

CODE NO.	ITEM	UNIT	QUANTITY
20200100	EARTH EXCAVATION	CU YD	1112
20200300	EARTH EXCAVATION FOR EROSION CONTROL	CU YD	59
20300100	CHANNEL EXCAVATION	CU YD	484
20400800	FURNISHED EXCAVATION	CU YD	934
25000200	SEEDING, CLASS 2	ACRE	1.1
25000400	NITROGEN FERTILIZER NUTRIENT	POUND	99
25000500	PHOSPHORUS FERTILIZER NUTRIENT	POUND	99
25000600	POTASSIUM FERTILIZER NUTRIENT	POUND	99
25100115	MULCH, METHOD 2	ACRE	1.1
28000250	TEMPORARY EROSION CONTROL SEEDING	POUND	110
28000300	TEMPORARY DITCH CHECKS	EACH	8
28000400	PERIMETER EROSION BARRIER	FOOT	524
28000500	INLET AND PIPE PROTECTION	EACH	2
28100107	STONE RIPRAP, CLASS A4	SQ YD	1727
28200200	FILTER FABRIC	SQ YD	1727
30201500	LIME	TON	43.0
31000600	PROCESSING LIME STABILIZED SOIL MIXTURE 12"	SQ YD	1909
35101800	AGGREGATE BASE COURSE, TYPE B 6"	SQ YD	111
40300100	BITUMINOUS MATERIALS (PRIME COAT)	GALLON	1006
40600300	AGGREGATE (PRIME COAT)	TON	6
48101200	AGGREGATE SHOULDERS, TYPE B	TON	182
50100100	REMOVAL OF EXISTING STRUCTURES	EACH	1
50300225	CONCRETE STRUCTURES	CU YD	19.6
50400605	PRECAST PRESTRESSED CONCRETE DECK BEAMS (33" DEPTH)	SQ FT	1664
50800205	REINFORCEMENT BARS, EPOXY COATED	POUND	2320
50900205	STEEL RAILING, TYPE S1	FOOT	139
51201300	FURNISHING STEEL PILES HP8X36	FOOT	247
51202700	DRIVING STEEL PILES	FOOT	247
51203300	TEST PILE STEEL HP8X36	EACH	1
51204315	CONCRETE ENCASEMENT	CU YD	3.4
51500100	NAME PLATES	EACH	1
54200220	PIPE CULVERTS, CLASS D, TYPE 1 15"	FOOT	70
58100200	WATERPROOFING MEMBRANE SYSTEM	SQ YD	185
58300100	PORTLAND CEMENT MORTAR FAIRING COURSE	FOOT	485
63000005	STEEL PLATE BEAM GUARD RAIL, TYPE B	FOOT	137.5
63100075	TRAFFIC BARRIER TERMINAL, TYPE 5A	EACH	4
63100167	* TRAFFIC BARRIER TERMINAL TYPE 1, SPECIAL (TANGENT)	EACH	4
67100100	* MOBILIZATION	L SUM	1
78201000	* TERMINAL MARKER - DIRECT APPLIED	EACH	4
X4066414	* BITUMINOUS CONCRETE SURFACE COURSE, SUPERPAVE, MIX "C", N50	TON	216
X4066614	* BITUMINOUS CONCRETE BINDER COURSE, SUPERPAVE, IL-19.0, N50	TON	598
Z0013825	* CONTROLLED LOW-STRENGTH MATERIAL	CU YD	14.5

**GENERAL NOTES**

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 DATES FOR ALL CLASSES OF SEEDING WILL BE AS LISTED BELOW:

CLASS OF SEEDING	BEGINNING DATES	TERMINATION DATES
1, 1A, 1B, 2, 2A, 3 (IN SPRING)	APRIL 1	MAY 15
1, 1A, 1B, 2, 2A, 3 (IN FALL)	AUGUST 15	OCTOBER 15

LAYOUT OF EROSION CONTROL ITEMS MAY BE VARIED IN THE FIELD TO SUIT GROUND CONDITIONS AS DIRECTED BY THE ENGINEER (SEE SHEET 8 FOR EROSION CONTROL).

IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE ACTUAL LOCATION OF ALL UNDERGROUND UTILITY FACILITIES. HE SHALL ALSO OBTAIN FROM THE RESPECTIVE UTILITY COMPANIES DETAILED INFORMATION RELATIVE TO THE LOCATION OF THEIR FACILITIES AND THE WORKING SCHEDULES OF THE UTILITY COMPANIES FOR THEIR MARKING OF THE EXACT LOCATION.

WHERE SECTION OR SUB-SECTION MONUMENTS ARE ENCOUNTERED, THE ENGINEER SHALL BE NOTIFIED BEFORE SUCH MONUMENTS ARE REMOVED. THE CONTRACTOR SHALL PROTECT AND CAREFULLY PRESERVE ALL MONUMENTS UNTIL AN AUTHORIZED SURVEYOR OR AGENT HAS WITNESSED OR OTHERWISE REFERENCED THEIR LOCATION. THE CONTRACTOR WILL BE RESPONSIBLE FOR THE COST OF HAVING AN AUTHORIZED SURVEYOR RE-ESTABLISH ANY SECTION OR SUB-SECTION MONUMENTS DESTROYED BY HIS OPERATIONS.

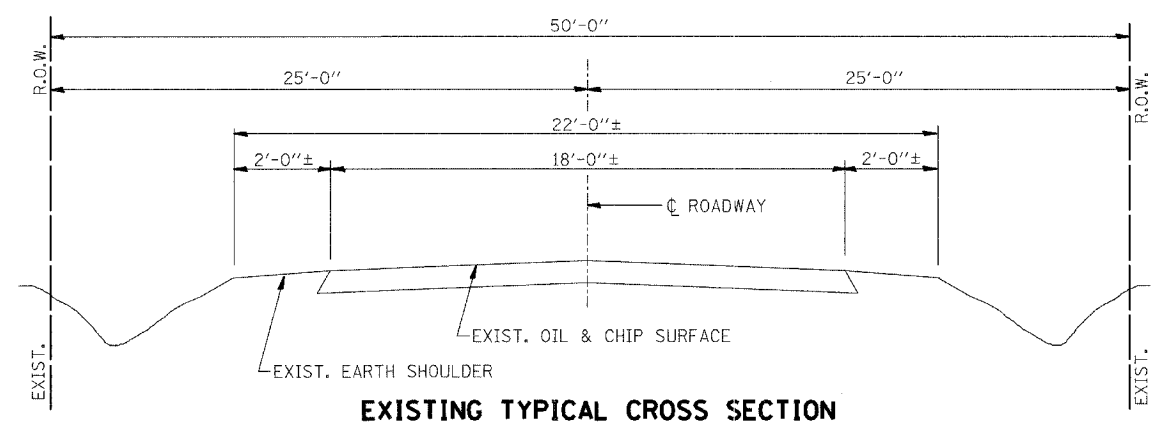
REMOVAL OF EXISTING PAVEMENT MATERIAL SHALL BE INCLUDED IN EARTH EXCAVATION.

APPLICATION RATES

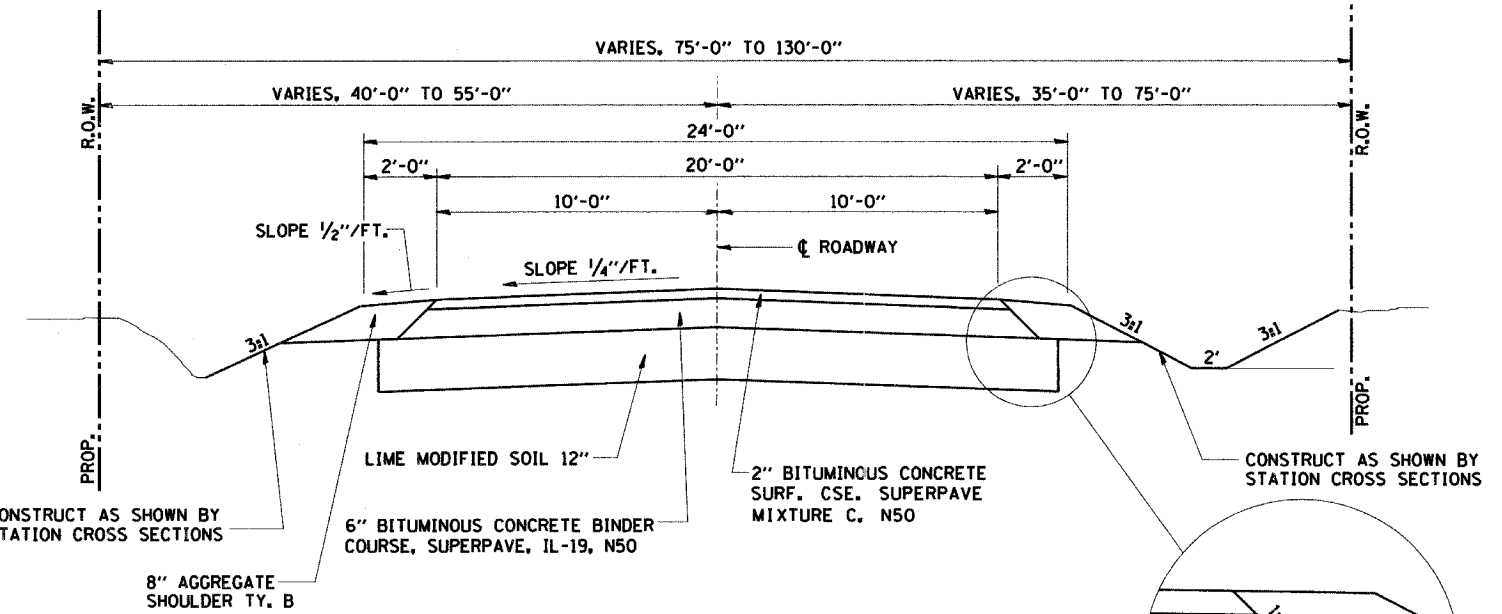
LIME	45	LBS./S. Y.
GRANULAR MATERIALS	2.05	TONS/CU. YD.
BITUMINOUS MATERIALS-PRIME COAT	0.50	GALS./S. Y.
BITUMINOUS MATERIALS-FOG COAT	0.03	GALS./S. Y.
AGGREGATE PRIME COAT	2 OR 4	LBS./S. Y.
BITUMINOUS CONCRETE	112	LBS./S. Y./INCH
FERTILIZER NUTRIENTS	90	LBS./ACRE
MULCH METHOD 2	2	TONS/ACRE

**BITUMINOUS MIXTURE REQUIREMENTS**

LOCATION	CH 19	CH 19
MIX USE	BINDER	SURFACE
AC/PG	PG 58-22	PG 58-22
RAP %	25	15
DESIGN VOIDS	4.0 @ N=50	4.0 @ N=50
MIXTURE COMPOSITION (GRAD. MIXTURE)	IL-19.0	IL-9.5
FRICTION	N/A	MIX C



**EXISTING TYPICAL CROSS SECTION**

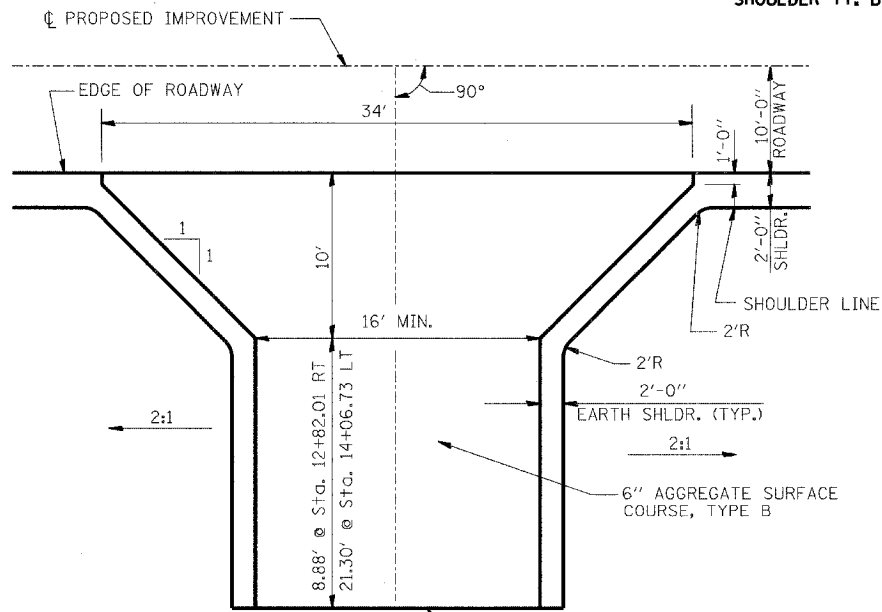


**PROPOSED TYPICAL CROSS SECTION**

STA. 12+50.00 TO STA. 15+27.09  
 STA. 15+98.09 TO STA. 19+90.00  
 (TRANSITION STA. 12+00.00 TO STA. 12+50.00)  
 (TRANSITION STA. 19+90.00 TO STA. 20+40.00)

**ROADWAY QUANTITY SCHEDULE**

LOCATION	PR LIM STAB SOIL M 12 (SQ YD)	BITUMINOUS MATERIALS (PRIME COAT) (GAL)	AGGREGATE (PRIME COAT) (TON)	BCBC SUP IL-19.0 N50 (TON)	BC SC SUPER "C" N50 (TON)	AGGREGATE SHLDS B (TON)
M.L. STA. 12+00.00 TO STA. 15+27.09	812	428	4	254	82	77
M.L. STA. 15+98.09 TO STA. 20+40.00	1097	578	2	344	111	105
OVERLAY AT STRUCTURE					23	
<b>TOTALS</b>	<b>1909</b>	<b>1006</b>	<b>6</b>	<b>598</b>	<b>216</b>	<b>182</b>



**PRIVATE & FIELD ENTRANCE DETAIL**

RT., STA. 12+82.01  
 LT., STA. 14+06.73  
 AGGREGATE BASE COURSE, TYPE B 6"  
 TOTAL = 111 SQ YD

**GENERAL DATA**

Date	Designed MJP	<b>C.H. 19 OVER WILLOW BRANCH</b> <b>SECTION 03-00181-00-BR</b> <b>MACON COUNTY</b> <b>STA. 15+62.59</b> <b>PROP. STR. NO. 058-3368</b>
Revisions	Drawn MJP	
	Checked KWB	
	Approved KWB	
Prepared by:	<b>URS</b> 3040 North University Avenue Decatur, IL 62526	URS Job No. <b>36431468</b>