

ROUTE NO. FAS 329 & 331	SECTION 05-00298-00-RS F. H. W. A. REG. 4 ILLINOIS	COUNTY IROQUOIS	TOTAL SHEETS 7	SHEET NO. 2
PROJECT RS 329(104)			CONTACT 87396	

SUMMARY OF QUANTITIES			FUND CODE	I000
ITEM #	CODE #	ITEM	UNIT	QUANTITY
1	Z0048665	RAILROAD PROTECTIVE LIABILITY INSURANCE	L SUM	1.00
2	Z0055300	RUMBLE STRIPS	EACH	6.00
* 3	20200500	EARTH EXCAVATION WIDENING	CU YD	240.00
4	40600100	BITUMINOUS MATERIALS (PRIME COAT)	GAL	3,800.00
5	40600300	AGGREGATE (PRIME COAT)	TON	131.00
* 6	40600625	LEVEL BINDER (MACHINE METHOD), N50	TON	6250.00
* 7	40600982	HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT	SQ YD	1205.00
8	40600985	PCC SURFACE REMOVAL-BUTT JOINT	SQ YD	50.00
9	40600990	TEMPORARY RAMP	SQ YD	250.00
*10	40603310	HOT-MIX ASPHALT SURFACE COURSE "C" N50	TON	5900.00
*11	40800050	INCIDENTAL HOT-MIX ASPHALT SURFACING	TON	403.00
*12	48101200	AGGREGATE SHOULDERS, TYPE B	TON	7500.00
*13	48203100	HOT-MIX ASPHALT SHOULDERS	TON	600.00
*14	550B0010	STORM SEWER, CLASS B, TYPE 1, 4'	FOOT	30.00
*15	60234500	INLETS TYPE A, TYPE 1 FRAME, OPEN LID (24' DEP)	EACH	1.00
16	66700205	PERMANENT SURVEY MARKER, TYPE 1	EACH	5.00
17	67100100	MOBILIZATION	L SUM	1.00
*18	70101700	TRAFFIC CONTROL AND PROTECTION	L SUM	1.00
19	70300100	SHORT-TERM PAVEMENT MARKING	FOOT	5898.00
20	70300200	TEMPORARY PAVEMENT MARKING	FOOT	30102.00
21	70301000	WORK ZONE PAVEMENT MARKING REMOVAL	SQ FT	983.00
Δ 22	78000100	THERMOPLASTIC PAVEMENT MARKING - LETTERS AND SYMBOLS	SQ FT	245.00
Δ 23	78000200	THERMOPLASTIC PAVEMENT MARKING - LINE 4'	FOOT	2660.00
Δ 24	78000650	THERMOPLASTIC PAVEMENT MARKING - LINE 24'	FOOT	151.00
Δ 25	78001110	PAINT PAVEMENT MARKING - LINE 4'	FOOT	27442.00

* SEE SPECIAL PROVISIONS
 Δ SPECIALTY ITEMS

GENERAL NOTES

THE THICKNESS OF HOT-MIX ASPHALT MIXTURES SHOWN ON THE TYPICAL X-SECTION IS THE NOMINAL THICKNESS. DEVIATIONS FROM THE NOMINAL THICKNESS WILL BE PERMITTED WHEN SUCH DEVIATIONS OCCUR DUE TO IRREGULARITIES IN THE EXISTING SURFACE.

THE ENGINEER SHALL BE THE SOLE JUDGE CONCERNING CURING TIME FOR THE VARIOUS HOT-MIX ASPHALT LIFTS.

FOR ALL PAVEMENT MARKINGS ON FINAL SURFACES (I.E., MAINLINE PAVEMENT), ONLY TEMPORARY PAVEMENT MARKING TAPE SHALL BE USED.

ANY REFERENCE TO A STANDARD IN THESE PLANS SHALL BE INTERPRETED TO MEAN THE EDITION AS INDICATED BY THE SUB-NUMBER LISTED IN THE INDEX OF SHEETS OR THE COPY OF THE STANDARD INCLUDED IN THESE PLANS.

THE FOLLOWING RATES OF APPLICATION HAVE BEEN ASSUMED IN CALCULATING PLAN QUALITIES:

GRANULAR MATERIALS	2.05	TONS/CU YD
BITUMINOUS MATERIALS PRIME COAT	0.05	GAL/SQ YD
AGGREGATE PRIME COAT	0.002	TONS/SQ YD
HOT MIX ASPHALT SURFACE COURSE	112	LBS/SQ YD/INCH
LEVELING BINDER (MACHINE METHOD)	112	LBS/SQ YD/INCH
BINDER COURSE, IL 19.0, N50	112	LBS/SQ YD/INCH
SHORT TERM PAVEMENT MARKING	4	FT/40 FT OF APPLICATION
PAINT PAVEMENT MARKING - LINE 4'	10	FT/40 FT OF APPLICATION

FUNCTIONAL OVERLAY

DESIGN DATA FOR INFORMATION ONLY.

FLEXIBLE PAVEMENT OVERLAY DESIGN FOR CLASS III ROAD USING EQUATION 54-5.3

DESIGN PERIOD D. P. = 20 YEARS

DESIGN YEAR = 2019 PV=88% SU=7% MU=5%

DESIGN ADT = 660 IBV = 2.88 TRAFFIC FACTOR = 0.159

SN_F = 3.19 SN_{Fe} = 2.07 D_o = 2.80

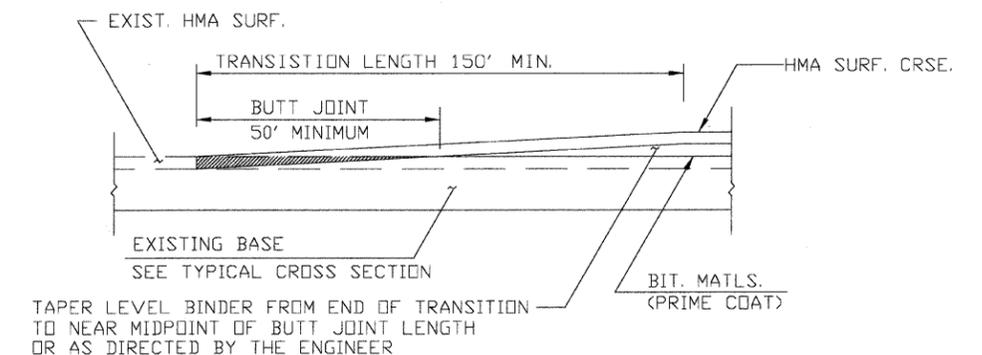
MIXTURE TABLE

	HMA LEVEL BINDER	HMA SURFACE	HMA SHOULDERS (BOTTOM 7 1/2)
PG GRADE	PG64-22	PG64-22	PG58-22
MAX % RAP ALLOWABLE**	15 %	15%	25%
DESIGN AIR VOIDS	4.0% @ N50	4.0% @ N50	2.0% @ N30
MIXTURE COMPOSITION	IL 9.5	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE		MIXTURE C	
DENSITY TEST METHOD	SATISFACTION OF ENGINEER	CORRELATION	*

* MATERIAL SHALL BE COMPACTED TO 93.0-97.4 PERCENT OF THE MAXIMUM THEORETICAL DENSITY, EXCEPT THAT WHEN PLACED AS FIRST LIFT ON AN UNIMPROVED SUBGRADE THE MINIMUM PERCENT COMPACTION SHALL BE 92.0 PERCENT. THE MAXIMUM THEORETICAL DENSITY SHALL BE DETERMINED FROM THE MOVING AVERAGE AS SPECIFIED IN THE QC/QA SPECIFICATION.

** WHEN MORE THAN 20% RAP IS USED, A SOFTER ASPHALT BINDER (PG58-22) MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.

HOT-MIX ASPHALT SURFACE REMOVAL - BUTT JOINT



SECTION NOTES

THE PROPOSED IMPROVEMENT CONSISTS OF A HOT MIX ASPHALT SURFACE COURSE INCLUDING LEVELING BINDER, SHOULDER STONE AND ALL WORK NECESSARY TO COMPLETE THE PROJECT ACCORDING TO THE PLANS AND SPECIFICATIONS.

COUNTY HIGHWAY 10 WAS CONSTRUCTED UNDER SECTIONS (200Q, 216 Q, 1-X) 15d, W & RS, 84-00255-00-RS. COUNTY HIGHWAY 45 WAS CONSTRUCTED UNDER SECTIONS (56-15d) W & RS and 82-00250-00-WR.