



AREA & FLOW COMPUTATIONS										
Area No.	Collection Point Type	Collection Point Location	Area (acres)	Wtd. C	CA	T _c (min)	I ₁₀ (in/hr)	Q ₁₀ (cfs)	I ₁₀₀ (in/hr)	Q ₁₀₀ (cfs)
A1	20' std curb inlet	Stm Line A Sta 2+92.50	2.89	0.5	1.45	10.00	7.20	10.40	9.80	14.16
A2	10' sag inlet	Stm Line A Sta 0+49.94	6.22	0.5	3.11	10.00	7.20	22.39	9.80	30.48

INLET COMPUTATIONS - 100 YEAR FREQUENCY															
INLET	LOCATION	RUNOFF		CARRY OVER (cfs)	TOTAL GUTTER FLOW (cfs)	GUTTER SLOPE (ft/ft)	CROWN TYPE	GUTTER CAPACITY (cfs)	INLET TYPE	CURB INLET DESIGN				CARRY OVER (cfs)	REMARKS
		DA NO	Q _a (cfs)							L reqd (ft)	L act (ft)	L/ Lreq	Q _{cap} (cfs)		
A1	Stm Line A Sta 2+92.50	A1	14.16	0.00	14.16	0.030	28' Parabolic	22,500	std ongrade curb	21	20	-	13.70	0.46	carryover to sag A2
A2	Stm Line A Sta 0+49.94	A2	30.48	0.46	30.94	0.005	28' Parabolic	22,500	rec sag curb	10	10	-	31.00	0.00	flow depth @ inlet = 0.7'

STORM SEWER LINE A															
STATION		HYDRAULIC LENGTH (ft)	Q		PIPE DIAMETER (in)	PIPE LENGTH (ft)	PIPE SLOPE (%)	FLOWLINE ELEVATION		HGL		FULL-FLOW CAPACITY (cfs)	ACTUAL VELOCITY		
FROM	TO		Q ₁₀ (cfs)	Q ₁₀₀ (cfs)				D/S (ft)	U/S (ft)	D/S (%)	U/S (%)		V ₁₀ (ft/s)	V ₁₀₀ (ft/s)	
-0+40.00	0+00.00	40.00	32.80	44.64	21.00	36.00	19.81	467.38	474.51	7.89	471.00	474.16	67.08	13.63	18.56
0+00.00	0+49.94	49.94	32.80	44.64	27.00	45.94	2.26	474.51	475.55	2.07	475.14	476.17	44.81	11.03	11.75
0+49.94	2+92.50	242.56	10.40	13.70	21.00	242.56	4.01	476.05	485.78	0.74	476.27	478.07	31.82	10.21	11.11

LEGEND

- DRAINAGE AREA BOUNDARY
- 540 --- EXISTING 2' CONTOURS
- FLOW DIRECTION ARROW
- A1
4.12
20.25 --- AREA ID
AREA (acres)
Q₁₀₀ (cfs)

VERDUNITY
A better future, by design.
17000 Preston Road, Suite 110, Dallas TX. 75248
(214)425-6720
www.verdunity.com
Texas P.E. Firm Registration No. F-13496

RECORD DRAWINGS

ISSUE	DATE	DESCRIPTION
1	12/17/14	RECORD DRAWINGS

DESIGNED BY: E. MAGEE
DRAWN BY: E. MAGEE
CHECKED BY: K. SHEPHERD
DATE: 12/16/2014
JOB NUMBER: 004-002

RECORD DRAWINGS
THESE PLANS ARE A RECORD SET OF THE CONSTRUCTED PROJECT, AND REFLECT REVISIONS AND CONSTRUCTION-RELATED CHANGES AS MADE BY THE CONTRACTOR. CHANGES MADE FROM THE ORIGINAL CONSTRUCTION DOCUMENTS DO NOT DEPICT ENGINEERING AND ARE NOT THE RESPONSIBILITY OF VERDUNITY, INC. OR THE ENGINEER ON RECORD ON THE ORIGINAL DOCUMENTS. ORIGINAL PLANS RELEASED FOR CONSTRUCTION WERE SEALED BY KEVIN M. SHEPHERD, PE NO. 88642



GLENN AVE. UTILITY REHABILITATION

DRAINAGE AREA MAP AND COMPUTATIONS

0 20' 40'

SHEET 05