND STRUCTURE ELEVATIONS. AS-BUILTS MUST BE COMPLETED AND SUBMITTED ONE WEEK PRIOR TO FINAL INSPECTION.
  - STABILIZATION IS REQUIRED WITHIN 14 CALENDAR DAYS OF COMPLETION OF ANY PHASE OF GRADING OR INACTIVITY ON PROJECT SITE.
  - SCHEDULE THE FINAL SITE INSPECTION THROUGH WAKE COUNTY.
  - SUBMIT DOCUMENTATION REQUIRED UNDER THE SITE NPDES STORMWATER PERMIT FOR CONSTRUCTION ACTIVITY (NCG010000) TO STORMWATER INSPECTIONS THROUGHOUT THE PROJECT.

**REQUIRED WAKE COUNTY CONSTRUCTION SEQUENCE**

- SCHEDULE A PRE-CONSTRUCTION CONFERENCE WITH THE WAKE COUNTY ENVIRONMENTAL CONSULTANT. OBTAIN A LAND DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS OR 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.
- CALL ENVIRONMENTAL CONSULTANT FOR AN ONSITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT TO OBTAIN A CERTIFICATE OF COMPLIANCE.
- BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
- INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENuded AREAS PER GROUND STABILIZATION TIME FRAMES.
- WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL ENVIRONMENTAL CONSULTANT FOR AN INSPECTION.
- IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

**REQUIRED WAKE COUNTY BASIN REMOVAL AND/OR CONVERSION SEQUENCE**

- SCHEDULE A SITE MEETING WITH THE ENVIRONMENTAL CONSULTANT TO DETERMINE IF A BASIN CAN BE REMOVED. INSTALL SILT FENCING OR OTHER TEMPORARY EROSION CONTROL MEASURES AS NEEDED PRIOR TO REMOVAL OF BASIN.
- CONTACT NCDCE - 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 NCDCE-DEMUR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET WITH YOU ONSITE. THE EMAIL SHOULD INCLUDE: EASIS 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 4, SECTION G, ITEM 4 OF THE NCG01. (KEEP EMAIL FOR YOUR NPDES MONITORING DOCUMENTATION)
- AFTER RECEIVING POSITIVE CONFIRMATION FROM NCDCE-DEMUR 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 ENVIRONMENTAL CONSULTANT 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. SOME MUNICIPALITIES MAY ALSO REQUIRE THIS.



**NPDES GROUND STABILIZATION**

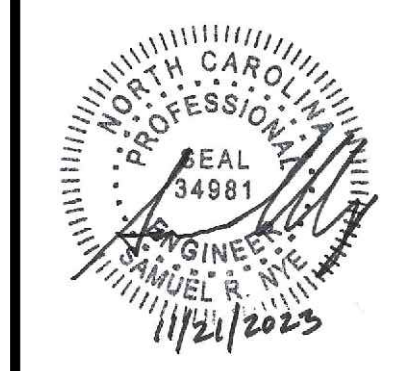
SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS
PERIMETER DIKES, SWALES, DITCHES AND SLOPES	7 DAYS	NONE
HIGH QUALITY WATER (HOW) ZONES	7 DAYS	NONE
SLOPES STEEPER THAN 3:1	7 DAYS	IF SLOPES ARE 10' OR LESS IN LENGTH AND ARE NOT STEEPER THAN 2:1, 14 DAYS ARE ALLOWED
SLOPES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



**DISTURBED AREA**  
202,385 SF / 4.65 AC



NC ENGINEERING LICENSE NO. P-0803



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E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE: 07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023  
24 AUG 2023  
21 NOV 2023

CONSTRUCTION DRAWINGS

EROSION CONTROL PLAN

Job Code: **SCBSZ**

Dwg No. **SITE 303**

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**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.

**SECTION E: GROUND STABILIZATION**

Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed.
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

**Note:** After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to ensure the surface stable against accelerated erosion until permanent ground stabilization is achieved.

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

- 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.

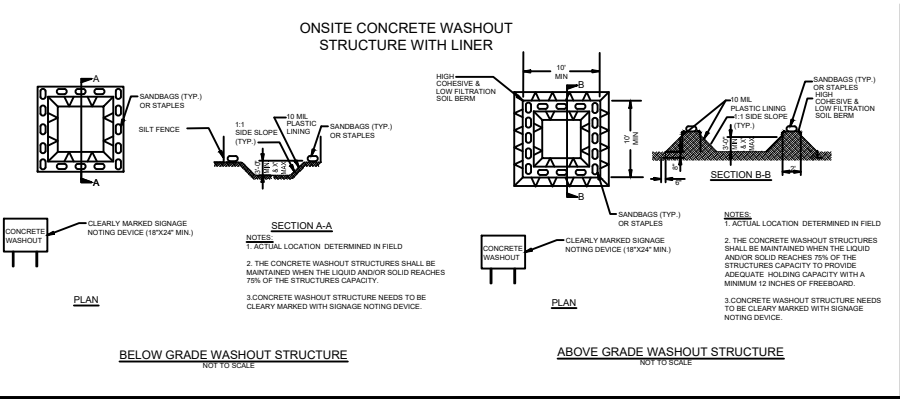
- EQUIPMENT AND VEHICLE MAINTENANCE**
- Maintain vehicles and equipment to prevent discharge of fluids.
  - Provide drip pans under any stored equipment.
  - Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
  - Collect all spent fluids, store in separate containers 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 and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
  - 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 or provide secondary containment. 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. Clean up immediately if containers overflow.
  - Dispose waste off-site at an approved disposal facility.
  - On business days, clean up and dispose of waste in designated waste containers.

- 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 unit.

- 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 openly.

- 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.

**NPDES GROUND STABILIZATION SCHEDULE**

SITE AREA DESCRIPTION	STABILIZATION TIME FRAME	STABILIZATION TIME FRAME EXCEPTIONS	AREAS ON THIS SITE
PERIMETER DIKES, SWALES, DITCHES AND ZONES	7 DAYS	NONE	TEMPORARY DIVERSION DITCHES
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	REMAINDER OF PROJECT AREA
ALL OTHER AREAS WITH SLOPES FLATTER THAN 4:1	14 DAYS	NONE (EXCEPT FOR PERIMETERS AND HQW ZONES)	INCLUDED W/ 3:1 OR FLATTER SLOPES

- NPDES PLAN NOTES**
- THIS PAGE IS SUBMITTED TO COMPLY WITH NPDES GENERAL STORMWATER PERMIT NCG010000.
  - THIS PAGE CAN BE APPROVED BY THE CITY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000 ONLY.
  - THIS PAGE OF THE APPROVED PLANS IS ENFORCEABLE EXCLUSIVELY PURSUANT TO NPDES GENERAL STORMWATER PERMIT NCG010000.

**NCG01 GROUND STABILIZATION AND MATERIALS HANDLING EFFECTIVE: 04/01/19**

**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 equal to or 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:
(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, report the cumulative rain measurement for those unattended days (and this will determine if a site inspection is needed), then on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&S 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. Description, evidence, and date of corrective 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 outfall 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. 5. Indication of visible sediment leaving the site. 6. Description, evidence, and date of corrective 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. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands on-site or office (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. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item 2)(g) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase covering installation of perimeter E&S measures, clearing and grubbing, installation of storm water management measures, and installation of land stabilization activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

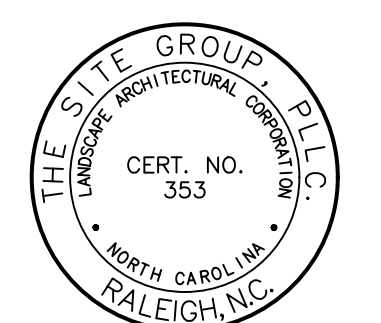
**NOTE:** The rain inspection resets the required 7 calendar day inspection requirement.

- PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING**
- SECTION B: RECORDKEEPING**
- 1. E&S Plan Documentation**  
 The approved E&S plan as well as any approved deviation shall be kept on the site. The approved E&S plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&S plan shall be kept on site and available for inspection at all times during normal business hours.
- | Item to Document  | Documentation Requirements   |
|---|--|
| (a) Each E&S measure has been installed and does not significantly erode from the locations, dimensions and relative elevations shown on the approved E&S plan. | Initial and date of each E&S measure on a copy of the approved E&S plan or complete, date and sign an inspection report that lists each E&S measure shown on the approved E&S plan. This documentation is required upon the initial installation of the E&S measures or if the E&S measures are modified after initial installation. |
| (b) A phase of grading has been completed.  | Initial and date a copy of the approved E&S 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&S plan.   | Initial and date a copy of the approved E&S 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&S measures have been performed.   | Complete, date and sign an inspection report.  |
| (e) Corrective actions have been taken to E&S measures.   | Initial and date a copy of the approved E&S plan or complete, date and sign an inspection report to indicate the completion of the corrective action.  |
- 2. Additional Documentation to be Kept on Site**  
 In addition to the E&S plan documents above, the following items shall be kept on the site and available for 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 twelve months. 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.
- 3. Documentation to be Retained for Three Years**  
 All data used to complete the e-NDI and all 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 113.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.
  - 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 Department's Environmental Emergency Center personnel at (800) 858-0368.
- | Occurrence   | Reporting Timeframes (After Discovery) and Other Requirements  |
|--|--|
| (a) Visible sediment deposition in a stream or wetland   | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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.</li> <li>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.</li> </ul> |
| (b) Oil spills and releases of hazardous substances per item 1)(b)-(c) above   | <ul style="list-style-type: none"> <li>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.</li> </ul>   |
| (c) Anticipated bypasses (40 CFR 122.41(m)(3))   | <ul style="list-style-type: none"> <li>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.</li> </ul>   |
| (d) Unanticipated bypasses (40 CFR 122.41(m)(3))   | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>Within 7 calendar days, a report that includes an evaluation of the quality and effect of the bypass.</li> </ul>  |
| (e) Noncompliance with the conditions of this permit that may endanger health or the environment (40 CFR 122.41(n)(7)) | <ul style="list-style-type: none"> <li>Within 24 hours, an oral or electronic notification.</li> <li>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(n)(6)).</li> <li>Division staff may waive the requirement for a written report on a case-by-case basis.</li> </ul>   |

- PART II, SECTION G, ITEM (4) DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT**
- Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:
- The E&S plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&S plan authority has approved these items.
  - The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2)(c) and (d) of this permit.
  - Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
  - Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
  - Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
  - Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

**NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING EFFECTIVE: 04/01/19**



NO ENGINEERING LICENSE NO. P-0803



**THE SITE GROUP**  
 CIVIL ENGINEERS • LANDSCAPE ARCHITECTS  
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 RALEIGH, NC 27605-1136 USA  
 Office: 919.835.4787  
 Fax: 919.839.2255  
 E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE:  
 07 NOV 2022  
 REVISED:  
 03 FEB 2023  
 09 MAY 2023

CONSTRUCTION DRAWINGS

NPDES PLAN

Job Code: **SCBSZ**

Dwg No. **304**



STANDARD UTILITY NOTES

- ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF RALEIGH DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION).
- UTILITY SEPARATION REQUIREMENTS:
  - A DISTANCE OF 100' SHALL BE MAINTAINED BETWEEN SANITARY SEWER & ANY PRIVATE OR PUBLIC WATER SUPPLY SOURCE SUCH AS AN IMPOUNDED RESERVOIR USED AS A SOURCE OF DRINKING WATER. IF ADEQUATE LATERAL SEPARATION CANNOT BE ACHIEVED, FERROUS SANITARY SEWER PIPE SHALL BE SPECIFIED & INSTALLED TO 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 &/OR SEWER MAINS, THE HORIZONTAL SEPARATION BETWEEN UTILITIES SHALL BE 10'. IF THIS SEPARATION CANNOT BE MAINTAINED DUE TO EXISTING CONDITIONS, THE VARIATION ALLOWED IS THE WATER MAIN IN A SEPARATE TRENCH WITH THE ELEVATION OF THE WATER MAIN AT LEAST 18" ABOVE THE TOP OF THE SEWER & MUST BE APPROVED BY THE PUBLIC UTILITIES DIRECTOR. ALL DISTANCES ARE MEASURED FROM OUTSIDE DIAMETER TO OUTSIDE DIAMETER.
  - WHERE IT IS IMPOSSIBLE TO OBTAIN PROPER SEPARATION, OR ANYTIME A SANITARY SEWER PASSES OVER A WATERMAIN, DIP MATERIALS OR STEEL ENCASUREMENT EXTENDED 10' ON EACH SIDE OF CROSSING MUST BE SPECIFIED & INSTALLED TO WATERLINE SPECIFICATIONS.
  - 5.0' MINIMUM HORIZONTAL SEPARATION IS REQUIRED BETWEEN ALL SANITARY SEWER & STORM SEWER FACILITIES, UNLESS DIP MATERIAL IS SPECIFIED FOR SANITARY SEWER.
  - MAINTAIN 18" MIN. VERTICAL SEPARATION AT ALL WATERMAIN & RCP SEWER 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.
- DEVELOPER SHALL PROVIDE 30 DAYS ADVANCE WRITTEN NOTICE TO OWNER FOR ANY WORK REQUIRED WITHIN AN EXISTING CITY OF RALEIGH UTILITY EASEMENT TRAVERSING PRIVATE PROPERTY.
- CONTRACTOR SHALL MAINTAIN CONTINUOUS WATER & SEWER SERVICE TO EXISTING RESIDENCES & BUSINESSES THROUGHOUT CONSTRUCTION OF PROJECT. ANY SERVICE INTERRUPTIONS SHALL BE PRECEDED BY A 24 HOUR ADVANCE NOTICE TO THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT.
- 3.0" MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCE MAINS. 4.0" MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.
- IT IS THE DEVELOPER'S RESPONSIBILITY TO ABANDON OR REMOVE EXISTING WATER & SEWER SERVICES NOT BEING USED IN REDEVELOPMENT OF A SITE UNLESS OTHERWISE DIRECTED BY THE CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.
- INSTALL 1/2" 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 & PRESSURE.
- INSTALL 4" PVC\* SEWER SERVICES @ 1.0% MINIMUM GRADE WITH CLEANOUTS LOCATED AT ROW OR EASEMENT LINE & SPACED EVERY 75' LINEAR FEET MAXIMUM.
- PRESSURE REDUCING VALVES ARE REQUIRED ON ALL WATER SERVICES EXCEEDING 80 PSI; BACKWATER VALVES ARE REQUIRED ON ALL SANITARY SEWER SERVICES HAVING BUILDING DRAINS LOWER THAN 1.0' ABOVE THE NEXT UPSTREAM MANHOLE.
- ALL ENVIRONMENTAL PERMITS APPLICABLE TO THE PROJECT MUST BE OBTAINED FROM NCDOW, USACE &/OR FEMA FOR ANY RIPARIAN BUFFER, WETLAND &/OR FLOODPLAIN IMPACTS (RESPECTIVELY) PRIOR TO CONSTRUCTION.
- NCDOT / RAILROAD ENCROACHMENT AGREEMENTS ARE REQUIRED FOR ANY UTILITY WORK (INCLUDING MAIN EXTENSIONS & SERVICE TAPS) WITHIN STATE OR RAILROAD ROW PRIOR TO CONSTRUCTION.
- GREASE INTERCEPTOR / OIL WATER SEPARATOR SIZING CALCULATIONS & INSTALLATION SPECIFICATIONS SHALL BE APPROVED BY THE CORPUD FOG 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, WHICHEVER IS MORE STRINGENT. CONTACT JOANIE HARTLEY AT (919) 996-5923 OR JOANIE.HARTLEY@RALEIGHNC.GOV FOR MORE INFORMATION.

GENERAL NOTES

- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST TOWN OF ZEBULON, WAKE COUNTY AND THE STATE OF NORTH CAROLINA STANDARDS AND SPECIFICATIONS.
- CONTRACTOR SHALL HAVE NORTH CAROLINA ONE CALL (811) LOCATE ALL EXISTING UTILITIES PRIOR TO BEGINNING CONSTRUCTION.
- CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES AND NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR CONFLICTS PRIOR TO BEGINNING CONSTRUCTION.
- BOUNDARY AND SURVEY INFORMATION IS TAKEN FROM A SURVEY BY ANGLE RIGHT LAND SURVEYING, PLLC DATED JUNE 1, 2022.
- ALL CONSTRUCTION SHALL CONFORM TO A.D.A. STANDARDS.
- NO PORTION OF THE PROPERTY IS LOCATED WITHIN A FEMA AE FLOOD ZONE BASED ON THE MAP #3720270500K MAP REVISED JULY 19, 2022.
- THE ROAD CLASSIFICATIONS FOR THIS PROJECT CONSIST OF LOCAL AND ALLEY.

SEWER INSTALLATION & BYPASS PUMPING NOTES

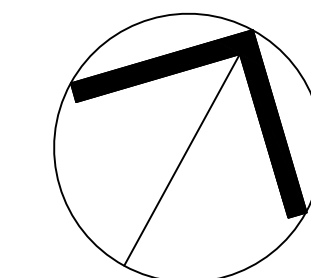
- PRE-CONSTRUCTION COORDINATION MUST TAKE PLACE WITH THE CITY OF RALEIGH BEFORE ANY WORK ON THE PUBLIC SEWER NETWORK IS COMMENCED.
- WORK WITH CITY OF RALEIGH INSPECTOR TO SCHEDULE WORK.
- NOTIFY RESIDENCES OF E VANCE ST. & E. HORTON ST. THAT WORK WILL BE OCCURRING ON THE SEWER SYSTEM AT LEAST ONE WEEK IN ADVANCE OF BEGINNING CONSTRUCTION.
- FLOW SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
- INSTALL DOGHOUSE SSMH #5A OVER THE 8" PVC AND DOGHOUSE SSMH #1 OVER 18" PVC. ONCE CONNECTING LINES ARE INSTALLED DIVERT FLOW IN 8" TERRICOTA TO NEW LINE OUT OF SSMH #5.
- BEGIN INSTALLATION OF NEW SANITARY SEWER RUN SSMH 1-SSMH 5.
- PLUG THE DOWNSTREAM LINE OF SUCTION SSMH #5A. INSTALL PUMP, STANDBY PUMP AND SUCTION PIPES IN SUCTION SSMH #5A. INSTALL DISCHARGE PIPING TO DISCHARGE SSMH #5. NOTE: EITHER SEPARATE DISCHARGE LINES OR WYED CONNECTION WITH CHECK VALVES ARE REQUIRED ON DISCHARGE LINES.
- CONSTRUCT 8" PVC BETWEEN SSMH 5A AND SSMH 5.
- DO NOT LEAVE ACTIVE SEWER LINES PLUGGED OVERNIGHT. IF SEWER RUN SSMH #5A TO SSMH #5 CANNOT BE COMPLETED IN ONE DAY, REMOVE PLUG IN SUCTION MH, REMOVE SUCTION AND DISCHARGE LINES AND COMPLETE INSTALLATION THE FOLLOWING DAY.
- WHEN PRESSURE TEST AND TELEVISION INSPECTION OF NEW SEWER LINES HAVE BEEN APPROVED, PLUG 8" PVC CONNECTION IN EX SSMH B, ABANDON EXISTING LINES BY FILLING WITH GROUT.

BYPASS PUMPING PHASE	ACTION TO BE COMPLETED	SUCTION MH	DISCHARGE MH	DISCHARGE STATIC LIFT	SUCTION STATIC LIFT	APPROX LENGTH	PEAK FLOW
1	PUMP FROM SSMH #5A TO SSMH #5	SSMH #5A	SSMH #5	5'	±8.5'	50'	10 GPM

**Public Sewer Collection / Extension System**  
 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 # S-5390  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

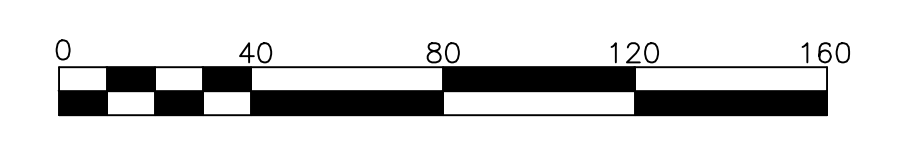
**Private Sewer Collection / Extension System**  
 The City of Raleigh consents to the connection to its public sewer system and extension of the private sewer collection system as shown on this plan. The material and construction methods used for this project shall conform to the standards and specifications of the City's Public Utilities Handbook.  
 City of Raleigh  
 Public Utilities Department Permit # S-5391(P)  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

**Public Water Distribution / Extension System**  
 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 # W-4078  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

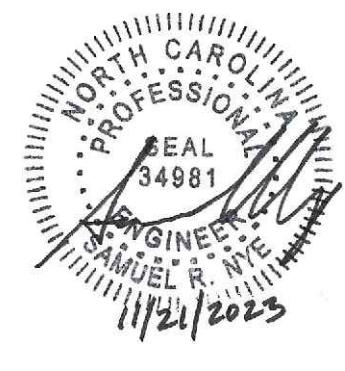


NORTH  
UTILITY  
PLAN

SCALE: 1" = 40' (DRAWING SCALED FOR 24x36 INCH PLOTS)



NC ENGINEERING LICENSE NO. P-0803



**THE SITE GROUP**  
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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE:  
 07 NOV 2022  
 REVISED:  
 03 FEB 2023  
 09 MAY 2023  
 24 AUG 2023  
 21 NOV 2023

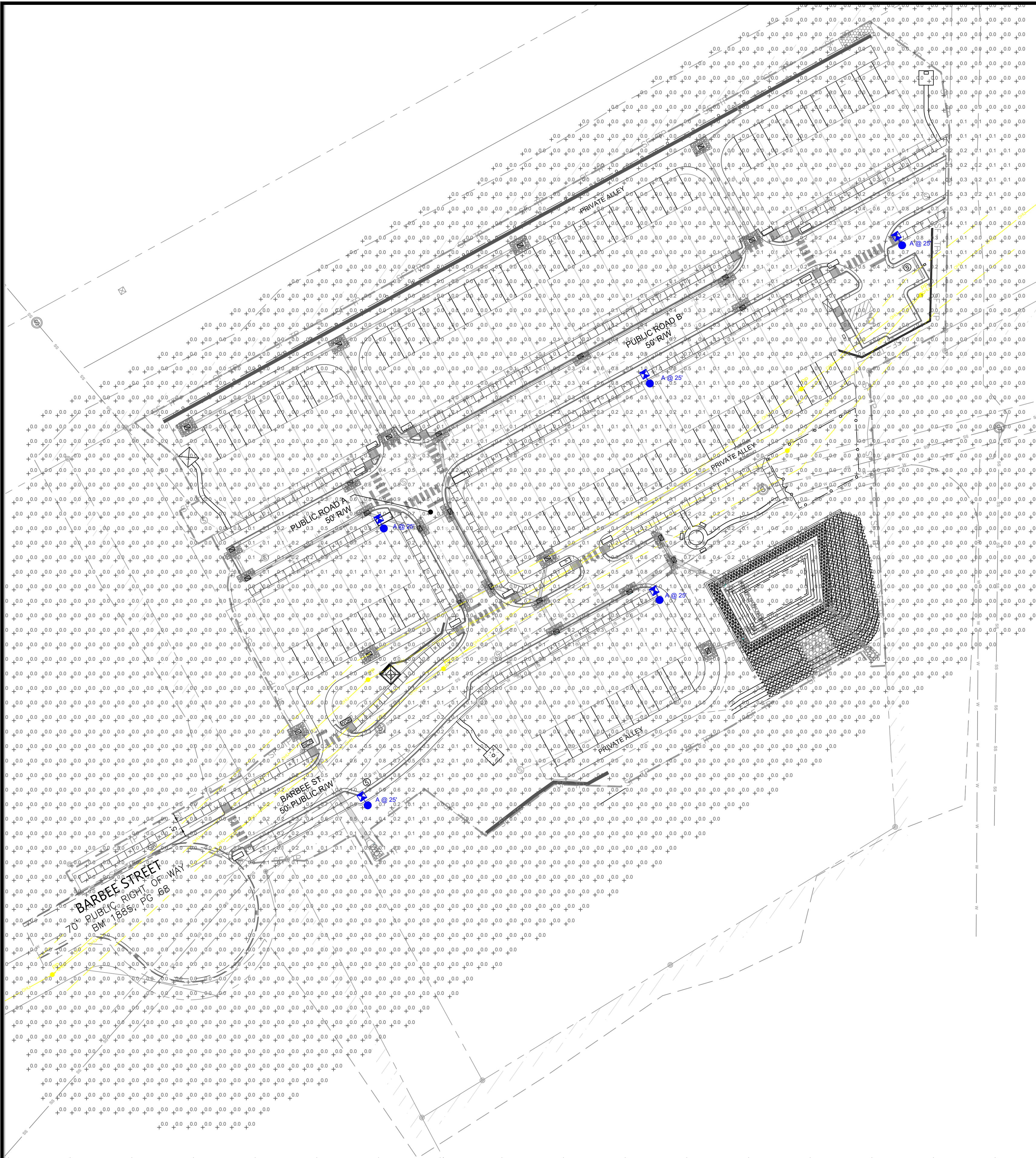
CONSTRUCTION DRAWINGS

UTILITY PLAN

Job Code: **SCBSZ**

Dwg No. **SITE 400**





**Outdoor Lighting**  
**Roadway LED**

The Roadway LED is a green solution and great fit for streets, roads, long, narrow areas and parking lots. This energy-efficient luminaire delivers the light where it is needed while increasing visibility and reducing spill light to adjoining properties. Choose low to medium light output on wood or fiberglass poles (or mount on an existing pole). Available with one to four fixtures per pole, depending on the fixture/pole combination selected.

**LED** (Light Emitting Diode) 50 | 75 | 105 | 150 | 215 | 280 watts

**Mounting heights** 25, 30, 35'

**Color** Gray, Black

**Poles** Fiberglass, Metal (special conditions), Wood

For additional information, visit us at [duke-energy.com/OutdoorLighting](http://duke-energy.com/OutdoorLighting) or call us toll free at 866.759.6417.

**Outdoor Lighting**  
**Roadway LED**

Light source: LED (white)  
Lumens: 4,807 - 25,050 (fixture dependent)

Wattage	Light Pattern	IESNA Backlight - Uplight - Glare (BUG) Rating
LED 50	IESNA Type III (medium oval)	B1-U0-G1
LED 75	IESNA Type II (long oval)	B1-U0-G2
LED 105	IESNA Type II (long oval)	B2-U0-G3
LED 150	IESNA Type III (medium oval)	B2-U0-G2
LED 215	IESNA Type III (medium oval)	B3-U0-G3
LED 280	IESNA Type III (medium oval)	B3-U0-G4

Color temperature: 4,000K  
Warm-up and restrike time: Instant on (no warm-up or restrike time)

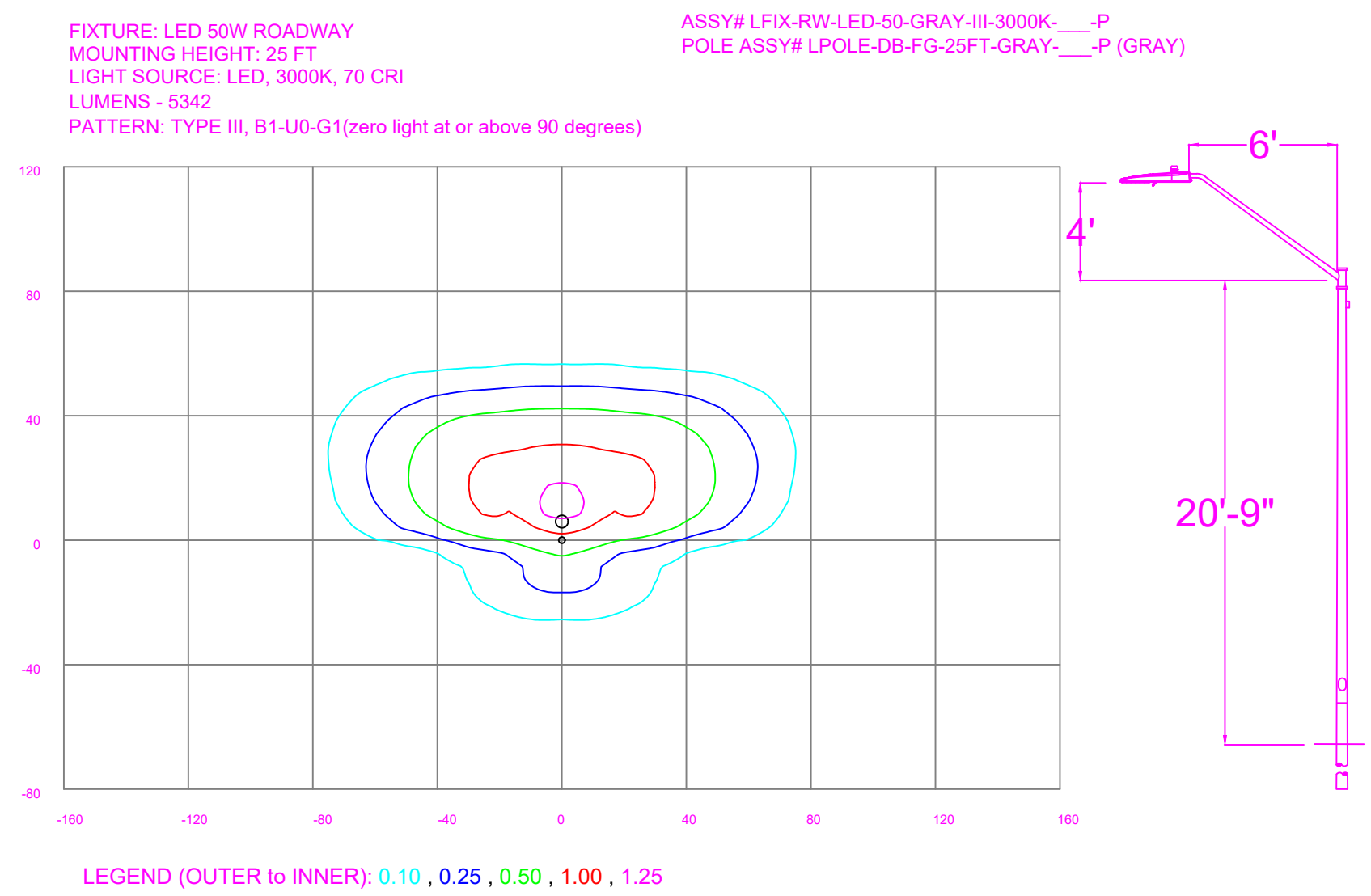
Poles available:	Mounting height	Color
Fiberglass	25, 30, 35'	Gray
Wood	25, 30, 35'	Standard
Metal (special conditions)**	25, 30, 35'	Gray

Features	Benefits
Little or no installation cost	Free up capital for other projects
Design services by lighting professionals included	Meets industry standards and lighting ordinances
Maintenance included	Eliminates high and unexpected repair bills
Electricity included	Less expensive than metered service
Warranty included	Worry-free
One low monthly cost on your electric bill	Convenience and savings for you
Turnkey operation	Provides hassle-free installation and service
Backed by over 40 years of experience	A name you can trust today ... and tomorrow

\*\* raised foundation available when required.

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**ISOFOOTCANDLE CURVES**

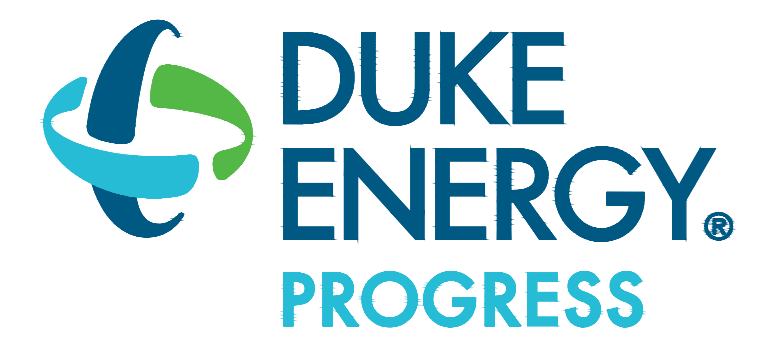


Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
	A	5	LED 50W Roadway - Type III - 3000K	1	5312	0.85

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Barbee Street	⊗	0.3 fc	0.9 fc	0.0 fc	N/A	N/A
Public Road A	⊗	0.4 fc	0.9 fc	0.0 fc	N/A	N/A

NO.	DATE	REVISION	BY

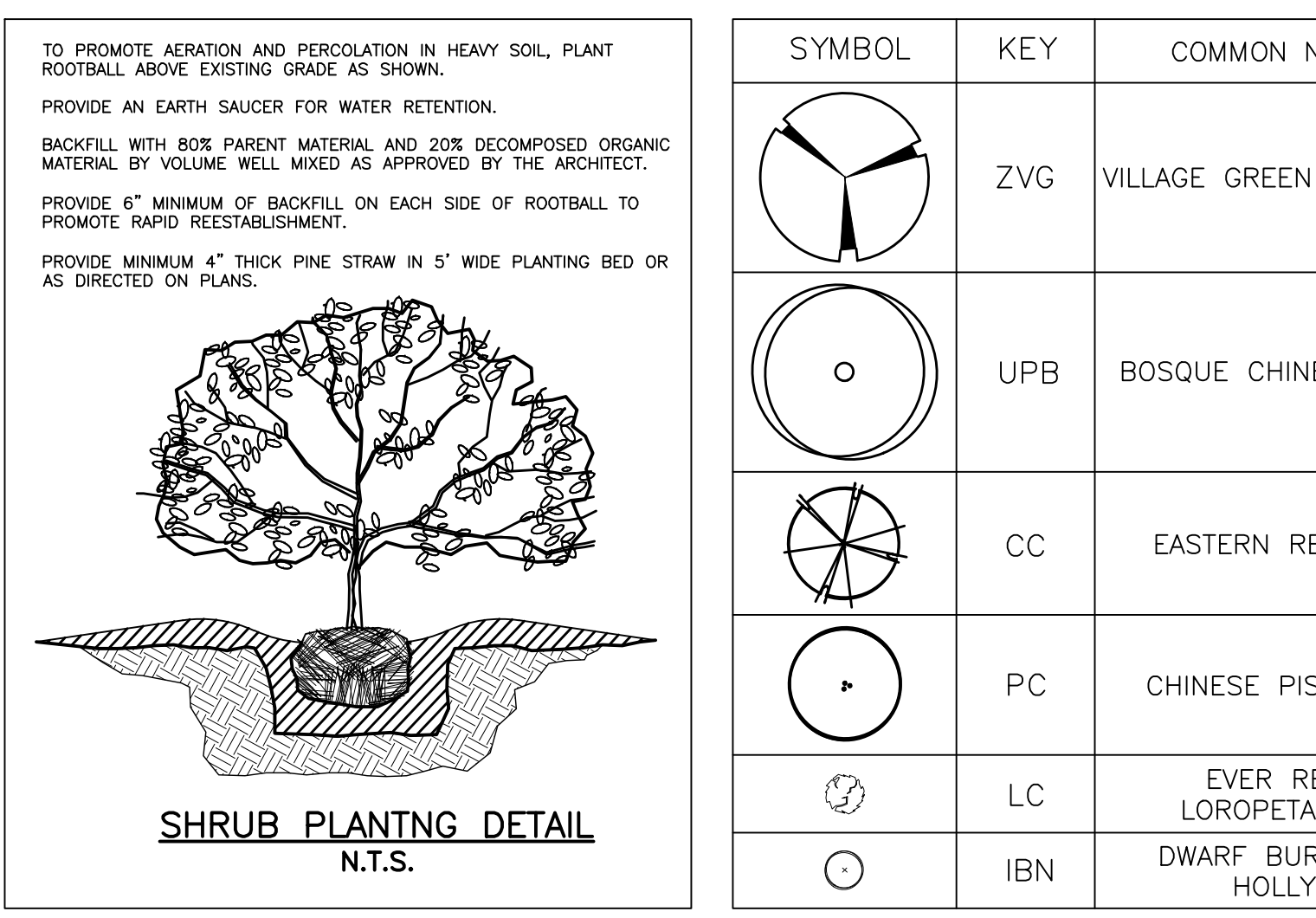
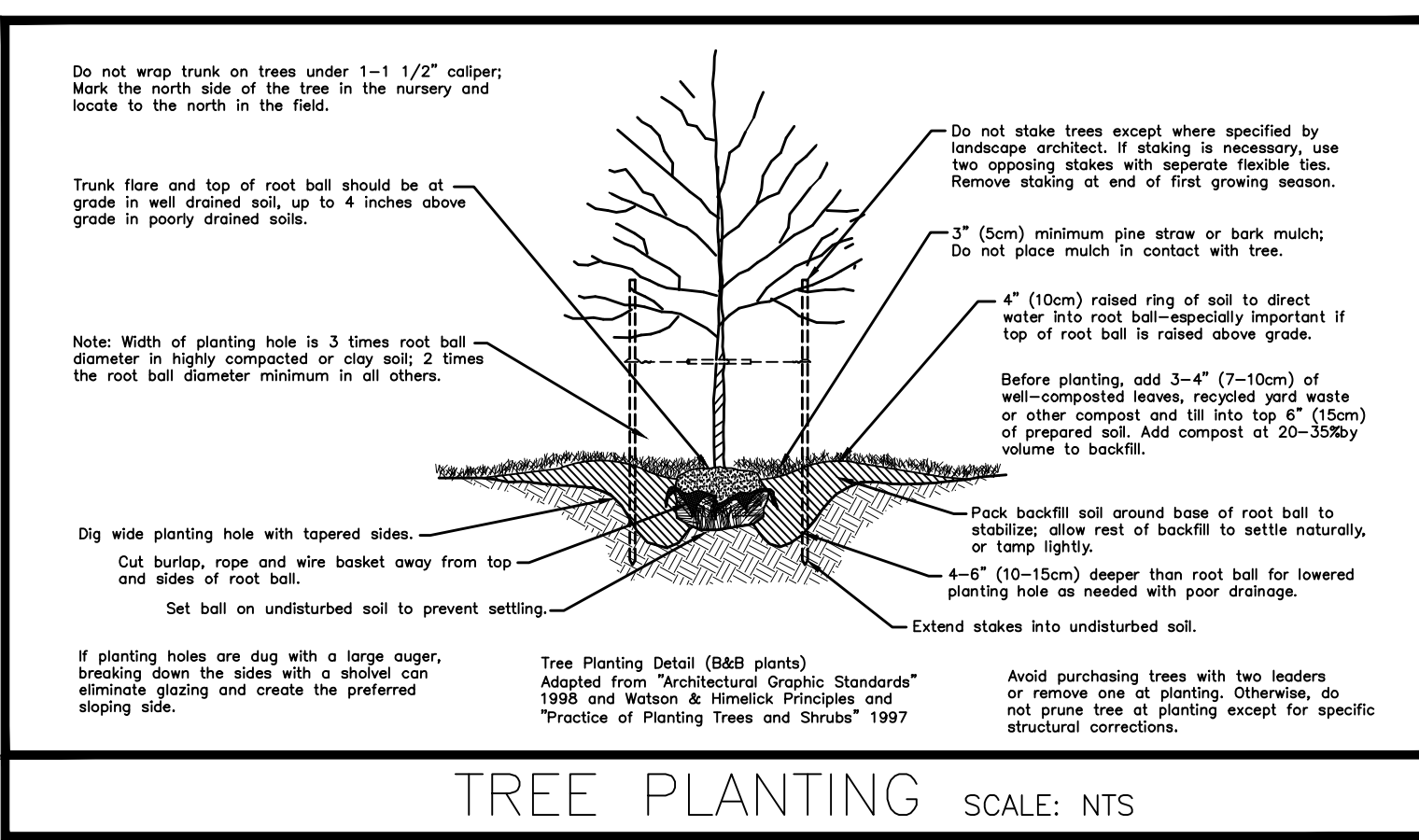
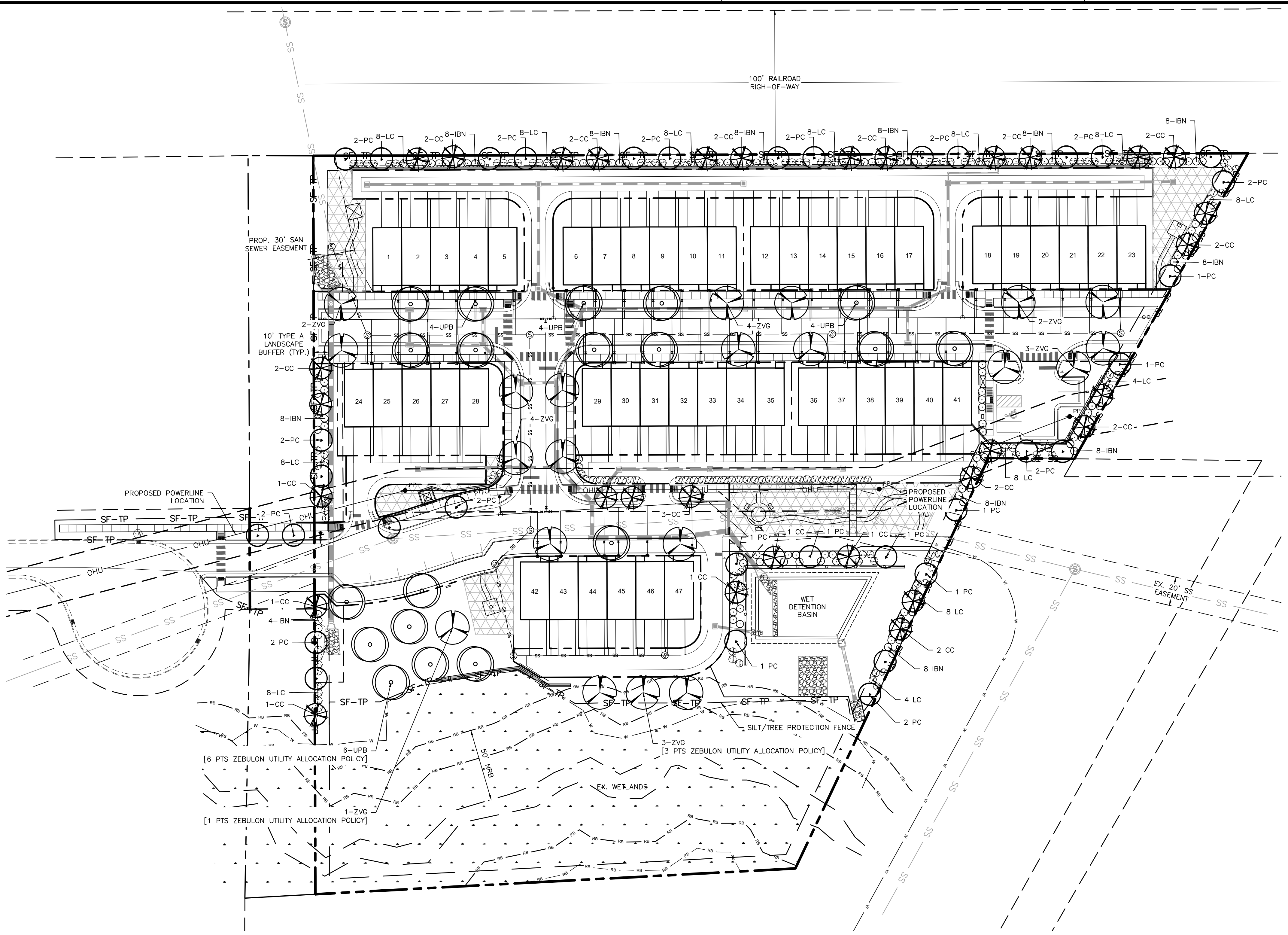
**LIGHTING DESIGN TOLERANCE**  
The calculated footcandle light levels in this lighting design are predicted values and are based on specific information that has been supplied to Duke Energy. Any inaccuracies in the supplied information, differences in luminaire installation, lighted area geometry including elevation differences, reflective properties of surrounding surfaces, obstructions (foliage or otherwise) in the lighted area, or lighting from sources other than listed in this design may produce different results from the predicted values. Normal tolerances of voltage, lamp output, and ballast and luminaire manufacture will also affect results.



**PROPRIETARY & CONFIDENTIAL**  
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0 Barbee Street	
Zebulon, NC	
STREET LIGHTING ARRANGEMENT	
Designed by DUKE ENERGY PROGRESS LIGHTING SOLUTIONS	
Reviewed by A. Herrera	Scale 1" = 40'
Date 9/28/2023	Size Drawing size "D"
Description LED Roadway	
Drawing No. 23-0401	Sht. 1 OF 1





**OVERALL PLANT LIST**

KEY	QTY	BOTANICAL NAME	COMMON NAME	HEIGHT	SIZE	ROOT	REMARKS
<b>CANOPY TREES</b>							
UPB	19	ULMUS PARVIFOLIA 'BOSQUE'	BOSQUE CHINESE ELM	10'	3" CAL.	B&B	MATCHING
ZVG	21	ZELKOVA SERRATA 'VILLAGE GREEN'	VILLAGE GREEN ZELKOVA	10'	3" CAL.	B&B	MATCHING
<b>UNDERSTORY TREES</b>							
CC	31	CERCIS CANADENSIS	EASTERN REDBUD	8' MIN.	2" CAL.	B&B	MATCHING
PC	34	PISTACHIA CHINENSIS	CHINESE PISTACHE	8' MIN.	2" CAL.	B&B	MATCHING
<b>SHRUBS</b>							
IBN	115	ILEX CORNUTA 'BURFORDII NANA'	DWARF BURFORD HOLLY	24" HT. MIN.	5 GAL.	CONT.	MATCHING
LC	149	LOROPETALUM CHINENSE 'EVER RED'	EVER RED LOROPETALUM	24" HT. MIN.	5 GAL.	CONT.	MATCHING

**PLANTING NOTES:**  
 LOCATE PLANTS AND PLANTING BEDS BY USING SCALED DIMENSIONS FROM STREET, PROPERTY LINES, BACK OF CURB, BUILDINGS, WALLS, ETC. ALL PLANTS SHALL MEET OR EXCEED THE MINIMUM STANDARDS SET BY THE U.S.D.A. FOR NURSERY STOCK SPONSORED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC., WASHINGTON, D.C. NO SUBSTITUTIONS SHALL BE PERMITTED WITHOUT WRITTEN APPROVAL FROM THE OWNER AND/OR THE LANDSCAPE ARCHITECT.  
**SYMBOLS:** B&B = BALLED & BURLAPPED; B.R. = BARE ROOT; CONT. = CONTAINER, O.C. = ON-CENTER, (R) = TO REMAIN  
**MULCH:** MULCH ALL BED AREAS WITH HARDWOOD MULCH TO A DEPTH OF 3".  
**NOTE:**  
 1. ANY TREES IN SIGHT TRIANGLES WILL BE LIMBED UP TO A HEIGHT OF 8'. ALL SHRUBS LOCATED IN SIGHT TRIANGLES WILL BE MAINTAINED BELOW 2'.  
 2. ALL SHRUB SPECIES SHALL REACH A MINIMUM OF 36" WITHIN THREE YEARS OF INSTALLATION.

**LANDSCAPE MAINTENANCE PLAN:**

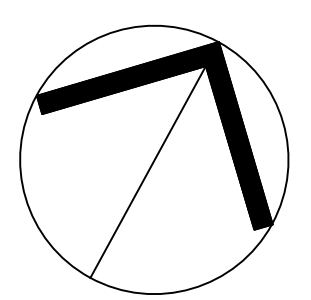
THE OWNERS OF THE PROPERTY AND THEIR AGENTS, HEIRS OR ASSIGNS SHALL BE RESPONSIBLE FOR THE INSTALLATION, PRESERVATION AND MAINTENANCE OF ALL PLANTINGS AND PHYSICAL FEATURES SHOWN ON THIS PLAN. THE OWNERS SHALL BE RESPONSIBLE FOR ANNUAL MAINTENANCE OF THE VEGETATION TO INCLUDE BUT NOT LIMITED TO:

- FERTILIZATION:** FERTILIZE LAWNS TWICE PER YEAR (FEBRUARY 15-MARCH 15 AND AGAIN SEPTEMBER 1-OCTOBER 31) ACCORDING TO SOIL TEST. FERTILIZE WARM SEASON GRASSES ONCE DURING THE GROWING SEASON PER SOIL TEST.
- PRUNING:** PRUNING SHALL BE LIMITED TO REMOVAL OF DEAD WOOD OR BRANCHES FOR TREES OR FOR SIGHT DISTANCES/SAFETY REASONS. THE ANSI A300 STANDARDS SHOULD BE ADHERED TO. THE PRUNING OF SHRUBS SHALL BE LIMITED TO THE PRUNING NECESSARY TO MAINTAIN THE NATURAL SHAPE OF THE PLANT EXCEPT FOR SHEARED HEDGES.
- PEST CONTROL:** PRE-EMERGENT WEED CONTROL FOR SHRUB BEDS MAY BE APPLIED IN FEBRUARY. CHEMICAL TREATMENT FOR INSECT INFESTATION AND DISEASE MAY BE APPLIED AND SHALL BE SPECIFIC TO THE PROBLEM.
- MULCHING:** MULCHING SHALL BE MAINTAINED AT A DEPTH OF 2-3" IN SHRUB BEDS. MULCH SHALL BE REAPPLIED EVERY TWO YEARS, AS NECESSARY TO MAINTAIN THE AVERAGE DEPTH OF THE PLANT BED.
- MOWING:** PRIMARY FESCUE LAWNS SHALL BE MAINTAINED AT A HEIGHT OF 3" AND SHALL BE MOWED APPROXIMATELY 30 TIMES PER YEAR. SECONDARY TURF AREAS MAY BE MAINTAINED HIGHER AND LESS FREQUENTLY. WARM SEASON GRASSES SHALL BE MOWED AS NEEDED DURING THE GROWING SEASON TO MAINTAIN THE RECOMMENDED HEIGHT OF THE SPECIES OF TURF GRASS.
- PLANT PROTECTION:** AVOID EXCESS INTRUSION INTO THE ROOT ZONE AREA OF ESTABLISHED PLANTINGS.
- WATERING:** IF ANY IRRIGATION SYSTEM IS UTILIZED, THE SYSTEM SHALL BE REGULATED TO PROVIDE APPROXIMATELY 1" OF RAINFALL PER WEEK DURING THE GROWING SEASON. (PENDING TOWN OF ZEBULON WATER/IRRIGATION SUPPLIES)
- PLANT REPLACEMENT:** ANY REQUIRED PLANTING, WHICH IS REMOVED OR DIES AFTER DATE OF PLANTING SHALL BE REPLACED DURING THE NEXT PLANTING SEASON. ALSO, ANY TREE IN A TREE PRESERVATION AREA WHICH IS REMOVED OR DIES SHALL BE REPLACED DURING THE NEXT PLANTING SEASON.

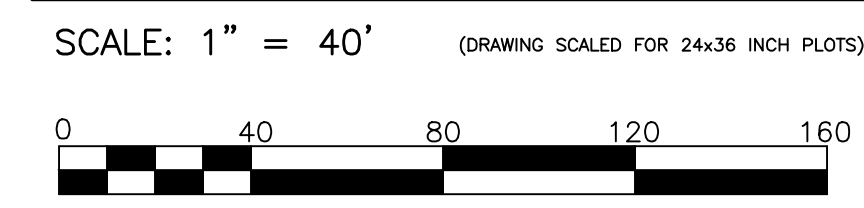
REMOVAL OF DISEASE INFESTED MATERIAL SHALL BE ALLOWED SO LONG AS REQUIRED SHRUBS ARE REPLACED AT THE REQUIRED RATES AND SIZES.  
 FAILURE TO MAINTAIN REQUIRED LANDSCAPE AREAS SHALL CONSTITUTE A VIOLATION OF THIS UDO ENFORCEABLE UNDER THE PROVISIONS OF SECTION 10-ENFORCEMENT.

**LANDSCAPE REQUIREMENTS:**

- THE SITE SHALL BE STABILIZED AND SEEDING PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- ALL MECHANICAL EQUIPMENT, WASTE DISPOSAL FACILITIES, AND VEHICULAR USE AREAS (DRIVES AND PARKING) SHALL BE SCREENED FROM PUBLIC VIEW.
- ALL ABOVE GROUND UTILITY EQUIPMENT AND FACILITIES ASSOCIATED WITH ON-SITE ELECTRIC, CABLE, TELEPHONE, GAS OR OTHER SIMILAR UTILITY SHALL BE LOCATED IN THE SIDE OF REAR YARD AREA OF THE SITE AND SCREENED, TO THE EXTENT POSSIBLE, WITH EVERGREEN PLANTINGS. PLANTINGS SHALL ALLOW FOR A MINIMUM OF 5' CLEARANCE AROUND THE STRUCTURE TO ALLOW FOR ACCESS. ADDITIONALLY, ANY SIDE OF THE STRUCTURE HAVING A DOOR OR LOCK, THE PLANTINGS SHALL ALLOW FOR A 10' CLEARANCE. THE AMOUNT OF CLEARANCE SHALL ACCOUNT FOR THE SIZE OF THE PLANT MATERIAL AT MATURITY.
- THE SIZE OF THE PLANTING AREA AND SIZE OF PLANT MATERIAL AT MATURITY SHALL ALLOW FOR A 2.5' BUMPER OVERHANG FROM THE BACK OF CURB.
- NO TREE SHALL BE LOCATED WITHIN A ROADWAY RIGHT OF WAY OR WITHIN 5' OF A SIDEWALK AND WITHIN 20' OF A LIGHTING LOCATION.
- ALL SHRUBS INSTALLED AS VEHICULAR USE SCREENING WILL BE MAINTAINED AS A CONTINUOUS HEDGE AT A MINIMUM HEIGHT OF 36 INCHES.
- UPON ESTABLISHMENT OF FINISHED GRADES AND PRIOR TO BEGINNING INSTALLATION OF ANY TREES, A SOIL AMENDMENT SCHEDULE FOR ALL TREE PLANTINGS SHALL BE PREPARED BY A CERTIFIED LANDSCAPE ARCHITECT AND BE PROVIDED TO THE TOWN OF ZEBULON PLANNING DEPARTMENT.
- PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY, A CERTIFIED STATEMENT SHALL BE PROVIDED TO CITY STAFF SITE INSPECTOR ATTESTING TO THE FACT THAT THE SOIL AMENDMENT SCHEDULE WAS FOLLOWED AS SPECIFIED IN THE APPROVED SITE AND/OR SUBDIVISION PLAN. THIS STATEMENT SHALL BE CERTIFIED BY A REGISTERED LANDSCAPE ARCHITECT, CERTIFIED ARBORIST, OR OTHER SPECIALIST AS DETERMINED ACCEPTABLE BY THE PLANNING DIRECTOR.
- THE PROPERTY OWNER OR DEVELOPER SHALL PROVIDE FOR CONTINUOUS MAINTENANCE OF THE LANDSCAPE AREAS AFTER OCCUPANCY OF THE BUILDING. THE PROPERTY OWNER SHALL ENSURE THAT PERFORMANCE CRITERIA WITHIN THIS ORDINANCE AND/OR INCLUDED ON THE APPROVED SITE AND/OR SUBDIVISION PLAN ARE MET. FAILURE TO CORRECT DEFICIENCIES IN A TIMELY MANNER SHALL RESULT IN A CITATION FOR VIOLATION OF THIS ORDINANCE IN ACCORDANCE WITH CHAPTER 11.
- ALL FOUNDATION PLANTINGS SHALL BE DESIGNED TO TOWN OF ZEBULON UDO SECTION REQUIREMENTS. THE TOWN OF ZEBULON SITE INSPECTOR RESERVES THE RIGHT TO REQUIRE ADDITIONAL PLANTINGS BASED ON ACTUAL FIELD CONDITIONS.
- ALL PLANTINGS WITHIN THE SIGHT DISTANCE TRIANGLES MUST BE 30 INCHES OR LESS IN HEIGHT OR MUST BE LIMBED UP TO PROVIDE 8' FROM THE LOWEST LIMBS TO THE CURB LINE ELEVATION OR THE NEAREST TRAVEL WAY IF NO CURBING EXISTS.



**NORTH LANDSCAPE PLAN**



**THE SITE GROUP, PLLC**  
 LANDSCAPE ARCHITECTURE COMPANY  
 CERT. NO. 353  
 NORTH CAROLINA  
 RALEIGH, NC

**NC ENGINEERING LICENSE NO. P-0803**

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 919.839.2255  
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**CONSTRUCTION DRAWINGS FOR:**  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE: 07 NOV 2022  
 REVISED:  
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**CONSTRUCTION DRAWING**

**LANDSCAPE PLAN**

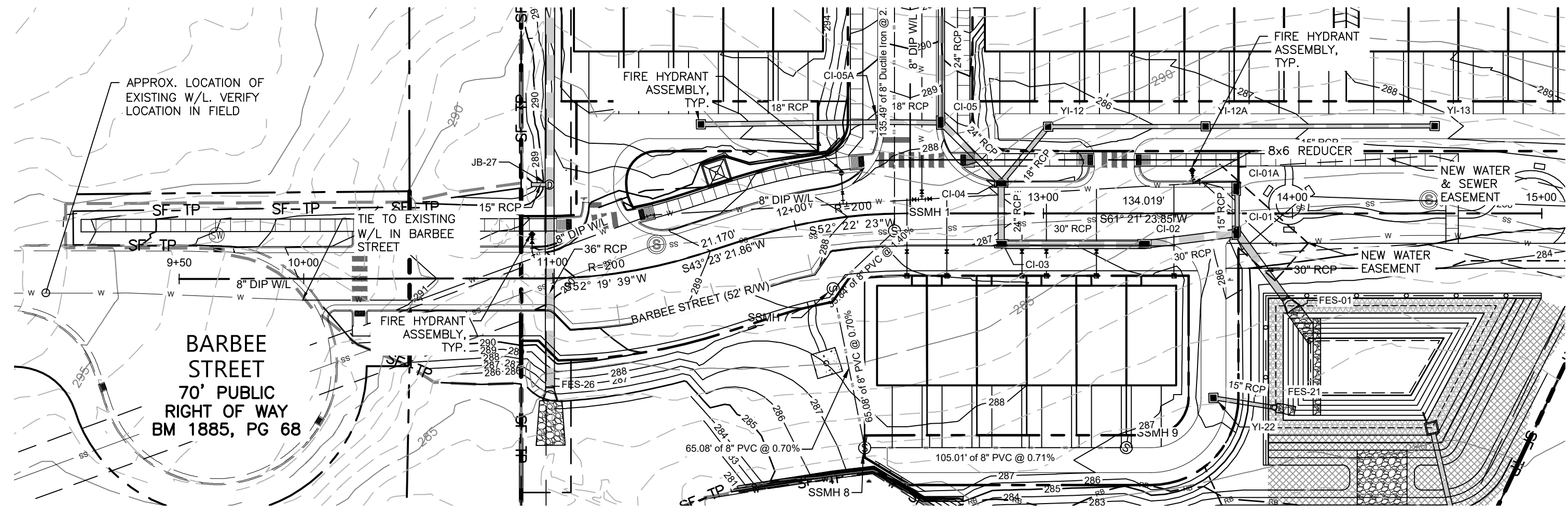
Job Code: **SCBSZ**

Dwg No. **SITE 500**

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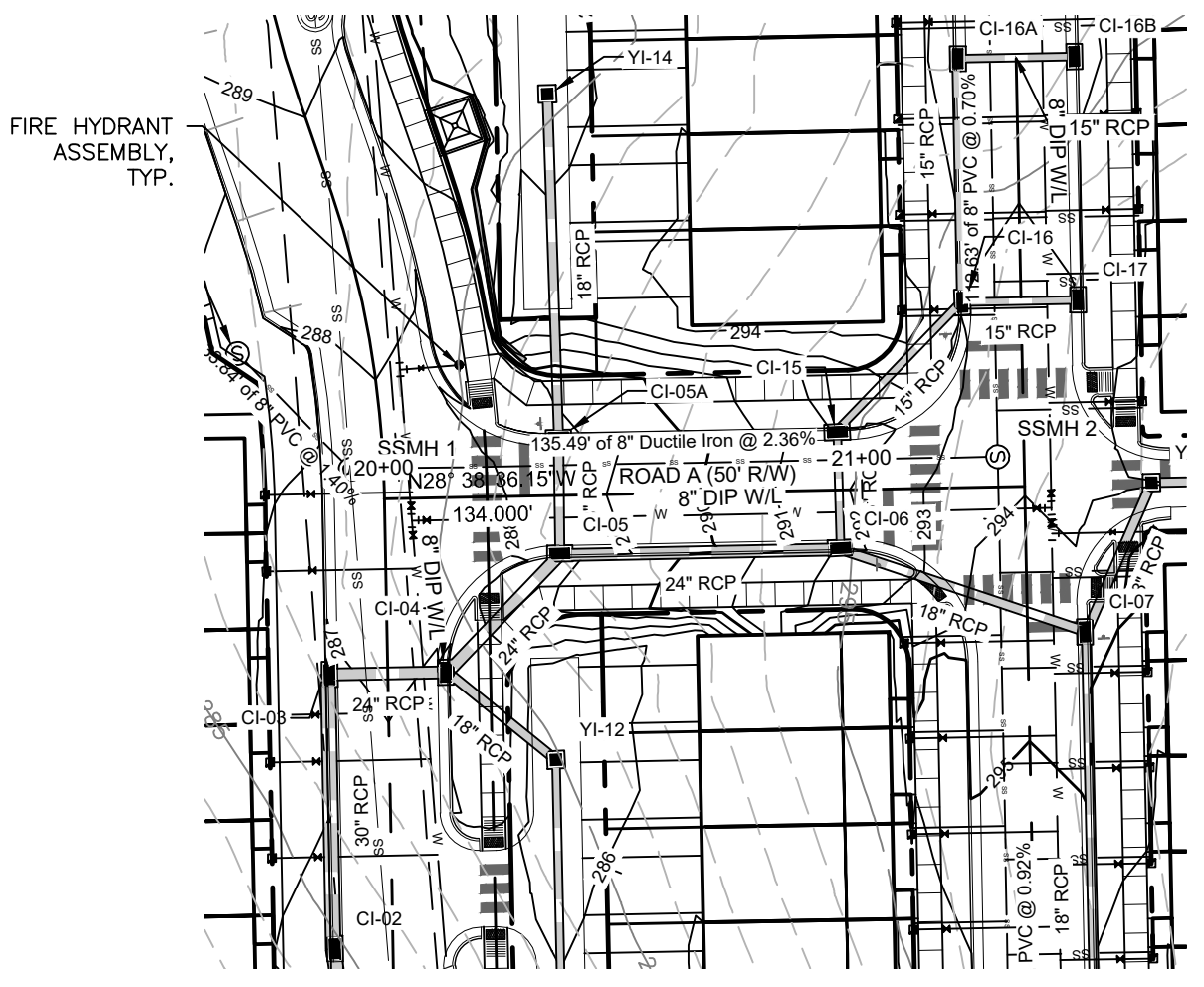


# BARBEE STREET

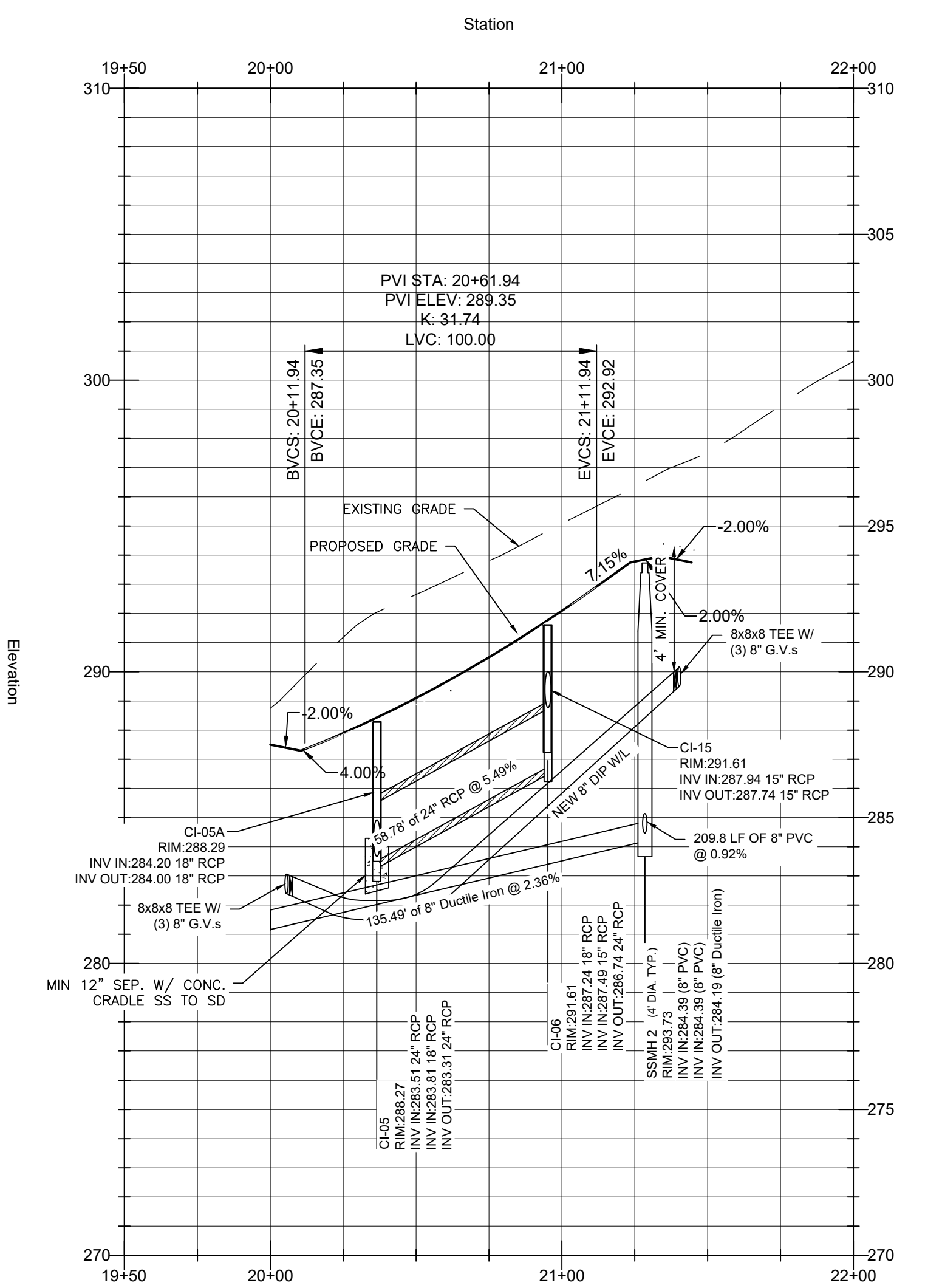
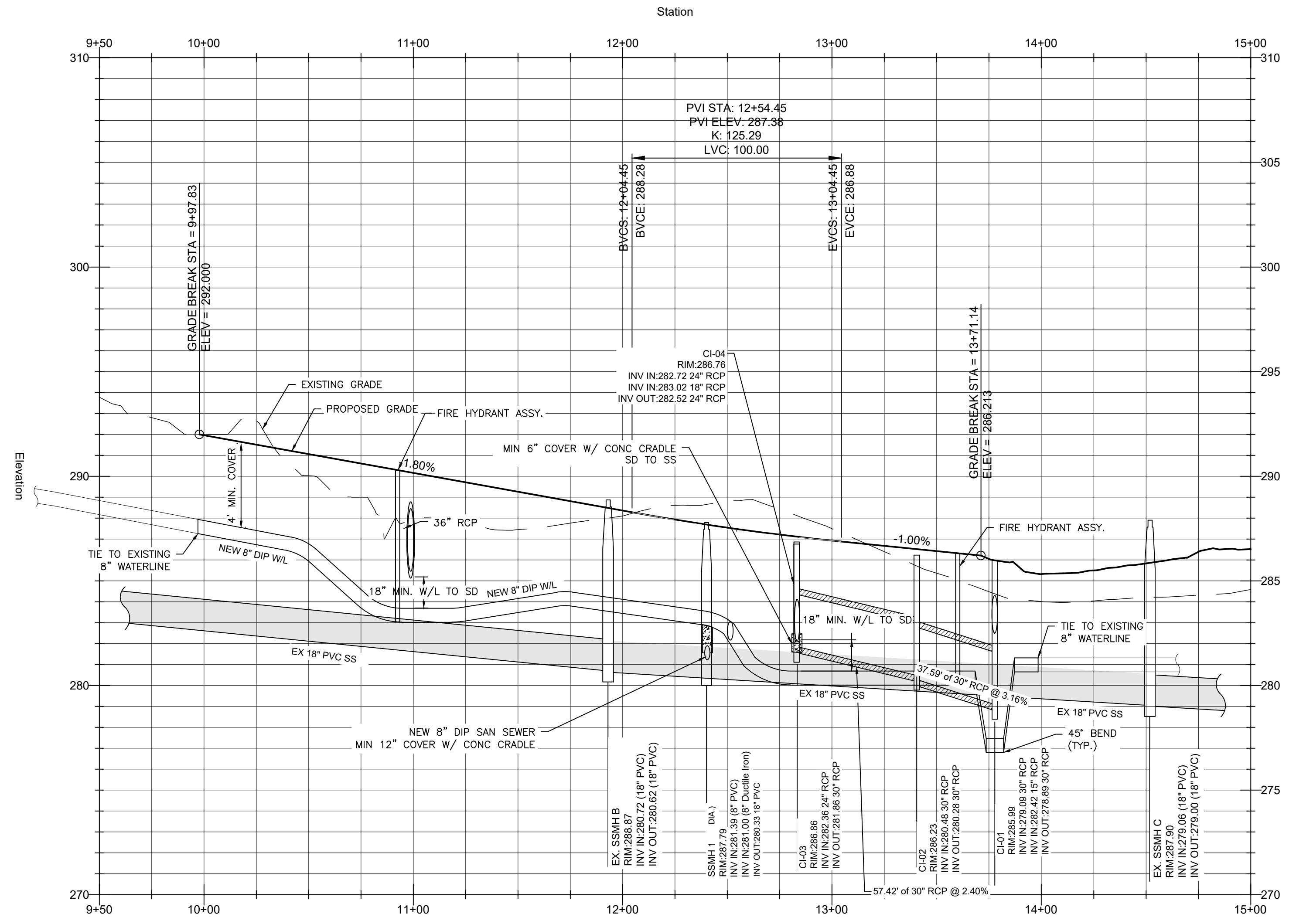


PLAN: 1"=40'  
 PROFILE: 1"=40' HORIZ.  
 1"= 4' VERT.

# PUBLIC ROAD A



PLAN: 1"=40'  
 PROFILE: 1"=40' HORIZ.  
 1"= 4' VERT.



**Public Sewer Collection / Extension System**  
 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 # S-5390  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

**Private Sewer Collection / Extension System**  
 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 # S-5391(P)  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

**Public Water Distribution / Extension System**  
 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 # W-4078  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_



NC ENGINEERING LICENSE NO. P-0803



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: WRR  
 Checked By: SRN

DATE: 03 FEB 2023  
 REVISED:  
 09 MAY 2023  
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CONSTRUCTION DRAWINGS  
**BARBEE ST & ROAD A PLAN & PROFILE**

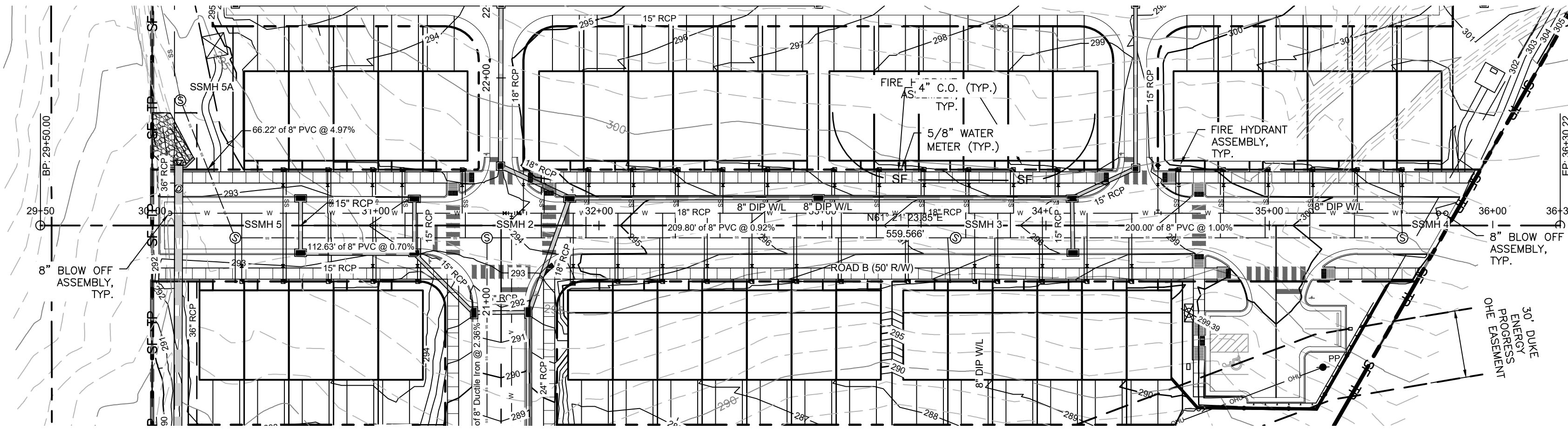
Job Code: SCBSZ

Dwg No. **SITE 600**

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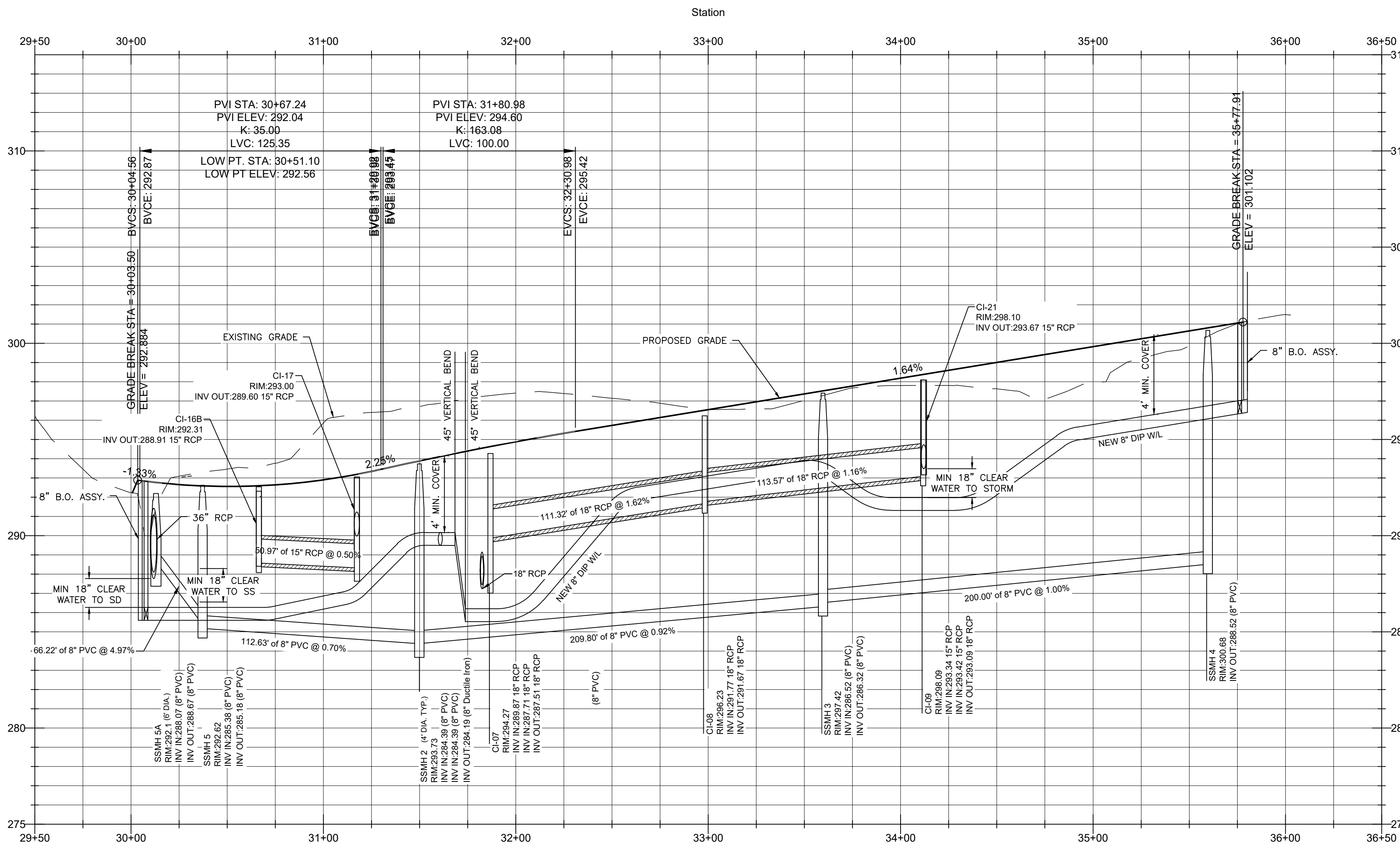


# PUBLIC ROAD B



PLAN: 1"=40'  
 PROFILE: 1"=40' HORIZ.  
 1"= 4' VERT.

STORM SEWER STRUCTURE TABLE		STORM SEWER STRUCTURE TABLE		STORM SEWER STRUCTURE TABLE	
STRUCTURE NAME:	DETAILS:	STRUCTURE NAME:	DETAILS:	STRUCTURE NAME:	DETAILS:
YI-11A	RIM = 300.44 INV OUT = 296.09 (156.0 LF 15" RCP @ 1.00%)	CI-16	RIM = 293.06 INV IN = 289.47 (24.8 LF 15" RCP @ 0.50%) INV IN = 288.33 (51.0 LF 15" RCP @ 0.50%) INV OUT = 288.13 (37.3 LF 15" RCP @ 0.50%)	YI-13	RIM = 287.82 INV OUT = 284.75 (92.0 LF 15" RCP @ 0.89%)
YI-11	RIM = 288.77 INV IN = 294.53 (156.0 LF 15" RCP @ 1.00%) INV OUT = 294.33 (73.3 LF 15" RCP @ 1.00%)	CI-17	RIM = 293.00 INV OUT = 289.60 (24.8 LF 15" RCP @ 0.50%)	CI-03	RIM = 286.86 INV IN = 282.36 (25.0 LF 24" RCP @ 0.64%) INV OUT = 281.86 (57.4 LF 30" RCP @ 2.40%)
YI-10	RIM = 298.71 INV IN = 293.60 (73.3 LF 15" RCP @ 1.00%) INV OUT = 293.50 (31.4 LF 15" RCP @ 0.51%)	YI-14	RIM = 292.65 INV OUT = 286.00 (71.6 LF 18" RCP @ 2.51%)	CI-04	RIM = 286.76 INV IN = 282.72 (34.0 LF 24" RCP @ 1.75%) INV OUT = 282.52 (25.0 LF 24" RCP @ 0.64%)
CI-21	RIM = 298.10 INV OUT = 293.67 (24.9 LF 15" RCP @ 0.99%)	CI-16A	RIM = 292.55 INV IN = 288.78 (25.0 LF 15" RCP @ 0.50%) INV OUT = 288.58 (51.0 LF 15" RCP @ 0.50%)	YI-12A	RIM = 286.30 INV IN = 283.93 (92.0 LF 15" RCP @ 0.89%) INV OUT = 283.73 (63.2 LF 15" RCP @ 0.50%)
CI-09	RIM = 298.09 INV IN = 293.34 (31.4 LF 15" RCP @ 0.51%) INV OUT = 293.09 (113.6 LF 18" RCP @ 1.16%)	YI-19A	RIM = 292.52 INV OUT = 289.28 (118.9 LF 15" RCP @ 0.50%)	CI-02	RIM = 286.23 INV IN = 280.48 (57.4 LF 30" RCP @ 2.40%) INV OUT = 280.28 (37.6 LF 30" RCP @ 3.16%)
YI-20	RIM = 296.46 INV OUT = 292.04 (142.2 LF 15" RCP @ 2.08%)	CI-16B	RIM = 292.31 INV OUT = 288.91 (25.0 LF 15" RCP @ 0.50%)	CI-01	RIM = 285.99 INV IN = 279.09 (37.6 LF 30" RCP @ 3.16%) INV OUT = 282.42 (17.7 LF 15" RCP @ 1.00%) INV OUT = 278.89 (38.0 LF 30" RCP @ 1.04%)
CI-08	RIM = 296.23 INV IN = 291.77 (113.6 LF 18" RCP @ 1.16%) INV OUT = 291.67 (111.3 LF 18" RCP @ 1.62%)	CI-06	RIM = 291.61 INV IN = 287.24 (54.2 LF 18" RCP @ 0.50%) INV IN = 287.49 (24.9 LF 15" RCP @ 1.00%) INV OUT = 286.74 (58.9 LF 24" RCP @ 5.49%)	CI-01A	RIM = 285.89 INV OUT = 282.60 (17.7 LF 15" RCP @ 1.00%)
FES-29	RIM = 296.00 INV OUT = 290.00 (12.7 LF 36" RCP @ 7.89%)	CI-15	RIM = 291.61 INV IN = 287.94 (37.3 LF 15" RCP @ 0.50%) INV OUT = 287.74 (24.9 LF 15" RCP @ 1.00%)	YI-22	RIM = 285.70 INV OUT = 281.39 (25.8 LF 15" RCP @ 11.28%)
YI-19	RIM = 294.64 INV IN = 289.08 (142.2 LF 15" RCP @ 2.08%) INV IN = 288.69 (118.9 LF 15" RCP @ 0.50%) INV OUT = 288.49 (72.4 LF 18" RCP @ 0.57%)	JB-27	RIM = 290.00 INV IN = 286.00 (139.0 LF 36" RCP @ 1.71%) INV IN = 287.80 (7.3 LF 15" RCP @ 1.36%) INV OUT = 285.80 (86.5 LF 36" RCP @ 0.92%)	YI-12	RIM = 285.58 INV IN = 283.42 (63.2 LF 15" RCP @ 0.50%) INV OUT = 283.17 (29.2 LF 15" RCP @ 11.28%)
CI-07	RIM = 294.27 INV IN = 289.87 (111.3 LF 18" RCP @ 1.62%) INV IN = 287.71 (34.0 LF 18" RCP @ 0.50%) INV OUT = 287.51 (54.2 LF 18" RCP @ 0.50%)	FES-26	RIM = 288.42 INV IN = 285.00 (86.5 LF 36" RCP @ 0.92%)	FES-21	RIM = 283.50 INV IN = 278.50 (25.8 LF 15" RCP @ 11.28%)
YI-18	RIM = 293.97 INV IN = 288.08 (72.4 LF 18" RCP @ 0.57%) INV OUT = 287.88 (34.0 LF 18" RCP @ 0.50%)	CI-05A	RIM = 288.29 INV IN = 284.20 (71.6 LF 18" RCP @ 2.51%) INV OUT = 284.00 (24.9 LF 18" RCP @ 0.76%)	FES-01	RIM = 281.38 INV IN = 278.50 (38.0 LF 30" RCP @ 1.04%)
JB-28	RIM = 293.18 INV IN = 289.00 (12.7 LF 36" RCP @ 7.89%) INV OUT = 286.37 (139.0 LF 36" RCP @ 1.71%)	CI-05	RIM = 288.27 INV IN = 283.51 (58.9 LF 24" RCP @ 5.49%) INV IN = 283.81 (24.9 LF 18" RCP @ 0.76%) INV OUT = 283.31 (34.0 LF 24" RCP @ 1.75%)		



NC ENGINEERING  
 LICENSE NO. P-0803



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE: 03 FEB 2023  
 REVISED:  
 09 MAY 2023  
 24 AUG 2023  
 21 NOV 2023

**Public Sewer Collection / Extension System**  
 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 # S-5390  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

**Private Sewer Collection / Extension System**  
 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 # S-5391(P)  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

**Public Water Distribution / Extension System**  
 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 # W-4078  
 Authorization to Construct \_\_\_\_\_  
 Date \_\_\_\_\_

CONSTRUCTION DRAWINGS

PUBLIC ROAD B  
 PLAN &  
 PROFILE

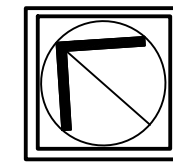
Job Code: **SCBSZ**

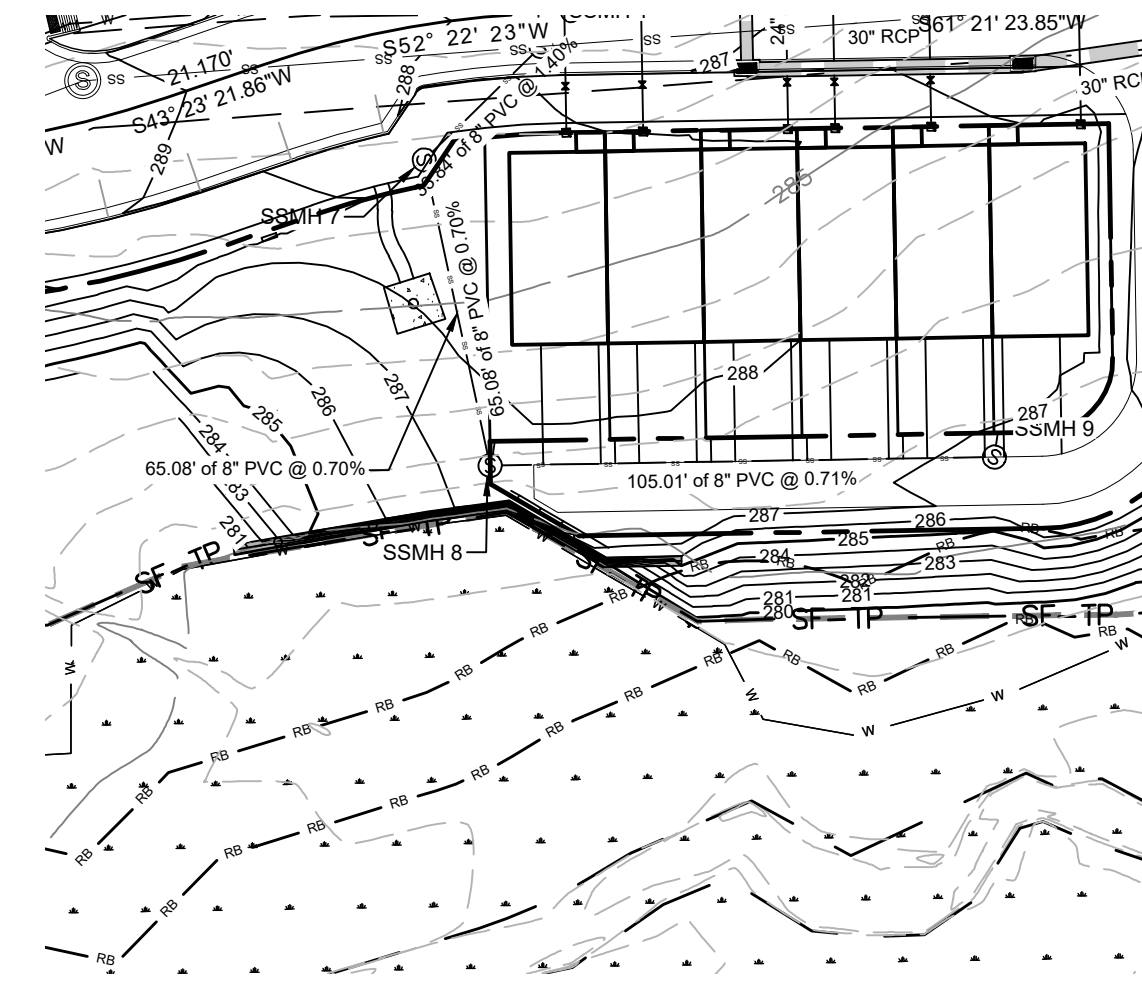
Dwg No.  
**SITE 601**

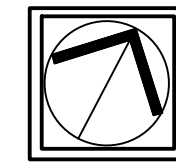
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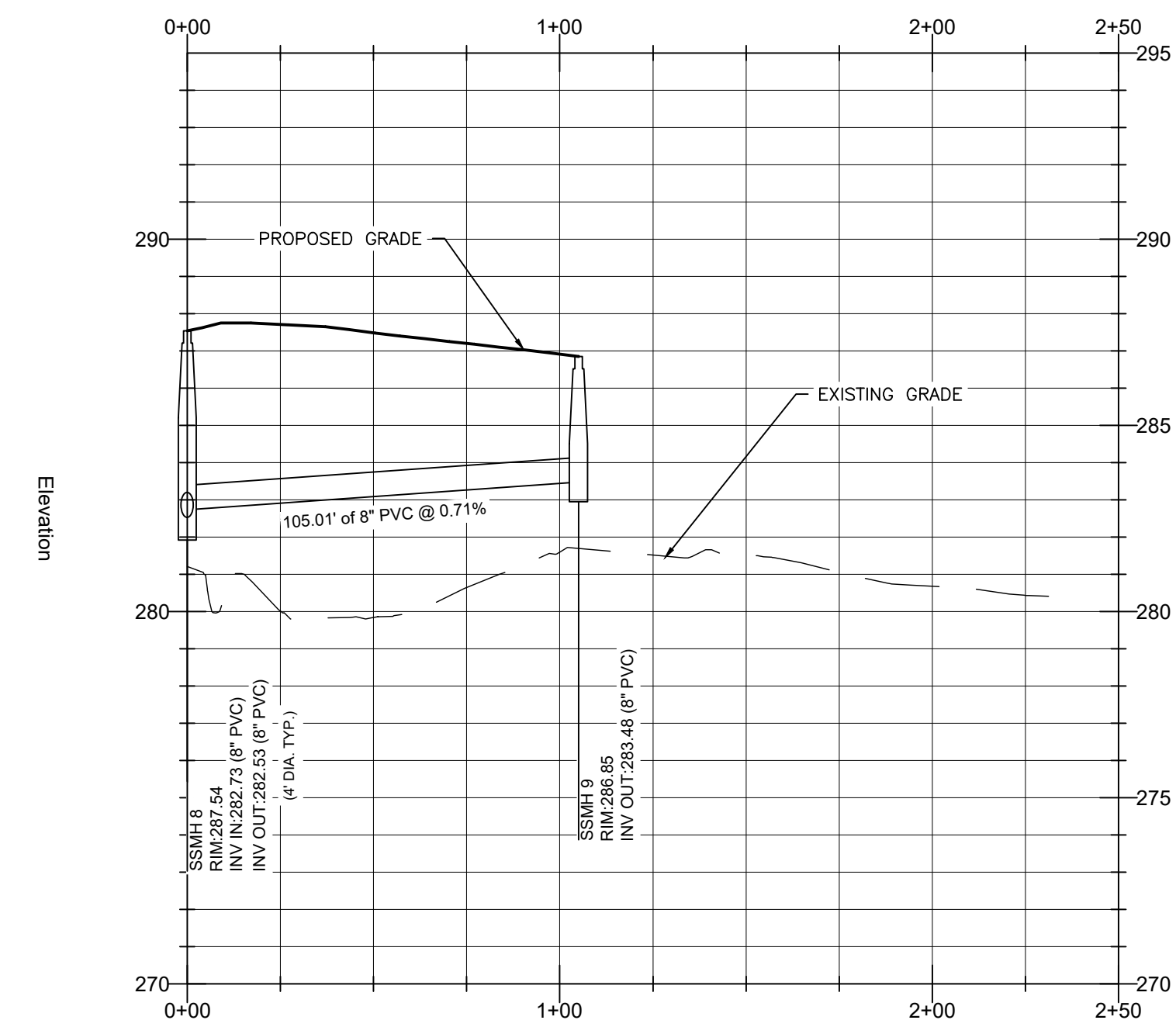
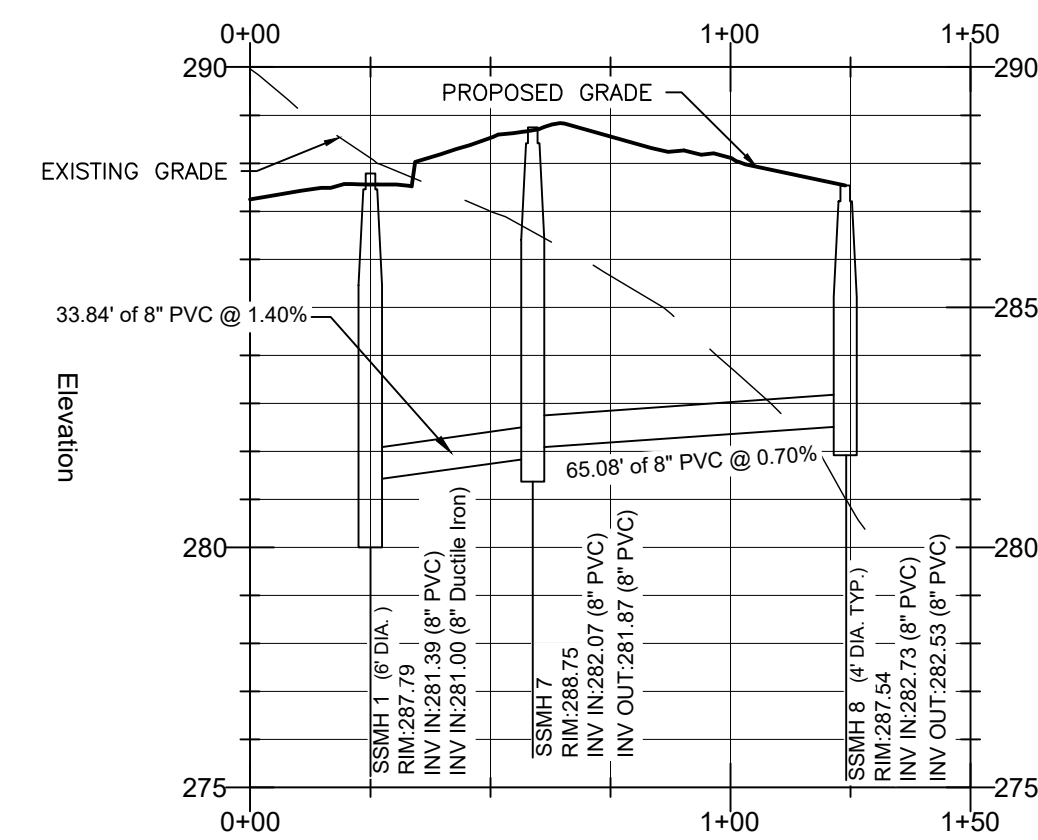





**PLAN:** 1"=40'  
**PROFILE:** 1"=40' HORIZ.  
 1"= 4' VERT.




**PLAN:** 1"=40'  
**PROFILE:** 1"=40' HORIZ.  
 1"= 4' VERT.



**Public**

**Sewer Collection / Extension System**

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 # S-5390

Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_

**Private**

**Sewer Collection / Extension System**

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 # S-5391(P)

Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_

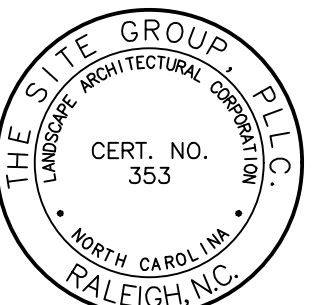
**Public**

**Water Distribution / Extension System**

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 # W-4078

Authorization to Construct \_\_\_\_\_  
Date \_\_\_\_\_



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E Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
O E BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By **WRR**  
Checked By **SRN**

DATE: 09 MAY 2023  
REVISED:  
24 AUG 2023  
21 NOV 2023

CONSTRUCTION DRAWINGS

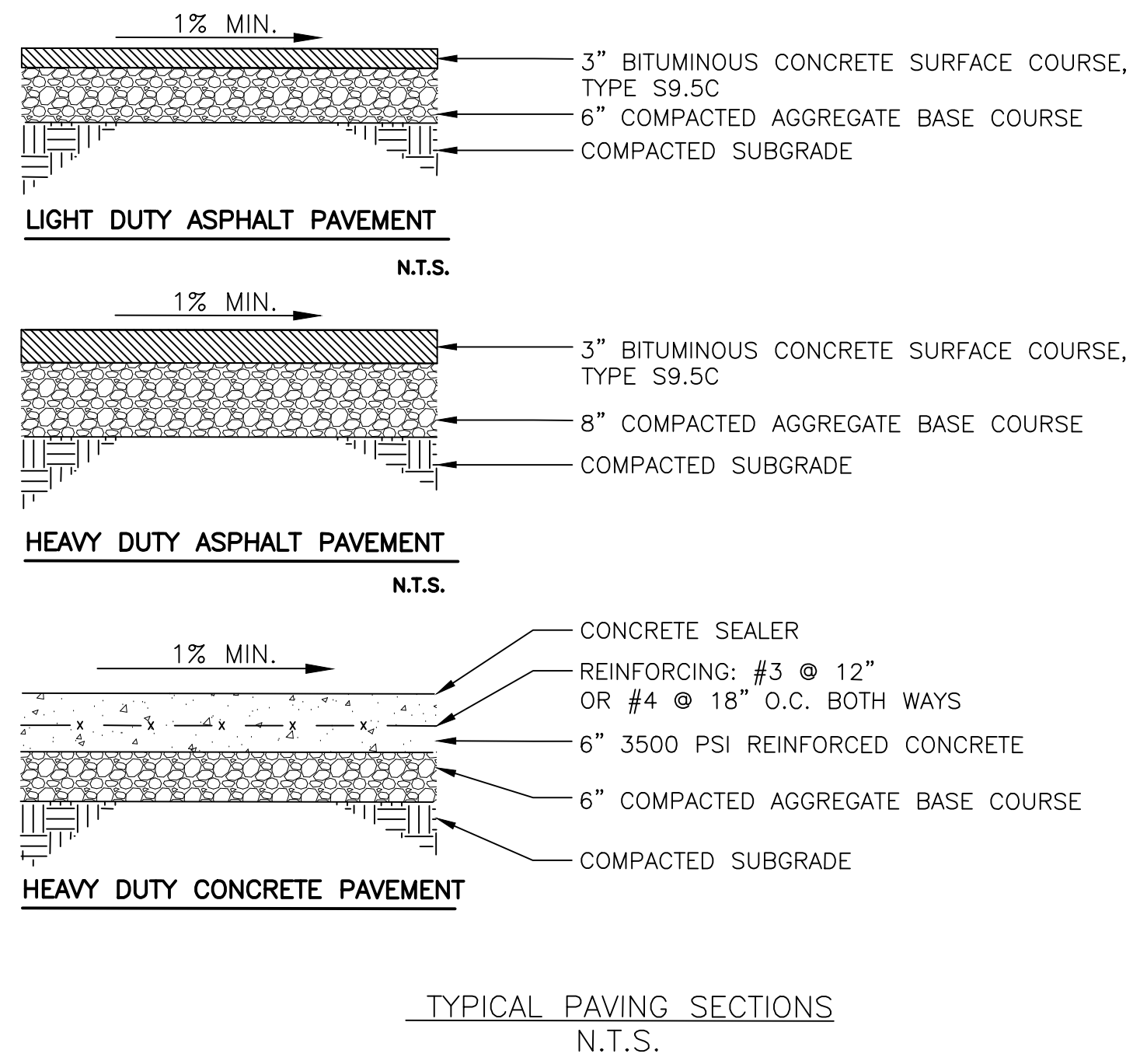
SANITARY SEWER PLAN & PROFILE

Job Code **SCBSZ**

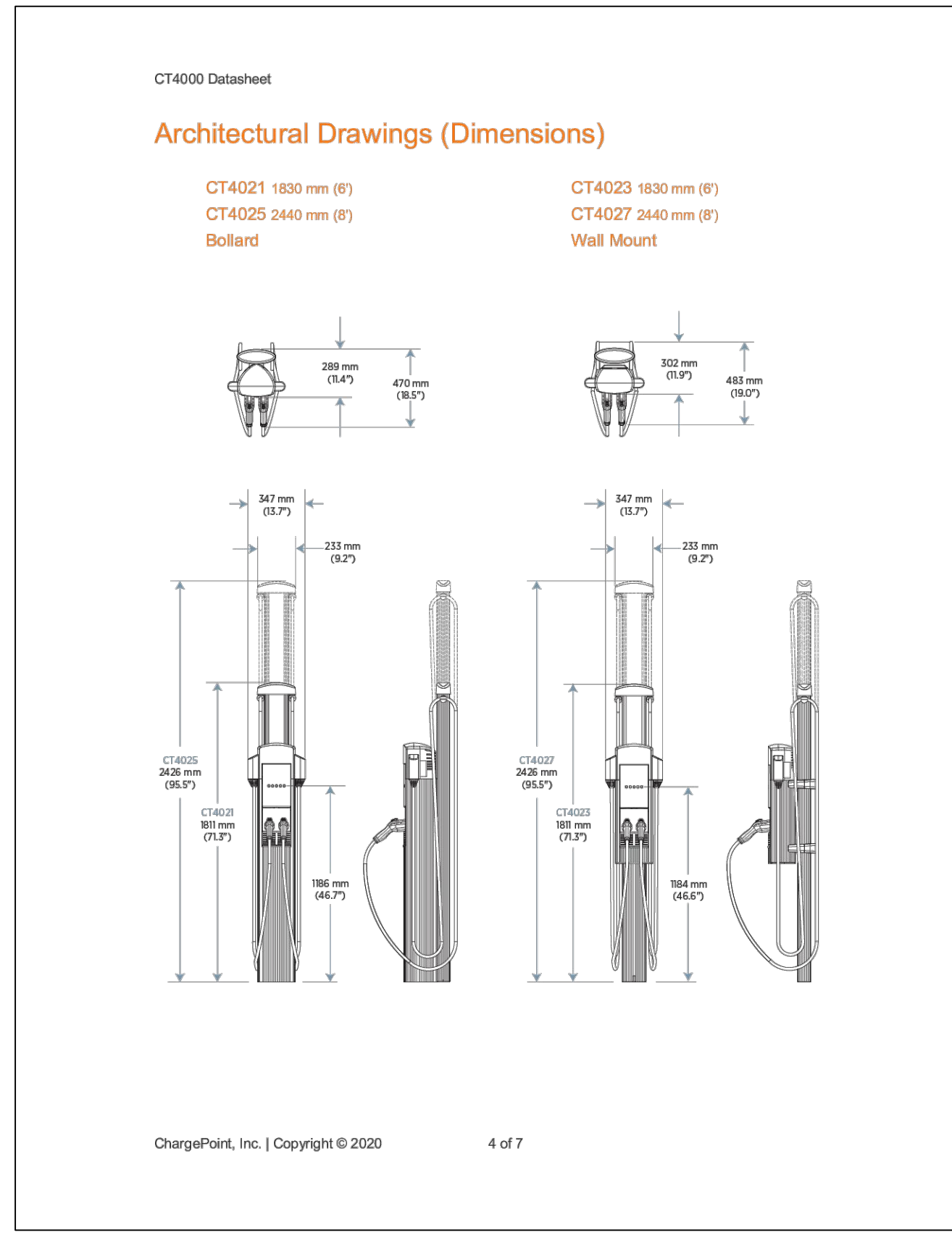
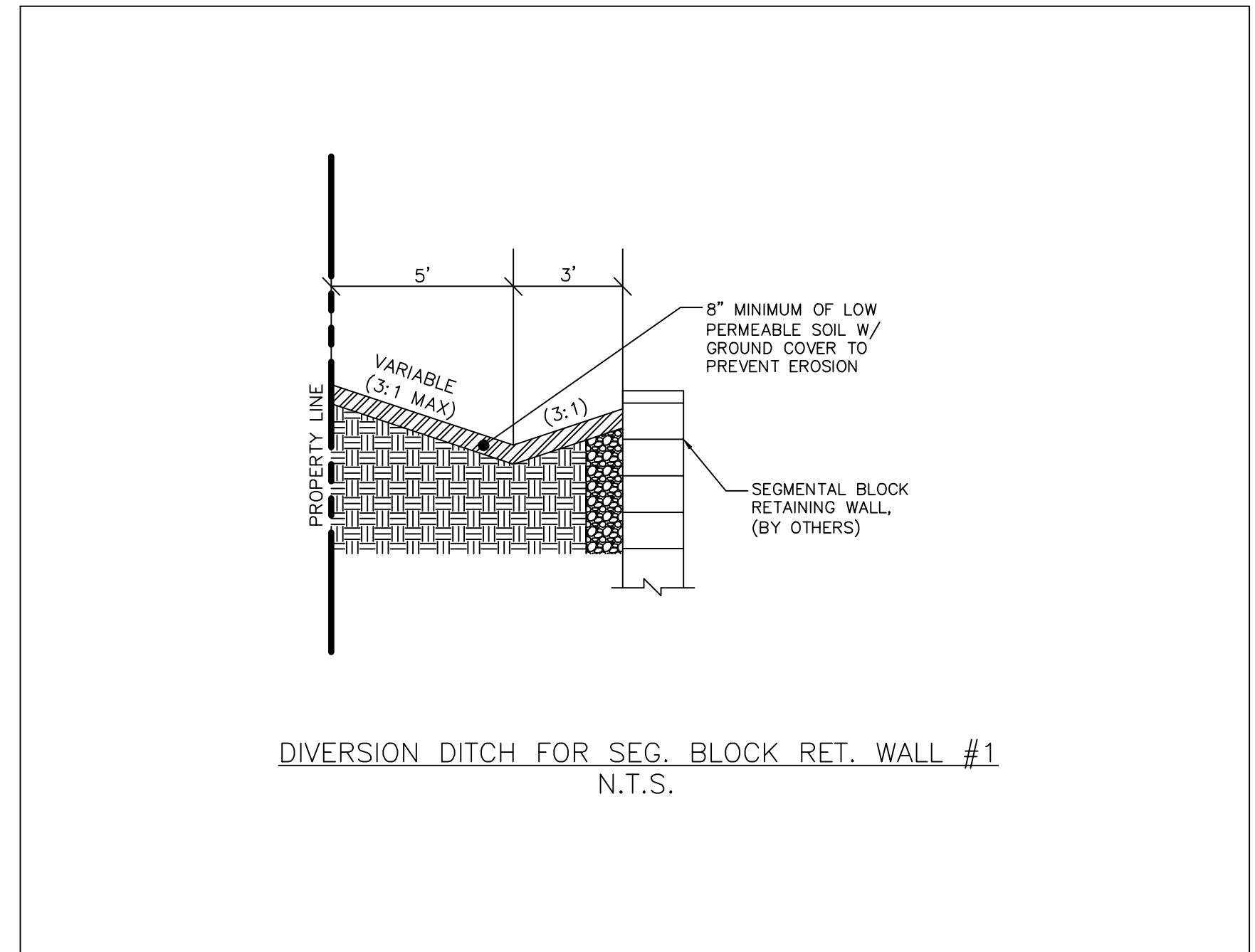
Dwg No.  
**SITE 602**

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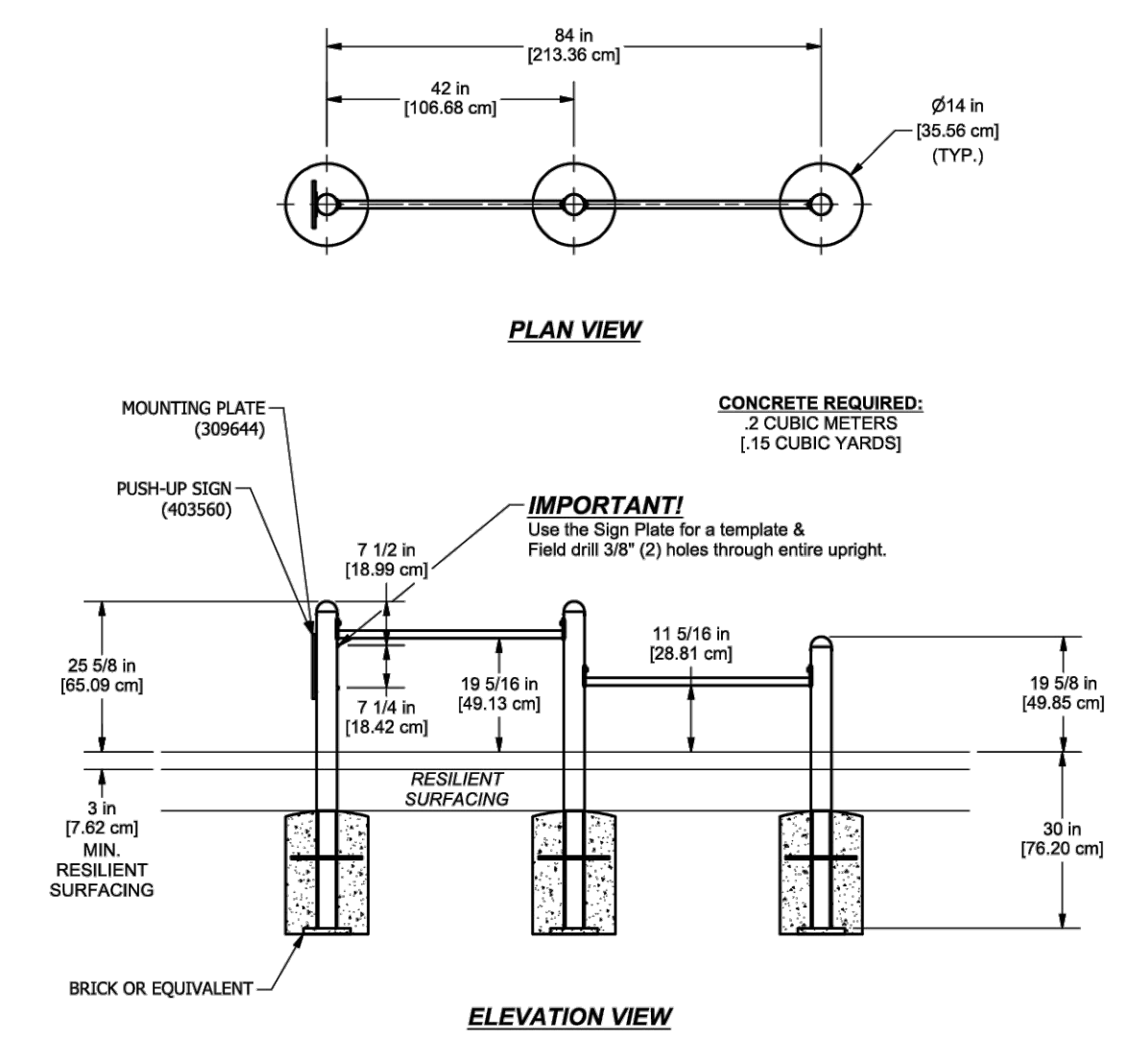
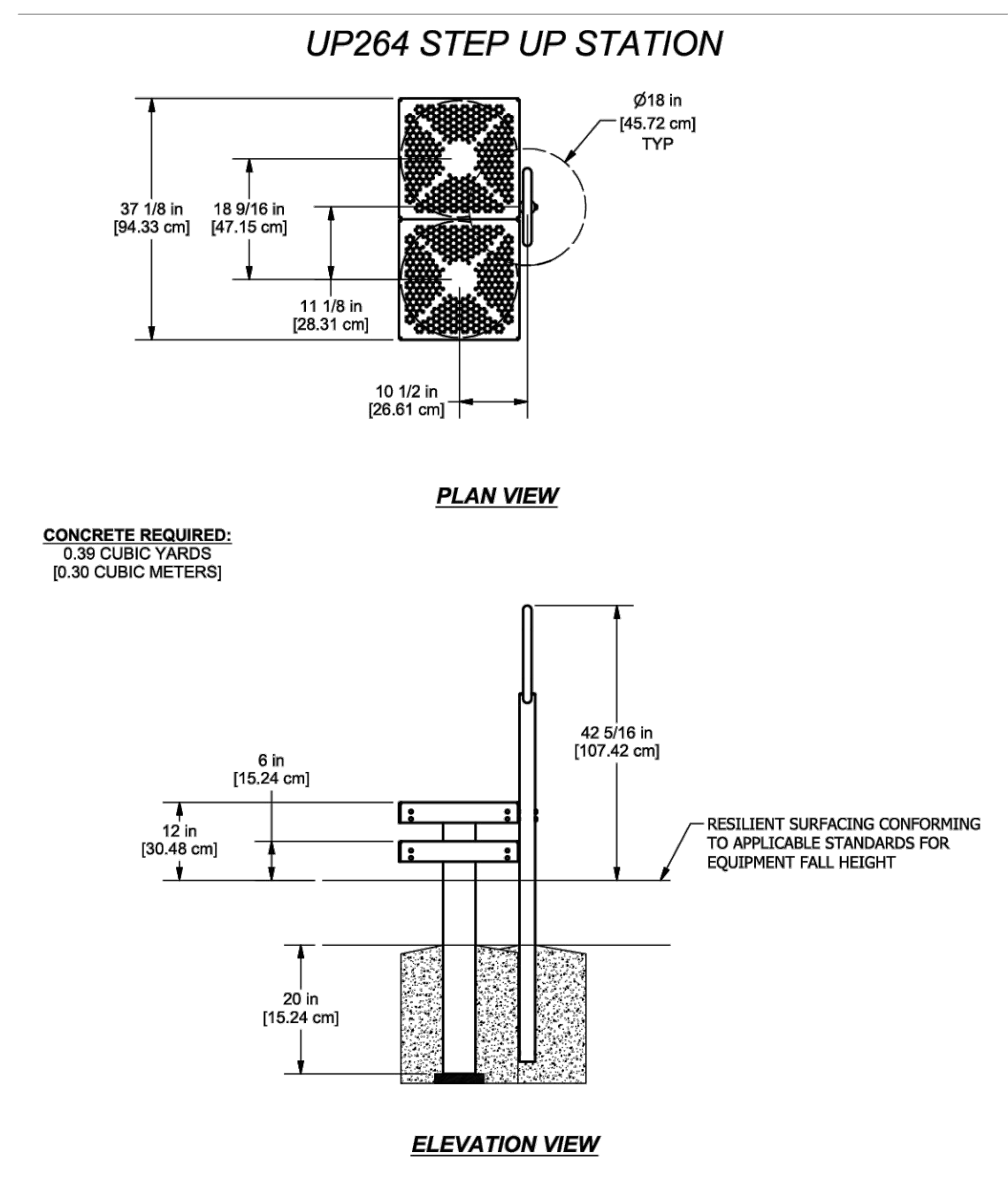
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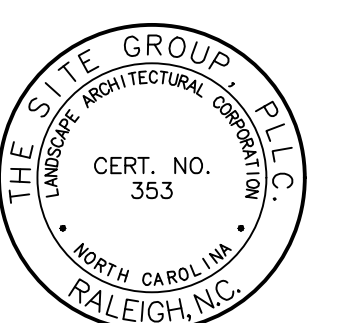
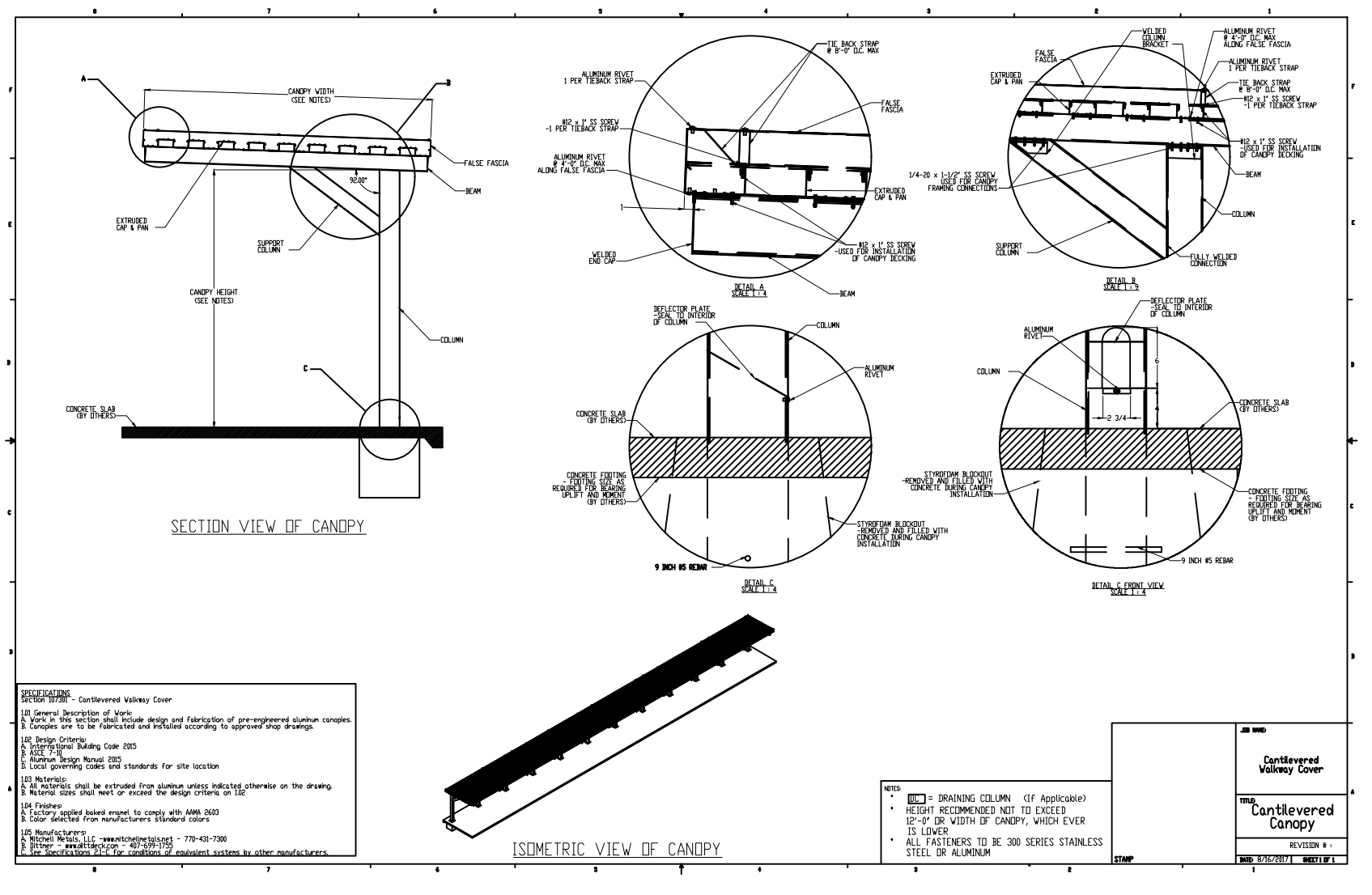
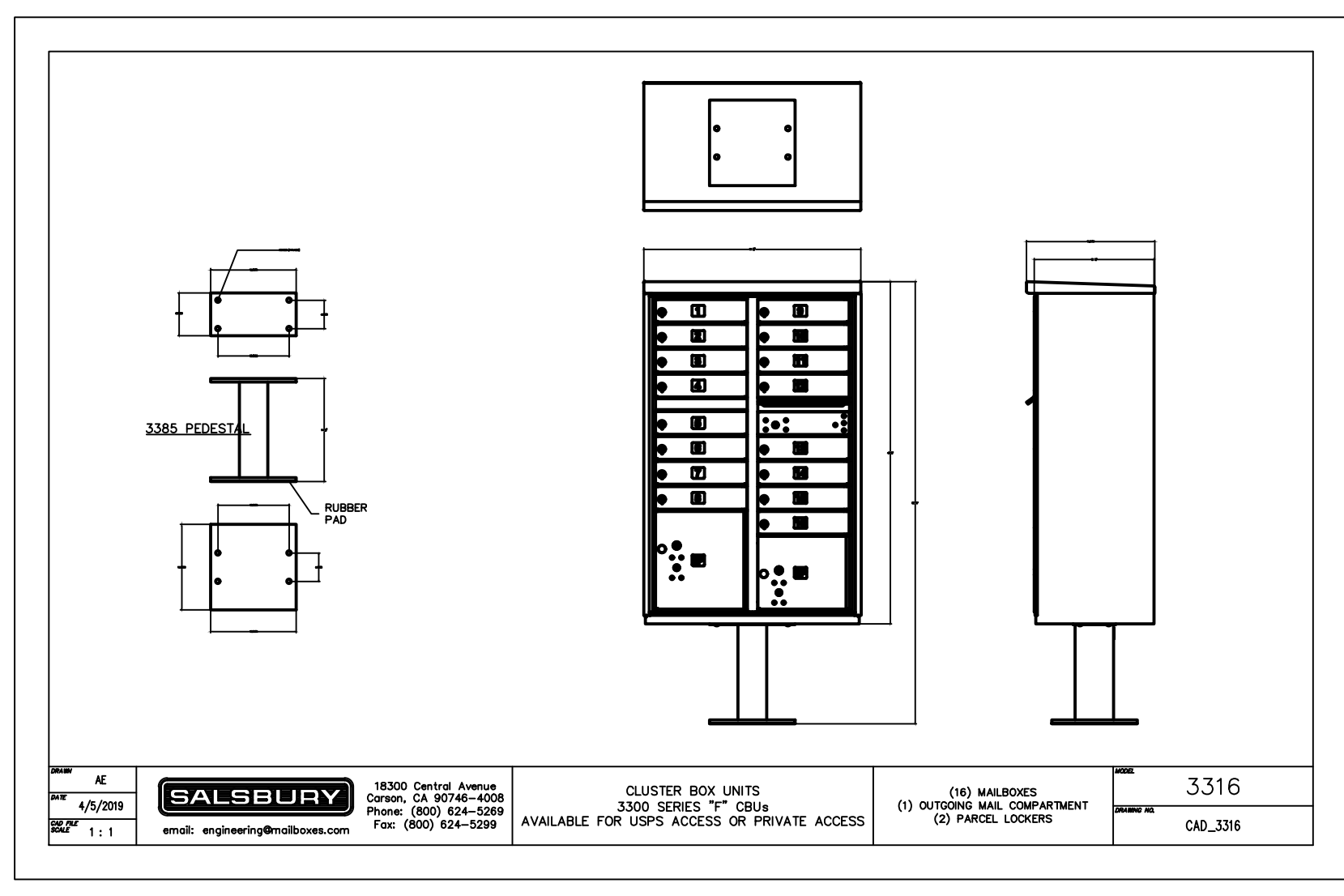
**ActionFit Traditional**

Push-Up  
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E-Mail: SRN@thesitegroup.net

CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: WRR  
Checked By: SRN

DATE: 07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023  
21 NOV 2023

CONSTRUCTION DRAWING

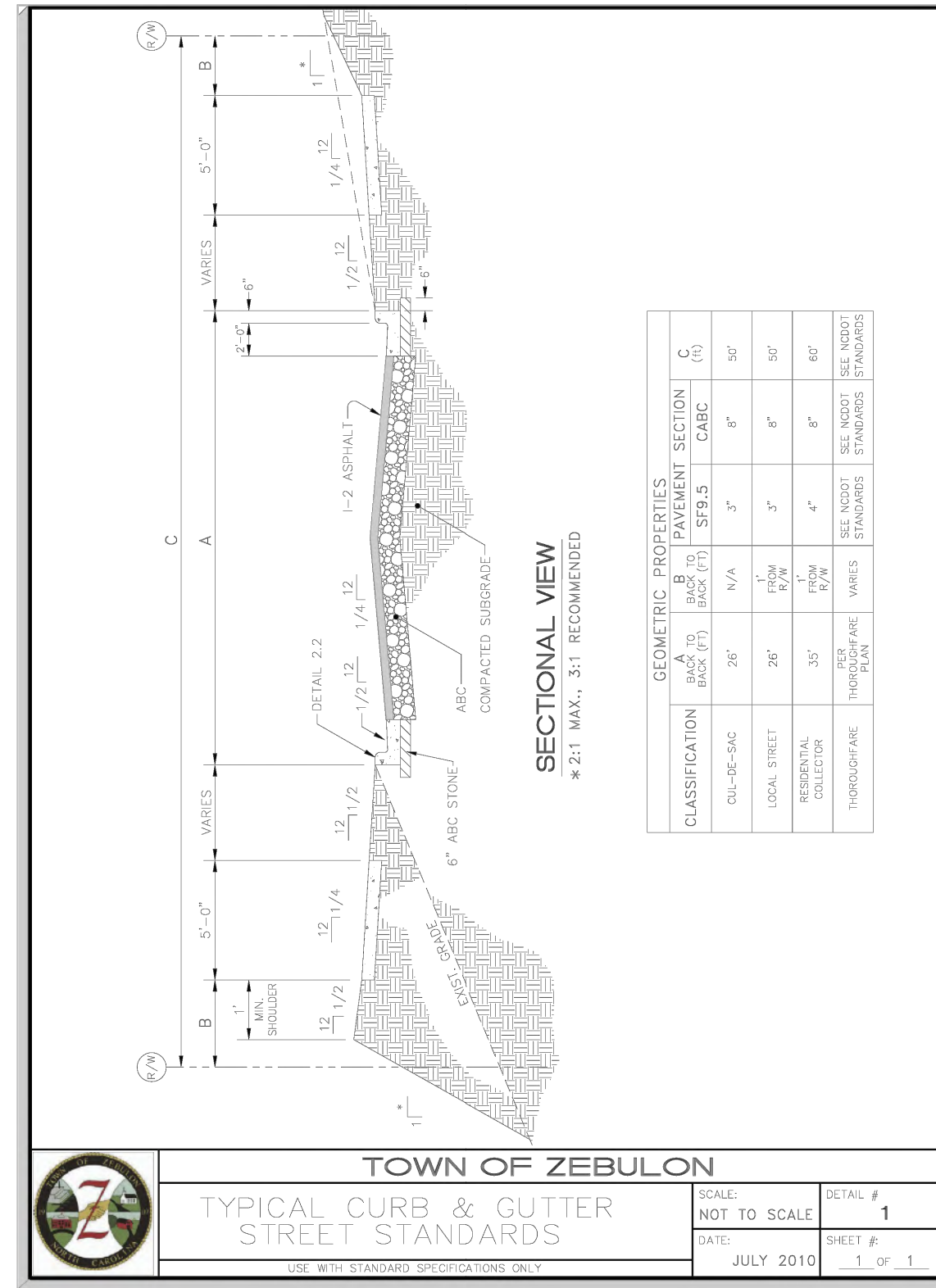
SITE DETAILS

Job Code: SCBSZ

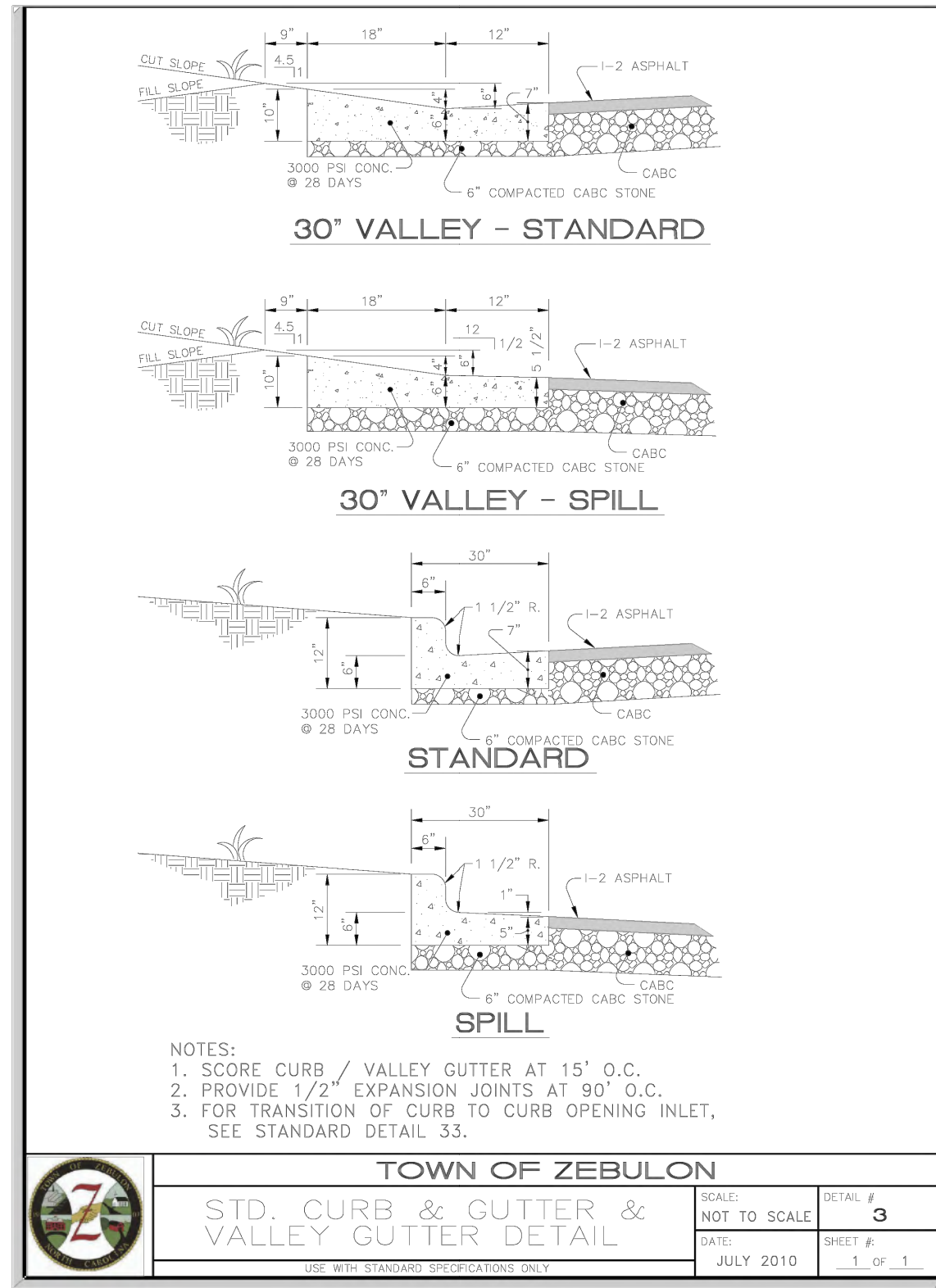
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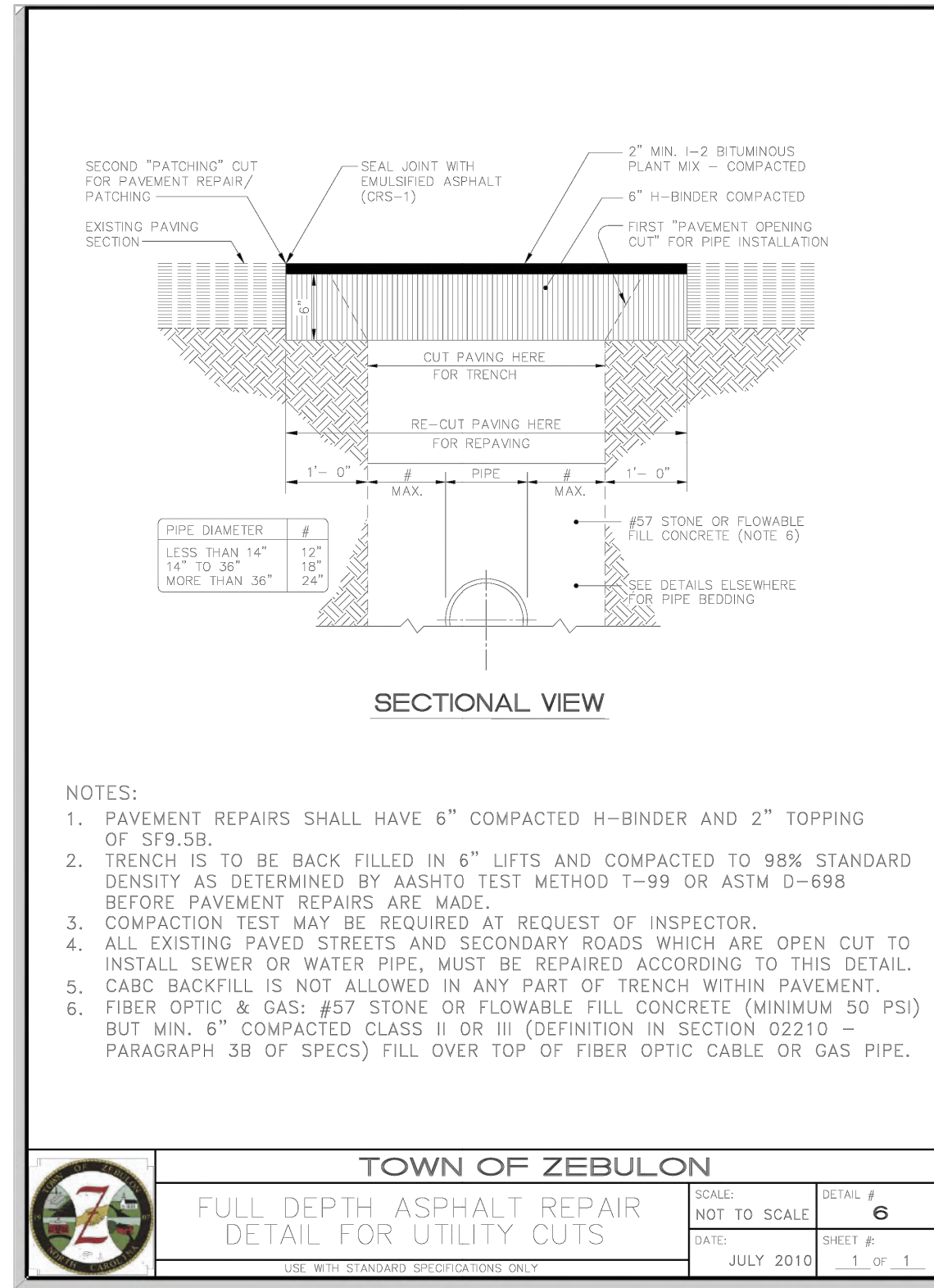




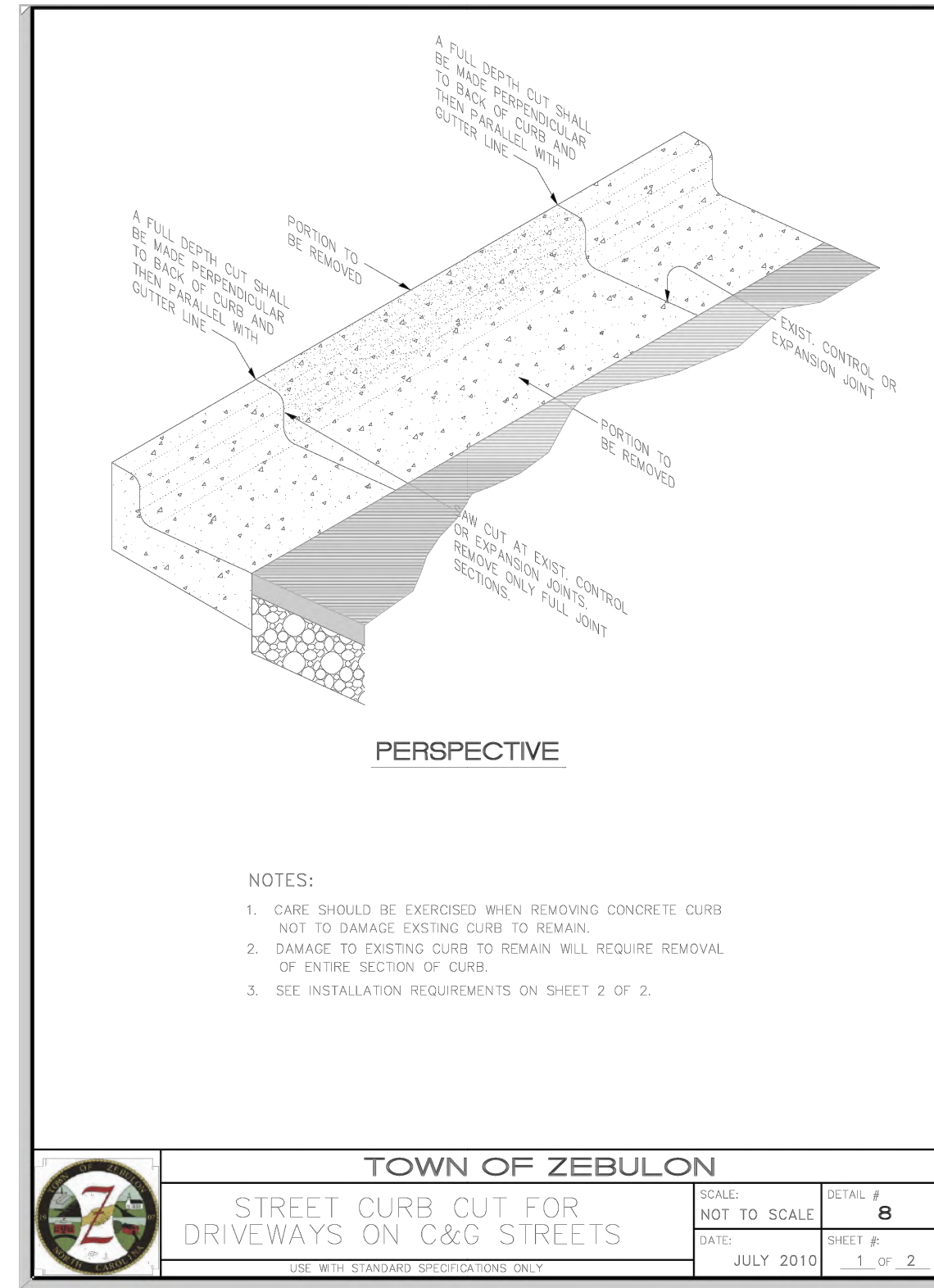
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TYPICAL CURB & GUTTER STREET STANDARDS  
SCALE: NOT TO SCALE  
DATE: JULY 2010  
SHEET # 1 OF 1



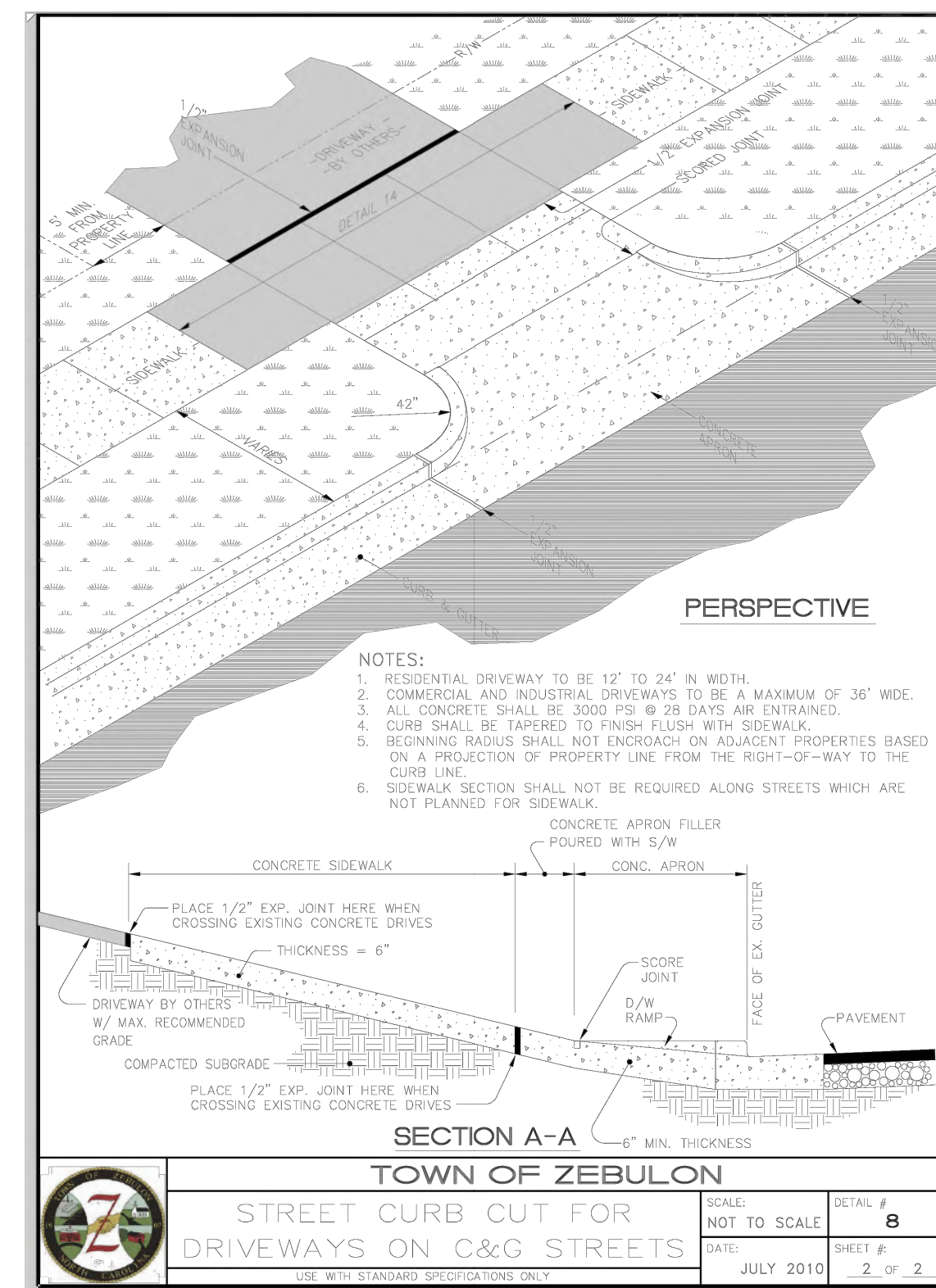
TOWN OF ZEBULON  
STD. CURB & GUTTER & VALLEY GUTTER DETAIL  
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DATE: JULY 2010  
SHEET # 3 OF 1



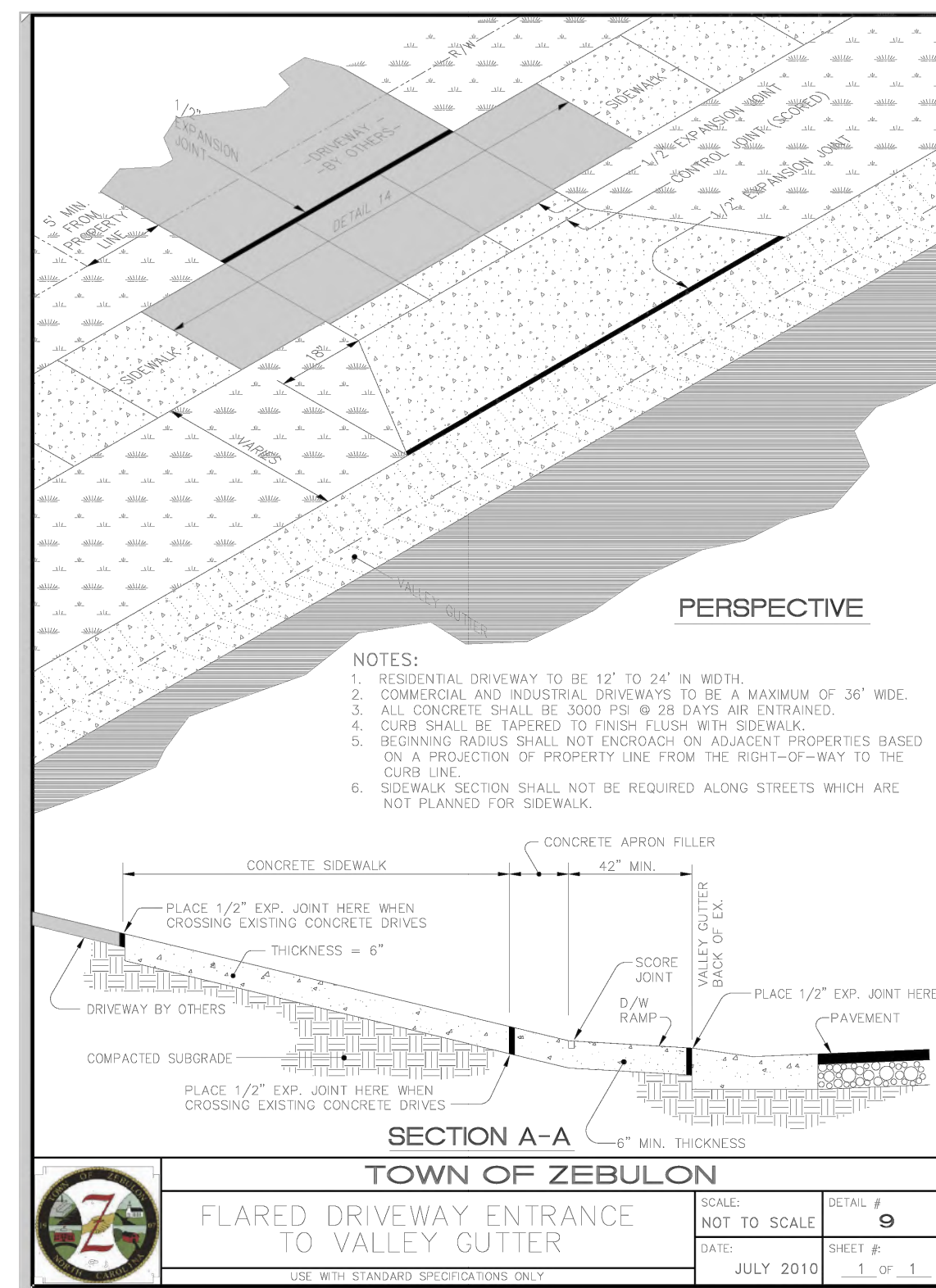
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FULL DEPTH ASPHALT REPAIR DETAIL FOR UTILITY CUTS  
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SHEET # 6 OF 1



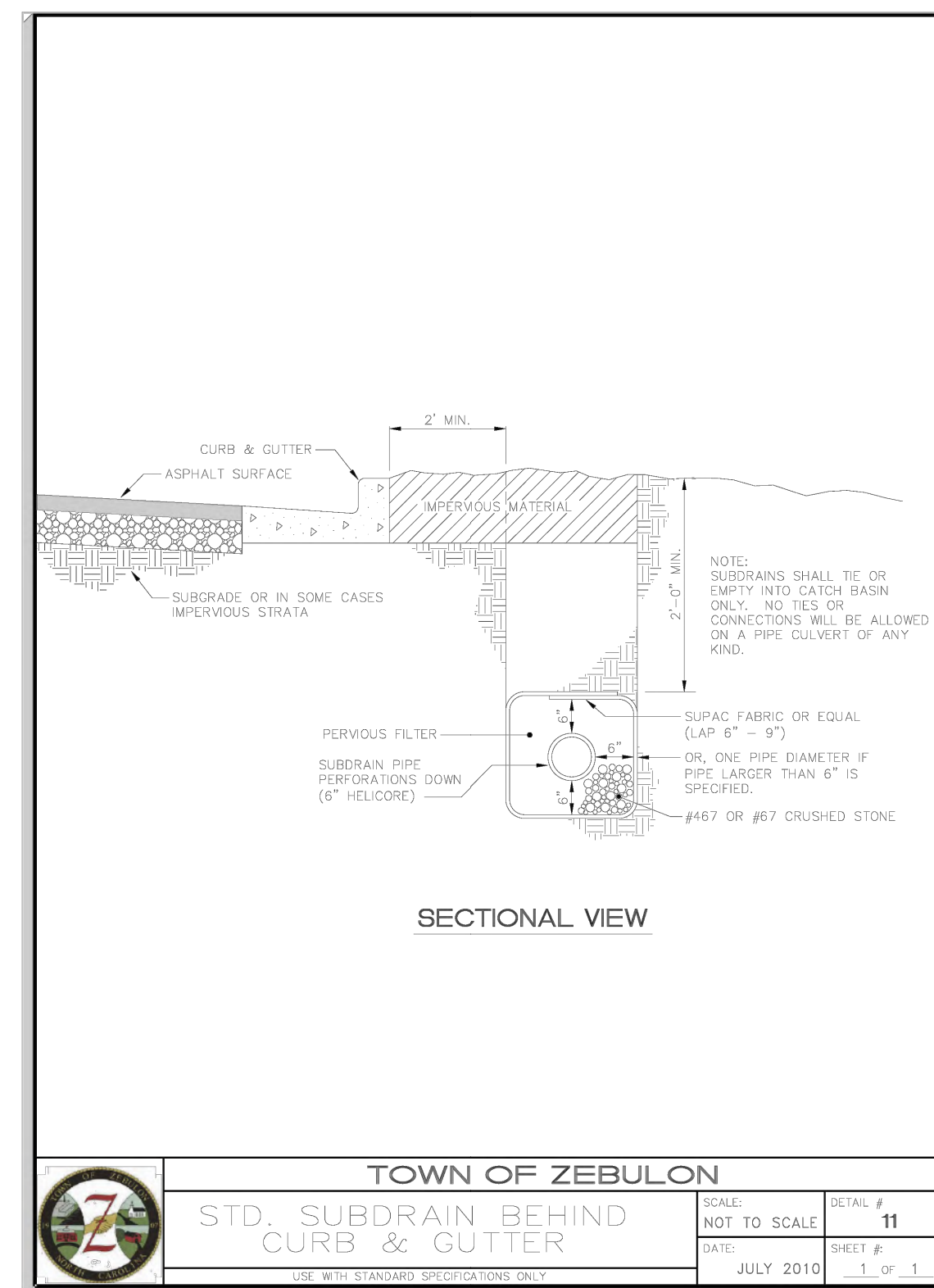
TOWN OF ZEBULON  
STREET CURB CUT FOR DRIVEWAYS ON C&G STREETS  
SCALE: NOT TO SCALE  
DATE: JULY 2010  
SHEET # 8 OF 2



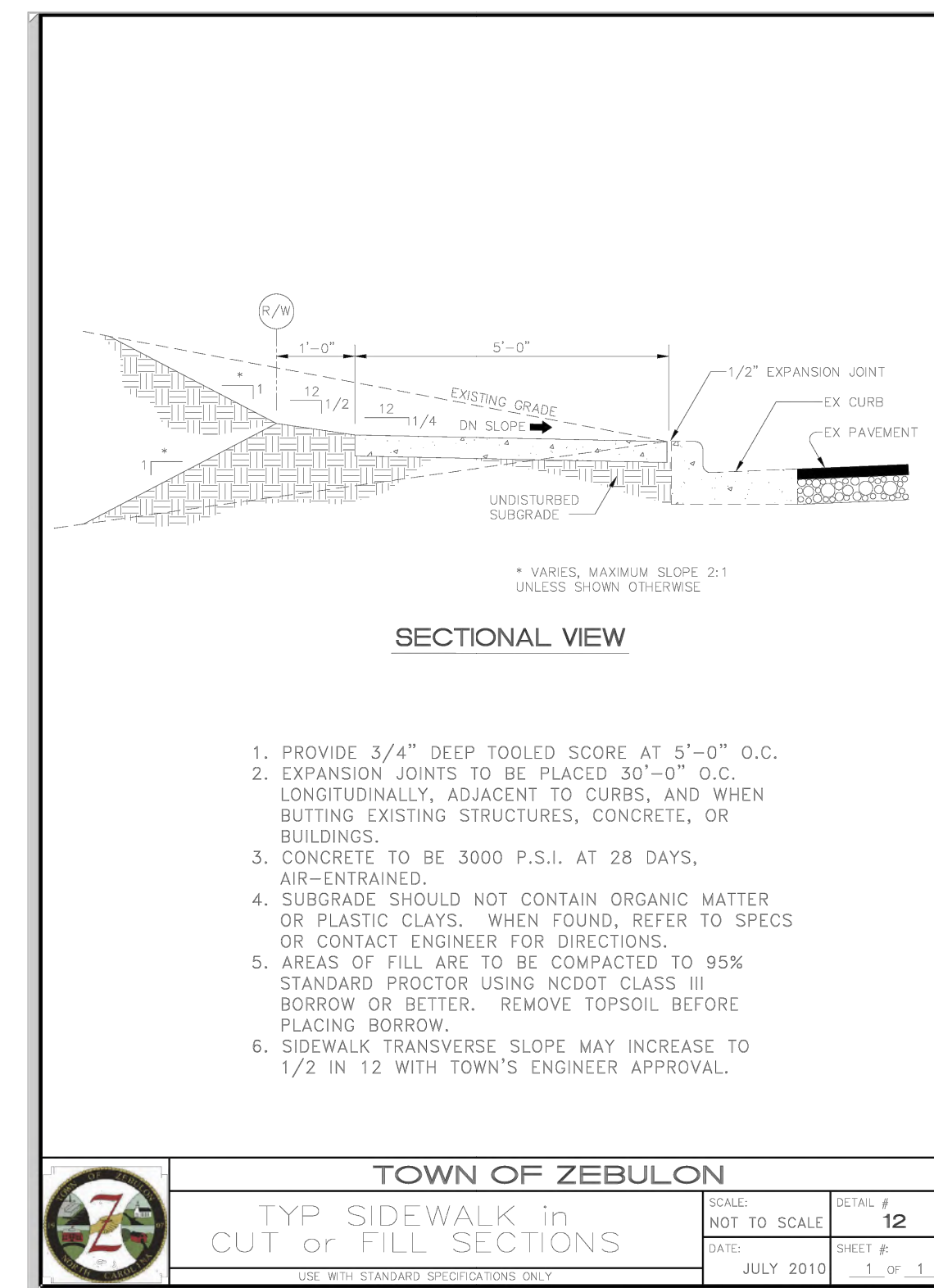
TOWN OF ZEBULON  
STREET CURB CUT FOR DRIVEWAYS ON C&G STREETS  
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SHEET # 8 OF 2



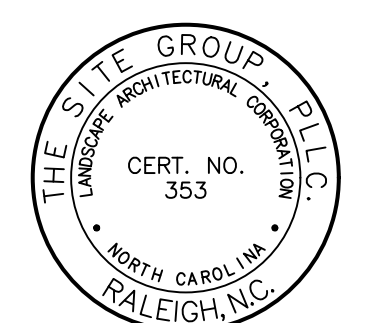
TOWN OF ZEBULON  
FLARED DRIVEWAY ENTRANCE TO VALLEY GUTTER  
SCALE: NOT TO SCALE  
DATE: JULY 2010  
SHEET # 9 OF 1



TOWN OF ZEBULON  
STD. SUBDRAIN BEHIND CURB & GUTTER  
SCALE: NOT TO SCALE  
DATE: JULY 2010  
SHEET # 11 OF 1



TOWN OF ZEBULON  
TYP. SIDEWALK in CUT or FILL SECTIONS  
SCALE: NOT TO SCALE  
DATE: JULY 2010  
SHEET # 12 OF 1



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: WRR  
Checked By: SRN

DATE:  
07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023

CONSTRUCTION DRAWING

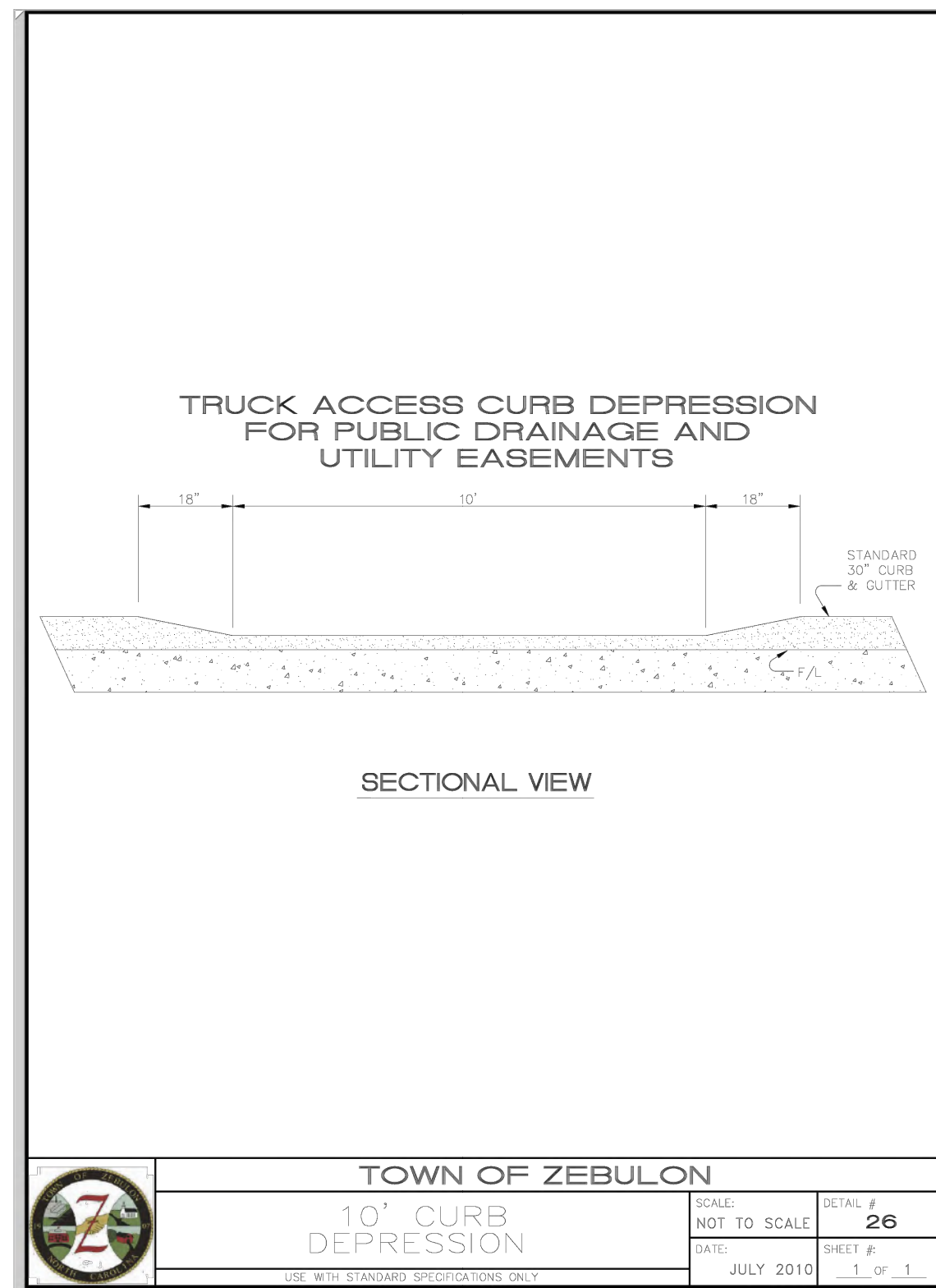
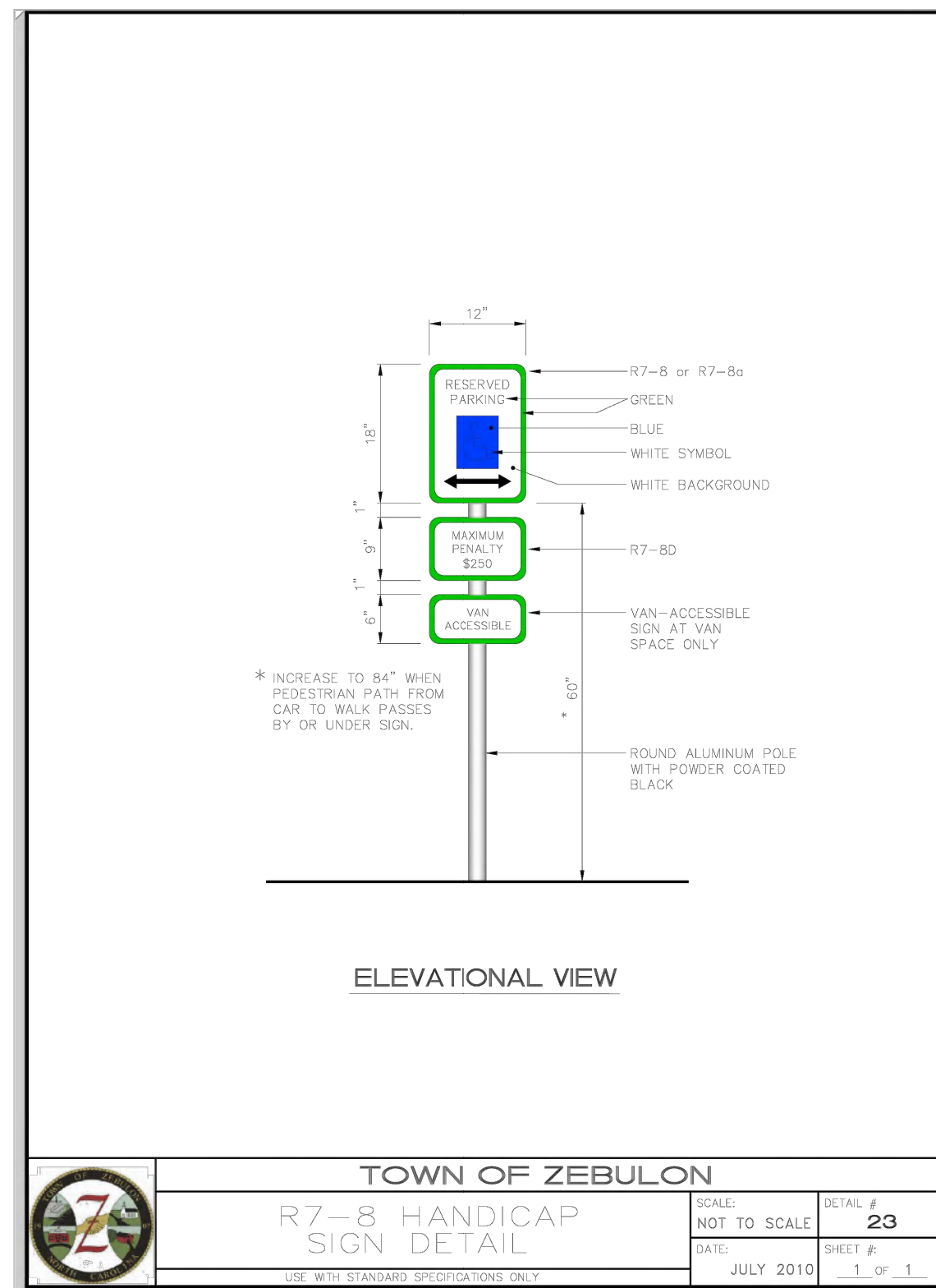
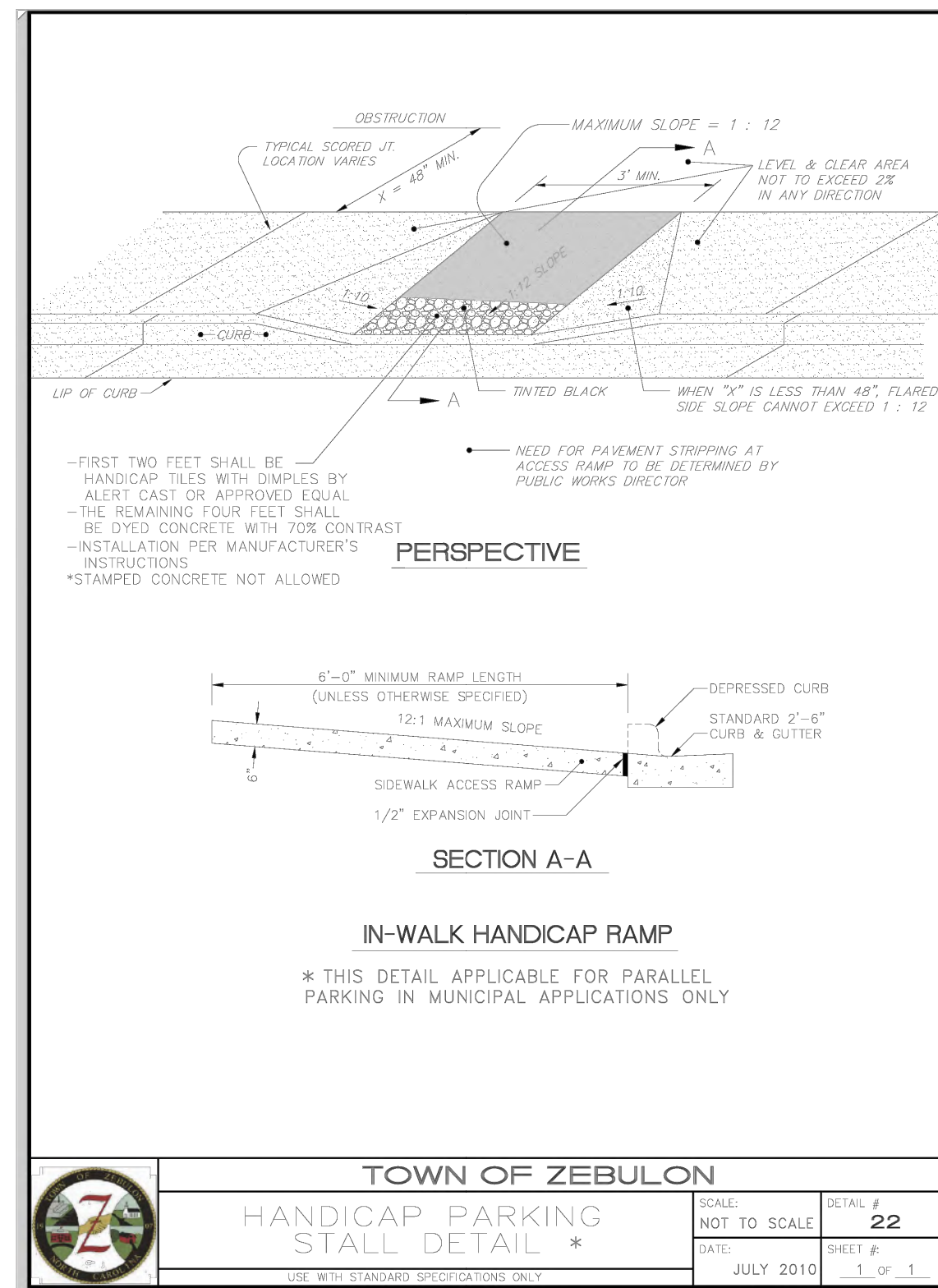
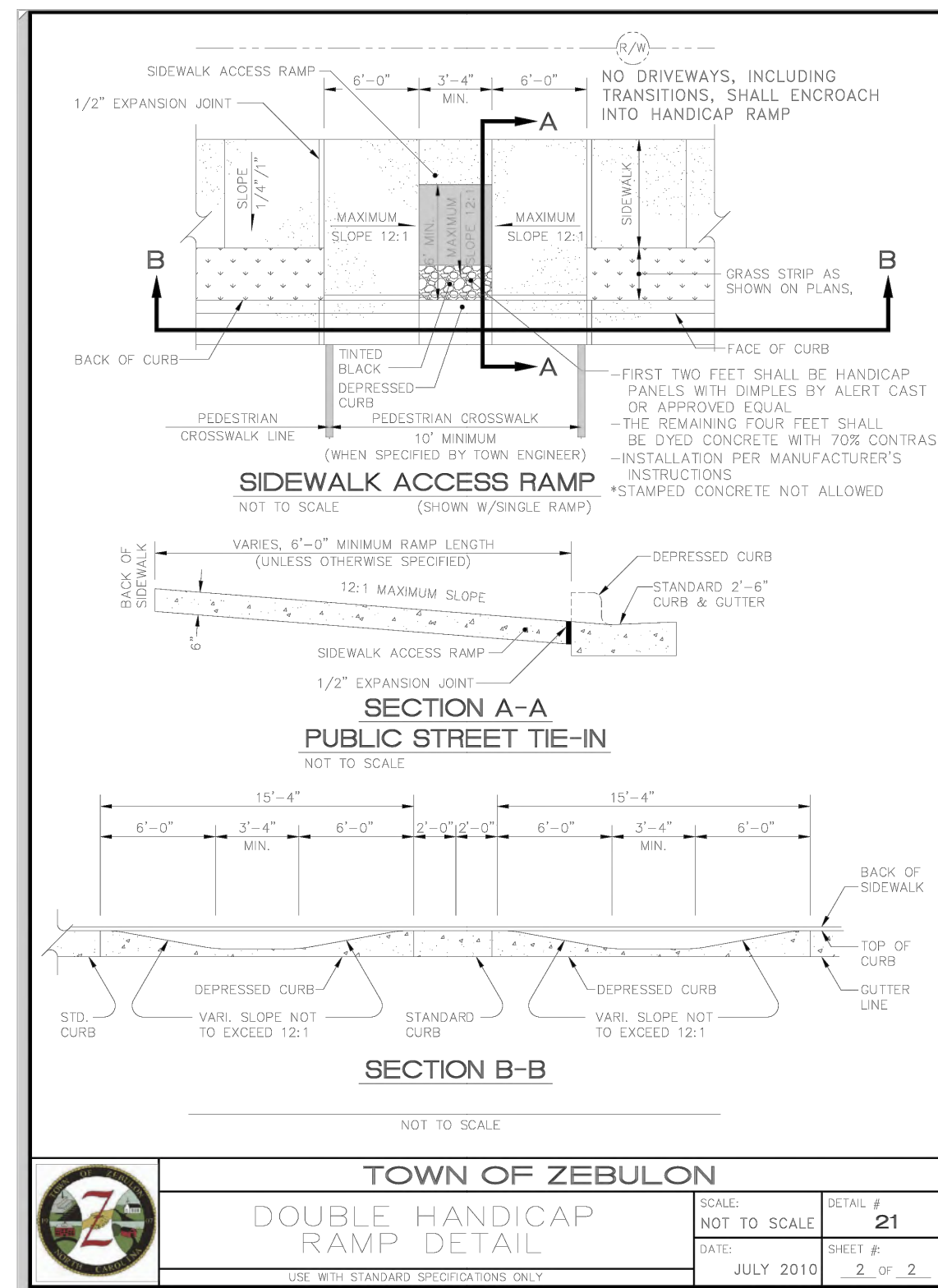
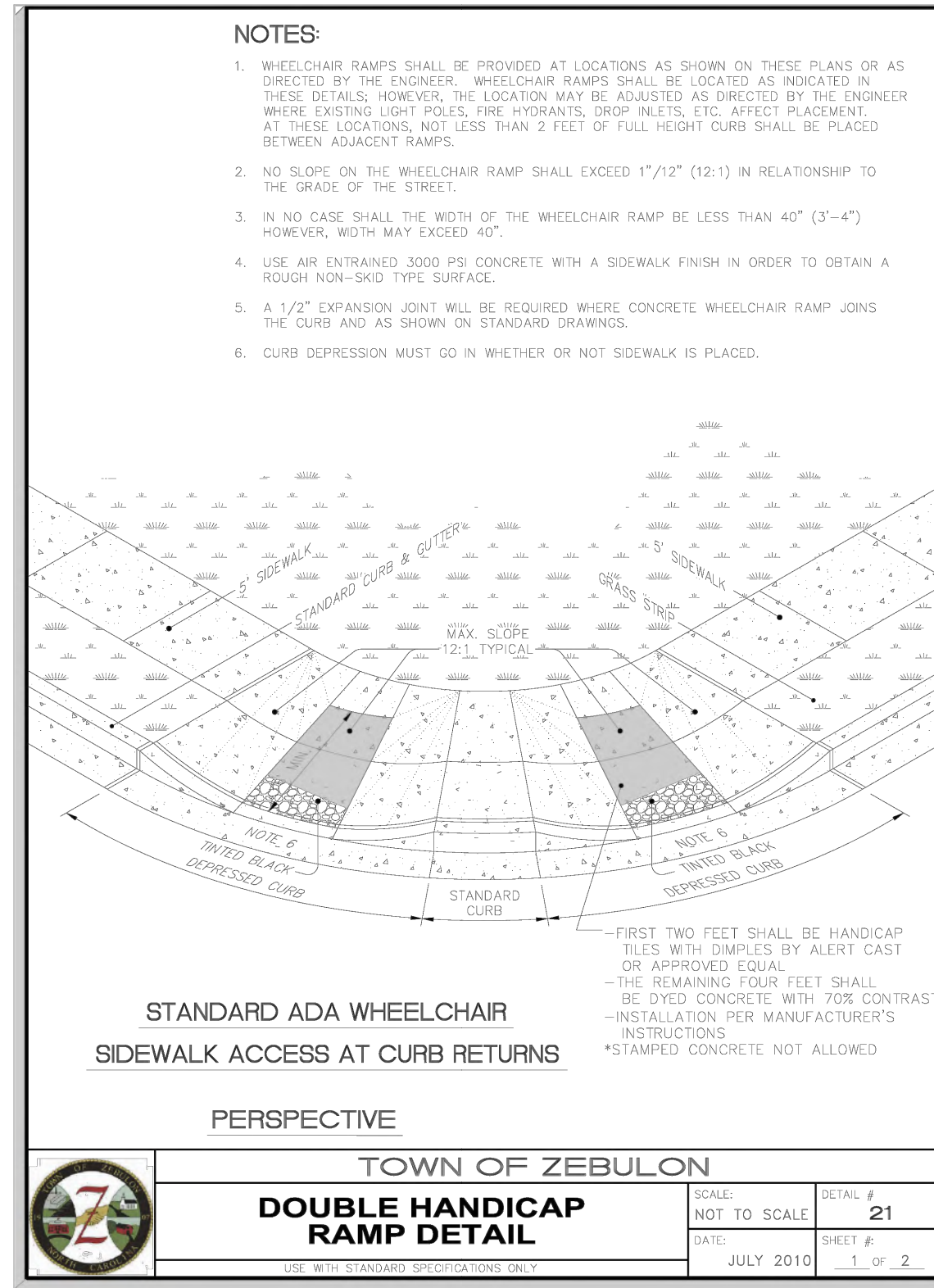
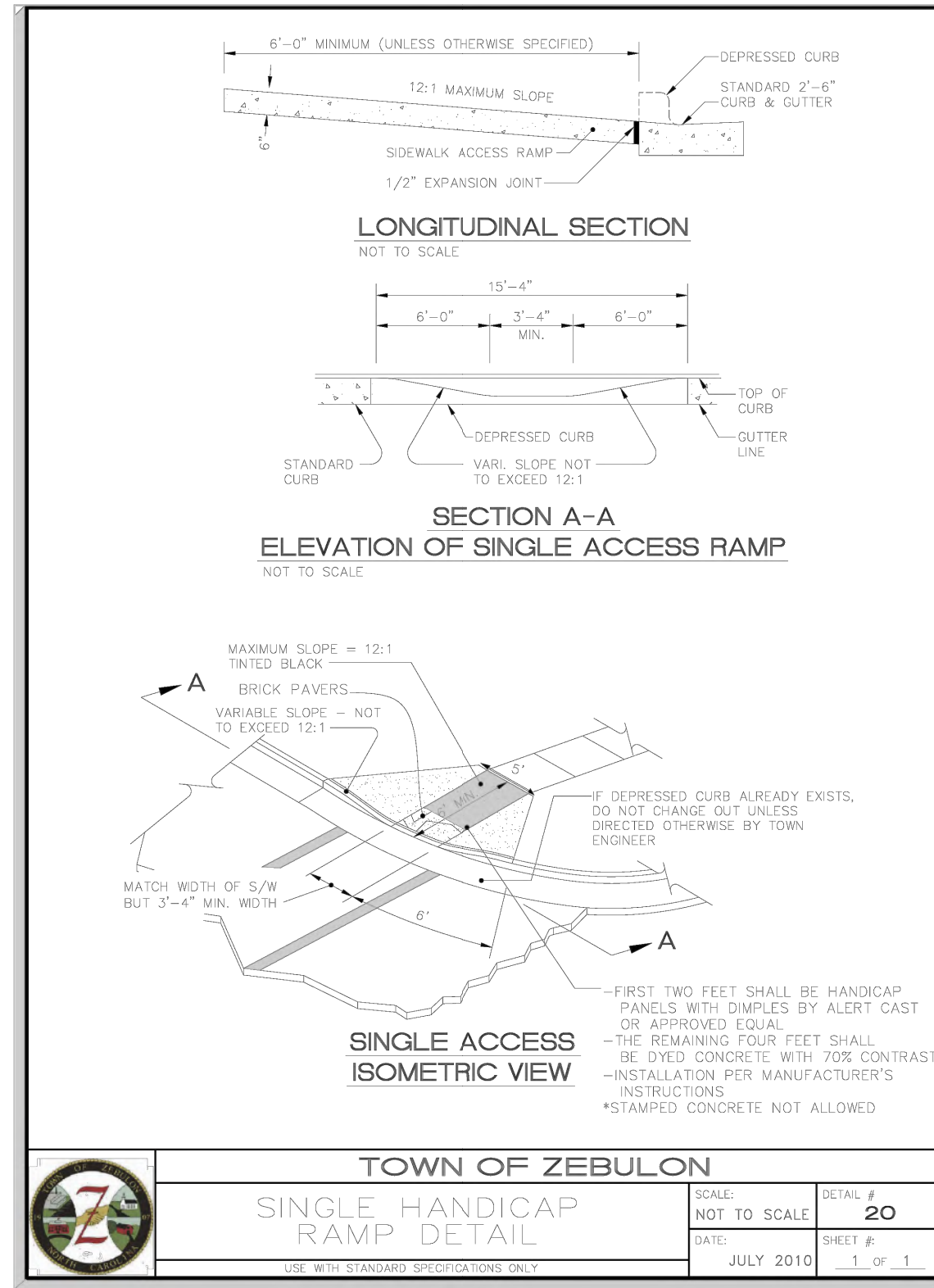
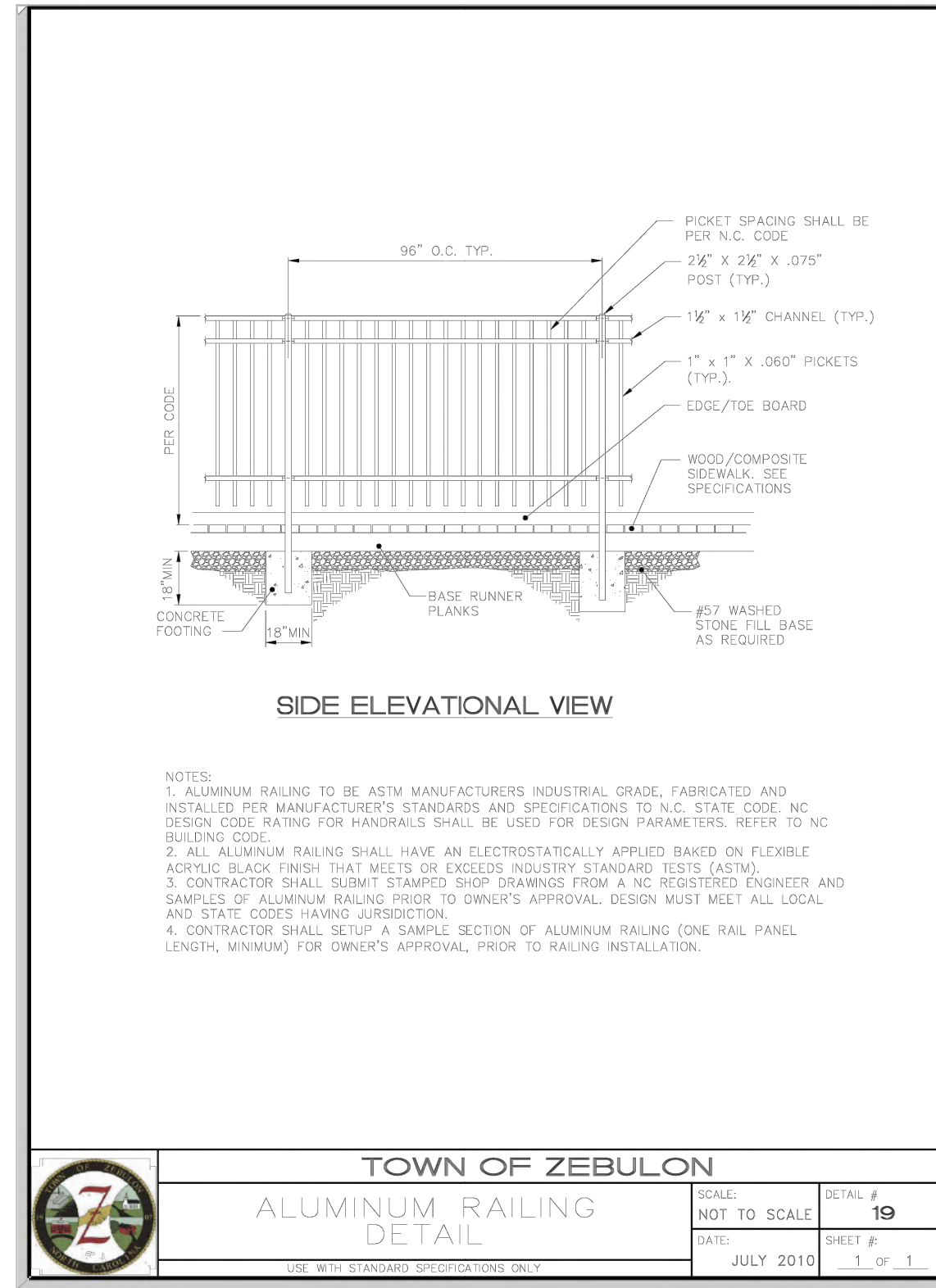
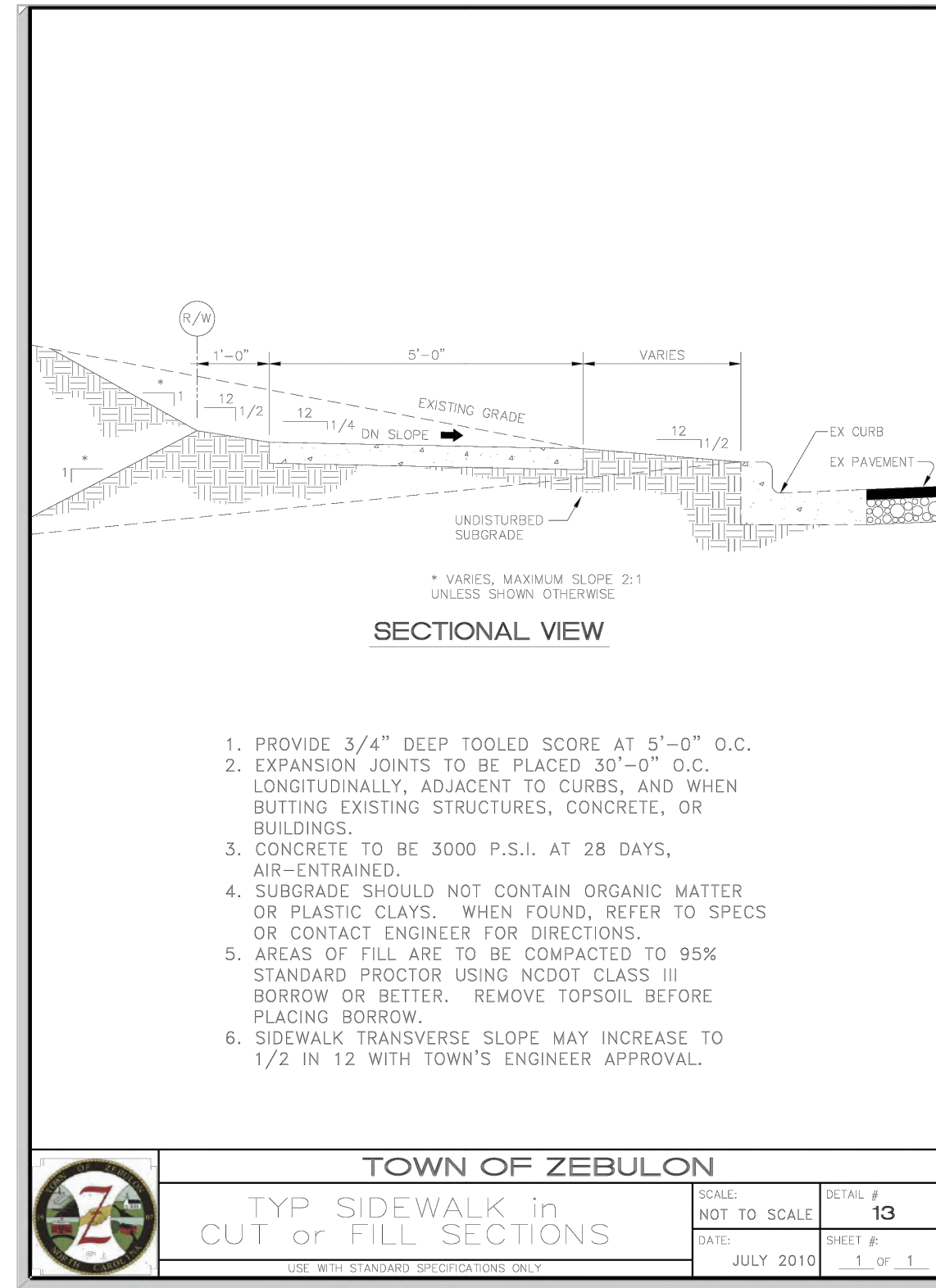
SITE DETAILS

Job Code: SCBSZ

Dwg No.  
**SITE 701**

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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE: 07 NOV 2022  
REVISED: 03 FEB 2023  
09 MAY 2023

CONSTRUCTION DRAWING

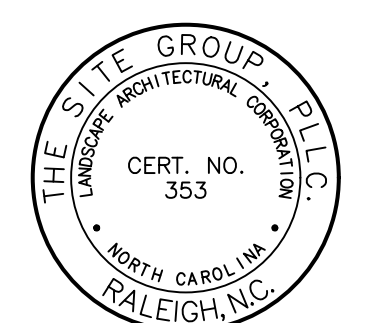
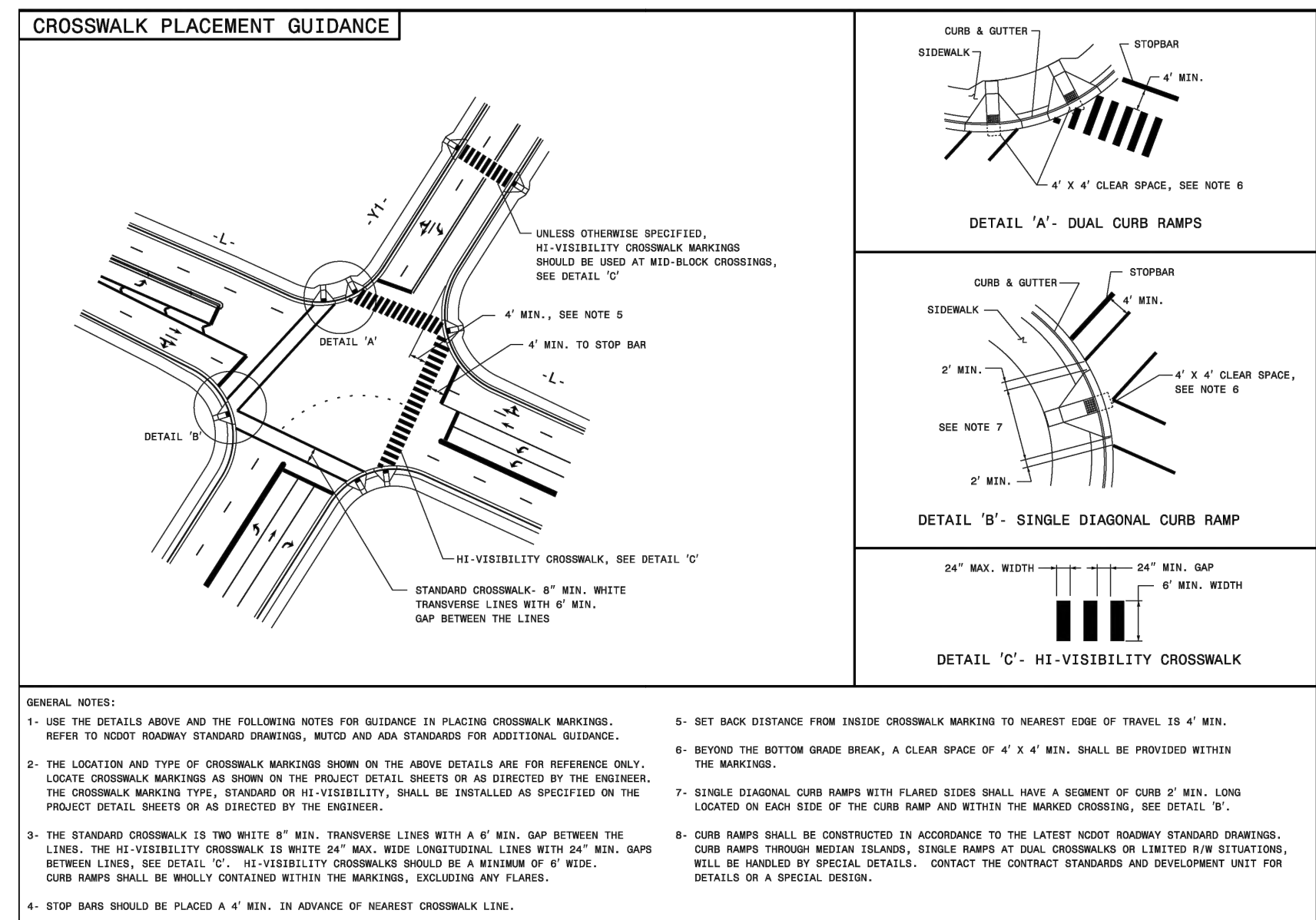
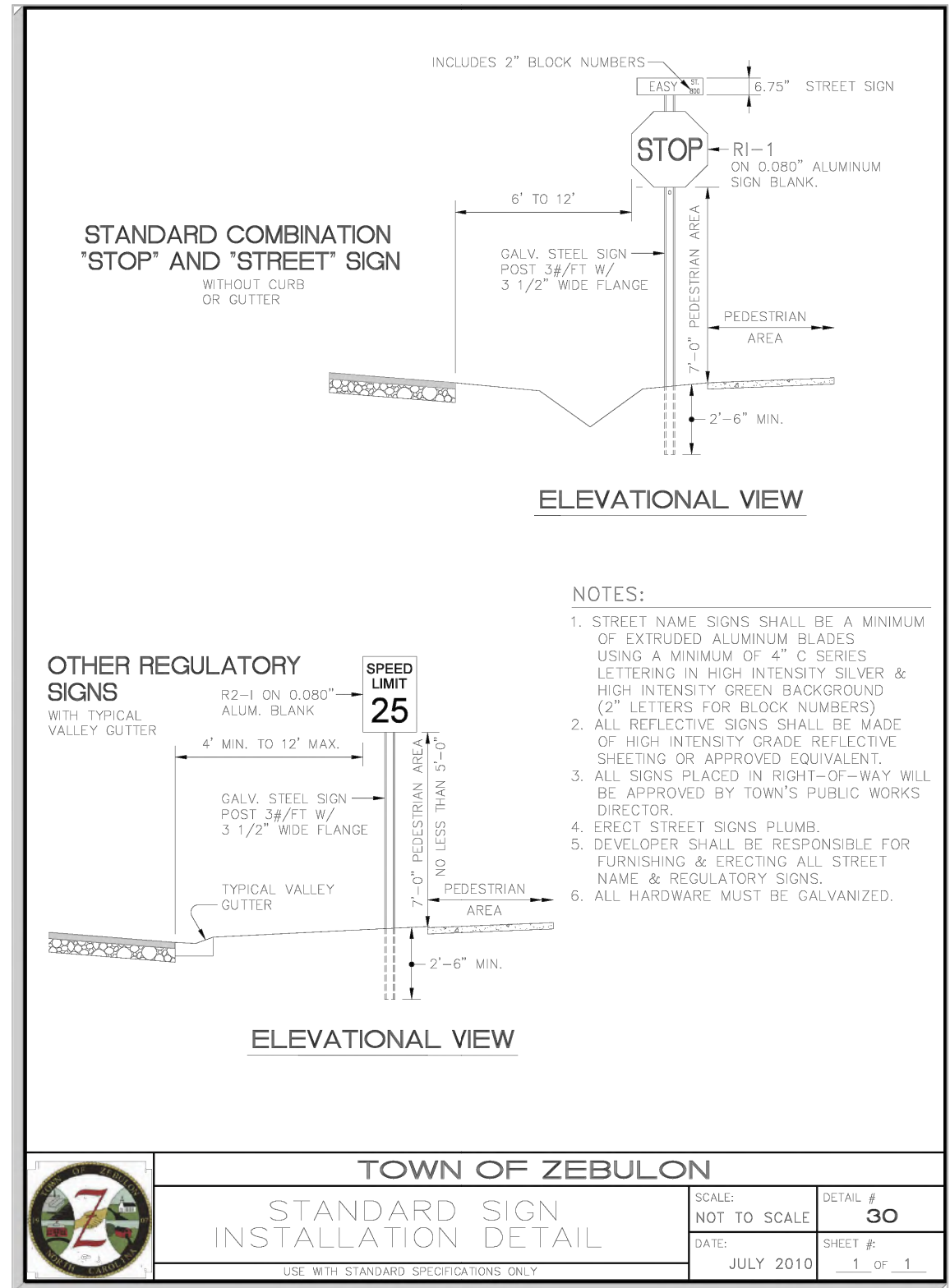
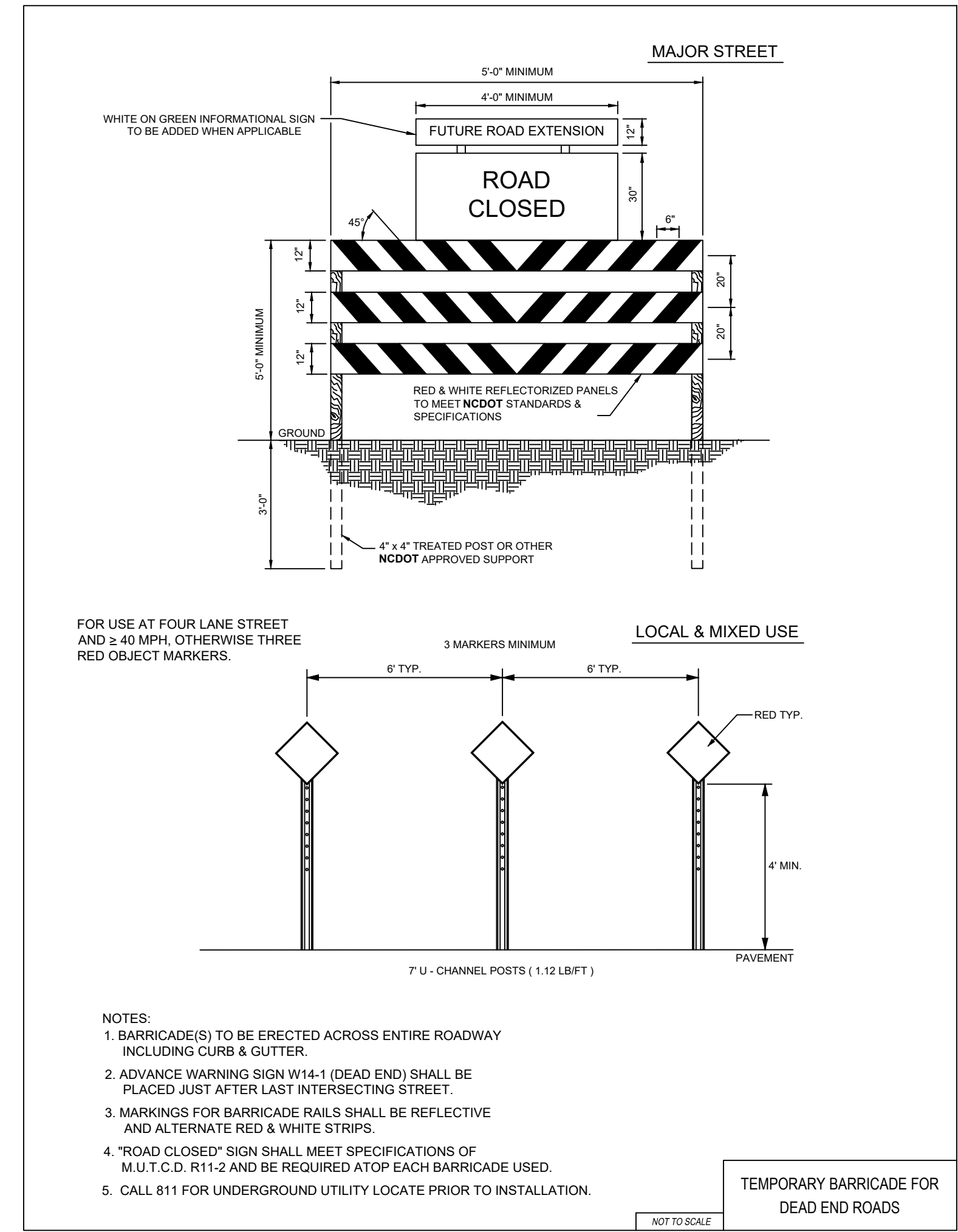
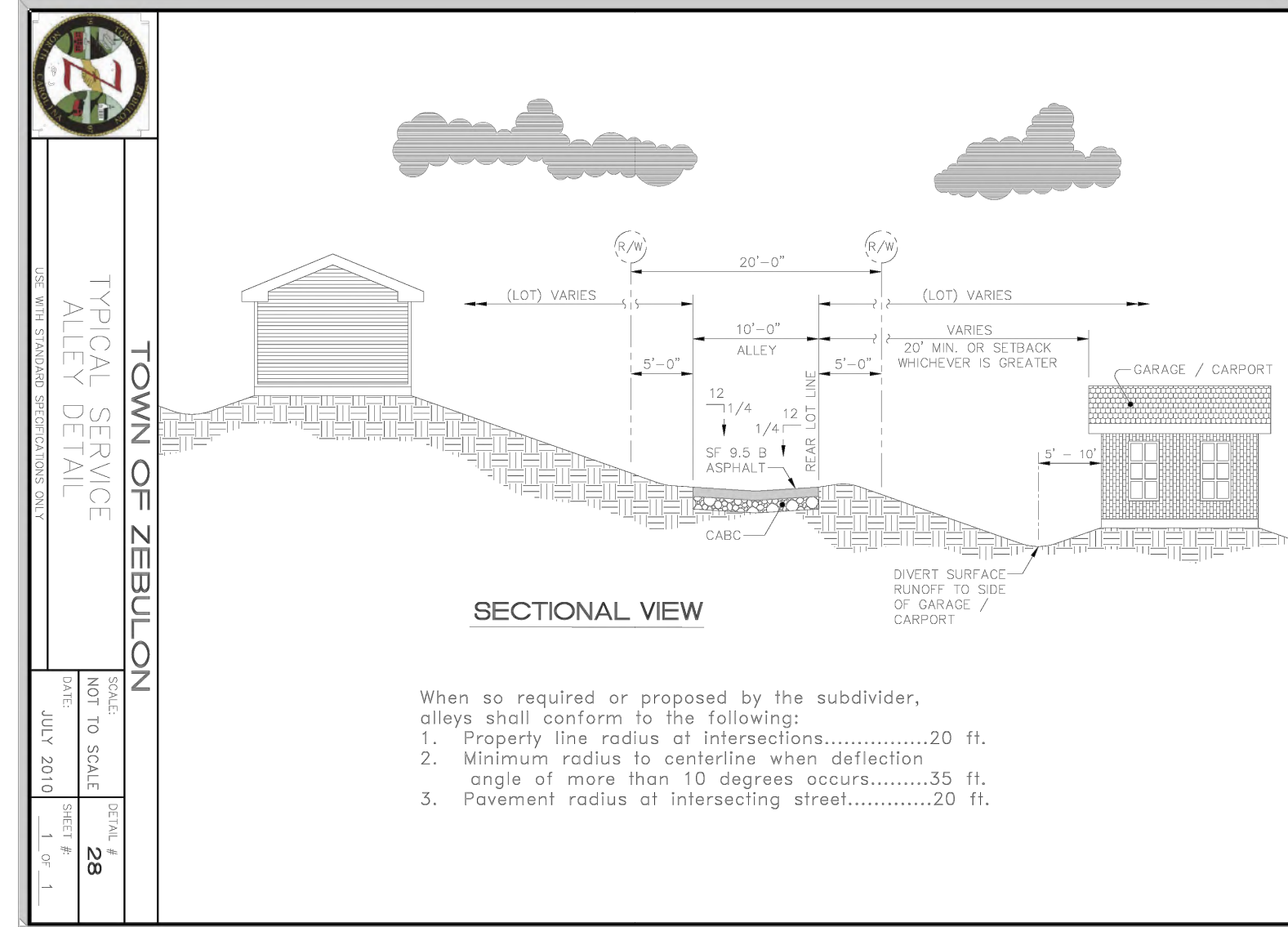
SITE DETAILS

Job Code: **SCBSZ**

Dwg No. **SITE 702**

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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE: 07 NOV 2022  
REVISED:  
03 FEB 2023  
09 MAY 2023

CONSTRUCTION DRAWING

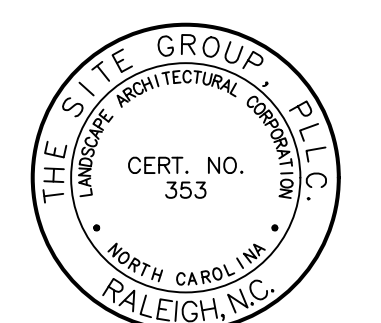
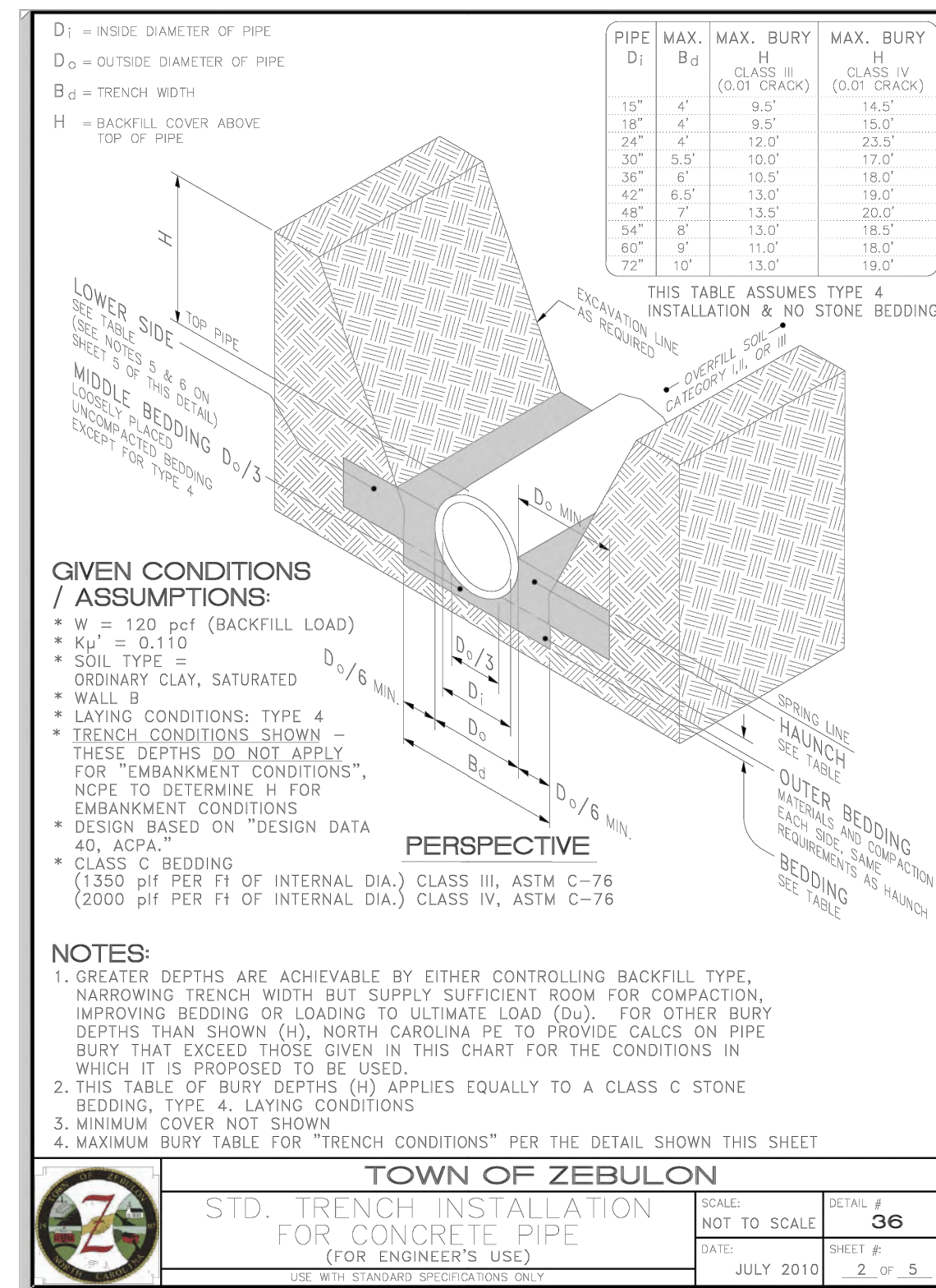
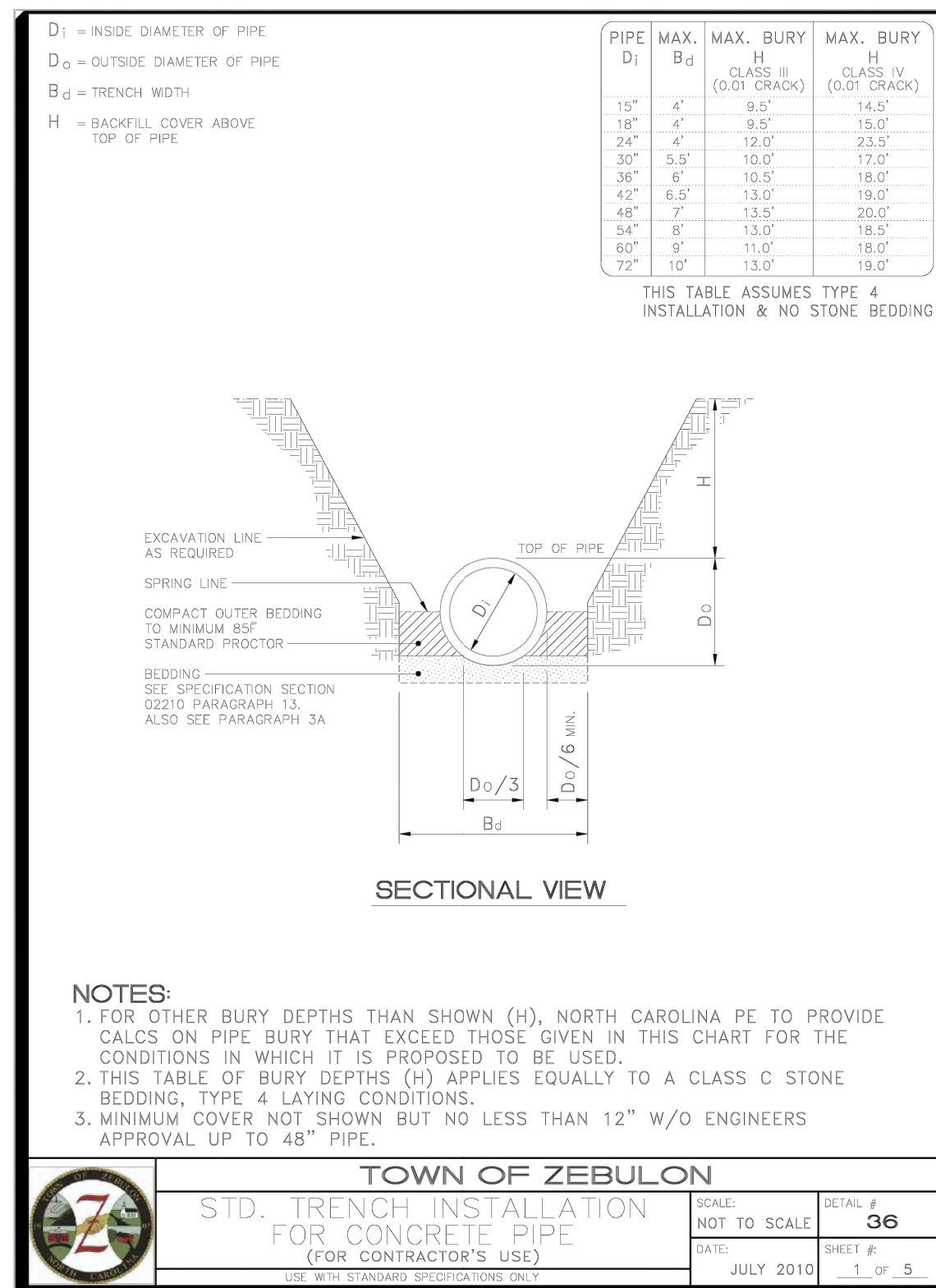
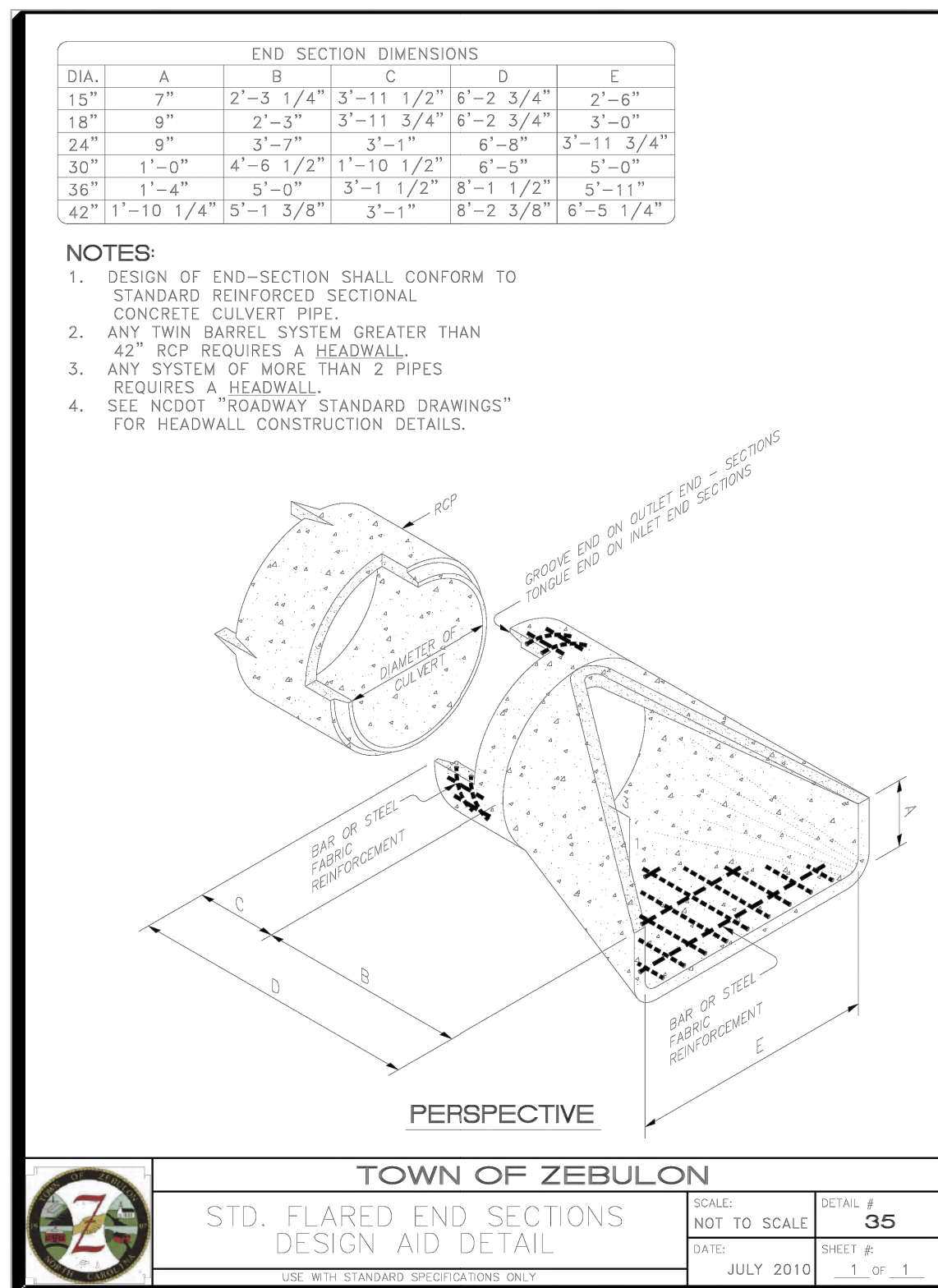
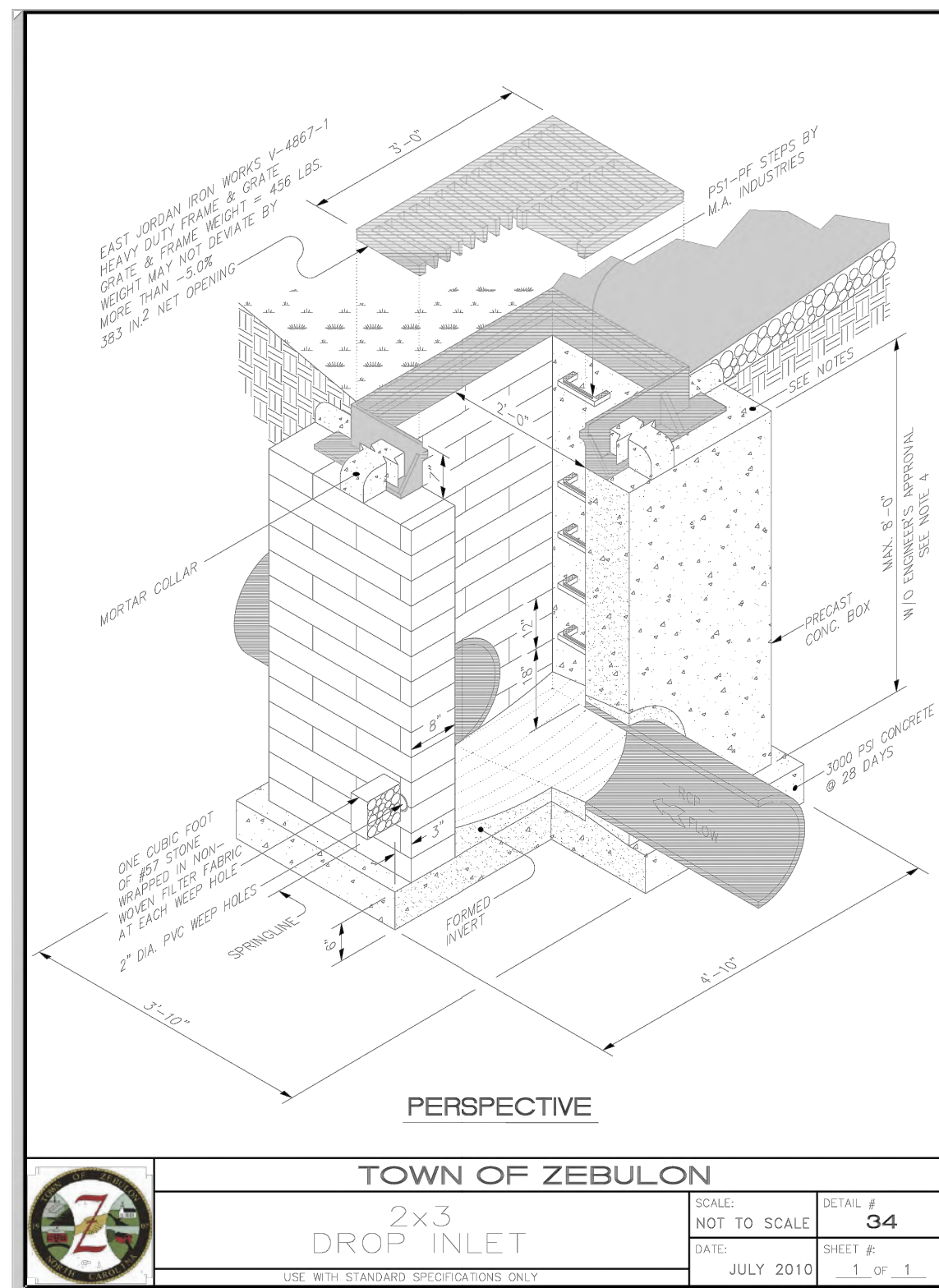
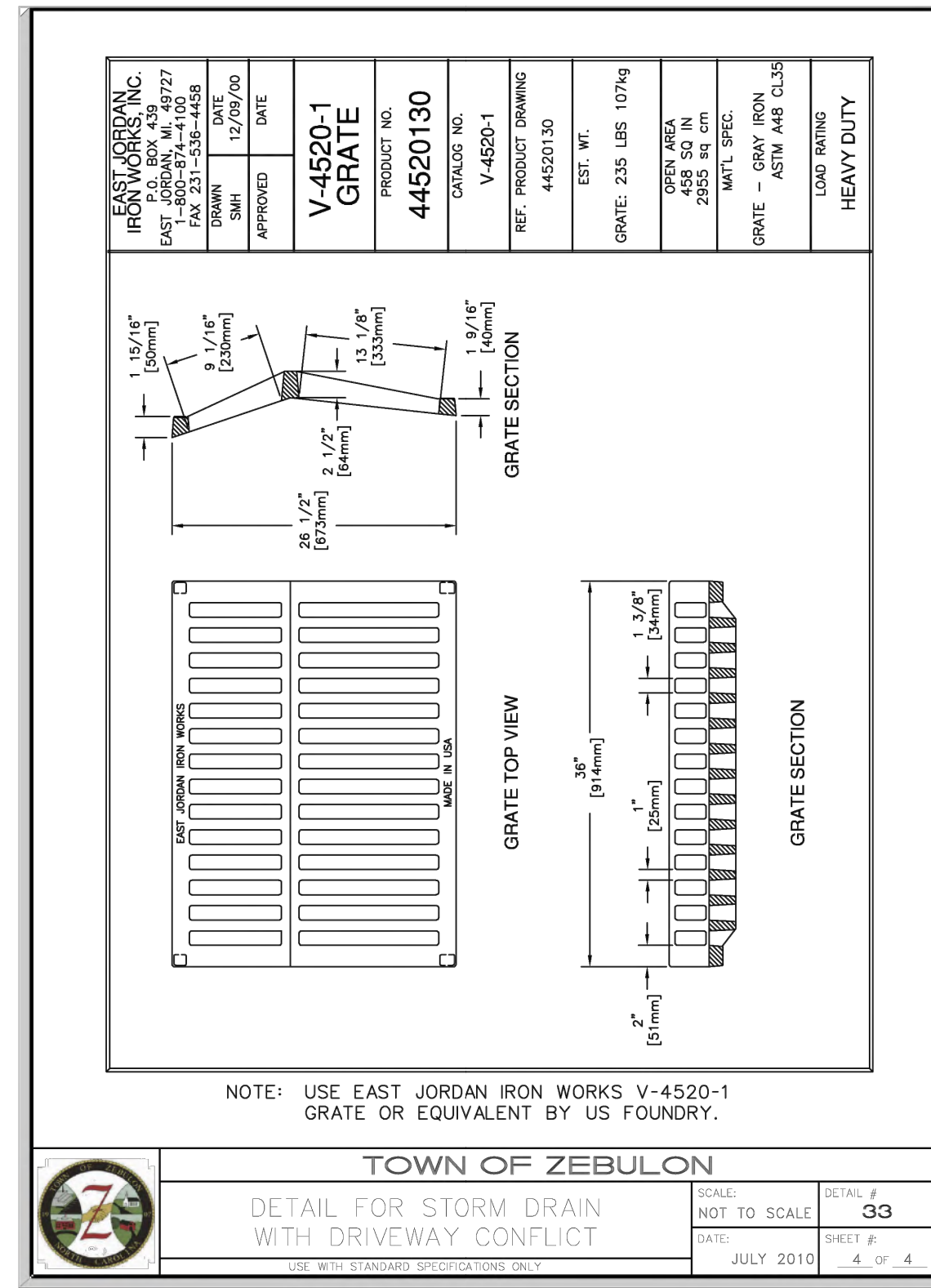
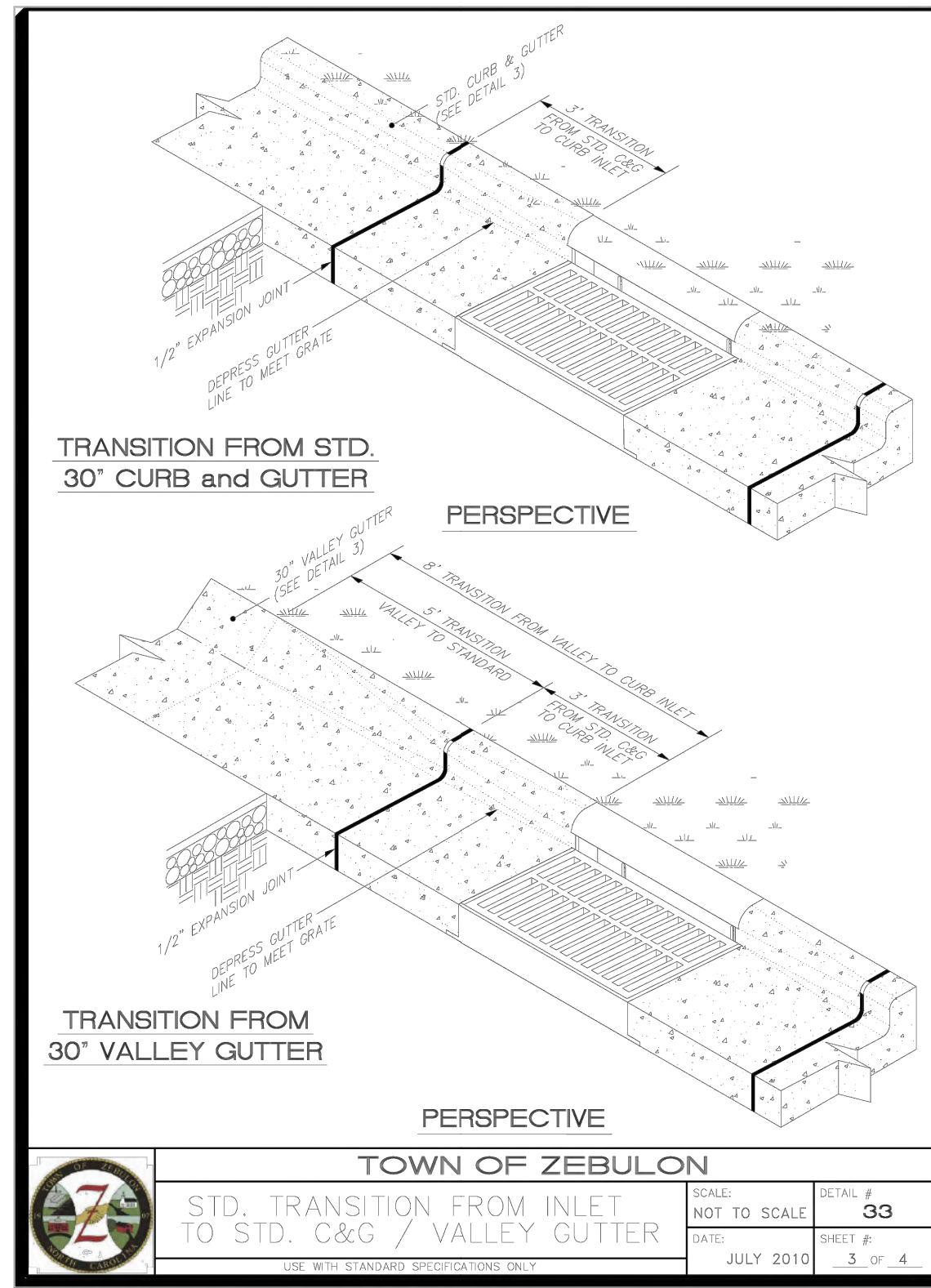
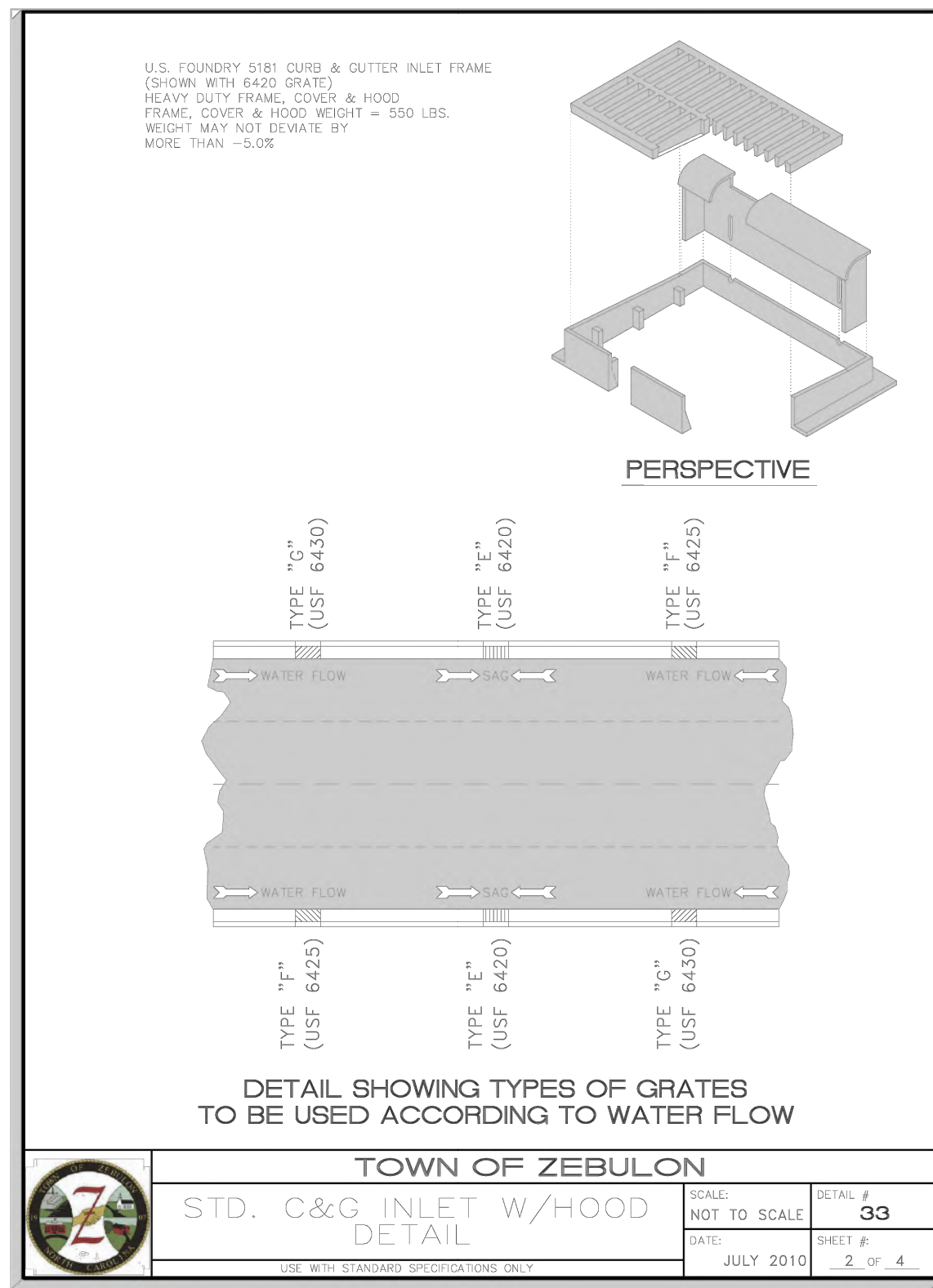
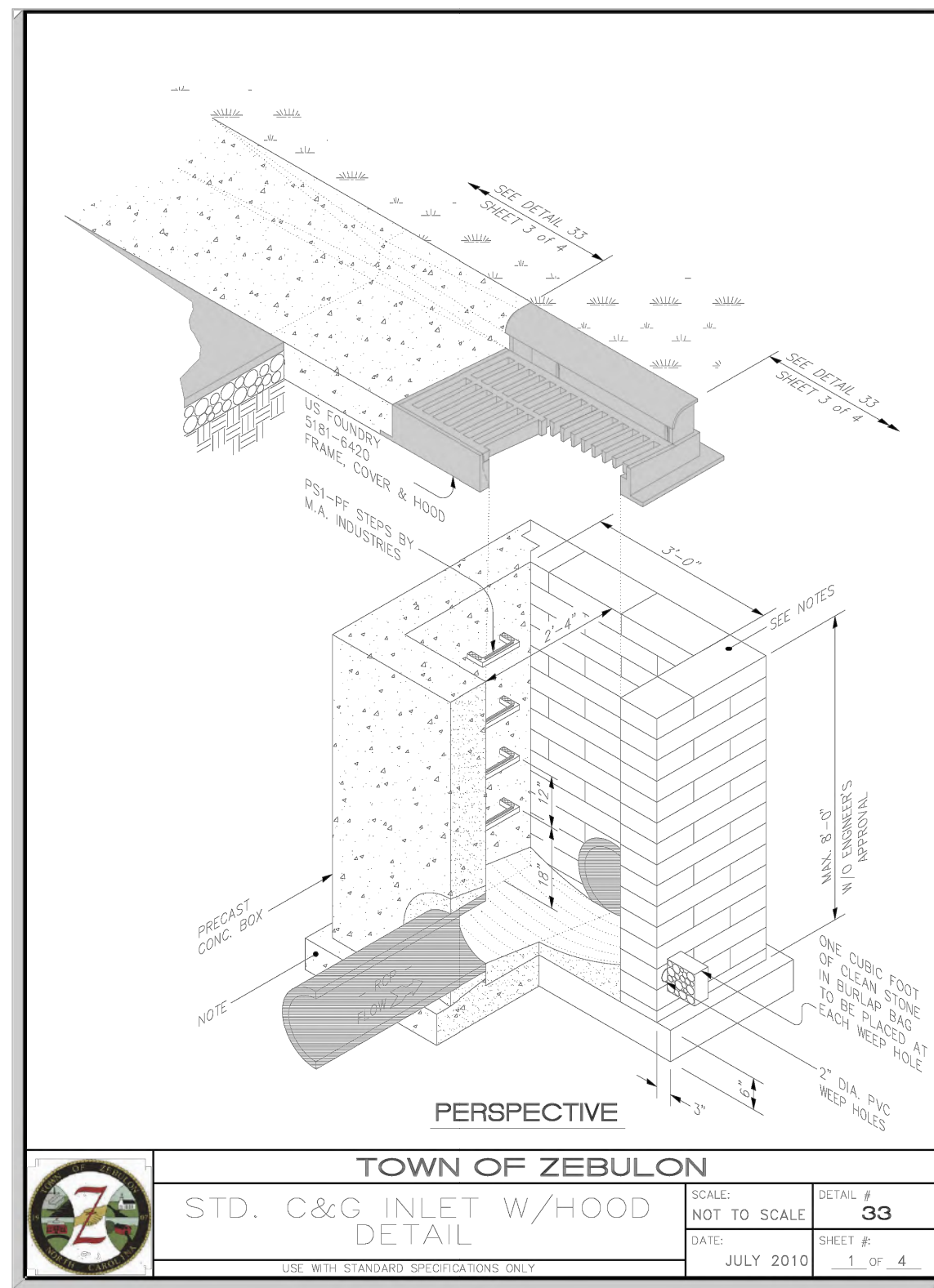
SITE DETAILS

Job Code: **SCBSZ**

Dwg No. **SITE 703**

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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE: 07 NOV 2022  
 REVISED: 09 MAY 2023

CONSTRUCTION DRAWING

SITE DETAILS

Job Code: **SCBSZ**

Dwg No. **704**

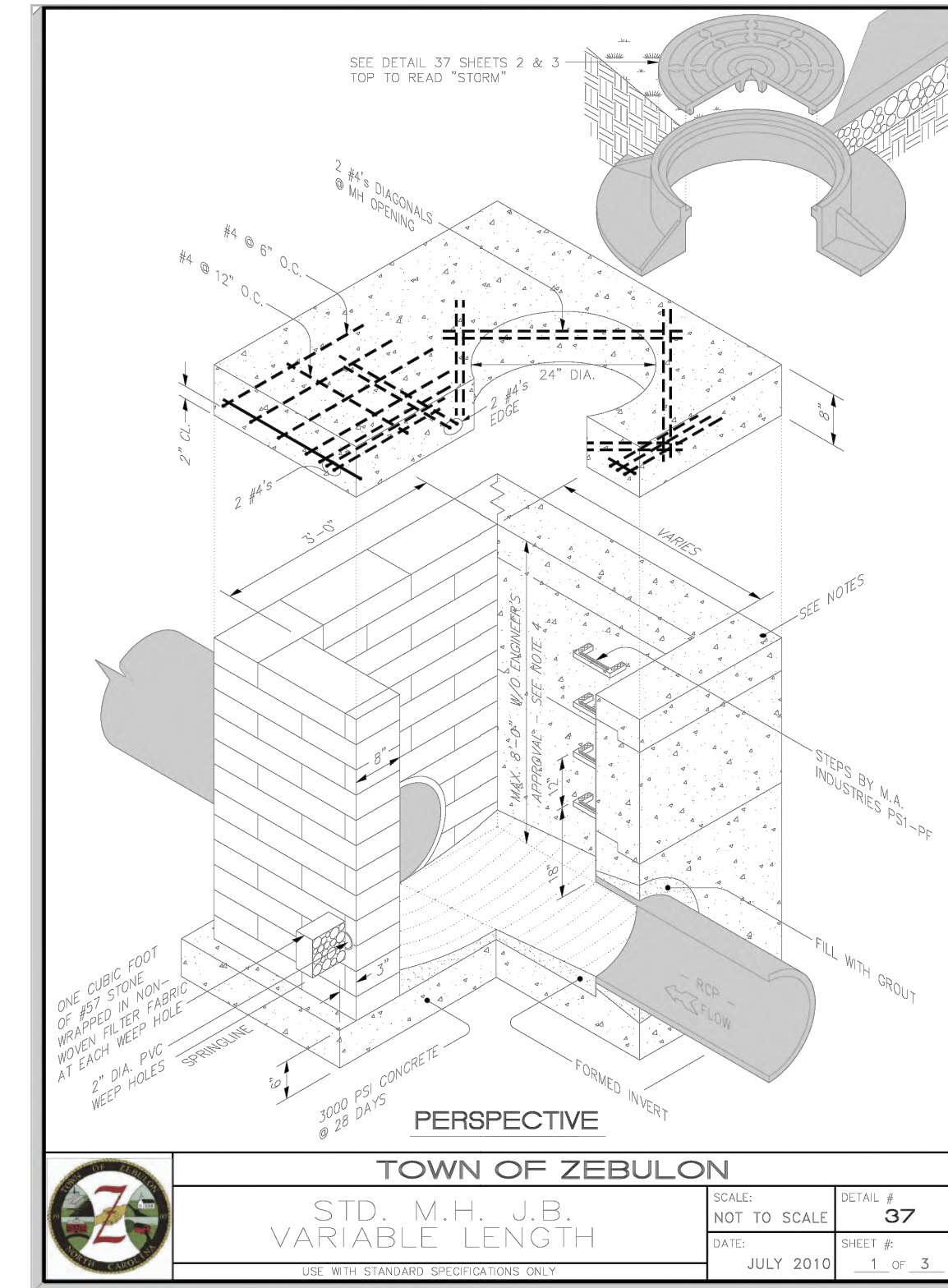
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SIDD Soil	Representative Soil Types		Percent Compaction	
	USCS	AASHTO	Standard Proctor	Modified Proctor
Gravelly Sand (Category I)	SW, SP, GW, GP	A1-A3	100	95
			95	90
			90	85
			85	80
Sandy Silt (Category II)	OM, SM, ML, AL, CL, OL, CL, ML, AL, CL, OL with less than 20% passing #200 sieve	A2-A4	100	95
			95	90
			90	85
			85	80
Silty Clay (Category III)	CL, MH, DC, SC	A5, A6	100	90
			95	85
			90	80
			85	75
OH			100	90
			95	85
			90	80
			85	75

Installation Type <sup>1</sup>	Bedding Thickness	Haunch and Outer Bedding	Lower Side
Type 1	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	98% Category I	90% Category I, 95% Category II, or 100% Category III
Type 2	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	90% Category I or 95% Category II	85% Category I, 90% Category II, or 95% Category III
Type 3	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	90% Category I, 90% Category II, or 95% Category III	80% Category I, 90% Category II, or 95% Category III
Type 4	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	No compaction required, except if Category III, use 85% Category III	No compaction required, except if Category III, use 85% Category III

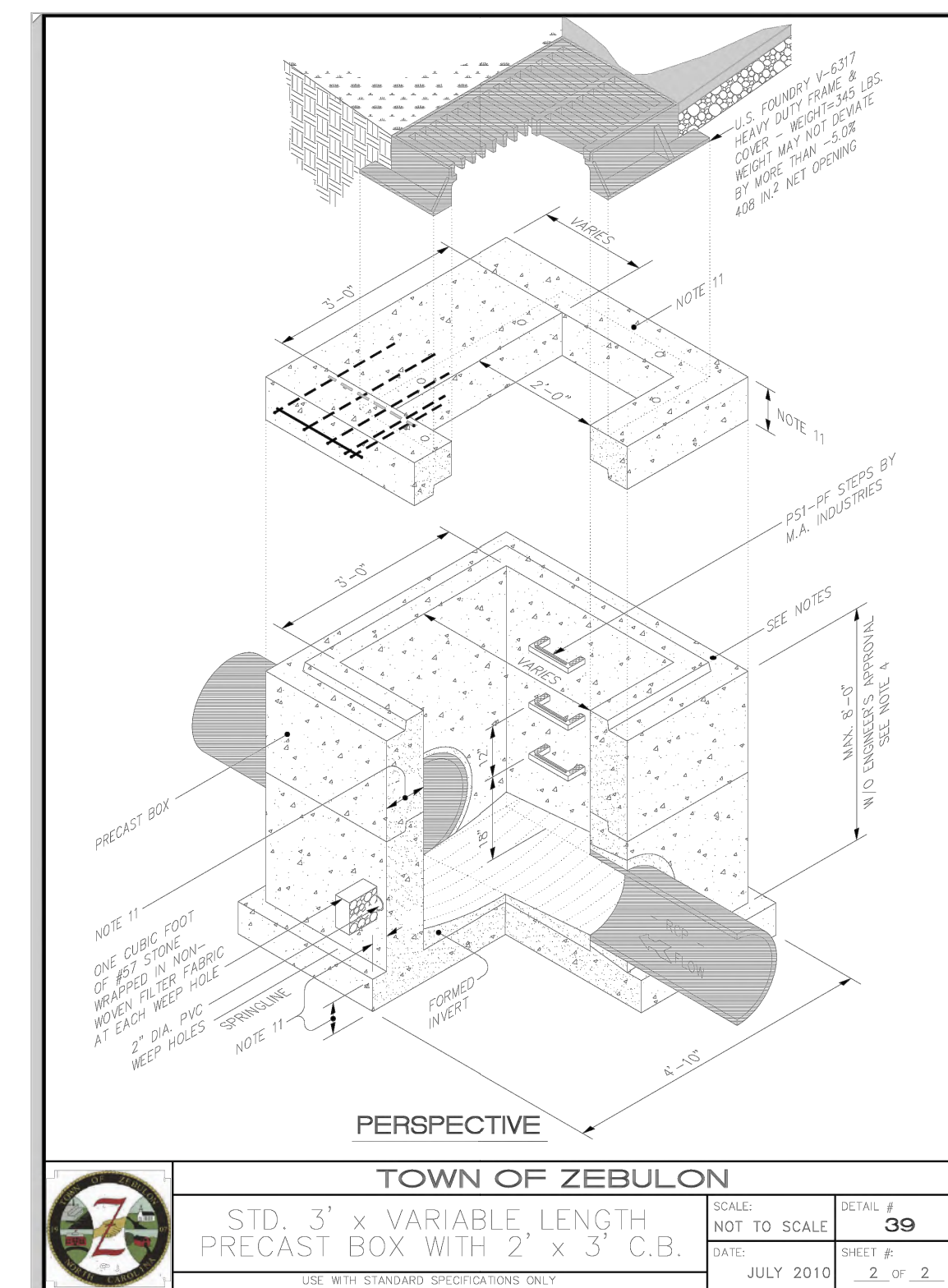
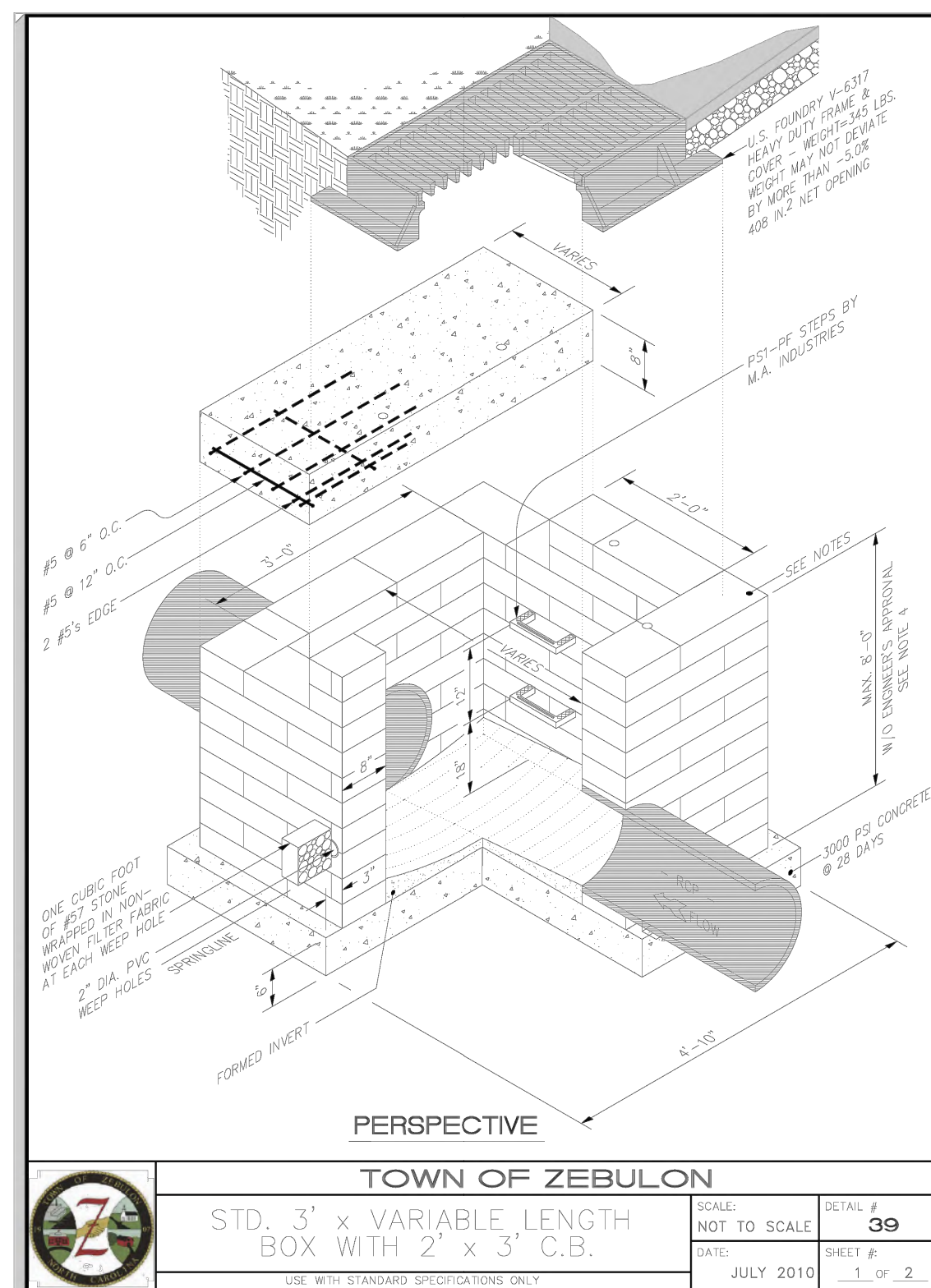
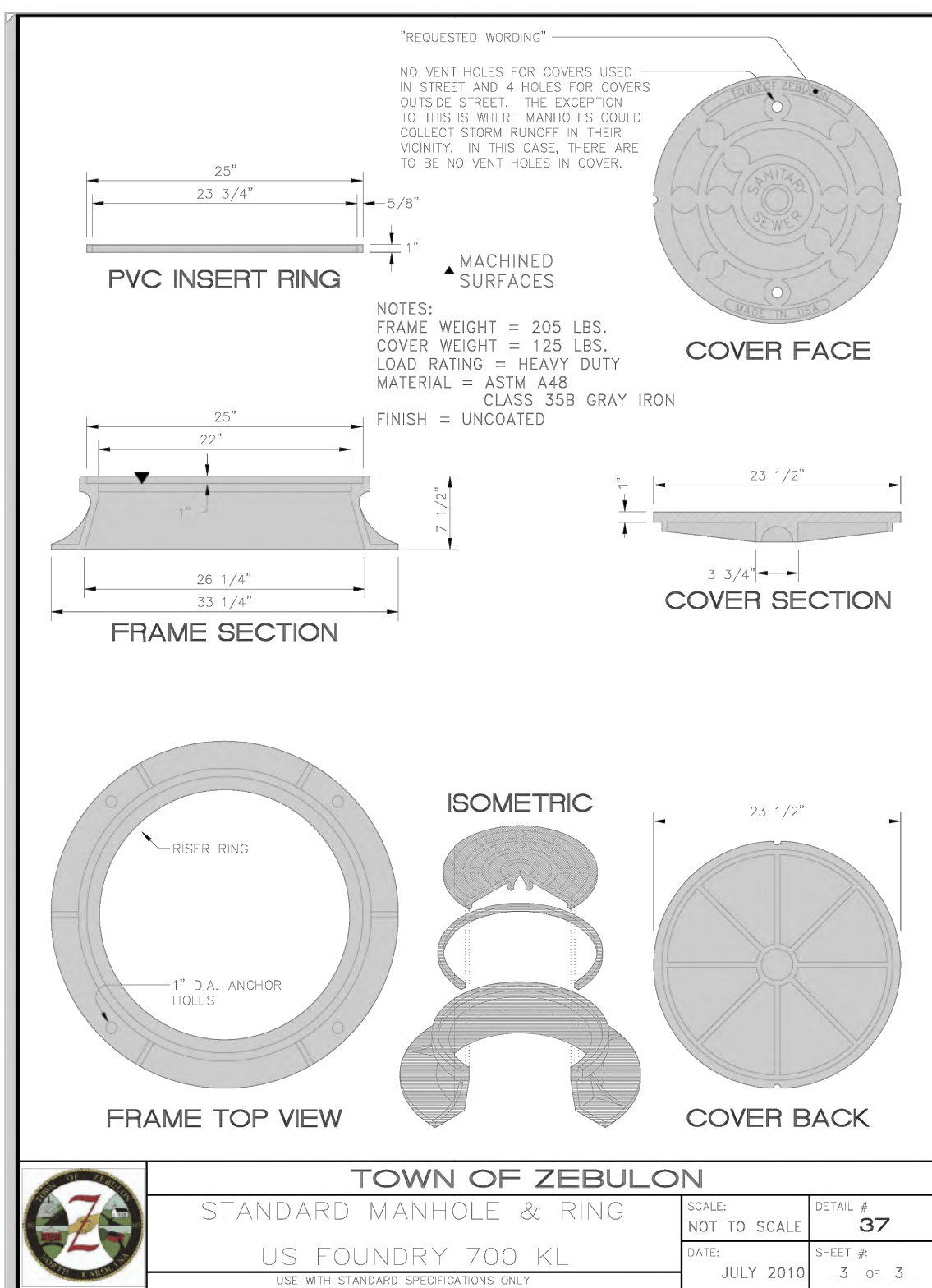
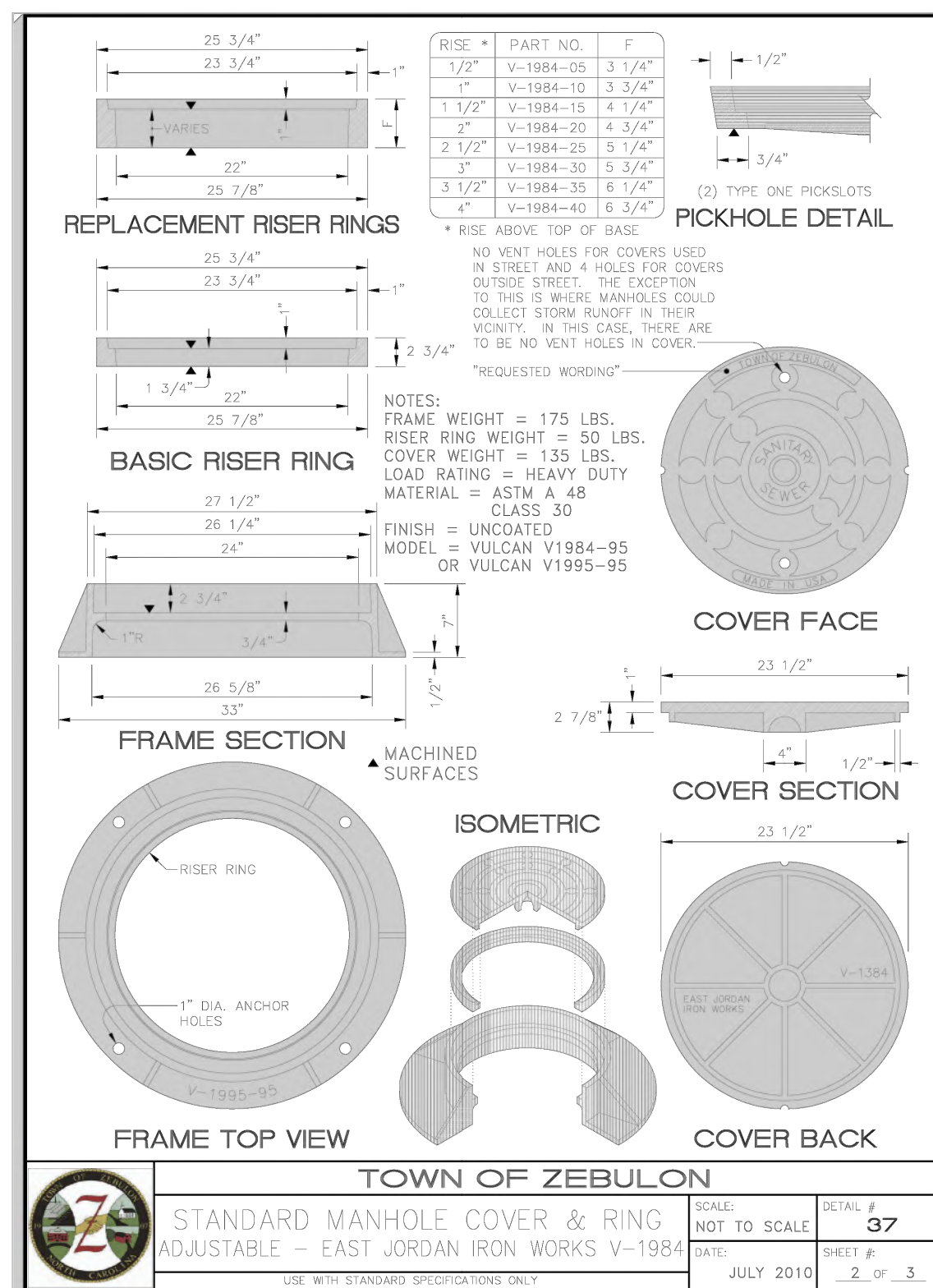
Installation Type <sup>1</sup>	Bedding Thickness	Haunch Outer Bedding	Lower Side
Type 1	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	98% Category I	90% Category I, 95% Category II, or 100% Category III
Type 2	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	90% Category I or 95% Category II	85% Category I, 90% Category II, or 95% Category III
Type 3	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	85% Category I, 90% Category II, or 95% Category III	80% Category I, 90% Category II, or 95% Category III
Type 4	D <sub>15</sub> /24 minimum, not less than 75 mm (3") If rock foundation, use D <sub>15</sub> /12 minimum, not less than 150 mm (6")	No compaction required, except if Category II, use 85% Category II	No compaction required, except if Category III, use 85% Category III



- Notes:**
1. Compaction and soils symbols - i.e. "98% Category I" refers to Category I soil materials with minimum standard Proctor compaction of 98%. See Table 1 for equivalent modified Proctor values.
  2. The trench top elevation shall be no lower than 0.1 H below finished grade or, for roadways, its top shall be no lower than on elevation of 0.3 m (1') below the bottom of the pavement base material.
  3. Soil in bedding and haunch zones shall be compacted to at least the same compaction as specified for the majority of soil in the backfill zone.
  4. The trench width shall be wider than shown if required for adequate space to attain the specified compaction in the haunch and bedding zone.
  5. For trench walls that are within 10 degrees of vertical, the compaction or firmness of the soil in the trench walls and lower side zone need not be considered.
  6. For trench walls with greater than 10 degrees slopes that consist of embankment, the lower side shall be compacted to at least the same compaction as specified for the soil in the backfill zone.
  7. Type 1 installation = relatively high quality material & high compaction effort.  
Type 4 installation = little or no control over material and compaction.



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE: 07 NOV 2022  
REVISED: 09 MAY 2023

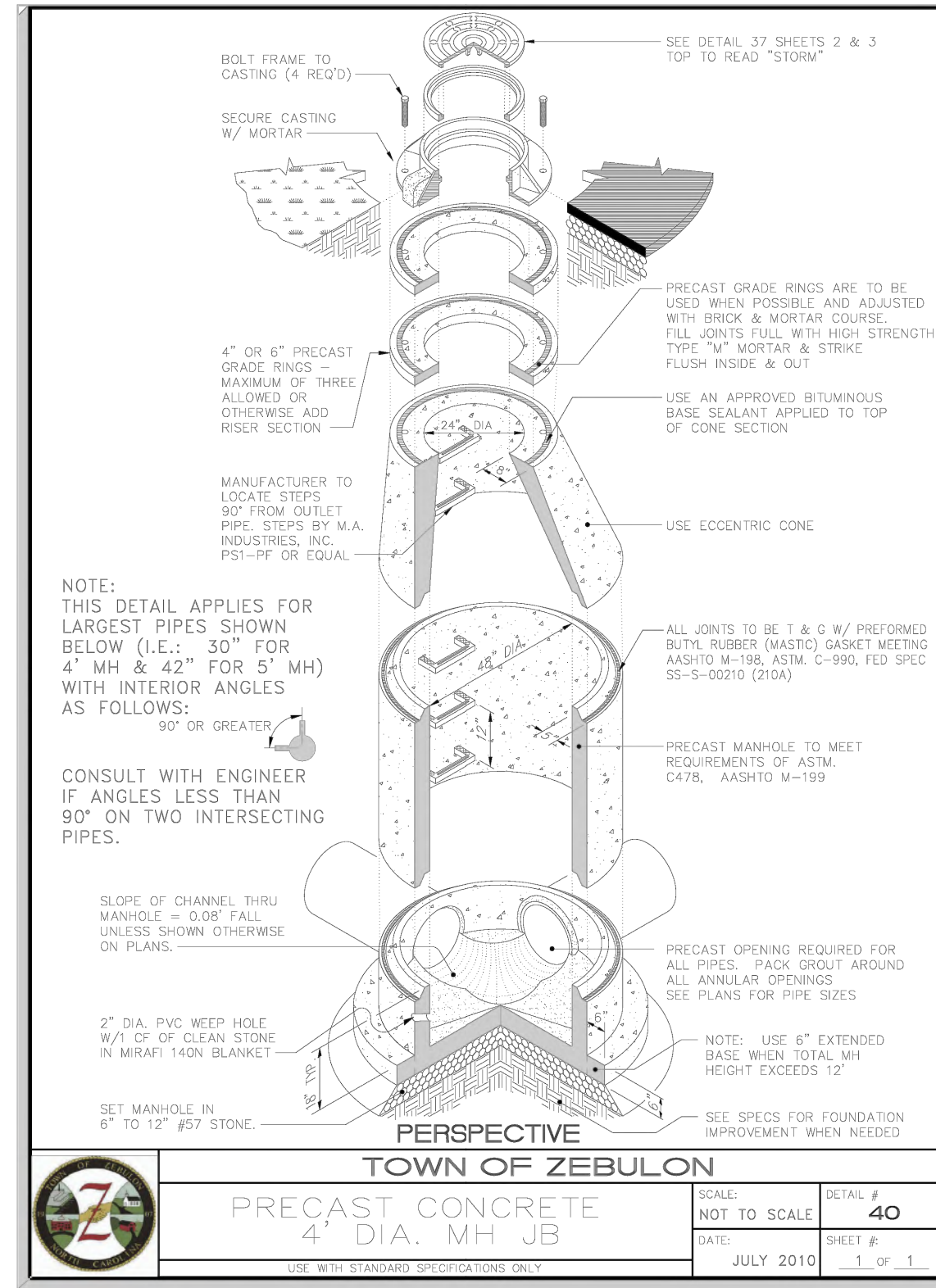
CONSTRUCTION DRAWING

SITE DETAILS

Job Code: **SCBSZ**

Dwg No. **SITE 705**





NOTE:  
THIS DETAIL APPLIES FOR LARGEST PIPES SHOWN BELOW (I.E.: 30" FOR 4' MH & 42" FOR 5' MH) WITH INTERIOR ANGLES AS FOLLOWS:  
90° OR GREATER

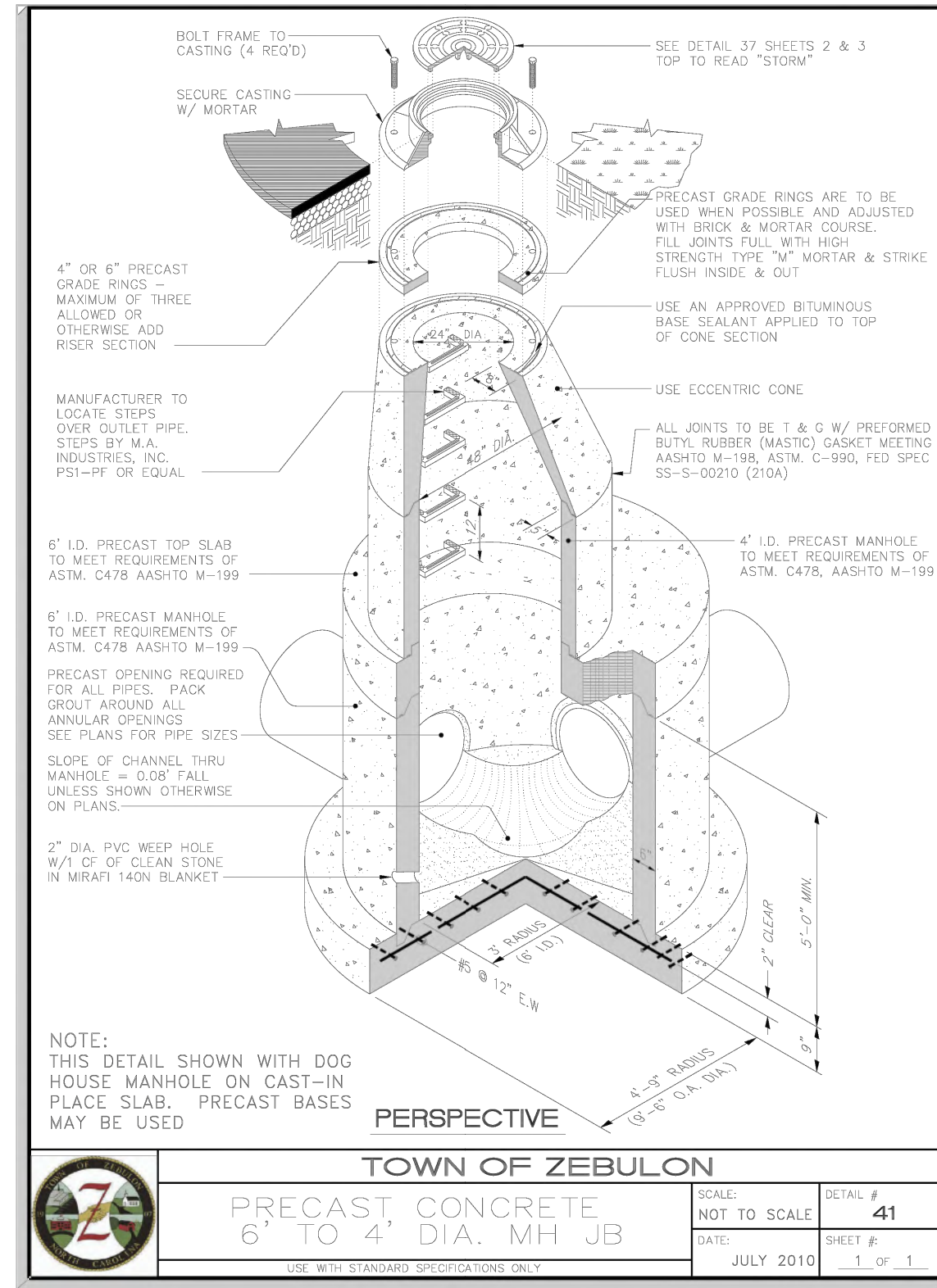
CONSULT WITH ENGINEER IF ANGLES LESS THAN 90° ON TWO INTERSECTING PIPES.

SLOPE OF CHANNEL THRU MANHOLE = 0.08' FAL UNLESS SHOWN OTHERWISE ON PLANS.

2" DIA. PVC WEEP HOLE W/1" CF OF CLEAN STONE IN 16" DIA. 16" BLANKET

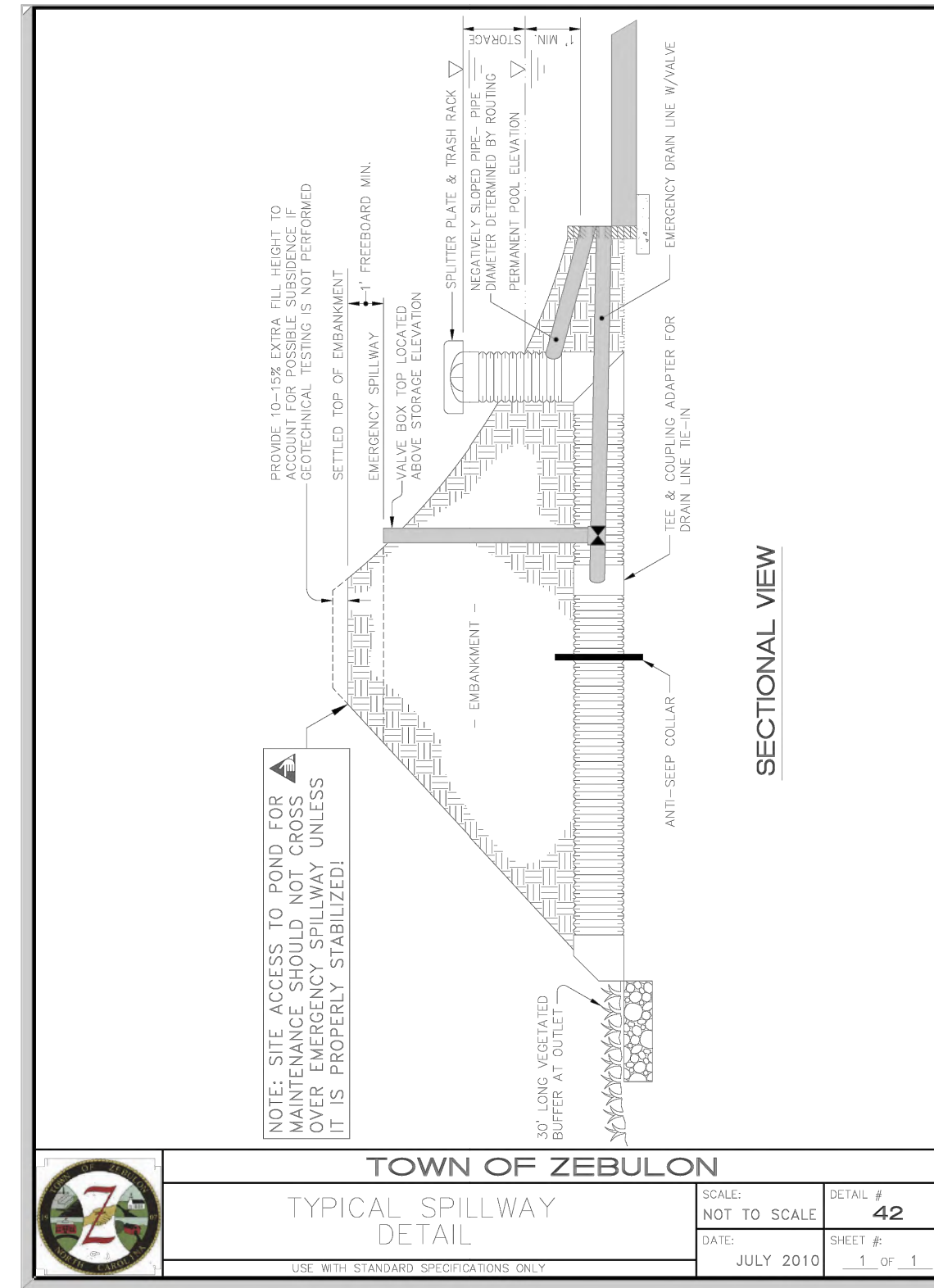
SET MANHOLE IN 6" TO 12" #57 STONE

	TOWN OF ZEBULON		SCALE: NOT TO SCALE	DETAIL # 40
	PRECAST CONCRETE	4' DIA. MH JB		



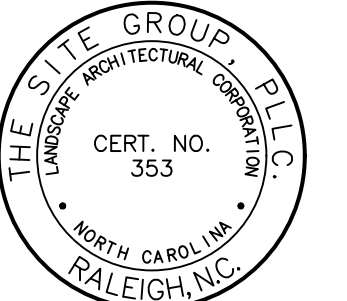
NOTE:  
THIS DETAIL SHOWN WITH DOG HOUSE MANHOLE ON CAST-IN PLACE SLAB. PRECAST BASES MAY BE USED

	TOWN OF ZEBULON		SCALE: NOT TO SCALE	DETAIL # 41
	PRECAST CONCRETE	6' TO 4' DIA. MH JB		



NOTE: SITE ACCESS TO POND FOR LOWER EMERGENCY SPILLWAY UNLESS IT IS PROPERLY STABILIZED!

	TOWN OF ZEBULON		SCALE: NOT TO SCALE	DETAIL # 42
	TYPICAL SPILLWAY	DETAIL		



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
0 E. BARBEE STREET  
ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
Checked By: **SRN**

DATE:  
07 NOV 2022  
REVISED:  
09 MAY 2023

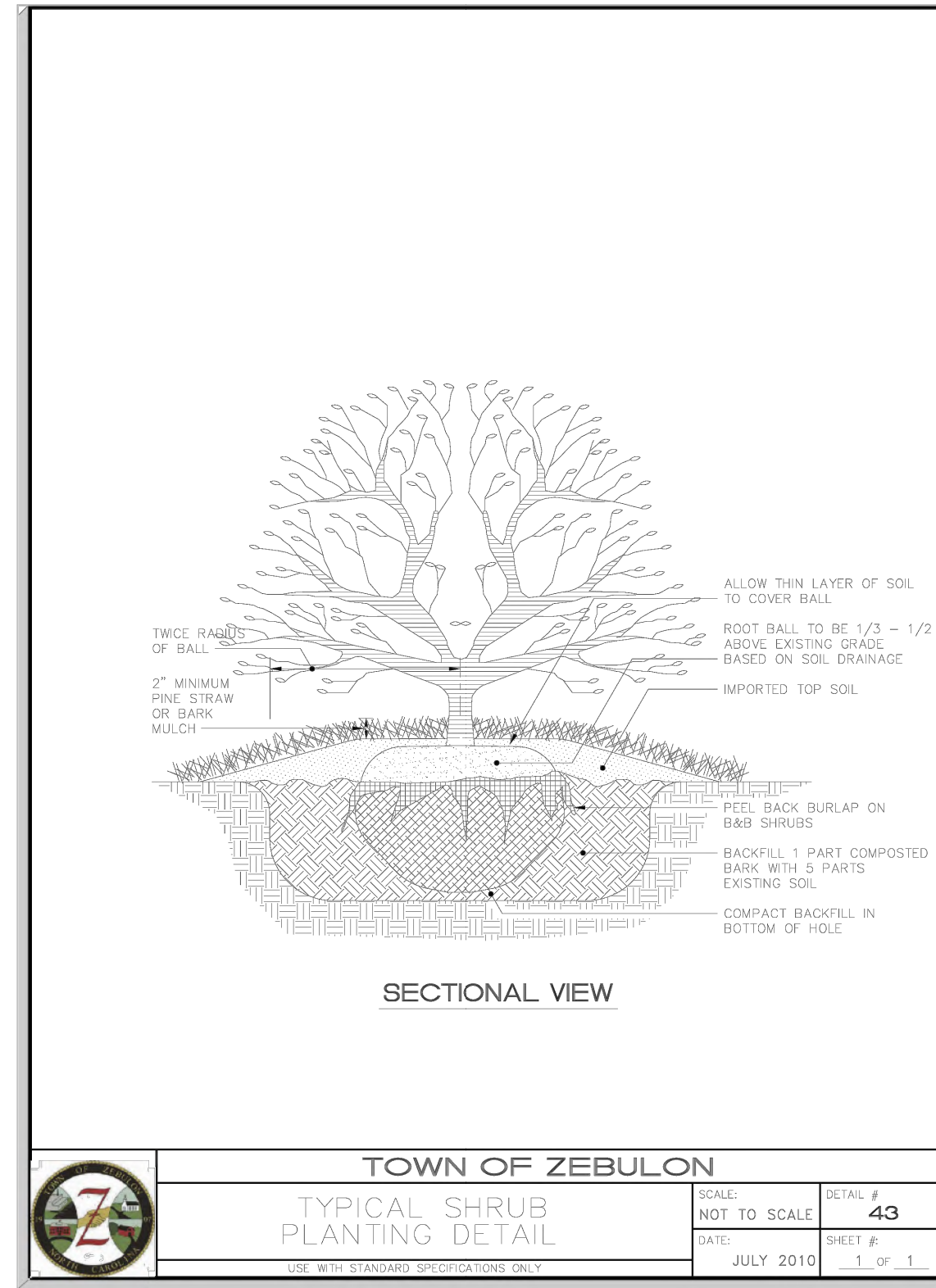
CONSTRUCTION DRAWING

SITE DETAILS

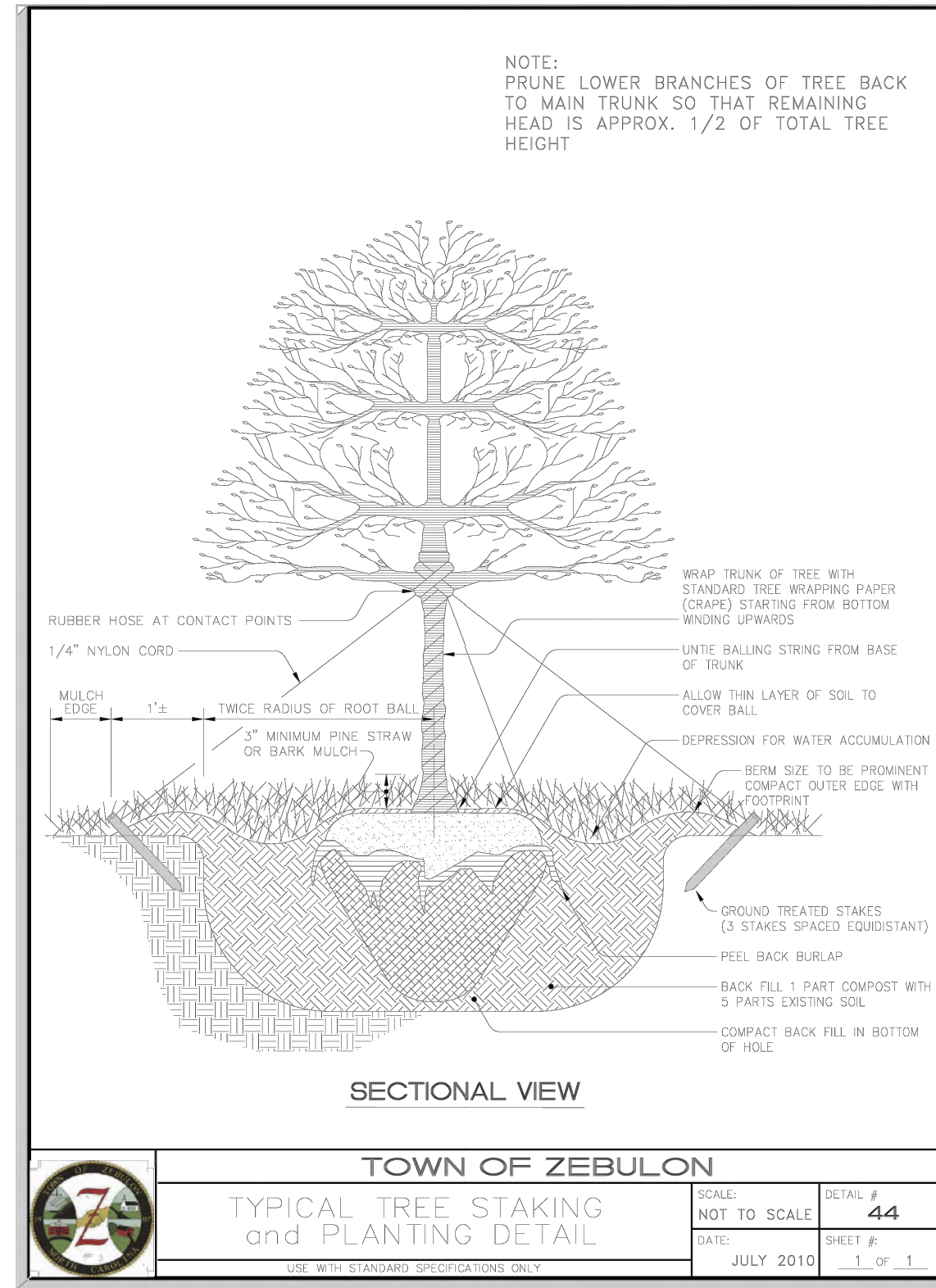
Job Code: **SCBSZ**

Dwg No.  
**SITE 706**

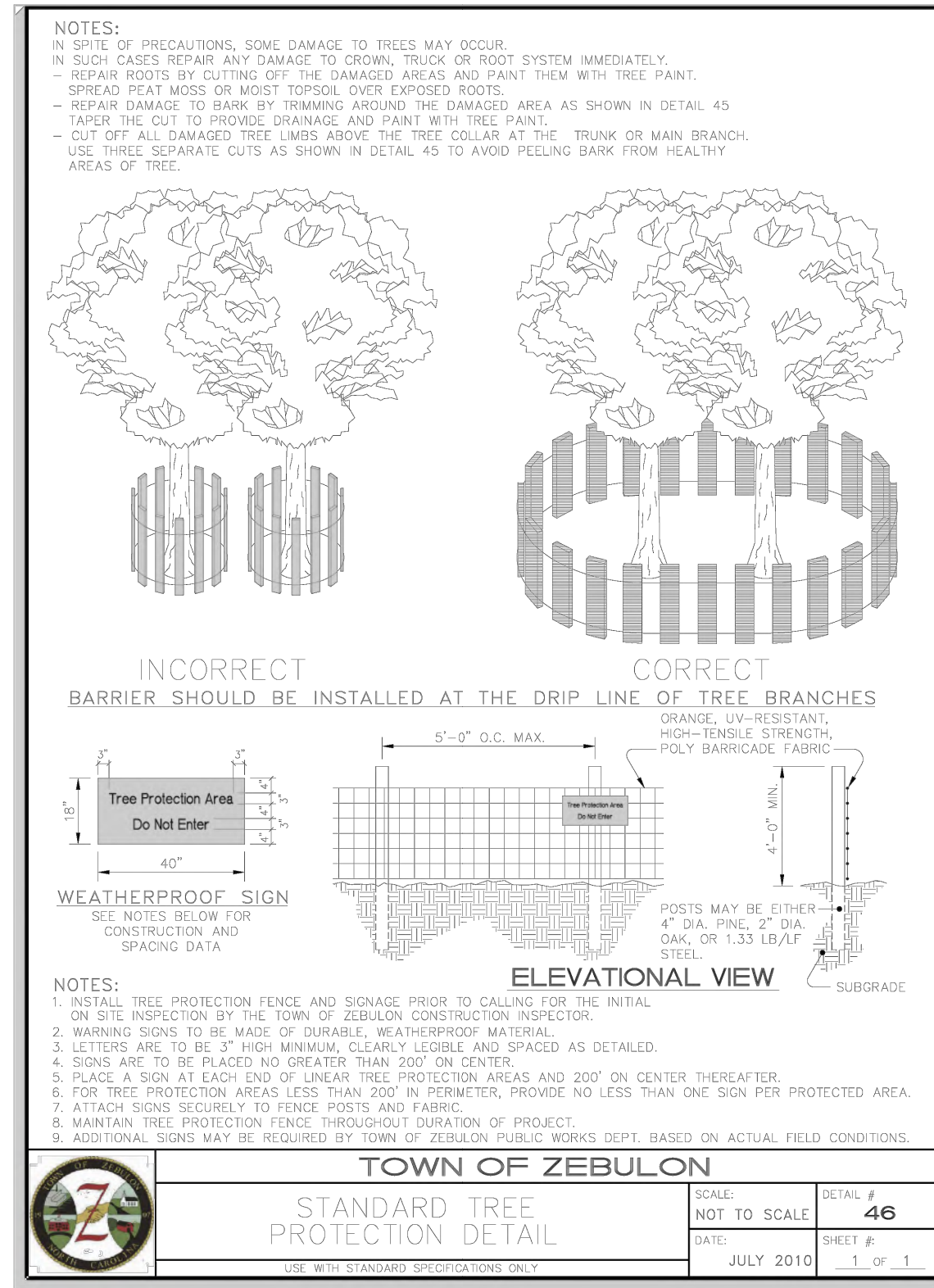




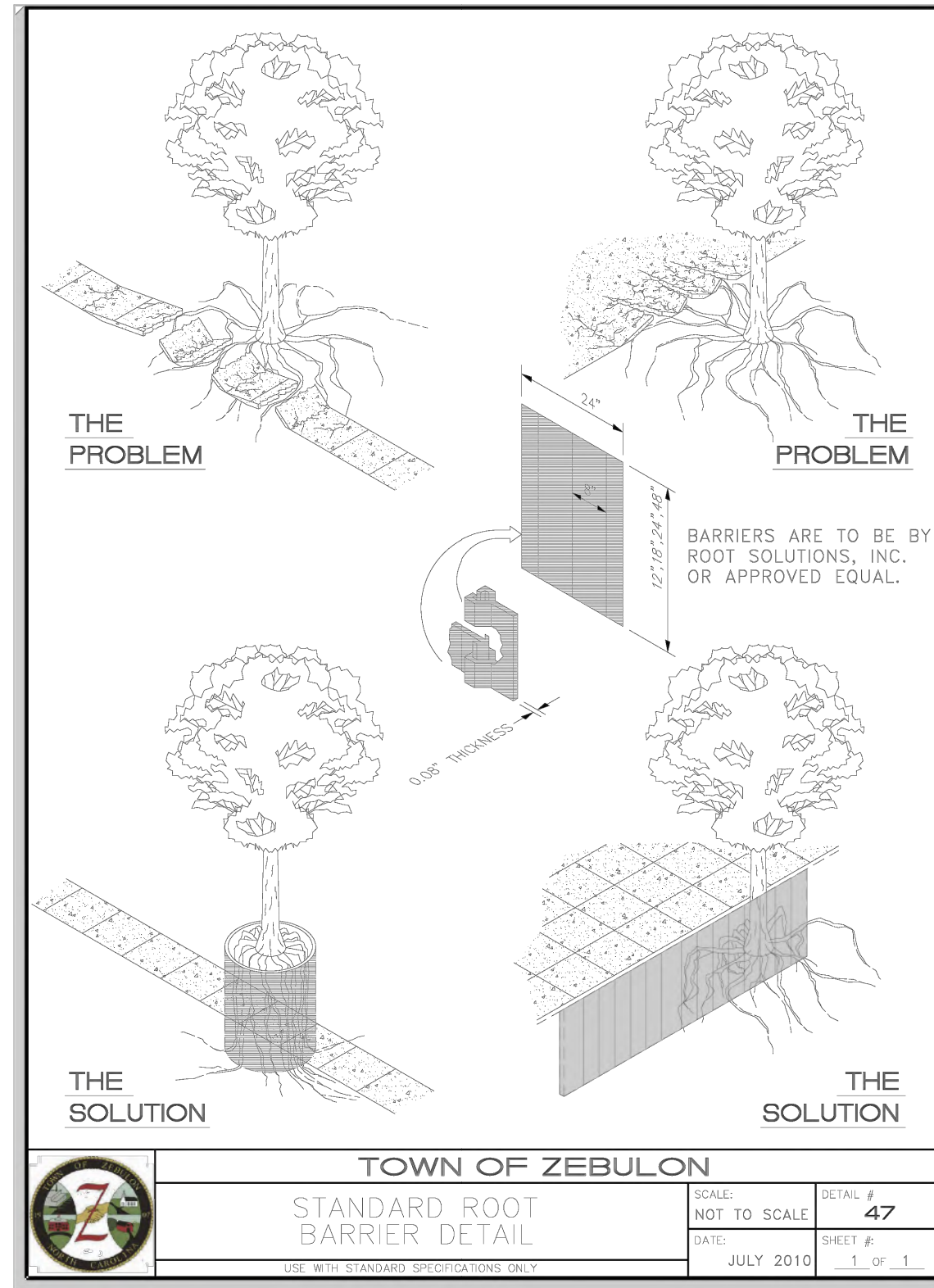
**TOWN OF ZEBULON**  
**TYPICAL SHRUB PLANTING DETAIL**  
 SCALE: NOT TO SCALE  
 DATE: JULY 2010  
 SHEET # 43  
 1 OF 1



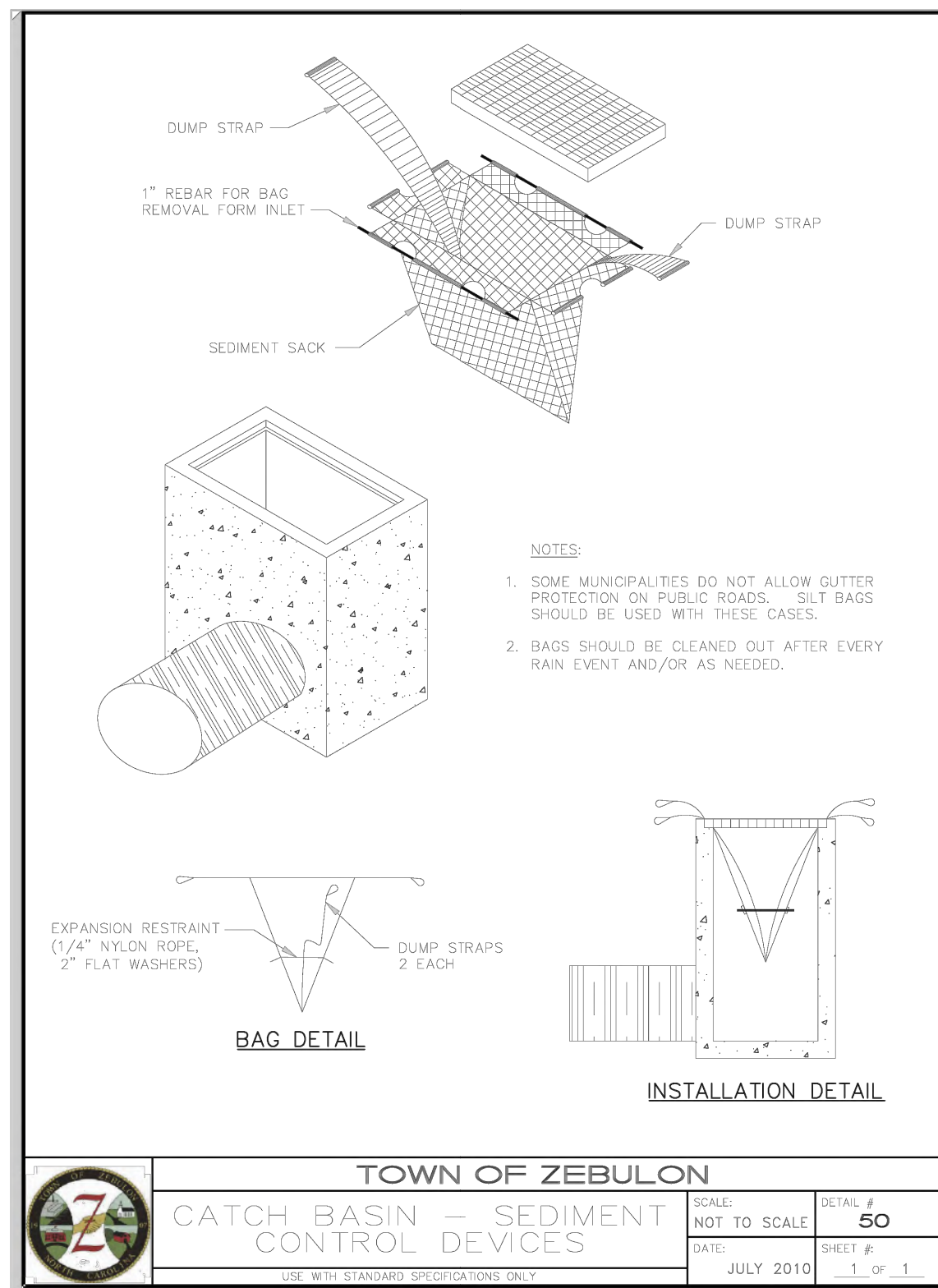
**TOWN OF ZEBULON**  
**TYPICAL TREE STAKING and PLANTING DETAIL**  
 SCALE: NOT TO SCALE  
 DATE: JULY 2010  
 SHEET # 44  
 1 OF 1



**TOWN OF ZEBULON**  
**STANDARD TREE PROTECTION DETAIL**  
 SCALE: NOT TO SCALE  
 DATE: JULY 2010  
 SHEET # 46  
 1 OF 1



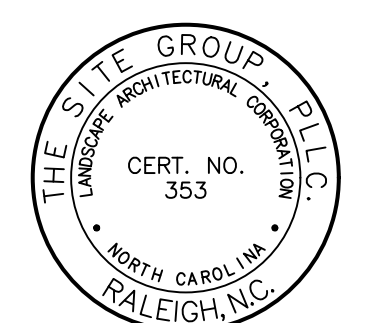
**TOWN OF ZEBULON**  
**STANDARD ROOT BARRIER DETAIL**  
 SCALE: NOT TO SCALE  
 DATE: JULY 2010  
 SHEET # 47  
 1 OF 1



**TOWN OF ZEBULON**  
**CATCH BASIN - SEDIMENT CONTROL DEVICES**  
 SCALE: NOT TO SCALE  
 DATE: JULY 2010  
 SHEET # 50  
 1 OF 1

NOTE:  
 PRUNE LOWER BRANCHES OF TREE BACK TO MAIN TRUNK SO THAT REMAINING HEAD IS APPROX. 1/2 OF TOTAL TREE HEIGHT

NOTES:  
 IN SPITE OF PRECAUTIONS, SOME DAMAGE TO TREES MAY OCCUR.  
 IN SUCH CASES REPAIR ANY DAMAGE TO CROWN, TRUNK OR ROOT SYSTEM IMMEDIATELY.  
 - REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS AND PAINT THEM WITH TREE PAINT.  
 - SPREAD PEAT MOSS OR MOST TOPSOIL OVER EXPOSED ROOTS.  
 - REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA AS SHOWN IN DETAIL 45.  
 - TAPE THE CUT TO PROMOTE DRAINAGE AND PAINT WITH TREE PAINT.  
 - CUT OFF ALL DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH.  
 USE THREE SEPARATE CUTS AS SHOWN IN DETAIL 45 TO AVOID PEELING BARK FROM HEALTHY AREAS OF TREE.



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CONSTRUCTION DRAWINGS FOR:  
**PARKVIEW TOWNES**  
 0 E. BARBEE STREET  
 ZEBULON, NORTH CAROLINA

Drawn By: **WRR**  
 Checked By: **SRN**

DATE: 07 NOV 2022  
 REVISED: 09 MAY 2023

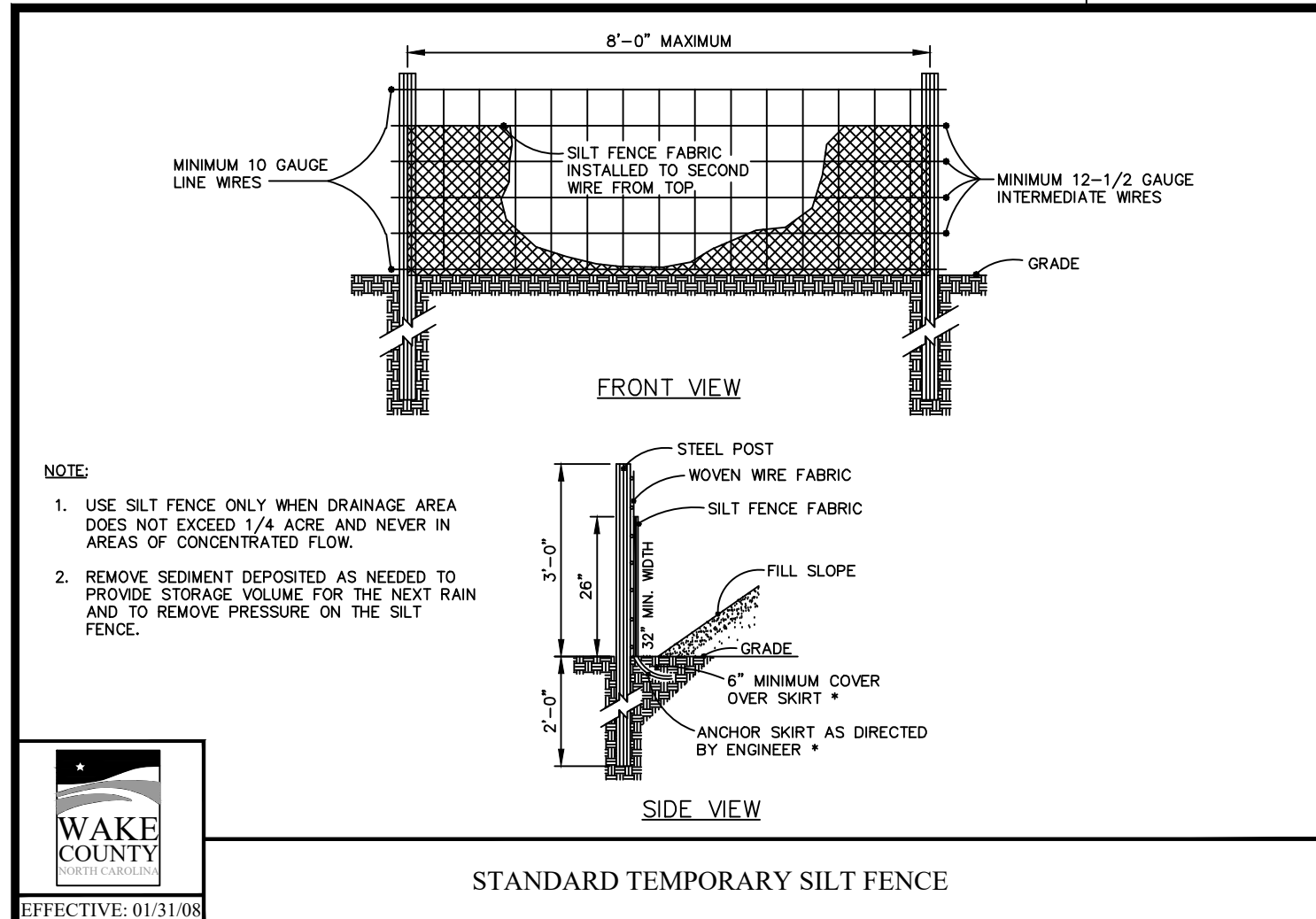
CONSTRUCTION DRAWING

SITE DETAILS

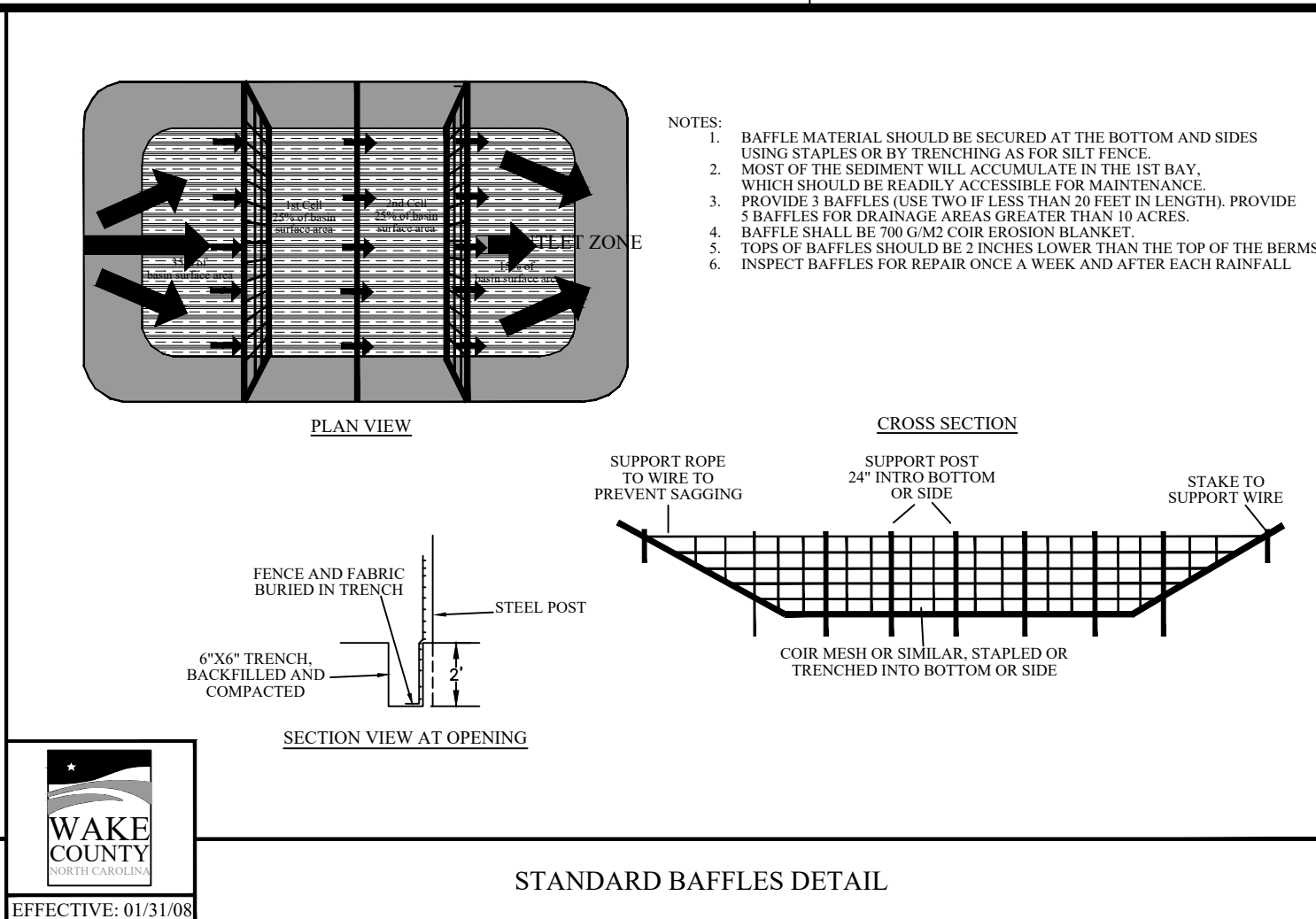
Job Code: **SCBSZ**

Dwg No. **SITE 707**

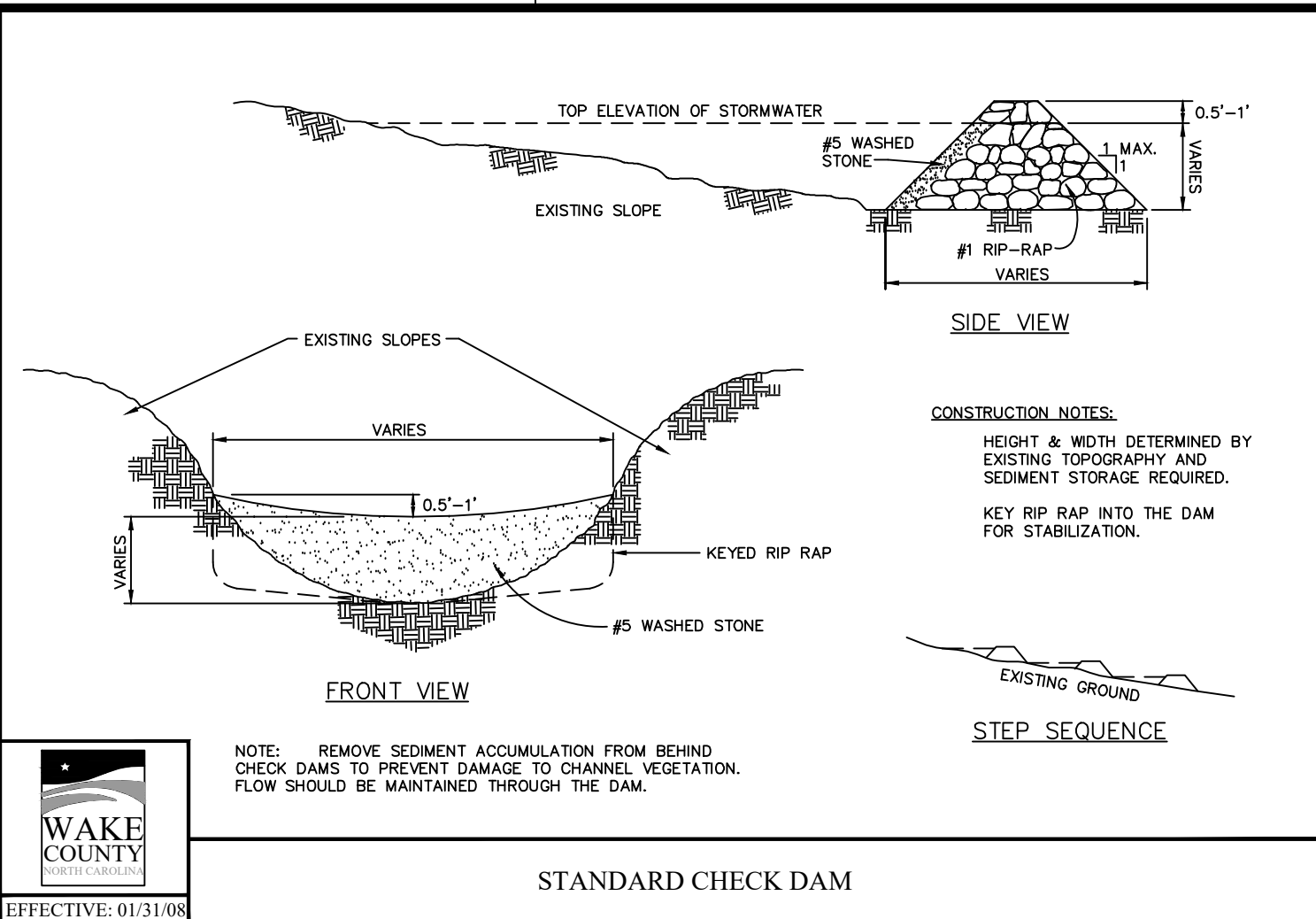




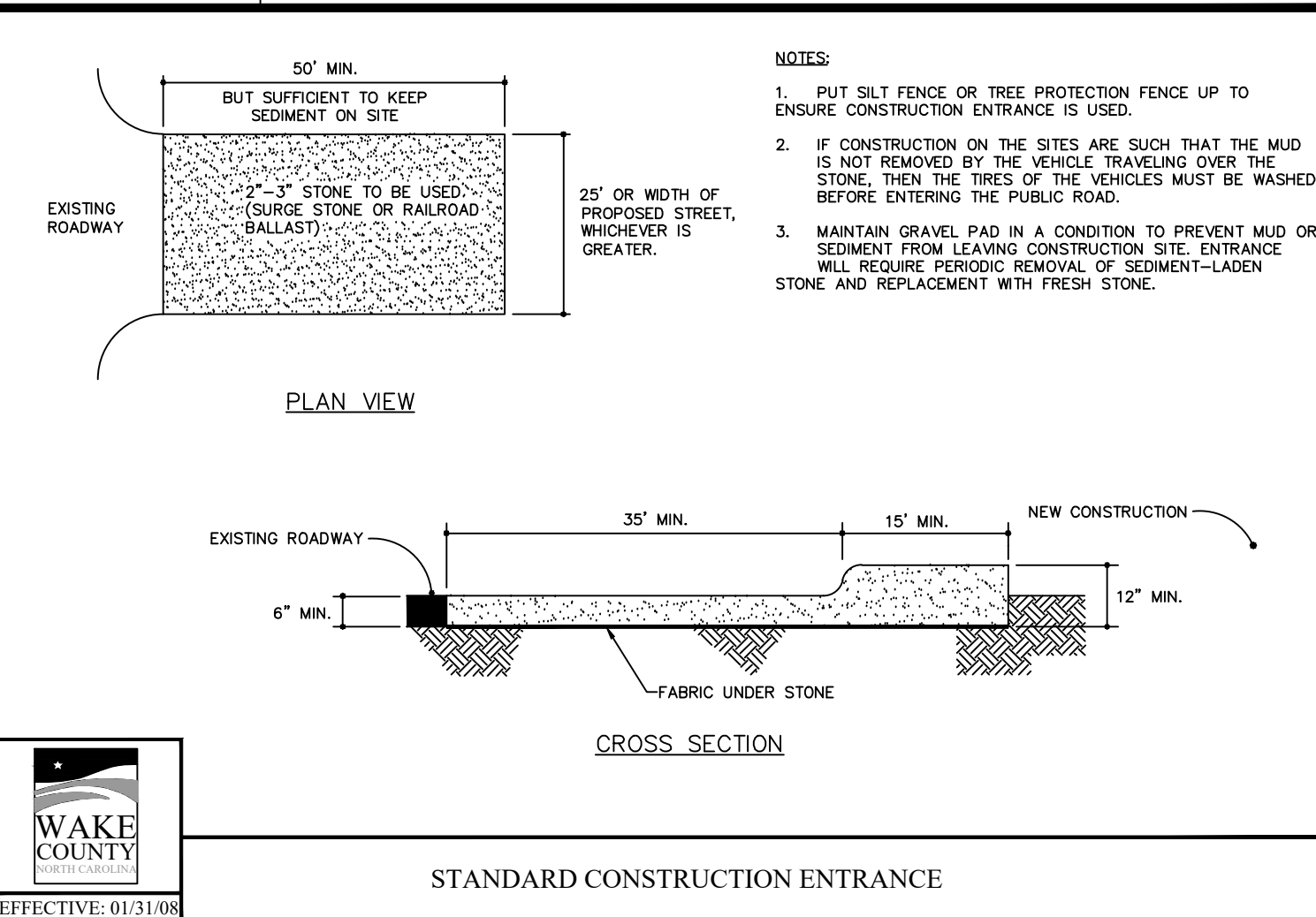
STANDARD TEMPORARY SILT FENCE



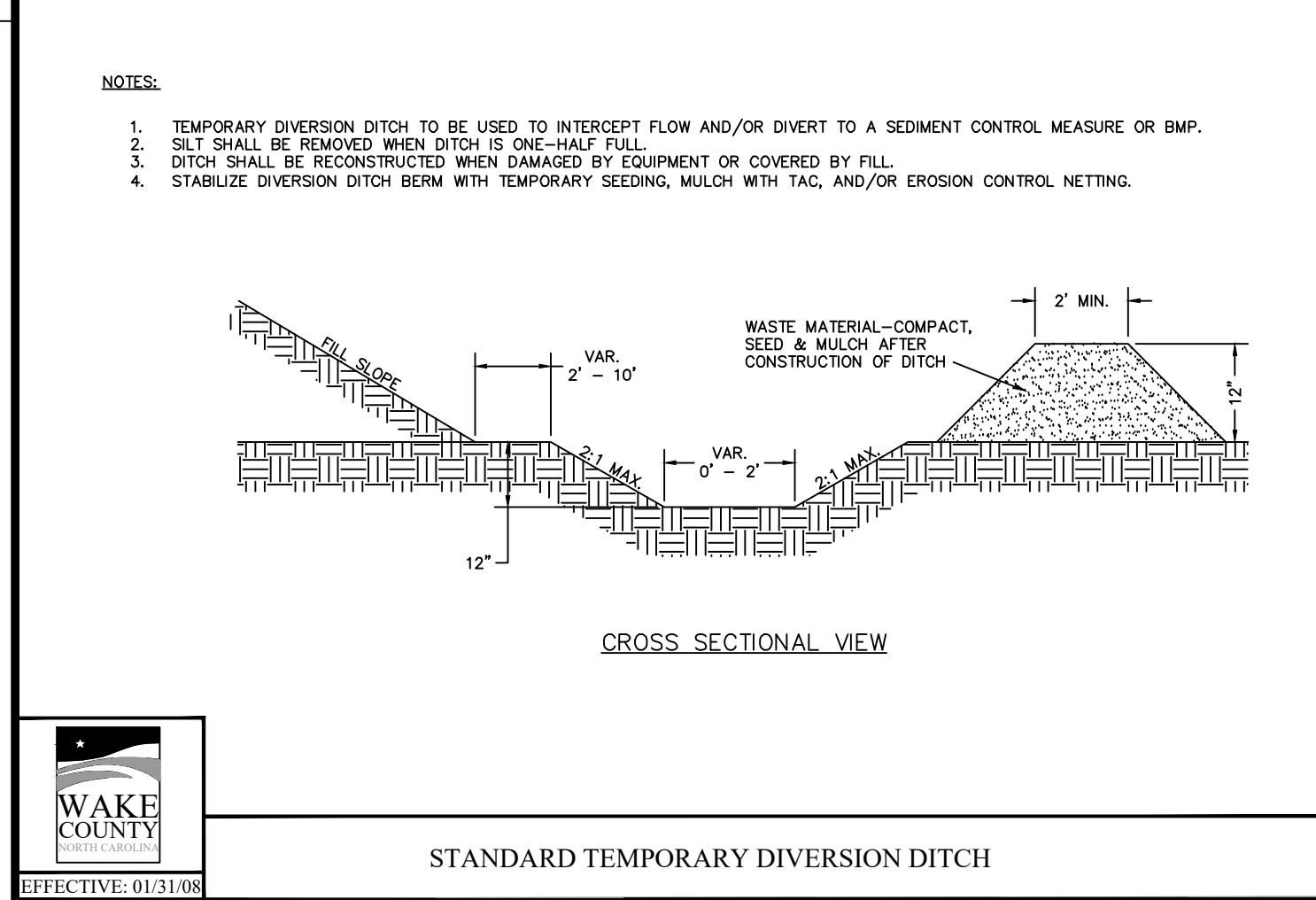
STANDARD BAFFLES DETAIL



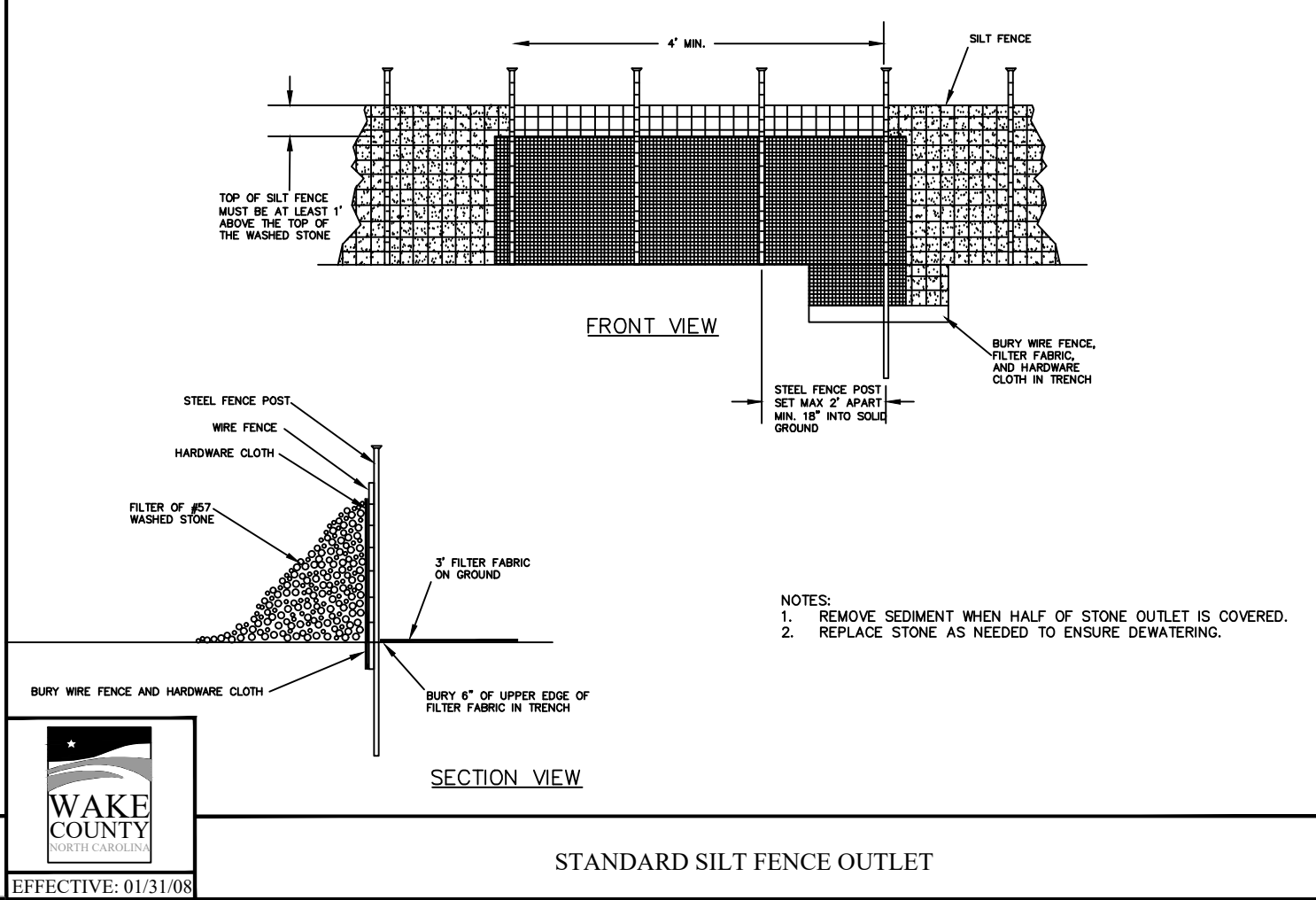
STANDARD CHECK DAM



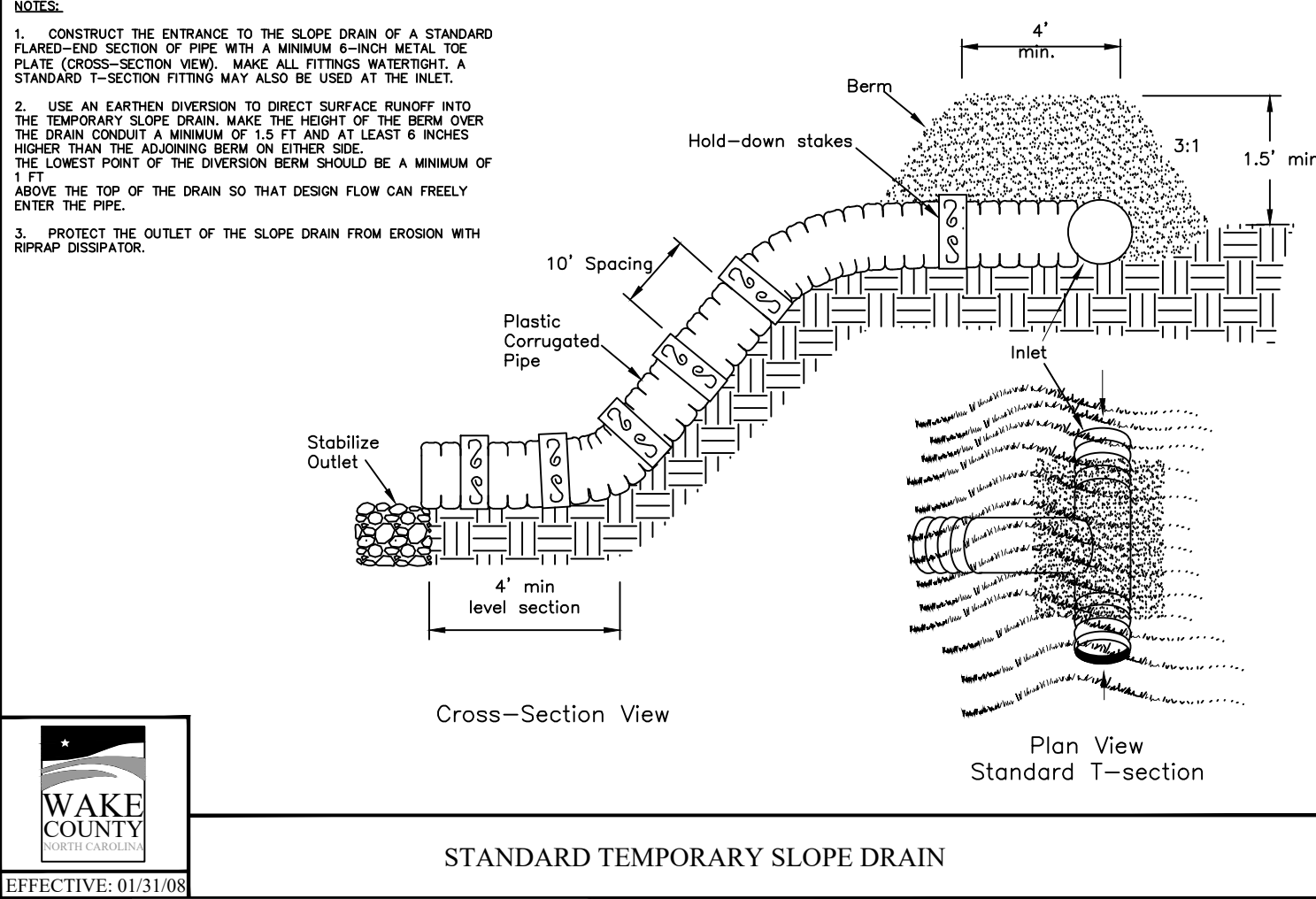
STANDARD CONSTRUCTION ENTRANCE



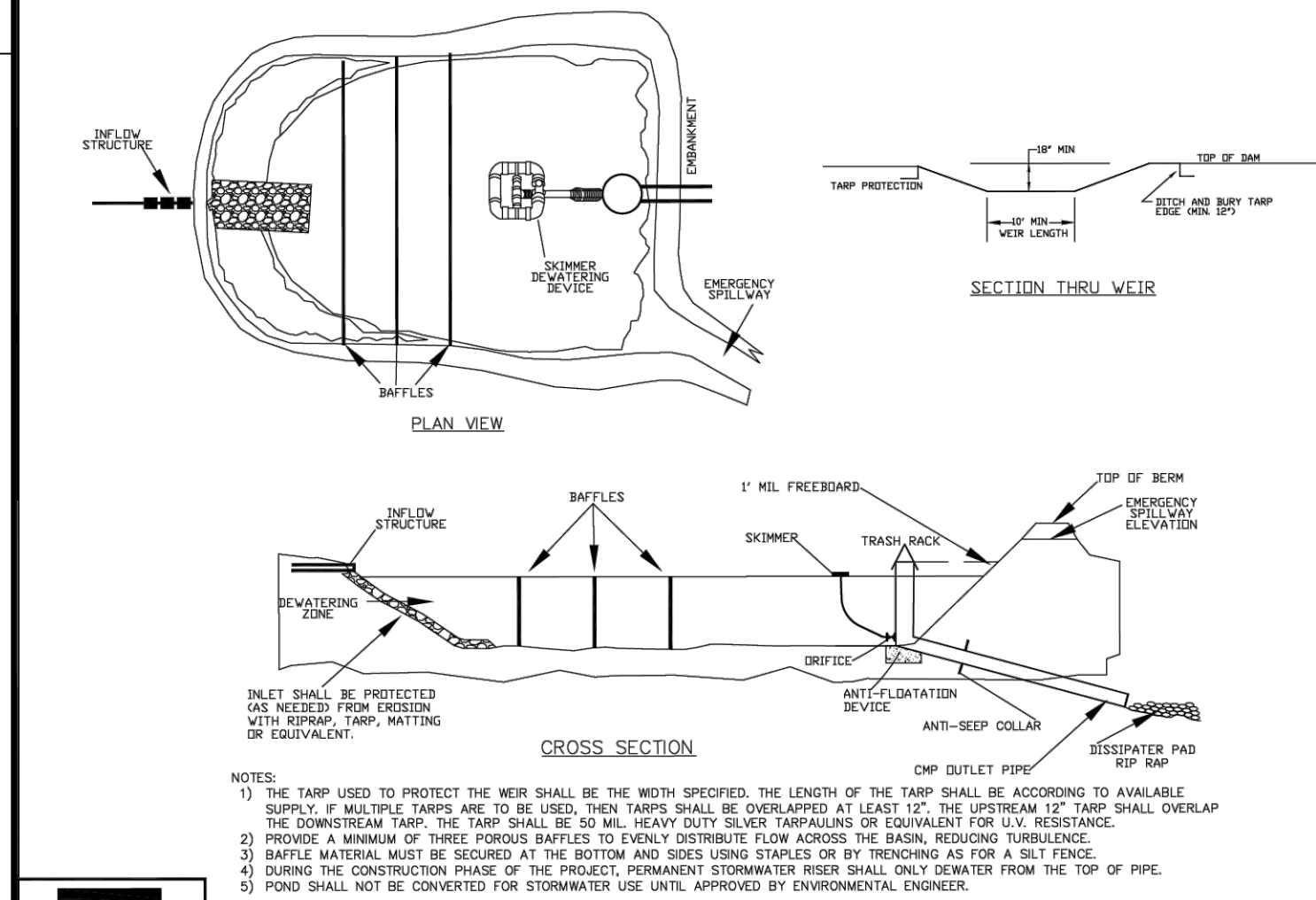
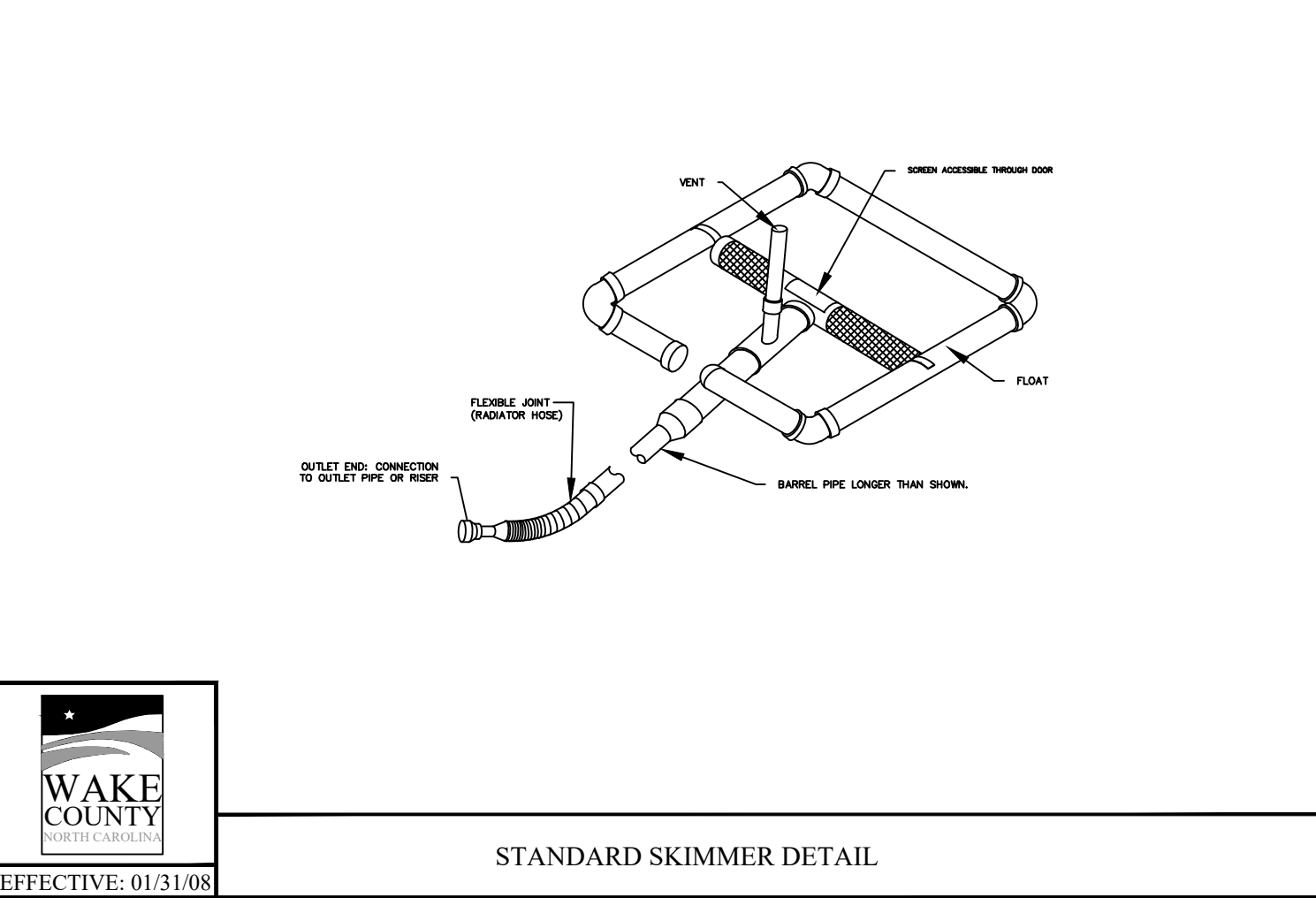
STANDARD TEMPORARY DIVERSION DITCH



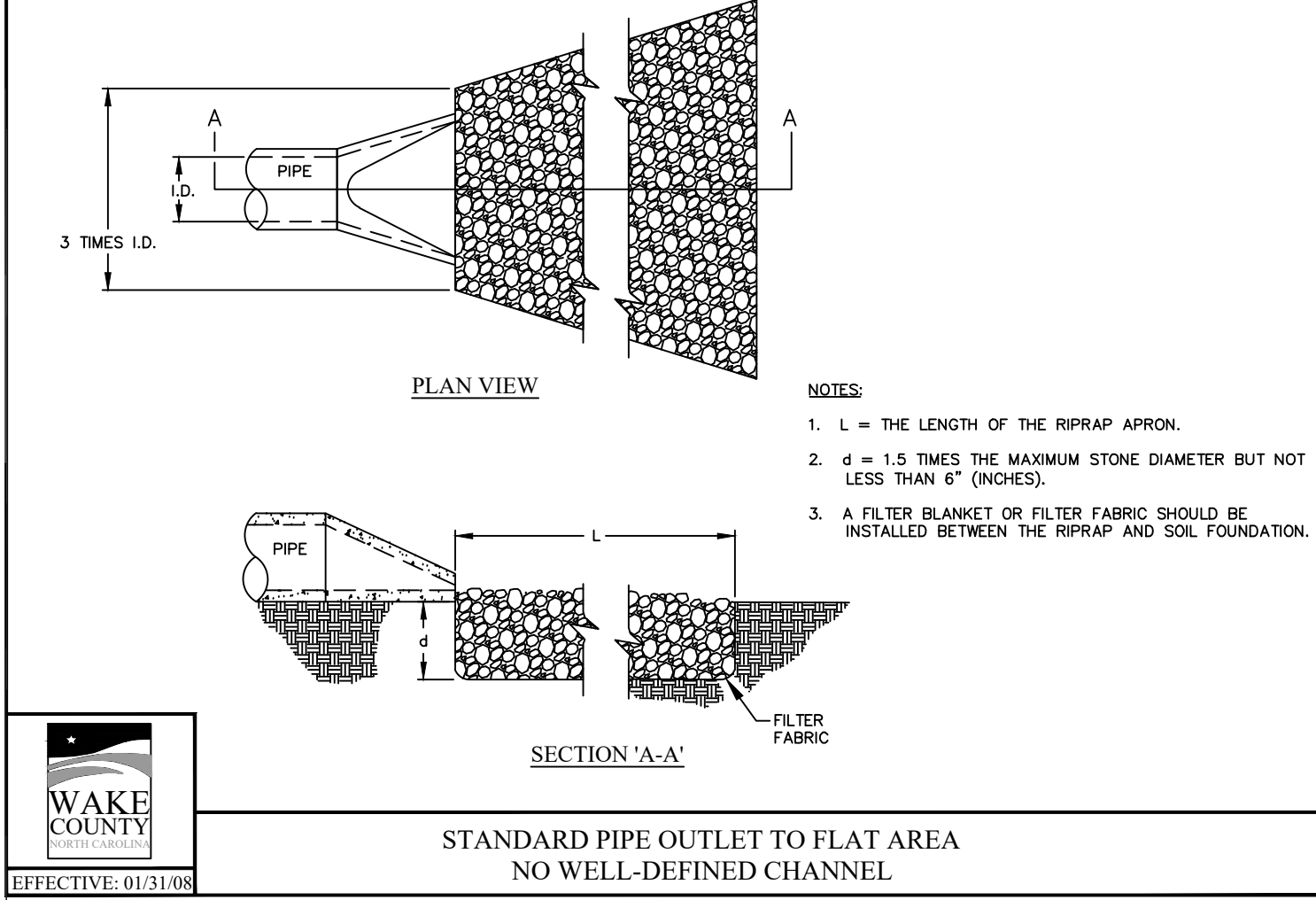
STANDARD SILT FENCE OUTLET



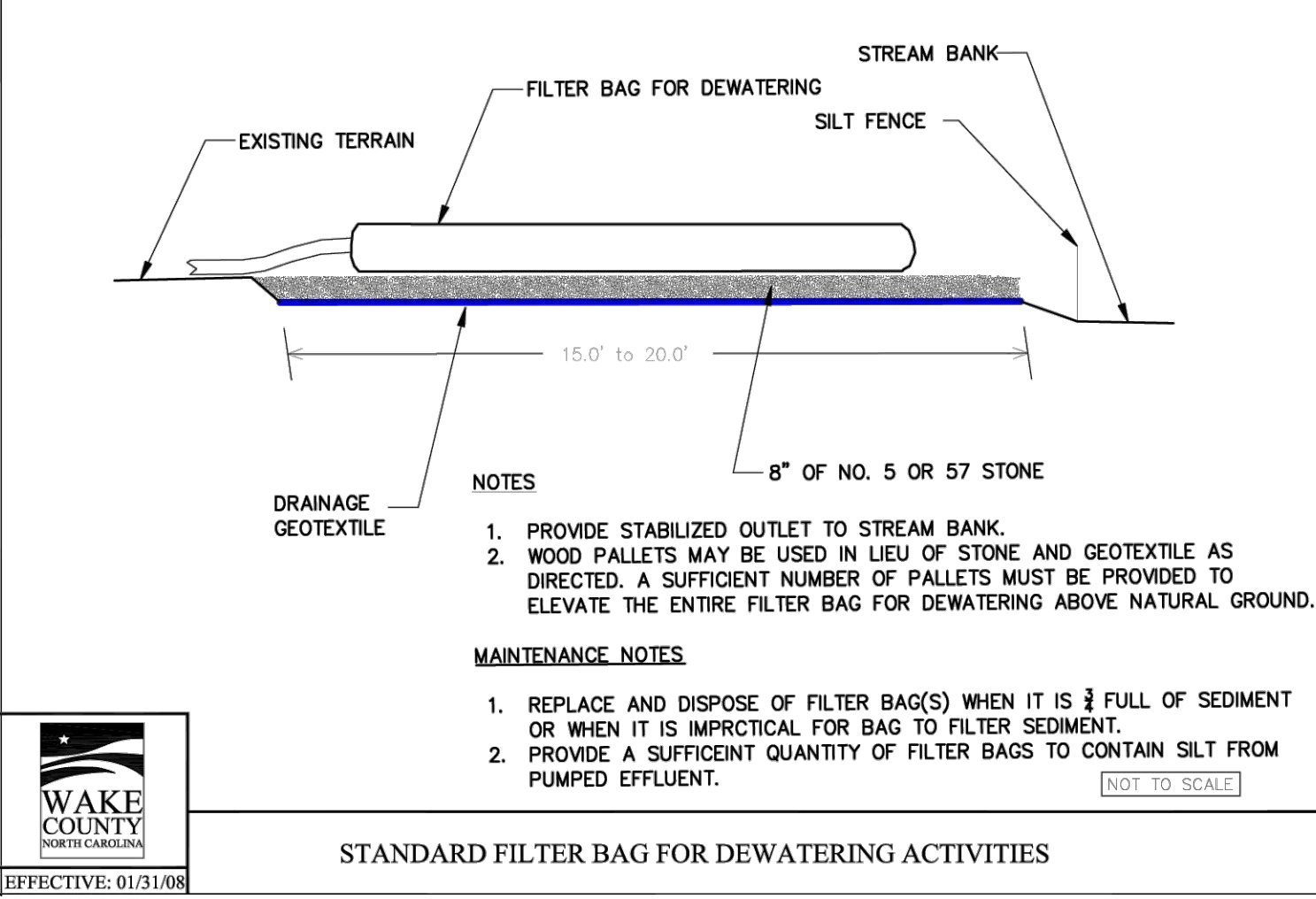
STANDARD TEMPORARY SLOPE DRAIN



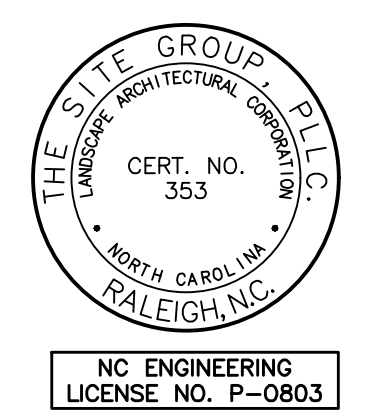
STANDARD SKIMMER ATTACHED TO PERMANENT RISER



STANDARD PIPE OUTLET TO FLAT AREA NO WELL-DEFINED CHANNEL



STANDARD FILTER BAG FOR DEWATERING ACTIVITIES



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Drawn By: **WRR**  
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21 NOV 2023

CONSTRUCTION DRAWING

SITE DETAILS

Job Code: **SCBSZ**

Dwg No. **SITE 708**