



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

December 9, 2011

U. S. Army Corps of Engineers
Wilmington Regulatory Office
69 Darlington Avenue
Wilmington, NC 28402-1890

ATTN: Mr. Ronnie Smith
NCDOT Coordinator

Dear Sir:

Subject: **Application for Section 404 Nationwide Permit 3** for the US 1 (Sandhills Boulevard) and SR 1309 (Morganton Road) Upgrade Interchange, State Project No. 8.1560801, Federal Aid Project No. STPNHF-1(10), WBS Element No. 34923.1.1, Division 8, T.I.P No. U-3324.

The North Carolina Department of Transportation (NCDOT) proposes to modify the US 1/Morganton Road interchange, the US 1/Luther Way intersection and the intersections of US 1 with Murray Hill Road, Saunders Boulevard, and Henson Street in Moore County.

Under the current design, no formal written concurrence is required by the NCDWQ for a Section 404 Nationwide 3 Permit. However, NCDOT must comply with all Section 401 General Certification No. 3687 conditions. A permit modification may be required if any of these conditions cannot be met.

Please see the enclosed copies of the Pre-Construction Notification (PCN), permit drawings, and design plans for the above-referenced project. The Categorical Exclusion (CE) for this project was completed in March 2009. Additional copies are available upon request.

This project calls for a letting date of September 18, 2012 and a review date of July 31, 2012. However, the let date may advance as additional funds become available.

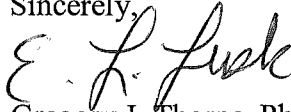
MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
NATURAL ENVIRONMENT UNIT
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1598

TELEPHONE: 919-707-6000
FAX: 919-212-5785
WEBSITE: WWW.NCDOT.ORG

LOCATION:
Century Center Building B
1020 Birch Ridge Drive
Raleigh, NC 27610

A copy of this permit application and its distribution list will be posted on the NCDOT website at <http://www.ncdot.org/doh/preconstruct/pe/neu/permit.html>. If you have any questions or need additional information, please call Greg Price at (919) 707-6148.

Sincerely,

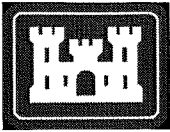
for 

Gregory J. Thorpe, Ph.D., Manager

Project Development and Environmental Analysis Unit

cc:

NCDOT Permit Application Standard Distribution List



Office Use Only:
 Corps action ID no. _____
 DWQ project no. _____
 Form Version 1.3 Dec 10 2008

Pre-Construction Notification (PCN) Form

A. Applicant Information		
1. Processing		
1a. Type(s) of approval sought from the Corps:	<input checked="" type="checkbox"/> Section 404 Permit <input type="checkbox"/> Section 10 Permit	
1b. Specify Nationwide Permit (NWP) number: 3 or General Permit (GP) number:		
1c. Has the NWP or GP number been verified by the Corps?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
1d. Type(s) of approval sought from the DWQ (check all that apply):		
<input type="checkbox"/> 401 Water Quality Certification – Regular <input type="checkbox"/> Non-404 Jurisdictional General Permit <input type="checkbox"/> 401 Water Quality Certification – Express <input type="checkbox"/> Riparian Buffer Authorization		
1e. Is this notification solely for the record because written approval is not required?	For the record only for DWQ 401 Certification: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	For the record only for Corps Permit: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1f. Is payment into a mitigation bank or in-lieu fee program proposed for mitigation of impacts? If so, attach the acceptance letter from mitigation bank or in-lieu fee program.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
1g. Is the project located in any of NC's twenty coastal counties. If yes, answer 1h below.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
1h. Is the project located within a NC DCM Area of Environmental Concern (AEC)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
2. Project Information		
2a. Name of project:	US 1 (Sandhills Boulevard) and SR 1309 (Morganton Road) Upgrade Interchange	
2b. County:	Moore	
2c. Nearest municipality / town:	Southern Pines	
2d. Subdivision name:	<i>not applicable</i>	
2e. NCDOT only, T.I.P. or state project no:	U-3324	
3. Owner Information		
3a. Name(s) on Recorded Deed:	North Carolina Department of Transportation	
3b. Deed Book and Page No.	<i>not applicable</i>	
3c. Responsible Party (for LLC if applicable):	<i>not applicable</i>	
3d. Street address:	1598 Mail Service Center	
3e. City, state, zip:	Raleigh, NC 27699-1598	
3f. Telephone no.:	(919) 707-6148	
3g. Fax no.:	(919) 212-5785	
3h. Email address:	gwprice@ncdot.gov	

4. Applicant Information (if different from owner)	
4a. Applicant is:	<input type="checkbox"/> Agent <input type="checkbox"/> Other, specify:
4b. Name:	<i>not applicable</i>
4c. Business name (if applicable):	
4d. Street address:	
4e. City, state, zip:	
4f. Telephone no.:	
4g. Fax no.:	
4h. Email address:	
5. Agent/Consultant Information (if applicable)	
5a. Name:	<i>not applicable</i>
5b. Business name (if applicable):	
5c. Street address:	
5d. City, state, zip:	
5e. Telephone no.:	
5f. Fax no.:	
5g. Email address:	

B. Project Information and Prior Project History	
1. Property Identification	
1a. Property identification no. (tax PIN or parcel ID):	<i>not applicable</i>
1b. Site coordinates (in decimal degrees):	Latitude: 35.176590 (DD.DDDDDD) Longitude: - 79.401295 (-DD.DDDDDD)
1c. Property size:	0.89 miles in length
2. Surface Waters	
2a. Name of nearest body of water (stream, river, etc.) to proposed project:	UT to McDeeds Creek
2b. Water Quality Classification of nearest receiving water:	WS-III, HQW
2c. River basin:	Cape Fear
3. Project Description	
3a. Describe the existing conditions on the site and the general land use in the vicinity of the project at the time of this application: High density residential and commercial.	
3b. List the total estimated acreage of all existing wetlands on the property: 0 acres	
3c. List the total estimated linear feet of all existing streams (intermittent and perennial) on the property: Approximately 40 feet	
3d. Explain the purpose of the proposed project: To improve safety and relieve traffic congestion in the vicinity of the US 1/Morganton Road interchange.	
3e. Describe the overall project in detail, including the type of equipment to be used: NCDOT proposes to modify the US1/Morganton Road interchange, the US1/Luther Way (SR1873) intersection and the intersections of US 1 with Murray Hill Road, Saunders Boulevard, and Henson Street. An energy dissipator will be installed to prevent erosion downstream from pipe replacement. Standard road building equipment such as trucks, dozers, and cranes will be used.	
4. Jurisdictional Determinations	
4a. Have jurisdictional wetland or stream determinations by the Corps or State been requested or obtained for this property / project (including all prior phases) in the past? Comments:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
4b. If the Corps made the jurisdictional determination, what type of determination was made?	<input type="checkbox"/> Preliminary <input type="checkbox"/> Final
4c. If yes, who delineated the jurisdictional areas? Name (if known):	Agency/Consultant Company: Other:
4d. If yes, list the dates of the Corps jurisdictional determinations or State determinations and attach documentation.	
5. Project History	
5a. Have permits or certifications been requested or obtained for this project (including all prior phases) in the past?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown
5b. If yes, explain in detail according to "help file" instructions.	
6. Future Project Plans	
6a. Is this a phased project?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
6b. If yes, explain.	

C. Proposed Impacts Inventory

1. Impacts Summary

1a. Which sections were completed below for your project (check all that apply):

- Wetlands Streams - tributaries Buffers
 Open Waters Pond Construction

2. Wetland Impacts

If there are wetland impacts proposed on the site, then complete this question for each wetland area impacted.

2a. Wetland impact number – Permanent (P) or Temporary (T)	2b. Type of impact	2c. Type of wetland (if known)	2d. Forested	2e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	2f. Area of impact (acres)
Site 1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ	
2g. Total wetland impacts					

2h. Comments:

3. Stream Impacts

If there are perennial or intermittent stream impacts (including temporary impacts) proposed on the site, then complete this question for all stream sites impacted.

3a. Stream impact number - Permanent (P) or Temporary (T)	3b. Type of impact	3c. Stream name	3d. Perennial (PER) or intermittent (INT)?	3e. Type of jurisdiction (Corps - 404, 10 DWQ – non-404, other)	3f. Average stream width (feet)	3g. Impact length (linear feet)
Site 1 <input checked="" type="checkbox"/> P <input checked="" type="checkbox"/> T	Fill	UT to McDeeds Creek	<input checked="" type="checkbox"/> PER <input type="checkbox"/> INT	<input checked="" type="checkbox"/> Corps 404 <input type="checkbox"/> DWQ		30 perm 10 temp
Site 2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 4 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 5 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
Site 6 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> PER <input type="checkbox"/> INT	<input type="checkbox"/> Corps <input type="checkbox"/> DWQ		
3h. Total stream and tributary impacts						30 perm, 10 temp

3i. Comments: Fill is for proposed energy dissipator that includes area already having riprap from original pipe installation. The activity is pipe replacement of a 36 in pipe with 48 in pipe in same location. No pipe extension will be required. The impacted stream is outside of the original study area described in CE. This activity was determined during final design.

4. Open Water Impacts

If there are proposed impacts to lakes, ponds, estuaries, tributaries, sounds, the Atlantic Ocean, or any other open water of the U.S. then individually list all open water impacts below.

4a. Open water impact number – Permanent (P) or Temporary (T)	4b. Name of waterbody (if applicable)	4c. Type of impact	4d. Waterbody type	4e. Area of impact (acres)
O1 <input type="checkbox"/> P <input type="checkbox"/> T				
O2 <input type="checkbox"/> P <input type="checkbox"/> T				
O3 <input type="checkbox"/> P <input type="checkbox"/> T				
O4 <input type="checkbox"/> P <input type="checkbox"/> T				
4f. Total open water impacts				

4g. Comments:

5. Pond or Lake Construction

If pond or lake construction proposed, then complete the chart below.

5a. Pond ID number	5b. Proposed use or purpose of pond	5c. Wetland Impacts (acres)			5d. Stream Impacts (feet)			5e. Upland (acres)
		Flooded	Filled	Excavated	Flooded	Filled	Excavated	Flooded
P1								
P2								
5f. Total								

5g. Comments:

5h. Is a dam high hazard permit required?	<input type="checkbox"/> Yes <input type="checkbox"/> No	If yes, permit ID no:
5i. Expected pond surface area (acres):		
5j. Size of pond watershed (acres):		
5k. Method of construction:		

6. Buffer Impacts (for DWQ)

If project will impact a protected riparian buffer, then complete the chart below. If yes, then individually list all buffer impacts below. If any impacts require mitigation, then you **MUST** fill out Section D of this form.

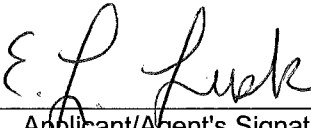
6a. Project is in which protected basin?		<input type="checkbox"/> Neuse <input type="checkbox"/> Catawba		<input type="checkbox"/> Tar-Pamlico <input type="checkbox"/> Randleman		<input type="checkbox"/> Other:	
6b. Buffer impact number – Permanent (P) or Temporary (T)	6c. Reason for impact	6d. Stream name	6e. Buffer mitigation required?	6f. Zone 1 impact (square feet)	6g. Zone 2 impact (square feet)		
B1 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
B2 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
B3 <input type="checkbox"/> P <input type="checkbox"/> T			<input type="checkbox"/> Yes <input type="checkbox"/> No				
6h. Total buffer impacts							
6i. Comments:							

D. Impact Justification and Mitigation		
1. Avoidance and Minimization		
1a. Specifically describe measures taken to avoid or minimize the proposed impacts in designing project. No impacts to jurisdictional features will occur in area of road construction. The only impacts will occur from pipe replacement that occurs offsite.		
1b. Specifically describe measures taken to avoid or minimize the proposed impacts through construction techniques. A proposed energy dissipator will be installed to reduce/prevent erosion downstream. Performed scour holes will also be implemented.		
2. Compensatory Mitigation for Impacts to Waters of the U.S. or Waters of the State		
2a. Does the project require Compensatory Mitigation for impacts to Waters of the U.S. or Waters of the State?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Per conversation on November 30, 2011 with Ronnie Smith of USACE, no mitigation will be required.	
2b. If yes, mitigation is required by (check all that apply):	<input type="checkbox"/> DWQ <input type="checkbox"/> Corps	
2c. If yes, which mitigation option will be used for this project?	<input type="checkbox"/> Mitigation bank <input type="checkbox"/> Payment to in-lieu fee program <input type="checkbox"/> Permittee Responsible Mitigation	
3. Complete if Using a Mitigation Bank		
3a. Name of Mitigation Bank: not applicable		
3b. Credits Purchased (attach receipt and letter)	Type	Quantity
3c. Comments:		
4. Complete if Making a Payment to In-lieu Fee Program		
4a. Approval letter from in-lieu fee program is attached.	<input type="checkbox"/> Yes	
4b. Stream mitigation requested:	0 linear feet	
4c. If using stream mitigation, stream temperature:	<input type="checkbox"/> warm <input type="checkbox"/> cool <input type="checkbox"/> cold	
4d. Buffer mitigation requested (DWQ only):	0 square feet	
4e. Riparian wetland mitigation requested:	0 acres	
4f. Non-riparian wetland mitigation requested:	0 acres	
4g. Coastal (tidal) wetland mitigation requested:	0 acres	
4h. Comments:		
5. Complete if Using a Permittee Responsible Mitigation Plan		
5a. If using a permittee responsible mitigation plan, provide a description of the proposed mitigation plan.		

6. Buffer Mitigation (State Regulated Riparian Buffer Rules) – required by DWQ					
6a. Will the project result in an impact within a protected riparian buffer that requires buffer mitigation?				<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. If yes, then identify the square feet of impact to each zone of the riparian buffer that requires mitigation. Calculate the amount of mitigation required.					
Zone	6c. Reason for impact	6d. Total impact (square feet)	Multiplier	6e. Required mitigation (square feet)	
Zone 1			3 (2 for Catawba)		
Zone 2			1.5		
			6f. Total buffer mitigation required:		
6g. If buffer mitigation is required, discuss what type of mitigation is proposed (e.g., payment to private mitigation bank, permittee responsible riparian buffer restoration, payment into an approved in-lieu fee fund).					
6h. Comments:					

E. Stormwater Management and Diffuse Flow Plan (required by DWQ)	
1. Diffuse Flow Plan	
1a. Does the project include or is it adjacent to protected riparian buffers identified within one of the NC Riparian Buffer Protection Rules?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
1b. If yes, then is a diffuse flow plan included? If no, explain why. Comments:	<input type="checkbox"/> Yes <input type="checkbox"/> No
2. Stormwater Management Plan	
2a. What is the overall percent imperviousness of this project?	N/A
2b. Does this project require a Stormwater Management Plan?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2c. If this project DOES NOT require a Stormwater Management Plan, explain why:	
2d. If this project DOES require a Stormwater Management Plan, then provide a brief, narrative description of the plan: See attached permit drawings.	
2e. Who will be responsible for the review of the Stormwater Management Plan?	<input type="checkbox"/> Certified Local Government <input type="checkbox"/> DWQ Stormwater Program <input checked="" type="checkbox"/> DWQ 401 Unit
3. Certified Local Government Stormwater Review	
3a. In which local government's jurisdiction is this project?	not applicable
3b. Which of the following locally-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Phase II <input type="checkbox"/> NSW <input type="checkbox"/> USMP <input type="checkbox"/> Water Supply Watershed <input type="checkbox"/> Other:
3c. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
4. DWQ Stormwater Program Review	
4a. Which of the following state-implemented stormwater management programs apply (check all that apply):	<input type="checkbox"/> Coastal counties <input type="checkbox"/> HQW <input type="checkbox"/> ORW <input type="checkbox"/> Session Law 2006-246 <input type="checkbox"/> Other:
4b. Has the approved Stormwater Management Plan with proof of approval been attached?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. DWQ 401 Unit Stormwater Review	
5a. Does the Stormwater Management Plan meet the appropriate requirements?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A
5b. Have all of the 401 Unit submittal requirements been met?	<input type="checkbox"/> Yes <input type="checkbox"/> No N/A

F. Supplementary Information	
1. Environmental Documentation (DWQ Requirement)	
1a. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1b. If you answered "yes" to the above, does the project require preparation of an environmental document pursuant to the requirements of the National or State (North Carolina) Environmental Policy Act (NEPA/SEPA)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
1c. If you answered "yes" to the above, has the document review been finalized by the State Clearing House? (If so, attach a copy of the NEPA or SEPA final approval letter.) Comments:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
2. Violations (DWQ Requirement)	
2a. Is the site in violation of DWQ Wetland Rules (15A NCAC 2H .0500), Isolated Wetland Rules (15A NCAC 2H .1300), DWQ Surface Water or Wetland Standards, or Riparian Buffer Rules (15A NCAC 2B .0200)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2b. Is this an after-the-fact permit application?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
2c. If you answered "yes" to one or both of the above questions, provide an explanation of the violation(s):	
3. Cumulative Impacts (DWQ Requirement)	
3a. Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
3b. If you answered "yes" to the above, submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent DWQ policy. If you answered "no," provide a short narrative description. Due to the minimal transportation impact resulting from the interchange improvement, this project will neither influence nearby land uses nor stimulate growth. Therefore, a detailed indirect or cumulative effects study will not be necessary.	
4. Sewage Disposal (DWQ Requirement)	
4a. Clearly detail the ultimate treatment methods and disposition (non-discharge or discharge) of wastewater generated from the proposed project, or available capacity of the subject facility. not applicable	

5. Endangered Species and Designated Critical Habitat (Corps Requirement)		
5a. Will this project occur in or near an area with federally protected species or habitat?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
5b. Have you checked with the USFWS concerning Endangered Species Act impacts?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
5c. If yes, indicate the USFWS Field Office you have contacted.	<input type="checkbox"/> Raleigh <input type="checkbox"/> Asheville	
5d. What data sources did you use to determine whether your site would impact Endangered Species or Designated Critical Habitat? NHP and USFWS websites. The Biological Conclusion remains "No Effect" for all listed federal T&E species based on surveys in April 2010 June 2010 (for Red-cockaded woodpecker and Michaux sumac, respectively; no habitat for other species).		
6. Essential Fish Habitat (Corps Requirement)		
6a. Will this project occur in or near an area designated as essential fish habitat?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
6b. What data sources did you use to determine whether your site would impact Essential Fish Habitat? NMFS County Index		
7. Historic or Prehistoric Cultural Resources (Corps Requirement)		
7a. Will this project occur in or near an area that the state, federal or tribal governments have designated as having historic or cultural preservation status (e.g., National Historic Trust designation or properties significant in North Carolina history and archaeology)?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
7b. What data sources did you use to determine whether your site would impact historic or archeological resources? NEPA Documentation		
8. Flood Zone Designation (Corps Requirement)		
8a. Will this project occur in a FEMA-designated 100-year floodplain?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
8b. If yes, explain how project meets FEMA requirements: NCDOT Hydraulics coordination with FEMA		
8c. What source(s) did you use to make the floodplain determination? FEMA Maps		
<u>Dr. Gregory J. Thorpe, Ph D</u> Applicant/Agent's Printed Name	 Applicant/Agent's Signature <small>(Agent's signature is valid only if an authorization letter from the applicant is provided.)</small>	12-9-11 Date



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

January 25, 2010

MEMORANDUM TO: File

FROM: Randy C. Henegar, P.E.
Hydraulics Unit

SUBJECT: Stormwater Management Plan
U-3324, Moore County

The following items were incorporated into the Hydraulic design of this project for stormwater quality considerations:

- Preformed Scour Holes were placed at discharge points, where possible.
- Energy Dissipater was placed at discharge point, where applicable.
- OTCB was placed at discharge point to diffuse flow.

SRH

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MOORE COUNTY

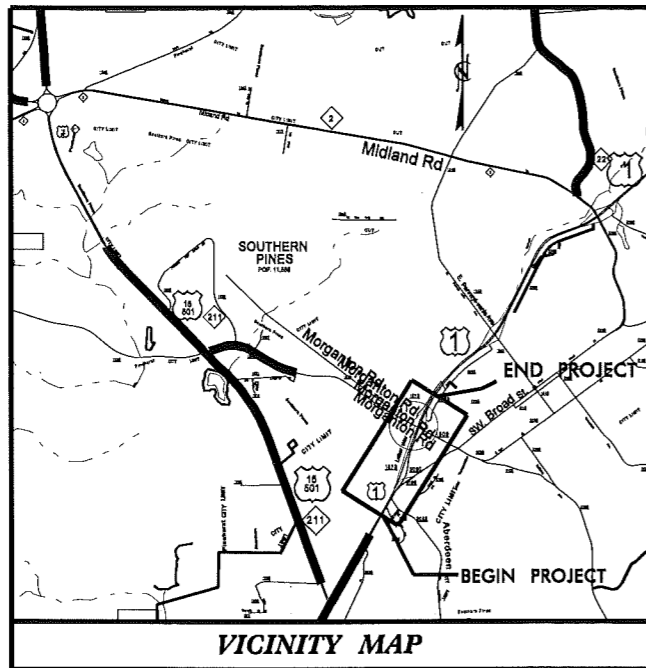
Permit Drawing
Sheet 1 of 5

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3324	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34923.1.1	STPNHF-1(10)	P.E.	
34923.2.2	STPNHF-1(10)	RW UTIL.	

LOCATION: ABERDEEN-SOUTHERN PINES - INTERSECTION OF
SR 1309 (MORGANTON ROAD) AND US1 (SANDHILLS BOULEVARD)

PERMIT DRAWINGS - SURFACE WATER IMPACTS

TIP PROJECT: U-3324



-Y4- STA. 12+00 = BEGIN CONSTRUCTION

-Y6- RMPA STA. 21+78.20 =

-Y6- STA. 17+49.84

-Y6- STA. 15+50 BEGIN CONSTRUCTION

-Y6- LPA STA. 10+00 =

-Y6- STA. 17+61.82

-Y6RMPA- STA. 10+00 =

-L- POC STA. 56+26.50 OFF -41.9'

-Y5- STA. 10+00 = BEGIN CONSTRUCTION

-Y1- STA. 10+79.49 = BEGIN CONSTRUCTION

-SBUS1- STA. 10+00 =

-L- STA. 14+70 OFF -16'

-L- STA. 14+67.06 =

-Y2- STA. 10+00

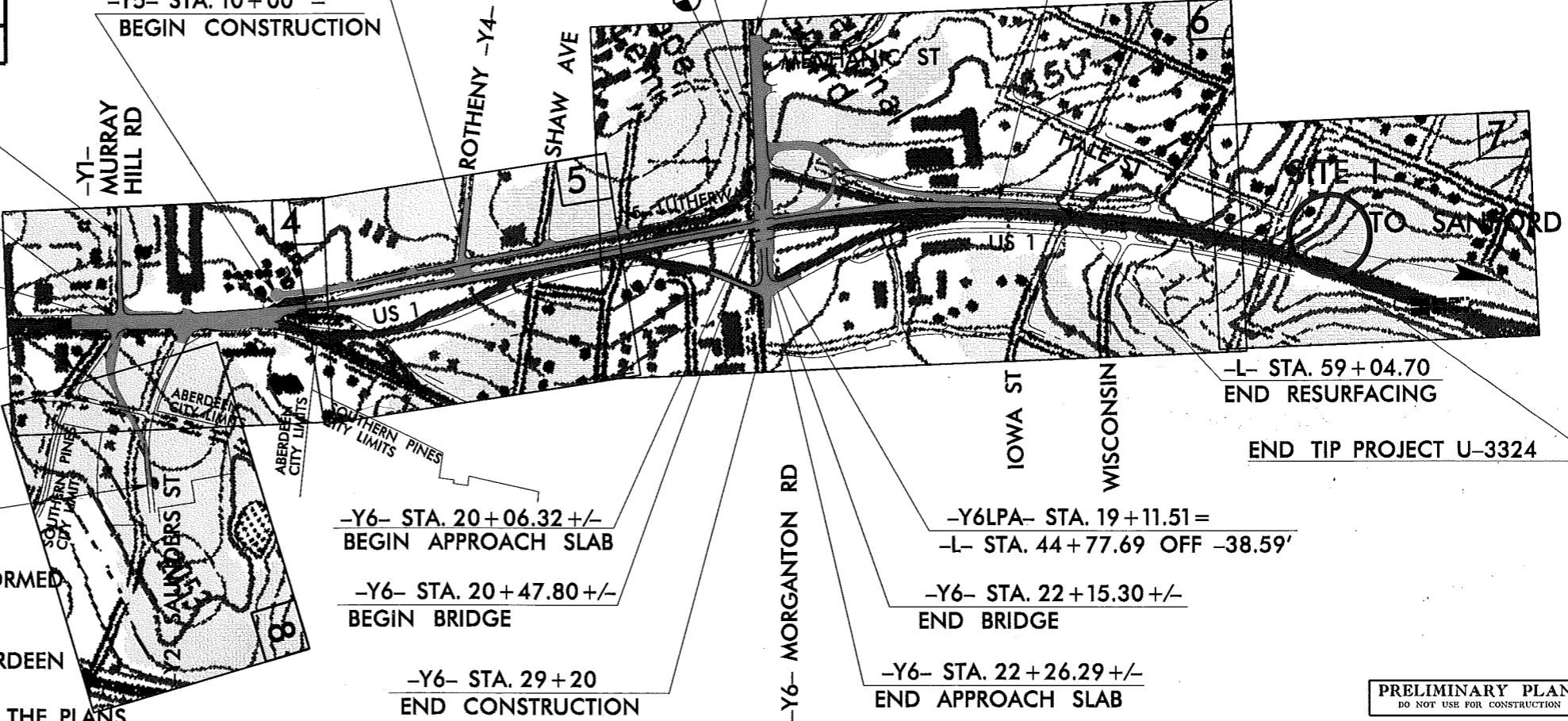
-L- STA. 12+30 BEGIN RESURFACING
BEGIN TIP PROJECT U-3324

-Y2- STA. 18+10.53 END CONSTRUCTION

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

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF SOUTHERN PINES AND ABERDEEN

THIS IS A PARTIALLY CONTROLLED ACCESS PROJECT WITH ACCESS POINTS SHOWN ON THE PLANS



-Y6- STA. 20+06.32 +/- BEGIN APPROACH SLAB

-Y6- STA. 20+47.80 +/- BEGIN BRIDGE

-Y6- STA. 29+20 END CONSTRUCTION

-Y6LPA- STA. 19+11.51 =

-L- STA. 44+77.69 OFF -38.59'

-Y6- STA. 22+15.30 +/- END BRIDGE

-Y6- STA. 22+26.29 +/- END APPROACH SLAB

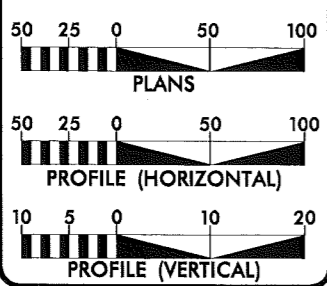
-L- STA. 59+04.70 END RESURFACING

END TIP PROJECT U-3324

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT: C202886

GRAPHIC SCALES



DESIGN DATA

**L- FUNCTIONAL CLASS. ARTERIAL FREEWAY

ADT 2009 = 27025

ADT 2030 = 45600

DHV = 10 %

D = 55 %

T = 5 % *

V = 60 MPH

* TTST 1 % DUAL 2 %

PROJECT LENGTH

LENGTH ROADWAY F.A PROJECT STPNHF-1(10) = 0.885 MI.

TOTAL LENGTH OF STATE PROJECT 34923.1.1 = 0.885 MI.

Prepared In the Office of:
DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

2005 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE:
SEPT 30, 2010

LETTING DATE:
SEPT 18, 2012

JIMMY GOODNIGHT, PE
PROJECT ENGINEER

TIM GOINS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

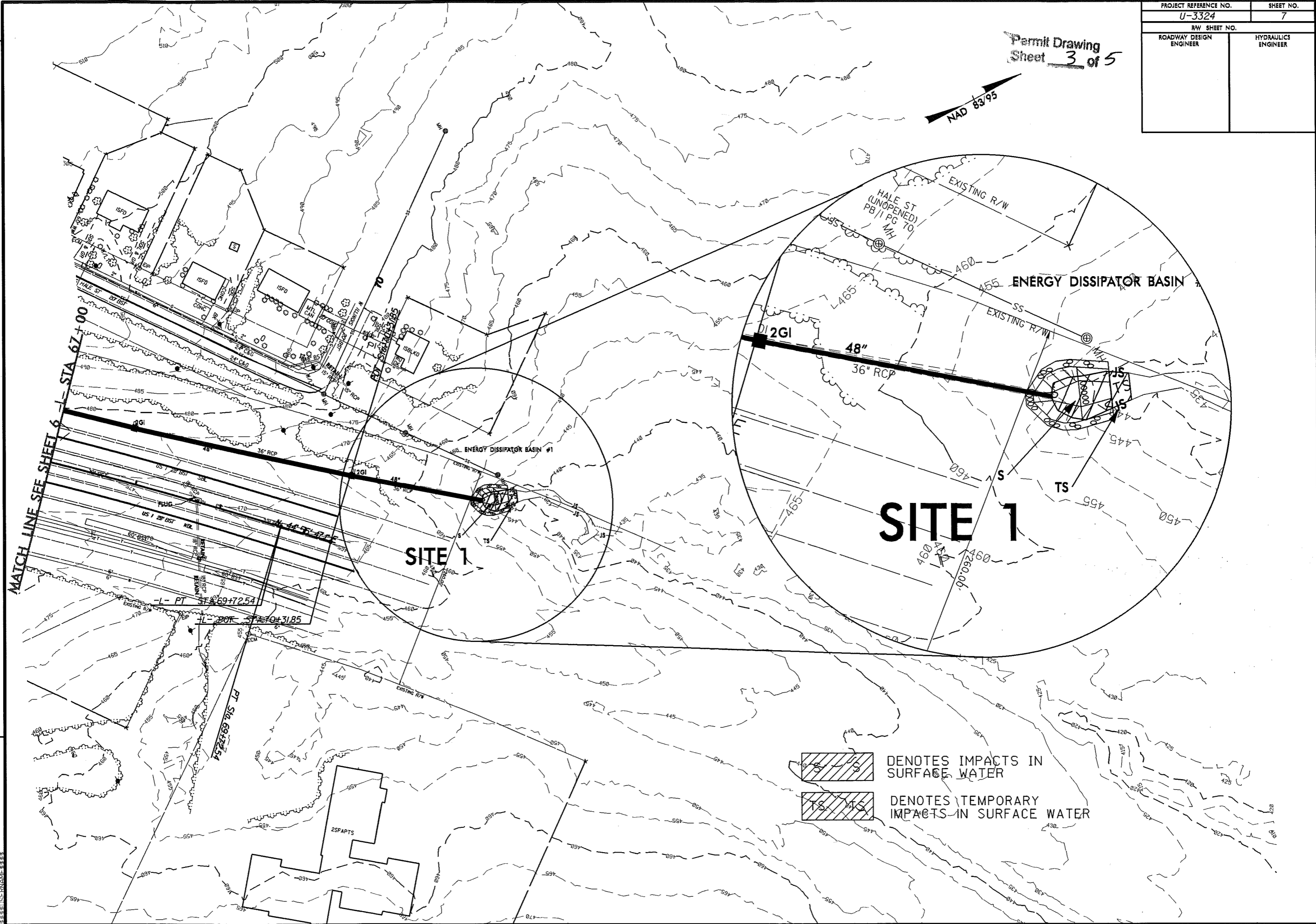


STATE HIGHWAY DESIGN ENGINEER

\$\$\$\$\$SYSTEM\$\$\$\$\$
\$\$\$\$\$USER\$\$\$\$\$

PROJECT REFERENCE NO. U-3324	SHEET NO. 7
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

Permit Drawing
Sheet 3 of 5



REVISIONS

DATE: 08/17/95
 TIME: 10:00 AM
 DRAWN BY: [illegible]
 CHECKED BY: [illegible]
 APPROVED BY: [illegible]

DENOTES IMPACTS IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER

PROPERTY OWNERS

<u>Site</u>	<u>Last Name</u>	<u>First Name</u>	<u>Address</u>	<u>City/Town</u>	<u>State</u>	<u>Zip Code</u>
1	STATE OF NORTH CAROLINA		PO BOX 629	RALEIGH	NC	27611

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS

MOORE COUNTY
WBS - 34923.1.1 (U-3324)

SHEET **4 of 5** 11/21/2011

WETLAND PERMIT IMPACT SUMMARY

Site No.	Station (From/To)	Structure Size / Type	WETLAND IMPACTS						SURFACE WATER IMPACTS			
			Permanent Fill In Wetlands (ac)	Temp. Fill In Wetlands (ac)	Excavation in Wetlands (ac)	Mechanized Clearing in Wetlands (ac)	Hand Clearing in Wetlands (ac)	Permanent SW impacts (ac)	Temp. SW impacts (ac)	Existing Channel Impacts Permanent (ft)	Existing Channel Impacts Temp. (ft)	Natural Stream Design (ft)
1	70+31 -L- (LT)	48" RCP/ENERGY DISSIPATOR						0.01	<0.01	30	10	
TOTALS:			0.01	<0.01				0.01	<0.01	30	10	

* 48" RCP PIPE / ENERGY DISSIPATOR

05/08/95
 23-NOV-2010 09:40
 R:\Roadway\Projects\U3324\rdy-tsh.dgn
 \$\$\$USERNAME\$\$\$

TIP PROJECT: U-3324

CONTRACT: C202886

See Sheet 1-A For Index of Sheets

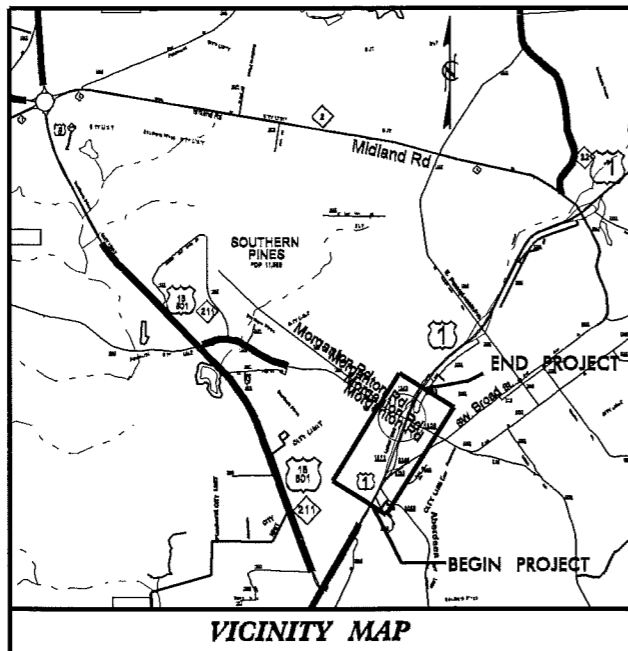
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

MOORE COUNTY

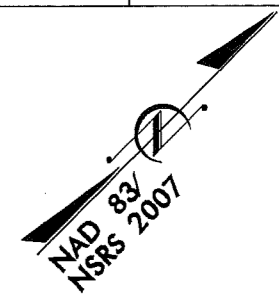
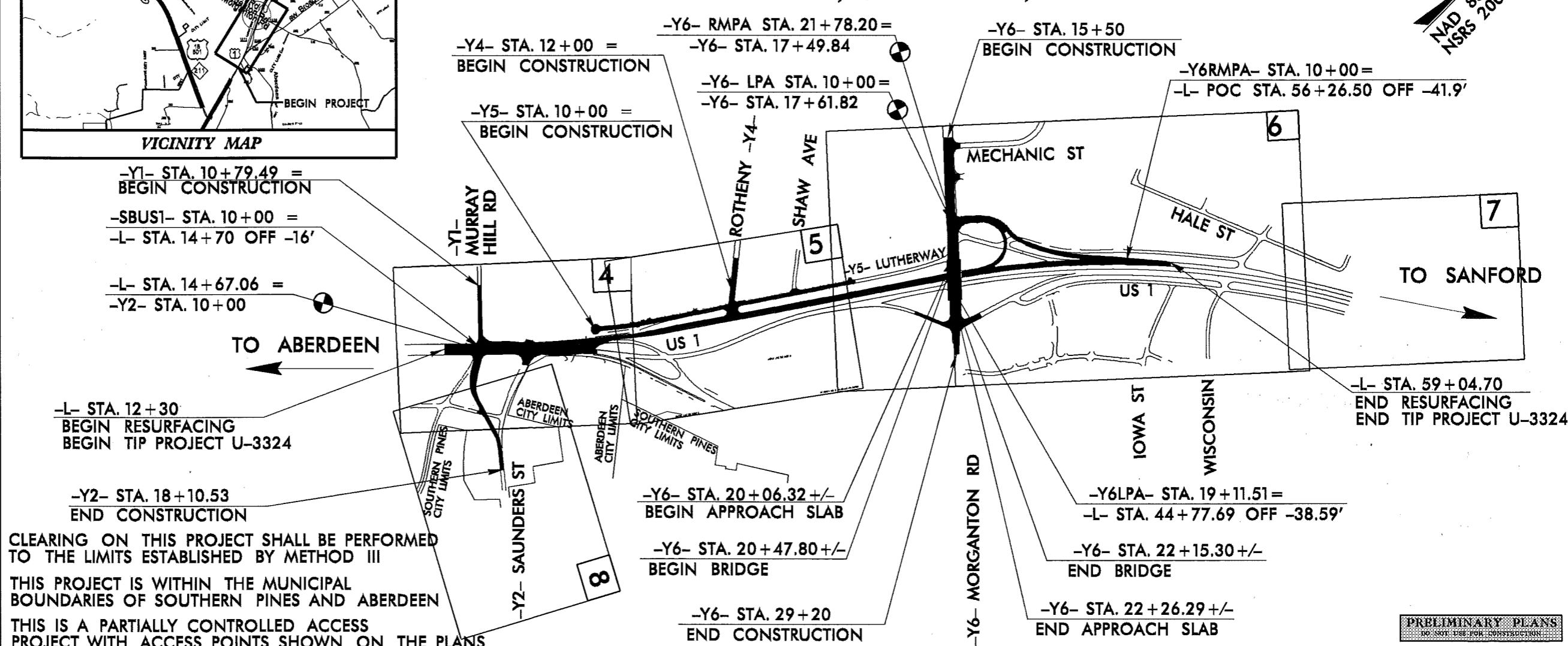
**LOCATION: ABERDEEN-SOUTHERN PINES - INTERSECTION OF
SR 1309 (MORGANTON ROAD) AND US1 (SANDHILLS BOULEVARD)**

**TYPE OF WORK: RESURFACING, PAVING, GRADING, DRAINAGE, STRUCTURE,
GUARDRAIL, CURB & GUTTER, SIGNING AND SIGNALS**

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3324	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34923.1.1	STPNHF-1(10)	P.E.	
34923.2.2	STPNHF-1(10)	RW UTIL.	



VICINITY MAP



-Y1- STA. 10+79.49 =
BEGIN CONSTRUCTION

-SBUS1- STA. 10+00 =

-L- STA. 14+70 OFF -16'

-L- STA. 14+67.06 =

-Y2- STA. 10+00

-L- STA. 12+30
BEGIN RESURFACING
BEGIN TIP PROJECT U-3324

-Y2- STA. 18+10.53
END CONSTRUCTION

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

THIS PROJECT IS WITHIN THE MUNICIPAL BOUNDARIES OF SOUTHERN PINES AND ABERDEEN

THIS IS A PARTIALLY CONTROLLED ACCESS PROJECT WITH ACCESS POINTS SHOWN ON THE PLANS

-Y4- STA. 12+00 =
BEGIN CONSTRUCTION

-Y5- STA. 10+00 =
BEGIN CONSTRUCTION

-Y6- RMPA STA. 21+78.20 =

-Y6- STA. 17+49.84

-Y6- LPA STA. 10+00 =

-Y6- STA. 17+61.82

-Y6- STA. 15+50
BEGIN CONSTRUCTION

-Y6RMPA- STA. 10+00 =

-L- POC STA. 56+26.50 OFF -41.9'

-Y6- STA. 20+06.32 +/-
BEGIN APPROACH SLAB

-Y6- STA. 20+47.80 +/-
BEGIN BRIDGE

-Y6- STA. 29+20
END CONSTRUCTION

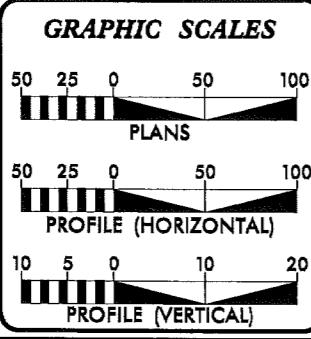
-Y6LPA- STA. 19+11.51 =

-L- STA. 44+77.69 OFF -38.59'

-Y6- STA. 22+15.30 +/-
END BRIDGE

-Y6- STA. 22+26.29 +/-
END APPROACH SLAB

-L- STA. 59+04.70
END RESURFACING
END TIP PROJECT U-3324



DESIGN DATA

**L- FUNCTIONAL CLASS. ARTERIAL FREEWAY

ADT 2009 = 27025

ADT 2030 = 45600

DHV = 10 %

D = 55 %

T = 5 % *

V = 60 MPH

* TTST 1 % DUAL 2 %

PROJECT LENGTH

LENGTH ROADWAY F.A PROJECT STPNHF-1(10) = 0.885 MI.

TOTAL LENGTH OF STATE PROJECT 34923.1.1 = 0.885 MI.

Prepared In the Office of:

DIVISION OF HIGHWAYS

1000 Birch Ridge Dr., Raleigh NC, 27610

100% STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: SEPT 30, 2010

LETTING DATE: SEPT 18, 2012

JIMMY GOODNIGHT, PE
PROJECT ENGINEER

TIM GOINS
PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

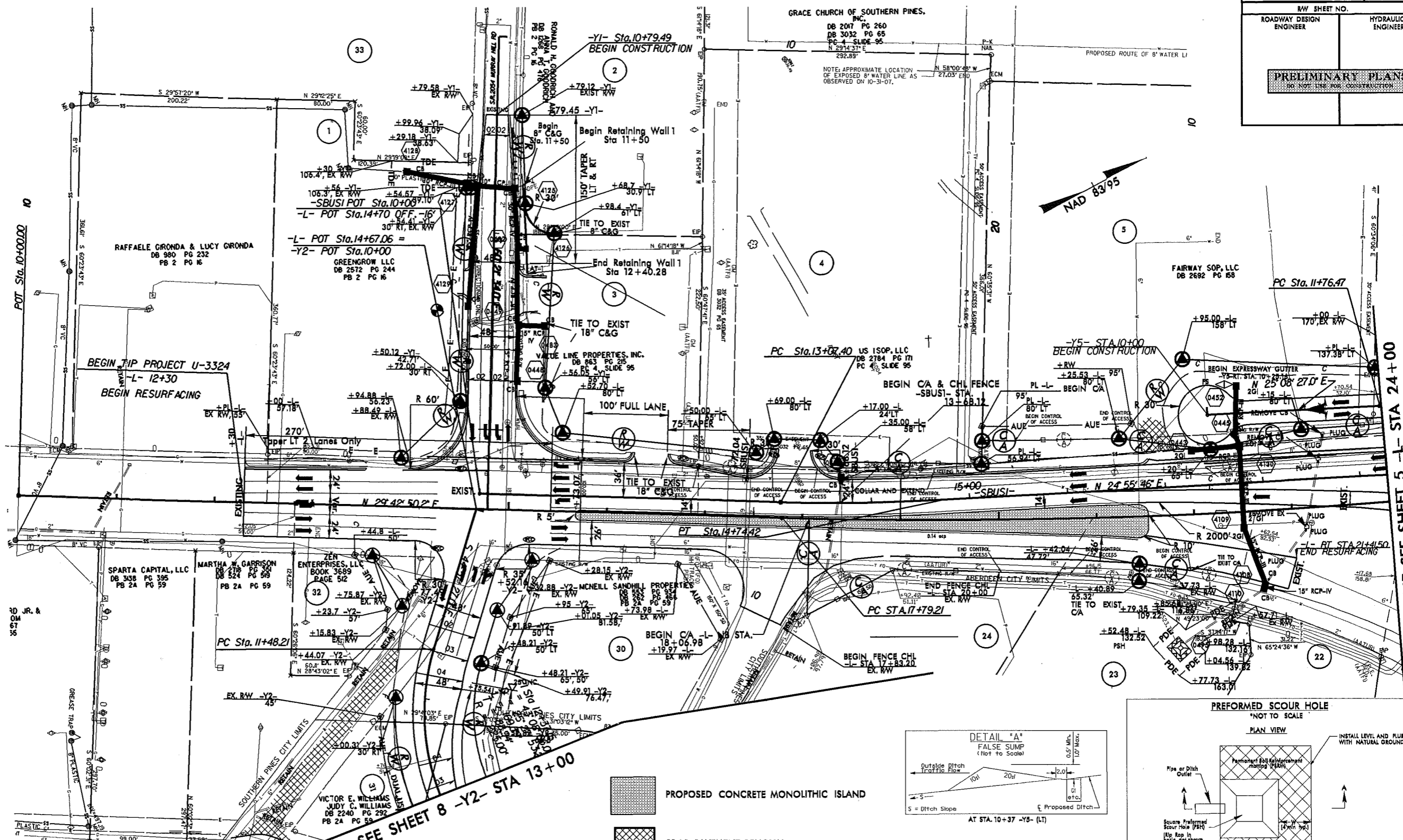
SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

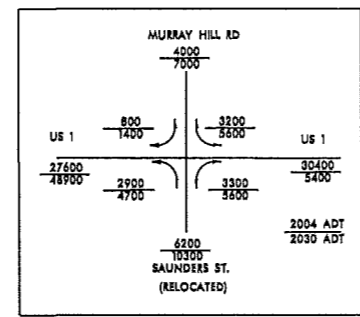
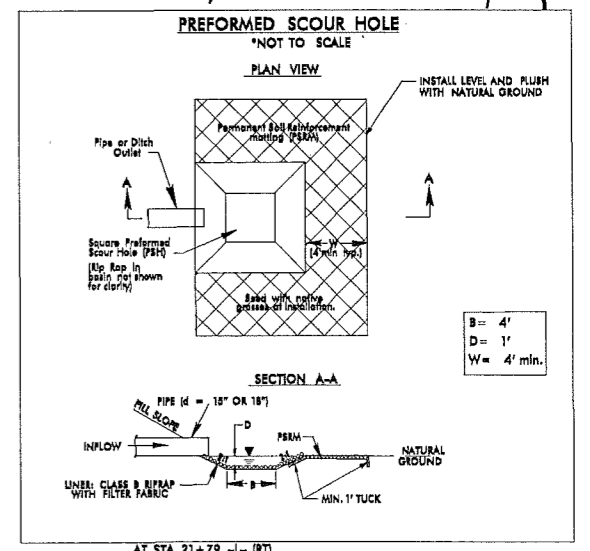
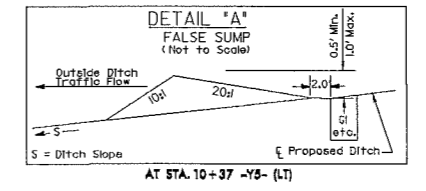
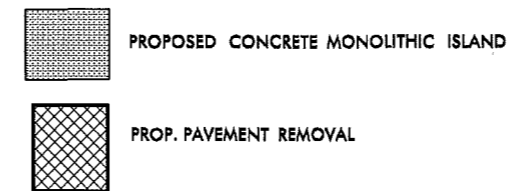
8/17/99



REVISIONS
Removed AUE from Parcel 24 Per RW Request Dated 9-21-2011. 10-11-2011 DDL

MATCH LINE SEE SHEET 5 -L- STA 24+00

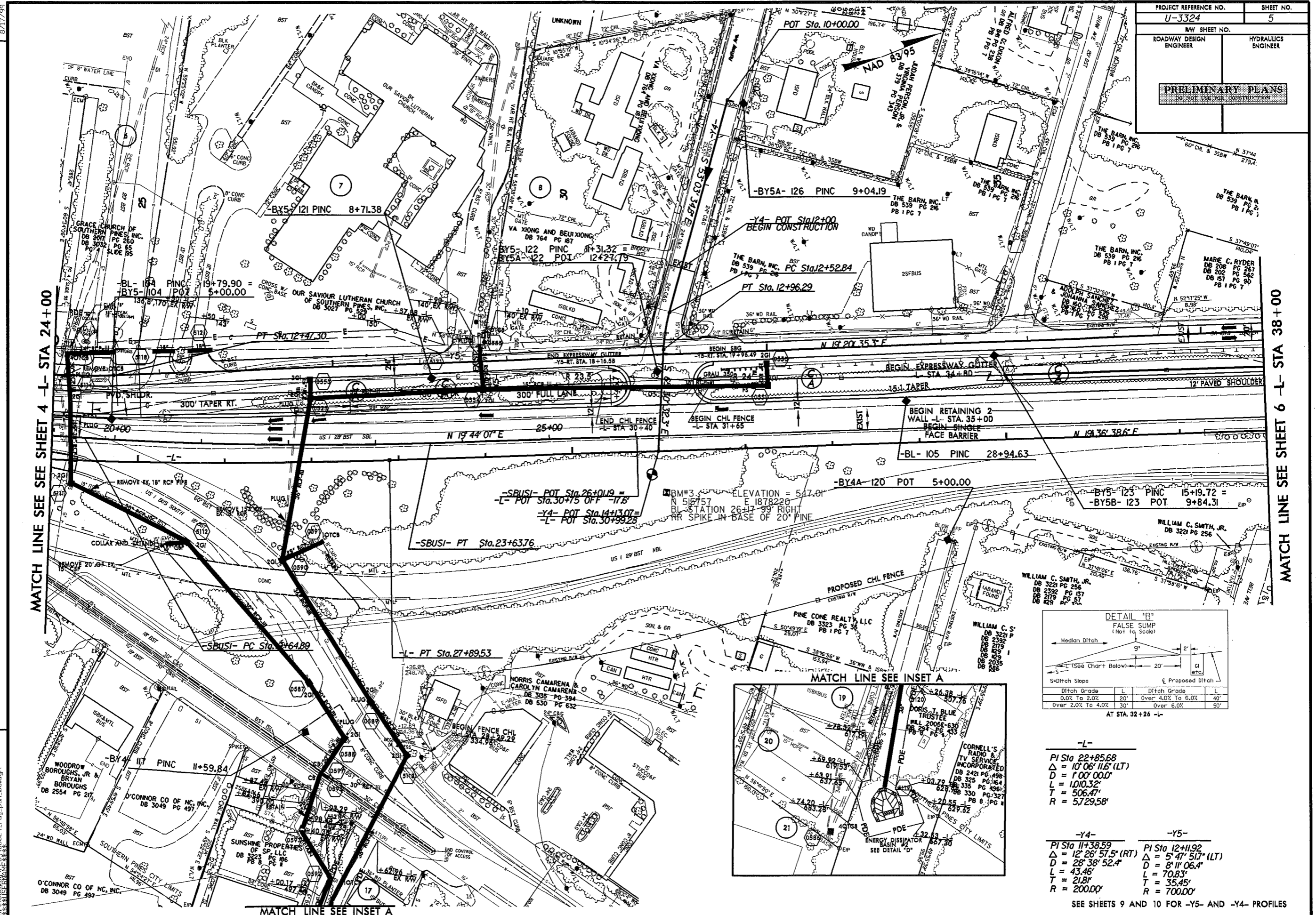
MATCH LINE SEE SHEET 8 -Y2- STA 13+00



-Y5-	-Y2-	-L-
PI Sta 12+11.92	PI Sta 12+37.15	PI Sta 22+85.68
$\Delta = 5' 47.517' (LT)$	$\Delta = 43' 08' 06.07' (LT)$	$\Delta = 10' 06' 11.6' (LT)$
$D = 8' 11' 06.4'$	$D = 25' 27' 53.2'$	$D = 1' 00' 00.0'$
$L = 70.83'$	$L = 169.39'$	$L = 1,010.32'$
$T = 35.45'$	$T = 88.94'$	$T = 506.47'$
$R = 700.00'$	$R = 225.00'$	$R = 5,729.58'$

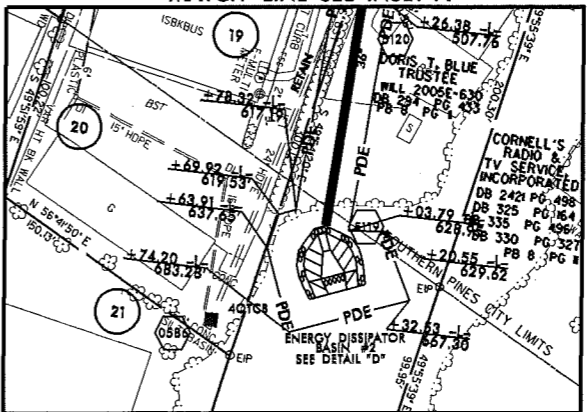
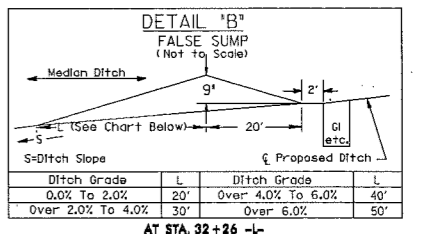
SEE SHEETS 9 & 10 FOR -Y2- AND -Y5- PROFILES

07-NOV-2011 08:33
P:\Roadwork\U3324_rdl\psh_04.dgn
P:\Roadwork\U3324_rdl\psh_04.dgn



REVISIONS
 On Parcels 19, 20, 21 removed the PDE. Parcel 19 removed portion of PDE. 4-4-2011 DDL

03 NOV 2011 09:42
 U:\3324-rdy_psh_05.dgn
 3324



-L-

PI Sta 22+85.68
 $\Delta = 10' 06'' 11.6''$ (LT)
 $D = 1' 00'' 00.0''$
 $L = 10.032'$
 $T = 506.47'$
 $R = 5,729.58'$

-Y4-

PI Sta 11+38.59
 $\Delta = 12' 28'' 57.5''$ (RT)
 $D = 28' 38'' 52.4''$
 $L = 43.46'$
 $T = 21.81'$
 $R = 200.00'$

-Y5-

PI Sta 12+11.92
 $\Delta = 5' 47'' 51.7''$ (LT)
 $D = 8' 11'' 06.4''$
 $L = 70.83'$
 $T = 35.45'$
 $R = 700.00'$

SEE SHEETS 9 AND 10 FOR -Y5- AND -Y4- PROFILES

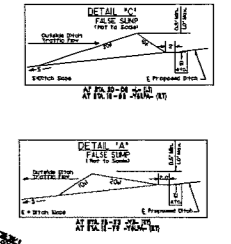
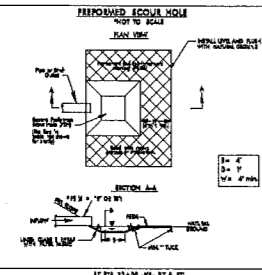
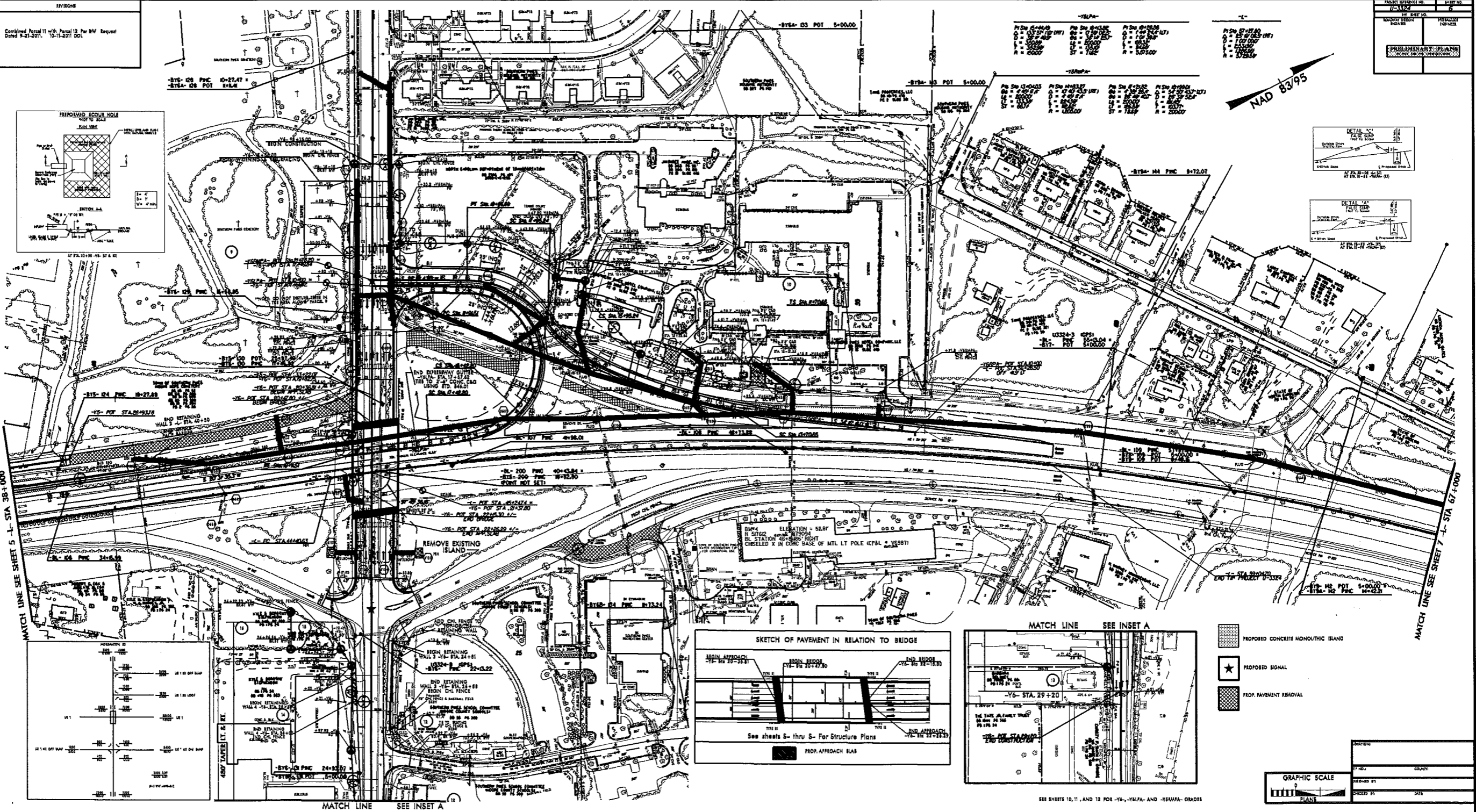
MATCH LINE SEE SHEET 4 -L- STA 24+00

MATCH LINE SEE SHEET 6 -L- STA 38+00

Combined Parcel 11 with Parcel 12 Per RW Request
 Dated 9-21-2011 10-11-2011 DOT

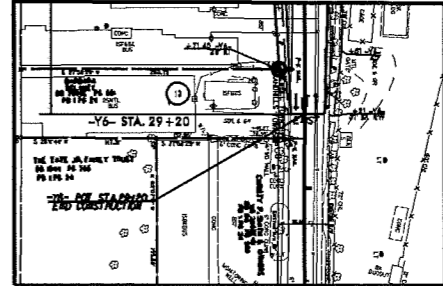
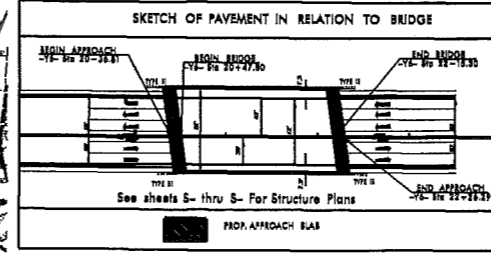
PROJECT REFERENCE NO.	8395
DATE	10/11/2011
DESIGNER	DOT
PROJECT	BRIDGE
DATE	10/11/2011
DESIGNER	DOT
PROJECT	BRIDGE

-181A-		-181B-	
PI STA 0+00.00	PI STA 0+00.00	PI STA 0+00.00	PI STA 0+00.00
0 = 100.00	0 = 100.00	0 = 100.00	0 = 100.00
1 = 100.00	1 = 100.00	1 = 100.00	1 = 100.00
2 = 100.00	2 = 100.00	2 = 100.00	2 = 100.00
3 = 100.00	3 = 100.00	3 = 100.00	3 = 100.00
4 = 100.00	4 = 100.00	4 = 100.00	4 = 100.00
5 = 100.00	5 = 100.00	5 = 100.00	5 = 100.00
6 = 100.00	6 = 100.00	6 = 100.00	6 = 100.00
7 = 100.00	7 = 100.00	7 = 100.00	7 = 100.00
8 = 100.00	8 = 100.00	8 = 100.00	8 = 100.00
9 = 100.00	9 = 100.00	9 = 100.00	9 = 100.00
10 = 100.00	10 = 100.00	10 = 100.00	10 = 100.00

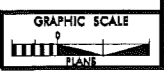


MATCH LINE SEE SHEET 5 - STA 28+000

MATCH LINE SEE SHEET 7 - STA 67+000



- PROPOSED CONCRETE MONOLITHIC ISLAND
- PROPOSED SIGNAL
- PROP. PAVEMENT REMOVAL

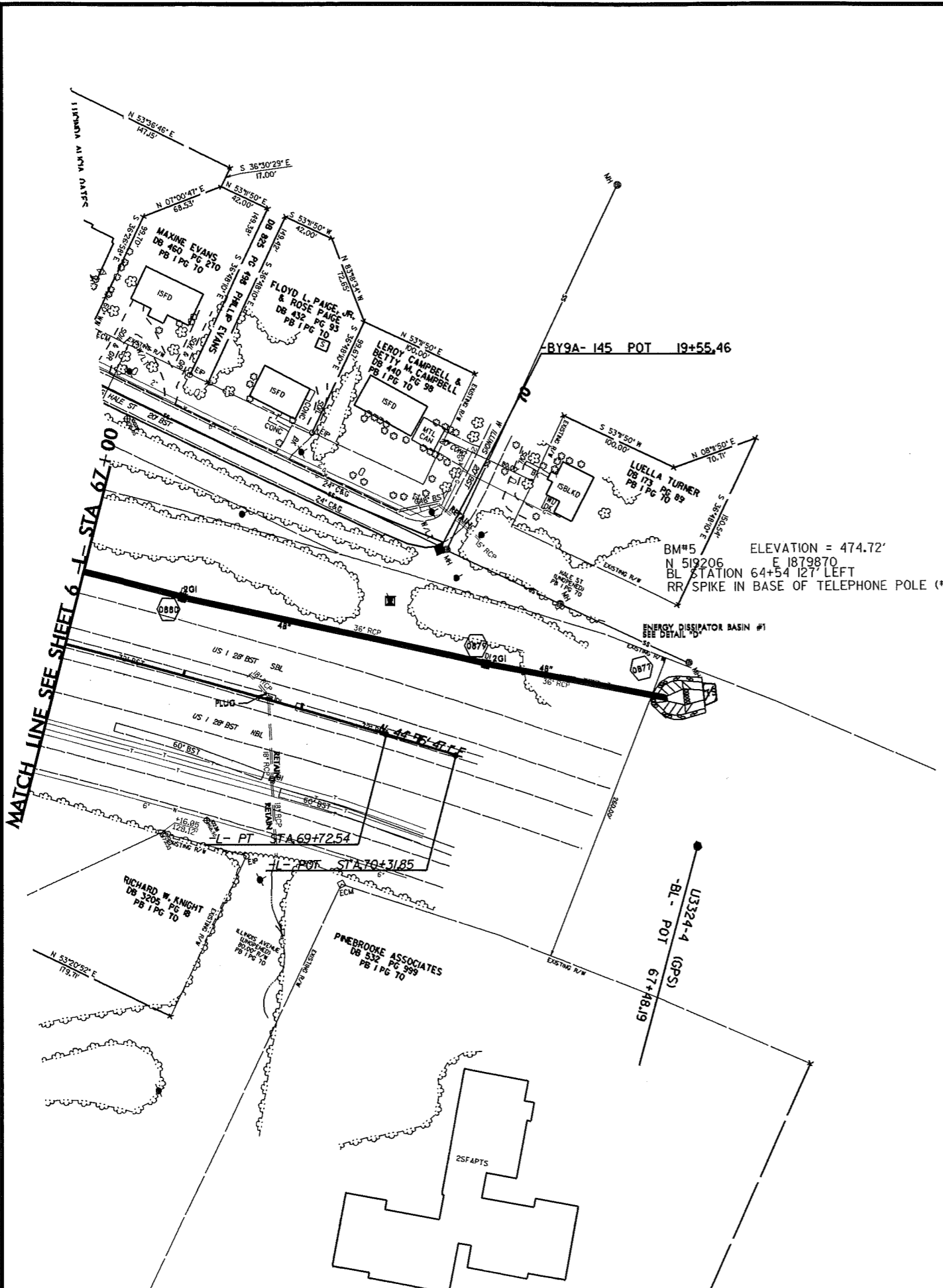


DATE	10/11/2011
BY	DOT
CHECKED BY	DOT
DATE	10/11/2011

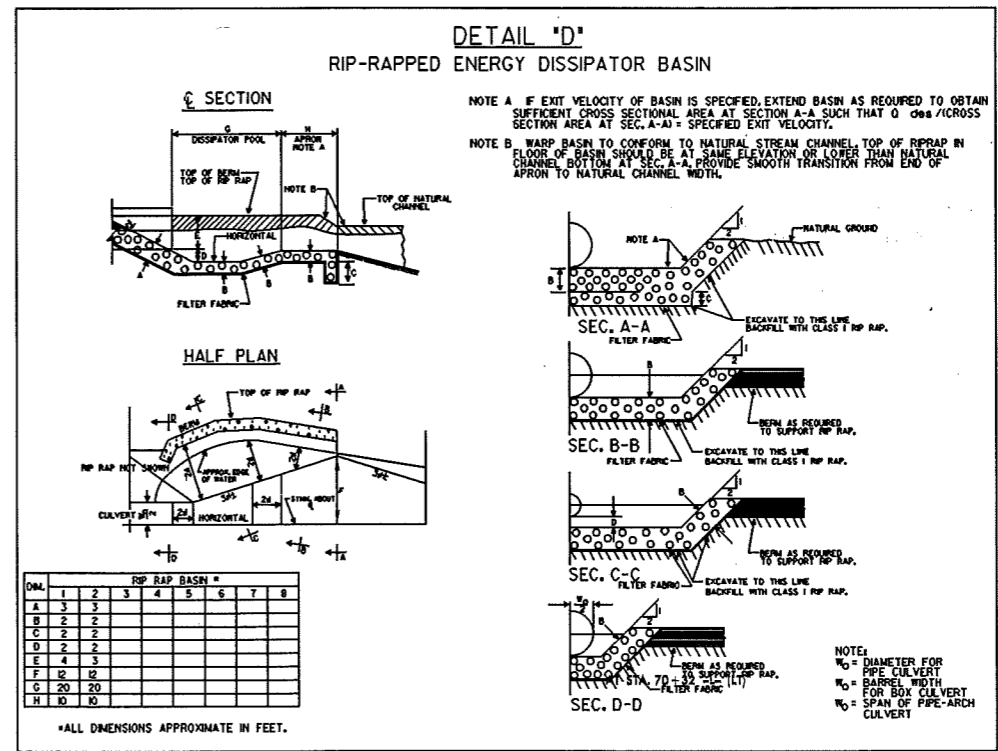
SEE SHEETS 10, 11 AND 12 FOR -181A- AND -181B- GRADES

8/17/99

PROJECT REFERENCE NO.	SHEET NO.
U-3324	7
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS	



BM#5 ELEVATION = 474.72'
 N 519206 E 1879870
 BL STATION 64+54 127' LEFT
 RR SPIKE IN BASE OF TELEPHONE POLE (# 85J42)



REVISIONS

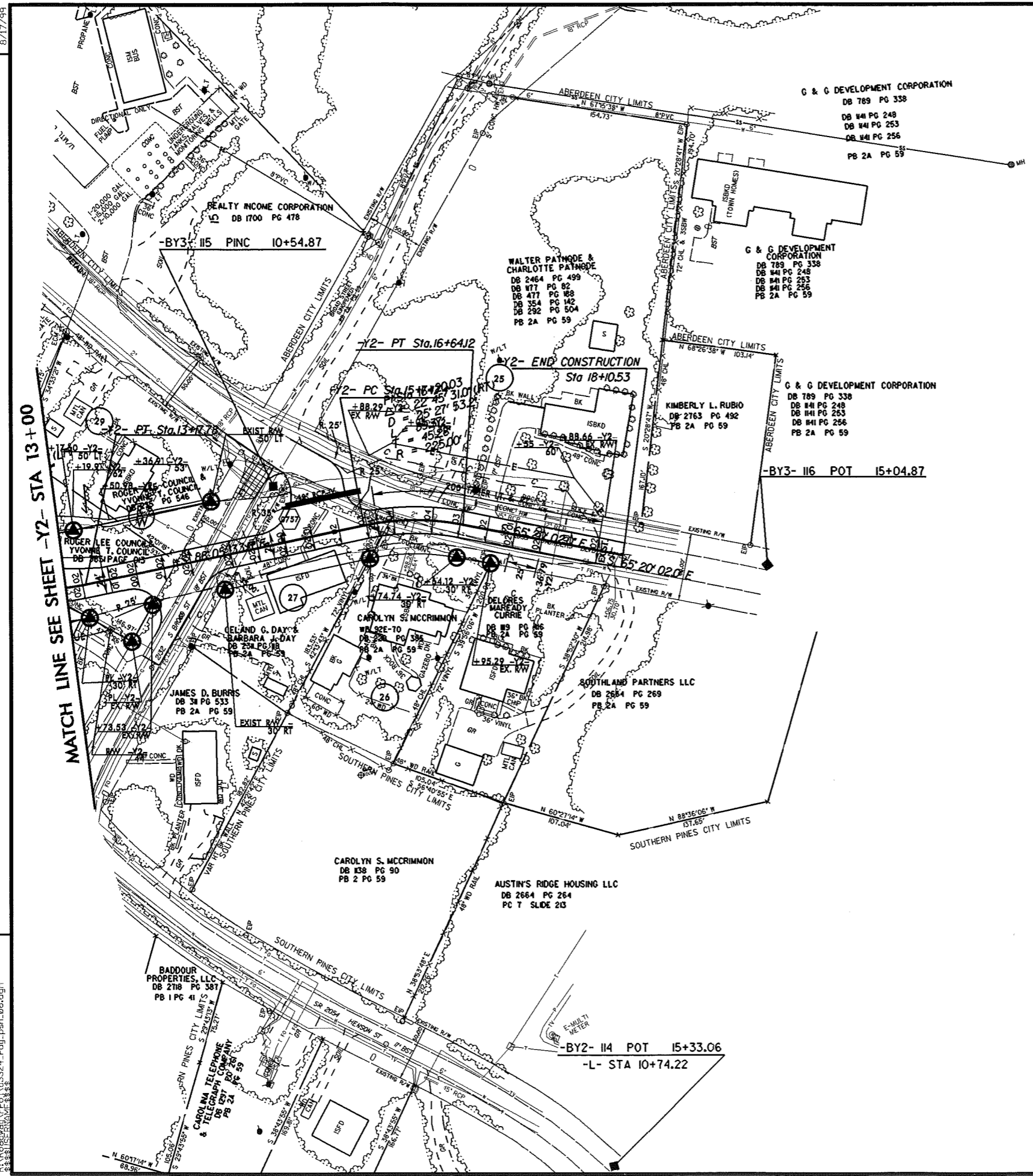
MATCH LINE SEE SHEET 6 L- STA 67+00

23-NOV-2011 08:56
333-555-1111
3324_rdy_psh_07.dgn

PROJECT REFERENCE NO.	SHEET NO.
U-3324	8
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS	

-Y2-

PI Sta 12+37.15 PI Sta 16+20.03
 $\Delta = 43^{\circ} 08' 06.0''$ (LT) $\Delta = 22^{\circ} 45' 31.0''$ (RT)
 $D = 25^{\circ} 27' 53.2''$ $D = 25^{\circ} 27' 53.2''$
 $L = 169.39'$ $L = 89.37'$
 $T = 88.94'$ $T = 45.28'$
 $R = 225.00'$ $R = 225.00'$



MATCH LINE SEE SHEET -Y2- STA 13+00

REVISIONS
CHANGED PARCEL 28 TO PARCEL 29 AND CHANGED THE NAME TO ROGER LEE COUNCIL & YVONNE T. COUNCIL 8-03-2011.DDL

23-NOV-2011 08:37
U:\3324_rdl_psh_08.dgn