



US Army Corps
of Engineers
St Paul District

Public Notice

APPLICANT: Lon Aune
Marshall County
Highway Department
REFER TO: 2010-04477-LSP

ISSUED: 27 February 2013
EXPIRES: 29 March 2013

SECTION:404 - Clean Water Act

1. APPLICATION FOR PERMIT TO discharge dredged and fill material into approximately 29.01 acres of unnamed wetlands for the reconstruction of 14.08 miles of County State Aid Highway (CSAH) 6 from the NW corner of Sec.8, T.157N., R.46W., to the NE corner of Sec. 9, T.157N., R.44., Marshall County, Minnesota.

2. SPECIFIC INFORMATION.

APPLICANT'S ADDRESS: Mr. Lon Aune
Marshall County Highway Department
447 South Main
Warren, Minnesota 56762

PROJECT LOCATION:

The project site is located in the following areas:

T157N R44W Sections 4, 5, 6, 7, 8, 9.

T157N R45W Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.

T157N R45W Sections 1, 2, 3, 4, 5, 8, 9, 10, 11, 12.

The approximate decimal degrees for this site begin at Latitude 48.442 and Longitude -96.628 and end at Latitude 48.443 and Longitude -96.321.

DESCRIPTION OF PROJECT: The applicant proposes to reconstruct 14.08 miles of CSAH 6 from the NW corner of Sec.8, T.157N., R.46W., to the NE corner of Sec. 9, T.157N., R.44., Marshall County, MN (see attached map and drawings). The project includes shoulder widening, culvert replacement, restoring ditches to original grades, and overlay of the existing paved surface.

The applicant states that the purpose of the project is to upgrade CSAH 6 to meet current state design standards. The existing road surface is variable in width, but generally has a road surface with lane widths of 12 feet, aggregate shoulders that are generally 2 to 3 feet wide, and inslopes of 1:4 (V:H). The proposed project would retain the existing lane width of 12 feet but would increase the width of the shoulders to include 7-foot wide aggregate shoulders. The proposed shoulder widths are a deviation from the minimum design standards (4-foot wide shoulders) for a rural undivided roadway with an Average Daily Traffic (ADT) of 200. The applicant has identified that this deviation is to accomplish a 10-ton capacity roadway to allow for large agricultural traffic. The applicant has indicated that the proposed dimensions are consistent with other segments of CSAH 6. Inslopes would be constructed at 1:4 (V:H) with new ditch cuts resembling the original as-built ditch dimensions. The

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applicant states that the project is intended to restore the original ditch grade and ditches would not be made deeper than the original construction grades. The roadway would be built with a design speed of 55 miles per hour. Existing culverts would be replaced in their existing locations.

A more detailed set of design plans are available by contacting the St. Paul District, Corps of Engineers, Bemidji Regulatory Field Office at (651) 290-5337.

QUANTITY, TYPE, AND AREA OF FILL: A wetland delineation was conducted and identified 79 wetland basins where permanent and temporary impacts would occur as a result of the road reconstruction. The wetland delineation further identified approximately 15.96 miles of roadside ditches exhibiting wetland characteristics which were excavated through upland areas.

Of the 29.01 acres of total impact to wetlands, 17.36 acres of impact will be permanent and 11.65 acres of impact will be temporary.

Fill impacts associated with shoulder widening and inslope construction include: 0.19 acres of seasonally flooded basin (Type 1); 1.11 acres of wet meadow (Type 2); 0.27 acres of sedge meadow (Type 2); 0.92 acres of shallow marsh (Type 3); 1.92 acres of shrub-carr (Type 6); and 0.31 acres of hardwood swamp (Type 7) wetlands; totaling 4.72 acres of impact.

Excavation impacts associated with relocating the road ditch include: 0.77 acres of seasonally flooded basin (Type 1); 2.73 acres of wet meadow (Type 2); 1.05 acres of sedge meadow (Type 2); 1.98 acres of shallow marsh (Type 3); 5.18 acres of shrub-carr (Type 6); and 0.93 acres of hardwood swamp (Type 7) wetlands; totaling 12.64 acres of impact.

There would be temporary impacts associated with this project due to grading required for ditch construction and soil stockpile areas beyond the top of the backslope. Estimated temporary impacts include 0.83 acres of seasonally flooded basin (Type 1); 3.07 acres of wet meadow (Type 2); 0.92 acres of sedge meadow (Type 2); 1.76 acres of shallow marsh (Type 3); 4.08 acres of shrub-carr (Type 6); and 0.99 acres of hardwood swamp (Type 7) for a total of 11.65 acres of wetland temporarily impacted.

VEGETATION IN AFFECTED AREA: Type 2 wetlands along the project corridor have been broken down to include wet meadow and sedge meadow wetlands. Wet meadows in the area of the project generally support a perennial forb, grass, and sedge mixture. Species identified in wet meadow include reed canary grass, redtop, giant reed grass, green bulrush, cattail, fringed brome, blue joint grass, and scattered willow shrubs.

Sedge meadow wetlands throughout the project were dominated by sedges but also may include bulrushes and grasses.

A listed calcareous fen (Tamarac River Fen) is traversed by CSAH 6. Calcareous fens are a rare and distinctive category of Type 2 wetlands which generally occur near the base of beach ridges associated with Glacial Lake Agassiz in northwest Minnesota. Calcareous fens are characterized by non-acidic peat soil and are dependent on a constant supply of cold, oxygen-poor groundwater rich in calcium and magnesium bicarbonates. Because of this unique groundwater chemistry, calcareous fens

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support relatively unique plant communities which contain many rare plant species. Since these communities are so rare, calcareous fens are afforded special protection under the Minnesota Wetlands Conservation Act (Minn. Statutes 103G.223). In the interest of avoiding impacts to the calcareous fen, the applicant has modified the road design (approximate stations 152+00 – 228+00) which would include lowering the road grade to achieve the desired width. This modification was been reviewed by the Minnesota Department of Natural Resources (MNDNR). The MNDNR agreed that the modification would not impact the listed calcareous fen and that no Fen Management Plan (a requirement for proposed impacts to a listed calcareous fen) would be required.

Type 3 wetlands have soils that are saturated early in the spring and often contain up to 6 inches of water during the growing season. As a result, these wetlands typically are dominated by cattails, bulrushes, and lake sedges. The Type 3 wetlands throughout the project were generally composed of cattail, giant reed grass, sedges, reed canary grass, rushes, and willow shrubs.

Type 6 wetland communities are dominated by woody vegetation that is less than 20-feet in height and less than 6 inches in diameter at breast height (dbh). The shrub-carr vegetation communities along CSAH 6 were dominated by willow species and included lesser amounts of red-osier dogwood.

Type 7 hardwood swamps are dominated by deciduous hardwood trees and have soil saturated much of the growing season. Vegetation species identified in hardwood swamps throughout the project corridor include balsam polar, black ash, and quaking aspen.

PROPOSED MITIGATION: The total wetland loss subject to compensatory mitigation is 4.72 acres which includes: 0.19 acres of Type 1; 1.38 acres of Type 2; 0.92 acres of Type 3; 1.92 acres of Type 6; and 0.31 acres of Type 7 wetlands.

The applicant proposes to provide compensatory mitigation for the 4.72-acre loss off-site through the debit of credits from the BWSR Road Replacement Program mitigation bank. The compensatory mitigation would be achieved by debiting from the bank at a ratio of 2:1. Temporary impacts would be restored to pre-construction contours and planted with an appropriate native seed mix.

SOURCE OF FILL MATERIAL: Fill material will be clean material either excavated on site or purchased from commercial sources.

SURROUNDING LAND USE: Land use in the area consists primarily of agricultural operations and rural residences. The roadway is used primarily by east-west commuters and local residents.

THE FOLLOWING POTENTIALLY TOXIC MATERIALS COULD BE USED AT THE PROJECT SITE: The applicant has indicated that only clean fill material would be used for road construction. No use of toxic materials has been identified by the applicant.

THE FOLLOWING PRECAUTIONS TO PROTECT WATER QUALITY HAVE BEEN DESCRIBED BY THE APPLICANT: Best Management Practices to protect water quality in the form

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of temporary and permanent erosion and sediment control measures would be used throughout the project area. Because the applicant would disturb greater than one acre of soil, they will be required to prepare a Storm Water Pollution Prevention Plan for this project.

3. REPLIES/COMMENTS.

Interested parties are invited to submit to this office written facts, arguments, or objections within 30 days of the date of this notice. These statements should bear upon the suitability of the location and the adequacy of the project and should, if appropriate, suggest any changes believed to be desirable. Comments received may be forwarded to the applicant.

Replies may be addressed to Regulatory Branch, St. Paul District, Corps of Engineers, 180 Fifth Street East, Suite 700, Saint Paul, MN 55101-1678.

Or, IF YOU HAVE QUESTIONS ABOUT THE PROJECT, call Mr. Craig Jarnot at the Bemidji Office of the Corps of Engineers. The telephone number is: (651) 290-5337.

To receive Public Notices by e-mail, go to: http://www2.mvp.usace.army.mil/list_server/ and add your information in the New Registration Box.

4. FEDERALLY-LISTED THREATENED OR ENDANGERED WILDLIFE OR PLANTS OR THEIR CRITICAL HABITAT.

None were identified by the applicant or are known to exist in the permit area. However, portions of Marshall County are within the known or historic range of the following Federally-listed threatened (T) and endangered (E) species:

<u>Species</u>	<u>Habitat</u>
Canada Lynx (T) <i>Lynx canadensis</i>	Northern Forested Areas

This application is being coordinated with the U.S. Fish and Wildlife Service. Any comments it may have concerning Federally-listed threatened or endangered wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

5. JURISDICTION. 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 a <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.

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Based on the results of a preliminary jurisdictional determination this project comes under the regulatory jurisdiction of the Corps of Engineers because wetlands in the project area are adjacent to the Middle River.

REGULATORY AUTHORITY: This application will be reviewed according to the provisions of Section 404 of the Clean Water Act. Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 Code of Federal Regulations 230).

THE APPLICANT HAS STATED THAT THE FOLLOWING STATE, COUNTY, AND/OR LOCAL PERMITS HAVE BEEN APPLIED FOR/ISSUED: WCA, MnDNR Waters, PCA

6. STATE SECTION 401 WATER QUALITY CERTIFICATION.

Valid Section 404 permits cannot be issued for any activity unless state water quality certification for the activity is granted or waived pursuant to Section 401 of the Clean Water Act. The state Section 401 authority in Minnesota is the Minnesota Pollution Control Agency (MPCA). The St. Paul District has provided this public notice and a copy of the applicant's Section 404 permit application form to the MPCA. If MPCA needs any additional information in order for the Section 401 application to be considered complete by MPCA, the MPCA has indicated that it will request such information from the applicant. It is the permit applicant's responsibility to ensure that the MPCA has received a valid, complete application for state Section 401 certification and to obtain a final Section 401 action from the MPCA.

The MPCA has indicated that this public notice serves as its public notice of the application for Section 401 water quality certification under Minnesota Rules Part 7001. The MPCA has also indicated that the Section 401 process shall begin to commence upon the issuance date of this public notice unless the MPCA notifies both the St. Paul District and the permit applicant to the contrary, in writing, before the expiration date of this public notice.

Any comments relative to MPCA's Section 401 Certification for the activity proposed in this public notice may be sent to:

Minnesota Pollution Control Agency
Municipal Division
Attention: 401 Certification
520 Lafayette Road North
St. Paul, Minnesota 55155-4194.

7. HISTORICAL/ARCHAEOLOGICAL.

This public notice is being sent to the National Park Service and the State Archaeologist for their comments. The Corps will review information on known cultural resources and/or historic properties within and adjacent to the project area. The Corps will also consider the potential effects of the project on any properties that have yet to be identified. The results of this review and the Corps' determination

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of effect will be coordinated with the State Historic Preservation Officer independent of this public notice. Any adverse effects on historic properties will be resolved prior to the Corps authorization, or approval, of the work in connection with this project.

8. PUBLIC HEARING REQUESTS.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, in detail, the reasons for holding a public hearing. A request may be denied if substantive reasons for holding a hearing are not provided or if there is otherwise no valid interest to be served.

9. PUBLIC INTEREST REVIEW.

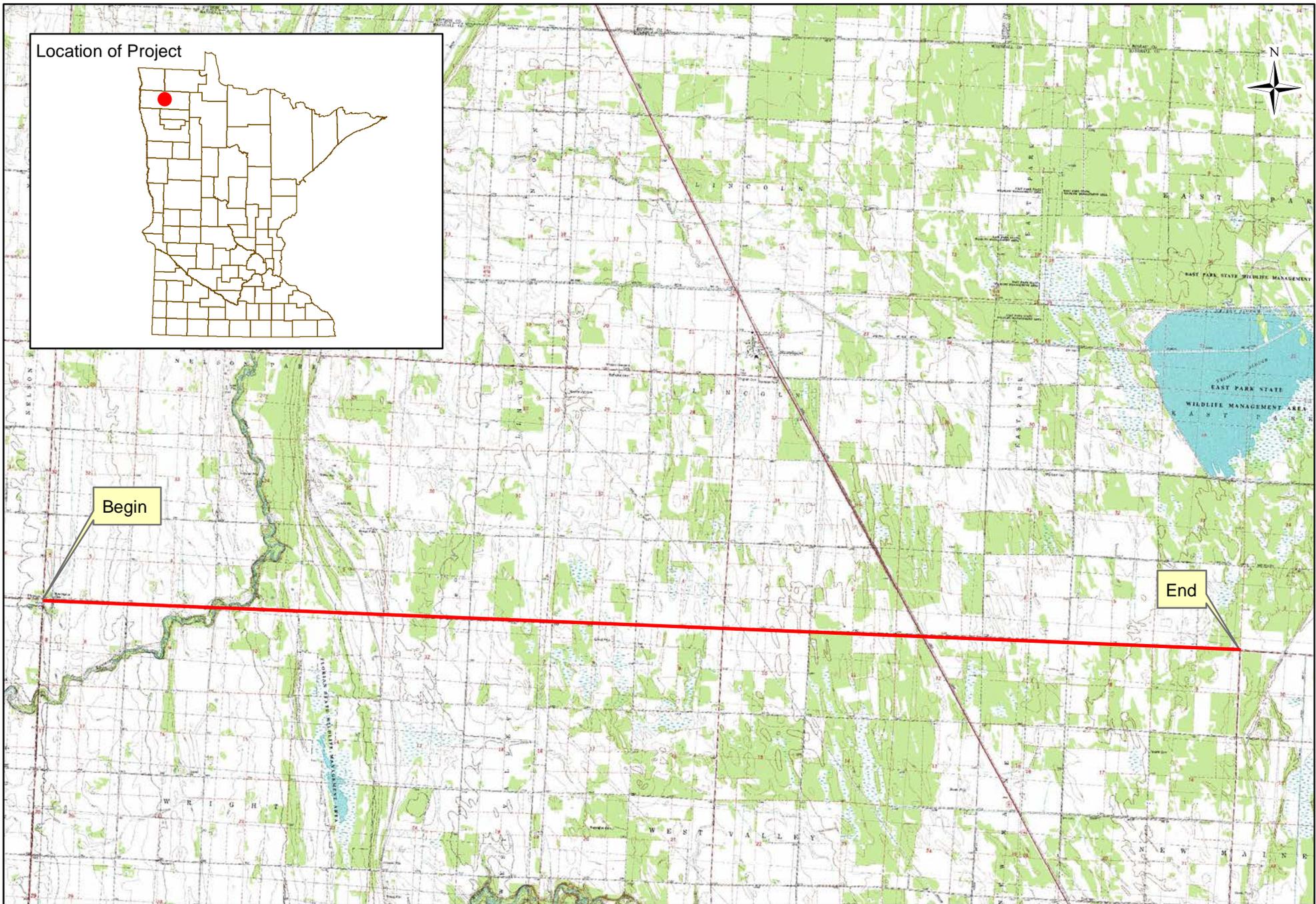
The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production and, in general, the needs and welfare of the people. Environmental and other documents will be available for review in the St. Paul District Office.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

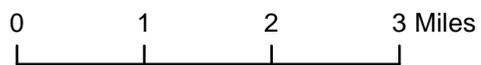
Kelly J. Urbanek
Chief, Northwest Minnesota Permit Section

Enclosures

NOTICE TO EDITORS: This public notice is provided as background information and is not a request or contract for publication.



Location of CSAH 6
Reconstruction Project
Marshall County, Minnesota



MINNESOTA DEPARTMENT OF TRANSPORTATION MARSHALL COUNTY

MINN. PROJ. NO.

GOVERNING SPECIFICATIONS

THE 2005 EDITION OF THE MINNESOTA DEPARTMENT OF TRANSPORTATION "STANDARD SPECIFICATIONS FOR CONSTRUCTION", SHALL GOVERN.

INDEX

SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	ESTIMATE SHEET
3	TYPICAL SECTION
4	CONSTRUCTION QUANTITIES
5	DETAILS
6-31	PLAN AND PROFILE SHEETS
32-157	CROSS SECTION SHEETS
158	TRAFFIC CONTROL

THIS PLAN CONTAINS 158 SHEETS

UTILITIES

THE SUBSURFACE UTILITY INFORMATION IN THIS PLAN IS UTILITY QUALITY LEVEL D. THIS UTILITY QUALITY LEVEL WAS DETERMINED ACCORDING TO THE GUIDELINES OF CI/ASCE 38-02, ENTITLED "STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA"

TELEPHONE = WIKSTROM
ELECTRIC = PKM
ELECTRIC = RED LAKE ELECTRIC
GAS = GREAT LAKES TRANSMISSION

DESIGN DESIGNATION

ADT (2011): . 200
PROJ. ADT (2031): . 220
SOIL FACTOR: 100%
NO. OF TRAFFIC LANES: 2-12
SHOULDER WIDTH: . 7'
DESIGN SPEED: . 55 MPH
BASED ON: STOPPING SIGHT DISTANCE
HEIGHT OF EYE: . 3.5' HEIGHT OF OBJECT: 2.0'
DESIGN SPEED NOT ACHIEVED AT: NONE
STOP CONDITION: .

LOCAL AGENCY SIGNATURES:

SIGNATURE: _____ LON P. AUNE

DESIGN ENGINEER: I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA

DATE: _____ LICENSE NO. 23385

STATE AID APPROVALS:

DISTRICT STATE AID ENGINEER: REVIEWED FOR COMPLIANCE WITH STATE AID RULES/POLICY.

FOR STATE AID ENGINEER: APPROVED FOR FEDERAL AND STATE AID FUNDING

CONSTRUCTION PLAN FOR GRADE WIDENING, CULVERTS AND AGGREGATE SHOULDERING

LOCATED ON C.S.A.H. 6 BETWEEN C.S.A.H. 1 AND C.S.A.H. 8 (GEOGRAPHIC DESC.)

FROM THE N.W. COR. SEC. 8, T. 157 N., R. 46 W. TO THE N.E. COR. SEC. 9, T. 157 N., R. 44 W. (LEGAL DESC.)

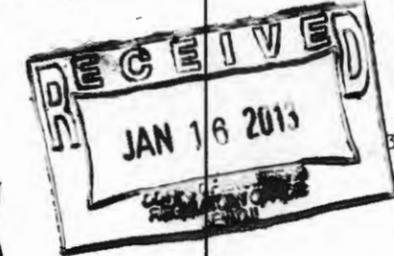
S.A.P. 045-606-028

GROSS LENGTH . 74,404.44 FEET 14.092 MILES

BRIDGE LENGTH FEET MILES

EXCEPTIONS 81.10 FEET 0.015 MILES

NET LENGTH . . 74,323.34 FEET 14.076 MILES



PLAN SYMBOLS

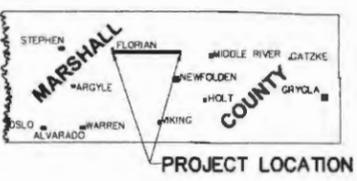
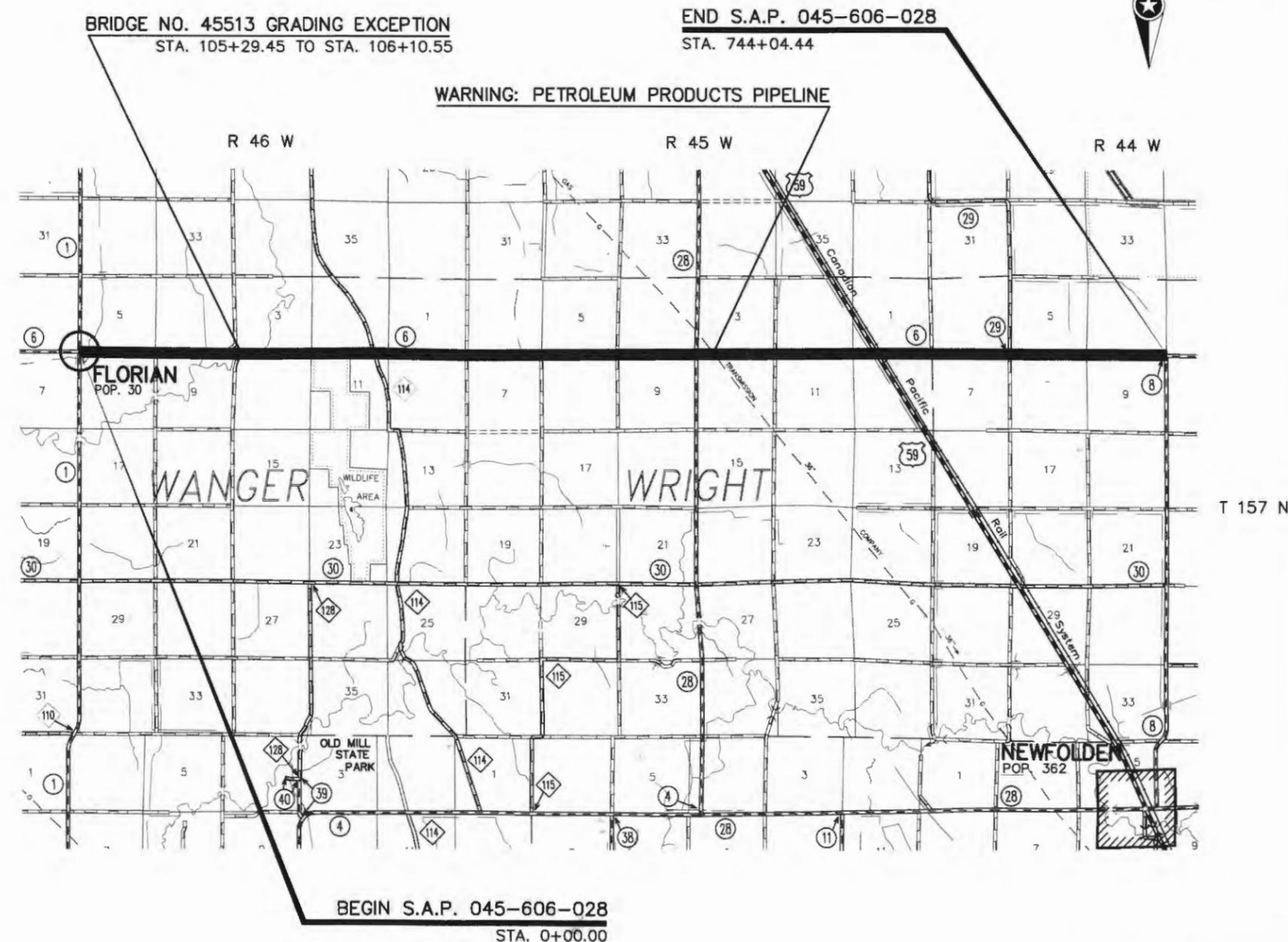
- COUNTY LINE
- SECTION LINE
- QUARTER LINE
- RIGHT-OF-WAY
- PRESENT RIGHT-OF-WAY
- PROPERTY LINE (EXCEPT LAND LINES)
- CORPORATE OR CITY LIMITS
- TRUNK HIGHWAY CENTER LINE
- RAILROAD
- RIVER OR CREEK
- DRAINAGE DITCH
- DRAINAGE
- CULVERT
- BARBED WIRE FENCE
- TIMBER ORCHARD
- BRUSH NURSERY
- BRIDGE
- BUILDING (ONE STORY)
- B BRICK F FRAME C CONCRETE ST STUCCO S STONE T TILE
- GRAVEL PIT
- BORROW PIT

UTILITIES SYMBOLS

- TEMPORARY EASEMENT
- POWER POLE LINE
- ANCHOR
- PEDESTAL (TELEPHONE CABLE TERMINAL)
- GAS MAIN
- WATER MAIN
- BURIED FIBER OPTIC CABLE
- BURIED TELEPHONE CABLE
- BURIED ELECTRICAL CABLE
- SEWER (SANITATION OR STORM)
- SEWER MANHOLE

ROAD SYMBOLS

- TRUNK HIGHWAY
- COUNTY
- COUNTY STATE AID



SCALES

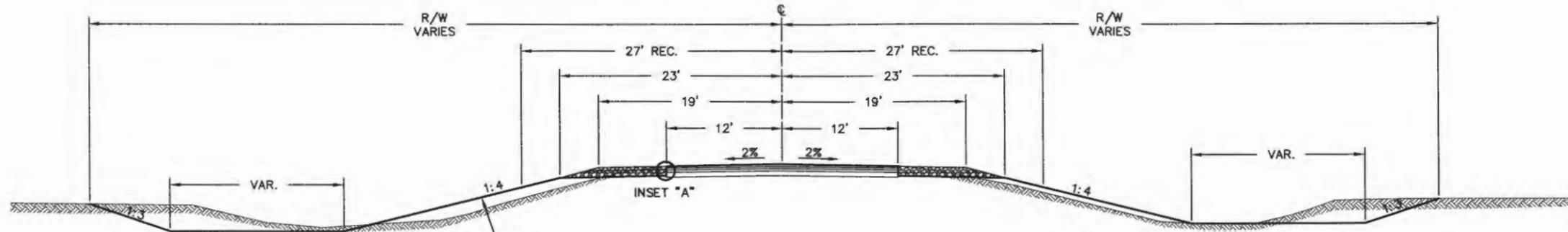
- PLAN [AS SHOWN]
- PROFILE [AS SHOWN]
- CROSS SECTIONS 10'
- INDEX MAP 1 MILE

BEGIN S.A.P. 045-606-028
STA. 0+00.00

TYPICAL SECTIONS

TYPICAL GRADING AND SURFACE SECTION

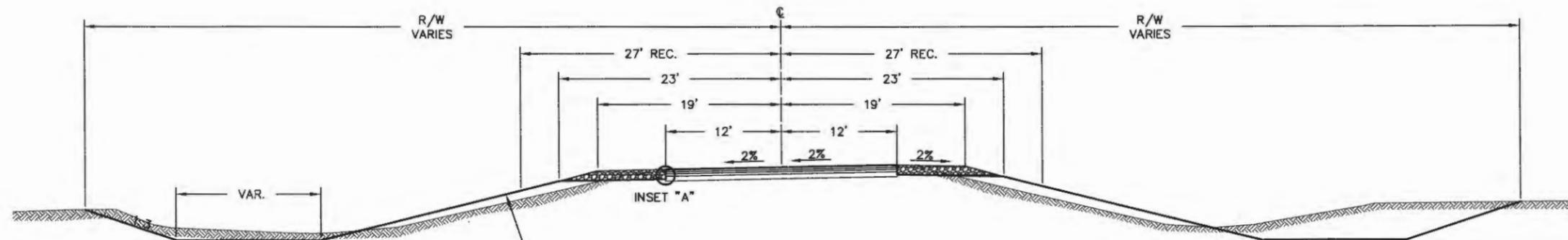
STA. 0+00.00 TO 112+50.94
 STA. 136+63.98 TO 152+00.00
 STA. 228+00.00 TO 744+04.44



3" TOPSOIL TO BE PLACED ON THE INSLOPE AND BACK SLOPE ABOVE THIS TYPICAL GRADING SECTION LINE

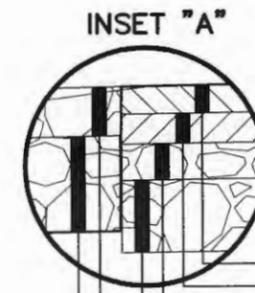
TYPICAL GRADING AND SURFACE SECTION

STA. 112+50.94 TO 136+63.98



3" TOPSOIL TO BE PLACED ON THE INSLOPE AND BACK SLOPE ABOVE THIS TYPICAL GRADING SECTION LINE

NOTE:
 CROSS SLOPES IN TRANSITION AREAS VARY, FULL SUPER SHOWN

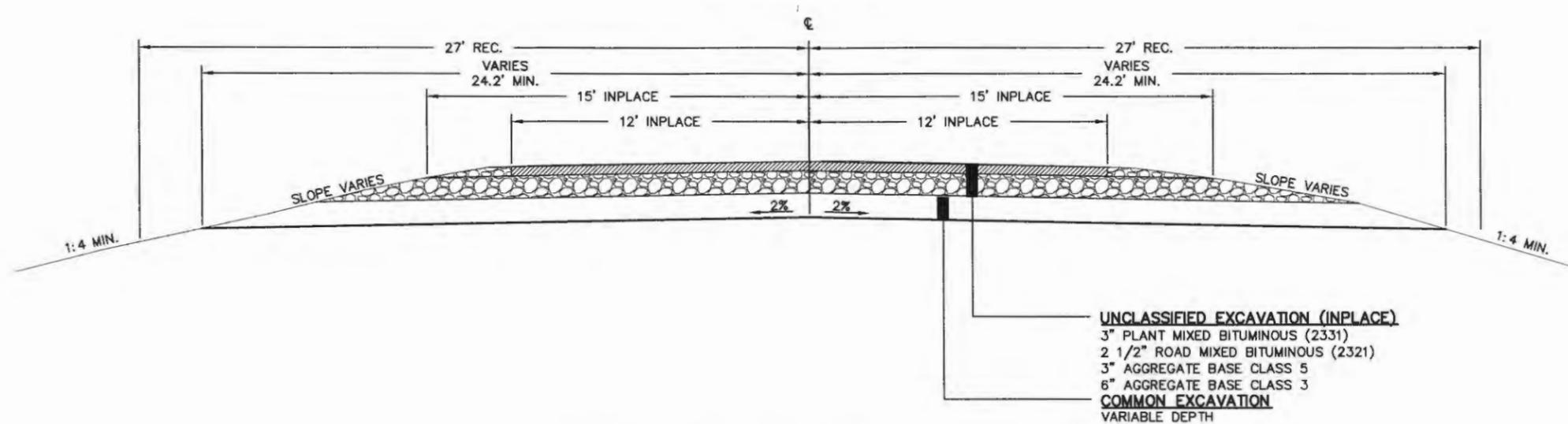


- INPLACE**
- 3" PLANT MIXED BITUMINOUS
 - 2 1/2" ROAD MIXED BITUMINOUS
 - 3" CL. 5 GRAVEL BASE
 - 6" CL. 3 GRAVEL BASE
- CONSTRUCT**
- 4" AGGREGATE BASE CL. 5
 - 8" AGGREGATE BASE CL. 3

TYPICAL SECTIONS

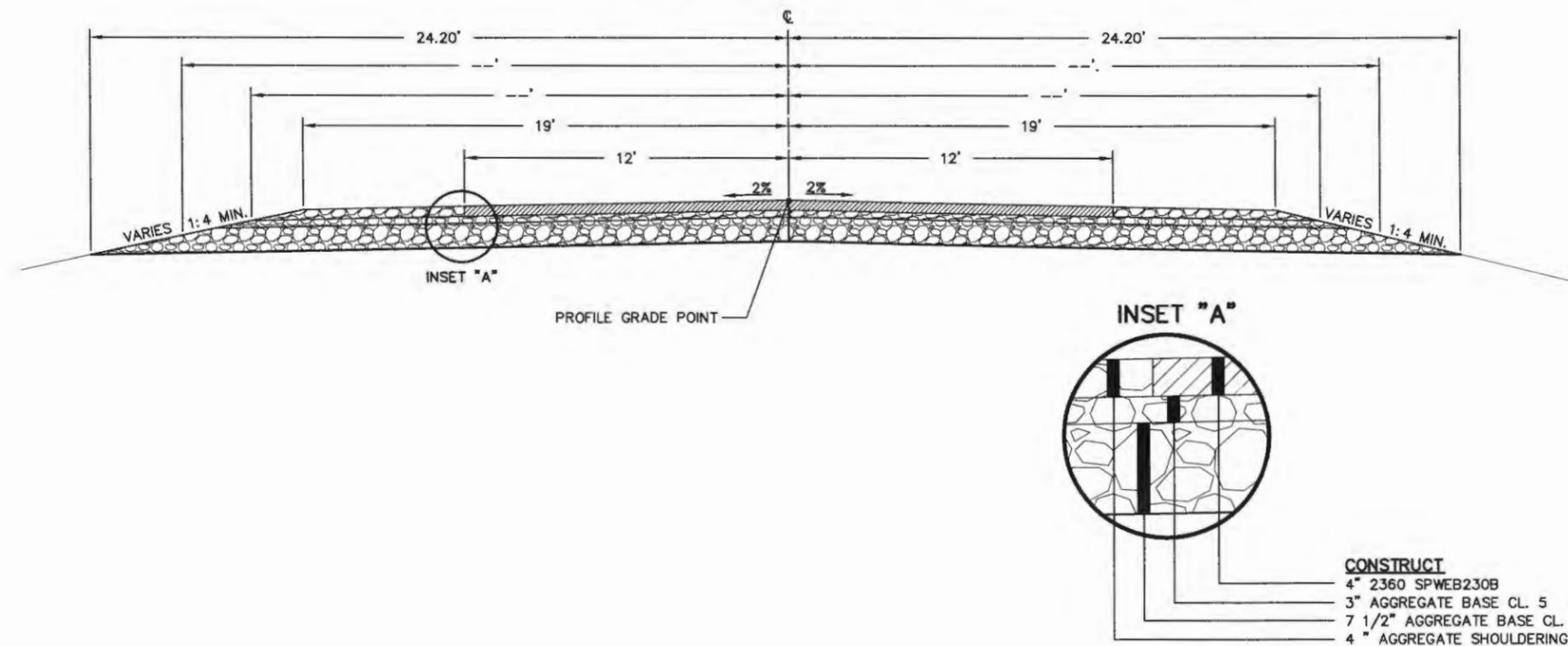
TYPICAL GRADING SECTION

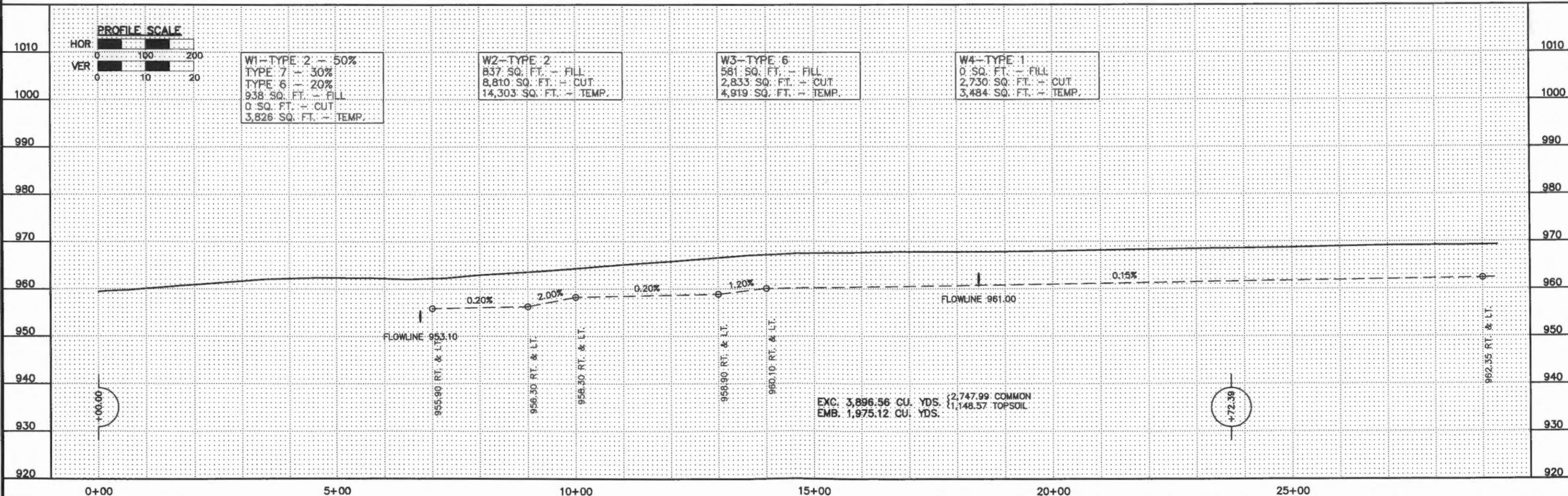
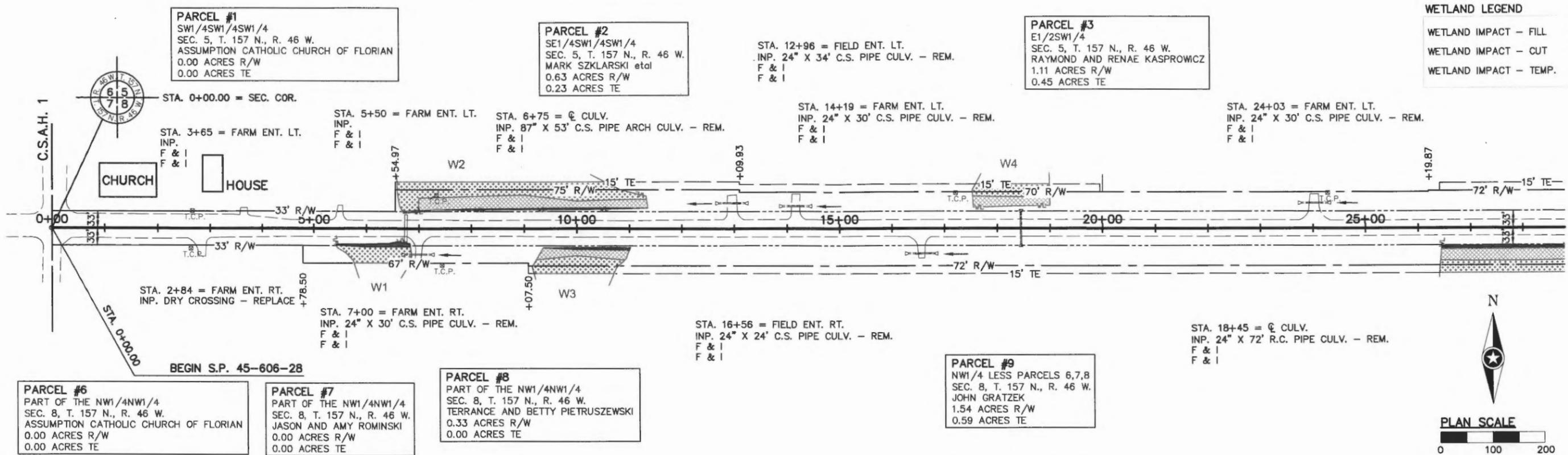
STA. 152+00 TO 228+00



TYPICAL SURFACE SECTION

STA. 152+00 TO 228+00





WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

PARCEL #4
 W1/2SE1/4
 SEC. 5, T. 157 N., R. 46 W.
 MARK SZKLARSKI et al
 1.32 ACRES R/W
 0.45 ACRES TE

PARCEL #5
 SE1/4SE1/4
 SEC. 5, T. 157 N., R. 46 W.
 RAYMOND AND RENAE KASPROWICZ
 0.96 ACRES R/W
 0.45 ACRES TE

PARCEL #10
 NE1/4
 SEC. 8, T. 157 N., R. 46 W.
 COURTNEY AND BERNADINE ABEL et al
 2.13 ACRES R/W
 0.90 ACRES TE

STA. 33+26 = FIELD ENT. LT.
 INP. 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 41+38 = FIELD ENT. LT.
 INP. DRY CROSSING
 F & I
 F & I

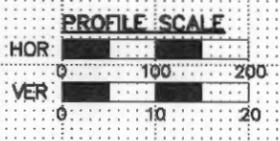
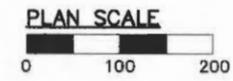
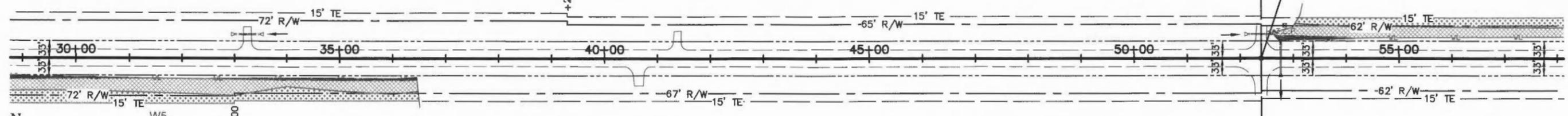
STA. 52+40 = TWP APP. LT.
 INP. 24" X 36' C.S. PIPE CULV. - REM.
 F & I
 F & I

54
 89
 STA. 52+39.73 = SEC. COR. & P.I.
 Δ = 00°19'43" RT.

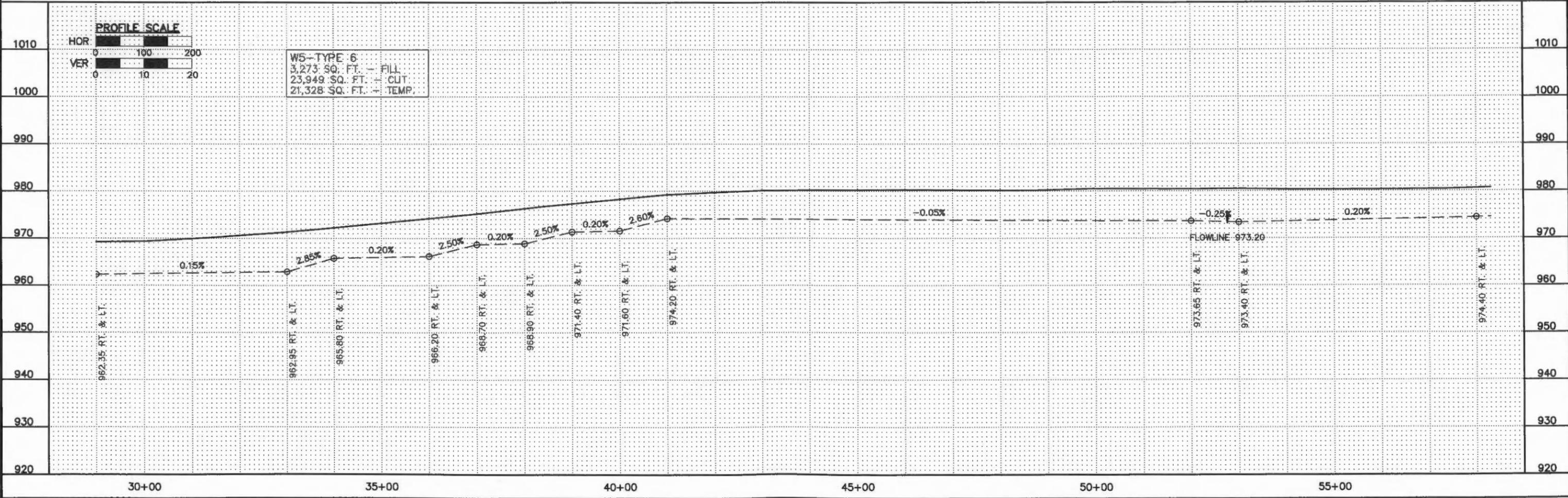
STA. 40+65 = FIELD ENT. RT.
 INP. DRY CROSSING
 F & I
 F & I

STA. 52+40 = TWP APP. RT.
 INP. DRY CROSSING

STA. 52+76 = CULV.
 INP. 30" X 71' R.C. PIPE CULV. - REM.
 F & I
 F & I



W5-TYPE 6
 3,273 SQ. FT. - FILL
 23,949 SQ. FT. - CUT
 21,328 SQ. FT. - TEMP.



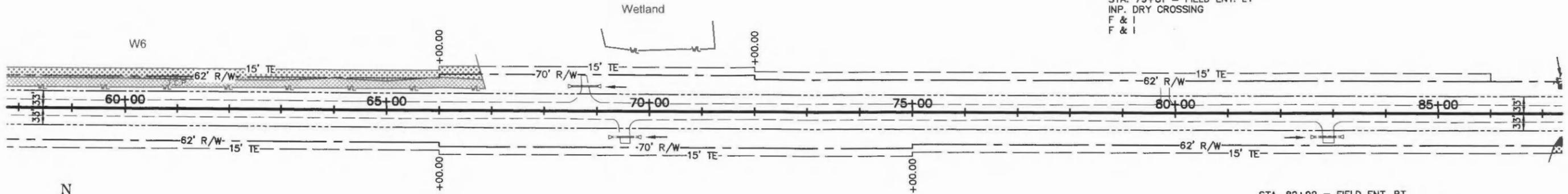
WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

PARCEL #11
 W1/2
 SEC. 4, T. 157 N., R. 46 W.
 RANDY BOROWICZ et al
 1.94 ACRES R/W
 0.95 ACRES TE

STA. 68+78 = FARM ENT. LT.
 INP. 18" X 46' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 79+81 = FIELD ENT. LT
 INP. DRY CROSSING
 F & I
 F & I



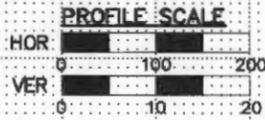
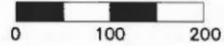
STA. 69+55 = FIELD ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #13
 NW1/4
 SEC. 9, T. 157 N., R. 46 W.
 RAYMOND AND RENAE KASPROWICZ
 2.00 ACRES R/W
 0.95 ACRES TE

STA. 82+92 = FIELD ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

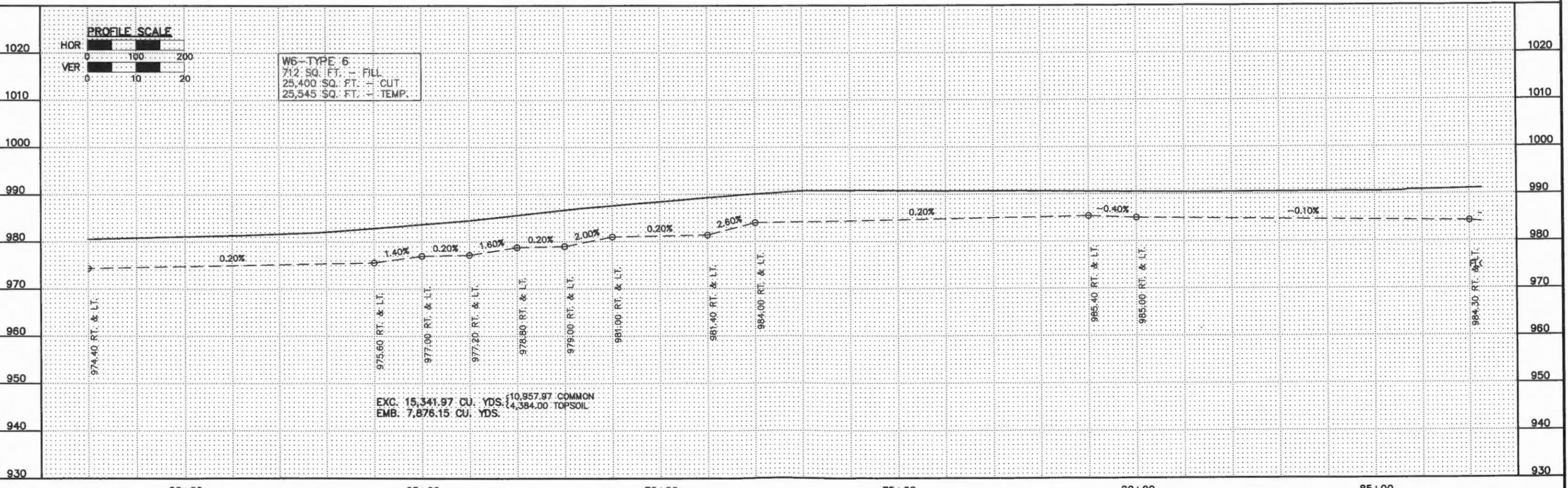


PLAN SCALE



W6--TYPE 6
 712 SQ. FT. - FILL
 25,400 SQ. FT. - CUT
 25,545 SQ. FT. - TEMP.

EXC. 15,341.97 CU. YDS. 10,957.97 COMMON
 EMB. 7,876.15 CU. YDS. 4,384.00 TOPSOIL



WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 87+79 = CULV.
 INP. 48" X 100' R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #12
 E1/2
 SEC. 4, T. 157 N., R. 46 W.
 EVALD AND MARY KUJAVIA
 2.05 ACRES R/W
 0.81 ACRES TE

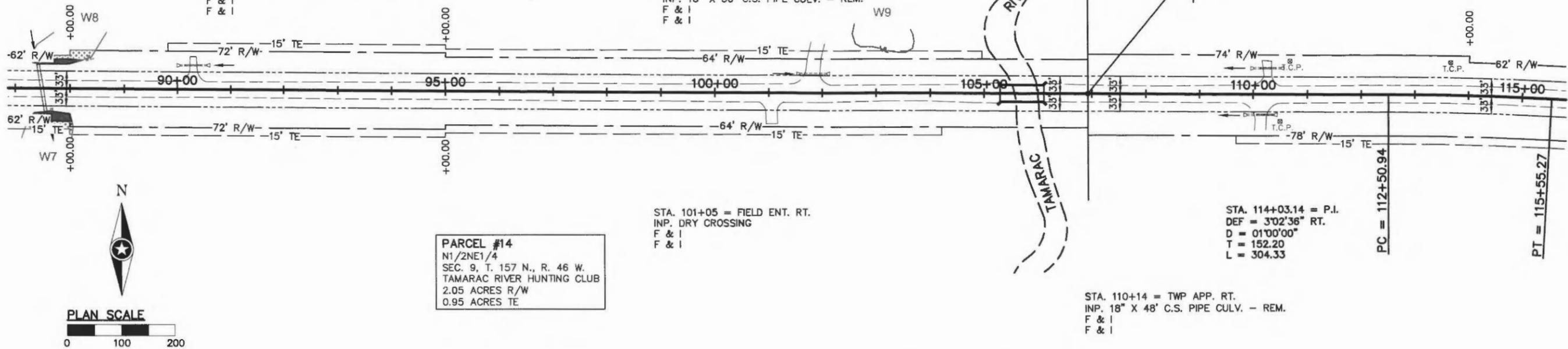
STA. 105+70 = BRIDGE 45513
 INP. 31.0' X 81.1' PRECAST CHANNEL SPAN - LEAVE AS IS

STA. 110+28 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 90+31 = FARM ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 101+81 = TWP APP. LT.
 INP. 18" X 50' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 106+92.43 = SEC. COR.

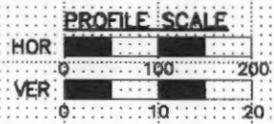


PARCEL #14
 N1/2NE1/4
 SEC. 9, T. 157 N., R. 46 W.
 TAMARAC RIVER HUNTING CLUB
 2.05 ACRES R/W
 0.95 ACRES TE

STA. 101+05 = FIELD ENT. RT.
 INP. DRY CROSSING
 F & I
 F & I

STA. 114+03.14 = P.I.
 DEF = 3'02'36" RT.
 D = 01'00'00"
 T = 152.20
 L = 304.33

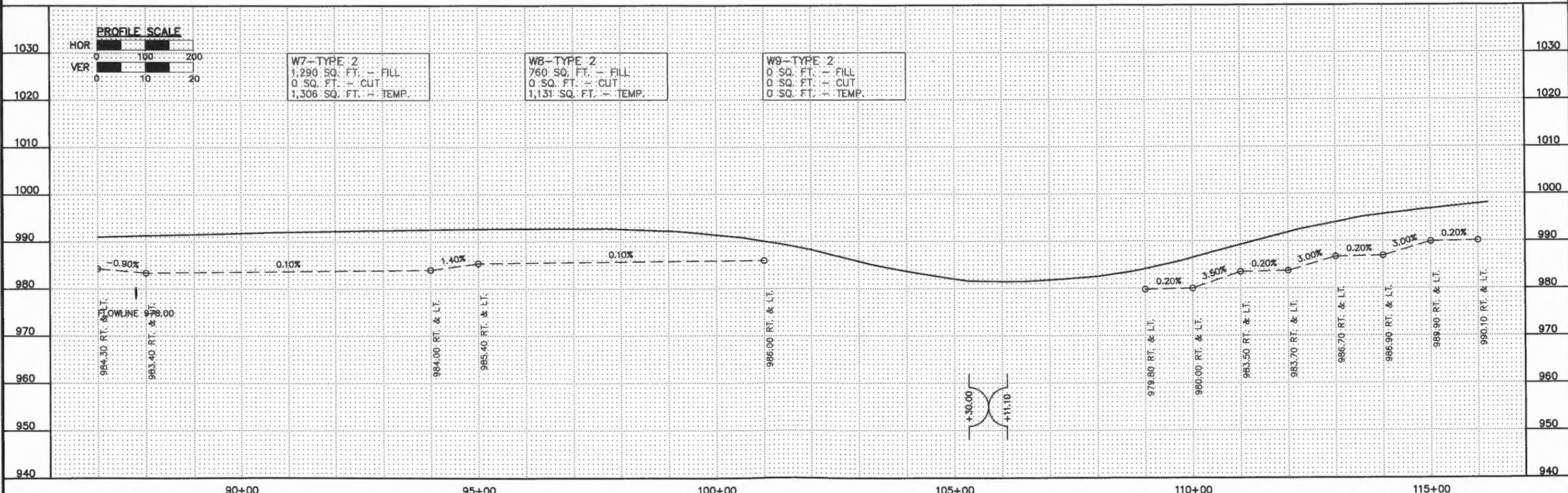
STA. 110+14 = TWP APP. RT.
 INP. 18" X 48' C.S. PIPE CULV. - REM.
 F & I
 F & I



W7--TYPE 2
 1,290 SQ. FT. - FILL
 0 SQ. FT. - CUT
 1,306 SQ. FT. - TEMP.

W8--TYPE 2
 760 SQ. FT. - FILL
 0 SQ. FT. - CUT
 1,131 SQ. FT. - TEMP.

W9--TYPE 2
 0 SQ. FT. - FILL
 0 SQ. FT. - CUT
 0 SQ. FT. - TEMP.



CERTIFIED BY: _____

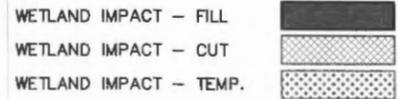
LICENSE NO. 23385

DATE: _____

MARSHALL COUNTY, MINNESOTA STATE AID PROJECT NO. 45-606-28

SHEET 9 OF 158 SHEETS

WETLAND LEGEND



PARCEL #15
SW1/4
SEC. 3, T. 157 N., R. 46 W.
FLOYD BLAZEJEWSKI et al
2.38 ACRES R/W
0.10 ACRES TE

STA. 125+38 = C CULV.
INP. 24" X 72' C.S. PIPE CULV. - REM.
F & I
F & I

STA. 136+29 = FARM ENT LT.
INP. 48" X 46' C.S. PIPE CULV. - REM.
F & I
F & I

PARCEL #16
W1/2SE1/4
SEC. 3, T. 157 N., R. 46 W.
EARL AND BECKY RYAN
1.38 ACRES R/W
0.34 ACRES TE

STA. 123+81.86 = P.I.
DEF = 9'47'37" LT.
D = 01'00'00"
T = 490.87
L = 979.36

STA. 130+61 = FIELD ENT. LT.
INP. 42" X 36' C.S. PIPE CULV. - REM.
F & I
F & I

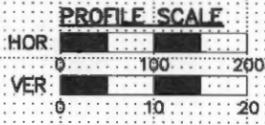
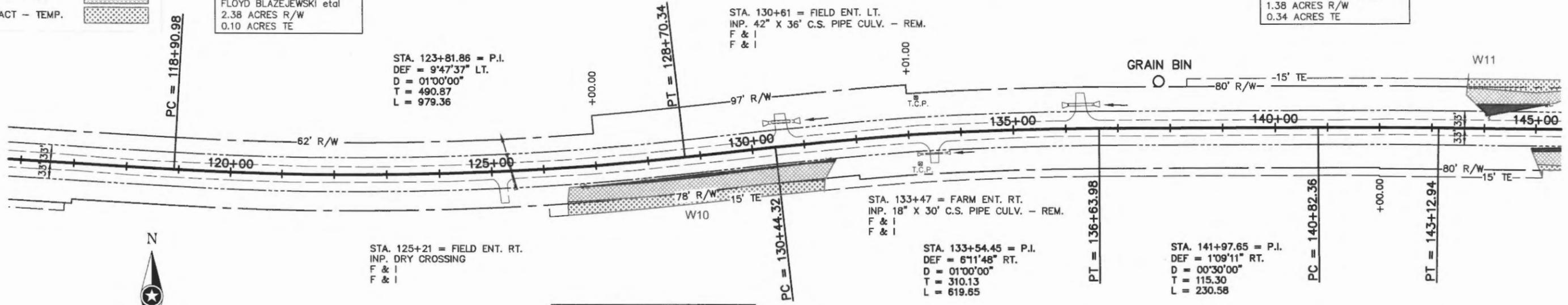
STA. 133+47 = FARM ENT. RT.
INP. 18" X 30' C.S. PIPE CULV. - REM.
F & I
F & I

STA. 133+54.45 = P.I.
DEF = 6'11'48" RT.
D = 01'00'00"
T = 310.13
L = 619.65

STA. 141+97.65 = P.I.
DEF = 1'09'11" RT.
D = 00'30'00"
T = 115.30
L = 230.58

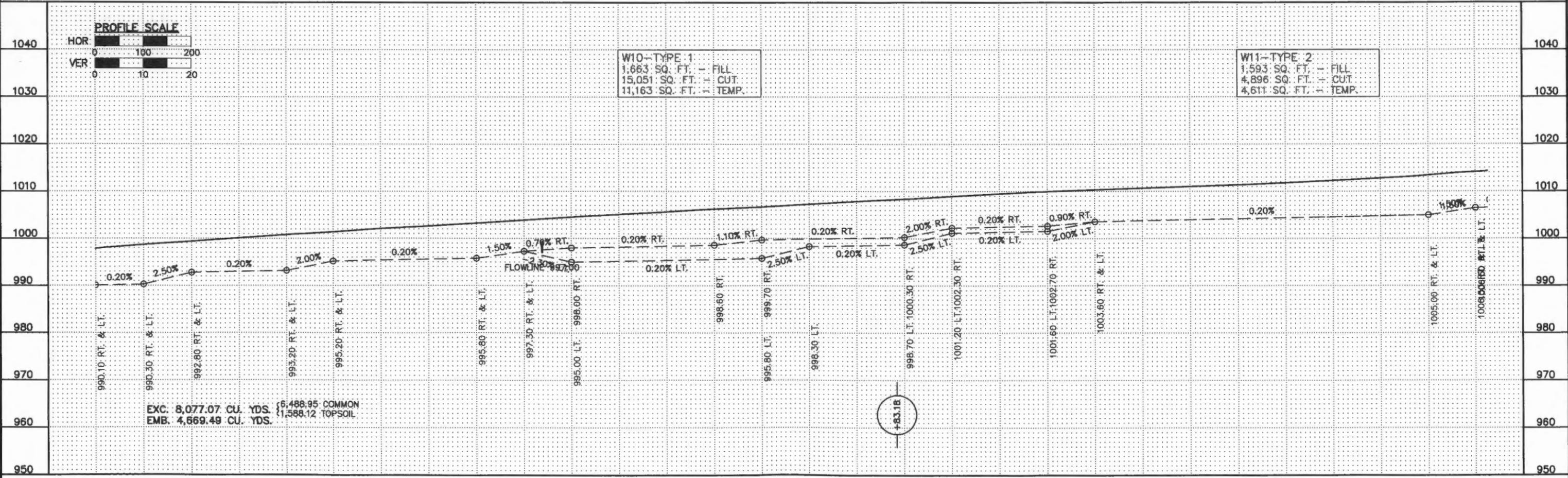
STA. 125+21 = FIELD ENT. RT.
INP. DRY CROSSING
F & I
F & I

PARCEL #18
SEC. 10, T. 157 N., R. 46 W.
TIMOTHY AND CATHERINE BUDZISZEWSKI
5.38 ACRES R/W
1.17 ACRES TE

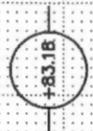


W10-TYPE 1
1,663 SQ. FT. - FILL
15,051 SQ. FT. - CUT
11,163 SQ. FT. - TEMP.

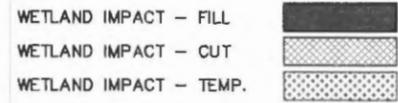
W11-TYPE 2
1,593 SQ. FT. - FILL
4,896 SQ. FT. - CUT
4,611 SQ. FT. - TEMP.



EXC. 8,077.07 CU. YDS. 6,488.95 COMMON
EMB. 4,669.49 CU. YDS. 11,588.12 TOPSOIL



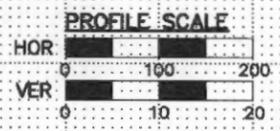
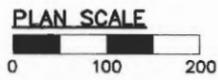
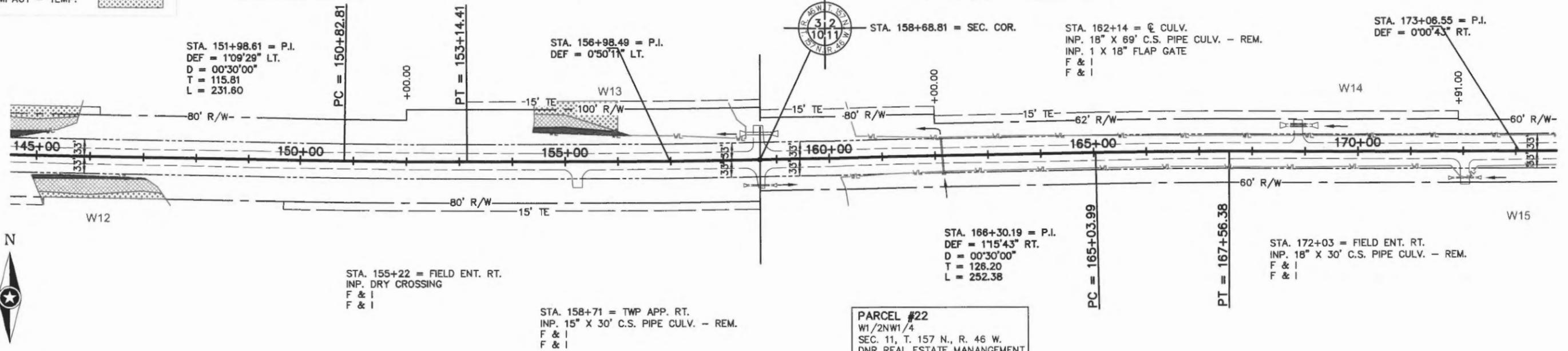
WETLAND LEGEND



PARCEL #17
 SE1/4SE1/4
 SEC. 3, T. 157 N., R. 46 W.
 MERIDIAN OIL CO.
 1.69 ACRES R/W
 0.23 ACRES TE

PARCEL #19
 W1/2SW1/4
 SEC. 2, T. 157 N., R. 46 W.
 BONITA AND MARVIN SWANSON
 1.02 ACRES R/W
 0.46 ACRES TE

STA. 168+88 = FIELD ENT. LT.
 INP. 2 X 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

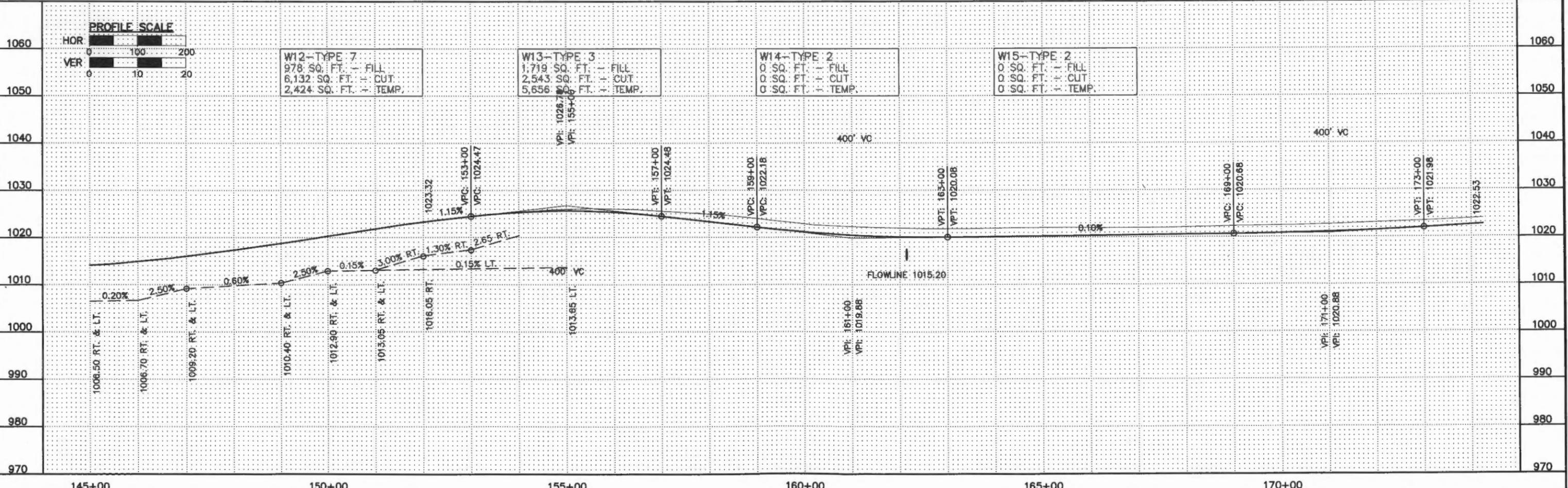


W12-TYPE 7
 978 SQ. FT. - FILL
 6,132 SQ. FT. - CUT
 2,424 SQ. FT. - TEMP.

W13-TYPE 3
 1,719 SQ. FT. - FILL
 2,543 SQ. FT. - CUT
 5,656 SQ. FT. - TEMP.

W14-TYPE 2
 0 SQ. FT. - FILL
 0 SQ. FT. - CUT
 0 SQ. FT. - TEMP.

W15-TYPE 2
 0 SQ. FT. - FILL
 0 SQ. FT. - CUT
 0 SQ. FT. - TEMP.



WETLAND LEGEND
 WETLAND IMPACT - FILL
 WETLAND IMPACT - CUT
 WETLAND IMPACT - TEMP.

PARCEL #20
 E1/2SW1/4
 SEC. 2, T. 157 N., R. 46 W.
 STATE OF MINNESOTA
 1.12 ACRES R/W
 0.17 ACRES TE

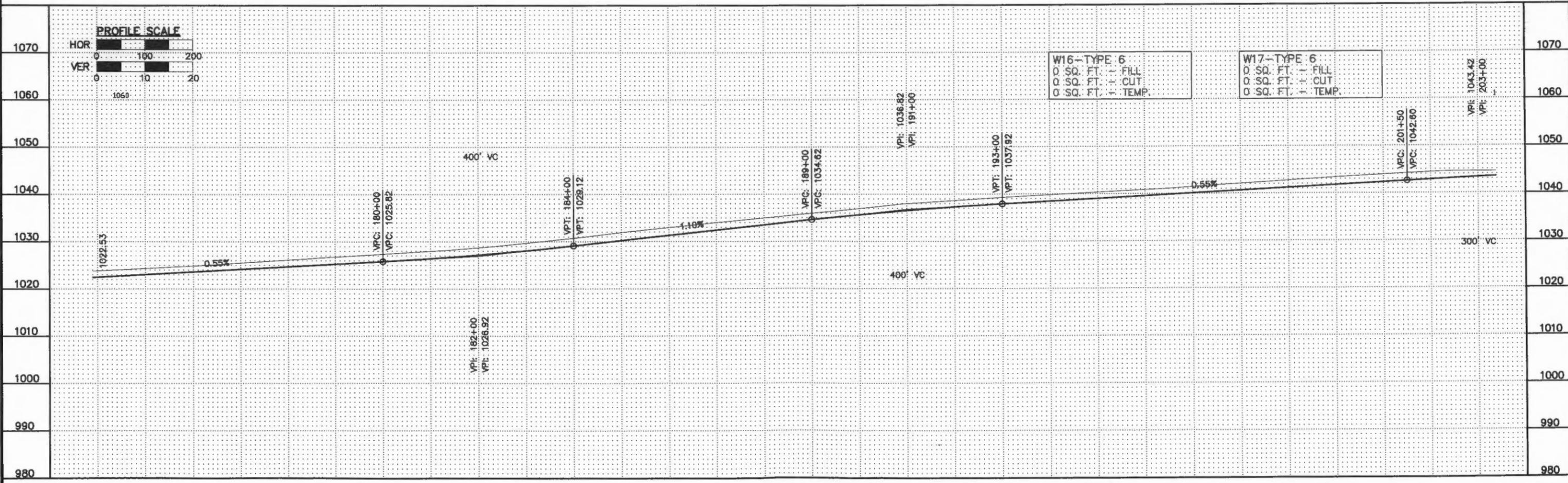
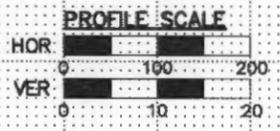
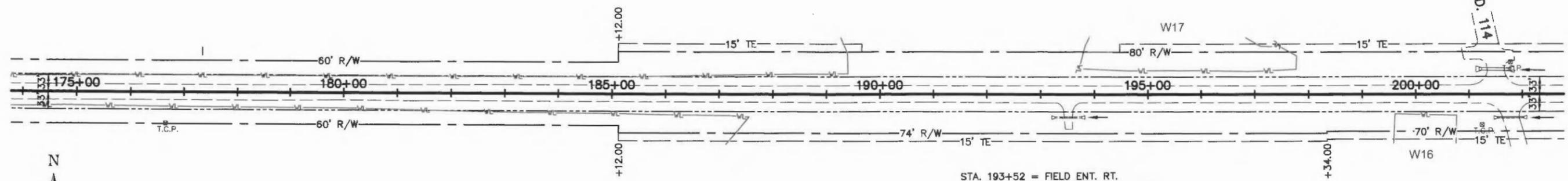
PARCEL #21
 SE1/4
 SEC. 2, T. 157 N., R. 46 W.
 FLOYD BLAZEJEWSKI et al
 3.30 ACRES R/W
 0.91 ACRES TE

STA. 201+51 = CO. RD. 114
 INP. 36" X 60' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #23
 E1/2NW1/4
 SEC. 11, T. 157 N., R. 46 W.
 STATE OF MINNESOTA WILDLIFE AREA
 1.12 ACRES R/W
 0.24 ACRES TE

PARCEL #24
 W1/2NE1/4
 SEC. 11, T. 157 N., R. 46 W.
 ROBERT BLAZEJEWSKI
 1.24 ACRES R/W
 0.46 ACRES TE

STA. 201+79 = CO. RD. 114
 INP. 18" X 48' C.S. PIPE CULV. - REM.
 F & I
 F & I



WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

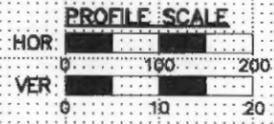
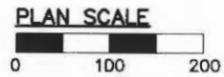
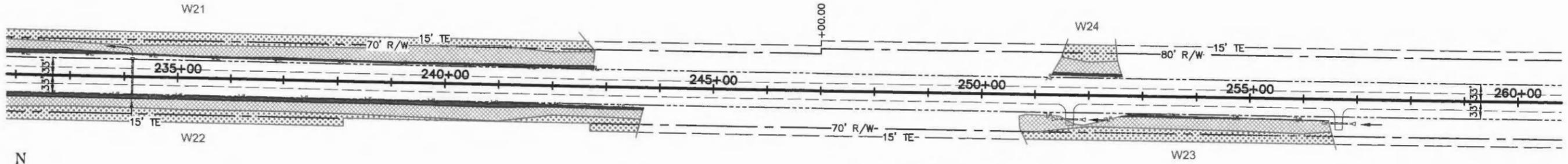
STA. 234+16 = ϕ CULV.
 INP. 18" X 66" C.S. PIPE CULV. - REM.
 INP. 1 X 18" FLAP GATE
 F & I
 F & I

PARCEL #27
 SE1/4
 SEC. 1, T. 157 N., R. 46 W.
 ROBERT AND SALLY CARLSON
 2.68 ACRES R/W
 0.92 ACRES TE

STA. 251+65 = FIELD ENT. RT.
 INP. 18" X 30" C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #29
 NE1/4
 SEC. 12, T. 157 N., R. 46 W.
 LUCILLE HAUGEN
 2.27 ACRES R/W
 0.76 ACRES TE

STA. 256+67 = FIELD ENT. RT.
 INP. 18" X 30" C.S. PIPE CULV. - REM.
 F & I
 F & I

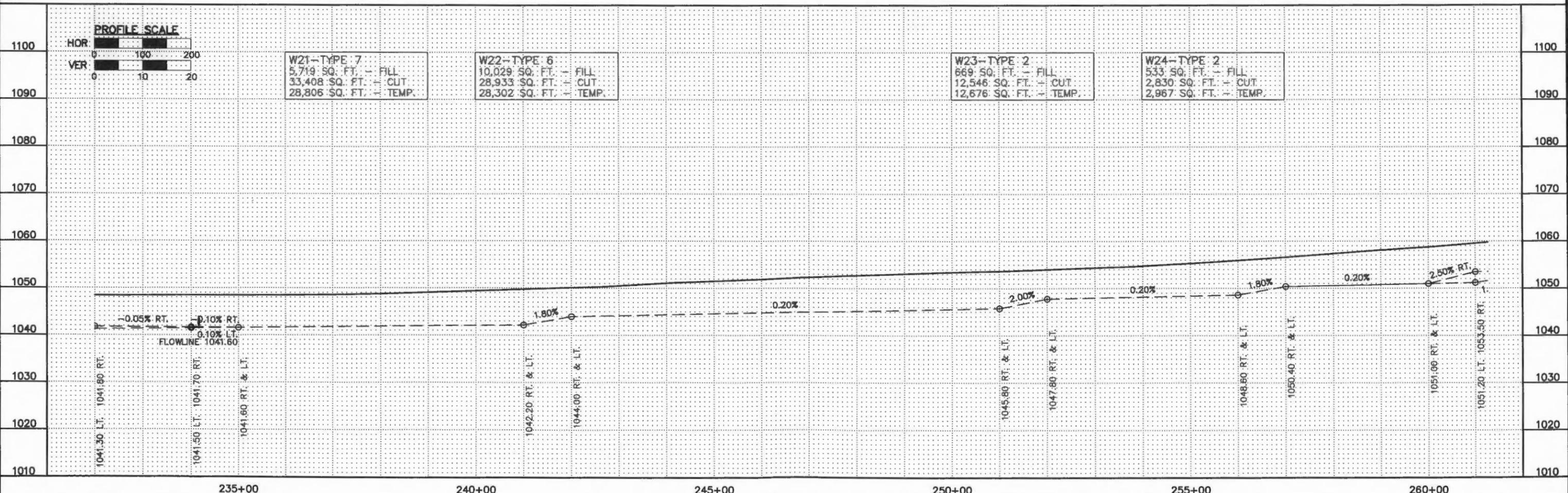


W21--TYPE 7
 5,719 SQ. FT. - FILL
 33,408 SQ. FT. - CUT
 28,806 SQ. FT. - TEMP.

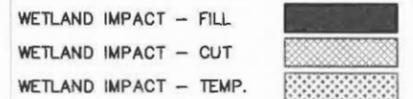
W22--TYPE 6
 10,029 SQ. FT. - FILL
 28,933 SQ. FT. - CUT
 28,302 SQ. FT. - TEMP.

W23--TYPE 2
 669 SQ. FT. - FILL
 12,546 SQ. FT. - CUT
 12,676 SQ. FT. - TEMP.

W24--TYPE 2
 533 SQ. FT. - FILL
 2,830 SQ. FT. - CUT
 2,967 SQ. FT. - TEMP.



WETLAND LEGEND



STA. 265+25 = FIELD ENT.
 INP. 15" X 12' C.S. PIPE CULV. - REM.
 INP. 1-15" FLAP GATE
 F & I
 F & I

PARCEL #30
 GOV'T LOT 7
 SEC. 6, T. 157 N., R. 45 W.
 RAYMOND AND RENAE KASPROWICZ
 2.07 ACRES R/W
 0.44 ACRES TE

STA. 279+34 = FIELD ENT. LT.
 INP. 36" X 84' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #31
 E1/2SW1/4
 SEC. 6, T. 157 N., R. 45 W.
 KEITH URBANIAK
 2.38 ACRES R/W
 0.08 ACRES TE

STA. 290+01.99 = P.I.
 DEF = 111'32" LT.
 D = 00'30"00"
 T = 119.23
 L = 238.45

STA. 265+00 = TWP APP. LT.
 INP. 2-24" X 48' C.S. PIPE CULV. - REM.
 F & I
 F & I

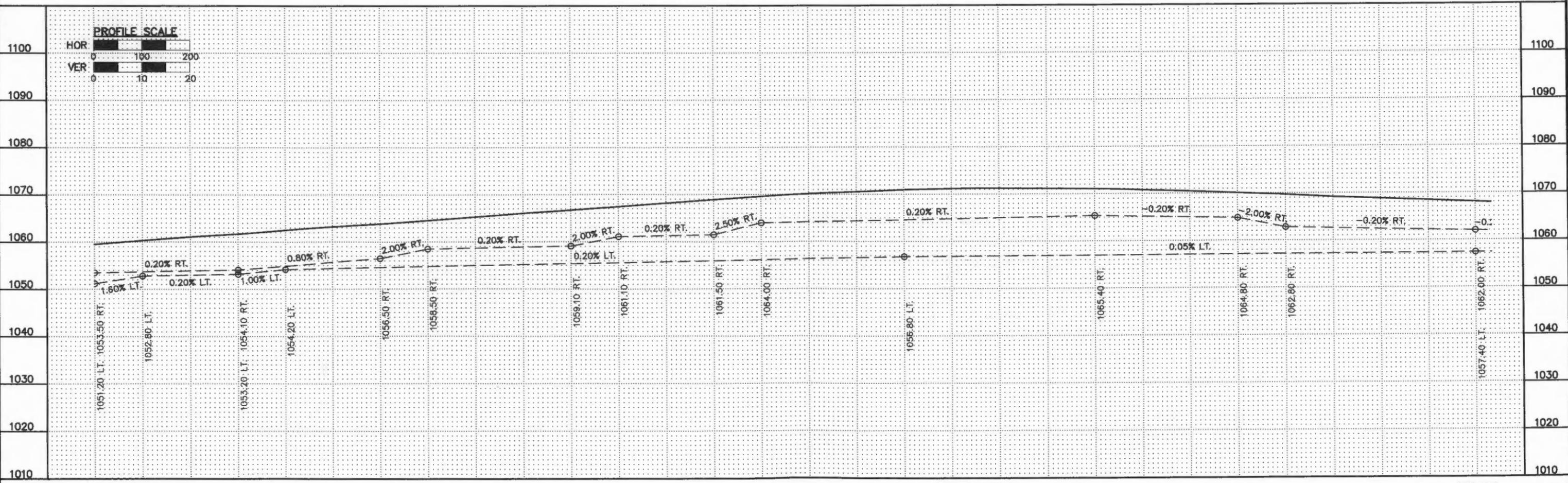
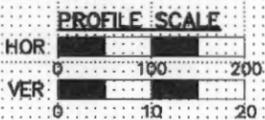
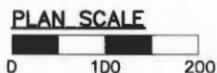
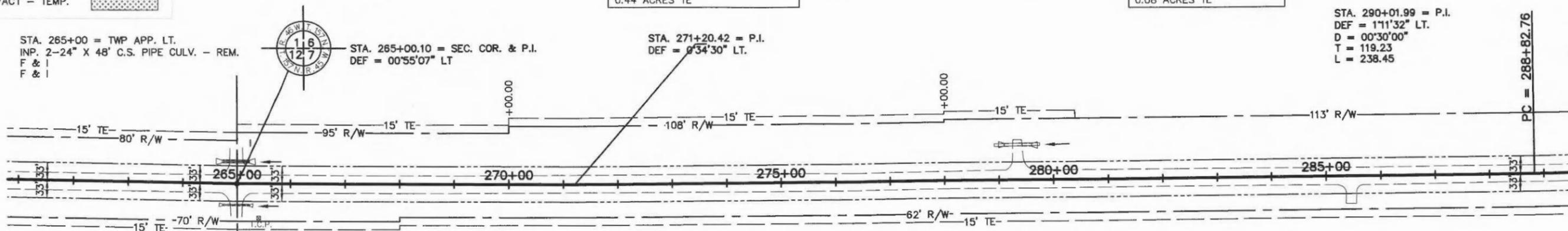
STA. 265+00.10 = SEC. COR. & P.I.
 DEF = 00'55'07" LT

STA. 271+20.42 = P.I.
 DEF = 0'34'30" LT.

STA. 285+46 = TWP APP. RT.
 INP. ORY CROSSING
 F & I
 F & I

STA. 285+00 = TWP APP. RT.
 INP. 18" X 48' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #33
 LOT 1, E1/2NW1/4, W1/2NE1/4
 SEC. 7, T. 157 N., R. 45 W.
 KENNETH URBANIAK/TRUST
 2.64 ACRES R/W
 1.10 ACRES TE



CERTIFIED BY: _____

LICENSE NO. 23385

DATE: _____

MARSHALL COUNTY, MINNESOTA STATE AID PROJECT NO. 45-606-28

SHEET 15 OF 158 SHEETS

WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

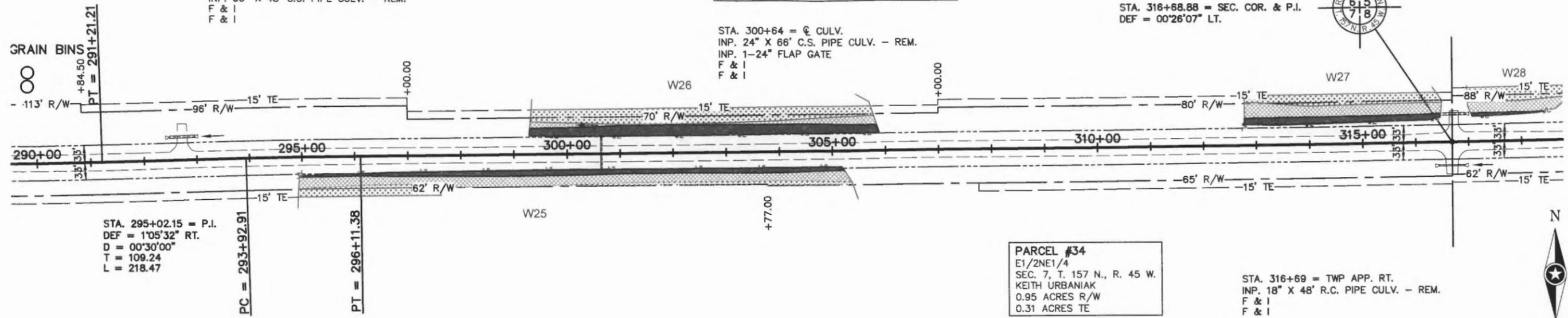
PARCEL #32
 SE1/4
 SEC. 6, T. 157 N., R. 45 W.
 MORENZ FAMILY TRUST AND STEPHEN MORENZ
 2.78 ACRES R/W
 0.89 ACRES TE

STA. 316+71 = FIELD ENT. LT.
 INP. 36" X 48' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 292+74 = FIELD ENT. LT.
 INP. 36" X 48' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 300+64 = C CULV.
 INP. 24" X 66' C.S. PIPE CULV. - REM.
 INP. 1-24" FLAP GATE
 F & I
 F & I

STA. 316+68.88 = SEC. COR. & P.I.
 DEF = 00'26'07" LT.



STA. 295+02.15 = P.I.
 DEF = 1'05'32" RT.
 D = 00'30'00"
 T = 109.24
 L = 218.47

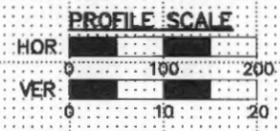
PC = 293+92.91
 PT = 296+11.38

PARCEL #34
 E1/2NE1/4
 SEC. 7, T. 157 N., R. 45 W.
 KEITH URBANIAK
 0.95 ACRES R/W
 0.31 ACRES TE

STA. 316+69 = TWP APP. RT.
 INP. 18" X 48' R.C. PIPE CULV. - REM.
 F & I
 F & I



PLAN SCALE
 0 100 200

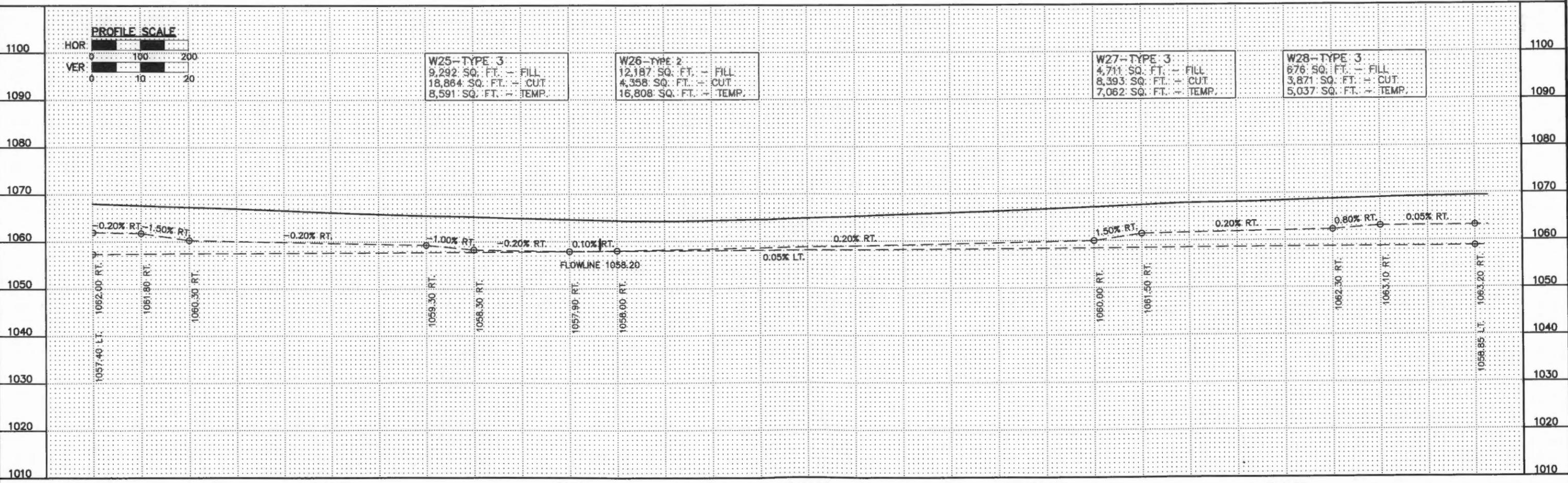


W25-TYPE 3
 9,292 SQ. FT. - FILL
 18,864 SQ. FT. - CUT
 8,591 SQ. FT. - TEMP.

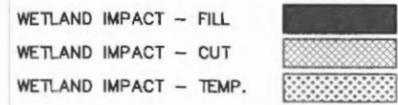
W26-TYPE 2
 12,187 SQ. FT. - FILL
 4,358 SQ. FT. - CUT
 16,808 SQ. FT. - TEMP.

W27-TYPE 3
 4,711 SQ. FT. - FILL
 8,393 SQ. FT. - CUT
 7,062 SQ. FT. - TEMP.

W28-TYPE 3
 676 SQ. FT. - FILL
 3,871 SQ. FT. - CUT
 5,037 SQ. FT. - TEMP.



WETLAND LEGEND



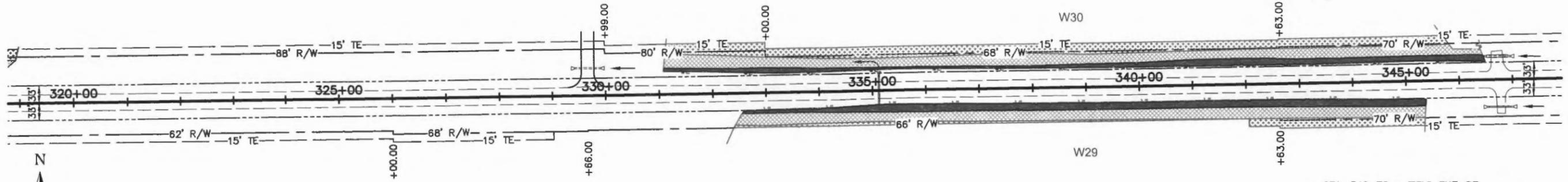
PARCEL #35
 SW1/4SW1/4
 SEC. 5, T. 157 N., R. 45 W.
 LORI JENSEN
 1.63 ACRES R/W
 0.45 ACRES TE

PARCEL #36
 SE1/4SW1/4
 SEC. 5, T. 157 N., R. 45 W.
 RONALD AND ANGELA WESTMAN
 1.13 ACRES R/W
 0.12 ACRES TE

STA. 329+66 = FIELD ENT. LT.
 F & I
 F & I

STA. 335+12 = CULV.
 INP. 30" X 72' R.C. PIPE CULV. - REM.
 F & I
 F & I

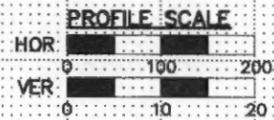
STA. 346+73 = FIELD ENT. LT.
 INP. 36" X 40' C.S. PIPE CULV. - REM.
 F & I
 F & I



PARCEL #38
 NW1/4NW1/4
 SEC. 8, T. 157 N., R. 45 W.
 WAYNE LARSON et al
 0.91 ACRES R/W
 0.45 ACRES TE

PARCEL #39
 E1/2NW1/4
 SEC. 8, T. 157 N., R. 45 W.
 STATE OF MINNESOTA
 0.98 ACRES R/W
 0.07 ACRES TE

STA. 346+78 = FIELD ENT. RT.
 INP. 18" X 40' C.S. PIPE CULV. - REM.
 F & I
 F & I



W29-TYPE 6
 16,436 SQ. FT. - FILL
 27,038 SQ. FT. - CUT
 9,067 SQ. FT. - TEMP.

W30-TYPE 6
 12,952 SQ. FT. - FILL
 29,327 SQ. FT. - CUT
 28,411 SQ. FT. - TEMP.

EXC. 107,323.24 CU. YDS. 87,967.53 COMMON
 19,355.71 TOPSOIL
 EMB. 55,213.28 CU. YDS. 11,240.40 UNCLASSIFIED

FLOWLINE 1059.90

320+00

325+00

330+00

335+00

340+00

345+00

CERTIFIED BY: _____

LICENSE NO. 23385

DATE: _____

MARSHALL COUNTY, MINNESOTA

STATE AID PROJECT NO. 45-606-28

SHEET 17 OF 158 SHEETS

WETLAND LEGEND

- WETLAND IMPACT - FILL 
- WETLAND IMPACT - CUT 
- WETLAND IMPACT - TEMP. 

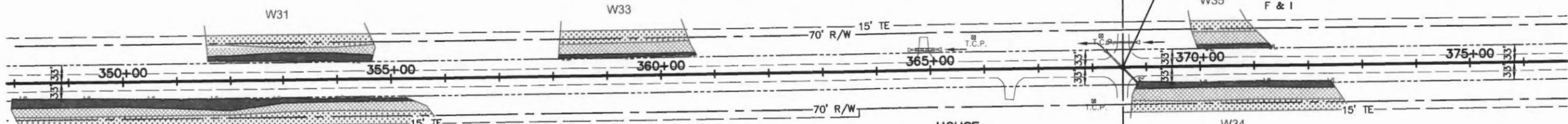
PARCEL #37
 S1/2SE1/4
 SEC. 5, T. 157 N., R. 45 W.
 ELDOR WESTMAN
 2.21 ACRES R/W
 0.89 ACRES TE

STA. 368+58 = CULV. DIAGONAL
 INP. 30" X 90' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 364+90 = FARM ENT. LT.
 INP. 36" X 36' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 368+56.30 = SEC. COR. & P.I.
 DEF = 00'19"03" RT.

STA. 368+58 = TWP APP. LT.
 INP. 24" X 48' R.C. PIPE CULV. - REM.
 F & I
 F & I

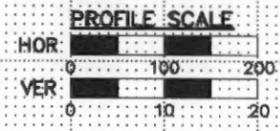
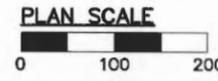


PARCEL #40
 NW1/4NE1/4
 SEC. 8, T. 157 N., R. 45 W.
 GINGER AND PATRICK PASSA
 1.10 ACRES R/W
 0.45 ACRES TE

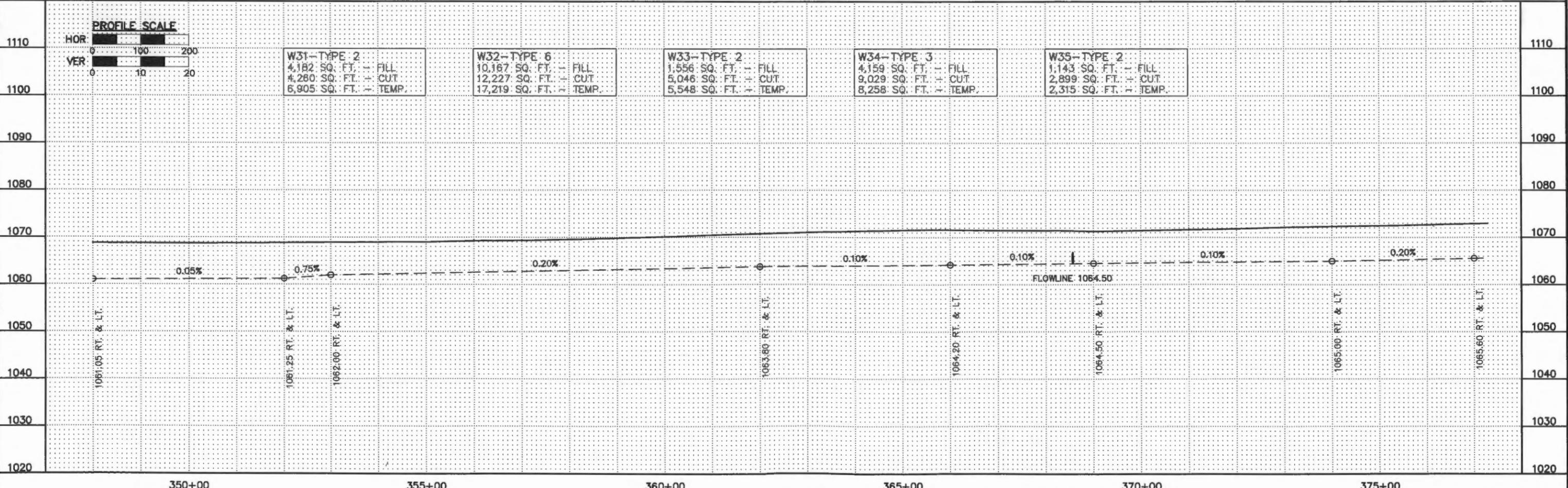
PARCEL #41
 PART OF THE NE1/4NE1/4
 SEC. 8, T. 157 N., R. 45 W.
 DOUGLAS HENRICKSON et al
 0.80 ACRES R/W
 0.33 ACRES TE

STA. 366+47 = FARM ENT. RT.
 INP. DRY CROSSING
 F & I
 F & I

HOUSE 
 STA. 368+55 = TWP APP. RT.
 INP. DRY CROSSING
 F & I
 F & I



<p>W31--TYPE 2 4,182 SQ. FT. - FILL 4,280 SQ. FT. - CUT 6,905 SQ. FT. - TEMP.</p>	<p>W32--TYPE 6 10,167 SQ. FT. - FILL 12,227 SQ. FT. - CUT 17,219 SQ. FT. - TEMP.</p>	<p>W33--TYPE 2 1,556 SQ. FT. - FILL 5,046 SQ. FT. - CUT 5,548 SQ. FT. - TEMP.</p>	<p>W34--TYPE 3 4,159 SQ. FT. - FILL 9,029 SQ. FT. - CUT 8,258 SQ. FT. - TEMP.</p>	<p>W35--TYPE 2 1,143 SQ. FT. - FILL 2,899 SQ. FT. - CUT 2,315 SQ. FT. - TEMP.</p>
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WETLAND LEGEND

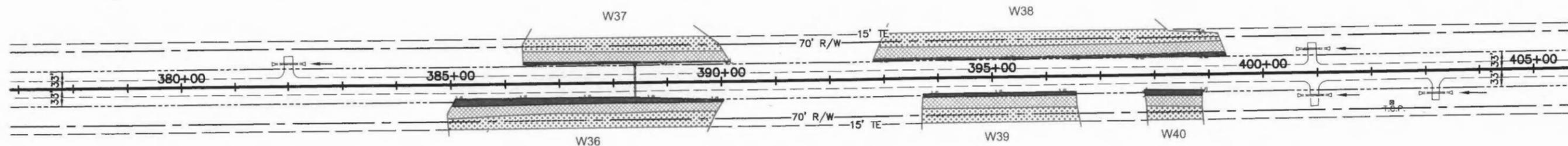
- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

PARCEL #43
 SW1/4
 SEC. 4, T. 157 N., R. 45 W.
 RICKIE ANDERSON
 2.28 ACRES R/W
 0.93 ACRES TE

PARCEL #44
 SE1/4 LESS THE EASTERLY 570'
 SEC. 4, T. 157 N., R. 45 W.
 END - IRA, INC. et al
 1.80 ACRES R/W
 0.73 ACRES TE

STA. 382+03 = FIELD ENT. LT.
 INP. 24" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 400+90 = FIELD ENT. LT.
 INP. 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I



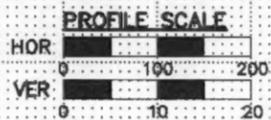
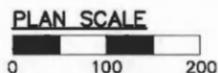
STA. 400+95 = FARM ENT. RT.
 INP. 30" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 403+19 = FARM ENT. RT.
 INP. 30" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

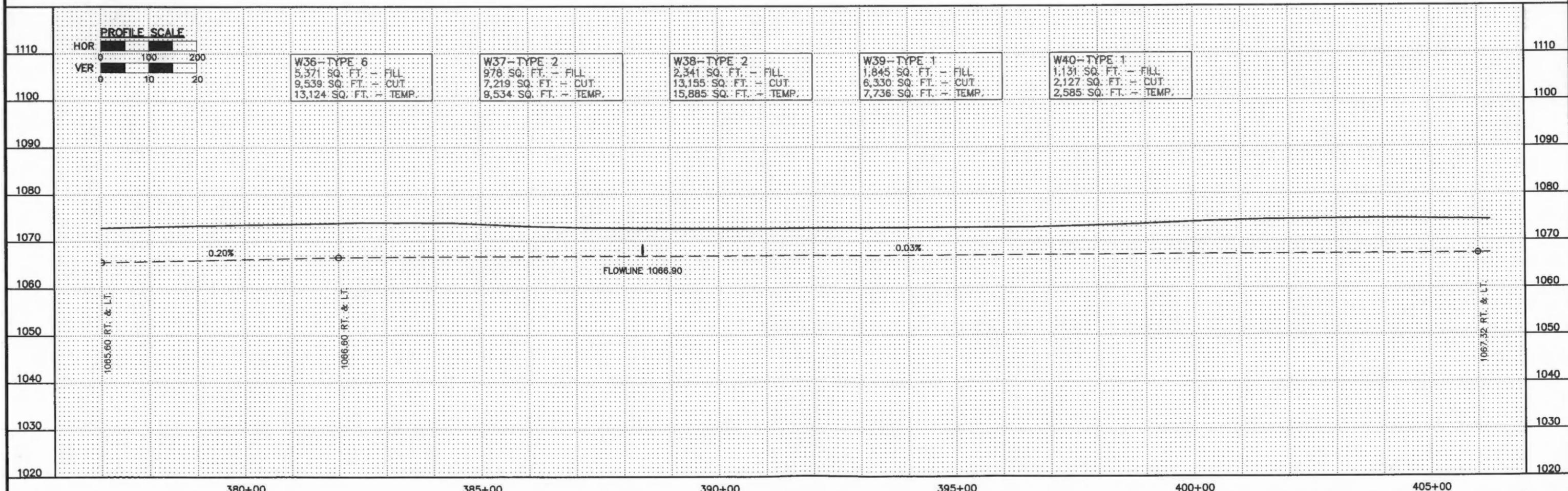
PARCEL #46
 NW1/4NW1/4
 SEC. 9, T. 157 N., R. 45 W.
 PALMER AND AUDREY RUD
 1.15 ACRES R/W
 0.46 ACRES TE

STA. 388+40 = C. CULV.
 INP. 18" X 78' R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #47
 NE1/4NW1/4, N1/2NE1/4
 SEC. 9, T. 157 N., R. 45 W.
 LEONARD JACOBSON
 3.43 ACRES R/W
 1.39 ACRES TE



<p>W36-TYPE 6 5,371 SQ. FT. - FILL 9,539 SQ. FT. - CUT 13,124 SQ. FT. - TEMP.</p>	<p>W37-TYPE 2 978 SQ. FT. - FILL 7,219 SQ. FT. - CUT 8,534 SQ. FT. - TEMP.</p>	<p>W38-TYPE 2 2,341 SQ. FT. - FILL 13,155 SQ. FT. - CUT 15,885 SQ. FT. - TEMP.</p>	<p>W39-TYPE 1 1,845 SQ. FT. - FILL 6,330 SQ. FT. - CUT 7,736 SQ. FT. - TEMP.</p>	<p>W40-TYPE 1 1,131 SQ. FT. - FILL 2,127 SQ. FT. - CUT 2,585 SQ. FT. - TEMP.</p>
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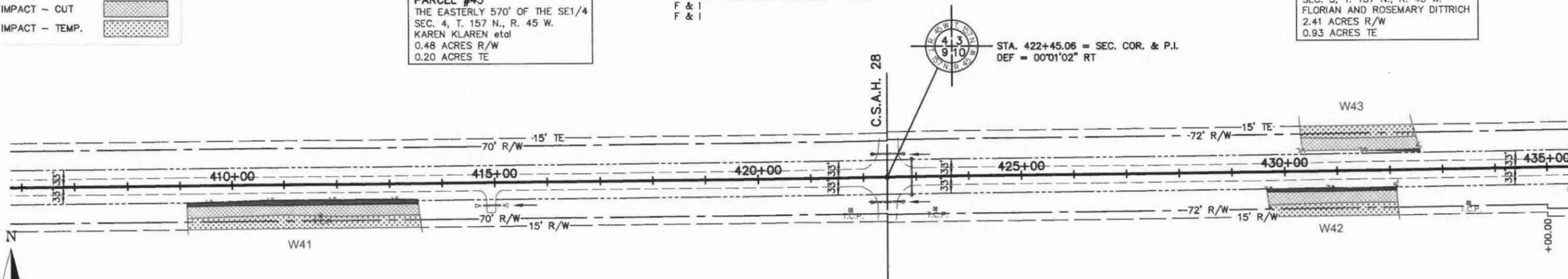
WETLAND LEGEND

- WETLAND IMPACT - FILL 
- WETLAND IMPACT - CUT 
- WETLAND IMPACT - TEMP. 

PARCEL #45
 THE EASTERLY 570' OF THE SE1/4
 SEC. 4, T. 157 N., R. 45 W.
 KAREN KLAREN et al
 0.48 ACRES R/W
 0.20 ACRES TE

STA. 422+47 = TWP APP. LT.
 INP. 30" X 68" R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #48
 SW1/4
 SEC. 3, T. 157 N., R. 45 W.
 FLORIAN AND ROSEMARY DITTRICH
 2.41 ACRES R/W
 0.93 ACRES TE

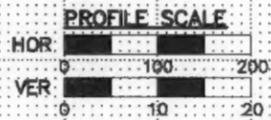


STA. 414+94 = FIELD ENT. RT.
 INP. 30" X 30" R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 422+46 = TWP APP. RT.
 INP. 30" X 68" R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 422+91 = C CULV.
 INP. 24" X 76" R.C. PIPE CULV. - REM.
 F & I
 F & I

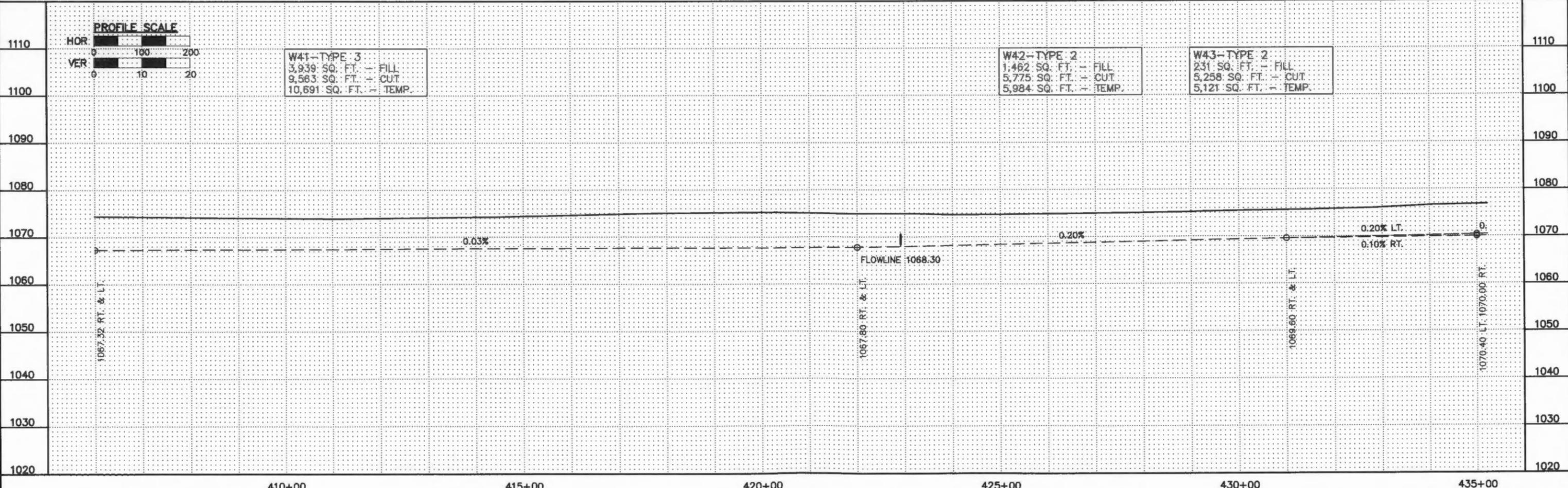
PARCEL #50
 N1/2NW1/4
 SEC. 10, T. 157 N., R. 45 W.
 SCOTT THUN et al.
 2.67 ACRES R/W
 0.93 ACRES TE



W41--TYPE 3
 3,939 SQ. FT. - FILL
 9,583 SQ. FT. - CUT
 10,691 SQ. FT. - TEMP.

W42--TYPE 2
 1,462 SQ. FT. - FILL
 5,775 SQ. FT. - CUT
 5,984 SQ. FT. - TEMP.

W43--TYPE 2
 231 SQ. FT. - FILL
 5,258 SQ. FT. - CUT
 5,121 SQ. FT. - TEMP.



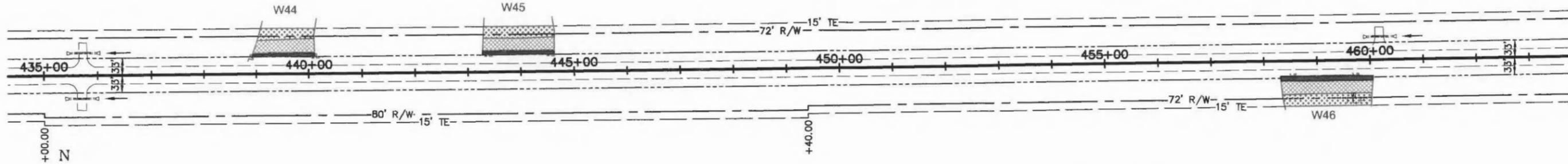
WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 435+73 = FIELD ENT. LT.
 INP. 24" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

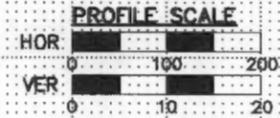
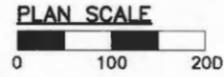
PARCEL #49
 SE1/4
 SEC. 3, T. 157 N., R. 45 W.
 RICKY AND STACEY NELSON
 2.41 ACRES R/W
 0.93 ACRES TE

STA. 460+19 = FARM ENT. LT.
 INP. 24" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I



STA. 435+71 = FIELD ENT. RT.
 INP. 24" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

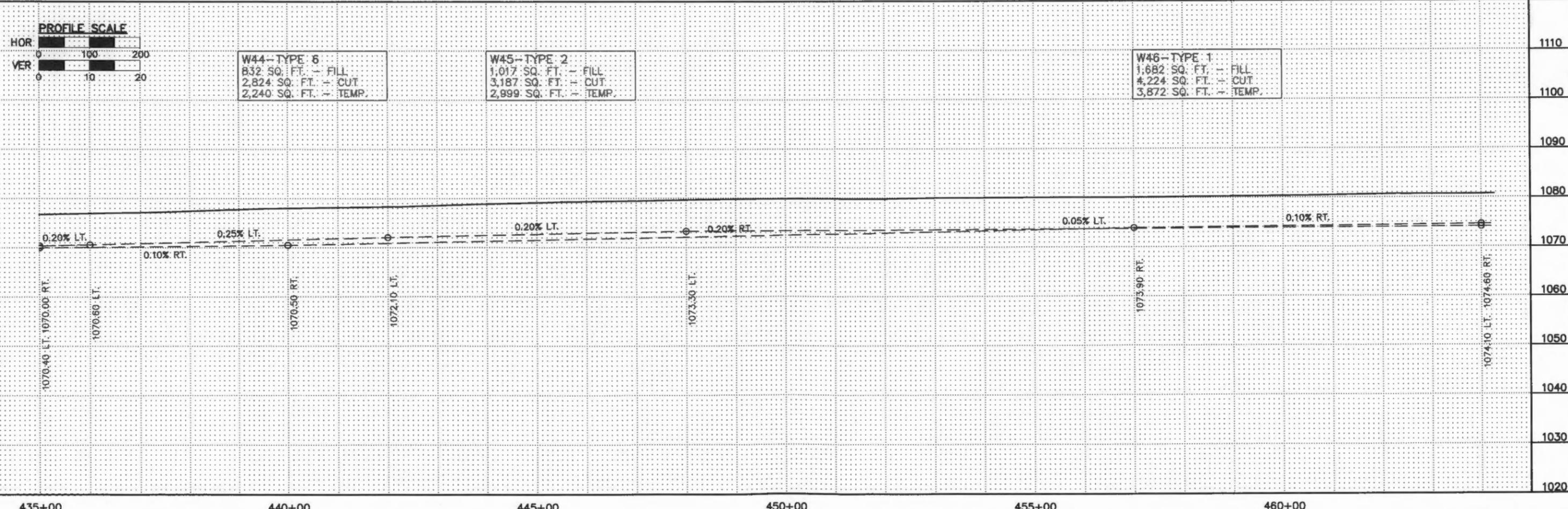
PARCEL #51
 W1/2NE1/4
 SEC. 10, T. 157 N., R. 45 W.
 EMORY AND JENNIFER FLATEN
 1.21 ACRES R/W
 0.46 ACRES TE



W44--TYPE 6
 832 SQ. FT. - FILL
 2,824 SQ. FT. - CUT
 2,240 SQ. FT. - TEMP.

W45--TYPE 2
 1,017 SQ. FT. - FILL
 3,187 SQ. FT. - CUT
 2,999 SQ. FT. - TEMP.

W46--TYPE 1
 1,682 SQ. FT. - FILL
 4,224 SQ. FT. - CUT
 3,872 SQ. FT. - TEMP.



WETLAND LEGEND

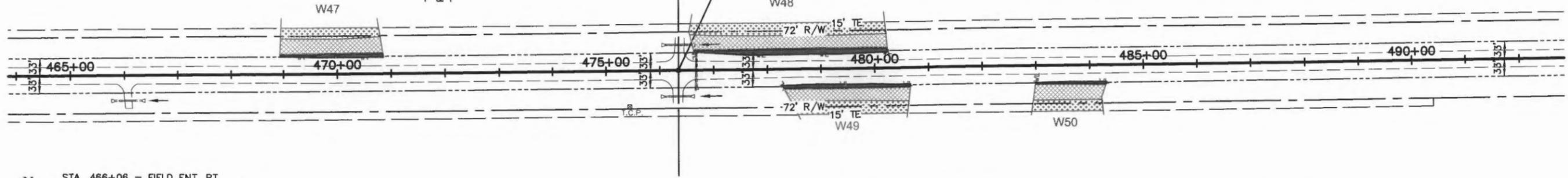
WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 476+37 = FIELD ENT. LT.
 INP. 24" X 48' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 476+68 = CULV.
 INP. 18" X 78' R.C. PIPE CULV. - REM.
 F & I
 F & I

STA. 476+34.57 = SEC. COR. & P.I.
 DEF = 00°00'48" RT.

PARCEL #53
 S1/2SW1/4
 SEC. 2, T. 157 N., R. 45 W.
 MITCHELL BORNEMAN
 2.40 ACRES R/W
 0.92 ACRES TE



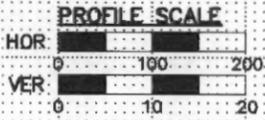
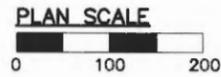
STA. 466+06 = FIELD ENT. RT.
 INP. 24" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #52
 E1/2NE1/4
 SEC. 10, T. 157 N., R. 45 W.
 MARY AND CHRISTIAN SCHAFFHAUSER
 1.21 ACRES R/W
 0.46 ACRES TE

STA. 476+33 = TWP APP. RT.
 INP. 24" X 48' R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #56
 W1/2NW1/4NW1/4
 SEC. 11, T. 157 N., R. 45 W.
 MERIDIAN OIL CO.
 0.60 ACRES R/W
 0.23 ACRES TE

PARCEL #57
 E1/2NW1/4NW1/4
 SEC. 11, T. 157 N., R. 45 W.
 MERIDIAN OIL CO.
 0.60 ACRES R/W
 0.23 ACRES TE

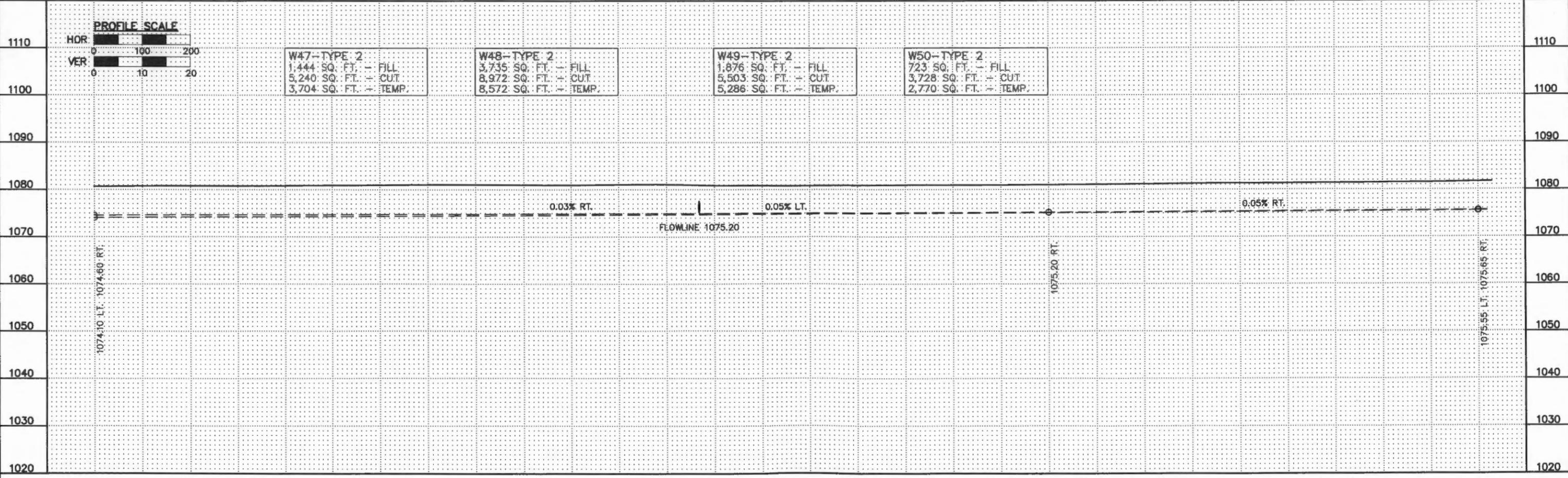


W47-TYPE 2
 1,444 SQ. FT. - FILL
 5,240 SQ. FT. - CUT
 3,704 SQ. FT. - TEMP.

W48-TYPE 2
 3,735 SQ. FT. - FILL
 8,972 SQ. FT. - CUT
 8,572 SQ. FT. - TEMP.

W49-TYPE 2
 1,876 SQ. FT. - FILL
 5,503 SQ. FT. - CUT
 5,286 SQ. FT. - TEMP.

W50-TYPE 2
 723 SQ. FT. - FILL
 3,728 SQ. FT. - CUT
 2,770 SQ. FT. - TEMP.



465+00

470+00

475+00

480+00

485+00

490+00

CERTIFIED BY: _____

LICENSE NO. 23385

DATE: _____

MARSHALL COUNTY, MINNESOTA STATE AID PROJECT NO. 45-606-28

SHEET 22 OF 158 SHEETS

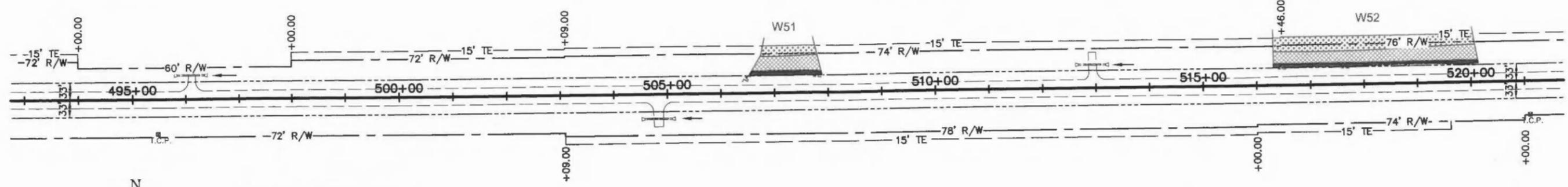
WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 496+13 = FARM ENT. LT.
 INP. 18" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #54
 W1/2SE1/4
 SEC. 2, T. 157 N., R. 45 W.
 EINER LANGELETT
 1.26 ACRES R/W
 0.46 ACRES TE

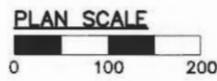
STA. 512+95 = FIELD ENT. LT.
 INP. 18" X 30' R.C. PIPE CULV. - REM.
 F & I
 F & I



PARCEL #58
 NE1/4NW1/4
 SEC. 11, T. 157 N., R. 45 W.
 STATE OF MINNESOTA
 1.20 ACRES R/W
 0.05 ACRES TE

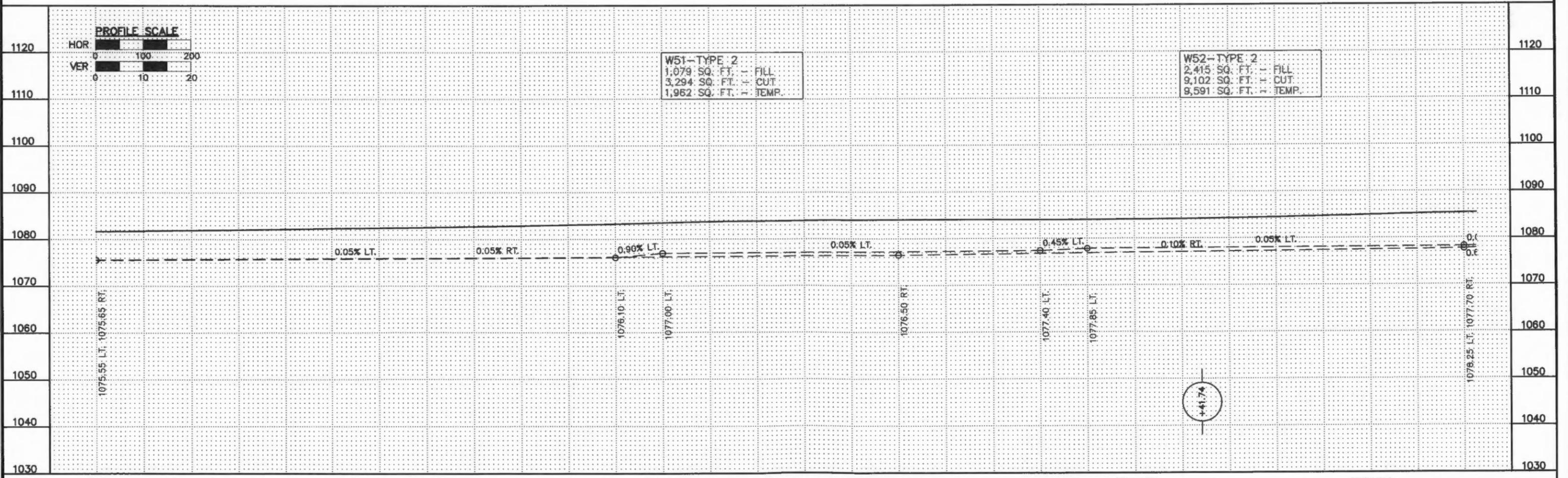
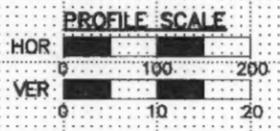
STA. 504+83 = FIELD ENT. RT.
 INP. 18" X 40' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #59
 N1/2NE1/4
 SEC. 11, T. 157 N., R. 45 W.
 CLYDE KOSTRZEWSKI et al.
 2.64 ACRES R/W
 0.92 ACRES TE



W51-TYPE 2
 1,079 SQ. FT. - FILL
 3,294 SQ. FT. - CUT
 1,962 SQ. FT. - TEMP.

W52-TYPE 2
 2,415 SQ. FT. - FILL
 9,102 SQ. FT. - CUT
 9,591 SQ. FT. - TEMP.



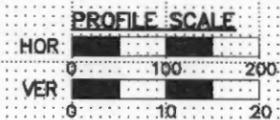
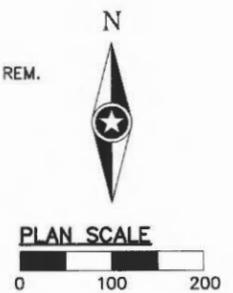
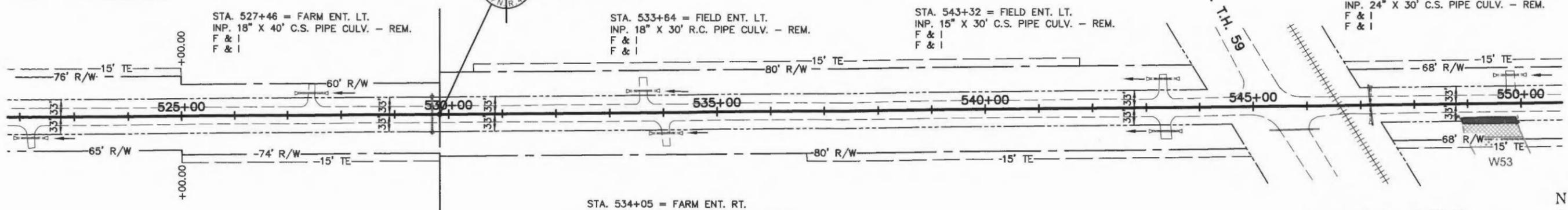
WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

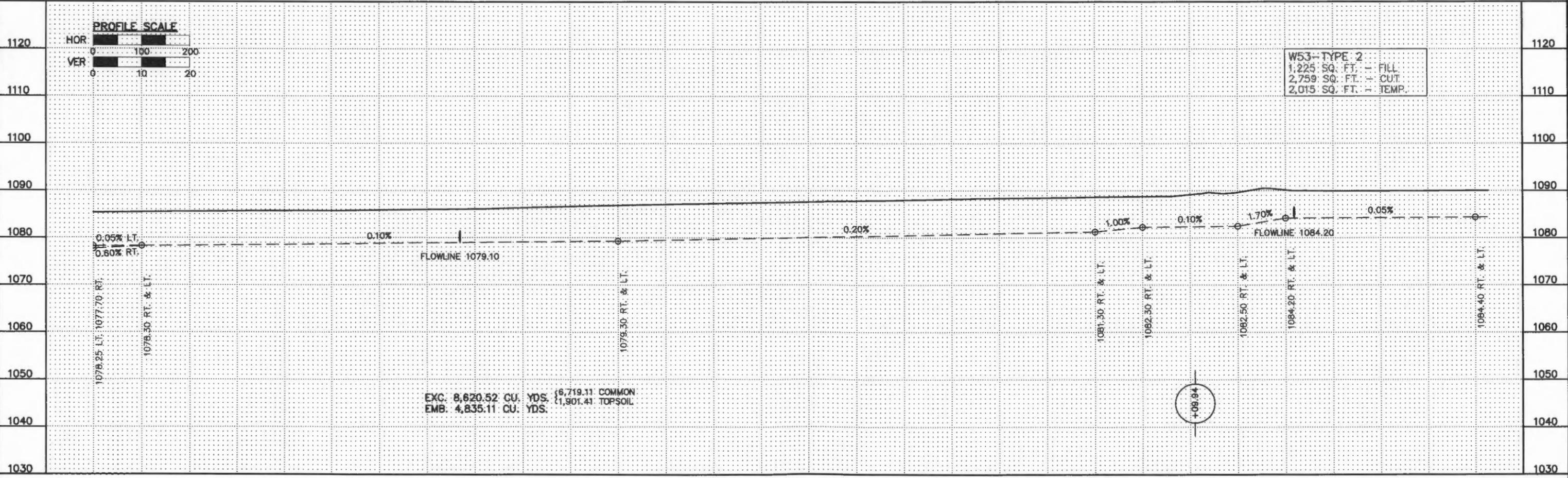
PARCEL #55
 E1/2SE1/4
 SEC. 2, T. 157 N., R. 45 W.
 LINDA BODELL et al
 1.32 ACRES R/W
 0.46 ACRES TE

PARCEL #60
 W1/2SW1/4, SE1/4SW1/4 LYING W. OF SOO R.R.
 SEC. 1, T. 157 N., R. 45 W.
 LINDA BODELL et al.
 1.64 ACRES R/W
 0.41 ACRES TE

PARCEL #64
 NW1/4NW1/4
 SEC. 12, T. 157 N., R. 45 W.
 JOHN AND LINDA BODELL
 1.47 ACRES R/W
 0.24 ACRES TE



W53-TYPE 2
 1,225 SQ. FT. - FILL
 2,759 SQ. FT. - CUT
 2,015 SQ. FT. - TEMP.



PARCEL #61
 PART OF SW1/4 LYING NE OF HWY. 59
 SEC. 1, T. 157 N., R. 45 W.
 MERIDIAN OIL COMPANY
 0.79 ACRES R/W
 0.34 ACRES TE

T. 157 N., R. 45 W.

STA. 557+05.57 = 1/4 COR. & P.I.
 DEF=00°00'37" RT.

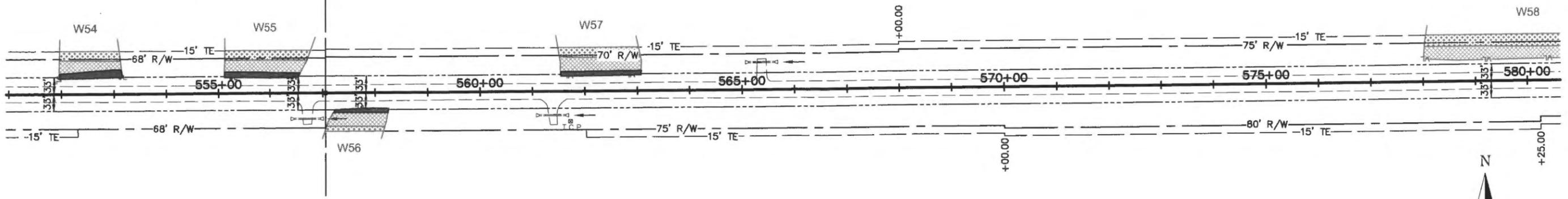
STA. 565+38 = FIELD ENT. LT.
 INP. 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #62
 W1/2SE1/4
 SEC. 1, T. 157 N., R. 45 W.
 SCOTT THUN et al.
 1.15 ACRES R/W
 0.46 ACRES TE

PARCEL #63
 SE1/4SE1/4
 SEC. 1, T. 157 N., R. 45 W.
 ANDERSON/MORENZ TRUST
 1.28 ACRES R/W
 0.46 ACRES TE

WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

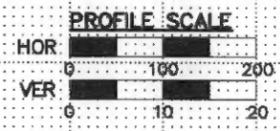


PARCEL #65
 NE1/4NW1/4
 SEC. 12, T. 157 N., R. 45 W.
 DON AND BETTY PETERSON
 1.14 ACRES R/W
 0.30 ACRES TE

STA. 556+71 = FIELD ENT. RT.
 INP. 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 561+40 = FARM ENT. RT.
 INP. 24" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #66
 N1/2NE1/4 LESS PARCEL #67
 SEC. 12, T. 157 N., R. 45 W.
 WESLEY RUD et al.
 2.35 ACRES R/W
 0.60 ACRES TE



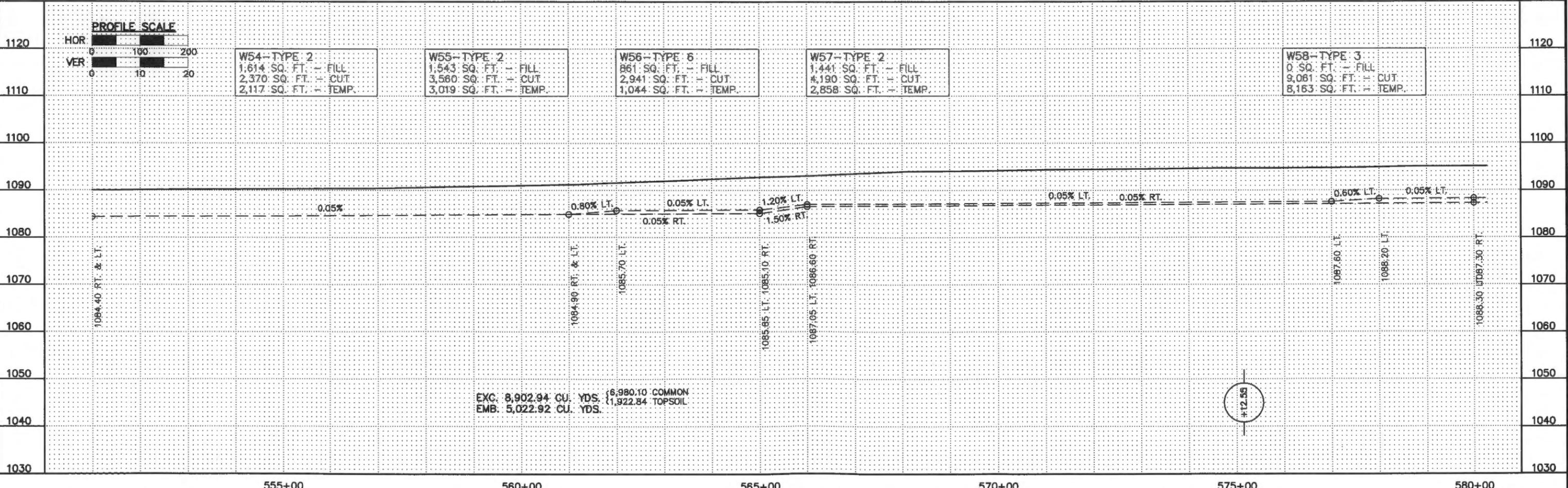
W54-TYPE 2
 1,614 SQ. FT. - FILL
 2,370 SQ. FT. - CUT
 2,117 SQ. FT. - TEMP.

W55-TYPE 2
 1,543 SQ. FT. - FILL
 3,580 SQ. FT. - CUT
 3,019 SQ. FT. - TEMP.

W56-TYPE 6
 861 SQ. FT. - FILL
 2,941 SQ. FT. - CUT
 1,044 SQ. FT. - TEMP.

W57-TYPE 2
 1,441 SQ. FT. - FILL
 4,190 SQ. FT. - CUT
 2,858 SQ. FT. - TEMP.

W58-TYPE 3
 0 SQ. FT. - FILL
 9,081 SQ. FT. - CUT
 8,163 SQ. FT. - TEMP.



EXC. 8,902.94 CU. YDS. 6,980.10 COMMON
 EMB. 5,022.92 CU. YDS. 1,922.84 TOPSOIL

WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

STA. 583+55 = TWP APP. LT.
 INP. 24" X 48" C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 587+57 = CULV.
 INP. 24" X 72" C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #68
 S1/2
 SEC. 6, T. 157 N., R. 44 W.
 ANDERSON/MORENZ TRUST
 4.84 ACRES R/W
 1.84 ACRES TE

STA. 602+07 = FIELD ENT. LT.
 INP. 18" X 30" C.S. PIPE CULV. - REM.
 F & I
 F & I



STA. 583+55.43 = SEC. COR. & P.I.
 DEF = 110°20' RT.
 D = 00°30'00"
 T = 117.24
 L = 234.47

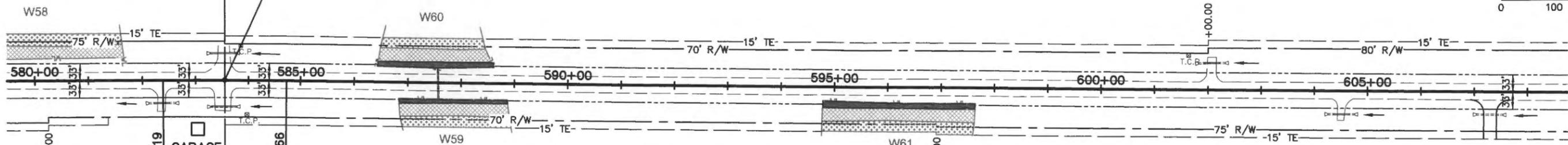
STA. 582+35 = FARM ENT. RT.
 INP. 24" X 30" C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 583+54 = FARM ENT. RT.
 INP. 24" X 48" C.S. PIPE CULV. - REM.
 F & I
 F & I

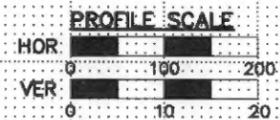
PARCEL #69
 LOT 1
 SEC. 7, T. 157 N., R. 44 W.
 ANDERSON/MORENZ TRUST
 1.14 ACRES R/W
 0.46 ACRES TE

PARCEL #70
 NE1/4NW1/4
 SEC. 7, T. 157 N., R. 44 W.
 RONALD AND BARBARA BENKE
 1.06 ACRES R/W
 0.38 ACRES TE

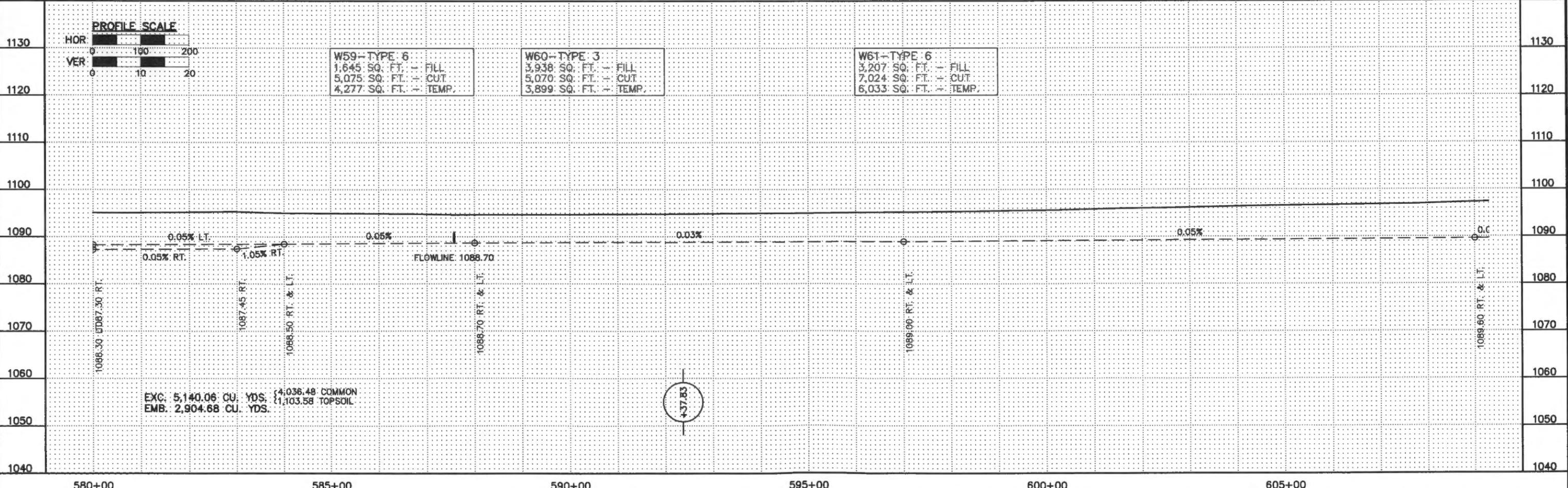
PARCEL #71
 NE1/4NW1/4
 SEC. 7, T. 157 N., R. 44 W.
 RONALD AND BARBARA BENKE
 1.06 ACRES R/W
 0.38 ACRES TE



PARCEL #67
 E 20 RODS OF NE1/4NE1/4
 SEC. 12, T. 157 N., R. 45 W.
 WESLEY AND EUNICE RUD
 0.30 ACRES R/W
 0.11 ACRES TE



<p>W59--TYPE 6 1,645 SQ. FT. - FILL 5,075 SQ. FT. - CUT 4,277 SQ. FT. - TEMP.</p>	<p>W60--TYPE 3 3,938 SQ. FT. - FILL 5,070 SQ. FT. - CUT 3,899 SQ. FT. - TEMP.</p>	<p>W61--TYPE 6 3,207 SQ. FT. - FILL 7,024 SQ. FT. - CUT 6,033 SQ. FT. - TEMP.</p>
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EXC. 5,140.06 CU. YDS. (4,036.48 COMMON
 EMB. 2,904.68 CU. YDS. 1,103.58 TOPSOIL

WETLAND LEGEND

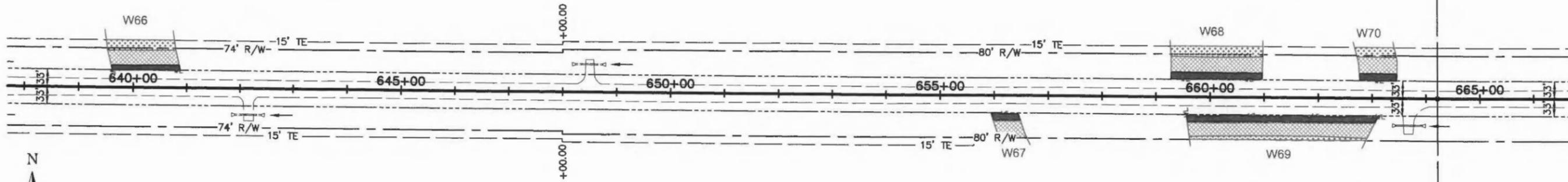
WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 648+50 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #75
 SW1/4
 SEC. 5, T. 157 N., R. 44 W.
 JAY ULFERTS et al.
 2.78 ACRES R/W
 0.94 ACRES TE

T. 157 N., R. 44 W.

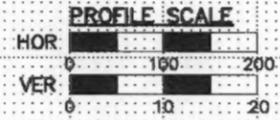
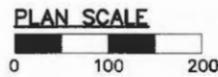
STA. 664+21.27 = 1/4 COR. & P.I.
 DEF=00'16"12" LT.



STA. 642+17 = FIELD ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #77
 NW1/4
 SEC. 8, T. 157 N., R. 44 W.
 DONALD AND GAIL LARSON
 2.48 ACRES R/W
 0.64 ACRES TE

STA. 663+69 = FARM ENT. RT.
 INP. 18" X 50' C.S. PIPE CULV. - REM.
 F & I
 F & I



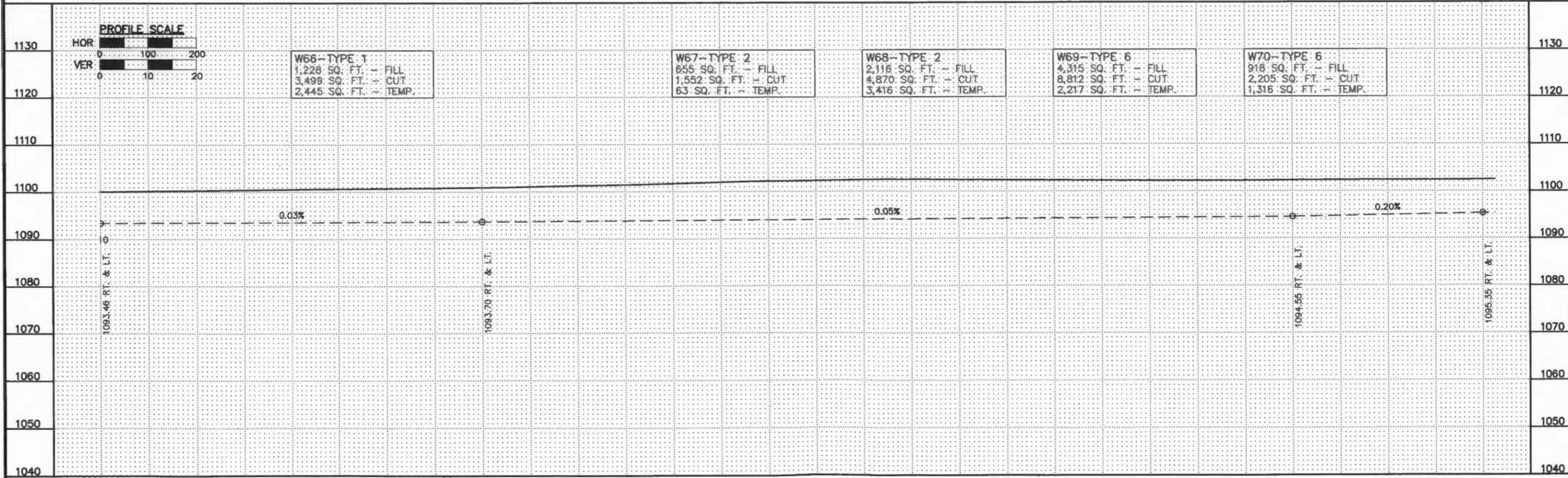
W66--TYPE 1
 1,228 SQ. FT. - FILL
 3,499 SQ. FT. - CUT
 2,445 SQ. FT. - TEMP.

W67--TYPE 2
 655 SQ. FT. - FILL
 1,552 SQ. FT. - CUT
 63 SQ. FT. - TEMP.

W68--TYPE 2
 2,116 SQ. FT. - FILL
 4,870 SQ. FT. - CUT
 3,416 SQ. FT. - TEMP.

W69--TYPE 6
 4,315 SQ. FT. - FILL
 8,812 SQ. FT. - CUT
 2,217 SQ. FT. - TEMP.

W70--TYPE 6
 918 SQ. FT. - FILL
 2,205 SQ. FT. - CUT
 1,316 SQ. FT. - TEMP.



640+00 645+00 650+00 655+00 660+00 665+00

WETLAND LEGEND

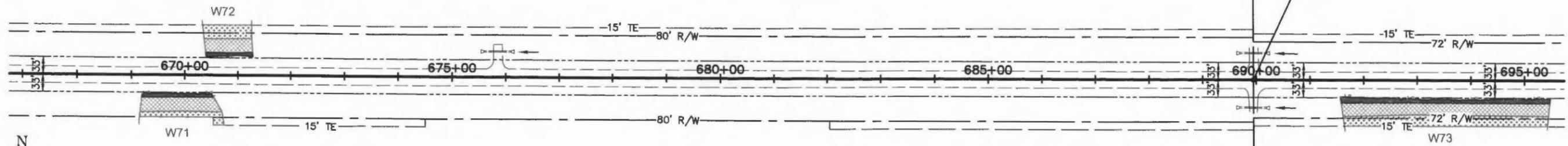
WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

STA. 675+86 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #76
 SE1/4
 SEC. 5, T. 157 N., R. 44 W.
 EVERT AND BETTY LANGELETT
 2.77 ACRES R/W
 0.89 ACRES TE

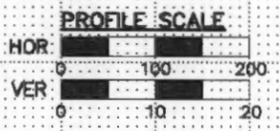
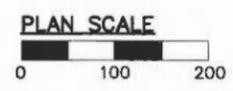
STA. 689+95 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 689+94.66 = SEC. COR. & P.I.
 DEF. = 00°07'38" RT.



PARCEL #78
 NE1/4
 SEC. 8, T. 157 N., R. 44 W.
 JOHN MATTSON
 2.77 ACRES R/W
 0.41 ACRES TE

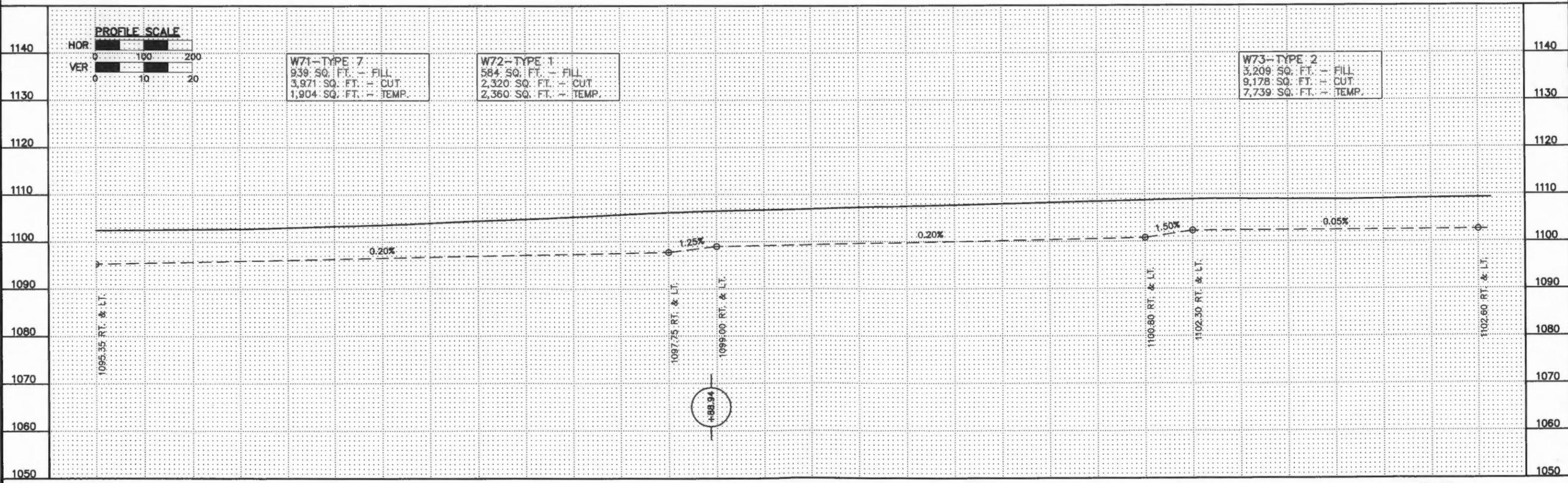
STA. 689+95 = FIELD ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I



W71-TYPE 7
 939 SQ. FT. - FILL
 3,971 SQ. FT. - CUT
 1,904 SQ. FT. - TEMP.

W72-TYPE 1
 584 SQ. FT. - FILL
 2,320 SQ. FT. - CUT
 2,360 SQ. FT. - TEMP.

W73-TYPE 2
 3,209 SQ. FT. - FILL
 9,178 SQ. FT. - CUT
 7,739 SQ. FT. - TEMP.



WETLAND LEGEND

- WETLAND IMPACT - FILL
- WETLAND IMPACT - CUT
- WETLAND IMPACT - TEMP.

PARCEL #79
 W1/2SW1/4
 SEC. 4, T. 157 N., R. 44 W.
 PATRICK BENKE
 1.21 ACRES R/W
 0.46 ACRES TE

PARCEL #80
 E1/2SW1/4
 SEC. 4, T. 157 N., R. 44 W.
 JEFFREY BENKE
 1.21 ACRES R/W
 0.46 ACRES TE

STA. 716+87 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

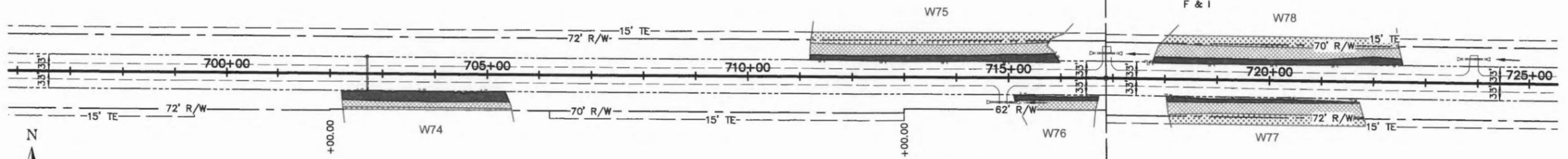
PARCEL #81
 W1/2SE1/4
 SEC. 4, T. 157 N., R. 44 W.
 RAYMOND AND CAROL BENKE
 1.15 ACRES R/W
 0.47 ACRES TE

STA. 702+71 = CULV.
 INP. 24" X 72' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 716+86.62 = 1/4 COR. & P.I.
 DEF=00°35'46" RT.

T. 157 N., R. 44 W.

STA. 723+94 = FIELD ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

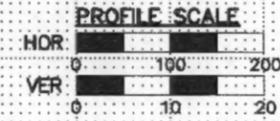


PARCEL #83
 N1/2NW1/4NW1/4 & NW1/4NE1/4NW1/4
 SEC. 9, T. 157 N., R. 44 W.
 GAYLAN AND TRACY MELVIE
 1.77 ACRES R/W
 0.48 ACRES TE

STA. 714+90 = FARM ENT. RT.
 INP. 18" X 40' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #84
 NE1/4NE1/4NW1/4
 SEC. 9, T. 157 N., R. 44 W.
 TYSON JARSHAW
 0.64 ACRES R/W
 0.23 ACRES TE

PARCEL #85
 NW1/4NE1/4
 SEC. 9, T. 157 N., R. 44 W.
 BRIAN AND CARMINE TRULSON
 1.21 ACRES R/W
 0.17 ACRES TE



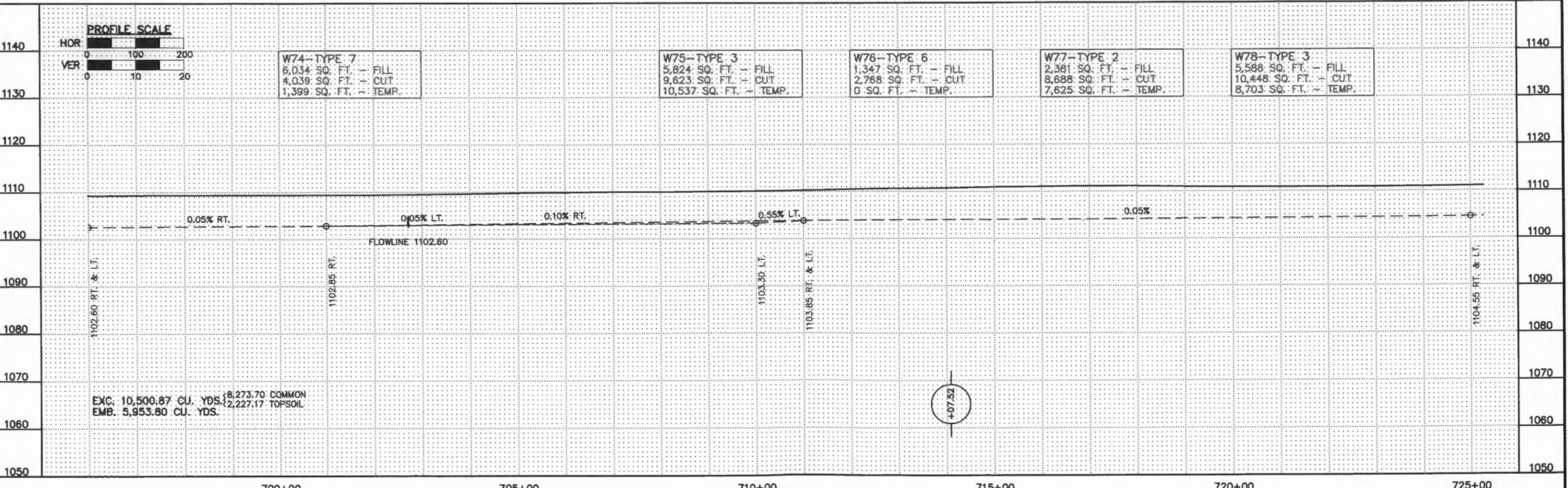
W74-TYPE 7
 6,034 SQ. FT. - FILL
 4,039 SQ. FT. - CUT
 1,399 SQ. FT. - TEMP.

W75-TYPE 3
 5,824 SQ. FT. - FILL
 9,623 SQ. FT. - CUT
 10,537 SQ. FT. - TEMP.

W76-TYPE 6
 1,347 SQ. FT. - FILL
 2,788 SQ. FT. - CUT
 0 SQ. FT. - TEMP.

W77-TYPE 2
 2,381 SQ. FT. - FILL
 8,688 SQ. FT. - CUT
 7,625 SQ. FT. - TEMP.

W78-TYPE 3
 5,588 SQ. FT. - FILL
 10,448 SQ. FT. - CUT
 8,703 SQ. FT. - TEMP.



EXC. 10,500.87 CU. YDS. 18,273.70 COMMON
 EMB. 5,953.80 CU. YDS. 12,227.17 TOPSOIL

WETLAND LEGEND

WETLAND IMPACT - FILL	
WETLAND IMPACT - CUT	
WETLAND IMPACT - TEMP.	

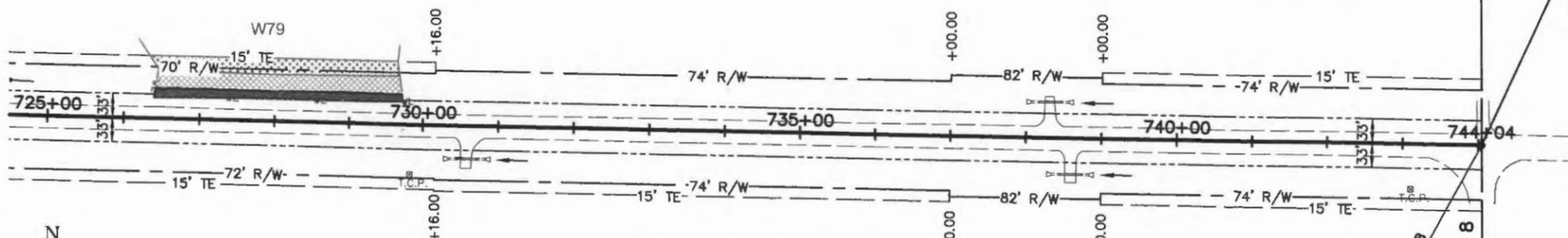
PARCEL #82
 E1/2SE1/4
 SEC. 4, T. 157 N., R. 44 W.
 CLAYTON HANSON AND ROGER JORGENSEN
 1.31 ACRES R/W
 0.17 ACRES TE

STA. 738+32 = FARM ENT. LT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

STA. 744+04 = TWP APP. LT.
 INP. DRY CROSSING



STA. 744+04.44 = SEC. COR.

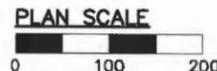


STA. 730+60 = FARM ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

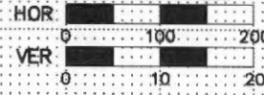
STA. 738+60 = FARM ENT. RT.
 INP. 18" X 30' C.S. PIPE CULV. - REM.
 F & I
 F & I

PARCEL #86
 E1/2NE1/4
 SEC. 9, T. 157 N., R. 44 W.
 JEFFREY BENKE
 1.32 ACRES R/W
 0.21 ACRES TE

STA. 744+04 = TWP APP. RT.
 INP. DRY CROSSING

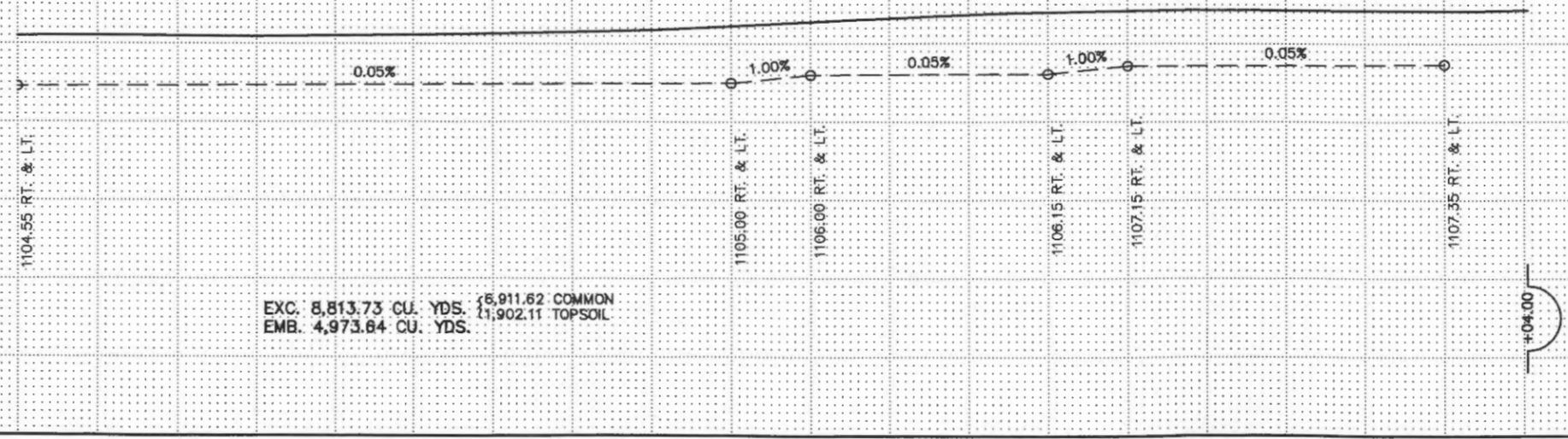


PROFILE SCALE

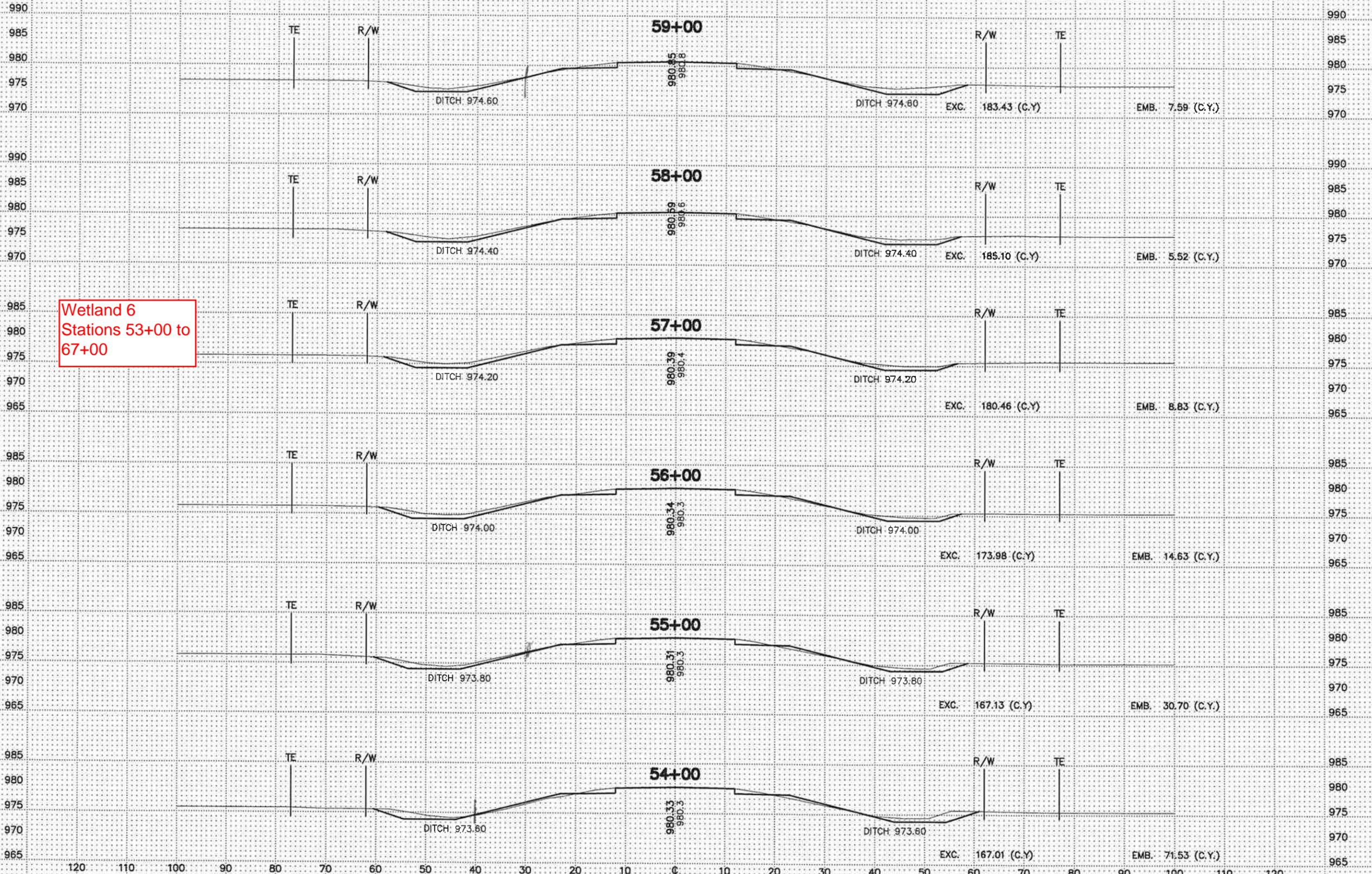


W79--TYPE 2
 3,896 SQ. FT. - FILL
 7,329 SQ. FT. - CUT
 6,788 SQ. FT. - TEMP.

EXC. 8,813.73 CU. YDS. 6,911.62 COMMON
 EMB. 4,973.64 CU. YDS. 1,902.11 TOPSOIL



120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120

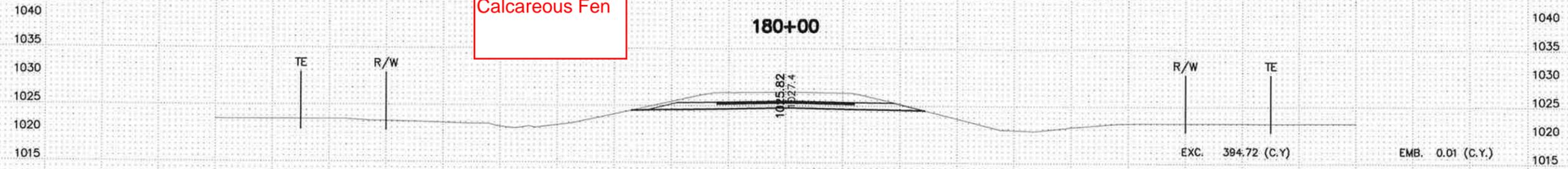


Wetland 6
Stations 53+00 to
67+00

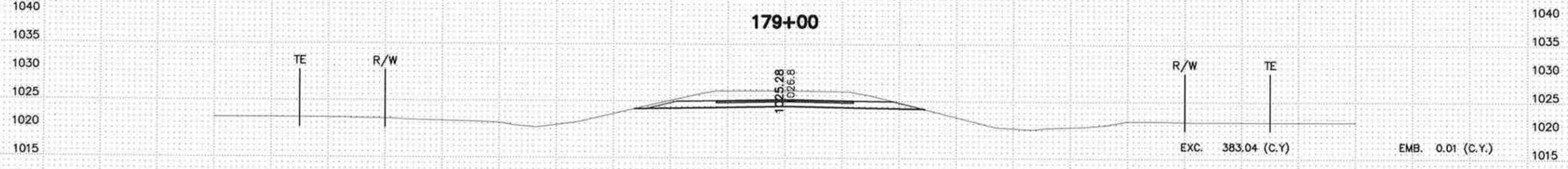
120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120

Calcareous Fen

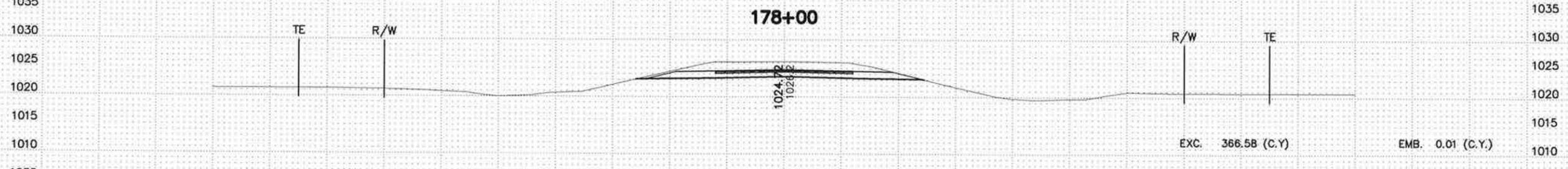
180+00



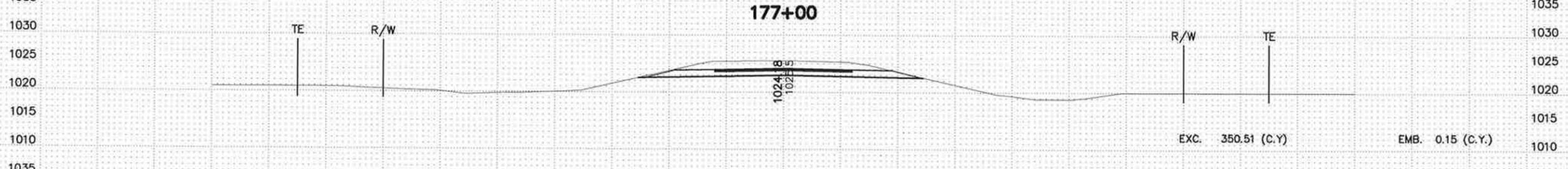
179+00



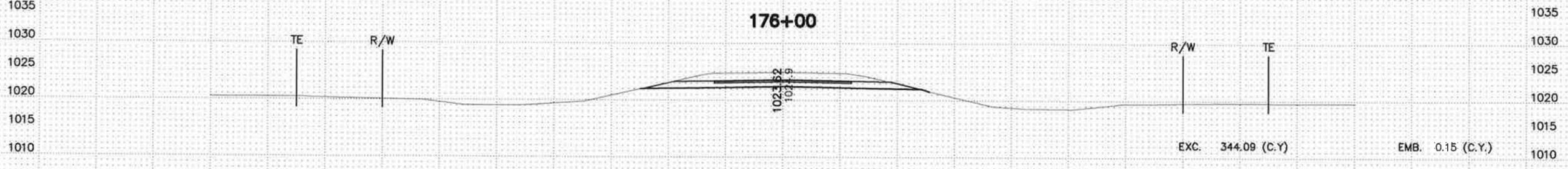
178+00



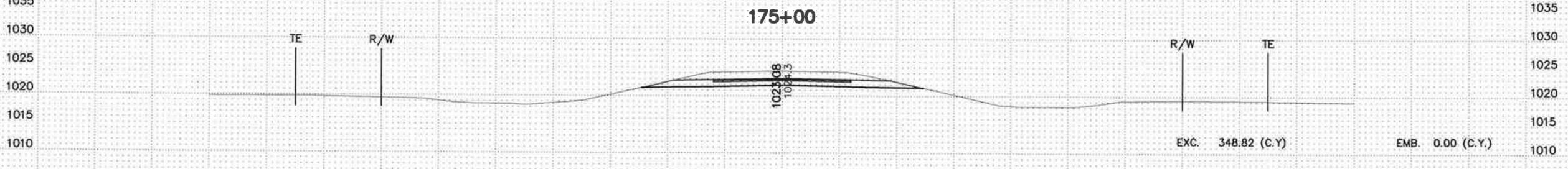
177+00



176+00



175+00



120 110 100 90 80 70 60 50 40 30 20 10 0 10 20 30 40 50 60 70 80 90 100 110 120

