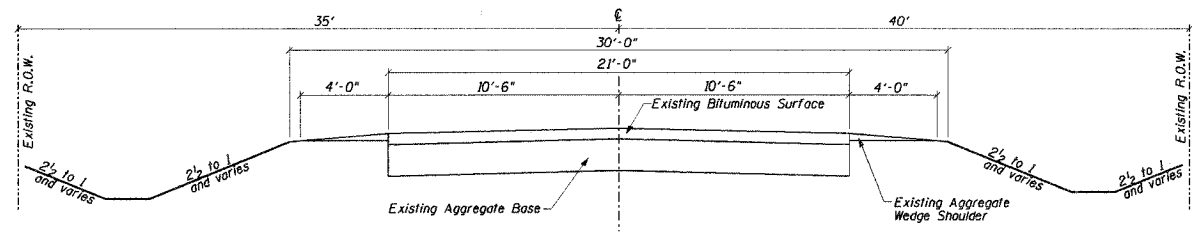
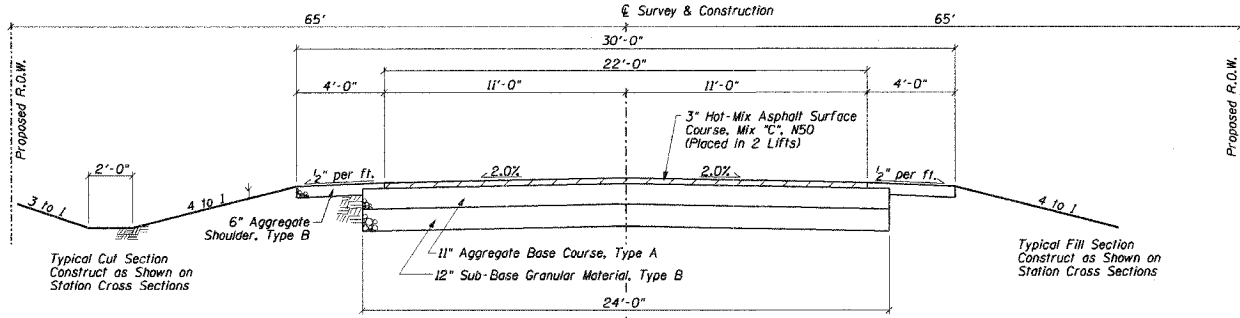


ROUTE NO.	SECTION	COUNTY	TOTAL SHEETS	SHEET NO.
FAS 1067	99-00119-00-BR	JO DAVIESS	9	2
ROAD DIST.	ILLINOIS			



Typical Existing Cross Section



Typical Proposed Cross Section

Sta. 10+50 to Sta. 13+50  
 Transition from existing roadway to proposed roadway to be constructed from Sta. 10+00 to Sta. 10+50 and from Sta. 13+50 to Sta. 14+00

**Pavement Design - FAS 1067**

**Traffic Parameters**  
 Structural Design Traffic (S.D.T.) - Year 2027 - P.V. = 176; S.U. = 18; M.U. = 6  
 Class IV Road  
 Heavy Commercial Vehicles (HCV) = S.U. + M.U. = 24

**Subgrade Parameters**  
 Subgrade Soil Properties (Based on Information from Jo Daviess County Soil Survey)  
 Soil Type - Beavercreek  
 Subgrade Resilient Modulus ERI  
 ERI @ Optimum Moisture Content = 6.0 ksi  
 ERI adjusted for seasonal moisture = < 2.0 ksi (will require subgrade improvement)  
 Immediate Bearing Value (IBV) = 3.72

**Pavement Design**  
 Figure 37-3L from BLR Design Manual - 3" HMA - 11" Aggregate Type A Base

**Subgrade Improvement**  
 Figure 37-7B from BLR Design Manual - 12" Granular Sub-Base for Subgrade Improvement

**Asphalt Mix Requirements**  
 Mixture Use(s) : Surface  
 PG: PG 58-22  
 Design Air Voids: 3.0@N50  
 Mixture Composition (Gradation Mixture) IL9.5 or 12.5  
 Friction Aggregate: C  
 20 Year ESAL: 0.06  
 Density to the satisfaction of the Engineer

**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, an authorized surveyor or agent has witnessed or otherwise referenced their location

Removal of the existing pavement (bituminous surface and aggregate base), where necessary to construct the proposed pavement, shall be considered Earth Excavation.

**Seeding, Class 2 (Special)**

The area to be seeded shall consist of all disturbed earth surfaces within the Right of Way, as directed by the Engineer

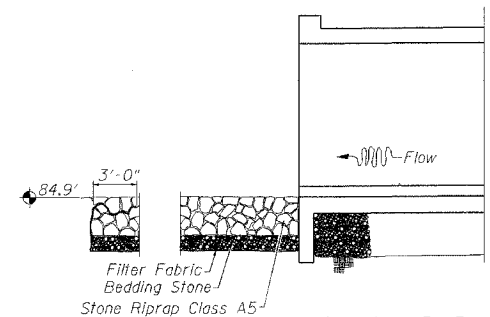
**Application Rates Used in Quantity Calculations**

Sub-Base Granular Material, Type B	120 lb./Cu. Ft.
Aggregate Base Course, Type A	125 lb./Cu. Ft.
Bituminous Materials (Prime Coat)	0.20 Gallons/Sq. Yd.
Hot-Mix Asphalt Surface Course, Mix "C", N50	1.51 Ton/Cu. Yd.
Aggregate Shoulders, Type B	120 lb./Cu. Ft.

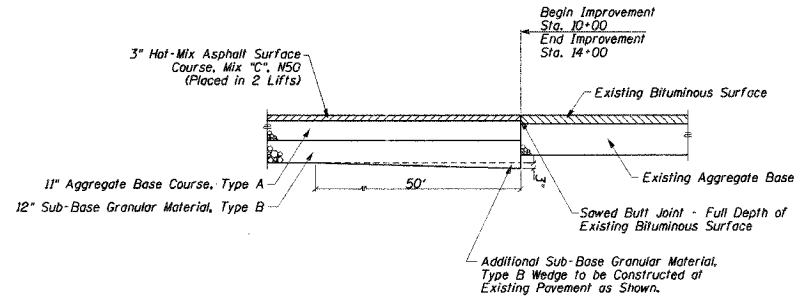
Note: The above application rates for Bituminous Materials (Prime Coat) are for quantity calculations only. The application rate to be applied will be determined by the Engineer at the time of placement.

**Summary of Quantities, Typical Sections, Details, Pavement Design & General Notes**

FAS 1067  
 Section No. 99-00119-BR  
 Jo Daviess County



Section B-B  
 Rip Rap Placement Profile



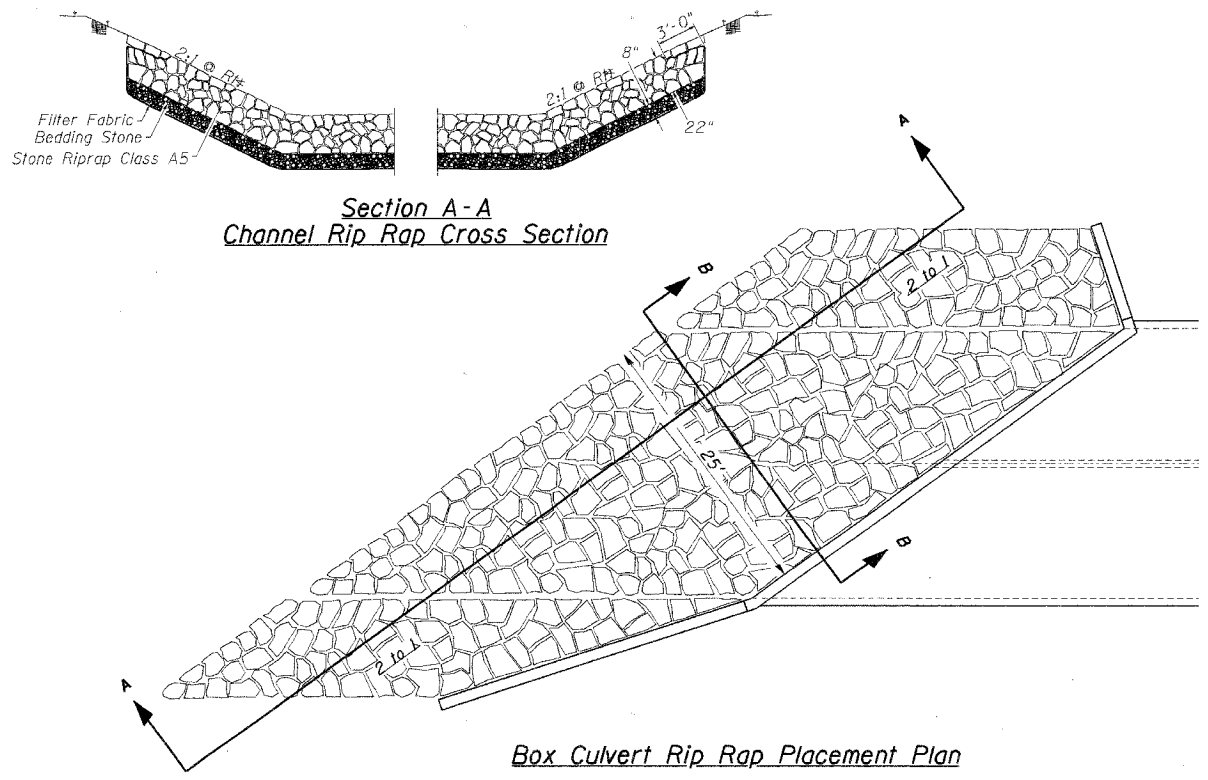
Elevation at Beginning and End of Improvement

**Joint Details**

**Summary of Quantities Construction Type Code: X028-2A**

Code No.	Item	Unit	Quantity
20200100	Earth Excavation	Cu. Yd.	850
20300100	Channel Excavation	Cu. Yd.	150
20400800	Furnished Excavation	Cu. Yd.	500
20700220	Porous Granular Embankment	Cu. Yd.	257
25001000	Seeding Class 2 (Special)	Acre	0.84
25100630	Erosion Control Blanket	Sq. Yd.	75
28000200	Earth Excavation for Erosion Control	Cu. Yd.	10
28000250	Temporary Erosion Control Seeding	Pound	350
28000300	Temporary Ditch Checks	Each	11
28000900	Fence (Erosion Control)	Foot	1050
28100109	Stone Rip Rap, Class A5	Sq. Yd.	190
28200200	Filter Fabric	Sq. Yd.	190
31101000	Sub-Base Granular Material, Type B	Ton	580
35100100	Aggregate Base Course, Type A	Ton	550
40600100	Bituminous Materials (Prime Coat)	Gallon	200
40603310	Hot-Mix Asphalt Surface Course, Mix "C", N50	Ton	165
48101200	Aggregate Shoulders, Type B	Ton	96
50100100	Removal of Existing Structures	Each	1
50200400	Rock Excavation for Structures	Cu. Yd.	10
50800105	Reinforcement Bars	Pound	51740
51500100	Name Plates	Each	1
51608000	Drilled Shaft in Soil 18"	Cu. Yd.	2.5
51609000	Drilled Shaft in Rock 18"	Cu. Yd.	6.5
54003000	Concrete Box Culverts	Cu. Yd.	270
66503200	Barbed Wire Fence, Five Strand	Foot	405
70101830	Traffic Control and Protection, Standard BLR 21	L. Sum	1
* 78001110	Paint Pavement Marking - Line 4"	Foot	900
67100100	Mobilization	L. Sum	1

\* SPECIALTY ITEMS



Box Culvert Rip Rap Placement Plan