



INLET SPACING DESIGN

PID : 110563 **Date :** 10/15/2022 **Project :** HAM-74

Location : Race Road NB

Description : Race Road over IR-74

Designer : Fishbeck

Rainfall Area: C

Storm Frequency (yr.) : 2

Total Allow. Spread (ft.) : 10.00

Allowable Depth (ft.) 0.16

STATION	C.B. Type	GUTTER LENGTH (ft.)	RUNOFF COEF	AREA (acres)	CONC. TIME (min.)	GUTTER TIME (min.)	TIME USED (min.)	LONG. SLOPE (ft./ft.)	GUTT. SLOPE (ft./ft.)	PAVT. SLOPE (ft./ft.)	GUTT. WIDTH (ft.)	LOCAL DEPRESS. (ft.)	RAIN FALL (in./hrs.)	INTERCPTD FLOW (cfs.)	BYPASS FLOW (cfs.)	TOTAL FLOW (cfs.)	DEPTH FLOW (ft.)	PAVT. SPREAD (ft.)
21+96	Begin																	
17+94	CB-3A	402.00	0.90	0.16	10.00	3.29	13.29	0.0400	0.0160	0.0160	2.00	0.0000	3.57	0.36	0.15	0.51	0.077	4.84

Spread check for Race Road NB over IR 74.
No Drainage Structures Req'd at end of MSE Wall per allowable spread calculations



INLET SPACING DESIGN

PID : 110563 **Date :** 10/15/2022 **Project :** HAM-74

Location : Race Road SB

Description : Race Road over IR-74

Designer : Fishbeck

Rainfall Area: C

Storm Frequency (yr.) : 2

Total Allow. Spread (ft.) : 10.00

Allowable Depth (ft.) 0.16

STATION	C.B. Type	GUTTER LENGTH (ft.)	RUNOFF COEF	AREA (acres)	CONC. TIME (min.)	GUTTER TIME (min.)	TIME USED (min.)	LONG. SLOPE (ft./ft.)	GUTT. SLOPE (ft./ft.)	PAVT. SLOPE (ft./ft.)	GUTT. WIDTH (ft.)	LOCAL DEPRESS. (ft.)	RAIN FALL (in./hrs.)	INTERCPTD FLOW (cfs.)	BYPASS FLOW (cfs.)	TOTAL FLOW (cfs.)	DEPTH FLOW (ft.)	PAVT. SPREAD (ft.)
21+86	Begin																	
18+10	CB-3A	384.00	0.90	0.19	10.00	2.98	12.98	0.0400	0.0160	0.0160	2.00	0.0000	3.61	0.42	0.21	0.63	0.084	5.25

Spread check for Race Road SB
 over IR 74.
 No Drainage Structures Req'd at
 end of MSE Wall per allowable
 spread calculations

Q = 0.33 cfs

C = 0.70

i = 5.43

A = 0.088 acres

Q = 1.44 cfs

C = 0.55

i = 5.43

A = 0.482 acres

HW

CB-2-2B

CB-2-2B

12" CMP

12" C

12" C

22

23

24

25

1,094.47'

05°40'00"E

RACE ROAD

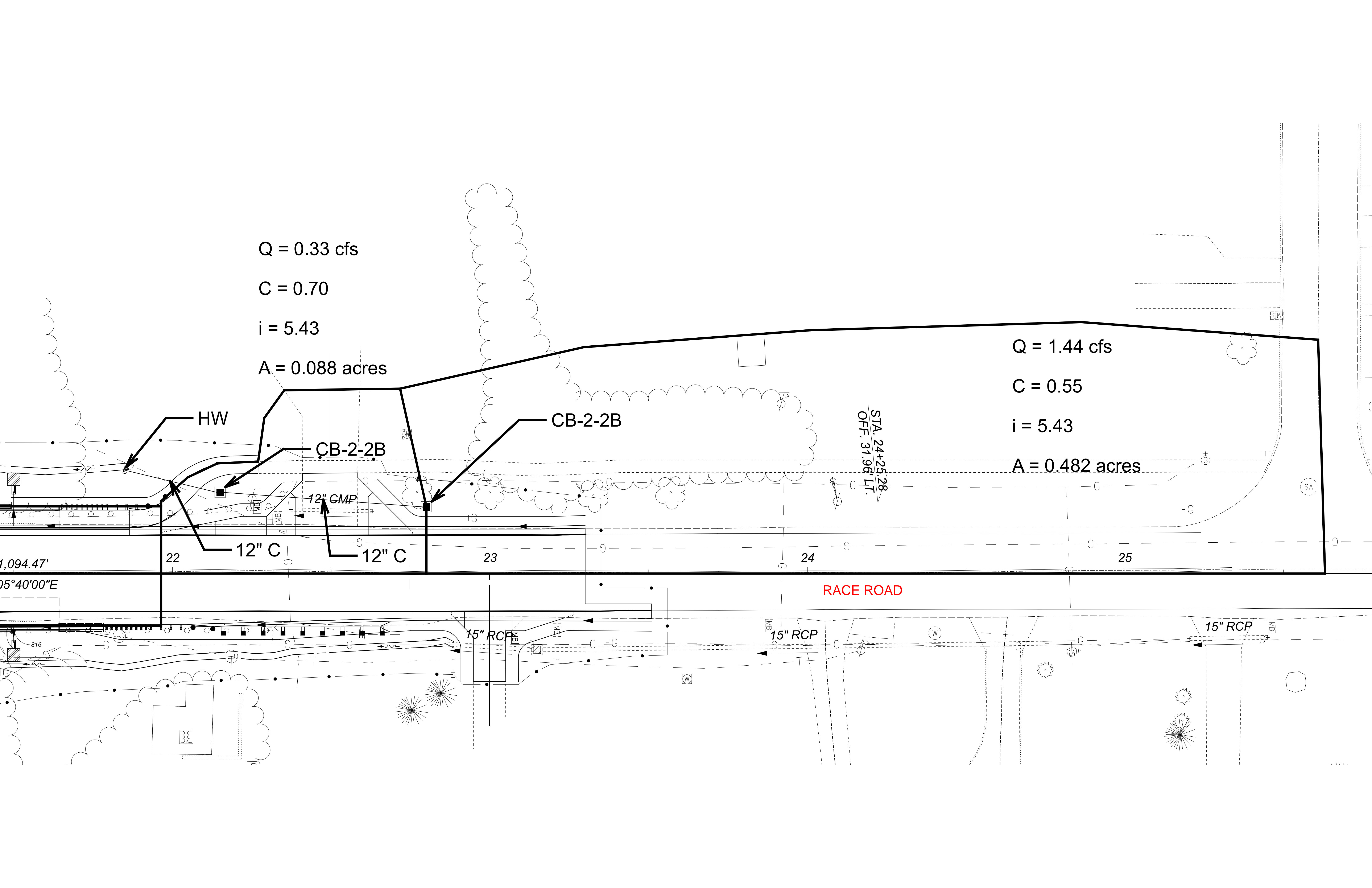
15" RCP

15" RCP

15" RCP

STA. 24+25.28
OFF. 31.96' LT.

816





STORM SEWER SYSTEM

PID : 110563 **Date :** 10/15/2022 **Project :** HAM-74

Location : Race Road SB

Description : Race Road over IR-74

Designer : Fishbeck

Rainfall Area: C

Just Full Capacity Frequency (yrs.) : 2

Hydraulic Gradient Frequency (yrs.) : 5

Minimum Pipe Size : 12.00

Tailwater Elevation (ft.): 715.00

JUNCTION		STATION		ΔAREA	ΔCA	BEGIN	RAINFALL		DISCHARGE		PIPE			F/L PIPE	MEAN	JUST FULL	FRICT	HYGR EL.	COVER	COVER	COVER	INLET TYPE
From	To	From	To	Σ AREA	Σ CA	TIME	INTENSITY	(cfs.)	(cfs.)	DIAM.	LENGTH	SLOPE	IN / OUT	VEL	CAPACITY	SLOPE	IN / OUT	IN / OUT	MINUS	MINUS	MINUS	MANNING'S
				(acres)		(min.)	(2 yrs.)	(5 yrs.)	(2 yrs.)	(5 yrs.)	(in.)	(ft.)	(ft./ft.)	(ft.)	(fps.)	(cfs.)	(ft./ft.)	(ft.)	(ft.)	HY GR	CROWN	'n'
CB2	CB1	22+80		0.48	0.27	10.00	4.08	4.79	1.1	1.3	12	64.0	0.0766	820.40	7.41	9.19	0.0017	820.66	823.40	2.74	2.00	CB 2-2B
	begin	22+15		0.48	0.27									815.50				816.24	818.00			0.015
CB1	HW1	82+15		0.09	0.06	10.14	4.06	4.77	1.3	1.6	12	30.0	0.0167	815.50	4.56	4.29	0.0025	815.93	818.00	2.07	1.50	CB 2-2B
	final	21+85		0.57	0.33									815.00				815.77	816.00			0.015