A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: October 15, 2013
Date of Addendum: October 9, 2013

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
103	59-0652-020	PCC OVERLAY - UNBONDED	LUCAS	NHSN-034-6(88)--2R-59 NHSX-065-2(20)--3H-59 STPN-014-1(12)--2J-93	15OCT103.A02

Notice: Only the bid proposal holders receive this addendum and responsibility for notifying any potential subcontractors or suppliers remains with the proposal holder.

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 0040 2102-2713090 EXCAVATION, CLASS 13, WASTE:
From: 10,031.000 CY
To: 15,085.000 CY

Change Proposal Line No. 0060 2121-7425010 GRANULAR SHOULDERS, TYPE A:
From: 12,993.000 TON
To: 13,693.300 TON

Delete Proposal Line No. 0070 2122-5500060 PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN.; 7,017.300 SY

Change Proposal Line No. 0080 2123-7450000 SHOULDER CONSTRUCTION, EARTH:
From: 961.900 STA
To: 958.900 STA

Change Section Labels as follows:
From: Section 0002 PAYMENT ADJUSTMENT INCENTIVE ITEMS
NHSX-065-2(20)--3H- 59
To: Section 0004 PAYMENT ADJUSTMENT INCENTIVE ITEMS
NHSX-065-2(20)--3H- 59

From: Section 0003 ROADWAY ITEMS
STPN-014-1(12)--2J-93
To: Section 0005 ROADWAY ITEMS
STPN-014-1(12)--2J-93

From: Section 0004 ROADWAY ITEMS
NHSN-034-6(88)--2R-59
To: Section 0006 ROADWAY ITEMS
NHSN-034-6(88)--2R-59

Add the following alternate sections and items:

Section 0002 ALTERNATE 'AA' OPTION 1: HMA PAVED SHOULDERS
BID THIS SECTION IF ALTERNATE 'AA' OPTION 1 IS CHOSEN - (20)

Proposal Line No. 0661 2122-5500060 PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN.; 6,758.000 SY

Proposal Line No. 0662 2548-0000100 MILLED SHOULDER RUMBLE STRIPS, HMA SURFACE; 132.300 STA

Proposal Line No. 0663 2548-0000110 ASPHALT EMULSION FOR FOG SEAL (SHOULDER RUMBLE STRIPS); 143.400 GAL

Proposal Line No. 0664 2548-0000200 MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE; 872.000 STA

Section 0003 ALTERNATE 'AA' OPTION 2: PCC PAVED SHOULDERS
BID THIS SECTION IF ALTERNATE 'AA' OPTION 2 IS CHOSEN - (20)

Proposal Line No. 0665 2122-5190006 PAVED SHOULDER, P.C. CONCRETE, 6 IN.; 6,758.000 SY

Proposal Line No. 0666 2548-0000200 MILLED SHOULDER RUMBLE STRIPS, PCC SURFACE; 1,004.300 STA

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

Make the following changes to the plan:

Replace plan sheet B.1 with attached plan sheet B.1

Note, Changes on plan sheet B.1:

Typical Overlay:

- Took off Existing Pavement Depth measurement and added Note: For Existing Pavement Detail see 1954 Paving detail on B sheets.

Typical 7307 M:

- Added 6" Modified Subbase to Section A-A and Detail.
- Added to Tab. Modified Subbase Column.
- Increased Class 13 values to reflect Modified Subbase inclusion.

Replace plan sheet B.2 with attached plan sheet B.2

Note, Changes on plan sheet B.2:

Typical Cross Section and Joint Diagram:

- Added to Note:
  or:
  The tie bars can be inserted into the plastic concrete during paving if the amount of movement is minimal and acceptable to the Engineer. If the Contractor can demonstrate satisfactory installation during paving, the center of the tie bar is to be placed to a depth of 3 inches (measured from the surface of the PCC overlay) into the plastic concrete.

Typical 7156 is now modified by:

Top note:

- Either 6" HMA Paved Shoulder at Guardrail or PCC with the following jointing layout.

Circle note 5 changed to:

- 'BT-5' joint for PCC Shoulder.
- 'B' joint for HMA shoulder.

Removed from the drawings any indication of subbase need.

Replace plan sheet B.5 with attached plan sheet B.5

Plan sheet C.2, add the following Estimate Reference Information:

For Item 2102-2713090 EXCAVATION, CLASS 13, WASTE:
See Tab. 112-9 on the C sheets for locations and details.

For Item 2122-5190006 PAVED SHOULDER, HOT MIX ASPHALT MIXTURE, 6 IN.,:
See Tab. 112-9 on C sheets for locations and details.

For Item 2122-5190006 PAVED SHOULDER, P.C. CONCRETE, 6 IN.:
See Tab. 112-9 on C sheets for locations and details.

Plan Sheet C.3, delete the following Estimate Reference Information:

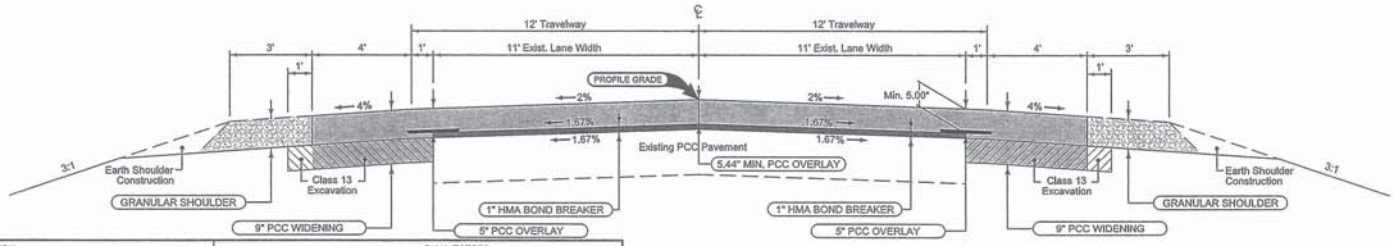
For Item Codes 2528-8445113 FLAGGERS and 2528-8445115 PILOT CARS:
Flaggers and Pilot Cars are needed for one lane, two way traffic control during the patching operations only.

Replace plan sheets C.12 and C.13 with attached plan sheets C.12 and C.13

Note, Changes on plan sheets C.12 and C.13:

- Added Equations and modified some stationing to reflect existing bridge approach shoulder panels.
- Added HMA volumes for Alternate ‘AA’ needs.
- Paved shoulder SY values updated to stationing changes.
- Granular Shoulder Tons and Tons/Sta. changed to reflect stationing changes and 6” common depth between HMA and PCC paved shoulder.
- Earth Shoulder Sta., HMA CY and PCC CY changed to reflect stationing changes and 6” common depth between HMA and PCC paved shoulder.

OVERLAY



LOCATION				QUANTITIES			
ROAD IDENTIFICATION	STATION TO STATION		SIDE	HMA Bond Breaker / HMA Stress Relief SY	PCC Unbonded Overlay QM-C PCC CY	PCC Unbonded Overlay QM-C PCC SY	Class 13 CY
US 65	3+00.00	219+65.00	Both	52958.89	13693.48	77031.11	3995.83
US 65	228+42.00	248+00.00	Both	4786.22	1237.56	6961.78	361.13
US 65	271+25.00	389+75.00	Both	28966.67	7489.86	42133.33	2185.58
US 65	396+85.00	406+59.61	Both	2382.38	616.01	3465.28	179.75
	Equation						
US 65	406+62.70	426+60.00	Both	4882.29	1262.40	7101.51	368.38
US 65	435+20.00	442+22.00	Both	1716.00	443.70	2496.00	129.47
US 65	451+63.00	457+39.66	Both	1409.61	364.48	2050.35	106.36
	Equation						
US 65	457+41.44	459+00.00	Both	387.59	100.22	563.77	29.24
		Total		97489.65	25207.71	141803.10	7355.74

Notes:

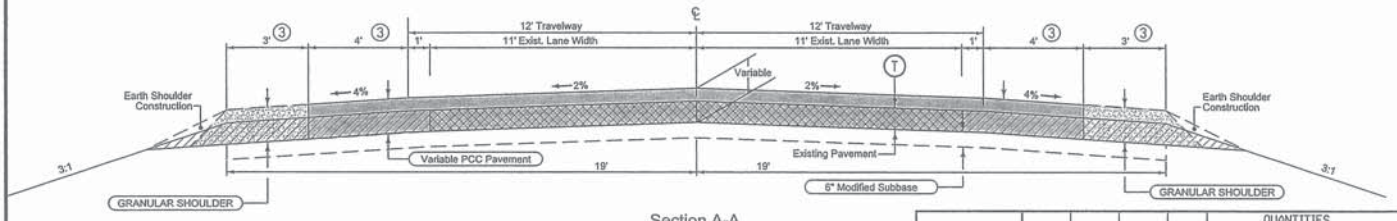
See Typ. 7156 on B sheets for "Paved Shoulder at Guardrail" Details and Tab. 112-9 for Shoulder Quantites.

See Typical 'ML-JNT' for Jointing Diagram.

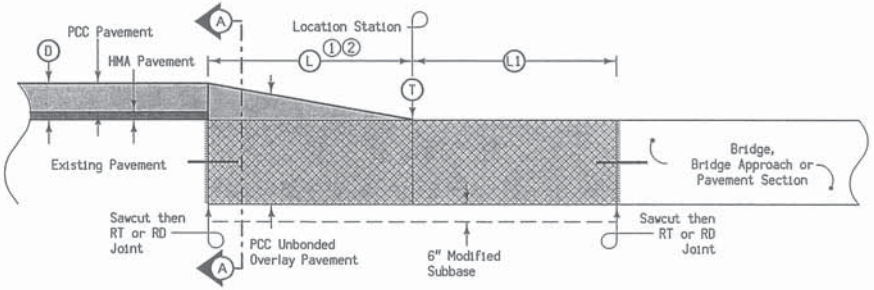
For Existing Pavement Detail, see 1954 Paving Detail on B sheet.

PROPOSED PCC OVERLAY

7307 M



Section A-A



Posted Speed Limit (mph)	Runout Ratio (ft per inch)
45 or More	50
20 to 45	25
Under 20	10 *

* Based on turning maneuvers at side roads and intersections.

Location Station	L Feet	L1 Feet	D Inches	T Inches	QUANTITIES: PCC Overlay Pavement CY	PCC Overlay Pavement SY	Class 13 CY	Modified Subbase CY
0+00.00	300	0	6	8.5	340.74	1066.67	453	212
222+65.00	300	0	6	10.0	362.96	1066.67	448	212
225+42.00	300	0	6	10.0	362.96	1066.67	448	212
251+00.00	300	0	6	9.0	348.15	1066.67	433	212
268+25.00	300	0	6	9.0	348.15	1066.67	433	212
392+75.00	300	110	6	9.0	445.93	1457.78	592	289
393+85.00	300	0	6	9.0	348.15	1066.67	433	212
429+60.00	300	0	6	10.0	362.96	1066.67	448	212
432+20.00	300	0	6	10.0	362.96	1066.67	448	212
445+22.00	300	0	6	10.0	362.96	1066.67	448	212
448+63.00	300	0	6	10.0	362.96	1066.67	448	212
462+00.00	300	0	6	9.0	348.15	1066.67	433	212
Total					4357.03	13191.15	5465	2621

(1) Variable Depth PCC Pavement. CD Transverse Joint: joint maximum spacing 20'. L-2 Longitudinal Joint: Centerline and 12' Travelway.

(2) See PV-101 for DH Table.

(3) See Typ. 7156 on B sheets for" Paved Shoulder at Guardrail Details" and Tab. 112-9 for Shoulder Quantites.

(4) See Tab. 110-1 on the C sheets for Pavement Removal Quantities.

(D) Pavement Depth

(T) Existing Pavement Depth

Pavement Removal (4)

Class 13 Removal

VARI. DEPTH PAVEMENT

ENGLISH | IOWA DOT | DESIGN TEAM FLATTERY\BUTTOLPH\CARLSON | LUCAS COUNTY | PROJECT NUMBER NHSX-065-2(20)--3H-59/STPN-14-1(12)--2J-93 NHSN-34-6(88)--2R-59 | SHEET NUMBER B.1

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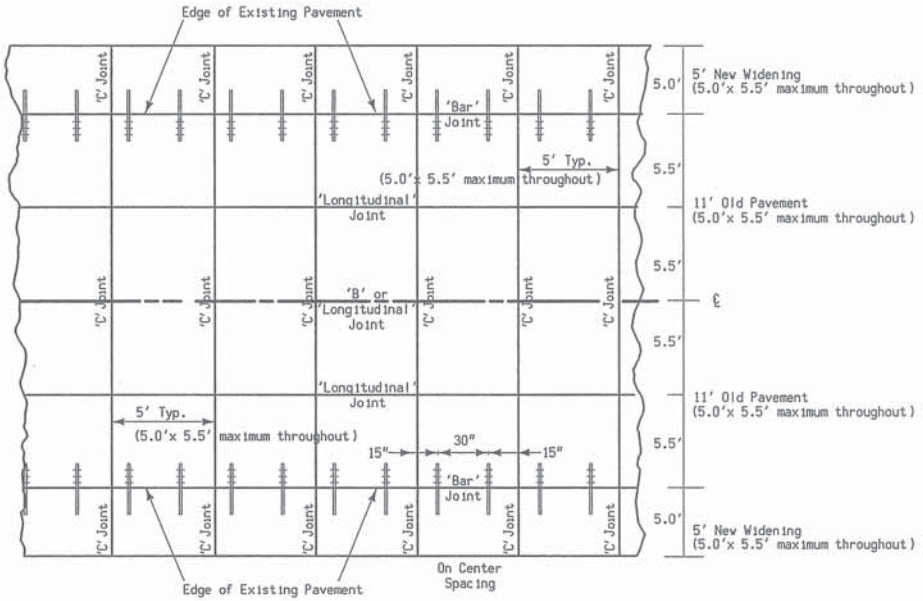
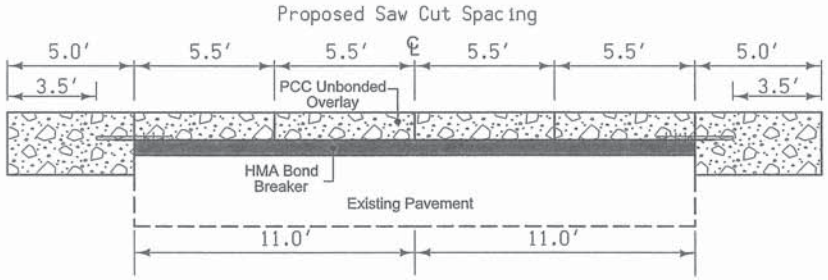
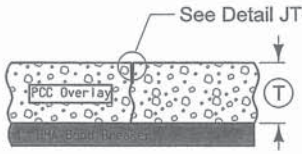
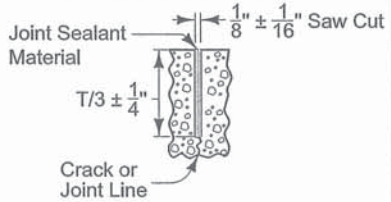


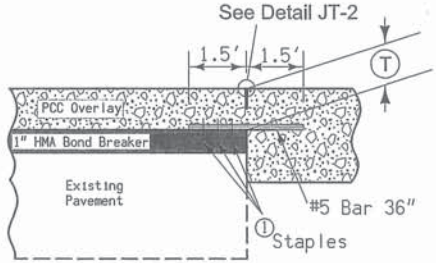




'LONGITUDINAL' JOINT
DETAIL JT-1



DETAIL JT-2



'BAR' JOINT
DETAIL JT-3

Notes:

① Minimum of 3 staples per Tiebar. Acceptable Method is based on no tiebar movement during Paving operation.
or:
the tie bars can be inserted into the plastic concrete during paving if the amount of movement is minimal and acceptable to the Engineer. If the Contractor can demonstrate satisfactory installation during paving, the center of the tie bar is to be placed to a depth of 3 inches (measured from the surface of the PCC overlay) into the plastic concrete.

TYPICAL CROSS SECTION AND JOINTING DIAGRAM PCC UNBONDED OVERLAY WITH BASE WIDENING

ENGLISH	IOWA DOT	DESIGN TEAM FLATTERY\BUTTOLPH\CARLSON	LUCAS COUNTY	PROJECT NUMBER NHSX-065-2(20)--3H-59/STPN-14-1(12)--2J-93 NHSN-34-6(88)--2R-59	SHEET NUMBER B.2

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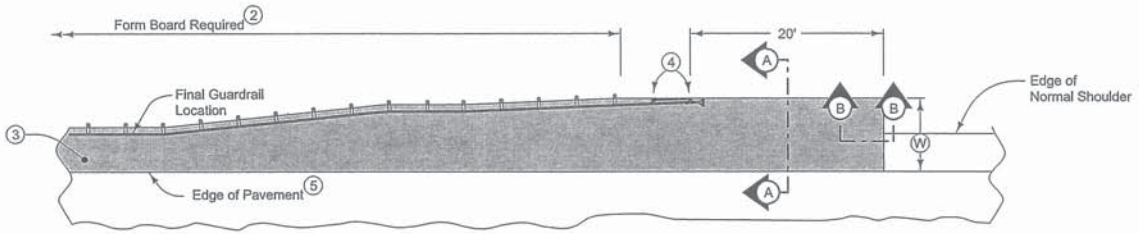
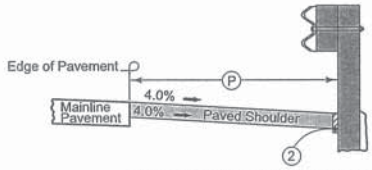
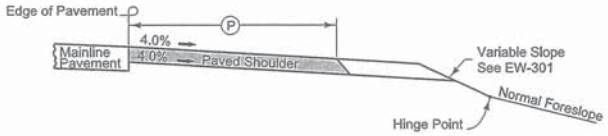
7156
Modified

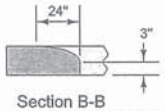




Typical Section with Form Board



Section A-A



Section B-B
Roll down at granular shoulder or earth.

Either 6" HMA Paved Shoulder at Guardrail or PCC with the following jointing layout:

Match mainline pavement joint spacing. When mainline pavement is 8" or greater in thickness, place additional transverse 'C' joints in shoulder at mid-panel of the mainline pavement. Place longitudinal 'C' joint at W/2 from edge of mainline pavement when W is greater than 10' wide. Terminate longitudinal joint at transverse joint less than 10' in length.

Compaction of HMA is required to face of guardrail post. Hand compaction will be allowed under guardrail. Removal & reinstallation of guardrail will be allowed with no additional payment.

Refer to Shoulder tabulation (112-9) for quantities.

(1) N/A

(2) When guardrail posts are installed prior to construction of paved shoulder, nail 1" x 6" untreated form boards along the face of guardrail posts for the length shown. This board is to prevent shoulder material from contacting the sides of the posts and altering the function of the guardrail. Form board not required for final 2 posts.

(3) Continue paved shoulder to existing paved shoulder or 20' beyond the end of guardrail.

(4) Shoulder may be notched for final 2 posts or post sleeves may be installed through pavement.

(5) 'BT-5' joint for PCC Shoulder.
'B' joint for HMA shoulder.

PAVED SHOULDER AT GUARDRAIL

ENGLISH	IOWA DOT	DESIGN TEAM FLATTERY\BUTTOLPH\CARLSON	LUCAS COUNTY	PROJECT NUMBER NHSX-065-2(20)--3H-59/STPN-14-1(12)--2J-93 NHSN-34-6(88)--2R-59	SHEET NUMBER B.5

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SHOULDERS

(1) Lane(s) to which the shoulder is adjacent.
(2) Bid Item
(3) Applies only for Paved Shoulders constructed on project with existing granular shoulders.
(4) Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 147, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Location					Quantities																	
Road Identification	(1) Direction Of Traffic	Station to Station		Side	(P) Width	(G) Width	(L) Length	(3) Class 13 Excavation	Hot Mix Asphalt		Binder	Paved Shoulder	Reinforced Paved Shoulder	Special Backfill				Modified Subbase	Granular Shoulder		Earth Shoulder Construction			Remarks
														HMA Alternate		PCC Alternate					(2) STA	HMA	PCC	
					FT	FT	FT	CY (2)	TON	TON/STA	TONS	SY (2)	SY (2)	TON (2)	TON/STA	TON (2)	TON/STA	CY (2)	TON (2)	TON/STA		CY (4)	CY (4)	
Right Side																								
US 65	NB	+00.00	3+00.00	Rt.	0.0	4 to 3	300.0					0.0							74.8	24.9	3.0	17.6	17.6	
US 65	NB	3+00.00	222+18.94	Rt.	0.0	3.0	21918.9					0.0							2884.5	13.2	219.2	482.4	482.4	
US 65	NB	222+18.94	222+38.94	Rt.	7.7	0.0	20.0		5.9	29.3	0.4	17.1												7156
US 65	NB	222+38.94	222+65.00	Rt.	7.7 - 6.7	0.0	26.1		7.1	27.4	0.4	20.8												7156
US 65	NB	222+65.00	222+88.74	Rt.	10.7 - 9.7	0.0	23.7	5.0	9.1	38.4	0.5	26.9												7156
US 65	NB	222+88.74	223+53.50	Rt.	9.7	0.0	64.8	13.0	23.7	36.6	1.4	69.8												7156
		Bridge																						
US 65	NB	224+96.50	225+04.21		9.6	0.0	7.7	2.0	2.8	36.2	0.2													7156
US 65	NB	225+04.21	225+42.02	Rt.	9.6 - 11	0.0	37.8	8.0	14.7	38.8	0.9	43.3												7156
US 65	NB	225+42.02	225+53.66	Rt.	7 - 7.5	0.0	11.6		3.2	27.6	0.2	9.4												7156
US 65	NB	225+53.66	225+73.66	Rt.	7.5	0.0	20.0		5.7	28.5	0.3	16.7												7156
US 65	NB	225+73.66	228+42.00	Rt.	0.0	4 to 3	268.3					0.0							74.2	27.7	2.7	24.2	24.2	
US 65	NB	228+42.00	248+00.00	Rt.	0.0	3.0	1958.0					0.0							257.7	13.2	19.6	43.1	43.1	
US 65	NB	248+00.00	251+00.00	Rt.	0.0	3 to 4	300.0					0.0							83.0	27.7	3.0	27.1	27.1	
US 65	NB	251+00.00	254+69.92	Rt.	4.0	4.0	369.9	74.0	57.9	15.7	3.5	164.4							53.3	14.4	3.7	8.1	8.1	
US 65	NB	254+69.92	254+89.92	Rt.	11.8	0.0	20.0	4.0	8.9	44.3	0.5	26.2												7156
US 65	NB	254+89.92	255+39.74	Rt.	11.8 - 9.7	0.0	49.8	10.0	20.1	40.4	1.2	59.5												7156
US 65	NB	255+39.74	255+84.50	Rt.	9.7	0.0	44.8	9.0	16.4	36.6	1.0	48.2												7156
		Bridge																						
US 65	NB	258+35.50	258+62.76	Rt.	9.6	0.0	27.3	5.0	9.9	36.2	0.6	29.1												7156
US 65	NB	258+62.76	259+12.59	Rt.	9.6 - 11.5	0.0	49.8	10.0	19.8	39.7	1.2	58.4												7156
US 65	NB	259+12.59	259+32.59	Rt.	11.5	0.0	20.0	4.0	8.6	43.2	0.5	25.6												7156
US 65	NB	259+32.59	268+25.00	Rt.	4.0	4.0	892.4	178.0	139.7	15.7	8.4	396.6							128.7	14.4	8.9	19.6	19.6	
US 65	NB	268+25.00	271+25.00	Rt.	0.0	4 to 3	300.0					0.0							78.8	26.3	3.0	24.6	24.6	
US 65	NB	271+25.00	389+75.00	Rt.	0.0	3.0	11850.0					0.0							1559.5	13.2	118.5	260.8	260.8	
US 65	NB	389+75.00	392+75.00	Rt.	0.0	3 to 4	300.0					0.0							78.8	26.3	3.0	24.6	24.6	
US 65	NB	392+75.00	393+85.00	Rt.	0.0	4.0	110.0					0.0							25.3	23.0	1.1	2.4	2.4	
US 65	NB	393+85.00	396+85.00	Rt.	0.0	4 to 3	300.0					0.0							78.8	26.3	3.0	24.6	24.6	
US 65	NB	396+85.00	406+59.61	Rt.	0.0	3.0	974.6					0.0							128.3	13.2	9.7	21.4	21.4	
Equation																								
US 65	NB	406+62.70	426+60.00	Rt.	0.0	3.0	1997.3					0.0							262.8	13.2	20.0	44.0	44.0	
US 65	NB	426+60.00	428+88.48	Rt.	0.0	3 to 4	228.5					0.0							63.2	27.7	2.3	18.7	18.7	
US 65	NB	428+88.48	429+08.64	Rt.	7.0	0.0	20.2		5.4	26.7	0.3	15.7												7156
US 65	NB	429+08.64	429+58.86	Rt.	7 - 5.6	0.0	50.2		12.1	24.1	0.7	35.2												7156
US 65	NB	429+58.86	429+60.00	Rt.	5.6	0.0	1.1		0.2	21.5	0.0	0.7												7156
US 65	NB	429+60.00	430+36.83	Rt.	9.6	0.0	76.8	15.0	27.8	36.2	1.7	82.0												7156
		Bridge																						
US 65	NB	431+63.17	431+70.61	Rt.	9.7	0.0	7.4	1.0	2.7	36.6	0.2	8.0												7156
US 65	NB	431+70.61	432+20.00	Rt.	9.7 - 11.7	0.0	49.4	10.0	19.9	40.3	1.2	58.7												7156
US 65	NB	432+20.00	432+40.42	Rt.	7.7	0.0	20.4		6.0	29.3	0.4	17.5												7156
US 65	NB	432+40.42	435+20.00	Rt.	0.0	4 to 3	279.6					0.0							77.3	27.7	2.8	22.9	22.9	
US 65	NB	435+20.00	442+22.00	Rt.	0.0	3.0	702.0					0.0							92.4	13.2	7.0	15.4	15.4	
US 65	NB	442+22.00	445+04.22	Rt.	0.0	3 to 4	282.2					0.0							78.0	27.7	2.8	23.1	23.1	
US 65	NB	445+04.22	445+22.00	Rt.	7.5	0.0	17.8		5.1	28.5	0.3	14.8												7156
US 65	NB	445+22.00	445+24.22	Rt.	11.5	0.0	2.2		1.0	43.2	0.1	2.8												7156
US 65	NB	445+24.22	445+74.00	Rt.	11.5 - 9.6	0.0	49.8	10.0	19.8	39.7	1.2	58.4												7156
US 65	NB	445+74.00	446+48.78	Rt.	9.6	0.0	74.8	15.0	27.1	36.2	1.6	79.8												7156
		Bridge																						
US 65	NB	447+71.06	447+85.23	Rt.	9.6 - 9.9	0.0	14.2	3.0	5.2	36.8	0.3	15.4												7156
US 65	NB	447+85.23	448+35.04	Rt.	9.6 - 11.6	0.0	49.8	10.0	19.9	39.9	1.2	58.7												7156
US 65	NB	448+35.04	448+55.04	Rt.	11.6	0.0	20.0		8.7	43.6	0.5	25.8												7156
US 65	NB	448+55.04	448+63.00	Rt.	4.0	4.0	8.0		1.2	15.7	0.1	3.5							1.1	14.4		0.7	0.7	7156
US 65	NB	448+63.00	451+63.00	Rt.	0.0	4 to 3	300.0					0.0							83.0	27.7	3.0	6.6	6.6	
US 65	NB	451+63.00	457+36.66	Rt.	0.0	3.0	573.7					0.0							75.5	13.2	5.7	47.0	47.0	
Equation																								
US 65	NB	457+41.44	459+00.00	Rt.	0.0	3.0	158.6					0.0							17.3	10.9	1.6	13.0	13.0	
US 65	NB	459+00.00	462+00.00	Rt.	0.0	3 to 4	300.0					0.0							78.8	26.3	3.0	6.6	6.6	
US 65	NB	462+00.00	485+29.03	Rt.	4.0	4.0	2329.0	465.0	364.6	15.7	21.9	1035.1							335.8	14.4	23.3	190.6	190.6	
US 65	NB	485+29.03	485+48.79	Rt.	14.0	0.0	19.8	4.0	10.4	52.4	0.6	30.7												7156
US 65	NB	485+48.79	485+97.96	Rt.	14 - 10.9	0.0	49.2	10.0	22.9	46.7	1.4	68.0												7156
US 65	NB	485+97.96	486+47.53	Rt.	10.9	0.0	49.6	10.0	20.3	41.0	1.2	60.0												7156
US 65	NB	486+47.53	486+60.36	Rt.	10.9 - 9.6	0.0	12.8	3.0	5.0	38.6	0.3	14.6												7156
US 65	NB	486+60.36	486+83.38	Rt.	9.6	0.0	23.0	5.0	8.3	36.2	0.5	24.6												7156
		Bridge																						
US 65	NB	489+69.80	490+11.99	Rt.	9.6	0.0	42.2	8.0	15.3	36.2	0.9	45.0												7156
US 65	NB	490+11.99	490+61.27	Rt.	9.6 - 12.9	0.0	49.3	10.0	20.8	42.3	1.2	61.6												7165
US 65	NB	490+61.27	490+81.03	Rt.	12.9	0.0	19.8	4.0	9.6	48.4	0.6	28.3												7156
US 65	NB	490+81.03	502+12.42	Rt.	4.0	4.0	1131.4	226.0	177.1	15.7	10.6	502.8							163.1	14.4	11.3	24.9	24.9	

SHOULDERS

(1) Lane(s) to which the shoulder is adjacent.
(2) Bid Item
(3) Applies only for Paved Shoulders constructed on project with existing granular shoulders.
(4) Does not include shrink.

Calculations assume a HMA unit weight (lbs/cf) of 147, a Special Backfill unit weight (lbs/cf) of 140, and a Granular Shoulder unit weight (lbs/cf) of 140.

Location					Quantities																	
Road Identification	(1) Direction Of Traffic	Station to Station		Side	(P) Width	(G) Width	(L) Length	(3) Class 13 Excavation	Hot Mix Asphalt		Binder	Paved Shoulder	Reinforced Paved Shoulder	Special Backfill				Modified Subbase	Granular Shoulder		Earth Shoulder Construction			Remarks
														HMA Alternate		PCC Alternate					(2)	HMA	PCC	
					FT	FT	FT	CY (2)	TON	TON/STA	TONS	SY (2)	SY (2)	TON (2)	TON/STA	TON (2)	TON/STA	CY (2)	TON (2)	TON/STA	STA	CY (4)	CY (4)	
Left Side																								
US 65	SB	+00.00	3+00.00	Lt.	0.0	4 to 3	300.0					0.0							74.8	24.9	3.0	10.7	10.7	
US 65	SB	3+00.00	219+65.00	Lt.	0.0	3.0	21665.0					0.0							2851.1	13.2	216.7	770.3	770.3	
US 65	SB	219+65.00	222+56.44	Lt.	0.0	3 to 4	291.4					0.0							80.6	27.7	2.9	10.4	10.4	
US 65	SB	222+56.44	222+65.00	Lt.	7.5	0.0	8.6		2.4	28.5	0.1	7.1												7156
US 65	SB	222+65.00	222+76.44	Lt.	11.5	0.0	11.4	2.0	4.9	43.2	0.3	14.6												7156
US 65	SB	222+76.44	223+26.24	Lt.	11.5 - 9.6	0.0	49.8	10.0	19.8	39.7	1.2	58.4												7156
US 65	SB	223+26.24	223+53.50	Lt.	9.6	0.0	27.3	5.0	9.9	36.2	0.6	29.1												7156
		Bridge																						
US 65	SB	224+96.50	225+42.00	Lt.	9.6	0.0	45.5	9.0	16.5	36.2	1.0	48.5												7156
US 65	SB	225+42.00	225+91.04	Lt.	5.7 - 7.8	0.0	49.0		12.6	25.7	0.8	36.8												7156
US 65	SB	225+91.04	226+11.04	Lt.	7.8	0.0	20.0		5.9	29.6	0.4	17.3												7156
US 65	SB	226+11.04	228+42.00	Lt.	0.0	4 to 3	231.0					0.0							63.9	27.7	2.3	8.2	8.2	
US 65	SB	228+42.00	248+00.00	Lt.	0.0	3.0	1958.0					0.0							257.7	13.2	19.6	69.6	69.6	
US 65	SB	248+00.00	251+00.00	Lt.	0.0	3 to 4	300.0					0.0							78.8	26.3	3.0	10.7	10.7	
US 65	SB	251+00.00	255+07.41	Lt.	4.0	4.0	407.4	81.0	63.8	15.7	3.8	181.1							58.7	14.4	4.1	14.5	14.5	
US 65	SB	255+07.41	255+27.41	Lt.	11.5	0.0	20.0	4.0	8.6	43.2	0.5	25.6												7156
US 65	SB	255+27.41	255+77.24	Lt.	11.5 - 9.6	0.0	49.8	10.0	19.8	39.7	1.2	58.4												7156
US 65	SB	255+77.24	255+84.50	Lt.	9.6	0.0	7.3	1.0	2.6	36.2	0.2	7.7												7156
		Bridge																						
US 65	SB	258+35.50	259+00.26	Lt.	9.7	0.0	64.8	13.0	23.7	36.6	1.4	69.8												7156
US 65	SB	259+00.26	259+50.07	Lt.	9.7 - 11.8	0.0	49.8	10.0	20.1	40.4	1.2	59.5												7156
US 65	SB	259+50.07	259+70.07	Lt.	11.8	0.0	20.0	4.0	8.9	44.3	0.5	26.2												7156
US 65	SB	259+70.07	268+25.00	Lt.	4.0	4.0	854.9	171.0	133.8	15.7	8.0	380.0							123.3	14.4	8.5	30.4	30.4	
US 65	SB	268+25.00	271+25.00	Lt.	0.0	4 to 3	300.0					0.0							78.8	26.3	3.0	10.7	10.7	
US 65	SB	271+25.00	389+75.00	Lt.	0.0	3.0	11850.0					0.0							1559.5	13.2	118.5	421.3	421.3	
US 65	SB	389+75.00	392+75.00	Lt.	0.0	3 to 4	300.0					0.0							74.8	24.9	3.0	10.7	10.7	
US 65	SB	392+75.00	393+85.00	Lt.	4.0	4.0	110.0		17.2	15.7	1.0	48.9							25.3	23.0	1.1	3.9	3.9	
US 65	SB	393+85.00	396+85.00	Lt.	0.0	4 to 3	300.0					0.0							78.8	26.3	3.0	10.7	10.7	
US 65	SB	396+85.00	406+59.61	Lt.	0.0	3.0	974.6												128.3	13.2	9.7	34.7	34.7	
Equation																								
US 65	SB	406+62.70	426+60.00	Lt.	0.0	3.0	1997.3												262.8	13.2	20.0	71.0	71.0	
US 65	SB	426+60.00	429+40.67	Lt.	0.0	3 to 4	280.7					0.0							77.6	27.7	2.8	10.0	10.0	
US 65	SB	429+40.67	429+60.00	Lt.	7.8 - 8.2	0.0	19.3		5.9	30.4	0.4	17.2												7156
US 65	SB	429+60.00	429+61.10	Lt.	8.2	0.0	1.1	0.0	0.3	31.1	0.0	1.0												7156
US 65	SB	429+61.10	430+09.92	Lt.	12.2 - 9.6	0.0	48.8	10.0	20.0	41.0	1.2	59.1												7156
US 65	SB	430+09.92	430+36.83	Lt.	9.6	0.0	26.9	5.0	9.8	36.2	0.6	28.7												7156
		Bridge																						
US 65	SB	431+43.17	432+07.76	Lt.	9.7	0.0	64.6	13.0	23.6	36.6	1.4	69.6												7156
US 65	SB	432+07.76	432+20.00	Lt.	9.7 - 10.2	0.0	12.2	2.0	4.6	37.5	0.3	13.5												7156
US 65	SB	432+20.00	432+57.53	Lt.	6.2 - 7.7	0.0	37.5		9.9	26.5	0.6	29.0												7156
US 65	SB	432+57.53	432+77.53	Lt.	7.7	0.0	20.0		5.9	29.3	0.4	17.1												7156
US 65	SB	432+77.53	435+20.00	Lt.	0.0	4 to 3	242.5					0.0							67.0	27.7	2.4	8.6	8.6	
US 65	SB	435+20.00	442+22.00	Lt.	0.0	3.0	702.0												92.4	13.2	7.0	25.0	25.0	
US 65	SB	442+22.00	445+22.00	Lt.	0.0	3 to 4	300.0					0.0							83.0	27.7		10.7	10.7	7156
US 65	SB	445+22.00	445+64.76	Lt.	4.0	4.0	42.8	9.0	6.7	15.7	0.4	19.0							6.2	14.4		1.5	1.5	7156
US 65	SB	445+64.76	445+84.76	Lt.	11.6	0.0	20.0	4.0	8.7	43.6	0.5	25.8												7156
US 65	SB	445+84.76	446+34.61	Lt.	11.6 - 9.6	0.0	49.8	10.0	19.9	39.9	1.2	58.7												7156
US 65	SB	446+34.61	446+63.22	Lt.	9.6	0.0	28.6	6.0	10.4	36.2	0.6	30.5												7156
		Bridge																						
US 65	SB	447+91.06	448+45.82	Lt.	9.6	0.0	54.8	11.0	19.8	36.2	1.2	58.4												7156
US 65	SB	448+45.82	448+63.00	Lt.	9.6 - 10.3	0.0	17.2	3.0	6.4	37.5	0.4	19.0												7156
US 65	SB	448+63.00	448+95.64	Lt.	6.3 - 7.6	0.0	32.6		8.6	26.5	0.5	25.2												7156
US 65	SB	448+95.64	449+15.64	Lt.	7.6	0.0	20.0		5.8	28.9	0.3	16.9												7156
US 65	SB	449+15.64	451+63.00	Lt.	0.0	4 to 3	247.4					0.0							68.4	27.7	2.5	8.8	8.8	
US 65	SB	451+63.00	457+39.66	Lt.	0.0	3.0	576.7					0.0							75.9	13.2	5.8	20.5	20.5	
Equation																								
US 65	SB	457+41.44	459+00.00	Lt.	0.0	3.0	158.6					0.0							20.9	13.2	1.6	5.6	5.6	
US 65	SB	459+00.00	462+00.00	Lt.	0.0	3 to 4	300.0					0.0							78.8	26.3	3.0	10.7	10.7	
US 65	SB	462+00.00	485+69.17	Lt.	4.0	4.0	2369.2	473.0	370.9	15.7	22.3	1053.0							341.6	14.4	23.7	84.2	84.2	
US 65	SB	485+69.15	485+89.37	Lt.	10.8	0.0	20.2	4.0	8.2	40.6	0.5	24.3												7156
US 65	SB	485+89.37	486+39.79	Lt.	10.8 - 9.6	0.0	50.4	10.0	19.4	38.4	1.2	57.1												7156
US 65	SB	486+39.79	486+83.38	Lt.	9.6	0.0	43.6	9.0	15.8	36.2	0.9	46.5												7156
		Bridge																						
US 65	SB	489+89.78	490+95.27	Lt.	9.7	0.0	105.5	21.0	38.6	36.6	2.3	113.7												7156
US 65	SB	490+95.27	491+65.94	Lt.	9.7 - 10.9	0.0	70.7	14.0	27.4	38.8	1.6	80.9												7156
US 65	SB	491+65.94	502+12.42	Lt.	4.0	4.0	1046.5	209.0	163.8	15.7	9.8	465.1							150.9	14.4	10.5	37.2	37.2	
												659.7												
Total								2264.0	2351.1		141.1	6758.0							13693.3		958.9	3104.3	3104.3	

ENGLISH	IOWA DOT	DESIGN TEAM Flattery/Carlson/Buttolph	Lucas COUNTY	PROJECT NUMBER NHSX-65-2(20)--3H-59/STPN-14-1(12)--23-93 NHSN-34-6(88)--2R-59	SHEET NUMBER C.13