

VICINITY MAP

#### OWNER KB HOMES CAROLINAS 140 SHADOWDALE LANE SITE ADDRESS ROLESVILLE, NC 27571 1759-88-6764 DB/PG 18362 / 1235 **EXISTING USE** VACANT PROPOSED USE AMENITY ZONING R3 WATERSHED NEUSE WATERSHED WATER SUPPLY UPPER NEUSE RIVER BASIN AUSTIN CREEK FEMA MAP MAP#3720175900K 7.19.22 GROSS TRACT AREA

THESE PLANS HAVE BEEN PREPARED USING THE BEST INFORMATION AVAILABLE FROM FIELD SURVEYS PERFORMED BY OTHERS, SITE OBSERVATIONS, AND OTHER AVAILABLE INFORMATION. EXISTING UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS LIMITED TO AND IS ONLY AS ACCURATE AS THE INFORMATION PRESENTED TO US BY FIELD SURVEYS PERFORMED BY OTHERS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PART REGARDING THE PRESENCE OR ABSCENSE OF UNDERGROUND FEATURES WHETHER SHOWN ON THESE PLANS OR NOT. THE EXISTING UTILITY LINE LOCATIONS SHOWN SHOULD BE CONSIDERED APPROXIMATE, AND ACTUAL UTILITIES AND CONDITIONS MAY DIFFER FROM THOSE INDICATED. SURFACE OR BURIED ROCK, UNSUITABLE MATERIAL, OR OTHER SOIL CONDITGIOSN MAY BE ENCOUUNTED DURING CONSTRUCTION. GENERALLY, THESE CONDITIONS ARE NOT NOTED ON THESE PLANS. IT SHOULD BE EXPECTED BY THE OWNER AND CONTRACTOR THAT UNFORSEEN CONDITIONS MAY OR WILL ARISE DURING CONSTRUCTGION THAT MAY REQUIRE MODIFICAITON OF THESE DESIGN PLANS BY THE ENGINEER. SHOULD UNFORESEEN CONDITIONS BE ENCOUNTERED DURING CONSTRUCTION, IT IS THE RESPONSIBILITY OF THE OWNER AND CONTRACTOR TO NOTIFY THE ENGINEER PRIOR TO CONSTRUCTION OF THE NATURE AND EXTENT OF SUCH CONDITIONS SO THAT TIMELY AND APPROPRIATE MEASURES CAN BE TAKEN TO REVISE THESE PLAN AS NECESSARY TO ACCOMDATE CONDITIONS ENCOUNTERED IN THE FIELD.

# PRESERVE AT JONES DAIRY SOUTH

AMENITY CENTER

APPROVED SUBDIVISION SITE PLAN: SP 22-05

APPROVED SUBDIVISION STORM PERMIT: SWF-044559-2020

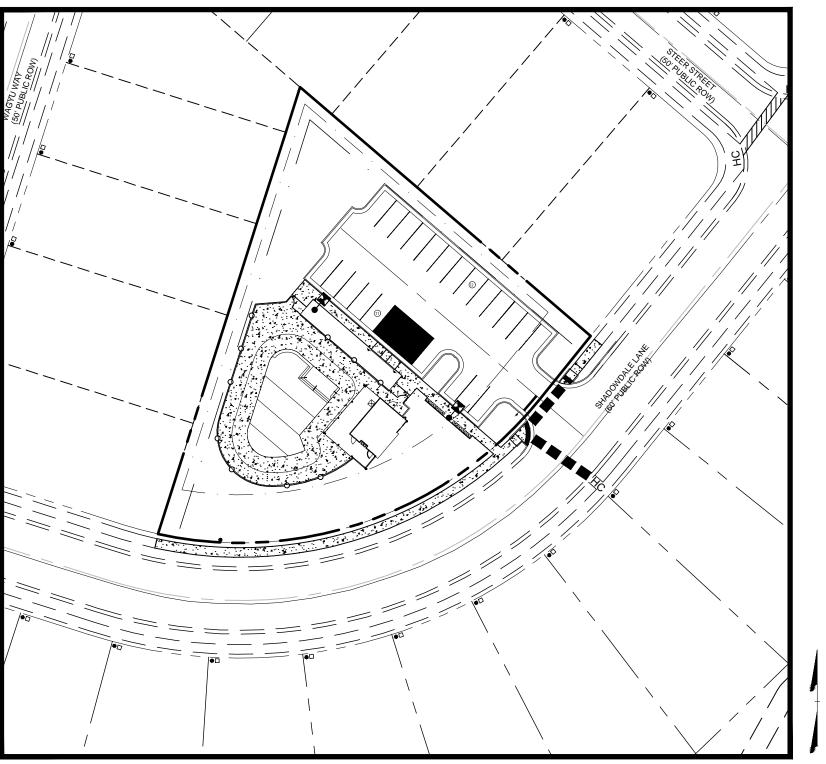
TOWN COMMENTS SUBMITTAL 1: 10.02.23

WAKE COUNTY EROSION CONTROL SUBMITTAL 1: 1.19.24

WAKE COUNTY EROSION CONTROL SUBMITTAL 2: 3.14.24

WAKE COUNTY EROSION CONTROL SUBMITTAL 3: 4.2.24

140 SHADOWDALE LANE ROLESVILLE, NC 27571 WAKE COUNTY



PROJECT PLAN

SCALE: 1" = 50'

# OWNER:

KB HOMES CAROLINA 4506 SOUTH MIAMI BLVD DURHAM NC 27703 P: 919.768.7977

**DEVELOPER:** 

KB HOMES CAROLINAS
CONTACT: ROMAN ACOSTA
4506 SOUTH MIAMI BLVD
DURHAM, NC 27703
P: 919.768.7977

ENGINEER:

BATEMAN CIVIL SURVEY COMPAN
DOUGLAS COOPER, PE

2524 RELIANCE AVE.

APEX, NC 27539



# Bateman Civil Survey Company

Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NCBELS FIRM No. C-2378

04/23/2024 10:15:45 AN

FOR CONSTRUCTION

04/23/2024 10:15:45-A

Sheet List Table
Sheet Title
COVER SHEET
EXISTING CONDITIONS
SITE AND UTILITY PLAN
GRADING AND STORM DRAINAGE PLAN
EROSION CONTROL PLAN - PHASE 1
EROSION CONTROL PLAN - PHASE 2
POOLHOUSE DETAILS
NCG01 REQUIREMENTS
STANDARD DETAILS

STANDARD DETAILS
STANDARD DETAILS

LANDSCAPE PLAN

LANDSCAPE SCHEDULE NOTES

DUKE LIGHTING PLAN



SP 22-05 / Site Plan /
Preserve at Jones Dairy (South) Amenity Center

APPROVED

Date: May 3, 2024

Meredith Gruber

23-0415A

Town of Rolesville Planning Department

CITY OF RALEIGH - PLANS AUTHORIZED FOR CONSTRUCTION

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

Raleigh Water Review Officer

# **EROSION AND SEDIMENT CONTROL**

# APPROVED PLAN

DATE

PERMIT NO. SEC-

Wake County Environmental Services Sedimentation & Erosion Control 919-856-7400



ENVIRONMENTAL CONSULTANT SIGNATURE



Date:	10.02.23	
Project #:	P230462	
	SHEET	
	C000	

REV # DATE DESCRIPTION

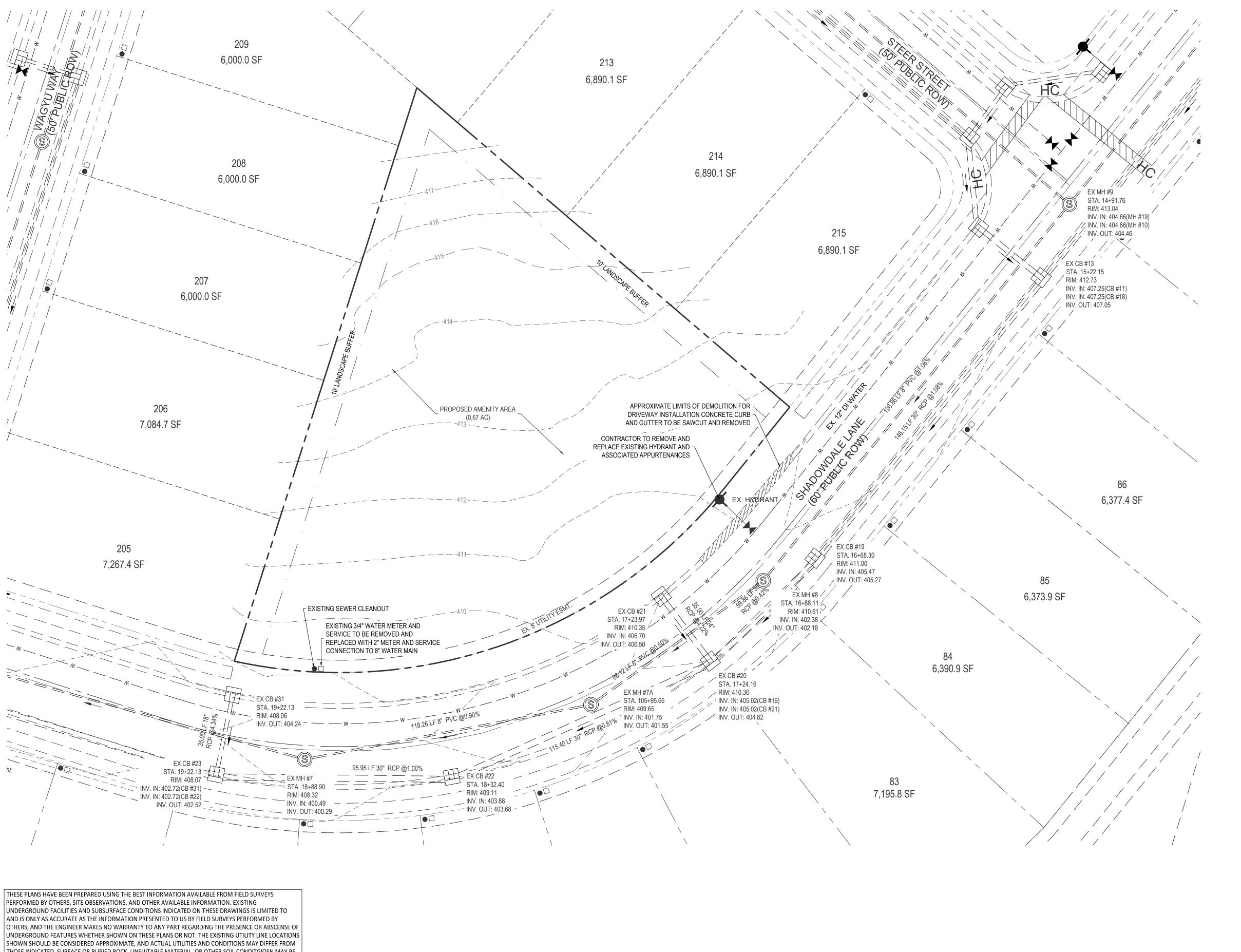
1 08.07.23 ROLESVILLE 2ND REVIEW COMMENTS (CAA)

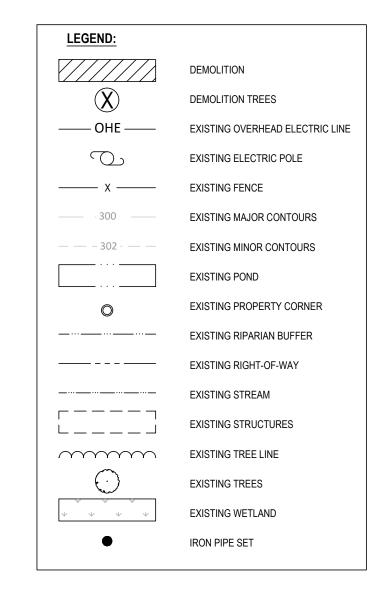
2 10.02.23 ROLESVILLE 3RD REVIEW COMMENTS (BCSC)

3 12.01.23 ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

4 01.18.24 WAKE COUNTY EC SUBMITTAL (BCSC)

5 03.14.24 WAKE COUNTY EC SUBMITTAL 2 (BCSC)



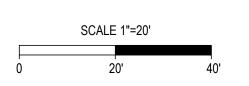


#### **DEMOLITION NOTES:**

- 1. ALL UTILITIES OR STRUCTURES NOT INDICATED FOR REMOVAL OR MODIFICATION ARE TO REMAIN AND BE PROTECTED FROM DAMAGE.
- 2. ALL WASTE MATERIAL GENERATED FROM CLEARING AND DEMOLITION ACTIVITIES SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL APPLICABLE RULES AND REGULATIONS.
- 3. REMOVE TOPSOIL AND STOCKPILE APPROPRIATELY ON-SITE. ON-SITE TEMPORARY STOCKPILES SHALL BE LOCATED WITHIN THE CONSTRUCTION
- 4. ALL PAVEMENT OR CONCRETE TO BE REMOVED SHALL BE SAW CUT TO PROVIDE A STRAIGHT AND UNIFORM JOINT WITH NEW CONSTRUCTION. ANY EXISTING PAVEMENT, SIDEWALK, CURB & GUTTER, ETC. THAT MUST BE REMOVED TO ALLOW NEW CONSTRUCTION SHALL BE REMOVED AND REPAIRED PER SPECIFICATIONS AND DETAILS OR TO MATCH EXISTING CONDITIONS (WHETHER OR NOT SHOWN ON THE DRAWINGS TO BE REMOVED). UTILITY INSTALLATIONS MAY UTILIZE OPEN CUT OF PAVEMENTS UNLESS INDICATED OTHERWISE. TRENCH IN EXISTING ASPHALT SHALL BE PATCHED PER PAVEMENT REPAIR DETAIL.
- 5. PROTECT ALL ADJACENT PROPERTIES, THE GENERAL PUBLIC AND ALL OF THE OWNER'S FACILITIES. SHOULD DAMAGE OCCUR, NOTIFY THE ENGINEER
- IMMEDIATELY. 6. THE CONTRACTOR SHALL EMPLOY A QUALIFIED UTILITY LOCATOR SERVICE TO LOCATE ALL UNDERGROUND UTILITIES (INCLUDING, BUT NOT LIMITED TO ELECTRICAL, TELEPHONE, GAS, CABLE AND FIBER OPTIC) WITHIN THE LIMITS
- OF CONSTRUCTION. 7. VERIFY ALL ILLUSTRATED KNOWN UNDERGROUND ELEMENTS. EXERCISE REASONABLE EFFORTS TO PROTECT ANY UNKNOWN UNDERGROUND ELEMENTS. NOTIFY THE ENGINEER IMMEDIATELY IF UNKNOWN ELEMENTS ARE DISCOVERED THAT WOULD NECESSITATE MODIFICATION TO THE PROPOSED
- 8. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND OSHA REGULATIONS.
- 9. EXISTING MANHOLES, VALVE BOXES, VAULTS, CLEANOUTS, UTILITY POLES, ETC. TO REMAIN WITHIN THE GRADING LIMITS SHALL BE ADJUSTED AS NEEDED TO FUNCTION PROPERLY WITH THE PROPOSED FINISHED GRADES (WHETHER INDICATED OR NOT TO BE MODIFIED).
- 10. GENERAL CONTRACTOR TO COORDINATE ALL PEDESTRIAN ACCESS PATHS, LOCATIONS, LIGHTING, ETC. WITH OWNER. 11. CONTRACTOR SHALL INSPECT ALL EXISTING SIDEWALK AND SHALL REPLACE
- OR REPAIR ANY BROKEN OR DAMAGED SECTIONS. 12. CONTRACTOR SHALL COMPLY WITH HARNETT COUNTY CONSTRUCTION STANDARDS AND SPECS. SITE NOTES
- 1. PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION TAKEN FROM A FIELD SURVEY BY CAWTHORNE, MOSS AND PANCIERA, ENTITLED "SURVEY FOR JVC", DATED
- 2. WETLANDS AND STREAMS HAVE RECEIVED PRELIMINARY JURISDICTION DELINEATION FROM NC DIVISION OF WATER RESOURCES.
- 3. NO FLOOD HAZARD AREAS WITHIN PROJECT BOUNDARY PER FEMA MAP 37201755900J , DATED MAY 2, 2006.
- 4. ALL STRIPING TO BE THERMOPLASTIC. 5. ALL EXISTING ELEVATIONS, FEATURES, AND UTILITIES TO BE
- FIELD VERIFIED.
- 6. SURVEY INFORMATION BY OTHERS. ENGINEER HAS NOT VERIFIED THE ACCURACY OF COMPLETENESS OF THE INFORMATION PROVIDED AND SHALL NOT BE RESPONSIBLE FOR ERRORS OR OMISSION THAT MAY BE INCORPORATED AS A RESULT. THIS SHALL NOT BE CONSIDERED A CERTIFIED SURVEY.

THESE PLANS HAVE BEEN PREPARED USING THE BEST INFORMATION AVAILABLE FROM FIELD SURVEYS
PERFORMED BY OTHERS, SITE OBSERVATIONS, AND OTHER AVAILABLE INFORMATION. EXISTING
UNDERGROUND FACILITIES AND SUBSURFACE CONDITIONS INDICATED ON THESE DRAWINGS IS LIMITED TO
AND IS ONLY AS ACCURATE AS THE INFORMATION PRESENTED TO US BY FIELD SURVEYS PERFORMED BY
OTHERS, AND THE ENGINEER MAKES NO WARRANTY TO ANY PART REGARDING THE PRESENCE OR ABSCENSE OF
UNDERGROUND FEATURES WHETHER SHOWN ON THESE PLANS OR NOT. THE EXISTING UTILITY LINE LOCATIONS
SHOWN SHOULD BE CONSIDERED APPROXIMATE, AND ACTUAL UTILITIES AND CONDITIONS MAY DIFFER FROM
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PLAN AS NECESSARY TO ACCOMDATE CONDITIONS ENCOUNTERED IN THE FIELD.

at Jon	REV#	DATE	DESCRIPTION
Projects\230462 Preserve	1	08.07.23	ROLESVILLE 2ND REVIEW COMMENTS (CAA)
	2	10.02.23	ROLESVILLE 3RD REVIEW COMMENTS (BCSC)
	3	12.01.23	ROLESVILLE 1ST REVIEW COMMENTS (BCSC)
	4	01.18.24	WAKE COUNTY EC SUBMITTAL (BCSC)
\2023	5	03.18.24	WAKE COUNTY EC SUBMITTAL 2 (BCSC)





FINAL DRAWING FOR CONSTRUCTION

Civil

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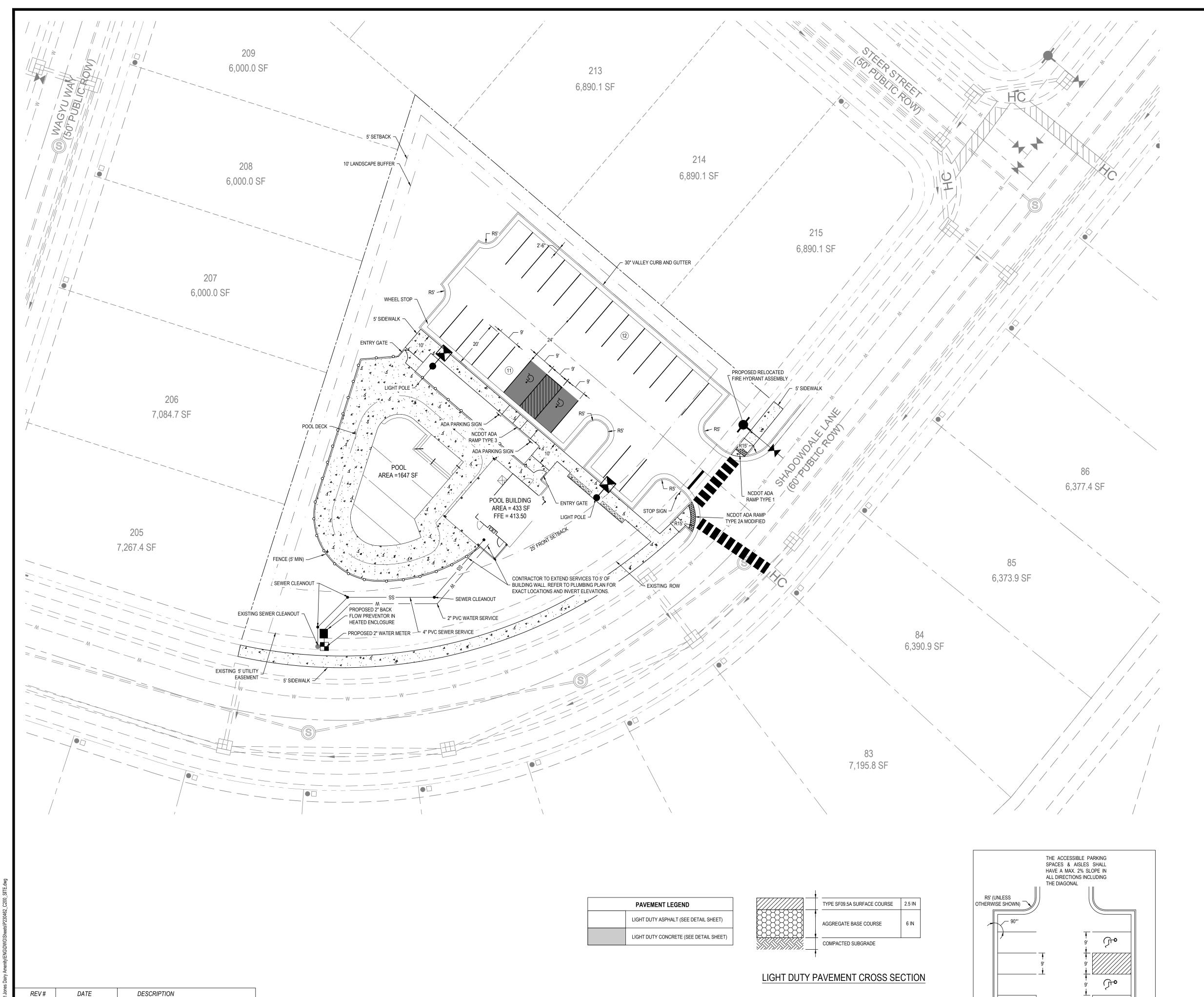
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**EXISTING** 

JMW 10.02.23 P230462 SHEET C100



08.07.23

10.02.23

12.01.23

01.18.24

03.18.24

ROLESVILLE 2ND REVIEW COMMENTS (CAA)

ROLESVILLE 3RD REVIEW COMMENTS (BCSC)

ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

WAKE COUNTY EC SUBMITTAL (BCSC)

WAKE COUNTY EC SUBMITTAL 2 (BCSC)

#### SITE NOTES

- 1. PROPERTY BOUNDARY AND EXISTING CONDITIONS INFORMATION TAKEN FROM A FIELD SURVEY BY CAWTHORNE, MOSS AND PANCIERA, ENTITLED "SURVEY FOR
- JVC", DATED APRIL, 2018.

  2. WETLANDS AND STREAMS HAVE RECIEVED PRELIMINARY JURISDICTION DELINATION FROM NC DIVISION OF WATER RESOURCES.

  3. NO FLOOD HAZARD AREAS WITHIN PROJECT BOUNDARY PER FEMA MAP
- 37201755900J, DATED MAY 2, 2006.
- ALL STRIPING TO BE THERMOPLASTIC.
   ALL EXISTING ELEVATIONS, FEATURES, AND UTILITIES TO BE FIELD VERIFIED.

#### TRAFFIC CONTROL NOTES

1. ALL SITE SIGNAGE SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND NCDOT STANDARDS.

SIGN	MUTCD STANDARD	SIZE
STOP SIGN	R1-1	30-IN X 30-IN
VAN ACCESSIBLE	R7-8A	12-IN X 6-IN

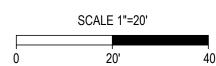
- 2. ALL SIGNS SHALL BE MOUNTED WITH A 5-FT MINIMUM VERTICAL CLEARANCE TO THE BOTTOM OF THE SIGN ON 2-LB GALVANIZED STEEL U-CHANNEL POST SET IN 18-IN DEEP X 8-IN DIAMETER CONCRETE FOOTING. SIGNS MOUNTED ADJACENT TO SIDEWALKS MUST BE MOUNTED WITH 7-FT MINIMUM VERTICAL CLEARANCE TO THE BOTTOM OF
- 3. ALL PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE MUTCD AND NCDOT STANDARDS AND PROJECT SPECIFICATIONS.

MARKINGS	NCDOT STANDARD	SIZE	COLOR
PARKING SPACE	1205.01	4-IN	WHITE
NO PARKING - FIRE LANE	1205.01	4-IN	YELLOW
STOPBAR	1205.01	24-IN	WHITE
CROSSWALK	1205.07	8-IN	WHITE

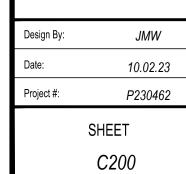
\*NO PARKING - FIRE LANE MARKINGS SHALL CONSIST OF A 4-IN SOLID YELLOW STRIPE AND 8-IN HIGH YELLOW TEXT " NO PARKING - FIRE LANE" AT 40' INTERVALS. STRIPPING SHALL BE PLACED AS INDICATED BY THE FOLLOWING LINE TYPE

## 4. ALL PAVEMENT MARKINGS SHALL BE RESIN TYPE PAINT AS REQUIRED BY THE TOWN

SITE DATA	<b>\</b>
OWNER	KB HOMES CAROLINAS
CITE ADDDECC	4506 SOUTH MIAMI BLVD
SITE ADDRESS	DURHAM, NC 27703
PIN	1759-88-6764
1 111	1750-00-0704
EXISTING USE	VACANT
PROPOSED USE	AMENITY
ZONING	R3
WATERSHED	NUESE
WATERSHED WATER SUPPLY	UPPER NUESE
RIVER BASIN	AUSTIN CREEK
FEMA MAP	MAP#3720175900K 7.19.2
GROSS TRACT AREA	0.67 AC
BUILDING SETBACKS	
PRIMARY STREET	25'
SIDE STREET	5'
SIDE LOT LINE	5'
REAR LOT LINE	5'
PARKING SETBACKS	S. AMENITY
PRIMARY STREET (MIN.)	25'
	5'
SIDE STREET (MIN.)	
SIDE LOT LINE (MIN.)	5'
REAR LOT LINE (MIN.)	5'
PARKING	<u> </u>
DECK AREA REQUIRED	1 SPACE / 300 SF
	1647/300 = 6 SPACES
CABANA REQUIRED	1/100SF
	1090/100 = 11
MAIL KIOSK REQUIRED	2 PER CUP
W/ NE MOON NE GOILLES	2
TOTAL REQURED	
TOTAL PROVIDED	23
TOTALTROVIDED	20
ADA PARKING CALCS.	1 TO 25 = 1
ADA PARKING REQUIRED	1SPACES
ADA PARKING PROVIDED	2 SPACES
IMPERVIOU	
NET TRACT AREA	0.67 AC. (29185 SF)
EXISTING IMPERVIOUS	0 AC. (0 SF)
DOOL DECK	0 00 VC (3E30 CL)
POOL DECK	0.08 AC (3528 SF)
SIDEWALKS	0.01 AC (380 SF)
AMENITY BUILDING	0.02 AC (960 SF)
ROADWAY B-B	0.19 AC (8157 SF)
TOTAL IMPERVIOUS	0.30 AC (13,395 SF)
IMPERVIOUS PERCENTAGE	46%







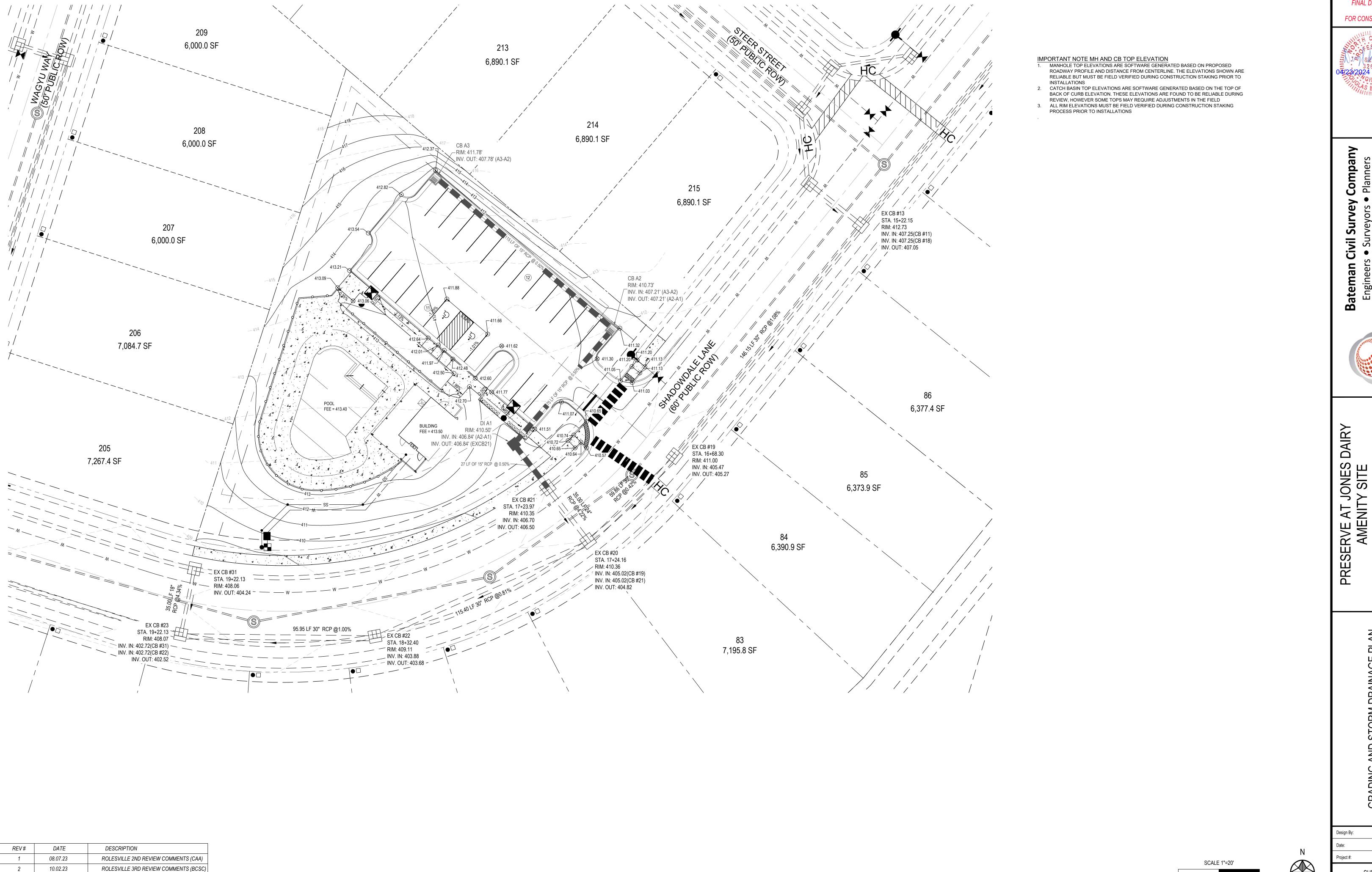


FINAL DRAWING

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DAIR

PRESERVE AT JONES AMENITY SITE



12.01.23

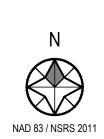
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ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

WAKE COUNTY EC SUBMITTAL (BCSC)

WAKE COUNTY EC SUBMITTAL 2 (BCSC)



*JMW* 10.02.23 P230462 SHEET C500

FINAL DRAWING

FOR CONSTRUCTION

Civil Survey (

Bateman C Engineers

12.01.23

01.18.24

03.18.24

ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

WAKE COUNTY EC SUBMITTAL (BCSC)

WAKE COUNTY EC SUBMITTAL 2 (BCSC)

#### **GENERAL EROSION AND SEDIMENT CONTROL NOTES:**

- ALL CONSTRUCTION SHALL COMPLY WITH NCDEQ STANDARDS AND SPECIFICATIONS.
- A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE ON FILE AT THE JOB SITE AT ALL TIMES. FAILURE TO FOLLOW THE APPROVED PLAN SEQUENCE AND DETAILS COULD SUBJECT THE CONTRACTOR TO FINES AND PENALTIES ISSUED BY DEQ.
- FIELD VERIFY ALL DIMENSIONS AND GRADES ON THESE PLANS PRIOR TO CONSTRUCTION. FAILURE TO NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH PLAN OR GRADE CHANGES, MAY RESULT IN NO EXTRA COMPENSATION PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES
- 5. EXCAVATION AND EARTH MOVING OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE

GIVEN OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION. ALL EXISTING UTILITIES SHOULD BE CONSIDERED

- GEOTECHNICAL ENGINEER. VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF ABOVE GROUND FEATURES. NO WARRANTY IS
- APPROXIMATE IN LOCATION AND VERIFIED PRIOR TO COMMENCING ACTIVITY ON SITE. 7. ALL ADJACENT ROADS TO THE SITE ARE TO BE SWEPT AND WASHED AT THE END OF EACH WORK DAY TO ENSURE NO SEDIMENT COLLECTS ON THE ROADWAYS
- INSPECT AND PROPERLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER
- INSTALL ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SEDIMENT RUNOFF. CONCRETE WASHOUT TO BE LOCATED A MINIMUM OF 50' FROM ANY DRAINAGE STRUCTURE.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. . ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER
- 13. MAINTAIN SILT FENCE AROUND THE ENTIRE PROJECT PERIMETER AREA WITH SILT FENCE OUTLETS AT THE LOW
- 14. THE NPDES CONSTRUCTION PERMIT REQUIRES EROSION CONTROL DEVICES AND STORM WATER OUTFALLS BE INSPECTED WEEKLY (EVERY 7 CALENDAR DAYS) AND WITHIN 24 HRS OF A .5 INCH RAIN EVENT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT THESE INSPECTIONS AND MAINTAIN RECORDS UNTIL THE AREA HAS STABILIZED. EVIDENT BY 95% VEGETATIVE GROWTH FOR AREAS PROVIDED SEEDING. TO FACILITATE RAINFALL MONITORING A RAIN GAUGE IS REQUIRED TO BE ON SITE. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING "SELF INSPECTIONS" INDICATING THE DATE BMPS ARE INSTALLED AND STABILIZATION MEASURES (SEEDING/MULICHING OR SOD) ARE INITIATED. THE "SELE INSPECTION" REPORTS WILL BE MAINTAINED ALONG WITH THE "NPDES" INSPECTION REPORTS. ONCE STABILIZATION HAS BEEN ACCOMPLISHED INSPECTION RECORDS ARE TO BE FORWARDED TO EAD AND ALL TEMPORARY EROSION/SEDIMENTATION CONTROL DEVICES REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH ALL PERMITS AND PLANS. ANY CHANGES WILL BE APPROVED BY THE STATE PRIOR TO EXECUTION. A COPY OF THE EROSION AND SEDIMENTATION CONTROL PLAN, LETTER OF APPROVAL, AND NPDES CONSTRUCTION PERMIT WILL BE MAINTAINED BY THE CONTRACTOR AT THE ONSITE OFFICE. IF SOIL IS REMOVED FROM OR BROUGHT ONSITE, THE APPLICABLE SOLID WASTE MANAGEMENT PERMIT NUMBER, EROSION SEDIMENTATION PERMIT NUMBER OR MINE PERMIT NUMBER WILL BE DISCLOSED.

#### MAINTENANCE PLAN

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
- ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2" OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
- 3. DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE ACTIVELY ASSOCIATED WITH A SWALE. SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE
- SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6' MAX WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL RE 8' MAX WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED. 5. ALL SEEDED AREAS WILL BE FERTILIZED. RESEEDED AS NECESSARY AND MULCHED ACCORDING TO
- WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING

SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES

- 6. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE MAINTAINED UNTIL ALL UPGRADE DRAINAGE AREAS
- HAVE BEEN STABILIZED WITH THE ESTABLISHMENT OF PERMANENT VEGETATION. 7. TACK AMOUNT SHALL BE APPLIED AT A RATE OF 0.10 GALLON PER SQUARE YARD.

#### WAKE COUNTY CONSTRUCTION SEQUENCE:

- 1. SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907), OBTAIN A LAND-DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD. TEMPORARY DIVERSION 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 WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) FOR AN ONSITE INSPECTION TO OBTAIN A
- CERTIFICATE OF COMPLIANCE 4. 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
- 6. 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. 7. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED MANAGER JEEVAN NEUPAN . PE (919-819-8907) FOR SITE INSPECTION.
- 8. IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- 9. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERHSED MANAGER, JEEVAN NEUPANE, PE (919-819-8907). OBTAIN A CERTIFICATE OF COMPLETION.

## TOTAL DISTURBED AREA = 0.67 AC

- 2. ALL EXISTING VAULTS, MANHOLES, STORM DRAIN STRUCTURES, VALVES BOXES, CLEANOUTS, ETC SHALL BE
- ADJUSTED AS NEEDED TO MATCH FINISHED GRADING.
- 3. ALL BACKFILL, COMPACTION, SOIL TESTING, ETC. SHALL BE PERFORMED BY THE OWNERS INDEPENDENT TESTING LABORATORY.
- 4. ALL SPOT ELEVATIONS INDICATED ARE AT BACK OF CURB, UNLESS OTHERWISE NOTED. 5. SITE IS NOT WITHIN 100 YEAR FLOOD PLAIN.
- 6. ALL ELEVATIONS ARE BASED ON NC GRID NORTH (NAD 83)
- 7. A RECONSTRUCTION MEETING MUST BE SCHEDULED PRIOR TO WORK, GRADING AND INSTALLATION OF FROSION CONTROL 8. UTILITY LOCATIONS ARE TO BE FOUND BY CALLING NC ONE CALL.
- 9. ALL HANDICAP PARKING SPACES AND STRIPPED ACCESSIBILITY AISLES ARE TO HAVE NO MORE THAN 1:50 SLOPE IN ALL DIRECTIONS.
- 10. ALL SIDEWALKS ARE TO HAVE NO MORE THAN A 1:20 SLOPE FOR THE LENGTH OF THE SIDEWALK AND NO MORE THAN A 1:50 SLOPE FOR THE WIDTH OF THE SIDEWALK.
- 11. IF CONTRACTOR NOTICES ANY DISCREPANCIES IN ANY OF THESE SLOPE REQUIREMENTS, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER PRIOR TO POURING ANY CONCRETE SO THAT A
- SOLUTION CAN BE FOUND 12. CONTACT THE TOWN OF WILSON'S MILLS PLANNING DEPARTMENT PRIOR TO CONVERSION OF ANY SCM ONSITE

PROFESSIONAL AND THE TOWN OF WILSON'S MILLS PLANNING DEPARTMENT MUST RECEIVE ALL AS BUILT

- FROM AN EROSION CONTROL DEVICE TO A STORMWATER CONTROL MEASURE. 13. ALL SLOPES TO BE VEGETATED WITH GRASS SHALL BE A MAXIMUM OF 3:1
- 14. ALL ROOF DRAINS SHALL BE DIRECTED TO THE STORM DRAIN SYSTEM. 15. AT THE CONCLUSION OF THE PROJECT ALL SCMS INSTALLED ON-SITE MUST BE CERTIFIED BY A DESIGN

DRAWINGS PRIOR TO RECEIVING THE CERTIFICATE OF OCCUPANCY.

## WAKE COUNTY STOCKPILE REQUIREMENTS:

- 1. A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE PROVIDED AROUND ALL
- PROPOSED STOCKPILES. STOCKPILES SHALL BE SET BACK A MINIMUM OF 25' FROM ADJACENT PROPERTY LINES.
- 3. STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET. 4 STOCKPILE SLOPES SHALL BE 2:1 OF FLATTER
- APPROVED BMPs SHALL BE PROVIDED TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM STOCKPILE. 5. STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
- 7. ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP. 8. OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY AND STATE REGULATIONS. ALL SPOIL AREAS OVER AN ACRE ARE REQUIRED TO HAVE AN APPROVED SEDIMENT CONTROL PLAN, DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

## STOCKPILE MAINTENANCE REQUIREMENTS:

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED TO REDUCE EROSION. TARPS SHALL BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE
- 3. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE, THE FINANCIALLY RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY TO DESIGNATE A NEW FINANCIALLY RESPONSIBLE PARTY
- FOR THE STOCKPILE.
- 4. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL
- BASIS WHILE THE STOCKPILE IS IN USE A VEGETATIVE BUFFER SHALL BE ESTABLISHED AND MAINTAINED AT THE TOE OF THE SLOPE (WHERE
- PRACTICAL)

#### **EROSION CONTROL DEVICES MAINTENANCE REQUIREMENTS**

RESEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE

THE ABSENCE OF OR AN INCOMPLETE LANDSCAPE MANAGEMENT SPECIFICATION AND/ OR COMPLETE MAINTENANCE SCHEDULE SHALL CONSTITUTE GROUNDS FOR DISAPPROVAL OF THE PLANS. PROPER MAINTENANCE IS CRITICAL FOR THE CONTINUED STABILIZATION ONCE VEGETATIVE COVER IS ESTABLISHED. ALTHOUGH MAINTENANCE STRATEGIES FOR DIFFERENT SITES MAY BE SIMILAR, NO TWO CONSTRUCTION SITES IN NORTH CAROLINA HAVE BEEN OR WILL BE ABLE TO BE CONTROLLED OR PROTECTED IN IDENTICAL WAYS. VARIATIONS IN CLIMATE. TOPOGRAPHY. SOILS. AVAILABLE MOISTURE. SIZE AND MANY OTHER CONDITIONS WILL DICTATE THE MAINTENANCE METHODOLOGY TO BE USED. A DETAILED SCHEDULE OF MAINTENANCE WILL BE REQUIRED ON THE PLANS. THIS SCHEDULE WILL ILLUSTRATE HOW THE INITIAL PLANTING WILL BE MAINTAINED TO ASSURE IMMEDIATE. SHORT TERM AND PERMANENT PROTECTION. THE SCHEDULE WILL ADDRESS TOPICS SUCH AS APPROPRIATE IRRIGATION OF PLANTS DURING THE EARLY ESTABLISHMENT PHASE. DROUGHT CONDITIONS. EXCESSIVE RAINFALL. MULCH REPLACEMENT, SUPPLEMENTAL SEEDING, SUPPLEMENTAL SOILS TESTS, APPLICATION OF NUTRIENTS AND AMENDMENTS, CONTROL OF COMPETITIVE AND INVASIVE SPECIES, DISEASE AND INSECT CONTROL, AND CORRECTIVE MAINTENANCE, MEASURES TO ADDRESS FAILURE OF VEGETATION TO BECOME ESTABLISHED. CONTRACTUAL RESPONSIBILITY FOR MAINTENANCE AFTER INITIAL ESTABLISHMENT OF VEGETATIVE COVER WILL BE PROVIDED ON THE PLANS. IN THE CONSTRUCTION SEQUENCE AND ON THE BID LIST FOR THE PROJECT. MAINTENANCE BONDS AND/OR WARRANTY GUARANTEE MAY BE REQUIRED OF THE RESPONSIBLE PARTY, ESPECIALLY FOR AREAS IN OR ADJACENT TO ENVIRONMENTALLY SENSITIVE SITES SUCH AS WETLANDS, RIPARIAN BUFFERS, FLOODPLAINS, AND WATERS OF THE STATE. SEE EXAMPLE 6.11A FOR A SAMPLE MAINTENANCE SPECIFICATION AND A MINIMUM MAINTENANCE CHECK LIST THAT SHALL BE PROVIDED ON ALL PLANS.

AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF THE SOD. DO NOT REMOVE MORE THAN ONE-THIRD OF THE SHOOT IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD REQUIRES FERTILIZATION, AND MAY ALSO REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS WHEN POSSIBLE, OR USE THE RATES IN

INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION. DISLOCATION OR FAILURE. WHERE EROSION IS OBSERVED, APPLY ADDITIONAL MULCH. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.

#### ROLLED EROSION CONTROL PRODUCTS

- . INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL EVENT REPAIR IMMEDIATELY. . GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH
- 3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED. 4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND
- 5. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED

INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED. REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY

#### PERMANENT DIVERSIONS

INSPECT PERMANENT DIVERSIONS AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA, AND REPAIR THE DIVERSION RIDGE. CHECK OUTLETS, AND MAKE TIMELY REPAIRS AS NEEDED. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITION AT ALL TIMES

### GRASS-LINED CHANNELS

DURING THE ESTABLISHMENT PERIOD. CHECK GRASS-LINED CHANNELS AFTER EVERY RAINFALL, AFTER GRASS IS ESTABLISHED, PERIODICALLY CHECK THE CHANNEL; CHECK IT AFTER EVERY HEAVY RAINFALL EVENT. IMMEDIATELY MAKE REPAIRS. IT IS PARTICULARLY IMPORTANT TO CHECK THE CHANNEL OUTLET AND ALL ROAD CROSSINGS FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLES. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATIONS TO MAINTAIN THE DESIGNED CARRYING CAPACITY. KEEP TH GRASS IN A HEALTHY, VIGOROUS CONDITION AT ALL TIMES, SINCE IT IS THE PRIMARY EROSION PROTECTION FOR THE CHANNEL (PRACTICE 6.11, PERMANENT SEEDING)

## RIPRAP AND PAVED CHANNELS

INSPECT CHANNELS AT REGULAR INTERVALS AS WELL AS AFTER MAJOR RAINS, AND MAKE REPAIRS PROMPTLY. GIVE SPECIAL ATTENTION TO THE OUTLET AND INLET SECTIONS AND OTHER POINTS WHERE CONCENTRATED FLOW ENTERS. CAREFULLY CHECK STABILITY AT ROAD CROSSINGS, AND LOOK FOR INDICATIONS OF PIPING SCOUR HOLES OR BANK FAILURES MAKE REPAIRS IMMEDIATELY MAINTAIN ALL VEGETATION ADJACENT TO THE CHANNEL IN A HEALTHY, VIGOROUS CONDITION TO PROTECT THE AREA FROM EROSION AND SCOUR DURING OUT-OF-BANK FLOW

## TEMPORARY SLOPE DRAINS

INSPECT THE SLOPE DRAIN AND SUPPORTING DIVERSION AFTER EVERY RAINFALL, AND PROMPTLY MAKE NECESSARY REPAIRS. WHEN THE PROTECTED AREA HAS BEEN PERMANENTLY STABILIZED, TEMPORARY MEASURES MAY BE REMOVED, MATERIALS DISPOSED OF PROPERLY, AND ALL DISTURBED AREAS STABILIZED APPROPRIATELY

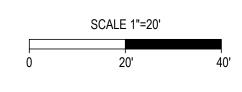
INSPECT, CLEAN, AND PROPERLY MAINTAIN THE EXCAVATED BASIN AFTER EVERY STORM UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. TO PROVIDE SATISFACTORY BASIN EFFICIENCY, REMOVE SEDIMENT WHEN THE VOLUME OF THE BASIN HAS BEEN REDUCED BY ONE-HALF. SPREAD ALL EXCAVATED MATERIAL EVENLY OVER THE SURROUNDING LAND AREA OR STOCKPILE AND STABILIZE IT APPROPRIATELY.

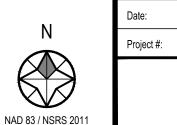
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

## BLOCK AND GRAVEL INLET PROTECTION

INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEAN OUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERTY STABILIZED.







FOR CONSTRUCTION

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ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

WAKE COUNTY EC SUBMITTAL (BCSC)

WAKE COUNTY EC SUBMITTAL 2 (BCSC)

#### **GENERAL EROSION AND SEDIMENT CONTROL NOTES:**

- ALL CONSTRUCTION SHALL COMPLY WITH NCDEQ STANDARDS AND SPECIFICATIONS.
- A COPY OF THE APPROVED EROSION CONTROL PLAN MUST BE ON FILE AT THE JOB SITE AT ALL TIMES. FAILURE TO FOLLOW THE APPROVED PLAN SEQUENCE AND DETAILS COULD SUBJECT THE CONTRACTOR TO FINES
- AND PENALTIES ISSUED BY DEQ. FIELD VERIFY ALL DIMENSIONS AND GRADES ON THESE PLANS PRIOR TO CONSTRUCTION. FAILURE TO NOTIFY THE OWNER OF ANY DISCREPANCIES PRIOR TO PROCEEDING WITH PLAN OR GRADE CHANGES, MAY RESULT IN NO EXTRA COMPENSATION PAID TO THE CONTRACTOR FOR ANY WORK DONE DUE TO DIMENSIONS OR GRADES
- 5. EXCAVATION AND EARTH MOVING OPERATIONS SHALL BE CONDUCTED UNDER THE SUPERVISION OF THE

GIVEN OR IMPLIED AS TO THE ACCURACY OF THE INFORMATION. ALL EXISTING UTILITIES SHOULD BE CONSIDERED

- GEOTECHNICAL ENGINEER. 6. VERIFY THE LOCATION OF ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION. EXISTING UTILITIES SHOWN ARE FROM THE BEST AVAILABLE RECORDS AND FROM A SURVEY OF ABOVE GROUND FEATURES. NO WARRANTY IS
- APPROXIMATE IN LOCATION AND VERIFIED PRIOR TO COMMENCING ACTIVITY ON SITE. 7. ALL ADJACENT ROADS TO THE SITE ARE TO BE SWEPT AND WASHED AT THE END OF EACH WORK DAY TO ENSURE NO SEDIMENT COLLECTS ON THE ROADWAYS.
- INSPECT AND PROPERLY MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES WEEKLY AND AFTER
- 9. INSTALL ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT SEDIMENT RUNOFF. CONCRETE WASHOUT TO BE LOCATED A MINIMUM OF 50' FROM ANY DRAINAGE STRUCTURE.
- THE EROSION CONTROL MEASURES INDICATED ON THE PLANS ARE THE MINIMUM REQUIREMENTS. 12. ADDITIONAL MEASURES MAY BE REQUIRED, AS DIRECTED BY THE ENGINEER, ENFORCEMENT OFFICER, OR OTHER
- 13. MAINTAIN SILT FENCE AROUND THE ENTIRE PROJECT PERIMETER AREA WITH SILT FENCE OUTLETS AT THE LOW
- 14. THE NPDES CONSTRUCTION PERMIT REQUIRES EROSION CONTROL DEVICES AND STORM WATER OUTFALLS BE INSPECTED WEEKLY (EVERY 7 CALENDAR DAYS) AND WITHIN 24 HRS OF A .5 INCH RAIN EVENT. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CONDUCT THESE INSPECTIONS AND MAINTAIN RECORDS UNTIL THE AREA HAS STABILIZED. EVIDENT BY 95% VEGETATIVE GROWTH FOR AREAS PROVIDED SEEDING. TO FACILITATE RAINFALL MONITORING A RAIN GAUGE IS REQUIRED TO BE ON SITE. ADDITIONALLY THE CONTRACTOR IS RESPONSIBLE FOR CONDUCTING "SELF INSPECTIONS" INDICATING THE DATE BMPS ARE INSTALLED AND STABILIZATION MEASURES (SEEDING/MULCHING OR SOD) ARE INITIATED. THE "SELF INSPECTION" REPORTS WILL BE MAINTAINED ALONG WITH THE "NPDES" INSPECTION REPORTS. ONCE STABILIZATION HAS BEEN ACCOMPLISHED INSPECTION RECORDS ARE TO BE FORWARDED TO EAD AND ALL TEMPORARY EROSION/SEDIMENTATION

CONTROL DEVICES REMOVED. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COMPLIANCE WITH ALL

PERMITS AND PLANS. ANY CHANGES WILL BE APPROVED BY THE STATE PRIOR TO EXECUTION. A COPY OF THE

EROSION AND SEDIMENTATION CONTROL PLAN, LETTER OF APPROVAL, AND NPDES CONSTRUCTION PERMIT WILL BE MAINTAINED BY THE CONTRACTOR AT THE ONSITE OFFICE. IF SOIL IS REMOVED FROM OR BROUGHT ONSITE, THE APPLICABLE SOLID WASTE MANAGEMENT PERMIT NUMBER, EROSION SEDIMENTATION PERMIT NUMBER OR

## MINE PERMIT NUMBER WILL BE DISCLOSED.

- 1. ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CHECKED FOR STABILITY AND OPERATION FOLLOWING EVERY RUNOFF PRODUCING RAINFALL, BUT IN NO CASE, LESS THAN ONCE EVERY WEEK AND WITHIN 24 HOURS OF EVERY HALF INCH RAINFALL.
- ALL POINTS OF EGRESS WILL HAVE CONSTRUCTION ENTRANCES THAT WILL BE PERIODICALLY TOP-DRESSED WITH AN ADDITIONAL 2" OF #4 STONE TO MAINTAIN PROPER DEPTH. THEY WILL BE MAINTAINED IN CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE SITE. IMMEDIATELY REMOVE OBJECTIONABLE MATERIAL SPILLED WASHED OR TRACKED ONTO THE CONSTRUCTION ENTRANCE OR ROADWAYS.
- 3. DIVERSION DITCHES WILL BE CLEANED OUT IMMEDIATELY TO REMOVE SEDIMENT OR OBSTRUCTIONS FROM THE FLOW AREA. THE DIVERSION RIDGES WILL ALSO BE REPAIRED. SWALES MUST BE TEMPORARILY STABILIZED WITHIN 21 CALENDAR DAYS OF CEASE OF ANY PHASE ACTIVELY ASSOCIATED WITH A SWALE.
- SEDIMENT WILL BE REMOVED FROM BEHIND THE SEDIMENT FENCE WHEN IT BECOMES HALF FILLED. THE SEDIMENT FENCE WILL BE REPAIRED AS NECESSARY TO MAINTAIN A BARRIER. STAKES MUST BE STEEL. STAKE SPACING WILL BE 6' MAX WITH THE USE OF EXTRA STRENGTH FABRIC, WITHOUT WIRE BACKING. STAKE SPACING WILL RE 8' MAX WHEN STANDARD STRENGTH FABRIC AND WIRE BACKING ARE USED. IF ROCK FILTERS ARE DESIGNED AT LOW POINTS IN THE SEDIMENT FENCE THE ROCK WILL BE REPAIRED OR REPLACED IF IT BECOMES HALF FULL OF SEDIMENT, NO LONGER DRAINS AS DESIGNED OR IS DAMAGED. 5. ALL SEEDED AREAS WILL BE FERTILIZED, RESEEDED AS NECESSARY AND MULCHED ACCORDING TO
- SPECIFICATIONS IN THE VEGETATIVE PLAN TO MAINTAIN A VIGOROUS, DENSE VEGETATIVE COVER. ALL SLOPES WILL BE STABILIZED WITHIN 21 CALENDAR DAYS. ALL OTHER AREAS WILL BE STABILIZED WITHIN 15 WORKING
- 6. ALL EROSION AND SEDIMENT CONTROL MEASURES MUST BE MAINTAINED UNTIL ALL UPGRADE DRAINAGE AREAS
- HAVE BEEN STABILIZED WITH THE ESTABLISHMENT OF PERMANENT VEGETATION. 7. TACK AMOUNT SHALL BE APPLIED AT A RATE OF 0.10 GALLON PER SQUARE YARD.

#### WAKE COUNTY CONSTRUCTION SEQUENCE:

MAINTENANCE PLAN

- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907), OBTAIN A LAND-DISTURBING PERMIT.
- INSTALL GRAVEL CONSTRUCTION PAD. TEMPORARY DIVERSION 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 WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) FOR AN ONSITE INSPECTION TO OBTAIN A
- CERTIFICATE OF COMPLIANCE 4. 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
- 6. 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. 7. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED
- MANAGER JEEVAN NEUPAN. PE (919-819-8907) FOR SITE INSPECTION. 8. IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED OR STABILIZE ANY RESULTING BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES, SUCH AS VELOCITY DISSIPATORS, SHOULD NOW BE INSTALLED.
- 9. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL FOR A FINAL SITE INSPECTION BY THE WATERHSED MANAGER, JEEVAN NEUPANE, PE (919-819-8907). OBTAIN A CERTIFICATE OF COMPLETION.

- TOTAL DISTURBED AREA = 0.67 AC 2. ALL EXISTING VAULTS, MANHOLES, STORM DRAIN STRUCTURES, VALVES BOXES, CLEANOUTS, ETC SHALL BE
- ADJUSTED AS NEEDED TO MATCH FINISHED GRADING. 3. ALL BACKFILL, COMPACTION, SOIL TESTING, ETC. SHALL BE PERFORMED BY THE OWNERS INDEPENDENT
- TESTING LABORATORY. 4. ALL SPOT ELEVATIONS INDICATED ARE AT BACK OF CURB, UNLESS OTHERWISE NOTED.
- 5. SITE IS NOT WITHIN 100 YEAR FLOOD PLAIN.
- 6. ALL ELEVATIONS ARE BASED ON NC GRID NORTH (NAD 83) 7. A RECONSTRUCTION MEETING MUST BE SCHEDULED PRIOR TO WORK, GRADING AND INSTALLATION OF FROSION CONTROL
- 8. UTILITY LOCATIONS ARE TO BE FOUND BY CALLING NC ONE CALL. 9. ALL HANDICAP PARKING SPACES AND STRIPPED ACCESSIBILITY AISLES ARE TO HAVE NO MORE THAN 1:50 SLOPE IN ALL DIRECTIONS.
- 10. ALL SIDEWALKS ARE TO HAVE NO MORE THAN A 1:20 SLOPE FOR THE LENGTH OF THE SIDEWALK AND NO MORE
- THAN A 1:50 SLOPE FOR THE WIDTH OF THE SIDEWALK. 11. IF CONTRACTOR NOTICES ANY DISCREPANCIES IN ANY OF THESE SLOPE REQUIREMENTS, IT IS THE
- CONTRACTOR'S RESPONSIBILITY TO CONTACT THE OWNER PRIOR TO POURING ANY CONCRETE SO THAT A SOLUTION CAN BE FOUND 12. CONTACT THE TOWN OF WILSON'S MILLS PLANNING DEPARTMENT PRIOR TO CONVERSION OF ANY SCM ONSITE

15. AT THE CONCLUSION OF THE PROJECT ALL SCMS INSTALLED ON-SITE MUST BE CERTIFIED BY A DESIGN PROFESSIONAL AND THE TOWN OF WILSON'S MILLS PLANNING DEPARTMENT MUST RECEIVE ALL AS BUILT

- FROM AN EROSION CONTROL DEVICE TO A STORMWATER CONTROL MEASURE. 13. ALL SLOPES TO BE VEGETATED WITH GRASS SHALL BE A MAXIMUM OF 3:1
- 14. ALL ROOF DRAINS SHALL BE DIRECTED TO THE STORM DRAIN SYSTEM.

## DRAWINGS PRIOR TO RECEIVING THE CERTIFICATE OF OCCUPANCY. WAKE COUNTY STOCKPILE REQUIREMENTS:

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- STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET. 4 STOCKPILE SLOPES SHALL BE 2:1 OF FLATTER
- APPROVED BMPs SHALL BE PROVIDED TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM STOCKPILE. 5. STOCKPILING MATERIALS ADJACENT TO A DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS
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- 8. OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY AND STATE CONTROL PLAN, DEVELOPER/CONTRACTOR SHALL NOTIFY WAKE COUNTY OF ANY OFFSITE DISPOSAL OF SOIL. PRIOR TO DISPOSAL. FILL OF FEMA FLOODWAYS AND NON-ENCROACHMENT AREAS ARE PROHIBITED EXCEPT AS OTHERWISE PROVIDED BY SUBSECTION 14-19-2 OF THE WAKE COUNTY UNIFIED DEVELOPMENT ORDINANCE (CERTIFICATIONS AND PERMITS REQUIRED).

## STOCKPILE MAINTENANCE REQUIREMENTS:

- SEEDING OR COVERING STOCKPILES WITH TARPS OR MULCH IS REQUIRED TO REDUCE EROSION. TARPS SHALL BE KEYED IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE
- 3. IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE, THE FINANCIALLY
- RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY TO DESIGNATE A NEW FINANCIALLY RESPONSIBLE PARTY
- FOR THE STOCKPILE. 4. THE APPROVED PLAN SHALL PROVIDE FOR THE USE OF STAGED SEEDING AND MULCHING ON A CONTINUAL
- BASIS WHILE THE STOCKPILE IS IN USE

#### A VEGETATIVE BUFFER SHALL BE ESTABLISHED AND MAINTAINED AT THE TOE OF THE SLOPE (WHERE PRACTICAL)

#### **EROSION CONTROL DEVICES MAINTENANCE REQUIREMENTS**

RESEED AND MULCH AREAS WHERE SEEDLING EMERGENCE IS POOR, OR WHERE EROSION OCCURS, AS SOON AS POSSIBLE. DO NOT MOW. PROTECT FROM TRAFFIC AS MUCH AS POSSIBLE

THE ABSENCE OF OR AN INCOMPLETE LANDSCAPE MANAGEMENT SPECIFICATION AND/ OR COMPLETE MAINTENANCE SCHEDULE SHALL CONSTITUTE GROUNDS FOR DISAPPROVAL OF THE PLANS. PROPER MAINTENANCE IS CRITICAL FOR THE CONTINUED STABILIZATION ONCE VEGETATIVE COVER IS ESTABLISHED. ALTHOUGH MAINTENANCE STRATEGIES FOR DIFFERENT SITES MAY BE SIMILAR, NO TWO CONSTRUCTION SITES IN NORTH CAROLINA HAVE BEEN OR WILL BE ABLE TO BE CONTROLLED OR PROTECTED IN IDENTICAL WAYS. VARIATIONS IN CLIMATE. TOPOGRAPHY, SOILS, AVAILABLE MOISTURE. SIZE AND MANY OTHER CONDITIONS WILL DICTATE THE MAINTENANCE METHODOLOGY TO BE USED. A DETAILED SCHEDULE OF MAINTENANCE WILL BE REQUIRED ON THE PLANS. THIS SCHEDULE WILL ILLUSTRATE HOW THE INITIAL PLANTING WILL BE MAINTAINED TO ASSURE IMMEDIATE. SHORT TERM AND PERMANENT PROTECTION. THE SCHEDULE WILL ADDRESS TOPICS SUCH AS APPROPRIATE IRRIGATION OF PLANTS DURING THE EARLY ESTABLISHMENT PHASE. DROUGHT CONDITIONS. EXCESSIVE RAINFALL. MULCH REPLACEMENT, SUPPLEMENTAL SEEDING, SUPPLEMENTAL SOILS TESTS, APPLICATION OF NUTRIENTS AND AMENDMENTS, CONTROL OF COMPETITIVE AND INVASIVE SPECIES, DISEASE AND INSECT CONTROL, AND CORRECTIVE MAINTENANCE, MEASURES TO ADDRESS FAILURE OF VEGETATION TO BECOME ESTABLISHED. CONTRACTUAL RESPONSIBILITY FOR MAINTENANCE AFTER INITIAL ESTABLISHMENT OF VEGETATIVE COVER WILL BE PROVIDED ON THE PLANS. IN THE CONSTRUCTION SEQUENCE AND ON THE BID LIST FOR THE PROJECT. MAINTENANCE BONDS AND/OR WARRANTY GUARANTEE MAY BE REQUIRED OF THE RESPONSIBLE PARTY, ESPECIALLY FOR AREAS IN OR ADJACENT TO ENVIRONMENTALLY SENSITIVE SITES SUCH AS WETLANDS, RIPARIAN BUFFERS, FLOODPLAINS, AND WATERS OF THE STATE. SEE EXAMPLE 6.11A FOR A SAMPLE MAINTENANCE SPECIFICATION AND A MINIMUM MAINTENANCE CHECK LIST THAT SHALL BE PROVIDED ON ALL PLANS.

AFTER THE FIRST WEEK, WATER AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF THE SOD. DO NOT REMOVE MORE THAN ONE-THIRD OF THE SHOOT IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED. AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD REQUIRES FERTILIZATION, AND MAY ALSO REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS WHEN POSSIBLE, OR USE THE RATES IN

INSPECT ALL MULCHES PERIODICALLY, AND AFTER RAINSTORMS TO CHECK FOR RILL EROSION. DISLOCATION OR FAILURE. WHERE EROSION IS OBSERVED, APPLY ADDITIONAL MULCH. IF WASHOUT OCCURS, REPAIR THE SLOPE GRADE, RESEED AND REINSTALL MULCH. CONTINUE INSPECTIONS UNTIL VEGETATION IS FIRMLY ESTABLISHED.

### ROLLED EROSION CONTROL PRODUCTS

- . INSPECT ROLLED EROSION CONTROL PRODUCTS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAIN FALL EVENT REPAIR IMMEDIATELY. . GOOD CONTACT WITH THE GROUND MUST BE MAINTAINED, AND EROSION MUST NOT OCCUR BENEATH
- 3. ANY AREAS OF THE RECP THAT ARE DAMAGED OR NOT IN CLOSE CONTACT WITH THE GROUND SHALL BE REPAIRED AND STAPLED.
- 4. IF EROSION OCCURS DUE TO POORLY CONTROLLED DRAINAGE, THE PROBLEM SHALL BE FIXED AND
- 5. MONITOR AND REPAIR THE RECP AS NECESSARY UNTIL GROUND COVER IS ESTABLISHED

# INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE

SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED. REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY

#### PERMANENT DIVERSIONS

INSPECT PERMANENT DIVERSIONS AFTER EVERY RAINFALL DURING THE CONSTRUCTION OPERATION. IMMEDIATELY REMOVE ANY OBSTRUCTIONS FROM THE FLOW AREA, AND REPAIR THE DIVERSION RIDGE. CHECK OUTLETS, AND MAKE TIMELY REPAIRS AS NEEDED. MAINTAIN THE VEGETATION IN A VIGOROUS, HEALTHY CONDITION AT ALL TIMES

## GRASS-LINED CHANNELS

DURING THE ESTABLISHMENT PERIOD, CHECK GRASS-LINED CHANNELS AFTER EVERY RAINFALL, AFTER GRASS IS ESTABLISHED, PERIODICALLY CHECK THE CHANNEL; CHECK IT AFTER EVERY HEAVY RAINFALL EVENT. IMMEDIATELY MAKE REPAIRS. IT IS PARTICULARLY IMPORTANT TO CHECK THE CHANNEL OUTLET AND ALL ROAD CROSSINGS FOR BANK STABILITY AND EVIDENCE OF PIPING OR SCOUR HOLES. REMOVE ALL SIGNIFICANT SEDIMENT ACCUMULATIONS TO MAINTAIN THE DESIGNED CARRYING CAPACITY. KEEP TH GRASS IN A HEALTHY, VIGOROUS CONDITION AT ALL TIMES, SINCE IT IS THE PRIMARY EROSION PROTECTION FOR THE CHANNEL (PRACTICE 6.11, PERMANENT SEEDING)

## RIPRAP AND PAVED CHANNELS

INSPECT CHANNELS AT REGULAR INTERVALS AS WELL AS AFTER MAJOR RAINS, AND MAKE REPAIRS PROMPTLY. GIVE SPECIAL ATTENTION TO THE OUTLET AND INLET SECTIONS AND OTHER POINTS WHERE CONCENTRATED FLOW ENTERS. CAREFULLY CHECK STABILITY AT ROAD CROSSINGS, AND LOOK FOR INDICATIONS OF PIPING SCOUR HOLES OR BANK FAILURES MAKE REPAIRS IMMEDIATELY MAINTAIN ALL VEGETATION ADJACENT TO THE CHANNEL IN A HEALTHY, VIGOROUS CONDITION TO PROTECT THE AREA FROM EROSION AND SCOUR DURING OUT-OF-BANK FLOW

## TEMPORARY SLOPE DRAINS

INSPECT THE SLOPE DRAIN AND SUPPORTING DIVERSION AFTER EVERY RAINFALL, AND PROMPTLY MAKE NECESSARY REPAIRS. WHEN THE PROTECTED AREA HAS BEEN PERMANENTLY STABILIZED, TEMPORARY MEASURES MAY BE REMOVED, MATERIALS DISPOSED OF PROPERLY, AND ALL DISTURBED AREAS STABILIZED APPROPRIATELY

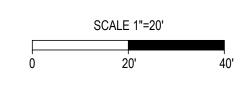
INSPECT, CLEAN, AND PROPERLY MAINTAIN THE EXCAVATED BASIN AFTER EVERY STORM UNTIL THE CONTRIBUTING DRAINAGE AREA HAS BEEN PERMANENTLY STABILIZED. TO PROVIDE SATISFACTORY BASIN EFFICIENCY, REMOVE SEDIMENT WHEN THE VOLUME OF THE BASIN HAS BEEN REDUCED BY ONE-HALF. SPREAD ALL EXCAVATED MATERIAL EVENLY OVER THE SURROUNDING LAND AREA OR STOCKPILE AND STABILIZE IT APPROPRIATELY.

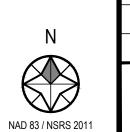
INSPECT INLETS AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL EVENT. CLEAR THE MESH WIRE OF ANY DEBRIS OR OTHER OBJECTS TO PROVIDE ADEQUATE FLOW FOR SUBSEQUENT RAINS. TAKE CARE NOT TO DAMAGE OR UNDERCUT THE WIRE MESH DURING SEDIMENT REMOVAL. REPLACE STONE AS NEEDED.

## BLOCK AND GRAVEL INLET PROTECTION

INSPECT THE BARRIER AT LEAST WEEKLY AND AFTER EACH SIGNIFICANT (1/2 INCH OR GREATER) RAINFALL AND MAKE REPAIRS AS NEEDED. REMOVE SEDIMENT AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR SUBSEQUENT RAINS. WHEN THE CONTRIBUTING DRAINAGE AREA HAS BEEN ADEQUATELY STABILIZED, REMOVE ALL MATERIALS AND ANY UNSTABLE SOIL, AND EITHER SALVAGE OR DISPOSE OF IT PROPERLY. BRING THE DISTURBED AREA TO PROPER GRADE, THEN SMOOTH AND COMPACT IT. APPROPRIATELY STABILIZE ALL BARE AREAS AROUND THE INLET

INSPECT SEDIMENT FENCES AT LEAST ONCE A WEEK AND AFTER EACH RAINFALL. MAKE ANY REQUIRED REPAIRS IMMEDIATELY. SHOULD THE FABRIC OF A SEDIMENT FENCE COLLAPSE, TEAR, DECOMPOSE OR BECOME INEFFECTIVE, REPLACE IT PROMPTLY. REMOVE SEDIMENT DEPOSITS AS NECESSARY TO PROVIDE ADEQUATE STORAGE VOLUME FOR THE NEXT RAIN AND TO REDUCE PRESSURE ON THE FENCE. TAKE CARE TO AVOID UNDERMINING THE FENCE DURING CLEAN OUT. REMOVE ALL FENCING MATERIALS AND UNSTABLE SEDIMENT DEPOSITS AND BRING THE AREA TO GRADE AND STABILIZE IT AFTER THE CONTRIBUTING DRAINAGE AREA HAS BEEN PROPERTY STABILIZED.





FOR CONSTRUCTION

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JMW10.02.23 P230462 SHEET

FINAL DRAWING

FOR CONSTRUCTION

JMW 10.02.23 P230462 SHEET

D. CLUGSTON
BUILDING & DEVELOPMENT CO. RIGHT ELEVATION
1/4" - 1'-0" PUMP ROOM SHEET DISCRIPTION
Planning Sheet DRAWING BY: COVERED PORCH WOMENS 101 CHECKED BY: Copyright D CLUGSTON, INC. 2021 - Unless otherwise indicated, all Materials, Ideas & Design on these pages, either text or image may be used for any other puripose. Therefore, reproduction, modification, storage in retrieval system or retransmission, in any form or by any means, electronic, mechanical, or otherwise pages, either text or image may be used for any other puripose. Therefore, reproduction, modification, storage in retrieval system or retransmission, in any form or by any means, electronic, mechanical, or otherwise, for reasons other than intended use on the specific project, nor can this project be assigned to any other puripose. Therefore, reproduction, modification, storage in retrieval system or retransmission, in any other puripose. Therefore, reproduction, modification, storage in retrieval system or retransmission, in any other puripose. Therefore, reproduction, modification, storage in retrieval system or retransmission, in any other puripose.



NOTES: TYPICAL POOL SITE RENDERING PROVIDED BY DEVELOPER. PLAYGROUND EQUIPMENT IS NOT PROPOSED FOR POOL SITE BUT IS TO BE INSTALLED IN DEDICATED LOCATIONS ELSEWHERE IN DEVELOPMENT AS SHOWN ON THE APPROVED SITE PLAN

REV#	DATE	DESCRIPTION
1	08.07.23	ROLESVILLE 2ND REVIEW COMMENTS (CAA)
2	10.02.23	ROLESVILLE 3RD REVIEW COMMENTS (BCSC
3	12.01.23	ROLESVILLE 1ST REVIEW COMMENTS (BCSC
4	01.18.24	WAKE COUNTY EC SUBMITTAL (BCSC)
5	03.18.24	WAKE COUNTY EC SUBMITTAL 2 (BCSC)



NCG01

SHEET

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH

THE NCG01 CONSTRUCTION GENERAL PERMI mplementing 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.

	Required Ground Stabilization Timeframes			
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 Zon -10 days for Falls Lake Watershed unles there is zero slope	

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 render 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
Temporary grass seed covered with straw or other mulches and tackifiers	Permanent grass seed covered with straw other mulches and tackifiers
Hydroseeding	Geotextile fabrics such as permanent soil
<ul> <li>Rolled erosion control products with or</li> </ul>	reinforcement matting
without temporary grass seed	Hydroseeding
<ul> <li>Appropriately applied straw or other mulch</li> <li>Plastic sheeting</li> </ul>	Shrubs or other permanent plantings cover with mulch
	Uniform and evenly distributed ground co sufficient to restrain erosion
	Structural methods such as concrete, asplantations wells

#### 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.

Rolled erosion control products with grass seed

- 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
- 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.
- 4. 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

Identify leaks and repair as soon as feasible, or remove leaking equipment from the

6. 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. 9. On business days, clean up and dispose of waste in designated waste containers.

## PAINT AND OTHER LIQUID WASTI

PORTABLE TOILETS

- Do not dump paint and other liquid waste into storm drains, streams or wetlands. 2. 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.
- 4. 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

- 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
- 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
- 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.

# 3.CONCRETE VASHOUT STRUCTURE NEEDS TO BE CLEARY MARKED VITH SIGNAGE NOTING DEVICE. ABOVE GRADE WASHOUT STRUCTURE

## **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
- 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
- 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.
- 10. 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
- Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
- Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately. Do not stockpile these materials onsite.

#### HAZARDOUS AND TOXIC WASTE

**SECTION C: REPORTING** 

(b) Oil spills if:

858-0368.

Occurrence

deposition in a

stream or wetland

(b) Oil spills and

substances per Item

1(b)-(c) above

(c) Anticipated

122.41(m)(3)]

bypasses [40 CFR

(d) Unanticipated

bypasses [40 CFR

of this permit that

122.41(m)(3)]

may endanger

environment[40

CFR 122.41(I)(7)]

health or the

release of

hazardous

1. Occurrences that Must be Reported

They are 25 gallons or more,

Permittees shall report the following occurrences:

(Ref: 40 CFR 302.4) or G.S. 143-215.85.

2. Reporting Timeframes and Other Requirements

(d) Anticipated bypasses and unanticipated bypasses.

(a) Visible sediment deposition in a stream or wetland.

- Create designated hazardous waste collection areas on-site.
- Place hazardous waste containers under cover or in secondary containment. 3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

SELF-INSPECTION, RECORDKEEPING AND REPORTING

They are less than 25 gallons but cannot be cleaned up within 24 hours,

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA

(e) Noncompliance with the conditions of this permit that may endanger health or the

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)

Reporting Timeframes (After Discovery) and Other Requirements

Within 7 calendar days, a report that contains a description of the

with the federal or state impaired-waters conditions.

Within 24 hours, an oral or electronic notification.

sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a

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

Within 24 hours, an oral or electronic notification. The notification

shall include information about the date, time, nature, volume and

A report at least ten days before the date of the bypass, if possible.

Within 7 calendar days, a report that includes an evaluation 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 reoccurrence of the noncompliance. [40 CFR 122.41(I)(6).

Division staff may waive the requirement for a written report on a

The report shall include an evaluation of the anticipated quality and

determine that additional requirements are needed to assure compliance

 They cause sheen on surface waters (regardless of volume), or They are within 100 feet of surface waters (regardless of volume).

(a) Visible sedimentWithin 24 hours, an oral or electronic notification.

location of the spill or release.

quality and effect of the bypass. (e) Noncompliance • Within 24 hours, an oral or electronic notification.

with the conditions • Within 7 calendar days, a report that contains a description of the

effect of the bypass.

case-by-case basis.

case-by-case basis.

# NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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 erformed upon the commencement of the next business day. Any time when inspection

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 of holiday periods, and no individual-day rainfall information available, record the cumulative rain measurement for those ur attended days (and this will determine if a site inspection needed). Days on which no rainfall occurred shall be recorded a "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the measures inspected,     Date and time of the inspection,     Name of the person performing the inspection,     Indication of whether the measures were operating properly,     Description of maintenance needs for the measure,     Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	Identification of the discharge outfalls inspected,     Date and time of the inspection,     Name of the person performing the inspection,     Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration,     Indication of visible sediment leaving the site,     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, an 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made:  1. 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)(a) of this permit
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing 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

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

#### **SECTION B: RECORDKEEPING** .. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

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

2. Additional Documentation to be Kept on Site In addition to the E&SC 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:

- (a) This General Permit as well as the Certificate of Coverage, after it is received.
- (b) 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-NOI 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 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:

- shall not commence until the E&SC plan authority has approved these items, (b) 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,
- (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, (e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- (f) 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.

EFFECTIVE: 04/01/19

NORTH CAROLINA

Environmental Quality

08.07.23 ROLESVILLE 2ND REVIEW COMMENTS (CAA) 10.02.23 ROLESVILLE 3RD REVIEW COMMENTS (BCSC) 12.01.23 ROLESVILLE 1ST REVIEW COMMENTS (BCSC)

WAKE COUNTY EC SUBMITTAL (BCSC)

WAKE COUNTY EC SUBMITTAL 2 (BCSC)

DESCRIPTION

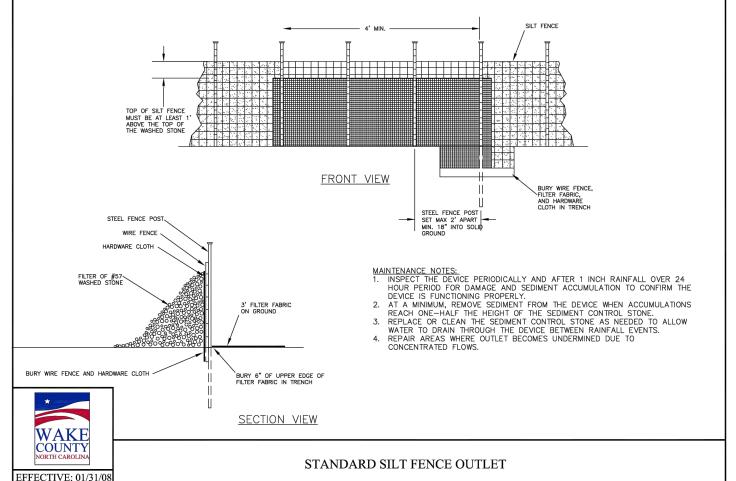
DATE

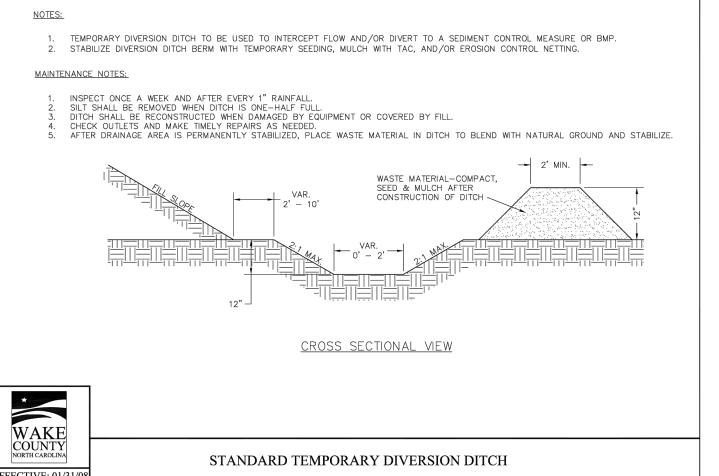
01.18.24

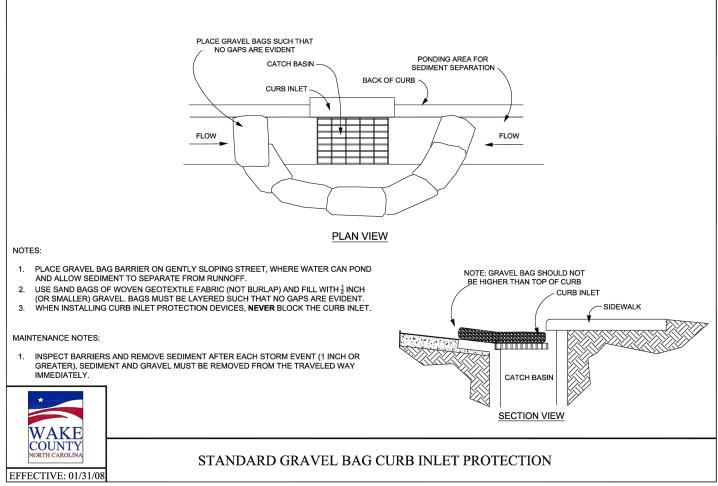
03.18.24

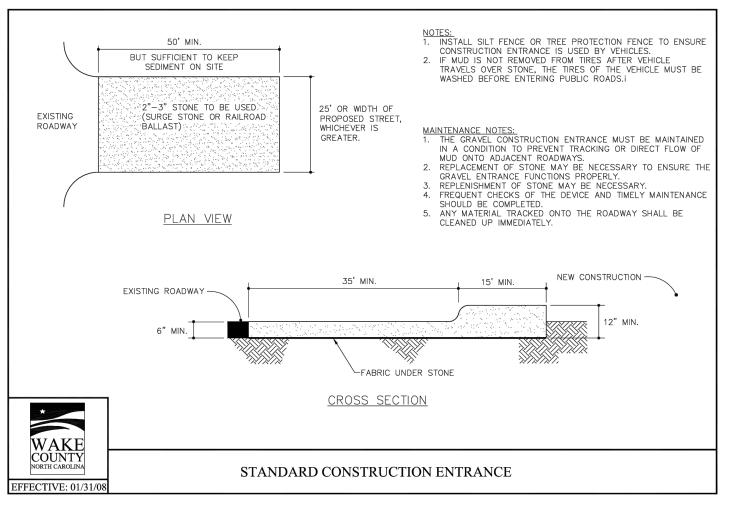
(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal

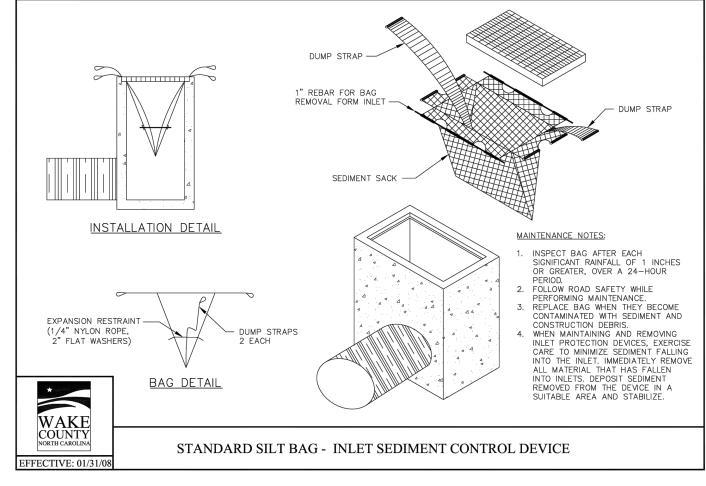
NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

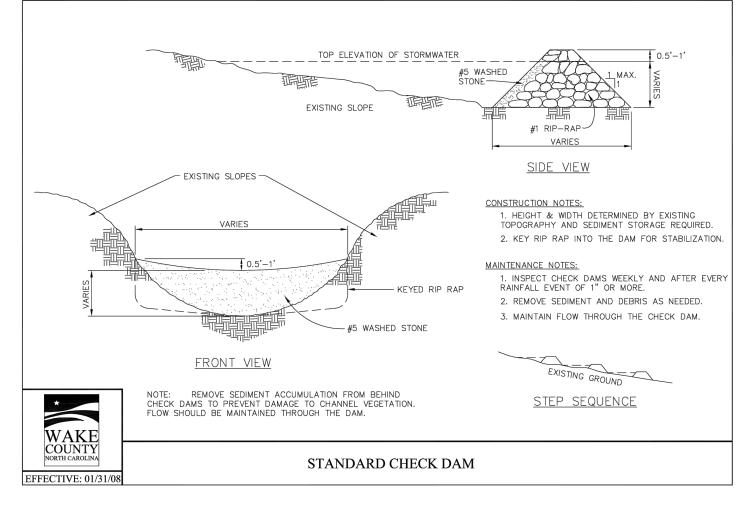












\* - WHERE CLEAR SPACE IS CONSTRAINED ON TWO OR MORE SIDES, THE CLEAR SPACE SHALL BE #MEDINEN X SAMENMUM, WITH SPROVINED IN THE DIRECTION OF THE PERISTRAIN STREET CONSTRUCT

NOTES: DETECTABLE WARNING SURFACE SHALL COMER 2°-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.

DETECTABLE WARNING SURFACE SHALL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

0 0 0 0 0

DETECTABLE WARNING SURFACE

TYPE 3 MODIFIED

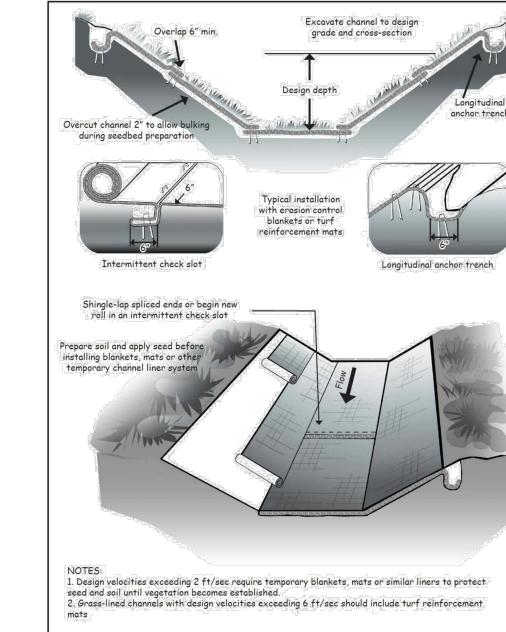
INSTALLATION IN A RADIUS

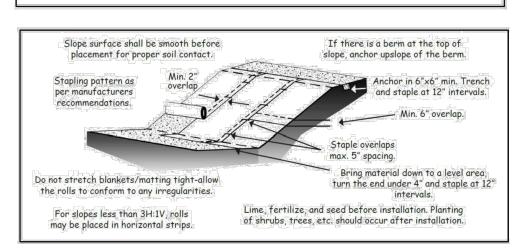
3 MAXIMUM CROSS SLOPE AND LONGITUDINAL SLOPE OF 200%.

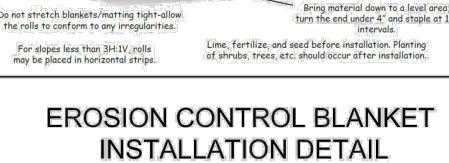
PAY LIMITS FOR 1 CURB RAMP

[] 8,33% (12sl) MAX RAMP SLOPE

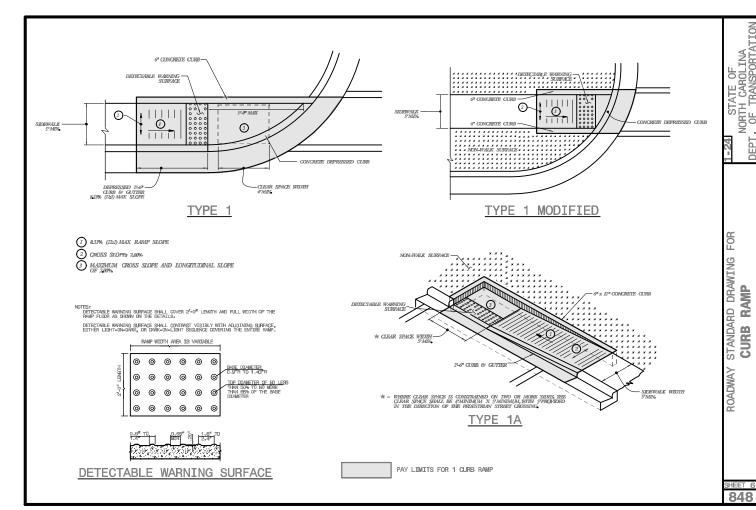
2 CROSS SLOPE: 200%

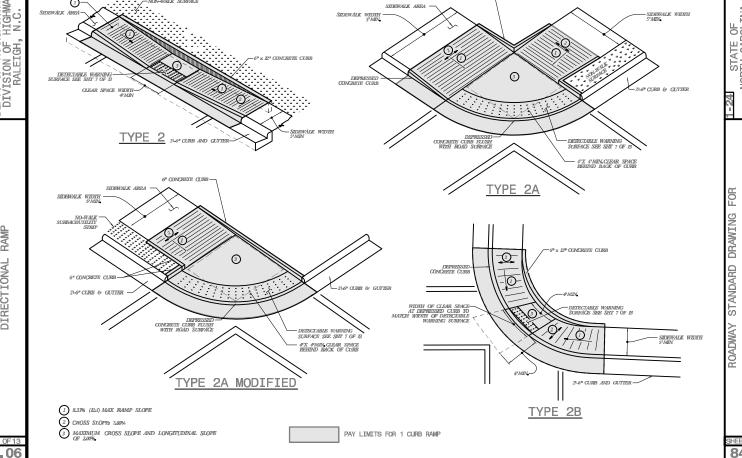


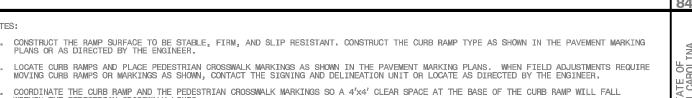




NO SCALE







- . COORDINATE THE CURB RAMP AND THE PEDESTRIAN CROSSWALK MARKINGS SO A 4'x4' CLEAR SPACE AT THE BASE OF THE CURB RAMP WILL FALL WITHIN THE PEDESTRIAN CROSSWALK LINES. . SET BACK DISTANCE FROM INSIDE CROSSWALK MARKING TO NEAREST EDGE OF TRAVEL LANE IS 4' MINIMUM.
- 5. REFER TO THE PAVEMENT MARKING PLANS FOR STOP BAR LOCATIONS AT SIGNALIZED INTERSECTIONS. IF A PAVEMENT MARKING PLAN IS NOT PROVIDED, CONTACT THE SIGNAL DESIGN SECTION FOR THE STOP BAR LOCATIONS OR LOCATE AS DIRECTED BY THE ENGINEER.
- 5. TERMINATE PARKING A MINIMUM OF 20' FROM THE BACK OF PEDESTRIAN CROSSWALK.
- CONSTRUCT CURB RAMPS A MINIMUM OF 4' WIDE.
- 8. CONSTRUCT THE RUNNING SLOPE OF THE RAMP 8.33% MAXIMUM.
- 9. ALLOWA LE CROSS SLOPE ON SIDEWALKS AND CURB RAMPS WILL BE 2% MAXIMUM.
- 10. CONSTRUCT THE SIDE FLARE SLOPE A MAXIMUM OF 10% MEASURED ALONG THE CURB LINE.
- CONSTRUCT THE COUNTER SLOPE OF THE GUTTER OR STREET AT THE BASE OF THE CURB RAMP A MAXIMUM OF 5% AND MAINTAIN A SMOOTH TRANSITION.
- . CONSTRUCT CLEAR SPACES FOR SIDEWALK A MINIMUM OF 4'X4' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. CONSTRUCT CLEAR SPACES FOR MEDIAN ISLANDS A MINIMUM OF 5'X5' WITH A MAXIMUM SLOPE OF 2% IN ANY DIRECTION. IF CONSTRAINED ON TWO OR MORE SIDES, THE THE CLEAR SPACE SHALL BE 4' MINIMUM X 5' MINIMUM, WITH 5' PROVIDED IN THE DIRECTION OF THE PEDESTRIAN STREET CROSSING.
- 3. TO USE A MEDIAN ISLAND AS A PEDESTRIAN REFUGE AREA, MEDIAN ISLANDS WILL BE A MINIMUM OF 6' WIDE. CONSTRUCT MEDIAN ISLANDS TO PROVIDE PASSAGE OVER OR THROUGH THE ISLAND.
- 4. SMALL CHANNELIZATION ISLANDS THAT CAN NOT PROVIDE A 5'X5' CLEAR SPACE AT THE TOP OF RAMPS, WILL BE CUT THROUGH LEVEL WITH THE SURFACE STREET.
- CURB RAMPS WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP, WHERE THE ADJACENT SURFACE IS PLANTING OR OTHER NON-WALKING SURFACE, OR THE SIDE APPROACH IS SUBSTANTIALLY OBSTRUCTED.
- 16. PLACE A ½" EXPANSION JOINT WHERE THE CONCRETE CURB RAMP JOINS THE CURB AS SHOWN IN ROADWAY STANDARD DRAWING 848.01. 7. PLACE ALL PEDESTRIAN PUSH BUTTON ACTUATORS AND CROSSING SIGNALS AS SHOWN IN THE PLANS OR AS SHOWN IN THE MUTCD.
- 3. DETECTABLE WARNING SURFACES WILL COVER 2'-0" LENGTH AND FULL WIDTH OF THE RAMP FLOOR AS SHOWN ON THE DETAILS.
- 19. DETECTABLE WARNING SURFACES WILL CONTRAST VISIBLY WITH ADJOINING SURFACE, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT SEQUENCE COVERING THE ENTIRE RAMP.

REV#	DATE	DESCRIPTION
1	08.07.23	ROLESVILLE 2ND REVIEW COMMENTS (CAA)
2	10.02.23	ROLESVILLE 3RD REVIEW COMMENTS (BCSC)
3	12.01.23	ROLESVILLE 1ST REVIEW COMMENTS (BCSC)
4	01.18.24	WAKE COUNTY EC SUBMITTAL (BCSC)
5	03.18.24	WAKE COUNTY EC SUBMITTAL 2 (BCSC)

JMW

FINAL DRAWING

FOR CONSTRUCTION



Company

Sur

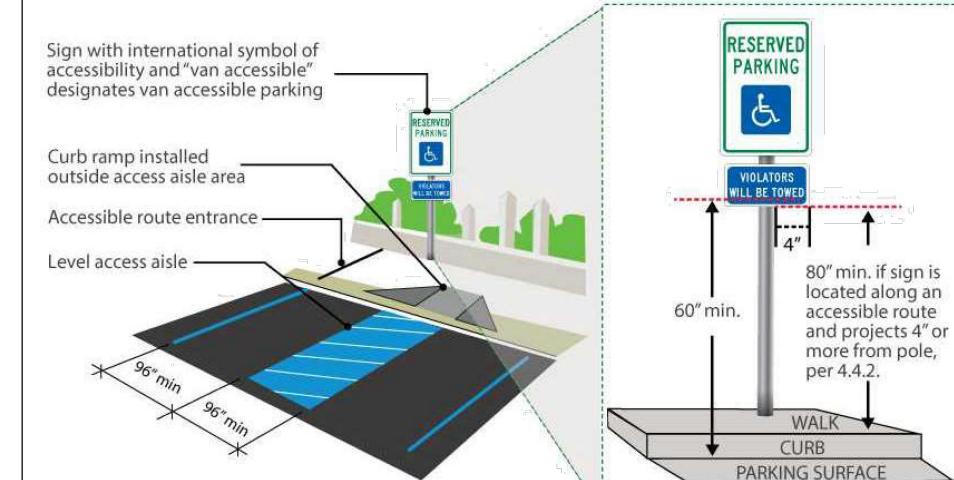
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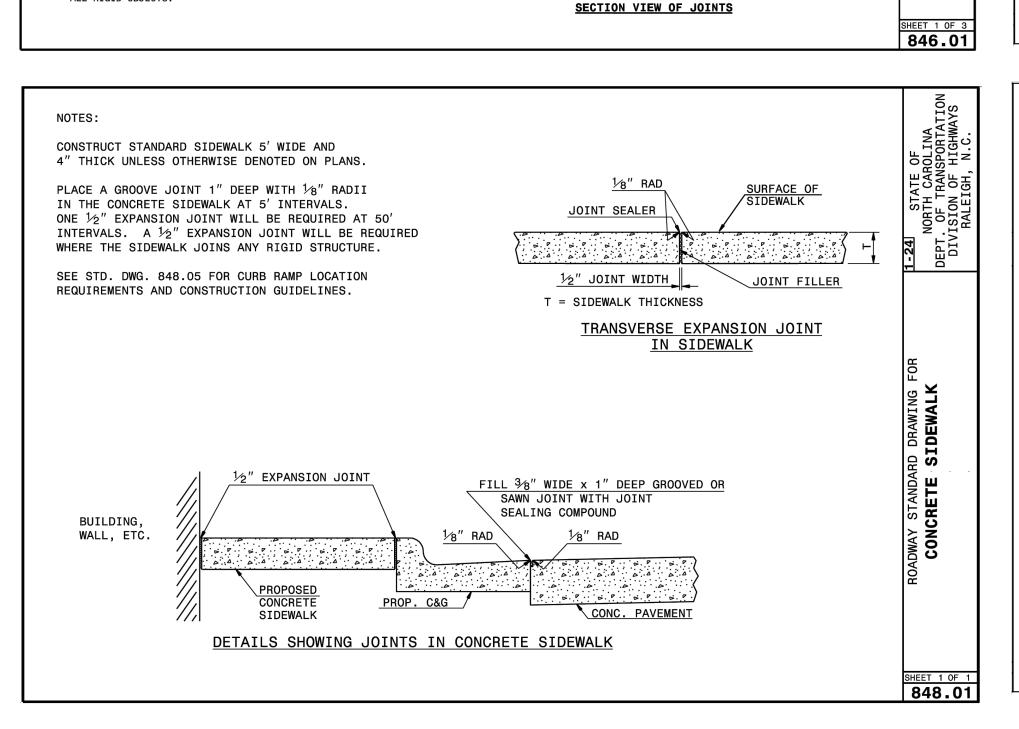
 $\mathbf{\Omega}$ 

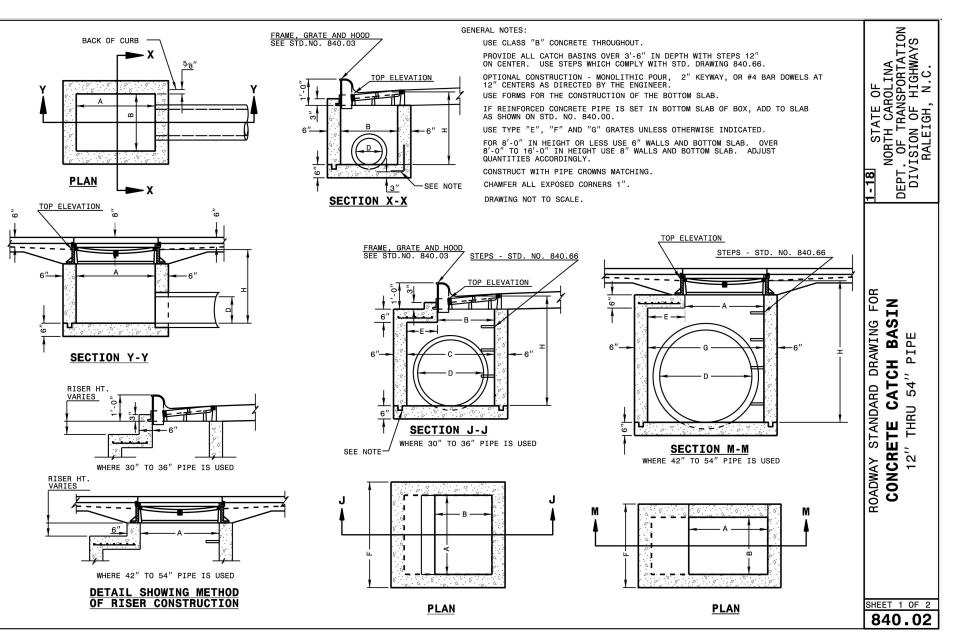
DAIR

PRESERVE AT JONES AMENITY SITE

Sign with international symbol of accessibility and "van accessible" designates van accessible parking Curb ramp installed outside access aisle area Accessible route entrance — Level access aisle —







NOTES: MORTAR JOINTS  $\frac{1}{2}$ " +/-  $\frac{1}{8}$ " THICK.

USE CLASS "B" CONCRETE THROUGHOUT.
USE FORMS FOR CONSTRUCTION OF THE BOTTOM SLAB.

CONSTRUCT WITH PIPE CROWNS MATCHING.

CHAMFER ALL EXPOSED CORNERS 1".

DRAWING NOT TO SCALE.

DEDUCT FOR PIPE(S) FROM TOTAL CU. YDS. OF BRICK MASONRY. USE #4 BAR DOWELS AT 12" CENTERS FOR ALL PIPE SIZES. PROVIDE ALL CATCH BASINS OVER 3'-6" IN DEPTH WITH STEPS 12" ON CENTER. USE STEPS WHICH COMPLY WITH STD. DRAWING 840.66. USE TYPE "E", "F" AND "G" GRATES UNLESS OTHERWISE INDICATED. USE BRICK OR CONCRETE BLOCK WHICH COMPLIES WITH THE REQUIREMENTS OF SECTION 840 OF THE STANDARD SPECIFICATIONS.

SECTION M-M 43"

IF REINFORCED CONCRETE PIPE IS SET IN BOTTOM SLAB OF BOX, ADD TO SLA AS SHOWN ON STD. NO. 840.00.

FOR 8'-0" IN HEIGHT OR LESS, USE 8" WALL. OVER 8'-0" IN HEIGHT, USE 12" WALL TO 6'-0" FROM TOP OF WALL AND 8" WALL FOR THE REMAINING 6'-0". QUANTITES TO BE ADJUSTED ACCORDINGLY.

STEPS - STD. NO. 840.66

840.01

FRAME, GRATE AND HOOD SEE STD.NO. 840.03

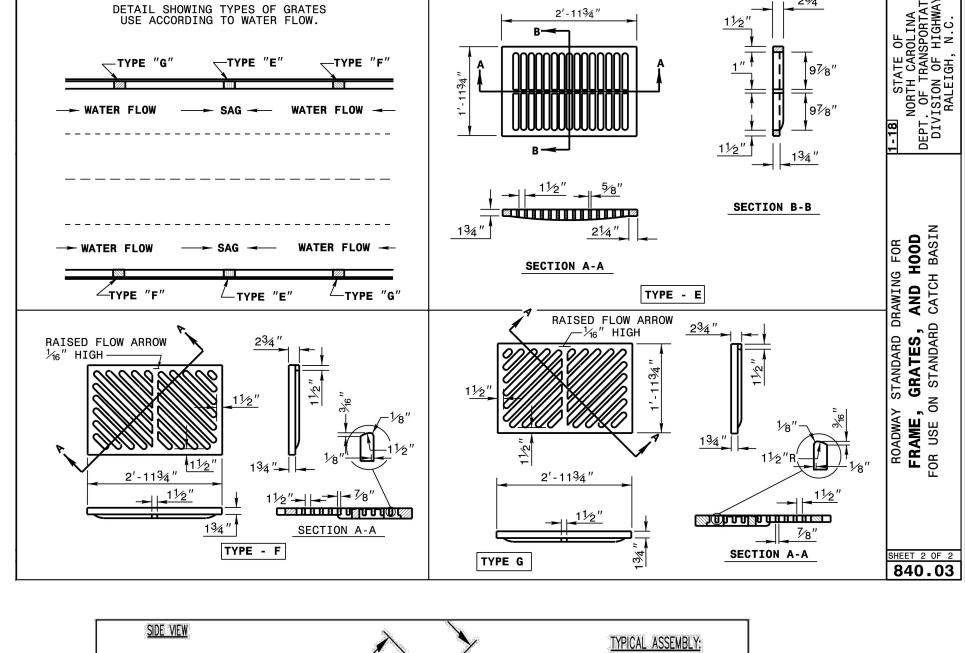
SECTION J-J
WHERE 30" TO 36" PIPE IS USED

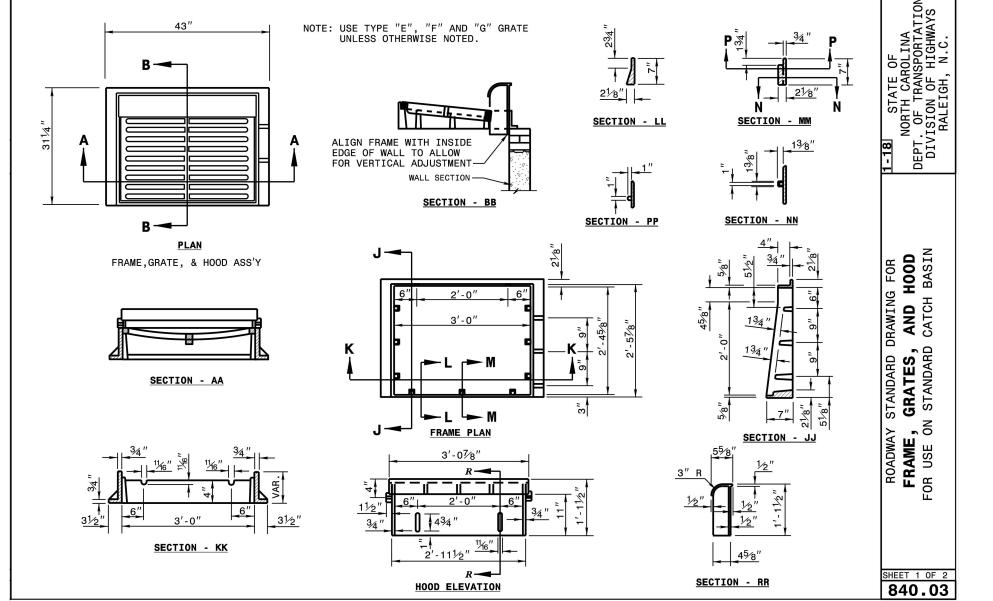
TOP ELEVATION

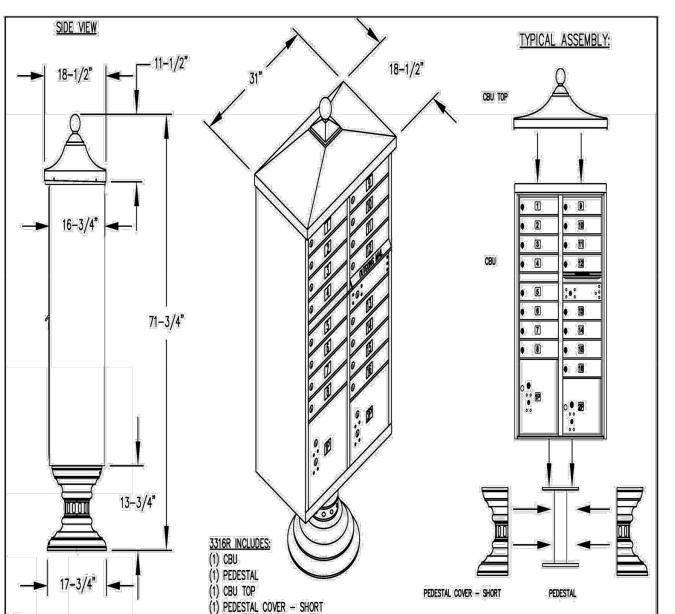
WHERE 30" TO 36" PIPE IS USED

WHERE 42" TO 54" PIPE IS USED

DETAIL SHOWING METHOD OF RISER CONSTRUCTION







3			
מניסווע	REV#	DATE	DESCRIPTION
2000	1	08.07.23	ROLESVILLE 2ND REVIEW COMMENTS (CAA)
701	2	10.02.23	ROLESVILLE 3RD REVIEW COMMENTS (BCSC)
13/200	3	12.01.23	ROLESVILLE 1ST REVIEW COMMENTS (BCSC)
10/01	4	01.18.24	WAKE COUNTY EC SUBMITTAL (BCSC)
2020	5	03.18.24	WAKE COUNTY EC SUBMITTAL 2 (BCSC)

2'-6"

8" 2'-4" MIN. 1/8" RADIUS

PLACE CONTRACTION JOINTS AT 10' INTERVALS, EXCEPT THAT
A 15' SPACING MAY BE USED WHEN A MACHINE IS USED OR WHEN
SATISFACTORY SUPPORT FOR THE FACE FORM CAN BE OBTAINED
WITHOUT THE USE OF TEMPLATES AT 10' INTERVALS.

-JOINT SPACING MAY BE ALTERED IF REQUIRED BY THE ENGINEER.
-CONTRACTION JOINTS MAY BE INSTALLED WITH THE USE OF

TEMPLATES OR FORMED BY OTHER APPROVED METHODS.

CONSTRUCT NON-TEMPLATE FORMED JOINTS A MIN. OF 1½" DEEP.

-FILL ALL CONSTRUCTION JOINTS, EXCEPT IN 8"x6" MEDIAN CURB, WITH JOINT FILLER AND SEALER.

-SPACE EXPANSION JOINTS AT 90' INTERVALS AND ADJACENT TO

2'-9" CURB AND GUTTER

2'-0"

SECTION VIEW OF CURBS OR CURBS AND GUTTERS

SEALER

JOINT/

LONGITUDINAL JOINT

**EXPRESSWAY GUTTER** 

1'-6" CURB AND GUTTER

8" X 6" MEDIAN CURB

9" X 12" OR 18" CONCRETE CURB

8"

8" X 12" OR 18" CONCRETE CURB

TRANSVERSE EXPANSION JOINT IN CURB AND GUTTER

2'-6" CURB AND GUTTER

SHOULDER BERM GUTTER

1'-0" 1'-0"

**VALLEY GUTTER** 

GENERAL NOTES:

ALL RIGID OBJECTS.

JMW10.02.23 P230462 SHEET

STANDARD DETAILS

FINAL DRAWING

PAVEMENT

BLOCK

- I '- O" —

-UNDISTURBED EARTH.

RESTRAINING \_

GLANDS

CITY OF RALEIGH

DEPARTMENT OF PUBLIC UTILITIES

STANDARD FIRE HYDRANT

INSTALLATION DETAIL

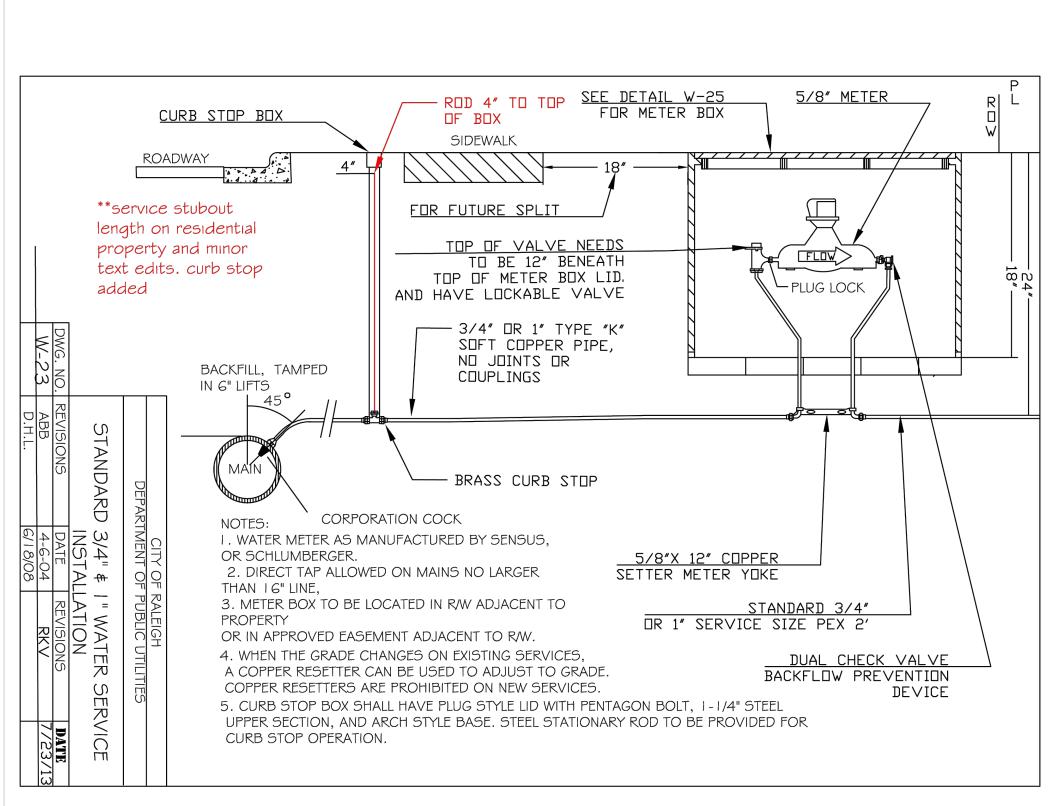
CONC. THRUST

6" GATE VALVE

 $\mathbf{\Omega}$ 

JMW
10.02.23
P230462
SHEET

C954



PROPERTY

MINIMUM 36" HORIZONTAL CLEARANCE

/ TOWARDS FIRE TRUCK ACCESS.

SIDEWALK

TRAFFIC FLANGE BETWEEN 2" - 6"

FIRE HYDRANT, PUMPER NOZZLE TO BE POINTED

COMPACTED BACKFILL

(TAMPED IN 6" LIFTS)

6" MIN. BRANCH PIPE

WATEROUS, CLOW, EAST JORDAN IRON WORKS, OR US PIPE.

4. STEEL RODS AND BOLTS SHALL BE 3" HOT DIPPED GALVANIZED 5. FIRE HYDRANTS WILL BE INSTALLED IN TRUE VERTICAL POSITION

INSTALLED NO MORE THAN 10' FROM HYDRANT AND POURED IN CONCRETE.

FIRE HYDRANTS TO BE LOCATED IN ROW OR 2 FOOT EASEMENT ADJACENT TO ROW

DWG. NO. REVISIONS

ABB

2. BRANCH PIPE SHALL BE DUCTILE IRON AWWA C | 50-96 3. 6" GATE VALVE SHALL BE AWWA C500-86 OPEN LEFT

RESTRAINING GLANDS -

VALVE BOX

I. FIRE HYDRANT SHALL BE AS MANUFACTURED: MUELLER, AMERICAN DARLING, KENNEDY, M¢H,

RODS SHALL NOT BE COUPLED MORE THAN ONCE. IF THE LENGTH FROM THE VALVE TO THE HYDRANT EXCEEDS 20' THEN A MECHANICAL RESTRAINING GLAND WITH A REBAR CAGE SHALL BE

FROM ANY OBJECT.

ABOVE GRADE

1'-3"x 1'-3"x 4" THICK

ANYTIME SITE WORK, CONSTRUCTION, ROAD WORK, OR ANY OTHER WORK CHANGES THE GRADE OF THE FIRE

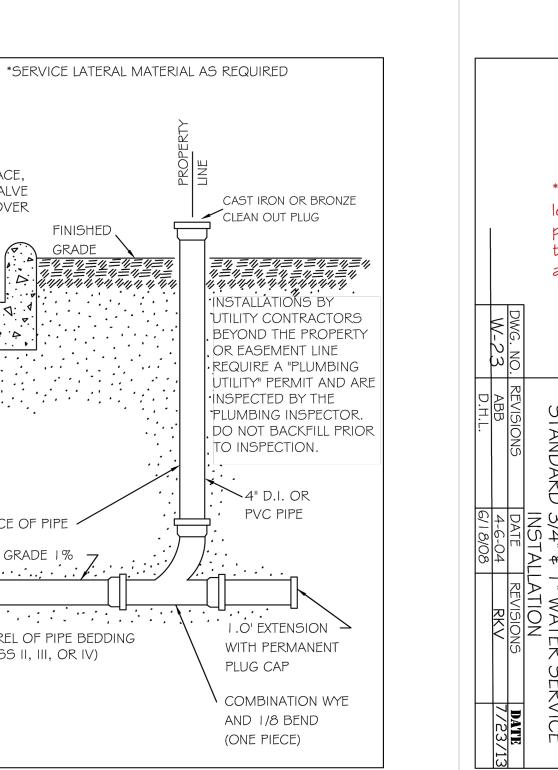
HYDRANT, THE PERSON RESPONSIBLE FOR THE WORK IS RESPONSIBLE FOR

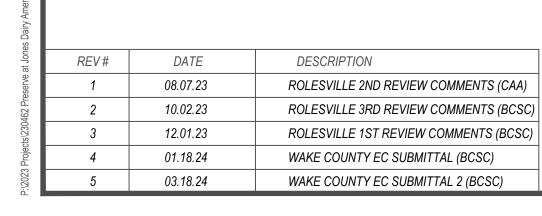
WITHIN COMPLIANCE.

ADJUSTING THE FIRE HYDRANT TO STAY

7 CU. FT. CRUSHED

STONE MIN.





PAVEMENT OPTION

4' DIAMETER CONCRETE

COLLAR 6" THICK

MUST BE 2" BELOW GRADE

가장 이번 회사 회사 회사 열 없었다.

**EXISTING** 

MAIN

THE FULL LENGTH OF THE SERVICE DITCH SHALL

BE COMPACTED IN 6" LIFTS WITH MECHANICAL TAMP.

DETAILS S-4 OR S-5 ACCORDING TO PIPE MATERIAL.

ALL TAPS WILL BE MADE USING MECHANICAL TAPPING

MACHINE. FOR PVC INSTALLATIONS, SADDLE AND BEND

OF PIPE BARREL MUST COMPLY WITH REQUIREMENTS OF

MUST BE BEDDED IN #67 STONE. BEDDING AND HAUNCHING

45° SEWER

FOR SADDLE INSTALLATION

DETAILS, SEE STANDARD

DETAIL S-31 \$ S-32.

NOTE:

8",10" OR 12" TAPPING

SADDLE OR IN-LINE WYE

PAVEMENT OR IMPERVIOUS SURFACE,

LABELED "SEWER".

1/16" OR 1/8" BEND

WHEN SEWER CLEAN OUT IS IN

IT MUST BE INSTALLED INSIDE A VALVE

BOX (OR MINI-MANHOLE) WITH COVER

FINISHED

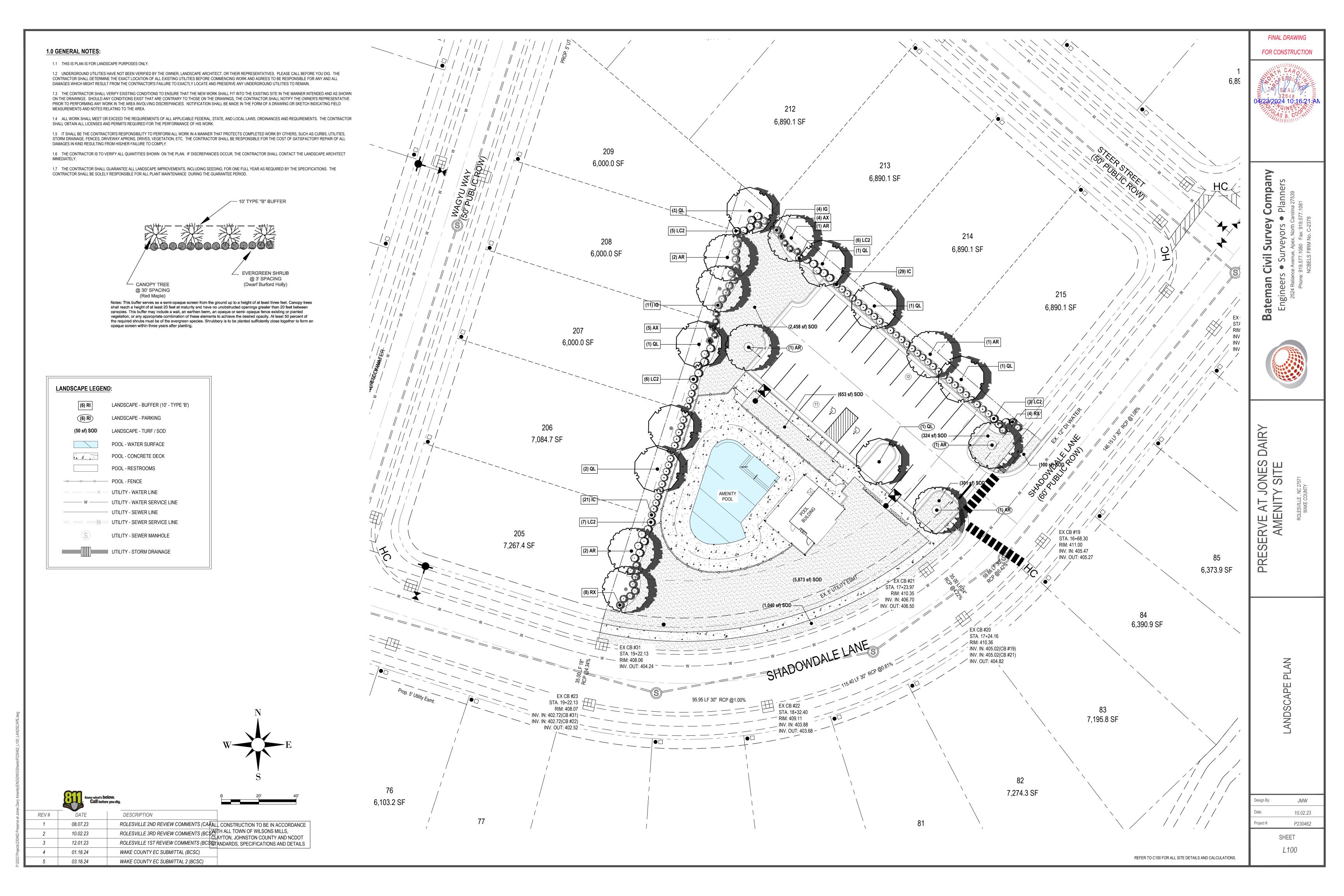
GRADE

I PIECE OF PIPE /

MIN. GRADE 1%

BARREL OF PIPE BEDDING

(CLASS II, III, OR IV)

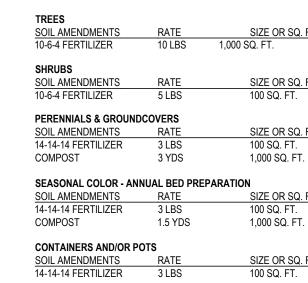


## 1.0 GENERAL NOTES:

- 1.1 UNDERGROUND UTILITIES HAVE NOT BEEN VERIFIED BY THE OWNER, LANDSCAPE ARCHITECT, OR THEIR REPRESENTATIVES. PLEASE CALL BEFORE YOU DIG. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT RESULT FROM THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY UNDERGROUND UTILITIES TO REMAIN.
- 1.2 THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS TO ENSURE THAT THE NEW WORK SHALL FIT INTO THE EXISTING SITE IN THE MANNER INTENDED AND AS SHOWN ON THE DRAWINGS. SHOULD ANY CONDITIONS EXIST THAT ARE CONTRARY TO THOSE ON THE DRAWINGS. THE CONTRACTOR SHALL NOTIFY THE OWNER'S REPRESENTATIVE PRIOR TO PERFORMING ANY WORK IN THE AREA INVOLVING DISCREPANCIES. NOTIFICATION SHALL BE MADE IN THE FORM OF A DRAWING OR SKETCH INDICATING FIELD MEASUREMENTS AND NOTES RELATING TO THE AREA.
- 1.3 ALL WORK SHALL MEET OR EXCEED THE REQUIREMENTS OF ALL APPLICABLE FEDERAL, STATE, AND LOCAL LAWS, ORDINANCES AND REQUIREMENTS. THE CONTRACTOR SHALL OBTAIN ALL LICENSES AND PERMITS REQUIRED FOR THE PERFORMANCE OF HIS WORK.
- 1.4 IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM ALL WORK IN A MANNER THAT PROTECTS COMPLETED WORK BY OTHERS. SUCH AS CURBS, UTILITIES, STORM DRAINAGE, FENCES, DRIVEWAY APRONS, DRIVES, VEGETATION, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF SATISFACTORY REPAIR OF ALL DAMAGES IN KIND RESULTING FROM HIS/HER FAILURE TO COMPLY.
- 1.5 THE CONTRACTOR IS TO VERIFY ALL QUANTITIES SHOWN ON THE PLAN. IF DISCREPANCIES OCCUR, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.
- 1.6 THE CONTRACTOR SHALL GUARANTEE ALL LANDSCAPE IMPROVEMENTS, INCLUDING SEEDING, FOR ONE FULL YEAR AS REQUIRED BY THE SPECIFICATIONS. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL PLANT MAINTENANCE DURING THE GUARANTEE PERIOD.

#### 2.0 LANDSCAPE NOTES:

2.1 SOIL AMENDMENTS SHALL BE APPLIED ANNUALLY ACCORDING TO THE FOLLOWING CHART:



2.2 <u>ALL PLANTS EXCEPT SPECIFICALLY NOTED SPECIES, WILL BE NURSERY GROWN.</u> THEY SHALL BE TYPICAL OF THEIR SPECIES CULTIVAR OR VARIETY. THEY SHALL BE SOUND, HEALTHY, AND VIGOROUS, AND SHALL BE FREE OF DISEASE AND ANY EVIDENCE OF INSECTS. IF IN LEAF, THEY SHALL BE DENSELY FOLIATED, WITHOUT LEAF SPOTS, DISCOLORATION, CURL, WILTING, CHLOROSIS OR DAMAGE. THEY SHALL HAVE HEALTHY, WELL-DEVELOPED ROOT SYSTEMS. UNLESS SPECIFIED IN THE PLANT SCHEDULE, TREES WITH BROKEN, CROOKED OR MULTIPLE LEADERS WILL NOT BE ACCEPTED. TREES WILL BE REJECTED IF THEY HAVE BARK ABRASIONS, SUN SCALD DAMAGE, DISFIGURING KNOTS OR PRUNING CUTS MORE THAN 1-1/4 INCHES IN DIAMETER WHICH HAVE NOT COMPLETELY GROWN OVER.

- 2.3 BALLED AND BURLAPPED PLANTS SHALL BE DUG WITH FIRM NATURAL BALLS OF EARTH, OF DIAMETER AND DEPTH TO INCLUDE MOST OF THE FIBROUS ROOTS, AND MEET THE MINIMUM AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS, LATEST EDITION. ROOT BALLS OF PLANTS SHALL BE ADEQUATELY PROTECTED AT ALL TIMES FROM SUN AND DRYING WINDS. OR FROST.
- 2.4 ROOTBALL MASS WHICH IS LOOSE WITHIN CONTAINER, OR WHICH IS SMALLER THAN THE CONTAINER WHEN REMOVED, SHALL BE REJECTED. PEAT OR FIBER POTTED PLANTS SHALL BE ROOTED THROUGH ALL SIDES AND BOTTOM OF POTS.
- 2.5 SHOOTS AND RHIZOMES SHALL EXHIBIT TURGOR AND SHOOTS SHALL BE LIGHTLY COLORED. BODIES OF TUBERS AND BULBS SHALL BE RIGID TO THE TOUCH. PROPAGULES WHOSE SHOOTS AND BODIES ARE SOFT OR MUSHY TO THE TOUCH, OR WHOSE SHOOTS LACK TURGOR OR ARE DARK
- 2.6 CALIPER SHALL BE MEASURED AT SIX (6") INCHES ABOVE THE ROOTBALL. HEIGHT SHALL BE MEASURED FROM THE CROWN OF THE ROOT BALL TO THE TOP OF MATURE GROWTH. SPREAD SHALL BE MEASURED TO THE END OF THE BRANCHING EQUALLY AROUND THE CROWN FROM THE CENTER OF THE TRUNK. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH. SINGLE TRUNK TREES SHALL BE FREE OF "V" CROTCHES THAT COULD BE POINT OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN
- 2.7 HEIGHT SHALL BE MEASURED FROM THE GROUND TO THE AVERAGE HEIGHT OF THE TOP OF THE PLANT. SPREAD SHALL BE MEASURED TO THE END OF BRANCHING EQUALLY AROUND THE SHRUB MASS. MEASUREMENTS ARE NOT TO INCLUDE ANY TERMINAL GROWTH.
- 2.8 SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH PLANTS ARE TO BE JUDGED.
- 2.9 THE SUPPLIER OF ALL PLANTS SHALL CERTIFY THAT THE ORIGIN OF THE PLANT IS FROM HARDINESS ZONES 6 OR 7. FROM THE FASTERN OR CENTRAL PORTIONS OF THE UNITED STATES, PRIOR TO PLANTING UNLESS AGREED TO OTHERWISE WITH THE LANDSCAPE ARCHITECT.
- 2.10 FINE GROUND, TRIPLE-SHREDDED BARK MULCH, SUCH AS NATURE'S HELPER OR APPROVED EQUAL, IS TO BE USED FOR ALL PERENNIAL/ANNUAL BEDS WITHIN THE GLADE/ENTRY PLAZA AND ALL PLANT MATERIAL ALONG THE EDGES OF BUILDING FOUNDATIONS. ALL REMAINING MULCH TO BE PINE STRAW.
- 2.11 PRIOR TO PLANTING, ANY TOPSOIL TO BE SPREAD SHALL BE TESTED BY AN APPROVED SOIL TESTING LABORATORY OR AGRICULTURAL EXTENSION SERVICE LABORATORY. TESTS SHALL INCLUDE MECHANICAL AND CHEMICAL ANALYSIS. A SOILS REPORT SHALL INCLUDE RECOMMENDATIONS FOR THE ADDITION OF FERTILIZER AND ADJUSTMENTS TO PH, OR OTHER AMENDMENTS AND INDICATE THE AMOUNT OF ORGANIC MATTER. A WRITTEN REVIEW OF SAID ANALYSIS AND RECOMMENDATIONS IS REQUIRED TO BE SUBMITTED TO THE LANDSCAPE ARCHITECT AND OWNER 15 DAYS PRIOR TO INSTALLATION
- 2.12 ACCEPTABLE TOPSOIL SHALL BE A FERTILE, FRIABLE NATURAL LOAM, UNIFORM IN COMPOSITION, FREE OF STONES, LIMBS, PLANTS AND THEIR ROOTS, AND OTHER EXTRANEOUS MATTER OVER 1 INCH IN DIAMETER. THE SOIL SHALL BE CAPABLE OF SUSTAINED PLANT GROWTH AND HAVE A 5% MINIMUM ORGANIC CONTENT. IN SITUATIONS WHICH REQUIRE A CUSTOM TOPSOIL OR STRUCTURAL SOIL, THE SOIL MIXTURE SPECIFICATION WILL BE PROVIDED BY THE LANDSCAPE ARCHITECT.
- 2.13 IF ADDITIONAL ORGANIC MATERIAL IS REQUIRED, COMPOST, LEAF MOLD, ECOLOGY A LOW PH COMPOSED SEWAGE SLUDGE PRODUCT, OR OTHER APPROVED ORGANIC MATERIAL SHALL BE THOROUGHLY DISCED INTO THE TOPSOIL AREA.

#### 3.0 INSTALLATION:

NOTIFY THE OWNER OR LANDSCAPE ARCHITECT IF ADJUSTMENTS TO PLANT PLACEMENT MAY BE REQUIRED DUE TO FIELD CONDITIONS AND FINAL GRADING. 3.2 PRIOR TO PLANTING, THE CONTRACTOR SHALL LAY OUT THE EXTEND OF THE PLANT BEDS AND THE PROPOSED LOCATIONS FOR B&B PLANTS FOR

REVIEW BY OWNER AND/OR LANDSCAPE ARCHITECT.

3.3 THE CONTRACTOR IS TO SLIGHTLY ADJUST PLANT LOCATIONS IN THE FIELD AS NECESSARY TO BE CLEAR OF DRAINAGE SWALES AND UTILITIES. FINISHED PLANTING BEDS SHALL BE GRADED SO AS NOT TO IMPEDE DRAINAGE AWAY FROM BUILDINGS.

SHALL BE SCARIFIED AS NEEDED TO BREAK UP ANY REMAINING COMPACTION.

3.7 BACKFILL THE PLANTING HOLES WITH IN-SITU SOIL MATERIAL REMOVED FOR PLANTING AFTER REMOVING ALL STONES. ROOTS AND OTHER DEBRIS GREATER THAN 1-1/2" IN DIAMETER. A MYCORRHIZAL INNOCULANT SHALL BE ADDED TO THE BACKFILL PER THE MANUFACTURER'S INSTRUCTIONS. FOLLOWING THE BACKFILLING, WATER TO THE POINT OF SOIL SATURATION AND TAMP TO COMPACT BACKFILL MIXTURE. ADD EXISTING SOIL TO BRING THE FINAL GRADE IN THE PLANTING HOLE TO THE SURROUNDING SOIL SURFACE. RAKE THE UNUSED EXISTING SOIL OUTSIDE THE PLANTING HOLES, TAKING CARE

3.8 ALL PLANTS SHALL BE WATERED IMMEDIATELY AFTER PLANTING UNTIL THE SOIL IS SATURATED. PLANTS SHALL BE WATERED A MINIMUM OF EVERY TWO WEEKS, SHOULD THE SOILS DRY, UNTIL ACCEPTANCE BY THE OWNER. DURING DRY CONDITIONS, WATER AS REQUIRED TO MAINTAIN PLANTS IN A WILT

3.10 ALL DISTURBED, NON-VEGETATED SLOPES SHALL BE PLANTED WITH AN ANNUAL RYE GRASS OR AN APPROVED EQUAL BEFORE INSTALLATION AT THE

NEAR H.V.A.C. UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN ONE (1') FOOT AIRSPACE BETWEEN UNIT AND PLANT. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSOR UNITS SHALL BE PLANTED AS REQUIRED TO SCREEN THE UNITS. SHOULD THE CONDENSOR UNITS BE INSTALLED IN LOCATIONS DIFFERENT FROM THOSE DEPICTED ON THE PLANS, WILL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE LANDSCAPE ARCHITECT AND INSTALL THE MATERIALS AROUND THE CONDENSOR UNITS AND TO ADJUST OTHER ADJACENT PLANTINGS ACCORDINGLY.

3.12 TREE STAKING AND GUYING SHALL BE COMPLETED PER DETAILS IN THIS SET OF LANDSCAPE PLANS. THE CONTRACTOR SHALL ENSURE THAT TREES

3.15 THE AMERICAN WITH DISABILITIES ACT (ADA) STANDARDS REQUIRE THAT A SEVEN (7) FOOT VERTICAL CLEARANCE BE MAINTAINED FROM TREE BRANCHES TO FINISHED GRADE WHERE PEDESTRIAN SIDEWALKS AND/OR TRAILS ARE LOCATED. THE CONTRACTOR IS TO ADJUST TREE PLANTINGS IN THE

3.16 SHRUBS, GROUNDCOVERS, AND PERENNIALS PLANTED ON SLOPES GREATER THAN 3:1 SHALL HAVE A NATURAL FIBER GEO-TEXTILE WOVEN MESH SPREAD ONTO SLOPE PRIOR TO PLACING MESH. EXCAVATE PLANT PITS THROUGH MESH.

3.17 ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS IN

3.18 THE CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTION(S). THE CONTRACT MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS AND PLANT ANY MISSING PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASONS. 3.19 GROUPS OF SHRUBS, PERENNIALS, GROUNDCOVERS SHALL BE PLACED IN A CONTINUOUS MULCH BED WITH SMOOTH CONTINUOUS LINE. ALL MULCHED BED EDGES SHALL BE CURVILINEAR IN SHAPE FOLLOWING THE CONTOUR OF THE PLANT MASS. TREES LOCATED WITHIN FOUR (4') FEET OF PLANT BEDS

3.22 THE CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDROSEED, STRAW MULCH, AND TACK ALL EXISTING LAWN AREAS DISTURBED AS A RESULT

("PROTECTION OF TREES AND VEGETATION FROM VEHICLE OVERHANG")

## 4.0 TREE PROTECTION:

4.3 MATERIALS SHALL NOT BE STORED, NOR VEHICLES PARKED WITHIN THE DRIP-LINE OF THE TREE UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT OR

UNLESS APPROVAL IS OBTAINED FROM THE LANDSCAPE ARCHITECT.

DOCUMENTS, OR WITH WRITTEN CONSENT BY THE LANDSCAPE ARCHITECT AND OWNER.

3.1 PRIOR TO PLANTING, THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTED GRADES ARE AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL

3.4 TOPSOIL SHALL BE SPREAD TO FINISH GRADE OVER THE ENTIRE ROUGH GRADED AREA TO BE LANDSCAPED. AFTER TOPSOIL IS APPLIED, THE SOIL

3.5 PLANTING HOLES FOR CONTAINER GROWN POTS SHALL BE ONE FOOT (1') DEEP, PLUS THE CONTAINER DEPTH IN WHICH THE PLANT HAS BEEN GROWN AND TWO FEET (2') WIDER THAN THE CONTAINER.

3.6 WHEN PLANTING HOLES FOR B&B PLANTS, THE CROWN OF THE ROOTBALL SHALL BE HIGHER AFTER SETTLING THAN THE ADJACENT SOIL. THE PLANTING HOLE SHALL BE EXCAVATED ONE FOOT (1') DEEP, PLUS THE ROOTBALL DEPTH AND TWO FEET (2') WIDER THAN THE ROOTBALL.

NOT TO MOUND THE SOIL OR TO SIGNIFICANTLY ALTER THE EXISTING GRADES AND THEN PLACE MULCH ATOP ENTIRE PLANTING HOLE. (SEE APPLICABLE PLANTING DETAILS FOR THICKNESS) THE PLANTING HOLE AREAS MUST NOT BE DEPRESSED BELOW THE SURROUNDING SOIL SURFACE ELEVATIONS.

3.9 ALL CONTRACTORS SHALL BE REQUIRED TO COMPLETELY REMOVE ALL TRASH, DEBRIS, AND EXCESS MATERIALS FROM THE WORK AREA AND THE PROPERTY (ESPECIALLY AT ALL CURB, GUTTERS, AND SIDEWALKS) DAILY DURING INSTALLATION.

RECOMMENDED RATE TO STABILIZE AREA, OR OTHER EQUIVALENT EROSION CONTROL MEASURES. 3.11 LARGE GROWN PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED

REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.

3.13 BURLAP, TAGS, AND TWINE SHALL BE REMOVED AND BURLAP IS TO BE ROLLED BACK ONE-THIRD ON ALL B&B PLANT MATERIAL. ANY SYNTHETIC BURLAP SHALL BE COMPLETELY REMOVED FROM PLANT MATERIAL.

3.14 SHRUBS, BULBS, AND GROUNDCOVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS AND IN APPLICABLE PLANTING

MATERIAL PINNED TO GROUND PER MANUFACTURER'S SPECIFICATIONS. GROUNDCOVER BEDS SHALL HAVE TWO (2") INCHES OF GROUND LEAF COMPOST

THIS SET OF LANDSCAPE PLANS.

SHALL SHARE THE SAME MULCH BED.

3.20 TREES SHALL BE LOCATED A MINIMUM OF THREE (3') FEET OR FOUR (4') FEET FROM WALLS AND WALKS WITHIN THE PROJECT. IF CONFLICTS ARISE BETWEEN ACTUAL SIZE OF AREA AND PLANS, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT FOR RESOLUTION. FAILURE TO MAKE SUCH CONFLICTS KNOWN TO THE LANDSCAPE ARCHITECT AND/OR OWNER WILL RESULT IN CONTRACTOR'S LIABILITY TO RELOCATE MATERIALS.

3.21 ALL SEASONAL COLOR SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN IN THE PLANTING DETAIL IN THIS SET OF LANDSCAPE PLANS. THE CONTRACTOR SHALL INSTALL THE FIRST ROTATION, WHICH IS 'IN SEASON' AT THE TIME THAT ADJACENT PLANTINGS ARE INSTALLED.

3.23 TREES AND SHRUBS SHALL BE LOCATED WITH A MINIMUM SEPARATION OF 3'6" FROM CURB FACES PER UDO EXHIBIT 4-6 AND UDO APPENDIX G

4.1 THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DAMAGE TO EXISTING TREES LOCATED ALONG ACCESS AND HAUL ROADS, AND ADJACENT TO, OR WITHIN BUILDING CONSTRUCTION SITES AND MATERIAL AND EQUIPMENT STORAGE AREAS. THOSE TREES TO BE SAVED SHALL BE FLAGGED BY THE LANDSCAPE ARCHITECT PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.

4.2 CONTRACTOR SHALL PROVIDE NECESSARY BARRICADES AND FENCING SO AS TO DIVERT AND DIRECT VEHICULAR AND PEDESTRIAN TRAFFIC AWAY FROM TREES. THE BARRICADES AND FENCING TYPE SHALL BE AS SHOWN ON THE CIVIL CONSTRUCTION DOCUMENTS.

4.4 VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER EXPOSED ROOTS AND ROADS SHALL NOT BE LOCATED WITHIN THE DRIP-LINE OF TREES

4.5 ALL TREES INTENDED TO BE SAVED WHICH HAVE BEEN DAMAGED DUE TO CONSTRUCTION PRACTICES, SHALL BE INSPECTED AND TREATED BY A CERTIFIED ARBORIST, OR REPLACED AT THE CONTRACTOR'S EXPENSE. 4.6 NO CUTTING OR FILLING OF EXISTING GRADE, TRENCHING OR PRUNING SHALL OCCUR UNLESS SPECIFICALLY DIRECTED BY THE CONSTRUCTION

4.7 NO BURNING OF TRASH IS ALLOWED WITHIN 75' OF EXISTING TREES AND CARE SHALL BE TAKEN TO PREVENT ANY SMOKE DAMAGE TO TREES.

FINAL DRAWING FOR CONSTRUCTION



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ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF WILSON MILLS, CLAYTON, JOHNSTON COUNTY AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS

 BEDS TO HAVE SMOOTHLY CONTOURED AND CLEANLY DEFINED EDGES. BEDS SHALL BE CURVILINEAR UNLESS OTHERWISE 2. PROPOSED BEDS MUST BE LAID OUT ON-SITE AND APPROVED BY

5. SCARIFY ROOTS ON POT BOUND PLANTS.

OWNER, IF REQUESTED. 3. REMOVE TOP 1/3 OF ALL BURLAP FABRIC AROUND ROOT BALL.

4. COMPLETELY REMOVE ALL STRINGS, RIBBONS, AND TABS FROM

7. ALL SHRUBS TO BE PLANTED IN MULCHED BEDS. PRUNE ALL BROKEN, DISEASED, AND WEAK BRANCHES. 9. ALL SHRUB BEDS TO BE COMPLETELY EXCAVATED OF ALL

6. PLANT SPACING VARIES (SEE PLAN).

EXISTING SOIL TO REQUIRED DEPTH AND BACKFILLED WITH REQUIRED SOIL MIX.

10. SOIL MIX: 2/3 TOPSOIL & 1/3 ORGANIC MATTER.

11. TOP DRESS BED WITH 10-6-4 FERTILIZER AT THE RATE OF 5 LBS. PER 100 S.F. OF BED AREA.

X = 2 TIMES THE DIAMETER OF THE CONTAINER OR THE ROOT BALL DIAMETER - 3" MIN. OF MULCH - 6' DIA. WATER RETENTION RING ROTO-TILL ENTIRE PLANT BED TO 5" DEPTH COMPACT SOIL TO 85% AT OPTIMUM

**SHRUB PLANTING BED** 

NOT TO SCALE

TREE PLANTING ON A SLOPE

- 3:1 MAX. GRASSED

SLOPE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. PLACE BARRIERS TO PREVENT THE APPROACH OF EQUIPMENT WITHIN

- ROWS 'A'

PLANT SPACING CHART 8.66" O.C. 12" O.C. 15.60" O.C. 20.80" O.C.

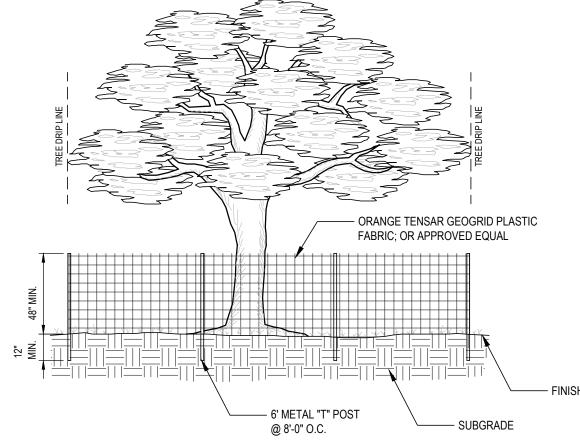
TRIANGULAR SPACING FOR SHRUBS AND GROUNDCOVERS

\L102

NOT TO SCALE

MULCH BEDS SHALL BE SET BACK FROM WALKS AND CURBS THE WIDTH OF ONE MOWING STRIP OF GRASS (UNLESS NOTED OTHERWISE ON PLANS). - SHRUB SHALL BE PLANTED 1"-2" ABOVE FINISHED GRADE - SOIL MIX: 2/3 TOPSOIL AND 1/3 ORGANIC MATTER — 3" PINE STRAW MULCH — EDGE OF PLANTING BED

SHRUB PLANTING IN RAISED BED L102 SECTION NOT TO SCALE



THE DRIP LINE OF TREES TO BE RETAINED.

3. DO NOT CUT TREE ROOTS INSIDE THE DRIP LINE.

 DO NOT REPLACE EQUIPMENT, CONSTRUCTION MATERIALS, TOP SOIL,
 OR FILL DIRT WITHIN THE LIMITS OF THE DRIP LINE OF TREES TO BE 5. IF A TREE MARKED FOR PRESERVATION IS DAMAGED, REMOVE IT AND REPLACE IT WITH A TREE OF THE SAME OR SIMILAR SPECIES, 2-INCH CALIPER OR LARGER, FROM BALLED AND BURLAP NURSERY STOCK

. DO NOT NAIL BOARDS TO TREE DURING BUILDING OPERATIONS.

WHEN ACTIVITY IN THE AREA IS COMPLETE. 6. DURING FINAL SITE CLEANUP, REMOVE BARRIERS AROUND TREES.

1. CONTRACTOR TO REGRADE, SOD OR HYDROSEED, AND STRAW MULCH ALL AREAS

2. UPRIGHT STAKES TO BE USED ON TREES UP TO 12' IN HEIGHT. LARGER TREES MUST

EVERGREEN TREES WHICH ARE TIGHTLY SPACED SHALL BE TIGHT TOGETHER IN ONE

CONTINUOUS BED. (CONTRACTOR TO INCLUDE THIS MULCHING IN HIS/HER BID)

TREES WHICH ARE LOCATED WITHIN 4 FEET OF ANY ADJACENT SHRUB BED SHALL

- TREE WRAP MAIN TRUNK

- 1-3/4" x 1-3/4" HARDWOOD STAKE

- 6' DIA. WATER RETENTION RING

ROOT BALL DIAMETER

ADD TO PLANTER MIX 10-6-5 FERTILIZER AT THE RATE OF 1/2 LBS. PER 1" OF TRUNK DIAMETER

— SOIL MIX: 2/3 TOPSOIL & 1/3 ORGANIC MATTER

X = 2-TIMES THE DIAMETER OF THE CONTAINER OR

- REMOVE TOP 1/3 OF ALL BURLAP FABRIC AROUND ROOT BALL

— 14 GAUGE STEEL WIRE

— 3" MULCH

— EXISTING GRADE

HAVE THEIR MULCHED AREA CONNECTED WITH THE MULCH BED OF THE SHRUBS. PRUNE PROPORTIONATELY TO COMPENSATE FOR REDUCTION OF ROOTS TO

DISTURBED AS A RESULT OF HIS/HER WORK.

3. 1/8TH OF ROOT BALL TO BE ABOVE FINISHED GRADE.

PROMOTE NATURAL CHARACTER OF GROWTH.

DO NOT COVER CROWN OF ROOT BALL

MAINTENANCE:

1. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED AREAS MAY OCCUR. IN SUCH CASES, REPAIR ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM IMMEDIATELY.

2. REPAIR ROOTS BY CUTTING OFF THE DAMAGED AREAS, AND PAINTING THEM WITH TREE PAINT. SPREAD PEAT MOSS OR MOIST TOP SOIL OVER EXPOSED ROOTS.

3. REPAIR DAMAGE TO BARK BY TRIMMING AROUND THE DAMAGED AREA, TAPER THE CUT TO PROVIDE DRAINAGE, AND PAINT WITH TREE PAINT. 4. CUT OFF ALL DAMAGED TREE LIMBS ABOVE THE TREE COLLAR AT THE TRUNK OR MAIN BRANCH. USE THREE SEPARATE CUTS TO AVOID

TREE PROTECTION FENCE

NOT TO SCALE

DATE DESCRIPTION 08.07.23 ROLESVILLE 2ND REVIEW COMMENTS (CAA) 10.02.23 ROLESVILLE 3RD REVIEW COMMENTS (BCSC) 12.01.23 ROLESVILLE 1ST REVIEW COMMENTS (BCSC) 01.18.24 WAKE COUNTY EC SUBMITTAL (BCSC) 03.18.24 WAKE COUNTY EC SUBMITTAL 2 (BCSC)

ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF WILSON MILLS, CLAYTON, JOHNSTON COUNTY AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS

FOR CONSTRUCTION



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DAIR PRESERVE AT JONES AMENITY SITE

LANDSCAPE DETAILS

**JMW** 10.02.23 P230462

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