

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 11	06-00002-01-BR	DEKALB	20	2
		ILLINOIS		

CONTRACT NO. 87366

**SUMMARY OF QUANTITIES**

NUMBER	ITEM	UNIT	QUANTITY	CONSTRUCTION TYPE CODE X020-2A
20200100	EARTH EXCAVATION	CU YD	22	
20300100	CHANNEL EXCAVATION	CU YD	122	
20700220	POROUS GRANULAR EMBANKMENT	CU YD	32	
* 25001000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.05	
* 25100630	EROSION CONTROL BLANKET	SQ YD	242	
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	10	
28000400	PERIMETER EROSION BARRIER	FOOT	350	
* 28100207	STONE RIPRAP, CLASS A4	TON	574	
28200200	FILTER FABRIC	SQ YD	591	
* 35101400	AGGREGATE BASE COURSE, TYPE B	TON	238	
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	87	
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	39	
40603305	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N30	TON	19	
44000100	PAVEMENT REMOVAL	SQ YD	224	
48203013	HOT-MIX ASPHALT SHOULDERS, 4"	SQ YD	110	
* 50100200	REMOVAL OF EXISTING STRUCTURES	L SUM	1	
50102400	CONCRETE REMOVAL	CU YD	37	
50200100	STRUCTURE EXCAVATION	CU YD	202	
50300225	CONCRETE STRUCTURES	CU YD	89.4	
50300255	CONCRETE SUPERSTRUCTURE	CU YD	215.0	
50300260	BRIDGE DECK GROOVING	SQ YD	298	
50300280	CONCRETE ENCASEMENT	CU YD	29.4	
50300300	PROTECTIVE COAT	SQ YD	418	
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	42,470	
Δ 50901050	STEEL RAILING, TYPE SM	FOOT	204	
51201600	FURNISHING STEEL PILES HP12X53	FOOT	450	
51202305	DRIVING PILES	FOOT	450	
51203600	TEST PILE STEEL HP12X53	EACH	1	
51500100	NAME PLATES	EACH	1	
52000110	PREFORMED JOINT STRIP SEAL	FOOT	70	
52100010	ELASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	12	
59100100	GEOCOMPOSITE WALL DRAIN	SQ YD	17	
59300100	CONTROLLED LOW-STRENGTH MATERIAL	CU YD	148	
Δ 63000000	STEEL PLATE BEAM GUARDRAIL, TYPE A	FOOT	212.5	
Δ 63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4	
Δ 63200310	GUARDRAIL REMOVAL	FOOT	402	
67100100	MOBILIZATION	L SUM	1	
* 70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1	
Δ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	800	
* X0325305	STRUCTURAL REPAIR OF CONCRETE (DEPTH EQUAL TO OR LESS THAN 5 INCHES)	SQ FT	10	
* X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1	
* X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1	
* X5121800	PERMANENT STEEL SHEET PILING	SQ FT	1963	

\*SEE SPECIAL PROVISIONS  
Δ SPECIALTY ITEMS

**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 MARKS AND MONUMENTS UNTIL THE OWNER, AND AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION.

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

SEEDING, CLASS 2 (SPECIAL) = 0.05 ACRE

HOT-MIX ASPHALT MIXTURE REQUIREMENTS			
	HMA BINDER	HMA SURFACE	HMA SURFACE
PG GRADE	PG64-22	PG58-22	PG58-22
MAX % RAP ALLOWABLE**	25%	30%	50%
DESIGN AIR VOIDS	4.0% N50	2.0% N30	2.0% N30
MIXTURE COMPOSITION	IL 19.0	IL 12.5 OR IL 9.5	IL 19.0
FRICTION AGGREGATE		MIXTURE C	
DENSITY TEST METHOD	NUCLEAR/ CORES	NUCLEAR/ CORES	NUCLEAR/ CORES

\*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 COMPACTON 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 15% RAP IS USED, A SOFTER ASPHALT BINDER (PG58-22) MAY BE REQUIRED AS DETERMINED BY THE ENGINEER.

**TEMPORARY EROSION CONTROL**

THE FOLLOWING QUANTITIES ARE ESTIMATE ONLY. ACTUAL QUANTITIES FOR EROSION CONTROL WILL BE DETERMINED BY THE ENGINEER IN THE FIELD AND THERE WILL BE NO ADJUSTMENT IN ANY PRICE DUE TO A CHANGE IN PLAN QUANTITY.

TEMPORARY EROSION CONTROL SEEDINGS = 10 POUND  
PERIMETER EROSION BARRIER = 350 FOOT

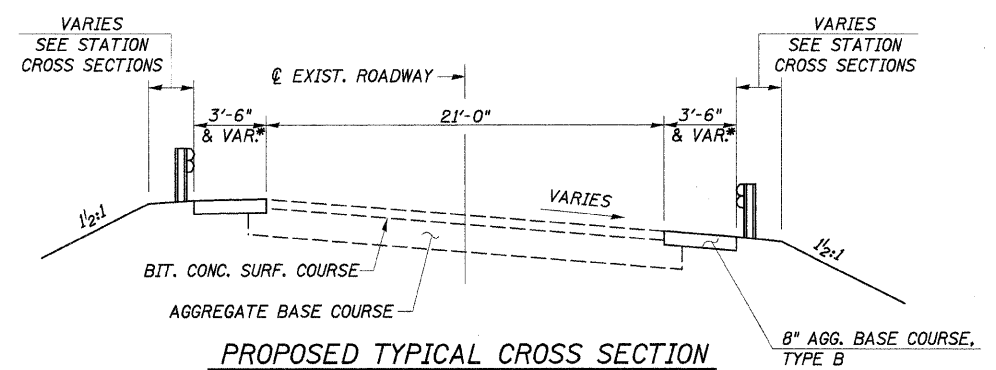
**APPLICATION RATES USED IN QUANTITY CALCULATIONS**

STONE RIPRAP, CLASS A4	1.65 TON/CU YD
AGGREGATE BASE COURSE	2.05 TON/CU YD
BITUMINOUS MATERIALS (PRIME COAT)	0.35 GAL/SQ YD
HOT-MIX ASPHALT (BINDER & SURFACE COURSE)	112#/SQ 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.

**PAVEMENT DESIGN**

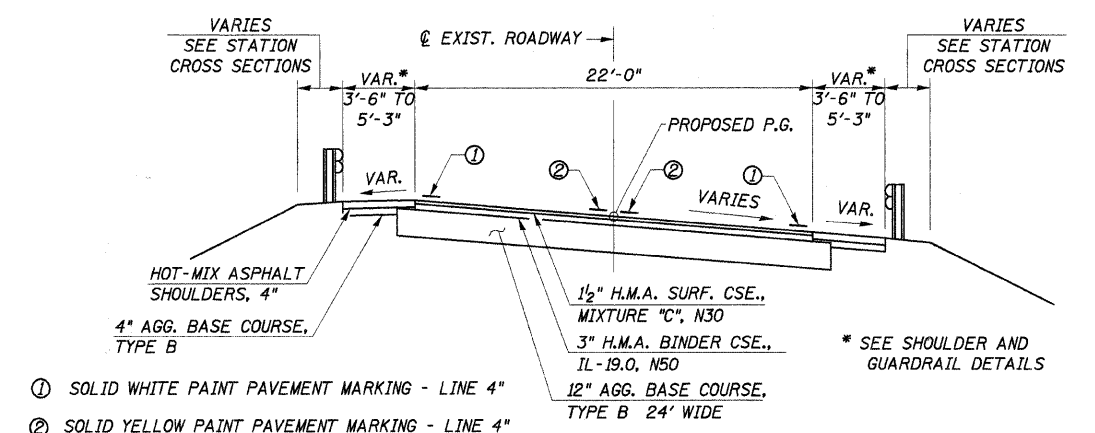
STRUCTURAL DESIGN TRAFFIC (S.D.T.) : YEAR 2018; P.V. = 2905, S.U. = 30, M.U. = 30  
CLASS II ROAD  
MINIMUM SOIL SUPPORT: I.B.R. = 3.0 (ASSUMED) (> 3 k.s.i.)  
PERCENT OF S.D.T. IN DESIGN LANE: P = 50%, S = 50%, M = 50%  
T.F. = 0.1535  
TEMP. = 73.5° F.; E<sub>ac</sub> = 620; DESIGN STRAIN = 253



**PROPOSED TYPICAL CROSS SECTION**

LT. STA. 42+45.64 TO LT. STA. 43+00  
RT. STA. 42+55.90 TO RT. STA. 43+00  
LT. STA. 45+00 TO LT. STA. 45+47.05  
RT. STA. 45+00 TO RT. STA. 45+47.97

\* SEE SHOULDER AND GUARDRAIL DETAILS

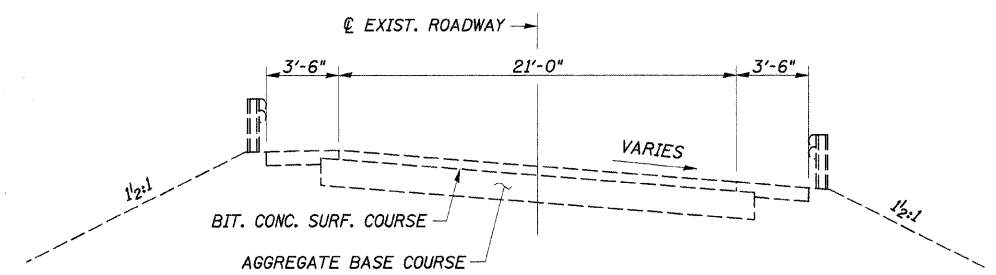


**PROPOSED TYPICAL CROSS SECTION**

STA. 43+00 TO STA. 45+00  
TRANSITION FROM EXISTING S.E. STA. 43+00 TO S.E. 0.035'/' AT STRUCTURE AND FROM S.E. 0.035'/' AT STRUCTURE TO EXISTING S.E. STA. 45+00

\* SEE SHOULDER AND GUARDRAIL DETAILS

- ① SOLID WHITE PAINT PAVEMENT MARKING - LINE 4"
- ② SOLID YELLOW PAINT PAVEMENT MARKING - LINE 4"



**EXISTING TYPICAL CROSS SECTION**

**SUMMARY OF QUANTITIES, GENERAL NOTES AND TYPICAL CROSS SECTION**

COUNTY HIGHWAY 11  
SECTION 06-00002-01-BR  
DEKALB COUNTY  
STATION 43+96

4440 ASH GROVE SPRINGFIELD, IL 62711 (217) 793-8600 www.fehr-graham.com	<b>FEHR-GRAHAM &amp; ASSOCIATES, LLC</b> ENGINEERING AND SCIENCE CONSULTANTS PERFORMING ENGINEERING, ARCHITECTURE & INTERIOR DESIGN SERVICES	DRAWN: S.A.P. DATE: 02/07/08	CHECKED: G.J.C./R.J.C. DATE: 03/04/08	JOB NO.: 47538 FILE: SUMTYP.DGN DATE: 09/02/08
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