

ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
C.H. 12	02-00083-00-BR	MACOUPIN	15	2
FED. ROAD DIST. NO. 7		ILLINOIS	FED. AID PROJECT-	

SUMMARY OF QUANTITIES CONSTRUCTION TYPE CODE X081-2A			
CODE NO.	ITEM	UNIT	QUANTITY
20100500	TREE REMOVAL, ACRES	ACRE	0.2
20200100	EARTH EXCAVATION	CU YD	520
20300100	CHANNEL EXCAVATION	CU YD	680
20400800	* FURNISHED EXCAVATION	CU YD	590
20700220	POROUS GRANULAR EMBANKMENT	CU YD	200
25001000	* SEEDING CLASS 2 (SPECIAL)	ACRE	0.6
28000300	TEMPORARY DITCH CHECKS	EACH	8
28100107	STONE RIPRAP, CLASS A4	SQ YD	319
28102600	* STONE RIPRAP DITCH	TON	95
28200400	FILTER FABRIC	SQ YD	319
40600100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	111
42001165	BRIDGE APPROACH PAVEMENT	SQ YD	160
42001430	BRIDGE APPROACH PAVEMENT CONNECTOR (FLEXIBLE)	SQ YD	32
44004000	PAVED DITCH REMOVAL	FOOT	123
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50200100	STRUCTURE EXCAVATION	CU YD	172
50300225	CONCRETE STRUCTURES	CU YD	32.4
50300255	CONCRETE SUPERSTRUCTURE	CU YD	108.3
50300260	BRIDGE DECK GROOVING	SQ YD	333
50300300	PROTECTIVE COAT	SQ YD	493
50401005	* FURNISHING AND ERECTING PRECAST PRESTRESSED CONCRETE I-BEAMS, 48 IN.	FOOT	492
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	21,520
50901005	STEEL BRIDGE RAIL, TYPE SM	FOOT	167
51201100	FURNISHING METAL PILE SHELLS 14"	FOOT	720
51202600	DRIVING AND FILLING SHELLS	FOOT	720
51203200	TEST PILE METAL SHELLS	EACH	2
51500100	NAME PLATES	EACH	1
54200223	PIPE CULVERTS, CLASS D, TYPE 1 18" (CSCP)	FOOT	36
61139900	* STORM SEWER (SPECIAL) 6"	FOOT	30
61140000	* STORM SEWER (SPECIAL) 8"	FOOT	30
61140100	* STORM SEWER (SPECIAL) 10"	FOOT	30
61140200	* STORM SEWER (SPECIAL) 12"	FOOT	30
63000005	STEEL PLATE BEAM GUARDRAIL, TYPE B	FOOT	50
63100087	TRAFFIC BARRIER TERMINAL, TYPE 6A	EACH	4
63100167	* TRAFFIC BARRIER TERMINAL, TYPE 1 SPECIAL (TANGENT)	EACH	4
63200310	GUARDRAIL REMOVAL	FOOT	407
70101830	* TRAFFIC CONTROL AND PROTECTION, STANDARD BLR 21	L SUM	1
78201000	* TERMINAL MARKER-DIRECT APPLIED	EACH	4
Z0002600	BAR SPLICERS	EACH	48
X3550400	* BITUMINOUS BASE COURSE SUPERPAVE 7"	SQ YD	1,204
X4066414	* BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N 50	TON	93
XX005347	* BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, N 50	TON	93

* SEE SPECIAL PROVISIONS

GENERAL NOTES

WHERE SECTION AND 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, AN 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 AND EASEMENTS AS DIRECTED BY THE ENGINEER.

SEEDING, CLASS 2 (SPECIAL) = 0.6 ACRES

ALL TREES THAT INTERFERE WITH CONSTRUCTION WITHIN THE R.O.W. AND EASEMENTS SHALL BE REMOVED ONLY AT THE DIRECTION OF THE ENGINEER.

THE COST OF REMOVAL OF ANY OBSTRUCTIONS OR CULVERTS NOT OTHERWISE INCLUDED IN REMOVAL OF EXISTING STRUCTURES WHICH INTERFERE WITH CONSTRUCTION WILL BE CONSIDERED INCIDENTAL TO THE COST OF EARTH EXCAVATION.

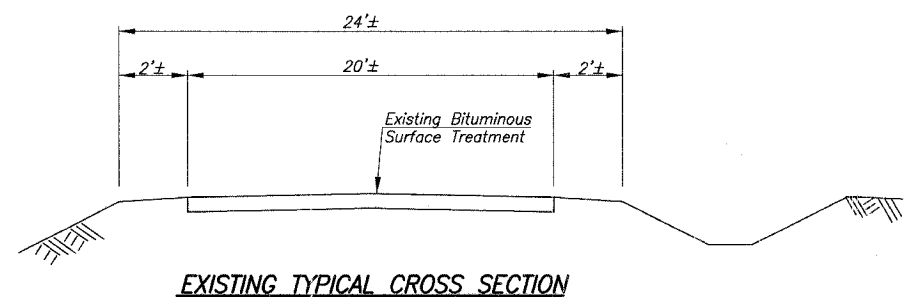
STORM SEWERS, SPECIAL QUANTITIES FOR FIELD TILE REPLACEMENT ARE ESTIMATED QUANTITIES ONLY AND ARE LISTED FOR THE PURPOSE OF ESTABLISHING A CONTRACT UNIT PRICE.

ALL PLAN ELEVATIONS REPRESENT U.S.G.S. DATUM.

PAVEMENT MARKING SHALL BE DONE BY OTHERS IN ACCORDANCE WITH STANDARD SPECIFICATIONS.

PAVEMENT DESIGN DATA

Design Period = 20 Years
 Structural Design Traffic (S.D.T.) = 730 Yr. 2013
 PV = 642 SU = 51 MU = 1137
 Class III Route
 Percent of S.D.T. in Design Lane P=50 S=50 M=50
 Traffic Factor: T.F. = 0.199
 Minimum Soil Support: IBSR=3.0
 Structural Number: D_t = 3.22
 Pavement Structure:
 Surface Course Type: 3" Bit. Conc. Superpave a₁=0.40
 Base Course Type: 7" Bit. Base Superpave, a₂=0.30
 D_t Furnished = 3.30



APPLICATION RATES USED IN QUANTITY CALCULATIONS

GRANULAR MATERIALS	2.05 TON/CU. YD.
BITUMINOUS MATERIALS (PRIME COAT)	0.10 GALLON/SQ. YD.
BITUMINOUS CONCRETE (BINDER AND SURFACE COURSE)	112 LBS./SQ. YD./INCH
STONE RIPRAP	1.75 TON/CU. YD.

BITUMINOUS CONCRETE MIXTURE REQUIREMENTS			
ITEM	ASPHALT GRADE	ALLOWABLE RAP	VOIDS
BINDER, SUPERPAVE, N50	PG 64-22	20%	4.0%
SURFACE, SUPERPAVE (Mix "C") N50	PG 64-22	15%	4.0%

GUARD RAIL SCHEDULE

TRAFFIC BARRIER TERMINAL, TY. 6A	TRAFFIC BARRIER TERMINAL, TY.1 SPECIAL (TANGENT)
LT. STA. 9+18.27 TO 9+46.84 = 1 EACH	LT. STA. 8+68.27 TO 9+18.27 = 1 EACH
RT. STA. 9+21.42 TO 9+49.99 = 1 EACH	RT. STA. 8+46.42 TO 8+96.42 = 1 EACH
LT. STA. 10+30.01 TO 10+58.58 = 1 EACH	LT. STA. 10+83.58 TO 11+33.58 = 1 EACH
RT. STA. 10+33.16 TO 10+61.73 = 1 EACH	RT. STA. 10+61.73 TO 11+11.73 = 1 EACH
TOTAL = 4 EACH	TOTAL = 4 EACH

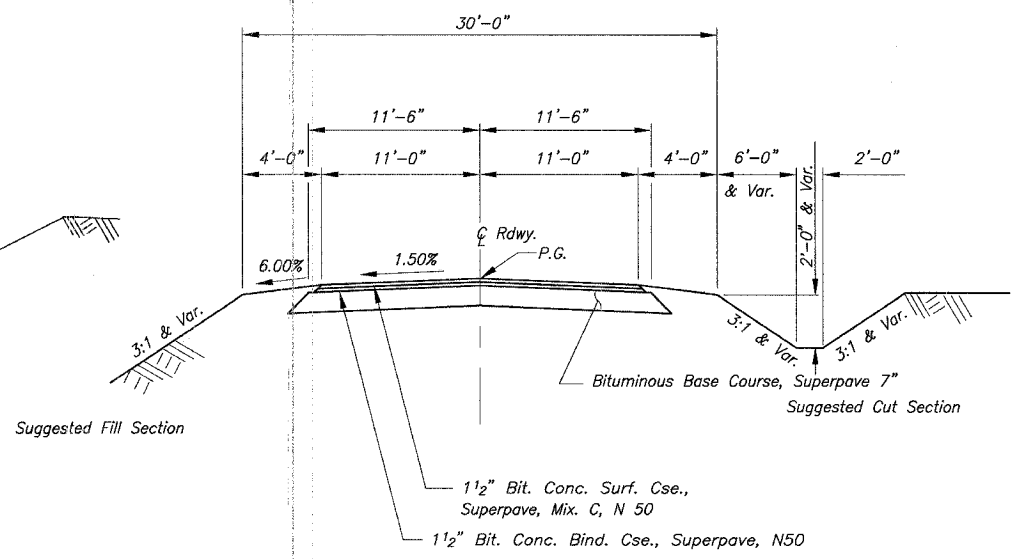
STEEL PLATE BEAM GUARD RAIL, TYPE B
 LT. STA. 10+58.58 TO 10+83.58 = 25 FOOT
 RT. STA. 8+96.42 TO 9+21.42 = 25 FOOT
TOTAL = 50 FOOT

GUARD RAIL REMOVAL

LT. STA. 8+81 TO 9+33 = 61 FOOT
 LT. STA. 9+57 TO 9+83 = 40 FOOT
 RT. STA. 8+81 TO 9+83 = 102 FOOT
 LT. STA. 10+23 TO 11+25 = 102 FOOT
 RT. STA. 10+23 TO 11+25 = 102 FOOT
TOTAL = 407 FOOT

PAVED DITCH REMOVAL

LT. STA. 8+34 TO 9+34 = 100 FOOT
 RT. STA. 9+00 TO 9+23 = 23 FOOT
TOTAL = 123 FOOT

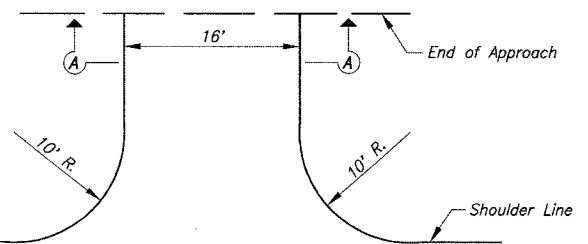


Road Classification: Collector ADT 400 & over
 Current ADT 600

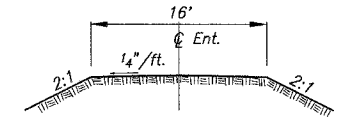
PROPOSED TYPICAL CROSS SECTION

Sta. 8+50 to Sta. 13+50

Transition from the proposed roadway to the existing roadway to be constructed from Sta. 8+00 to 8+50 and from Sta. 13+50 to 14+00. See sheet 4 for transition at the bridge.



FIELD ENTRANCE DETAIL



SECTION A-A

SHEET TITLE		SUMMARY OF QUANTITIES & TYPICAL CROSS SECTION	
PROJECT	SECTION 02-00083-00-BR C.H. 12/F.A.S. 732 MACOUPIN COUNTY STATION 9+90	PROJECT NO.	03016
DATE	11-6-03	CHECKED BY	MRL
DRAWING NO.		CHECKED BY	MCB
COOMBE-BLOXDORF P.C. Engineers / Land Surveyors Springfield, Illinois Design Firm License No. 184-002703			2
			OF 15 SHTS