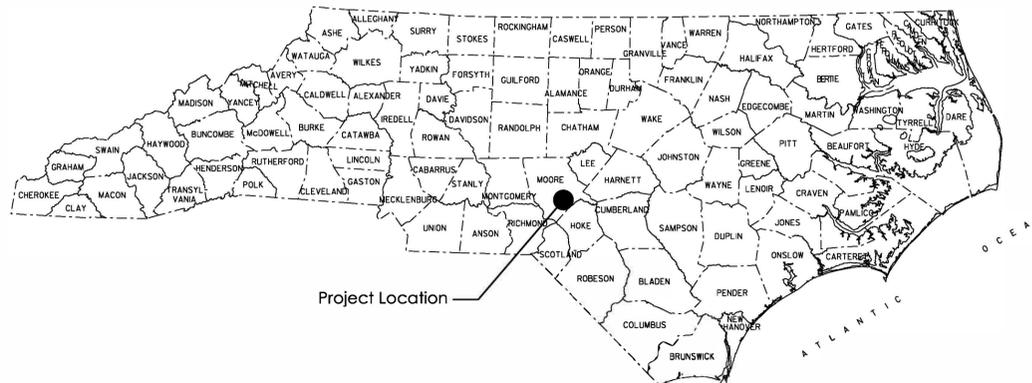
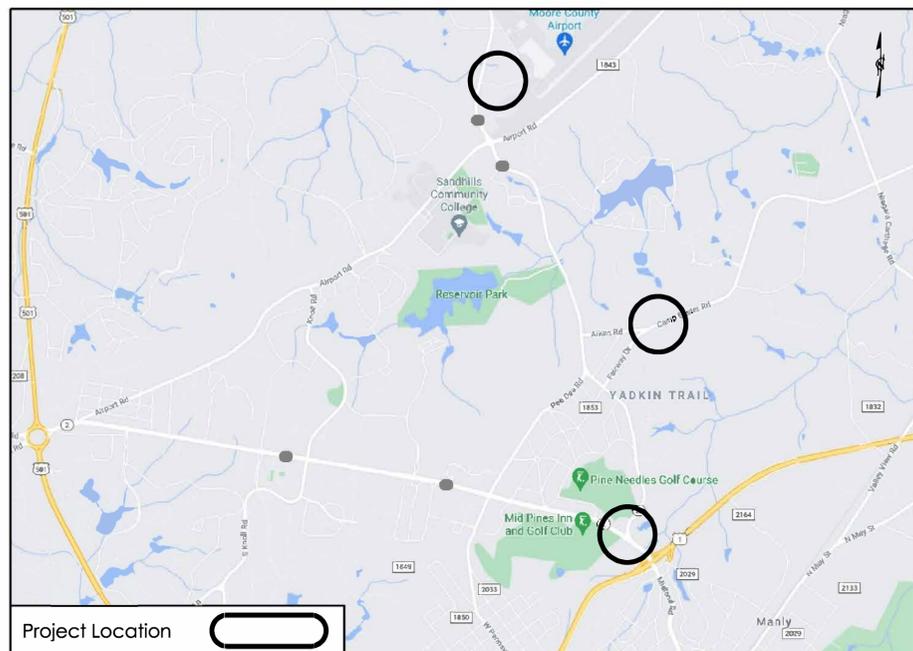




HIGHWAY LANDSCAPE DEVELOPMENT PROJECT



NC 22 CORRIDOR ENHANCEMENTS IN SOUTHERN PINES



Summary of Quantities
1 Year Establishment Period

| DES | SEC | QTY | UNIT | KEY | BOTANICAL NAME | COMMON NAME | SIZE | CALIPER | FURNISH | A.S.N.S. | REMARKS |
|--|------|-------|-------|-----|--|-------------------------------------|--------|---------|-----------|----------|-------------|
| Trees | | | | | | | | | | | |
| L | 1670 | 33 | ea | BN | <i>Betula nigra</i> 'BNMTF' | Dura Heat River Birch | 7-8' | | #15 Cont. | 2.1 | 15' O.C. |
| L | 1670 | 19 | ea | CC | <i>Cercis canadensis</i> 'Forest Pansy' | Forest Pansy Redbud | 7-8' | | #30 Cont. | 2.3 | As Shown |
| L | 1670 | 12 | ea | CF | <i>Cornus florida</i> 'Cherokee Princess' | Cherokee Princess Flowering Dogwood | 6-7' | | #15 Cont. | 2.4 | As Shown |
| L | 1670 | 11 | ea | JV | <i>Juniperus virginiana</i> | Eastern Red Cedar | 6-7' | | #30 Cont. | 4.7 | As Shown |
| L | 1670 | 7 | ea | ML | <i>Magnolia grandiflora</i> 'Little Gem' | Little Gem Dwarf Southern Magnolia | 7-8' | | #30 Cont. | 2.2 | As Shown |
| L | 1670 | 32 | ea | PP | <i>Pinus palustris</i> | Longleaf Pine | 8-9' | | #30 Cont. | 4.7 | 12' O.C. |
| Shrubs | | | | | | | | | | | |
| L | 1670 | 63 | ea | IV | <i>Ilex vomitoria</i> 'Schilling's Dwarf' | Schilling's Dwarf Yaupon Holly | 15-18" | | #3 Cont. | 5.5 | 4' O.C. |
| Grasses/Groundcovers/Perennials | | | | | | | | | | | |
| L | 1670 | 175 | ea | AT | <i>Asclepias tuberosa</i> | Butterflyweed | 6-12" | | #1 Cont. | 13.3 | 1.5' O.C. |
| L | 1670 | 141 | ea | EP | <i>Echinacea purpurea</i> 'PAS702917' | PowWow Wild Berry Cone Flower | 6-12" | | #1 Cont. | 13.3 | 15" O.C. |
| L | 1670 | 311 | ea | MC | <i>Muhlenbergia capillaris</i> | Pink Muhly Grass | 18-24" | | #3 Cont. | 13.4 | 3' O.C. |
| L | 1670 | 102 | ea | MW | <i>Muhlenbergia capillaris</i> 'White Cloud' | White Cloud Muhly Grass | 18-24" | | #3 Cont. | 13.4 | 3' O.C. |
| L | 1670 | 262 | ea | PS | <i>Phlox subulata</i> 'Emerald Blue' | Emerald Blue Creeping Phlox | 6-12" | | #1 Cont. | 13.5 | 15" O.C. |
| L | 1664 | 115.0 | sy | ZO | <i>Zoysia 'Compadre'</i> | Compadre Zoysiagrass | n/a | | Sod | n/a | Tight Seams |
| Other | | | | | | | | | | | |
| L | SP | 1 | LS | | Irrigation | | | | | | |
| L | 1670 | 12 | ea | | Establishment - Monthly Maintenance | | | | | | |
| L | 1670 | 267 | cuyd | | Mulch for Planting | | | | | | 4" Depth |
| L | 1670 | 2209 | sayd | | Pre emergence Herbicidal Treatment | | | | | | |
| L | 1670 | 2209 | sayd | | Post emergence Herbicidal Treatment | | | | | | |
| L | sp | 38.25 | ton | | River Rock (4-8") | | | | | | |
| L | sp | 210 | sqyds | | Plant Bed Removal | | | | | | |
| L | 1651 | 33 | ea | | Selective Tree Removal (6") | | | | | | |
| L | 1670 | 20 | m/g | | Water for Planting | | | | | | |

NOTES:

- Existing conditions shown on the plans are based on survey information and roadway plans. actual site conditions may vary.
- Prior to any demolition or work taking place, the contractor shall locate and verify all utility lines and structures within the construction areas (water, sewer, gas, electrical, etc.)
- The contractor shall take the necessary precautions to prevent damage of adjacent plant material, facilities, and structures to remain. The contractor shall restore disturbed areas to their original condition and to the satisfaction of the Division Roadside Environmental Engineer.
- The utilities shown on the plans are approximate locations. The contractor shall locate and protect in place all existing utilities before digging occurs and major construction begins.
- Demolition, removal, and disposal of items from the site must be completely in accordance with the law. The contractor is responsible for making a site visit to determine and verify all demolition requirements prior to bidding.
- The contractor shall verify all conditions and dimensions at the job site prior to construction, and if discrepancies are found, notify the Division Roadside Environmental Engineer for clarification.

| | | | |
|--------------|------------------------|---------|---------------|
| T.I.P. # | STATE PROJECT W.B.S. # | SHEET # | SHEET # TOTAL |
| ----- | ----- | L1 | 9 |
| FED. PROJ. # | DESCRIPTION | | DIVISION |
| ----- | Enhancement | | 8 |

CONVENTIONAL SYMBOLS

| | |
|--|-------|
| County Line..... | ----- |
| City or Town Line..... | ----- |
| Exist. Right of Way Line Marker..... | ----- |
| Prop. Right of Way Line Marker (By Others)..... | ----- |
| Prop Right of Way Line Marker (By Contract)..... | ----- |
| Exist. Control of Access Line..... | ----- |
| Prop. Control of Access Line..... | ----- |
| Property Line..... | ----- |
| Easement Line..... | ----- |
| Slope Stake Line..... | ----- |
| Exist. Fence..... | ----- |
| Prop. Woven Wire Fence..... | ----- |
| Prop. Chain Link Fence..... | ----- |
| Exist. Road..... | ----- |
| Prop. Road..... | ----- |
| Guardrail..... | ----- |
| Survey Line..... | ----- |
| Denotes Line Equality..... | ----- |
| Bridge..... | ----- |
| Culvert..... | ----- |
| Railroad..... | ----- |
| Woods..... | ----- |
| Exist. Telephone Pole..... | ----- |
| Prop. Telephone Pole..... | ----- |
| Tower Pole and Line..... | ----- |
| Exist. Power Pole..... | ----- |
| Prop. Power Pole..... | ----- |
| Sanitary Sewer Line..... | ----- |
| Water Line..... | ----- |
| Gas Line..... | ----- |
| Picnic Shelter..... | ----- |
| Regeneration..... | ----- |
| Reforestation..... | ----- |

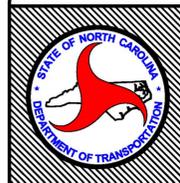
INDEX OF L SHEETS:

- L 1.0 - Title Sheet
- L 2.0 - Planting Details
- L 3.0 - L 6.0 - Planting Plans
- L 7.0 - Irrigation Specifications
- L 8.0 - Irrigation Details
- L 9.0 - Irrigation Plan

PREPARED BY: K. Cooper DATE: 6/16/2021

REVISIONS

| DATE | DESCRIPTION |
|------|-------------|
| | |
| | |
| | |



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOCATION: NC 22 Corridor Enhancements in Southern Pines

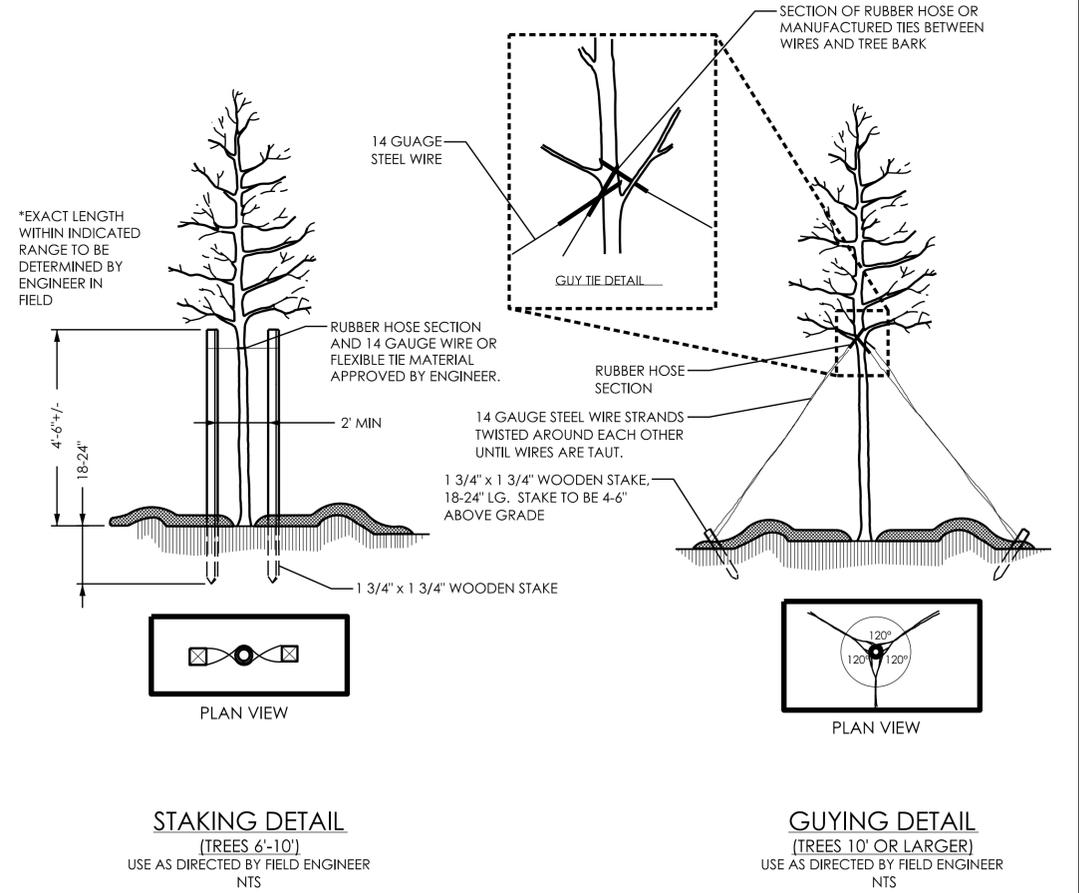
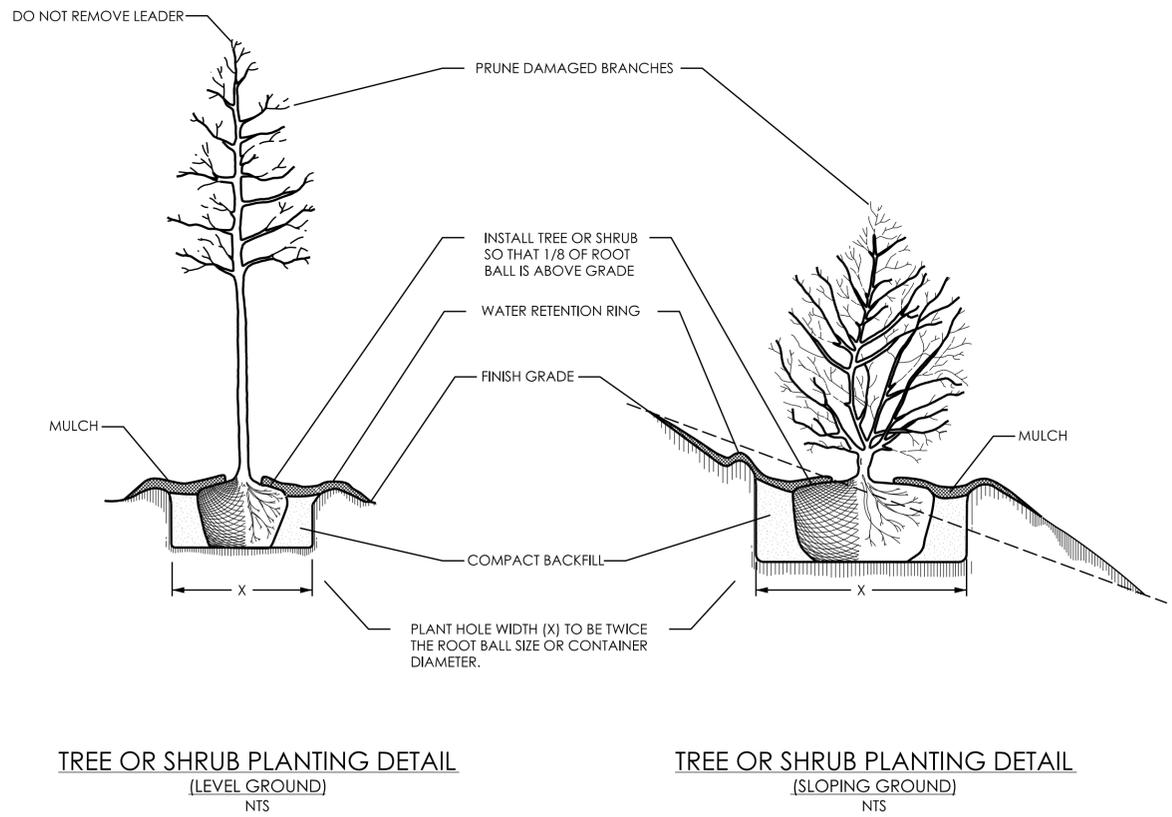
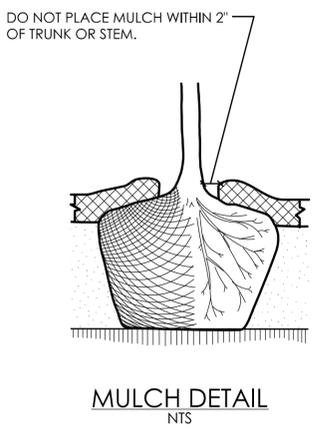
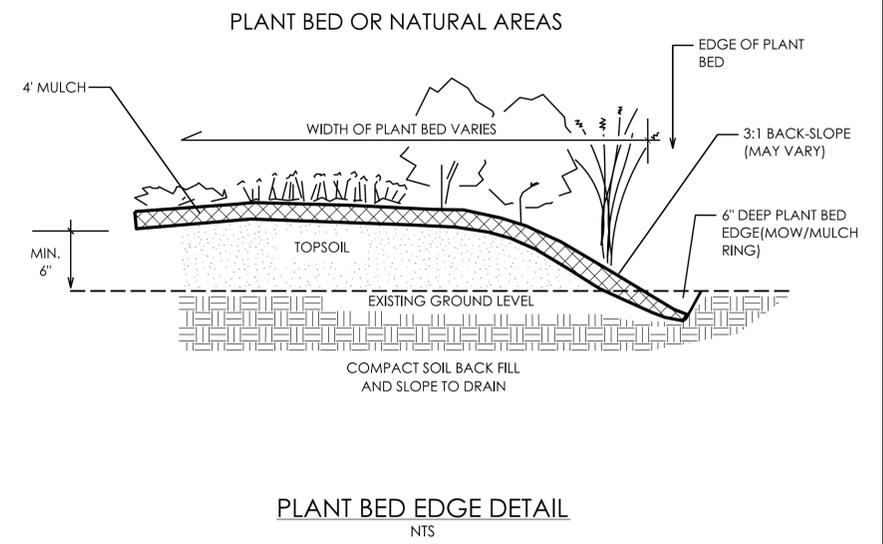
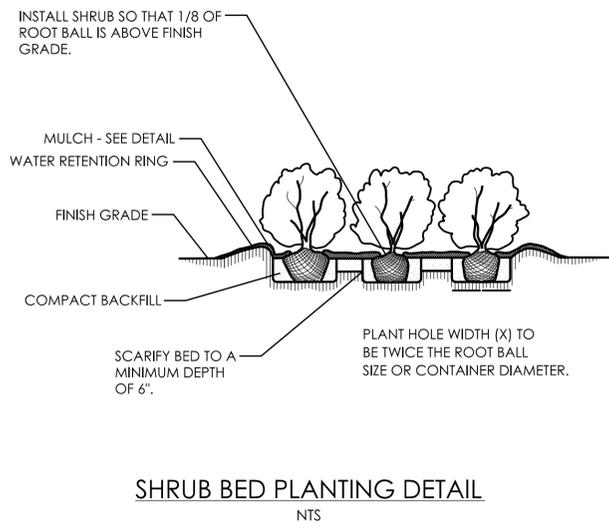
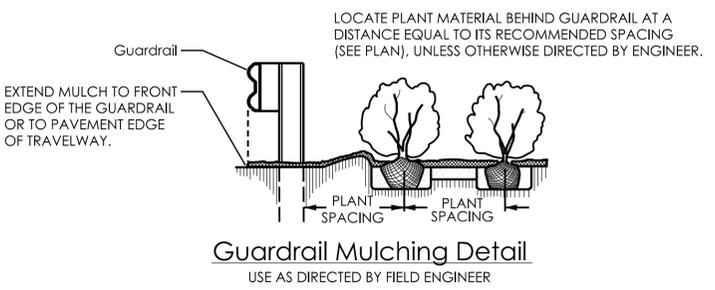
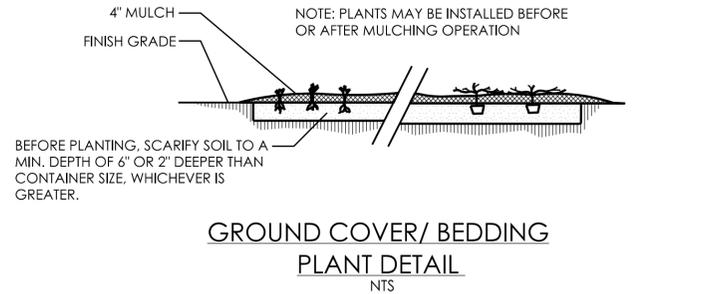
TYPE of WORK: Enhancements

COUNTY: Moore

2014 American Standard for Nursery Stock
 2018 NCDOT STANDARD SPECIFICATIONS
 PREPARED IN THE OFFICE OF:
 NCDOT- ROADSIDE ENVIRONMENTAL UNIT
 AESTHETIC ENGINEERING SECTION
 1557 MAIL SERVICE CENTER
 RALEIGH, NC 27699 919-707-2920

NOTES:

-  SCHEDULE FOR PLANT HOLE SIZE: PLANT HOLE WIDTH (X) TO BE TWICE THE ROOT BALL SIZE OR CONTAINER DIAMETER.
-  SEE STANDARD SPECIFICATIONS FOR PLANT BED FUMIGATION AND HERBICIDAL TREATMENT.
-  APPLY FERTILIZER AT PLANTING TIME IN THE FORM OF A SLOW RELEASE PELLET OR TABLET. APPLY AT RATE RECOMMENDED BY MANUFACTURER. BOTH RATE AND FORMULATION MUST BE APPROVED BY FIELD ENGINEER PRIOR TO APPLICATION.
-  REMOVE WIRE BASKET AND FOLD BURLAP BACK FROM TOP OF ROOT BALL BEFORE BACKFILLING IS COMPLETE.
-  ALL PRUNING TO FOLLOW STANDARD ARBORICULTURAL PRACTICES AS SPECIFIED BY INTERNATIONAL SOCIETY OF ARBORICULTURE.
-  DO NOT ATTEMPT TO STRAIGHTEN A TREE THAT HAS BEEN PLANTED AT AN ANGLE WITH THE USE OF STAKING OR GUYING. DIG TREE AND REPLANT TO UPRIGHT POSITION.



NCDOT - ROADSIDE ENVIRONMENTAL UNIT
 AESTHETIC ENGINEERING SECTION
 1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557
 PH: 919-707-2935 FAX: 919-715-2554
http://www.ncdot.org/doh/operations/dp_chief_eng/roadside/

NC 22 Corridor Enhancements
 Moore County
 WBS #: - - - - -

Landscape Architect


SHEET DESCRIPTION:

| | |
|--------------------|-----------|
| PREL. DESIGN DATE: | - - - - - |
| CHECKED BY & DATE: | - - - - - |
| FINAL DESIGN DATE: | - - - - - |

Planting Details
 Landscape Plan Sheet



| | |
|------------------|-----------|
| T.I.P. # | - - - - - |
| WBS # | - - - - - |
| FED I.D. # | - - - - - |
| SHEET NO.: | L-2 |
| TOTAL SHEET NO.: | L-9 |

Sheet L-4

Sheet L-4

NC 22

NC 22

Aviation Dr

BN-3
MC-35
Top of Slope

BN-3
MC-35
Top of Slope

River Rock - 3.75 Tons
(See notes below)

River Rock - 3.75 Tons
(See notes below)

River Rock - 3.5 Tons
(See notes below)

River Rock - 3.25 Tons
(See notes below)

Top of Slope
BN-3
MC-23

Top of Slope
BN-3
MC-23

RIVER ROCK (4-8")
 - River Rock should be 4-8" in size and colors should range from dark brown to tan.
 - Before placing the stone in the designated areas, repair any washouts and ruts, regrade the areas so the stones are slightly inset in the soil, and install landscape fabric where stone will be placed. Fabric should be secured using landscape/sod staples.
 - Place the stone around the edge of the bed as shown above. The layout shown above are approximate locations, and adjustments may be needed in the field with the approval of the Division Roadside Environmental Engineer.

Selective Tree Removal (6")
 - Remove the existing Crape Myrtles trees and rootballs where the new River Birch are to be planted.



| QTY | Key | Botanical Name | Common Name | Spacing |
|-----|-----|--------------------------------|-----------------------|----------|
| 12 | BN | <i>Betula nigra</i> 'BNMTF' | Dura Heat River Birch | 15' O.C. |
| 116 | MC | <i>Muhlenbergia capillaris</i> | Pink Muhly Grass | 3' O.C. |



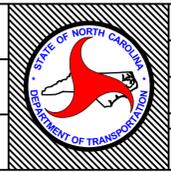
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NC 22 Corridor Enhancements
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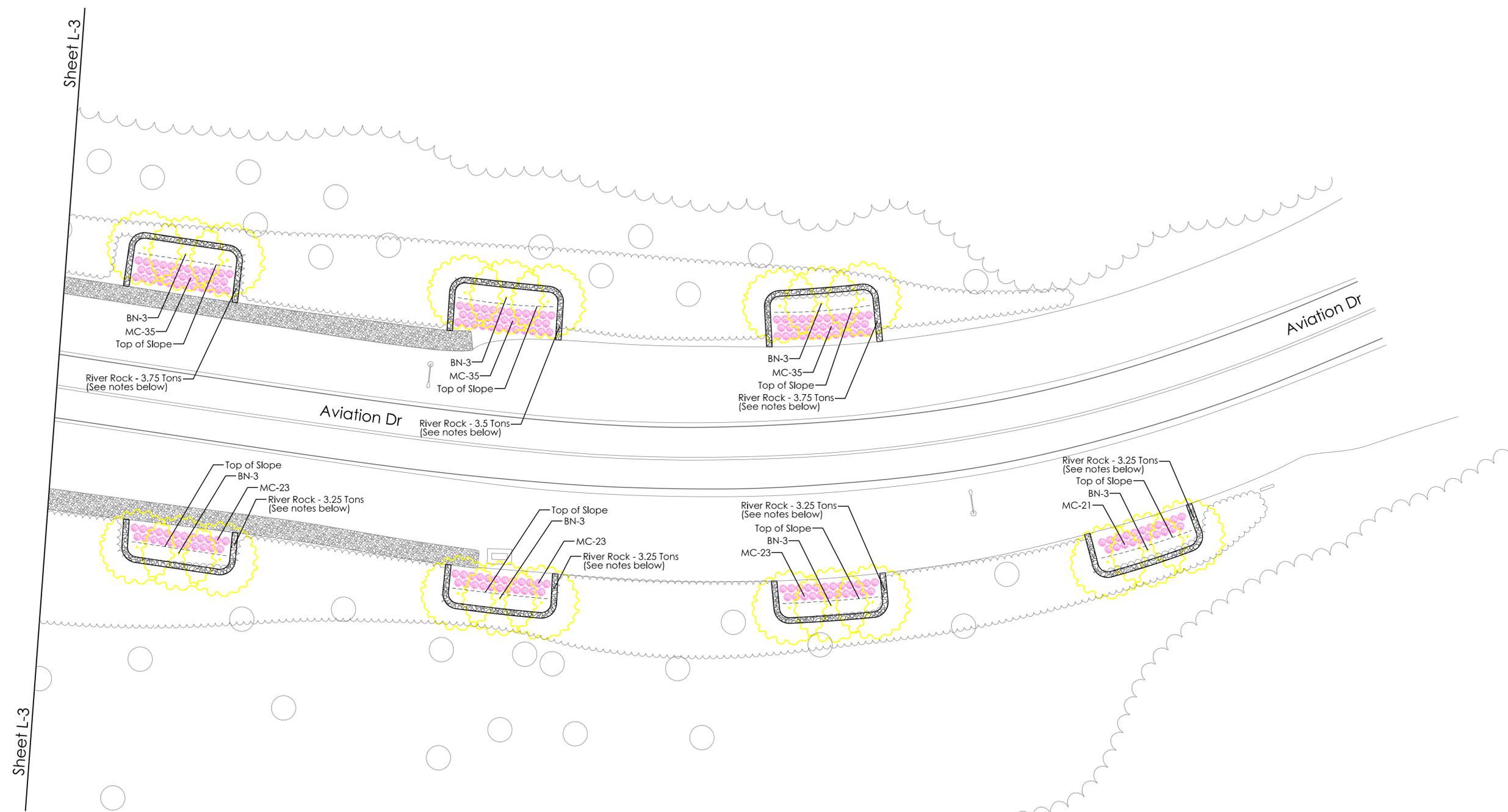
Landscape Architect
Kyle Cooney

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| | CHECKED BY & DATE: - - - - - |
| | FINAL DESIGN DATE: - - - - - |

Planting Plan
 Landscape Plan Sheet



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|-----------------------------|
| T.I.P. # - - - - - |
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| FED I.D. # - - - - - |
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| TOTAL SHEET NO.: L-9 |

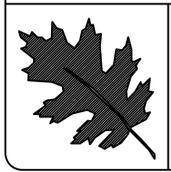


RIVER ROCK (4-8")
 - River Rock should be 4-8" in size and colors should range from dark brown to tan.
 - Before placing the stone in the designated areas, repair any washouts and ruts, regrade the areas so the stones are slightly inset in the soil, and install landscape fabric where stone will be placed. Fabric should be secured using landscape/sod staples.
 - Place the stone around the edge of the bed as shown above. The layout shown above are approximate locations, and adjustments may be needed in the field with the approval of the Division Roadside Environmental Engineer.

Selective Tree Removal (6")
 - Remove the existing Crape Myrtles trees and rootballs where the new River Birch are to be planted.



| QTY | Key | Botanical Name | Common Name | Spacing |
|-----|-----|--------------------------------|-----------------------|----------|
| 21 | BN | <i>Betula nigra</i> 'BNMTF' | Dura Heat River Birch | 15' O.C. |
| 195 | MC | <i>Muhlenbergia capillaris</i> | Pink Muhly Grass | 3' O.C. |

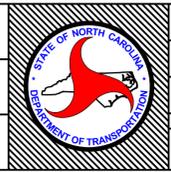


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NC 22 Corridor Enhancements
 Moore County
 WBS #: - - - - -

Landscape Architect
Kyle Cooper

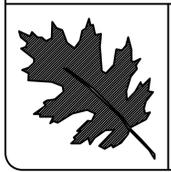
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| SHEET DESCRIPTION: | PREL. DESIGN DATE: - - - - - | Planting Plan | |
| | CHECKED BY & DATE: - - - - - | | Landscape Plan Sheet |
| | FINAL DESIGN DATE: - - - - - | | |



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| T.I.P. # | - - - - - |
| WBS # | - - - - - |
| FED I.D. # | - - - - - |
| SHEET NO.: | L-4 |
| TOTAL SHEET NO.: | L-9 |



| QTY | Key | Botanical Name | Common Name | Spacing |
|-----------|-----|--|--------------------------------|-------------|
| 99 | AT | <i>Asclepias tuberosa</i> | Butterflyweed | 1.5' O.C. |
| 3 | CC | <i>Cercis canadensis</i> 'Forest Pansy' | Forest Pansy Redbud | As Shown |
| 33 | IV | <i>Ilex vomitoria</i> 'Schilling's Dwarf' | Schilling's Dwarf Yaupon Holly | 4' O.C. |
| 57 | MW | <i>Muhlenbergia capillaris</i> 'White Cloud' | White Cloud Muhly Grass | 3' O.C. |
| 186 | PS | <i>Phlox subulata</i> 'Emerald Blue' | Emerald Blue Creeping Phlox | 15" O.C. |
| 115 sqyds | ZO | <i>Zoysia</i> 'Compadre' | Compadre Zoysiagrass | Tight Seams |



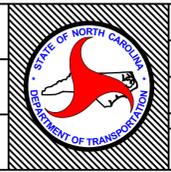
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NC 22 Corridor Enhancements
 Moore County
 WBS #: - - - - -

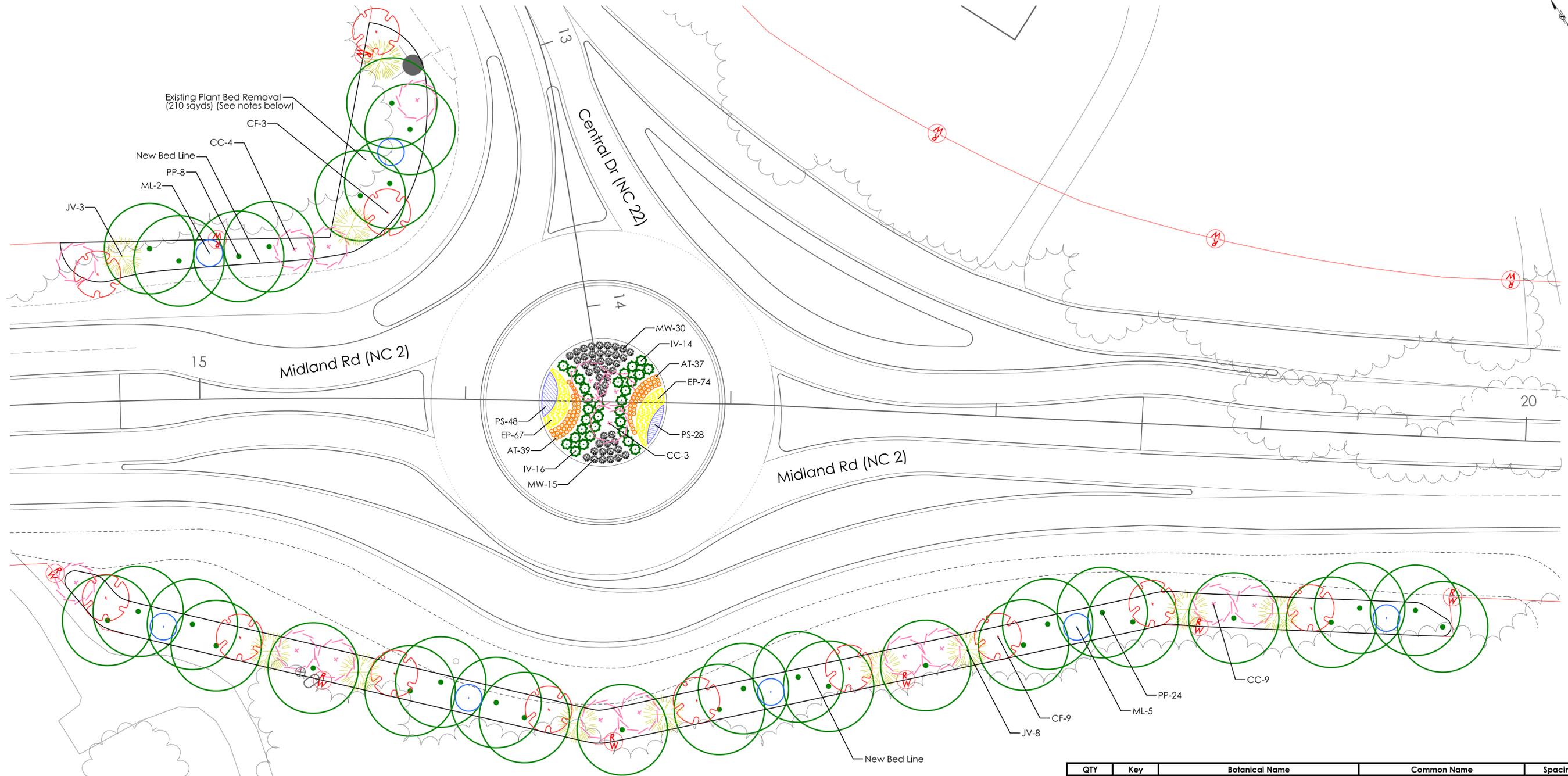
Landscape Architect
 Kyle Cooney

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| SHEET DESCRIPTION: | PREL. DESIGN DATE: - - - - - |
| | CHECKED BY & DATE: - - - - - |
| | FINAL DESIGN DATE: - - - - - |

Planting Plan
 Landscape Plan Sheet



| | |
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| T.I.P. # - - - - - | |
| WBS # - - - - - | |
| FED I.D. # - - - - - | |
| SHEET NO.: L-5 | TOTAL SHEET NO.: L-9 |



PLANT BED REMOVAL:

- Remove all existing perennials, shrubs, trees, weeds, and remaining stumps, unless otherwise specified.
- Remove all logs, stumps, down timber, dead or partially dead trees, broken trees or brush, dead brush, leaf piles, litter, and all other debris.
- DO NOT remove stumps and root systems from where plants are removed from steep slopes. Flush-cut these stumps instead.
- Salvage as much excess soil as possible to fill any remaining holes.
- Smooth and regrade the disturbed area to match the grades of the adjacent areas.

| QTY | Key | Botanical Name | Common Name | Spacing |
|-----|-----|--|-------------------------------------|-----------|
| 76 | AT | <i>Asclepias tuberosa</i> | Butterflyweed | 1.5' O.C. |
| 16 | CC | <i>Cercis canadensis</i> 'Forest Pansy' | Forest Pansy Redbud | As Shown |
| 12 | CF | <i>Comus florida</i> 'Cherokee Princess' | Cherokee Princess Flowering Dogwood | As Shown |
| 141 | EP | <i>Echinacea purpurea</i> 'PAS702917' | PowWow Wild Berry Cone Flower | 15" O.C. |
| 30 | IV | <i>Ilex vomitoria</i> 'Schilling's Dwarf' | Schilling's Dwarf Yaupon Holly | 4' O.C. |
| 11 | JV | <i>Juniperus virginiana</i> | Eastern Red Cedar | As Shown |
| 7 | ML | <i>Magnolia grandiflora</i> 'Little Gem' | Little Gem Dwarf Southern Magnolia | As Shown |
| 45 | MW | <i>Muhlenbergia capillaris</i> 'White Cloud' | White Cloud Muhly Grass | 3' O.C. |
| 32 | PP | <i>Pinus palustris</i> | Longleaf Pine | 12' O.C. |
| 76 | PS | <i>Phlox subulata</i> 'Emerald Blue' | Emerald Blue Creeping Phlox | 15" O.C. |



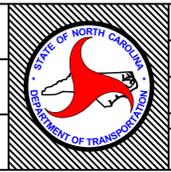
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NC 22 Corridor Enhancements
 Moore County
 WBS #: - - - - -

Landscape Architect
 Kyle Cooney

SHEET DESCRIPTION:
 PREL. DESIGN DATE: - - - - -
 CHECKED BY & DATE: - - - - -
 FINAL DESIGN DATE: - - - - -

Planting Plan
 Landscape Plan Sheet



T.I.P. # - - - - -
 WBS # - - - - -
 FED I.D. # - - - - -
 SHEET NO.: L-6
 TOTAL SHEET NO.: L-9

IRRIGATION NOTES & LEGEND

*Irrigation contractor must be licensed by the NCICLB under chapter (2008-177, S.1; 2013-383, S.3).

*All materials may be of comparable manufacture and performance to the brand listed.

GENERAL NOTES

- The irrigation design provided in the plans is schematic in nature, and the irrigation contractor may be required to make minor adjustments in the field as necessary. These adjustments shall be made at no additional cost to the owner and shall be made only after notification is made to the owner (NCDOT).

- The contractor(s) shall familiarize themselves with the site so that they are aware of any special conditions that may exist that could affect their bid proposal and shall hereafter be responsible for all cost incurred by themselves in relation to the installation.

- Place valves & boxes in plant beds where-ever possible.

- The contractor is to minimize disturbance in sod areas (cut and replace sod when necessary).

- Place pressure reducing valves in discreet locations.

- All irrigation products are to be Hunter, Rainbird, or Toro (as approved by the Division Roadside Environmental Engineer).

- If there is an existing system in place, be sure to use irrigation heads that are consistent with the existing system.

- The contractor is responsible for providing 'as built' plans to the owner (NCDOT) at the time of project approval. The plans shall be clear, concise, and show all elements of the irrigation system, the location of all equipment, irrigation lines, numbered zones, controller(s), heads and valves.

BACKFLOW PREVENTION

 - The reduced pressure backflow preventer assembly shall be the responsibility of the irrigation contractor. The backflow shall be 1.5" in size. The backflow assembly shall be installed downstream of the irrigation meter. The unit must be installed in accordance with all local and state code requirements and shall have an approved cover.

BATTERY OPERATED CONTROLLER WITH TIMER

 - Controller may be of comparable manufacture and performance to the brand named.

-The battery operated controller shall be a Hunter, Rainbird, or Toro Modular unit with at least 2 available zones. Location must be approved by the NCDOT Environmental Roadside Engineer.

- All 120 VAC wiring shall be installed in accordance with all applicable electrical code requirements.

- The contractor shall install a wired Hunter, Rainbird, or Toro rain sensor that is compatible with the make and model of the controller. The rain sensor mount is to be painted a dark hunter green in order to blend into the landscape.

CONTROLLER WIRING

- All control wiring shall be single strand copper wire with Polyethylene PE direct burial insulation. valve "common" wires shall have white insulation while valve "hot" wires shall have red insulation. Both the "common" and "hot" wires shall be #14 AWG. Valve wiring shall follow mainline piping where feasible. All wiring shall be installed in accordance with local code requirements.

- Wire splices shall be kept to an absolute minimum. Where major concentrations of splices are necessary, they shall be placed in a approved valve box with #910-2 cover installed at grade level. Splices at valve locations shall be made inside of the valve box. All splice locations shall be noted on the as built plan.

- Wire runs shall be installed with enough slack and/or expansion loops to prevent excessive strain due to thermal contraction.

- All wire splices shall be made using UL approved direct burial connectors and waterproof materials. All electrical work shall be installed according to code.

DRIP IRRIGATION



- Drip irrigation is to be 3/4" Netafim, Rainbird, or Orbit tubing with emitters spaced at 9" intervals for smaller plants & 12" intervals for larger plants at 1 gpm. An approved inline emitter drip line is to be installed under mulch in landscape areas as shown on the irrigation plan. (Install drip line before mulch is installed.)

 - Drip Valve Assembly, which includes a Hunter, Rainbird, or Toro remote control valve with flow control feature, a mesh filter, and a pressure regulator. The flow control valves shall be noted on boxes with lids mounted at grade level.

- Each system shall have a class 200 1 1/2" supply header and a flush/exhaust header to maintain even flow throughout the system. Larger systems may require center feed supply headers.

- A minimum of 2 emitters per shrub and 3 emitters per tree shall be installed.

- All drip zones should have a drip system operation indicator installed within them so technicians can observe whether systems are functioning properly. if possible, place towards the end of the drip line system in a visible area or as directed by the engineer.

ELECTRIC CONTROL VALVE

 - Valves shall be Hunter, Rainbird, or Toro.

- Location of ac powered electric remote control valve with flow control feature

- All remote control valves shall be installed in Carson valve boxes with lids mounted at grade level. Single valves may be installed in a Carson model #910-1 valve box with cover, while multiple valves (up to 2 - 1" valves or 1 - 1 1/2") shall be installed in Carson model #1419-1 box with #1419-2 cover.

HEADS



- Hunter, Rainbird, or Toro pop-up rotator spray head fitted with adjustable nozzles or 90°, 180°, 270°, and 360° fixed arc nozzles with the following radii: 14".

- All heads shall have a 6"-12" pop-up stroke, if installed with less than 1/3 of the sprinkler body exposed above grade, it shall be installed on polyethylene flex swing joint poly pipe fitted with elbows (3/8" insert by 1/2" M.P.T. and/or 3/8" insert by 3/4" M.P.T.)

-If greater than 1/3 of the sprinkler body is exposed, then the 6"-12" pop-up head shall be mounted on a schedule 40 PVC pipe riser as described below in relation to mounting shrub head models. In mounting 6"-12" pop-up heads on shrub type risers, care shall be taken to install the head in such a manner that the surrounding plant material (planned or existing) will hide the body of the sprinkler.

- All pop-up irrigation heads designed adjacent to curbs or pavement shall be installed with a clearance of 1 1/2' from the edges of all paved areas to provide for edging and maintenance operations. Heads installed on shrub risers or with the top of the head more than 1 1/2" above the grade shall be installed with a minimum 6" clearance from paved areas.

- All threaded pipe connections shall be assembled using Teflon thread sealing tape.

PIPE

 - PR 200 PVC Lateral Piping

-Minimum depth of cover over lateral piping to be 12". Lateral pipe sizing schedule and summation of gallonage demand on a particular branch of pipe within a control section shall be determined by using the gpm for a nozzle based on a 50 psi base of head pressure and full radius at that pressure as reported in the manufacturer's product catalog. Pipe sizes for the lateral lines shall be as follows:

- For 0 to 15 gpm accumulated flow use 3/4" PR 200 PVC pipe.
- For 15 up to 35 gpm use 1" PVC pipe.
- Allow for friction loss.

 - PR 200 Main Line Piping.

- Size of pipe to be a minimum of 1 1/2"
- Depth of cover of mainline piping to be 18"

- Piping shall be PR 200 solvent weld PVC pipe with schedule 40 PVC solvent weld fittings unless otherwise noted.

- The contractor shall take all precautions necessary to avoid damaging existing plantings and their roots during the installation of the irrigation system and shall coordinate their efforts with the landscape contractor to optimize the efficiency and the aesthetic quality of the installation.

SLEEVES



- Sleeves shall be 4" PVC. The irrigation contractor shall coordinate with the landscape contractor to insure proper installation of the irrigation system with the landscape and hardscape.

WATER SUPPLY/METER

 - The meter shall be the owner's/town's responsibility.

- The meter is 1.5" in size. Since the water supply for the system will be potable water, the contractor will be required to install a backflow prevention device which will be located downstream of the irrigation meter.

- This irrigation system shall be capable of delivering 33 gpm minimum with one control station operating at a time at 60 psi at the base of the head for optimum performance of the irrigation system.

Estimated Irrigation Quantities

Meter Locations - 1
Backflow Preventers - 1
Battery-powered Controller - 1
Spray Zone Valves - 1
Main Line Pipe - 143 LF
Lateral Pipe - 175 LF
4" PVC Sleeve Pipe - Already Provided

Rotator Spray Heads:
14' r - 13

Quantities are estimated based on design drawings. refer to plans for any discrepancies. plans take priority over these estimated quantities. Estimated quantities do not cover all materials necessary for installation. Quantities may be adjusted slightly due to site conditions, specific irrigation equipment, and implementation, or as directed by the NCDOT Engineer.



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AESTHETIC ENGINEERING SECTION
1557 MAIL SERVICE CENTER RALEIGH NC 27699-1557
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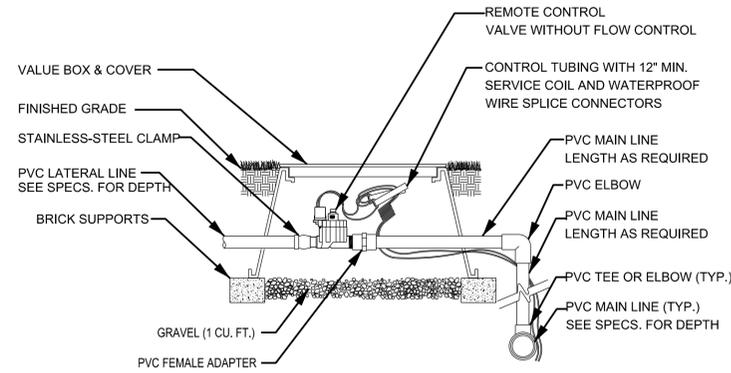
NC 22 Corridor Enhancements
Moore County
WBS #: - - - - -

Landscape Architect

Kyle Cooper

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|--------------------|------------------------------|---------------------------|----------------------|
| SHEET DESCRIPTION: | PREL. DESIGN DATE: 8/24/21 | Irrigation Specifications | T.I.P. # - - - - - |
| | CHECKED BY & DATE: - - - - - | Landscape Plan Sheet | WBS # - - - - - |
| | FINAL DESIGN DATE: - - - - - | | FED I.D. # - - - - - |
| | | | SHEET NO.: L-7 |
| | | | TOTAL SHEET NO.: L-9 |



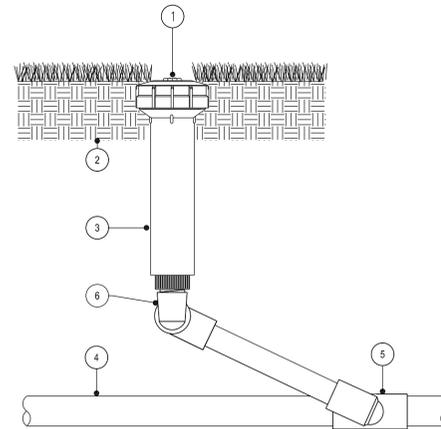


NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 2. DO NOT SCALE DRAWINGS.

 **VALVES & BOX**
 1" PLASTIC VALVE (NOT TO SCALE)

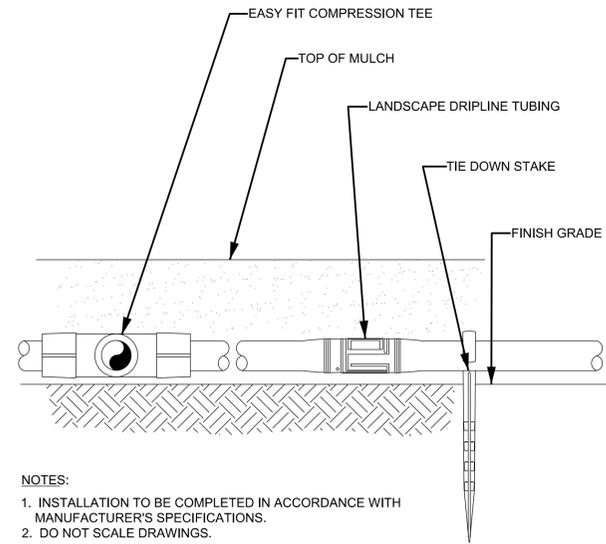
LEGEND

1. MPR PLUS NOZZLE (SIZE PER PLAN)
2. APPROVED BACKFILL
3. SPRINKLER
4. LATERAL PIPE
5. LATERAL TEE
6. MANUFACTURED SWING JOINT



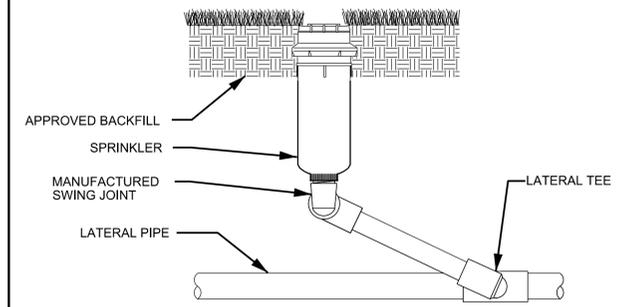
NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATIONS.
 2. DO NOT SCALE DRAWINGS.
 3. INSTALL SPRINKLERHEAD AT FINISHED GRADE

 **ROTOR SPRINKLER**
 4 INCH POP-UP (SWING JOINT) (NOT TO SCALE)



NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. DO NOT SCALE DRAWINGS.

 **LANDSCAPE DRIPLINE ON GRADE**
 POTABLE SYSTEM (NOT TO SCALE)



NOTES:
 1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
 2. DO NOT SCALE DRAWINGS.
 3. INSTALL SPRINKLER AT FINISHED GRADE.

 **POP-UP SPRAY HEADS**
 SINGLE-STREAM SPRINKLER, SWING JOINT (NOT TO SCALE)

BATTERY POWERED DDCWP CONTROLLER MOUNTED ON INSIDE OF BOX. SUBMIT MOUNT-HARDWARE FOR APPROVAL.

LEAVE SUFFICIENT AMOUNT OF WIRE FOR LID REMOVAL AND ACCESS TO CONTROLLER (APPROX. 3'-4')

HARDWARE TO SECURE BOX LID

PROVIDE SUFFICIENT AMOUNT OF WIRE LENGTH FOR MOUNTING CONTROLLER ON THE LID (APPROX. 3'-4')

VALVE
 3" GRAVEL BASE

VALVE BOX LID (UNDERSIDE)
 VALVE BOX LID
 VALVE BOX (INSTALLED PER MANUFACTURER INSTRUCTIONS)
 BOX BURIED WITH 1/2" EXPOSED (OR AS DIRECTED BY THE ENGINEER).
 FINISHED GRADE

 **DDCWP CONTROLLER BOX LID MOUNT**
 BATTERY POWERED CONTROLLER (NOT TO SCALE)



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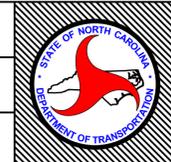
NC 22 Corridor Enhancements
 Moore County
 WBS #: - - - - -

Landscape Architect

Kyle Cooper

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Irrigation Details
 Landscape Plan Sheet



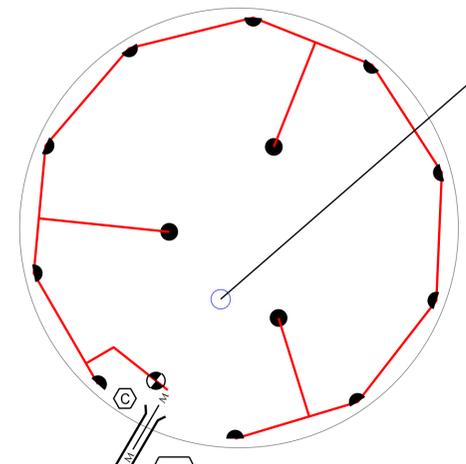
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Midland Rd (NC 2)

Midland Rd (NC 2)

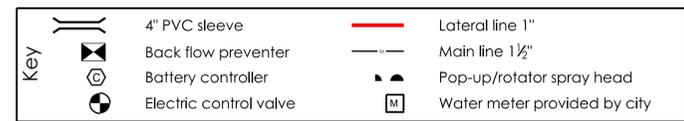
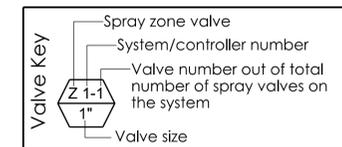
Existing stub-out access to sleeve
(Location may vary from drawing)



Z 1-1
1"

PVC sleeve already provided on project site.
(Location may vary from drawing)

R
W



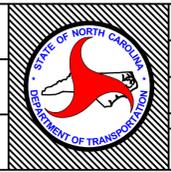
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Landscape Architect
Kyle Cooney

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| Irrigation Plan |
| Landscape Plan Sheet |



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| T.I.P. # | - - - - - |
| WBS # | - - - - - |
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| TOTAL SHEET NO.: | L-9 |