COMMONWEALTH OF KENTUCKY
TRANSPORTATION CABINET
Frankfort, Kentucky 40622
www.transportation.ky.gov/

Matthew G. Bevin
Governor

Greg Thomas
Secretary

October 20, 2017

CALL NO. 100
CONTRACT ID NO. 171245
ADDENDUM # 1

Subject: Rockcastle County, NHPP IM 0752 (095)
Letting October 27, 2017

(1) Revised - Plans
(2) Revised - Front Sheet
(3) Added - Note - Page 17(a) of 284
(4) Revised - Bid Items - Pages 277-284 of 284

Proposal revisions are available at http://transportation.ky.gov/Construction-Procurement/.

Plan revisions are available at http://www.lynnimaging.com/kytransportation/.

If you have any questions, please contact us at 502-564-3500.

Sincerely,

Rachel Mills

Rachel Mills, P.E.
Director
Division of Construction Procurement

RM:ks
Enclosures

PAVING AREAS

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	2J

ITEM CODE	ITEM	I-75	RAMP A	RAMP B	RAMP B-1	RAMP C	RAMP C-1	RAMP D	RAMP D-1	US 25	SOUTH APPROACH	FRONTAGE RD	FRONTAGE RD ENTRANCES	MOT										TOTAL PROJECT
		SQUARE YARDS																						
1	4" COMPACTED DENSE GRADED AGGREGATE (7)												280	274										554
1	6" COMPACTED DENSE GRADED AGGREGATE	253,972	2,674	9,226	832	6,434	612	3,346	1053															278,149
1	8" COMPACTED DENSE GRADED AGGREGATE									2,175		2,644												4,819
1	14½" COMPACTED DENSE GRADED AGGREGATE									2,332														2,332
1	FULL DEPTH COMPACTED DENSE GRADED AGGREGATE (SHOULDERS) (1)	3,649	982	985	115	994	72	655	106	689														8,247
8	CEMENT STABILIZED ROADBED	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
18	4" DRAINAGE BLANKET TY II	165,473	2,845	9,458	870	6,624	612	3,432	1,053															190,367
100	ASPHALT SEAL AGGREGATE (20 LBS/SY 2 APPLICATIONS)	37,090	3,714	3,375	324	3,598	188	2,374	588	2,426														53,677
103	ASPHALT SEAL COAT (2.40 LBS/SY 2 APPLICATIONS)	37,090	3,714	3,375	324	3,598	188	2,374	588	2,426														53,677
194	APPROX ½"± BASE LEVEL & WEDGE ASPHALT BASE PG 76-22	156,379	4,767	2,227		2,535		3,845		7,617	763													178,133
194	APPROX 2" ± BASE LEVEL & WEDGE ASPHALT BASE PG 76-22 (2)	5,639																						5,639
214	3¼" CL3 ASPHALT BASE 1.00D PG 64-22 (3)	77,577	1,838	1,798	241	2,589	157	1,041	335															85,576
~~208~~	~~4½" CL4 ASPHALT BASE 1.50D PG 64-22~~ (4)	82,423	895	7,479	615	3,854	469	2,328	731															98,794
205	4½" CL3 ASPHALT BASE 1.50D PG 64-22 (5)	75,863	1,838	1,798	241	2,589	157	1,041	335															83,862
~~219~~	~~3¼" CL4 ASPHALT BASE 1.00D PG 76-22~~ (6)	88,253	1,113	7,586	604	4,063	463	2,529	718															105,329
221	2" CL2 ASPHALT BASE 0.75D PG 64-22												273											273
221	3" CL2 ASPHALT BASE 0.75D PG 64-22											2,710												2,710
221	3¼" CL2 ASPHALT BASE 0.75D PG 64-22									4,703														4,703
221	3½" CL2 ASPHALT BASE 0.75D PG 64-22									1,930														1,930
221	4" CL2 ASPHALT BASE 0.75D PG 64-22 (7)									2,046				274										2,320
339	1" CL3 ASPHALT SURFACE 0.38D PG 64-22 (8)													74,868										74,868
339	1¼" CL3 ASPHALT SURFACE 0.38D PG 64-22	116874	2,668	2,119	241	2,765	157	1,993	335	12,521	582	2,617	268											143,140
342	1¼" CL4 ASPHALT SURFACE 0.38A PG 76-22	196,460	4,720	8,904	600	6,208	460	5,158	713		943													224,166
358	1.6 LBS/SY ASPHALT CURING SEAL	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
358	2.0 LBS/SY ASPHALT CURING SEAL	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
2542	CEMENT (.06 x 108 LBS/CU FT)	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
2702	5.0 LBS/SY SAND FOR BLOTTER	327,326	5,690	18,916	1,740	13,248	1,270	6,864	2,168															377,222
2676	1" ASPHALT PAVEMENT MILLING & TEXTURING (8)													74,868										74,868
2676	1 ¼" ASPHALT PAVEMENT MILLING & TEXTURING									205	1,470													1,675
20071EC	JOINT ADHESIVE (SHOWN LIN FT)	192,992	6,886	9,616	1034	8,488	784	7,272	1,330	8,490	1,720	1,189												239,801
21289ED	LONGITUDINAL EDGE KEY (SHOWN LIN FT)	55,017	2,692	2,141		3,058		2,221		3,400														68,529

NOTES
(1) QUANTITY SHOWN IN CUBIC YARDS
(2) 5,639 SY ADDED FOR OVERLAY AT US 25 BRIDGE
(3) 527 SY ADDED FOR OVERLAY AT US 25 BRIDGE
(4) 873 SY ADDED FOR OVERLAY AT US 25 BRIDGE
(5) 196 SY ADDED FOR OVERLAY AT US 25 BRIDGE
(6) 2,163 SY ADDED FOR OVERLAY AT US 25 BRIDGE
(7) 274 SY SHOWN FOR US 25 MOT
(8) SEE MOT TYPICAL NO. 1 IN PHASE 1 MOT PLANS

PAVING AREAS

PAVING AREAS

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	2J

ITEM CODE	ITEM	I-75	RAMP A	RAMP B	RAMP B-1	RAMP C	RAMP C-1	RAMP D	RAMP D-1	US 25	SOUTH APPROACH	FRONTAGE RD	FRONTAGE RD ENTRANCES	MOT										TOTAL PROJECT
		S	Q	U	A	R	E								Y	A	R	D	S					
1	4" COMPACTED DENSE GRADED AGGREGATE (7)												280	274										554
1	6" COMPACTED DENSE GRADED AGGREGATE	253,972	2,674	9,226	832	6,434	612	3,346	1053															278,149
1	8" COMPACTED DENSE GRADED AGGREGATE									2,175		2,644												4,819
1	14½" COMPACTED DENSE GRADED AGGREGATE									2,332														2,332
1	FULL DEPTH COMPACTED DENSE GRADED AGGREGATE (SHOULDERS) (1)	3,649	982	985	115	994	72	655	106	689														8,247
8	CEMENT STABILIZED ROADBED	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
18	4" DRAINAGE BLANKET TY II	165,473	2,845	9,458	870	6,624	612	3,432	1,053															190,367
100	ASPHALT SEAL AGGREGATE (20 LBS/SY 2 APPLICATIONS)	37,090	3,714	3,375	324	3,598	188	2,374	588	2,426														53,677
103	ASPHALT SEAL COAT (2.40 LBS/SY 2 APPLICATIONS)	37,090	3,714	3,375	324	3,598	188	2,374	588	2,426														53,677
194	APPROX ½"± BASE LEVEL & WEDGE ASPHALT BASE PG 76-22	156,379	4,767	2,227		2,535		3,845		7,617	763													178,133
194	APPROX 2" ± BASE LEVEL & WEDGE ASPHALT BASE PG 76-22 (2)	5,639																						5,639
214	3¼" CL3 ASPHALT BASE 1.00D PG 64-22 (3)	77,577	1,838	1,798	241	2,589	157	1,041	335															85,576
208	4½" CL4 ASPHALT BASE 1.50D PG 64-22 (4)	82,423	895	7,479	615	3,854	469	2,328	731															98,794
205	4½" CL3 ASPHALT BASE 1.50D PG 64-22 (5)	75,863	1,838	1,798	241	2,589	157	1,041	335															83,862
219	3¼" CL4 ASPHALT BASE 1.00D PG 76-22 (6)	88,253	1,113	7,586	604	4,063	463	2,529	718															105,329
221	2" CL2 ASPHALT BASE 0.75D PG 64-22												273											273
221	3" CL2 ASPHALT BASE 0.75D PG 64-22											2,710												2,710
221	3¼" CL2 ASPHALT BASE 0.75D PG 64-22									4,703														4,703
221	3½" CL2 ASPHALT BASE 0.75D PG 64-22									1,930														1,930
221	4" CL2 ASPHALT BASE 0.75D PG 64-22 (7)									2,046				274										2,320
339	1" CL3 ASPHALT SURFACE 0.38D PG 64-22 (8)													74,868										74,868
339	1¼" CL3 ASPHALT SURFACE 0.38D PG 64-22	116874	2,668	2,119	241	2,765	157	1,993	335	12,521	582	2,617	268											143,140
342	1¼" CL4 ASPHALT SURFACE 0.38A PG 76-22	196,460	4,720	8,904	600	6,208	460	5,158	713		943													224,166
358	1.6 LBS/SY ASPHALT CURING SEAL	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
358	2.0 LBS/SY ASPHALT CURING SEAL	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
2542	CEMENT (.06 x 108 LBS/CU FT)	163,663	2,845	9,458	870	6,624	635	3,432	1,084															188,611
2702	5.0 LBS/SY SAND FOR BLOTTER	327,326	5,690	18,916	1,740	13,248	1,270	6,864	2,168															377,222
2676	1" ASPHALT PAVEMENT MILLING & TEXTURING (8)													74,868										74,868
2676	1 ¼" ASPHALT PAVEMENT MILLING & TEXTURING									205	1,470													1,675
20071EC	JOINT ADHESIVE (SHOWN LIN FT)	192,992	6,886	9,616	1034	8,488	784	7,272	1,330	8,490	1,720	1,189												239,801
21289ED	LONGITUDINAL EDGE KEY (SHOWN LIN FT)	55,017	2,692	2,141		3,058		2,221		3,400														68,529

NOTES
1. QUANTITY SHOWN IN CUBIC YARDS
2. 5,639 SY ADDED FOR OVERLAY AT US 25 BRIDGE
3. 527 SY ADDED FOR OVERLAY AT US 25 BRIDGE
4. 873 SY ADDED FOR OVERLAY AT US 25 BRIDGE
5. 196 SY ADDED FOR OVERLAY AT US 25 BRIDGE
6. 2,163 SY ADDED FOR OVERLAY AT US 25 BRIDGE
7. 274 SY SHOWN FOR US 25 MOT
8. SEE MOT TYPICAL NO. 1 IN PHASE 1 MOT PLANS

PAVING AREAS

PAVING SUMMARY

ITEM CODE	ITEM	UNIT					TOTAL PROJECT	
1	DENSE GRADED AGGREGATE ①	TON					117,322	
8	CEMENT STABILIZED ROADBED	SQ YDS					188,611	
18	DRAINAGE BLANKET TY II ②	TON					38,073	
100	ASPHALT SEAL AGGREGATE	TON					1,074	
103	ASPHALT SEAL COAT	TON					129	
194	LEVEL & WEDGE ASPHALT BASE PG76-22	TON					5,519	
205	CL3 ASPHALT BASE 1.50D PG 64-22	TON					15,297	
208	CL4 ASPHALT BASE 1.50D PG 64-22	TON					24,452	
214	CL3 ASPHALT BASE 1.00D PG 64-22	TON					20,756	
219	CL4 ASPHALT BASE 1.00D PG 76-22	TON					18,828	
221	CL2 ASPHALT BASE 0.75D PG 64-22	TON					2,200	
339	CL3 ASPHALT SURFACE 0.38D PG 64-22	TON					13,959	
342	CL4 ASPHALT SURFACE 0.38A PG 76-22	TON					15,411	
358	ASPHALT CURING SEAL	TON					340	
2542	CEMENT	TON					3,685	
2702	SAND FOR BLOTTER	TON					943	
2676	MOBILIZATION FOR MILLING & TEXTURING	LP SUM					1	
2677	ASPHALT PAVEMENT MILLING & TEXTURING	TON					4,233	
20071EC	JOINT ADHESIVE	LIN FT					239,801	
21289ED	LONGITUDINAL EDGE KEY	LIN FT					68,529	
24781EC	INTELLIGENT COMPACTION OF ASPHALT	TON					144,175	④
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQ FT					4,669,000	④

NOTES

ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.

② ESTIMATED AT 100 LBS. PER SQ. YD. PER INCH OF DEPTH.

③ ESTIMATED AT 95 LBS. PER SQ. YD. PER INCH OF DEPTH.

④ SEE SPECIAL NOTE IN THE PROPOSAL

PAVING SUMMARY

COUNTY OF ROCKCASTLE | ITEM NO. 8-6.20 | SHEET NO. 2k

PAVING SUMMARY

ITEM CODE	ITEM	UNIT					TOTAL PROJECT	
1	DENSE GRADED AGGREGATE ①	TON					117,322	
8	CEMENT STABILIZED ROADBED	SQ YDS					188,611	
18	DRAINAGE BLANKET TY II ②	TON					38,073	
100	ASPHALT SEAL AGGREGATE	TON					1,074	
103	ASPHALT SEAL COAT	TON					129	
194	LEVEL & WEDGE ASPHALT BASE PG76-22	TON					5,519	
205	CL3 ASPHALT BASE 1.50D PG 64-22	TON					15,297	
208	CL4 ASPHALT BASE 1.50D PG 64-22	TON					24,452	
214	CL3 ASPHALT BASE 1.00D PG 64-22	TON					20,756	
219	CL4 ASPHALT BASE 1.00D PG 76-22	TON					18,828	
221	CL2 ASPHALT BASE 0.75D PG 64-22	TON					2,200	
339	CL3 ASPHALT SURFACE 0.38D PG 64-22	TON					13,959	
342	CL4 ASPHALT SURFACE 0.38A PG 76-22	TON					15,411	
358	ASPHALT CURING SEAL	TON					340	
2542	CEMENT	TON					3,685	
2702	SAND FOR BLOTTER	TON					943	
2676	MOBILIZATION FOR MILLING & TEXTURING	LP SUM					1	
2677	ASPHALT PAVEMENT MILLING & TEXTURING	TON					4,233	
20071EC	JOINT ADHESIVE	LIN FT					239,801	
21289ED	LONGITUDINAL EDGE KEY	LIN FT					68,529	
24781EC	INTELLIGENT COMPACTION OF ASPHALT	TON					144,175	④
24891EC	PAVE MOUNT INFRARED TEMP EQUIPMENT	SQ FT					4,669,000	④

NOTES

ALL ASPHALT MIXTURES SHALL BE ESTIMATED AT 110 LBS. PER SQ. YD. PER INCH OF DEPTH, UNLESS NOTED OTHERWISE.

① ESTIMATED AT 115 LBS. PER SQ. YD. PER INCH OF DEPTH.

② ESTIMATED AT 100 LBS. PER SQ. YD. PER INCH OF DEPTH.

③ ESTIMATED AT 95 LBS. PER SQ. YD. PER INCH OF DEPTH.

④ SEE SPECIAL NOTE IN THE PROPOSAL

PAVING SUMMARY

COUNTY OF ROCKCASTLE | ITEM NO. 8-6.20 | SHEET NO. 2K

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2m

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ①	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ①	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IV FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ①	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ①	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET		EACH													CU YD	TONS		SQ YD	LIN FT												
	I-75																																	
R160	3164+32.8 - 3165+53	0°	7	MED				1													196			52									
R160	3166+68	0°	3	MED																6	45		② 53									1	(y=1.78') 18" S&F Headwall
R160	3166+68 - 3167+18	0°	4	MED																	80												
R160	3167+18	0°	3	MED					1																								(y=1.77')
R161	3167+18 - 3167+68	0°	3	MED																	80												
Rx	3167+68	0°	2	MED																												1	(y=1.78')
Rx	3167+68 - 3169+48	0°	2	MED																	280											1	(y=1.77')
R161	3169+53	0°	4	MED														4			23					85							
R5	3172+59.4	45° Sk Lt	(Exist	Pipe)																											164		
R162	3174+03	0°	4	MED																	10				38							1	(y=1.78')
R162	3174+03 - 3177+50	0°	5	MED																	540											1	(y=1.77')
R163	Lt 3173+04.6-3175+60.4	0°	3	MED																	444												18" S&F Headwall
R164	3181+51.90	0°	2	MED																	10			80								1	(y=1.78')
R164	3181+51.90 - 3184+50	0°	2	MED																	487											1	(y=1.78')
R5	3184+39.7	25° Sk Rt	(Exist	Pipe)																									136				
R165	3189+24	0°	3	MED																	10			40								1	(y=1.77')
R165	3189+24 - 3192+50	0°	3	MED																	535											1	(y=1.77')
R166	3189+54.6 - 3192+43.7	0°		MED														8	10		548												24" S&F Headwall
R167	3192+50 - 3195+50	0°	2	MED																	490											1	
R168	3207+96.6 - 3210+50		(Exist	Pipe)																				125									
R168	3207+96.60	0°	5	MED																	5											1	(y=1.77')
R168	3210+50	0°	5	MED																	10											1	(y=1.02')
R168	3210+59.20	30° Rt	(Exist	Pipe)																				125				90					
R169	3213+90	0°	2	MED							1																						
R169	3213+90 - 3213+99.40	0°	2	MED																	15												
R169	3213+99.40	30° Rt	2	MED									1								19					92							
R170	Rt 3216+00.3-3217+48.5	0°	2	MED																	250												
R170	3217+95.70	30°10' Rt	3	MED																	25				92								
R171	3219+97.50	0°	3	MED							1										10			44									
R171	3227+99.10	0°	3	MED							1										10			41	92								
R171	3235+00 - 3235+75	0°	2	MED																	120											1	(y=0.20')
R172	3235+75 - 3235+98.5	0°	3	MED																	36											1	(y=0.59')
R172	3235+98.50	0°	4	MED																	10			41								1	(y=0.71')
R172	3243+01	0°	4	MED																	15			46	41							1	(y=1.43')
R173	3248+50 - 3251+50	0°	2	MED																	490			46								1	(y=1.48')
R174	3251+50 - 3254+50.80	0°	3	MED																	490											1	(y=1.53')
R174	3254+50.80	30° Rt	3	MED																	50			44								1	(y=0.43')
R174	3259+00 - 3259+65	0°	3	MED																	102											1	(y=0.14')
R175	3259+65 - 3262+73.30	0°	2	MED																	505											1	(y=0.67')
R175	3262+73.30	0°	2	MED																	10			41								1	(y=2.51')
R18	3265+23.4	45°00' Lt	(Exist	Pipe)																											328		
R175	3265+71.40	0°	2	MED																	10			49								1	(y=2.61')

① SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS
② SEE NOTE 3 ON SHEET R2q FOR ADDITIONAL INFORMATION

PIPE DRAINAGE SUMMARY

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2m

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ①	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ①	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IV FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ①	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ①	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET		EACH													CU YD	TONS		SQ YD	LIN FT												
	I-75																																	
R160	3164+32.8 - 3165+53	0°	7	MED				1													196			52									
R160	3166+68	0°	3	MED																6	45		② 53									1	(y=1.78') 18" S&F Headwall
R160	3166+68 - 3167+18	0°	4	MED																	80												
R160	3167+18	0°	3	MED					1																								(y=1.77')
R161	3167+18 - 3167+68	0°	3	MED																	80												
Rx	3167+68	0°	2	MED																												1	(y=1.78')
Rx	3167+68 - 3169+48	0°	2	MED																	280											1	(y=1.77')
R161	3169+53	0°	4	MED														4			23					85							
R5	3172+59.4	45° Sk Lt	(Exist	Pipe)																											164		
R162	3174+03	0°	4	MED																	10				38							1	(y=1.78')
R162	3174+03 - 3177+50	0°	5	MED																	540											1	(y=1.77')
R163	Lt 3173+04.6-3175+60.4	0°	3	MED																	444												18" S&F Headwall
R164	3181+51.90	0°	2	MED																	10			80								1	(y=1.78')
R164	3181+51.90 - 3184+50	0°	2	MED																	487											1	(y=1.78')
R5	3184+39.7	25° Sk Rt	(Exist	Pipe)																									136				
R165	3189+24	0°	3	MED																	10			40								1	(y=1.77')
R165	3189+24 - 3192+50	0°	3	MED																	535											1	(y=1.77')
R166	3189+54.6 - 3192+43.7	0°		MED														8	10		548												24" S&F Headwall
R167	3192+50 - 3195+50	0°	2	MED																	490											1	
R168	3207+96.6 - 3210+50		(Exist	Pipe)																				125									
R168	3207+96.60	0°	5	MED																	5											1	(y=1.77')
R168	3210+50	0°	5	MED																	10											1	(y=1.02')
R168	3210+59.20	30° Rt	(Exist	Pipe)																				125				90					
R169	3213+90	0°	2	MED								1																					
R169	3213+90 - 3213+99.40	0°	2	MED																	15												
R169	3213+99.40	30° Rt	2	MED									1								19					92							
R170	Rt 3216+00.3-3217+48.5	0°	2	MED																	250												
R170	3217+95.70	30°10' Rt	3	MED																	25				92								
R171	3219+97.50	0°	3	MED								1									10			44									
R171	3227+99.10	0°	3	MED								1									10			41	92								
R171	3235+00 - 3235+75	0°	2	MED																	120											1	(y=0.20')
R172	3235+75 - 3235+98.5	0°	3	MED																	36											1	(y=0.59')
R172	3235+98.50	0°	4	MED																	10			41								1	(y=0.71')
R172	3243+01	0°	4	MED																	15			46	41							1	(y=1.43')
R173	3248+50 - 3251+50	0°	2	MED																	490			46								1	(y=1.48')
R174	3251+50 - 3254+50.80	0°	3	MED																	490											1	(y=1.53')
R174	3254+50.80	30° Rt	3	MED																	50			44								1	(y=0.43')
R174	3259+00 - 3259+65	0°	3	MED																	102											1	(y=0.14')
R175	3259+65 - 3262+73.30	0°	2	MED																	505											1	(y=0.67')
R175	3262+73.30	0°	2	MED																	10			41								1	(y=2.51')
R18	3265+23.4	45° 00' Lt	(Exist	Pipe)																											328		
R175	3265+71.40	0°	2	MED																	10			49								1	(y=2.61')

① SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS

② SEE NOTE 3 ON SHEET R2q FOR ADDITIONAL INFORMATION

PIPE DRAINAGE SUMMARY

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2o

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ①	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ①	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IV FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ①	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ①	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET		EACH													CU YD	TONS		SQ YD	LIN FT												
R176	3269+41	0°	2	MED																	35													15° S&F Headwall
R176	3272+48.60	0°	3	MED																	10			40									1	
R22	3275+04.2	30°′ Lt	(Exist Pipe)																															
R177	3277+67.40	0°	9	MED																33														72° Pipe Culvert Headwall
R179	3279+98.40	0°	9	MED														5		10	120			32									1	(y=3.14′) 18° S&F Headwall
R180	3286+00 - 3289+09	0°	2	MED																	505												1	(y=2.97′)
R180	3289+09	13° 43′ Rt	4	MED												1					45				28								1	(y=3.02′) MH w/Fr & Lid Ty 2
R180	3289+09 - 3291+65	0°	2	MED																	465													
R182	3287+52.9 - 3289+75	0°	1	MED																	413													
R181	3289+75 - 3291+65	0°	2	MED																	350													
R182	245.6′ Rt 3291+43	0°	5	MED																	80													2-36° Pipe Culvert Headwalls
R182	3291+65	0°	2	MED											1			2		32	55													Manhole w/Frame & Lid Type 2
R183	Lt 3291+65-3294+00	0°	2	MED		1															455													
R183	3294+00	0°	1	MED		1																											1	(y=3.33′)
R183	3294+00 - 3294+93	0°	3	MED																	150													
R183	3294+00 - 3294+93	0°	2	MED																	173													
R183	3294+93	0°	4	MED		1												1		25	105	② 102											1	(y=3.32′) 24° S&F Headwall
R184	Lt 3294+93-3295+60	0°	2	MED																	108													
R184	3294+93 - 3296+00	0°	3	MED																	182													
R184	3296+00 - 3298+65	0°	2	MED					1												432													(y=2.59′)
R184	LT 3295+60 - 3297+50	0°	2	MED		1															325													
R185	3298+65 - 3289+90	0°	2	MED																	38												1	(y=0.92′)
R185	Lt 3297+50-3300+37.50	0°	2	MED		1															495													
R185	3298+90 - 3300+55	0°	2	MED																	268												1	(y=0.70′)
R186	3300+55	0°	1	MED																													1	(y=0.08′)
R186	3300+82.50	0°	1	MED														6		42	20													15° S&F Headwall
R187	3302+20	0°	2	MED								1						17		95	154		② 92											(y=0.10′)
R187	3303+60.70	15° Rt	9	MED														7		45	55					90								24° S&F Headwall
R188	3304+00	0°	2	MED								1									85		② 43											(y=0.01′) 18° S&F Headwall
R188	3304+00 - 3305+00	0°	2	MED						1											159												1	(y=0.01′)
R188	3309+37.60	0°	10	MED										1				3		50							119							30° Pipe Culvert Headwall
R188	3312+97.50	0°	8	MED														12		36	20						97							30° Pipe Culvert Headwall
R189	3313+97.50	0°	4	MED														2		9	30			42									1	(y=0.03′) 15° S&F Headwall
R189	3325+05	0°	5	MED														2		7	85		② 52										1	(y=1.43′) 18° S&F Headwall
R190	3325+05 - 3328+00	0°	3	MED																	485												1	(y=1.41′)
R190	3328+00 - 3330+35	0°	3	MED																	378												1	(y=1.41′)
R190	3330+35 - 3331+00	0°	3	MED																	105												2	(y=0.54′) (y=0.14′)
R191	3331+21.40	0°	(Exist Pipe)											1				11		65								188						36° Pipe Culvert Headwall
R192	3335+45.80	0°	9	MED														11		12	5			40									1	(y=0.26′) 15° S&F Headwall
R192	3335+45.80 - 3336+00	0°	3	MED																	85													
R192	3336+00	0°		MED																													1	(y=0.64′)
R193	Lt 3335+54.6-3337+77.9	0°	3	MED																	392													18° S&F Headwall
R194	3344+07.80	14° 58′ Rt	10	MED										1				2		23	115						71							30° Pipe Culvert Headwall
R194	3344+07.80 - 3344+50	0°	5	MED																	65													
R194	3344+50	0°		MED																													1	(y=1.43′)
R195	3344+50 - 3347+80	0°	3	MED																	540													
R195	3347+80 - 3351+10	0°	3	MED																	540												1	(y=1.43′)
R195	3351+10 - 3351+50	0°	3	MED																	65												2	(y=0.69′) (y=0.41)

① SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS

② SEE NOTE 3 ON SHEET R2q FOR ADDITIONAL INFORMATION

PIPE DRAINAGE SUMMARY

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2o

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ①	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ①	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IV FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ①	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ①	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET		EACH													CU YD	TONS		SQ YD	LIN FT												
R176	3269+41	0°	2	MED																	35													15" S&F Headwall
R176	3272+48.60	0°	3	MED																	10			40									1	
R22	3275+04.2	30°/ Lt	(Exist Pipe)																							144								
R177	3277+67.40	0°	9	MED																33														72" Pipe Culvert Headwall
R179	3279+98.40	0°	9	MED														5		10	120			32									1	(y=3.14') 18" S&F Headwall
R180	3286+00 - 3289+09	0°	2	MED																	505												1	(y=2.97')
R180	3289+09	13° 43' Rt	4	MED												1					45				28								1	(y=3.02') MH w/Fr & Lid Ty 2
R180	3289+09 - 3291+65	0°	2	MED																	465													
R182	3287+52.9 - 3289+75	0°	1	MED																	413													
R181	3289+75 - 3291+65	0°	2	MED																	350													
R182	245.6' Rt 3291+43	0°	5	MED																	80													2-36" Pipe Culvert Headwalls
R182	3291+65	0°	2	MED											1			2		32	55													Manhole w/Frame & Lid Type 2
R183	Lt 3291+65-3294+00	0°	2	MED		1															455													
R183	3294+00	0°	1	MED		1																											1	(y=3.33')
R183	3294+00 - 3294+93	0°	3	MED																	150													
R183	3294+00 - 3294+93	0°	2	MED																	173													
R183	3294+93	0°	4	MED		1												1		25	105	② 102											1	(y=3.32') 24" S&F Headwall
R184	Lt 3294+93-3295+60	0°	2	MED																	108													
R184	3294+93 - 3296+00	0°	3	MED																	182													
R184	3296+00 - 3298+65	0°	2	MED					1												432													(y=2.59')
R184	LT 3295+60 - 3297+50	0°	2	MED		1															325													
R185	3298+65 - 3289+90	0°	2	MED																	38												1	(y=0.92')
R185	Lt 3297+50-3300+37.50	0°	2	MED		1															495													
R185	3298+90 - 3300+55	0°	2	MED																	268												1	(y=0.70')
R186	3300+55	0°	1	MED																													1	(y=0.08')
R186	3300+82.50	0°	1	MED														6		42	20													15" S&F Headwall
R187	3302+20	0°	2	MED								1						17		95	154		② 92											(y=0.10')
R187	3303+60.70	15° Rt	9	MED														7		45	55					90								24" S&F Headwall
R188	3304+00	0°	2	MED								1									85		② 43											(y=0.01') 18" S&F Headwall
R188	3304+00 - 3305+00	0°	2	MED						1											159												1	(y=0.01')
R188	3309+37.60	0°	10	MED										1				3		50							119							30" Pipe Culvert Headwall
R188	3312+97.50	0°	8	MED														12		36	20						97							30" Pipe Culvert Headwall
R189	3313+97.50	0°	4	MED														2		9	30			42									1	(y=0.03') 15" S&F Headwall
R189	3325+05	0°	5	MED														2		7	85		② 52										1	(y=1.43') 18" S&F Headwall
R190	3325+05 - 3328+00	0°	3	MED																	485												1	(y=1.41')
R190	3328+00 - 3330+35	0°	3	MED																	378												1	(y=1.41')
R190	3330+35 - 3331+00	0°	3	MED																	105												2	(y=0.54') (y=0.14')
R191	3331+21.40	0°	(Exist Pipe)											1				11		65								188						36" Pipe Culvert Headwall
R192	3335+45.80	0°	9	MED														11		12	5			40									1	(y=0.26') 15" S&F Headwall
R192	3335+45.80 - 3336+00	0°	3	MED																	85													
R192	3336+00	0°		MED																													1	(y=0.64')
R193	Lt 3335+54.6-3337+77.9	0°	3	MED																	392													18" S&F Headwall
R194	3344+07.80	14° 58' Rt	10	MED										1				2		23	115						71							30" Pipe Culvert Headwall
R194	3344+07.80 - 3344+50	0°	5	MED																	65													
R194	3344+50	0°		MED																													1	(y=1.43')
R195	3344+50 - 3347+80	0°	3	MED																	540													
R195	3347+80 - 3351+10	0°	3	MED																	540												1	(y=1.43')
R195	3351+10 - 3351+50	0°	3	MED																	65												2	(y=0.69') (y=0.41)

① SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS

② SEE NOTE 3 ON SHEET R2q FOR ADDITIONAL INFORMATION

PIPE DRAINAGE SUMMARY

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2q

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ②	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ②	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IA FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ②	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ②	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET															CU YD	TONS		SQ YD	LIN FT												
R196	3353+95.40	0°	6	MED									1					1		10	70			38									1	(y=0.29') 15° S&F Headwall
R196	3353+95.4 - 3356+00	0°	3	MED																	329												1	(y=1.21')
R196	3371+52.20	0°	3	MED																	25			35									1	
R196	3375+02.90	0°	2	MED																	30					87								
R197	3379+40	0°	4	MED							1																							
R197	3379+40 - 3379+54	0°	2	MED																	20													
R197	3379+54	0°	2	MED				1													30						90							
R198	3389+50	0°	3	MED							1																							(Top Phase Only)
R198	3389+50 - 3392+50	0°	3	MED																														
R198	3392+50	0°	3	MED							1																							(Top Phase Only)
R199	3392+50 - 3395+50	0°	3	MED																														
R199	Rt 3393+59.6-3395+95.4	0°	2	MED																														18" S&F Headwall
R200	3395+50	0°	3	MED							1																							(Top Phase Only)
R200	3395+50 - 3398+00	0°	4	MED																														
R200	3398+00	0°	8	MED							1							10	20															(Top Phase Only)
	TOTALS				-	5	1	2	2	1	8	2	5	-	1	1	-	104	30	500	14656	③ 102	③ 240	1001	291	498	377	278	136	-	717	12	36	
	RAMP A																																	
R44	54+81.53	29° Lt	(Exist	Pipe)																											43			
	TOTALS																														43			
	RAMP B																																	
R201	200+99	0°	3	MED											1						91													Manhole w/Frame & Lid Type 2
R203	206+19	16° Lt		MED										1												76								
	TOTALS													1	1						91					76								
	RAMP D-1																																	
R202	600+00	0°		MED													1																	Manhole w/Frame & Lid Type 1
R202	600+00 - 601+50	0°	4	MED																	280													
R202	601+50	0°	3	MED	1																70													30" Pipe Culvert Headwall
	TOTALS				1												1				350													
	US 25																																	
R203	54+81.53	18° 35' Lt	9	MED																20	15				70									18" S&F Headwall
	TOTALS																			20	15				70									
	FRONTAGE ROAD																																	
R204	30+14.70	0°	4	MED																10	85													
	Ent Lt 38+44.7																																	
	TOTALS																			10	85													
	PROJECT TOTALS				1	5	1	2	2	1	8	2	5	1	2	1	1	① 104	① 30	① 530	15197	③ 123	③ 361	1001	361	574	377	278	136	43	717	12	36	

① CARRIED FORWARD TO GENERAL SUMMARY

② SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS

③ PROJECT TOTAL QUANTITIES FOR BORE & JACK PIPE 24 INCH AND BORE AND JACK PIPE 18 INCH HAVE BEEN REVISED (INCREASED) FOR CONSTRUCTABILITY PURPOSES. THE CONTRACTOR IS TO OBTAIN THE APPROVAL OF THE ENGINEER PRIOR TO INCREASING THE INDIVIDUAL TOTALS SHOWN ON THE PIPE DRAINAGE SUMMARY SHEETS AND PIPE SHEETS.

PIPE DRAINAGE SUMMARY

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R2q

SHEET NO.		SKEW	COVER HEIGHT	DESIGN pH LEVEL	DROP BOX INLET TYPE 7	DROP BOX INLET TYPE 13G	DROP BOX INLET TYPE 13S	CAP DROP BOX INLET	ASYM CONC MED BARRIER BOX INLET TYPE 12AIL-50 ②	CONC MED BARRIER BOX INLET TYPE 12BI-50	CONC MED BARRIER BOX INLET TYPE 12B2-50	ASYM CONC MED BARRIER BOX INLET TYPE 12B2-50 ②	JUNCTION BOX	ADJUST INLET	MANHOLE TYPE A	MANHOLE TYPE B	MANHOLE TYPE C	ROADWAY EXCAVATION	CHANNEL LINING CLASS IA	CHANNEL LINING CLASS III	GEOTEXTILE FABRIC TY IV FOR PIPE	BORE & JACK PIPE 24 INCH	BORE & JACK PIPE 18 INCH	S CIPP LINER 15 INCH	S CIPP LINER 18 INCH	S CIPP LINER 24 INCH	S CIPP LINER 30 INCH	S CIPP LINER 36 INCH	S CIPP LINER 54 INCH	S CIPP LINER 60 INCH	S CIPP LINER 72 INCH	ASYM CONC MED BARRIER BOX INLET TYPE 12BIH-50 ②	ASYM CONC MED BARRIER BOX INLET TYPE 12BIL-50 ②	REMARKS
ITEM CODE					1538	1559	1568	1584	22620NN	23611NN	21602NN	21602NN	1650	1719	1756	1761	1767	2200	2482	2484	2600	21799EN	23126EN	15124	15125	15007	15128	15129	15132	15133	15135	23611NN	23611NN	
UNIT TO BID ON			FEET															CU YD	TONS		SQ YD	LIN FT												
R196	3353+95.40	0°	6	MED									1					1		10	70			38									1	(y=0.29') 15° S&F Headwall
R196	3353+95.4 - 3356+00	0°	3	MED																	329												1	(y=1.21')
R196	3371+52.20	0°	3	MED																	25			35									1	
R196	3375+02.90	0°	2	MED																	30					87								
R197	3379+40	0°	4	MED							1																							
R197	3379+40 - 3379+54	0°	2	MED																	20													
R197	3379+54	0°	2	MED				1													30						90							
R198	3389+50	0°	3	MED							1																							(Top Phase Only)
R198	3389+50 - 3392+50	0°	3	MED																														
R198	3392+50	0°	3	MED							1																							(Top Phase Only)
R199	3392+50 - 3395+50	0°	3	MED																														
R199	Rt 3393+59.6-3395+95.4	0°	2	MED																														18° S&F Headwall
R200	3395+50	0°	3	MED							1																							(Top Phase Only)
R200	3395+50 - 3398+00	0°	4	MED																														
R200	3398+00	0°	8	MED							1							10	20															(Top Phase Only)
	TOTALS				-	5	1	2	2	1	8	2	5	-	1	1	-	104	30	500	14656	③ 102	③ 240	1001	291	498	377	278	136	-	717	12	36	
	RAMP A																																	
R44	54+81.53	29° Lt	(Exist	Pipe)																										43				
	TOTALS																													43				
	RAMP B																																	
R201	200+99	0°	3	MED											1						91													Manhole w/Frame & Lid Type 2
R203	206+19	16° Lt		MED										1												76								
	TOTALS													1	1						91					76								
	RAMP D-1																																	
R202	600+00	0°		MED													1																	Manhole w/Frame & Lid Type 1
R202	600+00 - 601+50	0°	4	MED																	280													
R202	601+50	0°	3	MED	1																70													30" Pipe Culvert Headwall
	TOTALS				1												1				350													
	US 25																																	
R203	54+81.53	18° 35' Lt	9	MED																20	15				70									18° S&F Headwall
	TOTALS																			20	15				70									
	FRONTAGE ROAD																																	
R204	30+14.70	0°	4	MED																10	85													
	Ent Lt 38+44.7																																	
	TOTALS																			10	85													
	PROJECT TOTALS				1	5	1	2	2	1	8	2	5	1	2	1	1	① 104	① 30	① 530	15197	③ 123	③ 361	1001	361	574	377	278	136	43	717	12	36	

① CARRIED FORWARD TO GENERAL SUMMARY

② SEE SHEETS R76B AND R76C FOR ASYM CONC MED BARRIER BOX INLET DETAILS

③ PROJECT TOTAL QUANTITIES FOR BORE & JACK PIPE 24 INCH AND BORE AND JACK PIPE 18 INCH HAVE BEEN REVISED (INCREASED) FOR CONSTRUCTABILITY PURPOSES. THE CONTRACTOR IS TO OBTAIN THE APPROVAL OF THE ENGINEER PRIOR TO INCREASING THE INDIVIDUAL TOTALS SHOWN ON THE PIPE DRAINAGE SUMMARY SHEETS AND PIPE SHEETS.

PIPE DRAINAGE SUMMARY

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	RI8

CONST TRANSITION FROM BRIDGE TO CONCRETE BW
Sta 3265+68.1 to Sta 3265+88.1
Sta 3268+63.0 to Sta 3268+83.0
SEE PROPOSAL FOR TRANSITION DETAIL

P.I. 3280+16.13
Δ = 48°05'18" Rt.
C = 1°30'07"
T = 1702.07'
L = 3201.92'
R = 3815.00'
E = 362.47'
e = 5.1%
Runoff = 325'
Runout = 127.45'

℄ RAMP C-1
℄ RAMP D-1
℄ RAMP D
℄ RAMP C
℄ RAMP A
℄ RAMP B
℄ RAMP B-1
℄ SURVEY INTERSTATE 75
℄ INTERSTATE I 75
℄ US 25
CP 117
CP 118
CP 201
CP 202
CP 204
CP 55
C P # 203
Sta 45+36.60 US 25 =
Sta 321+89.00 Ramp C
Sta 45+82.3 US 25 =
Sta 400+00 Ramp D
Sta 3267+17.97 I-75 =
Sta 50+00 US 25
Sta 53+96.4 US 25 =
Sta 200+00 Ramp B
Sta 54+49.4 US 25 =
Sta 120+94.38 Ramp A
3260+00
3265+00
3270+00
3275+00
50+00
55+00
500+00
P.C. 404+29.32
P.T. 602+83.20
P.C. 326+14.06
P.C. 114+70.80
P.T. 118+38.49
P.T. 318+95.35
P.T. 324+93.72
P.C. 347+85.00
P.C. 55+18.04
P.T. 502+01.10
P.C. 500+00.00
P.T. 517+16.59
S.T. 49+93.05
C.S. 47+68.05
N 25°16'14" E
S 84°10'55" E
S 81°55'22" E
S 43°15'00" E
N 57°43'56" W
N 58°10'29" W
N 2°19'31" E
S 9°43'51" W
N 55°02'55" W
TO KNOXVILLE
TO LEXINGTON
SOUTHBOUND LANES
NORTHBOUND LANES
Existing 42'-85'~62' Simple Span Composite Steel Bridge
Existing 52'~85'~72' Simple Span Composite Steel Bridge (Remove)
Remove CBI
Remove Inlet
Remove Headwall
Remove Slope Paving
Exist 15" RCP (Leave In Place)
Exist 72" RCP (Leave In Place)
Exist 60" CMP
Exist 15" RCP (Remove)
ACMBBI TY 12BIL-50
TG 1034.60
Inv 1028.97
TG 1030.45
Inv 1024.25
TG 1020.72
Inv 1014.93
CBI Type B
FL 1024.63
Inv 1019.90
Manhole TY
Lvd 982.03
Inv 974.3
OE 991.90
OE 966.8
6" Perf Pipe
4" Perf Pipe
4" Non Perf Pipe
15" SS
15" Pipe
*4" Perf Pipe Underdrain
*Place 4" Perf Pipe Before Approach Slab Is Constructed.
NEW ELECTRIC CABLE FOR HIGH MAST LIGHTING
EXPOSED TOP OF 24" DI W M ELEV 1004.59
EXPOSED TOP OF 24" DI W M ELEV 1000.96
ELJB 3" CONDUIT EXPOSED
IE 976.50
Spl 7.5' FB Dt
Spl V Dt
Spl V-FB
Spl 2' FB Dt
2' FB Dt
2' FB Dt
7.5' Dt Bench
10' Dt Bench
15' Dt Bench
25:1 Taper
50:1 Taper
250' Taper
Exist C/A Fence
Exist Fence Line
Fence Main NYS
Waffle House
PROP C/A R/W & FENCE
INGRESS / EGRESS EASEMENT
N38°31'04"W 830.76'
S38°31'04"E 748.19'
S45°54'39"E 194.34'
P 4
P 13

SCALE: 1"=50'

INTERSTATE 75
STA. 3260+00 TO STA. 3275+00

FILE NAME: P:\CIVIL\ROCK75\8-6.20\CONTRACT PLANS AND PROPOSAL\CONTRACT PLAN SET\ROADWAY\RO1800PL.DGN
USER: tvonbehren
DATE PLOTTED: October 18, 2017
E-SHEET NAME: RO1800PL
MicroStation v8.11.7.443

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R18

CONST TRANSITION FROM BRIDGE TO CONCRETE BW
Sta 3265+68.1 to Sta 3265+88.1
Sta 3268+63.0 to Sta 3268+83.0
SEE PROPOSAL FOR TRANSITION DETAIL
P.I. 3280+16.13
Δ = 48°05'18" Rt.
C = 1°30'07"
T = 1702.07'
L = 3201.92'
R = 3815.00'
E = 362.47'
e = 5.1%
Runoff = 325'
Runout = 127.45'
℄ RAMP C-1
℄ RAMP C
℄ RAMP D-1
℄ RAMP D
℄ RAMP A
℄ RAMP B
℄ RAMP B-1
C P # 203
Sta 45+36.60 US 25 =
Sta 321+89.00 Ramp C
Sta 45+82.3 US 25 =
Sta 400+00 Ramp D
Sta 3267+17.97 I-75 =
Sta 50+00 US 25
Sta 53+96.4 US 25 =
Sta 200+00 Ramp B
Sta 54+49.4 US 25 =
Sta 120+94.38 Ramp A
℄ SURVEY INTERSTATE 75
℄ INTERSTATE 75
℄ US 25
TO KNOXVILLE
SOUTHBOUND LANES TO LEXINGTON
NORTHBOUND LANES
N 57°43'56" W
N 58°10'29" W
N 55°02'55" W
S43°15'00"E
N 25°16'14" E
3260+00
3265+00
3270+00
3275+00
50+00
55+00
500+00
CP 117
CP 118
CP 201
CP 202
CP 204
CP 55
Existing 42'-85'-62' Simple Span Composite Steel Bridge
Existing 52'-85'-72' Simple Span Composite Steel Bridge (Remove)
*Place 4" Perf Pipe Before Approach Slab Is Constructed.
NEW ELECTRIC CABLE FOR HIGH MAST LIGHTING
HIGH MAST LIGHT
PROP C/A R/W & FENCE
INGRESS / EGRESS EASEMENT
Exist C/A Fence
10' Dt Bench
15' Dt Bench
7.5' Dt Bench
250' Taper
25:1 Taper
50:1 Taper
P 4
P 13
Waffle House

INTERSTATE 75
STA. 3260+00 TO STA. 3275+00

SCALE: 1"=50'

FILE NAME: P:\CIVIL\ROCK75\8-6.20\CONTRACT PLANS AND PROPOSAL\CONTRACT PLAN SET\ROADWAY\R01800PL.DGN

USER: tvonbehren
DATE PLOTTED: October 18, 2017

E-SHEET NAME: R01800PL

MicroStation v8.11.7.443

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R19

CONSTRUCT CONCRETE MEDIAN BARRIER		
STATION TO STATION	TYPE	LF
3260+00 - 3262+57.6	12C-50"	257.6
3262+82.6 - 3265+55.6	12C-50"	273.0
3265+80.6 - 3265+88.1	12C-50"	7.5
3268+63.0 - 3272+32.4	12C-50"	369.4
3272+57.4 - 3275+00	12C-50"	242.6

DITCH CONSTRUCTION NOTES

Station	Loc.	Size-Shape	Lining Type	Quantity	D	T
3260+00 - 3260+50	Lt	Spl V	EC Blnkt	56 SY	1.0'	
3268+25 - 3272+50	Lt	Spl V	EC Blnkt	440 SY	1.0'	
3260+00 - 3260+15	Rt	V	EC Blnkt	18 SY	1.0'	

CONSTRUCT STEEL W BEAM GUARDRAIL (SF)

Lt Sta 3263+59.2 to Sta 3265+55.9 (200 LF) & 1 End Treatment Type 2A & 1 Guardrail Connector to Bridge End Type A-1

Lt Sta 3268+04.5 to Sta 3271+47 (350 LF) & 1 Guardrail Connector to Bridge End Type A & 1 End Treatment Type 2A (W=22', Flare=330') (225 CY Emb)

Rt Sta 3261+99 to Sta 3266+41.9 (400 LF) & 1 End Treatment Type 4A W/ 1 Object Marker Ty 3 (32 CY Emb) & 1 Guardrail Connector to Bridge End Type A

Rt Sta 3269+03.8 to Sta 3275+00 (586.3 LF) & 1 Guardrail Connector to Bridge End Type A-1

REMOVE EXISTING BRIDGE

Lt Sta 3267+17.97 (US 25 Sta 50+00) 42'-85'-62' Simple Span Composite Steel Bridge (over US 25)

Rt Sta 3267+17.97 (US 25 Sta 50+00) 52'-85'-72' Simple Span Composite Steel Bridge (over US 25)

CONSTRUCT ISLAND HEADER CURB

Rt Sta 3269+13.6 to Sta 3269+31.2 (17.3 LF)

REMOVE EXISTING STEEL W BEAM GUARDRAIL

Lt Sta 3261+47 to Sta 3265+83 (441 LF)
Rt Sta 3260+00 to Sta 3266+61 (655 LF)
Lt Sta 3263+51 to Rt Sta 3266+33 (Med) (469 LF)
Lt Sta 3267+76 to Sta 3270+99 (329 LF)
Lt Sta 3268+04 to Rt Sta 3270+85 (Med) (469 LF)
Rt Sta 3268+81 to Sta 3275+00 (608 LF)

REMOVE CABLE GUARDRAIL BARRIER SYSTEM

Lt Sta 3260+00 to Sta 3265+68 (569 LF)
Lt Sta 3270+81 to Sta 3266+61 (422 LF)

SCALE: 1"= 50'

INTERSTATE 75
STA 3260+00 TO STA 3275+00
NOTES

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R19

CONSTRUCT CONCRETE MEDIAN BARRIER		
STATION TO STATION	TYPE	LF
3260+00 - 3262+57.6	12C-50"	257.6
3262+82.6 - 3265+55.6	12C-50"	273.0
3265+80.6 - 3265+88.1	12C-50"	7.5
3268+63.0 - 3272+32.4	12C-50"	369.4
3272+57.4 - 3275+00	12C-50"	242.6

DITCH CONSTRUCTION NOTES

Station	Loc.	Size-Shape	Lining Type	Quantity	D	T
3260+00 - 3260+50	Lt	Spl V	EC Blnkt	56 SY	1.0'	
3268+25 - 3272+50	Lt	Spl V	EC Blnkt	440 SY	1.0'	
3260+00 - 3260+15	Rt	V	EC Blnkt	18 SY	1.0'	

CONSTRUCT STEEL W BEAM GUARDRAIL (SF)

Lt Sta 3263+59.2 to Sta 3265+55.9 (200 LF) & 1 End Treatment Type 2A & 1 Guardrail Connector to Bridge End Type A-1

Lt Sta 3268+04.5 to Sta 3271+47 (350 LF) & 1 Guardrail Connector to Bridge End Type A & 1 End Treatment Type 2A (W=22', Flare=330') (225 CY Emb)

Rt Sta 3261+99 to Sta 3266+41.9 (400 LF) & 1 End Treatment Type 4A W/ 1 Object Marker Ty 3 (32 CY Emb) & 1 Guardrail Connector to Bridge End Type A

Rt Sta 3269+03.8 to Sta 3275+00 (586.3 LF) & 1 Guardrail Connector to Bridge End Type A-1

REMOVE EXISTING BRIDGE

Lt Sta 3267+17.97 (US 25 Sta 50+00) 42'-85'-62' Simple Span Composite Steel Bridge (over US 25)

Rt Sta 3267+17.97 (US 25 Sta 50+00) 52'-85'-72' Simple Span Composite Steel Bridge (over US 25)

CONSTRUCT ISLAND HEADER CURB

Rt Sta 3269+13.6 to Sta 3269+31.2 (17.3 LF)

REMOVE EXISTING STEEL W BEAM GUARDRAIL

Lt Sta 3261+47 to Sta 3265+83 (441 LF)
Rt Sta 3260+00 to Sta 3266+61 (655 LF)
Lt Sta 3263+51 to Rt Sta 3266+33 (Med) (469 LF)
Lt Sta 3267+76 to Sta 3270+99 (329 LF)
Lt Sta 3268+04 to Rt Sta 3270+85 (Med) (469 LF)
Rt Sta 3268+81 to Sta 3275+00 (608 LF)

REMOVE CABLE GUARDRAIL BARRIER SYSTEM

Lt Sta 3260+00 to Sta 3265+68 (569 LF)
Lt Sta 3270+81 to Sta 3266+61 (422 LF)

SCALE: 1"= 50'

INTERSTATE 75
STA 3260+00 TO STA 3275+00
NOTES

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R96b

MAINTENANCE OF TRAFFIC NOTES

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, should be treated as follows:

- Less than 2" - No protection required. Uneven Lanes signs W8-11 should be placed in advance and throughout the drop-off area.
- 2" to 4" - Place plastic drums, vertical panels, or barricades every 100 feet on tangent sections for speeds of 50 miles per hour or greater. Cones may be used in place of plastic drums, panels, and barricades during daylight hours only. Spacing for tapers should be in accordance with the Manual on Uniform Traffic Control Devices.
- Greater than 4" - Concrete Barrier Walls or wedge with 3:1 or flatter slope needed. If there is 8 feet or more distance between the edge of pavement and drop-off drums, panels, or barricades may be used. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations. For temporary conditions, drop-offs greater than 4" may be protected with plastic drums, vertical panels, or barricades for short distances during daylight hours while work is being done in the drop-off area. Payment will be allowed for the DGA materials used for wedging.
- Pavement edges at entrances and approaches will receive an asphalt wedge to maintain traffic.

LANE CLOSURES AND LANE SHIFTS

All lane closures, lane shifts and tapers shall be in accordance with the Standard Drawings and the MUTCD. Any lane closure or lane shift must be approved by the Engineer prior to the closure or lane shift. The Contractor must notify the Engineer at least five (5) days prior to any proposed lane closure or traffic pattern change. Contrary to Section 112, lane closures will not be measured for payment, but are considered incidental to "Maintain And Control Traffic," lump sum.

DOUBLE FINE SIGN NOTE

Locations not routinely protected by a barrier wall are eligible for "Double Fine" signs. A highway zone which has barrier wall but in which unusual or hazardous conditions exist which expose the workers to traffic hazards shall also be eligible for "Double Fine" signs. However, the signs shall only be placed in portions of work zones in which workers are exposed to traffic hazards.

The Contractor shall notify the Engineer a minimum of twelve (12) hours prior to using "Double Fine" signs. At the beginning of the highway work zone, the "Fine Doubled In Work Zone" sign will be placed. At the end of the work zone the "End Double Fine" sign shall be placed. The signs shall be covered or removed when the highway work zone does not have workers for more than a two (2) hour period.

Payment for the signs shall be made at the unit bid price for "Temporary Signs". The moving and covering of the signs shall be incidental to the bid item "Temporary Signs".

COORDINATION

The Contractor is advised there may be an active construction project adjacent to this project. He shall coordinate his work with the adjacent Contractor to avoid conflicts in the maintenance of traffic. Items of particular concern are temporary concrete barrier wall placement, relocation and removal and mainline I-75 lane closures, road closures, and traffic shifts. The Contractor shall also coordinate the location of the construction access points in the vicinity of the adjacent project. Construction of both projects should progress at a rate that will allow the concurrent shift of I-75 traffic to the new median pavement of both construction sections.

PROJECT TRAFFIC COORDINATOR (PTC)

Be advised this project is a significant project pursuant to section 112.03.12.

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must be certified in accordance with Department's 2012 Standard Specifications Sec. 112.03.12. The Traffic Coordinator will inspect the project maintenance of traffic once daily, including weekends, during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

LAW ENFORCEMENT OFFICERS (LEO'S)

Police support shall be a unit consisting of an off-duty police officer from any police force agency having lawful jurisdiction and a police car equipped with externally mounted flashing blue lights. Officers may be asked to issue citations for traffic violations, but will be considered incidental to the contract unit bid price for "Law Enforcement Officer". No additional compensation will be provided. The officers will be placed at the discretion of the Engineer. Police support will be measured and paid on a per hour basis for each officer and police vehicle.

WRECKER SERVICE

The contractor will have continuously on call a 24-hour wrecker service that the Contractor will promptly contact to remove any disabled vehicle within the project Limits. The wrecker service should have, but not be limited to, the following items/capabilities: cell phone, gasoline, jumper cables, vehicle pushing, and tire changing. The contractor will be charged three thousand dollars ($3,000) liquidated damages for each 15 minute period for any incidence when the wrecker service fails to reach the disabled vehicle beyond the 30 minute allotted response time. Payment for the wrecker service will be considered incidental to the bid item 'maintain and control traffic'.

BUFFER ZONE

Barrels and other traffic control devices will be extended 0.5 mile beyond the project limits on the Southbound lanes to create a buffer zone before entering the project area.

PORTABLE QUEUE WARNING ALERT SYSTEM

Portable Queue Warning Alert System is required on this project. Contrary to the special note for "Portable Queue Warning Alert System" in the proposal, SAT communication Service will not be required. This system shall be Ver-Mac Jamlogic Smart Work Zone or one that will seamlessly be compatible with it. All costs associated with furnishing and operating this system will be paid for by bid item 24873EC Control System for Incident Management. The unit for this bid item will be Lump Sum. System to include 12 Portable Changeable Message Signs.

TEMPORARY STRIPING AND PAVEMENT MARKINGS, REMOVAL OF PAVEMENT MARKINGS, AND RAISED PAVEMENT MARKERS

The Contractor will remove all pavement markings and the lenses of raised pavement markers that do not apply to the traffic operation in use. In areas where the pavement markings will conform to the final marking scheme or for other reasons will not be removed, pavement markings shall be of a permanent type pavement marking material. All temporary pavement markings, which must be subsequently removed, shall be an approved removable striping tape or temporary paint. Removable striping tape-white, removable striping tape-yellow or removable striping tape-black will be measured in linear feet for payment at their respective contract unit price. Estimated quantities for temporary paint and removable striping tape are included as bid items.

Any striping removal (temp, perm) shall be removed by waterblasting. Waterblasting and removal of temporary tape will be incidental to bid item "Maintain and Control Traffic".

Place temporary striping in accordance with Section 112, except that:

1) Temporary striping will be six (6) inches wide.

2) Edge lines will be required for temporary striping except for short term durations approved by the Engineer.

3) Existing, temporary, or permanent striping, will be in place before a lane is opened to traffic.

PORTABLE CHANGEABLE MESSAGE SIGN

The contractor shall furnish and maintain Portable Changeable Message Signs. The contractor shall install, operate and maintain the Portable Changeable Message Signs through the completion of the project. They shall be placed in a location designated or approved by the Engineer. The Portable Changeable Message Signs will be in accordance with "Special Note for Portable Changeable Message Sign". The Portable Changeable Message Signs will remain the property of the Contractor after construction is finished.

TEMPORARY SIGNS

Bid Item No. 2562 "Temporary Signs" will be paid for on a square foot basis and includes all costs necessary to furnish the signs, placement of the signs in the first location, relocating the signs from one location to another according to the construction phase, temporary covering or removal of the signs when the sign does not apply to the work being performed, and upon completion of the project, removal of the signs from the job site. See Section 112.04.02 of the 2012 Standard Specifications for additional details.

PERMANENT SIGNING MODIFICATIONS

Existing ground mounted and overhead panel signs will be covered as construction phasing requires. The Engineer will determine the duration that the covering shall remain in place. Since most materials used in covering signs may cause permanent damage to the sign face, porous cloth covers which are folded over the sign edges and secured on the back of the sign may be used or thin gauge sheeting material may be used. The use of tape, paper, plastic or sheet metal for covering signs is strictly prohibited. If any sign is damaged as a result of being covered, the sign shall be replaced by the Contractor at no cost to the Department. Covering of existing panel signs shall be incidental to Maintain And Control Traffic.

Existing sheeting signs will be covered, removed, relocated, or stored as directed by the Engineer during construction. The cost for covering, removing, relocating, or storing sheeting signs and all hardware necessary shall be incidental to Maintain And Control Traffic.

ARROW PANELS

The Contractor will provide arrow panels as indicated in the Maintenance Of Traffic Plan. The arrow panels shall be mounted in traffic-worthy carriages and meet the requirements as specified in the current Standard Drawings. Payment for the arrow panels will be based on a contract unit price of 'each' and will be full compensation for providing, placing, operating, relocating and maintaining the arrow panels.

The Contractor will have available one reserve arrow panel to be placed into operation in the event of damage or mechanical/electrical failure. No direct payment will be allowed for the reserve unit. All arrow panels will remain the property of the Contractor upon completion of the project.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain And Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of the number of times they are set, reset, removed and relocated within the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

TRAFFIC CONTROL NOTES

COUNTY OF	ITEM NO.	SHEET NO.
ROCKCASTLE	8-6.20	R96b

MAINTENANCE OF TRAFFIC NOTES

PAVEMENT EDGE DROP-OFFS

Pavement edges that traffic is not expected to cross, except accidentally, should be treated as follows:

- Less than 2" - No protection required. Uneven Lanes signs W8-11 should be placed in advance and throughout the drop-off area.
- 2" to 4" - Place plastic drums, vertical panels, or barricades every 100 feet on tangent sections for speeds of 50 miles per hour or greater. Cones may be used in place of plastic drums, panels, and barricades during daylight hours only. Spacing for tapers should be in accordance with the Manual on Uniform Traffic Control Devices.
- Greater than 4" - Concrete Barrier Walls or wedge with 3:1 or flatter slope needed. If there is 8 feet or more distance between the edge of pavement and drop-off drums, panels, or barricades may be used. If concrete barriers are used, special reflective devices or steady burn lights should be used for overnight installations. For temporary conditions, drop-offs greater than 4" may be protected with plastic drums, vertical panels, or barricades for short distances during daylight hours while work is being done in the drop-off area. Payment will be allowed for the DGA materials used for wedging.
- Pavement edges at entrances and approaches will receive an asphalt wedge to maintain traffic.

LANE CLOSURES AND LANE SHIFTS

All lane closures, lane shifts and tapers shall be in accordance with the Standard Drawings and the MUTCD. Any lane closure or lane shift must be approved by the Engineer prior to the closure or lane shift. The Contractor must notify the Engineer at least five (5) days prior to any proposed lane closure or traffic pattern change. Contrary to Section 112, lane closures will not be measured for payment, but are considered incidental to "Maintain And Control Traffic," lump sum.

DOUBLE FINE SIGN NOTE

Locations not routinely protected by a barrier wall are eligible for "Double Fine" signs. A highway zone which has barrier wall but in which unusual or hazardous conditions exist which expose the workers to traffic hazards shall also be eligible for "Double Fine" signs. However, the signs shall only be placed in portions of work zones in which workers are exposed to traffic hazards.

The Contractor shall notify the Engineer a minimum of twelve (12) hours prior to using "Double Fine" signs. At the beginning of the highway work zone, the "Fine Doubled In Work Zone" sign will be placed. At the end of the work zone the "End Double Fine" sign shall be placed. The signs shall be covered or removed when the highway work zone does not have workers for more than a two (2) hour period.

Payment for the signs shall be made at the unit bid price for "Temporary Signs". The moving and covering of the signs shall be incidental to the bid item "Temporary Signs".

COORDINATION

The Contractor is advised there may be an active construction project adjacent to this project. He shall coordinate his work with the adjacent Contractor to avoid conflicts in the maintenance of traffic. Items of particular concern are temporary concrete barrier wall placement, relocation and removal and mainline I-75 lane closures, road closures, and traffic shifts. The Contractor shall also coordinate the location of the construction access points in the vicinity of the adjacent project. Construction of both projects should progress at a rate that will allow the concurrent shift of I-75 traffic to the new median pavement of both construction sections.

PROJECT TRAFFIC COORDINATOR (PTC)

Be advised this project is a significant project pursuant to section 112.03.12.

Designate an employee to be traffic coordinator. The designated Traffic Coordinator must be certified in accordance with Department's 2012 Standard Specifications Sec. 112.03.12. The Traffic Coordinator will inspect the project maintenance of traffic once daily, including weekends, during the Contractor's operations and at any time a lane closure is in place. The Traffic Coordinator will report all incidents throughout the work zone to the Engineer on the project. The Contractor will furnish the name and telephone number where the Traffic Coordinator can be contacted at all times.

During any period when a lane closure is in place, the Traffic Coordinator will arrange for personnel to be present on the project at all times to inspect the traffic control, maintain the signing and devices, and relocate portable changeable message boards as queue lengths change. The personnel will have access on the project to a radio or telephone to be used in case of emergencies or accidents.

LAW ENFORCEMENT OFFICERS (LEO'S)

Police support shall be a unit consisting of an off-duty police officer from any police force agency having lawful jurisdiction and a police car equipped with externally mounted flashing blue lights. Officers may be asked to issue citations for traffic violations, but will be considered incidental to the contract unit bid price for "Law Enforcement Officer". No additional compensation will be provided. The officers will be placed at the discretion of the Engineer. Police support will be measured and paid on a per hour basis for each officer and police vehicle.

WRECKER SERVICE

The contractor will have continuously on call a 24-hour wrecker service that the Contractor will promptly contact to remove any disabled vehicle within the project Limits. The wrecker service should have, but not be limited to, the following items/capabilities: cell phone, gasoline, jumper cables, vehicle pushing, and tire changing. The contractor will be charged three thousand dollars ($3,000) liquidated damages for each 15 minute period for any incidence when the wrecker service fails to reach the disabled vehicle beyond the 30 minute allotted response time. Payment for the wrecker service will be considered incidental to the bid item 'maintain and control traffic'.

BUFFER ZONE

Barrels and other traffic control devices will be extended 0.5 mile beyond the project limits on the Southbound lanes to create a buffer zone before entering the project area.

PORTABLE QUEUE WARNING ALERT SYSTEM

Portable Queue Warning Alert System is required on this project. Contrary to the special note for "Portable Queue Warning Alert System" in the proposal, SAT communication Service will not be required. This system shall be Ver-Mac Jamlogic Smart Work Zone or one that will seamlessly be compatible with it. All costs associated with furnishing and operating this system will be paid for by bid item 24873EC Control System for Incident Management. The unit for this bid item will be Lump Sum. System to include 12 Portable Changeable Message Signs.

TEMPORARY STRIPING AND PAVEMENT MARKINGS, REMOVAL OF PAVEMENT MARKINGS, AND RAISED PAVEMENT MARKERS

The Contractor will remove all pavement markings and the lenses of raised pavement markers that do not apply to the traffic operation in use. In areas where the pavement markings will conform to the final marking scheme or for other reasons will not be removed, pavement markings shall be of a permanent type pavement marking material. All temporary pavement markings, which must be subsequently removed, shall be an approved removable striping tape or temporary paint. Removable striping tape-white, removable striping tape-yellow or removable striping tape-black will be measured in linear feet for payment at their respective contract unit price. Estimated quantities for temporary paint and removable striping tape are included as bid items.

Any striping removal (temp, perm) shall be removed by waterblasting. Waterblasting and removal of temporary tape will be incidental to bid item "Maintain and Control Traffic".

Place temporary striping in accordance with Section 112, except that:

1) Temporary striping will be six (6) inches wide.

2) Edge lines will be required for temporary striping except for short term durations approved by the Engineer.

3) Existing, temporary, or permanent striping, will be in place before a lane is opened to traffic.

PORTABLE CHANGEABLE MESSAGE SIGN

The contractor shall furnish and maintain Portable Changeable Message Signs. The contractor shall install, operate and maintain the Portable Changeable Message Signs through the completion of the project. They shall be placed in a location designated or approved by the Engineer. The Portable Changeable Message Signs will be in accordance with "Special Note for Portable Changeable Message Sign". The Portable Changeable Message Signs will remain the property of the Contractor after construction is finished.

TEMPORARY SIGNS

Bid Item No. 2562 "Temporary Signs" will be paid for on a square foot basis and includes all costs necessary to furnish the signs, placement of the signs in the first location, relocating the signs from one location to another according to the construction phase, temporary covering or removal of the signs when the sign does not apply to the work being performed, and upon completion of the project, removal of the signs from the job site. See Section 112.04.02 of the 2012 Standard Specifications for additional details.

PERMANENT SIGNING MODIFICATIONS

Existing ground mounted and overhead panel signs will be covered as construction phasing requires. The Engineer will determine the duration that the covering shall remain in place. Since most materials used in covering signs may cause permanent damage to the sign face, porous cloth covers which are folded over the sign edges and secured on the back of the sign may be used or thin gauge sheeting material may be used. The use of tape, paper, plastic or sheet metal for covering signs is strictly prohibited. If any sign is damaged as a result of being covered, the sign shall be replaced by the Contractor at no cost to the Department. Covering of existing panel signs shall be incidental to Maintain And Control Traffic.

Existing sheeting signs will be covered, removed, relocated, or stored as directed by the Engineer during construction. The cost for covering, removing, relocating, or storing sheeting signs and all hardware necessary shall be incidental to Maintain And Control Traffic.

ARROW PANELS

The Contractor will provide arrow panels as indicated in the Maintenance Of Traffic Plan. The arrow panels shall be mounted in traffic-worthy carriages and meet the requirements as specified in the current Standard Drawings. Payment for the arrow panels will be based on a contract unit price of 'each' and will be full compensation for providing, placing, operating, relocating and maintaining the arrow panels.

The Contractor will have available one reserve arrow panel to be placed into operation in the event of damage or mechanical/electrical failure. No direct payment will be allowed for the reserve unit. All arrow panels will remain the property of the Contractor upon completion of the project.

BARRICADES

Barricades used in lieu of barrels and cones for channelization or delineation will be incidental to Maintain And Control Traffic according to Section 112.04.01. Barricades used to protect pavement removal areas will be bid as each according to Section 112.04.04. Individual barricades will be measured only once for payment, regardless of the number of times they are set, reset, removed and relocated within the duration of the project. Replacements for damaged barricades or barricades directed to be replaced by the Engineer due to poor condition or reflectivity will not be measured for payment.

TRAFFIC CONTROL NOTES

CALL NO. 100

CONTRACT ID. 171245

ROCKCASTLE COUNTY

FED/STATE PROJECT NUMBER NHPP IM 0752 (095)

DESCRIPTION I-75 (ROCKCASTLE COUNTY)

WORK TYPE GRADE, DRAIN & SURFACE WITH BRIDGE

PRIMARY COMPLETION DATE 6/1/2020

LETTING DATE: October 27,2017

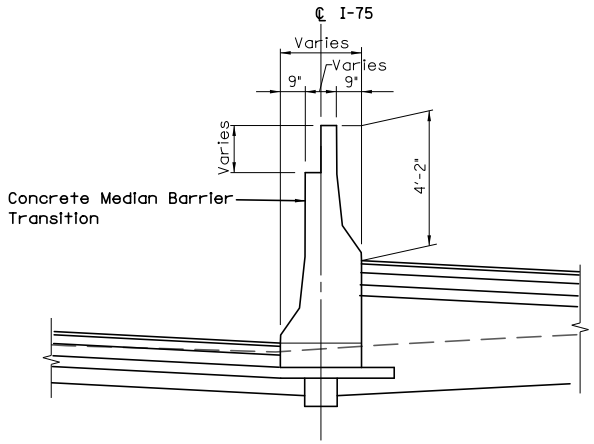
Sealed Bids will be received electronically through the Bid Express bidding service until 10:00 AM EASTERN DAYLIGHT TIME October 27,2017. Bids will be publicly announced at 10:00 AM EASTERN DAYLIGHT TIME.

PLANS AVAILABLE FOR THIS PROJECT.

DBE CERTIFICATION REQUIRED - 11%

REQUIRED BID PROPOSAL GUARANTY: Not less than 5% of the total bid.

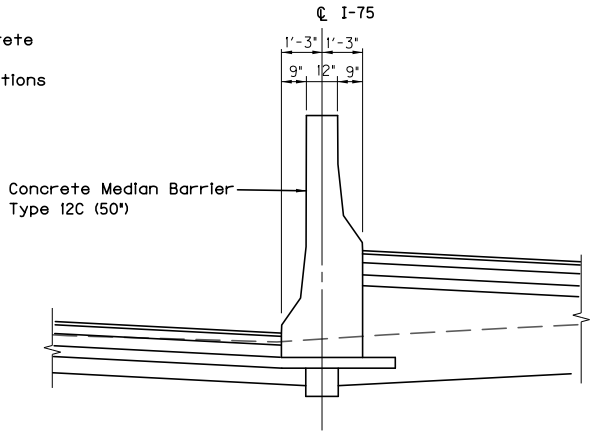
BRIDGE BARRIER TO ROADWAY BARRIER WALL TRANSITION DETAIL



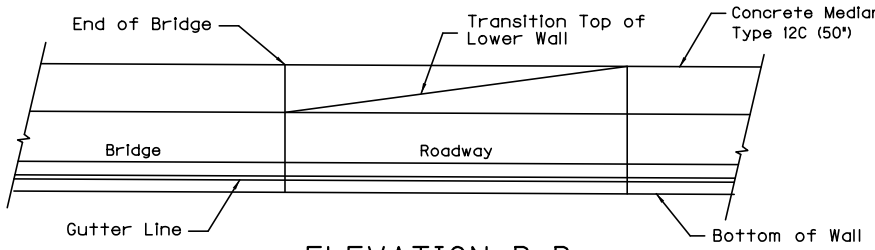
SECTION B-B

NOTES

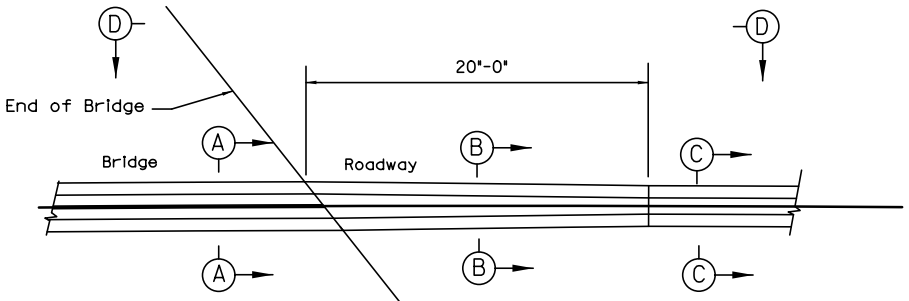
Cost of Transition Is Incidental To Concrete Median Barrier WallType 12C (50")
See Plan Sheets for Locations of Transitions



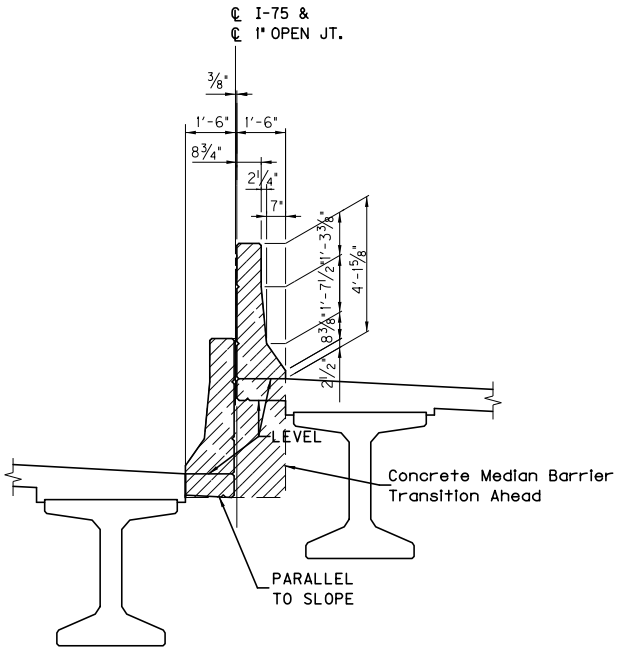
SECTION C-C



ELEVATION D-D



PLAN



SECTION A-A

NOT TO SCALE

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

Section: 0001 - PAVING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0010	00001		DGA BASE	117,322.00	TON		$	
0020	00008		CEMENT STABILIZED ROADBED	188,611.00	SQYD		$	
0030	00018		DRAINAGE BLANKET-TYPE II-ASPH	38,073.00	TON		$	
0040	00100		ASPHALT SEAL AGGREGATE	1,074.00	TON		$	
0050	00103		ASPHALT SEAL COAT	129.00	TON		$	
0060	00194		LEVELING & WEDGING PG76-22	5,519.00	TON		$	
0070	00205		CL3 ASPH BASE 1.50D PG64-22	15,297.00	TON		$	
0080	00208		CL4 ASPH BASE 1.50D PG64-22	24,452.00	TON		$	
0090	00214		CL3 ASPH BASE 1.00D PG64-22 (REVISED: 10-20-17)	20,756.00	TON		$	
0100	00219		CL4 ASPH BASE 1.00D PG76-22	18,828.00	TON		$	
0110	00221		CL2 ASPH BASE 0.75D PG64-22	2,200.00	TON		$	
0120	00339		CL3 ASPH SURF 0.38D PG64-22	13,959.00	TON		$	
0130	00342		CL4 ASPH SURF 0.38A PG76-22	15,411.00	TON		$	
0140	00358		ASPHALT CURING SEAL	340.00	TON		$	
0150	02542		CEMENT	3,685.00	TON		$	
0160	02676		MOBILIZATION FOR MILL & TEXT	1.00	LS		$	
0170	02677		ASPHALT PAVE MILLING & TEXTURING	4,233.00	TON		$	
0180	02702		SAND FOR BLOTTER	943.00	TON		$	
0190	20071EC		JOINT ADHESIVE	239,801.00	LF		$	
0200	21289ED		LONGITUDINAL EDGE KEY	68,529.00	LF		$	
0210	24781EC		INTELLIGENT COMPACTION FOR ASPHALT	144,175.00	TON		$	
0220	24891EC		PAVE MOUNT INFRARED TEMP EQUIPMENT	4,669,000.00	SF		$	

Section: 0002 - ROADWAY

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0520	00078		CRUSHED AGGREGATE SIZE NO 2 (FOR PERFORATED PIPE HEADWALLS)	50.00	TON		$	
0530	01000		PERFORATED PIPE-4 IN	30,500.00	LF		$	
0540	01001		PERFORATED PIPE-6 IN	22,839.00	LF		$	
0550	01010		NON-PERFORATED PIPE-4 IN	1,757.00	LF		$	
0560	01011		NON-PERFORATED PIPE-6 IN	212.00	LF		$	
0570	01015		INSPECT & CERTIFY EDGE DRAIN SYSTEM	1.00	LS		$	
0580	01020		PERF PIPE HEADWALL TY 1-4 IN	15.00	EACH		$	
0590	01024		PERF PIPE HEADWALL TY 2-4 IN	4.00	EACH		$	
0600	01028		PERF PIPE HEADWALL TY 3-4 IN	28.00	EACH		$	
0610	01032		PERF PIPE HEADWALL TY 4-4 IN	3.00	EACH		$	
0620	01875		STANDARD HEADER CURB	1,380.00	LF		$	
0630	01890		ISLAND HEADER CURB TYPE 1	52.00	LF		$	
0640	01982		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL WHITE	357.00	EACH		$	
0650	01983		DELINEATOR FOR GUARDRAIL MONO DIRECTIONAL YELLOW	9.00	EACH		$	
0660	01984		DELINEATOR FOR BARRIER - WHITE	950.00	EACH		$	
0670	01985		DELINEATOR FOR BARRIER - YELLOW	936.00	EACH		$	
0680	02003		RELOCATE TEMP CONC BARRIER	82,550.00	LF		$	

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0690	02159		TEMP DITCH	19,875.00	LF		$	
0700	02160		CLEAN TEMP DITCH	7,938.00	LF		$	
0710	02200		ROADWAY EXCAVATION	838,782.00	CUYD		$	
0720	02223		GRANULAR EMBANKMENT	7,000.00	CUYD		$	
0730	02242		WATER (FOR DUST CONTROL)	1,250.00	MGAL		$	
0740	02262		FENCE-WOVEN WIRE TYPE 1	10,232.00	LF		$	
0750	02363		GUARDRAIL CONNECTOR TO BRIDGE END TY A	4.00	EACH		$	
0760	02369		GUARDRAIL END TREATMENT TYPE 2A	30.00	EACH		$	
0770	02381		REMOVE GUARDRAIL	25,466.00	LF		$	
0780	02387		GUARDRAIL CONNECTOR TO BRIDGE END TY A-1	4.00	EACH		$	
0790	02391		GUARDRAIL END TREATMENT TYPE 4A	12.00	EACH		$	
0800	02429		RIGHT-OF-WAY MONUMENT TYPE 1	43.00	EACH		$	
0810	02432		WITNESS POST	3.00	EACH		$	
0820	02482		CHANNEL LINING CLASS IA	479.00	TON		$	
0830	02483		CHANNEL LINING CLASS II	3,435.00	TON		$	
0840	02484		CHANNEL LINING CLASS III	2,236.00	TON		$	
0850	02545		CLEARING AND GRUBBING (APPROXIMATELY 192 ACRES)	1.00	LS		$	
0860	02562		TEMPORARY SIGNS	770.00	SQFT		$	
0870	02585		EDGE KEY	35.00	LF		$	
0880	02599		FABRIC-GEOTEXTILE TYPE IV	24,000.00	SQYD		$	
0890	02650		MAINTAIN & CONTROL TRAFFIC	1.00	LS		$	
0900	02671		PORTABLE CHANGEABLE MESSAGE SIGN	8.00	EACH		$	
0910	02690		SAFELOADING	54.00	CUYD		$	
0920	02696		SHOULDER RUMBLE STRIPS	54,681.00	LF		$	
0930	02701		TEMP SILT FENCE	15,875.00	LF		$	
0940	02703		SILT TRAP TYPE A	192.00	EACH		$	
0950	02704		SILT TRAP TYPE B	192.00	EACH		$	
0960	02705		SILT TRAP TYPE C	192.00	EACH		$	
0970	02706		CLEAN SILT TRAP TYPE A	192.00	EACH		$	
0980	02707		CLEAN SILT TRAP TYPE B	192.00	EACH		$	
0990	02708		CLEAN SILT TRAP TYPE C	192.00	EACH		$	
1000	02726		STAKING	1.00	LS		$	
1010	02731		REMOVE STRUCTURE (I-75 NB OVER LAKE LINVILLE ROAD)	1.00	LS		$	
1020	02731		REMOVE STRUCTURE (I-75 NB OVER US 25)	1.00	LS		$	
1030	02731		REMOVE STRUCTURE (I-75 SB OVER LAKE LINVILLE ROAD)	1.00	LS		$	
1040	02731		REMOVE STRUCTURE (I-75 SB OVER US 25)	1.00	LS		$	
1050	02775		ARROW PANEL	6.00	EACH		$	
1060	02898		RELOCATE CRASH CUSHION	11.00	EACH		$	
1070	03171		CONCRETE BARRIER WALL TYPE 9T	52,565.00	LF		$	
1080	03425		ADJUST WATER VALVE	1.00	EACH		$	
1090	05950		EROSION CONTROL BLANKET	7,132.00	SQYD		$	
1100	05952		TEMP MULCH	1,858,560.00	SQYD		$	
1110	05953		TEMP SEEDING AND PROTECTION	464,640.00	SQYD		$	
1120	05963		INITIAL FERTILIZER	23.00	TON		$	

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1130	05964		20-10-10 FERTILIZER	23.00	TON		$	
1140	05985		SEEDING AND PROTECTION	437,950.00	SQYD		$	
1150	06401		FLEXIBLE DELINEATOR POST-M/W	784.00	EACH		$	
1160	06404		FLEXIBLE DELINEATOR POST-M/Y	77.00	EACH		$	
1170	06511		PAVE STRIPING-TEMP PAINT-6 IN	361,795.00	LF		$	
1180	06540		PAVE STRIPING-THERMO-4 IN W	3,973.00	LF		$	
1190	06541		PAVE STRIPING-THERMO-4 IN Y	7,728.00	LF		$	
1200	06542		PAVE STRIPING-THERMO-6 IN W	79,350.00	LF		$	
1210	06543		PAVE STRIPING-THERMO-6 IN Y	51,795.00	LF		$	
1220	06546		PAVE STRIPING-THERMO-12 IN W	4,427.00	LF		$	
1230	06549		PAVE STRIPING-TEMP REM TAPE-B	10,000.00	LF		$	
1240	06550		PAVE STRIPING-TEMP REM TAPE-W	10,000.00	LF		$	
1250	06551		PAVE STRIPING-TEMP REM TAPE-Y	10,000.00	LF		$	
1260	06568		PAVE MARKING-THERMO STOP BAR-24IN	137.00	LF		$	
1270	06569		PAVE MARKING-THERMO CROSS-HATCH	524.00	SQFT		$	
1280	06572		PAVE MARKING-DOTTED LANE EXTEN	20.00	LF		$	
1290	06574		PAVE MARKING-THERMO CURV ARROW	29.00	EACH		$	
1300	06578		PAVE MARKING-THERMO MERGE ARROW	6.00	EACH		$	
1310	06585		PAVEMENT MARKER TY IVA-MW TEMP	10,366.00	EACH		$	
1320	06586		PAVEMENT MARKER TY IVA-MY TEMP	4,476.00	EACH		$	
1330	08100		CONCRETE-CLASS A	3.77	CUYD		$	
1340	08150		STEEL REINFORCEMENT	163.00	LB		$	
1350	08901		CRASH CUSHION TY VI CLASS BT TL2	2.00	EACH		$	
1360	08903		CRASH CUSHION TY VI CLASS BT TL3	7.00	EACH		$	
1370	10020NS		FUEL ADJUSTMENT	190,100.00	DOLL	$1.00	$	$190,100.00
1380	10030NS		ASPHALT ADJUSTMENT	208,000.00	DOLL	$1.00	$	$208,000.00
1390	20191ED		OBJECT MARKER TY 3	12.00	EACH		$	
1400	20411ED		LAW ENFORCEMENT OFFICER	500.00	HOUR		$	
1410	20629NS719		THRIE BEAM TO W BEAM CONNECTOR	2.00	EACH		$	
1420	21380ES719		GUARDRAIL THRIE BEAM	1,182.50	LF		$	
1430	21417ES717		PAVE MARK THERMO CONE CAP-SOLID YELLOW	541.00	SQFT		$	
1440	21430ES508		CONC MEDIAN BARRIER TYPE 12C(50)	21,534.00	LF		$	
1450	21802EN		G/R STEEL W BEAM-S FACE (7 FT POST)	24,850.00	LF		$	
1460	23791EC		PAVE STRIPING-CHEVRON MARKINGS	2,423.00	SQFT		$	
1470	23979EC		CRASH CUSHION TY VI CLASS C TL3	1.00	EACH		$	
1480	24255EC		REMOVE CABLE GUARDRAIL BARRIER SYSTEM	22,412.00	LF		$	
1490	24489EC		INLAID PAVEMENT MARKER	1,852.00	EACH		$	
1500	24707ED		CABLE BARRIER SYSTEM REMOVE & RESTORE	1.00	LS		$	
1510	24814EC		PIPELINE INSPECTION	12,900.00	LF		$	
1520	24873EC		CONTROL SYSTEM FOR INCIDENT MANAGEMENT	1.00	L S		$	

Section: 0003 - DRAINAGE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1530	00440		ENTRANCE PIPE-15 IN	38.00	LF		$	
1540	00461		CULVERT PIPE-15 IN	180.00	LF		$	

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
1550	00462		CULVERT PIPE-18 IN	863.00	LF		$	
1560	00464		CULVERT PIPE-24 IN	340.00	LF		$	
1570	00466		CULVERT PIPE-30 IN	77.00	LF		$	
1580	00468		CULVERT PIPE-36 IN	58.00	LF		$	
1590	00474		CULVERT PIPE-72 IN	17.00	LF		$	
1600	00521		STORM SEWER PIPE-15 IN	5,403.00	LF		$	
1610	00522		STORM SEWER PIPE-18 IN	1,817.00	LF		$	
1620	00524		STORM SEWER PIPE-24 IN	923.00	LF		$	
1630	00526		STORM SEWER PIPE-30 IN	224.00	LF		$	
1640	01202		PIPE CULVERT HEADWALL-15 IN	5.00	EACH		$	
1650	01204		PIPE CULVERT HEADWALL-18 IN	10.00	EACH		$	
1660	01208		PIPE CULVERT HEADWALL-24 IN	5.00	EACH		$	
1670	01210		PIPE CULVERT HEADWALL-30 IN	4.00	EACH		$	
1680	01212		PIPE CULVERT HEADWALL-36 IN	3.00	EACH		$	
1690	01381		METAL END SECTION TY 2-18 IN	2.00	EACH		$	
1700	01432		SLOPED BOX OUTLET TYPE 1-15 IN	3.00	EACH		$	
1710	01450		S & F BOX INLET-OUTLET-18 IN	1.00	EACH		$	
1720	01451		S & F BOX INLET-OUTLET-24 IN	4.00	EACH		$	
1730	01452		S & F BOX INLET-OUTLET-30 IN	3.00	EACH		$	
1740	01480		CURB BOX INLET TYPE B	3.00	EACH		$	
1750	01490		DROP BOX INLET TYPE 1	5.00	EACH		$	
1760	01493		DROP BOX INLET TYPE 2	1.00	EACH		$	
1770	01505		DROP BOX INLET TYPE 5B	3.00	EACH		$	
1780	01538		DROP BOX INLET TYPE 7	1.00	EACH		$	
1790	01559		DROP BOX INLET TYPE 13G	5.00	EACH		$	
1800	01568		DROP BOX INLET TYPE 13S	1.00	EACH		$	
1810	01584		CAP DROP BOX INLET	2.00	EACH		$	
1820	01650		JUNCTION BOX	5.00	EACH		$	
1830	01719		ADJUST INLET	1.00	EACH		$	
1840	01756		MANHOLE TYPE A	2.00	EACH		$	
1850	01761		MANHOLE TYPE B	1.00	EACH		$	
1860	01767		MANHOLE TYPE C	1.00	EACH		$	
1870	02600		FABRIC GEOTEXTILE TY IV FOR PIPE	15,197.00	SQYD	$2.00	$	$30,394.00
1880	15007		S CIPP LINER 24 INCH	574.00	LF		$	
1890	15124		S CIPP LINER 15 INCH	1,001.00	LF		$	
1900	15125		S CIPP LINER 18 INCH	361.00	LF		$	
1910	15128		S CIPP LINER 30 INCH	377.00	LF		$	
1920	15129		S CIPP LINER 36 INCH	278.00	LF		$	
1930	15132		S CIPP LINER 54 INCH	136.00	LF		$	
1940	15133		S CIPP LINER 60 INCH	43.00	LF		$	
1950	15135		S CIPP LINER 72 INCH	717.00	LF		$	
1960	21602NN		CONC MED BARR BOX INLET TY 12B2-50	8.00	EACH		$	
1970	21602NN		CONC MED BARR BOX INLET TY 12B2-50 (ASYMETRICAL)	2.00	EACH		$	
1975	21799EN		BORE AND JACK PIPE-24 IN (ADDED: 10-20-17)	123.00	LF		$	
1980	22620NN		CONC MED BARR BOX INLET TY 12A1-50	2.00	EACH		$	
1990	23126EN		BORE AND JACK PIPE-18 IN (REVISED: 10-20-17)	361.00	LF		$	
2000	23611NN		CONC MED BAR BOX INLET TY 12B1-50	1.00	EACH		$	

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2010	23611NN		CONC MED BAR BOX INLET TY 12B1-50 (ASYMETRICAL)	48.00	EACH		$	
2020	24025EC		PIPE CULVERT HEADWALL-72 IN	1.00	EACH		$	

Section: 0004 - BRIDGE - US 25 - DWG. 26371

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2030	02231		STRUCTURE GRANULAR BACKFILL	2,135.00	CUYD		$	
2040	02998		MASONRY COATING	3,011.00	SQYD		$	
2050	03299		ARMORED EDGE FOR CONCRETE	307.00	LF		$	
2060	08001		STRUCTURE EXCAVATION-COMMON	2,869.00	CUYD		$	
2070	08002		STRUCTURE EXCAV-SOLID ROCK	165.00	CUYD		$	
2080	08020		CRUSHED AGGREGATE SLOPE PROT	1,126.00	TON		$	
2090	08033		TEST PILES	111.00	LF		$	
2100	08039		PRE-DRILLING FOR PILES	380.00	LF		$	
2110	08046		PILES-STEEL HP12X53	3,935.00	LF		$	
2120	08094		PILE POINTS-12 IN	147.00	EACH		$	
2130	08100		CONCRETE-CLASS A	981.70	CUYD		$	
2140	08104		CONCRETE-CLASS AA	1,523.80	CUYD		$	
2150	08150		STEEL REINFORCEMENT	134,604.00	LB		$	
2160	08151		STEEL REINFORCEMENT-EPOXY COATED	374,320.00	LB		$	
2170	08500		APPROACH SLAB	851.00	SQYD		$	
2180	21532ED		RAIL SYSTEM TYPE III	550.00	LF		$	
2190	24463ED		PPC I-BEAM HN 54 49	4,319.00	LF		$	
2200	24943ED		RAIL SYSTEM TYPE 15	550.00	LF		$	

Section: 0005 - BRIDGE - LAKE LINVILLE ROAD - DWG 26372

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2210	02231		STRUCTURE GRANULAR BACKFILL	879.00	CUYD		$	
2220	02403		REMOVE CONCRETE MASONRY	20.00	CUYD		$	
2230	02998		MASONRY COATING	537.00	SQYD		$	
2240	03299		ARMORED EDGE FOR CONCRETE	286.00	LF		$	
2250	08001		STRUCTURE EXCAVATION-COMMON	221.00	CUYD		$	
2260	08002		STRUCTURE EXCAV-SOLID ROCK	49.00	CUYD		$	
2270	08100		CONCRETE-CLASS A	173.60	CUYD		$	
2280	08104		CONCRETE-CLASS AA	457.20	CUYD		$	
2290	08150		STEEL REINFORCEMENT	10,714.00	LB		$	
2300	08151		STEEL REINFORCEMENT-EPOXY COATED	110,135.00	LB		$	
2310	08500		APPROACH SLAB	792.00	SQYD		$	
2320	08633		PRECAST PC I BEAM TYPE 3	1,423.00	LF		$	
2330	21532ED		RAIL SYSTEM TYPE III	165.00	LF		$	
2340	24943ED		RAIL SYSTEM TYPE 15	165.00	LF		$	

Section: 0006 - BRIDGE - CULVERT #1 - LAKE LINVILLE SPILLWAY - DWG. 26373

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2350	02231		STRUCTURE GRANULAR BACKFILL	947.00	CUYD		$	
2360	08001		STRUCTURE EXCAVATION-COMMON	270.00	CUYD		$	
2370	08100		CONCRETE-CLASS A	37.00	CUYD		$	
2380	08150		STEEL REINFORCEMENT	8,090.00	LB		$	

Section: 0007 - SIGNING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2390	02565		OBJECT MARKER TYPE 2	8.00	EACH		$	
2400	04904		BARRIER MOUNTING BRACKET	22.00	EACH		$	
2410	06400		GMSS GALV STEEL TYPE A	3,324.00	LB		$	
2420	06405		SBM ALUMINUM PANEL SIGNS	434.50	SQFT		$	
2430	06406		SBM ALUM SHEET SIGNS .080 IN	308.40	SQFT		$	
2440	06407		SBM ALUM SHEET SIGNS .125 IN	916.00	SQFT		$	
2450	06410		STEEL POST TYPE 1	1,693.00	LF		$	
2460	06412		STEEL POST MILE MARKERS	44.00	EACH		$	
2470	06441		GMSS GALV STEEL TYPE C	4,168.50	LB		$	
2480	06451		REMOVE SIGN SUPPORT BEAM	27.00	EACH		$	
2490	06490		CLASS A CONCRETE FOR SIGNS	35.70	CUYD		$	
2500	06491		STEEL REINFORCEMENT FOR SIGNS	2,034.00	LB		$	
2510	20418ED		REMOVE & RELOCATE SIGNS	11.00	EACH		$	
2520	20419ND		ROADWAY CROSS SECTION	13.00	EACH		$	
2530	21373ND		REMOVE SIGN	2.00	EACH		$	
2540	21596ND		GMSS TYPE D	28.00	EACH		$	
2550	24631EC		BARCODE SIGN INVENTORY	167.00	EACH		$	

Section: 0008 - SIGNALIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2560	04792		CONDUIT-1 IN	15.00	LF		$	
2570	04811		ELECTRICAL JUNCTION BOX TYPE B	3.00	EACH		$	
2580	04820		TRENCHING AND BACKFILLING	220.00	LF		$	
2590	04830		LOOP WIRE	2,500.00	LF		$	
2600	04844		CABLE-NO. 14/5C	1,500.00	LF		$	
2610	04850		CABLE-NO. 14/1 PAIR	2,500.00	LF		$	
2620	04886		MESSENGER-15400 LB	400.00	LF		$	
2630	04895		LOOP SAW SLOT AND FILL	800.00	LF		$	
2640	04931		INSTALL CONTROLLER TYPE 170	1.00	EACH		$	
2650	04932		INSTALL STEEL STRAIN POLE	3.00	EACH		$	
2660	20188NS835		INSTALL LED SIGNAL-3 SECTION	8.00	EACH		$	
2670	20266ES835		INSTALL LED SIGNAL- 4 SECTION	2.00	EACH		$	
2680	20390NS835		INSTALL COORDINATING UNIT	1.00	EACH		$	
2690	23157EN		TRAFFIC SIGNAL POLE BASE	16.00	CUYD		$	
2700	24900EC		PVC CONDUIT-1 1/4 IN-SCHEDULE 80	140.00	LF		$	
2710	24901EC		PVC CONDUIT-2 IN-SCHEDULE 80	80.00	LF		$	

Section: 0009 - LIGHTING

Section: 0009 - LIGHTING

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
2720	04714		POLE 120 FT MTG HT HIGH MAST	4.00	EACH		$	
2730	04797		CONDUIT-3 IN	330.00	LF		$	
2740	04800		MARKER	17.00	EACH		$	
2750	04820		TRENCHING AND BACKFILLING	6,485.00	LF		$	
2760	04860		CABLE-NO. 8/3C DUCTED	4,226.00	LF		$	
2770	04940		REMOVE LIGHTING	1.00	LS		$	
2780	20391NS835		ELECTRICAL JUNCTION BOX TYPE A	9.00	EACH		$	
2790	20410ED		MAINTAIN LIGHTING	1.00	LS		$	
2800	21543EN		BORE AND JACK CONDUIT	330.00	LF		$	
2810	23161EN		POLE BASE-HIGH MAST	22.00	CUYD		$	
2820	24749EC		HIGH MAST LED LUMINAIRE	20.00	EACH		$	
2830	24851EC		CABLE-NO. 10/3C DUCTED	7,520.00	LF		$	

Section: 0010 - INTELLIGENT TRANSPORATION SYSTEMS

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0230	04820		TRENCHING AND BACKFILLING	1,300.00	LF		$	
0240	20257NC		SITE PREPARATION	1.00	LS		$	
0250	21058ND		WINCH LOWERING TOOL	2.00	EACH		$	
0260	21066ND		MODEL 336 ENCLOSURE	1.00	EACH		$	
0270	21069ND		SURGE DEVICE 120 VOLT	1.00	EACH		$	
0280	21071ND		DATA SURGE DEVICE	1.00	EACH		$	
0290	21079ND		TRANSFORMER 480/120	1.00	EACH		$	
0300	21489ND		RACK MOUNTED UPS	1.00	EACH		$	
0310	22403NN		WEB CAMERA ASSEMBLY	1.00	EACH		$	
0320	23150NN		COMMUNICATION CABLE	50.00	LF		$	
0330	23151NN		POLE WITH LOWERING DEVICE	1.00	EACH		$	
0340	23157EN		TRAFFIC SIGNAL POLE BASE	4.00	CUYD		$	
0350	23941EC		VIDEO SURVEILLANCE CONTROLLER	1.00	EACH		$	
0360	23944EC		ADVANCED GROUNDING SYSTEM	1.00	EACH		$	
0370	24851EC		CABLE-NO. 10/3C DUCTED	1,500.00	LF		$	

Section: 0011 - WATERLINE

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0380	02220		FLOWABLE FILL	80.00	CUYD		$	
0390	14003		W CAP EXISTING MAIN	2.00	EACH		$	
0400	14012		W ENCASEMENT STEEL OPEN CUT RANGE 1	165.00	LF		$	
0410	14023		W FLUSHING ASSEMBLY	1.00	EACH		$	
0420	14057		W PIPE PVC 03 INCH	1,240.00	LF		$	
0430	14089		W TAPPING SLEEVE AND VALVE SIZE 1	2.00	EACH		$	
0440	14092		W TIE-IN 03 INCH	1.00	EACH		$	
0450	14115		W VALVE CUT-IN 03 INCH	1.00	EACH		$	
0460	20757ED		PAVEMENT REPAIR	15.00	SQYD		$	

Section: 0012 - TRAFFIC

171245

PROPOSAL BID ITEMS

Report Date 10/20/17

Section: 0012 - TRAINEES

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0470	02742		TRAINEE PAYMENT REIMBURSEMENT CEMENT MASON	1,200.00	HOUR		$	
0480	02742		TRAINEE PAYMENT REIMBURSEMENT CEMENT MASON	1,200.00	HOUR		$	
0490	02742		TRAINEE PAYMENT REIMBURSEMENT GROUP 2, 3 OR 4 OPERATOR	1,400.00	HOUR		$	

Section: 0013 - DEMOBILIZATION &/OR MOBILIZATION

LINE	BID CODE	ALT	DESCRIPTION	QUANTITY	UNIT	UNIT PRIC	FP	AMOUNT
0500	02568		MOBILIZATION	1.00	LS		$	
0510	02569		DEMOBILIZATION	1.00	LS		$	