



February 18, 2026

**ADDENDUM 1 – JOB 24461**

**TO:** All prospective bidders on Project IM-2-094(210)237, Job No. 24461 scheduled for the February 27, 2026 bid opening.

This addendum has been issued for the above referenced Job, Please see the attached summary from Chad Frisinger, P.E. dated February 18, 2026 for an explanation of changes.

This addendum is to be incorporated into the bidder's proposal for this project. If there are bid item changes the AASHTOWare Project Bids files should be updated by downloading the addendum file from the Bid Express on-line bidding exchange at <http://www.bidx.com/> and load it into the AASHTOWare Project Bids program.

A handwritten signature in blue ink, appearing to read "Phillip Murdoff".

PHILLIP MURDOFF, P.E. – CONSTRUCTION SERVICES ENGINEER

80: jwj

Enclosure

**PLAN ADDENDUM SUMMARY AND APPROVAL**

PROJECT INFORMATION		
Date: 2/17/26	Project: IM-2-094(210)237	PCN: 24461
Lead Designer: Leon Eckroth	Technical Support:	
Bid Opening Date: 2/27/26	Job Number: 24461	Addendum Number: 1

PLAN SHEET CHANGES		
Section	Sheet(s)	Description
2	2	Removed Standard D-714-26 and replaced it with D-714-25,
8	2	Added pay item 704-1090 Flashing Beacon.
8	3	Removed pay item 772-2110 Flashing Beacon-Post Mounted.
10	1	Removed reference to Department Optioned Borrow site.
51	1	Revised reference of Standard D-714-26 to Standard D-714-25 and added a note referring to Section 20 for pipe phasing installation.
100	1	Removed item 772-2110 for Flashing Beacon-Post Mounted and replaced it with item 704-1090 Flashing Beacon for use at cross overs.

BID ITEMS CHANGES					
Spec	Code	Description	Unit	Previous Quantity	Revised Quantity
704	1090	FLASHING BEACON	EA	0	2
772	2110	FLASHING BEACON-POST MOUNTED	EA	2	0

**APPROVAL**

for Chad Frisinger  
 Kirk J. Hoff, P.E. – Design Engineer

2/18/26

Date

BID ITEMS

Project: IM-2-094(210)237 (PCN-24461)

**Bidder must type or neatly print unit prices in numerals, make extensions for each item, and total. Do not carry unit prices further than three (3) decimal places.**

Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
001	103	0100	CONTRACT BOND	L SUM	1.				
002	103	0200	ESCROW OF BID DOCUMENTATION	L SUM	1.				
003	109	1000	E-TICKETING	L SUM	1.				
004	202	0114	REMOVAL OF CONCRETE PAVEMENT	SY	13,285.				
005	202	0132	REMOVAL OF BITUMINOUS SURFACING	SY	1,328.				
006	202	0151	REMOVE PRECAST CONCRETE BARRIER	LF	1,865.				
007	202	0235	REMOVAL OF CATCH BASIN	EA	6.				
008	202	0312	REMOVE EXISTING FENCE	LF	968.				
009	202	0350	REMOVAL OF TEMPORARY BYPASS	EA	2.				
010	203	0101	COMMON EXCAVATION-TYPE A	CY	48,981.				
011	203	0109	TOPSOIL	CY	27,303.				
012	203	0140	BORROW-EXCAVATION	CY	390,781.				
013	216	0100	WATER	M GAL	1,208.				
014	230	0165	SUBGRADE PREPARATION-TYPE A-12IN	STA	30.240				
015	251	0200	SEEDING CLASS II	ACRE	28.700				
016	251	2000	TEMPORARY COVER CROP	ACRE	56.210				

BID ITEMS

Project: IM-2-094(210)237 (PCN-24461)

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
017	253	0101	STRAW MULCH	ACRE	56.210				
018	255	0103	ECB TYPE 3	SY	188.				
019	256	0200	RIPRAP GRADE II	CY	7,048.				
020	260	0300	SILT FENCE	LF	812.				
021	260	0301	REMOVE SILT FENCE	LF	812.				
022	261	0112	FIBER ROLLS 12IN	LF	24,401.				
023	261	0113	REMOVE FIBER ROLLS 12IN	LF	12,802.				
024	262	0100	FLOTATION SILT CURTAIN	LF	3,640.				
025	262	0101	REMOVE FLOTATION SILT CURTAIN	LF	3,640.				
026	302	0120	AGGREGATE BASE COURSE CL 5	TON	57,712.				
027	401	0050	TACK COAT	GAL	4,790.				
028	401	0060	PRIME COAT	GAL	19,469.				
029	401	0070	FOG SEAL	GAL	2,179.				
030	430	0045	SUPERPAVE FAA 45	TON	23,417.				
031	430	0500	COMMERCIAL GRADE HOT MIX ASPHALT	TON	90.				
032	430	1000	CORED SAMPLE	EA	130.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
033	430	5818	PG 58H-34 ASPHALT CEMENT	TON	1,054.				
034	702	0100	MOBILIZATION	L SUM	1.				
035	704	0100	FLAGGING	MHR	400.				
036	704	1000	TRAFFIC CONTROL SIGNS	UNIT	2,612.				
037	704	1046	ATTENUATION DEVICE-TYPE B-80	EA	2.				
038	704	1052	TYPE III BARRICADE	EA	6.				
039	704	1060	DELINEATOR DRUMS	EA	91.				
040	704	1067	TUBULAR MARKERS	EA	338.				
041	704	1072	FLEXIBLE DELINEATORS	EA	136.				
042	704	1087	SEQUENCING ARROW PANEL-TYPE C	EA	2.				
043	704	1088	SEQUENCING ARROW PANEL-TYPE C-CROSSOVER	EA	2.				
044	704	1090	FLASHING BEACON	EA	2.				
045	704	1500	OBLITERATION OF PAVEMENT MARKING	SF	984.				
046	704	3511	STATE FURNISHED MEDIAN BARRIER	LF	1,700.				
047	704	4011	PORTABLE CHANGEABLE MESSAGE SIGN	EA	4.				
048	704	8015	VEHICLE SPEED FEEDBACK SIGN	EA	2.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$	000	\$\$\$\$	00
049	706	0400	FIELD OFFICE	EA	1.				
050	706	0500	AGGREGATE LABORATORY	EA	1.				
051	706	0550	BITUMINOUS LABORATORY	EA	1.				
052	706	0600	CONTRACTOR'S LABORATORY	EA	1.				
053	709	0100	GEOSYNTHETIC MATERIAL TYPE G	SY	1,486.				
054	709	0155	GEOSYNTHETIC MATERIAL TYPE RR	SY	13,930.				
055	714	4105	PIPE CONDUIT 24IN	LF	24.				
056	714	4110	PIPE CONDUIT 30IN	LF	381.				
057	714	4150	PIPE CONDUIT 78IN	LF	520.				
058	714	9680	PLUG PIPE-ALL TYPES & SIZES	EA	4.				
059	720	0110	RIGHT OF WAY MARKERS	EA	3.				
060	720	0125	ALIGNMENT MONUMENTS	EA	4.				
061	720	0130	IRON PIN R/W MONUMENTS	EA	3.				
062	722	4565	MEDIAN DRAIN PRECAST CONCRETE-TYPE A	EA	3.				
063	752	0200	FENCE BARBED WIRE 4 STRAND	LF	725.				
064	752	0911	TEMPORARY SAFETY FENCE	LF	500.				

BID ITEMS

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Item No.	Spec No.	Code No.	Description	Unit	Approx. Quantity	Unit Price		Amount	
						\$\$\$\$\$	000	\$\$\$\$\$	00
065	752	0993	FENCE TERMINAL	EA	3.				
066	754	0154	DELINEATORS-TYPE A-SINGLE SIDED	EA	26.				
067	754	0210	GALV STEEL POST-STANDARD PIPE	LF	14.				
068	754	0214	GALV STEEL POSTS-W-SHAPE POSTS(TWO OR MORE)	LF	79.				
069	754	0534	PANEL FOR SIGNS-TYPE IV REFLECTIVE SHEETING	SF	149.				
070	754	0592	RESET SIGN PANEL	EA	1.				
071	754	0596	RESET MILE POST	EA	2.				
072	754	0805	OBJECT MARKERS - CULVERTS	EA	10.				
073	754	1100	CLASS AE CONCRETE-SIGN FOUNDATIONS	CY	.400				
074	754	1104	REMOVE SIGN FOUNDATION	EA	5.				
075	760	0025	SINUSOIDAL RUMBLE STRIP - ASPHALT SHOULDER	MILE	3.860				
076	762	0200	RAISED PAVEMENT MARKERS	EA	11,520.				
077	762	0422	SHORT TERM 6IN LINE-TYPE R	LF	20,376.				
078	762	0432	SHORT TERM 6IN LINE-TYPE NR	LF	36,000.				
079	762	1106	PVMT MK PAINTED 6IN LINE	LF	43,920.				
080	764	0131	W-BEAM GUARDRAIL	LF	177.				



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D-101-20, 21	Line Styles
D-101-30, 31,32,33	Symbols
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D-261-1	Erosion Control - Fiber Roll Placement Details
D-704-1	Attenuation Device
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D-704-10	Construction Sign Details - Regulatory Signs
D-704-11, 11A	Construction Sign Details - Warning Signs
D-704-12	Shoulder Closure Tapers
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D-704-14	Construction Sign Punching And Mounting Details
D-704-22	Construction Truck And Temporary Detour Layouts
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Number	Description
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# ESTIMATE OF QUANTITIES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
ND	IM-2-094(210)237	8	2

REVISED 02/17/2026

SPEC CODE	ITEM DESCRIPTION	UNIT	MAINLINE	TOTAL
-----	-----	-----	-----	-----
702	0100 MOBILIZATION	L SUM	1	1
704	0100 FLAGGING	MHR	400	400
704	1000 TRAFFIC CONTROL SIGNS	UNIT	2,612	2,612
704	1046 ATTENUATION DEVICE-TYPE B-80	EA	2	2
704	1052 TYPE III BARRICADE	EA	6	6
704	1060 DELINEATOR DRUMS	EA	91	91
704	1067 TUBULAR MARKERS	EA	338	338
704	1072 FLEXIBLE DELINEATORS	EA	136	136
704	1087 SEQUENCING ARROW PANEL-TYPE C	EA	2	2
704	1088 SEQUENCING ARROW PANEL-TYPE C-CROSSOVER	EA	2	2
704	1090 FLASHING BEACON	EA	2	2
704	1500 OBLITERATION OF PAVEMENT MARKING	SF	984	984
704	3511 STATE FURNISHED MEDIAN BARRIER	LF	1,700	1,700
704	4011 PORTABLE CHANGEABLE MESSAGE SIGN	EA	4	4
704	8015 VEHICLE SPEED FEEDBACK SIGN	EA	2	2
706	0400 FIELD OFFICE	EA	1	1
706	0500 AGGREGATE LABORATORY	EA	1	1
706	0550 BITUMINOUS LABORATORY	EA	1	1
706	0600 CONTRACTOR'S LABORATORY	EA	1	1
709	0100 GEOSYNTHETIC MATERIAL TYPE G	SY	1,486	1,486
709	0155 GEOSYNTHETIC MATERIAL TYPE RR	SY	13,930	13,930
714	4105 PIPE CONDUIT 24IN	LF	24	24
714	4110 PIPE CONDUIT 30IN	LF	381	381
714	4150 PIPE CONDUIT 78IN	LF	520	520
714	9680 PLUG PIPE-ALL TYPES & SIZES	EA	4	4
720	0110 RIGHT OF WAY MARKERS	EA	3	3
720	0125 ALIGNMENT MONUMENTS	EA	4	4
720	0130 IRON PIN R/W MONUMENTS	EA	3	3
722	4565 MEDIAN DRAIN PRECAST CONCRETE-TYPE A	EA	3	3
752	0200 FENCE BARBED WIRE 4 STRAND	LF	725	725
752	0911 TEMPORARY SAFETY FENCE	LF	500	500
752	0993 FENCE TERMINAL	EA	3	3
754	0154 DELINEATORS-TYPE A-SINGLE SIDED	EA	26	26

# ESTIMATE OF QUANTITIES

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
<b>ND</b>	IM-2-094(210)237	<b>8</b>	<b>3</b>

REVISED 02/17/2026

SPEC CODE	ITEM DESCRIPTION	UNIT	MAINLINE	TOTAL
-----	-----	-----	-----	-----
754 0210	GALV STEEL POST-STANDARD PIPE	LF	14	14
754 0214	GALV STEEL POSTS-W-SHAPE POSTS(TWO OR MORE)	LF	79	79
754 0534	PANEL FOR SIGNS-TYPE IV REFLECTIVE SHEETING	SF	149	149
754 0592	RESET SIGN PANEL	EA	1	1
754 0596	RESET MILE POST	EA	2	2
754 0805	OBJECT MARKERS - CULVERTS	EA	10	10
754 1100	CLASS AE CONCRETE-SIGN FOUNDATIONS	CY	0.4	0.4
754 1104	REMOVE SIGN FOUNDATION	EA	5	5
760 0025	SINUSOIDAL RUMBLE STRIP - ASPHALT SHOULDER	MILE	3.86	3.86
762 0200	RAISED PAVEMENT MARKERS	EA	11,520	11,520
762 0422	SHORT TERM 6IN LINE-TYPE R	LF	20,376	20,376
762 0432	SHORT TERM 6IN LINE-TYPE NR	LF	36,000	36,000
762 1106	PVMT MK PAINTED 6IN LINE	LF	43,920	43,920
764 0131	W-BEAM GUARDRAIL	LF	177	177
764 0145	W-BEAM GUARDRAIL END TERMINAL	EA	3	3
764 0151	REMOVE W-BEAM GUARDRAIL & POSTS	LF	177	177
764 2081	REMOVE END TREATMENT & TRANSITION	EA	1	1
764 8080	MODIFY BARREL ATTENUATION DEVICE	EA	6	6
930 8230	SHORING	EA	7	7

Revised 2/17/26	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	IM-2-094(210)237	10	1

PAVING SUMMARY: MAINLINE PIPE ROADWAY PATCHING								
Roadway	Begin Station	End Station	Length	Area (Plan View)		302-0120 AGGREGATE BASE COURSE CL 5	401-0070 FOG SEAL	430 0500 COMMERCIAL GRADE HMA
				Aggrgate Base (12")	HMA (5")			
				(LF)	(SY)			
I-94 EB	12541+27	12541+57	30.00	182.00	182.00	113.75	9.10	50.56
I-94 EB	12563+00	12563+30	30.00	140.00	140.00	87.50	8.00	38.89
<b>TOTALS</b>						201.25	17.10	89.45

PAVING SUMMARY: MEDIAN CROSSOVER CONNECTIONS											
Roadway	Begin Station	End Station	Length	Area (Plan View)		302-0120 AGGREGATE BASE COURSE CL 5	401-0050 TACK COAT	401-0060 PRIME COAT	430-0045 SUPERPAVE FFA 45	430-5818 PG 58H-34 ASPHALT CEMENT	709-0100 GEOSYNTHETIC MATERIAL TYPE G
				Aggrgate Base (12")	HMA (5")						
				(LF)	(SF)						
I-94 West Crossover	12516+00	12524+00	800.00	26538.00	23778.00	1842.92	132.10	1032.03	732.71	32.97	204.77
I-94 East Crossover	12584+00	12592+00	800.00	25295.00	22385.00	1756.60	124.36	983.69	689.79	31.04	195.18
<b>TOTALS</b>						3599.51	256.46	2015.73	1422.50	64.01	399.95

Earthwork Summary

LOCATION	EARTHWORK SUMMARY				TOPSOIL SUMMARY
	EMBANKMENT*	203-0101 COMMON EXCAVATION TYPE A	203-0104 BORROW EXCAVATION	202-0350 REMOVAL OF TEMPORARY BYPASS	203-0109 TOPSOIL
	(CY)	(CY)	(CY)	(CY)	(CY)
	A	B	C=A-B	D	E
Construct West Crossover	708	162	546	-	705
Remove West Crossover	-	-	-	590	186
I-94 WB	196,985	36,542	160,443	-	16,926
I-94 EB	240,765	12,180	228,585	-	8,650
Construct East Crossover	1,304	97	1,207	-	637
Remove East Crossover				1,184	199
<b>TOTALS</b>	439,762	48,981	390,781	1,774	27,303

Notes:

\*Additional 50% volume for shrinkage for fill below the water and additional 20% volume for shrinkage for fill above the existing water.

Basis of Estimate  Grade Raise I-94 EB/WB  1.3 Miles West of Cleveland Interchange  Runner Slough	 02/18/26
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Revised 2-17-2026	STATE	PROJECT NO.	SECTION NO.	SHEET NO.
	ND	IM-2-094(210)237	51	1

Begin Station / Location	Begin Offset	End Station / Location	End Offset	Pipe Installation (Pay Item)			Allowable Material	Required Diameter	Steel Pipe Coatings	Steel Pipe Corrugations or Spiral Ribs	Steel Pipe Minimum Thickness	Geosynthetic Material - Type G (Pay Item)	(*) End Sections		Applicable Backfill
				In	Bid Item	LF							Begin EA	End EA	
12541+03	119.3' Lt	12541+84	123.7' Rt	78	Pipe Conduit	260'	Reinforced Concrete Pipe - Class IV (barrel length = 256 LF)	78				350	FES	FES	D-714-25**
12545+00	3.0' Lt	12545+00	3.0' Rt	30	Pipe Conduit	6' (T-Section)	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	30				5	Plug		D-714-25**
12545+00		12545+00		24	Pipe Conduit	8' (Riser)	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24							
12545+00	3.0' Rt	12545+00	123' Rt	30	Pipe Conduit	121'	Reinforced Concrete Pipe - Class III (barrel length = 120 LF)	30				95		FES	D-714-25**
12552+00	3.0' Lt	12552+00	3.0' Rt	30	Pipe Conduit	6' (T-Section)	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	30				5	Plug		D-714-25**
12552+00		12552+00		24	Pipe Conduit	8' (Riser)	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24							
12552+00	3.0' Rt	12552+00	123' Rt	30	Pipe Conduit	121'	Reinforced Concrete Pipe - Class III (barrel length = 120 LF)	30				95		FES	D-714-25**
12559+00	3.0' Lt	12559+00	3.0' Rt	30	Pipe Conduit	6' (T-Section)	Reinforced Concrete Pipe - Class III (barrel length = 6 LF)	30				5	Plug		D-714-25**
12559+00		12559+00		24	Pipe Conduit	8' (Riser)	Reinforced Concrete Pipe - Class III (barrel length = 8 LF)	24							
12559+00	3.0' Rt	12559+00	123' Rt	30	Pipe Conduit	121'	Reinforced Concrete Pipe - Class III (barrel length = 120 LF)	30				95		FES	D-714-25**
12562+90	127.1' Rt	12563+46	122.75' Lt	78	Pipe Conduit	260'	Reinforced Concrete Pipe - Class III (barrel length = 256 LF)	78				350	FES	FES	D-714-25**
12568+64		12568+64		18"	Plug Pipe										

Corrugations: 2 = 2-2/3"x1/2"  
 3 = 3"x1"  
 5 = 5"x1"

Coatings: Z = Zinc  
 A = Aluminum  
 P = Polymeric (over Zinc or Aluminum)

Spiral Ribs: 3/4 = 3/4"x3/4"@7-1/2"  
 1 = 3/4"x1"@11-1/2"

(\*) End sections are measured and paid for separately for pipe extensions.  
 FES = Flared End Section  
 TES = Traversable End Section  
 PLUG = Precast Concrete Plug  
 T-SECTION = See Standard D-722-07

\*\* See Section 20 sheets for pipe installation phasing.

Allowable Pipe List  Grade Raise I-94 EB/WB  1.3 Miles West of Cleveland Interchange  Runner Slough	 02/18/26
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Revised 2/17/2026

STATE	PROJECT NO.	SECTION NO.	SHEET NO.
<b>ND</b>	<b>IM-2-094(210)237</b>	<b>100</b>	<b>1</b>

SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED					TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
			1	2	3	4	5			
E5-1-48	48"x48"	EXIT GORE							35	
G20-1-60	60"x24"	ROAD WORK NEXT MILES							28	
G20-1b-60	60"x24"	NO WORK IN PROGRESS (Sign and installation only)							18	
<b>G20-2-48</b>	<b>48"x24"</b>	<b>END ROAD WORK</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>26</b>	<b>104</b>
G20-4-36	36"x18"	PILOT CAR FOLLOW ME (Mounted to back of pilot car)							18	
G20-4b-36	36"x30"	WAIT FOR PILOT CAR							18	
G20-50a-72	72"x36"	ROAD WORK NEXT MILES RT & LT ARROWS							43	
G20-52a-72	72"x24"	ROAD WORK NEXT MILES RT or LT ARROW							36	
<b>G20-55-96</b>	<b>96"x48"</b>	<b>SPEED LIMIT ENFORCED - MINIMUM FEE \$150 WHEN WORKERS PRESENT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>59</b>	<b>236</b>
M1-1-36	36"x36"	INTERSTATE ROUTE MARKER (Post and installation only)							11	
M1-4-24	24"x24"	U.S. ROUTE MARKER (Post and installation only)							10	
M1-5-24	24"x24"	STATE ROUTE MARKER (Post and installation only)							10	
M3-1-24	24"x12"	NORTH (Mounted on route marker post)							7	
M3-2-24	24"x12"	EAST (Mounted on route marker post)							7	
M3-3-24	24"x12"	SOUTH (Mounted on route marker post)							7	
M3-4-24	24"x12"	WEST (Mounted on route marker post)							7	
M4-8-24	24"x12"	DETOUR (Mounted on route marker post)							7	
M4-9-30	30"x24"	DETOUR ARROW RIGHT or LEFT/AHD AND RT or LT							15	
M4-10-48	48"x18"	DETOUR (INSIDE ARROW) RIGHT or LEFT (Mounted on barricade)							7	
M5-1-21	21"x15"	ADVANCE TURN ARROW RT or LT (Mounted on route marker post)							7	
M5-1-30	30"x21"	ADVANCE TURN ARROW RT or LT (Mounted on route marker post)							9	
M6-1-21	21"x15"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)							7	
M6-1-30	30"x21"	DIRECTIONAL ARROW RT or LT (Mounted on route marker post)							9	
M6-3-21	21"x15"	DIRECTIONAL ARROW UP (Mounted on route marker post)							7	
R1-1-48	48"x48"	STOP							32	
<b>R1-2-60</b>	<b>60"x60"</b>	<b>YIELD</b>	<b>2</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>2</b>	<b>29</b>	<b>58</b>
<b>R2-1-36</b>	<b>36"x48"</b>	<b>SPEED LIMIT (Portable only)</b>	<b>6</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>6</b>	<b>6</b>	<b>30</b>	<b>180</b>
<b>R2-1-48</b>	<b>48"x60"</b>	<b>SPEED LIMIT</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>39</b>	<b>312</b>
<b>R2-1aP-24</b>	<b>24"x18"</b>	<b>MINIMUM FEE \$150 (Mounted on Speed Limit post)</b>	<b>10</b>	<b>7</b>	<b>7</b>	<b>7</b>	<b>10</b>	<b>10</b>	<b>10</b>	<b>100</b>
R3-2-48	48"x48"	NO LEFT TURN							35	
<b>R4-1-48</b>	<b>48"x60"</b>	<b>DO NOT PASS</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>39</b>	<b>78</b>
<b>R4-7-48</b>	<b>48"x60"</b>	<b>KEEP RIGHT</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>39</b>	<b>78</b>
R5-1-48	48"x48"	DO NOT ENTER							35	
R6-1-54	54"x18"	ONE WAY RIGHT or LEFT (Mounted on STOP or DO NOT ENTER post)							14	
R7-1-12	12"x18"	NO PARKING ANY TIME							11	
R10-6-24	24"x36"	STOP HERE ON RED							16	
<b>R11-2-48</b>	<b>48"x30"</b>	<b>ROAD CLOSED (Mounted on barricade)</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>12</b>	<b>24</b>
R11-2a-48	48"x30"	STREET CLOSED (Mounted on barricade)							12	
R11-3a-60	60"x30"	ROAD CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)							15	
R11-3c-60	60"x30"	STREET CLOSED MILES AHEAD LOCAL TRAFFIC ONLY (Mtd on barricade)							15	
R11-4a-60	60"x30"	STREET CLOSED TO THRU TRAFFIC (Mounted on barricade)							15	
W1-3-48	48"x48"	REVERSE TURN RIGHT or LEFT							35	
<b>W1-4-48</b>	<b>48"x48"</b>	<b>REVERSE CURVE RIGHT or LEFT</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>35</b>	<b>70</b>
W1-4b-48	48"x48"	TWO LANE REVERSE CURVE RIGHT or LEFT							35	
W1-6-48	48"x24"	ONE DIRECTION LARGE ARROW							26	
<b>W1-6-60</b>	<b>60"x30"</b>	<b>ONE DIRECTION LARGE ARROW</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>31</b>	<b>62</b>
W3-1-48	48"x48"	STOP AHEAD							35	
W3-3-48	48"x48"	SIGNAL AHEAD							35	
W3-4-48	48"x48"	BE PREPARED TO STOP							35	
<b>W3-5-48</b>	<b>48"x48"</b>	<b>SPEED REDUCTION AHEAD</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>
<b>W4-2-48</b>	<b>48"x48"</b>	<b>LANE ENDS RIGHT or LEFT</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>
W5-1-48	48"x48"	ROAD NARROWS							35	
W5-8-48	48"x48"	THRU TRAFFIC RIGHT LANE							35	
W5-9-48	48"x48"	ROAD WORK TRAFFIC ONLY DOWN & LT or RT ARROW							35	
<b>W6-3-48</b>	<b>48"x48"</b>	<b>TWO WAY TRAFFIC</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>35</b>	<b>70</b>
W8-1-48	48"x48"	BUMP							35	
W8-3-48	48"x48"	PAVEMENT ENDS							35	
W8-7-48	48"x48"	LOOSE GRAVEL							35	
W8-11-48	48"x48"	UNEVEN LANES							35	
W8-12-48	48"x48"	NO CENTER LINE							35	
W8-17-48	48"x48"	SHOULDER DROP-OFF SYMBOL							35	
W8-53-48	48"x48"	TRUCKS ENTERING HIGHWAY							35	
W8-54-48	48"x48"	TRUCKS ENTERING AHEAD or FT or MILE							35	
W8-55-48	48"x48"	TRUCKS CROSSING AHEAD or FT or MILE							35	
W8-56-48	48"x48"	TRUCKS EXITING HIGHWAY							35	
W9-3a-48	48"x48"	CENTER LANE CLOSED SYMBOL							35	
<b>W13-1P-30</b>	<b>30"x30"</b>	<b>MPH ADVISORY SPEED PLAQUE (Mounted on warning sign post)</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>14</b>	<b>28</b>
W14-3-64	64"x48"	NO PASSING ZONE							28	
W16-2P-30	30"x24"	FEET PLAQUE (Mounted on warning sign post)							10	
<b>W20-1-48</b>	<b>48"x48"</b>	<b>ROAD WORK AHEAD or FT or MILE</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>35</b>	<b>140</b>
W20-2-48	48"x48"	DETOUR AHEAD or FT or MILE							35	
W20-3-48	48"x48"	ROAD or STREET CLOSED AHEAD or FT or MILE							35	
W20-4-48	48"x48"	ONE LANE ROAD AHEAD or FT or MILE							35	
<b>W20-5-48</b>	<b>48"x48"</b>	<b>RIGHT or CENTER or LEFT LANE CLOSED AHEAD or FT or MILE</b>	<b>4</b>	<b>8</b>	<b>8</b>	<b>8</b>	<b>4</b>	<b>8</b>	<b>35</b>	<b>280</b>
<b>W20-7-48</b>	<b>48"x48"</b>	<b>FLAGGER</b>	<b>2</b>				<b>2</b>	<b>2</b>	<b>35</b>	<b>70</b>
<b>W20-8-18</b>	<b>18"x18"</b>	<b>STOP - SLOW PADDLE Back to Back</b>	<b>2</b>				<b>2</b>	<b>2</b>	<b>5</b>	<b>10</b>
<b>W20-52P-54</b>	<b>54"x12"</b>	<b>NEXT MILES (Mounted on warning sign post)</b>	<b>2</b>	<b>2</b>	<b>2</b>			<b>2</b>	<b>12</b>	<b>24</b>
W21-1-48	48"x48"	WORKERS							35	
W21-2-48	48"x48"	FRESH OIL							35	
W21-3-48	48"x48"	ROAD MACHINERY AHEAD or FT or MILE							35	
W21-5-48	48"x48"	SHOULDER WORK							35	
W21-5a-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED							35	

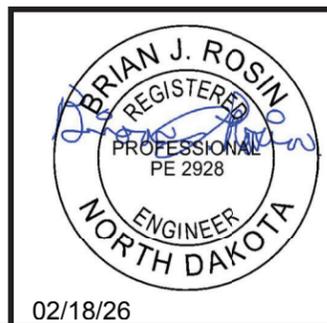
SIGN NUMBER	SIGN SIZE	DESCRIPTION	AMOUNT REQUIRED					TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
			1	2	3	4	5			
W21-5b-48	48"x48"	RIGHT or LEFT SHOULDER CLOSED AHEAD or FT or MILE							35	
W21-6-48	48"x48"	SURVEY CREW							35	
W21-50-48	48"x48"	BRIDGE PAINTING AHEAD or FT							35	
W21-51-48	48"x48"	MATERIAL ON ROADWAY							35	
W21-52-48	48"x48"	PAVEMENT BREAKS							35	
W21-53-48	48"x48"	RUMBLE STRIPS AHEAD							35	
W22-8-48	48"x48"	FRESH OIL LOOSE ROCK							35	
W24-1-48	48"x48"	DOUBLE REVERSE CURVE							35	

SPECIAL SIGNS	CONSIGN 1	CONSIGN 2	1	2	3	4	5	TOTAL AMOUNT REQUIRED	UNITS PER AMOUNT	UNITS SUB TOTAL
	150" X 72 I-94 EAST 13 FT LANE AHEAD		2	2	2	2		2	102	204
	150" X 72 I-94 WEST 13 FT LANE AHEAD		2	2	2	2		2	102	204

SPEC & CODE	DESCRIPTION	UNIT	QUANTITY BY PHASE NO.					TOTAL QUANTITY
			1	2	3	4	5	
<b>704-1000</b>	<b>TRAFFIC CONTROL SIGNS</b>							<b>2612</b>

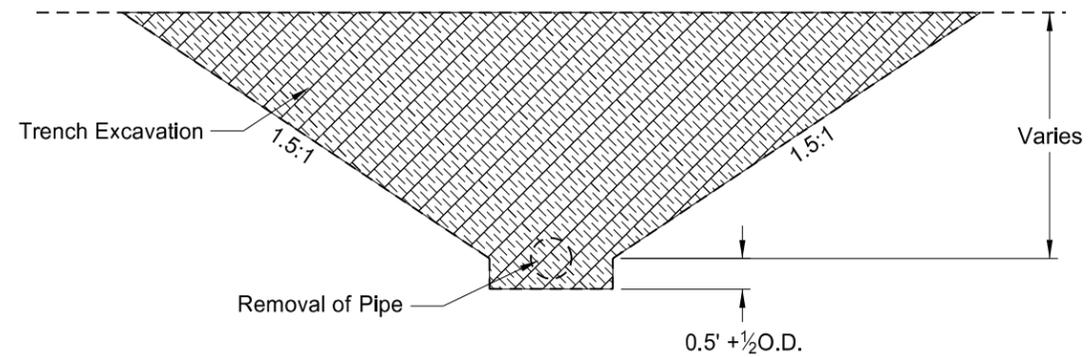
SPEC & CODE	DESCRIPTION	UNIT	QUANTITY BY PHASE NO.					TOTAL QUANTITY
			1	2	3	4	5	
704-0100	FLAGGING	MHR	80	80	80	80	80	400
704-1046	ATTENUATION DEVICE-TYPE B-80	EACH		1	1	1		1
704-1046	ATTENUATION DEVICE-TYPE B-80	EACH		1	1	1		1
704-1048	PORTABLE RUMBLE STRIPS	EACH						
704-1050	TYPE I BARRICADES	EACH						
704-1052	TYPE III BARRICADES	EACH	2	6	6	6	2	6
704-1060	DELINEATOR DRUMS	EACH	56	91	91	91	56	91
704-1065	TRAFFIC CONES	EACH						
704-1067	TUBULAR MARKERS	EACH	338	200	200	200	138	338
704-1070	DELINEATOR	EACH						
704-1072	FLEXIBLE DELINEATORS	EACH		136	136	136		136
704-1080	STACKABLE VERTICAL PANELS	EACH						
704-1081	VERTICAL PANELS - BACK TO BACK	EACH						
704-1085	SEQUENCING ARROW PANEL - TYPE A	EACH						
704-1086	SEQUENCING ARROW PANEL - TYPE B	EACH						
704-1087	SEQUENCING ARROW PANEL - TYPE C	EACH	2				2	2
704-1088	SEQUENCING ARROW PANEL - TYPE C - CROSSOVER	EACH		2	2	2		2
704-1090	FLASHING BEACON	EACH		2	2	2		2
704-1500	OBLITERATION OF PVMT MK	SF		984				984
704-3501	PORTABLE PRECAST CONCRETE MED BARRIER	LF						
704-3510	PRECAST CONCRETE MED BARRIER - STATE FURNISHED	EACH						
704-3511	STATE FURNISHED MEDIAN BARRIER	LF	1700	1700	1700			1700
704-4011	PORTABLE CHANGEABLE MESSAGE SIGN	EACH	4	2	2	2	2	4
704-8015	VEHICLE SPEED FEEDBACK SIGN	EACH		2	2	2		2
762-0200	RAISED PAVEMENT MARKERS	EACH	3840	3840	3840			11520
762-0420	SHORT TERM 4IN LINE - TYPE R	LF						
762-0422	SHORT TERM 6IN LINE-TYPE R	LF		6792	6792	6792		20376
762-0430	SHORT TERM 4IN LINE - TYPE NR	LF						
762-0432	SHORT TERM 6IN LINE-TYPE NR	LF	12000	12000	12000			36000
762-1106	PVMT MK PAINTED 6IN LINE	LF					43920	43920

NOTE:  
If additional signs are required, units will be calculated using the formula from Section III-18.06 of the Design Manual.  
<http://www.dot.nd.gov/>

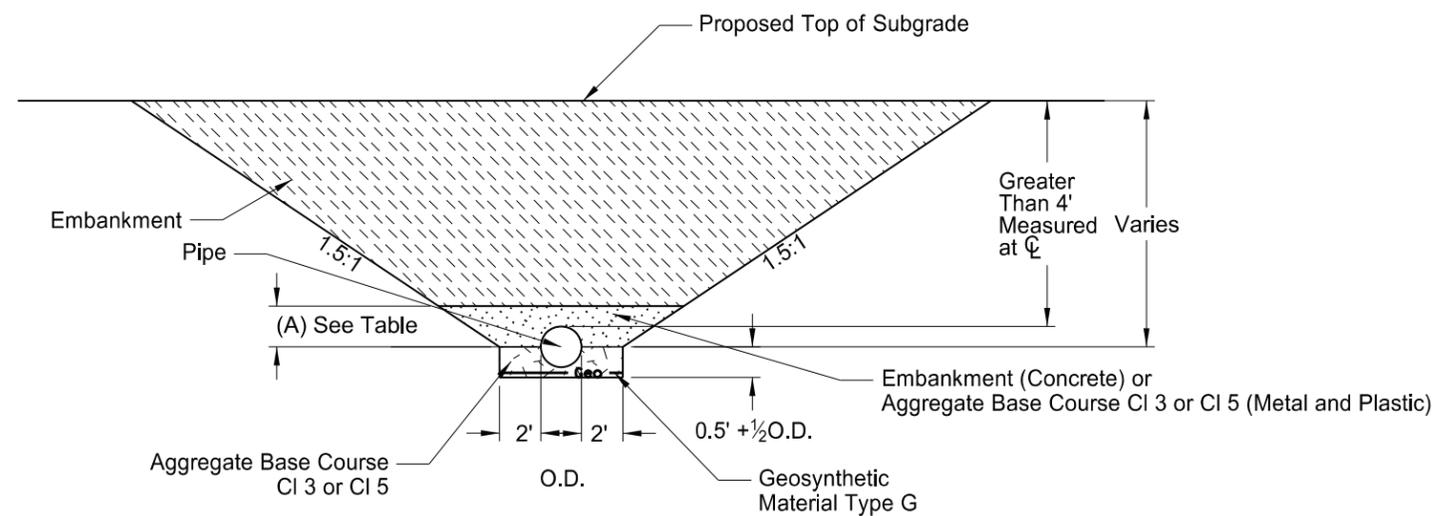


Traffic Control Devices List  
Grade Raise  
I-94 EB/WB  
1.3 Miles West of Cleveland Interchang  
Runner Slough

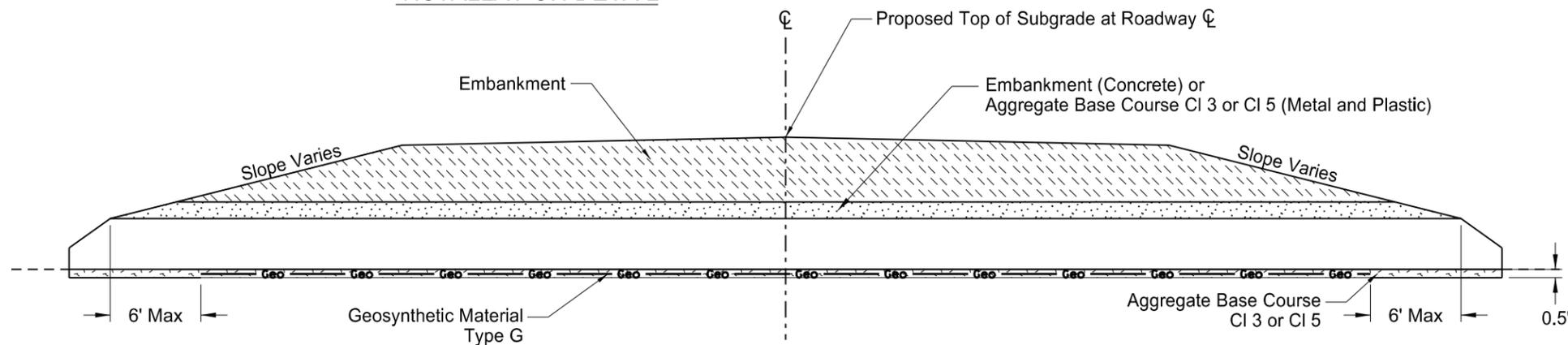
TRANSVERSE MAINLINE PIPE INSTALLATION DETAIL  
PIPES MORE THAN 4 FEET BELOW TOP OF SUBGRADE



EXCAVATION DETAIL



INSTALLATION DETAIL



CROSS SECTION

Pay Items

- 1) Pipe\*
- 2) Geosynthetic Material Type G
- 3) Removal of Pipe (if required)

\*Included in Pipe Pay Item

- 1) Pipe
- 2) Trench excavation
- 3) Aggregate Base Course CI 3 or CI 5
- 4) Embankment

NOTES:

- 1) This drawing applies to new/replaced mainline and paved intersection roadways (including ramps). It does not include pipes in approaches.
- 2) Embankment may be either Borrow Excavation or Common Excavation - Type A.

Backfill Dimensions	
Pipe Materials	Dimension (A)
Concrete	0.5 O.D.
Metal and Plastic	0.5 O.D. + 1 Foot

NORTH DAKOTA DEPARTMENT OF TRANSPORTATION	
7-26-13	
REVISIONS	
DATE	CHANGE
10-15-13	Label Formatting
1-21-14	Nomenclature
9-18-15	Title Rewording
12-10-15	Added Plastic Pipe
5-27-20	Replaced R1 Fabric with Geogrid Changed bedding depth

