

VICINITY MAP
SCALE: NTS

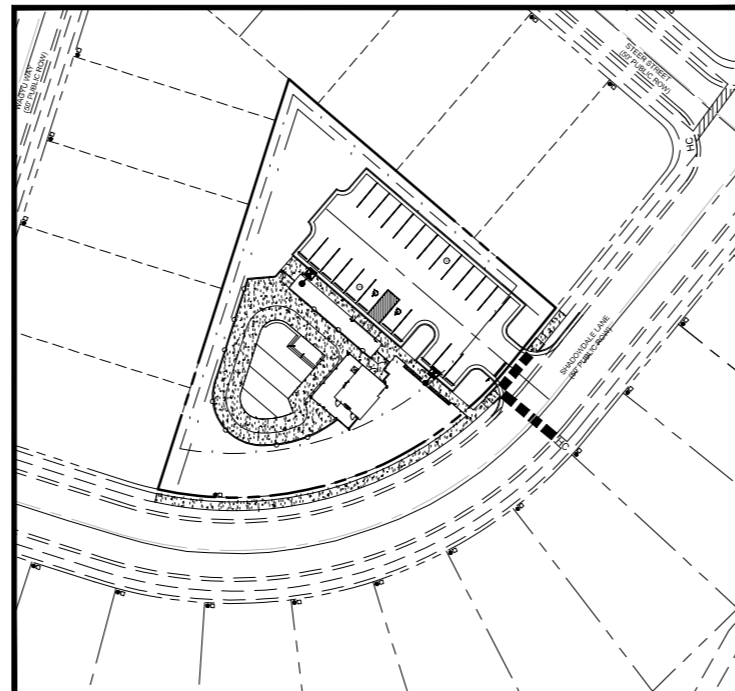
PRESERVE AT JONES DAIRY SOUTH

AMENITY CENTER

SITE PLAN : SP 22-05

TOWN COMMENTS SUBMITTAL 3: 10.02.23

140 SHADOWDALE LANE
ROLESVILLE, NC 27571
WAKE COUNTY



PROJECT PLAN
SCALE: 1" = 50'

OWNER	KB HOMES CAROLINAS
SITE ADDRESS	140 SHADOWDALE LANE ROLESVILLE, NC 27571
PIN	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	0.67 AC

Sheet List Table	
Sheet Number	Sheet Title
C000	COVER SHEET
C100	EXISTING CONDITIONS
C200	SITE AND UTILITY PLAN
C500	GRADING AND STORM DRAINAGE PLAN
C700	EROSION CONTROL PLAN
C950	POOLHOUSE DETAILS
C951	NCG01 REQUIREMENTS
C952	STANDARD DETAILS
C953	STANDARD DETAILS
C954	STANDARD DETAILS
L100	LANDSCAPE PLAN
L101	LANDSCAPE SCHEDULE NOTES
L102	LANDSCAPE DETAILS
23-0415A	DUKE LIGHTING PLAN

#2 - Please provide storm calculation package including Drainage areas and HGL's

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 CONDITGOSN MAY BE ENCOUNUTED 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 CONSTRUCTION THAT MAY REQUIRE MODIFICATON 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.

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 COMPANY
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



KNOW WHAT IS BELOW
CALL BEFORE YOU DIG

#1 - Note previous submittal done by another firm

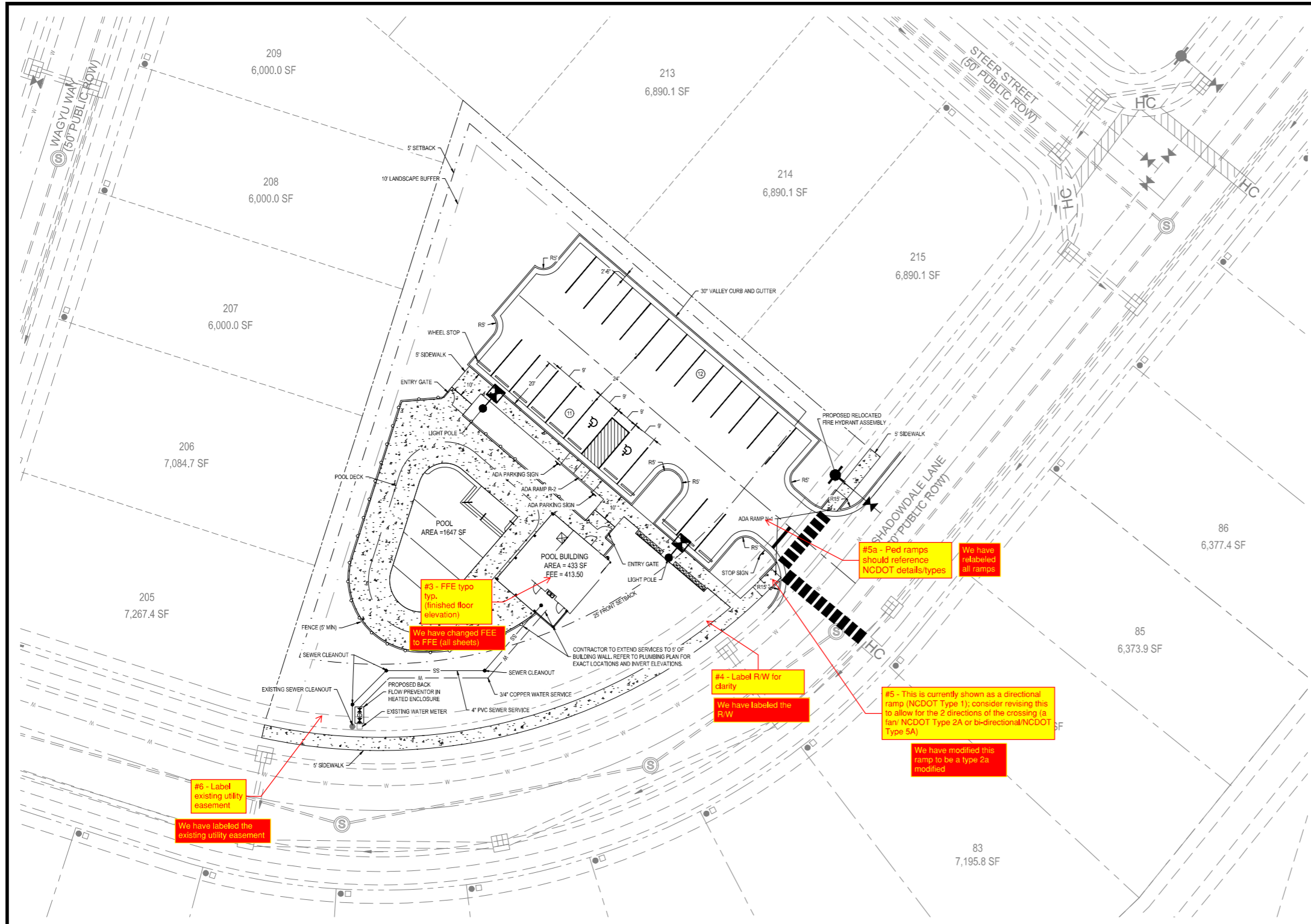
We have modified title block to reflect desired changes

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS

Preliminary
11/07/2023 2:37:53 PM

Date:	10.02.23
Project #:	P230462
SHEET	C000

P230462_PRESERVE_AT_JONES_DAIRY

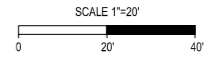


SITE NOTES

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 RECEIVED PRELIMINARY JURISDICTION DELINEATION FROM NC DIVISION OF WATER RESOURCES.
3. NO FLOOD HAZARD AREAS WITHIN PROJECT BOUNDARY PER FEMA MAP 3720175900J, DATED MAY 2, 2006.
4. ALL STRIPING TO BE THERMOPLASTIC.
5. ALL EXISTING ELEVATIONS, FEATURES, AND UTILITIES TO BE FIELD VERIFIED.

SITE DATA	
OWNER	KB HOMES CAROLINAS
SITE ADDRESS	140 SHADOWDALE LANE ROLESVILLE, NC 27271
PIN	1759-88-6764
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	0.67 AC
BUILDING SETBACKS - AMENITY	
PRIMARY STREET	25'
SIDE STREET	5'
SIDE LOT LINE	5'
REAR LOT LINE	5'
PARKING	
DECK AREA REQUIREMENT	1 SPACE / 300 SF
CABANA AREA REQUIREMENT	1 SPACE / 100 SF
DECK AREA	3636 SF
CABANA AREA	940 SF
DECK PARKING REQUIRED	3636 / 300 = 12 SPACES
CABANA PARKING REQUIRED	940 / 100 = 9 SPACES
MAIL KIOSK REQUIREMENT	2 PER CUP
MAIL KIOSK REQUIRED	2
TOTAL REQUIRED	23
TOTAL PROVIDED	23
ADA PARKING CALCS.	1 TO 25 = 1
ADA PARKING REQUIRED	1 SPACE
ADA PARKING PROVIDED	2 SPACES
IMPERVIOUS	
NET TRACT AREA	0.67 AC (29185 SF)
EXISTING IMPERVIOUS	0 AC (0 SF)
POOL DECK	0.083 AC (3,636 SF)
AMENITY BUILDING	0.01 AC (463 SF)
CABANA YARD	0.01 AC (477 SF)
SIDEWALKS	0.047 AC (2,030 SF)
ROADWAY B-B	0.198 AC (8,665 SF)
TOTAL LOT IMPERVIOUS	0.35 AC (15,261 SF)
TOTAL IMPERVIOUS PERCENT	53%

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS



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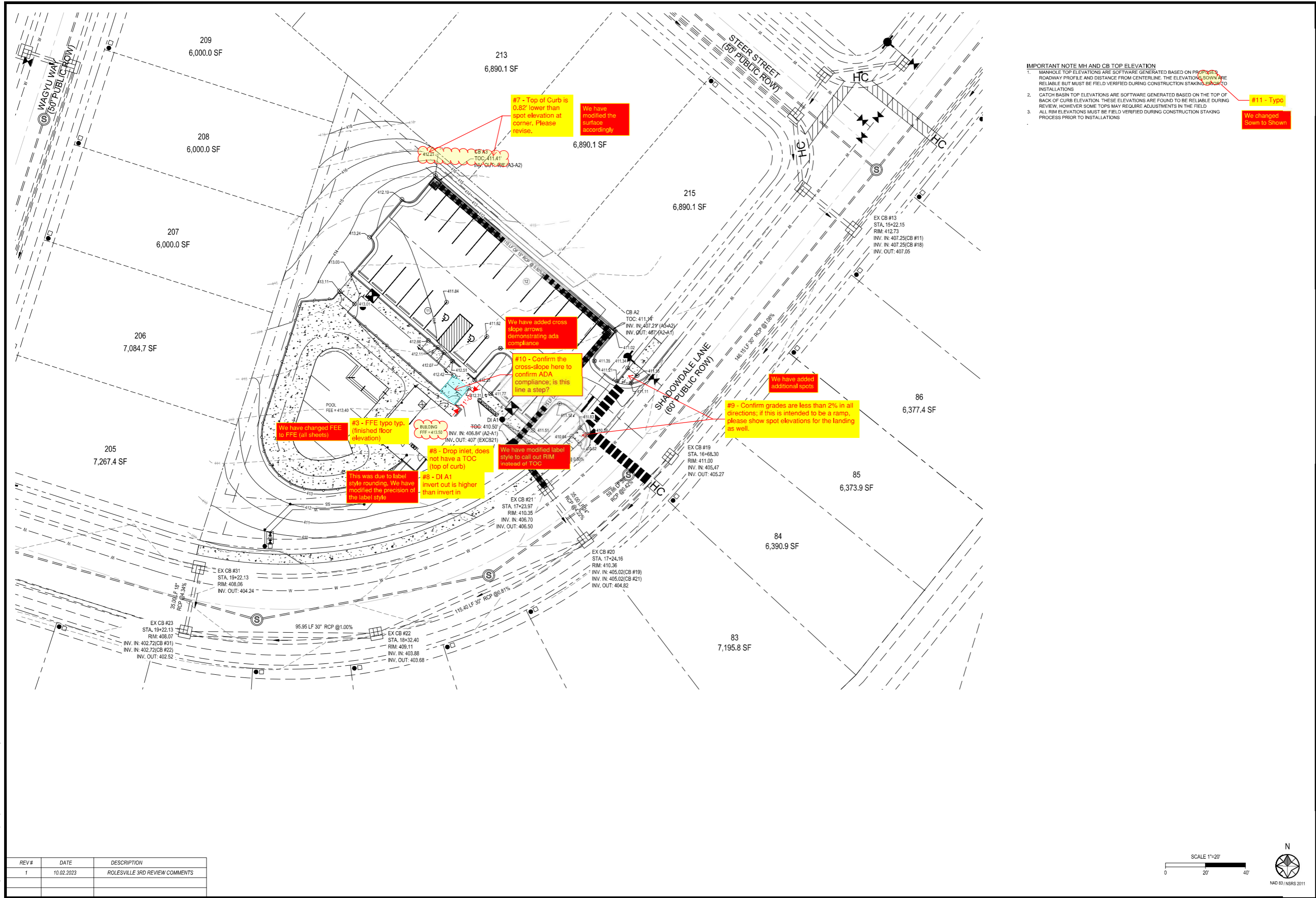
PRESERVE AT JONES DAIRY
AMENITY SITE

SITE AND UTILITY PLAN

Design By: JMW
Date: 10.02.23
Project #: P230462

SHEET
C200

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IMPORTANT NOTE MH AND CB TOP ELEVATION

1. MANHOLE TOP ELEVATIONS ARE SOFTWARE GENERATED BASED ON PROPOSED ROADWAY PROFILE AND DISTANCE FROM CENTERLINE. THE ELEVATIONS SHOWN ARE RELIABLE BUT MUST BE FIELD VERIFIED DURING CONSTRUCTION STAKING. RETURN TO INSTALLATIONS.
2. CATCH BASIN TOP ELEVATIONS ARE SOFTWARE GENERATED BASED ON THE TOP OF BACK OF CURB ELEVATION. THESE ELEVATIONS ARE FOUND TO BE RELIABLE DURING REVIEW, HOWEVER SOME TOPS MAY REQUIRE ADJUSTMENTS IN THE FIELD.
3. ALL RM ELEVATIONS MUST BE FIELD VERIFIED DURING CONSTRUCTION STAKING PROCESS PRIOR TO INSTALLATIONS.

#11 - Typo
We changed
Down to Shown

#7 - Top of Curb is 0.82' lower than spot elevation at corner. Please revise.
We have modified the surface accordingly

We have added cross slope arrows demonstrating ada compliance

#10 - Confirm the cross-slope here to confirm ADA compliance; is this line a step?

#9 - Confirm grades are less than 2% in all directions; if this is intended to be a ramp, please show spot elevations for the landing as well.

We have changed FEE to FFE (all sheets)

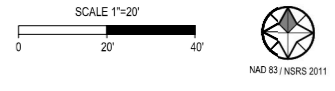
#3 - FFE typo typ. (finished floor elevation)
This was due to label style rounding. We have modified the precision of the label style

#8 - Drop inlet, does not have a TOC (top of curb)
#8 - DI A1 invert out is higher than invert in

We have modified label style to call out RIM instead of TOC

We have added additional spots

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS



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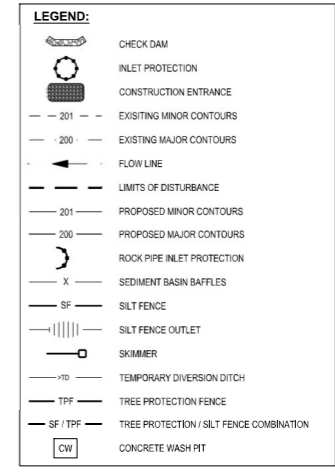
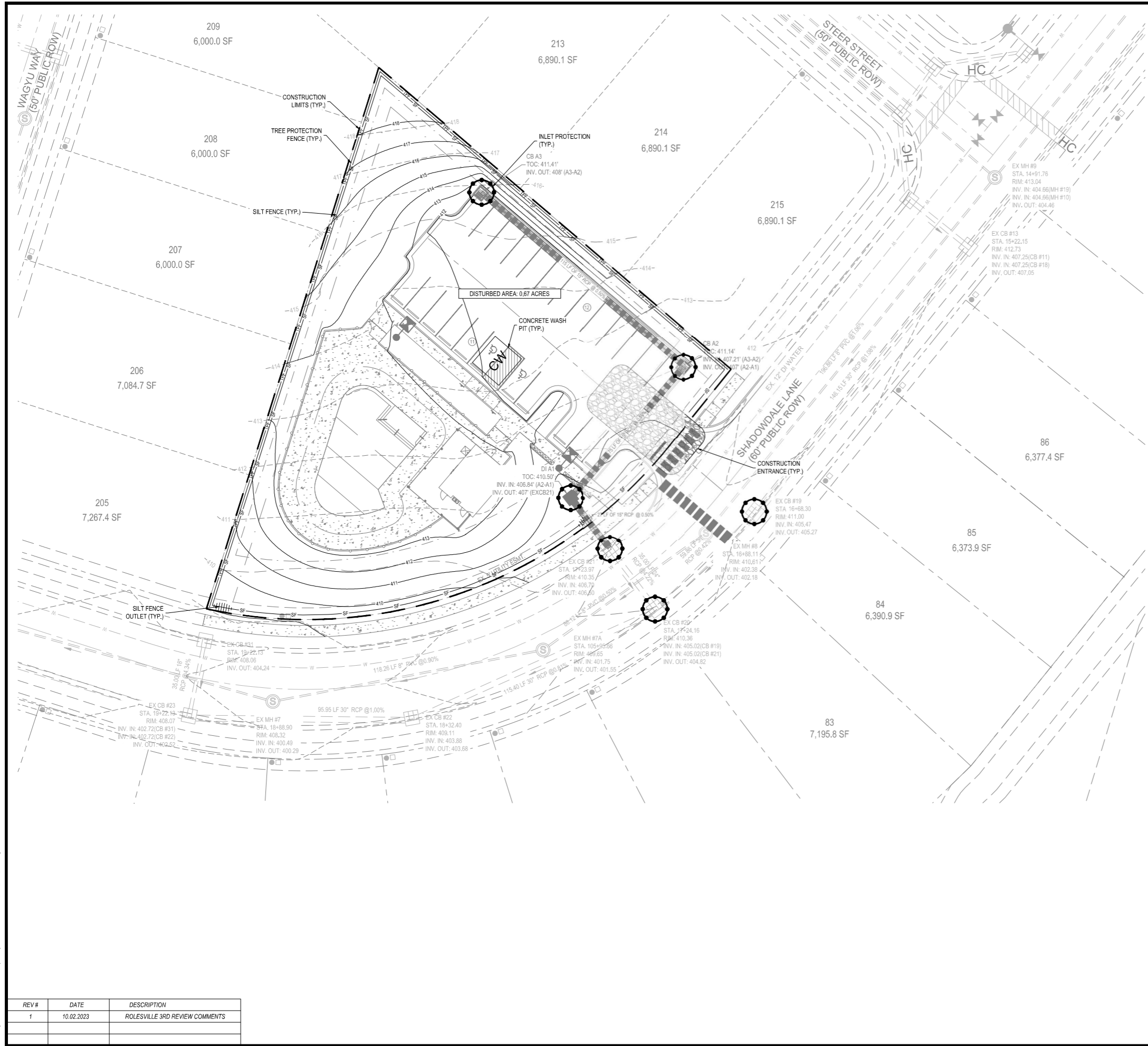
PRESERVE AT JONES DAIRY AMENITY SITE
ROLESVILLE, NC 27571
WAKE COUNTY

GRADING AND STORM DRAINAGE PLAN

Design By: JAW
Date: 10.02.23
Project #: P230462

SHEET
C500

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- WAKE COUNTY SEEDING SPECIFICATIONS**
- SEEDBED PREPARATION:**
- CHISEL COMPACTED AREAS AND SPREAD TOPSOIL, THREE INCHES DEEP OVER ADVERSE SOIL CONDITIONS, IF AVAILABLE.
 - RIP THE ENTIRE AREA TO SIX INCHES DEEP.
 - REMOVE ALL LOOSE ROCK, ROOTS AND OTHER OBSTRUCTIONS, LEAVING SURFACE REASONABLY SMOOTH AND UNIFORM.
 - APPLY AGRICULTURAL LIME, FERTILIZER AND SUPERPHOSPHATE UNIFORMLY AND MIX WITH SOIL (SEE MIXTURE BELOW).
 - CONTINUE TILAGE UNTIL A WELL-PULVERIZED, FIRM, REASONABLY UNIFORM SEEDBED IS PREPARED FOUR TO SIX INCHES DEEP.
 - SEED ON A FRESHLY PREPARED SEEDBED AND COVER SEED LIGHTLY WITH SEEDING EQUIPMENT OR CULTIPACK AFTER SEEDING.
 - MULCH IMMEDIATELY AFTER SEEDING AND ANCHOR MULCH.
 - INSPECT ALL SEEDBED AREAS AND MAKE NECESSARY REPAIRS OR RESEEDINGS WITHIN THE PLANTING SEASON, IF POSSIBLE. IF STAND SHOULD BE MORE THAN 80% DAMAGED RE-ESTABLISH FOLLOWING THE ORIGINAL LIME, FERTILIZER AND SEEDING RATES.
 - CONSULT SEEC ENVIRONMENTAL ENGINEERS ON MAINTENANCE TREATMENT AND FERTILIZATION AFTER PERMANENT COVER IS ESTABLISHED.
- MIXTURE:**
- AGRICULTURAL LIMESTONE 2 TONS/ACRE (3 TONS/ACRE IN CLAY SOILS)
 FERTILIZER 1,000 LBS/ACRE - 10-10-10
 SUPERPHOSPHATE 500 LBS/ACRE - 20% ANALYSIS
 MULCH 2 TONS/ACRE - SMALL GRAIN STRAW
 ANCHOR ASPHALT EMULSION AT 300 GALS/ACRE

SEEDING SCHEDULE:

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

DATE	TYPE	PLANTING RATE
AUG 15-NOV 1	TALL FESCUE	300 LBS/ACRE
NOV 1-APR 1	TALL FESCUE & ABRUZZI RYE	300 LBS/ACRE
MAR 1-APR 15	TALL FESCUE	300 LBS/ACRE
APR 15-JUN 30	HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUL 1-AUG 15	TALL FESCUE AND BROWNTOP MILLET OR BORGHUM-SUDAN HYBRIDS**	125 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)

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

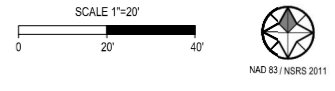
DATE	TYPE	PLANTING RATE
MAR 1-JUN 1	SERICEA LESPEDEZA (SCARIFIED) AND USE THE FOLLOWING COMBINATIONS:	50 LBS/ACRE (SERICEA LESPEDEZA);
MAR 1-APR 15	ADD TALL FESCUE	120 LBS/ACRE
MAR 1-JUN 30	OR ADD WEEPING LOVE GRASS	10 LBS/ACRE
MAR 1-JUN 30	OR ADD HULLED COMMON BERMUDAGRASS	25 LBS/ACRE
JUN 1-SEPT 1	TALL FESCUE AND BROWNTOP MILLET OR MULLET; 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)	120 LBS/ACRE (TALL FESCUE); 35 LBS/ACRE (BROWNTOP MILLET); 30 LBS/ACRE (SORGHUM-SUDAN HYBRIDS)
SEPT 1-MAR 1	SERICEA LESPEDEZA (UNHULLED - UNSCARIFIED) AND TALL FESCUE	70 LBS/ACRE (SERICEA LESPEDEZA); 120 LBS/ACRE (TALL FESCUE)
NOV 1-MAR 1	AND ABRUZZI RYE	25 LBS/ACRE

- WAKE COUNTY CONSTRUCTION SEQUENCE:**
- SCHEDULE A PRECONSTRUCTION CONFERENCE WITH THE WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907), OBTAIN A LAND-DEVELOPMENT PERMIT.
 - INSTALL GRUBBING, 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.
 - BEGIN CLEARING AND GRUBBING. MAINTAIN DEVICES AS NEEDED. ROUGH GRADE SITE.
 - INSTALL STORM SEWER, IF SHOWN, AND PROTECT INLETS WITH BLOCK AND GRAVEL INLET CONTROLS. SEDIMENT TRAPS OR OTHER APPROVED MEASURES AS SHOWN ON THE PLAN, BEGIN CONSTRUCTION, BUILDING, ETC.
 - STABILIZE SITE AS AREAS ARE BROUGHT UP TO FINISH GRADE WITH VEGETATION, PAVING, DITCH LININGS, ETC. SEED AND MULCH DENuded AREAS PER GRADING STABILIZATION TIME FRAMES.
 - WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED COMPLETELY, CALL WATERSHED MANAGER JEEVAN NEUPANE, PE (919-819-8907) FOR SITE INSPECTION.
 - IF SITE IS APPROVED, REMOVE TEMPORARY DIVERSIONS, SILT FENCE, SEDIMENT BASINS, ETC., AND SEED BARE AREAS. ALL REMAINING PERMANENT EROSION CONTROL DEVICES.
 - WE CHANGED TO #11 - Typo. TO BE INSTALLED. CALL FOR A FINAL SITE INSPECTION BY THE WATERSHED MANAGER, JEEVAN NEUPANE, PE (919-819-8907) FOR A CERTIFICATE OF COMPLIANCE.

- WAKE COUNTY STOCKPILE REQUIREMENTS:**
- A 25-FOOT TEMPORARY MAINTENANCE AND ACCESS EASEMENT SHALL BE ESTABLISHED AROUND ALL PROPOSED STOCKPILES.
 - STOCKPILES SHALL BE SET BACK A MINIMUM OF 25 FEET FROM ADJACENT PROPERTY LINES.
 - STOCKPILE HEIGHT SHALL NOT EXCEED 35 FEET.
 - STOCKPILE SLOPES SHALL BE 2:1 OF FLATTER.
 - APPROVED BMPs SHALL BE PROVIDED TO CONTROL ANY POTENTIAL SEDIMENT LOSS FROM STOCKPILE. STOCKPILING MATERIALS ADJACENT TO DITCH, DRAINAGEWAY, WATERCOURSE, WETLAND, STREAM BUFFER, OR OTHER BODY OF WATER SHALL BE AVOIDED UNLESS AN ALTERNATIVE LOCATION IS DEMONSTRATED TO BE UNAVAILABLE.
 - ANY CONCENTRATED FLOW LIKELY TO AFFECT THE STOCKPILE SHALL BE DIVERTED TO AN APPROVED BMP.
 - OFF-SITE SPOIL OR BORROW AREAS MUST BE IN COMPLIANCE WITH WAKE COUNTY 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 14-192 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 KEPT IN AT THE TOP OF THE SLOPE TO KEEP WATER FROM RUNNING UNDERNEATH THE PLASTIC.
 - IF A STOCKPILE IS TO REMAIN FOR FUTURE USE AFTER THE PROJECT IS COMPLETE, THE FINANCIALLY RESPONSIBLE PARTY MUST NOTIFY WAKE COUNTY TO DESIGNATE A NEW FINANCIALLY RESPONSIBLE PARTY FOR THE STOCKPILE.
 - 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).

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS



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NCBELS FRM No. C-2278

PRESERVE AT JONES DAIRY AMENITY SITE

ROLESVILLE, NC 27571 WAKE COUNTY

EROSION CONTROL PLAN

Design By: JAW
Date: 10.02.23
Project #: P230462

SHEET
C700

RIGHT ELEVATION
1/8" = 1'-0"

FLOOR PLAN
1/8" = 1'-0"

D. CLUGSTON
ARCHITECTURE & INTERIOR DESIGN

DCI

Planning Sheet

SHEET DESCRIPTION
PROJECT # : 2001
DATE PLOTTED : 10/02/2023
DRAWING BY : ESI
CHECKED BY : RSC

433 SF BATH, PUMP, ELEC.
486 SF COVERED PORCH
BATHHOUSE PLANS

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

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS

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NCBELS FIRM No. C-6278



PRESERVE AT JONES DAIRY
AMENITY SITE
ROLESVILLE, NC 27571
WAKE COUNTY

POOLHOUSE DETAILS

Design By: JMW
Date: 10.02.23
Project #: P230462

SHEET
C950



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

SECTION E: GROUND STABILIZATION

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

Notes: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 30 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 • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrub or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt retaining walls • Rolled erosion control products with grass seed

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

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

- LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE**
- Never bury or burn waste. Place litter and debris in approved waste containers.
 - Provide a sufficient number and size of waste containers (e.g. dumpster, trash receptacle) on site to contain construction and domestic wastes.
 - Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
 - Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
 - Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
 - Anchor all lightweight items in waste containers during times of high winds.
 - Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
 - Dispose waste off-site at an approved disposal facility.
 - On business days, clean up and dispose of waste in designated waste containers.

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

- PORTABLE TOILETS**
- Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands and does not drain directly to a storm drain, stream or wetland. If 50 feet offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
 - Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
 - Maintain portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

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



NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

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

Inspection	Frequency (during normal business hours)	Inspection records must include:
(1) Itemize construction in good working areas	Daily	Daily self-inspection. If site conditions prevent observations use weekly during weekend or holiday periods, and an individual day self-inspection is available, record the construction site observations for those days when observations are not feasible with observations if a site inspection is required. Days on which an individual inspection shall be conducted are "days". The inspector may use another self-inspection device, approved by the Division.
(2) Erosion Control Measures	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Location of the inspection. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Description of whether the erosion control measures are working properly. 5. Description of maintenance records (if applicable). 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge controls (SDCs)	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Identification of the discharge outlets inspected. 2. Date and time of the inspection. 3. Name of the person performing the inspection. 4. Evidence of violations of stormwater pollution control measures, timing or suspension status or observation. 5. Evidence of public notification of the site. 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. Evidence of violations found within site limits, there is a record of the following shall be made: a. Description, evidence, and date of corrective actions taken, and b. An explanation as to the actions taken to correct future violations.
(5) Stormwater treatment devices	At least once per 7 calendar days and within 24 hours of a rain event > 1.0 inch in 24 hours	1. If the stormwater treatment device has increased visible sedimentation or a stormwater treatment device has failed the following shall be made: a. Description, evidence and date of corrective actions taken, and b. Record of the required reports to the appropriate Division required under Part III, Section C, Item 2(a) of this permit. 2. The phase of grading (installation of perimeter EESC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, re-vegetation or re-landscaping, permanent ground cover). 3. Documentation that the required ground stabilization measures have been provided within the specified timeframes or an assurance that they will be provided as soon as possible.

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

PART III SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING
The approved EESC plan as well as any approved deviation shall be kept on the site. The approved EESC plan may be kept up-to-date throughout the coverage under this permit. The following items pertaining to the EESC plan shall be kept on site and available for inspection at all times during normal business hours.

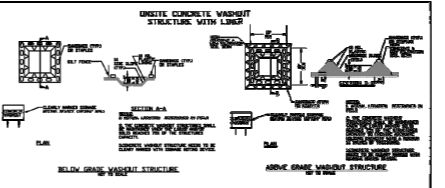
Item to Document	Documentation Requirements
(a) Each EESC measure has been installed and does not significantly deviate from the location, dimensions and other observations shown on the approved EESC plan.	Initial and date each EESC measure on a copy of the approved EESC plan or complete, date and sign an inspection report that lists each EESC measure shown on the approved EESC plan. This documentation is required upon the initial installation of the EESC measures or if the EESC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved EESC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Erosion control is increased and installed in accordance with the approved EESC plan.	Initial and date a copy of the approved EESC 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 EESC measures have been performed.	Cumulative, date and sign an inspection report.
(e) Corrective actions have been taken to EESC measures.	Initial and date a copy of the approved EESC 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 EESC plan documents above, the following items shall be kept on the site and available for inspection at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

- This General Permit as well as the Certificate of Coverage, after it is received.
- Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.
- Documentation to be Retained for Three Years
All data used to complete the e-NIG and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III, SECTION 6, ITEM 4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT
Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

- The EESC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the EESC plan authority has approved these items.
- The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item 2)(c) and (d) of this permit.
- Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems.
- Vegetated, upland areas of the site or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in item (c) above.
- Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
- Sediment removed from the dewatering treatment devices described in item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.



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

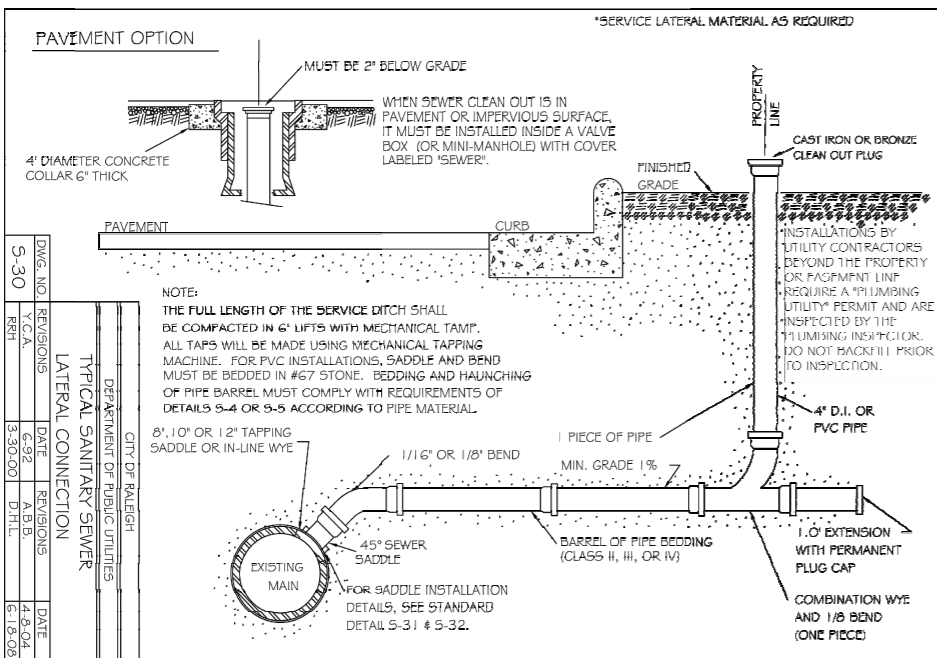
- HERBICIDES, PESTICIDES AND RODENTICIDES**
- Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
 - Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in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

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

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

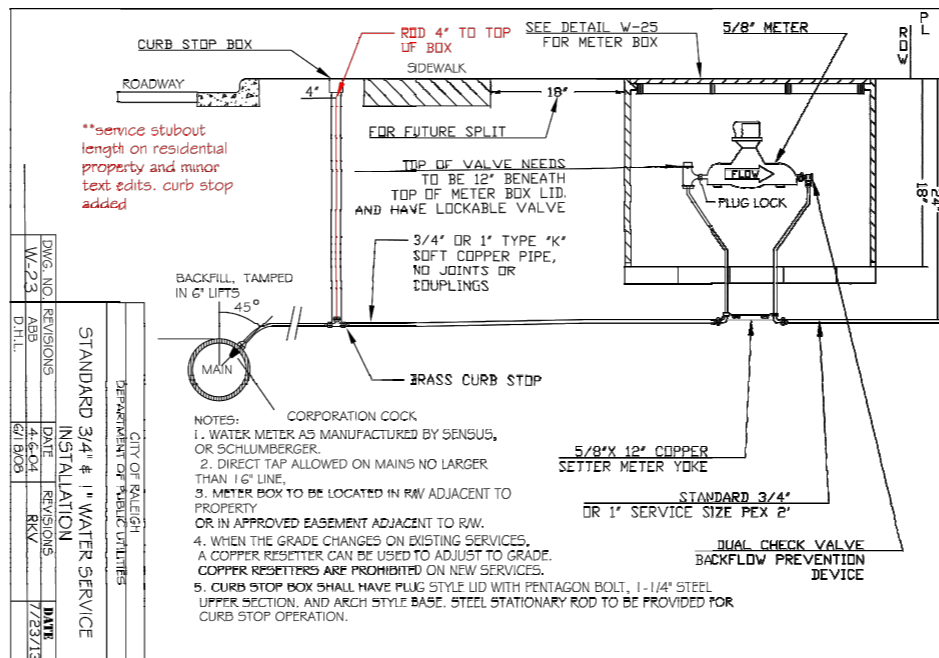
EFFECTIVE: 04/01/19

REV #	DATE	DESCRIPTION
1	10.02.2023	ROSELVILLE 3RD REVIEW COMMENTS



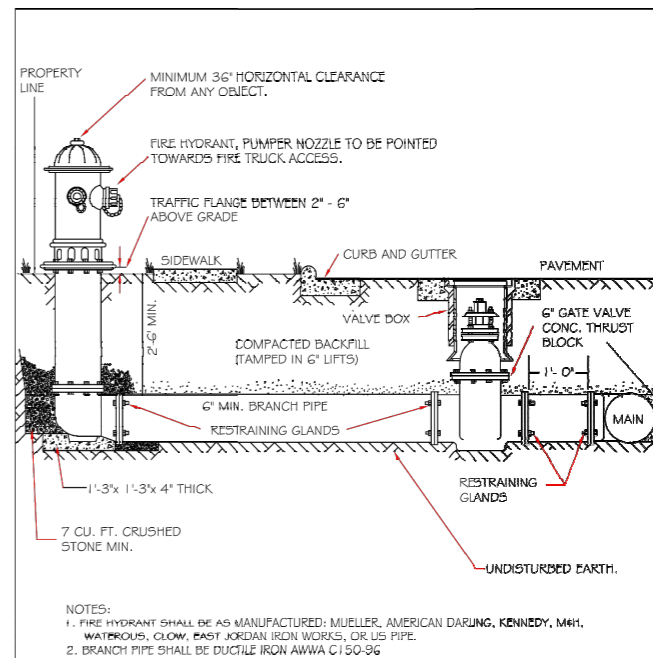
REV. NO.	REVISIONS	DATE
5-30	RRH	3-30-00
5-31	Y.C.A.	6-92
5-32	A.B.B.	4-10-04
5-33	D.H.L.	6-18-06

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
TYPICAL SANITARY SEWER
LATERAL CONNECTION



REV. NO.	REVISIONS	DATE
W-23	DGB	6-18-06
W-24	R.K.V.	7-25-13

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD 3/4\"/>



DWG. NO.	REVISIONS	DATE	REVISIONS	DATE
W-4	ABB	4-6-04	PAF	2/17/08
	DHL	2/14/08		

CITY OF RALEIGH
DEPARTMENT OF PUBLIC UTILITIES
STANDARD FIRE HYDRANT
INSTALLATION DETAIL

REV. #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS

Preliminary
11/07/2023 2:38:36 PM

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2824 Ralston Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NGBELS FIRM No. C-6278



PRESERVE AT JONES DAIRY
AMENITY SITE
ROLESVILLE, NC 27571
WAKE COUNTY








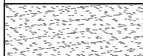
STANDARD DETAILS

Design By: JMW
Date: 10.02.23
Project #: P230462

SHEET
C954

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PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	HEIGHT	SPREAD	REMARKS
	AR	9	Acer rubrum 'Autumn Flame' / Autumn Flame Red Maple	3" Cal.	B&B	min. 12'	6'-8'	
	QL	8	Quercus laurifolia / Laurel-leaved Oak	3" Cal.	B&B	min. 12'	6'-8'	
SHRUBS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	HEIGHT	SPREAD	REMARKS
	AX	9	Abelia x grandiflora / Glossy Abelia	5 gal.	Cont.	min. 24"	18"-24"	
	IC	50	Ilex cornuta 'Burfordii Nana' / Dwarf Burford Holly	5 gal.	Cont.	min. 24"	18"-24"	
	IG	15	Ilex glabra 'Compacta' / Compact Inkberry	5 gal.	Cont.	min. 24"	18"-24"	
	LC2	27	Loropetalum chinense rubrum 'Ruby' / Ruby Fringe Flower	7 gal.	Cont.	min. 24"	24"-30"	
	RX	12	Rhododendron x 'Conlec' / Autumn Royalty® Encore® Azalea	5 gal.	Cont.	min. 24"	18"-24"	
GROUND COVERS	CODE	QTY	BOTANICAL / COMMON NAME	SIZE	CONTAINER	HEIGHT	SPREAD	REMARKS
	SOD	10,749 sf	Eremochloa ophiuroides / Centipede Sod	---				(OR APPROVED EQUAL)

REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS

1.0 GENERAL NOTES:

- 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.
- 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.
- 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.
- 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 APPROX, 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.
- THE CONTRACTOR IS TO VERIFY ALL QUANTITIES SHOWN ON THE PLAN. IF DISCREPANCIES OCCUR, THE CONTRACTOR SHALL CONTACT THE LANDSCAPE ARCHITECT IMMEDIATELY.
- 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:

- SOIL AMENDMENTS SHALL BE APPLIED ANNUALLY ACCORDING TO THE FOLLOWING CHART.

TREES		
SOIL AMENDMENTS	RATE	SIZE OR SQ. FT.
10-14 FERTILIZER	15 LBS	1,000 SQ. FT.

SHRUBS		
SOIL AMENDMENTS	RATE	SIZE OR SQ. FT.
10-14 FERTILIZER	5 LBS	100 SQ. FT.

PERENNIALS & GROUNDCOVERS		
SOIL AMENDMENTS	RATE	SIZE OR SQ. FT.
10-14 FERTILIZER	3 LBS	100 SQ. FT.
COMPOST	3 YDS	1,000 SQ. FT.

SEASONAL COLOR - ANNUAL BED PREPARATION		
SOIL AMENDMENTS	RATE	SIZE OR SQ. FT.
10-14 FERTILIZER	3 LBS	100 SQ. FT.
COMPOST	1.5 YDS	1,000 SQ. FT.

CONTAINERS AND/OR POTS		
SOIL AMENDMENTS	RATE	SIZE OR SQ. FT.
10-14 FERTILIZER	3 LBS	100 SQ. FT.
- ALL PLANTS EXCEPT SPECIFICALLY NOTED SPECIES WILL BE NURSERY GROWN. 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.
- 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.
- 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.
- 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 COLORED SHALL BE REJECTED.
- GAUPE 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 "Y" CROTCHES THAT COULD BE POINT OF WEAK LIMB STRUCTURE OR DISEASE INFESTATION. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.
- 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.
- SIZES SPECIFIED IN THE PLANT LIST ARE MINIMUM SIZES TO WHICH PLANTS ARE TO BE JUDGED.
- THE SUPPLIER OF ALL PLANTS SHALL CERTIFY THAT THE ORIGIN OF THE PLANT IS FROM HARDINESS ZONES 6 OR 7, FROM THE EASTERN OR CENTRAL PORTIONS OF THE UNITED STATES, PRIOR TO PLANTING UNLESS AGREED TO OTHERWISE WITH THE LANDSCAPE ARCHITECT.
- 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.
- 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 SOIL 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.
- ACCEPTABLE TOPSOIL SHALL BE A FERTILE, FRIABLE NATURAL LOAM UNIFORM IN COMPOSITION, FREE OF STONES, LIMBS, PLANTS AND THEIR ROOTS, AND OTHER EXTRANEANOUS 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.
- 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:

- PRIOR TO PLANTING, THE CONTRACTOR SHALL VERIFY THAT CONSTRUCTED GRADES ARE AS INDICATED ON THE PLANS. THE CONTRACTOR SHALL NOTIFY THE OWNER OR LANDSCAPE ARCHITECT IF ADJUSTMENTS TO PLANT PLACEMENT MAY BE REQUIRED DUE TO FIELD CONDITIONS AND FINAL GRADING.
- 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.
- 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 IMPED DRAINAGE AWAY FROM BUILDINGS.
- TOPSOIL SHALL BE SPREAD TO FINISH GRADE OVER THE ENTIRE ROUGH GRADED AREA TO BE LANDSCAPED. AFTER TOPSOIL IS APPLIED, THE SOIL SHALL BE SCARIFIED AS NEEDED TO BREAK UP ANY REMAINING COMPACTION.
- 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.
- 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.
- 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 INOCULANT 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 NOT TO MOUND THE SOIL OR TO SIGNIFICANTLY ALTER THE EXISTING GRADES AND THEN PLACE MULCH TOP ENTIRE PLANTING HOLE. (SEE APPLICABLE PLANTING DETAILS FOR THICKNESS) THE PLANTING HOLE AREAS MUST NOT BE DEPRESSED BELOW THE SURROUNDING SOIL SURFACE ELEVATIONS.
- 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 WELL FREE CONDITION.
- 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, CUTTERS, AND SIDEWALKS) DAILY DURING INSTALLATION.
- ALL DISTURBED, NON-VEGETATED SLOPES SHALL BE PLANTED WITH AN ANNUAL RYE GRASS OR AN APPROVED EQUAL BEFORE INSTALLATION AT THE RECOMMENDED RATE TO STABILIZE AREA, OR OTHER EQUIVALENT EROSION CONTROL MEASURES.
- LARGE GROWN PLANTS ARE NOT TO BE PLANTED IN FRONT OF WINDOWS, UNDER BUILDING OVERHANGS, OR IN DRAINAGE SWALES. SHRUBS PLANTED NEAR H.V.A.C. UNITS TO BE LOCATED SO THAT SHRUBS AT MATURITY WILL MAINTAIN ONE (1) FOOT SPACED BETWEEN UNIT AND PLANT. ANY PLANTING WHICH IS SHOWN ADJACENT TO CONDENSOR UNITS SHALL BE PLANTED AS REQUIRED TO GREEN 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.
- TREE STAKING AND GUYING SHALL BE COMPLETED PER DETAILS IN THIS SET OF LANDSCAPE PLANS. THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.
- 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.
- SHRUBS, BULBS, AND GROUNDCOVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS AND IN APPLICABLE PLANTING DETAILS.
- 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 FIELD SLIGHTLY TO MINIMIZE BRANCH OVERHANG.
- SHRUBS, GROUNDCOVERS, AND PERENNIALS PLANTED ON SLOPES GREATER THAN 3:1 SHALL HAVE A NATURAL FIBER GEO-TEXTILE WOVEN MESH MATERIAL PINNED TO GROUND PER MANUFACTURER'S SPECIFICATIONS. GROUNDCOVER BEDS SHALL HAVE TWO (2) INCHES OF GROUND LEAF COMPOST SPREAD ONTO SLOPE PRIOR TO PLACING MESH. EXCAVATE PLANT PITS THROUGH MESH.
- ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS IN THIS SET OF LANDSCAPE PLANS.
- THE CONTRACTOR MUST CONTACT THE OWNER AT LEAST 10 WORKING DAYS IN ADVANCE TO SCHEDULE ACCEPTANCE INSPECTIONS. THE CONTRACTOR MUST REPLACE ALL DEAD OR UNACCEPTABLE PLANTS AND PLANT ANY MISSING PLANTS DURING THE FOLLOWING RECOMMENDED PLANTING SEASONS.
- 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 SHALL SHARE THE SAME MULCH BED.
- 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.
- 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.
- THE CONTRACTOR SHALL BE RESPONSIBLE TO REGRADE, HYDROSEED, STRAW MULCH, AND TACK ALL EXISTING LAWN AREAS DISTURBED AS A RESULT OF HIS/HER WORK.
- TREES AND SHRUBS SHALL BE LOCATED WITH A MINIMUM SEPARATION OF 36" FROM CURB FACES PER UDO EXHIBIT 4-8 AND UDO APPENDIX G ("PROTECTION OF TREES AND VEGETATION FROM VEHICLE OVERHANG")

4.0 TREE PROTECTION:

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING DAMAGE TO EXISTING TREES LOCATED ALONG ACCESS AND HAIL 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.
- 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.
- MATERIALS SHALL NOT BE STORED, NOR VEHICLES PARKED WITHIN THE DRIP-LINE OF THE TREE UNLESS AUTHORIZED BY LANDSCAPE ARCHITECT OR OWNER.
- VEHICLES AND EQUIPMENT SHALL NOT BE DRIVEN OVER EXPOSED ROOTS AND ROADS SHALL NOT BE LOCATED WITHIN THE DRIP-LINE OF TREES UNLESS APPROVAL IS OBTAINED FROM THE LANDSCAPE ARCHITECT.
- 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.
- NO CUTTING OR FILLING OF EXISTING GRADE, TRENCHING OR PRUNING SHALL OCCUR UNLESS SPECIFICALLY DIRECTED BY THE CONSTRUCTION DOCUMENTS, OR WITH WRITTEN CONSENT BY THE LANDSCAPE ARCHITECT AND OWNER.
- NO BURNING OF TRASH IS ALLOWED WITHIN 15' OF EXISTING TREES AND CARE SHALL BE TAKEN TO PREVENT ANY SMOKE DAMAGE TO TREES.

Bateman Civil Survey Company
Engineers • Surveyors • Planners
2524 Reliance Avenue, Apex, North Carolina 27539
Phone: 919.577.1080 Fax: 919.577.1081
NGBELLS FIRM No. C-2378



PRESERVE AT JONES DAIRY
AMENITY SITE
ROLESVILLE, NC 27571
WAKE COUNTY

LANDSCAPE SCHEDULE / NOTES

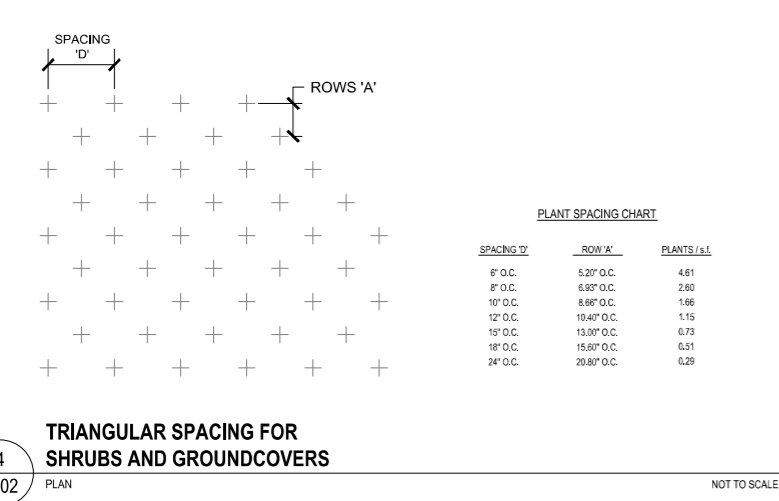
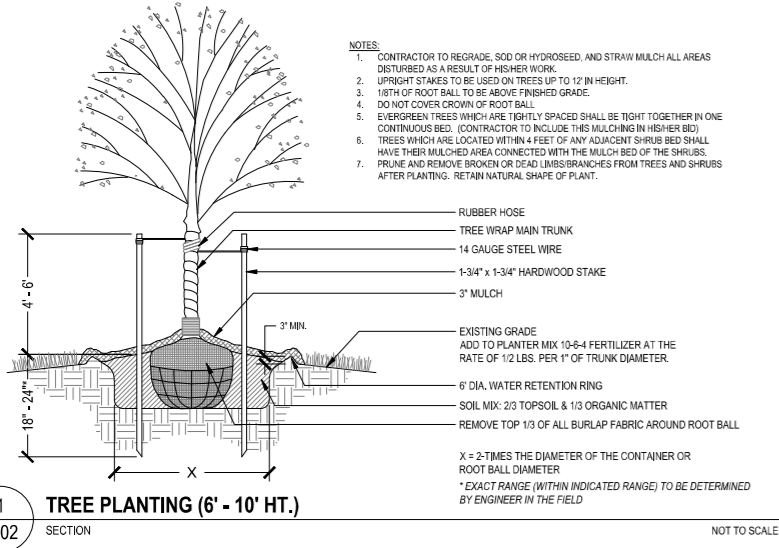
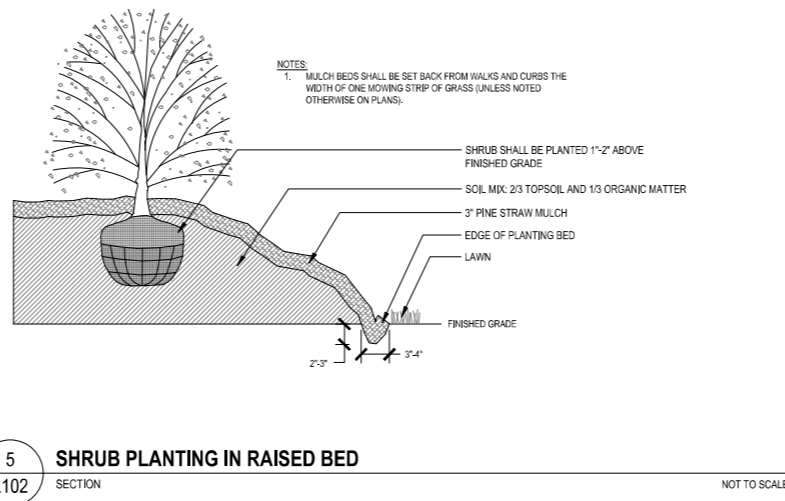
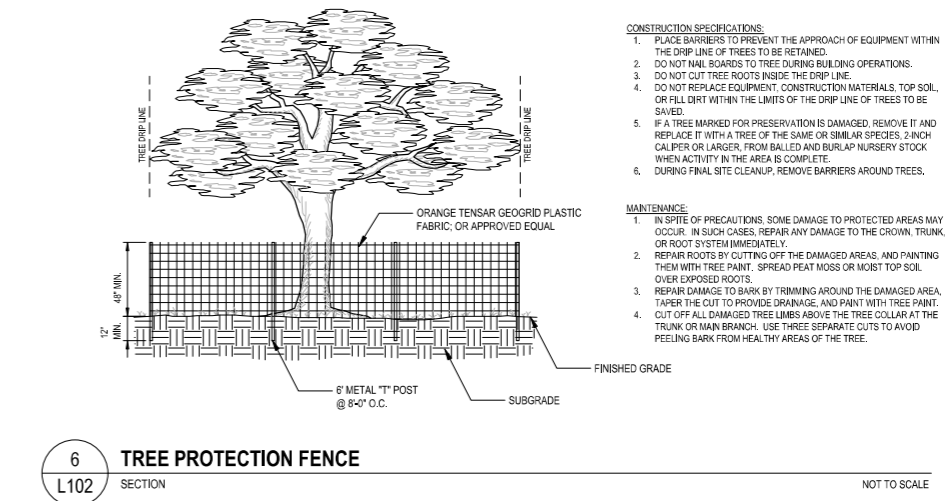
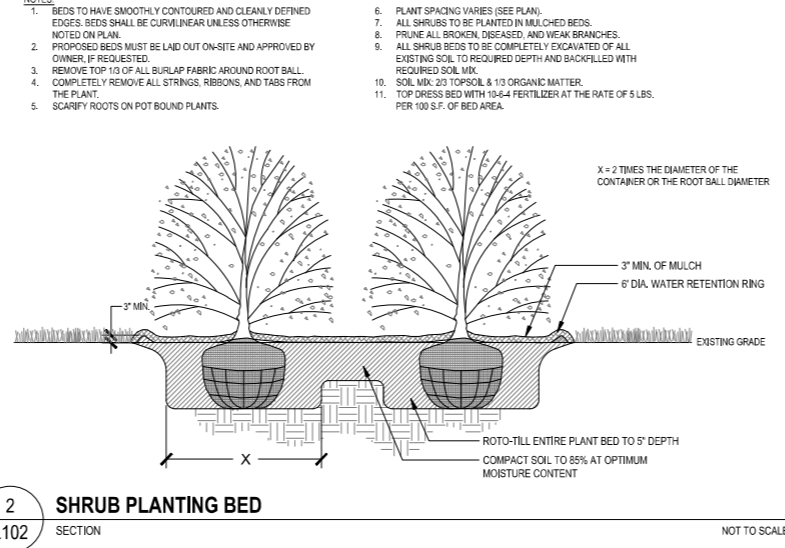
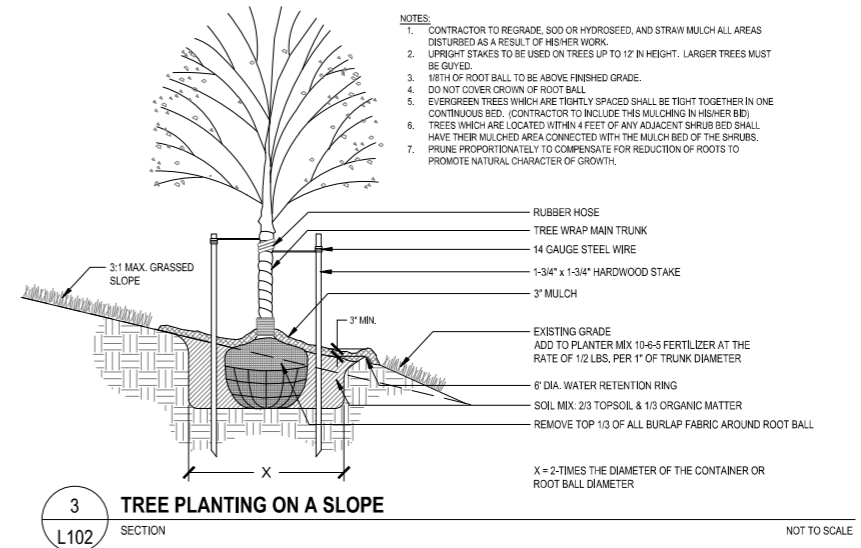
Design By: JMW
Date: 10.02.23
Project #: P230462

SHEET
L101

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

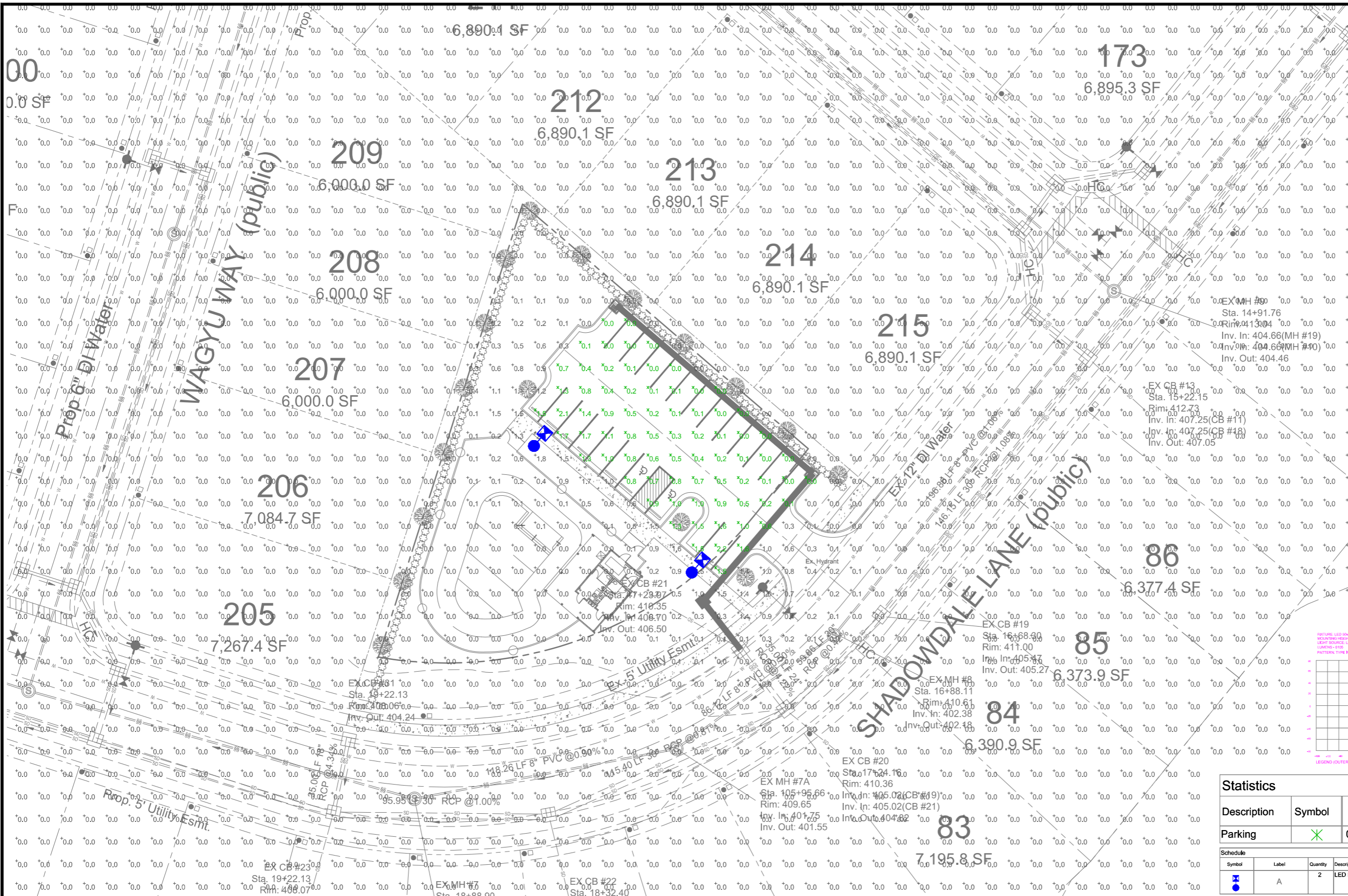


ALL CONSTRUCTION TO BE IN ACCORDANCE WITH ALL TOWN OF WILSON MILLS, CLAYTON, JOHNSTON COUNTY AND NCDOT STANDARDS, SPECIFICATIONS AND DETAILS



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REV #	DATE	DESCRIPTION
1	10.02.2023	ROLESVILLE 3RD REVIEW COMMENTS



Customer Lighting

PEDESTRIAN SHOEBOX LED
(Made Dark Sky Compliant)

LED
(Light emitting diode) 50 watts
Mounting height 12' - 17'
Color Black
Finish Aluminum, Fiberglass, Concrete, Decorative aluminum
Applications Neighborhoods, Parks, Shopping centers

Light source: LED (4x4x4)
Voltage: 50 watts
Lumens: 4,200 L & H
Light pattern: E38VA Type IV
IESNA color classification: Full-cutoff
RA: Minimum 90 (CRI = 91.0000)
Color temperature: 3,000K (4,000K)

FILE AVAILABLE	MOUNTING HEIGHT	COLOR
Aluminum	12', 15', 17'	Black
Fiberglass	15'	Black
Painted Concrete	15'	Black
Decorative Aluminum	12', 15'	Black

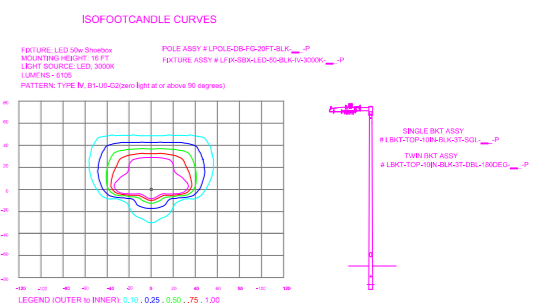
FEATURES

- Turnkey operation
- Little or no installation cost
- Design services by lighting professionals included
- Maintenance, electrical & warranty included
- One low monthly cost on your electric bill

BENEFITS

- Provides hassle-free installation and service
- Free up capital for other projects
- Meets industry standards and lighting ordinances
- Eliminates high and repeated repair bills
- Convenience and savings for you

DUKE ENERGY PROGRESS



Statistics

Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking	X	0.6 fc	2.2 fc	0.0 fc	N/A	N/A

Schedule

Symbol	Label	Quantity	Description	Number Lamps	Lumens Per Lamp	Light Loss Factor
X	A	2	LED 50w Shoebox- Type IV - 3000K	16	382	0.85

NO.	DATE	REVISION	BY

LIGHTING DESIGN TOLERANCE

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



PROPRIETARY & CONFIDENTIAL

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PRESERVE AT JONES DAIRY AMENITY
Rolesville, NC

SITE LIGHTING ARRANGEMENT

Designed by **DUKE ENERGY PROGRESS LIGHTING SOLUTIONS**
Reviewed by **N. Johnson** Scale **1" = 20'**
Date **09/28/2023** Size **Drawing size "D"**
Description **LED Pedestrian Shoebox**
Drawing No. **23-0415A** Sht. **1 OF 1**