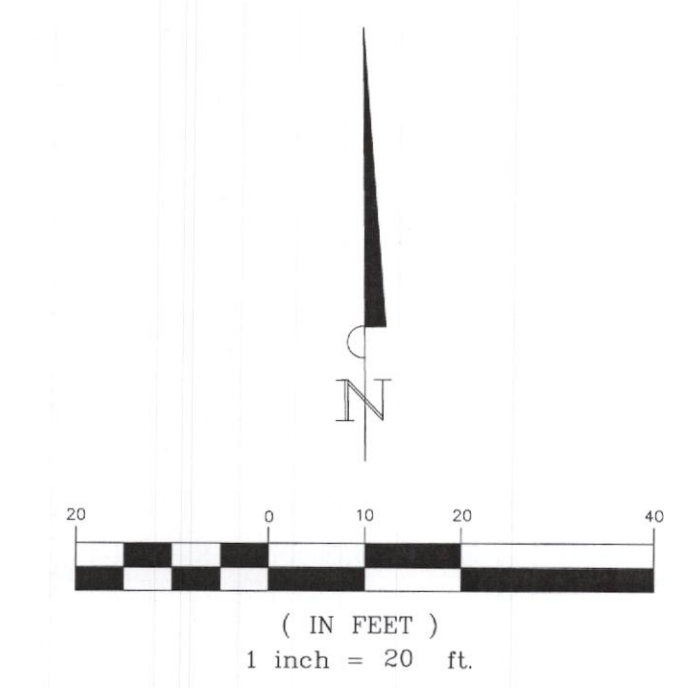
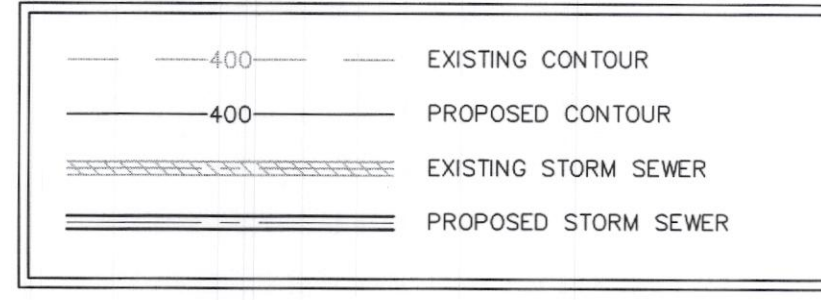


No.	Date	Revision Description



LEGEND



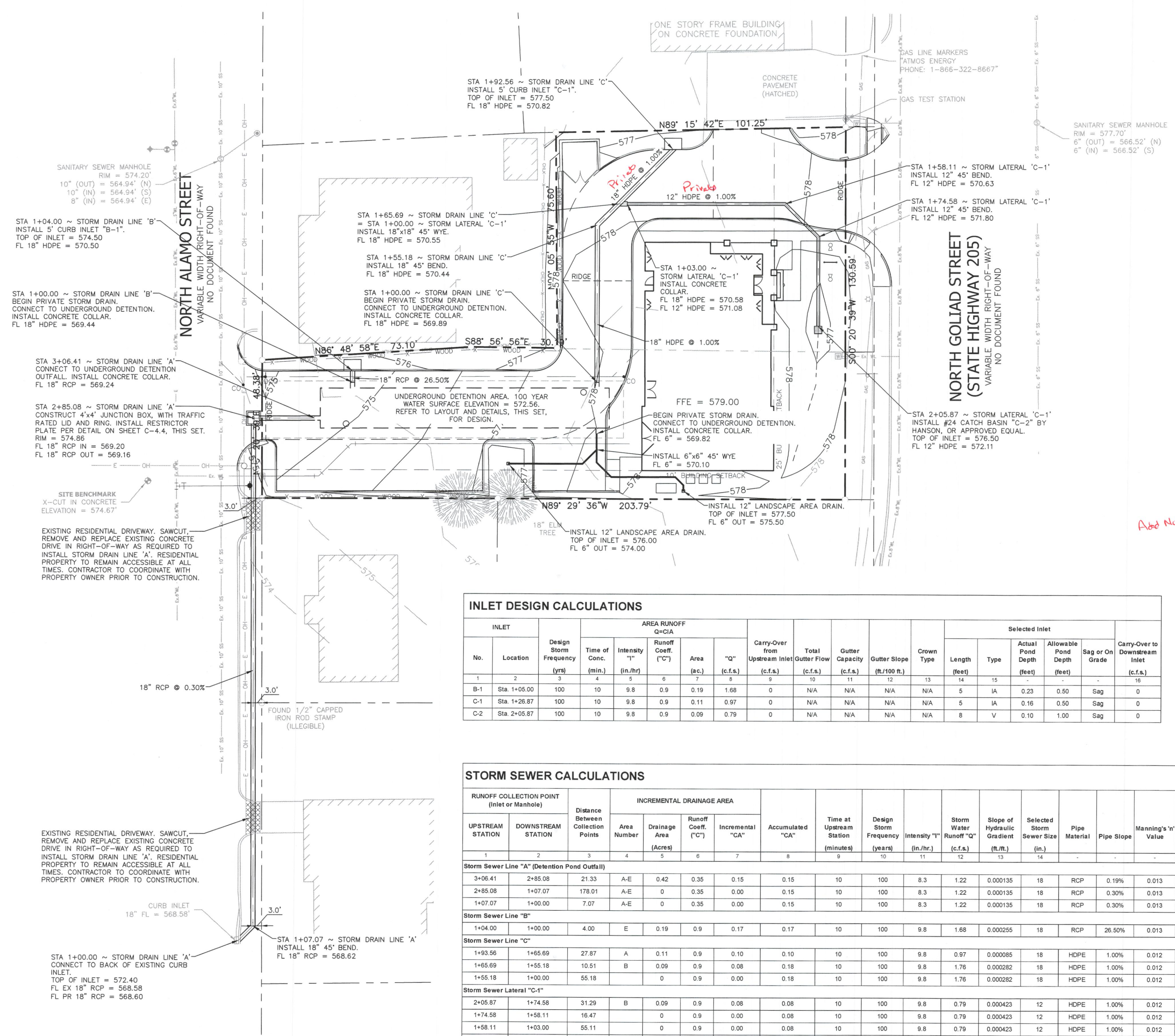
NOTES

- REFER TO SHEET C-1.1 FOR ADDITIONAL NOTES.
- CONTRACTOR TO VERIFY THE EXISTENCE, LOCATION AND DEPTHS OF ALL EXISTING UTILITIES WITHIN THE PROJECT WORK AREA BEFORE COMMENCING CONSTRUCTION.
- ALL UTILITIES SHALL BE CONSTRUCTED BEGINNING AT THE TIE-IN LOCATION TO EXISTING UTILITIES (DOWNSTREAM) AND PROCEED TO PROPOSED STRUCTURES (UPSTREAM).
- VERIFY ALL DIMENSIONS SHOWN ON THIS PLAN WITH ARCHITECTURAL PLANS BEFORE COMMENCING CONSTRUCTION.
- PRIVATE STORM AND DETENTION SYSTEM TO BE MAINTAINED BY PROPERTY OWNER.
- 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 OF ACCURACY OR DESIGN.

NOTES TO CONTRACTOR

- INFORMATION ON THIS SHEET AND OTHER SHEETS THROUGHOUT THIS PLAN SET IS PART OF A UNIFIED DESIGN. THE CONTRACTOR SHALL NOT SEPARATE DRAWINGS FROM THE SET FOR DISTRIBUTION TO SPECIFIC DISCIPLINES. EACH SUBCONTRACTOR SHALL BE PROVIDED WITH ALL SHEETS WITHIN THIS PLAN SET.
- CONTRACTOR SHALL REFERENCE GENERAL NOTES SHEET FOR ADDITIONAL INFORMATION. INFORMATION ON THE GENERAL NOTES SHEET IS PART OF A UNIFIED DESIGN AND IS PERTINENT TO THIS PLAN SHEET.

Abd Note: Detention system to be installed and fully functioning prior to any paving/installation



INLET DESIGN CALCULATIONS

INLET No.	Location	Design Storm Frequency (yrs)	AREA RUNOFF								Selected Inlet							
			Time of Conc. (min.)	Intensity "I" (in./hr)	Runoff Coeff. ("C")	Area (ac.)	"Q" (c.f.s.)	Carry-Over from Upstream Inlet (c.f.s.)	Total Gutter Flow (c.f.s.)	Gutter Capacity (c.f.s.)	Gutter Slope (ft./100 ft.)	Crown Type	Length (feet)	Type	Actual Pond Depth (feet)	Allowable Pond Depth (feet)	Sag or On Grade	Carry-Over to Downstream Inlet (c.f.s.)
B-1	Sta. 1+05.00	100	10	9.8	0.9	0.19	1.68	0	N/A	N/A	N/A	N/A	5	IA	0.23	0.50	Sag	0
C-1	Sta. 1+26.87	100	10	9.8	0.9	0.11	0.97	0	N/A	N/A	N/A	N/A	5	IA	0.16	0.50	Sag	0
C-2	Sta. 2+05.87	100	10	9.8	0.9	0.09	0.79	0	N/A	N/A	N/A	N/A	8	V	0.10	1.00	Sag	0

STORM SEWER CALCULATIONS

RUNOFF COLLECTION POINT (Inlet or Manhole)		Distance Between Collection Points	INCREMENTAL DRAINAGE AREA				Accumulated "CA"	Time at Upstream Station (minutes)	Design Storm Frequency (years)	Intensity "I" (in./hr.)	Storm Water Runoff "Q" (c.f.s.)	Slope of Hydraulic Gradient (ft./ft.)	Selected Storm Sewer Size (in.)	Pipe Material	Pipe Slope	Manning's "n" Value	Velocity in Sewer Between Collection Points "V" (feet/sec.)	Head Loss Coeff. K _f	Velocity Head Loss at Upstream Station (feet)	Flow Time in Sewer (minutes)	Time at Downstream Station (minutes)	HYDRAULIC GRADE		Remarks
UPSTREAM STATION	DOWNSTREAM STATION		Area Number	Drainage Area (Acres)	Runoff Coeff. ("C")	Incremental "CA"																Upstream	Downstream	
Storm Sewer Line "A" (Detention Pond Outfall)																								
3+06.41	2+85.08	21.33	A-E	0.42	0.35	0.15	10	100	8.3	1.22	0.000135	18	RCP	0.19%	0.013	0.69	1.25	0.01	0.51	10.51	570.17	570.16	Underground detention outfall with restrictor plate to junction box	
2+85.08	1+07.07	178.01	A-E	0	0.35	0.00	0.15	10	100	8.3	1.22	0.000135	18	RCP	0.30%	0.013	0.69	0.50	0.00	4.30	14.30	570.16	570.13	Junction box to 45 degree bend
1+07.07	1+00.00	7.07	A-E	0	0.35	0.00	0.15	10	100	8.3	1.22	0.000135	18	RCP	0.30%	0.013	0.69	1.00	0.01	0.17	10.17	570.10	570.10	45 degree bend to system outfall at existing curb inlet
Storm Sewer Line "B"																								
1+04.00	1+00.00	4.00	E	0.19	0.9	0.17	10	100	9.8	1.88	0.000255	18	RCP	28.50%	0.013	0.95	1.25	0.02	0.07	10.07	570.94	570.94	5' curb inlet to underground detention	
Storm Sewer Line "C"																								
1+93.58	1+65.69	27.87	A	0.11	0.9	0.10	10	100	9.8	0.97	0.000085	18	HDPE	1.00%	0.012	0.55	1.25	0.01	0.85	10.85	571.44	571.44	5' curb inlet to 45 degree wye	
1+65.69	1+55.18	10.51	B	0.09	0.9	0.08	10	100	9.8	1.76	0.000282	18	HDPE	1.00%	0.012	1.00	0.60	0.01	0.18	10.18	571.42	571.42	45 degree wye to 45 degree bend	
1+55.18	1+00.00	55.18	0	0.9	0.00	0.18	10	100	9.8	1.76	0.000282	18	HDPE	1.00%	0.012	1.00	0.50	0.01	0.92	10.92	571.41	571.39	45 degree bend to underground detention	
Storm Sewer Lateral "C-1"																								
2+05.87	1+74.58	31.29	B	0.09	0.9	0.08	10	100	9.8	0.79	0.000423	12	HDPE	1.00%	0.012	1.01	1.25	0.02	0.52	10.52	571.52	571.51	Area inlet to 45 degree bend	
1+74.58	1+58.11	16.47	0	0.9	0.00	0.08	10	100	9.8	0.79	0.000423	12	HDPE	1.00%	0.012	1.01	0.50	0.01	0.27	10.27	571.49	571.48	45 degree bend to 45 degree bend	
1+58.11	1+03.00	55.11	0	0.9	0.00	0.08	10	100	9.8	0.79	0.000423	12	HDPE	1.00%	0.012	1.01	0.50	0.01	0.91	10.91	571.47	571.44	45 degree bend to 18"x12" reducer	
1+03.00	1+00.00	3.00	0	0.9	0.00	0.08	10	100	9.8	0.79	0.000049	18	HDPE	1.00%	0.012	0.45	0.60	0.00	0.11	10.11	571.42	571.42	18"x12" reducer to 45 degree wye	



Know what's below. Call before you dig.
(@ least 48 hours prior to digging)

BENCHMARK

SOURCE BENCHMARK: City of Rockwall monument No. Reset R005-1, Concrete monument with a brass cap stamped "Reset R005-1" found in the median of Summit Ridge Drive at the intersection of Summit Ridge Drive and F.A. Highway No. 740.
Elevation = 578.631'