STATE	PROJECT NO.	YEAR	SHEET NO.	SHEETS
KANSAS	87 N-0351-01	2012	75	220

SUMMARY OF QUANTITIES

WALL	BID ITEM	QUANTITY (S.F.-FACE)	PROJECT
"A"	RETAINING WALL	37.3	
"B"	RETAINING WALL	463.0	
"C"	RETAINING WALL	58.3	
"D"	RETAINING WALL	1318.1	
"E"	RETAINING WALL	832.0	
"F"	RETAINING WALL	1348.6	
"G"	RETAINING WALL	2386.9	
"H"	RETAINING WALL	3241.7	
		9,686	Total Pay Quantity

The bottom of wall elevations listed on these plans are finished grades at the bottom of the wall. The Contractor is responsible for including any amount of wall and footings below finished grade required by the retaining wall design. Cost of all wall and footings below finished grade is subsidiary to the per unit cost for the construction of the wall.

WALL DRAINAGE NOTES

1. Contractor shall place the strip drain against the back of the wall and place the perforated pipe and the outlet pipe.
2. Perforated pipe shall be placed next to the strip drain.
3. Non-perforated pipe shall be used for the outlet pipes. Care shall be taken to enclose the perforated pipe with the extension of the filter fabric.
4. Strip Drain material shall meet requirements of the Engineer.
5. Perforated pipe and non-perforated outlet pipe shall be corrugated polyethylene tubing and shall meet requirements of KDOT Specifications.
6. Any overexcavation below the perforated pipe shall be back filled with cohesive soil, Type C compaction.
7. Strip drain, perforated pipes, outlet pipes and overexcavation back fill shall be included in the price bid for each retaining wall.
8. Locate outlet pipes, as required, to avoid conflicts with other improvements and existing items to remain.

GENERAL NOTES

DESIGN SPECIFICATION:
AASHTO LRFD Specifications for Highway Bridges, 2007 Edition with appropriate interim specifications.

CONSTRUCTION SPECIFICATIONS:
Kansas Department of Transportation Standard Specifications for State Road and Bridge Construction, 2007 and Special Provisions.

DESIGN LOADING:
Live Load — Surcharge Load of 200 p.s.f.
Equivalent Fluid Pressure — $K_a = 0.35$ $\gamma_s = 110$ p.c.f.

UNIT STRESSES:
Concrete (Grade 4.0)(AE) — $f'c = 4$ ksi
Reinforcing Steel (Grade 60) — $fy = 60$ ksi

CONCRETE: All concrete shall be Concrete (Grade 4.0). Bevel all exposed edges of concrete with a ¾" triangular molding, except as otherwise noted on the plans. Exposed surfaces, except recessed grooves, shall be given a rubbed surface. Construction joints are optional with the contractor, but if used, shall be made only at the locations shown, or at the locations approved by the Engineer. All concrete shall be considered subsidiary to wall bid items.

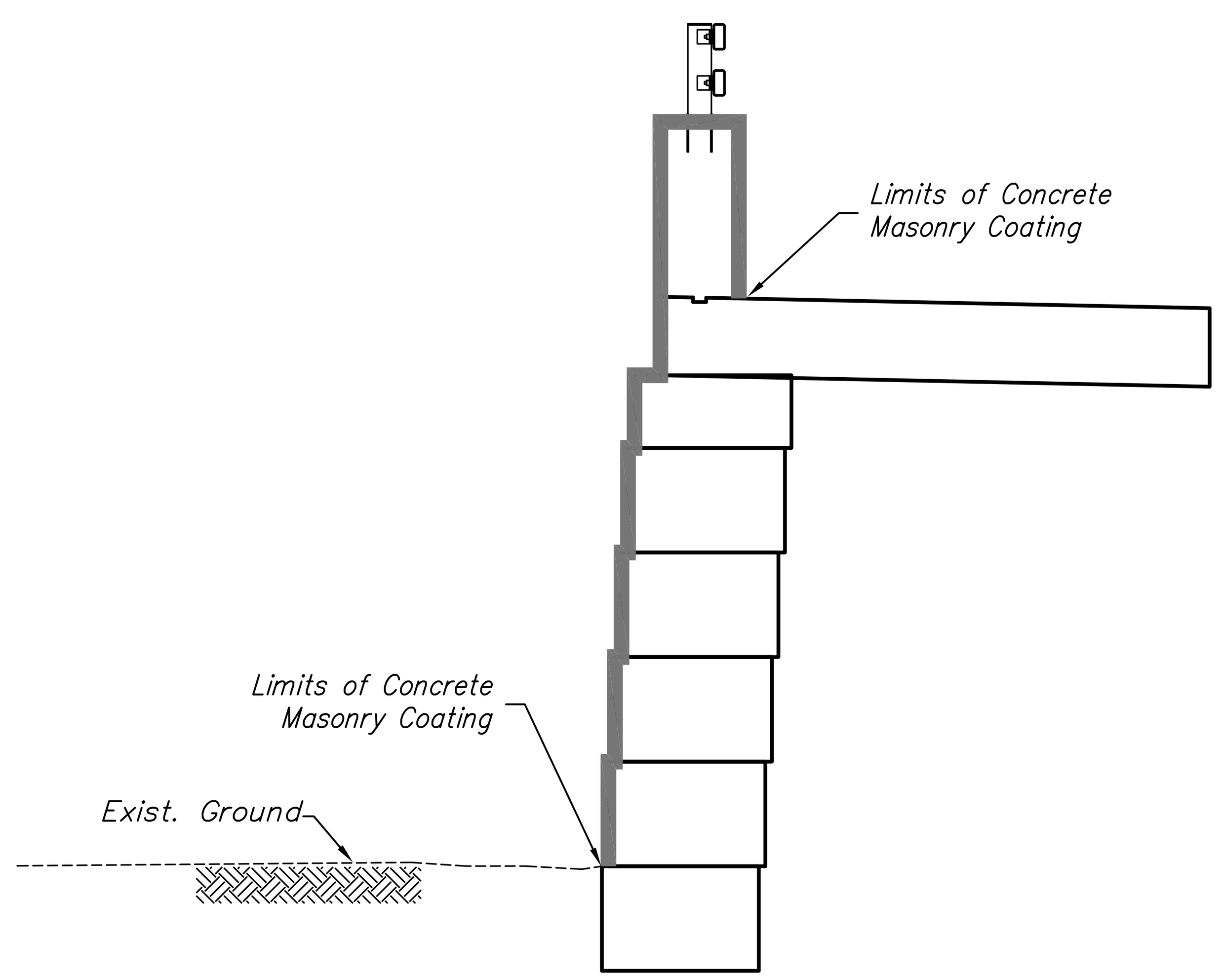
REINFORCING SHOP DRAWINGS: The shop drawings for all wall reinforcing shall be reviewed by the Engineer prior to casting the concrete.

EPOXY COATED REINFORCING STEEL: All reinforcing steel dimensions are to the centerline of bars, unless otherwise noted. All the reinforcing steel shall conform to the requirements of ASTM A615 Grade 60. Support reinforcing as shown on the sheet "SUPPORTS AND SPACERS FOR REINFORCING STEEL". Install reinforcing supports per the latest edition of the CRSI "Manual of Standard Practice". All epoxy coated reinforcing steel shall be considered subsidiary to wall bid items.

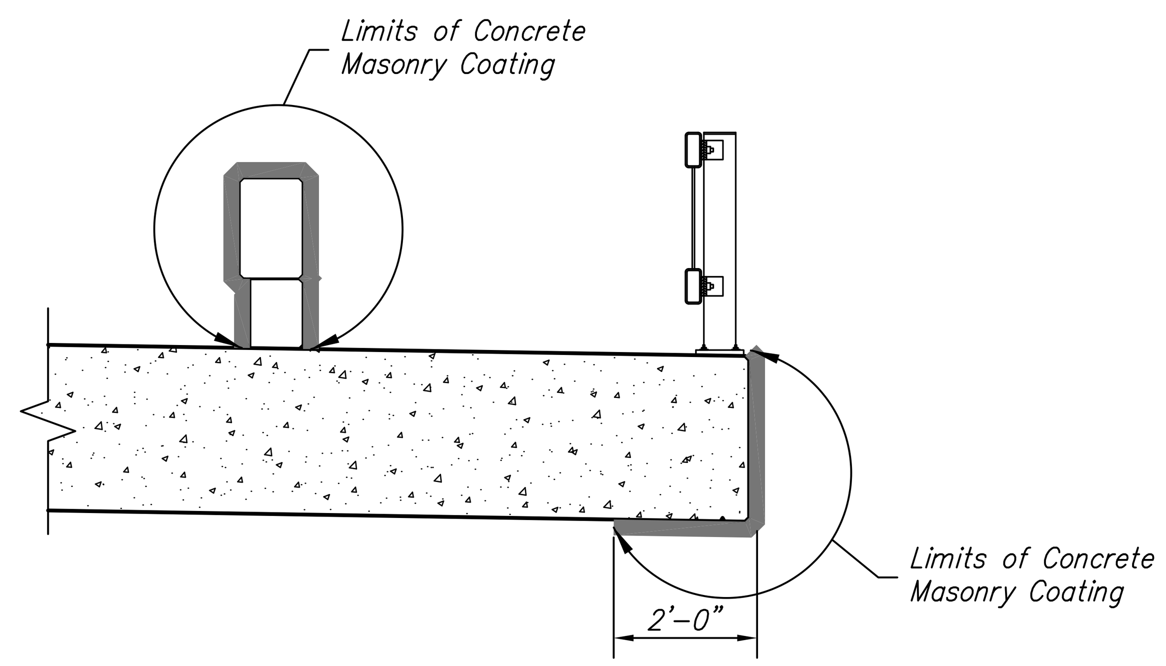
WALL DRAINAGE: Strip drains, perforated, non-perforated polyethylene tubing, filter fabric, and any other wall drainage items shall be considered subsidiary to the unit price bid for each wall.

GEOLOGIC INFORMATION: Boring logs are in the file of the consultant and are available for inspection by interested and/or qualified bidders.

PROFILES: Profiles are along face of wall at wall top.



RETAINING WALL



BRIDGE DECK

LIMITS OF CONCRETE MASONRY COATING

CONCRETE MASONRY COATING NOTES

1. Concrete masonry coating shall be an opaque cement based polymer or acrylic polymer water seal for use in coating and sealing the exterior face of exposed concrete surfaces such as Thoro Pigmented Sealer or approved equal as outlined on this sheet. The material must conform with KDOT standards and be on KDOTs pre-qualification list.
2. Contractor shall submit pigmented color formulation samples to the Engineer for review prior to performing the work.
3. Contractor shall provide material with the following properties:
   - Coats and waterproofs concrete and masonry
   - Does not produce a vapor barrier (breathes)
   - Is thermally compatible with Portland cement mortar and concrete
   - Exhibits no chalking, checking, cracking, scaling, blistering, or other deleterious effects after 5000 hours in a weatherometer (ASTM G26).
4. Contractor shall provide the Engineer with copies of the coating manufacturer's material safety and technical data sheets. The technical data must include detailed application instructions, minimum and maximum application temperatures, and recommended time between coats.
5. Clean the surfaces to be coated so that they are free of foreign materials, projections, and loose mortar particles.
6. Store, mix, apply and cure the concrete masonry coating as recommended by the manufacturer.
7. Refer to the Detail on this sheet for Surfaces on the Project to receive Concrete Masonry Coating.
8. All surface preparation work, cleaning, coating, etc. shall be subsidiary to "Concrete Masonry Coating."

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

CENTRAL AVENUE IMPROVEMENTS FROM 135TH ST. W. TO 119TH ST. W.

SEGMENT RETAINING WALL DETAILS AND NOTES
SHEET TITLE

472-84017
PROJECT NUMBER

DESIGN BY JRA
DRAWN BY WNJ
CHECKED BY JRA

ISSUED November 9, 2012
REVISED

SHEET NO. 75 of 220

J:\Civil\04238\dwg\Details\04238 Seg Ret Wall.dwg

PLOTTED: Wednesday, November 14, 2012 @ 02:38PM