

**SEQUENCE OF CONSTRUCTION**

THE PURPOSE OF THIS PROJECT IS TO PERFORM CULVERT REPLACEMENT, LANDSLIDE REMEDIATION AND ROADWAY RECONSTRUCTION ALONG SR 104. IT IS THE INTENT OF THE SEQUENCE OF CONSTRUCTION, AS DETAILED IN THE PLANS, TO PROVIDE A SAFE WORK AREA FOR THE CONTRACTOR WHILE ALSO MAINTAINING TRAFFIC IN A MANNER WHICH IS SAFE TO THE TRAVELING PUBLIC AS WELL.

- AS PER SCD MT-97.10 FLAGGER CLOSING 1-LANE OF A 2-LANE HIGHWAY, PLACE ALL SIGNAGE AND CHANNELIZING DEVICES TO CLOSE THE SOUTHBOUND LANE OF SR104. CONSTRUCT TEMPORARY PAVEMENT ALONG THE WESTERN EDGE OF SR104 AND COMPLETE PAVING OFF THE NORTHERN HALF OF THE RESIDENTIAL DRIVEWAY.
- AS PER SCD MT-96.11, MT-96.20, MT-96.26, MT-97.11, MT-101.90 AND MT-105.10, INSTALL ALL SIGNAGE, WORK ZONE TRAFFIC SIGNALS AND APPURTENANCES, PLACE PORTABLE BARRIER AND REMAINING MAINTENANCE OF TRAFFIC ITEMS AS DETAILED IN THE PLANS TO MAINTAIN A SIGNALIZED 1-LANE BIDIRECTIONAL CONFIGURATION USING THE SOUTHBOUND SR 104 EXISTING PAVEMENT AND THE TEMPORARY PAVEMENT. WITHIN THE DESIGNATED WORK ZONE, PERFORM CLEARING AND GRUBBING, REMOVAL OF ANY EXISTING GUARDRAILS, EXISTING PAVEMENT, EARTHWORK AND ALL ITEMS DEEMED NECESSARY TO PERFORM CULVERT REPLACEMENT AND LANDSLIDE REMEDIATION AS DETAILED IN THE PLANS.
- AFTER CULVERTS ARE COMPLETED, PERFORM EARTHWORK AND EXCAVATION ACTIVITIES, CONSTRUCT NEW NORTHBOUND PAVEMENT, INSTALL GUARDRAIL, PLACE EROSION CONTROL AND PERFORM SEEDING AND MULCHING.
- SHIFT TRAFFIC ONTO NEW NORTHBOUND PAVEMENT, SHIFT PORTABLE BARRIER AND UPDATE ADVANCE WARNING SIGNS, THE NORTHBOUND LANE WILL NOW BE USED TO MAINTAIN A SIGNALIZED 1-LANE BIDIRECTIONAL CONFIGURATION. WITHIN THE DESIGNATED WORK AREA, REMOVED EXISTING SOUTHBOUND PAVEMENT AND TEMPORARY PAVEMENT, CONSTRUCT NEW SOUTHBOUND SR104 LANE, COMPLETE DRIVEWAY PAVING PERFORM ANY EARTHWORK AND EXCAVATION ACTIVITIES, PLACE EROSION CONTROL, PERFORM SEEDING AND MULCHING AND COMPLETE CULVERT REPLACEMENT AND LANDSLIDE REMEDIATION AS NECESSARY.
- AFTER COMPLETION OF ALL CONSTRUCTION ACTIVITIES, REMOVE ALL WORK ZONE SIGNAGE AND TRAFFIC CONTROL ITEMS, PLACE THE PROPOSED PAVEMENT SURFACE COURSE ALONG WITH PERMANENT STRIPING, ANY REMAINING SEEDING AND MULCHING, INSTALL ANY REMAINING TRAFFIC CONTROL DEVICES TO COMPLETE THE REHABILITATION AND OPEN THE COMPLETED ROADWAY TO THE TRAVELING PUBLIC.

**DUST CONTROL**

THE CONTRACTOR SHALL FURNISH AND APPLY WATER FOR DUST CONTROL AS DIRECTED BY THE ENGINEER. THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED FOR DUST CONTROL PURPOSES:

ITEM 616, WATER 30 M. GAL

**ITEM 615, EARTHWORK FOR MAINTAINING TRAFFIC**

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE PLAN FOR INFORMATION ONLY:

EXCAVATION FOR MAINTAINING TRAFFIC 30 CY  
 EMBANKMENT FOR MAINTAINING TRAFFIC 13 CY

WHEN UNDERCUTS ARE NECESSARY FOR MAINLINE PAVEMENT OR EMBANKMENT CONSTRUCTION, EVALUATE THE NEED FOR TEMPORARY ROAD UNDERCUTS IF WITHIN A CLOSE PROXIMITY TO THE MAINLINE UNDERCUTS. A GEOTECHNICAL EVALUATION SHOULD BE CONSIDERED TO DETERMINE IF THE EXISTING SOIL CONDITIONS ARE ADEQUATE TO SUPPORT THE TEMPORARY ROAD. ADDITIONAL SOIL BORINGS ALONG THE TEMPORARY ROAD ARE NOT NORMALLY REQUIRED.

**ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN**

THE PAVEMENT BUILDUP SHALL USE ITEM 302 AS SPECIFIED IN CMS 615.05. THE FOLLOWING QUANTITIES HAVE BEEN CARRIED TO THE GENERAL SUMMARY:

ITEM 615, PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN, 117 SY

**FULLY-ACTUATED OPERATION OF WORK ZONE TRAFFIC SIGNAL**

THE WORK ZONE SIGNAL CONTROL REQUIRED FOR THIS PROJECT AND SHOWN ON SHEETS 7-8 AND TRAFFIC SCDS MT-96.11, 96.20 AND 96.26 SHALL BE FULLY TRAFFIC-ACTUATED AND OPERATE IN A MANNER SIMILAR TO THAT DESCRIBED IN SECTION 733.02 OF THE CONSTRUCTION AND MATERIAL SPECIFICATIONS.

THE INITIAL CONTROLLER TIMING SHALL BE AS FOLLOWS:

PHASE	1 MAINLINE SOUTHBOUND	2 MAINLINE NORTHBOUND	3 PRIVATE DRIVES
MIN. GREEN	20	20	10
EXTENSION	4	4	4
MAX. GREEN	40	40	15
YELLOW	5	5	5
ALL RED	36	36	36

SIGNAL WILL REST ON RED WHEN NO VEHICLES ARE DETECTED.

THE CONTRACTOR SHALL ALSO DESIGN, FURNISH, INSTALL AND MAINTAIN A TRAFFIC DETECTOR ON EACH TRAFFIC APPROACH WHICH WILL RELIABLY DETECT ALL LEGAL TRAFFIC APPROACHING (BUT NOT LEAVING) THE SIGNAL AS IT PASSES OR WAITS IN THE DESIGNATED DETECTOR ZONE SHOWN IN THE PLANS. DETECTOR DESIGNS WHICH DO NOT PROVIDE RELIABLE DETECTION, FREE FROM FALSE CALLS, SHALL BE IMMEDIATELY REPLACED BY THE CONTRACTOR.

**DELINEATION OF PORTABLE AND PERMANENT BARRIER**

BARRIER REFLECTORS AND OBJECT MARKERS SHALL BE INSTALLED ON ALL PORTABLE BARRIER (PB) USED FOR TRAFFIC CONTROL AND ON PERMANENT CONCRETE BARRIER (INCLUDING BRIDGE PARAPETS) LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE.

BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THE SPACING SHALL BE AS PER TRAFFIC SCD MT-101.70. OBJECT MARKERS AND THEIR INSTALLATION SHALL CONFORM TO C&MS 614.03 AND SCD MT-101.70. WHEN THE PB CONTAINS GLARE SCREEN, ONE SET OF THREE VERTICAL STRIPES OF SHEETING SHALL BE CONSIDERED EQUIVALENT TO AN OBJECT MARKER, ONE-WAY.

INCREASED BARRIER DELINEATION, AS SPECIFIED HEREIN, SHALL BE INSTALLED ON ALL PB AND CONCRETE PERMANENT BARRIER LOCATED WITHIN 5 FEET OF THE EDGE OF THE TRAVELED LANE ALONG TAPERS AND TRANSITION AREAS AND ALONG CURVES (OUTSIDE ONLY) WITH DEGREE OF CURVATURE GREATER THAN OR EQUAL TO 3 DEGREES.

THE INCREASED BARRIER DELINEATION SHALL CONSIST OF EITHER DELINEATION PANELS OR THE TRIPLE STACKING OF WORK ZONE BARRIER REFLECTORS.

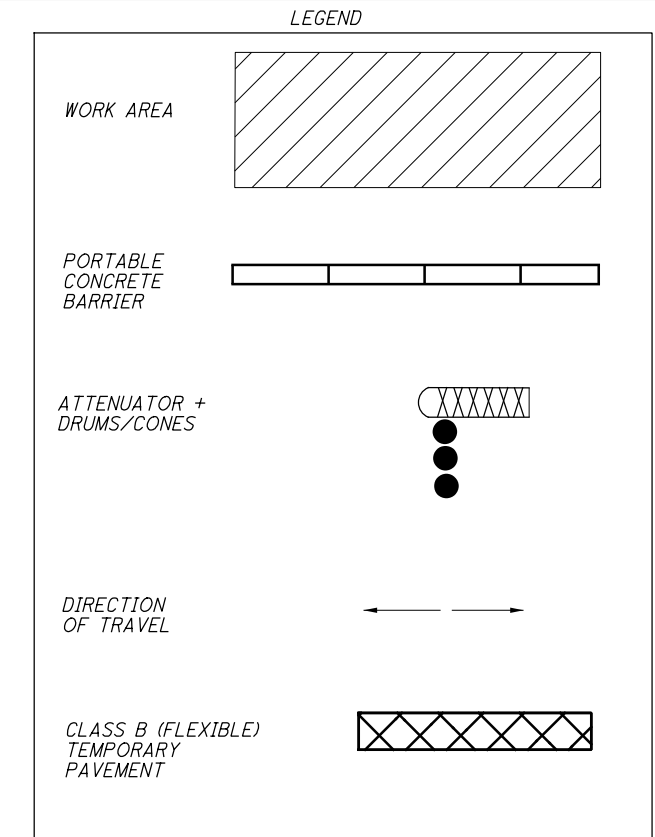
DELINEATION PANELS SHALL CONSIST OF PANELS OF DELINEATION, APPROXIMATELY 34 INCHES LONG AND 6 INCHES WIDE AND SHALL BE "CRIMPED." PANELS SHALL BE INSTALLED AND SPACED PER TRAFFIC SCD MT-101.70.

TRIPLE-STACKED BARRIER REFLECTORS SHALL CONSIST OF ALIGNING THREE BARRIER REFLECTORS VERTICALLY, AT LOCATIONS WHERE A SINGLE BARRIER REFLECTOR WOULD BE OTHERWISE ATTACHED. THERE SHALL BE NO OPEN SPACE BETWEEN THE ADJACENT BARRIER REFLECTORS. THE TRIPLE-STACKED BARRIER REFLECTORS SHALL CONFORM TO C&MS 626, EXCEPT THAT THEY SHALL BE SPACED AND ALIGNED PER TRAFFIC SCD MT-101.70.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL) 29 EACH  
 ITEM 614, OBJECT MARKER, TWO WAY 29 EACH  
 ITEM 614, INCREASED BARRIER DELINEATION 370 FT

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING EACH OF THE ABOVE ITEMS.



**DELINEATION OF TEMPORARY AND PERMANENT GUARDRAIL**

BARRIER REFLECTORS SHALL BE INSTALLED ON ALL TEMPORARY GUARDRAIL USED FOR TRAFFIC CONTROL AND ON ALL PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. BARRIER REFLECTORS SHALL CONFORM TO C&MS 626.

OBJECT MARKERS SHALL BE INSTALLED ON ALL TEMPORARY AND PERMANENT GUARDRAIL LOCATED WITHIN 5 FEET OF THE EDGE OF THE ADJACENT TRAVEL LANE. GUARDRAIL-MOUNTING OF OBJECT MARKERS SHALL BE MADE BY INSTALLING THE OBJECT MARKERS ON THE EXTENSION BLOCKS RATHER THAN DIRECTLY ONTO THE GUARDRAIL ITSELF. OBJECT MARKERS SHALL CONFORM TO C&MS 614.03 AND THE SPACING SHALL BE APPROXIMATELY 50 FEET.

THE FOLLOWING ESTIMATED QUANTITIES HAVE BEEN INCLUDED IN THE PLANS AND CARRIED TO THE GENERAL SUMMARY:

ITEM 614, BARRIER REFLECTOR, TYPE 3 (BI-DIRECTIONAL) 13 EACH  
 ITEM 614, OBJECT MARKER, TWO WAY 13 EACH

PAYMENT SHALL BE FULL COMPENSATION FOR ALL MATERIAL, LABOR, INCIDENTALS AND EQUIPMENT NECESSARY FOR FURNISHING, INSTALLING, MAINTAINING AND REMOVING THE ABOVE ITEM(S).

CALCULATED  
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MAINTENANCE OF TRAFFIC GENERAL NOTES

SCI-104-8.15

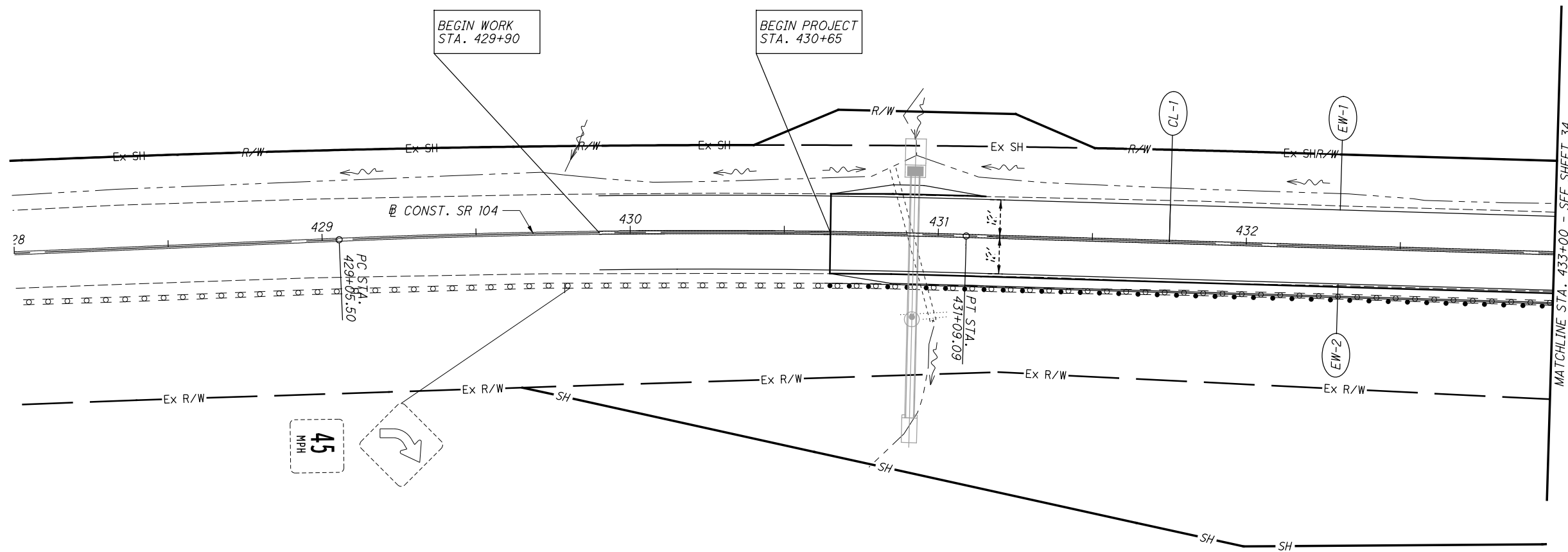
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SHEET NUM.											PART.	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET NO.
5	6	7	8	11	29	33					01/STR/O T		EXT	TOTAL			
				1,163							1,163	254	01000	1,163	SY	PAVEMENT PLANING, ASPHALT CONCRETE 1.5"	
				180							180	301	46000	180	CY	ASPHALT CONCRETE BASE, PG64-22	
				188							284	304	20000	284	CY	AGGREGATE BASE	
				231							231	407	10000	231	GAL	TACK COAT	
				64							64	411	10000	64	CY	STABILIZED CRUSHED AGGREGATE	
				136							136	441	50000	136	CY	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (448), PG64-22	
				19							19	441	50300	19	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE 2, (448)	
																<b>TRAFFIC CONTROL</b>	
						0.29					0.29	644	00100	0.29	MILE	EDGE LINE, 4"	
						0.14					0.14	644	00300	0.14	MILE	CENTER LINE	
																<b>RETAINING WALLS</b>	
							LS				LS	503	21300	LS		UNCLASSIFIED EXCAVATION	
							328				328	507	00400	328	FT	STEEL PILES, MISC.: HP10X42	
							15				15	511	81300	15	EACH	CONCRETE, MISC.: PRECAST LAGGING	
							61				61	518	21200	61	CY	POROUS BACKFILL WITH GEOTEXTILE FABRIC	
							100				100	518	40000	100	FT	6" PERFORATED CORRUGATED PLASTIC PIPE	
							15				15	518	40010	15	FT	6" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	
							102				102	524	94503	102	FT	DRILLED SHAFTS, 24" DIAMETER, ABOVE BEDROCK, AS PER PLAN	
							160				160	524	94505	160	FT	DRILLED SHAFTS, 24" DIAMETER, INTO BEDROCK, AS PER PLAN	
							2				2	601	20000	2	SY	CRUSHED AGGREGATE SLOPE PROTECTION	
																<b>MAINTENANCE OF TRAFFIC</b>	
16											16	614	11110	16	HR	LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
	370										370	614	11630	370	FT	INCREASED BARRIER DELINEATION	
		2	2								4	614	12384	4	EACH	WORK ZONE IMPACT ATTENUATOR, 24" WIDE HAZARDS, (BIDIRECTIONAL)	
		29									29	614	13310	29	EACH	BARRIER REFLECTOR, TYPE 1 (BI-DIRECTIONAL)	
		13									13	614	13314	13	EACH	BARRIER REFLECTOR, TYPE 3 (BI-DIRECTIONAL)	
		42									42	614	13360	42	EACH	OBJECT MARKER, TWO WAY	
			0.19	0.19							0.38	614	21200	0.38	MILE	WORK ZONE CENTER LINE, CLASS I, 740.06, TYPE I	
			0.3	0.28							0.58	614	22200	0.58	MILE	WORK ZONE EDGE LINE, CLASS I, 4", 740.06, TYPE I	
			24	24							48	614	26400	48	FT	WORK ZONE STOP LINE, CLASS I, 740.06, TYPE I	
											LS	615	10000	LS		ROADS FOR MAINTAINING TRAFFIC	
											117	615	25001	117	SY	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B, AS PER PLAN	
											30	616	10000	30	MGAL	WATER	
		705	664								1,369	622	41110	1,369	FT	PORTABLE BARRIER, ANCHORED	
																<b>INCIDENTALS</b>	
											LS	614	11000	LS		MAINTAINING TRAFFIC	
											3	619	16010	3	MNTH	FIELD OFFICE, TYPE B	
											LS	623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
											LS	624	10000	LS		MOBILIZATION	




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<b>GENERAL SUMMARY</b>			
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SHEET NO.	REFERENCE NO.	LOCATION	STATION		SIDE	MILE	
			FROM	TO		EDGE LINE, 4" (WHITE)	CENTER LINE
33-34	CL-1	SR 104	429+90	437+50	CL	0.14	0.14
33-34	EW-1	SR 104	429+90	437+50	LT	0.14	
33-34	EW-2	SR 104	429+90	437+50	RT	0.14	
<b>TOTALS CARRIED TO GENERAL SUMMARY</b>						0.29	0.14

PAVEMENT MARKING LEGEND

-  EDGE LINE, 4" (WHITE)
-  CENTER LINE (SOLID DOUBLE)
-  EXISTING SIGN TO REMAIN



TRAFFIC CONTROL PLAN  
STA. 428+00 TO STA. 433+00