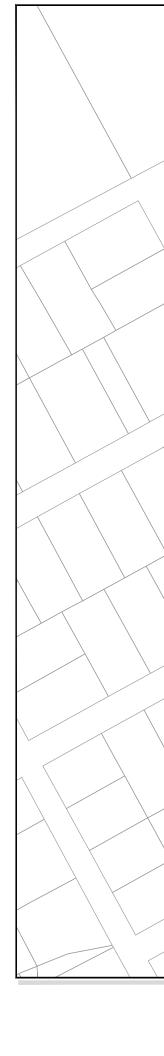


LOCATION:	706 N ARENDELL AVE, ZEBULON
	WAKE
PARENT PIN:	2705274195
PM/PG:	2006/02452
ZONING:	DTP
	1.38 ACRES
CURRENT LAND USE MAP CLASSIFICATION:	1.50 AGRES
PROPOSED LAND USE MAP CLASSIFICATION:	TN
AND CLASS:	RESIDENTIAL
MINIMUM BUILDING SETBACKS:	
FRONT YARD:	25'
SIDE YARD:	2 0' OR 5'
REAR YARD:	0 0100
	4
CORNER YARD:	5
RIGHT OF WAY & OTHER AREAS:	
RIGHT OF WAY DEDICATION:	0.00 AC
NATURAL WETLANDS:	0.00 AC
STREAM BUFFER:	0.00 AC
LOT ACREAGE:	
TOTAL NUMBER PROPOSED LOTS:	12
MAXIMUM ALLOWED DENSITY:	10 DU/AC
PROPOSED DENSITY:	8.70 DU/AC
MINIMUM ALLOWED LOT SIZE:	3,000 SF
MINIMUM PROPOSED LOT SIZE:	3,090 SF
MAXIMUM PROPOSED LOT SIZE:	3.427 SF
AVERAGE PROPOSED LOT SIZE:	3,152 SF
MINIMUM ALLOWABLE LOT WIDTH:	30'
MINIMUM PROPOSED LOT WIDTH:	30'
MAXIMUM ALLOWED LOT COVERAGE:	85%
	63%
OPEN SPACE BREAKDOWN:	
PROPERTY BOUNDARY: REQUIRED URBAN SET-ASIDE:	60,200 SF (1.38 AC)
REQUIRED URBAN SET- ASIDE:	6,020 SF (10% OF TOTAL SITE)
PROVIDED URBAN SET-ASIDE:	9,079 SF (0.21 AC)
IMPERVIOUS AREAS:	
ROADWAYS / PARKING:	7,085 SF (0.16 AC)
SIDEWALKS:	3.017 SF (0.07 AC)
LOTS (1,710 SF/LOT):	20,520 SF (0.47 AC)
LOTS (1,710 SF/LOT): TOTAL ON-SITE IMPERVIOUS AREA:	30,622 SF (0.7 AC)
TOTAL ON-SITE IMPERVIOUS PERCENT:	50.72%
JTILITY DEMANDS:	
SEWAGE USAGE:	4,320 GPD
	3 BED X 120 GPD/BED X 12 UNIT
WATER USAGE:	4.320 GPD
	3 BED X 120 GPD/BED X 12 UNIT
DISTURBED AREA:	
TOTAL DISTURBED AREA:	61,002 SF (1.4 AC)
STREET TYPE SUMMARY: 16' ROW SECTION:	390 I E
	000 Li





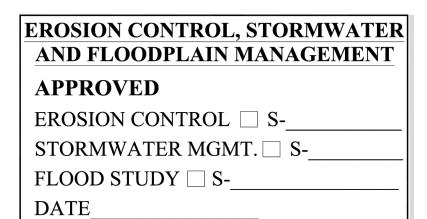
# Know what's **below**. **Call** before you dig.

# ARENDELL AVE SITE PLAN SET **PROJECT #561602**

SITE

VICINITY MAP

1" = 200'



ENVIRONMENTAL CONSULTANT SIGNATURE

## PERMIT INFORMATION:

(PERMITTING AUTHORITY, PERMIT IDENTIFIERS, &	EFFECTIVE DATES)
TOWN OF ZEBULON PLANNING AND ZONING: - EFFECTIVE DATE OF ZONING APPROVAL: - EFFECTIVE DATE OF MASTER PLAN APPROVAL:	
WAKE COUNTY ENVIRONMENTAL: -LAND DISTURBANCE PERMIT: -STORMWATER PERMIT:	
NCDWR/CITY OF ZEBULON PUBLIC UTILITIES: -WATER EXTENSION PERMIT: -SEWER EXTENSION PERMIT:	
NC DEPT. OF TRANSPORTATION: -DRIVEWAY PERMIT: -2 PARTY ENCROACHMENT AGMT: 2 PARTY ENCROACHMENT AGMT:	E51-XXX-XXXX (DATE: XX-XX-XXXX)
-3 PARTY ENCROACHMENT AGMT: U.S. ARMY CORPS OF ENGINEERS: -IMPACT PERMIT:	E51-XXX-XXXX (DATE: XX-XX-XXXX)
NC DIVISION OF WATER QUALITY: -BUFFER IMPACT AUTHORIZATION:	NOT REQUIRED

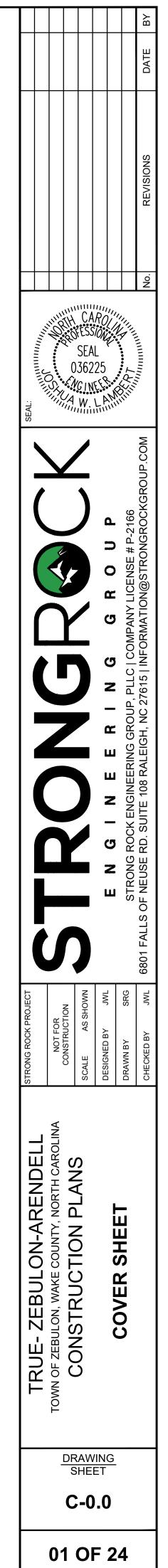
#### SURVEYOR:

WAKE

TAYLOR LAND CONSULTANTS 5448 APEX PEAKWAY APEX, NC 27502 919-801-1104 (O) 919-337-7998 (M) CONTACT: JEREMY TAYLOR, PLS jeremy@taylorlc.com

#### **CIVIL ENGINEERING:**

STRONG ROCK ENGINEERING GROUP, PLLC PO BOX 55992 RALEIGH, NC 27624 COMPANY LICENSE #: P-2166 CONTACT: 984-200-1932 (P) information@strongrockengineering.com



SHE	ET INDEX
C-0.0	COVER SHEET
C-1.0	EXISTING CONDITIONS PLAN
C-2.0	SITE PLAN
C-3.0	UTILITY PLAN
C-4.0	OFF-SITE SANITARY SEWER PLAN & PROFILE
C-5.0	GRADING PLAN
C-6.0	STORMWATER PLAN
C-7.0	EROSION CONTROL NOTE
C-7.1	EROSION COTROL PLAN - STAGE 1
C-7.2	EROSION CONTROL PLAN - STAGE 2
C-8.0	LANDSCAPING PLAN
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D-2.5	SITE DETAILS
D-2.6	SITE DETAILS
D-2.7	EROSION CONTROL DETAILS
D-2.8	EROSION CONTROL DETAILS
D-2.9	EROSION CONTROL DETAILS
D-2.10	LIGHTING DETAILS

#### PUBLIC UTILITY IMPROVEMENTS:

WATER MAIN: 0 SF SEWER MAIN: 76 SF WATER STUBS: 14 SEWER STUBS: 16 NOTE: STUB QUANTITY INCLUDES REMOVAL OF EXISTING STUBS.

## SITE PERMITTING APPROVAL:

#### WATER AND SEWER PERMITS (IF APPLICABLE)

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 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 PUBLIC UTILITIES DEPARTMENT PERMIT # <u>S-3936</u> CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 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 PUBLIC . UTILITIES DEPARTMENT PERMIT # <u>N/A</u> CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR

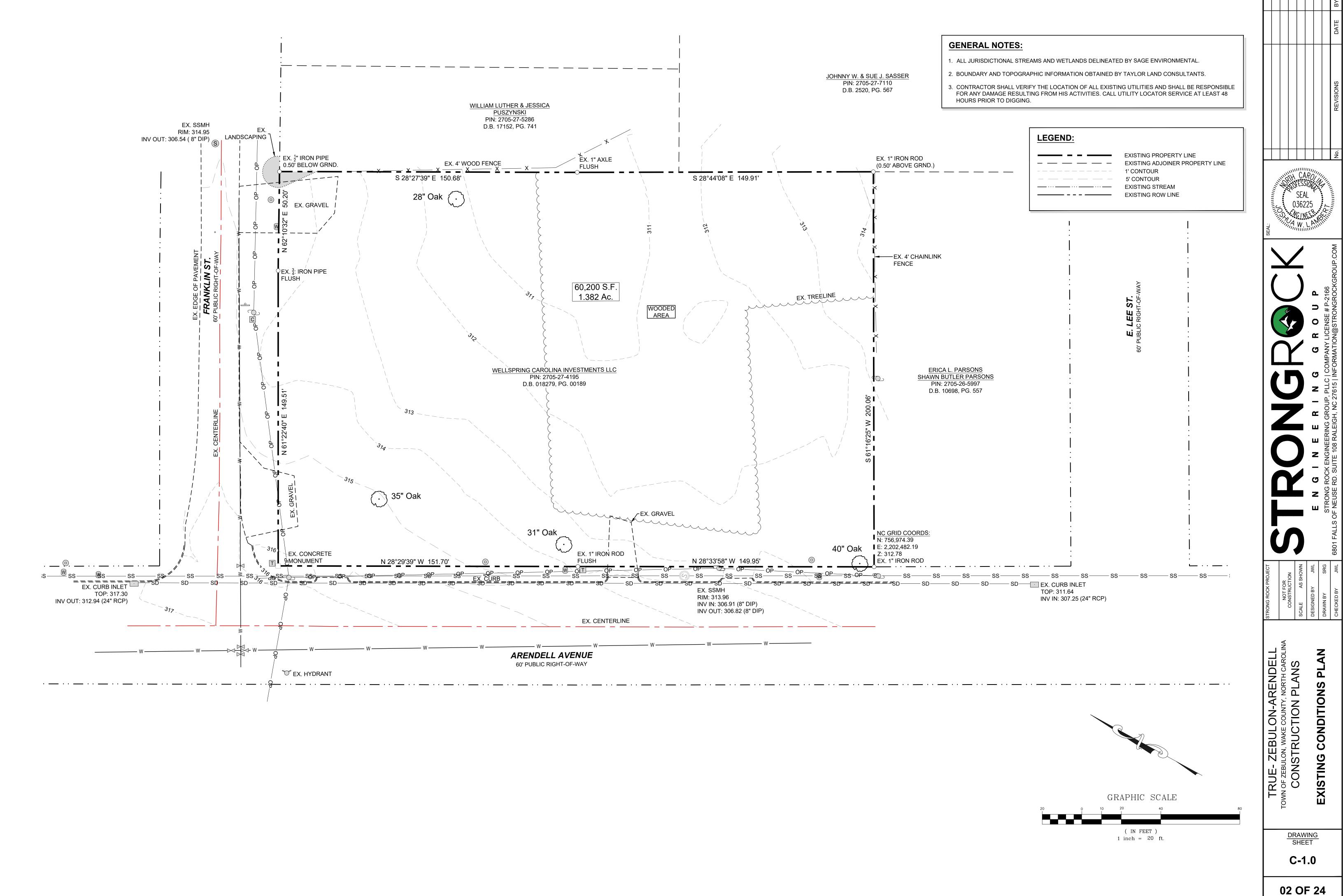
CONSTRUCTION

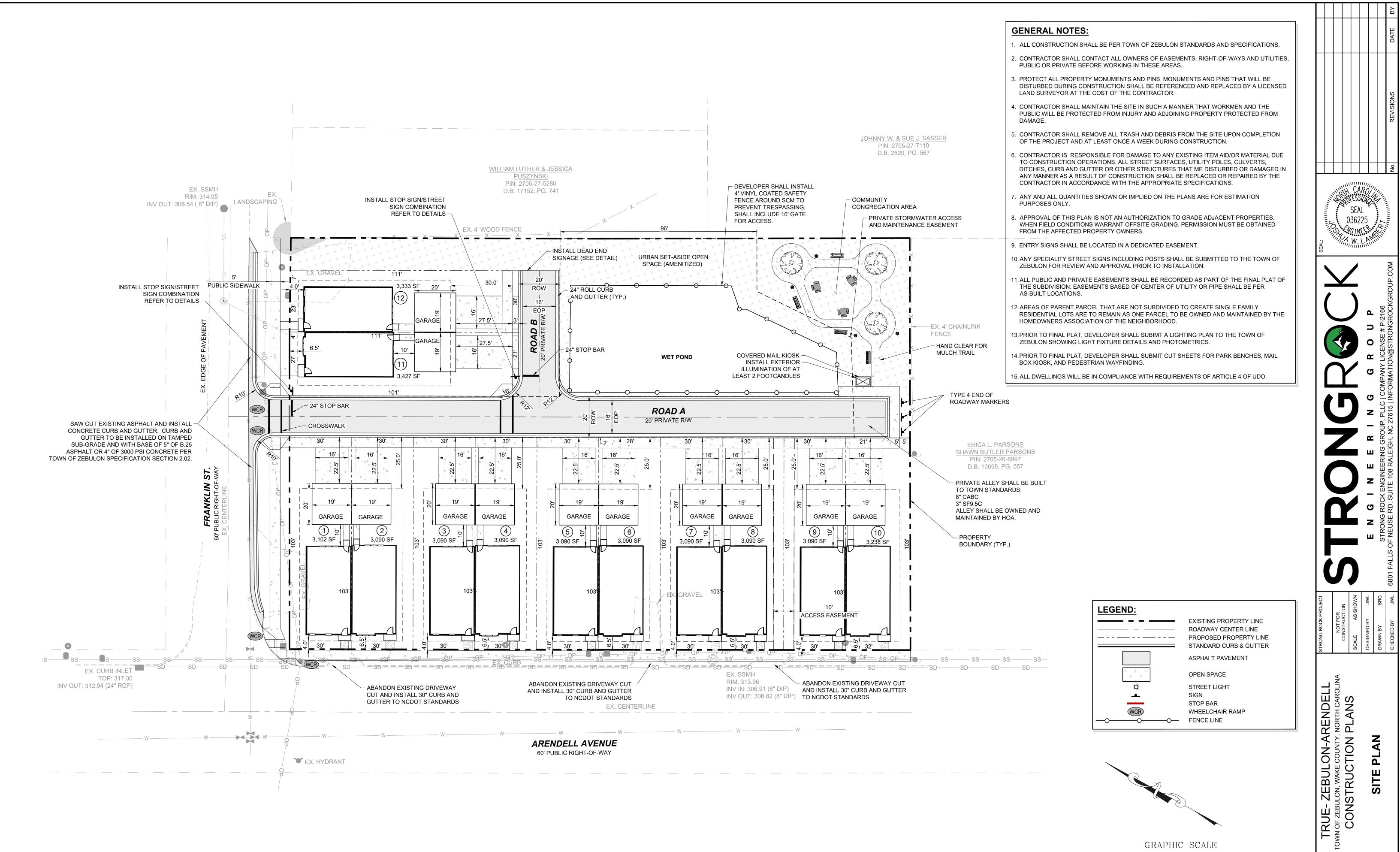
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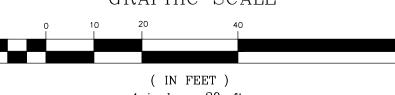
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

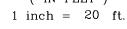
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER









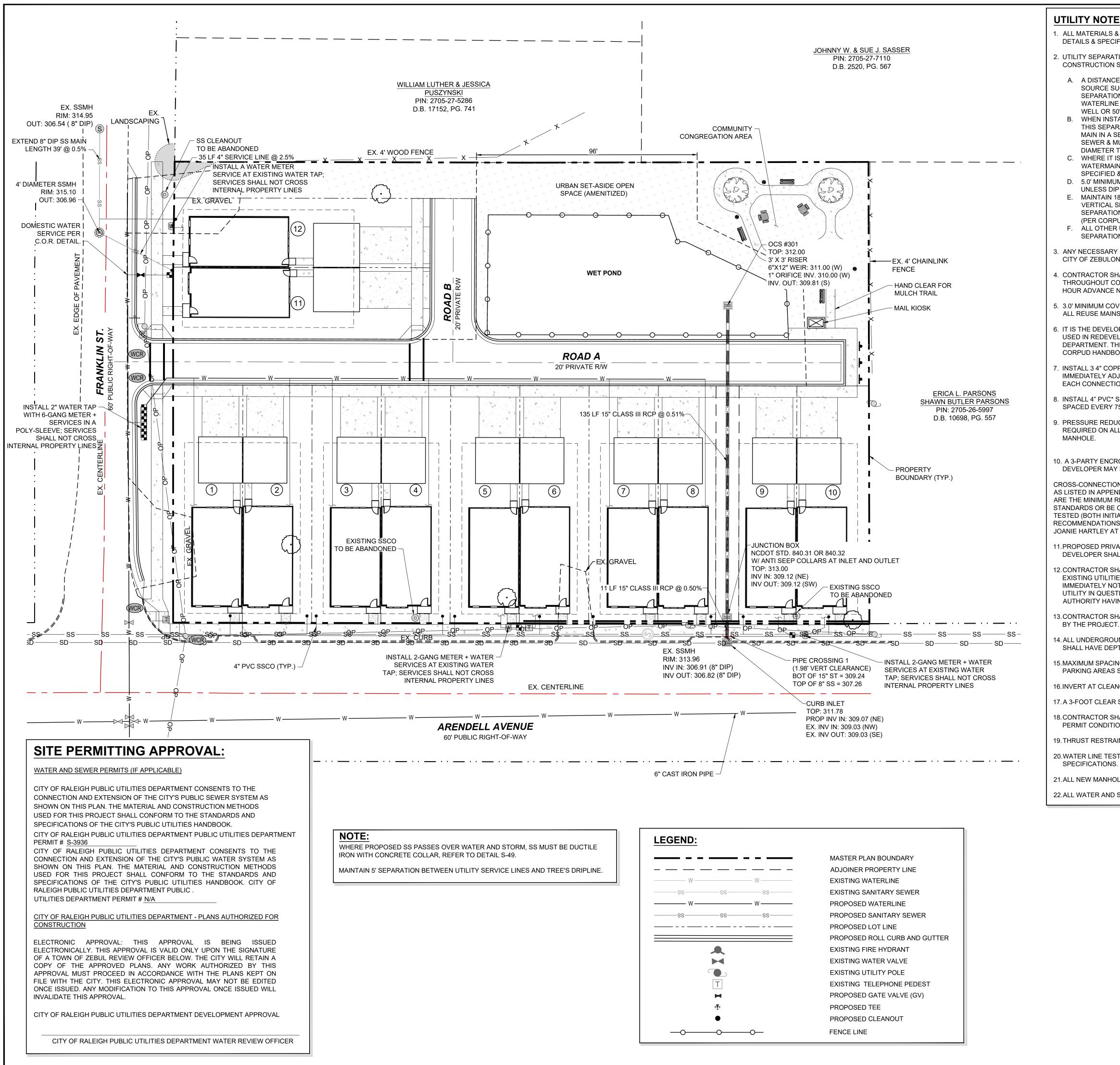


03 OF 24

DRAWING

SHEET

C-2.0



#### **UTILITY NOTES:**

ALL MATERIALS & CONSTRUCTION METHODS SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON DESIGN STANDARDS, DETAILS & SPECIFICATIONS (REFERENCE: CORPUD HANDBOOK, CURRENT EDITION)

2. UTILITY SEPARATION REQUIREMENTS (TAKEN FROM CORPUD HANDBOOK, 2014 EDITION, SEWER DESIGN, MATERIAL, & CONSTRUCTION STANDARDS, SECTION 1. a. 15;):

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 ZEBULON PUBLIC UTILITIES DEPARTMENT PRIOR TO CONSTRUCTION.

. 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 ZEBULON PUBLIC UTILITIES DEPARTMENT.

5. 3.0' MINIMUM COVER IS REQUIRED ON ALL WATER MAINS & SEWER FORCEMAINS. 4.0' MINIMUM COVER IS REQUIRED ON ALL REUSE MAINS.

3. 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 ZEBULON PUBLIC UTILITIES DEPARTMENT. THIS INCLUDES ABANDONING TAP AT MAIN & REMOVAL OF SERVICE FROM ROW OR EASEMENT PER CORPUD HANDBOOK PROCEDURE.

INSTALL 3 4" 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.

3. 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

10. A 3-PARTY ENCROACHMENT AGREEMENT BETWEEN THE NCDOT, THE CITY OF ZEBULON PUBLIC UTILITIES, AND THE DEVELOPER MAY BE NEEDED FOR WATER AND SEWER SERVICE TAPS WITHIN THE NCDOT MAINTAINED RIGHT OF WAY.

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.

11. PROPOSED PRIVATE UTILITIES (POWER, TELEPHONE, NATURAL GAS, CABLE TV) ARE NOT SHOWN ON THIS PLAN. THE DEVELOPER SHALL COORDINATE THE INSTALLATION OF THOSE UTILITIES WHEN INSTALLING PUBLIC UTILITIES.

12. CONTRACTOR SHALL LOCATE ALL UNDERGROUND UTILITIES PRIOR TO ANY LAND DISTURBANCE ACTIVITIES. IF ANY EXISTING UTILITIES ARE LOCATED THAT CAUSE A CONFLICT WITH PROPOSED UTILITIES, CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CIVIL ENGINEER OF RECORD IN WRITING. IF SUCH A SCENARIO ARISES, THE PROPOSED UTILITY IN QUESTION SHALL NOT BE INSTALLED UNTIL AN ACCEPTABLE SOLUTION IS PREPARED AND APPROVED BY THE AUTHORITY HAVING JURISDICTION.

13. CONTRACTOR SHALL ADJUST ALL CLEANOUTS, VALVE BOXES, MANHOLES, ETC. TO THE FINISHED GRADES ESTABLISHED BY THE PROJECT.

14. ALL UNDERGROUND ELECTRICAL CONDUITS SHALL HAVE A MINIMUM COVER OF 36"; GAS AND COMMUNICATION LINES SHALL HAVE DEPTH AND SPACING AS SPECIFIED BY SERVICE COMPANY.

15. MAXIMUM SPACING FOR SANITARY SEWER CLEANOUTS IS 75 FEET, ALL CLEANOUTS LOCATED IN DRIVE AISLES AND/OR PARKING AREAS SHALL TO BE TRAFFIC RATED.

16. INVERT AT CLEANOUT IS INVERT ELEVATION AT THE CONNECTION OF THE HORIZONTAL BEND.

17. A 3-FOOT CLEAR SPACE SHALL BE MAINTAINED AROUND THE CIRCUMFERENCE OF FIRE HYDRANTS.

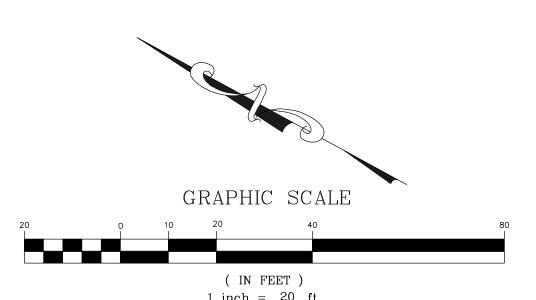
18. CONTRACTOR SHALL PROVIDE PROPER NOTIFICATION TO AUTHORITIES HAVING JURISDICTION AS SPECIFIED IN AGENCY PERMIT CONDITIONS. AS A COURTESY, CIVIL ENGINEER OF RECORD REQUESTS NOTIFICATION.

19. THRUST RESTRAINT SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON STANDARD SPECIFICATIONS.

20. WATER LINE TESTING AND STERILIZATION SHALL BE IN ACCORDANCE WITH CITY OF ZEBULON STANDARD

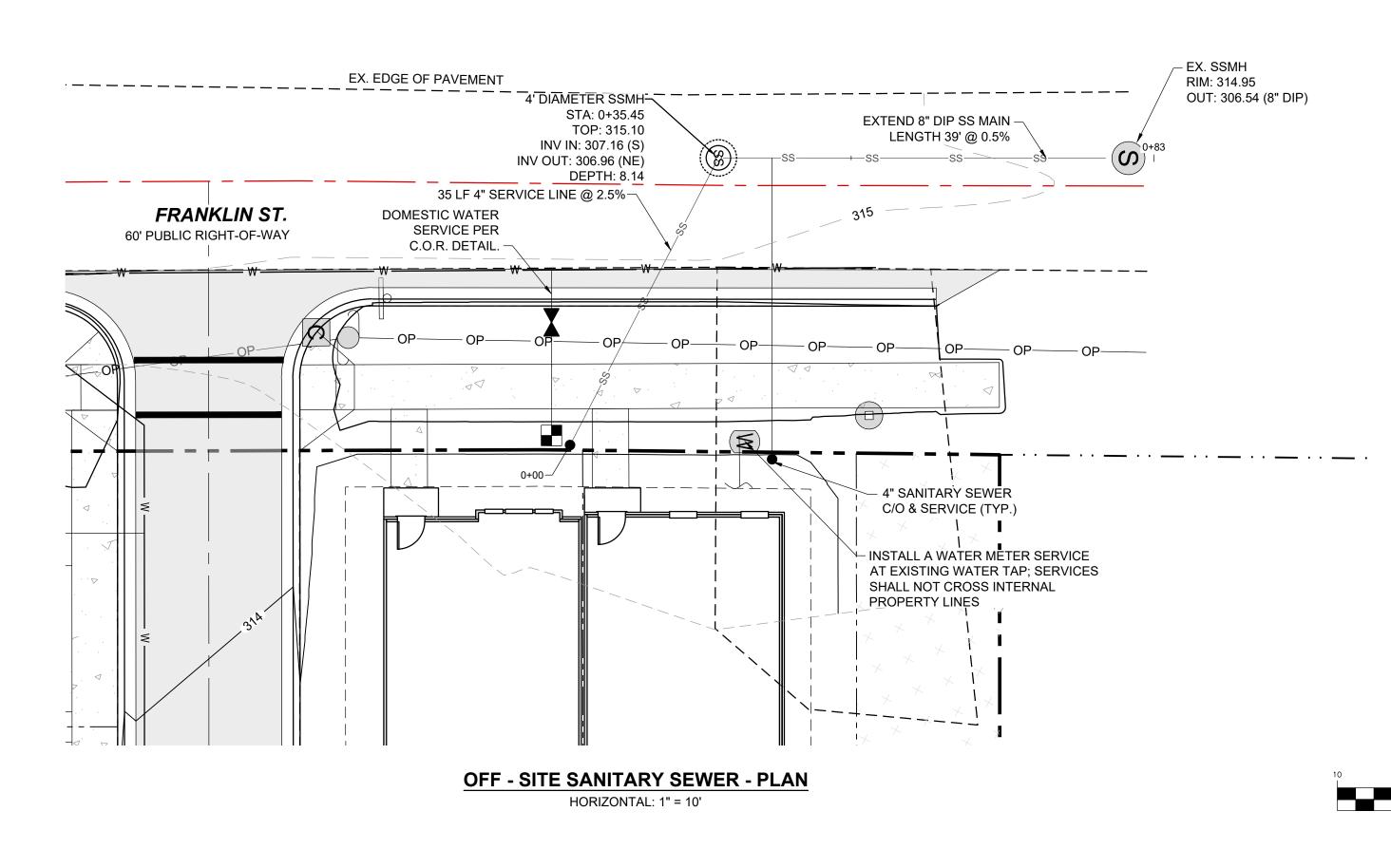
21.ALL NEW MANHOLES SHALL BE ECCENTRIC UNLESS OTHERWISE NOTED.

22.ALL WATER AND SEWER SERVICE CONNECTIONS SHALL BE INSTALLED BY A LICENSED PLUMBER.



1 inch = 20 ft.





## SITE PERMITTING APPROVAL:

WATER AND SEWER PERMITS (IF APPLICABLE)

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # <u>S-3936</u>

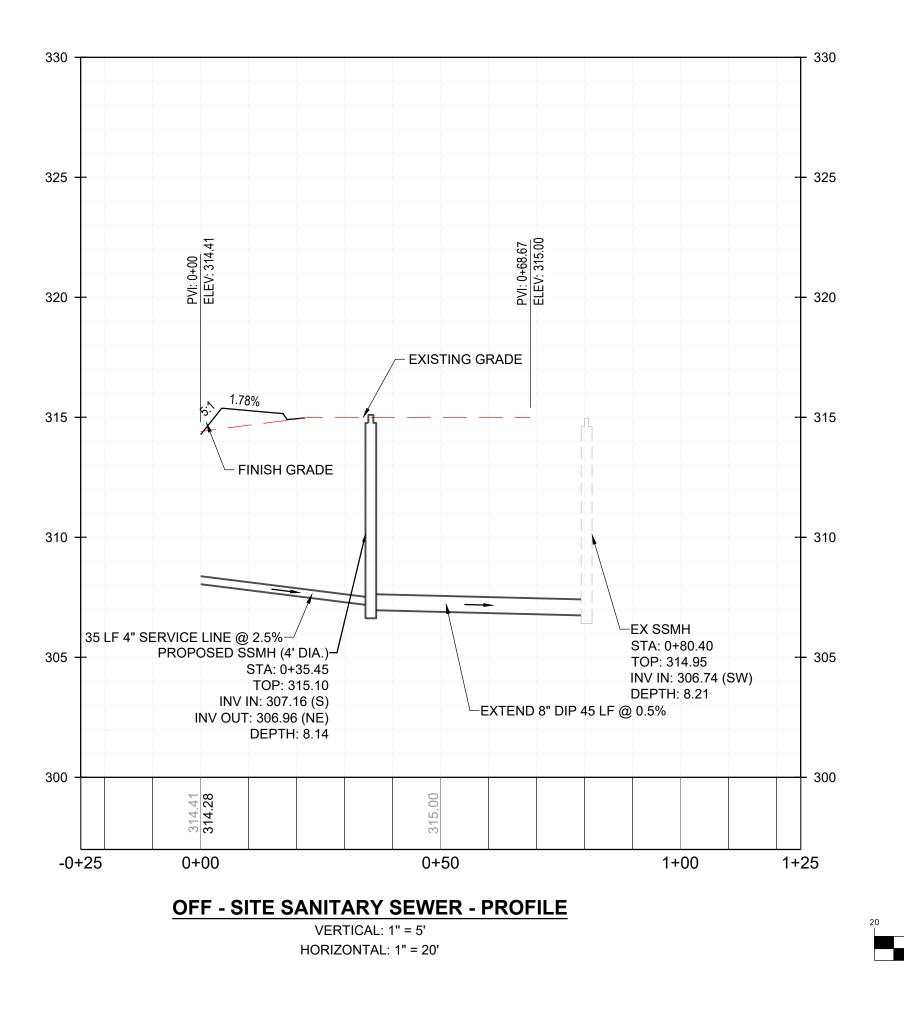
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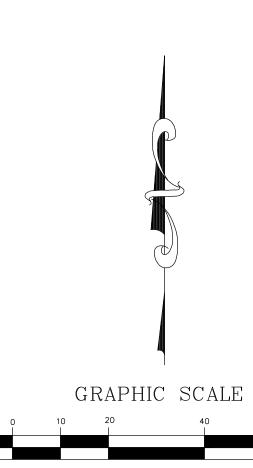
<u>CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR</u> CONSTRUCTION

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A TOWN OF ZEBUL REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED ONCE ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

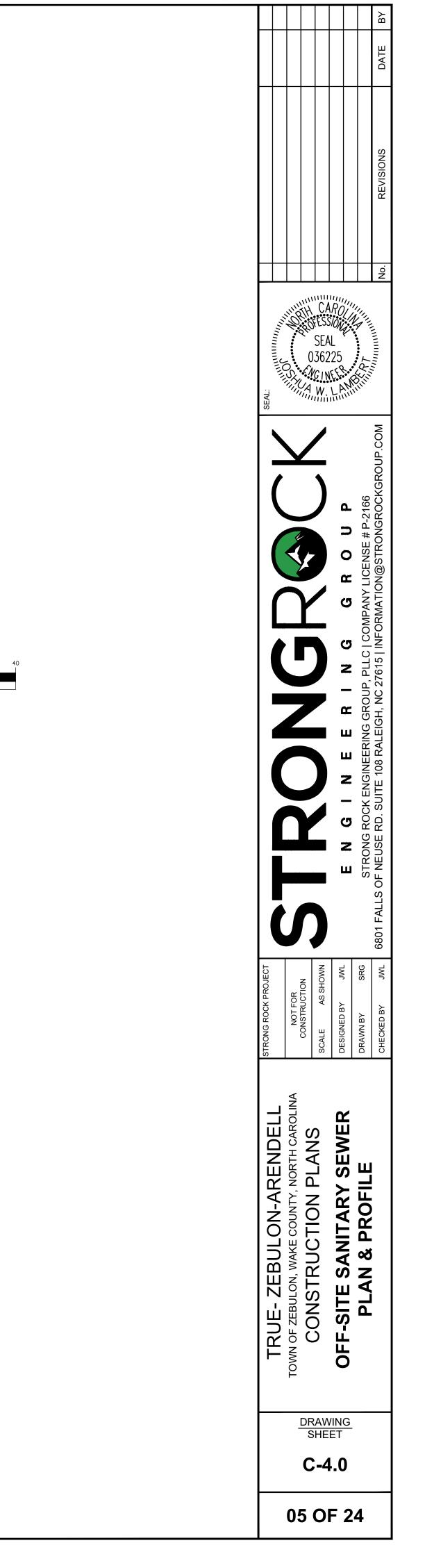
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER



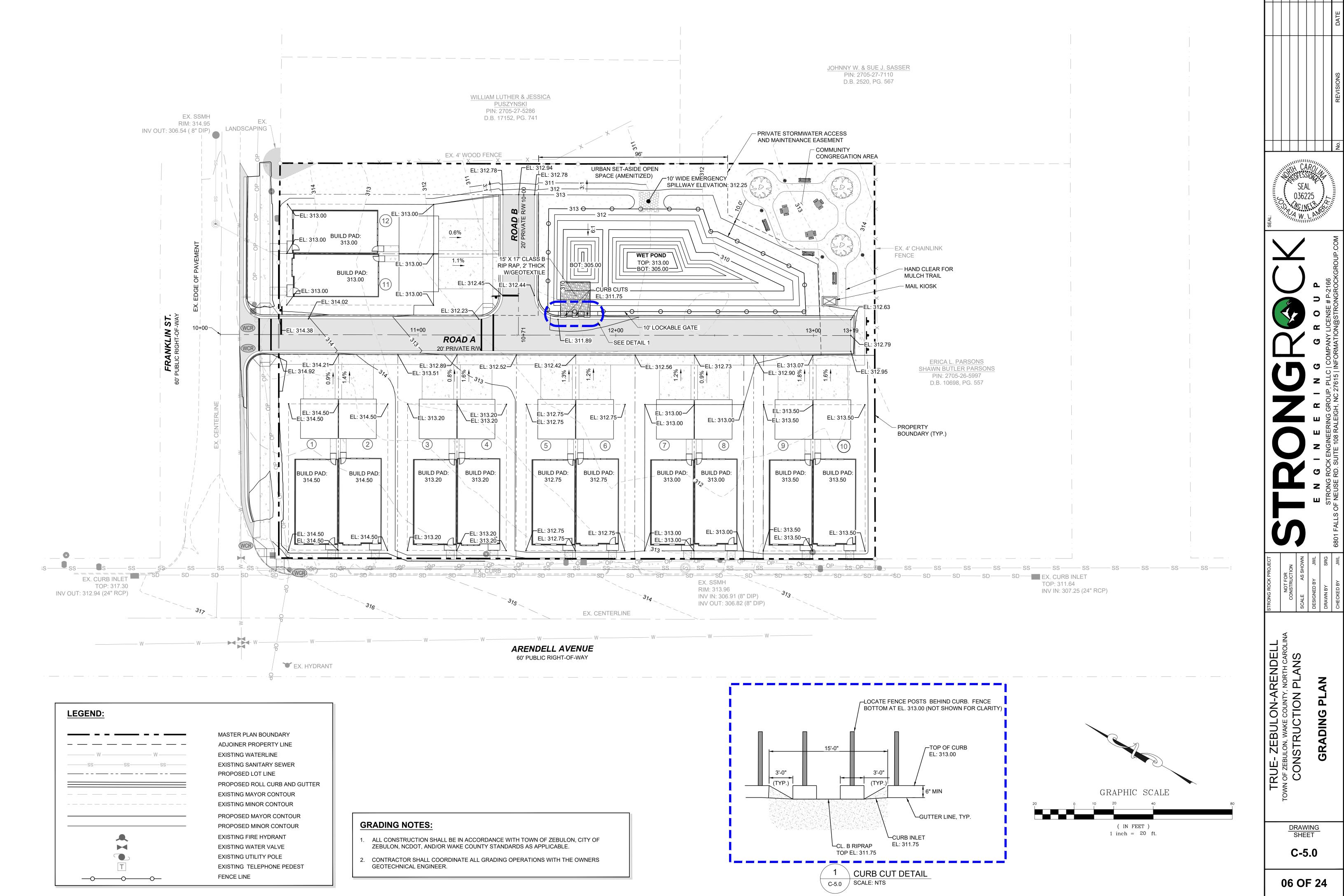


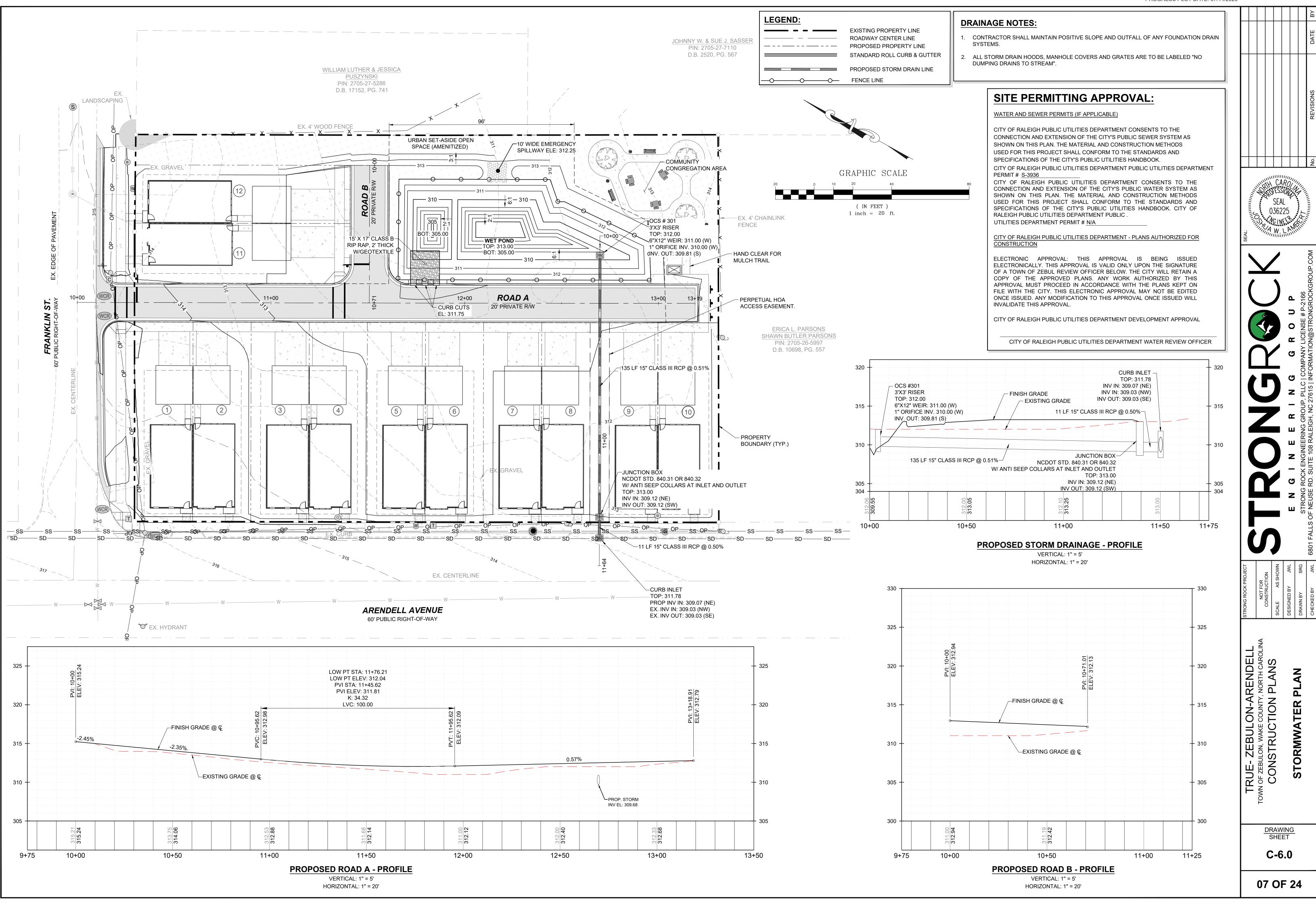
( IN FEET ) 1 inch = 20 ft.



## GRAPHIC SCALE

( IN FEET ) 1 inch = 10 ft.





**OFFSITE SPOIL NOTE:** 

1. IF AN OFFSITE SOIL SPOIL OR BORROW SITE IS UTILIZED, THEN THE DISTURBED AREA FOR THE SPOIL/BORROW SITE MUST BE INCLUDED IN THE LAND-DISTURBANCE PLAN AND PERMIT UNLESS THE SPOIL/BORROW SITE ALREADY HAS A SEPARATE LAND-DISTURBANCE PERMIT.

#### **STAGE 1 SPECIFIC SEQUENCE:**

- INSTALL CONSTRUCTION ENTRANCE, SILT FENCING, SILT FENCE OUTLETS, DIVERSION DITCHES, AND SKIMMER BASINS AS SHOWN ON APPROVED STAGE 1 EROSION CONTROL PLAN. CLEAR AND GRADE ONLY AREAS NECESSARY TO INSTALL THESE EROSION AND SEDIMENT CONTROL DEVICES. INSTALL SILT FENCE OUTLETS AT LOW POINTS IN THE SILT FENCING AS NEEDED TO PREVENT BLOWOUTS.
- STABILIZE ALL DISTURBED AREAS DOWNSTREAM OF SEDIMENT BASINS AND OTHER CRITICAL EROSION CONTROL AREAS IMMEDIATELY UPON INSTALLATION. ONCE APPROVED, BEGIN CLEARING AND GRADING REMAINDER OF THE SITE. MAINTAIN EROSION CONTROL DEVICES AS NEEDED. INSTALL DIVERSION DITCHES AS SHOWN ON THE STAGE 1 EROSION CONTROL PLANS. MAINTAIN DIVERSION DITCHES AS SITE IS BROUGHT TO FINAL GRADE IN ORDER TO DIVERT AS MUCH RUNOFF INTO SEDIMENT BASINS AS POSSIBLE.
- STABILIZE GRADED AREAS AS THEY ARE CLEARED. TEMPORARILY SEED AND MULCH DENUDED AREAS PER THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE SEC. 12.20.5(2). ONCE FINAL GRADE HAS BEEN ACHIEVED, PAVE OR PERMANENTLY SEED ALL AREAS AND SLOPES PER NCDENR'S EROSION SEDIMENT CONTROL PLANNING AND DESIGN MANUAL VERSION 6/06, SECTION 6.10 AND 6.11,
- MAINTAIN EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RAIN EVENT THROUGHOUT CONSTRUCTION.

#### STAGE 2 SPECIFIC SEQUENCE:

- AFTER CONTRACTOR HAS COMPLETED ROUGH GRADING OPERATIONS:
- A. CONTRACTOR SHALL STABILIZE HOUSE LOTS WITH TEMPORARY SEEDING; REFER TO SEEDING DETAILS.
- B. CONTRACTOR SHALL PERMANENTLY STABILIZE ALL SLOPES AND/OR OTHER AREAS THAT ARE AT FINAL GRADE.
- C. CONTRACTOR MAY CREATE ENTRANCE THROUGH SILT FENCE TO LOTS PERMITTED FOR GRADING AS REQUIRED.
- D. CONTRACTOR SHALL CREATE STABILIZED ENTRANCE AT DEFINED LOCATIONS TO REDUCE SEDIMENT TRACKING AND LIMIT ACCESS LOCATIONS.
- INSTALL UTILITIES, INCLUDING STORM NETWORK. CONTRACTOR SHALL ONLY EXCAVATE THE AMOUNT OF TRENCH TO ALLOW FOR ONE DAY OF PIPE INSTALLATION.
- CONTRACTOR SHALL USE BERMS, DIVERSIONS, AND PIPE INLET PROTECTION TO PREVENT SEDIMENT RUNOFF FROM ENTERING THE STORM SYSTEM.
- 4. INSTALL INLET PROTECTION ON ALL COMPLETED STORM STRUCTURES
- 5. UPON APPROVAL OF PERMANENT STABILIZATION, REMOVE BALANCE OF EROSION CONTROL MEASURES, GRADE AND STABILIZE REMAINDER OF SITE.
- WITH APPROVAL OF EROSION CONTROL INSPECTOR, REMOVE THE REMAINER OF THE EROSION CONTROL DEVICES.

#### **EROSION CONTROL NARRATIVE NOTE:**

THE PURPOSE OF THIS PLAN IS TO ESTABLISH 12 LOTS RESIDENTIAL SUBDIVISION. LAND DISTURBANCE WILL BE KEPT TO THE MINIMUM AMOUNT NEEDED TO INSTALL THE INFRASTRUCTURE AND ASSOCIATED STORM WATER DEVICE SHOWN ON THE PLAN. ACCELERATED EROSION WILL BE CONTROLLED BY MINIMIZING THE AMOUNT OF EXISTING VEGETATIVE COVER TO BE REMOVED, AND PROVIDING TEMPORARY AND PERMANENT STABILIZATION MEASURE ON DISTURBED AREAS AS SOON AS POSSIBLE. IN GENERAL, STRIPPING OF VEGETATION, REGRADING OR OTHER DEVELOPMENT IS TO BE DONE IN SUCH A WAY THAT WILL MINIMIZE EROSION. THE PRIMARY CONTROL FOR CAPTURING SEDIMENT FROM THESE AREAS WILL BE SILT FENCE AND RISER/SKIMMER BASIN. A CONSTRUCTION ENTRANCE WILL BE PROVIDED FOR THE ACCESS. THE AMOUNT OF DISTURBED AREA AND THE DURATION OF EXPOSURE SHALL BE KEPT TO A PRACTICAL MINIMUM AND THE PERMANENT VEGETATION AND STORMWATER CONTROL SYSTEMS WILL BE INSTALLED AS SOON AS POSSIBLE TO PREVENT EROSION AND THEREFORE MINIMIZE THE AMOUNT OF SEDIMENT TO BE CONTROLLED.

#### **BASIN REMOVAL 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 THE BASIN.

2. CONTACT NCDEQ - RALEIGH REGIONAL OFFICE (919) 791-4200 TO DETERMINE THE DIVISION OF ENERGY, MINERAL AND LAND RESOURCES CONTACT PERSON TO RECEIVE DEWATERING NOTIFICATIONS. AT LEAST 10 DAYS PRIOR TO BEGINNING DEWATERING ACTIVITY, SEND EMAIL TO NCDEQ-DEMLR CONTACT PERSON AND COPY ENVIRONMENTAL CONSULTANT THAT MET YOU ONSITE. THE EMAIL SHOULD INCLUDE: E&SC JURISDICTION: WAKE COUNTY, WAKE COUNTY PROJECT: NAME, NUMBER, AND LOCATION (CITY/TOWN), ENVIRONMENTAL CONSULTANT NAME, AND ADDRESS THE FOLLOWING:

- A. REASON FOR CONVERSION
- B. BASIN #
- C. DEWATERING METHOD
- 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.

#### **EROSION CONTROL NOTES:**

- ALL CONSTRUCTION SHALL CONFORM TO THE LATEST WAKE COUNTY STANDARDS, SPECIFICATIONS AND DETAILS.
- 2. GRADING AND EROSION CONTROL METHODS SHALL ADHERE TO THE WAKE COUNTY SOIL AND EROSION CONTROL STANDARDS AND SPECIFICATIONS.
- GRADING AND EROSION CONTROL METHODS SHALL ADHERE TO THE NORTH CAROLINA DEPARTMENT OF NATURAL RESOURCES DIVISION OF WATER QUALITY (DWQ) STANDARDS AND SPECIFICATIONS. WHERE DIFFERENT FROM WAKE COUNTY STANDARDS, THE MORE STRINGENT METHOD SHALL BE APPLIED.
- 4. FAILURE TO FOLLOW THE APPROVED PLAN SEQUENCE AND DETAILS COULD SUBJECT THE FINANCIALLY RESPONSIBLE PARTY TO FINES AND PENALTIES ISSUED BY EITHER THE WAKE COUNTY EROSION CONTROL DEPARTMENT OR THE DWQ.
- 5. CONTRACTOR SHALL SEED AND STABILIZE ALL STEEP SLOPES (GREATER THAN 2H:1V) WITHIN 7 DAYS, 10 DAYS FOR MODERATE SLOPES ( 3H:1V OR GREATER) AND WITHIN 14 CALENDAR DAYS EVERYWHERE ELSE (STATE LAW 2009-486).
- 6. FOR ANY LAND-DISTURBING ACTIVITY WHERE GRADING ACTIVITIES HAVE BEEN COMPLETED, TEMPORARY OR PERMANENT GROUND COVER SUFFICIENT TO RESTRAIN EROSION SHALL BE PROVIDED AS SOON AS PRACTICAL, BUT IN NO CASE LATER THAN SEVEN (7) DAYS AFTER COMPLETING THE WORK. STABILIZATION IS THE BEST FORM OF EROSION CONTROL. TEMPORARY SEEDING IS NECESSARY TO ACHIEVE EROSION CONTROL ON LARGE DENUDED AREAS AND ESPECIALLY WHEN SPECIFICALLY REQUIRED AS PART OF THE CONSTRUCTION SEQUENCE ON THE PLAN.
- . NO DEBRIS SHALL BE TRACKED ONTO PUBLIC RIGHT OF WAY. IF THE SITUATION OCCURS WHERE MUD, ROCK AND DEBRIS IS TRACKED ONTO PAVEMENT, THE CONTRACTOR SHALL CLEAN THE PAVEMENT AND INSTALL ADDITIONAL MEASURES TO PREVENT THE FUTURE OCCURRENCE.
- 3. THE EROSION CONTROL INSPECTOR MAY REQUIRE ADDITIONAL FIELD MEASURES AS NECESSARY TO PROVIDE ADEQUATE PROTECTION FROM RECEIVING WATER COURSES.
- 9. EROSION AND SEDIMENT CONTROL DEVICES MUST BE INSTALLED AND INSPECTED PRIOR TO ANY GRADING ON SITE. THE CONTRACTOR SHALL CALL FOR AN INSPECTION BY NCDEQ ONCE INITIAL MEASURES ARE IN PLACE. (SEE CONSTRUCTION SEQUENCES)
- 10. CONTRACTOR SHALL INSPECT ALL SEDIMENT /EROSION CONTROL DEVICES AFTER EACH STORM EVENT. EACH DEVICE IS TO BE MAINTAINED OR REPLACED IF SEDIMENT ACCUMULATION HAS REACHED ONE HALF THE CAPACITY OF THE DEVICE.
- 11. A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE ON FILE AT THE JOB SITE AT ALL TIMES.
- 12. CONSTRUCTION, MAINTENANCE, AND REMOVAL OF ALL EROSION CONTROL DEVICES ARE THE RESPONSIBILITY OF THE GRADING CONTRACTOR UNLESS OTHERWISE NOTED.
- 13. ANY GRADING BEYOND THE DENUDED LIMITS SHOWN ON THE PLAN IS A VIOLATION OF THE CITY/COUNTY EROSION CONTROL ORDINANCE AND IS SUBJECT TO A FINE.
- 14. ADDITIONAL MEASURES TO CONTROL EROSION AND SEDIMENT MAY BE REQUIRED BY A REPRESENTATIVE OF THE CITY/COUNTY ENGINEERING DEPARTMENT AND ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- 15. PROTECTION OF EXISTING VEGETATION: AT THE START OF GRADING INVOLVING THE STRIPPING OF TOPSOIL OR LOWERING OF EXISTING GRADE AROUND A TREE, A CLEAN, SHARP, VERTICAL CUT SHALL BE MADE AT THE EDGE OF THE TREE SAVE AREA AT THE SAME TIME AS OTHER EROSION CONTROL MEASURES ARE INSTALLED. THE TREE PROTECTION FENCING SHALL BE INSTALLED ON THE SIDE OF THE CUT FARTHEST AWAY FROM THE TREE TRUNK AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE. NO STORAGE OF MATERIALS, FILL, OR EQUIPMENT AND NO TRESPASSING SHALL BE ALLOWED WITHIN THE BOUNDARY OF THE PROTECTED AREA AND SHALL BE POSTED ON THE PROTECTION FENCE. A PROTECTION FENCE CONSTRUCTED OF MATERIAL RESISTANT TO DEGRADATION BY SUN, WIND, AND MOISTURE FOR THE DURATION OF THE CONSTRUCTION, SHALL BE INSTALLED AT THE SAME TIME AS THE EROSION CONTROL MEASURES AND SHALL BE IN PLACE UNTIL ALL CONSTRUCTION IN THE VICINITY OF THE TREES IS COMPLETE.
- 16. A CONSTRUCTION SEQUENCE HAS BEEN PROVIDED. INSTALLATION OF ALL PROPOSED SEDIMENTATION & EROSION CONTROL MEASURES IN THE SEQUENCE(S) PROVIDED AND MAINTENANCE OF THOSE DEVICES IS REQUIRED. THE CONTRACTOR MAY BE ALLOWED, WITH PRIOR APPROVAL FROM THE OWNER. TO COORDINATE CHANGES TO THE PLAN WITH THE ON-SITE SEDIMENTATION & EROSION CONTROL INSPECTOR AND THE ENGINEER.
- 17. PROVIDE INLET PROTECTION AROUND ALL SITE STORM INLETS. PROTECT OPEN PIPES UNDER CONSTRUCTION WITH EITHER PLYWOOD OR WITH MESH AND GRAVEL WEIRS. RUNOFF SHALL NOT BE ALLOWED IN ANY OPEN TRENCH.
- 18. CONTRACTOR WILL FIELD LOCATE SILT FENCE OUTLETS AT LOW POINTS IN SILT FENCE AS REQUIRED TO PROVIDE RELIEF FROM CONCENTRATED FLOWS AND PONDING.
- 19. TEMPORARY DIVERSIONS SHALL BE MAINTAINED DAILY BY CONTRACTOR SO THAT THEY ARE FUNCTIONAL AT THE END OF EACH WORKDAY AND WHEN STOPPING WORK FOR RAIN.
- 20. ALL DIMENSIONS AND GRADES SHOWN ON THE PLANS SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. CONTRACTOR SHALL NOTIFY THE OWNER AND ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION FOR NECESSARY PLAN OR GRADE CHANGES. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN GIVEN.
- 21. DISTURBANCE OUTSIDE OF THE SITE PROPERTY LIMITS OR PUBLIC RIGHT-OF-WAY SHALL ONLY BE AS ALLOWED BY SIGNED GRADING AGREEMENTS AND/OR EASEMENTS BETWEEN THE DEVELOPER AND THE OFFSITE PROPERTY OWNER.
- 22. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN SAFE OPEN ACCESS TO ALL PROPERTIES ALONG ADJACENT PROPERTIES DURING CONSTRUCTION PERIOD FOR IMPROVEMENTS.
- 23. SLOPES GREATER THAN 3:1 AND/OR GREATER THAN 10' IN VERTICAL DIFFERENCE SHALL BE INSTALLED WITH ROLLED EROSION CONTROL PRODUCT IMMEDIATELY UPON INSTALLATION.

#### **CONSTRUCTION SEQUENCE:**

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE ENVIRONMENTAL CONSULTANT. OBTAIN A LANDDISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD, SILT FENCE, SEDIMENT BASIN OR OTHER MEASURES AS SHOWN ON THE APPROVED PLAN. CLEAR ONLY AS NECESSARY TO INSTALL THESE DEVICES.
- . 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.
- 5. INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS, OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN. BEGIN CONSTRUCTION, BUILDING, ETC.
- 5. STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, 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, SILT FENCE, SEDIMENT BASIN, ETC., AND SEED OUT OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES. SHOULD NOW BE INSTALLED.
- WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE ENVIRONMENTAL CONSULTANT. OBTAIN A CERTIFICATE OF COMPLETION.

KARYN PAGEAU AT 919-796-8769 AS ENVIRONMENTAL CONSULTANT.

10. WAKE COUNTY MUST GRANT PERMISSION TO CONVERT THE SEDIMENT BASIN OVER TO STORMWATER USE PRIOR TO COMPLETING ANY RELATED WORK

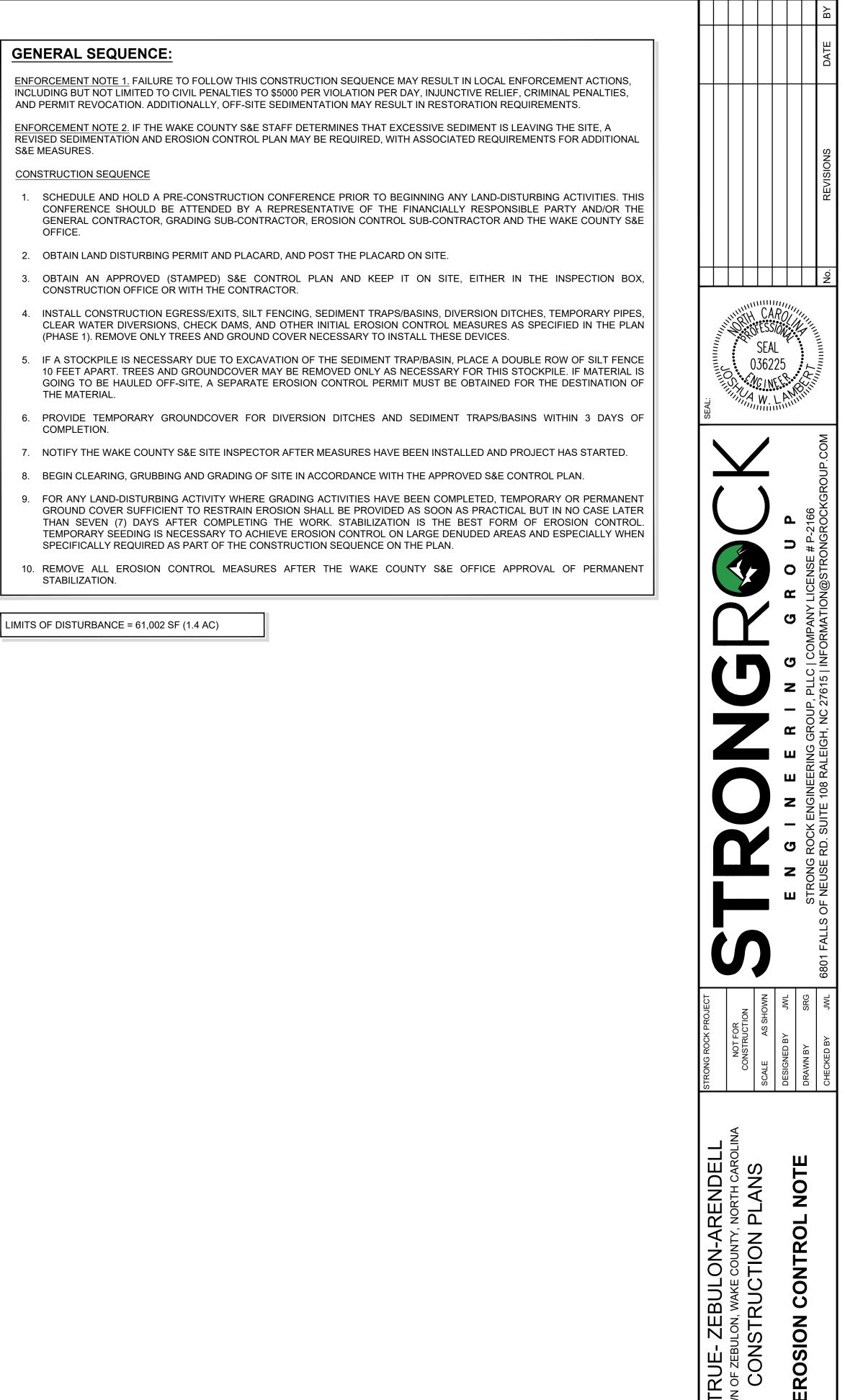
#### **GENERAL SEQUENCE:**

S&E MEASURES.

CONSTRUCTION SEQUENCE

OFFICE.

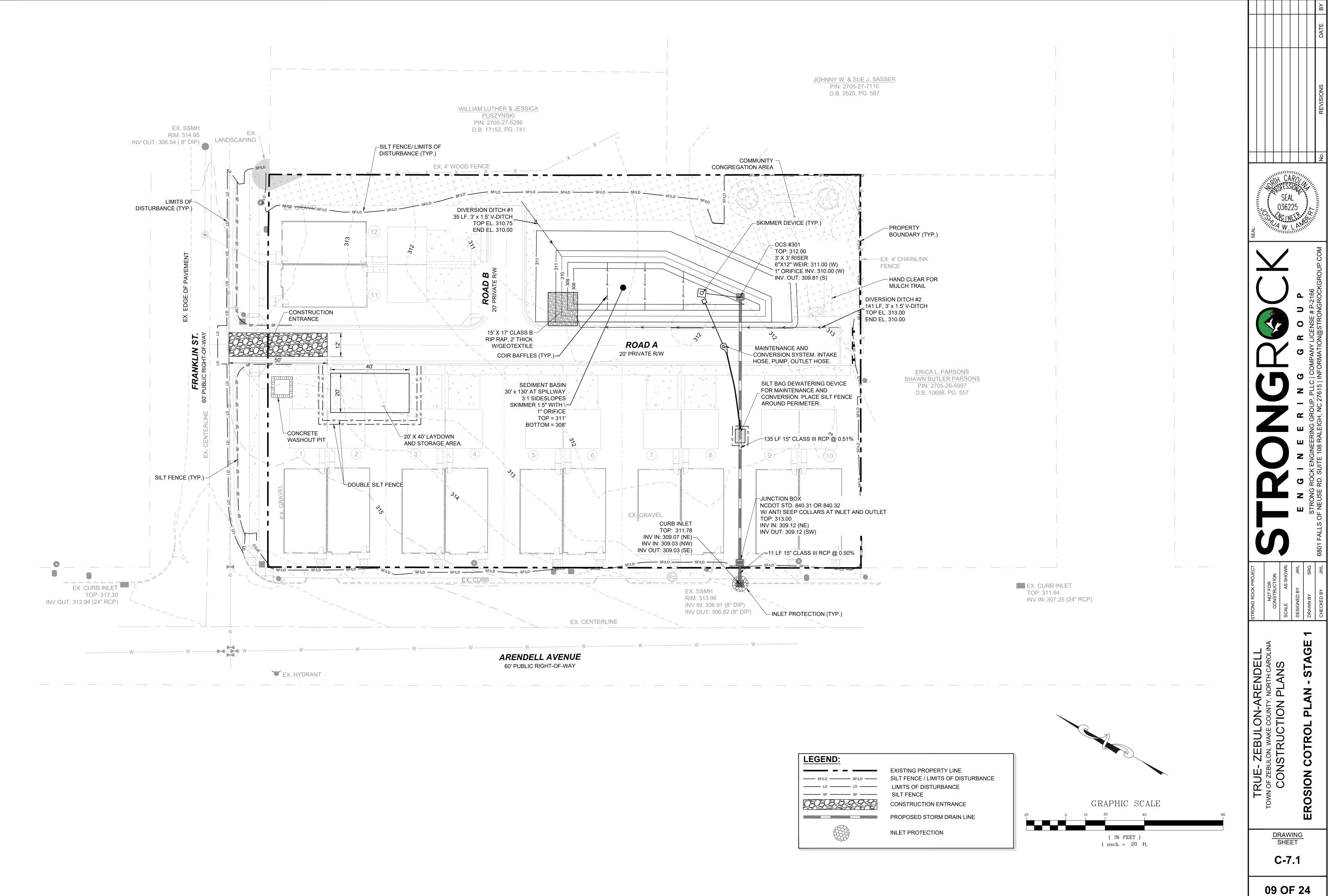
- THE MATERIAL.
- COMPLETION.



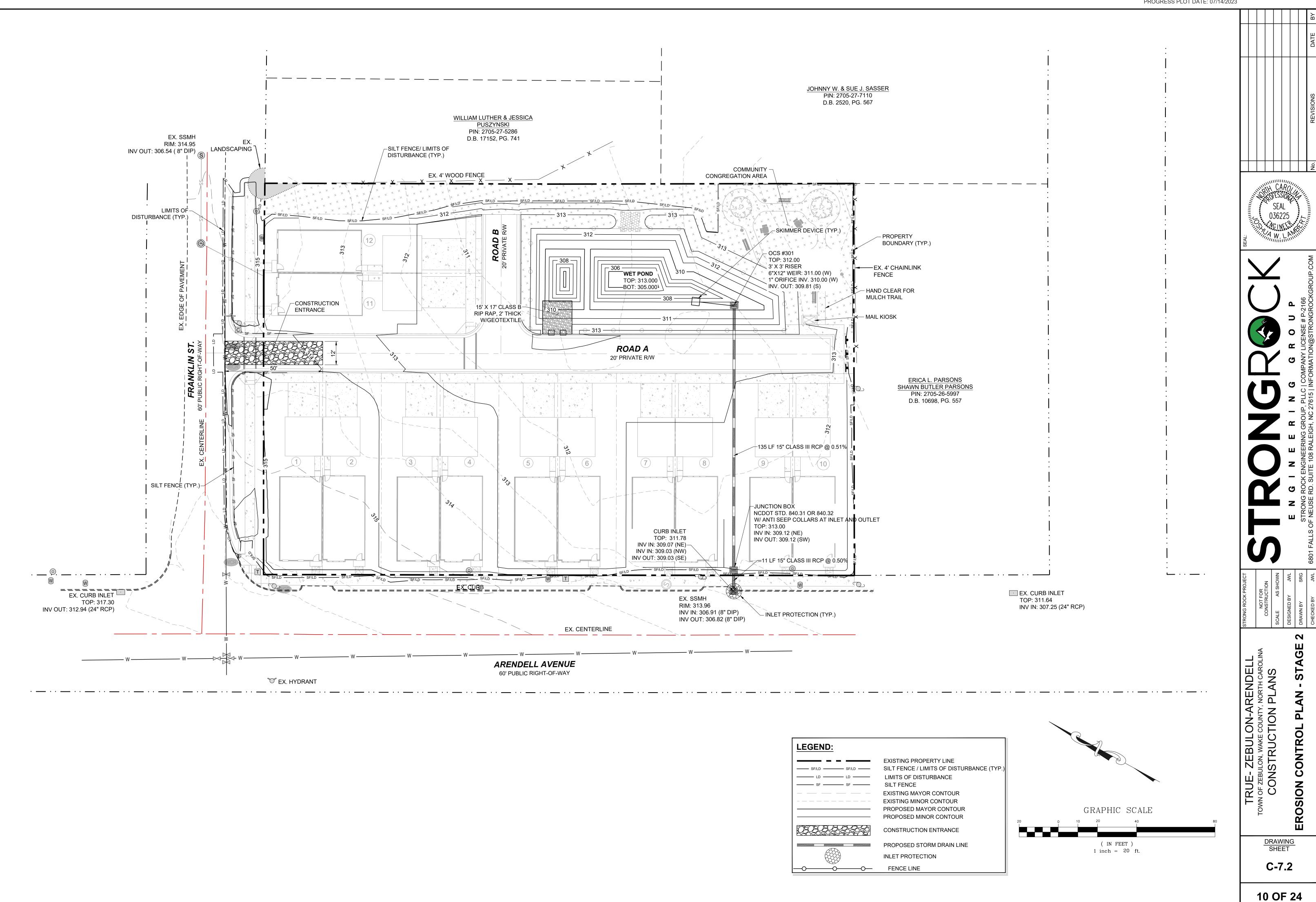
DRAWING

SHEET

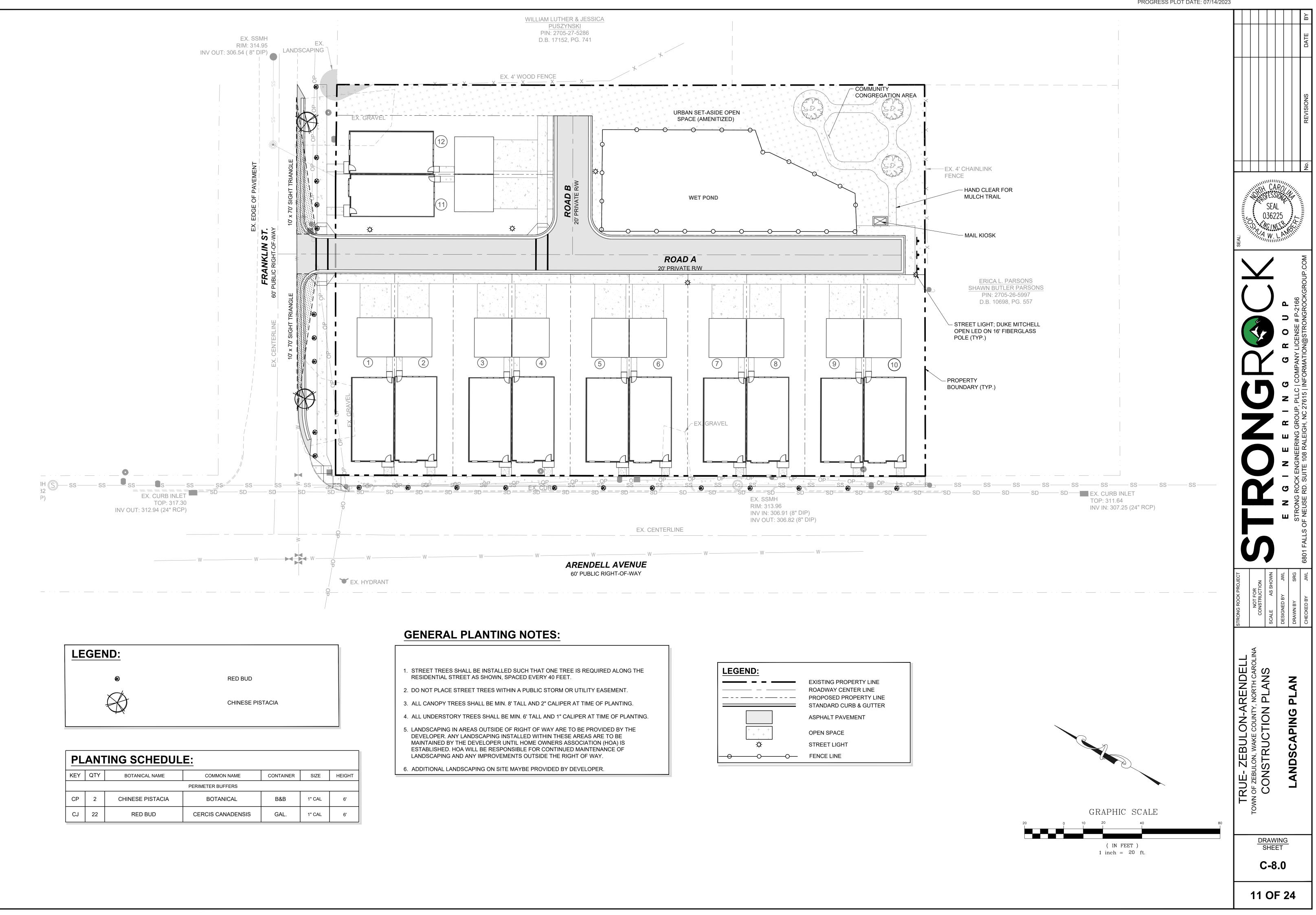
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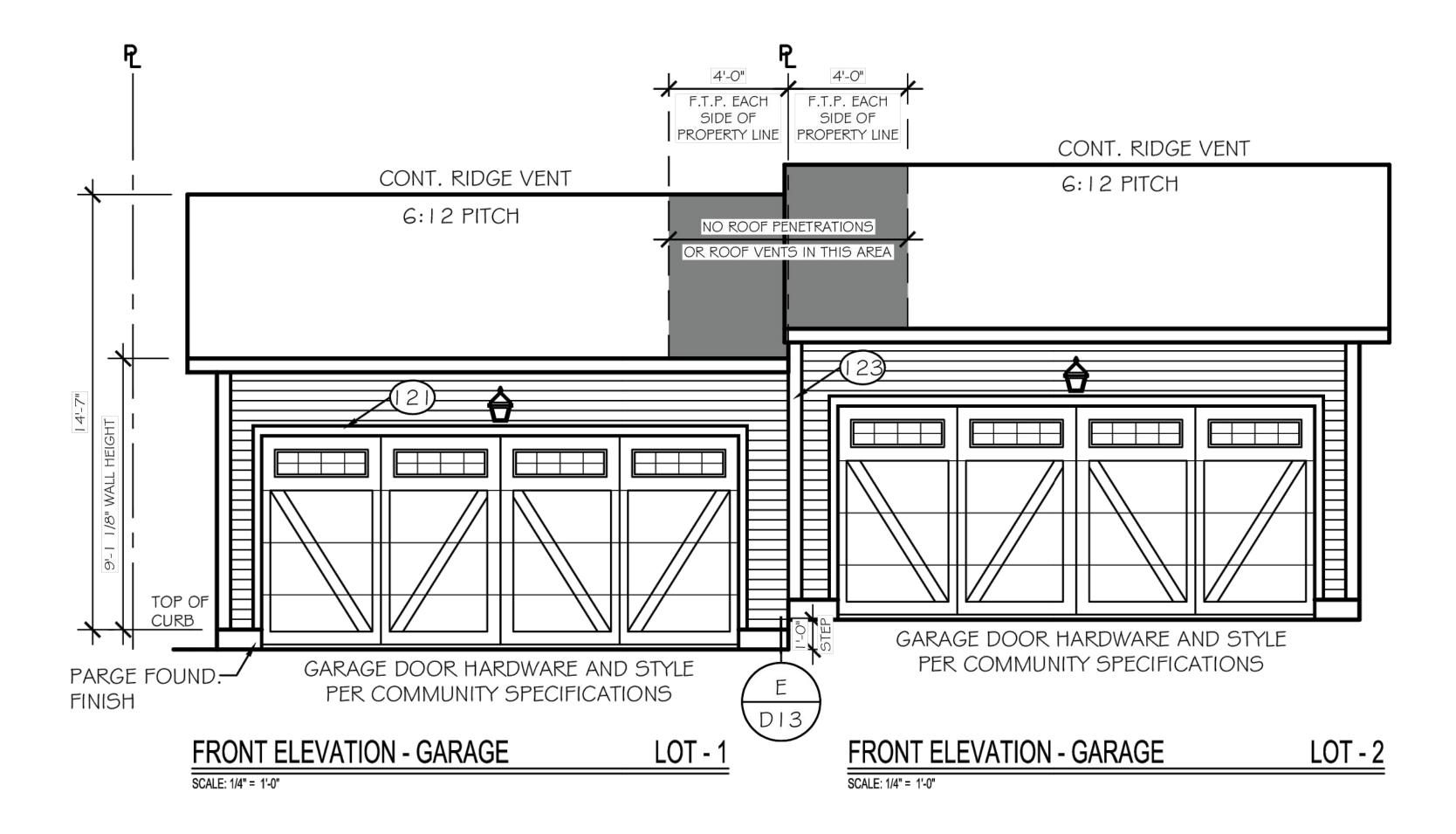
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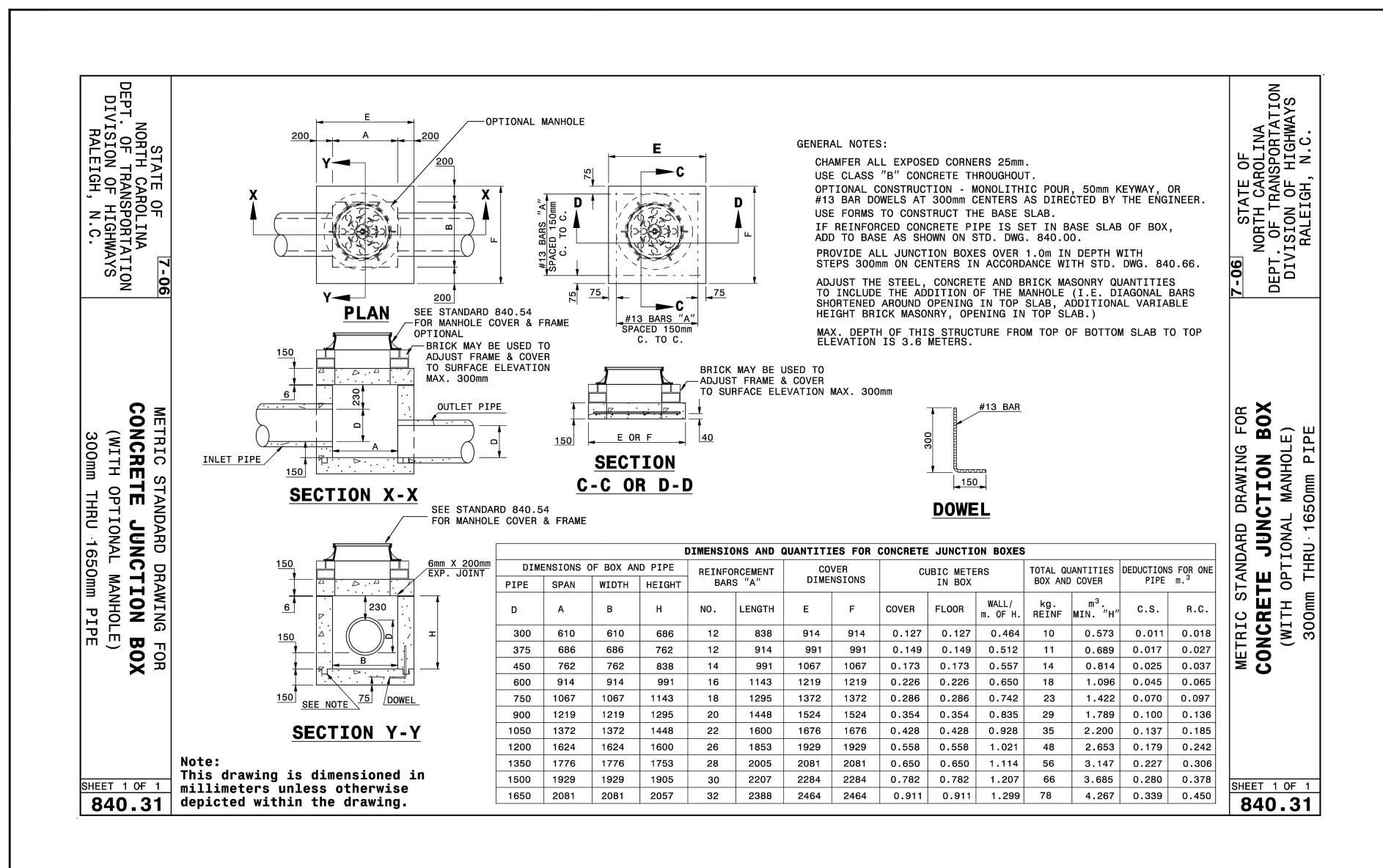
PLANTING SCHEDULE:						
KEY	QTY	BOTANICAL NAME	COMMON NAME	CONTAINER	SIZE	HEIGHT
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СР	2	CHINESE PISTACIA	BOTANICAL	B&B	1" CAL	6'
CJ	22	RED BUD	CERCIS CANADENSIS	GAL.	1" CAL	6'







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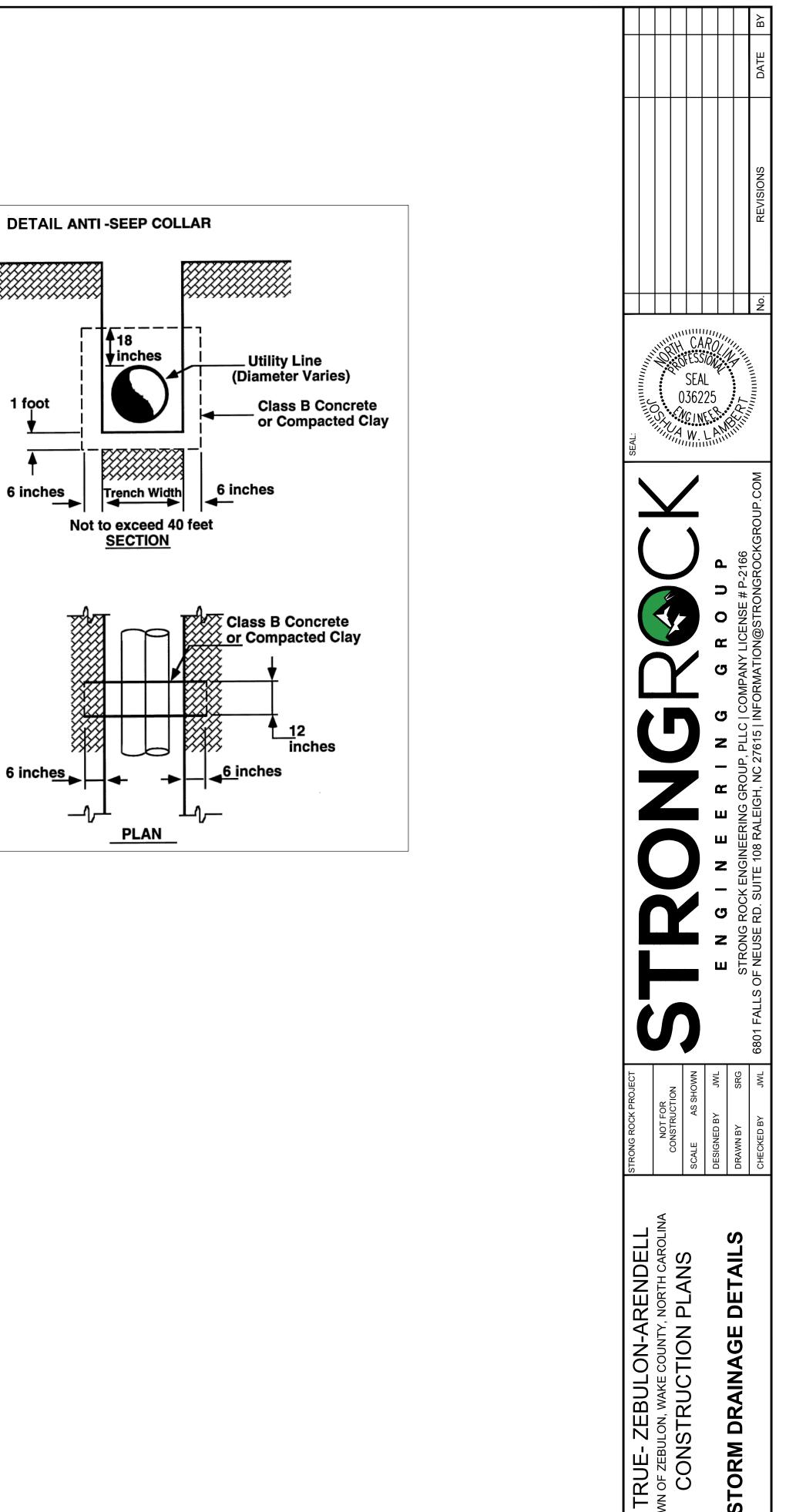


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6 inches

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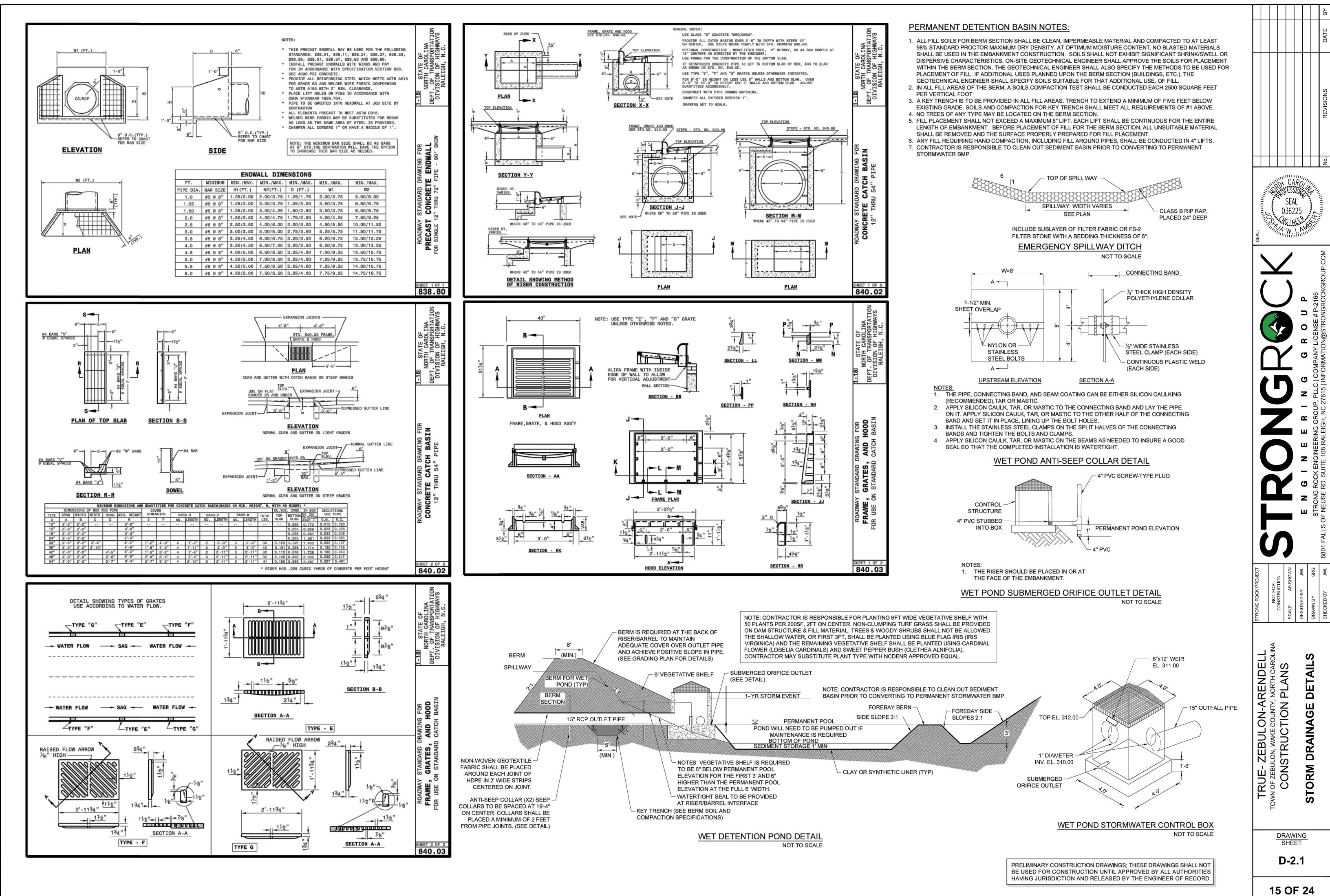


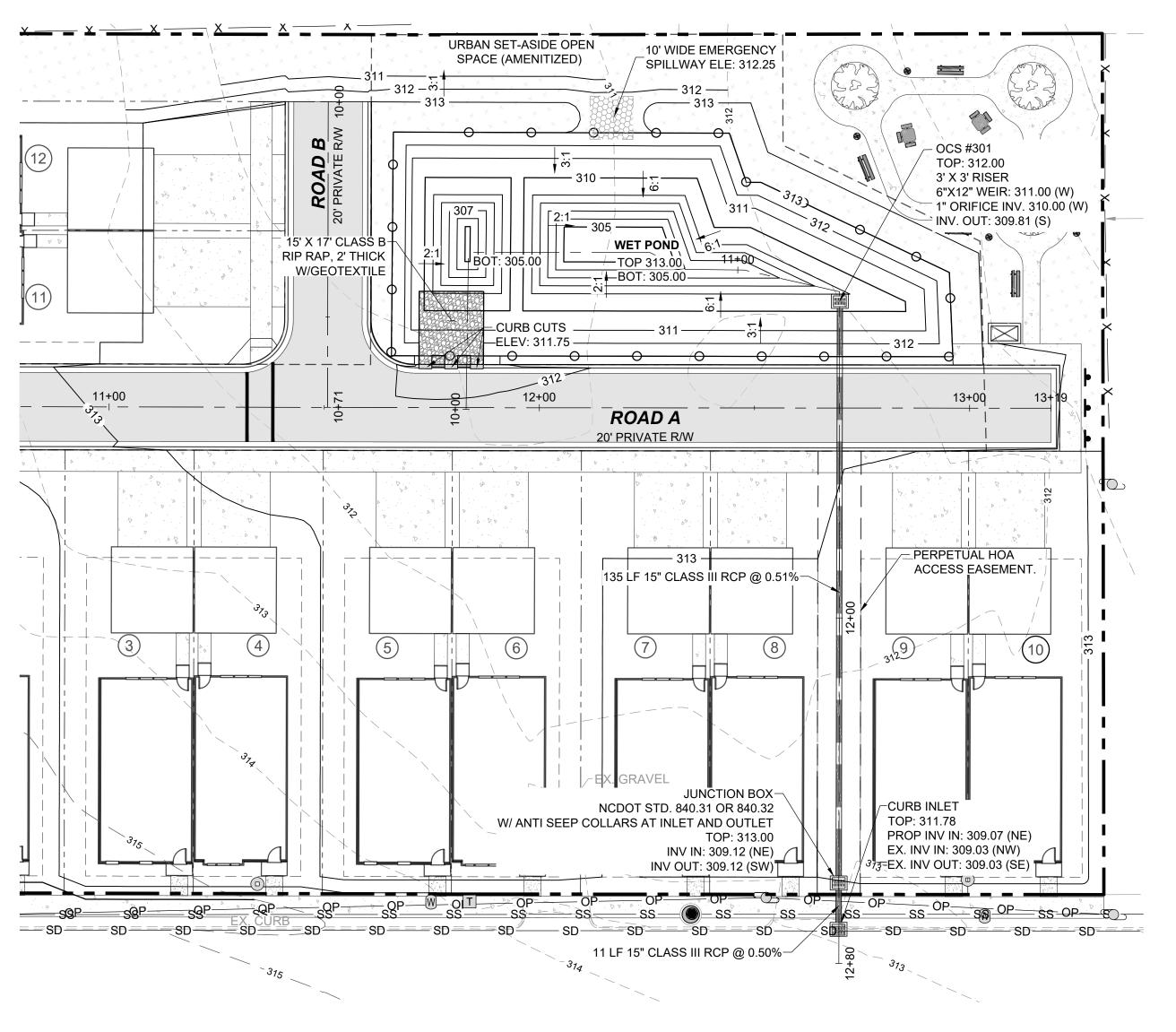
14 OF 24

DRAWING SHEET

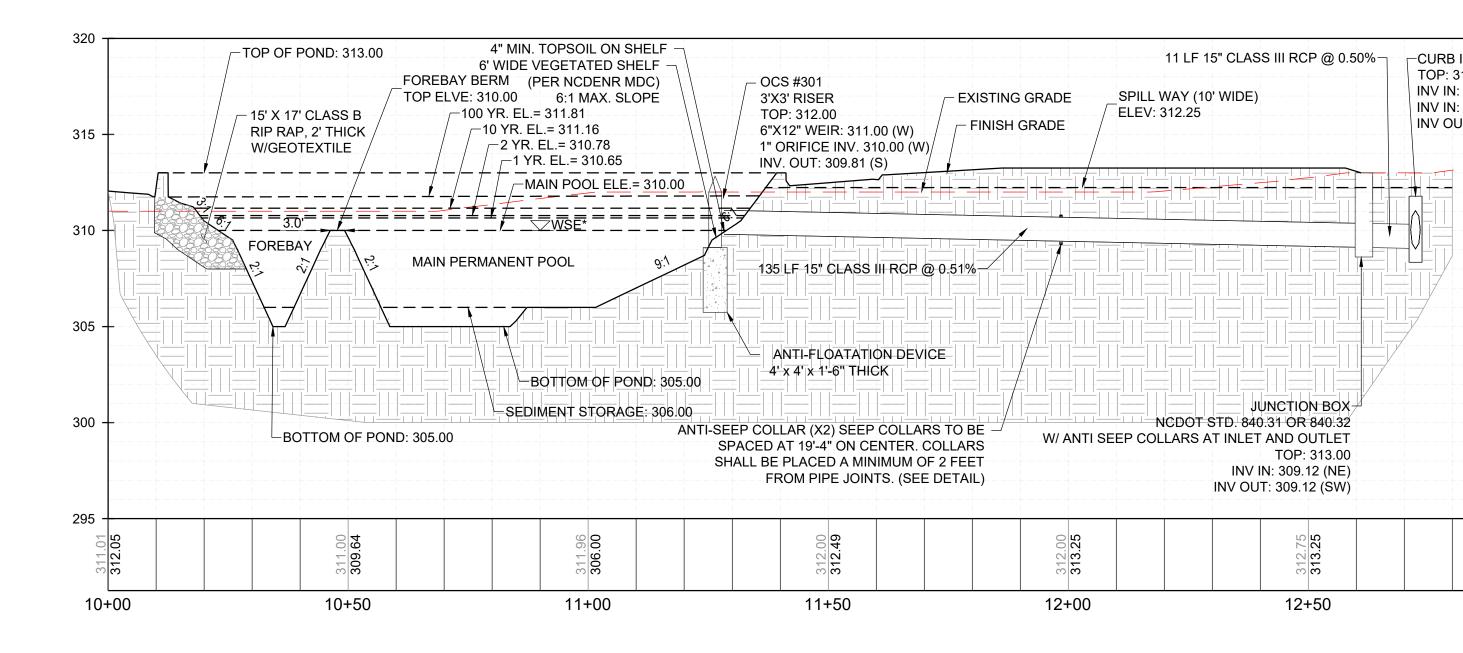
D-2.0

STORM

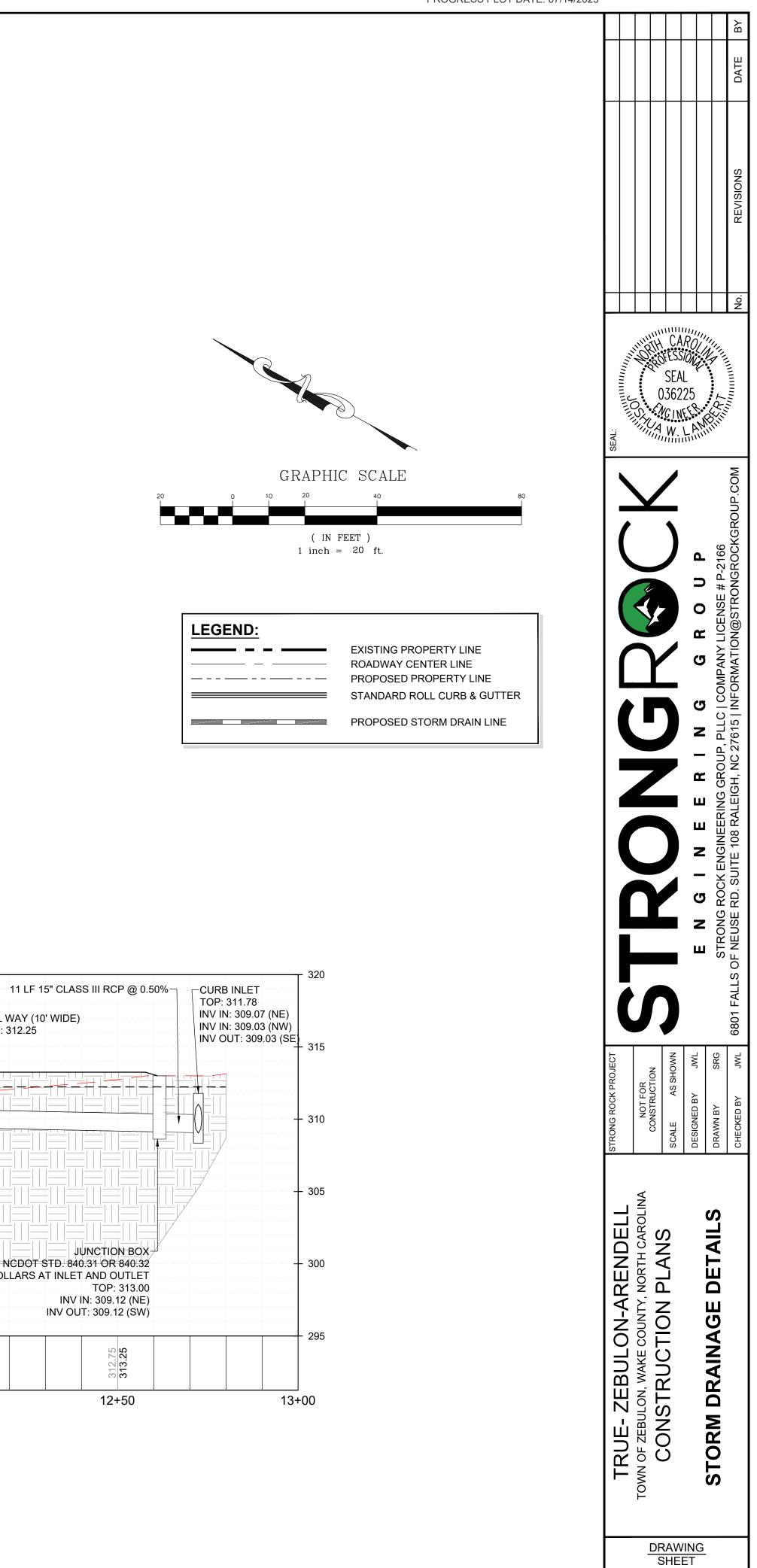




#### WET POND - PLAN HORIZONTAL: 1" = 20'

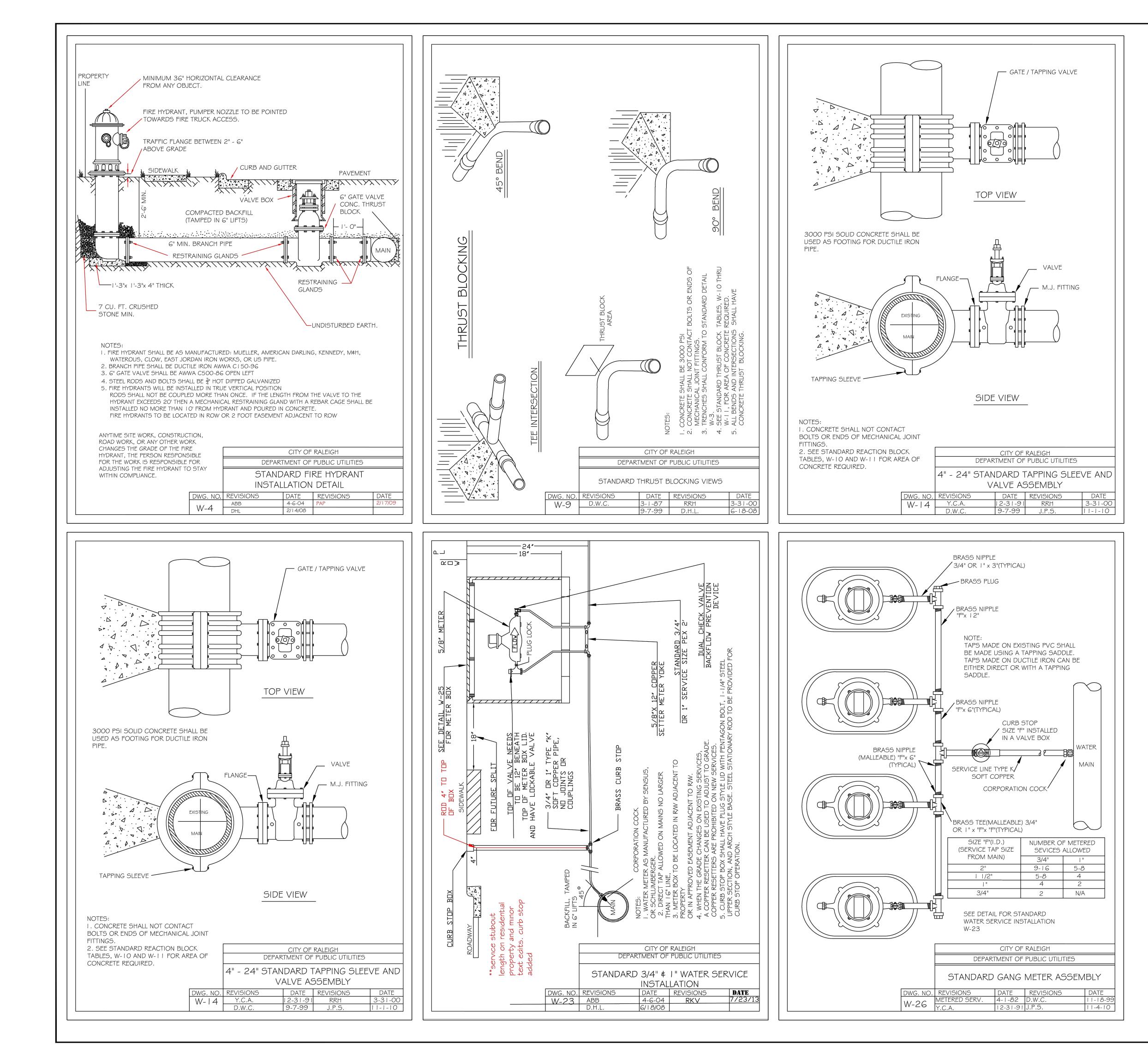


WET POND - PROFILE VERTICAL: 1" = 5'



16 OF 24

**D-2.2** 





## **SITE PERMITTING APPROVAL:**

WATER AND SEWER PERMITS (IF APPLICABLE)

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 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 PUBLIC UTILITIES DEPARTMENT PERMIT # <u>S-3936</u>

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 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 PUBLIC . UTILITIES DEPARTMENT PERMIT # N/A

<u>CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT - PLANS AUTHORIZED FOR</u> CONSTRUCTION

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A TOWN OF ZEBUL REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED ONCE ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

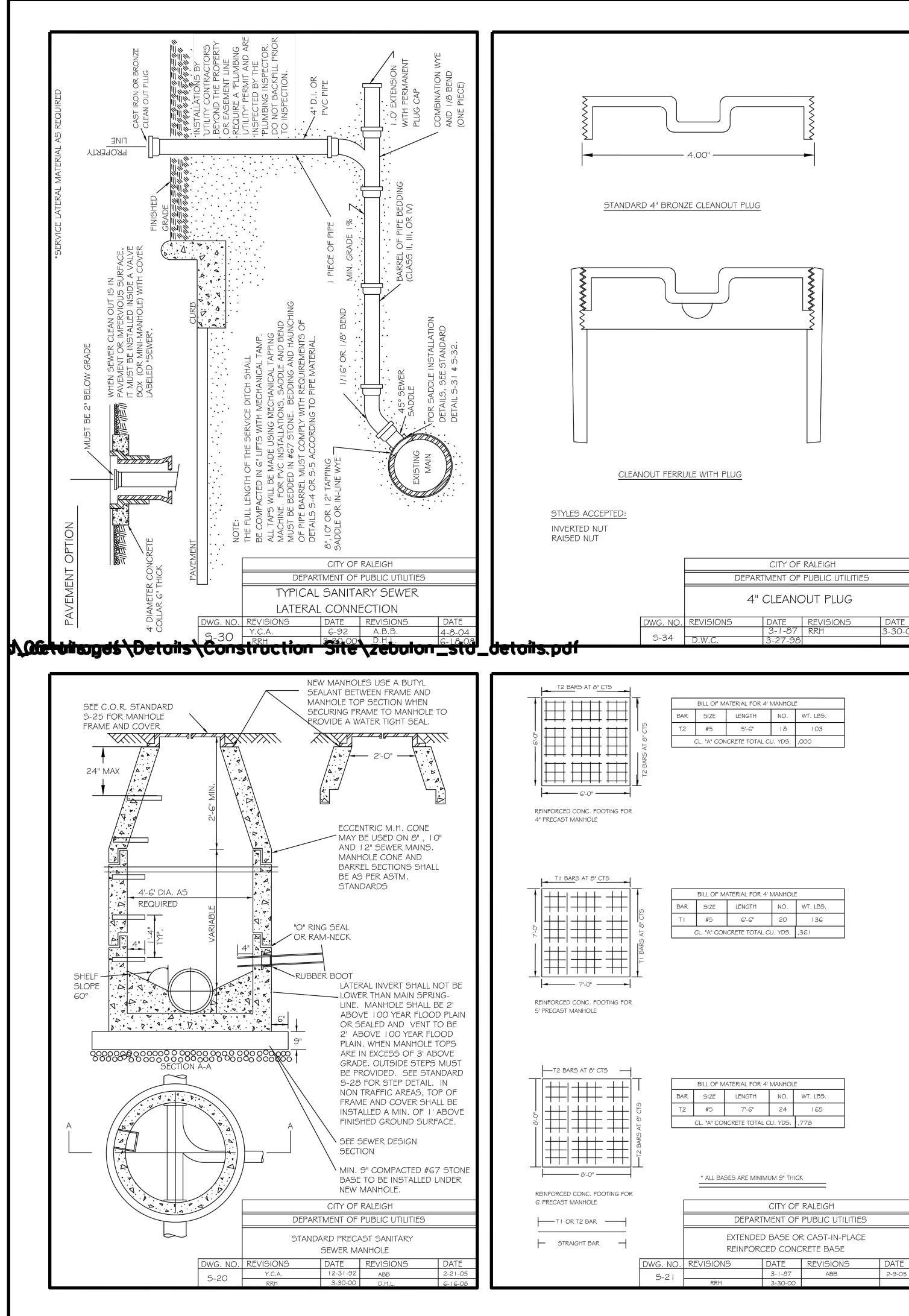
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

#### CITY OF ZEBULON - PLANS AUTHORIZED FOR CONSTRUCTION:

ELECTRONIC APPROVAL: THIS APPROVAL IS BEING ISSUED ELECTRONICALLY. THIS APPROVAL IS VALID ONLY UPON THE SIGNATURE OF A CITY OF ZEBULON REVIEW OFFICER BELOW. THE CITY WILL RETAIN A COPY OF THE APPROVED PLANS. ANY WORK AUTHORIZED BY THIS APPROVAL MUST PROCEED IN ACCORDANCE WITH THE PLANS KEPT ON FILE WITH THE CITY. THIS ELECTRONIC APPROVAL MAY NOT BE EDITED ONCE ISSUED. ANY MODIFICATION TO THIS APPROVAL ONCE ISSUED WILL INVALIDATE THIS APPROVAL.

CITY OF ZEBULON DEVELOPMENT APPROVAL

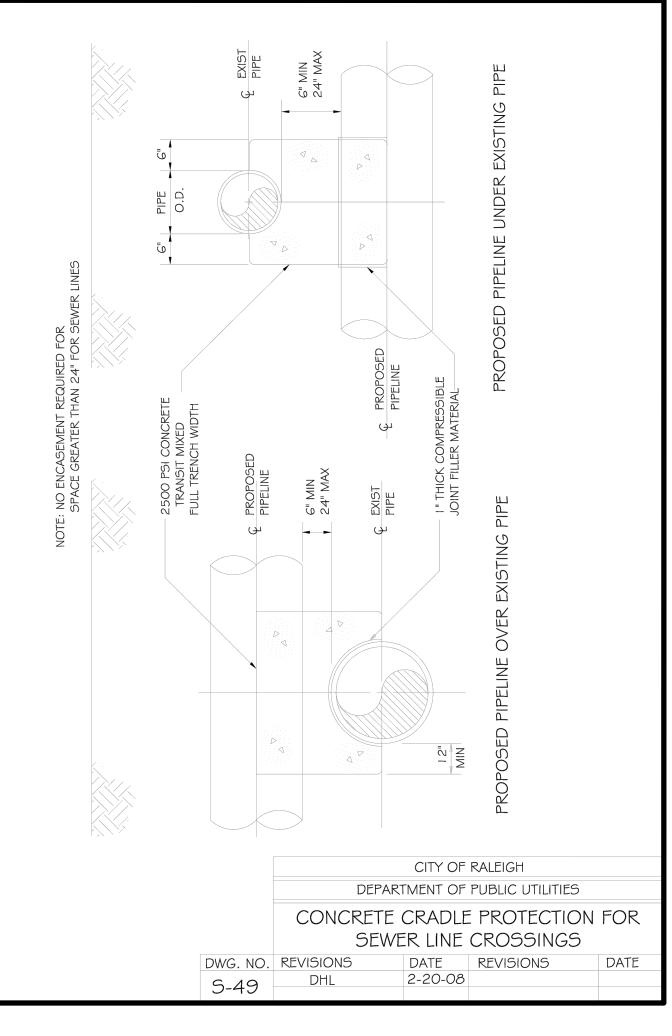
ZEBULON WATER REVIEW OFFICER

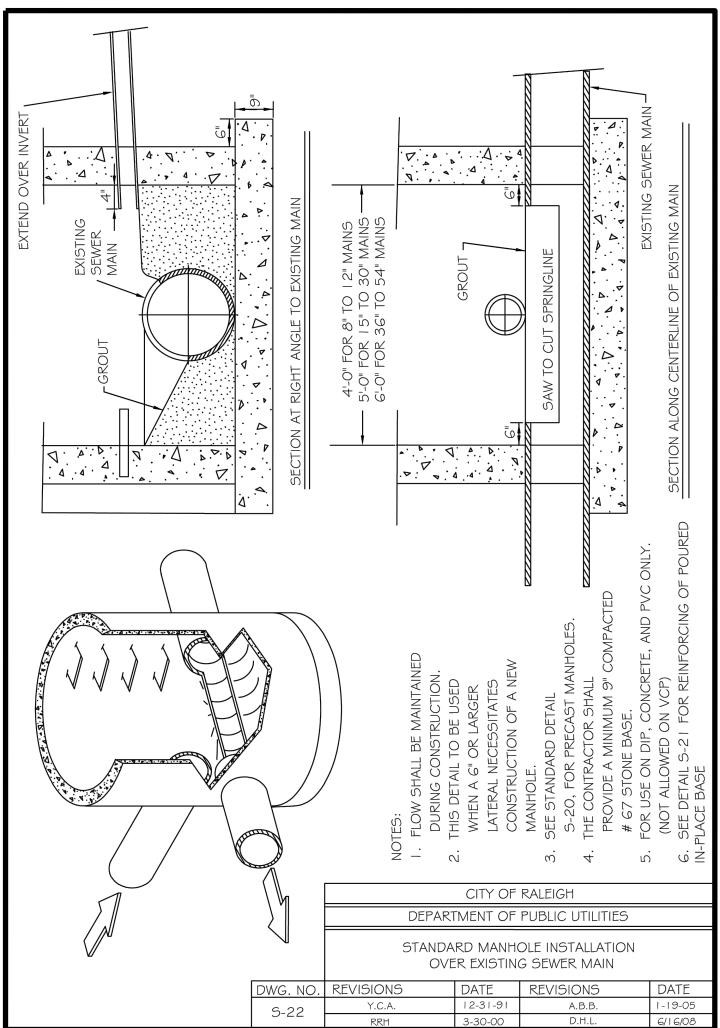


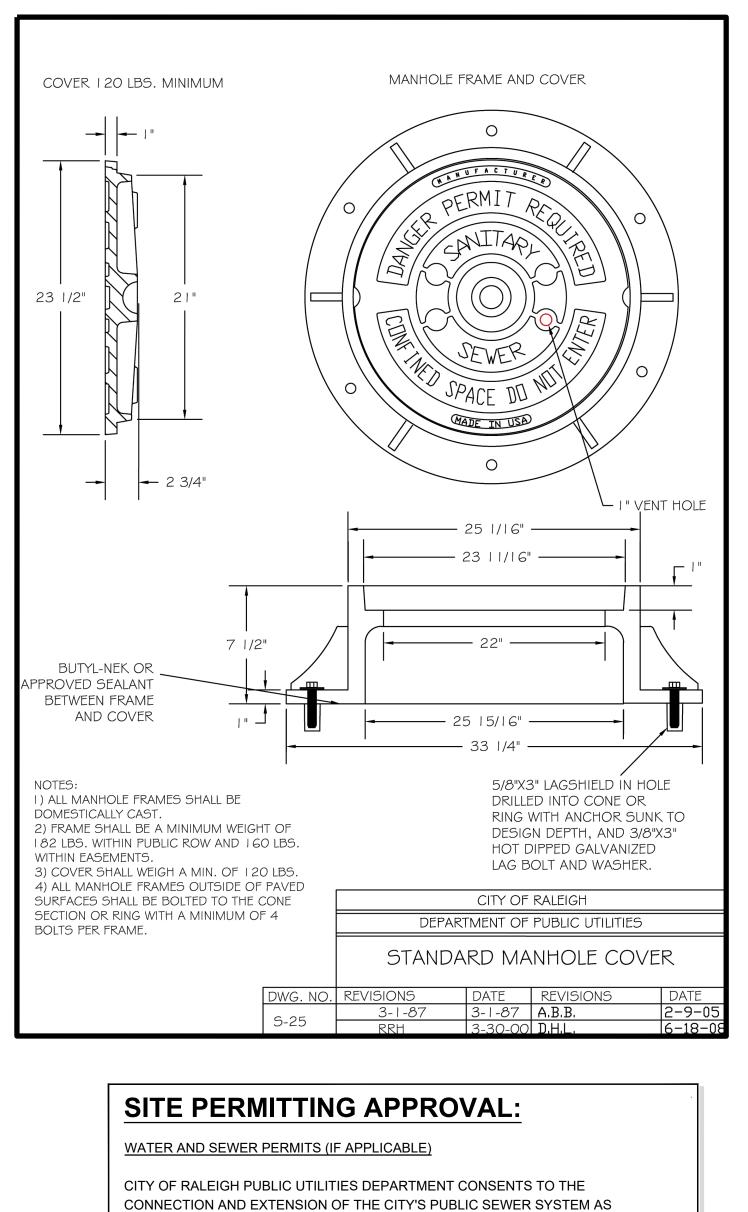
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BAR	SIZE	LENGTH	NO.	WT. LBS.	
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SHOWN ON THIS PLAN. THE MATERIAL AND CONSTRUCTION METHODS USED FOR THIS PROJECT SHALL CONFORM TO THE STANDARDS AND SPECIFICATIONS OF THE CITY'S PUBLIC UTILITIES HANDBOOK. CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT PUBLIC UTILITIES DEPARTMENT PERMIT # <u>S-3936</u> CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT 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

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CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT DEVELOPMENT APPROVAL

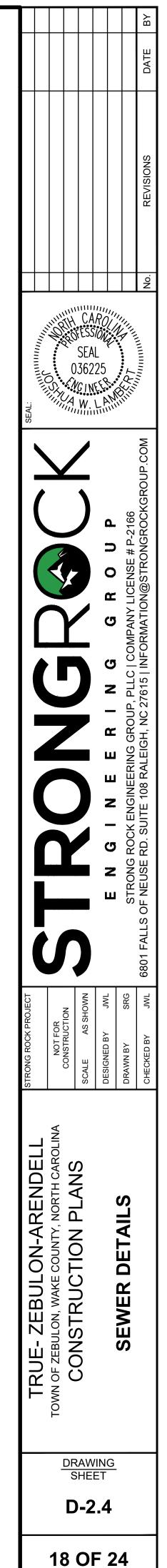
CITY OF RALEIGH PUBLIC UTILITIES DEPARTMENT WATER REVIEW OFFICER

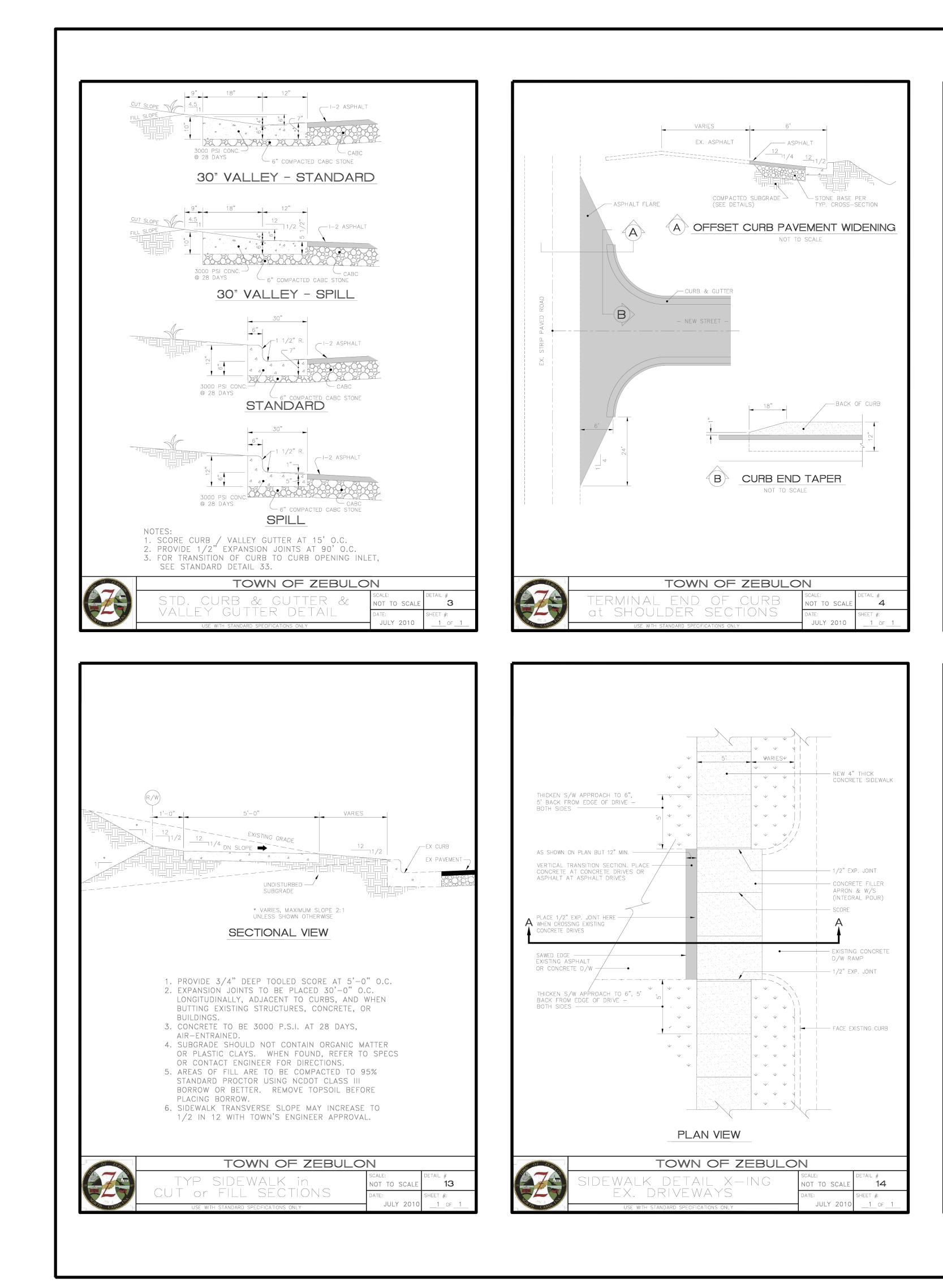
#### **CITY OF ZEBULON - PLANS AUTHORIZED FOR CONSTRUCTION:**

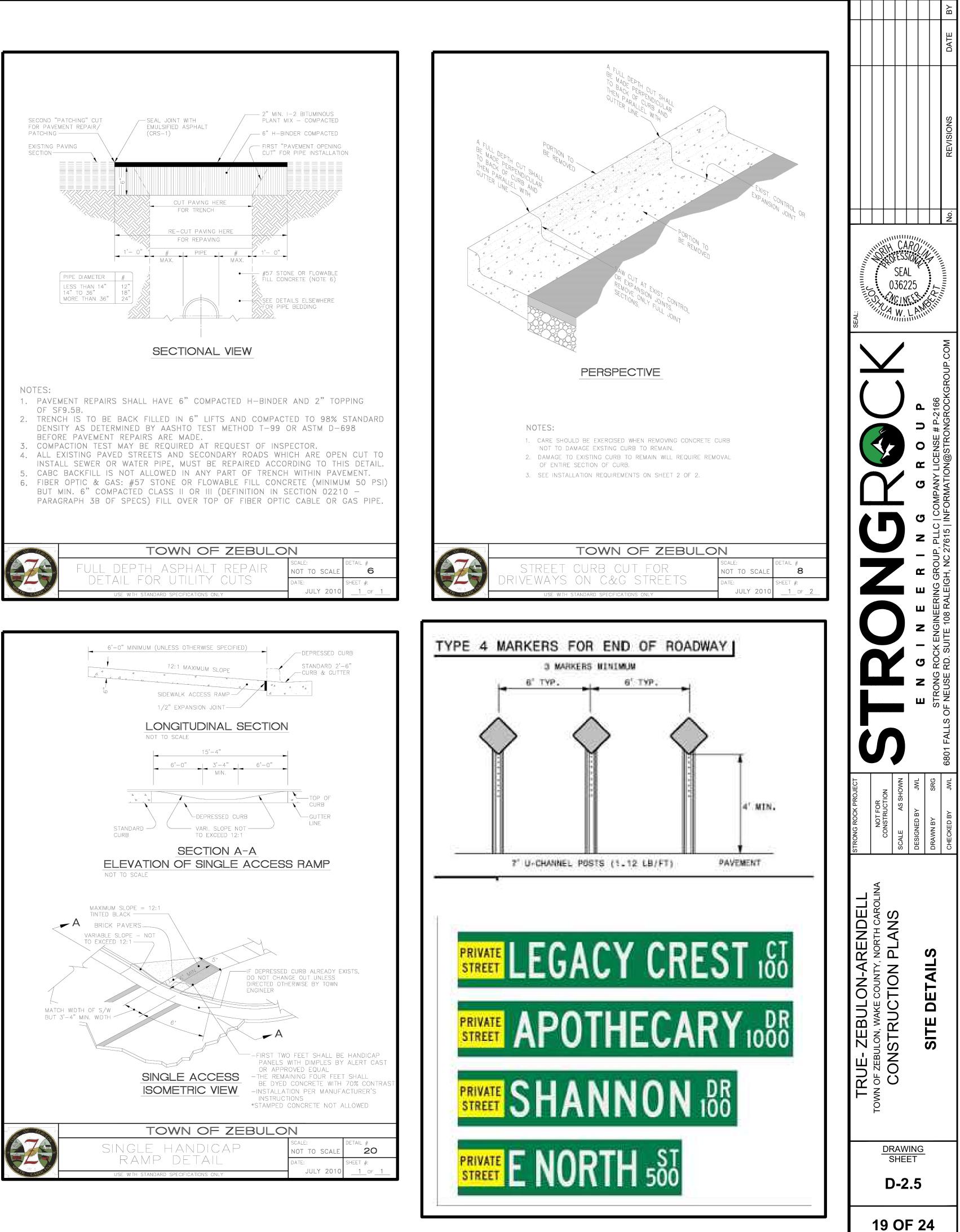
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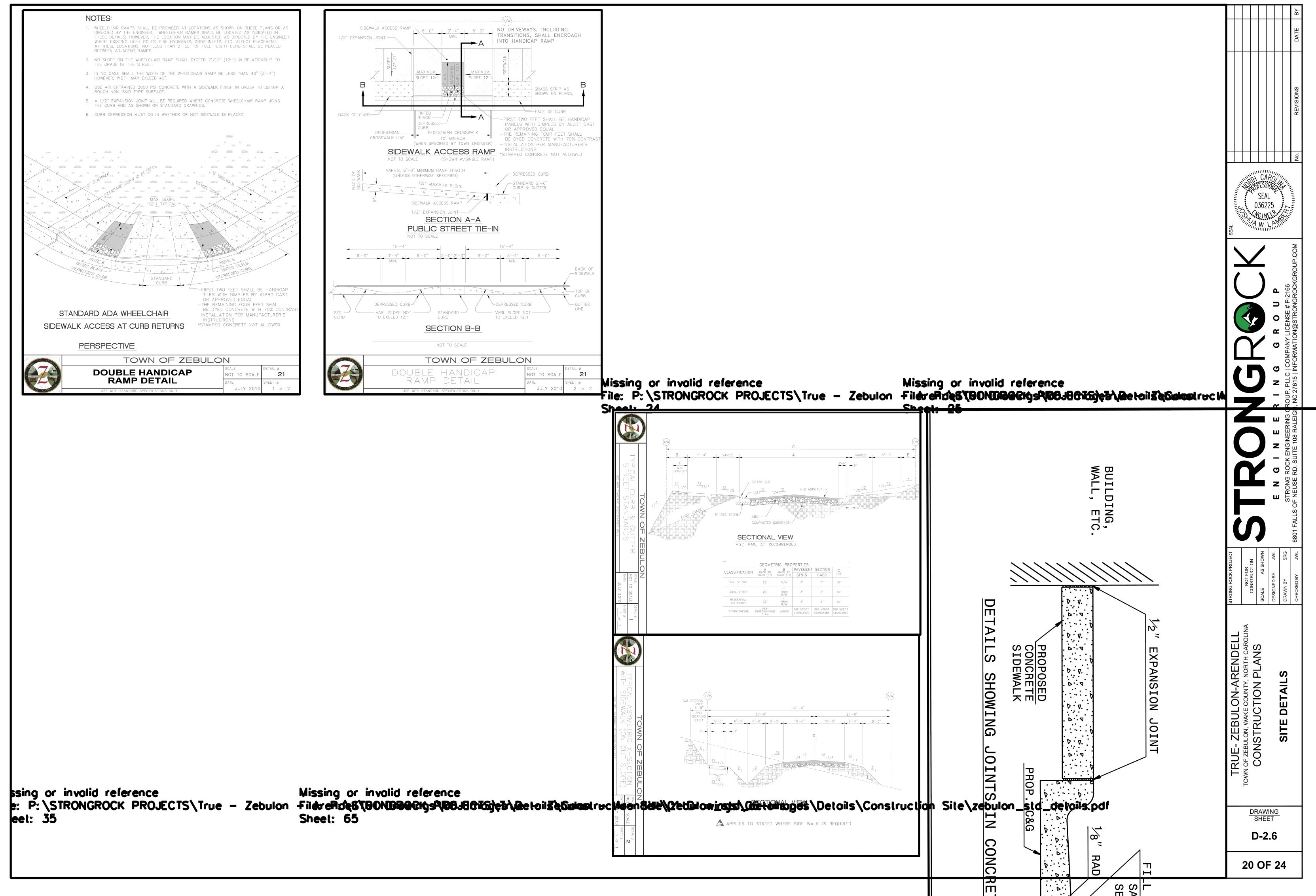
CITY OF ZEBULON DEVELOPMENT APPROVAL

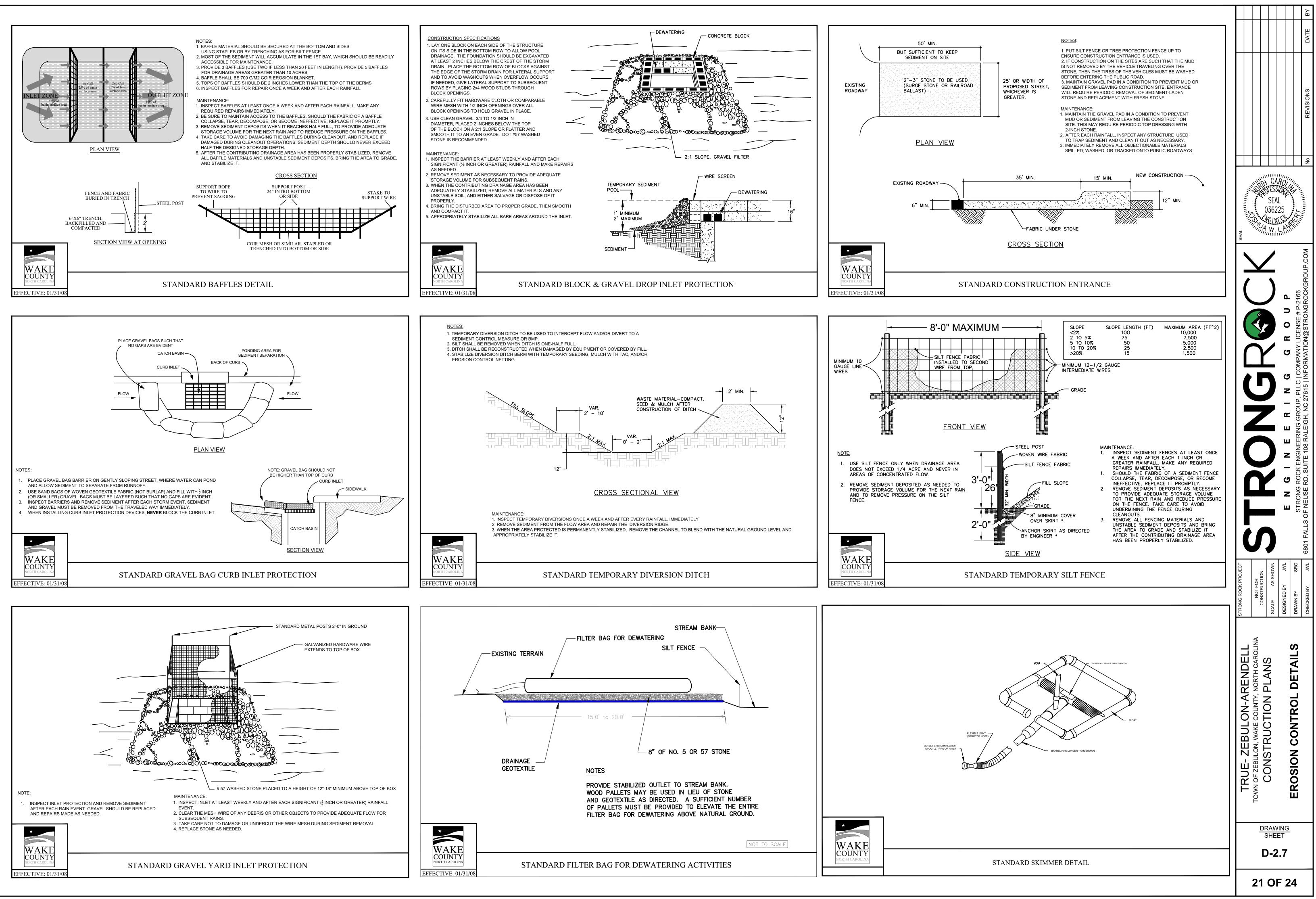
ZEBULON WATER REVIEW OFFICER



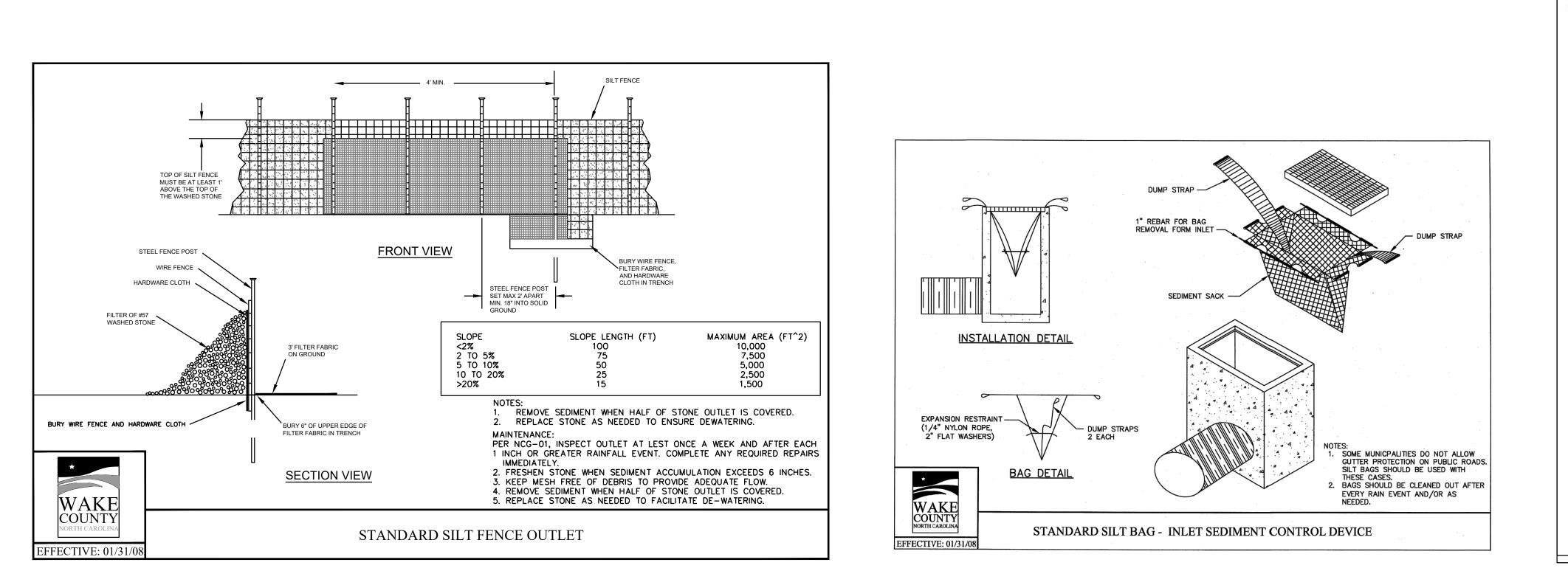


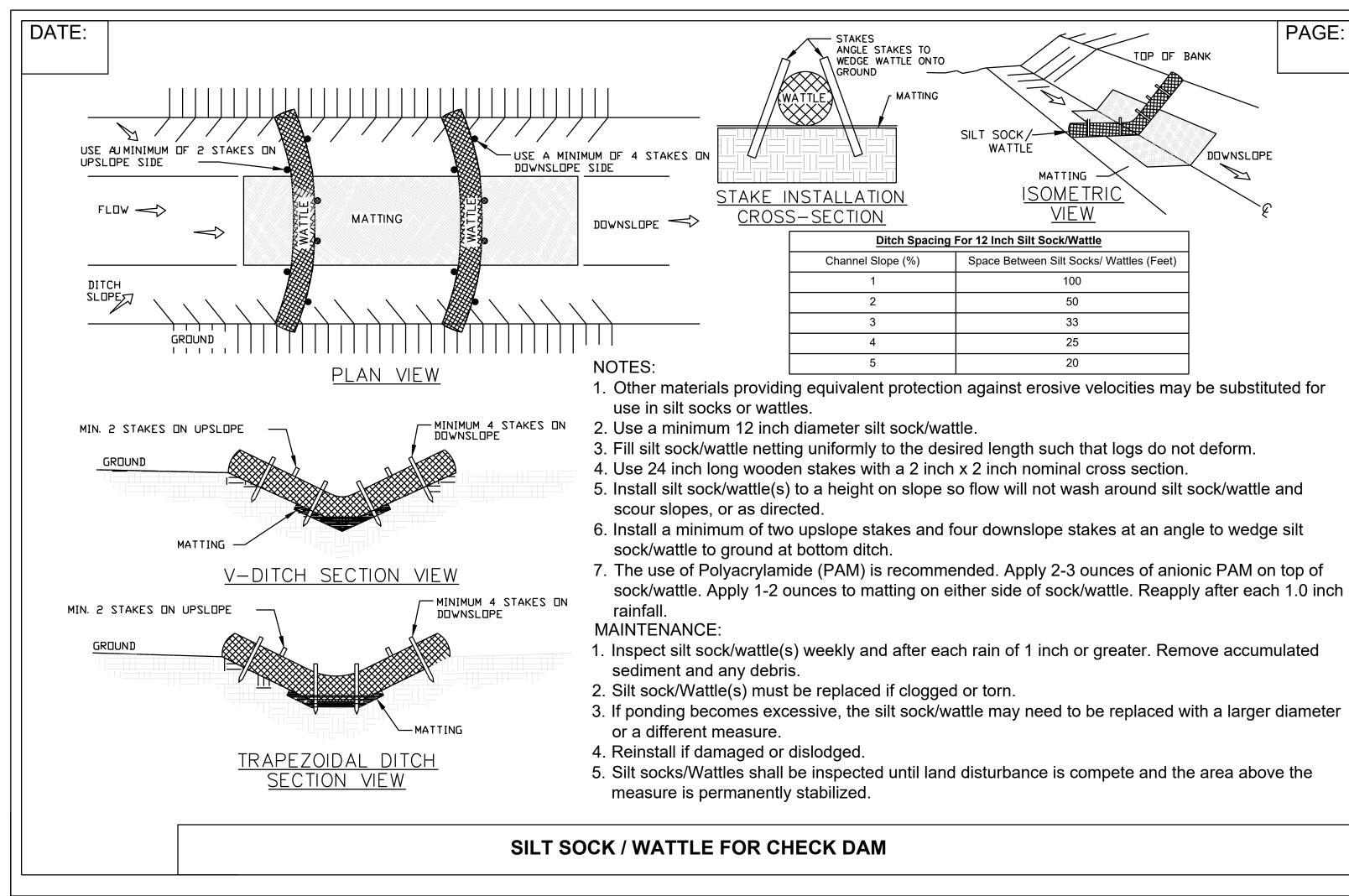


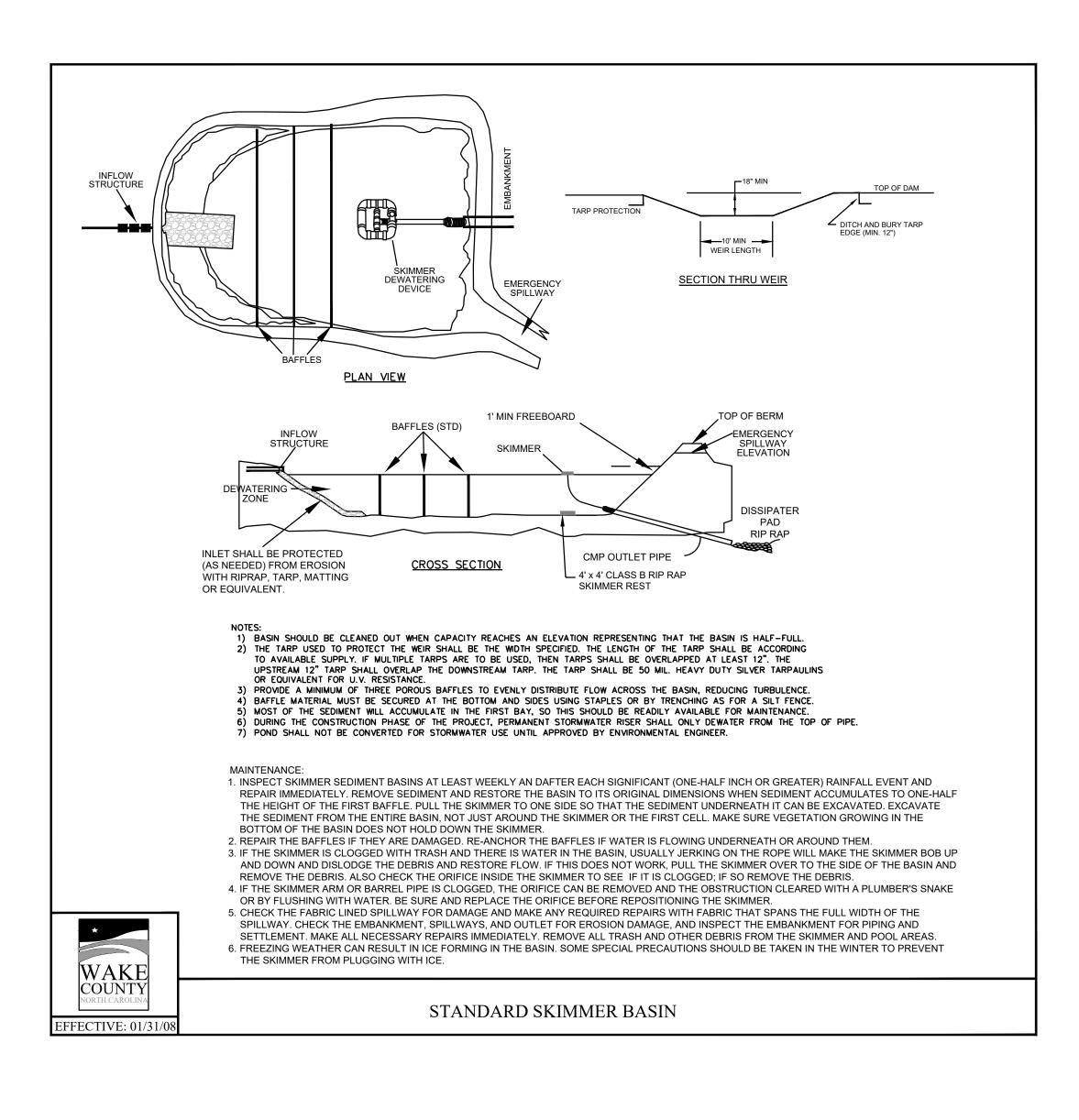


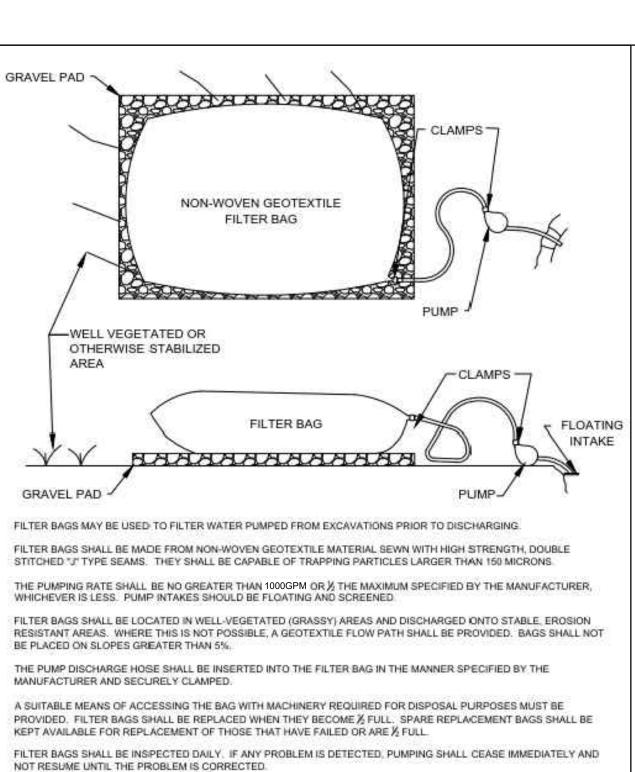


PROGRESS PLOT DATE: 07/14/2023

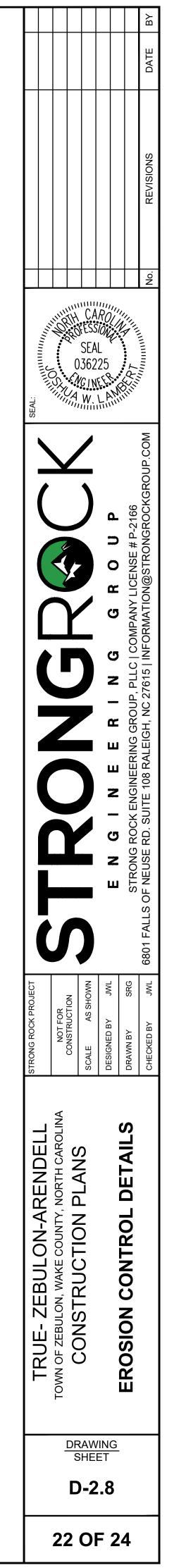




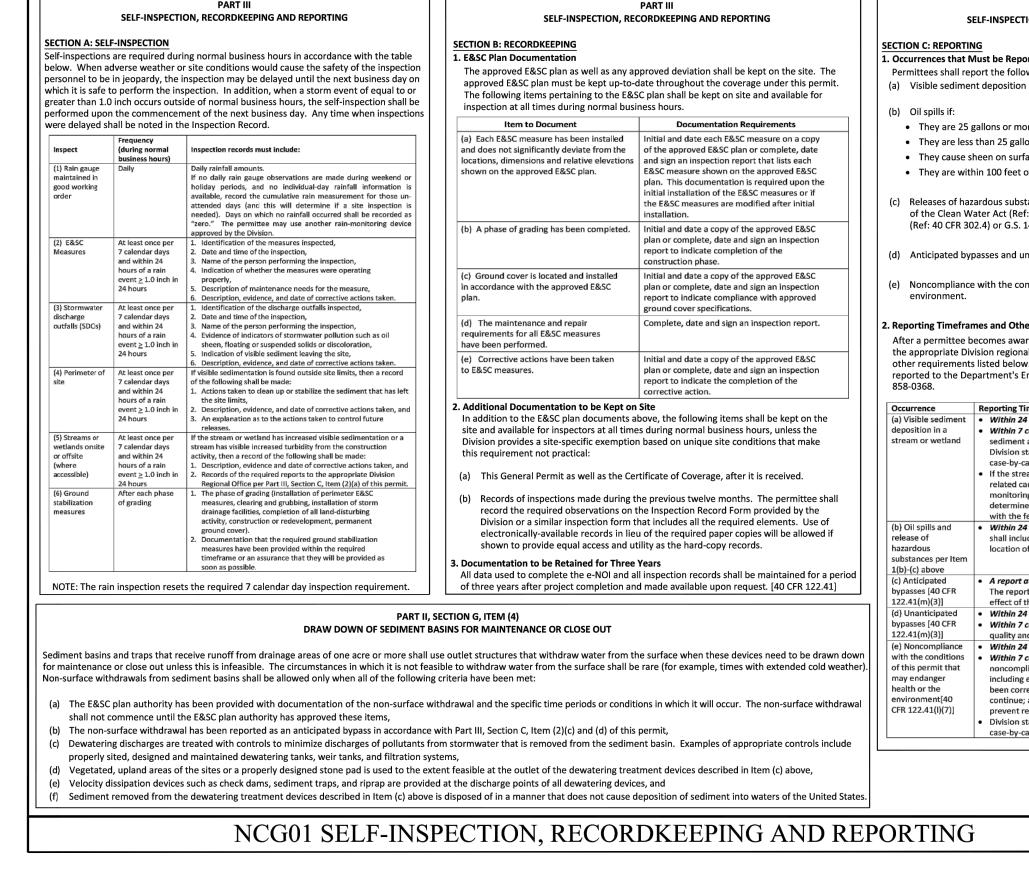




FILTER BAG NO SCALE



THE NCG01 CONSTRUCTIO Implementing the details at activity being considered co sections of the NCG01 Cons permittee shall comply with delegated authority having						
activity being considered co sections of the NCG01 Cons permittee shall comply with delegated authority having	ON GENERAL PERMIT	NDLING PRACTICES FOR COMPLIANCE WITH	EQUIPMENT AND VEHICLE MAINTENA 1. Maintain vehicles and equipmen			DNSITE CONCRETE VASHOUT STRUCTURE VITH LINER
permittee shall comply with delegated authority having	compliant with the Gr	this plan sheet will result in the construction ound Stabilization and Materials Handling	2. Provide drip pans under any stor			
	th the Erosion and Se	rmit (Sections E and F, respectively). The diment Control plan approved by the ils and specifications shown on this sheet	project.	eparate containers and properly dispose as		
		the delegated authority having jurisdiction.	hazardous waste (recycle when 5. Remove leaking vehicles and cor	possible). nstruction equipment from service until the problem	CINCRETE CLEARLY INVICED SD CONCRETE NOTING DEVICE GPT	
SECTION E: GROUND STAB	BILIZATION equired Ground Stabi	ilization Timoframos	has been corrected. 6. Bring used fuels, lubricants, cool	lants, hydraulic fluids and other petroleum products		LATING LOCHTEN RETRIEVES INTEL CONSETT OF THE ACCESSION OF A THE CONSETT OF THE ACCESSION OF A THE CONSETT OF A THE ACCESSION O
	Stabilize within this	5	to a recycling or disposal center	that handles these materials.	PLAN	ADDRAFT WARDUT STRUCTURE NOTAL TO BE PLAN. 22 DACKS OF PROTOCO CLARY WARDU VITH STRUCTURE NOTAL RAVIES. DOCUMENTAL WARDUT W WARDUT WARDUT WARD
	many calendar days after ceasing land disturbance	Timeframe variations	LITTER, BUILDING MATERIAL AND LAN 1. Never bury or burn waste. Place	D CLEARING WASTE litter and debris in approved waste containers.	BELUW	GRADE VASHOUT STRUCTURE. ABOVE GRADE WASHOUT STRUCTURE
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None	receptacle) on site to contain con			charge concrete or cement slurry from the site.
(b) High Quality Water	7	None	waters unless no other alternativ	50 feet away from storm drain inlets and surface res are reasonably available. s that do not receive substantial amounts of runoff	and state s	, or recycle settled, hardened concrete residue in accordance with solid waste regulations and at an approved facility.
(HQW) Zones (c) Slopes steeper than		If slopes are 10' or less in length and are	from upland areas and does not o	drain directly to a storm drain, stream or wetland. d of each workday and before storm events or	addition p	ashout from mortar mixers in accordance with the above item and lace the mixer and associated materials on impervious barrier and v to really for an
3:1	7	not steeper than 2:1, 14 days are allowed	provide secondary containment.	Repair or replace damaged waste containers. aste containers during times of high winds.	4. Install tem	ter silt fence. porary concrete washouts per local requirements, where applicabl
		-7 days for slopes greater than 50' in length and with slopes steeper than 4:1	• •	ed to prevent overflow. Clean up immediately if	review and	method or product is to be used, contact your approval authority for d approval. If local standard details are not available, use one of the emporary concrete washouts provided on this detail.
(d) Slopes 3:1 to 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones	8. Dispose waste off-site at an appro	oved disposal facility. ispose of waste in designated waste containers.	5. Do not use	concrete washouts for dewatering or storing defective curb or sid stormwater accumulated within the washout may not be pumped i
		-10 days for Falls Lake Watershed -7 days for perimeter dikes, swales,	PAINT AND OTHER LIQUID WASTE	spose of waste in designated waste containers.	discharged	I to the storm drain system or receiving surface waters. Liquid was d out and removed from project.
(e) Areas with slopes	14	ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless	1. Do not dump paint and other liqu	uid waste into storm drains, streams or wetlands. 0 feet away from storm drain inlets and surface	can be sho	shouts at least 50 feet from storm drain inlets and surface waters u own that no other alternatives are reasonably available. At a minim
flatter than 4:1		there is zero slope	<ol> <li>2. Eocate paint washouts at least 50 waters unless no other alternation</li> <li>3. Contain liquid wastes in a control</li> </ol>	ves are reasonably available.	spills or ov	
ground stabilization shall be	be converted to perm	iction activities, any areas with temporary anent ground stabilization as soon as lar days after the last land disturbing	4. Containment must be labeled, size	zed and placed appropriately for the needs of site.	entrance p	shouts in an easily accessible area, on level ground and install a sto bad in front of the washout. Additional controls may be required by authority.
activity. Temporary ground	d stabilization shall b	ar days after the last land disturbing e maintained in a manner to render the permanent ground stabilization is achieved.	construction sites.	solvents, detergents and other liquid wastes from		east one sign directing concrete trucks to the washout within the pr
GROUND STABILIZATION S	SPECIFICATION	·	PORTABLE TOILETS	ound, at least 50 feet away from storm drains,	9. Remove le	st signage on the washout itself to identify this location. avings from the washout when at approximately 75% capacity to li events. Replace the tarp, sand bags or other temporary structural
techniques in the table belo	low:	not dislodge the soil. Use one of the	streams or wetlands unless there offset is not attainable, provide r	e is no alternative reasonably available. If 50 foot elocation of portable toilet behind silt fence or place	componen	events. Replace the tarp, sand bags or other temporary structural its when no longer functional. When utilizing alternative or proprie follow manufacturer's instructions.
Temporary Stabi	ered with straw or 🔹	Permanent Stabilization Permanent grass seed covered with straw or provide the second stabilized in the second stabilized		h sand bags. ortable toilets during periods of high winds or in high	10. At the con	npletion of the concrete work, remove remaining leavings and disp oved disposal facility. Fill pit, if applicable, and stabilize any disturb
other mulches and tackifier <ul> <li>Hydroseeding</li> <li>Bolled erosion control prod</li> </ul>	•	other mulches and tackifiers Geotextile fabrics such as permanent soil reinforcement matting		ng and properly dispose of any leaked material.		removal of washout.
<ul> <li>Rolled erosion control prod without temporary grass se</li> <li>Appropriately applied straw</li> </ul>	eed •	reinforcement matting Hydroseeding Shrubs or other permanent plantings covered	Utilize a licensed sanitary waste h with properly operating unit.	hauler to remove leaking portable toilets and replace	HERRICIDES DES	TICIDES AND RODENTICIDES
<ul> <li>Appropriately applied straw</li> <li>Plastic sheeting</li> </ul>	•	with mulch Uniform and evenly distributed ground cover	EARTHEN STOCKPILE MANAGEMENT			apply herbicides, pesticides and rodenticides in accordance with la
	•	sufficient to restrain erosion Structural methods such as concrete, asphalt or	50 feet away from storm drain in	s. Locate earthen-material stockpile areas at least lets, sediment basins, perimeter sediment controls	2. Store herb	icides, pesticides and rodenticides in their original containers with h lists directions for use, ingredients and first aid steps in case of
		retaining walls Rolled erosion control products with grass seed	available.	be shown no other alternatives are reasonably	<ol> <li>accidental poisoning.</li> <li>Do not store herbicides, pesticides and rodenticides in areas where flooding is</li> </ol>	
POLYACRYLAMIDES (PAMS		<b>S</b> r the soils being exposed during	<ol> <li>Protect stockpile with silt fence in five feet from the toe of stockpile</li> <li>Provide stable stone access point</li> </ol>		possible or or surface	where they may spill or leak into wells, stormwater drains, ground water. If a spill occurs, clean area immediately.
construction, selectir	ing from the NC DWR	<i>List of Approved PAMS/Flocculants.</i> o Erosion and Sediment Control Measures.	4. Stabilize stockpile within the time	t when feasible. eframes provided on this sheet and in accordance additional requirements. Soil stabilization is defined	4. Do not sto	ckpile these materials onsite.
3. Apply flocculants at t	the concentrations s	pecified in the <i>NC DWR List of Approved</i> n the manufacturer's instructions.	as vegetative, physical or chemic	additional requirements. Son stabilization is defined al coverage techniques that will restrain accelerated nporary or permanent control needs.	HAZARDOUS ANI	
· ·		treated Stormwater before discharging			2. Place hazar	ignated hazardous waste collection areas on-site. dous waste containers under cover or in secondary containment.
5. Store flocculants in le	leak-proof containers condary containmen	that are kept under storm-resistant cover t structures.	NC En	DRTH CAROLINA <i>vironmental Quality</i>	3. Do not stor	e hazardous chemicals, drums or bagged materials directly on the
	N	CG01 GROUND	STABILIZATION	AND MATERIALS H	ANDI IN	G EFFECTIVE: 04/
				PART III		PART III
SELF-INSPI	·	EPING AND REPORTING		CORDKEEPING AND REPORTING		ELF-INSPECTION, RECORDKEEPING AND REPORTING
Self-inspections are required	 d during normal busin	ess hours in accordance with the table would cause the safety of the inspection	SECTION B: RECORDKEEPING 1. E&SC Plan Documentation The approved E&SC plan as well as any an	nroved deviation shall be kent on the star The	SECTION C: REPORTIN 1. Occurrences that N Permittees shall real	Aust be Reported
personnel to be in jeopardy, t which it is safe to perform th	the inspection may b he inspection. In addi	e delayed until the next business day on ition, when a storm event of equal to or	approved E&SC plan must be kept up-to-c	pproved deviation shall be kept on the site. The date throughout the coverage under this permit. G plan shall be kept on site and available for		port the following occurrences: nt deposition in a stream or wetland.
erformed upon the commer	encement of the next	siness hours, the self-inspection shall be business day. Any time when inspections	inspection at all times during normal busin	ness hours.	(b) Oil spills if:	
vere delayed shall be noted Frequency (during norma			Item to Document (a) Each E&SC measure has been installed and does not significantly deviate from the	Documentation Requirements Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date	-	than 25 gallons but cannot be cleaned up within 24 hours,
(1) Rain gauge Daily maintained in	rs) Daily rainfall amou		locations, dimensions and relative elevations shown on the approved E&SC plan.	and sign an inspection report that lists each E&SC measure shown on the approved E&SC		heen on surface waters (regardless of volume), or hin 100 feet of surface waters (regardless of volume).
maintained in good working order	holiday periods, available, record t	and no individual-day rainfall information is the cumulative rain measurement for those un-		plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial		ardous substances in excess of reportable quantities under Section
	needed). Days on "zero." The perm	nd this will determine if a site inspection is which no rainfall occurred shall be recorded as nittee may use another rain-monitoring device	(b) A phase of grading has been completed.	the E&SC measures are modified after initial installation. Initial and date a copy of the approved E&SC	of the Clean W	(area out substances in excess of reportable quantities under section (ater Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CER )2.4) or G.S. 143-215.85.
(2) E&SC At least once p Measures 7 calendar day	ys 2. Date and time	f the measures inspected, of the inspection,	to, A phase of graving has been completed.	plan or complete, date and sign an inspection report to indicate completion of the		passes and unanticipated bypasses.
and within 24 hours of a rain event ≥ 1.0 inc	3. Name of the pe A 4. Indication of w	hether the measures were operating	(c) Ground cover is located and installed	construction phase. Initial and date a copy of the approved E&SC		
24 hours	<ol> <li>Description of i</li> <li>Description, evidence</li> </ol>	meintenance needs for the measure, idence, and date of corrective actions taken. If the discharee outfalls inspected.	in accordance with the approved E&SC plan.	plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications	(e) Noncompliance environment.	e with the conditions of this permit that may endanger health or the
(3) Stormwater At least once p discharge 7 calendar day outfalls (SDCs) and within 24	ys 2. Date and time of 3. Name of the pe	of the inspection, erson performing the inspection,	(d) The maintenance and repair	ground cover specifications. Complete, date and sign an inspection report.		mes and Other Requirements
hours of a rain	ch in sheen, floating 5. Indication of vis	icators of stormwater pollution such as oil or suspended solids or discoloration, sible sediment leaving the site,	requirements for all E&SC measures have been performed. (e) Corrective actions have been taken	Initial and date a copy of the approved E&SC	the appropriate Div	becomes aware of an occurrence that must be reported, he shall co vision regional office within the timeframes and in accordance with
event ≥ 1.0 inc 24 hours	per If visible sediment	idence, and date of corrective actions taken. ation is found outside site limits, then a record all be made:	(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the	reported to the De	s listed below. Occurrences outside normal business hours may also partment's Environmental Emergency Center personnel at (800)
(4) Perimeter of At least once p site 7 calendar day	1. Actions taken t n the site limits,	o clean up or stabilize the sediment that has left idence, and date of corrective actions taken, and	2. Additional Documentation to be Kept on	corrective action.	858-0368.	Reporting Timeframes (After Discovery) and Other Requirements
(4) Perimeter of At least once p	ch in 2. Description ev	as to the actions taken to control future	In addition to the E&SC plan documents al site and available for inspectors at all time	bove, the following items shall be kept on the es during normal business hours, unless the	(a) Visible sediment deposition in a	Within 24 hours, an oral or electronic notification.     Within 7 calendar days, a report that contains a description of the
24 hours       (4) Perimeter of site     At least once p       7 calendar day and within 24 hours of a rain event ≥ 1.0 inc       24 hours	<ol> <li>An explanation releases.</li> </ol>	atland has increased wights and in entry in the	I Division provides a site-specific exemption	n based on unique site conditions that make	stream or wetland	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.
24 hours       (4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite     At least once p 7 calendar day and within 24	3. An explanation releases. per If the stream or we stream has visible activity, then a rec	etland has increased visible sedimentation or a increased turbidity from the construction cord of the following shall be made:	this requirement not practical:			
(4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite (where accessible)     At least once p 7 calendar day and within 24 hours of a rain 24 hours	3. An explanation releases. per If the stream or wi stream has visible activity, then a rec 1. Description, ev chin 2. Records of the Regional Office	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division per Part III, Section C, Item (2)(a) of this permit.		rtificate of Coverage, after it is received.		<ul> <li>If the stream is named on the <u>NC 303(d) list</u> as impaired for sediment- related causes, the permittee may be required to perform additional</li> </ul>
24 hours       (4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite (where accessible)     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours	3. An explanation releases. per If the stream or w stream has visible activity, then a rec 1. Description, ev 2. Records of the <u>Regional Office</u> 1. The phase of gr measures, clea	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division	this requirement not practical: (a) This General Permit as well as the Cer (b) Records of inspections made during th	rtificate of Coverage, after it is received. he previous twelve months. The permittee shall the Inspection Record Form provided by the		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 complia
24 hours       (4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite (where accessible)     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (6) Ground stabilization     After each pha of grading	3. An explanation releases. per If the stream or w stream has visible activity, then a rec Description, ev C. Records of the Regional Office 1. The phase of gr measures, clea drainage facilit activity, constrr ground cover).	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&SC ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieu</li> </ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if	(b) Oil spills and release of	related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff
24 hours       (4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite (where accessible)     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (6) Ground stabilization     After each pha of grading	3. An explanation releases.       per     If the stream or w stream has visible activity, then a rec Description, ev 2. Records of the Regional Office activity, constri- ground cover).       1. The phase of gr measures, clea drainage faciliti activity, constri- ground cover).       2. Documentation measures have timeframe or a	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&C ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent on that the required ground stabilization been provided within the required n assurance that they will be provided as	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the division of the division of</li></ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if tillty as the hard-copy records.	release of hazardous substances per Item	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <li>Within 24 hours, an oral or electronic notification. The notification</li> </ul>
(4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite (where accessible)     At least once p 7 calendar day on within 24 hours of a 7 calendar day nours of a rain event ≥ 1.0 inc 24 hours       (6) Ground stabilization measures     After each pha of grading	3. An explanation releases. per If the stream or wights stream has visible activity, then a rec 1. Description, ev Records of the Regional Office ase     1. The phase of gr measures, cleaa drainage faciliti activity, constri- ground cover). 2. Documentation measures have timeframe or a soon as possible	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&C ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent on that the required ground stabilization been provided within the required n assurance that they will be provided as	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieues shown to provide equal access and ut</li> <li>3. Documentation to be Retained for Three All data used to complete the e-NOI and all sectors and the sectors and the sectors and the sectors and the sectors are completed to the sector and all sectors are completed to the sector as the sector and all sectors are completed to the sector and all sectors are completed tot</li></ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if tillty as the hard-copy records.	release of hazardous substances per Item 1(b)-(c) above (c) Anticipated	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <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> <li>A report at least ten days before the date of the bypass, if possible.</li> </ul>
(4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (6) Ground stabilization measures	3. An explanation releases. per If the stream or wights stream has visible activity, then a rec 1. Description, ev Records of the Regional Office ase     1. The phase of gr measures, cleaa drainage faciliti activity, constri- ground cover). 2. Documentation measures have timeframe or a soon as possible	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&SC ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent in that the required ground stabilization been provided within the required in assurance that they will be provided as e. calendar day inspection requirement.	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieues shown to provide equal access and ut</li> <li>3. Documentation to be Retained for Three All data used to complete the e-NOI and all sectors and the sectors and the sectors and the sectors and the sectors are completed to the sector and all sectors are completed to the sector as the sector and all sectors are completed to the sector and all sectors are completed tot</li></ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if cility as the hard-copy records. <b>Years</b> Il inspection records shall be maintained for a period	release of hazardous substances per Item 1(b)-(c) above (c) Anticipated bypasses [40 CFR 122.41(m)(3)] (d) Unanticipated	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <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> <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> <li>Within 24 hours, an oral or electronic notification.</li> </ul>
(4) Perimeter of site     At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (5) Streams or wetlands onsite or offsite and within 24 hours of a rain event ≥ 1.0 inc 24 hours       (6) Ground stabilization measures	3. An explanation releases. per If the stream or wights stream has visible activity, then a rec 1. Description, ev Records of the Regional Office ase     1. The phase of gr measures, cleaa drainage faciliti activity, constri- ground cover). 2. Documentation measures have timeframe or a soon as possible	increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&SC ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent in that the required ground stabilization been provided within the required in assurance that they will be provided as e. calendar day inspection requirement.	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieue shown to provide equal access and ut</li> <li>3. Documentation to be Retained for Three All data used to complete the e-NOI and all of three years after project completion and an another the shown to provide equal access and the shown to provide the e-NOI and all of three years after project completion and an another the shown to provide the e-NOI and all of three years after project completion and an another the shown to provide the the shown to provide the shown to pro</li></ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if cility as the hard-copy records. <b>Years</b> Il inspection records shall be maintained for a period	release of hazardous substances per Item 1(b)-(c) above (c) Anticipated bypasses (40 CFR 122.41(m)(3)] (d) Unanticipated bypasses (40 CFR 122.41(m)(3)]	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <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> <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> <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>
(4) Perimeter of site       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (5) Streams or wetlands onsite or offsite (where hours of a rain accessible)       At least once p 7 calendar day and within 24 hours of a rain accessible)         (6) Ground stabilization measures       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (6) Ground stabilization measures       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (6) Ground stabilization measures       At least once p 7 calendar day and within 24 hours of a rain of grading         wetter the stabilization measures       At least once p 7 calendar day and within 24 hours of a rain of grading         wetter the stabilization measures       At least once p 7 calendar day and within 24 hours of a rain of grading         wetter the stabilization measures       At least once p 7 calendar day and within 24 hours of grading         NOTE: The rain inspection r       The rain inspection r         ediment basins and traps that or maintenance or close out       The provement of the proveme	3. An explanation releases.     997     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     107     1	Increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&SC ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent that the required ground stabilization been provided within the required a assurance that they will be provided as e. calendar day inspection requirement. PART II, S DRAW DOWN OF SEDIMENT BA m drainage areas of one acre or more shall us oble. The circumstances in which it is not feasi	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieues shown to provide equal access and ut</li> <li><b>3. Documentation to be Retained for Three</b> All data used to complete the e-NOI and al of three years after project completion and electron G, ITEM (4)</li> <li><b>ECTION G, ITEM (4)</b></li> <li><b>SINS FOR MAINTENANCE OR CLOSE OUT</b></li> <li>The outlet structures that withdraw water from the surface shall be to withdraw water from the surface shall be</li> </ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if cility as the hard-copy records. <b>Years</b> Il inspection records shall be maintained for a period	release of hazardous substances per Item 1(b)-(c) above (c) Anticipated bypasses [40 CFR 122.41(m)(3)] (d) Unanticipated bypasses [40 CFR	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <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> <li>A report at least ten days before the date of the bypass, if possible. 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24 hours         (4) Perimeter of site       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (5) Streams or wetlands onsite or offsite (where hours of a rain accessible)       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (6) Ground stabilization measures       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         (6) Ground stabilization measures       At least once p 7 calendar day and within 24 hours of a rain event ≥ 1.0 inc 24 hours         MOTE: The rain inspection r       At reset p ha of grading         NOTE: The rain inspection r       At raps the or maintenance or close out lon-surface withdrawals from	3. An explanation releases.         per       If the stream or wish stream has visible activity, then a recinit activity. The properties of the regional office activity constring ground cover).         2. Records of the Regional office activity, constring ground cover).         2. Documentation measures, clear drainage facility activity, constring ground cover).         2. Documentation measures have timeframe or a soon as possible resets the required 7         mat receive runoff from tunless this is infeasile m sediment basins shows a solution of the stress of the resets the required 7	Increased turbidity from the construction cord of the following shall be made: idence and date of corrective actions taken, and required reports to the appropriate Division .per Part III, Section C, Item (2)(a) of this permit. rading (installation of perimeter E&SC ring and grubbing, installation of storm ies, completion of all land-disturbing uction or redevelopment, permanent that the required ground stabilization been provided within the required n assurance that they will be provided as e. calendar day inspection requirement. PART II, S DRAW DOWN OF SEDIMENT BA In drainage areas of one acre or more shall us obe. The circumstances in which it is not feasi all be allowed only when all of the following	<ul> <li>this requirement not practical:</li> <li>(a) This General Permit as well as the Cer</li> <li>(b) Records of inspections made during the record the required observations on the Division or a similar inspection form the electronically-available records in lieues shown to provide equal access and ut</li> <li><b>3. Documentation to be Retained for Three</b></li> <li>All data used to complete the e-NOI and al of three years after project completion and electronical shown to provide equal access and ut</li> <li><b>ECTION G, ITEM (4)</b></li> <li><b>SINS FOR MAINTENANCE OR CLOSE OUT</b></li> <li>Se outlet structures that withdraw water from the surface shall be criteria have been met:</li> </ul>	he previous twelve months. The permittee shall the Inspection Record Form provided by the hat includes all the required elements. Use of u of the required paper copies will be allowed if illity as the hard-copy records. <b>Years</b> Il inspection records shall be maintained for a period d made available upon request. [40 CFR 122.41] the surface when these devices need to be drawn down the rare (for example, times with extended cold weather).	release of hazardous substances per Item 1(b)-(c) above (c) Anticipated bypasses [40 CFR 122.41(m)(3)] (d) Unanticipated bypasses [40 CFR 122.41(m)(3)] (e) Noncompliance with the conditions of this permit that may endanger health or the	<ul> <li>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 complia with the federal or state impaired-waters conditions.</li> <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> <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> <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> <li>Within 7 calendar days, a report that contains a description of the noncompliance, and its causes; the period of noncompliance has not been corrected, the anticipated time noncompliance is expected to</li> </ul>
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#### 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:

- (A) THE E&SC 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&SC 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, (B) (C) 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, (D) 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 (E) SEDIMENT REMOVED FROM THE DEWATERING TREATMENT DEVICES DESCRIBED IN ITEM (C) ABOVE IS DISPOSED OF IN A MANNER THAT DOES NOT CAUSE DEPOSITION (F) OF SEDIMENT INTO WATERS OF THE UNITED STATES.

### **SEEDING SPECIFICATIONS:**

SEEDBED PREPARATION:

- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL THREE INCHES DEEP OVER ADVERSESOIL CONDITIONS, IF AVAILABLE. RIP THE ENTIRE AREA TO SIX INCHES DEEP.
- REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
- APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE BELOW).
- CONTINUE TILLAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP. SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
- MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
- INSPECT ALL SEEDED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 60% DAMAGED, REESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
- CONSULT WAKE COUNTY SOIL & WATER OR NC STATE COOPERATIVE EXTENSION ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.

MIXTURE:

AGRICULTURAL	LIMESTONE	2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)	
FERTILIZER		1,000 LBS/ACRE - 10-10-10	
SUPERPHOSPH	ATE	500 LBS/ACRE - 20% ANALYSIS	
MULCH		2 TONS/ACRE - SMALL GRAIN STRAW	
ANCHOR		ASPHALT EMULSION AT 400 GALS/ACRE	
SEEDING SCHEDULE:			
FOR SHOULDERS, SID	E DITCHES. SLOPES (MAX 3	:1):	
DATE	TYPE	PLANTING RATE	
AUG 15-NOV 1	TALL FESCUE	300 LBS/ACRE	

NOV 1-MAR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE		
MAR 1-APR 15	TALL FESCUE	300 LBS/ACRE		
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE		
JUL 1-AUG 15	TALL FESCUE AND BROWNTOP MILLET OR SORGHUM-SUDAN HYBRIDS***	125 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)		
FOR SHOULDERS, SIDE DITCHES. SLOPES (MAX 3:1 TO 2:1):				
DATE	TYPE	PLANTING RATE		
MAR 1-JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND USE THE FOLLOWING COMBINATIONS:	50 LBS/ACRE (SERICEA LESPEDEZA);		
MAR 1-APR 15	ADD TALL FESCUE	120 LBS/ACRE		
MAR 1-JUN 30	OR ADD WEEPING LOVE GRASS	10 LBS/ACRE		
MAR 1-JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE		
JUL 1-SEPT 1	TALL FESCUE AND BROWNTOP MULLET OR SORGHUM-SUDAN HYBRIDS***	120 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MULLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)		

AND ABRUZZI RYE 25 IBS/ACRE NOV 1-MAR 1 CONSULT WAKE COUNTY SOIL & WATER CONSERVATION DISTRICT OR NC STATE COOPERATIVE EXTENSION FOR ADDITIONAL INFORMATION CONCERNING OTHER ALTERNATIVES FOR VEGETATION OF DENUDED AREAS. THE ABOVE VEGETATION RATES ARE THOSE THAT DO WELL UNDER LOCAL CONDITIONS; OTHER SEEDING RATE COMBINATIONS

SERICEA LESPEDEZA (UNHULLED

-UNSCARIFIED) AND TALL FESCUE

ARE POSSIBLE. \* TEMPORARY

SEPT 1-MAR 1

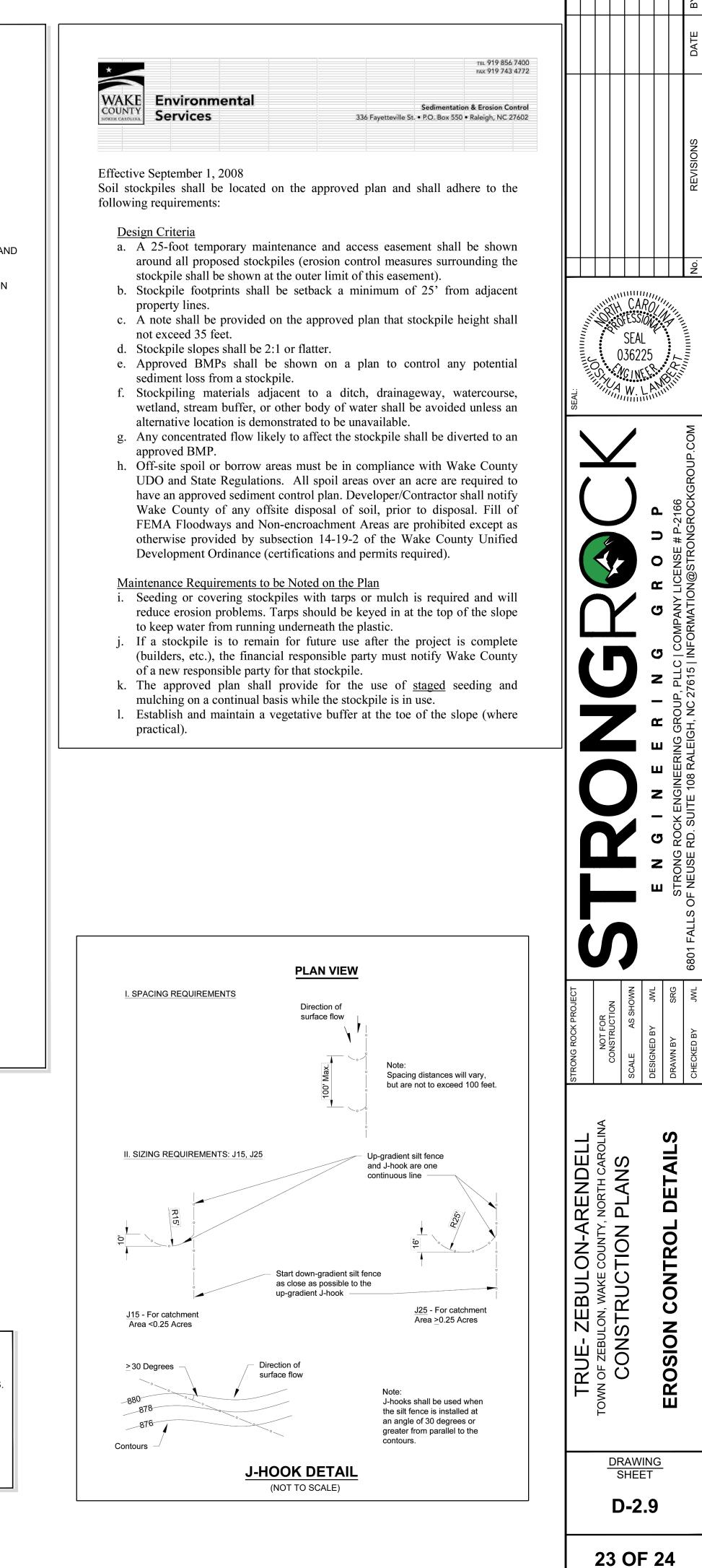
RESEED ACCORDING TO OPTIMUM SEASON FOR DESIRED PERMANENT VEGETATION. DO NOT ALLOW TEMPORARY COVER TO GROW MORE THAN 12" IN HEIGHT BEFORE MOWING; OTHERWISE, FESCUE MAY BE SHADED OUT.

#### J-HOOK MAINTENANCE:

70 LBS/ACRE (SERICEA LESPEDEZA); 120

LBS/ACRE (TALL FESCUE)

- INSPECT J-HOOK INSTALLATION AT REGULAR INTERVALS PER NPDES MONITORING REQUIREMENTS.
- REPLACE TORN SILT FENCE FABRIC WITH NEW FENCE MATERIAL.
- BENT OR BROKEN WIRES AND T-POLES SHALL BE REPLACED IMMEDIATELY.
- SEDIMENT ACCUMULATION HIGHER THAN 1/3 OF INSTALLED HEIGHT OF FABRIC SHALL BE PROMPTLY REMOVED.



#### Outdoor Lighting

## Mitchell LED Series

Mitchell LED Mitchell Top Hat LED Mitchell LED with ribs, bands and medallions Mitchell Open LED Mitchell Top Hat LED with ribs, bands and medallions

The energy-efficient fixtures in the Mitchell LED Series enhance the character and prestige of streetscapes and parking lots, as well as pedestrian areas and greenways. These fixtures provide safety and security in commercial settings and complement any neighborhood with their classic, elegant design.

<b>LED</b> (Light Emitting Diode)	<mark>50 watts,</mark>
Mounting heights	12', 13', <mark>1</mark>
Color	Black
Poles	Fiberglass Smooth rc Style V Style VI Style VI

For additional information, visit us at duke-energy.com/OutdoorLighting or call us toll free at 866.769.6417.

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s<mark>,</mark> 75 watts (*Mitchell Open*)

#### <mark>16'</mark>

ss round concrete

# Outdoor Lighting

## Mitchell LED Series

Light source: LED (white) Lumens: 4,332 – 5,678 (fixture dependent) Color temperature: 4,000K

	Wattage	Light Patt
Mitchell LED	50	IESNA Typ
Mitchell Top Hat LED	50	IESNA Typ
Mitchell Open LED	75	IESNA Typ
Mitchell LED with Ribs, Bands and Medallions	50	IESNA Typ
Mitchell Top Hat LED with Ribs, Bands and Medallions	50	IESNA Typ

Mounting height	Color
12', 16'	Black
16'	Black
12', 16'	Black
12'	Black
13'	Black
	12', 16' 16' 12', 16' 12'

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