CONTRACTION AND/OR EXPANSION JOINTS

ALTHOUGH SPECIFIC LOCATIONS OF CERTAIN CONTRACTION AND EXPANSION JOINTS HAVE BEEN DETAILED ON THIS PLAN, NO WAIVER OF THE SPECIFICATIONS IS INTENDED. PROVISIONS OF EXPANSION JOINTS AT ALL MAJOR STRUCTURES AND THE MAXIMUM SPACING BETWEEN CONTRACTION JOINTS SHALL, IN ALL CASES, BE IN ACCORDANCE WITH STANDARD CONSTRUCTION DRAWING BP-2.2 AND THE SPECIFICATIONS.

CONTRACTION JOINTS IN CONCRETE PAVEMENT OR BASE WIDENING

CONTRACTION JOINTS SHALL BE CONSTRUCTED AS PER STANDARD CONSTRUCTION DRAWING BP-2.2, EXCEPT THAT THE SPACING SHALL BE 14 FOOT MAXIMUM.

ADDITIONAL SOIL INFORMATION

THE SOIL BORING LOGS ARE SHOWN ON SHEETS 32 THROUGH 54 AND CONTAIN ALL AVAILABLE SOIL AND BEDROCK INFORMATION WHICH CAN BE CONVENIENTLY SHOWN. ADDITIONAL INFORMATION MAY ALSO BE AVAILABLE FROM THE FOLLOWING:

1) SUBSURFACE INVESTIGATION REPORT(S) PREPARED FOR THE PROJECT.

2) ADDITIONAL SUBSURFACE INVESTIGATIONS MADE TO STUDY SOME ASPECT OF THE PROJECT.

3) SOIL PROFILE AND/OR STRUCTURE FOUNDATION INVESTIGATION SHEETS FROM THE CONSTRUCTION PLANS FOR THE EXISTING FACILITY AND/OR STRUCTURE(S).

ADDITIONAL INFORMATION, IF ANY, MAY BE EXAMINED BY PROSPECTIVE BIDDERS AT THE OHIO TURNPIKE OFFICE, 682 PROSPECT STREET, BEREA, OHIO 44017.

ITEM SP604 - CATCH BASIN, TYPE CB-1

EXISTING TOP OF GRATE ELEVATIONS AND INVERT ELEVATIONS FOR ALL STORM STRUCTURES SHALL BE FIELD MEASURED AND RECORDED BY THE CONTRACTOR PRIOR TO REMOVAL OF THE STRUCTURES. PROPOSED CATCH BASINS SHALL BE INSTALLED AT THE SAME TOP OF GRATE AND INVERT ELEVATIONS AS EXISTING. PROPOSED DRAINAGE PIPES SHALL BE CONNECTED TO EXISTING PIPES USING MASONRY COLLAR AS PER STANDARD DRAWING DM-1.1. ALL COSTS ASSOCIATED WITH THIS WORK SHALL BE INCLUDED WITH ITEM SP604 - CATCH BASIN, TYPE CB-1.

COATED DOWEL BARS

DOWEL BARS REQUIRED ON STANDARD DRAWING BP-2.2 SHALL BE COATED IN ACCORDANCE WITH 709.13.

ITEM 622 - CONCRETE BARRIER, TYPE B-50, AS PER PLAN

THIS ITEM SHALL BE IN ACCORDANCE WITH OTC STANDARD DRAWING CBR-3 AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIAL AND INCIDENTALS TO COMPLETE THIS ITEM.

ITEM 603 - 8" CONDUIT, TYPE F, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING MEDIAN SHOULDER PAVEMENT AND THE REPLACEMENT OF THIS SHOULDER PAVEMENT IN ORDER TO INSTALL THIS PROPOSED CONDUIT.

ITEM 839 - 12" TRENCH DRAIN WITH STANDARD GRATE, AS PER PLAN

THIS ITEM SHALL INCLUDE THE REMOVAL OF EXISTING MEDIAN SHOULDER PAVEMENT AND THE REPLACEMENT OF THIS SHOULDER PAVEMENT IN ORDER TO INSTALL THIS PROPOSED TRENCH DRAIN.

ITEM 202 - GUARDRAIL REMOVED FOR SALVAGE, AS PER PLAN

THIS ITEM SHALL INCLUDE REMOVAL AND SALVAGE OF THE FOLLOWING MATERIALS AT EACH LOCATION IDENTIFIED IN THE PLANS: EXISTING TYPE E (ET-2000 PLUS) ANCHOR ASSEMBLY EXTRUDER HEAD, CABLE ANCHOR, ANGLE STRUT, CABLE ASSEMBLY, BEARING PLATE, TWO TUBE SLEEVES, AND THE FIRST TWO 12.5' GUARDRAIL PANELS. CONTRACTOR SHALL USE CARE IN THE REMOVAL PROCESS TO MINIMIZE DAMAGE TO THE MATERIALS.

ITEM SP304 - 9" RECYCLED AGGREGATE BASE, AS PER PLAN (SHOULDER)

THE CONTRACTOR SHALL CRUSH THE EXISTING CONCRETE BASE PAVEMENT FOR USE AS ITEM SP304 - 9" RECYCLED AGGREGATE BASE, AS PER PLAN (SHOULDER). THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL TRANSPORTATION, CRUSHING OPERATIONS, TESTING, PERMITTING AND ASSOCIATED WORK IN ORDER TO PREPARE AND CREATE THIS MATERIAL. IT IS THE INTENT OF THIS ITEM TO PROCESS ALL EXISTING CONCRETE BASE PAVEMENT INTO ITEM SP304. THIS MAY RESULT IN EXCESS MATERIAL AFTER ALL THE REQUIRED MATERIAL HAS BEEN PLACED IN THE SHOULDER LIMITS. ANY AND ALL EXCESS MATERIAL SHALL BE THE PROPERTY OF THE COMMISSION AND SHALL BE STOCKPILED AT A LOCATION WITHIN THE LIMITS OF THE PROJECT AS DIRECTED BY THE CHIEF ENGINEER. EACH STOCKPILE OF RECYCLED PORTLAND CEMENT CONCRETE (RPCC) MUST MEET THE REQUIREMENTS OF ODOT ITEM 304, AND OTC ITEM SP304,WITH THE EXCEPTION OF THE SODIUM SULFATE SOUNDNESS TESTING, WHICH WILL BE REPLACED WITH MAGNESIUM SULFATE SOUNDNESS TESTING. THE SOUNDNESS LOSS MUST BE LESS THAN 15% WHEN TESTED USING MAGNESIUM SULFATE PER AASHTO T104. AN ESTIMATED RESIDUAL QUANTITY OF 10,000 CU. YD. FOR ITEM SPECIAL - CRUSHED MATERIAL STOCKPILE HAS BEEN ADDED TO THE GENERAL SUMMARY FOR THE ALTERNATE BID ITEM.

ITEM 605 - AGGREGATE DRAIN, AS PER PLAN

THE ENTIRE OUTSIDE PERIMETER OF THE AGGREGATE DRAIN SHALL BE WRAPPED WITH FILTER FABRIC, TYPE A, AS PER ODOT SPECIFICATION 712.09. DURING THE EXCAVATION OF THE TRENCH FOR AGGREGATE DRAIN, SPECIAL CARE IS NEEDED TO PREVENT DAMAGE TO THE ADJACENT EXISTING UNDERDRAIN FILTER FABRIC WRAP. PAYMENT FOR ALL OPERATIONS DESCRIBED ABOVE SHALL BE INCLUDED IN THE CONTRACT PRICE FOR ITEM 605 - AGGREGATE DRAIN, AS PER PLAN.

ITEM 642 - PERMANENT PAVEMENT MARKINGS

PERMANENT PAVEMENT MARKING LOCATIONS SHALL BE DETERMINED BY REFERENCING THE BASE PAVEMENT JOINTS, AS SHOWN ON OTC STANDARD DRAWING RPM-1.

PAVEMENT REPAIRS

THE FOLLOWING QUANTITIES, ARE INCLUDED AS A CONTINGENCY, TO BE USED AS DIRECTED BY THE CHIEF ENGINEER FOR PAVEMENT REPAIR MEASURES TO MAINTAIN TRAFFIC. CONTRACTOR SHALL FOLLOW ODOT CMS FOR ITEM 255, EXCEPT THAT PLACEMENT OF THE DOWEL BARS ARE NOT REQUIRED, CONCRETE SHALL BE CLASS FS, **AND MAINTENANCE OF TRAFFIC COSTS INCURRED BY THE CONTRACTOR FOR THESE CURRENTLY UNKNOWN AND UNDEFINED PAVEMENT REPAIRS WILL BE COMPENSATED ON A TIME AND MATERIALS BASIS AS APPROVED BY THE CHIEF ENGINEER. UNIT PRICES BID FOR THE ITEMS IMMEDIATELY BELOW SHALL NOT INCLUDE MAINTENANCE OF TRAFFIC COSTS.**

ITEM 251 - PARTIAL DEPTH PAVEMENT REPAIR	1500 SQ. YD.
ITEM 255 - FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	1500 SQ. YD.
ITEM 255 - FULL DEPTH PAVEMENT SAWING	300 FT.

ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT

THIS ITEM SHALL INCLUDE FURNISHING AND PLACING AN ASPHALT PAVEMENT REINFORCEMENT GRID AT THE LOCATIONS AS SHOWN ON THE PLANS. THE ASPHALT PAVEMENT REINFORCEMENT GRID SHALL BE "GLASGRID - 8502" AS MANUFACTURED BY SAINT-GOBAIN TECHNICAL FABRICS OR APPROVED EQUAL. THE ASPHALT PAVEMENT REINFORCEMENT GRID SHALL BE INSTALLED AS PER THE RECOMMENDATIONS OF THE MANUFACTURER. THE UNIT PRICE BID PER SQUARE YARD FOR ITEM SPECIAL - ASPHALT PAVEMENT REINFORCEMENT SHALL BE FULL COMPENSATION FOR ALL LABOR, MATERIALS, AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK.

ITEM 452 - NON-REINFORCED CONCRETE PAVEMENT (T=12")

WHEN THIS ITEM IS TO BE OVERLAID WITH ASPHALT, COMPOUNDS FOR CURING CONCRETE AS DESCRIBED IN 705.07 SHALL NOT BE USED EXCEPT THAT CURING COMPOUNDS SHALL MEET THE REQUIREMENTS OF ASTM C309 AND SHALL BE COMPATIBLE WITH ITEM SPECIAL TRACKLESS TACK COAT. CURING SHALL BE IN ACCORDANCE WITH ALTERNATE METHODS SPECIFIED IN ODOT SPECIFICATION 451.10 AND SUPPLEMENTED WITH SPECIFICATION 305.02. CONTRACTOR MAY USE OTHER WATER BASED CURING COMPOUNDS AS AN ALTERNATIVE METHOD WHICH RESULT IN A SURFACE THAT PREVENTS DE BONDING BETWEEN CONCRETE BASE AND ASPHALT OVERLAY. THE SPECIFICATIONS FOR ALTERNATIVE CURING COMPOUNDS SHALL BE SUBMITTED TO THE CHIEF ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ANY APPLICATION OR PURCHASE.

ITEM SPECIAL - SAW CUT JOINT

THIS ITEM SHALL CONSIST OF SAW CUTTING WITH A DIAMOND BLADE AT JOINTS WHERE EXISTING ASPHALT AND PROPOSED ASPHALT MEET. THE LOCATION AND DEPTH SHALL BE AS SPECIFIED IN THE PLANS AND/OR AS DIRECTED BY THE CHIEF ENGINEER. PAYMENT FOR THIS ITEM WILL BE AT UNIT BID PRICE PER LINEAR FOOT FOR ITEM SPECIAL - SAW CUT JOINT AND SHALL INCLUDE ALL LABOR, EQUIPMENT AND MATERIALS NECESSARY TO COMPLETE THIS ITEM. THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY:

ITEM SPECIAL - SAW CUT JOINT 25,000 FT.

ALL MAINTENANCE OF TRAFFIC NECESSARY TO COMPLETE THIS ITEM SHALL BE CONSIDERED INCIDENTAL TO ITEM SP 614 - MAINTAINING TRAFFIC.

ITEM SPECIAL - ROLLER COMPACTED CONCRETE (T=9")

THIS ITEM SHALL COMPLY WITH OTC SPECIFICATION FOR ROLLER COMPACTED CONCRETE AND SHALL INCLUDE ALL EQUIPMENT, MATERIAL, LABOR AND OTHER INCIDENTALS NECESSARY TO COMPLETE THIS ITEM OF WORK. SAW CUT JOINTS SHALL BE INSTALLED TO MATCH ADJACENT JOINTS IN ITEM 452.

ITEM 206 - CHEMICALLY STABILIZED SUBGRADE, AS PER PLAN

THIS WORK SHALL COMPLY WITH ALL REQUIREMENTS SPECIFIED IN ITEM 206 - CHEMICALLY STABILIZED SUBGRADE OF ODOT 2010 CMS EXCEPT AS NOTED BELOW:

ITEM 206.02 MATERIALS: CURING COAT SUBMITTAL NOT REQUIRED

ITEM 206.03 SUBMITTALS: MIXTURE DESIGN FOR CHEMICALLY STABILIZED SOILS IS NOT REQUIRED BY THE CONTRACTOR.

ITEM 206.05 CONSTRUCTION:
A. SPREADING - USE AN APPLICATION RATE OF 6% PORTLAND CEMENT BY DRY UNIT WEIGHT. THE APPLICATION RATE WILL VARY DEPENDING ON THE IN-SITU DRY UNIT WEIGHT OF THE SOIL. QUANTITY OF PORTLAND CEMENT IS BASED ON A IN-SITU DRY UNIT WEIGHT OF 110 LBS/FT'.

D. CURING - THE TREATED AREA SHOULD BE SHAPED TO THE REQUIRED LINES, GRADES AND CROSS SECTIONS AND FINAL COMPACTION, BY WAY OF SMOOTH DRUM ROLLER WEIGHING AT LEAST 10 TONS, SHOULD CONTINUE UNTIL UNIFORM AND ADEQUATE COMPACTION IS OBTAINED. THE CONTRACTOR SHALL MAINTAIN THE SURFACE OF THE CEMENT STABILIZED SOIL SUBGRADE IN A MOIST CONDITION DURING THE CURING PERIOD. FINISHED PORTIONS OF THE STABILIZED SUBGRADE THAT ARE TRAVELED ON BY EQUIPMENT USED IN CONSTRUCTING AN ADJOINING SECTION SHALL BE PROTECTED IN SUCH A MANNER AS TO PREVENT EQUIPMENT FROM MARRING OR DAMAGING COMPLETED WORK. DURING THE CURING PERIOD, NO TRAFFIC SHALL BE PERMITTED ON THE COMPLETED WORK BEYOND THAT REQUIRED FOR MAINTAINING MOIST CONDITIONS. THE LENGTH OF THE CURING PERIOD WILL DEPEND ON THE ACCEPTANCE OF THE CEMENT STABILIZED SOIL SUBGRADE. THE ACCEPTANCE OF THE CEMENT STABILIZED SOIL SUBGRADE WILL BE EVALUATED AFTER 72 HOURS OF CURING. DEPENDING ON THE ACCEPTANCE OF THE CEMENT STABILIZED SOIL SUBGRADE, ADDITIONAL CURING MAY BE REQUIRED. SUFFICIENT PROTECTION FROM FREEZING SHALL BE GIVEN THE CHEMICALLY STABILIZED MATERIAL FOR 7 DAYS AFTER ITS CONSTRUCTION OR AS APPROVED BY THE CHIEF ENGINEER.

E. PROOF ROLLING - ACCEPTANCE TESTING OF THE CEMENT STABILIZED SOIL SUBGRADE WILL BE PERFORMED AFTER 72 HOURS OF CURING. AN AUTOMATIC DYNAMIC CONE PENETROMETER (ADCP) WILL BE USED AS THE INITIAL ACCEPTANCE TEST FOR THE CEMENT STABILIZED SOIL SUBGRADE. THE ADCP WILL MEASURE THE PENETRATION RATE (PR) IN MM/BLOW FOR THE CEMENT STABILIZED SOIL SUBGRADE THROUGH THE TREATMENT DEPTH. THE MAXIMUM PENETRATION RATE THROUGHOUT THE CEMENT STABILIZED SOIL SUBGRADE MUST AVERAGE 8.0 MM/BLOW TESTS WILL BE PERFORMED EVERY 200 LINEAR FEET OF ROADWAY. IF THE AVERAGE PR OF THE CEMENT STABILIZED SOIL SUBGRADE IS BELOW 8.0 MM/BLOW, THEN THE CONTRACTOR CAN PROCEED WITH CONSTRUCTION OF THE PAVEMENT STRUCTURE.

IF THE AVERAGE PR OF THE CEMENT STABILIZED SOIL SUBGRADE IS ABOVE 8.0 MM/BLOW, THEN THE CEMENT STABILIZED SOIL SUBGRADE MUST CONTINUE TO CURE FOR TWO ADDITIONAL DAYS AND THEN BE PROOF ROLLED IN ACCORDANCE WITH ODOT ITEM 204.

LOCATION	BEGIN STATION	END STATION	STABILIZATION DEPTH (INCHES)	LENGTH	WIDTH	TREATMENT AREA	TREATMENT AREA	PORTLAND CEMENT APPLICATION RATE	TOTAL WEIGHT OF PORTLAND CEMENT	TOTAL WEIGHT OF PORTLAND CEMENT
				FT.	FT.	S.F.	S.Y.	LBS./S.Y.	LBS.	TONS
MAINLINE	603+50	636+33	12	3,283	26	85,358	9,484	65	616,474	308
	643+70	679+10	12	3,540	26	92,040	10,227	65	664,733	332
	682+13	733+00	12	5,087	26	132,262	14,696	65	955,226	478
	733+00	802+20	14	6,920	26	179,920	19,991	76	1,519,324	760
	805+76	863+90	14	5,814	26	151,164	16,796	76	1,276,496	638
SHOULDER	603+50	636+33	12	3,283	9.42	30,926	3,436	44	151,193	76
	643+70	679+10	12	3,540	9.42	33,347	3,705	44	163,029	82
	682+13	733+00	12	5,087	9.42	47,920	5,324	44	234,273	117
	733+00	802+20	12	6,920	9.42	65,186	7,243	44	318,689	159
	805+76	863+90	12	5,814	9.42	54,768	6,085	44	267,754	134
			TOTALS				96,987			3,084

THE FOLLOWING QUANTITIES HAVE BEEN INCLUDED IN THE GENERAL SUMMARY FOR THE WORK UNDER ITEM 206 - CHEMICALLY STABILIZED SUBGRADE, AS PER PLAN:

ITEM 206 - CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP, AS PER PLAN	60,200 SQ. YD.
ITEM 206 - CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	36,787 SQ. YD.
ITEM 206 - CEMENT	3,084 TON
ITEM 206 - WATER FOR CURING	1.3 M GAL.
ITEM 206 - TEST ROLLING	33 HOURS

SEEDING & MULCHING

THE FOLLOWING QUANTITIES ARE PROVIDED TO PROMOTE GROWTH AND CARE OF PERMANENT SEEDED AREAS:

ITEM 659 - SOIL ANALYSIS TEST	2	EACH
ITEM 659 - TOPSOIL	3,058	CU. YD.
ITEM 659 - SEEDING AND MULCHING	27,547	SQ. YD.
ITEM 659 - REPAIR SEEDING AND MULCHING	1,377	SQ. YD.
ITEM 659 - INTER-SEEDING	1,377	SQ. YD.
ITEM 659 - COMMERCIAL FERTILIZER	3.7	TON
ITEM 659 - LIME	5.7	ACRES
ITEM 659 - WATER	149	M. GAL.

SEEDING AND MULCHING SHALL BE APPLIED TO ALL AREAS OF EXPOSED SOIL BETWEEN THE RIGHT-OF-WAY LINES, AND WITHIN THE CONSTRUCTION LIMITS FOR AREAS OUTSIDE THE RIGHT-OF- WAY LINES COVERED BY WORK AGREEMENT OR SLOPE EASEMENT. QUANTITY CALCULATIONS FOR SEEDING AND MULCHING ARE BASED ON AN ASSUMED LIMIT 10' BEYOND THE SHOULDER.

ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE A

THIS ITEM OF WORK SHALL CONSIST OF INSTALLING PRESSURE RELIEF JOINT, TYPE A, AT EACH APPROACH TO EACH MAINLINE BRIDGE ACROSS THE NEW PAVEMENT AND OUTSIDE SHOULDER IN ACCORDANCE WITH THE DETAIL SHOWN ON OHIO DEPARTMENT OF TRANSPORATION STANDARD DRAWING BP-2.3 (07-16-04).

PRESSURE RELIEF JOINT LOCATIONS WILL BE FIELD LOCATED BY THE CHIEF ENGINEER. APPROXIMATE LOCATIONS FOR WESTBOUND LANES ARE AS FOLLOWS:
STA. 636+33, STA. 640+21, STA. 641+12, STA. 643+70, STA. 679+10, STA. 682+13
STA. 802+20, STA. 805+76.

THE FOLLOWING QUANTITY IS PROVIDED IN THE GENERAL SUMMARY:

ITEM SPECIAL - PRESSURE RELIEF JOINT, TYPE A	500 FT.
ITEM SP605 - 6" SHALLOW PIPE UNDERDRAIN WITH FABRIC WRAP	500 FT.
ITEM 603 - 6" CONDUIT TYPE F, NON-PERFORATED ASTM D3034 (SDR 35) 707.42 OR 707.33	100 FT.

CONNECTION BETWEEN EXISTING AND PROPOSED GUARDRAIL

WHEN IT IS NECESSARY TO SPLICE PROPOSED GUARDRAIL TO EXISTING GUARDRAIL, ONLY THE EXISTING GUARDRAIL SHALL BE CUT, DRILLED, OR PUNCHED. THE CONNECTION SHALL BE MADE USING A 'W-BEAM RAIL SPLICE' AS SHOWN ON STANDARD CONSTRUCTION DRAWING GR-1.1. PAYMENT SHALL BE INCLUDED IN THE CONTRACT PRICE FOR THE RESPECTIVE GUARDRAIL ITEMS.

ITEM SP626 - RAISED PAVEMENT MARKER

THIS ITEM SHALL BE INSTALLED IN ACCORDANCE WITH SP626 WITH THE FOLLOWING CHANGES IN SPACING: 120' FOR ALL TANGENT SECTIONS AND 80' FOR ALL CURVES.

ITEM SPECIAL - PRECAST REINFORCED CONCRETE OUTLET

THIS ITEM SHALL BE IN ACCORDANCE WITH OTC STANDARD DRAWING UD-1 AND SHALL INCLUDE ALL LABOR, EQUIPMENT, MATERIALS AND INCIDENTALS TO COMPLETE THIS ITEM.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	NLC	2/12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE WESTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION
GENERAL NOTES

RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OH 42321

DESIGNED: X	CHECKED: SSK	DATE: 01/20/2012
DRAWN: NLC	IN CHARGE: SSK	SCALE: N/A

CONTRACT 39-12-02 SHEET 9 OF 128

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ITEM 407 - TACK COAT, TRACKLESS, AS PER PLAN

DESCRIPTION: THIS WORK CONSISTS OF PREPARING AND TREATING A PAVED SURFACE WITH NTSS-IHM TRACKLESS TACK PRODUCED BY BLACKLIDGE EMULSIONS, INC. MEET ALL REQUIREMENTS OF CONSTRUCTION AND MATERIAL SPECIFICATIONS ITEM 407 TACK COAT EXCEPT AS NOTED BELOW.

MATERIAL: CONFORM TO THE FOLLOWING TYPICAL PHYSICAL PROPERTIES:

PARAMETER	TEST METHOD	MIN.	MAX.
SAYBOLT FUROL VISCOSITY, SFS @ 25C	AASHTO T59	15	100
STORAGE STABILITY, 24 HRS, %	AASHTO T59	--	1
STORAGE STABILITY, 5 DAYS, %	AASHTO T59	--	5
RESIDUE BY DISTILLATION, %	AASHTO T5950	--	
OIL DISTILLATE, %	AASHTO T59	--	1
SIEVE TEST, %	AASHTO T59	--	0.30
TEST ON RESIDUE:			
PENETRATION, @ 25C	AASHTO T49	--	20
SOFTENING POINT RANGE DEG C	AASHTO T53	65	--
SOLUBILITY,%	AASHTO T44	97.5	--
ORIGINAL BINDER DSR@82C			
G*/SIN ,,10 RAD/SEC	AASHTO T315	1.00	--

NOTE: PRODUCT SHOULD NOT CONTAIN FILLER SUCH AS CLAY, ETC. KEEP FROM FREEZING. SUPPLY CERTIFIED TEST DATA FROM AN INDEPENDENT LAB TO THE ENGINEER SHOWING THE MATERIAL SUPPLIED WAS TESTED FOR AND MEETS THE ABOVE PROPERTIES.

EQUIPMENT: ALL REQUIREMENTS OF 407.03 APPLY. SEE MANUFACTURER'S REPRESENTATIVE FOR CORRECT DISTRIBUTOR SETTINGS. THOROUGHLY CLEAN ALL EQUIPMENT IF CATIONIC EMULSION WAS PREVIOUSLY USED.

WEATHER LIMITATIONS: ALL REQUIREMENTS OF 407.04 APPLY.

PREPARATION OF SURFACE: ALL REQUIREMENTS OF 407.05 APPLY.

APPLICATION OF ASPHALT MATERIAL: UNIFORMLY APPLY THE ASPHALT MATERIAL WITH A DISTRIBUTOR PER THE REQUIREMENTS OF 407.06 EXCEPT AS NOTED. IF PRODUCT IS STORED FOR AN EXTENDED PERIOD OF TIME, PRIOR TO APPLICATION, AGITATE OR GENTLY CIRCULATE THE MATERIAL. ALL NOZZLES AND SPRAY PATTERNS SHALL BE IDENTICAL TO ONE ANOTHER ALONG THE DISTRIBUTOR SPRAY BAR. THE ANGLE OF THE NOZZLE SHOULD BE A 15 TO 30 DEGREE ANGLE TO THE SPRAY BAR AXIS TO MAXIMIZE OVERLAP OR AS RECOMMENDED BY THE NOZZLE MANUFACTURER. CONTACT THE MANUFACTURER'S REPRESENTATIVE FOR REQUIRED SPRAY NOZZLE SIZE, AND DISTRIBUTOR AND NOZZLE SETTINGS. APPLY AT A RATE OF 0.075 GALLONS PER SQUARE YARD TO ALL MILLED SURFACES AND AT A RATE OF 0.06 GALLONS PER SQUARE YARD TO ALL SMOOTH PAVED SURFACES AND BETWEEN COURSES OF ASPHALT. RECOMMENDED APPLICATION TEMPERATURE IS 160F TO 180F. DO NOT EXCEED 180F. DILUTION IS NOT ALLOWED.

THE ENGINEER AND MANUFACTURER'S REPRESENTATIVE WILL APPROVE RATE OF APPLICATION, TEMPERATURE, DISTRIBUTOR SETTINGS, AND AREAS TO BE TREATED BEFORE APPLICATION OF THE TACK COAT. THE ENGINEER WILL DETERMINE THE ACTUAL APPLICATION IN GALLONS PER SQUARE YARD BY A CHECK ON THE PROJECT. THE APPLICATION IS CONSIDERED SATISFACTORY WHEN THE MATERIAL IS APPLIED UNIFORMLY WITH NO VISIBLE EVIDENCE OF STREAKING OR RIDGING AND THE APPLICATION RATE IS ±10% OF THE SPECIFIED RATE.

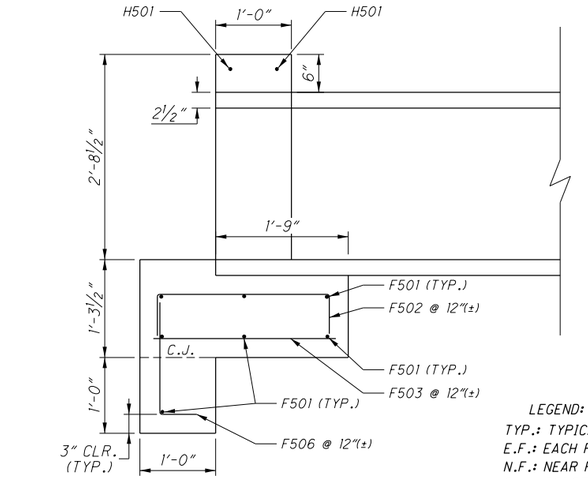
METHOD OF MEASUREMENT: ALL REQUIREMENTS OF 407.07 APPLY.

BASIS OF PAYMENT: ALL REQUIREMENTS OF 407.08 APPLY.

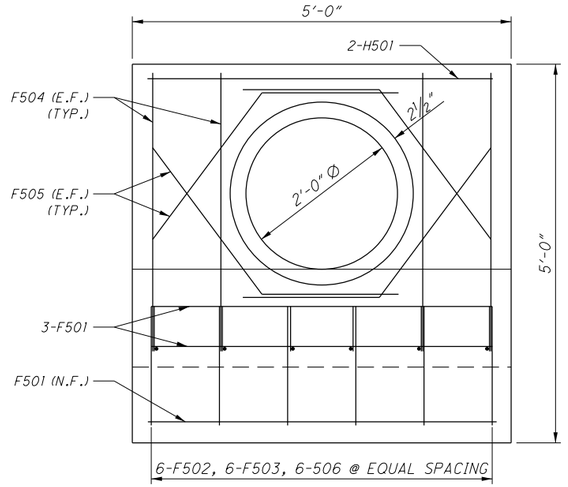
1

ASPHALT SURFACE COURSE PAVING WITH MATERIAL TRANSFER DEVICE

IN ADDITION TO THE REQUIREMENTS OF SP 400, A MATERIAL TRANSFER DEVICE (MTD) SHALL BE USED FOR ALL SURFACE COURSE MAINLINE AND RAMP PAVING. THE MTD SHALL BE SELF PROPELLED AND NOT ATTACHED TO THE ASPHALT SPREADING AND FINISHING EQUIPMENT. THE MTD SHALL BE CAPABLE OF REMIXING AND TRANSFERRING THE ASPHALT MIXTURE FROM THE MTD TO THE ASPHALT SPREADING AND FINISHING EQUIPMENT. ALL COSTS ASSOCIATED WITH THE USE OF THIS EQUIPMENT SHALL BE INCLUDED IN THE UNIT PRICE BID FOR THE PERTINENT SP 404 ITEMS.



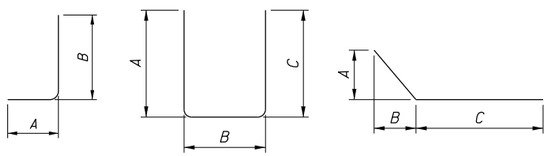
LEGEND:
TYP.: TYPICAL
E.F.: EACH FACE
N.F.: NEAR FACE
C.J.: CONSTRUCTION JOINT



FULL HEIGHT HEADWALL DETAIL

MARK	NUMBER	LENGTH	WEIGHT (LBS.)	TYPE	DIMENSIONS		
					A	B	C
H501	2	4'-8"	10	STR.			
F501	7	4'-6"	33	STR.			
F502	6	3'-6"	22	2	9"	2'-3"	9"
F503	6	2'-3"	14	STR.			
F504	8	3'-8"	31	STR.			
F505	8	4'-3"	35	3	2'-0"	2'-0"	1'-6"
F506	6	2'-8"	15	1	2'-0"	6½"	
		TOTAL	160				

BENDING DIAGRAMS



TYPE-1 TYPE-2 TYPE-3

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	NLC	2-10-12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE WESTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION
GENERAL NOTES

RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OH 42321

DESIGNED: X	CHECKED: SSK	DATE: 01/20/2012
DRAWN: NLC	IN CHARGE: SSK	SCALE: N/A

CONTRACT 39-12-02 SHEET 10 OF 128

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MAINTENANCE OF TRAFFIC SUB-SUMMARY

SHEET NO.	PHASE A, STEP 1	FROM STATION	TO STATION	SIDE	614 WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL) EACH	614 FLASHING ARROW PANEL EACH	614 WORK ZONE CROSSOVER LIGHTING SYSTEM EACH	621 REMOVAL OF RPM REFLECTORS EACH	SP 622A TEMPORARY PORTABLE BARRIER (WITHOUT GLARE SHIELD) FT	SP 622A TEMPORARY PORTABLE BARRIER (WITH GLARE SHIELD) FT	SP 626A CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, WHITE EACH	SP 626A CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, YELLOW EACH	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (4" - WHITE) FT	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (4" - YELLOW) FT	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (6" - YELLOW) FT	614 WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT (8" - WHITE) FT	614 WORK ZONE TRANSVERSE LINE, CLASS I, 642 PAINT (12" - WHITE) FT	SP 641C REMOVAL OF PAVEMENT MARKINGS FT	SP 641 4" TEMPORARY WHITE DOTTED LINE FT	SP 641 4" TEMPORARY WHITE EDGE LINE FT	SP 641 4" TEMPORARY YELLOW EDGE LINE FT	SP 641 6" TEMPORARY YELLOW EDGE LINE FT	SPECIAL EXISTING CROSSOVER TO BE CLOSED / RE-OPENED, AS PER PLAN EACH
23	FAP	558+50		RT		1																		
23	ELY6	558+50	569+00	RT											1050			1050						
23	*RLL	558+50	566+90	RT				10										840						
24	ELY6	569+00	605+00	RT											3600			3600						
24	CH	585+45	590+45	LT												500		500						
24	ELY	590+45	605+00	LT										1455				1455						
24	ELW	590+45	605+00	LT/RT									1455					1455						
24	ELY	594+45	605+00	LT/RT										1055				1055						
24	ELW	597+45	605+00	LT									755					755						
24	REL	594+45	605+00	LT														1055						
24	REL	601+50	605+00	RT														350						
24	*RLL	597+45	602+00	LT				4										455						
24	*RLL	597+45	601+50	LT				3										405						
24	TCB	599+70	605+00	RT						530														
24	TCB	603+31	605+00	LT					169															
24–32	REL	605+00	840+00	LT/RT														46,874						
24–32	TCB	605+00	840+00	RT						23,437														
24–32	TCB	605+00	840+00	LT					23,437															
24–32	ELY6	605+00	840+00	RT											22,173			22,173						
24–32	ELY	605+00	840+00	LT/RT										44,346				44,346						
24–32	ELW	605+00	840+00	LT/RT									44,346					44,346						
32	MEDIAN BARRIER	812+62	814+43	CL																				1
33	REL	840+00	869+00	LT/RT														5976						
33	TCB	840+00	869+00	RT						2988														
33	TCB	840+00	869+00	LT					2988															
33	ELY6	840+00	869+00	RT											2988			2988						
33	ELY	840+00	869+00	LT/RT										5976				5976						
33	ELW	840+00	869+00	LT/RT									5976					5976						
33	MEDIAN BARRIER	863+12	864+93	CL																				1
33	DL	862+35	869+00	LT															665					
33	*RLL	864+00	869+00	LT				4										500						
SUB-TOTALS CARRIED TO SHEET 17					0	1	0	21	26,594	26,955	0	0	52,532	52,832	29,811	500	0	192,130	665	0	0	0	2	

1 — 44,346

1 — 52,532

NOTE 1: ITEM SP 641 – TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED ON ALL CONCRETE APPROACH SLABS AND BRIDGE DECKS.

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PSL	2/12

OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC SUB-SUMMARY

CT Consultants
engineers | architects | planners
8240 Sterling Court Mentor, Ohio 44060
440.951.9090 www.ctconsultants.com

DESIGNED: W.D.B.	CHECKED: J.M.P.	DATE: NOV. 2011
DRAWN: J.J.C.	IN CHARGE: W.D.B.	SCALE: N.T.S.

CONTRACT 39-12-02 SHEET 14 OF 128

DESIGNED BY: W.D.L.	CHECKED BY:
DATE: NOV. 2011	DATE:
DRAWN BY: J.J.C.	REVISED BY:
DATE: NOV. 2011	DATE:
CAD FILE NAME: 1312\MOTQNT.DWG	

MAINTENANCE OF TRAFFIC SUB-SUMMARY

SHEET NO.	PHASE A, STEP 1 CROSSOVER DETAILS	FROM STATION	TO STATION	SIDE	614 WORK ZONE IMPACT ATTENUATOR FOR 24" WIDE HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL) EACH	614 FLASHING ARROW PANEL EACH	614 WORK ZONE CROSSOVER LIGHTING SYSTEM EACH	621 REMOVAL OF RPM REFLECTORS EACH	SP 622A TEMPORARY PORTABLE BARRIER (WITHOUT GLARE SHIELD) FT	SP 622A TEMPORARY PORTABLE BARRIER (WITH GLARE SHIELD) FT	SP 626A CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, WHITE EACH	SP 626A CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, YELLOW EACH	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (4" - WHITE) FT	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (4" - YELLOW) FT	614 WORK ZONE EDGE LINE, CLASS I, 642 PAINT (6" - YELLOW) FT	614 WORK ZONE CHANNELIZING LINE, CLASS I, 642 PAINT (8" - WHITE) FT	614 WORK ZONE TRANSVERSE LINE, CLASS I, 642 PAINT (12" - WHITE) FT	SP 641C REMOVAL OF PAVEMENT MARKINGS FT	SP 641 4" TEMPORARY WHITE DOTTED LINE FT	SP 641 4" TEMPORARY WHITE EDGE LINE FT	SP 641 4" TEMPORARY YELLOW EDGE LINE FT	SP 641 6" TEMPORARY YELLOW EDGE LINE FT	SPECIAL EXISTING CROSSOVER TO BE CLOSED / RE-OPENED, AS PER PLAN EACH
44–46	CZMY	595+45	603+55	LT/RT								163												
44–46	CZMY	595+45	605+31	LT								198												
44–46	CZMW	595+45	606+21	RT							216													
44–46	CZMW	595+45	603+31	LT							158													
44–46	LIGHTING	597+45	603+30.6	LT/RT			1																	
47–49	CZMY	885+45	893+55	LT/RT								163												
47–49	CZMY	881+79	892+65	LT								218												
47–49	CZMW	881+79	893+55	LT/RT							236													
47–49	CZMW	884+28	892+65	LT							168													
47–49	LIGHTING	884+79	890+64.5	LT			1																	
26	BRIDGE LIMITS	636+41.99	640+18.38	LT																752	752	376		
26	BRIDGE LIMITS	641+17.81	643+62.24	LT																488	488	244		
27	BRIDGE LIMITS	679+13.43	682+11.45	LT																596	596	298		
31	BRIDGE LIMITS	802+29.45	805+75.54	LT																692	692	346		
SHEET SUB-TOTALS					0	0	2	0	0	0	778	742	0	0	0	0	0	0	0	2528	2528	1264	0	
SUB-TOTALS CARRIED FROM SHEET 16					0	0	0	0	4560	0	0	0	5932	5932	0	0	0	11,864	0	2528	2528	0	0	
SUB-TOTALS CARRIED FROM SHEET 15					3	1	0	29	5579	2020	0	0	7380	8755	6925	3104	530	35,449	805	0	0	0	0	
SUB-TOTALS CARRIED FROM SHEET 14					0	1	0	21	26,594	26,955	0	0	52,532	52,832	29,811	500	0	192,130	665	0	0	0	2	
TOTALS					3	2	2	50	36,733	28,975	778	742	65,844	67,519	36,736	3604	530	239,443	1470	5056	5056	1264	2	
TOTALS CARRIED TO GENERAL SUMMARY SHEETS 50-52					3	2	2	50	6.96 MILE	5.49 MILE	778	742	12.47 MILE	12.79 MILE	6.96 MILE	3604	530	45.35 MILE	1470	0.96 MILE	0.96 MILE	0.24 MILE	2	

NOTE 1: ITEM SP 641 – TEMPORARY PAVEMENT MARKINGS SHALL BE PLACED ON ALL CONCRETE APPROACH SLABS AND BRIDGE DECKS.

DESIGNED BY: W.D.B.	CHECKED BY:		
DATE: NOV. 2011	DATE:		
DRAWN BY: J.J.C.	REVISED BY:		
DATE: NOV. 2011	DATE:		
CAD FILE NAME: 11312\MOTQNT.DWG			

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PSL	2/12

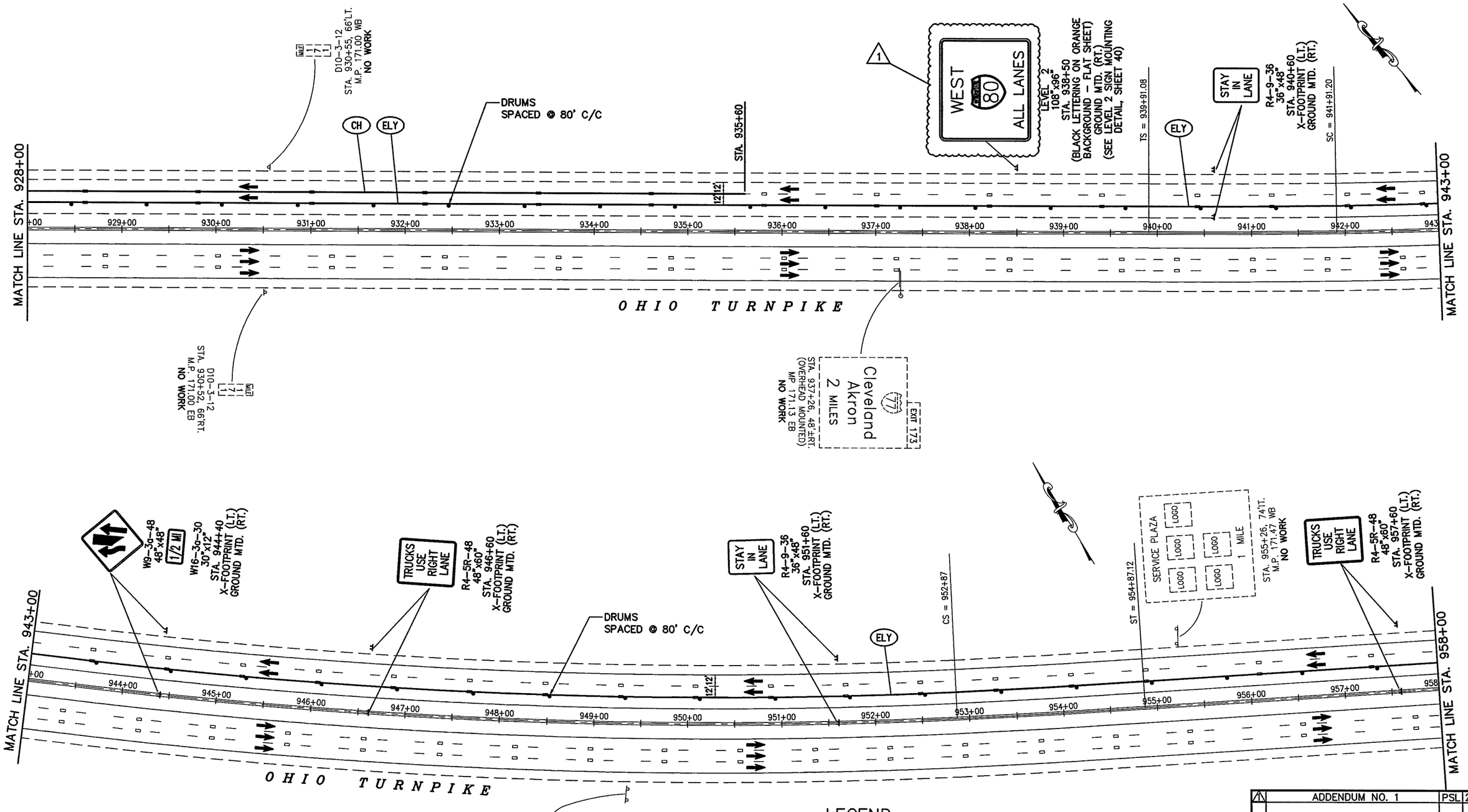
OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC SUB–SUMMARY

CT Consultants engineers | architects | planners

DESIGNED:	W.D.B.	CHECKED:	J.M.P.	DATE:	NOV. 2011
DRAWN:	J.J.C.	IN CHARGE:	W.D.B.	SCALE:	N.T.S.

CONTRACT 39–12–02 SHEET 17 OF 128



NOTES: 1. ALL SIGNS FOR MAINTAINING TRAFFIC SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.

2. FOR DETAILS OF SIDE MOUNTED DELINEATORS ON TEMPORARY PORTABLE BARRIER, SEE OTC STANDARD DRAWINGS TCR-2.1 & TCR-3.1.

LEGEND

ELW	4" TEMPORARY EDGE LINE (WHITE)
ELY	4" TEMPORARY EDGE LINE (YELLOW)
ELY6	6" TEMPORARY EDGE LINE (YELLOW)
CH	8" CHANNELIZING LINE (WHITE)
DL	4" DOTTED LINE (WHITE)
TL	12" TRANSVERSE LINE (WHITE)
R__	REMOVE PAVEMENT MARKING
*R__	REMOVE PAVEMENT MARKING & RPM REFLECTORS
	PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
X X X	REMOVE PAVEMENT MARKING AND/OR RPM REFLECTORS
	TRAFFIC FLOW

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PSL	2/12

DESIGNED BY: WDB | CHECKED BY:
DATE: NOV. 2011 | DATE:
DRAWN BY: PSL | REVISED BY:
DATE: NOV. 2011 | DATE:
CAD FILE NAME: 1131Z/MOT001.DWG

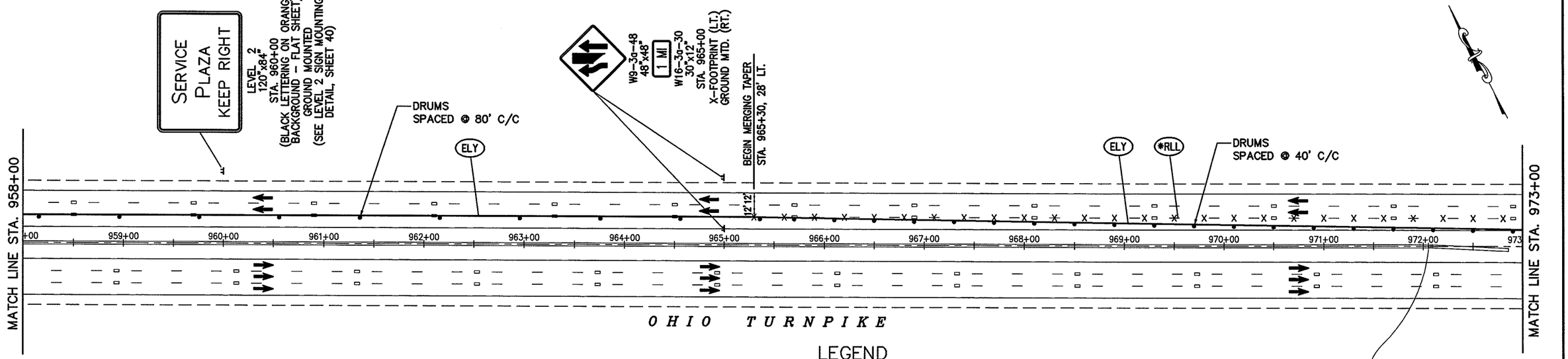
OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE PLAN DETAILS
PHASE A, STEP 1

CT Consultants
engineers | architects | planners

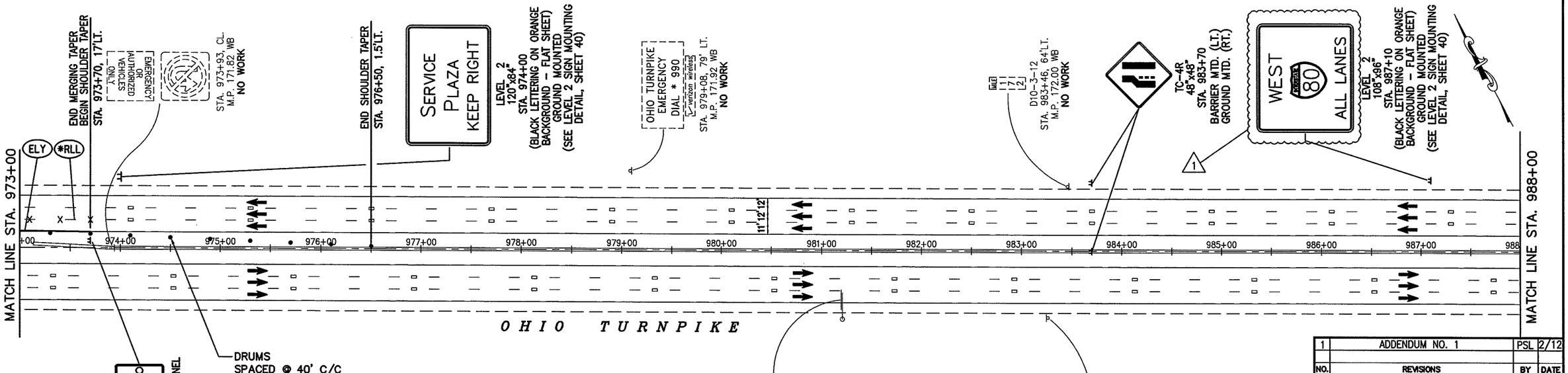
DESIGNED:	J.M.P.	CHECKED:	J.M.P.	DATE:	NOV. 2011
DRAWN:	J.D.C.	IN CHARGE:	W.D.B.	SCALE:	1:50

CONTRACT 39-12-02 SHEET 37 OF 128



LEGEND

- (ELW) 4" TEMPORARY EDGE LINE (WHITE)
- (ELY) 4" TEMPORARY EDGE LINE (YELLOW)
- (ELY6) 6" TEMPORARY EDGE LINE (YELLOW)
- (CH) 8" CHANNELIZING LINE (WHITE)
- (DL) 4" DOTTED LINE (WHITE)
- (TL) 12" TRANSVERSE LINE (WHITE)
- (R__) REMOVE PAVEMENT MARKING
- (*R__) REMOVE PAVEMENT MARKING & RPM REFLECTORS
- PROPOSED PERMANENT PAVEMENT CONSTRUCTED THIS PHASE
- X X X REMOVE PAVEMENT MARKING AND/OR RPM REFLECTORS
- TRAFFIC FLOW



NOTES:
1. ALL SIGNS FOR MAINTAINING TRAFFIC SHALL BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
2. FOR DETAILS OF SIDE MOUNTED DELINEATORS ON TEMPORARY PORTABLE BARRIER, SEE OTC STANDARD DRAWINGS TCR-2.1 & TCR-3.1.

DESIGNED BY: WDB	CHECKED BY:
DATE: NOV. 2011	DATE:
DRAWN BY: PSL	REVISED BY:
DATE: NOV. 2011	DATE:
CAD FILE NAME: 11312/MOT001.DWG	

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	PSL	2/12

OHIO TURNPIKE COMMISSION

MAINTENANCE OF TRAFFIC
PHASE PLAN DETAILS
PHASE A, STEP 1

CT Consultants
engineers | architects | planners
8230 Sterling Court Mason, Ohio 45040
513.573.2600 www.ctconsultants.com

DESIGNED: J.M.P.	CHECKED: J.M.P.	DATE: NOV. 2011	
DRAWN: J.D.C.	IN CHARGE: W.D.B.	SCALE: 1:50	

CONTRACT 39-12-02 SHEET 38 OF 128

SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
8	9	11	12	13	17	18	54	55	56	57	58	90	98	99	117					
																			DRAINAGE (CONT.)	
300							33									603	333	FT	12" CONDUIT, TYPE C	
100							3									603	103	FT	15" CONDUIT, TYPE C	
150							9									603	159	FT	18" CONDUIT, TYPE C	
							10									603	10	FT	24" CONDUIT, TYPE C	
							15									SP604	15	EACH	CATCH BASIN TYPE CB-1	9
										24774						605	24774	FT	AGGREGATE DRAIN, AS PER PLAN	9
	500								49025							SP605	49525	FT	6" SHALLOW PIPE UNDERDRAIN, WITH FILTER FABRIC WRAP	
									38							SPECIAL	38	EACH	PRECAST REINFORCED CONCRETE OUTLET	8
							40									839	40	FT	12" TRENCH DRAIN WITH STANDARD GRATE, AS PER PLAN	9
																			PAVEMENT	
	60200															206	60200	SQ YD	CEMENT STABILIZED SUBGRADE, 12 INCHES DEEP, AS PER PLAN	9
	36787															206	36787	SQ YD	CEMENT STABILIZED SUBGRADE, 14 INCHES DEEP, AS PER PLAN	9
	3084															206	3084	TON	CEMENT	
	1.3															206	1.3	M GAL	WATER FOR CURING	
	33															206	33	HOUR	TEST ROLLING	
	1500															251	1500	SQ YD	PARTIAL DEPTH PAVEMENT REPAIR	9
										25274						252	25274	FT	FULL DEPTH PAVEMENT SAWING	
	1500															255	1500	SQ YD	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT	9
	300															255	300	FT	FULL DEPTH PAVEMENT SAWING	
						36										SP302	36	CU YD	BITUMINOUS AGGREGATE BASE COURSE, PG64-22	
										12089						SP304	12089	CU YD	AGGREGATE BASE	
										6456						SP304	6456	CU YD	AGGREGATE BASE (SHOULDER)	
						476				1167						SP402	1643	CU YD	ASPHALT CONC. BASE COURSE, OR RECYCLED ASPHALT CONC. BASE COURSE, PG64-22	
										3599						SP402	3599	CU YD	ASPHALT CONC. BASE COURSE, OR RECYCLED ASPHALT CONC. BASE COURSE, PG70-22 (FR)	
										1026						SP404	1026	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG64-22	
												141								
										3084						SP404	3084	CU YD	ASPHALT CONCRETE SURFACE COURSE, USING CRUSHED SLAG, PG70-22 (FR)	
						130										SP404	130	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC ON CROSSOVER, PG64-22	
						2208				25175		4160				SP404A	31543	FT	JOINT SEALER	
										13064						407	13064	GALLON	TACK COAT, TRACKLESS TACK, AS PER PLAN	10
						266										SP407	266	GALLON	TACK COAT	
						212						202				SP407	414	GALLON	TACK COAT FOR INTERMEDIATE COURSE	
										228						452	228	SQ YD	NON-REINFORCED CONCRETE PAVEMENT (T=15")	
										71285						452	71285	SQ YD	NON-REINFORCED CONCRETE PAVEMENT (T=12")	9
										24457						SPECIAL	24457	SQ YD	ROLLER COMPACTED CONCRETE (T=9")	9
										4183						SP617	4183	SQ YD	SHOULDER PREPARATION	
										349						SP617	349	CU YD	COMPACTED AGGREGATE	
										384						SP627	384	CU YD	STONE SHOULDER PROTECTION	
										13709						SPECIAL	13709	SQ YD	ASPHALT PAVEMENT REINFORCEMENT	9
	500															SPECIAL	500	FT	PRESSURE RELIEF JOINT, TYPE A	9
										4.67		0.40				SPECIAL	5.07	MILE	SONIC NAP ALERT PATTERN (SNAP)	
	25000					2208						2080				SPECIAL	29288	FT	SAW CUT JOINT	9
							61 △										△		***ALTERNATE BID***	
24420																203	24481	CU YD	EXCAVATION	
										21782						SP302	21782	CU YD	BITUMINOUS AGGREGATE BASE COURSE PG64-22 (MAINLINE)	
										5435						SP302	5435	CU YD	BITUMINOUS AGGREGATE BASE COURSE PG64-22 (SHOULDER)	
										6450						SP304	6450	CU YD	RECYCLED AGGREGATE BASE, AS PER PLAN (SHOULDER)	9
	10000															SPECIAL	10000	CU YD	CRUSHED MATERIAL STOCKPILE	
																			BRIDGE MAINTENANCE	
																LUMP	SP202	LUMP	LUMP	PORTIONS OF STRUCTURE REMOVED
																300	509	300	POUND	EPOXY COATED REINFORCING STEEL, GRADE 60, AS PER PLAN
																30	513	30	EACH	WELDED STUD SHEAR CONNECTORS, AS PER PLAN
																150	SP516A	150	FT	CRACK REPAIR USING EPOXY INJECTION
																1905	SP516B	1905	FT	SEALING OF CONSTRUCTION JOINTS
																LUMP	SP527	LUMP	LUMP	FALSEWORK, TEMPORARY BRACING AND PROTECTIVE STRUCTURES
																250	SP533F	250	FT	REPLACEMENT OF COMPRESSION SEAL WITH CONTINUOUS ELASTOMER SEAL
																527	SP533G	527	FT	REPLACEMENT OF STRIP SEAL WITH CONTINUOUS ELASTOMER SEAL
																353	SP533H	353	FT	CONTINUOUS ELASTOMER SEAL IN STRUCTURAL STEEL JOINT
																2570	SP536	2570	SQ YD	CONCRETE WEATHERPROOFING, BARRIERS AND PARAPETS
																8390	SP536	8390	SQ YD	CONCRETE WEATHERPROOFING, DECK, ABUTMENT SLABS AND APPROACH SLABS
																3285	848	3285	SQ YD	MICRO SILICA MODIFIED CONCRETE OVERLAY USING HYDRODEMOLITION 2" THICK
																3285	848	3285	SQ YD	SURFACE PREPARATION USING HYDRODEMOLITION
																10	848	10	CU YD	MICRO SILICA MODIFIED CONCRETE OVERLAY (VARIABLE THICKNESS), MATERIAL ONLY
																13	848	13	SQ YD	HAND CHIPPING
																LUMP	848	LUMP	LUMP	TEST SLAB
																34	848	34	CU YD	FULL DEPTH REPAIR

NO.	REVISIONS	BY	DATE
△	ADDENDUM NO. 1	NLC	2/12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE WESTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION
GENERAL SUMMARY

RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OH 42321

DESIGNED: NLC | CHECKED: SSK | DATE: 01/20/2012
DRAWN: NLC | IN CHARGE: SSK | SCALE: N/A

CONTRACT 39-12-02 SHEET 51 OF128

SHEET NUMBER																ITEM	GRAND TOTAL	UNIT	DESCRIPTION	REF. NO.
8	9	11	12	13	17	18	54	55	56	57	58	90	98	99	117					
																			TRAFFIC CONTROL	
													104			620	104	EACH	REMOVAL OF DELINEATOR	
													104			620	104	EACH	DELINEATOR, POST MOUNTED, AS PER PLAN	99
													548			SP626	548	EACH	RAISED PAVEMENT MARKER STIMSONITE MODEL 101 LPCR (WHITE)	
													45			SP626	45	EACH	REPLACEMENT PRISMATIC RETRO-REFLECTOR (WHITE)	
													27.04			642	27.04	MILE	6" EDGE LINE, TYPE 1, AS PER PLAN	9
													27.43			642	27.43	MILE	6" LANE LINE, TYPE 1, AS PER PLAN	9
													1600			642	1600	FT	6" DOTTED LINE, TYPE 1, AS PER PLAN	9
													10			SPECIAL	10	EACH	AIR SPEED ZONE MARKINGS	
														195		630	195	FT	GROUND MOUNTED SUPPORT, NO. 3 POST	
														77		630	77	SQ FT	SIGN, FLAT SHEET	
														17		630	17	EACH	REMOVAL OF GROUND MOUNTED SIGN AND DISPOSAL	
														16		630	16	EACH	REMOVAL OF GROUND MOUNTED POST SUPPORT AND DISPOSAL	
																			MAINTENANCE OF TRAFFIC	
			5000													SP614	5000	HOUR	ZONE PERSON	
			LUMP													SP614	LUMP	LUMP	MAINTAINING TRAFFIC	12
				100												614	100	CU YD	ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
			10													614	10	EACH	REPLACEMENT SIGN	
					2											614	2	EACH	WORK ZONE CROSSOVER LIGHTING SYSTEM	
				720												614	720	DAY	PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	12
				5	3											614	8	EACH	WORK ZONE IMPACT ATTENUATOR FOR 24" HAZARDS (UNIDIRECTIONAL OR BIDIRECTIONAL)	12
					2											614	2	EACH	FLASHING ARROW PANEL	
					12.47	1										614	12.47	MILE	WORK ZONE EDGE LINE, CLASS 1, 642 PAINT (4" WHITE)	
					12.79											614	12.79	MILE	WORK ZONE EDGE LINE, CLASS 1, 642 PAINT (4" YELLOW)	
					6.96											614	6.96	MILE	WORK ZONE EDGE LINE, CLASS 1, 642 PAINT (6" YELLOW)	
					3604											614	3604	FT	WORK ZONE CHANNELIZING LINE, CLASS 1, 642 PAINT (8" WHITE)	
					530											614	530	FT	WORK ZONE TRANSVERSE LINE, CLASS 1, 642 PAINT (12" WHITE)	
				750												616	750	M GAL	WATER	
					50											621	50	EACH	REMOVAL OF RPM REFLECTORS	
			0.05		6.96											SP622A	7.01	MILE	TEMPORARY PORTABLE BARRIER (WITHOUT GLARE SHIELD)	
			0.05		5.49											SP622A	5.54	MILE	TEMPORARY PORTABLE BARRIER (WITH GLARE SHIELD)	
		25														SP626	25	EACH	RAISED PAVEMENT MARKER - STIMSONITE MODEL 101 LPCR (WHITE)	
		25														SP626	25	EACH	REPLACEMENT PRISMATIC RETRO-REFLECTOR (WHITE)	
		25														SP626	25	EACH	REPLACEMENT RAISED PAVEMENT MARKER CASTING - STIMSONITE MODEL 101 LPCR	
					778											SP626A	778	EACH	CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, WHITE	
					742											SP626A	742	EACH	CONSTRUCTION ZONE MARKER, ONE-WAY MODEL, YELLOW	
			500													630	500	SQ FT	SIGNING, MISC.: ADDITIONAL SIGNS WITH SUPPORTS, AS DIRECTED BY THE CHIEF ENGINEER	
					0.96											SP641	0.96	MILE	4" TEMPORARY WHITE EDGE LINE	
					0.96											SP641	0.96	MILE	4" TEMPORARY YELLOW EDGE LINE	
					0.24											SP641	0.24	MILE	6" TEMPORARY YELLOW EDGE LINE	
					1470											SP641	1470	FT	4" TEMPORARY WHITE DOTTED LINE	
					45.35											SP641C	45.35	MILE	REMOVAL OF PAVEMENT MARKINGS	
			200													SP802	200	EACH	BARRIER REFLECTOR, TYPE A (WHITE)	
			285													SP802	285	EACH	BARRIER REFLECTOR, TYPE B (WHITE)	
			59250													SPECIAL	59250	FT	"SNAP" MILL AND FILL	
					2											SPECIAL	2	EACH	EXISTING CROSSOVER TO BE CLOSED / RE-OPENED, AS PER PLAN	11
																			GENERAL	
																IB, ART.6	LUMP	LUMP	PREMIUM FOR CONTRACT PERFORMANCE BOND AND PAYMENT BOND	
																SP619	LUMP	LUMP	FIELD OFFICE	
																SP623	LUMP	LUMP	CONSTRUCTION LAYOUT SURVEY	
																624	LUMP	LUMP	MOBILIZATION	

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	NLC	2/12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE WESTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION
GENERAL SUMMARY

RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OH 42321

DESIGNED: NLC | CHECKED: SSK | DATE: 01/20/2012
DRAWN: NLC | IN CHARGE: SSK | SCALE: N/A

CONTRACT 39-12-02 SHEET 52 OF128

CURVE DATA
P.I.= Sta. 632+20.68
D = 19° 41' 02" (RT)
Dc = 0° 40' 00"
R = 8,594.37'
T = 1,490.99'
L = 2,952.60'
E = 128.37'
C = 2,938.10'
C.B. = S 60° 24' 08" E

GR-2 R-2 UD-10 UD-11 UD-12 UD-13 UD-14 UD-15 UD-16 UD-17 CB-2 R-5 R-6 R-4 AS-1 AS-2 AS-3 AS-4 R-3 R-8 GR-3 R-7

EXISTING EASEMENT
SAW CUT
B-34-03
(ABAND.)
MATCHLINE STA. 632+00
MATCHLINE STA. 644+00
(CULVERT) PLUGGED & FILLED
℄ OHIO TURNPIKE
EDGE OF PROP. OVERLAY
ROYALTON RD. (S.R. 82)
YORK RD.
15" NON-REINFORCED CONCRETE PAVEMENT
15" RCP
Ex R/W
R/W
FOt
MCI
LCI
SAN
W
G
633 634 635 636 637 638 639 640 641 642 643

OHIO TURNPIKE WESTBOUND LANES PROFILE

PROP. RT. EDGE OF THIRD LANE 911.23
EX. RT. EDGE OF THIRD LANE 911.23
912.14 913.01 913.80 914.87 915.93 917.36 917.53 919.05 920.06 921.06 922.06 923.06 924.06 925.06 926.06 927.06 928.06 929.06 930.06 931.06 932.06 933.06 934.06
FULL SUPERELEVATION MAX. RATE = -0.028'/FT.
400' VERTICAL CURVE
930 920 910 900
EXISTING RIGHT EDGE OF THIRD LANE (IN DIRECTION OF TRAFFIC)
B-34-03
635+04.36
50.5' LT.
ASPHALT = 0.6'
CONCRETE = 0.7'
BASE = 0.5'
8 16
13 16
17 15
25 16
N_{60} WC
6" U.D.
EX. 15" RCP
E =927.39
UNDERDRAIN OUTLET
STA. 643+42
ELEV. 628.38
UNDERDRAIN OUTLET
STA. 640+70
ELEV. 922.94
632+00 633+00 634+00 635+00 636+00 637+00 638+00 639+00 640+00 641+00 642+00 643+00 644+00

0 50
25 100
HORIZONTAL SCALE IN FEET

NO.	REVISIONS	BY	DATE
1	ADDENDUM NO. 1	NLC	2/12

OHIO TURNPIKE COMMISSION

OHIO TURNPIKE WESTBOUND RIGHT TWO LANES & SHOULDER RECONSTRUCTION
PLAN & PROFILE – 632+00 TO 644+00

RESOURCE INTERNATIONAL, INC.
6350 PRESIDENTIAL GATEWAY
COLUMBUS, OH 42321

DESIGNED: CFR	CHECKED: SSK	DATE: 01/20/2012
DRAWN: NLC	IN CHARGE: SSK	SCALE: 1" = 50'

CONTRACT 39-12-02 SHEET 70 OF 128

G:\projects\2011\NN-11-015 OTC MP165-170\roadway\sheets\GP004.dgn 2/17/2012 10:00:43 AM natec