



**US Army Corps
of Engineers**
Fort Worth District

Public Notice

Applicant: Titus County, Texas

Permit Application No.: SWF-2009-00017

Date: October 15, 2009

The purpose of this public notice is to inform you of a proposal for work in which you might be interested. It is also to solicit your comments and information to better enable us to make a reasonable decision on factors affecting the public interest. We hope you will participate in this process.

Regulatory Program

Since its early history, the U.S. Army Corps of Engineers has played an important role in the development of the nation's water resources. Originally, this involved construction of harbor fortifications and coastal defenses. Later duties included the improvement of waterways to provide avenues of commerce. An important part of our mission today is the protection of the nation's waterways through the administration of the U.S. Army Corps of Engineers Regulatory Program.

Section 10

The U.S. Army Corps of Engineers is directed by Congress under Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) to regulate *all work or structures in or affecting the course, condition or capacity of navigable waters of the United States*. The intent of this law is to protect the navigable capacity of waters important to interstate commerce.

Section 404

The U.S. Army Corps of Engineers is directed by Congress under Section 404 of the Clean Water Act (33 USC 1344) to regulate the *discharge of dredged and fill material into all waters of the United States, including wetlands*. The intent of the law is to protect the nation's waters from the indiscriminate discharge of material capable of causing pollution and to restore and maintain their chemical, physical and biological integrity.

Contact

Name: Mr. Frederick Land

Phone Number: (817) 886-1729

JOINT PUBLIC NOTICE

U.S. ARMY CORPS OF ENGINEERS, FORT WORTH DISTRICT

AND

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

SUBJECT: Application for a Department of the Army Permit under Section 404 of the Clean Water Act (CWA) and for water quality certification under Section 401 of the CWA to discharge dredged and fill material into waters of the United States associated with the Titus County proposal to construct the Farm-to-Market Road (FM) 2348 project, east of the City of Mount Pleasant, Titus County, Texas.

APPLICANT: Titus County
c/o Mr. A. Scott Young, P.E.
Pate Transportation Partners
17304 Preston Road, Suite 1330
Dallas, Texas 75252

APPLICATION NUMBER: SWF-2009-00017

DATE ISSUED: October 15, 2009

LOCATION: The project proposes to extend existing FM 2348 as a two-lane roadway northward from State Highway (SH) 49 to the intersection of US Highway (US) 67 and FM 1001, which connects to Interstate Highway (IH) 30. The proposed project is 3.10 miles in length. The proposed transportation project would be found on the Mount Pleasant and Harvard, Texas, United States Geological Survey (USGS) 7.5-minute topographic maps. The project area begins at approximately N 33°10'53.511" latitude; W 94°55'46.2066" longitude and terminates at approximately N 33°8'17.2896" latitude; W 94°55'12.3636". Hydrologic Unit 11140305.

OTHER AGENCY AUTHORIZATIONS: Section 401 State Water Quality Certification.

PROJECT DESCRIPTION: The applicant proposed to discharge approximately 9,095.82 cubic yards of dredged and fill material into approximately 10.15 acres of waters of the United States in conjunction with the extension of FM 2348 from the intersection of SH 49 northward to the intersection of US 67 and FM 1001, located in Titus County east of Mount Pleasant (Sheets 1-31 of 31). Impacts to waters of the U.S. include the placement of dredged and fill material into thirteen wetlands and sixteen streams. The proposed project would be 3.10 miles in length and would consist of two 12-foot travel lanes (one lane in each direction) with two 10-foot wide shoulders. Additionally, there would be dedicated left turn lanes at the intersections of FM 1001 and US 67 and FM 2348 and SH 49. The proposed project would replace County Road (CR) 4215 from CR 4205 to

the existing intersection of SH 49 and FM 2348. This section of the proposed project would provide for a safe intersection alignment of the proposed project with existing FM 2348. The majority of the proposed project would be on new location with a typical proposed right-of-way (ROW) ranging from approximately 120-180 feet.

The proposed project would consist of one bridge structure, which would cross Evans Creek, and the adjacent Union Pacific Railroad (UPRR). The intersections of the proposed project with several existing county roadways (CR 4205, CR 4215 and CR 4218) would be modified to intersect safely with the proposed alignment. At the intersection of CR 4205 and CR 4215 with the proposed FM 2348, the intersection will be a two-way stop controlled with the proposed FM 2348 being the through facility. At the intersection of CR 4218 with the proposed FM 2348, the intersection will be a one-way stop controlled with the proposed FM 2348 being the through facility. At the intersection of the proposed FM 2348 and US 67, about 0.8 mile of US 67 would be widened to provide for dedicated left turn lanes to the proposed FM 2348. This section of the proposed project would provide for a safe transition zone for traffic accessing the proposed FM 2348 from US 67 and would consist of four 12-foot travel lanes (two lanes in each direction) with two 10-foot wide shoulders, 16-foot flush median, and curb and gutters.

Stormwater drainage would be conveyed through parallel roadside drainage channels (ditches). Eight culverts or pipes and one bridge-class culvert would be installed at various stream/drainage crossings along the proposed FM 2348. At and near the intersection of the proposed project and US 67 seven additional culvert or pipes would be constructed for the purposes of storm and sewer drainage.

The proposed FM 2348 project is needed to address the lack of efficient and safe regional mobility, provide connectivity to regional transportation facilities, and to improve access to community and emergency facilities for the eastern portion of Mount Pleasant and northeast Titus County.

A high percentage of truck traffic (13.7 percent) (TxDOT 2007a), heavy local and regional traffic, and extensive development have resulted in a high accident rate for US 271. From 2000 to 2001, there were a total of 179 accidents along US 271 from its intersection with US 67 to the south side of Mount Pleasant, a distance of approximately five miles (TxDOT, 2007b). Of these accidents, 121 involved injuries.

In 2001, a new central fire station was built on SH 49 about one half mile east of US 271. Currently, the most expedient travel route for emergency vehicles from this fire station to access emergencies northeast of Mount Pleasant and along US 67 is through downtown which inhibits efficient emergency access.

The proposed FM 2348 project is needed to address the lack of efficient and safe regional mobility, provide connectivity to regional transportation facilities and improve access to community and emergency facilities for the east side of Mount Pleasant. In order to achieve these goals, the proposed facility would need to provide connectivity to the regional roadway network and meet current roadway design standards.

The applicant's preferred alternative traverses pastureland, residential areas as well as commercial properties. The topography is flat to gently rolling, ranging from approximately 285 feet to 390 feet above mean sea level (MSL) and is dominated by tributaries related to Evans Creek and Hart Creek and their associated floodplains. The vegetation communities in the area support riparian zones, forested wetlands, emergent wetlands, upland forests, rangelands, upland pasture, and maintained grasslands.

Seven vegetative communities were identified within the proposed project area based on the review of aerial photography and field surveys. The communities identified within the proposed project area included: riparian zones, upland forest, forested wetland, emergent wetland, rangeland, upland pasture, and maintained grassland.

The dominant plant species occurring along riparian zones crossed by the proposed project included an overstory canopy of sugarberry (*Celtis laevigata*), water oak (*Quercus nigra*), American elm (*Ulmus americana*), southern red oak (*Quercus falcata*), and sweetgum (*Liquidambar styraciflua*). The vine community was dominated by common greenbrier (*Smilax rotundifolia*).

Dominant plant species identified within the upland forest community included an overstory canopy of water oak, American elm, cedar elm (*Ulmus crassifolia*), post oak (*Quercus stellata*), Eastern red cedar (*Juniperus virginiana*), Osage orange (*Maclura pomifera*), sweetgum, sugarberry, southern red oak, and loblolly pine (*Pinus taeda*). Dominant understory species included Chinese privet (*Ligustrum sinense*), Japanese honeysuckle (*Lonicera japonica*), common greenbrier, muscadine grape (*Vitis rotundifolia*), and longleaf woodoats (*Chasmanthium sessiliflorum*).

Dominant plant species identified within the forested wetland community included an overstory of water oak, willow oak (*Quercus phellos*), sugarberry, American elm, Osage orange, green ash (*Fraxinus pennsylvanica*), black willow (*Salix nigra*), Eastern cottonwood (*Populus deltoides*), American hornbeam (*Carpinus caroliniana*), cedar elm, and sweetgum. Dominant understory plant species included giant cane (*Arundinaria gigantea*), Chinese privet, common greenbrier, hardy orange (*Poncirus trifoliata*), Japanese honeysuckle, muscadine grape, southern dewberry (*Rubus trivialis*), and crossvine (*Bignonia capreolata*). The herbaceous layer was dominated by Virginia wildrye (*Elymus virginicus*), curly dock (*Rumex crispus*), common rush (*Juncus effusus*), sedges (*Carex* spp.), and Indian woodoats (*Chasmanthium latifolium*).

Plant species identified within the emergent wetland community included curly dock, common rush, switchgrass (*Panicum virgatum*), Pennsylvania smartweed (*Polygonum pennsylvanicum*), thistle (*Cirsium* spp.), southern dewberry, tall goldenrod (*Solidago altissima*), annual ryegrass (*Lolium perenne*), and crossvine.

Dominant tree species found within the rangeland community included scattered southern red oak. Bermudagrass (*Cynodon dactylon*), southern dewberry, silver bluestem (*Bothriochloa saccharoides*), and henbit (*Lamium amplexicaulis*) were dominant vine and herbaceous species.

Tree species identified within the pastureland community included scattered post oak and redbud (*Cercis canadensis*). Herbaceous vegetation and vines included annual bluegrass (*Poa annua*), bermudagrass, Texas croton (*Croton texensis*), tall goldenrod, annual ryegrass, dovefoot geranium (*Geranium molle*), silver bluestem, southern dewberry, and crossvine.

Vegetation identified within the maintained grassland community included bermudagrass and other native herbaceous species.

Sixteen streams, fourteen wetlands, and one open water area are located within the applicant's preferred alternative ROW. The wetland areas included seven forested wetlands and seven emergent wetlands. The 16 streams included Evans Creek (a tributary of Hart Creek), tributaries of Evans Creek and tributaries of Hart Creek. The open water area included a small stock pond that did not exhibit a discrete surface hydrologic connection to waters of the U.S.

A total of 11.76 acres of waters of the U.S. exist within the proposed project area. Construction of the proposed project would result in the discharge of approximately 9,095.82 cubic yards of dredged and fill material into waters of the U.S. Thirteen wetlands and sixteen streams would be adversely impacted (Sheets 3-31 or 31). The applicant proposes to fill 1.0 acre of Wetland 1, an emergent wetland; 0.11 acre of Wetland 2, a forested wetland; 1.02 acre of Wetland 3, a forested wetland; 4.81 acres of Wetland 4, a forested wetland; 1.46 acre of Wetland 5, an emergent wetland; 0.10 acre of Wetland 7, a forested wetland; 0.06 acre of Wetland 8, an emergent wetland; 0.15 acre of Wetland 9, an emergent wetland; less than 0.01 acre of Wetland 10, a forested wetland; 0.04 acre of Wetland 11, a forested wetland; 0.19 acre of Wetland 12, an emergent wetland; 0.12 acre of Wetland 13, a forested wetland; and 0.55 acre of Wetland 14 an emergent wetland. Impacts to Streams 1 through 16 would include 0.004, 0.080, 0.015, 0.119, 0.044, 0.006, 0.026, 0.012, 0.003, 0.072, 0.002, 0.001, 0.001, 0.009, 0.020, and 0.127 acre which correlates to 174, 348, 327, 346, 319, 131, 566, 261, 65, 392, 44, 44, 44, 196, 436, and 692 linear feet respectively (Sheets 3-31 or 31). When considering all dredge and fill impacts, the proposed discharges would result in permanent adverse impacts to 9.61 acres of wetlands and 0.54 acre of streams for impacts totaling 10.15 acres.

The applicant considered various alternatives, including a no-build alternative during the proposed project evaluation process. The proposed project was selected after consideration of social, environmental, and engineering factors. The Texas Department of Transportation (TxDOT) is preparing an Environmental Assessment (EA) for the proposed project. Federal Highway Administration (FHWA) approval of the EA is pending.

Alternative 1 would run parallel to existing CR 4015 for approximately one mile before veering to the east to cross Evans Creek and the UPRR. The alternative then would veer southwest at a curve and then back southeast to eventually follow CR 4215 from CR 4205 to SH 49 where it would tie back into existing FM 2348 at SH 49.

There are approximately 12 parcels adjacent to Alternative 1 that would be affected and approximately 4 acres of trees that would need to be acquired. As compared with other alternatives, Alternative 1 would have the fewest impacts to existing homes along CR 4015 and a desirable

alignment at the UPRR, which crosses it perpendicularly, but would transect a dense area of bottomland hardwood forested wetlands. The distance between Evans Creek and UPRR is relatively close, requiring only one bridge structure to be built to cross over them. Alternative 1 would require improvements to the intersections at CR 4205, CR 4215, and CR 4218 to meet the current design standards.

Alternative 2 would begin at the intersection of US 67 and FM 1001 at a skew angle; then veers east to connect to existing CR 4015. It then would follow the existing CR 4015 alignment and crosses Evans Creek and UPRR perpendicularly. Similar to Alternative 1, this alternative would only require one bridge structure to be built across Evans Creek and UPRR. After crossing UPRR and Evans Creek, this alternative would continue to expand to the south to then follow CR 4215 from CR 4205 to SH 49 where it would tie back into existing FM 2348 at SH 49. This alternative would have 2 potential displacements. There are 18 parcels of land that would be affected, one landlocked parcel and approximately 4.0 acres of trees would need to be acquired.

Alternative 2 would have the most direct alignment utilizing existing CR 4015 ROW and would cross the UPRR perpendicularly. However, Alternative 2 would not have an optimal alignment with FM 1001, because of the alignment curves necessary to align with CR 4015. It also would have the greatest impact to the residents along CR 4015. Alternative 2 would require improvements to the intersections at CR 4205, CR 4215, and CR 4218 to meet the current design standards.

Alternative 3 would follow a similar alignment to Alternative 1 for approximately 0.5 mile; it would then veer to the southeast at a curve and crosses UPRR and Evans Creek at a skew angle. Alternative 3 would require one long bridge structure or two bridge structures to be built because of the distance between where it crosses UPRR and Evans Creek. Alternative 3 would require realigning CR 4215 before connecting into the existing CR 4015. Similarly to Alternative 1 and Alternative 2, the intersections of CR 4205, CR 4215, and CR 4218 would be improved to meet current design standards. There are 15 parcels of land that would be affected, 3 landlocked parcels and approximately 7 acres of trees would need to be acquired. It also crosses 2 ponds, and there is 1 residence in the ROW.

The No-Build Alternative would not involve the construction of a relief route around Mount Pleasant, Texas. The No-Build Alternative would not meet the goals of the TTS nor enhance regional mobility or improve the safety along the corridor, and therefore, would not meet the need and purpose of the project.

The applicant's preferred alternative represents a combination of Alternative 2 and Alternative 3. The current proposal would follow Alternative 3 from US 67 south to CR 4015, and would then follow Alternative 2 to the southern terminus at SH 49. The combination of alignments from Alternative 2 and Alternative 3 would allow the current proposal to avoid crossing the UPRR at a skew angle and avoid the extraneous construction costs necessary to accommodate the alignment while capturing some of Alternative 3's avoidance of displacements. Additionally, the combination of alignments from Alternative 2 and Alternative 3 would minimize environmental impacts in comparison to Alternative 1 or Alternative 3 alone, by avoiding high quality bottomland areas to the

west (Alternative 1) and bottomland areas and two ponds to the east (Alternative 3). Furthermore, by following the alignment of Alternative 3 from US 67 south to CR 4015 the applicant's preferred alternative minimizes social impacts in comparison to Alternative 2 alone by avoiding the potential displacements of residences along CR 4015. The proposed project would provide the best configuration and alignment for connections to existing and planned facilities while minimizing environmental and social impacts, and incurring the lowest cost. In comparison to the other two alternatives, the current proposal best meets the project's need and purpose to provide overall enhancement to regional mobility and safety while minimizing social and environmental impacts.

The applicant believes substantial efforts have been made to avoid and minimize adverse impacts to the aquatic environment. The proposed project has been designed in a manner to ensure that it would not substantially disrupt the necessary life-cycle movements of aquatic life species indigenous to waterbodies in the area, including those species that normally migrate through the area. Culverts placed in streams would be installed to maintain low-flow conditions. Further, the applicant has designed the proposed project to retain excess flows from the site and maintain surface flow rates from the site in a manner similar to preconstruction conditions, avoid stream channelization, and incorporate appropriate soil erosion and sedimentation controls to be used and maintained during and following construction. All exposed soil and other fills, as well as any work within waters of the U.S., would be stabilized at the earliest practicable date. Any temporary fills would be removed in their entirety and the affected areas returned to their pre-construction contours. As such, on a preliminary basis, it appears these measures would help to ensure no more than minimal adverse effects to water quality.

The applicant proposes to compensate for unavoidable adverse impacts to waters of the U.S., including wetlands. Both on-site and near-site mitigation possibilities were considered by the applicant for suitability as compensatory mitigation. The applicant believes that a proposal to purchase mitigation banking credits that would support and preserve contiguous, high-quality wetlands would provide higher functional value in comparison to other compensatory mitigation options, especially those that would involve on-site or near-site restoration or enhancement in an area where future development pressure appears to be inevitable. For these reasons, the applicant proposes to purchase mitigation banking credits from a local USACE-approved mitigation bank to compensate for the 10.15 acres of unavoidable adverse impacts to waters of the U.S., including wetlands.

PUBLIC INTEREST REVIEW FACTORS: This application will be reviewed in accordance with 33 CFR 320-331, the Regulatory Program of the U. S. Army Corps of Engineers (USACE), and other pertinent laws, regulations, and executive orders. Our evaluation will also follow the guidelines published by the U. S. Environmental Protection Agency pursuant to Section 404 (b)(1) of the CWA. The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impact, of the proposed activity on the public interest. That decision will reflect the national concerns for both protection and utilization of important resources. The benefits 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 its cumulative effects. Among the factors addressed are conservation,

economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The USACE 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 USACE in determining whether to issue, issue with modifications, or conditions, 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.

STATE WATER QUALITY CERTIFICATION: This project would result in a direct impact of greater than three acres of waters of the state or 1,500 linear feet of streams (or a combination of the two), and as such would not fulfill Tier I criteria for the project. Therefore, Texas Commission on Environmental Quality (TCEQ) certification is required. Concurrent with USACE processing of this Department of the Army application, the TCEQ is reviewing this application under Section 401 of the Clean Water Act, and Title 30, Texas Administrative Code Section 279.1-13 to determine if the work would comply with State water quality standards. By virtue of an agreement between the USACE and the TCEQ, this public notice is also issued for the purpose of advising all known interested persons that there is pending before the TCEQ a decision on water quality certification under such act. **Any comments concerning this application may be submitted to the Texas Commission on Environmental Quality, 401 Coordinator, MSC-150, P.O. Box 13087, Austin, Texas 78711-3087.** The public comment period extends 30 days from the date of publication of this notice. A copy of the public notice with a description of the work is made available for review in the TCEQ's Austin Office. The TCEQ may conduct a public hearing to consider all comments concerning water quality if requested in writing. A request for a public hearing must contain the following information: the name, mailing address, application number, or other recognizable reference to the application; a brief description of the interest of the requestor, or of persons represented by the requestor; and a brief description of how the application, if granted, would adversely affect such interest.

ENDANGERED AND THREATENED SPECIES: The USACE has reviewed the U.S. Fish and Wildlife Service's latest published version of endangered and threatened species to determine if any may occur in the project area. The proposed project would be located in Titus County where the bald eagle (*Haliaeetus leucocephalus*), peregrine falcon (*Falco peregrinus*), least tern (*Sterna antillarum*), piping plover (*Charadrius melodus*), Louisiana black bear (*Ursus americanus*), and red wolf (*Canis rufus*) are known to occur or may occur as migrants. The bald eagle and peregrine falcon are delisted and being monitored, the least tern and red wolf are listed endangered

species, and the piping plover and Louisiana black bear are listed threatened species. Our initial review indicates that the proposed work would have no effect on federally-listed endangered or threatened species.

NATIONAL REGISTER OF HISTORIC PLACES: The records review revealed no Official State of Texas Historical Markers (OSHM), no SALs, and no National Register of Historic Places (NRHP) properties within the project area. However, one Recorded Texas Historic Landmark (RTHL), the Broadstreet Farmhouse, was identified within the Area of Potential Effect (APE) at the intersection with US 67. According to the Texas Historic Sites Atlas, Paris and Mary Broadstreet constructed the house after their arrival in Titus County from Mississippi in the 1860s. The house was relocated and restored in 1971. The reconnaissance-level field survey in March 2008 recorded 30 sites containing 53 historic-age resources, of which 10 are in the proposed ROW, that are or will be 50 years of age or older at a projected construction date of 2009.

Recorded resource types represent domestic, transportation, agricultural, and commercial uses. These resources do not embody the characteristics of a type, period, or method of construction. Excepting the Broadstreet Farmhouse, a RTHL, the recorded resources are all of a common type and do not represent the work of a master or represent high artistic value, are not known to be associated with a significant historical event, nor are they associated with a person of transcendent importance. The Broadstreet Farmhouse, through relocations and alterations, no longer retains sufficient integrity of location, setting, or feeling to be considered eligible for inclusion in the NRHP. Because it lacks integrity of setting and no new ROW is required from the resource, no further evaluation of it is anticipated under either Section 106 or Section 4(f). All of the resources lack the integrity to form an historic district.

TxDOT has determined that no historic sites, including buildings, structures, objects, and districts are present within the proposed project's APE and that individual project coordination with TSHPO is not required. No further evaluation of this project under Section 4(f) of the Department of Transportation Act is required. The USACE concurs with these determinations.

Four prehistoric sites are either partially or entirely within the presently proposed APE. Initial field work is complete and the survey draft report is pending.

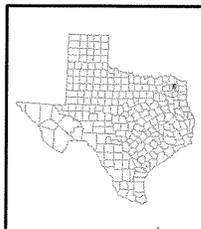
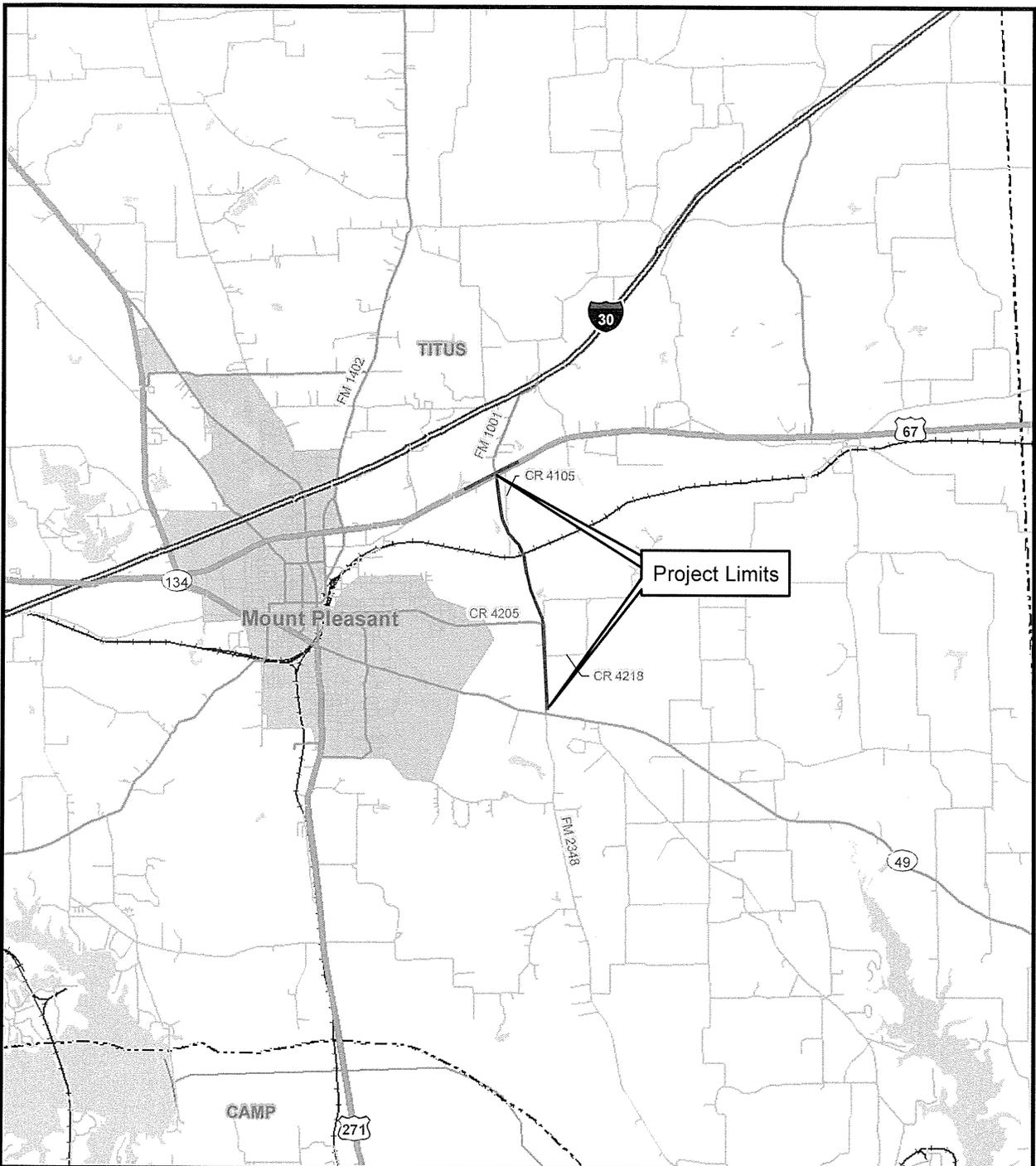
FLOODPLAIN MANAGEMENT: The USACE is sending a copy of this public notice to the local floodplain administrator. In accordance with 44 CFR part 60 (Flood Plain Management Regulations Criteria for Land Management and Use), the floodplain administrators of participating communities are required to review all proposed development to determine if a floodplain development permit is required and maintain records of such review.

SOLICITATION OF COMMENTS: The public notice is being distributed to all known interested persons in order to assist in developing fact upon which a decision by the USACE may be based. For accuracy and completeness of the record, all data in support of or in opposition to the proposed work should be submitted in writing setting forth sufficient detail to furnish a clear understanding of the reasons for support or opposition.

PUBLIC HEARING: Prior to the close of the comment period any person may make a written request for a public hearing setting forth the particular reasons for the request. The District Engineer will determine whether the issues raised are substantial and should be considered in his permit decision. If a public hearing is warranted, all known interested persons will be notified of the time, date, and location.

CLOSE OF COMMENT PERIOD: All comments pertaining to this Public Notice must reach this office on or before November 14, 2008, which is the close of the comment period. Extensions of the comment period may be granted for valid reasons provided a written request is received by the limiting date. If no comments are received by that date, it will be considered that there are no objections. Comments and requests for additional information should be submitted to Mr. Frederick Land; Regulatory Branch, CESWF-PER-R; U. S. Army Corps of Engineers; Post Office Box 17300; Fort Worth, Texas 76102-0300. You may visit the Regulatory Branch in Room 3A37 of the Federal Building at 819 Taylor Street in Fort Worth between 8:00 A.M. and 3:30 P.M., Monday through Friday. Telephone inquiries should be directed to (817) 886-1731. Please note that names and addresses of those who submit comments in response to this public notice may be made publicly available.

DISTRICT ENGINEER
FORT WORTH DISTRICT
CORPS OF ENGINEERS



— Proposed Project

Datum: NAD 83
 Projection: UTM
 Zone: 15
 Units: Meters

Roads: ESRI Streetmap



Sheet 1 of 31
 USACE No. 2009-00017
 Vicinity Map
 FM 2348 Mount Pleasant
 Titus County, Texas

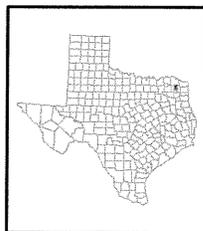
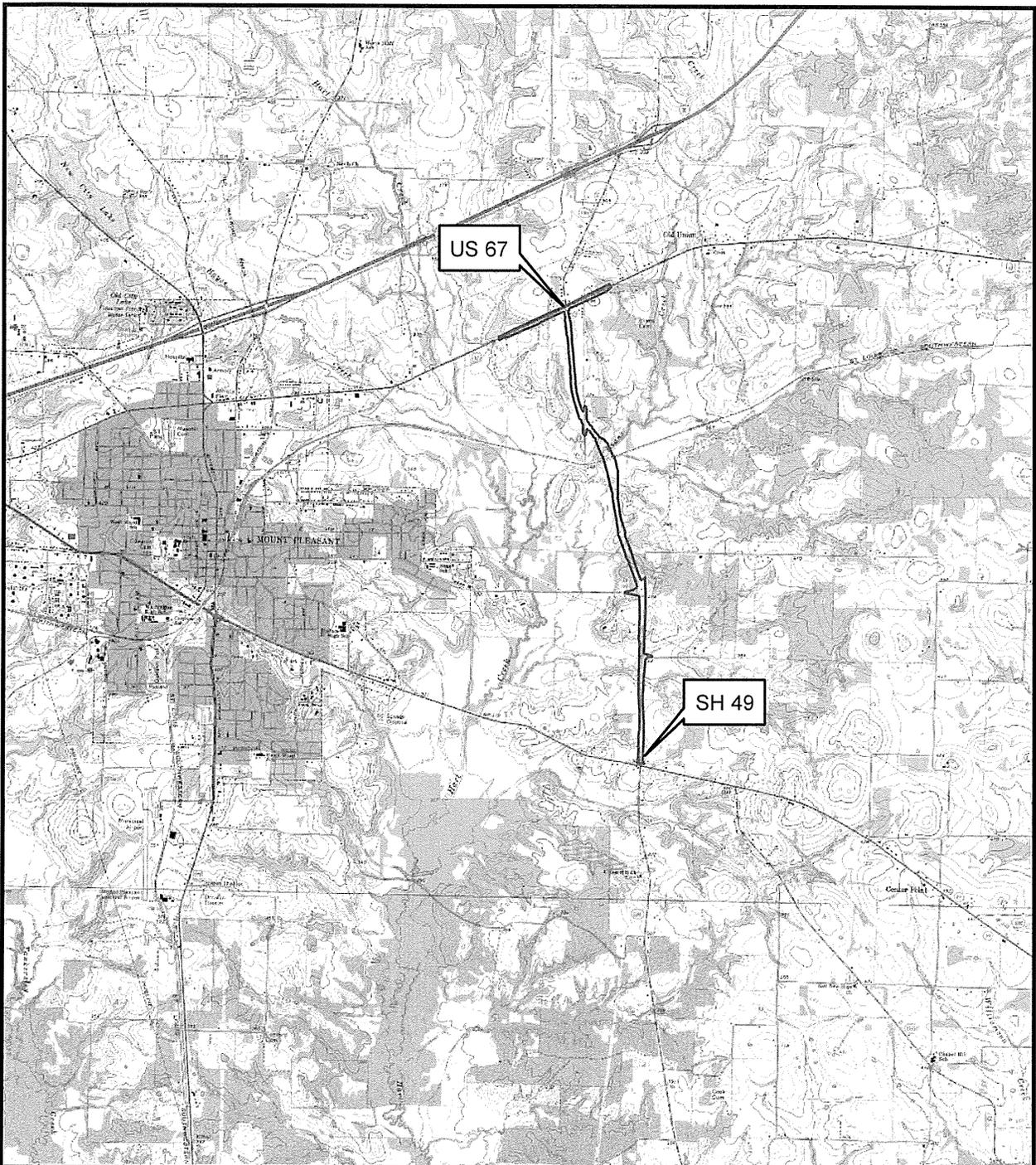
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Scale: 1" = 10,000'

Job No.: 046149700

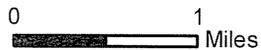
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 **Proposed ROW**

Datum: NAD 83
 Projection: UTM
 Zone: 15
 Units: Meters
 Topo: USGS



Sheet 2 of 31
 USACE No. 2009-00017
 Project Location Map
 FM 2348 Mount Pleasant
 Titus County, Texas

Prepared By: PBS&J/19998

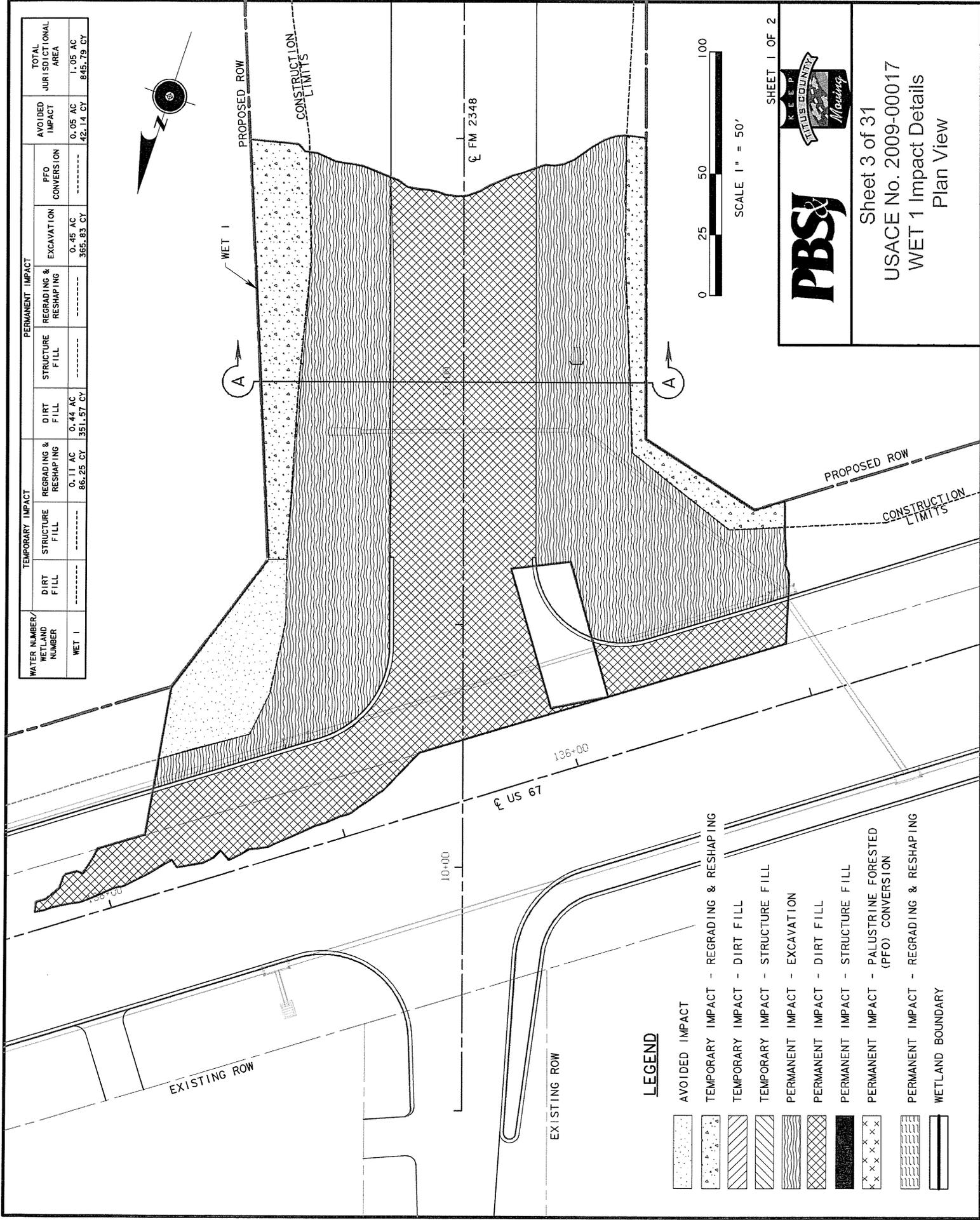
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Date: May 13, 2008

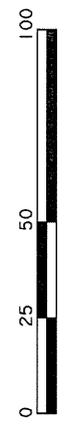
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WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT			TOTAL JURISDICTIONAL AREA			
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING		EXCAVATION	PFO CONVERSION	AVOIDED IMPACT
WET 1	-----	-----	0.11 AC 86.25 CY	0.44 AC 351.57 CY	-----	-----	0.45 AC 365.83 CY	-----	0.05 AC 42.14 CY	1.05 AC 845.79 CY



LEGEND

- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRAIDING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRAIDING & RESHAPING
- WETLAND BOUNDARY

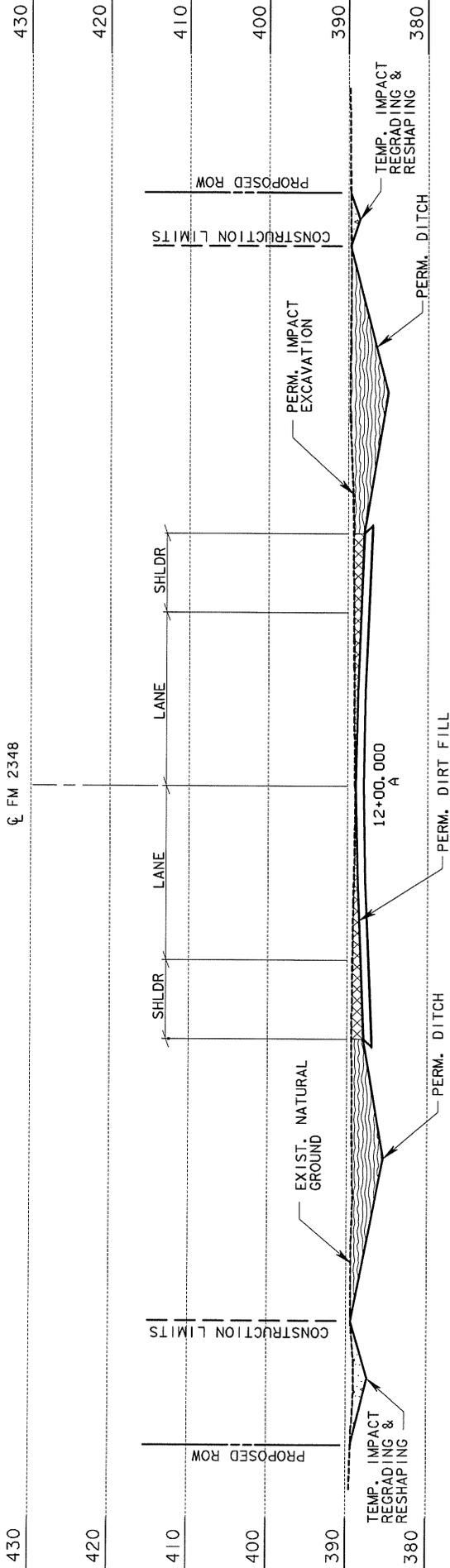


SCALE 1" = 50'

SHEET 1 OF 2



Sheet 3 of 31
 USACE No. 2009-00017
 WET 1 Impact Details
 Plan View



SECTION A-A
STA. 12+00.00

NOTE: SEE SHEET 1 OF 2 FOR FILL QUANTITIES.

LEGEND

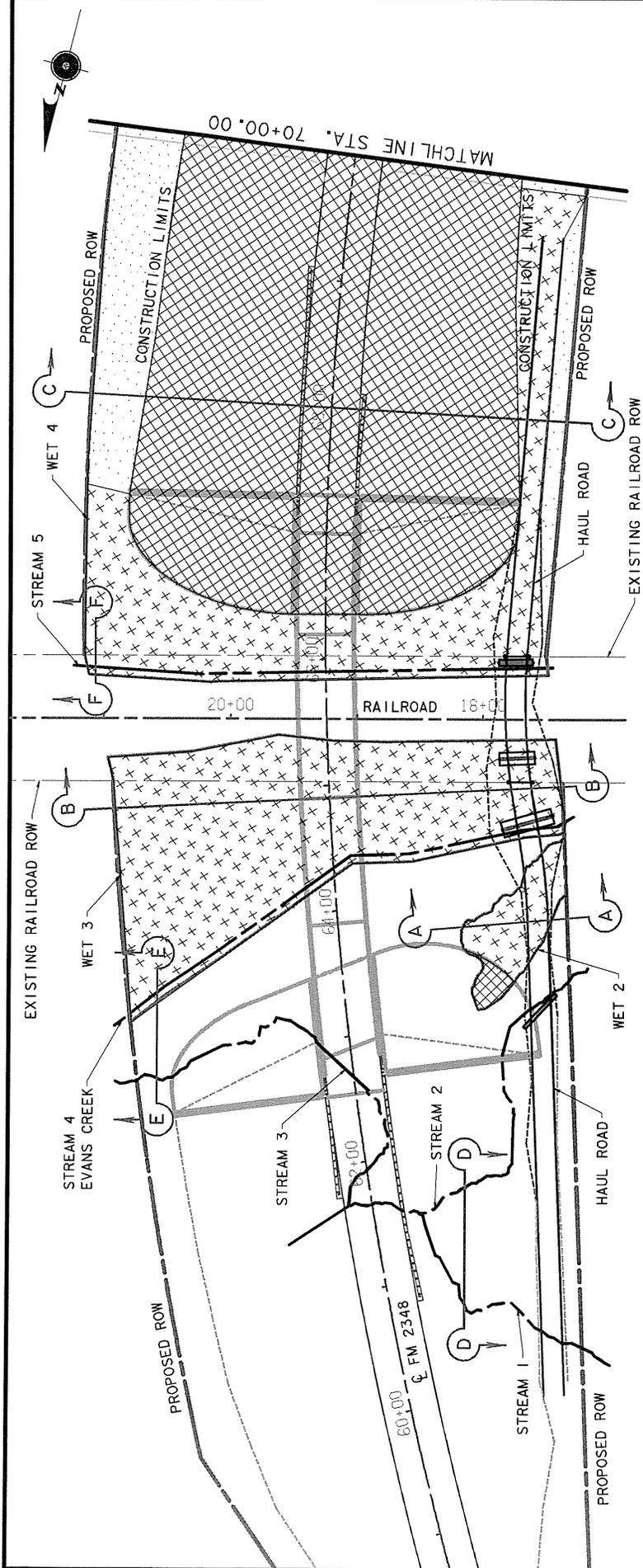
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY



SHEET 2 OF 2

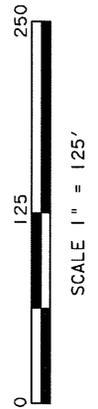


Sheet 4 of 31
USACE No. 2009-00017
WET 1 Impact Details
Cross Section

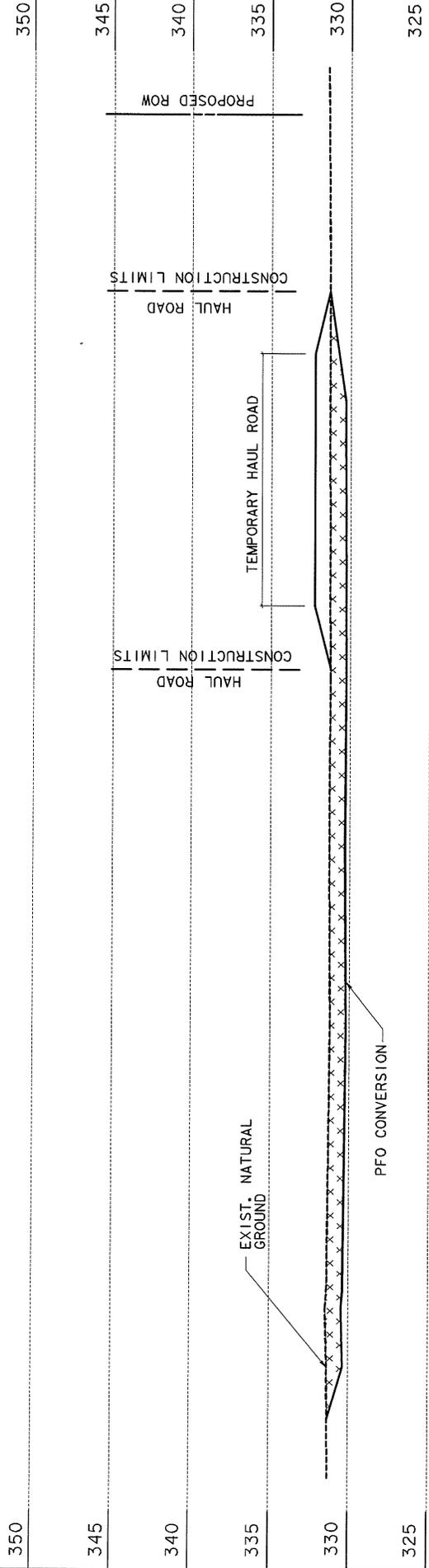


WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT		PERMANENT IMPACT				TOTAL JURISDICTIONAL AREA			
	DIRT FILL	STRUCTURE FILL	REGRADING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRADING & RESHAPING		EXCAVATION	PFO CONVERSION	AVOIDED IMPACT
WET 2	---	---	---	0.02 AC 14.94 CY	---	---	---	0.10 AC 73.43 CY	0.01 AC 7.46 CY	0.12 AC 95.83 CY
WET 3	---	---	---	---	0.015 AC 28.74 CY	---	---	1.00 AC 801.61 CY	0.004 AC 3.57 CY	1.02 AC 833.92 CY
WET 4	---	---	---	3.98 AC 3213.77 CY	0.028 AC 53.65 CY	---	---	0.80 AC 647.66 CY	1.05 AC 853.57 CY	5.84 AC 4748.65 CY
STREAM 1	---	---	---	---	---	---	---	---	---	0.004 AC
STREAM 2	0.005 AC	---	---	---	---	---	---	---	---	0.070 AC
STREAM 3	0.003 AC	---	---	---	---	---	---	---	---	0.008 AC
STREAM 4	---	---	---	---	---	---	---	---	---	0.102 AC
STREAM 5	---	---	---	---	---	---	---	---	---	0.038 AC

- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



Sheet 5 of 31
 USACE No. 2009-00017
 WET 2-4 and Streams 1-5
 Impact Details Plan View



SECTION A-A
STA. 63+75.00

- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY

NOTE:

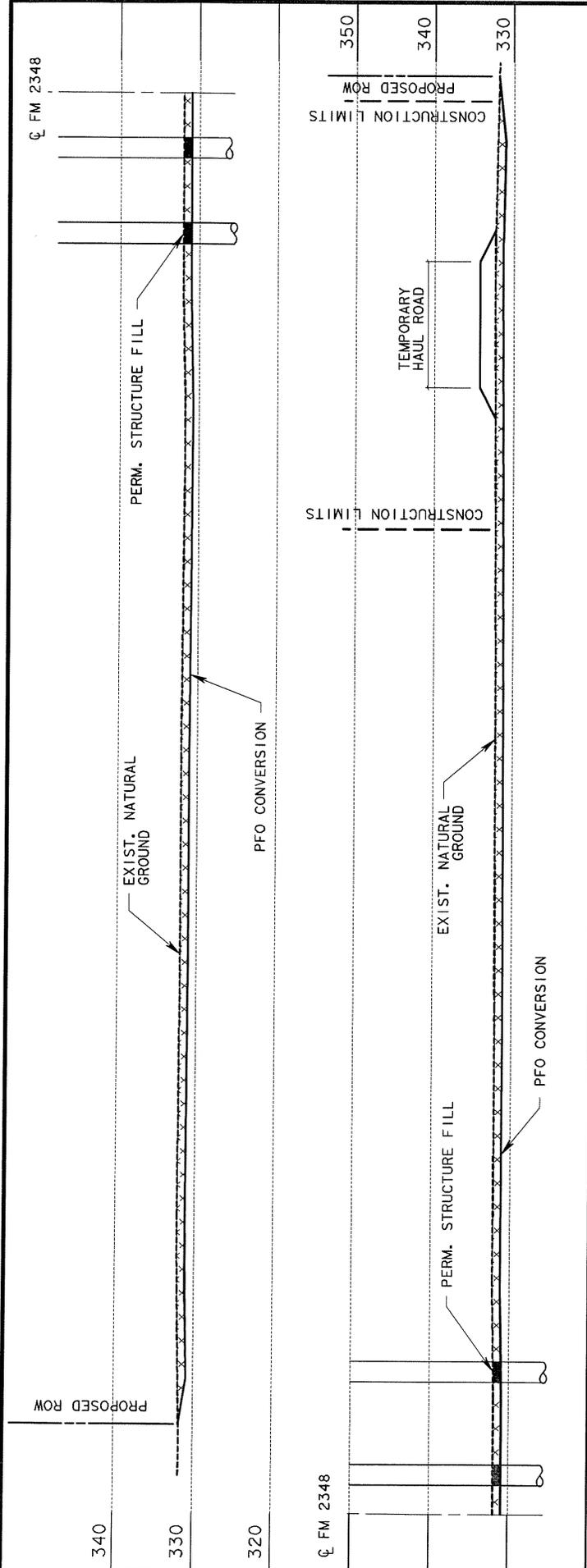
1. SEE SHEET 1 OF 7 FOR FILL QUANTITIES.
2. TEMPORARY HAUL ROAD WILL BE REMOVED UPON PROJECT COMPLETION AND AREA WILL BE RESTORED TO PRECONSTRUCTION CONTOURS.



SHEET 2 OF 7



Sheet 6 of 31
USACE No. 2009-00017
WET 2 Impact Details
Cross Section



SECTION B-B
STA. 65+00.00

NOTE: 1. SEE SHEET 1 OF 7 FOR
 FILL QUANTITIES.
 2. TEMPORARY HAUL ROAD WILL
 BE REMOVED UPON PROJECT
 COMPLETION AND AREA WILL BE
 RESTORED TO PRECONSTRUCTION
 CONTOURS

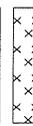


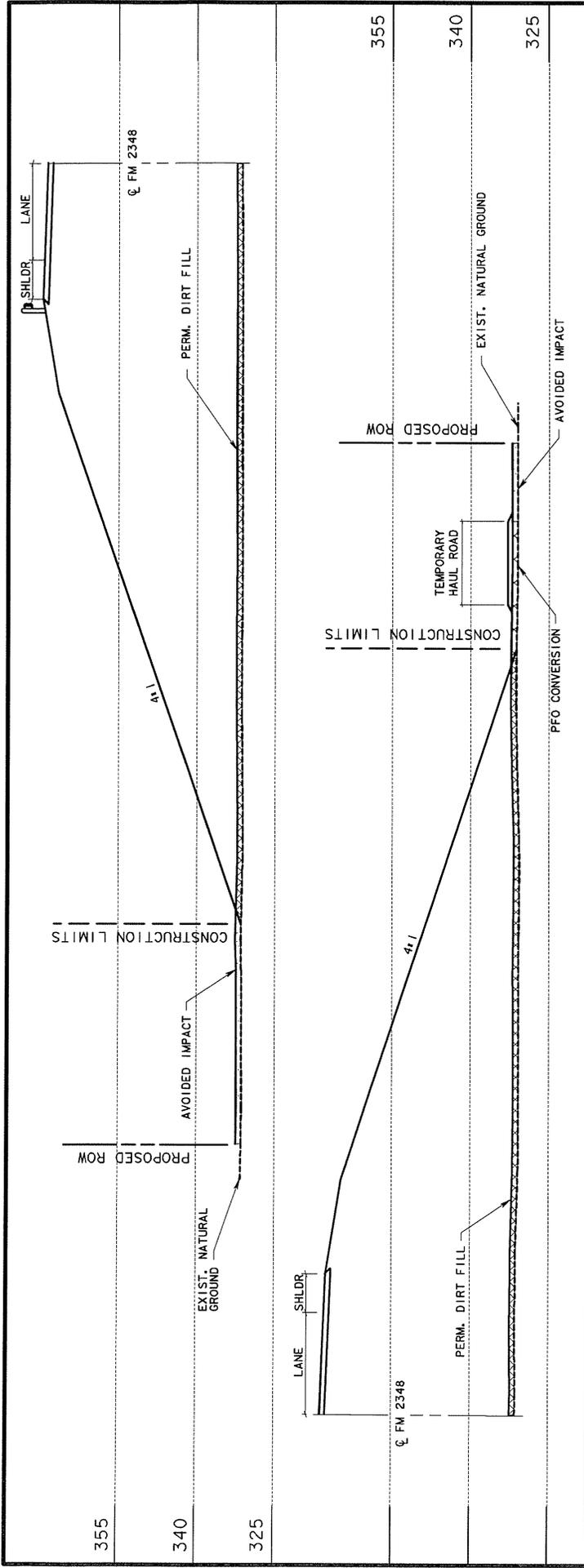
SHEET 3 OF 7



Sheet 7 of 31
 USACE No. 2009-00017
 WET 3 Impact Details
 Cross Section

LEGEND

-  AVOIDED IMPACT
-  TEMPORARY IMPACT - REGRADING & RESHAPING
-  TEMPORARY IMPACT - DIRT FILL
-  TEMPORARY IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - EXCAVATION
-  PERMANENT IMPACT - DIRT FILL
-  PERMANENT IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
-  PERMANENT IMPACT - REGRADING & RESHAPING
-  WETLAND BOUNDARY



SECTION C-C
STA. 68+00.00

NOTE: 1. SEE SHEET 1 OF 7 FOR FILL QUANTITIES.

2. TEMPORARY HAUL ROAD WILL BE REMOVED UPON PROJECT COMPLETION AND AREA WILL BE RESTORED TO PRECONSTRUCTION CONTOURS.



SCALE 1" = 30'

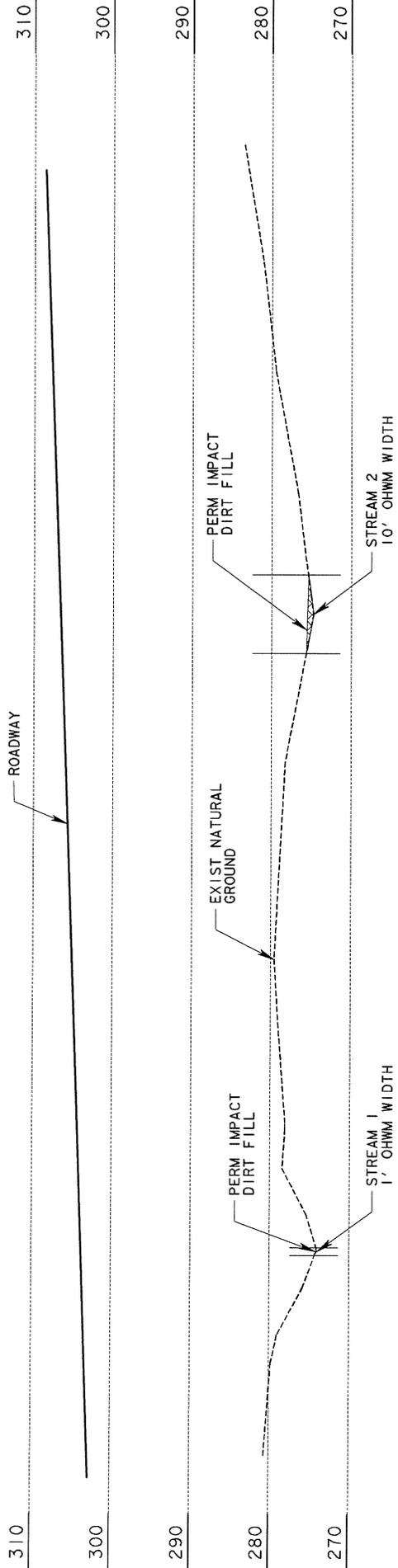
SHEET 4 OF 7



Sheet 8 of 31
USACE No. 2009-00017
WET 4 Impact Details
Cross Section

LEGEND

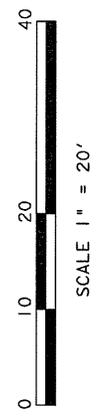
-  AVOIDED IMPACT
-  TEMPORARY IMPACT - REGRADING & RESHAPING
-  TEMPORARY IMPACT - DIRT FILL
-  TEMPORARY IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - EXCAVATION
-  PERMANENT IMPACT - DIRT FILL
-  PERMANENT IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
-  PERMANENT IMPACT - REGRADING & RESHAPING
-  WETLAND BOUNDARY



SECTION D-D

NOTE: SEE SHEET 1 OF 7 FOR FILL QUANTITIES.

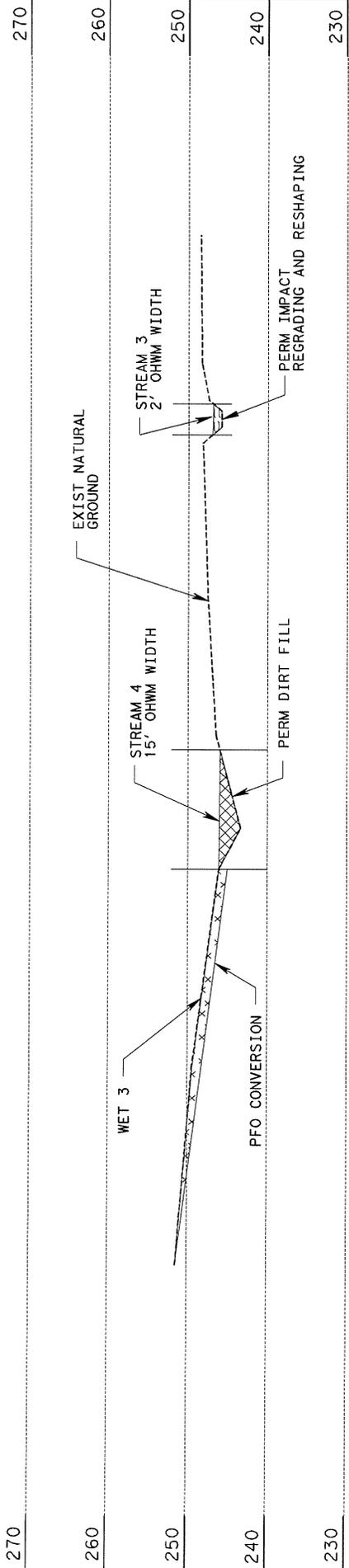
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRAIDING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRAIDING & RESHAPING
 - WETLAND BOUNDARY



SHEET 5 OF 7



Sheet 9 of 31
 USACE No. 2009-00017
 Streams 1 and 2 Impact Details
 Cross Section



SECTION E-E

NOTE: SEE SHEET 1 OF 7 FOR FILL QUANTITIES.

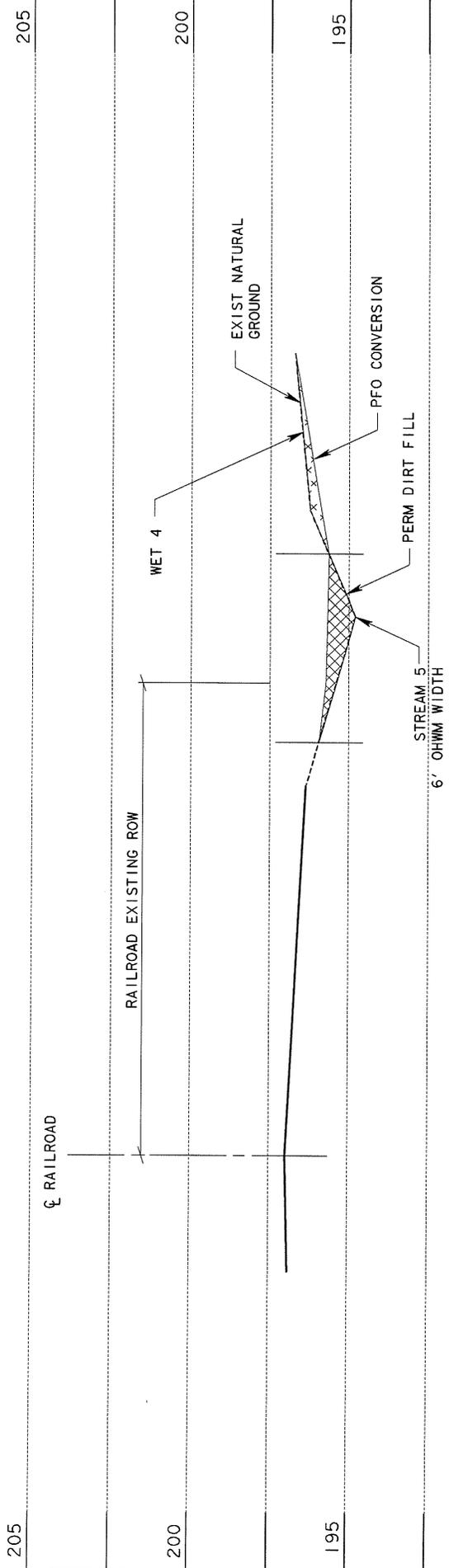
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 6 OF 7



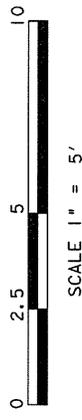
Sheet 10 of 31
 USACE No. 2009-00017
 Streams 3 and 4
 Impact Details Cross Section



SECTION F-F

NOTE: SEE SHEET 1 OF 7 FOR FILL QUANTITIES.

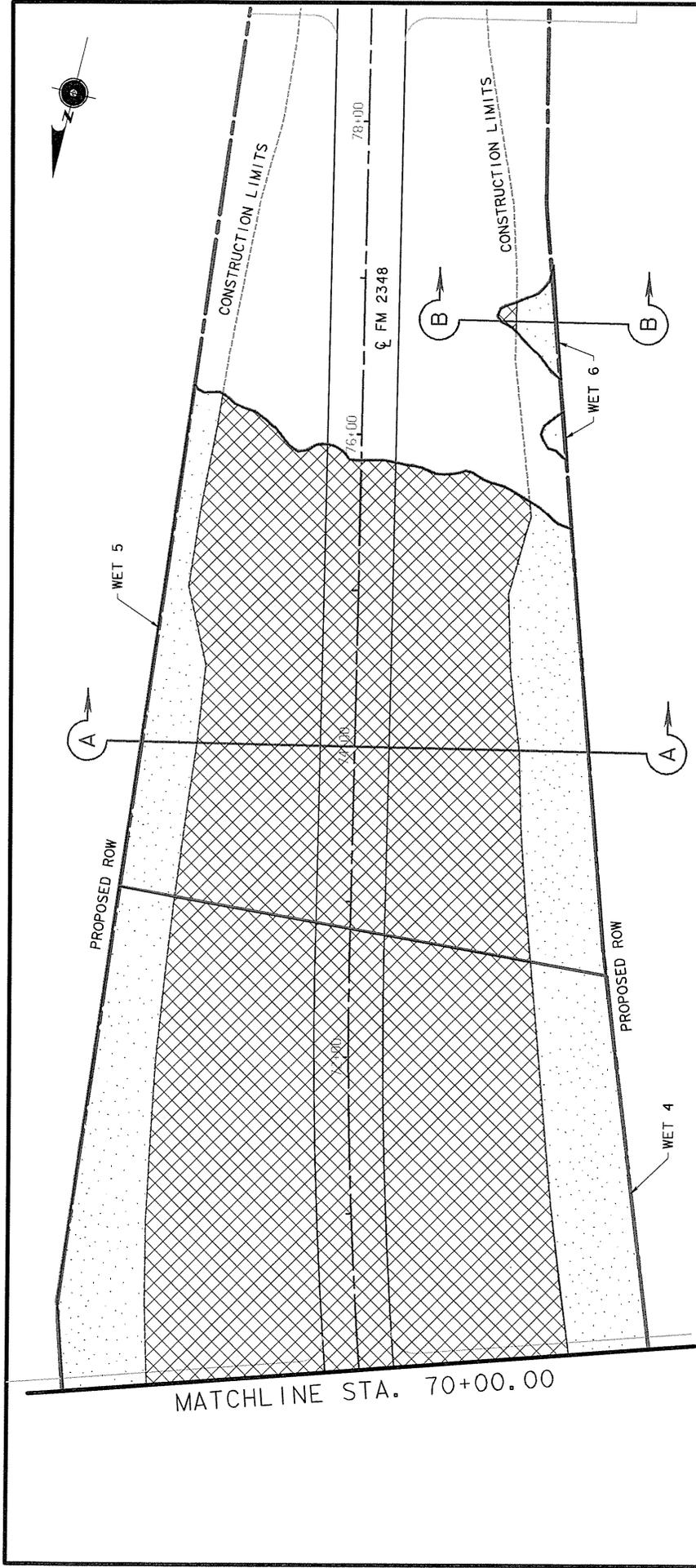
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 7 OF 7

KEEP IT THIS COUNTRY Moving

Sheet 11 of 31
 USACE No. 2009-00017
 Stream 5 Impact Details
 Cross Section



LEGEND

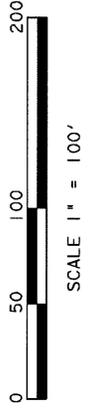
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRAIDING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRAIDING & RESHAPING
- WETLAND BOUNDARY

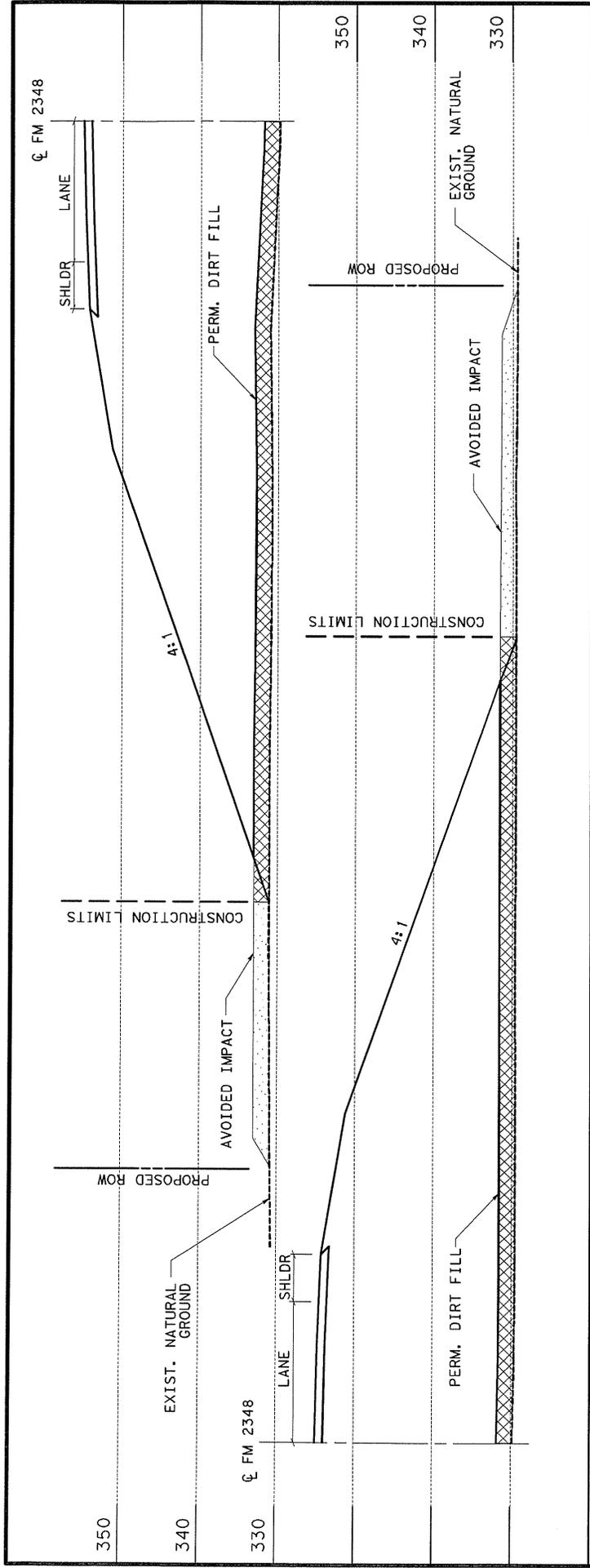
WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT				AVOIDED IMPACT	TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	EXCAVATION		
WET 4	---	---	---	3.98 AC 3213.77 CY	0.028 AC 53.65 CY	---	---	0.80 AC 647.66 CY	5.84 AC 4748.65 CY
WET 5	---	---	---	1.46 AC 1176.00 CY	---	---	---	---	1.95 AC 1572.94 CY
WET 6	---	---	---	0.003 AC 2.65 CY	---	---	---	---	0.03 AC 21.95 CY

SHEET 1 OF 3



Sheet 12 of 31
 USACE No. 2009-00017
 WET 5 and 6 Impact Details
 Plan View

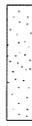
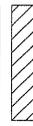
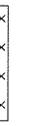


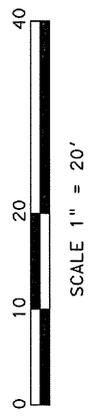


SECTION A-A
STA. 74+00.00

NOTE: SEE SHEET 1 OF 3 FOR FILL QUANTITIES.

LEGEND

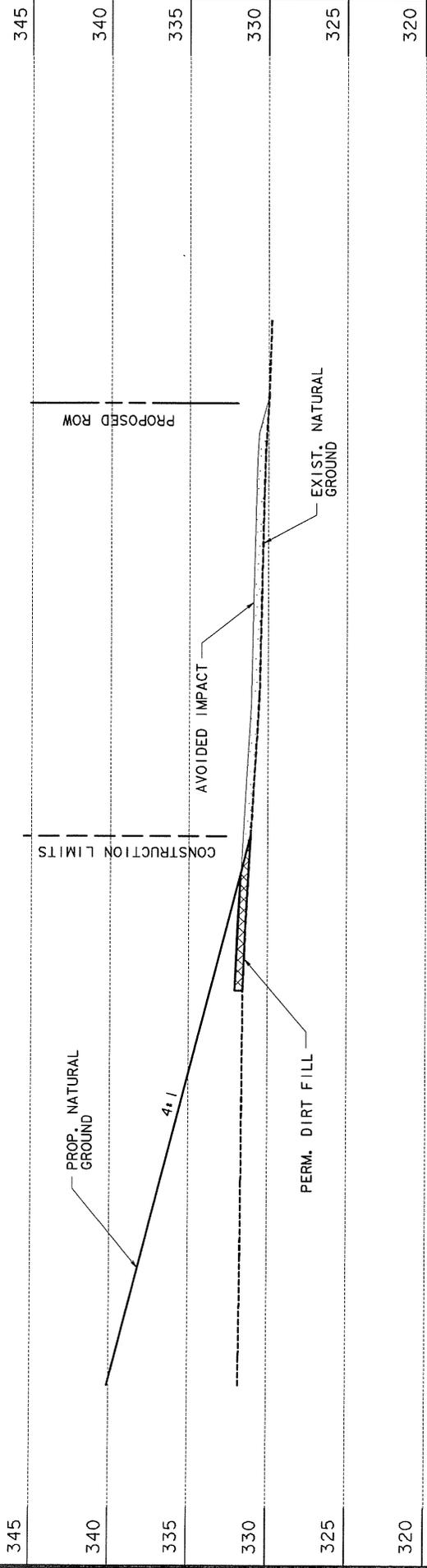
-  AVOIDED IMPACT
-  TEMPORARY IMPACT - REGRADING & RESHAPING
-  TEMPORARY IMPACT - DIRT FILL
-  TEMPORARY IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - EXCAVATION
-  PERMANENT IMPACT - DIRT FILL
-  PERMANENT IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
-  PERMANENT IMPACT - REGRADING & RESHAPING
-  WETLAND BOUNDARY



SHEET 2 OF 3



Sheet 13 of 31
USACE No. 2009-00017
WET 5 Impact Details
Cross Section



SECTION B-B
STA. 76+60.00

NOTE: SEE SHEET 1 OF 3 FOR
 FILL QUANTITIES.

LEGEND

- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY

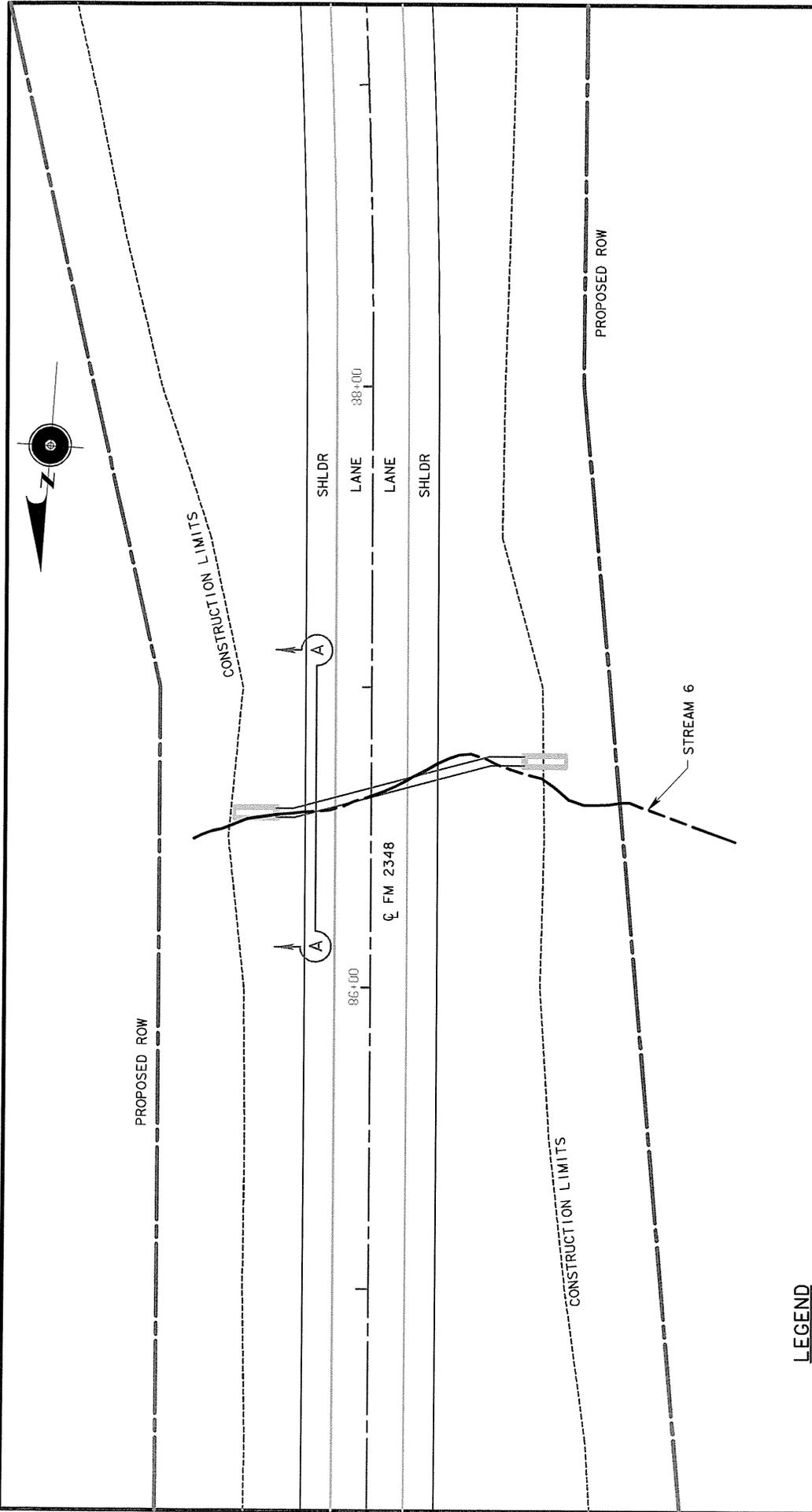


SCALE 1" = 10'

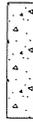
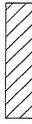
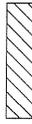
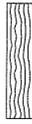
SHEET 3 OF 3



Sheet 14 of 31
 USACE No. 2009-00017
 WET 6 Impact Details
 Cross Section



LEGEND

-  AVOIDED IMPACT
-  TEMPORARY IMPACT - REGRAIDING & RESHAPING
-  TEMPORARY IMPACT - DIRT FILL
-  TEMPORARY IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - EXCAVATION
-  PERMANENT IMPACT - DIRT FILL
-  PERMANENT IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
-  PERMANENT IMPACT - REGRAIDING & RESHAPING
-  WETLAND BOUNDARY

WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT			AVOIDED IMPACT	TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING		
STREAM 6	0.002 AC	0.004 AC	0.004 AC	0.002 AC	0.004 AC	0.004 AC	0.006 AC	0.006 AC

SHEET 1 OF 2

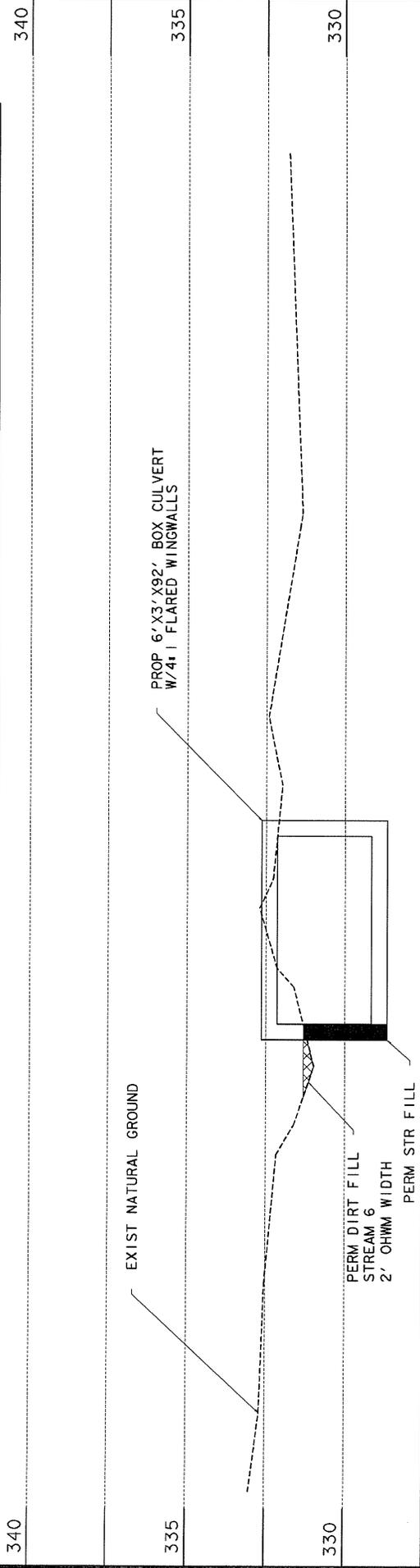


Sheet 15 of 31
 USACE No. 2009-00017
 Stream 6 Impact Details
 Plan View



SCALE 1" = 50'

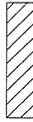
PROP ROADWAY



SECTION A-A

NOTE: SEE SHEET 1 OF 2 FOR FILL QUANTITIES.

LEGEND

-  AVOIDED IMPACT
-  TEMPORARY IMPACT - REGRADING & RESHAPING
-  TEMPORARY IMPACT - DIRT FILL
-  TEMPORARY IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - EXCAVATION
-  PERMANENT IMPACT - DIRT FILL
-  PERMANENT IMPACT - STRUCTURE FILL
-  PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
-  PERMANENT IMPACT - REGRADING & RESHAPING
-  WETLAND BOUNDARY

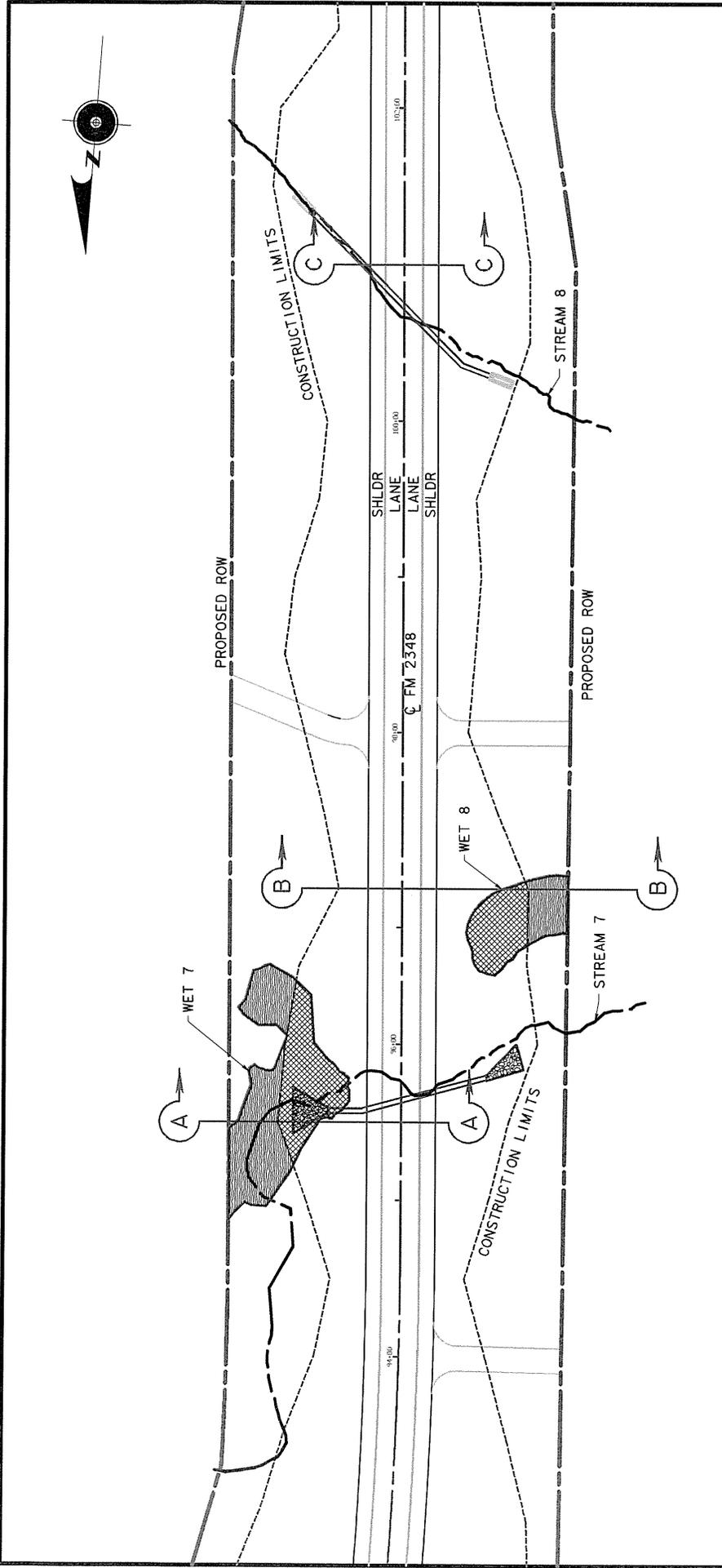


SCALE 1" = 10'

SHEET 2 OF 2



Sheet 16 of 31
 USACE No. 2009-00017
 Stream 6 Impact Details
 Cross Section



LEGEND

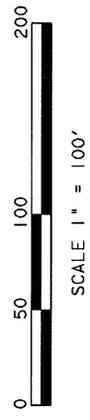
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY

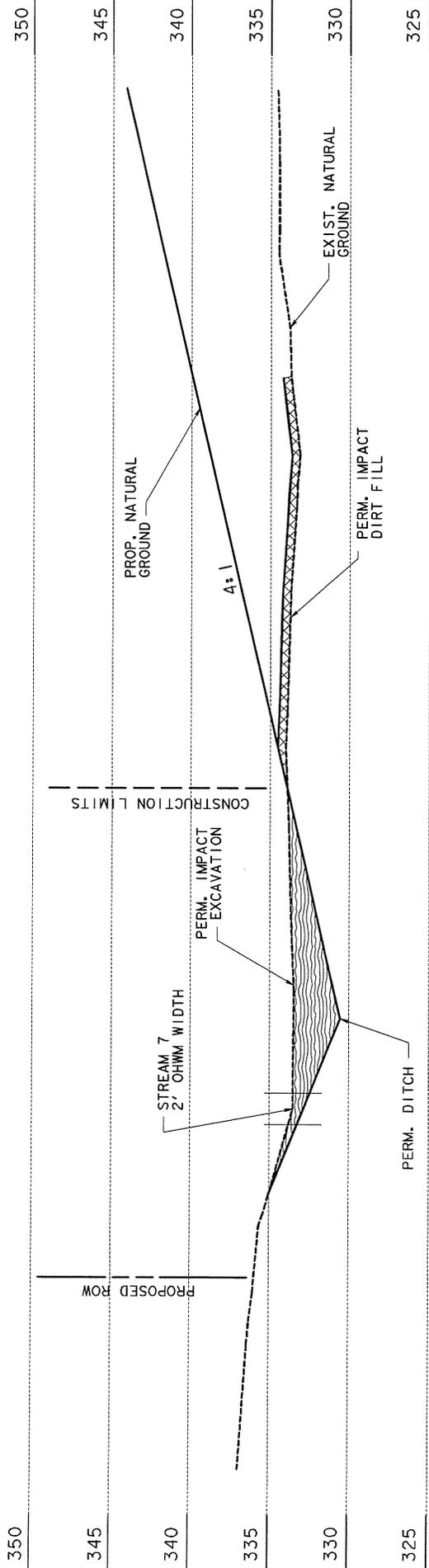
WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT			PFO CONVERSION	AVOIDED IMPACT	TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRADING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRADING & RESHAPING			
WET 7	0.06 AC	48.26 CY	0.04 AC	0.06 AC	0.04 AC	0.04 AC	0.10 AC	---	0.10 AC
WET 8	---	---	---	0.04 AC	---	---	30.05 AC	---	79.31 CY
STREAM 7	0.018 AC	---	---	31.10 CY	---	---	0.02 AC	---	0.06 AC
STREAM 8	0.003 AC	---	---	0.006 AC	0.002 AC	---	18.32 CY	---	49.42 CY
				0.005 AC	0.004 AC	---	---	---	0.026 AC
									0.012 AC

SHEET 1 OF 4



Sheet 17 of 31
 USACE No. 2009-00017
 WET 7-8 and Streams 7-8
 Impact Details Plan View

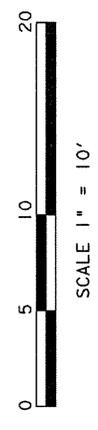




SECTION A-A
STA. 95+50.00

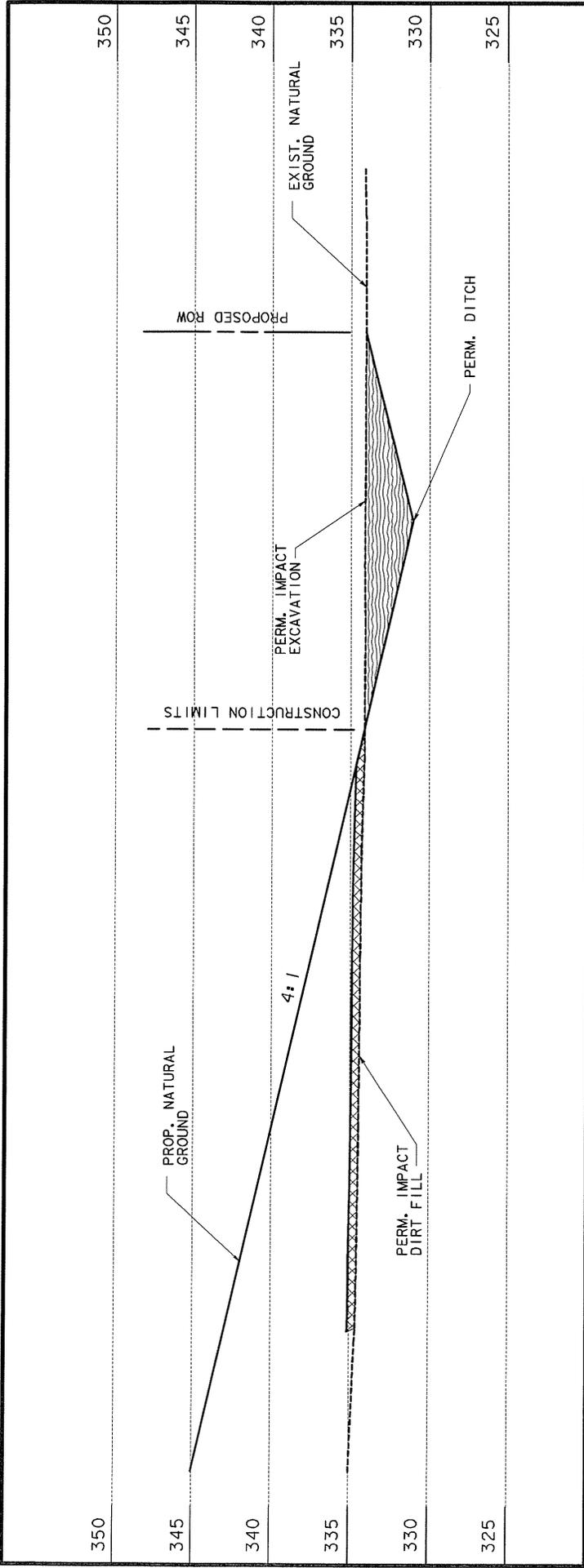
NOTE: SEE SHEET 1 OF 4 FOR
 FILL QUANTITIES.

- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 2 OF 4

Sheet 18 of 31
 USACE No. 2009-00017
 WET 7 and Stream 7
 Impact Details Cross Section

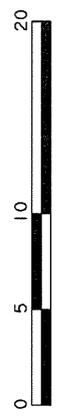


SECTION B-B
STA. 96+75.00

NOTE: SEE SHEET 1 OF 4 FOR FILL QUANTITIES.

LEGEND

- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY

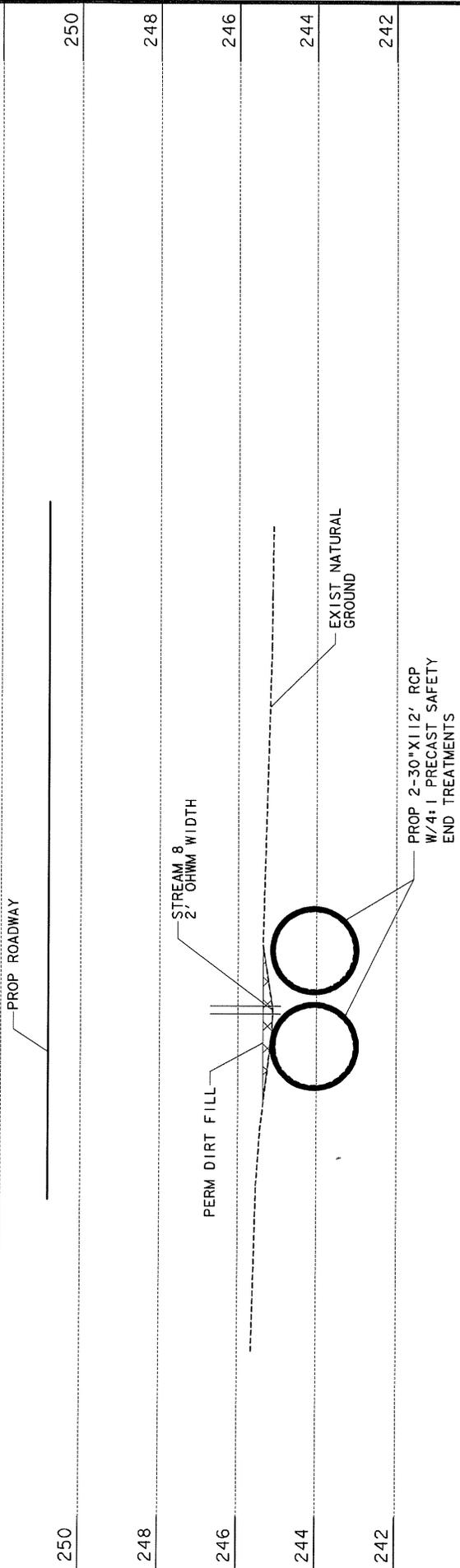


SCALE 1" = 10'

SHEET 3 OF 4



Sheet 19 of 31
 USACE No. 2009-00017
 WET 8 Impact Details
 Cross Section

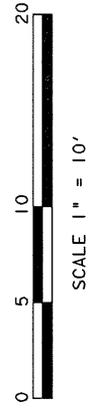


SECTION C-C

NOTE: SEE SHEET 1 OF 4 FOR FILL QUANTITIES.

LEGEND

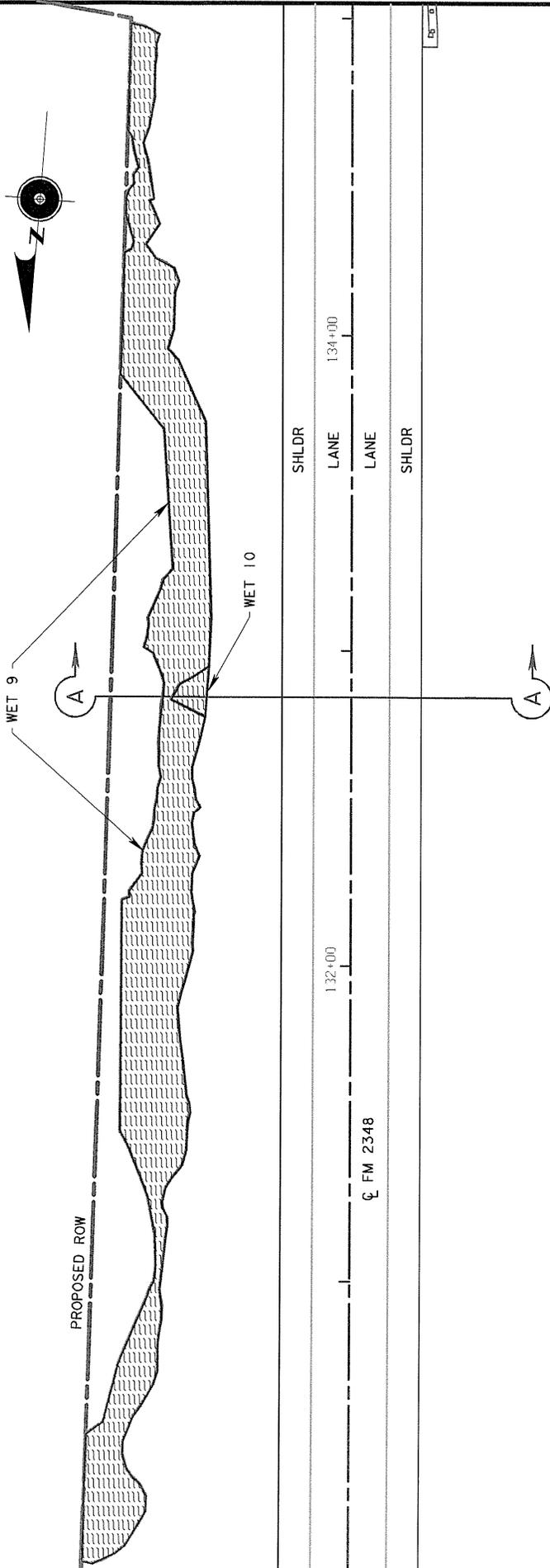
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY



SHEET 4 OF 4

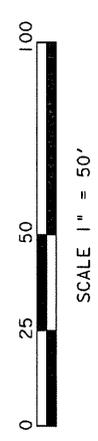


Sheet 20 of 31
 USACE 2009-00017
 Stream 8 Impact Details
 Cross Section



WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT				PERMANENT IMPACT				AVOIDED IMPACT	TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	EXCAVATION	PFO CONVERSION		
WET 9	-----	-----	-----	-----	-----	0.15 AC	-----	-----	-----	0.15 AC
WET 10	-----	-----	-----	-----	-----	0.02 AC	-----	-----	-----	0.02 AC
	-----	-----	-----	-----	-----	1.93 AC	-----	-----	-----	1.93 AC

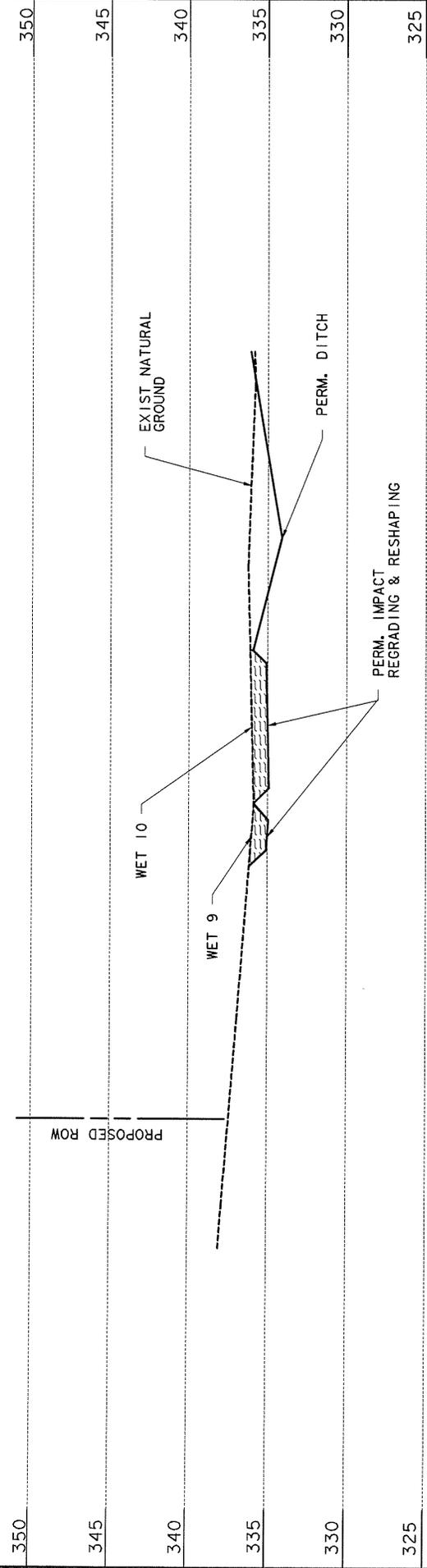
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRAIDING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRAIDING & RESHAPING
 - WETLAND BOUNDARY



SHEET 1 OF 2



Sheet 21 of 31
 USACE No. 2009-00017
 WET 9 and WET 10
 Impact Details Plan View

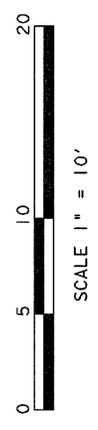


SECTION A-A
STA. 132+85.00

NOTE: SEE SHEET 1 OF 2 FOR
 FILL QUANTITIES.

LEGEND

	AVOIDED IMPACT
	TEMPORARY IMPACT - REGRADING & RESHAPING
	TEMPORARY IMPACT - DIRT FILL
	TEMPORARY IMPACT - STRUCTURE FILL
	PERMANENT IMPACT - EXCAVATION
	PERMANENT IMPACT - DIRT FILL
	PERMANENT IMPACT - STRUCTURE FILL
	PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
	PERMANENT IMPACT - REGRADING & RESHAPING
	WETLAND BOUNDARY

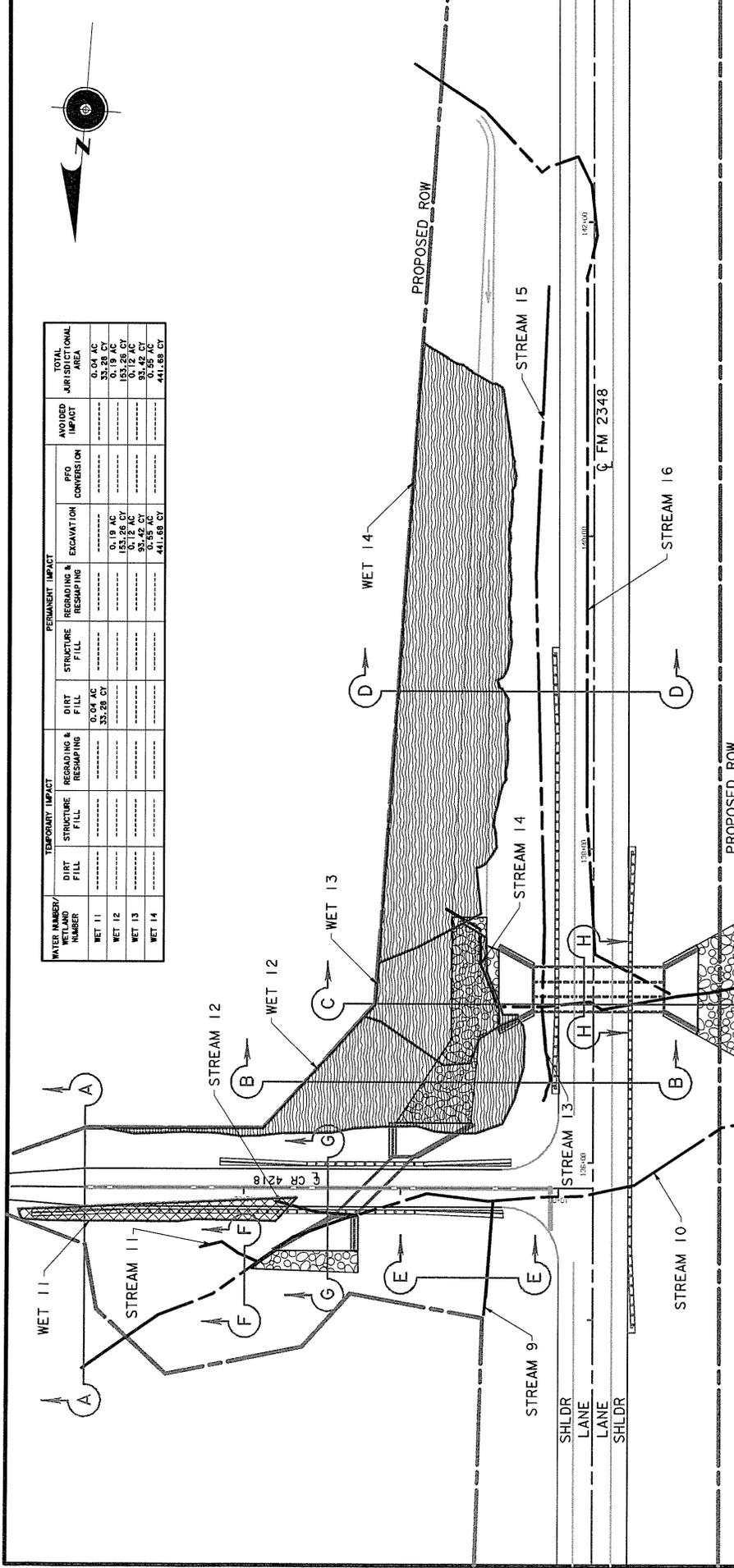


SHEET 2 OF 2

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 USACE No. 2009-00017
 WET 9 and WET 10
 Impact Details Cross Section



WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT			TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	
WET 11	0.04 AC	33.28 CY	0.04 AC	0.04 AC	33.28 CY	0.04 AC	0.04 AC
WET 12	0.04 AC	153.24 CY	0.04 AC	0.04 AC	153.24 CY	0.04 AC	0.04 AC
WET 13	0.04 AC	93.42 CY	0.04 AC	0.04 AC	93.42 CY	0.04 AC	0.04 AC
WET 14	0.04 AC	441.68 CY	0.04 AC	0.04 AC	441.68 CY	0.04 AC	0.04 AC



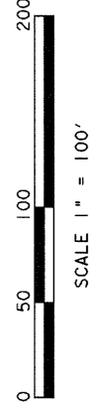
LEGEND

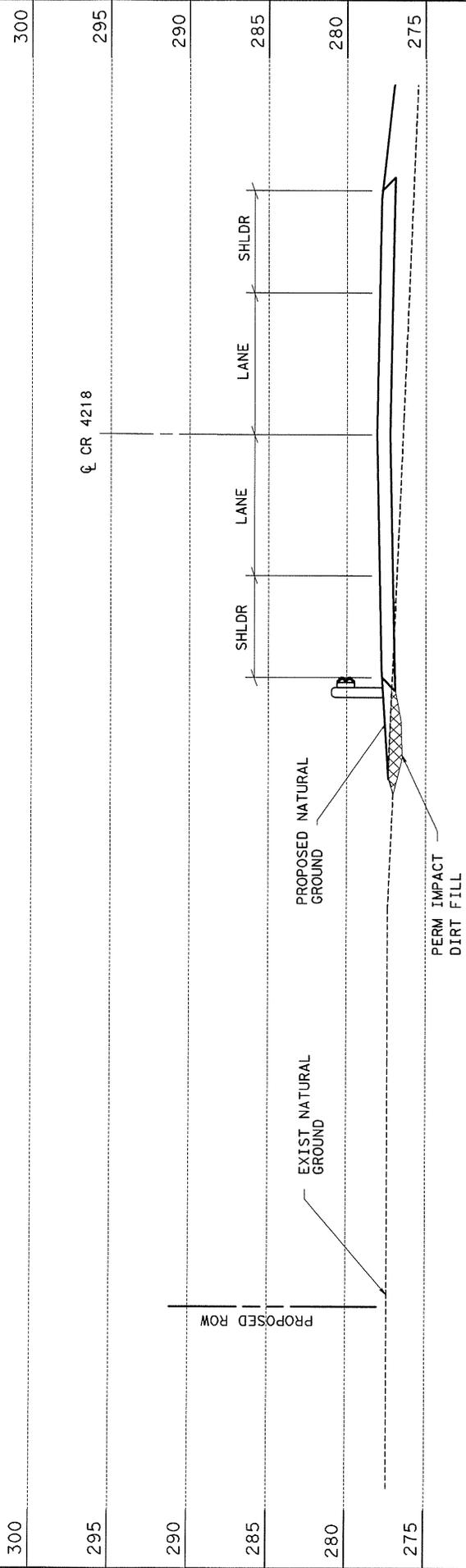
- [Pattern: Dotted] AVOIDED IMPACT
- [Pattern: Diagonal lines /] TEMPORARY IMPACT - REGRAIDING & RESHAPING
- [Pattern: Diagonal lines \] TEMPORARY IMPACT - DIRT FILL
- [Pattern: Horizontal lines] TEMPORARY IMPACT - STRUCTURE FILL
- [Pattern: Vertical lines] PERMANENT IMPACT - EXCAVATION
- [Pattern: Cross-hatch] PERMANENT IMPACT - DIRT FILL
- [Pattern: Solid black] PERMANENT IMPACT - STRUCTURE FILL
- [Pattern: X's] PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- [Pattern: Wavy lines] PERMANENT IMPACT - REGRAIDING & RESHAPING
- [Pattern: Double line] WETLAND BOUNDARY

WATER NUMBER/ WETLAND NUMBER	TEMPORARY IMPACT			PERMANENT IMPACT			TOTAL JURISDICTIONAL AREA
	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	DIRT FILL	STRUCTURE FILL	REGRAIDING & RESHAPING	
STREAM 9	0.003 AC	0.003 AC	0.003 AC	0.003 AC	0.003 AC	0.003 AC	0.003 AC
STREAM 10	0.010 AC	0.010 AC	0.032 AC	0.002 AC	0.010 AC	0.032 AC	0.032 AC
STREAM 11	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC
STREAM 12	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC
STREAM 13	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC	0.002 AC
STREAM 14	0.005 AC	0.005 AC	0.005 AC	0.005 AC	0.005 AC	0.005 AC	0.005 AC
STREAM 15	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC	0.001 AC
STREAM 16	0.005 AC	0.005 AC	0.013 AC	0.009 AC	0.013 AC	0.018 AC	0.021 AC

SHEET 1 OF 9

Sheet 23 of 31
 USACE No. 2009-00017
 WET 11-14 and Streams 9-16
 Impact Details Plan View





SECTION A-A

STA. 13+00.00

NOTE: SEE SHEET 1 OF 9 FOR FILL QUANTITIES.

LEGEND

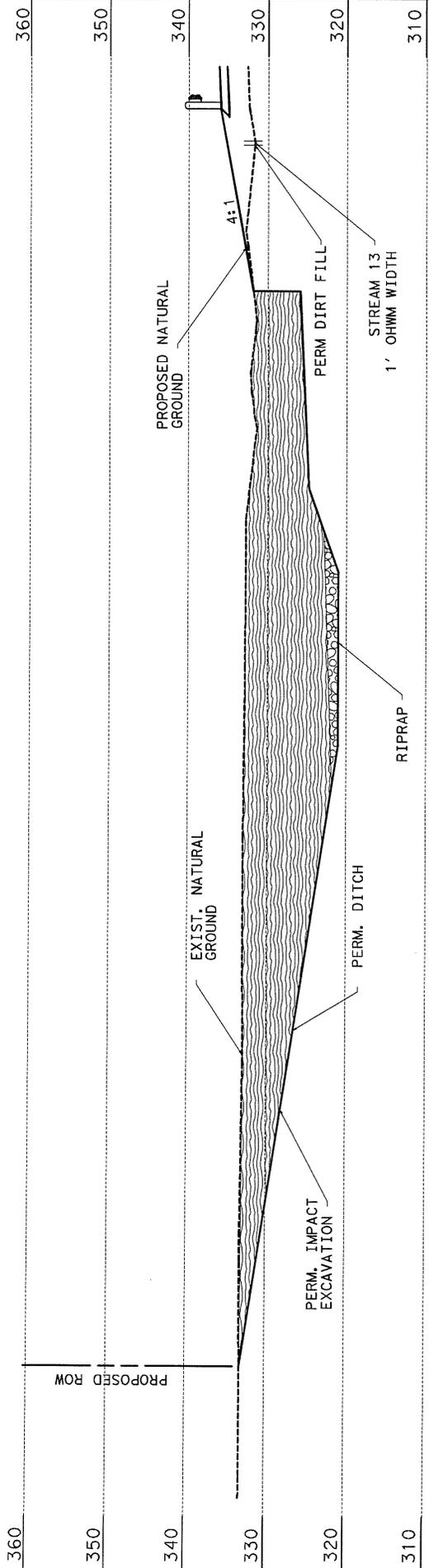
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY



SHEET 2 OF 9



Sheet 24 of 31
 USACE No. 2009-00017
 WET 11 Impact Details
 Cross Section



SECTION B-B
STA. 136+50.00

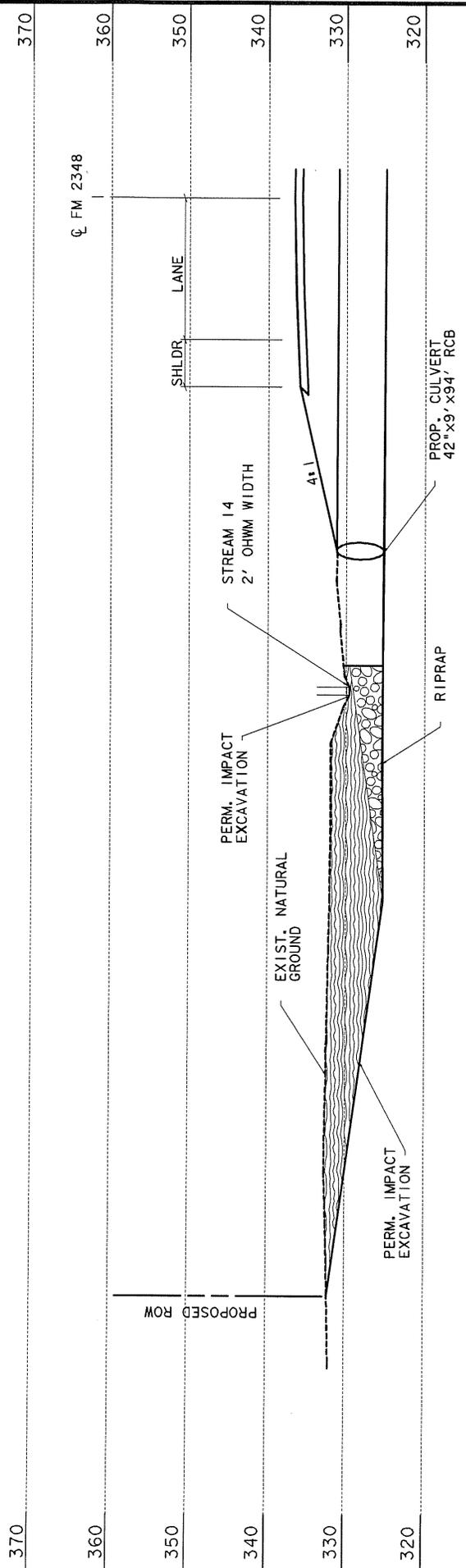
NOTE: SEE SHEET 1 OF 9 FOR
 FILL QUANTITIES.

- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 3 OF 9

Sheet 25 of 31
 USACE No. 2009-00017
 WET 12 and Stream 13
 Impact Details Cross Section



SECTION C-C
STA. 137+00.00

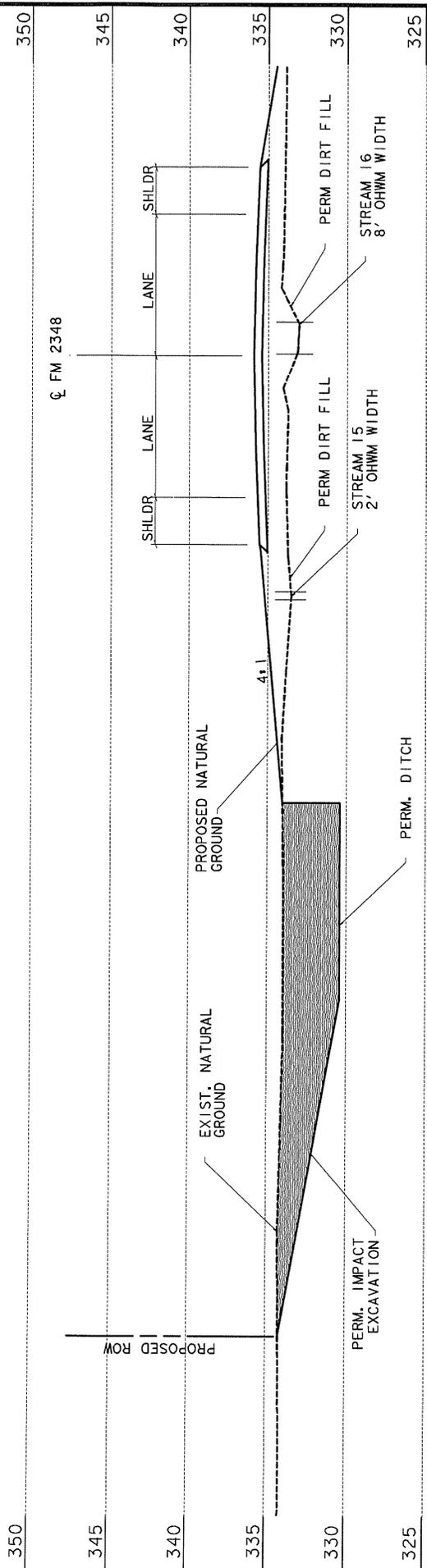
NOTE: SEE SHEET 1 OF 9 FOR FILL QUANTITIES.

- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 4 OF 9

Sheet 26 of 31
USACE No. 2009-00017
WET 13 and Stream 14
Impact Details Cross Section



SECTION D-D
STA. 139+00.00

NOTE: SEE SHEET I OF 9 FOR FILL QUANTITIES.

LEGEND

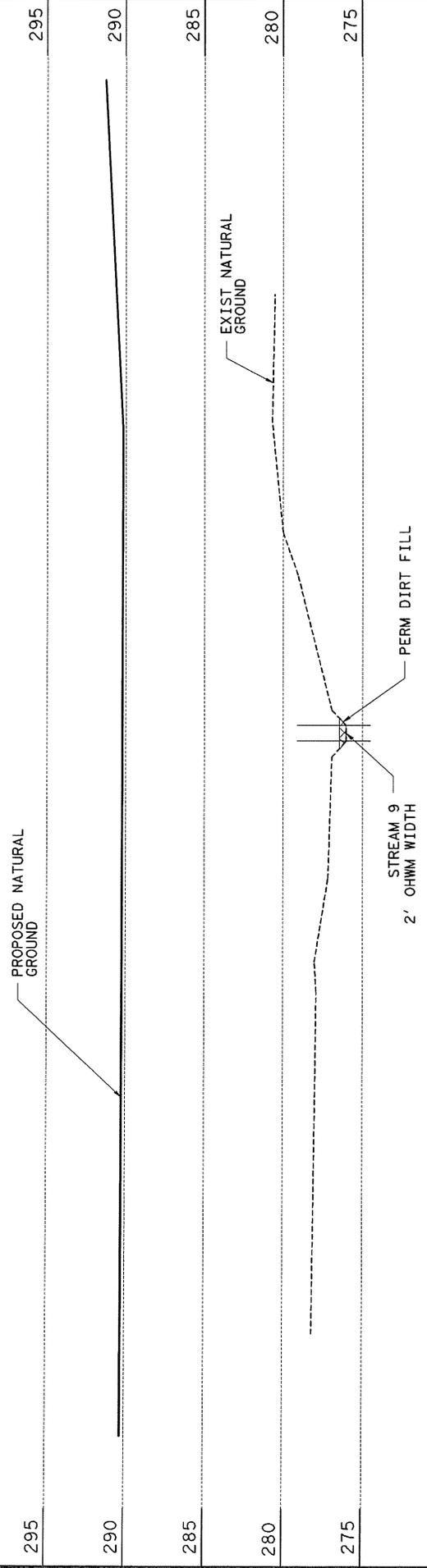
- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY



SHEET 5 OF 9



Sheet 27 of 31
 USACE No. 2009-00017
 WET 14 and Streams 15-16
 Impact Details Cross Section



SECTION E-E

NOTE: SEE SHEET 1 OF 9 FOR FILL QUANTITIES.

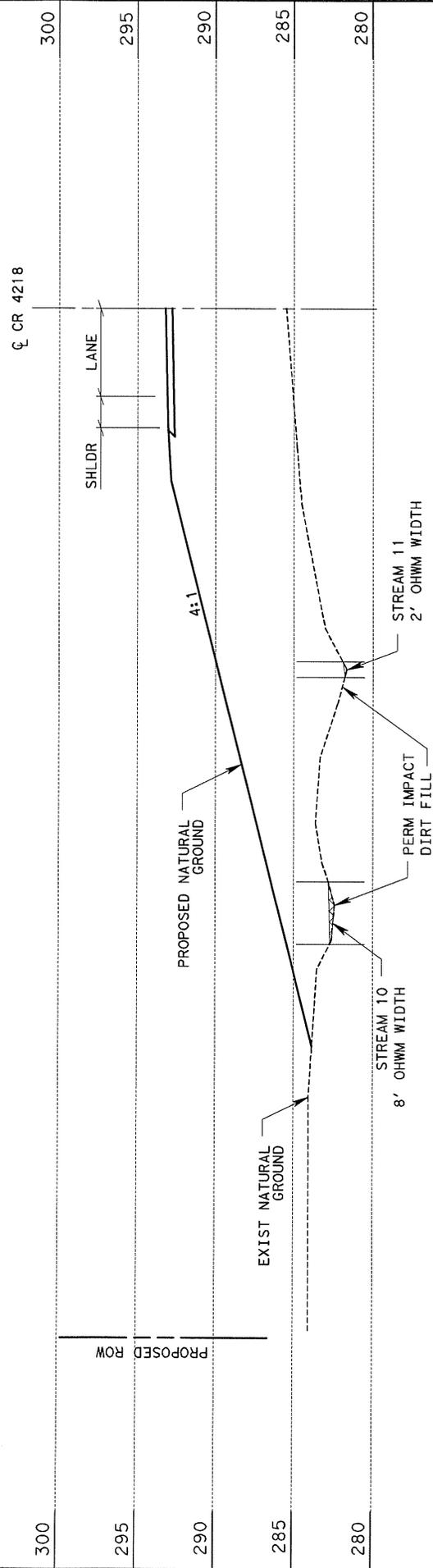
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 6 OF 9



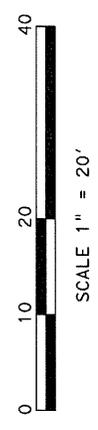
Sheet 28 of 31
 USACE No. 2009-00017
 Stream 9 Impact Details
 Cross Section



SECTION F-F

NOTE: SEE SHEET 1 OF 9 FOR FILL QUANTITIES.

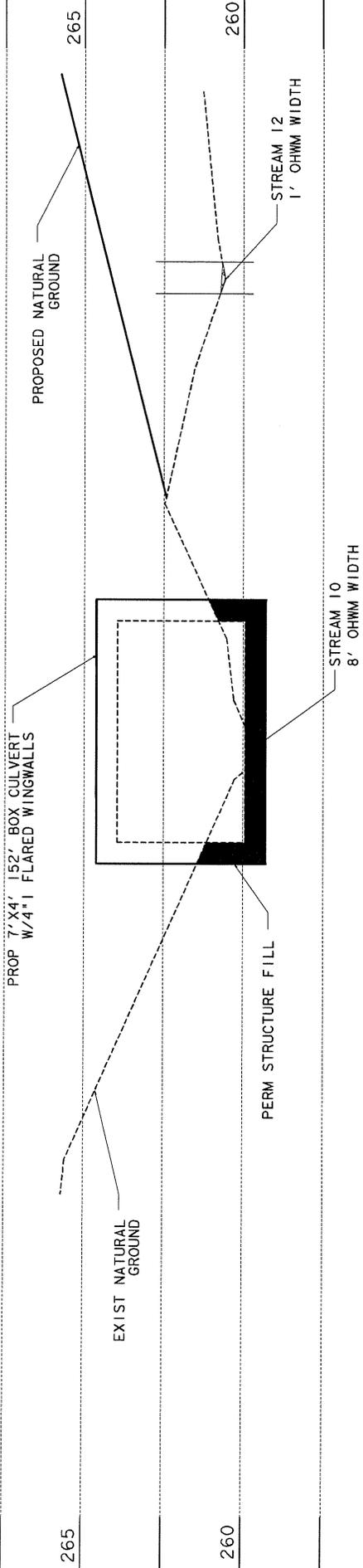
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 7 OF 9



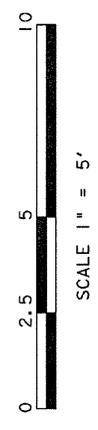
Sheet 29 of 31
USACE No. 2009-00017
Streams 10 and 11
Impact Details Cross Section



SECTION G-G

NOTE: SEE SHEET I OF 9 FOR FILL QUANTITIES.

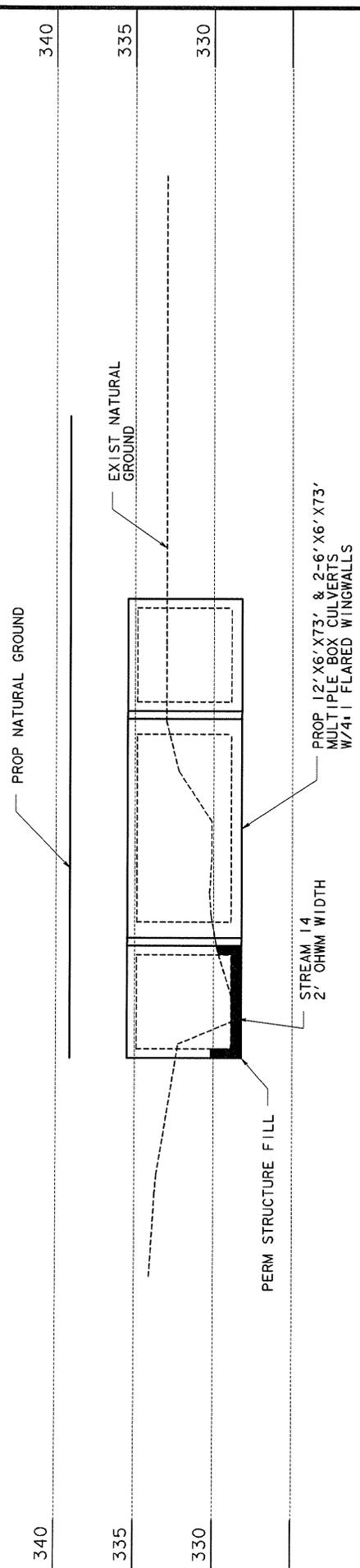
- LEGEND**
- AVOIDED IMPACT
 - TEMPORARY IMPACT - REGRADING & RESHAPING
 - TEMPORARY IMPACT - DIRT FILL
 - TEMPORARY IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - EXCAVATION
 - PERMANENT IMPACT - DIRT FILL
 - PERMANENT IMPACT - STRUCTURE FILL
 - PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
 - PERMANENT IMPACT - REGRADING & RESHAPING
 - WETLAND BOUNDARY



SHEET 8 OF 9



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USACE 2009-00017
Streams 10 and 12
Impact Details Cross Section



SECTION H-H

NOTE: SEE SHEET I OF 9 FOR FILL QUANTITIES.

LEGEND

- AVOIDED IMPACT
- TEMPORARY IMPACT - REGRADING & RESHAPING
- TEMPORARY IMPACT - DIRT FILL
- TEMPORARY IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - EXCAVATION
- PERMANENT IMPACT - DIRT FILL
- PERMANENT IMPACT - STRUCTURE FILL
- PERMANENT IMPACT - PALUSTRINE FORESTED (PFO) CONVERSION
- PERMANENT IMPACT - REGRADING & RESHAPING
- WETLAND BOUNDARY



SHEET 9 OF 9



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 USACE No. 2009-00017
 Stream 14 Impact Details
 Cross Section