#### GENERAL NOTES

WHERE SECTION OR SUBSECTION MONUMENTS ARE ENCOUNTERED. THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL PROPERTY MARKERS AND MONUMENTS UNTIL THE OWNER. AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

THE AREA TO BE SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY. AS DIRECTED BY THE

SEEDING, CLASS 2 (SPECIAL) = 3.05 ACRE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS						
MIXTURE USE(S)	SURFACE	BINDER				
PG:	PG 58-22	PG 58-22				
DESIGN AIR VOIDS:	3.0 @ N50	3.0 e N50				
MIXTURE COMPOSITION:						
(GRADATION MIXTURE)	IL 9.5 OR 12.5	IL 19.0				
FRICTION AGGREGATE	С	N/A				
20 YEAR ESAL	0.1	0.1				
MIX UNIT WEIGHT	112 LBS/SY/IN					

#### TREE REMOVAL

TREES THAT INTERFERE WITH CONSTRUCTION WITHIN THE LIMITS OF THE ROW LINES SHALL BE REMOVED AT THE DIRECTION OF THE ENGINEER.

TREE REMOVAL (	6 TO	15 UNITS	DIAMETER)
22' RT. STA. 2	23+14	=	6 UNIT
22' RT. STA. 2	3+14	=	6 UNIT
3' RT. STA. 2	23+25	=	8 UNIT
3' RT. STA. 2	23+25	=	8 UNIT
10' RT. STA. 2	3+31	z	6 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
0.5' LT. STA.	23+41	=	10 UNIT
1' LT. STA. 2	3+44	=	10 UNIT
1' LT. STA. 2	3+44	=	10 UNIT
14' RT. STA. 2	3+54	=	8 UNIT
T	OTAL	E	122 UNIT

TREE REMOVAL (OVER 15 UNITS DIAMETER)

18 UNIT

ANCHOR TRENCH
SEE SPECIAL PROVISIONS

TREE REPLACEMENT

CONTRACTOR SHALL PLANT ONE (I) CONTAINER GROWN TREE (SEE SPECIAL PROVISIONS).

IN AREAS WHERE TREE REMOVAL IS MEASURED FOR PAYMENT IN ACRES, THE CONTRACTOR

SHALL MARK TREES TO BE REMOVED THAT HAVE A DIAMETER GREATER THAN SIX (6) INCHES.

TURF REINFORCEMENT

FOR EACH REMOVED TREE HAVING A DIAMETER OF SIX (6) INCHES OR GREATER, THE

PRIOR TO REPLACEMENT TREES BEING ORDERED. THE CONTRACTOR SHALL RECEIVE CONCURRENCE FROM THE ENGINEER IN REGARD TO THE NUMBER OF REPLACEMENT TREES

REQUIRED FOR TREE REMOVAL IN AREAS MEASURED FOR PAYMENT IN ACRES.

= 36 UNIT

5' LT. STA. 23+61 = 23.5' LT. STA. 24+68 =

TOTAL

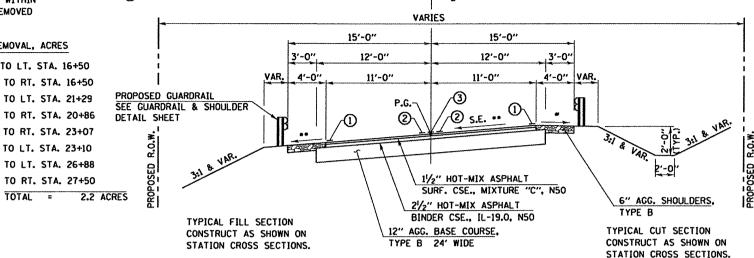
#### TREE REMOVAL, ACRES

LT. STA. 9+00 TO LT. STA. 16+50 RT. STA. 14+50 TO RT. STA. 16+50 LT. STA. 16+50 TO LT. STA. 21+29 RT. STA. 16+50 TO RT. STA. 20+86 RT. STA. 22+71 TO RT. STA. 23+07 LT. STA. 22+81 TO LT. STA. 23+10 LT. STA. 24+84 TO LT. STA. 26+88 RT. STA. 23+75 TO RT. STA. 27+50

# 1) SOLID WHITE PAINT PAVEMENT MARKING - LINE 4"

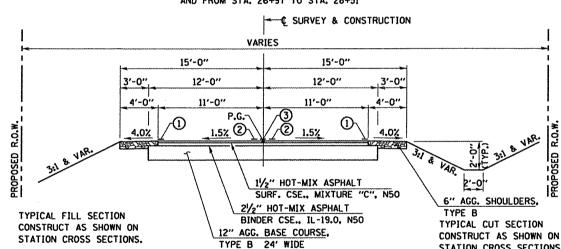
(2) SOLID YELLOW PAINT PAYMENT MARKING - LINE 4"

_							
(3) SKIP-DASH	YELLOW PAIN	T PAVEMENT	MARKING -	LINE	4" <del> - C</del>	SURVEY &	CONSTRUCTIO



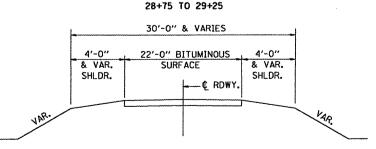
#### PROPOSED TYPICAL CROSS SECTION

- . 2.0% STA. 12+47 TO STA. 18+77
- •• 8% STA. 12+47 TO STA. 18+77
- S.E. TRANSITION FROM STA. 10+38 TO STA. 12+47 AND FROM STA. 18+77 TO STA. 20+86
  - . 4.0% STA, 24+94 TO STA, 26+97
- •• 5.5% STA. 24+94 TO STA. 26+97
- S.E. TRANSITION FROM STA. 23+40 TO STA. 24+94 AND FROM STA. 26+97 TO STA. 28+51



### PROPOSED TYPICAL CROSS SECTION

STA. 9+50 TO STA. 10+38 STA. 28+51 TO STA. 28+75 TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY STA. 9+00 TO STA. 9+50 TRANSITION FROM PROPOSED ROADWAY TO EXISTING ROADWAY



**EXISTING TYPICAL CROSS SECTION** 

PROPOSED STRUCTURE @ STA. 22+18.00

# **PAVEMENT DESIGN**

Structural Design Traffic (S.D.T.) ; Year 2021; P.V. = 662, S.U. = 14, M.U. = 14 Class III Road

Minimum Soil Support: I.B.R. = 3.0 (Assumed) ( > 3 k.s.i.)

Percent of S.D.T. in Design Lane: P = 50%, S = 50%, M = 50% T.F. = 0.118

Temp.=72° F.: Eac =656; Design Strain=327

#### APPLICATION RATES USED IN QUANTITY CALCULATIONS

STONE RIPRAP, CLASS A5	1.65 TON/CU YD
AGGREGATE DITCH (SPECIAL)	1.65 TON/CU YD
AGGREGATE BASE COURSE AND SURFACE COURSE	2.05 TON/CU YD
BITUMINOUS MATERIALS (PRIME COAT) - (AGG.)	0.35 GAL/SQ YD
BITUMINOUS MATERIALS (PRIME COAT) - (HMA)	0.10 GAL/SQ YD
HOT-MIX ASPHALT (BINDER & SURFACE COURSE)	112*/SO YD/IN

THE ABOVE NOTED APPLICATION RATES FOR BITUMINOUS MATERIALS (PRIME COAT) ARE FOR QUANTITY CALCULATIONS ONLY. THE APPLICATION RATE TO BE APPLIED WILL BE DETERMINED BY THE ENGINEER AT THE TIME

OF PLACEMENT. BEGIN IMPROVEMENT STA. 9+00 END IMPROVEMENT STA. 29+25 PROPOSED 11/2" HOT-MIX SAWED BUTT JOINT FULL DEPTH ASPHALT, SURFACE CSE. OF EXIST. BIT. SURFACE ... PROPOSED PROFILE PROPOSED 21/2" HOT-MIX TOP OF EXIST. BIT. GRADE ASPHALT BINDER CSE. SURFACE PROPOSED 12" AGGREGATE ADDITIONAL AGG. BASE CSE., TY B BASE CSE., TYPE B WEDGE TO BE CONSTRUCTED AT 50' EXISTING PAVEMENT AS SHOWN.

#### **ELEVATION AT BEGINNING AND END OF IMPROVEMENT**

## **JOINT DETAILS**

\*\*\*COST INCLUDED IN "PAVEMENT REMOVAL".

# ANCHOR TRENCH SEE SPECIAL PROVISIONS TURF REINFORCEMENT

#### **TURF REINFROCEMENT MAT**

LT.	STA.	11+00	TO	LT.	STA.	14+00	=	935 SQ. YD.
LT.	STA.	15+00	TO	LT.	STA.	15+50	=	195 SQ. YD.
RT.	STA.	13+00	TO	RT.	STA.	15+72	=	852 SQ. YD.
RT.	STA.	16+28	TO	RT.	STA.	20+00	=	1,148 SQ. YD.
LT.	STA.	23+50	TO	LT.	STA.	24+50	=	275 SO. YD.
LT.	STA.	24+50	TO	LT.	STA.	26+50	=	551 SQ. YD.
LT.	STA.	26+50	TO	LT.	STA.	27+47	=	311 SQ. YD.
LT.	STA.	27+87	TO	LT.	STA.	28+00	=	86 SO. YD.
						TOTAL	=	4,353 SO. YD.

SECTION A-A

#### FILE NAME = 6860\_SUMTYP.DG

1	DESIGNED	-	G.J.C.	REVISED	-	S.A.P.	03/24/11
-	DRAWN	-	S.A.P.	REVISED	-	S.A.P.	11/08/11
-	CHECKED	-	R.J.C.	REVISED	-		
	DATE	-	01/10/11	REVISED	-		

4440 ASH GROVE SPRINGFIELD, IL. 62711 (217) 793-8600 www.fehr-graham.com

# FEHR-GRAHAM & ASSOCIATES, LLC **ENGINEERING AND SCIENCE CONSULTANTS** FREEPORT, IL ROCKFORD, IL ROCHELLE, IL MONROE, WI SPRINGFIELD, IL SCALE: N/A

**GENERAL NOTES AND TYPICAL CROSS SECTIONS** 

SECTION COUNTY 06-00127-00-BR JO DAVIESS 55 3 CONTRACT NO. 85539 SCOUT CAMP ROAD

STATION CROSS SECTIONS.

85539