

MILLED RUMBLE STRIPS  
HSIPX-000-T(451)--3L-00

**LETTING DATE**  
**JUL. 21, 2026**

INDEX OF SHEETS	
NO.	DESCRIPTION
<b>A Sheets</b>	<b>Title Sheets</b>
A.1	Title Sheet
A.2	Location Map Sheet
<b>C Sheets</b>	<b>Quantities and General Information</b>
C.1	Estimated Project Quantities & Reference Information
C.2	General Notes
C.3	Standard Road Plans
C.4 - 5	Tabulations
<b>J Sheets</b>	<b>Traffic Control and Staging Sheets</b>
J.1	Traffic Control Plan
J.2	511 Travel Restrictions
J.3	Coordinated Operations
<b>U Sheets</b>	<b>500 Series, Mod.Stds. and Detail Sheets</b>
U.1 - 2	500 Series, Modified Standards and Detail Sheets



# PLANS OF PROPOSED IMPROVEMENT ON THE PRIMARY ROAD SYSTEM STATEWIDE COUNTY MILLED RUMBLE STRIPS Various Counties and Routes in District 2

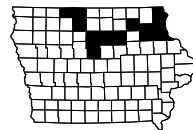
SCALES: As Noted

Refer to the Proposal Form for list of applicable specifications.


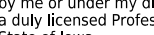
**Value Engineering Saves.** Refer to Article 1105.14 of the Specifications.

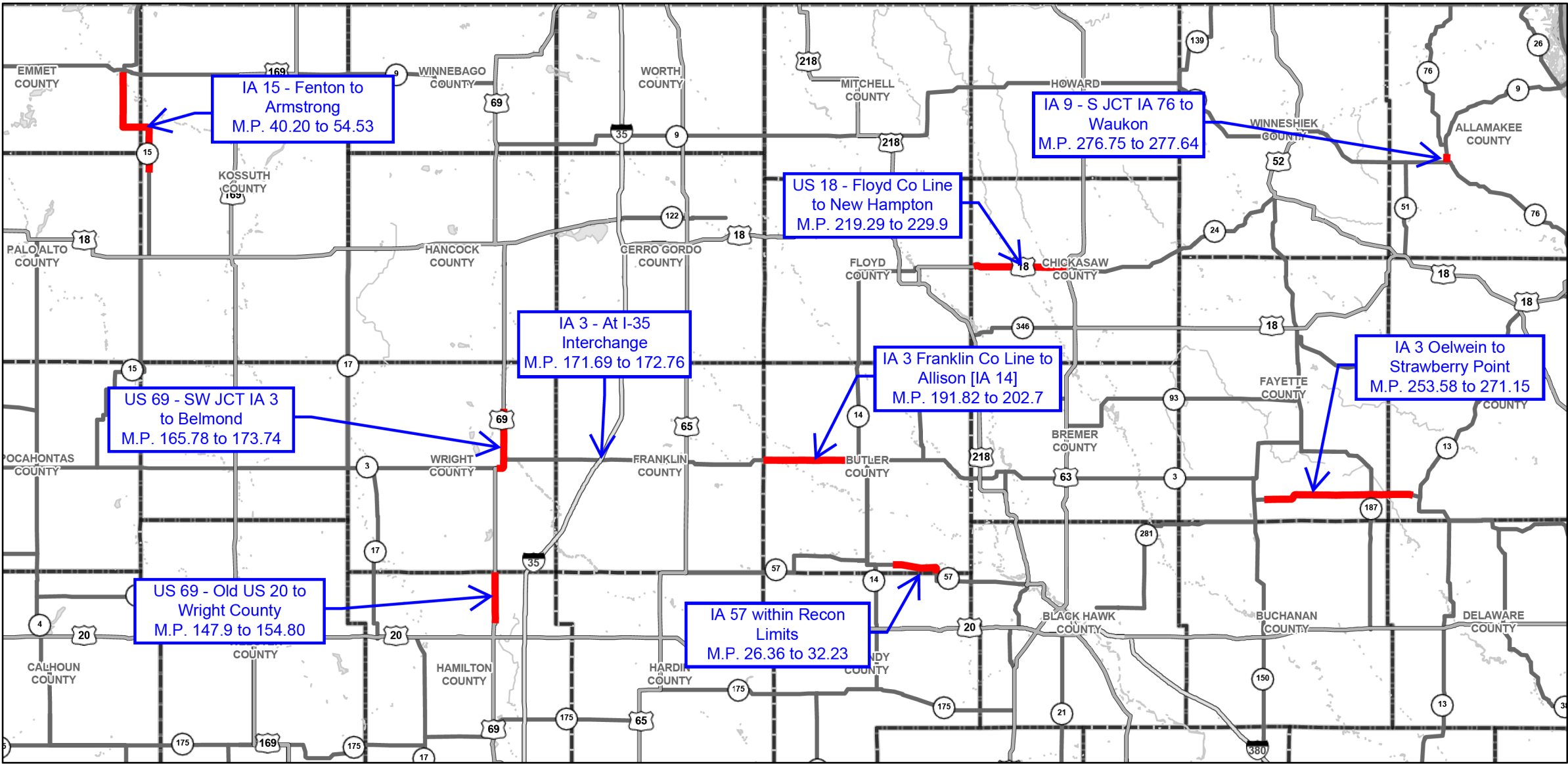


Refer to Sheet A.2 for location map and information



<div>REVISIONS</div>	TOTAL	
	12	
	PROJECT IDENTIFICATION NUMBER	
	26-00-000-060	
	PROJECT NUMBER	
	HSIPX-000-T(451)--3L-00	
	R.O.W. PROJECT NUMBER	

	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.	
		4/28/2026
	Signature	Date
	DUSTEN D. ROLANDO	
	Printed or Typed Name	
	My license renewal date is December 31, 2027	
Pages or sheets covered by this seal: A.1-A.2, C.1-C.5, J.1-J.3, U.1-U.2		



Notes:

Rumble Strip Operations shall be paused through city limits if speed limit is less than 55 MPH.

\* Imagery not to scale.

IA 15 - Kossuth & Emmet Counties

NCL Fenton to Co Rd A35/P12			
DESIGN DATA RURAL			
2024	AADT	660	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		15.61	%
Total Design ESALs		--	

IA 3 - Butler County

ECL Dumont to W JCT IA 14			
DESIGN DATA RURAL			
2024	AADT	1110	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		17.66	%
Total Design ESALs		--	

IA 57 - Butler County

Co Rd T47 to WCL New Hartford			
DESIGN DATA RURAL			
2024	AADT	2270	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		7.4	%
Total Design ESALs		--	

US 18 - Chickasaw County

Co Rd V18 to N JCT US 63			
DESIGN DATA RURAL			
2024	AADT	3110	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		12.48	%
Total Design ESALs		--	

IA 3 - Franklin County

At the I-35 Interchange			
DESIGN DATA RURAL			
2024	AADT	2460	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		19.35	%
Total Design ESALs		--	

US 69 - Hamilton County

Co Rd D20 to Wright County Line			
DESIGN DATA RURAL			
2024	AADT	1910	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		19.16	%
Total Design ESALs		--	

US 69 - Wright County

N JCT IA 3 to Co Rd C25			
DESIGN DATA RURAL			
2024	AADT	2490	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		17.99	%
Total Design ESALs		--	

IA 9 - Allamakee County

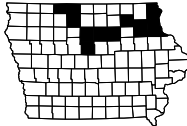
S JCT IA 76 to 11th Ave SE			
DESIGN DATA RURAL			
2024	AADT	4910	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		6.99	%
Total Design ESALs		--	

IA 3 - Fayette County

Co Rd W33 to IA 187			
DESIGN DATA RURAL			
2024	AADT	1440	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		16.39	%
Total Design ESALs		--	

IA 3 - Clayton County

Fayette County to Sebald Road			
DESIGN DATA RURAL			
2024	AADT	2140	V.P.D.
20 -	AADT	--	V.P.D.
20 -	DHV	--	V.P.H.
TRUCKS		12.85	%
Total Design ESALs		--	



ESTIMATED PROJECT QUANTITIES AND REFERENCE NOTES

Roadway Items : Roadway Items

Item no.	Item Code	Item	Unit	Quantities	Estimate Reference Notes
				Estimated	
				Roadway Items	
1	2526-8285010	CONSTRUCTION SURVEY, MONUMENT PRESERVATION	LS	1	<p>The DOT will be responsible for the preservation of section corners including the Public Land Survey Corner Certificates per Specification 2526.03.B.2, and shall not be included in this bid item.</p> <p>All other construction survey requirements, including Monument Preservation Certificates of monuments likely to be disturbed or removed, shall apply to this item.</p>
2	2527-9263209	PAINTED PAVEMENT MARKINGS, WATERBORNE OR SOLVENT-BASED	STA	3,190.67	Refer to Tabulation 108-22 for additional information.
3	2528-8445110	TRAFFIC CONTROL	LS	1	<p>Refer to Tabulation 108-23A for additional information.</p> <p>No work of any kind is allowed within 50 feet of either side of railroad track centerline.</p>
4	2533-4980005	MOBILIZATION	LS	1	--
5	2548-0000310	MILLED CENTERLINE RUMBLE STRIPS, HMA SURFACE	STA	3,828.52	Refer to Tabulation 112-10 for additional information.
6	2548-0000320	MILLED CENTERLINE RUMBLE STRIPS, PCC SURFACE	STA	133.07	

262\_06  
9/28/22

UTILITIES (NOT A POINT 25 PROJECT)

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

<div>105_04 4/21/26</div> <div>STANDARDS</div> <div>The following Standards apply to construction work on this project.</div>		
Number	Date	Title
PM-110	10-15-24	Line Types
PM-221	10-15-24	Climbing Lane
PM-420	10-15-24	Two-Lane Roadway with no Turn Lanes (One-Way Stop Condition)
PM-520	10-15-24	Two-Lane Roadway with no Turn Lanes (Two-Way Stop Condition)
PM-521	10-15-24	Two-Lane Roadway with Right Turn Lanes
PM-522	10-15-24	Two-Lane Roadway with Left Turn Lanes
PV-13	04-16-24	Milled Centerline Rumble Strips
SI-881	04-16-19	Special Signs for Workzones
TC-1	10-15-19	Work Not Affecting Traffic (Two-Lane or Multi-Lane)
TC-202	04-18-23	Work Within 15 ft of Traveled Way
TC-233	10-17-17	Pavement Marking Operations Two-Lane

108\_22

11/25/25

PAVEMENT MARKING LINE TYPES

Line factors based on 6-inch wide continuous line.

\*BCY4 - Place on the same side of the roadway to match existing markings near the project.

\*\*NPY4 - Estimating purposes only. No Passing Zone Lines will be located in the field.

\*\*\*MNY6 - Factor of 1.00 includes number of 6-inch passes to cover median nose area.

BCY4: Broken Centerline (Yellow) @ 0.17

BCY6: Broken Centerline (Yellow) @ 0.25

BLC6: Broken Line Contrast (White/Black) @ 0.50

BLW4: Broken Lane Line (White) @ 0.17

BLW6: Broken Lane Line (White) @ 0.25

CBW6: Crosswalk Bar (White) @ 10.00

CHW8: Channelizing Line (White) @ 1.33

CHW10: Channelizing Line (White) @ 1.67

CHY8: Channelizing Line (Yellow) @ 1.33

CHY10: Channelizing Line (Yellow) @ 1.67

CLW6: Crosswalk Line (White) @ 2.00

DCY4: Double Centerline (Yellow) @ 1.34

DCY6: Double Centerline (Yellow) @ 2.00

DDY4: Double Dotted Line (Yellow) @ 0.44

DDY6: Double Dotted Line (Yellow) @ 0.67

DLW4: Dotted Line (White) @ 0.22

DLW6: Dotted Line (White) @ 0.33

DLY4: Dotted Line (Yellow) @ 0.22

DLY6: Dotted Line (Yellow) @ 0.33

ELW4: Edge Line Right (White) @ 0.67

ELW6: Edge Line Right (White) @ 1.00

ELY4: Edge Line Left (Yellow) @ 0.67

ELY6: Edge Line Left (Yellow) @ 1.00

LDW8: Lane Drop (White) @ 0.33

LDW10: Lane Drop (White) @ 0.42

MNY6: Median Nose (Yellow) @ 1.00

NPY4: No Passing Zone Line (Yellow) @ 0.84

NPY6: No Passing Zone Line (Yellow) @ 1.25

RLW4: Ramp Edge Line Right (White) @ 0.67

RLW6: Ramp Edge Line Right (White) @ 1.00

RLY4: Ramp Edge Line Left (Yellow) @ 0.67

RLY6: Ramp Edge Line Left (Yellow) @ 1.00

SLW2: Stop Line (White) @ 4.00

SLW4: Solid Lane Line (White) @ 0.67

SLW6: Solid Lane Line (White) @ 1.00

SPW4: Sloped Curb 4" (White) @ 2.16

SPW6: Sloped Curb 6" (White) @ 2.28

SPY4: Sloped Curb 4" (Yellow) @ 2.16

SPY6: Sloped Curb 6" (Yellow) @ 2.28

STW6: Standard Curb 6" (Yellow) @ 2.03

STY6: Standard Curb 6" (Yellow) @ 2.03

YLW2: Yield Line (White) @ 1.15

Road ID	Begin Ref. Location Sign	End Ref. Location Sign	Lane	Marking Type	Left	Center	Right	Groove Marking Needed?	Groove Qty. (STA)	BCY6 Factored (STA)	CHY10 Factored (STA)	DCY6 Factored (STA)	NPY6** Factored (STA)	Remarks
IA 3	171.69	271.15	2-Lane	Waterborne/Solvent Paint		x		No		178.99	153.26	252.38	776.16	
IA 9	276.75	277.64	2-Lane	Waterborne/Solvent Paint		x		No		2.90		24.28	31.02	
IA 15	40.20	54.53	2-Lane	Waterborne/Solvent Paint		x		No		110.75		71.80	352.44	
US 18	219.29	229.9	2-Lane	Waterborne/Solvent Paint		x		No		61.77		80.26	306.90	
IA 57	26.36	32.23	2-Lane	Waterborne/Solvent Paint		x		No		60.45		23.24	58.08	
US 69	147.90	154.80	2-Lane	Waterborne/Solvent Paint		x		No		47.39		68.64	97.03	
US 69	165.78	173.74	2-Lane	Waterborne/Solvent Paint		x		No		64.55	161.00	76.04	131.34	
Total:										526.8	314.26	596.64	1752.97	

All pavement markings are estimated for roadway sections where rumble strips are being installed. Where applicable, continue markings through bridges and approach pavements.

MILLED RUMBLE STRIPS								112_10 4/15/25
* Calculated at 18" width for Shoulder. ** For use with penetrating Engineered Fog Seal. Calculated at 2" wider than rumble strips.								
Line No.	Road Identification	Begin Ref. Location Sign	End Ref. Location Sign	Rumble Strip Lane	Rumble Strip Type	PCC Length (STA)	HMA Length (STA)	Remarks
1.0	IA 3	253.58	271.15	Centerline	Milled		927.70	Fayette/Clayton Counties
2.0	IA 3	191.82	202.75	Centerline	Milled	60.19	484.70	Butler County
3.0	IA 3	171.69	172.76	Centerline	Milled		52.80	Franklin County
4.0	IA 9	276.75	277.64	Centerline	Milled		47.00	Allamakee County
5.0	IA 15	40.20	54.53	Centerline	Milled	4.24	752.38	Kossuth/Emmet Counties
6.0	US 18	219.29	229.9	Centerline	Milled	52.80	485.23	Chickasaw County
7.0	IA 57	26.36	32.23	Centerline	Milled		309.94	Butler County
8.0	US 69	147.9	154.80	Centerline	Milled		364.32	Hamilton County
9.0	US 69	165.78	173.74	Centerline	Milled	15.84	404.45	Wright County
Total:						133.07	3828.52	

108\_23A  
8/15/22

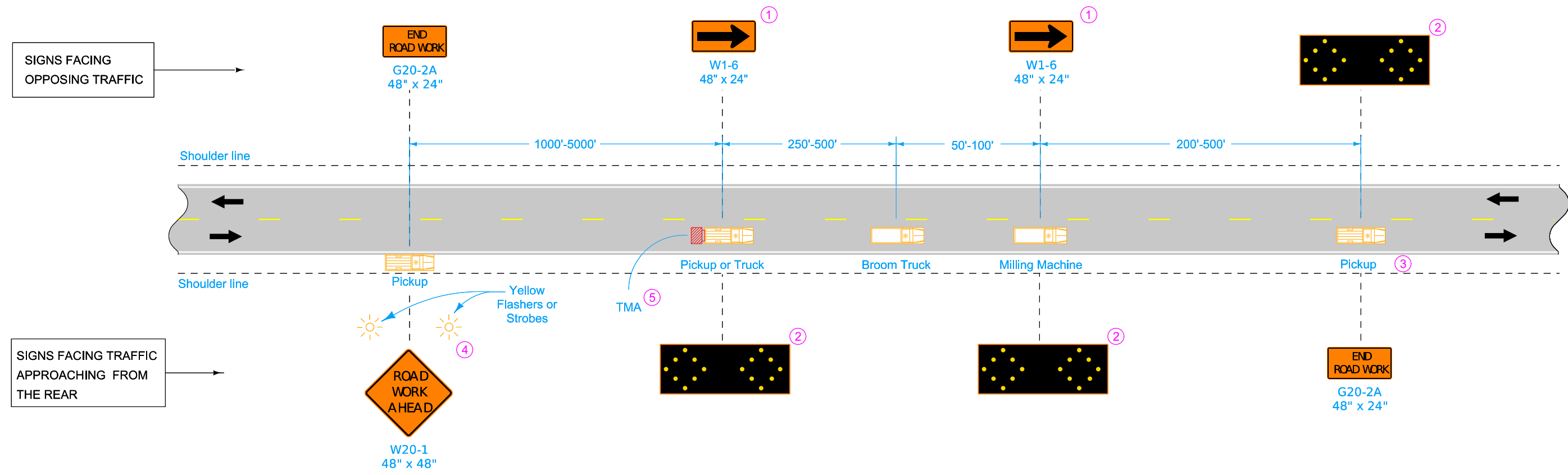
TRAFFIC CONTROL PLAN

Through traffic shall be maintained at all times.



FILE NO.	ENGLISH	DESIGN TEAM	<b>Rolando \ Johnson</b>	STATEWIDE	COUNTY	PROJECT NUMBER	<b>HSIPX-000-T(451)--3L-00</b>	SHEET NUMBER	<b>J.2</b>
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<div>111_01 10/14/22</div> <div>COORDINATED OPERATIONS</div> <div>Other work in progress during the same period of time will include the construction of the projects listed. Coordinate operations with those of other contractors working within the same area.</div>	
Project	Type of Work
NHSX-003-4(047)--3H-99	HMA Resurfacing w/ CIPR
BRF-015-4(19)--38-22	Bridge Deck Overlay
BRFN-003-5(83)--39-12	Culvert (New)
STP-069-7(051)--2C-99	PCC Overlay
STP-069-7(052)--2C-99	PCC Overlay
	Others to be discussed at Pre-Con



**VEHICLES NOT STRADDLING CENTERLINE**

This layout may be used when installing edgeline or centerline rumble strips.

Equip all vehicles with an amber revolving light or amber strobe light.

- ① Optional Fluorescent Yellow Green (FYG) sign background may be used.
- ② This arrow board may be operated in a four-corner caution mode.
- ③ Move this vehicle to the shoulder to accommodate passing traffic.
- ④ A vehicle mounted Portable Dynamic Message Sign (PDMS) may be used in lieu of this sign.
- ⑤ TMA required for speed limits of 55 mph or greater and ADT greater than 3,000.

Possible Contract Item:  
Traffic Control

LEGEND

←

Direction of Traffic

▨

Truck-Mounted Attenuator (TMA)

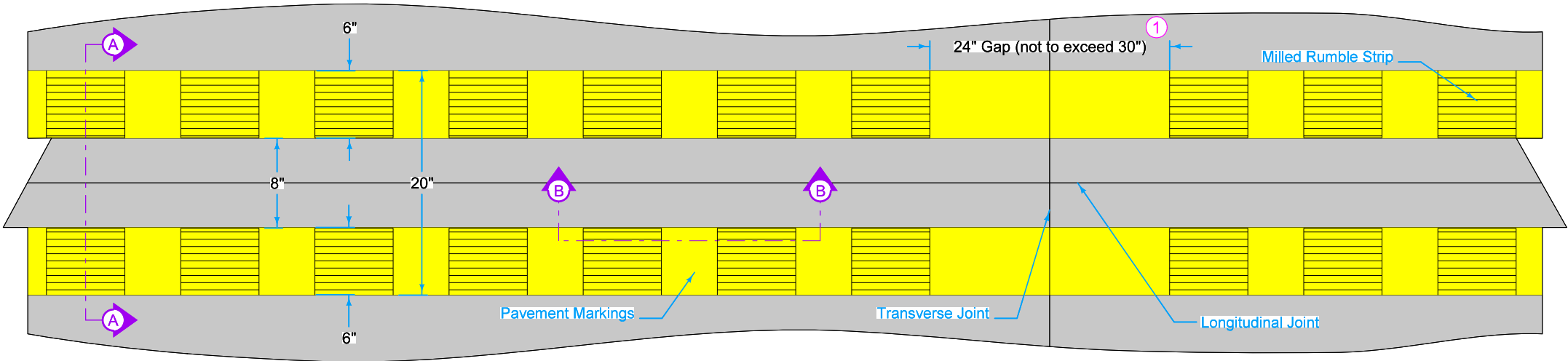
MODIFIED

MODIFICATIONS: Replaced pavement marking signage with general road work signage  
Removed note referencing SI-881  
Added vehicle and modified descriptions for milling operations

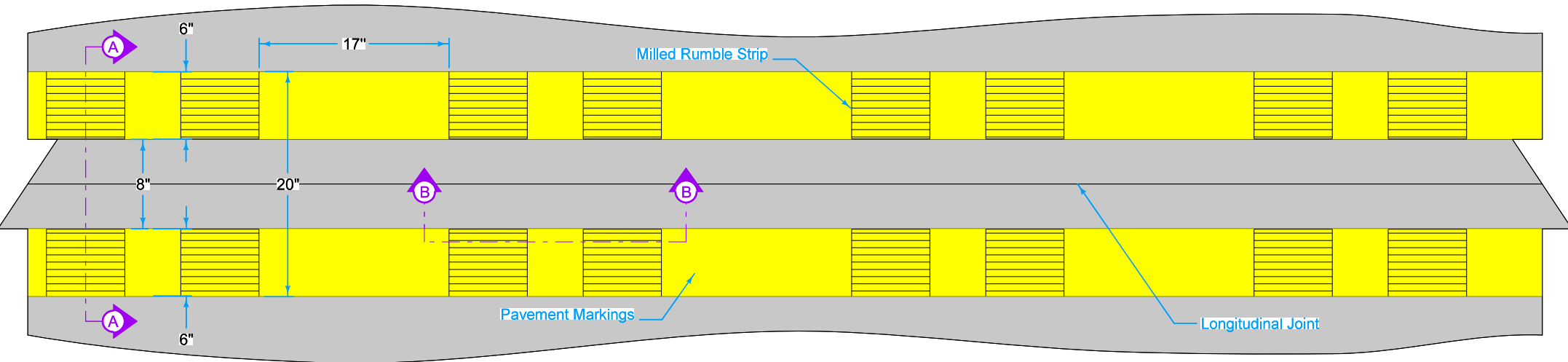
CENTERLINE RUMBLE STRIP OPERATIONS  
TWO-LANE

TC-233

SHEET 1 of 1



PLAN (PCC)

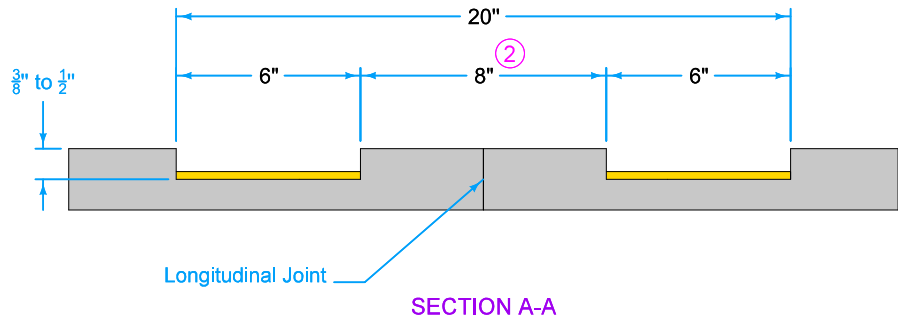


PLAN (HMA)

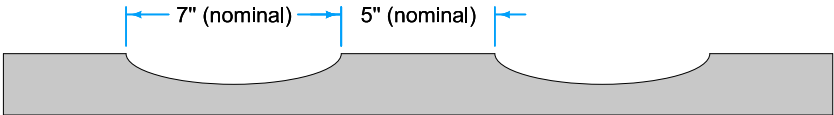
- Centerline rumble strip placement is the same regardless of centerline pavement marking.
- ① Gap rumble strips at PCC transverse joints. Centering the gap about the joint is desirable. Maintain a minimum of 3 inches between rumble and transverse joint.
  - ② Center 8 inch gap over longitudinal joint.

Possible Contract Items:  
Milled Centerline Rumble Strips, HMA Surface  
Milled Centerline Rumble Strips, PCC Surface

Possible Tabulation:  
112-10



SECTION A-A



SECTION B-B

<b>MODIFIED</b>		
<b>STANDARD ROAD PLAN</b>	<b>PV-13</b>	
	SHEET 1 of 4	
MODIFICATIONS: Updated to reflect usage of 6" Centerline markings.		
<b>MILLED CENTERLINE RUMBLE STRIPS</b>		