ESTIMATED BRIDGE QUANTITIES

FOOTNOTE	ITEM NO.	ITEM DESCRIPTION	UNIT	TOTAL	SUPERSTRUCTURE	ABUTMENT NO. 1	ABUTMENT NO. 2
(1)	202-04.04	REMOVAL OF STRUCTURES (PARTIAL, BRIDGE NO. 19-I0040-17.09)	LS.	1			
(2)	204-02.01	DRY EXCAVATION (BRIDGES)	C.Y.	1760		880	880
(3)	602-04.02	STEEL STRUCTURES (CHARLOTTE AVE., BRIDGE NO. 19-I0040-17.09)	LS.	1			
(4)	602-04.99	STEEL STRUCTURES (CHARLOTTE AVE BRIDGE MATERIAL ONLY 701,183 LBS.)	LS.	1			
(5)	602-10.66	BEARING DEVICES (STL REINF ELASTOMERIC)	EACH	40		20	20
(6)	604-01.32	CLASS A CONCRETE (LEVELING)	C.Y.	800		400	400
(7)	604-03.04	PAVEMENT @ BRIDGE ENDS	S.Y.	487		229	258
(8)	604-03.07	CLASS A CONCRETE (HIGH EARLY STRENGTH)	C.Y.	277		137	140
(9)	604-03.09	CLASS D CONCRETE (BRIDGE DECK)	C.Y.	489	489		
(10)	604-04.02	APPLIED TEXTURE FINISH (EXISTING STRUCTURES)	S.Y.	552	342	105	105
(11)	604-04.41	THREE STAR STATE EMBLEM	EACH	4			
(12)	604-07.07	RETAINING WALL NO. 7 (@ ABUTMENT NO. 1)	S.F.	5717		5717	
(13)	604-07.08	RETAINING WALL NO. 8 (@ ABUTMENT NO. 2)	S.F.	5855			5855
(14)	604-10.14	REMOVE EXISTING WEARING SURFACE	LS.	1			
(15)	604-10.18	REINFORCING STEEL (REPAIRS)	LB.	190000	141012	24162	24826
(16)	615-04.10	NON-SHRINK GROUT	C.F.	1240	1240		
(17)	615-04.30	PRECAST BRIDGE ABUTMENT WALL	C.Y.	68		34	34
(18)	617-01	BRIDGE DECK SEALANT	S.Y.	2720	2720		
(19)	617-02	BRIDGE DECK CRACK SEALING	L.F.	3236	3236		
(20)	617-05	SEALANT (HMWM)	GAL	17	17		
(21)	620-05.01	CONC PARAPET SINGLE SLOPE (STD-1-1SS)	L.F.	267	267		
(22)	711-02.06	REINFORCED CONCRETE MEDIAN BARRIER (STD-1-3SS)	L.F.	133	133		
(23)	714-01.05	STRUCTURAL LIGHTING (BRIDGE NO. 19I0040-17.09)	LS.	1			

FOOTNOTES

(1) ITEM INCLUDES REMOVAL OF EXISTING BRIDGE SUPERSTRUCTURE, BENT FOOTINGS TO ONE FOOT BELOW EXISTING GROUND, PARTIAL REMOVAL OF ABUTMENTS AND WINGWALLS AND OTHER AREAS DESIGNATED IN THE PLANS. ALSO INCLUDES REMOVAL AND DISPOSAL OF WASTE FROM EXISTING BEAMS PRODUCED DUE TO ANY CUTTING REQUIRED FOR CHOSEN DEMOLITION METHOD. ITEM ALSO INCLUDES ANY BRACING THAT MAY BE REQUIRED TO SUPPORT PORTIONS OF THE SUPERSTRUCTURE AND SUBSTRUCTURE DURING THE EXECUTION OF THE PROJECT AND ALSO INCLUDES ALL FORMWORK REQUIRED SO THAT NO DEBRIS IS ALLOWED TO FALL ONTO THE ROADWAY BELOW. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION AND REQUIREMENTS.

(2) EXCAVATION BASED ON EXISTING GROUND LINE.

(3) ITEM INCLUDES ALL LABOR, EQUIPMENT AND INCIDENTALS NECESSARY FOR THE INSTALLATION OF FABRICATED BRIDGE AS DETAILED IN THE CONTRACT PLANS. THIS DOES NOT INCLUDE THE COST OF THE WORK ITEMS AND MATERIALS INCLUDED IN ITEM 602-04.99.

(4) LUMP SUM: TOTAL ESTIMATED WEIGHT OF 701,183 LBS. OF STRUCTURAL STEEL INCLUDES BEAMS, DIAPHRAGMS, BOLTS, STUDS AND PLATES. ALSO SEE TENNESSEE STANDARD SPECIFICATIONS SECTIONS 602.49 AND 602.50. STRUCTURAL STEEL PLATES AND SHAPES SHALL BE ASTM A588 AND BOLTS SHALL ALSO BE WEATHERING STEEL. SEE DRAWING NO. BR-119-178 AND BR-119-179 FOR ADDITIONAL NOTES AND BR-119-185 FOR DETAILS. PORTIONS OF STRUCTURAL STEEL TO BE ENCASED IN CONCRETE SHALL BE PRIMED AND PAINTED AS NOTED IN THE PLANS. COST IS FOR MATERIALS, FABRICATION AND DELIVERY TO SITE.

(5) BEARING DEVICES SHALL BE STEEL REINFORCED LAMINATED ELASTOMERIC BEARING PADS (50 DUROMETER MATERIAL) VULCANIZED TO STEEL SHIM PLATES. SEE PLANS FOR BEARING DIMENSIONS AND DETAILS. COST OF STEEL SHIM PLATES INCLUDED IN COST OF BEARING DEVICES. APPROX. WEIGHT OF STRUCTURAL STEEL IS 13,475 LBS.

(6) LEVELING CONCRETE IS TO BE USED TO FILL THE SPACE BETWEEN THE SOLID ROCK AND BOTTOM OF PROPOSED ABUTMENT FOOTINGS. SEE RELATED NOTES ON LAYOUT DRAWING.

(7) PAVEMENT AT BRIDGE ENDS SHALL BE PRECAST AND REINFORCED AS SHOWN IN THE PLANS. CLOSURE POUR JOINT MATERIAL SHALL BE PATCHING MORTAR SIMILAR TO SYSTEM USED ON SUPERSTRUCTURE UNITS AND IS INCLUDED IN UNIT PRICE FOR PAVEMENT @ BRIDGE ENDS. ALSO INCLUDED IS 3250 SY BIAXIAL GEOTEXTILE FOR REPLACEMENT OF SLEEPER SLAB.

(8) CLASS "A" CONCRETE IS FOR CONSTRUCTION OF THE BARRIER AND MEDIAN BARRIERS RAILS AND ABUTMENTS CONSTRUCTION. F'c = 3,000 PSI IS REQUIRED. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

(9) CLASS "D" CONCRETE IS TO BE USED FOR FOR ALL PRECAST SUPERSTRUCTURE UNIT CONCRETE AND CAST-IN-PLACE MEDIAN DECK POUR.

(10) FOR NOTES AND LIMITS OF TEXTURE COATING, SEE DETAIL THIS SHEET.

(11) COST INCLUDES ALL INCIDENTALS, LABOR AND MATERIALS FOR THE COMPLETE INSTALLATION AND FINISHING OF THIS ITEM. LOCATION TO BE ON THE BACK OF THE BRIDGERAIL WITH THE EXACT LOCATION DESIGNATED BY THE ENGINEER IN THE FIELD.

(12) SEE RETAINING WALL 7 (ROADWAY SHEET 2V) FOR ADDITIONAL NOTES AND DETAILS.

(13) SEE RETAINING WALL 8 (ROADWAY SHEET 2W) FOR ADDITIONAL NOTES AND DETAILS.

(14) AVERAGE DEPTH OF EXISTING ASPHALT IS 3½" ON SBL AND 4" ON NBL.

(15) MECHANICAL BAR SPLICERS: MUST BE ON THE APPROVED LIST MAINTAINED BY THE DIVISION OF MATERIALS AND TESTS. THE BAR SPLICER SHALL MEET AASHTO STANDARD SPECIFICATIONS FOR MECHANICAL CONNECTION. WHEN EPOXY COATING IS REQUIRED, THE EXPOSED THREADS SHALL BE REPAIRED AFTER SPLICING ACCORDING TO THE STANDARD SPECIFICATIONS, SECTION 907. THE COST OF FURNISHING THE BAR SPLICERS, EPOXY COATING INCLUDING ALL LABOR AND MATERIALS NECESSARY FOR COMPLETE INSTALLATION, SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEM NO. 604-10.18, LBS.

(16) ITEM TO BE USED FOR CLOSURE POURS, FILLING VOIDS UNDER PRECAST END-BLOCKS AND OTHER GROUTING APPLICATIONS AS DESIGNATED IN THE PLANS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

(17) INCLUDES ALL COSTS FOR SUPPLYING AND INSTALLING PRECAST ABUTMENT WALL ELEMENTS INCLUDING CLASS "A" CONCRETE, STEEL BAR REINFORCING, BACKER RODS, BITUMINOUS FIBERBOARD, FORMS, SPACERS, SHIMS & ADHESIVE AND LIFTING HARDWARE. QUANTITIES ARE BASED ON PRECAST DIMENSIONS SHOWN IN THE CONTRACT DRAWINGS. AVERAGE REINFORCEMENT IS ESTIMATED AT 300 LBS/CY.

(18) BRIDGE DECK SEALANT TO BE APPLIED TO MANUFACTURE'S SPECIFICATIONS. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.

(19) INCLUDES ALL COSTS FOR INSTALLING BRIDGE DECK CRACK SEALER (HMWM) INCLUDING CRACK PREPARATION, CLEANING LABOR AND MISCELLANEOUS MATERIALS TO SEAL ALL TRANSVERSE AND LONGITUDINAL CONSTRUCTION JOINTS.

(20) INCLUDES ALL COSTS FOR FURNISHING THE SEALER (HMWM) FOR SEALING CRACKS. QUANTITY BASED ON APPLICATION RATE OF 200 L.F. PER GALLON. SEALER SHALL BE IN ACCORDANCE WITH SPECIAL PROVISION 604CR.

(21) ITEM INCLUDES LABOR AND MATERIALS TO CONSTRUCT BRIDGERAIL PER STANDARD STD-1-1SS AND TO FORM AND CAST TWO (2) LIGHT STANDARDS AS SHOWN ON STD-8-2SS AND LOCATED ON DRAWING BR-119-156.

(22) COST OF TEXTURE COATING MEDIAN BARRIER IS INCLUDED IN THE COST OF THE MEDIAN BARRIER RAIL. SEE GENERAL NOTE 10 ON BR-119-158.

(23) SEE STD-8-2SS FOR LIGHT SUPPORT DETAILS (TWO REQUIRED) AND ITEMS INCLUDED IN PAY ITEM. SEE LIGHTING PLANS FOR ADDITIONAL DETAILS AND REQUIREMENTS.

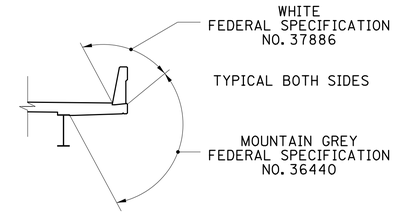
(24) COST OF CORRUGATED METAL PIPES, DRILLING AND EPOXY GROUTING BARS AND ANCHOR BOLTS AND DOWEL RODS FOR SUPERSTRUCTURE UNITS SHALL BE INCLUDED IN OTHER ITEMS BID ON.

CONST. NO. 19005-3161-44

PROJECT NO.	YEAR	SHEET NO.
BH-I-40-4(86)	2015	

REVISIONS

NO.	DATE	BY	BRIEF DESCRIPTION



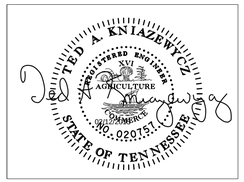
LIMITS OF TEXTURE FINISH

NOTE: IN ADDITION TO PORTIONS SHOWN IN THE TEXTURE FINISH SKETCH, THE ABUTMENTS ARE TO RECEIVE AN APPLIED TEXTURE FINISH.

NOTE: BEFORE APPLYING ANY TEXTURE FINISH, ALL SURFACES SHALL BE COMPLETELY CLEANED OF ALL DEBRIS AND FOREIGN MATERIALS.

NOTE: THE CONTRACTOR SHALL USE CONTAINMENT SCREENS OR OTHER MEASURES TO PREVENT ANY TEXTURE COATING FROM ENTERING THE ENVIRONMENT. CONTAINMENT MEASURES SHALL BE APPROVED BY THE ENGINEER AND COST SHALL BE INCLUDED IN ITEMS BID NO.

NOTE: CONCRETE FINISHING SHALL BE IN ACCORDANCE WITH SECTION 604.22 OF THE TENNESSEE STANDARD SPECIFICATION. A CLASS I FINISH FOLLOWED BY AN APPLIED TEXTURE FINISH SHALL BE USED IN LIEU OF A CLASS II FINISH. THE COLOR OF THE FINISH SHALL BE SIMILAR TO MOUNTAIN GRAY, FEDERAL SPECIFICATION NO. 36440, FEDERAL COLOR STANDARD NO. 595A, EXCEPT THAT THE INSIDE FACE AND TOP OF THE PARAPET SHALL BE WHITE, FEDERAL SPECIFICATION NO. 37886. A COLOR SAMPLE SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL. THE APPLIED TEXTURE FINISH SHALL BE MEASURED AND PAID FOR UNDER ITEM 604-04.02.



BRIDGE NO. 5
STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION
ESTIMATED
BRIDGE QUANTITIES
I-40
OVER
CHARLOTTE AVE.
BR. NO. 19-I0040-17.09
DAVIDSON COUNTY
2015

BR-119-177

DESIGNED BY GRESHAM SMITH & PARTNERS DATE 2/09/2015
DRAWN BY G.YOUNG DATE 1/2015
SUPERVISED BY T. KNIAZEWYCZ DATE 1/2015
CHECKED BY T. KNIAZEWYCZ DATE 2/2015

GS&P GRESHAM SMITH AND PARTNERS

kniazet
Q:\2807115\b\Bridge D Charlotte\Bridge 1\8071b15db1BQ.sht
2/12/2015
PRF