Information for File # 2012-04559-LED

Applicant	**Minnesota Department of Transportation**
Corps Contact	Leslie Day
Address	1554 Highway 2, Suite 2 Two Harbors, Minnesota 55616
E-Mail	leslie.e.day@usace.army.mil
Phone	651-290-5693
Primary County	Lake County
Section	Section 36; Sections 9, 10, 16, 20, 21, 29, 30, 31
Township	T. 57N.; T. 57N.
Range	R. 7W.; R. 6W.
Information Complete On	March 7, 2013
Posting Expires On	March 25, 2013
Authorization Type	LOP-05-MN

This application is being reviewed in accordance with the practices for documenting Corps jurisdiction under Sections 9 & 10 of the Rivers and Harbor Act of 1899 and Section 404 of the Clean Water Act identified in Regulatory Guidance Letter 07-01. We have made a preliminary determination that the aquatic resources that would be impacted by the proposed project are regulated by the Corps of Engineers under Section 404 of the Clean Water Act. Our jurisdictional review and final jurisdictional determination could result in modifications to the scope of the project's regulated waterbody/wetland impacts and compensatory mitigation requirements identified above. An approved jurisdictional determination will be made prior to reaching a permit decision, and will be posted on the St. Paul District web page at http://www.mvp.usace.army.mil/.

Project

Project Description and Purpose:
The Minnesota Department of Transportation is proposing to reconstruct an approximately 5.5-mile segment of Trunk Highway (TH) 61 from 3.2 miles north of TH 1 to 0.4 miles south of Manitou River. This is State Project (SP) 3803-35.

The purpose of the project is to correct safety concerns resulting from substandard features throughout the 5.5 mile corridor. These deficiencies include poor vertical alignments, degraded pavement condition, narrow shoulders and lanes, damaged culverts, and lack of guardrail or guardrails in need of repair. This segment of TH 61 is currently a 55mph rural principal arterial two lane highway with substandard curves that meet design speeds of 40 to 50 mph.

Existing shoulder widths are 3.5 -feet useable (2-feet paved) which is below the current design standard (8-feet usable width/paved) for a rural principal arterial highway with traffic counts greater than 2000 AADT. The existing shoulder width south of the project is 10-feet bituminous shoulder and north of the project area is 4-feet bituminous shoulder. It was determined that a 6-foot useable shoulder (5-foot paved) would be suitable for maintaining both the safety and the scenic quality of this corridor.

The project would involve reconstruction to meet a 55 mph design speed along the existing alignment with 6 foot useable shoulders and 1:4 (v:h) inslopes.

Name, Area and Types of Waters Subject to Loss: The project would involve the discharge of dredged and fill material in approximately 3.09 acres of wetlands (1.66 acres of wet meadow (Type 2) and 1.43 acres of shrub-carr (Type 6) wetlands) adjacent to Lake Superior and tributaries of Lake Superior for the reconstruction of the 5.5 mile long segment of TH 61 in Lake County. During the fall of 2012, the Corps field reviewed and approved the wetland boundaries as delineated.

From the typical cross-section provided, the project may involve the construction of new ditches or the deepening of existing ditches along the trail. A complete set of cross-sections has been requested of the applicant. Once received, the Corps will evaluate the project's potential for resulting in the lateral drainage effect to waters of the United States.

The Corps has requested additional information on the 5.5 mile corridor, including cross-sections, to complete our evaluation and environmental analyses for this project.

Project Involves: The project would result in the loss of some terrestrial habitat (primarily shrub and herbaceous dominated habitats) for a variety of wildlife, including the Canada lynx, a federally-listed threatened species. This species could use the area as a travel corridor.

The project is located within the 1854 Ceded Territory as determined by the Treaty of 1854.

Alternatives Considered:
The application submitted to the Corps included the discussion and evaluation of three alternatives considered for the 5.5 mile TH 61 reconstruction project.

Compensatory Mitigation:
Compensatory mitigation for the approximately 3.09 acres of permanent wetland impacts in Bank Service Area (BSA) 1 would be required for the project under Section 404 of the Clean Water Act. The applicant has proposed that 1.8 acres of these impacted wetlands are wetland ditches that may have been historically cut through uplands and that have developed wetland criteria in the decades since the road was originally constructed. As the proposed reconstruction project would involve shifting these ditches and as the new ditches would be expected to develop wetland criteria over time and provide similar functions to the existing ditch wetlands, the applicant has proposed that no mitigation is required for these impacts.

The applicant has proposed to withdraw Corps approved mitigation credits from a MnDOT road bank as compensation for impacts to the other 1.29 acres of wetlands which would be impacted as part of the project. At this time, no specific MnDOT bank has been identified or proposed. Prior to the completion of the Section 404 permit review, the applicant will be required to provide a mitigation proposal for these impacts using the watershed approach.

The Corps has requested additional information regarding ditch construction along the corridor to assist in the evaluation of the project's potential drainage effects. Should it be determined that lateral effect drainage impacts would occur as a result of the project, these effects would require compensatory mitigation.

Drawings See attached.

Path: S:\KO\M\Mnt01\121852\3-env-stdy-regs\GIS\Little Marais\DeIn Report\fig02_USGS.mxd

SEH

418 W. SUPERIOR ST., SUITE 200
DULUTH, MN 55802-1512
PHONE: (218) 279.3000
FAX: (888) 908.8166
TF: (888) 722.0547
www.sehinc.com

Project: MNT01 121852
Print Date: 9/26/2012

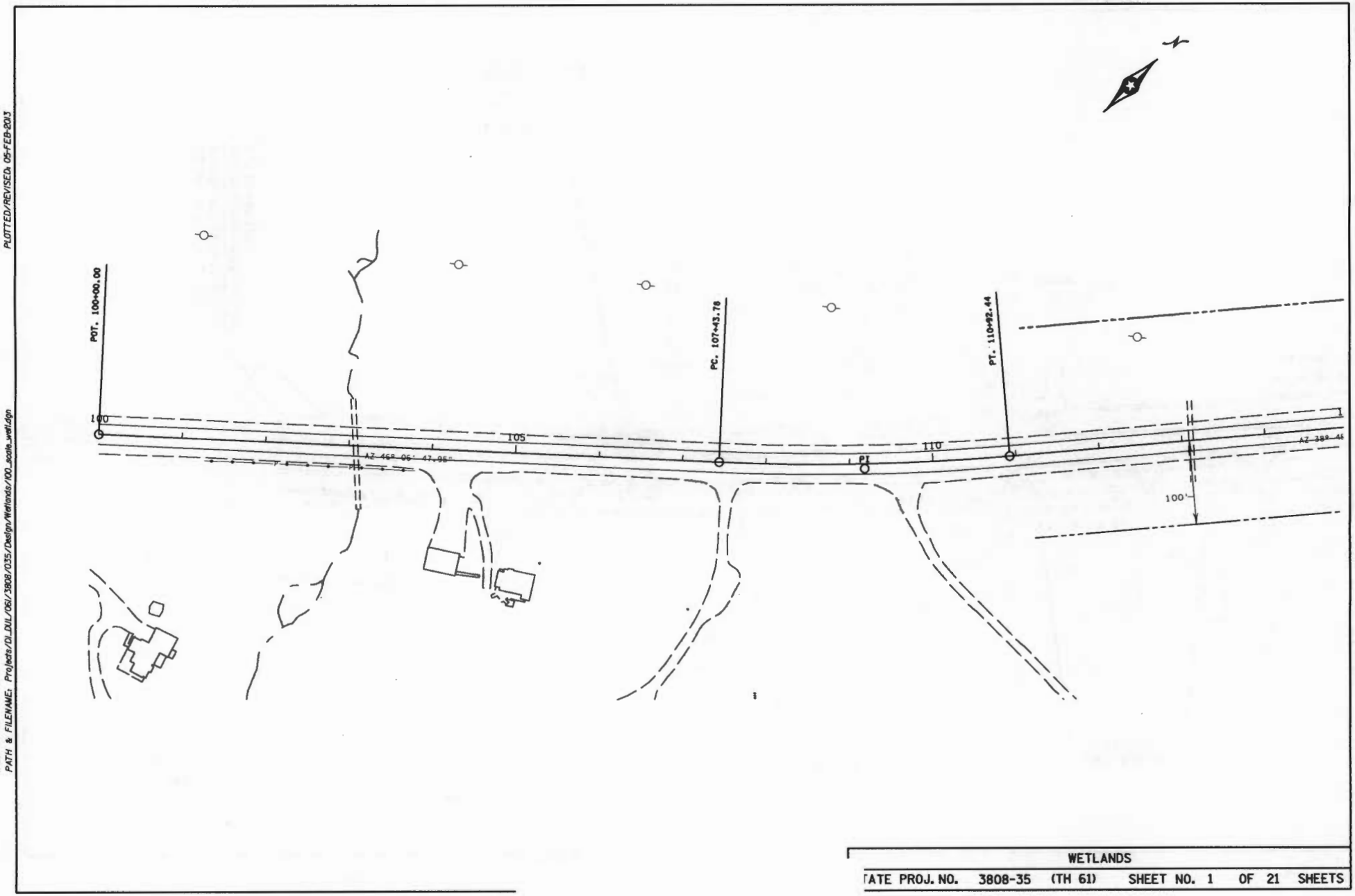
Map by: bpt
Projection: NAD83 UTM15N
Source: MnDNR, SEHInc
Background: USGS 100k

Project Area Map

TH 61 Reconstruction - Little Marais
Lake County, Minnesota

Figure 2

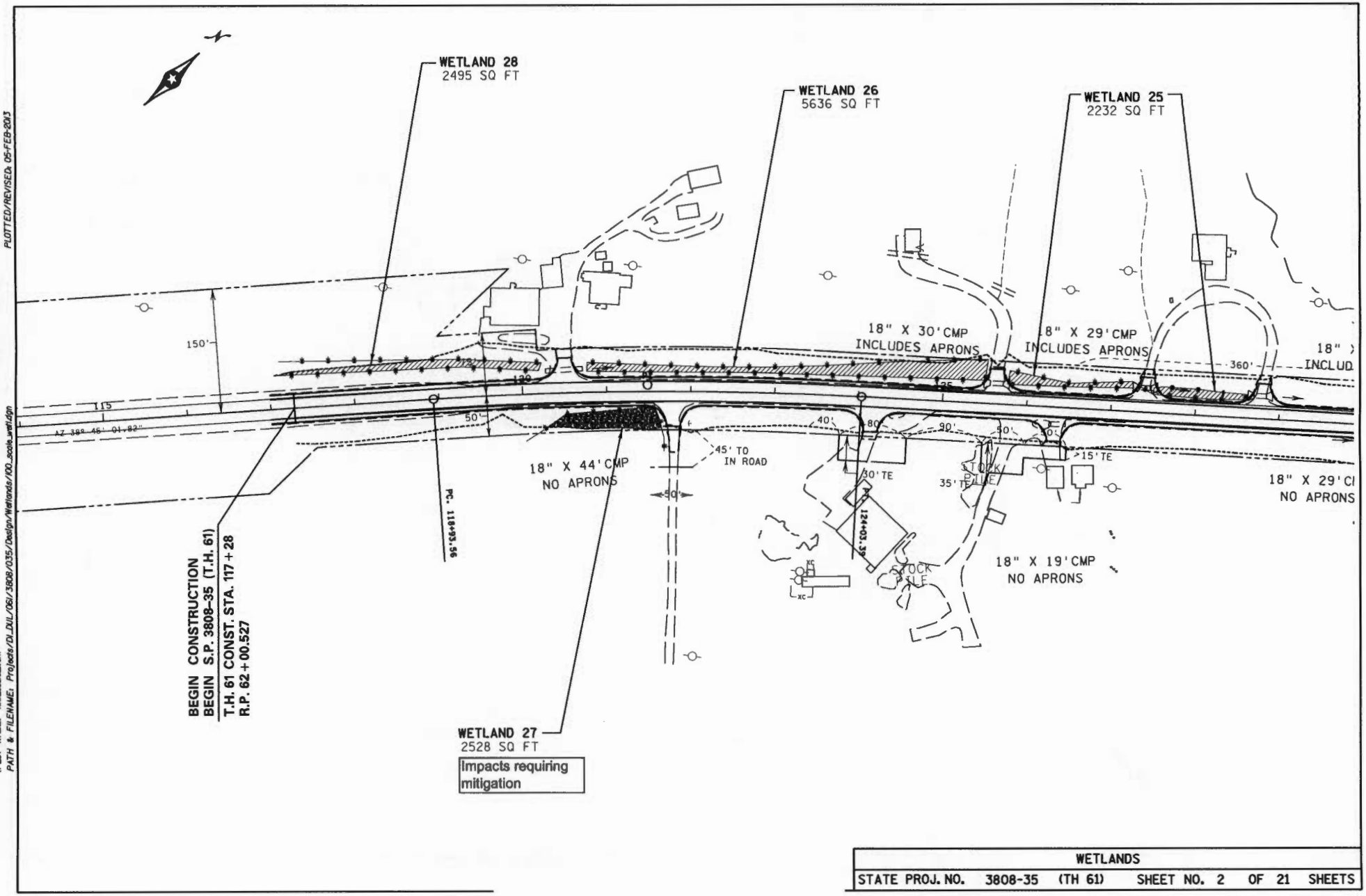
This map is neither a legally recorded map nor a survey map and is not intended to be used as one. This map is a compilation of records, information, and data gathered from various sources listed on this map and is to be used for reference purposes only. SEH does not warrant that the Geographic Information System (GIS) Data used to prepare this map are error free, and SEH does not represent that the GIS Data can be used for navigational, tracking, or any other purpose requiring exacting measurement of distance or direction or precision in the depiction of geographic features. The user of this map acknowledges that SEH shall not be liable for any damages which arise out of the user's access or use of data provided.



WETLANDS

STATE PROJ. NO. 3808-35 (TH 61) SHEET NO. 1 OF 21 SHEETS

2012-04559-LED
Drawing 2 of 24



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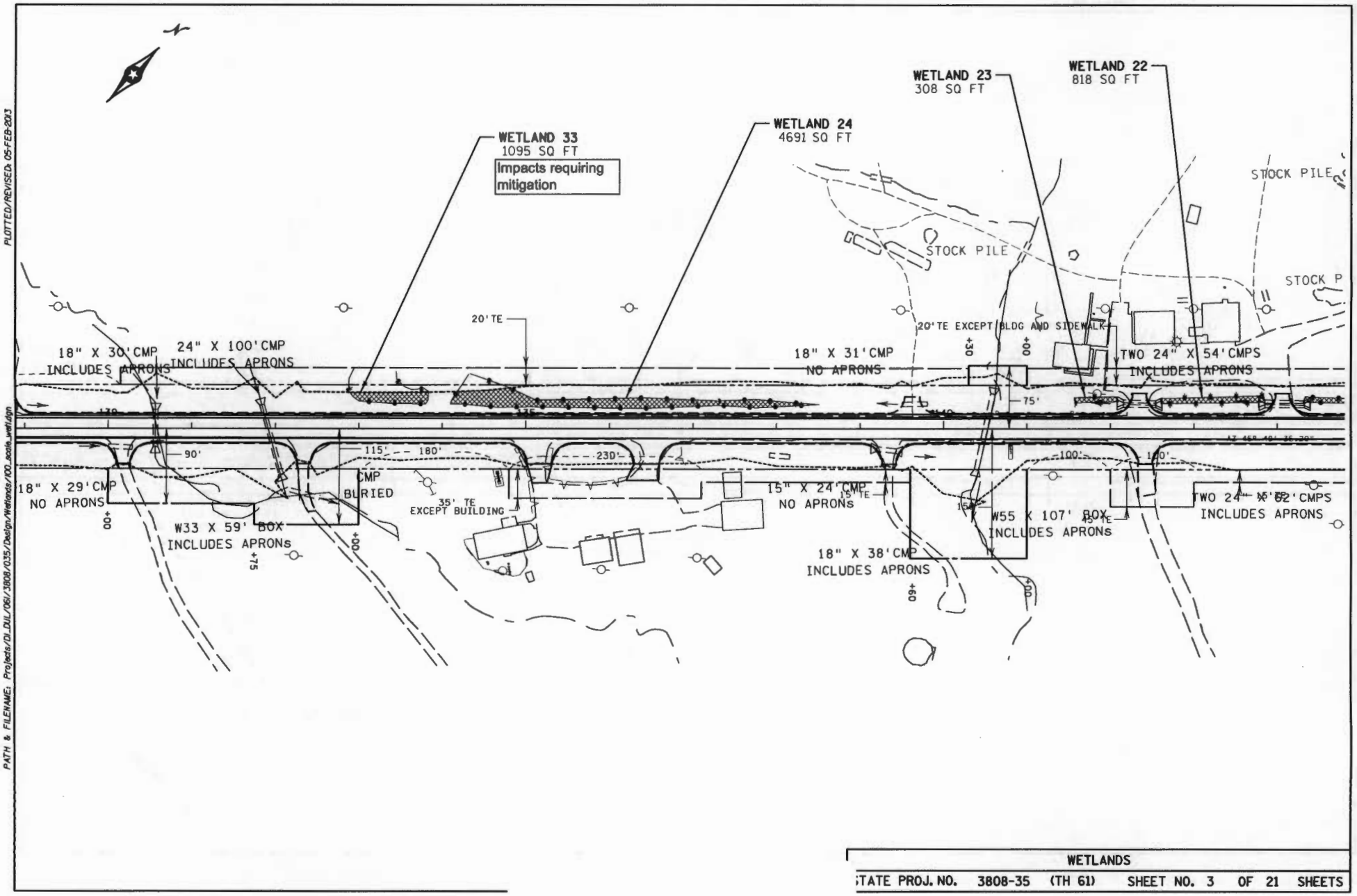

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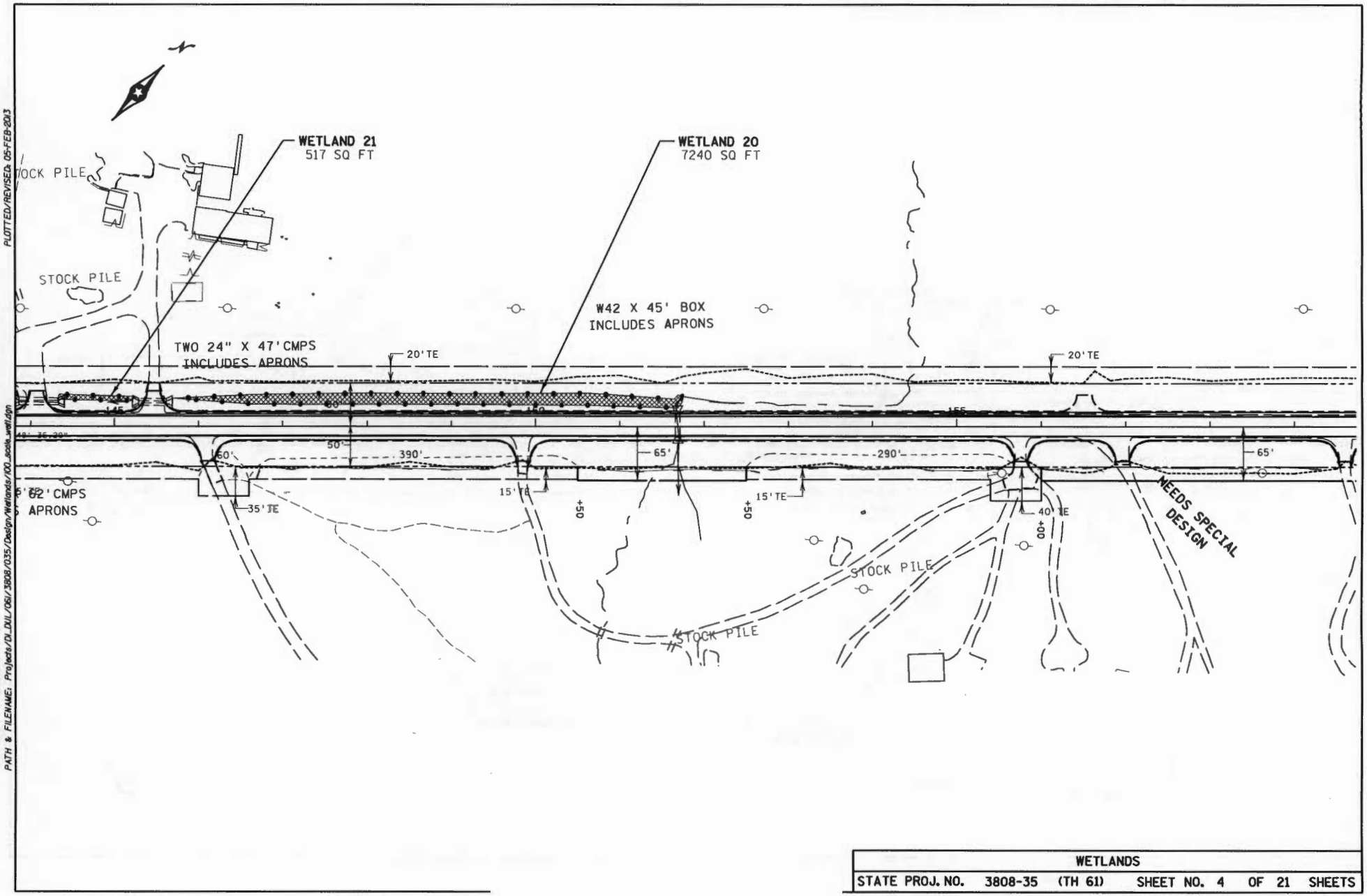

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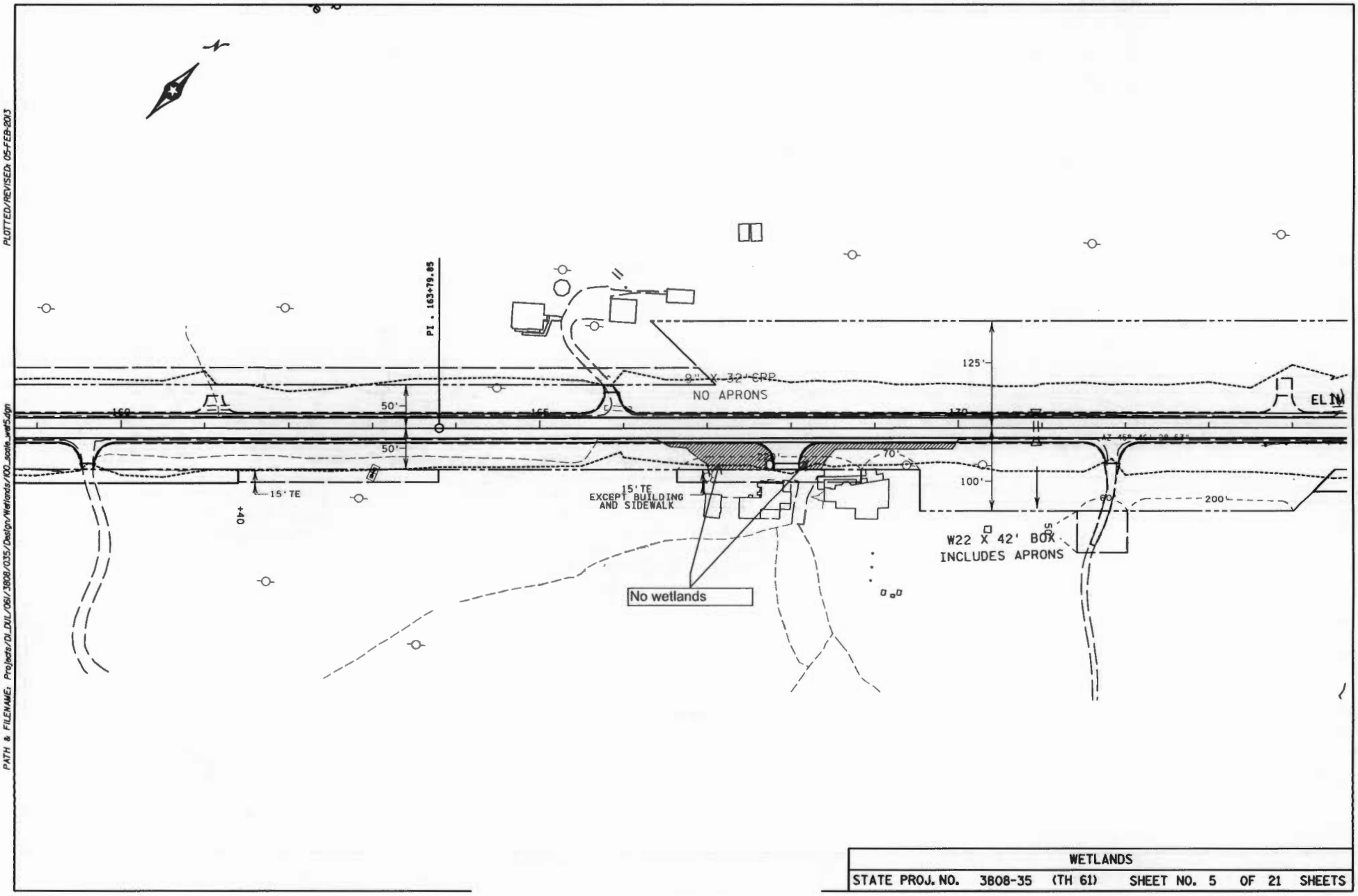
Drawing 5 of 24



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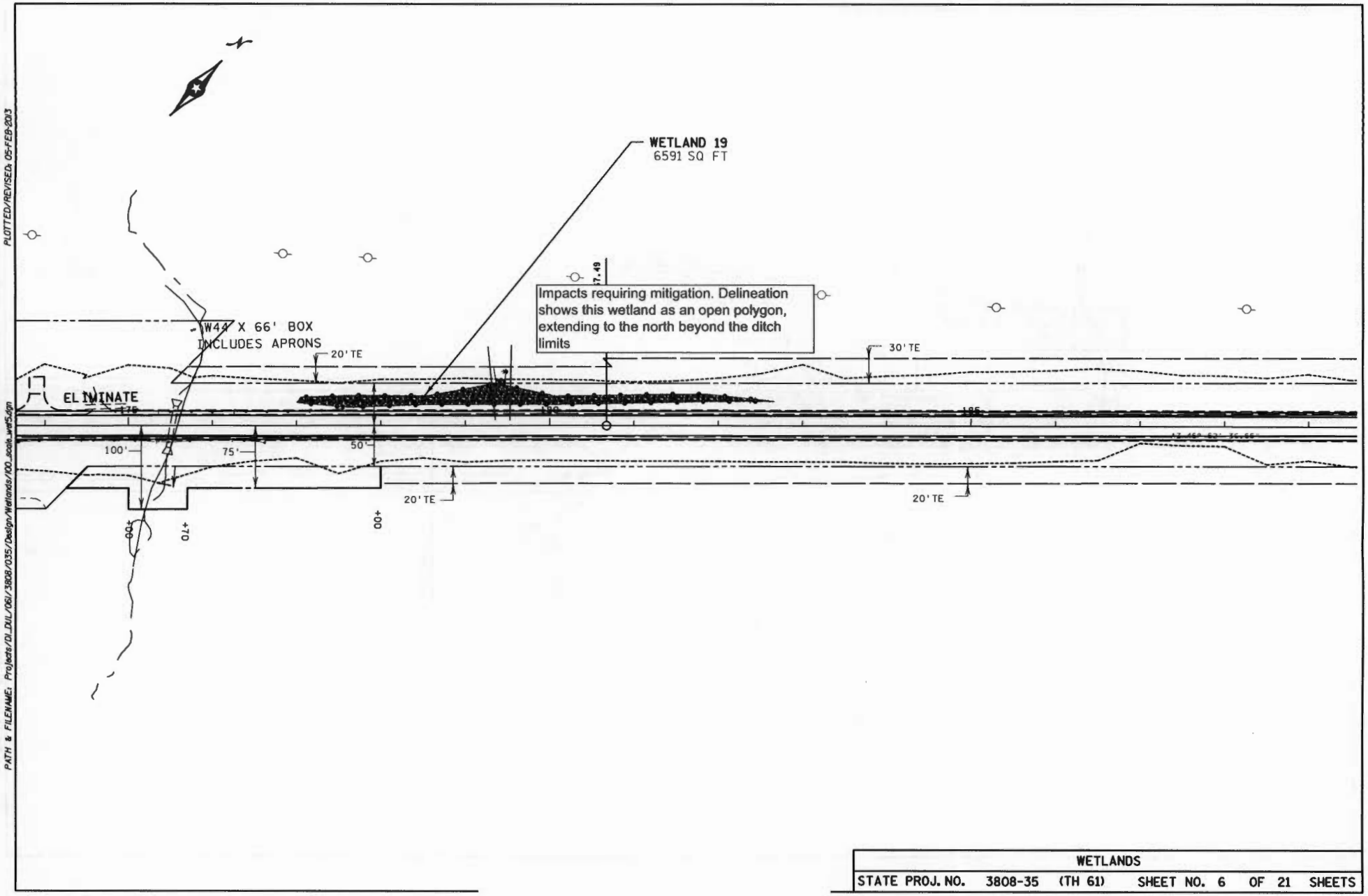

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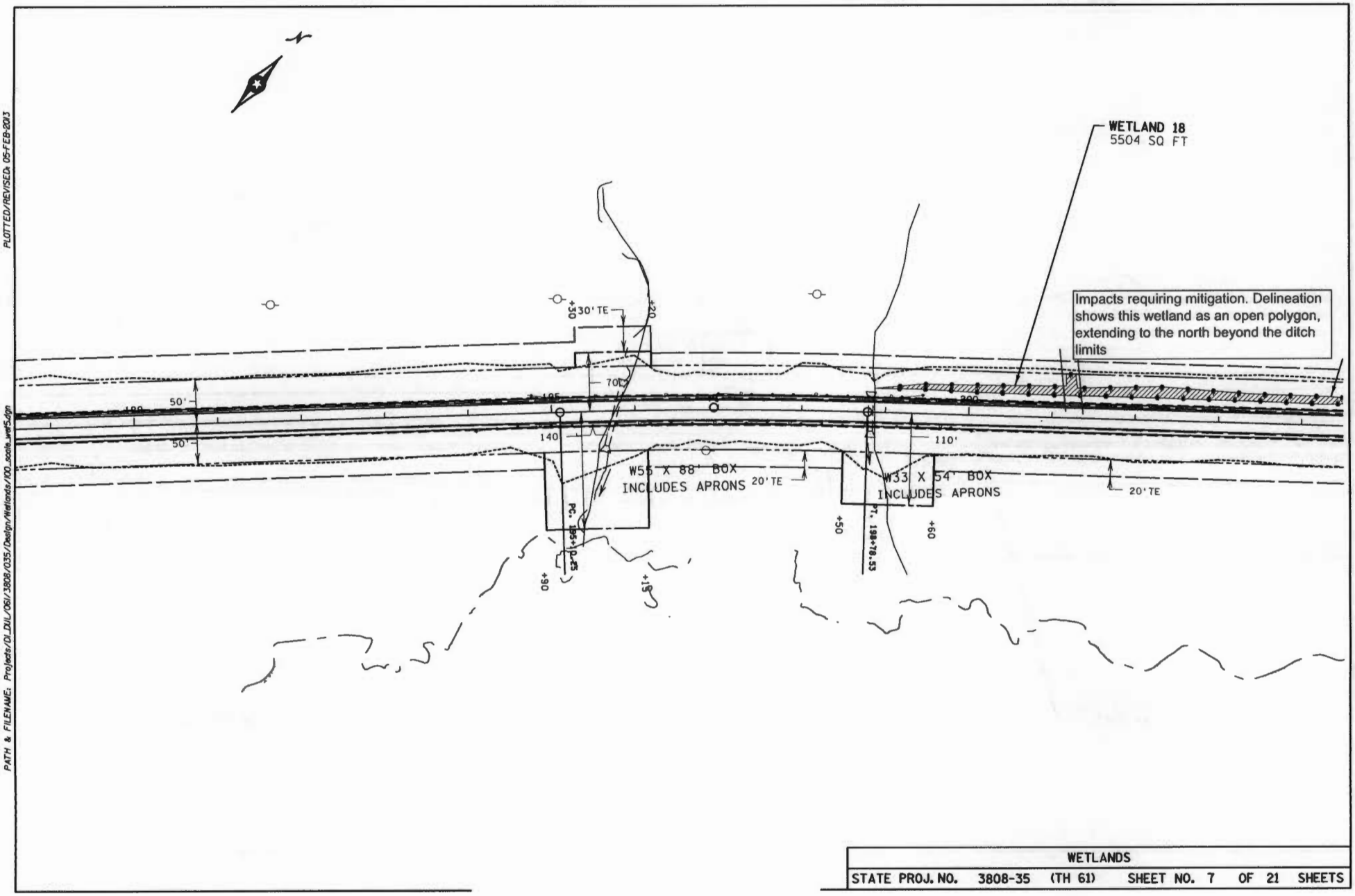

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PLOTTED/REVISED: 05-FEB-2013

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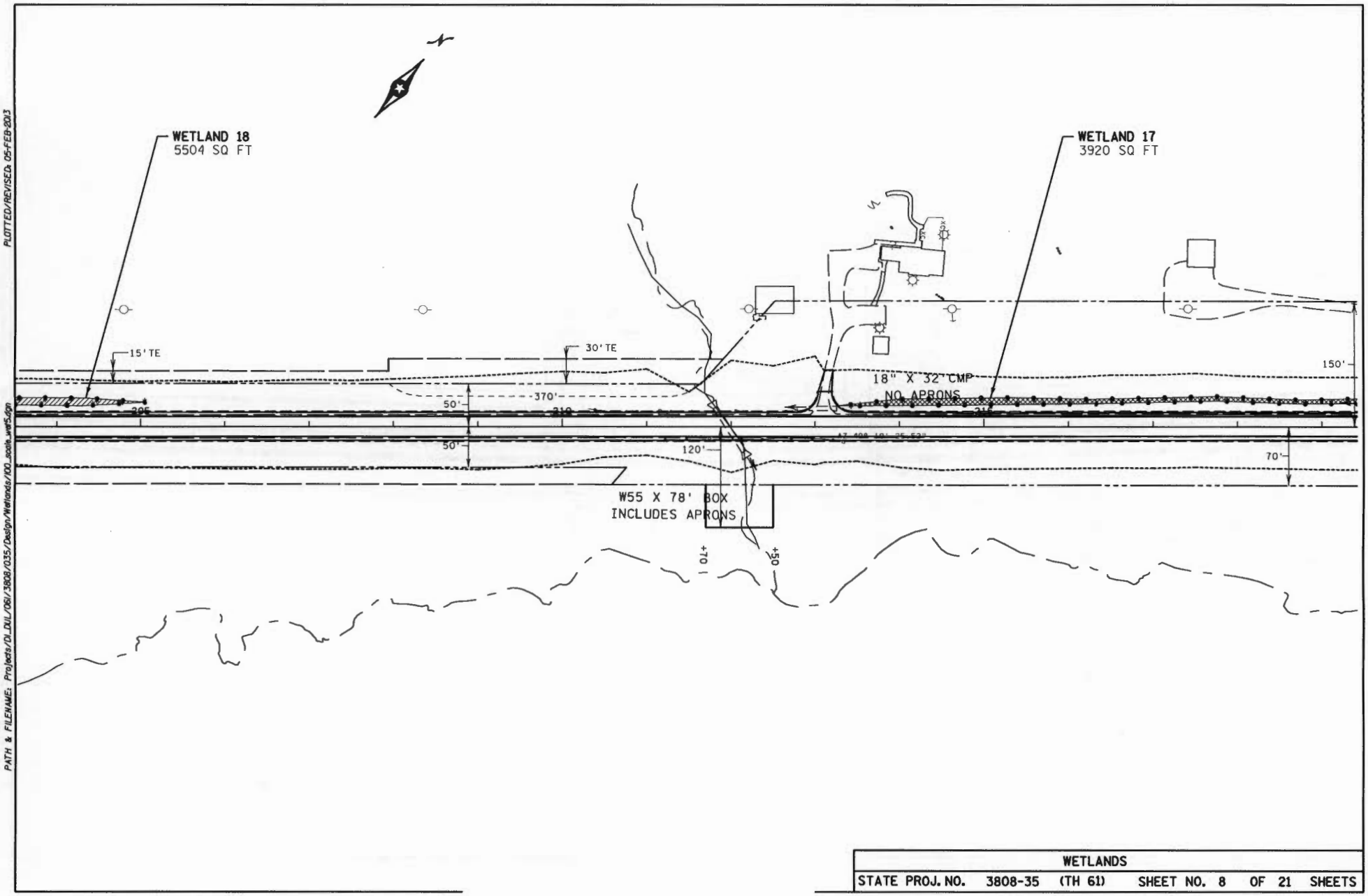

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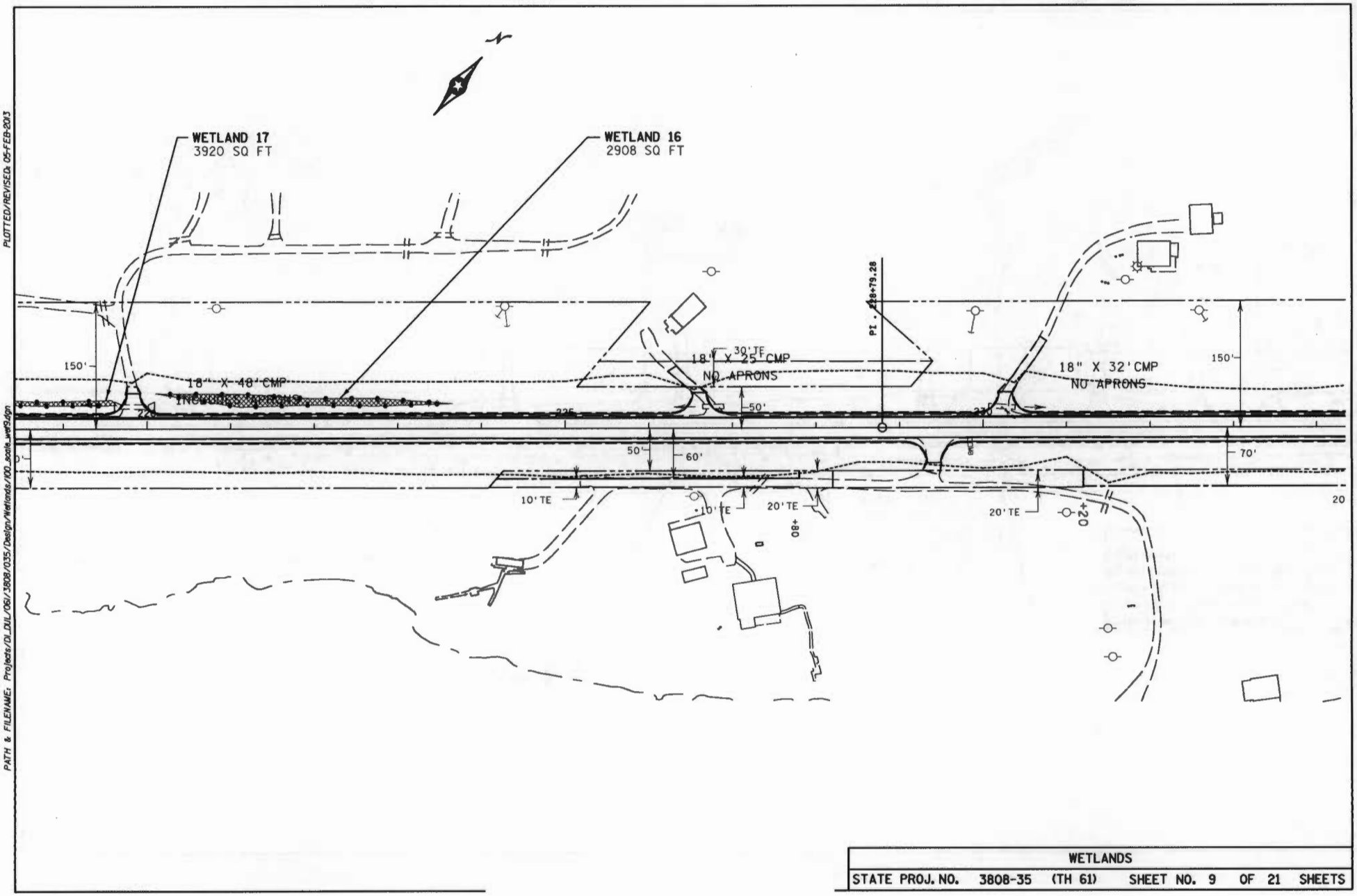

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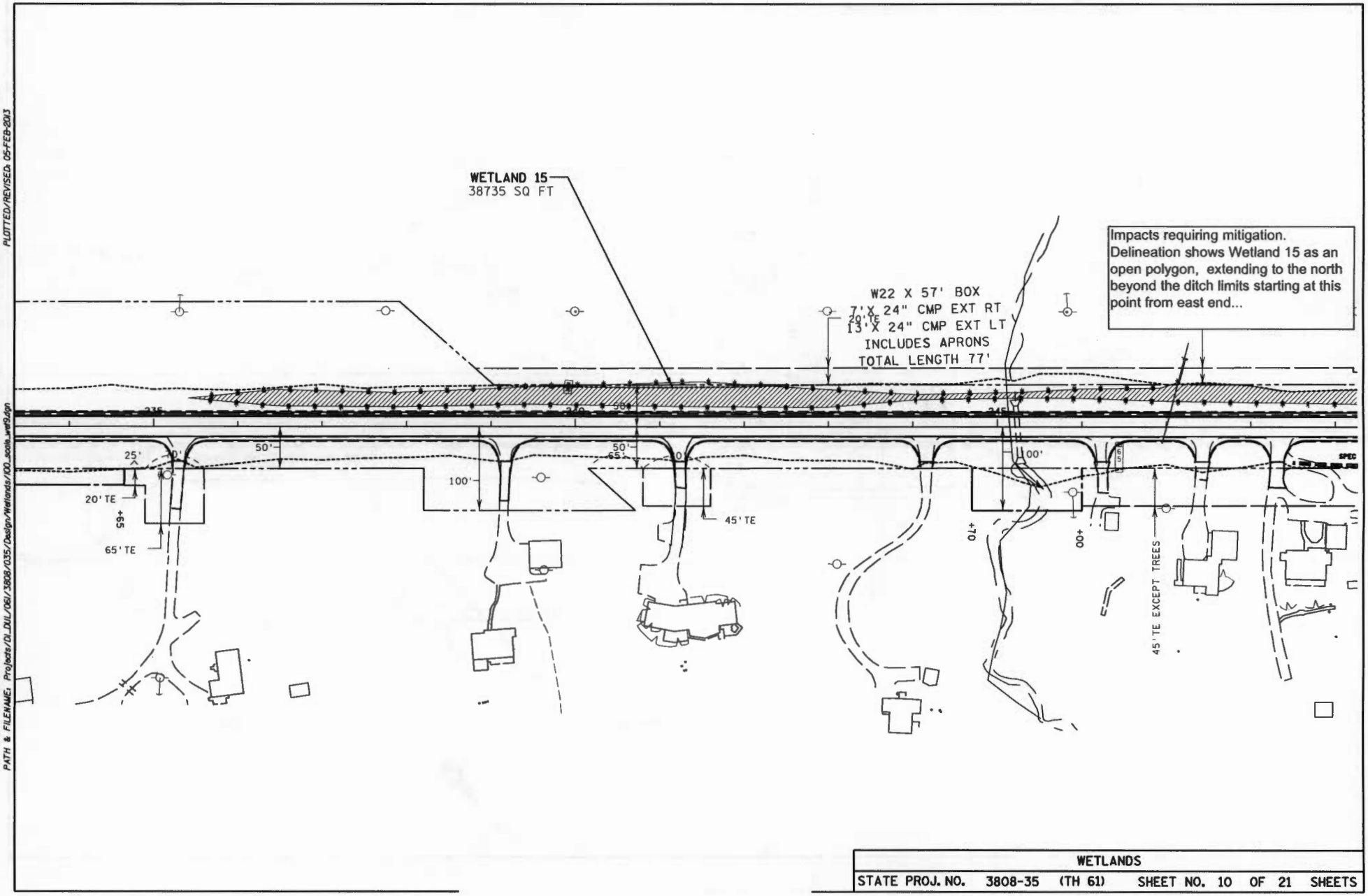

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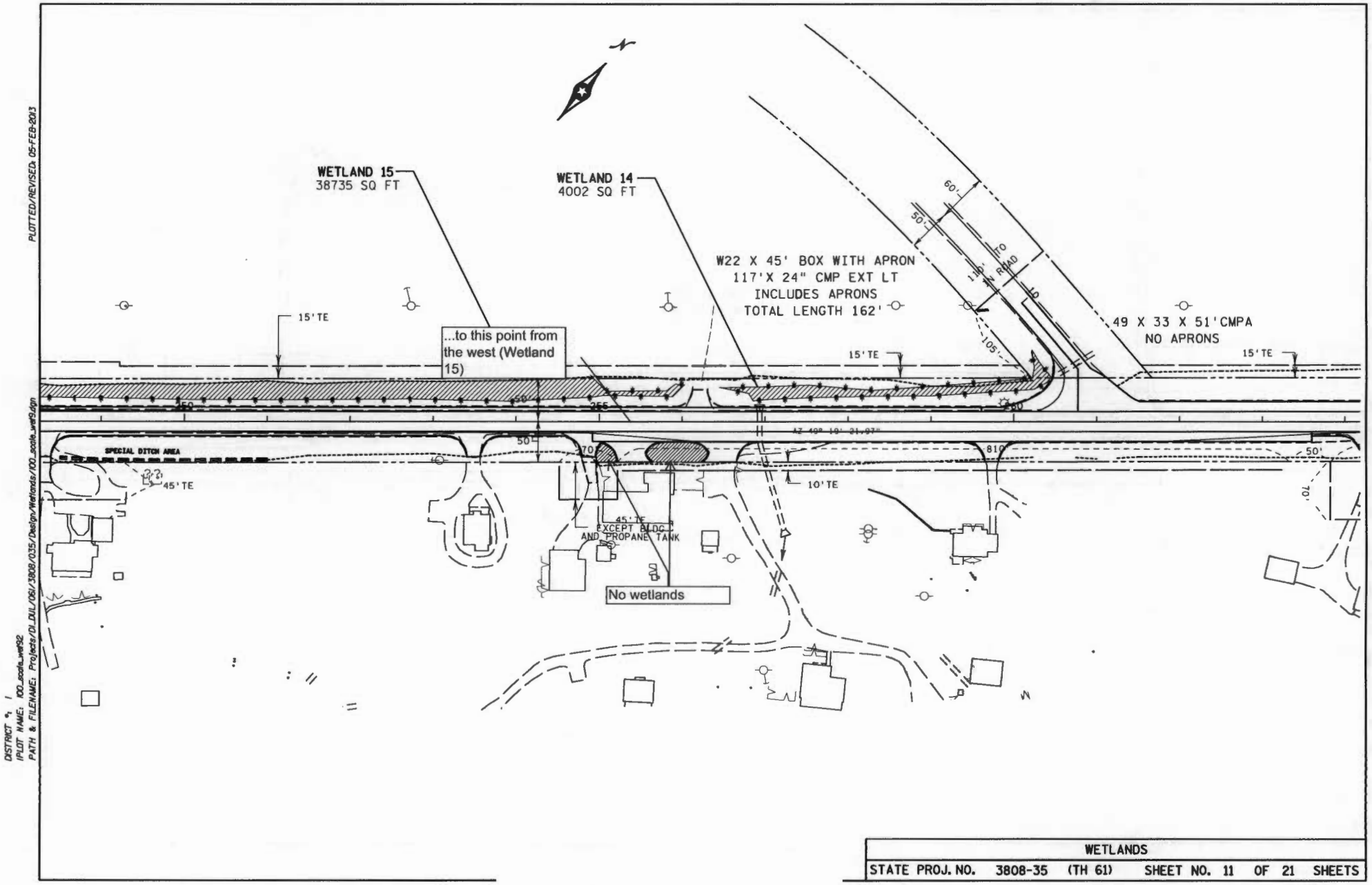

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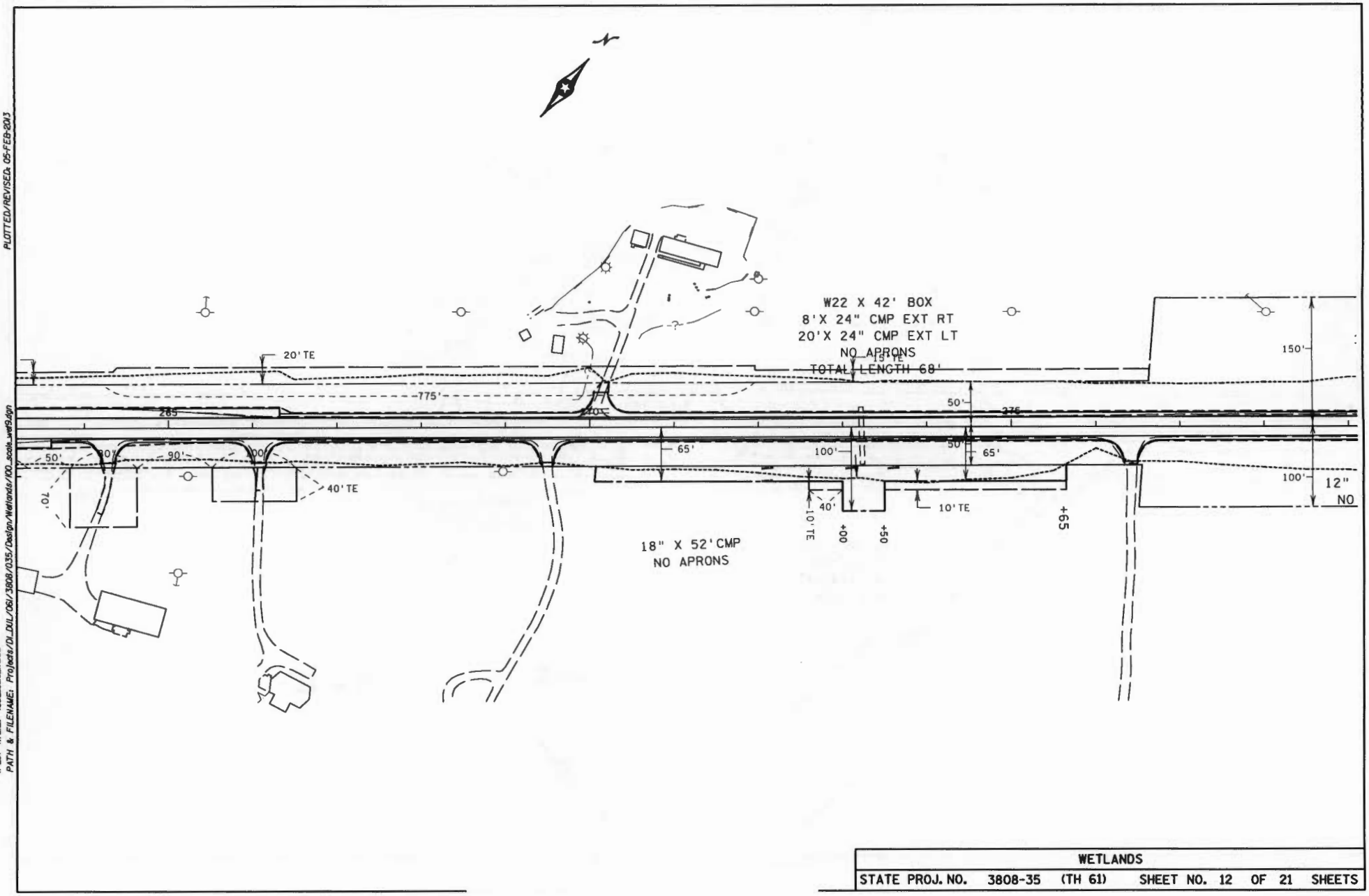

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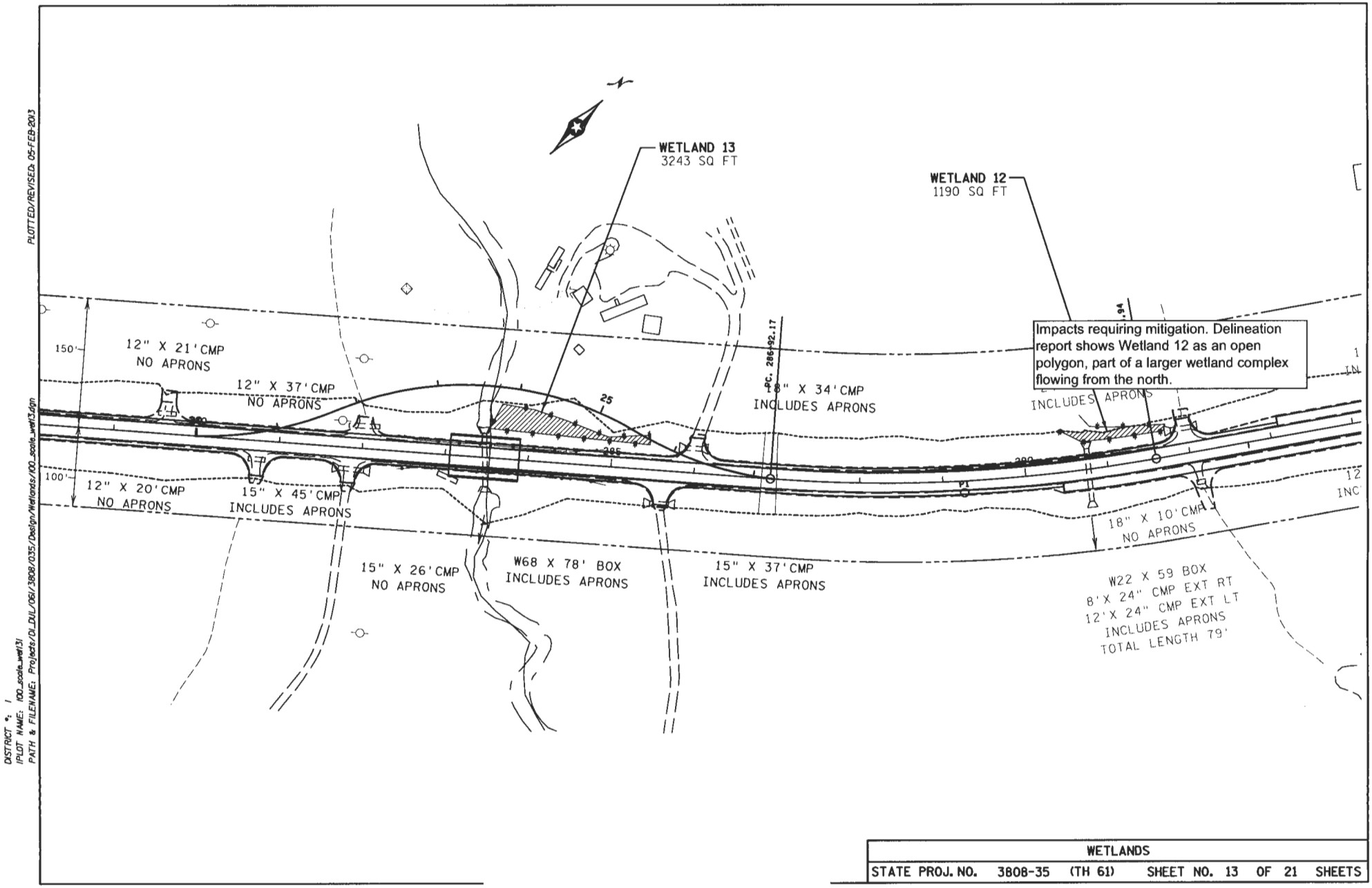

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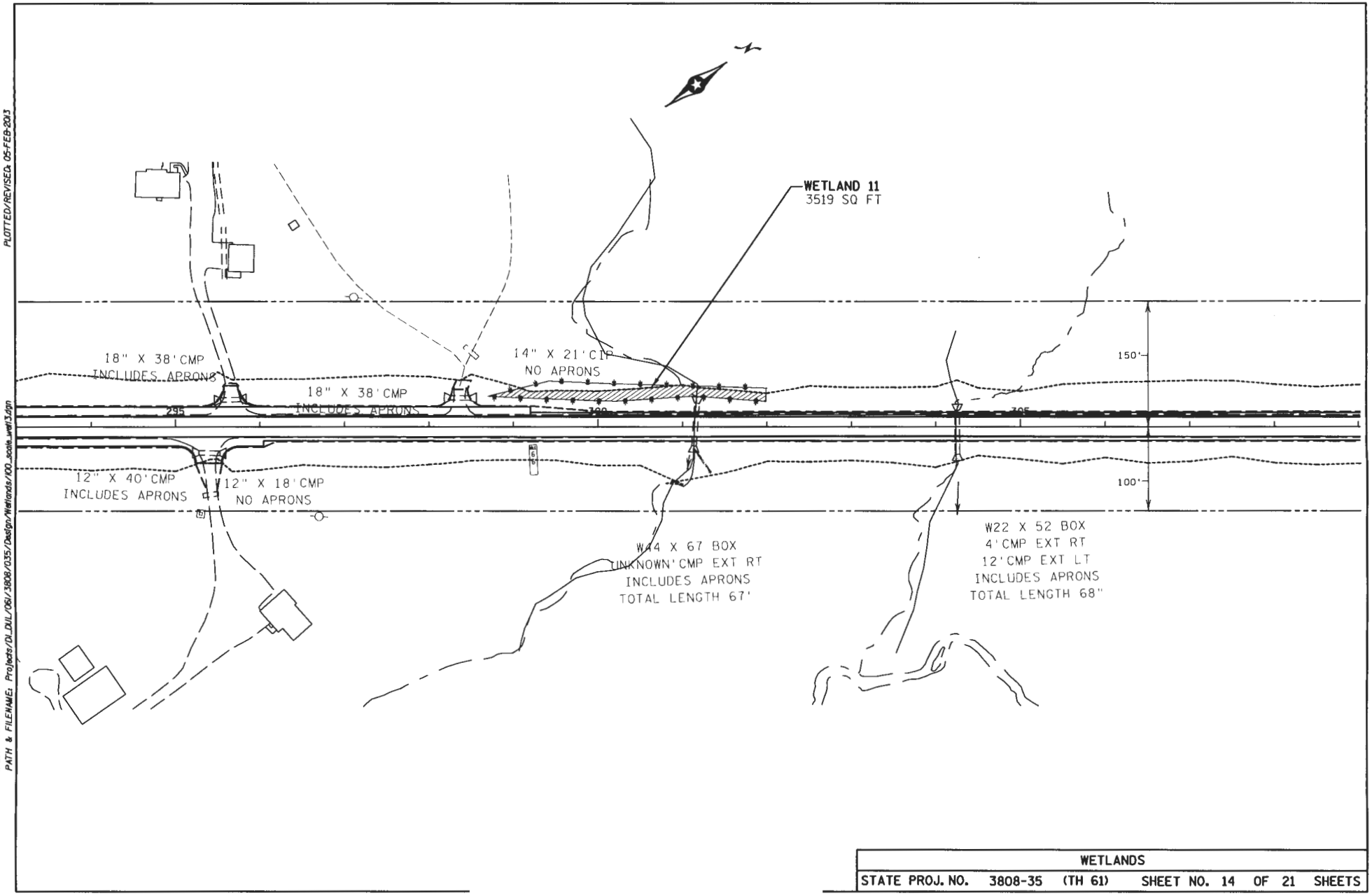

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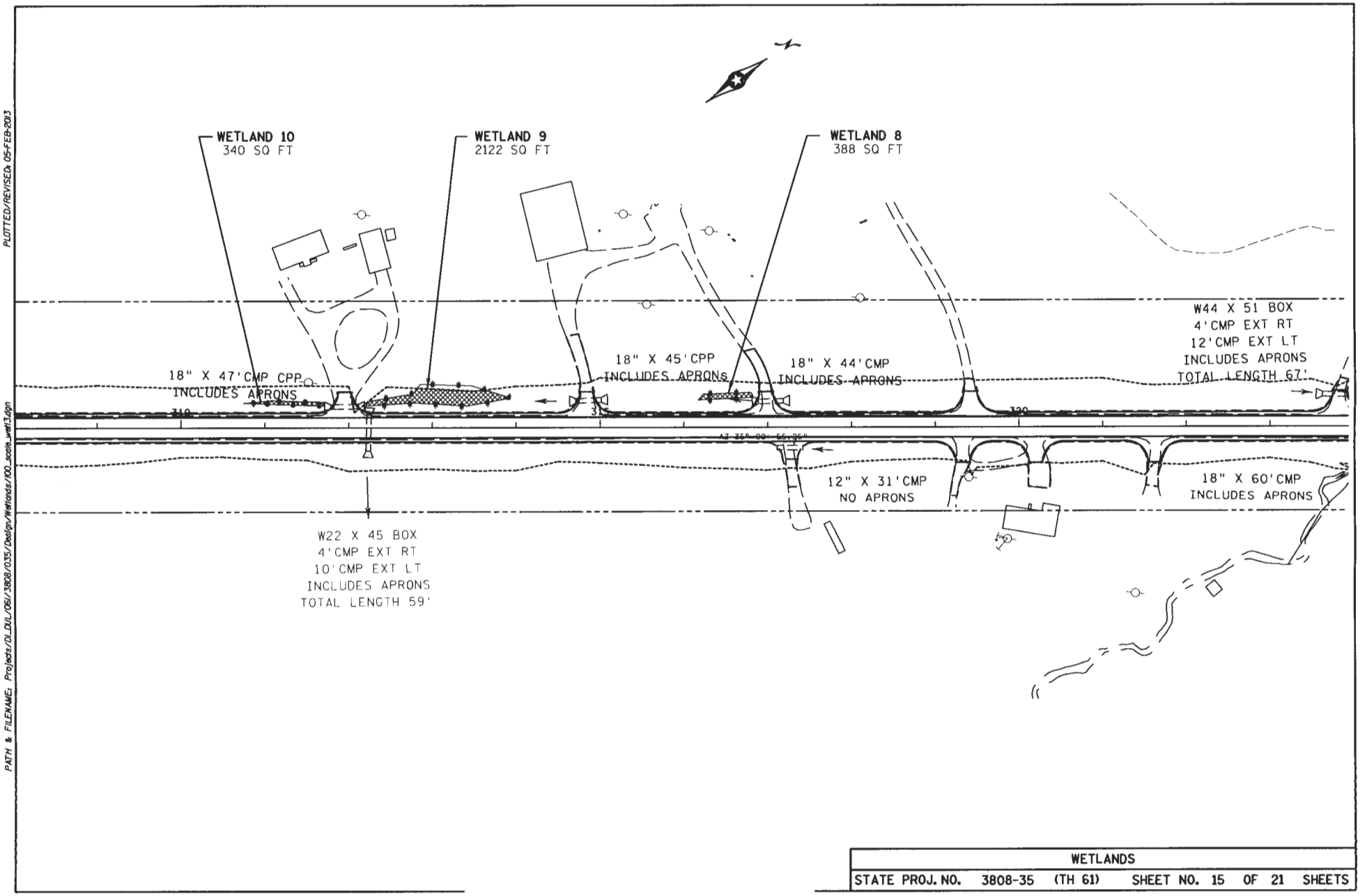

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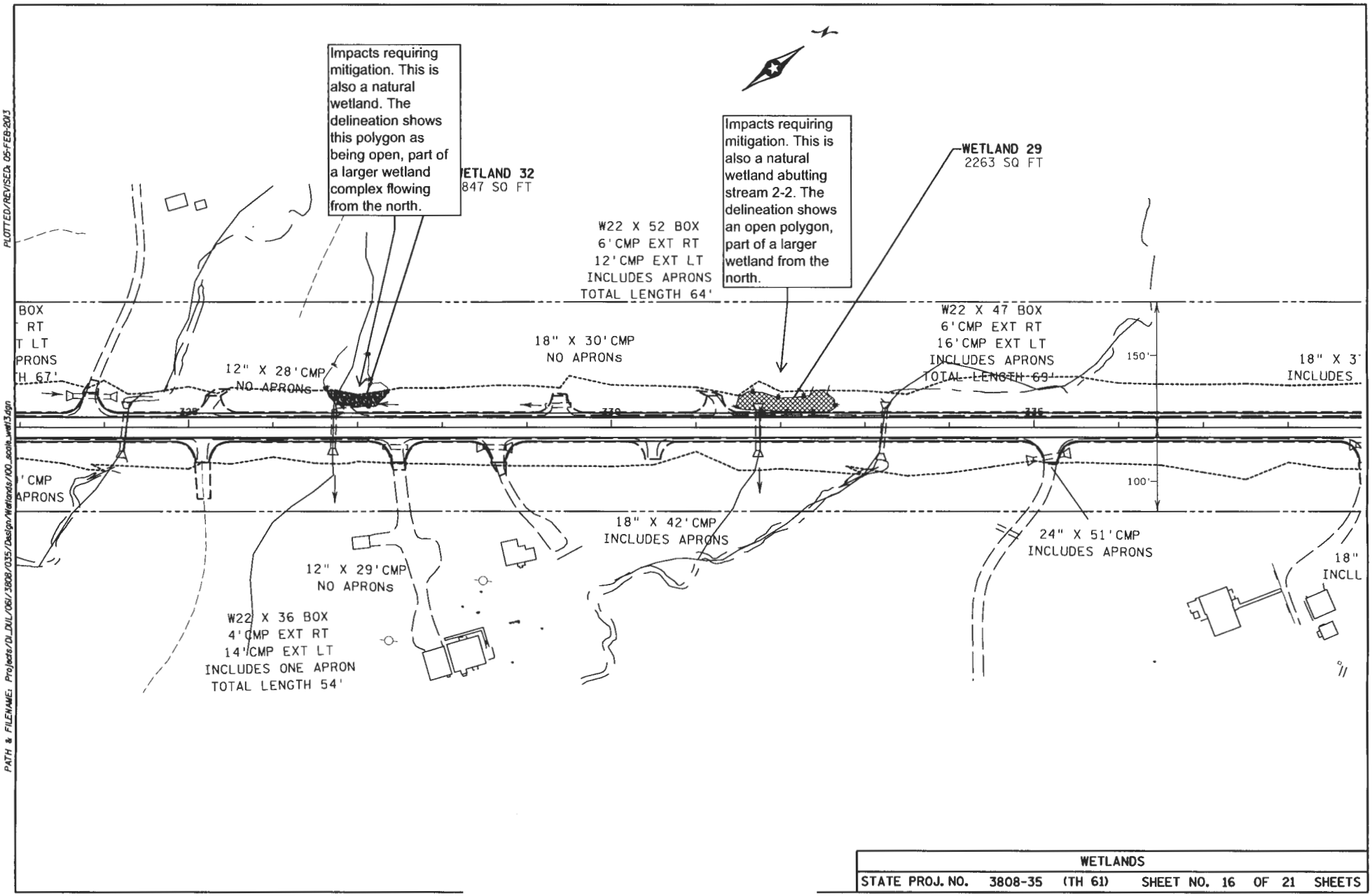

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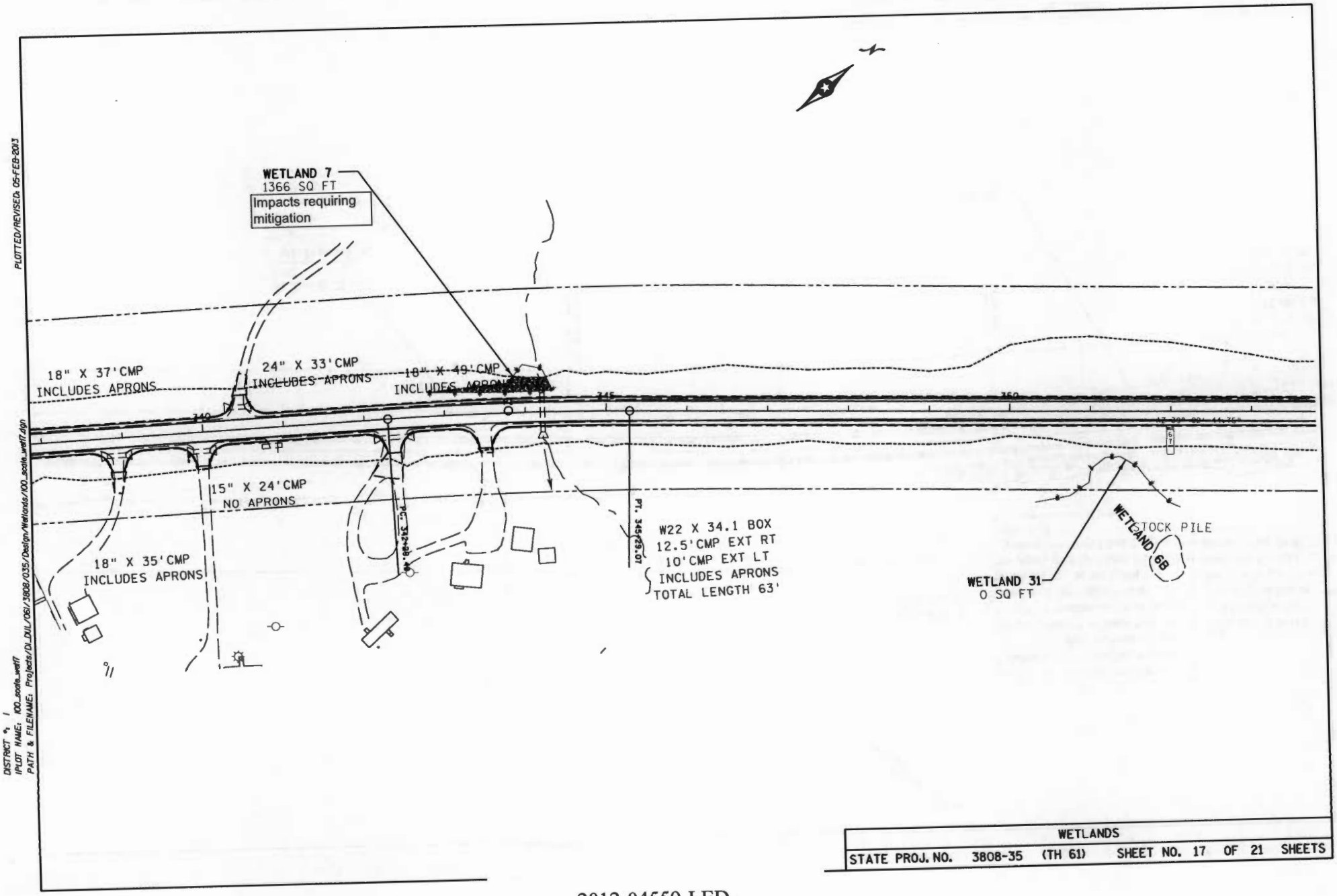

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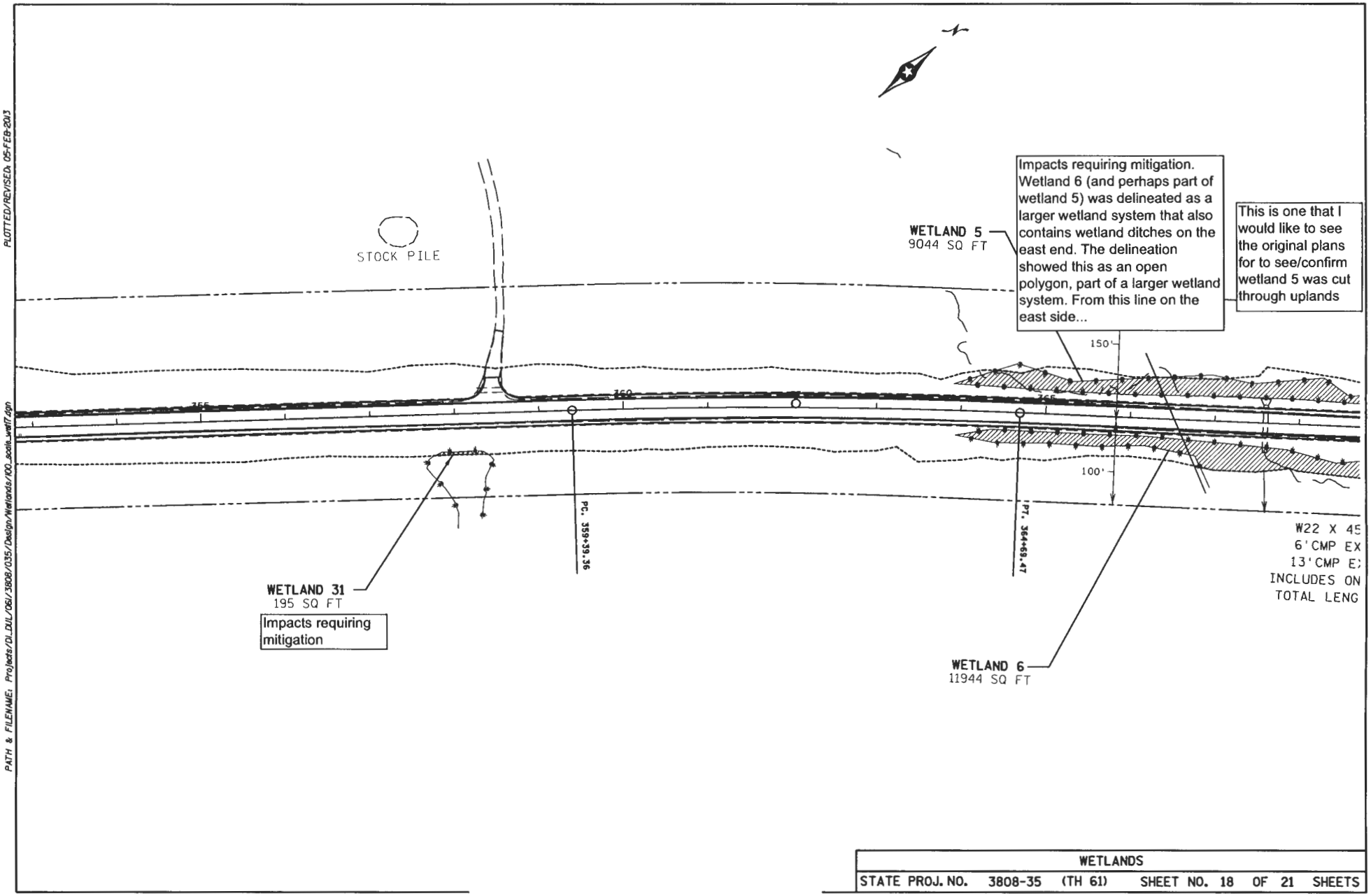

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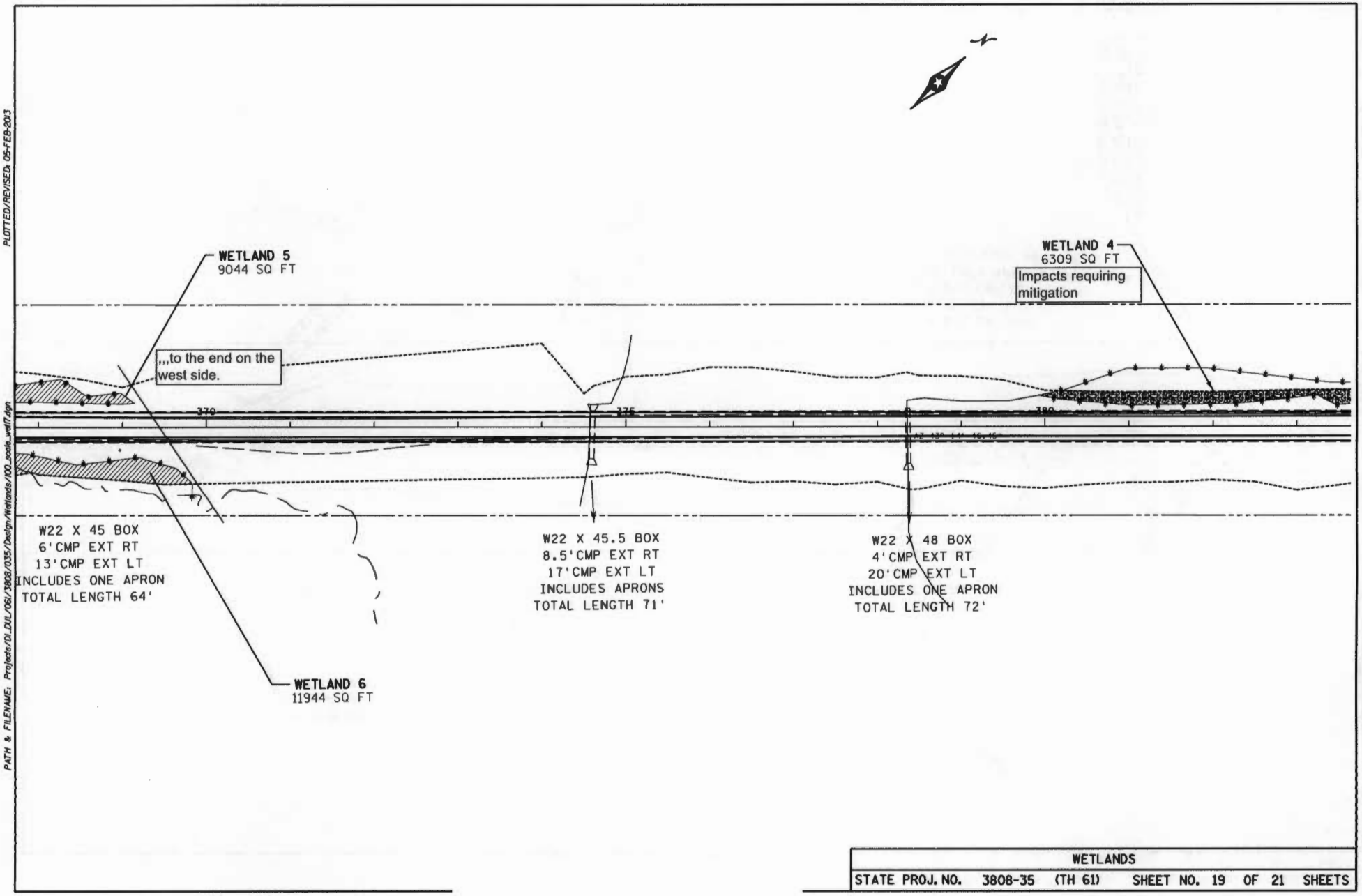

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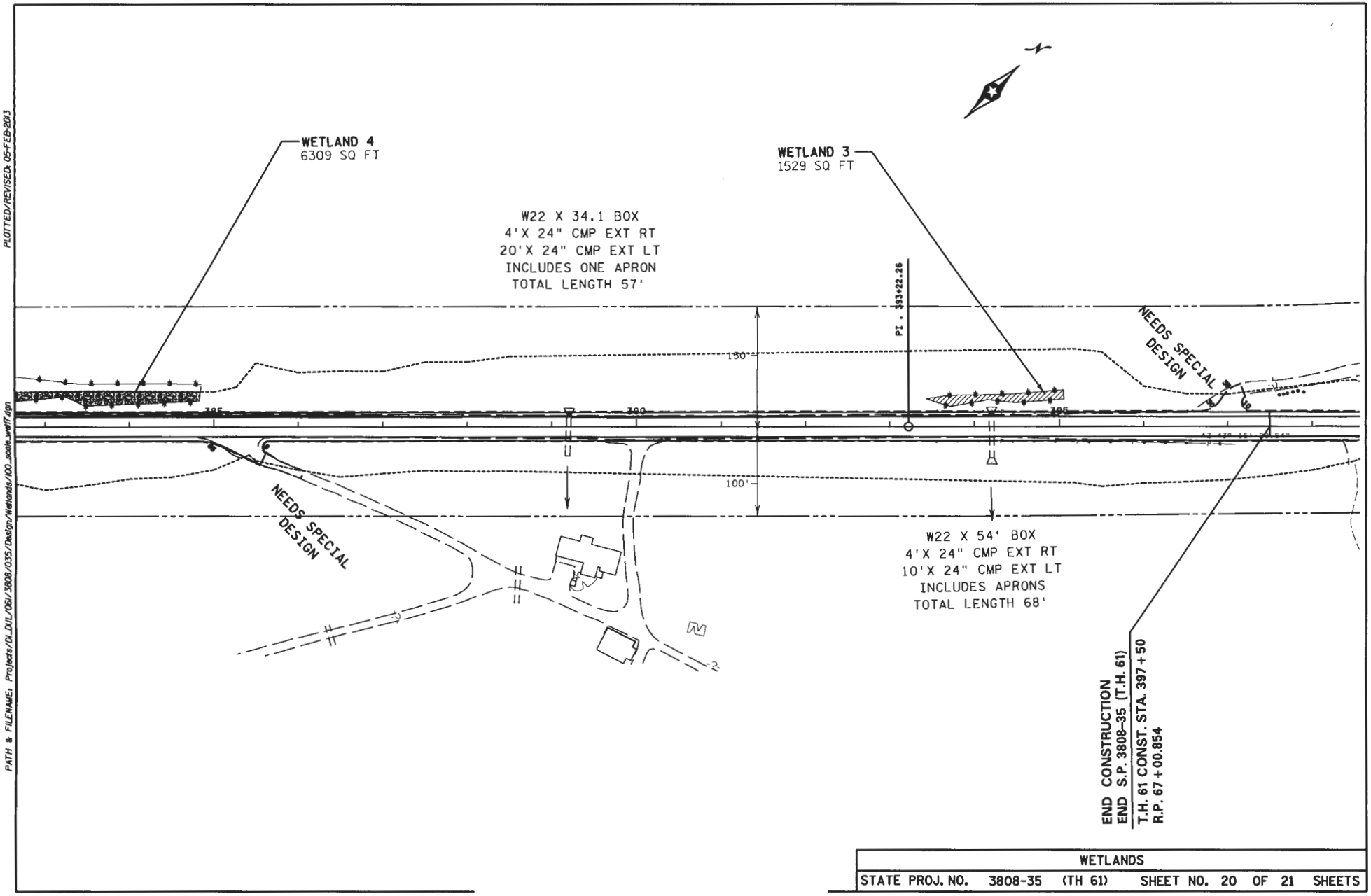

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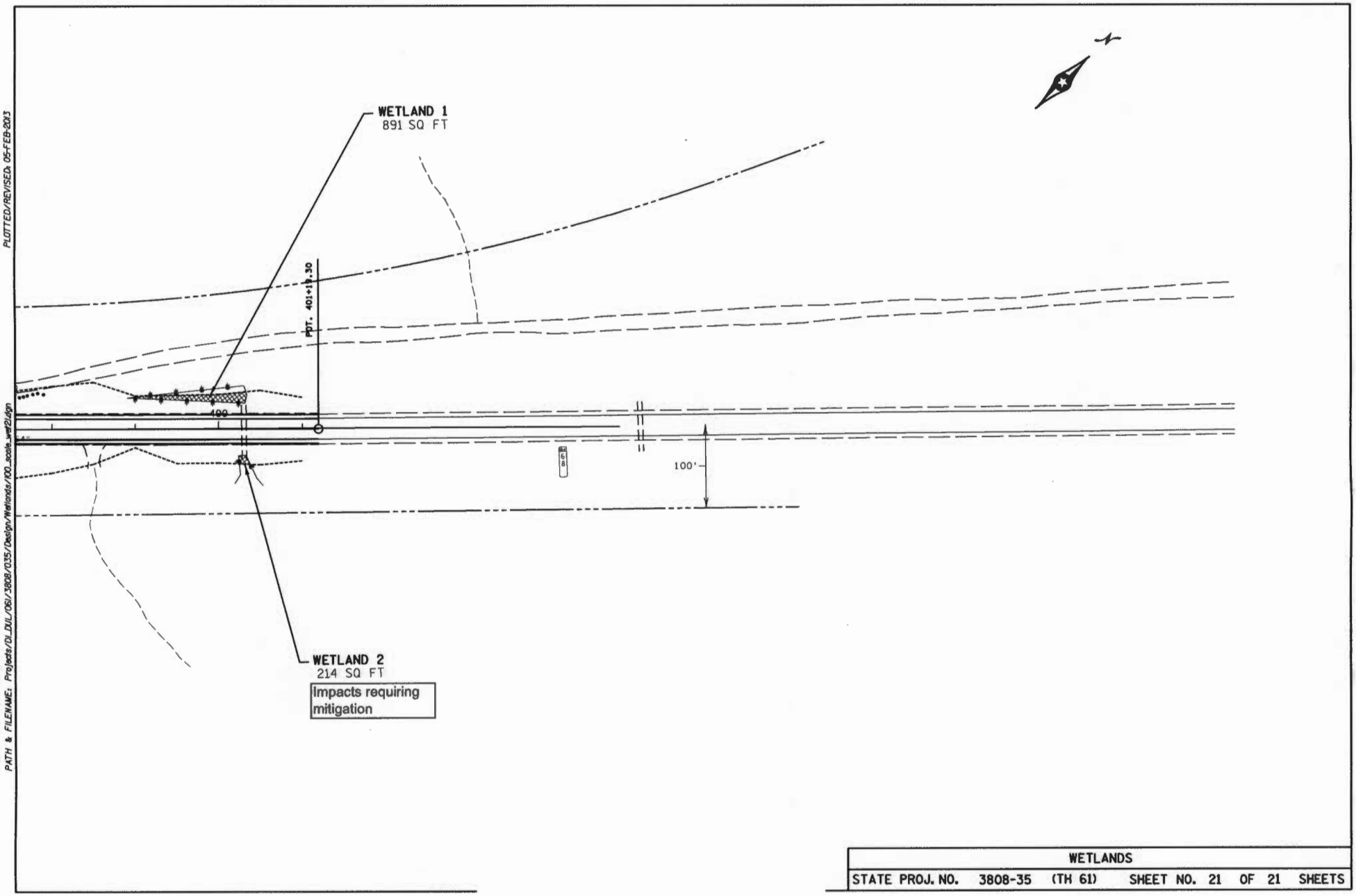

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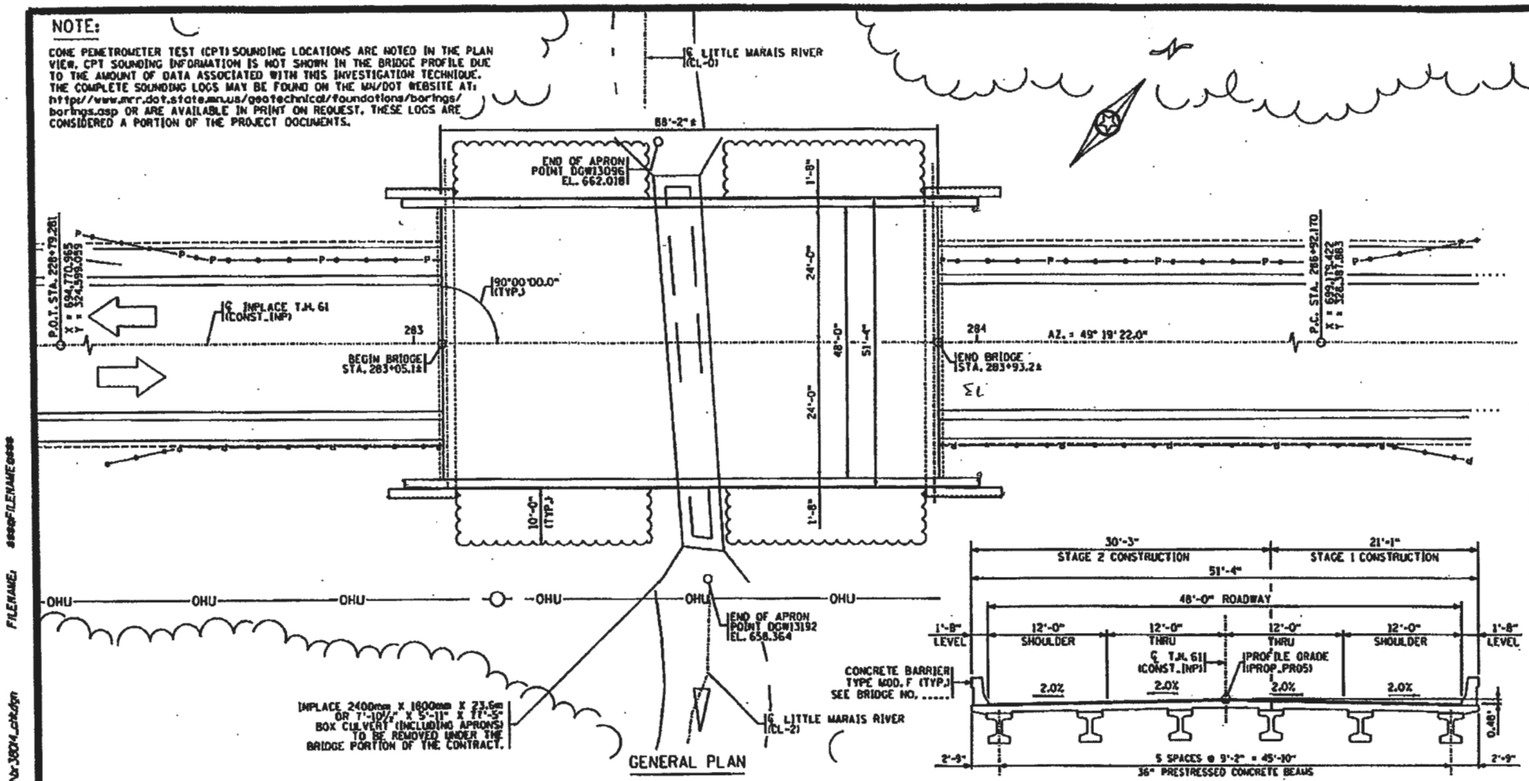
WETLANDS							
STATE PROJ. NO.	3808-35	(TH 61)	SHEET NO.	21	OF	21	SHEETS

NOTE:

CONE PENETROMETER TEST (CPT) SOUNDING LOCATIONS ARE NOTED IN THE PLAN VIEW. CPT SOUNDING INFORMATION IS NOT SHOWN IN THE BRIDGE PROFILE DUE TO THE AMOUNT OF DATA ASSOCIATED WITH THIS INVESTIGATION TECHNIQUE. THE COMPLETE SOUNDING LOGS MAY BE FOUND ON THE MN/DOT WEBSITE AT: http://www.mn.dot.state.mn.us/geotechnical/foundations/borings/borings.asp OR ARE AVAILABLE IN PRINT ON REQUEST. THESE LOGS ARE CONSIDERED A PORTION OF THE PROJECT DOCUMENTS.



DESIGN DATA

2012 AND CURRENT INTERIM AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS

LOAD AND RESISTANCE FACTOR DESIGN METHOD

HL93 LIVE LOAD

DEAD LOAD INCLUDES 20 PSF ALLOWANCE FOR FUTURE WEARING COURSE MODIFICATIONS

MATERIAL DESIGN PROPERTIES:
REINFORCED CONCRETE:
f'c = 4 KSI n = 8
fy = 60 KSI REINFORCEMENT
PRESTRESSED CONCRETE:
f'c = 9 KSI n = 1
fpu = 270 KSI LOW RELAXATION STRANDS
0.75 fpu FOR INITIAL PRESTRESS

DESIGN SPEED:
OVER = 60 M.P.H. UNDER = N.A. M.P.H.

APPROXIMATE DECK AREA 4,200 SQ. FT.

2033 PROJECTED TRAFFIC VOLUMES

ROADWAY OVER	ROADWAY UNDER
A.D.T.	N.A.
D.H.V.	N.A.
A.D.T.T.	N.A.

NOTES:

NUMBER AND SPACING OF BEAMS IS APPROXIMATE AND WILL BE SET IN FINAL DESIGN.

TRAFFIC TO BE DETOURED DURING CONSTRUCTION.

HATCHED AREA TO BE REMOVED UNDER BRIDGE PORTION OF CONTRACT.

SEE SHEET 2 FOR INPLACE UTILITIES.

RIPRAP IN GRADING PORTION WILL TIE TO RIPRAP EXTENT SHOWN IN BRIDGE PLAN.

APPROXIMATELY ___ SQ. FT. OF WATERWAY IS AVAILABLE BELOW EL. ____

BRIDGE APPROACH PANEL LAYOUT STANDARDS FIG. 5-297.224 & 5-297.225 APPLY.

PROPOSED TYPE OF STRUCTURE

DECK:
36" PRESTRESSED CONCRETE BEAMS
SEPARATE CONCRETE WEARING COURSE
SIMPLE SPAN
ALL BARS EPOXY COATED

SUBSTRUCTURE:
INTEGRAL ABUTMENTS SUPPORTED ON

AESTHETICS:
LEVEL B

MINNESOTA DEPARTMENT OF TRANSPORTATION

PRELIMINARY PLAN
BRIDGE NO. 38014

T.H. 61 OVER LITTLE MARAIS RIVER
0.43 MILES NORTH OF THE JUNCTION OF C.S.A.H. 6

SEC. 16 TWP. 57 N. R. 6 W.
UNORGANIZED TWP. LAKE CO.

DATE: _____

NOT FINAL

STATE BRIDGE ENGINEER

ROAD DESIGN UNIT: TODD CAMPBELL 218-725-2744
BRIDGE DESIGN UNIT: PAUL KETTLESON 651-366-4562

EXISTING GROUND PROFILE
35' LT. ----------
℄ T.H. 61 ----------
35' RT. ----------

DEPTH OF STRUCTURE:
4'-0" GUTTER TO LOW BRIDGE
36" P.C.B. 6± LINES

JOB NO. T14475 | MINNESOTA PROJECT NO. - | STATE PROJECT NO. 3808-38014 (T.H. 61 = 001) | SHEET NO. 1 OF 5 SHEETS | 38014 | L.O.A.

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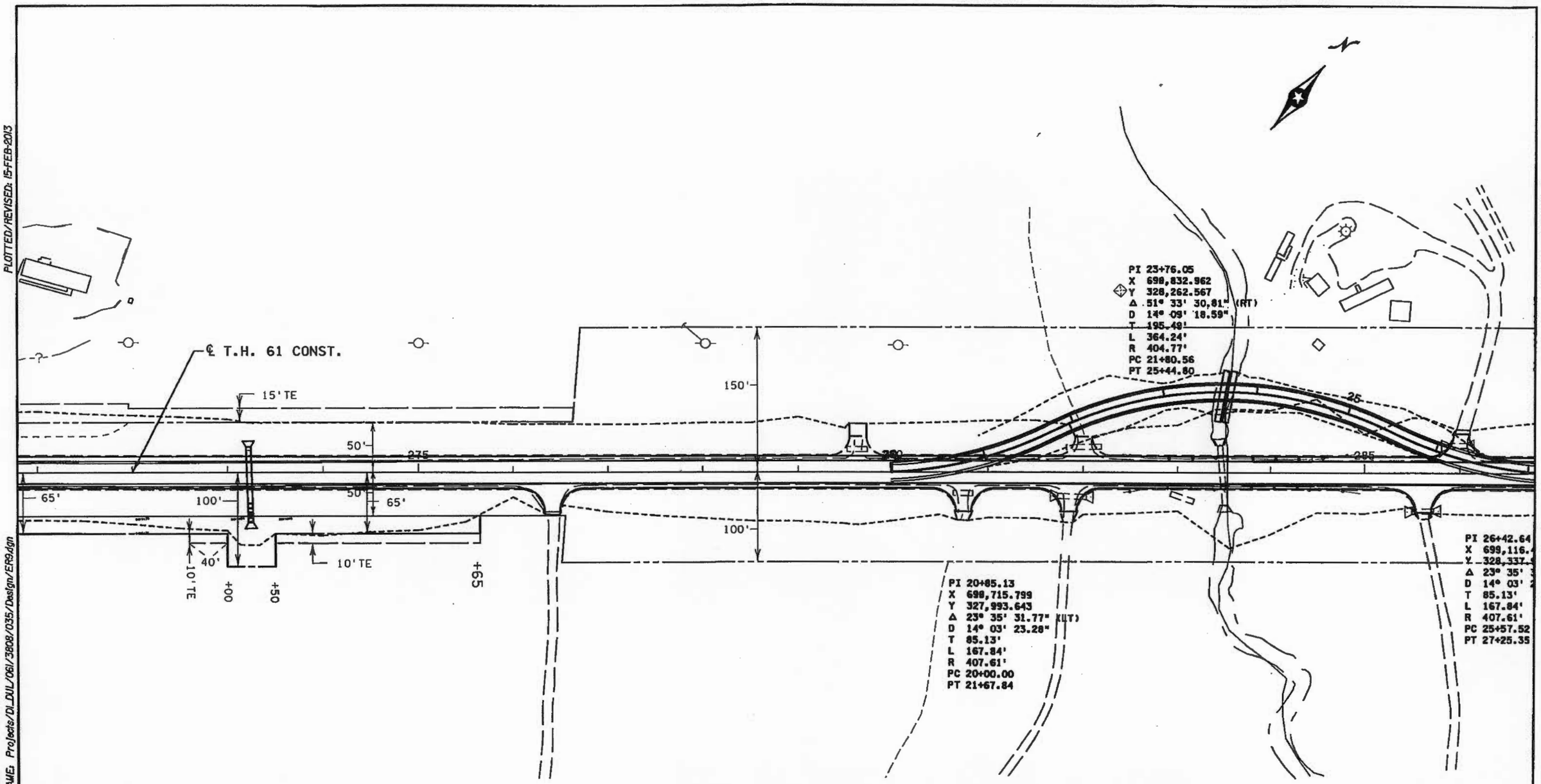

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EROSION CONTROL					
STATE PROJ. NO.	3808-35	(TH 61)	SHEET NO.	OF	SHEETS

PLOTTED/REVISED: 15-FEB-2013

DISTRICT #: 1
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