

VOLZ ENGINEERING & SURVEYING, INC. 10849 INDIAN HEAD INDUSTRIAL BLVD. ST. LOUIS, MO 63132 (314)426-6212 HYDRAULICS FOR 88-2860 TWIN CHINNEYS VILLAGE F

Table with columns: STRUCTURES, UPPER LOWER, LENGTH SIZE, FLOWLINE UPPER LOWER GRADE, UPPER STRUCTURE ELEVATION FREEBOARD, HYDRAULIC UPPER LOWER GRADE, FRICTION LOSS, VELOCITY FPS HEAD GAIN, TURN ANGLE LOSS, AREA FT, QUANTITY INCH TOTAL, CAPACITIES PIPE INLET OUTLET BYPASS.

5.569v

LINE 9 - 5 STRUCTURES

AI 1025-MH 1024- 100-0 12 584.40 583.32 .010

MH 1024-MH 1023- 47.0 12 583.32 582.85 .010

CI 1023-CI 1022- 34.0 15 582.85 581.49 .040

CI 1022-AI 1240- 140.0 15 581.49 574.52 .060

LINE 9 - 5 STRUCTURES

AI 1029-AI 1028- 155.0 12 580.10 585.00 .000

AI 1028-CI 1027- 95.0 15 585.00 583.10 .020

CI 1027-CI 1026- 36.0 13 583.10 582.38 .020

CI 1026-AI 1235- 272.0 15 582.38 587.42 .085

LINE 10 - 5 STRUCTURES

CI 1042-CI 1040- 67.0 15 573.50 571.49 .020

CI 1040-CI 1041- 52.0 15 571.49 570.43 .020

CI 1041-MH 1040- 35.0 15 570.43 566.51 .112

MH 1040-AI 1220- 129.0 27 566.51 544.57 .015

LINE 11 - 4 STRUCTURES

AI 227-MAI 1045- 163.0 21 575.20 572.80 .015

AI 1045-AI 1044- 75.0 21 572.80 570.61 .029

AI 1044-MH 1040- 178.0 24 570.61 546.51 .083

*** Ais # of sides open & depth of still

GIS street grade at inlet

GIS depth over grate

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7.469v

LINE 2 - 11 STRUCTURES

AI 1012-AI 1012- 41.0 15 582.74 580.140

AI 1012-CI 1011- 88.0 18 582.00 580.39 .016

CI 1011-CI 1010- 34.0 21 580.39 580.08 .015

CI 1010-CI 1009- 103.0 21 580.09 574.59 .030

CI 1009-AI 1008- 125.0 21 574.59 569.34 .050

AI 1008-AI 1007- 42.0 21 569.34 566.95 .023

AI 1007-MH 1006- 109.0 30 566.95 565.86 .010

MH 1006-CI 1005- 41.0 20 565.86 565.45 .010

CI 1005-CI 1004- 34.0 20 565.45 565.11 .010

CI 1004-FE 1003- 150.0 30 557.00 555.50 .010

LINE 3 - 8 STRUCTURES

AI 1009-AI 1019- 220.0 12 579.90 576.60 .015

CI 1019-CI 1018- 104.0 15 576.60 574.96 .010

CI 1018-CI 1017- 34.0 15 574.96 574.62 .010

CI 1017-MH 1016- 42.0 18 574.62 574.20 .010

MH 1016-AI 1015- 102.0 18 574.20 572.18 .010

AI 1015-AI 1014- 107.0 18 573.18 572.11 .010

AI 1014-AI 1007- 120.0 18 572.11 566.95 .043

LINE 4 - 2 STRUCTURES

CI 1021-CI 1010- 267.0 15 586.75 580.09 .025

AI 1022-AI 1012- 80.0 12 503.20 582.00 .015

LINE 5 - 2 STRUCTURES

AI 1025-AI 1012- 150.0 12 584.25 582.00 .015

*** Ais # of sides open & depth of still

GIS street grade at inlet

GIS depth over grate

- * lower hydraulic elevation when flowing less than full
C curve loss in pipe
R radius of curve
HM entrance control elevation
PV partial flow velocity