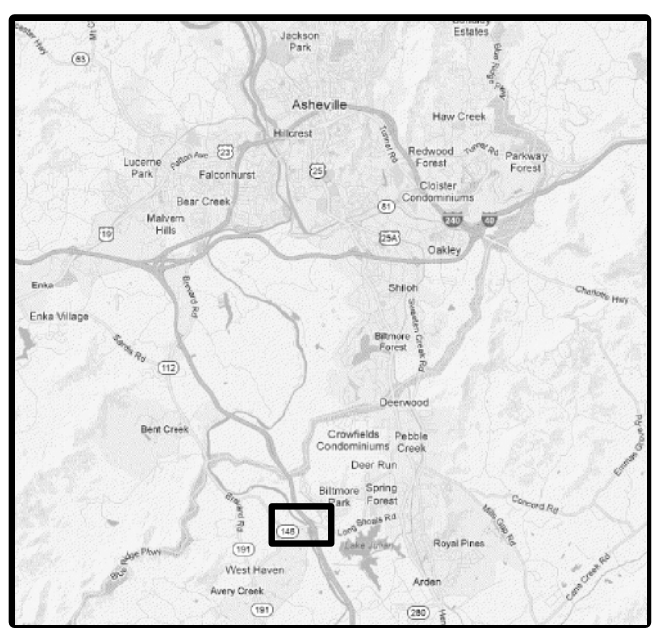
PROJECT: LANDSCAPE PLANTING AT I-26 & NC 146 - BUNCOMBE COUNTY

PROPOSED HIGHWAY LANDSCAPE DEVELOPMENT PROJECT

T.I.P. #	STATE PROJECT W.B.S. #	SHEET #	SHEET # TOTAL
R-2813B		1	6
FED. PROJ. #	DESCRIPTION		DIVISION
NA	I-26 & NC 146 LONG SHOALS ROAD		13

Vicinity Map



Summary of Quantities

Quan.	Key	Unit	Botanical Name	Common Name	Furnish	ASNS	Spacing
Plant Materials							
Ornamental Trees							
6	CV	EA	*Chionanthus virginicus*	Fringe Tree	4-5', Multi-stem shrub form, Well branched	1.3.1	As shown
3	CCB	EA	*Cornus florida 'Cherokee Brave'*	Cherokee Brave Flowering Dogwood	5-6', Single Straight Trunk, Well branched	1.2.4	To be field staked
14	CCP	EA	*Cornus florida 'Cherokee Princess'*	Cherokee Princess Flowering Dogwood	5-6', Single Straight Trunk, Well branched	1.2.4	To be field staked
12	OA	EA	*Oxydendron arboreum*	Sourwood	5-6', Single Straight Trunk, Well branched	1.2.3	To be field staked
Conifer and Evergreen Trees							
5	AC	EA	*Abies concolor 'Candicans'*	Concolor Fir	10-12', B&B, Full to ground, Matched specimens	3.2.4	To be field staked
44	TO	EA	*Thuja occidentalis 'Hetz Wintergreen'*	Hetz Wintergreen Arborvitae	10-12', B&B, Heavy and full to ground	3.2.6	20' OC
Grasses and Sedges							
206	PVS	EA	*Panicum virgatum 'Shenandoah'*	Shenandoah Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	3' OC
507	PVT	EA	*Panicum virgatum 'Thundercloud'*	Thundercloud Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	6' OC
4,917	SS	EA	*Schizachyrium scoparium 'Blaze'*	Blaze Little Bluestem	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	2' OC
3,614	SN	EA	*Sorghastrum nutans 'Indian Steel'*	Blue Indian Grass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	2' OC
891	SB	EA	*Spartina bakerii*	Cord Grass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	5' OC
Replacement Plant Materials							
Replacements - Ornamental Trees							
1	CV	EA	*Chionanthus virginicus*	Fringe Tree	4-5', Multi-stem shrub form, Well branched	1.3.1	As shown
1	CCB	EA	*Cornus florida 'Cherokee Brave'*	Cherokee Brave Flowering Dogwood	5-6', Single Straight Trunk, Well branched	1.2.4	To be field staked
1	CCP	EA	*Cornus florida 'Cherokee Princess'*	Cherokee Princess Flowering Dogwood	5-6', Single Straight Trunk, Well branched	1.2.4	To be field staked
1	OA	EA	*Oxydendron arboreum*	Sourwood	5-6', Single Straight Trunk, Well branched	1.2.3	To be field staked
Replacements - Conifer and Evergreen Trees							
1	AC	EA	*Abies concolor 'Candicans'*	Concolor Fir	10-12', B&B, Full to ground, Matched specimens	3.2.4	To be field staked
5	TO	EA	*Thuja occidentalis 'Hetz Wintergreen'*	Hetz Wintergreen Arborvitae	10-12', B&B, Heavy and full to ground	3.2.6	20' OC
Replacements - Grasses and Sedges							
21		EA	*Panicum virgatum 'Shenandoah'*	Shenandoah Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	3' OC
51		EA	*Panicum virgatum 'Thundercloud'*	Thundercloud Switchgrass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	6' OC
492		EA	*Schizachyrium scoparium 'Blaze'*	Blaze Little Bluestem	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	2' OC
361		EA	*Sorghastrum nutans 'Indian Steel'*	Blue Indian Grass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	2' OC
89		EA	*Spartina bakerii*	Cord Grass	3 1/2 to 4" Pot, Tray of 18, Must be fully rooted into this container with full top growth and weed free	12.2.5	5' OC

Quan.		Unit	Description
Other Items			
1		LS	**Post-Emergence Herbicidal Treatment for Plant Beds (approx. 11,634 SY)**
1		LS	**Pre-Emergence Herbicidal Treatment for Plant Beds (approx. 11,634 SY)**
1,623		CY	**Mulch for Planting**
66		M/G	**Water for Planting**
1.32		Acre	**Seeding and Mulching**
24		Cycle	**Mowing (approx. 1.74 Acres)**
2041		SY	**Zoysia Sod**
297		M/G	**Water for Sod**
543		LF	**Mulch Catcher**
17		Each	**Monthly Establishment Work Cycle**

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:

1..... TITLE, DESCRIPTION, AND SUMMARY OF QUANTITIES

2..... PLANTING DETAILS

3-6.... LANDSCAPE PLANS

PREPARED BY: CSM

PRELIMINARY DESIGN DATE: JAN. 7, 2013

REVISION DATE:

FINAL DESIGN DATE: JAN. 11, 2013

I-26 AND NC 146, LONG SHOALS ROAD

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

STATE OF
NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

LOCATION: INTERCHANGE OF I-26 & NC 146, LONG SHOALS ROAD AND NC 146 TO CLAYTON ROAD

TYPE OF WORK: LANDSCAPE PLANTING

COUNTY: BUNCOMBE COUNTY

DIVISION: 13
55 ORANGE STREET, ASHEVILLE, NC 28801

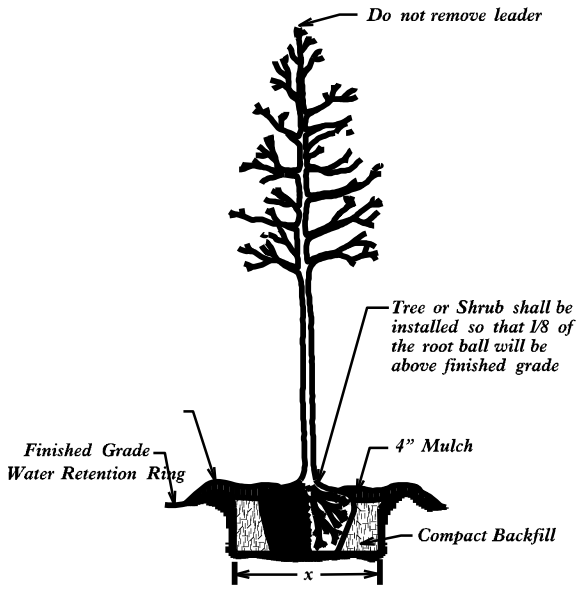
DIV. ENG.: J. J. SWAIN, JR.,PE

DIV. ROADSIDE DEPT. ENG.: KEITH HILL

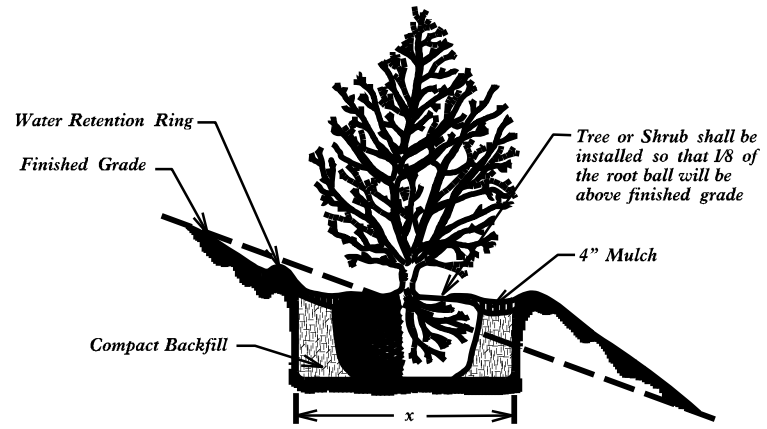
2004 American Standard for Nursery Stock

2012 NCDOT STANDARD SPECIFICATIONS

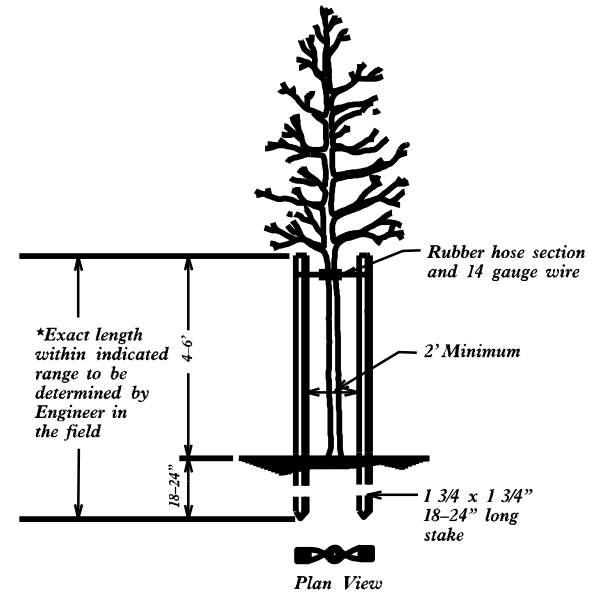
PREPARED IN THE OFFICE OF:
NCDOT- ROADSIDE ENVIRONMENTAL UNIT
LANDSCAPE DESIGN & DEVELOPMENT SECTION
1557 MAIL SERVICE CENTER
RALEIGH NC 27699 919-707-2920



Tree or Shrub Planting Detail (Level Ground)

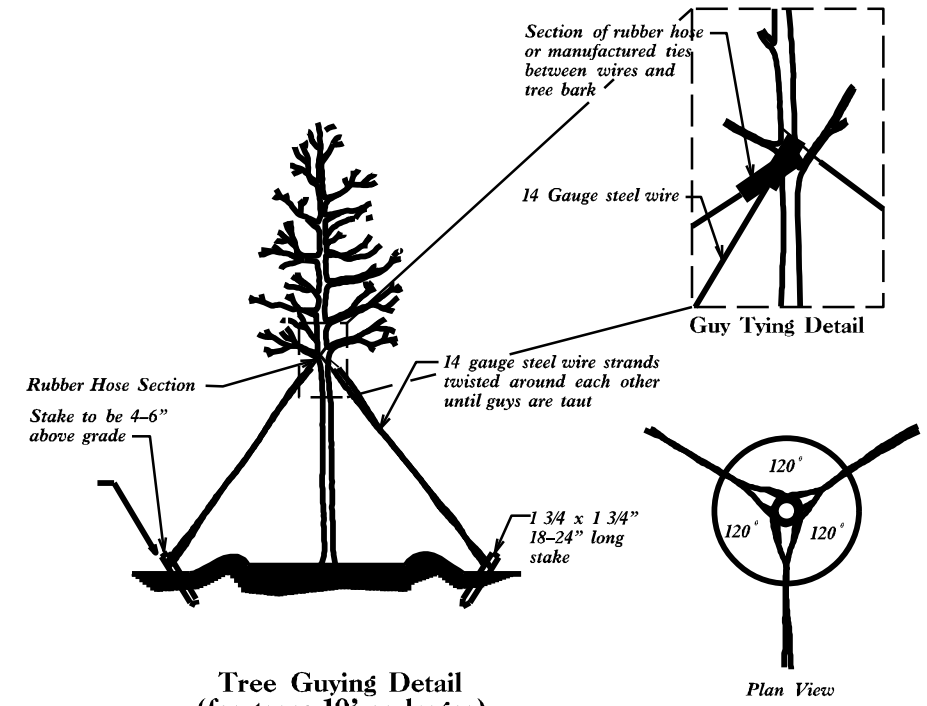


Tree or Shrub Planting Detail (Sloping Ground)



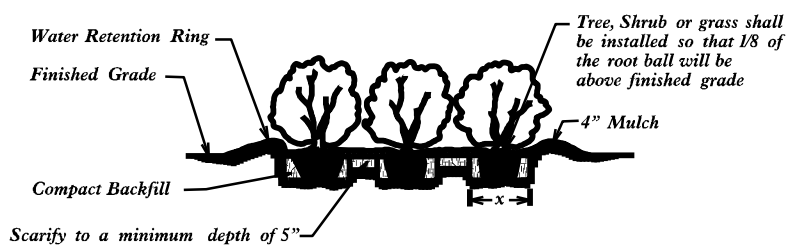
Staking Detail (for trees 6' to 10')

* Utilize staking detail only if requested by the Engineer.

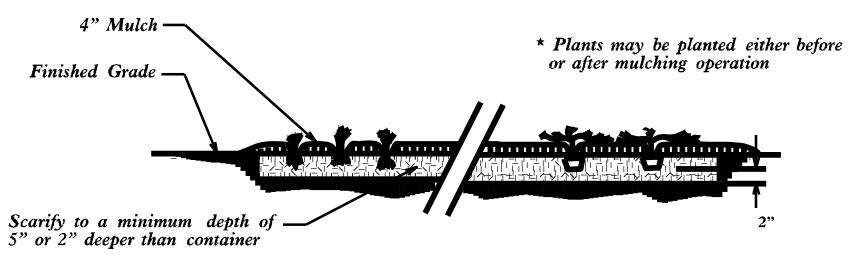


Tree Guying Detail (for trees 10' or larger)

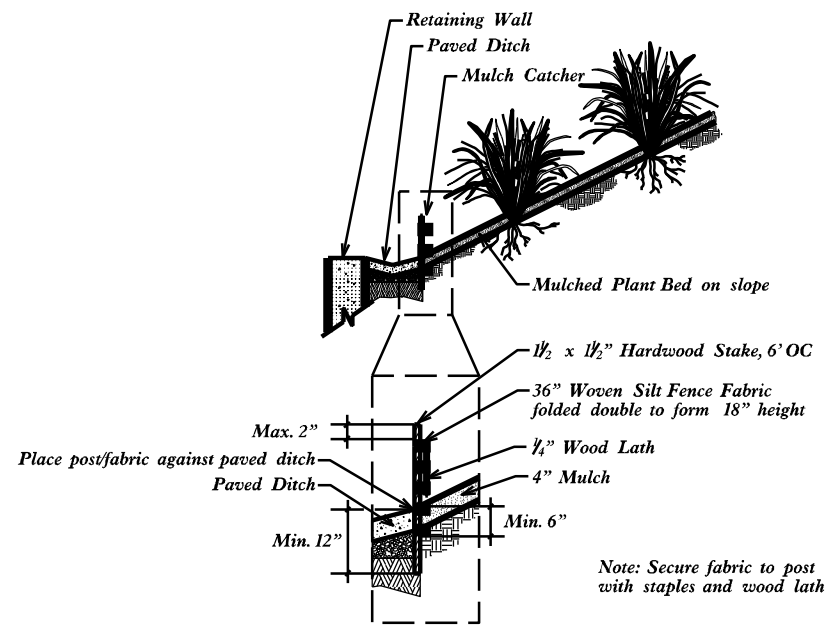
* Utilize guying detail only if requested by the Engineer.



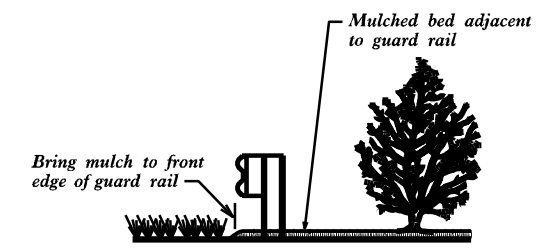
Bed Planting Detail



Ground Cover Planting Detail



Mulch Catcher Detail



Bed /Guard Rail Detail

Notes:

- Schedule for Plant Hole Size: X = 2 times the diameter of the container or the root ball diameter
- Fertilizer shall be applied at time of planting. Fertilizer shall be a slow release pellet or tablet. Formulation shall be approved by the engineer in the field. Rates shall be per manufacturer's recommendations and approved by the engineer in the field. Thouroughly mix with topsoil, backfill or scarified soil.
- Before backfilling, cut and remove wire basket and remove burlap around top of root ball to expose root collar. Depending on type of soil at installation site, set root ball at grade or slightly above as directed by the Engineer. Do not place mulch against root collar. Do not place mulch within 12" of tree trunk or 6" of shrub trunk.
- Staking and guying shall be at the direction of the enginner in the field.
- When mulched bed is adjacent to guard rail run mulch to front edge of guard rail – see detail
- When mulched bed is located on a steep slope and/or behind a paved ditch or other drainage apparatus include a 'mulch catcher' – see detail

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LANDSCAPE DESIGN & DEVELOPMENT
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R-2813B:
INTERCHANGE OF I-26 & NC 146, LONG SHOALS ROAD & NC 146 TO CLAYTON ROAD

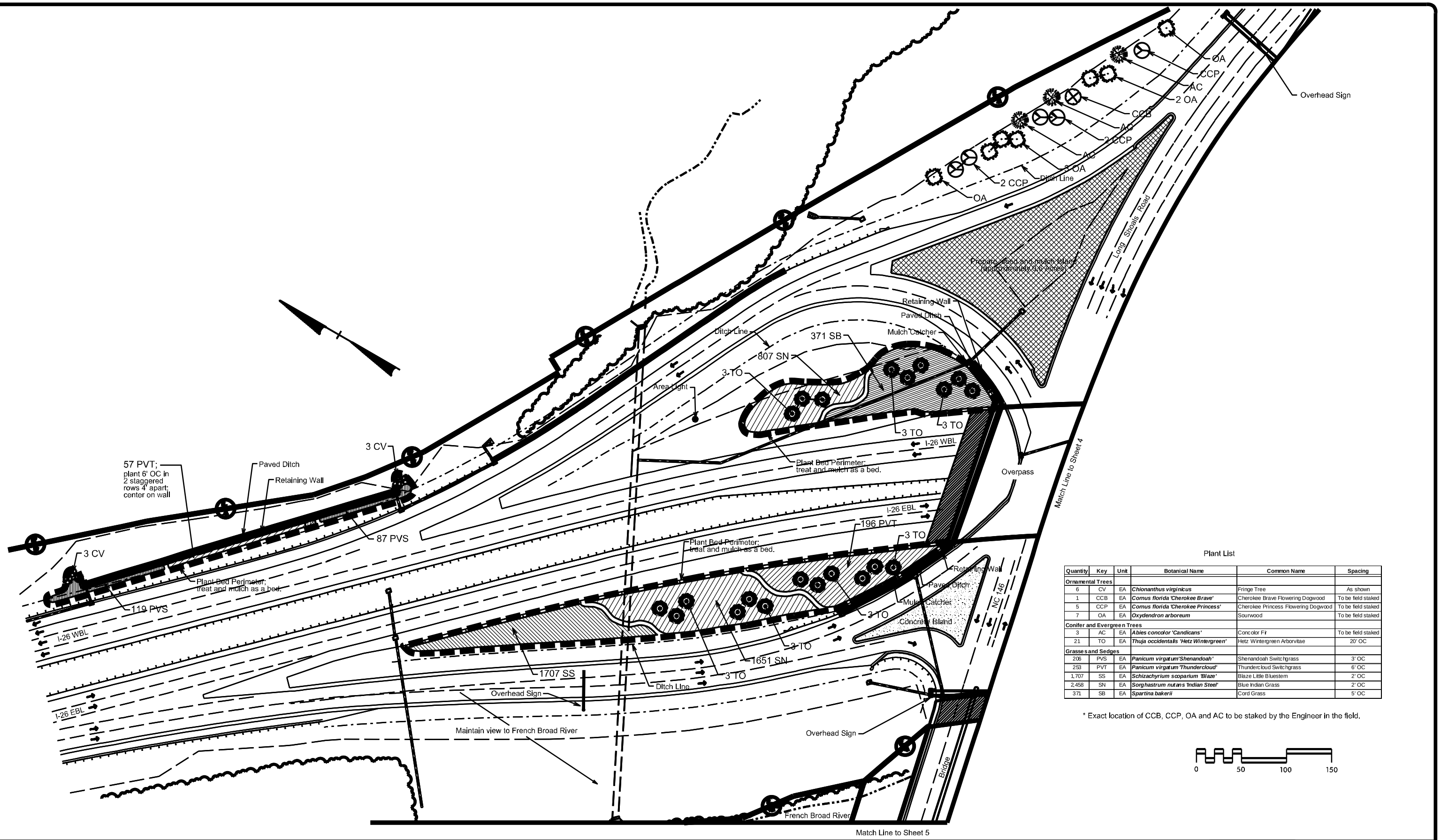
Connie Morgan
REU ENGINEER

SHEET DESCRIPTION:
LANDSCAPE DEVELOPMENT
PLANTING DETAILS

PRELIMINARY DESIGN DATE: JAN. 7, 2013
FINAL DESIGN DATE: JAN. 11, 2013
PROJECT: R-2813B
I-26 & NC 146, LONG SHOALS ROAD
DIVISION AND COUNTY:
DIVISION 13 - BUNCOMBE COUNTY

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SHEET NO: 2
TOTAL SHEET NO: 6



Plant List

Quantity	Key	Unit	Botanical Name	Common Name	Spacing
Ornamental Trees					
6	CV	EA	***Chionanthus virginicus***	Fringe Tree	As shown
1	CCB	EA	***Cornus florida 'Cherokee Brave'***	Cherokee Brave Flowering Dogwood	To be field staked
5	CCP	EA	***Cornus florida 'Cherokee Princess'***	Cherokee Princess Flowering Dogwood	To be field staked
7	OA	EA	***Oxydendron arboreum***	Sourwood	To be field staked
Conifer and Evergreen Trees					
3	AC	EA	***Abies concolor 'Candicans'***	Concolor Fir	To be field staked
21	TO	EA	***Thuja occidentalis 'Hetz Wintergreen'***	Hetz Wintergreen Arborvitae	20' OC
Grasses and Sedges					
206	PVS	EA	***Panicum virgatum'Shenandoah'***	Shenandoah Switchgrass	3' OC
253	PVT	EA	***Panicum virgatum 'Thundercloud'***	Thundercloud Switchgrass	6' OC
1,707	SS	EA	***Schizachyrium scoparium 'Blaze'***	Blaze Little Bluestem	2' OC
2,458	SN	EA	***Sorghastrum nutans 'Indian Steel'***	Blue Indian Grass	2' OC
371	SB	EA	***Spartina bakerii***	Cord Grass	5' OC

* Exact location of CCB, CCP, OA and AC to be staked by the Engineer in the field.

0 50 100 150

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SHEET DESCRIPTION:
LANDSCAPE DEVELOPMENT
PLANTING PLAN

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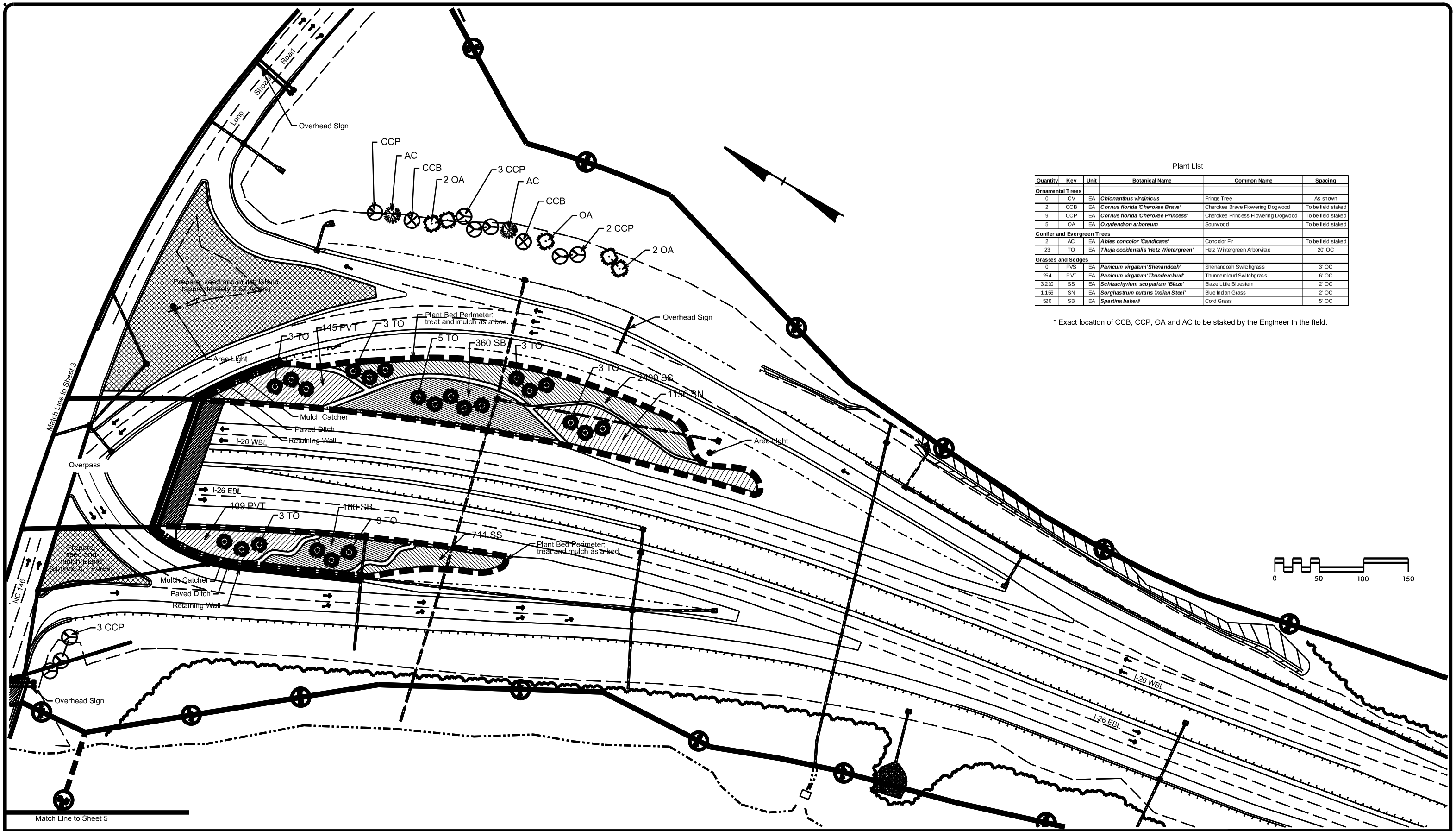
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SHEET NO : 3
TOTAL SHEET NO : 6



Plant List

Quantity	Key	Unit	Botanical Name	Common Name	Spacing
Ornamental Trees					
0	CV	EA	***Chionanthus virginicus***	Fringe Tree	As shown
2	CCB	EA	***Cornus florida 'Cherokee Brave'***	Cherokee Brave Flowering Dogwood	To be field staked
9	CCP	EA	***Cornus florida 'Cherokee Princess'***	Cherokee Princess Flowering Dogwood	To be field staked
5	OA	EA	***Oxydendron arboreum***	Sourwood	To be field staked
Conifer and Evergreen Trees					
2	AC	EA	***Abies concolor 'Candicans'***	Concolor Fir	To be field staked
23	TO	EA	***Thuja occidentalis 'Hetz Wintergreen'***	Hetz Wintergreen Arborvitae	20' OC
Grasses and Sedges					
0	PVS	EA	***Panicum virgatum 'Shenandoah'***	Shenandoah Switchgrass	3' OC
254	PVT	EA	***Panicum virgatum 'Thundercloud'***	Thundercloud Switchgrass	6' OC
3,210	SS	EA	***Schizachyrium scoparium 'Blaze'***	Blaze Little Bluestem	2' OC
1,156	SN	EA	***Sorghastrum nutans 'Indian Steel'***	Blue Indian Grass	2' OC
520	SB	EA	***Spartina bakerii***	Cord Grass	5' OC

* Exact location of CCB, CCP, OA and AC to be staked by the Engineer in the field.

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SHEET DESCRIPTION:
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DIVISION AND COUNTY:
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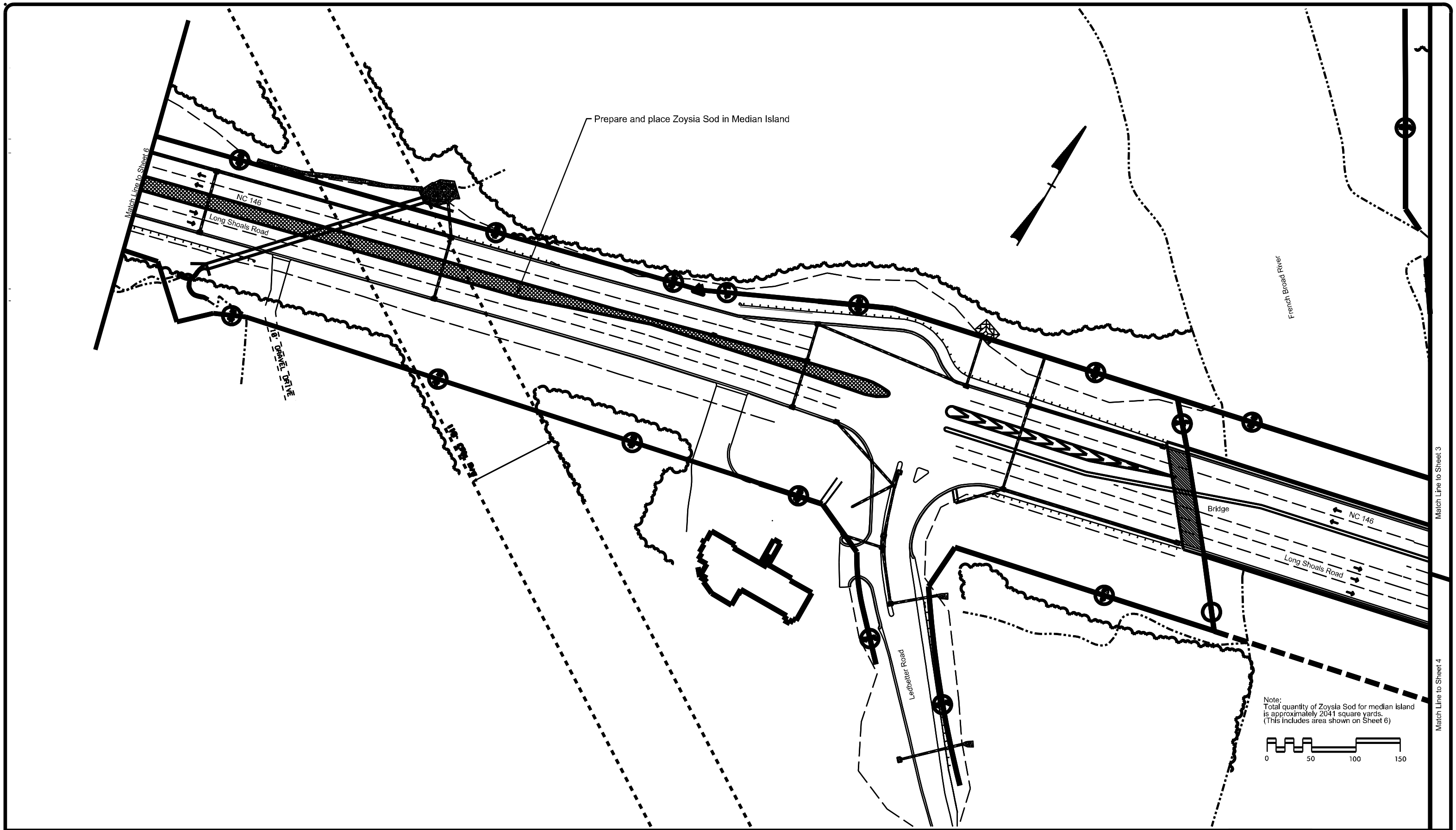
STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SHEET NO : 4
TOTAL SHEET NO : 6



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Connie Morgan
REU ENGINEER

SHEET DESCRIPTION:
LANDSCAPE DEVELOPMENT
PLANTING PLAN SHEET

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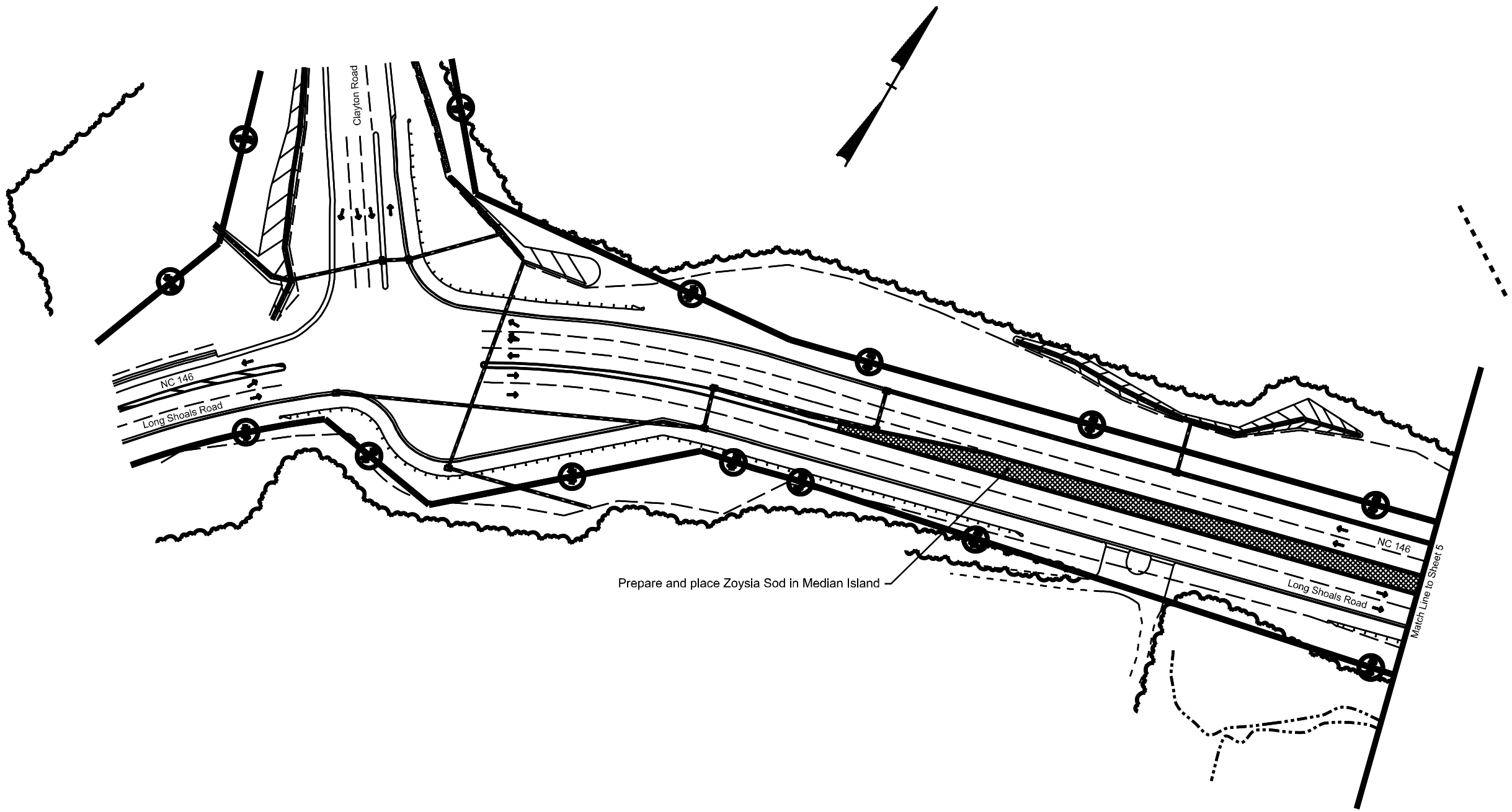
DIVISION AND COUNTY:
DIVISION 13 - BUNCOMBE COUNTY

STATE OF NORTH CAROLINA DEPARTMENT OF TRANSPORTATION

SHEET NO: 5
TOTAL SHEET NO: 6



Note:
Total quantity of Zoysia Sod for median island is approximately 2041 square yards.
(This includes area shown on Sheet 5)

0 50 100 150

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DIVISION AND COUNTY:
DIVISION 13 - BUNCOMBE COUNTY

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SHEET NO : 6
TOTAL SHEET NO : 6