

INDEX OF SHEETS  
SEE SHEET 2 OF 66

# STATE OF VERMONT AGENCY OF TRANSPORTATION

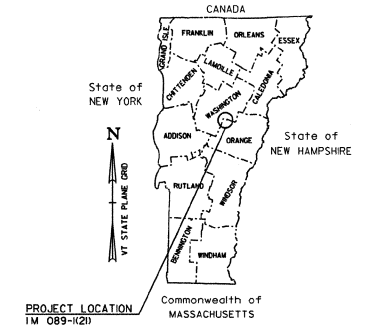


## PROPOSED IMPROVEMENT TOWNS OF BROOKFIELD - WILLIAMSTOWN NORTHFIELD - BERLIN - MONTPELIER COUNTIES OF ORANGE AND WASHINGTON INTERSTATE ROUTE 89

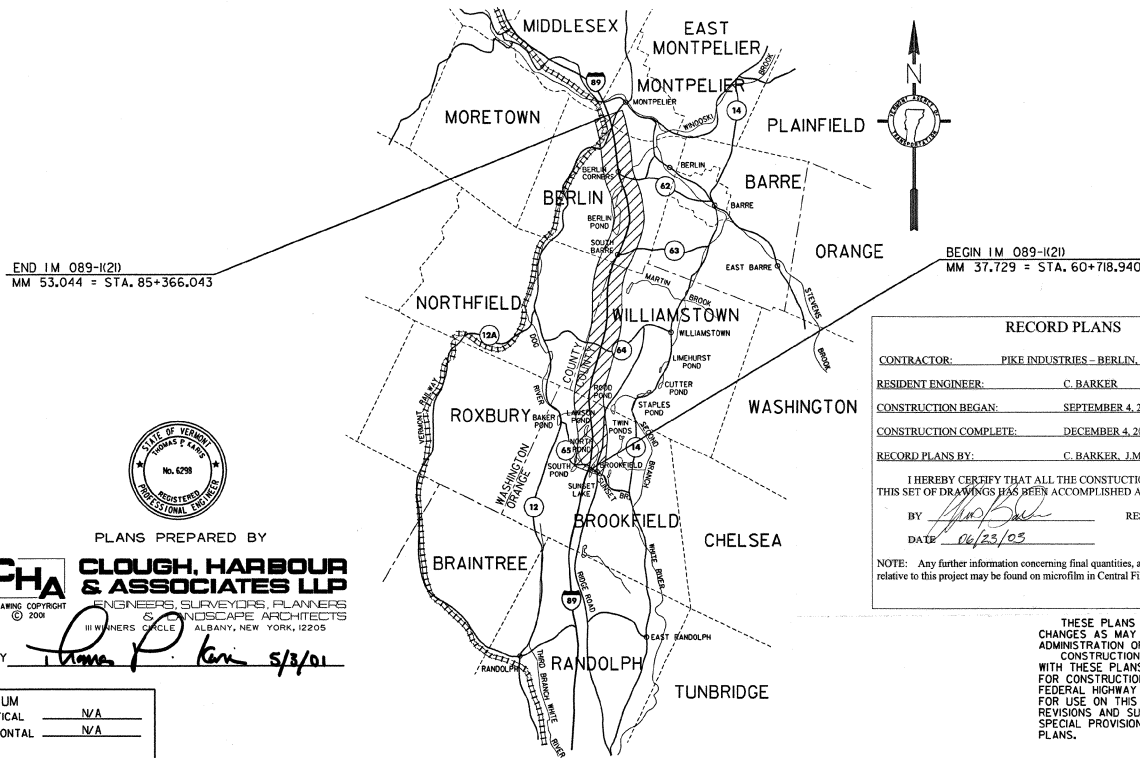
BEGINNING AT MM 37.729 = STA. 60+718.940 ON THE NORTHBOUND LANES IN THE TOWN OF BROOKFIELD AND  
EXTENDING 24 647.103 m (15.315 MILES) NORTH TO MM 53.044 = STA. 85+366.043 IN THE TOWN OF MONTPELIER.

LENGTH OF ROADWAY 24 647.103 m (15.315 MILES)  
LENGTH OF PROJECT 24 647.103 m (15.315 MILES)

WORK TO BE PERFORMED UNDER THIS PROJECT INCLUDES COLD PLANING, RESURFACING THE NORTHBOUND LANES AND  
NORTHBOUND INTERCHANGE RAMP WITH A SHIM/LEVELING COURSE, BASE COURSE, BINDER COURSE AND WEARING COURSE.  
NEW PAVEMENT MARKINGS, DRAINAGE IMPROVEMENTS, GUARDRAIL IMPROVEMENTS AND INCIDENTAL ITEMS.



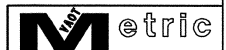
TRAFFIC DATA	
NB INTERSTATE ROUTE 89 INTERCHANGE NO. 4 TO INTERCHANGE NO. 5	
2001 ADT	= 6100
2001 DHV	= 910
2021 ADT	= 9000
2021 DHV	= 1260
2001-2021 CUM. ESALS = 10,380,000	
NB INTERSTATE ROUTE 89 INTERCHANGE NO. 5 TO INTERCHANGE NO. 6	
2001 ADT	= 7500
2001 DHV	= 1080
2021 ADT	= 11000
2021 DHV	= 1490
2001-2021 CUM. ESALS = 12,151,000	
NB INTERSTATE ROUTE 89 INTERCHANGE NO. 6 TO INTERCHANGE NO. 7	
2001 ADT	= 7600
2001 DHV	= 1100
2021 ADT	= 12800
2021 DHV	= 1660
2001-2021 CUM. ESALS = 13,374,000	
NB INTERSTATE ROUTE 89 INTERCHANGE NO. 7 TO INTERCHANGE NO. 8	
2001 ADT	= 15000
2001 DHV	= 1410
2021 ADT	= 16800
2021 DHV	= 2050
2001-2021 CUM. ESALS = 13,531,000	



RECORD PLANS	
CONTRACTOR:	PIKE INDUSTRIES - BERLIN, VT
RESIDENT ENGINEER:	C. BARKER
CONSTRUCTION BEGAN:	SEPTEMBER 4, 2001
CONSTRUCTION COMPLETE:	DECEMBER 4, 2002
RECORD PLANS BY:	C. BARKER, J. MARSCHELL
I HEREBY CERTIFY THAT ALL THE CONSTRUCTION REQUIRED BY THIS SET OF DRAWINGS HAS BEEN ACCOMPLISHED AS INDICATED HEREIN.	
BY:	<i>[Signature]</i> RESIDENT ENGINEER
DATE:	06/23/03
NOTE: Any further information concerning final quantities, amounts or other details relative to this project may be found on microfilm in Central Files.	

BITUMINOUS CONCRETE PAVEMENT SUPERPAVE MIXTURE DESIGN CRITERIA	
DESIGN LANE / DESIGN LIFE ESAL	13,531,000
DESIGN NUMBER OF CYRATIONS	100
PERFORMANCE GRADED ASPHALT BINDER	PG 58-34

UNLESS OTHERWISE NOTED, ALL DRAWINGS AND DETAILS OF THE PROJECT PLANS ARE NOT TO SCALE  
RIGHT OF WAY LIMITS, IF APPLICABLE, ARE PROVIDED SOLELY FOR THE CONVENIENCE OF THE STATE AND ITS CONTRACTOR DURING THE COURSE OF THIS PAVING PROJECT. ANY REFERENCES TO OFFSETS ON THESE PLANS ARE APPROXIMATE AND SHOULD NOT BE RELIED UPON FOR ANY OTHER PURPOSES



APPROVED	<i>[Signature]</i>	DATE	5/6/03
DIRECTOR OF PROJECT DEVELOPMENT			
DEPARTMENT OF TRANSPORTATION FEDERAL HIGHWAY ADMINISTRATION			
APPROVED	<i>[Signature]</i>	DATE	6-7-01
DIVISION ADMINISTRATOR			
PROJECT	BROOKFIELD - MONTPELIER AC 1M 089-1(21)		
SHEET 1 OF 66 SHEETS			

CONVENTIONAL SIGNS	
COUNTY LINE	---
TOWN LINE	- - - - -
LIMITS OF ACCESS	— X —
POINT OF ACCESS	X
FENCE LINE	— x — x —
STONE WALL	— o — o —
TRAVELED WAY	— o — o —
RAILROAD	— x — x —
SURVEY LINE	— o — o —
CULVERT	— o — o —
TELEPHONE POLE	— o — o —
TREES	— o — o —
CONTROL OF ACCESS	— o — o —
PROPERTY LINE	— o — o —
R.O.W. TAKING LINE	— o — o —
SLOPE RIGHTS	— o — o —
TOP OF CUT	— o — o —
TOE OF SLOPE	— o — o —

PLANS PREPARED BY

**CHA** **CLOUGH, HARBOUR & ASSOCIATES LLP**  
ENGINEERS, SURVEYORS, PLANNERS & LANDSCAPE ARCHITECTS  
111 WINNERS CIRCLE ALBANY, NEW YORK, 12205

BY: *[Signature]* 5/13/01

DATUM  
VERTICAL N/A  
HORIZONTAL N/A



FILE NAME: I:\2001\1M 089-1(21)\1M 089-1(21).DWG  
DATE PLOTTED: 06/23/03 10:58:57

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D-9M	REINFORCED CONCRETE DROP INLET TOPS	01-03-00
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DATUM  
 VERTICAL N/A  
 HORIZONTAL N/A

<b>INDEX OF SHEETS</b>	SURVEYED BY <u>N/A</u> DATE <u>N/A</u>
	DRAWN BY <u>R.L.F.</u> DATE <u>5/01</u>
	SQUAD LEADER <u>T.P.K.</u>
	DESIGN FILE NO. <u>10ave/98all2/pall2.dgn</u>
	IPARM FILE <u>pall2ind.i</u> DATE PLOTTED <u>\$DATE\$</u>
	PROJ. NAME <u>BROOKEFIELD - MONIPELIER</u>
PROJ. NO. <u>IM_089-1(2)</u>	
SHEET <u>2</u> OF <u>66</u> SHEETS <u>        </u>	

**NOTES**



**MAINLINE TYPICAL SECTION AND PAVEMENT MARKINGS**

NORTHBOUND STA. 60+718.940 (MM 37.729) TO STA. ~~75+961.037~~ (MM 47.200)

TRAVEL LANE, PASSING LANE, ACCELERATION & DECELERATION LANES

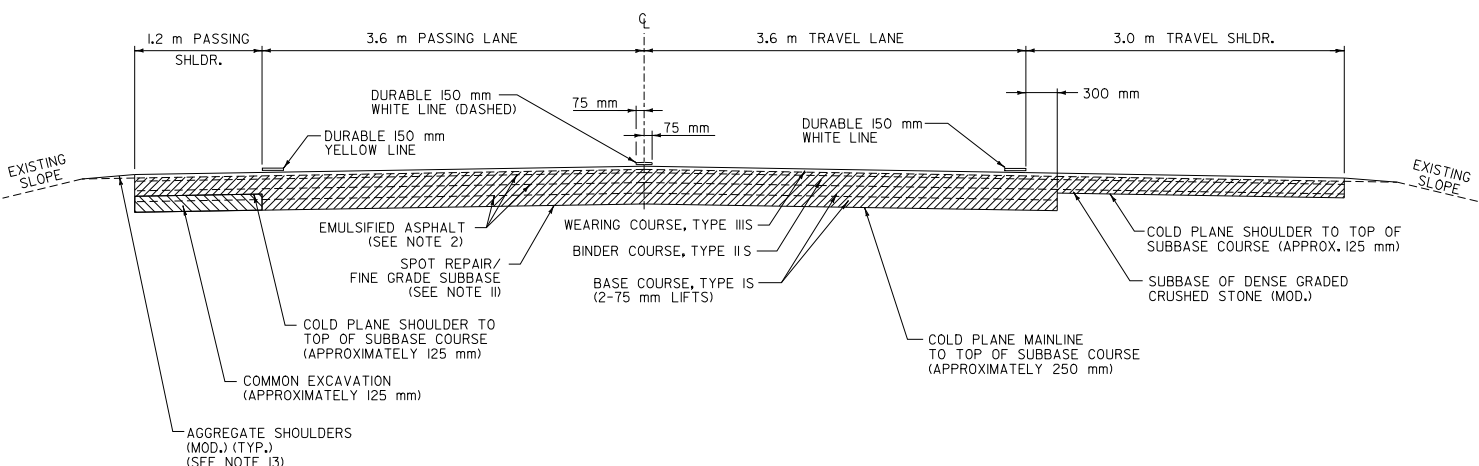
45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIS  
 70 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BINDER COURSE, TYPE IIS  
 150 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BASE COURSE, TYPE IS  
 COLD PLANE BITUMINOUS CONCRETE PAVEMENT TO TOP OF SUBBASE COURSE (APPROXIMATELY 250 mm)

**TRAVEL SHOULDER**

45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIS  
 70 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BINDER COURSE, TYPE IIS  
 25 mm SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.)  
 COLD PLANE BITUMINOUS CONCRETE PAVEMENT TO TOP OF SUBBASE COURSE (APPROXIMATELY 125 mm)

**PASSING SHOULDER**

45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIS  
 70 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BINDER COURSE, TYPE IIS  
 150 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BASE COURSE, TYPE IS  
 COLD PLANE BITUMINOUS CONCRETE PAVEMENT TO TOP OF SUBBASE COURSE (APPROXIMATELY 125 mm)  
 EXCAVATE ADDITIONAL SUBBASE MATERIAL (APPROXIMATELY 125 mm)



**PROJECT PAVING LIMITS**

ROUTE	BEGIN STATION (MILE MARKER)	END STATION (MILE MARKER)	LANE TYPICAL	WEARING DEPTH	LEVELING †	NOTES
I-89 NB	60+718.940 (MM 37.729)	75+961.037 (MM 47.200)	1.2 m - 3.6 m - 3.6 m - 3.0 m	45 mm	-	TRAVEL LANE, PASSING LANE, ACCELERATION & DECELERATION LANES: COLD PLANE TO TOP OF SUBBASE COURSE, PAVE WITH 150 mm TYPE IS, 70 mm TYPE IIS & 45 mm TYPE IIS TRAVEL SHOULDER: COLD PLANE TO TOP OF SUBBASE COURSE, BACKFILL WITH 25 mm SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.), PAVE WITH 70 mm TYPE IIS & 45 mm TYPE IIS PASSING SHOULDER: COLD PLANE TO TOP OF SUBBASE, EXCAVATE ADDITIONAL SUBBASE MATERIAL APPROXIMATELY 125 mm, PAVE WITH 150 mm TYPE IS, 70 mm TYPE IIS & 45 mm TYPE IIS
INTERCHANGE 5						
RAMP "A"	A0+000.000 (MM 5A 0.000)	A0+273.000 (MM 5A 0.170)	VARIES	45 mm	56	COLD PLANE 45 mm, LEVEL WITH IS mm TYPE IVS & PAVE WITH 45 mm TYPE IIS
RAMP "B"	B0+028.968 (MM 5B 0.018)	B0+299.338 (MM 5B 0.186)	VARIES	45 mm	50	COLD PLANE 45 mm, LEVEL WITH IS mm TYPE IVS & PAVE WITH 45 mm TYPE IIS
INTERCHANGE 6						
RAMP "A"	A0+000.000 (MM 6A 0.000)	A0+298.000 (MM 6A 0.185)	VARIES	45 mm	54	COLD PLANE 45 mm, LEVEL WITH IS mm TYPE IVS & PAVE WITH 45 mm TYPE IIS
RAMP "B"	B0+075.639 (MM 6B 0.047)	B0+484.413 (MM 6B 0.301)	VARIES	45 mm	56	COLD PLANE 45 mm, LEVEL WITH IS mm TYPE IVS & PAVE WITH 45 mm TYPE IIS

- THE WEARING COURSE SHALL BE TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE BINDER COURSE SHALL BE TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT. THE BASE COURSE SHALL BE TYPE IS OR TYPE IIS SUPERPAVE BITUMINOUS CONCRETE PAVEMENT AS SHOWN ON THE TYPICAL SECTIONS OR AS DIRECTED BY THE RESIDENT ENGINEER. THE LEVELING COURSE SHALL BE TYPE IVS SUPERPAVE BITUMINOUS CONCRETE UNLESS OTHERWISE DIRECTED BY THE RESIDENT ENGINEER. ALL ASPHALT CEMENT USED IN THE SUPERPAVE BITUMINOUS CONCRETE PAVEMENT SHALL BE PG 58-34.
- EMULSIFIED ASPHALT SHALL BE APPLIED ON ALL EXISTING PAVEMENT SURFACES, ON ALL COLD PLANED SURFACES, ON ALL SAW CUT PAVEMENT JOINTS AND BETWEEN ALL COURSES OF PAVEMENT AT THE RATE OF 0.12 L/m<sup>2</sup> OR AS DIRECTED BY THE RESIDENT ENGINEER.
- SUPERPAVE BITUMINOUS CONCRETE PAVEMENT TOLERANCE = ± 5 mm (TOTAL PAVEMENT THICKNESS EXCLUDING LEVELING).
- EXCESS ACCUMULATED MATERIAL ADJACENT TO SHOULDERS WHERE GUARDRAIL IS TO BE RETAINED SHALL BE GRADED TO ALLOW PROPER DRAINAGE (100% OF TOTAL LENGTH OF RETAINED RAIL). PAYMENT FOR THIS WORK SHALL BE MADE UNDER ITEM 203.99 SHOULDER BERM REMOVAL.
- REFER TO SHEETS 11, 12 AND 13 FOR PAVING/COLD PLANING DETAILS AND NOTES. REFER TO SHEETS 17 AND 18 FOR MILLED RUMBLE STRIP DETAILS AND NOTES.
- ITEM 210.10 COLD PLANING - BITUMINOUS PAVEMENT HAS BEEN ESTIMATED ASSUMING THREE PASSES FOR THE MAINLINE TRAVELED WAY AREA AND TWO PASSES FOR THE TRAVEL SHOULDER AND PASSING SHOULDER AREAS BETWEEN MM 37.729 AND MM 47.200. BETWEEN MM 47.200 AND MM 53.044, COLD PLANING HAS BEEN ESTIMATED ASSUMING ONE PASS FOR THE MAINLINE AND SHOULDER AREAS. THESE ESTIMATES REFLECT THE NUMBER OF COLD PLANING PASSES REQUIRED TO ATTAIN THE PAVEMENT REMOVAL DEPTHS SHOWN IN THE PLANS.
- ALL LONGITUDINAL JOINTS BETWEEN TYPE IS BASE COURSE PAVEMENT LIFTS AND BETWEEN TYPE IIS BINDER COURSE PAVEMENT LIFTS SHALL BE SAW CUT TO ACHIEVE A VERTICAL JOINT SURFACE AND TACK COATED AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT FOR SAW CUTTING SHALL BE CONSIDERED SUBSIDIARY TO ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34).
- ESTIMATED QUANTITIES OF ITEMS 601.995 CLEANING CULVERT PIPE IN PLACE (0-600 mm) AND 601.996 CLEANING CULVERT PIPE IN PLACE (GREATER THAN 600 mm) SHALL BE USED TO CLEAN CULVERTS AT LOCATIONS DETERMINED BY THE RESIDENT ENGINEER. ALL EXISTING IN-DITCH DROP INLETS SHALL ALSO BE CLEANED OUT. THE COSTS ASSOCIATED WITH THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO THE APPROPRIATE CULVERT CLEANING ITEM.
- ESTIMATED QUANTITIES OF ITEMS 621.76 REPLACE GUARDRAIL POST ASSEMBLY, 621.76 REPLACE GUARDRAIL POST ASSEMBLY W/2.4 m POSTS (MOD.) AND 621.77 REPLACE GUARDRAIL BEAM UNIT SHALL BE USED TO REPAIR EXISTING GUARDRAIL AS DIRECTED BY THE RESIDENT ENGINEER.
- ITEMS 676.10 DELINEATORS WITH STEEL POSTS AND 676.12 REMOVAL OF EXISTING DELINEATORS SHALL BE USED TO REPLACE EXISTING DELINEATORS LOCATED AT THE ENDS OF EACH GUARDRAIL RUN BETWEEN MM 37.729 AND MM 47.200 AS DIRECTED BY THE RESIDENT ENGINEER.
- DISTURBED AREAS OF EXISTING SUBBASE MATERIAL SHALL BE REPAIRED PRIOR TO FINE GRADING. REPAIRS SHALL BE MADE BY REPLACING OR ENHANCING EXISTING SUBBASE MATERIAL WITH ITEM 301.35 SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.) AS DIRECTED BY THE RESIDENT ENGINEER.
- BITUMINOUS CONCRETE GUTTERS WILL BE PAID ONLY WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER. ALL OTHER BITUMINOUS CONCRETE PAVEMENT WORK THAT COULD INVOLVE SOME HAND WORK (SUCH AS DRAINAGE STRUCTURES) SHALL BE PAID FOR AT THE CONTRACT UNIT PRICE FOR ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34).
- ALL EDGES OF PAVEMENT AND TREATED TIMBER CURB (MOD.) SHALL BE BACKED UP TO FULL HEIGHT WITH COLD PLANE GRINDINGS AS DIRECTED BY THE RESIDENT ENGINEER. THIS WORK SHALL BE PAID FOR UNDER ITEM 402.12 AGGREGATE SHOULDERS (MOD.).
- EXCAVATED DITCHING MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF END SECTION FLARES THAT SHALL BE CAPPED WITH 75 mm OF AGGREGATE SHOULDER MATERIAL (MOD.). ADDITIONAL MATERIAL, IF NEEDED FOR THE CONSTRUCTION OF FLARES, WILL BE PAID FOR UNDER ITEM 203.30 EARTH BORROW.
- TWO PLANT SPECIES OF SPECIAL CONCERN HAVE BEEN IDENTIFIED BY THE ENVIRONMENTAL REVIEWING AGENCIES AND ARE LOCATED IN THE MEDIAN AREA AND TO THE WEST OF THE SOUTHBOUND LANES BETWEEN MM 39.00 AND MM 41.00. THE CONTRACTOR SHALL NOT USE THESE AREAS FOR PARKING VEHICLES, EQUIPMENT OR STORING SUPPLIES. SPECIAL PRECAUTIONS MUST BE TAKEN IN THESE AREAS TO AVOID ANY IMPACTS TO THE PLANTS. THE RESIDENT ENGINEER SHALL CONTACT JOHN LEPORE, VAOT BIOLOGIST, AT (802) 828-3963 TO IDENTIFY THE LOCATIONS OF THE PLANT SPECIES TO ENSURE AVOIDANCE.

<b>MAINLINE TYPICAL SECTION AND PAVEMENT MARKINGS SHEET 1</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.E.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	C:\pave\980112\pall2.dgn		
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PROJ. NAME	BROOKEIELD...MONPELIER			
PROJ. NO.	IM_089-1(2)			
SHEET	3	OF	66	SHEETS

DATUM  
 VERTICAL N/A  
 HORIZONTAL N/A

## MAINLINE TYPICAL SECTION AND PAVEMENT MARKINGS & TRAVEL SHOULDER

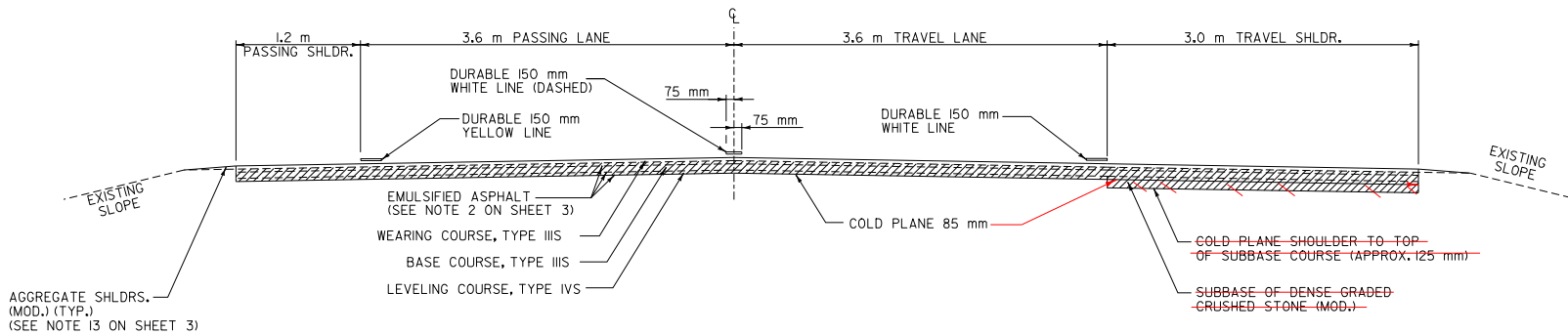
NORTHBOUND STA. ~~75+961.037~~ (MM 47.200) TO STA. 85+366.043 (MM 53.044)  
~~76+038~~ ~~248~~

~~TRAVEL LANE, PASSING LANE, PASSING SHOULDER, ACCELERATION & DECELERATION LANES~~

~~45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIIS  
 40 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BASE COURSE, TYPE IIIS  
 15 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), LEVELING COURSE, TYPE IVS  
 85 mm COLD PLANE BITUMINOUS CONCRETE PAVEMENT~~

~~TRAVEL SHOULDER~~

~~45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIIS  
 40 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), BASE COURSE, TYPE IIIS  
 15 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), LEVELING COURSE, TYPE IVS  
 40 mm SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.)  
 COLD PLANE BITUMINOUS CONCRETE PAVEMENT TO TOP OF SUBBASE COURSE (APPROXIMATELY 125 mm)~~



### CONSERVATION SEED MIX

RURAL AREA - SEED MIXTURE				
% WT.	kg/ha.	NAME	PUR.%	GERM.%
37.14	26.0	CREEPING RED FESCUE	98	85
37.14	26.0	TALL FESCUE	95	90
5.71	4.0	RED TOP	95	90
14.30	10.0	BIRDSFOOT TREFOIL	98	85
5.71	4.0	ANNUAL RYEGRASS	95	85
100.0	70.0			

SEED MIXTURE:  
 SHALL NOT HAVE A WEED CONTENT EXCEEDING 0.40% BY WEIGHT AND SHALL BE FREE OF ALL NOXIOUS WEED SEED.

SEED:  
 TO BE APPLIED PER SEEDING FORMULA DIRECTED BY THE RESIDENT ENGINEER.

FERTILIZER:  
 FORMULA 10-20-10 TO BE USED WITH SEED, APPLIED AT THE RATE OF 560 kg/ha (HYDRO SEEDERS MAY USE 19-19-19 FORMULA)

AGRICULTURAL LIMESTONE:  
 TO BE APPLIED AT THE RATE OF 4.5 tons/ha OR AS DIRECTED BY THE RESIDENT ENGINEER.

HAY MULCH:  
 TO BE APPLIED ON EARTH SLOPES AT THE RATE OF 4.5 tons/ha, OR AS DIRECTED BY THE RESIDENT ENGINEER.

TOPSOIL:  
 TO BE USED WITH SEED AS INDICATED ON THE PLANS OR AS DIRECTED BY THE RESIDENT ENGINEER.

### PROJECT PAVING LIMITS

ROUTE	BEGIN STATION (MILE MARKER)	END STATION (MILE MARKER)	LANE TYPICAL	WEARING DEPTH	LEVELING †	NOTES
I-89 NB	75+961.037 (MM 47.200)	85+366.043 (MM 53.044)	1.2 m - 3.6 m - 3.6 m - 3.0 m	45 mm	3794	TRAVEL LANE, PASSING LANE, PASSING SHOULDER, ACCELERATION & DECELERATION LANES: COLD PLANE 85 mm, LEVEL WITH 15 mm TYPE IVS, PAVE WITH 40 mm TYPE IIIS & 45 mm TYPE IIS <del>TRAVEL SHOULDER: COLD PLANE TO TOP OF SUBBASE COURSE, BACKFILL WITH 40 mm SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.), LEVEL WITH 15 mm TYPE IVS, PAVE WITH 40 mm TYPE IIS &amp; 45 mm TYPE IIIS</del>
INTERCHANGE 7						
RAMP "A"	A0+000.000 (MM 7A 0.000)	A0+338.000 (MM 7A 0.210)	VARIES	45 mm	68	COLD PLANE 60 mm, LEVEL WITH 15 mm TYPE IVS & PAVE WITH 45 mm TYPE IIIS
RAMP "B"	B0+077.249 (MM 7B 0.048)	B0+447.398 (MM 7B 0.278)	VARIES	45 mm	70	COLD PLANE 60 mm, LEVEL WITH 15 mm TYPE IVS & PAVE WITH 45 mm TYPE IIIS
INTERCHANGE 8						
RAMP "A"	A0+000.000 (MM 8A 0.000)	A0+331.000 (MM 8A 0.206)	VARIES	45 mm	58	COLD PLANE 60 mm, LEVEL WITH 15 mm TYPE IVS & PAVE WITH 45 mm TYPE IIIS

**MAINLINE TYPICAL SECTION AND PAVEMENT MARKINGS SHEET 2**

SURVEYED BY <u>N/A</u> DATE <u>N/A</u>	DRAWN BY <u>R.L.F.</u> DATE <u>5/01</u>
SQUAD LEADER <u>T.P.K.</u>	DESIGN FILE NO. <u>2pave/98all2/pall2.dgn</u>
IPARM FILE <u>pall2+y2.i</u> DATE PLOTTED <u>\$DATE\$</u>	PROJ. NAME <u>BROOKEIELD...MONPELIER</u>
PROJ. NO. <u>IM_089-1(2)</u>	SHEET <u>4</u> OF <u>66</u> SHEETS <u>.....</u>

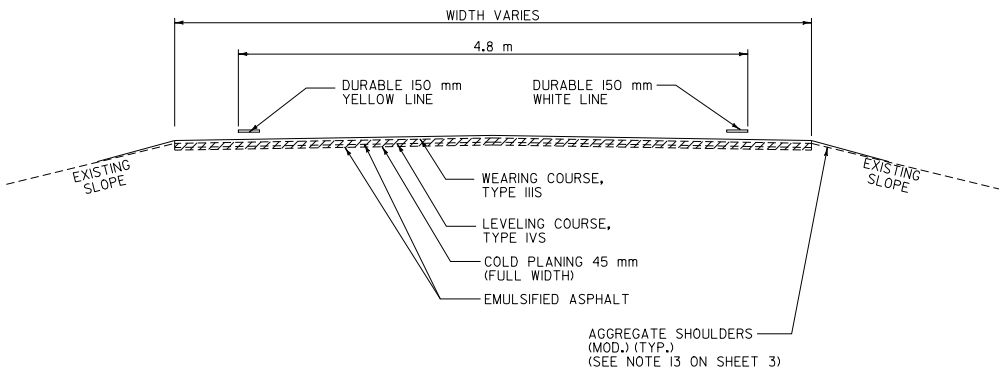
DATUM  
 VERTICAL N/A  
 HORIZONTAL N/A

### RAMP TYPICAL SECTION - UNCURBED INTERCHANGE No. 5 RAMP A & B INTERCHANGE No. 6 RAMP A & B

INTERCHANGE # 6 ONLY

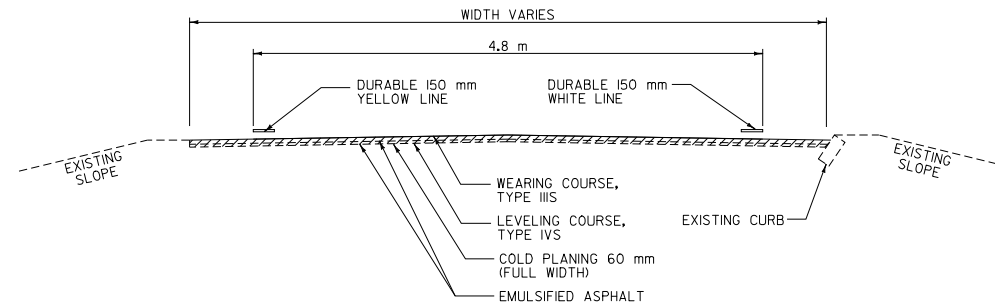
45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIIS  
15 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), LEVELING COURSE, TYPE IVS  
45 mm COLD PLANING BITUMINOUS PAVEMENT  
EMULSIFIED ASPHALT TO BE APPLIED @ 0.12 L/m<sup>2</sup> OR AS DIRECTED BY RESIDENT ENGINEER

INTERCHANGE #5-60mm TYPE III



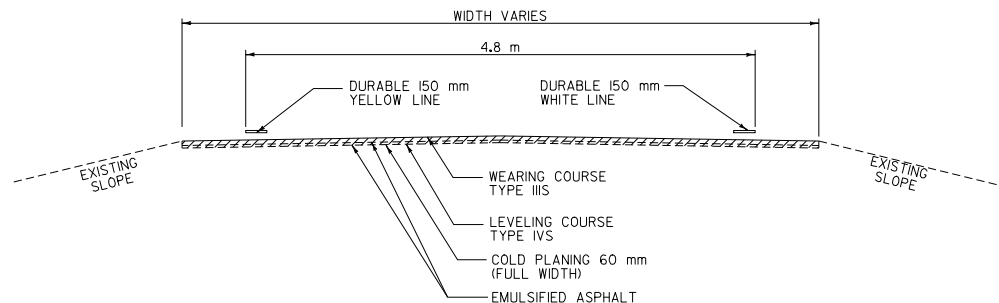
### RAMP TYPICAL SECTION - CURBED INTERCHANGE No. 8 RAMP A

45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIIS  
15 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), LEVELING COURSE, TYPE IVS  
60 mm COLD PLANING BITUMINOUS PAVEMENT  
EMULSIFIED ASPHALT TO BE APPLIED @ 0.12 L/m<sup>2</sup> OR AS DIRECTED BY RESIDENT ENGINEER



### RAMP TYPICAL SECTION - UNCURBED INTERCHANGE No. 7 RAMP A & B

45 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), WEARING COURSE, TYPE IIIS  
15 mm SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34), LEVELING COURSE, TYPE IVS  
60 mm COLD PLANING BITUMINOUS PAVEMENT  
EMULSIFIED ASPHALT TO BE APPLIED @ 0.12 L/m<sup>2</sup> OR AS DIRECTED BY RESIDENT ENGINEER



DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>RAMP TYPICAL SECTIONS</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.F.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	/rave/98all2/pall2.dgn		
	IPARM FILE	pall2+y3.i	DATE PLOTTED	\$DATE\$
	PROJ. NAME	BROOKEIELD - MONIPELIER		
	PROJ. NO.	IM_089-1(2)		
	SHEET	5	OF	66
	SHEETS			





# ITEM DETAIL SUMMARY SHEET



LOCATION		POS.	GUARDRAIL												REMARKS	
STATION (MILE MARKER)	STATION (MILE MARKER)		616.35	621.20	621.20	621.505	621.52	621.60	621.74	621.75	621.76	621.76	621.77	621.80		621.81
			TREATED TIMBER CURB (MOD.)	STEEL BEAM G.R.	STEEL BEAM G.R. w/2.4 m POSTS (MOD.)	MANUFACTURED TERMINAL SECT. (FLARED)	MANUFACTURED TERMINAL SECTION	ANCHOR FOR G.R.	ALUMINUM APPROACH RAILING	REMOVING AND RESET G.R. (MOD.)	REPLACE G.R. POST ASSEMBLY	REPLACE G.R. POST ASSEMBLY w/2.4 m POSTS (MOD.)	REPLACE GUARDRAIL BEAM UNIT	REMOVE & DISP. G.R.	REMOVE & DISP. G.P.	
			m	m	m	EA	EA	EA	m	m	EA	EA	EA	m	EA	
INTERSTATE ROUTE 89 N.B.																
43	44									99.1	6		3			FLARE MTS + 11.4 M OF RAIL @ 1.5
60+718.9	60+825.3	RT								-95-				11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 60+730.3
60+886.3	60+916.7	LT								11.4						CHANGED STEEL OFFSET BLOCKS
46	32									175.3			1			
61+018.3	61+208.3	RT								-178.6						INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 61+029.7
42	800									49.5						
62+421.6	62+505.2	RT	40.2							-72.2						INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 62+433.0
																INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 62+450.2 TO STA. 62+505.2
51	805									49.5	4					
62+431.3	62+503.5	LT	15							-60.8						INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 62+442.7
																INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 62+488.5 TO STA. 62+503.5
75	82									221	2		28			EXISTING TREATED TIMBER CURB
62+539.1	62+778.5	LT								-220.4	15		5	-19		
62	74									209.6			10			
62+539.1	62+755.7	RT								-209	6		2	-7.6		
65	42									262.7	3		13	11.4		
63+459.7	63+737.1	RT								-258.4	6		2	-19		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 63+471.7
78	44									335	4		32	11.4		
63+461.3	63+810.9	LT								-330.6	15		5	-19		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 63+472.7
44	47									411.5	3					FLARED MTS + 34.2M OF RAIL @ 1.5, CONC. IST. 2 POSTS
65+080.3	65+505.9	LT								-414.2			67	11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 65+091.7
51	549									308.6	14					
65+244.4	65+567.4	RT	251.5							-311.6			5	11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 65+255.8
188	17									156.2	1		6			INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 65+294.0 TO STA. 65+549.0
67+129.0	67+300.0	LT	89.6							-152	6		2	-19		FLARED MTS + 41.8M OF RAIL @ 1.5
																INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 67+140.4
373	64									308.6	13		29	11.4		INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 67+195.0 TO STA. 67+285.0
67+367.1	67+691.1	RT								-306.2	9		3	-22.8		FLARED MTS + 41.8M OF RAIL @ 1.5
59	36									826.8	13		156	11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 67+370.5
67+455.7	68+291.7	LT	352.7							-737.2	36		23	98.8		FLARED MTS + 34.2M OF RAIL @ 1.5
																INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 67+467.1
33	95															INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 67+464.0 TO STA. 67+819.0
69+031.2	69+111.0	RT	48.2							68.4						CONC 2ND POST OF MTS
																INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 69+042.6
69+036.0	69+104.4	LT	40.2													INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 69+051.0 TO STA. 69+111.0
69+180	69+204	RT	24.1							-57			10	11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 69+047.4
69+187.3	69+270.9	LT														INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 69+069.4 TO STA. 69+104.4
69+380.4	69+552.0	LT		148.6										163.8		REPLACED T.T. CURB UNDER ALL APPROACH RAIL
				-155.8										-167.2		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 69+391.8
21	74													228.6		INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. 69+547.6
69+332.1	69+553.1	RT		228.6										-216.6		SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 69+549.5
				-216.6												SEE INTERCHANGE 5 SECTION ON SHEET 9 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 69+332.1 = STA. 80+299.3
12	17															INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. 69+548.7
69+713.6	70+969.0	LT	505.1							1230.6	44		107	11.4		SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 69+550.6
										1235						INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 69+725.0
93	25									586.7						INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 69+785.0 TO STA. 70+105.0 AND FROM STA. 70+710.0 TO STA. 70+905.0
71+179.7	71+776.3	LT								585.2	28		45	11.4		FLARED MTS + 57.2M OF RAIL @ 1.5
24	92															INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 71+191.7
71+928.0	72+555.6	LT		613.4			+	+		613.4	116 + 1		46	11.4		INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 71+939.4
				-611.8										623.2		INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. 72+551.2
																SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 72+553.1
SHEET SUBTOTAL			1380	984.2		17	3	3		5399.8	93		33	42	1326.2	

DATUM  
VERTICAL N/A  
HORIZONTAL N/A

**ITEM  
DETAIL  
SUMMARY  
SHEET 1**

SURVEYED BY N/A DATE N/A  
 DRAWN BY R.L.F. DATE 5/01  
 SQUAD LEADER T.P.K.  
 DESIGN FILE NO. grave/98all2/pall2.dgn  
 IPARM FILE pall2idl.l DATE PLOTTED \$DATE\$  
 PROJ. NAME BROOKEIELD...MONPELIER  
 PROJ. NO. IM\_089-1(2)  
 SHEET 8 OF 66 SHEETS

# ITEM DETAIL SUMMARY SHEET



LOCATION			GUARDRAIL												REMARKS		
STATION (MILE MARKER)	STATION (MILE MARKER)	POS.	616.35 TREATED TIMBER CURB (MOD.) m	621.20 STEEL BEAM G.R. m	621.20 STEEL BEAM G.R. w/2.4 m POSTS (MOD.) m	621.505 MANUFACTURED TERMINAL SECT. (FLARED) EA	621.52 MANUFACTURED TERMINAL SECTION EA	621.60 ANCHOR FOR G.R. EA	621.74 ALUMINUM APPROACH RAILING m	621.75 REMOVING AND RESET G.R. (MOD.) m	621.76 REPLACE G.R. POST ASSEMBLY EA	621.76 REPLACE G.R. POST ASSEMBLY w/2.4 m POSTS (MOD.) EA	621.77 REPLACE GUARDRAIL BEAM UNIT EA	621.80 REMOVE & DISP. G.R. m		621.81 REMOVE & DISP. G.P. EA	
INTERSTATE ROUTE 89 N.B.																	
96 72+698.9 (MM 45.173)	171 73+424.5 (MM 45.622)	16 LT	-640	-706.8		I	I	+I					10	716.3 -718.2			INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 72+710.3- 696 INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 72+776.0 TO STA. 73+416.0. INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. 73+417.1. SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 73+419.0. <b>RETAINED EXISTING ANC.</b> <b>FLARED MFS + 57.2 M OF RAIL @ I45</b>
91 72+895.2 (MM 45.295)	92 73+271.4 (MM 45.529)	24 RT	281.9 -280			I				362 -349.6	10 12		17 4-	11.4 -26.6			INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 72+906.6- 91 INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 72+955.0 TO STA. 73+235.0. <b>FLARED MFS + 34.2 M OF RAIL @ I45</b> INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 73+552.0- 34 <b>FLARED MFS + 34.2 M OF RAIL @ I45</b> INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 74+277.8- 61 <b>FLARED MFS + 53.3 M OF RAIL @ I45</b>
34 73+540.6 (MM 45.696)	92 73+935.8 (MM 45.942)	88 LT				I				384.8 -383.8	13		7	11.4			INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 75+459.4- 35 <b>FLARED MFS + 22.9 M OF RAIL @ I45</b> INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 75+465.8- 43
61 74+266.4 (MM 46.147)	43 74+589.4 (MM 46.348)	42 LT				I				308.6 -288.8	5 18		27 6-	11.4 -34.2			INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 75+586.0 TO STA. 75+896.0.
35 75+447.7 (MM 46.881)	73 75+512.3 (MM 46.921)	14 RT				I				53.2	4		4	11.4			INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 76+397.0- 3 <b>FLARED MFS + 22.9 M OF RAIL @ I45</b> INSTALL NEW MANUFACTURED TERMINAL SECTION (FLARED) AT STA. 76+639.0. SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 76+639.6.
43 75+454.1 (MM 46.885)	96 75+507.3 (MM 46.918)	LT				I				41.8				11.4			INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 76+397.0 TO STA. 76+639.6.
73 75+584.5 (MM 46.966)	59 75+911.3 (MM 47.169)	160 LT	322.2 -310							311.6	-12		10 4-	-15.2			INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 76+397.0 TO STA. 76+639.6.
74 75+589.3 (MM 46.969)	59 75+703.3 (MM 47.040)	30 RT								114							INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 76+397.0 TO STA. 76+639.6.
76+361 76+387.5 (MM 47.465)	76+685.5 76+643.4 (MM 47.624)	RT LT						+I							4.4		INSTALL NEW MANUFACTURED TERMINAL SECTION AT STA. 76+639.0. SEE VAOT STANDARD G-IDM, PROVIDE ANCHOR AT STA. 76+639.6.
77+137 78+098.2 (MM 48.528)	77+268 78+307.5 (MM 48.658)	RT LT									1 -12		6 7 4	-15.2			CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
117 78+148.1 (MM 48.559)	89.6 78+272.1 (MM 48.636)	RT									1 -6		6 2-	-7.6			CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
62.5 78+645.4 (MM 48.868)	75 78+861.1 (MM 49.002)	LT									-6		6 2-	-7.6			CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
78+671 82+092.6 (MM 51.010)	78+846.4 83+681.1 (MM 51.997)	RT LT									4 15		10 21 9-	-34.2			CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
58.2 83+602.2 (MM 51.948)	49.3 84+522.7 (MM 52.520)	RT									3 -36		24 12-	-45.6			CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
INTERCHANGE 5																	
80+249.9	80+299.3	RT		19.1 -49.4										8	19.1 -49.4		CONNECT NEW STEEL BEAM GUARDRAIL TO EXISTING RAIL AT STA. 80+249.9. SEE INTERSTATE ROUTE 89 N.B. SECTION ON SHEET 8 OF 66 FOR THE CONTINUATION OF GUARDRAIL THROUGH THE EQUALITY AT STA. 80+299.3 = STA. 69+332.1.
INTERCHANGE 6																	
80+182.0	80+482.2	RT	74.4 -205							171.5 -300.2	8		21				INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 80+182.0 TO STA. 80+387.0.
INTERCHANGE 7																	
80+082.1 80+033.5 80+426.5 81+018.3 81+023.2 81+166.5	80+447.4 80+426.5 80+485.1 81+118.6 81+095.7 81+674.7	RT RT RT RT LT RT	12.1 58.6								-12 2 5 5		27 -4 22 8 2 51	-15.2			INSTALL TREATED TIMBER CURB (MOD.) FROM STA. 80+182.0 TO STA. 80+387.0.
SHEET SUBTOTAL			1435	756.2		6	2	2		1843	129		12	47	1007.6		
SHEET 8 SUBTOTAL			1380	984.2		17	3	3		5399.8	93		33	42	1326.2		
ROUNDING			85	59.6		-	-	-		257.2	-		-	-	66.2		
TOTAL			2900	1800		23	5	5		7500	222		45	89	2400		

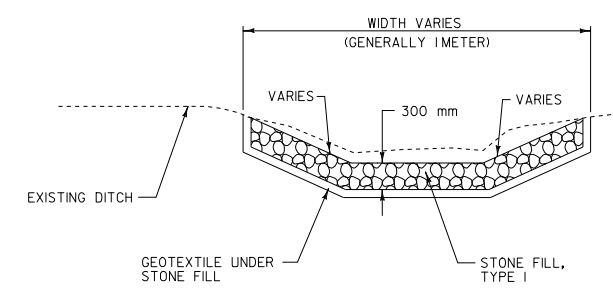
DATUM  
VERTICAL N/A  
HORIZONTAL N/A

**ITEM  
DETAIL  
SUMMARY  
SHEET 2**

SURVEYED BY N/A DATE N/A  
 DRAWN BY R.L.F. DATE 5/01  
 SQUAD LEADER T.P.K.  
 DESIGN FILE NO. zgrave/98all2/pall2.dgn  
 IPARM FILE pall2id2j DATE PLOTTED \$DATE\$  
 PROJ. NAME BROOKEIELD...MONIPELIER  
 PROJ. NO. IM\_089-1(2)  
 SHEET 3 OF 66 SHEETS .....

LOCATION				METERS OF DITCHING			MISC. ITEMS			REMARKS
SITE	STATION	STATION	POS.	PERCENT GRADE			654.10	613.10	649.31	
				0-2	2-5	>5	EROS. MATT.	STONE FILL TYP. 1	GEOT. UNDER STONE FILL	
INTERSTATE ROUTE 89 NB BROOKFIELD:										
1	61+316.0		RT		25		-25			
2	62+523.0		RT/LT		20		-20			
3	64+615.0	64+857.0	RT	242						
WILLIAMSTOWN:										
1	68+558.0		RT	40						
2	69+282.0		RT	20						
3	69+524.0	69+685.0	RT	161						
4	71+374.0	71+455.0	RT	81						
5	73+225.0		RT	60						
6	73+547.0		RT	20						
7	73+708.0		RT	30						
8	74+352.0		RT	20						
BERLIN:										
1	74+513.0		RT	30						
2	77+651.0		RT	20			20			
3	79+341.0		RT	85			85			
4	79+582.0		RT	85			85			
SUBTOTAL				704	235		235			
ROUNDING				36	15		15			
TOTAL				740	250		250			

LOCATION				METERS OF DITCHING			MISC. ITEMS			REMARKS
SITE	STATION	STATION	POS.	PERCENT GRADE			654.10	613.10	649.31	
				0-2	2-5	>5	EROS. MATT.	STONE FILL TYP. 1	GEOT. UNDER STONE FILL	
							m <sup>2</sup>	m <sup>3</sup>	m <sup>2</sup>	



**DITCH DETAIL**  
NOT TO SCALE

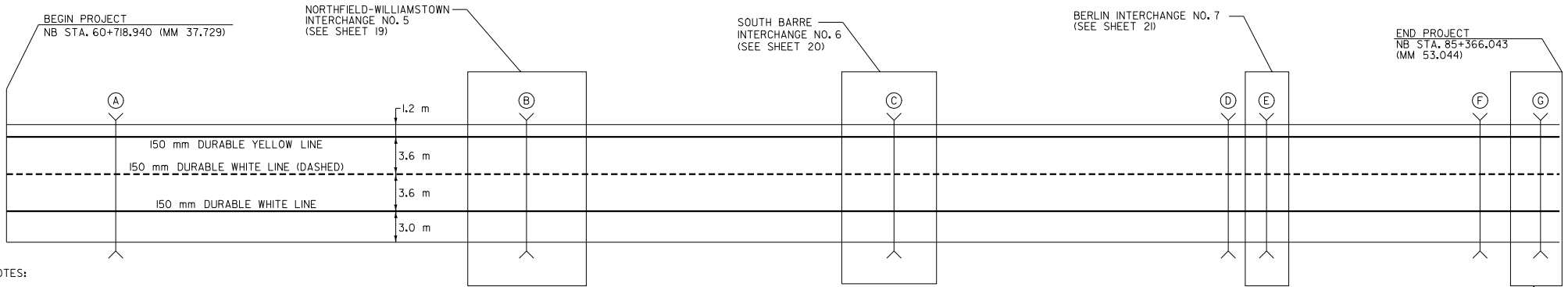
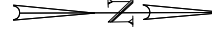
- NOTES:
- PIPE INLET AND OUTLET AREAS AND DITCH CLEANING THROUGH PROJECT SHALL BE PERFORMED AT LOCATIONS AND AS DIRECTED BY THE RESIDENT ENGINEER. PAYMENT WILL BE UNDER THE APPLICABLE EQUIPMENT RENTAL ITEM(S).
  - AN ESTIMATED QUANTITY OF EROSION MATTING AND STONE FILL, TYPE I HAS BEEN INCLUDED. EROSION MATTING SHALL BE USED IN ALL DITCHES WITH A GRADE BETWEEN 2 AND 5 PERCENT AND STONE FILL TYPE I SHALL BE USED IN ALL DITCHES WITH A GRADE GREATER THAN 5 PERCENT OR AS DIRECTED BY THE RESIDENT ENGINEER.

DATUM  
VERTICAL N/A  
HORIZONTAL N/A

**DITCH CLEANING DETAIL SHEET**

SURVEYED BY N/A DATE N/A  
 DRAWN BY R.L.F. DATE 5/01  
 SQUAD LEADER T.P.K.  
 DESIGN FILE NO. Crave/98all2/pall2.dgn  
 IPARM FILE pall2dt+j DATE PLOTTED \$DATE\$  
 PROJ. NAME BROOKEIELD--MONIPELIER  
 PROJ. NO. IM\_089-1(2)  
 SHEET 10 OF 66 SHEETS

### MAINLINE DETAILS



- NOTES:**
- SPECIAL PRECAUTIONS MUST BE TAKEN TO PREVENT DAMAGE TO THE EXISTING MEMBRANES AT BRIDGES 36-N AND 41-N. THE CONTRACTOR SHALL PERFORM COLD PLANING WITH CAUTION AT THIS LOCATION. ANY DAMAGES WHICH MAY OCCUR TO THE MEMBRANE AS A RESULT OF THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND WILL BE REPLACED AT NO COST TO THE STATE.
  - ITEM 646.76, LINE STRIPING TARGETS SHALL BE USED FOR CENTERLINE MARKING ONLY.
  - SHOULDER WIDTHS AT BRIDGE G, AS SHOWN ABOVE, SHALL BE 900 mm.

### PAVEMENT MARKING DETAILS

<p><b>702</b> 646.415 DURABLE 150 mm YELLOW LINE STA. 60+718.940 (MM 37.729) - STA. 85+366.043 (MM 53.044) 76+269 80+718</p> <p><b>702</b> 646.414 DURABLE 150 mm WHITE LINE STA. 60+718.940 (MM 37.729) - STA. 85+366.043 (MM 53.044) 76+269 80+375 MM 45.50 STA 76+269 STA 80+718</p>	<p><b>THICKNESS</b></p> <p>SOLID LINE 3.6 m LT 2.3mm DASHED C 3.2mm DASHED C 2.3mm</p> <p>SOLID LINE 3.6 m RT 2.3mm DASHED C 3.2mm DASHED C 2.3mm DASHED C 3.2mm DASHED C 2.3mm</p>	<p><b>646.615 TEMPORARY 150 mm YELLOW LINE</b> STA. 60+718.940 (MM 37.729) - STA. 85+366.043 (MM 53.044) SOLID LINE 3.6 m LT</p> <p><b>646.614 TEMPORARY 150 mm WHITE LINE</b> STA. 60+718.940 (MM 37.729) - STA. 85+366.043 (MM 53.044) SOLID LINE 3.6 m RT</p> <p><b>TAPE 3 M --- IN LAID</b> MM 42.5 - MM45.5 - C DASH</p>
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### PAVEMENT CORES

LOCATION		TOTAL DEPTH (mm)	PCC
1. STA. 61+637.875 (MM 38.300)	TRAVEL SHLDR.	124	N
2. STA. 61+637.875 (MM 38.300)	TRAVEL LANE	267	N
3. STA. 61+637.875 (MM 38.300)	PASSING SHLDR.	102	N
4. STA. 63+247.219 (MM 39.300)	TRAVEL LANE	241	N
5. STA. 63+730.022 (MM 39.600)	TRAVEL LANE	216	N
6. STA. 63+762.209 (MM 39.620)	TRAVEL LANE	216	N
7. STA. 65+741.702 (MM 40.850)	TRAVEL SHLDR.	127	N
8. STA. 65+741.702 (MM 40.850)	TRAVEL LANE	260	N
9. STA. 66+385.440 (MM 41.250)	TRAVEL LANE	241	N
10. STA. 66+417.627 (MM 41.270)	TRAVEL LANE	254	N
11. STA. 68+075.251 (MM 42.300)	PASSING LANE	241	N
12. STA. 70+972.070 (MM 44.100)	PASSING LANE	235	N
13. STA. 70+972.070 (MM 44.100)	PASSING SHLDR.	102	N
14. STA. 72+581.414 (MM 45.100)	PASSING LANE	254	N
15. STA. 77+650.848 (MM 48.250)	TRAVEL SHLDR.	121	N
16. STA. 77+650.848 (MM 48.250)	TRAVEL LANE	267	N
17. STA. 77+650.848 (MM 48.250)	PASSING SHLDR.	127	N
18. STA. 79+984.397 (MM 49.700)	TRAVEL SHLDR.	108	N
19. STA. 79+984.397 (MM 49.700)	TRAVEL LANE	216	N
20. STA. 81+030.470 (MM 50.350)	TRAVEL LANE	235	N
21. STA. 82+237.478 (MM 51.100)	TRAVEL LANE	235	N

### DRAINAGE STRUCTURES

<p><b>604.40 CHANGING ELEVATION OF DI, CB OR MH &amp; 604.412 REHABING DI, CB OR MH, CLASS 1</b> (SEE NOTE I)</p> <p>STA. 65+296.0 309 RT STA. 72+958.0 953 LT STA. 65+388.0 400 RT STA. 73+049.0 044 LT STA. 65+480.0 492 RT STA. 73+049.0 044 RT STA. 67+284.0 275 LT STA. 73+144.0 128 LT STA. 67+545.0 556 LT STA. 73+144.0 136 RT STA. 67+636.0 640 LT STA. 73+233.0 227 LT STA. 67+819.0 823 LT STA. 73+515.0 RT STA. 69+109.0 110 LT STA. 73+524.0 319 LT STA. 69+140.0 110 RT STA. 75+566.0 635 LT STA. 69+186.0 183 LT STA. 75+757 RT STA. 69+785.0 783 LT STA. 75+818 RT STA. 69+864.0 859 LT STA. 70+012 LT STA. 69+937.0 935 LT STA. 73+732 LT STA. 70+843.0 844 LT STA. 75+879 LT STA. 70+909.0 895 LT STA. 75+899 LT STA. 72+867.0 861 LT STA. 75+635 LT STA. 72+867.0 861 LT STA. 67+290 LT STA. 67+549 LT STA. 69+844 LT STA. 75+727 LT STA. 75+879 LT</p>	<p><b>604.412 REHABING DI, CB OR MH, CLASS 1</b></p> <p>STA. 76+474.0 510 LT INTERCHANGE 6 - RAMP B STA. 76+566.0 599 LT STA. 80+099.0 RT STA. 80+130.0 RT STA. 80+174.0 RT STA. 80+180.0 RT STA. 80+239.0 245 RT STA. 80+322.0 RT STA. 80+789.0 RT STA. 80+384.0 RT STA. 81+309.0 RT STA. 81+386.0 RT STA. 81+461.0 RT STA. 81+537.0 RT STA. 83+014.0 LT STA. 80+114.0 RT STA. 83+014.0 LT STA. 80+189.0 RT STA. 83+014.0 LT STA. 80+266.0 RT STA. 83+091.0 LT STA. 80+344.0 RT STA. 83+152.0 LT STA. 80+420.0 RT STA. 83+216.0 LT STA. 80+493.0 RT STA. 83+546.0 LT STA. 80+570.0 RT STA. 75+330 LT STA. 80+723.0 RT</p>	<p><b>604.40 CHANGING ELEVATION OF DI, CB OR MH</b></p> <p>STA. 80+316.0 RT STA. 80+100 RT STA. 80+946.0 RT STA. 80+180 RT STA. 81+019.0 RT STA. 80+320 RT STA. 81+614.0 RT STA. 80+788 RT STA. 81+701.0 LT STA. 80+230 RT STA. 81+385 RT STA. 83+136 LT STA. 81+465 RT STA. 83+199 LT STA. 81+530 RT STA. 83+528 LT STA. 81+610 RT STA. 82+923 LT STA. 82+999 LT STA. 83+075 LT</p>
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### BRIDGE DETAILS

A. BRIDGE 34-N	STA. 62+521.405 (MM 38.849)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
B. BRIDGE 35-N	STA. 69+150.293 (MM 42.968)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
C. BRIDGE 36-N	STA. 75+550.654 (MM 46.945)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
D. BRIDGE 37-N	STA. 80+510.652 (MM 50.027)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
E. BRIDGE 38-N	STA. 80+982.190 (MM 50.320)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
F. BRIDGE 40-N	STA. 84+609.651 (MM 52.574)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS
G. BRIDGE 41-N	STA. 85+288.795 (MM 52.996)	COLD PLANE 25 mm & PAVE 25 mm	TYPE IVS

REFER TO SHEET I3 OF 66 FOR BRIDGE APPROACH DETAILS

**NOTE:**

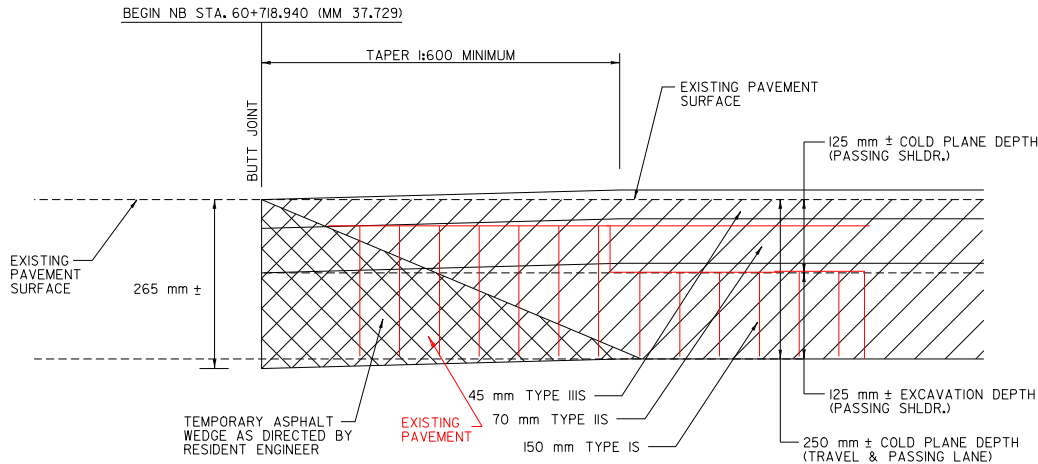
I. ALL DRAINAGE STRUCTURES IN PAVEMENT BETWEEN STA. 60+718.940 (MM 37.729) AND STA. 75+961.037 (MM 47.200) SHALL BE KEPT FLUSH WITH THE SURROUNDING PAVEMENT AT ALL TIMES DURING CONSTRUCTION WHEN THE STRUCTURE IS LOCATED IN TRAFFIC OR DIRECTLY ADJACENT TO TRAFFIC DUE TO THE SHIFTING OF LANES DURING CONSTRUCTION PHASING. PAYMENT FOR THIS WORK SHALL BE MADE ONCE UNDER ITEM 604.40 FOR EACH AFFECTED STRUCTURE. EACH STRUCTURE SHALL ALSO BE REHABED AND PAID FOR UNDER ITEM 604.412.

### MAINLINE DETAILS

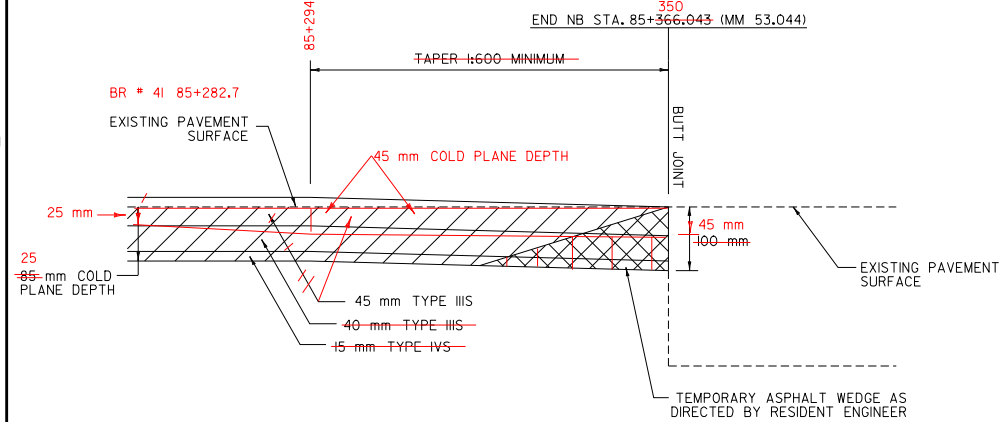
SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	/page/28all2/pall2.dgn		
IPARM FILE	pall2dtl1	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKFIELD--MONTPELIER		
PROJ. NO.	IM_089-1(2)-----		
SHEET	11	OF	66 SHEETS

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

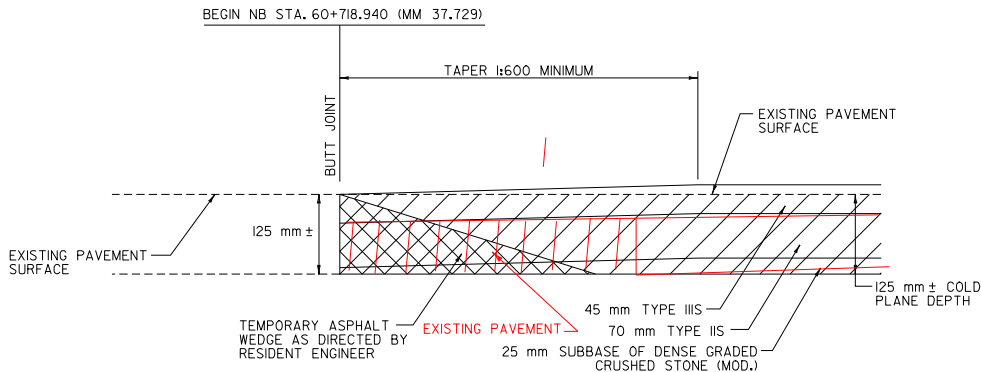
### BEGIN PROJECT PAVEMENT TRANSITION AT TRAVEL & PASSING LANES AND PASSING SHOULDER



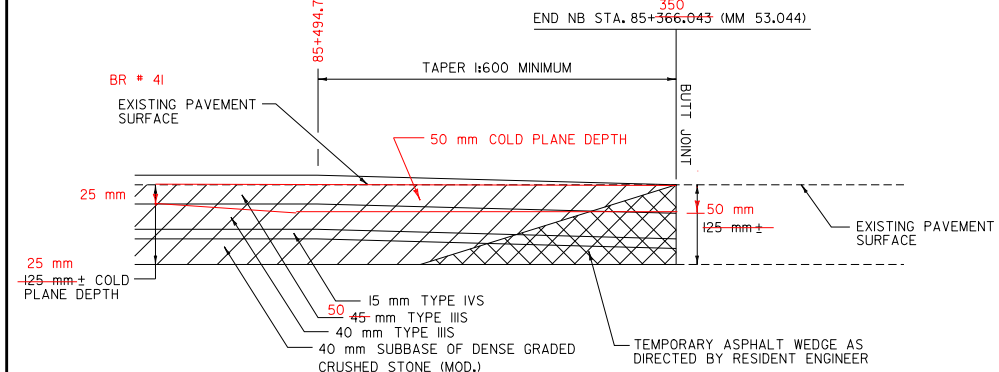
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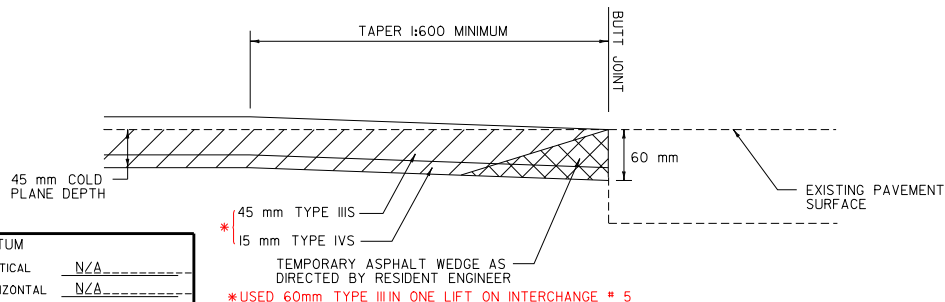
### BEGIN PROJECT PAVEMENT TRANSITION AT TRAVEL SHOULDER



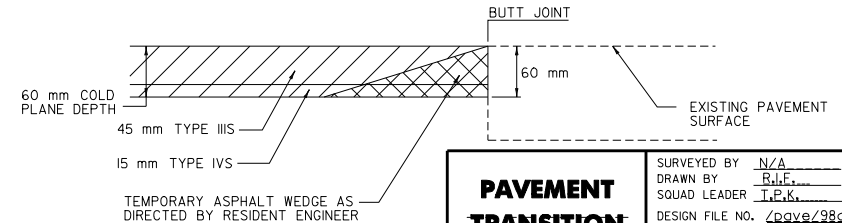
### END PROJECT PAVEMENT TRANSITION AT TRAVEL SHOULDER



### BEGIN & END PROJECT PAVEMENT TRANSITION AT INTERCHANGE 5 & 6 RAMP TERMINALS

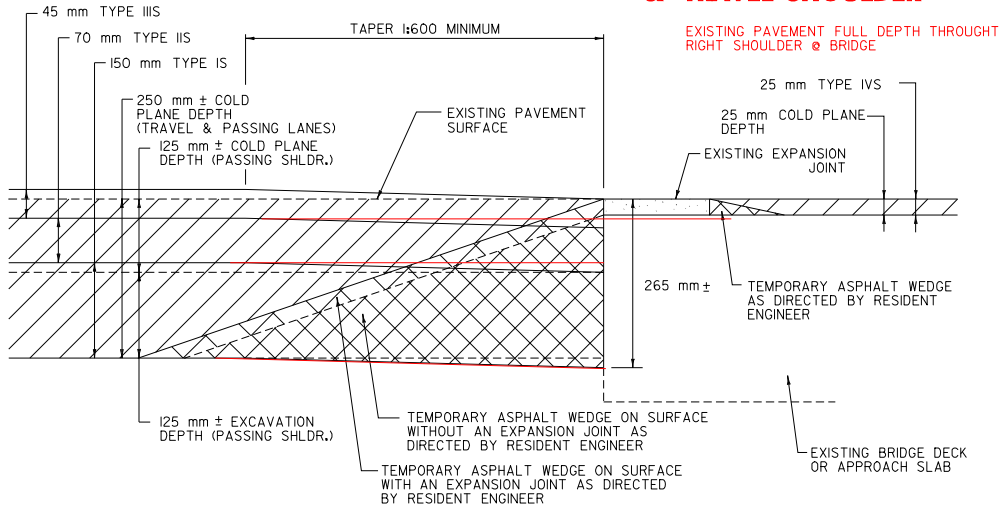


### BEGIN & END PROJECT PAVEMENT TRANSITION AT INTERCHANGE 7 & 8 RAMP TERMINALS



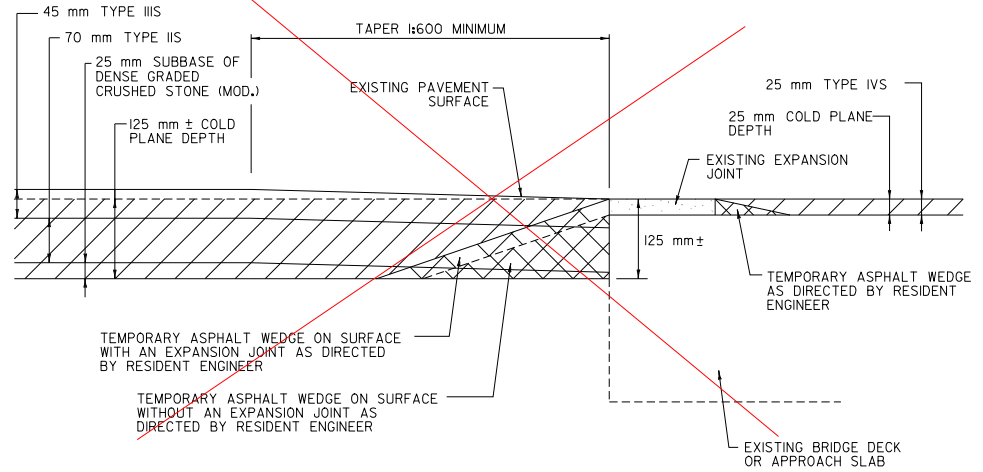
PAVEMENT TRANSITION DETAILS SHEET 1	
SURVEYED BY	N/A DATE N/A
DRAWN BY	R.L.F. DATE 5/01
SQUAD LEADER	T.P.K.
DESIGN FILE NO.	zrave/98all2/pall2.dgn
IPARM FILE	pall2dt2.i DATE PLOTTED \$DATE\$
PROJ. NAME	BROOKFIELD MONIPELIER
PROJ. NO.	IM_089-1(2)
SHEET J2 OF	66 SHEETS

### BRIDGE APPROACH DETAIL AT TRAVEL & PASSING LANES AND PASSING SHOULDER & TRAVEL SHOULDER



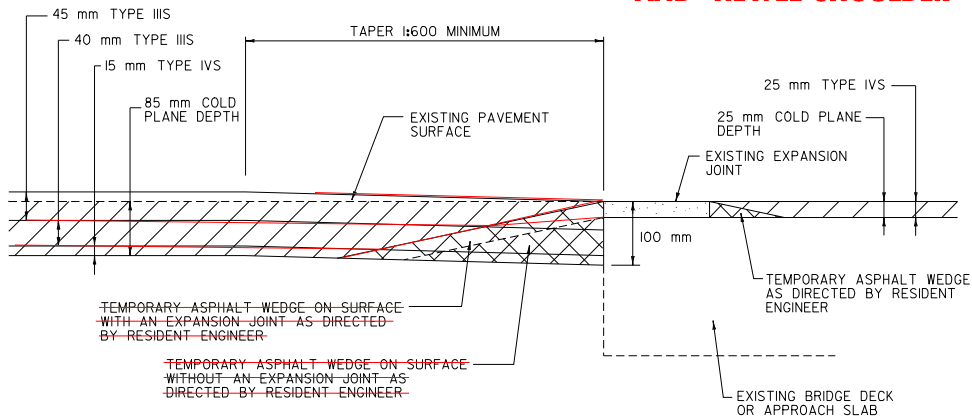
- BR 34-N SOUTH APPROACH
- BR 34-N NORTH APPROACH
- BR 35-N SOUTH APPROACH
- BR 35-N NORTH APPROACH
- BR 36-N SOUTH APPROACH
- BR 36-N NORTH APPROACH

### ~~BRIDGE APPROACH DETAIL AT TRAVEL SHOULDER~~



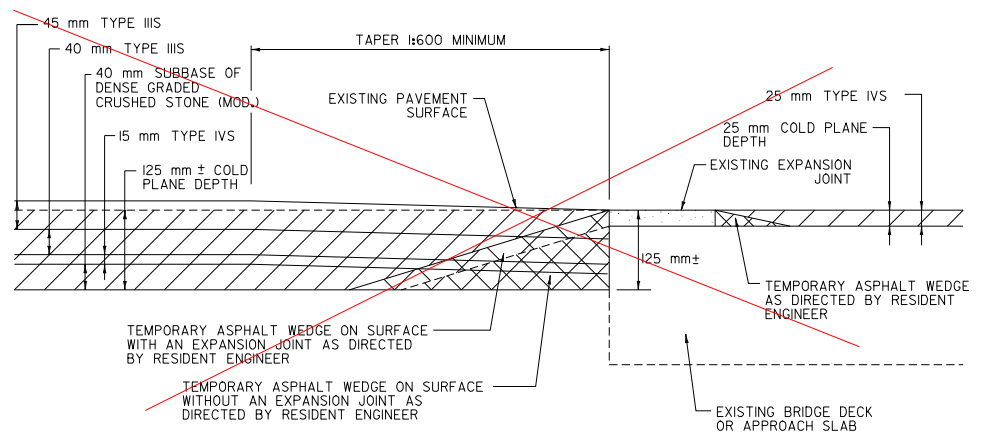
- BR 34-N SOUTH APPROACH
- BR 34-N NORTH APPROACH
- BR 35-N SOUTH APPROACH
- BR 35-N NORTH APPROACH
- BR 36-N SOUTH APPROACH
- BR 36-N NORTH APPROACH

### BRIDGE APPROACH DETAIL AT TRAVEL & PASSING LANES AND PASSING SHOULDER AND TRAVEL SHOULDER



- BR 37-N SOUTH APPROACH
- BR 37-N NORTH APPROACH
- BR 38-N SOUTH APPROACH
- BR 38-N NORTH APPROACH
- BR 40-N SOUTH APPROACH
- BR 40-N NORTH APPROACH
- BR 41-N SOUTH APPROACH
- BR 41-N NORTH APPROACH

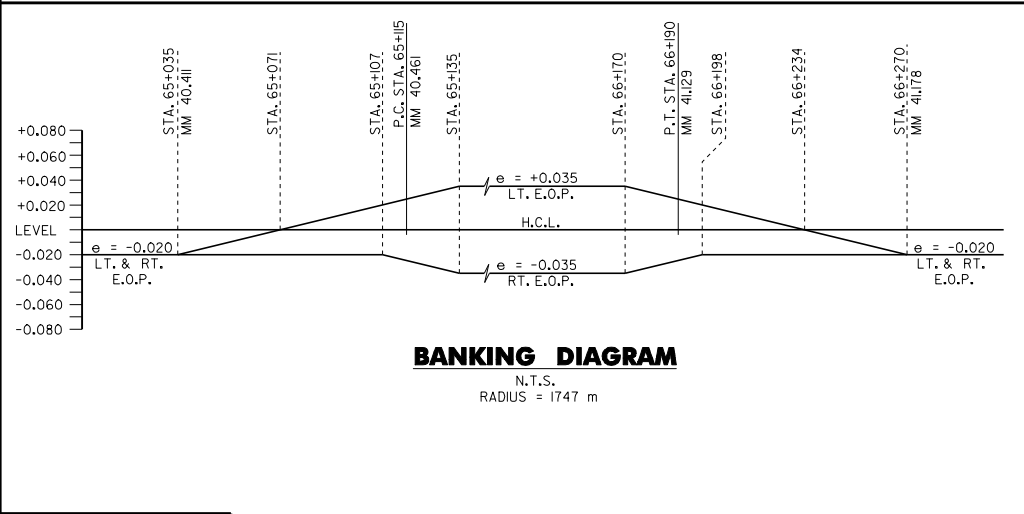
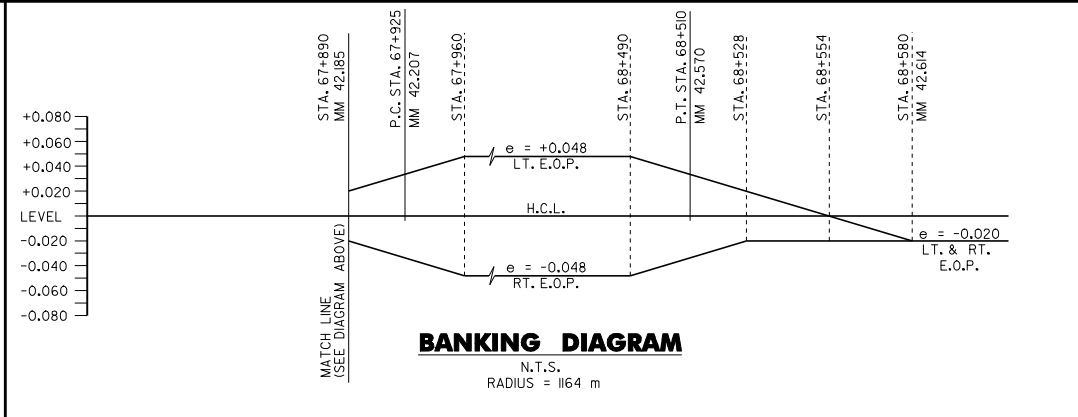
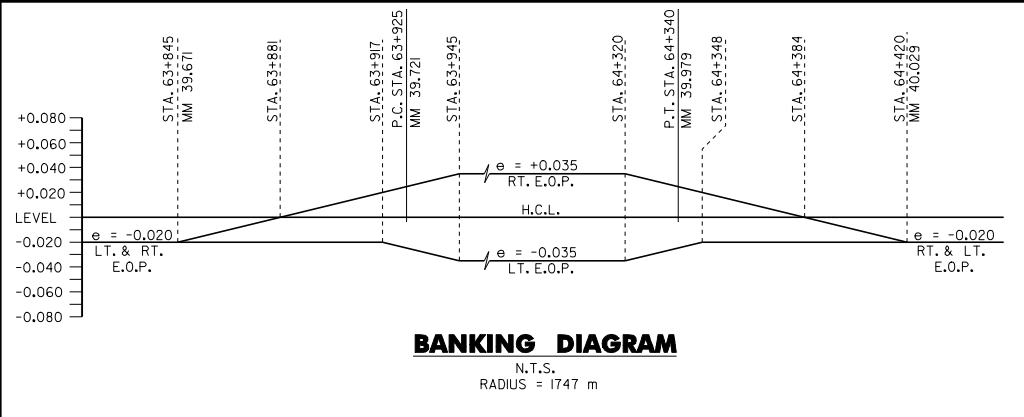
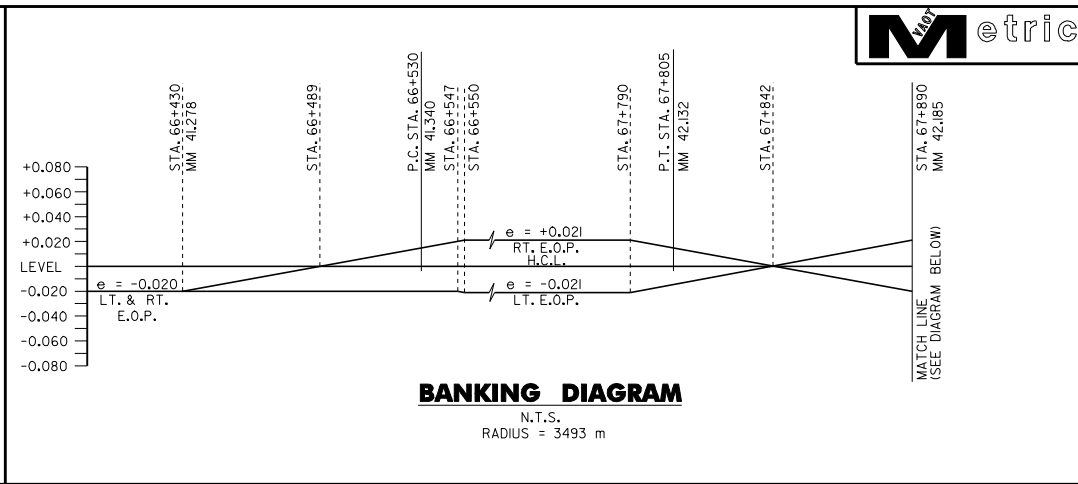
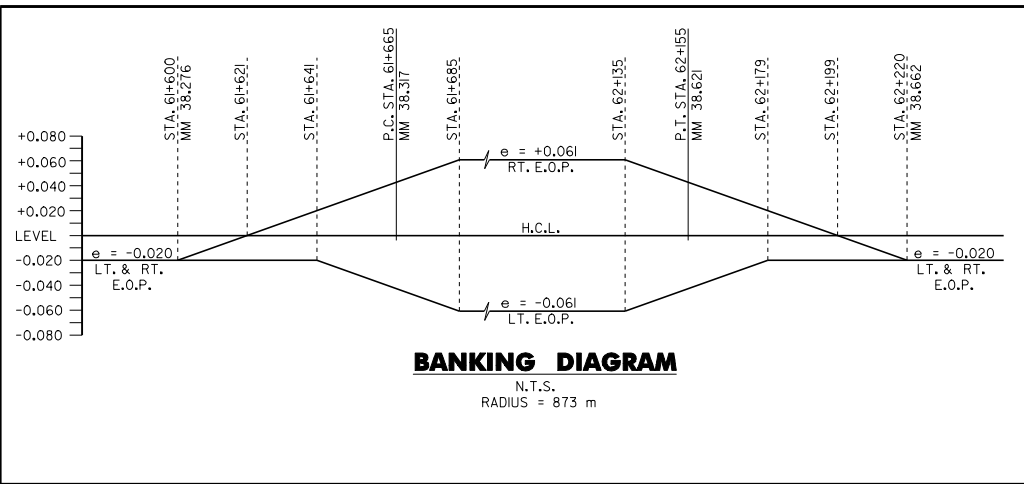
### ~~BRIDGE APPROACH DETAIL AT TRAVEL SHOULDER~~



- BR 37-N SOUTH APPROACH
- BR 37-N NORTH APPROACH
- BR 38-N SOUTH APPROACH
- BR 38-N NORTH APPROACH
- BR 40-N SOUTH APPROACH
- BR 40-N NORTH APPROACH
- BR 41-N SOUTH APPROACH
- BR 41-N NORTH APPROACH

PAVEMENT TRANSITION		SHEET 2	
SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	C:\pave\98all2\pall2.dgn		
IPARM FILE	pall2dt3.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEIELD...MONPELIER		
PROJ. NO.	IM_089-1(2).....		
SHEET	13	OF	66
		SHEETS	

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A



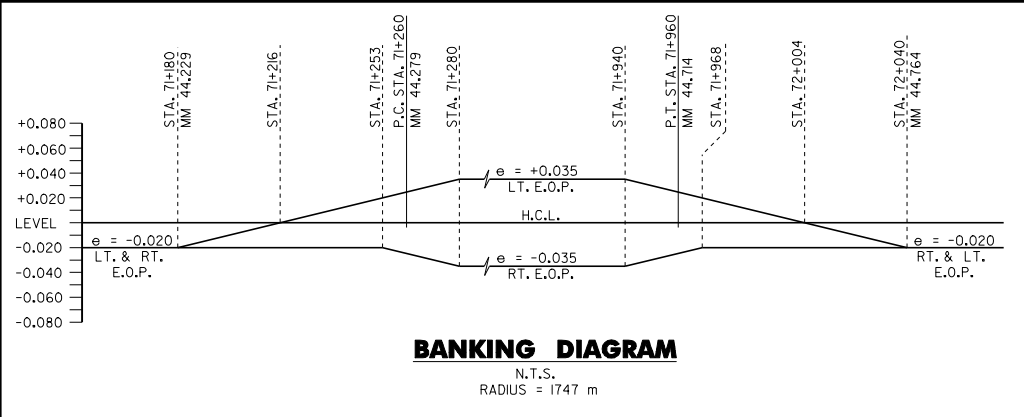
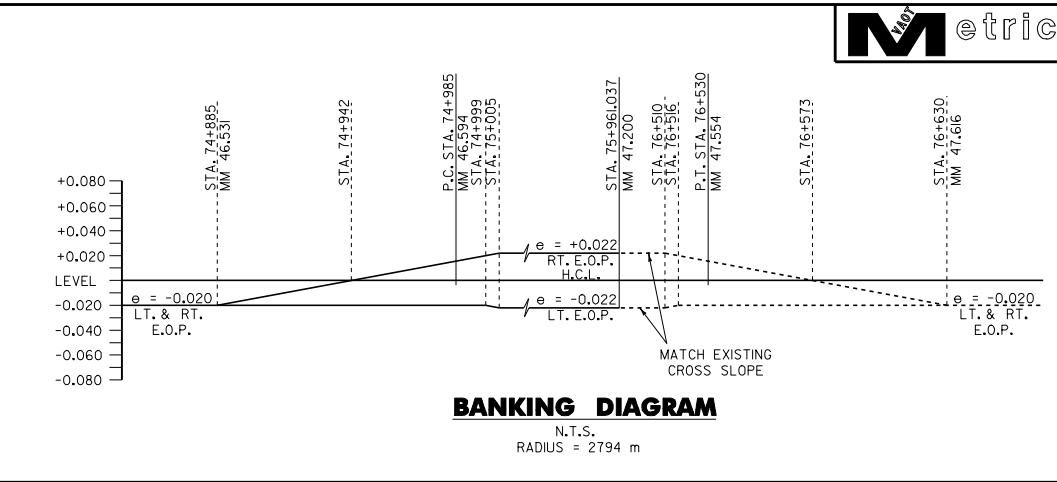
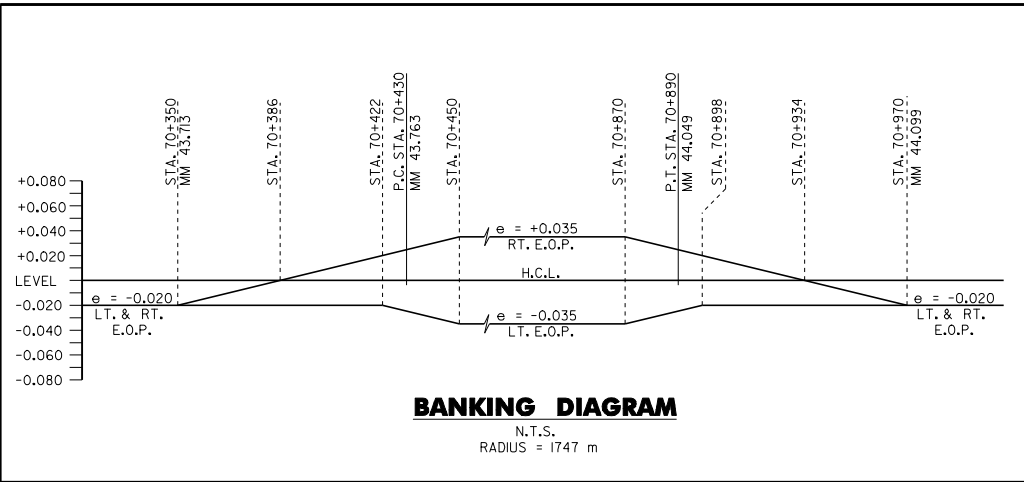
**SUPERELEVATION BANKING NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE HORIZONTAL AND VERTICAL GEOMETRY OF THE EXISTING ROADWAY.
2. BANKING DIAGRAMS HAVE BEEN INCLUDED ONLY FOR SUPERELEVATED CURVES LOCATED BETWEEN MM 37.729 AND MM 47.200. BANKING DIAGRAMS HAVE NOT BEEN INCLUDED FOR TWO CURVES THAT MAINTAIN NORMAL CROWN CROSS SLOPE. THESE CURVES ARE LOCATED BETWEEN P.C. STA. 69+075 (MM 42.921) AND P.T. STA. 69+555 (MM 43.219) AND BETWEEN P.C. STA. 73+660 (MM 45.770) AND P.T. STA. 74+205 (MM 46.109).
3. THE MAXIMUM ROLL-OVER BETWEEN LANE AND SHOULDER CROSS SLOPES ON THE OUTSIDE (HIGH SIDE) OF A SUPERELEVATED CURVE SHALL BE SEVEN PERCENT. SHOULDER CROSS SLOPE ON THE INSIDE (LOW SIDE) OF A SUPERELEVATED CURVE SHALL BE A MINIMUM OF SIX PERCENT AND MATCH THE ADJACENT LANE CROSS SLOPE WHEN THE LANE CROSS SLOPE EXCEEDS SIX PERCENT.

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

**SUPERELEVATION BANKING DIAGRAMS SHEET 1**

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	/pave/98all2/pall2.dgn		
IPARM FILE	pall2bdl.j	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEIELD...MONIPELIER		
PROJ. NO.	IM_089-1(2)		
SHEET	14	OF	66
SHEETS			

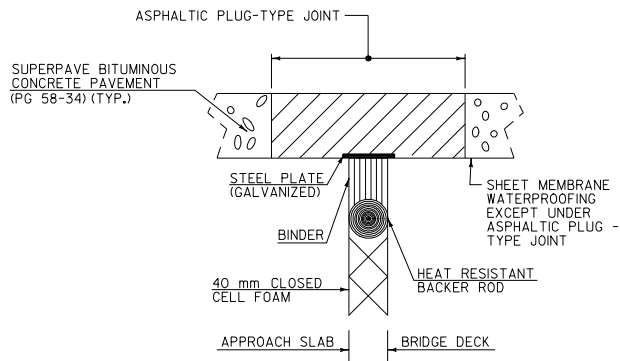


**SUPERELEVATION BANKING NOTES:**

1. THE CONTRACTOR IS RESPONSIBLE FOR ESTABLISHING AND MAINTAINING THE HORIZONTAL AND VERTICAL GEOMETRY OF THE EXISTING ROADWAY.
2. BANKING DIAGRAMS HAVE BEEN INCLUDED ONLY FOR SUPERELEVATED CURVES LOCATED BETWEEN MM 37.729 AND MM 47.200, BANKING DIAGRAMS HAVE NOT BEEN INCLUDED FOR TWO CURVES THAT MAINTAIN NORMAL CROWN CROSS SLOPE. THESE CURVES ARE LOCATED BETWEEN P.C. STA. 69+075 (MM 42.921) AND P.T. STA. 69+555 (MM 43.219) AND BETWEEN P.C. STA. 73+660 (MM 45.770) AND P.T. STA. 74+205 (MM 46.109).
3. THE MAXIMUM ROLL-OVER BETWEEN LANE AND SHOULDER CROSS SLOPES ON THE OUTSIDE (HIGH SIDE) OF A SUPERELEVATED CURVE SHALL BE SEVEN PERCENT. SHOULDER CROSS SLOPE ON THE INSIDE (LOW SIDE) OF A SUPERELEVATED CURVE SHALL BE A MINIMUM OF SIX PERCENT AND MATCH THE ADJACENT LANE CROSS SLOPE WHEN THE LANE CROSS SLOPE EXCEEDS SIX PERCENT.

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>SUPERELEVATION BANKING DIAGRAMS SHEET 2</b>	
SURVEYED BY	N/A DATE N/A
DRAWN BY	R.L.F. DATE 5/01
SQUAD LEADER	T.P.K.
DESIGN FILE NO.	zrave/98all2/pall2.dgn
IPARM FILE	pall2bd2.i DATE \$DATE\$
PROJ. NAME	BROOKEIELD...MONIPELIER
PROJ. NO.	IM_089-(12)
SHEET 15 OF 66	SHEETS



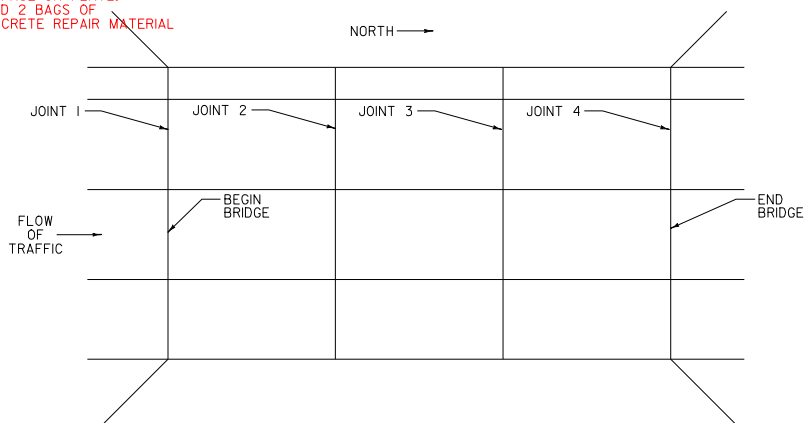
### ASPHALTIC PLUG-TYPE JOINT DETAIL

BR 35-N  
ADDITIONAL WORK DONE ON JOINT, USED 9 BAGS OF CONC. REPAIR MATERIAL, NO PLATE

JOINT IN POOR CONDITION, NO FLAT SURFACE OR PLATE

BRIDGE 34-N - STA. 62+503.702	(MM 38.838)	JOINT 1	14.5	m	LENGTH	FIXED JOINTS, NO PLATE, NO GAP, DETERIORATED CONCRETE
BRIDGE 35-N - STA. 69+171.214	(MM 42.981)	JOINT 2	12.0	m	LENGTH	
BRIDGE 36-N - STA. 75+524.905	(MM 46.929)	JOINT 1	12.4	m	LENGTH	JOINT CONSTRUCTED AS PER DETAIL
BRIDGE 36-N - STA. 75+576.404	(MM 46.961)	JOINT 2	12.4	m	LENGTH	
BRIDGE 37-N - STA. 80+494.559	(MM 50.017)	JOINT 2	16.5	m	LENGTH	
BRIDGE 38-N - STA. 80+956.441	(MM 50.304)	JOINT 1,2	13.2	m	LENGTH	
BRIDGE 40-N - STA. 84+540.450	(MM 52.531)	JOINT 1	14.3	m	LENGTH	
BRIDGE 40-N - STA. 84+678.853	(MM 52.617)	JOINT 4	18.1	m	LENGTH	
BRIDGE 41-N - STA. 85+264.654	(MM 52.981)	JOINT 1,2	10.3	m	LENGTH	

BR 37-N JOINT 2  
JOINT IN POOR CONDITION, NO FLAT SURFACE OR PLATE. USED 2 BAGS OF CONCRETE REPAIR MATERIAL



### JOINT NUMBERING SCHEMATIC

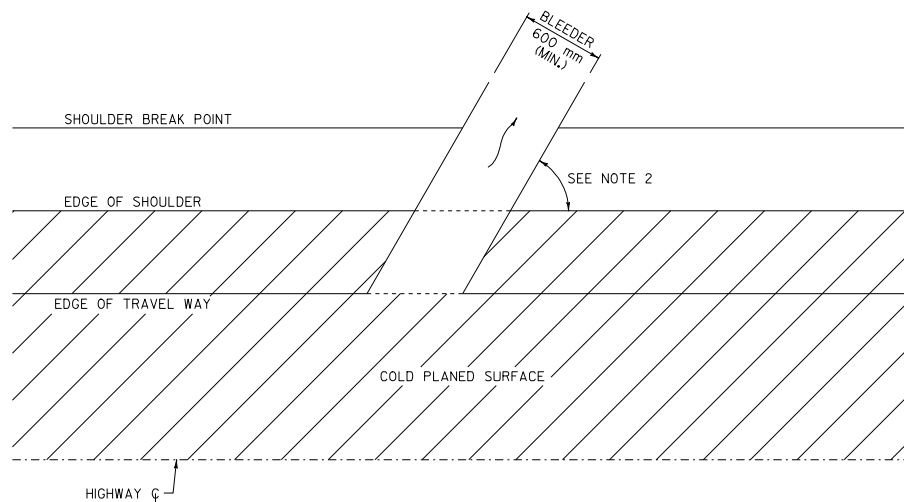
#### NOTES:

- ALL WORK COMPLETED TO THE MANUFACTURER'S RECOMMENDATIONS SHALL BE PAID FOR UNDER ITEM 516.10.
- ALL SURFACES WITHIN THE JOINT SYSTEM SHALL BE BRUSHED-BLASTED OR BLOWN CLEAN WITH A 1650°C HOT COMPRESSED AIR LANCE PRIOR TO TACKING SURFACES WITH THE LIQUID BINDER.
- THE CONTRACTOR SHALL PROVIDE THE RESIDENT ENGINEER WITH A DETAIL OF THE PREFERRED MANUFACTURER'S ASPHALTIC PLUG-TYPE JOINT BEFORE ANY JOINT REHABILITATION WORK MAY BEGIN.

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

#### BR 40N LT CURB REPAIR

SAW CUT PAVEMENT FULL DEPTH 1M FROM LT CURB, FULL LENGTH OF BRIDGE.  
REMOVE DAMAGED CONCRETE WITH COMPRESSED AIR, REPAIRED DEEP AREAS WITH MASTER BUILDERS SET 45 @ 4 LOCATIONS AS SHOWN BELOW.  
SEAL ENTIRE LENGTH & WIDTH WITH HOT RUBBER MEMBRANE.  
PAVE WITH TYPE IV.

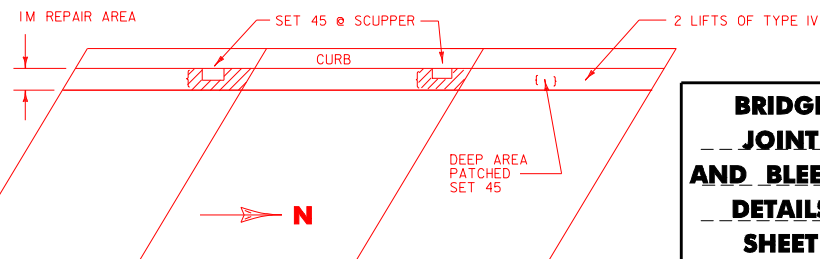


### BLEEDER DETAIL

#### NOTES:

- BLEEDERS SHALL BE CUT TO THE DEPTH OF COLD PLANING AT LOCATIONS SPECIFIED BY THE RESIDENT ENGINEER DURING COLD PLANING OPERATIONS. WHEN THE TRAVEL WAY IS COLD PLANED TO A GREATER DEPTH THAN THE SHOULDER, THE BLEEDER SHALL BE CUT THROUGH THE SHOULDER TO THE SAME DEPTH AS THE TRAVEL WAY.
- ANGLE BLEEDERS TO BEST ACCEPT WATER FLOW. LINE BLEEDERS WITH SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.) AND GRADE TO DRAIN.
- BLEEDERS CUT THROUGH THE SHOULDER SHALL BE FILLED WITH SUBBASE OF DENSE GRADED CRUSHED STONE (MOD.) PRIOR TO PAVING THE SHOULDER. BLEEDERS CUT BEYOND THE EDGE OF SHOULDER SHALL BE FILLED WITH EXCAVATED DITCHING MATERIAL OR EARTH BORROW AS DIRECTED BY THE RESIDENT ENGINEER WHEN NO LONGER NEEDED.
- PAYMENT FOR CONSTRUCTING BLEEDERS WILL BE MADE UNDER THE APPROPRIATE EQUIPMENT RENTAL ITEM(S).

#### BR 40N LT CURB REPAIR

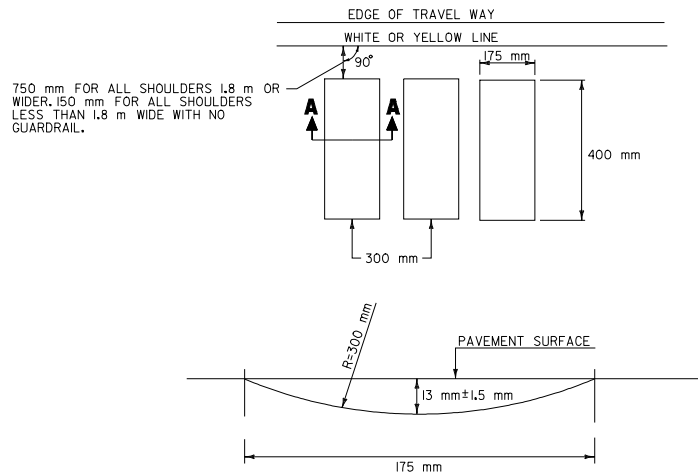


### BRIDGE JOINT AND BLEEDER DETAILS SHEET

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	/rave/98all2/pall2.dgn		
IPARM FILE	pall2dt4.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEFIELD - MONPELIER		
PROJ. NO.	IM_089-(2)		
SHEET	16	OF	66
SHEETS			

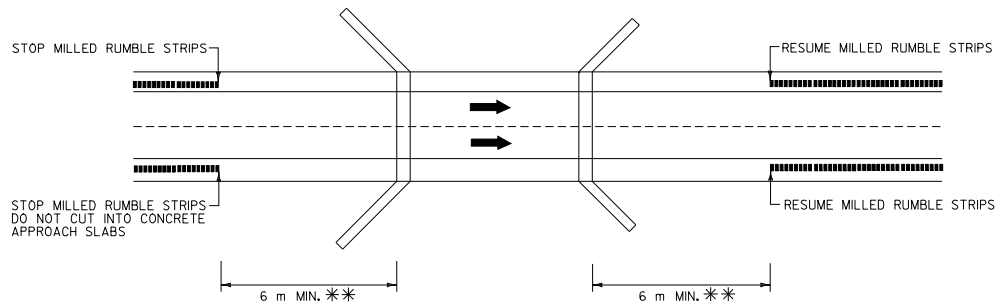


### TYPICAL MILLING DETAIL



### SECTION A-A

### BRIDGE DETAIL

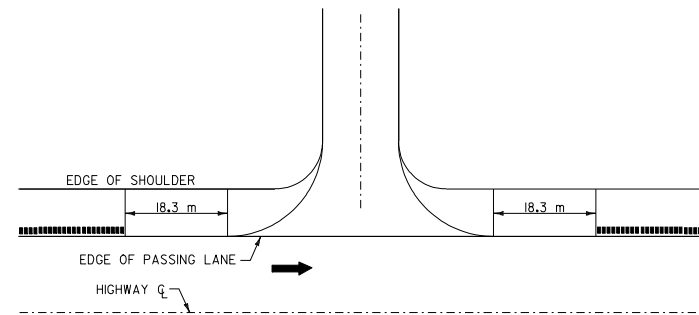


\*\* BRIDGE RAIL WILL DETERMINE MINIMUM DISTANCE IN SOME CASES.

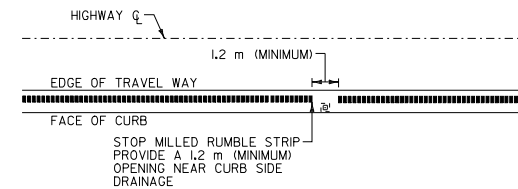
#### LEGEND

- DIRECTION OF TRAFFIC FLOW
- MILLED RUMBLE STRIPS

### U-TURN DETAIL



### DRAINAGE DETAIL



#### NOTE:

1. MILLED RUMBLE STRIPS WILL NOT BE REQUIRED IN GUARDRAIL AREAS ADJACENT TO THE 1.2 m SHOULDER.

**MILLED RUMBLE STRIP DETAILS SHEET 2**

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.I.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	/pave/98all2/pall2.dgn		
IPARM FILE	pall2rs2.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEIELD - MONIPELIER		
PROJ. NO.	IM_089-1(2)		
SHEET	J8	OF	66
SHEETS			

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

## PAVEMENT AND MARKING DETAIL NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO. 5

**646.415 DURABLE 150 mm YELLOW LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID LT (216 m)  
RAMP "B" SOLID LT (237 m)

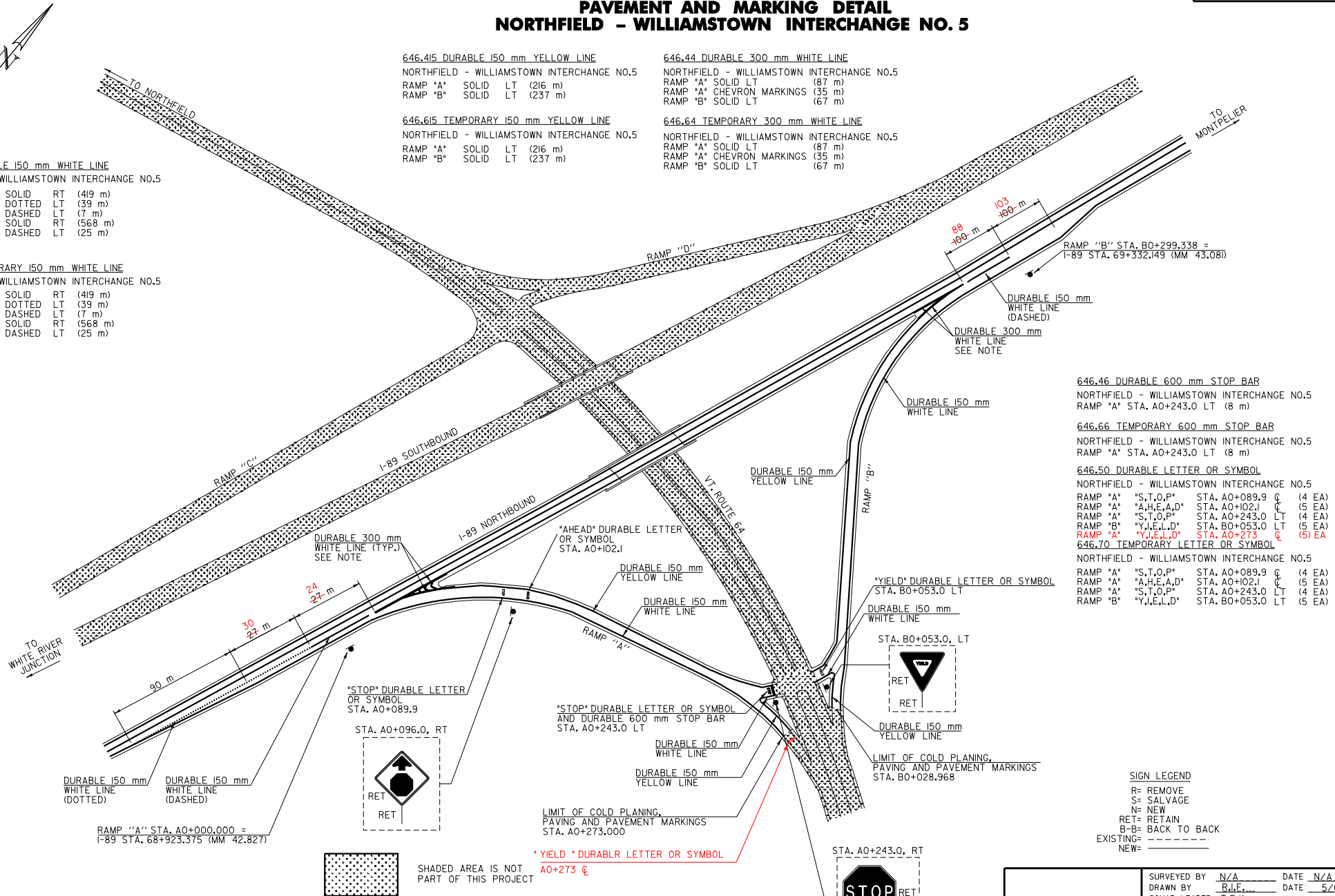
**646.44 DURABLE 300 mm WHITE LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID LT (87 m)  
RAMP "A" CHEVRON MARKINGS (35 m)  
RAMP "B" SOLID LT (67 m)

**646.615 TEMPORARY 150 mm YELLOW LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID LT (216 m)  
RAMP "B" SOLID LT (237 m)

**646.64 TEMPORARY 300 mm WHITE LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID LT (87 m)  
RAMP "A" CHEVRON MARKINGS (35 m)  
RAMP "B" SOLID LT (67 m)

**646.414 DURABLE 150 mm WHITE LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID RT (419 m)  
RAMP "A" DOTTED LT (39 m)  
RAMP "A" DASHED LT (7 m)  
RAMP "B" SOLID RT (568 m)  
RAMP "B" DASHED LT (25 m)

**646.614 TEMPORARY 150 mm WHITE LINE**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" SOLID RT (419 m)  
RAMP "A" DOTTED LT (39 m)  
RAMP "A" DASHED LT (7 m)  
RAMP "B" SOLID RT (568 m)  
RAMP "B" DASHED LT (25 m)



**646.46 DURABLE 600 mm STOP BAR**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" STA. A0+243.0 LT (8 m)

**646.66 TEMPORARY 600 mm STOP BAR**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" STA. A0+243.0 LT (8 m)

**646.50 DURABLE LETTER OR SYMBOL**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" "S,T,O,P" STA. A0+089.9 C (4 EA)  
RAMP "A" "A,H,E,A,D" STA. A0+102.1 C (5 EA)  
RAMP "A" "S,T,O,P" STA. A0+243.0 LT (4 EA)  
RAMP "B" "Y,I,E,L,D" STA. B0+053.0 LT (5 EA)  
RAMP "A" "Y,I,E,L,D" STA. A0+273 C (5 EA)

**646.70 TEMPORARY LETTER OR SYMBOL**  
NORTHFIELD - WILLIAMSTOWN INTERCHANGE NO.5  
RAMP "A" "S,T,O,P" STA. A0+089.9 C (4 EA)  
RAMP "A" "A,H,E,A,D" STA. A0+102.1 C (5 EA)  
RAMP "A" "S,T,O,P" STA. A0+243.0 LT (4 EA)  
RAMP "B" "Y,I,E,L,D" STA. B0+053.0 LT (5 EA)

**SIGN LEGEND**  
R= REMOVE  
S= SALVAGE  
N= NEW  
RET= RETAIN  
B-B= BACK TO BACK  
EXISTING= -----  
NEW= -----

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.E.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	C:\pave\98all2\pall2.dgn		
IPARM FILE	DATE	DATE	\$DATE\$
PROJ. NAME	BROOKEIELD...MONPELIER		
PROJ. NO.	IM_089-1(2)		
SHEET 19	OF	66	SHEETS

### INTERCHANGE NO. 5 DETAIL

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

**NOTE:**  
REFER TO SHEET 23 OF 66 & STANDARD SHEETS  
E-191M & E-192M FOR PAVEMENT MARKING DETAILS

## PAVEMENT AND MARKING DETAIL SOUTH BARRE INTERCHANGE NO. 6

**646.414 DURABLE 150 mm WHITE LINE**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" SOLID RT (470 m)
- RAMP "A" DOTTED LT (45 m)
- RAMP "B" SOLID RT (518 m)
- RAMP "B" DASHED LT (6 m)

**646.614 TEMPORARY 150 mm WHITE LINE**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" SOLID RT (470 m)
- RAMP "A" DOTTED LT (45 m)
- RAMP "B" SOLID RT (518 m)
- RAMP "B" DASHED LT (6 m)

**646.415 DURABLE 150 mm YELLOW LINE**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" SOLID LT (237 m)
- RAMP "B" SOLID LT (217 m)

**646.615 TEMPORARY 150 mm YELLOW LINE**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" SOLID LT (237 m)
- RAMP "B" SOLID LT (217 m)

**646.44 DURABLE 300 mm WHITE LINE**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" SOLID LT (173 m)
- RAMP "A" CHEVRON MARKINGS (120 m)
- RAMP "B" SOLID LT (285 m)

**646.64 TEMPORARY 300 mm WHITE LINE**  
SOUTH BARRE INTERCHANGE NO.6

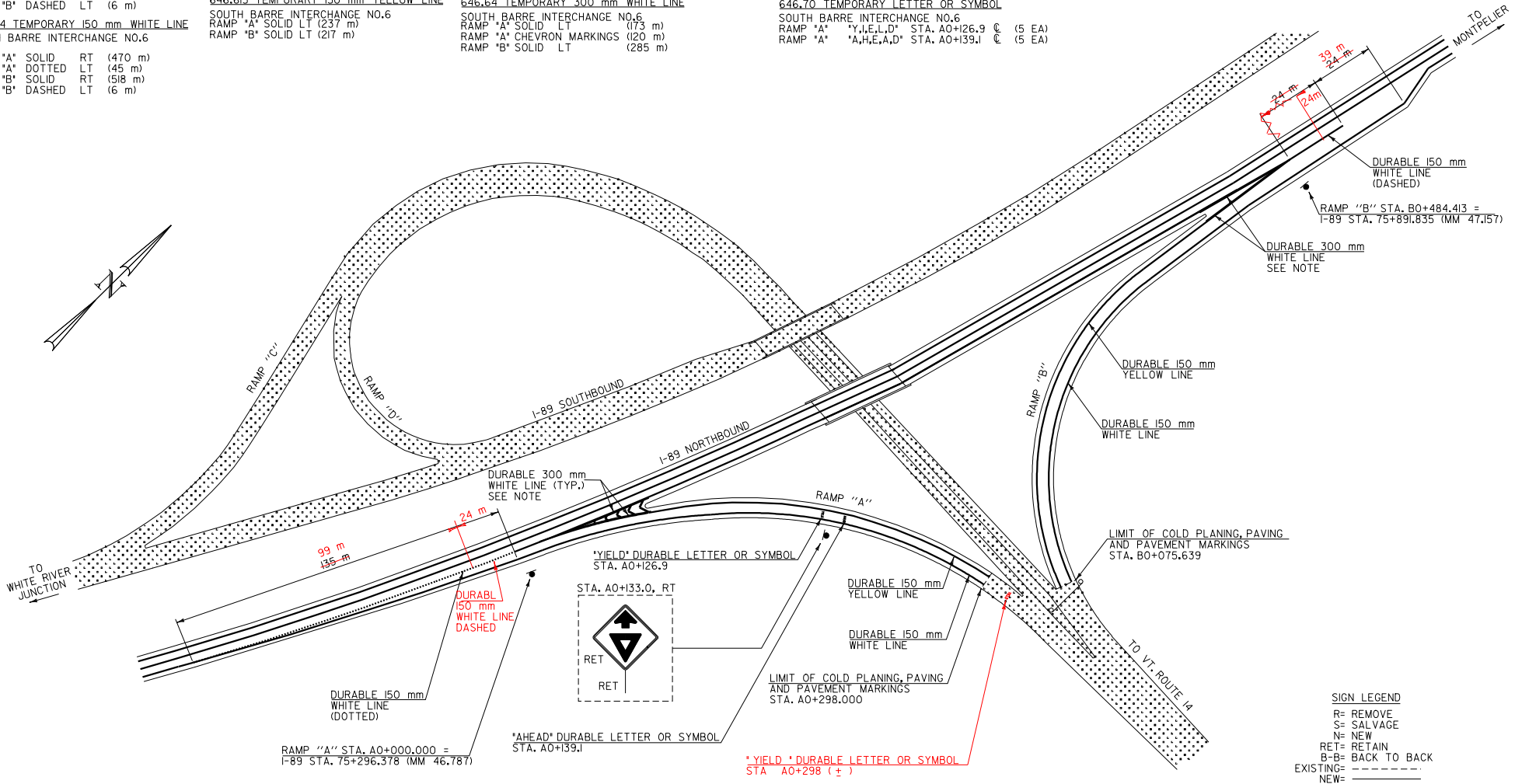
- RAMP "A" SOLID LT (173 m)
- RAMP "A" CHEVRON MARKINGS (120 m)
- RAMP "B" SOLID LT (285 m)

**646.50 DURABLE LETTER OR SYMBOL**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" "Y,I,E,L,D" STA. A0+126.9 C (5 EA)
- RAMP "A" "A,H,E,A,D" STA. A0+139.1 C (5 EA)
- RAMP "A" "Y,I,E,L,D" STA. A0+298 ± C (5 EA)

**646.70 TEMPORARY LETTER OR SYMBOL**  
SOUTH BARRE INTERCHANGE NO.6

- RAMP "A" "Y,I,E,L,D" STA. A0+126.9 C (5 EA)
- RAMP "A" "A,H,E,A,D" STA. A0+139.1 C (5 EA)



- SIGN LEGEND**
- R= REMOVE
  - S= SALVAGE
  - N= NEW
  - RET= RETAIN
  - B-B= BACK TO BACK
  - EXISTING= - - - - -
  - NEW= \_\_\_\_\_

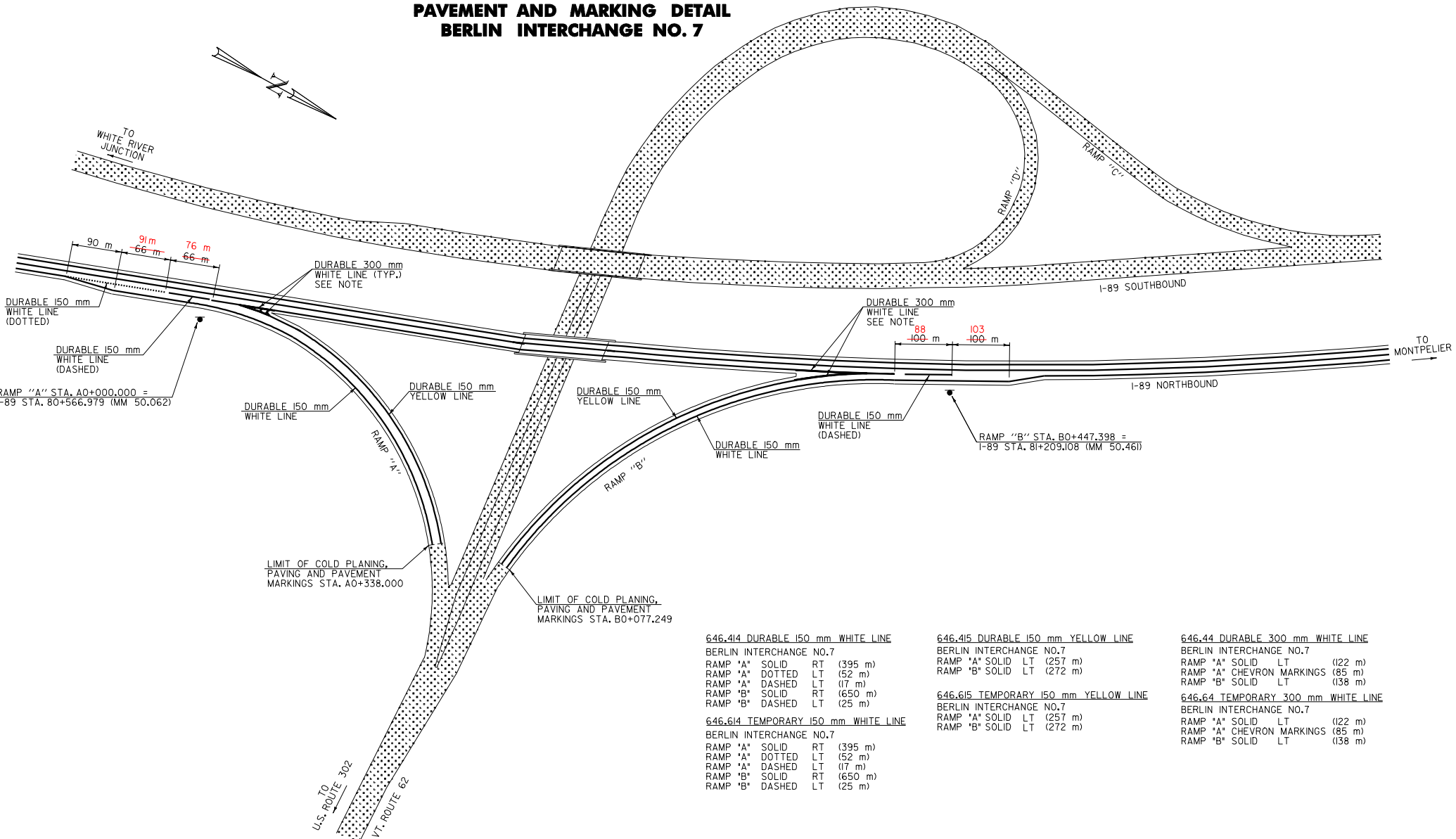
SHADED AREA IS NOT PART OF THIS PROJECT

NOTE:  
REFER TO SHEET 23 OF 66 & STANDARD SHEETS  
E-191M & E-192M FOR PAVEMENT MARKING DETAILS

DATUM	N/A
VERTICAL	N/A
HORIZONTAL	N/A

<b>INTERCHANGE NO. 6 DETAIL</b>	
SURVEYED BY N/A	DATE N/A
DRAWN BY R.L.F.	DATE 5/01
SQUAD LEADER T.P.K.	
DESIGN FILE NO. /rave/98all2/pall2.dgn	
IPARM FILE pall2in6.i	DATE PLOTTED \$DATE\$
PROJ. NAME BROOKFIELD - MONPELIER	
PROJ. NO. IM_089-1(2)	
SHEET 20 OF 66	SHEETS

## PAVEMENT AND MARKING DETAIL BERLIN INTERCHANGE NO. 7



LIMIT OF COLD PLANING,  
PAVING AND PAVEMENT  
MARKINGS STA. A0+338.000

LIMIT OF COLD PLANING,  
PAVING AND PAVEMENT  
MARKINGS STA. B0+077.249

- |  |   |  |
|--|---|--|
| <p>646.414 DURABLE 150 mm WHITE LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID RT (395 m)<br/>RAMP 'A' DOTTED LT (52 m)<br/>RAMP 'A' DASHED LT (17 m)<br/>RAMP 'B' SOLID RT (650 m)<br/>RAMP 'B' DASHED LT (25 m)</p>   | <p>646.415 DURABLE 150 mm YELLOW LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID LT (257 m)<br/>RAMP 'B' SOLID LT (272 m)</p>   | <p>646.44 DURABLE 300 mm WHITE LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID LT (122 m)<br/>RAMP 'A' CHEVRON MARKINGS (85 m)<br/>RAMP 'B' SOLID LT (138 m)</p>   |
| <p>646.614 TEMPORARY 150 mm WHITE LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID RT (395 m)<br/>RAMP 'A' DOTTED LT (52 m)<br/>RAMP 'A' DASHED LT (17 m)<br/>RAMP 'B' SOLID RT (650 m)<br/>RAMP 'B' DASHED LT (25 m)</p> | <p>646.615 TEMPORARY 150 mm YELLOW LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID LT (257 m)<br/>RAMP 'B' SOLID LT (272 m)</p> | <p>646.64 TEMPORARY 300 mm WHITE LINE<br/>BERLIN INTERCHANGE NO.7<br/>RAMP 'A' SOLID LT (122 m)<br/>RAMP 'A' CHEVRON MARKINGS (85 m)<br/>RAMP 'B' SOLID LT (138 m)</p> |

SHADED AREA IS NOT  
PART OF THIS PROJECT

NOTE:  
REFER TO SHEET 23 OF 66 & STANDARD SHEETS  
E-191M & E-192M FOR GORE MARKING DETAILS

DATUM \_\_\_\_\_  
VERTICAL N/A  
HORIZONTAL N/A

<b>INTERCHANGE NO. 7 DETAIL</b>	SURVEYED BY <u>N/A</u> DATE <u>N/A</u>
	DRAWN BY <u>R.I.F.</u> DATE <u>5/01</u>
	SQUAD LEADER <u>T.P.K.</u>
	DESIGN FILE NO. <u>z:pave/98all2/pall2.dgn</u>
IPARM _____ DATE _____	FILE <u>pall2ip71</u> PLOTTED <u>\$DATE\$</u>
PROJ. NAME <u>BROOKFIELD - MONTPELIER</u>	PROJ. NO. <u>IM_089-1(2)</u>
SHEET <u>21</u> OF <u>66</u>	SHEETS _____

## PAVEMENT AND MARKING DETAIL MONTPELIER INTERCHANGE NO. 8

**646.414 DURABLE 150 mm WHITE LINE**

MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID RT (618 m)  
 RAMP "A" DOTTED LT (44 m)  
 RAMP "A" DASHED LT (11 m)

**646.614 TEMPORARY 150 mm WHITE LINE**

MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID RT (618 m)  
 RAMP "A" DOTTED LT (44 m)  
 RAMP "A" DASHED LT (11 m)

**646.415 DURABLE 150 mm YELLOW LINE**

MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID LT (246 m)

**646.615 TEMPORARY 150 mm YELLOW LINE**

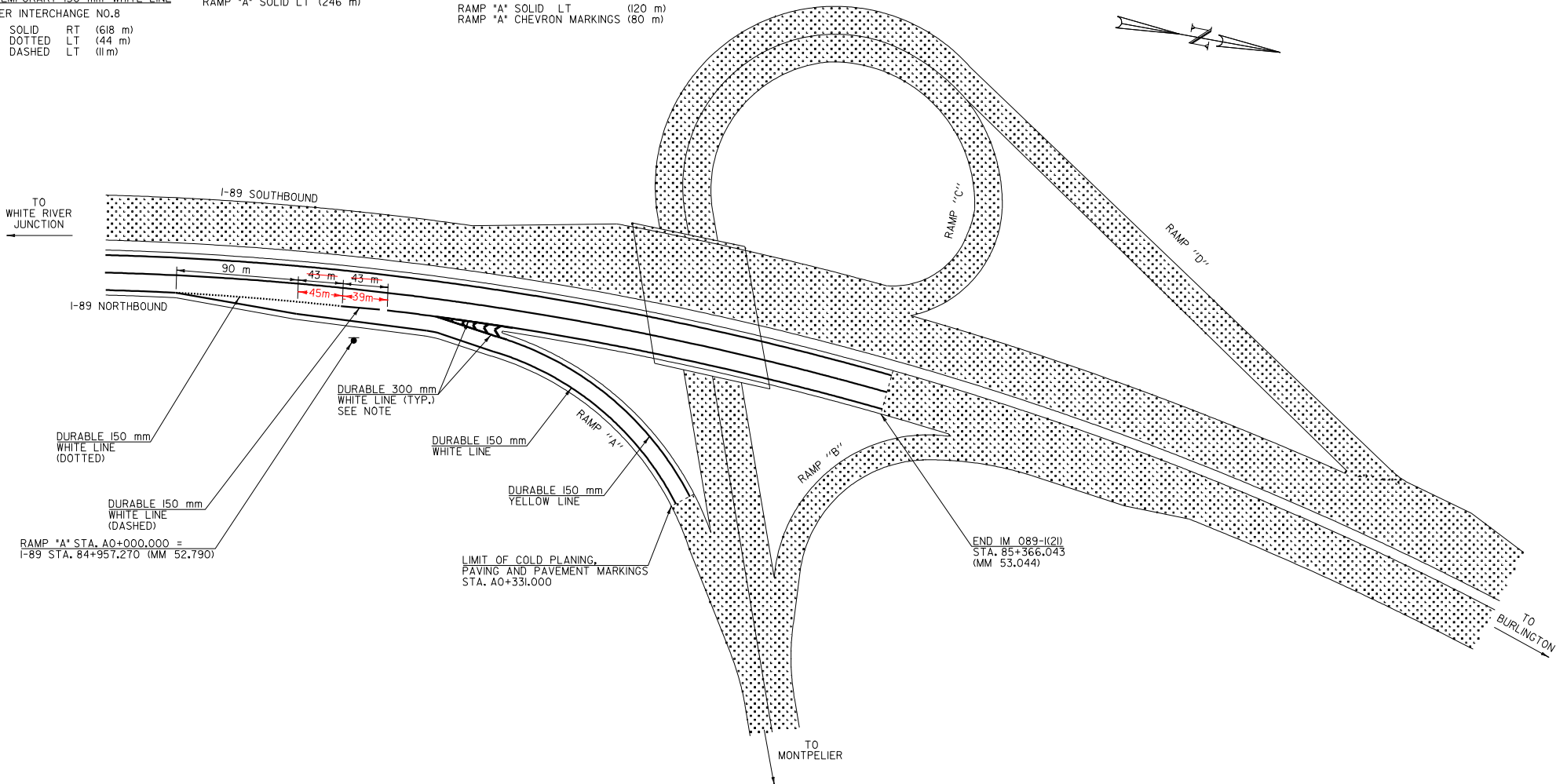
MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID LT (246 m)

**646.44 DURABLE 300 mm WHITE LINE**

MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID LT (120 m)  
 RAMP "A" CHEVRON MARKINGS (80 m)

**646.64 TEMPORARY 300 mm WHITE LINE**

MONTPELIER INTERCHANGE NO.8  
 RAMP "A" SOLID LT (120 m)  
 RAMP "A" CHEVRON MARKINGS (80 m)



DURABLE 150 mm  
WHITE LINE  
(DOTTED)

DURABLE 150 mm  
WHITE LINE  
(DASHED)

RAMP "A" STA. A0+000.000 =  
I-89 STA. 84+957.270 (MM 52.790)

DURABLE 300 mm  
WHITE LINE (TYP.)  
SEE NOTE

DURABLE 150 mm  
WHITE LINE

DURABLE 150 mm  
YELLOW LINE

LIMIT OF COLD PLANING,  
PAVING AND PAVEMENT MARKINGS  
STA. A0+331.000

END IM 089-I(2)  
STA. 85+366.043  
(MM 53.044)



SHADED AREA IS NOT  
PART OF THIS PROJECT

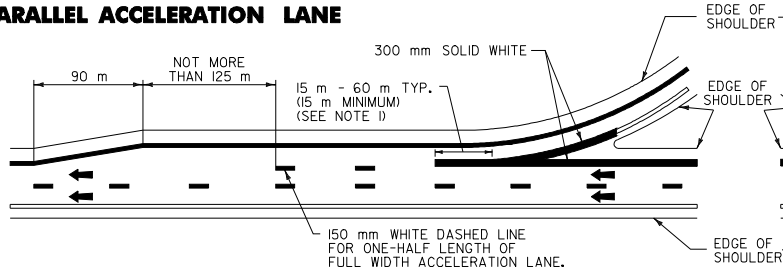
NOTE:  
REFER TO SHEET 23 OF 66 & STANDARD SHEETS  
E-191M & E-192M FOR GORE MARKING DETAILS

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

### INTERCHANGE NO. 8 DETAIL

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	I:\pave\98all2\pall2.dgn		
IPARM FILE	pall2in8.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKFIELD - MONTPELIER		
PROJ. NO.	IM_089-I(2)		
SHEET	22	OF	66
SHEETS			

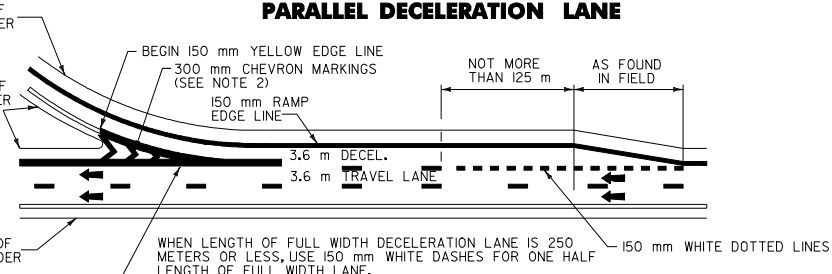
### PARALLEL ACCELERATION LANE



WHEN LENGTH OF FULL WIDTH ACCELERATION LANE IS 250 METERS OR LESS, USE 150 mm WHITE DASHES FOR ONE HALF LENGTH OF FULL WIDTH.

WHEN LENGTH OF FULL WIDTH ACCELERATION LANE IS GREATER THAN 250 METERS, USE 150 mm WHITE DASHES LEAVING ONLY THE 125 m OPENING PLUS TAPER UNMARKED.

### PARALLEL DECELERATION LANE

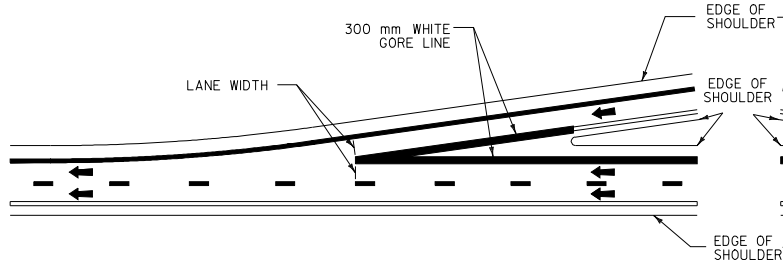


WHEN LENGTH OF FULL WIDTH DECELERATION LANE IS 250 METERS OR LESS, USE 150 mm WHITE DASHES FOR ONE HALF LENGTH OF FULL WIDTH LANE.

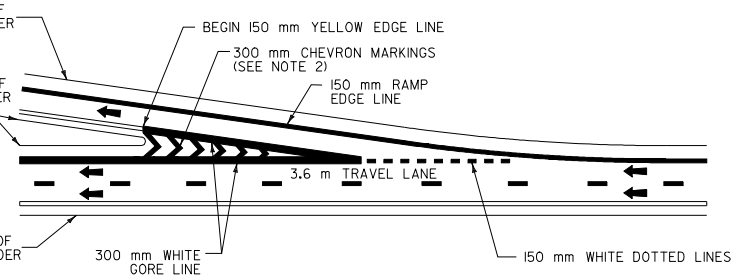
WHEN LENGTH OF FULL WIDTH DECELERATION LANE IS GREATER THAN 250 METERS, USE 150 mm WHITE DASHED LINE AND 150 mm WHITE DOTTED LINE FOR ONLY 125 m PLUS TAPER.

ACTUAL LOCATION OF 300 mm GORE MARKING TRANSITION CURVE MUST BE OFFSET FROM THE THEORETICAL RAMP EXTENSION LINE TO PROVIDE A VISUALLY SMOOTH RAMP ENTRANCE.

### TAPERED ACCELERATION LANE



### TAPERED DECELERATION LANE



**NOTES:**

- MATCH EXISTING DIMENSIONS UNLESS NONE ARE PRESENT.
- CHEVRON MARKINGS SHALL CONSIST OF 300 mm WHITE LINES SPACED 4.2 m CENTER TO CENTER AND SET 45° TO MAINLINE EDGE LINES AND APPROXIMATELY 45° TO RAMP EDGE LINES. THE VERTEX OF EACH CHEVRON SHALL BE LOCATED APPROXIMATELY EQUIDISTANT BETWEEN EDGE LINES. THESE MARKINGS SHALL BE USED TO INCREASE VISIBILITY DUE TO DIFFICULT VERTICAL OR HORIZONTAL ALIGNMENT AS DIRECTED BY THE RESIDENT ENGINEER.
- DASH PATTERNS WILL BE MODIFIED IN THE FIELD TO OVERLAY EXISTING DASHES WHERE PRESENT.
- 300 mm WHITE TRANSVERSE LINES WILL SUPERSEDE 200 mm WHITE LINES.

**LEGEND**

- 150 mm WHITE LINES
- 150 mm YELLOW LINES
- 300 mm CHANNELIZATION LINES
- DIRECTION OF TRAFFIC FLOW

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>INTERSTATE TYPICAL PAVEMENT MARKINGS DETAIL</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.F.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	Iqave/98all2/pall2.dgn		
	IPARM FILE	pall2d15.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEFIELD MONTELELIER			
PROJ. NO.	IM_089-1(2)			
SHEET 23 OF 66	SHEETS			

**INTRODUCTION:**

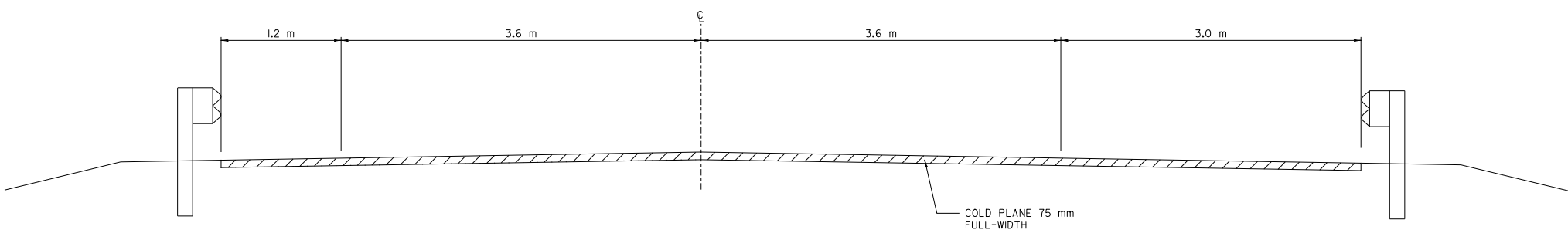
THE OBJECTIVE OF THE CONSTRUCTION PHASING DETAILS SHOWN ON THE FOLLOWING SHEETS IS TO ILLUSTRATE THE CONSTRUCTABILITY OF THIS PROJECT WHILE SAFELY MAINTAINING TRAFFIC FLOW AT ALL TIMES DURING CONSTRUCTION.

THESE PHASING DETAILS ARE INTENDED TO BE A GENERAL OUTLINE REGARDING HOW THE WORK SHOULD PROCEED ALONG MAINLINE PORTIONS OF THE ROADWAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE SPECIFIC DETAILS TO ADDRESS PHASING OF WORK IN THE VICINITY OF INTERCHANGES AND BRIDGES. HIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, PROVIDING A PLAN DETAILING THE USE AND PLACEMENT OF SIGNS, CHANNELIZING DEVICES, ARROW BOARDS, FLAGGERS AND UNIFORMED TRAFFIC OFFICERS DURING LANE CLOSURES IN ALL PHASES OF CONSTRUCTION. ALL TRAFFIC CONTROL DEVICES MUST BE DESIGNED AND IMPLEMENTED IN ACCORDANCE WITH THE MUTCD AND VAOT STANDARDS E-100M, E-101M, E-102M, E-102AM, E-103M, E-106M, E-107M, E-107AM, E-108M, AND E-110M.

IF THE CONTRACTOR DOES NOT WISH TO FOLLOW THE CONSTRUCTION PHASING ILLUSTRATED BELOW, HE MUST SUBMIT AN ALTERNATE PROPOSAL TO THE RESIDENT ENGINEER FOR REVIEW AND APPROVAL.

**GENERAL TRAFFIC CONTROL NOTES:**

1. THE BID PRICE FOR ITEM 64110 TRAFFIC CONTROL SHALL INCLUDE ALL APPROACH AND ON-SITE CONSTRUCTION SIGNS, BARRELS, CONES, BARRICADES, AND TEMPORARY REGULATORY AND WARNING SIGNS AND POSTS. ALL ADJUSTING, MAINTAINING, RELOCATING AND REMOVING THESE DEVICES SHALL ALSO BE INCLUDED. THE FOLLOWING ITEMS SHALL BE PAID FOR UNDER THEIR SPECIFIC BID PRICES:
  1. ITEM 203.15 COMMON EXCAVATION
  2. ITEM 210.10 COLD PLANING - BITUMINOUS PAVEMENT
  3. ITEM 490.30 SUPERPAVE BITUMINOUS CONCRETE PAVEMENT (PG 58-34)
  4. ITEM 621.90 TEMPORARY TRAFFIC BARRIER (CONCRETE MEDIAN BARRIER)
  5. ITEM 630.10 UNIFORMED TRAFFIC OFFICERS
  6. ITEM 630.15 FLAGGERS
  7. ITEM 641.15 PORTABLE CHANGEABLE MESSAGE SIGN
  8. ITEM 641.16 PORTABLE ARROW BOARD
  9. ITEM 646.614 TEMPORARY 150 mm WHITE LINE
  10. ITEM 646.615 TEMPORARY 150 mm YELLOW LINE
  11. ITEM 646.76 LINE STRIPING TARGETS
  12. ITEM 646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS
  13. ITEM 646.86 BLACK PAVEMENT MARKING MASKING TAPE
2. THE CONTRACTOR SHALL COVER OR REMOVE ALL EXISTING SIGNS THAT CONTRADICT TEMPORARY TRAFFIC CONTROL SIGNS. ANY SIGN REMOVED OR COVERED BY THE CONTRACTOR SHALL BE REPLACED OR UNCOVERED BY THE CONTRACTOR AFTER CONSTRUCTION IS COMPLETE. PAYMENT FOR THIS WORK SHALL BE CONSIDERED SUBSIDIARY TO ITEM 64110 TRAFFIC CONTROL.
3. TEMPORARY SPEED LIMIT THROUGH THE CONSTRUCTION ZONE SHALL BE 50 M.P.H.
4. LANE AND SHOULDERS THAT ARE OPEN TO TRAFFIC SHALL HAVE A MINIMUM COMBINED WIDTH OF 4.5 m DURING NON-WORK HOURS. THE CONTRACTOR SHALL MAKE EVERY ATTEMPT TO MAINTAIN THIS 4.5 m WIDTH DURING CONSTRUCTION WORK HOURS.
5. ALL LANE SHIFTS AND TAPERS SHALL BE DESIGNED IN ACCORDANCE WITH VAOT STANDARD SHEET E-106M. ANY LANE OPEN TO TRAFFIC THAT IS SHIFTED OUTSIDE THE EDGES OF THE NORMAL TRAVEL OR PASSING LANE SHALL BE DELINEATED WITH 150 mm TEMPORARY EDGE LINES.
6. ALL EXISTING PAVEMENT MARKINGS THAT INTERFERE OR CONTRADICT TEMPORARY PAVEMENT MARKINGS SHALL BE COVERED WITH ITEM 646.86 BLACK PAVEMENT MARKING MASKING TAPE OR REMOVED WITH ITEM 646.85 REMOVAL OF EXISTING PAVEMENT MARKINGS. THE REMOVAL OF ANY TEMPORARY PAVEMENT MARKINGS SHALL BE CONSIDERED SUBSIDIARY TO THE APPLICABLE TEMPORARY PAVEMENT MARKING ITEM.
7. TYPE III BARRICADES SHALL BE PLACED ACROSS CLOSED LANES AT 500 m INTERVALS.
8. SHOULDER DROP-OFF CONSTRUCTION SIGNS SHALL BE PLACED PERIODICALLY ALONG THE MAINLINE ADJACENT TO LONGITUDINAL DROP-OFF AREAS AS DIRECTED BY THE RESIDENT ENGINEER.

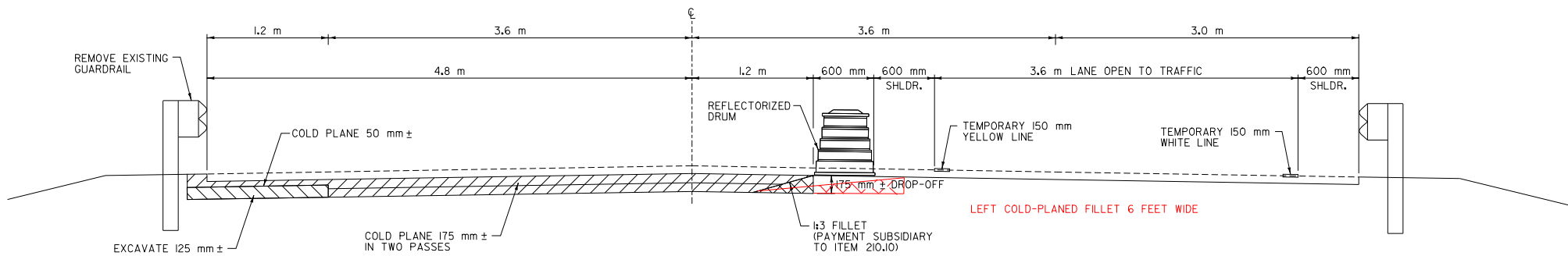


**PHASE 1**

COLD PLANE 75 mm FROM TRAVEL & PASSING LANES AND SHOULDERS AS SHOWN

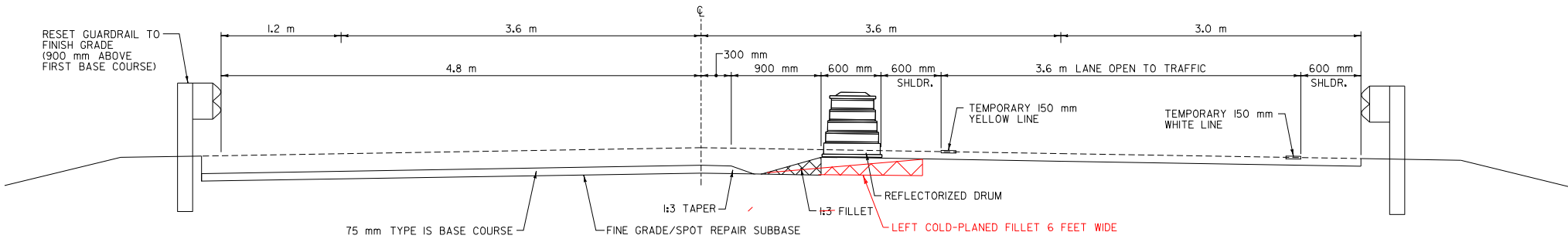
DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>CONSTRUCTION</b> <b>PHASING</b> <b>DETAILS</b> <b>SHEET 1</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.F.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	/rave/98all2/pall2.dgn		
	IPARM FILE	pall2pdl.i	DATE PLOTTED	\$DATE\$
	PROJ. NAME	BROOKEIELD...MONIPELIER		
PROJ. NO.	IM_089-1(2)			
SHEET	24	OF	66	SHEETS



**PHASE 2**

MOVE ALL TRAFFIC TO TRAVEL LANE & SHOULDER  
 COLD PLANE PASSING LANE & PORTION OF TRAVEL LANE TO TOP OF SUBBASE AS SHOWN (APPROXIMATELY 175 mm)  
 COLD PLANE PASSING SHOULDER TO TOP OF SUBBASE (APPROXIMATELY 50 mm)  
 EXCAVATE ADDITIONAL SUBBASE FROM PASSING SHOULDER (APPROXIMATELY 125 mm)

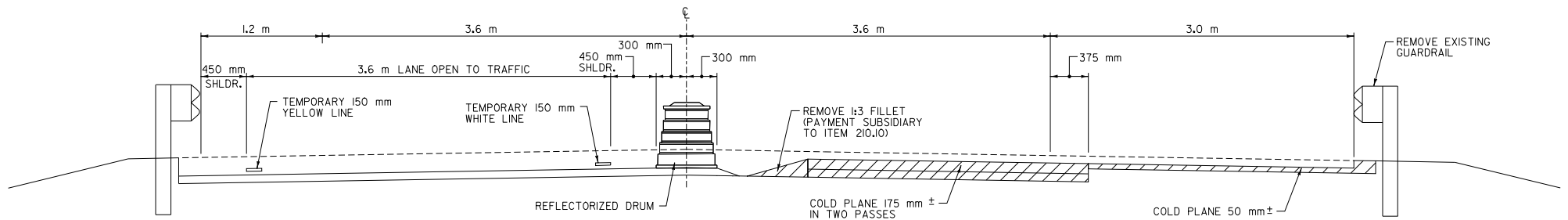


**PHASE 2A**

FINE GRADE/SPOT REPAIR SUBBASE  
 PLACE FIRST 75 mm LIFT OF BASE COURSE AS SHOWN

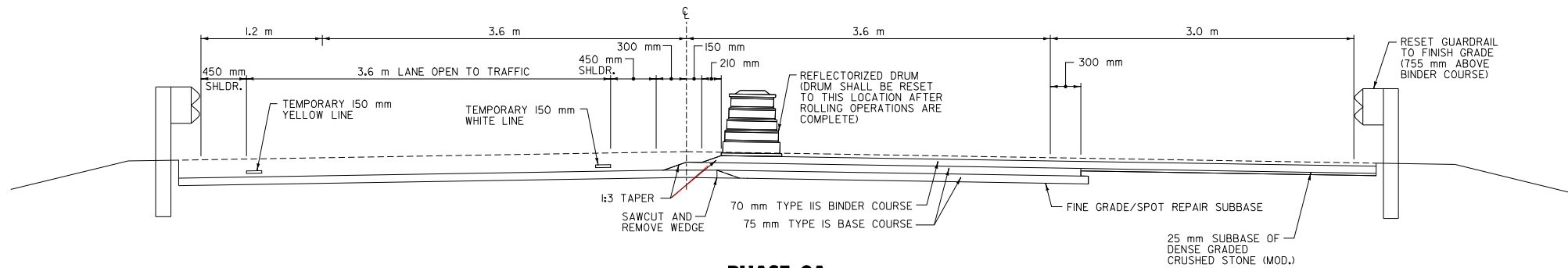
DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>CONSTRUCTION PHASING DETAILS SHEET 2</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.F.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	C:\pave\98all2\pall2.dgn		
	IPARM FILE	pall2pd2.i	DATE PLOTTED	\$DATE\$
	PROJ. NAME	BROOKEFIELD - MONTEPIELIER		
	PROJ. NO.	IM_089-1(2)		
	SHEET 25 OF	66	SHEETS	



**PHASE 3**

MOVE ALL TRAFFIC TO PASSING LANE & SHOULDER  
 COLD PLANE TRAVEL LANE TO TOP OF SUBBASE (APPROXIMATELY 175 mm)  
 COLD PLANE TRAVEL SHOULDER TO TOP OF SUBBASE (APPROXIMATELY 50 mm)

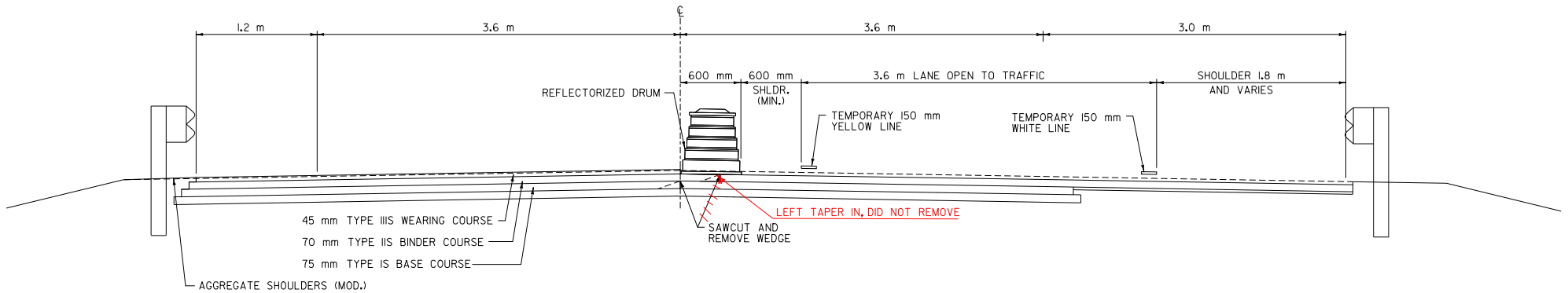


**PHASE 3A**

FINE GRADE/SPOT REPAIR SUBBASE  
 PLACE TWO 75 mm LIFTS OF BASE COURSE ON TRAVEL LANE  
 PLACE 25 mm OF SUBBASE OF DENSE GRADED CRUSHED STONE ON TRAVEL SHOULDER  
 PLACE 70 mm OF BINDER COURSE ON TRAVEL LANE & SHOULDER

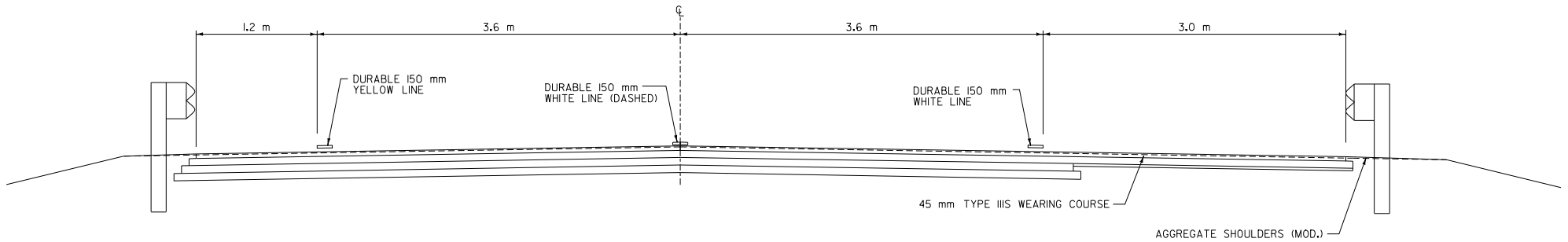
DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

<b>CONSTRUCTION</b> <b>PHASING</b> <b>DETAILS</b> <b>SHEET 3</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	R.L.F.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	C:\pave\98all2\pall2.dgn		
	IPARM FILE	pall2pd3.i	DATE PLOTTED	\$DATE\$
	PROJ. NAME	BROOKEFIELD - MONPELIER		
	PROJ. NO.	IM_089-1(2)		
	SHEET	26	OF	66
	SHEETS			



### PHASE 4

MOVE ALL TRAFFIC TO TRAVEL LANE & SHOULDER  
PLACE SECOND 75 mm LIFT OF BASE COURSE ON PASSING LANE & SHOULDER  
PLACE 70 mm BINDER COURSE ON PASSING LANE & SHOULDER  
PLACE 45 mm WEARING COURSE ON PASSING LANE & SHOULDER



### PHASE 5

MOVE ALL TRAFFIC TO PASSING LANE  
PLACE 45 mm WEARING COURSE ON TRAVEL LANE & SHOULDER

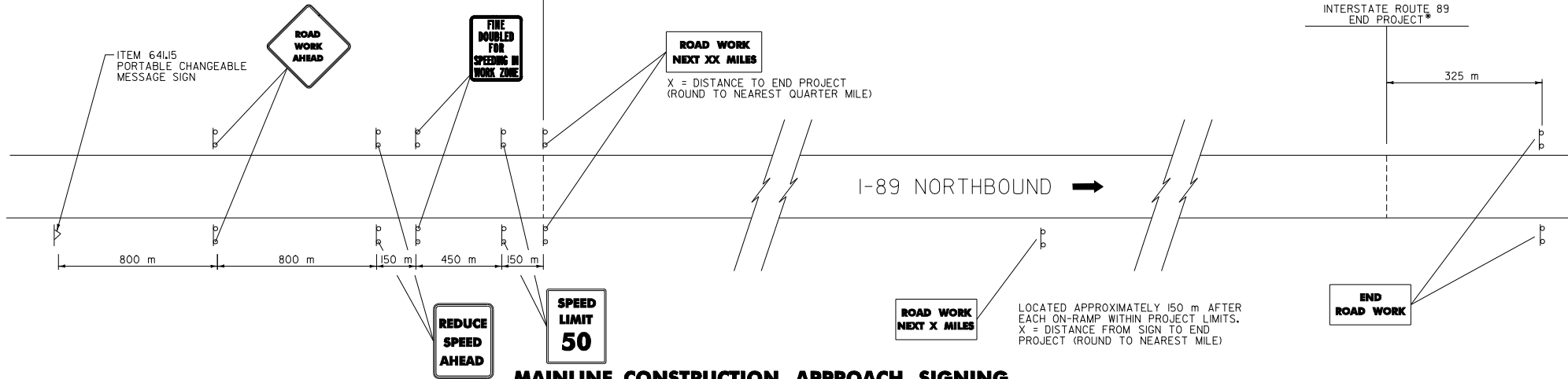
<b>CONSTRUCTION</b> <b>PHASING</b> <b>DETAILS</b> <b>SHEET 4</b>	SURVEYED BY	N/A	DATE	N/A
	DRAWN BY	B.L.E.	DATE	5/01
	SQUAD LEADER	T.P.K.		
	DESIGN FILE NO.	pave/98all2/pall2.dgn		
	IPARM FILE	pall2pd4.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKFIELD - MONPELIER			
PROJ. NO.	IM_Q89-1(2)			
SHEET 27 OF 66	SHEETS			

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A



INTERSTATE ROUTE 89  
BEGIN PROJECT\*

INTERSTATE ROUTE 89  
END PROJECT\*

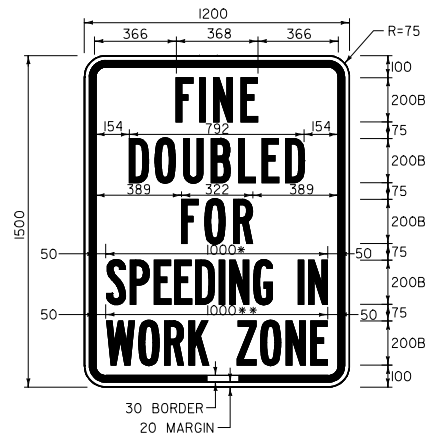


### MAINLINE CONSTRUCTION APPROACH SIGNING

SEE VAOT STANDARDS E-100M AND E-103M FOR ADDITIONAL SIGN PLACEMENT

\* THE TERMS 'BEGIN PROJECT' AND 'END PROJECT' USED HERE REFER TO THE LIMITS OF WORK ANTICIPATED FOR ONE CONSTRUCTION SEASON AND NOT TO THE OVERALL PROJECT LIMITS (IT IS ASSUMED THAT THIS PROJECT WILL BE CONSTRUCTED OVER TWO SEASONS).

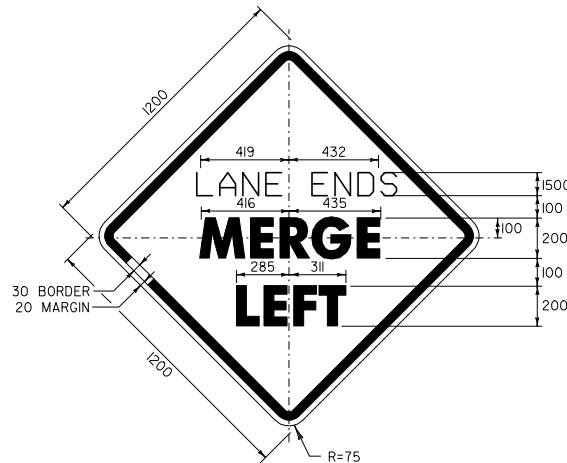
NOTE: THE CONTRACTOR SHALL INSTALL AND MAINTAIN THE APPROPRIATE CONSTRUCTION SIGNING WHICH WARNS THE TRAVELING PUBLIC OF THE ROUGH COLD PLANNED ROADWAY SURFACE.



\* REDUCE SPACING BY 12%  
\*\* REDUCE SPACING BY 7.7%

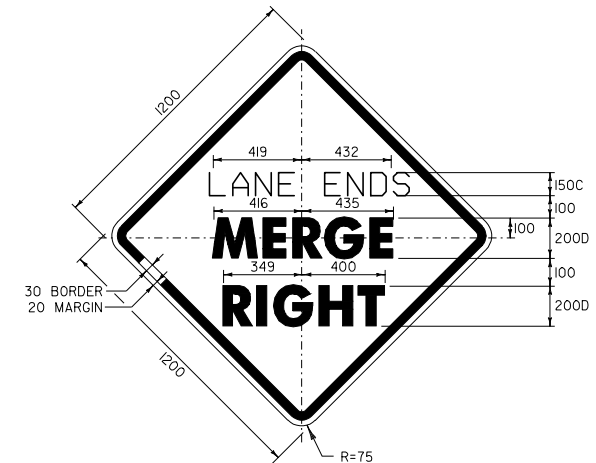
COLOR: BLACK BORDER & TEXT (NON-REFLECTORIZED)  
WHITE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-142M



COLOR: BLACK BORDER & TEXT (NON-REFLECTORIZED)  
ORANGE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-100M



COLOR: BLACK BORDER & TEXT (NON-REFLECTORIZED)  
ORANGE BACKGROUND (REFLECTORIZED)

MATERIAL: PER VAOT STANDARD E-100M

**NOTES:**

1. TEXT LAYOUT DIMENSIONS ARE BASED ON THE "LETTER & NUMERAL WIDTHS & SPACE" TABLES FOUND IN THE "STANDARD HIGHWAY SIGNS" BOOKLET. MINOR VARIATIONS IN TEXT DIMENSIONS ARE ACCEPTABLE BASED ON INDIVIDUAL MANUFACTURER'S LETTER FABRICATION. SIGNIFICANT CHANGES THAT AFFECT SIGN APPEARANCE SHALL BE BROUGHT TO THE ATTENTION OF THE VAOT'S TRAFFIC AND SAFETY DIVISION BEFORE FABRICATION.

2. PAYMENT FOR FABRICATION AND INSTALLATION OF THESE SIGNS AND POSTS WILL BE INCLUDED UNDER ITEM 6410 TRAFFIC CONTROL.

3. 'LANE ENDS' SIGN SHALL BE USED TO REPLACE SIGN W4-2 SHOWN IN THE CONSTRUCTION APPROACH SIGNING PACKAGE ON VAOT STANDARD E-103M.

ALL DIMENSIONS IN MILLIMETERS EXCEPT WHERE OTHERWISE INDICATED.

REVISED 6/26/01 L.E.W.

### MAINLINE CONSTRUCTION APPROACH SIGNING AND SIGN - DETAILS

SURVEYED BY	N/A	DATE	N/A
DRAWN BY	R.L.F.	DATE	5/01
SQUAD LEADER	T.P.K.		
DESIGN FILE NO.	C:\pave\98all2\pall2.dgn		
IPARM FILE	pall2csl.i	DATE PLOTTED	\$DATE\$
PROJ. NAME	BROOKEIELD...MONTELIER		
PROJ. NO.	IM_089-(12)		
SHEET	28	OF	66
SHEETS			

DATUM	
VERTICAL	N/A
HORIZONTAL	N/A

