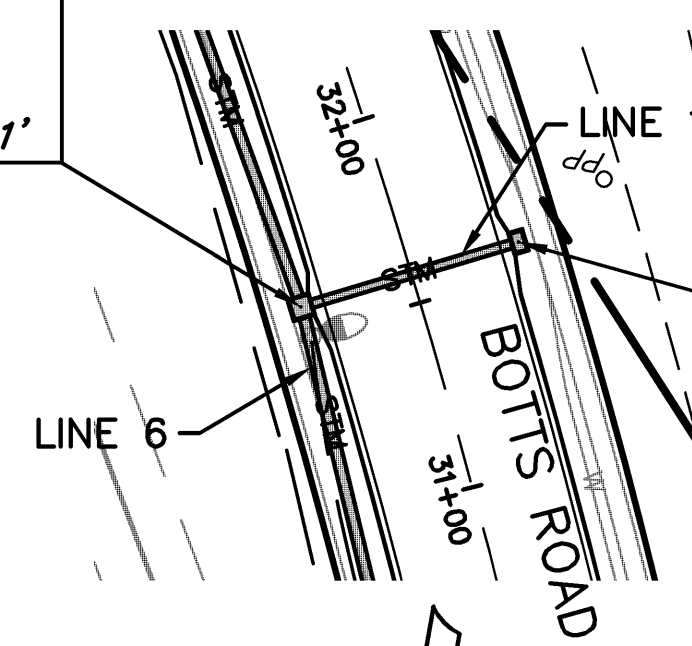


AS BUILT

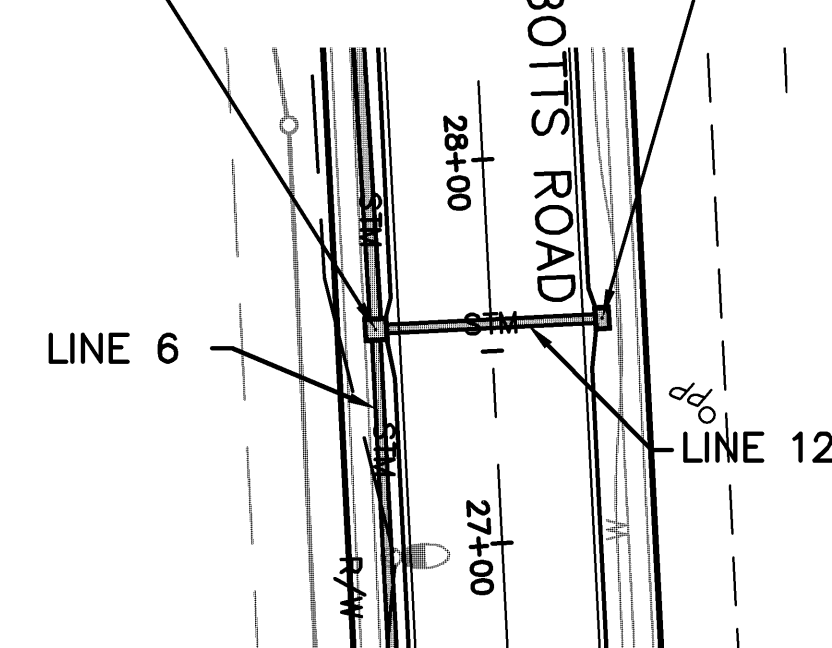
Date Surveyed: January 29, 2009
 Project No.: CR200810781
 SEC4: 70087223
 Field Acceptance Date:
 File No.:

C.I. #6-5, Const. Std. Type I
 Curb Inlet (5'x5' Inside)
 Sta. 10+00.00 (Line 11)
 18+02.90 = Sta. 18+01.51 (Line 6)
 31+58.02 = Sta. 31+57.81 (Q)
 Botts Rd., 29.98' Lt. 30.11'
 6-5
 Asbuilt is 0.12' S
 & 0.21' E of Plan



Asbuilt is 0.24' N
 & 0.05' W of Plan
 C.I. #11-1, Const. Std. Type I
 Curb Inlet (5'x3' Inside)
 Sta. 10+59.00 (Line 11) 10+59.05
 =Sta. 31+57.81 (Q) 31+57.58
 Botts Rd., 00.00' Rt. 28.93'
 11-1

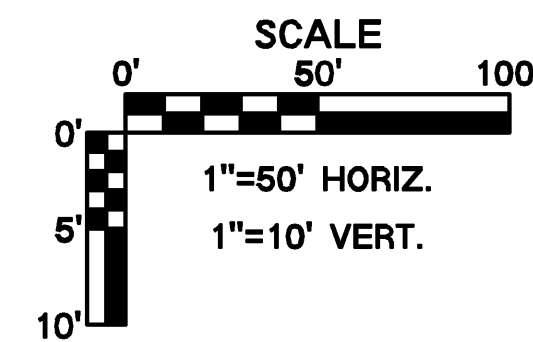
C.I. #6-6, Const. Std. Type I
 Curb Inlet (5'x5' Inside)
 Sta. 10+00.00 (Line 12)
 22+01.82 = Sta. 22+00.04 (Line 6)
 27+57.04 = Sta. 27+57.23 (Q)
 Botts Rd., 30.00' Lt. 29.93'
 6-6
 Asbuilt is 0.15' N
 & 0.14' W of Plan



C.I. #12-1, Const. Std. Type I
 Curb Inlet (5'x3' Inside)
 Sta. 10+59.00 (Line 12) 10+59.02
 =Sta. 27+57.23 (Q) 27+57.05
 Botts Rd., 29.02' Rt. 29.09'
 12-1
 Asbuilt is 0.13' N
 & 0.15' W of Plan

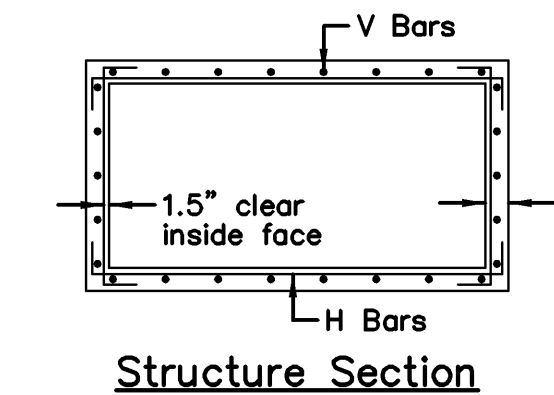
Line 6, CI-J #6-5
 Direct A = 0.36 ac
 Direct C = 0.62
 Local CxA = 0.22 ac
 Total CxA = 4.47 ac
 Ant. K = 1.25
 i = 8.77 in/hr
 100 yr Q = 49.03 cfs
 Cap. = 82.03 cfs
 Vel. = 17.45 fps
 Mann n = 0.013

Line 11, CI-J #11-1
 Direct A = 0.37 ac
 Direct C = 0.62
 Local CxA = 0.23 ac
 Total CxA = 1.24 ac
 Ant. K = 1.25
 i = 9.03 in/hr
 100 yr Q = 13.99 cfs
 Cap. = 22.62 cfs
 Vel. = 7.58 fps
 Mann n = 0.013



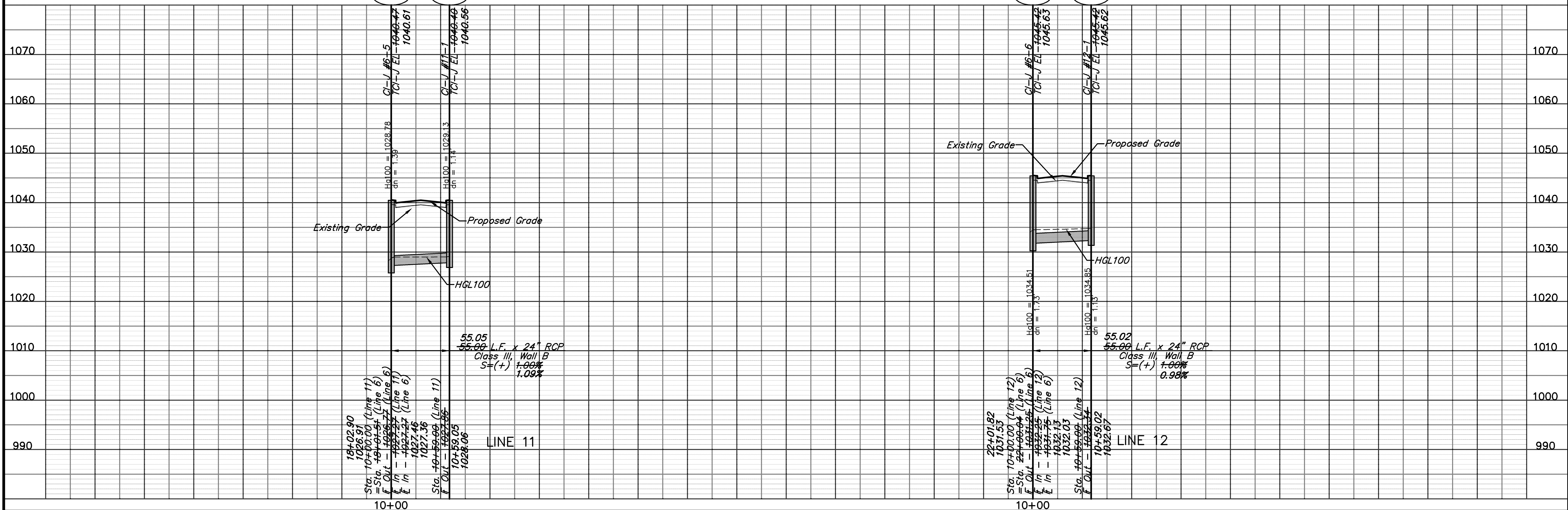
Line 6, CI-J #6-6
 Direct A = 0.36 ac
 Direct C = 0.62
 Local CxA = 0.22 ac
 Total CxA = 5.01 ac
 Ant. K = 1.25
 i = 8.99 in/hr
 100 yr Q = 33.82 cfs
 Cap. = 41.02 cfs
 Vel. = 9.33 fps
 Mann n = 0.013

Line 12, CI-J #12-1
 Direct A = 0.36 ac
 Direct C = 0.62
 Local CxA = 0.22 ac
 Total CxA = 1.23 ac
 Ant. K = 1.25
 i = 9.03 in/hr
 100 yr Q = 13.92 cfs
 Cap. = 22.62 cfs
 Vel. = 7.57 fps
 Mann n = 0.013



Str. #	Wall Reinforcing* V Bars	H Bars (in.)	t**
11-1	#5 @ 12"	#4 @ 12"	6
12-1	#6 @ 12"	#4 @ 12"	6

* For depths greater than 7'
 ** Add 2" if cast in place



Location: N:\Engineering\Richard Gebaur - 07165 & 07166\Drafting\Botts & Thunderbird Road\ASBUILT\Street & Storm\SM3 - 07165.dwg

STORM SEWER PLAN & PROFILE

CENTERPOINT-KCS INTERMODAL CENTER

DATE	P.E. SIGNATURE	DESCRIPTION
06-07-07	R.J.S.	Prepared for Review.
01-25-08	R.J.S.	Revised all pipe alignments
02-09-08	R.J.S.	AS BUILT

Reviewed By: S.E.C.
 Designed By: R.J.S.
 Drafted By: J.W.W.
 Lutjen Project No.: 07165

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Sheet No.:
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