LOCATION MAP SEE SHEET 2

STATE OF OHIO DEPARTMENT OF TRANSPORTATION

TRU-82-22.74

VIENNA, BROOKFIELD & HUBBARD TOWNSHIP TRUMBULL COUNTY

INDEX OF SHEETS:

TITLE SHEET	1
LOCATION MAP	2
TYPICAL SECTIONS	3
GENERAL NOTES	4-5
MAINTENANCE OF TRAFFIC	6-10
GENERAL SUMMARY	11-12
PAVEMENT CALCULATIONS	13-15
RPM SUBSUMMARY	16
PAVEMENT MARKING SUBSUMMARY	17
DRAINAGE	18-23
STRUCTURES	24-28

PROJECT DESCRIPTION

RESURFACING OVER TRU SR82 22.74 TO 29.89 AND TRU 616 0.00 TO 0.62. INCLUDES MINOR BRIDGE WORK TO 11 STRUCTURES AND WORK ON 5 CULVERTS.

EARTH DISTURBED AREAS

PROJECT EDA: N/A (MAINTENANCE PROJECT)
ESTIMATED CONTRACTOR EDA: N/A (MAINTENANCE PROJECT)
NOTICE OF INTENT EDA: N/A (NOI NOT REQUIRED)

LIMITED ACCESS

THIS IMPROVEMENT IS ESPECIALLY DESIGNED FOR THROUGH TRAFFIC AND HAS BEEN DECLARED A LIMITED ACCESS HIGHWAY OR FREEWAY BY ACTION OF THE DIRECTOR IN ACCORDANCE WITH THE PROVISIONS OF SECTION 5511.02 OF THE OHIO REVISED CODE.

2019 SPECIFICATIONS

THE STANDARD SPECIFICATIONS OF THE STATE OF OHIO, DEPARTMENT OF TRANSPORTATION, INCLUDING SUPPLEMENTAL SPECIFICATIONS LISTED IN THE PLANS AND CHANGES LISTED IN THE PROPOSAL SHALL GOVERN THIS IMPROVEMENT.

I HEREBY APPROVE THESE PLANS AND DECLARE THAT THE MAKING OF THIS IMPROVEMENT WILL REQUIRE THE CLOSING TO TRAFFIC OF THE HIGHWAY AND THAT DE-TOURS WILL BE PROVIDED AS INDICATED ON SHEET 8.

DESIGN DESIGNATION

DESIGN FUNCTIONAL CLASSIFICATION / NHS PROJECT SR 82: URBAN PRINCIPAL ARTERIAL / NHS: YES SR 616: RURAL PRINCIPAL ARTERIAL / NHS: YES

DESIGN EXCEPTIONS

NONE

 \bigcirc

 \bigcirc

 \bigcirc

0

UNDERGROUND UTILITIE	5
Contact Two Working Days Before You Dig	
OHIO811.org	

OHIO811, 8-1-1, or 1-800-362-2764 (Non-members must be called directly)

PLAN PREPARED BY:

ODOT DISTRICT 4 - PLANNING AND ENGINEERING
2088 S. ARLINGTON RD.

AKRON, OHIO 44306

				STANDAR	O CONSTR	OCTION D	PRAWINGS	SUPPLEMENTAL SPECIFICATIONS	SPECI. PROVISI	
	BP-3.1	01/17/20	MT-95.30	7/19/19	TC-64.10	1/17/20		800-2020 10/16/20	WPC :	3/31/20
	BP-3.2	1/18/19	MT-97.10	4/19/19	TC-65.10	1/17/14		 821 4/20/12		
			MT-98.10	1/17/20	TC-65.11	7/21/17		832 10/19/18		
ENGINEERS SEAL:	DM-1.1	7/17/20	MT-98.11	1/17/20	TC-71.10	1/19/18		 875 1/18/19		
LIVOTIVLENS SEAL.	DM-4.3	1/15/16	MT-98.20	4/19/19	TC-72.20	7/20/18		921 4/20/12		
	DM-4.4	1/15/16	MT-98.22	1/17/20						
TE OF COM			MT-98.29	1/17/20						
18 1	BP-4.1	7/19/13	MT-98.30	7/19/19						
MARK			MT-99.20	4/19/19						
ANDRASIK	MG5-1.1	1/19/18	MT-101.90	7/17/20						
E-80194	MG5-2.1	1/19/18	MT-105.10	1/17/20				 		
A CONSTERNA	MGS-4.3	1/18/13								
TINO ONAL ENGINE			TC-41.20	10/18/13						
A PARTITION OF THE PARTIES OF THE PA	HW-2.1	7/20/18	TC-42.20	10/18/13						
SIGNED: 7.011 DATE: 2/37/2020	HW-2.2	7/20/18	TC-52.10	10/18/13					_	
DATE: 4/27/2020			TC-52.20	7/20/18						

DATE 2/22/20 DISTRICT DEPUTY DIRECTOR

APPROVED_

DATE ______ DIRECTOR, DEPARTMENT OF TRANSPORTATION

1 28

(9

LO

9

OUTHERN

S

Y

ORFOL

N

S

 \supset

MAINTENANCE OF TRAFFIC

 \bigcirc

 \bigcirc

THIS ITEM SHALL CONSIST OF MAINTENANCE OF TRAFFIC ON EXISTING ROADWAYS AND RAMPS IN ACCORDANCE WITH THE OHIO MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS, CURRENT EDITION, LATEST REVISION, THE SPECIFICATIONS AND THE FOLLOWING:

1. SR 82: A MINIMUM OF ONE TEN FOOT LANE IN EACH DIRECTION SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

SR 616: A MINIMUM OF ONE BIDIRECTIONAL TEN FOOT LANE SHALL BE MAINTAINED ON THE EXISTING PAVEMENT OR COMPLETED PAVEMENT DURING CONSTRUCTION OF THE WORK.

- 2. THE CONTRACTOR SHALL INFORM THE DISTRICT OFFICE (330) 786-2208, AND PENNDOT (DIANA CRAFT 814-678-7153, DARRELL CHAPMAN 724-269-1061) EIGHTEEN (18) DAYS PRIOR TO THE BEGINNING OF WORK.
- 3. TRUCK MOUNTED ATTENUATORS [TMA'S] SHALL BE USED AS SHOWN IN THE STANDARD CONSTRUCTION DRAWINGS.
- 4. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR BE PERMITTED TO HAVE SUCCESSIVE WORK ZONES UNLESS THE DISTANCE BETWEEN THE DRUMS, BARRICADES OR CONES EXCEEDS TWO (2) MILES RURAL OR ONE [1] MILE URBAN.
- 5. FOR ROUTES NOT ON THE PERMITTED LANE CLOSURE CHART, ONLY DURING OFF-PEAK PERIODS (ie ANY PERIOD OTHER THAN 6-8AM AND 3-6PM) SHALL THE CONTRACTOR INSTALL AND SUBSEQUENTLY RESET ALL TRAFFIC CONTROL NECESSARY FOR THE WORK ZONE FOR EACH CONSTRUCTION
- 6. IN ADDITION TO THE REQUIREMENTS OF 614.11 WORK ZONE PAVEMENT MARKINGS, AT THE END OF EACH DAY OF WORK, THE CONTRACTOR SHALL REPLACE (WITH WORK ZONE MARKINGS) ALL LANE, CENTER, STOP OR CHANNELIZING LINES THAT WERE REMOVED OR COVERED DURING THE PAVEMENT REMOVAL OR PLACEMENT OPERATIONS. QUANTITIES FOR SUCH PLACEMENT ARE CARRIED AS PART OF THE ITEMS LISTED UNDER 614 WORK ZONE PAVEMENT MARKINGS.
- 7. A QUANTITY OF 20 CU. YDS. OF ITEM 614 ASPHALT CONCRETE FOR MAINTAINING TRAFFIC SHALL BE PROVIDED FOR USE IN MAINTAINING PAVEMENT, SHOULDERS AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER.
- 8. PRIOR TO OPENING TO TRAFFIC EACH LANE SHALL BE IN A SAFE, PASSABLE CONDITION. ALL TRANSVERSE JOINTS SHALL EXTEND ACROSS THE FULL LANE AND SHOULDER WIDTH AND EACH LANE SHALL BE FREE FROM UNEVEN LONGITUDINAL JOINTS. THE CONTRACTOR SHALL PROVIDE ASPHALT WEDGES FOR TRANSVERSE JOINTS WHEREVER THERE ARE PAVEMENT ELEVATION DIFFERENCES.

10. THE CONTRACTOR SHALL PLACE THE SIGNS: W8-1 [BUMP] PER OMUTCD 2C.28; W8-II [UNEVEN LANES] PER OMUCTD 6F.45; AND W6-3 [TWO-WAY TRAFFIC] PER OMUTCD 6F.32. PAYMENT FOR THESE SIGNS SHALL BE INCIDENTAL TO THE LUMP SUM ITEM 614-MAINTAINING TRAFFIC. A QUANTITY OF ITEM 614 WORK ZONE MARKING SIGNS HAS BEEN INCLUDED IN THE PLANS PER CMS 614.04.

11. THE CONTRACTOR SHALL SET A WORK ZONE AT THE REQUEST OF THE ENGINEER TO ALLOW THE LAYOUT OF THE PARTIAL/FULL DEPTH PAVEMENT REPAIR AREAS. THIS WORK IS INCIDENTAL TO ITEM 614 MAINTAINING TRAFFIC.

THE FOLLOWING QUANTITIES SHALL BE USED FOR THE MAIN-TENANCE OF TRAFFIC ON THIS PROJECT:

PHASE I: MILLED SURFACE

614, WORK ZONE CENTER LINE, CLASS I, 642 PAINT, 0.62 MILE 614, WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT, 14.04 MILE 614, WORK ZONE STOP LINE, CLASS 1, 642 PAINT, 160 FT 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT,

614, WORK ZONE MARKING SIGN, (ALL PHASES) 50 EACH PHASE II: INTERMEDIATE COURSE

614, WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT 14.04 MILE 614, WORK ZONE STOP LINE, CLASS 1, 642 PAINT 160 FT 614, WORK ZONE CHANNELIZING LINE, CLASS 1, 12", 642 PAINT

PHASE III: SURFACE COURSE

614, WORK ZONE CENTERLINE, CLASS III, 642 PAINT 0.62 MILE 614, WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT 14.04 MILE 614, WORK ZONE STOP LINE, CLASS III, 12", 642 PAINT 160 FT 614, WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT 3490 FT

TO BE USED AS DIRECTED BY THE ENGINEER 614, WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT 32.14 MILE THE SIGN SHALL DISPLAY THE DATE OF THE CLOSURE IN

TRAFFIC CONTROL INSPECTOR

THE CONTRACTOR SHALL DESIGNATE AN INDIVIDUAL OTHER THAN THE SUPERINTENDENT AND SUBJECT TO THE APPROVAL OF THE ENGINEER, TO CONTINUOUSLY INSPECT ALL TRAFFIC CONTROL DEVICES WHENEVER CONSTRUCTION WORK IS BEING PERFORMED WITHIN THE WORK LIMITS OF THE PROJECT. THE DESIGNATED INDIVIDUAL SHALL ALSO INSPECT ALL TRAFFIC DEVICES AT THE BEGINNING AND AT THE END OF EACH WORK DAY. THE DESIGNATED INDIVIDUAL OR A QUALIFIED REP-RESENTATIVE SHALL ALSO BE AVAILABLE ON AN AROUND THE CLOCK BASIS TO REPAIR AND/OR REPLACE DAMAGED OR MISS-ING TRAFFIC CONTROL DEVICES. THESE INDIVIDUALS SHALL BE EQUIPPED WITH CELLULAR PHONES AND THEIR NAMES AND PHONE NUMBERS SHALL BE GIVEN TO THE PROJECT ENGINEER AT THE PRE-CONSTRUCTION MEETING. THE DESIGNATED INDIVIDUAL MAY HAVE OTHER CONSTRUCTION RELATED DUTIES AS LONG AS IMMEDIATE ATTENTION IS GIVEN TO TRAFFIC CONTROL. PAYMENT FOR THE SERVICES OF THE TRAFFIC CONTROL INSPECTOR SHALL BE INCLUDED IN THE LUMP SUM PRICE BID FOR ITEM 614 MAINTAINING TRAFFIC.

ADVANCED NOTICE TO PAVE

THE CONTRACTOR SHALL SUBMIT FOR APPROVAL TO THE DISTRICT CONSTRUCTION ENGINEER A DETAILED SCHEDULE 15 DAYS PRIOR TO THE PLACEMENT OF THE OVERLAY COURSES, ON HOW THEY PROPOSE TO PROSECUTE THE PAVING OPERATIONS. THE DETAILS SHALL SHOW THE ORDER OF PERFORMANCE OF EACH STAGE (START TO FINISH) OF THE WORK INCLUDING THE MAINTENANCE OF TRAFFIC THAT WILL BE USED.

TIME LIMITATION, TRAFFIC ON A MILLED SURFACE

THE MAXIMUM ALLOWABLE TIME FOR TRAFFIC TO BE PLACED ON A MILLED SURFACE SHALL BE 5 CONSECUTIVE CALENDAR DAYS. SHOULD THE CONTRACTOR FAIL TO MEET THIS REQUIREMENT, THE CONTRACTOR SHALL BE ASSSESSED A DISINCENTIVE IN THE AMOUNT OF \$3,000 PER DAY THAT THE TRAFFIC IS PLACED ON A MILLED SURFACE BEYOND THE SPECIFIED LIMT.

ITEM 614, MAINTAINING TRAFFIC (NOTICE OF CLOSURE SIGN)

NOTICE OF CLOSURE SIGNS (W20-H13) SHALL BE ERECTED BY THE CONTRACTOR PRIOR TO THE SCHEDULED ROAD OR RAMP CLOSURE IN ACCORDANCE WITH THE NOTICE OF CLOSURE TIME TABLE BELOW. [AT THE APPROVAL OF THE ENGINEER, PORTABLE CHANGEABLE MESSAGE SIGNS MAY BE USED IN LIEU OF THE STANDARD FLATSHEET SIGN FOR CLOSURE DURATIONS OF LESS THAN 1 WEEK.]

THE SIGNS SHALL BE ERECTED ON THE RIGHT-HAND SIDE OF THE ROAD/RAMP FACING TRAFFIC. THEY SHALL BE PLACED SO AS NOT TO INTERFERE WITH THE VISIBILITY OF ANY OTHER TRAFFIC CONTROL SIGNS. ON ROADWAYS, THEY SHOULD BE ERECTED AT OR NEAR THE POINT OF CLOSURE. THE SIGNS MAY BE ERECTED ANYWHERE ON RAMPS AS LONG AS THEY ARE VISIBLE TO THE MOTORISTS USING THE RAMP. ON ENTRANCE RAMPS, THE SIGN SHALL BE ERECTED WELL IN ADVANCE OF THE MERGE AREA TO AVOID DISTRACTING MOTORISTS.

	NOTICE OF CLOSURE SIGN TIME TABLE														
ITEM	DURATION OF CLOSURE	SIGN DISPLAYED TO PUBLIC													
RAMP &	>= 2WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE													
RAMP	> 12 HOURS & < 2 WEEKS	7 CALENDAR DAYS PRIOR TO CLOSURE													
CLOSURE	<12 HOURS	2 BUSINESS DAYS PRIOR TO CLSOURE													

MMM-DD FORMAT AND THE NUMBER OF DAYS OF THE CLOSURE. THE LAST LINE OF THE W20-H13 SIGN LISTS A PHONE NUMBER WHICH A MOTORIST MAY CALL FOR ADDITIONAL INFORMATION. THIS IS TO BE A SPECIFIC OFFICE WITHIN THE DISTRICT RATHER THAN THE GENERAL SWITCHBOARD NUMBER.

> WILL BE CL OSFD DAYS FOR INFO: 330-786-2208

> > W20-H13-60

NOTIFICATION OF TRAFFIC RESTRICTIONS

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IN WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITING OF ALL TRAFFIC RESTRICTIONS AND UPCOMING MAINTENANCE OF TRAFFIC CHANGES. THE CONTRACTOR SHALL ENSURE THE WRITTEN NOTIFICATION IS SUBMITTED IN A TIMELY MANNER TO ALLOW THE PROJECT ENGINEER TO MEET THE REQUIRED TIME FRAMES SET FORTH IN THE TABLE BELOW TO INFORM THE SPECIAL HAULING PERMITS SECTION (HAULING.PERMITS@DOT.OHIO.GOV) AND THE DISTRICT PUBLIC INFORMATION OFFICE (PIO). THIS NOTIFICATION SHALL BE RECEIVED BY THE PROJECT ENGINEER PRIOR TO THE PHYSICAL SETUP OF ANY APPLICABLE SIGNS OR MESSAGE BOARDS.

INFORMATION SHOULD INCLUDE. BUT IS NOT LIMITED TO. ALL CONSTRUCTION ACTIVITIES THAT IMPACT OR INTERFERE WITH TRAFFIC AND SHALL LIST THE SPECIFIC LOCATION, TYPE OF WORK, ROAD STATUS, DATE AND TIME OF RESTRICTION, DURATION OF RESTRICTION, NUMBER OF LANES MAINTAINED, NUMBER OF LANES CLOSED, MINIMUM VERTICAL CLEARANCE, MINIMUM WIDTH OF DRIVABLE PAVEMENT, DETOUR ROUTES, IF APPLICABLE, AND ANY OTHER INFORMATION REQUESTED BY THE PROJECT ENGINEER.

	NOTIFICATIO	ON TIME TABLE
ITEM	DURATION OF CLOSURE	NOTICE DUE TO PERMITS & PIO
ROAD & RAMP	>= 2WEEKS	21 CALENDAR DAYS PRIOR TO CLOSURE
CLOSURES	> 12 HOURS & < 2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
CLUSURES	<12 HOURS	4 BUSINESS DAYS PRIOR TO CLOSURE
	>=2 WEEKS	14 CALENDAR DAYS PRIOR TO CLOSURE
RESTRICTIONS	< 2 WEEKS	2 BUSINESS DAYS PRIOR TO CLOSURE
START OF		
CONSTRUCTION &	N/A	14 CALENDAR DAYS PRIOR TO IMPLEMENTATION
TRAFFIC PATTERNS	IN/A	14 CALLINDAN DATS FINON TO INTELEMENTATION
CHANGES		

ANY UNFORESEEN CONDITIONS NOT SPECIFIED IN THE PLANS REQUIRING TRAFFIC RESTRICTIONS SHALL ALSO BE REPORTED TO THE PROJECT ENGINEER USING THE NOTIFICATION TIME TABLE.

COOPERATION BETWEEN CONTRACTORS

THE CONTRACTOR SHALL BE ADVISED THAT PROJECT TRU US 422/SR 193 17.53/6.78 (PID 98505) AND TRU CR 175 (BEDFORD) (PID 98505) TRU CULVERTS FY2021 (PID 108829) MAY BE ONGOING IN AN AREA IMMEDIATELY ADJACENT TO AND WITHIN THE PROJECT LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL SCHEDULE HIS WORK SO AS TO CAUSE A MINIMUM OF DELAY OR CONFLICT WITH THE OTHER PROJECTS. IN ACCORDANCE WITH 105.08, THE CONTRACTOR SHALL ARRANGE WITH THE OTHER CONTRACTORS APPROVAL OF THE ENGINEER. THE CONTRACTOR SHALL RECEIVE DAILY APPROVALS FROM THE ENGINEER PRIOR TO COMMENCING ANY OPERATIONS. ANY CONFLICT BETWEEN CONTRACTORS INVOLVING WORK SCHEDULES, WORK AREA, OR COOPERATION SHALL BE RESOLVED BY THE ENGINEER. COMPENSATION FOR THE ABOVE COOPERATION SHALL BE INCIDENTAL TO THE VARIOUS PAY ITEMS INCLUDED WITHIN THIS PROJECT.

	ı	Т		EET NU		1				01/NHS/P	PART. 02/S>2/P	04/NHS/C	ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET
	3	4	13	14	15	16	17	19		V V	V	V		EXT	TOTAL			NO.
																	ROADWAY	
								LS				LS	201	11000	LS		CLEARING AND GRUBBING	
								4				4	202	20010	4	EACH	HEADWALL REMOVED	
					100					100			202	23500	100	SY	WEARING COURSE REMOVED	
								58				58	202	35200	58	FT	PIPE REMOVED, OVER 24"	
								55				55	202	98200	55	FT	REMOVAL MISC.:CHANNEL CLEANOUT	18
		96								96			203	10000	96	CY	EXCAVATION	
								25				25	203	40000	25	CY	BORROW	
		404								396	8		209	60200	404	STA	LINEAR GRADING	
			1,419	126	66					1,594	17		209	72000	1,611	STA	PREPARING SUBGRADE FOR SHOULDER PAVING	
		1								1			623	39501	1	EACH	MONUMENT BOX ADJUSTED TO GRADE, AS PER PLAN	5
																	EROSION CONTROL	
								65				65	601	32100	65	CY	ROCK CHANNEL PROTECTION, TYPE B WITH FILTER	
								10				10	601	32200	10	CY	ROCK CHANNEL PROTECTION, TYPE C WITH FILTER	
	2	22,446								22,001	445		659	10000	22,446	SY	SEEDING AND MULCHING	
		3.03								2.97	0.06		659	20000	3.03	TON	COMMERCIAL FERTILIZER	
		4.64								4.55	0.09		659	31000	4.64	ACRE	LIME	
		121.2								118.8	2.4		659	35000	121.2	MGAL	WATER	
										3,000			832	30000	3,000	EACH	EROSION CONTROL	
																	DRAINAGE	
								LS				LS	503	11100	LS		COFFERDAMS AND EXCAVATION BRACING	
								4				4	602	20000	4		CONCRETE MASONRY	
								12				12	611	16200	12	FT	36" CONDUIT, TYPE A, (706.01)	
								30				30	611	16200	30		36" CONDUIT, TYPE A, (707.04 OR 707.33)	
								16				16	611	19200	16	FT	42" CONDUIT, TYPE A, (706.01)	
								10				10	613	41200	10	CY	LOW STRENGTH MORTAR BACKFILL	
								10				10	013	41200	10	Ci	LOW STRENGTH MORTAR BACKFILL	
																	PAVEMENT	
	5,100									5,000	100		251	01000	5,100	SY	PARTIAL DEPTH PAVEMENT REPAIR (441)	
	3,100	192								192	100		253	01000	192		PAVEMENT REPAIR	
1			289,098	32.159						315,061	6,196		254	01000	321,257		PAVEMENT PLANING, ASPHALT CONCRETE (T=3-1/4")	
		384		,						384	0,100		255	10010	384	SY	FULL DEPTH PAVEMENT REMOVAL AND RIGID REPLACEMENT, CLASS QC1	
		2,040								2,040			255	20000	2,040	FT	FULL DEPTH PAVEMENT SAWING	
															·			
		96								96			304	20000	96	CY	AGGREGATE BASE	
			43,365	4,825	846					48,106	930		407	20000	49,036	GAL	NON-TRACKING TACK COAT	
			12,607	1,119	582					14,157	151		408	10001	14,308	GAL	PRIME COAT, AS PER PLAN	5
					264					264			424	12001	264	CY	FINE GRADED POLYMER ASPHALT CONCRETE, TYPE B, AS PER PLAN	5
			17,466	1,191						18,250	407		441	00100	18,657	CY	ANTI-SEGREGATION EQUIPMENT	
			12,046	1,340						13,127	259		442	10051	13,386	CY	ASPHALT CONCRETE SURFACE COURSE, 12.5 MM, TYPE B (446), AS PER PLAN, PG 70-22M	5
			,						l I	15,338	302		442	10150	15,640	CY	ASPHALT CONCRETE INTERMEDIATE COURSE, 19 MM, TYPE B (446)	
		22	14,054	1,564														
		22	14,054 1,751	1,564 170	81					1,981	21		617	10101	2,002	CY	COMPACTED AGGREGATE, AS PER PLAN	5
		22	14,054 1,751 28	170	81					1,981 27	1		618	10101 40600	28	CY MILE	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	5
		22	14,054 1,751		81					1,981				10101		CY	COMPACTED AGGREGATE, AS PER PLAN	5
		22	14,054 1,751 28	170						1,981 27 14,778	1		618 875	10101 40600 10000	28 15,116	CY MILE LB	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE	5
		22	14,054 1,751 28	170	9,394					1,981 27	1		618	10101 40600	28	CY MILE LB	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE)	5
		22	14,054 1,751 28	170						1,981 27 14,778	1		618 875	10101 40600 10000	28 15,116	CY MILE LB	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1")	5
		22	14,054 1,751 28	170		075				1,981 27 14,778 9,394	338		618 875 897	10101 40600 10000 01010	28 15,116 9,394	CY MILE LB	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL	5
		22	14,054 1,751 28	170		875				1,981 27 14,778 9,394	1		618 875 897	10101 40600 10000 01010	28 15,116 9,394 875	CY MILE LB SY	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM	5
		22	14,054 1,751 28	170		875 600	32.14			1,981 27 14,778 9,394 860 600	1 338 15		618 875 897 621 621	10101 40600 10000 01010 00100 54000	28 15,116 9,394 875 600	CY MILE LB SY EACH EACH	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED	5
		22	14,054 1,751 28	170			32.14			1,981 27 14,778 9,394 860 600 31.5	1 338 15 0.64		618 875 897 621 621 642	10101 40600 10000 01010 00100 54000 00104	28 15,116 9,394 875 600 32.14	CY MILE LB SY EACH EACH MILE	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1	5
		22	14,054 1,751 28	170			14.04			1,981 27 14,778 9,394 860 600 31.5 13.72	1 338 15		618 875 897 621 621 642 642	10101 40600 10000 01010 00100 54000 00104 00204	28 15,116 9,394 875 600 32.14 14.04	CY MILE LB SY EACH EACH MILE MILE	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1	5
		22	14,054 1,751 28	170						1,981 27 14,778 9,394 860 600 31.5	1 338 15 0.64		618 875 897 621 621 642	10101 40600 10000 01010 00100 54000 00104	28 15,116 9,394 875 600 32.14	CY MILE LB SY EACH EACH MILE MILE	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62	1 338 15 0.64		618 875 897 621 621 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300	28 15,116 9,394 875 600 32.14 14.04 0.62	CY MILE LB SY EACH EACH MILE MILE MILE	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62	1 338 15 0.64		618 875 897 621 621 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490	CY MILE LB SY EACH EACH MILE MILE MILE FT	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160	1 338 15 0.64		618 875 897 621 621 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160	CY MILE LB SY EACH EACH MILE MILE MILE FT FT	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160 550			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160 550	1 338 15 0.64		618 875 897 621 621 642 642 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500 00700	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160 550	CY MILE LB SY EACH EACH MILE MILE MILE FT FT FT	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1 TRANSVERSE/DIAGONAL LINE, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160 550 284			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160 550 284	1 338 15 0.64		618 875 897 621 621 642 642 642 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500 00700 00900	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160 550 284	CY MILE LB SY EACH EACH MILE MILE FT FT FT SF	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1 TRANSVERSE/DIAGONAL LINE, TYPE 1 ISLAND MARKING, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160 550			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160 550	1 338 15 0.64		618 875 897 621 621 642 642 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500 00700	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160 550	CY MILE LB SY EACH EACH MILE MILE FT FT FT SF	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1 TRANSVERSE/DIAGONAL LINE, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160 550 284			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160 550 284	1 338 15 0.64		618 875 897 621 621 642 642 642 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500 00700 00900	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160 550 284	CY MILE LB SY EACH EACH MILE MILE FT FT FT SF EACH	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1 TRANSVERSE/DIAGONAL LINE, TYPE 1 ISLAND MARKING, TYPE 1	5
		22	14,054 1,751 28	170			14.04 0.62 3,490 160 550 284 23			1,981 27 14,778 9,394 860 600 31.5 13.72 0.62 3,490 160 550 284 23	1 338 15 0.64		618 875 897 621 621 642 642 642 642 642 642 642 642	10101 40600 10000 01010 00100 54000 00104 00204 00300 00404 00500 00700 00900 01300	28 15,116 9,394 875 600 32.14 14.04 0.62 3,490 160 550 284 23	CY MILE LB SY EACH EACH MILE MILE FT FT FT SF EACH	COMPACTED AGGREGATE, AS PER PLAN RUMBLE STRIPS, SHOULDER (ASPHALT CONCRETE) LONGITUDINAL JOINT ADHESIVE PAVEMENT PLANING, ASPHALT CONCRETE, CLASS A (T=1") TRAFFIC CONTROL RPM RAISED PAVEMENT MARKER REMOVED EDGE LINE, 6", TYPE 1 LANE LINE, 6", TYPE 1 CENTER LINE, TYPE 1 CHANNELIZING LINE, 12", TYPE 1 STOP LINE, TYPE 1 TRANSVERSE/DIAGONAL LINE, TYPE 1 ISLAND MARKING, TYPE 1 LANE ARROW, TYPE 1	5

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc

-			SH	HEET NU	JM.		ı		01/NHS/P	PART.		ITEM	ITEM	GRAND	UNIT	DESCRIPTION	SEE SHEET
						6	7	19	V V	V	V		EXT	TOTAL			NO.
																CTDUCTURE REPAIR	
	\vdash			<u> </u>				30			30	512	10100	30	SY	STRUCTURE REPAIR SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	
	++			<u> </u>	_			30			30	512		30		PATCHING CONCRETE STRUCTURE, AS PER PLAN	10
	++			<u> </u>	_			30			30	519	11101	30	- 5F	PATCHING CONCRETE STRUCTURE, AS PER PLAN	18
	\longmapsto			<u> </u>	1											CTRUCTURE REPAIRS	
	++			<u> </u>	-											STRUCTURE REPAIRS	25
	\longmapsto				+							.				FOR TRU-62-0871L ESTIMATED QUANTITIES	25
	\longmapsto			<u> </u>	+											FOR TRU-62-0871R ESTIMATED QUANTITIES	25
	\longmapsto			<u> </u>												FOR TRU-82-2207R ESTIMATED QUANTITIES	25
	↓			<u> </u>												FOR TRU-82-2210L ESTIMATED QUANTITIES	25
	\longmapsto			<u> </u>												FOR TRU-82-2518L ESTIMATED QUANTITIES	25
	\longmapsto															FOR TRILLOG OSCIOR FOTIMATER OLIVANITITIES	0.5
	\longmapsto															FOR TRU-82-2518R ESTIMATED QUANTITIES	25
	↓				1											FOR TRU-82-2535R ESTIMATED QUANTITIES	25
	↓															FOR TRU-82-2536L ESTIMATED QUANTITIES	25
	\perp															FOR TRU-82-2540L ESTIMATED QUANTITIES	26
																FOR TRU-82-2540R ESTIMATED QUANTITIES	26
	\bot			<u> </u>													
	\bot			<u> </u>												FOR TRU-82-2955 ESTIMATED QUANTITIES	26
	$oxed{oxed}$			<u> </u>													
	\bot			<u> </u>												MAINTENANCE OF TRAFFIC	
							300		300			614	11110	300		LAW ENFORCEMENT OFFICER WITH PATROL CAR FOR ASSISTANCE	
						50			40	10		614	12460	50		WORK ZONE MARKING SIGN	
						20			20			614	13000	20		ASPHALT CONCRETE FOR MAINTAINING TRAFFIC	
							16		16			614	18601	16		PORTABLE CHANGEABLE MESSAGE SIGN, AS PER PLAN	7
						28.08			27.44	0.64		614	20110	28.08	MILE	WORK ZONE LANE LINE, CLASS I, 6", 642 PAINT	
						14.04			13.72	0.32		614	20560	14.04		WORK ZONE LANE LINE, CLASS III, 6", 642 PAINT	
						0.62			0.62			614	21100	0.62	MILE	WORK ZONE CENTER LINE, CLASS I, 642 PAINT	
						0.62			0.62			614	21550	0.62	MILE	WORK ZONE CENTER LINE, CLASS III, 642 PAINT	
						32.14			31.5	0.64		614	22360	32.14		WORK ZONE EDGE LINE, CLASS III, 6", 642 PAINT	
						6,980			6,980			614	23210	6,980	FT	WORK ZONE CHANNELIZING LINE, CLASS I, 12", 642 PAINT	
						3,490			3,490			614	23690	3,490	FT	WORK ZONE CHANNELIZING LINE, CLASS III, 12", 642 PAINT	
						320			320			614	26200	320		WORK ZONE STOP LINE, CLASS I, 642 PAINT	
	1					160			160			614	26610	160		WORK ZONE STOP LINE, CLASS III, 642 PAINT	
	1																
	1															INCIDENTALS	
				<u> </u>					LS			614	11000	LS		MAINTAINING TRAFFIC	
									6			619	16010	6	MNTH	FIELD OFFICE, TYPE B	
									LS			623	10000	LS		CONSTRUCTION LAYOUT STAKES AND SURVEYING	
									LS			624	10000	LS		MOBILIZATION	
	1																
	\vdash																
	\vdash			t	†			†					1				
	\vdash			t	†			†					1				
	\vdash			1	1												
	\vdash			1	1			 									
	\vdash			1	1			<u> </u>									
	\vdash			1	+		 	 				 					
	+																
	+				+												
	++			<u> </u>	+												
	++			<u> </u>	+							 					
	++				+												
	++				-												
	++			<u> </u>													
	₩			<u> </u>	+												
	\longmapsto			<u> </u>	+												
	\longmapsto			<u> </u>	+												
	+			 	1	-	<u> </u>	<u> </u>				 	 				
	\longmapsto			 	1			ļ									
	+	ļ		 	1												
	\sqcup			<u> </u>	1			ļ									
				.	1	ļ											
	1	Ī	Ī	1	1												
				1													

												LINE									GENERAL SPEC: 640 MATERIAL TYPE: 642
Υ	ROUTE			F	ROM			-	ТО			HITE EDGE I			LOW EDGE					COMMENTS	
		TRUE LOG			T COIN		TRUE LOG					HIGHWAY	RAMP		HIGHWAY	RAMP				COMMENTO	
? U	82 EB		EAST OF		2055				RE TRU-82-2955		6.86	6.86		6.86	6.86						
RU RU	82I EB 82 WB		STRUCTUF EAST OF 1		2955				EDFORD RD RE TRU-82-2955		0.16 6.86	0.16 6.86		0.16 6.86	0.16 6.86						
RU	82I WB		STRUCTUE		2055		0.16		EDFORD RD		0.16	0.16		0.00	0.00		9	FF PAMP (G FOR SR 8	82 SLM 29.60 TO 29.87	
	RAMP A	0.00	011100101	KL 1110-02-2			0.10	OTATON D	LDI OND ND		0.23	0.10	0.23	0.10	0.10	0.23		LL IVAIVII V	O I OIL OIL	32 OLIVI 23.00 TO 23.01	
	RAMP B										0.20		0.20	0.20		0.20					
	RAMP C										0.20		0.20	0.20		0.20					
	RAMP D										0.23		0.23	0.23		0.23					
	RAMP E										0.23		0.23	0.23		0.23					
	RAMP F										0.20		0.20	0.20		0.20					
	RAMP G										0.20		0.20	0.20		0.20					
	RAMP H										0.23		0.23	0.23		0.23					
D	010	0.00	COLINITY	INIC DD			0.00	MOKINILEY	DD CE		0.00	0.00									
2 U	616	0.00	COUNTY L	INE RD			0.62	MCKINLEY	RD SE		0.62	0.62									
L			I								16.38	14.66	1.72	15.76	14.04	1.72					
											LANE	LINE									
TV	POLITE				ROM				ТО		TOTAL		NE LINE						COMMENTS		
TY		TRUE LOG			I COIVI		TRUE LOG				MILES	DASHED	SOLID								
₹∪	82 EB		EAST OF '						RE TRU-82-2955		6.86	6.86									
? U	82I EB		STRUCTUR		2955				EDFORD RD		0.16	0.16					· · ·				
? U	82 WB		EAST OF		0055				RE TRU-82-2955		6.86	6.86									
2 U	82I WB	0.00	STRUCTUE	KE IKU-82-2	2900		0.16	SHARON B	EDFORD RD		0.16	0.16									
	<u>_</u>																				
ľ			·								14.04	14.04									
											CENTE	R LINE									
											TOTAL		'ALENT								
TY	ROUTE	TRUE LOG	1	F	ROM		TRUE LOG]	ТО		MILES		D LINE					C	COMMENTS	3	
		II OL LOO					TROL LOC				WILLO	OOLI	J LINE								
RU	616	0.00	COUNTY L	INE RD			0.62	MCKINLEY	RD SE		0.62	0.	35								
۱L											0.62	0.	35								
											AUXI	LIARY									
					CHANNEL	STOP	CROSS		SVERSE ISLAND	SYMI	BOL MARK				ANE ARROV	VS		WORD OF		DOTTED	
TY	RO!	UTE LOCAT	ION	TRUE	LINE	LINE	WALK		AL LINES MARKING			HOOL	TURN	TURN	THRU	сомв.	MERGE -	ONL		LINES	COMMENTS
	1			LOG			LINES		YELLOW		72"	96"	LEFT	RIGHT				72"	96"		
DI I	SR 82 @ WA	ARNED DD		24.52	FT 300	FT	FT	FT	FT SQ FT	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	EACH	FT	
₹∪	SR 82 @ VV	R 7		24.52 27.11	300 1450	86		200	284	+			10	3				+			
2I I	SR 82 @ BE)	27.11	300	74		200	204	+			6				+				
	SR 82 GORE	ES @ US 62	<u>.</u> 2	29.47	480	, , ,		150	 	+			 							1300	
RU	SD 92 COD	ES @ US 62	2	29.52	710			200		+										1175	
₹U ₹U	OK OZ GOKL			29.87	250					1										325	
RU RU RU	SR 82 GORE																				
RU RU RU																					
₹U ₹U ₹U																					
₹U ₹U ₹U					1																
₹U ₹U ₹U					_	1	Í	1													
₹U ₹U ₹U																	1				
₹U ₹U ₹U														-							
RU RU RU																					
RU RU RU																					
₹U ₹U ₹U																					

 \bigcirc

 \bigcirc

 \bigcirc

 \bigcirc