SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by execution of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO.	**1**	DATED	**5/19/2016**	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Revised Table of Contents; Revised NTB Nos. 6283, 6285, 6287, 6288, 6289, 6290, & 6294; Add NTB Nos. 6377, 6378, 6379, 6380, & 6381; Remove SP 907-107-14; Add SP Nos. 907-618-18 & 907-804-13; Revised BidItems; Revised or Added Plan Sheet Nos. 2, 3, 6, 10, 12, 14, 17-19, 5001, 5004-5007, 8001, 8070, & 9007-9038; Amendment EBS Download Required.

TOTAL ADDENDA: **1**
(Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____
Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President	Address
Secretary	Address
Treasurer	Address

The following is my (our) itemized proposal.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
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05/19/2016 10:37 AM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6283 **CODE: (SP)**

DATE: 05/18/2016

SUBJECT: Contract Time

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

The date for completion of the work to be performed under this contract will not be a predetermined date but will be the date calculated by adding the number of days specified by the Contractor on the Expedite Bid Sheets to the effective date of the Notice to Proceed / Beginning of Contract Time. This date will be known as the Specified Completion Date, which date or extended date as provided in the contract shall be the end of contract time.

It is anticipated that the Notice of Award will be issued no later than **May 24, 2016** and the effective date of the Notice to Proceed / Beginning of Contract Time will be **July 5, 2016**.

It is anticipated that the Contractor will prosecute all phases of work using multiple crews simultaneously. The Contractor will be allowed to work 24 hours and 7 days a week on the project. No work will be allowed requiring the presence of the Project Engineer or his representative(s) on the following days: Thanksgiving day, Christmas Day, and New Years Day.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6285 **CODE (SP)**

DATE: 05/18/2016

SUBJECT: Placement of Fill Material in Federally Regulated Areas

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

A Permit (404, General, Nationwide, etc.) for placing fill material federally regulated sites is required.

The Department has acquired the following permits for permanently filling at regulated sites that are identified during project development:

Nationwide Permit No.23 (Wetlands & Waters of U.S.) – All Sites
(ID. No. MVK-2016-00286)

Copies of said permit(s) are on file with the Department.

Securing a permit(s) for the filling of any other regulated site, the purpose of which is temporary construction for the convenience of the Contractor, shall be the responsibility of the Contractor.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6287 **CODE: (SP)**

DATE: 05/18/2016

SUBJECT: A + B Bidding

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are hereby advised this project contains requirements for A + B bidding.

The bidder shall determine the total number of calendar days required to complete the work in the contract. The product of the total number of calendar days required for construction of the project in accordance with the plans and specifications (contract time), as determined by the Bidder, times the disincentive cost of **$10,000.00 per calendar day** shall be added to the total bid determined from the bid items. The sum of these two amounts will be the amount used for comparison of bids. This information will be shown on the Expedite Bid Sheets.

The proposal guaranty for this project should not include the amount determined for contract time as specified above. The proposal guaranty should be for the amount of the bid items.

After the proposals are opened and read, they will be compared on the basis of the following formula:

X = A + B

Where:

X = The total amount used only for determining the lowest bid for award of Contract.

A = Total Bid - Direct and Dependent Items - This being the summation of the products of the quantities shown in the bid schedule multiplied by their respective unit prices.

B = Value of the Contract Time – This being the total calendar days required to complete construction of the project in accordance with the plans and specifications (contract time), as determined by the Bidder, multiplied by the disincentive cost of **$10,000.00** per day. The value B is included for comparison of bids only and will NOT be included in any payment to the Contractor. **The total number of days entered for contract time CAN NOT EXCEED 517 Calendar Days.** If the Contractor enters a Contract Time of more than **517 calendar days**, the proposal will be considered **irregular, rejected, and returned to the bidder.**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6288 **CODE: (SP)**

DATE: 5/18/2016

SUBJECT: Milestone Construction

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are hereby advised that a project milestone will be required in order to minimize impacts on the traveling public and shall consist of the following:

The Milestone Construction is defined as work associated with High friction surface treatment on the I-55 Coldwater River Bridges. This work shall be the initial phase of construction for the project, and this work can be completed prior to concurrence of the Contractor's Erosion Control Plan.

The project milestone will not be considered complete until all bridge repairs are complete, all items of work associated with the High Friction Surface Course has been completed, and normal traffic volume has resumed on both bridges.

The Completion Date for the Milestone Construction is **September 16, 2016**.

The contractor will be assessed a fee of **$10,000.00** each Calendar Day beyond **September 16, 2016** until the contractor has completed the project milestone to the satisfaction of the Engineer.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 6289 **CODE: (SP)**

DATE: 05/18/2016

SUBJECT: Lane Closure Restrictions-I-55

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are hereby advised of the following lane closure restrictions on the above captioned project.

No lane closure or other work that impedes either of the two lanes of traffic along I-55 shall be allowed Monday through Friday between the hours of 6:00 a.m. and 9:00 a.m. on the Northbound Bridge, and 4:00 p.m. to 7:00 p.m. on the Southbound Bridge.

The Engineer shall alter lane closure times or placement in the event of excessive queuing.

Also, no lane closures will be permitted on the following holidays or the day preceding them: New Year's Day, Independence Day, Labor Day, Thanksgiving Day or Christmas Day. In the event that one the above mentioned holidays falls during the weekend or on a Monday, no lane closures will be allowed during that weekend or the Friday immediately preceding that holiday.

If the lane closure restriction listed above is violated, no excuses will be accepted by the Department and the Contractor will be charged a fee of **$ 1,500.00** for each full or partial five minute period until the roadway is back in compliance with the lane closure restriction requirement.

For the purposes of this contract, official time shall be the announced time available at Southaven area telephone number (662) 895-5527.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6290 **CODE: (SP)**

DATE: 05/18/2016

SUBJECT: Repair for the I-55 Coldwater River Bridges

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

The contract documents do not include an official set of construction plans for this work, but may by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings". All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

Bidders are advised that this work **will take place during the initial phase** of construction for this project. Bidders are also advised that this work will be allowed to take place prior to approval of the Contractor's Erosion Control Plan. For each bridge, the limits of construction shall be two (2) miles in advance of each bridge and two (2) miles beyond each bridge.

The repair work for Bridge #272.9A, Bridge ID 14621, I-55 Southbound over Coldwater River & Bridge #272.9B, Bridge ID 14622, I-55 Northbound over Coldwater River will be as follows:

1.) Remove all bituminous patches, payment for this work will be paid as 202-B307, Removal of Bridge Deck. Remove all loose or delaminated deck patches and concrete from the top surface of the deck, payment for this work will be paid as 202-B307, Removal of Bridge Deck. Patch top surface of deck to provide bonding surface for High Friction Surface Treatment. Seal cracks in the top surface of the deck with a sealant compatible with the High Friction Surface Treatment, payment for the patching will be absorbed in other items of work. The High Friction Surface Treatment will consist of two layers placed in accordance with 907-410-11. Apply a leveling course of High Friction Surface Treatment to the entire bridge deck surface to provide a more uniform surface for the final application of a surface course. The leveling course may be hand applied in accordance with 907-410.03.1.2. Machine apply the surface course of High Friction Surface Treatment to the entire bridge deck surface in accordance with 907-410.03.1.1. Payment for the High Friction Surface Treatment will be paid for using pay item 907-410-D.

Repair of each Bridge Deck, following removal of any damaged deck material/asphalt patching, will be made using one of the three list materials below, or an approved equal.

- "HP-BINDER" shall be as manufactured by Hunt Process Corporation, P.O. Box 688, Ridgeland, MS 39158, Telephone No. (601) 856-8811.

- "Polymer Concrete" shall be as manufactured by Polymer Concrete, Inc. P.O. Box 610, Camden, AL 36726, Telephone No. (205) 682-4296.

- CeraTech Pavement VR" shall be as manufactured by CeraTech, Inc., 3037 Tuggle Ives Dr., Buford, GA 30519, Telephone No. (770) 831-0794.

General Notes

It shall be the responsibility of the Contractor to protect existing structures from damage which might occur during construction. The contractor shall replace or repair, as directed by the Engineer, any structures damaged during the life of the contract. No payment will be made for replacement or repair of damaged items.

The Contractor shall erect and maintain construction signing and provide all signs and traffic control devices necessary to safely maintain traffic around and through the work areas in accordance with the Traffic Control Plan and the MUTCD. The cost is to be included in the price bid for Pay Item No. 618-A001, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except those designated in the plans to be black legend and border on white background. Standard roadside construction signs and barricades will be paid for using the appropriate pay items.

Bidders are advised that there is an associated Milestone date of September 16, 2016 to complete this repair work.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 6294 **CODE: (SP)**

DATE: 05/19/2016

SUBJECT: Haul Road

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are advised that the Erosion Control plans, and the General Notes in the plans call for a temporary haul road to be used by the Contractor during construction of Bridge 278.6 to be absorbed in other items of work. This is incorrect. The temporary haul road will be paid for under pay item, 907-618-G001, Construction and Removal of Haul Road, LS. This pay item will allow for the Construction, Maintenance, and Removal of the temporary haul road. Upon Completion of the Construction of the temporary haul road, the Contractor will be paid 75% of the bid cost, the remaining 25% will be paid upon removal of the temporary haul road back to natural ground elevation.

Bidders are advised that temporary haul road shall be constructed in accordance with The Department's US Army Corp of Engineer permit.

"The temporary haul road will be constructed adjacent to the bridge on the east side to allow for the construction and act as a conduit for materials. This haul road will be approximately twenty (20) feet wide and will be inside the construction limits. The haul road will be removed after construction is complete. Temporary stream crossings are anticipated at stations 118+00 to 120+00 and 129+00 to 131+00."

Bidders are advised that geotextile fabric will be required underneath all rock (rip rap & crushed stone). The haul road shall be removed back to natural ground.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6377 **CODE:(SP)**

DATE: 05/19/2016

SUBJECT: Additional Construction Requirements

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are hereby advised of the following construction requirements.

USACE Existing Gauge Removal

Bidders are advised of an existing USACE gauge located on the existing bridge. During the bridge demolition phase of the project, this gauge will have to be removed. The USACE request that advanced notification of **14** calendar days be given prior to removal of the gauge to coordinate efforts. Contact information is listed below.

Drew A. Smith, P.E.
Acting Chief, Water Control Management Section Vicksburg District, U.S. Army Corps of Engineers
601-631-5207

Bridge Removal

Bidders are advised that the piling/substructure for existing bridge 278.3 should be removed as per section 202 of the Mississippi Standard Specifications for Road and Bridge Construction. Payment for this work will be paid as 202-A001, Removal of Obstructions.

USACE Boat Ramp

Bidders are advised that the existing USACE Boat Ramp located at Station 144+48 LT shall remain open and maintained throughout the life of the project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 6378 **CODE: (SP)**

DATE: 05/18/2016

SUBJECT: Extension of Contract Time

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are advised that this project is prone to flooding during certain times of the year. Bidders are further advised that Special Provision No. 907-108-38 provides for a time extension due to flooded essential work areas. For the purposes of this project, a time extension for flooded essential work areas shall only apply between the dates of September 1st and May 1st when the Coldwater River elevation is above 235.0. In this instance, contract time will be extended on a calendar day basis for each calendar day the Coldwater River elevation is above 235.0 based on readings from the USACE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6379 **CODE: (SP)**

DATE: 05/19/2016

SUBJECT: Utility Adjustments

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

The Bidder is hereby advised of utilities which have not been relocated.

Entergy Power

Bidders are advised that Utility Power Poles exist in the fill areas associated with this project at Stations 50+50.00 LT to Stations 146+00 LT. Bidders should consider working in the vicinity of these objects during bid development. The power pole at station 139+30, 60' LT will be removed prior to the construction of the Soldier Pile wall. The remainder of the power poles **will not** be removed/relocated before, or during this project. Prior to any earthwork operations taking place in these areas bidders are to contact Entergy, contact listed below, to coordinate inspection efforts by Entergy.

Entergy Contact

Russell Lee
Field Engineer
Entergy Mississippi, Inc.
662-342-7573
662-342-7567 FAX
901-488-5998 CELL

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 6380

DATE: **05/19/2016**

SUBJECT: **Restricted Area**

PROJECT: **STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties**

Bidders are hereby advised of the following Restricted Area on the project:

Station 138+80 LT to Station 139+80 LT

The above area is restricted until the power pole located at 139+30, 60’ LT has been removed. This work will be dependent upon the Coldwater River elevation, during times of significant rainfall the area where this work is to take place is under water. Upon written notification by the Engineer, the Contractor may have immediate access.

No extension of contract time will be considered for this non-access.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6381 **CODE: (SP)**

DATE: 05/19/2016

SUBJECT: Contract Modifications

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are advised of the following changes regarding pay items:

- The Plan sheets do not reference pay item 202-B307, Removal of Bridge Deck. This is in error. Payment for the Removal of the Deck material associated with the I-55 Bridge Deck Repairs shall be made using pay item 202-B307, Removal of Bridge Deck with a quantity of 140 S.Y. The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item 907-410-D001, High Friction Surface Treatment. This is in error. Payment for the Surface treatment work on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 907-410-D001, High Friction Surface Treatment with a quantity of 26,300 S.Y. The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item 907-618-G001, Construction and Removal of Haul Road. This is in error. Payment for the Temporary haul road allowing access to the construction area along the SR 51 Coldwater Bridge shall be made using pay item 907-618-G001, Construction and Removal of Haul Road with a quantity of 1 L.S. The bid items have been corrected to reflect this change.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-18 **CODE: (SP)**

DATE: 05/17/2016

SUBJECT: Construction and Removal of Haul Road

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-618.01--Description. After Subsection 618.01.2 on page 413, add the following.

907-618.01.4--Lump Sum Haul Road.

907-618.01.4.1--General. When specified on the plans or in the contract documents, the Contractor will construct, maintain and remove all haul roads as indicated in the plans and contract documents. This work shall consist of the design, furnishing of materials, construction, repair, and removal of haul roads as described herein.

Limits of the lump sum haul road shall be as shown on the plans.

Temporary erosion control items will not be included in the cost of the lump sum haul road. These items will be paid for under appropriate pay items.

907-618.01.4.2--Design and Documentation. The Contractor will be responsible for the design of the haul road. The Contractor shall construct the haul road using geotextile fabric and rip rap and/or crushed stone. The geotextile fabric shall be placed beneath the rip rap and/or crushed stone. Temporary work bridge materials may also be used to span greater distances. When the temporary haul road is no longer in service, it shall be removed back to natural ground.

907-618.04--Method of Measurement. After the last paragraph of Subsection 618.04 on page 418, add the following.

Construction and removal of haul road will be measured as a lump sum quantity, consisting of furnishing all labor and materials, construction, repair and replacement of each haul road as deemed necessary during the life of the project.

All Contractor furnished material for the haul road shall remain the property of the Contractor and shall be removed from the project unless otherwise approved by the Engineer.

Percentages for construction and removal of each haul road will be applied as follows:

Construction of Haul Road 75%
Removal of Haul Road..... 25%

Each month the Engineer will estimate the percentage of construction and removal of each haul road and apply the percentage as indicated above to the Contractor's monthly estimate.

907-618.05--Basis of Payment. After the fifth paragraph of Subsection 618.05 on page 418, add the following.

Construction and removal of haul road, measured as provided above, will be paid for at the contract lump sum bid price bid, which price shall be full compensation for furnishing all labor and materials, design, construction, repair, replacement, and removal when ordered by the Engineer.

After the last pay item listed on page 418, add the following:

907-618-G: Construction and Removal of Haul Road - lump sum

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-804-13

DATE: **02/14/2013**

SUBJECT: **Self-Consolidating Concrete for Drilled Shafts**

Delete Subsection 907-804-02.10 on pages 2 & 3, and substitute the following.

907-804.02.10--Portland Cement Concrete Mix Design. Delete the first sentence of the first paragraph of Subsection 804.02.10 on page 850 and substitute the following.

At least 30 days prior to production of concrete, the Contractor shall submit to the Engineer proposed concrete mixture designs complying with the Department's *Concrete Field Manual*.

Delete the Notes under Table 3 of Subsection 804.02.10 on pages 850 & 851, and substitute the following:

* Maximum size aggregate shall conform to the concrete mix design for the specified aggregate.

** Portland cement shall be Type II meeting the requirements of Subsection 907-701.02. The replacement of Portland cement by other cementitious materials shall be either GGBFS in accordance with Subsection 907-714.06 or Class F fly ash in accordance with Subsection 907-714.05. The replacement of Portland cement by weight by GGBFS shall be 70%. The replacement of Portland cement by weight by Class F fly ash shall be 35%. Other supplementary cementitious materials shall not be used. Mixture designs containing only Portland cement shall not be used.

*** The slump may be increased up to eight (8) inches with:

- an approved water-reducing admixture,
- an approved water-reducing/set-retarding admixture, or
- a combination of an approved water-reducing admixture and an approved set-retarding admixture, in accordance with 907-713.02. Minus slump requirements shall meet those set forth in Table 3 of AASHTO Designation: M157.

**** Entrained air is not required except for concrete exposed to seawater. For concrete exposed to seawater, the total air content shall be 3.0 % to 6.0%. For concrete not exposed to seawater, the total air content shall not exceed 6.0%.

***** For Class DS, the maximum slump flow shall be 24 inches. The minus slump flow tolerance shall be six (6) inches.

Delete the last paragraph of Subsection 804.02.10 on page 851 and substitute the following.

At least one water-reducing admixture shall be used in all classes of concrete in accordance with the manufacturer's recommended dosage range. Other admixtures for developing specific

performance characteristics may be used in accordance with Special Provision 907-713-2. Any combinations of admixtures shall be approved by the Engineer before their use.

Delete Subsection 804.02.10.1 on page 851 and substitute the following.

907-804.02.10.1--Proportioning of Portland Cement Concrete Mixture Design. Proportioning of Portland cement concrete shall be based on an existing mixture of which the producer has field experience and documentation or based on a recently batched laboratory mixture tested according to the required specifications.

Additionally, only proposed mixtures meeting the following additional requirements shall be tentatively approved for use in construction of drilled shafts.

a) Compressive Strength/Maturity Relationship. The compressive strength/maturity relationship shall be developed for the mixture design for a minimum of 28 days following the requirements of Subsection 907-804.03.15. The compressive strength/maturity relationship information shall be submitted with the mixture design information. Depending on the rate at which the mixture develops compressive strength, it may be necessary to develop the relationship for a minimum of 56 days.

Delete Subsection 907-804-02.10.1.1 on page 3, and substitute the following.

907-804.02.10.1.1--Proportioning on the Basis of Previous Field Experience of Trial Mixtures. Delete the first sentence of the first paragraph of Subsection 804.02.10.1.1 on page 851, and substitute the following.

Where a concrete production facility has a record, based on at least 10 consecutive strength tests from at least 10 different batches within the past 12 months from a mixture not previously used on Department projects, the standard deviation shall be calculated.

Delete the first paragraph of subparagraph c) on page 851, and substitute the following.

c) Consist of 10 consecutive tests, average of two cylinders per test, tested at 28 days, including the slump, air content, and temperature data recorded for the plastic concrete for each strength test. For Class DS, the test data for the plastic concrete shall include the slump flow data, J-ring data, and at least one test to determine the static segregation. For all mixture designs, for each of these tests on the plastic concrete the test data shall meet the acceptance criteria of Subsection 804.02.13.1.

907-804.02.10.1.2--Proportioning on the Basis of Laboratory Trial Mixtures. Delete paragraph b) on page 852 and substitute the following,

b) Trial mixtures having proportions and consistencies suitable for the proposed work shall be made using ACI 207.1, ACI 211.1, and ACI 237 as guides to proportion the mixture design.

Add the following paragraph after the first paragraph of subparagraph c) on page 852.

For Class DS, the mixture shall be designed to produce a slump flow within ±2 inches of the maximum permitted, a maximum difference between the slump flow and the J-ring flow of two inches (2"), and a maximum static segregation of 10.0 percent. The slump flow and J-ring tests shall be conducted using Filling Procedure B with the inverted slump cone. The concrete shall not be rodded or vibrated during casting the test specimens.

Delete paragraph of subparagraph d) beginning on page 852, and substitute the following.

For each proposed mixture, at least three compressive test cylinders shall be made and cured in accordance with AASHTO Designation: T 126. Each change of water-cementitious ratio shall be considered a new mixture. The cylinders shall be tested for strength in accordance with AASHTO Designation: T 22 and shall be tested at 28 days. Depending on the rate at which the mixture develops compressive strength, it may be necessary to develop the relationship for a minimum of 56 days.

For Class DS, test specimens shall be made in accordance with the above listed specifications with the exception that the concrete shall not be rodded or vibrated during casting the test specimens.

Delete the first four paragraphs of Subsection 907-804-02.10.3 on pages 3 & 4, and substitute the following.

Aggregates and concrete tests during the first placement shall be as follows.

Aggregates	Concrete
Bulk Specific Gravity	Water Content
Moisture	Slump Flow
Gradation	J-Ring
	Air Content
	Unit Weight
	Yield
	Static Segregation

Delete the first sentence of the third paragraph of Subsection 804.02.10.3 on page 853 and substitute the following.

For all Classes of concrete, the mixture shall be verified to yield within 2.0% of the correct volume when all the mix water is added to the batch.

For all Classes of concrete other than DS, F, and FX, the mixture shall produce a slump within a minus 1½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of three inches (3") or less or within a minus 2½-inch tolerance of the maximum

permitted for mixtures with a maximum permitted slump of greater than three inches (3"), and producing a total air content within a minus 1½ percent tolerance of the maximum allowable air content in Table 3.

For Class DS, the slump flow shall be within the requirements in Note ***** below Table 3, the difference between the slump flow and the J-ring flow shall not exceed two inches (2"), and the static segregation shall not exceed 10.0%. For Class DS exposed to seawater, the total air content shall be within a minus 1½ percent tolerance of the maximum allowable air content in Note **** below Table 3. For Class DS not exposed to seawater the total air content shall be within the requirements in Note **** below Table 3.

For Classes F and FX, the slump shall be within a minus 1½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of three inches (3") or less or within a minus 2½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of greater than three inches (3"). For Classes F and FX exposed to seawater, the total air content shall be within a minus 1½ percent tolerance of the maximum allowable air content in Note **** below Table 3. For Classes F and FX not exposed to seawater the total air content shall be within the requirements in Note **** below Table 3.

Delete Subsection 907-804-02.12 on pages 4 & 5, and substitute the following.

907-804.02.12--Contractor's Quality Control. Delete the fourth paragraph of Subsection 804.02.12 on pages 854 & 855, and substitute the following.

The Contractor's Quality Control program shall encompass the requirements of AASHTO Designation: M 157 into concrete production and control, equipment requirements, testing, and batch ticket information. The requirement of AASHTO Designation: M 157, Section 11.7 shall be followed except, on arrival to the job site, a maximum of 1½ gallons per cubic yard is allowed to be added. Water shall not be added at a later time. If the maximum permitted slump flow is exceeded after the addition of water at the job site, the concrete shall be rejected.

Delete Subsection 907-804-02.12.5 on page 5, and substitute the following.

907-804.02.12.5--Non-Conforming Materials. In Table 4 of Subsection 804.02.12.5 on page 857, delete "/ FM" from the requirements on line B.3.a.

Delete line C. on page 857 and substitute the following.

C. PLASTIC CONCRETE		
1. Sampling		T 141
2. Air Content	First load then one per 50 yd³	T 152* or T 196*
3. Slump Flow*	First load then one per 50 yd³	C 1611*
4. J-Ring*	First load then one per 50 yd³	C 1621*
5. Static Segregation*	2500 yd³ Concrete	C1610*
6. Compressive Strength	A minimum of one set (two cylinders) for each 100 yd³ and one set for each additional 100 yd³ or fraction thereof for each class concrete delivered and placed on a calendar day from a single supplier. A test shall be the average of two cylinders.	T 22*, T 23*, T 231
7. Yield	Each 400 yd³	T 121*
8. Temperature	With each sample	C 1064

* For Class DS the following requirements shall apply:

1. Substitute the appropriate AASHTO Designation for references to other ASTM Designations listed in ASTM Designations C1610, C1611, and C1621.
2. Test specimens shall be made in accordance with the above listed specifications with the exception that the concrete shall not be rodded or vibrated during casting the test specimens.
3. The slump flow test shall only be performed on SCC mixtures in accordance with ASTM Designation C1611. For these mixtures AASHTO Designation T119 is not required. For the slump flow and J-ring tests, the filling procedure used shall be Procedure B. Additionally, for each slump flow test, determine the T50 and VSI values in accordance with the information in Appendix X1 of ASTM Designation C1611. There are no acceptance criteria for the T50 or VSI determinations.
4. The static segregation test shall only be performed on SCC mixtures.

After the second paragraph of Subsection 907-804.02.13 on page 5, add the following.

Delete line B. on page 858 and substitute the following.

B. PLASTIC CONCRETE		
1. Sampling		T 141
2. Air Content	Every 100 yd³	T 152* or T 196*
3. Slump Flow*	Every 100 yd³	T 119 or C 1611*
4. Compressive Strength	One set (two cylinders) for every 100 yd³ inclusive. A test shall be the average of two cylinders.	T 22*, T 23*, T 231
5. Temperature	With each sample	C 1064

* For Class DS the following requirements shall apply:

1. Substitute the appropriate AASHTO Designation for references to other ASTM Designations listed in ASTM Designation C1611.
2. Test specimens shall be made in accordance with the above listed specifications with the exception that the concrete shall not be rodded or vibrated during casting the test specimens.
3. The slump flow test shall only be performed on SCC mixtures in accordance with ASTM Designation C1611. For these mixtures AASHTO Designation T119 is not required. For the slump flow test, the filling procedure used shall be Procedure B.

Delete Subsection 907-804.02.13.1 on pages 5, 6 & 7, and substitute the following.

907-804.02.13.1--Basis of Acceptance.

907-804.02.13.1.1--Sampling. Sampling of concrete mixture shall be performed in accordance with the latest edition of the Department's *Concrete Field Manual*.

907-804.02.13.1.2--Slump Flow and J-Ring Flow. Slump flow of plastic concrete shall meet the requirements of Table 3: MASTER PROPORTION TABLE FOR STRUCTURAL CONCRETE DESIGN. The difference between the slump flow and the J-ring flow shall meet the requirements of Subsection 907-804.02.10.1.2. A check test shall be made on another portion of the sample before rejection of any load.

907-804.02.13.1.3--Air. Total air content of concrete shall be within the specified range for the class of concrete listed in Table 3: MASTER PROPORTION TABLE FOR STRUCTURAL CONCRETE DESIGN. A check test shall be made on another portion of the sample before rejection of any load.

907-804.02.13.1.4--Yield. If the yield of the concrete mix design is more than plus or minus 3% of the designed volume, the mix shall be adjusted by a Class III Certified Technician representing the Contractor to yield the correct volume plus or minus three percent (±3%). If batching of the proportions of the mix design varies outside the batching tolerance range of the originally approved proportions by more than the tolerances allowed in Subsection 804.02.12.1, the new proportions shall be field verified per Subsection 804.02.10.3.

907-804.02.13.1.5--Temperature. Cold weather concreting shall follow the requirements of Subsection 907-804.03.16.1. Hot weather concreting shall follow the requirements of Subsection 804.03.16.2. The maximum acceptance temperature for Class DS concrete shall be determined from the in-place concrete temperatures measured during the installation of the trial shaft(s) in accordance with Subsection 907-804.03.6.4.1. Based on these results, the maximum acceptance temperature shall be the lesser of the following.

- 95°F, or
- T_{max} (°F) = 150°F-($T_{maxTrialShaft}$-$T_{acceptanceTrialShaft}$)

where:

$T_{maxTrialShaft}$-$T_{acceptanceTrialShaft}$ = the increase in concrete temperature in the shaft between the maximum internal shaft temperature and initial concrete acceptance temperature;
$T_{maxTrialShaft}$ = the maximum internal shaft temperature determined in Subsection 907-804.03.6.4.1; and
$T_{acceptanceTrialShaft}$ = the jobsite acceptance temperature of the Class DS concrete used to construct the trial shaft prior to placement in the shaft hole, not to exceed 95°F

Concrete with a temperature exceeding the maximum acceptance temperature shall be rejected and not used in Department work.

907-804.02.13.1.6--Compressive Strength. Laboratory cured concrete compressive strength tests shall conform to the specified strength (f'_c) listed in the specifications. Concrete represented by compressive strength test below the specified strength (f'_c) may be removed and replaced by the Contractor. If the Contractor elects not to remove the material, it will be evaluated by the Department as to the adequacy for the use intended. All concrete evaluated as unsatisfactory for the intended use shall be removed and replaced by the Contractor at no additional cost to the Department. For concrete allowed to remain in place, reduction in payment will be as follows.

Projects with 1000 Cubic Yards and More. When the evaluation indicates that the work may remain in place, a statistical analysis will be made of the QC and QA concrete test results. If this statistical analysis indicates at least 93% of the material would be expected to have a compressive strength equal to or greater than the specified strength (f'_c) and 99.87% of the material would be expected to have a compressive strength at least one standard deviation above the allowable design stress (f_c), the work will be accepted. If the statistical analysis indicates that either of the two criteria are not met, the Engineer will provide for an adjustment in pay as follows for the material represented by the test result.

Total Pay on Material in Question = Unit Price - (Unit Price x % Reduction)

$$\% \text{ Reduction} = \frac{\left(f'_c - X\right)}{f'_c - \left(f_c + s\right)} \times 100$$

where:

f'_c = Specified 28-day compressive strength, psi
X = Individual compressive strength below f'_c, psi
s = standard deviation, psi*
f_c = allowable design stress, psi

* Standard deviation used in the above reduction of pay formula shall be calculated from the applicable preceding compressive strengths test results plus the individual compressive strength below f'_c. If below f'_c strengths occur during the project's first ten compressive strength tests, the standard deviation shall be calculated from the first ten compressive strength tests results.

Projects of More Than 200 but Less Than 1000 Cubic Yards. When the evaluation indicates that the work may remain in place, a percent reduction in pay will be assessed based on a comparison of the deficient 28-day test result to the specified strength. The Engineer will provide for an adjustment in pay as follows for the material represented by the test result.

Total Pay on Material in Question = Unit Price - (Unit Price x % Reduction)

$$\% \text{ Reduction} = \frac{(f'_c - X)}{f'_c} \times 100$$

where:

f'_c = Specified 28-day compressive strength, psi
X = Individual compressive strength below f'_c, psi

907-804.02.13.1.7--Static Segregation. For Class DS the static segregation of the plastic concrete shall meet the requirements of Subsection 907-804.02.10.1.2. If the static segregation of the concrete mix design exceeds this requirement, the mix shall be adjusted by a Class III Certified Technician representing the Contractor to ensure a static segregation less than the maximum allowable. If batching of the proportions of the mix design varies outside the batching tolerance range of the originally approved proportions by more than the tolerances allowed in Subsection 804.02.12.1, the new proportions shall be field verified per Subsection 804.02.10.3.

After Subsection 907-804.03.6.2 on page 7, add the following.

907-804.03.6.4.1--Foundations and Substructures. Add the following after the first paragraph of Subsection 804.03.6.4.1:

The internal temperature of trial shaft(s) will be monitored by the Department.

Before Subsection 907-804.03.15 on page 7, add the following.

907-804.03.14.2--Stay-In-Place Metal Forms. Delete the sentence in Subsection 804.03.14.2 on page 871 and substitute the following.

Stay-in-place (SIP) metal forms are corrugated metal sheets permanently installed between the supporting superstructure members. After the concrete has cured, these forms shall remain in place as permanent, non-structural members of the bridge.

Pay quantities for bridge deck concrete will be computed from the dimensions shown in the Contract Plans with no allowance for changes in deflection and /or changes in dimensions necessary to accommodate the SIP metal forms.

There will be no direct payment for the cost of the forms and form supports, or any material, tools, equipment, or labor incidental thereto, but the cost shall be considered absorbed in the contract unit price for bridge deck concrete.

Before fabricating any material, three (3) complete sets of SIP metal form shop drawings and design calculations, bearing the Design Engineer's Seal, shall be submitted to the Director of Structures, State Bridge Engineer, through the Project Engineer, for review. The Contractor's SIP metal form

Design Engineer shall be a MS Registered Professional Engineer who is knowledgeable in the field of structural design.

In no case shall additional dead load produced by the use of SIP metal forms overstress any bridge component. Design calculations shall indicate any additional dead load from SIP metal form self-weight, form support hangers, concrete in flutes, concrete due to form deflection, etc. not included in the Contract Plans. The additional dead loads shall be clearly labeled and tabulated on the shop drawings. Bridge Division will evaluate the additional load for overstress of the bridge components. In the event that the additional dead load produces an overstress in any bridge component, Bridge Division will reject the Contractor's design. Deflection and loads produced by deflection of the SIP metal forms shall be considered and indicated in the design calculations.

The cambers and deflections provided in the Contract Plans do not consider the effects of SIP metal forms. The Contractor's Engineer shall take into account the weight of the forms and any additional dead load when developing the "Bridge Superstructure Construction Plan".

For the purpose of reducing any additional dead load produced by the SIP metal forms, the flutes of SIP metal forms may be filled with polystyrene foam. When polystyrene foam is used to fill the forms, the form flutes shall be filled completely; no portion of the polystyrene foam shall extend beyond the limits of the flutes. The Contractor shall ensure that the polystyrene foam remains in its required position within flutes during the entire concrete placement process. The Contractor shall not use reinforcing steel supports or other accessories in such a manner as to cause damage to the polystyrene foam. All damaged polystyrene foam shall be replaced to the satisfaction of the Project Engineer. All welding of formwork shall be completed prior to placement of polystyrene foam.

For bridges not located in horizontal curves, the Contractor may reduce the additional dead load by matching the flute spacing with the transverse steel spacing of the bottom layer. The bottom longitudinal layer of steel shall have one (1) inch of minimum concrete cover measured from the bottom of the reinforcing to the top of the flute. The Contractor will not be allowed to vary the reinforcing steel spacing or size from the Contract Plans for the purpose of matching flute spacing.

907-804.03.14.2.1--Materials. SIP metal forms and supports shall meet the requirements of ASTM Designation: A653 having a coating designation G165. Form materials that are less than 0.03-inch uncoated thickness shall not be allowed.

907-804.03.14.2.2--Certification. The Contractor shall provide written certification from the manufacturer stating the product meets the requirements of this specification to the Project Engineer along with the delivery of the coated forms to the job site.

All welds shall be performed by certified welders meeting the requirements of the approved shop drawings.

907-804.03.14.2.3--Polystyrene Foam. The polystyrene foam shall be comprised of expanded polystyrene manufactured from virgin resin of sufficient density to support the weight of concrete without deformation. The polystyrene foam shall be extruded to match the geometry of the flutes and provide a snug fit. The polystyrene foam shall have a density of not less than 0.8 pounds per cubic foot. The polystyrene foam shall have water absorption of less than 2.6% when tested according to ASTM Designation: C272. The Contractor shall provide written certification from the manufacturer stating the polystyrene foam product meets the requirements of this specification to the Project Engineer along with the delivery of the coated forms to the job site.

907-804.03.14.2.4--Design. The design of the SIP metal forms shall meet the following criteria.

1. The maximum self-weight of the stay in place metal forms, plus the weight of the concrete or expanded polystyrene required to fill the form flutes (where used), shall not exceed 20 psf.

2. The forms shall be designed on the basis of dead load of form, reinforcement, and plastic concrete plus 50 pounds per square foot for construction loads. The design shall use a unit working stress in the steel sheet of not more than 0.725 of the specified minimum yield strength of the material furnished, but not to exceed 36,000 psi.

3. Deflection under the weight of the forms, reinforcement, and plastic concrete shall not exceed 1/180 of the form span or 1/2 inch, whichever is less, for form spans of 10 feet or less, or 1/240 of the form span or 3/4 inch, whichever is less, for form spans greater than 10 feet.

4. The design span of the form shall equal the clear span of the form plus two (2) inches. The span shall be measure parallel to the form flutes.

5. Physical design properties shall be computed in accordance with requirements of the AISI Specifications for the Design of Cold Formed Steel Structural Members, latest published edition.

6. The design concrete cover required by the plans shall be maintained for all reinforcement.

7. The plan dimensions of both layers of primary deck reinforcement from the top surface of the concrete deck shall be maintained.

8. The SIP metal form shall not be considered as lateral bracing for compression flanges of supporting structural members.

9. SIP metal forms shall not be used under closure pours or in bays where longitudinal slab construction joints are located. SIP metal forms shall not be used under cantilevered slabs such as the overhang outside of fascia members.

10. Forms shall be secured to the supporting members by means other than welding directly to the member. Welding to the top flanges of steel stringers and/or girders shall not be allowed. Alternate installation procedures shall be submitted addressing this condition.

907-804.03.14.2.5--Construction. SIP metal form sheets shall not rest directly on the top of the stringer of floor beam flanges. Sheets shall be fastened securely to form supports, and maintain a minimum bearing length of one (1) inch at each end for metal forms. Form supports shall be placed in direct contact with the flange of the stringer or floor beam. All attachments for coated metal forms shall be made by bolts, clips, screws, or other approved means.

907-804.03.14.2.6--Form Galvanizing Repairs. Where forms or their installation are unsatisfactory in the opinion of the Project Engineer, either before or during placement of the concrete, the Contractor shall correct the defects before proceeding with the construction work. The cost of such corrective work shall be at the sole expense of the Contractor. Minor heat discoloration in areas of welds shall not be touched up.

907-804.03.14.2.7--Placing of Concrete. The Contractor shall insure that concrete placement does not damage the SIP metal forms. The concrete shall be vibrated to avoid honeycomb and voids, especially at construction joints, expansion joints, valleys and ends of form sheets. Approved pouring sequences shall be used. Calcium chloride or any other admixture containing chloride salts shall not be used in the concrete. The completed SIP metal form system shall be sufficiently tight to prevent leakage of mortar or concrete.

907-804.03.14.2.8--Inspection. The Project Engineer will observe the Contractor's method of construction during all phases of the construction of the bridge deck slab, including the installation of the SIP metal form system; location and fastening of the reinforcement; composition of concrete items; mixing procedures, concrete placement, and vibration; and finishing of the bridge deck. Should the Project Engineer determine that the procedures used during the placement of the concrete warrant inspection of the underside of the deck, at least one section of the metal forms shall be removed in each span for this purpose. This shall be done as soon after placing the concrete as practical in order to provide visual evidence that the concrete mix and the procedures are obtaining the desired results. An additional section shall be removed in any span if the Project Engineer determines that there has been any change in the concrete mix or in the procedures warranting additional inspection.

If, in the Project Engineer's judgment, inspection is needed to check for defects in the bottom of the deck or to verify soundness, the SIP metal forms shall be sounded with a hammer after the deck concrete has been in place a minimum of two days. If sounding discloses areas of doubtful soundness to the Project Engineer, the SIP metal forms shall be removed from such areas for visual inspection after the concrete has attained adequate strength. The SIP metal bridge deck forms shall be removed at no expense to the State.

At locations where sections of the metal forms have been removed, the Project Engineer will not require the Contractor to replace the metal forms. The adjacent metal forms and supports shall be repaired to present a neat appearance and to ensure their satisfactory retention. As soon as the form is removed, the Project Engineer will examine the concrete surfaces for cavities,

honeycombing, and other defects. If irregularities are found and the Project Engineer determines that these irregularities do not justify rejection of the work, the concrete shall be repaired as directed by the Project Engineer. If the Project Engineer determines that the concrete where the form is removed is unsatisfactory, additional metal forms as necessary shall be removed to inspect and repair the slab, and the Contractor's method of construction shall be modified as required to obtain satisfactory concrete in the slab. All unsatisfactory concrete shall be removed and replaced as directed at no expense to the State.

If the method of construction and the results of the inspections as outlined above indicate that sound concrete has been obtained throughout the slabs, the amount of sounding and form removal may be reduced when approved by the Project Engineer.

The Contractor shall provide a safe and convenient means of conducting of the inspection.

Delete the first sentence of Subsection 907-804.03.16.1 on page 9, and substitute the following.

907-804.03.16.1--Cold Weather Concreting.

At the option of the Contractor with the approval of the Engineer, when concrete is placed during cold weather and there is a probability of ambient temperatures lower than 40 Degrees Fahrenheit, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-804-13 **CODE: (IS)**

DATE: 11/09/2010

SUBJECT: Concrete Bridges And Structures

Section 804, Concrete Bridges And Structures, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-804.02-- Materials.

907-804.02.1--General. Delete the third and fourth sentences of the first paragraph of Subsection 804.02.1 on page 846, and substitute the following:

For projects with 1000 cubic yards and more, quality control and acceptance shall be achieved through statistical evaluation of test results. For projects of more than 200 but less than 1000 cubic yards, quality control and acceptance shall be achieved by individual test results.

Add the following materials to the list of materials in Subsection 804.02.1 on page 847.

Blended Cement..... 907-701.01 and 907-701.04
Ground Granulated Blast Furnace Slag (GGBFS)..... 907-714.06
Silica Fume 907-714.07.2

907-804.02.8--Laboratory Accreditation. In Table 1 of Subsection 804.02.8 on page 849, substitute AASHTO: R 39 - Making and Curing Concrete Test Specimens in the Laboratory for AASHTO: T 126 - Making and Curing Concrete Test Specimens in the Laboratory.

907-804.02.9--Testing Personnel. Delete Table 2 in this subsection and replace it with the following.

Table 2

Concrete Technician's Tasks	Test Method Required	Certification Required**
Sampling or Testing of Plastic Concrete	AASHTO Designation:T 23, T 119, T 121, T 141, T 152, T 196, and ASTM Designation: C 1064	MDOT Class I certification
Compressive Strength Testing of Concrete Cylinders	AASHTO Designation: T 22 and T 231	MDOT Concrete Strength Testing Technician certification
Sampling of Aggregates	AASHTO Designation: T 2	Work under the supervision of an MDOT Class II certified technician

Testing of Aggregates	AASHTO Designation: T 19, T 27, T 84, T 85, T 248, and T 255	MDOT Class II certification
Proportioning of Concrete Mixtures*	AASHTO Designation: M 157 and R 39	MDOT Class III
Interpretation and Application of Maturity Meter Readings	AASHTO Designation: T 325 and ASTM Designation: C 1074	MDOT Class III or Two hours maturity method training

* Technicians making concrete test specimens for meeting the requirements of Subsection 804.02.10.1.2 shall be MDOT Class I certified and under the direct supervision of an MDOT Class III certified technician.

** MDOT Class I certification encompasses the same test procedures and specifications as ACI Concrete Field Testing Technician Grade I. MDOT Class II certification encompasses the same test procedures and specifications as ACI Aggregate Testing Technician - Level 1. MDOT Concrete Strength Testing Technician encompasses the same test procedures and specifications as ACI Concrete Strength Testing certification.

For specifics about the requirements for each level of certification, please refer to the latest edition of the Department's *Concrete Field Manual*. Technicians holding current MDOT Class I, MDOT Class II and/or MDOT Class III certifications shall be acceptable until those certifications expire. Upon a current certification expiration, recertification with the certifications listed in Table 2 shall be required. Technicians currently performing either specific gravity testing of aggregates or compressive strength tests shall be required to either:

- have the required MDOT certification listed in Table 2, or
- have a current MDOT Class III certification or work under the direct supervision of current MDOT Class III technician, and have demonstrated the specific gravity and/or compressive strength test during the inspection of laboratory equipment by the Materials Division, Concrete Section.

907-804.02.10--Portland Cement Concrete Mix Design. Delete the first sentence of the first paragraph of Subsection 804.02.10 on page 850 and substitute the following:

At least 30 days prior to production of concrete, the Contractor shall submit to the Engineer proposed concrete mixture designs complying with the Department's *Concrete Field Manual*.

Delete the Notes under Table 3 of Subsection 804.02.10 on pages 850 & 851, and substitute the following:

* Maximum size aggregate shall conform to the concrete mix design for the specified aggregate.

** The replacement limits of Portland cement by weight by other cementitious materials (such as fly ash, GGBFS, metakaolin, silica fume, or others) shall be in accordance with the values in Subsection 907-701.02. Other hydraulic cements may be used in accordance with the specifications listed in Section 701.

*** The slump may be increased up to eight (8) inches with :
- an approved water-reducing admixture,
- an approved water-reducing/set-retarding admixture, or
- a combination of an approved water-reducing admixture and an approved set-retarding admixture, in accordance with 907-713.02. Minus slump requirements shall meet those set forth in Table 3 of AASHTO Designation: M157.

**** Entrained air is not required except for concrete exposed to seawater. For concrete exposed to seawater, the total air content shall be 3.0 % to 6.0%. For concrete not exposed to seawater, the total air content shall not exceed 6.0%.

***** Class DS Concrete for drilled shafts shall have an 8±1-inch slump.

Delete the last paragraph of Subsection 804.02.10 on page 851 and substitute the following:

At least one water-reducing admixture shall be used in all classes of concrete in accordance with the manufacturer's recommended dosage range. Any combinations of admixtures shall be approved by the Engineer before their use.

907-804.02.10.1.1--Proportioning on the Basis of Previous Field Experience of Trial Mixtures. Delete the first sentence of the first paragraph of Subsection 804.02.10.1.1 on page 851, and substitute the following:

Where a concrete production facility has a record, based on at least 10 consecutive strength tests from at least 10 different batches within the past 12 months from a mixture not previously used on Department projects, the standard deviation shall be calculated.

907-804.02.10.3--Field Verification of Concrete Mix Design. Delete the first sentence of the third paragraph of Subsection 804.02.10.3 on page 853 and substitute the following:

For all Classes of concrete, the mixture shall be verified to yield within 2.0% of the correct volume when all the mix water is added to the batch.

For all Classes of concrete other than DS, F, and FX, the mixture shall produce a slump within a minus 1½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of three inches (3") or less or within a minus 2½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of greater than three inches (3"), and producing a total air content within a minus 1½ percent tolerance of the maximum allowable air content in Table 3.

For Class DS, the slump shall be within the requirements in Note ***** below Table 3. For Class DS exposed to seawater, the total air content shall be within a minus 1½ percent tolerance of the maximum allowable air content in Note **** below Table 3. For Class DS not exposed to seawater the total air content shall be within the requirements in Note **** below Table 3.

For Classes F and FX, the slump shall be within a minus 1½-inch tolerance of the maximum permitted for mixtures with a maximum permitted slump of three inches (3") or less or within a minus 2½-inch tolerance of the maximum permitted for mixtures with a maximum permitted

slump of greater than three inches (3"). For Classes F and FX exposed to seawater, the total air content shall be within a minus 1½ percent tolerance of the maximum allowable air content in Note **** below Table 3. For Classes F and FX not exposed to seawater the total air content shall be within the requirements in Note **** below Table 3.

Delete the third sentence of the third paragraph of Subsection 804.02.10.3 on page 853, and substitute the following:

If the requirements of yield, slump, or total air content are not met within three (3) production days after the first placement, subsequent field verification testing shall not be permitted on department projects, and the mix design shall not be used until the requirements listed above are met

907-804.02.10.4--Adjustments of Mixture Proportions. Delete the paragraph in Subsection 804.02.10.4 on page 854, and substitute the following:

The mixture may be adjusted by the Class III Certified Technician representing the Contractor in accordance with the allowable revisions listed in the Department's Concrete Field Manual, paragraph 5.7. Written notification shall be submitted to the Engineer a minimum of seven (7) days prior to any source or brand of material change, aggregate size change, allowable material type change, or decrease in any cementitious material content. Any adjustments of the concrete mixture design shall necessitate repeat of field verification procedure as described in Subsection 804.02.10.3 and approval by the Engineer.

907-804.02.11--Concrete Batch Plants. Delete the first three paragraphs of Subsection 804.02.11 on page 854, and substitute the following:

The concrete batch plant shall meet the requirements of the National Ready Mixed Concrete Association *Quality Control Manual, Section 3, Plant Certification Checklist* as outlined in the latest edition of the Department's *Concrete Field Manual*. The Contractor shall submit a copy of the approved checklist along with proof of calibration of batching equipment, i.e., scales, water meter, and admixture dispenser, to the Engineer 30 days prior to the production of concrete.

For projects with 1000 cubic yards and more, the concrete batch plant shall meet the requirements for an automatic system capable of recording batch weights. It shall also have automatic moisture compensation for the fine aggregate. For projects of more than 200 but less than 1000 cubic yards the plant can be equipped for manual batching with a fine aggregate moisture meter visible to the plant operator.

The concrete batch plant shall have available adequate facilities to cool concrete during hot weather.

Mixer trucks to be used on the project are to be listed in the checklist and shall meet the requirements of the checklist.

907-804.02.12--Contractor's Quality Control. Delete the fourth paragraph of Subsection 804.02.12 on page 854 & 855, and substitute the following:

The Contractor's Quality Control program shall encompass the requirements of AASHTO Designation: M 157 into concrete production and control, equipment requirements, testing, and batch ticket information. The requirement of AASHTO Designation: M 157, Section 11.7 shall be followed except, on arrival to the job site, a maximum of 1½ gallons per cubic yard is allowed to be added. Water shall not be added at a later time. If the maximum permitted slump is exceeded after the addition of water at the job site, the concrete shall be rejected.

907-804.02.12.3--Documentation. After the second sentence of the second paragraph of Subsection 804.02.12.3 on page 856, add the following:

Batch tickets and gradation data shall be documented in accordance with Department requirements. Batch tickets shall contain all the information in AASHTO Designation: M157, Section 16 including the additional information in Subsection 16.2 with the following exception: the information listed in paragraphs 16.2.7 and 16.2.8 is not required. Batch tickets shall also contain the concrete producer's permanent unique mix number assigned to the concrete mix design.

907-804.02.12.5--Non-Conforming Materials. In Table 4 of Subsection 804.02.12.5 on page 857, delete "/ FM" from the requirements on line B.3.a.

In Table 4 of Subsection 804.02.12.5 on page 857, replace "One set (two cylinders) for 0-100 yd^3 inclusive" with "A minimum of one set (two cylinders) for each 100 yd^3,"

907-804.02.13--Quality Assurance Sampling and Testing. Delete subparagraph c) in Subsection 804.02.13 on page 858 and substitute the following:

c) For concrete, the Contractor's QC and Department's QA testing of concrete compressive strengths compare when using the data comparison computer program with an alpha value of 0.01 for projects with 1000 cubic yards and more; or, strength comparisons are within 990 psi for projects of more than 200 but less than 1000 cubic yards.

In Table 5 of Subsection 804.02.13 on page 858, delete "and FM" from the requirements on line A.3.

Delete Subsection 907-804.02.13.1 beginning on page 859 and substitute the following:

907-804.02.13.1--Basis of Acceptance.

907-804.02.13.1.1--Sampling. Sampling of concrete mixture shall be performed in accordance with the latest edition of the Department's *Concrete Field Manual*.

907-804.02.13.1.2--Slump. Slump of plastic concrete shall meet the requirements of Table 3: MASTER PROPORTION TABLE FOR STRUCTURAL CONCRETE DESIGN. A check test shall be made on another portion of the sample before rejection of any load.

907-804.02.13.1.3--Air. Total air content of concrete shall be within the specified range for the class of concrete listed in Table 3: MASTER PROPORTION TABLE FOR STRUCTURAL CONCRETE DESIGN. A check test shall be made on another portion of the sample before rejection of any load.

907-804.02.13.1.4--Yield. If the yield of the concrete mix design is more than plus or minus 3% of the designed volume, the mix shall be adjusted by a Class III Certified Technician representing the Contractor to yield the correct volume plus or minus three percent (±3%). If batching of the proportions of the mix design varies outside the batching tolerance range of the originally approved proportions by more than the tolerances allowed in Subsection 804.02.12.1, the new proportions shall be field verified per Subsection 804.02.10.3.

907-804.02.13.1.5--Temperature. Cold weather concreting shall follow the requirements of Subsection 907-804.03.16.1. Hot weather concreting shall follow the requirements of Subsection 804.03.16.2 with a maximum temperature of 95°F for Class DS concrete or for concrete mixes containing cementitious materials meeting the requirements of Subsection 907-701.02.2 as a replacement of Portland cement. For other concrete mixes, the maximum concrete temperature shall be 90°F. Concrete with a temperature more than the maximum allowable temperature shall be rejected and not used in Department work.

907-804.02.13.1.6--Compressive Strength. Laboratory cured concrete compressive strength tests shall conform to the specified strength (f'_c) listed in the specifications. Concrete represented by compressive strength test below the specified strength (f'_c) may be removed and replaced by the Contractor. If the Contractor elects not to remove the material, it will be evaluated by the Department as to the adequacy for the use intended. All concrete evaluated as unsatisfactory for the intended use shall be removed and replaced by the Contractor at no additional cost to the Department. For concrete allowed to remain in place, reduction in payment will be as follows:

Projects with 1000 Cubic Yards and More. When the evaluation indicates that the work may remain in place, a statistical analysis will be made of the QC and QA concrete test results. If this statistical analysis indicates at least 93% of the material would be expected to have a compressive strength equal to or greater than the specified strength (f'_c) and 99.87% of the material would be expected to have a compressive strength at least one standard deviation above the allowable design stress (f_c), the work will be accepted. If the statistical analysis indicates that either of the two criteria are not met, the Engineer will provide for an adjustment in pay as follows for the material represented by the test result.

Total Pay on Material in Question = Unit Price - (Unit Price x % Reduction)

$$\% \text{ Reduction} = \frac{\left(f'_c - X\right)}{f'_c - \left(f_c + s\right)} \times 100$$

where:

f'_c = Specified 28-day compressive strength, psi

X = Individual compressive strength below f'_c, psi
s = standard deviation, psi*
f_c = allowable design stress, psi

* Standard deviation used in the above reduction of pay formula shall be calculated from the applicable preceding compressive strengths test results plus the individual compressive strength below f'_c. If below f'_c strengths occur during the project's first ten compressive strength tests, the standard deviation shall be calculated from the first ten compressive strength tests results.

Projects of More Than 200 but Less Than 1000 Cubic Yards. When the evaluation indicates that the work may remain in place, a percent reduction in pay will be assessed based on a comparison of the deficient 28-day test result to the specified strength. The Engineer will provide for an adjustment in pay as follows for the material represented by the test result.

Total Pay on Material in Question = Unit Price - (Unit Price x % Reduction)

$$\% \text{ Reduction} = \frac{(f'_c - X)}{f'_c} \times 100$$

where:

f'_c = Specified 28-day compressive strength, psi
X = Individual compressive strength below f'_c, psi

907-804.03--Construction Requirements.

907-804.03.6--Handling and Placing Concrete.

907-804.03.6.2--Consolidation. After the last sentence of Subsection 804.03.6.2 on page 864, add the following:

If the Department determines that there is an excessive number of projections, swells, ridges, depressions, waves, voids, holes, honeycombs or other defects in the completed structure, removal of the entire structure may be required as set out in Subsection 105.12.

907-804.03.15--Removal of Falsework, Forms, and Housing. Delete the first sentence of the second paragraph of Subsection 804.03.15 on page 871, and substitute the following:

Concrete in the last pour of a continuous superstructure shall have attained a compressive strength of 2,400 psi, as determined by cylinder tests or maturity meter probe, prior to striking any falsework.

Delete the first sentence of the third paragraph of Subsection 804.03.15 on page 871, and substitute the following:

At the Contractor's option and with the approval of the Engineer, the time for removal of forms may be determined by cylinder tests, in accordance with the requirements listed in Table 6, in which case the Contractor shall furnish facilities for testing the cylinders.

Delete the fourth and fifth paragraphs of Subsection 804.03.15 on pages 871 & 872, and substitute the following:

The cylinders shall be cured under conditions which are not more favorable than those existing for the portions of the structure which they represent.

Delete the table in Subsection 804.03.15 on page 872, and substitute the following:

Table 6
Minimum Compressive Strength Requirements for Form Removal

Forms:	
Columns	1000 psi
Side of Beams	1000 psi
Walls not under pressure	1000 psi
Floor Slabs, overhead	2000 psi
Floor Slabs, between beams	2000 psi
Slab Spans	2400 psi
Other Parts	1000 psi
Centering:	
Under Beams	2400 psi
Under Bent Caps	2000 psi
Limitation for Placing Beams on:	
Pile Bents, pile under beam	2000 psi
Frame Bents, two or more columns	2200 psi
Frame Bents, single column	2400 psi

In lieu of using concrete strength cylinders to determine when falsework, forms, and housings can be removed, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 7. Falsework, forms, and housings may be removed when maturity meter readings indicate that the required concrete strength is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T 325 and ASTM Designation: C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

Table 7
Requirements for use of Maturity Meter Probes

Structure Component	Quantity of Concrete	No. of Probes
Slabs, beams, walls, & miscellaneous items	0 - 30 yd^3	2
	> 30 to 60 yd^3	3
	> 60 to 90 yd^3	4
	> 90 yd^3	5
Footings, Columns & Caps	0 - 13 yd^3	2
	> 13 yd^3	3
Pavement, Pavement Overlays	1200 yd^2	2
Pavement Repairs	Per repair or 900 yd^2 Whichever is smaller	2

907-804.03.16--Cold or Hot Weather Concreting.

907-804.03.16.1--Cold Weather Concreting. After the third paragraph of Subsection 804.03.16.1 on page 873, add the following:

In lieu of the protection and curing of concrete in cold weather, at the option of the Contractor with the approval of the Engineer, when concrete is placed during cold weather and there is a probability of ambient temperatures lower that 40°F, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 7. An approved insulating blanketing material shall be used to protect the work when ambient temperatures are less than 40°F and shall remain in place until the required concrete strength in Table 6 is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T 325 and ASTM Designation: C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

Rename the Table in Subsection 804.03.16.1 on page 874 from "Table 6" to "Table 8".

907-804.03.19--Finishing Concrete Surfaces.

907-804.03.19.7--Finishing Bridge Floors.

907-804.03.19.7.4--Acceptance Procedure for Bridge Deck Smoothness. After the first sentence of the second paragraph of Subsection 804.03.19.7.4 on page 886, add the following:

Auxiliary lanes, tapers, shoulders and other areas that are not checked with the profilograph, shall meet a 1/8 inch in 10-foot straightedge check made transversely and longitudinally across the deck or slab.

907-804.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 898.

Bridge Replacement on US 51 (#278.3) & Bridge Repair on I-55 (#272.9A & #272.9B), known as Federal Aid Project Nos. STP/EXB-2920-00(014) / 105335301 & 302 in Tate and Desoto Counties.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0020	202-A001		1	Lump Sum	Removal of Obstructions (bridge)
0030	202-B005		12,134	Square Yard	Removal of Asphalt Pavement, All Depths
0040	202-B017		640	Linear Feet	Removal of Concrete Combination Curb & Gutter
0050	202-B036		33,174	Square Yard	Removal of Concrete Slope Paving
0060	202-B070		15	Each	Removal of Sign Including Post & Footing
0070	202-B102		754	Linear Feet	Removal of Guard Rail
0080	202-B138		955	Square Yard	Removal of Riprap
0085	202-B307		140	Square Yard	Removal of Bridge Deck
0090	203-A003	(E)	2,611	Cubic Yard	Unclassified Excavation, FM, AH
0100	203-EX017	(E)	224,690	Cubic Yard	Borrow Excavation, AH, FME, Class B9
0110	203-G003	(E)	48,459	Cubic Yard	Excess Excavation, FM, AH
0120	211-B001	(E)	11,197	Cubic Yard	Topsoil for Slope Treatment, Contractor Furnished
0130	213-C001		10	Ton	Superphosphate
0140	217-A001		600	Square Yard	Ditch Liner
0150	219-A001		4	Thousand Gallon	Watering [$20.00]
0160	220-A001		11	Acre	Insect Pest Control [$30.00]
0170	221-A001	(S)	34	Cubic Yard	Portland Cement Concrete Paved Ditch
0180	223-A001		42	Acre	Mowing [$50.00]
0190	234-A001		20,579	Linear Feet	Temporary Silt Fence
0200	239-A001		2,676	Linear Feet	Temporary Slope Drains
0210	413-D001		80	Linear Feet	Cleaning and Filling Joints
0220	423-A001		3	Mile	Rumble Strips, Ground In
0230	502-A001	(C)	204	Square Yard	Reinforced Cement Concrete Bridge End Pavement
0240	606-B001		1,238	Linear Feet	Guard Rail, Class A, Type 1
0250	606-D012		4	Each	Guard Rail, Bridge End Section, Type I
0260	606-E002		4	Each	Guard Rail, Terminal End Section, Flared
0270	615-A018	(S)	40	Linear Feet	Concrete Bridge End Barrier, 33.5"
0280	619-D1001		48	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0290	619-D2001		161	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0300	619-G4001		48	Linear Feet	Barricades, Type III, Single Faced

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0310	619-G7001		4	Each	Warning Lights, Type "B"
0320	620-A001		1	Lump Sum	Mobilization
0330	621-A001		1	Each	Field Laboratory
0340	627-D001		131	Each	Two-Way Yellow Reflective Raised Markers
0350	630-A001		18	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0360	630-A002		18	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0370	630-C003		115	Linear Feet	Steel U-Section Posts, 3.0 lb/ft
0380	630-F001		40	Each	Delineators, Guard Rail, White
0390	630-G006		4	Each	Type 3 Object Markers, OM-3R or OM-3L
0395	630-K002		14	Linear Feet	Welded & Seamless Steel Pipe Posts, 3 1/2"
0400	809-A003	(S)	3,360	Square Feet	Retaining Wall System
0410	815-A006	(S)	1,559	Ton	Loose Riprap, Size 100
0420	815-A009	(S)	29,240	Ton	Loose Riprap, Size 300
0430	815-E001	(S)	38,925	Square Yard	Geotextile under Riprap
0440	907-216-A001		169	Square Yard	Solid Sodding
0450	907-225-A001		21	Acre	Grassing
0460	907-225-B001		63	Ton	Agricultural Limestone
0470	907-225-C001		42	Ton	Mulch, Vegetative Mulch
0480	907-225-D001		42	Ton	Mulch, Hydromulch
0490	907-226-A001		42	Acre	Temporary Grassing
0500	907-234-C002		1,385	Linear Feet	Super Silt Fence
0510	907-234-F001		15,230	Linear Feet	Turbidity Barrier
0520	907-237-A003		300	Linear Feet	Wattles, 20"
0530	907-249-A001		120	Ton	Riprap for Erosion Control
0540	907-249-B001		700	Cubic Yard	Remove and Reset Riprap
0550	907-304-B009	(GT)	4,692	Ton	Granular Material, Class 3, Group D
0560	907-304-B011	(GT)	10,993	Ton	Granular Material, Class 9, Group B
0570	907-307-C003	(M)	17,289	Square Yard	6" Soil-Lime-Water Mixing, Class C
0580	907-307-D001		234	Ton	Lime
0590	907-307-S001	(A3)	4,323	Gallon	Bituminous Curing Seal
0600	907-403-A022	(BA1)	2,171	Ton	9.5-mm, MT, Asphalt Pavement
0610	907-403-A023	(BA1)	2,667	Ton	12.5-mm, MT, Asphalt Pavement
0620	907-403-A024	(BA1)	3,026	Ton	19-mm, MT, Asphalt Pavement
0630	907-403-C011	(BA1)	137	Ton	19-mm, MT, Asphalt Pavement, Trench Widening

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0640	907-406-A001		1,578	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0650	907-407-A001	(A2)	2,457	Gallon	Asphalt for Tack Coat
0660	907-410-D001		26,300	Square Yard	High Friction Surface Treatment
0670	907-413-E001		94	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
0680	907-601-B003	(S)	2	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0690	907-603-ALT01	(S)	56	Linear Feet	18" Type A Alternate Pipe
0700	907-618-A001		1	Lump Sum	Maintenance of Traffic
0705	907-618-G001		1	Lump Sum	Construction and Removal of Haul Road
0710	907-619-E3001		3	Each	Changeable Message Sign
0720	907-626-C003		4	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0730	907-626-D006		3	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0740	907-626-E005		158	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0750	907-626-G006		534	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0760	907-626-H009		224	Linear Feet	Thermoplastic Double Drop Legend, White
0770	907-630-O001		1	Each	Remove and Reset Signs, Ground Mounted on Round Post(s)
0780	907-630-O006		1	Each	Remove and Reset Signs, Post Mounted
0790	907-630-PP008		47	Square Feet	Roadside Directional Signs, Sheet Aluminum, 0.080" Thickness, Ground Mounted
0800	907-699-A002		1	Lump Sum	Roadway Construction Stakes
0810	907-815-F001	(S)	24	Ton	Sediment Control Stone
0820	907-906001		1,040	Hours	Trainees [$5.00]
			ALTERNATE GROUP AA NUMBER 1		
0830	907-304-F004	(GT)	352	Ton	Size 825B Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 2		
0840	907-304-F002	(GT)	352	Ton	Size 610 Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 3		
0850	907-304-F003	(GT)	352	Ton	3/4" and Down Crushed Stone Base
			ALTERNATE GROUP BB NUMBER 1		
0860	907-308-A001		440	Ton	Portland Cement
0870	907-308-B001	(M)	25,148	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Base
0880	907-308-B002	(M)	17,289	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Design Soil
0890	907-308-S001	(A3)	10,610	Gallon	Bituminous Curing Seal
			ALTERNATE GROUP BB NUMBER 2		
0900	907-311-A003	(M)	42,437	Square Yard	Processing Lime and Fly Ash Treated Course, 6" Thick
0910	907-311-B001		311	Ton	Lime

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0920	907-311-C001		1,241	Ton	Fly Ash, Class C
0930	907-311-S001	(A3)	10,610	Gallon	Bituminous Curing Seal
			Bridge Items		
0940	501-K001		8,600	Square Yard	Transverse Grooving
0950	803-B002	(S)	1	Each	Conventional Static Pile Load Test [$5,000.00]
0960	803-D007	(S)	2,210	Linear Feet	HP 14 x 89 Steel Piling
0970	803-I003	(S)	2	Each	PDA Test Pile, HP Steel Pile
0980	803-I004	(S)	5	Each	PDA Test Pile, Steel Pipe Pile
0990	803-J001	(S)	2	Each	Pile Restrike
1000	803-N001	(S)	240	Linear Feet	Exploration
1010	803-O018	(S)	960	Linear Feet	Permanent Casing, 72" Diameter
1020	805-A001	(S)	912,062	Pounds	Reinforcement
1030	813-A002	(S)	3,875	Linear Feet	Concrete Railing, 32"
1040	815-A009	(S)	8,493	Ton	Loose Riprap, Size 300
1050	815-E001	(S)	8,088	Square Yard	Geotextile under Riprap
1060	907-803-K010	(S)	1,680	Linear Feet	Drilled Shaft, 72" Diameter
1070	907-803-L006	(S)	1	Each	Test Shaft, 72" Diameter
1080	907-803-M008	(S)	144	Linear Feet	Trial Shaft, 72" Diameter
1090	907-803-PP003		5,500	Linear Feet	30" Steel Pipe Piling, Wall Thickness 0.750"
1100	907-804-A018	(S)	861	Cubic Yard	Bridge Concrete, Substructure, Class AA
1110	907-804-A019	(S)	2,594	Cubic Yard	Bridge Concrete, Superstructure, Class AA
1120	907-804-C271	(S)	7,878	Linear Feet	120' Prestressed Concrete Beam, Type BT-63
1130	907-810-A001	(S)	1,533,376	Pounds	Structural Steel, A 709, Grade 50W
1140	907-811-D001	(S)	20	Each	Disc Bearing Device
1150	907-822-B004		92	Linear Feet	2" Reinforced Elastomeric Molded Rubber Expansion Joint
1160	907-822-B008		92	Linear Feet	4" Reinforced Elastomeric Molded Rubber Expansion Joint

ADDENDUM

105335/301000

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MISS.	STP/EXB-2920-00(014)

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GENERAL NOTES	GN-1	4
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TYPICAL SECTION - OVERLAY AND BRIDGE END PAVING	TS-2	6
TYPICAL SECTION - WIDENING AND OVERLAY LOCAL ROAD	TS-3	7
TYPICAL SECTION - MISCELLANEOUS TYPICAL SECTION DETAILS	TS-4	8
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PERMANENT SIGN PLANS-LAYOUT	PSP-5	1005

DREW T. DAVIS
REGISTERED PROFESSIONAL
ENGINEER
19077
STATE OF MISSISSIPPI
5/17/16

VOLKERT

PS & E PLANS-DATE 4/19/16		
FMS CON. 105335/301000/302000		
REVISIONS		
DATE	SHEET NO.	BY
5/12/16	10, 5001	WCJ
5/17/16	6,10,12,17,18,19,	WCJ
5/17/16	5004-5007,	WCJ
5/17/16	9007-9038	WCJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

TATE AND DESOTO COUNTIES
PROJ.NO:STP/EXB-2920-00(014)

BY | REVISION | DATE

FILENAME: DI_1.DGN
DESIGN TEAM VOLKERT CHECKED _____ DATE _____

WORKING NUMBER
DI-1
SHEET NUMBER
2

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 14:46:34 DI_1.DGN

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

ADDENDUM

DESCRIPTION OF SHEET		WKG. NO.	SH. NO.
EROSION CONTROL PLANS (7)			
EROSION & SEDIMENT CONTROL PLAN - LEGEND		ECP-1	5001
EROSION & SEDIMENT CONTROL PLAN-INITIAL PHASE (STA. 45+00-STA. 105+00)		ECP-2	5002
EROSION & SEDIMENT CONTROL PLAN-INITIAL PHASE (STA. 105+00-STA. 146+00)		ECP-3	5003
EROSION & SEDIMENT CONTROL PLAN-INTERMEDIATE PHASE-(STA 45+00-STA 105+00)		ECP-4	5004
EROSION & SEDIMENT CONTROL PLAN-INTERMEDIATE PHASE-(STA 105-STA 146+00)		ECP-5	5005
EROSION & SEDIMENT CONTROL PLAN-FINAL PHASE (STA.45+00-STA.105+00)		ECP-6	5006
EROSION & SEDIMENT CONTROL PLAN-FINAL PHASE (STA.105+00-STA.146+00)		ECP-7	5007
STANDARD DRAWINGS - ROADWAY SHEETS (20)			
PAVEMENT MARKING DETAILS FOR 2 & 4-LANE DIVIDED ROADWAYS	(12/01/99)	PM-1	6120
GUARD RAIL : "W" BEAM (WOOD POSTS)	(3/01/02)	GR-1	6180
GUARD RAIL : THRIE BEAM (WOOD POSTS)	(3/01/02)	GR-1A	6181
GUARD RAIL : "W" BEAM (STEEL POSTS)	(3/01/02)	GR-1B	6182
GUARD RAIL : MODIFIED THRIE BEAM (STEEL POSTS)	(3/01/02)	GR-1C	6183
GUARD RAIL : TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON DIVIDED HIGHWAYS	(12/01/99)	GR-4A	6195
GUARD RAIL : TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS	(3/01/02)	GR-4D	6198
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STANDARD ROADSIDE SIGN ASSEMBLY & INSTALLATION		SN-4	6225
STANDARD ROADSIDE SIGN ASSEMBLY & INSTALLATION		SN-4A	6226
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BREAK-AWAY SIGN SUPPORTS		SN-6	6229
BREAK-AWAY SIGN SUPPORTS		SN-6A	6230
TYPICAL GUARD RAIL DELINEATION	(3/01/02)	SN-8C	6236
RURAL DRIVEWAYS		RD-1	6271
TYPICAL GRADING TRANSITION BETWEEN CUTS & FILLS		GT-1	6272
SPUR DIKE: EARTH	(12/01/99)	ED-1	6274
MISCELLANEOUS DETAIL SHEET 1. STACKED PIPE JOINT 2. EXCAVATION AT GRADE POINTS		MDS-1	6290
DETAILS OF PAVED FLUMES		PF-1	6291
PIPE CULVERT INSTALLATION		PI-1	6300
SPECIAL DESIGN BRIDGE SHEETS-- SEE BRIDGE SHEETS BEGINNING 8001			
CROSS SECTIONS (64)			
STA. 50+50 TO STA. 147+50			9001-9064
TOTAL SHEETS (NOT INCLUDING BRIDGE SHEETS)			161

GREGG M. BISSOT
LICENSED PROFESSIONAL ENGINEER
18712
STATE OF MISSISSIPPI

EROSION & SEDIMENT CONTROL PLANS ONLY

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/10/2016 08:28:31 DI_1.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

TATE AND DESOTO COUNTIES
PROJ.NO:STP/EXB-2920-00(014)

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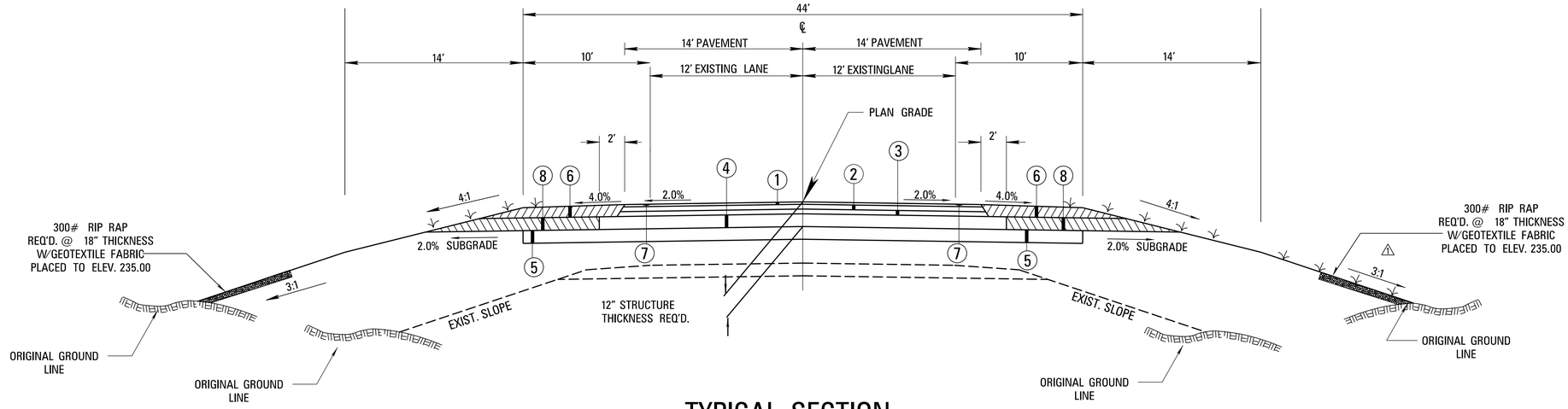
WORKING NUMBER: DI-2
SHEET NUMBER: 3

FMS:105335/301000

ADDENDUM

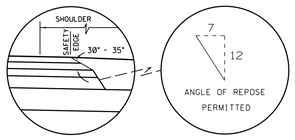
STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



TYPICAL SECTION

NEW CONSTRUCTION

STA. 65+00.00 TO STA. 112+67.83



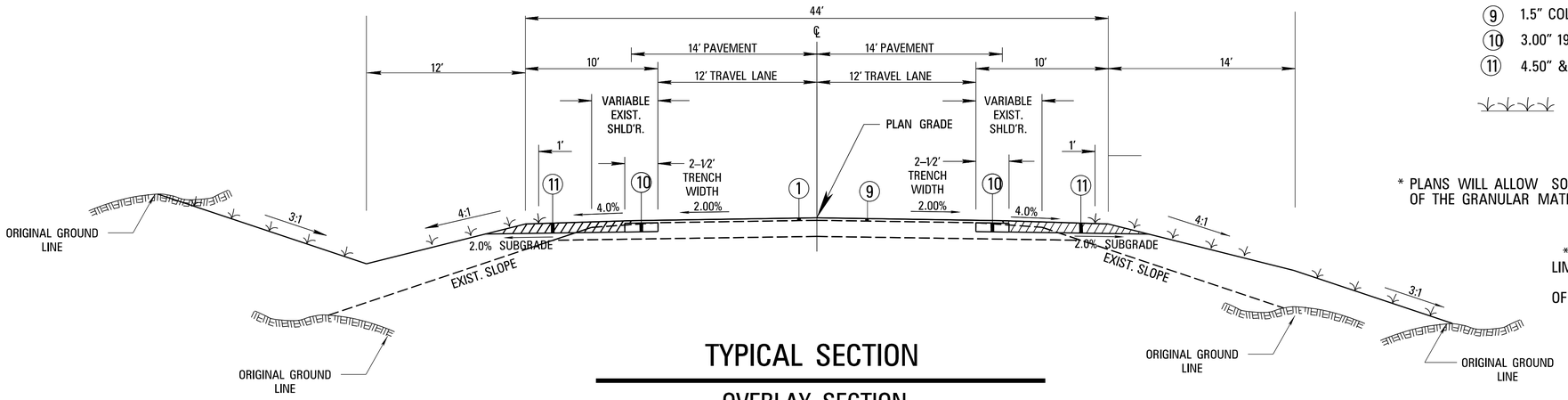
SAFETY EDGE REQ'D
TOP 2 LIFTS ONLY
(NOT A PAY ITEM)
NEW CONSTRUCTION

1. 1.50" 9.5 mm, MT, ASPHALT PAVEMENT, (1 @ 1.50") REQ'D.
2. 2.00" 12.5 mm, MT, ASPHALT PAVEMENT, (1 @ 2.00") REQ'D.
3. 2.50" 19 mm, MT, ASPHALT PAVEMENT, (1 @ 2.50") REQ'D.
4. 6.00" CHEMICALLY TREATED GRANULAR MATERIAL (CLASS9, GROUP B) *
5. 6.00" CHEMICALLY TREATED SUBGRADE **
6. 6" & VARIABLE GRANULAR SHOULDER MATERIAL (CLASS 3, GROUP "D") REQ'D.
7. RUMBLE STRIP
8. 6.00" & VARIABLE GRANULAR MATERIAL (CLASS 9, GROUP "B") REQ'D.
9. 1.5" COLD MILLING
10. 3.00" 19mm MT, ASPHALT PAVEMENT, TRENCH WIDENING
11. 4.50" & VARIABLE GRANULAR SHOULDER MATERIAL (CLASS 3, GROUP "D") REQ'D.

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. NO. VS–1.

* PLANS WILL ALLOW SOIL CEMENT(5.5% CEMENT) OR LIME FLY ASH (3%LIME, 12% FLY ASH) TREATMENT OF THE GRANULAR MATERIAL.

** PLAN QUANTITIES WILL ALLOW SOIL CEMENT TREATMENT (4% CEMENT) OR LIME FLY ASH TREATMENT (3% LIME, 12% FLY ASH) OF 50% OF THE SUBGRADE AND LIME TREATMENT (6% LIME) OF THE REMAINING 50% OF THE SUBGRADE.



TYPICAL SECTION

OVERLAY SECTION

*STA. 50+50.00 TO STA. 52+00.00
STA. 52+00.00 TO STA. 54+00.00
STA. 144+15.00 TO STA. 146+00.00

* NOTE: THIS AREA INCLUDES CONCRETE OVERLAID WITH ASPHALT.
MILL ALL ASPHALT OVER CONCRETE PAVEMENT.
SAW AND SEAL EXISTING JOINTS.

BY	REVISION	DATE
WCJ	REVISE TYPICAL TO SHOW RIP RAP	5/17/16

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

WIDENING AND OVERLAY

AND

BRIDGE END PAVING

TATE AND DESOTO COUNTIES
PROJ.NO.STP/EXB-2920-00(014)

FILENAME: TS-1.DGN
DESIGN TEAM VOLKERT CHECKED DATE

WORKING NUMBER
TS-2

SHEET NUMBER
6

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:04:28 TS-1.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

SUMMARY OF QUANTITIES (SHEET 2)

PAY ITEM NO.	PAY ITEM	UNIT	TATE		DESOTO		TOTALS		
			PRELIM.	FINAL	PRELIM.	FINAL	PRELIM.	FINAL	
234-A001	TEMPORARY SILT FENCE	LF	18344		2235		20579		② ⚠2
907-234-C002	SUPER SILT FENCE	LF	1385		0		1385		
907-234-F001	TURBIDITY BARRIER	LF	13555		1675		15230		
907-237-A003	WATTLES, 20"	LF	250		50		300		
239-A001	TEMPORARY SLOPE DRAINS	LF	2414		262		2676		
907-249-A001	RIPRAP FOR EROSION CONTROL	TON	40		80		120		
907-249-B001	REMOVE AND RESET RIPRAP	CY	640		60		700		
907-304-B009	GRANULAR MATERIAL, CLASS 3, GROUP D	TON	3824		868		4692		①
907-304-B011	GRANULAR MATERIAL, CLASS 9, GROUP B	TON	9083		1910		10993		①
	CRUSHED STONE ALTERNATES								
907-304-F004	SIZE 825B CRUSHED STONE BASE	TON	176		176		352		①
OR	OR								
907-304-F002	SIZE 610 CRUSHED STONE BASE	TON	176		176		352		①
OR	OR								
907-304-F003	3/4" AND DOWN CRUSHED STONE BASE	TON	176		176		352		① ⚠1
907-307-C003	6" SOIL-LIME-WATER MIXING, CLASS C	SY	14295		2994		17289		
907-307-D001	LIME	TON	193		41		234		
907-307-S001	BITUMINOUS CURING SEAL	GAL	3574		749		4323		
907-308-A001	PORTLAND CEMENT	TON	363		77		440		②
907-308-B001	SOIL-CEMENT-WATER MIXING, OPTIONAL MIXERS, BASE	SY	20793		4355		25148		
907-308-B002	SOIL-CEMENT-WATER MIXING, OPTIONAL MIXERS, DESIGN SOIL	SY	14295		2994		17289		
907-308-S001	BITUMINOUS CURING SEAL	GAL	8772		1838		10610		③
OR	OR								
907-311-A003	PROCESSING LIME AND FLY ASH TREATED COURSE, 6" THICK	SY	35088		7349		42437		④
907-311-B001	LIME	TON	256		55		311		⑤
907-311-C001	FLY ASH, CLASS C	TON	1026		215		1241		⑥
907-311-S001	BITUMINOUS CURING SEAL	GAL	8772		1838		10610		③

① 20% SHRINKAGE FACTOR USED,

② INCLUDES 121 TONS IN TATE CO. AND 26 TONS IN DESOTO CO. FOR DESIGN SOIL AND 242 TONS IN TATE CO. AND 51 TONS IN DESOTO CO. FOR GRANULAR MATERIAL.

③ INCLUDES 3574 GAL. IN TATE CO. AND 749 GAL. IN DESOTO CO. FOR DESIGN SOIL AND 5198 GAL. IN TATE CO. AND 1089 GAL. IN DESOTO CO. FOR GRANULAR MATERIAL.

④ INCLUDES 14295 SY IN TATE CO. AND 2994 SY IN DESOTO CO. FOR DESIGN SOIL AND 20793 SY IN TATE CO. AND 4355 SY IN DESOTO CO. FOR GRANULAR MATERIAL.

⑤ INCLUDES 96 TONS IN TATE CO. AND 21 TONS IN DESOTO CO. FOR DESIGN SOIL AND 160 TONS IN TATE CO. AND 34 TONS IN DESOTO CO. FOR GRANULAR MATERIAL.

⑥ INCLUDES 386 TONS IN TATE CO. AND 81 TONS IN DESOTO CO. FOR DESIGN SOIL AND 640 TONS IN TATE CO. AND 134 TONS IN DESOTO CO. FOR GRANULAR MATERIAL.

DATE	REVISION	BY
5/17/12	REVISED QUANTITY	WCJ
5/12/16	REVISED QUANTITY	WCJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

TATE AND DESOTO COUNTIES
PROJ.NO:STP/EXB-2920-00(014)

FILENAME: SQS_SH_2.DGN
DESIGN TEAM VOLKERT CHECKED DATE

WORKING NUMBER SQ-2
SHEET NUMBER 10

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:04:29 SQS_SH_2.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

SUMMARY OF QUANTITIES (SHEET 4)

PAY ITEM NO.	PAY ITEM	UNIT	TATE		DESOTO		TOTALS		
			PRELIM.	FINAL	PRELIM.	FINAL	PRELIM.	FINAL	
619-D2001	STANDARD ROADSIDE CONSTRUCTION SIGNS, 10 SQUARE FEET OR MORE	SF	68		93		161		
907-619-E3001	CHANGEABLE MESSAGE SIGN	EA	1		2		3		
619-G4001	BARRICADES, TYPE III, SINGLE FACED	LF	24		24		48		
619-G7001	WARNING LIGHTS, TYPE "B"	EA	2		2		4		
620-A001	MOBILIZATION	LS	79%		21%		100%		
621-A001	FIELD LABORATORY	EA	0		1		1		
907-626-C003	6" THERMOPLASTIC DOUBLE DROP EDGE STRIPE, CONTINUOUS WHITE	MI	3		1		4		④
907-626-D006	6" THERMOPLASTIC DOUBLE DROP TRAFFIC STRIPE, SKIP YELLOW	MI	2		1		3		⑤
907-626-E005	6" THERMOPLASTIC DOUBLE DROP TRAFFIC STRIPE, CONTINUOUS YELLOW	LF	0		158		158		
907-626-G006	THERMOPLASTIC DOUBLE DROP DETAIL STRIPE, WHITE	LF	0		534		534		
907-626-H009	THERMOPLASTIC DOUBLE DROP LEGEND, WHITE	LF	0		224		224		
627-D001	TWO-WAY YELLOW REFLECTIVE RAISED MARKERS	EA	94		37		131		
630-A001	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.080" THICKNESS	SF	10		8		18		
630-A002	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.125" THICKNESS	SF	9		9		18		
630-C003	STEEL U-SECTION POSTS, 3.0 LB/FT	LF	87		28		115		
630-F001	DELINEATORS, GUARD RAIL, WHITE	EA	11		29		40		
630-G006	TYPE 3 OBJECT MARKERS, OM-3R OR OM-3L	EA	2		2		4		
630-K002	WELDED & SEAMLESS STEEL PIPE POSTS, 3 1/2"	LF	0		14		14		
907-630-O001	REMOVE AND RESET SIGNS, GROUND MOUNTED ON ROUND POST(S)	EA	1		0		1		①
907-630-O006	REMOVE AND RESET SIGNS, POST MOUNTED	EA	0		1		1		②
907-630-PP008	ROADSIDE DIRECTIONAL SIGNS, SHEET ALUMINUM, 0.080" THICKNESS, GROUND MOUNTED	SF	33		14		47		
907-699-A002	ROADWAY CONSTRUCTION STAKES	LS	79%		21%		100%		
809-A003	RETAINING WALL SYSTEM	SF	0		3360		3360		③
815-A006	LOOSE RIPRAP, SIZE 100	TON	0		1559		1559		
815-A009	LOOSE RIPRAP, SIZE 300	TON	29240		0		29240		⚠1
815-E001	GEOTEXTILE UNDER RIPRAP	SY	37000		1925		38925		⚠1
907-815-F001	SEDIMENT CONTROL STONE	TON	8		16		24		

① INCLUDES REMOVAL AND RESET SIGN AT STA. 58+25 (MARTIN LUTHER KING JR. MEMORIAL HIGHWAY)
② INCLUDES REMOVAL AND RESET SIGN AT STA. 146+00 (HIGHWAY 51 LANDING)
③ TO BE CONTRACTOR DESIGNED. SEE BRIDGE PLANS FOR DETAILS, SHEETS 8067-8070.
④ INCLUDES 1096 L.F. IN DESOTO COUNTY AND 2780 L.F. IN TATE COUNTY FOR BRIDGE STRIPING.
⑤ INCLUDES 548 L.F. IN DESOTO COUNTY AND 1390 L.F. IN TATE COUNTY FOR BRIDGE STRIPING.

BY	REVISION	DATE
WCJ	REVISED QUANTITY	5/17/16

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

TATE AND DESOTO COUNTIES
PROJ.NO:STP/EXB-2920-00(014)

FILENAME: SQS_SH_2.DGN
DESIGN TEAM VOLKERT CHECKED DATE

WORKING NUMBER SQ-4
SHEET NUMBER 12

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:04:42 SQS_SH_2.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

ESTIMATED EARTHWORK QUANTITIES

WK. SH. NUMBER	CUT	FILL	BORROW ( )	BORROW (B9)	UNCLASSIFIED EXCAVATION	EXCAVATION EXCESS	EXCAVATION SURPLUS	REMARKS
	TATE CO.							
3	1035	27898						
4	Ø	91054						
5	Ø	63363				37646		
	C.Y.	C.Y.						
	1035	182315						
	FILL-(CUT/1+S.F.)=BORROW			C.Y.				
	182315-(1035/1.25)=			181487				
	DESOTO CO.							
5	Ø	20879				10813		
6	1576	23585						
	C.Y.	C.Y.						
	1576	44464						
	FILL-(CUT/1+S.F.)=BORROW			C.Y.				
	44464-(1576/1.25)=			43203				
	C.Y.	C.Y.						
	2611	226779		C.Y.		C.Y.		
	PROJECT TOTAL			224690		48459		

BRIDGE END PAVEMENT REQUIRED

WORK NO.	BRIDGE ABUT. STATION	W_1	W_2	W_B	W	A	B	ANGLE "Z"	PAV'MT.	JOINT	33.5" RAIL	42" RAIL	TRANSVERSE GROOVING	REMARKS
5	112+67.83	22	22	44	46.83	20	20	Ø	102.04	46.83	20			
5	132+05.17	22	22	44	46.83	20	20	Ø	102.04	46.83	20			
									SY	LF	LF			
									204.08	93.66	40			

ESTIMATED EROSION & SEDIMENT CONTROL ITEMS

	WK. SH. NO.	SILT FENCE	SLOPE DRAIN	SUPER SILT FENCE	TURBIDITY BARRIER	WATTLES 20"	RIP RAP FOR EROSION CONTROL	REMOVE AND RESET RIPRAP	SEDIMENT CONTROL STONE	REMARKS
1	5002	7841			10112	50				
1	5003	3275			5118	50	20		4	
	5004	7977	2032			75	40		8	
	5005	1486	644	1385		125	60		12	
	5006							560		
	5007							140		
	TOTAL	20579	2676	1385	15230	300	120	700	24	
		LF	LF	LF	LF	LF	TON	CY	TON	

1

1 REVISED SILT FENCE QUANTITY 5-17-16 DATE — GMB BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ESTIMATED QUANTITIES

TATE AND DESOTO COUNTIES
PROJ.NO:STP/EXB-2920-00(014)

WORKING NUMBER EQ-2

FILENAME: EQ.DGN
DESIGN TEAM VOLKERT CHECKED DATE

SHEET NUMBER 14

FILE:
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:04:56 EQ.DGN

FMS:105335/301000

ADDENDUM

REVISIONS	
DATE	BY
⚠1 5/17/16	WCJ

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(14)

NOTE: BETWEEN STA. 65+00 LT. TO STA. 112+67.83 LT.
300# RIP RAP WITH GEOTEXTILE FABRIC REQ'D FROM
THE TOE OF SLOPE TO ELEVATION 235.00.

☒ NOTE: REMOVE EXISTING PAVEMENT
BEGINNING AT STA. 54+00. TO STA. 95+50.

▨ RIP RAP REQ'D.

⚠1 ADD RIPRAP AND REVISED RIPRAP
AND GEOTEXTILE QUANTITY

BEGIN CONSTRUCTION
STA 50+50.00
N: 18922315.5126
E: 2402352.5633

WETLAND SITE		
TEMPORARILY FILLED	0.00	AC.
PERMANENTLY FILLED	0.60	AC.
BRIDGED		AC.

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.	☒	
SOIL REINF. MATERIAL	S.Y.	○	
PAVED DITCH	C.Y.	▨	
⚠1 RIP RAP	TON	▨	4678
SILT FENCE	L.F.	—SF—	
SUPER SILT FENCE	L.F.	—SSF—	
⚠1 GEOTEXTILE	S.Y.		6006
SOLID SOD	S.Y.		
EROSION CHECKS	BALE		

EARTHWORK TOTAL THIS SHEET		
Cut	1035	Cu.Yds
Fill	27898	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

UTILITY OWNERS:
GAS – ATMOS
LARRY SAMPLES
901–946–9851
ELEC – ENTERGY
RUSSELL LEE
662–342–7573
TELE – AT&T
CURT MAYS
662–622–0185
CABLE – COMCAST
BRUCE HARRIS
901–601–1123

STA. 58+15
16' RAMP REQ'D. RT
56'–18" PIPE REQ'D

STA. 60+00 TO STA 75+00
REMOVAL OF SLOPE PAVING LEFT REQ'D.

STA.	℄ PROPOSED	℄ EXISTING
52	241.92	241.92
	241.91	241.80
53	241.93	241.72
	242.00	241.68
54	242.10	241.64
	242.22	241.59
55	242.34	241.58
	242.46	241.63
56	242.58	241.67
	242.70	241.70
57	242.82	241.72
	242.94	241.73
58	243.06	241.73
	243.18	241.74
59	243.30	241.75
	243.42	241.76
60	243.54	241.83
	243.66	241.98
61	243.78	242.10
	243.90	242.16
62	244.02	242.23
	244.14	242.35
63	244.26	242.44
	244.35	242.48
64	244.43	242.50
	244.47	242.50
65	244.50	242.50
	244.50	242.52
66	244.50	242.53
	244.50	242.54
67	244.50	242.55
	244.50	242.57
68	244.50	242.56
	244.50	242.51
69	244.50	242.49
	244.50	242.51
70	244.50	242.54
	244.50	242.56
71	244.50	242.57
	244.50	242.58
72	244.50	242.58
	244.50	242.57
73	244.50	242.57
	244.50	242.57
74	244.50	242.57
	244.50	242.55
75	244.50	242.52

Wk. Sh. 3
Sh. No. 17

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:50:26 WK-3.DGN

DESIGN TEAM: VOLKERT FILENAME: WK-3.DGN COUNTY: **TATE AND DESOTO COUNTIES** PROJECT NO. **STP/EXB-2920-00(014)** SHEET ID: **BRIDGE NO. 278.3 HWY 51**

FMS:105335/301000

REVISIONS	
DATE	BY
5/17/16	WCJ

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

NOTE: REMOVE EXISTING PAVEMENT FROM STA. 54+00 TO STA. 95+50.

RIP RAP REQ'D.

WETLAND SITE		
TEMPORARILY FILLED	0.08	AC.
PERMANENTLY FILLED	1.34	AC.
BRIDGED		AC.

△1 ADDED RIPRAP AND REVISED RIPRAP AND GEOTEXTILE QUANTITY

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS	
DITCH LINER	S.Y.	▨		
SOIL REINF. MATERIAL	S.Y.	○○○○○		
PAVED DITCH	C.Y.	▨		
RIP RAP	TON	▨	17548	△1
SILT FENCE	L.F.	—SF—		
SUPER SILT FENCE	L.F.	—SSF—		
GEOTEXTILE	S.Y.		21620	△1
SOLID SOD	S.Y.			
EROSION CHECKS	BALE			

B.M.ELEV. 240.05
DESC. BM-1 1 /12" STAMPED
(MDOT #05169001
ALUMINUM DISK SET ON
TOP 5/8"X4' REBAR, 18.6'
EAST OF THE CENTERLINE
OF HWY 51

EARTHWORK TOTAL THIS SHEET		
Cut	0	Cu.Yds
Fill	91054	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

STA. 75 + 00 TO STA. 105 + 00
REMOVAL OF SLOPE PAVING LEFT REQ'D.

STA. 100 + 95
16' RAMP REQ'D. RT

244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50
242.49	242.46	242.42	242.40	242.40	242.42	242.48	242.53	242.57	242.58	242.55	242.52	242.50	242.48	242.46	242.46	242.49	242.53	242.59	242.62	242.62	242.62	242.62	242.61	242.60	242.59	242.59	242.57	242.51	242.42

244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.50	244.53	244.61	244.74	244.93	245.15	245.36	245.58	245.79	246.01	246.22	246.44	246.65	246.87	247.08	247.30	247.51	247.73	247.94	248.16	248.37	248.59	248.80
242.28	242.15	242.01	241.89	241.81	241.76	241.75	241.74	241.73	241.72	241.72	241.72	241.72	241.70	241.68	241.67	241.68	241.69	241.72	241.71	241.66	241.62	241.61	241.60	241.58	241.56	241.53	241.51	241.49	241.46

Wk. Sh.
4

Sh. No.
18

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/18/2016 13:04:39 WK-4.DGN

DESIGN TEAM: VOLKERT *FILENAME:* WK-4.DGN *COUNTY:* **TATE AND DESOTO COUNTIES** *PROJECT NO.* **STP/EXB-2920-00(014)** *SHEET ID:* **BRIDGE NO. 278.3 HWY 51**

FMS:105335/301000

ADDENDUM

RIP RAP REQ'D.

REVISIONS		
DATE	BY	
5/17/16	WCJ	

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

B.M.ELEV. 241.85
DESC. BM-2 1 /12" STAMPED (MDOT "05169002") ALUMINUM DISK SET ON TOP 5/8"X4' REBAR, 19.9' WEST OF THE CENTERLINE OF HWY 51

IMPAIRED WATER BODY
Coldwater River IS IMPAIRED DUE TO Pathogens

Curve AL159_6
Δ = 5° 11' 57.489" (RT)
D = 0° 31' 32.338"
L = 989.120'
T = 494.900'
R = 10,900.000'
BK N 17° 11' 54.204" W
AH N 11° 59' 56.716" W
PI 135+87.729
PC 130+92.829
PT 140+81.949

⚠ ADDED RIP RAP AND REVISED QUANTITY FOR RIPRAP AND GEOTEXTILE

BEGIN RETAINING WALL
STA. 132+44
OFF. 59.80' LT TO FACE
PAVED DITCH REQ'D. ON WALL

408624000-0000100
UNITED STATES OF AMERICA
30-250

RANGE 8 WEST
RANGE 7 WEST

MATCH LINE STA. 105+00.00 SEE WK. SH. 5

MATCH LINE STA. 135+00.00 SEE WK. SH. 6

PROP. BR. ABUT 112+67.83

PAVED FLUME REQ'D.

GRASS

WOODS

PRES. R/W

COLDWATER RIVER

COUNTY LINE

LOCATION OF BRIDGE PIERS (TYP.)

CONC. BM-2

GRAVEL

CONC.

HALT

N 17° 11' 54.204" W

110 115 120 125 130

CENTERLINE HWY 51

BRIDGE ABUTMENT 119+14.35

BRIDGE

TATE

DESOTO

STA. 126+71.39
TATE / DESOTO COUNTY LINE

BRIDGE ABUTMENT 130+65.71

COMPUTED R/W MARKER

PROP. BR. ABUT. 132+05.17

RIP RAP PP

PARKING LOT

RIP RAP REQ'D ON 2:1 SLOPE

PC Sta. 130+92.829

111+00
150.20' RT
TIE TO
EXIST ROW

111+00
290' RT

112+85
290' RT

PERMANENT ESMT. REQUIRED

113+50
150.23' RT
TIE TO
EXIST ROW

CHANNEL

131+10
150.16' RT
TIE TO
EXIST ROW

132+00
250' RT

133+55
250' RT

133+55
148.71' RT
TIE TO
EXIST ROW

PERMANENT ESMT. REQUIRED

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		* 18
RIP RAP	TON	RIPRAP	**7531 ⚠
SILT FENCE	L.F.	—SF—	
SUPER SILT FENCE	L.F.	—SSF—	
GEOTEXTILE	S.Y.		**9374 ⚠
SOLID SOD	S.Y.		* 169
EROSION CHECKS	BALE		

* QUANTITY INCLUDES BOTH COUNTIES—
** QUANTITY INCLUDES BOTH COUNTIES AND 100# AND 300# RIPRAP (7014 TONS)

WETLAND SITE		
TEMPORARILY FILLED	0.00	AC.
PERMANENTLY FILLED	2.89	AC.
BRIDGED		AC.

B.M.ELEV. 242.37
DESC. BM-3 1 /12" STAMPED (MDOT "05169003") ALUMINUM DISK SET ON TOP 5/8"X4' REBAR, 24.3' WEST OF THE CENTERLINE OF HWY 51

* QUANTITY INCLUDES BOTH COUNTIES—
408624000-0000100
UNITED STATES OF AMERICA
30-250

EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds
Fill	84242	Cu.Yds
Excess	* 48459	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

STA 112+67.83
9 SPANS @ 120'
1 SPAN @ 615' (1 SPAN @ 180' – 1 SPAN @ 255' – 1 SPAN @ 180')
2 SPANS @ 120'
212.5' GUARDRAIL REQ'D (62.5'LT, 150'RT)
2 TYPE I BRIDGE END SECTIONS
2 TERMINAL SECTIONS
A=193.1458' B=150' C=105.6458' D=62.5'
2–PAVED FLUMES REQ'D. (1–RT. & 1–LT.)

STA 112+67.83
150' SPUR DIKE REQ'D
UPSTREAM

STA 105+00 TO STA. 119+00
REMOVAL OF SLOPE PAVING LEFT REQ'D.

STA 130+50 TO STA. 133+00
REMOVAL OF SLOPE PAVING LEFT REQ'D.

STA 132+05.17
1,025' GUARDRAIL REQ'D (62.5'RT, 962.5'LT)
2 TYPE I BRIDGE END SECTIONS
2 TERMINAL SECTIONS
962.5' STD. GUARD RAIL REQ'D. LT
C=105.6458' D=62.5'
2–PAVED FLUMES REQ'D. (1–RT. & 1–LT.)

STA 132+05.17
100' SPUR DIKE REQ'D
UPSTREAM

VPC 124+50.00
EL. 257.19

VPI 127+00.00
EL. 258.26
500' V.C.
K = 350

VPT 129+50.00
EL. 255.76

BRIDGE ABUT. STA. 112+67.83

BRIDGE ABUT. STA. 132+05.17

+0.43%

-1.00%

FILL 63,363*
*(INCLUDES 7460 CY FOR SPUR DIKE AND 332 CY FOR SPILL THRU)

EXCAVATE EXISTING ROAD TO ELEVATION 224.00.

EXCAVATE EXISTING ROAD TO ELEVATION 224.00.

FILL 20,879*
*(INCLUDES 5537 CY FOR SPUR DIKE AND 328 CY FOR SPILL THRU)

270 260 250 240 230 220 210

	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135
GROUND	241.40	241.40	241.50	241.55	241.53	241.53	241.57	241.63	241.72	241.80	241.87	241.93	241.99	242.06	242.15	242.24	242.33	242.40	242.44	242.50	242.59	242.65	242.66	242.71	242.80	242.90	243.04	243.19	224.30	214.95	218.16
PROFILE	249.02	249.23	249.45	249.66	249.88	250.09	250.31	250.52	250.74	250.95	251.17	251.38	251.60	251.81	252.03	252.24	252.46	252.67	252.89	253.10	253.32	253.53	253.75	253.96	254.18	254.39	254.61	254.82	255.04	255.25	255.47

	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166
GROUND	223.11	223.27	223.18	223.71	223.97	224.29	224.34	224.43	224.54	224.47	222.92	210.46	213.88	223.40	224.52	224.04	223.10	219.07	216.54	236.82	243.44	243.50	243.52	243.45	243.32	243.12	242.88	242.59	242.40		
PROFILE	255.68	255.90	256.11	256.33	256.54	256.76	256.97	257.19	257.36	257.47	257.51	257.47	257.37	257.19	256.94	256.62	256.22	255.76	255.26	254.76	254.26	253.76	253.26	252.76	252.26	251.76	251.26	250.76	250.26		

Wk. Sh. 5
Sh. No. 19

DESIGN TEAM: VOLKERT FILENAME: WK-5.DGN COUNTY: TATE AND DESOTO COUNTIES PROJECT NO.: STP/EXB-2920-00(014) SHEET ID: BRIDGE NO. 278.3 HWY 51

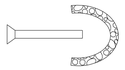
PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 16:50:29 WK-5.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

BEST MANAGEMENT PRACTICES (BMP's)

TEMPORARY SLOPE DRAIN PIPE WITH ROCK BERM	
TEMPORARY EARTH BERM	
STABILIZED CONSTRUCTION ENTRANCE	
PERMANENT SEEDING\MULCHING	
SILT FENCE SEDIMENT BARRIER	
TURBIDITY BARRIER	
WATTLE DITCH CHECK	
SUPER SILT FENCE SEDIMENT BARRIER	
ROCK FILTER DAM	

EROSION AND SEDIMENT CONTROL PHASES

INITIAL CONSTRUCTION PHASE - AS CLEARING BEGINS AND PRIOR TO ANY GRUBBING OR GRADING WORK.

INTERMEDIATE CONSTRUCTION PHASE - AS NEEDED. AS WORK IS ONGOING AND ADVANCING TOWARD COMPLETION.

FINAL CONSTRUCTION PHASE - AS WORK IS COMPLETED AND PERMANENT VEGETATION IS ESTABLISHED.

ESC PROJECT NOTES:

1. THERE SHALL BE NO FUEL TANKS STORED ON THE RIGHT OF WAY. IN ADDITION, FUEL TRUCKS OR VEHICLES TRANSPORTING CHEMICALS, FERTILIZER, ETC. SHALL NOT BE LEFT UNATTENDED ON THE RIGHT-OF-WAY.
2. TEMPORARY EROSION AND SEDIMENT CONTROL BMPS INCLUDING TURBIDITY BARRIERS, DITCH CHECKS AND SILT FENCE WILL BE REQUIRED IN ADDITION TO THOSE SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN SHEETS, AS DIRECTED BY THE ENGINEER.
3. MAINTAIN A MINIMUM 15' UNDISTURBED GRASS BUFFER BETWEEN ALL WORK AND EXISTING ROW, WHERE POSSIBLE.
4. AVOID THE REMOVAL OR DISTURBANCE OF ESTABLISHED VEGETATION AND TREES OUTSIDE OF THE SLOPE STAKES WHERE FEASIBLE.
5. STABILIZED CONSTRUCTION ENTRANCES AND CONCRETE WASHOUTS ARE IN APPROXIMATE LOCATIONS AND MAY BE MOVED AT THE DISCRETION OF THE CONTRACTOR AND APPROVED BY THE ENGINEER. THE CONTRACTOR SHALL UPDATE THE EROSION AND SEDIMENT CONTROL PLAN TO SHOW THE NEW LOCATIONS.
6. TEMPORARY ROCK BERM MATERIAL SHALL BE INCORPORATED INTO THE SLOPE OR BRIDGE FILL SLOPE STABILIZATION MATERIAL. THIS WORK WILL BE PAID FOR UNDER PAY ITEM 907-249-B001, REMOVE AND RESET RIPRAP.
7. OMIT
8. THE SLOPE STABILIZATION (RIPRAP OR PERMANENT SEEDING AND MULCHING) SHOWN IN THE FINAL PHASE OF THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE INSTALLED ON THE CONSTRUCTED FINISHED SLOPE AFTER 10' OF VERTICAL FILL IS CONSTRUCTED AND SHOULD PROGRESS UP THE SLOPE AS FILL PROGRESSES. NO MORE THAN 10' OF VERTICAL FILL SHALL BE EXPOSED AT ANY TIME.
9. (1) THE HAUL ROAD SHOWN IN THE EROSION AND SEDIMENT CONTROL PLAN IS TO BE DESIGNED BY THE CONTRACTOR. ALL LABOR, MATERIAL, EQUIPMENT, MAINTENANCE, REMOVAL, EROSION AND SEDIMENT CONTROL, AND PERMANENT COVER AFTER REMOVAL REQUIRED TO CONSTRUCT THE HAUL RD SHALL BE ABSORBED IN OTHER ITEMS BID. A WORK BRIDGE WILL BE REQUIRED TO SPAN THE MAIN CHANNEL OF THE COLDWATER RIVER. TEMPORARY CULVERT STREAM CROSSINGS AS SHOWN ON ECD-17, SHEET NUMBER 56, SHALL BE USED FOR ANY OTHER WATERCOURSE CROSSING AS DIRECTED BY THE ENGINEER.
10. THE EXISTING ROADWAY EMBANKMENT UNDER THE PROPOSED BRIDGE IS TO BE EXCAVATED DOWN TO AN ELEVATION OF 224'. THIS AREA SHALL BE PERMANENTLY STABILIZED AS EXCAVATION PROGRESSES AND FINISHED GRADE IS ESTABLISHED.
11. TEMPORARY SLOPE DRAINS SHALL BE INSTALLED ONCE THE FILL HEIGHT HAS REACHED 5' IN ELEVATION. BY THE END OF EACH WORK DAY, THE SLOPE DRAINS SHALL BE EXTENDED TO COINCIDE WITH THE HEIGHT OF THE EMBANKMENT AS SHOWN ON TEC-2.
12. THE RIPRAP BERMS LOCATED AT THE OUTLET OF EACH SLOPE DRAIN, AS SHOWN IN THE INITIAL AND INTERMEDIATE PHASE OF THE EROSION AND SEDIMENT CONTROL PLAN, SHALL BE INCORPORATED INTO THE COST OF PAY ITEM 239-A001 TEMPORARY SLOPE DRAINS.

GREGG M. BISSOT LICENSED PROFESSIONAL ENGINEER 18712 STATE OF MISSISSIPPI

NO.	REVISION	DATE	BY
1	REVISED PLAN SHEET NUMBER IN NOTE 9	5-12-16	CMB

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

EROSION & SEDIMENT CONTROL PLAN

LEGEND SHEET

US-51

PROJ NO: STP/EXB-2920-00(014)

COUNTY: TATE AND DESOTO

FILENAME:

DESIGN TEAM CHECKED DATE

WORKING NUMBER ECP-1

SHEET NUMBER 5001

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

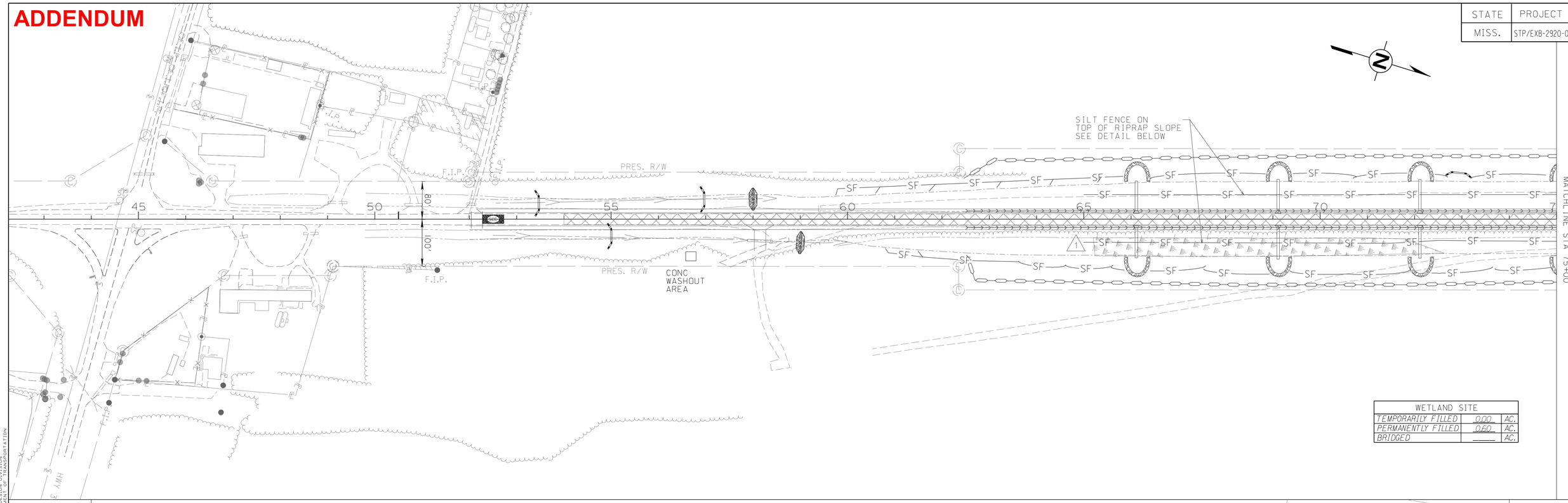
XMODYY 00:00AMPM DGNFILENAME

ESC_legend_01.dgn 5/12/2016 1:50:51 PM

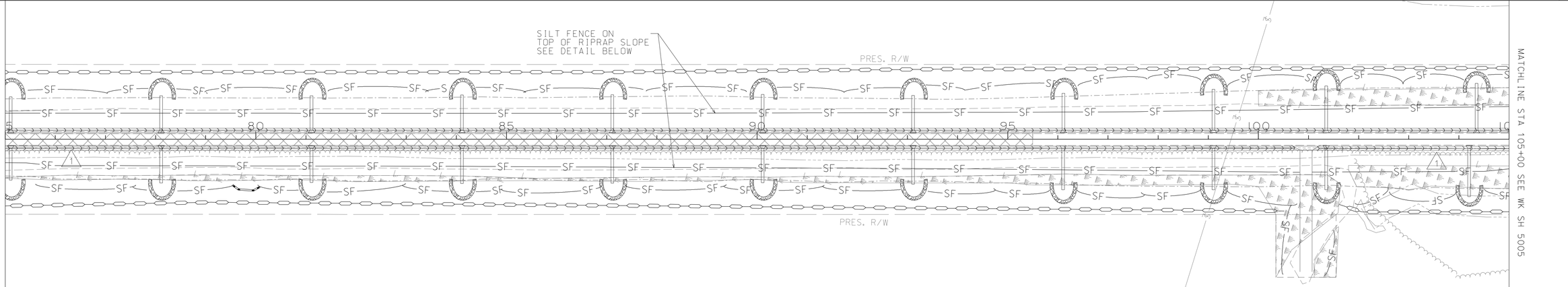
FMS CON:105335/301000

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



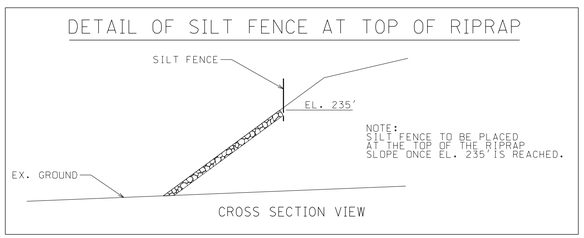
WETLAND SITE		
TEMPORARILY FILLED	0.00	AC.
PERMANENTLY FILLED	0.60	AC.
BRIDGED	____	AC.



WETLAND SITE		
TEMPORARILY FILLED	0.08	AC.
PERMANENTLY FILLED	1.34	AC.
BRIDGED	____	AC.

TEMP. EROSION AND SEDIMENT CONTROL ITEMS	UNITS	SYMBOL	TOTALS
SILT FENCE	L.F.	—SF—	7977
SLOPE DRAIN	L.F.		2032
WATTLES, 20"	L.F.		75
RIPRAP FOR EROSION CONTROL	TON		40
SEDIMENT CONTROL STONE	TON		8

DETAIL OF SILT FENCE AT TOP OF RIPRAP



NOTE: BMP'S SHOWN IN THESE PLANS ARE NOT DRAWN TO SCALE AND ARE FOR LOCATION PURPOSES ONLY.

GRAPHIC SCALE
(FEET)
100 0 50 100 200 300 400

DATE	REVISION	BY
5-17-16	ADDED SILT FENCE	GMB

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
EROSION & SEDIMENT CONTROL PLAN

INTERMEDIATE PHASE

US-51

(STA. 45+00 - STA. 105+00)

PROJ NO: STP/EXB-2920-00(014)

COUNTY: TATE AND DESOTO

WORKING NUMBER
ECP-4

SHEET NUMBER
5004

FILENAME: _____

DESIGN TEAM _____ CHECKED _____ DATE _____

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MMDDYY 00:00AMPM DGNFILENAME

FMS CON:105335/301000

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

MATCHLINE STA 105+00 SEE WK SH 5004

SILT FENCE ON TOP OF RIPRAP SLOPE SEE DETAIL ON SHEET 5004

GRASS

WOODS

PRES. R/W

110 115 120 125 130

CENTERLINE HWY 51

BRIDGE

CONTRACTOR DESIGNED TEMPORARY HAUL RD

MATCHLINE STA 135+00

WETLAND SITE		
TEMPORARILY FILLED	0.00	AC.
PERMANENTLY FILLED	2.89	AC.
BRIDGED	____	AC.

IMPAIRED WATER BODY
Coldwater River IS IMPAIRED DUE TO PATHOGENS

CHECK STATION
MONEY BOX
HAND RAIL
CONC. SIDEWALK
PICNIC TABLES
GRAVEL DR.
PAVED PARKING
PAVED DR.
GRAVEL SH.
PAVED RD.
ASPHALT
140 145
HWY 51
CONC WASHOUT AREA
202'
147+76.99
0.000' RT
PRES. R/W
GRAVEL DR.

MATCHLINE STA 135+00

WETLAND SITE		
TEMPORARILY FILLED	0.02	AC.
PERMANENTLY FILLED	0.28	AC.
BRIDGED	____	AC.

TEMP. EROSION AND SEDIMENT CONTROL ITEMS	UNITS	SYMBOL	TOTALS
SILT FENCE	L.F.	—SF—	1486
SLOPE DRAIN	L.F.		644
WATTLES, 20'	L.F.		125
RIPRAP FOR EROSION CONTROL	TON		60
SEDIMENT CONTROL STONE	TON		12

NOTE: BMP'S SHOWN IN THESE PLANS ARE NOT DRAWN TO SCALE AND ARE FOR LOCATION PURPOSES ONLY.

GRAPHIC SCALE (FEET)

100 0 50 100 200 300 400

NO.	DATE	REVISION	BY
1	5-17-16	ADDED SILT FENCE	GMB

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
EROSION & SEDIMENT CONTROL PLAN
INTERMEDIATE PHASE
US-51
(STA. 105+00 - STA. 146+00)
PROJ NO: STP/EXB-2920-00(014)
COUNTY: TATE AND DESOTO

WORKING NUMBER ECP-5

SHEET NUMBER 5005

FILENAME:
DESIGN TEAM CHECKED DATE

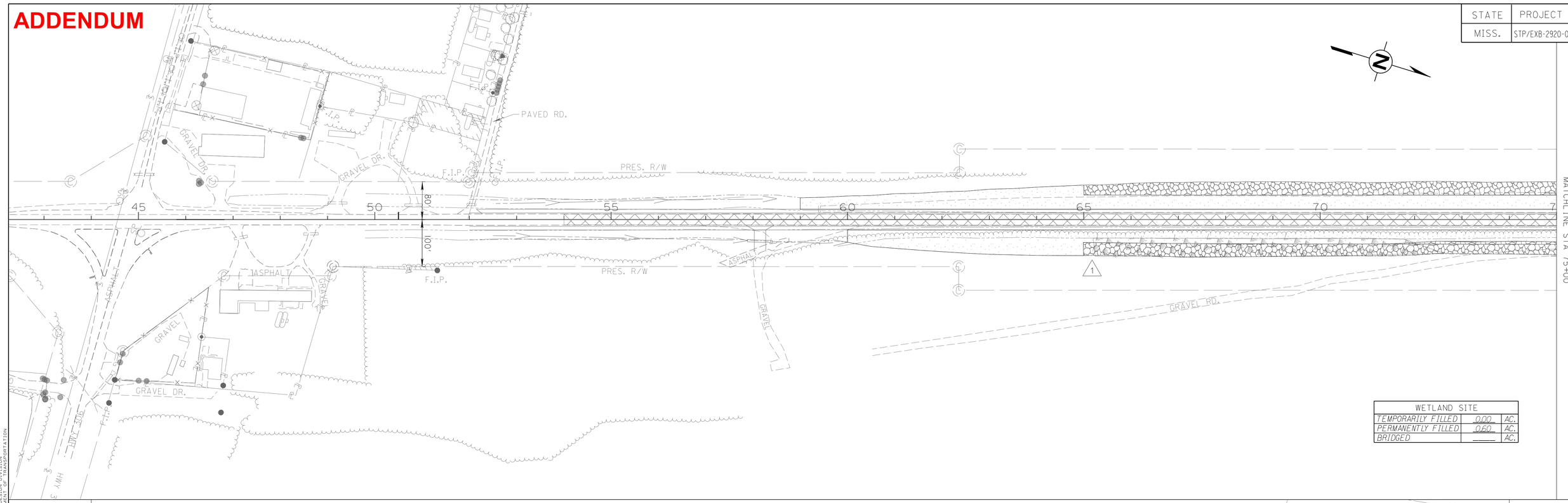
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MMDDYY 00:00AMPM DGNFILENAME

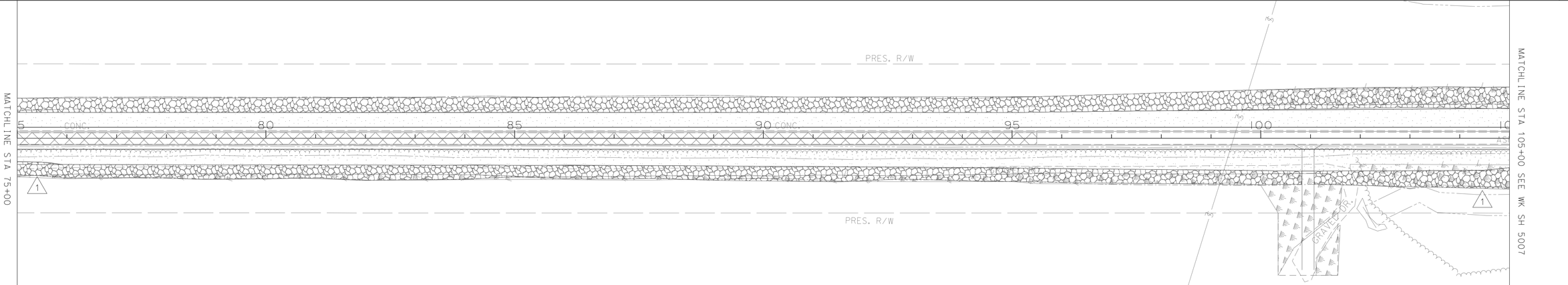
FMS CON:105335/301000

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



WETLAND SITE		
TEMPORARILY FILLED	.00	AC.
PERMANENTLY FILLED	.60	AC.
BRIDGED	____	AC.



WETLAND SITE		
TEMPORARILY FILLED	0.08	AC.
PERMANENTLY FILLED	1.34	AC.
BRIDGED	____	AC.

FLOODED AREA

TEMP. EROSION AND SEDIMENT CONTROL ITEMS	UNITS	SYMBOL	TOTALS
REMOVE AND RESET RIPRAP	C.Y.		560

NOTE: BMP'S SHOWN IN THESE PLANS ARE NOT DRAWN TO SCALE AND ARE FOR LOCATION PURPOSES ONLY.

GRAPHIC SCALE
(FEET)
100 0 50 100 200 300 400

DATE	REVISION	BY
5-17-16	ADDED RIPRAP SLOPE PROTECTION	GMB

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
EROSION & SEDIMENT CONTROL PLAN

FINAL PHASE

US-51

(STA. 45+00 - STA. 105+00)

PROJ NO: STP/EXB-2920-00(014)

COUNTY: TATE AND DESOTO

WORKING NUMBER
ECP-6

SHEET NUMBER
5006

FILENAME: _____

DESIGN TEAM _____ CHECKED _____ DATE _____

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MMDDYY 00:00AMPM DGNFILENAME

FMS CON:105335/301000

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

MATCHLINE STA 105+00 SEE WK SH 5006

GRASS

WOODS

PRES. R/W

5 110 115 120 125 130

CONC.

BRIDGE

CENTERLINE HWY 51

PRES. R/W

WOODS

MATCHLINE STA 135+00

1

WETLAND SITE	
TEMPORARILY FILLED	0.00 AC.
PERMANENTLY FILLED	2.89 AC.
BRIDGED	____ AC.

IMPAIRED WATER BODY
Coldwater River IS IMPAIRED DUE TO PATHOGENS

WOODS

CHECK STATION

MONEY BOX

HAND RAIL

CONC. SIDEWALK

PICNIC TABLES

GRAVEL DR.

PAVED PARKING

PAVED DR.

PRES. R/W

ASPH. GRAVEL DR.

GRAVEL SH.

PAVED RD.

5 140 145

HWY 51

ASPHALT

202'

148'

GRAVEL

PRES. R/W

MATCHLINE STA 135+00

WETLAND SITE		
TEMPORARILY FILLED	0.02	AC.
PERMANENTLY FILLED	0.28	AC.
BRIDGED	____	AC.

TEMP. EROSION AND SEDIMENT CONTROL ITEMS	UNITS	SYMBOL	TOTALS
REMOVE AND RESET RIPRAP	C.Y.		140

NOTE: BMP'S SHOWN IN THESE PLANS ARE NOT DRAWN TO SCALE AND ARE FOR LOCATION PURPOSES ONLY.

GRAPHIC SCALE (FEET)

100 0 50 100 200 300 400

1

DATE	REVISION	BY
5-17-16	ADDED RIPRAP SLOPE PROTECTION	GMB

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

EROSION & SEDIMENT CONTROL PLAN

FINAL PHASE

US-51

(STA. 105+00 - STA. 146+00)

PROJ NO: STP/EXB-2920-00(014)

COUNTY: TATE AND DESOTO

FILENAME: _____

DESIGN TEAM _____ CHECKED _____ DATE _____

WORKING NUMBER ECP-7

SHEET NUMBER 5007

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MMDDYY 00:00AMPM DGNFILENAME

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DESCRIPTION OF SHEETS	WORKING NO(S).	SHEET NO(S).
DETAILED INDEX (BRIDGE)	DI-BR-1	8001
SUMMARY OF QUANTITIES (BRIDGE)	SQ-BR-1	8002
US 51 ACROSS COLDWATER RIVER	1	8003
US 51 ACROSS COLDWATER RIVER	2	8004
US 51 ACROSS COLDWATER RIVER	3	8005
US 51 ACROSS COLDWATER RIVER	4	8006
US 51 ACROSS COLDWATER RIVER	5	8007
FOUNDATION PLAN	6	8008
FOUNDATION PLAN	7	8009
FOUNDATION PLAN	8	8010
FOUNDATION PLAN	9	8011
TRIAL & TEST SHAFT DETAILS	10	8012
END BENT NO. 1 DETAILS	11	8013
END BENT NO. 15 DETAILS	12	8014
END BENT DETAILS	13	8015
INT. BENT NOS. 2, 3, 5, 6, 8, 9 & 14 DETAILS	14	8016
INT. BENT NOS. 4 & 7 DETAILS	15	8017
INT. BENT NOS. 2-9 & 14 DETAILS	16	8018
30" STEEL PIPE PILING DETAILS	17	8019
INT. BENT NO. 10 DETAILS	18	8020
INT. BENT NOS. 11 & 12 DETAILS	19	8021
INT. BENT NO. 13 DETAILS	20	8022
INT. BENT NOS. 10-13 DETAILS	21	8023
INT. BENT NOS. 10-13 DETAILS	22	8024
SPAN NOS. 1, 4 & 7 DETAILS	23	8025
SPAN NOS. 2, 5 & 8 DETAILS	24	8026
SPAN NOS. 3, 6 & 9 DETAILS	25	8027
SPAN NO. 13 DETAILS	26	8028
SPAN NO. 14 DETAILS	27	8029
120 FT. SPAN DETAILS	28	8030
120 FT. SPAN DETAILS	29	8031
MISCELLANEOUS SPAN DETAILS	30	8032
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-1	31	8033
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-2	32	8034
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-3 (SHEET 1 OF 2)	33	8035
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-3 (SHEET 2 OF 2)	34	8036
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-4 (SHEET 1 OF 2)	35	8037
120'-0" BEAM DETAILS (TYPE BT-63) BEAM 120-4 (SHEET 2 OF 2)	36	8038
120'-0" BEAM DETAILS (TYPE BT-63) BEAMS 120-5 TO 120-10	37	8039
NEOPRENE PAD DETAILS	38	8040
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	39	8041
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	40	8042
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	41	8043
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	42	8044
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	43	8045
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	44	8046
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	45	8047
615'-0" CONTINUOUS COMPOSITE PLATE GIRDER SPAN DETAILS	46	8048

DESCRIPTION OF SHEETS	WORKING NO(S).	SHEET NO(S).
REINFORCED ELASTOMERIC MOLDED RUBBER EXPANSION JOINT DETAILS	47	8049
SCUPPER DETAILS	48	8050
DISC BEARING DETAILS	49	8051
DISC BEARING DETAILS	50	8052
2'-8" RAILING DETAILS	51	8053
GENERALIZED SOIL PROFILE	52	8054
GENERALIZED SOIL PROFILE	53	8055
GENERALIZED SOIL PROFILE	54	8056
GENERALIZED SOIL PROFILE	55	8057
GENERALIZED SOIL PROFILE	56	8058
GENERALIZED SOIL PROFILE	57	8059
* INFORMATION PLANS - SN-A-FA 141(8)	--	8060-8066
SOLDIER PILE WALL AT OPP. STA. 132+44 US 51	W1	8067
SOLDIER PILE WALL AT OPP. STA. 132+44 US 51	W2	8068
SOLDIER PILE WALL AT OPP. STA. 132+44 US 51	W3	8069
SOLDIER PILE WALL AT OPP. STA. 132+44 US 51	W4	8070

* ***DEMOLITION PLAN:***

The Contractor shall submit a demolition plan to the Director of Structures, State Bridge Engineer, for approval. After the demolition plan has been approved, a minimum of fourteen (14) days notice shall be given by the Contractor to the Director of Structures, State Bridge Engineer, prior to beginning demolition of existing bridge. Demolition shall include removal of all superstructure elements and removal of substructure elements to an elevation of two (2) feet below ground line. Payment will be made under pay item 202-A001 Removal of Obstructions (see roadway summary of quantities).

BRIDGE DIVISION		
REVISIONS		
DATE	SHEET NO.	BY
5/10/2016	8070	MRA

NICK J. ALTOBELLI
LICENSED PROFESSIONAL ENGINEER
12230
STATE OF MISSISSIPPI
DATE: 5-10-16

REVISIONS | BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BRIDGE AT STA. 112+67.83

DETAILED INDEX (BRIDGE)

PROJECT 105335/301000
STP/EXB-2920-00(014)

TATE & DESOTO COUNTY

WORKING NUMBER
DI-BR-1

DATE | DESIGNER Mason Atkinson | CHECKER Adam Hall
DETAILER Hugh Williams | ISSUE DATE

DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER PE.
DEP. DIR. OF STRUCTURES, ASSIST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD PE.

SHEET NUMBER
8001

10:47:32 AM 5/10/2016 K:\2016\16027013 - US 51 over Coldwater River\Drawings\US51-S001-QT.dgn

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

RETAINING WALL PLAN NOTES:

Elevations of bottom and top of walls and lengths of walls shall be verified in the field by the Contractor prior to fabrication/ordering of the wall system components.

Where it is found necessary to change the wall dimensions, revisions shall be submitted to the Director of Structures, State Bridge Engineer for approval.

After precast concrete wall panels are set in place they shall be welded to the front flanges of the Piling per the Contractor's design.

The retaining wall shall be designed in accordance with MDOT Standard Specifications, Section 809 Retaining Wall Systems and AASHTO LRFD Bridge Design Specifications, and comply with the latest edition of the AASHTO LRFD Bridge Construction Specifications.

△ The retaining wall designer shall be a professional engineer registered in the State of Mississippi. The retaining wall design shall utilize materials specific to the construction and materials included on the MDOT Approved Product List. LRFD Design shall include external stability resistance (sliding, overall global stability and bearing resistance) and internal stability. Maximum retaining wall lateral displacement shall be limited to 0.5-inches per 10-feet of retaining wall height, unless otherwise specified. Surcharge loads shall be included. Resistance factors used for design shall be provided within the design calculations. Three (3) copies of the design calculations shall be provided for MDOT review and approval prior to initiation of construction.

Foundation soils shall be free of saturated soil, debris, frozen or deleterious material, water, soft or otherwise unsuitable soil. If soil conditions differ from those presented on the Generalized Soil Profile, over-excavation and replacement of foundation soil may be required and included in the retaining wall construction cost. Borrow Excavation and Size 57 Crushed Stone shall be placed and compacted in accordance to the Soldier Pile Design Plans and MDOT Standard Specifications, Section 203 Excavation and Embankment.

Site characteristics dictate that a differential ground water level of 5 feet be considered to account for drawdown subsequent to extreme flooding events.

A continuous retaining wall drainage system and drainage system outlet shall be incorporated into the design. The drainage system location and elevations shall be included on the design drawings.

Roadway surface runoff shall be intercepted at the top or bottom of the retaining wall, or both, and directed away from the retaining wall structure.

The retaining wall system shall be paid for at the contract unit price per square foot of wall measured from the bottom of the wall facing elements to the top of the retaining wall. The price shall include full compensation for the approved design and construction of the approved retaining wall system, all excavation, backfill, leveling pads (if required), undercut and backfill replacement, all materials and installation of wall drainage system, wall system components, equipment, labor and incidentals necessary to complete the work as directed by the Engineer.

GENERAL NOTES:

Specifications; Mississippi Standard Specifications for Road and Bridge Construction, 2004.

No change of plans will be permitted except by written authority of the Director of Structures, State Bridge Engineer. Minor changes in details of design or construction may be authorized in writing by the Director of Structures, State Bridge Engineer provided such changes are not justifiable reasons for contract price adjustments.

All concrete shall be Class "AA".

All reinforcing steel shall be A.S.T.M A615 Grade 60, unless otherwise noted.

Bar bending details shall be in accordance with "Manual of Engineering and Placing Drawings for Reinforced Concrete Structures" (ACI 315R-04).

Reinforcement order lists and required placing plans shall be furnished in accordance with Section 805 of the Mississippi Standard Specifications. Partial submittals are not acceptable.

The coping shall be given a spray finish in accordance with the specifications.

All structural steel shall be A.S.T.M A709, grade 50.

Welding shall be done by the electric arc process. Welders shall be certified and electrodes shall be approved.

Preformed expansion joint material shall be a bituminum type.

All exposed edges shall be chamfered $\frac{3}{4}$".

All work for which no pay items are provided in the proposal will not be paid for directly and compensation therefore will be included in the prices and payments for bid items.

The contractor should be aware that additional minor items of work not specifically listed may be necessary to complete this project and that compensation therefore will be included in the prices and payments for bid items.

Alternate retaining wall systems will not be considered.

LIQUEFACTION-INDUCED DRAG LOAD TABLE
SITE NO. 14-69-2145, RETAINING WALL

Station to Station	Liquefied Zone		Unfactored Drag Load (Tons)	
	Bottom Elevation (ft.)	Thickness (ft.)	Steel H-Pile	
			12"	14"
132+50 to 140+20	205	5	8	12

PREFORMED PILE HOLE AND PILE NOTES:

△ Preformed pile holes shall be placed at the contractor designed spacing as shown on the plans. The Contractor shall insure that all pilings are placed in the vertical at the contractor designed spacings to accomodate the placement of precast panels.

Preformed pile holes shall be drilled and piles shall be placed to a minimum depth per Contractor's design.

All exposed steel piling and structural steel surfaces shall be cleaned and then painted with one prime coat of inorganic zinc.

All exposed steel portions of the retaining wall shall be given field intermediate coat of acrylic latex and one field top coat of acrylic latex per Section 814 "Painting Metal Structures." Color shall be selected to match the selected textured panel color.

SPECIAL PROVISIONS REQUIRED:

Concrete Bridges And Structures . . . . . No. 907-804

PRECAST WALL PANEL NOTES:

The panels shall be fabricated according to Section 809 of the Standard Specifications.

TEXTURED CONCRETE FINISH NOTE:

The front face of all precast panels shall be given a textured finish.

The Contractor shall submit catalog-cuts and specifications for 3 different formliners to the Director of Structures, State Bridge Engineer for approval prior to placing concrete.

One formliner shall produce a field stone pattern, one shall produce a random square stone pattern and the third shall produce a running band stone pattern. Each shall be submitted with the appropriate concrete stain color to the Director of Structures, State Bridge Engineer for selecting the final choice.

STRUCTURAL STEEL NOTES:

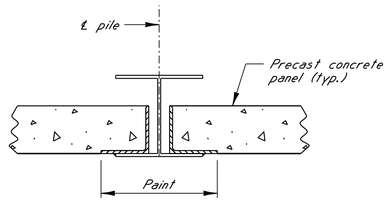
All structural steel in the retaining walls shall be A.S.T.M. A709 Grade 50.

Structural steel will not be paid for directly, but will be included in the cost of the soldier pile wall.

PAINT NOTES:

All exposed steel surfaces of the pile wall shall be cleaned and then field painted as follows:

One (1) coat of epoxy mastic primer,
One (1) intermediate top coat (white) and
One (1) final top coat to match selected textured panel finish of acrylic latex per Section 814



PAINT LIMIT DETAILS

TOLERANCE FOR INSTALLATION OF PILING:

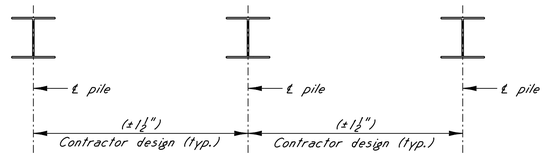
The Contractor should be aware that accurate pile placement is essential to the accurate construction of the walls. The use of templates and bracing to install the piles is required.

Piling shall be placed horizontally per Contractor's design as shown in the plans. The elevation at the top of each pile shall be equal to the elevation at the top of the highest panel connecting to the pile.

The following pile placement tolerances supercede the driving tolerances given in the Specifications:

1. Piles shall not be more than $1\frac{1}{2}$" out of position in either the longitudinal or transverse directions. See diagram below.
2. Piles shall not be more than $\frac{1}{2}$" in 10' out of plumb from vertical.

The overall length of the wall shall be maintained as shown in the plans.



PILE NOTES:

All piles shall be HP type, A.S.T.M. A709, grade 50.

All piles shall be installed in oversized pre-formed pile holes and backfilled with Class "B" concrete. No pile driving is required.

Pile concrete encasement is part of the structural system and may not be omitted for any reason.

Piles shall be installed to an elevation no higher than the elevation per the Contractor's design.

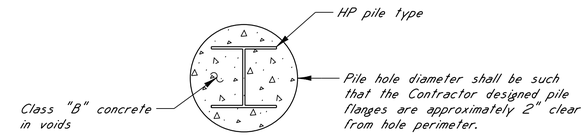
Piles shall be installed full length. Splicing will not be allowed.

PRE-FORMED PILE HOLE NOTES:

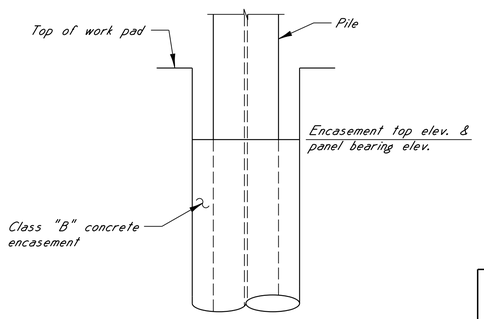
All piles shall be installed in oversized pre-formed pile holes as shown below and backfilled with Class "B" concrete to the encasement top elevation per the Contractor's design.

The top of the concrete encasement will serve as a bearing surface for the precast panels.

The Contractor shall maintain an open pile hole until the concrete encasement has been placed.



SECTION



ELEVATION

PRE-FORMED PILE HOLE DETAILS

NICK J. ALTOBELLI
REGISTERED PROFESSIONAL ENGINEER
12230
STATE OF MISSISSIPPI

DATE: 5-10-16

BY	MODIFIED NOTES / REVISIONS	DATE
MRA		5/10/16

DESIGNER Mason Atkinson CHECKER Nick Altobelli
DETAILER Hugh Williams ISSUE DATE

DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER PE.
DEP. DIR. OF STRUCTURES, ASSIST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD PE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SOLDIER PILE WALL AT
OPP. STA. 132+44 US 51

PROJECT 105335/301000
STP/EXB-2920-00(014)

DESOTO COUNTY

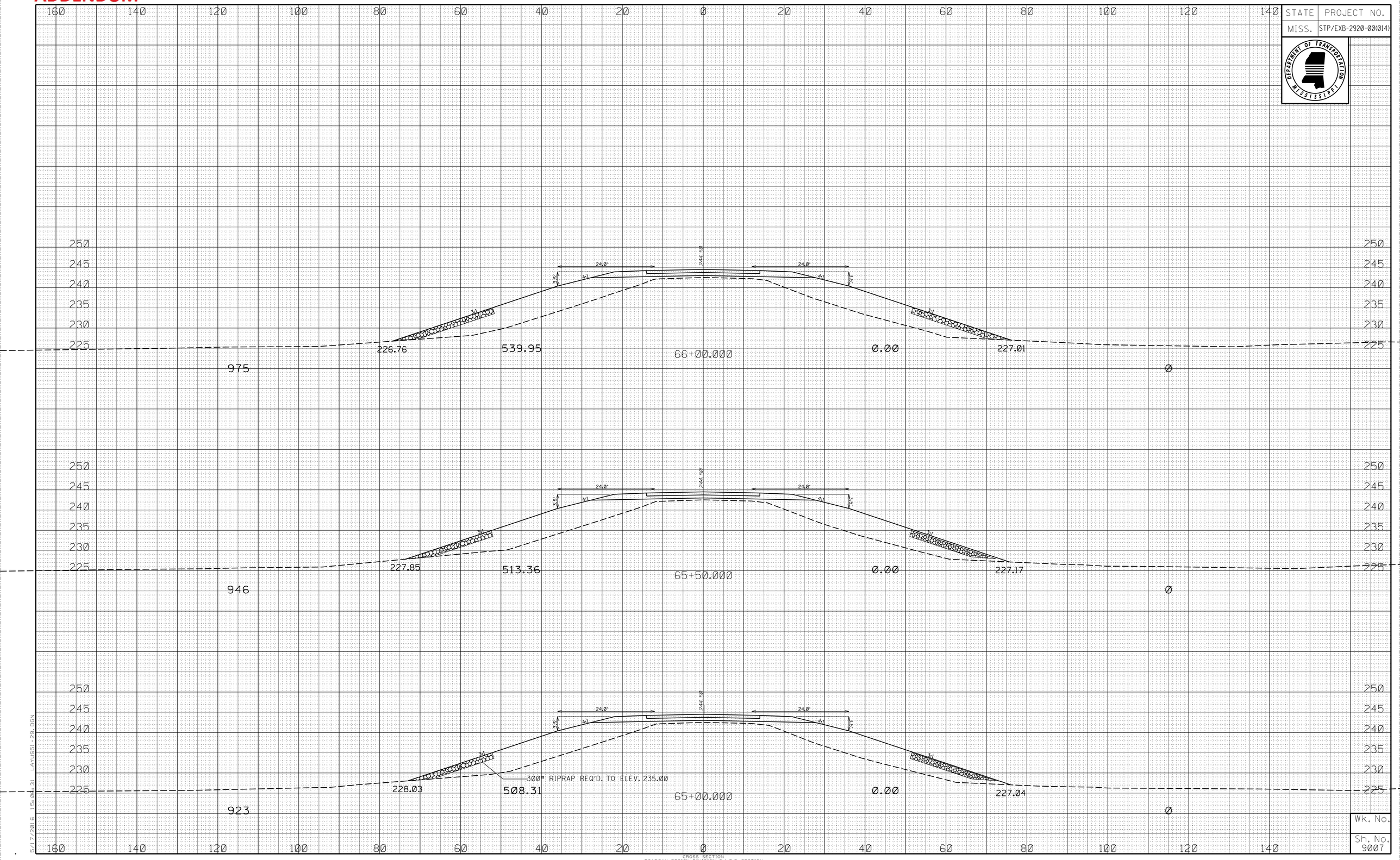
WORKING NUMBER W4 of 4

SHEET NUMBER 8070

△

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



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Wk. No.

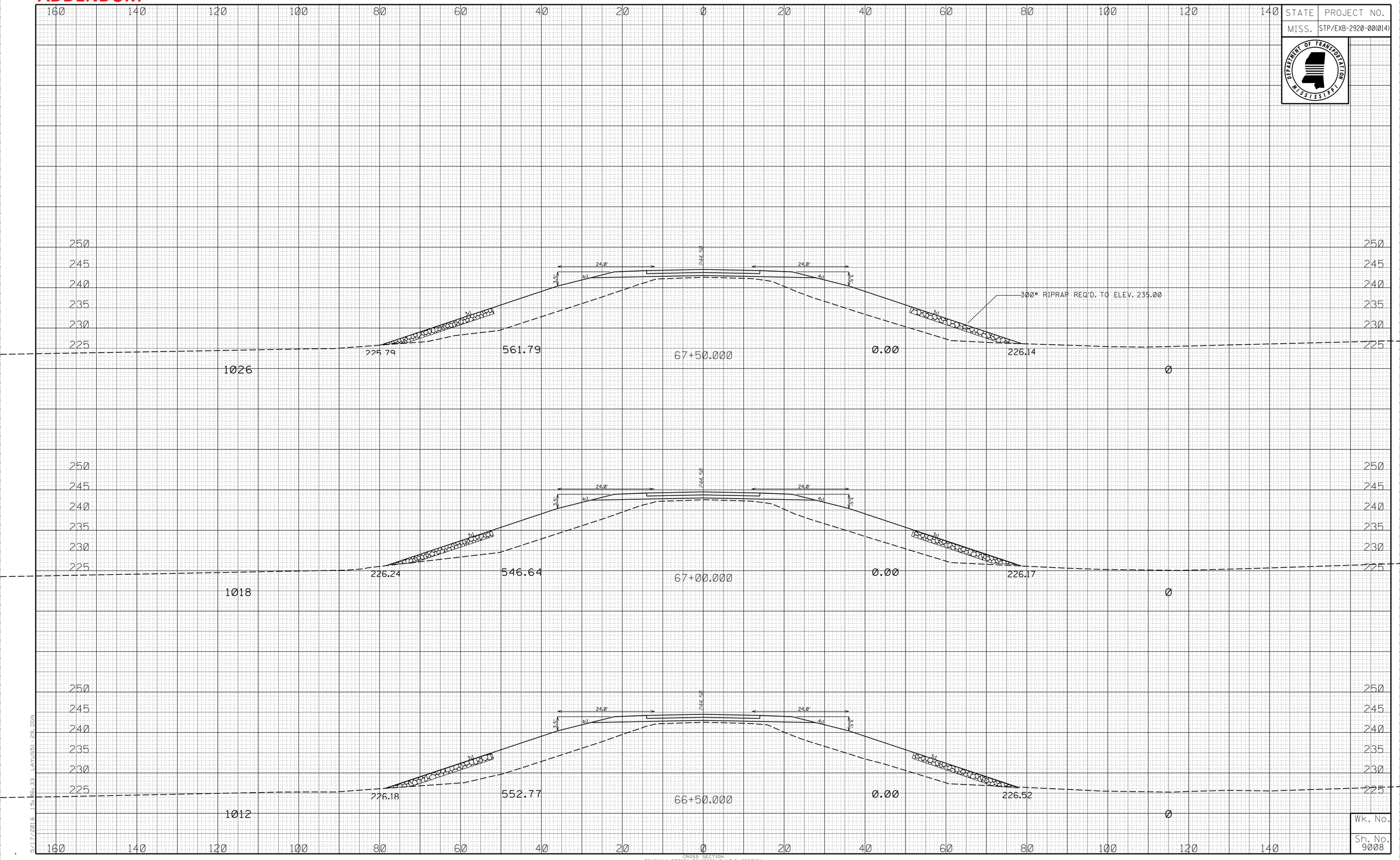
Sh. No. 9007

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



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Wk. No.

Sh. No. 9008

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI

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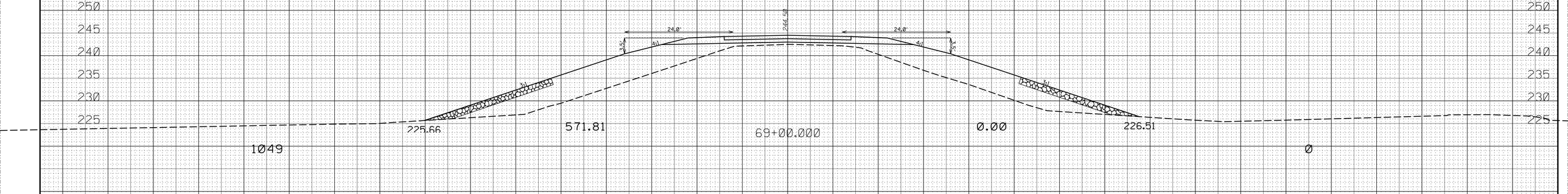

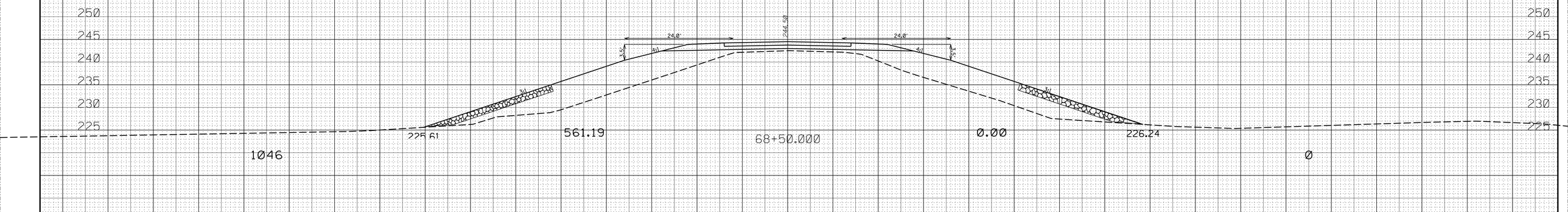

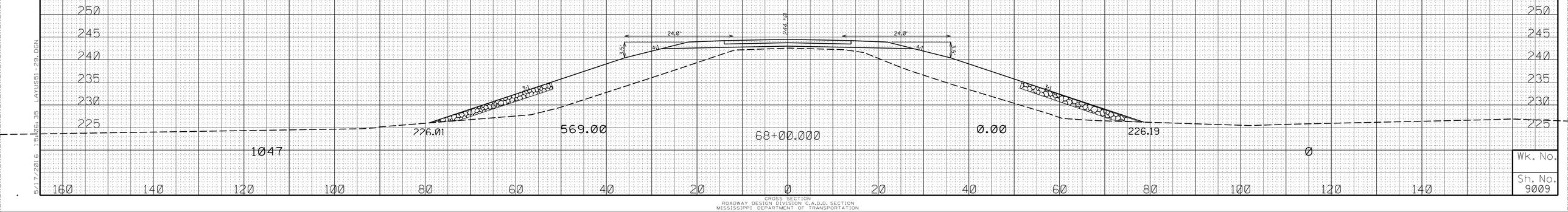

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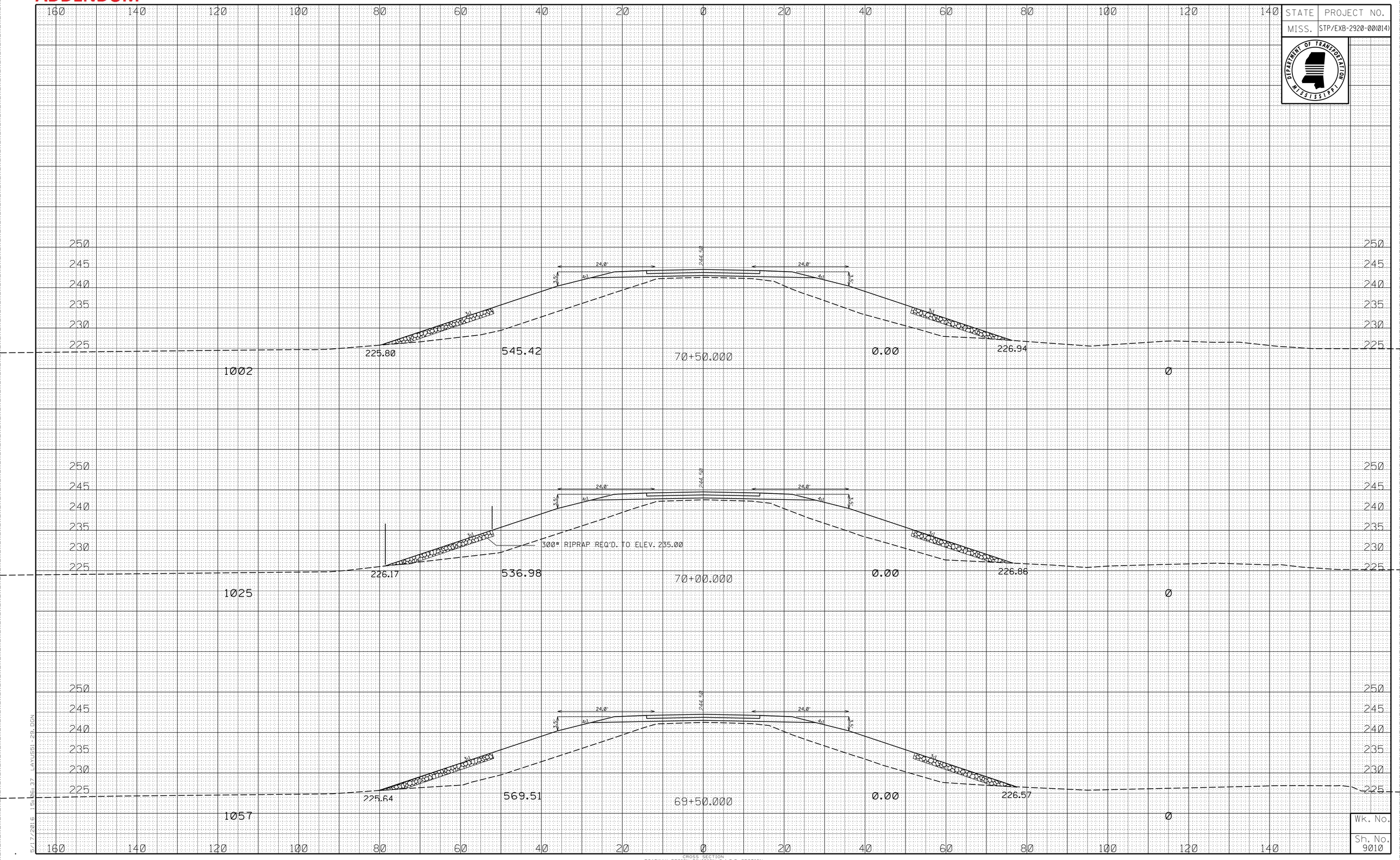
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9009

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION
MISSISSIPPI



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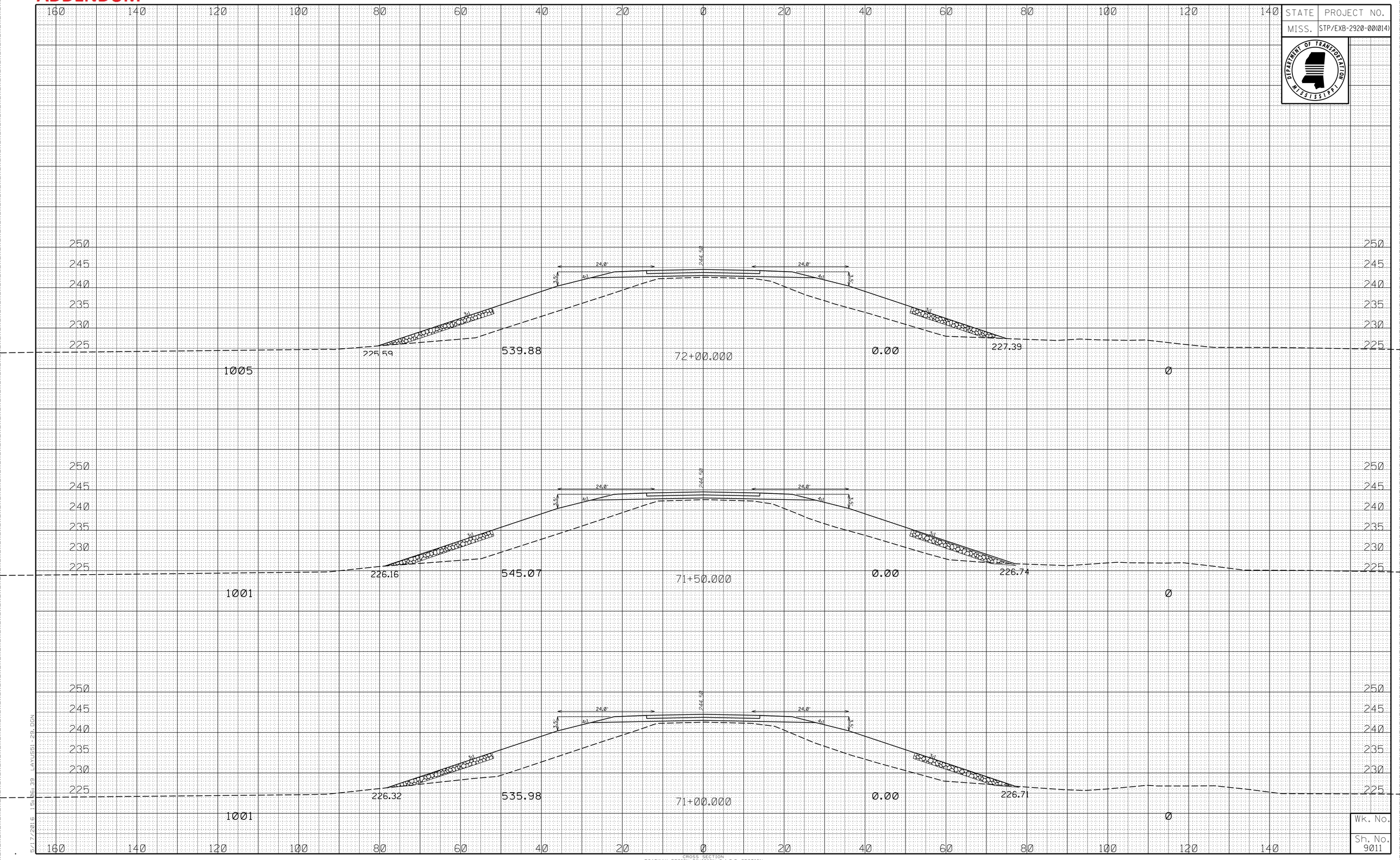
Wk. No.
Sh. No. 9010

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



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Wk. No.

Sh. No. 9011

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI

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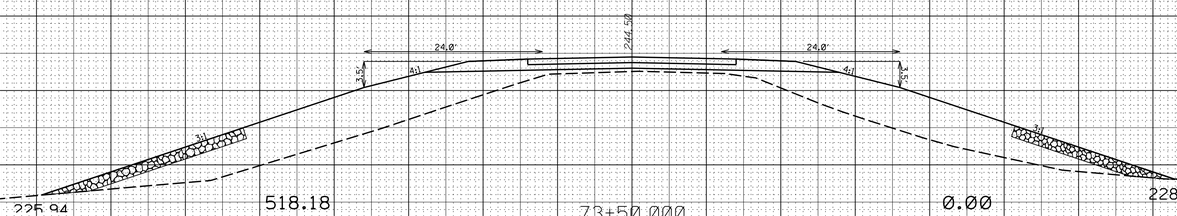

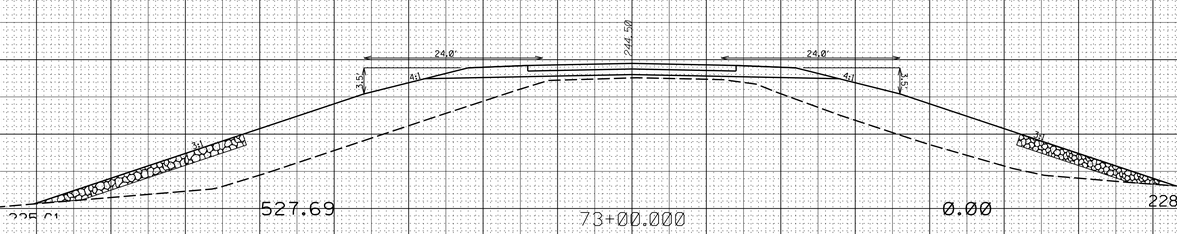

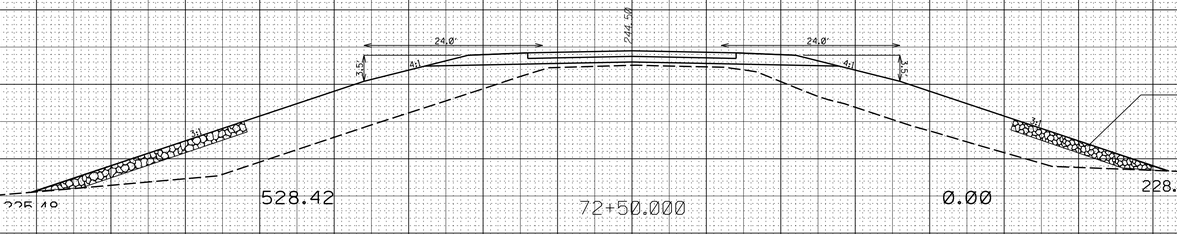

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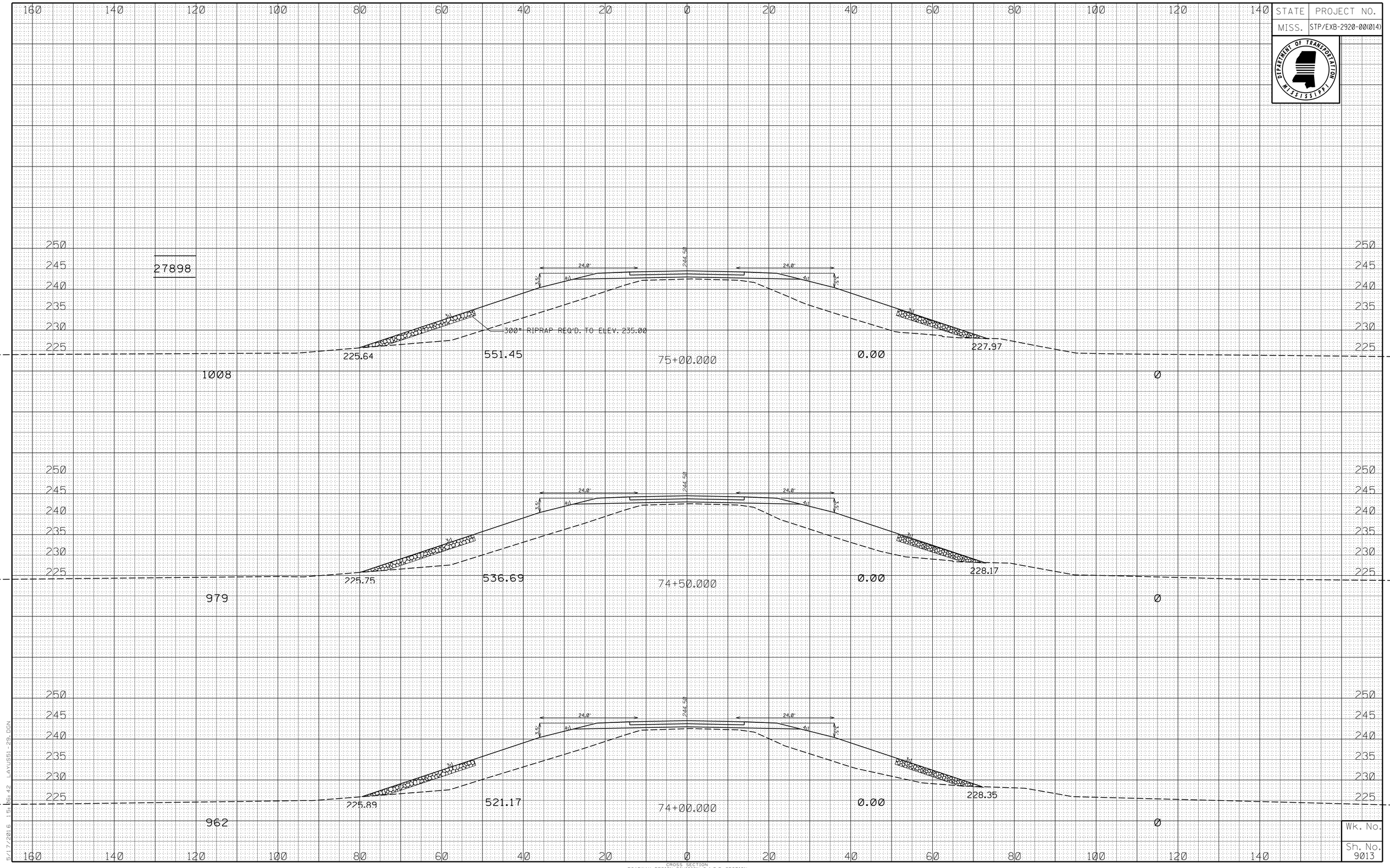
Wk. No.
Sh. No. 9012

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



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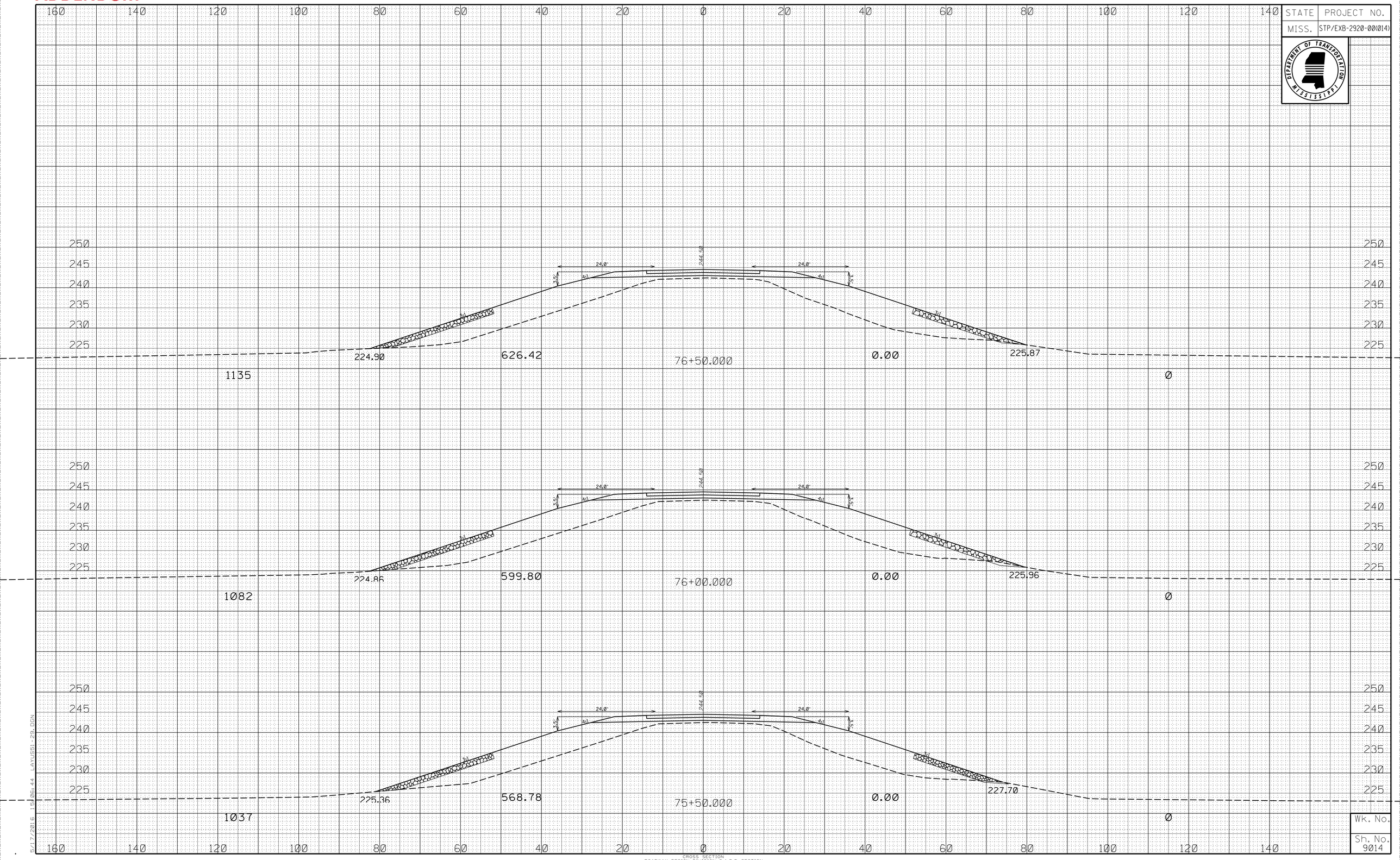
Wk. No.
Sh. No. 9013

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



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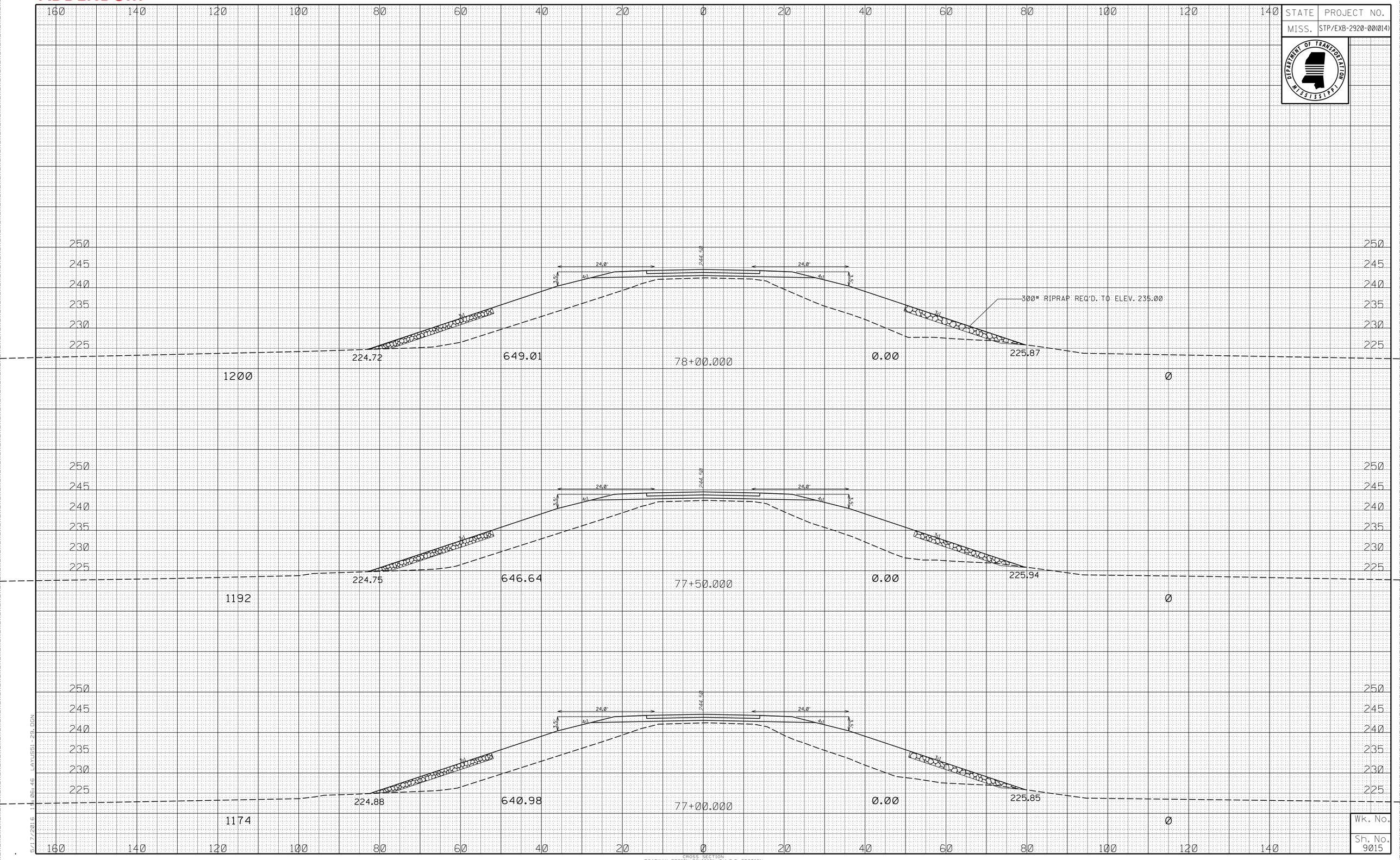
Wk. No.
Sh. No. 9014

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



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Wk. No.	
Sh. No.	9015

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

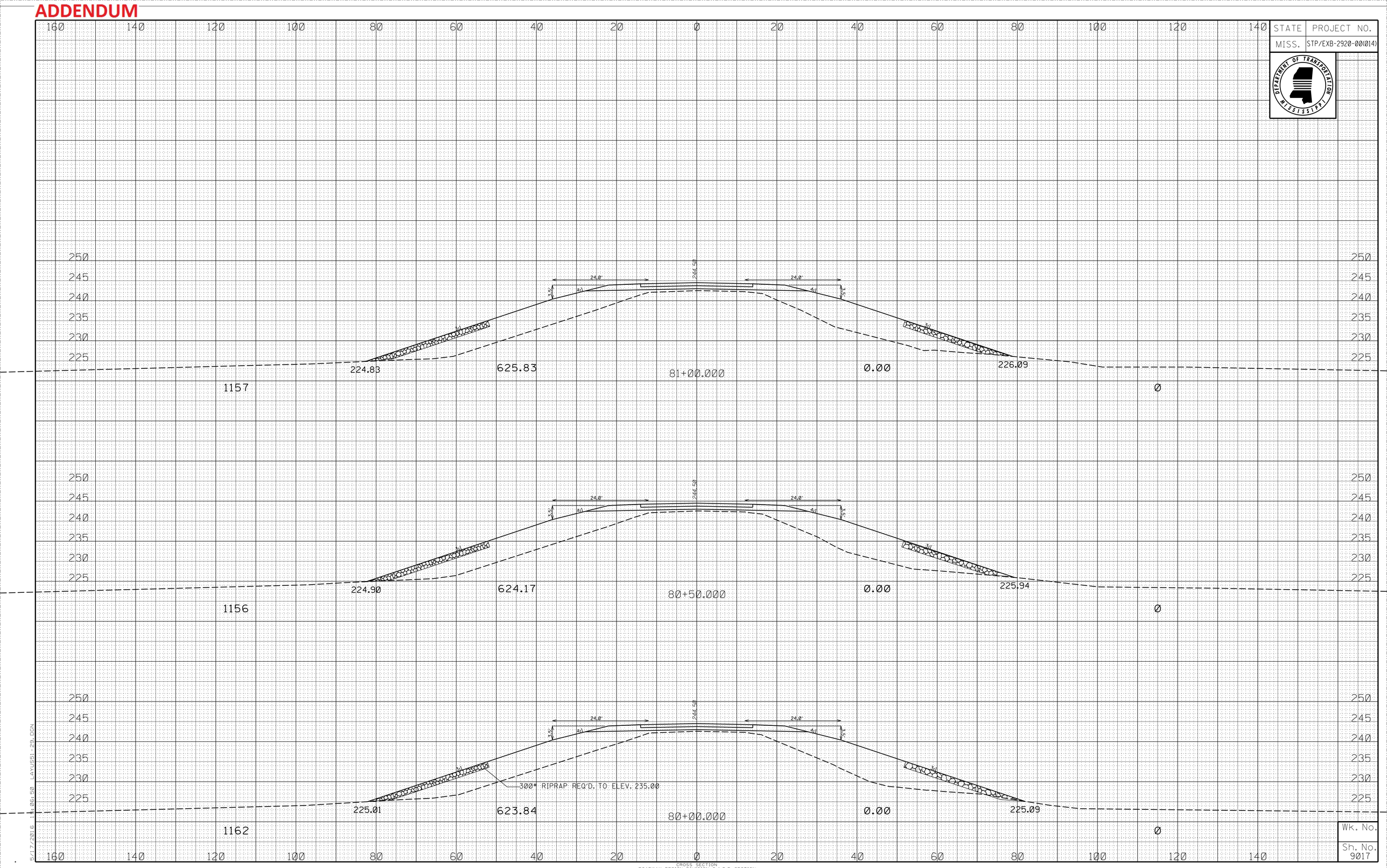
ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



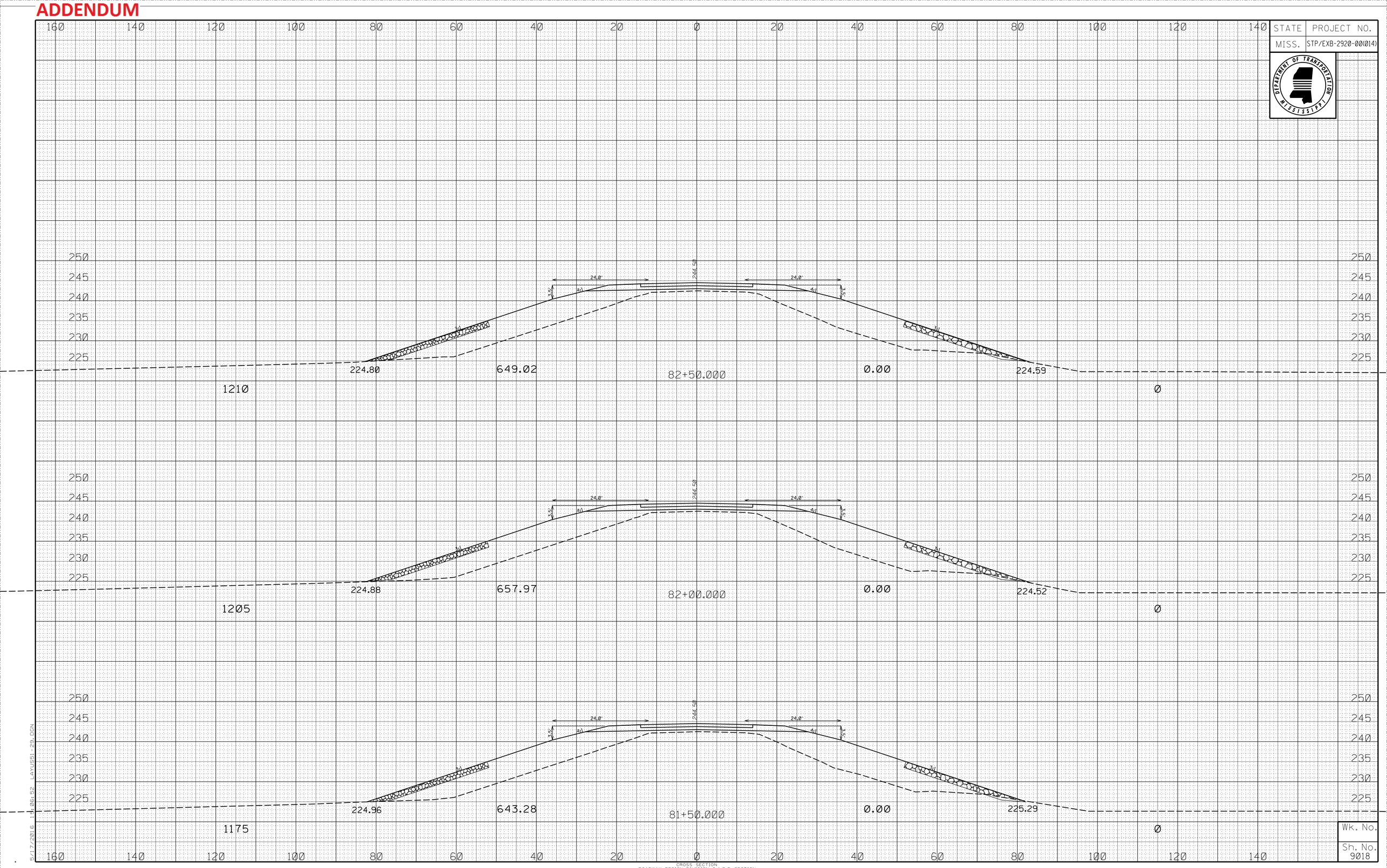
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9017

5/17/2016 11:06:50 LAYOUT1 - 29.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



5/17/2016 1:06:52 LAYOUT1 29.DGN

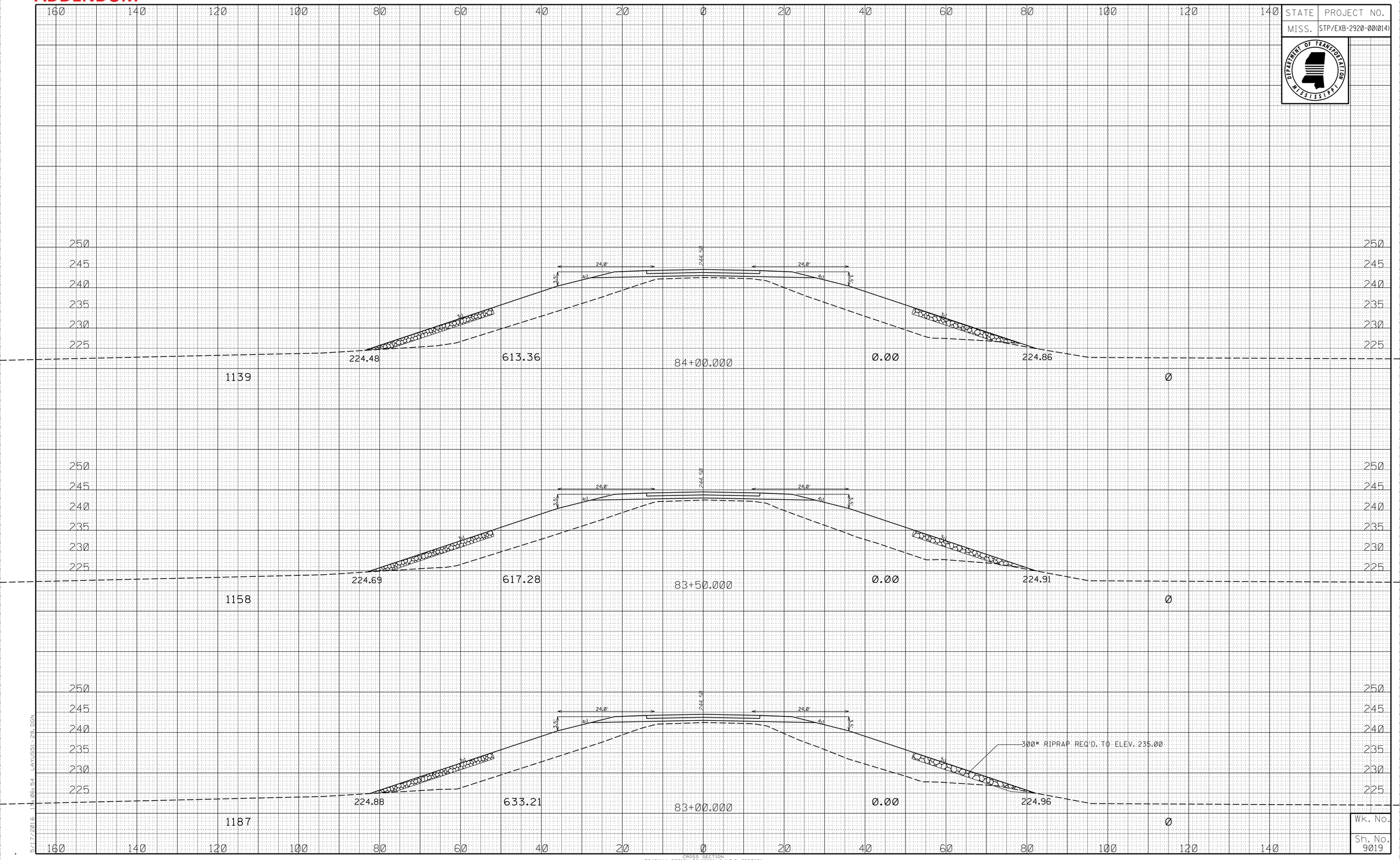
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9018

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



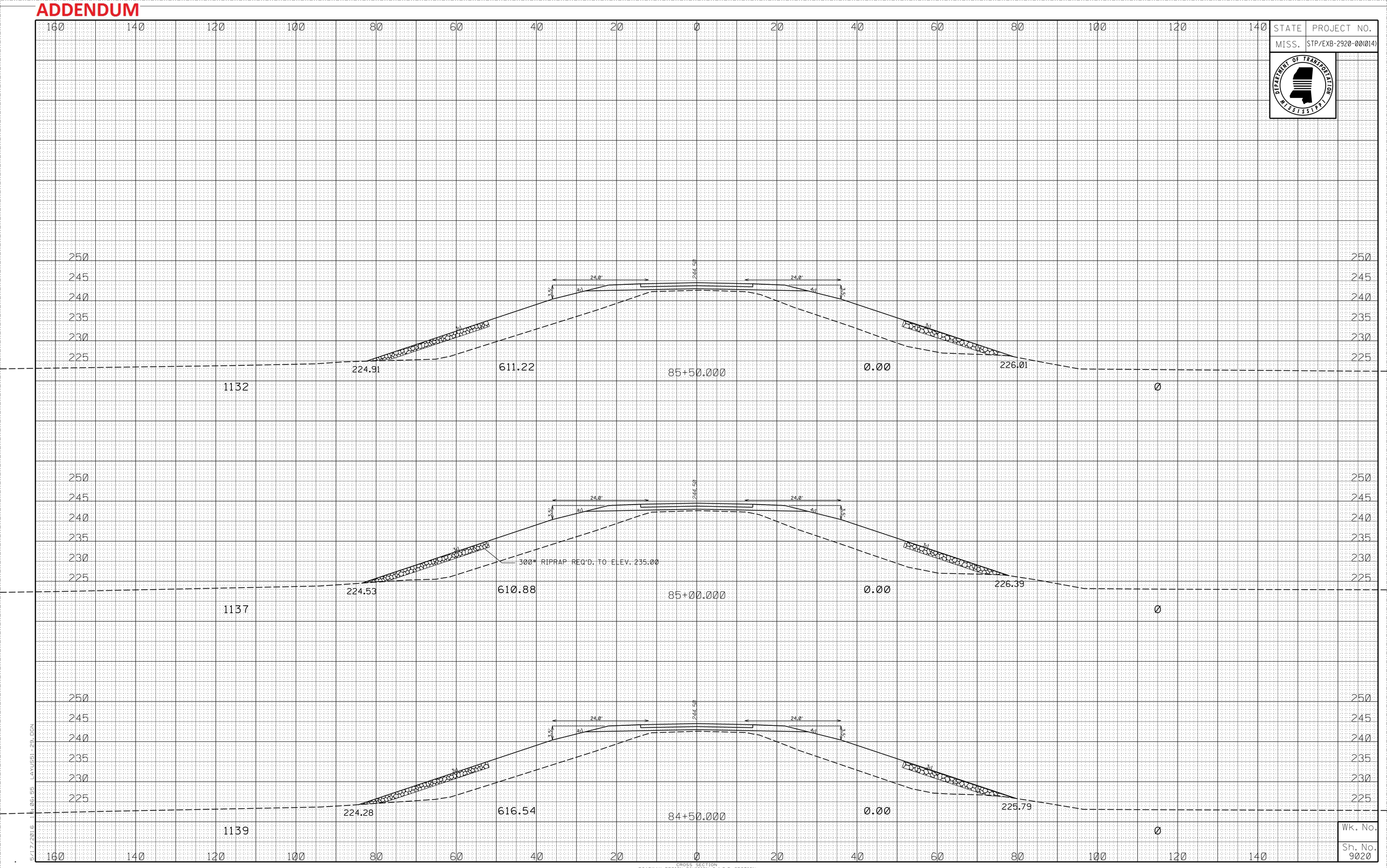
5/17/2016 14:06:54 LAYOUT: 29.DGN

Wk. No.
Sh. No. 9019

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



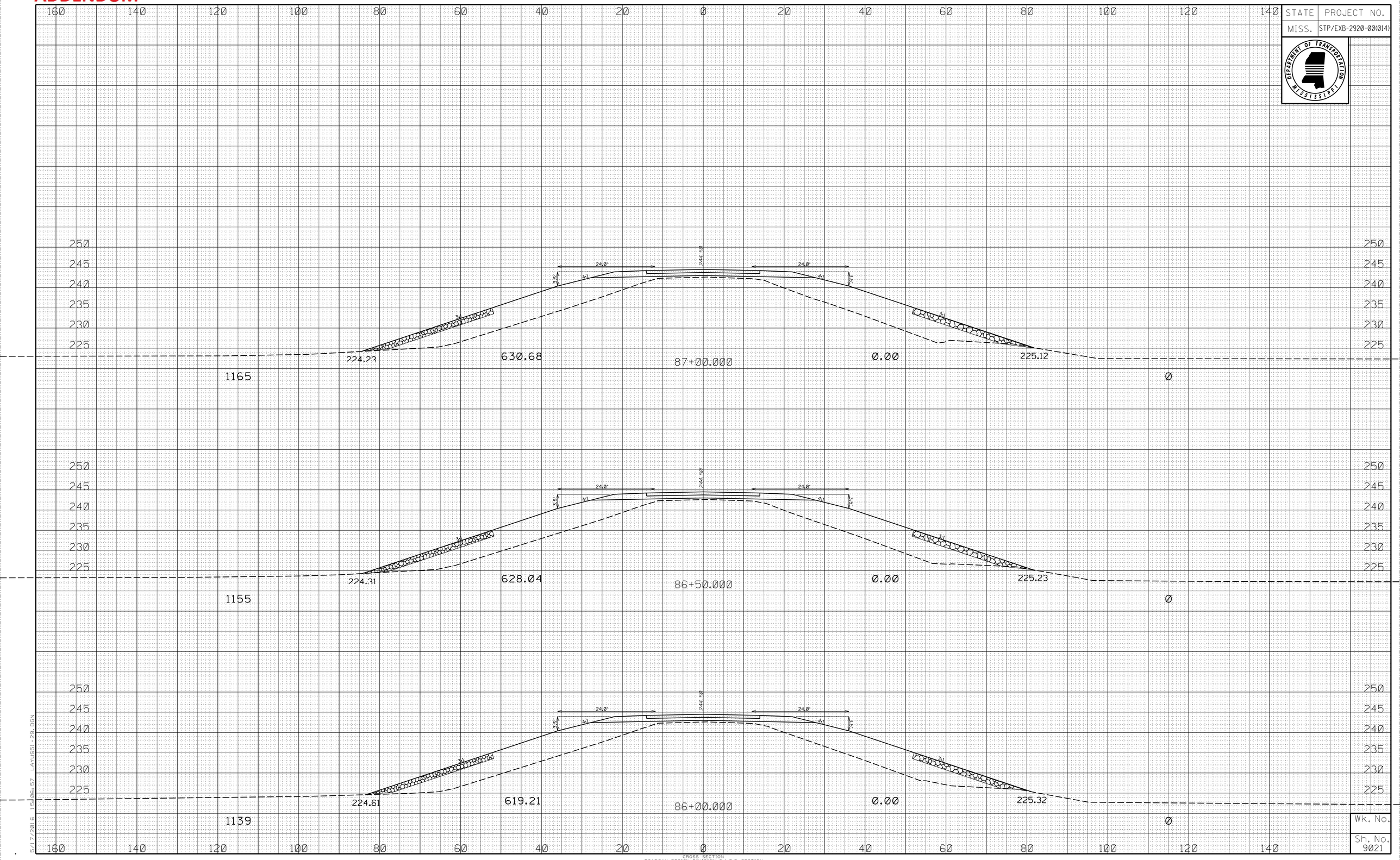
5/17/2016 11:05:55 LAYOUT1 - 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9020

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



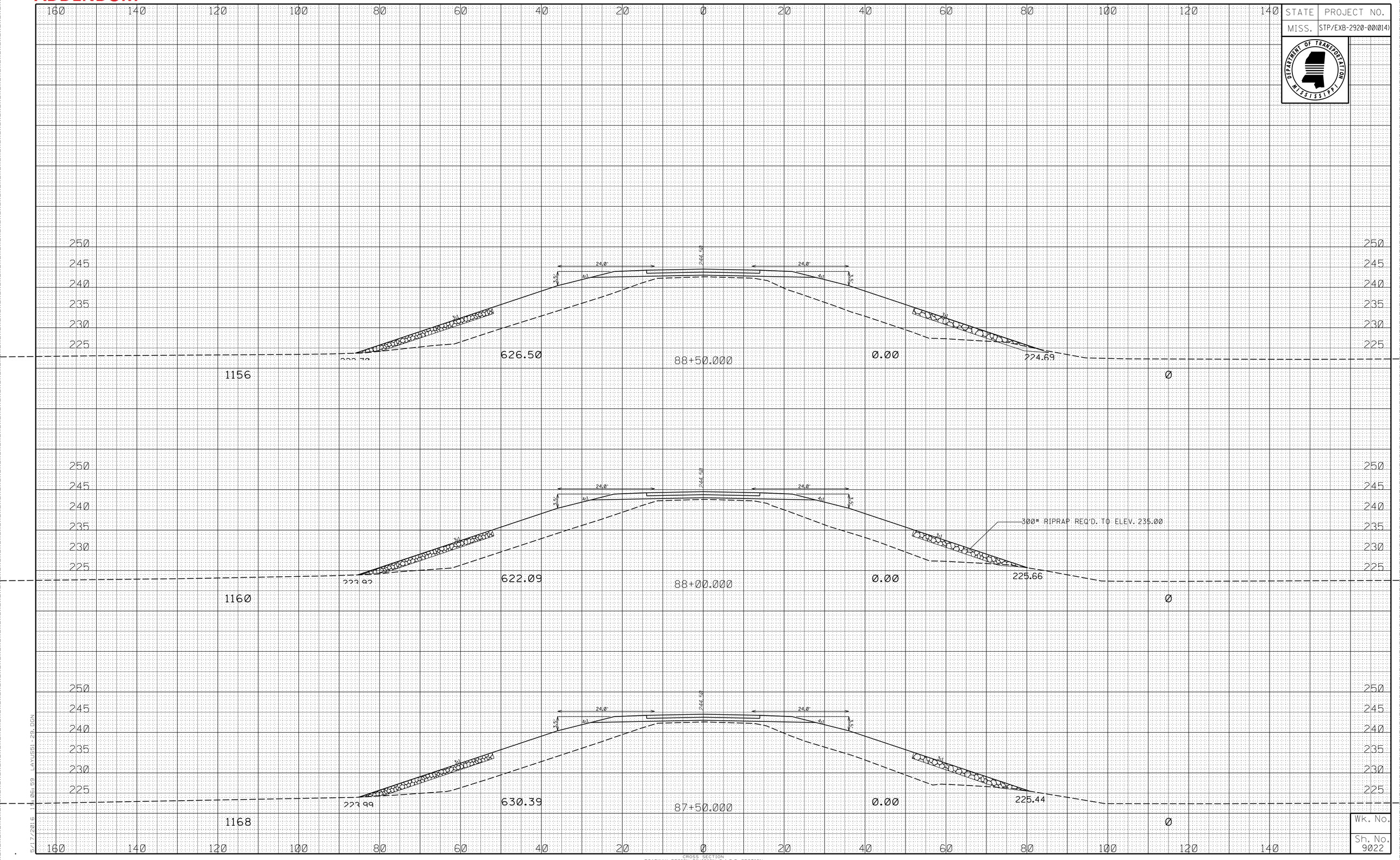
5/17/2016 15:06:57 LAYOUT1 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9021

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



5/17/2016 14:06:59 LAYOUT1 - 29.DGN

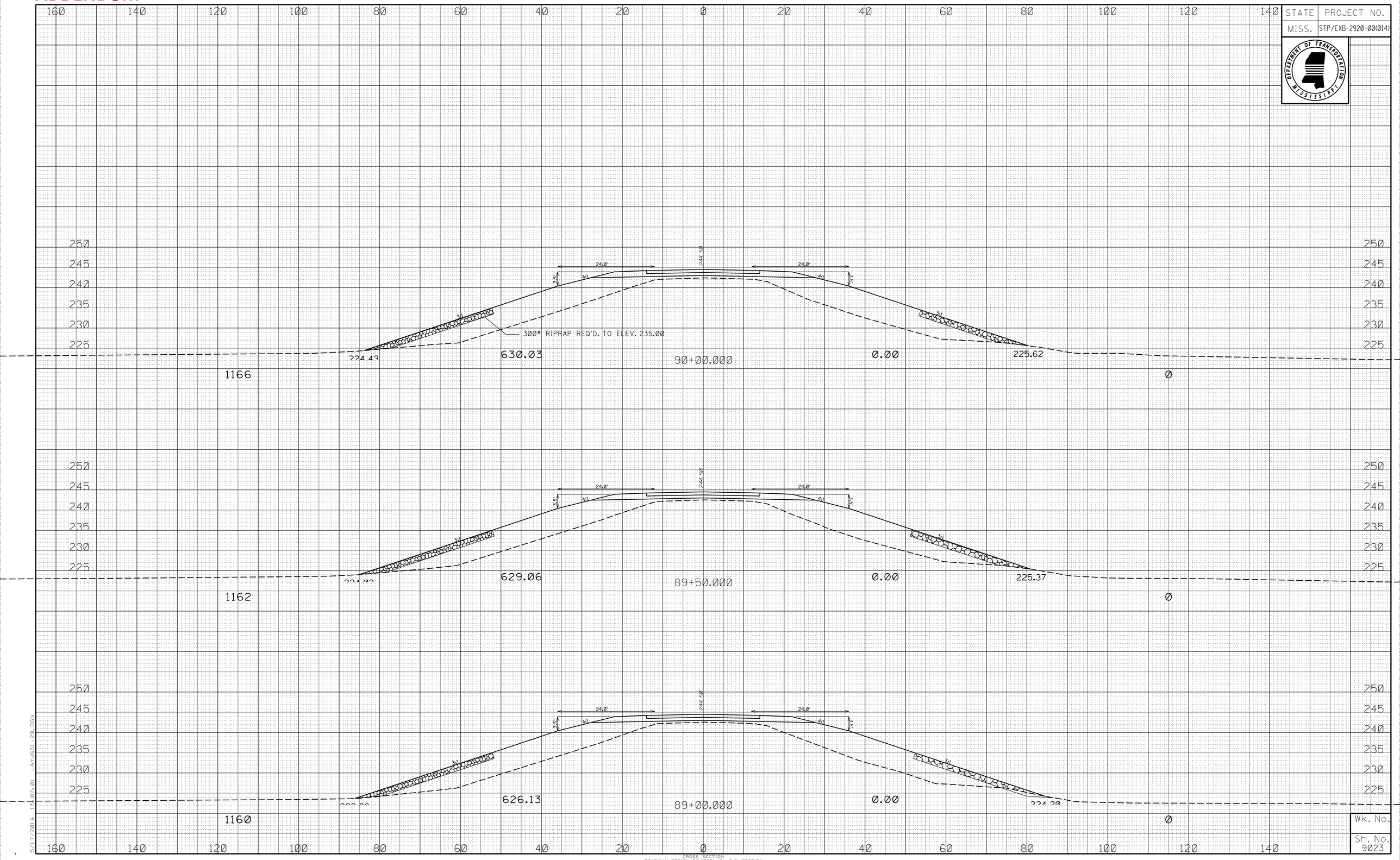
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9022

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI



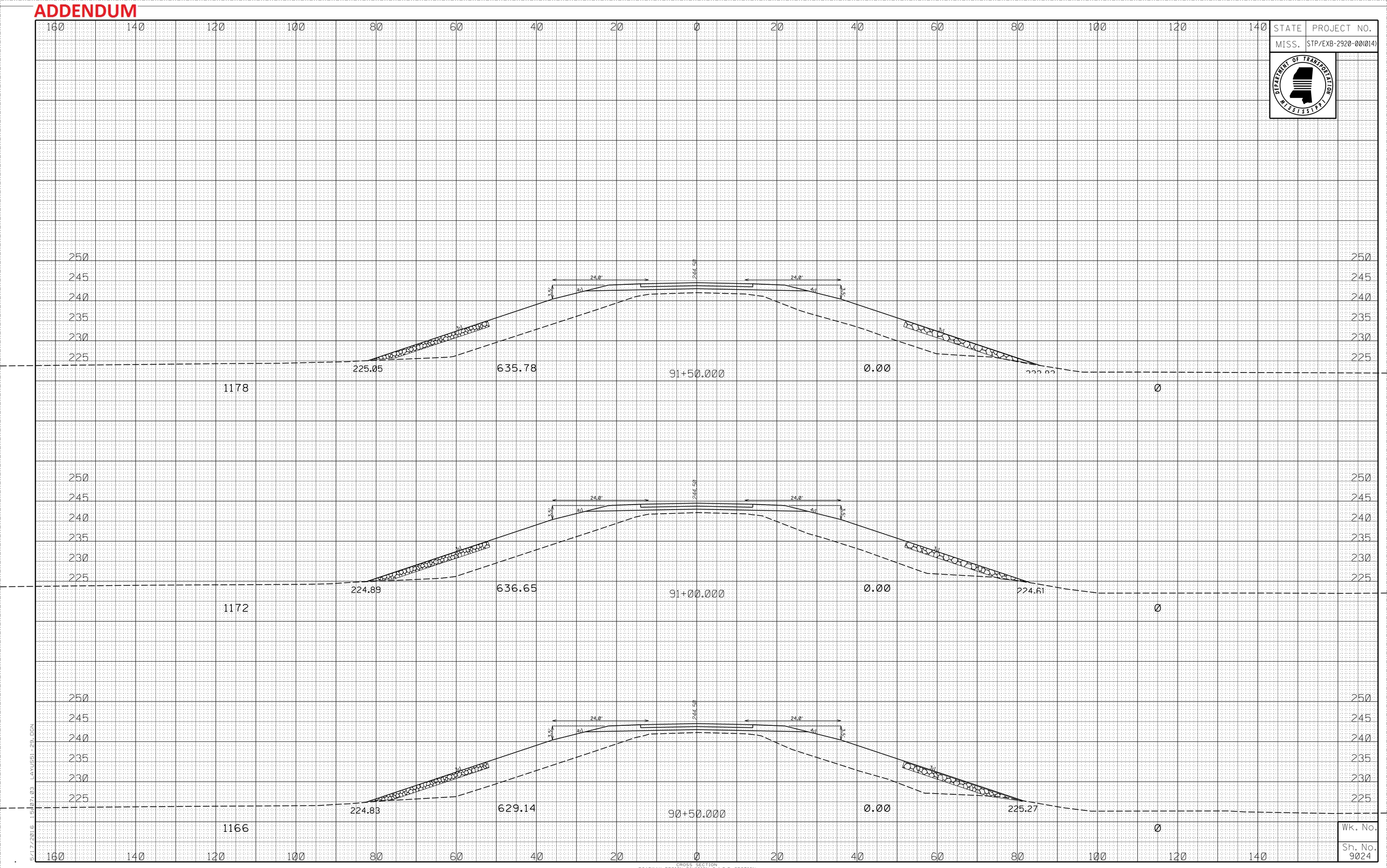
5/17/2016 15:07:01 LAYOUT1-29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.	
Sh. No.	9023

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



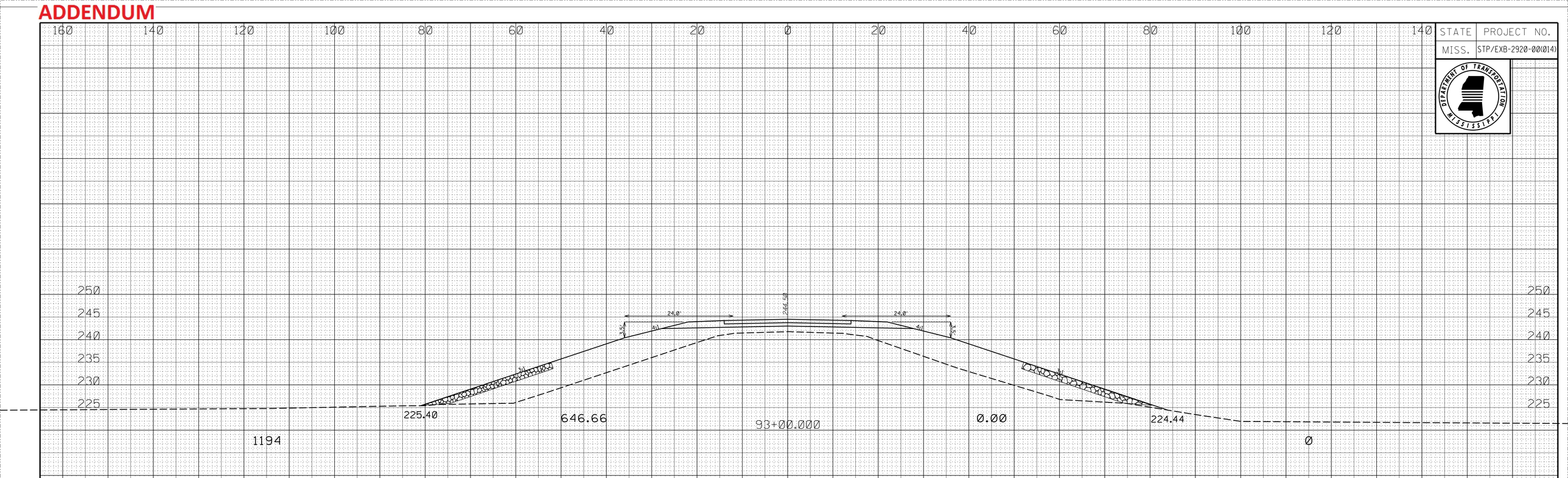
5/17/2016 15:07:03 LAYOUT1 - 29.DGN

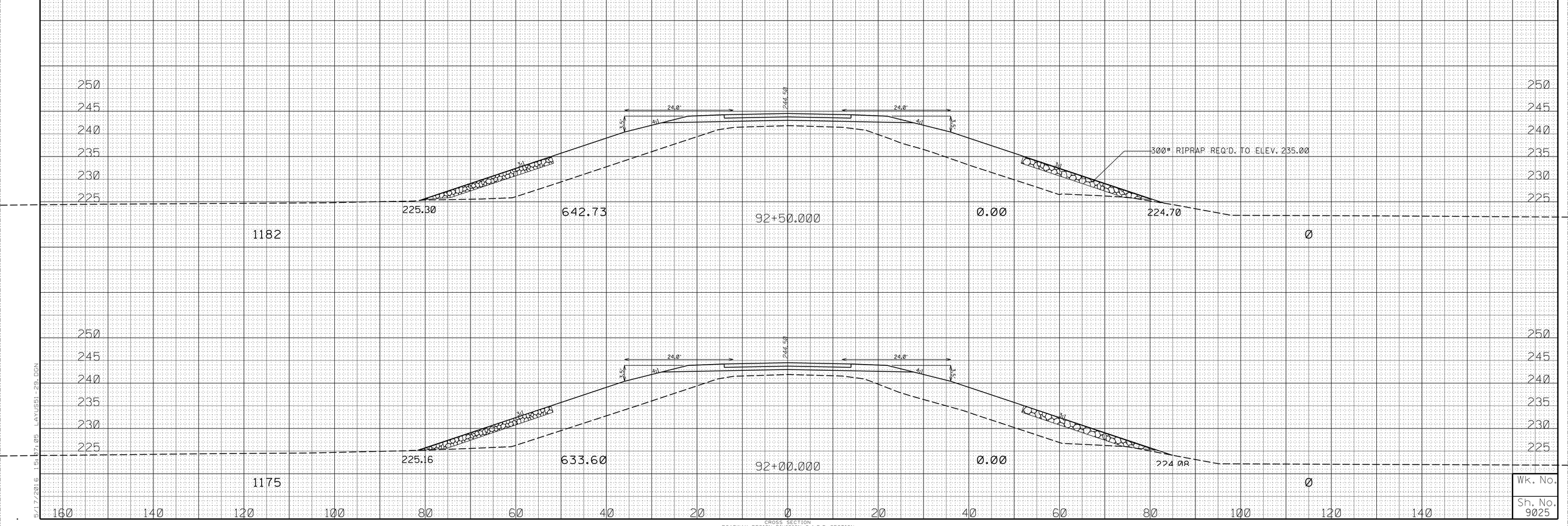
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9024

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)





5/17/2016 15:07:05 LAYOUT1 - 29.DGN

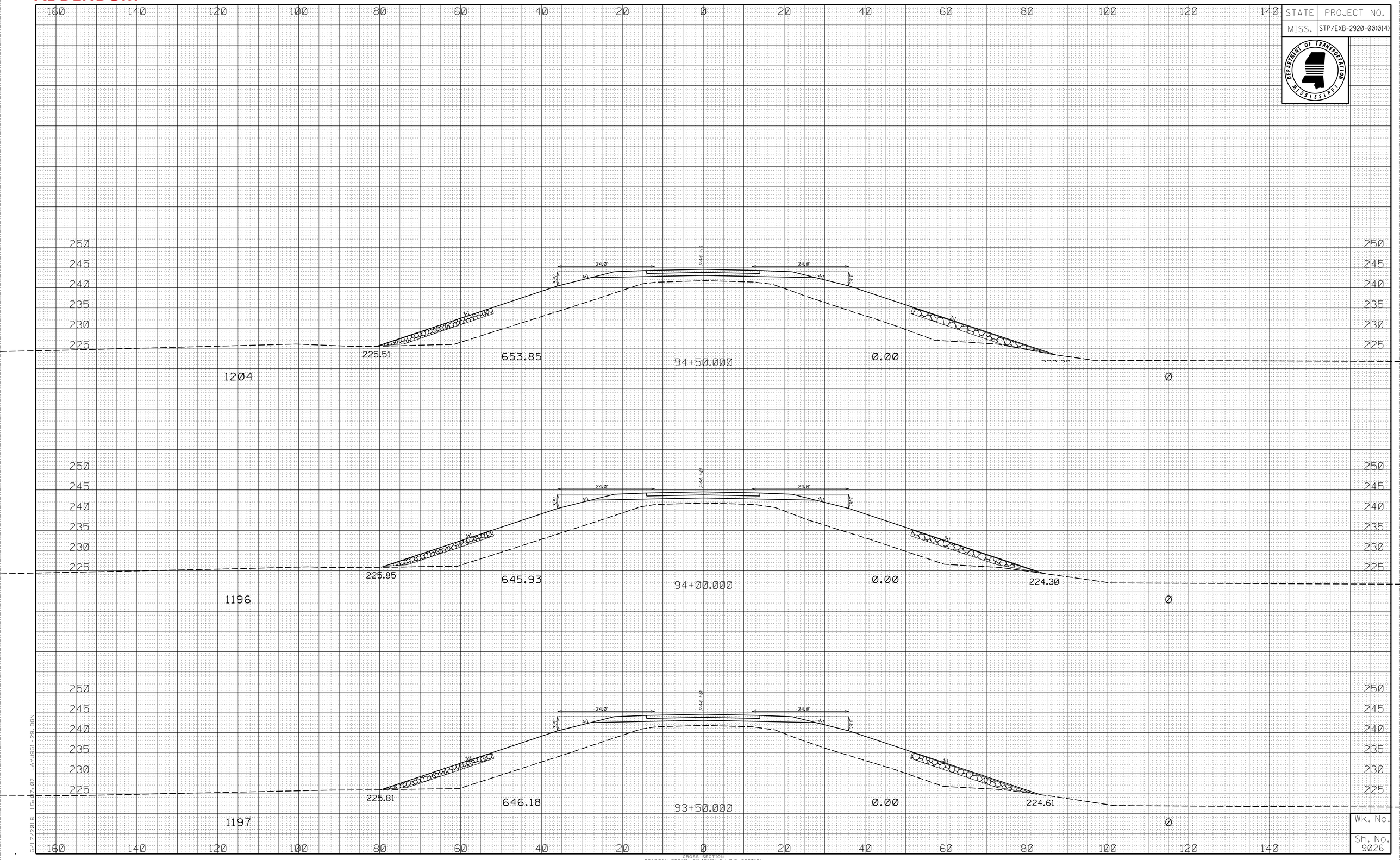
Wk. No.
Sh. No. 9025

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



5/17/2016 15:07:07 LAYUSS1-29.DGN

Wk. No.	
Sh. No.	9026

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

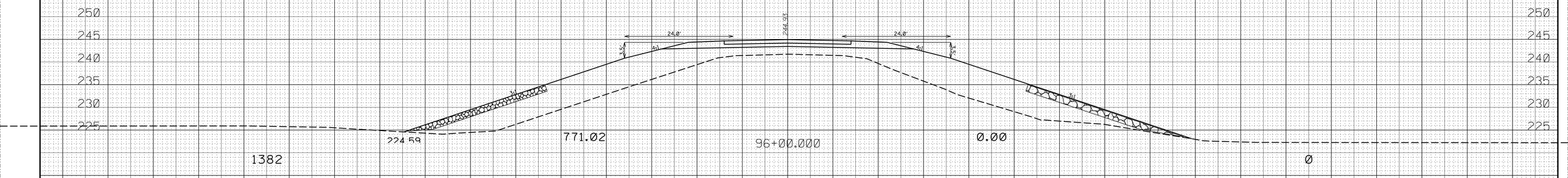
ADDENDUM

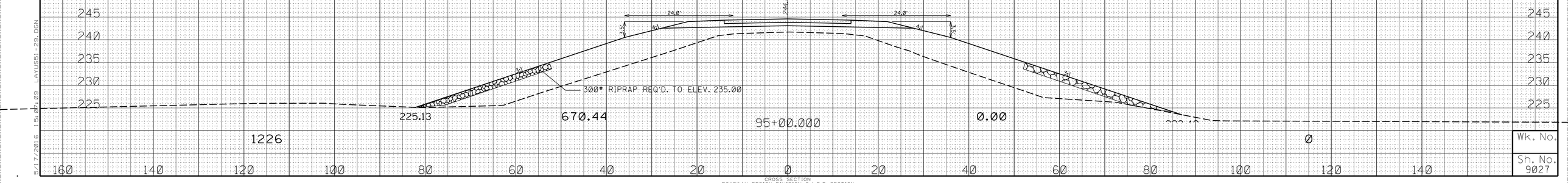
STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION · MISSISSIPPI

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

250 245 240 235 230 225





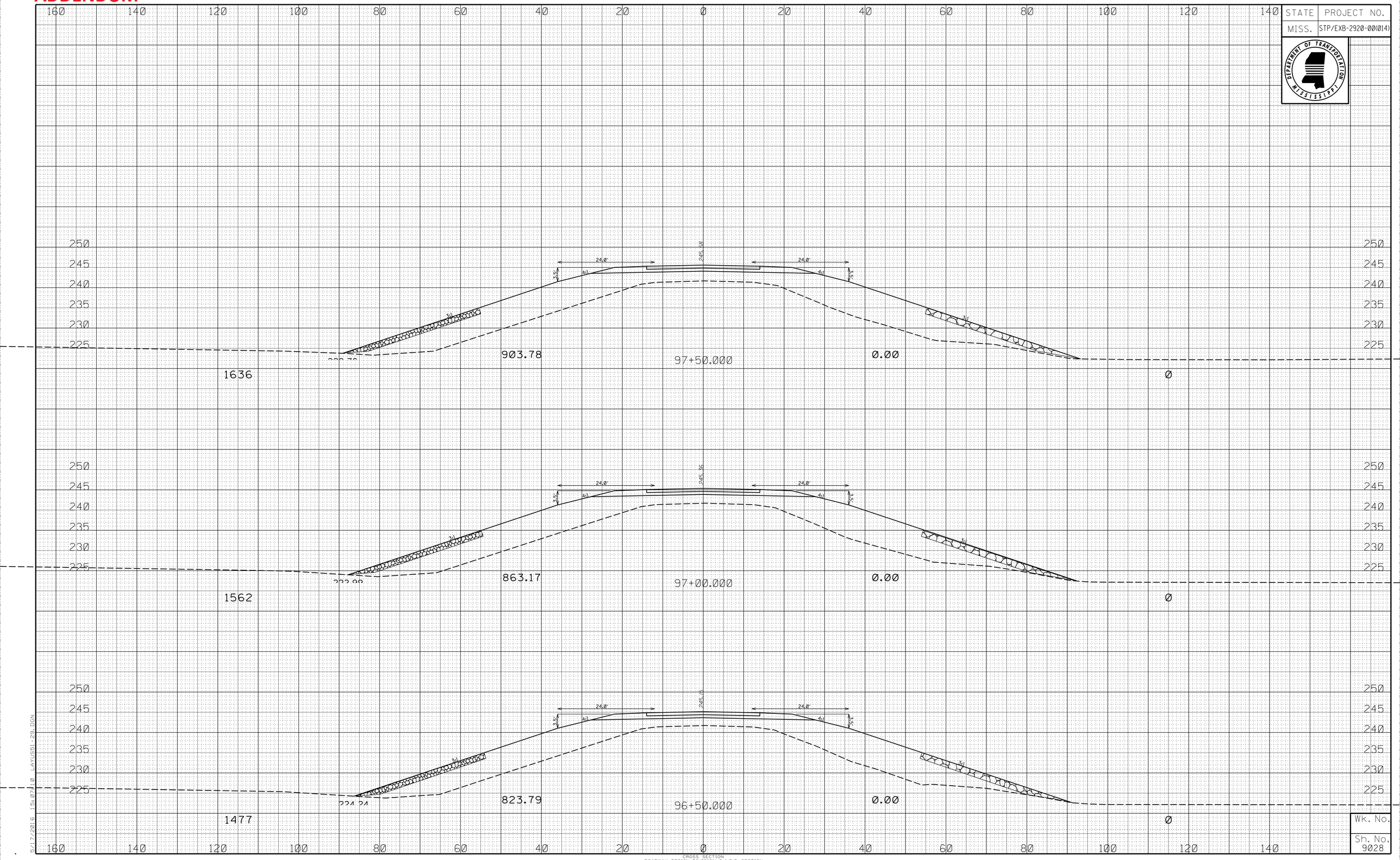
5/17/2016 15:07:09 LAYUSS1-29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9027

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

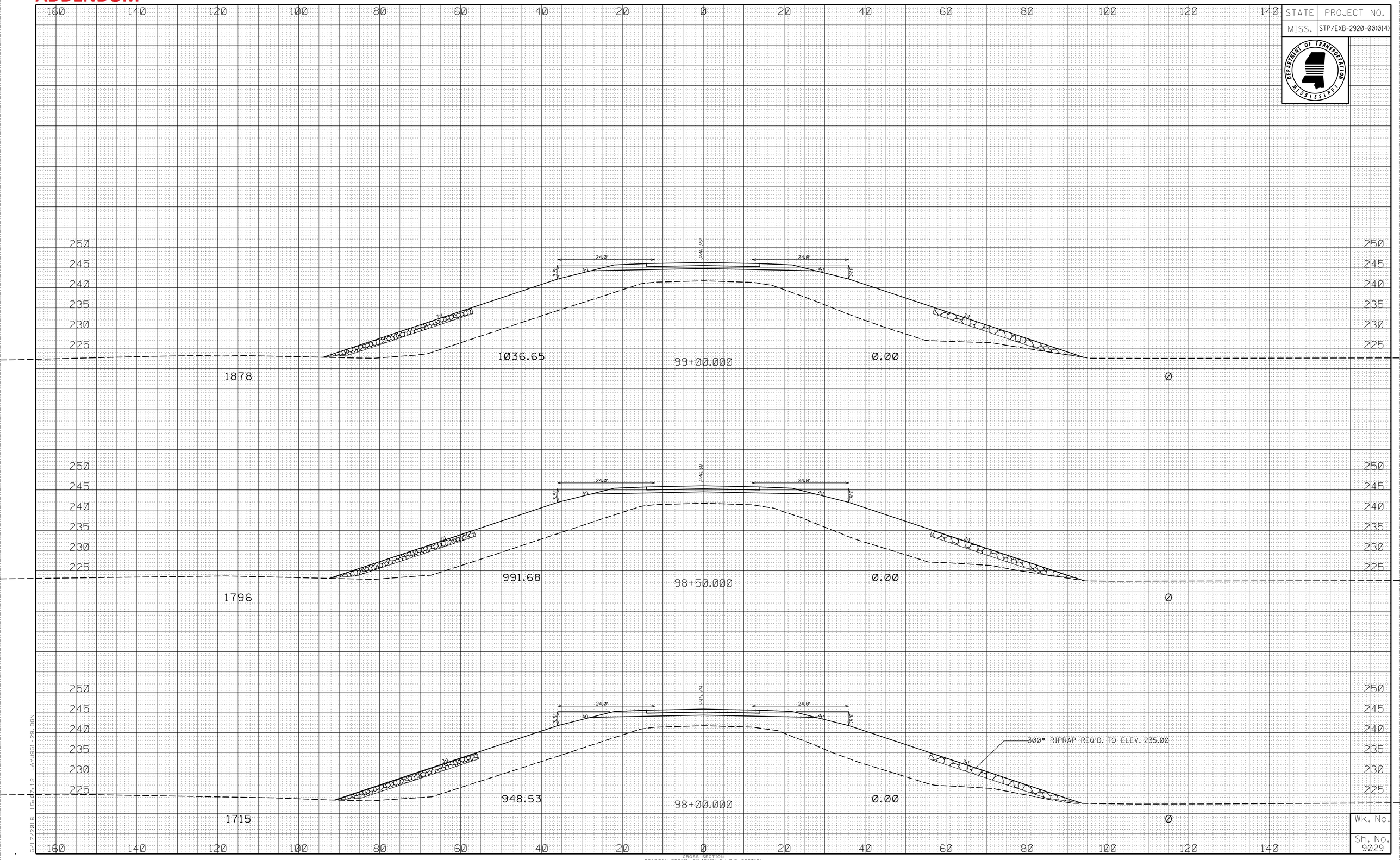
Wk. No.	
Sh. No.	9028

5/17/2016 15:07:10 LAYOUT1 - 29.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



5/17/2016 15:07:12 LAYUSS1-29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.	
Sh. No.	9029

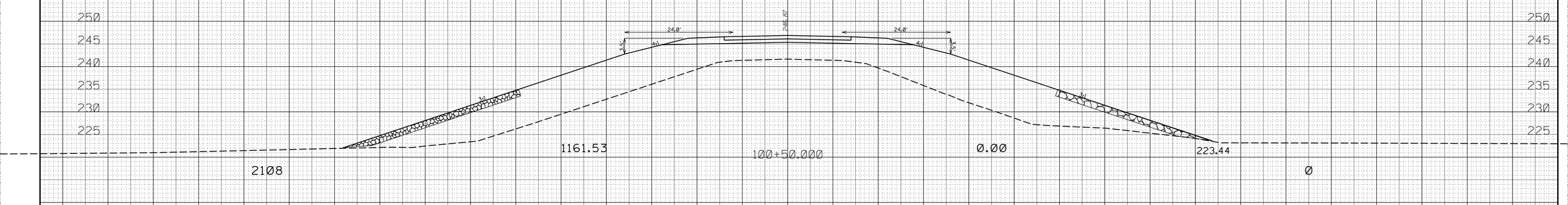
ADDENDUM

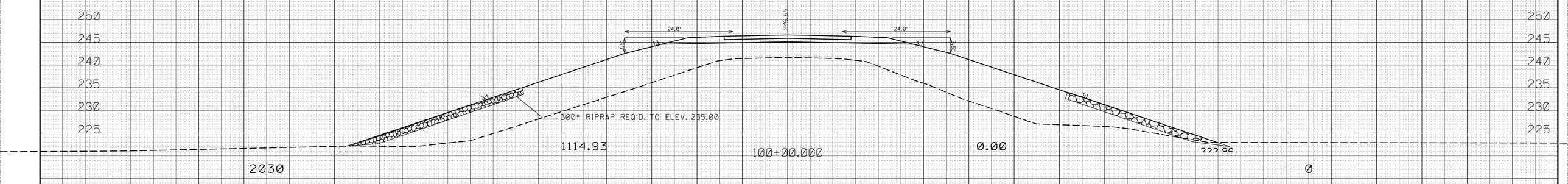
STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

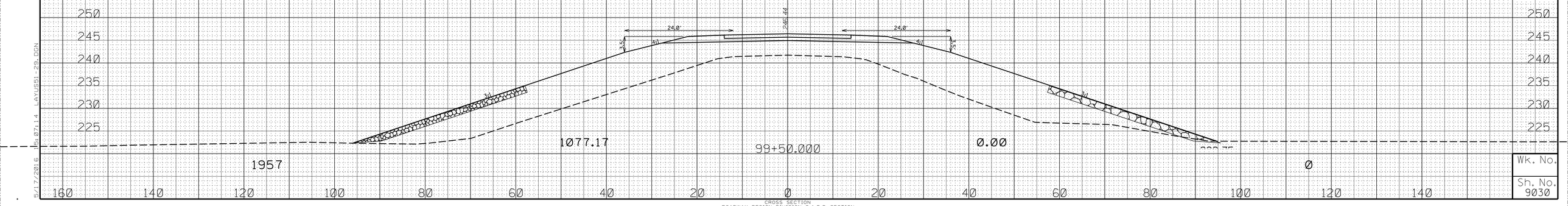
DEPARTMENT OF TRANSPORTATION · MISSISSIPPI

160 140 120 100 80 60 40 20 0 20 40 60 80 100 120 140

250 245 240 235 230 225







Wk. No.
Sh. No. 9030

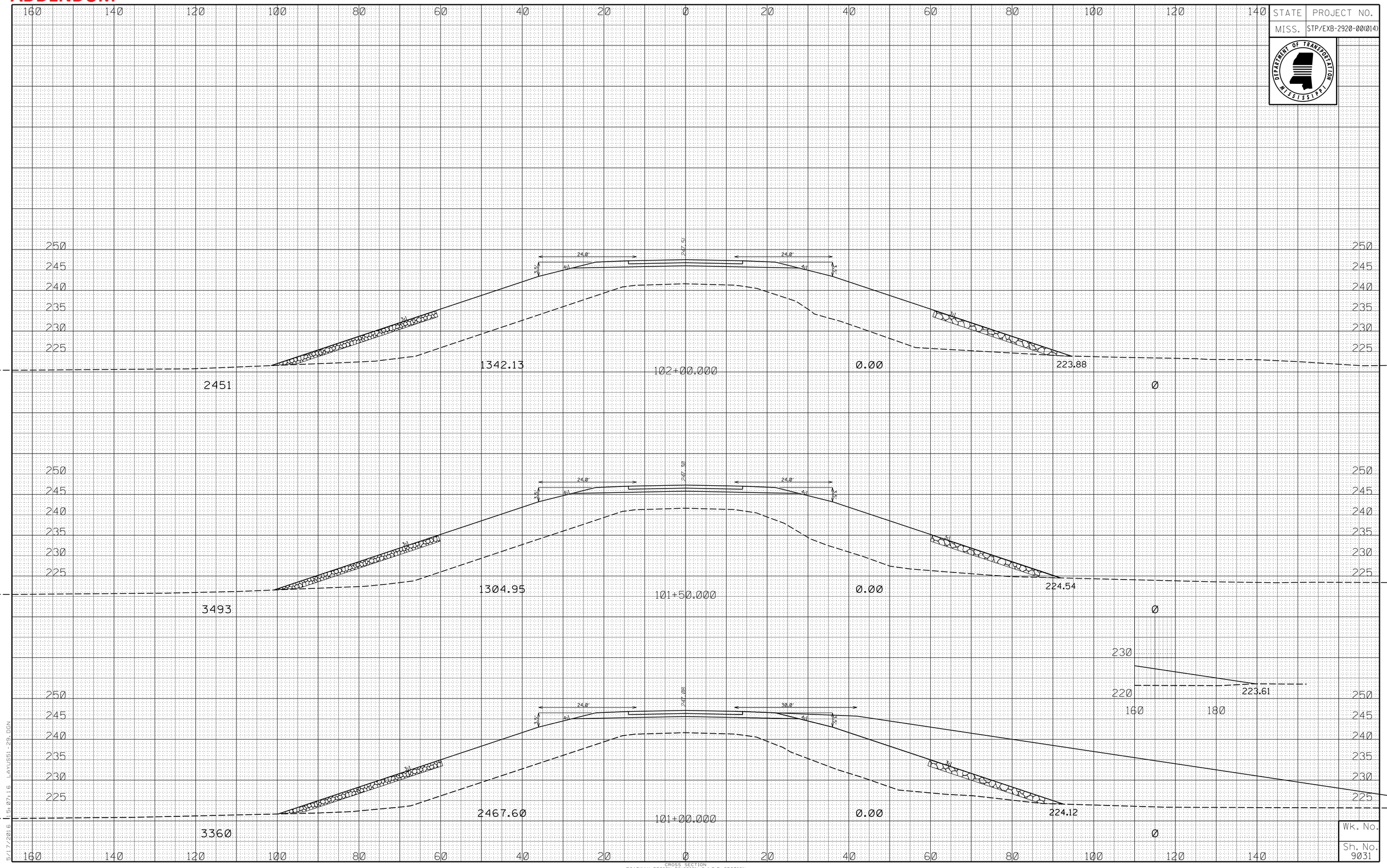
5/17/2016 15:07:14 LAYOUT1 - 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION
MISSISSIPPI



5/17/2016 15:07:16 LAYOUS1 - 29.DGN

Wk. No.

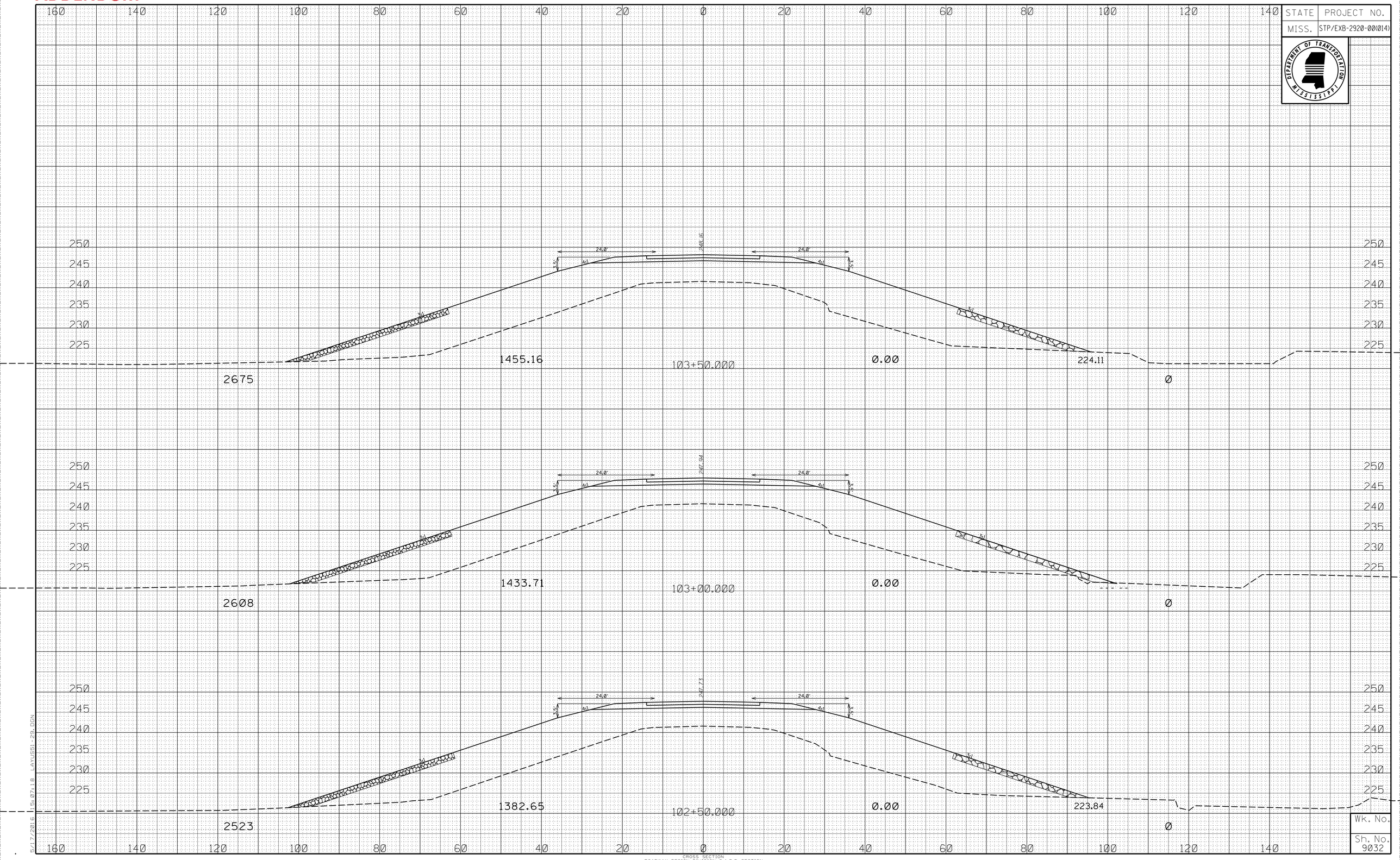
Sh. No. 9031

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



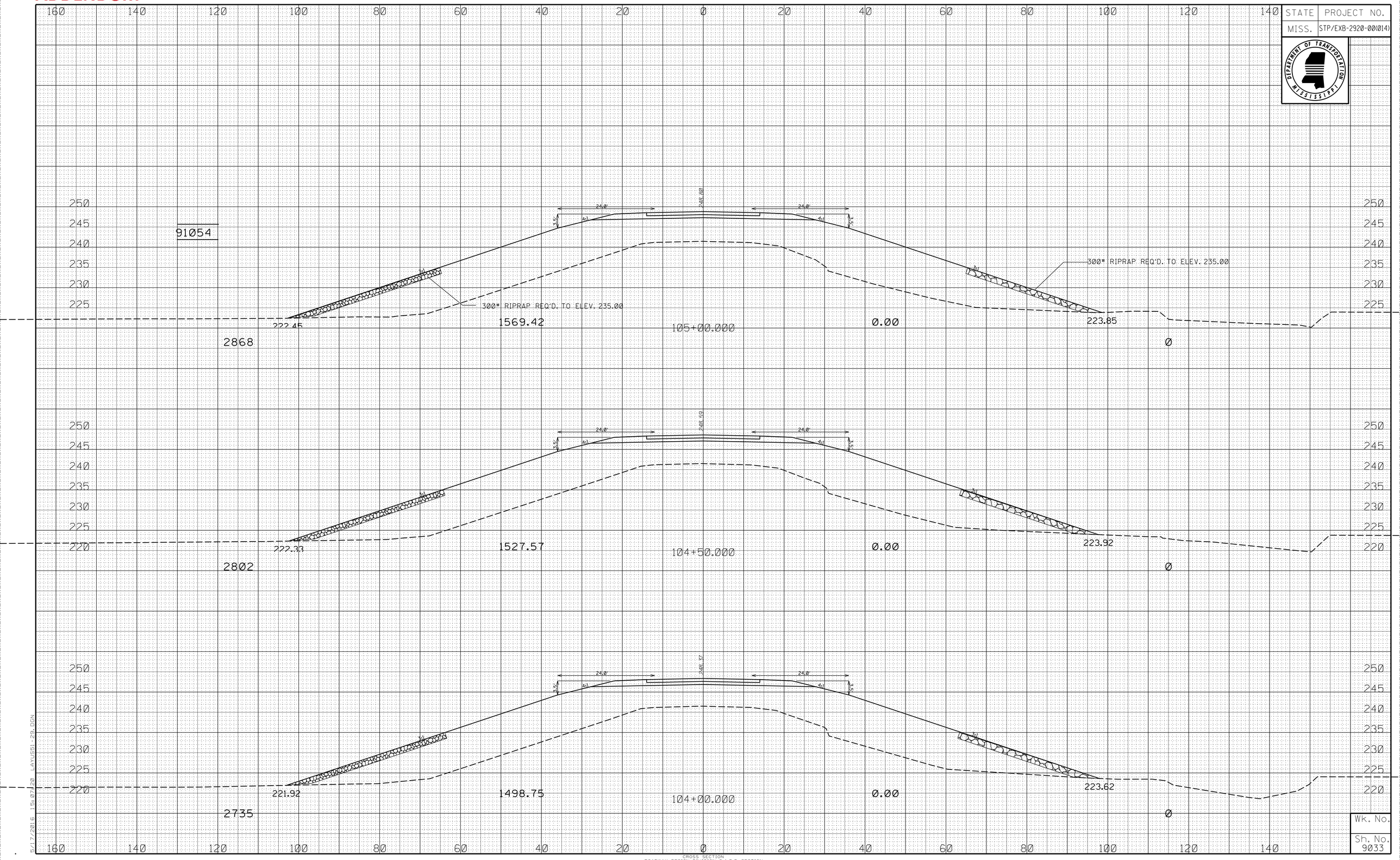
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9032

5/17/2016 15:07:18 LAYOUT1 - 29.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



5/17/2016 15:07:28 LAYUSS1-29.DGN

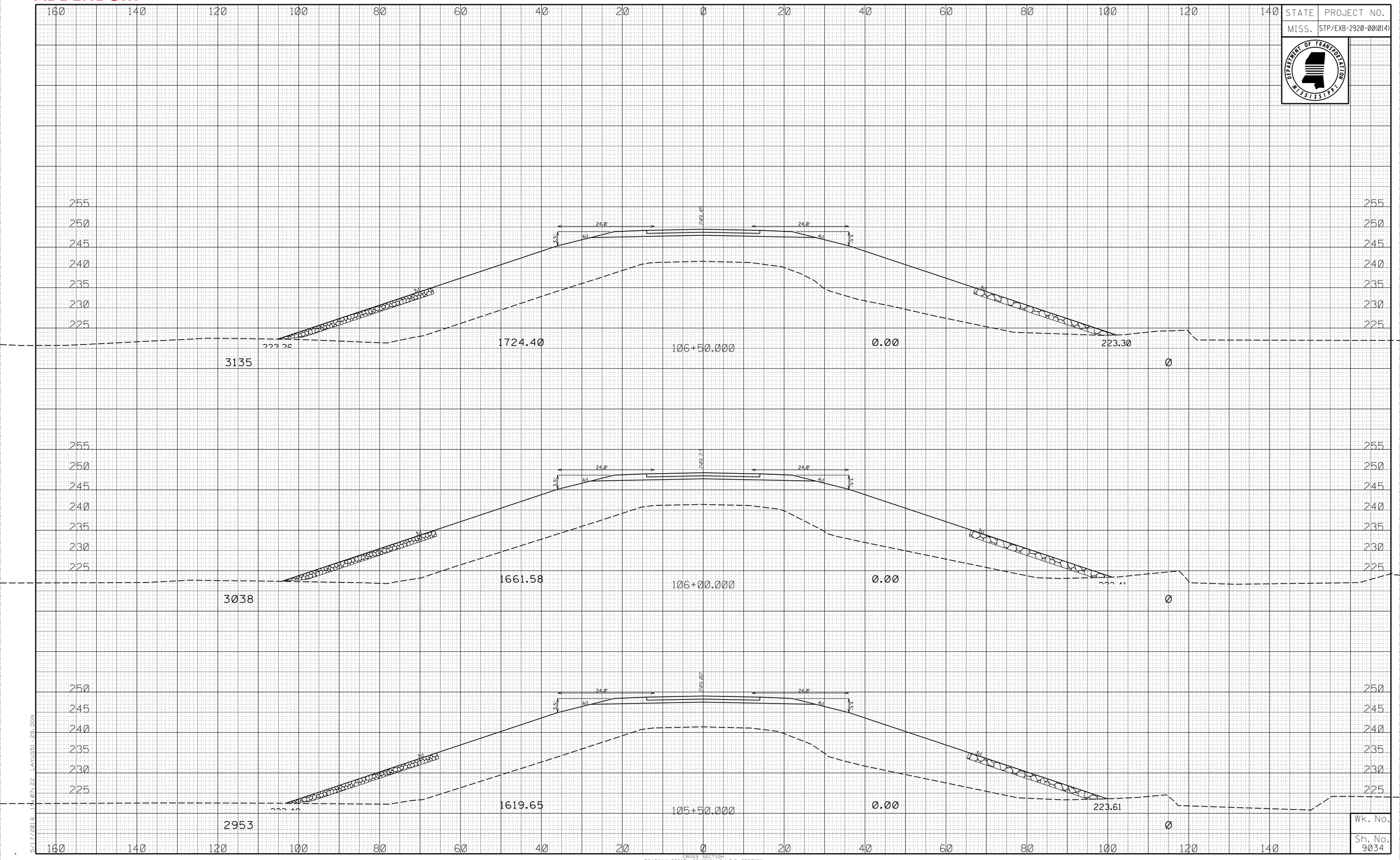
CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9033

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



5/17/2016 14:07:22 LAYUSS1-29.DGN

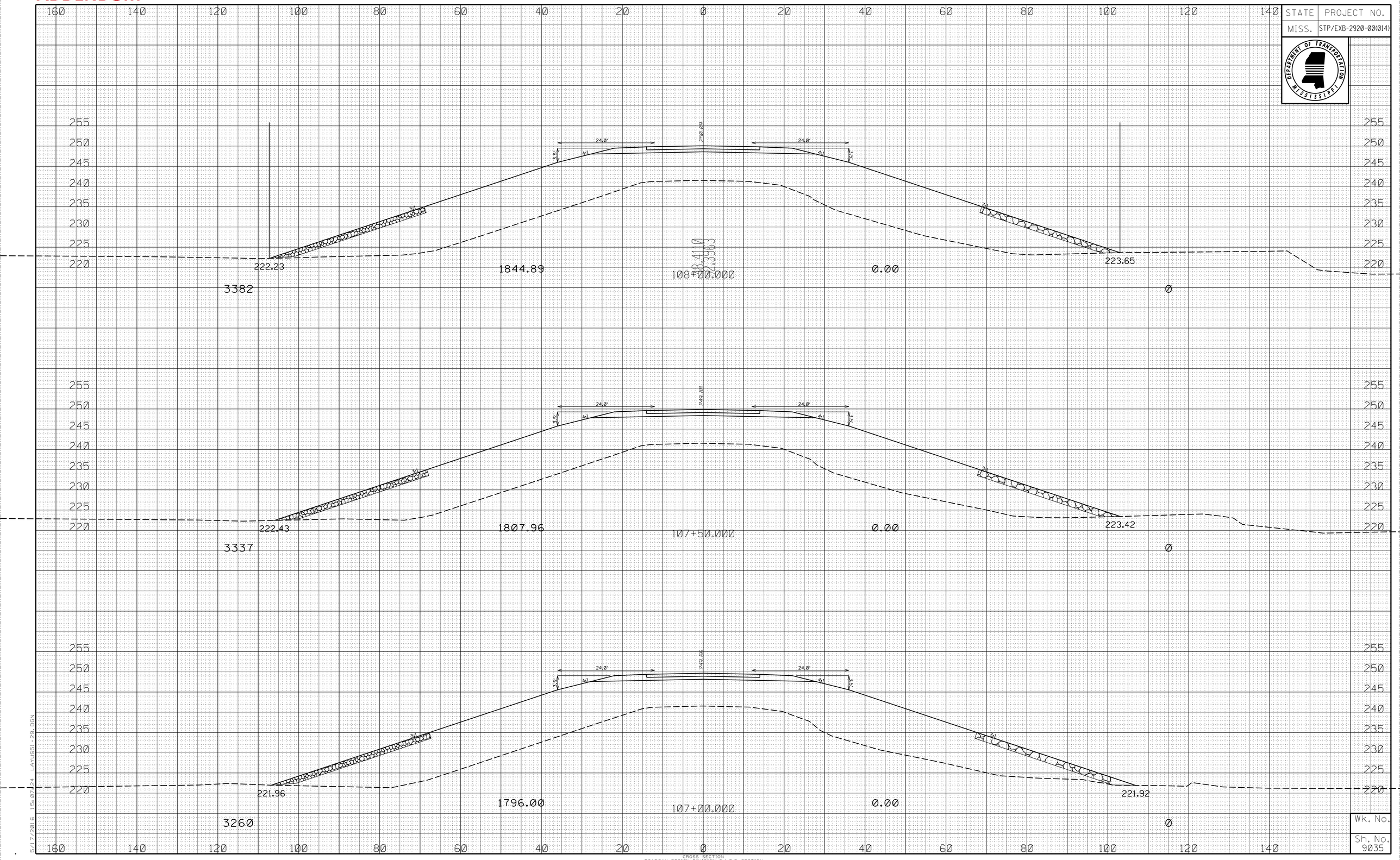
Wk. No.
Sh. No. 9034

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



Wk. No.
Sh. No. 9035

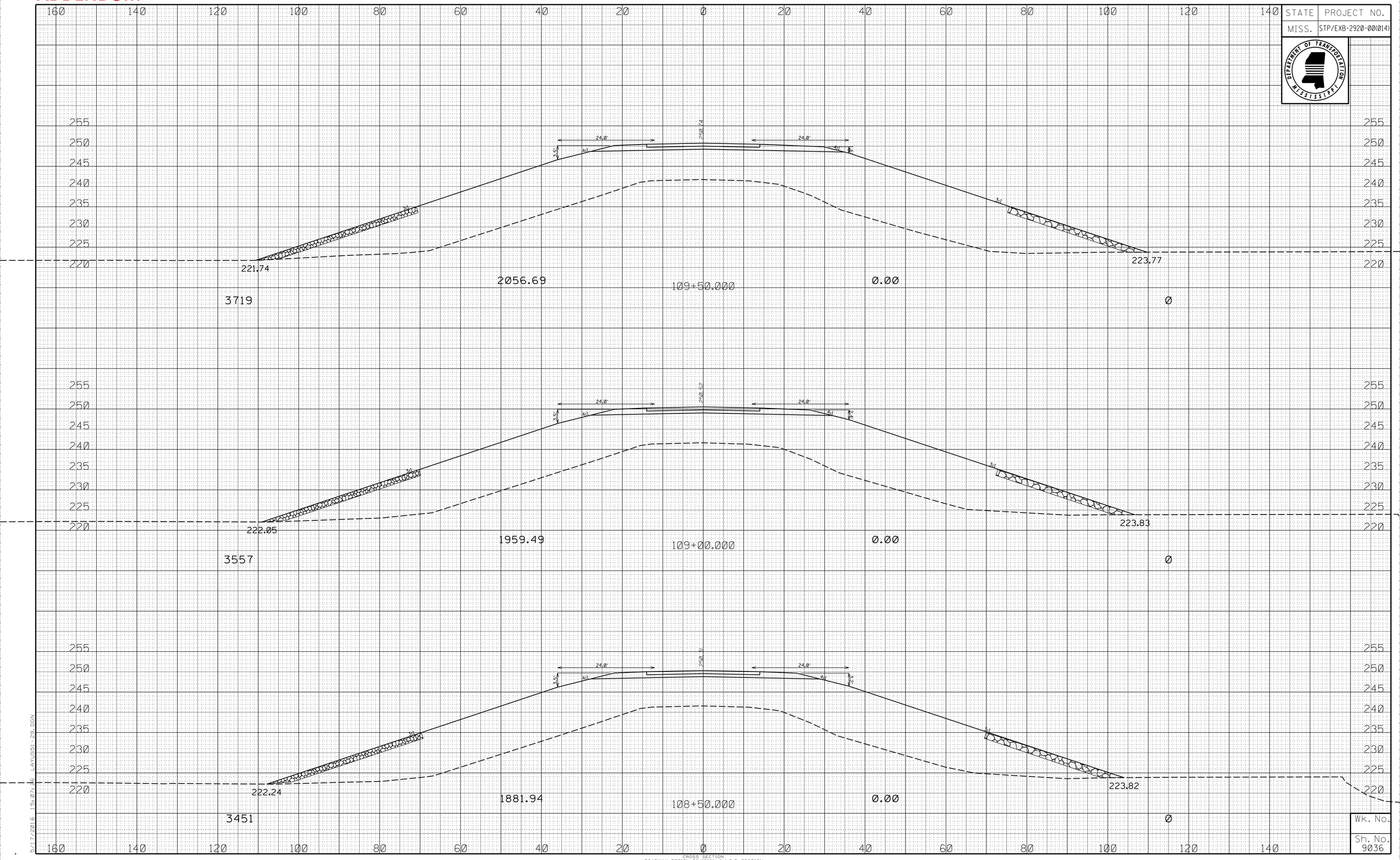
5/17/2016 15:07:24 LAYUSS1 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

DEPARTMENT OF TRANSPORTATION — MISSISSIPPI



Wk. No.

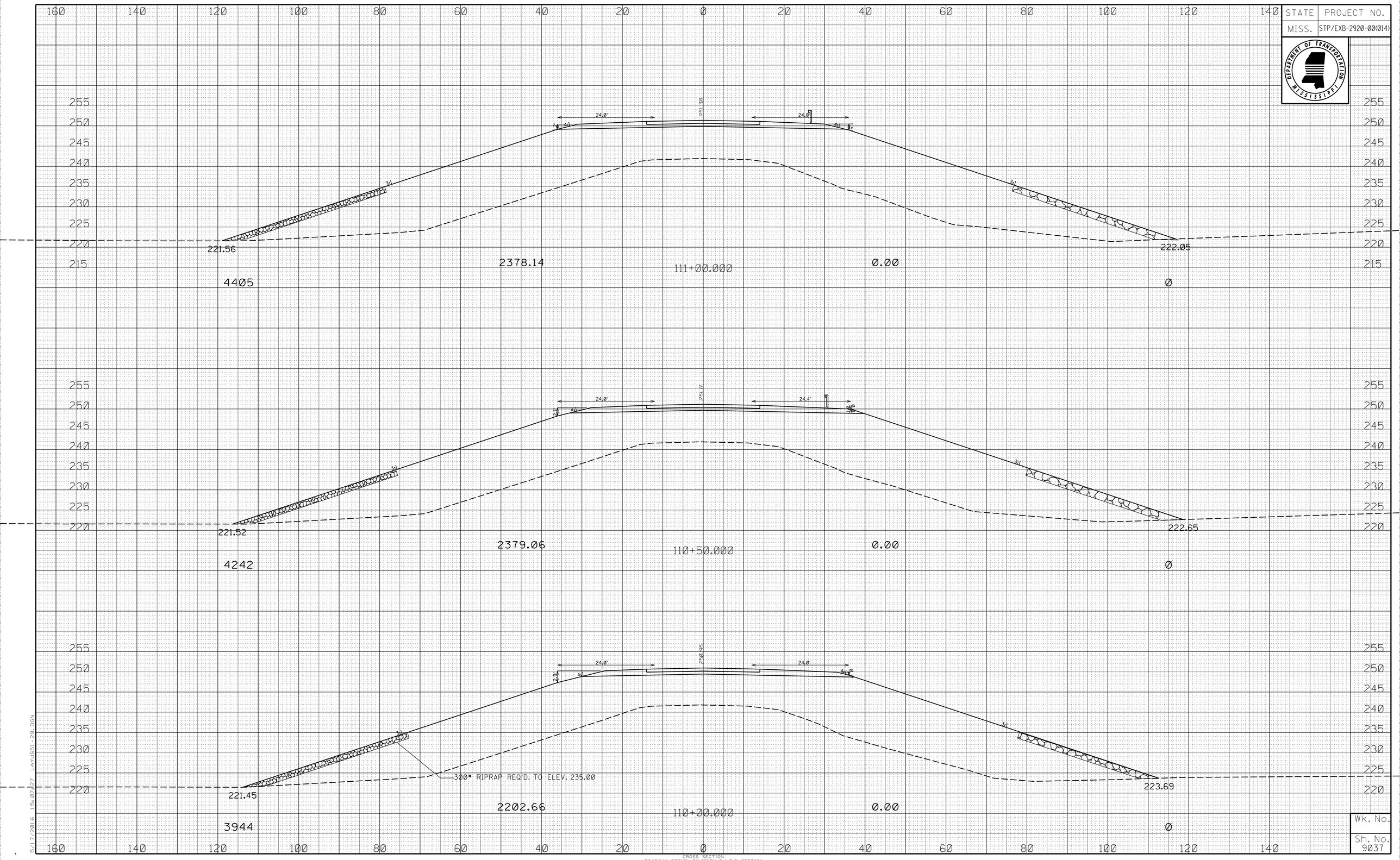
Sh. No. 9036

5/17/2016 15:01:36 LAUGSI 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)



5/17/2016 15:07:27 LAYUSS1 29.DGN

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Wk. No.
Sh. No. 9037

ADDENDUM

STATE	PROJECT NO.
MISS.	STP/EXB-2920-00(014)

7460.03 cy
rip rap 504.03 tons
geotextile 746.71 sy

SPUR DIKE

4170 — 2239.65 — 112+50.000 — 0.00 — Ø

4436 — 2263.70 — 112+00.000 — 0.00 — Ø

221.59 — 4542 — 2527.39 — 111+50.000 — 0.00 — 221.49 — Ø

CROSS SECTION
ROADWAY DESIGN DIVISION C.A.D.D. SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/17/2016 15:07:29 LAYOUT1 29.DGN

Wk. No.
Sh. No. 9038