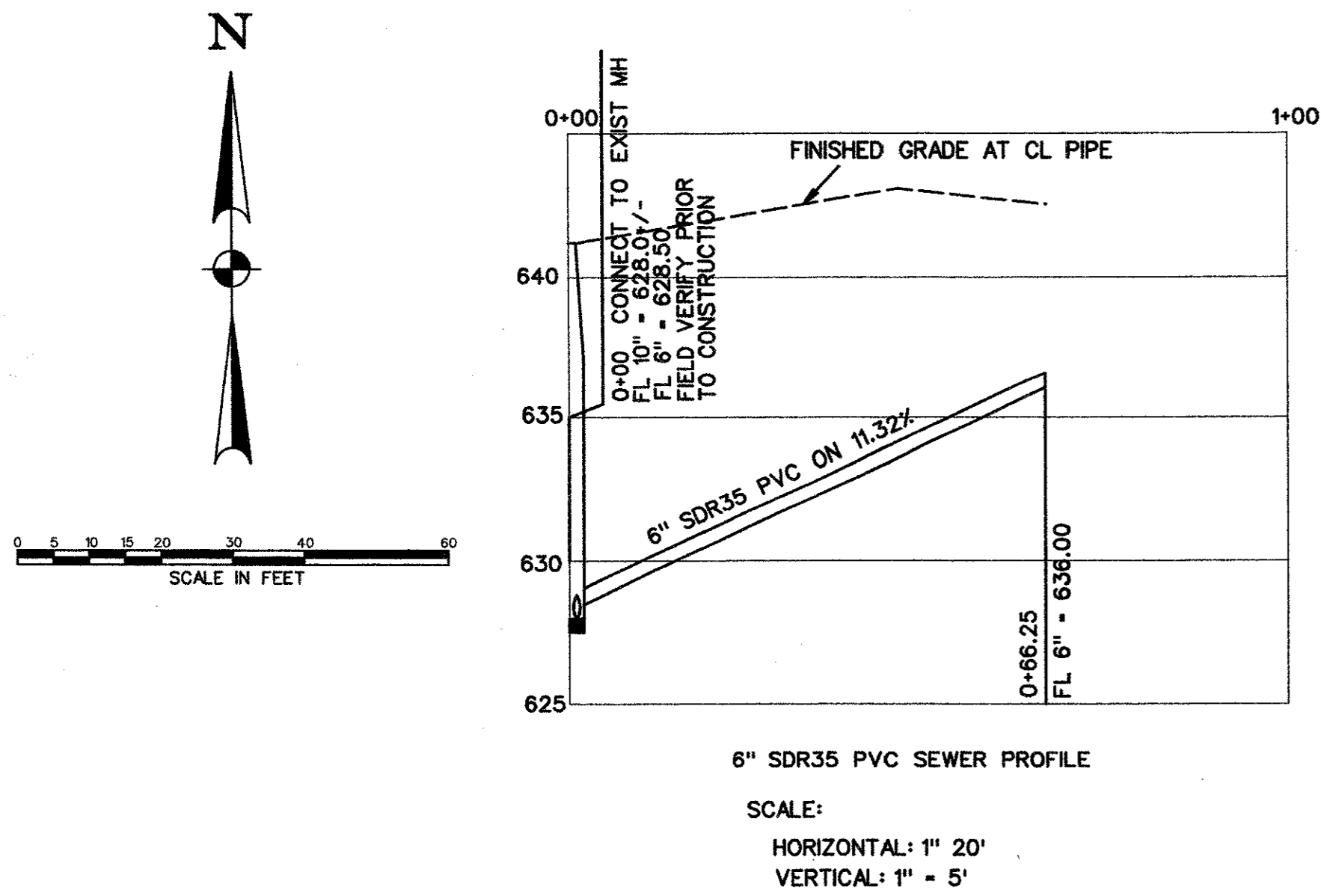


B5-6

CLAIRE CHENNAULT MISSION HANGAR

B5-6

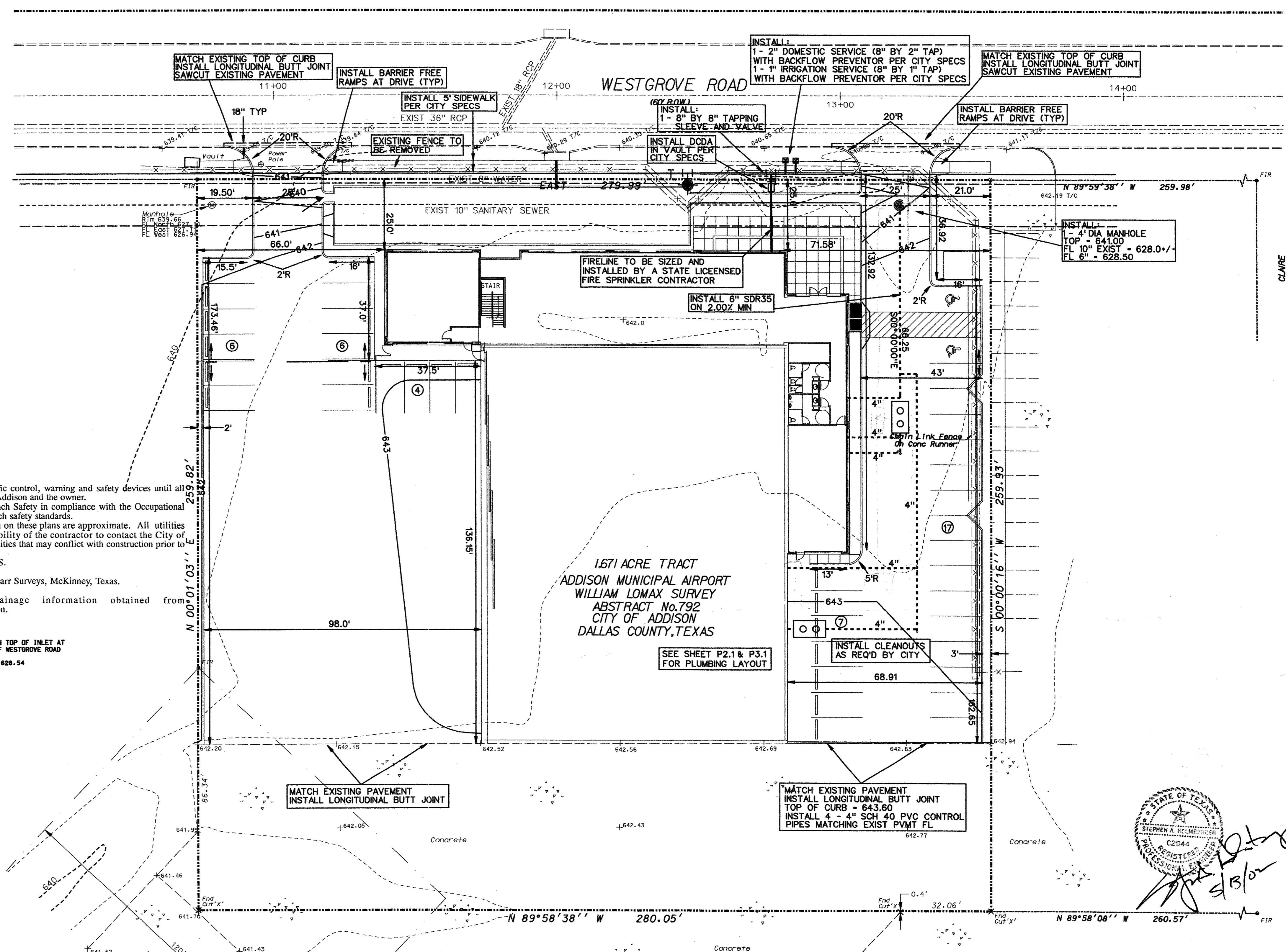


**SITE TABULATIONS**

<b>ZONING: INDUSTRIAL-3 DISTRICT</b>	
<b>PROPOSED USE</b>	<b>AIRCRAFT STORAGE HANGAR AND OFFICES</b>
<b>LOT AREA</b>	<b>72,800 S.F./1.67 ACRES</b>
<b>LOT COVERAGE 21,729 Grnd Fl/72,800</b>	<b>29.8%</b>
<b>BUILDING AREA / FAR</b>	<b>22,279 S.F./72,800 .31</b>
<b>PARKING REQUIRED</b>	
OFFICE 7,677/300	25 SPACES
HANGAR 15,120/1,000	15 SPACES
<b>TOTAL PARKING REQUIRED</b>	<b>40 SPACES</b>
<b>PARKING PROVIDED</b>	
	38 SPACES
	2 HANDICAP SPACE
<b>TOTAL</b>	<b>40 SPACES</b>
<b>LANDSCAPE REQUIREMENTS</b>	
AREA REQUIRED 10% OF 72,800 SF	7,280 SF.
AREA PROVIDED	9,052 SF.
AREA IN FRONT OF BLDG. LINE	7,438 SF.
<b>PARKING LOT LANDSCAPE</b>	
SURFACE PARKING AREA	13,320 S.F.
INTERIOR LANDSCAPE REQUIRED @ 5%	696 S.F.
INTERIOR LANDSCAPE PROVIDED	796 S.F.

- Contractor shall be responsible for traffic control, warning and safety devices until all work has been accepted by the City of Addison and the owner.
  - Contractor shall be responsible for Trench Safety in compliance with the Occupational Safety and Health Administration's trench safety standards.
  - The location of existing utilities shown on these plans are approximate. All utilities may not be shown. It is the responsibility of the contractor to contact the City of Addison and DIG-TESS and all area utilities that may conflict with construction prior to beginning work.
  - Erosion control shall conform to NPDES.
- Topography and field surveying provided by Sparr Surveys, McKinney, Texas.  
 Asbuilt utilities, paving and drainage information obtained from record drawings on file with the City of Addison.

**BENCH MARK:**  
 FOUND SQUARE CUT ON TOP OF INLET AT  
 NORTHWEST CORNER OF WESTGROVE ROAD  
 AND SUNBELT.  
 ELEV. 628.54



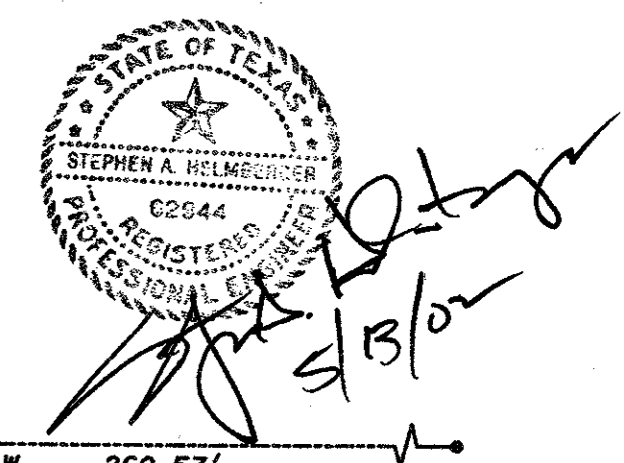
**PAVING AND GRADING GENERAL NOTES**

- All construction shall conform to the City of Addison Standard Construction Details and Standard Specifications for Public Works Construction and North Central Texas Council of Governments. In the event that an item is not covered, the contractor shall bring the problem to the attention of the Addison Public Works Department for approval or modification.
- Excavation or fill operations shall not interfere with or obstruct pre-construction drainage patterns until such time as on-site drainage improvements are constructed.
- Top of curb elevations are noted with (TC) following them. Gutter elevations are 0.50 feet below top of curb. All other spot elevations shown are to top of pavement or finished grade unless otherwise noted. The intention of this grading plan is preclude ponding water on paving or grassed areas. If the contractor finds any location that will result in ponding water, the Engineer shall be notified for clarification prior to pavement placement.
- All subgrade beneath proposed pavement shall be scarified 8" deep and compacted to 95% Standard Proctor (ASTM-D-698) at or slightly above (0 to 3%) optimum moisture content.
- All driveways/approaches shall match existing street pavement sections. Firelane and access to the dumpster location and access easement pavement shall be 6" thick 4000 psi concrete with #3 bars on 18" centers both ways. Parking lot pavement shall be 5" 3000 psi concrete with #3 bars on 24" centers both ways.
- The trash enclosure foundation shall be constructed of 6" thick 3000 psi concrete with #3 bars on 18" centers both ways. Slab edges shall be 12" wide by 24" deep with two #5 bars top and bottom.
- Sawed transverse dummy joints shall be installed in concrete pavement on 15' centers. Sawed longitudinal dummy joints shall be installed along centerline of fire lane and outside were applicable. All joints shall be filled with an Town approved sealer.
- Transverse expansion joints shall be installed at all drive returns and right of way line. Expansion joints shall be placed along all fixed objects such as light poles and foundations.
- Contractor shall adjust all manholes and water valves to match finished grades as shown on drawings.
- Street lights shall be installed 3 1/2 to 4' behind back of curbs as required but shall not encroach on any sidewalks.
- Contractor shall construct barrier free ramps at all intersections per City of Addison Details. All handicap ramps, stalls, walks and access to the building(s) shall meet ADA standards.
- All conduit for irrigation sleeves shall be class 200 PVC installed 12" below concrete pavement and extend 2" outside of back of curb.

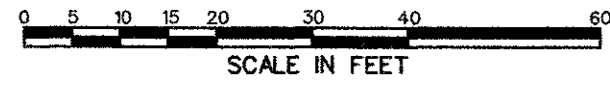
**UTILITY CONSTRUCTION GENERAL NOTES**

- All water and sanitary sewer construction shall conform to the City of Addison Standard Construction Details and Standard Specifications for Public Works Construction and North Central Texas Councils of Governments. In the event an item is not covered, the contractor shall bring the problem to the attention of the Town of Addison Public Works Department for a decision, approval or modification.
- All water mains 6" or less shall be class 150, AWWA C909 PVC pipe. All water mains 8" through 12" shall be Class 150, AWWA C909 PVC pipe.
- All gate valves shall be City approved resilient Seat Gate Valves (A-2370-series).
- All fire hydrants must meet City of Addison Specifications, Mueller Centurian or approved equal.
- Hose/pumper nozzles on fire hydrants shall be 18" above top of curb, or finished grade and shall face the streets or firelane. Fire hydrant shall not be placed less than 2.0' nor more than 6.0' behind the curb.
- All water mains shall have a minimum cover of 48" below finished grade.
- All water mains shall be pressure tested in accordance with the specifications. The Contractor shall flush and sterilize all water mains as set forth in the Town of Addison Standard Specifications.
- The location of existing utilities shown on these plans is approximate. All utilities may not be shown. It is the responsibility of the contractor to contact all area utilities that may conflict with construction prior to beginning work and perform line locates as required.
- All sanitary sewer pipe outside of the building shall be SDR35 PVC pipe.
- All concrete blocking and embedment for water and sewer line shall be in accordance with the City of Addison construction standards.
- Contractor shall be responsible for traffic control, warning and safety devices until all work has been accepted by the City of Addison and the owner.
- Contractor shall be responsible for Trench Safety in compliance with the Occupational Safety and Health Administration's trench safety standards.
- Any water or sanitary sewer service located outside of a street, alley or easement shall be installed by a licensed plumber and be inspected by Building Inspection.
- Fire Department Connection shall be within 100' of a fire hydrant.

**CONSTRUCTION SET**  
 ISSUED BY  
**TOWN OF ADDISON**  
**PUBLIC WORKS DEPARTMENT**  
 NAME: *Shea Chatham* DATE: *5/15/02*



SITE PLAN						
LOT 1, BLOCK 1 MISSION COMPANY ADDITION						
MISSION COMPANY						
4600 CLAIRE CHENNAULT, ADDISON, TEXAS						
<b>H HELMBERGER ASSOCIATES, INC.</b> CIVIL AND ENVIRONMENTAL ENGINEERS 124 HOOPER ROAD, WYLE TEXAS 75086 (214) 442-7469						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
HELM.	CADD	MAY 2002	1"=20'	SPLAN	0216	C1



**MODIFIED RATIONAL METHOD (DETENTION VOLUME CALCULATIONS)**  
North Side Addison Airport 1.67-acre Tract

**INPUT:**  
Area: 0.730 acre  
Top: 10 min  
Runoff Coefficient: 0.9  
Peak Inflow: 5.800 cfs  
Max. Outflow: 1.66 cfs

$S = (60 \times \text{inflow} \times \text{td}) - (0.5 \times 1.66 (\text{top} + \text{td}) 60)$   
where:  
S = Storage Volume Required (cf)  
td = storm duration (min)  
top = time of concentration (min)

**OUTPUT:**

Interval	Duration (min)	Intensity (in/hr)	Qin (cfs)	Volume (in) (cf)	Volume (out) (cf)	Volume (storage) (cf)
1	5	10.37	6.8	2,044	747	1,297
2	10	8.76	5.8	3,453	996	2,457
3	15	7.65	5.0	4,523	1,245	3,278
4	20	6.93	4.5	5,385	1,494	3,891
5	25	6.20	4.1	6,110	1,743	4,367
6	30	5.69	3.7	6,729	1,992	4,737
7	35	5.35	3.5	7,361	2,241	5,140
8	40	4.93	3.2	7,774	2,490	5,284
9	45	4.60	3.0	8,160	2,739	5,421
10	50	4.37	2.9	8,613	2,988	5,625
11	55	4.20	2.8	9,106	3,237	5,869
12	60	3.95	2.6	9,343	3,486	5,857
13	70	3.56	2.3	9,823	3,984	5,839
14	80	3.27	2.1	10,312	4,482	5,830
15	90	3.04	2.0	10,785	4,980	5,805

**RAINFALL INTENSITIES (1):**

Storm Event (yr)	Intensity (in/hr)
100	10.37
5	8.76
10	7.65
15	6.93
20	6.20
25	5.69
30	5.35
35	5.00
40	4.93
45	4.60
50	4.37
55	4.20
60	3.95
70	3.56
80	3.27
90	3.04

North Detention Area - Landscaped Sump

Area = 0.73 Acres  
C = 0.35  
I = 7.65  
Q (max release rate) = 1.66 CFS

Release Structure - 8" Sch 40 PVC Pipe

**BENCH MARK:**  
FOUND SQUARE CUT ON TOP OF INLET AT  
NORTHWEST CORNER OF WESTGROVE ROAD  
AND SUNBELT. ELEV. 629.54

**MODIFIED RATIONAL METHOD (DETENTION VOLUME CALCULATIONS)**  
Southeast Side Addison Airport 1.67-acre Tract

**INPUT:**  
Area: 0.250 acre  
Top: 10 min  
Runoff Coefficient: 0.9  
Peak Inflow: 2.000 cfs  
Max. Outflow: 0.964 cfs

$S = (60 \times \text{inflow} \times \text{td}) - (0.5 \times 0.964 (\text{top} + \text{td}) 60)$   
where:  
S = Storage Volume Required (cf)  
td = storm duration (min)  
top = time of concentration (min)

**OUTPUT:**

Interval	Duration (min)	Intensity (in/hr)	Qin (cfs)	Volume (in) (cf)	Volume (out) (cf)	Volume (storage) (cf)
1	5	10.37	2.3	700	434	266
2	10	8.76	2.0	1,183	578	604
3	15	7.65	1.7	1,949	723	826
4	20	6.93	1.5	1,844	868	977
5	25	6.20	1.4	2,093	1,012	1,080
6	30	5.69	1.3	2,304	1,157	1,148
7	35	5.35	1.2	2,528	1,301	1,226
8	40	4.93	1.1	2,662	1,446	1,216
9	45	4.60	1.0	2,795	1,591	1,204
10	50	4.37	1.0	2,950	1,735	1,215
11	55	4.20	0.9	3,119	1,880	1,239
12	60	3.95	0.9	3,200	2,024	1,175
13	70	3.56	0.8	3,364	2,314	1,051
14	80	3.27	0.7	3,532	2,603	929
15	90	3.04	0.7	3,694	2,892	802

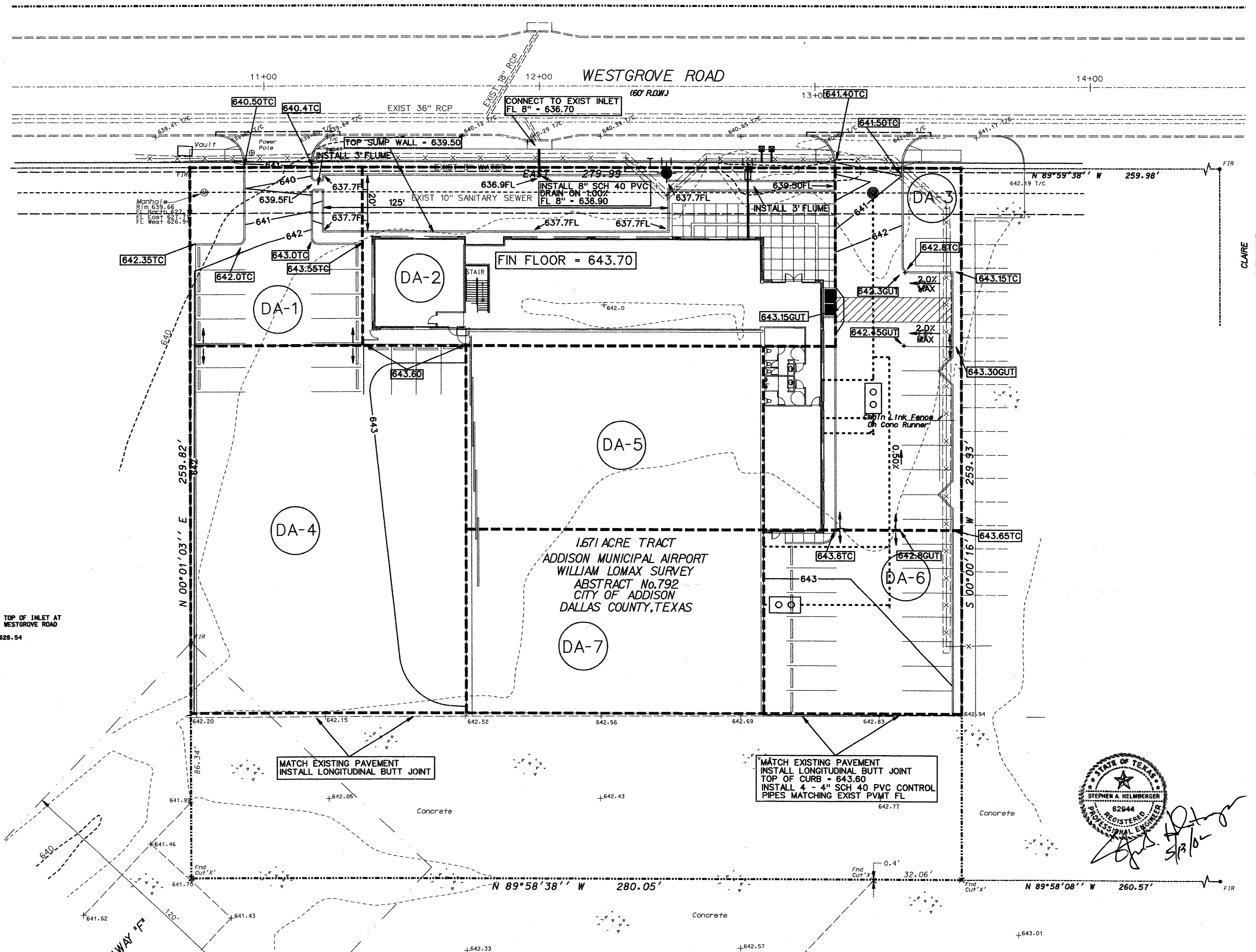
**RAINFALL INTENSITIES (1):**

Storm Event (yr)	Intensity (in/hr)
100	10.37
5	8.76
10	7.65
15	6.93
20	6.20
25	5.69
30	5.35
35	5.00
40	4.93
45	4.60
50	4.37
55	4.20
60	3.95
70	3.56
80	3.27
90	3.04

Southeast Detention Area - Parking Lot

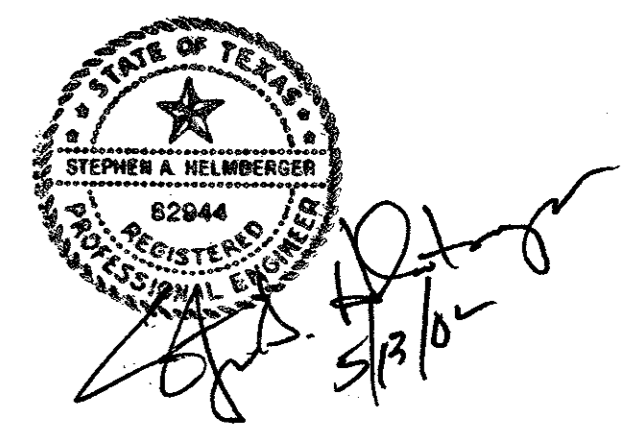
Area = 0.25 Acres  
C = 0.35  
I = 7.65  
Q (max release rate) = 0.96 CFS

Release Structure - 4 - 4" Sch 40 PVC Pipe Openings through curb



**STORMWATER RUNOFF CALCULATIONS**

LOCATION	To (MINUTES)	I (100)	A (ACRES)	C	Q100
DA-1	10	8.80	0.09	0.90	0.7 CFS
DA-2	10	8.80	0.26	0.90	2.1 CFS
DA-3	10	8.80	0.18	0.90	1.4 CFS
DA-4	10	8.80	0.41	0.90	3.2 CFS
DA-5	10	8.80	0.17	0.90	1.3 CFS
DA-6	10	8.80	0.11	0.90	0.9 CFS
DA-7	10	8.80	0.17	0.90	1.3 CFS



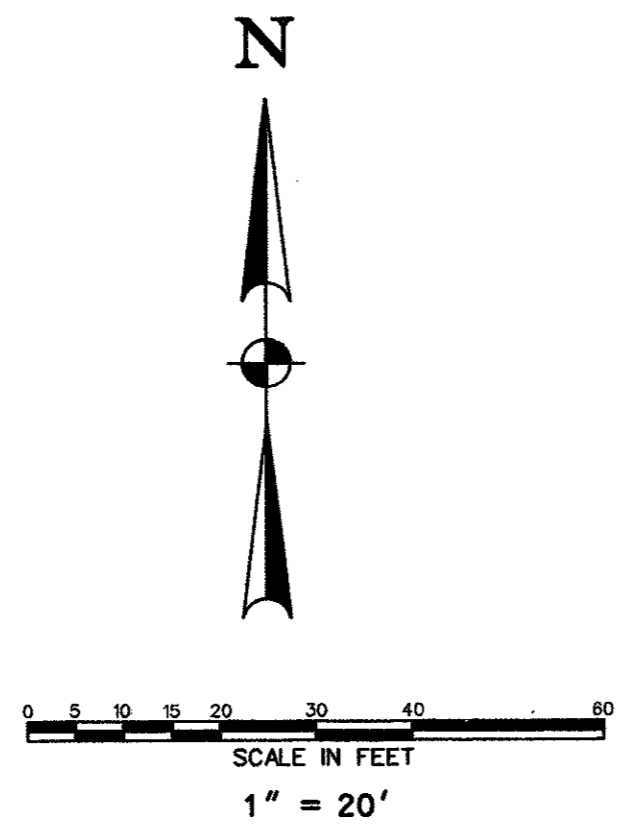
**GRADING AND DRAINAGE PLAN**  
LOT 1, BLOCK 1 MISSION COMPANY ADDITION  
MISSION COMPANY  
4600 CLAIRE CHENNAULT, ADDISON, TEXAS

**HELMBERGER ASSOCIATES, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
124 HOOPER ROAD, WYLLIE, TEXAS 75086 (214) 442-7400

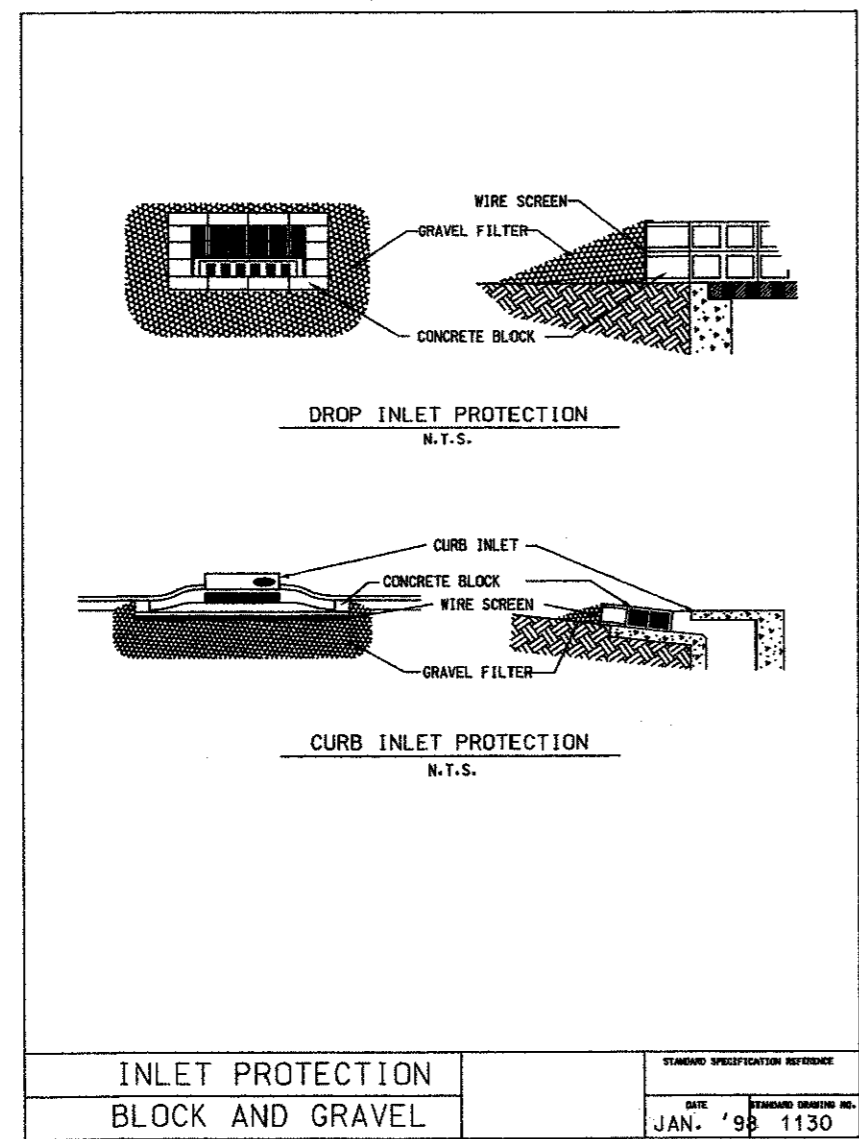
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
HELM.	CADD	MAY 2002	1"=20'	GDBORDER	0216	C2

**GENERAL NOTES:**

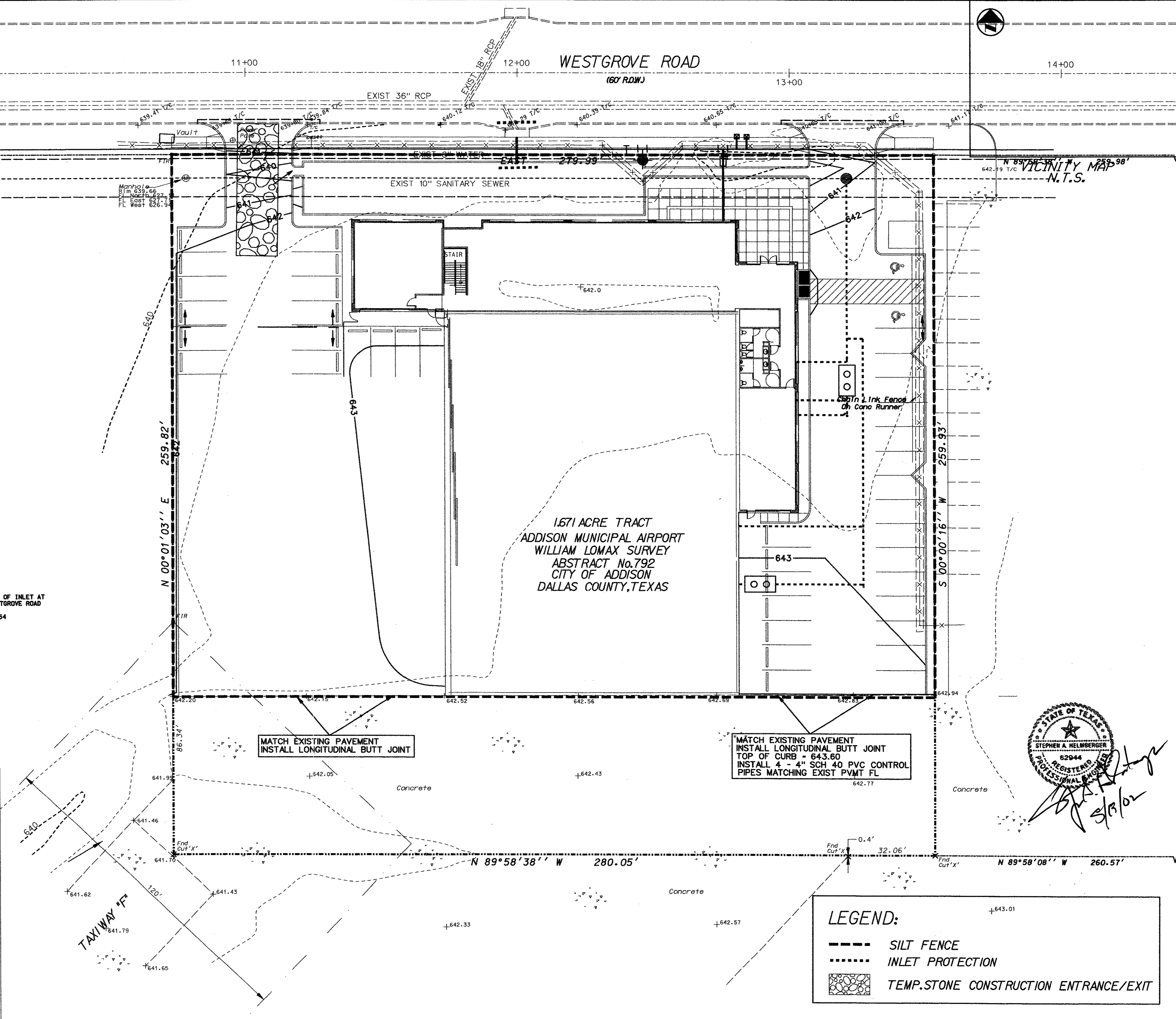
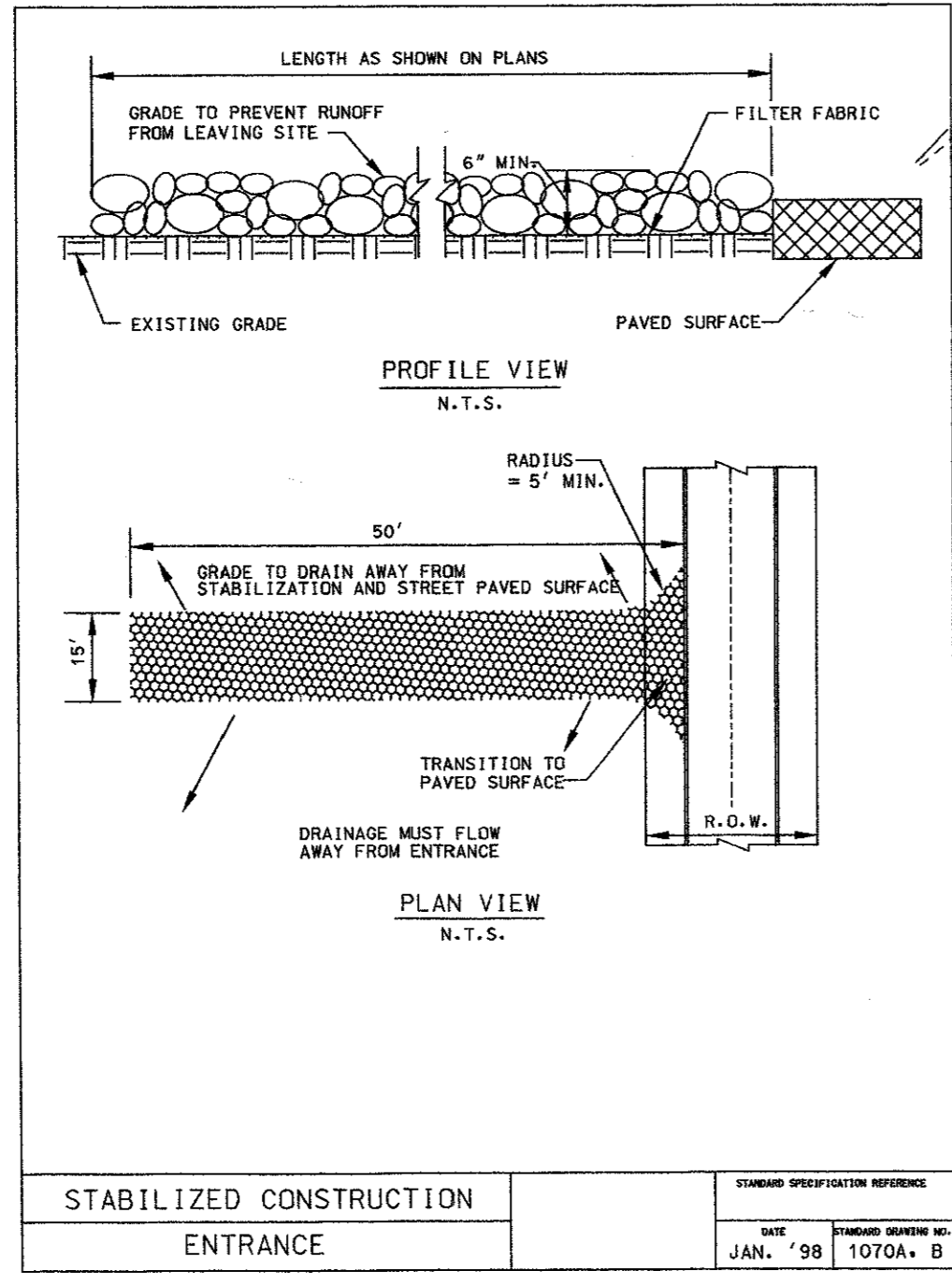
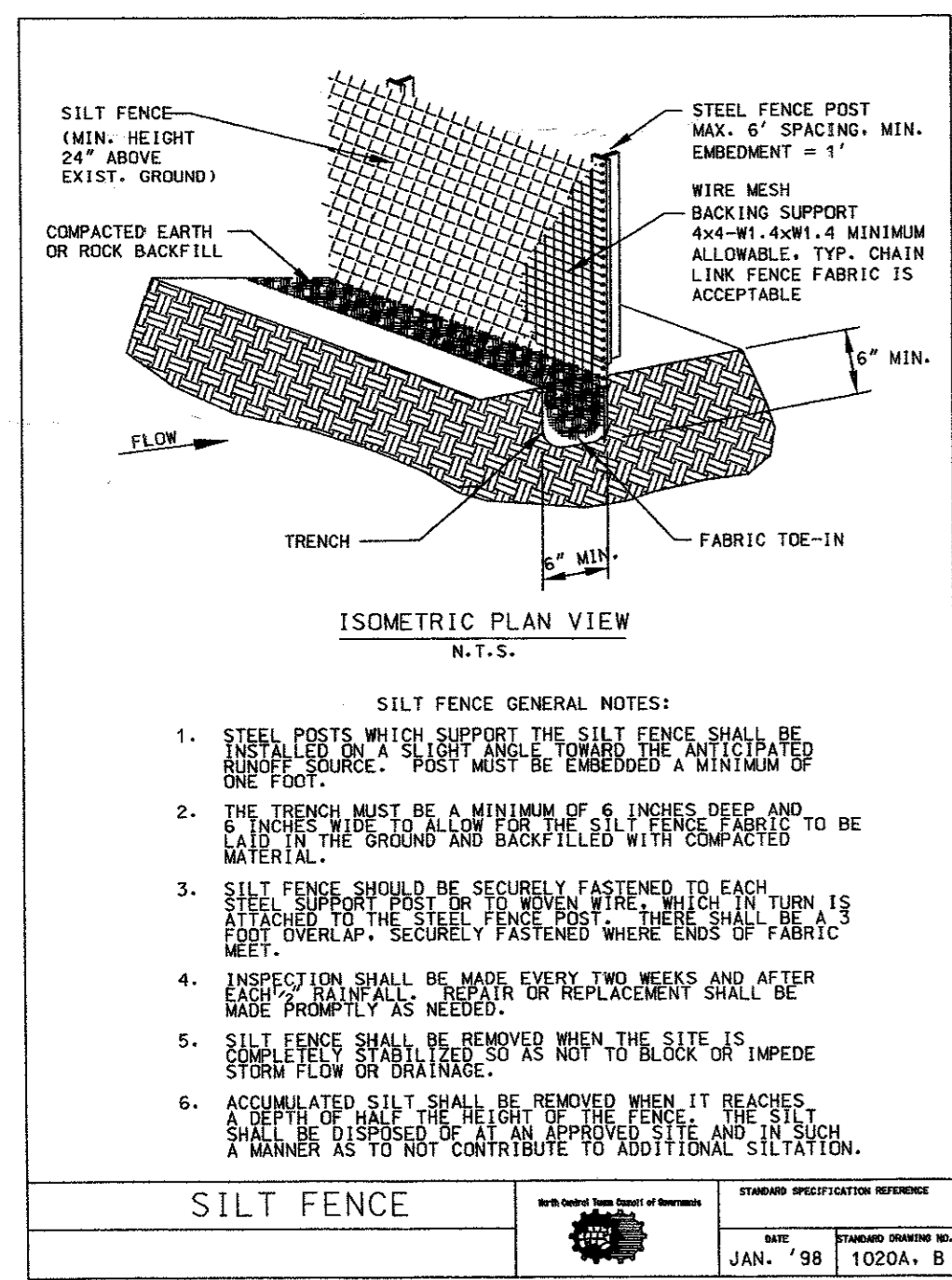
1. EROSION CONTROL DEVICES AS SHOWN ON THE EROSION CONTROL PLAN FOR THE PROJECT SHALL BE INSTALLED PRIOR TO THE START OF LAND DISTURBING ACTIVITIES ON THE PROJECT.
2. ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH THE APPROVED PLANS AND SPECIFICATIONS FOR THE PROJECT. CHANGES ARE TO BE APPROVED BEFORE CONSTRUCTION BY THE DESIGN ENGINEER AND THE CITY OF ADDISON ENGINEERING DIVISION.
3. IF THE EROSION CONTROL PLAN AS APPROVED CANNOT CONTROL EROSION AND OFF-SITE SEDIMENTATION FROM THE PROJECT THE EROSION CONTROL PLAN WILL BE REQUIRED TO BE REVISED AND/OR ADDITIONAL EROSION CONTROL DEVICES WILL BE REQUIRED ON SITE.
4. IF OFF-SITE SOIL BORROW OR SPOIL SITES ARE USED IN CONJUNCTION WITH THIS PROJECT, THIS INFORMATION SHALL BE DISCLOSED AND SHOWN ON THE EROSION CONTROL PLAN. OFF-SITE BORROW AND SPOIL AREAS ARE CONSIDERED A PART OF THE PROJECT SITE AND THEREFORE SHALL COMPLY WITH THE CITY OF ADDISON EROSION CONTROL REQUIREMENTS. THESE AREAS SHALL BE STABILIZED WITH PERMANENT GROUND COVER PRIOR TO FINAL APPROVAL OF THE PROJECT.
5. TOTAL PROJECT AREA = 1.67 ACRES  
DISTURBED AREA = 1.29 ACRES  
UNDISTURBED AREA = 0.38 ACRES
6. SEE SHEET C1 FOR PROPOSED UTILITIES
7. SEE SHEET C2 FOR DRAINAGE CALCULATIONS AND GRADING IMPROVEMENTS
8. SEE CITY OF ADDISON EROSION AND SEDIMENT CONTROL MANUAL FOR LATEST BMP DEVICE STANDARDS AND SPECIFICATIONS.



BMP MAINTENANCE SCHEDULE		
BMP	MAINTENANCE FREQUENCY	BY:
SILT FENCE	WEEKLY/AFTER RAINS	CONTRACTOR
CONST ENTRANCE	WEEKLY/AFTER RAINS	CONTRACTOR
INLET PROTECTION	WEEKLY/AFTER RAINS	CONTRACTOR



**BENCH MARK:**  
FOUND SQUARE CUT ON TOP OF INLET AT NORTHWEST CORNER OF WESTGROVE ROAD AND SUNBELT. ELEV. 628.54



MATCH EXISTING PAVEMENT  
INSTALL LONGITUDINAL BUTT JOINT  
TOP OF CURB = 643.60  
INSTALL 4 - 4" SCH 40 PVC CONTROL PIPES MATCHING EXIST PVMT FL

**LEGEND:**

- SILT FENCE
- ..... INLET PROTECTION
- ⊗ TEMP. STONE CONSTRUCTION ENTRANCE/EXIT

REV.	BY:	REVISION

EROSION CONTROL CONSTRUCTION PLAN		
CONSTRUCTION ENTRANCE	INSTALLATION:	REMOVAL:
CONSTRUCTION ENTRANCE	PRIOR TO STARTING	PRIOR TO PAVEMENT PLACEMENT
SILT FENCE	PRIOR TO STARTING	AFTER ESTABLISHING GRASS COVER
CURB INLET PROTECTION	PRIOR TO STARTING	AFTER ESTABLISHING GRASS COVER

**EROSION CONTROL PLAN**

LOT 1, BLOCK 1 MISSION COMPANY ADDITION  
MISSION COMPANY  
4600 CLAIRE CHENNAULT, ADDISON, TEXAS

**HELMBERGER ASSOCIATES, INC.**  
CIVIL AND ENVIRONMENTAL ENGINEERS  
124 HOOPER ROAD, WYLE, TEXAS 75086 (972) 442-7400

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
HELM.	CADD	MAY 2002	1"=20'	ERBORDER	0216	C3

