



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY  
GOVERNOR

LYNDO TIPPETT  
SECRETARY

January 4, 2007

U. S. Army Corps of Engineers  
Regulatory Field Office  
Post Office Box 1000  
Washington, NC 27889-1000

ATTENTION: Mr. Bill Biddlecome  
NCDOT Coordinator

Dear Sir:

Subject: **Revision to the Nationwide 23 and 33 Permit Application and Tar-Pamilico Buffer Authorization** for the Replacement of Bridge No. 82 over Marsh Swamp on NC 561; Halifax County; TIP Project B-3853; Federal Aid Project No. BRSTP-561(1); State Project No.8.1301901; WBS 33000.1.1.

The following revisions for the subject project are being submitted for your review:

- This bridge will be built using workpads and not top-down construction as stated in the PCN. Revised pages 2 and 5 are included.
- NCDOT proposes to use a special sediment control fence for temporary fill in wetlands (see attached "Temporary Fill in Wetlands for Erosion & Sediment Control Measures").
- The permit drawings submitted with the permit package showed buffer going into the road and no end bents. The attached revised drawings show both correctly.

Proposed impacts to jurisdictional resources remain unchanged. If you have any questions or need additional information, please contact Chris Underwood at (919) 715-1451.

Sincerely,

A handwritten signature in black ink, appearing to read "G. J. Thorpe".

*fw* Gregory J. Thorpe, Ph.D., Environmental Management Director  
Project Development and Environmental Analysis

W/attachment:

Mr. John Hennessy, NCDWQ (5 Copies)  
Mr. Travis Wilson, NCWRC  
Mr. Gary Jordan, USFWS  
Mr. Ron Sechler, NMFS  
Mr. Michael Street, NCDMF  
Dr. David Chang, P.E., Hydraulics  
Mr Greg Perfetti, P.E., Structure Design  
Mr. Mark Staley, Roadside Environmental  
Mr. Richard E. Greene, P.E., Division 4 Engineer  
Mr. Jamie Guerrero, Division 4 Environmental Officer

W/o attachment

Mr. Scott McLendon, USACE, Wilmington  
Mr. Jay Bennett, P.E., Roadway Design  
Mr. Majed Alghandour, P.E., Programming and TIP  
Mr. Art McMillan, P.E., Highway Design  
Mr. Mark Pierce, P.E., PDEA

### 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: Replacement of Bridge No. 82 on NC 561 over Marsh Swamp
2. T.I.P. Project Number or State Project Number (NCDOT Only): B-3853
3. Property Identification Number (Tax PIN): N/A
4. Location  
County: Halifax Nearest Town: Halifax  
Subdivision name (include phase/lot number): N/A  
Directions to site (include road numbers/names, landmarks, etc.): Take I-95 north to NC 561 follow NC 561 to the project
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): 36° 18' 07" °N 77° 39' 38" °W
6. Property size (acres): N/A
7. Name of nearest receiving body of water: Fishing Creek
8. River Basin: Tar-Pamlico  
(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/.](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: Forest
10. Describe the overall project in detail, including the type of equipment to be used: Replacing a structurally deficient bridge using work pads. Standard road building equipment will be used.

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.

N/A

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.): N/A

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

Current land use in the vicinity of the pond: N/A

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. Bridge was lengthened and minimum widths were used for structures and approaches.

**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

## **Temporary Fill in Wetlands for Erosion & Sediment Control Measures:**

The areas permitted for Mechanized or Hand Clearing in Wetlands on this project will include zones for Temporary Fill in Wetlands for Erosion & Sediment Control Measures. The Erosion and Sediment Control Measures that are considered temporary fill includes Special Sediment Control Fence and/or Temporary Rock Silt Check(s) Type A.

### **Special Sediment Control Fence:**

Special Sediment Control Fence shall be placed as shown on the plans or as directed by the Engineer. The Special Sediment Control Fence shall consist of steel posts, ¼ inch hardware cloth, and sediment control stone. The sections of Special Sediment Control Fence shall serve as drainage outlets for Silt Fence and each section shall not exceed 10 ft. (3 m) in length and 2 ft. in width (0.6 m).

### **Materials:**

#### **(A) Posts:**

Steel posts shall be at least 5 feet (1.5 m) in length, approximately 1 3/8 inches (35 mm) wide measured parallel to the fence, and have a minimum weight of 1.25 lb/ft (1.86 kg/m) of length. The post shall be equipped with an anchor plate having a minimum area of 14.0 square inches (9000 square millimeters), and shall have a means of retaining wire in the desired position without displacement.

#### **(B) 1/4 inch (6.4mm) Hardware Cloth:**

Hardware cloth shall have 1/4 inch (6.4mm) openings constructed from #24 gauge wire. The hardware cloth shall be installed according to Standard Drawing No. 1606.01 with a minimum of 2 ft. (0.6m) of the cloth placed on the ground beneath the Sediment Control Stone.

#### **(C) Sediment Control Stone:**

Sediment control stone shall meet the requirements of Section 1005 of the 2002 Standard Specifications for Roads and Structures. Install stone according to Standard Drawing No. 1606.01.

### **Maintenance and Removal:**

The Contractor shall maintain the special sediment control fence until the project is accepted or until the fence is removed. The Contractor shall remove and dispose of silt accumulations at the fence when so directed by the Engineer in accordance with Section 1630 of the 2002 Standard Specifications for Roads and Structures. The special sediment

control fence shall be removed at the completion of the project, and any earth disturbance inside the Mechanized Clearing area shall be seeded with native grasses.

#### Temporary Rock Silt Check Type A:

Temporary Rock Silt Checks Type A shall be placed as shown on the plans or as directed by the Engineer. The Type A Checks will be rock dams constructed of Class B stone, with sediment control stone placed on the flow side, and filter fabric underneath. Temporary Rock Silt Checks Type A shall serve as drainage outlets for Silt Fence and shall be constructed according to Standard Drawing No. 1633.01.

#### Materials:

##### (A) Class B Stone:

Class B stone shall meet the requirements of Section 1005 of the 2002 Standard Specifications for Roads and Structures. Install stone according to Standard Drawing No. 1633.01.

##### (B) Sediment Control Stone:

Sediment control stone shall meet the requirements of Section 1005 of the 2002 Standard Specifications for Roads and Structures. Install stone according to Standard Drawing No. 1633.01.

##### (C) Filter Fabric:

The filter fabric shall meet the requirements of Type 2 in Section 1056 of the 2002 Standard Specifications for Roads and Structures. The filter fabric shall be placed on the ground beneath the Temporary Rock Silt Check Type A.

#### Maintenance and Removal:

The Contractor shall maintain the Temporary Rock Silt Checks Type A until the project is accepted or until the dam is removed. The Contractor shall remove and dispose of silt accumulations at the Type A Check when so directed by the Engineer in accordance with Section 1630 of the 2002 Standard Specifications for Roads and Structures. The Temporary Rock Silt Checks Type A shall be removed at the completion of the project, and any earth disturbance inside the Mechanized Clearing area shall be seeded with native grasses.

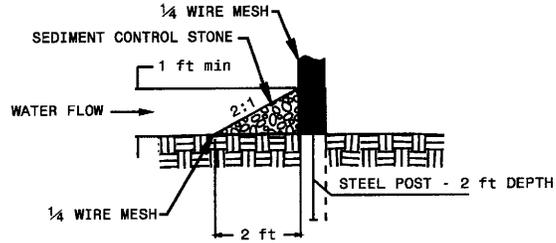
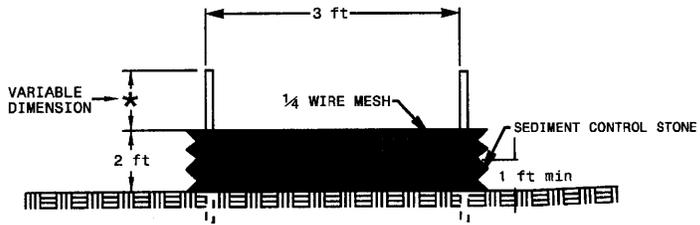
**GENERAL NOTES:**

SEDIMENT CONTROL STONE SHALL BE NO. 5 OR NO. 57 AND SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE PER TON "SEDIMENT CONTROL STONE."

USE HARDWARE CLOTH 24 GAUGE WIRE MESH WITH 1/4 INCH MESH OPENINGS.

INSTALL 5 FT. SELF FASTENER ANGLE STEEL POST 2 FT. DEEP MINIMUM.

POST SPACING SHALL BE A MAXIMUM OF 3 FT.

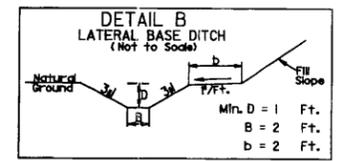




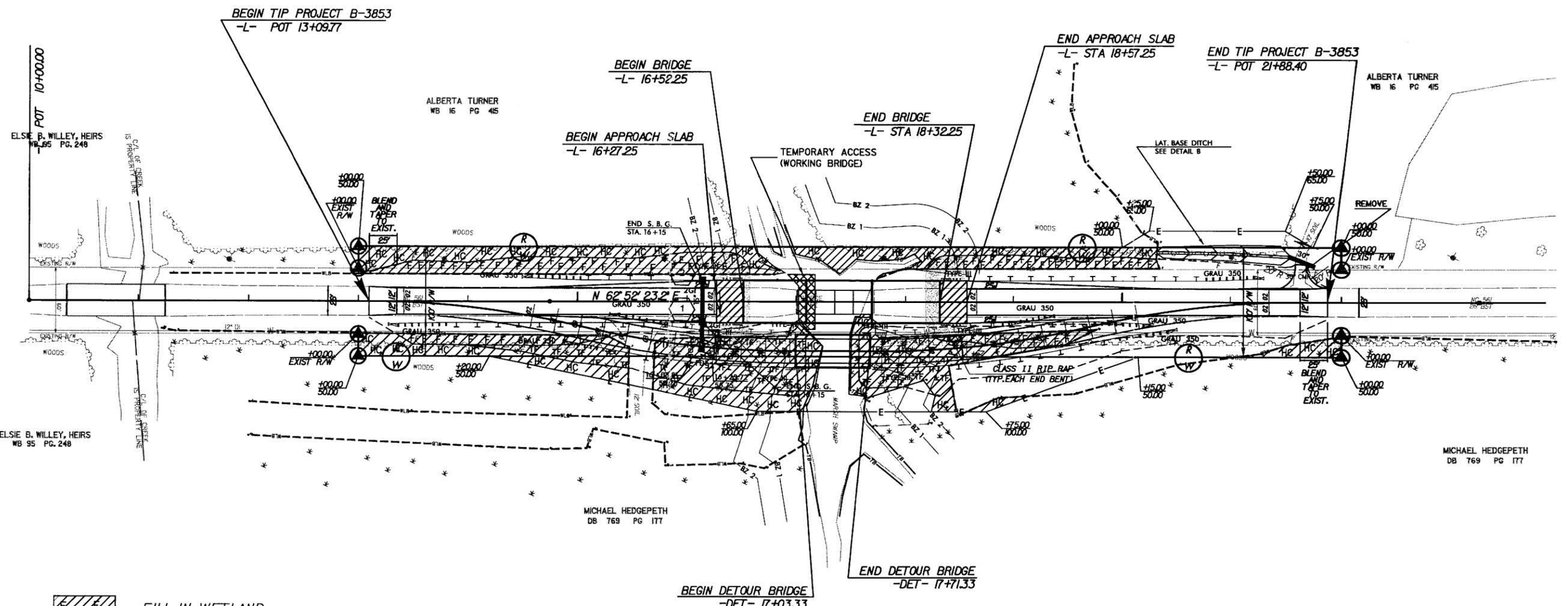
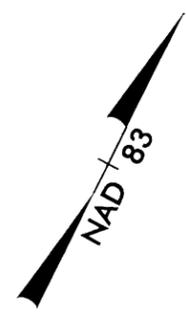


PROJECT REFERENCE NO. <b>B-3853</b>	SHEET NO. <b>5</b>
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
<b>INCOMPLETE PLANS</b> DO NOT USE FOR R/W ACQUISITION	
<b>PRELIMINARY PLANS</b> DO NOT USE FOR CONSTRUCTION	

Wetland Drawing  
**5A**

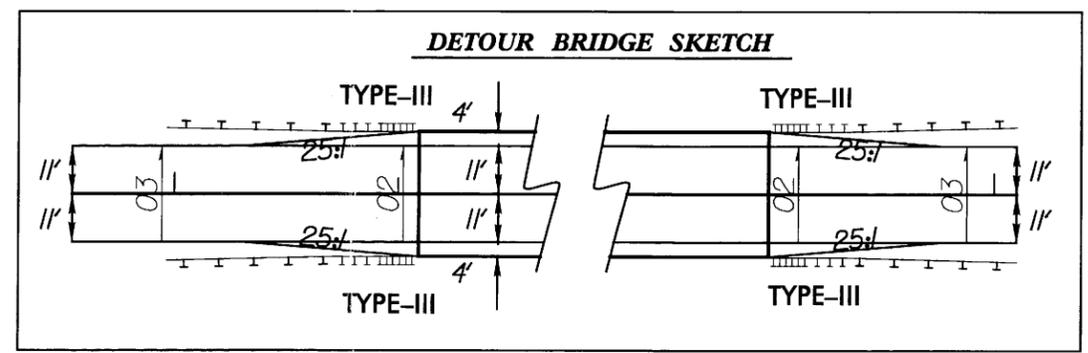


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REVISIONS

- FILL IN WETLAND
- PERMANENT SURFACE WATER IMPACT
- HAND CLEARING
- TEMPORARY SURFACE WATER IMPACT
- TEMPORARY FILL IN WETLAND

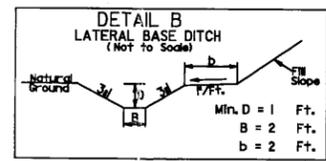
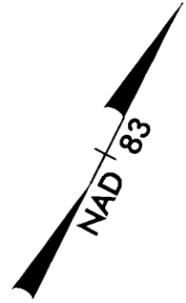


38.5 Square Ft Permanent Surface Water Impacts

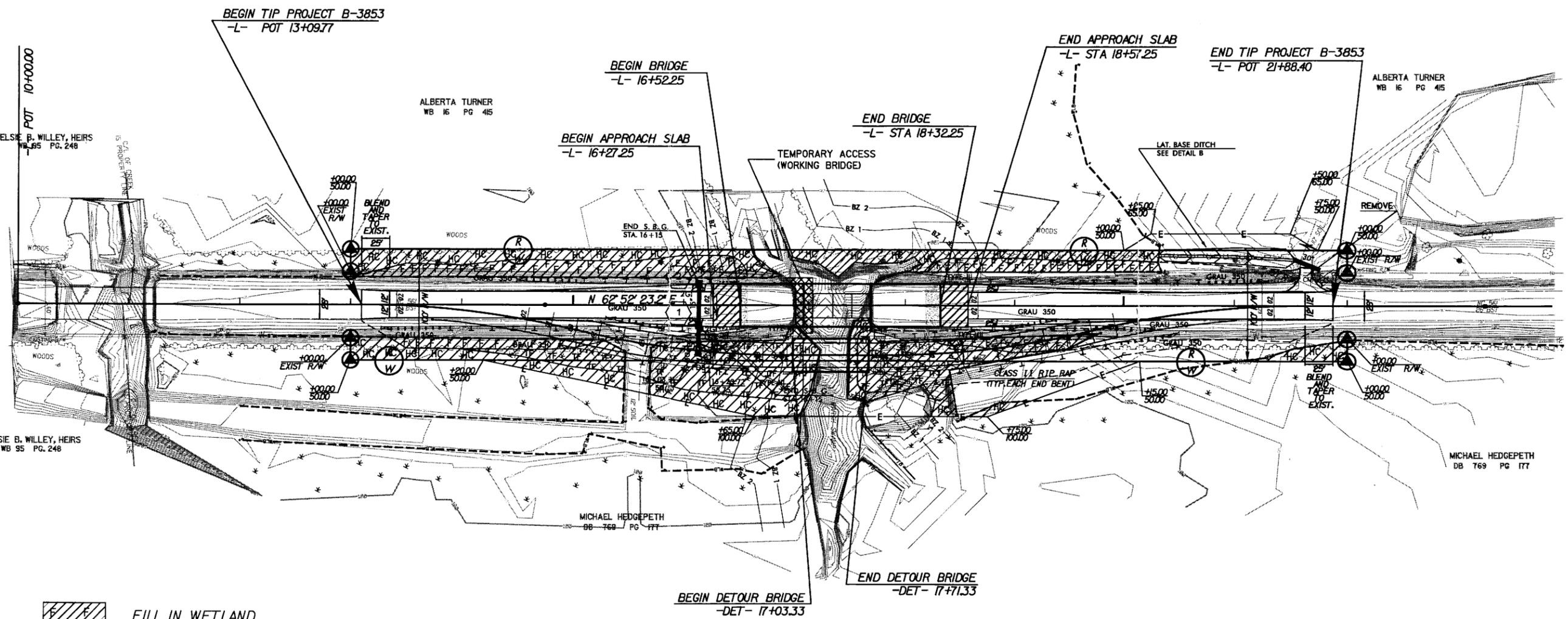
N. C. DEPT. OF TRANSPORTATION  
DIVISION OF HIGHWAYS  
HALIFAX COUNTY  
PROJECT NO. 33300.1.1 (B-3853)  
  
BRIDGE NO. 82, OVER  
MARSH SWAMP  
  
ON NC 561  
  
SHEET OF 10 / 31 / 2005

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*Wetland Drawing 5B*

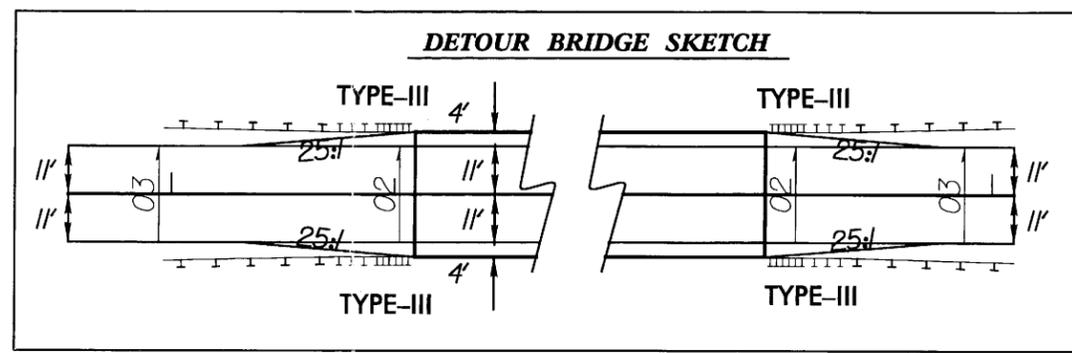


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REVISIONS

- FILL IN WETLAND
- PERMANENT SURFACE WATER IMPACT
- HAND CLEARING
- TEMPORARY SURFACE WATER IMPACT
- TEMPORARY FILL IN WETLAND



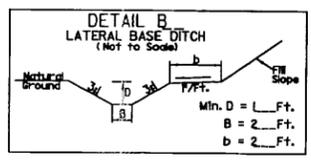
38.5 Square Ft Permanent Surface Water Impacts

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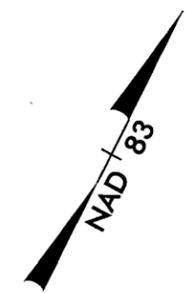
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RW SHEET NO.	
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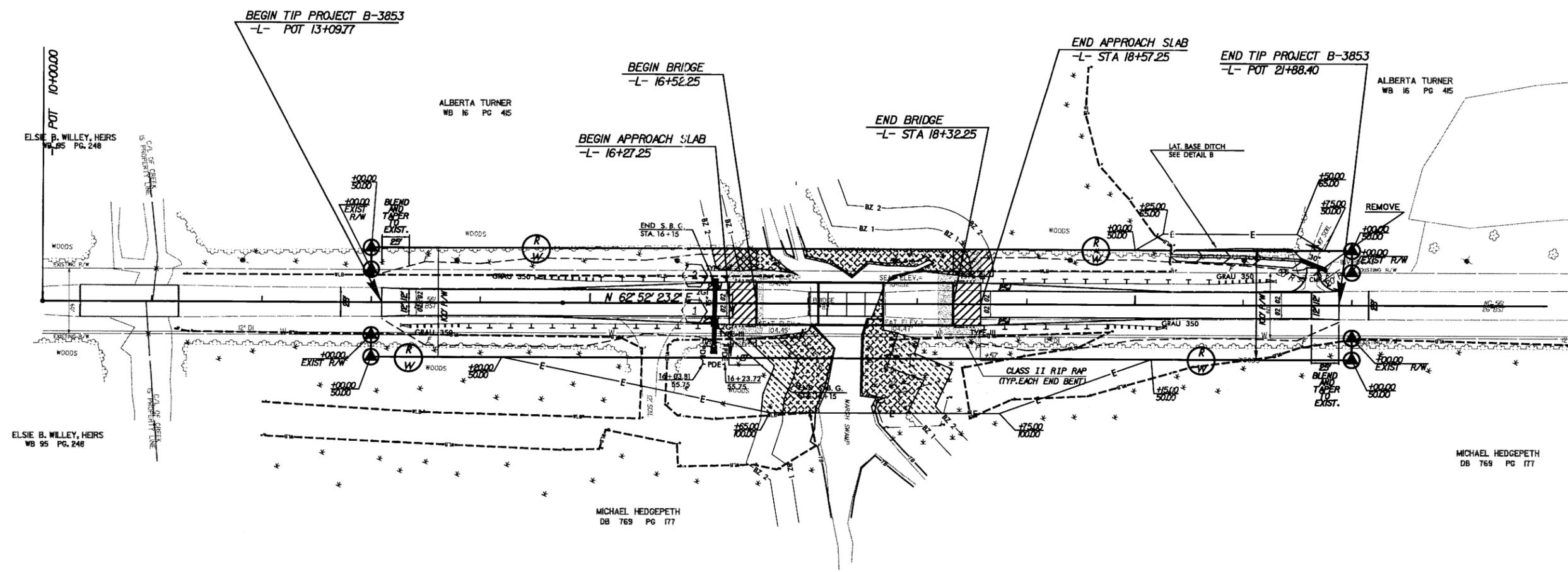
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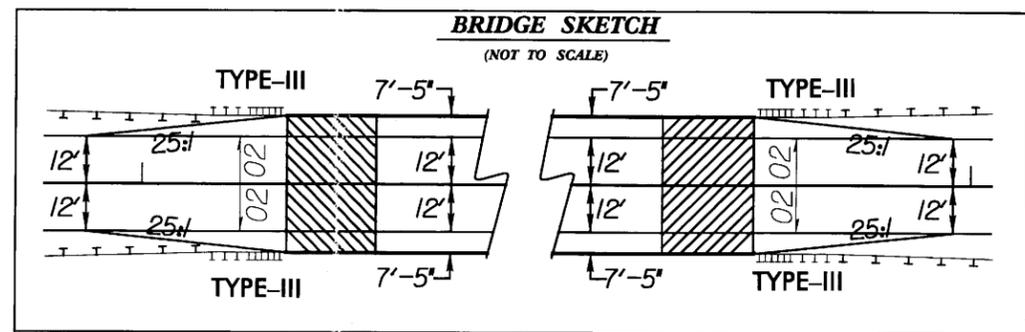
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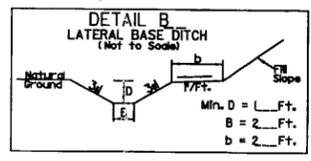
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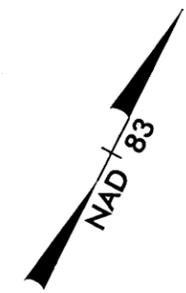
N. C. DEPT. OF TRANSPORTATION  
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RW SHEET NO.	
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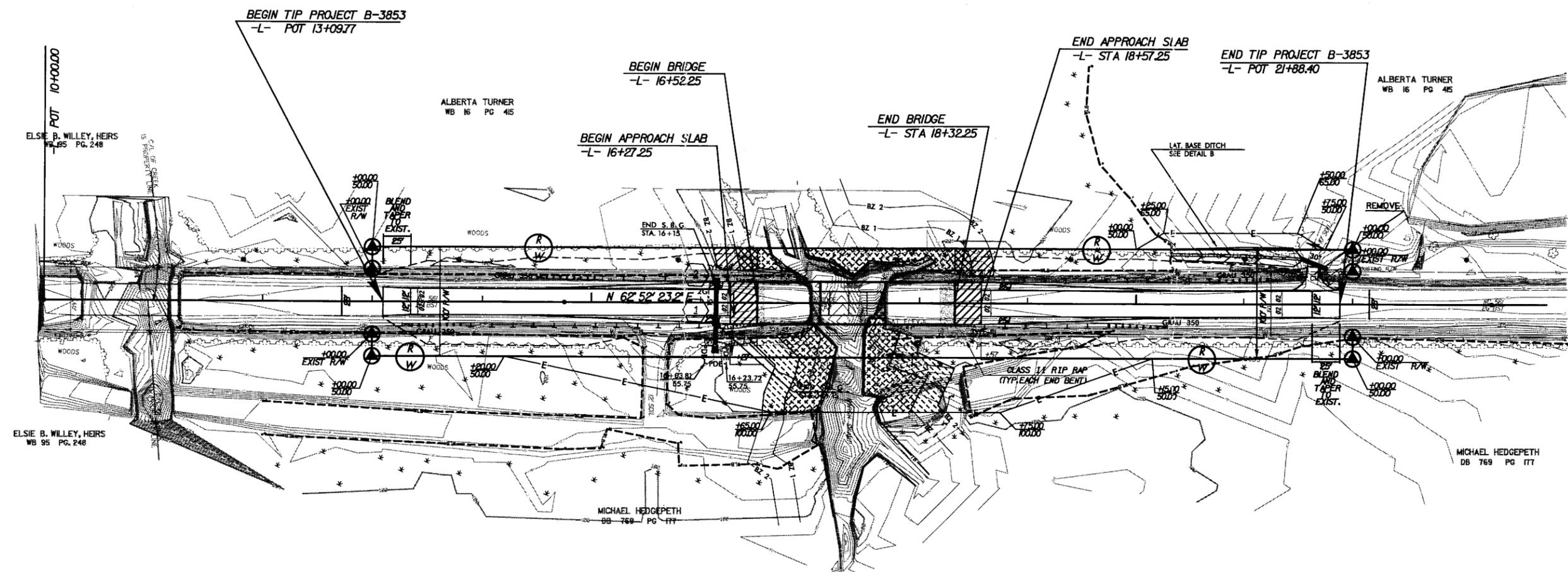
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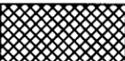


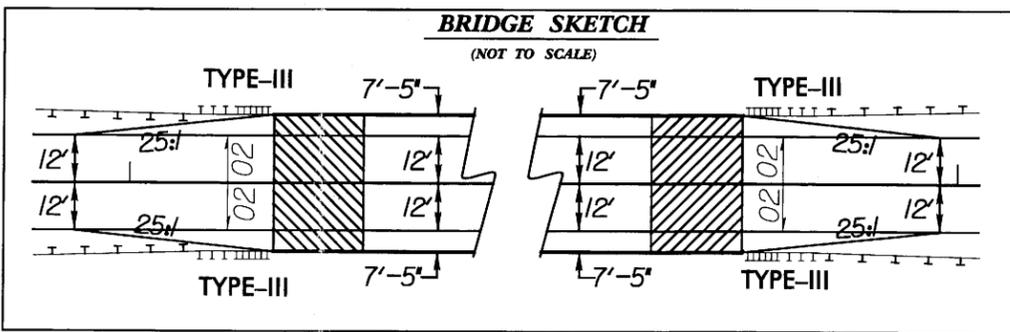
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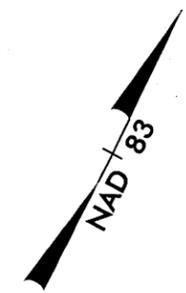
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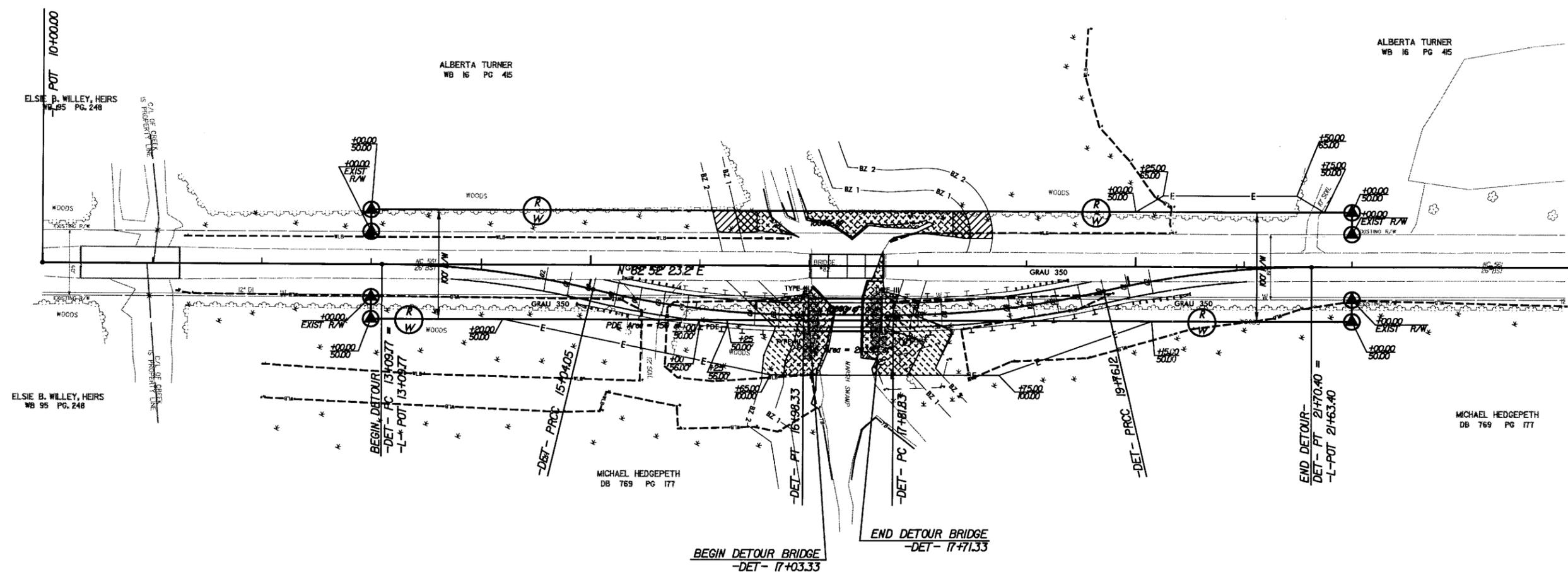
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PROJECT REFERENCE NO. B-3853	SHEET NO. 5
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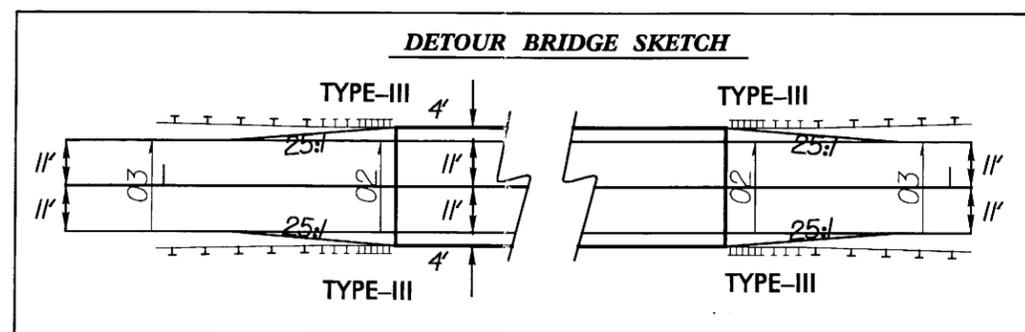
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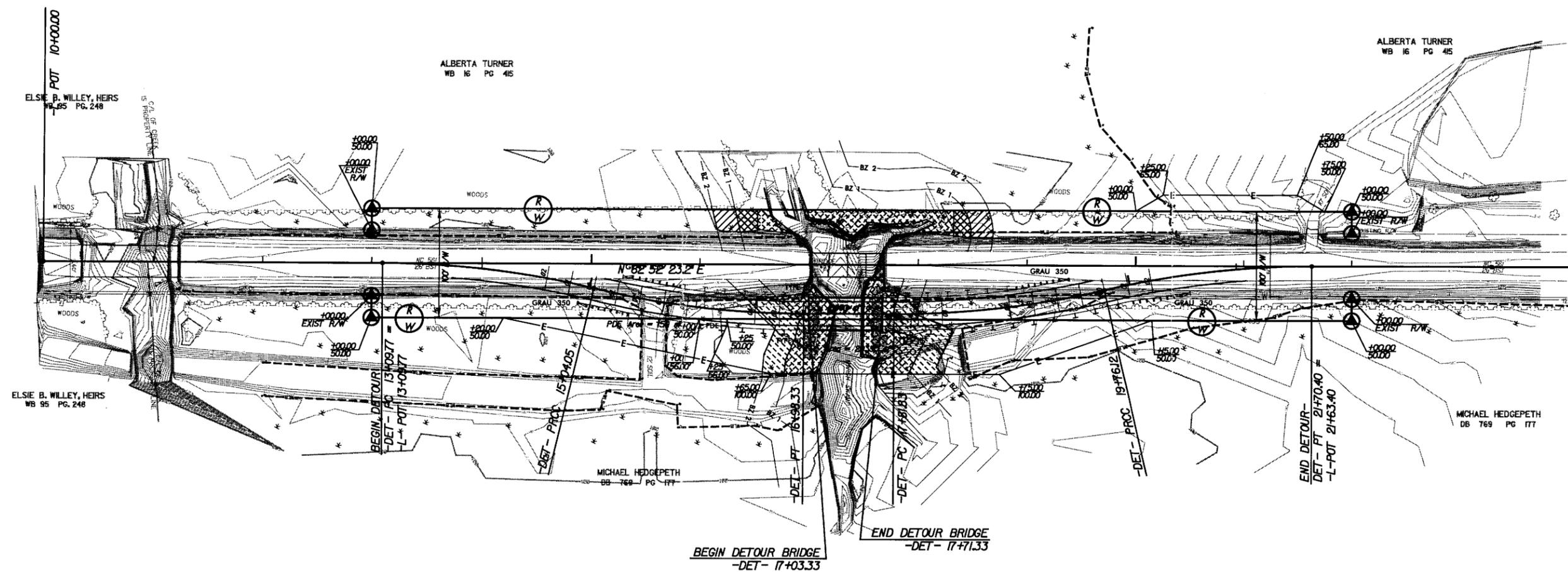
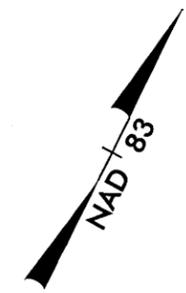


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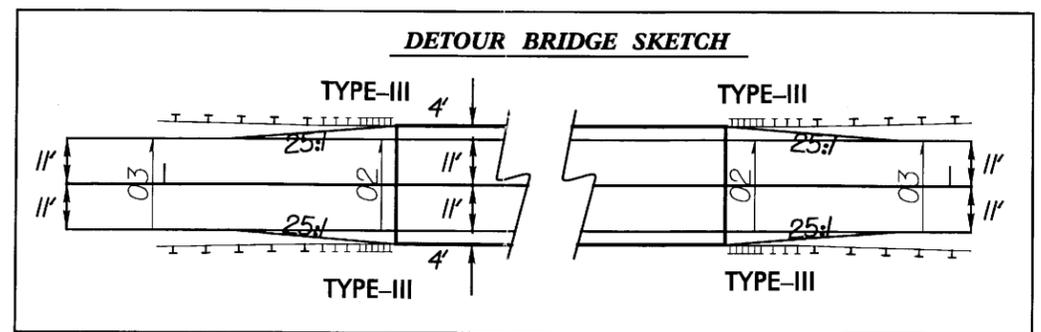
REVISIONS

PROJECT REFERENCE NO. <b>B-3853</b>	SHEET NO. <b>5</b>
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