STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0519-01	2012	72	212

NOTES:

1. *The table provided on this sheet divides the plan earthwork quantities by construction phase. This table assumes that earthwork designated to be performed in a given phase will be completed to the final grades. The contractor is allowed and encouraged to perform earthwork in a manner that reduces the necessary quantities of "Excavation, Contractor Furnished" in construction phases 2 and 3 and reduces the necessary quantity of "Excavation, Waste" in construction phase 4. The detail below provides an allowable means of achieving this earthwork reduction. Regardless of the contractor's plan for performing earthwork on the project, the plan quantities for earthwork shown in the bid form shall be used as the basis for bidding. Additional requirements are noted below:*
   - *Positive drainage must be maintained at all time*
   - *The Roadway clear zone of 6 feet must be met by the temporary embankment*
   - *Traffic control channelizing devices shall be placed behind the back of curb along any temporary slope constructed on a slope steeper than 4:1*
   - *Maximum temporary slope allowed is 2.5:1*
2. *Additional fill material may be obtained from the existing Broadway embankments during Phases 2 and 3 provided the remaining slopes are not steeper than 2.5:1.*
3. *Settlement of placed and compacted embankment material and settlement of the underlying ground is estimated as shown in the Earthwork Summary table. Additional fill material will be necessary to compensate for this settlement. The values provided in the table are estimates based on the soils report prepared for this project.*

EARTHWORK SUMMARY

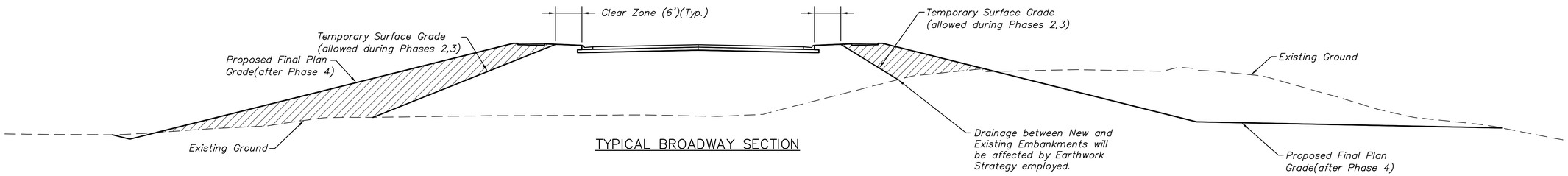
LOCATION AND CONSTRUCTION PHASE	EXCAVATION (CU. YD.)	EXCAVATION, CONTRACTOR FURNISHED (CU. YD.)	EXCAVATION, WASTE (CU. YD.)	ASSUMED VMF	FILL, COMPACTED (95% DENSITY) (CU. YD.)	*** CONSOLIDATION (CU. YD.)
PHASE 2						
DETENTION POND	13,065	0	0	0.8	385	0
SHOOFLY EMBANKMENT	0	30,804	0	0.8	33,550 ****	1,160
PHASE 3						
SOUTH SIDE OF BRIDGE	0	113,301	0	0.8	89,096	2,556
UNDER THE BRIDGE	53	12,355	0	0.8	9,523	403
NORTH SIDE OF BRIDGE*	15,888	49,999	0	0.8	51,183	1,526
37TH, TOPEKA AND GALENA	1,641	0	0	0.8	302	0
PHASE 4						
SHOOFLY EMBANKMENT	0	0	33,550****		0	0
SOUTH SIDE OF BRIDGE	0	0	23,744		0	0
LAFARGE PRIVATE ROAD**	872	0	0	0.8	637	0
PROJECT PLAN QUANTITIES	31,519	206,459	57,294		184,676	

* Some of this embankment work will be accomplished during Phase 2. Refer to the Construction Sequence on sheet 146.

** Construction of the private road may be accomplished during any phase of the project. It is assumed that since the cut and fill volumes are nearly equal that no measurable import or removal of excess material will be required.

*** The volume of consolidation is approximate and given for information only. Additional compaction required to account for consolidation will be subsidiary to the cost of compacted fill, however, the additional contractor furnished excavation required to accommodate consolidation is included in the plan quantities and reflected in this table

****6,010 C.Y. of fill volume in the shoofly detour embankment is to be ASTM C33 Course Aggregate Size 89. This volume has been subtracted from the fill volume and the excavation, waste volume in the above table. See Sheet 142.



TYPICAL BROADWAY SECTION

Volume of "Excavation, Contractor Furnished" Reduction during Phase 2 and 3 and Volume of "Excavation Waste" Reduction in Phase 4.

Likely Areas where Volume Reductions will be possible along the Outside of the Roadway Curve:

Sta. 41+00.00 to Sta. 47+63.50
Sta. 56+00.00 to Sta. 59+50.00

Likely Areas where Volume Reductions will be possible along the Inside of the Roadway Curve:

Sta. 41+50.00 to Sta. 45+50.00
Sta. 54+50.00 to Sta. 57+50.00

MKEC ENGINEERING CONSULTANTS, INC.
411 N. WEBB ROAD
WICHITA, KS. 67206
316 - 684 - 9600

JAY ANGLEMYER LICENSED 13283 PROFESSIONAL ENGINEER STATE OF KANSAS

BROADWAY BRIDGE AT 34TH STREET SOUTH

MISCELLANEOUS DETAILS
SHEET TITLE

472-84830
PROJECT NUMBER

JRA
DESIGN BY

JSB
DRAWN BY

JRA
CHECKED BY

ISSUED
October 9, 2012
REVISED

SHEET NO.
72 of 212

PLOTTED: Thursday, October 11, 2012 @ 10:45AM

J:\Civil\09081\dwg\Details\09081 Excavation Detail