

**PAVEMENT MARKING RESTORATION**

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED FOR PAVEMENT MARKING RESTORATION ON ROBERTSON AVE. AND IR-71.

ITEM 642, CENTER LINE	0.06 MILE
ITEM 642, EDGE LINE	0.10 MILE
ITEM 642, LANE LINE	0.10 MILE
ITEM 642, REMOVAL OF PAVEMENT MARKINGS	1.10 MILES

**DESIGNATED LOCAL DETOUR ROUTE**

IN ADDITION TO THE OFFICIAL, SIGNED DETOUR ROUTE, A LOCAL ROUTE HAS BEEN DETERMINED TO BE THE SECONDARY, UNSIGNED DETOUR ROUTE OR "DESIGNATED LOCAL DETOUR ROUTE." THIS ROUTE IS SHOWN ON SHEET NO. 8. DURING THE TIME THAT TRAFFIC IS DETOURED, THE CONTRACTOR SHALL MAINTAIN THIS ROUTE IN A CONDITION WHICH IS REASONABLY SMOOTH AND FREE FROM HOLES, RUTS, RIDGES, BUMPS, DUST AND STANDING WATER. ONCE THE DETOUR IS REMOVED AND TRAFFIC RETURNED TO ITS NORMAL PATTERN, THE DESIGNATED LOCAL DETOUR ROUTE SHALL BE RESTORED TO A CONDITION THAT IS EQUIVALENT TO THAT WHICH EXISTED PRIOR TO ITS USE FOR THIS PURPOSE. ALL SUCH WORK SHALL BE PERFORMED WHEN AND AS DETERMINED BY THE ENGINEER.

THE FOLLOWING ESTIMATED QUANTITIES ARE PROVIDED FOR USE AS DETERMINED BY THE ENGINEER TO MAINTAIN AND SUBSEQUENTLY RESTORE THE DESIGNATED LOCAL DETOUR ROUTE.

ITEM 441, ASPHALT CONCRETE SURFACE COURSE,	
TYPE 1, PG 64-22	122 CU. YD.
ITEM 407, TACK COAT	316 GAL.
ITEM 616, WATER	15 M. GAL.
ITEM 642, CENTER LINE	0.5 MILE

**ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE DURING CONSTRUCTION OPERATIONS**

USE OF LAW ENFORCEMENT OFFICERS (LEOS) BY CONTRACTORS OTHER THAN THE USES SPECIFIED BELOW WILL NOT BE PERMITTED AT PROJECT COST. LEOS SHOULD NOT BE USED WHERE THE OMTCD INTENDS THAT FLAGGERS BE USED.

IN ADDITION TO THE REQUIREMENTS OF C&MS 614 AND THE OMTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHALL BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS:

DURING THE ENTIRE ADVANCE PREPARATION AND CLOSURE SEQUENCE WHERE COMPLETE BLOCKAGE OF TRAFFIC IS REQUIRED.

DURING A TRAFFIC SIGNAL INSTALLATION WHEN IMPACTING THE NORMAL FUNCTION OF THE SIGNAL OR THE FLOW OF TRAFFIC, OR WHEN TRAFFIC NEEDS TO BE DIRECTED THROUGH AN ENERGIZED TRAFFIC SIGNAL CONTRARY TO THE SIGNAL DISPLAY (E.G., DIRECTING MOTORISTS THROUGH A RED LIGHT).

IN ADDITION TO THE REQUIREMENT OF C&MS 614 AND THE OMTCD, A UNIFORMED LEO WITH AN OFFICIAL PATROL CAR (CAR WITH TOP-MOUNTED EMERGENCY FLASHING LIGHTS AND COMPLETE MARKINGS OF THE APPROPRIATE LAW ENFORCEMENT AGENCY) SHOULD BE PROVIDED FOR THE FOLLOWING TRAFFIC CONTROL TASKS AS APPROVED BY THE ENGINEER:

FOR LANE CLOSURES: DURING INITIAL SET-UP PERIODS, TEAR DOWN PERIODS, SUBSTANTIAL SHIFTS OF A CLOSURE POINT OR WHEN NEW LANE CLOSURE ARRANGEMENTS ARE INITIATED FOR LONG-TERM LANE CLOSURES/SHIFTS (FOR THE FIRST AND LAST DAY OF MAJOR CHANGES IN TRAFFIC CONTROL SETUP).

FOR OPERATIONS WITHOUT POSITIVE PROTECTION OCCURRING WITHIN 10 FEET OF AN OPEN TRAVELED LANE THAT MEET ALL OF THE FOLLOWING CRITERIA:

- ON A MULTI-LANE DIVIDED INTERSTATE, OTHER FREEWAY OR EXPRESSWAY; AND
- AN AUTHORIZED SPEED LIMIT OF 45 MPH OR GREATER THAT IS IN EFFECT AT THE TIME OF THE OPERATION;
- AND,
- AADT OF 50,000 (OR AADT OF 30,000 WITH 25% OR HIGHER PERCENT TRUCKS)

"WITHOUT POSITIVE PROTECTION" MEANS USE OF DRUMS, CONES, SHADOW VEHICLE, ETC, WITHOUT PROTECTION FROM PORTABLE BARRIER OR OTHER RIGID BARRIER ALONG THE WORK AREA. THIS PHRASE DOES NOT APPLY TO CASES WHERE POSITIVE PROTECTION IS REQUIRED. MOBILE OPERATIONS ARE REGARDED AS "WITHOUT POSITIVE PROTECTION". FOR WORK ZONES USING A COMBINATION OF BARRIER AND TEMPORARY TRAFFIC CONTROL DEVICES (CONES, DRUMS, ETC), THE DESIGNATION SHALL BE BASED UPON THE TYPE OF DEVICES USED IN THE AREA THAT WORKERS ARE LOCATED.

IF MULTIPLE ACTIVE LOCALIZED QUALIFYING WORK AREAS OCCUR WITHOUT POSITIVE PROTECTION, PER MAINLINE TRAFFIC DIRECTION, PROVIDE A UNIFORMED LEO AND OFFICIAL PATROL CAR IN ADVANCE OF:

- THE FIRST ACTIVE WORK AREA THAT DRIVERS WILL ENCOUNTER; OR
  - THE ACTIVE WORK AREA LATERALLY CLOSEST TO THE OPEN TRAVELED LANE; OR
  - OTHER LOCATION AS APPROVED BY THE ENGINEER.
- THE UNIFORMED LEO AND OFFICIAL PATROL CAR MAY RELOCATE AMONG THE LISTED LOCATIONS AS APPROPRIATE AS THE OPERATIONS PROCEED IN THE LOCALIZED QUALIFYING WORK AREAS.

IN GENERAL, LEOS SHOULD BE POSITIONED IN ADVANCE OF AND ON THE SAME SIDE AS THE LANE RESTRICTION (OR AT THE POINT OF ROAD CLOSURE), AND TO MANUALLY CONTROL TRAFFIC MOVEMENTS THROUGH SIGNALIZED INTERSECTIONS IN WORK ZONES.

LEOS SHOULD NOT FORGO THEIR TRAFFIC CONTROL RESPONSIBILITIES TO APPREHEND MOTORISTS FOR ROUTINE TRAFFIC VIOLATIONS. HOWEVER, IF A MOTORIST'S ACTIONS ARE CONSIDERED TO BE RECKLESS, THEN PURSUIT OF THE MOTORIST IS APPROPRIATE.

THE LEOS WORK AT THE DIRECTION OF THE CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR SECURING THE SERVICES OF THE LEOS WITH THE APPROPRIATE AGENCIES AND COMMUNICATING THE INTENTIONS OF THE PLANS WITH RESPECT TO DUTIES OF THE LEOS. THE ENGINEER SHALL HAVE FINAL CONTROL OVER THE LEOS' DUTIES AND PLACEMENT, AND WILL RESOLVE ANY ISSUES THAT MAY ARISE BETWEEN THE TWO PARTIES.

ENSURE PROVIDED LEOS HAVE BEEN TRAINED APPROPRIATE TO THE JOB DECISIONS THEY ARE REQUIRED TO MAKE WHILE ON THE PROJECT, IN ACCORDANCE WITH C&MS 614.03.

THE LEO SHALL REPORT IN TO THE CONTRACTOR PRIOR TO THE START OF THE SHIFT, IN ORDER TO RECEIVE INSTRUCTIONS REGARDING SPECIFIC WORK ASSIGNMENTS DURING HIS/HER SHIFT. THE LEO IS EXPECTED TO STAY AT THE PROJECT SITE FOR THE ENTIRE DURATION OF HIS/HER SHIFT. THE LEO SHALL REPORT TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT. SHOULD IT BE NECESSARY TO LEAVE THE PROJECT SITE, THE LEO SHALL NOTIFY THE ENGINEER. THE CONTRACTOR SHALL PROVIDE THE LEO WITH A TWO-WAY COMMUNICATION DEVICE THAT SHALL BE RETURNED TO THE CONTRACTOR AT THE END OF HIS/HER SHIFT.

LEOS (WITH PATROL CAR) REQUIRED BY THE TRAFFIC MAINTENANCE TASKS ABOVE SHALL BE PAID FOR ON A UNIT PRICE (HOURLY) BASIS UNDER ITEM 614, LAW ENFORCEMENT OFFICER (WITH PATROL CAR) FOR ASSISTANCE. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY.

ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE 200 HOURS

THE HOURS PAID SHALL INCLUDE ANY MINIMUM SHOW-UP TIME REQUIRED BY THE LAW ENFORCEMENT AGENCY INVOLVED.

ANY ADDITIONAL COSTS (ADMINISTRATIVE OR OTHERWISE) INCURRED BY THE CONTRACTOR TO OBTAIN THE SERVICES OF A LEO ARE INCLUDED WITH THE BID UNIT PRICE FOR ITEM 614, LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE.

DESIGN AGENCY



DESIGNER

CAH

REVIEWER

GTF MM-DD-YY

PROJECT ID

115355

SHEET

TOTAL

5 | 22

SHEET NUM.						PART.		ITEM	ITEM EXT	GRAND TOTAL	UNIT	DESCRIPTION	SEE SHEET NO.
2	3	4	5	6	13	01/IMS/BR	02/IMS/BR						
					150			202	75267	150	FT	<b>ROADWAY</b> VANDAL PROTECTION FENCE REMOVED AND RESET, AS PER PLAN	12
					400			607	39994	400	FT	TEMPORARY VANDAL FENCE, TYPE B	12
					348			202	98200	348	FT	<b>ENVIRONMENTAL / REMEDIATION</b> REMOVAL MISC.:ASBESTOS TELECOM CONDUITS	2
LUMP						LUMP		SPECIAL	69098400	LS		MISC.: WORK INVOLVING ASBESTOS CONTAINING MATERIALS	2
												<b>PAVEMENT</b> NON-TRACKING TACK COAT	
					316			407	20000	316	GAL		
					122			441	50000	122	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
					15			618	10000	15	MGAL	WATER	
												<b>TRAFFIC CONTROL</b> EDGE LINE, 6", TYPE 1	
					0.1			642	00104	0.1	MILE	LANE LINE, 6", TYPE 1	
					0.1			642	00204	0.1	MILE	CENTER LINE, TYPE 1	
					0.56			642	00300	0.56	MILE	REMOVAL OF PAVEMENT MARKING	
					1.1			642	30030	1.1	MILE		
												<b>STRUCTURE REPAIR (HAM-71-6.75)</b>	13
												<b>STRUCTURE REPAIR (HAM-71-7.31)</b>	13
					348			625	25550	348	FT	<b>OTHER UTILITIES</b> CONDUIT, 3-1/2", 725.04	2
												<b>MAINTENANCE OF TRAFFIC</b> LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE, AS PER PLAN	5
				200				614	11111	200	HOUR	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
					2			614	12384	2	EACH	DETOUR SIGNING	
					LUMP			614	12420	LS		WORK ZONE LIGHTING SYSTEM	
					1			614	12740	1	EACH	BARRIER REFLECTOR, TYPE 1, BI-DIRECTIONAL	
					40			614	13310	40	EACH	OBJECT MARKER, TWO WAY	
					10			614	13360	10	EACH	PORTABLE CHANGEABLE MESSAGE SIGN	
				20				614	18600	20	SNMT	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
					0.11			614	21100	0.11	MILE	WORK ZONE EDGE LINE, CLASS I, 6", 642 PAINT	
					0.23			614	22110	0.23	MILE	PORTABLE BARRIER, ANCHORED	
					400			622	41110	400	FT		
												<b>INCIDENTALS</b> MAINTAINING TRAFFIC	
LUMP	LUMP					LUMP	LUMP	614	11000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING, AS PER PLAN	2
								623	10001	LS		MOBILIZATION	
								624	10000	LS			

0.1		0.1	642	00104	0.1	MILE	EDGE LINE, 6", TYPE 1
0.1		0.1	642	00204	0.1	MILE	LANE LINE, 6", TYPE 1
0.56		0.56	642	00300	0.56	MILE	CENTER LINE, TYPE 1
1.1		1.1	642	30030	1.1	MILE	REMOVAL OF PAVEMENT MARKING

GENERAL SUMMARY

DESIGN AGENCY



DESIGNER

CAH

REVIEWER

GTF MM-DD-YY

PROJECT ID

115355

SHEET TOTAL

9 | 22

ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-6.75					(100% 01/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	4	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			4	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	2	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			2	
849	10700	LS	LUMP	STRAIGHTENING DAMAGED MEMBER			LUMP	

ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-6.75 (REPAIR NOT ASSOCIATED WITH THE BRIDGE HIT)					(100% 02/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	4	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			4	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	2	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			2	

ESTIMATED QUANTITIES - STRUCTURE No.: HAM-71-7.31					(100% 01/IMS/BR FUNDING)			
ITEM	EXTENSION	TOTAL	UNIT	DESCRIPTION	ABUTMENT	PIERS	SUPERSTRUCTURE	GENERAL
202	11203	LS	LUMP	PORTIONS OF STRUCTURE REMOVED, OVER 20 FOOT SPAN, AS PER PLAN			LUMP	
202	11501	1	EACH	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (MAIN MEMBERS)			1	
202	11501	23	EACH	PORTIONS OF STRUCTURE REMOVED, AS PER PLAN (SECONDARY MEMBERS)			23	
509	10000	5940	POUND	EPOXY COATED REINFORCING STEEL			5,940	
510	10000	450	EACH	DOWEL HOLES WITH NON-SHRINK, NON-METALIC GROUT			450	
511	21522	27	CY	CLASS QC2 CONCRETE WITH QC/QA, SUPERSTRUCTURE			27	
512	10300	12	SY	SEALING CONCRETE BRIDGE DECKS WITH HMWM RESIN			12	
512	74500	1200	FT	REMOVAL OF EXISTING PAVEMENT MARKING			1200	
513	10200	1700	LB	STRUCTURAL STEEL MEMBERS, LEVEL UF			1700	
513	10280	11550	LB	STRUCTURAL STEEL MEMBERS, LEVEL 4			11550	
513	95000	46	FT	STRUCTURAL STEEL MISC.: REPAIR OF MAIN AND SECONDARY MEMBERS, FILLET WELDING			46	
514	10000	1	EACH	FINAL INSPECTION REPAIR			1	
514	20001	826	SF	FIELD PAINTING OF DAMAGED STRUCTURAL STEEL, AS PER PLAN (TWO COAT)			826	
516	47001	LS	LUMP	JACKING AND TEMPORARY SUPPORT OF STRUCTURE, AS PER PLAN			LUMP	
517	76300	75	FT	RAILING, MISC.: BRIDGE RAILING REMOVED AND RESET			75	
690	98400	LS	LUMP	SPECIAL - STRUCTURES: CONSULTANT FOR CONCRETE QUALITY CONTROL INCLUDING TESTING AND INSPECTION			LUMP	
849	10000	LS	LUMP	DAMAGE ASSESSMENT			LUMP	
849	10500	LS	LUMP	SURFACE PREPARATION			LUMP	
849	10600	10	HOURS	REPAIRING DAMAGED MEMBER BY GRINDING			10	
849	10700	LS	LUMP	STRAIGHTENING DAMAGED MEMBER			LUMP	
<b>ITEMS CARRIED TO GENERAL SUMMARY</b>								
202	-----	75	FT	VANDAL PROTECTION FENCE REMOVED AND RESET			75	
202	-----	348	FT	REMOVAL, MISC: ASBESTOS TELECOM CONDUITS			348	
607	-----	400	FT	TEMPORARY VANDAL FENCE, TYPE B			400	
625	-----	348	FT	CONDUIT, 3 1/2", 625.04			348	

STRUCTURE QUANTITIES  
 BRIDGE No.: HAM-71-6.75 & HAM-71-7.31  
 EDMONSON RD. & ROBERTSON AVE. OVER I-71

SFN  
 3114813/3114902  
 DESIGN AGENCY



DESIGNER	CHECKER
CAH	GTF
REVIEWER	
XXX MM-DD-YY	
PROJECT ID	115355
SUBSET	TOTAL
1	1
SHEET	TOTAL
13	22