



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

October 28, 2008

U. S. Army Corps of Engineers
Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, NC 28801-5006

ATTENTION: Mr. Steve Lund
NCDOT Coordinator

SUBJECT: **Application for a Nationwide Permit 14 and Section 401 Water Quality Certification** for the extension of SR 1542 (Ridge Street) from existing Ridge Street to SR 1549 (Airport Road) in Stanly County, Federal Aid Project No. STP-1542(2), State Project No. 8.2681301, WBS Element No. 34908.1.1, TIP No. U-3300 B.

Dear Sir:

Please see the enclosed Pre-Construction Notification form, permit drawings, and design plans, for the above referenced project. The project will permanently impact 0.05 acre of wetlands, 340 linear feet of stream channel, and temporarily impact 208 linear feet of stream channel.

The North Carolina Department of Transportation (NCDOT) proposes to relocate a portion of existing SR 1542 (Ridge Street) and extend SR 1542 on new location from existing Ridge Street west of SR 1545 (Mountain View Church Road) to SR 1549 (Airport Road). The project is approximately 1.4 miles long. The purpose of the project is to provide a direct connection between SR 1542 and SR 1549 and avoid the potential safety hazards that exist along the current route connecting these two roads.

NEPA DOCUMENT STATUS

An Environmental Assessment (EA) was submitted by the NCDOT in compliance with the National Environmental Policy Act (NEPA). The EA was approved on October 31, 2003. A Finding of No Significant Impact (FONSI) was approved on July 7, 2006. The EA explains the purpose and need for the project; provides a complete description of the alternatives considered; and characterizes the social, economic and environmental effects. After the EA was approved, it was circulated to the federal and local agencies. Copies of the EA and FONSI have been provided to regulatory review agencies involved in the approval process. Additional copies will be provided upon request.

MAILING ADDRESS:
NC DEPARTMENT OF TRANSPORTATION
PROJECT DEVELOPMENT AND ENVIRONMENTAL ANALYSIS
1598 MAIL SERVICE CENTER
RALEIGH NC 27699-1548

TELEPHONE: 919-715-1334
FAX: 919-715-5501

WEBSITE: WWW.NCDOT.ORG

LOCATION:
PARKER LINCOLN BUILDING,
2728 CAPITAL BLVD.
RALEIGH NC 27604

IMPACTS TO WATERS OF THE UNITED STATES

General Description:

The water resources impacted for this project include unnamed tributaries (UTs) to Mountain Creek. Mountain Creek is located in the Yadkin River Basin (Hydrological Cataloguing Unit 03040104) and is classified as class "C". The DWQ Index number for Mountain Creek is 13-5-(0.3). There are no 303(d) waters listed within one mile of the project study area. Additionally, no High Quality Waters (HQW), Water Supplies (WS-I or WSII), or Outstanding Resource Waters (ORW), occur within one mile of the project study area.

Resource Status:

Mr. Steve Lund of the U.S. Army Corps of Engineers (USACE) and Ms. Polly Lespinasse of the North Carolina Department of Water Quality (NCDWQ) verified the jurisdictional resources on February 7, 2007. At the time of the field visit, an additional intermittent stream was added to the project study area; however, it requires no mitigation per the USACE. Additionally, the project will have no impact to the newly identified stream. The stream was assessed by NEU and scored within the range for ephemeral stream channels with its main source of hydrology resulting from storm water. A Jurisdictional Determination has not been provided by the USACE at this time. However, personal communication with both Mr. Lund and Ms. Lespinasse stated as long as no changes occur in design, the Jurisdictional Determination will be issued at the time of the permit application. Each impact is described in detail below. Site and station numbers correspond with the permit (hydraulic) drawings included in this application.

Impacts:

Site 1 (-L- 39+34 – 39+67)

A 48" RCP buried one foot will be used at this location. Impacts will result in 0.05 acres of wetlands, 188 linear feet of permanent surface water impacts, and 40 linear feet of temporary surface water impacts.

Site 2 (-Y2- 13+75 – 13+40)

A 24" pipe carrying UT2 to Mountain Creek will be replaced with one 10' X 6' RCBC buried one foot. There will also be four 48" RCP's buried one foot located to the east for overflow purposes. Impacts will result in 34 linear feet of permanent surface water impacts and 103 linear feet of temporary surface water impacts.

Site 3 (-L- 43+57 – 44+32)

A 10' X 6' RCBC buried one foot will be added to this site along with the addition of four 48" RCP's buried one foot to the south for overflow. Impacts will result in 118 linear feet of permanent surface water impacts and 65 linear feet of temporary surface water impacts.

Total Impacts

The project will permanently impact 0.05 acre of wetlands and 340 linear feet of streams, and temporarily impact 208 linear feet of streams as outlined in the attached Impact Summary Table.

Utility Impacts:

There are no jurisdictional impacts associated with utility relocations with this project.

FEDERALLY PROTECTED SPECIES

Plants and animals with federal classifications of Endangered (E), Threatened (T), Proposed Endangered (PE) and Proposed Threatened (PT) are protected under provisions of Section 7 and Section 9 of the Endangered Species Act of 1973, as amended. As of July 17, 2008, the United States Fish and Wildlife Service (USFWS) list one federally protected species for Stanly County (Table 1).

In a letter dated February 27, 2004, the USFWS concurred with a biological conclusion of “May Affect, Not Likely to Adversely Affect” for Schweinitz’s sunflower. The most recent survey for the Schweinitz’s sunflower was completed on September 2007. Suitable habitat was found for this species, with no individuals found within the project study area. However, the biological conclusion “May Affect, Not Likely to Adversely Affect” is still warranted because there are known populations located within 1 mile of the project study area.

AVOIDANCE, MINIMIZATION AND MITIGATION

Avoidance and Minimization:

Avoidance examines all appropriate and practicable possibilities of averting impacts to “Waters of the United States.” The NCDOT is committed to incorporating all reasonable and practicable design features to avoid and minimize jurisdictional impacts. In addition, Best Management Practices will be followed as outlined in “NCDOT’s Best Management Practices for Construction and Maintenance Activities”.

- Best Management Practices will be followed for this project as outlined in “NCDOT’s Best Management Practices for Construction and Maintenance Activities”.
- The new culverts (48”) located onsite will replace significantly undersized culverts (24”) and will be buried one foot allowing natural material to fill the culvert. This should help alleviate the issue of flooding experienced within the area, especially along SR 1545.
- Design Standards for Sensitive Watersheds will be used for protection of downstream waters.
- 2:1 slopes to avoid impacts in wetlands.

Mitigation: Site 4 (-Y1- STA 13+47) A 30” RCP will be removed at this location, totaling 46 linear feet, to successfully re-establish channel morphology both upstream and downstream. The existing road will then terminate into a cul-de-sac area (see attached stream restoration plan). The remaining 294 linear feet of permanent impacts will be mitigated by the use of EEP (Please see attached mitigation acceptance letter).

PROJECT SCHEDULE

The project schedule calls for a February 17, 2009 let date, and a review date of December 30, 2008.

REGULATORY APPROVALS

Section 404 Permit:

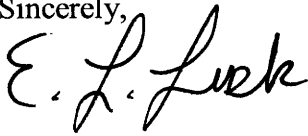
It is anticipated that the permanent impacts to streams and wetlands associated with this linear transportation project will be authorized under Section 404 Nationwide Permit 14. We are, therefore, requesting the issuance of a Nationwide Permit 14.

Section 401 Certification:

We anticipate 401 General Certification number 3704 will apply to this project. In compliance with Section 143-215.3D(e) of the NCAC, we will provide \$570.00 to act as payment for processing the Section 401 certification application (debit WBS element 34908.1.1). We are providing five copies of this application to the North Carolina Department of Environment and Natural Resources, Division of Water Quality for their approval.

Thank you for your assistance with this project. If you have any questions or need additional information, please contact Kris Dramby at kjdramby@ncdot.gov or (919) 715-5526. The application will be posted at <http://207.4.62.65/PDEA/PermApps/>.

Sincerely,



gd Gregory J. Thorpe, Ph.D., Environmental Management Director
Project Development and Environmental Analysis Branch

W/attachment

Mr. Brian Wrenn, NCDWQ (5 Copies)
Ms. Marella Buncick, USFWS
Ms. Marla Chambers, NCWRC

W/o attachment (see website for attachments)

Dr. David Chang, P.E., Hydraulics
Mr. Greg Perfetti, P.E., Structure Design
Mr. Victor Barbour, P.E., Project Services Unit
Mr. Mark Staley, Roadside Environmental
Mr. Barry Moose, PE, Division 10
Mr. Larry Thompson, Division 10
Mr. Jay Bennett, P.E., Roadway Design
Mr. Majed Alghandour, P. E., Programming and TIP
Mr. Art McMillan, P.E., Highway Design
Mr. Scott McLendon, USACE, Wilmington
Ms. Beth Harmon, EEP
Mr. Todd Jones, NCDOT External Audit Branch
Mr. Andy Hussey, Project Planning Engineer

Office Use Only:

Form Version March 05

USACE Action ID No. _____ **DWQ No.** _____

(If any particular item is not applicable to this project, please enter "Not Applicable" or "N/A".)

I. Processing

1. Check all of the approval(s) requested for this project:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Section 404 Permit | <input type="checkbox"/> Riparian or Watershed Buffer Rules |
| <input type="checkbox"/> Section 10 Permit | <input type="checkbox"/> Isolated Wetland Permit from DWQ |
| <input checked="" type="checkbox"/> 401 Water Quality Certification | <input type="checkbox"/> Express 401 Water Quality Certification |

2. Nationwide, Regional or General Permit Number(s) Requested: NWP 14

3. If this notification is solely a courtesy copy because written approval for the 401 Certification is not required, check here:

4. If payment into the North Carolina Ecosystem Enhancement Program (NCEEP) is proposed for mitigation of impacts, attach the acceptance letter from NCEEP, complete section VIII, and check here:

5. If your project is located in any of North Carolina's twenty coastal counties (listed on page 4), and the project is within a North Carolina Division of Coastal Management Area of Environmental Concern (see the top of page 2 for further details), check here:

II. Applicant Information

1. Owner/Applicant Information

Name: Gregory J. Thorpe, Ph.D., Environmental Management Director
Mailing Address: 1598 Mail Service Center
Raleigh, NC 27699-1598

Telephone Number: (919) 733-3141 Fax Number: (919) 733-9794
E-mail Address: _____

2. Agent/Consultant Information (A signed and dated copy of the Agent Authorization letter must be attached if the Agent has signatory authority for the owner/applicant.)

Name: _____
Company Affiliation: _____
Mailing Address: _____

Telephone Number: _____ Fax Number: _____
E-mail Address: _____

III. Project Information

Attach a **vicinity map** clearly showing the location of the property with respect to local landmarks such as towns, rivers, and roads. Also provide a detailed **site plan** showing property boundaries and development plans in relation to surrounding properties. Both the vicinity map and site plan must include a scale and north arrow. The specific footprints of all buildings, impervious surfaces, or other facilities must be included. If possible, the maps and plans should include the appropriate USGS Topographic Quad Map and NRCS Soil Survey with the property boundaries outlined. Plan drawings, or other maps may be included at the applicant's discretion, so long as the property is clearly defined. For administrative and distribution purposes, the USACE requires information to be submitted on sheets no larger than 11 by 17-inch format; however, DWQ may accept paperwork of any size. DWQ prefers full-size construction drawings rather than a sequential sheet version of the full-size plans. If full-size plans are reduced to a small scale such that the final version is illegible, the applicant will be informed that the project has been placed on hold until decipherable maps are provided.

1. Name of project: Albemarle – SR 1542 (Ridge Street Extension)
2. T.I.P. Project Number or State Project Number (NCDOT Only): U-3300 B
3. Property Identification Number (Tax PIN): N/A
4. Location
County: Stanly Nearest Town: Palestine
Subdivision name (include phase/lot number): N/A
Directions to site (include road numbers/names, landmarks, etc.): From SR 52 continue to SR 740 heading southeast. Continue to SR 1545 (Mountain View Church Road) and travel approximately 4 miles until reaching project study area.
5. Site coordinates (For linear projects, such as a road or utility line, attach a sheet that separately lists the coordinates for each crossing of a distinct waterbody.)
Decimal Degrees (6 digits minimum): 35°42'90.98" N 85°15'10.75" W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Mountain Creek
8. River Basin: Yadkin
(Note – this must be one of North Carolina's seventeen designated major river basins. The River Basin map is available at <http://h2o.enr.state.nc.us/admin/maps/>.)
9. Describe the existing conditions on the site and general land use in the vicinity of the project at the time of this application: The site is located in a rural section of Stanly County primarily surrounded by agriculture and forested land. The topography in the project area is comprised of gently rolling hills. Elevation within the project area measures approximately 600 feet above mean sea level.

10. Describe the overall project in detail, including the type of equipment to be used: The project will consist of relocating a portion of existing SR 1542 (Ridge Street) and extend SR 1542 on new location from existing Ridge Street west of SR 1545 (Mountain View Church Road) to SR 1549 (Airport Road). The project is approximately 1.4 miles long. Structures used for this project are 2 culverts both are single barrel 10' X 6' and each with four 48" pipes. Despite avoidance and minimization efforts, there will be 0.05 acres of permanent impacts to wetlands, 340 linear feet of permanent impacts to surface waters, and 208 linear feet of temporary impacts to surface waters. An unnamed tributary pipe will be day-lighted by removal of 46 linear feet of a 30" RCP and the existing road will become a cul-de-sac. Construction equipment will consist of heavy trucks, earth moving equipment, cranes, etc.
11. Explain the purpose of the proposed work: The purpose of the project is to provide a direct connection between SR 1542 (Ridge Street) and SR 1549 (Airport Road) and avoid the potential safety hazards that exist along the current route connecting these two roads.

IV. Prior Project History

If jurisdictional determinations and/or permits have been requested and/or obtained for this project (including all prior phases of the same subdivision) in the past, please explain. Include the USACE Action ID Number, DWQ Project Number, application date, and date permits and certifications were issued or withdrawn. Provide photocopies of previously issued permits, certifications or other useful information. Describe previously approved wetland, stream and buffer impacts, along with associated mitigation (where applicable). If this is a NCDOT project, list and describe permits issued for prior segments of the same T.I.P. project, along with construction schedules. N/A

V. Future Project Plans

Are any future permit requests anticipated for this project? If so, describe the anticipated work, and provide justification for the exclusion of this work from the current application. N/A

VI. Proposed Impacts to Waters of the United States/Waters of the State

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to wetlands, open water, and stream channels associated with the project. Each impact must be listed separately in the tables below (e.g., culvert installation should be listed separately from riprap dissipater pads). Be sure to indicate if an impact is temporary. All proposed impacts, permanent and temporary, must be listed, and must be labeled and clearly identifiable on an accompanying site plan. All wetlands and waters, and all streams (intermittent and perennial) should be shown on a delineation map, whether or not impacts are proposed to these systems. Wetland and stream evaluation and delineation forms should be included as appropriate. Photographs may be included at the applicant's discretion. If this proposed impact is strictly for

wetland or stream mitigation, list and describe the impact in Section VIII below. If additional space is needed for listing or description, please attach a separate sheet.

1. Provide a written description of the proposed impacts: There will be 0.05 acres of permanent impacts to wetlands, 340 linear feet of permanent impacts to surface waters, and 208 linear feet of temporary impacts to surface waters.
2. Individually list wetland impacts. Types of impacts include, but are not limited to mechanized clearing, grading, fill, excavation, flooding, ditching/drainage, etc. For dams, separately list impacts due to both structure and flooding.

Wetland Impact Site Number (indicate on map)	Type of Impact	Type of Wetland (e.g., forested, marsh, herbaceous, bog, etc.)	Located within 100-year Floodplain (yes/no)	Distance to Nearest Stream (linear feet)	Area of Impact (acres)
Site 1	Permanent Fill	PFO		0.00	0.05
Total Wetland Impact (acres)					

3. List the total acreage (estimated) of all existing wetlands on the property: 0.05 acre
4. Individually list all intermittent and perennial stream impacts. Be sure to identify temporary impacts. Stream impacts include, but are not limited to placement of fill or culverts, dam construction, flooding, relocation, stabilization activities (e.g., cement walls, rip-rap, crib walls, gabions, etc.), excavation, ditching/straightening, etc. If stream relocation is proposed, plans and profiles showing the linear footprint for both the original and relocated streams must be included. To calculate acreage, multiply length X width, then divide by 43,560.

Stream Impact Number (indicate on map)	Stream Name	Type of Impact	Perennial or Intermittent?	Average Stream Width Before Impact	Impact Length (linear feet)	Area of Impact (acres)
Site 1	UT3	Permanent Fill	Intermittent	3 feet	188	0.02
Site 1	UT3	Temporary Fill	Intermittent	3 feet	40	0.01
Site 1	UT 4	Permanent Fill	Intermittent	3 feet	20	0.01
Site 2	UT2	Permanent Fill	Intermittent	5 feet	34	0.01
Site 2	UT2	Temporary Fill	Intermittent	5 feet	103	0.01
Site 3	UT2	Permanent Fill	Intermittent	5 feet	118	0.02
Site 3	UT2	Temporary Fill	Intermittent	5 feet	65	0.01
Total Stream Impact (by length and acreage)					548	0.09

5. Individually list all open water impacts (including lakes, ponds, estuaries, sounds, Atlantic Ocean and any other water of the U.S.). Open water impacts include, but are not limited to fill, excavation, dredging, flooding, drainage, bulkheads, etc.

Open Water Impact Site Number (indicate on map)	Name of Waterbody (if applicable)	Type of Impact	Type of Waterbody (lake, pond, estuary, sound, bay, ocean, etc.)	Area of Impact (acres)
N/A				
Total Open Water Impact (acres)				

6. List the cumulative impact to all Waters of the U.S. resulting from the project:

Stream Impact (acres):	0.09
Wetland Impact (acres):	0.05
Open Water Impact (acres):	0.00
Total Impact to Waters of the U.S. (acres)	0.14
Total Stream Impact (linear feet):	548

7. Isolated Waters

Do any isolated waters exist on the property? Yes No

Describe all impacts to isolated waters, and include the type of water (wetland or stream) and the size of the proposed impact (acres or linear feet). Please note that this section only applies to waters that have specifically been determined to be isolated by the USACE.

8. Pond Creation

If construction of a pond is proposed, associated wetland and stream impacts should be included above in the wetland and stream impact sections. Also, the proposed pond should be described here and illustrated on any maps included with this application.

Pond to be created in (check all that apply): uplands stream wetlands

Describe the method of construction (e.g., dam/embankment, excavation, installation of draw-down valve or spillway, etc.): _____

Proposed use or purpose of pond (e.g., livestock watering, irrigation, aesthetic, trout pond, local stormwater requirement, etc.): _____

Current land use in the vicinity of the pond: _____

Size of watershed draining to pond: _____ Expected pond surface area: _____

VII. Impact Justification (Avoidance and Minimization)

Specifically describe measures taken to avoid the proposed impacts. It may be useful to provide information related to site constraints such as topography, building ordinances, accessibility, and financial viability of the project. The applicant may attach drawings of alternative, lower-impact site layouts, and explain why these design options were not feasible. Also discuss how impacts were minimized once the desired site plan was developed. If applicable, discuss construction

techniques to be followed during construction to reduce impacts. See Permit Application Cover Letter

VIII. Mitigation

DWQ - In accordance with 15A NCAC 2H .0500, mitigation may be required by the NC Division of Water Quality for projects involving greater than or equal to one acre of impacts to freshwater wetlands or greater than or equal to 150 linear feet of total impacts to perennial streams.

USACE – In accordance with the Final Notice of Issuance and Modification of Nationwide Permits, published in the Federal Register on January 15, 2002, mitigation will be required when necessary to ensure that adverse effects to the aquatic environment are minimal. Factors including size and type of proposed impact and function and relative value of the impacted aquatic resource will be considered in determining acceptability of appropriate and practicable mitigation as proposed. Examples of mitigation that may be appropriate and practicable include, but are not limited to: reducing the size of the project; establishing and maintaining wetland and/or upland vegetated buffers to protect open waters such as streams; and replacing losses of aquatic resource functions and values by creating, restoring, enhancing, or preserving similar functions and values, preferable in the same watershed.

If mitigation is required for this project, a copy of the mitigation plan must be attached in order for USACE or DWQ to consider the application complete for processing. Any application lacking a required mitigation plan or NCEEP concurrence shall be placed on hold as incomplete. An applicant may also choose to review the current guidelines for stream restoration in DWQ's Draft Technical Guide for Stream Work in North Carolina, available at <http://h2o.enr.state.nc.us/ncwetlands/strmgide.html>.

1. Provide a brief description of the proposed mitigation plan. The description should provide as much information as possible, including, but not limited to: site location (attach directions and/or map, if offsite), affected stream and river basin, type and amount (acreage/linear feet) of mitigation proposed (restoration, enhancement, creation, or preservation), a plan view, preservation mechanism (e.g., deed restrictions, conservation easement, etc.), and a description of the current site conditions and proposed method of construction. Please attach a separate sheet if more space is needed.
See attached Stream Restoration Plan.
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-

2. Mitigation may also be made by payment into the North Carolina Ecosystem Enhancement Program (NCEEP). Please note it is the applicant's responsibility to contact the NCEEP at (919) 715-0476 to determine availability, and written approval from the NCEEP indicating that they are will to accept payment for the mitigation must be attached to this form. For additional information regarding the application process for the NCEEP, check the NCEEP

website at <http://h2o.enr.state.nc.us/wrp/index.htm>. If use of the NCEEP is proposed, please check the appropriate box on page five and provide the following information:

Amount of stream mitigation requested (linear feet): 294
 Amount of buffer mitigation requested (square feet): N/A
 Amount of Riparian wetland mitigation requested (acres): 0.05
 Amount of Non-riparian wetland mitigation requested (acres): N/A
 Amount of Coastal wetland mitigation requested (acres): N/A

IX. Environmental Documentation (required by DWQ)

1. Does the project involve an expenditure of public (federal/state/local) funds or the use of public (federal/state) land? Yes No
2. If yes, does the project require preparation of an environmental document pursuant to the requirements of the National or North Carolina Environmental Policy Act (NEPA/SEPA)?
 Note: If you are not sure whether a NEPA/SEPA document is required, call the SEPA coordinator at (919) 733-5083 to review current thresholds for environmental documentation.
 Yes No
3. If yes, has the document review been finalized by the State Clearinghouse? If so, please attach a copy of the NEPA or SEPA final approval letter. Yes No

X. Proposed Impacts on Riparian and Watershed Buffers (required by DWQ)

It is the applicant's (or agent's) responsibility to determine, delineate and map all impacts to required state and local buffers associated with the project. The applicant must also provide justification for these impacts in Section VII above. All proposed impacts must be listed herein, and must be clearly identifiable on the accompanying site plan. All buffers must be shown on a map, whether or not impacts are proposed to the buffers. Correspondence from the DWQ Regional Office may be included as appropriate. Photographs may also be included at the applicant's discretion.

1. Will the project impact protected riparian buffers identified within 15A NCAC 2B .0233 (Neuse), 15A NCAC 2B .0259 (Tar-Pamlico), 15A NCAC 02B .0243 (Catawba) 15A NCAC 2B .0250 (Randleman Rules and Water Supply Buffer Requirements), or other (please identify _____)? Yes No
2. If "yes", identify the square feet and acreage of impact to each zone of the riparian buffers. If buffer mitigation is required calculate the required amount of mitigation by applying the buffer multipliers.

Zone*	Impact (square feet)	Multiplier	Required Mitigation
1		3 (2 for Catawba)	
2		1.5	
Total			

* Zone 1 extends out 30 feet perpendicular from the top of the near bank of channel; Zone 2 extends an additional 20 feet from the edge of Zone 1.

3. If buffer mitigation is required, please discuss what type of mitigation is proposed (i.e., Donation of Property, Riparian Buffer Restoration / Enhancement, or Payment into the Riparian Buffer Restoration Fund). Please attach all appropriate information as identified within 15A NCAC 2B .0242 or .0244, or .0260. N/A
-
-

XI. Stormwater (required by DWQ)

Describe impervious acreage (existing and proposed) versus total acreage on the site. Discuss stormwater controls proposed in order to protect surface waters and wetlands downstream from the property. If percent impervious surface exceeds 20%, please provide calculations demonstrating total proposed impervious level. N/A

XII. Sewage Disposal (required by DWQ)

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.
N/A

XIII. Violations (required by DWQ)

Is this site in violation of DWQ Wetland Rules (15A NCAC 2H .0500) or any Buffer Rules?

Yes No

Is this an after-the-fact permit application? Yes No

XIV. Cumulative Impacts (required by DWQ)

Will this project (based on past and reasonably anticipated future impacts) result in additional development, which could impact nearby downstream water quality? Yes No

If yes, please submit a qualitative or quantitative cumulative impact analysis in accordance with the most recent North Carolina Division of Water Quality policy posted on our website at <http://h2o.enr.state.nc.us/ncwetlands>. If no, please provide a short narrative description: _____

XV. Other Circumstances (Optional):

It is the applicant's responsibility to submit the application sufficiently in advance of desired construction dates to allow processing time for these permits. However, an applicant may

choose to list constraints associated with construction or sequencing that may impose limits on work schedules (e.g., draw-down schedules for lakes, dates associated with Endangered and Threatened Species, accessibility problems, or other issues outside of the applicant's control).
N/A

E. L. Lusk

10.29.08

Applicant/Agent's Signature

Date

(Agent's signature is valid only if an authorization letter from the applicant is provided.)



October 22, 2008

Mr. Steve Lund
U. S. Army Corps of Engineers
Asheville Regulatory Field Office
151 Patton Avenue, Room 208
Asheville, North Carolina 28801-5006

Dear Mr. Lund:

Subject: EEP Mitigation Acceptance Letter:

U-3300B, Albemarle – SR 1542 (Ridge Street Extension) from Existing Ridge Road to Airport Road, Stanly County; Yadkin River Basin (Cataloging Unit 03040104); Southern Piedmont (SP) Eco-Region

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream mitigation for the unavoidable impacts associated with the above referenced project. As indicated in the NCDOT's mitigation request dated October 14 2008, compensatory mitigation from EEP is required for approximately 294 feet of warm stream impact.

This mitigation acceptance letter replaces the mitigation acceptance letter issued on August 11, 2008. Compensatory mitigation associated with this project will be provided in accordance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the N. C. Department of Environment and Natural Resources, the N. C. Department of Transportation, and the U. S. Army Corps of Engineers fully executed on March 8, 2007 (Tri-Party MOA). EEP commits to implement sufficient compensatory stream mitigation up to 588 warm stream mitigation credits to offset the impacts associated with this project by the end of the MOA year in which this project is permitted. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

William D. Gilmore, P.E.
EEP Director

cc: Mr. Gregory J. Thorpe, Ph.D., NCDOT-PDEA
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: U-3300B Revised

Restoring... Enhancing... Protecting Our State





October 22, 2008

Mr. Gregory J. Thorpe, Ph.D.
Environmental Management Director
Project Development and Environmental Analysis Branch
North Carolina Department of Transportation
1548 Mail Service Center
Raleigh, North Carolina 27699-1548

Dear Dr. Thorpe:

Subject: EEP Mitigation Acceptance Letter:

U-3300B, Albemarle – SR 1542 (Ridge Street Extension) from
Existing Ridge Road to Airport Road, Stanly County

The purpose of this letter is to notify you that the Ecosystem Enhancement Program (EEP) will provide the compensatory stream mitigation for the subject project. Based on the information supplied by you on October 14, 2008, the impacts are located in CU 03040104 of the Yadkin River Basin in the Southern Piedmont (SP) Eco-Region, and are as follows:

Warm Stream: 294 feet

This mitigation acceptance letter replaces the mitigation acceptance letter issued on August 11, 2008. EEP commits to implementing sufficient compensatory stream mitigation to offset the impacts associated with this project by the end of the MOA Year in which this project is permitted, in accordance with Section X of the Amendment No. 2 to the Memorandum of Agreement between the North Carolina Department of Environment and Natural Resources, the North Carolina Department of Transportation, and the U. S. Army Corps of Engineers, fully executed on March 8, 2007. If the above referenced impact amounts are revised, then this mitigation acceptance letter will no longer be valid and a new mitigation acceptance letter will be required from EEP.

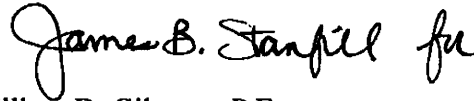
Restoring... Enhancing... Protecting Our State



North Carolina Ecosystem Enhancement Program, 1652 Mail Service Center, Raleigh, NC 27699-1652 / 919-715-0476 / www.nceep.net

If you have any questions or need additional information, please contact Ms. Beth Harmon at 919-715-1929.

Sincerely,

A handwritten signature in black ink that reads "James B. Stanfill fu". The signature is written in a cursive style with a large initial 'J' and a trailing 'fu'.

William D. Gilmore, P.E.
EEP Director

cc: Mr. Steve Lund, USACE – Asheville Regulatory Field Office
Mr. Brian Wrenn, Division of Water Quality, Wetlands/401 Unit
File: U-3300B Revised

Stream Restoration Plan
Unnamed Tributary to Mountain Creek
SR 1542 (Ridge Street)
Stanly County

TIP U-3300B
Federal Aid Project No. STP-1542 (2)
State Project No. 8.2681301
WBS No. 34908.1.1
August 2008

The North Carolina Department of Transportation (NCDOT) will perform on-site mitigation for stream impacts associated with the extension of SR 1542 (Ridge Street) from existing Ridge Street west of SR 1545 (Mountain View Church Road) to SR 1549 (Airport Road). The roadway project is approximately 1.4 miles long and will permanently impact 0.08 acres of wetlands, 190 linear feet of stream channel, and temporarily impact 178 linear feet of stream channel. NCDOT will restore 46 linear feet of jurisdictional stream as onsite mitigation for the impacts associated with this project. This mitigation site occurs at Sta. 12 + 30.00 – Sta. 14 + 45.00 within Transportation Improvement Program (TIP) U-3300B.

EXISTING CONDITIONS

The project is located in Stanly County, southwest of the Stanly County Airport, approximately 2 miles west of Badin. Land use within the project study area is primarily comprised of agricultural and forested land with some residential areas interspersed throughout.

An unnamed tributary to Mountain Creek flows under Ridge Street through a 30" RCP, approximately 300 feet north of Mountain View Church Road. The stream channel varies from 3 – 4 feet wide with average bank heights of 2 feet and a substrate comprised primarily of gravel and cobble. Up and downstream of the crossing, the tributary has a well developed canopy and wooded buffer providing for a stable channel. Buffer canopy is dominated by cherrybark oak (*Quercus pagoda*), scarlet oak (*Quercus coccinea*), and hickory species (*Carya* spp.) The sub-canopy consists of shrubs including flowering dogwood (*Cornus florida*), willow oak (*Quercus phellos*), blackgum (*Nyssa sylvatica*), winged elm (*Ulmus alata*), and red maple (*Acer rubrum*).

The Finding of No Significant Impact (FONSI) for TIP U-3300B, dated June 2006, provides further details concerning existing roadway and project study area conditions.

PROPOSED CONDITIONS

The proposed stream mitigation will consist of restoring 46 linear feet of jurisdictional stream. Restoration will involve removing pavement, roadway fill, and the associated

30”RCP. Cul-de-sacs will be constructed at the terminal ends of Ridge Street. The stream channel and banks will be reestablished to match both upstream and downstream geomorphology. The stream banks will be stabilized using coir fiber matting and planted in accordance to the reforestation plan.

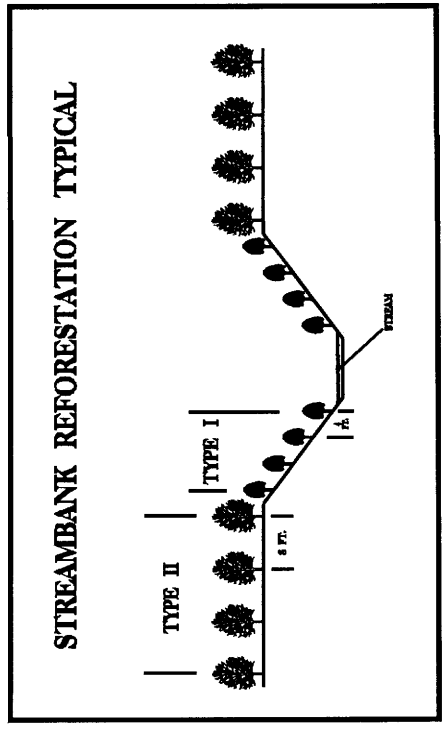
The Natural Environment Unit shall be contacted to provide construction assistance, if necessary, to ensure that the stream mitigation area is constructed appropriately.

MONITORING

No specific monitoring is proposed for this restoration site. The Natural Environment Unit will verify the channel dimensions and site stability after construction has been completed. Agency representatives will be invited to a post-construction site inspection.

- TYPE 1 STREAMBANK REFORESTATION SHALL BE PLANTED 3 FT. TO 5 FT. ON CENTER, RANDOM SPACING, AVERAGING 4 FT. ON CENTER, APPROXIMATELY 2724 PLANTS PER ACRE.
- TYPE 2 STREAMBANK REFORESTATION SHALL BE PLANTED 6 FT. TO 10 FT. ON CENTER, RANDOM SPACING, AVERAGING 8 FT. ON CENTER, APPROXIMATELY 680 PLANTS PER ACRE.

NOTE: TYPE 1 AND TYPE 2 STREAMBANK REFORESTATION SHALL BE PAID FOR AS "STREAMBANK REFORESTATION"



STREAMBANK REFORESTATION MIXTURE, TYPE, SIZE AND FORKUBH SHALL CONFORM TO THE FOLLOWING:

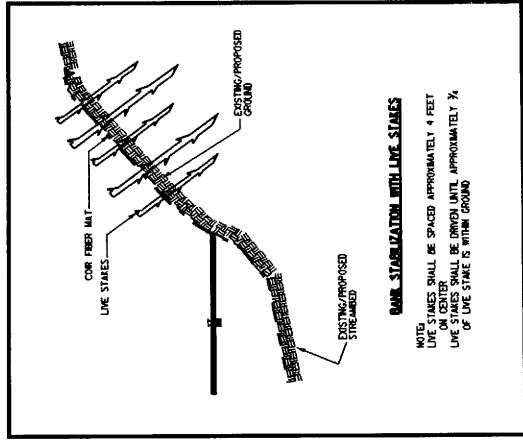
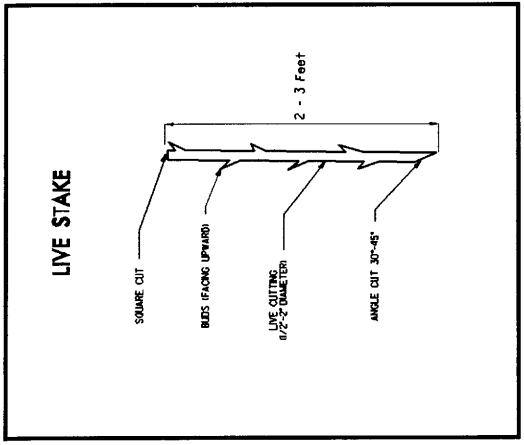
TYPE 1	TYPE 2
50% SALIX NIGRA	40% QUERCUS FALCATA VAR. PAGODAEOFLA
50% CORNUS AMOMUM	30% PLATANUS OCCIDENTALIS
	30% QUERCUS PHELLOS
2 ft - 3 ft LIVE STAKES	CHERRYBARK OAK 12 in - 18 in BR
2 ft - 3 ft LIVE STAKES	SYCAMORE 12 in - 18 in BR
	WILLOW OAK 12 in - 18 in BR

SEE PLAN SHEETS FOR AREAS TO BE PLANTED

STREAMBANK REFORESTATION
DETAIL SHEET 1 OF 2
 N.C.DOT - ROADSIDE ENVIRONMENTAL UNIT

PLANTING DETAILS

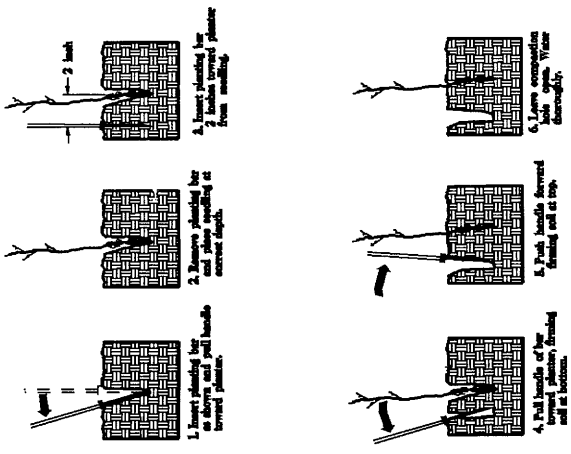
LIVE STAKES PLANTING DETAIL



BANK STABILIZATION WITH LIVE STAKES

NOTE: LIVE STAKES SHALL BE SPACED APPROXIMATELY 4 FEET ON CENTER. LIVE STAKES SHALL BE DRIVEN UNTIL APPROXIMATELY 2/3 OF LIVE STAKE IS WITHIN GROUND.

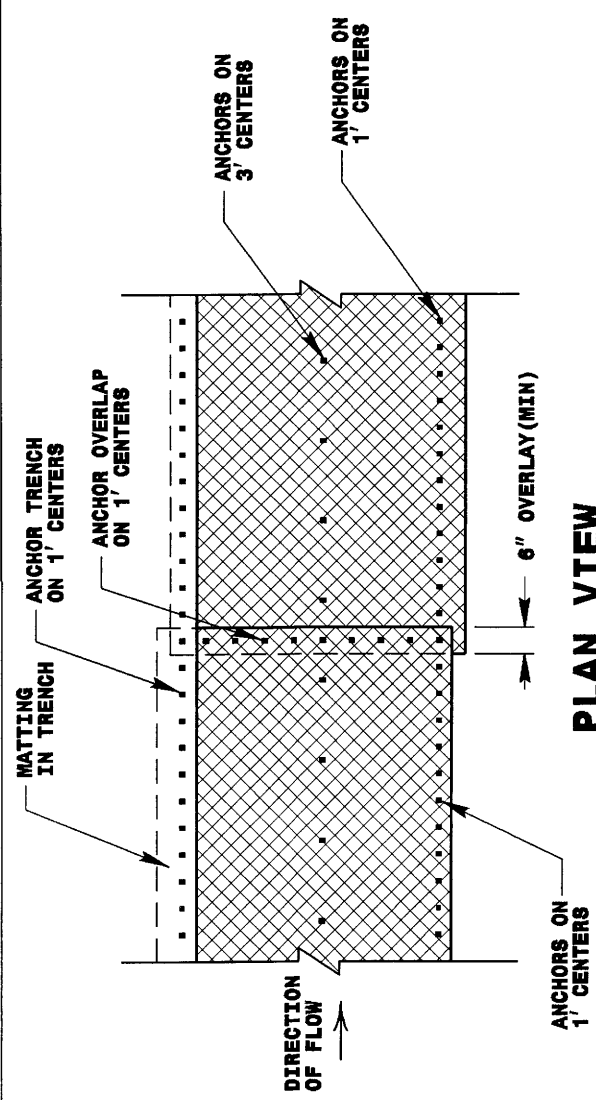
**BAREROOT PLANTING DETAIL
 DIBBLE PLANTING METHOD
 USING THE ABC PLANTING BAR**



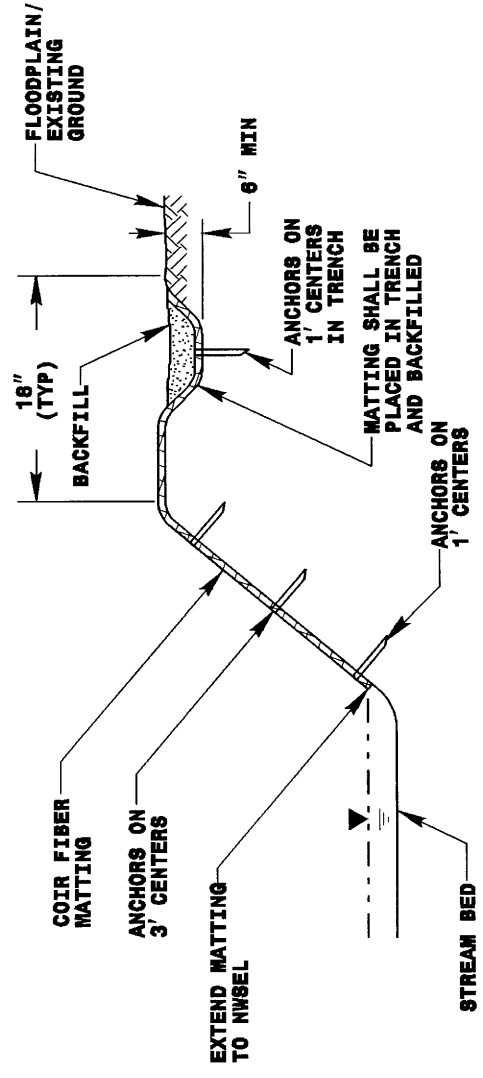
PLANTING NOTES:

- PLANTING BAG:** Dressed plastic mulch shall be kept in a stack covered with a heavy canvas bag or similar material to keep the root systems from drying.
- ABC PLANTING BAR:** The bar shall have a square end and shall be 2 1/2 inches long by 1 1/2 inches wide and 1 inch thick at center.
- ROOT BELLING:** All bellings shall be root belling, if necessary, so that no roots extend more than 20 inches below the root collar.

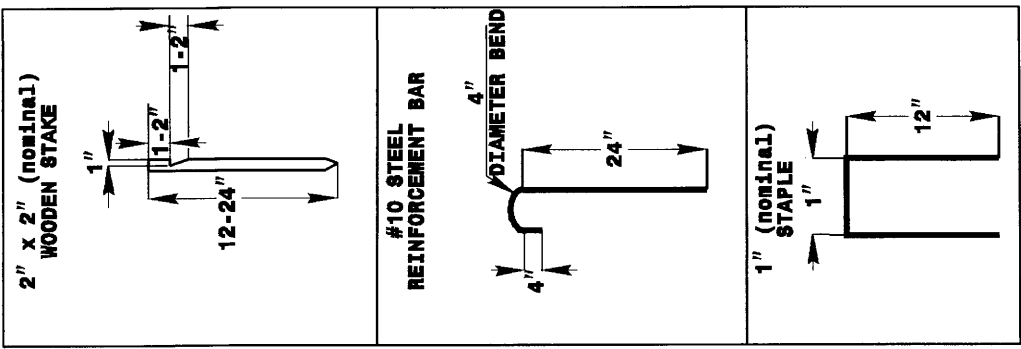
PROJECT REFERENCE NO. U-3300B	SHEET NO. RF-2
BY ROADWAY DESIGN ENGINEER	CHECKED BY HYDRAULIC ENGINEER



PLAN VIEW

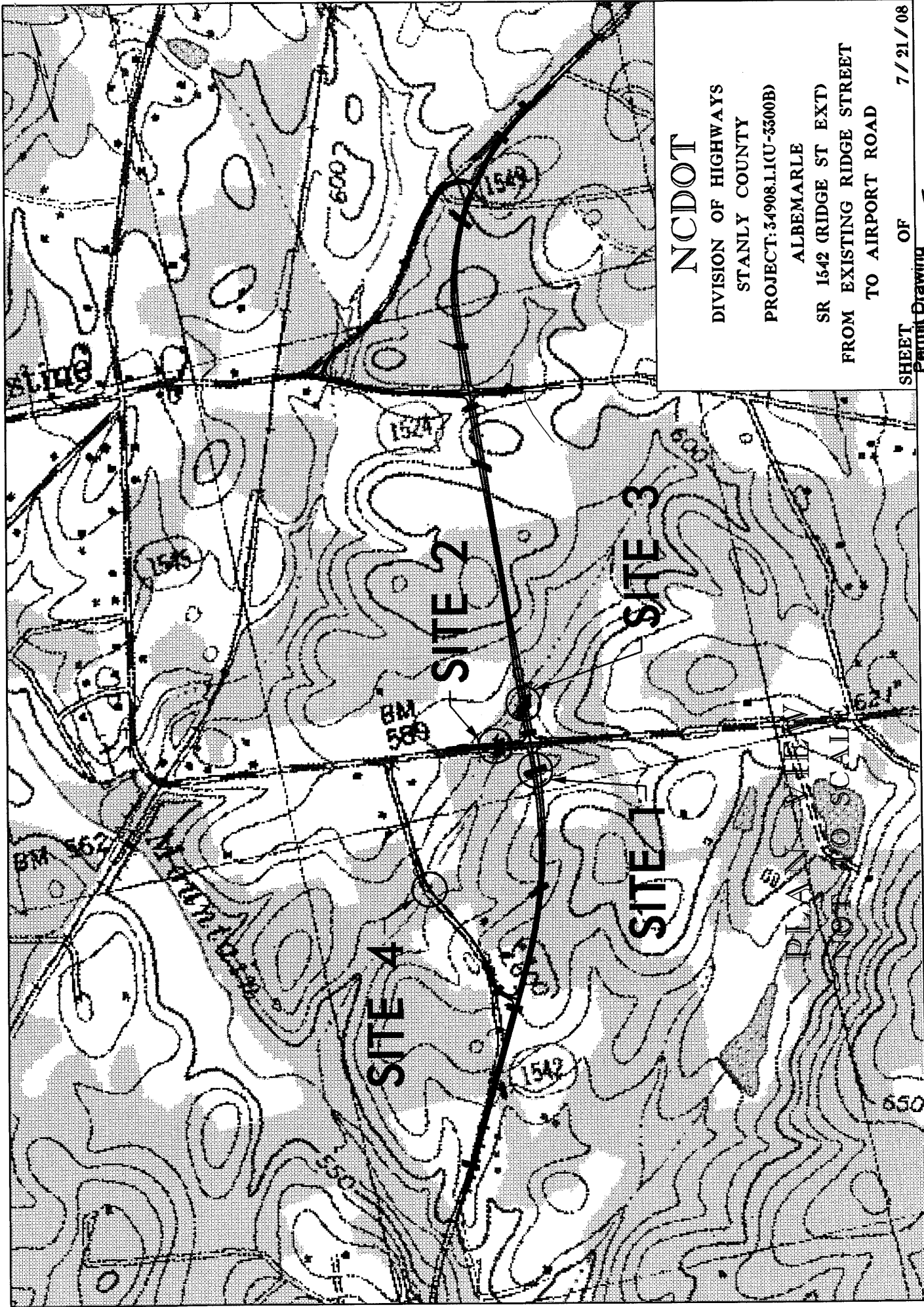


TYPICAL CROSS SECTION



ANCHOR OPTIONS

COIR FIBER MATTING DETAIL
NOT TO SCALE



NCDOT

DIVISION OF HIGHWAYS

STANLY COUNTY

PROJECT: 34908.1(U-3300B)

ALBEMARLE

SR 1542 (RIDGE ST EXT)

FROM EXISTING RIDGE STREET

TO AIRPORT ROAD

SHEET _____ OF 7 / 21 / 08

Permit Drawing

Sheet 7 of 15

PROPERTY OWNERS

NAMES AND ADDRESSES

PARCEL NO.	NAMES	ADDRESSES
6	DEAN S. & MARILYN S CAMPBELL	40257 AIRPORT ROAD ALBEMARLE, NC, 28001
8	MICHAEL E. SNYDER	P.O. BOX 670 ALBEMARLE, NC, 28002
8	MICHAEL E. SNYDER	41362 MOUNTAIN VIEW CHURCH RD ALBEMARLE, NC, 28001

Permit Drawing
Sheet 2 of 15

NCDOT

**DIVISION OF HIGHWAYS
STANLY COUNTY**

PROJECT: 34908.1.1 (U-3300B)

ALBEMARLE

SR 1542 (RIDGE ST EXT)

**FROM EXISTING RIDGE STREET
TO AIRPORT ROAD**

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	-L- 39+29 - 39+71	48" RCP Bank Stabilization	0.05	0.00	0.00	0.00	0.00	0.02	0.01	174	40	0
2	-Y2- 13+75 - 13+40	10' X 6' RCBC	0.00	0.00	0.00	0.00	0.01	0.01	0.01	34	103	0
3	-L- 43+57 - 44+32	10' X 6' RCBC	0.00	0.00	0.00	0.00	0.02	0.01	0.01	118	65	0
TOTALS:			0.05				0.05	0.03	0.03	340	208	

**SITE 4: -Y1- STA 13+47 - 46 LF 30" RCP REMOVAL
SEE MITIGATION PLAN**

**Permit Drawing
Sheet 3 of 15**

NC DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
STANLY COUNTY
WBS - 34935.1.1 (U-3300B)

SHEET

10/10/2008

See Sheet 1-A For Index of Sheets

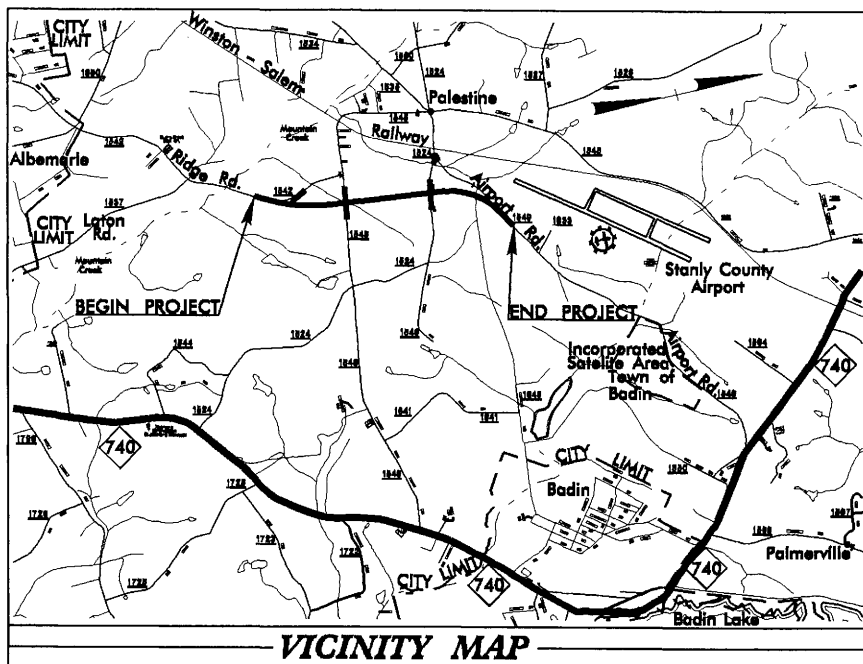
STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

STANLY COUNTY

LOCATION: ALBEMARLE - SR 1542 (RIDGE STREET EXTENSION)
FROM EXISTING RIDGE STREET TO AIRPORT ROAD
TYPE OF WORK: GRADING, DRAINAGE, AND PAVING

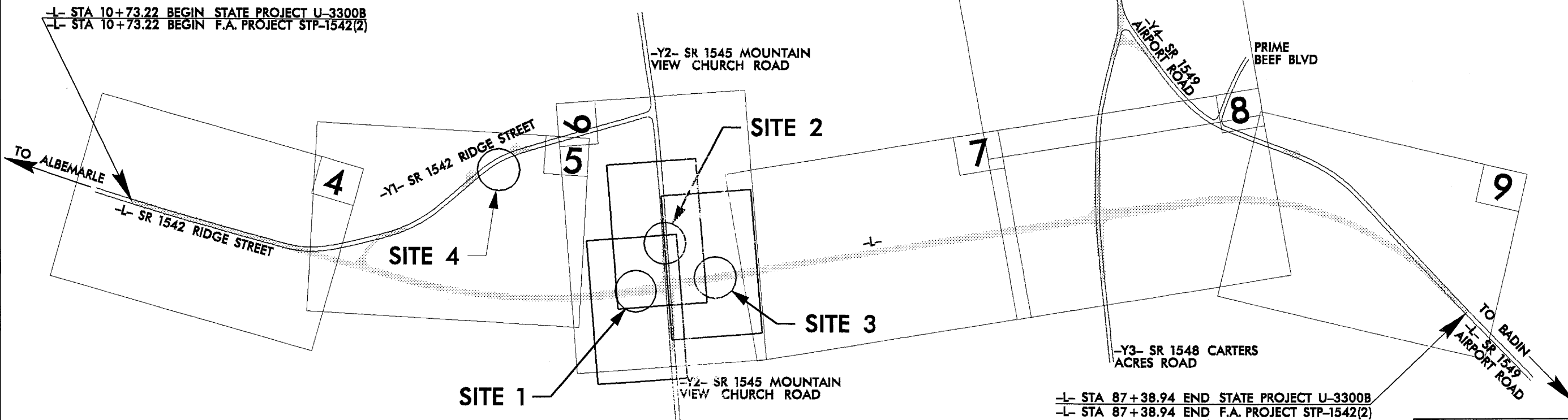
WETLAND AND SURFACE WATER PERMIT

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	U-3300B	1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
34908.1.1	STP-1542(2)	P.E.	



TIP PROJECT: U-3300B

-L- STA 10+73.22 BEGIN STATE PROJECT U-3300B
-L- STA 10+73.22 BEGIN F.A. PROJECT STP-1542(2)

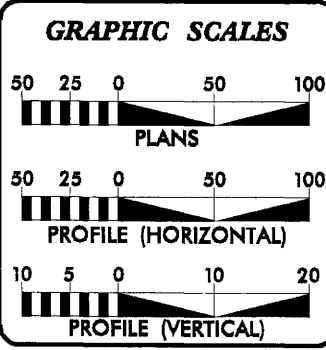


NOTE: THIS PROJECT IS NOT WITHIN ANY MUNICIPAL BOUNDARIES
CLEARING ON THIS PROJECT SHALL BE PERFORMED TO THE LIMITS ESTABLISHED BY METHOD ()

-L- STA 87+38.94 END STATE PROJECT U-3300B
-L- STA 87+38.94 END F.A. PROJECT STP-1542(2)
Permit Drawing
Sheet 4 of 15

INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION
PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

CONTRACT:



DESIGN DATA

ADT 2008 =	4640
ADT 2028 =	10240
DHV =	55 %
D =	12 %
T =	11 % *
V =	60 MPH
* TTST 5%	DUAL 6%

PROJECT LENGTH

LENGTH ROADWAY TIP PROJECT U-3300B =	1.452 mi.
TOTAL LENGTH TIP PROJECT U-3300B =	1.452 mi.

Prepared in the Office of:

DIVISION OF HIGHWAYS
1000 Birch Ridge Dr., Raleigh, NC, 27610

2006 STANDARD SPECIFICATIONS

RIGHT OF WAY DATE: FEBRUARY 16, 2007	JIMMY GOODNIGHT PROJECT ENGINEER
LETTING DATE: FEBRUARY 17, 2009	MARK HUSSEY PROJECT DESIGN ENGINEER

HYDRAULICS ENGINEER

Permit Drawing
Sheet _____ of _____

SIGNATURE: _____ P.E.

ROADWAY DESIGN ENGINEER

SIGNATURE: _____ P.E.

DIVISION OF HIGHWAYS
STATE OF NORTH CAROLINA

STATE HIGHWAY DESIGN ENGINEER

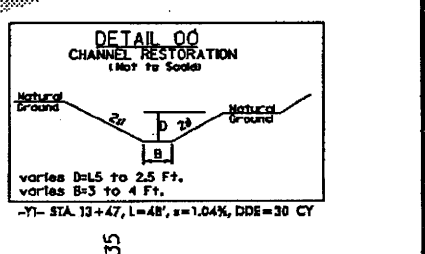
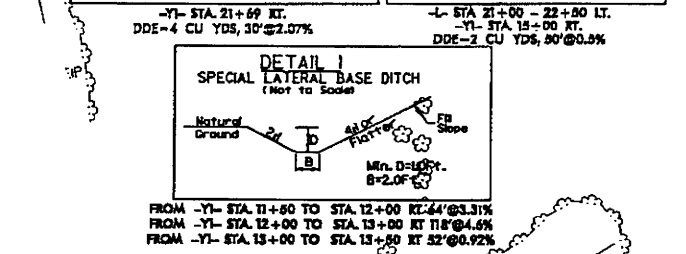
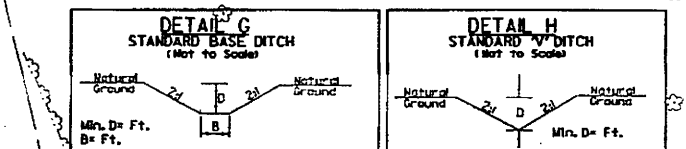
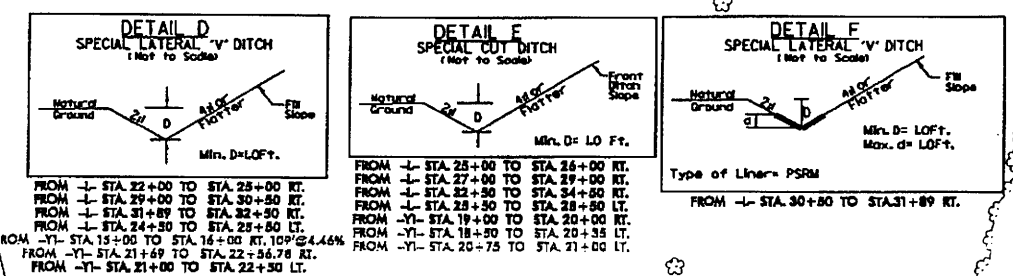
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8/17/05

U-3300B 5

R/W SHEET NO. ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION

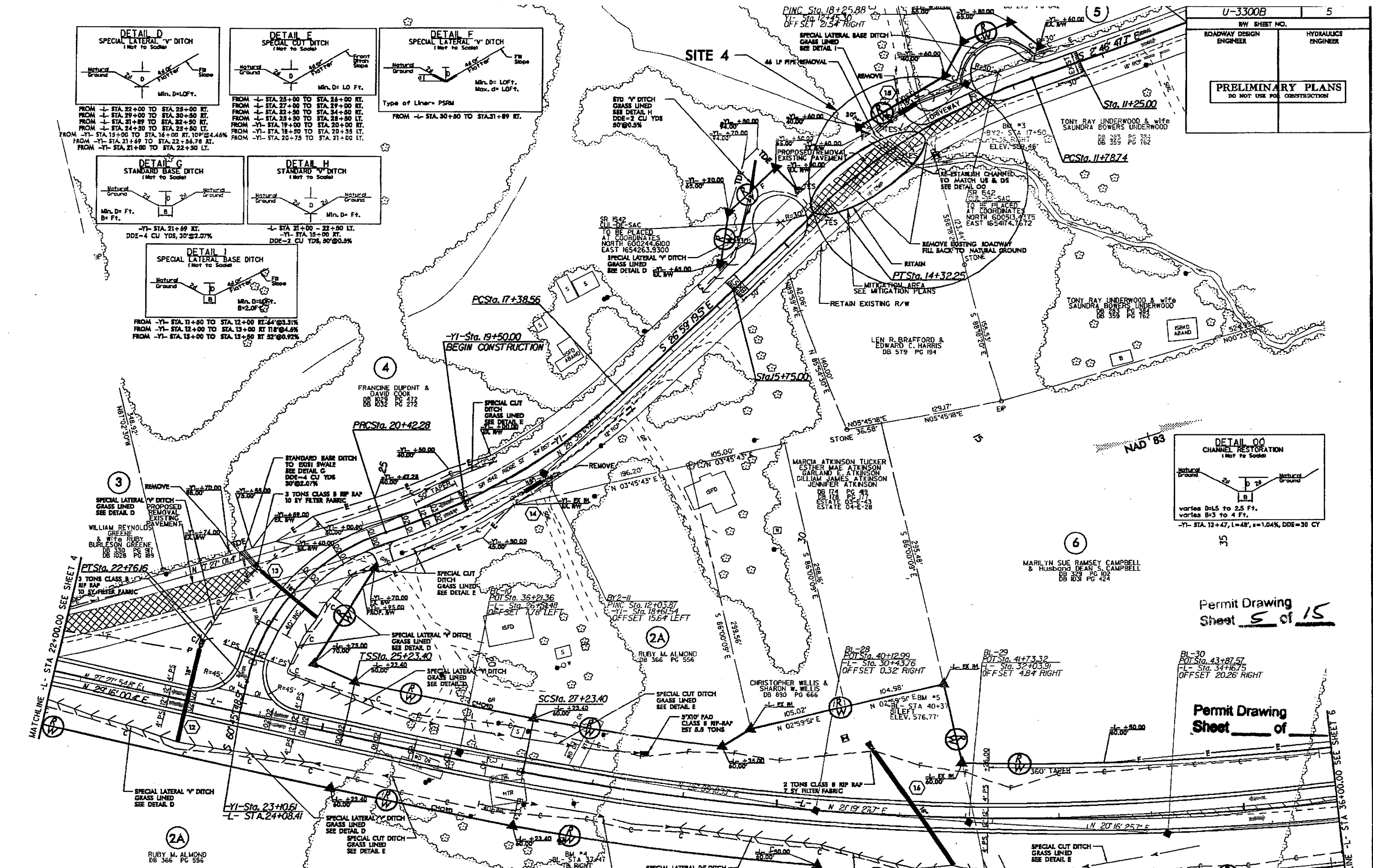


REVISIONS

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-YI-			-L-		
PI Sta 13+07.42	PI Sta 18+93.04	PI Sta 21+110.2	PIs Sta 26+56.74	PI Sta 32+91.79	PIs Sta 39+135.4
Δ = 24' 12" 31.8' (LT)	Δ = 25' 46" 49.8' (RT)	Δ = 59' 33" 19.2' (LT)	Δs = 1' 54" 35.5"	Δ = 2' 27" 23.7' (LT)	Δs = 1' 54" 35.5"
D = 9' 32" 57.5"	D = 8' 29" 17.7"	D = 25' 27" 53.2"	Ls = 200.0'	D = 1' 54" 35.5"	Ls = 200.0'
L = 253.5'	L = 303.72'	L = 233.87'	LT = 133.34'	L = 1123.46'	LT = 133.34'
T = 128.68'	T = 154.47'	T = 128.74'	ST = 66.67'	T = 568.39'	ST = 66.67'
R = 600.00'	R = 675.00'	R = 225.00'		R = 3,000.00'	

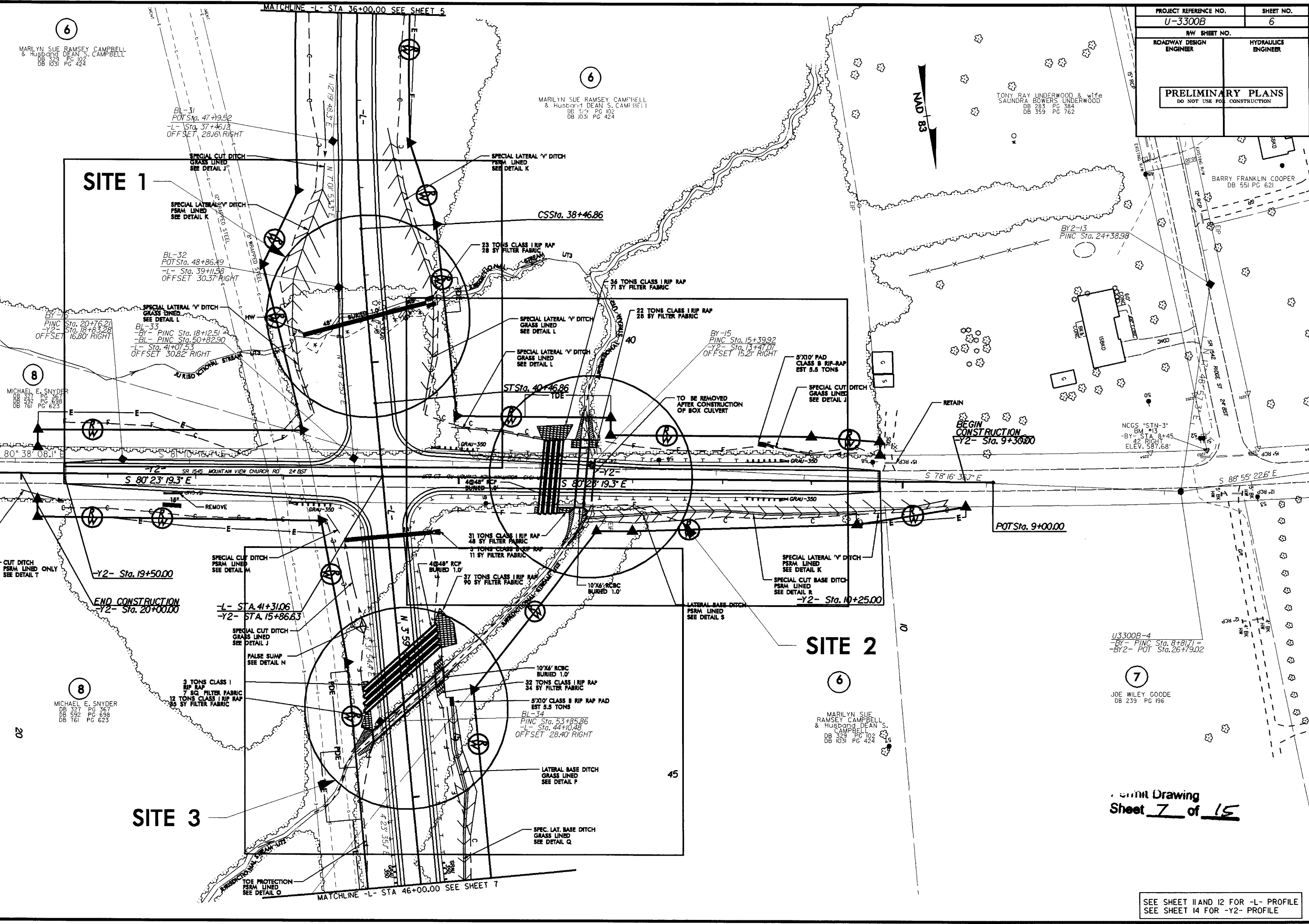


Permit Drawing Sheet 5 of 15

Permit Drawing Sheet of

SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -YI- PROFILE

PROJECT REFERENCE NO. U-3300B	SHEET NO. 6
ROADWAY DESIGN ENGINEER RW SHEET NO.	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	



Permit Drawing
Sheet 7 of 15

SEE SHEET 11 AND 12 FOR -L- PROFILE
SEE SHEET 14 FOR -Y2- PROFILE

REVISIONS

10-0CT-2008 10:05
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11/23/2008 11:44

20

B/17/99

MARILYN SUE RAMSEY CAMPBELL
& Husband DEAN S. CAMPBELL
DB 329 PG 102
DB 1031 PG 424

MARILYN SUE RAMSEY CAMPBELL
& Husband DEAN S. CAMPBELL
DB 329 PG 102
DB 1031 PG 424

TONY RAY UNDERWOOD & wife
SAUNDRA BOWERS UNDERWOOD
DB 283 PG 384
DB 359 PG 762

BARRY FRANKLIN COOPER
DB 551 PG 621

NCCS "STN-3"
BM "13"
-BY- STA. 8+45
ELEV. 367.68'

MICHAEL E. SNYDER
DB 327 PG 367
DB 592 PG 638
DB 761 PG 623

JOE WILEY GOODE
DB 239 PG 196

MARILYN SUE
RAMSEY CAMPBELL
& Husband DEAN S.
CAMPBELL
DB 329 PG 102
DB 1031 PG 424

SITE 3

SITE 2

SITE 1

6

6

6

7

BL-31
POT Sta. 47+99.52
-L- Sta. 37+46.13
OFFSET 28.16' RIGHT

SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL J

SPECIAL LATERAL 'V' DITCH
PSRM LINED
SEE DETAIL K

BL-32
POT Sta. 48+86.49
-L- Sta. 39+11.59
OFFSET 30.37' RIGHT

BL-33
-BY- PINC Sta. 18+12.51
-BL- PINC Sta. 50+82.90
-L- Sta. 41+07.53
OFFSET 30.82' RIGHT

SPECIAL LATERAL 'V' DITCH
PSRM LINED
SEE DETAIL K

23 TONS CLASS I RIP RAP
28 SY FILTER FABRIC

36 TONS CLASS I RIP RAP
71 SY FILTER FABRIC

SPECIAL LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL L

SPECIAL LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL L

SPECIAL LATERAL 'V' DITCH
GRASS LINED
SEE DETAIL L

31 TONS CLASS I RIP RAP
48 SY FILTER FABRIC

3 TONS CLASS B RIP RAP
11 SY FILTER FABRIC

37 TONS CLASS I RIP RAP
90 SY FILTER FABRIC

10'x6' RCBC
BURIED 1.0'

10'x6' RCBC
BURIED 1.0'

32 TONS CLASS I RIP RAP
34 SY FILTER FABRIC

5'x10' CLASS B RIP RAP PAD
EST 5.5 TONS

BL-34
PINC Sta. 53+85.86
-L- Sta. 44+10.48
OFFSET 28.40' RIGHT

LATERAL BASE DITCH
GRASS LINED
SEE DETAIL P

SPEC. LAT. BASE DITCH
GRASS LINED
SEE DETAIL Q

22 TONS CLASS I RIP RAP
28 SY FILTER FABRIC

BY-15
PINC Sta. 15+39.92
-Y2- Sta. 13+47.07
OFFSET 15.21' RIGHT

8'x10' PAD
CLASS B RIP-RAP
EST 5.5 TONS

TO BE REMOVED
AFTER CONSTRUCTION
OF BOX CULVERT

SPECIAL CUT DITCH
GRASS LINED
SEE DETAIL J

SPECIAL LATERAL 'V' DITCH
PSRM LINED
SEE DETAIL K

SPECIAL CUT BASE DITCH
PSRM LINED
SEE DETAIL R

LATERAL BASE DITCH
PSRM LINED
SEE DETAIL S

40'x48' RCP
BURIED 1.0'

40'x48' RCP
BURIED 1.0'

10'x6' RCBC
BURIED 1.0'

10'x6' RCBC
BURIED 1.0'

10'x6' RCBC
BURIED 1.0'

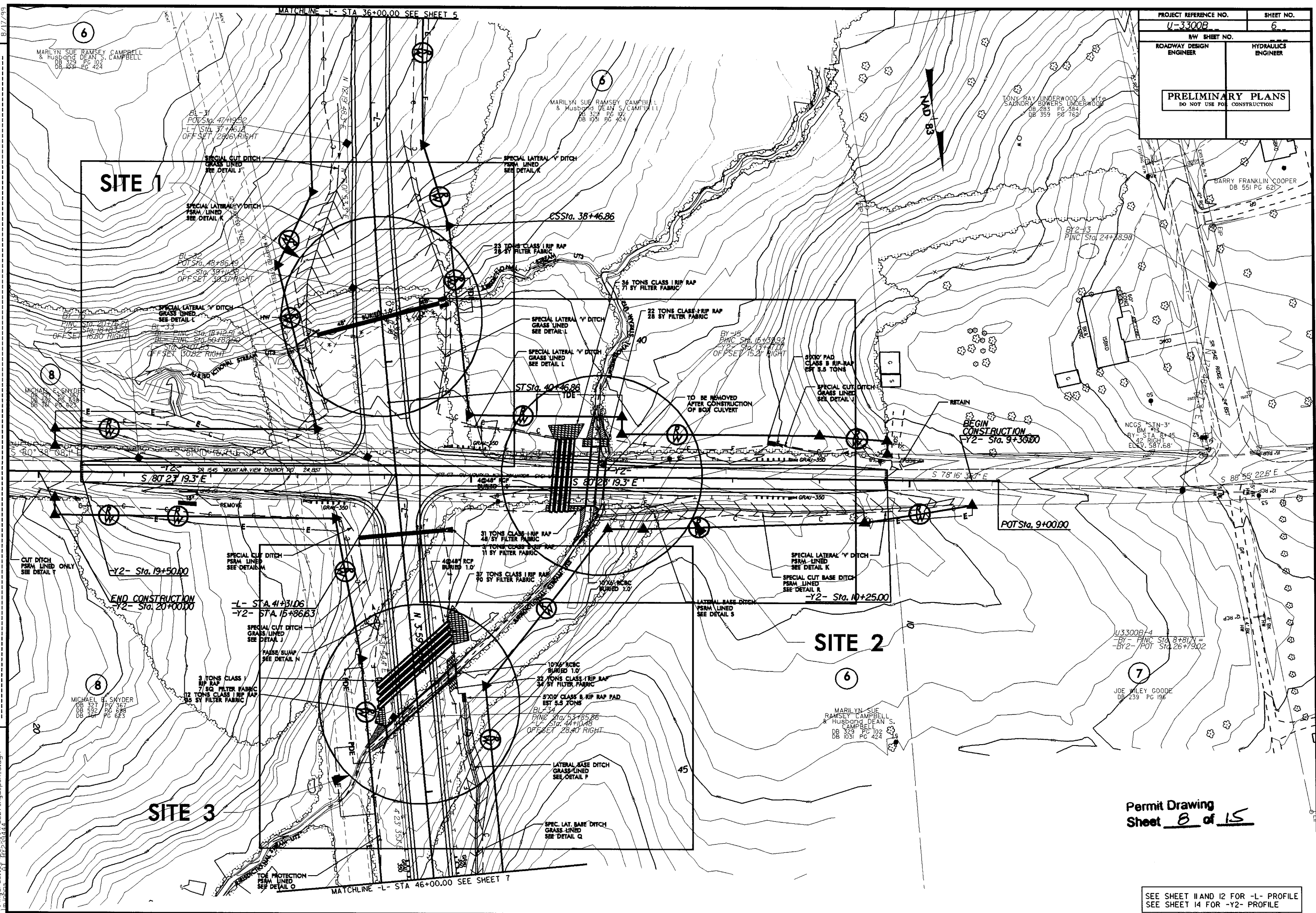
10'x6' RCBC
BURIED 1.0'

PROJECT REFERENCE NO.	SHEET NO.
U-3300B	6
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS	
DO NOT USE FOR CONSTRUCTION	

8/17/99

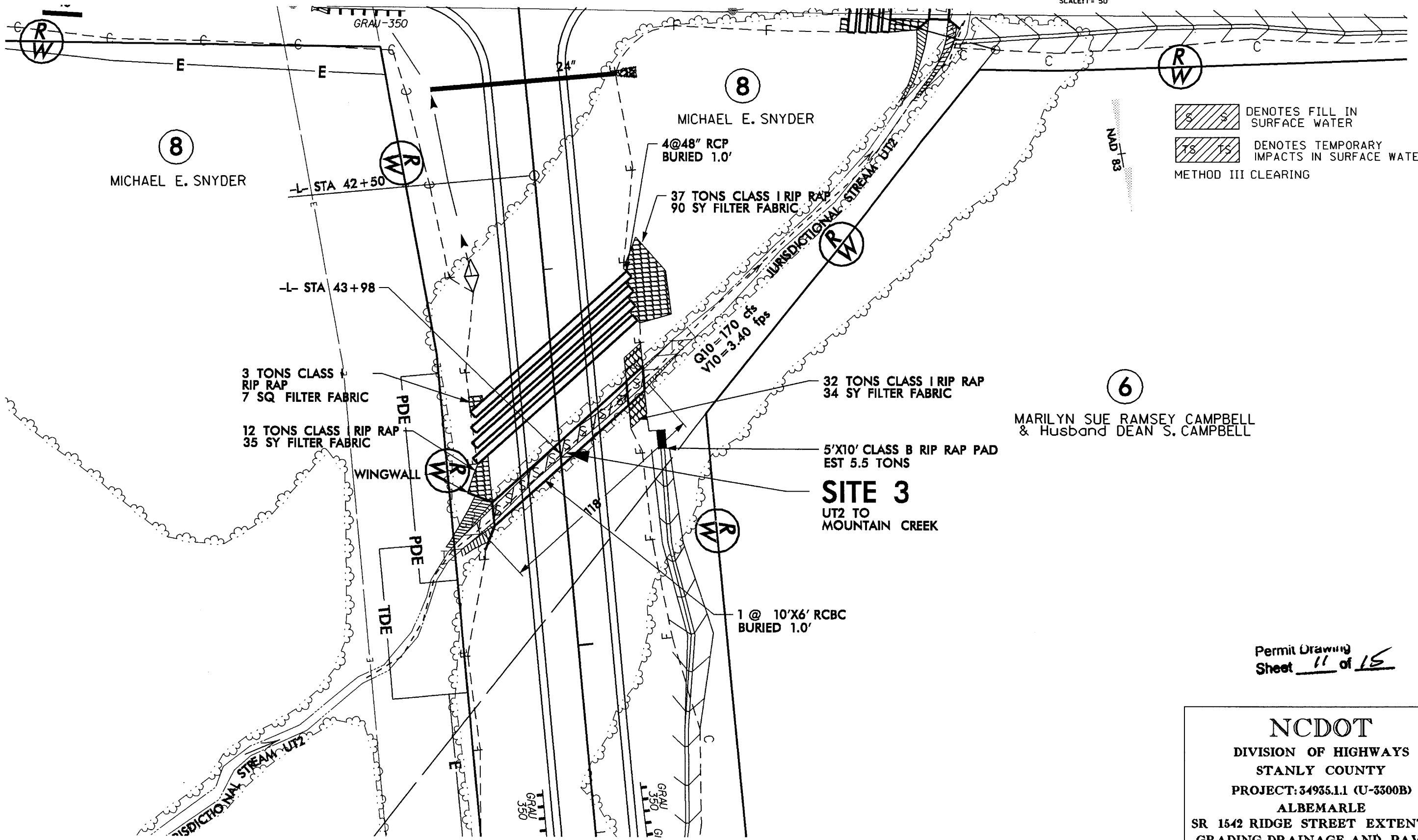
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REVISIONS



Permit Drawing
 Sheet 8 of 15

SEE SHEET 11 AND 12 FOR -L- PROFILE
 SEE SHEET 14 FOR -Y2- PROFILE



DENOTES FILL IN SURFACE WATER
 DENOTES TEMPORARY IMPACTS IN SURFACE WATER
 METHOD III CLEARING

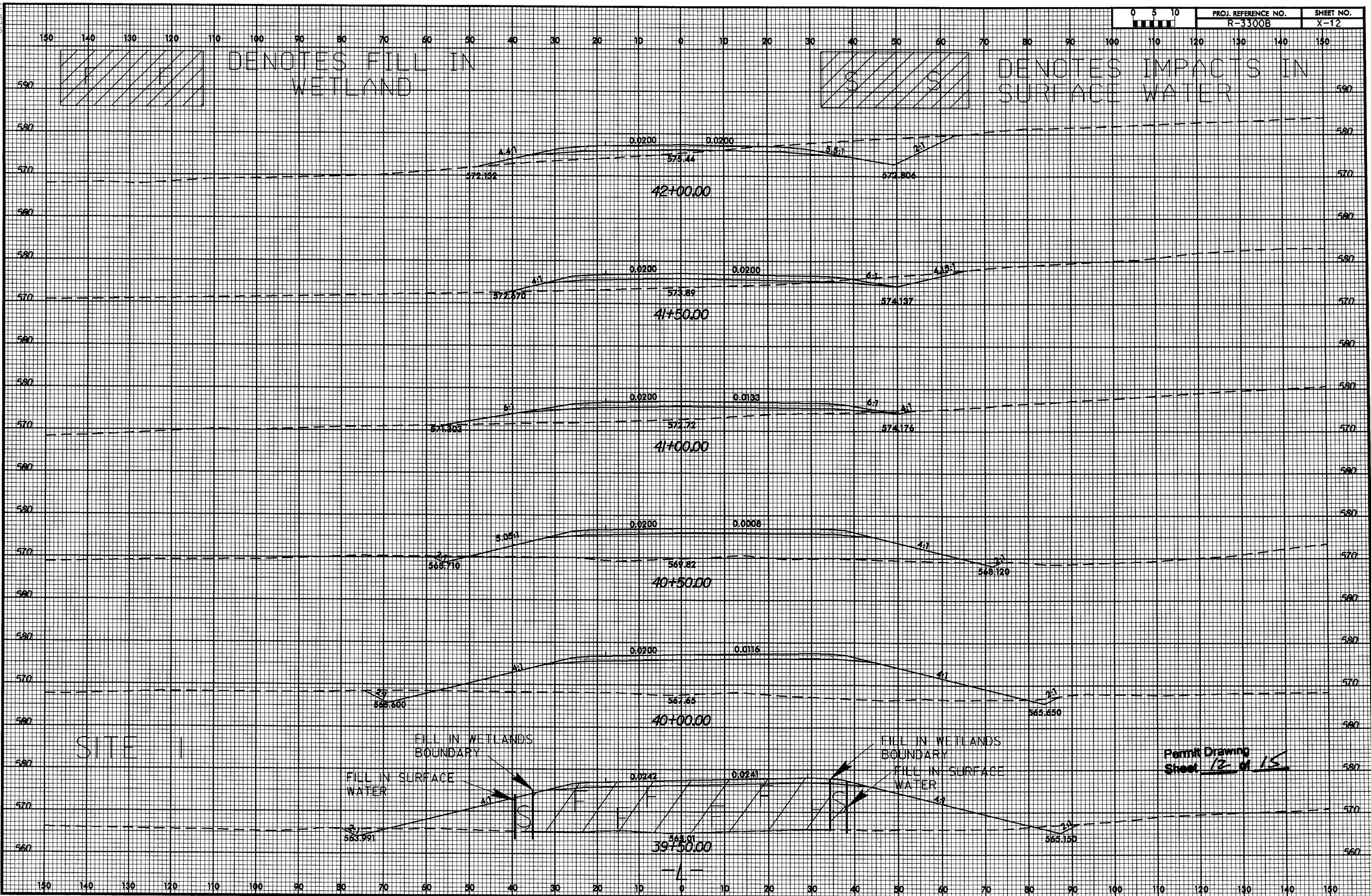
6
 MARILYN SUE RAMSEY CAMPBELL
 & Husband DEAN S. CAMPBELL

SITE 3
 UT2 TO
 MOUNTAIN CREEK

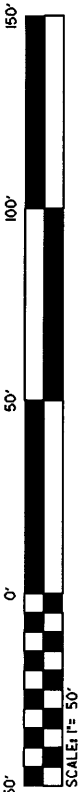
Permit Drawing
 Sheet 11 of 15

NCDOT
 DIVISION OF HIGHWAYS
 STANLY COUNTY
 PROJECT: 34935.1.1 (U-3300B)
 ALBEMARLE
 SR 1542 RIDGE STREET EXTENTION
 GRADING, DRAINAGE, AND PAVING
 SITE 3

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lmjohns At



Permit Drawing
Sheet 12 of 15

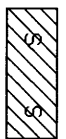

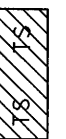


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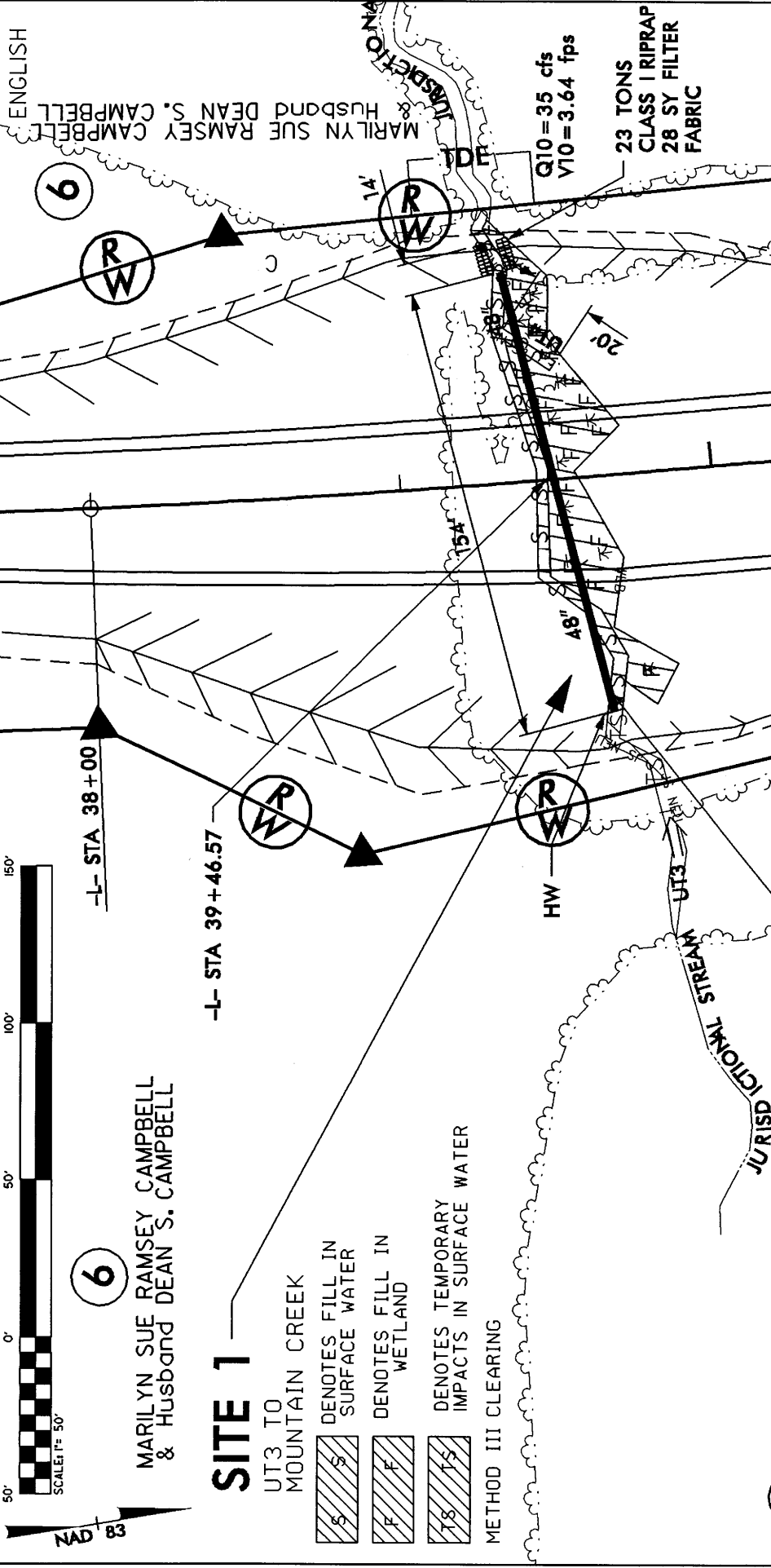
MARILYN SUE RAMSEY CAMPBELL
& Husband DEAN S. CAMPBELL

SITE 1

UT3 TO MOUNTAIN CREEK

-  DENOTES FILL IN SURFACE WATER
-  DENOTES FILL IN WETLAND
-  DENOTES TEMPORARY IMPACTS IN SURFACE WATER

METHOD III CLEARING



NCDOT

DIVISION OF HIGHWAYS
STANLY COUNTY
ALBEMARLE

PROJECT: 54955.1.1 (U-3500B)

SR 1542 RIDGE STREET EXTENTION
GRADING, DRAINAGE, AND PAVING

Permit Drawing
Sheet ~~1~~ of 15

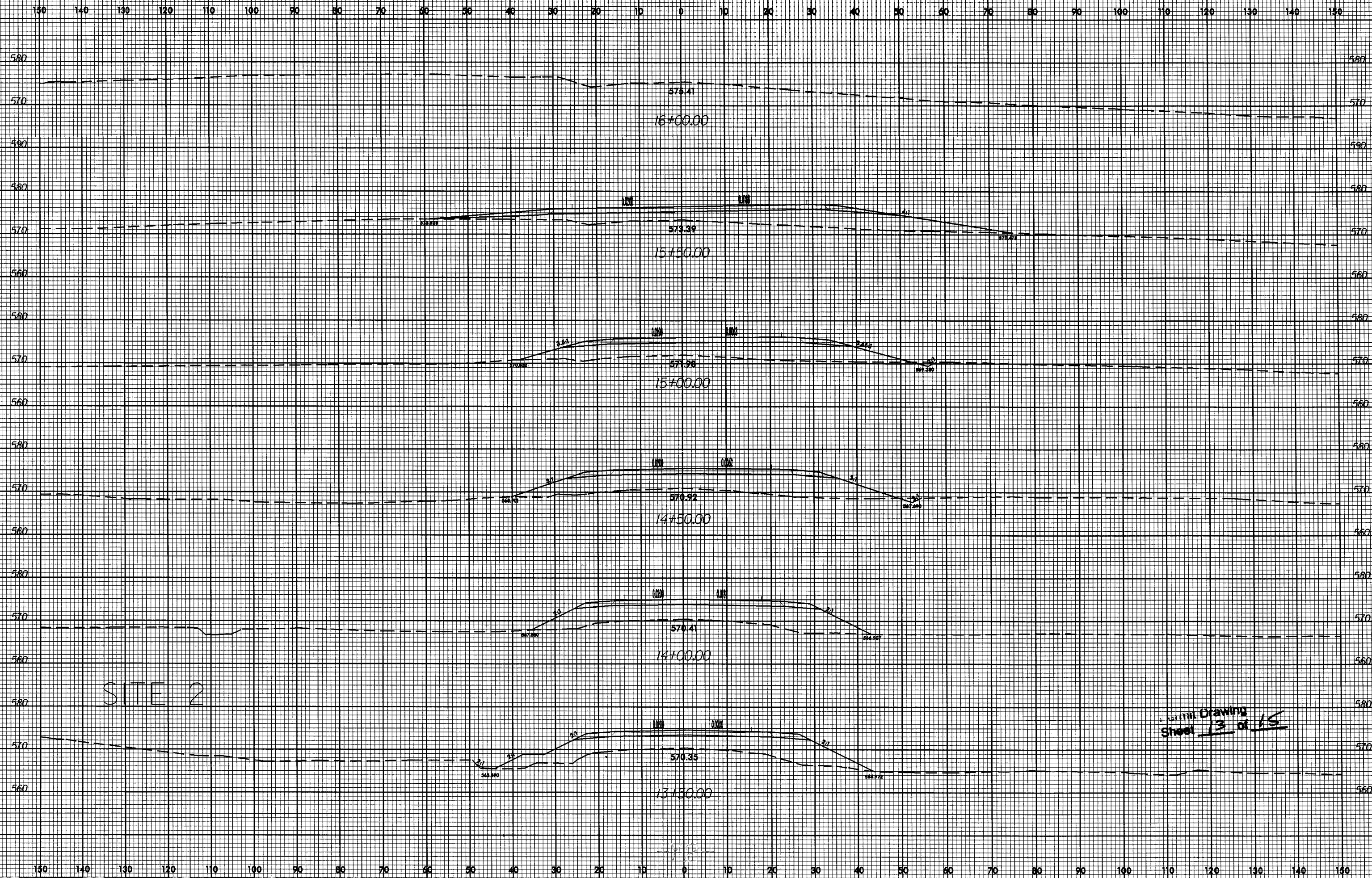
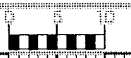
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MICHAEL E. SNYDER

SHEET 10/10/08

SR 1545 MOUNTAIN VIEW CHURCH RD 24' BST

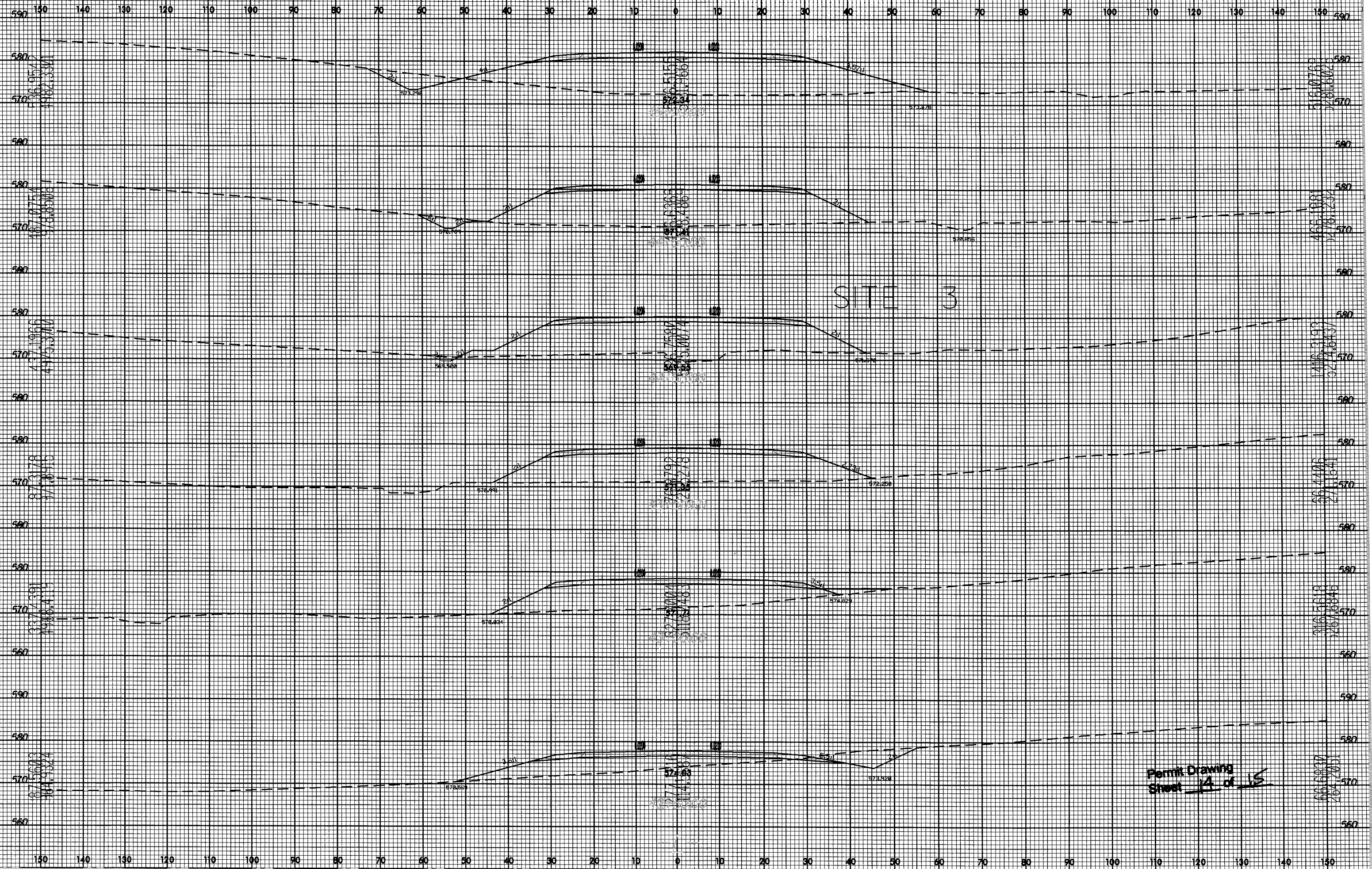
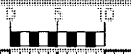
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SITE 2

Final Drawing Sheet 13 of 15

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SITE 3

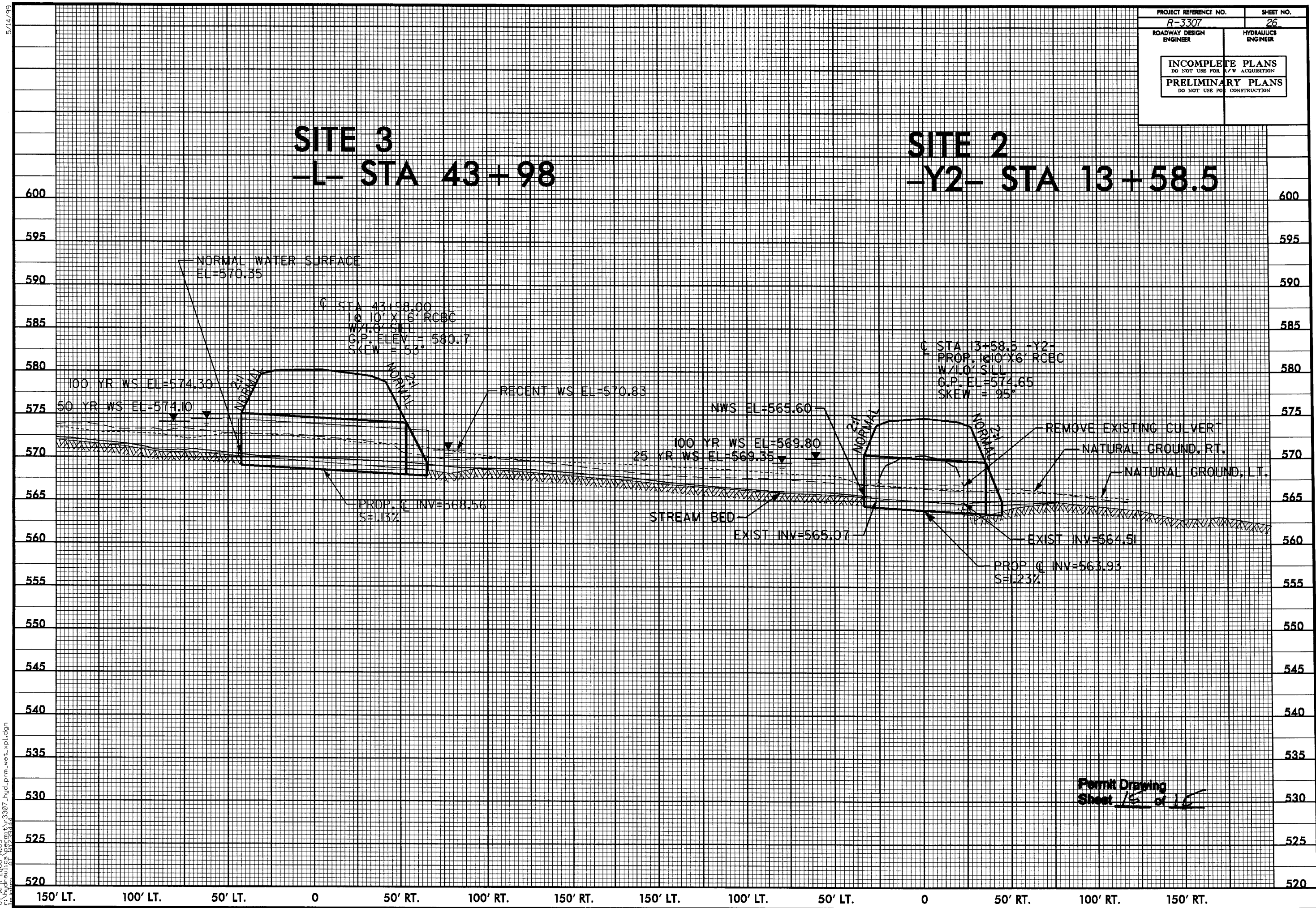
Permit Drawing
Sheet 14 of 15

SITE 3

-L- STA 43+98

SITE 2

-Y2- STA 13+58.5



Permit Drawing
Sheet 15 of 16

5/14/99

07-APR-2008 14:05
C:\hydro\util\p\p\3307_hyd.prm_wet_xpl.dgn

Note: Not to Scale

*S.U.E. = Subsurface Utility Engineering

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

CONVENTIONAL PLAN SHEET SYMBOLS

BOUNDARIES AND PROPERTY:

State Line	-----
County Line	-----
Township Line	-----
City Line	-----
Reservation Line	-----
Property Line	-----
Existing Iron Pin	○
Property Corner	⊗
Property Monument	□
Parcel/Sequence Number	②③
Existing Fence Line	-----
Proposed Woven Wire Fence	-----
Proposed Chain Link Fence	-----
Proposed Barbed Wire Fence	-----
Existing Wetland Boundary	-----
Proposed Wetland Boundary	-----
Existing Endangered Animal Boundary	-----
Existing Endangered Plant Boundary	-----

BUILDINGS AND OTHER CULTURE:

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

HYDROLOGY:

Stream or Body of Water	-----
Hydro, Pool or Reservoir	-----
Jurisdictional Stream	-----
Buffer Zone 1	-----
Buffer Zone 2	-----
Flow Arrow	-----
Disappearing Stream	-----
Spring	-----
Swamp Marsh	-----
Proposed Lateral, Tail, Head Ditch	-----
False Sump	-----

RAILROADS:

Standard Gauge	-----
RR Signal Milepost	-----
Switch	-----
RR Abandoned	-----
RR Dismantled	-----

RIGHT OF WAY:

Baseline Control Point	◆
Existing Right of Way Marker	△
Existing Right of Way Line	-----
Proposed Right of Way Line	-----
Proposed Right of Way Line with Iron Pin and Cap Marker	-----
Proposed Right of Way Line with Concrete or Granite Marker	-----
Existing Control of Access	-----
Proposed Control of Access	-----
Existing Easement Line	-----
Proposed Temporary Construction Easement	-----
Proposed Temporary Drainage Easement	-----
Proposed Permanent Drainage Easement	-----
Proposed Permanent Utility Easement	-----

ROADS AND RELATED FEATURES:

Existing Edge of Pavement	-----
Existing Curb	-----
Proposed Slope Stakes Cut	-----
Proposed Slope Stakes Fill	-----
Proposed Wheel Chair Ramp	-----
Curb Cut for Future Wheel Chair Ramp	-----
Existing Metal Guardrail	-----
Proposed Guardrail	-----
Existing Cable Guiderail	-----
Proposed Cable Guiderail	-----
Equality Symbol	-----
Pavement Removal	-----

VEGETATION:

Single Tree	-----
Single Shrub	-----
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	-----
Recorded U/G Power Line	-----
Designated U/G Power Line (S.U.E.*)	-----

TELEPHONE:

Existing Telephone Pole	-----
Proposed Telephone Pole	-----
Telephone Manhole	-----
Telephone Booth	-----
Telephone Pedestal	-----
Telephone Cell Tower	-----
U/G Telephone Cable Hand Hole	-----
Recorded U/G Telephone Cable	-----
Designated U/G Telephone Cable (S.U.E.*)	-----
Recorded U/G Telephone Conduit	-----
Designated U/G Telephone Conduit (S.U.E.*)	-----
Recorded U/G Fiber Optics Cable	-----
Designated U/G Fiber Optics Cable (S.U.E.*)	-----

WATER:

Water Manhole	-----
Water Meter	-----
Water Valve	-----
Water Hydrant	-----
Recorded U/G Water Line	-----
Designated U/G Water Line (S.U.E.*)	-----
Above Ground Water Line	-----

TV:

TV Satellite Dish	-----
TV Pedestal	-----
TV Tower	-----
U/G TV Cable Hand Hole	-----
Recorded U/G TV Cable	-----
Designated U/G TV Cable (S.U.E.*)	-----
Recorded U/G Fiber Optic Cable	-----
Designated U/G Fiber Optic Cable (S.U.E.*)	-----

GAS:

Gas Valve	-----
Gas Meter	-----
Recorded U/G Gas Line	-----
Designated U/G Gas Line (S.U.E.*)	-----
Above Ground Gas Line	-----

SANITARY SEWER:

Sanitary Sewer Manhole	-----
Sanitary Sewer Cleanout	-----
U/G Sanitary Sewer Line	-----
Above Ground Sanitary Sewer	-----
Recorded SS Forced Main Line	-----
Designated SS Forced Main Line (S.U.E.*)	-----

MISCELLANEOUS:

Utility Pole	-----
Utility Pole with Base	-----
Utility Located Object	-----
Utility Traffic Signal Box	-----
Utility Unknown U/G Line	-----
U/G Tank; Water, Gas, Oil	-----
A/G Tank; Water, Gas, Oil	-----
U/G Test Hole (S.U.E.*)	-----
Abandoned According to Utility Records	-----
End of Information	-----

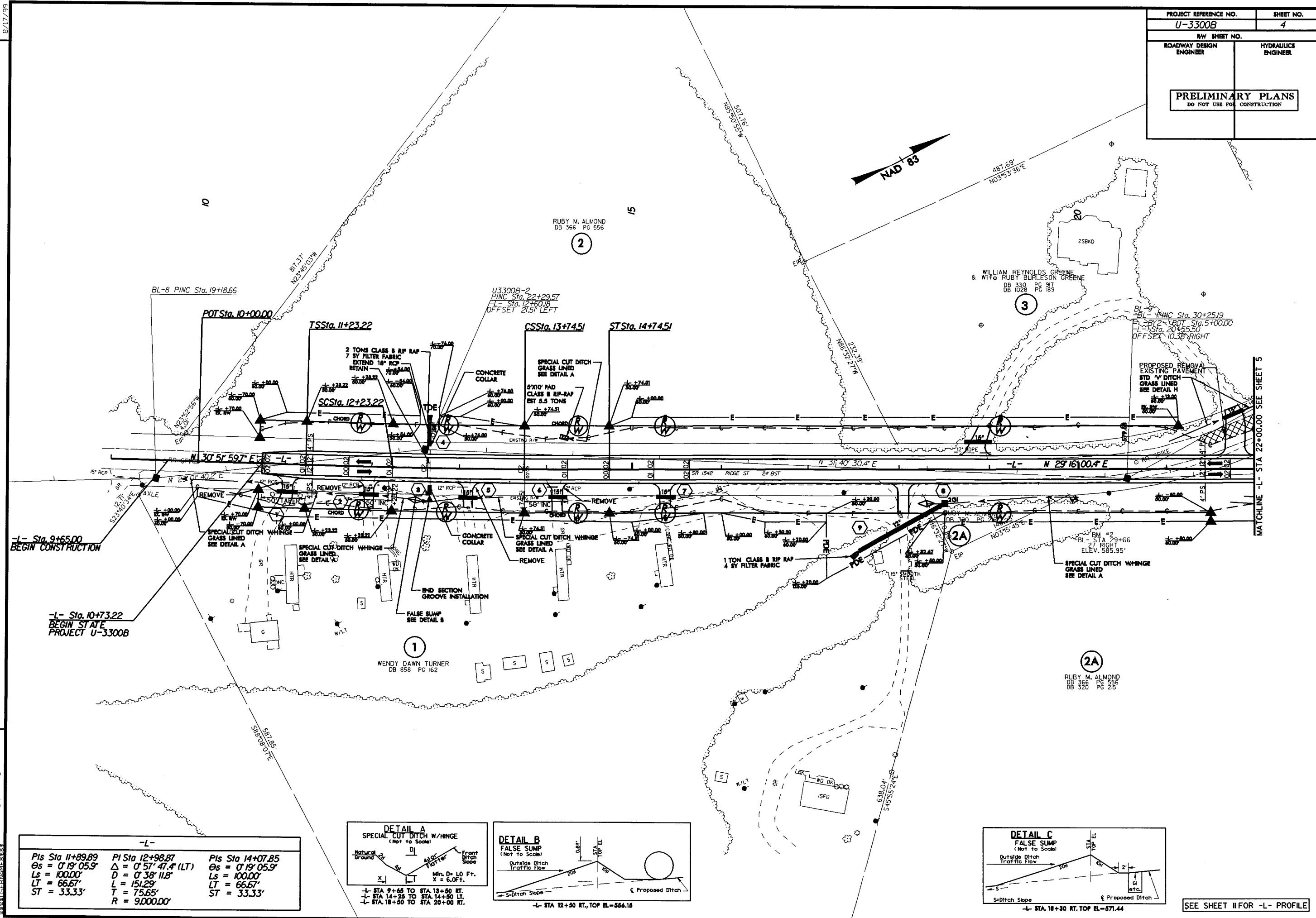
10/25/05

8/17/99

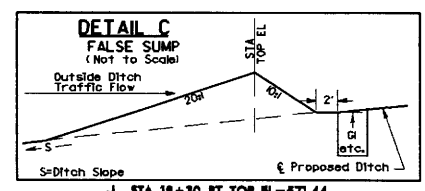
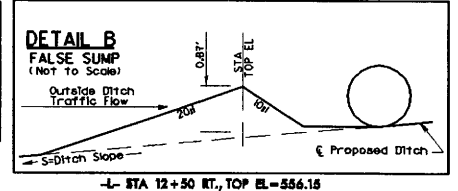
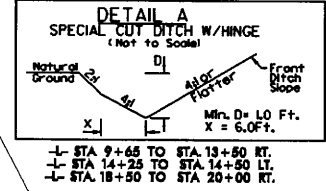
PROJECT REFERENCE NO. U-3300B	SHEET NO. 4
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

ROW REV 11-8-2007 G/L----- CHANGED PARCEL 3 TO 2A AND PARCEL 2 TO 2A AND ADDED DEED BOOK ON THE RIGHT SIDE OF -L- BOTH RUBY M. ALMOND

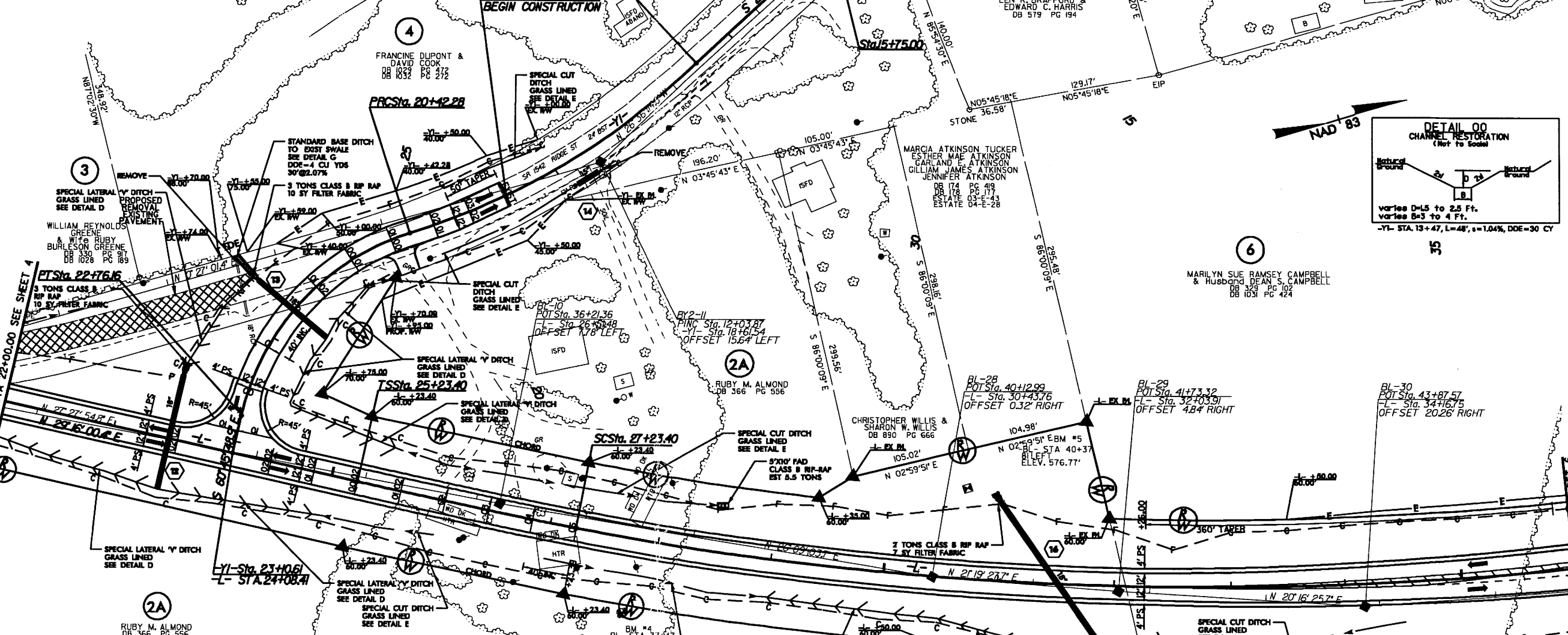
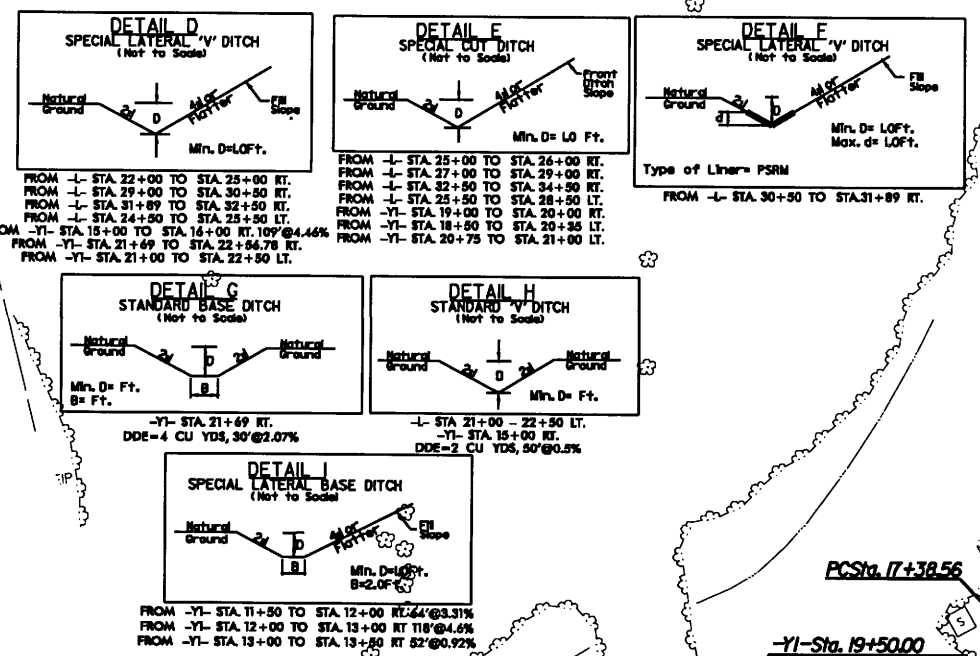
25-MAR-2008 12:04 - 3300b_r.dwg_psh4.dgn



-L-		
Pis Sta 11+89.89	Pi Sta 12+98.87	Pis Sta 14+07.85
Es = 0'19'05.9"	Δ = 0'57'47.4" (LT)	Es = 0'19'05.9"
Ls = 100.00'	D = 0'38'11.8"	Ls = 100.00'
LT = 66.67'	L = 151.29'	LT = 66.67'
ST = 33.33'	T = 75.65'	ST = 33.33'
	R = 9,000.00'	

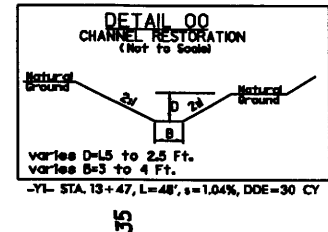


SEE SHEET 11 FOR -L- PROFILE



-YI-	-L-	-L-
PI Sta 13+07.42	PI Sta 26+56.74	PI Sta 39+13.54
Δ = 24' 12" 31.8' (LT)	Δ = 1' 54" 35.5'	Δ = 1' 54" 35.5'
D = 9' 32" 57.5'	D = 200.00'	D = 200.00'
L = 253.51'	L = 133.34'	L = 133.34'
T = 128.68'	T = 66.67'	T = 66.67'
R = 600.00'	R = 675.00'	R = 225.00'

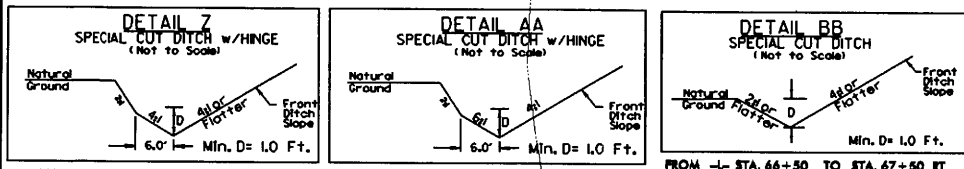
-YI-	-L-	-L-
PI Sta 18+93.04	PI Sta 32+91.79	PI Sta 39+13.54
Δ = 25' 46" 49.8' (RT)	Δ = 2' 27" 23.7' (LT)	Δ = 1' 54" 35.5'
D = 8' 29" 17.7'	D = 1' 54" 35.5'	D = 200.00'
L = 303.72'	L = 1123.46'	L = 200.00'
T = 154.47'	T = 568.39'	T = 133.34'
R = 675.00'	R = 3,000.00'	R = 225.00'



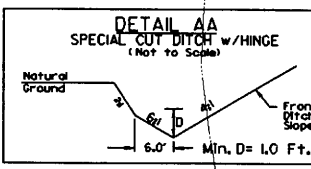
SEE SHEET 11 FOR -L- PROFILE
SEE SHEET 14 FOR -YI- PROFILE

REVISIONS

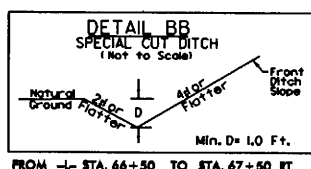
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RUBEN PEREZ



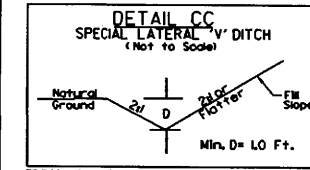
FROM -L- STA. 60+50 TO STA. 63+50 RT
FROM -L- STA. 66+50 TO STA. 68+17.44 LT



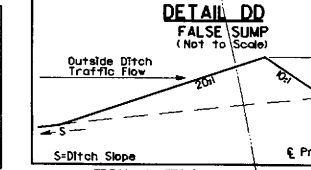
FROM -L- STA. 61+50 TO STA. 63+00 LT



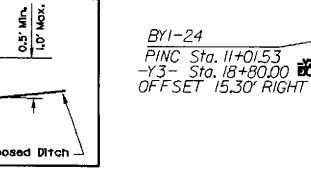
FROM -L- STA. 66+50 TO STA. 67+50 RT
FROM -L- STA. 69+00 TO STA. 70+50 RT
FROM -Y3- STA. 24+50 TO STA. 25+50 LT



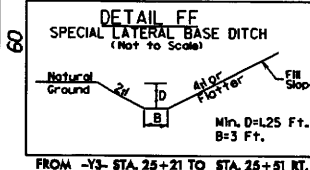
FROM -L- STA. 63+50 TO STA. 64+06.54 RT
FROM -L- STA. 67+50 TO STA. 69+00 RT
FROM -L- STA. 63+00 TO STA. 63+50 LT
FROM -L- STA. 64+00 LT TO -Y3- STA. 19+50 RT
FROM -Y3- STA. 23+50 TO STA. 26+06 LT
FROM -Y3- STA. 23+51 TO STA. 26+00 RT



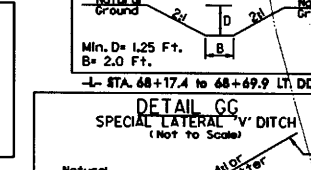
FROM -L- STA. 62+00 RT, TOP EL.=589.38



FROM -L- STA. 68+17.4 TO 68+69.9 LT, DDE=16 CY

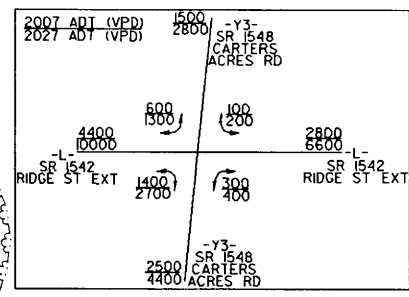


FROM -Y3- STA. 25+21 TO STA. 25+51 RT.



FROM -Y3- STA. 26+06 TO STA. 26+90 LT.

BY1-24
PINC Sta. 11+01.53
-Y3- Sta. 18+80.00
OFFSET 15.30' RIGHT



BY3-21
PINC Sta. 20+02.28
-L- Sta. 18+88.98
OFFSET 28.00' RIGHT

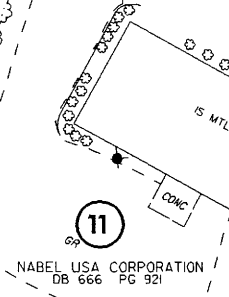
10
GUS SCHAAD
DB 361 PG 888
DB 568 PG 071

BL-42
PINC Sta. 76+79.35
-L- Sta. 67+03.84
OFFSET 11.27' RIGHT

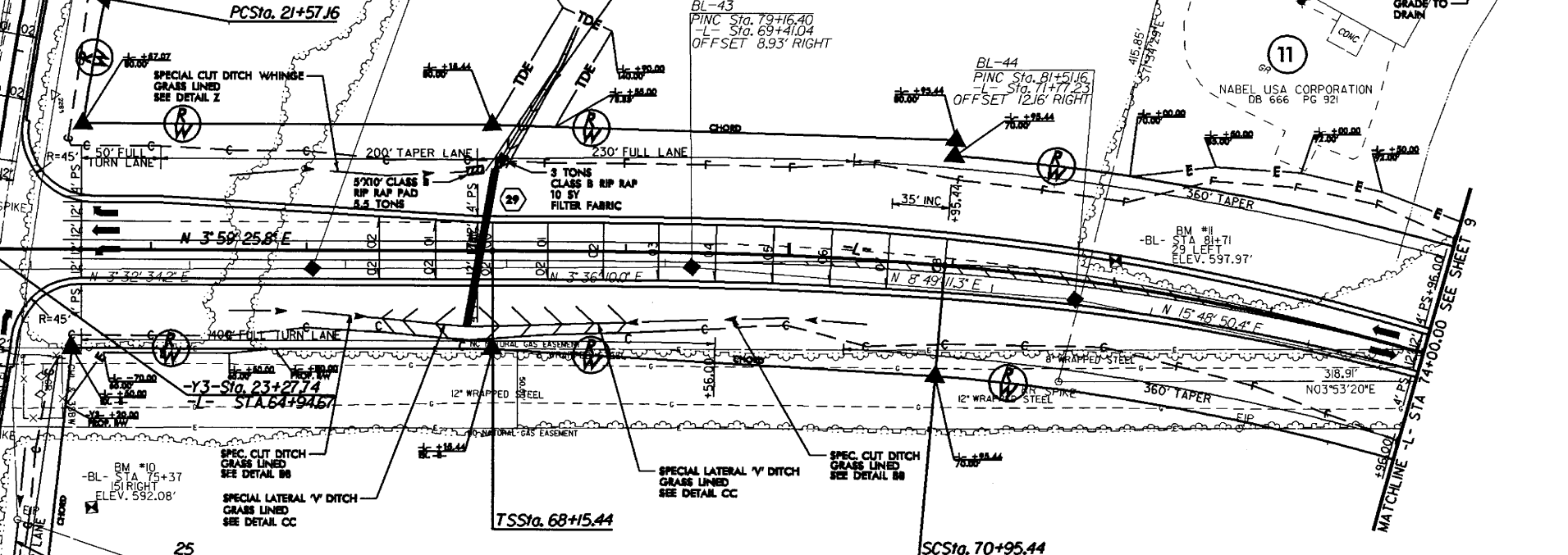
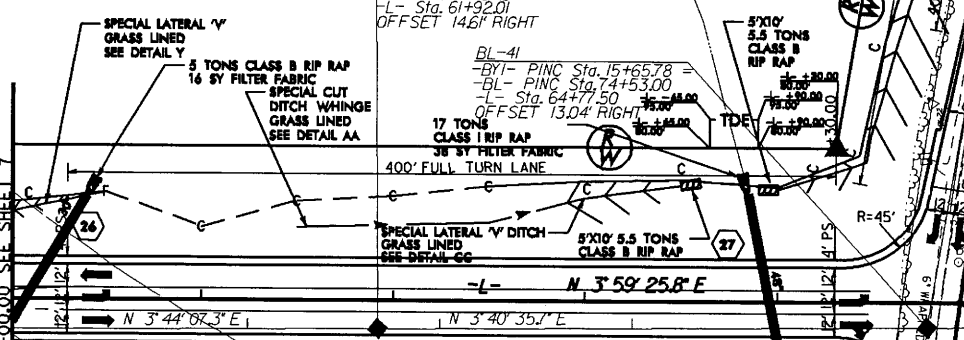
BL-43
PINC Sta. 79+16.40
-L- Sta. 69+41.04
OFFSET 8.93' RIGHT

NAD 83

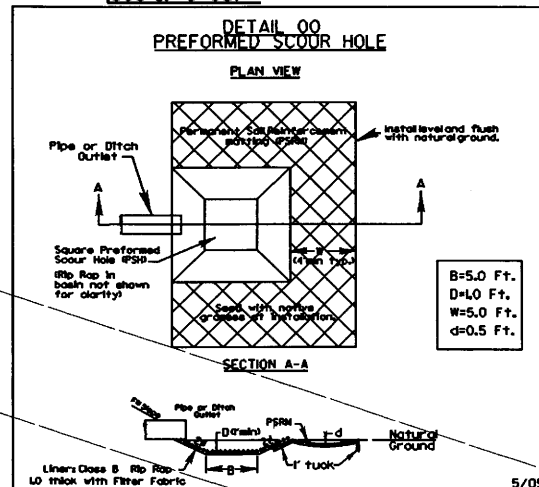
REMOVE & REPLACE W/ 24" RCF



DB 666 PG 921



-L-		
Pis Sta 70+0218	Pi Sta 77+79.88	Pis Sta 84+82.35
Os = 5'00" 48.2"	D = 46'19" 13.7" (RT)	Os = 5'00" 48.2"
Ls = 280.00'	D = 3'34" 51.6"	Ls = 280.00'
LT = 186.74'	L = 1293.51'	LT = 186.74'
ST = 93.40'	R = 1,600.00'	ST = 93.40'
-Y3-		
Pi Sta 12+46.39	Pi Sta 17+71.30	Pi Sta 23+78.93
Δ = 20'50" 34.0" (RT)	Δ = 13'32" 58.7" (LT)	Δ = 6'20" 48.8" (LT)
D = 7'32" 20.7"	D = 3'49" 11.0"	D = 1'25" 56.6"
L = 276.47'	L = 354.73'	L = 443.10'
T = 139.78'	L = 178.20'	T = 221.77'
R = 760.00'	R = 1,500.00'	R = 4,000.00'



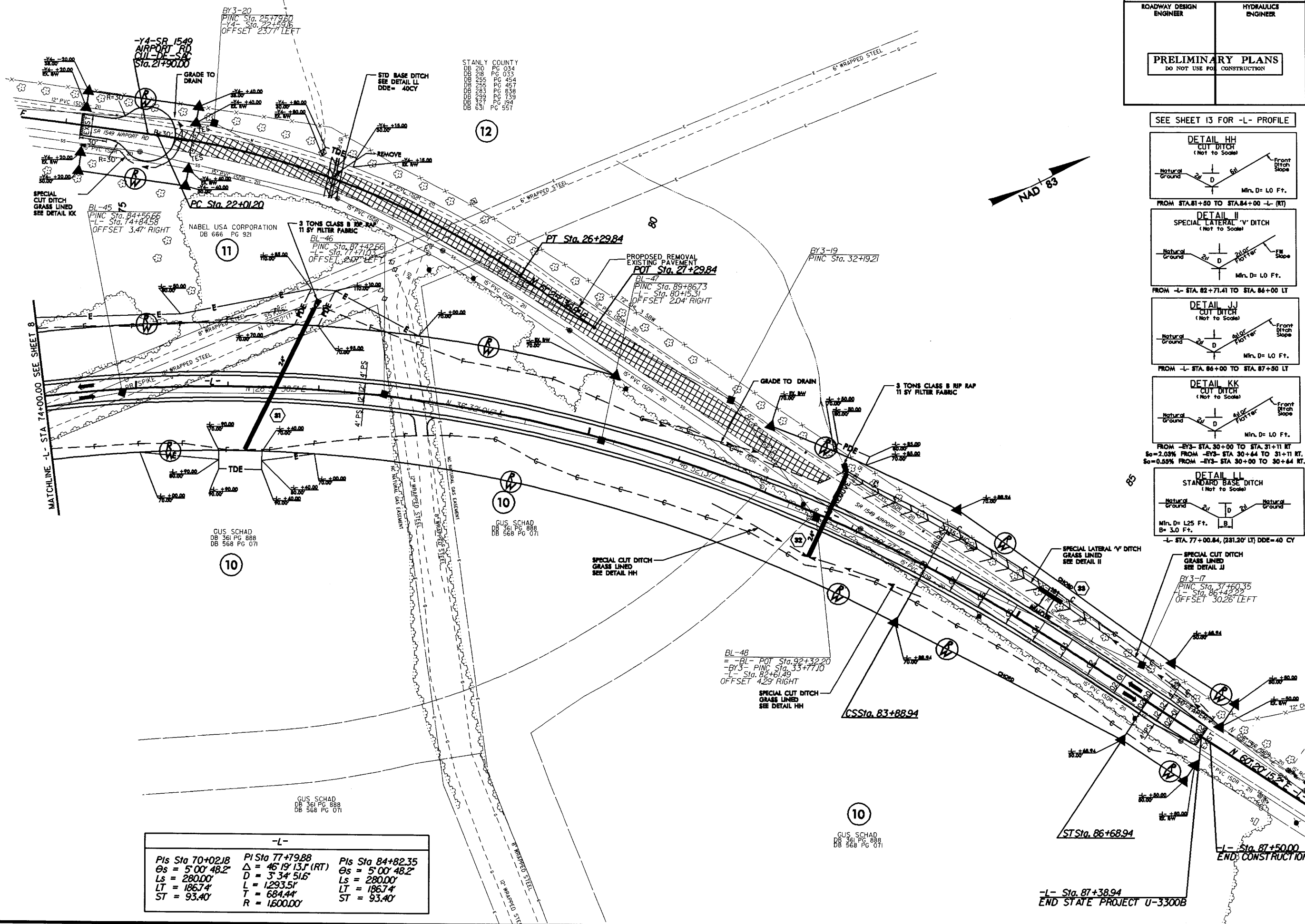
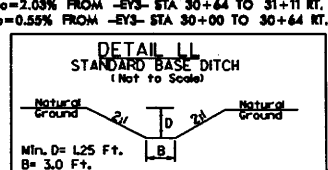
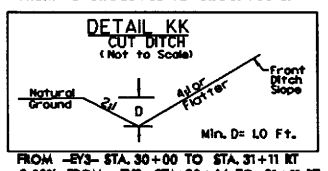
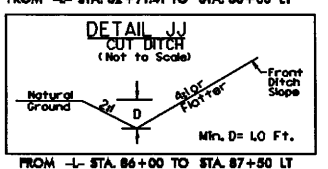
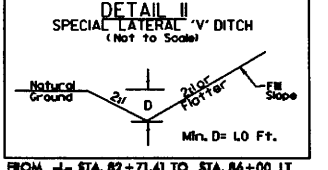
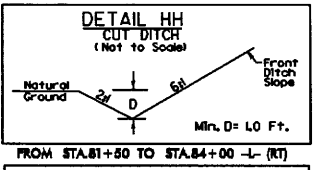
SEE SHEET 12 AND 13 FOR -L- PROFILE
SEE SHEET 15 FOR -Y3- PROFILE

26-MAR-2008 12:06
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 MICHAEL E. SNYDER
 DB 327 PG 367
 DB 592 PG 898
 DB 761 PG 623

8/17/99

PROJECT REFERENCE NO. U-3300B	SHEET NO. 9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

SEE SHEET 13 FOR -L- PROFILE



-L-		
PIs Sta 70+02.18	PI Sta 77+79.88	PIs Sta 84+82.35
Os = 5' 00" 48.2"	Δ = 46' 19" 13.1" (RT)	Os = 5' 00" 48.2"
Ls = 280.00'	D = 3' 34" 51.6"	Ls = 280.00'
LT = 186.74'	L = 1293.51'	LT = 186.74'
ST = 93.40'	T = 684.44'	ST = 93.40'
	R = 1600.00'	

REVISIONS

26-MAR-2008 12:07
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 3300B.PRELIM

-L- Sta. 87+38.94
 END STATE PROJECT U-3300B

5/28/99

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.7

DRAINAGE AREA	= 23.05	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 64.75	CFS
DESIGN HW ELEVATION	= 568.91	FT
100 YEAR DISCHARGE	= 75.3	CFS
100 YEAR HW ELEVATION	= 569.47	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 150	CFS
OVERTOPPING ELEVATION	= 576.45	FT

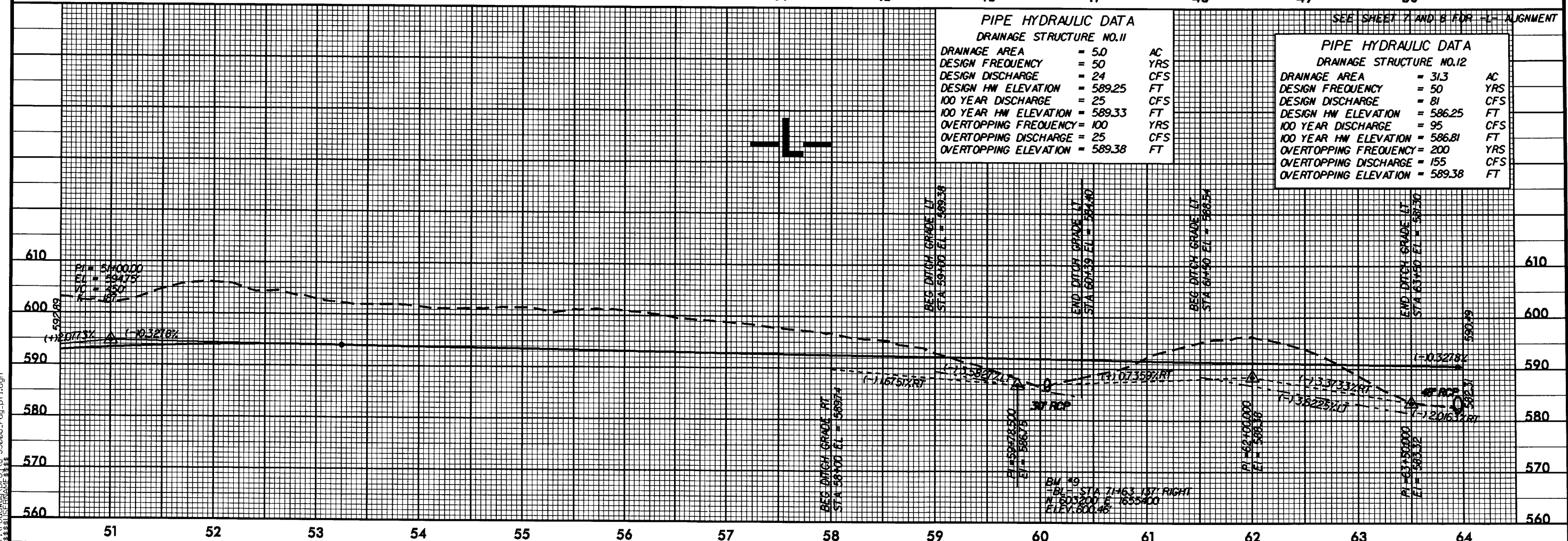
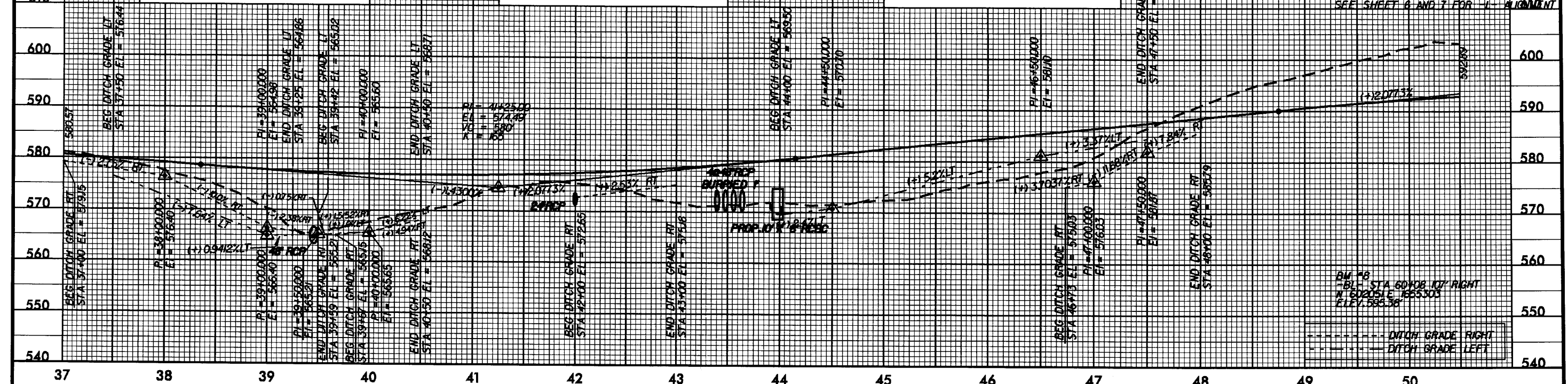
PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.8

DRAINAGE AREA	= 2.99	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 14	CFS
DESIGN HW ELEVATION	= 574.63	FT
100 YEAR DISCHARGE	= 15	CFS
100 YEAR HW ELEVATION	= 574.73	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 25	CFS
OVERTOPPING ELEVATION	= 576.23	FT

CULVERT HYDRAULIC DATA

DESIGN DISCHARGE	= 310	CFS
DESIGN FREQUENCY	= 50	YRS
DESIGN HW ELEVATION	= 574.10	FT
BASE DISCHARGE	= 360	CFS
BASE FREQUENCY	= 100	YRS
BASE HW ELEVATION	= 574.30	FT
OVERTOPPING DISCHARGE	= 750	CFS
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING ELEVATION	= 576.25	FT

PROJECT REFERENCE NO.	U-3300B	SHEET NO.	12
ROADWAY DESIGN ENGINEER		HYDRAULICS ENGINEER	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION			



PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.11

DRAINAGE AREA	= 5.0	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 24	CFS
DESIGN HW ELEVATION	= 589.25	FT
100 YEAR DISCHARGE	= 25	CFS
100 YEAR HW ELEVATION	= 589.33	FT
OVERTOPPING FREQUENCY	= 100	YRS
OVERTOPPING DISCHARGE	= 25	CFS
OVERTOPPING ELEVATION	= 589.38	FT

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.12

DRAINAGE AREA	= 31.3	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 81	CFS
DESIGN HW ELEVATION	= 586.25	FT
100 YEAR DISCHARGE	= 95	CFS
100 YEAR HW ELEVATION	= 586.81	FT
OVERTOPPING FREQUENCY	= 200	YRS
OVERTOPPING DISCHARGE	= 155	CFS
OVERTOPPING ELEVATION	= 589.38	FT

26-MAR-2008 12:30
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5/28/99

PROJECT REFERENCE NO. U-3300B	SHEET NO. 13
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.14

DRAINAGE AREA	= 269	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 8.2	CFS
DESIGN HW ELEVATION	= 590.24	FT
100 YEAR DISCHARGE	= 8.8	CFS
100 YEAR HW ELEVATION	= 590.4	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 14.2	CFS
OVERTOPPING ELEVATION	= 592.26	FT

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.15

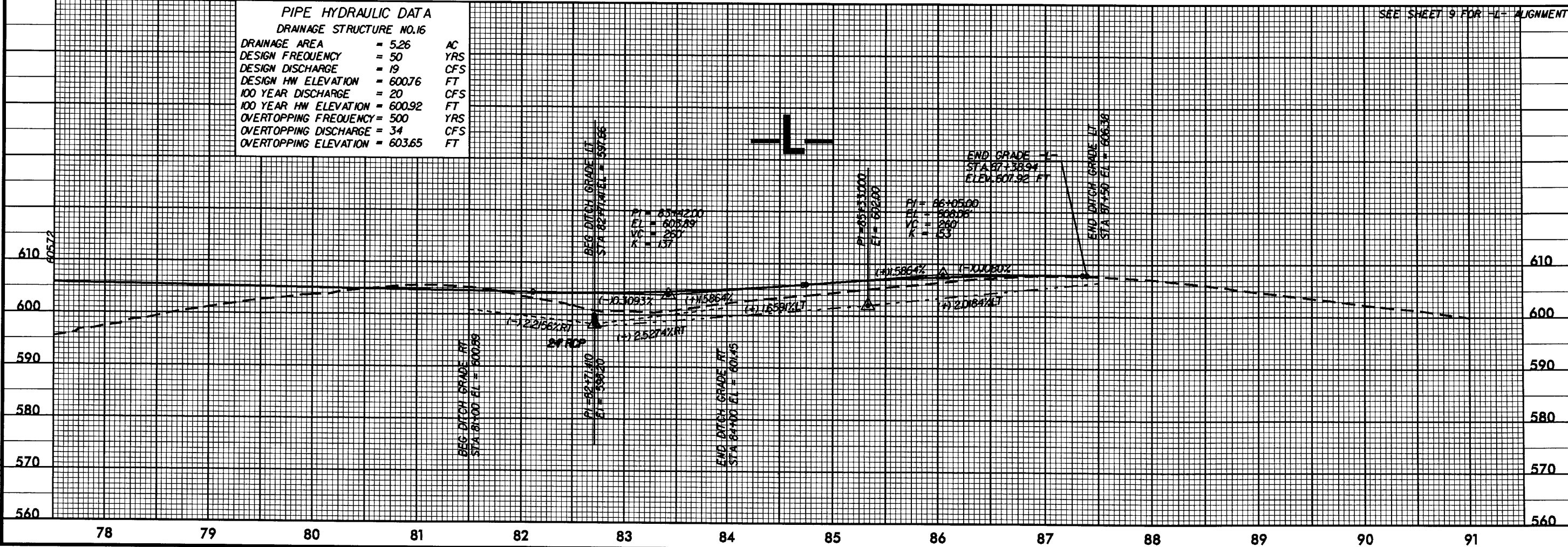
DRAINAGE AREA	= 5.26	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 17	CFS
DESIGN HW ELEVATION	= 593.93	FT
100 YEAR DISCHARGE	= 18	CFS
100 YEAR HW ELEVATION	= 594.03	FT
OVERTOPPING FREQUENCY	= 200	YRS
OVERTOPPING DISCHARGE	= 27	CFS
OVERTOPPING ELEVATION	= 595.33	FT



SEE SHEET 8 AND 9 FOR -L- ALIGNMENT

PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.16

DRAINAGE AREA	= 5.26	AC
DESIGN FREQUENCY	= 50	YRS
DESIGN DISCHARGE	= 19	CFS
DESIGN HW ELEVATION	= 600.76	FT
100 YEAR DISCHARGE	= 20	CFS
100 YEAR HW ELEVATION	= 600.92	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 34	CFS
OVERTOPPING ELEVATION	= 603.65	FT



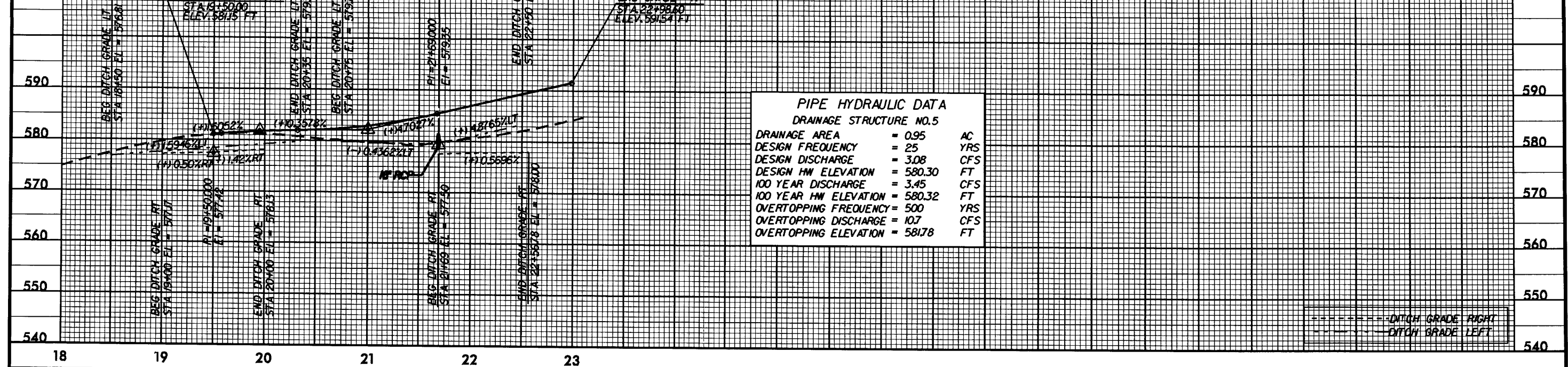
SEE SHEET 9 FOR -L- ALIGNMENT

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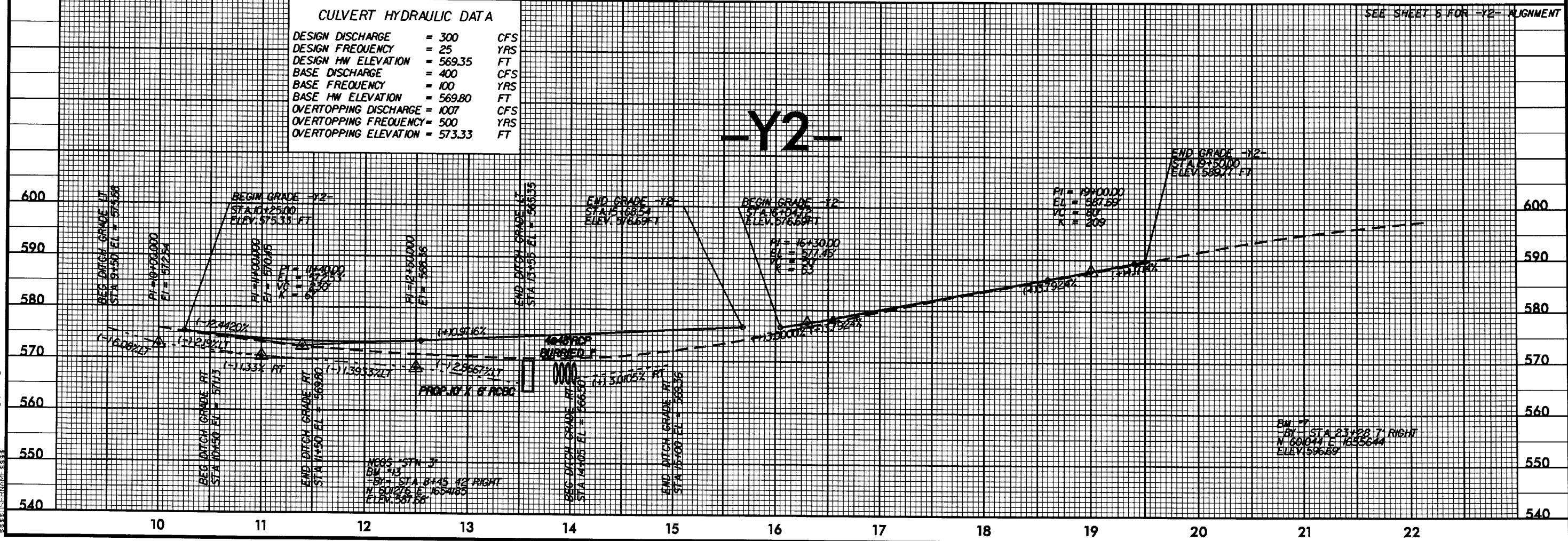
5/26/99

PROJECT REFERENCE NO. U-3300B	SHEET NO. 14
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

SEE SHEET 5 FOR -Y1- ALIGNMENT



SEE SHEET 6 FOR -Y2- ALIGNMENT



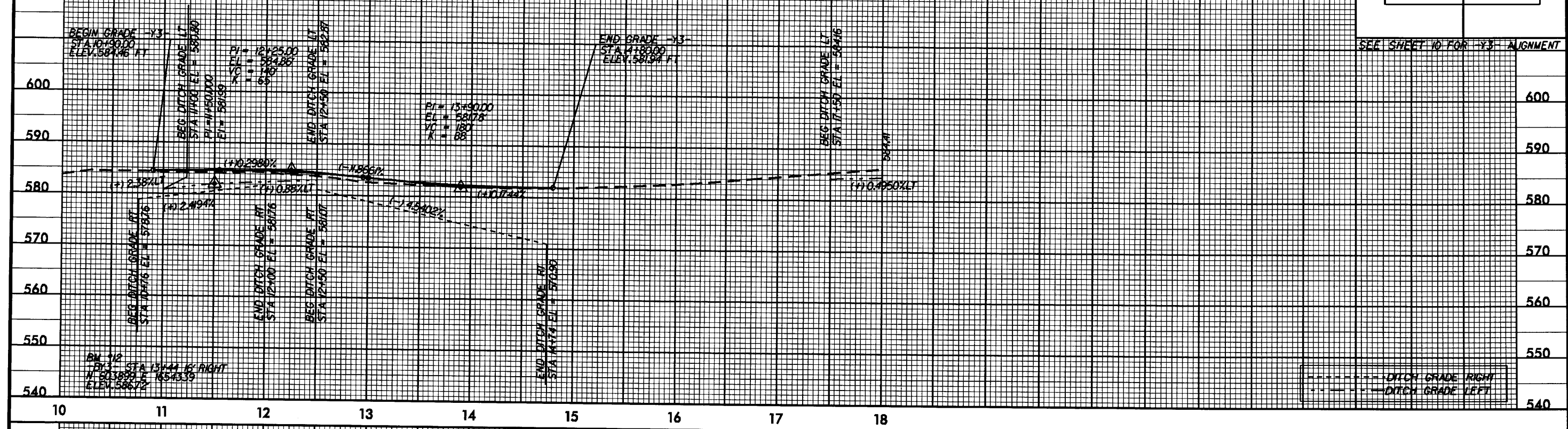
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5/28/99

PROJECT REFERENCE NO. U-3300B	SHEET NO. 15
ROADWAY DESIGN ENGINEER	HYDRAULICE ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-Y3-

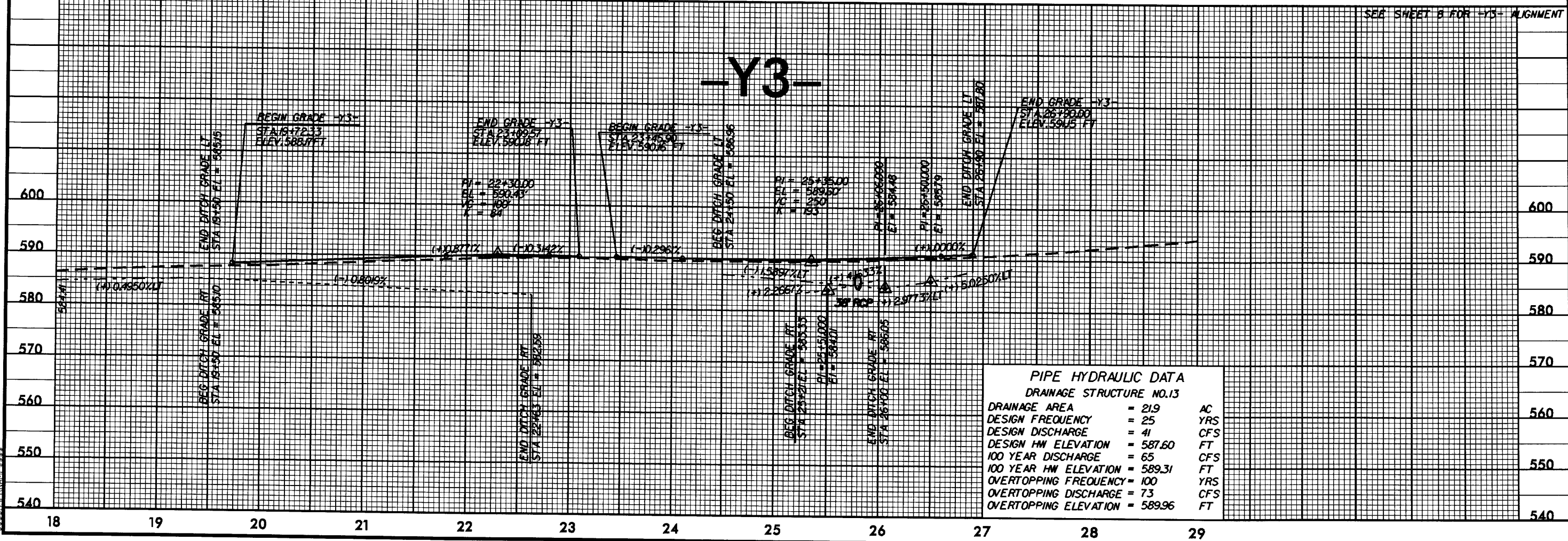
SEE SHEET 10 FOR -Y3- ALIGNMENT



----- DITCH GRADE RIGHT
 - - - - - DITCH GRADE LEFT

SEE SHEET 8 FOR -Y3- ALIGNMENT

-Y3-

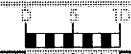


PIPE HYDRAULIC DATA
DRAINAGE STRUCTURE NO.13

DRAINAGE AREA	= 219	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 41	CFS
DESIGN HW ELEVATION	= 587.60	FT
100 YEAR DISCHARGE	= 65	CFS
100 YEAR HW ELEVATION	= 589.31	FT
OVERTOPPING FREQUENCY	= 100	YRS
OVERTOPPING DISCHARGE	= 73	CFS
OVERTOPPING ELEVATION	= 589.96	FT

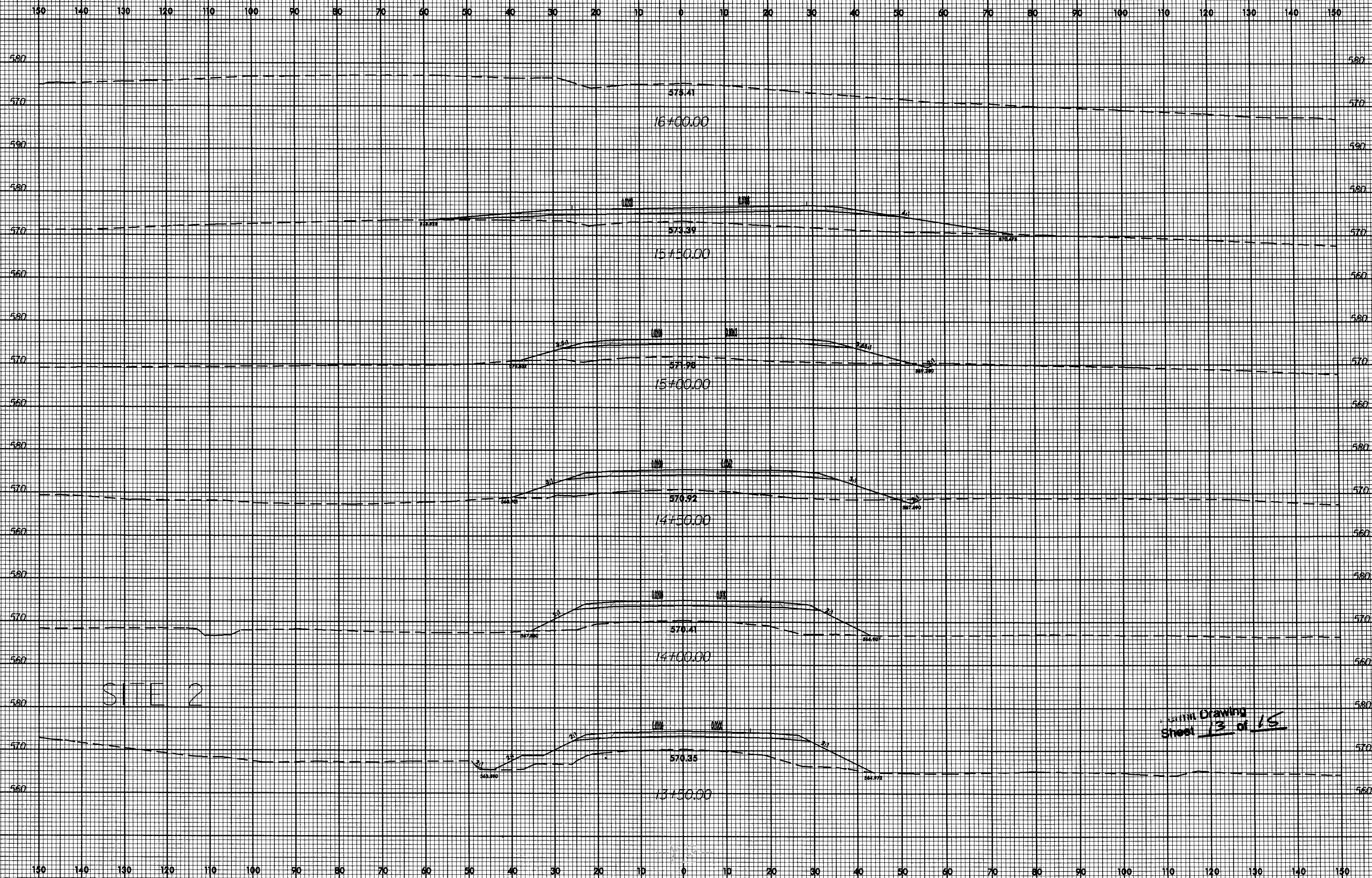
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8/23/99



PROJ. REFERENCE NO.
U-3300B

SHEET NO.
X-33

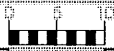


SITE 2

WITH DRAWING
Sheet 13 of 15

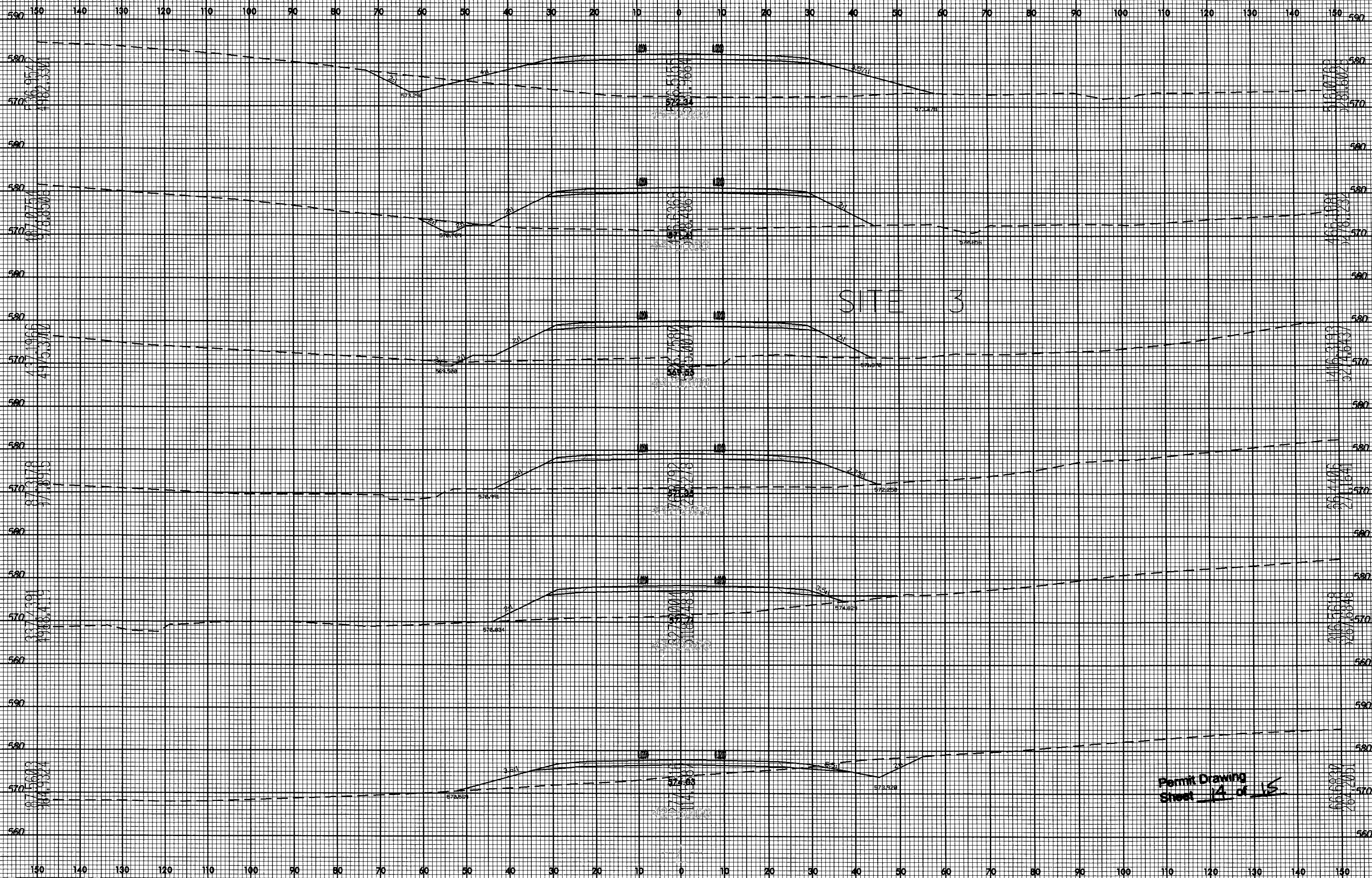
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John

8/23/99



PROJ. REFERENCE NO.
R-3300B

SHEET NO.
X-13



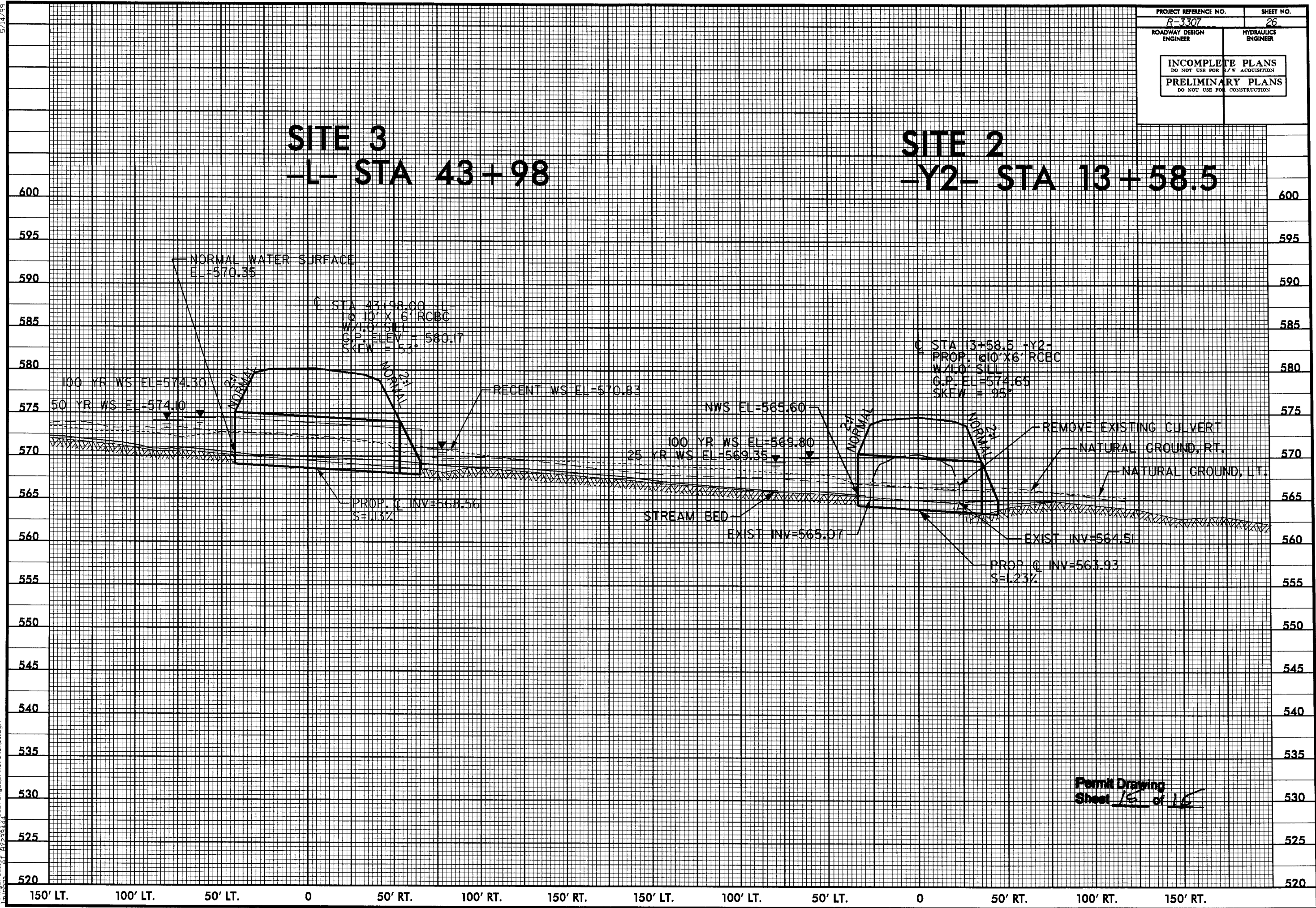
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in\johns

Permit Drawing
Sheet 14 of 15

PROJECT REFERENCE NO. R-3307	SHEET NO. 26
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
INCOMPLETE PLANS DO NOT USE FOR ACQUISITION	
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

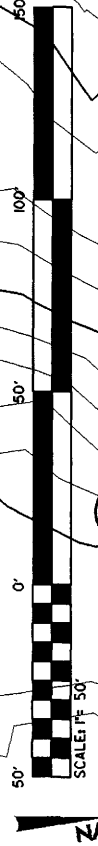
SITE 3 -L- STA 43+98

SITE 2 -Y2- STA 13+58.5



Permit Drawing
Sheet 15 of 16

07-APR-2008 14:05
 I:\Hydraulics\Permit\3307_hyd_prm_wet.xpl.dgn
 5/14/99



6

MARILYN SUE RAMSEY CAMPBELL
& Husband DEAN S. CAMPBELL

SITE 1

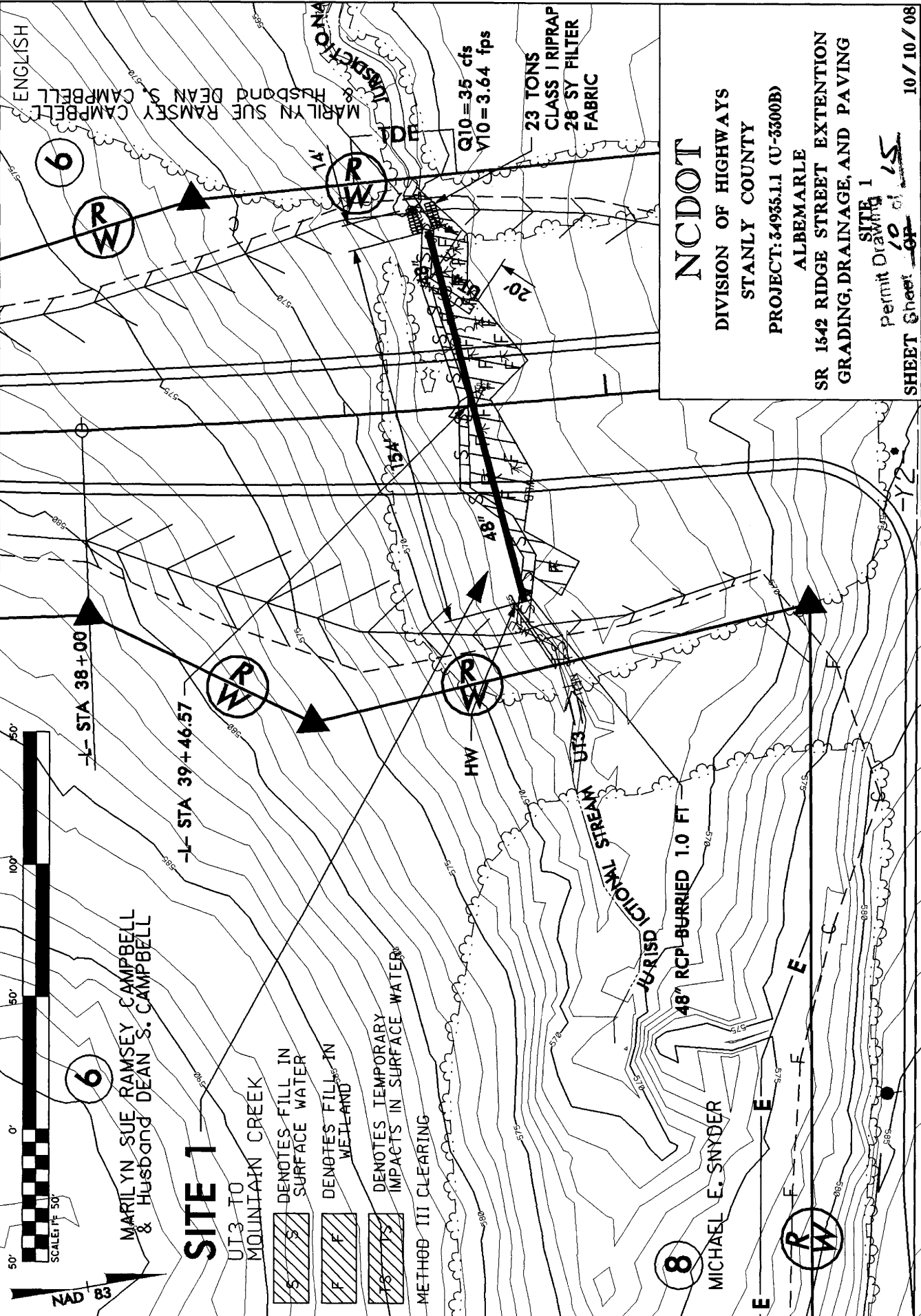
UT3 TO
MOUNTAIN CREEK

DENOTES FILL IN SURFACE WATER

DENOTES FILL IN WETLAND

DENOTES TEMPORARY IMPACTS IN SURFACE WATER

METHOD III CLEARING



NCDOT

DIVISION OF HIGHWAYS
STANLY COUNTY

PROJECT: 34935.11 (U-5300B)
ALBEMARLE

SR 1542 RIDGE STREET EXTENTION
GRADING, DRAINAGE, AND PAVING

SITE 1
Permit Drawing 10 of 15
SHEET 10 of 15

10/10/08

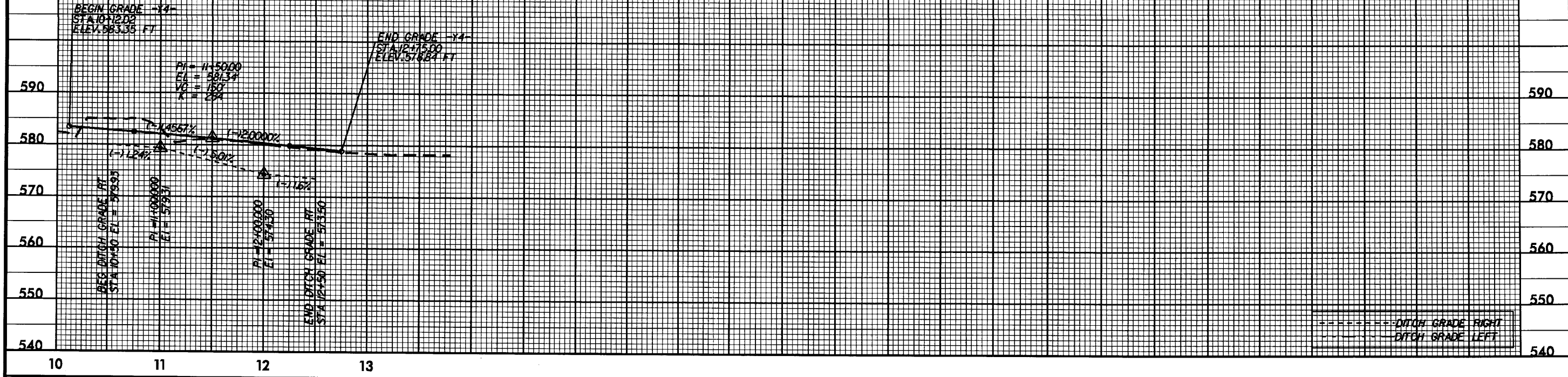
SR 1545 MOUNTAIN VIEW CHURCH RD 24' BST

5/28/99

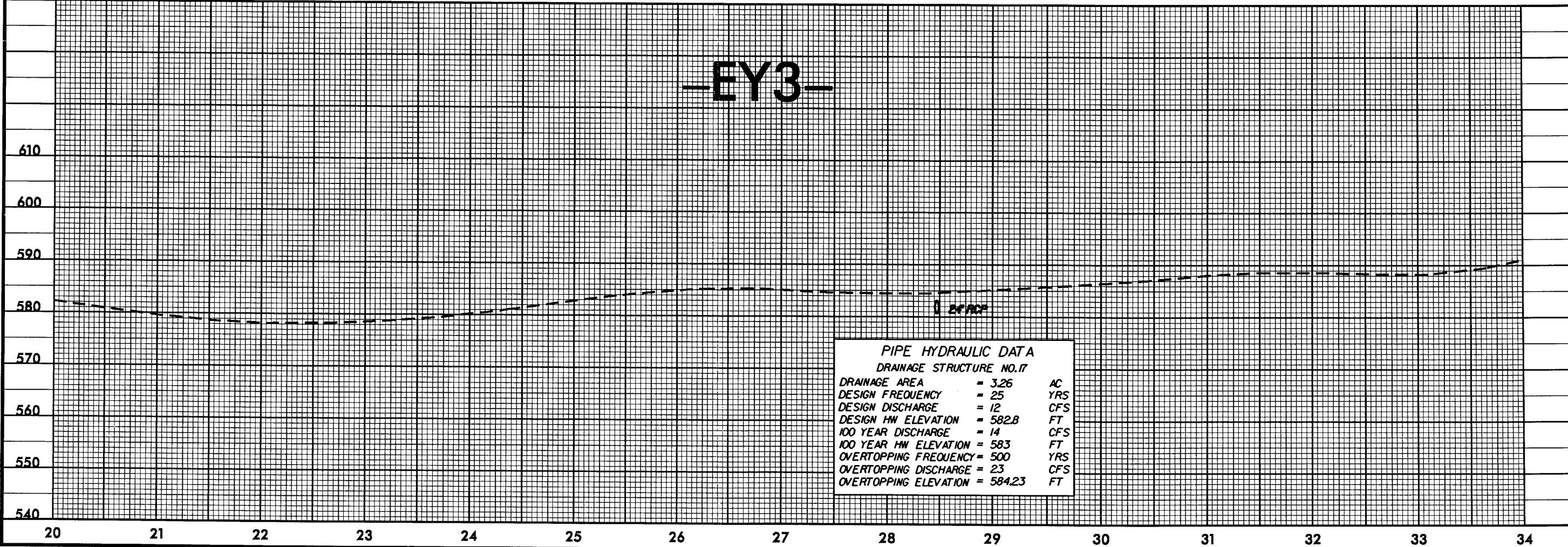
PROJECT REFERENCE NO. U-3300B	SHEET NO. 16
ROADWAY DESIGN ENGINEER	HYDRAULIC ENGINEER
PRELIMINARY PLANS DO NOT USE FOR CONSTRUCTION	

-Y4-

SEE SHEET 10 FOR Y4 ALIGNMENT



-EY3-



PIPE HYDRAULIC DATA		
DRAINAGE STRUCTURE NO. 17		
DRAINAGE AREA	= 3.26	AC
DESIGN FREQUENCY	= 25	YRS
DESIGN DISCHARGE	= 12	CFS
DESIGN HW ELEVATION	= 582.8	FT
100 YEAR DISCHARGE	= 14	CFS
100 YEAR HW ELEVATION	= 583	FT
OVERTOPPING FREQUENCY	= 500	YRS
OVERTOPPING DISCHARGE	= 23	CFS
OVERTOPPING ELEVATION	= 584.23	FT

26-MAR-2008 12:31 P:\Roadway\Projects\U-3300b_rdu_pfl.dgn