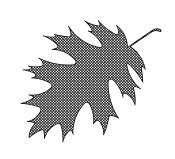


# STATE OF NORTH CAROLINA - DEPARTMENT OF TRANSPORTATION

	T.I.P. #	STATE PROJECT W.B.S. #		TOTAL SHEETS
	I - 3802B	36780.1.2	1	17
	FED. PROJ. #	D. PROJ. # DESCRIPTION		DIVISION
I - 85 from SR 2180		0		
		to US 29-601		

County Line.

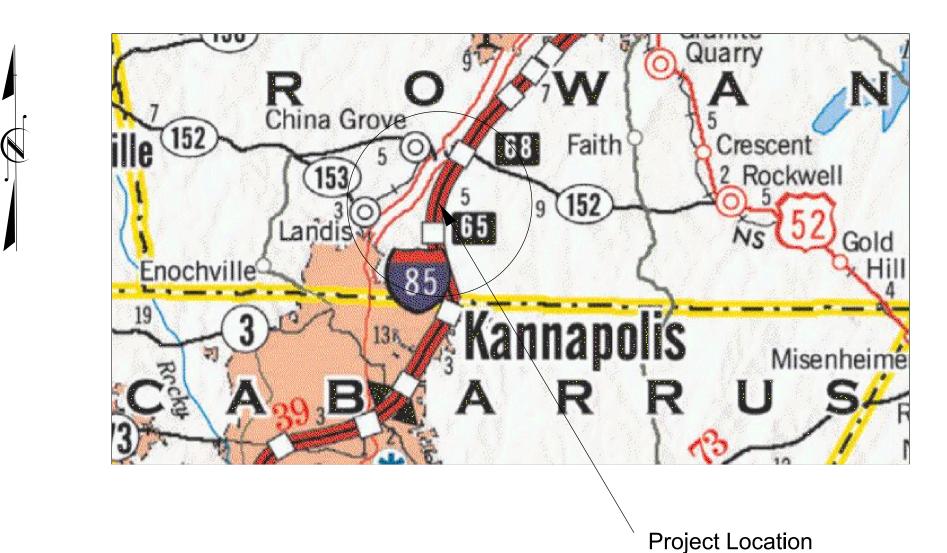
City or Town Line



## PROPOSED HIGHWAY LANDSCAPE DEVELOPMENT PROJECT



Vicinity Map



## **Summary of Quantities** 2-2 1/2" Cal., B&B, Well 2-2 1/2" Cal., B&B, Well ranched, Sgl. Straight Leade 2-2 1/2" Cal., B&B, Well 3 - 3 1/2", Min. 14', B&B, 3 - 3 1/2", Min. 14', B&B, 8-10', B&B Heavy nmingbird Summ 126 EA IWR | Ilex verticillata 'Southern Gentleman 18-24", #3 Cont., Min. 3 Canes Emerald American Arborvitae 1 Cont. Fully Rooted pecial Shrub Planting - 0.32 Acres Ceanothus americanus Kodiak Orange Bush Honeysuckle 18-24", #3 Cont., Min. 3 Canes enry's Garnet Quantity Unit Pre-Emergence Herbicidal Treatment for Plant Beds Water for Planting Decorative Pavemen 9,580 SF Seeding and Mulching(Turfgrass) Topsoil Grading 173 SqYd 363 CY Mobilization (1% Total of Pay Items)

llex verticillata 'Jim Dandy' is the male pollinator for 'Red Sprite'. Ilex verticillata 'Southern Gentleman' is the male pollinator for 'Winter Red'. Intersperse approximately 10% of the total quantity of each bed with the appropriate male pollinator.

PLANS PREPARED FOR:

NCDOT- Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh NC 27699

Contact: Jeff Lackey - jefflackey@ncdot.gov

PROJECT ADMINISTRATION:

NCDOT- Division Nine 375 Silas Creek Parkway Winston Salem, NC 27127 Division Engineer - Pat Ivey, PE

Roadside Environmental Department 405 Polo Road Winston Salem, NC 27105 Contact: Daniel Horne - dmhorne@ncdot.gov

## PLANS PREPARED BY:

Michael Baker International 8000 Regency Parkway Cary, NC 27518 Connie Morgan - Aesthetics Designer Fred N. Grogan Jr. - Landscape Architect

2018 NCDOT Standard Specifications 2014 American Standard for Nursery Stock Conceptual Design Date: March, 2021 Preliminary Design Date: November 9, 2021 Final Design Date: February 18, 2022 Revision Dates:

### CONVENTIONAL SYMBOLS

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	- $(c)$ $   -$
Prop. Control of Access Line	
Property Line	
Easement Line	
Slope Stake Line	
Exist. Fence	<del>+</del>
Prop. Woven Wire Fence	<del>0 0 0</del>
Prop. Chain Link Fence	
Exist. Road	
Prop. Road	
Guardrail	
Survey Line	
Denotes Line Equality	
Bridge	
Culvert	
Railroad	
Woods	# ♦ # ♦ OR OR
Exist. Telephone Pole	-
Prop. Telephone Pole	———
Tower Pole and Line	
Exist. Power Pole	<b>_</b>
Prop. Power Pole	0-
Sanitary Sewer Line	→ ss
Water Line	
Gas Line	GAS
Picnic Shelter	
Regeneration	
Reforestation	

### INDEX OF L SHEETS:

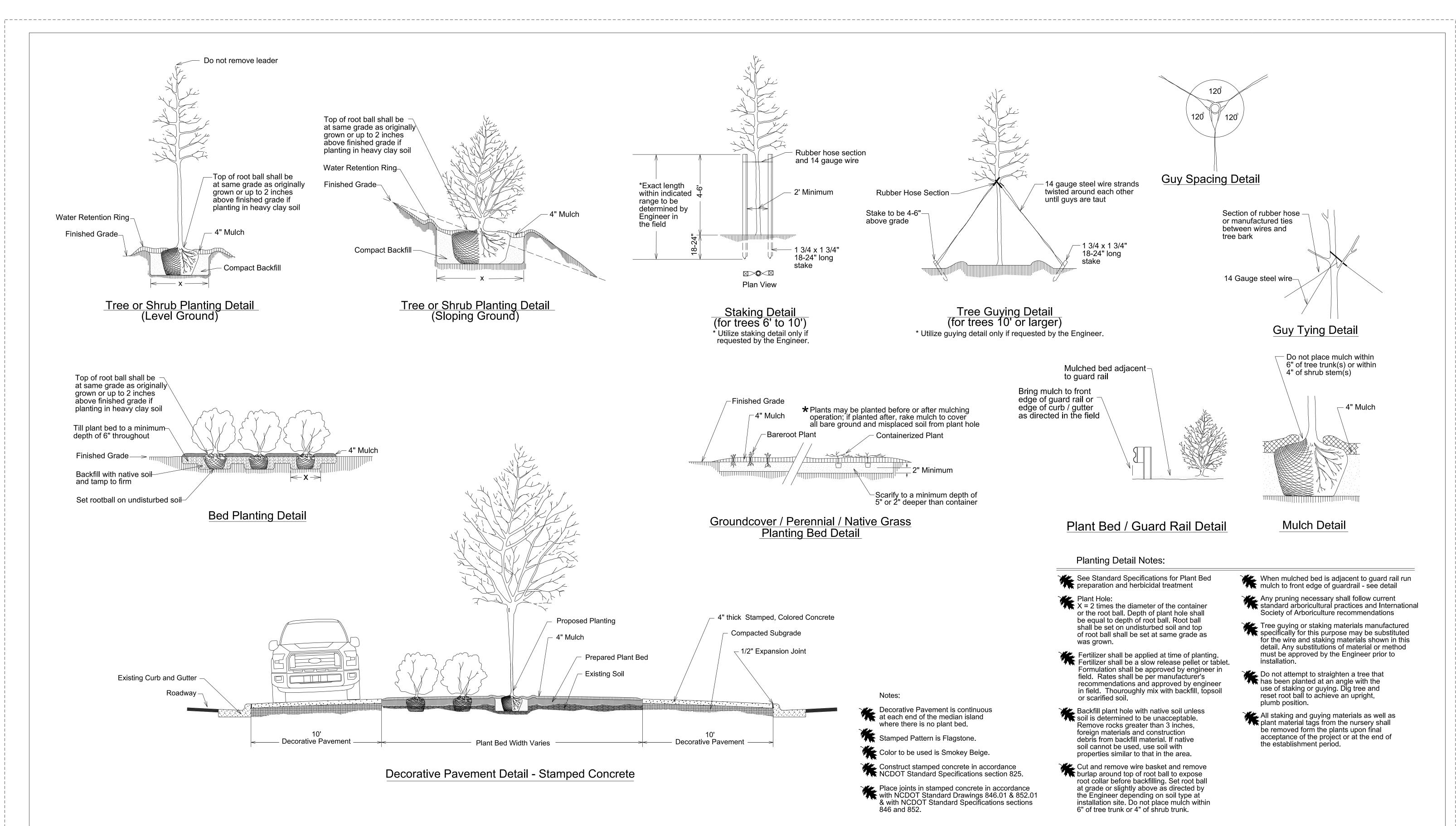
- 1 ......Title, Description, Location and Summary of Quantities
- 2 ......Planting and Pavement Details
- 3 .....Reforestation and Special Shrub Planting
- 4-17....Planting Plans

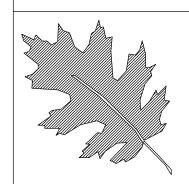
I - 85 from SR 2180 to US 29-601 Connector

Cabarrus and Rowan County

LANDSCAPE PLANTING

FINAL DESIGN PLANS



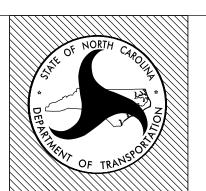


NCDOT - Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



I - 85 from Lane Stre SR 2180 (Exit 63) Cabarrus County to US 29-601 connect (Exit 68) in Rowan County

I - 3802 B

eet,	neet Description:	
in	scrip	
to	De	
tor	neet	

Landscape Development		ept Design Date ch 25, 2021
Details (Planting and Pavement)		Design Date ruary 18, 2022
Division 9 - Forsyth County	Sheet:	2

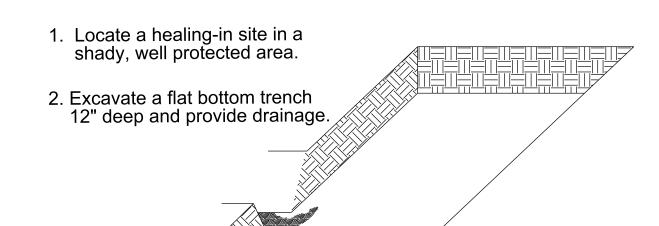
Preliminary Design Date

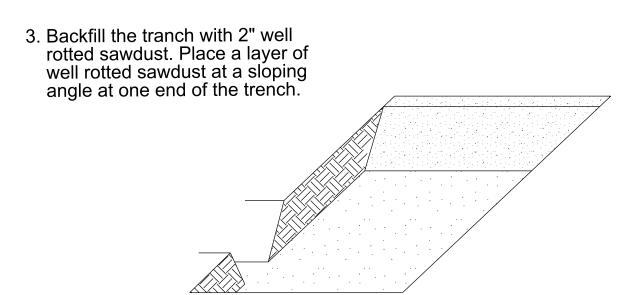
November 9, 2021

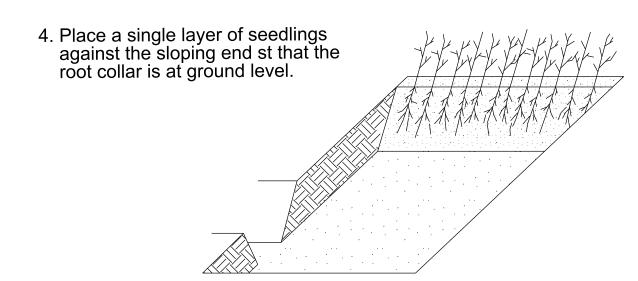
Revision Dates

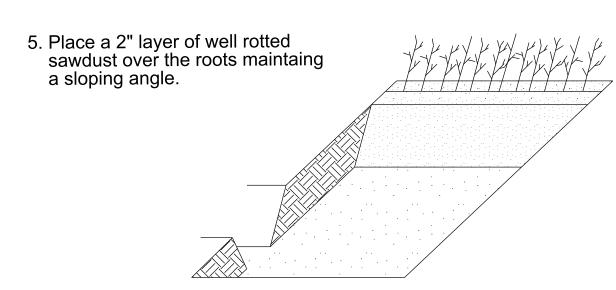
### REFORESTATION

#### **HEALING-IN DETAIL**



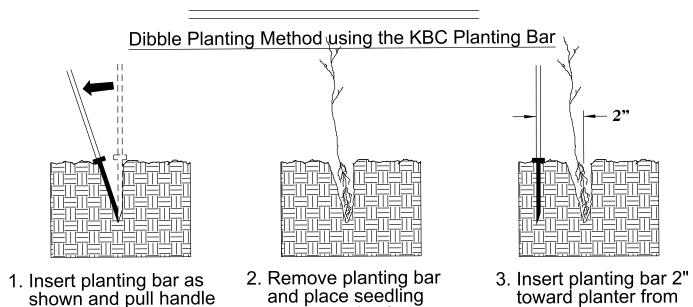




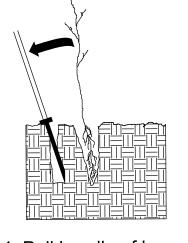


6. Repeat layers of seedlings and sawdust as necessary and water thoroughly.

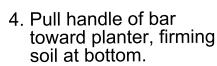
#### SEEDLING PLANTING DETAIL

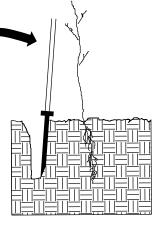


at correct depth.

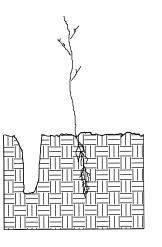


toward planter.





5. Push handle away from planter firming



seedling.

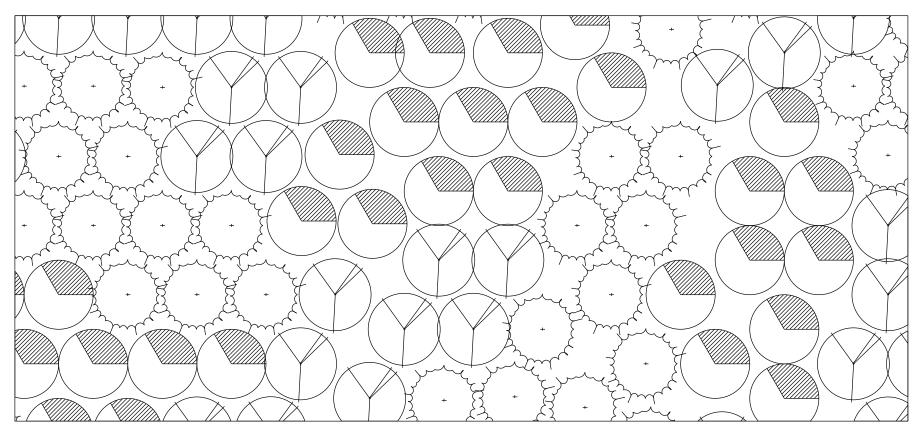
Leave compaction hole open. Water thoroughly.

### SPECIAL SHRUB PLANTING



Special Shrub Planting consists of Ceonanthus americanus, New Jersey Tea, Diervilla 'G2X88544', Kodiak Orange Bush Honeysuckle, and Itea virginica 'Henry's Garnet'. Container shrubs shall be planted in groupings of 7 to 21 in a random pattern, mingling the edges of species as shown in

Before installing as shown in the 'Planting Details - Sloping Ground' on Sheet 2, line trim existing vegetation to 6 inches or less, taking care not to scalp the ground. Plants shall be mulched individually. Water as needed.



DETAIL OF RANDOM PLACEMENT WITH MINGLED EDGES

#### REFORESTATION PLANTING NOTES

During planting, seedlings shall be kept in a moist canvas bag or similar container, to prevent the root system from drying.



**KBC Planting Bar:** Planting bar to be 12" long, 4" wide and 1" thick at the center with a triangular cross section.

Root Pruning:
All seedlings shall be root pruned, if necessary, so that no roots extend more than 10" below the root



Reforestation shall be planted 8 feet to 12 feet, averaging 10 feet on center and spaced randomly. Total number of plants per acre is approximately 436 seedlings.



Seedling mixture shall consist of the following species: 15% Amelanchier arborea, Downy Serviceberry (65 plants per acre)

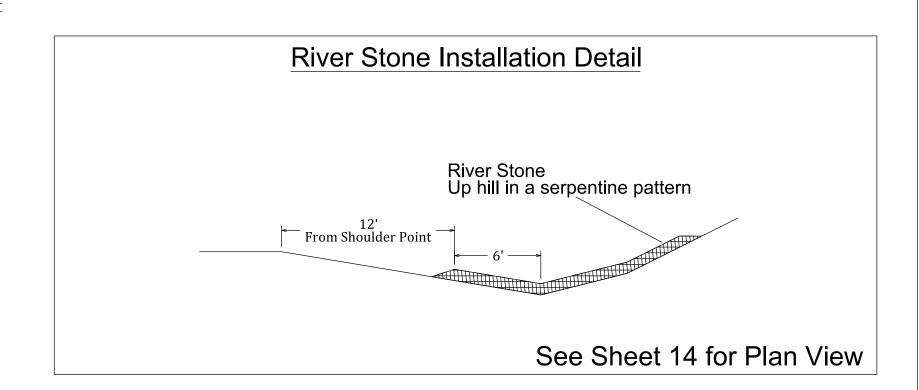
15% Cercis canadensis, Eastern Redbut (65 plants per acre) 10% Cornus florida, Flowering Dogwood (44 plants per acre)

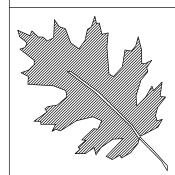
30% Oxydendrum arboreum, Sourwood (131 plants per acre) 30% Rhus glabra, Smooth Sumac (131 plants per acre)

Species shall be planted grouping 7 to 15 of a single species, mingling the edge of one species with another. See diagram.



All seedlings shall be furnished bare root, 12 to 18 inches minimum, 24 inches maximum and with a minimum root length of 6 inches.





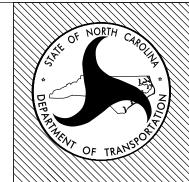
NCDOT - Roadside Environmental Unit **Aesthetic Engineering Section** 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne

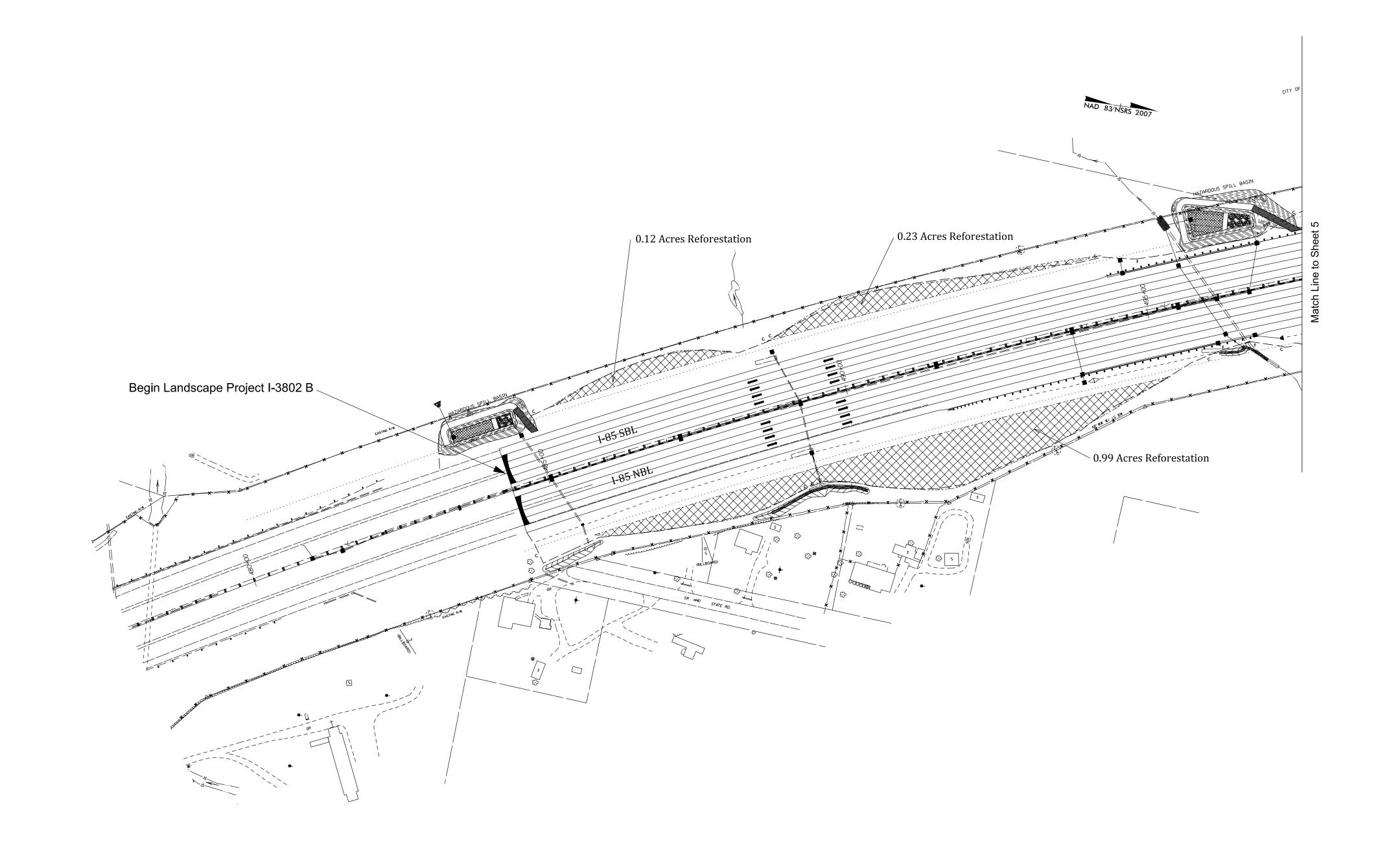
ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

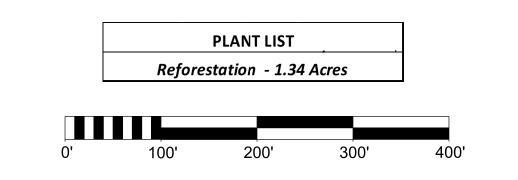


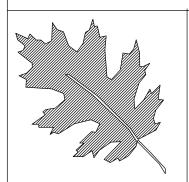
	I - 3802 B
Jeser Iprion.	I - 85 from Lane Str
5	SR 2180 (Exit 63)
_	Cabarrus County
0 0	US 29-601 connec
-	/F '( 00 ) ' D

I - 3802 B I - 85 from Lane Street,	otion:	Landscape Develop
SR 2180 (Exit 63) in Cabarrus County to	: Description:	Details (Reforestation Special Shrub Plan
US 29-601 connector (Exit 68) in Rowan County	Sheet	Division 9 - Forsyth (

Landscape Development		eept Design Date rch 25, 2021		ninary Design Date ember 9, 2021
Details (Reforestation and Special Shrub Planting)	Final Design Date Revision Dates February 18, 2022		sion Dates	
			S:	
Division 9 - Forsyth County	Sheet	3	Total Sheet	17





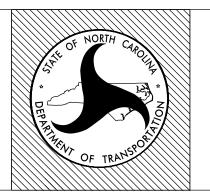


NCDOT - Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

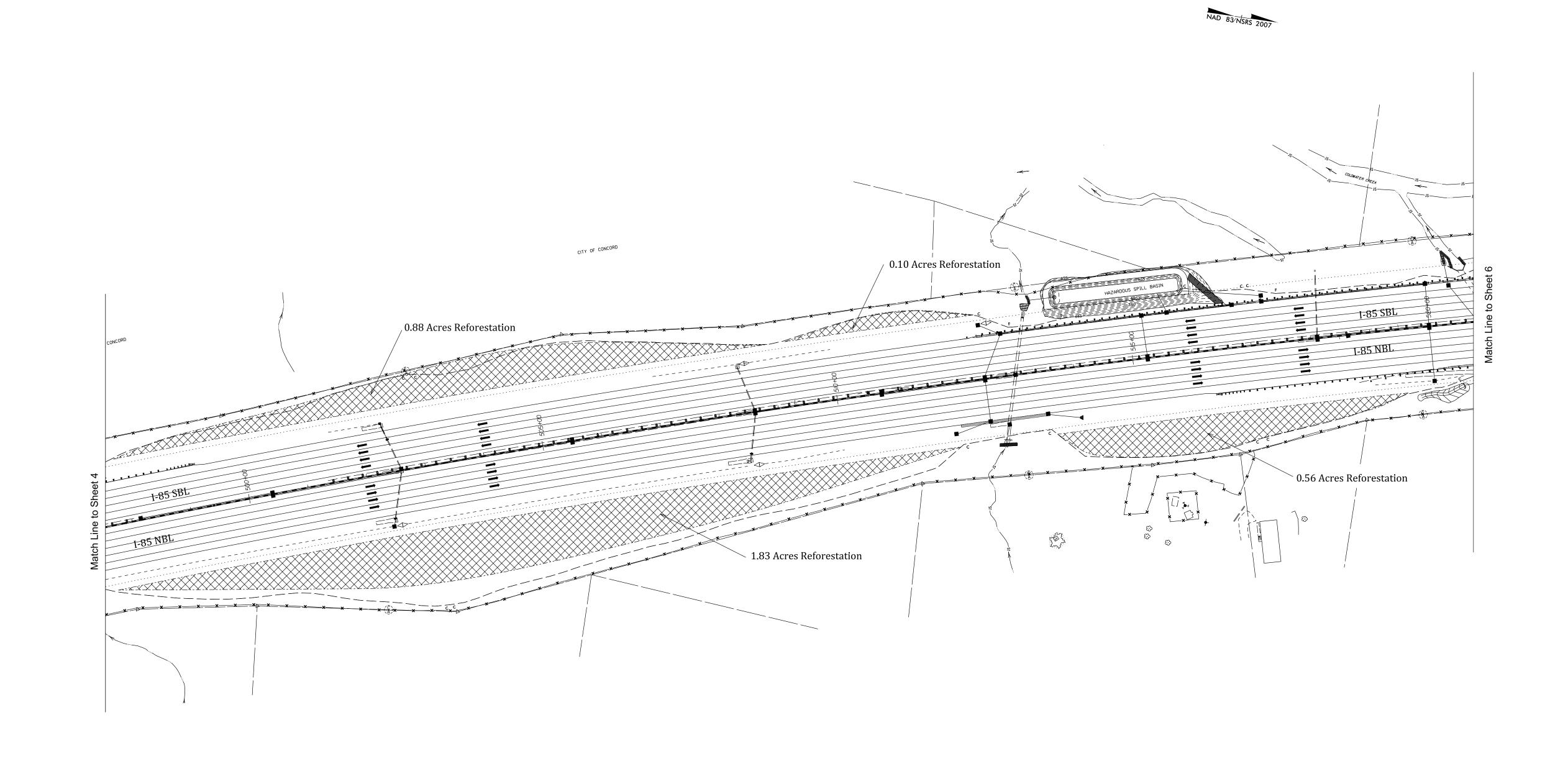
NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



I - 3802 B
I - 85 from Lane Street,
SR 2180 (Exit 63) in
Cabarrus County to
US 29-601 connector
(Exit 68) in Rowan County

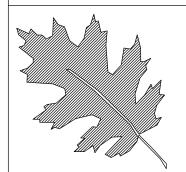
	otion:	Laı
	Sheet Description:	
<b>V</b>	Shee	Divi

Landscape Development		cept Design Date		minary Design Date rember 9, 2021	
Final Design Plan		Final Design Date February 18, 2022		Revision Dates	
Division 9 - Forsyth County	Sheet:	4	Total Sheets	17	



**PLANT LIST** Reforestation - 3.27 Acres



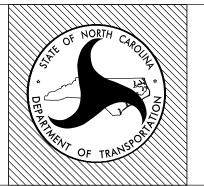


NCDOT - Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

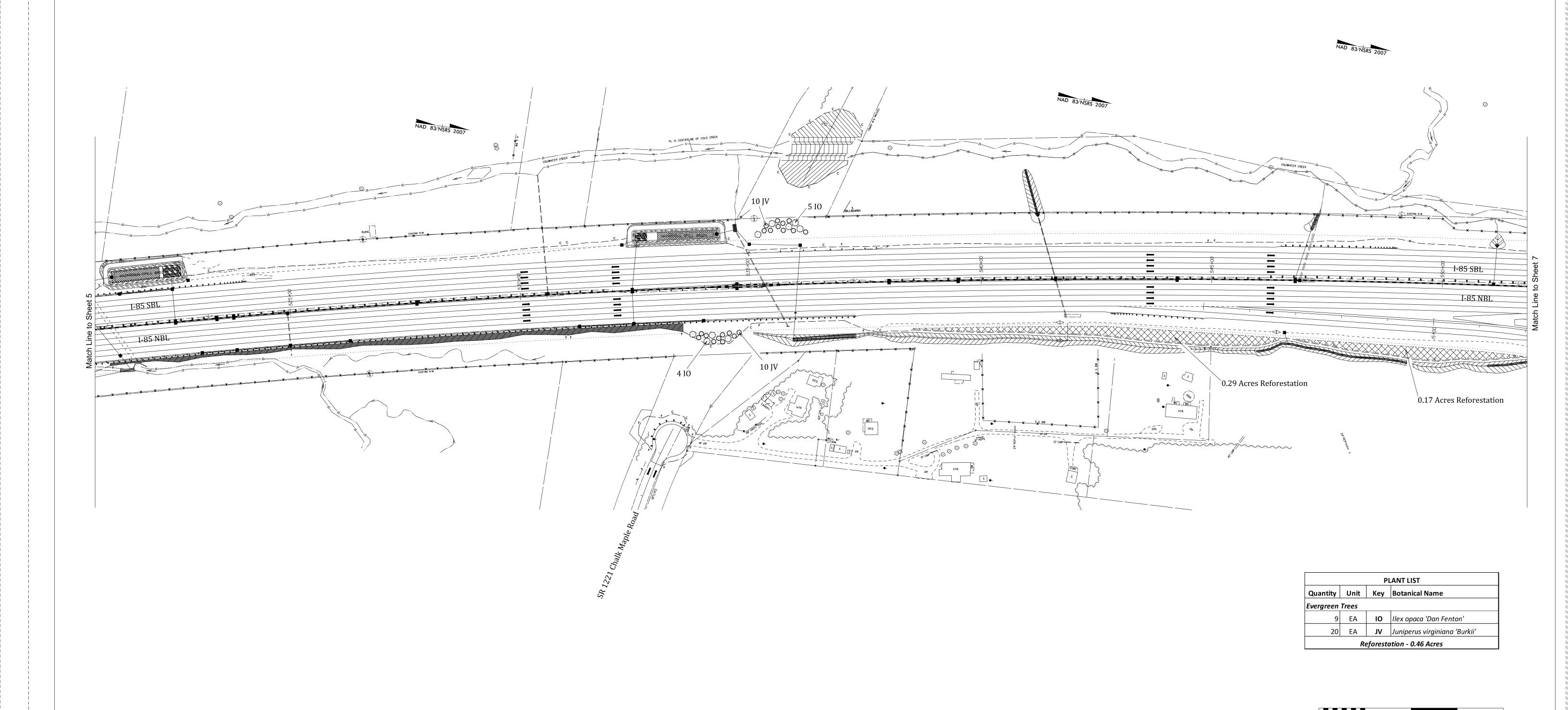
mbakerintl.com

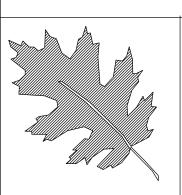
NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



	Landscape Developme
at Description:	Final Design Plan
פפר	Division 9 - Forsyth Cou

Landscape Development	Concept Design Date March 25, 2021		Preliminary Design Date November 9, 2021	
Final Design Plan	Final Design Date February 18, 2022		Revision Dates	
Division 9 - Forsyth County	Sheet:	5	Total Sheets	17





NCDOT - Roadside Environmental Unit

Aesthetic Engineering Section

1557 Mail Service Center Raleigh, NC 27699-1557

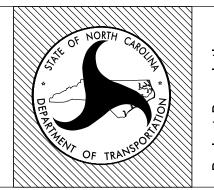
Phone: 919-707-2920 Fax: 919-715-2554

connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

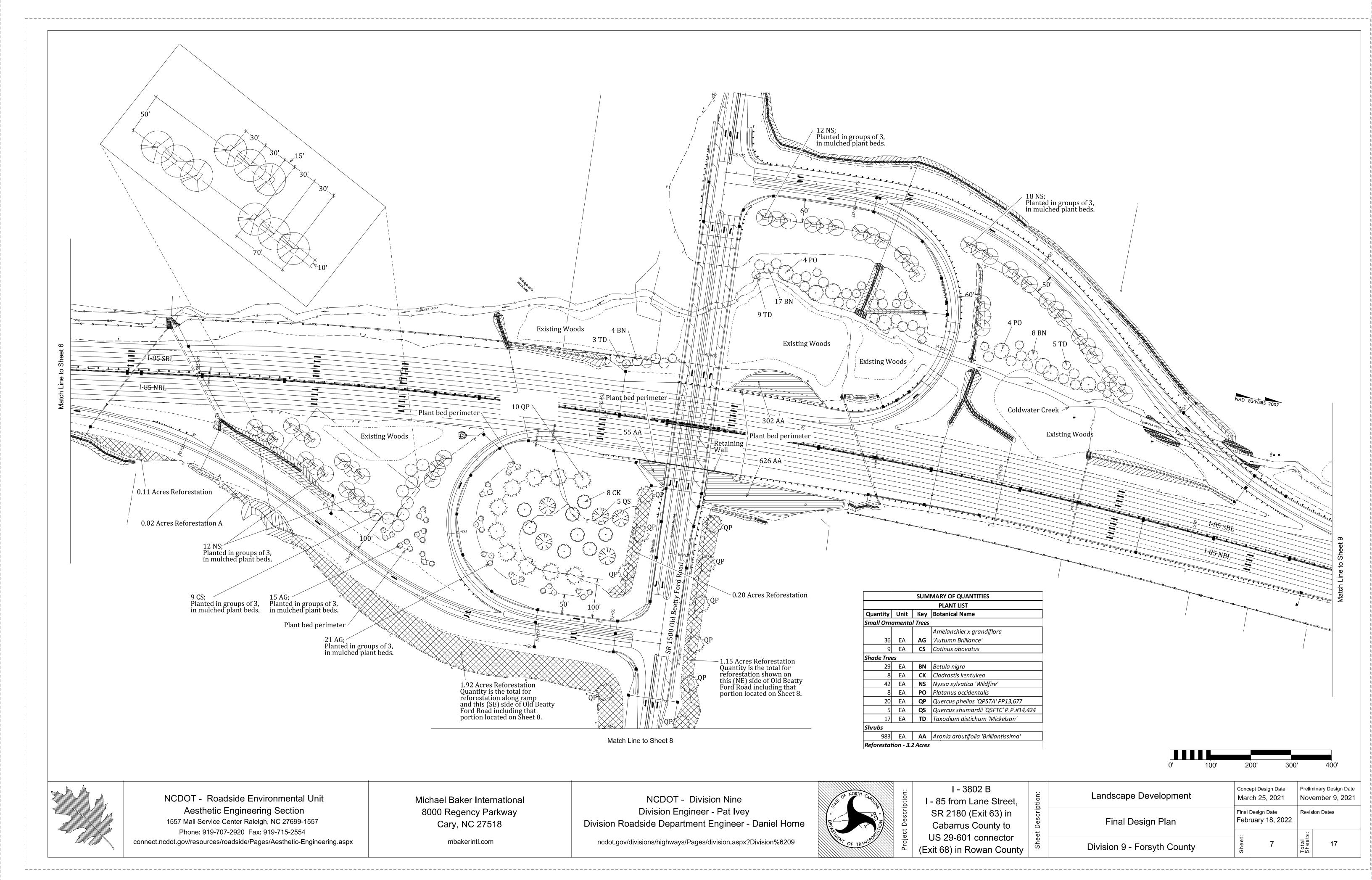
NCDOT - Division Nine
Division Engineer - Pat Ivey
Division Roadside Department Engineer - Daniel Horne
ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

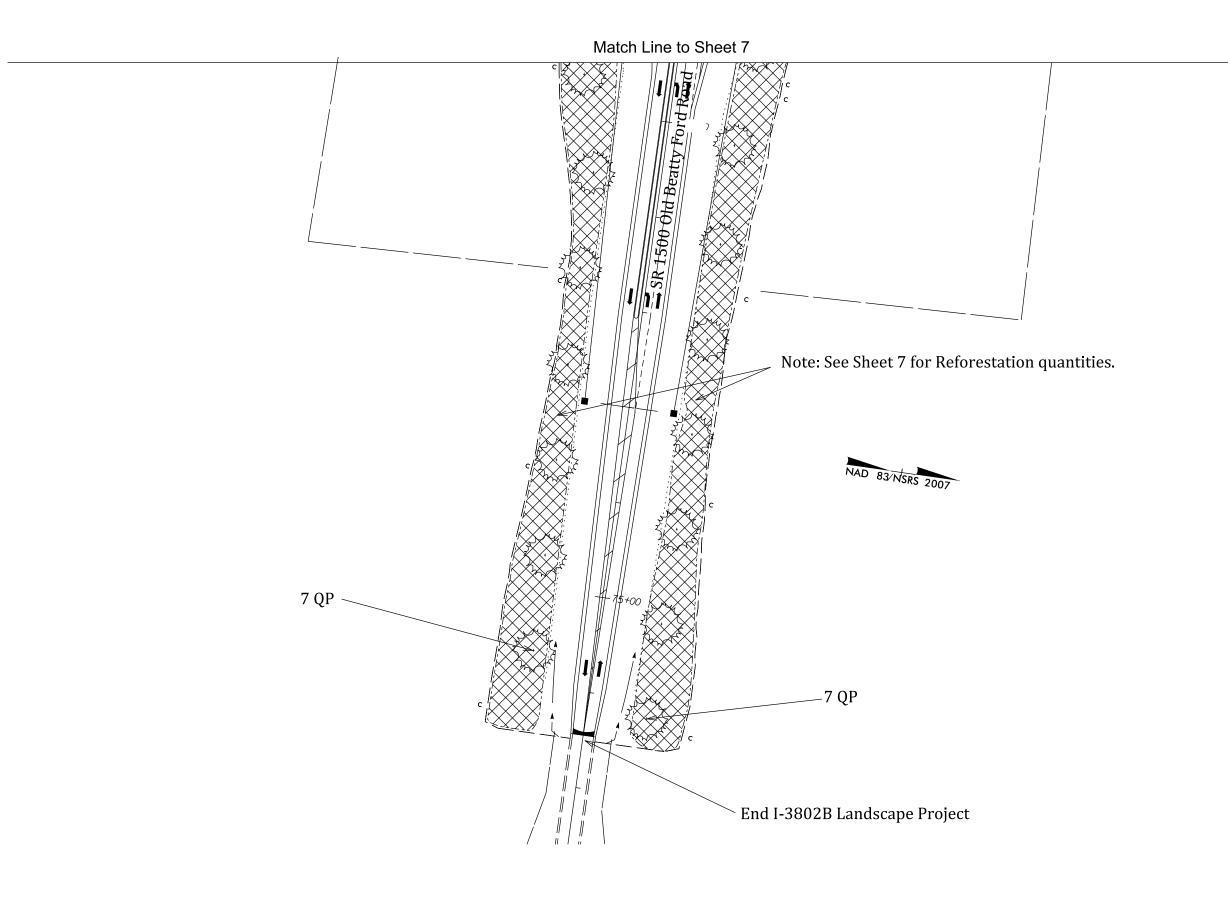


I - 3802 B
I - 85 from Lane Street,
SR 2180 (Exit 63) in
Cabarrus County to
US 29-601 connector
(Exit 68) in Rowan County

et,	Sheet Description:	
n	scri	
)	. De	
or	neet	
untv	S	

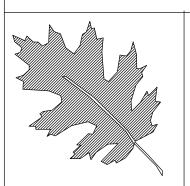
Landscape Development	Concept Design Date March 25, 2021		Preliminary Design Dat November 9, 202	
Final Design Plan	Final Design Date February 18, 2022		Revision Dates	
Division 9 - Forsyth County	Sheet:	6	Total Sheets:	17





PLANT LIST							
Quantity Unit Key Botanical Name							
Shade Tree	Shade Trees						
14	14 EA <b>QP</b> Quercus phellos 'QPSTA' PP13,677						
Reforestation - See Sheet 7A for Quantity							



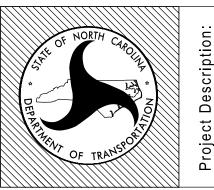


NCDOT - Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

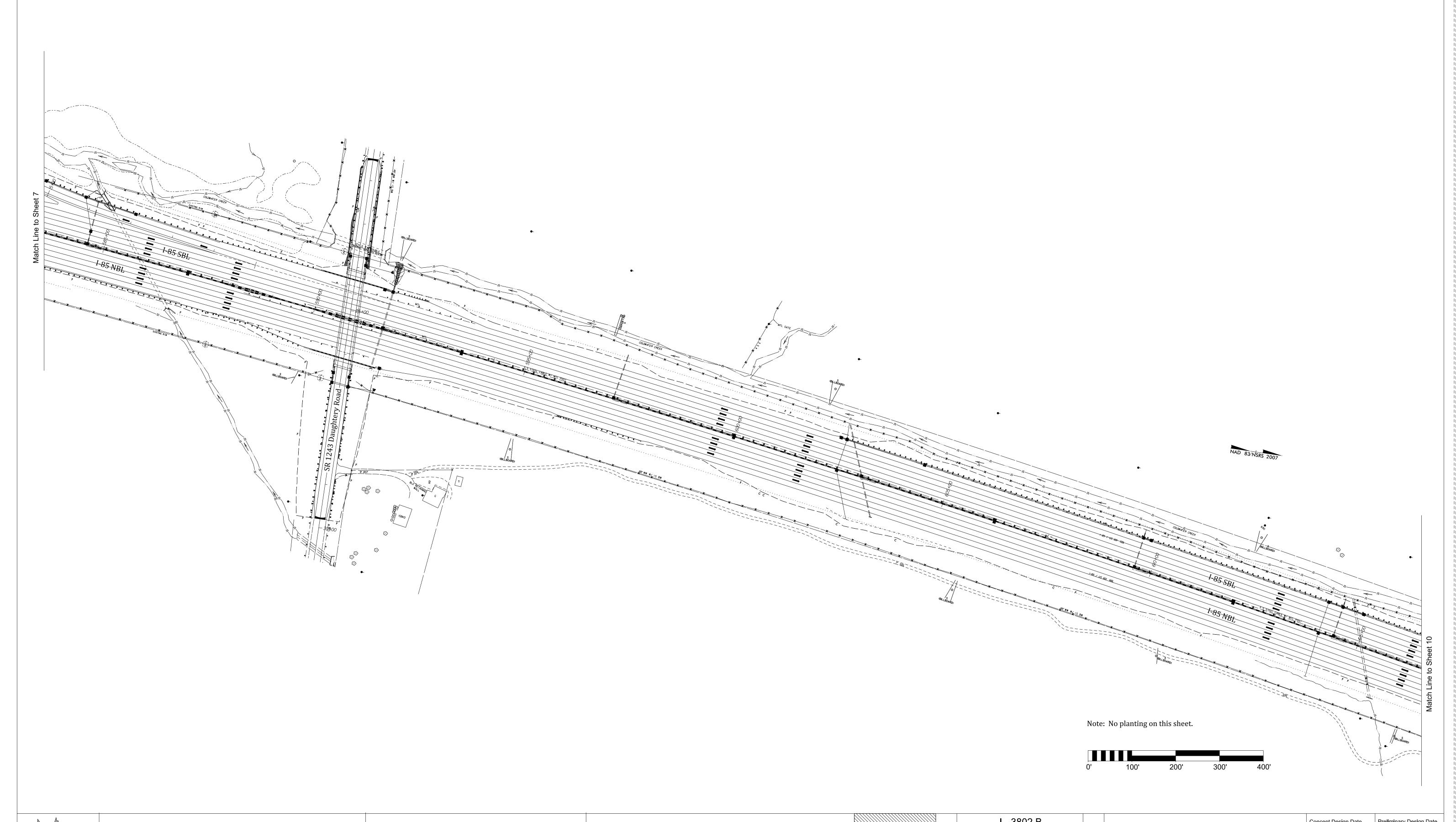
mbakerintl.com

NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



t,	otion:	La
	Sheet Description:	
-	et	
otv.	She	Div

	Landscape Development	Concept Design Date March 25, 2021  Final Design Date February 18, 2022		Preliminary Design Date November 9, 2021  Revision Dates	
•	Final Design Plan				
	Division 9 - Forsyth County	Sheet:	8	Total Sheets:	17





NCDOT - Roadside Environmental Unit

Aesthetic Engineering Section

1557 Mail Service Center Raleigh, NC 27699-1557

Phone: 919-707-2920 Fax: 919-715-2554

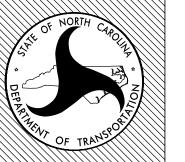
connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

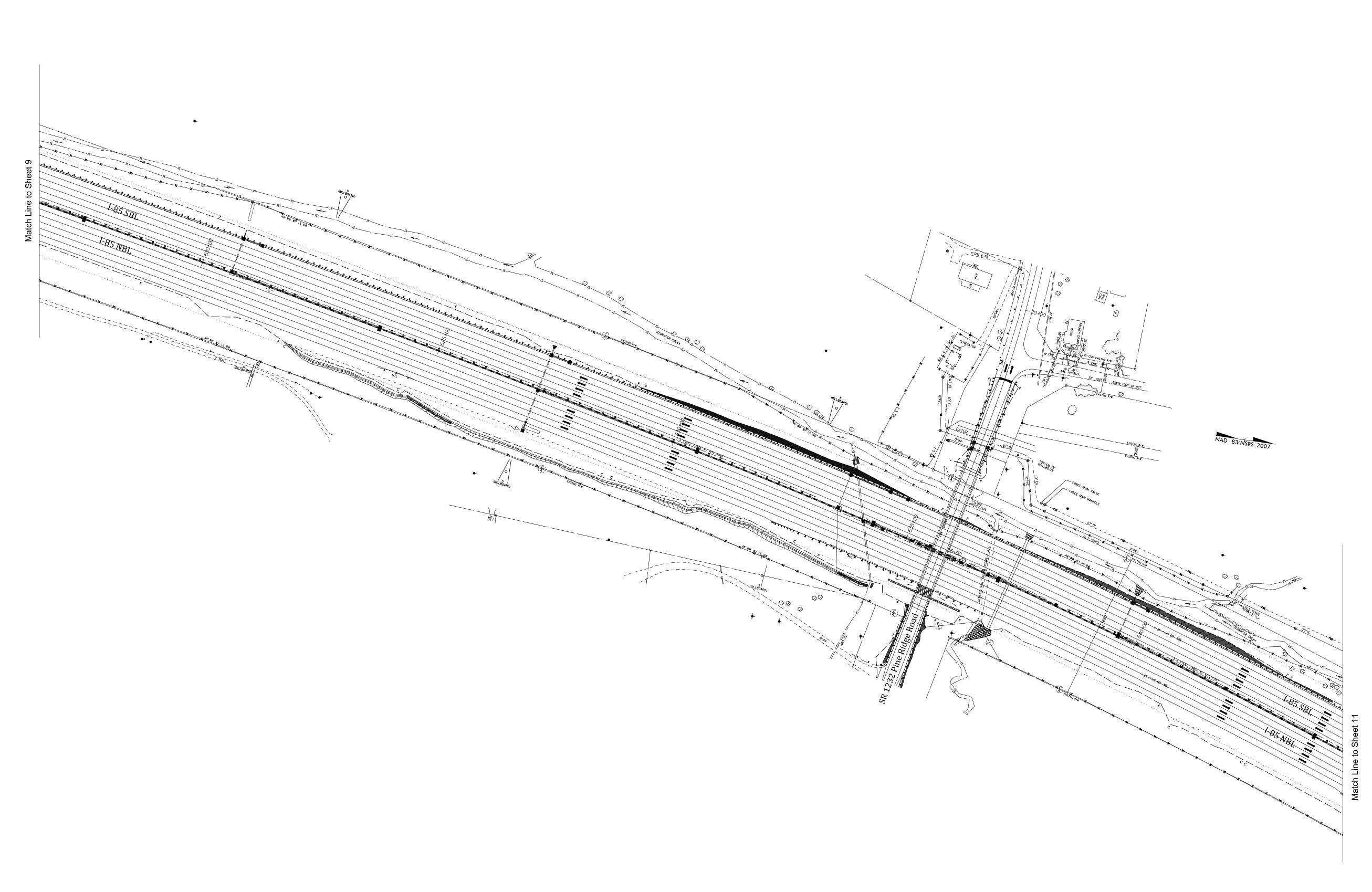
mbakerintl.com

NCDOT - Division Nine
Division Engineer - Pat Ivey
Division Roadside Department Engineer - Daniel Horne

ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

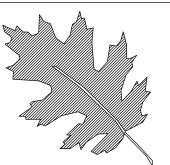


Landscape Development	andscape Development  Concept Design Date March 25, 2021  Final Design Plan  Final Design Date February 18, 2022		·		Preliminary Design Date November 9, 2021	
Final Design Plan			Revision Dates			
Division 9 - Forsyth County	Sheet:	9	Total Sheets:	17		



Note: No planting on this sheet.





NCDOT - Roadside Environmental Unit

Aesthetic Engineering Section

1557 Mail Service Center Raleigh, NC 27699-1557

Phone: 919-707-2920 Fax: 919-715-2554

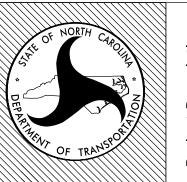
connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

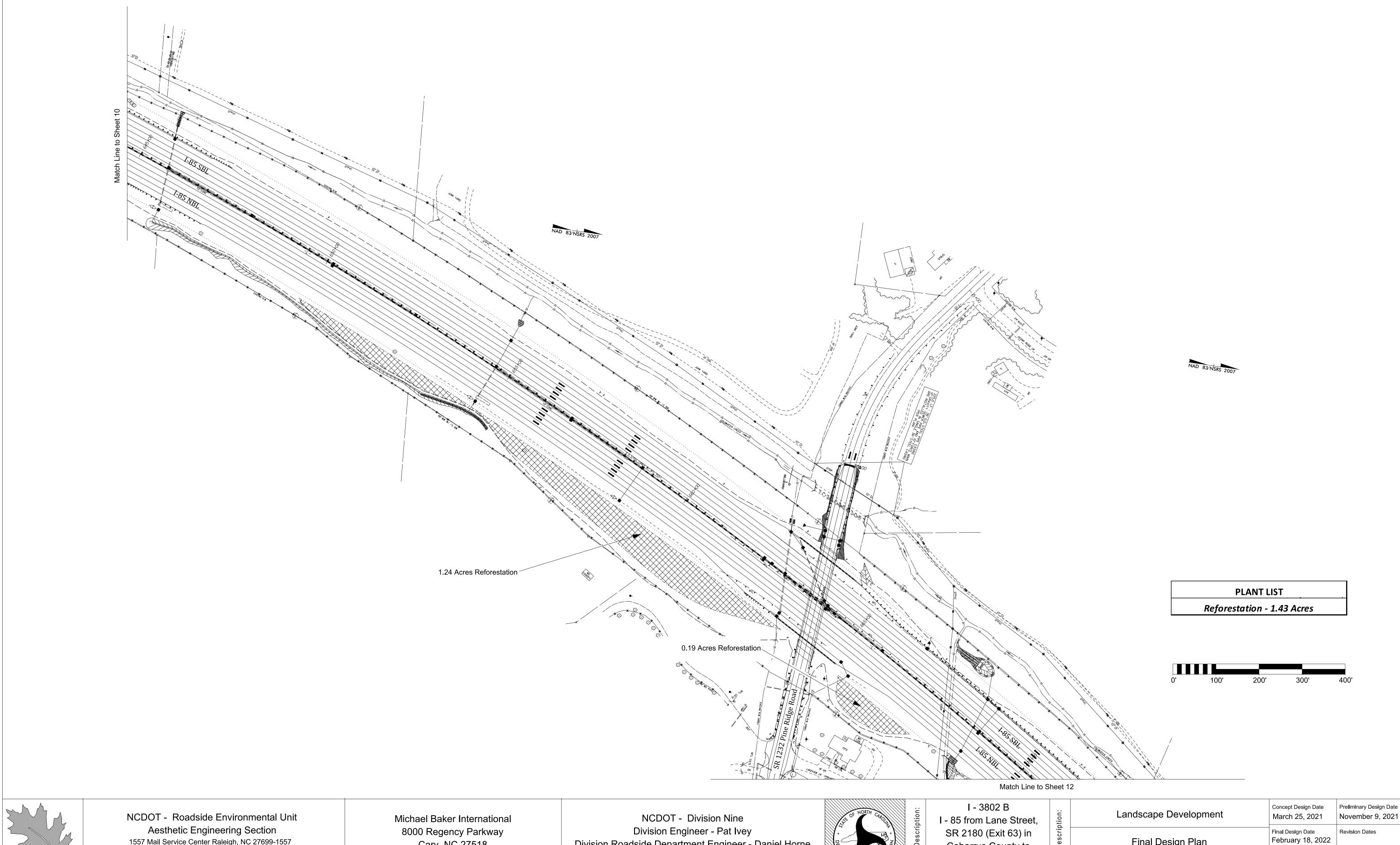
mbakerintl.com

NCDOT - Division Nine
Division Engineer - Pat Ivey
Division Roadside Department Engineer - Daniel Horne
ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

\_\_\_\_\_\_



	Landscape Development		ept Design Date ch 25, 2021	Preliminary Design Date November 9, 2021		
•	Final Design Plan	Final Design Date February 18, 2022		Revision Dates		
	Division 9 - Forsyth County	Sheet:	10	Total Sheets:	17	

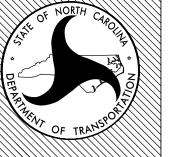




1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx Cary, NC 27518

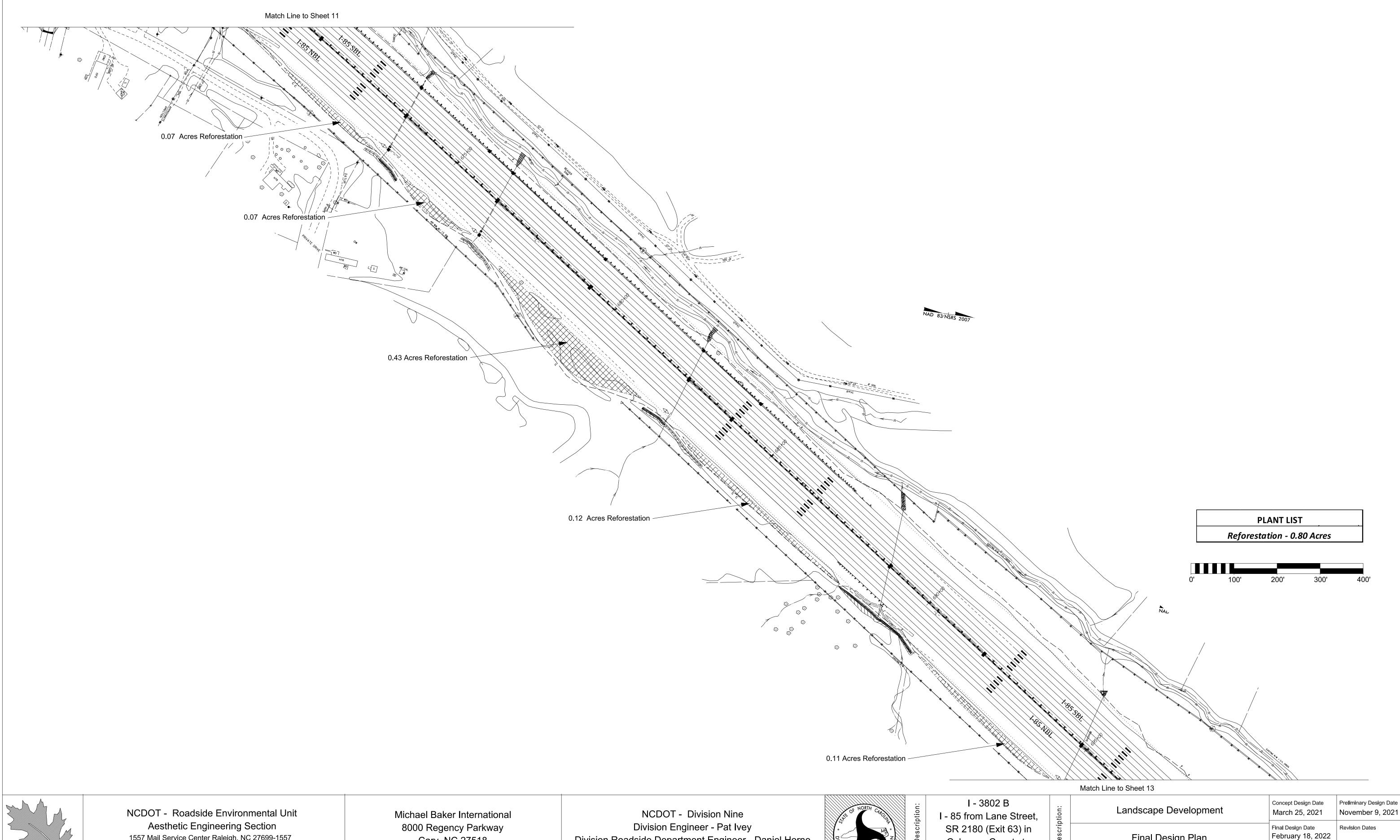
mbakerintl.com

Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



Cabarrus County to US 29-601 connector (Exit 68) in Rowan County

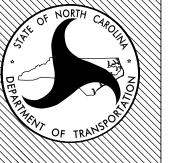
Landscape Development	Co N
Final Design Plan	Fi
Division 9 - Forsyth County	, 1004.





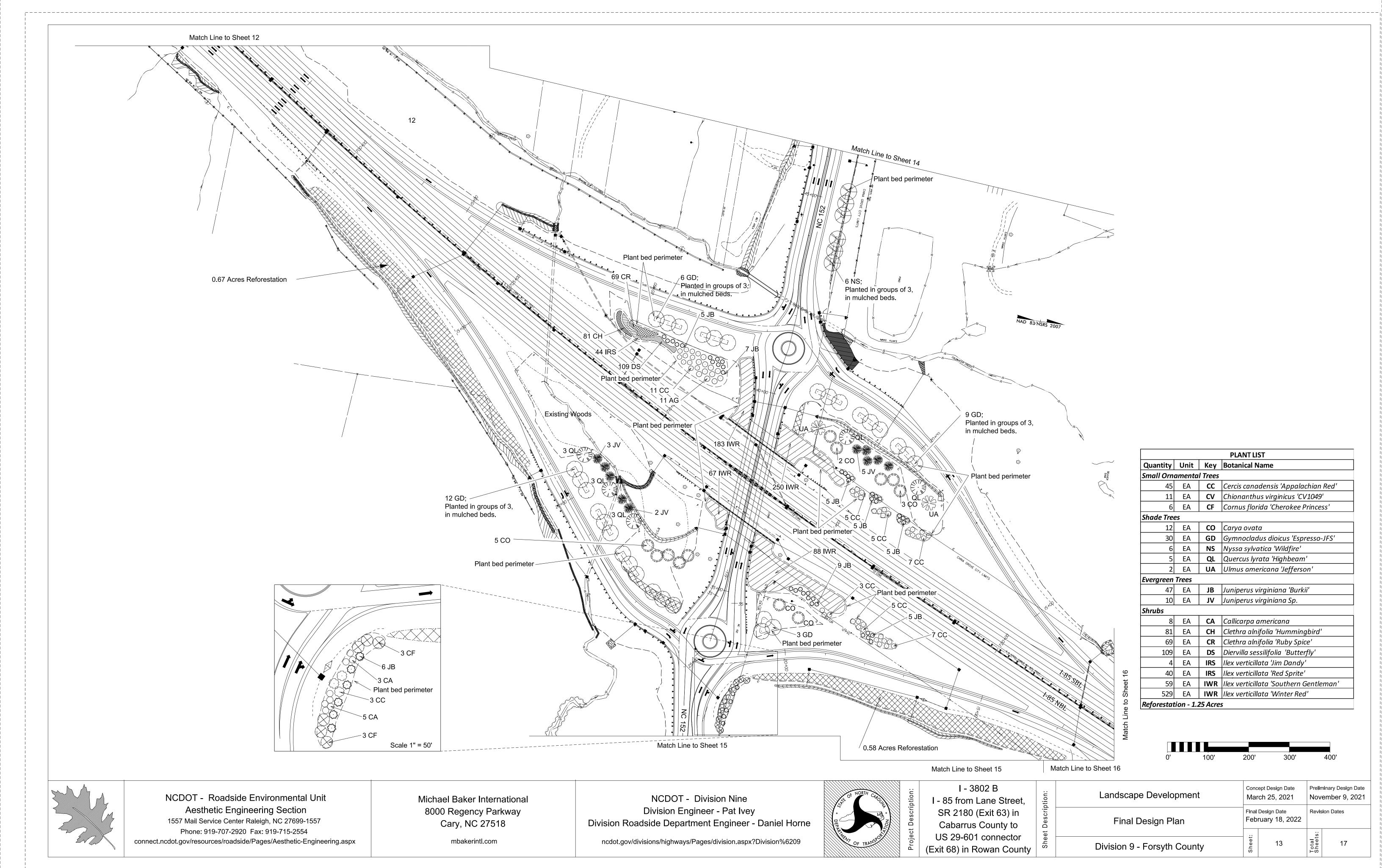
1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx Cary, NC 27518 mbakerintl.com

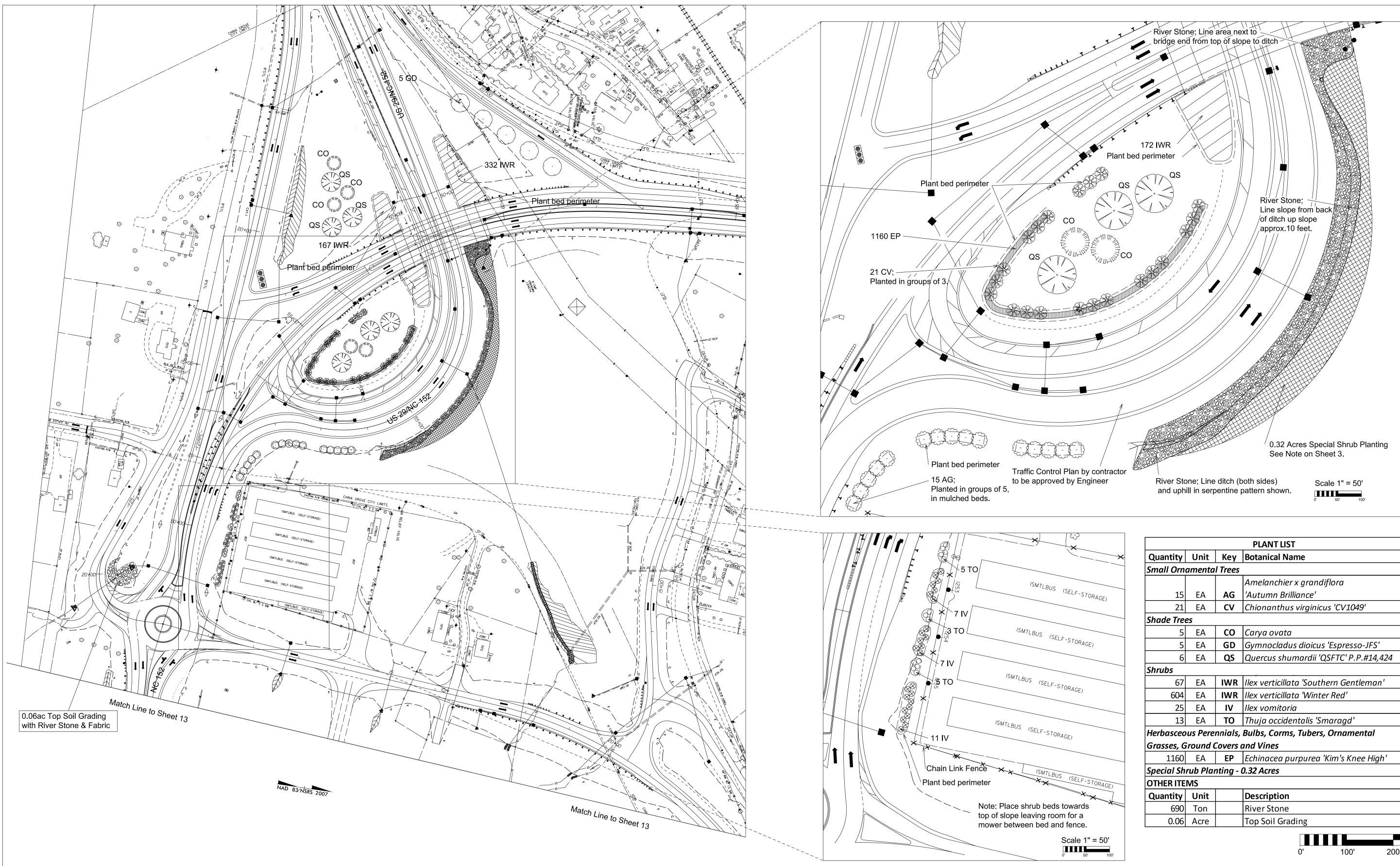
Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

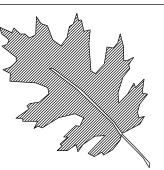


Cabarrus County to US 29-601 connector (Exit 68) in Rowan County

February 18, 2022 Final Design Plan Division 9 - Forsyth County





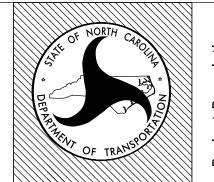


NCDOT - Roadside Environmental Unit Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

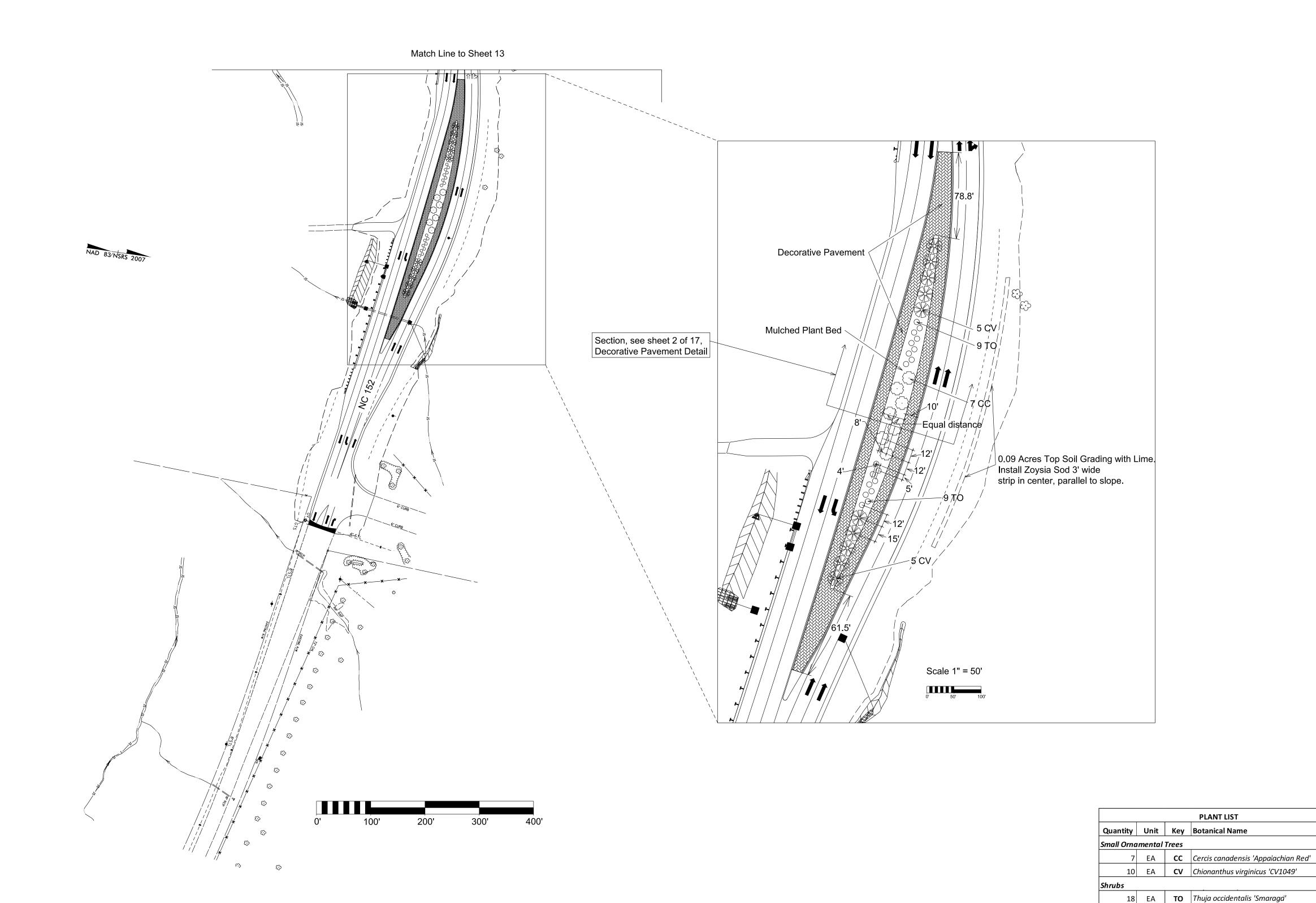
mbakerintl.com

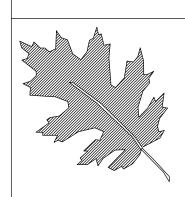
NCDOT - Division Nine Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



otion:	Landscape Developmen
et Description:	Final Design Plan
Sheet	Division 9 - Forsyth Coun

Landscape Development	Concept Design Date March 25, 2021		Preliminary Design Date November 9, 2021		
Final Design Plan	Final Design Date February 18, 2022		Revision Dates		
Division 9 - Forsyth County	Sheet:	14	Total Sheets:	17	





NCDOT - Roadside Environmental Unit

Aesthetic Engineering Section

1557 Mail Service Center Raleigh, NC 27699-1557

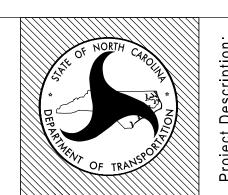
Phone: 919-707-2920 Fax: 919-715-2554

connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

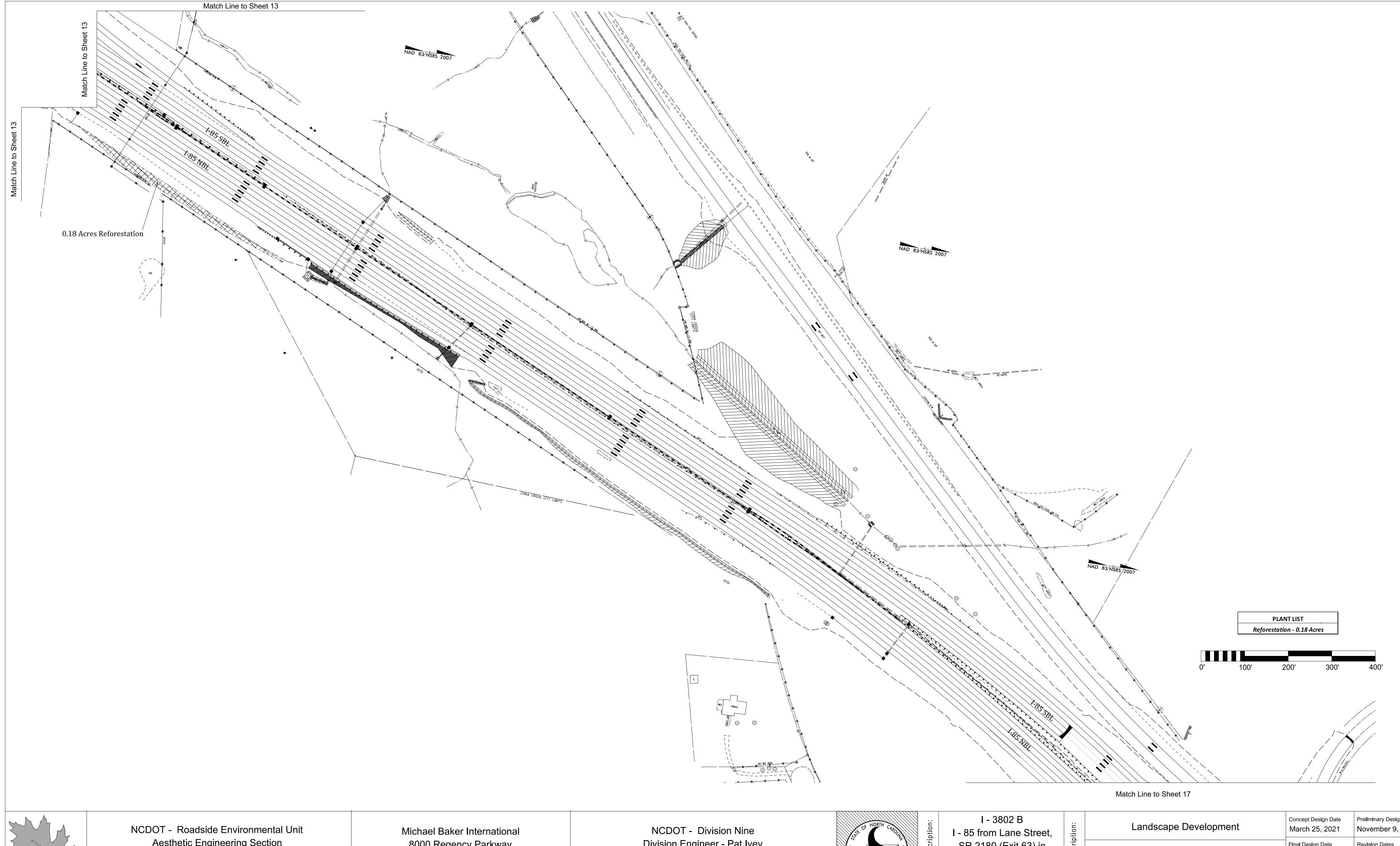
Micheal Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

NCDOT - Division Nine
Division Engineer - Pat Ivey
Division Roadside Department Engineer - Daniel Horne
ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



Landscape Development		ept Design Date ch 25, 2021	Preliminary Design Date November 9, 2021		
Preliminary Plan	Final Design Date		Revision Dates		
Division 9 - Forsyth County	Sheet:	15	Total Sheets:	17	

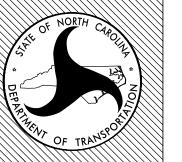


\_\_\_\_\_\_

Aesthetic Engineering Section 1557 Mail Service Center Raleigh, NC 27699-1557 Phone: 919-707-2920 Fax: 919-715-2554 connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

Division Engineer - Pat Ivey Division Roadside Department Engineer - Daniel Horne ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209

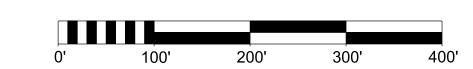


SR 2180 (Exit 63) in Cabarrus County to US 29-601 connector (Exit 68) in Rowan County

Preliminary Design Date November 9, 2021 Final Design Date
February 18, 2022 Revision Dates Final Design Plan Division 9 - Forsyth County



Note: There is no planting on this sheet.



Preliminary Design Date

November 9, 2021

March 25, 2021

17

Final Design Date
February 18, 2022



NCDOT - Roadside Environmental Unit

Aesthetic Engineering Section

1557 Mail Service Center Raleigh, NC 27699-1557

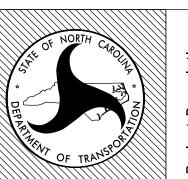
Phone: 919-707-2920 Fax: 919-715-2554

connect.ncdot.gov/resources/roadside/Pages/Aesthetic-Engineering.aspx

Michael Baker International 8000 Regency Parkway Cary, NC 27518

mbakerintl.com

NCDOT - Division Nine
Division Engineer - Pat Ivey
Division Roadside Department Engineer - Daniel Horne
ncdot.gov/divisions/highways/Pages/division.aspx?Division%6209



Sheet Description:	Landscape Development
	Final Design Plan
	Division 9 - Forsyth County