



PROPOSED TYPICAL SECTION

PEACE ROAD

STA. 123+00 TO STA. 124+52

STRUCTURAL DESIGN DATA

STREET	STRUCTURAL DESIGN TRAFFIC 2021		_ DESIGN TRAFFIC 2021		TRAFFIC FACTOR	SSR	TEMP	STRAIN	AC	EAC	REQ'D HMA THICKNESS	MECHANISTIC PAVEMENT DESIGN
	PV	SU	MU					-				
												FULL DEPTH PAVEMENT
PEACE ROAD	24,245	285	2,037	1	9.19	POOR	78° F	54	PG 58-28	510	15.75	2" HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N70
								·				2 3/4" HOT-MIX BINDER COURSE, IL-19.0, N70
												11" HOT-MIX BINDER COURSE, IL-19.0, N70
												12" AGGREGATE SUBGRADE

EXISTING LEGEND

- HOT-MIX ASPHALT PAVEMENT 7.5"±
- AGGREGATE BASE COURSE 20"±
- AGGREGATE SHOULDER
- HOT-MIX ASPHALT SHOULDER 8"±
- RESERVED
- (F) EXISTING GUARDRAIL
- (G) GROUND SURFACE
- Н PAVEMENT REMOVAL
 - AGGREGATE BASE COURSE GRADING (SEE NOTE 1)
- (INCLUDED IN PREPARATION OF BASE)
- HOT-MIX ASPHALT SURFACE REMOVAL 4.75"
- GUARDRAIL REMOVAL
- AGGREGATE SHOULDER REMOVAL (PAID FOR AS EARTH EXCAVATION) ITEM TO BE REMOVED

PROPOSED LEGEND

- HOT-MIX ASPHALT OVERLAY 7"
 - SURFACE COURSE, MIX "D" N70 2" BINDER COURSE, IL-19.0, N70 - 2.75"
- BINDER COURSE, IL-19.0, N70 2.25" (SEE NOTE 4)
- HOT-MIX ASPHALT OVERLAY 8.75" SURFACE COURSE, MIX "D" N70 - 2"
 - BINDER COURSE, IL-19.0, N70 2.75" BINDER COURSE, IL-19.0, N70 - 4" (SEE NOTE 4)
- (1C) HOT MIX ASPHALT 15.75"
 - SURFACE COURSE, MIX "D" N70 2"
 - BINDER COURSE, IL-19.0, N70 2.25" (SEE NOTE 4) (3)
 - BINDER COURSE, IL-19.0, N70 2.75" BINDER COURSE, IL-19.0, N70 - 8.75" (SEE NOTE 5)

- (ID) HOT MIX ASPHALT 15.75"
 - SURFACE COURSE, MIX "D" N70 2"
 - BINDER COURSE, IL-19.0, N70 2.75" BINDER COURSE, IL-19.0, N70 - 4" (SEE NOTE 4)
- BINDER COURSE, IL-19.0, N70 7" (SEE NOTE 5)
- (IE) HOT MIX ASPHALT 4.75"
 - SURFACE COURSE, MIX "D" N70 2" BINDER COURSE, IL-19.0, N70 - 2.75"
- (2A) AGGREGATE, SUBGRADE 12"
- AGGREGATE BASE COURSE, TYPE B 4"
- PREPARATION OF BASE (SEE NOTE 1)
- POROUS GRANULAR EMBANKMENT, SUBGRADE AND GEOTECHNICAL FABRIC (SEE NOTE 2)

SCALE: NONE

- COMBINATION CONCRETE CURB AND GUTTER, TYPE B-6.24 (11.5" FLAG DEPTH)
- TOPSOIL, FURNISH AND PLACE, 4"
- SEEDING, CLASS 2, FERTILIZER AND EROSION BLANKET
- CLASS D PATCHES TYPE I-IV, 8" (SEE NOTE 6)
- STEEL PLATE BEAM GUARDRAIL, TYPE A
- AGGREGATE WEDGE SHOULDERS TYPE B
- (10) AGGREGATE SHOULDERS TYPE B 15.75"

HOT-MIX ASPHALT MIXTURE REQUIREMENTS

	HMA BINDER & PATCHES	HMA SURFACE	TEMP. PAVEMENT
PG GRADE	PG64-22	PG64-22	PG64-22
DESIGN AIR VOIDS	4.0% @ N70	4.0% @ N70	4.0% @ N50
MIXTURE COMPOSITION	IL. 19.0	IL. 9.5	IL. 19.0
FRICTION AGGREGATE		MIXTURE D	
DENSITY TEST METHOD	CORES/CORRELATION	CORES/CORRELATION	CORES/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 OC/QA SPECIFICATION.
- WHEN RAP EXCEEDS 20%, THE VIRGIN ASPHALT BINDER SHALL BE REDUCED BY ONE GRADE (I.e. 25% RAP WOULD REQUIRE A VIRGIN ASPHALT BINDER GRADE OF PG64-22 TO BE REDUCED TO A PG58-22).

NOTES:

- 1. GRADE EXCESS AGGREGATE BASE COURSE INTO WIDENING AREA.
- 2. POROUS GRANULAR EMBANKMENT, SUBGRADE (PGES) HAS BEEN PROVIDED FOR USE AT THE LOCATIONS INDICATED FOR SOILS THAT TEND TO BE UNSUITABLE OR UNSTABLE. THE ACTUAL NEED FOR REMOVAL AND REPLACEMENT WITH PGES WILL BE DETERMINED IN THE FIELD AT THE TIME OF CONSTRUCTION BY THE ENGINEER. ALL POTENTIALLY UNSTABLE SOILS SHALL BE TESTED WITH A DYNAMIC CONE PENETROMETER AND TREATED IN ACCORDANCE WITH ARTICLES 301.03 AND 301.04. IF UNSTABLE MATERIAL IS NOT ENCOUNTERED, THEN THE QUANTITY SHALL BE DEDUCTED AND NO ADDITIONAL COMPENSATION WILL BE DUE THE
 - THE FOLLOWING LIMITS OF UNSTABLE SOILS HAVE BEEN IDENTIFIED FOR ESTIMATING PURPOSES:

ROADWAY LIMITS ESTIMATED UNDERCUT

PEACE ROAD 3. RESERVED

STA. 116+50 TO STA. 119+50

- 4. TRANSITION BINDER DEPTH FROM 2.25" TO 4" FROM STA. 116+00 TO STA. 117+50 TO ACCOUNT FOR DIFFERENCE IN THE OVERLAY THICKNESS.
- TRANSITION BINDER DEPTH FROM 8.75" TO 7" FROM STA. 116+00 TO STA. 117+50 TO ACCOUNT FOR DIFFERENCE IN THE OVERLAY THICKNESS.
- 6. AS DETERMINED BY THE ENGINEER.

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	DATE	-	04-01-2011	FILE NAME	~ 081068	-41-5	sht-t	ypical

CITY OF DEKALB, ILLINOIS PEACE ROAD **IMPROVEMENTS**

	TYPICAL SEC	TIONS		RTE.	SECTION	COUNTY	SHEETS	SHE
	ITPICAL SEC	110M2		5369	06-00172-01-WR	DeKALB	33	ç
			· · · · · · · · · · · · · · · · · · ·			CONTRACT	NO. 87	488
100		STA. 114+10	TO STA.124+52	FED. ROAL	D DIST. NO. 3 ILLINOIS FED.	AID PROJECT M-5	017(045)	