

**SUMMARY OF QUANTITIES**

NUMBER	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	300
20300100	CHANNEL EXCAVATION	CU YD	358
20400800	FURNISHED EXCAVATION	CU YD	60
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	50
28000400	PERIMETER EROSION BARRIER	FOOT	945
28000500	INLET AND PIPE PROTECTION	EACH	1
35100100	AGGREGATE BASE COURSE, TYPE A	TON	592
40200100	AGGREGATE SURFACE COURSE, TYPE A	TON	15
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	495
40603080	HOT-MIX ASPHALT BINDER COURSE, IL 19.0, N50	TON	155
40603310	HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	121
48100100	AGGREGATE SHOULDERS, TYPE A	TON	161
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	51.8
50300280	CONCRETE ENCASEMENT	CU YD	21.0
50400305	PRECAST PRESTRESSED CONCRETE DECK BEAMS (17" DEPTH)	SQ FT	2,700
50800105	REINFORCEMENT BARS	POUND	7,010
Δ 50900205	STEEL RAILING, TYPE S1	FOOT	180
51201400	FURNISHING STEEL PILES HP10X42	FOOT	544
51202305	DRIVING PILES	FOOT	544
51203400	TEST PILE STEEL HP10X42	EACH	4
51500100	NAME PLATES	EACH	1
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	301
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	608
Δ 63100045	TRAFFIC BARRIER TERMINAL, TYPE 2	EACH	2
Δ 63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	2
Δ 63100167	TRAFFIC BARRIER TERMINAL, TYPE 1 (SPECIAL) TANGENT	EACH	2
Δ 63300725	STEEL PLATE BEAM GUARDRAIL (SHORT RADIUS)	FOOT	37.5
67100100	MOBILIZATION	L SUM	1
70101830	TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
Δ 78001110	PAINT PAVEMENT MARKING - LINE 4"	FOOT	1,100
Δ 78201000	TERMINAL MARKER - DIRECT APPLIED	EACH	4
X2501000	SEEDING, CLASS 2 (SPECIAL)	ACRE	0.3
X2810208	STONE RIPRAP, CLASS A4 (SPECIAL)	TON	289
X5020501	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 1	EACH	1
X5020502	UNDERWATER STRUCTURE EXCAVATION PROTECTION - LOCATION 2	EACH	1

\*SEE SPECIAL PROVISIONS  
Δ SPECIALTY ITEMS

CONSTRUCTION TYPE CODE: 0011 (X080)

**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 SEEDED SHALL CONSIST OF ALL DISTURBED EARTH SURFACES WITHIN THE RIGHT OF WAY, AS DIRECTED BY THE ENGINEER.  
SEEDING, CLASS 2 (SPECIAL) = 0.3 ACRE

**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.

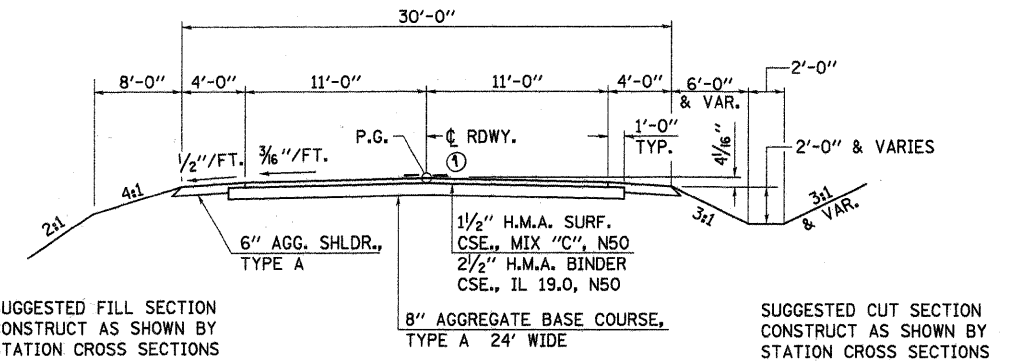
TEMPORARY EROSION CONTROL SEEDING = 50 POUND  
PERIMETER EROSION CONTROL BARRIER = 1068 FOOT  
INLET AND PIPE PROTECTION = 1 EACH

**INLET AND PIPE PROTECTION**

STA. 16 + 02 = 1 EACH  
TOTAL = 1 EACH

**HOT-MIX ASPHALT MIXTURE REQUIREMENTS**

ITEM	H.M.A. BINDER COURSE	H.M.A. SURFACE COURSE
AGGREGATE COMPOSITION:	IL 19.0	IL 9.5 OR 12.5 MIX "C"
ASPHALT GRADE:	PG 64-22	PG 64-22
DESIGN AIR VOIDS:	4.0% @ N50	4.0% @ N50

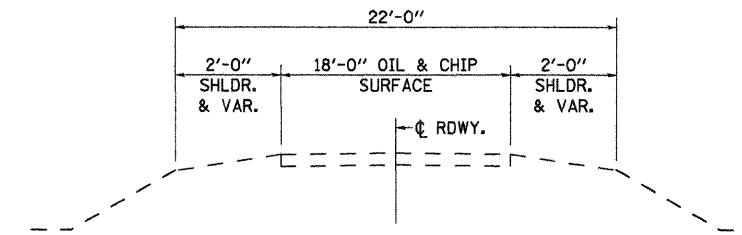


**TYPICAL PROPOSED CROSS SECTION**

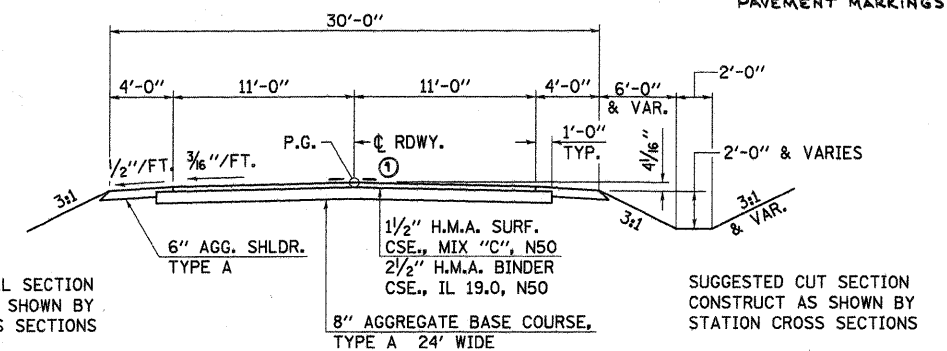
STA. 12+50 TO STA. 14+51.12

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 12+00 TO STA. 12+50.

① SOLID DOUBLE YELLOW PAVEMENT MARKINGS



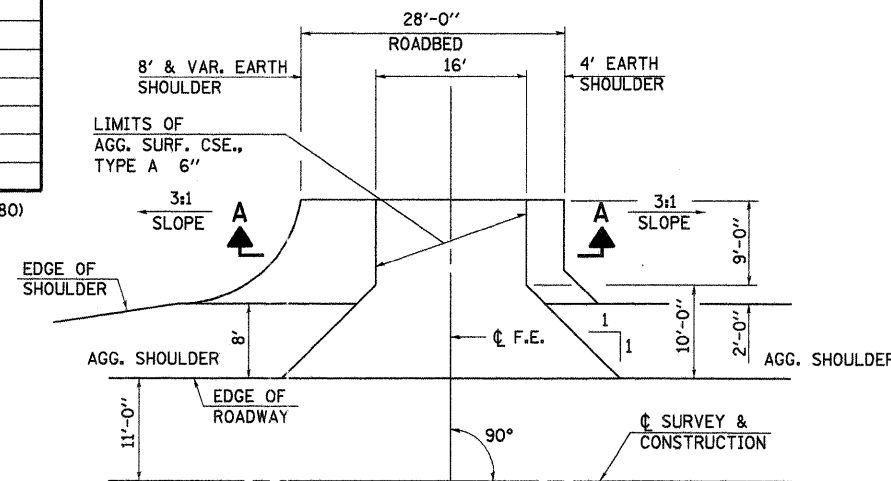
**EXISTING TYPICAL CROSS SECTION**



**TYPICAL PROPOSED CROSS SECTION**

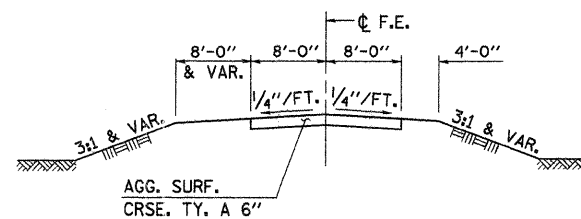
STA. 15+42.87 TO STA. 17+00

TRANSITION FROM EXISTING ROADWAY TO PROPOSED ROADWAY TO BE CONSTRUCTED FROM STA. 17+00 TO STA. 17+50



**FIELD ENTRANCE DETAIL**

F.E. LT. STA. 15+85.5  
(SEE SHEET 4 FOR GUARDRAIL DETAIL)



**SECTION A-A**

**APPLICATION RATES USED IN QUANTITY CALCULATIONS**

AGGREGATE BASE COURSE AND SURFACE COURSE	2.05 TON/CU YD
AGGREGATE SHOULDERS	2.05 TON CU YD
BITUMINOUS MATERIALS (PRIME COAT) ON AGGREGATE	0.35 GAL/SQ YD/APPLICATION
BITUMINOUS MATERIALS (PRIME COAT) ON HMA	0.10 GAL/SQ YD/APPLICATION
H.M.A. SURFACE COURSE AND LEVELING BINDER	112 LBS/SQ YD-IN
RIPRAP, SPECIAL	1.65 TON/CU YD

NOTE: THE ABOVE NOTED APPLICATION RATES 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 2022; P.V. = 373, S.U. = 18, 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. = 0.074

TEMP. = 77° F.; E<sub>AC</sub> = 623; DESIGN STRAIN = 321

FILE NAME = 18-273-SUMTYP.DGN

DESIGNED - G.J.C.	REVISED -
DRAWN - R.D.F & S.A.P.	REVISED -
CHECKED - G.J.C.	REVISED -
DATE - 04/19/11	REVISED -

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

SCALE: N/A SHEET NO. OF SHEETS PROPOSED STRUCTURE @ STA. 14+97.00

C.H.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
48	08-00095-00-BR	SANGAMON	18	2
				CONTRACT NO. 08-00095-00-BR
ILLINOIS				