

# A d d e n d u m

Iowa Department of Transportation  
Office of Contracts

Date of Letting: September 20, 2016  
Date of Addendum: September 14, 2016

<b>B.O.</b>	<b>Proposal ID</b>	<b>Proposal Work Type</b>	<b>County</b>	<b>Project Number</b>	<b>Addendum</b>
005	85-0354-183	BRIDGE NEW - STEEL GIRDER	STORY	IM-035-4(182)112--13-85 IM-035-4(183)112--13-85 IM-035-4(184)112--13-85 IM-035-4(185)112--13-85 IM-035-4(226)112--13-85	20SEP005A05

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Add Proposal Line No. 1321 2401-6750001 REMOVALS, AS PER PLAN; 1.000 LS

Add Proposal Line No. 1322 2403-0100010 STRUCTURAL CONCRETE (BRIDGE);  
23.200 CY

Add Proposal Line No. 1323 2404-7775005 REINFORCING STEEL, EPOXY COATED;  
1299.000 LB

Add Proposal Line No. 1324 2507-2638610 CONCRETE SLOPE PROTECTION; 180.000 SY

Add Proposal Line No. 1325 2512-1750006 CURB AND GUTTER, P.C. CONCRETE, AS PER  
PLAN; 172.000 LF

Add Proposal Line No. 1326 2599-9999014 SOIL NAIL WALL SYSTEM; 597.000 SF

If the above changes are not made, they will be made as shown here.

Make the following changes to IM-035-4(182)112--13-85 plans:

Replaced plan V.10, V.11, and V.12 with the attached.

## ESTIMATED SOIL NAIL RETAINING WALL QUANTITIES

ITEM NO.	ITEM CODE	ITEM	UNIT	TOTAL	AS BUILT QUANTITY
1	2401-6750001	REMOVALS, AS PER PLAN	LS	1.0	
2	2403-0100010	STRUCTURAL CONCRETE (BRIDGE)	CY	23.2	
3	2404-7775005	REINFORCING STEEL, EPOXY COATED	LB	1299.0	
4	2507-2638610	CONCRETE SLOPE PROTECTION	SY	180.0	
5	2512-1750006	CURB AND GUTTER, P.C. CONCRETE, AS PER PLAN	LF	172.0	
6	2599-9999014	SOIL NAIL WALL SYSTEM	SF	597.0	

## ESTIMATE REFERENCE INFORMATION

ITEM NO.	ITEM CODE	DESCRIPTION
1	2401-6750001	REMOVALS, AS PER PLAN INCLUDES REMOVAL AND DISPOSAL OF EXISTING CONCRETE SLOPE PROTECTION AND PERFORATED SUBDRAIN.
2	2403-0100010	STRUCTURE CONCRETE (BRIDGE) CONCRETE FOR SOIL NAIL WALL CAST IN PLACE FACING. 8" FACING THICKNESS USED IN QUANTITY. FINAL THICKNESS DETERMINED BY CONTRACTOR SOIL NAIL DESIGNER. INCLUDES DEPTH BELOW GRADE.
3	2404-7775005	REINFORCING STEEL, EPOXY COATED REINFORCING STEEL FOR SOIL NAIL WALL CAST IN PLACE FACING. NO. 4 BARS AT 1'-0" SPACING EACH WAY WERE USED IN QUANTITY. FINAL REINFORCING STEEL DETERMINED BY CONTRACTOR SOIL NAIL DESIGNER. INCLUDES DEPTH BELOW GRADE.
4	2507-2638610	CONCRETE SLOPE PROTECTION SEE SHEET 3 FOR MORE DETAILS. EXISTING GRANULAR SUBBASE AND ENGINEERING FABRIC TO REMAIN.
5	2512-1750006	CURB AND GUTTER, P.C. CONCRETE, AS PER PLAN PLACED ALONG TOP OF RETAINING WALL AS SHOWN ON SHEET 2 AND SHEET 3 SECTION A-A. REINFORCING STEEL INCIDENTAL.
6	2599-9999014	SOIL NAIL WALL SYSTEM SEE SPECIAL PROVISIONS. INCLUDES COST OF 330 CY EXCAVATION FOR RETAINING WALL. SEE SECTION A DETAIL ON DESIGN SHEET 2 FOR EXCAVATION LIMITS.

### GENERAL NOTES:

IT IS THE INTENT OF THIS DESIGN TO CONSTRUCT A 172'-0" VARIABLE HEIGHT SOIL NAIL RETAINING WALL DURING THE ROADWAY LANE AND SHOULDER WIDENING AT THE EXISTING BERM OF THE DAYTON AVE. STRUCTURE ABUTMENT.

THE LUMP SUM BID FOR "REMOVALS, AS PER PLAN" SHALL INCLUDE REMOVAL AND DISPOSAL OF THE EXISTING CONCRETE SLOPE WALL AT THE DAYTON AVE. STRUCTURE DESIGN NO. 1092.

PLANS OF THE EXISTING DAYTON AVE. STRUCTURE DESIGN NO. 1092 WILL BE MADE AVAILABLE TO THE CONTRACTOR. CONTACT THE OFFICE OF CONTRACTS - HIGHWAY DESIGN - IOWA D.O.T. - AMES.

REMOVALS SHALL BE IN ACCORDANCE WITH SECTION 2401, OF THE STANDARD SPECIFICATIONS.

FAINT LINES ON PLANS INDICATE EXISTING STRUCTURE.

UTILITY COMPANIES WHOSE FACILITIES ARE SHOWN ON THE PLANS OR KNOWN TO BE WITHIN THE CONSTRUCTION LIMITS SHALL BE NOTIFIED BY THE CONTRACTOR OF THE CONSTRUCTION STARTING DATE.

CONTRACTOR SHALL COORDINATE SOIL NAIL WALL WEEP HOLES WITH ROADWAY CONCRETE BARRIER WEEP HOLES. WEEP HOLES AND CONNECTOR PIPES SHALL BE INCIDENTAL TO SOIL NAIL WALL SYSTEM.

NOTE:  
ROADWAY QUANTITIES SHOWN  
IN ROADWAY PLANS.

NOTE:  
POLLUTION PREVENTION PLAN SHOWN  
IN ROADWAY PLANS.

**TRAFFIC CONTROL PLAN**  
NOTE:  
REFER TO THE TRAFFIC CONTROL  
PLAN SHOWN IN ROADWAY PLANS.

### DESIGN HISTORY AT THIS SITE


(INCLUDES THIS DESIGN)

DES. NO.	TYPE OF WORK
1092	DAYTON AVE BRIDGE
516	RETAINING WALL

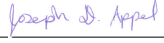
### UTILITY CONTACTS:

IOWA NETWORK SERVICES

### STRUCTURAL DESIGN



I hereby certify that this engineering document was prepared by me or under my direct personal supervision and that I am a duly licensed Professional Engineer under the laws of the State of Iowa.

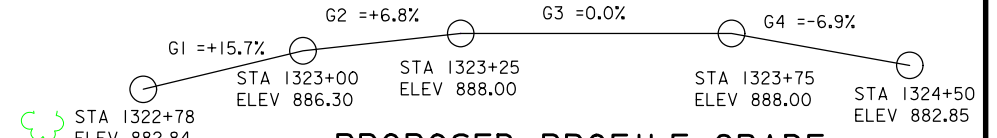
 06/17/2016  
 Signature Date  
 Joseph D. Appel  
 Printed or Typed Name  
 My license renewal date is December 31, 2016

Pages or sheets covered by this seal: SHEETS V.10 THRU V.12

DESIGN FOR  
172'-0" x VAR. HEIGHT  
SOIL NAIL RETAINING WALL  
QUANTITIES AND GENERAL NOTES  
START STA. 1322+78.00      JUNE 20, 2016  
END STA. 1324+50.00  
**STORY COUNTY**  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 1 OF 3      FILE NO. 31296      DESIGN NO.

895	STA 1323+00 ELEV 886.30	STA 1323+25 ELEV 888.00	895
890	STA 1322+78 ELEV 882.84	STA 1323+75 ELEV 888.00	890
885	EXISTING GROUND		885
880	PROPOSED GRADING FRONT FACE OF WALL		880
875			875
870			870

LONGITUDINAL SECTION ALONG  $\perp$  RETAINING WALL



PROPOSED PROFILE GRADE TOP OF WALL

LOCATION

RETAINING WALL  
BELOW DAYTON AVE. ON U.S. 30  
T-83N R-24W  
SECTION 13  
WASHINGTON TOWNSHIP  
STORY COUNTY  
CITY OF AMES  
LATITUDE 42.006808°  
LONGITUDE -93.586384°

UTILITIES LEGEND:

F03 FIBER OPTIC LINE:  
IOWA NETWORK SERVICES

NOTES:  
WALL BASELINE STATIONING IS  
EQUAL TO US HIGHWAY 30 STATIONING

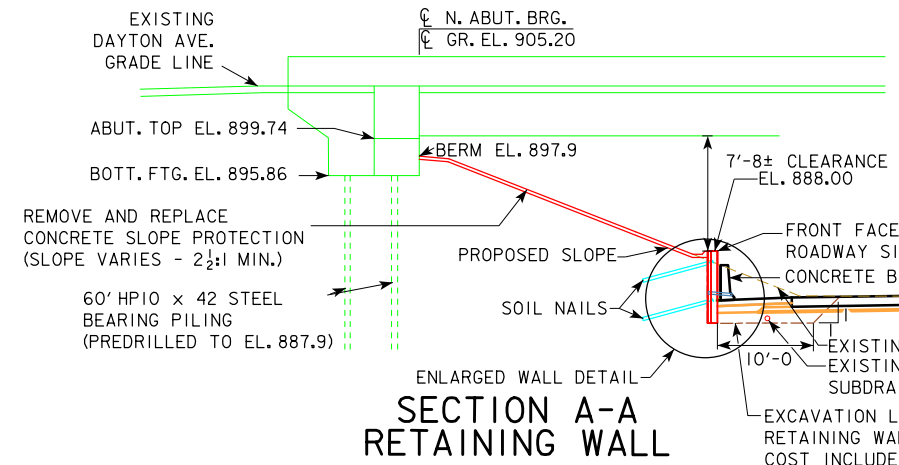
SEE ROADWAY PLANS FOR BARRIER PROTECTION

4" GAP BETWEEN WALL AND BARRIER FOR  
2" PAVED SHOULDER OVERHANG (STANDARD BA-106)  
AND 2" EXPANSION JOINT AT EDGE OF SHOULDER

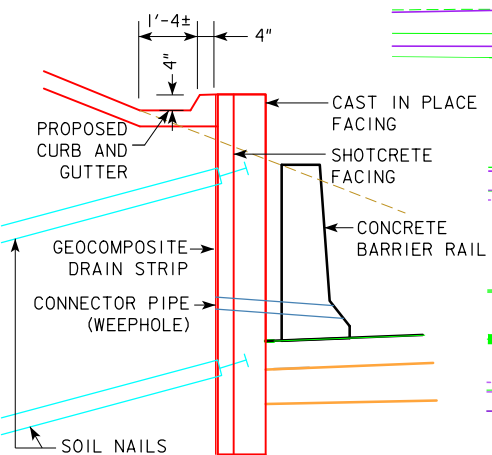
GEOTECH REPORT FOR RETAINING WALL - US 30 AT  
DAYTON ROAD, FEBRUARY 2016 BY HDR ENGINEERING, INC.

TRAFFIC ESTIMATE

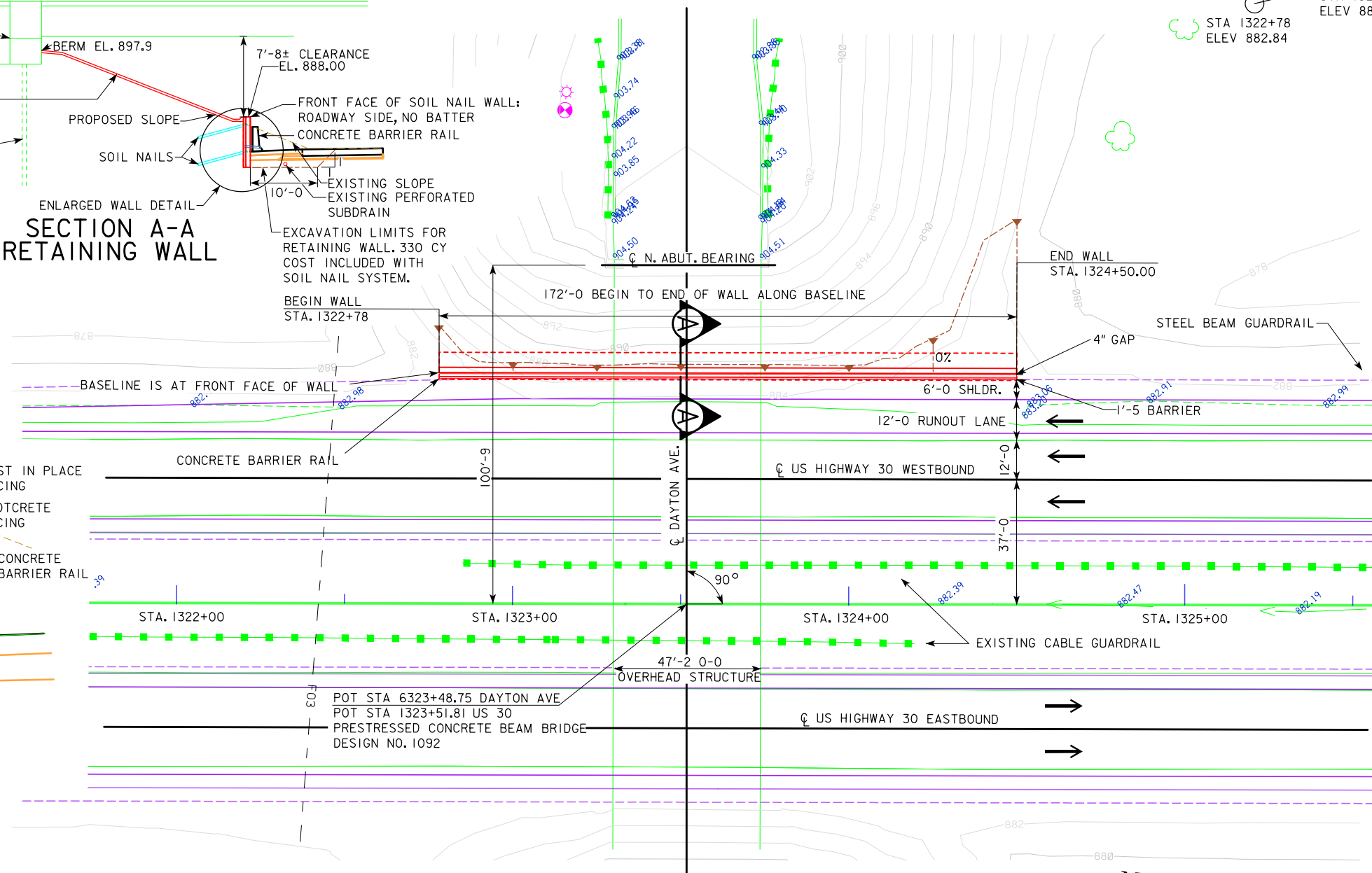
2011 AADT	29,200	V.P.D.
2038 AADT	54,335	V.P.D.
20... DHV		V.P.H.
TRUCKS		%
TOTAL DESIGN ESALs		



SECTION A-A  
RETAINING WALL



ENLARGED  
WALL DETAIL

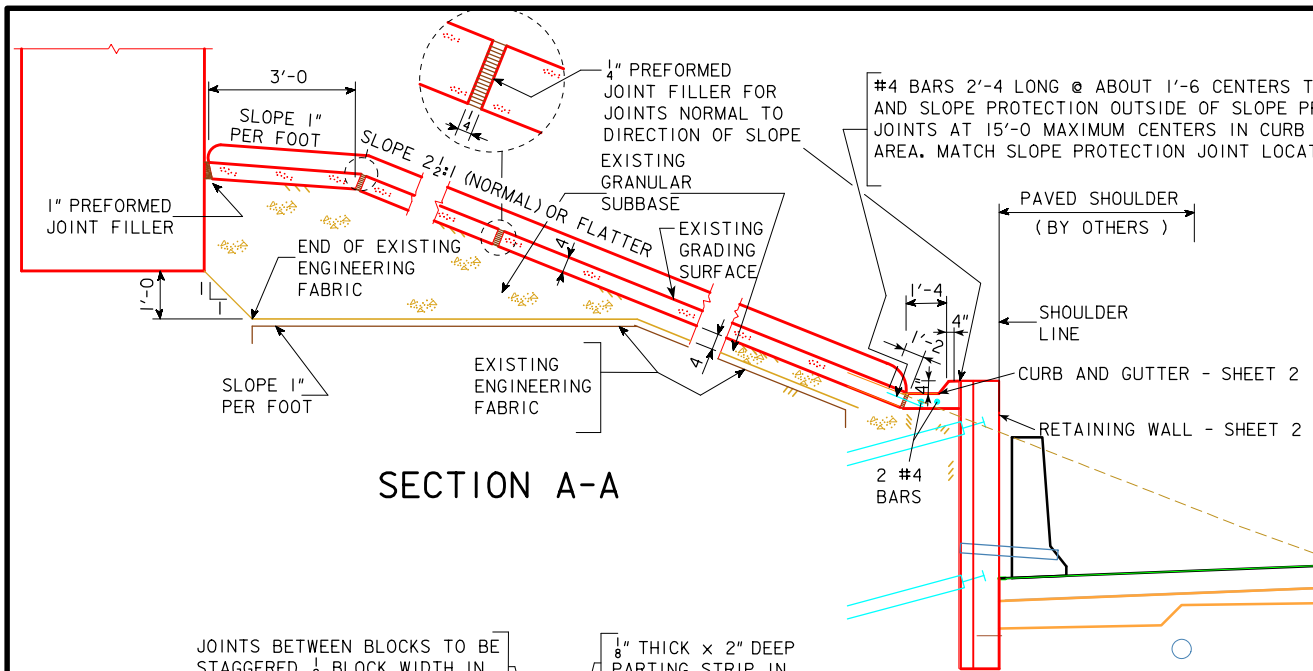


WALL $\perp$ STATION = US 30 STATION OFFSET		
BEGIN WALL	1322+78	68.75 LT
END WALL	1324+50	68.75 LT

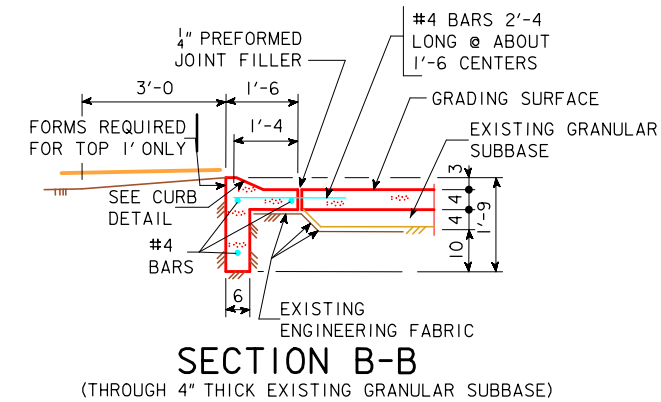
SITUATION PLAN



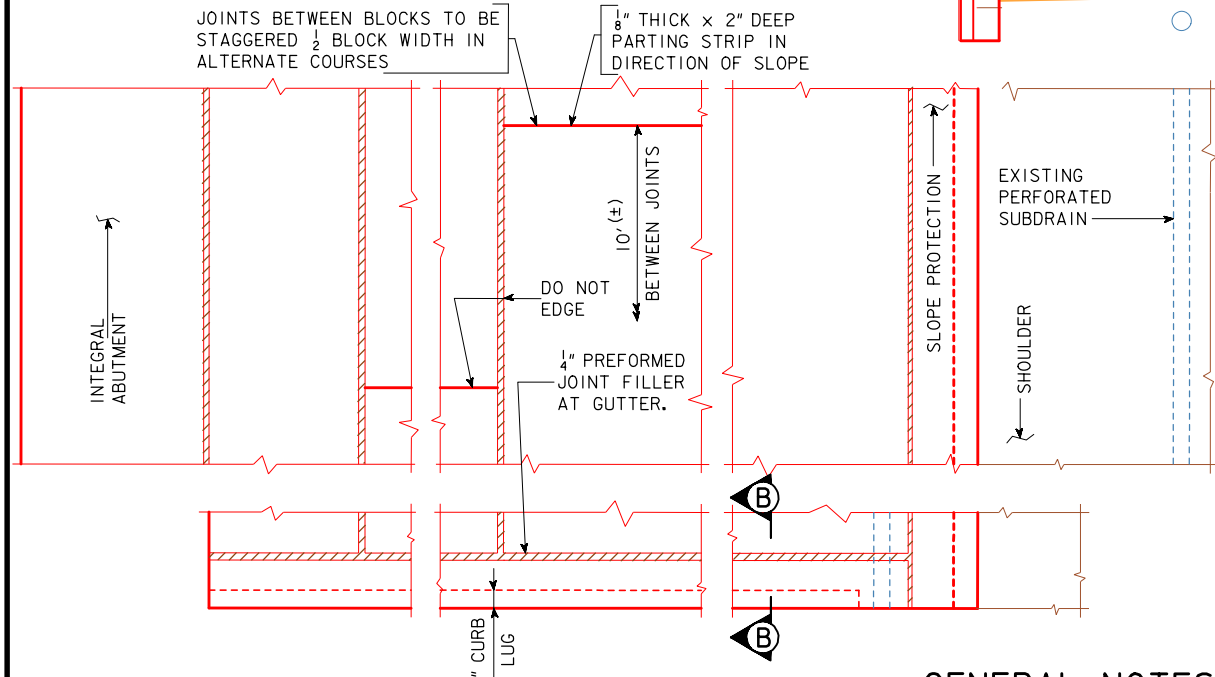
DESIGN FOR  
**172'-0 x VAR. HEIGHT  
SOIL NAIL RETAINING WALL  
SITUATION PLAN**  
START STA. 1322+78.00      JUNE 20, 2016  
END STA. 1324+50.00  
**STORY COUNTY**  
IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
DESIGN SHEET NO. 2 OF 3      FILE NO. 31296      DESIGN NO. \_\_\_\_\_



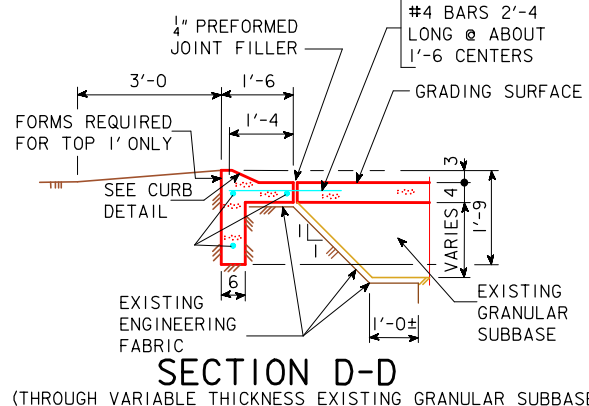
SECTION A-A



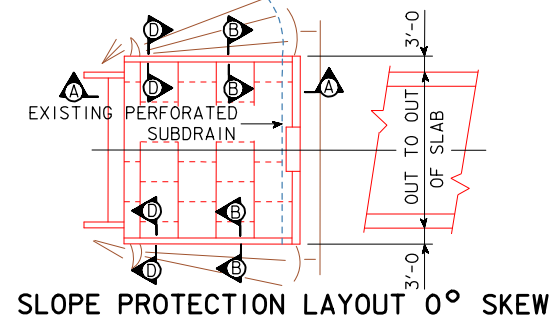
SECTION B-B  
(THROUGH 4" THICK EXISTING GRANULAR SUBBASE)



PART SLOPE PROTECTION PLAN



SECTION D-D  
(THROUGH VARIABLE THICKNESS EXISTING GRANULAR SUBBASE)



SLOPE PROTECTION LAYOUT 0° SKEW

**GENERAL NOTES:**

THIS PLAN SHEET SHOWS DETAILS FOR PLACING A PORTLAND CEMENT CONCRETE SLOPE PROTECTION UNDER OVERHEAD STRUCTURES.

THE CURRENT SPECIFICATIONS OF THE IOWA DEPARTMENT OF TRANSPORTATION SHALL APPLY WITH MODIFICATIONS OR ADDITIONS LISTED BELOW :

FINISH - CLASS 1, FLOATED SURFACE FINISH.  
 CURE - CURE AS PER CURRENT SPECIFICATIONS.  
 GRANULAR SUBBASE - MATERIAL IS EXISTING AND TO REMAIN. MINOR SHAPING OR ADDITIONAL GRANULAR SUBBASE MAY BE REQUIRED. THIS PREWETTED MATERIAL SHALL BE DEPOSITED BY A METHOD APPROVED BY THE ENGINEER AND BE THOROUGHLY TAMPED OR VIBRATED TO INSURE COMPACTION. FINISHED SHAPE SHALL BE AS SHOWN IN SECTION A-A.

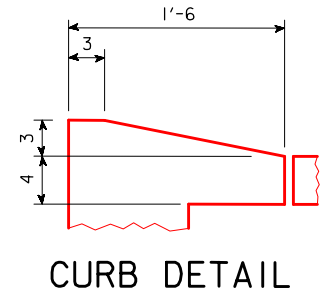
FORESLOPE PREPARATION -  
 EXISTING FORESLOPE IS ALREADY PREPARED  
 ENGINEERING FABRIC SHALL BE IN ACCORDANCE WITH ARTICLE 4196.01, B, 2, OF THE STANDARD SPECIFICATIONS.

IF THE ENGINEERING FABRIC IS LAPPED, THE LAPS SHALL BE A MINIMUM OF ONE FOOT IN LENGTH, SHINGLE FASHION WITH UP SLOPE LAP PIECE ON TOP AND STAPLED FOR CONTINUITY. FABRIC IS EXISTING AND TO REMAIN IN PLACE. MINOR ADDITIONAL FABRIC MAY BE REQUIRED AT SLOPE PROTECTION PERIMETER IF FABRIC IS DISTURBED DURING SLOPE PROTECTION REMOVAL.

THE CAST IN PLACE CONCRETE IS TO BE POURED IN APPROXIMATELY 10' WIDE COURSES, BUT ALL COURSES ON ONE SLOPE SHOULD HAVE APPROXIMATELY EQUAL WIDTHS. ADJACENT COURSES SHALL NOT BE POURED WITHIN 15 HOURS OF ONE ANOTHER. THE JOINTS IN THE DIRECTION OF THE SLOPE ARE TO BE STAGGERED ABOUT 1/2 BLOCK WIDTH.

PAYMENT FOR "CONCRETE SLOPE PROTECTION" WILL BE MADE ON A SQUARE YARD BASIS FOR SLOPE PROTECTION CONSTRUCTED. THE UNIT PRICE BID PER SQUARE YARD IS TO INCLUDE COSTS OF ALL MATERIALS AND LABOR REQUIRED TO CONSTRUCT THE SLOPE PROTECTION AS SHOWN ON THESE PLANS. THE DISPOSAL OF EXCESS SOIL FROM SHAPING OR TRENCHING, AS DIRECTED BY THE ENGINEER, SHALL BE CONSIDERED INCIDENTAL TO PLACING THE CONCRETE SLOPE PROTECTION. SHAPING SHOULD INCLUDE EXCAVATION FROM THE GRADING SURFACE SHOWN.

WHERE EROSION CONTROL WORK IS COMPLETED THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY PLANT MATERIALS DESTROYED ADJACENT TO SLOPE PROTECTION AREA. THE CONTRACTOR SHALL REPLANT, RESEED AND REMULCH ALL AREAS IN ACCORDANCE WITH SECTION 2601, OF THE STANDARD SPECIFICATIONS, AT THE CONTRACTOR'S EXPENSE.



CURB DETAIL

ESTIMATED QUANTITIES		
DESCRIPTION	LOCATION	QUANTITY
CONCRETE SLOPE PROTECTION	ABUT.	180.0 SQ. YDS.
TOTAL		180.0 SQ. YDS.

ITEMS TO BE INCLUDED IN "CONCRETE SLOPE PROTECTION":  
 ENGINEERING FABRIC  
 GRANULAR SUBBASE  
 CLASS "C" STRUCTURAL CONCRETE  
 #4 REINFORCING  
 PREFORMED JOINT FILLER  
 EXCAVATION, SHAPING AND COMPACTING  
 COMMERCIAL BITUMINOUS PATCHING MATERIAL.

DESIGN FOR  
**172'-0" x VAR. HEIGHT**  
**SOIL NAIL RETAINING WALL**  
**CONCRETE SLOPE PROTECTION**  
 START STA. 1322+78.00      JUNE 20, 2016  
 END STA. 1324+50.00

**STORY COUNTY**

IOWA DEPARTMENT OF TRANSPORTATION - HIGHWAY DIVISION  
 DESIGN SHEET NO. 3 OF 3      FILE NO. 31296      DESIGN NO. \_\_\_\_\_