STATE OF VERMONT
AGENCY OF TRANSPORTATION

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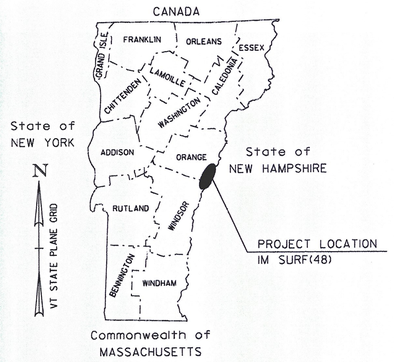
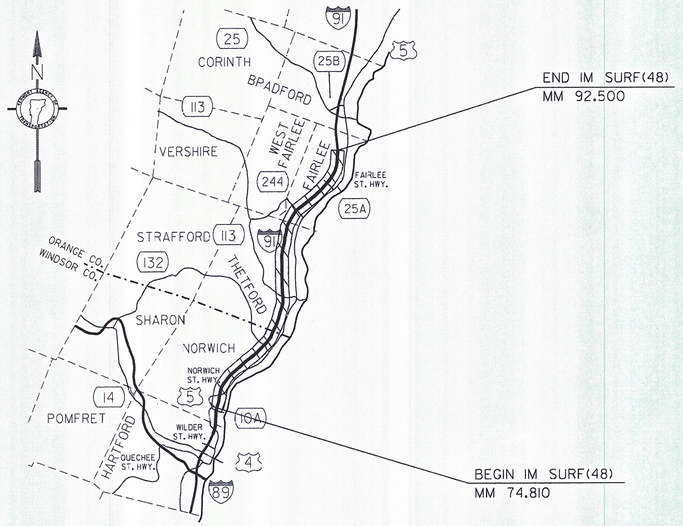
PROPOSED IMPROVEMENT
TOWNS OF NORWICH, THETFORD & FAIRLEE
COUNTIES OF WINDSOR & ORANGE
INTERSTATE ROUTE 91 (NHS)

IM SURF(48) NORTHBOUND:
BEGINNING IN THE TOWN OF NORWICH AT MILE MARKER 74.810 AND EXTENDING NORTHERLY ALONG INTERSTATE ROUTE 91 (NORTHBOUND BARREL) FOR A DISTANCE OF 93,403.20 FT (17.690 MILES) TO MILE MARKER 92.500 IN THE TOWN OF FAIRLEE.

NB LENGTH OF ROADWAY = 93,403.20 FT = (17.690 MILES)
NB LENGTH OF PROJECT = 93,403.20 FT = (17.690 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES SURFACE PREPARATION INVOLVING PATCHING, POT HOLE REPAIR, CRACK SEALING AND OVERLAYING WITH A THIN BITUMINOUS CONCRETE WEARING SURFACE ON THE EXISTING INTERSTATE TYPICAL, PAVEMENT MARKINGS, AND OTHER RELATED HIGHWAY ITEMS.





NOT TO SCALE

TRAFFIC DATA

I-91 NORTHBOUND	2015 AADT	2025 AADT	2015 DHV	2025 DHV	FLEXIBLE ESALS (2015-2025)	FLEXIBLE ESALS (2015-2035)
BEGIN PROJECT TO EXIT 14	5900	6300	920	980	1,716,000	3,870,000
EXIT 14 TO EXIT 15	5300	5700	820	880	1,682,000	3,962,000
EXIT 15 TO END OF PROJECT	3900	4100	600	630	1,700,000	3,937,000

RECORD PLANS

CONTRACTOR: GORMAN GROUP, LLC - ALBANY, NY
RESIDENT ENGINEER: SANDY SCHMITT
CONSTRUCTION BEGAN: APRIL 22, 2015
CONSTRUCTION COMPLETE: JULY 20, 2015
RECORD PLANS BY: SANDY SCHMITT & C. PIERCE

I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.

BY Sandra E. Schmitt RESIDENT ENGINEER

DATE 03-16-16

NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found at Central Files in the electronic archives.

CONSTRUCTION IS TO BE CARRIED ON IN ACCORDANCE WITH THESE PLANS AND THE STANDARD SPECIFICATIONS FOR CONSTRUCTION DATED 2014, AS APPROVED BY THE FEDERAL HIGHWAY ADMINISTRATION ON JULY 20, 2011 FOR USE ON THIS PROJECT, INCLUDING ALL SUBSEQUENT REVISIONS AND SUCH REVISED SPECIFICATIONS AND SPECIAL PROVISIONS AS ARE INCORPORATED IN THESE PLANS.

QUALITY ASSURANCE PROGRAM : LEVEL I

SURVEYED BY : N/A
SURVEYED DATE : N/A

DATUM
VERTICAL: N/A
HORIZONTAL: N/A

DIRECTOR OF PROJECT DELIVERY
APPROVED _____ DATE 12/15/2014

PROJECT MANAGER : JONATHAN C. HARRINGTON, P.E.

PROJECT NAME : NORWICH - FAIRLEE
PROJECT NUMBER : IM SURF (48)

SHEET 1 OF 22 SHEETS

GENERAL INFORMATION

SYMBOLOGY LEGEND NOTE

THE SYMBOLOGY ON THIS SHEET IS INTENDED TO COVER STANDARD CONVENTIONAL SYMBOLOGY. THE SYMBOLOGY IS USED FOR EXISTING & PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROJECT ANNOTATION, AS NOTED ON PROJECT PLAN SHEETS. THIS LEGEND SHEET COVERS THE BASICS. SYMBOLOGY ON PLANS MAY VARY, PLAN ANNOTATIONS AND NOTES SHOULD BE USED TO CLARIFY AS NEEDED.

R.O.W. ABBREVIATIONS (CODES) & SYMBOLS

POINT	CODE	DESCRIPTION
	CH	CHANNEL EASEMENT
	CONST	CONSTRUCTION EASEMENT
	CUL	CULVERT EASEMENT
	D&C	DISCONNECT & CONNECT
	DIT	DITCH EASEMENT
	DR	DRAINAGE EASEMENT
	DRIVE	DRIVEWAY EASEMENT
	EC	EROSION CONTROL
	HWY	HIGHWAY EASEMENT
	I&M	INSTALL & MAINTAIN EASEMENT
	LAND	LANDSCAPE EASEMENT
	R&RES	REMOVE & RESET
	R&REP	REMOVE & REPLACE
	SR	SLOPE RIGHT
	UE	UTILITY EASEMENT
	(P)	PERMANENT EASEMENT
	(T)	TEMPORARY EASEMENT
■	BNDNS	BOUND SET
⊡	BNDNS	BOUND TO BE SET
●	IPNS	IRON PIN SET
◎	IPNS	IRON PIN TO BE SET
⊠	CALC	EXISTING ROW POINT
○	PROW	PROPOSED ROW POINT
[LENGTH]		LENGTH CARRIED ON NEXT SHEET

COMMON TOPOGRAPHIC POINT SYMBOLS

POINT	CODE	DESCRIPTION
	APL	BOUND APPARENT LOCATION
	BM	BENCH MARK
	BND	BOUND
	CB	CATCH BASIN
	COMB	COMBINATION POLE
	DITHR	DROP INLET THROATED DNC
	EL	ELECTRIC POWER POLE
	FPOLE	FLAGPOLE
	GASFIL	GAS FILLER
	GP	GUIDE POST
	GSO	GAS SHUT OFF
	GUY	GUY POLE
	GUYW	GUY WIRE
	GV	GATE VALUE
	H	TREE HARDWOOD
	HCTRL	CONTROL HORIZONTAL
	HVCTRL	CONTROL HORIZ. & VERTICAL
	HYD	HYDRANT
	IP	IRON PIN
	IPIPE	IRON PIPE
	LI	LIGHT - STREET OR YARD
	MB	MAILBOX
	MH	MANHOLE (MH)
	MM	MILE MARKER
	PM	PARKING METER
	PMK	PROJECT MARKER
	POST	POST STONE/WOOD
	RRSIG	RAILROAD SIGNAL
	RRSL	RAILROAD SWITCH LEVER
	S	TREE SOFTWOOD
	SAT	SATELLITE DISH
	SHRUB	SHRUB
	SIGN	SIGN
	STUMP	STUMP
	TEL	TELEPHONE POLE
	TIE	TIE
	TSIGN	SIGN W/DOUBLE POST
	VCTRL	CONTROL VERTICAL
	WELL	WELL
	WSO	WATER SHUT OFF

THESE ARE COMMON VAOT SURVEY POINT SYMBOLS FOR EXISTING FEATURES, ALSO USED FOR PROPOSED FEATURES WITH HEAVIER LINEWEIGHT, IN COMBINATION WITH PROPOSED ANNOTATION.

PROPOSED GEOMETRY CODES

CODE	DESCRIPTION
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
CC	CENTER OF CURVE
PT	POINT OF TANGENCY
PCC	POINT OF COMPOUND CURVE
PRC	POINT OF REVERSE CURVE
POB	POINT OF BEGINNING
POE	POINT OF ENDING
STA	STATION PREFIX
AH	AHEAD STATION SUFFIX
BK	BACK STATION SUFFIX
D	CURVE DEGREE OF (100FT)
R	CURVE RADUIS OF
T	CURVE TANGENT LENGTH
L	CURVE LENGTH OF
E	CURVE EXTERNAL DISTANCE

UTILITY SYMBOLOGY

UNDERGROUND UTILITIES

- UT — TELEPHONE
- UE — ELECTRIC
- UC — CABLE (TV)
- UEC — ELECTRIC+CABLE
- UET — ELECTRIC+TELEPHONE
- UCT — CABLE+TELEPHONE
- UECT — ELECTRIC+CABLE+TELEP.
- G — GAS LINE
- W — WATER LINE
- S — SANITARY SEWER (SEPTIC)

ABOVE GROUND UTILITIES (AERIAL)

- T — TELEPHONE
- E — ELECTRIC
- C — CABLE (TV)
- EC — ELECTRIC+CABLE
- ET — ELECTRIC+TELEPHONE
- AER E&T — ELECTRIC+TELEPHONE
- CT — CABLE+TELEPHONE
- ECT — ELECTRIC+CABLE+TELEP.
- UTILITY POLE GUY WIRE

PROJECT CONSTRUCTION SYMBOLOGY

PROJECT DESIGN & LAYOUT SYMBOLOGY

- CLEAR ZONE
- PLAN LAYOUT MATCHLINE

PROJECT CONSTRUCTION FEATURES

- TOP OF CUT SLOPE
- TOE OF FILL SLOPE
- STONE FILL
- BOTTOM OF DITCH 'L'
- CULVERT PROPOSED
- STRUCTURE SUBSURFACE
- PDF — PDF — PROJECT DEMARCATION FENCE
- BF — BF — BARRIER FENCE
- TREE PROTECTION ZONE (TPZ)
- STRIPING LINE REMOVAL
- SHEET PILES

CONVENTIONAL BOUNDARY SYMBOLOGY

BOUNDARY LINES

- TOWN LINE — TOWN BOUNDARY LINE
- COUNTY LINE — COUNTY BOUNDARY LINE
- STATE LINE — STATE BOUNDARY LINE
- PROPOSED STATE R.O.W. (LIMITED ACCESS)
- PROPOSED STATE R.O.W.
- STATE ROW (LIMITED ACCESS)
- STATE ROW
- TOWN ROW
- PERMANENT EASEMENT LINE (P)
- TEMPORARY EASEMENT LINE (T)
- SURVEY LINE
- PROPERTY LINE (P/L)
- SR SR SR — SLOPE RIGHTS
- 6f — 6f — 6F PROPERTY BOUNDARY
- 4f — 4f — 4F PROPERTY BOUNDARY
- HAZ — HAZ — HAZARDOUS WASTE

EPSC LAYOUT PLAN SYMBOLOGY

EPSC MEASURES

- FILTER CURTAIN
- SILT FENCE
- SILT FENCE WOVEN WIRE
- CHECK DAM
- DISTURBED AREAS REQUIRING RE-VEGETATION
- EROSION MATTING

ENVIRONMENTAL RESOURCES

- WETLAND BOUNDARY
- RIPARIAN BUFFER ZONE
- WETLAND BUFFER ZONE
- SOIL TYPE BOUNDARY
- THREATENED & ENDANGERED SPECIES
- HAZ — HAZ — HAZARDOUS WASTE AREA
- AGRICULTURAL LAND
- FISH & WILDLIFE HABITAT
- FLOOD PLAIN
- ORDINARY HIGH WATER (OHW)
- STORM WATER
- USDA FOREST SERVICE LANDS
- WILDLIFE HABITAT SUIT/CONN

ARCHEOLOGICAL & HISTORIC

- ARCHEOLOGICAL BOUNDARY
- HISTORIC DISTRICT BOUNDARY
- HISTORIC AREA
- (H) HISTORIC STRUCTURE

CONVENTIONAL TOPOGRAPHIC SYMBOLOGY

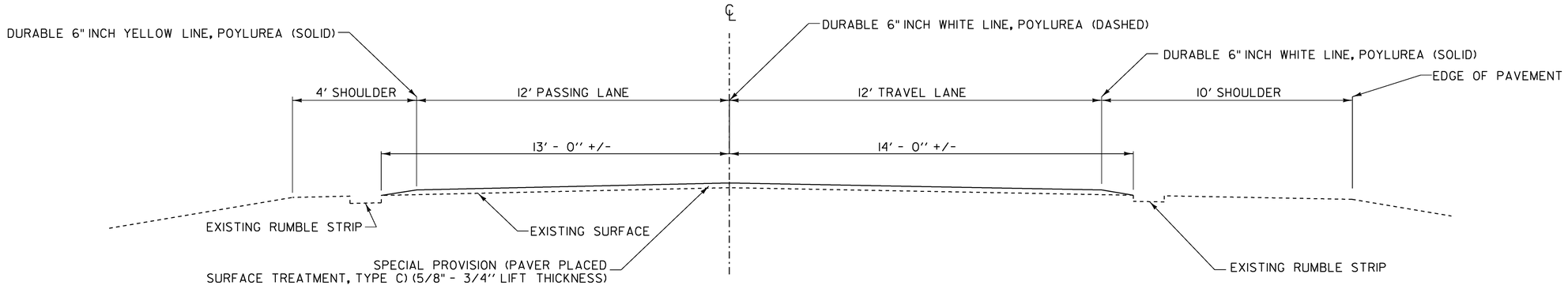
EXISTING FEATURES

- ROAD EDGE PAVEMENT
- ROAD EDGE GRAVEL
- DRIVEWAY EDGE
- DITCH
- FOUNDATION
- FENCE (EXISTING)
- FENCE WOOD POST
- FENCE STEEL POST
- GARDEN
- ROAD GUARDRAIL
- RAILROAD TRACKS
- CULVERT (EXISTING)
- STONE WALL
- WALL
- WOOD LINE
- BRUSH LINE
- HEDGE
- BODY OF WATER EDGE
- LEDGE EXPOSED

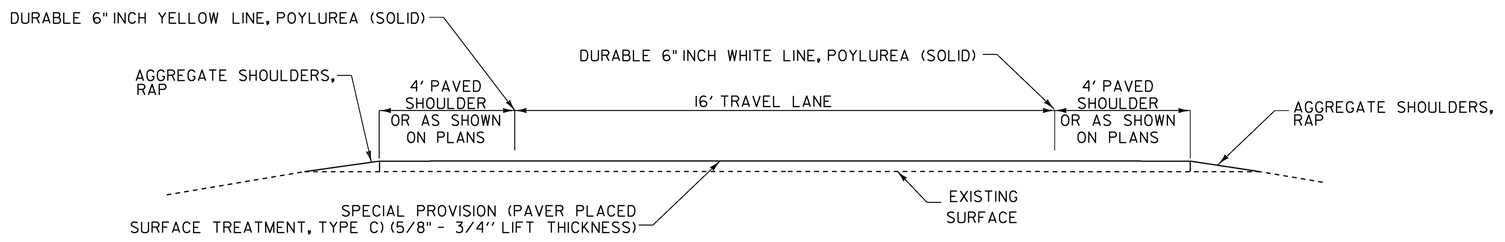
PROJECT NAME: NORWICH - FAIRLEE
PROJECT NUMBER: IM SURF (48)

FILE NAME: 14a144 Norwich-Fairlee.dgn
PROJECT LEADER: J. HARRINGTON
DESIGNED BY: N. PAPPAS
CONVENTIONAL SYMBOLOGY - LEGEND

PLOT DATE: 15-DEC-2014
DRAWN BY: N. PAPPAS
CHECKED BY: J. HARRINGTON
SHEET 2 OF 22



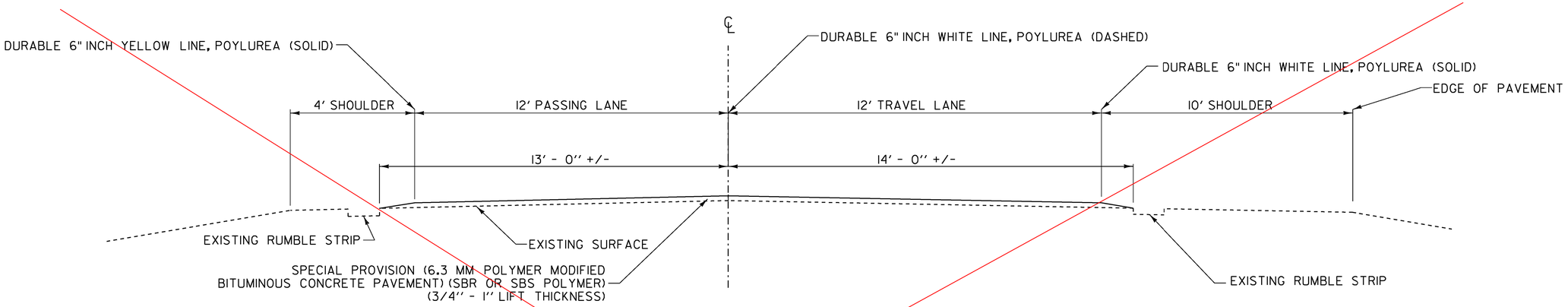
ROADWAY TYPICAL NORMAL SECTION
ALTERNATE A
I-91 NORTHBOUND NORWICH MM 74.810 - FAIRLEE MM 92.500



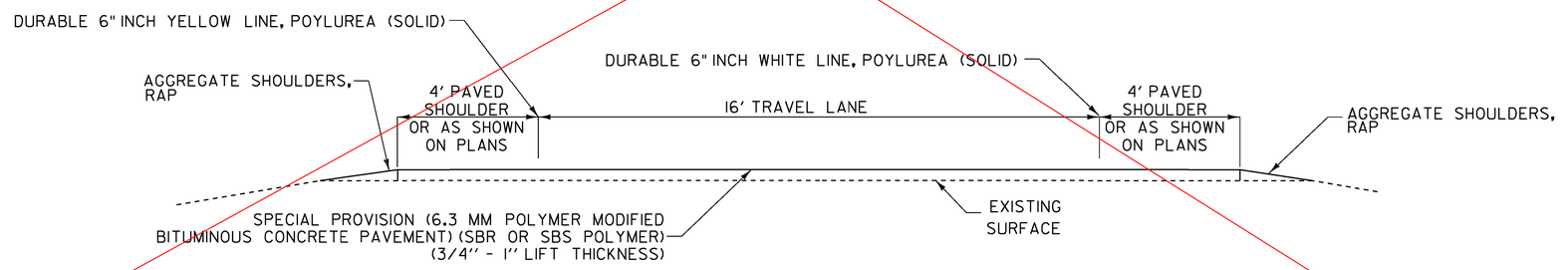
ROADWAY TYPICAL RAMP SECTION
ALTERNATE A

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
TYPICAL SECTION - ALTERNATE A	SHEET 3 OF 22



ROADWAY TYPICAL NORMAL SECTION
ALTERNATE B
I-91 NORTHBOUND NORWICH MM 74.810 – FAIRLEE MM 92.500



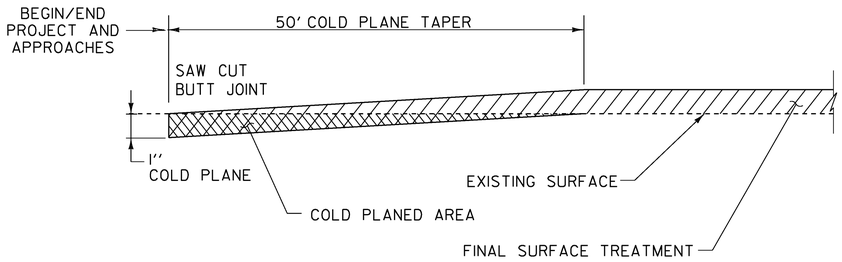
ROADWAY TYPICAL RAMP SECTION
ALTERNATE B

ALTERNATE A USED

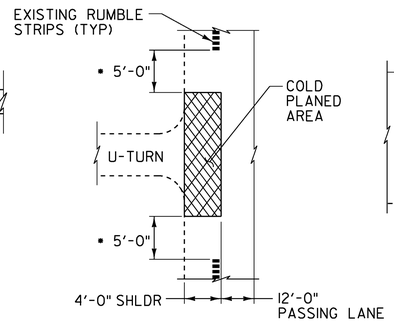
NOTE:
1. PRIOR TO THE PLACEMENT OF THE 6.3 MM POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT, EMULSIFIED ASPHALT SHALL BE APPLIED TO ALL EXISTING PAVEMENT SURFACES AND ON ALL COLD PLANED SURFACES AT A RATE OF 0.080 GAL/SY (+/- 0.01 GAL/SY) OR AS DIRECTED BY THE ENGINEER. EMULSIFIED ASPHALT SHALL BE RS-1H OR CRS-1H PER THE MANUFACTURER'S RECOMMENDATION AND PAID UNDER ITEM 900.683 SPECIAL PROVISION (EMULSIFIED ASPHALT) (RS-1H OR CRS-1H).

NOT TO SCALE

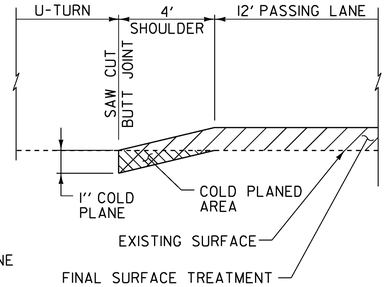
PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 19-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
TYPICAL SECTION - ALTERNATE B	SHEET 4 OF 22



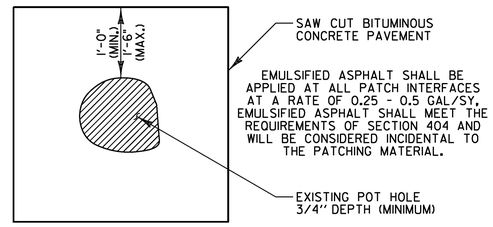
TYPICAL APPROACH AREA DETAIL MAINLINE & RAMPS



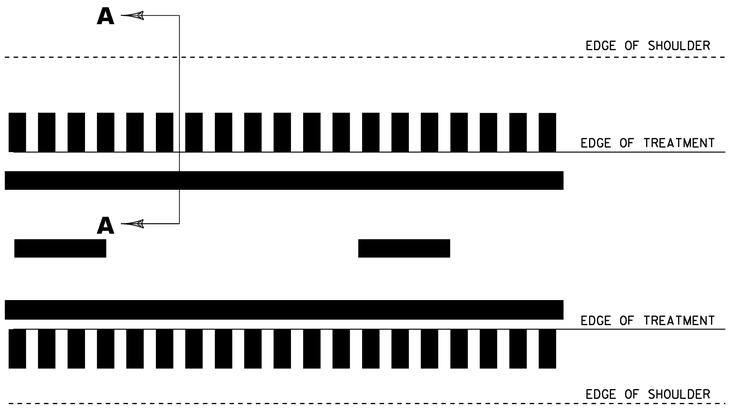
• BEGIN COLD PLANING 5'-0" AFTER RUMBLE STRIPS END, AND END COLD PLANING 5'-0" BEFORE RUMBLE STRIPS BEGIN



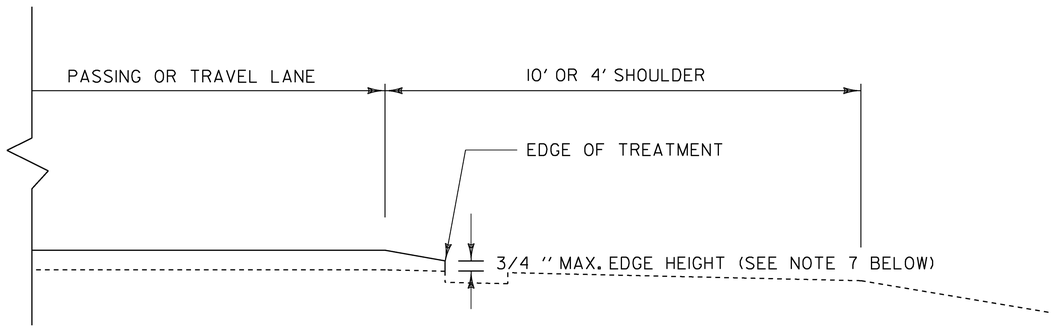
COLD PLANE DETAIL AT U-TURNS



TYPICAL POT HOLE REPAIR



EDGE OF TREATMENT TYPICAL PLAN



EDGE OF TREATMENT TYPICAL SECTION A-A

NOTES:

1. ALL NECESSARY SURFACE PREPARATION INVOLVING PATCHING, POTHOLE REPAIR, AND CRACK-SEALING SHALL BE PERFORMED PRIOR TO APPLICATION OF THE FINAL SURFACE TREATMENT. ALL CRACKS GREATER THAN 0.10'' AND UP TO 1.0'' IN WIDTH SHALL BE SEALED USING THE ''BLOW AND GO'' FILL METHOD. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE PAID FOR UNDER ITEM 417.20, BITUMINOUS CRACK SEALING, ''BLOW AND GO'' METHOD. THE PATCHING OF ALL CRACKS GREATER THAN 1.0'' AND ALL OTHER PATCHING AND POTHOLE REPAIR SHALL BE COMPLETED USING BITUMINOUS CONCRETE PAVEMENT IN ACCORDANCE WITH ITEM 900.680 SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I). AN ESTIMATED QUANTITY FOR THIS ITEM HAS BEEN INCLUDED TO COVER ALL COSTS ASSOCIATED WITH THIS WORK.

2. EXISTING SHOULDER PAVEMENT SURFACES BEYOND THE LIMITS OF THE FINAL SURFACE TREATMENT SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POTHOLE REPAIR TREATMENTS.

3. FOLLOWING COMPLETION OF COLD PLANING, THE MILLED SURFACE FOR ALL BRIDGES TO BE COLD PLANED SHALL ALSO RECEIVE CRACK-SEALING AND RELATED PATCHING AND POTHOLE REPAIR TREATMENTS, AS DIRECTED BY THE ENGINEER.

4. ALL EXISTING PAVEMENT MARKINGS SHALL BE REMOVED PRIOR TO ANY CRACK SEALING BEING PERFORMED AND PRIOR TO APPLYING THE FINAL SURFACE TREATMENT. ALL LANE DELINEATION IS TO BE MAINTAINED DURING CONSTRUCTION BY THE USE OF LINE STRIPING TARGETS OR TEMPORARY PAINT.

5. A 50' COLD PLANED WEDGE SHALL BE CONSTRUCTED AT THE PROJECT BEGIN, PROJECT END, RAMPS, AND AT ALL BRIDGE APPROACHES OR AS DIRECTED BY THE ENGINEER. THE LONGITUDINAL EDGES OF THE SURFACE TREATMENT SHALL BE FEATHERED AS SHOWN ON THE TYPICAL SECTION, OR AS DIRECTED BY THE ENGINEER. ANY SAWCUTTING AT BUTT JOINTS SHALL BE PAID INCIDENTAL TO ITEM 900.675 SPECIAL PROVISION, MICRO-MILLING BITUMINOUS CONCRETE PAVEMENT.

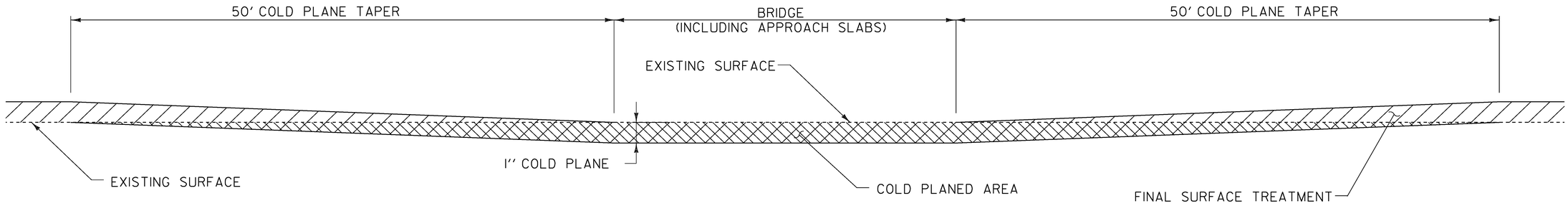
6. THERE ARE R.W.I.S. SENSORS IN THE PAVEMENT AT APPROXIMATE MM 84.270 NORTHBOUND THAT MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CONTACT MARK GERRISH, FIBER OPTIC PROJECT MANAGER, VTRANS OPERATIONS AND MAINTENANCE BUREAU AT 802-461-5570 48 HOURS PRIOR TO BEGINNING ANY WORK IN THIS AREA SO THAT MARK OR HIS REPRESENTATIVE CAN REMOVE THESE SENSORS. INSTALLATION OF NEW SENSORS WILL BE PERFORMED BY OTHERS FOLLOWING COMPLETION OF THE PROJECT. THERE IS A WEIGH IN MOTION SENSOR IN THE PAVEMENT AT APPROXIMATE MM 91.05 NORTHBOUND THAT MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES. INSTALLATION OF NEW SENSORS WILL BE PERFORMED BY OTHERS FOLLOWING COMPLETION OF THE PROJECT.

7. THE SCREED OF THE PAVER SHALL BREAK AT THE BREAK POINT OF THE SHOULDER SUCH THAT THE DESIGNED NOMINAL THICKNESS IS CARRIED ONTO THE SHOULDER AND BROKEN OR PINCHED BY ROLLING. EDGE HEIGHT SHALL BE MEASURED AT A MINIMUM OF FIVE RANDOMLY SPACED POINTS PER TENTH OF A MILE. IF IT IS FOUND THAT THE AVERAGE EDGE HEIGHT IS GREATER THAN 3/4'' OVER THE TENTH OF A MILE, WORK SHALL BE PERFORMED SUCH THAT THE 3/4'' AVERAGE HEIGHT IS ACHIEVED. THIS APPLIES TO BOTH THE 10' AND 4' SHOULDER SIDES OF THE HIGHWAY.

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE
PROJECT NUMBER: IM SURF(48)

FILE NAME: 14a144 Norwich-Fairlee.dgn
PROJECT LEADER: J. HARRINGTON
DESIGNED BY: N. PAPPAS
PROJECT NOTES AND DETAILS
PLOT DATE: 19-DEC-2014
DRAWN BY: N. PAPPAS
CHECKED BY: J. HARRINGTON



BRIDGE COLD PLANE TYPICAL SECTION A – A

LOCATIONS

BRIDGE 48-N	MM 74.834
BRIDGE 49-N	MM 75.841
BRIDGE 51-N	MM 80.217
BRIDGE 55-N	MM 89.266
BRIDGE 56-N	MM 91.539

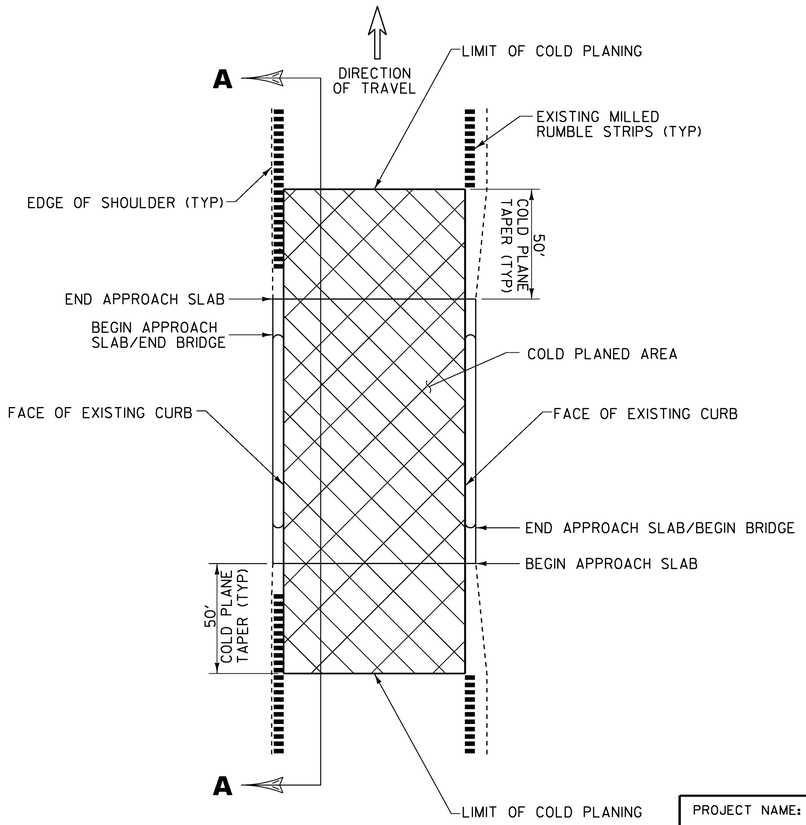
NOTES:

1. REFER TO ASPHALTIC PLUG JOINT DETAIL SHEET, SD-516.10. ALL NEW JOINTS TO BE PAID FOR UNDER ITEM 516.10, "BRIDGE EXPANSION JOINT, ASPHALTIC PLUG."

2. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID DAMAGING DRAINAGE STRUCTURES AND EXPANSION JOINTS. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED BY THE CONTRACTOR AT NO COST TO THE STATE.

3. THE CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID THE ACCUMULATION OF DEBRIS IN THE DRAINAGE STRUCTURES LOCATED AT CURB LINE AND IN THE EXPANSION JOINTS. THE CONTRACTOR SHALL EXAMINE THESE BRIDGE FEATURES ON A DAILY BASIS TO ENSURE THAT DEBRIS HAS NOT ACCUMULATED. ANY DEBRIS WHICH IS PRESENT SHALL BE REMOVED BY THE CONTRACTOR AT NO COST TO THE STATE.

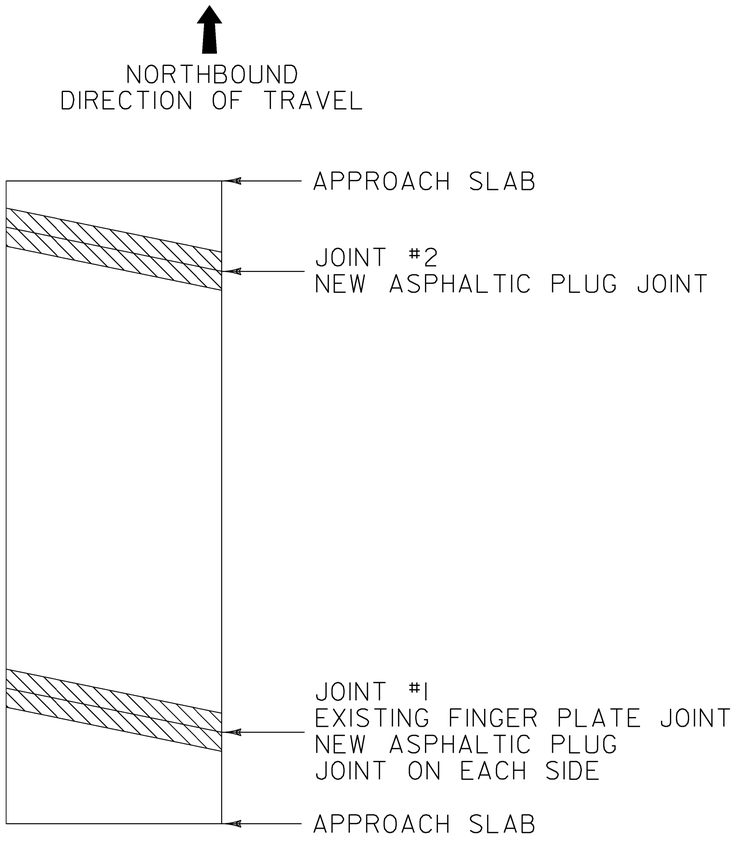
4. THE CONTRACTOR SHALL USE CAUTION WHEN COLD PLANING AND PAVING OPERATIONS OCCUR ON BRIDGE DECKS. SHOULD ANY DAMAGE OCCUR TO THE DECK OR MEMBRANE AS A RESULT OF THESE OPERATIONS THE ENGINEER SHALL CONTACT THE VTRANS CONSTRUCTION STRUCTURES ENGINEER TO PROVIDE AN ASSESSMENT OF THE DAMAGE AND RECOMMEND ANY NECESSARY REPAIRS. THE CONSTRUCTION STRUCTURES ENGINEER WILL ALSO DETERMINE IF THE DAMAGE WAS AVOIDABLE. IF THE CONTRACTOR IS DETERMINED BY THE ENGINEER TO BE AT FAULT FOR THE DAMAGE, THE RECOMMENDED REPAIRS SHALL BE COMPLETED BY THE CONTRACTOR AT NO COST TO THE STATE.



BRIDGE COLD PLANE TYPICAL PLAN

NOT TO SCALE

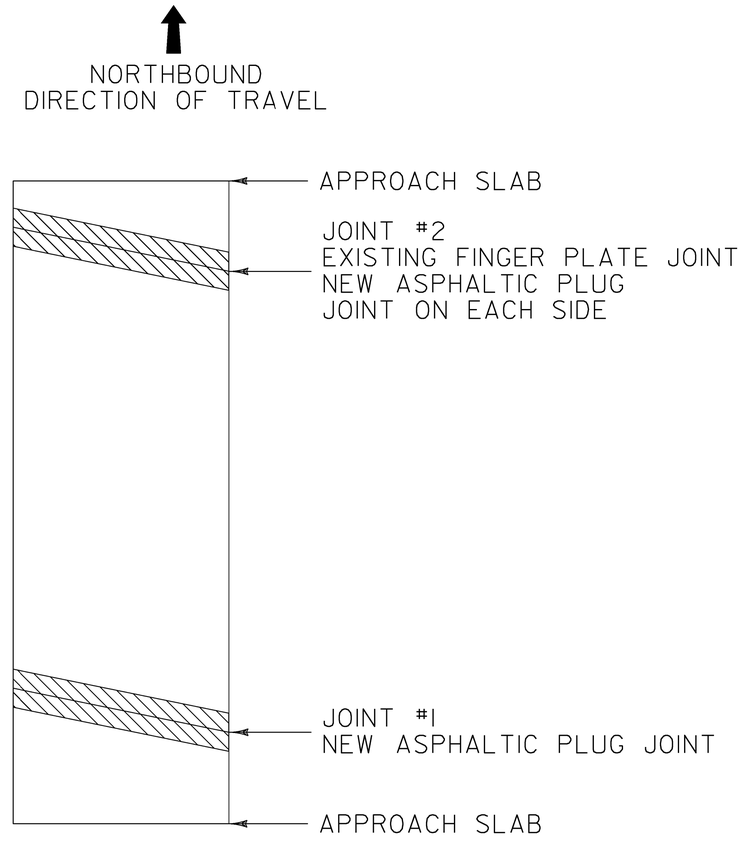
PROJECT NAME:	NORWICH - FAIRLEE
PROJECT NUMBER:	IM SURF(48)
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
BRIDGE DETAIL SHEET 1	SHEET 6 OF 22



BRIDGE 48N

MM 74.834

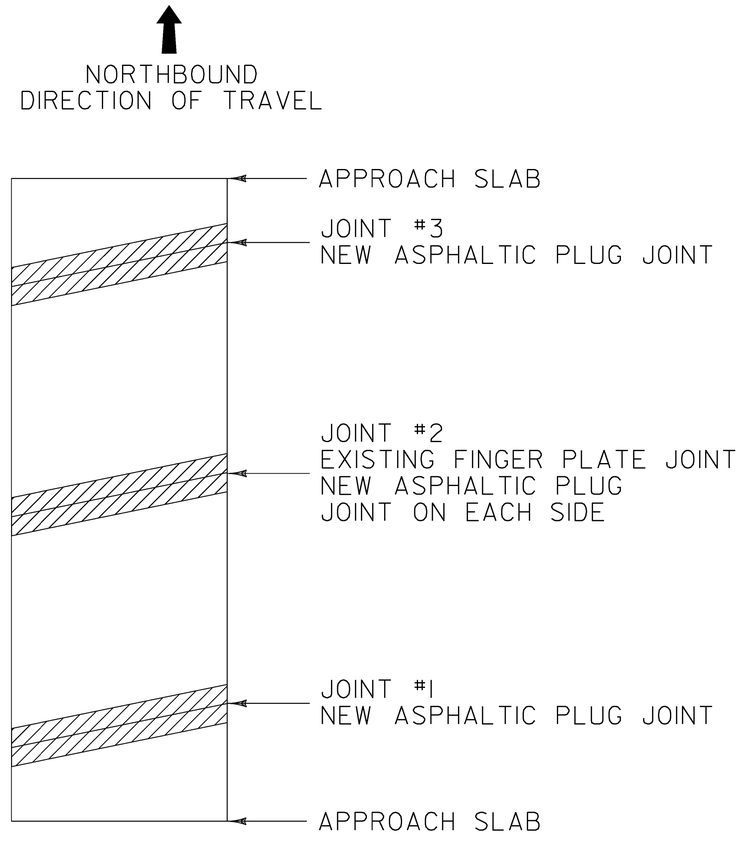
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - ~~40'~~ 41' X 2 = ~~80'~~ 82'
JOINT #2 - ~~40'~~ 41'
TOTAL = ~~120'~~ 123'



BRIDGE 49N

MM 75.841

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - ~~45'~~ 46'
JOINT #2 - 45' X 2 = 90'
TOTAL = ~~135'~~ 136'



BRIDGE 51N

MM 80.217

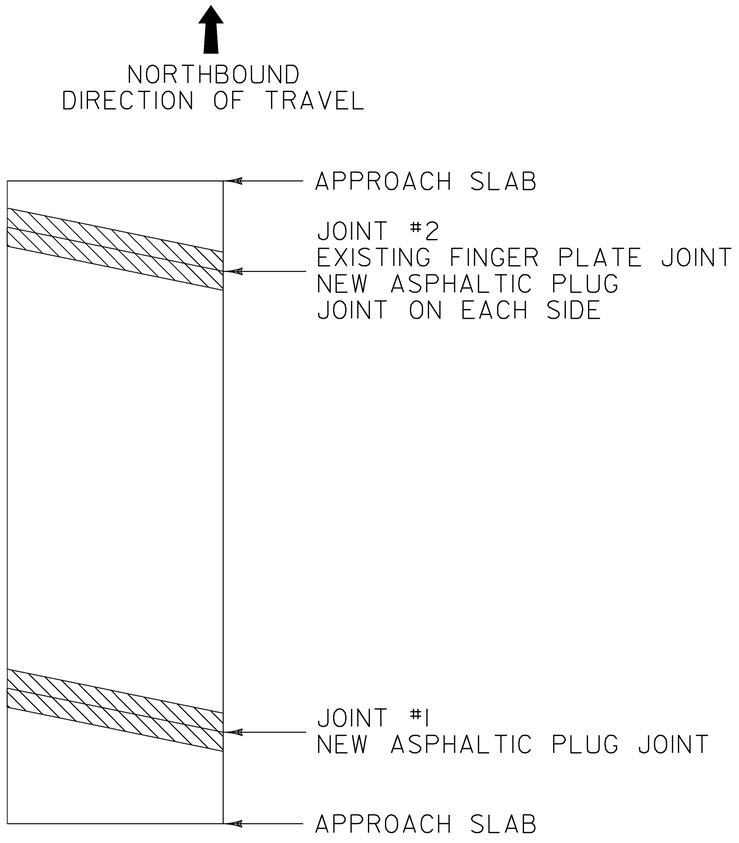
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - ~~40'~~ 41'
JOINT #2 - ~~40'~~ 41' X 2 = ~~80'~~ 82'
JOINT #3 - ~~40'~~ 41'
TOTAL = ~~160'~~ 164'

LEGEND

EXISTING BRIDGE JOINTS TO BE REPAIRED WITH ASPHALTIC PLUG JOINT.

NOT TO SCALE

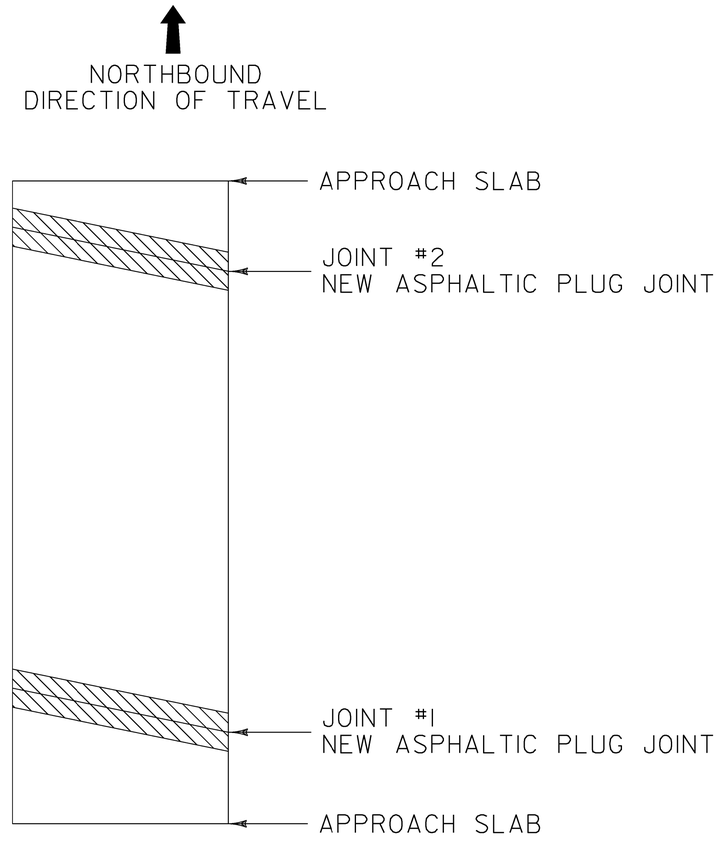
PROJECT NAME:	NORWICH - FAIRLEE
PROJECT NUMBER:	IM SURF(48)
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
BRIDGE DETAIL SHEET 2	SHEET 7 OF 22



BRIDGE 55N

MM 89.266

LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - ~~50'~~ 49.5'
JOINT #2 - ~~50'~~ 49' X 2 = ~~100'~~ 98'
TOTAL = ~~150'~~ 147.5'



BRIDGE 56N

MM 91.539

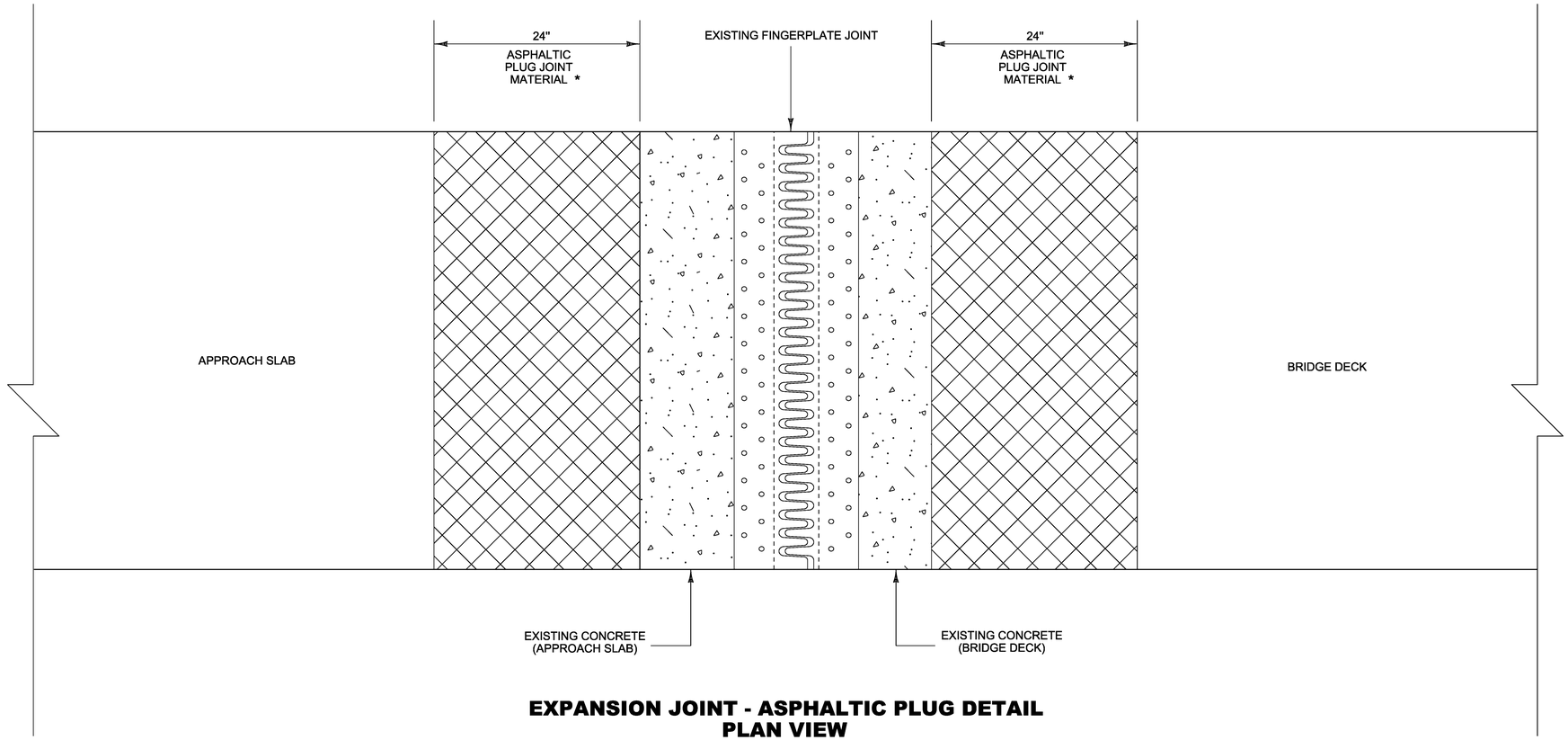
LENGTH OF ASPHALTIC PLUG JOINTS:
JOINT #1 - ~~40'~~ 40.5'
JOINT #2 - ~~40'~~ 40.5'
TOTAL = ~~80'~~ 81'

LEGEND

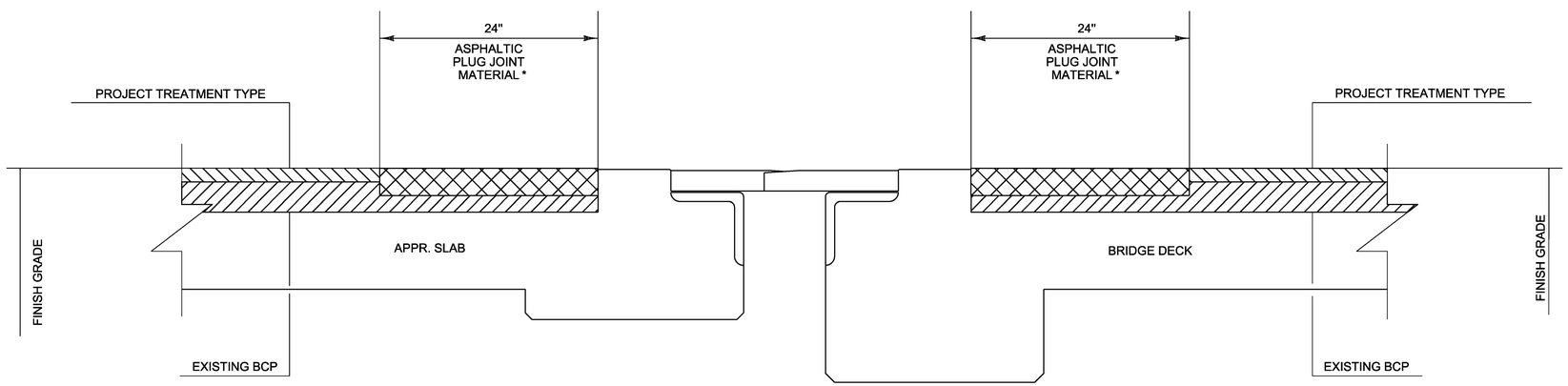
EXISTING BRIDGE JOINTS TO BE REPAIRED WITH ASPHALTIC PLUG JOINT.

NOT TO SCALE

PROJECT NAME:	NORWICH - FAIRLEE
PROJECT NUMBER:	IM SURF(48)
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
BRIDGE DETAIL SHEET 3	SHEET 8 OF 22



EXPANSION JOINT - ASPHALTIC PLUG DETAIL
PLAN VIEW
(FINGER PLATE JOINT)



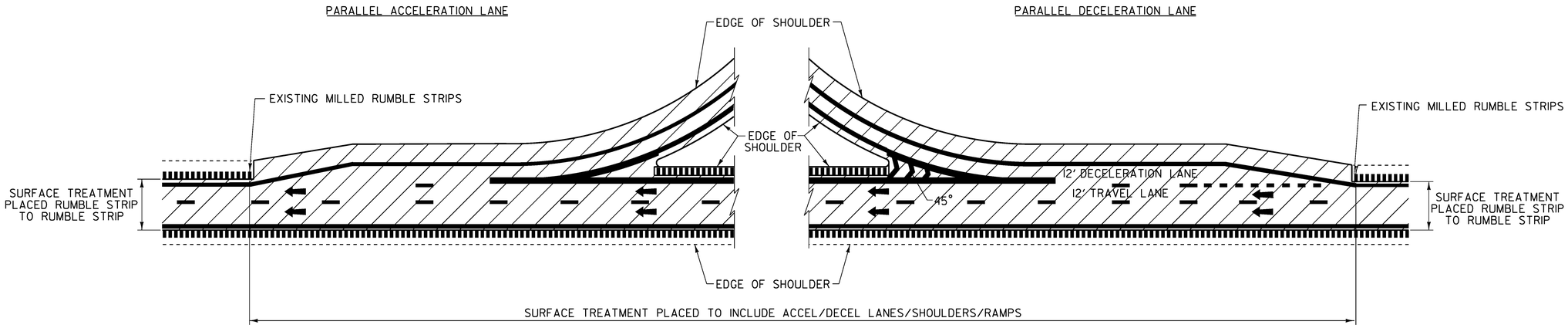
* 2" MINIMUM DEPTH UNLESS OTHERWISE DIRECTED BY THE ENGINEER

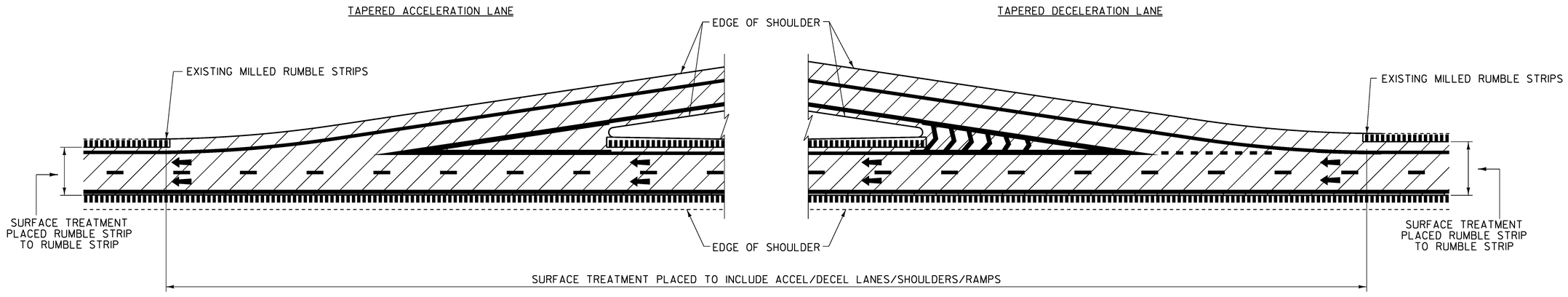
EXPANSION JOINT - ASPHALTIC PLUG DETAIL
CROSS SECTION VIEW
(FINGER PLATE JOINT)

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
BRIDGE DETAIL SHEET 4	SHEET 9 OF 22

TYPICAL INTERCHANGE CONSTRUCTION DETAILS #1





LEGEND

SURFACE TREATMENT

DIRECTION OF TRAFFIC FLOW

EXISTING MILLED RUMBLE STRIPS

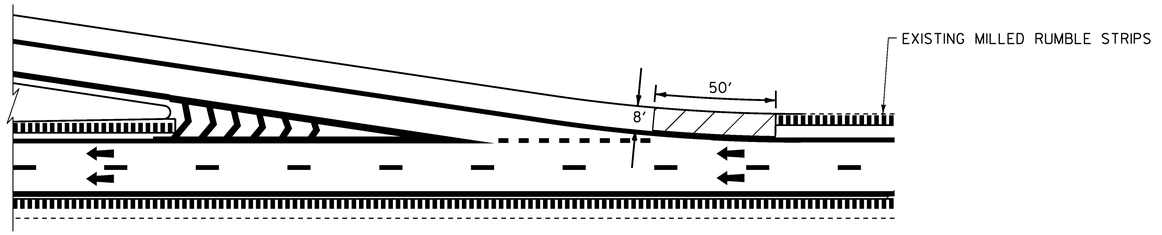
NOTE: LINE STRIPING SHOWN FOR REFERENCE ONLY.

NOT TO SCALE

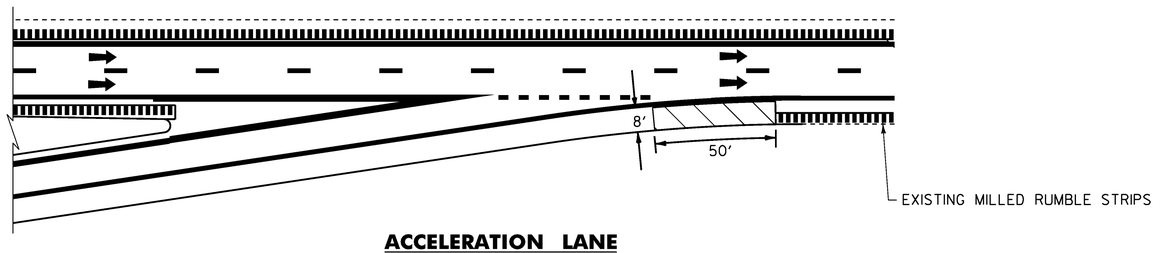
PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
TYPICAL INTERCHANGE CONSTRUCT. DETAIL 1	SHEET 10 OF 22

TYPICAL INTERCHANGE CONSTRUCTION DETAILS # 2

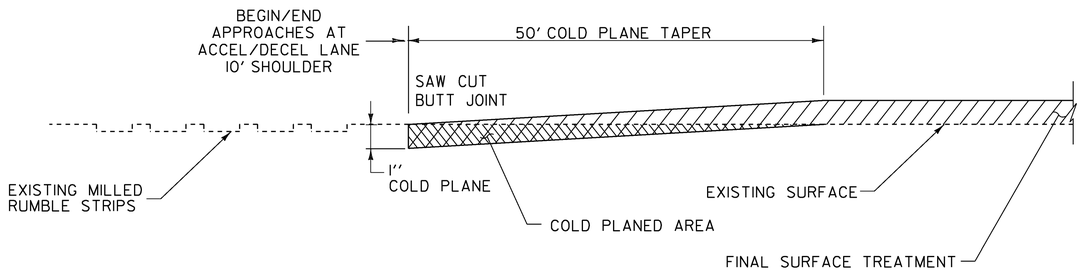
NOT TO SCALE



DECELERATION LANE



ACCELERATION LANE



TYPICAL APPROACH AREA DETAIL AT ACCEL/DECEL LANE 10 FT SHOULDER

LEGEND

AREA TO BE COLD PLANED

DIRECTION OF TRAFFIC FLOW

EXISTING MILLED RUMBLE STRIPS

PROJECT NAME:	NORWICH - FAIRLEE
PROJECT NUMBER:	IM SURF(48)
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
TYPICAL INTERCHANGE CONSTRUCT. DETAIL 2	SHEET 11 OF 22

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 1

SUMMARY OF ESTIMATED QUANTITIES				TOTALS		DESCRIPTIONS			
ROADWAY	BRIDGE	FULL C.E. ITEMS	ROADWAY (ALTERNATE A)	ROADWAY (ALTERNATE B)	GRAND TOTAL	FINAL	UNIT	ITEMS	ITEM NUMBER	ROUND
62200					62200		LF	SHOULDER BERM REMOVAL	203.40	EST
1					1		CY	TRENCH EXCAVATION OF EARTH, EXPLORATORY (N.A.B.I.)	204.22	-
100					100		TON	AGGREGATE SHOULDERS, RAP	402.13	-
1					1		LU	PRICE ADJUSTMENT, ASPHALT CEMENT (N.A.B.I.)	406.50	-
44225					44225		LB	BITUMINOUS CRACK SEALING, "BLOW AND GO" METHOD (AASHTO M 324 (ASTM D 6690) TYPE II)	417.20	EST
	365				365		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG (@ FINGER PLATE/VERMONT JOINT)	516.10	15
	305				305		LF	BRIDGE EXPANSION JOINT, ASPHALTIC PLUG	516.10	10
	100				100		CF	RAPID SETTING CONCRETE REPAIR MATERIAL WITH COARSE AGGREGATE	580.20	EST
100					100		HR	POWER BROOM RENTAL, TYPE I	608.30	EST
200					200		HR	POWER BROOM RENTAL, TYPE II	608.31	EST
200					200		HR	TRUCK RENTAL	608.37	EST
200					200		HR	TRUCK-MOUNTED ATTENUATOR	608.45	EST
100					100		HR	TRUCK-MOUNTED ATTENUATOR, AWV/PV	608.50	EST
600					600		HR	UNIFORMED TRAFFIC OFFICERS	630.10	EST
225					225		HR	FLAGGERS	630.15	EST
		1			1		LS	FIELD OFFICE, ENGINEERS	631.10	-
		1			1		LS	TESTING EQUIPMENT, BITUMINOUS	631.17	-
		3000			3000		DL	FIELD OFFICE TELEPHONE (N.A.B.I.)	631.26	-
1					1		LS	MOBILIZATION/DEMOBILIZATION	635.11	-
1					1		LS	TRAFFIC CONTROL	641.10	-
7					7		EACH	PORTABLE CHANGEABLE MESSAGE SIGN	641.15	EST
127000					127000		LF	DURABLE 6 INCH WHITE LINE, POLYUREA	646.424	-
99000					99000		LF	DURABLE 6 INCH YELLOW LINE, POLYUREA	646.434	-
2900					2900		LF	DURABLE 12 INCH WHITE LINE, POLYUREA	646.464	-
								BEGIN OPTION AA		
100					100		LF	DURABLE 24 INCH STOP BAR, THERMOPLASTIC	646.482	EST
100					100		LF	DURABLE 24 INCH STOP BAR, POLYUREA	646.484	EST
								END OPTION AA		
								BEGIN OPTION BB		
28					28		EACH	DURABLE LETTER OR SYMBOL, THERMOPLASTIC	646.492	-
28					28		EACH	DURABLE LETTER OR SYMBOL, POLYUREA	646.494	-
								END OPTION BB		
127000					127000		LF	TEMPORARY 6 INCH WHITE LINE, PAINT	646.622	-
99000					99000		LF	TEMPORARY 6 INCH YELLOW LINE, PAINT	646.632	-
2900					2900		LF	TEMPORARY 12 INCH WHITE LINE, PAINT	646.662	-
100					100		LF	TEMPORARY 24 INCH STOP BAR, PAINT	646.682	EST
28					28		EACH	TEMPORARY LETTER OR SYMBOL, PAINT	646.692	-
15000					15000		EACH	LINE STRIPING TARGETS	646.76	EST
228500					228500		SF	REMOVAL OF EXISTING PAVEMENT MARKINGS	646.85	EST
1					1		LU	PRICE ADJUSTMENT, FUEL (N.A.B.I.)	690.50	-

DETAILED SUMMARY OF QUANTITIES		
QUANTITIES	UNIT	ITEMS

PROJECT NAME: NORWICH - FAIRLEE
PROJECT NUMBER: IM SURF(48)

FILE NAME: 14a144 Norwich-Fairlee.dgn
PROJECT LEADER: J. HARRINGTON
DESIGNED BY: N. PAPPAS
QUANTITY SHEET 1

PLOT DATE: 15-DEC-2014
DRAWN BY: N. PAPPAS
CHECKED BY: J. HARRINGTON
SHEET 12 OF 22

STATE OF VERMONT
AGENCY OF TRANSPORTATION

QUANTITY SHEET 2

SUMMARY OF ESTIMATED QUANTITIES

ROADWAY	BRIDGE	FULL C.E. ITEMS	ROADWAY (ALTERNATE A)	ROADWAY (ALTERNATE B)
10550				
150				
			315500	
				1
				18500
				2250

TOTALS

GRAND TOTAL	FINAL
10550	
150	
315500	
1	
18500	
2250	

DESCRIPTIONS

UNIT	ITEMS	ITEM NUMBER	ROUND
SY	SPECIAL PROVISION (MIRCO-MILLING BITUMINOUS CONCRETE PAVEMENT)	900.675	160
TON	SPECIAL PROVISION (BITUMINOUS CONCRETE PAVEMENT SURFACE PREPARATION, TYPE I)	900.680	EST
	BEGIN ALTERNATE ZA1		
SY	SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)	900.675	1512
	END ALTERNATE ZA1		
	BEGIN ALTERNATE ZA2		
LU	AIR VOIDS PAY ADJUSTMENT (N.A.B.I.)	490.31	-
TON	SPECIAL PROVISION (6.3 MM POLYMER MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)	900.680	191
CWT	SPECIAL PROVISION (EMULSIFIED ASPHALT)(RS-1H OR CRS-1H)	900.683	137
	END ALTERNATE ZA2		

DETAILED SUMMARY OF QUANTITIES

QUANTITIES	UNIT	ITEMS
		SPECIAL PROVISION (MICRO-MILLING BITUMINOUS CONCRETE PAVEMENT)
422	SY	MAINLINE BEGIN AND END PROJECT
662	SY	U TURNS
1687	SY	BRIDGE 48-N AND APPROACHES
2177	SY	BRIDGE 49-N AND APPROACHES
1898	SY	BRIDGE 51-N AND APPROACHES
1369	SY	BRIDGE 55-N AND APPROACHES
1508	SY	BRIDGE 56-N AND APPROACHES
133	SY	EXIT 13 DECEL LANE
267	SY	EXIT 14 DECEL/ACCEL LANES
267	SY	EXIT 15 DECEL/ACCEL LANES
160	SY	ROUNDING
10550	SY	TOTAL
		ALTERNATE (ZA1)
		SPECIAL PROVISION (PAVER PLACED SURFACE TREATMENT, TYPE C)
280,210	SY	MAINLINE
4,294	SY	EXIT 13 ON RAMP
4,984	SY	EXIT 14 OFF RAMP
16,164	SY	EXIT 14 ON RAMP
4,182	SY	EXIT 15 OFF RAMP
4,154	SY	EXIT 15 ON RAMP
1512	SY	ROUNDING
315,500	SY	TOTAL
		ALTERNATE (ZA2)
		SPECIAL PROVISION (6.3MM POLYMER-MODIFIED BITUMINOUS CONCRETE PAVEMENT)(SBR OR SBS POLYMER)
16,339	TONS	MAINLINE
250	TONS	EXIT 13 ON RAMP
291	TONS	EXIT 14 OFF RAMP
943	TONS	EXIT 14 ON RAMP
244	TONS	EXIT 15 OFF RAMP
242	TONS	EXIT 15 ON RAMP
191	TONS	ROUNDING
18,500	TONS	TOTAL

PROJECT NAME: NORWICH - FAIRLEE
PROJECT NUMBER: IM SURF(48)

FILE NAME: 14a144 Norwich-Fairlee.dgn
PROJECT LEADER: J. HARRINGTON
DESIGNED BY: N. PAPPAS
QUANTITY SHEET 2

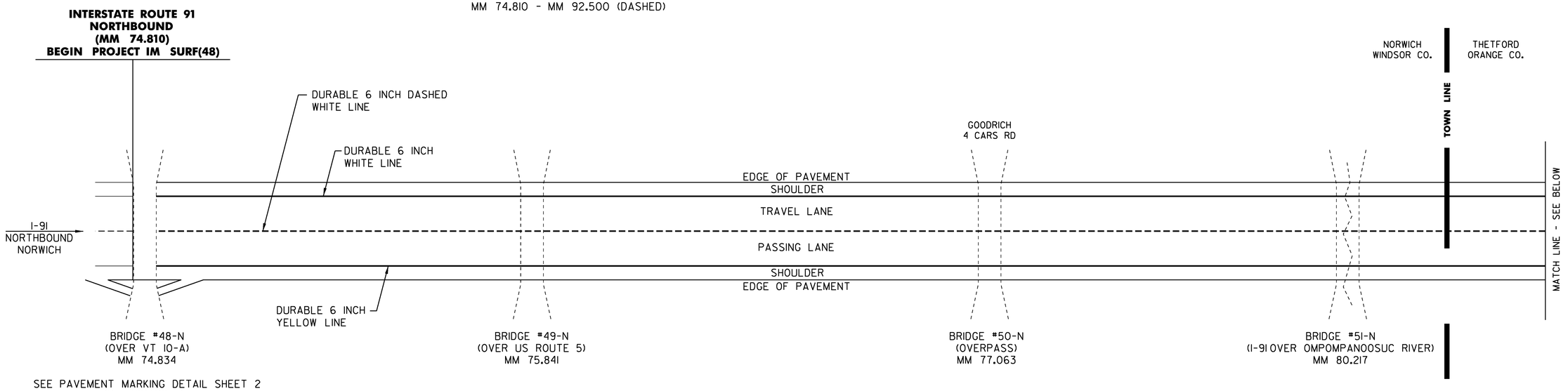
PLOT DATE: 19-DEC-2014
DRAWN BY: N. PAPPAS
CHECKED BY: J. HARRINGTON
SHEET 13 OF 22

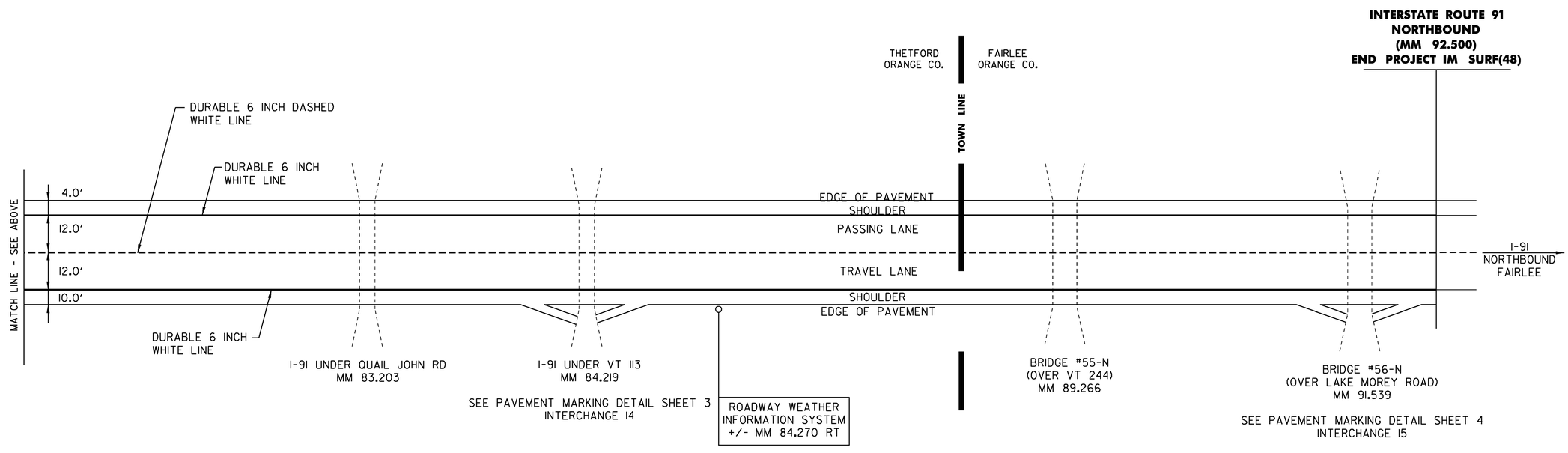
TEMPORARY 6 INCH WHITE LINE, PAINT
MM 74.810 - MM 92.500 (SOLID RT)
MM 74.810 - MM 92.500 (DASHED)

DURABLE 6 INCH WHITE LINE, POLYUREA
MM 74.810 - MM 92.500 (SOLID RT)
MM 74.810 - MM 92.500 (DASHED)

TEMPORARY 6 INCH YELLOW LINE, PAINT
MM 74.810 - MM 92.500 (SOLID LT)

DURABLE 6 INCH YELLOW LINE, POLYUREA
MM 74.810 - MM 92.500 (SOLID LT)





NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
PAVEMENT MARKING DETAIL SHEET 1	SHEET 14 OF 22

TEMPORARY 6 INCH YELLOW LINE, PAINT
EXIT 13
NB ON RAMP STA 0+00 TO 7+90 SOLID LT

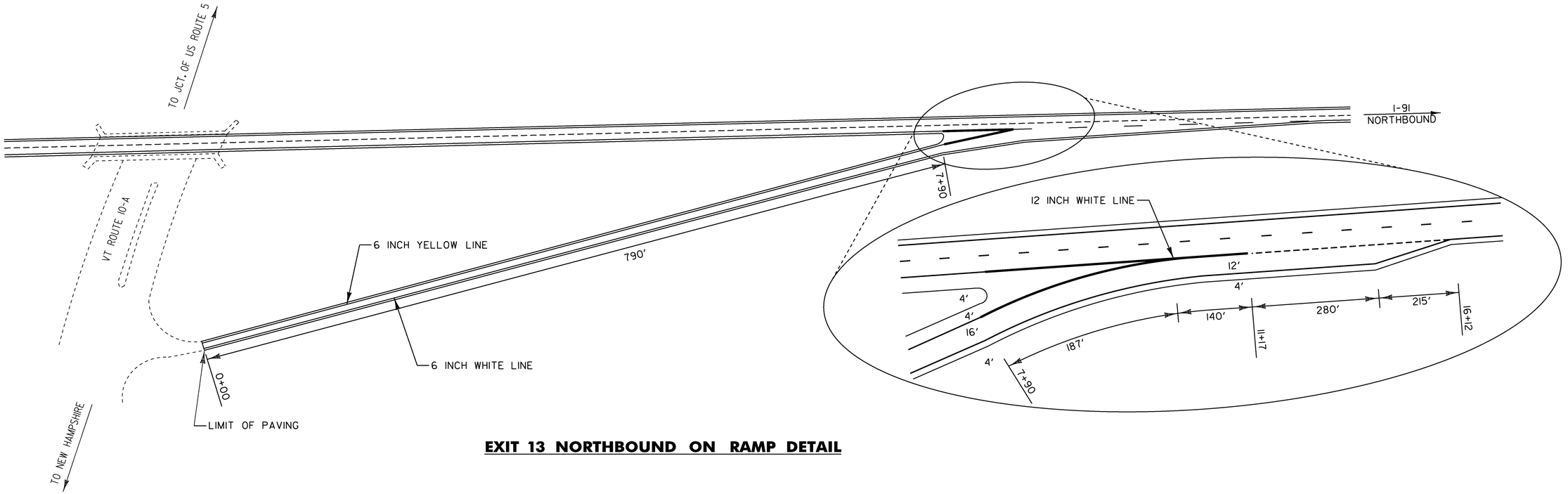
DURABLE 6 INCH YELLOW LINE, POLYUREA
EXIT 13
NB ON RAMP STA 0+00 TO 7+90 SOLID LT

TEMPORARY 6 INCH WHITE LINE, PAINT
EXIT 13
NB ON RAMP STA 0+00 TO 16+12 SOLID RT
NB ON RAMP STA 11+17 TO 16+12 LT DOTTED LANE LINE

DURABLE 6 INCH WHITE LINE, POLYUREA
EXIT 13
NB ON RAMP STA 0+00 TO 16+12 SOLID RT
NB ON RAMP STA 11+17 TO 16+12 LT DOTTED LANE LINE

TEMPORARY 12 INCH WHITE LINE, PAINT
EXIT 13
NB ON RAMP STA 7+90 TO 11+17 SOLID LT

DURABLE 12 INCH WHITE LINE, POLYUREA
EXIT 13
NB ON RAMP STA 7+90 TO 11+17 SOLID LT



EXIT 13 NORTHBOUND ON RAMP DETAIL

NOTE: SEE PAVEMENT MARKING DETAIL SHEET 5 FOR ADDITIONAL MARKING DETAILS

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
PAVEMENT MARKING DETAIL SHEET 2	SHEET 15 OF 22

TEMPORARY 6 INCH YELLOW LINE, PAINT
EXIT 14
NB OFF RAMP STA 9+40 TO 18+70 SOLID LT
NB ON RAMP STA 0+00 TO 11+00 SOLID LT

DURABLE 6 INCH YELLOW LINE, POLYUREA
EXIT 14
NB OFF RAMP STA 9+40 TO 18+70 SOLID LT
NB ON RAMP STA 0+00 TO 11+00 SOLID LT

TEMPORARY 6 INCH WHITE LINE, PAINT
EXIT 14
NB OFF RAMP STA 0+00 TO 17+55 LT DOTTED LANE LINE
NB OFF RAMP STA 0+00 TO 18+70 SOLID RT
NB ON RAMP STA 0+00 TO 19+05 SOLID RT
NB ON RAMP STA 11+00 TO 13+30 LT DOTTED LANE LINE

DURABLE 6 INCH WHITE LINE, POLYUREA
EXIT 14
NB OFF RAMP STA 0+00 TO 17+55 LT DOTTED LANE LINE
NB OFF RAMP STA 0+00 TO 18+70 SOLID RT
NB ON RAMP STA 0+00 TO 19+05 SOLID RT
NB ON RAMP STA 11+00 TO 13+30 LT DOTTED LANE LINE

TEMPORARY 12 INCH WHITE LINE, PAINT
EXIT 14
MAINLINE (GORE STRIPES) SOLID LT
NB OFF RAMP STA 7+55 TO 9+40 SOLID LT (GORE)
NB ON RAMP STA 11+00 TO 13+30 SOLID LT (GORE)

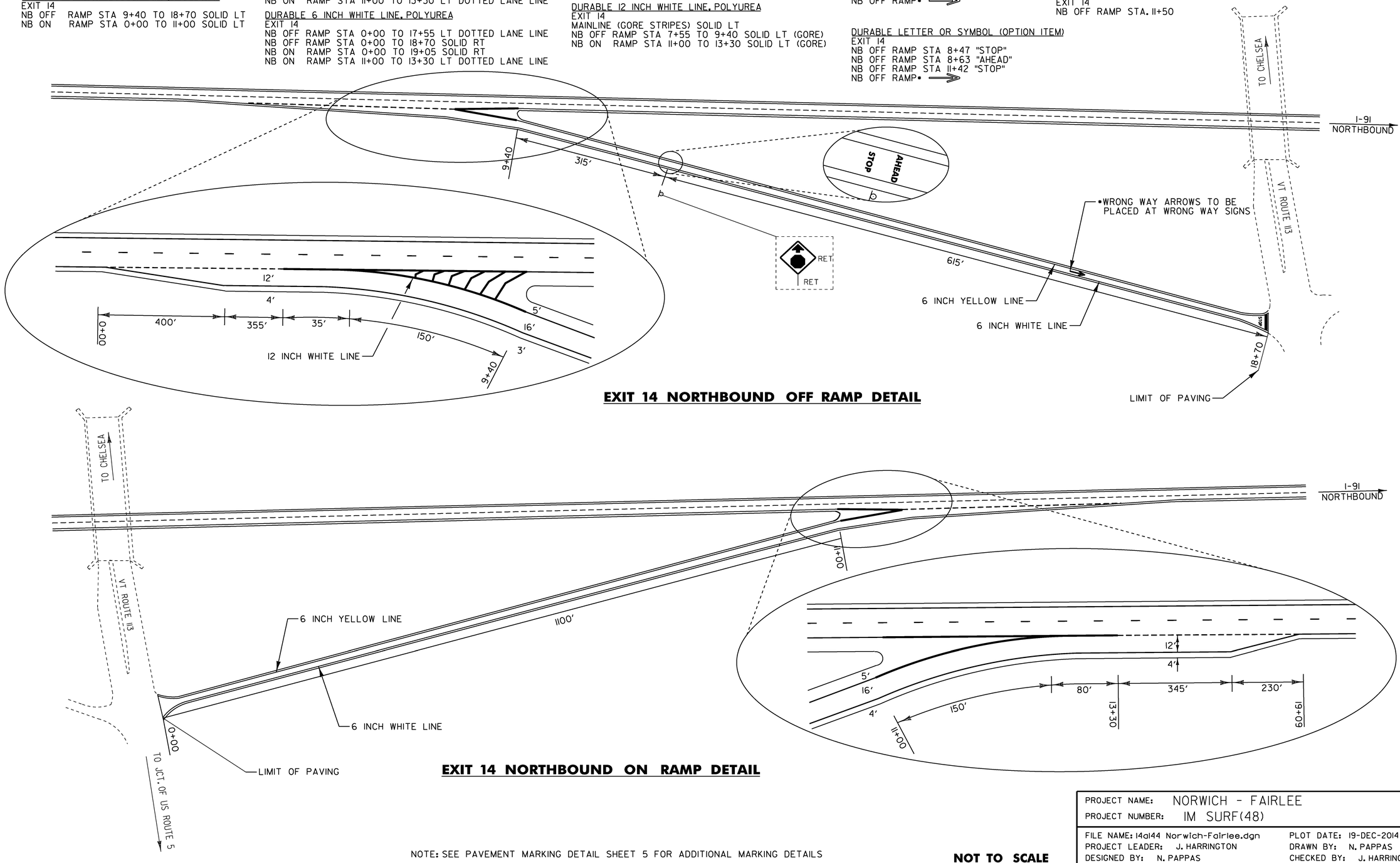
DURABLE 12 INCH WHITE LINE, POLYUREA
EXIT 14
MAINLINE (GORE STRIPES) SOLID LT
NB OFF RAMP STA 7+55 TO 9+40 SOLID LT (GORE)
NB ON RAMP STA 11+00 TO 13+30 SOLID LT (GORE)

TEMPORARY LETTER OR SYMBOL, PAINT
EXIT 14
NB OFF RAMP STA 8+47 "STOP"
NB OFF RAMP STA 8+63 "AHEAD"
NB OFF RAMP STA 11+42 "STOP"
NB OFF RAMP•

DURABLE LETTER OR SYMBOL (OPTION ITEM)
EXIT 14
NB OFF RAMP STA 8+47 "STOP"
NB OFF RAMP STA 8+63 "AHEAD"
NB OFF RAMP STA 11+42 "STOP"
NB OFF RAMP•

TEMPORARY 24 INCH STOP BAR, PAINT
EXIT 14
NB OFF RAMP STA. 11+50

DURABLE 24 INCH STOP BAR (OPTION ITEM)
EXIT 14
NB OFF RAMP STA. 11+50



EXIT 14 NORTHBOUND OFF RAMP DETAIL

EXIT 14 NORTHBOUND ON RAMP DETAIL

NOTE: SEE PAVEMENT MARKING DETAIL SHEET 5 FOR ADDITIONAL MARKING DETAILS

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 19-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
PAVEMENT MARKING DETAIL SHEET 3	SHEET 16 OF 22

TEMPORARY 6 INCH YELLOW LINE, PAINT
EXIT 15
NB OFF RAMP STA 6+75 TO 15+70 SOLID LT
NB ON RAMP STA 0+00 TO 15+60 SOLID LT

DURABLE 6 INCH YELLOW LINE, POLYUREA
EXIT 15
NB OFF RAMP STA 6+75 TO 15+70 SOLID LT
NB ON RAMP STA 0+00 TO 15+60 SOLID LT

TEMPORARY 6 INCH WHITE LINE, PAINT
EXIT 15
NB OFF RAMP STA 0+00 TO 4+25 LT DOTTED LANE LINE
NB OFF RAMP STA 0+00 TO 15+70 SOLID RT
NB ON RAMP STA 0+00 TO 15+60 SOLID RT
NB ON RAMP STA 8+95 TO 15+60 RT DOTTED LANE LINE

DURABLE 6 INCH WHITE LINE, POLYUREA
EXIT 15
NB OFF RAMP STA 0+00 TO 4+25 LT DOTTED LANE LINE
NB OFF RAMP STA 0+00 TO 15+70 SOLID RT
NB ON RAMP STA 0+00 TO 15+60 SOLID RT
NB ON RAMP STA 8+95 TO 15+60 RT DOTTED LANE LINE

TEMPORARY 12 INCH WHITE LINE, PAINT
EXIT 15
MAINLINE (GORE STRIPES) SOLID LT
NB OFF RAMP STA 4+65 TO 6+75 SOLID LT
NB ON RAMP STA 4+50 TO 8+95 SOLID LT

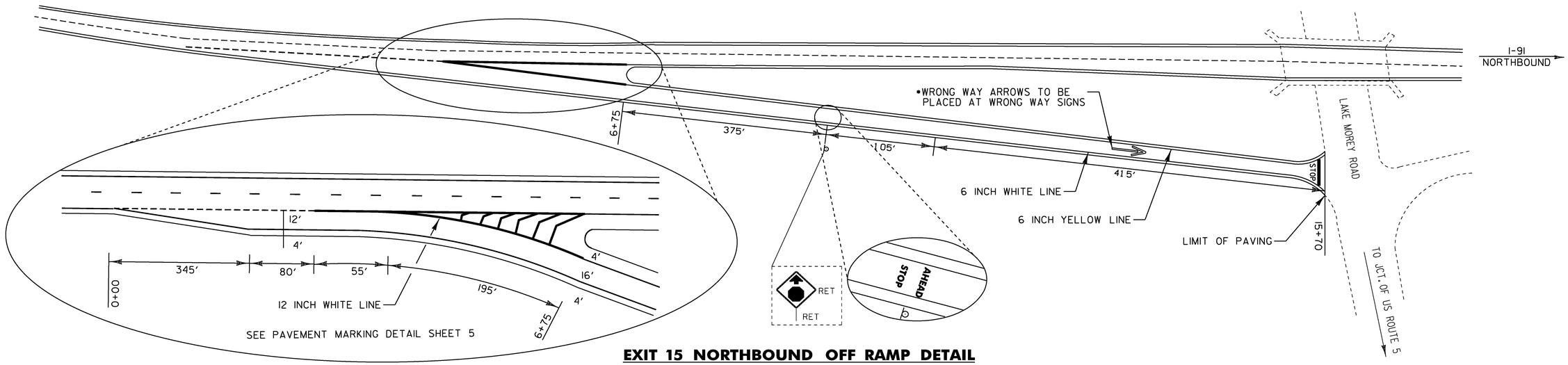
DURABLE 12 INCH WHITE LINE, POLYUREA
EXIT 15
MAINLINE (GORE STRIPES) SOLID LT
NB OFF RAMP STA 4+65 TO 6+75 SOLID LT
NB ON RAMP STA 4+50 TO 8+95 SOLID LT

TEMPORARY LETTER OR SYMBOL, PAINT
EXIT 15
NB OFF RAMP STA 10+42 - "STOP"
NB OFF RAMP STA 10+58 - "AHEAD"
NB OFF RAMP STA 15+56 - "STOP"
NB OFF RAMP• ⟹

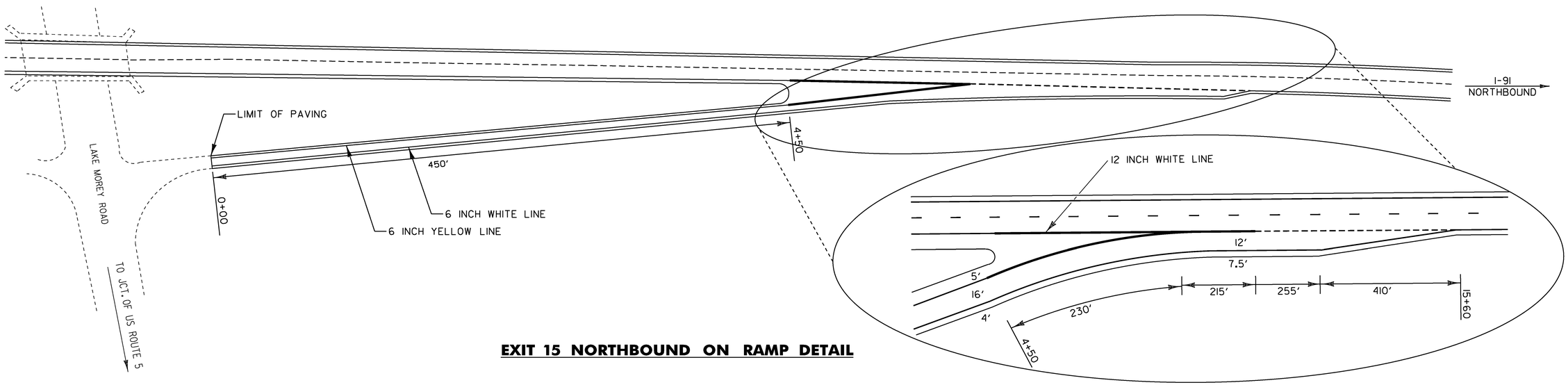
DURABLE LETTER OR SYMBOL (OPTION ITEM)
EXIT 15
NB OFF RAMP STA 10+42 - "STOP"
NB OFF RAMP STA 10+58 - "AHEAD"
NB OFF RAMP STA 15+56 - "STOP"
NB OFF RAMP• ⟹

TEMPORARY 24 INCH STOP BAR, PAINT
EXIT 15
NB OFF RAMP STA 15+62

DURABLE 24 INCH STOP BAR (OPTION ITEM)
EXIT 15
NB OFF RAMP STA 15+62



EXIT 15 NORTHBOUND OFF RAMP DETAIL

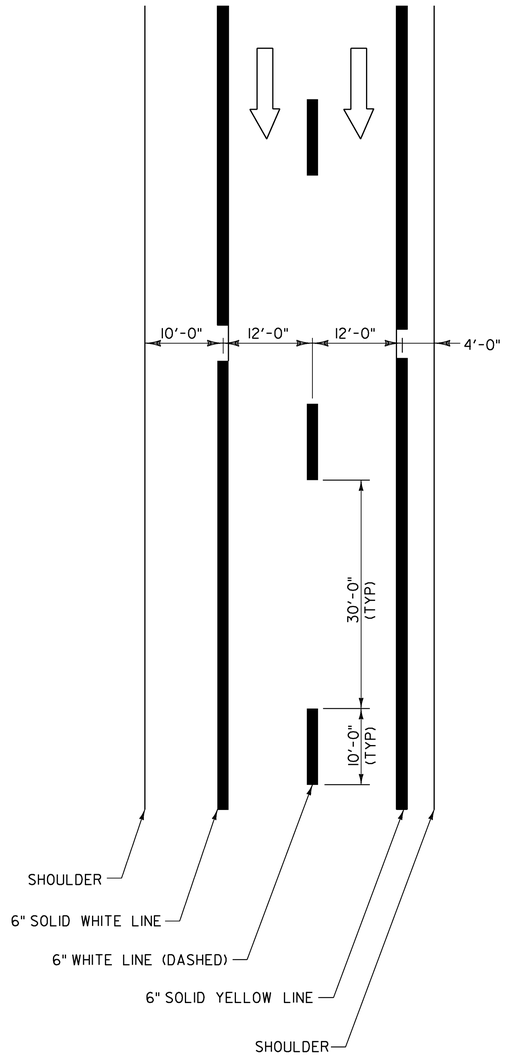


EXIT 15 NORTHBOUND ON RAMP DETAIL

NOTE: SEE PAVEMENT MARKING DETAIL SHEET 5 FOR ADDITIONAL MARKING DETAILS

NOT TO SCALE

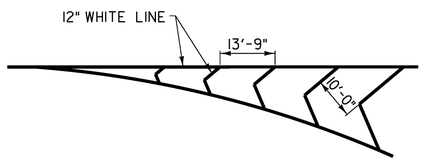
PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 19-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
PAVEMENT MARKING DETAIL SHEET 4	SHEET 17 OF 22



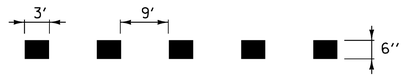
TYPICAL MAINLINE MARKING PLAN
NOT TO SCALE

LEGEND

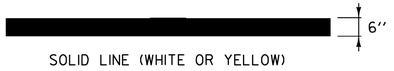
DIRECTION OF TRAFFIC FLOW



GORE MARKING DETAIL
NOT TO SCALE



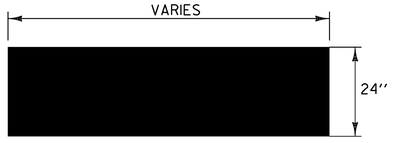
DOTTED LINE (WHITE)



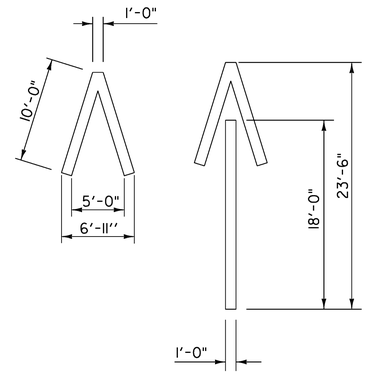
SOLID LINE (WHITE OR YELLOW)

CHANNELIZING LINE (WHITE)

PAVEMENT MARKING LINE DETAILS
NOT TO SCALE



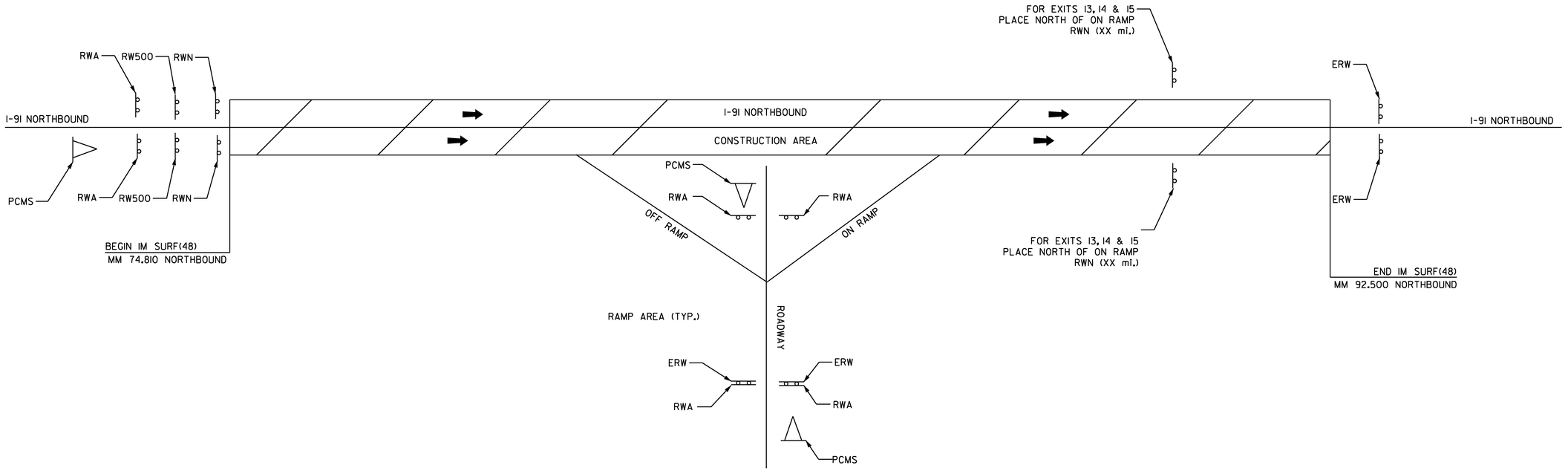
STOP BAR DETAIL
NOT TO SCALE



WRONG WAY ARROW
NOT TO SCALE
MARKINGS TO BE PLACED AT EXISTING WRONG WAY SIGN

NOT TO SCALE

PROJECT NAME: NORWICH - FAIRLEE	
PROJECT NUMBER: IM SURF(48)	
FILE NAME: 14a144 Norwich-Fairlee.dgn	PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON	DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
PAVEMENT MARKING DETAIL SHEET 5	SHEET 18 OF 22



TOWN/STATE HIGHWAY NAME	ROAD WORK AHEAD	END ROAD WORK	ROAD WORK 500'	ROAD WORK NEXT XX MILES	PCMS
I-91 NORTHBOUND					
BEGINNING OF PROJECT	2		2	2	1
EXIT 13 INTERCHANGE	4	2		2	2
EXIT 14 INTERCHANGE	4	2		2	2
EXIT 15 INTERCHANGE	4	2		2	2
END OF PROJECT		2			
TOTAL	14	8	2	8	7

LEGEND

RWA = ROAD WORK AHEAD
RW500 = ROAD WORK IN 500 FEET
RWN = ROAD WORK NEXT (XX MILES)
ERW = END ROAD WORK

= PORTABLE CHANGEABLE MESSAGE SIGN

= WORK AREA

= DIRECTION OF TRAFFIC FLOW

PROJECT NAME: NORWICH - FAIRLEE
PROJECT NUMBER: IM SURF(48)

FILE NAME: 14a144 Norwich-Fairlee.dgn PLOT DATE: 15-DEC-2014
PROJECT LEADER: J. HARRINGTON DRAWN BY: N. PAPPAS
DESIGNED BY: N. PAPPAS CHECKED BY: J. HARRINGTON
CONSTRUCTION APPROACH SIGNING SHEET 19 OF 22

1. THE CONTRACTOR SHALL SUBMIT A SITE SPECIFIC TRAFFIC CONTROL PLAN TO THE ENGINEER FOR APPROVAL PRIOR TO THE START OF CONSTRUCTION. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, "TRAFFIC CONTROL".

2. THE 2009 MUTCD, WITH REVISIONS SHALL BE THE STANDARD FOR ALL TRAFFIC CONTROL DEVICES. EXISTING SIGNS, SIGNALS AND MARKINGS SHALL BE VALID UNTIL SUCH TIME AS THEY ARE REPLACED OR RECONSTRUCTED. WHEN NEW TRAFFIC CONTROL DEVICES ARE ERECTED OR PLACED OR EXISTING TRAFFIC CONTROL DEVICES ARE REPLACED OR REPAIRED THE EQUIPMENT, DESIGN, METHOD OF INSTALLATION, PLACEMENT OR REPAIR SHALL CONFORM WITH THE MUTCD.

3. ADDITIONAL RAMP SIGNING MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.

4. THE BID PRICE FOR ''TRAFFIC CONTROL'', ITEM 641.10, SHALL INCLUDE ALL APPROACH AND ON-PROJECT CONSTRUCTION SIGNING, PORTABLE ARROW BOARDS, BARRIERS, BARRELS, CONES, BARRICADES, TEMPORARY REGULATORY AND WARNING SIGNS, AND POSTS AS DETAILED IN VAOT STANDARDS. ALL ADJUSTING, RELOCATING, AND REMOVING OF THESE DEVICES AS DIRECTED BY THE ENGINEER SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS WILL BE PAID FOR SEPARATELY:

   630.10 AND 630.15 - UNIFORMED TRAFFIC OFFICERS AND FLAGGERS
   646.622 TEMPORARY 6 INCH WHITE LINE, PAINT
   646.632 TEMPORARY 6 INCH YELLOW LINE, PAINT
   646.662 TEMPORARY 12 INCH WHITE LINE, PAINT
   646.682 TEMPORARY 24 INCH STOP BAR, PAINT
   646.692 TEMPORARY LETTER OR SYMBOL, PAINT
   646.76 LINE STRIPING TARGETS

5. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHALL BE PROVIDED FOR USE ALONG THIS PROJECT. THE PLACEMENT OF THESE UNITS AS WELL AS THE MESSAGE WILL BE APPROVED BY THE ENGINEER. THESE SIGNS WILL BE PAID FOR UNDER ITEM 641.15, ''PORTABLE CHANGEABLE MESSAGE SIGN''.

   PCMS SHOULD NOT REPLACE ANY OF THE SIGNING DETAILED IN THE MUTCD AND SHOULD NOT BE USED IF STANDARD TRAFFIC CONTROL DEVICES ADEQUATELY PROVIDE THE INFORMATION THE MOTORISTS NEED TO TRAVEL SAFELY.

   THE PCMS SHALL CONSIST OF EITHER ONE OR TWO PHASES. TYPICALLY, A PHASE SHALL CONSIST OF UP TO THREE LINES OF EIGHT CHARACTERS PER LINE. THE PCMS SHOULD BE USED AS A SUPPLEMENT AND NOT AS A SUBSTITUTE FOR CONVENTIONAL SIGNS AND PAVEMENT MARKINGS.

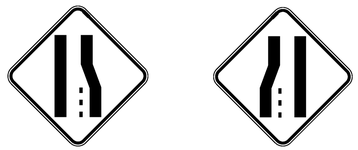
   THE PCMS SHOULD COMMUNICATE WHAT INFORMATION MOTORISTS NEED TO KNOW. UNNECESSARY INFORMATION SHOULD BE AVOIDED. MESSAGES SHOULD BE UPDATED PERIODICALLY TO DESCRIBE THE WORK ACTIVITY OCCURRING SO THAT THE PCMS CONTINUES TO COMMAND THE ATTENTION OF MOTORISTS.

6. THE CONTRACTOR SHALL INCLUDE A CONSTRUCTION SIGN APPROACH PACKAGE FOR EXPECTED LANE CLOSURES AND WORK ZONE SPEED REDUCTIONS IN COMPLIANCE WITH VAOT STANDARDS. PAYMENT FOR PROVIDING THIS PACKAGE SHALL BE INCIDENTAL TO ITEM 641.10, "TRAFFIC CONTROL". ADD G20-5aP "WORK ZONE" PLAQUE AND R2-6aP "FINES DOUBLED" PLAQUE TO SPEED LIMIT SIGNS (SEE FIG. 6F-3 OF MUTCD). OMIT VR-355 "FINES DOUBLED FOR SPEEDING IN WORK ZONE" SIGN. IF LANE CLOSURES ARE USED THEY SHOULD NOT EXCEED THREE MILES AT ANY GIVEN PERIOD OF TIME. IF LANE CLOSURES REDUCE THE TRAVEL LANE WIDTH TO LESS THAN 12 FEET DMV MUST BE NOTIFIED TO DETOUR WIDE LOAD PERMITTED VEHICLES.

7. NO CONSTRUCTION SIGNS SHALL BE INSTALLED AS TO INTERFERE OR OBSTRUCT THE VIEW OF EXISTING TRAFFIC CONTROL DEVICES, STOPPING SIGHT DISTANCE, AND CORNER SIGHT DISTANCE FROM DRIVES AND INTERSECTING HIGHWAYS.

8. REFER TO VT. STATE STANDARDS, THE SPECIAL PROVISIONS, AND THE MUTCD FOR TEMPORARY TRAFFIC CONTROL SIGN DIMENSIONS AND COLORS.

9. SIGN W4-2 MAY BE REPLACED WITH W9-2:



W4-2

W9-2

10. IN ADVANCE OF ANY PROPOSED INTERCHANGE RAMP CLOSURES THE CONTRACTOR SHALL SUBMIT A PLAN THAT WILL DEPICT HOW ADVANCED WARNING TO THE TRAVELING PUBLIC WILL BE ACCOMMODATED DURING THE CLOSURE. ADVANCED WARNING SHALL BE DEFINED AS PROVIDING ADVANCED WARNING SIGNS, BOTH STATIC AND PCMS, THAT PROVIDE INFORMATION FOR MOTORISTS TO SAFELY UTILIZE THE REGIONALLY ACCEPTABLE OPPORTUNITIES FOR SEEKING AN ALTERNATE ROUTE PRIOR TO APPROACHING THE INTERCHANGE INVOLVING RAMP CLOSURES. THE PLAN WILL NEED TO BE SUBMITTED FOR REVIEW AND COMMENT BY THE PROJECT MANAGER A MINIMUM OF 7 CALENDAR DAYS AHEAD OF ANY PLANNED CLOSURE. APPROVAL OF THE PLAN SHALL BE IN PLACE 72 HOURS BEFORE WORK MAY BEGIN.

    INSTALLATION OF THE PCMS NETWORK SHALL BE DONE 48 HOURS BEFORE WORK MAY BEGIN. ELEMENTS OF THE PLAN SHALL INCLUDE BUT WILL NOT BE LIMITED TO THE LOCATION OF PCMS AND ASSOCIATED MESSAGES, ANY OTHER NECESSARY SIGNAGE, LOCATIONS FOR DEPLOYMENT OF UNIFORMED TRAFFIC OFFICERS AND FLAGGERS, AND SEQUENCING AND DURATION OF CLOSURE FOR EACH RAMP WITHIN THE RESPECTIVE INTERCHANGE. NO MORE THAN ONE INTERCHANGE PER WORK PERIOD MAY HAVE RAMP CLOSURES. THE COST OF PREPARING THIS PLAN (AND MAKING CHANGES IF NECESSARY) SHALL NOT BE PAID SEPARATELY BUT WILL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM 641.10, TRAFFIC CONTROL.

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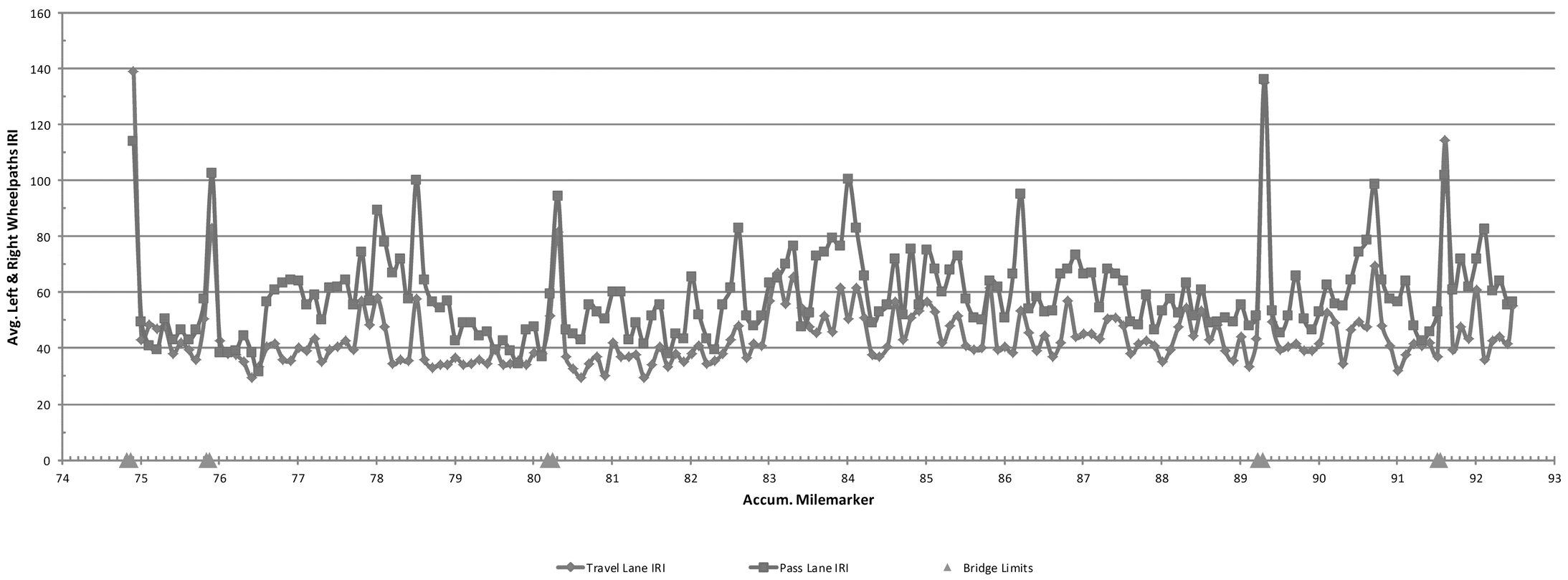
DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
CONSTRUCTION APPROACH SIGNING NOTES	SHEET 20 OF 22

I-91 NB Norwich-Fairlee IM SURF(48) PreCon IRI

Profiled 10/10/14

Travel Lane Avg. IRI = 44.7 Pass Lane Avg. IRI = 58.9



FOR INFORMATIONAL PURPOSES ONLY

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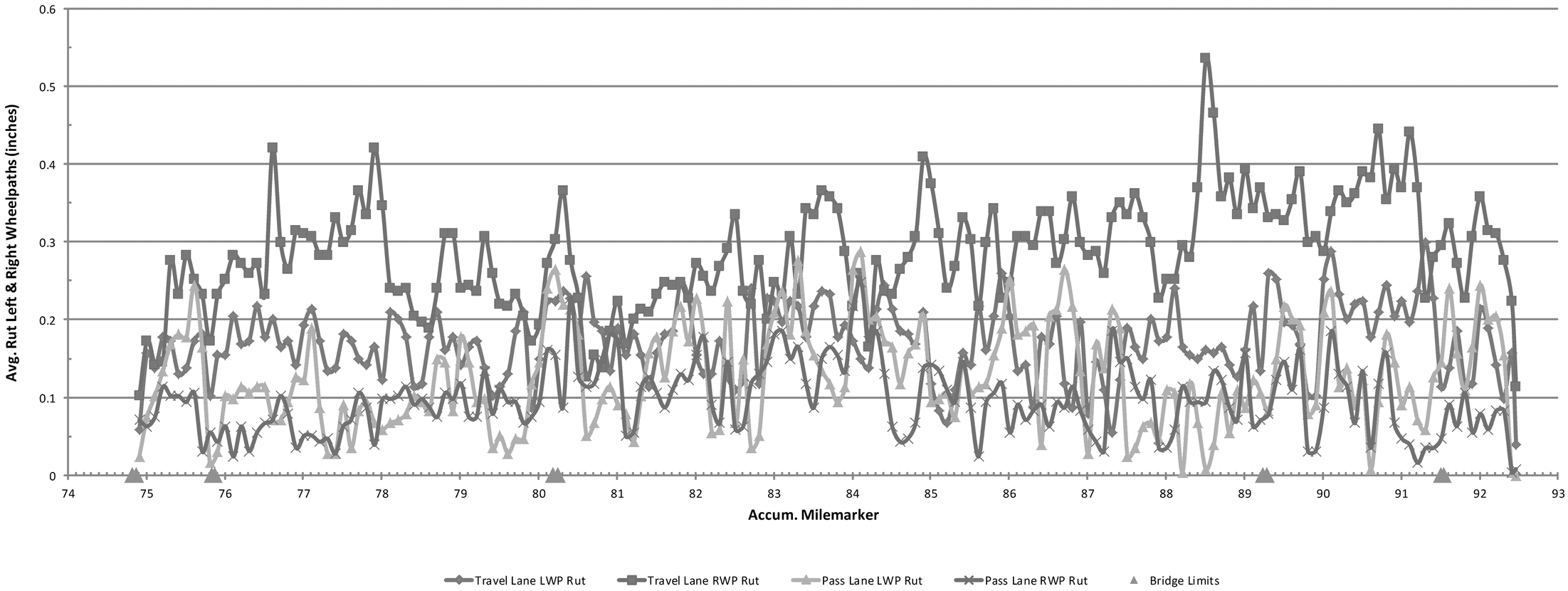
ROUGHNESS DATA INFORMATION SHEET	SHEET 21 OF 22

I-91 NB Norwich-Fairlee IM SURF(48) PreCon Ruts

Profiled 10/10/2014



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DESIGNED BY: N. PAPPAS	CHECKED BY: J. HARRINGTON
RUTTING DATA INFORMATION SHEET	SHEET 22 OF 22