

See Sheet 1A For Index of Sheets  
See Sheet 1B For Conventional Symbols

STATE OF NORTH CAROLINA  
DIVISION OF HIGHWAYS

**WAKE COUNTY**

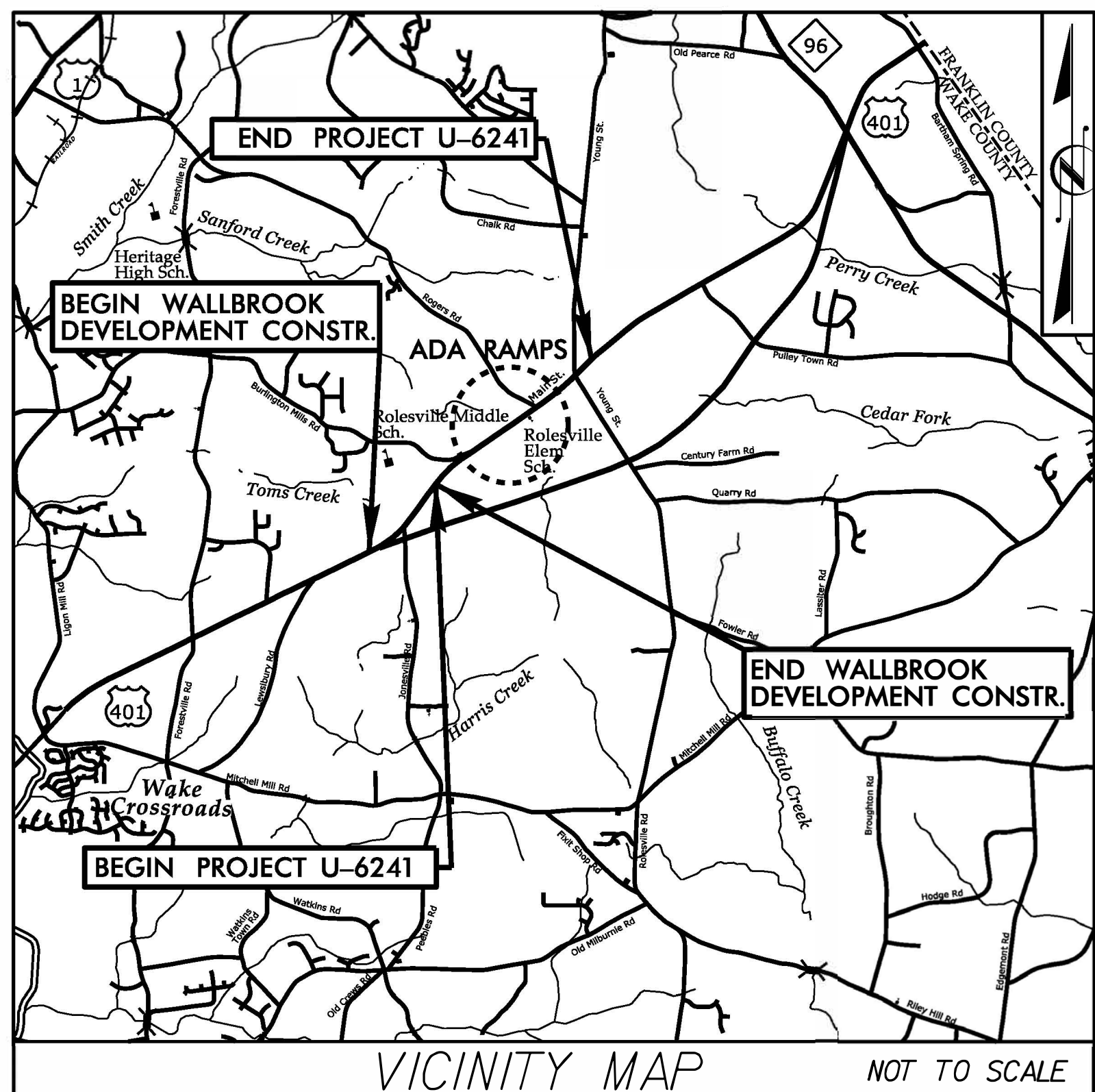
**LOCATION: US 401 BUS (MAIN STREET) FROM JONESVILLE ROAD  
TO NORTH OF YOUNG STREET**

**TYPE OF WORK: GRADING, DRAINAGE, PAVING, AND SIGNALS**

| STATE           | STATE PROJECT REFERENCE NO. | SHEET NO.        | TOTAL SHEETS |
|-----------------|-----------------------------|------------------|--------------|
| N.C.            | U-6241                      | 1                |              |
| STATE PROJ. NO. | F.A. PROJ. NO.              | DESCRIPTION      |              |
| 36249.4025      | N/A                         | PE               |              |
| 36249.4025      | N/A                         | R/W              |              |
| 49183.3.1       | 2051002                     | CON. (WALLBROOK) |              |
| 49183.3.2       | 2051002                     | CON. (U-6241)    |              |
|                 |                             | CON. (ADA RAMP)  |              |

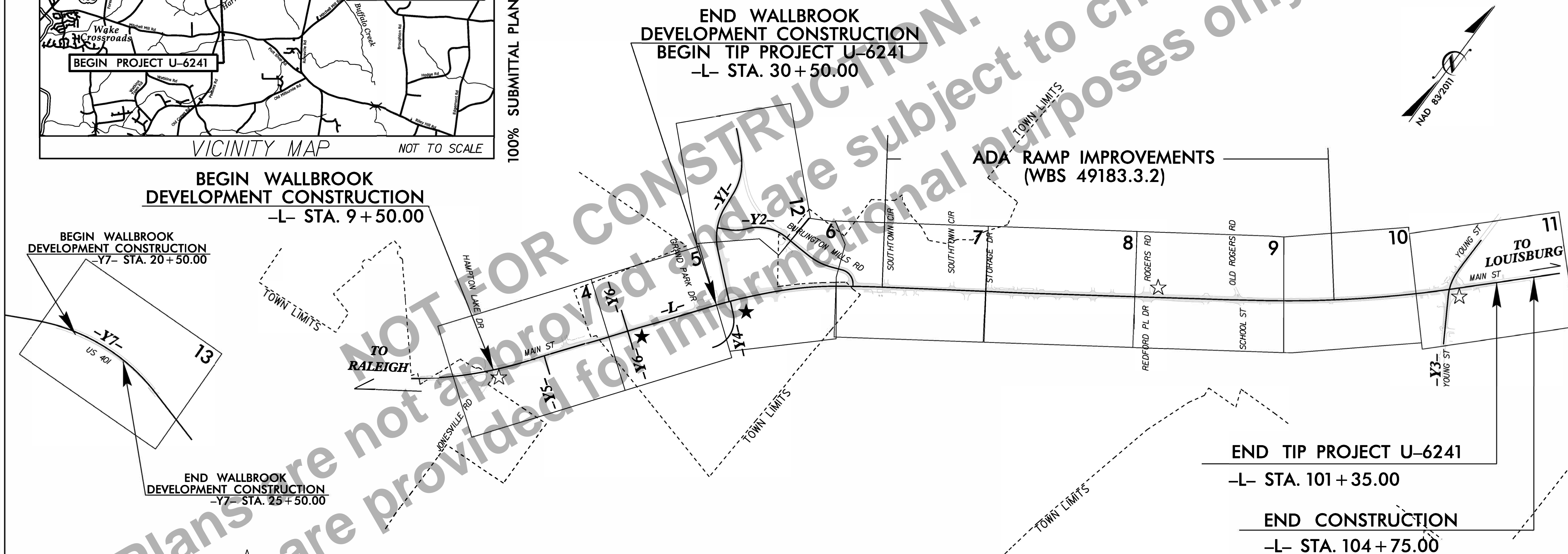


**TIP PROJECT: U-6241**



VICINITY MAP NOT TO SCALE

100% SUBMITTAL PLANS



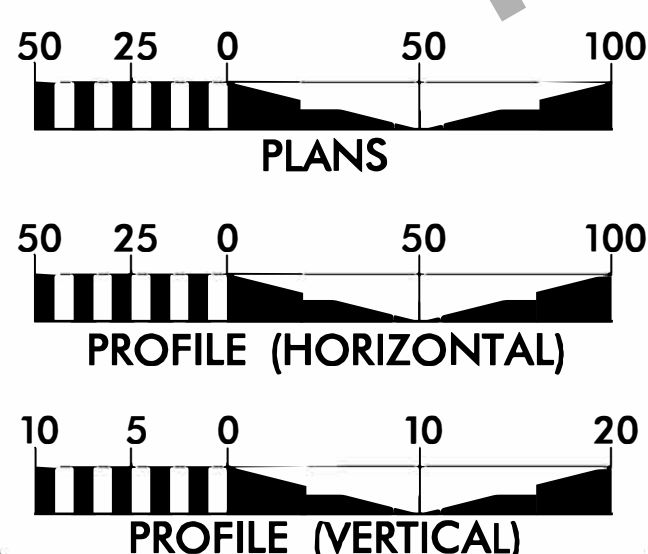
Plans are not approved for informational purposes only.

☆ UPGRADING EXISTING SIGNAL  
★ NEW SIGNAL

DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

**CONTRACT:**

**GRAPHIC SCALES**



**DESIGN DATA**

ADT 2021 = 19,690  
ADT 2041 = 32,264  
K = 10 %  
D = 55 %  
T = 2 %  
V = 40 MPH  
FUNC CLASS = ARTERIAL  
SUBREGIONAL TIER

**PROJECT LENGTH**

LENGTH ROADWAY TIP PROJECT U-6241 = 1.342 MILES  
TOTAL LENGTH TIP PROJECT U-6241 = 1.342 MILES  
LENGTH ROADWAY PROJECT WALLBROOK = 0.398 MILES  
TOTAL LENGTH PROJECT WALLBROOK = 0.398 MILES

PREPARED IN THE OFFICE OF:

**Stantec**  
STANTEC CONSULTING  
801 Jones Franklin Road (Suite 300)  
Raleigh, NC 27606  
Tel: (919) 851-6866 | Fax: (919) 851-7024  
License No. P-5072

**SUNGATE DESIGN GROUP, P.A.**  
905 JONES FRANKLIN ROAD  
RALEIGH, NORTH CAROLINA 27606  
NC COA No. C-0890

FOR THE TOWN OF ROLESVILLE

2018 STANDARD SPECIFICATIONS

LETTING DATE:  
DECEMBER 2021

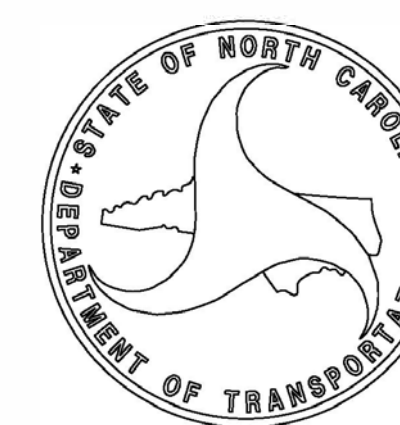
**MICHAEL LINDGREN, PE**  
PROJECT ENGINEER

**KELLY ARNOLD**  
ROLESVILLE TOWN MANAGER

**TRACY PARROTT, PE**  
DIVISION PROJECT DELIVERY ENGINEER

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER



9/20/2021

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|                                                                          |                         |
|--------------------------------------------------------------------------|-------------------------|
| PROJECT REFERENCE NO.                                                    | SHEET NO.               |
| U-6241                                                                   | I-A                     |
|                                                                          | ROADWAY DESIGN ENGINEER |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b> |                         |

| INDEX OF SHEETS     |                                                                 |
|---------------------|-----------------------------------------------------------------|
| SHEET NUMBER        | SHEET                                                           |
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| X-1 THRU X-83       | CROSS-SECTIONS                                                  |

2018 ROADWAY ENGLISH STANDARD DRAWINGS

The following Roadway Standards as appear in "Roadway Standard Drawings" Highway Design Branch - N. C. Department of Transportation - Raleigh, N. C., Dated January, 2018 are applicable to this project and by reference hereby are considered a part of these plans:

| STD. NO.                                   | TITLE                                                                         |
|--------------------------------------------|-------------------------------------------------------------------------------|
| DIVISION 2 - EARTHWORK                     |                                                                               |
| 200.03                                     | Method of Clearing - Method III                                               |
| 225.02                                     | Guide for Grading Subgrade - Secondary and Local                              |
| 225.04                                     | Method of Obtaining Superelevation - Two Lane Pavement                        |
| 225.06                                     | Method of Grading Sight Distance at Intersections                             |
| 225.07                                     | Grading for False Cut at Grade Separations                                    |
| DIVISION 3 - PIPE CULVERTS                 |                                                                               |
| 300.01                                     | Method of Pipe Installation                                                   |
| DIVISION 5 - SUBGRADE, BASES AND SHOULDERS |                                                                               |
| 560.01                                     | Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| DIVISION 8 - INCIDENTALS                   |                                                                               |
| 840.00                                     | Concrete Base Pad for Drainage Structures                                     |
| 840.01                                     | Brick Catch Basin - 12" thru 54" Pipe                                         |
| 840.02                                     | Concrete Catch Basin - 12" thru 54" Pipe                                      |
| 840.03                                     | Frame, Grates and Hood - for Use on Standard Catch Basin                      |
| 840.14                                     | Concrete Drop Inlet - 12" thru 30" Pipe                                       |
| 840.15                                     | Brick Drop Inlet - 12" thru 30" Pipe                                          |
| 840.16                                     | Drop Inlet Frame and Grates - for use with Std. Dwg 840.14 and 840.15         |
| 840.22                                     | Frames and Wide Slot Sag Grates                                               |
| 840.25                                     | Anchorage for Frames - Brick or Concrete or Precast                           |
| 840.29                                     | Frames and Narrow Slot Flat Grates                                            |
| 840.45                                     | Precast Drainage Structure                                                    |
| 840.54                                     | Manhole Frame and Cover                                                       |
| 840.66                                     | Drainage Structure Steps                                                      |
| 840.71                                     | Concrete and Brick Pipe Plug                                                  |
| 846.01                                     | Concrete Curb, Gutter and Curb & Gutter                                       |
| 848.01                                     | Concrete Sidewalk                                                             |
| 848.02                                     | Driveway Turnout - Radius Type                                                |
| 848.03                                     | Driveway Turnout - Drop Curb Type                                             |
| 848.04                                     | Street Turnout                                                                |
| 848.05                                     | Curb Ramp - Proposed Curb & Gutter                                            |
| 848.06                                     | Curb Ramp - Existing Curb & Gutter                                            |
| 852.01                                     | Concrete Islands                                                              |
| 852.02                                     | Concrete Mountable Median - for Use with Rigid or Flexible Pavement           |
| 852.06                                     | Method for Placement of Drop Inlets in Concrete Islands                       |
| 876.02                                     | Guide for Rip Rap at Pipe Outlets                                             |
| 876.04                                     | Drainage Ditches with Class 'B' Rip Rap                                       |

GENERAL NOTES:

2018 SPECIFICATIONS

GRADING AND SURFACING OR RESURFACING AND WIDENING:

THE GRADE LINES SHOWN DENOTE THE FINISHED ELEVATION OF THE PROPOSED SURFACING AT GRADE POINTS SHOWN ON THE TYPICAL SECTIONS. WHERE NO GRADE LINES ARE SHOWN, THE PROFILES SHOWN DENOTE THE TOP ELEVATION OF THE EXISTING PAVEMENT ALONG THE CENTER LINE OF SURVEY ON WHICH THE PROPOSED RESURFACING WILL BE PLACED. GRADE LINES MAY BE ADJUSTED BY THE ENGINEER IN ORDER TO SECURE A PROPER TIE-IN.

CLEARING:

CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD III.

SUPERELEVATIONS:

ALL CURVES ON THIS PROJECT SHALL BE SUPERELEVATED IN ACCORDANCE WITH STD. NO. 225.04 USING THE RATE OF SUPERELEVATION AND RUNOFF SHOWN ON THE PLANS. SUPERELEVATION IS TO BE REVOLVED ABOUT THE GRADE POINTS SHOWN ON THE TYPICAL SECTIONS.

SIDE ROADS:

THE CONTRACTOR WILL BE REQUIRED TO DO ALL NECESSARY WORK TO PROVIDE SUITABLE CONNECTIONS WITH ALL ROADS, STREETS, AND DRIVES ENTERING THIS PROJECT. THIS WORK WILL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR THE PARTICULAR ITEMS INVOLVED.

DRIVEWAYS:

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.02 USING 3 FOOT RADII OR RADII AS SHOWN ON THE PLANS. LOCATIONS OF DRIVES WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

DRIVEWAYS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. 848.03 AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

STREET TURNOUT:

STREET RETURNS SHALL BE CONSTRUCTED IN ACCORDANCE WITH STD. NO. 848.04 USING THE RADII NOTED ON PLANS.

TEMPORARY SHORING:

SHORING REQUIRED FOR THE MAINTENANCE OF TRAFFIC WILL BE PAID FOR AS "EXTRA WORK" IN ACCORDANCE WITH SECTION 104-7.

UTILITIES:

UTILITY OWNERS ON THIS PROJECT ARE Century Link, City Of Raleigh, Dominion Energy, Duke Energy, Spectrum, Ting Fiber, Wake Electric

ANY RELOCATION OF EXISTING UTILITIES WILL BE ACCOMPLISHED BY OTHERS, EXCEPT AS SHOWN ON THE PLANS.

RIGHT-OF-WAY MARKERS:

ALL RIGHT-OF-WAY MARKERS ON THIS PROJECT SHALL BE PLACED BY OTHERS.

CURB RAMPS

CURB RAMPS ARE SHOWN ON THE PLANS AT APPROXIMATE LOCATIONS. CONSTRUCT ALL CURB RAMPS ACCORDANCE WITH STD 848.05 and/or 848.06.

NOT FOR CONSTRUCTION. Plans are not approved and are subject to change only. Plans are provided for informational purposes only.

# STATE OF NORTH CAROLINA, DIVISION OF HIGHWAYS

## CONVENTIONAL PLAN SHEET SYMBOLS

12/2/2016

### BOUNDARIES AND PROPERTY:

|                                       |             |
|---------------------------------------|-------------|
| State Line                            | -----       |
| County Line                           | -----       |
| Township Line                         | -----       |
| City Line                             | -----       |
| Reservation Line                      | -----       |
| Property Line                         | -----       |
| Existing Iron Pin                     | ○ EIP       |
| Computed Property Corner              | -----       |
| Property Monument                     | □ ECM       |
| Parcel/Sequence Number                | ①23         |
| Existing Fence Line                   | -x-x-x-     |
| Proposed Woven Wire Fence             | ○           |
| Proposed Chain Link Fence             | □           |
| Proposed Barbed Wire Fence            | ◇           |
| Existing Wetland Boundary             | --- WLB --- |
| Proposed Wetland Boundary             | WLB         |
| Existing Endangered Animal Boundary   | --- EAB --- |
| Existing Endangered Plant Boundary    | --- EPB --- |
| Existing Historic Property Boundary   | --- HPB --- |
| Known Contamination Area: Soil        | ☠-S-☠-S-    |
| Potential Contamination Area: Soil    | ☠-S-☠-S-    |
| Known Contamination Area: Water       | ☠-W-☠-W-    |
| Potential Contamination Area: Water   | ☠-W-☠-W-    |
| Contaminated Site: Known or Potential | ☠           |

### BUILDINGS AND OTHER CULTURE:

|                               |     |
|-------------------------------|-----|
| Gas Pump Vent or U/G Tank Cap | ○   |
| Sign                          | ○ S |
| Well                          | ○ W |
| Small Mine                    | ⊗   |
| Foundation                    | □   |
| Area Outline                  | □   |
| Cemetery                      | ⊕   |
| Building                      | □   |
| School                        | □   |
| Church                        | ⊕   |
| Dam                           | ⊕   |

### HYDROLOGY:

|                                    |              |
|------------------------------------|--------------|
| Stream or Body of Water            | -----        |
| Hydro, Pool or Reservoir           | -----        |
| Jurisdictional Stream              | --- JS ---   |
| Buffer Zone 1                      | --- BZ 1 --- |
| Buffer Zone 2                      | --- BZ 2 --- |
| Flow Arrow                         | ←            |
| Disappearing Stream                | →            |
| Spring                             | ○            |
| Wetland                            | ⬇            |
| Proposed Lateral, Tail, Head Ditch | -----        |
| False Sump                         | ▽            |

### RAILROADS:

|                    |       |
|--------------------|-------|
| Standard Gauge     | ----- |
| RR Signal Milepost | ⊙     |
| Switch             | □     |
| RR Abandoned       | ----- |
| RR Dismantled      | ----- |

### RIGHT OF WAY & PROJECT CONTROL:

|                                                           |       |
|-----------------------------------------------------------|-------|
| Secondary Horiz and Vert Control Point                    | ----- |
| Primary Horiz Control Point                               | ----- |
| Primary Horiz and Vert Control Point                      | ----- |
| Exist Permanent Easement Pin and Cap                      | ◆     |
| New Permanent Easement Pin and Cap                        | ◆     |
| Vertical Benchmark                                        | △     |
| Existing Right of Way Marker                              | △     |
| Existing Right of Way Line                                | ----- |
| New Right of Way Line                                     | ----- |
| New Right of Way Line with Pin and Cap                    | ----- |
| New Right of Way Line with Concrete or Granite R/W Marker | ----- |
| New Control of Access Line with Concrete C/A Marker       | ----- |
| Existing Control of Access                                | ----- |
| New Control of Access                                     | ----- |
| Existing Easement Line                                    | ----- |
| New Temporary Construction Easement                       | ----- |
| New Temporary Drainage Easement                           | ----- |
| New Permanent Drainage Easement                           | ----- |
| New Permanent Drainage / Utility Easement                 | ----- |
| New Permanent Utility Easement                            | ----- |
| New Temporary Utility Easement                            | ----- |
| New Aerial Utility Easement                               | ----- |

### ROADS AND RELATED FEATURES:

|                            |           |
|----------------------------|-----------|
| Existing Edge of Pavement  | -----     |
| Existing Curb              | -----     |
| Proposed Slope Stakes Cut  | --- C --- |
| Proposed Slope Stakes Fill | --- F --- |
| Proposed Curb Ramp         | -----     |
| Existing Metal Guardrail   | -----     |
| Proposed Guardrail         | -----     |
| Existing Cable Guiderail   | -----     |
| Proposed Cable Guiderail   | -----     |
| Equality Symbol            | ⊕         |
| Pavement Removal           | ⊗         |

### VEGETATION:

|              |   |
|--------------|---|
| Single Tree  | ☼ |
| Single Shrub | ☼ |

Note: Not to Scale

\*S.U.E. = Subsurface Utility Engineering

|            |       |
|------------|-------|
| Hedge      | ----- |
| Woods Line | ----- |
| Orchard    | ----- |
| Vineyard   | ----- |

### EXISTING STRUCTURES:

|                                          |       |
|------------------------------------------|-------|
| MAJOR:                                   | ----- |
| Bridge, Tunnel or Box Culvert            | ----- |
| Bridge Wing Wall, Head Wall and End Wall | ----- |
| MINOR:                                   | ----- |
| Head and End Wall                        | ----- |
| Pipe Culvert                             | ----- |
| Footbridge                               | ----- |
| Drainage Box: Catch Basin, DI or JB      | ----- |
| Paved Ditch Gutter                       | ----- |
| Storm Sewer Manhole                      | ----- |
| Storm Sewer                              | ----- |

### UTILITIES:

|                                |       |
|--------------------------------|-------|
| POWER:                         | ----- |
| Existing Power Pole            | ●     |
| Proposed Power Pole            | ○     |
| Existing Joint Use Pole        | ●     |
| Proposed Joint Use Pole        | ○     |
| Power Manhole                  | ⊕     |
| Power Line Tower               | ⊗     |
| Power Transformer              | ⊗     |
| U/G Power Cable Hand Hole      | ----- |
| H-Frame Pole                   | ----- |
| U/G Power Line LOS B (S.U.E.*) | ----- |
| U/G Power Line LOS C (S.U.E.*) | ----- |
| U/G Power Line LOS D (S.U.E.*) | ----- |

### TELEPHONE:

|                                        |       |
|----------------------------------------|-------|
| Existing Telephone Pole                | ●     |
| Proposed Telephone Pole                | ○     |
| Telephone Manhole                      | ⊕     |
| Telephone Pedestal                     | ⊕     |
| Telephone Cell Tower                   | ⊕     |
| U/G Telephone Cable Hand Hole          | ----- |
| U/G Telephone Cable LOS B (S.U.E.*)    | ----- |
| U/G Telephone Cable LOS C (S.U.E.*)    | ----- |
| U/G Telephone Cable LOS D (S.U.E.*)    | ----- |
| U/G Telephone Conduit LOS B (S.U.E.*)  | ----- |
| U/G Telephone Conduit LOS C (S.U.E.*)  | ----- |
| U/G Telephone Conduit LOS D (S.U.E.*)  | ----- |
| U/G Fiber Optics Cable LOS B (S.U.E.*) | ----- |
| U/G Fiber Optics Cable LOS C (S.U.E.*) | ----- |
| U/G Fiber Optics Cable LOS D (S.U.E.*) | ----- |

### WATER:

|                                       |       |
|---------------------------------------|-------|
| Water Manhole                         | ⊕     |
| Water Meter                           | ○     |
| Water Valve                           | ⊗     |
| Water Hydrant                         | ⊕     |
| U/G Water Line LOS B (S.U.E.*)        | ----- |
| U/G Water Line LOS C (S.U.E.*)        | ----- |
| U/G Water Line LOS D (S.U.E.*)        | ----- |
| Above Ground Water Line               | ----- |
| TV:                                   | ----- |
| TV Pedestal                           | ⊕     |
| TV Tower                              | ⊗     |
| U/G TV Cable Hand Hole                | ----- |
| U/G TV Cable LOS B (S.U.E.*)          | ----- |
| U/G TV Cable LOS C (S.U.E.*)          | ----- |
| U/G TV Cable LOS D (S.U.E.*)          | ----- |
| U/G Fiber Optic Cable LOS B (S.U.E.*) | ----- |
| U/G Fiber Optic Cable LOS C (S.U.E.*) | ----- |
| U/G Fiber Optic Cable LOS D (S.U.E.*) | ----- |

### GAS:

|                                     |       |
|-------------------------------------|-------|
| Gas Valve                           | ◇     |
| Gas Meter                           | ⊕     |
| U/G Gas Line LOS B (S.U.E.*)        | ----- |
| U/G Gas Line LOS C (S.U.E.*)        | ----- |
| U/G Gas Line LOS D (S.U.E.*)        | ----- |
| Above Ground Gas Line               | ----- |
| SANITARY SEWER:                     | ----- |
| Sanitary Sewer Manhole              | ⊕     |
| Sanitary Sewer Cleanout             | ⊕     |
| U/G Sanitary Sewer Line             | ----- |
| Above Ground Sanitary Sewer         | ----- |
| SS Forced Main Line LOS B (S.U.E.*) | ----- |
| SS Forced Main Line LOS C (S.U.E.*) | ----- |
| SS Forced Main Line LOS D (S.U.E.*) | ----- |

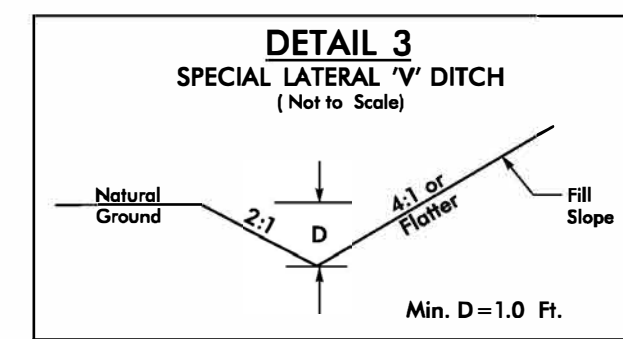
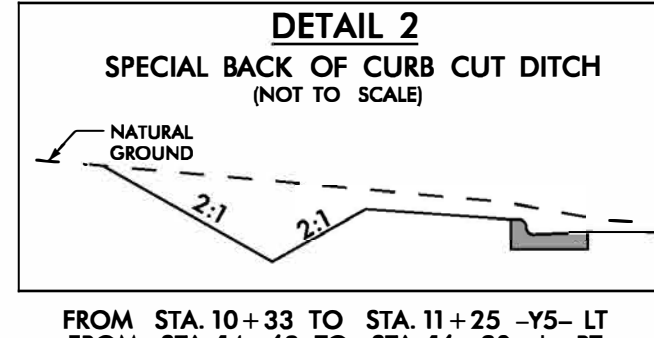
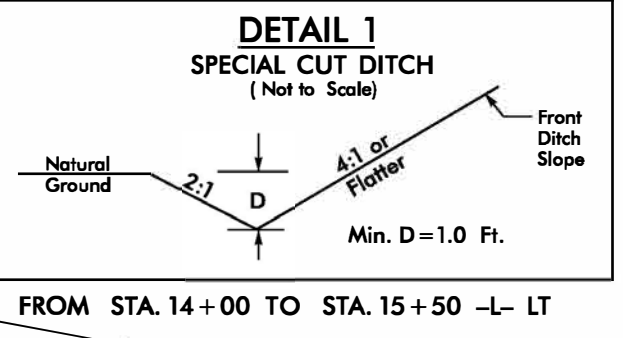
### MISCELLANEOUS:

|                                          |       |
|------------------------------------------|-------|
| Utility Pole                             | ●     |
| Utility Pole with Base                   | □     |
| Utility Located Object                   | ○     |
| Utility Traffic Signal Box               | ⊕     |
| Utility Unknown U/G Line LOS B (S.U.E.*) | ----- |
| U/G Tank; Water, Gas, Oil                | ----- |
| Underground Storage Tank, Approx. Loc.   | ----- |
| A/G Tank; Water, Gas, Oil                | ----- |
| Geoenvironmental Boring                  | ⊕     |
| U/G Test Hole LOS A (S.U.E.*)            | ----- |
| Abandoned According to Utility Records   | ----- |
| End of Information                       | ----- |

NOT FOR CONSTRUCTION. Plans are not approved and are subject to change. Plans are not provided for informational purposes only.



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|                    |      |                      |  |
|--------------------|------|----------------------|--|
| U-6241             |      | 4286 HAMPTON LAKE DR |  |
| MAIN ST            |      | 7023                 |  |
| US 401 BUS         |      |                      |  |
| 1965               | 1744 |                      |  |
| 3220               | 2858 |                      |  |
|                    | -L-  |                      |  |
| 16404              |      | 19690                |  |
| 26880              |      | 32264                |  |
| 238                | 3745 |                      |  |
| 390                | 6137 |                      |  |
| JONESVILLE RD -Y5- |      |                      |  |
|                    | 4561 |                      |  |
|                    | 7473 |                      |  |
| YR 2021            |      |                      |  |
| YR 2041            |      |                      |  |

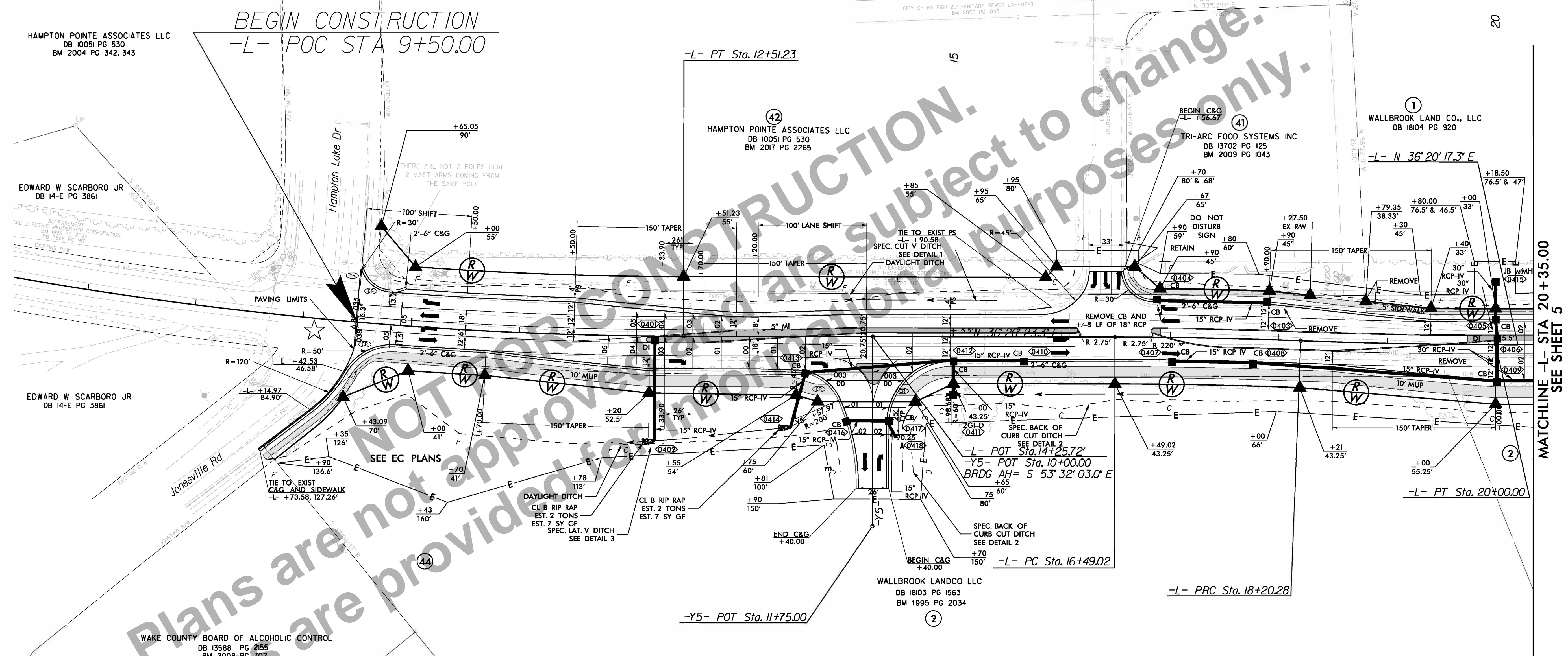
**Stantec**

Stantec Consulting Services Inc.  
 801 Jones Franklin Road  
 Suite 300  
 Raleigh, NC 27606  
 Tel. (919) 851-8866  
 Fax. (919) 851-7024  
 www.stantec.com  
 License No. F-0672

SUNGATE DESIGN GROUP, P.A.  
 905 JONES FRANKLIN ROAD  
 RALEIGH, NORTH CAROLINA 27606  
 NC CDA No. C-0890

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>U-6241 | SHEET NO.<br>4      |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**



BEGIN CONSTRUCTION  
 -L- POC STA 9+50.00

ALL WORK ON THIS SHEET IS ASSOCIATED WITH WALLBROOK DEVELOPMENT AND IS NOT SUBJECT TO FEDERAL REIMBURSEMENT.

★ UPGRADED EXISTING SIGNAL

NOTE: FOR -L- PROFILE SEE SHEET 14 & 15  
 NOTE: FOR -Y5- PROFILE SEE SHEET 20

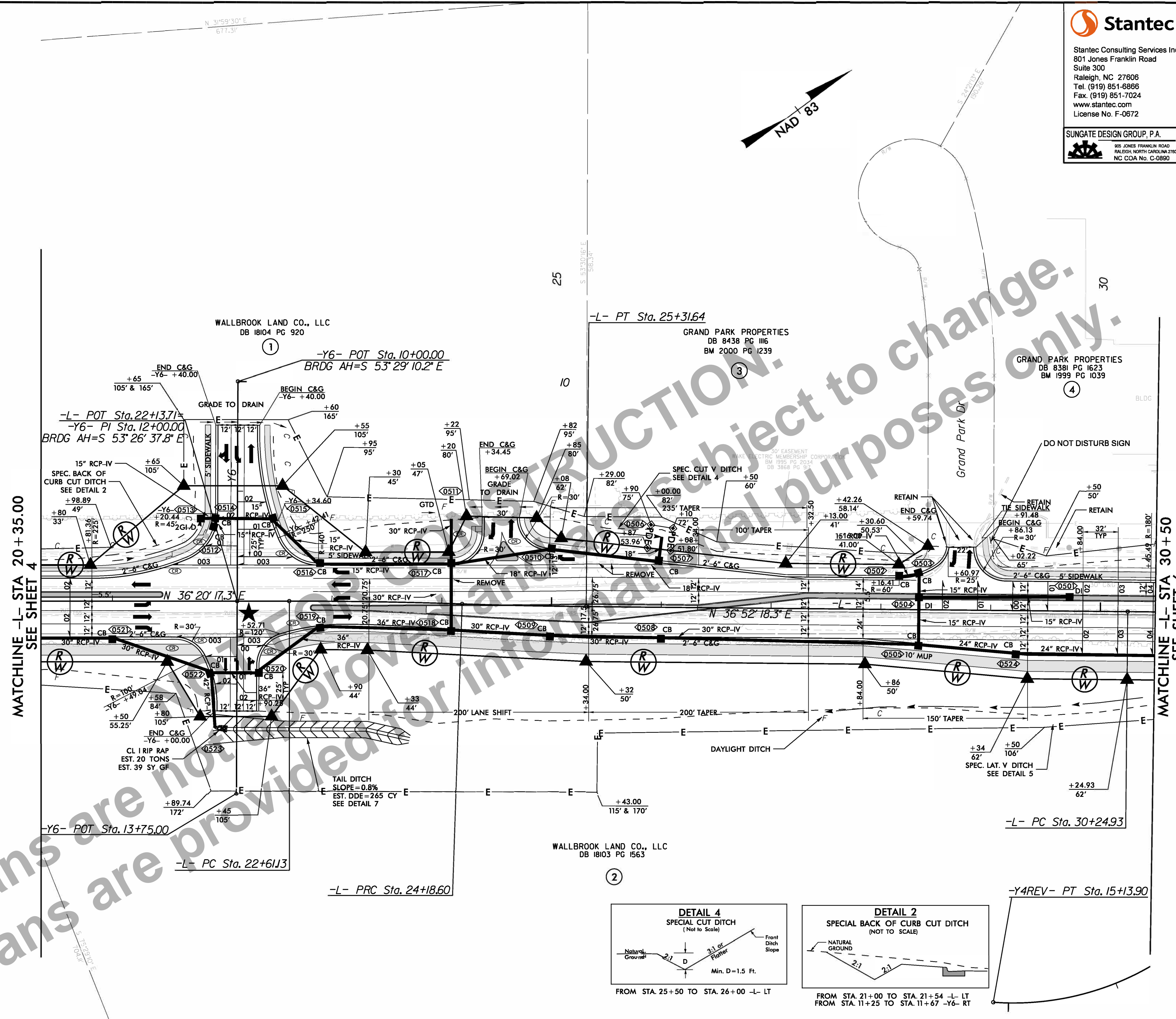
|                        |                       |                       |
|------------------------|-----------------------|-----------------------|
| -L-                    |                       |                       |
| PI Sta 7+29.38         | PI Sta 17+34.66       | PI Sta 19+10.15       |
| Δ = 16° 43' 51.3" (LT) | Δ = 2° 03' 25.6" (RT) | Δ = 2° 09' 31.7" (LT) |
| D = 1' 35" 29.6"       | D = 1' 12" 04.2"      | D = 1' 12" 04.2"      |
| L = 1051.23'           | L = 171.26'           | L = 179.72'           |
| T = 529.38'            | T = 85.64'            | T = 89.87'            |
| R = 3600.00'           | R = 4770.00'          | R = 4770.00'          |
| SE = SEE PLANS         | SE = SEE PLANS        | SE = SEE PLANS        |

MATCHLINE -L- STA 20 + 35.00 SEE SHEET 5

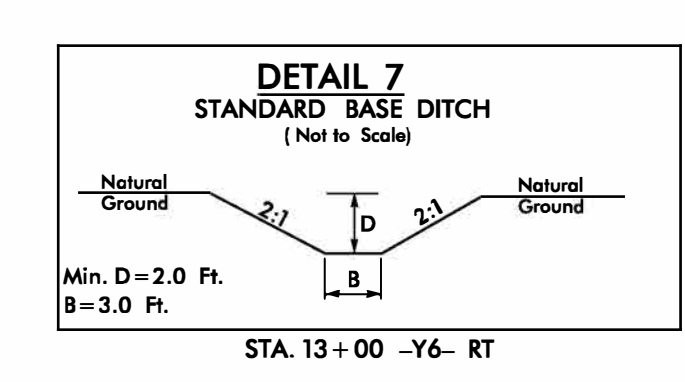
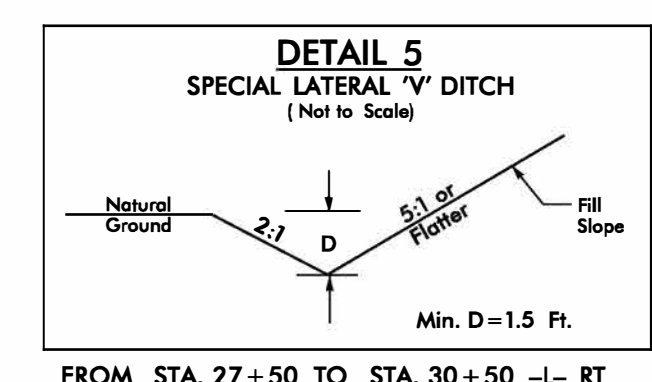
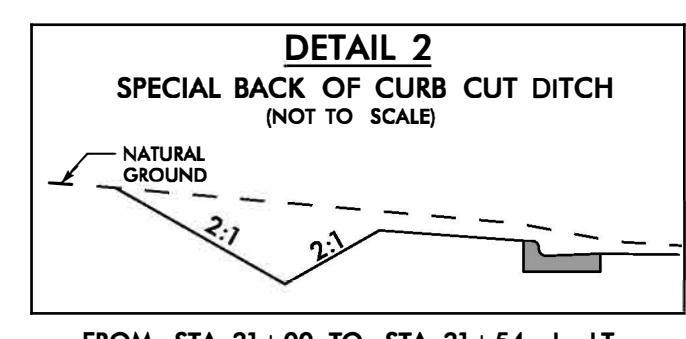
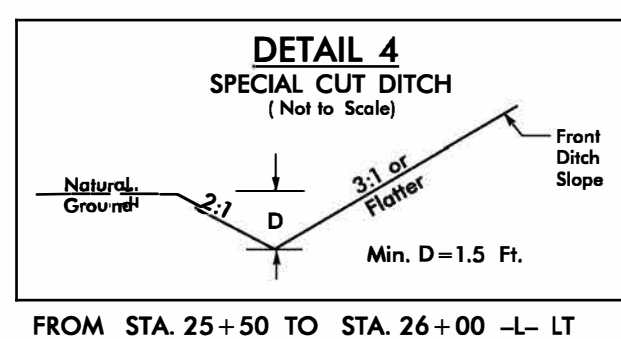


|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>U-6241 | SHEET NO.<br>5      |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |

**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**



Plans are not for construction. Plans are provided for informational purposes only.



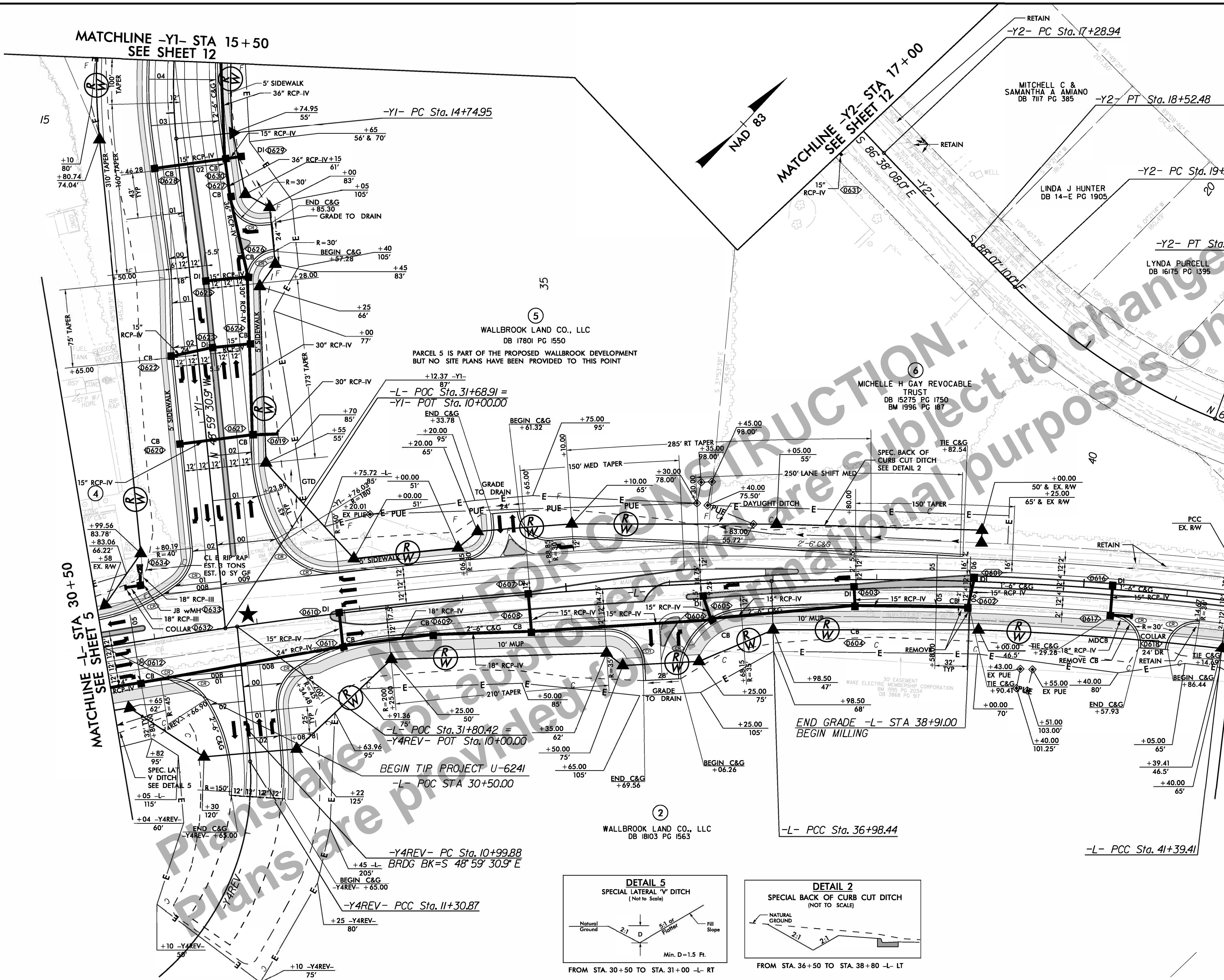
| -L-                                |                                    |                                    |
|------------------------------------|------------------------------------|------------------------------------|
| PI Sta. 23+39.87                   | PI Sta. 24+75.12                   | PI Sta. 33+62.25                   |
| $\Delta = 1^{\circ}53'29.3''$ (RT) | $\Delta = 1^{\circ}21'28.3''$ (LT) | $\Delta = 8^{\circ}05'24.3''$ (RT) |
| $D = 1^{\circ}12'04.2''$           | $D = 1^{\circ}12'04.2''$           | $D = 1^{\circ}12'04.2''$           |
| $L = 157.47'$                      | $L = 113.05'$                      | $L = 673.52'$                      |
| $T = 78.74'$                       | $T = 56.53'$                       | $T = 337.32'$                      |
| $R = 4,770.00'$                    | $R = 4,770.00'$                    | $R = 4,770.00'$                    |
| SE = SEE PLANS                     | SE = SEE PLANS                     | SE = SEE PLANS                     |

**ALL WORK ON THIS SHEET IS ASSOCIATED WITH WALLBROOK DEVELOPMENT AND IS NOT SUBJECT TO FEDERAL REIMBURSEMENT.**

★ **NEW SIGNAL**  
 NOTE: FOR -L- PROFILE SEE SHEET 15  
 NOTE: FOR -Y6- PROFILE SEE SHEET 20



8/17/99  
 8/20/2021  
 Us:\Revised\Y-Proj\U-6241\_Rdu\_psh06.dgn  
 thoppe

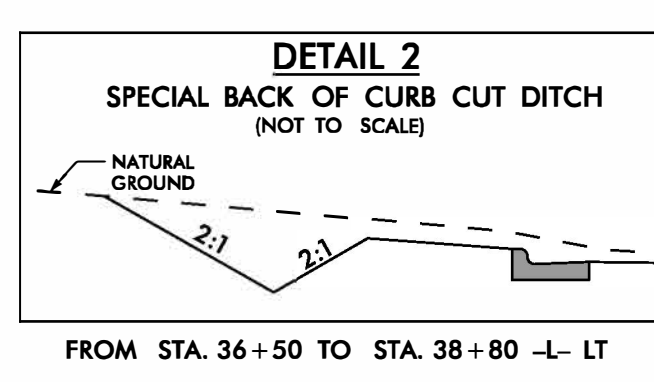
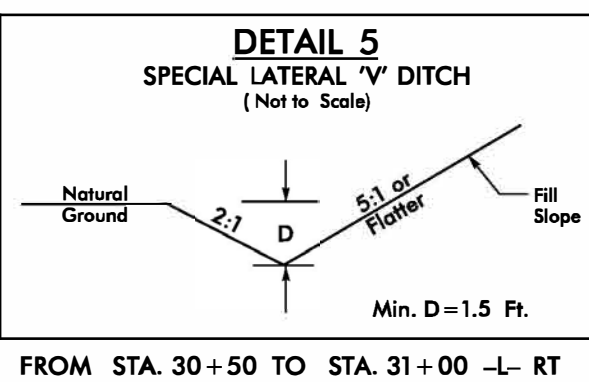


**Stantec**  
 Stantec Consulting Services Inc.  
 801 Jones Franklin Road  
 Suite 300  
 Raleigh, NC 27606  
 Tel. (919) 851-8866  
 Fax. (919) 851-7024  
 www.stantec.com  
 License No. F-0672

**SUNGATE DESIGN GROUP, P.A.**  
 905 JONES FRANKLIN ROAD  
 RALEIGH, NORTH CAROLINA 27606  
 NC CDA No. C-0890

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>U-6241 | SHEET NO.<br>6      |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**



|                                 |                                          |                |
|---------------------------------|------------------------------------------|----------------|
| U-6241<br>MAIN ST<br>US 401 BUS | 5220<br>BURLINGTON<br>MILLS ROAD<br>8554 | 17118<br>28050 |
| 16950<br>27775                  | 2294<br>3759                             | 2065<br>3383   |
|                                 | 559<br>916                               | 956<br>1566    |
|                                 | 2376<br>3894                             | -Y4-           |

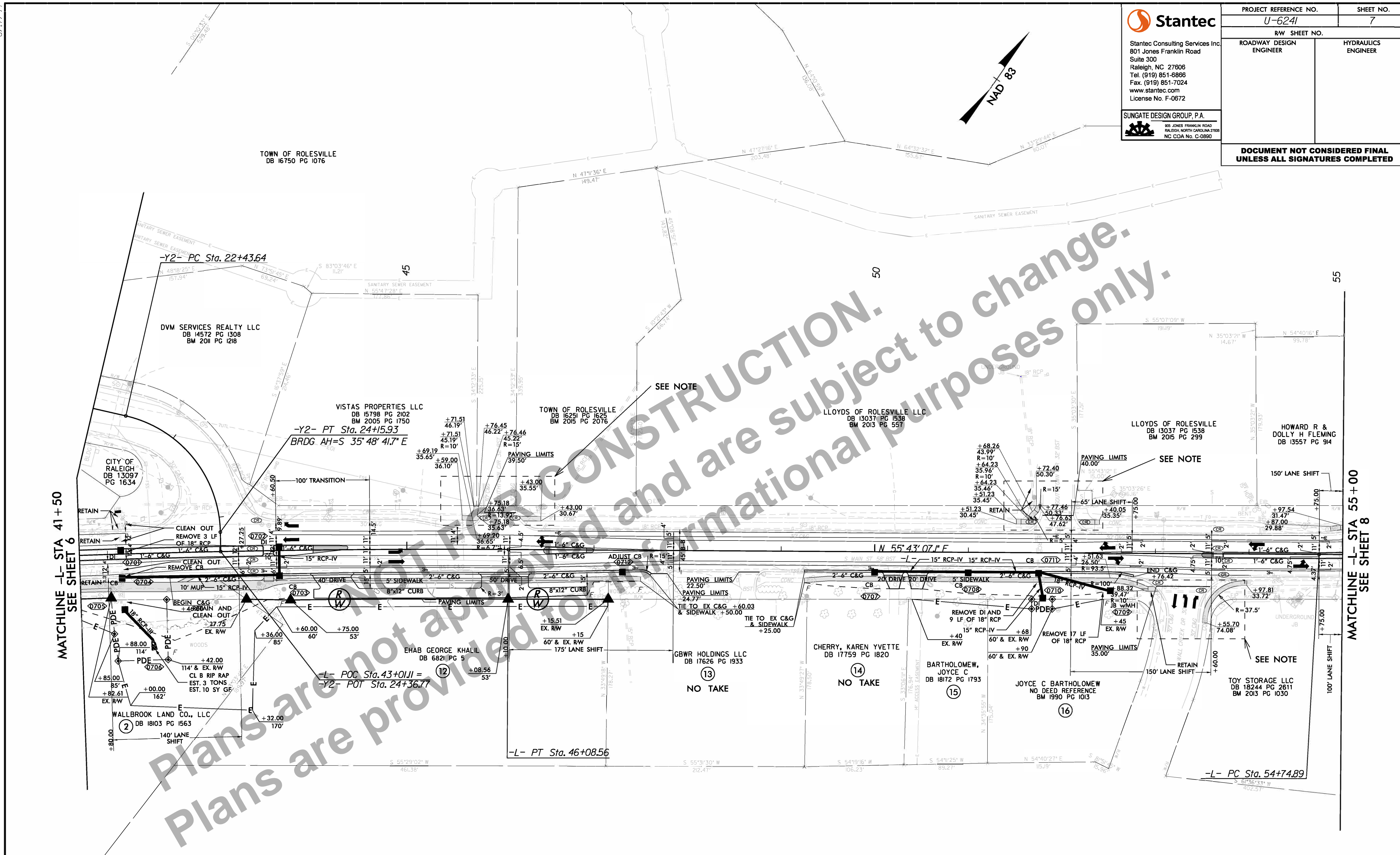
|                                                                                                                                                           |                                                                                                                                                            |                                                                                                                                                             |                                                                                                                                                             |                                                                                                                                                            |                                                                                                                                                             |                                                                                                                                                              |                                                                                                                                                                |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>-L-</b><br>PI Sta 33+62.25<br>$\Delta = 8' 05" 24.3" (RT)$<br>$D = 1' 12" 04.2"$<br>$L = 673.52'$<br>$T = 337.32'$<br>$R = 4770.00'$<br>SE = SEE PLANS | <b>-L-</b><br>PI Sta 39+19.33<br>$\Delta = 8' 25' 18.5" (RT)$<br>$D = 1' 54' 35.5"$<br>$L = 440.97'$<br>$T = 220.88'$<br>$R = 3,000.00'$<br>SE = SEE PLANS | <b>-L-</b><br>PI Sta 43+74.02<br>$\Delta = 2' 20' 06.0" (RT)$<br>$D = 0' 29' 51.7"$<br>$L = 469.15'$<br>$T = 234.61'$<br>$R = 11,512.00'$<br>SE = SEE PLANS | <b>-Y1-</b><br>PI Sta 16+89.75<br>$\Delta = 43' 53' 56.0" (RT)$<br>$D = 10' 44' 58.8"$<br>$L = 408.37'$<br>$T = 214.80'$<br>$R = 533.00'$<br>SE = SEE PLANS | <b>-Y2-</b><br>PI Sta 17+90.71<br>$\Delta = 1' 29' 02.0" (LT)$<br>$D = 1' 12' 04.2"$<br>$L = 123.54'$<br>$T = 61.77'$<br>$R = 4,770.00'$<br>SE = SEE PLANS | <b>-Y2-</b><br>PI Sta 20+27.92<br>$\Delta = 23' 37' 46.3" (LT)$<br>$D = 10' 08' 27.0"$<br>$L = 233.01'$<br>$T = 118.19'$<br>$R = 565.00'$<br>SE = SEE PLANS | <b>-Y4REV-</b><br>PI Sta 11+15.38<br>$\Delta = 1' 46' 32.8" (RT)$<br>$D = 5' 43' 46.5"$<br>$L = 30.99'$<br>$T = 15.50'$<br>$R = 1,000.00'$<br>SE = SEE PLANS | <b>-Y4REV-</b><br>PI Sta 13+71.38<br>$\Delta = 87' 46' 55.7" (RT)$<br>$D = 22' 55' 05.9"$<br>$L = 383.02'$<br>$T = 240.51'$<br>$R = 250.00'$<br>SE = SEE PLANS |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|

★ **NEW SIGNAL**

**NOTE:**  
 FOR -L- PROFILE SEE SHEET 15  
 FOR -Y1- PROFILE SEE SHEET 18  
 FOR -Y4REV- PROFILE SEE SHEET 20



**DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED**



Plans are not for CONSTRUCTION. Plans are subject to change. Plans are provided for informational purposes only.

MATCHLINE -L- STA 41 + 50  
SEE SHEET 6

MATCHLINE -L- STA 55 + 00  
SEE SHEET 8

| -L-                            |                                |
|--------------------------------|--------------------------------|
| PI Sta 43+74.02                | PI Sta 55+41.73                |
| $\Delta = 2' 20'' 06.0''$ (RT) | $\Delta = 0' 38'' 18.0''$ (RT) |
| $D = 0' 29'' 51.7''$           | $D = 0' 28'' 38.9''$           |
| $L = 469.15'$                  | $L = 133.69'$                  |
| $T = 234.61'$                  | $T = 66.85'$                   |
| $R = 11,512.00'$               | $R = 12,000.00'$               |
| SE = SEE PLANS                 | SE = SEE PLANS                 |

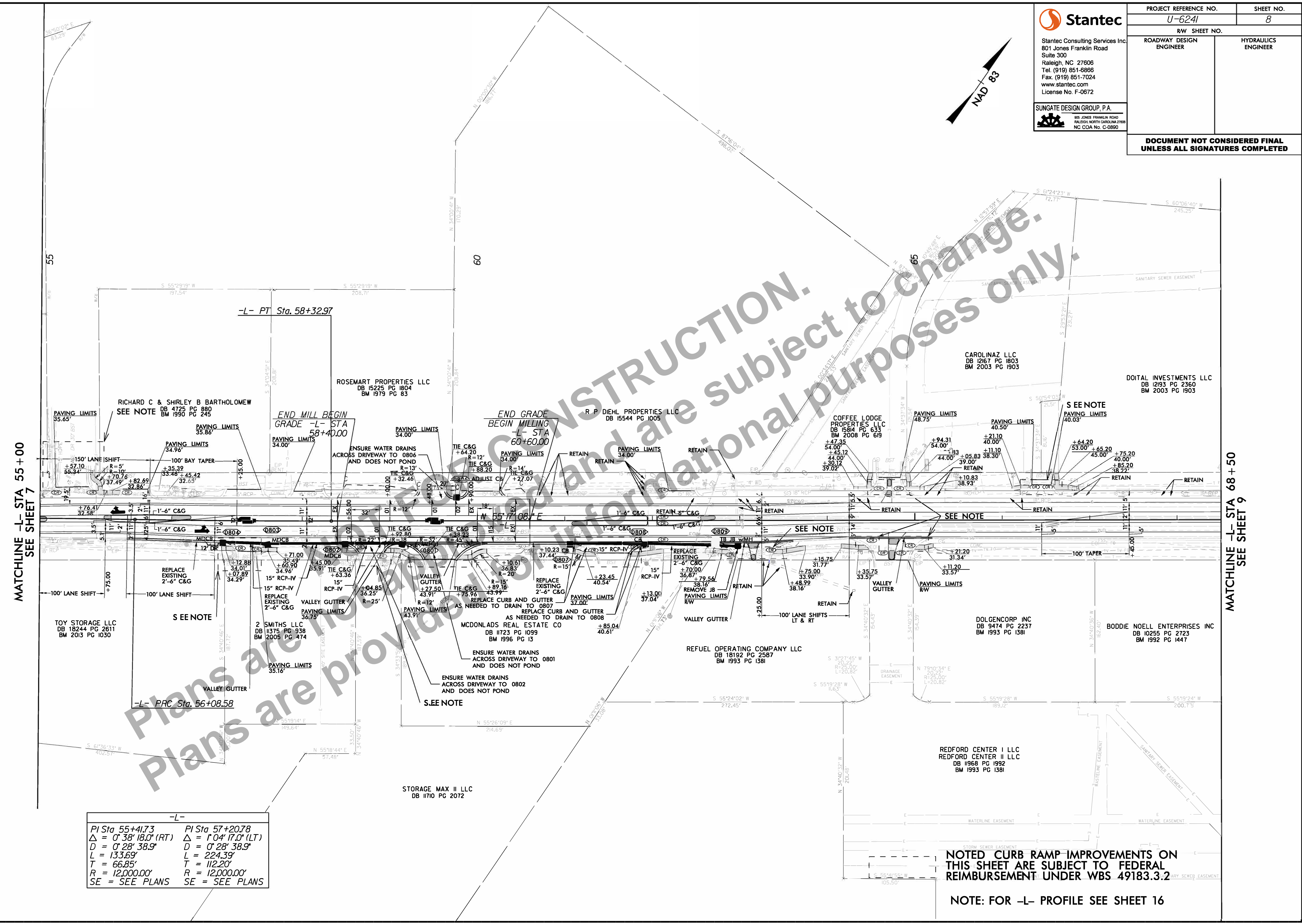
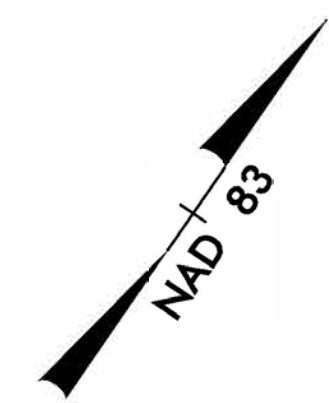
| -Y2-                            |  |
|---------------------------------|--|
| PI Sta 23+45.09                 |  |
| $\Delta = 75' 56'' 14.6''$ (RT) |  |
| $D = 44' 04'' 25.2''$           |  |
| $L = 172.30'$                   |  |
| $T = 101.45'$                   |  |
| $R = 130.00'$                   |  |
| SE = SEE PLANS                  |  |

NOTED CURB RAMP IMPROVEMENTS ON THIS SHEET ARE SUBJECT TO FEDERAL REIMBURSEMENT UNDER WBS 49183.3.2

NOTE: FOR -L- PROFILE SEE SHEET 15 & 16



|                                                                          |                     |
|--------------------------------------------------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>U-6241                                          | SHEET NO.<br>8      |
| RW SHEET NO.<br>ROADWAY DESIGN ENGINEER                                  | HYDRAULICS ENGINEER |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b> |                     |



MATCHLINE -L- STA 55+00  
SEE SHEET 7

MATCHLINE -L- STA 68+50  
SEE SHEET 9

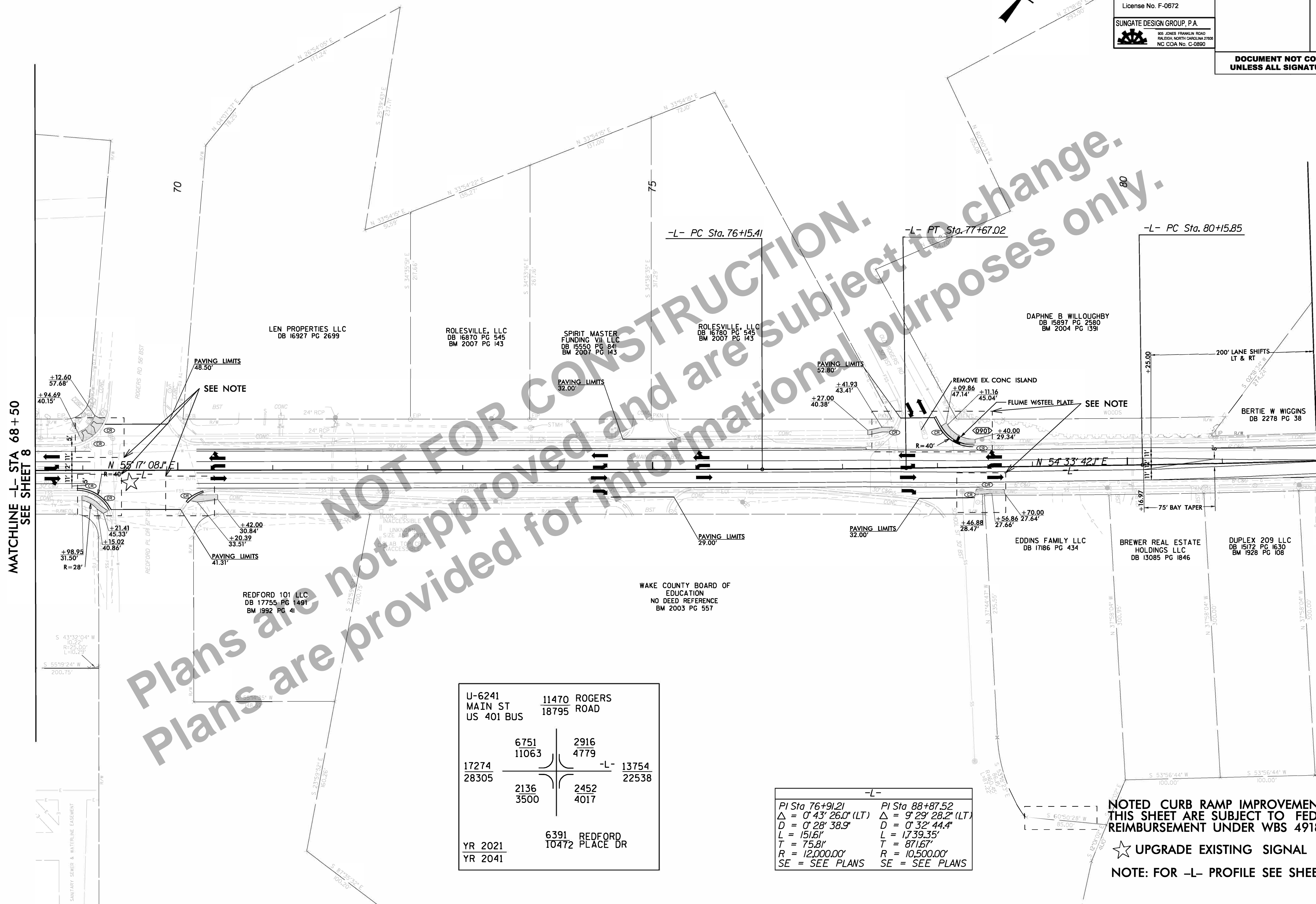
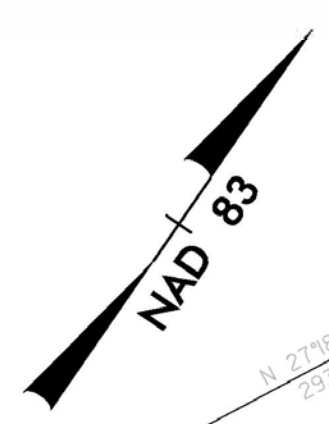
|                                      |                                      |
|--------------------------------------|--------------------------------------|
| -L-                                  |                                      |
| PI Sta 55+41.73                      | PI Sta 57+20.78                      |
| $\Delta = 0^{\circ} 38' 18.0''$ (RT) | $\Delta = 1^{\circ} 04' 17.0''$ (LT) |
| $D = 0^{\circ} 28' 38.9''$           | $D = 0^{\circ} 28' 38.9''$           |
| $L = 133.69'$                        | $L = 224.39'$                        |
| $T = 66.85'$                         | $T = 112.20'$                        |
| $R = 12,000.00'$                     | $R = 12,000.00'$                     |
| SE = SEE PLANS                       | SE = SEE PLANS                       |

**NOTED CURB RAMP IMPROVEMENTS ON THIS SHEET ARE SUBJECT TO FEDERAL REIMBURSEMENT UNDER WBS 49183.3.2**

NOTE: FOR -L- PROFILE SEE SHEET 16

8/17/99  
 8/20/2021  
 Us:Roadway\_V-Proj\_NJ\_6241\_Rdu\_psh08.dgn





MATCHLINE -L- STA 68+50  
SEE SHEET 8

MATCHLINE -L- STA 82+00  
SEE SHEET 10

|                                 |                                |
|---------------------------------|--------------------------------|
| U-6241<br>MAIN ST<br>US 401 BUS | 11470 ROGERS<br>18795 ROAD     |
| 17274<br>28305                  | 6751<br>11063                  |
|                                 | 2916<br>4779                   |
|                                 | -L- 13754                      |
|                                 | 2136<br>3500                   |
|                                 | 2452<br>4017                   |
| YR 2021                         | 6391 REDFORD<br>10472 PLACE DR |
| YR 2041                         |                                |

|                                    |                                    |
|------------------------------------|------------------------------------|
| -L-                                |                                    |
| PI Sta 76+91.21                    | PI Sta 88+87.52                    |
| $\Delta = 0^\circ 43' 26.0''$ (LT) | $\Delta = 9^\circ 29' 28.2''$ (LT) |
| $D = 0^\circ 28' 38.9''$           | $D = 0^\circ 32' 44.4''$           |
| $L = 151.61'$                      | $L = 1739.35'$                     |
| $T = 75.81'$                       | $T = 871.67'$                      |
| $R = 12,000.00'$                   | $R = 10,500.00'$                   |
| SE = SEE PLANS                     | SE = SEE PLANS                     |

NOTED CURB RAMP IMPROVEMENTS ON THIS SHEET ARE SUBJECT TO FEDERAL REIMBURSEMENT UNDER WBS 49183.3.2

★ UPGRADE EXISTING SIGNAL

NOTE: FOR -L- PROFILE SEE SHEET 16 & 17

B:\17\99  
9/20/2021  
U:\Roadway\Proj\U-6241\_Rdu\_psh09.dgn



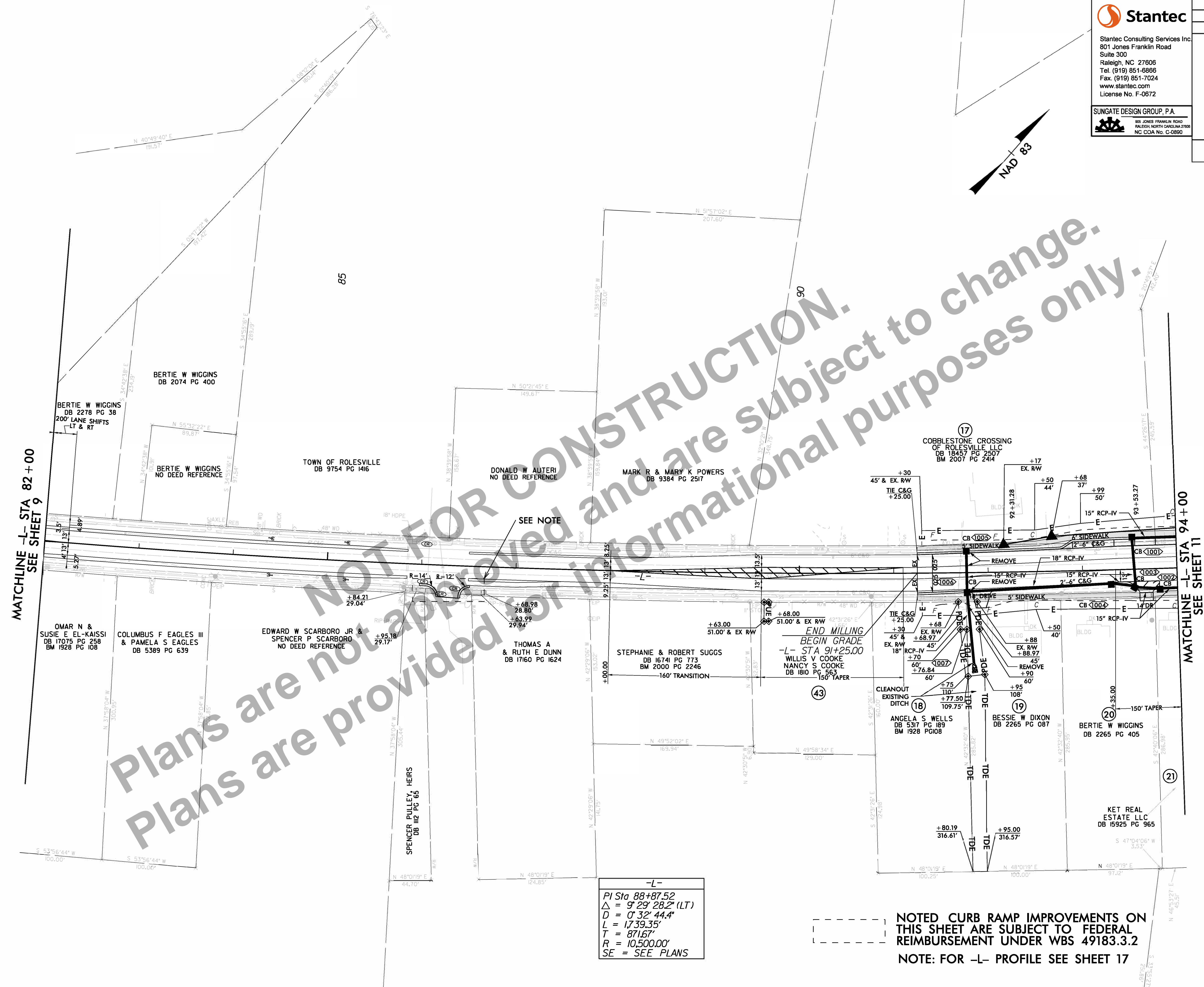
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9/20/2021  
D:\Roadway\Pro\NJ-6241\_Rdu\_psh10.dgn

|                                 |  |                     |  |
|---------------------------------|--|---------------------|--|
| PROJECT REFERENCE NO.<br>U-6241 |  | SHEET NO.<br>10     |  |
| RW SHEET NO.                    |  |                     |  |
| ROADWAY DESIGN ENGINEER         |  | HYDRAULICS ENGINEER |  |

Stantec  
Stantec Consulting Services Inc.  
801 Jones Franklin Road  
Suite 300  
Raleigh, NC 27606  
Tel. (919) 851-8866  
Fax. (919) 851-7024  
www.stantec.com  
License No. F-0672

SUNGATE DESIGN GROUP, P.A.  
905 JONES FRANKLIN ROAD  
RALEIGH, NORTH CAROLINA 27606  
NC CDA No. C-0890

**DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED**



MATCHLINE -L- STA 82+00  
SEE SHEET 9

MATCHLINE -L- STA 94+00  
SEE SHEET 11

-L-  
PI Sta 88+87.52  
 $\Delta = 9' 29'' 28.2''$  (LT)  
 $D = 0' 32'' 44.4''$   
 $L = 1739.35'$   
 $T = 871.67'$   
 $R = 10,500.00'$   
SE = SEE PLANS

NOTED CURB RAMP IMPROVEMENTS ON THIS SHEET ARE SUBJECT TO FEDERAL REIMBURSEMENT UNDER WBS 49183.3.2  
NOTE: FOR -L- PROFILE SEE SHEET 17



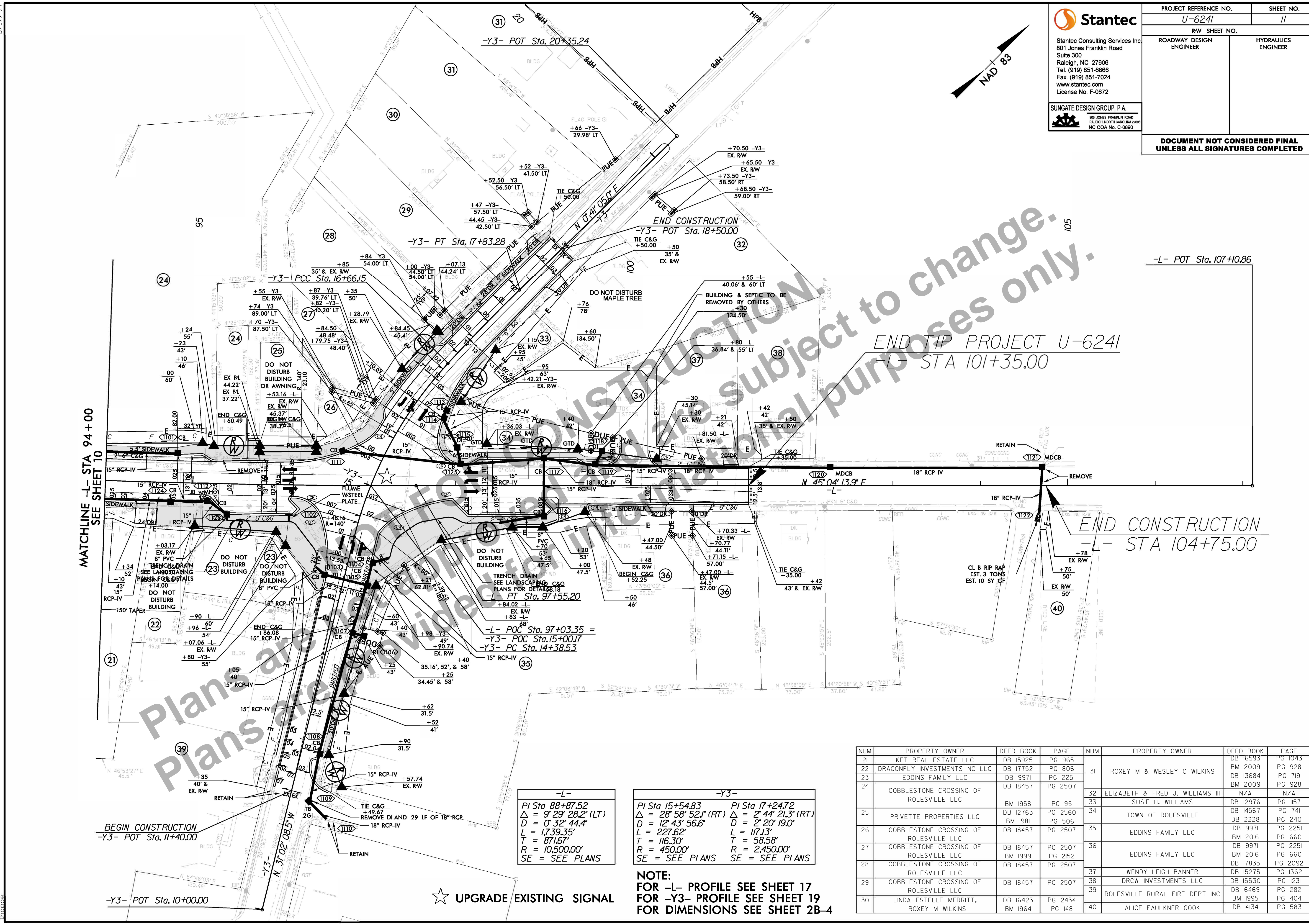
8/17/99  
 8/20/2020  
 U:\Roadway\Projects\U-6241\_Rdu\_psh1.dgn  
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**Stantec**  
 Stantec Consulting Services Inc.  
 801 Jones Franklin Road  
 Suite 300  
 Raleigh, NC 27606  
 Tel. (919) 851-8866  
 Fax. (919) 851-7024  
 www.stantec.com  
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**SUNGATE DESIGN GROUP, P.A.**  
 105 JONES FRANKLIN ROAD  
 RALEIGH, NORTH CAROLINA 27606  
 NC COA No. C-0890

|                                 |                     |
|---------------------------------|---------------------|
| PROJECT REFERENCE NO.<br>U-6241 | SHEET NO.<br>11     |
| ROADWAY DESIGN ENGINEER         | HYDRAULICS ENGINEER |

**DOCUMENT NOT CONSIDERED FINAL  
 UNLESS ALL SIGNATURES COMPLETED**



MATCHLINE -L- STA 94+00  
 SEE SHEET 10

BEGIN CONSTRUCTION  
 -Y3- POT Sta. 11+40.00

-Y3- POT Sta. 10+00.00

**-L-**  
 PI Sta 88+87.52  
 $\Delta = 9^{\circ} 29' 28.2''$  (LT)  
 $D = 0^{\circ} 32' 44.4''$   
 $L = 1,739.35'$   
 $T = 871.67'$   
 $R = 10,500.00'$   
 SE = SEE PLANS

**-Y3-**  
 PI Sta 15+54.83      PI Sta 17+24.72  
 $\Delta = 28^{\circ} 58' 52.1''$  (RT)     $\Delta = 2^{\circ} 44' 21.3''$  (RT)  
 $D = 12^{\circ} 43' 56.6''$        $D = 2^{\circ} 20' 19.0''$   
 $L = 227.62'$                $L = 117.13'$   
 $T = 116.30'$                $T = 58.58'$   
 $R = 450.00'$                $R = 2,450.00'$   
 SE = SEE PLANS          SE = SEE PLANS

**NOTE:**  
 FOR -L- PROFILE SEE SHEET 17  
 FOR -Y3- PROFILE SEE SHEET 19  
 FOR DIMENSIONS SEE SHEET 28-4

★ UPGRADE EXISTING SIGNAL

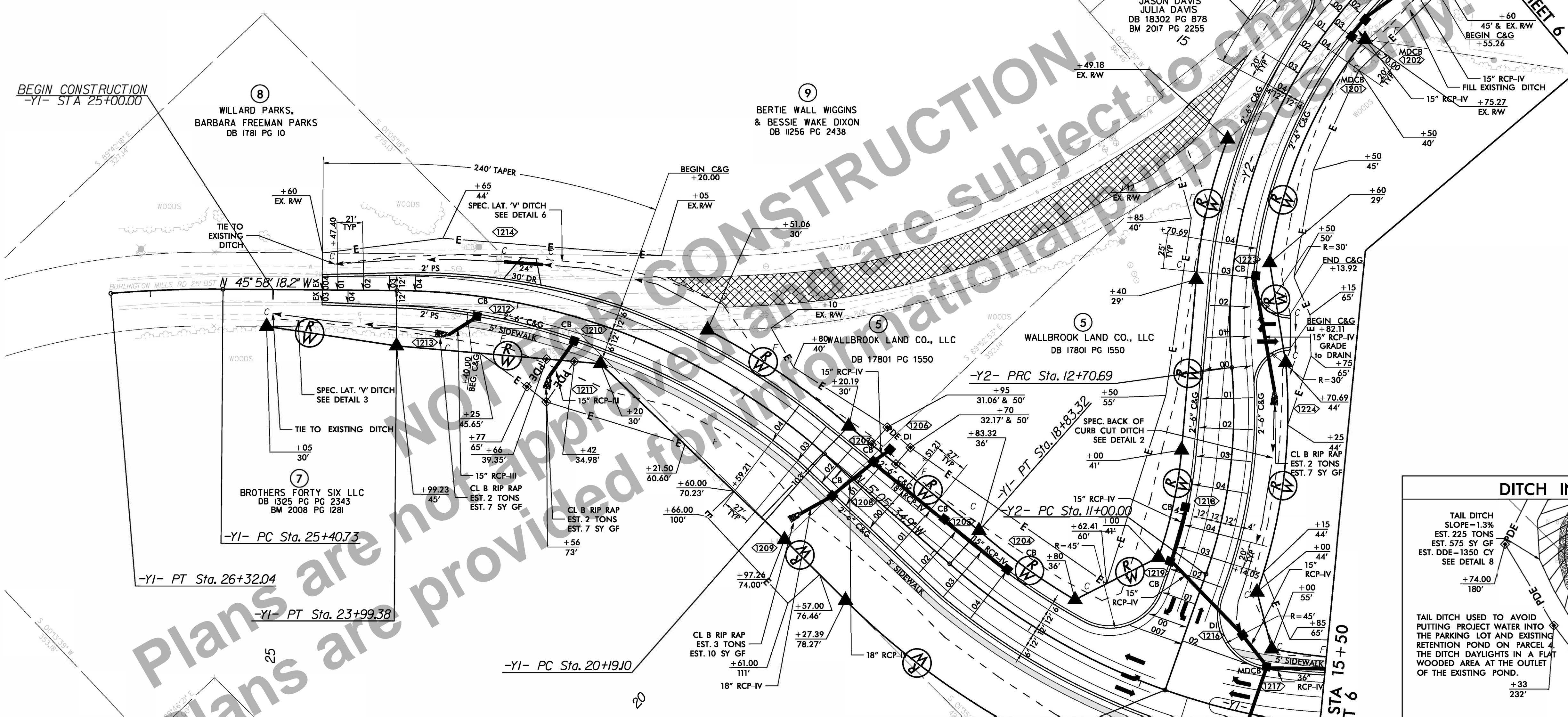
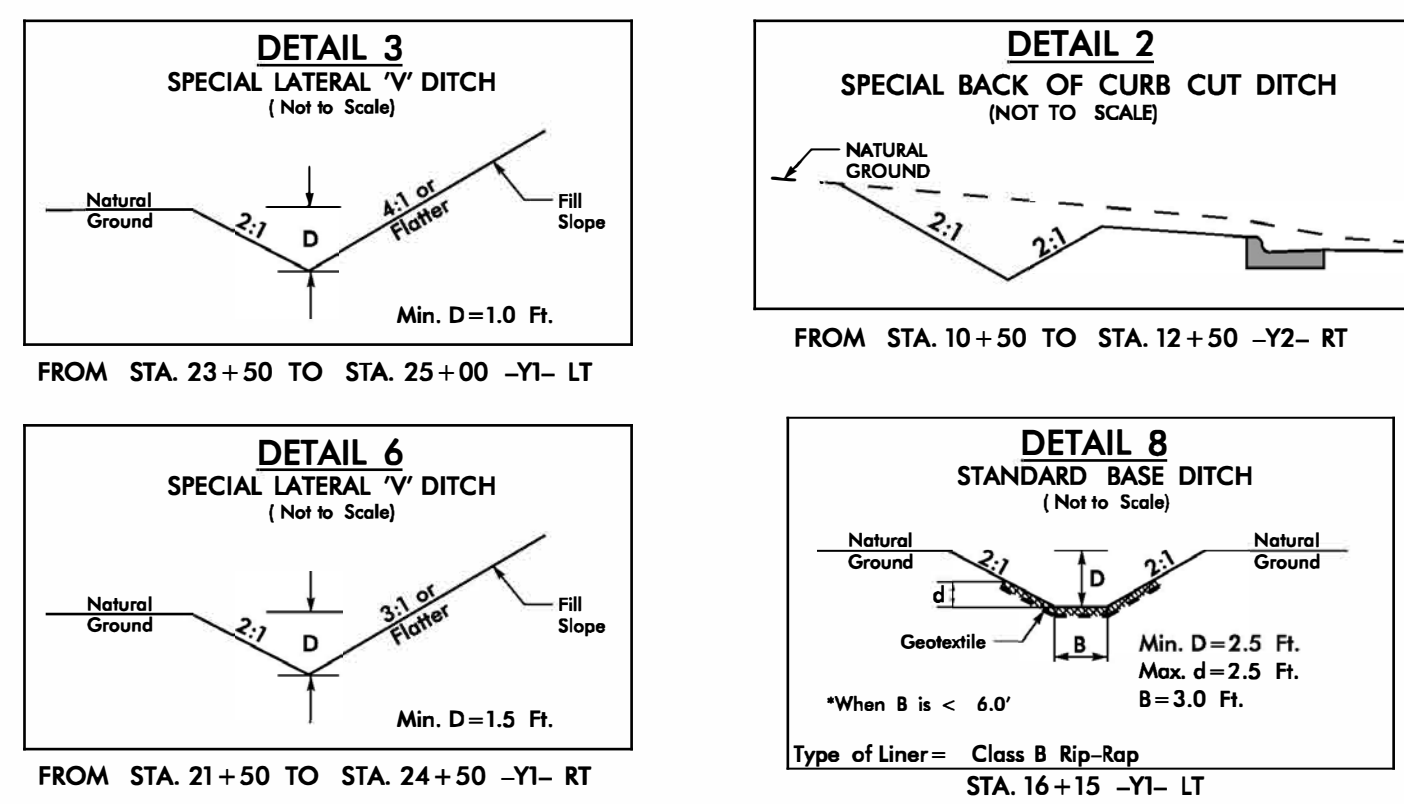
| NUM | PROPERTY OWNER                         | DEED BOOK | PAGE    | NUM     | PROPERTY OWNER                   | DEED BOOK | PAGE    |
|-----|----------------------------------------|-----------|---------|---------|----------------------------------|-----------|---------|
| 21  | KET REAL ESTATE LLC                    | DB 15925  | PG 965  | 31      | ROXEY M & WESLEY C WILKINS       | DB 16593  | PG 1043 |
| 22  | DRAGONFLY INVESTMENTS NC LLC           | DB 17752  | PG 806  |         |                                  | BM 2009   | PG 928  |
| 23  | EDDINS FAMILY LLC                      | DB 9971   | PG 2251 |         |                                  | DB 13684  | PG 719  |
| 24  | COBBLESTONE CROSSING OF ROLESVILLE LLC | DB 18457  | PG 2507 | BM 2009 | PG 928                           |           |         |
|     |                                        | BM 1958   | PG 95   | 32      | ELIZABETH & FRED J. WILLIAMS III | N/A       | N/A     |
| 25  | PRIVETTE PROPERTIES LLC                | DB 12763  | PG 2560 | 33      | SUSIE H. WILLIAMS                | DB 12976  | PG 1157 |
| 26  | COBBLESTONE CROSSING OF ROLESVILLE LLC | DB 18457  | PG 2507 | 34      | TOWN OF ROLESVILLE               | DB 14567  | PG 741  |
|     |                                        | BM 1981   | PG 506  | 35      | EDDINS FAMILY LLC                | DB 17835  | PG 2092 |
| 27  | COBBLESTONE CROSSING OF ROLESVILLE LLC | DB 18457  | PG 2507 | 36      | EDDINS FAMILY LLC                | DB 9971   | PG 2251 |
| 28  | COBBLESTONE CROSSING OF ROLESVILLE LLC | DB 18457  | PG 2507 |         |                                  | BM 2016   | PG 660  |
| 29  | COBBLESTONE CROSSING OF ROLESVILLE LLC | DB 18457  | PG 2507 | 37      | WENDY LEIGH BANNER               | DB 15275  | PG 1362 |
|     |                                        | BM 1999   | PG 2152 | 38      | DRCW INVESTMENTS LLC             | DB 15530  | PG 1231 |
| 30  | LINDA ESTELLE MERRITT, ROXEY M WILKINS | DB 16423  | PG 2434 | 39      | ROLESVILLE RURAL FIRE DEPT INC   | DB 6469   | PG 282  |
|     |                                        | BM 1964   | PG 148  | 40      | ALICE FAULKNER COOK              | BM 1995   | PG 404  |

END TIP PROJECT U-6241  
 STA 101+35.00

-L- POT Sta. 107+10.86

END CONSTRUCTION  
 -L- STA 104+75.00

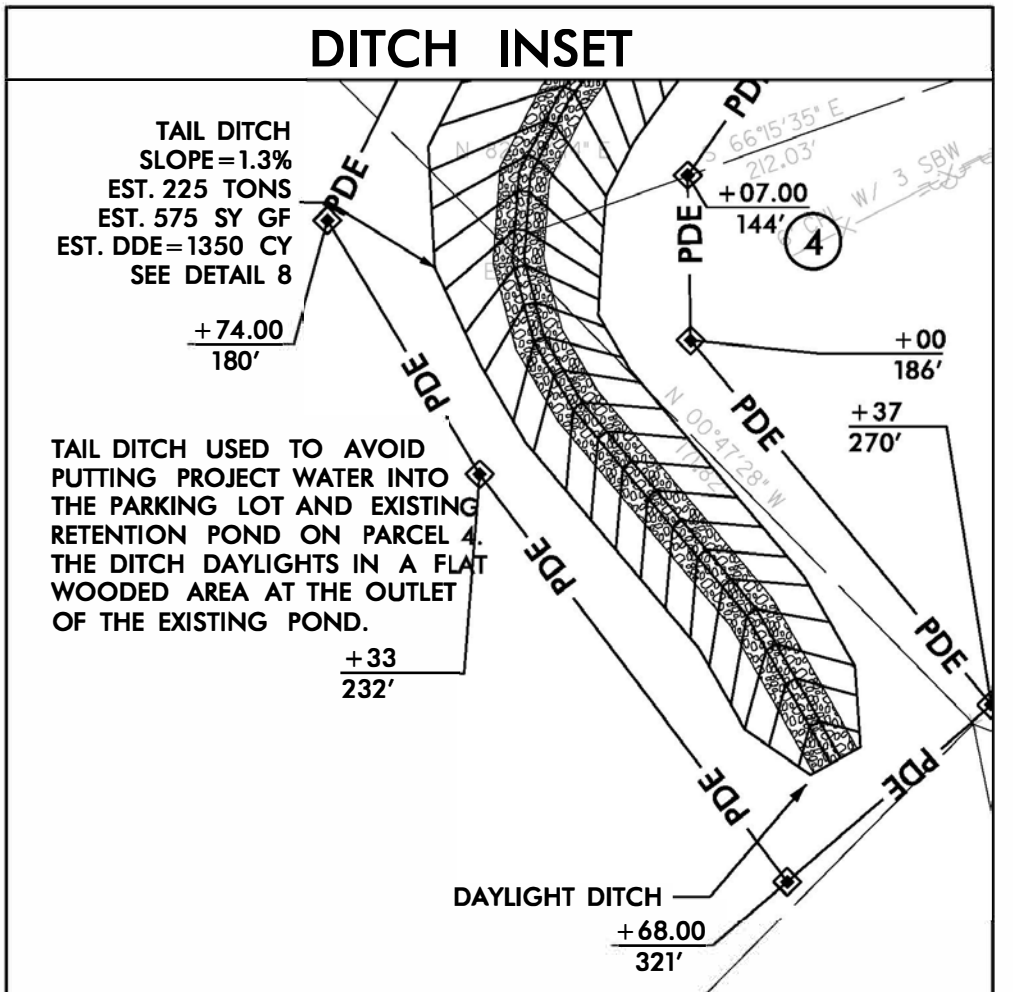




| -Y1-                                |                                     |                                    |
|-------------------------------------|-------------------------------------|------------------------------------|
| PI Sta 16+89.75                     | PI Sta 22+17.74                     | PI Sta 25+86.41                    |
| $\Delta = 43^\circ 53' 56.0''$ (RT) | $\Delta = 40^\circ 52' 43.3''$ (LT) | $\Delta = 5^\circ 13' 54.0''$ (LT) |
| D = 10' 44' 58.8"                   | D = 10' 44' 58.8"                   | D = 5' 43' 46.5"                   |
| L = 408.37'                         | L = 380.28'                         | L = 91.31'                         |
| T = 214.80'                         | T = 198.64'                         | T = 45.69'                         |
| R = 533.00'                         | R = 533.00'                         | R = 1,000.00'                      |
| SE = SEE PLANS                      | SE = SEE PLANS                      | SE = SEE PLANS                     |

| -Y2-                                |                                     |
|-------------------------------------|-------------------------------------|
| PI Sta 11+86.66                     | PI Sta 14+78.28                     |
| $\Delta = 24^\circ 26' 57.0''$ (LT) | $\Delta = 54^\circ 51' 21.9''$ (RT) |
| D = 14' 19' 26.2"                   | D = 14' 19' 26.2"                   |
| L = 170.69'                         | L = 382.97'                         |
| T = 86.66'                          | T = 207.59'                         |
| R = 400.00'                         | R = 400.00'                         |
| SE = SEE PLANS                      | SE = SEE PLANS                      |

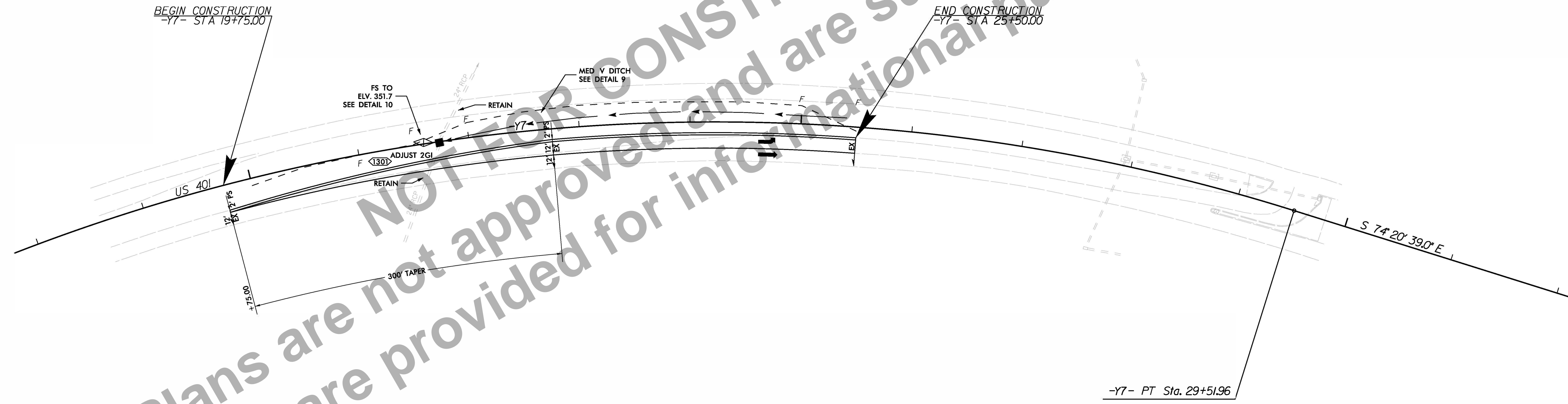
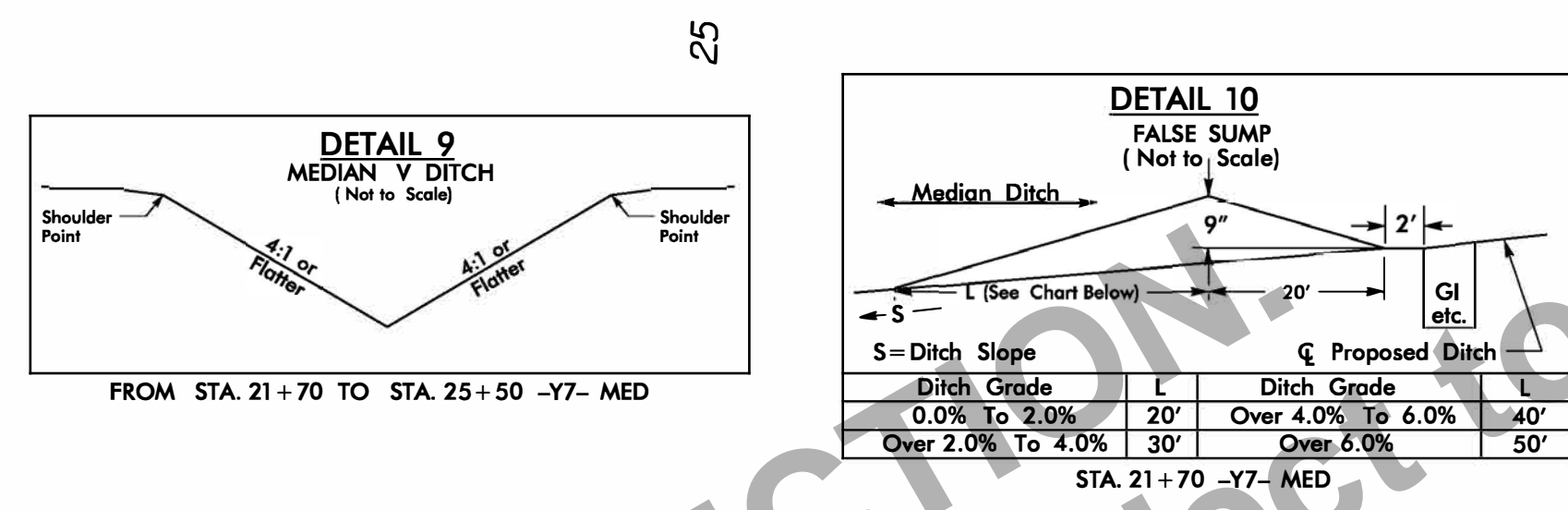


**NOTE:**  
 FOR -Y1- PROFILE SEE SHEET 18  
 FOR -Y2- PROFILE SEE SHEET 19

Plans are not approved for international use. Plans are subject to change.



|                                                                          |                        |
|--------------------------------------------------------------------------|------------------------|
| PROJECT REFERENCE NO.<br><i>U-6241</i>                                   | SHEET NO.<br><i>13</i> |
| RW SHEET NO.                                                             |                        |
| ROADWAY DESIGN ENGINEER                                                  | HYDRAULICS ENGINEER    |
| <b>DOCUMENT NOT CONSIDERED FINAL<br/>UNLESS ALL SIGNATURES COMPLETED</b> |                        |



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|                                     |
|-------------------------------------|
| -Y7-                                |
| PI Sta 23+34.65                     |
| $\Delta = 42^\circ 38' 33.8''$ (RT) |
| $D = 3' 17'' 06.4''$                |
| $L = 1,298.06'$                     |
| $T = 680.75'$                       |
| $R = 1,744.10'$                     |
| SE = SEE PLANS                      |

|            |               |            |
|------------|---------------|------------|
| U-6241     | 16404         | US 401 BUS |
| MAIN ST    | 26880         |            |
| US 401 BUS |               |            |
|            | -L-           |            |
|            | 15142         | 1262       |
|            | 24812         | 2068       |
| 32493      | US 401 BYPASS | 18613      |
| 53243      | -Y7-          | 30499      |
| YR 2021    |               |            |
| YR 2041    |               |            |

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