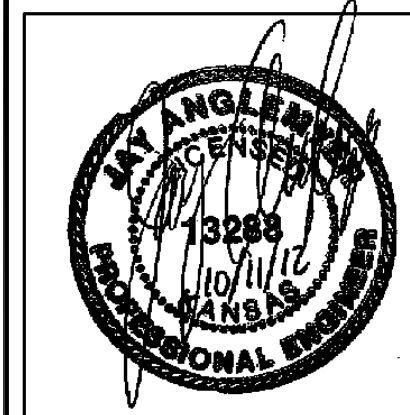


STATE	PROJECT NO.	YEAR	SHEET NO.	TOTAL SHEETS
KANSAS	87 N-0519-01	2012	69	212

MKEC
ENGINEERING
CONSULTANTS, INC.

411 N. WEBB ROAD
WICHITA, K.S. 67206
316-684-9600



**BROADWAY BRIDGE
AT 34TH STREET SOUTH**

RETAINING WALL NOTES & SUMMARY

SHEET TITLE
472-84830
PROJECT NUMBER

DESIGN BY: JRA
DRAWN BY: JLB
CHECKED BY: JRA

ISSUED
October 9, 2012
REVISED

SHEET NO.
69 of 212

SUMMARY OF QUANTITIES

WALL	BID ITEM	QUANTITY (S.F.-FACE)	PROJECT
"A"	RETAINING WALL	3818.7	
"B"	RETAINING WALL	160.4	
"C"	RETAINING WALL	158.3	
"D"	RETAINING WALL	3728.8	
"E"	RETAINING WALL	163.6	
"F"	RETAINING WALL	131.2	
		8161.0	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.

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 $K_a = 0.35 \text{ sy} = 110 \text{ p.c.f.}$

UNIT STRESSES:
Concrete (Grade 4.0)(AE) $f'_c = 4 \text{ ksi}$
Reinforcing Steel (Grade 60) $f_y = 60 \text{ ksi}$

CONCRETE: All concrete shall be Concrete (Grade 4.0). Bevel all exposed edges of concrete with a $\frac{3}{4}$ " 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.

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 back face of wall at the top of coping.

CONCRETE MASONRY COATING NOTES

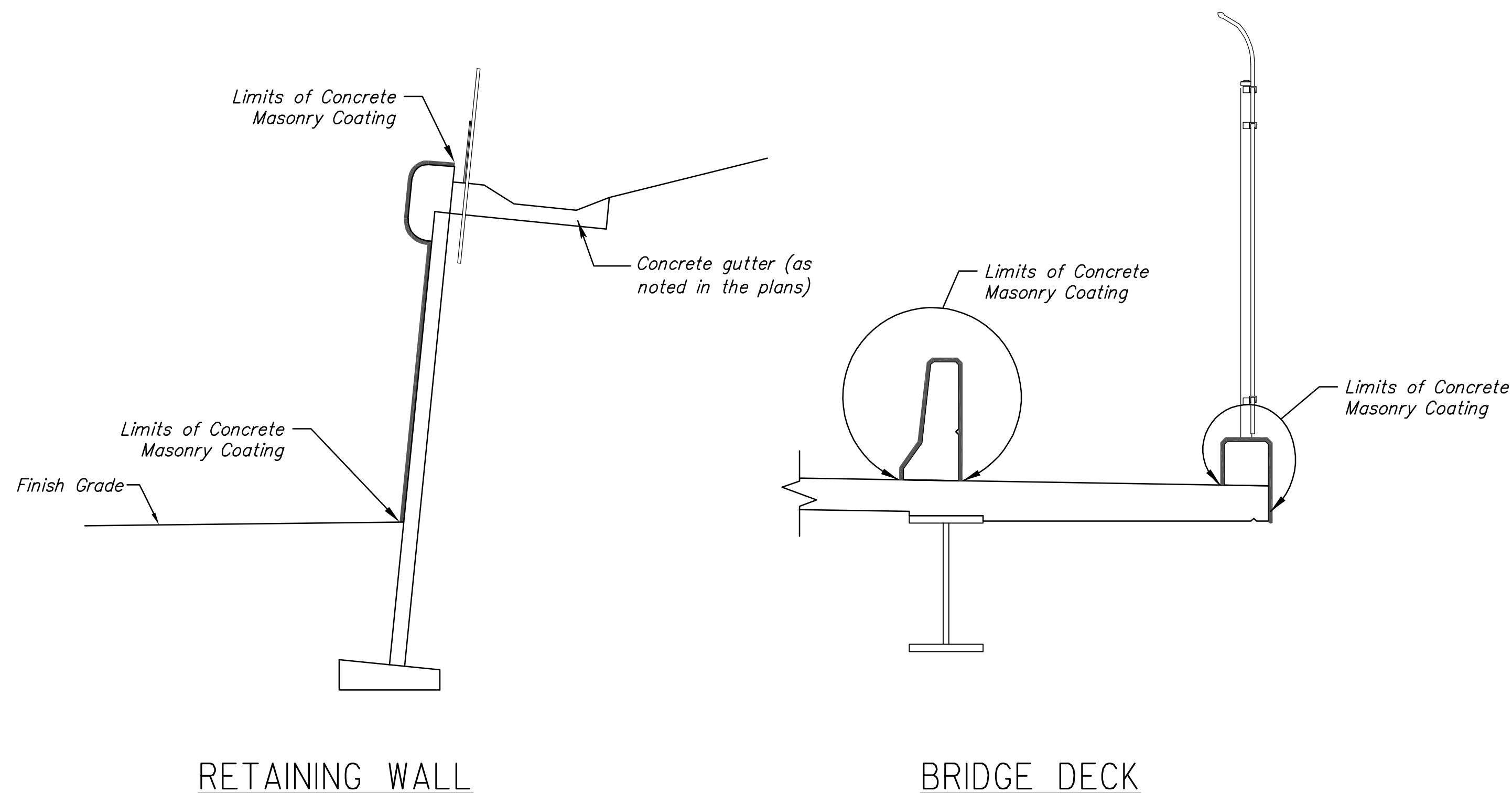
- Concrete masonry coating shall be an opaque cement based polymer or acrylic polymer water seal for use in coating and sealing the exterior face of exposed concrete surfaces such as Thoro Pigmented Sealer or approved equal as outlined on this sheet. The material must conform with KDOT standards and be on KDOTs pre-qualification list.
- Contractor shall submit pigmented color formulation samples to the Engineer for review prior to performing the work.
- 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).
- 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.
- Clean the surfaces to be coated so that they are free of foreign materials, projections, and loose mortar particles.
- Store, mix, apply and cure the concrete masonry coating as recommended by the manufacturer.
- Retaining Walls, Coping, Roadway Traffic Rails shall receive Concrete Masonry Coating. See details on this sheet.
- All surface preparation work, cleaning, coating, etc. shall be subsidiary to "Concrete Masonry Coating."

WALL DRAINAGE NOTES

- Contractor shall place the strip drain against the back of the wall and place the perforated pipe and the outlet pipe.
- Perforated pipe shall be placed next to the strip drain.
- 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.
- Strip Drain material shall meet requirements of the Engineer.
- Perforated pipe and non-perforated outlet pipe shall be corrugated polyethylene tubing and shall meet requirements of KDOT Specifications.
- Any overexcavation below the perforated pipe shall be back filled with cohesive soil, Type C compaction.
- Strip drain, perforated pipes, outlet pipes and overexcavation back fill shall be included in the price bid for each retaining wall.
- Locate outlet pipes, as required, to avoid conflicts with other improvements and existing items to remain.

SURFACE TREATMENT NOTES:

- The surfaces receiving surface treatment will need to be cast thicker than shown in the plans to account for the depth of the surface treatment as shown on this sheet. The additional concrete thickness shall be subsidiary to "Surface Treatment".
- All Retaining Walls shall receive Surface Treatment. No other surfaces will be treated.
- The Surface shall be "Cypress fin" manufactured by Fitzgerald Formliners or approved equal. Patter shall be submitted for approval prior to Construction.



RETAINING WALL

BRIDGE DECK

LIMITS OF CONCRETE MASONRY COATING