

**MAHASKA CO.**

PCC PATCHING/HMA PATCHING  
MP-092-5(710)179--76-62

LETTING DATE  
May 21, 2019



Highway Division

PLANS OF PROPOSED IMPROVEMENT ON THE

PRIMARY ROAD SYSTEM  
**MAHASKA COUNTY**  
PCC PATCHING/HMA PATCHING

IA 163 Interchange to ECL Oskaloosa

SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.

Value Engineering Saves. Refer to Article 1105.14 of the Specifications.

For Project Location Map  
Refer to Sheet A.2 and A.3



REVISIONS

TOTAL

9

PROJECT IDENTIFICATION NUMBER

PROJECT NUMBER

MP-092-5(710)179--76-62

R.O.W. PROJECT NUMBER

INDEX OF SHEETS

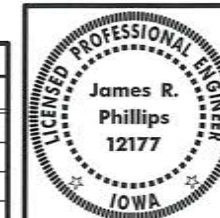
No.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2 - 3	Location Map Sheet
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Project Description
C.1	Estimated Project Quantities
C.1	Estimate Reference Information
C.1	Standard Road Plans
C.1	Index of Tabulations
C.1	General Notes
C.1 - 5	Tabulations
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
J.1	511 Travel Restrictions
	* Color Plan Sheets

DESIGN DATA URBAN

2018	AADT	13,400	V.P.D.
20--	AADT	--	V.P.D.
20--	DHV	--	V.P.H.
	TRUCKS	5	%
	Total		
	Design ESALs	--	

INDEX OF SEALS

SHEET NO.	NAME	TYPE
A.1	James R. Phillips	Primary Signature Block



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.

Signature: *James R. Phillips* Date: 2/14/2019

Printed or Typed Name: James R. Phillips

My license renewal date is December 31, 20 20

Pages or sheets covered by this seal: ALL SHEETS

FILE NO.

ENGLISH

DESIGN TEAM Van Dyke \ Phillips \ Fiedler

MAHASKA COUNTY

PROJECT NUMBER

MP-092-5(710)179--76-62

SHEET NUMBER

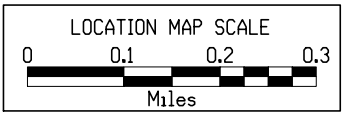
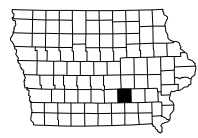
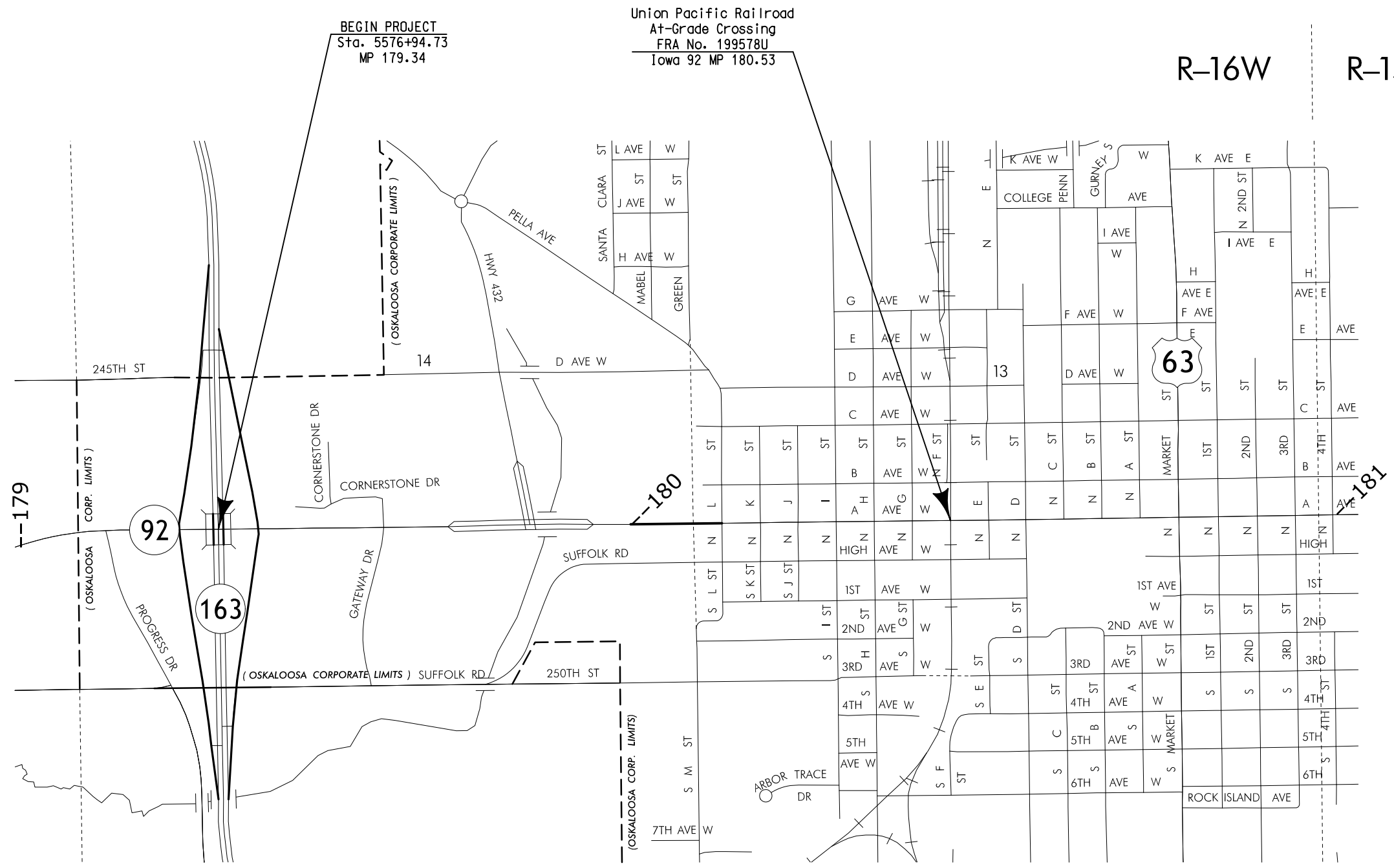
A.1

T-75N

R-16W R-15W

Union Pacific Railroad  
At-Grade Crossing  
FRA No. 199578U  
Iowa 92 MP 180.53

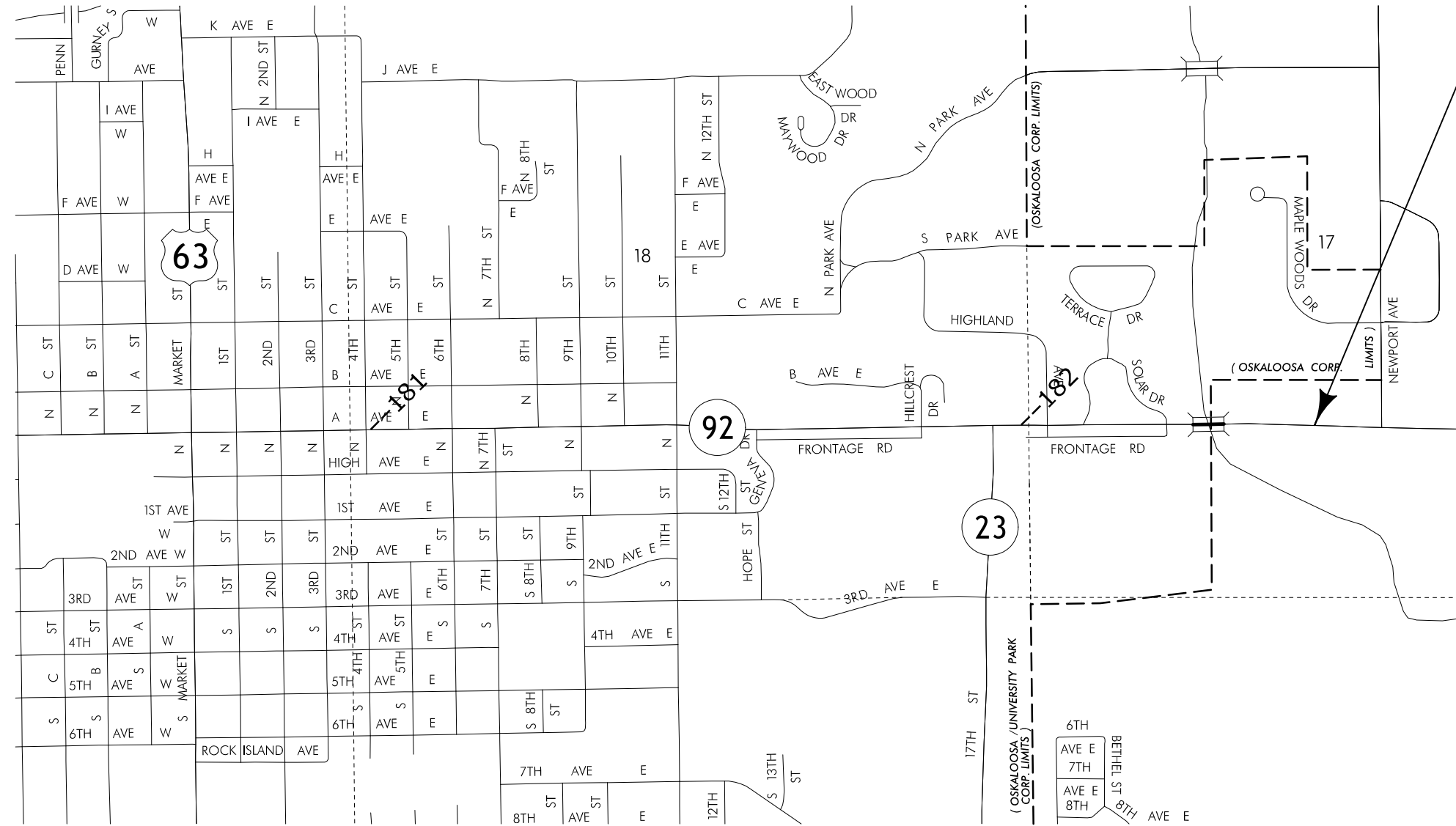
BEGIN PROJECT  
Sta. 5576+94.73  
MP 179.34



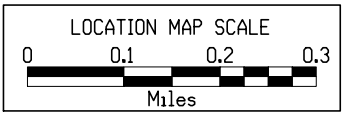
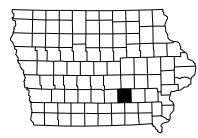
R-16W

R-15W

END PROJECT  
Sta. 5737+00  
MP 182.37



T-75N



**ESTIMATED PROJECT QUANTITIES  
(1 DIVISION PROJECT)**

100-1A  
07-15-97

Item No.	Item Code	Item	Unit	Total	As Built Qty.
1	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	133.21	
2	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED	EACH	12	
3	2528-8445110	TRAFFIC CONTROL	LS	1.00	
4	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA	SY	1,877.3	
5	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT	EACH	221	
6	2530-0400061	HOT MIX ASPHALT (PARTIAL DEPTH PATCH MATERIAL)	TON	1,527.4	
7	2530-5070221	REGULAR PARTIAL DEPTH HOT MIX ASPHALT FINISH PATCHES, BY ARE A	SY	9,235.9	
8	2533-4980005	MOBILIZATION	LS	1.00	
9	2590-0000020	PROJECT MANAGEMENT	LS	1.00	

**PROJECT DESCRIPTION**

100-1D  
10-18-05

This project is for the full depth PCC finish patching and HMA partial depth patching along IA 92 from the IA 163 interchange to the ECL of Oskaloosa in Mahaska County.  
The full depth PCC patching includes full depth patching of curb and gutter areas and mainline full depth patching of IA 92.  
The HMA partial depth patching includes regular partial depth HMA patching of east bound and west bound longitudinal centerline joint of IA 92.

**STANDARD ROAD PLANS**

105-4  
10-18-11

The following Standard Road Plans apply to construction work on this project.

Number	Date	Title
PM-110	10-16-18	Line Types
PM-111	04-21-15	Symbols and Legends
PM-120	10-21-14	Stop Lines and Islands
PM-211	10-18-11	Separation in Four-Lane Roadway
PM-521	04-19-11	Two-Lane Roadway with Right Turn Lanes
PM-522	04-16-19	Two-Lane Roadway with Left Turn Lanes
PR-103	10-21-14	Full Depth PCC Patch with Dowels
PV-101	04-16-19	Joints
TC-1	04-16-13	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-419	10-16-18	Lane Closure on Undivided Highway
TC-423	04-16-19	Closure of Two Adjacent Lanes on Undivided Highway
TC-433	10-17-17	Pavement Marking Operations

**INDEX OF TABULATIONS**

111-25  
10-18-11

Tabulation	Tabulation Title	Sheet No.
<b>C Sheets</b>		
100-1A	ESTIMATED PROJECT QUANTITIES (1 DIVISION PROJECT)	C.1
100-1D	PROJECT DESCRIPTION	C.1
100-4A	ESTIMATE REFERENCE INFORMATION	C.1
102-5	EXISTING PAVEMENT	C.2
102-6C_ML	FULL-DEPTH PATCHES - MAINLINE	C.3 - C.4
102-6C_Curb	FULL-DEPTH PATCHES - CURB AND GUTTER	C.3
102-11	PARTIAL DEPTH REGULAR HMA FINISH PATCHES	C.2
105-4	STANDARD ROAD PLANS	C.1
108-22	PAVEMENT MARKING LINE TYPES	C.5
108-29	PAVEMENT MARKING SYMBOLS AND LEGENDS	C.5
111-25	INDEX OF TABULATIONS	C.1
<b>J Sheets</b>		
108-23A	TRAFFIC CONTROL PLAN	J.1
108-25	511 TRAVEL RESTRICTIONS	J.1

**ESTIMATE REFERENCE INFORMATION**

100-4A  
10-29-02

Item No.	Item Code	Description
1	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED See Tab 108-22 for location and information.
-	-	-
2	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED See Tab 108-29 for location and information.
-	-	-
3	2528-8445110	TRAFFIC CONTROL As per current Standard Specifications and Road Standards. See also Tab 108-23A on sheet J.1 for more information.
-	-	-
4	2529-5070110	PATCHES, FULL-DEPTH FINISH, BY AREA
5	2529-5070120	PATCHES, FULL-DEPTH FINISH, BY COUNT See Tabs 102-6C Curb and 102 6C ML for locations and information. Tab 102-6C_Curb is for the full depth patching of 2' wide curb and gutter along shoulder areas. Tab 102-6C ML is for the full depth patching of the mainline of IA 92. Quantities increased by 10% for irregularities.  Calcium chloride shall not be used in the patch concrete within the divided two-lane highway. From April 15th to October 15th, Class C concrete may be used if the maturity method is used. Otherwise, Class M concrete shall be used. For Class M concrete, cure time required prior to opening shall be a minimum of 24 hours and a minimum flexural strength of 500 psi determined from beam specimens made during the progress of the work. With prior approval, the Engineer may waive the restriction of calcium chloride use at identified patches located in intersections or other areas that require early opening due to anticipated traffic movements.
-	-	-
6	2530-0400061	HOT MIX ASPHALT (PARTIAL DEPTH PATCH MATERIAL) See Tab 102-11 for locations and information. Hot Mix Asphalt tonnage calculated on patch thickness of 3 inches and weight of 147 lbs./cu. ft. Quantity increased by 10% for irregularities.
-	-	-
7	2530-5070221	REGULAR PARTIAL DEPTH HOT MIX ASPHALT FINISH PATCHES, BY ARE A See Tab 102-11 for location and information.  Item is for the repair of the longitudinal centerline joint of the east bound and west bound lanes, quantity computed using 1 ft. width by tabulated length.  Item also includes quantity at additional locations for patching along the gutter, quantity computed using 3 ft. width by tabulated length.  Quantity increased by 10% for irregularities.
-	-	-
8	2533-4980005	MOBILIZATION As per current Standard Specifications.
-	-	-
9	2590-0000020	PROJECT MANAGEMENT See Supplemental Specification (SS) for additional information concerning Project Management.
-	-	-

**UTILITIES  
(NOT A POINT 25 PROJECT)**

262-6  
10-18-05

This is NOT a POINT 25 project and is not subject to the provisions of IAC 761-115.25.

**EXISTING PAVEMENT**

No.	Location					Year	Type	Project Number	Surface		Base		Subbase		Removal		Coarse Aggregate			Reinforcement	Remarks
	County	Route	Dir. of Travel	Begin Ref. Loc. Sign	End Ref. Loc. Sign				Type	Depth	Type	Depth	Type	Depth	Type	Depth	Source	Type	Durability Class		
1	62	IA 92	1	179.17	179.83	2004	W	STPN-92-7(39)--2J-62	AAC	1.5	AAC	2	BAC	7							Last 0.36 mi. of section
						2004		STPN-92-7(39)--2J-62	AAC	1.5	AAC	2									
						1995		NHS-163-4(9)--19-62	AAC	3	TBB	7.5									
2	62	IA 92	1	179.83	180.15	2004		STPN-92-7(39)--2J-62	AAC	1.5	AAC	2									
						1953		NA	PCC	8.5											
3	62	IA 92	1	180.15	180.65	2004		STPN-92-7(39)--2J-62	AAC	1.5	AAC	2									
						1973		UN-92-7(12)--41-62	PCC	9											
4	62	IA 92	1	180.65	181.98	2004	V	STPN-92-7(39)--2J-62	AAC	1.5	AAC	2									DOUDS MINE
						1982		FN-92-7(23)--21-62	AAC	1.5	AAC	1.5									
						1949		NA	PCC	10											
5	62	IA 92	1	181.98	182.4	2004		STPN-92-7(39)--2J-62	AAC	1.5	AAC	2									EDDYVILLE
						1960		FN-293	PCC	10											

**PARTIAL DEPTH REGULAR HMA FINISH PATCHES**

Location				Dimension Of Patch		Estimated Quantities		Remarks
No.	Begin Station	End Station	Lane	Length x Width		SY	TON	
				FT				
1	5582+07.00	5599+08.00	CL	1701.0	x 1.0	189.0	31.256	Mill & Fill, EB outside through lane, See Note 1
2	5582+07.00	5599+08.00	CL	1701.0	x 1.0	189.0	31.256	Mill & Fill, EB inside through lane, See Note 1
3	5582+07.00	5591+37.00	CL	930.0	x 1.0	103.3	17.089	Mill & Fill, WB inside through lane, See Note 1
4	5613+22.00	5616+48.00	EB Out	326.0	x 3.0	108.7	17.971	See Note 2
5	5618+75.00	5619+34.00	EB Out	59.0	x 3.0	19.7	3.252	See Note 2
6	5620+25.00	5639+05.00	EB Out	1880.0	x 3.0	626.7	103.635	See Note 2
7	5641+54.00	5647+27.00	EB Out	573.0	x 3.0	191.0	31.587	See Note 2
8	5647+27.00	5655+05.00	EB Out	778.0	x 3.0	259.3	42.887	See Note 2
9	5655+99.00	5658+15.00	EB Out	216.0	x 3.0	72.0	11.907	See Note 2
10	5659+05.00	5668+17.00	EB Out	912.0	x 3.0	304.0	50.274	See Note 2
11	5668+99.00	5694+60.00	EB Out	2561.0	x 3.0	853.7	141.175	See Note 2
12	5695+50.00	5717+97.00	EB Out	2247.0	x 3.0	749.0	123.866	See Note 2
13	5719+95.00	5737+00.00	EB Out	1705.0	x 3.0	568.3	93.988	See Note 2
14	5737+00.00	5695+57.00	WB Out	4143.0	x 3.0	1381.0	228.383	See Note 2
15	5694+90.00	5678+85.00	WB Out	1605.0	x 3.0	535.0	88.476	See Note 2
16	5678+55.00	5669+10.00	WB Out	945.0	x 3.0	315.0	52.093	See Note 2
17	5668+55.00	5662+60.00	WB Out	595.0	x 3.0	198.3	32.799	See Note 2
18	5662+10.00	5659+30.00	WB Out	280.0	x 3.0	93.3	15.435	See Note 2
19	5658+30.00	5639+50.00	WB Out	1880.0	x 3.0	626.7	103.635	See Note 2
20	5645+50.00	5639+50.00	WB Out	600.0	x 3.0	200.0	33.075	See Note 2
21	5639+20.00	5630+00.00	WB Out	920.0	x 3.0	306.7	50.715	See Note 2
22	5629+20.00	5620+40.00	WB Out	880.0	x 3.0	293.3	48.510	See Note 2
23	5619+65.00	5613+25.00	WB Out	640.0	x 3.0	213.3	35.280	See Note 2
						8396.3	1388.544	
								Note 1: Patch Thickness 3", HMA rate 147 lbs/cu. ft.
								Note 2: Along Gutter, Patch Thickness 3", avg. width 3', HMA rate 147 lbs/cu. ft.

**FULL-DEPTH PATCHES - CURB AND GUTTER**

Possible Standards: PR-101, PR-102, PR-103, PR-104, PR-105 and PR-140.

Count	Location			Dimension			PCC Patches				HMA Patches	Composite HMA	Subbase Patches	Subbase Patch w/ 'EF' Joint	Patch Subdrain	'CD' Joints	'CT' Joints	'EF' Joints	Anchor Lugs Removal	Remarks
	Station	Reference Location Sign	Lane	Length	Width	Patch Thickness	With Dowels	Without Dowels	C R C	Ramp with Dowels										
							PR-103	PR-102	PR-104	PR-105										
			L, R, or B	FT	FT	IN	SY	SY	SY	SY	SY	TON	SY	SY	PR-101 or PR-140	No.	No.	No.	No.	
1	5641+24.00		EB Out	57.0	2.0	12.5	12.7													w/curb
1	5656+67.00		EB Out	18.0	2.0	16.5	4.0													w/curb
1	5665+56.00		EB Out	58.0	2.0	16.5	12.9													w/curb
1	5674+97.00		EB Out	22.0	2.0	16.5	4.9													w/curb
1	5693+45.00		EB Out	36.0	2.0	16.5	8.0													w/curb
1	5673+86.00		WB Out	28.0	2.0	16.5	6.2													w/curb
1	5660+93.00		WB Out	48.0	2.0	16.5	10.7													w/curb
1	5655+62.00		WB Out	105.0	2.0	16.5	23.3													w/curb
1	5653+22.00		WB Out	12.0	2.0	16.5	2.7													w/curb
1	5650+44.00		WB Out	64.0	2.0	16.5	14.2													w/curb
1	5643+38.00		WB Out	35.0	2.0	12.5	7.8													w/curb
1	5620+25.00		WB Out	40.0	2.0	12.5	8.9													w/curb
1	5618+45.00		WB Out	75.0	2.0	13.0	16.7													w/curb
1	5617+46.00		WB Out	25.0	2.0	13.0	5.6													w/curb
1	5665+55.00		WB Out	32.0	2.0	16.5	7.1													w/curb
15	Totals						145.7													

**FULL-DEPTH PATCHES - MAINLINE**

Possible Standards: PR-101, PR-102, PR-103, PR-104, PR-105 and PR-140.

Count	Location				Dimension			PCC Patches				HMA Patches	Composite HMA	Subbase Patches	Subbase Patch w/ 'EF' Joint	Patch Subdrain	'CD' Joints	'CT' Joints	'EF' Joints	Anchor Lugs Removal	Remarks
	Station	Reference Location Sign	Direction	Lane	Length	Width	Patch Thickness	With Dowels	Without Dowels	C R C	Ramp with Dowels										
								PR-103	PR-102	PR-104	PR-105										
			L, R, or B	FT	FT	IN	SY	SY	SY	SY	SY	TON	SY	SY	PR-101 or PR-140	No.	No.	No.	No.		
1	179.440		E	RO	6.0	14.0	14.0	9.3													
1	179.521		E	RO	6.0	14.0	14.0	9.3													
1	179.529		E	RO	6.0	14.0	14.0	9.3													
2	179.533		W	B	6.0	14.0	14.0	18.7													
1	179.534		E	RI	6.0	14.0	14.0	9.3													
2	179.536		E	B	6.0	14.0	14.0	18.7													
2	179.554		E	B	6.0	14.0	14.0	18.7													inside lane and turning lane
1	179.575		W	RI	6.0	14.0	14.0	9.3													
3	179.575		E	B	6.0	12.0	14.0	24.0													turning lane and inside and outside lanes
2	179.594		W	B	6.0	14.0	14.0	18.7													
2	179.594		E	B	6.0	14.0	14.0	18.7													
2	179.638		E	B	6.0	14.0	14.0	18.7													
4	179.638		W	B	6.0	12.0	14.0	32.0													2 TURNING LANES AND INSIDE/OUTSIDE LANES
3	179.668		W	B	6.0	14.7	14.0	29.3													TURNING LANE AND INSIDE/OUTSIDE LANES
3	179.671		W	B	6.0	11.3	14.0	22.7													INSIDE/OUTSIDE LANES AND 10' MEDIAN
2	179.710		E	B	6.0	12.0	14.0	16.0													
2	179.726		W	B	6.0	14.0	14.0	18.7													
1	179.730		E	RI	6.0	12.0	14.0	8.0													
2	179.734		E	B	8.0	14.0	14.0	24.9													
2	179.763		W	B	6.0	12.0	14.0	16.0													
2	179.763		E	B	6.0	12.0	14.0	16.0													
2	179.767		E	B	6.0	12.0	14.0	16.0													
2	179.772		E	B	6.0	12.0	14.0	16.0													
2	179.776		E	B	6.0	12.0	14.0	16.0													
2	179.781		E	B	6.0	12.0	14.0	16.0													
2	179.783		E	B	6.0	12.0	14.0	16.0													
2	179.790		E	B	6.0	12.0	14.0	16.0													
2	179.809		E	B	6.0	12.0	14.0	16.0													
2	179.822		W	B	8.0	12.0	14.0	21.3													
2	179.837		E	B	6.0	12.0	14.0	16.0													
2	179.875		W	B	6.0	12.0	12.0	16.0													
2	179.886		W	B	6.0	12.0	12.0	16.0													
2	179.890		W	B	6.0	12.0	12.0	16.0													
2	179.905		E	B	6.0	12.0	12.0	16.0													
2	179.906		W	B	6.0	12.0	12.0	16.0													
2	179.916		W	B	6.0	12.0	12.0	16.0													
1	179.923		E	RO	6.0	12.0	12.0	8.0													
1	179.923		E	RO	6.0	12.0	12.0	8.0													
1	179.937		W	RI	8.0	12.0	12.0	10.7													
2	180.005		W	B	6.0	12.0	12.0	16.0													
2	180.224		W	B	6.0	12.0	12.5	16.0													
2	180.244		E	B	6.0	12.0	12.5	16.0													
2	180.244		E	B	6.0	12.0	12.5	16.0													
2	180.259		W	B	6.0	12.0	12.5	16.0													
2	180.284		E	B	6.0	12.0	12.5	16.0													

**FULL-DEPTH PATCHES - MAINLINE**

Possible Standards: PR-101, PR-102, PR-103, PR-104, PR-105 and PR-140.

Count	Station	Location			Dimension			PCC Patches				HMA Patches	Composite HMA	Subbase Patches	Subbase Patch w/ 'EF' Joint	Patch Subdrain	'CD' Joints	'CT' Joints	'EF' Joints	Anchor Lugs Removal	Remarks
		Reference Location Sign	Direction	Lane	Length	Width	Patch Thickness	With Dowels	Without Dowels	C R C	Ramp with Dowels										
		L, R, or B	FT	FT	IN	PR-103 SY	PR-102 SY	PR-104 SY	PR-105 SY	PR-140 SY	PR-101 SY										
2	180.283	E	B	6.0	12.0	12.5	16.0														CURB
2	180.306	W	B	6.0	12.0	12.5	16.0														CURB
2	180.309	E	B	6.0	12.0	12.5	16.0														CURB
2	180.310	E	B	6.0	12.0	12.5	16.0														CURB
1	180.402	W	RI	6.0	12.0	12.5	8.0														CURB
2	180.448	E	B	6.0	12.0	12.5	16.0														CURB
2	180.600	W	B	6.0	12.0	12.5	16.0														CURB
2	180.727	E	B	6.0	12.0	16.5	16.0														CURB
2	180.734	E	B	6.0	12.0	16.5	16.0														CURB
2	180.734	W	B	6.0	12.0	16.5	16.0														CURB
2	180.742	W	B	6.0	12.0	16.5	16.0														CURB
2	180.747	W	B	6.0	12.0	16.5	16.0														CURB
2	180.750	E	B	6.0	12.0	16.5	16.0														CURB
2	180.760	E	B	6.0	12.0	16.5	16.0														CURB
2	180.772	E	B	6.0	12.0	16.5	16.0														CURB
2	180.783	E	B	6.0	12.0	16.5	16.0														CURB
2	180.792	E	B	6.0	12.0	16.5	16.0														CURB
2	180.914	W	B	6.0	12.0	16.5	16.0														CURB
2	180.919	W	B	6.0	12.0	16.5	16.0														CURB
2	180.950	E	B	6.0	12.0	16.5	16.0														CURB
2	180.959	E	B	6.0	12.0	16.5	16.0														CURB
2	180.969	W	B	6.0	12.0	16.5	16.0														CURB
2	180.970	E	B	6.0	12.0	16.5	16.0														CURB
2	180.973	E	B	6.0	12.0	16.5	16.0														CURB
2	180.985	E	B	6.0	12.0	16.5	16.0														CURB
2	180.995	E	B	6.0	12.0	16.5	16.0														CURB
2	181.031	E	B	6.0	12.0	16.5	16.0														CURB
2	181.036	W	B	6.0	12.0	16.5	16.0														CURB
2	181.036	E	B	6.0	12.0	16.5	16.0														CURB
2	181.044	E	B	6.0	12.0	16.5	16.0														CURB
2	181.045	W	B	6.0	12.0	16.5	16.0														CURB
2	181.055	W	B	6.0	12.0	16.5	16.0														CURB
2	181.056	E	B	6.0	12.0	16.5	16.0														CURB
2	181.101	W	B	6.0	12.0	16.5	16.0														CURB
2	181.148	E	B	8.0	12.0	16.5	21.3														CURB
2	181.148	W	B	8.0	12.0	16.5	21.3														CURB
2	181.220	W	B	6.0	12.0	16.5	16.0														CURB
2	181.220	E	B	6.0	12.0	16.5	16.0														CURB
2	181.233	E	B	6.0	12.0	16.5	16.0														CURB
2	181.234	W	B	8.0	12.0	16.5	21.3														CURB
2	181.285	W	B	6.0	12.0	16.5	16.0														CURB
2	181.284	E	B	6.0	12.0	16.5	16.0														CURB
2	181.298	E	B	6.0	12.0	16.5	16.0														CURB
2	181.298	W	B	6.0	12.0	16.5	16.0														CURB
1	181.369	E	RI	6.0	12.0	16.5	8.0														CURB
2	181.369	E	B	6.0	12.0	16.5	16.0														CURB
1	181.420	W	LO	6.0	12.0	16.5	8.0														CURB
1	181.527	E	RO	6.0	12.0	16.5	8.0														CURB
1	181.533	W	LO	6.0	12.0	16.5	8.0														CURB
1	181.663	W	LO	12.0	12.0	16.5	16.0														CURB
1	182.075	E	RO	6.0	12.0	13.5	8.0														CURB
1	182.075	W	LO	6.0	12.0	13.5	8.0														CURB
1	182.206	W	LO	6.0	12.0	13.5	8.0														CURB
1	182.218	W	LO	8.0	12.0	13.5	10.7														CURB
186	Totals						1560.9														





**TRAFFIC CONTROL PLAN**

1. Through traffic will be maintained on the project at all times.
2. Traffic control on this project shall be found in accordance with the TC series of Standard Road Plans found in Tab 105-4. For additional complimentary information, refer to Part 6 of the Manual on the Uniform traffic Control Devices and the current Standard Specifications.
3. Since no calcium additive is allowed and since longer PCC cure times may be needed, the repair patching may occur with 2 separate, noncontiguous applications of Road Standards TC-419 and TC-423.

**511 TRAVEL RESTRICTIONS**

Route	Direction	County	Location Description	Feature Crossed	Object Type	Maint. Bridge No., Structure ID, or FHWA No.	Type of Restriction	Existing Measurement	Construction Measurement	Construction Measurement as Signed	Projected As Built Measurement	Remarks
IA 92	EB/WB	Mahaska	Alternating lane closure within the project limits due to road maintenance work.									