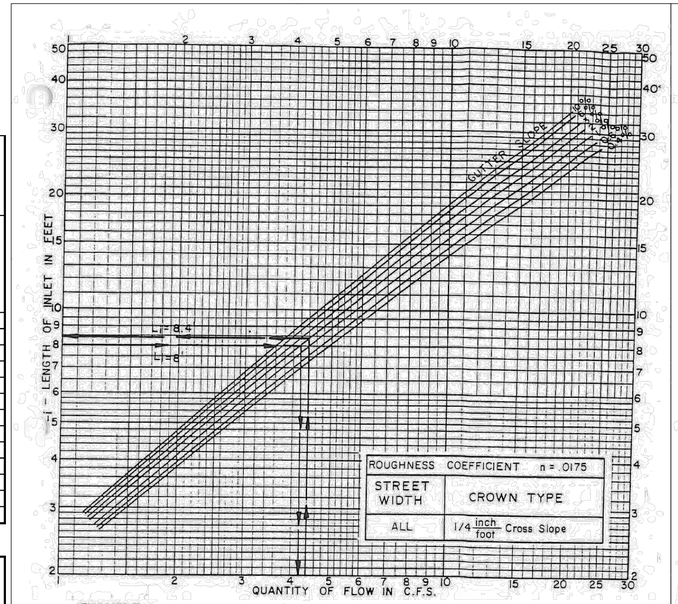
COMPUTATION SHEET
FOR DETERMINING CAPACITY OF
CURB OPENING INLETS AND DROP INLETS IN SUMPS

INLET NO.	GUTTER SLOPE S_o FT./FT.	CROWN SLOPE OF PVM'T θ_o FT./FT.	GUTTER FLOW Q_{100} C.F.S.	DEPTH OF GUTTER FLOW Y_o FT.	CAPACITY OF INLET PER FOOT OF LENGTH Q/L C.F.S./FT.	LENGTH OF INLET OPENING L OR P FT.	CAPACITY OF INLET Q C.F.S.	NOTES
LAT 1A	1.00	0.50	1.15	0.4	0.23	5	8.5	
LAT 1C	1.00	0.50	0.77	0.4	0.15	5	8.5	
LAT 1D	1.00	0.50	1.15	0.4	0.23	5	8.5	
LAT 1F	1.00	0.50	0.93	0.4	0.19	5	8.5	
LAT 1G-1	1.00	0.50	6.66	0.4	0.67	10	17.5	
LAT 1H	0.88	0.55	0.62	0.4	0.12	5	8.5	
LAT 1J	2.50	1.00	0.99	0.4	0.20	5	8.5	
LINE 6	1.00	2.00	3.74	0.4	0.37	10	17.5	
LINE 7	1.00	2.00	5.11	0.4	0.51	10	17.5	
LAT 7A	2.50	2.00	7.24	0.4	0.72	10	17.5	
LAT 7B	1.50	3.53	9.93	0.4	0.99	10	17.5	
LINE 11	1.50	2.00	8.84	0.4	0.88	10	17.5	
LAT 11A	1.50	2.00	3.92	0.4	0.39	10	17.5	

COMPUTATION SHEET
FOR DETERMINING CAPACITY OF
CURB OPENING INLETS ON GRADE

INLET NO.	GUTTER SLOPE S_o FT./FT.	CROWN SLOPE OF PVM'T θ_o FT./FT.	GUTTER FLOW Q_{100} C.F.S.	DEPTH OF GUTTER FLOW Y_o FT.	CAPACITY OF INLET PER FOOT OF LENGTH Q/L C.F.S./FT.	LENGTH OF INLET OPENING L OR P FT.	CAPACITY OF INLET Q C.F.S.	NOTES
LINE 1 STA. 8+96.82	8.00	1.00	0.71	0.4	0.14	5	5	
LINE 1 STA. 8+63.55	8.25	4.50	0.22	0.4	0.04	5	5	
LINE 3	7.72	2.00	0.99	0.4	0.10	10	5	
LINE 5	9.00	1.00	2.25	0.4	0.23	10	5	
LAT 5A	9.20	1.00	1.17	0.4	0.12	10	5	



EXAMPLE

Known:
- Pavement Width = 24'
- Gutter Slope = 2.0 %
- Pavement Cross Slope = 1/4" / 1'
- Gutter Flow = 4.4 cfs

Find:
- Length of Inlet Required (L_i)

Solution:
- Enter Graph at 4.4 cfs
- Intersect Slope = 2.0 %
- Read L_i = 8.4'

Decision:
1. Use 10' Inlet
   - No Flow Remains in Gutter
2. Use 8' Inlet
   - Intercept Only Part of Flow

Use 8' Inlet
Enter Graph at L_i = 8'
Intersect Slope = 2.0%
Read Q = 4.2 cfs
Remaining Gutter Flow = 4.4 cfs − 4.2 cfs = 0.2 cfs

RECESSED AND STANDARD CURB OPENING INLET CAPACITY CURVES ON GRADE

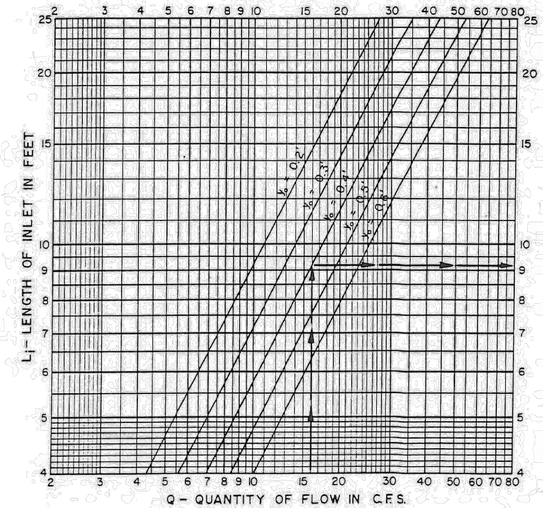
FIGURE 3.5a

EXAMPLE

Known:
- Quantity of Flow = 16.0 c.f.s.
- Maximum Depth of Flow Desired in Gutter At Low Point (y_o) = 0.4'

Find:
- Length of Inlet Required (L_i)

Solution:
- Enter Graph at 16.0 c.f.s.
- Intersect y_o = 0.4'
- Read L_i = 9.2'
- Use 10' Inlet



ROUGHNESS COEFFICIENT n = .0175	
STREET WIDTH	CROWN TYPE
ALL	Straight and Parabolic

RECESSED AND STANDARD CURB OPENING INLET CAPACITY CURVES AT LOW POINT

FIGURE 3.7

AS–BUILT

THIS RECORD DRAWING IS COMPILATION OF A COPY OF THE SEALED ENGINEERING DRAWING FOR THIS PROJECT; MODIFIED BY ADDENDA, CHANGE ORDERS, AND INFORMATION FURNISHED BY THE CONTRACTOR. THE INFORMATION SHOWN ON THE RECORD DRAWINGS IS PROVIDED BASED ON SURVEYING AT THE SITE AND INFORMATION PROVIDED BY THE CONTRACTOR OR OTHERS NOT ASSOCIATED WITH THE DESIGN ENGINEER. THE ORIGINAL SEALED DRAWING ARE ON FILE AT THE OFFICES OF WINKELMANN AND ASSOCIATES, INC.

Maria L. Bonilla — 10–19–2016

WINKELMANN AND ASSOCIATES, INC. — *DATE*

ALL RESPONSIBILITY FOR ADEQUACY OF DESIGN REMAINS WITH THE DESIGN ENGINEER. THE CITY OF ROCKWALL, IN REVIEWING AND RELEASING PLANS FOR CONSTRUCTION, ASSUMES NO RESPONSIBILITY FOR ADEQUACY OR ACCURACY OF DESIGN.

No.	DATE	REVISION	APPROV.
1.	12/09/2015	BULLETIN #1	M.B.
2.	12/18/2015	ISSUE FOR CONSTRUCTION	M.B.
3.			
4.			
5.			
6.			

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LAST SAVED BY: BHOGUE October 19, 2016

STATE OF TEXAS — MARIA C. BONILLA-NICHOLLS — 100106 — LICENSED PROFESSIONAL ENGINEER

10-19-2016

THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY MARIA C. BONILLA-NICHOLLS P.E. # 100106

INLET COMPUTATIONS

SEC N. GOLIAD ST. AND E.QUAIL RUN RD. ROCKWALL, TEXAS

C–11.17

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31585.00

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