Wisconsin Department of Transportation

January 5, 2016

Division of Transportation Systems Development
Bureau of Project Development
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NOTICE TO ALL CONTRACTORS:

Proposal #18:

1005-10-71
Illinois State Line – Madison
Rock River Bridges B-53-0357/0358
IH 39
Rock County

1005-10-72
Illinois State Line – Madison
Knutson Rd to North Rock County Line
IH 39
Rock County

Letting of January 12, 2016

This is Addendum No. 01, which provides for the following:

Special Provisions

Revised Special Provisions	
Article No.	Description
1	General
5	Prosecution and Progress
6	Lane Rental Fee Assessment
7	Traffic
9	Utilities
11	Other Contracts
43	QMP Base Aggregate
46	Concrete Pavements
57	Noise Barriers Double-Sided Sound Absorptive N-53-20, Item 531.0300.S.001
79	Temporary Traffic Signals for Intersections I-39 SB Off-Ramp and STH 59, Item 661.0200.001; I-39 NB On-Ramp and STH 59, Item 661.0200.002; STH 59 and Goede Rd, Item 661.0200.003; I-39 NB Ramps and USH 51/STH 73, Item 661.0200.004
92	High Performance Concrete (HPC) Masonry Structures, Item SPV.0035.701
128	Electrical Service Meter Breaker Pedestal Special, Item SPV.0105.350

Added Special Provisions	
Article No.	Description
143	Timely Decision Making Manual
144	Coordination with Businesses and Residents
145	Field Facilities
146	Aggregate Quality Testing for Concrete Pavement and HPC Structure Mixes

Deleted Special Provisions	
Article No.	Description
12	Project Communication Enhancement Effort
27	Coordination with Businesses

Schedule of Items

Revised Bid Item Quantities					
Bid Item	Item Description	Unit	Old Quantity	Revised Quantity	Proposal Total
465.0120	Asphaltic Surface Driveways and Field Entrances	Ton	349	9	358
521.1506	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-inch 4 to 1	Each	5	-1	4
521.1530	Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-inch 6 to 1	Each	3	-1	2
611.9800.S	Pipe Grates	Each	20	-2	18

Plan Sheets

Revised Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of changes to sheet)
12-14	Finished Typical Sections (added call-off for Concrete Pavement HES)
33	Construction Details (added Private Entrance to Rural and Urban Driveway Table)
154-155	Plan Details (clarified limits of Concrete Pavement HES)
159-165	Plan Details (clarified limits of Concrete Pavement HES)
171	Plan Details (clarified limits of Concrete Pavement HES)
747	Miscellaneous Quantities (added quantity for Asphaltic Surface Driveways and Field Entrances)
754	Miscellaneous Quantities (revised quantity for Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-inch 4 to 1 and 6 to 1 and Pipe Grates)
1149	Structure B-53-357 (revised pre-bore note under “Foundation Data”)
1163	Structure B-53-357 (revised pre-bore depth under “Notes”)
1164	Structure B-53-357 (revised pre-bore depth under “Notes” and moved “Bill of Bars” info to new sheet 1,164A)
1196	Structure B-53-358 (revised pre-bore note under “Foundation Data”)
1211	Structure B-53-358 (revised pre-bore depth under “Notes”)
1212	Structure B-53-358 (revised pre-bore depth under “Notes” and moved “Bill of Bars” info to new sheet 1,212A)
1276	Structure R-53-32 (revised dimension on “Section Thru Wall At Gates” detail)
1281	Structure R-53-33 (revised dimension on “Section Thru Wall At Gates” detail)
1469	Cross section STA 1386+00 (revised pipe size/class label)
1578	Cross section STA 1386+00 (revised pipe size/class label)

Added Plan Sheets	
Plan Sheet	Plan Sheet Title (brief description of why sheet was added)
1164A	Structure B-53-357 (new sheet for moved “Bill of Bars” info)
1212A	Structure B-53-358 (new sheet for moved “Bill of Bars” info)
1302A-1302O	Earthwork Data (added missing sheets 1 of 31 through 15 of 31)

The responsibility for notifying potential subcontractors and suppliers of these changes remains with the prime contractor.

Sincerely,

Mike Coleman

Proposal Development Specialist
Proposal Management Section

ADDENDUM NO. 01

1005-10-71, 1005-10-72

January 5, 2016

Special Provisions

1. General

Replace entire article language with the following:

Perform the work under this construction contract for Project 1005-10-71, Illinois State Line – Madison, Rock River Bridges B-53-0357/0358, IH 39, and 1005-10-72, Illinois State Line – Madison, Knutson Road to North Rock County Line, IH 39, Rock County, Wisconsin as the plans show and execute the work as specified in the State of Wisconsin, Department of Transportation, Standard Specifications for Highway and Structure Construction, 2016 Edition, as published by the department, and these special provisions.

If all or a portion of the plans and special provisions are developed in the SI metric system and the schedule of prices is developed in the US standard measure system, the department will pay for the work as bid in the US standard system.
100-005 (20150630)

5. Prosecution and Progress

Replace paragraph four under section titled **A Freeway Work Restrictions** *with the following:*

The contractor is allowed overnight ramp closures for temporary barrier installation, temporary culvert installation, and temporary ramp connections during the IH 39 Permitted Lane Closure Times defined in the Traffic article. Only close one ramp at a time for overnight ramp closures. A total of eight overnight ramp closures will be allowed to complete this work. These overnight ramp closures are in addition to the ramp closures specified for interim liquidated damages. An overnight ramp closure may occur concurrently with a ramp closure specified in the interim liquidated damages. If the contractor fails to open ramps to traffic by the specified times, assessments shown in the article Lane Rental Fee Assessment will be placed upon the contractor based on the hourly rental rate for the closure type and hourly definition that the noncompliant closure occurs. The total assessment to the contractor will be the summation of the separate assessments for each ramp closure violation. The contractor shall also be responsible for the Lane Rental Fee Assessment and all traffic control and detour costs that are required in excess of eight overnight ramp closures.

Replace entire language under section titled **D Interim Liquidated Damages** *with the following:*

D Interim Liquidated Damages
The STH 59 Southbound On Ramp may be closed and detoured for a maximum of 14 calendar days to complete the initial ramp reconstruction and temporary ramp connections in Stage 2A2, and shall re-open prior to 12:01 AM May 27, 2016.

If the contractor fails to reopen the STH 59 Southbound On Ramp to traffic within 14 calendar days of closing or prior to 12:01 AM May 27, 2016, whichever is sooner, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 14 calendar days or after 12:01 AM May 27, 2016. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Goede Road may be closed from North Eastman Road to Kenlyn Road for a maximum of two calendar days to complete the final connection to Kenlyn Road in Stage 2B1. The demolition of the

existing Goede Road bridge over IH 39 shall not begin prior to this closure but may continue after the reconfigured Kenlyn Road is reopened to traffic. If the contractor fails to reopen the reconfigured Kenlyn Road to traffic on binder or final HMA surface within 2 calendar days of closing Goede Road, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 2 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

The STH 59 Northbound On Ramp may be closed and detoured for a maximum of 21 calendar days to complete the final ramp reconstruction connection in Stage 2C2 and all work required to open IH 39 northbound traffic to Stage 2D traffic configuration. The northbound On Ramp shall not be closed prior to 6:00 AM September 6, 2016, and shall re-open in conjunction with the IH 39 northbound traffic shift to Stage 2D traffic configuration prior to 12:01 AM October 17, 2016. If the contractor fails to reopen the STH 59 Northbound On Ramp in conjunction with the IH 39 northbound traffic shift to Stage 2D traffic configuration within 21 calendar days of closing, or prior to 12:01 AM October 17, 2016, whichever is sooner, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 21 calendar days or after 12:01 AM October 17, 2016. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Complete the construction operations on STH 59, Goede Road, Kenlyn Road, North Richardson Springs Road, and East Richardson Springs Road including pavement, shoulders, curb and gutter, signing, pavement marking and temporary traffic signal removal in Stage 3A prior to 12:01 AM November 18, 2016. If the contractor fails to complete the construction operations on STH 59, Goede Road, Kenlyn Road, North Richardson Springs Road, and East Richardson Springs Road including pavement, shoulders, curb and gutter, signing, pavement marking and temporary traffic signal removal in Stage 3A prior to 12:01 AM November 18, 2016, the department will assess the contractor $10,000 in interim liquidated damages for each calendar day that the roadways remain incomplete after 12:01 AM, November 18, 2016. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

Complete the construction operations on IH 39 including concrete pavement, shoulders, signing, and pavement marking necessary to switch northbound IH 39 traffic to Crossover R1 in Stage 3B prior to 12:01 AM April 24, 2017. If the contractor fails to complete the construction operations on IH 39 including concrete pavement, shoulders, signing, and pavement marking necessary to switch northbound IH 39 traffic to Crossover R1 in Stage 3B prior to 12:01 AM April 24, 2017, the department will assess the contractor $20,000 in interim liquidated damages for each calendar day that the roadways remain incomplete after 12:01 AM, April 24, 2017. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

The STH 59 Southbound On Ramp may be closed and detoured for a maximum of 17 calendar days to complete the final ramp reconstruction connections in Stage 4C and all work required to open IH 39 southbound traffic to Stage 4D traffic configuration. The Southbound On Ramp shall not be closed during the Independence Day holiday work restriction period, and shall re-open in conjunction with the IH 39 southbound traffic shift to Stage 4D traffic configuration. If the contractor fails to reopen the STH 59 Southbound On Ramp in conjunction with the IH 39 southbound traffic shift to Stage 4D traffic configuration within 17 calendar days of closing, the department will assess the contractor $5,000 in interim liquidated damages for each calendar day contract work remains incomplete beyond 17 calendar days. An entire calendar day will be charged for any period of time within a calendar day that the road remains closed beyond 12:01 AM.

The department will not grant time extensions to the interim completion dates specified above for the following:

1. Severe weather as specified in standard spec 108.10.2.2.
2. Labor disputes that are not industry wide.
3. Delays in material deliveries.

If contract time expires prior to completing all work specified in the contract, additional liquidated damages will be affixed in accordance to standard spec 108.11.

6. Lane Rental Fee Assessment

Replace entire article language with the following:

A Description

This special provision describes Lane Rental Fee Assessment to enforce compliance of lane restrictions and discourage unnecessary closures.

A.1 General

The contract designates some lane closures to perform the work. No Lane Rental Fee Assessments will be charged for closing lanes during the designated working hours. If a lane is closed outside of the designated working hours, the contractor will be subject to Lane Rental Fee Assessments. If a lane is obstructed at any time due to contractor operations, it is considered a closure.

If the contractor closes lanes of traffic prior to or fails to open lanes of traffic by the specified times, then a reduction based upon 15-minute increments will be assessed to the contractor. The total reductions assessed to the contractor will be cumulative based on an escalating scale of 15-minute increments and will be the summation of separate reductions for each traffic lane and each direction of traffic in violation.

The contractor will incur a Lane Rental Fee Assessment for each lane closure outside of the designated working hours. The contractor will not incur a Lane Rental Fee Assessment for closure of lanes during the designated working hours. The designated lane closure times are located in the Traffic article.

The contractor shall submit the dates of the proposed lane, ramp, and roadway restrictions to the engineer as part of the progress schedule. The contractor will coordinate lane, ramp, and roadway closures with any concurrent operations on adjacent roadways within 3 miles of the project.

If other projects are in the vicinity of this project, the contractor shall coordinate lane closures to run concurrent with lane closures on adjacent projects when possible. When lane closures on adjacent projects extend into the limits of this project, Lane Rental Fee Assessments will only occur if the closure facilitates work under this contract.

A.2 Lane Rental Fee Assessment

The Lane Rental Fee Assessment incurred for each lane closure, each ramp closure, and each full closure of a roadway, per direction of travel, is as follows:

$2,500 per lane per 15 minutes

The total reduction from monies due to the contractor shall be the summation of the separate reductions for each work restriction violation.

The Lane Rental Fee Assessment represents the average cost of the interference and inconvenience to the road users for each closure. The Lane Rental Fee Assessment will be measured in 15-minute increments. All lane, roadway, or ramp closure event increments less than 15 minutes will be assessed as a 15-minute increment.

Lane Rental Fee Assessments will be made based on the applicable rate for any and all closures whether work is being performed or not. The engineer, or designated representative, will be the sole authority in determining time period length for the Lane Rental Fee Assessment.

Lane Rental Fee Assessments will not be assessed for closures due to crashes, accidents, or emergencies not initiated by the contractor.

B (Vacant)

C (Vacant)

D Measurement
The department will assess Lane Rental Fee Assessment by the dollar under the administrative item Failing to Open Road to Traffic. The total dollar amount of Lane Rental Fee Assessment will be computed by multiplying the Lane Rental Assessment Rate by the number of 15-minute increments of each lane closure event as described above.

Lane Rental Fee Assessment will be in effect from the time of the Notice to Proceed until the department issues final acceptance.

E (Vacant)

7. Traffic

Replace entire section titled **D Definitions** *with the following:*

D Freeway Rolling Closure Times
On IH 39, freeway rolling closures are allowed only at the following times:

Permitted Freeway Rolling Closure Times:
Sunday 11:00 PM to Monday 5:00 AM
Monday 11:00 PM to Tuesday 5:00 AM
Tuesday 11:00 PM to Wednesday 5:00 AM
Wednesday 11:00 PM to Thursday 5:00 AM
Thursday 11:00 PM to Friday 5:00 AM
Friday 11:00 PM to Saturday 5:00 AM
Saturday 11:00 PM to Sunday 5:00 AM

Replace entire section titled **E Lane and Shoulder Closures** *with the following:*

E Lane and Shoulder Closure Times
Closures are allowed only at the times in the following tables and text. At all other times, all lanes and shoulders shall be fully open to traffic.

Permitted Shoulder Closure Times

Permitted Shoulder Closure Times		
Day of the Week	**IH 39**	**STH 59/Local Roads**
Monday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM
Tuesday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM
Wednesday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM
Thursday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM

Permitted Shoulder Closure Times		
Day of the Week	**IH 39**	**STH 59/Local Roads**
Friday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM
Saturday	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM	12:00 AM – 11:59 AM 12:00 PM – 11:59 PM
Sunday	12:00 AM – 11:59 AM 6:01 PM – 11:59 PM	12:00 AM – 11:59 AM 6:01 PM – 11:59 PM

Permitted Lane Closure Times

Permitted Lane Closure Times		
Day of the Week	**IH 39**	**STH 59/Local Roads**
Monday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM	9:00 AM – 3:00 PM
Tuesday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM	9:00 AM – 3:00 PM
Wednesday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM	9:00 AM – 3:00 PM
Thursday	12:00 AM – 5:00 AM 8:00 PM – 11:59 PM	9:00 AM – 3:00 PM
Friday	12:00 AM – 5:00 AM 10:00 PM – 11:59 PM	Not Allowed
Saturday	12:00 AM – 7:00 AM 8:00 PM – 11:59 PM	Not Allowed
Sunday	12:00 AM – 9:00 AM 9:00 PM – 11:59 PM	Not Allowed

For all freeway closures, a maximum of one lane or one shoulder may be closed at any one time at a specific location.

During the times when one lane is allowed to be closed, a minimum clear width of 16 feet, including the adjacent shoulder, shall be maintained at all times. Times listed for lane closures include setup and breakdown of any equipment and traffic control devices.

Short-term single lane flagging operations will be required on STH 59 and the local roads to accommodate storm sewer crossing construction and roadway tie-in work. Flagging operations are limited to times defined as STH 59/Local Road Permitted Lane Closure Times in the Lane Rental Fee Assessment article. Delays due to flagging may not exceed 10 minutes in any direction. The engineer will have the ability to suspend work activities beyond the periods identified in this article in the event any undesirable traffic congestion develops that has the potential to cause lengthy motorist delay or unsafe workings conditions.

Request approval from the engineer for all lane closures in accordance to the requirements of the subsection titled “Wisconsin Lane Closure System Advanced Notification” of this article. Include justification for the lane closure and the anticipated duration in the request. A request does not constitute approval. Terminate single lane closures at the beginning of peak travel periods. Failure to obtain approval or reopen closed lanes at the required time shall be subject to penalties specified under the article Prosecution and Progress.

Shoulders may be closed if required by the work operation, but the right and left shoulder may not be closed in the same area at the same time.

All lane and shoulder closures shall be removed when work is not in progress. Provide arrow boards for use during all single lane closures in accordance to the MUTCD. Arrow boards for single lane closures will be paid for under the item Traffic Control Arrow Boards for each day with a single lane closure where an arrow board is in use.

Replace paragraph three under section titled **F Roadway and Ramp Closures** *with the following:*

Place Traffic Control Signs Portable Changeable Message for all lane and roadway closures as shown on the plans at least seven days prior to the lane or roadway closure. Obtain approval from the department for all messages for the Traffic Control Signs Portable Changeable Message. The engineer shall contact Jeff Gustafson at the Southwest Region Madison Office, (608) 516-6400 or Jeffrey.gustafson@dot.wi.gov. All lane closures are subject to the approval of the Region traffic engineer.

Replace entire section titled **L Wisconsin Lane Closure System Advanced Notification** *with the following:*

L Wisconsin Lane Closure System Advanced Notification
Provide the following minimum advance notification to the engineer for incorporation in the Wisconsin Lane Closure System (LCS).

CLOSURE TYPE AND REQUIRED MINIMUM ADVANCE NOTIFICATION

Closure type with height, weight, or width restrictions (available width, all lanes in one direction ≤16')	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
Full roadway closures	14 calendar days
System and service ramp closures	14 calendar days
Full system and service ramp closures	14 calendar days
Detours	14 calendar days

Closure type without height, weight, or width restrictions (available width, all lanes in one direction >16')	MINIMUM NOTIFICATION
Lane and shoulder closures	14 calendar days
System and service ramp closures	14 calendar days
Modifying all closure types	14 calendar days

Discuss LCS completion dates and provide changes in the schedule to the engineer at weekly project meetings in order to manage closures nearing their completion date.

Notify the engineer and WisDOT Statewide Traffic Operations Center (STOC) at (414) 227-2142 if there are any changes in the schedule, early completions, or cancellations of scheduled work.

The department has the authority to disallow any requested closures or width restrictions.

Replace entire section titled **Q Enhanced Reference Location Signing**

R Enhanced Reference Location Signing
Maintain all existing enhanced reference location signing throughout the duration of the project as shown in the plans.

9. Utilities

Replace paragraph one under section titled **Alliant Energy – Electric** *with the following:*

There are overhead and underground electrical facilities within the project limits as described below. Adjustments including directional boring of new cable prior to construction started in August 2015. Adjustments during construction are anticipated to occur during the first three months. Contact Jason Hogan (608) 458-4871 (office) or (608) 395-7395 (mobile) regarding the status of facility relocations and to coordinate adjustments during construction.

Replace first bullet statement under subsection titled IH-39 *under section titled* **Alliant Energy – Electric** *with the following:*

- The existing overhead electric crossing north of the STH 59 bridge and poles at Station 1409+66'SB', 105' LT and Station 1408+20, 126' RT will remain in service and are anticipated for removal by April 2016. Coordinate grading activities with relocation of the poles and overhead electric. To replace this overhead crossing, a new underground duct was installed crossing both IH-39 northbound and southbound lanes near Station 1431+60 in August 2015. This new line will extend to the west side of N South Eastman Road and continue approximately 3' inside the west right-of-way line to the intersection with Kenlyn Road.

Replace paragraph one under section titled **Alliant Energy – Gas** *with the following:*

There are underground gas facilities within the project limits as described below. Adjustments listed below were completed in 2015. The contact is Jason Hogan (608) 458-4871 office or (608) 395-7395 mobile.

Replace paragraph one under section titled **CenturyLink** *with the following:*

There are underground telephone facilities within the project limits as described below. Adjustments will occur prior to construction and are anticipated to be done in conjunction with Frontier Communications work with an estimated 2 working days to complete. The contact is Mark Murn, (262) 392-5210.

Replace paragraph one under section titled **Charter Communications** *with the following:*

There are overhead and underground fiber optic and coax lines within the project limits as described below. Some adjustments were completed in 2015, however, several relocations require coordination with Alliant Energy during construction. Contact Randy Steurer (608) 373-7544 office or (608) 209-3194 mobile, to coordinate adjustments required during construction.

Replace third bullet statement under subsection titled STH 59 'F' *under section titled* **Charter Communications** *with the following:*

- New underground facilities were bored 9' deep under STH 59 at approximately Station 31+50'F' and along the west side of the I90 Tires driveway right-of-way in 2015. No conflicts are anticipated.

Replace first bullet statement under subsection titled N Richardson Springs Road *under section titled* **Charter Communications** *with the following:*

- The existing underground coax line along the east side of the road from Station 20+00'RS' to Station 21+65'RS' is not anticipated to be in conflict.

Replace paragraph one under section titled **Frontier Communications** *with the following:*

There are overhead and underground fiber optic and telephone facilities within the project limits as described below. Adjustments prior to construction are anticipated to start December 15, 2015 and require 40 working days to complete. Minor adjustments during construction are required at N Eastman Road. Contact Russ Ryan (920) 583-3275 a minimum of 5 days prior to adjustments required during construction.

Replace paragraph one under section titled **Consolidated Koshkonong Sanitary District (CKSD)** *with the following:*

There are gravity sanitary sewer and sanitary sewer force main facilities along Ellendale Road and Richardson Springs Road. All vertical manhole adjustments to be made by contractor under contract. All other work to be done by CKSD. Contact Dave Houfe (608) 774-0490 (mobile) a minimum of 3 days prior to performing work near sanitary sewer locations.

Replace first bullet statement under subsection titled Richardson Springs Road 'RS' *under section titled* **Consolidated Koshkonong Sanitary District (CKSD)** *with the following:*

- The existing 4" sanitary force main bend at Station 9+32'RS' is in conflict with northbound Rock River bridge pier #5 excavation and temporary shoring.

    - CKSD forces adjusted the force main in 2015 and restored the disturbed pavement area with aggregate and HMA pavement to an elevation flush with the adjacent roadway.

11. Other Contracts

Replace entire section titled **Project 1007-10-78** *with the following:*

Project 1007-10-78
This project involves temporary widening of the southbound IH 39 lanes north of the Dane County Line in 2016/2017. The northbound crossover (Crossover R1) associated with the STH 59 interchange project matches into the temporary widening. Coordination with this project will be required

Replace entire section titled **Project 1007-11-74** *with the following:*

Project 1007-11-74
This project involves reconstruction of the southbound IH 39 lanes north of the Dane County Line in 2018. Traffic control within the reconstruction limits of the STH 59 interchange project will be taken over by Project 1007-11-74. Portions of the permanent pavement marking within the project limits will also be installed as part of Project 1007-11-74. IH 39 may be opened to three lanes northbound and three lanes southbound by others in the fall of 2018 upon completion of the work in Project 1007-11-74.

Add the following as the last section of the article:

Intelligent Work Zone
Work under this Intelligent Work Zone contract will progress concurrently with the work under this contract within the project limits and work zones. The Intelligent Work Zone work will consist of installation and operation of a real-time queue warning system capable of measuring vehicular speeds at downstream sections of I-39, and displaying the speed information on changeable message signs at upstream locations. The purpose of this work is to inform motorists of traffic speed reductions, and traffic queuing with the overall goal of improving work zone safety by reducing the number of and severity of crashes, and improving driver awareness of conditions. Coordination with this project will be required.

12. DELETED

27. DELETED

43. QMP Base Aggregate.

Replace note (5) *under section titled* **A.1 General** *with the following:*

(5) Chapter 8 of the department's construction and materials manual (CMM) provides additional detailed guidance for QMP work and describes required sampling and testing procedures. The contractor may obtain the CMM from the department's web site at:
http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/rdwy/default.aspx

Replace entire section titled **B.3 Laboratory** *with the following:*

B.3 Laboratory
(1) Perform QC testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:
Materials Management Section
3502 Kinsman Blvd.
Madison, WI 53704
Telephone: (608) 246-5388
http://wisconsindot.gov/Pages/doing-bus/eng-consultants/cnslt-rsrces/tools/appr-prod/qual-labs.aspx

46. Concrete Pavements.

Replace entire article language with the following:

This special provision describes specialized material requirements for aggregates used in Concrete Pavements. Conform to standard specs 415 and 501, as modified in this special provision. Conform to standard spec 715 for QMP Concrete Pavement and Structures.

Replace standard spec 501.2.5.4.1with the following:

501.2.5.4.1 General

(1) Provide coarse aggregates from a department-approved source as specified under 106.3.4.2.

(2) Use clean, hard, durable crushed gravel or crushed limestone free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances, or adherent coatings considered injurious.

(3) Use virgin aggregates only.

Replace the first paragraph of standard spec 501.2.5.4.2 with the following:

(1) The amount of deleterious substances must not exceed the following percentages:

DELETERIOUS SUBSTANCE	PERCENT BY WEIGHT
Shale	1.0
Coal	1.0
Clay lumps	0.3
Soft fragments	5.0
Any combination of above	5.0
Thin or elongated pieces based on a 3:1 ratio	15.0
Materials passing the No. 200 sieve	1.5
Chert[1]	2.0

[1] Material classified lithologically as chert and having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of chert by dividing the weight of chert in the sample retained on a 3/8-inch sieve by the weight of the total sample.

Replace the first paragraph of standard spec 501.2.5.4.3 with the following:

(1) The percent wear shall not exceed 40, the weighted soundness loss shall not exceed 9 percent, and the weighted freeze-thaw average loss shall not exceed 12 percent.

57. Noise Barriers Double-Sided Sound Absorptive N-53-20, Item 531.0300.S.001.

Replace entire article language with the following:

A Description

This special provision describes designing, fabricating, transporting, and erecting double-sided sound absorptive noise barriers in accordance to the plans, applicable portions of the standard specifications, the department-approved installation specifications, and as hereinafter provided.

B Materials

All materials used in the work shall conform to the pertinent requirements of the standard specifications and as hereinafter specified.

Provide grade A, A-2, A-FA, A-S, A-T, A-IS, A-IP, or A-IT concrete conforming to standard spec 501 as modified in standard spec 716 for concrete posts and the core component of composite concrete sound absorbing panels. Provide QMP for class II ancillary concrete as specified in standard spec 716.

B.1 System Pre-Qualification

The noise wall system supplied must be pre-qualified by the department. The department maintains a list of pre-qualified systems which can be viewed at: http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm. Systems eligible for use on this project shall be pre-qualified and added to that list prior to the award of this contract.

B.2 Design

The department specifies pre-qualified double-sided sound absorptive noise barrier products on the department's approved product lists available at:

http://www.dot.wisconsin.gov/business/engrserv/approvedprod.htm

Provide the name of the selected system to the engineer within 25 days after award of the contract. Schedule a pre-design meeting with the engineer subsequent to award of the contract and prior to beginning design of the noise barrier. The suppliers of the noise barrier components shall attend this meeting.

B.2.1 Structural and Foundation Design

The structural and foundation design of the noise barrier system shall be in accordance to the current edition of "Guide Specifications for Structural Design of Sound Barriers published by the American Association of State Highway and Transportation Officials (AASHTO), 444 North Capitol Street, NW, Suite 225, Washington, DC 20001.

Design the noise barrier to withstand wind pressure, applied perpendicular to the barrier, in each direction, of 28.5 pounds per square foot for ground mounted barriers, and 37.5 pounds per square foot for structure mounted barriers.

The top 3-feet of supporting soil shall be ignored in the design of ground-mounted barrier foundations.

B.2.2 Fire Hose Access Openings

Design fire hose access openings, at locations shown on the plans, with additional reinforcement and protective coating around the opening as necessary to maintain structural integrity. Detail drawings shall show the additional reinforcement and method for attaching the Fire Hydrant Location Signs to the barrier panel.

B.2.3 Barrier Profile

Unless otherwise shown on the plan or approved by the engineer, design the top of the noise barrier to be horizontal and at or above the acoustic elevation line shown on the plans. The bottom elevation of the noise barrier shall be as shown on the plans. Changes in elevation shall be accomplished by stepping sections at posts. Steps shall not exceed 3-feet in height. All joints shall be horizontal or vertical and shall be aligned with the adjacent panels.

B.2.4 Panel Orientation

Design the panels to prevent entrapment and ponding of water. Avoid inadvertently providing areas for perching, nesting of birds, or collecting of dirt and debris in the design of the noise barrier system.

B.2.5 Color and Surface Texture

Unless otherwise shown and provided for in the plans, wall pattern shall contain textures with relief features of sufficient depth and quantity to be distinguishable at an observation distance of 500-feet. The color(s) and texture(s) chosen will be within the following parameters; however, at the discretion of the engineer, a single color and/or a single texture may be selected for either side of the noise barrier.

	Freeway Side	**Residential Side**
Number of colors	2	2
In the proportion of	75:25 (±5%)	75:25 (±5%)
Number of textures	2	2
In the proportion of	75:25 (±5%)	75:25 (±5%)

The final color of the panels and posts shall be earth tone browns and tans. Coating and coloring of the post and panels shall be shop applied.

Base Color – #30372
Accent Color – #30140

All individual noise barrier panels shall not be more than one color except as noted in the follow paragraph, and shall be the same color on both sides, unless otherwise approved by the engineer. Noise barrier posts shall be manufactured of the same materials throughout the project.

Supply and deliver to the engineer a 3-foot x 5-foot minimum test panel for each panel type, with the specified pattern and colors. Obtain the engineer's acceptance of the panel's pattern and color prior to production of the panels required for the contract. The accepted pattern and color test panels shall remain on the project site in a readily accessible location for the duration of the project. The accepted pattern and color sample panels will be the standard for all noise barriers on the project.

The engineer will visually inspect panels for color consistency upon arrival at the project. The panels shall have no substantial variation in color from the accepted sample panel submitted for the project. All panels with substantial color variation will be rejected and shall be removed from the project.

B.2.6 Sound Transmission Loss (TL)
Design the noise barrier panel material to achieve a transmission loss equal to or greater than 20 decibels in all test frequency bands.

B.2.7 Noise Reduction Coefficient (NRC)
Design the noise barrier so that at least 70 percent of the highway side of the noise barrier panels that are 2-feet above the ground shall have a minimum NRC of 0.80. The remaining noise barrier panels on the highway side that are 2-feet or more above the ground shall have a minimum NRC of 0.70. The minimum NRC for panels on the residential side, which are 2-feet above the ground shall be 0.70.

B.2.8 Structural Steel
Galvanize all structural steel after fabrication by the hot dip process in accordance to ASTM A123. Galvanize steel hardware and threaded fasteners, bolts, nuts, and washers in accordance to ASTM A153.

Shop coat all steel galvanized surfaces exposed to view with an approved paint system as hereinafter specified. Clean galvanizing surfaces to be painted per SSPC-SP1 to remove, chlorides, sulfates zinc salts, oil, dirt, organic matter and other contaminants. The cleaned surface should then be Brush Blast Cleaned per SSPC-SP7 to create a slight angular surface profile (1.0 – 1.5 mils suggested) for adhesion. Blasting should not fracture the galvanized finish or remove any dry film thickness.

After cleaning, provide a tie coat from an approved coating system that is specifically intended to be used on a galvanized surface. The tie coat shall etch the galvanized surface and prepare the surface for the top coat. Apply a top coat matching the finished color specified in B.2.5. Use a pre-approved top coat that is resistant to the effects of the sun, and is suitable for use in a marine environment. Exercise care so as not to damage the painted surfaces during shipment and erection of the noise barriers.

Use one of the qualified paint sources and products given below. An equivalent system may be used with the written approval of the engineer. Supply the engineer with the product data sheets before applying any coating. The product data sheets shall indicate the mixing and thinning directions, the recommended spray nozzles and pressures, the minimum drying time for shop applied coats, and the recommended procedures for coating galvanized bolts, nuts, and washers.

Producer	Coat	Products	Dry Film Minimum Thickness (mils)	Minimum Time Between Coats (hours)
Sherwin Williams 1051 Permeter Drive, Suite 710 Schaumburg, IL 60173 (847) 330-1562	Tie	Recoatable Epoxy Primer B67-5 Series/B67V5	2.0 to 4.0	6
	Top	Acrolon 218 HS Polyurethane, B65-650	2.0 to 4.0	NA
Carbolin 350 Hanley Industrial St Louis, MO 63144 (314) 644-1000	Tie	Rustbond Penetrating Sealer FC	1	36
	Top	Carboline 133 LH	4	NA
Wasser Corporation 4118 B Place NW Suite B Auburn, WA 98001	Tie	MC-Ferrox B 100	3.0 to 5.0	8
	Top	MC-Luster 100	2.0 to 4.0	NA

B.2.9 Design Coordination

B.2.9.1 Underground Utility and Drainage Crossings

Design the noise barrier post spacing so as not to interfere with the existing utility and drainage facilities.

Design the noise barrier post spacing so as not to interfere with proposed utility and drainage facilities shown in the plans. This includes proposed roadway lighting and ITS facilities.

B.2.9.2 Proposed Structures

For noise barriers mounted behind or near proposed retaining walls, coordinate and design the noise barrier post spacing so as to not interfere with embedded portion of the proposed retaining walls, including MSE wall soil reinforcement and tieback anchors on soldier pile and timber lagging retaining walls.

For noise barriers mounted on proposed bridges and retaining walls, coordinate and design the noise barrier post spacing to coincide with noise barrier post and embedded noise barrier anchor assembly spacing shown on the bridge and retaining wall plans. Coordinate any required changes to the noise barrier post spacing and embedded noise barrier anchor assembly locations shown on the bridge and retaining wall plans, if required for the design of the noise barrier.

B.2.10 Project Submittal Requirements

Submit three copies of the following documents to the engineer for review:

1. All structural and foundation design calculations.
2. Detailed design/shop drawings.
3. Certifications for all materials, including trade name of the products along with the name and address of the manufacturers.
4. Specifications regarding installation requirements and sequence of construction, including a detailed bill of materials.
5. Detailed colored plan of the aesthetic treatment for the entire noise barrier.

Submit the following documents to the Bureau of Structures Design Section:

1. Three sets of design/shop drawings and one set of design calculations for review and acceptance. Any necessary revisions and/or corrections required for acceptance will be noted and returned to the contractor.

Design calculations shall be on 8½-inch x 11-inch sheets, neatly bound with a title sheet listing the complete project identification number and sound barrier designation. Design/shop drawings shall conform to the contract plans and the requirements of these special provisions. The design/shop drawings shall consist of plan and profile sheets, details, explanatory notes, erection diagrams, aesthetic treatments, and other working plans. All dimensions, sizes of material, material information and other information necessary for the complete fabrication and construction of the noise barrier should be designated on the appropriate sheets. The design/shop drawings shall be drawn to an appropriate scale on reproducible sheets 11 x 17-inches including borders. Each sheet shall carry the complete project identification number and noise barrier designation. Design/shop drawings and calculations shall be signed, sealed and dated by a professional engineer licensed in the State of Wisconsin.

B.2.11 Review Process

All documents, including drawings, calculations and related material submitted for review and acceptance by the engineer.

It is expressly understood that the engineer's review and acceptance of the drawings, calculations, and related material, submitted by the contractor, means only an acceptance of the character and sufficiency of the details, and does not relieve the contractor from responsibility in regard to errors or omissions on said submittals.

The final accepted design documents and/or shop drawings shall become a part of the contract. Any substitution of materials or dimensions contemplated by the contractor's submitted documents, different from materials or dimensions shown on the contract plans, shall be made only when approved by the engineer, and in such case, additional costs resulting from such substitution shall be borne by the contractor.

Ordering of materials by the contractor prior to acceptance of the submittal requirements shall be at the contractor's own risk.

B.3 Wall System Testing Requirements

All test reports required in section B.3 shall reference the specific facility which will be producing material for this contract. Test reports shall be representative of differing production lots on materials manufactured for this specific contract which is representative of the manufacturer's continuous production for wall systems. Panels tested or from which samples will be taken from shall be selected and appropriately marked by the engineer either at the manufactures' plant or from panels delivered to the project at the engineer's option. Test reports will be required for each lot of material not to exceed 100,000 SF of noise barrier produced. Testing shall be conducted on panels within the first 30,000 SF of production of each lot not exceeding 100,000 SF. For projects that do not exceed 100,000 SF, a minimum of two lots of material will represent the project, each lot representing equivalent square footage. The first set of tests conducted for projects that do not exceed 100,000 SF shall be within the first third of the total square footage of the project.

Products tested should be tested as a system under the requirements in B.3.1 and B.3.2; this includes stain intended for the supplied concrete and composite concrete components wall panels.

B.3.1 Noise Reduction Coefficient (NRC)

The noise barrier panel shall be tested in accordance to ASTM C423, and placed in accordance to ASTM E795, mounting type A, to determine the noise reduction coefficient (NRC) of the material. Submit to the engineer an independent testing laboratory test report that shows that the noise barrier panels achieve an NRC as specified for each side of the barrier.

B.3.2 Salt Scaling Resistance

All sound absorbing composite concrete and composite concrete components shall be tested for salt scaling resistance in accordance to ASTM C672 and the following modifications and/or requirements.

B.3.2.1 Test Specimens
For the purposes of the test, three specimens of a full cross section of the composite panel at least 12 inches x 12-inches shall be selected at random from the provided composite panel as defined in B.3. Sample specimens shall be from production panels as selected and marked by the engineer, representative of the manufacturer's continuous production operation.

The surfaces of the sample specimen(s) shall be prepared for testing as follows. Brush the surfaces of the sample to remove any loose particles. The test specimens shall then be submerged in water for a period of 24 hours prior to testing. Immediately following this, the specimens shall be covered with the sodium chloride solution as stated below.

B.3.2.2 Test Procedure
Place samples in a 5 sided water tight container in which a solution of sodium chloride (concentration 3% by mass) fully submerges the specimen. A ¼- inch of sodium chloride solution shall be maintained above the top surface of the fully submerged specimen within the container.

The specimens shall then be subjected to continuous freeze-thaw cycles as follows:

After each five cycles, the salt solution and particles of deteriorated concrete shall be removed from the slab and collected in a watertight container. The operation is best accomplished by tilting the slab in a funnel approximately 20-inches in diameter and washing the surface of the slab with a 3% sodium chloride solution. This washing should continue until all loose particles are removed from the concrete. The solution shall then be strained through a filter and the residue dried out at 221 degrees Fahrenheit to a constant mass condition. The residue shall be cumulatively weighed after each five cycles. This residue shall be defined as the loss of mass and expressed in pounds per square foot of exposed slab area. This is to exclude the concrete core for composite concrete panels in the calculation of the area used to express the mass loss per square foot. The loss of mass shall be calculated to the nearest 0.01 pounds per square foot. The surfaces should be rated in accordance to 10.1.5 of ASTM C672 including any delamination of the sound absorbing material from the concrete core for composite concrete materials. After the washing of each slab, a new solution of sodium chloride (concentration 3% by mass) shall be placed in the five sided water tight container to fully submerge the specimen to a depth of ¼-inch above the top surface of the fully submerged test specimen.

The test shall continue until 50 freeze-thaw cycles have been completed.

During the test each specimen shall be positioned and supported to allow free circulation of the test solution under, around, and over test pieces. The bottom of the specimens shall be supported on blocks in a manner to assure movement of moisture through and around the test specimen(s).

B.3.2.3 Test Report
Submit to the engineer an independent testing laboratory test report which shows that all solid and composite concrete products meet or exceed the following criteria:

a. After 50 freeze-thaw cycles the test specimens shall not exhibit excessive deterioration in the form of cracks, spalls, aggregate disintegration, delamentation, or other objectionable features.
b. Compliance with the test requirements is based upon a loss of mass of not more than 0.2 pounds per square foot from the surface after 50 cycles of freezing and thawing. The measured surfaces are not to include the exposed surface of any core material of a composite concrete component.
c. The report shall include the following:
    1. Name of manufacturer.
    2. Location of production.
    3. Production description.
    4. Date product sample was cast.

5. Commencement date of testing.
6. Specimen identification.
7. 5x7-inch color photographs of the test specimens before and after the 50 cycles freeze-thaw test.
8. A graph of the cumulative mass loss of each specimen plotted against the number of freeze-thaw cycles for 5, 10, 15, 20, 25, 30, 40, and 50 freeze-thaw cycles.
9. Visual rating in accordance to 10.1.5 ASTM C672 including report of any delamination of the sound absorbing material from the concrete core for composite concrete components.

B.4 Wall Systems Material Requirement

Contractor shall provide certification of compliance to all applicable requirements in B.4. All material certifications shall reference the specific facility manufacturing the material and this contract. Certifications will be required for each lot of material not to exceed 100,000 SF of noise barrier produced. For projects that do not exceed 100,000 SF, a minimum of 2 lots of material will represent the project, each lot representing equivalent square footage.

B.4.1 Sound Transmission Loss (TL)

Submit to the engineer certification of compliance that the sound transmission loss of the panel material, when tested in accordance to ASTM Standard E90, achieves a transmission loss as specified in B.2.6.

B.4.2 Structural Steel

Submit to the engineer certification of compliance that structural steel galvanized after fabrication is in accordance to ASTM A123. Steel posts of post and panel walls shall be galvanized. Any galvanized surfaces exposed to view shall be coated with an approved paint system as referenced in B.2.8.

B.4.3 Accelerated Weathering

Submit to the engineer certification of compliance that all coatings on barrier components, with the exception of structural steel and wood components, comply with the following requirements when tested by ASTM Standard G155, G153, or G152 after 2400 hours of exposure on a cement based test specimen(s):

1. No checking when rated in accordance to ASTM D660.
2. No cracking when rated in accordance to ASTM D661.
3. No blistering when rated in accordance to ASTM D714.
4. No difference in adhesion between the unexposed control sample and an exposed sample when tested in accordance to ASTM D3359, Method A.
5. No chalking less than #7 rating when rated in accordance to ASTM D4214.
6. No color change greater than 5 NBS units when measured in accordance to ASTM D2244, using illuminant D65 and the 1964 10 degree standard observer.

B.4.4 Corrosion Resistance (Salt Fog Exposure)

Submit to the engineer certification of compliance that all coated steel components, with the exception of structural steel, has a coating system that has been tested for corrosion resistance in accordance to ASTM B117 and comply with the following requirements:

1. No checking when rated in accordance to ASTM D660.
2. No blistering when rated in accordance to ASTM D714.
3. No loss of adhesion when tested in accordance to ASTM D3359 with no evidence of corrosion along the edges of the samples or along the score lines or other defects.

B.4.5 Steel Panels

All steel panels shall be minimum nominal 20 gauge galvanized steel. The steel panels shall be free from laminations, blisters, slivers, open seams, pits from heavy rolled-in scale, ragged edges or other defects that may affect their appearance or use for the intended purpose. All shearing, cutting, and punching shall be done prior to preparation of the panels for application of coatings.

B.4.6 Aluminum Panels
All aluminum panels shall be minimum 0.063 inch nominal thickness or greater. The aluminum panels shall be free from laminations, blisters, slivers, open seams, pits from heavy rolled-in scale, ragged edges or other defects that may affect their appearance or use for the intended purpose. All aluminum panels shall conform to the thickness tolerances of the Aluminum Association, Inc. All shearing, cutting, and punching shall be done prior to preparation of the panels for application of coatings.

B.4.7 Timber Components
All lumber and timber furnished for the work shall be in accordance to the requirements of standard spec 507 and as hereinafter specified.

B.4.7.1 Species of Wood
All lumber and timber, with the exception of Glue Laminated Timber, shall be from one of the following species: Douglas Fir-Larch, Southern Pine, and Hem-Fir.

Glue laminated timber shall be Southern Pine.

B.4.7.2 Preservative Treatment
All timber components shall receive a chemical preservative treatment. The wood shall be dried to 19% or less prior to treatment. The wood shall be treated using a chromated-copper arsenate solution in accordance to standard spec 507.2.2.6. After treatment, all wood having nominal dimensions less than 3-inches by 3-inches shall be air or kiln dried to a maximum moisture content of 15%. Wood in greater dimensions shall be dried to maximum moisture content of 19%. The required Certificate of Preservative Treatment shall indicate compliance with the maximum moisture content requirement(s), in addition to requirements of the preservative treatment specifications herewith set forth. Wood shall be protected from increases in moisture content until incorporated into the work.

B.4.7.3 Glue Laminated Timber
Glue laminated timber shall contain the mark of a recognized inspection agency as being in conformance with ANSI/AITC A190.1. A wet-use adhesive suitable for use with treated wood as shown in ANSI/AITC A190.1 shall be used. Members shall be of Industrial appearance grade per AITC 110.

Lumber to be glue laminated shall be pressure preservative treated prior to gluing to a retention of 0.4 pounds per cubic foot.

B.4.7.4 Lumber
Non-laminated timber shall not exceed the proportion of six (nominal width) to one (nominal thickness) and shall be No. 1 grade or better. Sound knots shall extend through members no farther than 50 percent of the cross-section width. Unsound knots are not permitted. Knots are not permitted in the fastening area of any member.

B.4.7.5 Plywood
Plywood shall be exterior type conforming to the provisions of the US Product Standards PS-1 and shall bear the mark of a qualified and approved inspection and testing agency.

B.4.7.6 Sealant/Stain
All wood components of the barrier system shall be coated with a wood sealer/stain as hereinafter provided.

The manufacturer shall select a sealer/stain from one of the sources on the department’s approved product list. Product data sheets shall be provided which indicate the mixing directions and

recommended method(s) of application. The method and rate of application shall be as recommended by the producer.

B.4.7.7 Hardware and Fasteners
All hardware and fastening devices shall be either hot dipped galvanized steel or made of nonferrous or stainless steel. Fastening devices shall be screws; no nails or staples shall be allowed.

B.4.7.8 Mineral Fiber Material
Mineral fiber material used to increase sound absorption shall be manufactured in accordance to Federal Specification HH-1-558B and ASTM C612. Mineral fiber material shall have a minimum density of 6 pounds per cubic foot, shall absorb less than 1 percent of water when tested in accordance to ASTM C553, be non-corrosive, and nonhygroscopic. The mineral fiber material shall be fastened to the noise barrier system in a manner to prevent sagging when in a saturated condition.

C Construction

C.1 General

Construct the noise barriers at the locations shown on the plans, in accordance to the contract specifications and design drawings and/or as directed by the engineer. All sound absorbing composite concrete components shall be delivered to the project site(s) as a finished component. A sound absorbing composite concrete system, which has the sound absorbing material glue-laminated or alternately affixed by a secondary adhesion method on the project site, will not be allowed.

Provide a minimum ten day notice to the engineer of the date that the fabrication of the noise barrier material will commence. Certifications and test reports will be required for each lot of material not to exceed 100,000 SF of noise barrier produced. For projects that do not exceed 100,000 SF a minimum of 2 lots of material will represent the project, each lot representing equivalent square footage.

Panels from which samples will be taken from for testing required in B.3 shall be selected and appropriately marked by the engineer either at the manufactures' plant or from panels delivered to the project at the engineer's option. Test reports will be required for each lot of material not to exceed 100,000 SF of noise barrier produced. Testing shall be conducted on panels within the first 30,000 SF of production of each lot not exceeding 100,000 SF. For projects that do not exceed 100,000 SF, a minimum of two lots of material will represent the project, each lot representing equivalent square footage. The first set of tests conducted for projects that do not exceed 100,000 SF shall be within the first third of the total square footage of the project.

Inspect all materials delivered to the construction site for proper dimensions, honeycombing, cracks, voids, surface defects, consistency in color and texture, and any other damage or imperfections, prior to installation.

If any part of the noise barrier material fails to comply with any requirements of the contract specification, the component shall either be corrected, permanently marked as unacceptable and be disposed of by the contractor or accepted at a reduced price. The decision will be made by the engineer and is dependent on the severity of the specification deviation.

C.2 Fire Hydrant Location Signs

Furnish and install fire hydrant location sign(s). These shall be attached to the noise barrier at each location shown on the plans by a method as shown on the department approved drawings. The signs shall conform and be of the type specified in the department's sign plate book, plate D9-54 and/or D9-54A.

Compensation for furnishing and placing the fire hydrant location signs shall be included in the contract price for Noise Barriers Double-Sided Sound Absorptive and no additional compensation therefore will be allowed.

C.3 Name Plates
Furnish and install name plates conforming to the requirements of standard spec 506.2.4.

Furnish and place one name plate on each noise barrier at the location indicated on the plans.

Rigidly attach each plate to the barrier by a means approved by the engineer.

Compensation for furnishing and placing of name plates shall be included in the contract price for Noise Barriers, Double-Sided Sound Absorptive Structure and no additional compensation therefore will be allowed.

C.4 Structure Mounted Noise Barriers
Do not erect noise barriers mounted to bridge or retaining wall structures until after the concrete for bridge decks and parapets or retaining wall moment slabs and parapets have attained their specified 28-day strength.

For noise barriers mounted to moment slabs and parapets on top of MSE retaining walls, erection of the noise barrier is limited to two-thirds of the height of the noise barrier acoustical line shown in the plans prior to placement of earth fill or pavement over the top of the moment slab as shown in the plans. Erection of the noise barrier in excess of two-thirds its height to the full height of the noise barrier acoustical line shown on the plans may not occur until after the earth fill or pavement structure over the top of the moment slab shown in the plans is complete.

C.5 Tolerances The posts and panels comprising the noise barrier shall be installed plumb within ½-inch of vertical in 15-feet. The posts shall be located to the line and grades as shown in the plans to within +/- ¾-inch. Horizontal joints of adjacent panels shall be lined up to a vertical tolerance of ¼-inch. Where vertical adjustments are required for alignment, a mortar base or steel shims shall be used. Galvanize and prime coat steel shims in accordance with B.2.8.

D Measurement
The department will measure Noise Barriers Double-Sided Sound Absorptive by the square foot, acceptably completed, measured as the area the original plans show plus engineer-approved modifications to the plan quantity caused by plan corrections or revisions.

E Payment
The department will pay for measured quantities at the contract unit price under the following bid item:

ITEM NUMBER	DESCRIPTION	UNIT
531.0300.S.001	Noise Barriers Double-Sided Sound Absorptive N-53-20	SF

Payment is full compensation for providing noise barrier including coloring and aesthetic treatment on panels; for preparing the design drawings and calculations; for furnishing and delivering sample and test panels; for testing, noise barrier materials; for excavation, preparing the site, constructing foundations, erecting posts and panels, and disposing of waste materials.
531-010 (20150630)

79. Temporary Traffic Signals for Intersections I-39 SB Off-Ramp and STH 59, Item 661.0200.001; I-39 NB On-Ramp and STH 59, Item 661.020.002; STH 59 and Goede Rd, Item 661.0200.003; I-39 NB Ramps and USH 51/STH 73, Item 661.0200.004.

Replace the last paragraph with the following:

Payment for Temporary Traffic Signals for Intersections is full compensation for providing, operating, maintaining, and repairing the complete temporary installation; and for removal. Payment also includes the following:

- Providing replacement equipment.
- The cost of delivery and pick-up of the cabinet assemblies for department testing.
- Furnishing and installing aerial power distribution cables; and for overhead route planning, approval and staking.

92. High Performance Concrete (HPC) Masonry Structures, Item SPV.0035.701.

Replace entire section titled **501.2.5.4.1 General** *with the following:*

501.2.5.4.1 General
Replace the entire text with the following:

Provide coarse aggregates from a department-approved source as specified under 106.3.4.2.

Use clean, hard, durable crushed limestone with 100% fractured surfaces and free of an excess of thin or elongated pieces, frozen lumps, vegetation, deleterious substances or adherent coatings considered injurious.

Use virgin aggregates only.

Replace entire section titled **501.2.5.4.3 Physical Properties** *with the following:*

501.2.5.4.3 Physical Properties
Replace paragraph one with the following:

The percent wear shall not exceed 35, the weighted soundness loss shall not exceed 6 percent, and the weighted freeze-thaw average loss shall not exceed 12 percent.

128. Electrical Service Meter Breaker Pedestal Special, Item SPV.0105.350.

Replace entire section titled **C Construction** *with the following:*

C Construction
In accordance to the plans and standard spec 656.3 and as hereinafter provided:

Ensure that electrical service is installed and energized a minimum of one week prior to the system activation deadline.

143. Timely Decision Making Manual.

Use the Timely Decision Making Manual (TDM) on this contract. Coordinate with the department to modify the various published tools as necessary to meet the particular project needs and determine how to implement those tools under the contract. Ensure the full participation of the contractor and its principal subcontractors throughout the term of the contract.

Forms and associated guidance are published in the TDM available at the department's Highway Construction Contract Information (HCCI) web site at: http://wisconsindot.gov/rdwy/admin/tdm.doc.

144. Coordination with Businesses and Residents.

The contractor shall arrange and conduct a meeting between the contractor, the department, affected residents, local officials and business people to discuss the project schedule of operations including vehicular and pedestrian access during construction operations. Hold the first meeting at least one week prior to the start of work under this contract and hold two meetings per month thereafter. The contractor shall arrange for a suitable location for the meeting(s) that provides reasonable accommodation for public involvement. The department will prepare and coordinate publication of the meeting notices and mailings for the meeting(s). The contractor shall schedule the meeting(s) with at least 2 weeks prior notice to the engineer to allow for these notifications.
108-060 (20141107)

145. Field Facilities

Replace standard spec 642.2.1 (4) with the following:

Provide and maintain suitable interior sanitary facilities conforming to State and local health requirements, in clean and good working condition, provide a weekly cleaning service, and stock with sanitary supplies for the duration of the contract.

Supplement standard spec 642.2.2.1 (2) with the following:

Provide CAT 5 services with a minimum of six (6) CAT 5 receptacles.

Replace standard spec 642.2.2.1 (3) with the following:

Provide and maintain a plain-paper photocopier with scanner with the following characteristics:

- Uses toner, not ink.
- Has auto-feed capability.
- Can copy and scan both 8 1/2” x 11” and 11” x 17” paper.
- Can output a PDF of a copied or scanned document.

Replenish paper, toner cartridges, and other supplies before fully expended.

Add standard spec 642.2.2.1 (5) as follows:

Provide a field office having an adjacent hard surface parking facility with a minimum capacity of 16 passenger vehicles.

Replace standard spec 642.2.2.4 with the following:

Under bid item Field Office Type D, furnish a facility with a minimum interior space of 1,500 square feet including a meeting room that is at least 20 feet by 20 feet; furnish indoor sanitary facilities that are housed within, or directly adjacent to, the field office; clean, maintain, and supply the field office and sanitary facilities weekly; and equip with the following:

- Ten suitable office desks with drawers and locks.
- Ten ergonomically correct office chairs in working condition in accordance with standard spec 642.2.2.1 (4).
- Two four-drawer file cabinets.
- Two four-shelf bookcases.
- Four 2.5 x 5 foot (minimum) tables.
- Four 4 x 8 foot (minimum) tables for the meeting room.
- Twenty, or more, folding chairs.

Add standard spec 642.3 (7) as follows:

(7) Locate the field office to be within 3 miles of the IH 39-STH 59 interchange.

Add standard spec 642.5 (4) as follows:

(4) Payment of the field office is full compensation for providing a weekly cleaning service for the field office and sanitary facilities, for providing sanitary supplies as necessary, for replenishing paper, toner cartridges, and other supplies before fully expended, for maintaining the photocopier/scanner in working order at all times and for providing and supporting CAT 5 services.

146. Aggregate Quality Testing for Concrete Pavement and HPC Structure Mixes

A Description

(1) This provision describes additional requirements for testing the quality of coarse aggregates being used in concrete mixes for pavements and HPC structures.

(2) Conform to the standard specifications and high-performance concrete provisions contained within the contract, as modified in this provision.

B Materials

B.1 Personnel

(1) Have personnel certified under the department's highway technician certification program (HTCP) perform sampling, testing, and documentation.

B.2 Laboratory

(1) Perform testing at a department-qualified laboratory. Obtain information on the Wisconsin laboratory qualification program from:

Materials Management Section
3502 Kinsman Blvd.
Madison, Wisconsin 53704
Telephone: 608-246-5388
http://www.dot.state.wi.us/business/engrserv/lab-qualification.htm

B.3 Equipment

(1) Furnish the necessary equipment and supplies for performing quality control testing. The engineer may inspect the measuring and testing devices to confirm both calibration and condition. Calibrate all testing equipment according to the CMM and maintain a calibration record at the laboratory.

B.4 Records

(1) Document all observations, inspection records, and test results. Submit testing records to the engineer.

B.5 Contractor Testing

(1) Perform all quality control tests necessary to control the production processes applicable to this special provision. Use the test methods identified below, or other methods the engineer approves, to perform the following tests:

LA Wear (100 and 500 revolutions)..... AASHTO T 96
Sodium Sulfate Soundness (R-4, 5 cycles)..... AASHTO T 104
Freeze-Thaw Soundness ..... AASHTO T 103
Chert[1] .....

[1]Material classified lithologically as chert and having a bulk specific gravity (saturated surface-dry basis) of less than 2.45. Determine the percentage of chert by dividing the weight of chert in the sample retained on the 3/8-inch sieve by the weight of the total sample.

(2) The department may periodically observe contractor sampling and testing, and direct additional contractor sampling and testing for department evaluation. Ensure that all test results are available for the engineer's review at any time during normal working hours.

(3) In addition to the requirements of standard spec 106.3.4.2.2, perform tests for LA wear, sodium sulfate soundness, freeze-thaw soundness and chert at least once per calendar year when producing coarse aggregates for use in concrete pavement or HPC structure concrete mixes.

(4) Randomly test the percentage of chert at least once per 10,000 tons during production of coarse aggregates to be used in concrete pavement and HPC structure mixes or at least once per 10,000 cubic yards during placement of concrete pavement.

B.6 Department Testing

(1) The department will have a HTCP certified technician, or ACT working under a certified technician, perform verification testing. The department will sample randomly at locations independent of the contractor's QC work. In all cases, the department will conduct the verification tests with separate personnel and equipment from the contractor's QC tests. The department will perform verification testing of chert at a frequency of 10 percent of the random quality control tests or a minimum of once per project, or at greater frequency if determined to be necessary by the engineer.

C (Vacant)

D (Vacant)

E Payment

(1) Costs for all sampling, testing, and documentation required under this special provision are incidental to the work. If the contractor fails to perform the work required under this special provision, the department may reduce the contractor's pay.

Schedule of Items

Attached, dated January 5, 2016, are the revised Schedule of Items pages 9, 16, and 24.

Plan Sheets

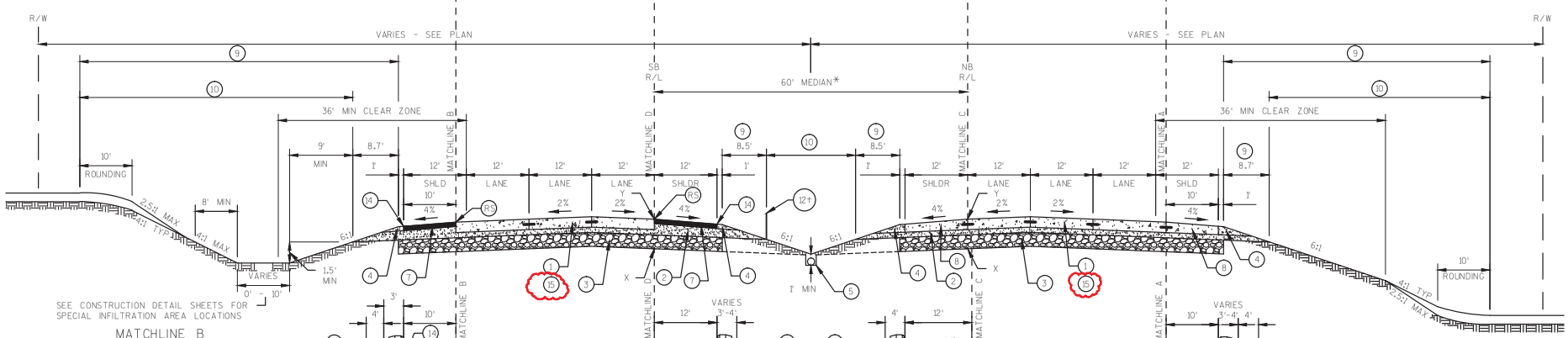
The following 8 ½ x 11-inch plan sheets are attached and need to be made part of the plans for this proposal:

Revised: 12-14, 33, 154, 155, 159-165, 171, 747, 754, 1149, 1163, 1164, 1196, 1211, 1212, 1276, 1281, 1469, and 1578

Added: 1164A, 1212A, and 1302A – 1302O

END OF ADDENDUM

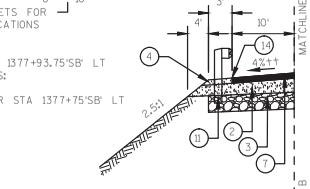
Addendum No. 01
ID 1005-10-71/72
Revised Sheet 12
January 5, 2016



SEE CONSTRUCTION DETAIL SHEETS FOR SPECIAL INFILTRATION AREA LOCATIONS

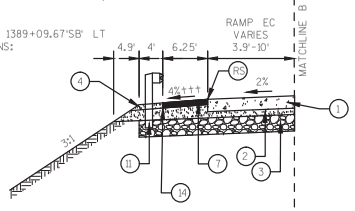
MATCHLINE B

SB IH-39/90 STA 1372+95.99'SB' - STA 1377+93.75'SB' LT
†† SHOULDER CROSS SLOPE TRANSITIONS:
END 4% STA 1377+00'SB' LT
BEGIN 2% TO MATCH B-53-357 SHLDR STA 1377+75'SB' LT



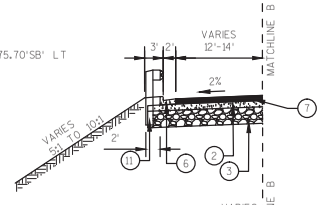
MATCHLINE B

SB IH-39/90 STA 1385+54.75'SB' - STA 1389+09.67'SB' LT
††† SHOULDER CROSS SLOPE TRANSITIONS:
END 2% STA 1385+75'SB' LT
BEGIN 4% STA 1386+50'SB' LT



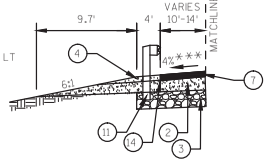
MATCHLINE B

SB IH-39/90 STA 1407+96'SB' - STA 1408+75.70'SB' LT



MATCHLINE B

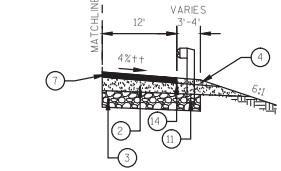
SB IH-39/90 STA 1407+93.50'SB' - STA 1410+60.83'SB' LT
*** SHOULDER CROSS SLOPE TRANSITIONS:
END 2% STA 1408+75'SB' LT
BEGIN 4% STA 1409+50'SB' LT



MATCHLINE D

SB IH-39/90
STA 1377+21.88'SB' - STA 1377+93.75'SB' RT
STA 1385+54.75'SB' - STA 1390+09.71'SB' RT

†† SHOULDER CROSS SLOPE TRANSITIONS:
END 4% STA 1377+00'SB' RT
BEGIN 2% TO MATCH B-53-357
SHLDR STA 1377+75'SB' RT

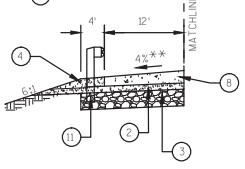


MATCHLINE C

NB IH-39/90
STA 1372+75.00 - STA 1377+93.75 LT
STA 1385+44.75 - STA 1389+93.59 LT

** SHOULDER CROSS SLOPE TRANSITIONS:
END 4% STA 1377+00 LT
BEGIN 2% TO MATCH B-53-358
SHLDR STA 1377+75 LT

END 2% STA 1385+75 LT
BEGIN 4% STA 1386+50 LT

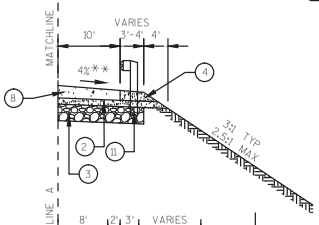


MATCHLINE A

NB IH-39/90
STA 1372+76.08 - STA 1377+93.75 RT
STA 1385+44.75 - STA 1388+02.90 RT
STA 1440+00.00 - STA 1446+53.13 RT

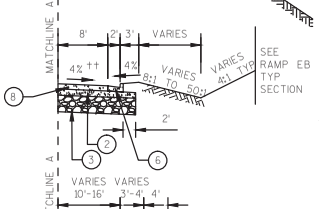
** SHOULDER CROSS SLOPE TRANSITIONS:
END 4% STA 1377+00 RT
BEGIN 2% TO MATCH B-53-358
SHLDR STA 1377+75 RT

END 2% STA 1385+75 RT
BEGIN 4% STA 1386+50 RT



MATCHLINE A

NB IH-39/90
STA 1495+88.38 - STA 1402+67.10 RT
†† SHOULDER CROSS SLOPE TRANSITIONS:
2.7% STA 1395+88.38 - STA 1396+00 RT
BEGIN 4% STA 1396+50 RT



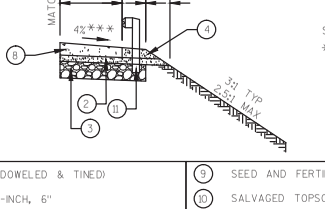
MATCHLINE A

NB IH-39/90
STA 1402+67.10 - STA 1405+34.50 RT

*** SHOULDER CROSS SLOPE TRANSITIONS:
END 2.7% AT GORE STA 1396+00 RT
BEGIN 4% AT STA 1396+50 RT

END 2% STA 1385+75 RT
BEGIN 4% STA 1386+50 RT

END 4% STA 1404+25 RT
BEGIN 2% STA 1405+00 RT



TYPICAL FINISHED SECTION IH-39/90

STA 1354+28.63 - STA 1377+91.25
STA 1385+47.25 - STA 1405+32.00
STA 1407+12.00 - STA 1434+79.12
STA 1446+08.13 - STA 1447+60.57

STA 1354+28.63'SB' - STA 1377+91.25'SB'
STA 1385+57.25'SB' - STA 1406+06.00'SB'
STA 1407+96.00'SB' - STA 1434+79.12'SB'
STA 1446+08.13'SB' - STA 1447+60.57'SB'
V=70 MPH

X = POINT REFERRED TO ON CROSS SECTIONS
Y = POINT REFERRED TO ON PROFILE

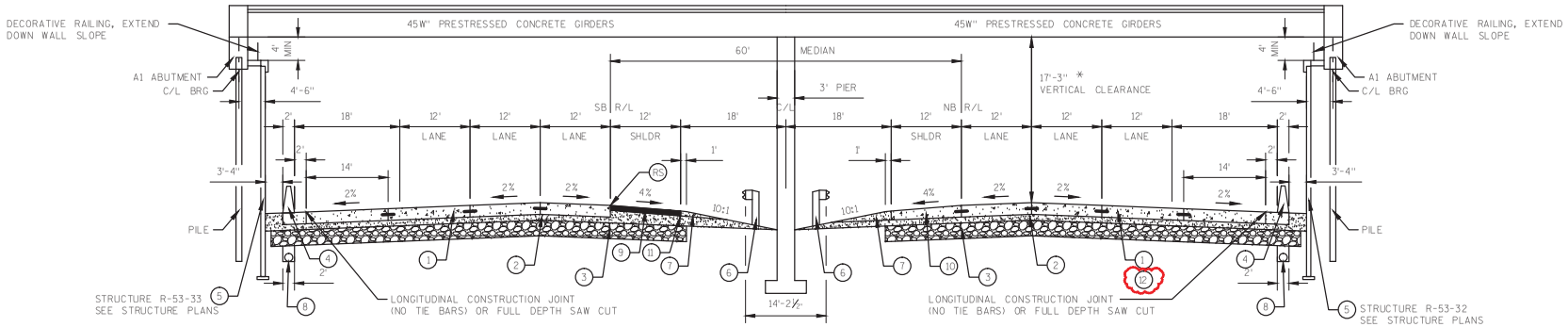
*MEDIAN WIDTH TRANSITIONS FROM 60' AT STA 1355+80.51 TO 65' AT STA 1365+13.57 AND FROM 65' AT STA 1389+82.40 TO 60' AT STA 1395+86.77

† INSTALL HIGH TENSION CABLE GUARD 8' MIN AND 10' DESIRABLE FROM MEDIAN DITCH BOTTOM. LOCATION SWITCHES FROM LEFT & RIGHT OF DITCH CENTERLINE, SEE CONSTRUCTION DETAILS.

LEGEND

1 CONCRETE PAVEMENT 12-INCH (DOWELED & TINED)	9 SEED AND FERTILIZER
2 BASE AGGREGATE DENSE 1 1/4-INCH, 6"	10 SALVAGED TOPSOIL, SEED, FERTILIZER & MULCH
3 SELECT CRUSHED MATERIAL, 16"	11 MGS GUARDRAIL 3
4 BASE AGGREGATE DENSE 3/4-INCH, (SAME DEPTH AS ADJACENT PAVEMENT)	12 HIGH TENSION CABLE GUARD
5 PIPE UNDERDRAIN WRAPPED 6-INCH (DRAIN TO MEDIAN INLETS, SEE CONSTRUCTION DETAIL)	13 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
6 CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A	14 SAFETY EDGE, SEE SDD
7 HMA PAVEMENT TYPE E-1, 5"	15 CONCRETE PAVEMENT HES 12-INCH (SEE PLAN DETAILS & MISCELLANEOUS QUANTITIES FOR LOCATIONS)
8 TRAPEZOIDAL SHOULDER (PAID FOR AS ADJACENT "CONCRETE PAVEMENT 12-INCH")	RS ROUT AND SEAL, SEE DETAIL

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 12	E



TYPICAL FINISHED SECTION
IH-39/90 UNDER STH 59 BRIDGE

STA 1405+32.00 - STA 1407+12.00 NB
STA 1406+06.00'SB' - STA 1407+96.00'SB'
V=70 MPH

* 16' MIN VERTICAL CLEARANCE PROVIDED TO EXISTING IH-39/90 DURING CONSTRUCTION
** SEE STRUCTURE PLANS FOR BRIDGE AND MSE WALL DETAILS

X = POINT REFERRED TO ON CROSS SECTIONS
Y = POINT REFERRED TO ON PROFILE

LEGEND

1	CONCRETE PAVEMENT 12-INCH (DOWELED & TINED)
2	BASE AGGREGATE DENSE 1 1/4-INCH, 6"
3	SELECT CRUSHED MATERIAL, 16"
4	CONCRETE BARRIER TYPE S42
5	WALL CONCRETE PANEL MSE **
6	STEEL THRIE BEAM BULLNOSE TERMINAL
7	BASE AGGREGATE DENSE 3/4-INCH, (SAME DEPTH AS ADJACENT PAVEMENT)
8	PIPE UNDERDRAIN 6-INCH
9	HMA PAVEMENT TYPE E-1, 5"
10	TRAPEZOIDAL SHOULDER (PAID FOR AS ADJACENT "CONCRETE PAVEMENT 12-INCH")
11	SAFETY EDGE, SEE SDD
12	CONCRETE PAVEMENT HES 12-INCH (SEE PLAN DETAILS & MISCELLANEOUS QUANTITIES FOR LOCATIONS)
RS	ROUT AND SEAL, SEE DETAIL

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January 5, 2016

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 13	E

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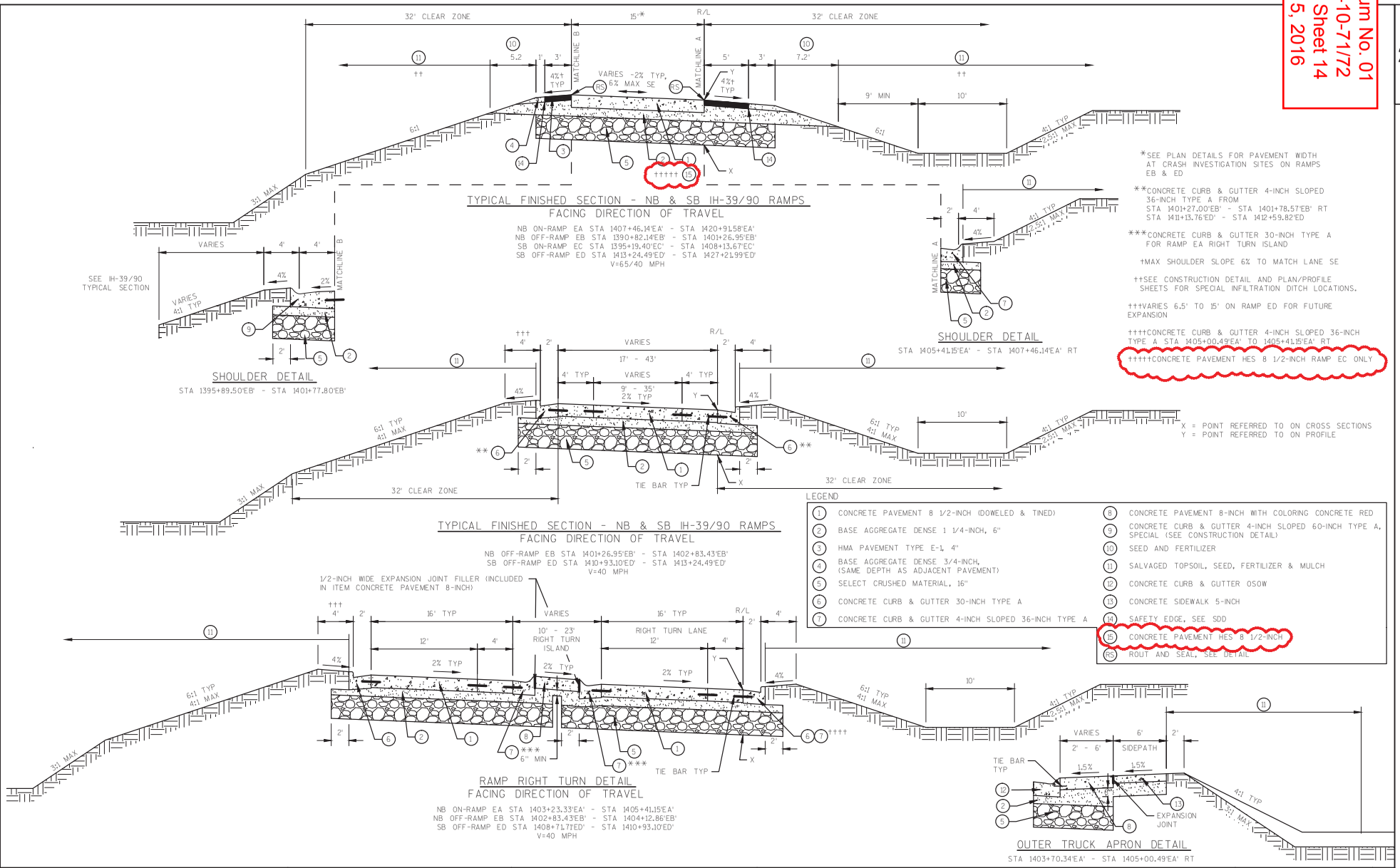
Revised Sheet 14
January 5, 2016



TYPICAL FINISHED SECTION - NB & SB IH-39/90 RAMPS
FACING DIRECTION OF TRAVEL

NB ON-RAMP EA STA 1407+46.14'EA' - STA 1420+91.58'EA'
NB OFF-RAMP EB STA 1390+82.14'EB' - STA 1401+26.95'EB'
SB ON-RAMP EC STA 1395+19.40'EC' - STA 1408+13.67'EC'
SB OFF-RAMP ED STA 1413+24.49'ED' - STA 1427+21.99'ED'
V=65/40 MPH

SHOULDER DETAIL
STA 1395+89.50'EB' - STA 1401+77.80'EB'

SHOULDER DETAIL
STA 1405+41.15'EA' - STA 1407+46.14'EA' RT

*SEE PLAN DETAILS FOR PAVEMENT WIDTH AT CRASH INVESTIGATION SITES ON RAMPS EB & ED

**CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A FROM
STA 1401+27.00'EB' - STA 1401+78.57'EB' RT
STA 1411+13.76'ED' - STA 1412+59.82'ED

***CONCRETE CURB & GUTTER 30-INCH TYPE A FOR RAMP EA RIGHT TURN ISLAND

†MAX SHOULDER SLOPE 6% TO MATCH LANE SE

††SEE CONSTRUCTION DETAIL AND PLAN/PROFILE SHEETS FOR SPECIAL INFILTRATION DITCH LOCATIONS.

†††VARIES 6.5' TO 15' ON RAMP ED FOR FUTURE EXPANSION

††††CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A STA 1405+00.49'EA' TO 1405+41.15'EA' RT

†††††CONCRETE PAVEMENT HES 8 1/2-INCH RAMP EC ONLY

X = POINT REFERRED TO ON CROSS SECTIONS
Y = POINT REFERRED TO ON PROFILE

TYPICAL FINISHED SECTION - NB & SB IH-39/90 RAMPS
FACING DIRECTION OF TRAVEL

NB OFF-RAMP EB STA 1401+26.95'EB' - STA 1402+83.43'EB'
SB OFF-RAMP ED STA 1410+93.10'ED' - STA 1413+24.49'ED'
V=40 MPH

LEGEND

1	CONCRETE PAVEMENT 8 1/2-INCH (DOWELED & TINED)	8	CONCRETE PAVEMENT 8-INCH WITH COLORING CONCRETE RED
2	BASE AGGREGATE DENSE 1 1/4-INCH, 6"	9	CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
3	HMA PAVEMENT TYPE E-1, 4"	10	SEED AND FERTILIZER
4	BASE AGGREGATE DENSE 3/4-INCH, (SAME DEPTH AS ADJACENT PAVEMENT)	11	SALVAGED TOPSOIL, SEED, FERTILIZER & MULCH
5	SELECT CRUSHED MATERIAL, 16"	12	CONCRETE CURB & GUTTER 0SOW
6	CONCRETE CURB & GUTTER 30-INCH TYPE A	13	CONCRETE SIDEWALK 5-INCH
7	CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A	14	SAFETY EDGE, SEE SDD
		15	CONCRETE PAVEMENT HES 8 1/2-INCH
		RS	ROUT AND SEAL, SEE DETAIL

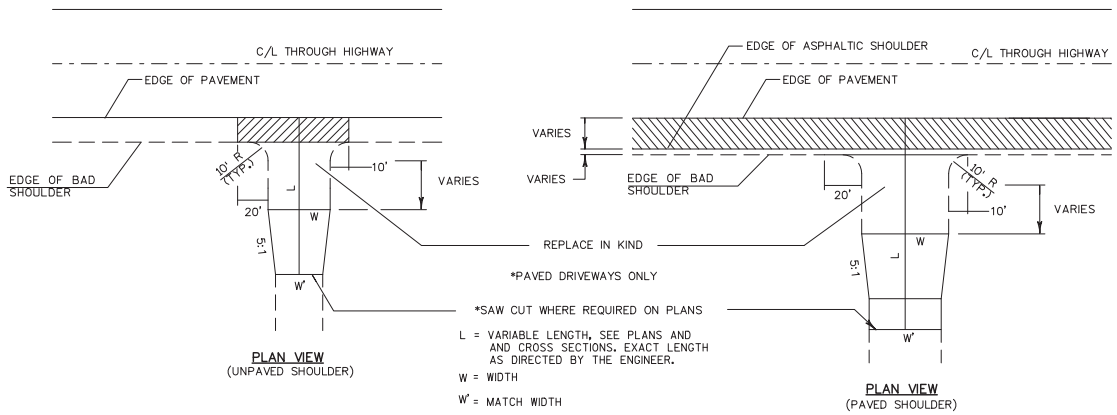
1/2-INCH WIDE EXPANSION JOINT FILLER (INCLUDED IN ITEM CONCRETE PAVEMENT 8-INCH)

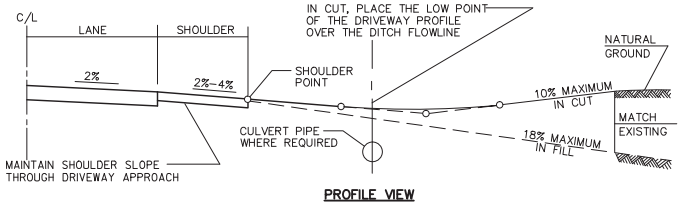
RAMP RIGHT TURN DETAIL
FACING DIRECTION OF TRAVEL

NB ON-RAMP EA STA 1403+23.33'EA' - STA 1405+41.15'EA'
NB OFF-RAMP EB STA 1402+83.43'EB' - STA 1404+12.86'EB'
SB OFF-RAMP ED STA 1408+71.71'ED' - STA 1410+93.10'ED'
V=40 MPH

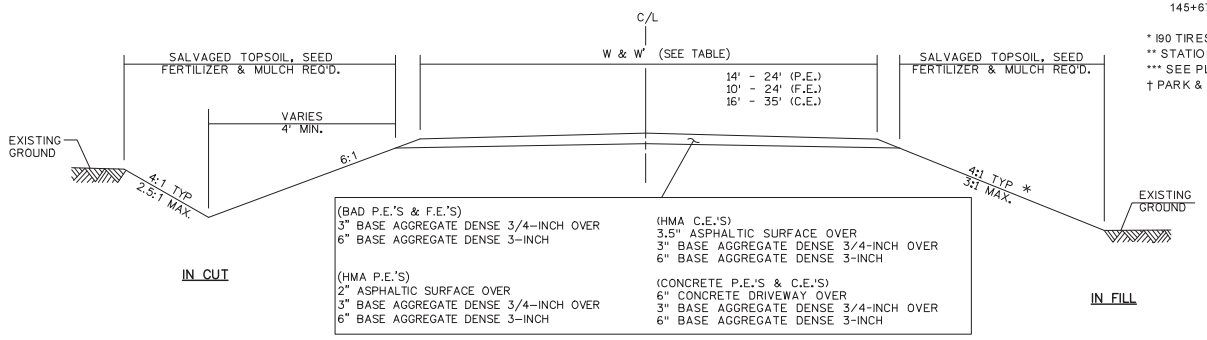
OUTER TRUCK APRON DETAIL
STA 1403+70.34'EA' - STA 1405+00.49'EA' RT

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	TYPICAL SECTIONS	SHEET 14	E





TYPICAL DRIVEWAY DETAILS



*NOTE: USE 6:1 FORESLOPES INSIDE MAINLINE CLEAR ZONE.

TYPICAL SECTION FOR RURAL DRIVEWAY

RURAL AND URBAN DRIVEWAY TABLE

ROADWAY	LOCATION	TYPE	WIDTH (W)	MATCH WIDTH (W')	EXISTING SURFACE	FINAL SURFACE
STH 59						
32+02 'F' *	RT	CE	35'	35'	ASPH	ASPH
NEWVILLE ROAD						
1347+50 **	RT	FE	20'	N/A	N/A	BAD
KENLYN LANE						
12+39 'KL'	RT	CE	16'	18'	BAD	BAD
12+50 'KL'	LT	CE	25'	33.4'	ASPH	ASPH
14+17 'KL'	RT	CE	16'	18.6'	BAD	BAD
15+00 'KL'	LT	FE	17'	21'	BAD	BAD
17+50 'KL'	LT	CE	25'	***	ASPH	ASPH
24+50 'KL'	RT	FE	20'	20'	N/A	BAD
36+00 'KL'	LT	FE	20'	20'	N/A	BAD
44+00 'KL'	LT	FE	20'	20'	N/A	BAD
GOEDE ROAD						
103+25 'GS'	RT	CE	48'	54'	ASPH	ASPH
104+96 'GS'	RT	CE	45'	45'	ASPH	ASPH
105+50 'GS'	LT	CE	35'	24'	ASPH	ASPH
106+10 'GS'	RT	CE	35'	38'	ASPH	ASPH
E RICHARDSON SPRINGS ROAD						
5+37 'ORS'	LT	FE	10'	10'	BAD	BAD
5+70 'ORS'	LT	CE	35'	48'	ASPH	ASPH
6+75 'ORS'	RT	CE	30'	45'	N/A	ASPH
7+25 'RS'	RT	PE	30'	30'	BAD	ASPH
N RICHARDSON SPRINGS ROAD						
22+30 'RS'	LT	CE	35'	***	ASPH	ASPH
29+25 'RS'	LT	†	†	N/A	N/A	†
N SOUTH EASTMAN ROAD						
80+61	LT	FE	15'	N/A	N/A	ASPH
86+50	RT	FE	20'	20'	N/A	BAD
N EASTMAN ROAD						
144+73 'GS'	RT	FE	20'	20'	BAD	ASPH
145+67 'GS'	RT	PE	14'	14'	BAD	BAD

* I90 TIRES DWY TYPICAL SECTION AND PLAN/PROFILE SHEET INCLUDED
** STATION BASED ON IH-39/90 NB R/L
*** SEE PLAN DETAILS FOR THESE COMMERCIAL ENTRANCES
† PARK & RIDE DWY; 28' MIN WIDTH; HMA TYPE E-1 OVER 8" BAD 1 1/4-INCH OVER 6" BAD 3-INCH

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Revised Sheet 33
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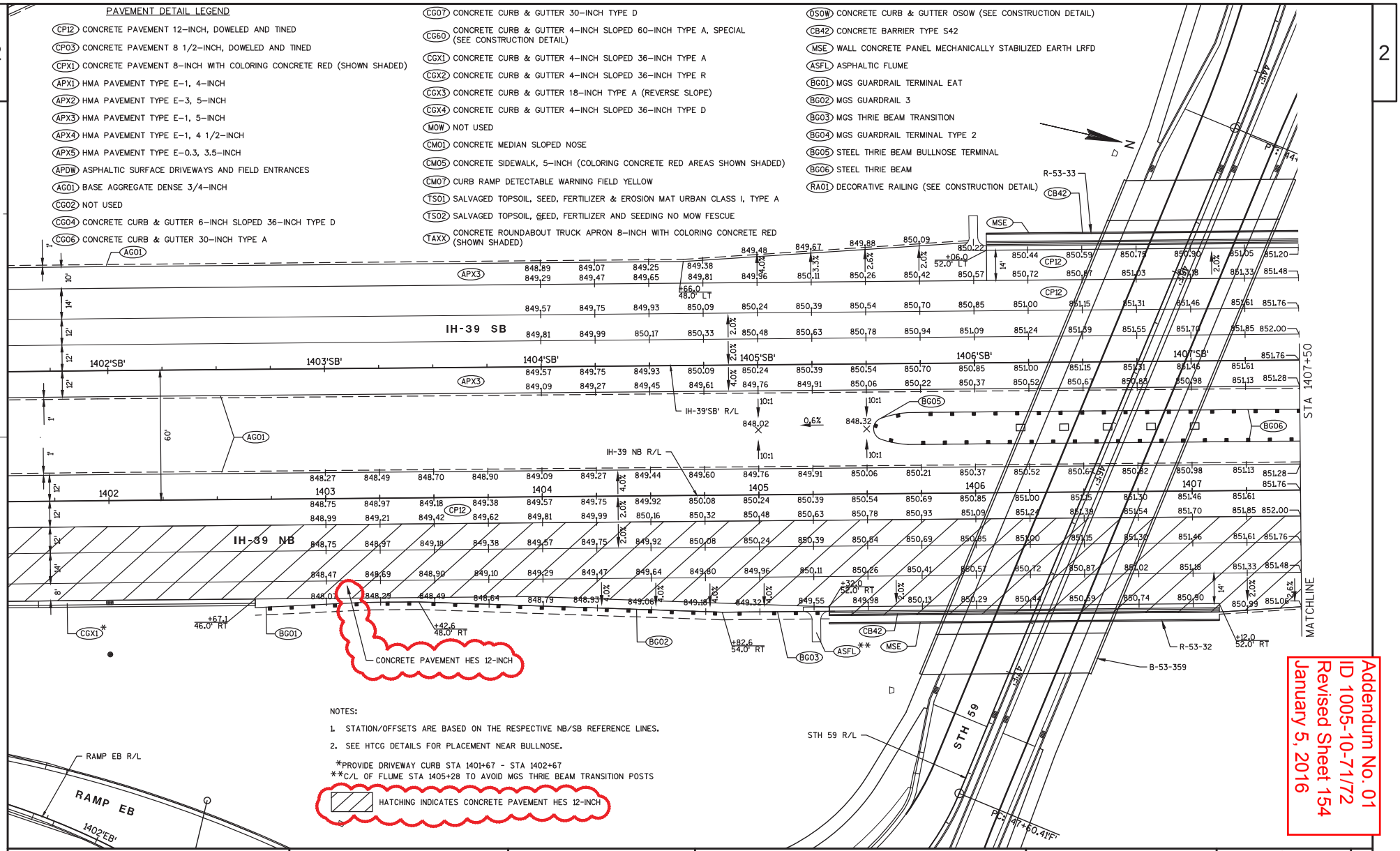
PAVEMENT DETAIL LEGEND

- CP12 CONCRETE PAVEMENT 12–INCH, DOWELED AND TINED
- CP03 CONCRETE PAVEMENT 8 1/2–INCH, DOWELED AND TINED
- CPX1 CONCRETE PAVEMENT 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- APX1 HMA PAVEMENT TYPE E–1, 4–INCH
- APX2 HMA PAVEMENT TYPE E–3, 5–INCH
- APX3 HMA PAVEMENT TYPE E–1, 5–INCH
- APX4 HMA PAVEMENT TYPE E–1, 4 1/2–INCH
- APX5 HMA PAVEMENT TYPE E–0.3, 3.5–INCH
- APDW ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- AG01 BASE AGGREGATE DENSE 3/4–INCH
- CG02 NOT USED
- CG04 CONCRETE CURB & GUTTER 6–INCH SLOPED 36–INCH TYPE D
- CG06 CONCRETE CURB & GUTTER 30–INCH TYPE A
- CG07 CONCRETE CURB & GUTTER 30–INCH TYPE D
- CG60 CONCRETE CURB & GUTTER 4–INCH SLOPED 60–INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- CGX1 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE A
- CGX2 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE R
- CGX3 CONCRETE CURB & GUTTER 18–INCH TYPE A (REVERSE SLOPE)
- CGX4 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE D
- MOW NOT USED
- CM01 CONCRETE MEDIAN SLOPED NOSE
- CM05 CONCRETE SIDEWALK, 5–INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- CM07 CURB RAMP DETECTABLE WARNING FIELD YELLOW
- TS01 SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- TS02 SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- TAXX CONCRETE ROUNDABOUT TRUCK APRON 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- OSOW CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- CB42 CONCRETE BARRIER TYPE S42
- MSE WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- ASFL ASPHALTIC FLUME
- BG01 MGS GUARDRAIL TERMINAL EAT
- BG02 MGS GUARDRAIL 3
- BG03 MGS THRIE BEAM TRANSITION
- BG04 MGS GUARDRAIL TERMINAL TYPE 2
- BG05 STEEL THRIE BEAM BULLNOSE TERMINAL
- BG06 STEEL THRIE BEAM
- RA01 DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)



NOTES:

1. STATION/OFFSETS ARE BASED ON THE RESPECTIVE NB/SB REFERENCE LINES.
2. SEE HTCG DETAILS FOR PLACEMENT NEAR BULLNOSE.

*PROVIDE DRIVEWAY CURB STA 1401+67 - STA 1402+67
**C/L OF FLUME STA 1405+28 TO AVOID MGS THRIE BEAM TRANSITION POSTS

HATCHING INDICATES CONCRETE PAVEMENT HES 12-INCH

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 154
January 5, 2016

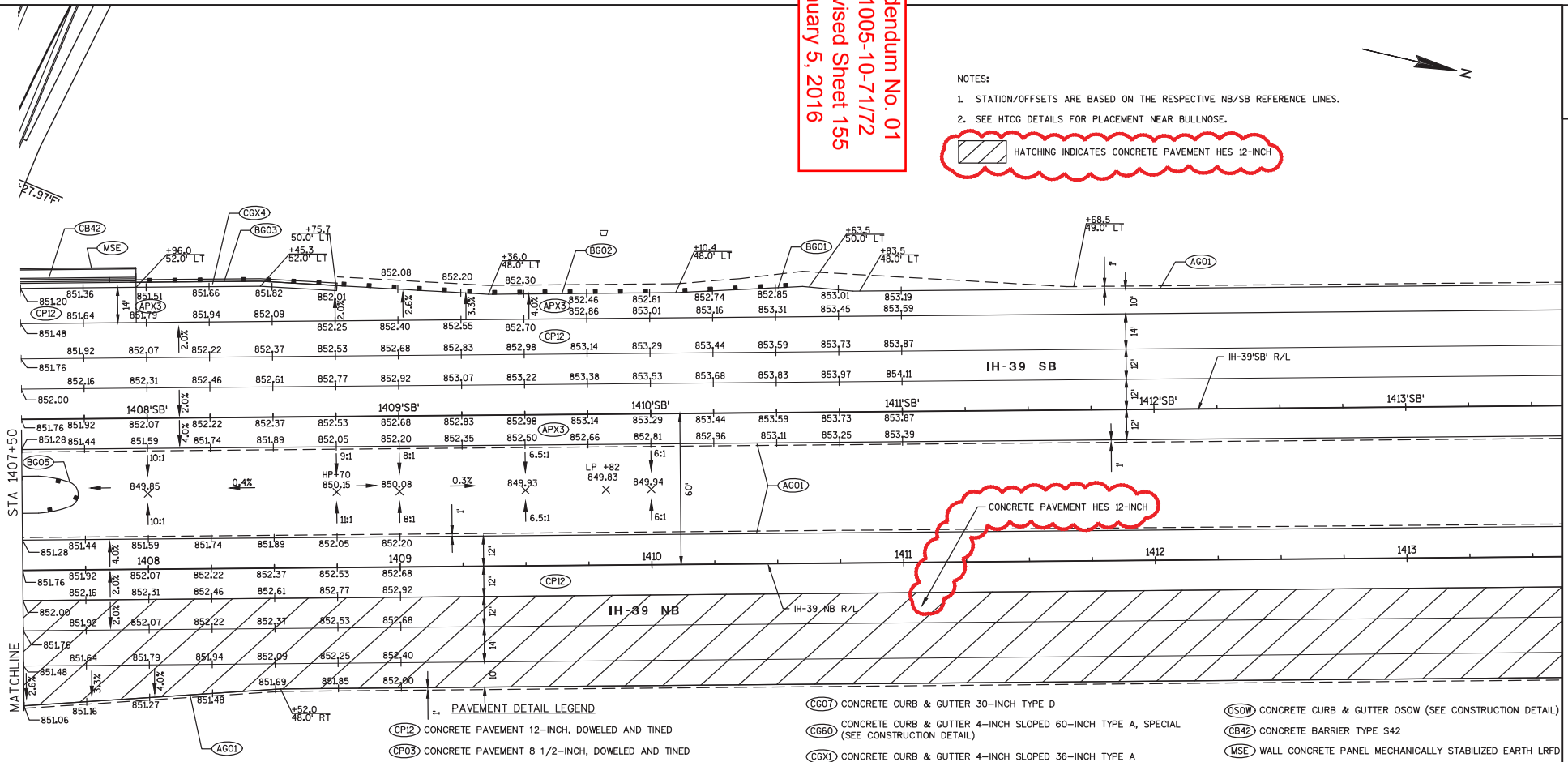
PROJECT NO:1005-10-71,72	HWY:IH-39/90	COUNTY:ROCK	PLAN DETAILS IH-39/90 AT STH 59	SCALE, FEET 0 20 40	SHEET 154	E

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 155
January 5, 2016

NOTES:

1. STATION/OFFSETS ARE BASED ON THE RESPECTIVE NB/SB REFERENCE LINES.
2. SEE HTCG DETAILS FOR PLACEMENT NEAR BULLNOSE.

HATCHING INDICATES CONCRETE PAVEMENT HES 12-INCH

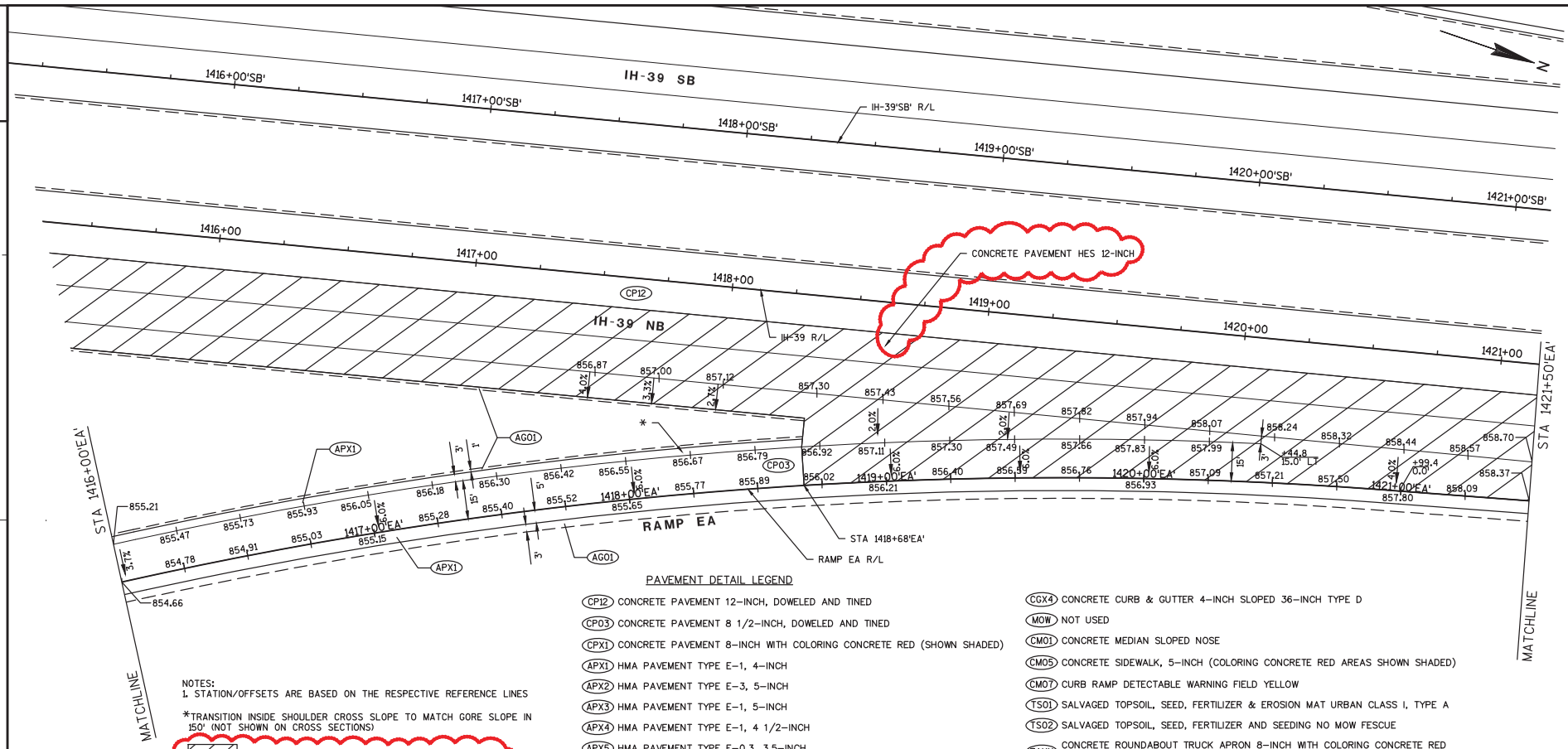


PAVEMENT DETAIL LEGEND

- CP12 CONCRETE PAVEMENT 12–INCH, DOWELED AND TINED
- CP03 CONCRETE PAVEMENT 8 1/2–INCH, DOWELED AND TINED
- CPX1 CONCRETE PAVEMENT 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- APX1 HMA PAVEMENT TYPE E–1, 4–INCH
- APX2 HMA PAVEMENT TYPE E–3, 5–INCH
- APX3 HMA PAVEMENT TYPE E–1, 5–INCH
- APX4 HMA PAVEMENT TYPE E–1, 4 1/2–INCH
- APX5 HMA PAVEMENT TYPE E–0.3, 3.5–INCH
- APDW ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- AG01 BASE AGGREGATE DENSE 3/4–INCH
- CG02 NOT USED
- CG04 CONCRETE CURB & GUTTER 6–INCH SLOPED 36–INCH TYPE D
- CG06 CONCRETE CURB & GUTTER 30–INCH TYPE A
- CG07 CONCRETE CURB & GUTTER 30–INCH TYPE D
- CG60 CONCRETE CURB & GUTTER 4–INCH SLOPED 60–INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- CGX1 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE A
- CGX2 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE R
- CGX3 CONCRETE CURB & GUTTER 18–INCH TYPE A (REVERSE SLOPE)
- CGX4 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE D
- MOW NOT USED
- CM01 CONCRETE MEDIAN SLOPED NOSE
- CM05 CONCRETE SIDEWALK, 5–INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- CM07 CURB RAMP DETECTABLE WARNING FIELD YELLOW
- TS01 SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- TS02 SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- TAXX CONCRETE ROUNDABOUT TRUCK APRON 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- OSOW CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- CB42 CONCRETE BARRIER TYPE S42
- MSE WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- ASFL ASPHALTIC FLUME
- BG01 MGS GUARDRAIL TERMINAL EAT
- BG02 MGS GUARDRAIL 3
- BG03 MGS THRIE BEAM TRANSITION
- BG04 MGS GUARDRAIL TERMINAL TYPE 2
- BG05 STEEL THRIE BEAM BULLNOSE TERMINAL
- BG06 STEEL THRIE BEAM
- RA01 DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS IH-39/90 AT STH 59	SCALE, FEET 0 20 40	SHEET 155	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021201_PD.DWG PLOT DATE : 12/21/2015 9:54 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT



NOTES:
1. STATION/OFFSETS ARE BASED ON THE RESPECTIVE REFERENCE LINES

*TRANSITION INSIDE SHOULDER CROSS SLOPE TO MATCH GORE SLOPE IN 150' (NOT SHOWN ON CROSS SECTIONS)

HATCHING INDICATES CONCRETE PAVEMENT HES 12-INCH

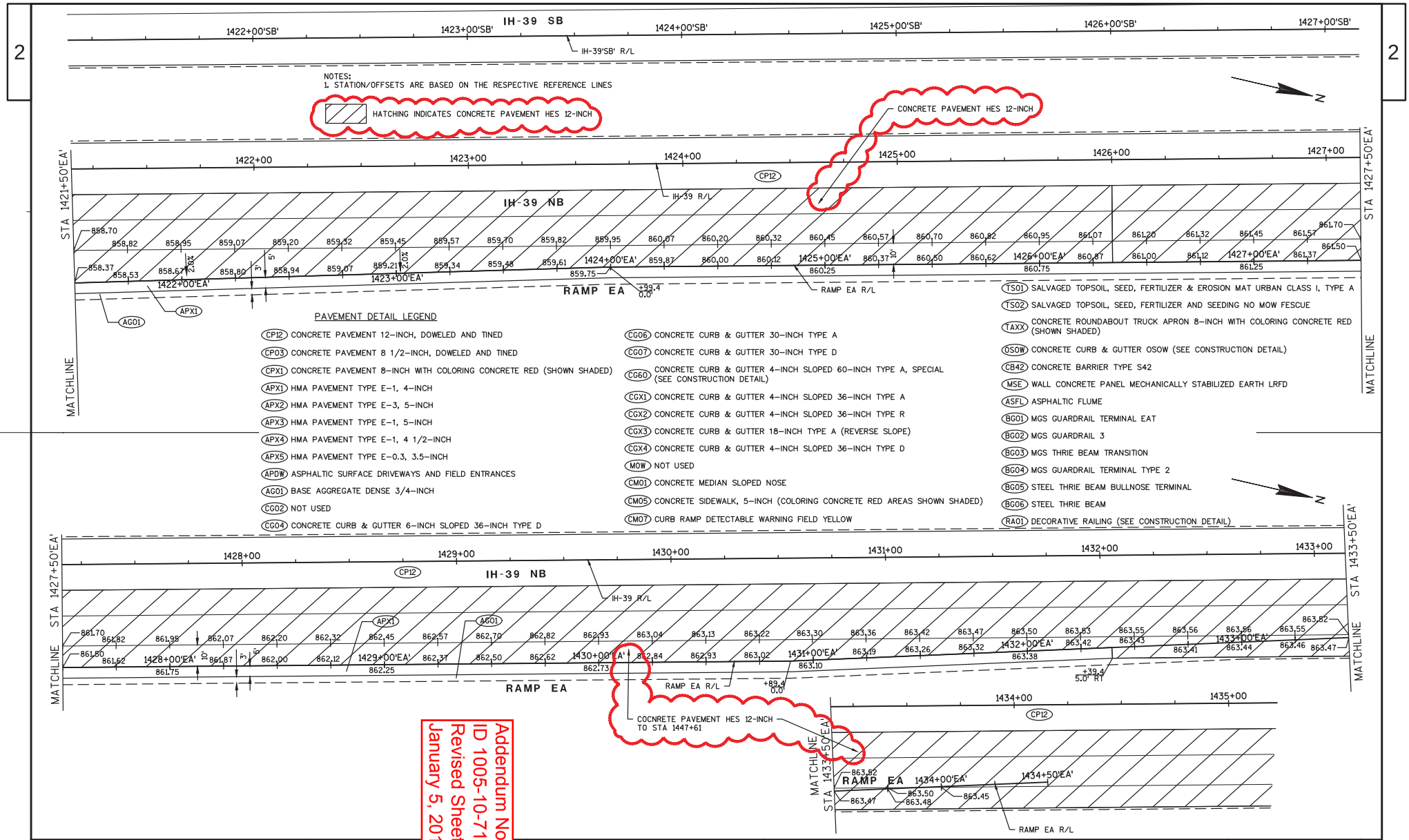
PAVEMENT DETAIL LEGEND

- (CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- (CPO3) CONCRETE PAVEMENT 8 1/2-INCH, DOWELED AND TINED
- (CPX1) CONCRETE PAVEMENT 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (APX1) HMA PAVEMENT TYPE E-1, 4-INCH
- (APX2) HMA PAVEMENT TYPE E-3, 5-INCH
- (APX3) HMA PAVEMENT TYPE E-1, 5-INCH
- (APX4) HMA PAVEMENT TYPE E-1, 4 1/2-INCH
- (APX5) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (APDW) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (CGO2) NOT USED
- (CGO4) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CGO6) CONCRETE CURB & GUTTER 30-INCH TYPE A
- (CGO7) CONCRETE CURB & GUTTER 30-INCH TYPE D
- (CG60) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- (CGX1) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CGX2) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
- (CGX3) CONCRETE CURB & GUTTER 18-INCH TYPE A (REVERSE SLOPE)
- (CGX4) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (MOW) NOT USED
- (CMO1) CONCRETE MEDIAN SLOPED NOSE
- (CMO5) CONCRETE SIDEWALK, 5-INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- (CMO7) CURB RAMP DETECTABLE WARNING FIELD YELLOW
- (TSO1) SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- (TSO2) SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- (TAXX) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (OSOW) CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- (CB42) CONCRETE BARRIER TYPE S42
- (MSE) WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- (ASFL) ASPHALTIC FLUME
- (BGO1) MGS GUARDRAIL TERMINAL EAT
- (BGO2) MGS GUARDRAIL 3
- (BGO3) MGS THRIE BEAM TRANSITION
- (BGO4) MGS GUARDRAIL TERMINAL TYPE 2
- (BGO5) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BGO6) STEEL THRIE BEAM
- (RA01) DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 159
January 5, 2016

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS RAMP EA	SCALE, FEET 0 20 40	SHEET 159	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021203_PD.DWG PLOT DATE : 12/21/2015 10:14 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT



Addendum No. 01
ID 1005-10-71/72
Revised Sheet 160
January 5, 2016

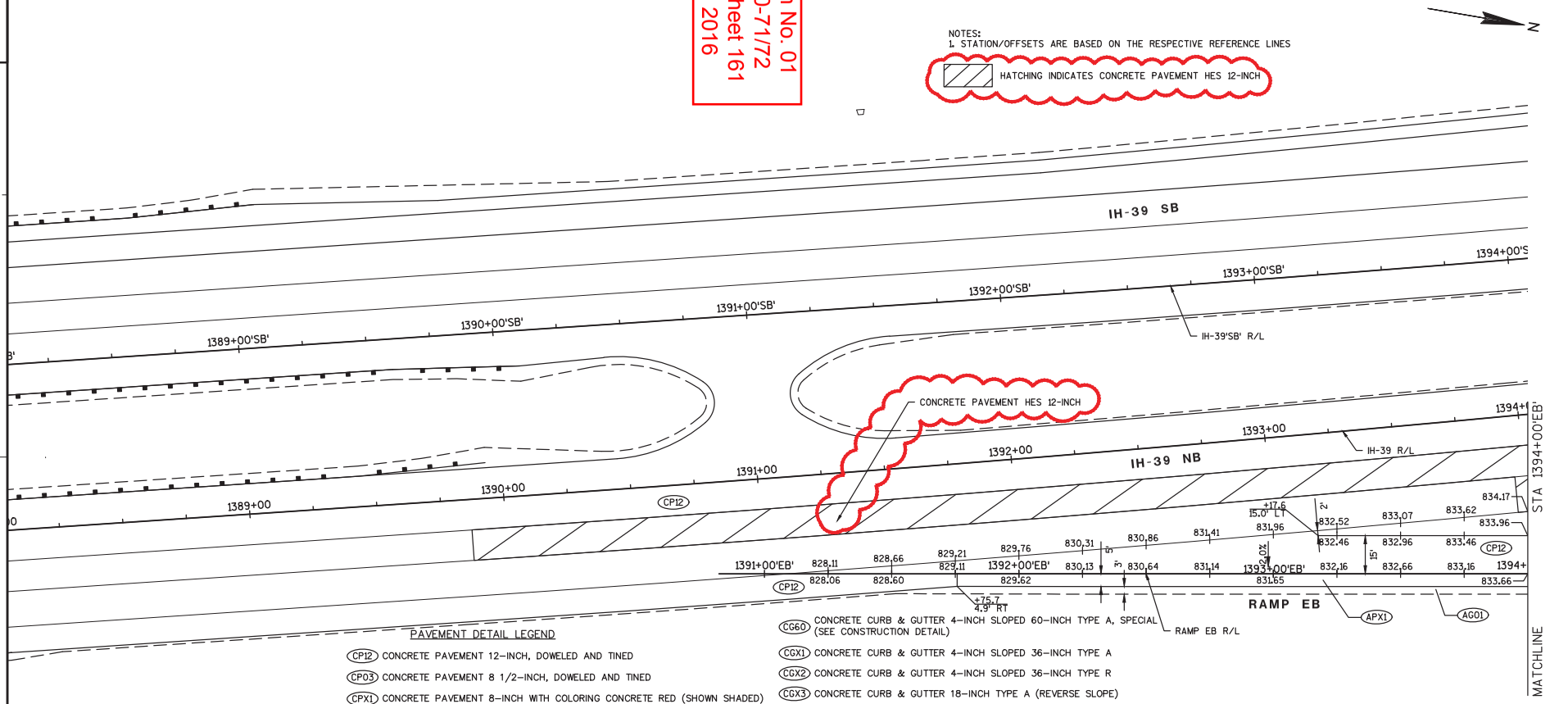
PROJECT NO:1005-10-71,72	HWY:IH-39/90	COUNTY:ROCK	PLAN DETAILS RAMP EA	SCALE, FEET 0 20 40	SHEET 160	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021203_PD.DWG PLOT DATE : 12/21/2015 10:14 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 161
January 5, 2016

NOTES:
1. STATION/OFFSETS ARE BASED ON THE RESPECTIVE REFERENCE LINES

HATCHING INDICATES CONCRETE PAVEMENT HES 12-INCH

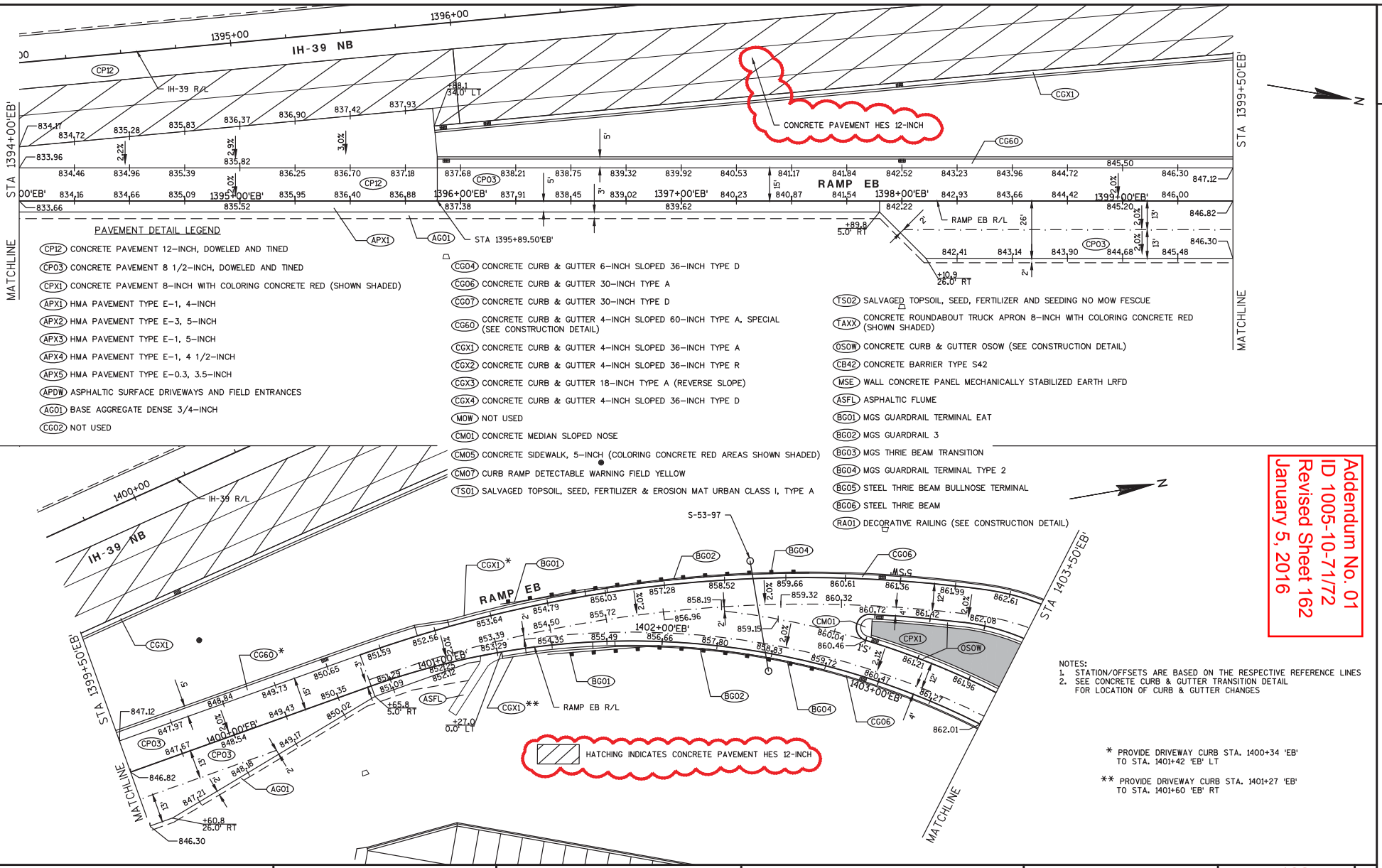


PAVEMENT DETAIL LEGEND

- (CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- (CP03) CONCRETE PAVEMENT 8 1/2-INCH, DOWELED AND TINED
- (CPX1) CONCRETE PAVEMENT 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (APX1) HMA PAVEMENT TYPE E-1, 4-INCH
- (APX2) HMA PAVEMENT TYPE E-3, 5-INCH
- (APX3) HMA PAVEMENT TYPE E-1, 5-INCH
- (APX4) HMA PAVEMENT TYPE E-1, 4 1/2-INCH
- (APX5) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (APDW) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- (AG01) BASE AGGREGATE DENSE 3/4-INCH
- (CG02) NOT USED
- (CG04) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CG06) CONCRETE CURB & GUTTER 30-INCH TYPE A
- (CG07) CONCRETE CURB & GUTTER 30-INCH TYPE D
- (CG60) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- (CGX1) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CGX2) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
- (CGX3) CONCRETE CURB & GUTTER 18-INCH TYPE A (REVERSE SLOPE)
- (CGX4) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (MOW) NOT USED
- (CM01) CONCRETE MEDIAN SLOPED NOSE
- (CM05) CONCRETE SIDEWALK, 5-INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- (CM07) CURB RAMP DETECTABLE WARNING FIELD YELLOW
- (TS01) SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- (TS02) SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- (TAXX) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (OSOW) CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- (CB42) CONCRETE BARRIER TYPE S42
- (MSE) WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- (ASFL) ASPHALTIC FLUME
- (BG01) MGS GUARDRAIL TERMINAL EAT
- (BG02) MGS GUARDRAIL 3
- (BG03) MGS THRIE BEAM TRANSITION
- (BG04) MGS GUARDRAIL TERMINAL TYPE 2
- (BG05) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BG06) STEEL THRIE BEAM
- (RA01) DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

PROJECT NO:1005-10-71,72	HWY:IH-39/90	COUNTY:ROCK	PLAN DETAILS RAMP EB	SCALE, FEET 0 20 40	SHEET 161	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021204_PD.DWG PLOT DATE : 12/21/2015 10:24 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT



PAVEMENT DETAIL LEGEND

- CP12 CONCRETE PAVEMENT 12–INCH, DOWELED AND TINED
- CP03 CONCRETE PAVEMENT 8 1/2–INCH, DOWELED AND TINED
- CPX1 CONCRETE PAVEMENT 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- APX1 HMA PAVEMENT TYPE E–1, 4–INCH
- APX2 HMA PAVEMENT TYPE E–3, 5–INCH
- APX3 HMA PAVEMENT TYPE E–1, 5–INCH
- APX4 HMA PAVEMENT TYPE E–1, 4 1/2–INCH
- APX5 HMA PAVEMENT TYPE E–0.3, 3.5–INCH
- APDW ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- AG01 BASE AGGREGATE DENSE 3/4–INCH
- CG02 NOT USED
- CG04 CONCRETE CURB & GUTTER 6–INCH SLOPED 36–INCH TYPE D
- CG06 CONCRETE CURB & GUTTER 30–INCH TYPE A
- CG07 CONCRETE CURB & GUTTER 30–INCH TYPE D
- CG60 CONCRETE CURB & GUTTER 4–INCH SLOPED 60–INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- CGX1 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE A
- CGX2 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE R
- CGX3 CONCRETE CURB & GUTTER 18–INCH TYPE A (REVERSE SLOPE)
- CGX4 CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE D
- MOW NOT USED
- CM01 CONCRETE MEDIAN SLOPED NOSE
- CM05 CONCRETE SIDEWALK, 5–INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- CM07 CURB RAMP DETECTABLE WARNING FIELD YELLOW
- TS01 SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- TS02 SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- TAXX CONCRETE ROUNDABOUT TRUCK APRON 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- OSOW CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- CB42 CONCRETE BARRIER TYPE S42
- MSE WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- ASFL ASPHALTIC FLUME
- BG01 MGS GUARDRAIL TERMINAL EAT
- BG02 MGS GUARDRAIL 3
- BG03 MGS THRIE BEAM TRANSITION
- BG04 MGS GUARDRAIL TERMINAL TYPE 2
- BG05 STEEL THRIE BEAM BULLNOSE TERMINAL
- BG06 STEEL THRIE BEAM
- RA01 DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

NOTES:
1. STATION/OFFSETS ARE BASED ON THE RESPECTIVE REFERENCE LINES
2. SEE CONCRETE CURB & GUTTER TRANSITION DETAIL FOR LOCATION OF CURB & GUTTER CHANGES

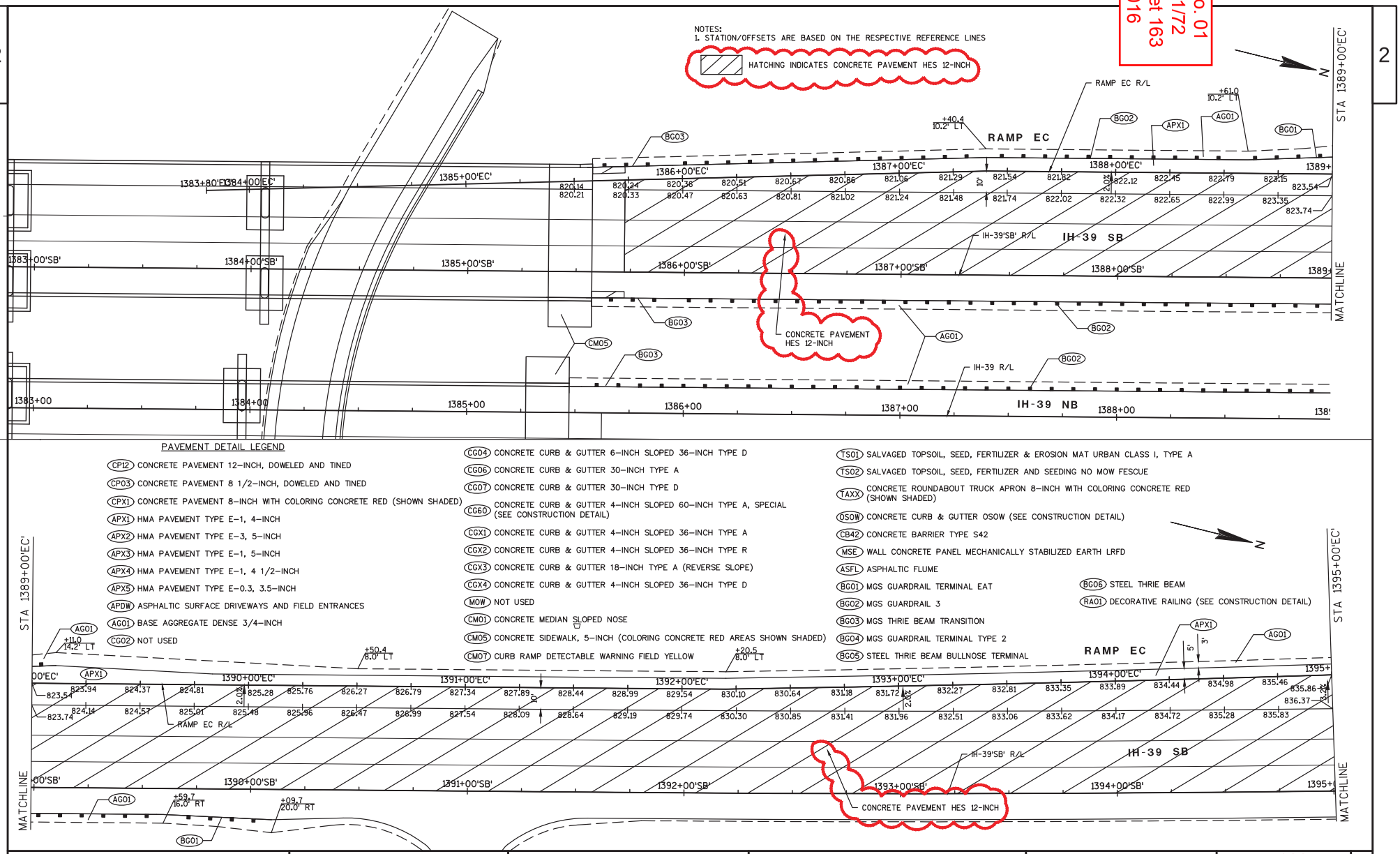
* PROVIDE DRIVEWAY CURB STA. 1400+34 'EB' TO STA. 1401+42 'EB' LT

** PROVIDE DRIVEWAY CURB STA. 1401+27 'EB' TO STA. 1401+60 'EB' RT

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 162
January 5, 2016

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS RAMP EB	SCALE, FEET 0 20 40	SHEET 162	E

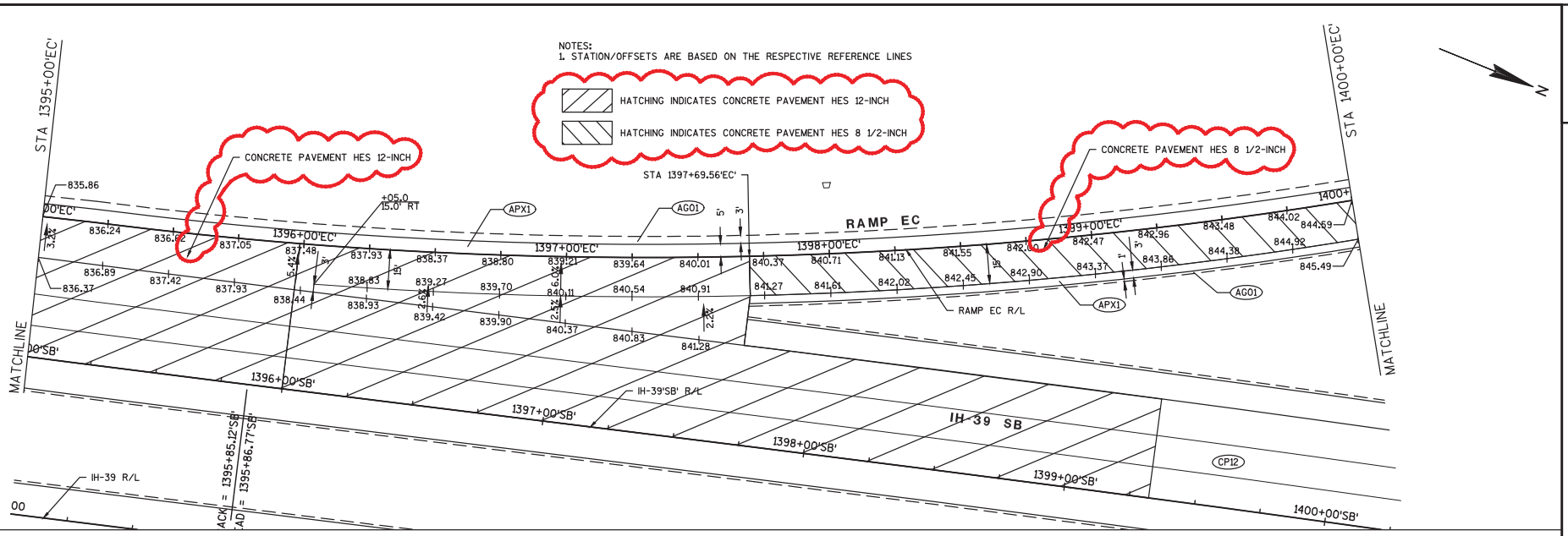
Addendum No. 01
ID 1005-10-71/72
Revised Sheet 163
January 5, 2016

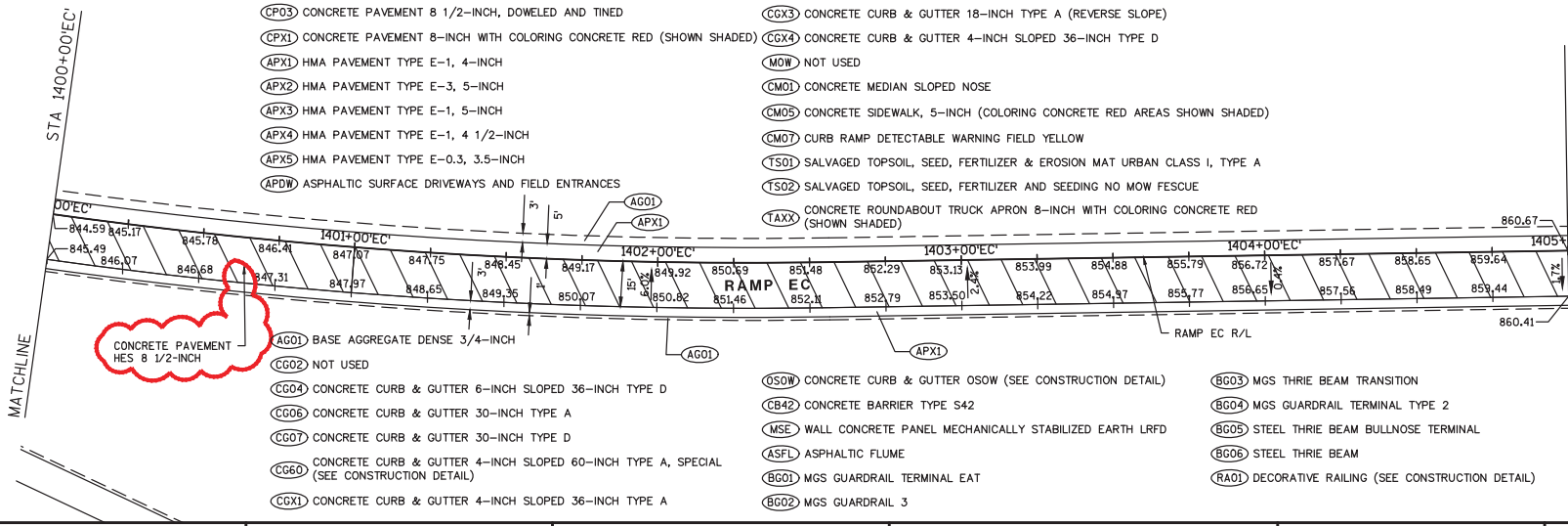


PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS RAMP EC	SCALE, FEET 0 20 40	SHEET 163	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021205_PD.DWG PLOT DATE : 12/21/2015 10:31 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : *********

WISDOT/CADDS SHEET 42





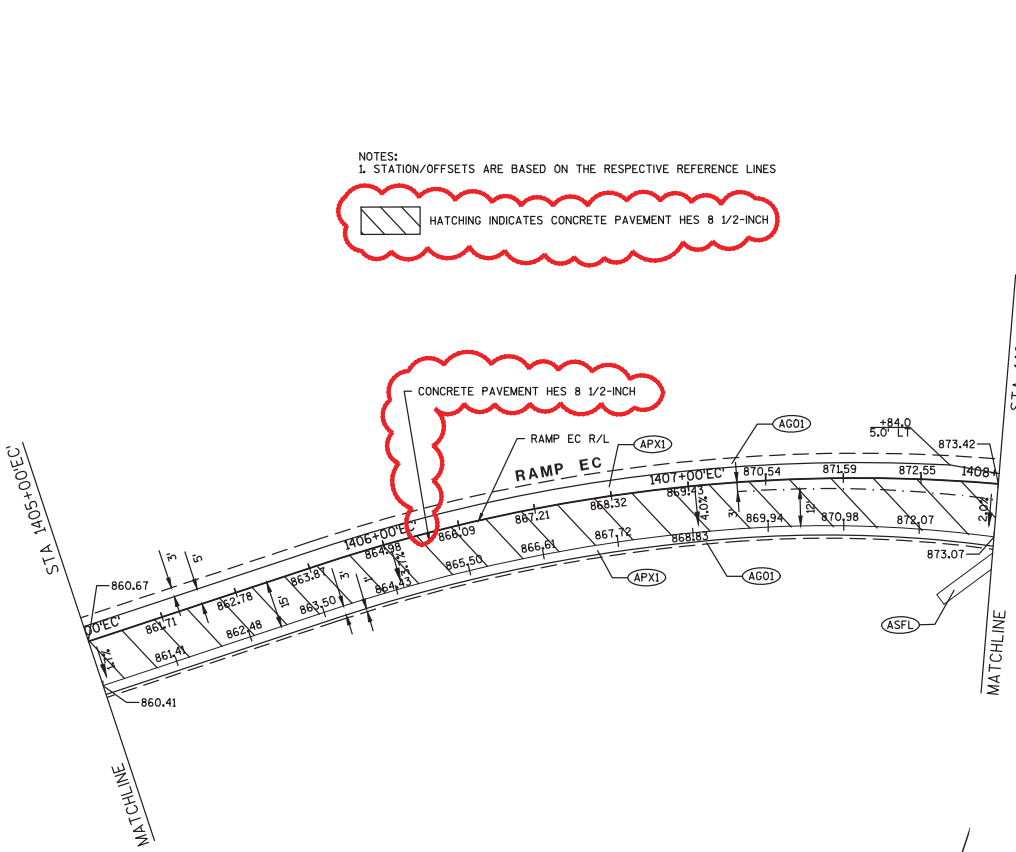
PAVEMENT DETAIL LEGEND

- (CP12) CONCRETE PAVEMENT 12-INCH, DOWELED AND TINED
- (CP03) CONCRETE PAVEMENT 8 1/2-INCH, DOWELED AND TINED
- (CPX1) CONCRETE PAVEMENT 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (APX1) HMA PAVEMENT TYPE E-1, 4-INCH
- (APX2) HMA PAVEMENT TYPE E-3, 5-INCH
- (APX3) HMA PAVEMENT TYPE E-1, 5-INCH
- (APX4) HMA PAVEMENT TYPE E-1, 4 1/2-INCH
- (APX5) HMA PAVEMENT TYPE E-0.3, 3.5-INCH
- (APDW) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- (AGO1) BASE AGGREGATE DENSE 3/4-INCH
- (CGO2) NOT USED
- (CGO4) CONCRETE CURB & GUTTER 6-INCH SLOPED 36-INCH TYPE D
- (CGO6) CONCRETE CURB & GUTTER 30-INCH TYPE A
- (CGO7) CONCRETE CURB & GUTTER 30-INCH TYPE D
- (CGO60) CONCRETE CURB & GUTTER 4-INCH SLOPED 60-INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- (CGX1) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE A
- (CGX2) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE R
- (CGX3) CONCRETE CURB & GUTTER 18-INCH TYPE A (REVERSE SLOPE)
- (CGX4) CONCRETE CURB & GUTTER 4-INCH SLOPED 36-INCH TYPE D
- (MOW) NOT USED
- (CMO1) CONCRETE MEDIAN SLOPED NOSE
- (CMO5) CONCRETE SIDEWALK, 5-INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- (CMO7) CURB RAMP DETECTABLE WARNING FIELD YELLOW
- (TSO1) SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- (TSO2) SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- (TAXX) CONCRETE ROUNDABOUT TRUCK APRON 8-INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (OSOW) CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- (CB42) CONCRETE BARRIER TYPE S42
- (MSE) WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- (ASFL) ASPHALTIC FLUME
- (BGO1) MGS GUARDRAIL TERMINAL EAT
- (BGO2) MGS GUARDRAIL 3
- (BGO3) MGS THRIE BEAM TRANSITION
- (BGO4) MGS GUARDRAIL TERMINAL TYPE 2
- (BGO5) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BGO6) STEEL THRIE BEAM
- (RA01) DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 164
January 5, 2016

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS RAMP EC	SCALE, FEET 0 20 40	SHEET 164	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021205_PD.DWG PLOT DATE : 12/21/2015 10:40 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT



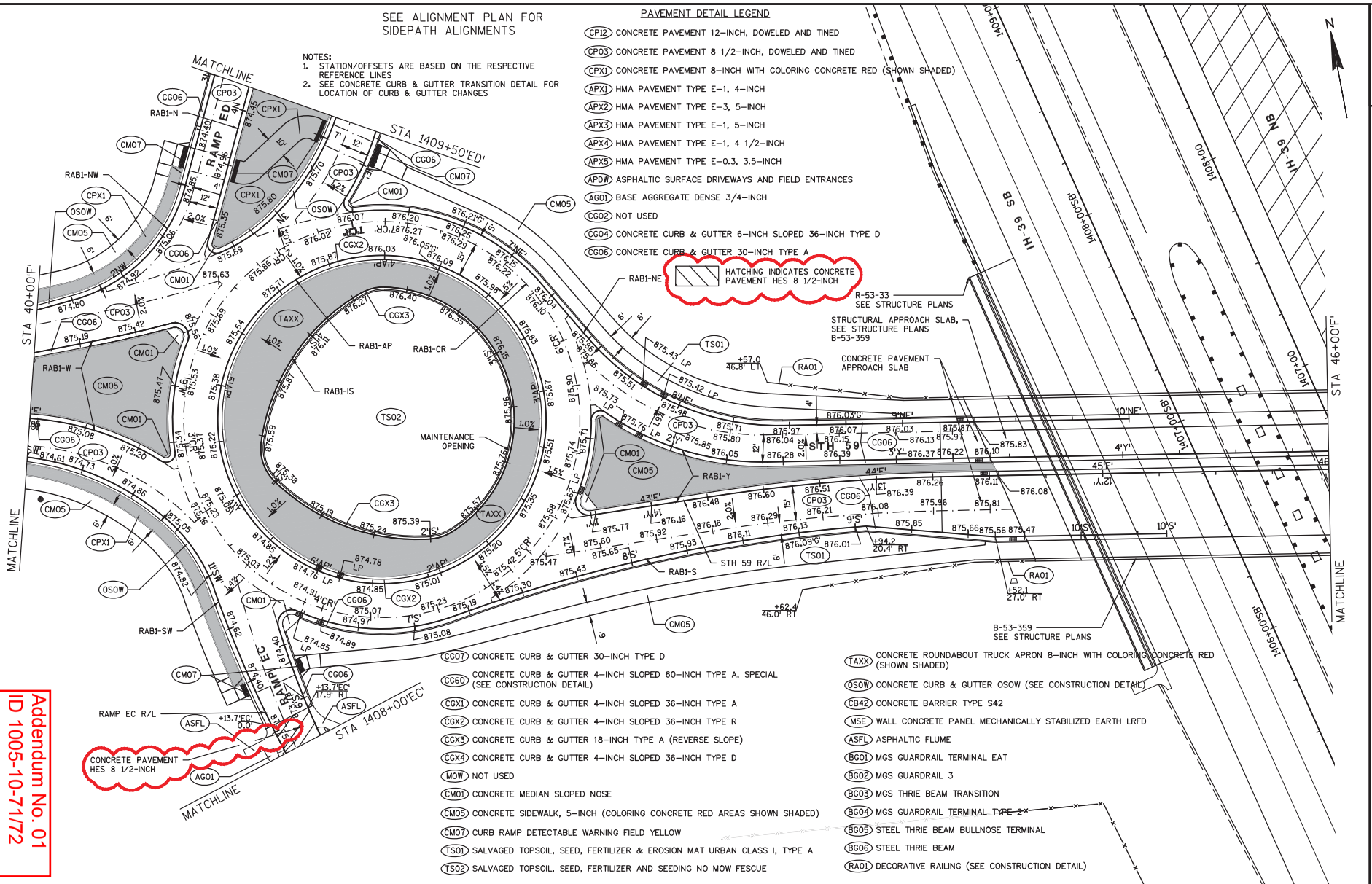
PAVEMENT DETAIL LEGEND

- (CP12) CONCRETE PAVEMENT 12–INCH, DOWELED AND TINED
- (CP03) CONCRETE PAVEMENT 8 1/2–INCH, DOWELED AND TINED
- (CPX1) CONCRETE PAVEMENT 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (APX1) HMA PAVEMENT TYPE E–1, 4–INCH
- (APX2) HMA PAVEMENT TYPE E–3, 5–INCH
- (APX3) HMA PAVEMENT TYPE E–1, 5–INCH
- (APX4) HMA PAVEMENT TYPE E–1, 4 1/2–INCH
- (APX5) HMA PAVEMENT TYPE E–0.3, 3.5–INCH
- (APDW) ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES
- (AGO1) BASE AGGREGATE DENSE 3/4–INCH
- (CGO2) NOT USED
- (CGO4) CONCRETE CURB & GUTTER 6–INCH SLOPED 36–INCH TYPE D
- (CGO6) CONCRETE CURB & GUTTER 30–INCH TYPE A
- (CGO7) CONCRETE CURB & GUTTER 30–INCH TYPE D
- (CGO60) CONCRETE CURB & GUTTER 4–INCH SLOPED 60–INCH TYPE A, SPECIAL (SEE CONSTRUCTION DETAIL)
- (CGX1) CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE A
- (CGX2) CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE R
- (CGX3) CONCRETE CURB & GUTTER 18–INCH TYPE A (REVERSE SLOPE)
- (CGX4) CONCRETE CURB & GUTTER 4–INCH SLOPED 36–INCH TYPE D
- (MOW) NOT USED
- (CMO1) CONCRETE MEDIAN SLOPED NOSE
- (CMO5) CONCRETE SIDEWALK, 5–INCH (COLORING CONCRETE RED AREAS SHOWN SHADED)
- (CMO7) CURB RAMP DETECTABLE WARNING FIELD YELLOW
- (TSO1) SALVAGED TOPSOIL, SEED, FERTILIZER & EROSION MAT URBAN CLASS I, TYPE A
- (TSO2) SALVAGED TOPSOIL, SEED, FERTILIZER AND SEEDING NO MOW FESCUE
- (TAXX) CONCRETE ROUNDABOUT TRUCK APRON 8–INCH WITH COLORING CONCRETE RED (SHOWN SHADED)
- (OSOW) CONCRETE CURB & GUTTER OSOW (SEE CONSTRUCTION DETAIL)
- (CB42) CONCRETE BARRIER TYPE S42
- (MSE) WALL CONCRETE PANEL MECHANICALLY STABILIZED EARTH LRFD
- (ASFL) ASPHALTIC FLUME
- (BGO1) MGS GUARDRAIL TERMINAL EAT
- (BGO2) MGS GUARDRAIL 3
- (BGO3) MGS THRIE BEAM TRANSITION
- (BGO4) MGS GUARDRAIL TERMINAL TYPE 2
- (BGO5) STEEL THRIE BEAM BULLNOSE TERMINAL
- (BGO6) STEEL THRIE BEAM
- (RAO1) DECORATIVE RAILING (SEE CONSTRUCTION DETAIL)

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 165
January 5, 2016

PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS RAMP EC	SCALE, FEET 0 20 40	SHEET 165	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021206_PD.DWG PLOT DATE : 12/21/2015 10:45 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT



PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	PLAN DETAILS - STH 59	SCALE, FEET 0 20 40	SHEET 171	E

FILE NAME : K:\1112719\CIVIL3D\10051072\SHEETSPLAN\PAVING\021211_PD.DWG PLOT DATE : 12/21/2015 11:05 AM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : 1 IN:40 FT

WISDOT/CADDS SHEET 42

CONCRETE PAVEMENT APPROACH SLAB

STAGE	ROADWAY	LOCATION	415.0410 SY
1	IH-39 NB	SOUTH END B-53-358	44
		NORTH END B-53-358	44
	STAGE 1 SUBTOTAL		88
2A	STH 59 'F'	WEST END B-53-359	122
		EAST END B-53-359	121
	STAGE 2A SUBTOTAL		243
3A	IH-39 NB	SOUTH END B-53-358	20
		NORTH END B-53-358	20
	STAGE 3A SUBTOTAL		40
4B	IH-39 'SB'	SOUTH END B-53-357	64
		NORTH END B-53-357	71
	STAGE 4B SUBTOTAL		135
	PROJECT TOTALS		506

ROUT AND SEAL

STAGE	ROADWAY	STATION		STATION	SIDE	415.6000.S LF
2A	RAMP 'EA'	1405+38	-	1418+68	LT/RT	2,431
	RAMP 'EC'	1403+00	-	1408+04	LT/RT	999
	RAMP 'ED'	1413+07	-	1422+71	LT/RT	1,912
	STAGE 2A SUBTOTAL					5,342
2C	RAMP 'EA'	1418+68	-	1433+39	RT	1,371
	RAMP 'EB'	1391+76	-	1397+90	RT	619
	STAGE 2C SUBTOTAL					1,990
4	IH-39 'SB'	1342+82	-	1366+00	LT/RT	3,484
		1366+00	-	1396+00	LT/RT	4,539
		1396+00	-	1426+00	LT/RT	6,144
		1426+00	-	1447+60	LT/RT	3,240
	RAMP 'EC'	1397+00	-	1403+00	LT/RT	1,065
	STAGE 4 SUBTOTAL					18,472
	PROJECT TOTALS					25,804

DRIVEWAY PAVEMENT ITEMS

ROADWAY	STATION	SIDE (LT/RT)	416.0160 CONCRETE DRIVEWAY 6-INCH SY	465.0120 ASPHALTIC SURFACE DRIVEWAYS AND FIELD ENTRANCES TON
STH 59 'F'	32+02	RT	---	110
KENLYN LANE 'KL'	12+39	RT	10	---
	12+50	LT	15	23
	14+17	RT	10	---
	15+00	LT	10	---
	17+50	LT	14	51
GOEDE ROAD 'GS'	103+25	RT	69	17
	104+96	RT	49	16
	105+50	LT	39	6
	106+10	RT	39	14
E RICHARDSON SPRINGS RD 'ORS'	5+37	LT	16	---
	5+70	LT	37	19
	6+75	LT	41	35
	7+25 'RS'	RT	---	9
N RICHARDSON SPRINGS RD 'RS'	22+30	LT	124	19
N SOUTH EASTMAN ROAD	80+61	LT	---	12
N EASTMAN ROAD	144+73	RT	---	27
	PROJECT TOTALS		473	358

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 747
January 5, 2016

APRON ENDWALLS FOR CULVERT PIPE

		INLET				OUTLET				*** 521.1505	521.1506	*** 521.1515	*** 521.1524	521.1530	521.0442	*** 522.1030	522.1036	522.1042	522.1048	523.0524	*** SPV.0060.012	SPV.0060.013	611.9800.S	**	**** 633.5200	
										SLOPED SIDE DRAINS STEEL					SLOPED CROSS DRAINS	REINFORCED CONCRETE				HORIZONTAL	REINFORCED CONCRETE ENDWALLS & GRATES					
										24-INCH	30-INCH	15-INCH	24-INCH	30-INCH	STEEL					ELLIPTICAL	19x30-INCH	24x38-INCH	PIPE	JOINT	MARKERS	
										4 to 1	4 to 1	6 to 1	6 to 1	6 to 1	42-INCH 6 to 1	30-INCH	36-INCH	42-INCH	48-INCH	24x38-INCH	SPECIAL	SPECIAL	GRATES	TIES	CULVERT END	
ROADWAY	LOCATION	STATION	OFFSET	LT/RT	ELEV.	STATION	OFFSET	LT/RT	ELEV.	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	REMARKS
IH-39	CROSS DRAIN	1345+00	142.0	LT*	870.46	1345+00	84.1	RT*	869.54	---	2	---	---	---	---	---	---	---	---	---	---	---	---	12	2	CONNECTS TO STORM STRUC 210
	SIDE DRAIN	1351+62	100.0	RT*	871.69	1352+24	100.0	RT*	871.38	---	---	---	2	---	---	---	---	---	---	---	---	---	---	12	2	NEWVILLE RD EMERGENCY ACCESS
	CROSS DRAIN	1386+00	146.5	LT*	806.12	1386+00	82.9	RT*	804.97	---	---	---	---	---	---	---	2	---	---	---	---	---	---	12	2	BORING AND JACKING REQ'D
	1 - CROSS DRAIN	1411+93	81.5	RT*	845.44	1411+93	142.2	LT*	844.04	---	1	---	---	1	---	---	---	---	---	---	---	---	---	12	2	
	2 - CROSS DRAIN	1412+00	81.5	RT*	845.44	1412+00	142.2	LT*	844.04	---	1	---	---	1	---	---	---	---	---	---	---	---	---	12	2	
	CROSS DRAIN	1425+00	83.2	RT*	851.44	1425+00	152.0	LT*	850.56	---	---	---	---	---	2	---	---	---	---	---	---	---	---	12	2	
RAMP 'EA'	1 - CROSS DRAIN	1413+93	21.3	RT	849.35	1413+93	46.1	LT	848.66	---	---	---	---	---	---	---	---	---	---	---	---	2	---	12	2	
	2 - CROSS DRAIN	1414+00	21.3	RT	849.35	1414+00	46.1	LT	848.66	---	---	---	---	---	---	---	---	---	---	---	---	2	---	12	2	
RAMP 'EB'	1 - SIDE DRAIN	1396+86	41.6	RT	833.22	1396+13	33.8	RT	832.21	---	---	2	---	---	---	---	---	---	---	---	---	---	---	12	2	DITCH PIPE
	2 - SIDE DRAIN	1396+86	45.6	RT	833.22	1396+12	37.7	RT	832.21	---	---	2	---	---	---	---	---	---	---	---	---	---	---	12	2	DITCH PIPE
RAMP 'EC'	SIDE DRAIN	1397+07	46.9	LT	831.31	1396+88	46.7	LT	831.24	---	---	---	---	---	---	---	---	---	---	---	2	---	---	12	2	DITCH PIPE
	CROSS DRAIN	1402+00	81.0	RT	837.96	1402+00	53.4	LT	836.18	---	---	---	---	---	---	2	---	---	---	---	---	---	---	12	2	
STH 59 'F'	CROSS DRAIN	30+00	50.9	LT	878.49	30+00	37.8	RT	878.00	---	---	---	---	---	---	---	---	---	---	---	2	---	---	12	2	
	I-90 TIRES DWY	31+75	45.4	RT	877.01	32+31	45.4	RT	876.53	---	---	---	---	---	---	---	---	---	---	---	2	---	---	12	---	
	CROSS DRAIN	39+07	132.6	LT	842.96	38+94	118.8	RT	841.70	---	---	---	---	---	---	---	---	---	2	---	---	---	---	12	2	BORING AND JACKING REQ'D
	CROSS DRAIN	43+77	142.1	LT	842.42	44+29	134.2	RT	839.88	---	---	---	---	---	---	---	---	2	---	---	---	---	---	12	2	BORING AND JACKING REQ'D
	CROSS DRAIN	59+25	42.5	RT	828.90	59+25	69.9	LT	828.07	1	---	---	1	---	---	---	---	---	---	---	---	---	---	12	2	
KENLYN LANE 'KL'	CROSS DRAIN	31+50	66.1	LT	870.09	31+50	68.1	RT	869.42	---	---	---	---	---	---	2	---	---	---	---	---	---	---	12	2	
E. RICHARDSON	1 - CROSS DRAIN	10+43	23.1	LT	787.9	10+43	25.9	RT	787.2	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
SPRINGS RD 'RS'	2 - CROSS DRAIN	10+50	23.1	LT	787.9	10+50	25.9	RT	787.2	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
	3 - CROSS DRAIN	10+57	23.1	LT	787.9	10+57	25.9	RT	787.2	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
ELLENDALE RD 'ER'	1 - CROSS DRAIN	11+62	20.8	RT	783.02	11+62	25.1	LT	782.88	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
	2 - CROSS DRAIN	11+70	20.8	RT	783.02	11+70	25.1	LT	782.88	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	---	
	3 - CROSS DRAIN	11+78	20.8	RT	783.02	11+78	25.1	LT	782.88	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
	1 - CROSS DRAIN	15+42	21.0	RT	782.99	15+42	24.2	LT	782.76	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
	2 - CROSS DRAIN	15+50	21.0	RT	782.99	15+50	24.2	LT	782.76	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	---	
	3 - CROSS DRAIN	15+58	21.0	RT	782.99	15+58	24.2	LT	782.76	---	---	---	---	---	---	---	---	---	---	2	---	---	2	12	2	
	PROJECT TOTALS									1	4	4	3	2	2	4	2	2	2	18	6	4	18	324	48	

* OFFSETS ARE BASED ON THE NB IH-39 R/L

** NON-BID ITEM, FOR INFORMATION ONLY. APRON ENDWALLS SHALL BE TIED FOR THE LAST THREE JOINTS AT PIPE ENDS.

*** ADDITIONAL QUANTITIES LISTED ELSEWHERE, SEE "STORM SEWER PIPES AND ENDWALLS" TABLE

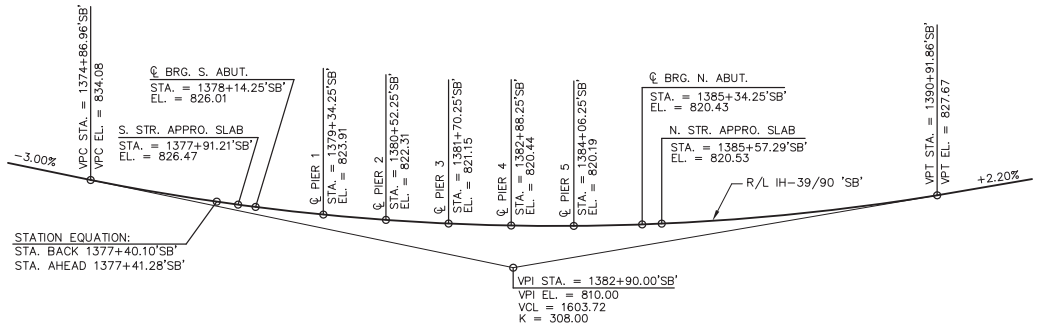
**** ADDITIONAL QUANTITIES LISTED ELSEWHERE, SEE "STEEL CULVERT PIPE & ENDWALLS" AND "STORM SEWER PIPES & ENDWALLS" TABLES

PIPE BORING AND JACKING

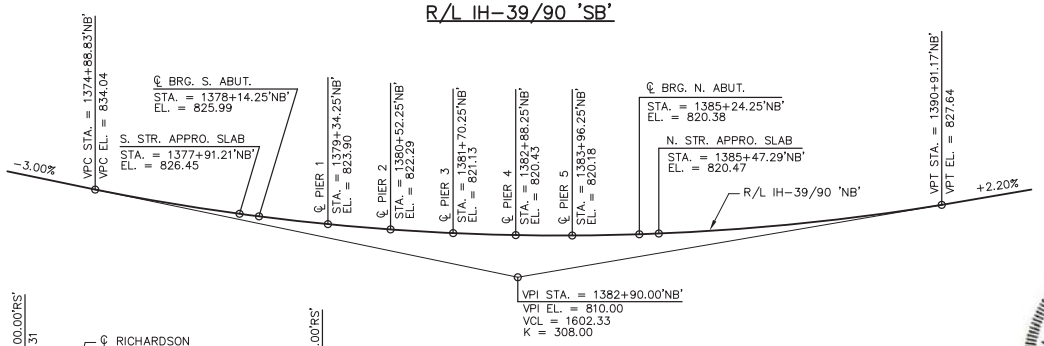
ROADWAY	STATION	SPV.0090.007 36-INCH LF	* SPV.0090.008 42-INCH LF	SPV.0090.009 48-INCH LF
IH-39	1386+00	183	---	---
STH 59 'F'	44+00	---	363	---
	39+00	---	---	206
PROJECT TOTALS		183	363	206

* INCLUDES QUANTITY FOR STAGE 1 TEMPORARY PIPE

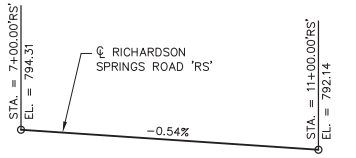
Addendum No. 01
ID 1005-10-71/72
Revised Sheet 754
January 5, 2016



PROFILE GRADE LINE,
R/L IH-39/90 'SB'



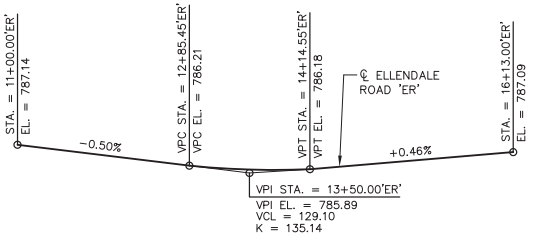
PROFILE GRADE LINE,
R/L IH-39/90 'NB'



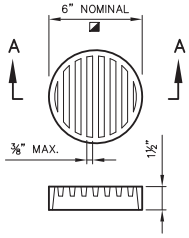
PROFILE GRADE LINE,
℄ RICHARDSON SPRINGS ROAD 'RS'

William C. Drecher SDR
12/04/15

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER
12/4/2015



PROFILE GRADE LINE,
℄ ELLENDALE ROAD 'ER'



SECTION A-A

RODENT SHIELD

DIMENSIONS ARE APPROXIMATE. THE GRATE IS SIZED TO FIT INTO A PIPE COUPLING. ORIENT SHIELD SO SLOTS ARE VERTICAL.

THE RODENT SHIELD SHALL BE A PVC GRATE SIMILAR TO THIS DETAIL. THE GRATE IS COMMERCIALLY AVAILABLE AS A FLOOR STRAINER. A PIPE COUPLING IS REQUIRED FOR THE ATTACHMENT OF THIS SHIELD TO THE EXPOSED END OF THE PIPE UNDERDRAIN. THE SHIELD SHALL BE FASTENED TO THE PIPE COUPLING WITH TWO OR MORE NO. 10 X 1-INCH STAINLESS STEEL SHEET METAL SCREWS.

THE RODENT SHIELD, PIPE COUPLING AND SCREWS SHALL BE INCLUDED WITH THE BID ITEM "PIPE UNDERDRAIN WRAPPED 6-INCH".

STATE PROJECT NUMBER
1005-10-71

DESIGN DATA

LIVE LOAD:

DESIGN LOADING — HL-93
INVENTORY RATING FACTOR — RF = 1.19
OPERATING RATING FACTOR — RF = 1.55
WISCONSIN STANDARD PERMIT VEHICLE RATING (WIS.-SPV): — 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY,
HPC DECK & SUPERSTRUCTURE — $f'c$ = 4,000 P.S.I.
ALL OTHER — $f'c$ = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT — fy = 60,000 P.S.I.
54W-INCH PRESTRESSED GIRDERS
CONCRETE MASONRY — $f'c$ = 8,000 P.S.I.
STRANDS - 0.6" DIAMETER WITH AN
ULTIMATE TENSILE STRENGTH OF — fu = 270,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

PIERS TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED PILE LENGTHS:

SOUTH ABUTMENT	40 FT
PIER 1	25 FT *
PIER 2	25 FT
PIER 3	30 FT
PIER 4	30 FT
PIER 5	20 FT
NORTH ABUTMENT	20 FT *

1 * A MINIMUM OF 3-FEET OF PRE-BORE AT THE NORTH ABUTMENT AND A MINIMUM OF 4-FEET OF PRE-BORE AT PIER 1 INTO SUITABLE BEDROCK IS REQUIRED IF THE MINIMUM 10-FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED. THE CONTRACTOR AND THE CONSTRUCTION ENGINEER SHOULD ANTICIPATE VARIABLE PILE PENETRATION AND POSSIBLE ADDITIONAL LOCATIONS OF PRE-BORING.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES DYNAMIC FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

DUE TO THE PRESENCE OF GRAVEL AND WEATHERED SANDSTONE IN THE SUBSTRATA, HARD DRIVING SHOULD BE EXPECTED. PILE POINTS SHALL BE USED TO PROTECT THE PILES DURING DRIVING.

HYDRAULIC DATA:

REGULATORY Q_{100}	10,500 C.F.S.
REGULATORY Q_{100} (THRU BRIDGE)	10,500 C.F.S.
REGULATORY Q_{100} (ROAD)	N/A C.F.S.
REGULATORY HIGH WATER EL.	784.26 FT
DESIGN Q_{100}	14,830 C.F.S.
DESIGN Q_{100} (THRU BRIDGE)	14,830 C.F.S.
DESIGN Q_{100} (ROAD)	N/A C.F.S.
DESIGN HIGH WATER EL.	784.59 FT
ORDINARY HIGH WATER EL.	779.64 FT
WATER AREA @ DESIGN Q_{100}	5,644 SQ. FT.
VELOCITY @ DESIGN Q_{100}	2.63 F.P.S.
Q_2	3,550 C.F.S.
Q_2 WATER EL.	777.43
DRAINAGE AREA	2,500 SQ. MI.
OVERTOPPING ROADWAY	N/A
SCOUR CRITICAL CODE	5

TRAFFIC DATA:

IH-39/90

A.A.D.T. (2016)	50,500
A.A.D.T. (2040)	71,800
DESIGN SPEED	70 M.P.H.

RICHARDSON SPRINGS ROAD

A.A.D.T. (2016)	105
A.A.D.T. (2040)	115
DESIGN SPEED	25 M.P.H.

ELLENDALE ROAD

A.A.D.T. (2016)	1,750
A.A.D.T. (2040)	2,100
DESIGN SPEED	30 M.P.H.

Addendum No. 01
ID 1005-10-71
Revised Sheet 1149
January 5, 2016

NO.	DATE	REVISION	BY
1	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-357

DRAWN BY CDS | PLANS CK'D JJK

PROFILES AND DESIGN DATA

SHEET 2 OF 47

1149

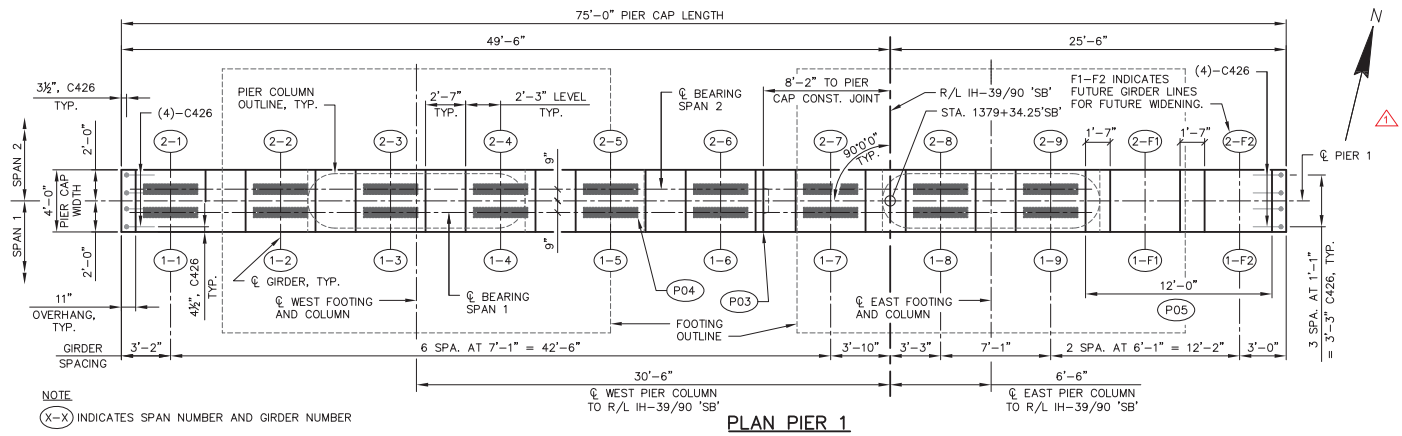
I.D. 1005-10-71 PLOT DATE: Dec 04, 2015

FILE: 02-03-B530357_gnt.dwg
PLOT SCALE:

8

8

STATE PROJECT NUMBER
1005-10-71



NOTE
(X-X) INDICATES SPAN NUMBER AND GIRDER NUMBER

PLAN PIER 1

NOTES

SECTIONS "A-A", "B-B", "C-C" & "D-D" SHOWN ON "PIER 1 DETAILS" SHEET.
TYPICAL SECTION THRU PIER COLUMN SHOWN ON "PIER 1 ADDITIONAL DETAILS" SHEET.

1 PIER 1 TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS OF 25 FT. A MINIMUM OF 4-FEET OF PRE-BORE INTO SUITABLE BEDROCK IS REQUIRED IF MINIMUM 10-FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED.

P01 KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'-2" X 10'-0" X 4". RUN STEEL THROUGH JOINT. JOINT IN COLUMN 20'-0" ABOVE FOOTING IS OPTIONAL.

P02 PIER COLUMN AESTHETIC REVEALS. SEE "PIER AESTHETICS" SHEET.

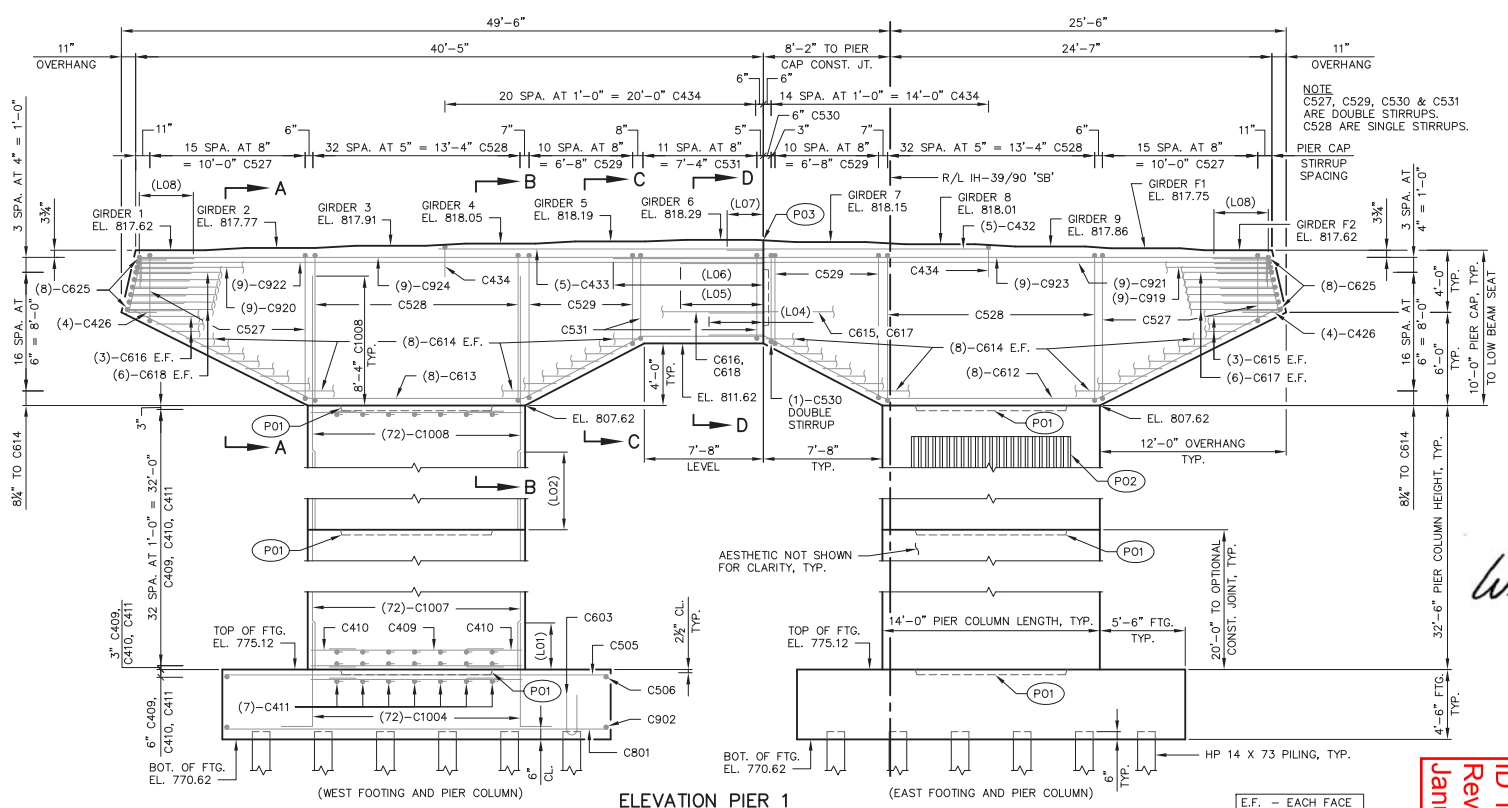
P03 KEYED CONSTRUCTION JOINT FOR PIER CAP FORMED BY BEVELED 1'-8" X 3'-8" X 4". RUN BAR STEEL THROUGH JOINT. THE CONTRACTOR HAS THE OPTION TO USE BAR COUPLERS TO FACILITATE STAGE CONSTRUCTION AT NO ADDITIONAL COMPENSATION BEYOND THE REBAR QUANTITIES SHOWN. BAR COUPLERS, IF USED, SHALL BE STAGGERED TO ASSIST CONSTRUCTION.

P04 STEEL BEARINGS, TYP. SEE "BEAM SEAT DETAILS" SHEET.

P05 SEAL WIDENED PORTION OF PIER CAP SEAT WITH A POLYUREA COATING. QUANTITY INCLUDED IN BID ITEM "POLYUREA COATING".

LAP LENGTH TABLE

LAP MARK	LAPPED BARS	LAP LENGTH	LOCATION
L01	C1004 WITH C1007	10-10	AT TOP OF FOOTING
L02	C1007 WITH C1008	10-10	AT COLUMN CONST. JT.
L03	C409 WITH C410	1-8	COLUMN HORIZ. REINF.
L04	C612 WITH C613, AND C615 WITH C616, AND C617 WITH C618	3-6	AT PIER CAP CONST. JT.
L05	C919 WITH C920, AND C921 WITH C922	5-4	AT PIER CAP CONST. JT.
L06	C923 WITH C924	9-8	AT PIER CAP CONST. JT.
L07	C432 WITH C433	2-4	AT PIER CAP CONST. JT.
L08	C625 WITH C617, C618, C919, C920, C923 AND C924	3-6	AT PIER CAP ENDS



ELEVATION PIER 1

(LOOKING NORTH)

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER
12/4/2015

William C. Dreher SDR
12/04/15

NO.	DATE	REVISION	BY
1	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-357

DRAWN BY CAG | PLANS CK'D JJK

PIER 1

SHEET 16 OF 47

1163

I.D. 1005-10-71 PLOT DATE: Dec 04, 2015

FILE: 16-25_B530357_pier.dwg
PLOT SCALE:

Addendum No. 01
ID 1005-10-71
Revised Sheet 1163
January 5, 2016

STATE PROJECT NUMBER

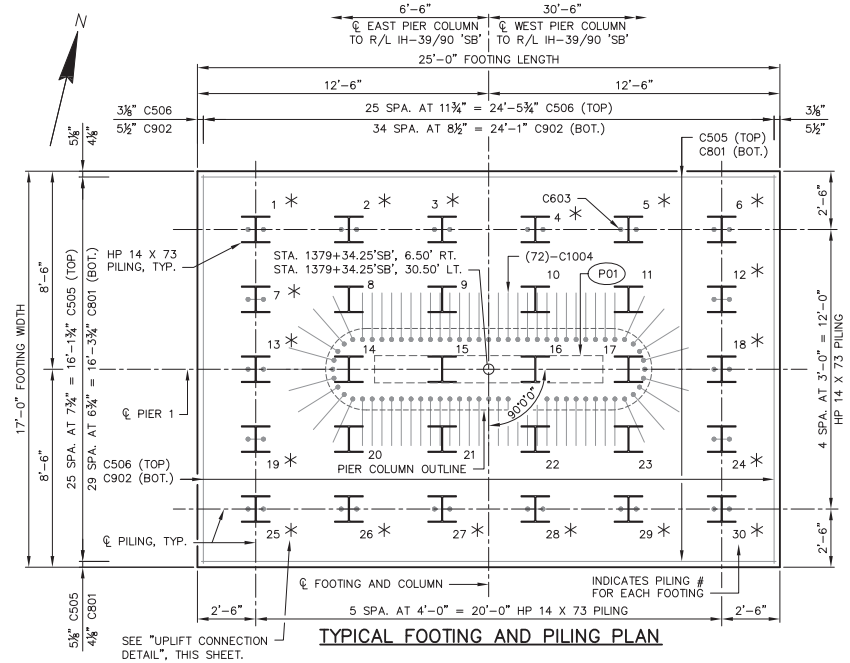
1005–10–71

NOTES

⚠ PIER 1 TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS OF 25 FT. A MINIMUM OF 4–FEET OF PRE–BORE INTO SUITABLE BEDROCK IS REQUIRED IF MINIMUM 10–FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED.

P01 KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'–2" X 10'–0" X 4". RUN BAR STEEL THRU JOINT.

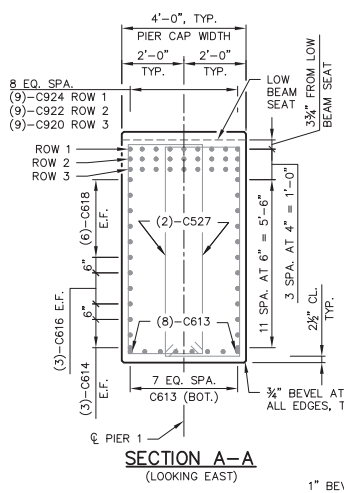
P03 KEYED CONSTRUCTION JOINT FOR PIER CAP FORMED BY BEVELED 1'–8" X 3'–8" X 4". RUN BAR STEEL THROUGH JOINT. THE CONTRACTOR HAS THE OPTION TO USE BAR COUPLERS TO FACILITATE STAGE CONSTRUCTION AT NO ADDITIONAL COMPENSATION BEYOND THE REBAR QUANTITIES SHOWN.



TYPICAL FOOTING AND PILING PLAN

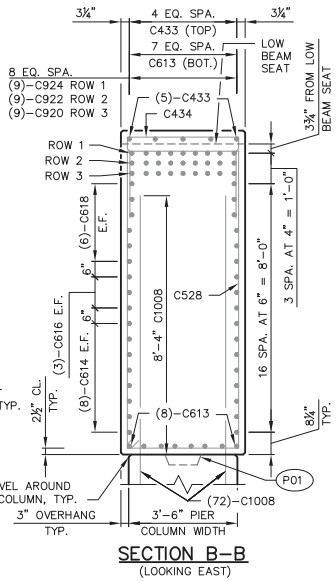
William C. Drecher SDR
12/04/15

12/4/2015

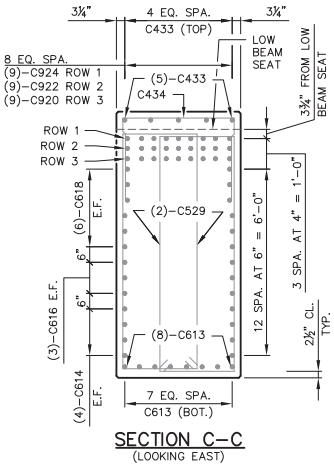


SECTION A–A
(LOOKING EAST)

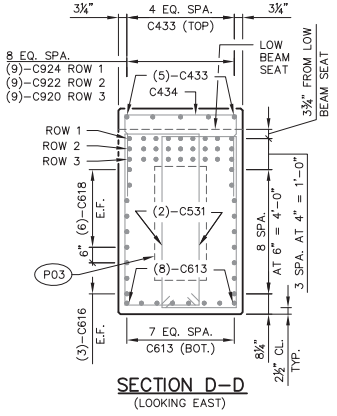
NOTE: C612 ALIGN WITH C613
C615 ALIGN WITH C616
C617 ALIGN WITH C618
C919 ALIGN WITH C920
C921 ALIGN WITH C922
C923 ALIGN WITH C924
C432 ALIGN WITH C433



SECTION B–B
(LOOKING EAST)



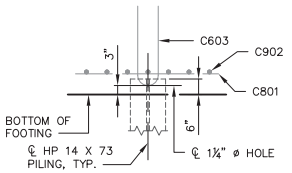
SECTION C–C
(LOOKING EAST)



SECTION D–D
(LOOKING EAST)

E.F. – EACH FACE

Addendum No. 01
ID 1005-10-71
Revised Sheet 1164
January 5, 2016



✳ UPLIFT CONNECTION DETAIL

(PLACE C603 BAR IN 1¼" ø HOLE DRILLED INTO PILE WEB. USE (1)–BAR AT EACH UPLIFT PILE.)

NO.	DATE	REVISION	BY
⚠1	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–53–357

DRAWN BY CAG | PLANS CK'D JJK

PIER 1 DETAILS

SHEET 17 OF 47

1164

I.D. 1005–10–71

PLOT DATE: Dec 04, 2015

FILE: 16–25_B530357_pier.dwg
PLOT SCALE:

STATE PROJECT NUMBER

1005-10-71

BILL OF BARS
PIER 1

COATED = 61,710 LBS.
UNCOATED = 10,450 LBS.

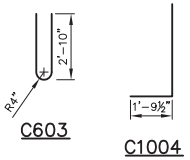
MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	SERIES	LOCATION	
C801		60	24-7			FOOTING - BOTTOM - TRANS.	HORIZ.
C902		70	16-7			FOOTING - BOTTOM - LONG.	HORIZ.
C603		36	6-1	X		FOOTING - THRU UPLIFT PILES	VERT.
C1004	144		16-4	X		FOOTING - COLUMN DOWELS	VERT.
C505		52	24-7			FOOTING - TOP - TRANS.	HORIZ.
C506		52	16-7			FOOTING - TOP - LONG.	HORIZ.
C1007	144		30-10			COLUMNS - BELOW CONST. JT.	VERT.
C1008	144		20-10			COLUMNS - ABOVE CONST. JT.	VERT.
C409	136		11-10			COLUMNS - SIDE STIRRUPS	HORIZ.
C410	136		6-9	X		COLUMNS - END STIRRUPS	HORIZ.
C411	476		3-7	X		COLUMNS - LATERAL TIES	HORIZ.
C612	8		39-4	X		CAP - BOTTOM - EAST SIDE	HORIZ.
C613	8		43-6	X		CAP - BOTTOM - WEST SIDE	HORIZ.
C614	32		22-7		⚠	CAP - SIDES - EAST AND WEST SIDE	HORIZ.
C615	6		35-1		⚠	CAP - SIDES - EAST SIDE	HORIZ.
C616	6		39-2		⚠	CAP - SIDES - WEST SIDE	HORIZ.
C617	12		36-8		⚠	CAP - SIDES - EAST SIDE	HORIZ.
C618	12		40-9		⚠	CAP - SIDES - WEST SIDE	HORIZ.
C919	9		38-2			CAP - ROW 3 - EAST SIDE	HORIZ.
C920	9		40-5			CAP - ROW 3 - WEST SIDE	HORIZ.
C921	9		39-5	X		CAP - ROW 2 - EAST SIDE	HORIZ.
C922	9		41-8	X		CAP - ROW 2 - WEST SIDE	HORIZ.
C923	9		43-8	X		CAP - ROW 1 - EAST SIDE	HORIZ.
C924	9		41-7	X		CAP - ROW 1 - WEST SIDE	HORIZ.
C625	16		10-1	X		CAP - ENDS - EAST AND WEST SIDES	HORIZ.
C426	8		6-10	X		CAP - ENDS - STIRRUPS	VERT.
C527	64		19-2	X	⚠	CAP - STIRRUPS - EAST AND WEST SIDES	VERT.
C528	66		27-0	X		CAP - STIRRUPS - OVER COLUMNS	VERT.
C529	44		20-8	X	⚠	CAP - STIRRUPS - EAST AND WEST SIDES	VERT.
C530	2		16-10	X		CAP - STIRRUPS - AT CONST. JT.	VERT.
C531	24		16-6	X		CAP - STIRRUPS - CENTER	VERT.
C432	5		17-0			CAP - BEAM SEAT - EAST SIDE	HORIZ.
C433	5		20-11			CAP - BEAM SEAT - WEST SIDE	HORIZ.
C434	36		6-9	X		CAP - BEAM SEAT - STIRRUPS	VERT.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
ALL BAR BEND DIMENSIONS ARE OUT TO OUT OF BAR.
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE BAR SERIES TABLE FOR ACTUAL LENGTHS.

BAR SERIES TABLE

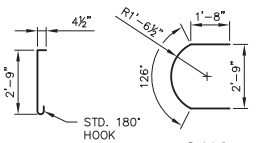
MARK	NO. REQ'D	LENGTH
C614	4 SERIES OF 8	15'-9" TO 29'-5"
C615	2 SERIES OF 3	34'-1" TO 36'-1"
C616	2 SERIES OF 3	38'-2" TO 40'-2"
C617	2 SERIES OF 6	36'-4" TO 36'-11"
C618	2 SERIES OF 6	40'-6" TO 41'-0"
C527	4 SERIES OF 16	14'-2" TO 24'-2"
C529	4 SERIES OF 11	17'-2 TO 24'-2"

BUNDLE AND TAG EACH SERIES SEPARATELY.

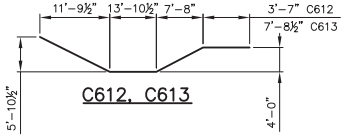


C603 C1004

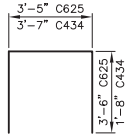
C921, C922, C923, C924



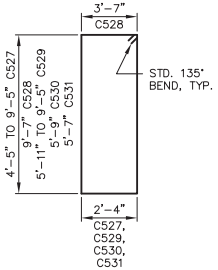
C411 C410



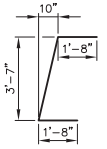
C612, C613



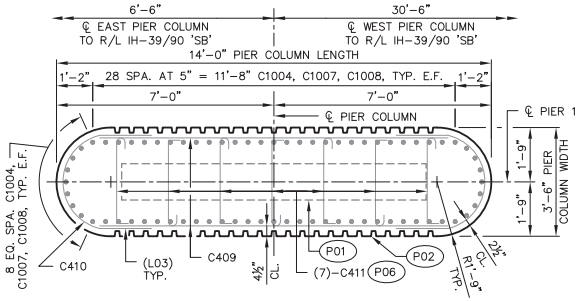
C625, C434



C527, C528, C529, C530, C531



C426



TYPICAL SECTION THRU PIER 1 COLUMNS

NOTES

(P01) KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'-2" X 10'-0" X 4". RUN STEEL THROUGH JOINT. JOINT IN COLUMN 20'-0" ABOVE FOOTING IS OPTIONAL.

(P02) PIER COLUMN AESTHETIC REVEALS. SEE "PIER AESTHETICS" SHEET.

(P06) ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS ON C411 AT EACH VERTICAL LAYERS OF TIES.

LAP LENGTH TABLE

LAP MARK	LAPPED BARS	LAP LENGTH	LOCATION
L03	C409 WITH C410	1-8	COLUMN HORIZ. REINF.

Addendum No. 01
ID 1005-10-71
Added Sheet 1149A
January 5, 2016

William C. Drecher SDR
12/04/15

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER
12/4/2015

NO.	DATE	REVISION	BY
⚠	12-4-15	ADDED SHEET	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-357

DRAWN BY CAG | PLANS CK'D JJK

PIER 1
ADDITIONAL DETAILS

SHEET 17A OF 47

1164A

I.D. 1005-10-71 PLOT DATE: Dec 04, 2015

FILE: 16-25_B530357_pier.dwg
PLOT SCALE:

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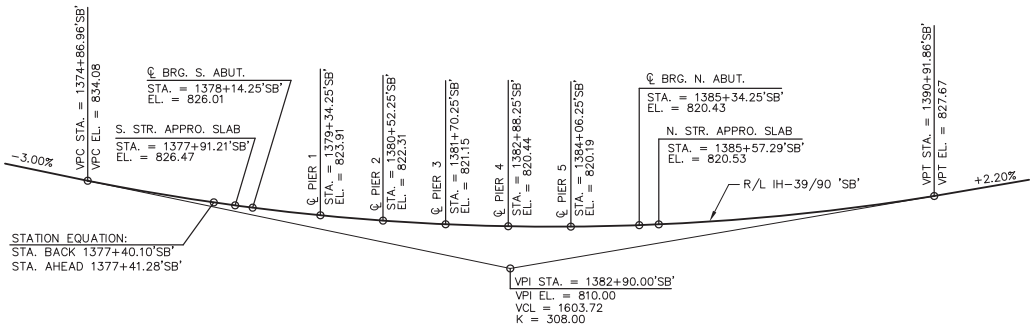
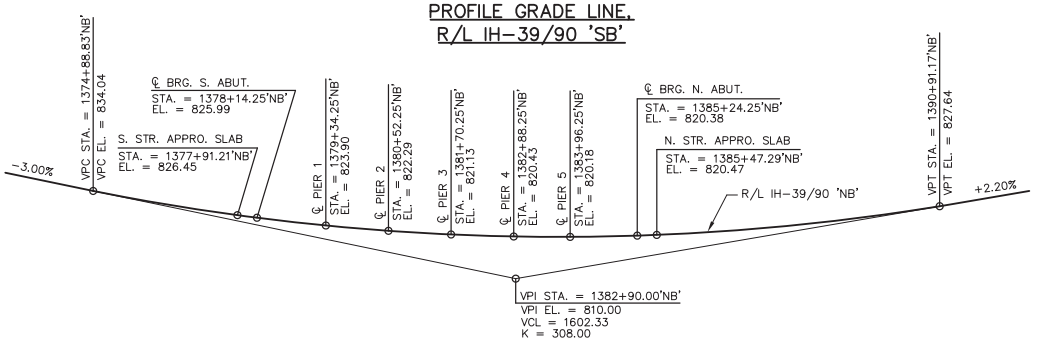
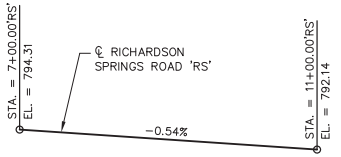


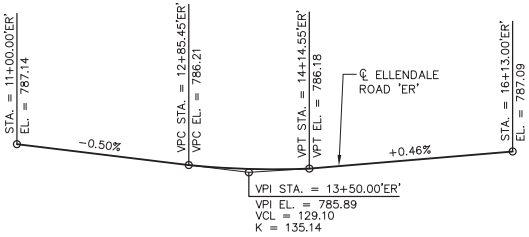
PROFILE GRADE LINE,
R/L IH-39/90 'SB'



PROFILE GRADE LINE,
R/L IH-39/90 'NB'



PROFILE GRADE LINE,
℄ RICHARDSON SPRINGS ROAD 'RS'



PROFILE GRADE LINE,
℄ ELLENDALE ROAD 'ER'

William C. Drecher SDR
12/04/15

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER
12/4/2015

STATE PROJECT NUMBER
1005-10-71

DESIGN DATA

LIVE LOAD:

DESIGN LOADING ——— HL-93
INVENTORY RATING FACTOR ——— RF = 1.19
OPERATING RATING FACTOR ——— RF = 1.54
WISCONSIN STANDARD PERMIT VEHICLE RATING (WIS.-SPV) ——— 250 KIPS

STRUCTURE IS DESIGNED FOR A FUTURE WEARING SURFACE OF 20 POUNDS PER SQUARE FOOT.

MATERIAL PROPERTIES:

CONCRETE MASONRY,
HPC DECK & SUPERSTRUCTURE ——— f'_c = 4,000 P.S.I.
ALL OTHER ——— f'_c = 3,500 P.S.I.
HIGH-STRENGTH BAR STEEL REINFORCEMENT ——— f_y = 60,000 P.S.I.
54W-INCH PRESTRESSED GIRDERS
CONCRETE MASONRY ——— f'_c = 8,000 P.S.I.
STRANDS – 0.6" DIAMETER WITH AN
ULTIMATE TENSILE STRENGTH OF ——— f_u = 270,000 P.S.I.

FOUNDATION DATA:

ABUTMENTS TO BE SUPPORTED ON HP 12 X 53 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 220 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

PIERS TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA.

ESTIMATED PILE LENGTHS:
SOUTH ABUTMENT ——— 40 FT
PIER 1 ——— 25 FT*
PIER 2 ——— 25 FT
PIER 3 ——— 30 FT
PIER 4 ——— 30 FT
PIER 5 ——— 25 FT
NORTH ABUTMENT ——— 15 FT*

⚠ * A MINIMUM OF 3-FEET OF PRE-BORE AT THE NORTH ABUTMENT AND A MINIMUM OF 5-FEET OF PRE-BORE AT PIER 1 INTO SUITABLE BEDROCK IS REQUIRED IF THE MINIMUM 10-FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED. THE CONTRACTOR AND THE CONSTRUCTION ENGINEER SHOULD ANTICIPATE VARIABLE PILE PENETRATION AND POSSIBLE ADDITIONAL LOCATIONS OF PRE-BORING.

THE FACTORED AXIAL RESISTANCE OF PILES IN COMPRESSION USED FOR DESIGN IS THE REQUIRED DRIVING RESISTANCE MULTIPLIED BY A RESISTANCE FACTOR OF 0.5 USING MODIFIED GATES DYNAMIC FORMULA TO DETERMINE DRIVEN PILE CAPACITY.

DUE TO THE PRESENCE OF GRAVEL AND WEATHERED SANDSTONE IN THE SUBSTRATA, HARD DRIVING SHOULD BE EXPECTED. PILE POINTS SHALL BE USED TO PROTECT THE PILES DURING DRIVING.

HYDRAULIC DATA:

REGULATORY Q_{100} ——— 10,500 C.F.S.
REGULATORY Q_{100} (THRU BRIDGE) ——— 10,500 C.F.S.
REGULATORY Q_{100} (ROAD) ——— N/A C.F.S.
REGULATORY HIGH WATER EL. ——— 784.27 FT
DESIGN Q_{100} ——— 14,830 C.F.S.
DESIGN Q_{100} (THRU BRIDGE) ——— 14,830 C.F.S.
DESIGN Q_{100} (ROAD) ——— N/A C.F.S.
DESIGN HIGH WATER EL. ——— 784.61 FT
ORDINARY HIGH WATER EL. ——— 779.64 FT
WATER AREA @ DESIGN Q_{100} ——— 5,455 SQ. FT.
VELOCITY @ DESIGN Q_{100} ——— 2.72 F.P.S.
Q_2 ——— 3,550 C.F.S.
Q_2 WATER EL. ——— 777.44
DRAINAGE AREA ——— 2,500 SQ. MI.
OVERTOPPING ROADWAY ——— N/A
SCOUR CRITICAL CODE ——— 5

TRAFFIC DATA:

IH-39/90
A.A.D.T. (2016) ——— 50,500
A.A.D.T. (2040) ——— 71,800
DESIGN SPEED ——— 70 M.P.H.

RICHARDSON SPRINGS ROAD
A.A.D.T. (2016) ——— 105
A.A.D.T. (2040) ——— 115
DESIGN SPEED ——— 25 M.P.H.

ELLENDALE ROAD
A.A.D.T. (2016) ——— 1,750
A.A.D.T. (2040) ——— 2,100
DESIGN SPEED ——— 30 M.P.H.

Addendum No. 01
ID 1005-10-71
Revised Sheet 1196
January 5, 2016

NO.	DATE	REVISION	BY
1	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-358

DRAWN BY CDS | PLANS CK'D JJK

PROFILES AND DESIGN DATA

SHEET 2 OF 51

1196

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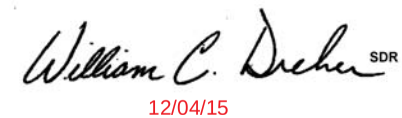
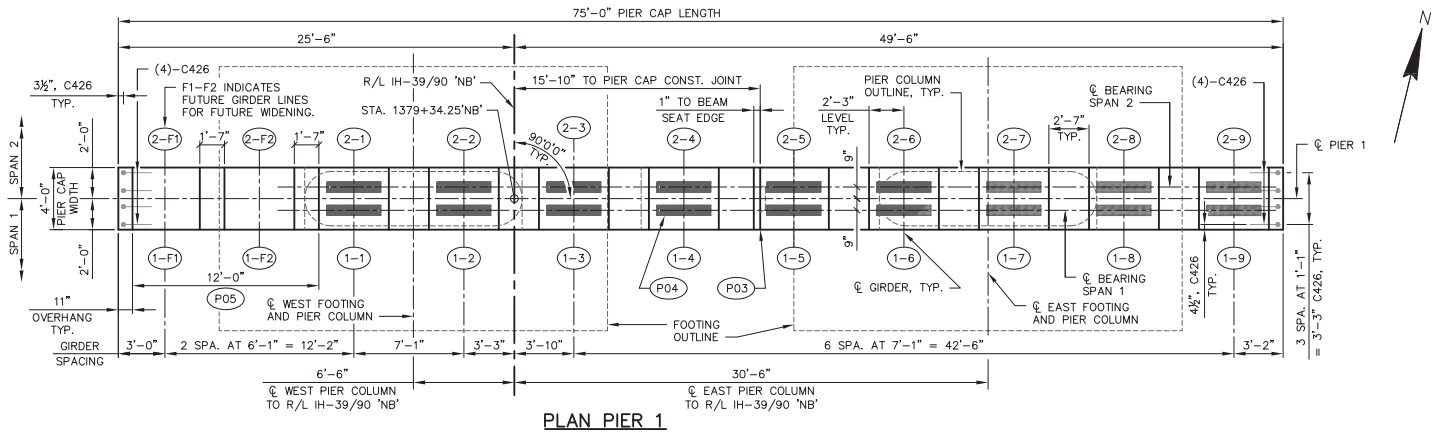
I.D. 1005-10-71 PLOT DATE: Dec 04, 2015

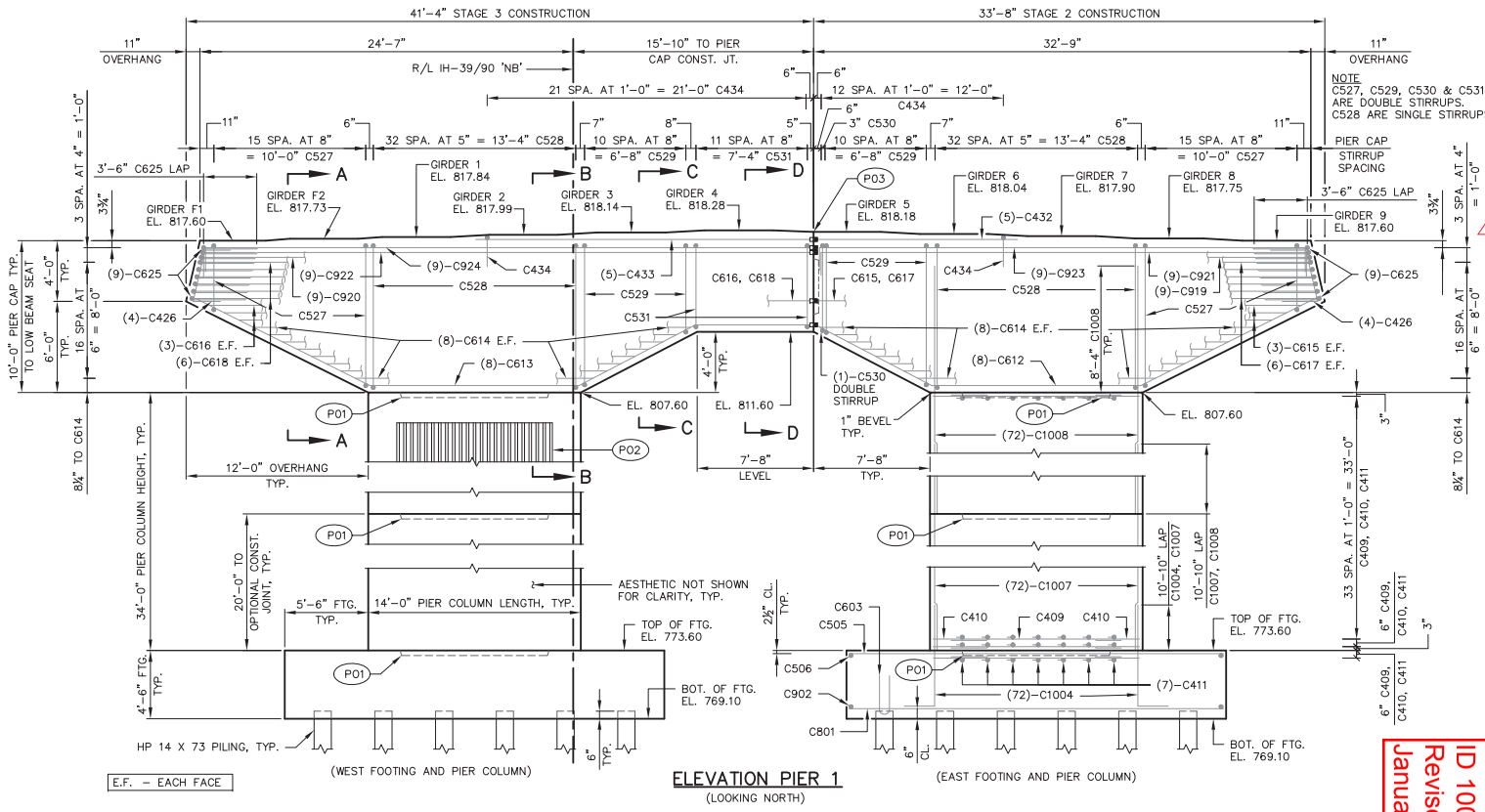
FILE: 02-04-B530358_gnt.dwg
PLOT SCALE:

STATE PROJECT NUMBER
1005–10–71





PLAN PIER 1



E.F. – EACH FACE

ELEVATION PIER 1
(LOOKING NORTH)

NOTE
C527, C529, C530 & C531 ARE DOUBLE STIRRUPS. C528 ARE SINGLE STIRRUPS.

NOTES

SECTIONS "A–A", "B–B", "C–C" & "D–D" SHOWN ON "PIER 1 DETAILS" SHEET. FOR TYPICAL SECTION THRU COLUMN SEE "PIER 1 ADDITIONAL DETAILS" SHEET.

⚠ PIER 1 TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS OF 25 FT. A MINIMUM OF 5–FEET OF PRE–BORE INTO SUITABLE BEDROCK IS REQUIRED IF MINIMUM 10–FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED.

(X–X) INDICATES SPAN NUMBER AND GIRDER NUMBER.

(P01) KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'–2" X 10'–0" X 4". RUN STEEL THROUGH JOINT. JOINT IN COLUMN 20'–0" ABOVE FOOTING IS OPTIONAL.

(P02) PIER COLUMN AESTHETIC REVEALS. SEE "PIER AESTHETICS" SHEET.

(P03) KEYED CONSTRUCTION JOINT FOR PIER CAP FORMED BY BEVELED 1'–8" X 3'–8" X 4". SEE "BAR COUPLERS" SHEET FOR BAR COUPLERS THROUGH JOINT. BAR COUPLERS SHALL BE STAGGERED TO ASSIST CONSTRUCTION.

(P04) STEEL BEARINGS, TYP. SEE "BEAM SEAT DETAILS" SHEET.

(P05) SEAL WIDENED PORTION OF PIER CAP SEAT WITH A POLYUREA COATING. QUANTITY INCLUDED IN BID ITEM "POLYUREA COATING".

NO.	DATE	REVISION	BY
⚠	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B–53–358

DRAWN BY CAG | PLANS CK'D JJK

PIER 1

SHEET 17 OF 51

1211

I.D. 1005–10–71 PLOT DATE: Dec 04, 2015

FILE: 17–26–B530358_pier.dwg
PLOT SCALE:

Addendum No. 01
ID 1005-10-71
Revised Sheet 1211
January 5, 2016

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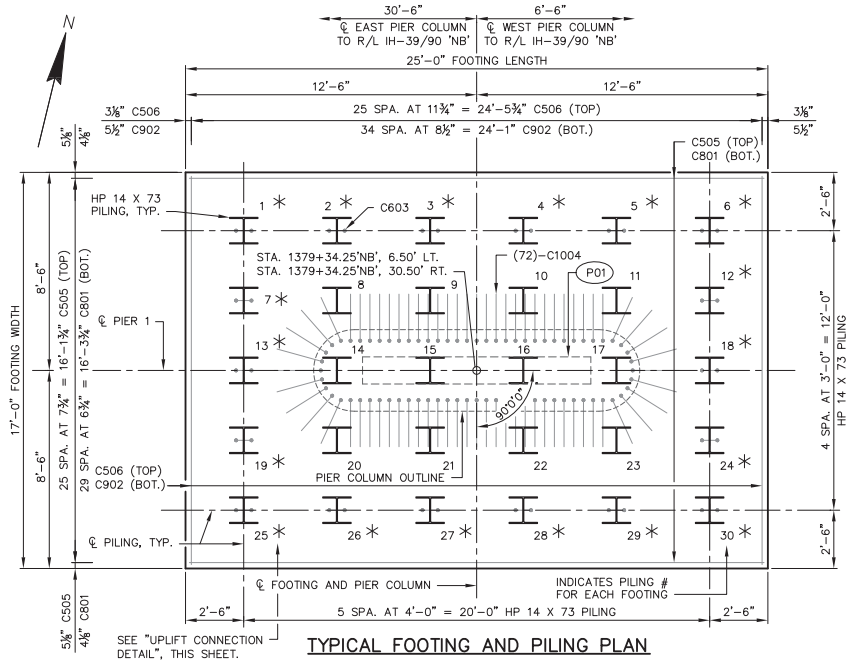


TYPICAL FOOTING AND PILING PLAN

NOTES

⚠1 PIER 1 TO BE SUPPORTED ON HP 14 X 73 PILES DRIVEN TO A REQUIRED DRIVING RESISTANCE OF 250 TONS PER PILE AS DETERMINED BY THE MODIFIED GATES DYNAMIC FORMULA. ESTIMATED PILE LENGTHS OF 25 FT. A MINIMUM OF 5-FEET OF PRE-BORE INTO SUITABLE BEDROCK IS REQUIRED IF MINIMUM 10-FEET OF PILE PENETRATION INTO NATURAL GROUND CANNOT BE ACHIEVED.

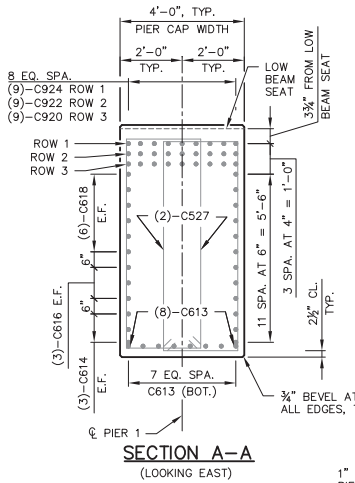
P01 KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'-2" X 10'-0" X 4". RUN BAR STEEL THRU JOINT.

P03 KEYED CONSTRUCTION JOINT FOR PIER CAP FORMED BY BEVELED 1'-8" X 3'-8" X 4". SEE "BAR COUPLERS" SHEET FOR BAR COUPLERS THROUGH JOINT.

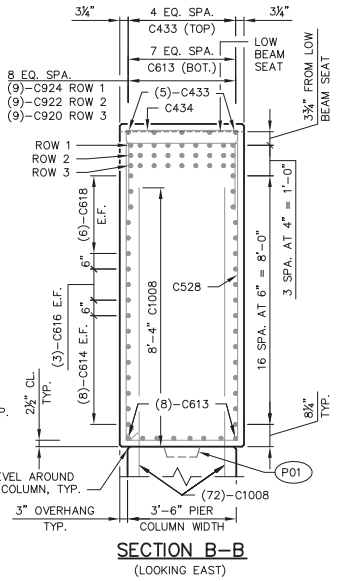
William C. Dreher SDR
12/04/15

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER
12/4/2015

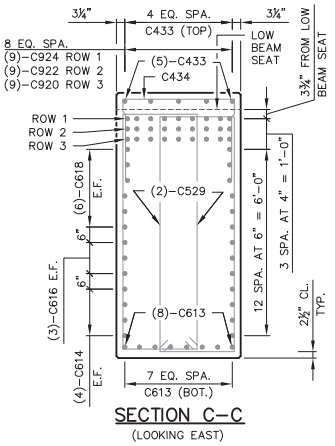
STATE PROJECT NUMBER
1005-10-71



SECTION A-A
(LOOKING EAST)



SECTION B-B
(LOOKING EAST)



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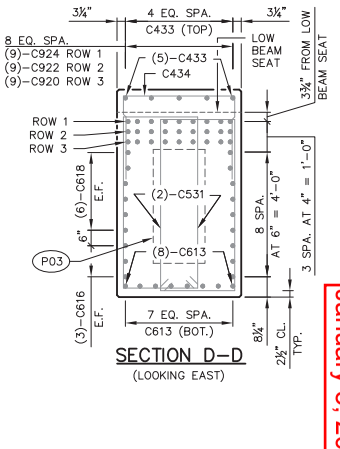
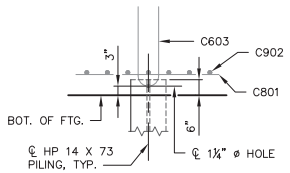


SECTION D-D
(LOOKING EAST)



✳ UPLIFT CONNECTION DETAIL
(PLACE C603 BAR IN 1¼" ø HOLE DRILLED INTO PILE WEB. USE (1)-BAR AT EACH UPLIFT PILE.)

NOTE: C612 ALIGN WITH C613
C615 ALIGN WITH C616
C617 ALIGN WITH C618
C919 ALIGN WITH C920
C921 ALIGN WITH C922
C923 ALIGN WITH C924
C432 ALIGN WITH C433

E.F. - EACH FACE

Addendum No. 01
ID 1005-10-71
Revised Sheet 1212
January 5, 2016

NO.	DATE	REVISION	BY
⚠1	12-4-15	REVISE PIER 1 PRE-BORE DEPTH	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-358

DRAWN BY CAG | PLANS CK'D JJK

PIER 1 DETAILS

SHEET 18 OF 51

1212

I.D. 1005-10-71

PLOT DATE: Dec 04, 2015

FILE: 17-26-B530358_pier.dwg
PLOT SCALE:

STATE PROJECT NUMBER

1005-10-71

BILL OF BARS
PIER 1

COATED = 62,100 LBS.
UNCOATED = 10,450 LBS.

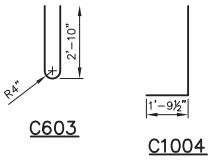
MARK	NUMBER COATED	NUMBER UNCOATED	LENGTH	BENT	SERIES	LOCATION	
C801		60	24-7			FOOTING - BOTTOM - TRANS.	HORIZ.
C902		70	16-7			FOOTING - BOTTOM - LONG.	HORIZ.
C603		36	6-1	X		FOOTING - THRU UPLIFT PILES	VERT.
C1004	144		16-4	X		FOOTING - COLUMN DOWELS	VERT.
C505		52	24-7			FOOTING - TOP - TRANS.	HORIZ.
C506		52	16-7			FOOTING - TOP - LONG.	HORIZ.
C1007	144		30-10			COLUMNS - BELOW CONST. JT.	VERT.
C1008	144		22-4			COLUMNS - ABOVE CONST. JT.	VERT.
C409	144		11-10			COLUMNS - SIDE STIRRUPS	HORIZ.
C410	144		6-9	X		COLUMNS - END STIRRUPS	HORIZ.
C411	504		3-7	X		COLUMNS - LATERAL TIES	HORIZ.
C612	8		35-8	X		CAP - BOTTOM - EAST SIDE	HORIZ.
C613	8		43-6	X		CAP - BOTTOM - WEST SIDE	HORIZ.
C614	32		22-7		⚠	CAP - SIDES - EAST AND WEST SIDE	HORIZ.
C615	6		31-5		⚠	CAP - SIDES - EAST SIDE	HORIZ.
C616	6		39-2		⚠	CAP - SIDES - WEST SIDE	HORIZ.
C617	12		33-0		⚠	CAP - SIDES - EAST SIDE	HORIZ.
C618	12		40-9		⚠	CAP - SIDES - WEST SIDE	HORIZ.
C919	9		32-7			CAP - ROW 3 - EAST SIDE	HORIZ.
C920	9		40-3			CAP - ROW 3 - WEST SIDE	HORIZ.
C921	9		35-2	X		CAP - ROW 2 - EAST SIDE	HORIZ.
C922	9		41-6	X		CAP - ROW 2 - WEST SIDE	HORIZ.
C923	9		35-1	X		CAP - ROW 1 - EAST SIDE	HORIZ.
C924	9		41-5	X		CAP - ROW 1 - WEST SIDE	HORIZ.
C625	18		10-1	X		CAP - ENDS - EAST AND WEST SIDES	HORIZ.
C426	8		6-10	X		CAP - ENDS - STIRRUPS	VERT.
C527	64		19-2	X	⚠	CAP - STIRRUPS - EAST AND WEST SIDES	VERT.
C528	66		27-0	X		CAP - STIRRUPS - OVER COLUMNS	VERT.
C529	44		20-8	X	⚠	CAP - STIRRUPS - EAST AND WEST SIDES	VERT.
C530	2		16-8	X		CAP - STIRRUPS - AT CONST. JT.	VERT.
C531	24		16-6	X		CAP - STIRRUPS - CENTER	VERT.
C432	5		13-3			CAP - BEAM SEAT - EAST SIDE	HORIZ.
C433	5		22-1			CAP - BEAM SEAT - WEST SIDE	HORIZ.
C434	35		6-9	X		CAP - BEAM SEAT - STIRRUPS	VERT.

THE FIRST OR FIRST TWO DIGITS OF A FOUR DIGIT BAR MARK SIGNIFIES THE BAR SIZE.
ALL BAR DIMENSIONS ARE OUT TO OUT OF BAR.
⚠ LENGTH SHOWN FOR BAR IS AN AVERAGE LENGTH AND SHOULD ONLY BE USED FOR BAR WEIGHT CALCULATIONS. SEE "BAR SERIES TABLE" FOR ACTUAL LENGTHS.

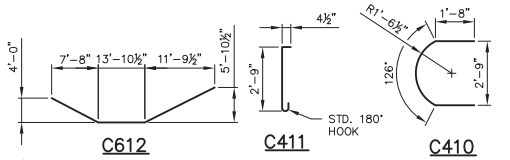
BAR SERIES TABLE

MARK	NO. REQ'D	LENGTH
C614	4 SERIES OF 8	15'-9" TO 29'-5"
C615	2 SERIES OF 3	30'-5" TO 32'-5"
C616	2 SERIES OF 3	38'-2" TO 40'-2"
C617	2 SERIES OF 6	32'-8" TO 33'-3"
C618	2 SERIES OF 6	40'-6" TO 41'-0"
C527	4 SERIES OF 16	14'-2" TO 24'-2"
C529	4 SERIES OF 11	17'-2 TO 24'-2"

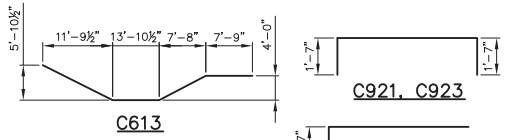
BUNDLE AND TAG EACH SERIES SEPARATELY.



C603 C1004

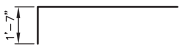


C612 C411 C410

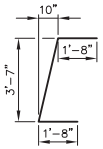


C613

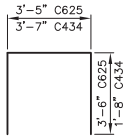
C921, C923



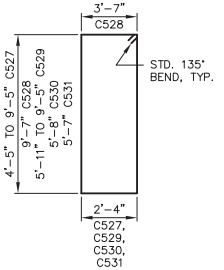
C922, C924



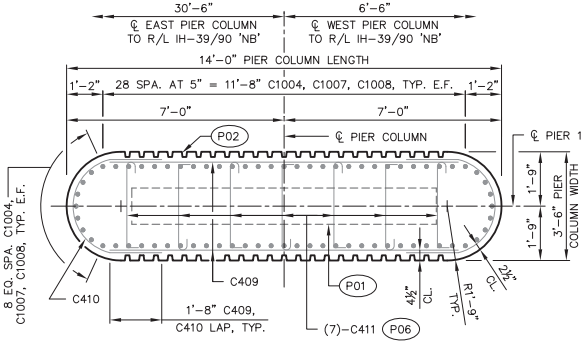
C426



C625, C434



C527, C528, C529, C530, C531



TYPICAL SECTION THRU PIER 1 COLUMNS

NOTES

(P01) KEYED CONSTRUCTION JOINT FOR ALL COLUMNS AND FOOTINGS FORMED BY BEVELED 1'-2" X 10'-0" X 4". RUN STEEL THROUGH JOINT. JOINT IN COLUMN 20'-0" ABOVE FOOTING IS OPTIONAL.

(P02) PIER COLUMN AESTHETIC REVEALS. SEE "PIER AESTHETICS" SHEET.

(P06) ALTERNATE THE POSITION OF THE 90° AND 180° HOOKS ON C411 AT EACH VERTICAL LAYERS OF TIES.

Addendum No. 01
ID 1005-10-71
Added Sheet 1212A
January 5, 2016

WISCONSIN
JEFFREY J. KOCH
E-28802
PLAIN, WISCONSIN
PROFESSIONAL ENGINEER

12/4/2015

William C. Dreher SDR
12/04/15

NO.	DATE	REVISION	BY
⚠	12-4-15	ADDED SHEET	CDS

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION

STRUCTURE B-53-358

DRAWN BY CAG | PLANS CK'D JJK

PIER 1
ADDITIONAL DETAILS

SHEET 18A OF 51

1212A

I.D. 1005-10-71 PLOT DATE: Dec 04, 2015

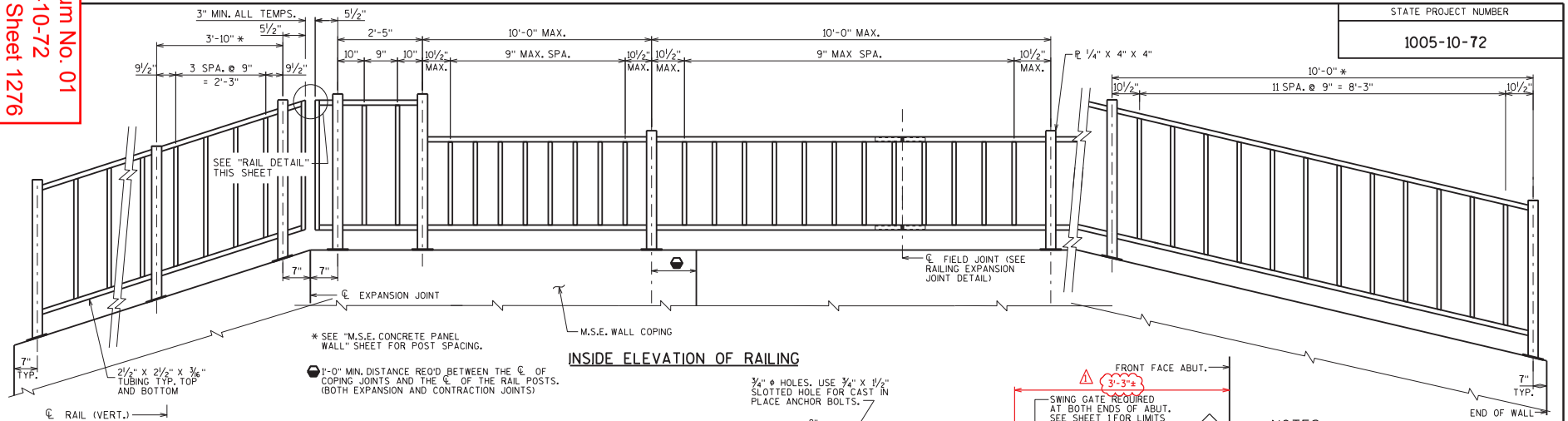
FILE: 17-26-B530358_pier.dwg
PLOT SCALE:

8

8

Addendum No. 01
ID 1005-10-72
Revised Sheet 1276
January 5, 2016

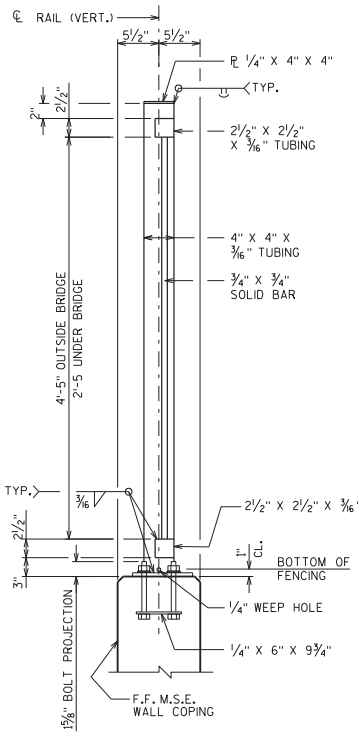
STATE PROJECT NUMBER
1005-10-72



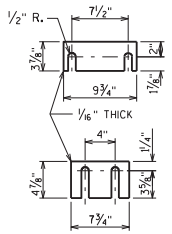
* SEE "M.S.E. CONCRETE PANEL WALL" SHEET FOR POST SPACING.

1'-0" MIN. DISTANCE REQ'D BETWEEN THE ℄ OF COPING JOINTS AND THE ℄ OF THE RAIL POSTS. (BOTH EXPANSION AND CONTRACTION JOINTS)

INSIDE ELEVATION OF RAILING

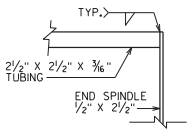


SECTION THRU RAILING

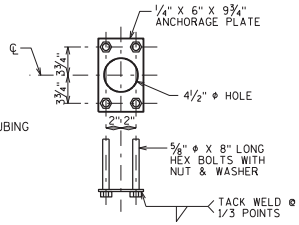


SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST



RAIL DETAIL

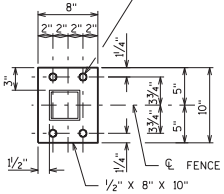


ANCHORAGE DETAIL

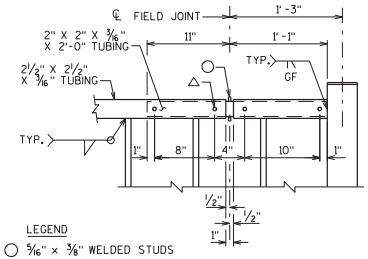
⅝" CAST-IN-PLACE ANCHOR BOLTS. MASONRY ANCHORS MAY BE SUBSTITUTED FOR C.I.P. ANCHOR BOLTS. ANCHORAGE PLATE NOT REQUIRED WHEN TYPE S ANCHORS ARE USED.

MASONRY ANCHOR TYPE S ⅝-INCH. EMBED 7" IN CONCRETE.

¾" ø HOLES. USE ¾" X 1½" SLOTTED HOLE FOR CAST IN PLACE ANCHOR BOLTS.



BASE PLATE

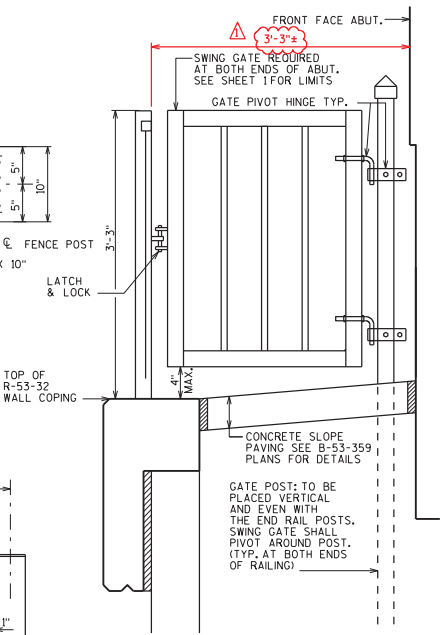


LEGEND

○ ⅝" × ⅜" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL



SECTION THRU WALL AT GATES

NOTE:
ALL POSTS, GATES AND ASSOCIATED HARDWARE SHALL BE PAINTED (FEDERAL COLOR NO. 30140) AND SHALL BE PAID FOR UNDER THE BID ITEM "RAILING TUBULAR SCREENING R-53-32"

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 30140.

BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-53-32" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

NO.	DATE	REVISION	BY
1	12/3/15	GATE TO ABUTMENT DIMENSION	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-32

DRAWN BY JLR | PLANS CK'D. SDR

RAILING TUBULAR SCREENING

SHEET 4

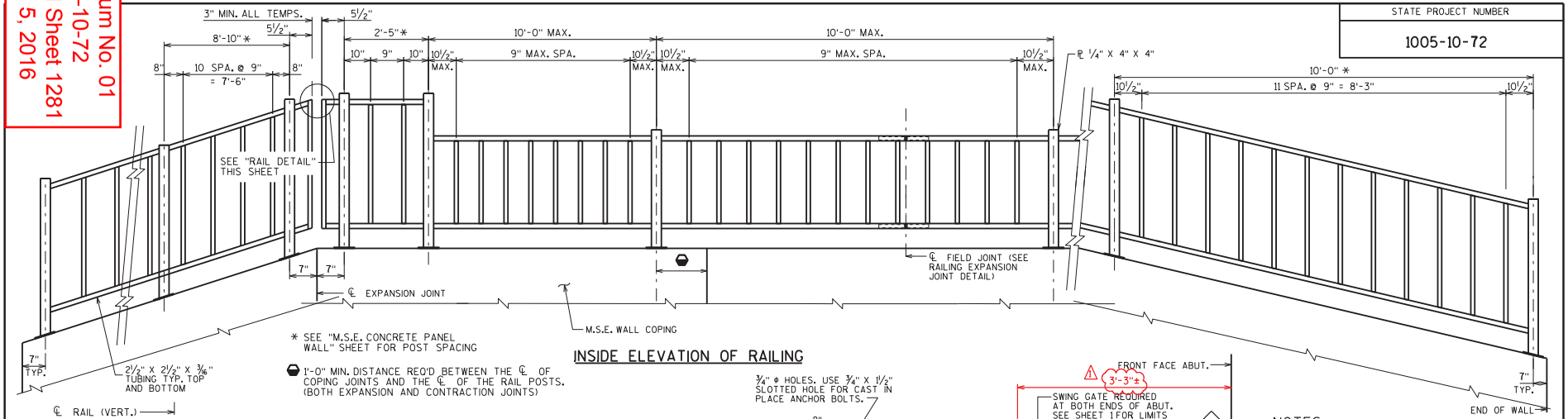
1276

William C. Dreher LLS 12/22/15

SCALE = 1.00

Addendum No. 01
ID 1005-10-72
Revised Sheet 1281
January 5, 2016

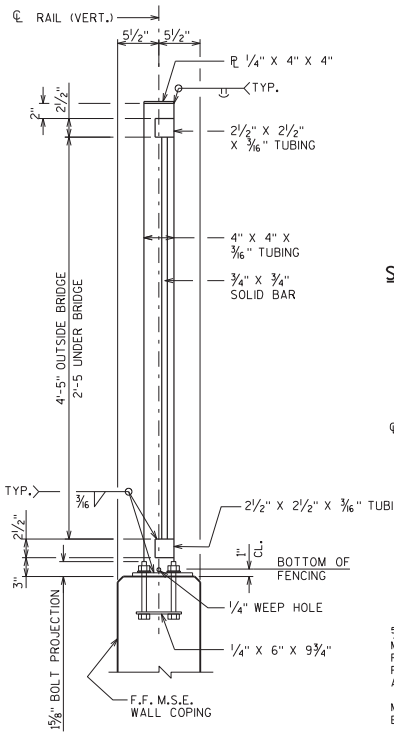
STATE PROJECT NUMBER
1005-10-72



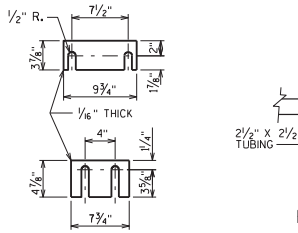
* SEE "M.S.E. CONCRETE PANEL WALL" SHEET FOR POST SPACING

1'-0" MIN. DISTANCE REQ'D BETWEEN THE ℄ OF COPING JOINTS AND THE ℄ OF THE RAIL POSTS. (BOTH EXPANSION AND CONTRACTION JOINTS)

INSIDE ELEVATION OF RAILING

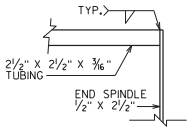


SECTION THRU RAILING

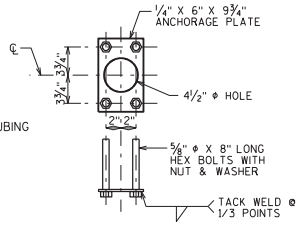


SHIM PLATE DETAILS

TWO SHIMS OF EACH SIZE REQUIRED PER POST



RAIL DETAIL



ANCHORAGE DETAIL

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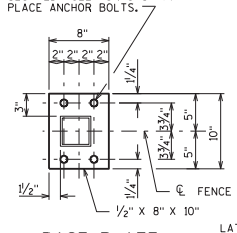
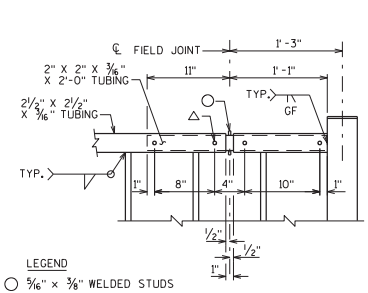
MASONRY ANCHOR TYPE S ⅝-INCH. EMBED 7" IN CONCRETE.



BASE PLATE

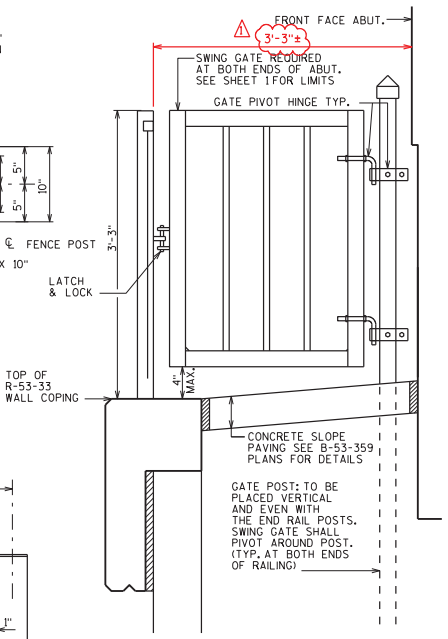


LEGEND

○ ⅝" × ⅜" WELDED STUDS

△ WELD BEAD ON EACH SIDE OF TUBE. GRIND BEADS SO THAT SLEEVE FITS FREELY INSIDE THE 2½" × 2½" TUBE.

RAILING EXPANSION JOINT DETAIL



SECTION THRU WALL AT GATES

NOTE:
ALL POSTS, GATES AND ASSOCIATED HARDWARE SHALL BE PAINTED (FEDERAL COLOR NO. 30140) AND SHALL BE PAID FOR UNDER THE BID ITEM "RAILING TUBULAR SCREENING R-53-33"

NOTES

POST BASE PLATES SHALL BE FLAT WITH ALL SURFACES SMOOTH AND FREE FROM WARP AND ALL EDGES SMOOTH, STRAIGHT AND VERTICAL. ALL PLATE CUTS SHALL BE MACHINE OR MACHINE FLAME CUT.

RAILS AND POSTS TO BE ASTM A500, GRADE B. BASE PLATES AND SHIMS TO BE ASTM A709, GRADE 36. ALL GALVANIZED AFTER FABRICATION.

ANCHORAGES SHALL BE ACCURATELY PLACED TO PROVIDE CORRECT ALIGNMENT OF RAILING. SET POSTS NORMAL TO GRADE.

ALL POST SPA. ARE TAKEN HORIZ. ALONG CENTER LINE OF RAILING AT BASE OF POST.

SHIMS SHALL BE USED UNDER BASE PLATES WHERE REQUIRED FOR ALIGNMENT.

CAULK AROUND PERIMETER OF BASE PLATES AND FILL PORTION OF SLOTTED HOLES AROUND ANCHOR BOLTS WITH NON-STAINING GRAY NON-BITUMINOUS JOINT SEALER.

CUT BOTTOM OF POST TO MAKE VERTICAL IN TRANSVERSE DIRECTION.

ANCHOR BOLTS, NUTS AND WASHERS SHALL BE EITHER STAINLESS STEEL OR ASTM 307. IF 307 IS USED, ANCHOR BOLTS, NUTS, AND WASHERS SHALL BE GALVANIZED.

RAILING TO BE PAINTED AND FENCE FABRIC AND TIES TO BE VINYL COATED. FEDERAL COLOR NO. 30140.

BID ITEM SHALL BE "RAILING TUBULAR SCREENING R-53-33" WHICH SHALL INCLUDE ALL ITEMS SHOWN.

RAILING SHALL BE FABRICATED IN LENGTHS THAT INCLUDE NOT MORE THAN 3 POSTS.

VENT HOLES SHALL BE DRILLED IN MEMBERS AS REQUIRED TO FACILITATE GALVANIZING.

ALL MATERIAL SHALL BE GALVANIZED AFTER FABRICATION. PRIOR TO GALVANIZING ALL STEEL RAILING POSTS AND STEEL TUBING SHALL BE GIVEN A #6 BLAST CLEANING BY SSPC SPECIFICATIONS. PAINT OVER GALVANIZING WITH APPROVED TIE COAT AND TOPCOAT.

NO.	DATE	REVISION	BY
1	12/3/15	GATE TO ABUTMENT DIMESION	JLR

STATE OF WISCONSIN
DEPARTMENT OF TRANSPORTATION
STRUCTURES DESIGN SECTION

STRUCTURE R-53-33

DRAWN BY JLR | PLANS CK'D. SDR

RAILING TUBULAR SCREENING

SHEET 4

1281

William C. Dreher LLS 12/22/15

SCALE = 1.00

IH 39 NB / STAGE 1 / DIVISION S1											
STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	EBS	Cut	Fill	EBS	Cut 1.00	Fill 1.00	EBS 1.00	
1362+00	0	435	0	0	0	0	0	0	0	0	0
1363+00	100	488	0	0	1,709	0	0	1,709	0	0	1,709
1364+00	100	638	0	0	2,085	0	0	3,793	0	0	3,793
1365+00	100	522	0	0	2,149	0	0	5,942	0	0	5,942
1366+00	100	635	0	0	2,143	0	0	8,085	0	0	8,085
1367+00	100	656	0	0	2,391	0	0	10,476	0	0	10,476
1368+00	100	723	0	0	2,555	0	0	13,031	0	0	13,031
1369+00	100	536	0	0	2,332	0	0	15,363	0	0	15,362
1370+00	100	640	0	0	2,178	0	0	17,541	1	0	17,540
1371+00	100	296	0	0	1,734	0	0	19,275	1	0	19,274
1372+00	100	51	257	0	643	477	0	19,917	477	0	19,440
1373+00	100	49	642	25	184	1,665	46	20,101	2,142	46	17,960
1374+00	100	40	805	23	164	2,678	89	20,265	4,820	135	15,445
1375+00	100	59	869	19	183	3,099	78	20,448	7,919	213	12,529
1376+00	100	132	863	491	354	3,207	944	20,802	11,126	1,157	9,676
1377+00	100	171	835	517	561	3,144	1,867	21,363	14,270	3,024	7,092
1378+00	100	104	1,049	565	510	3,488	2,004	21,873	17,758	5,028	4,115
1378+11	11	130	947	596	48	406	237	21,920	18,164	5,264	3,756
COLUMN TOTALS:					21,920	18,164	5,264				

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302A
January 5, 2016

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IH 39 NB / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)			Incremental Vol (CY) (Unadjusted)			Cumulative Vol (CY)			Mass Ordinate
		Cut	Fill	EBS	Cut	Fill	EBS	Cut 1.00	Fill 1.00	EBS 1.00	
1385+27 AH	0	445	99	27	0	0	0	0	0	0	0
1386+00	73	308	141	34	1,014	323	82	1,014	323	82	691
1387+00	100	175	212	34	894	653	126	1,909	976	208	933
1388+00	100	92	326	26	495	995	111	2,404	1,972	319	432
1389+00	100	59	335	0	280	1,224	48	2,683	3,196	367	-512
1390+00	100	83	249	0	262	1,082	0	2,945	4,278	367	-1,332
1391+00	100	122	45	0	379	545	0	3,324	4,822	367	-1,498
1391+50 BK	50	221	0	0	317	42	0	3,641	4,864	367	-1,223
1412+00 AH	0	1,495	0	0	0	0	0	3,641	4,864	367	-1,223
1413+00	100	754	0	0	4,165	0	0	7,806	4,864	367	2,942
1414+00	100	171	4	0	1,713	7	0	9,519	4,871	367	4,648
1415+00	100	55	19	0	419	42	0	9,938	4,913	367	5,025
1416+00	100	19	14	0	137	61	0	10,076	4,974	367	5,101
1416+25 BK	25	29	0	0	22	7	0	10,098	4,981	367	5,117
1422+42 AH	0	24	96	0	0	0	0	10,098	4,981	367	5,117
1423+00	58	39	94	0	67	204	0	10,165	5,184	367	4,980
1424+00	100	32	110	0	132	378	0	10,297	5,563	367	4,734
1425+00	100	38	134	0	131	451	0	10,428	6,013	367	4,415
1426+00	100	23	140	0	114	507	0	10,542	6,520	367	4,022
1427+00	100	19	138	0	78	515	0	10,620	7,036	367	3,585
1428+00	100	24	105	0	79	450	0	10,699	7,485	367	3,214
1429+00	100	69	53	0	172	293	0	10,871	7,778	367	3,094
1430+00	100	47	53	0	216	198	0	11,088	7,975	367	3,112
1431+00	100	25	54	0	135	199	0	11,222	8,174	367	3,048
1432+00	100	28	46	0	99	185	0	11,321	8,359	367	2,962
1433+00 BK	100	27	33	0	102	146	0	11,423	8,504	367	2,918
COLUMN TOTALS:					11,423	8,504	367				

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302B
January 5, 2016

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IH 39 SB / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1385+90 AH	0	0	91	0	0	0	0	0
1386+00	10	13	93	2	34	2	34	-32
1387+00	100	23	54	66	272	69	306	-237
1388+00	100	1	95	44	275	113	581	-468
1389+00	100	18	24	36	220	149	801	-653
1389+12	12	19	18	8	9	157	810	-653
1390+00	88	40	0	96	29	252	839	-587
1391+00	100	50	0	165	0	418	839	-421
1392+00	100	275	0	602	0	1,019	839	180
1393+00 BK	100	432	0	1,311	0	2,330	839	1,491
1399+50 AH	0	97	0	0	0	2,330	839	1,491
1400+00	50	79	0	164	0	2,494	839	1,655
1401+00	100	167	0	456	0	2,950	839	2,111
1402+00	102	245	0	776	0	3,726	839	2,887
1403+00	100	161	0	751	0	4,477	839	3,638
1403+50	50	92	0	234	0	4,711	839	3,872
1404+00	50	737	0	767	0	5,479	839	4,640
1405+00	100	1,729	0	4,567	0	10,045	839	9,206
1406+00 BK	100	1,688	0	6,328	0	16,373	839	15,534
1410+00 AH	0	563	0	0	0	16,373	839	15,534
1411+00	100	622	0	2,194	0	18,567	839	17,728
1412+00	100	356	0	1,810	0	20,376	839	19,537
1413+00	100	137	2	912	3	21,289	842	20,446
1414+00	100	87	3	414	9	21,703	851	20,851
1415+00	100	26	31	209	63	21,912	914	20,998
1416+00	100	0	52	49	153	21,960	1,067	20,893
1417+00	100	0	46	0	181	21,960	1,248	20,712
1418+00	100	0	40	0	160	21,960	1,408	20,552
1419+00	100	0	52	0	170	21,960	1,579	20,381
1420+00	100	0	57	0	201	21,960	1,780	20,180
1420+75	75	0	24	0	113	21,960	1,892	20,068
1421+00	25	0	20	0	21	21,960	1,913	20,047
1422+00	100	0	19	0	73	21,960	1,986	19,974
1423+00	100	0	21	0	75	21,960	2,062	19,899
1424+00	100	0	3	0	44	21,960	2,106	19,854
1425+00	100	0	0	0	5	21,960	2,111	19,849
1426+00	100	0	0	0	0	21,960	2,111	19,849
1427+00	100	14	81	25	150	21,985	2,261	19,724
1428+00	100	22	72	65	284	22,050	2,545	19,506
1429+00	100	31	54	96	233	22,147	2,778	19,369
1429+25	25	26	43	26	45	22,173	2,823	19,350
1430+00	75	22	44	67	121	22,240	2,943	19,297
1431+00	100	24	46	85	166	22,325	3,109	19,216
1432+00	100	32	25	105	132	22,430	3,241	19,189
1433+00	100	42	13	139	70	22,569	3,311	19,258
1433+32 BK	32	54	15	57	16	22,626	3,327	19,298
			COLUMN TOTALS:	22,626	3,327			

RAMP EA / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1406+00	0	488	1	0	0	0	0	0
1407+00	100	1,265	2	3,247	6	3,247	6	3,241
1408+00	100	1,037	51	4,263	98	7,510	104	7,406
1409+00	100	195	332	2,281	709	9,791	813	8,977
1410+00	100	223	322	773	1,212	10,564	2,025	8,539
1411+00	100	288	41	947	672	11,511	2,697	8,814
1412+00	100	718	21	1,863	114	13,374	2,811	10,563
1413+00	100	650	10	2,534	58	15,908	2,869	13,039
1414+00	100	281	14	1,725	45	17,633	2,913	14,720
1415+00	100	86	53	680	124	18,313	3,037	15,276
1416+00	100	47	71	245	230	18,558	3,267	15,291
1416+50	50	26	48	67	111	18,625	3,378	15,248
1417+00	50	1	36	25	78	18,651	3,456	15,195
1418+00	100	252	0	470	66	19,120	3,522	15,598
1419+00	100	222	0	879	0	19,999	3,522	16,477
1420+00	100	80	0	560	0	20,559	3,522	17,037
1421+00	100	40	2	223	5	20,782	3,527	17,255
1422+00	100	27	65	125	125	20,908	3,652	17,255
1422+75	75	24	97	72	225	20,979	3,877	17,102
			COLUMN TOTALS:	20,979	3,877			

RAMP EB / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1391+57	0	209	0	0	0	0	0	0
1392+00	43	354	0	449	0	449	0	449
1393+00	100	506	0	1,592	0	2,041	0	2,041
1394+00	100	492	0	1,848	0	3,889	0	3,889
1395+00	100	463	0	1,770	0	5,659	0	5,659
1396+00	100	523	0	1,826	0	7,486	0	7,485
			COLUMN TOTALS:	7,486	0			

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302C
January 5, 2016

RAMP EC / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1393+37 AH	0	451	0	0	0	0	0	0
1394+00	63	576	0	1,193	0	1,193	0	1,193
1395+00	100	517	0	2,024	0	3,217	0	3,217
1396+00	100	284	0	1,483	0	4,700	0	4,700
1397+00	100	110	0	731	0	5,431	0	5,431
1398+00	100	188	0	552	0	5,983	0	5,983
1399+00	100	290	0	885	0	6,868	0	6,868
1399+50 BK	50	404	0	642	0	7,511	0	7,511
1404+00 AH	0	1,965	403	0	0	7,511	0	7,511
1405+00	100	1,510	758	6,432	2,149	13,943	2,149	11,794
1406+00	100	1,388	1,038	5,366	3,325	19,309	5,474	13,835
1407+00	100	421	1,166	3,350	4,082	22,659	9,555	13,104
1408+00	100	14	1,422	806	4,793	23,465	14,348	9,117
1408+25 BK	25	12	1,013	12	1,127	23,477	15,475	8,001
			COLUMN TOTALS:	23,477	15,475			

RAMP ED / STAGE 1 / DIVISION N1

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1411+00	0	769	1,648	0	0	0	0	0
1411+76	76	594	1,432	1,918	4,335	1,918	4,335	-2,417
1411+87	11	566	1,423	236	582	2,154	4,917	-2,762
1412+00	13	528	1,435	264	688	2,418	5,605	-3,187
1412+12	12	484	1,430	225	637	2,643	6,242	-3,598
1412+26	14	420	1,428	234	741	2,877	6,983	-4,105
1412+37	11	381	1,451	163	586	3,041	7,569	-4,529
1413+00	63	267	1,324	756	3,238	3,796	10,807	-7,010
1413+17	17	248	1,343	162	840	3,958	11,646	-7,688
1413+50	33	177	1,358	260	1,650	4,218	13,297	-9,078
1414+00	50	116	1,374	271	2,530	4,489	15,826	-11,337
1415+00	100	59	1,127	322	4,631	4,811	20,457	-15,646
1416+00	100	46	844	193	3,648	5,005	24,105	-19,101
1417+00	100	39	620	157	2,710	5,161	26,816	-21,654
1418+00	100	34	464	135	2,007	5,297	28,822	-23,526
1419+00	100	37	362	131	1,529	5,428	30,351	-24,923
1420+00	100	32	286	127	1,200	5,555	31,552	-25,997
1420+42	42	29	273	47	435	5,602	31,987	-26,384
1421+00	58	28	190	61	497	5,663	32,483	-26,820
1422+00	100	50	156	146	640	5,809	33,124	-27,315
1423+00	100	42	156	171	578	5,980	33,702	-27,722
1424+00	100	58	134	186	537	6,166	34,239	-28,073
1425+00	100	52	121	204	472	6,369	34,711	-28,341
1426+00	100	36	94	162	398	6,532	35,109	-28,577
			COLUMN TOTALS:	6,532	35,109			

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302D
January 5, 2016

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PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	EARTHWORK DATA	SHEET NO: 1302D	E

IH 39 NB TEMPORARY WIDENING / STAGE 2A / DIVISION S2								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1322+81	0	12	0	0	0	0	0	0
1323+00	19	12	0	8	0	8	0	8
1324+00	100	11	0	43	0	52	0	51
1325+00	100	14	0	47	0	98	1	98
1326+00	100	16	0	55	0	154	1	153
1327+00	100	17	0	62	0	215	1	214
1328+00	100	20	0	69	0	284	2	282
1329+00	100	18	4	71	7	355	9	346
1330+00	100	18	7	68	19	423	28	396
1331+00	100	19	11	69	33	492	61	431
1332+00	100	18	16	67	52	559	112	447
1333+00	100	18	44	67	111	626	224	402
1334+00	100	20	69	71	209	697	433	264
1335+00	100	19	59	71	236	768	669	99
1336+00	100	20	44	72	190	840	859	-19
1337+00	100	21	44	75	163	915	1,022	-107
1338+00	100	22	22	78	123	994	1,145	-152
1339+00	100	31	1	98	44	1,091	1,189	-97
1340+00	100	37	0	127	3	1,218	1,191	27
1341+00	100	35	0	134	1	1,352	1,192	159
1342+00	100	33	3	126	7	1,478	1,199	278
1343+00	100	34	7	124	19	1,601	1,218	383
1344+00	100	38	15	132	39	1,733	1,257	476
1345+00	100	33	6	131	38	1,864	1,295	569
1346+00	100	33	2	122	15	1,986	1,310	676
1347+00	100	39	0	133	4	2,118	1,314	805
1348+00	100	46	0	158	0	2,277	1,314	963
1349+00	100	46	0	171	0	2,448	1,314	1,134
1350+00	100	39	0	158	0	2,605	1,314	1,291
1351+00	100	30	2	127	4	2,732	1,318	1,414
1352+00	100	43	11	135	25	2,868	1,343	1,525
1353+00	100	65	0	200	21	3,068	1,364	1,704
1354+00	100	38	0	191	1	3,259	1,364	1,894
1355+00	100	55	0	172	1	3,430	1,365	2,065
1356+00	100	70	0	231	0	3,661	1,365	2,296
1357+00	100	26	9	178	17	3,840	1,382	2,457
1358+00	100	24	18	92	51	3,932	1,433	2,499
1359+00	100	27	12	94	55	4,026	1,488	2,538
1360+00	100	28	18	102	56	4,128	1,544	2,584
1361+00	100	23	40	95	108	4,223	1,652	2,571

IH 39 NB TEMPORARY WIDENING / STAGE 2A / DIVISION S2 (CONTINUED)								
STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1362+00	100	25	47	89	161	4,312	1,813	2,499
1363+00	100	23	66	88	210	4,400	2,023	2,377
1364+00	100	21	74	81	259	4,481	2,282	2,199
1365+00	100	22	60	80	248	4,561	2,530	2,031
1366+00	100	20	50	78	203	4,639	2,733	1,906
1367+00	100	23	44	80	173	4,719	2,905	1,814
1368+00	100	21	29	81	135	4,800	3,040	1,760
1369+00	100	22	19	79	88	4,879	3,128	1,751
1370+00	100	23	16	84	65	4,963	3,193	1,770
1371+00	100	24	13	87	55	5,050	3,248	1,802
1372+00	100	29	2	98	28	5,148	3,277	1,872
1373+00	100	26	0	103	4	5,251	3,281	1,970
1374+00	100	24	0	93	0	5,344	3,281	2,063
1375+00	100	26	0	91	0	5,436	3,281	2,154
1376+00	100	19	0	83	0	5,518	3,282	2,237
1377+00	100	18	0	69	1	5,588	3,282	2,305
1378+00	100	19	0	70	0	5,657	3,283	2,374
1378+17	17	12	65	10	20	5,667	3,303	2,364
			COLUMN TOTALS:	5,667	3,303			

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302E
January 5, 2016

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PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	EARTHWORK DATA	SHEET NO: 1302E	E

IH 39 NB TEMPORARY WIDENING / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1384+63	0	12	122	0	0	0	0	0
1385+00	37	20	0	22	84	22	84	-62
1386+00	100	20	0	72	1	94	85	9
1387+00	100	19	0	72	0	166	85	81
1388+00	100	21	0	75	0	240	85	156
1389+00	100	20	0	77	0	317	85	232
1390+00	100	20	0	75	1	392	86	306
1391+00	100	20	0	73	0	465	86	379
1392+00	100	23	0	78	0	543	86	456
1393+00	100	24	0	86	1	629	87	541
1394+00	100	26	1	92	2	721	90	631
1395+00	100	27	0	99	2	820	91	729
1396+00	100	26	0	100	1	920	92	828
1397+00	100	29	0	103	1	1,023	93	930
1398+00	100	31	0	111	1	1,133	93	1,040
1399+00	100	38	0	128	0	1,261	93	1,168
1400+00	100	38	0	142	0	1,403	93	1,310
1401+00	100	44	0	153	0	1,557	93	1,463
1402+00	100	41	0	159	0	1,716	94	1,622
1403+00	100	40	0	151	0	1,866	94	1,772
1404+00	100	34	0	138	1	2,004	94	1,910
1405+00	100	27	2	114	4	2,118	99	2,019
1406+00	100	45	0	134	4	2,252	102	2,150
1407+00	100	61	0	197	0	2,449	102	2,346
1408+00	100	64	0	231	0	2,680	102	2,577
1409+00	100	64	0	237	0	2,917	102	2,815
1410+00	100	44	0	201	0	3,118	102	3,016
1411+00	100	47	0	170	0	3,288	102	3,186
1412+00	100	45	0	172	0	3,460	103	3,357
1413+00	100	49	0	175	1	3,635	103	3,531
1414+00	100	49	0	181	0	3,816	104	3,712
1415+00	100	27	28	140	51	3,955	155	3,800
1416+00	100	30	0	105	51	4,061	206	3,854
1417+00	100	33	0	118	0	4,179	207	3,972
1418+00	100	39	0	134	1	4,313	207	4,105
1419+00	100	35	0	138	1	4,450	208	4,242
1420+00	100	32	0	125	0	4,575	209	4,367
1421+00	100	37	0	127	0	4,703	209	4,494
1422+00	100	36	0	134	0	4,836	209	4,627
1423+00	100	37	0	135	0	4,971	210	4,762

IH 39 NB TEMPORARY WIDENING / STAGE 2A / DIVISION N2 (CONTINUED)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1424+00	100	30	0	125	0	5,096	210	4,886
1425+00	100	29	2	110	4	5,206	214	4,992
1426+00	100	30	0	109	3	5,316	217	5,098
1427+00	100	32	0	114	0	5,430	217	5,213
1428+00	100	36	0	125	0	5,555	217	5,337
1429+00	100	38	0	137	0	5,692	217	5,474
1430+00	100	31	0	128	1	5,820	218	5,601
1431+00	100	31	0	115	1	5,935	219	5,716
1432+00	100	39	0	130	1	6,065	220	5,845
1433+00	100	44	0	152	0	6,217	220	5,997
1434+00	100	47	0	168	0	6,385	220	6,164
1435+00	100	70	0	217	0	6,602	220	6,381
1436+00	100	72	0	264	0	6,866	220	6,646
1437+00	100	69	0	263	0	7,129	220	6,908
1438+00	100	37	0	198	0	7,326	220	7,106
1439+00	100	30	0	125	0	7,451	220	7,231
1440+00	100	32	0	115	0	7,566	221	7,345
1441+00	100	28	0	111	0	7,677	221	7,456
1442+00	100	27	0	102	1	7,779	222	7,557
1443+00	100	28	0	103	0	7,881	222	7,659
1444+00	100	23	0	94	0	7,976	223	7,753
1445+00	100	27	0	92	0	8,067	223	7,844
1446+00	100	21	4	89	8	8,157	231	7,926
1447+00	100	21	5	78	18	8,235	248	7,986
1448+00	100	22	5	80	19	8,315	267	8,048
1449+00	100	24	6	85	20	8,400	287	8,113
1449+51	51	23	6	44	11	8,443	298	8,145
1501+00	100	27	2	93	14	8,536	312	8,224
1502+00	100	24	2	95	7	8,631	319	8,312
1503+00	100	17	11	77	24	8,708	343	8,365
1504+00	100	22	5	73	29	8,781	372	8,409
1505+00	100	21	3	79	15	8,859	387	8,472
1506+00	100	20	2	76	10	8,935	397	8,538
1507+00	100	21	0	76	5	9,011	402	8,609
1508+00	100	22	0	80	1	9,091	402	8,689
1509+00	100	22	0	82	0	9,174	403	8,771
1510+00	100	19	0	76	0	9,249	403	8,847
1511+00	100	16	0	65	0	9,314	403	8,912
1512+00	100	14	0	57	0	9,371	403	8,968
1513+00	100	12	0	49	0	9,420	403	9,018
1513+78	78	12	0	36	0	9,456	403	9,053
			COLUMN TOTALS:	9,456	403			

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RAMP EB / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1396+00	0	663	0	0	0	0	0	0
1396+50	50	378	0	964	0	964	0	964
1397+00	50	679	0	979	0	1,943	0	1,943
1397+50	50	655	0	1,235	0	3,178	0	3,178
1398+00	50	1,136	0	1,658	0	4,836	0	4,836
1398+10	10	1,350	0	463	0	5,299	0	5,299
1398+50	40	2,242	0	2,657	0	7,957	0	7,957
1399+00	50	3,043	0	4,893	0	12,850	0	12,850
1399+50	50	2,200	0	4,854	0	17,704	0	17,704
1400+00	50	999	0	2,962	0	20,665	0	20,665
1400+50	50	320	3	1,221	3	21,887	3	21,884
1401+00	50	63	45	355	45	22,242	47	22,194
1401+30	30	231	286	163	184	22,405	231	22,173
1401+48	18	417	324	212	200	22,617	431	22,186
1401+50	2	446	323	37	28	22,654	459	22,195
1402+00	50	780	155	1,136	442	23,790	901	22,889
1402+50	50	771	1	1,436	144	25,226	1,045	24,181
1402+59	9	785	2	259	0	25,485	1,046	24,440
1402+77	18	843	9	546	4	26,031	1,049	24,982
1403+00	23	986	38	776	20	26,807	1,069	25,737
	COLUMN TOTALS:			26,807	1,069			

RAMP EC / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1400+89.58	0	1,295	0	0	0	0	0	0
1401+00	10	1,366	0	514	0	514	0	514
1402+00	100	1,828	0	5,915	0	6,429	0	6,429
1403+00	100	600	299	4,498	553	10,926	553	10,373
1404+00	100	31	403	1,169	1,300	12,095	1,853	10,241
	COLUMN TOTALS:			12,095	1,853			

TEMPORARY RAMP TEA-SOUTH / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
100+00	0	17	0	0	0	0	0	0
100+50	50	0	224	16	207	16	207	-192
101+00	50	0	131	0	329	16	536	-520
101+50	50	378	0	350	121	366	657	-291
101+99	49	844	0	1,114	0	1,480	657	823
	COLUMN TOTALS:			1,480	657			

TEMPORARY RAMP TEA-NORTH / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
102+77	0	18	0	0	0	0	0	0
103+00	23	19	0	15	0	15	0	15
103+50	50	22	0	38	0	53	1	53
104+00	50	27	0	46	0	99	1	98
104+50	50	47	0	68	0	168	1	167
105+00	50	49	0	89	0	257	1	256
105+50	50	51	0	93	0	349	1	348
106+00	50	47	0	90	0	439	1	439
106+50	50	42	0	82	0	522	1	521
107+00	50	39	0	75	0	597	1	596
107+50	50	37	0	70	0	667	1	666
108+00	50	36	0	68	0	735	1	734
108+50	50	36	0	67	0	802	1	801
109+00	50	36	0	67	0	869	1	868
109+50	50	36	0	67	0	935	1	934
110+00	50	37	0	67	0	1,002	1	1,001
110+50	50	36	0	68	0	1,070	1	1,069
111+00	50	36	0	67	0	1,137	1	1,136
111+50	50	36	0	66	0	1,203	1	1,202
112+00	50	36	0	66	0	1,269	1	1,268
112+50	50	34	0	64	0	1,333	1	1,333
113+00	50	34	0	63	0	1,396	1	1,395
113+50	50	32	0	61	0	1,457	1	1,456
114+00	50	30	0	57	0	1,514	1	1,514
114+50	50	30	0	55	0	1,570	1	1,569
115+00	50	20	0	46	0	1,616	1	1,615
115+50	50	17	0	34	0	1,650	1	1,649
115+66	16	16	0	10	0	1,660	1	1,659
	COLUMN TOTALS:			1,660	1			

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TEMPORARY RAMP TEB / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
202+51	0	4	0	0	0	0	0	0
203+00	49	18	0	19	0	19	0	19
203+50	50	40	0	53	0	72	0	72
204+00	50	54	0	86	0	159	0	159
204+50	50	52	0	97	0	256	0	256
205+00	50	40	1	85	1	341	1	340
205+50	50	70	0	102	2	443	3	441
206+00	50	50	3	111	3	555	6	549
206+50	50	59	6	101	8	655	13	642
207+00	50	62	9	112	14	767	27	740
207+50	50	52	2	106	10	873	37	836
208+00	50	49	2	94	3	967	40	926
208+50	50	43	16	86	17	1,052	57	995
209+00	50	108	85	140	94	1,192	151	1,041
209+42	42	112	81	172	130	1,364	281	1,083
		COLUMN TOTALS:		1,364	281			

TEMPORARY RAMP TEC / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
312+72	0	5	0	0	0	0	0	0
313+00	28	14	0	10	0	10	0	10
313+50	50	24	0	35	0	45	0	45
314+00	50	47	0	66	0	111	0	111
314+50	50	13	0	56	0	167	0	167
315+00	50	171	13	171	12	338	12	326
315+50	50	639	171	750	171	1,088	183	905
316+00	50	802	143	1,334	290	2,422	473	1,949
316+50	50	1,124	90	1,783	215	4,206	688	3,517
316+74	24	1,334	90	1,075	79	5,281	767	4,514
		COLUMN TOTALS:		5,281	767			

TEMPORARY RAMP TED-SOUTH / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
400+25	0	60	212	0	0	0	0	0
400+50	25	0	874	28	506	28	506	-478
401+00	50	8	2,610	7	3,226	35	3,732	-3,696
401+50	50	246	2,541	235	4,769	270	8,501	-8,231
402+00	50	607	2,011	789	4,214	1,059	12,715	-11,656
402+25	25	591	1,718	564	1,755	1,623	14,470	-12,847
		COLUMN TOTALS:		1,623	14,470			

TEMPORARY RAMP TED-NORTH-1 / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
404+04	0	0	52	0	0	0	0	0
404+50	46	1	34	1	72	1	72	-71
405+00	50	2	12	3	43	4	115	-111
405+50	50	13	1	14	12	18	127	-109
406+00	50	17	0	28	1	46	127	-82
406+50	50	32	0	46	0	92	127	-36
407+00	50	27	1	54	1	146	129	17
407+50	50	30	0	53	1	199	130	69
408+00	50	34	0	60	0	258	130	128
408+50	50	35	0	64	0	322	130	192
409+00	50	32	0	62	0	384	130	254
409+50	50	32	0	59	0	443	130	313
410+00	50	31	0	58	0	501	130	371
410+50	50	31	0	57	0	559	130	429
410+74	24	28	0	27	0	585	130	455
		COLUMN TOTALS:		585	130			

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STH 59 / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
19+00	0	68	0	0	0	0	0	0
20+00	100	76	3	266	5	266	5	261
21+00	100	76	4	281	11	547	16	531
22+00	100	86	3	300	11	847	27	820
23+00	100	113	1	369	7	1,215	34	1,181
24+00	100	68	3	336	7	1,551	41	1,510
25+00	100	60	4	236	12	1,788	54	1,734
26+00	100	43	38	190	77	1,978	131	1,847
27+00	100	43	13	159	95	2,137	225	1,911
28+00	100	55	12	182	46	2,318	272	2,047
29+00	100	117	15	318	49	2,636	321	2,316
30+00	100	211	12	607	51	3,243	372	2,871
30+50	50	201	10	381	21	3,624	392	3,232
31+00	50	183	10	355	18	3,979	411	3,569
31+50	50	98	9	260	18	4,240	429	3,811
32+00	50	88	2	172	11	4,411	439	3,972
32+50	50	99	0	173	2	4,585	441	4,144
33+00	50	63	11	150	11	4,735	452	4,283
33+50	50	69	28	122	36	4,857	488	4,369
34+00	50	47	153	107	168	4,964	655	4,308
34+50	50	30	259	71	382	5,035	1,037	3,998
35+00	50	23	396	49	607	5,084	1,644	3,440
35+50	50	37	516	56	845	5,140	2,489	2,651
36+00	50	74	699	103	1,125	5,242	3,614	1,628
36+50	50	36	970	102	1,546	5,344	5,159	185
37+00	50	58	1,207	87	2,016	5,431	7,175	-1,744
37+50	50	9	1,357	62	2,374	5,493	9,549	-4,056
38+00	50	9	1,345	17	2,502	5,510	12,051	-6,541
38+50	50	17	1,248	24	2,401	5,535	14,453	-8,918
39+00	50	83	885	93	1,975	5,628	16,428	-10,800
39+50	50	51	68	125	882	5,752	17,310	-11,557
40+00	50	88	27	129	87	5,882	17,397	-11,516
40+50	50	67	65	144	85	6,025	17,482	-11,457
		COLUMN TOTALS:		6,025	17,482			

STH 59 SB RAMPS ROUNDABOUT / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
05+25 AH	0	10	653	0	0	0	0	0
05+50	25	3	1,025	6	777	6	777	-771
05+75	25	21	1,538	11	1,186	17	1,963	-1,946
06+00	25	0	1,964	10	1,621	26	3,584	-3,558
06+25	25	0	1,647	0	1,672	26	5,256	-5,229
06+50	25	0	1,815	0	1,602	26	6,858	-6,832
06+56 BK	6	0	1,945	0	384	26	7,242	-7,216
02+00 AH	0	0	1,945	0	0	26	7,242	-7,216
02+25	25	133	2,334	62	1,981	88	9,223	-9,135
02+50	25	0	1,991	62	2,002	149	11,225	-11,076
02+75 BK	25	0	1,729	0	1,722	149	12,947	-12,798
		COLUMN TOTALS:		149	12,947			

STH 59 / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
43+00 AH	0	114	1,042	0	0	0	0	0
43+50	50	482	1,064	552	1,950	552	1,950	-1,398
44+00	50	1,425	1,000	1,765	1,911	2,317	3,860	-1,543
44+50	50	2,162	1,043	3,321	1,892	5,638	5,752	-114
44+73	23	1,998	1,479	1,767	1,071	7,405	6,824	582
44+89 BK	16	1,776	600	1,118	616	8,524	7,440	1,084
46+81 AH	0	0	71	0	0	8,524	7,440	1,084
46+96	16	0	976	0	309	8,524	7,748	775
47+00	4	0	1,047	0	132	8,524	7,880	644
47+16	16	0	1,139	0	659	8,524	8,539	-15
47+50	34	20	752	12	1,181	8,536	9,720	-1,184
48+00	50	119	499	128	1,159	8,664	10,878	-2,215
48+50 BK	50	212	461	307	890	8,970	11,768	-2,798
		COLUMN TOTALS:		8,970	11,768			

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STH 59 NB RAMPS ROUNDABOUT / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
03+00 AH	0	0	515	0	0	0	0	0
03+25	25	0	899	0	655	0	655	-655
03+50	25	96	1,070	44	911	44	1,566	-1,522
03+75	25	374	915	217	919	262	2,485	-2,223
04+00	25	636	852	467	818	729	3,303	-2,574
04+25	25	9	792	298	761	1,027	4,064	-3,037
04+27 BK	2	13	771	1	63	1,028	4,127	-3,099
00+00 AH	0	13	770	0	0	1,028	4,127	-3,099
00+25	25	89	931	47	788	1,075	4,914	-3,839
00+50	25	0	807	41	805	1,116	5,719	-4,603
00+75 BK	25	0	618	0	660	1,116	6,378	-5,262
			COLUMN TOTALS:	1,116	6,378			

STH 59 / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
50+75	0	149	374	0	0	0	0	0
51+00	25	348	289	230	307	230	307	-77
51+50	50	34	243	353	492	583	799	-216
52+00	50	17	210	47	420	630	1,219	-588
52+50	50	5	170	20	352	651	1,571	-921
53+00	50	8	154	12	301	662	1,872	-1,209
53+50	50	37	138	41	271	703	2,143	-1,439
54+00	50	16	130	49	248	752	2,391	-1,639
			COLUMN TOTALS:	752	2,391			

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STH 59 GOEDE ROAD ROUNDABOUT / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
05+00 AH	0	135	88	0	0	0	0	0
05+25	25	98	150	108	110	108	110	-2
05+50	25	201	107	138	119	246	229	17
05+61 BK	11	288	98	103	43	350	272	77
01+45 AH	0	288	98	0	0	350	272	77
01+50	5	364	80	64	18	414	290	124
01+75	25	451	76	377	72	791	362	429
02+00	25	167	163	286	111	1,077	473	604
02+25	25	62	340	106	233	1,183	706	477
02+50 BK	25	59	237	56	267	1,239	972	266
			COLUMN TOTALS:	1,239	972			

STH 59 / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
56+00	0	33	270	0	0	0	0	0
56+50	50	24	358	52	582	52	582	-530
57+00	50	54	286	72	596	125	1,179	-1,054
57+50	50	61	179	107	431	231	1,609	-1,378
58+00	50	53	105	105	264	336	1,873	-1,537
58+50	50	137	59	176	152	512	2,025	-1,513
59+00	50	169	0	284	55	796	2,080	-1,283
59+50	50	122	6	269	6	1,066	2,086	-1,020
60+00	50	143	2	245	8	1,310	2,093	-783
60+50	50	176	1	295	3	1,605	2,096	-491
61+00	50	220	1	366	2	1,971	2,098	-127
61+50	50	178	0	368	1	2,339	2,100	239
62+00	50	89	37	247	35	2,586	2,135	451
62+43	43	92	10	144	38	2,730	2,173	557
62+50	7	38	2	17	2	2,746	2,174	572
63+00	50	37	0	69	2	2,815	2,176	639
63+50	50	75	0	103	0	2,918	2,176	742
64+00	50	0	0	69	0	2,988	2,176	812
64+50	50	30	28	28	26	3,016	2,202	814
65+00	50	29	0	55	26	3,071	2,228	843
65+50	50	11	0	37	0	3,108	2,228	880
			COLUMN TOTALS:	3,108	2,228			

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PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	EARTHWORK DATA	SHEET NO: 1302J	E

KENLYN LANE / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
11+00	0	96	0	0	0	0	0	0
11+50	50	87	0	169	0	169	0	169
12+00	50	108	0	181	0	350	0	349
12+50	50	185	0	271	0	621	0	621
13+00	50	149	0	309	0	930	0	929
13+50	50	253	0	372	0	1,301	0	1,301
14+00	50	176	0	397	0	1,698	0	1,698
14+50	50	148	0	300	0	1,999	0	1,999
15+00	50	203	0	326	0	2,325	0	2,324
15+50	50	193	0	367	0	2,691	0	2,691
16+00	50	192	0	356	0	3,047	0	3,047
16+50	50	179	0	344	0	3,391	0	3,391
17+00	50	246	0	394	0	3,785	0	3,785
17+50	50	345	0	547	0	4,332	0	4,332
18+00	50	291	0	588	0	4,921	0	4,921
18+50	50	250	2	501	2	5,421	2	5,419
19+00	50	245	0	458	2	5,879	4	5,875
19+50	50	275	0	481	0	6,361	4	6,356
20+00	50	295	0	528	0	6,888	4	6,884
20+50	50	274	0	527	0	7,415	4	7,411
21+00	50	310	0	541	0	7,956	4	7,952
21+50	50	323	0	586	0	8,543	4	8,539
22+00	50	306	0	582	0	9,125	4	9,121
23+00	100	529	0	1,545	0	10,670	4	10,666
24+00	100	380	0	1,683	0	12,353	4	12,348
25+00	100	10	21	723	38	13,075	42	13,033
26+00	100	22	57	59	144	13,134	186	12,948
27+00	100	17	580	71	1,180	13,206	1,366	11,839
28+00	100	16	843	61	2,635	13,266	4,001	9,265
29+00	100	6	959	40	3,336	13,306	7,337	5,969
29+50	50	42	1,393	44	2,177	13,351	9,514	3,836
30+00	50	13	1,747	51	2,907	13,402	12,421	981
30+50	50	19	1,940	30	3,414	13,432	15,835	-2,403
31+00	50	33	1,883	49	3,539	13,481	19,375	-5,894
31+50	50	62	1,704	89	3,321	13,569	22,695	-9,126
32+00	50	69	1,610	122	3,069	13,691	25,764	-12,073
32+50	50	73	1,504	131	2,883	13,822	28,647	-14,825
33+00	50	98	1,321	158	2,616	13,980	31,263	-17,282
33+50	50	112	1,170	194	2,307	14,175	33,570	-19,395
34+00	50	4	984	108	1,995	14,282	35,565	-21,282
35+00	100	4	512	16	2,770	14,298	38,335	-24,037
36+00	100	11	225	28	1,365	14,326	39,700	-25,374
37+00	100	535	0	1,010	417	15,336	40,117	-24,781
38+00	100	2,454	0	5,535	0	20,871	40,117	-19,246
39+00	100	3,820	0	11,618	0	32,489	40,117	-7,628

KENLYN LANE / STAGE 2A / DIVISION N2 (CONTINUED)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
40+00	100	4,422	0	15,261	0	47,750	40,117	7,633
41+00	100	5,172	0	17,766	0	65,516	40,117	25,399
42+00	100	4,007	0	16,998	0	82,514	40,117	42,397
43+00	100	1,043	0	9,352	0	91,866	40,117	51,749
44+00	100	111	26	2,138	49	94,004	40,166	53,838
45+00	100	66	89	329	213	94,333	40,379	53,954
46+00	100	58	156	230	453	94,563	40,832	53,731
46+99	99	50	150	197	560	94,760	41,392	53,368
			COLUMN TOTALS:	94,760	41,392			

HEMENWAY LANE / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
102+07	0	46	0	0	0	0	0	0
102+50	43	85	0	104	0	104	0	104
102+82	32	114	0	118	0	223	0	223
			COLUMN TOTALS:	223	0			

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GOEDE ROAD TEMPORARY WIDENING / STAGE 2A1 / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
101+75	0	25	0	0	0	0	0	0
102+00	25	11	78	17	36	17	36	-19
102+50	50	6	140	16	201	32	237	-205
103+00	50	6	118	12	239	44	476	-432
103+50	50	6	91	11	193	55	669	-614
104+00	50	6	27	11	109	67	778	-711
104+50	50	6	28	11	51	78	829	-751
105+00	50	6	19	11	44	88	873	-785
105+50	50	0	0	5	17	94	890	-797
106+00	50	5	12	5	11	98	901	-803
106+50	50	4	6	8	17	107	918	-811
107+00	50	6	0	9	6	116	923	-807
107+06	4	6	0	1	0	117	923	-806
			COLUMN TOTALS:	117	923			

GOEDE ROAD / STAGE 2A2/2A3 / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
102+50	0	163	0	0	0	0	0	0
103+00	50	147	46	287	42	287	42	245
103+50	50	195	0	317	42	604	85	519
104+00	50	128	14	300	13	903	97	806
104+50	50	81	1	193	14	1,097	111	986
105+00	50	76	0	145	1	1,242	112	1,129
105+50	50	59	1	125	1	1,366	113	1,253
106+00	50	51	0	102	1	1,468	114	1,354
106+50	50	23	2	68	2	1,536	116	1,420
107+00	50	50	0	67	2	1,603	118	1,485
107+06	6	28	0	9	0	1,612	118	1,494
			COLUMN TOTALS:	1,612	118			

N RICHARDSON SPRINGS ROAD / STAGE 2 A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
22+00	0	120	0	0	0	0	0	0
22+50	50	175	0	273	0	273	0	273
23+00	50	296	0	437	0	709	0	709
23+50	50	337	0	587	0	1,296	0	1,296
24+00	50	352	0	638	0	1,934	0	1,934
24+50	50	343	0	643	0	2,577	0	2,577
25+00	50	321	0	615	0	3,192	0	3,192
25+50	50	433	0	698	0	3,890	0	3,890
26+00	50	335	0	711	0	4,602	0	4,602
26+50	50	291	0	579	0	5,181	0	5,181
27+00	50	360	0	602	0	5,783	0	5,783
27+50	50	377	0	682	0	6,466	0	6,466
28+00	50	731	0	1,025	0	7,491	0	7,491
28+50	50	481	0	1,122	0	8,613	0	8,613
29+00	50	246	0	673	0	9,286	0	9,286
29+50	50	250	0	459	0	9,745	0	9,745
29+65	15	346	0	165	0	9,911	0	9,911
30+00	35	376	0	467	0	10,378	0	10,378
30+50	50	328	34	652	32	11,030	32	10,998
			COLUMN TOTALS:	11,030	32			

E RICHARDSON SPRINGS ROAD / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
06+25	0	68	9	0	0	0	0	0
06+50	25	11	14	36	11	36	11	25
06+75	25	12	0	11	7	47	18	29
07+00	25	12	11	11	5	58	23	35
07+25	25	20	9	15	10	73	33	40
07+50	25	30	1	23	5	96	38	58
			COLUMN TOTALS:	96	38			

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N SOUTH EASTMAN ROAD / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
79+88	0	118	0	0	0	0	0	0
80+00	12	146	0	59	0	59	0	59
80+50	50	85	0	214	0	273	0	273
81+00	50	93	0	165	0	439	0	439
81+50	50	101	0	180	0	618	0	618
82+00	50	117	0	202	0	820	0	820
82+50	50	137	0	235	0	1,056	0	1,056
83+00	50	152	0	267	0	1,323	0	1,323
83+50	50	189	0	315	0	1,638	0	1,638
84+00	50	340	0	490	0	2,128	0	2,128
84+50	50	207	0	506	0	2,634	0	2,634
85+00	50	279	0	450	0	3,084	0	3,084
85+50	50	230	0	472	0	3,556	0	3,556
86+00	50	71	0	279	0	3,834	0	3,834
86+50	50	45	0	107	0	3,942	0	3,942
87+00	50	25	0	65	0	4,007	0	4,007
87+50	50	23	0	45	0	4,052	0	4,052
88+00	50	1	29	22	27	4,075	27	4,047
88+50	50	1	72	2	94	4,076	121	3,955
89+00	50	3	87	4	147	4,080	268	3,812
		COLUMN TOTALS:		4,080	268			

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FARM DITCH / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
100+31	0	0	9	0	0	0	0	0
100+50	19	5	0	2	3	2	3	-1
101+00	50	8	0	12	0	13	3	10
101+50	50	8	0	14	0	28	3	24
102+00	50	8	0	14	0	42	3	39
102+50	50	7	0	13	0	55	3	52
103+00	50	7	0	13	0	68	3	65
103+50	50	10	0	16	0	85	3	81
104+00	50	11	0	19	0	104	3	101
104+50	50	12	0	21	0	125	3	122
105+00	50	95	0	99	0	224	3	221
		COLUMN TOTALS:		224	3			

FDA HOLDINGS DRIVEWAY / STAGE 2A / DIVISION N2

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
06+44	0	40	0	0	0	0	0	0
06+50	6	52	0	10	0	10	0	10
06+60	10	269	0	60	0	70	0	70
06+70	10	356	0	116	0	186	0	186
06+80	10	376	0	136	0	321	0	321
06+90	10	390	0	142	0	463	0	463
07+00	10	393	0	145	0	608	0	608
07+10	10	386	0	144	0	752	0	752
07+20	10	384	0	143	0	895	0	895
07+25	5	387	0	71	0	966	0	966
07+50	25	405	0	367	0	1,333	0	1,333
		COLUMN TOTALS:		1,333	0			

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IH 39 NB / STAGE 2C / DIVISION S3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1332+68	0	0	0	0	0	0	0	0
1333+00	32	30	15	18	9	18	9	9
1334+00	100	29	20	110	65	128	73	54
1335+00	100	29	11	108	58	236	131	105
1336+00	100	32	8	113	35	349	166	183
1337+00	100	33	8	120	30	469	196	273
1338+00	100	33	7	123	28	592	224	367
1339+00	100	36	8	129	27	720	251	469
1340+00	100	35	11	133	35	853	286	567
1341+00	100	79	18	212	53	1,065	339	725
1342+00	100	94	17	320	65	1,385	404	980
1343+00	100	86	34	332	94	1,717	498	1,218
1343+05	5	134	36	20	6	1,737	505	1,232
1344+00	95	110	66	430	180	2,167	684	1,482
1345+00	100	99	87	386	284	2,553	969	1,584
1346+00	100	119	85	402	320	2,955	1,288	1,667
1347+00	100	188	84	568	314	3,524	1,602	1,922
1348+00	100	180	82	683	308	4,207	1,910	2,297
1349+00	100	41	95	411	328	4,618	2,238	2,380
1350+00	100	78	109	220	378	4,838	2,616	2,222
1351+00	100	141	92	405	373	5,243	2,989	2,254
1352+00	100	45	128	345	408	5,588	3,397	2,191
1353+00	100	62	82	199	389	5,787	3,785	2,002
1354+00	100	177	40	444	225	6,231	4,011	2,220
1354+29	29	264	33	234	38	6,465	4,049	2,416
1355+00	71	449	21	942	71	7,407	4,120	3,287
1356+00	100	473	18	1,708	72	9,114	4,192	4,923
1357+00	100	134	60	1,124	144	10,238	4,336	5,902
1358+00	100	170	37	563	179	10,801	4,515	6,286
1359+00	100	343	0	950	68	11,751	4,583	7,168
1360+00	100	579	0	1,708	0	13,459	4,583	8,876
1361+00	100	722	0	2,409	0	15,868	4,583	11,285
1361+50	50	713	0	1,328	0	17,197	4,583	12,613
1362+00	50	215	0	859	0	18,056	4,583	13,473
1363+00	100	203	0	775	0	18,831	4,583	14,247

IH 39 NB / STAGE 2C / DIVISION S3 (CONTINUED)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1364+00	100.00	198.70	0.17	744	0	19,575	4,584	14,991
1365+00	100.00	176.44	0.69	695	2	20,270	4,585	15,684
1366+00	100.00	147.38	1.99	600	5	20,869	4,590	16,279
1367+00	100.00	110.84	6.95	478	17	21,347	4,607	16,741
1368+00	100.00	93.73	9.83	379	31	21,726	4,638	17,088
1369+00	100.00	79.64	13.85	321	44	22,047	4,682	17,366
1370+00	100.00	53.12	51.64	246	121	22,293	4,803	17,490
1371+00	100.00	42.82	98.89	178	279	22,471	5,082	17,389
1372+00	100.00	23.15	23.13	122	226	22,593	5,308	17,285
1372+75	75.00	14.53	8.62	52	44	22,645	5,352	17,294
1373+24.96	49.96	15.19	4.99	27	13	22,673	5,364	17,308
1374+00	75.04	5.46	6.91	29	17	22,701	5,381	17,321
1375+00	100.00	0.66	66.43	11	136	22,713	5,517	17,196
1376+00	100.00	0.00	127.60	1	359	22,714	5,876	16,838
1377+00	100.00	0.00	116.50	0	452	22,714	6,328	16,386
1377+90	90.00	0.00	256.23	0	621	22,714	6,949	15,765
			COLUMN TOTALS:	22,714	6,949			

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IH 39 NB / STAGE 2C / DIVISION N3

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1385+50	0	0	204	0	0	0	0	0
1386+00	50	0	154	0	331	0	331	-331
1387+00	100	0	106	0	481	0	811	-811
1388+00	100	12	9	23	213	23	1,024	-1,001
1388+03	3	12	22	1	2	24	1,026	-1,002
1389+00	97	27	21	71	77	95	1,103	-1,007
1389+94	94	55	19	142	69	237	1,172	-934
1390+00	6	57	19	13	4	251	1,176	-926
1391+00	100	95	18	282	69	533	1,245	-712
1392+00	100	144	0	443	33	975	1,278	-303
1393+00	100	171	0	582	0	1,557	1,278	278
1394+00	100	224	0	730	0	2,287	1,278	1,009
1395+00	100	274	0	923	0	3,210	1,278	1,931
1396+00	100	302	0	1,067	0	4,276	1,279	2,998
1397+00	100	311	0	1,135	1	5,411	1,279	4,132
1398+00	100	338	1	1,201	3	6,613	1,282	5,331
1399+00	100	346	2	1,265	5	7,878	1,287	6,591
1400+00	100	294	3	1,184	8	9,062	1,295	7,767
1401+00	100	238	10	984	23	10,046	1,318	8,727
1402+00	100	243	0	889	18	10,935	1,336	9,599
1403+00	100	230	0	874	0	11,809	1,336	10,473
1404+00	100	193	2	782	4	12,591	1,340	11,251
1405+00	100	186	7	701	17	13,292	1,357	11,935
1405+32	32	193	0	225	5	13,517	1,362	12,155
1406+00	68	188	34	480	43	13,997	1,405	12,592
1407+00	100	274	0	856	63	14,852	1,468	13,385
1407+12	12	282	0	124	0	14,976	1,468	13,508
1408+00	88	949	302	2,007	492	16,983	1,960	15,023
1409+00	100	1,016	478	3,639	1,444	20,622	3,405	17,217
1410+00	100	1,380	67	4,436	1,010	25,058	4,414	20,643
1411+00	100	123	1	2,784	127	27,841	4,541	23,300
1412+00	100	121	1	451	4	28,293	4,545	23,747
1413+00	100	109	1	426	4	28,718	4,550	24,169
1414+00	100	110	1	406	4	29,125	4,554	24,571
1415+00	100	111	1	409	4	29,534	4,558	24,976
1416+00	100	111	1	411	4	29,945	4,562	25,383
1417+00	100	165	1	512	5	30,457	4,567	25,890
1418+00	100	113	1	514	5	30,971	4,572	26,399
1419+00	100	111	0	415	2	31,386	4,574	26,812
1420+00	100	82	0	358	0	31,744	4,574	27,170
1421+00	100	65	0	272	0	32,016	4,574	27,442
1422+00	100	60	0	232	0	32,248	4,574	27,674
1423+00	100	86	4	272	7	32,520	4,580	27,939
1424+00	100	74	6	296	19	32,816	4,599	28,217
1425+00	100	66	6	259	23	33,075	4,622	28,453
1426+00	100	57	8	229	27	33,304	4,649	28,655
1427+00	100	48	11	194	36	33,497	4,685	28,813
1428+00	100	39	11	161	42	33,658	4,726	28,932
1429+00	100	26	12	120	42	33,778	4,769	29,009
1430+00	100	21	23	86	63	33,864	4,832	29,032

IH 39 NB / STAGE 2C / DIVISION N3 (CONTINUED)

STATION	Distance	AREA (SF)		Incremental Vol (CY) (Unadjusted)		Cumulative Vol (CY)		Mass Ordinate
		Cut	Fill	Cut	Fill	Cut 1.00	Fill 1.00	
1431+00	100	12	29	61	95	33,925	4,927	28,998
1432+00	100	16	27	53	104	33,978	5,031	28,947
1432+05	5	16	27	3	5	33,981	5,036	28,945
1433+00	95	23	19	68	81	34,050	5,117	28,932
1434+00	100	82	3	194	40	34,243	5,158	29,086
1434+79	79	255	0	494	4	34,737	5,162	29,575
1435+00	21	260	0	199	0	34,936	5,162	29,774
1436+00	100	150	0	758	0	35,694	5,162	30,532
1437+00	100	119	0	497	0	36,191	5,162	31,030
1438+00	100	119	2	441	4	36,632	5,166	31,466
1439+00	100	133	2	467	8	37,098	5,173	31,925
1440+00	100	128	4	484	11	37,582	5,184	32,398
1441+00	100	124	5	468	16	38,050	5,201	32,850
1442+00	100	123	5	458	17	38,508	5,218	33,291
1443+00	100	126	10	461	26	38,969	5,244	33,725
1444+00	100	153	19	517	53	39,486	5,298	34,188
1445+00	100	163	18	585	68	40,071	5,366	34,705
1446+00	100	231	13	729	58	40,799	5,424	35,375
1446+08	8	233	14	70	4	40,869	5,428	35,441
1446+53	45	214	16	372	25	41,241	5,453	35,788
1447+00	47	161	22	326	33	41,567	5,486	36,081
1447+60	60	129	31	322	59	41,889	5,545	36,344
1448+00	40	67	22	145	39	42,035	5,584	36,451
1449+00	100	69	19	251	75	42,286	5,659	36,627
1500+00	61	65	23	150	47	42,436	5,706	36,730
1501+00	100	62	26	236	90	42,672	5,796	36,876
1502+00	100	54	44	215	130	42,887	5,926	36,961
1503+00	100	28	67	152	206	43,038	6,132	36,906
1504+00	100	28	28	103	176	43,141	6,308	36,833
1505+00	100	27	18	101	85	43,243	6,393	36,849
1506+00	100	28	9	102	50	43,344	6,443	36,901
1507+00	100	27	6	101	27	43,445	6,471	36,975
1508+00	100	27	3	99	17	43,545	6,488	37,057
1509+00	100	27	2	100	10	43,645	6,497	37,148
1510+00	100	26	1	99	5	43,744	6,503	37,241
1511+00	100	28	0	99	2	43,843	6,505	37,339
1512+00	100	27	1	102	2	43,946	6,506	37,439
1512+13	13	28	1	14	0	43,959	6,507	37,453
			COLUMN TOTALS:	43,959	6,507			

Addendum No. 01
ID 1005-10-71/72
Added Sheet 1302O
January 5, 2016

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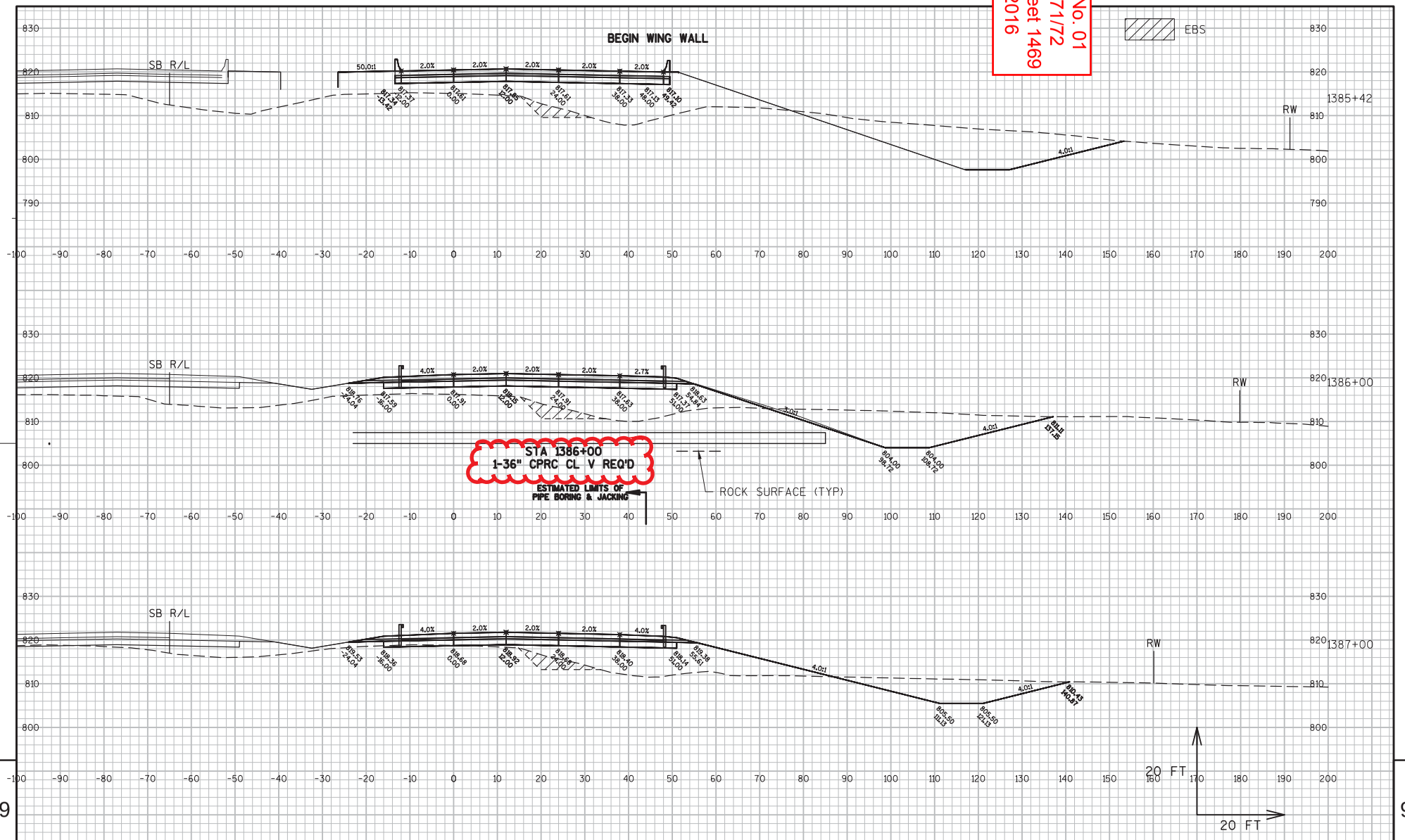
PROJECT NO: 1005-10-71,72 | HWY: IH-39/90 | COUNTY: ROCK | EARTHWORK DATA | SHEET NO: 1302O E

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 1469
January 5, 2016

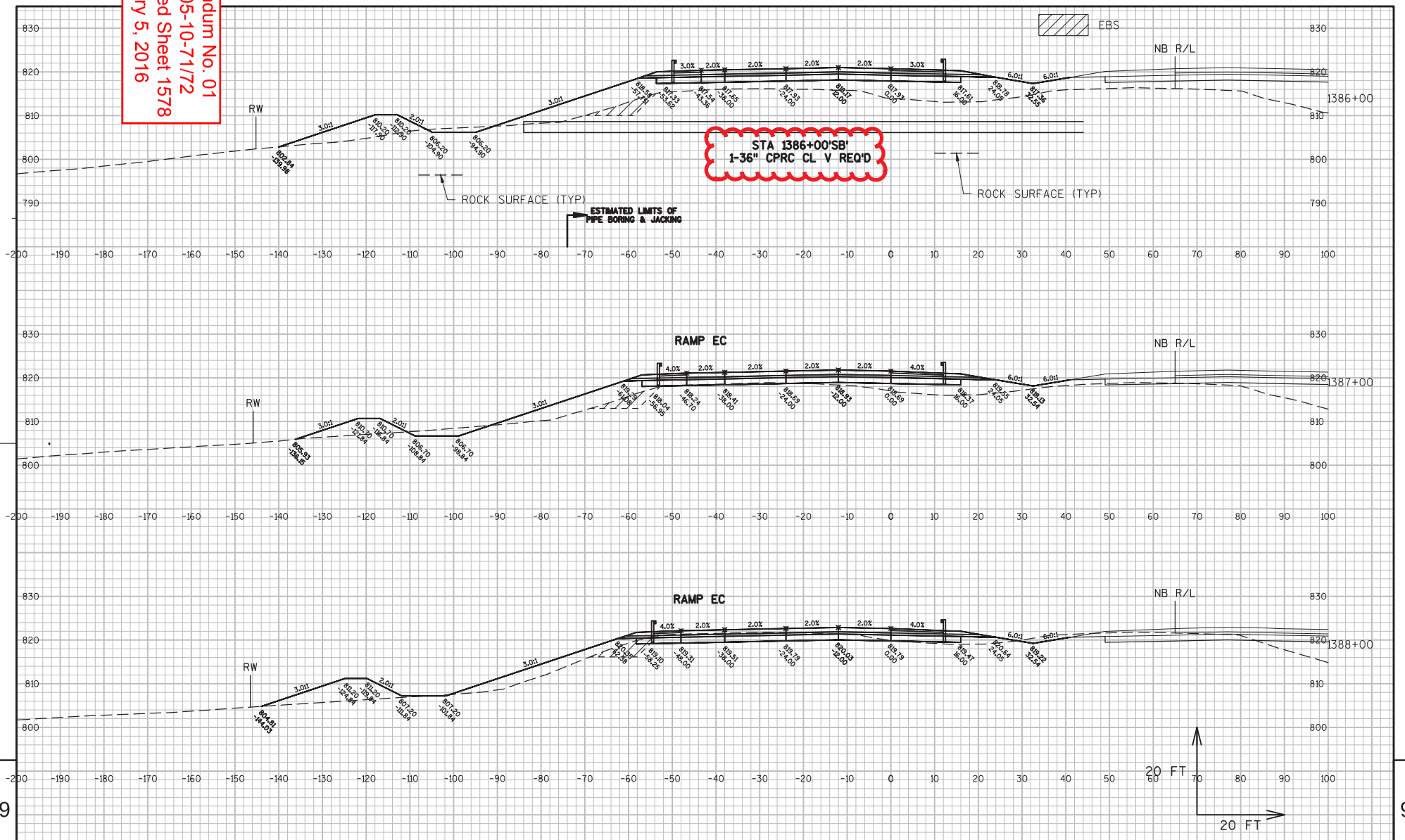


PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	CROSS SECTIONS: IH-39 NB	SHEET 1469	E

FILE NAME : K:\1112719\CIVIL3D\1005107 2\SHEETSPLAN\XSECT\090201_XS.DWG PLOT DATE : 12/22/2015 3:04 PM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : *********

WISDOT/CADDS SHEET 49

Addendum No. 01
ID 1005-10-71/72
Revised Sheet 1578
January 5, 2016



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PROJECT NO: 1005-10-71,72	HWY: IH-39/90	COUNTY: ROCK	CROSS SECTIONS: IH-39 SB	SHEET 1578	E

FILE NAME : K:\1112719\CIVIL3D\1005107 2\SHEETSPLAN\XSECT\090202_XS.DWG PLOT DATE : 12/22/2015 3:13 PM PLOT BY : BECKENDORF, RANDY PLOT NAME : PLOT SCALE : ********* WISDOT/CADDS SHEET 49

CONTRACT: 20160112018
PROJECT(S): 1005-10-71, 1005-10-72
FEDERAL ID(S): N/A, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
0840	460.1130 HMA Pavement Type E-30	23,284.000 TON		.		.
0850	460.2000 Incentive Density HMA Pavement	24,450.000 DOL	1.00000		24450.00	
0860	460.4000 HMA Cold Weather Paving	4,179.000 TON		.		.
0870	465.0120 Asphaltic Surface Driveways and Field Entrances	358.000 TON		.		.
0880	465.0125 Asphaltic Surface Temporary	6,484.000 TON		.		.
0890	465.0310 Asphaltic Curb	515.000 LF		.		.
0900	465.0315 Asphaltic Flumes	213.000 SY		.		.
0910	465.0400 Asphaltic Shoulder Rumble Strips	16,430.000 LF		.		.
0920	501.1000.S Ice Hot Weather Concreting	68,905.000 LB		.		.
0930	502.0100 Concrete Masonry Bridges **P**	4,609.000 CY		.		.
0940	502.1100 Concrete Masonry Seal	1,748.000 CY		.		.

CONTRACT: 20160112018
PROJECT(S): 1005-10-71, 1005-10-72
FEDERAL ID(S): N/A, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
1560	521.1503 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 4 to 1	8.000 EACH		.		.
1570	521.1505 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 4 to 1	2.000 EACH		.		.
1580	521.1506 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-Inch 4 to 1	4.000 EACH		.		.
1590	521.1515 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 15-Inch 6 to 1	5.000 EACH		.		.
1600	521.1518 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 18-Inch 6 to 1	2.000 EACH		.		.
1610	521.1524 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 24-Inch 6 to 1	8.000 EACH		.		.
1620	521.1530 Apron Endwalls for Culvert Pipe Sloped Side Drains Steel 30-Inch 6 to 1	2.000 EACH		.		.
1630	522.0115 Culvert Pipe Reinforced Concrete Class III 15-Inch	148.000 LF		.		.
1640	522.0124 Culvert Pipe Reinforced Concrete Class III 24-Inch	62.000 LF		.		.

CONTRACT: 20160112018
PROJECT(S): 1005-10-71, 1005-10-72
FEDERAL ID(S): N/A, N/A

CONTRACTOR :_____

LINE NO	ITEM DESCRIPTION	APPROX. QUANTITY AND UNITS	UNIT PRICE DOLLARS	UNIT PRICE CTS	BID AMOUNT DOLLARS	BID AMOUNT CTS
2350	611.8120.S Cover Plates Temporary	41.000 EACH		.		.
2360	611.9800.S Pipe Grates	18.000 EACH		.		.
2370	612.0106 Pipe Underdrain 6-Inch	4,565.000 LF		.		.
2380	612.0206 Pipe Underdrain Unperforated 6-Inch	495.000 LF		.		.
2390	612.0218 Pipe Underdrain Unperforated 18-Inch	285.000 LF		.		.
2400	612.0406 Pipe Underdrain Wrapped 6-Inch	10,048.000 LF		.		.
2410	612.0806 Apron Endwalls for Underdrain Reinforced Concrete 6-Inch	15.000 EACH		.		.
2420	612.0902.S Insulation Board Polystyrene (inch) 001. 2-Inch	38.000 SY		.		.
2430	614.0150 Anchor Assemblies for Steel Plate Beam Guard	12.000 EACH		.		.
2440	614.0220 Steel Thrie Beam Bullnose Terminal	2.000 EACH		.		.