

CURVE DATA TABLE

CURVE	RADIUS	DELTA	LENGTH	TANGENT	CHORD	BEARING
C1	130.00	44.9824	100.07	52.86	97.62	S 21°30'33" E
C2	50.00	38.1337	33.38	17.33	32.74	S 12°29'29" W
C3	50.00	38.5805	34.01	17.89	33.35	S 19°17'15" E
C4	50.00	30.4323	29.17	16.84	31.16	S 45°09'53" E
C5	50.00	39.1637	33.91	18.37	32.74	N 44°50'01" E
C6	50.00	30.0000	28.54	16.00	30.00	N 44°48'12" E
C7	50.00	19.2304	18.92	8.54	18.84	N 80°06'40" E
C8	50.00	28.7270	25.89	13.73	25.00	N 55°57'50" E
C9	130.00	24.4813	56.28	28.59	56.84	N 55°57'50" W
C10	50.00	29.4018	25.89	13.24	25.61	N 53°51'48" W
C11	50.00	47.2200	41.34	21.30	40.77	N 62°27'00" E
C12	50.00	35.5157	34.93	17.93	34.52	N 43°07'46" W
C13	50.00	18.5441	18.02	8.45	18.22	N 58°15'39" E
C14	100.00	60.3101	105.10	57.99	100.33	N 86°36'16" E
C15	50.00	12.9317	12.78	6.34	12.60	S 81°03'00" E
C16	50.00	56.1651	49.11	26.74	47.16	S 28°28'28" E
C17	50.00	26.4931	25.89	13.24	25.61	S 27°52'00" E
C18	50.00	40.9257	37.17	19.46	36.86	S 21°04'14" E

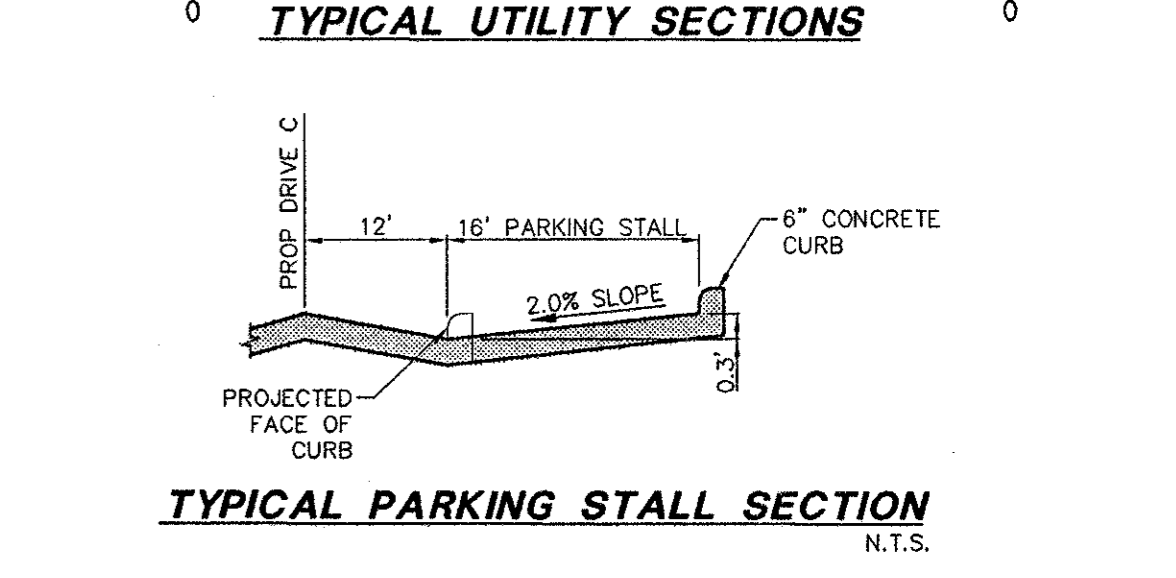
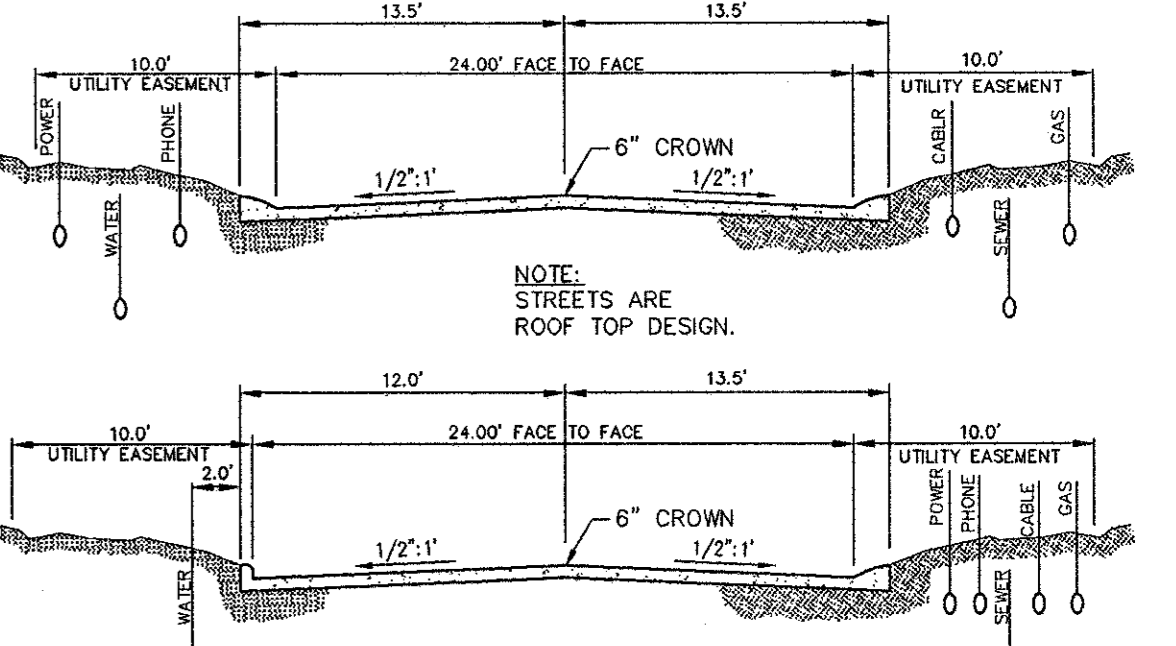
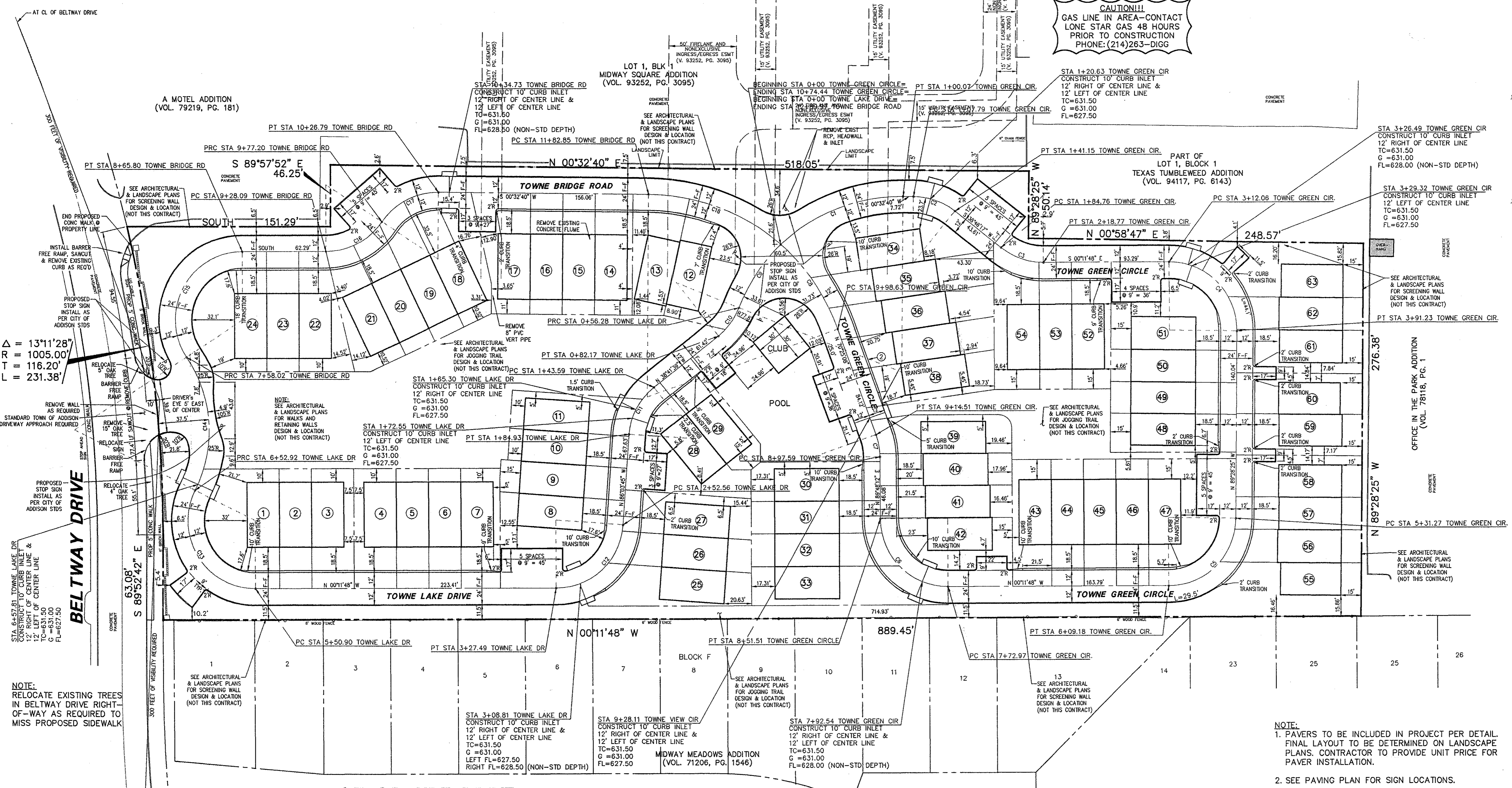
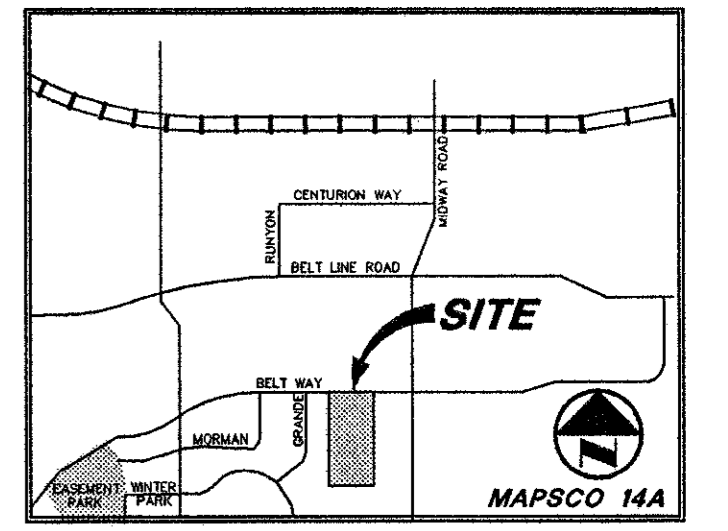
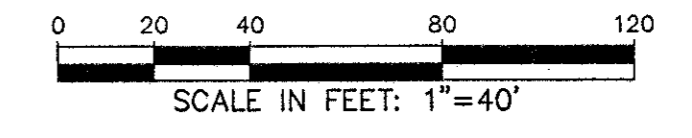
CONTACT:
MR ED KEAH, OPERATING SUPPORT SECTION
DISTRIBUTION DEPARTMENT, 2 WORKING
DAYS PRIOR TO EXCAVATING T.U. ELECTRIC
FACILITIES.
PHONE: (214)688-7239 OR (214)698-7207

CAUTION!!
UNDERGROUND TELEPHONE
IN AREA - CONTACT S.W.B.T.
48 HOURS PRIOR TO CONSTRUCTION
PHONE: 1-800-315-0440

CAUTION!!
GAS LINE IN AREA-CONTACT
LONE STAR GAS 48 HOURS
PRIOR TO CONSTRUCTION
PHONE: (214)263-DIGG

LEGEND

PH	FIRE HYDRANT
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
CV	CLEANOUT
MH	MANHOLE
GM	GAS METER
---	PROPERTY LINE

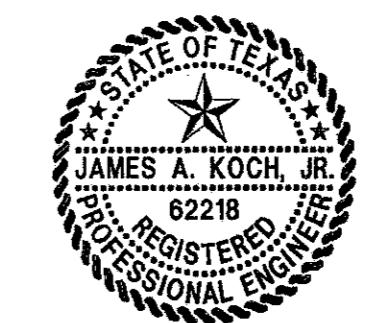


- NOTES:**
1. BEARING SYSTEM BASED ON THE FINAL PLAT OF THE MIDWAY SQUARE ADDITION VOL. 93252 PG. 3095.
 2. LOTS # 64,65,66 AND 67 ARE COMMON AREAS
 3. FACE OF GARAGE DOORS SHALL BE LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF STREET PAVEMENT
 4. NO FENCES OR BUILDINGS SHALL BE ALLOWED WITHIN 10 FEET OF THE BACK OF CURB OR IN INDICATED VISIBILITY AREAS
 5. SEE DETAIL SHEET FOR GENERAL NOTES, STANDARD DETAILS, EROSION CONTROL DETAILS & POLLUTION CONTROL NOTES.

NOTE:
ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

- NOTE:**
1. PAVERS TO BE INCLUDED IN PROJECT PER DETAIL. FINAL LAYOUT TO BE DETERMINED ON LANDSCAPE PLANS. CONTRACTOR TO PROVIDE UNIT PRICE FOR PAVEMENT INSTALLATION.
 2. SEE PAVING PLAN FOR SIGN LOCATIONS.

REVISED: FEBRUARY 10, 1997



THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JAMES A. KOCH JR., P.E. 62218 ON 02/10/97. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.

CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/99

PACHECO KOCH 9401 LBJ Freeway, Suite 300
Consulting Engineers, Inc. Dallas, Texas 75243
Civil Engineering • Land Surveying (972) 235-3031

DIMENSIONAL CONTROL PLAN

TOWNE LAKE ADDITION

THOMAS L. CHENOWETH SURVEY

ABSTRACT No. 273

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	02/10/97	1"=40'			C-1.1

PK NO: 1664-96.112 DWG NO: 1664-07A

CONTACT:
MR ED KEAH, OPERATING SUPPORT SECTION
DISTRIBUTION DEPARTMENT, 2 WORKING
DAYS PRIOR TO EXCAVATING T.U. ELECTRIC
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48 HOURS PRIOR TO CONSTRUCTION
PHONE: 1-800-315-0440

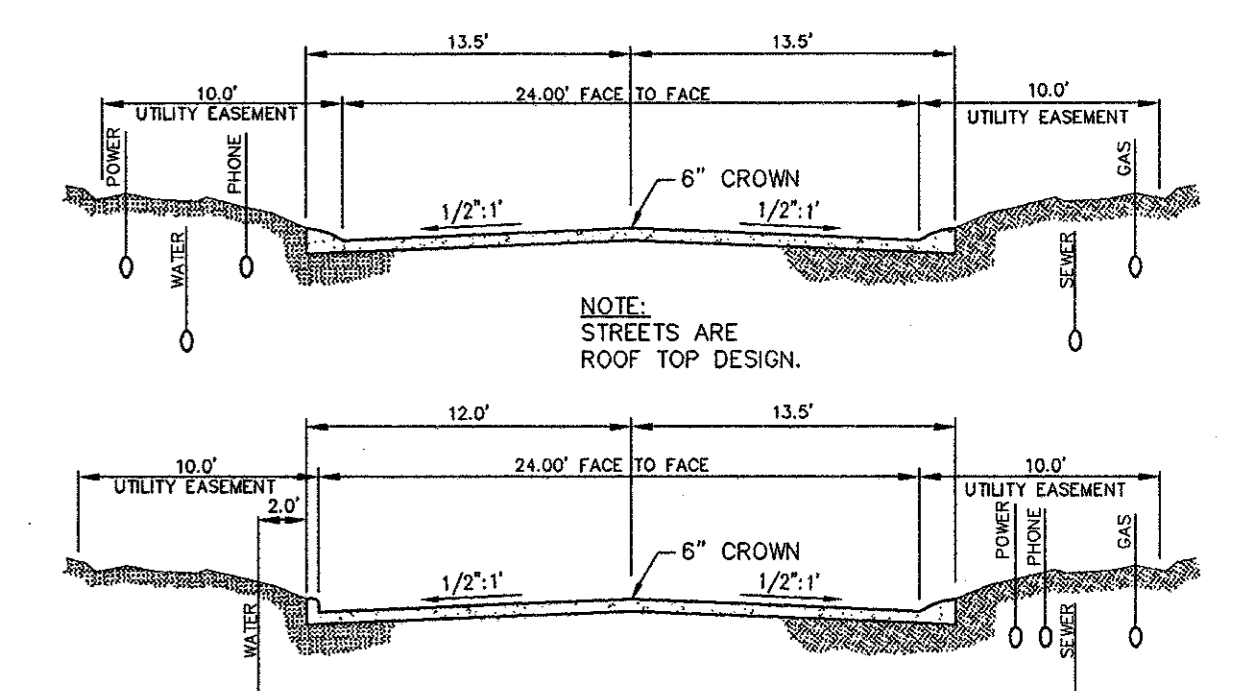
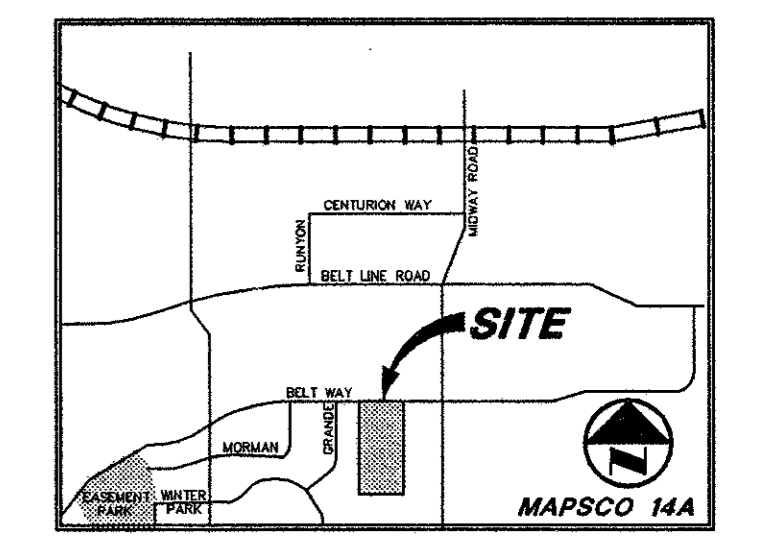
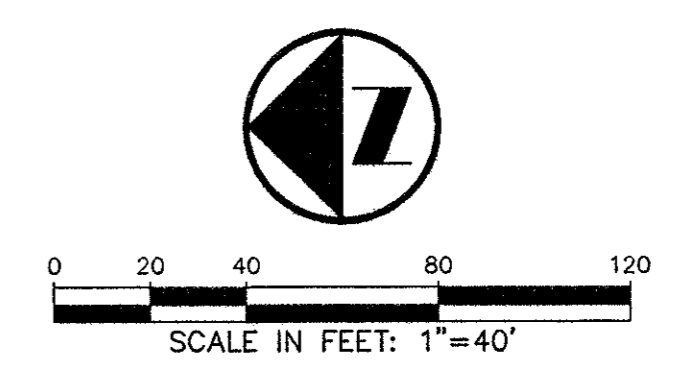
CAUTION!!!
GAS LINE IN AREA - CONTACT
LONE STAR GAS 48 HOURS
PRIOR TO CONSTRUCTION
PHONE: (214)263-DIGGS

NOTE:
GRADING AND FILL TO BE COMPLETED
AND PLACED IN ACCORDANCE WITH
RECOMMENDATIONS OUTLINED IN A
GEOTECHNICAL INVESTIGATION OF THE
SITE PREPARED BY "FUGRO McCLELLAND"
DATED: JUNE, 1996.

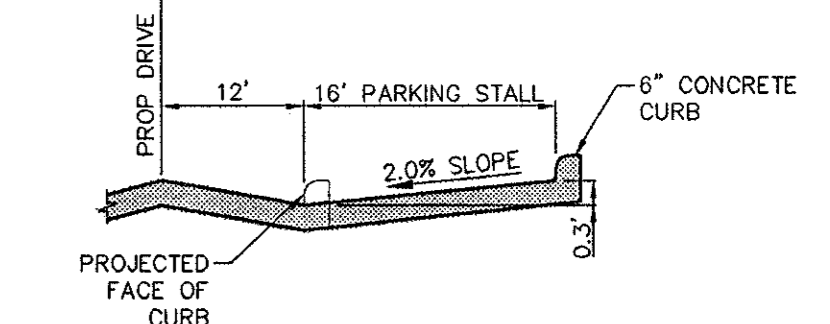
NOTE:
SEE SHEET C-2.3 FOR
ALL VIEWS AROUND
PERIMETER OF THIS SITE.

LEGEND

PH	FIRE HYDRANT
PP	POWER POLE
LS	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
CQ	CLEANOUT
MH	MANHOLE
GM	GAS METER
---	PROPERTY LINE
---	EXISTING CONTOUR
EL. 612.38	EXISTING SPOT ELEVATION
TC 612.39	EXISTING TOP OF CURB ELEVATION
G 611.92	EXISTING GUTTER ELEVATION
---	PROPOSED CONTOUR
TC 614.5	PROPOSED TOP OF CURB ELEVATION
G 614.0	PROPOSED GUTTER ELEVATION
EL. 614.5	PROPOSED SPOT ELEVATION
---	PROPOSED DRAINAGE FLOW DIRECTION
---	PROPOSED DRAINAGE DIVIDE
---	EROSION CONTROL



TYPICAL UTILITY SECTIONS
N.T.S.



TYPICAL PARKING STALL SECTION
N.T.S.

**CONTRACTOR TO TAKE STEPS AS
REQUIRED TO PROTECT EXISTING
TREES AND ROOT SYSTEMS SHOWN
ON THIS PLAN TO THE FULLEST
EXTENT POSSIBLE. UNLESS TREES
THAT ARE MARKED FOR REMOVAL
MAINTAIN EXISTING GRADE AS CLOSE
AS POSSIBLE UNDER DRIP LINE**

- NOTES:**
1. BEARING SYSTEM BASED ON THE FINAL PLAT OF THE MIDWAY SQUARE ADDITION VOL. 93252 PG. 3095.
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NOTE:
ALL DIMENSIONS ARE FROM FACE
OF CURB TO FACE OF CURB

- BENCHMARK LIST**
1. "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE EL = 629.57
 2. "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
 3. "□" CUT ON TOP OF CURB OF SOUTHWEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 628.75

NOTE:
GRADING AND FILL TO BE COMPLETED
AND PLACED IN ACCORDANCE WITH
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SITE PREPARED BY "FUGRO McCLELLAND"
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CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/92



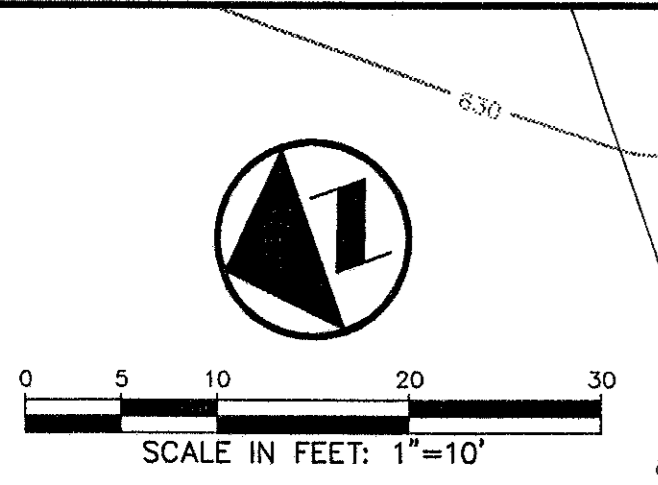
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REVISED: FEBRUARY 10, 1997

PACHECO KOCH 9401 LBJ Freeway, Suite 300
Consulting Engineers, Inc. Dallas, Texas 75243
Civil Engineering • Land Surveying (972) 235-3031

GRADING PLAN
TOWNE LAKE ADDITION
THOMAS L. CHENOWETH SURVEY
ABSTRACT No. 273
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	02/10/97	1"=40'			C-2.1



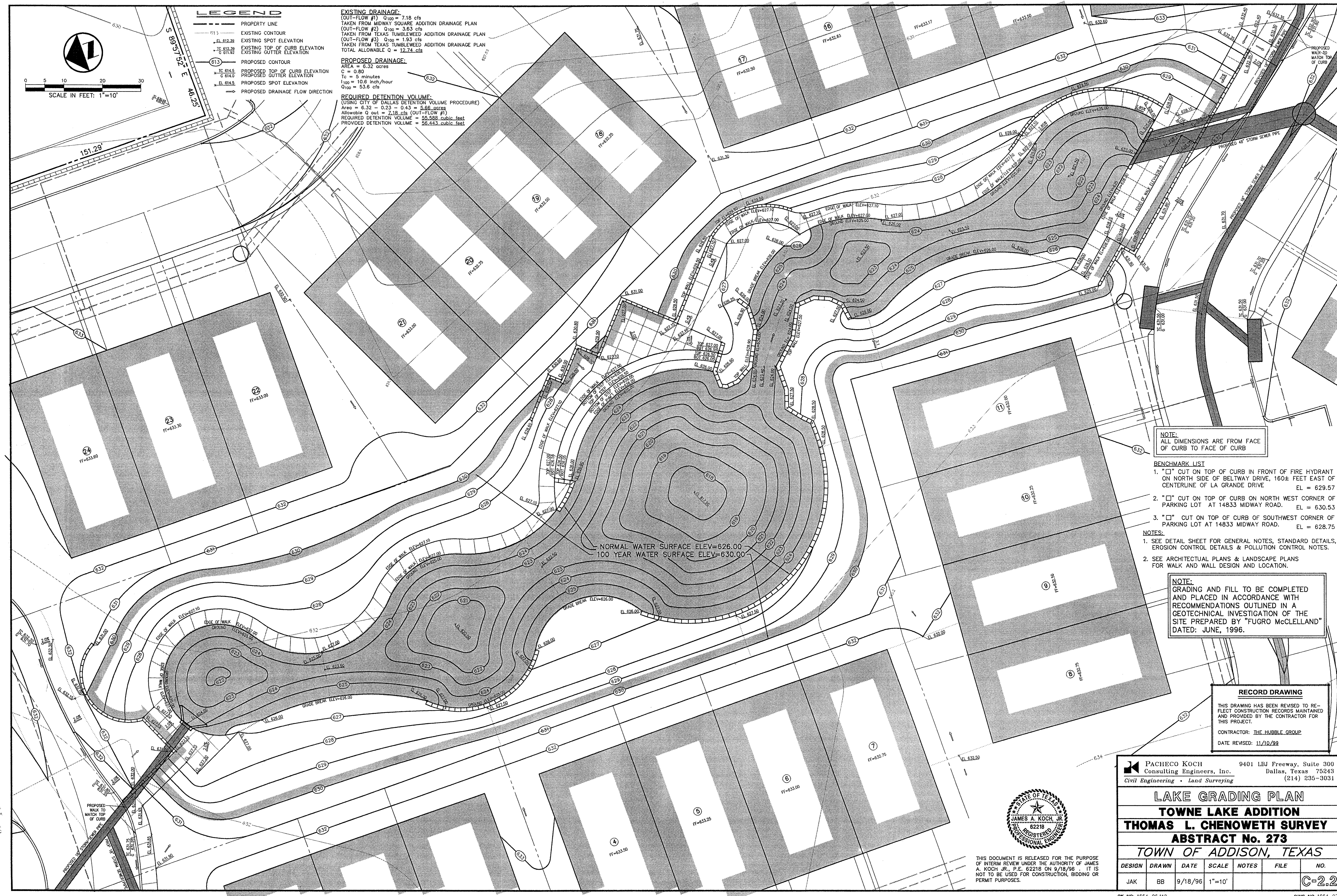
LEGEND

---	PROPERTY LINE
---	EXISTING CONTOUR
EL 612.39	EXISTING SPOT ELEVATION
TC 612.39	EXISTING TOP OF CURB ELEVATION
C 611.92	EXISTING GUTTER ELEVATION
---	PROPOSED CONTOUR
TC 614.5	PROPOSED TOP OF CURB ELEVATION
C 614.0	PROPOSED GUTTER ELEVATION
EL 614.5	PROPOSED SPOT ELEVATION
---	PROPOSED DRAINAGE FLOW DIRECTION

EXISTING DRAINAGE:
 (OUT-FLOW #1) $Q_{100} = 7.18$ cfs
 TAKEN FROM MIDWAY SQUARE ADDITION DRAINAGE PLAN
 (OUT-FLOW #2) $Q_{100} = 3.63$ cfs
 TAKEN FROM TEXAS TUMBLEWEED ADDITION DRAINAGE PLAN
 (OUT-FLOW #3) $Q_{100} = 1.93$ cfs
 TAKEN FROM TEXAS TUMBLEWEED ADDITION DRAINAGE PLAN
 TOTAL ALLOWABLE $Q = 12.74$ cfs

PROPOSED DRAINAGE:
 AREA = 6.32 acres
 $C = 0.80$
 $T_c = 5$ minutes
 $I_{100} = 10.6$ inch/hour
 $Q_{100} = 53.6$ cfs

REQUIRED DETENTION VOLUME:
 (USING CITY OF DALLAS DETENTION VOLUME PROCEDURE)
 AREA = 6.32 - 0.23 = 0.43 = 5.86 ACRES
 Allowable $Q_{out} = 7.18$ cfs (OUT-FLOW #1)
 REQUIRED DETENTION VOLUME = 55,528 cubic feet
 PROVIDED DETENTION VOLUME = 56,443 cubic feet



NOTE:
 ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

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- NOTES:**
- SEE DETAIL SHEET FOR GENERAL NOTES, STANDARD DETAILS, EROSION CONTROL DETAILS & POLLUTION CONTROL NOTES.
 - SEE ARCHITECTURAL PLANS & LANDSCAPE PLANS FOR WALK AND WALL DESIGN AND LOCATION.

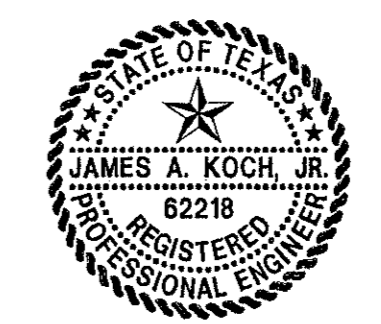
NOTE:
 GRADING AND FILL TO BE COMPLETED AND PLACED IN ACCORDANCE WITH RECOMMENDATIONS OUTLINED IN A GEOTECHNICAL INVESTIGATION OF THE SITE PREPARED BY "FUGRO McCLELLAND" DATED: JUNE, 1996.

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 DATE REVISED: 11/10/99

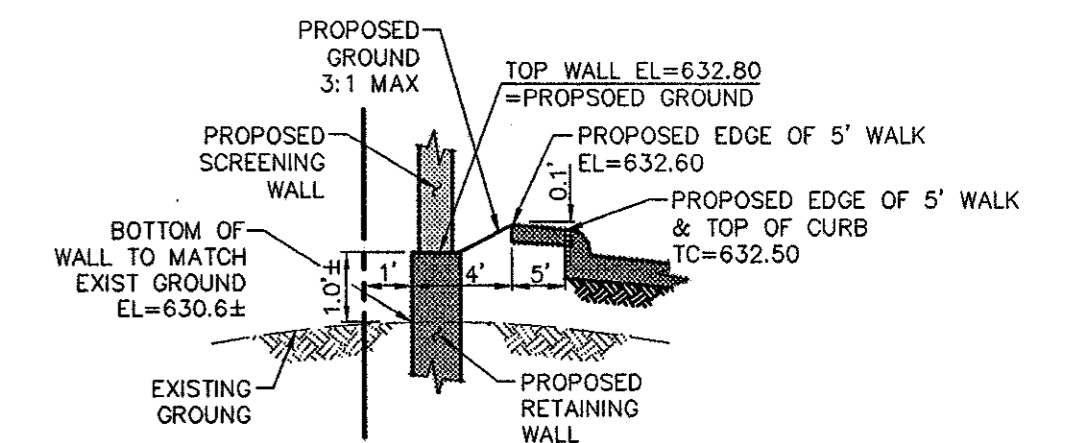
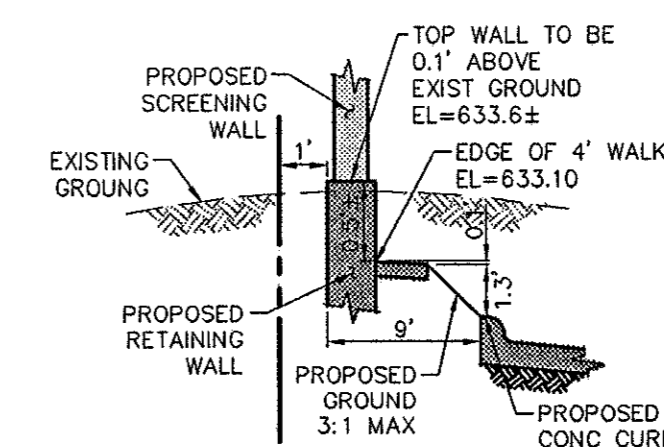
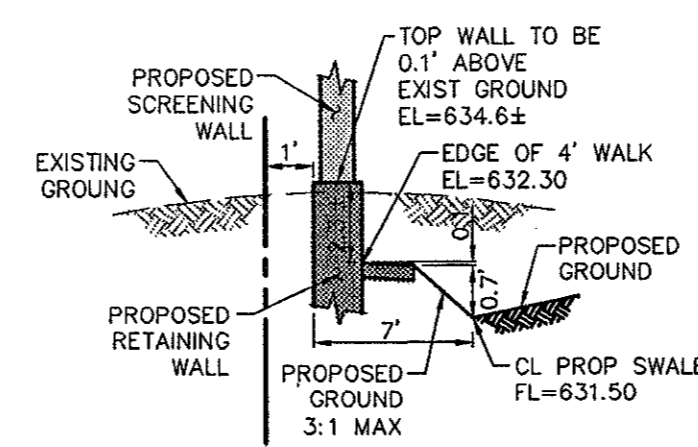
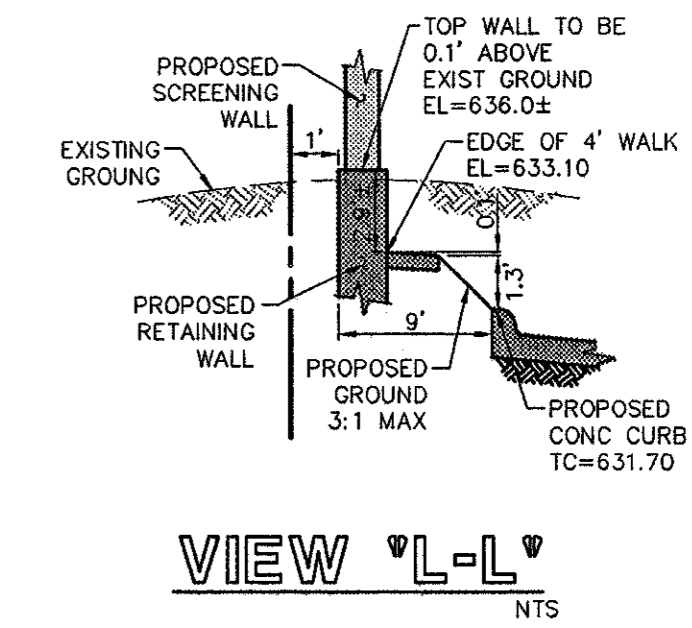
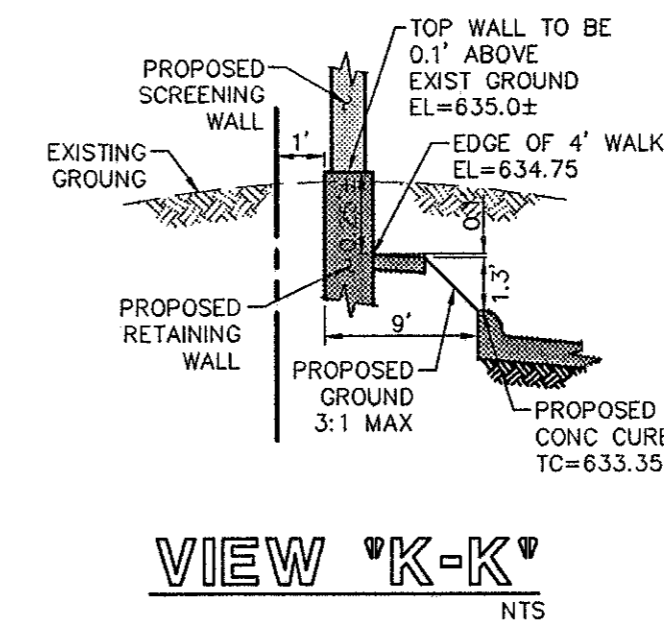
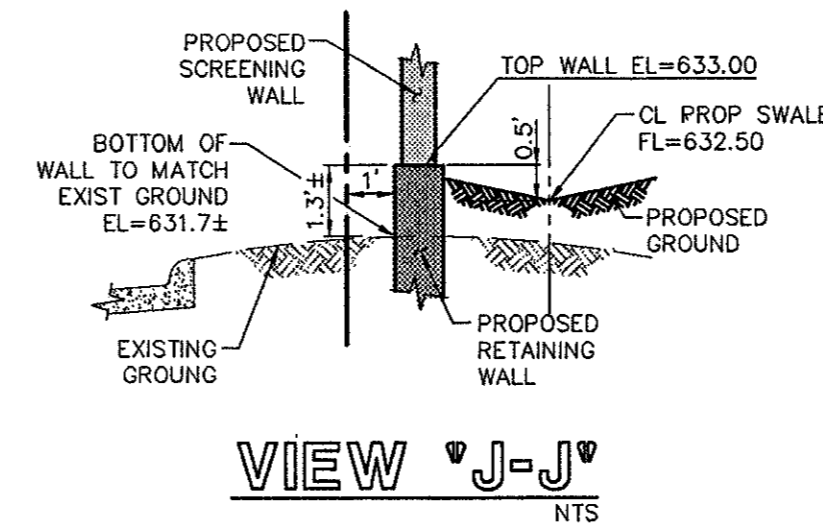
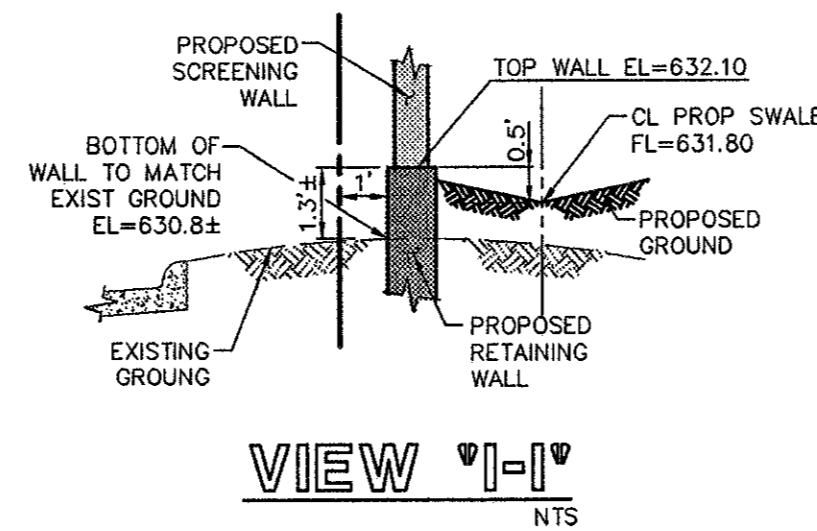
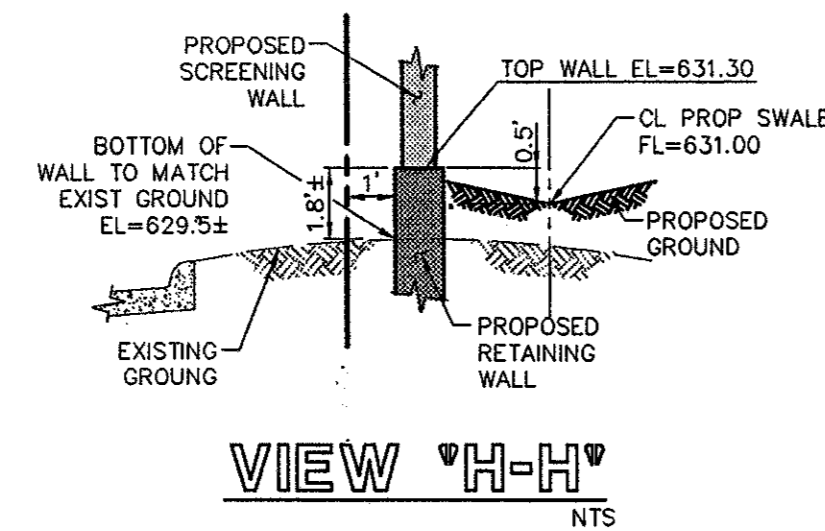
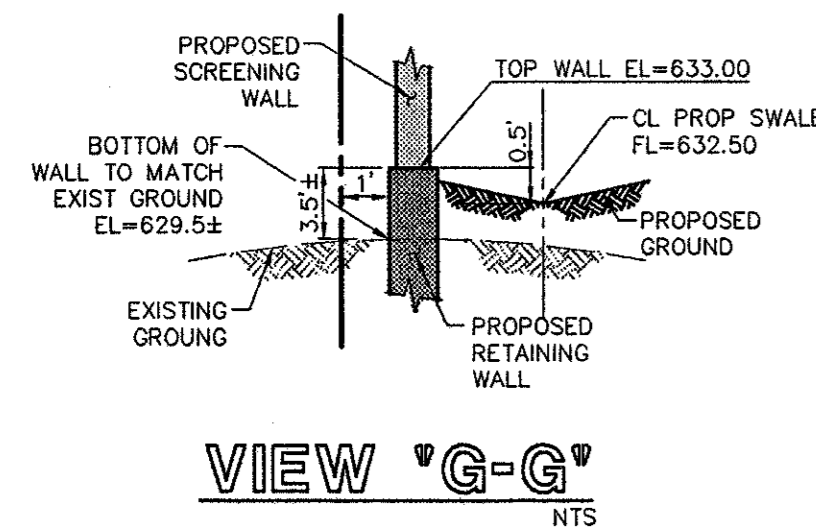
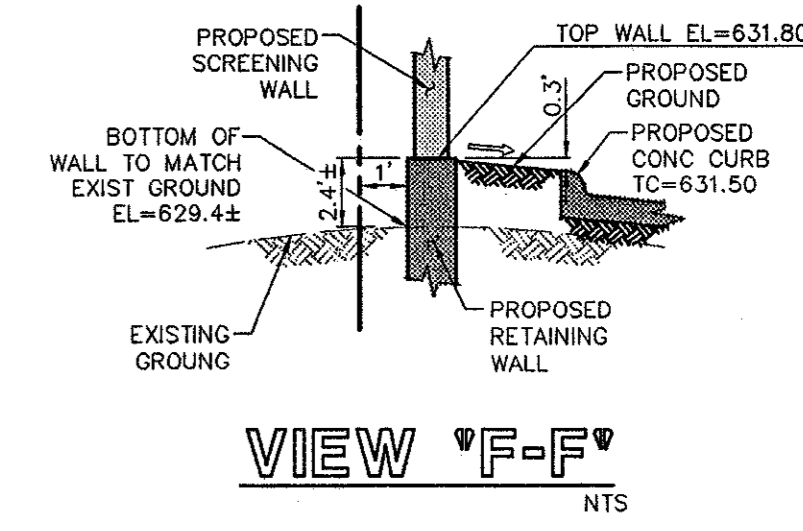
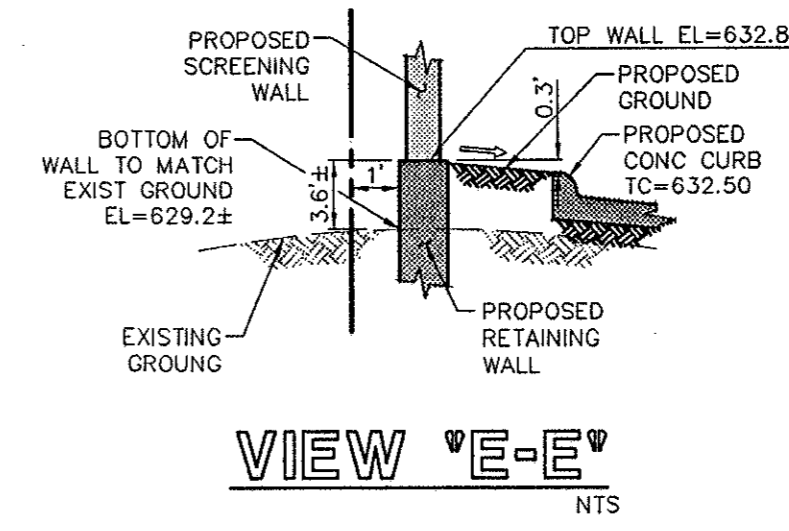
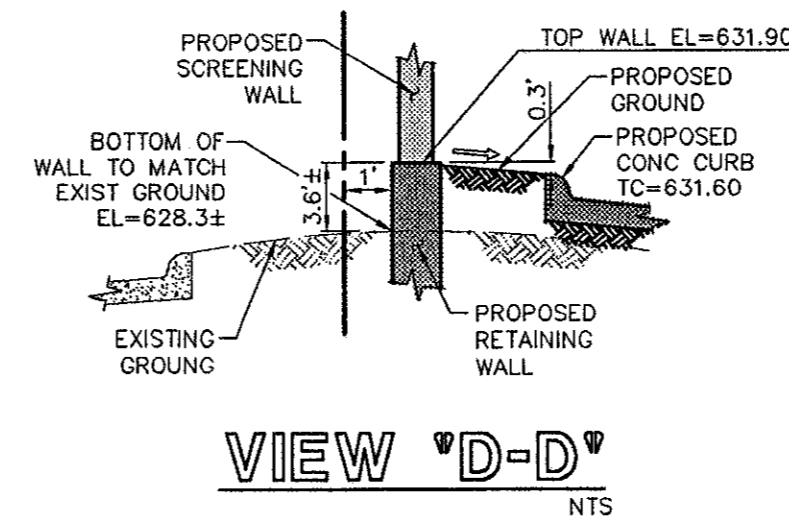
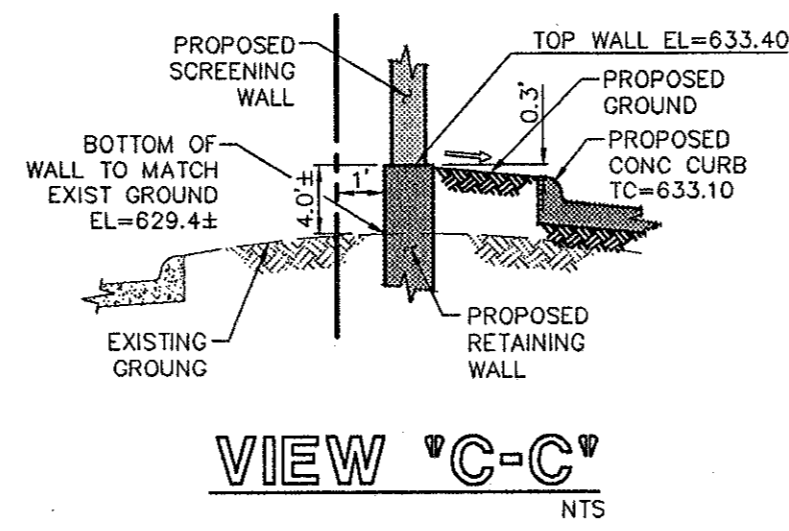
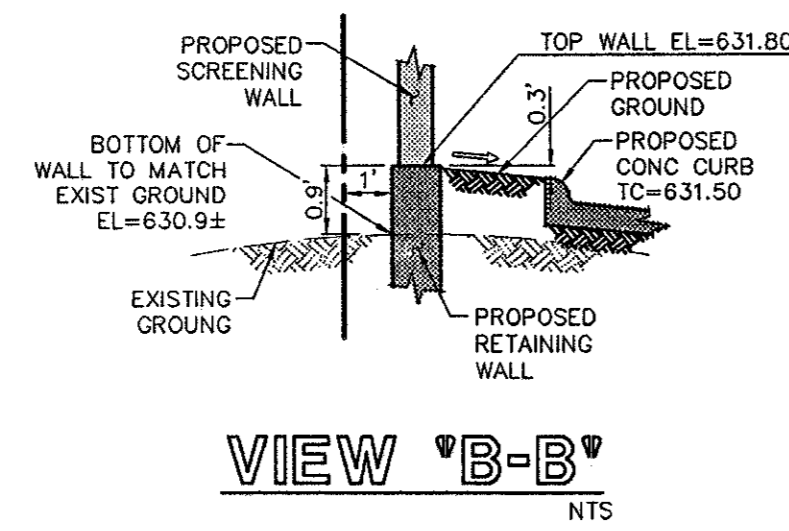
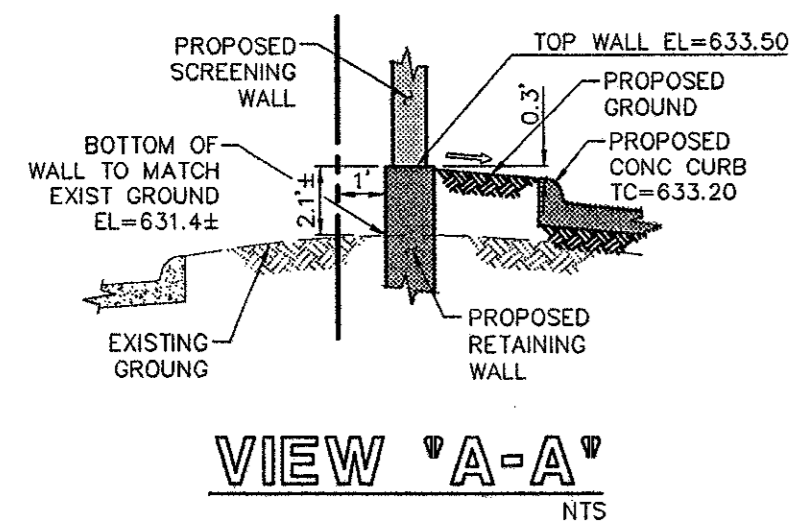
PACHECO KOCH Consulting Engineers, Inc. 9401 LBJ Freeway, Suite 300 Dallas, Texas 75243
 Civil Engineering • Land Surveying (214) 235-3031

LAKE GRADING PLAN
TOWNE LAKE ADDITION
THOMAS L. CHENOWETH SURVEY
ABSTRACT No. 273
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	9/18/96	1"=10'			C=2.2



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VIEW 'M-M' NTS

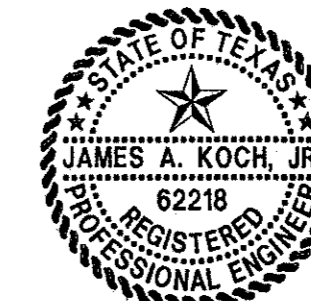
VIEW 'N-N' NTS

VIEW 'O-O' NTS

BENCHMARK LIST

- "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE EL = 629.57
- "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
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RECORD DRAWING
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 CONTRACTOR: THE HUBBLE GROUP
 DATE REVISED: 11/10/99



THIS DOCUMENT IS RELEASED FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JAMES A. KOCH JR., P.E. 62218 ON 12/16/96. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

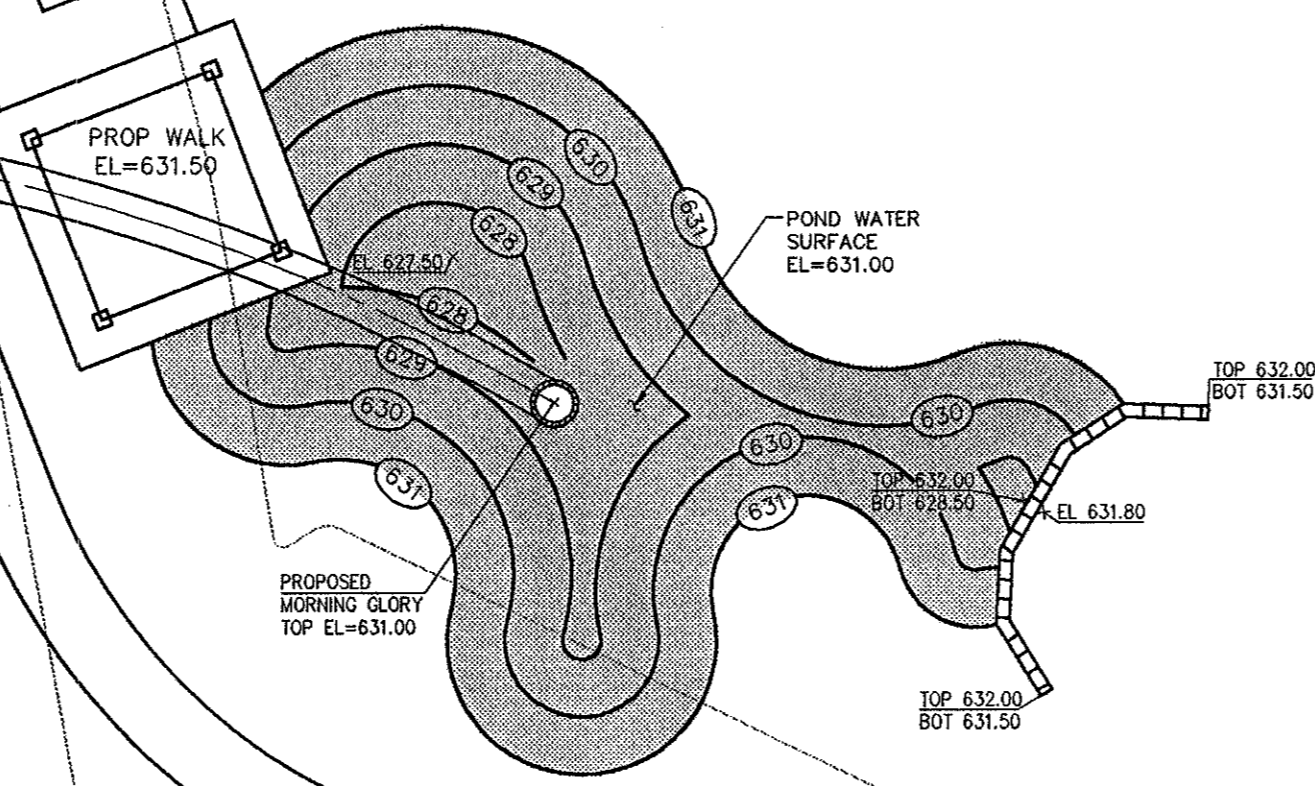
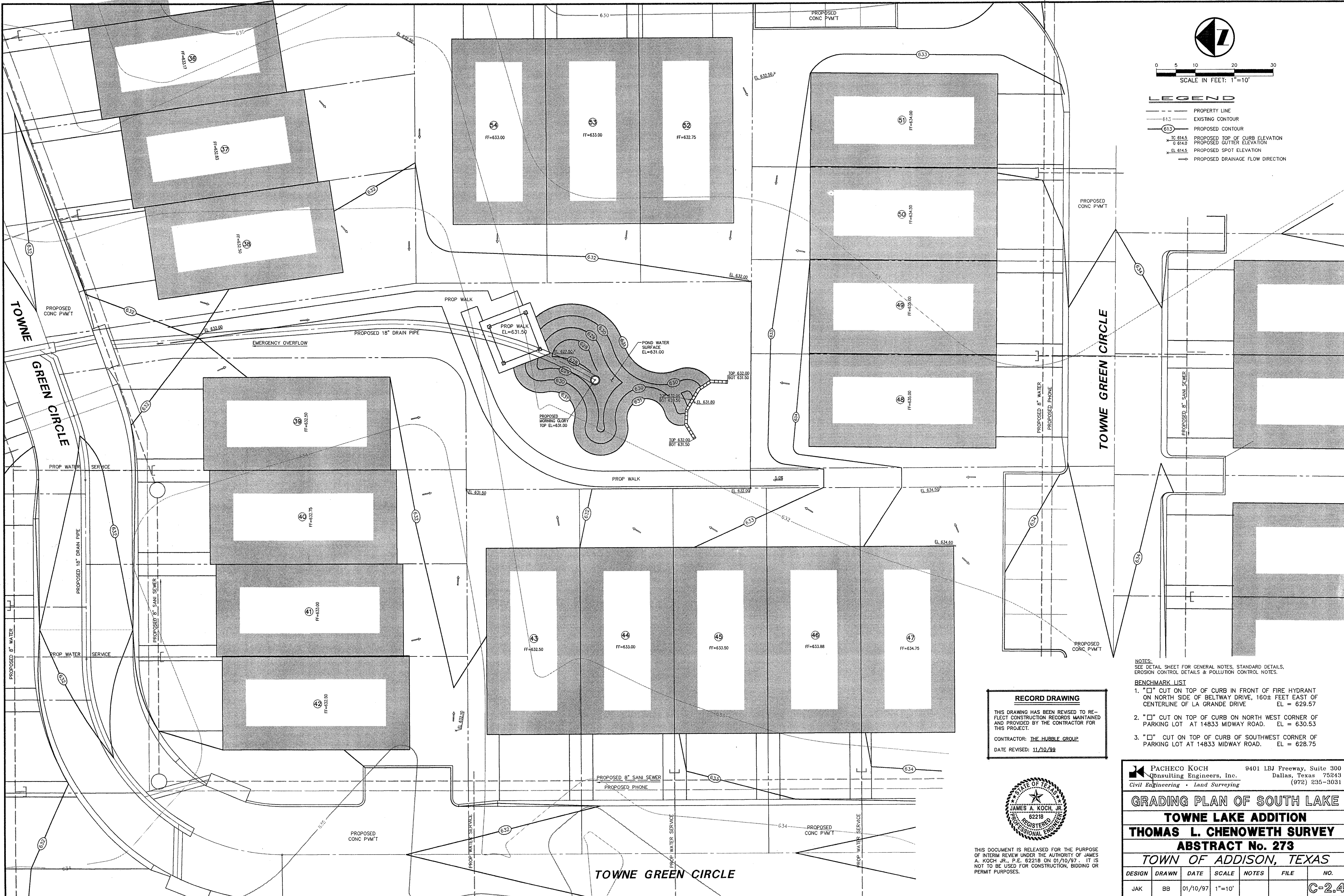
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 Civil Engineering • Land Surveying

GRADING PLAN VIEWS						
TOWNE LAKE ADDITION						
THOMAS L. CHENOWETH SURVEY						
ABSTRACT No. 273						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	12/16/96	1"=40'			C-2.3



LEGEND

---	PROPERTY LINE
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	PROPOSED TOP OF CURB ELEVATION
---	PROPOSED GUTTER ELEVATION
---	PROPOSED SPOT ELEVATION
---	PROPOSED DRAINAGE FLOW DIRECTION

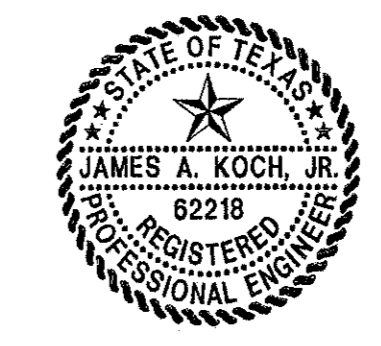


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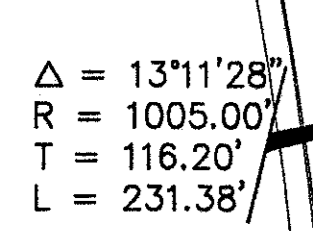
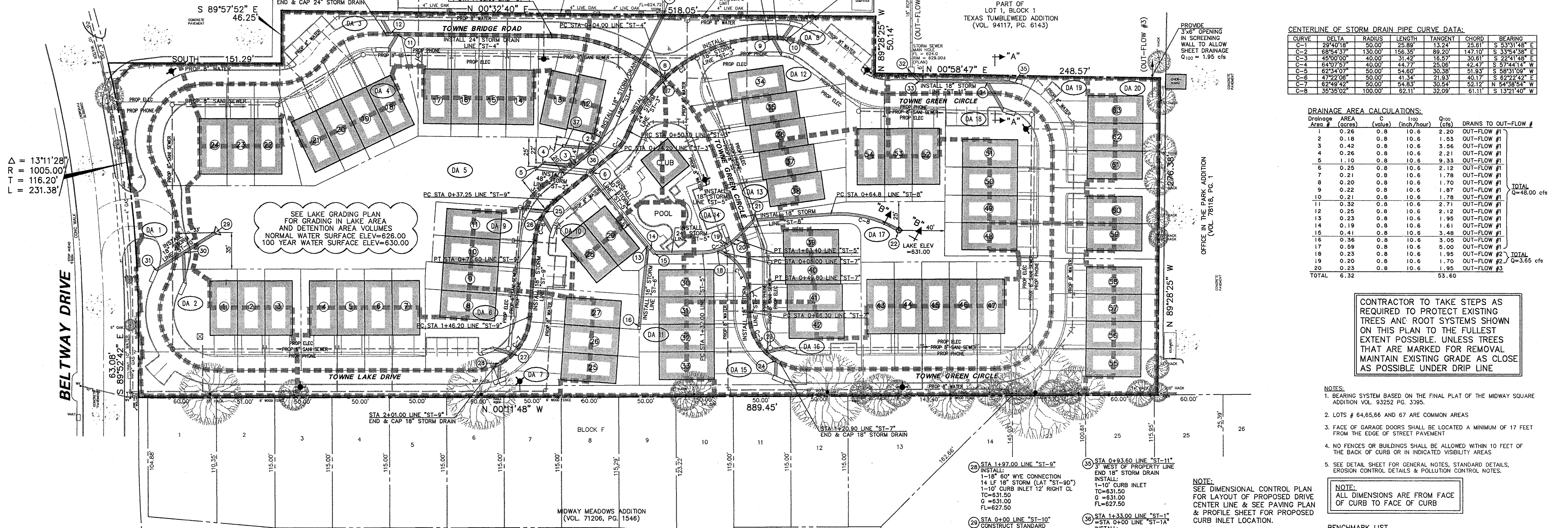
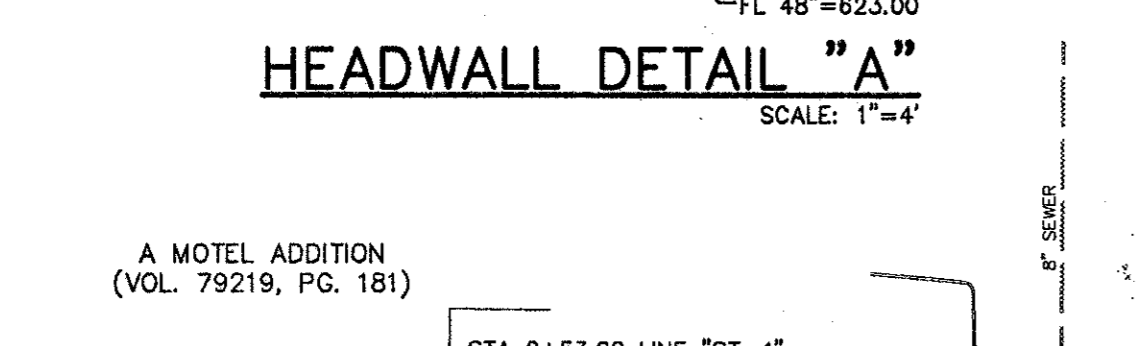
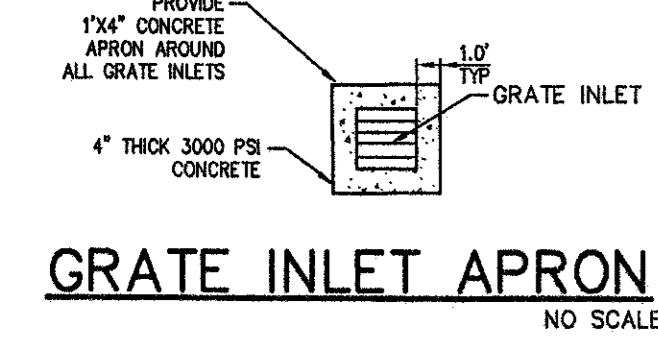
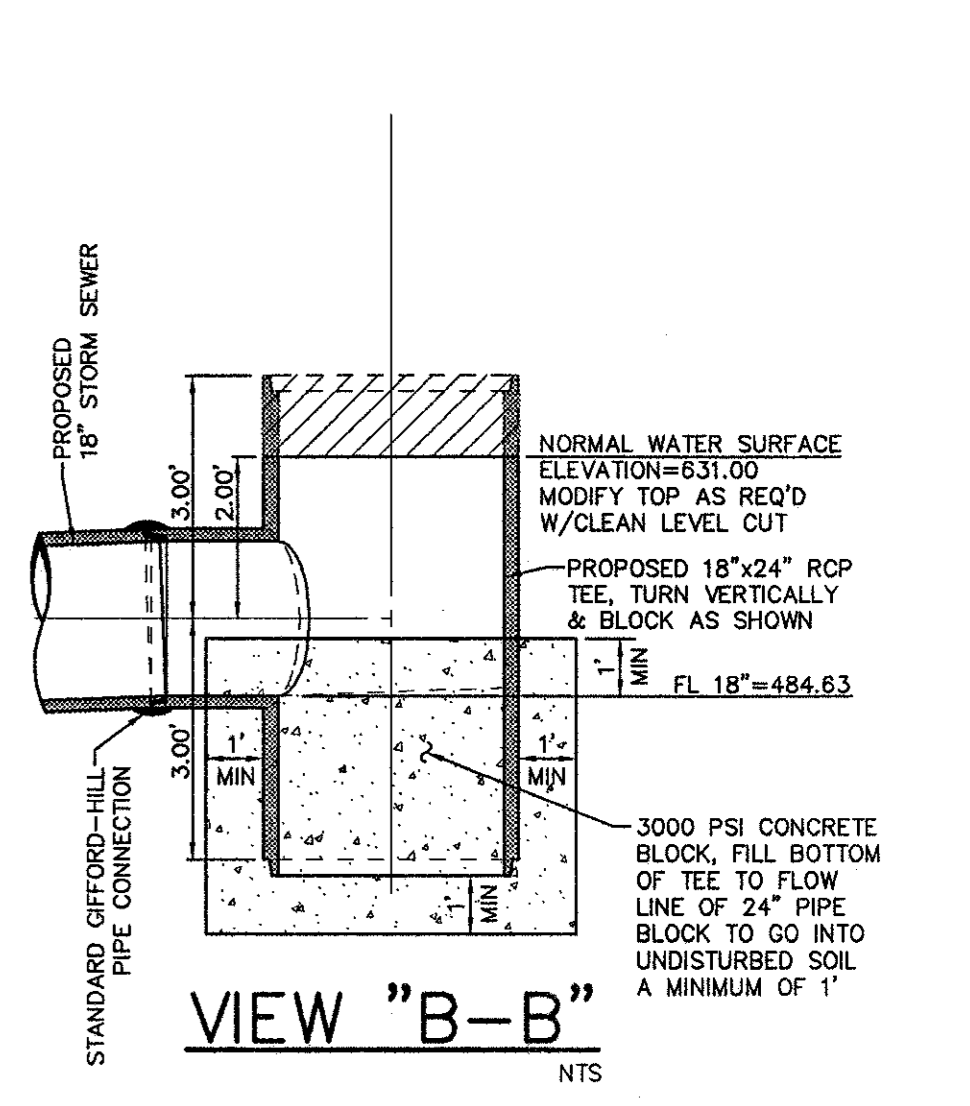
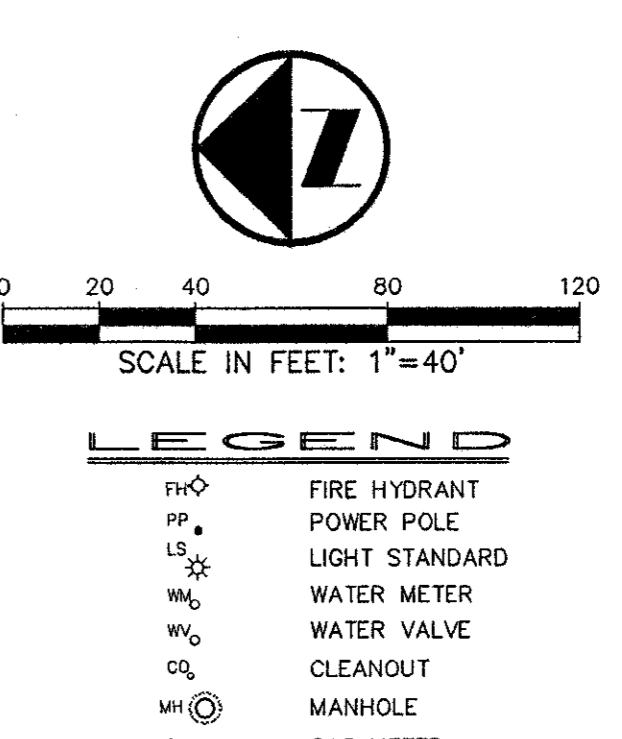
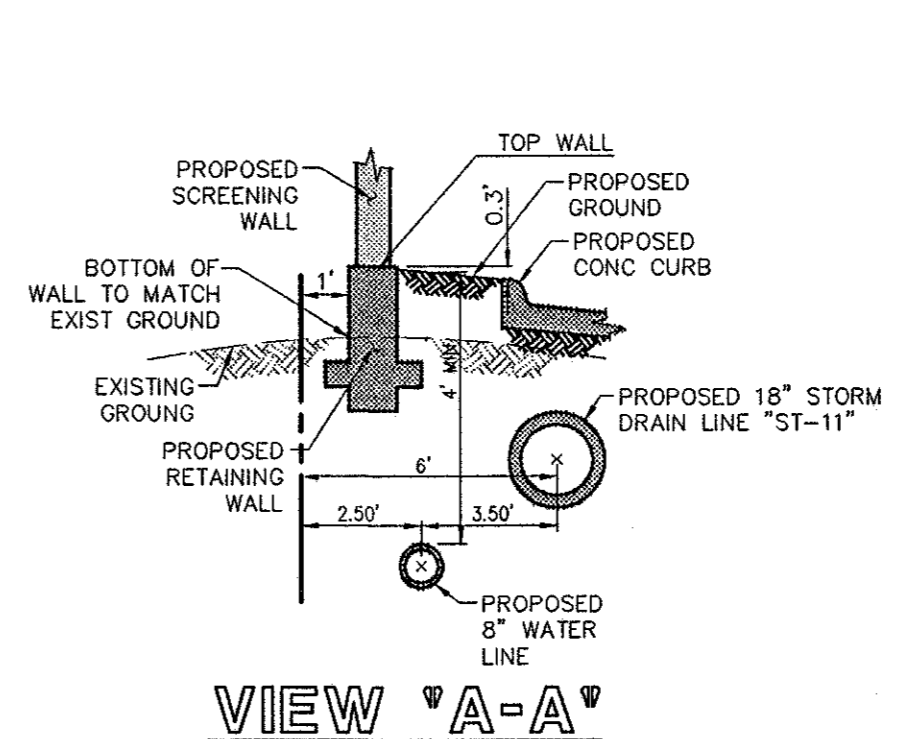
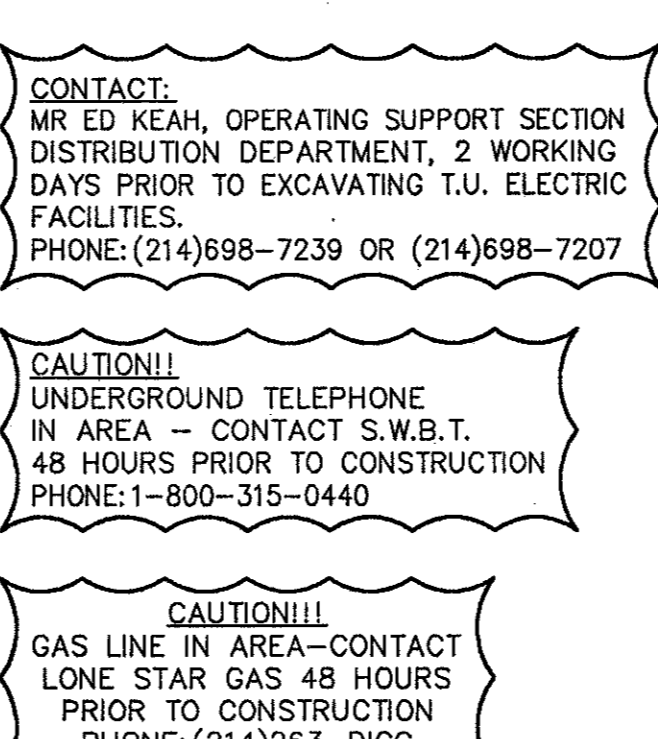
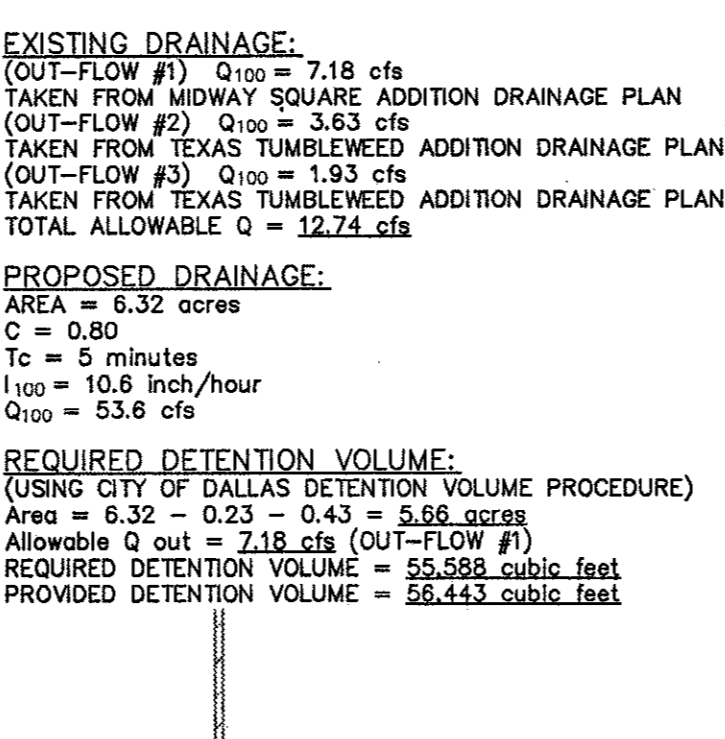
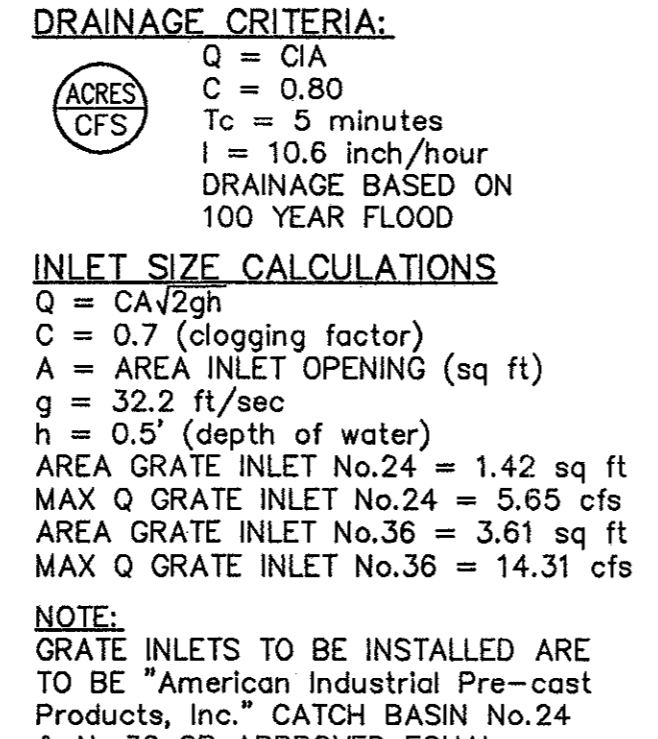
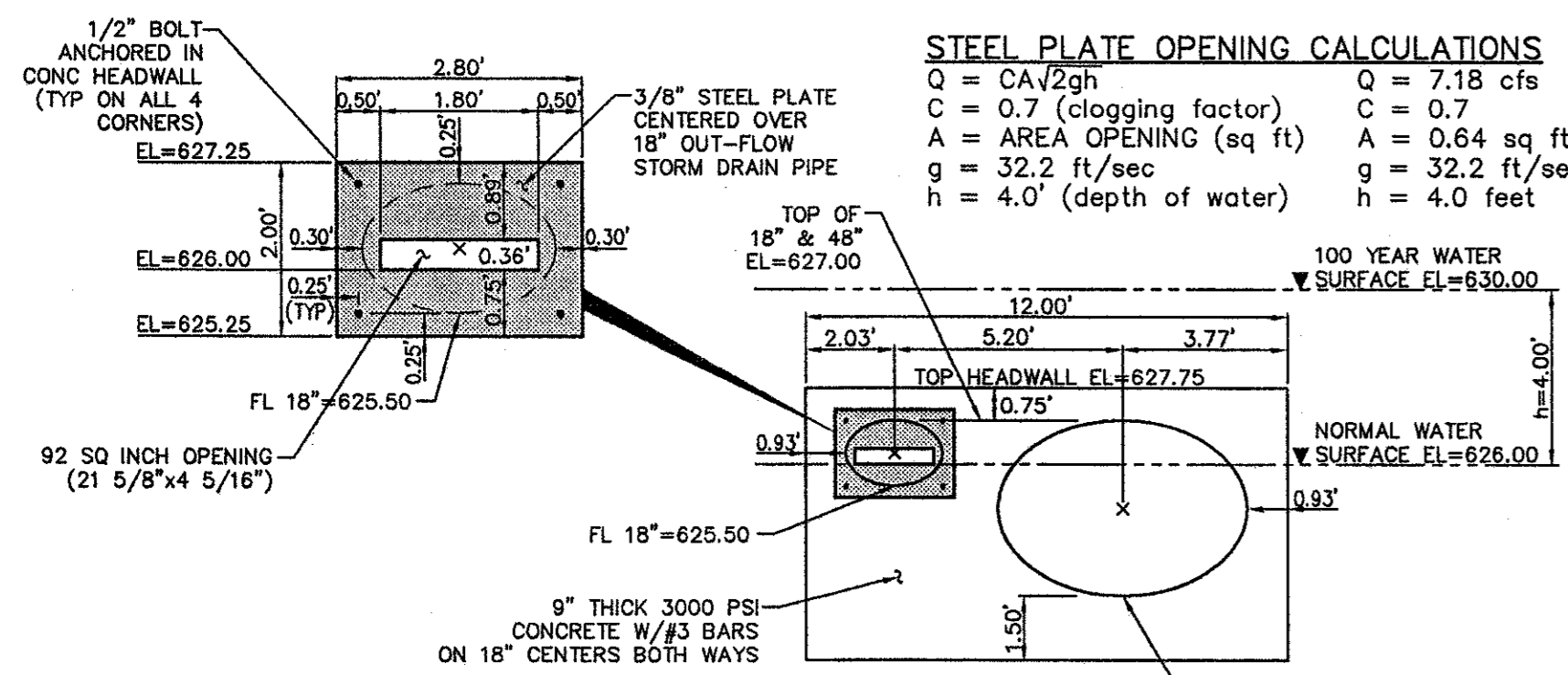


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PACHECO KOCH Consulting Engineers, Inc. 9401 LBJ Freeway, Suite 300 Dallas, Texas 75243 (972) 235-3031
Civil Engineering • Land Surveying

GRADING PLAN OF SOUTH LAKE
TOWNE LAKE ADDITION
THOMAS L. CHENOWETH SURVEY
ABSTRACT No. 273
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	01/10/97	1"=10'			C-2.4



CENTERLINE OF STORM DRAIN PIPE CURVE DATA:

CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	BEARING
C-1	29°40'18"	50.00'	25.89'	13.24'	25.61'	S 53°31'48" E
C-2	68°54'37"	130.00'	156.35'	89.20'	147.10'	S 33°54'38" E
C-3	45°00'00"	40.00'	31.42'	16.57'	30.61'	S 22°41'48" E
C-4	64°07'57"	40.00'	44.77'	26.08'	42.47'	S 57°44'14" W
C-5	62°34'07"	50.00'	54.60'	30.38'	51.53'	S 58°31'09" W
C-6	47°22'08"	50.00'	41.34'	21.93'	40.17'	S 62°22'42" E
C-7	62°49'42"	50.00'	54.83'	30.54'	52.12'	N 54°38'54" W
C-8	35°35'02"	100.00'	62.11'	32.09'	61.11'	S 13°21'40" W

DRAINAGE AREA CALCULATIONS:

Drainage Area #	AREA (acres)	C	I ₁₀₀ (inch/hour)	Q ₁₀₀ (cfs)	DRAINS TO OUT-FLOW #
1	0.24	0.8	10.6	2.20	OUT-FLOW #1
2	0.18	0.8	10.6	1.53	OUT-FLOW #1
3	0.42	0.8	10.6	3.56	OUT-FLOW #1
4	0.26	0.8	10.6	2.21	OUT-FLOW #1
5	1.10	0.8	10.6	9.33	OUT-FLOW #1
6	0.25	0.8	10.6	2.12	OUT-FLOW #1
7	0.21	0.8	10.6	1.78	OUT-FLOW #1
8	0.20	0.8	10.6	1.70	OUT-FLOW #1
9	0.22	0.8	10.6	1.87	OUT-FLOW #1
10	0.21	0.8	10.6	1.78	OUT-FLOW #1
11	0.32	0.8	10.6	2.71	OUT-FLOW #1
12	0.25	0.8	10.6	2.12	OUT-FLOW #1
13	0.23	0.8	10.6	1.95	OUT-FLOW #1
14	0.19	0.8	10.6	1.61	OUT-FLOW #1
15	0.41	0.8	10.6	3.48	OUT-FLOW #1
16	0.36	0.8	10.6	3.05	OUT-FLOW #1
17	0.59	0.8	10.6	5.00	OUT-FLOW #1
18	0.23	0.8	10.6	1.95	OUT-FLOW #2
19	0.20	0.8	10.6	1.70	OUT-FLOW #2
20	0.23	0.8	10.6	1.95	OUT-FLOW #3
TOTAL	6.32			53.60	

TOTAL $Q = 48.00 \text{ cfs}$
 TOTAL $Q = 3.55 \text{ cfs}$

CONTRACTOR TO TAKE STEPS AS REQUIRED TO PROTECT EXISTING TREES AND ROOT SYSTEMS SHOWN ON THIS PLAN TO THE FULLEST EXTENT POSSIBLE. UNLESS TREES THAT ARE MARKED FOR REMOVAL MAINTAIN EXISTING GRADE AS CLOSE AS POSSIBLE UNDER DRIP LINE

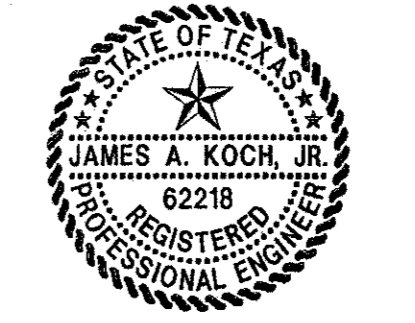
- NOTES:**
- BEARING SYSTEM BASED ON THE FINAL PLAT OF THE MIDWAY SQUARE ADDITION VOL. 93252 PG. 3095.
 - LOTS # 64, 65, 66 AND 67 ARE COMMON AREAS
 - FACE OF GARAGE DOORS SHALL BE LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF STREET PAVEMENT
 - NO FENCES OR BUILDINGS SHALL BE ALLOWED WITHIN 10 FEET OF THE BACK OF CURB OR IN INDICATED VISIBILITY AREAS
 - SEE DETAIL SHEET FOR GENERAL NOTES, STANDARD DETAILS, EROSION CONTROL DETAILS & POLLUTION CONTROL NOTES.

NOTE:
 ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

- BENCHMARK LIST**
- "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE. EL = 629.57
 - "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
 - "□" CUT ON TOP OF CURB OF SOUTHWEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 628.75

RECORD DRAWING
 THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.
 CONTRACTOR: THE HUBBLE GROUP
 DATE REVISED: 11/10/99

REVISED: FEBRUARY 2, 1997



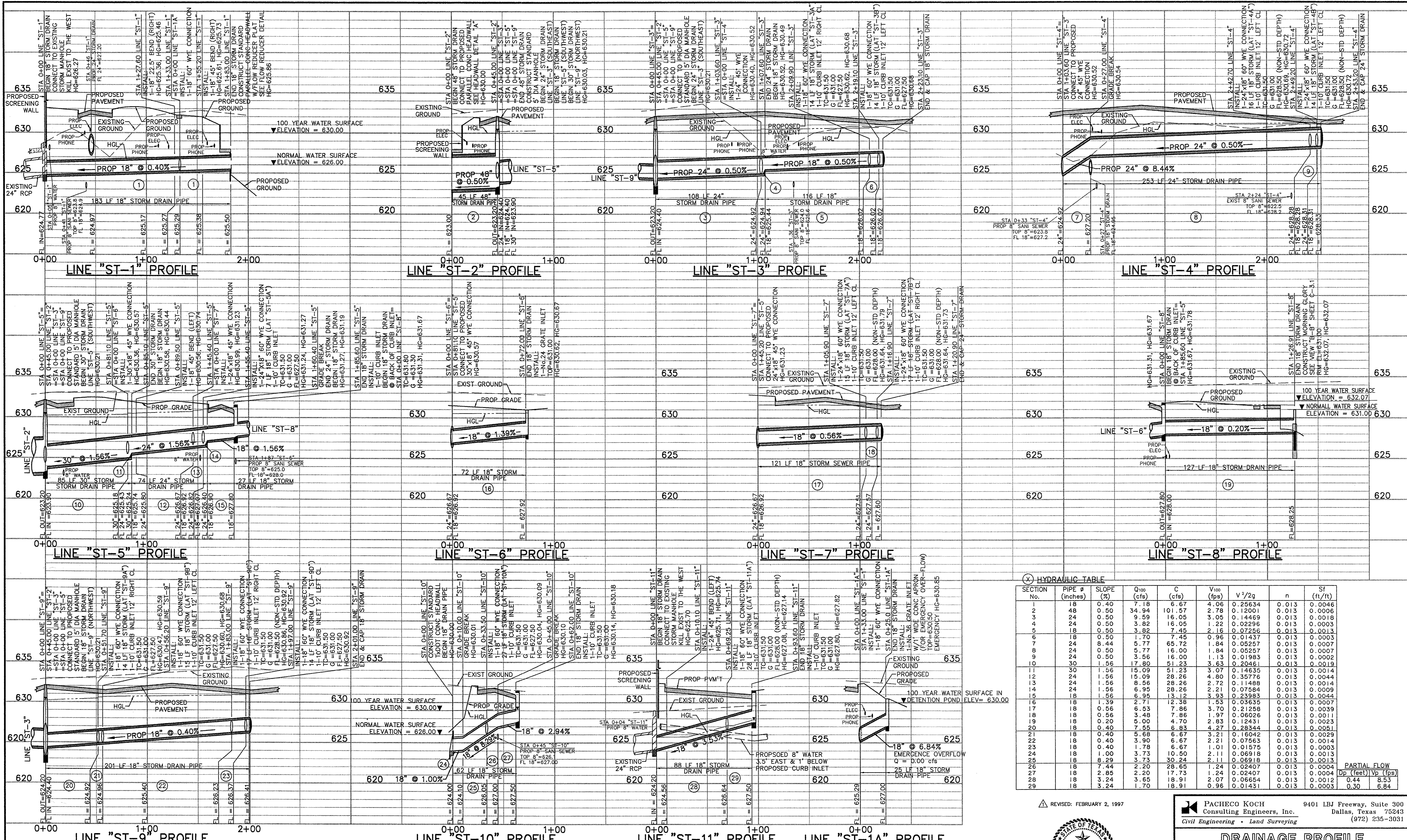
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 Consulting Engineers, Inc. Dallas, Texas 75243
 Civil Engineering • Land Surveying (972) 235-3031

DRAINAGE PLAN
TOWNE LAKE ADDITION
THOMAS L. CHENOWETH SURVEY
ABSTRACT No. 273
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	02/10/97	1"=40'			C-3.1

PK NO: 1664-96.112 DWG NO: 1664-07C



HYDRAULIC TABLE

SECTION No.	PIPE (inches)	SLOPE (%)	Q ₁₀₀ (cfs)	C (cfs)	V ₁₀₀ (fps)	V ² /2g	n	S _f (ft/ft)	
1	18	0.40	7.18	6.67	4.06	0.25634	0.013	0.0046	
2	24	0.50	34.94	101.57	2.78	0.12001	0.013	0.0006	
3	24	0.50	9.59	16.05	3.05	0.14469	0.013	0.0018	
4	24	0.50	3.82	16.05	1.22	0.02296	0.013	0.0003	
5	18	0.50	3.92	7.45	2.16	0.07256	0.013	0.0013	
6	24	0.50	11.70	7.45	0.16	0.01437	0.013	0.0003	
7	24	0.44	5.77	65.72	1.84	0.05257	0.013	0.0007	
8	24	0.50	5.77	16.00	1.84	0.05257	0.013	0.0007	
9	24	0.50	3.56	16.00	1.13	0.01983	0.013	0.0002	
10	30	1.56	17.80	51.23	3.63	0.20461	0.013	0.0019	
11	30	1.56	15.09	51.23	3.07	0.14635	0.013	0.0014	
12	24	1.56	15.09	28.26	4.80	0.35776	0.013	0.0044	
13	24	1.56	8.56	28.26	2.72	0.11488	0.013	0.0014	
14	24	1.56	6.95	28.26	2.21	0.07584	0.013	0.0009	
15	18	1.56	6.95	13.12	3.93	0.23983	0.013	0.0044	
16	18	1.39	2.71	12.38	1.53	0.03636	0.013	0.0007	
17	18	0.56	6.53	7.86	3.70	0.21258	0.013	0.0039	
18	18	0.56	3.48	7.86	1.97	0.06026	0.013	0.0011	
19	18	0.20	5.00	2.83	2.83	0.12431	0.013	0.0023	
20	18	0.40	7.55	6.83	4.27	0.2844	0.013	0.0041	
21	18	0.40	5.68	6.67	3.21	0.16042	0.013	0.0029	
22	18	0.40	3.90	6.67	2.21	0.07563	0.013	0.0014	
23	18	0.40	1.78	6.67	1.01	0.01575	0.013	0.0003	
24	18	1.00	3.73	10.50	2.11	0.06918	0.013	0.0013	
25	18	0.20	7.44	3.73	30.24	2.11	0.06918	0.013	0.0013
26	18	2.85	7.44	1.24	0.2407	0.02407	0.013	0.0004	
27	18	2.85	2.20	17.73	1.24	0.02407	0.013	0.0004	
28	18	3.24	3.65	18.91	2.07	0.06654	0.013	0.0012	
29	18	3.24	1.70	18.91	0.96	0.01431	0.013	0.0003	

PARTIAL FLOW
Dp (feet) | Vp (fps)
0.44 | 8.53
0.30 | 6.84

RECORD DRAWING
THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.
CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/98

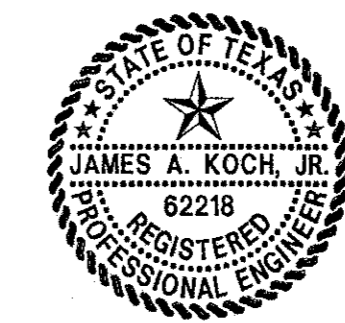
CONTACT:
MR ED KEAH, OPERATING SUPPORT SECTION
DISTRIBUTION DEPARTMENT, 2 WORKING
DAYS PRIOR TO EXCAVATING T.U. ELECTRIC
FACILITIES.
PHONE: (214)698-7239 OR (214)698-7207

CAUTION!!
UNDERGROUND TELEPHONE
IN AREA - CONTACT S.W.B.T.
48 HOURS PRIOR TO CONSTRUCTION
PHONE: 1-800-315-0440

CAUTION!!
GAS LINE IN AREA - CONTACT
LONE STAR GAS 48 HOURS
PRIOR TO CONSTRUCTION
PHONE: (214)263-DIGG

- BENCHMARK LIST**
- "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE. EL = 629.57
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REVISED: FEBRUARY 2, 1997

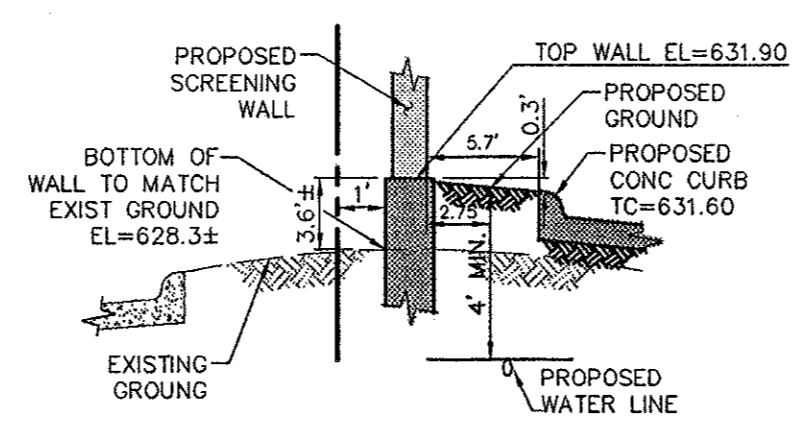
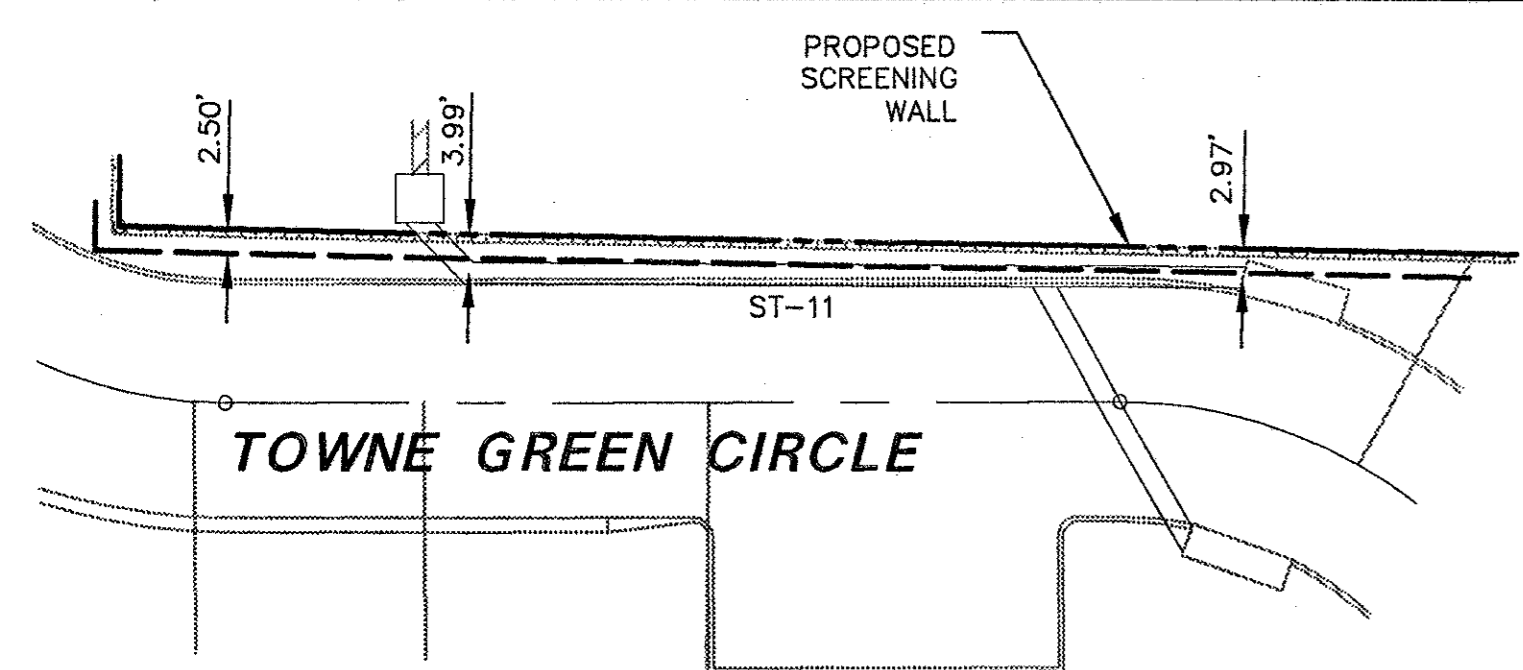


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Civil Engineering • Land Surveying (972) 235-3031

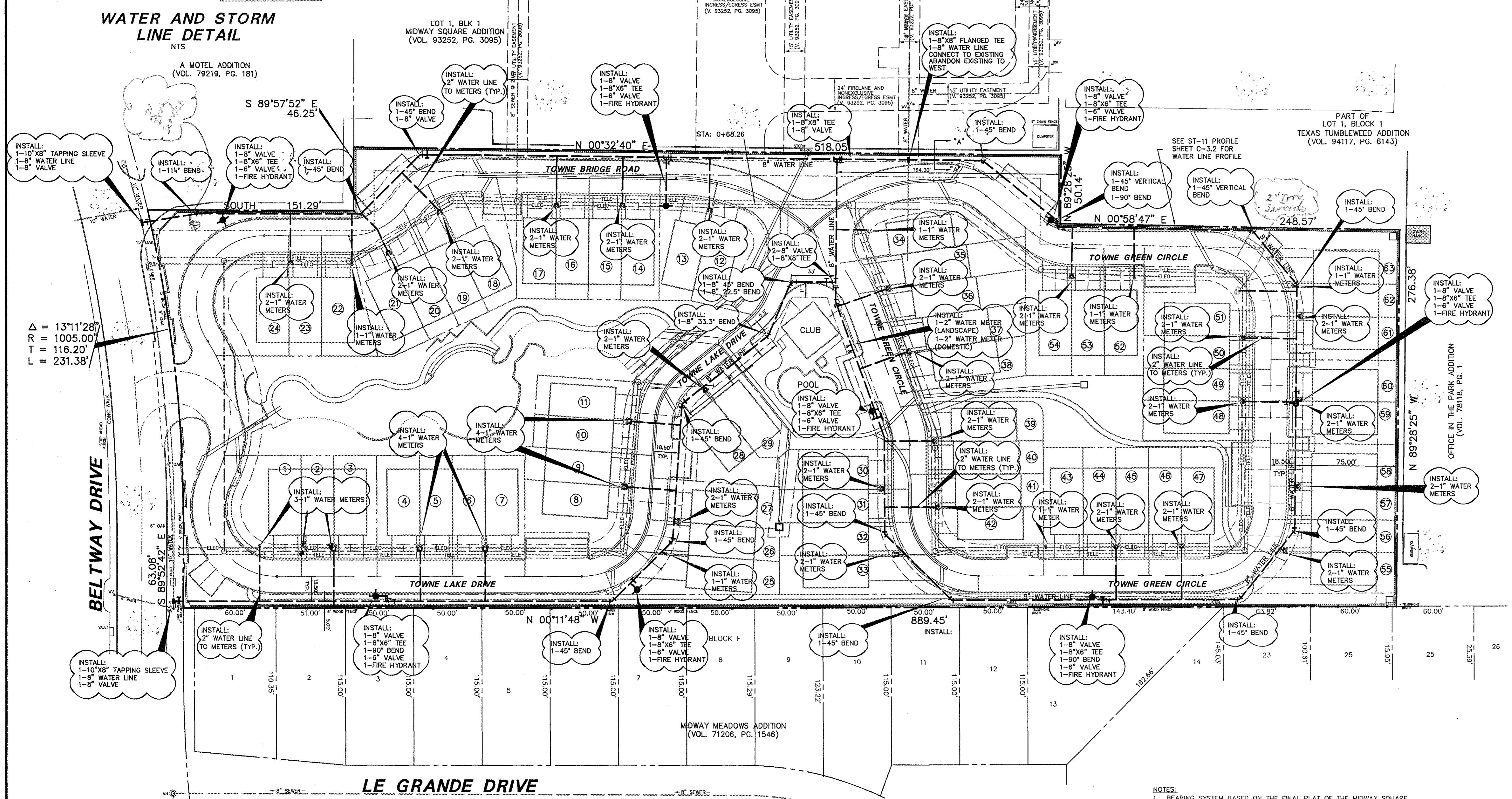
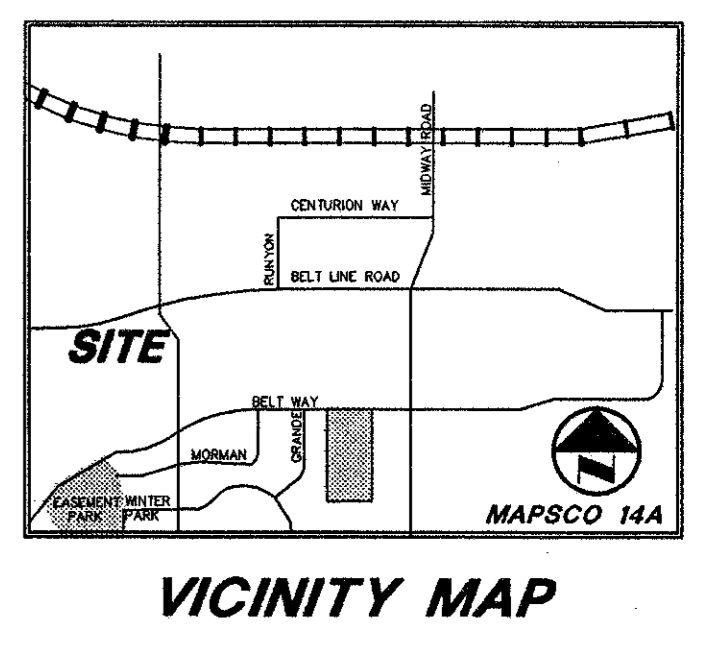
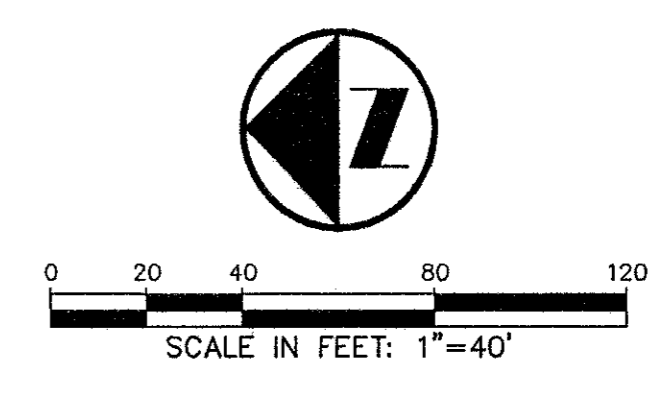
DRAINAGE PROFILE
TOWNE LAKE ADDITION
THOMAS L. CHENOWETH SURVEY
ABSTRACT No. 273
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	02/10/97	1"=40'H 1"=5'V			C-3.2

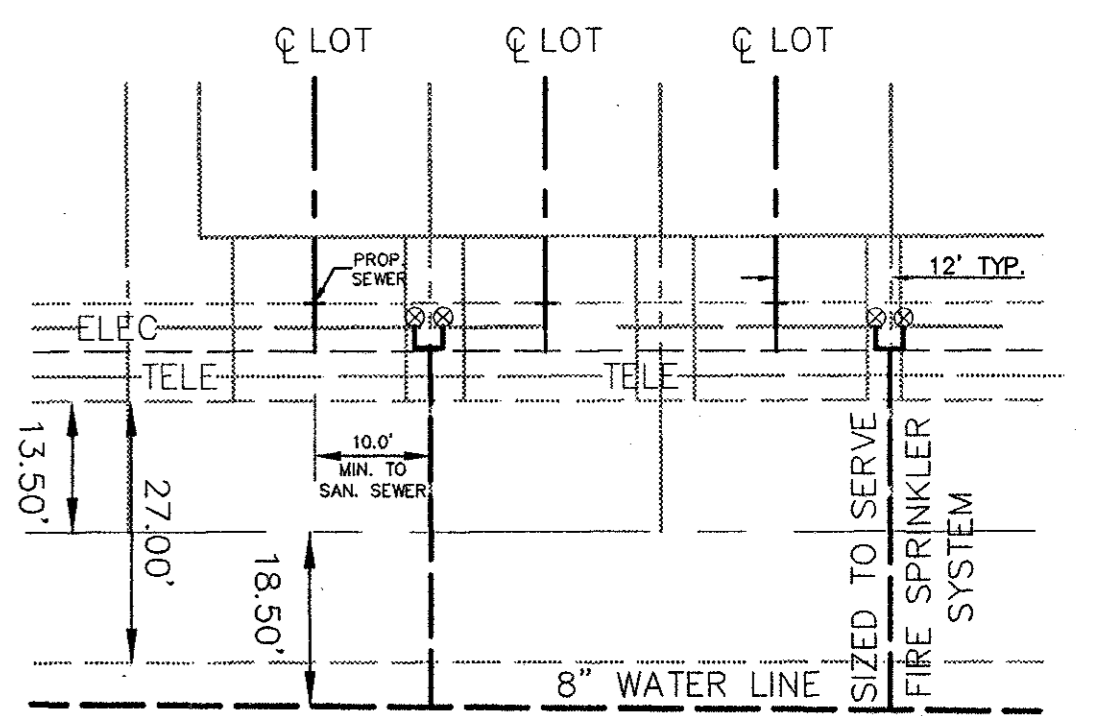


LEGEND

FH	FIRE HYDRANT
PP	POWER POLE
L.S.	LIGHT STANDARD
WM	WATER METER
WV	WATER VALVE
CR	CLEANOUT
MH	MANHOLE
GM	GAS METER
- - -	PROPERTY LINE



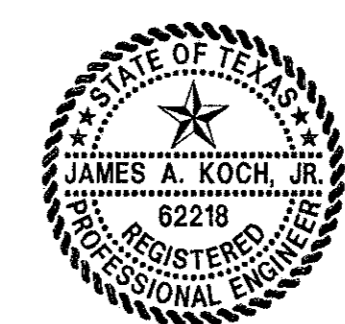
- WATER AND SANITARY SEWER GENERAL NOTES**
1. ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND CITY OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
 2. UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
 3. THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT.
 4. CONTRACTOR SHALL MAINTAIN ONE SET OF "RECORD DRAWINGS" ON SITE WHICH WILL BE SUBMITTED TO OWNER OR ENGINEER UPON COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL INDICATE THE LOCATION OF ALL SUBTERRANEAN UTILITY IMPROVEMENTS, AND INDICATE TIES TO ALL MANHOLES, CULVERTS, INLETS, JUNCTION BOXES, ETC.
 5. ALL WATER MAINS SHALL BE DUCTILE IRON CLASS 51 WITH CATHODIC PROTECTION OR PVC C900, DR 18, CLASS 150.
 6. ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
 7. SANITARY SEWER PIPE SHALL BE PVC SDR-35.
 8. THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
 9. BARRICADING AND PROJECT SIGNS SHALL CONFORM TO "STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION BARRICADING AND CONSTRUCTION STANDARDS."
 10. PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
 11. WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED OF CAST IRON, DUCTILE IRON OR PVC MEETING ASTM SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.



TYPICAL SERVICE LATERAL DETAIL

- NOTES:**
1. BEARING SYSTEM BASED ON THE FINAL PLAT OF THE MIDWAY SQUARE ADDITION VOL. 93252 PG. 3095.
 2. PORTIONS OF EASEMENTS DEDICATED IN V. 93252 PG. 3095 WHICH ARE DEDICATED ON THIS SITE, SHALL BE VACATED BY THIS PLAT.
 3. LOTS # 64,65,66 AND 67 ARE COMMON AREAS.
 4. FACE OF GARAGE DOORS SHALL BE LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF STREET PAVEMENT.
 5. NO FENCES OR BUILDINGS SHALL BE ALLOWED WITHIN 10 FEET OF THE BACK OF CURB OR IN INDICATED VISIBILITY AREAS.

REVISED: FEBRUARY 10, 1997



RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.

CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/99

CAUTION!!!
GAS LINE IN AREA—CONTACT LONE STAR GAS 48 HOURS PRIOR TO CONSTRUCTION
PHONE: 283-3444

CONTACT:
MR. ED KEAH, OPERATING SUPPORT SECTION
DISTRIBUTION DEPARTMENT, 2 WORKING DAYS PRIOR TO EXCAVATING T.U. ELECTRIC FACILITIES.
PHONE: 698-7239 OR 698-7207

CAUTION!!!
UNDERGROUND TELEPHONE IN AREA—CONTACT S.W.B.T. 48 HOURS PRIOR TO CONSTRUCTION
PHONE: 698-7239 (UNDERGROUND)
PHONE: 698-7240 (OVER-HEAD)

PACHECO KOCH Consulting Engineers, Inc. 9401 LBJ Freeway, Suite 300 Dallas, Texas 75243
Civil Engineering • Land Surveying (214) 235-3031

WATER PLAN

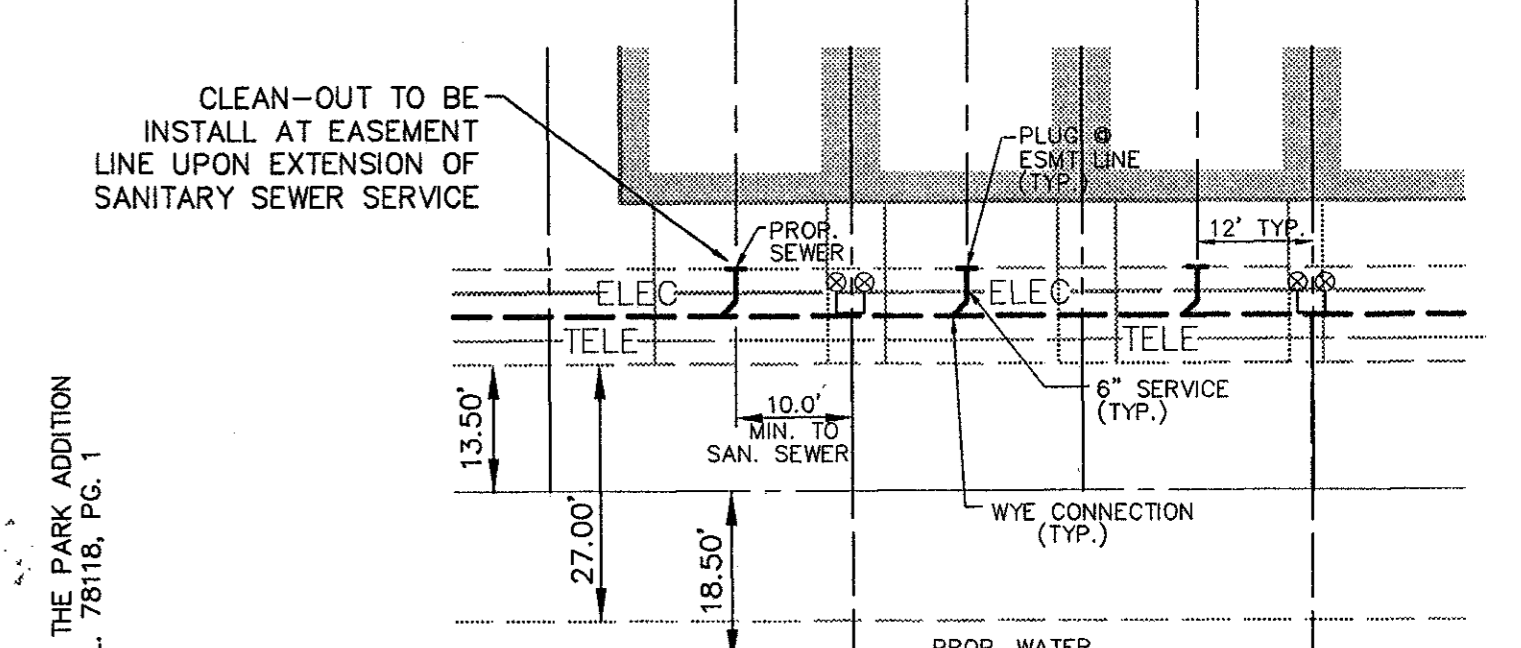
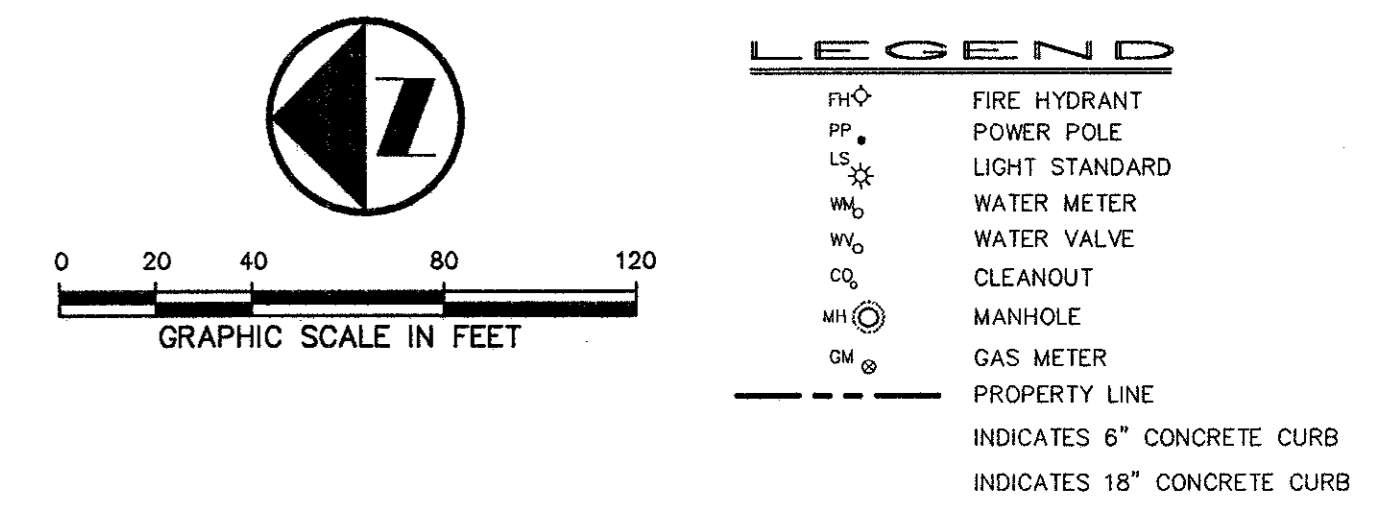
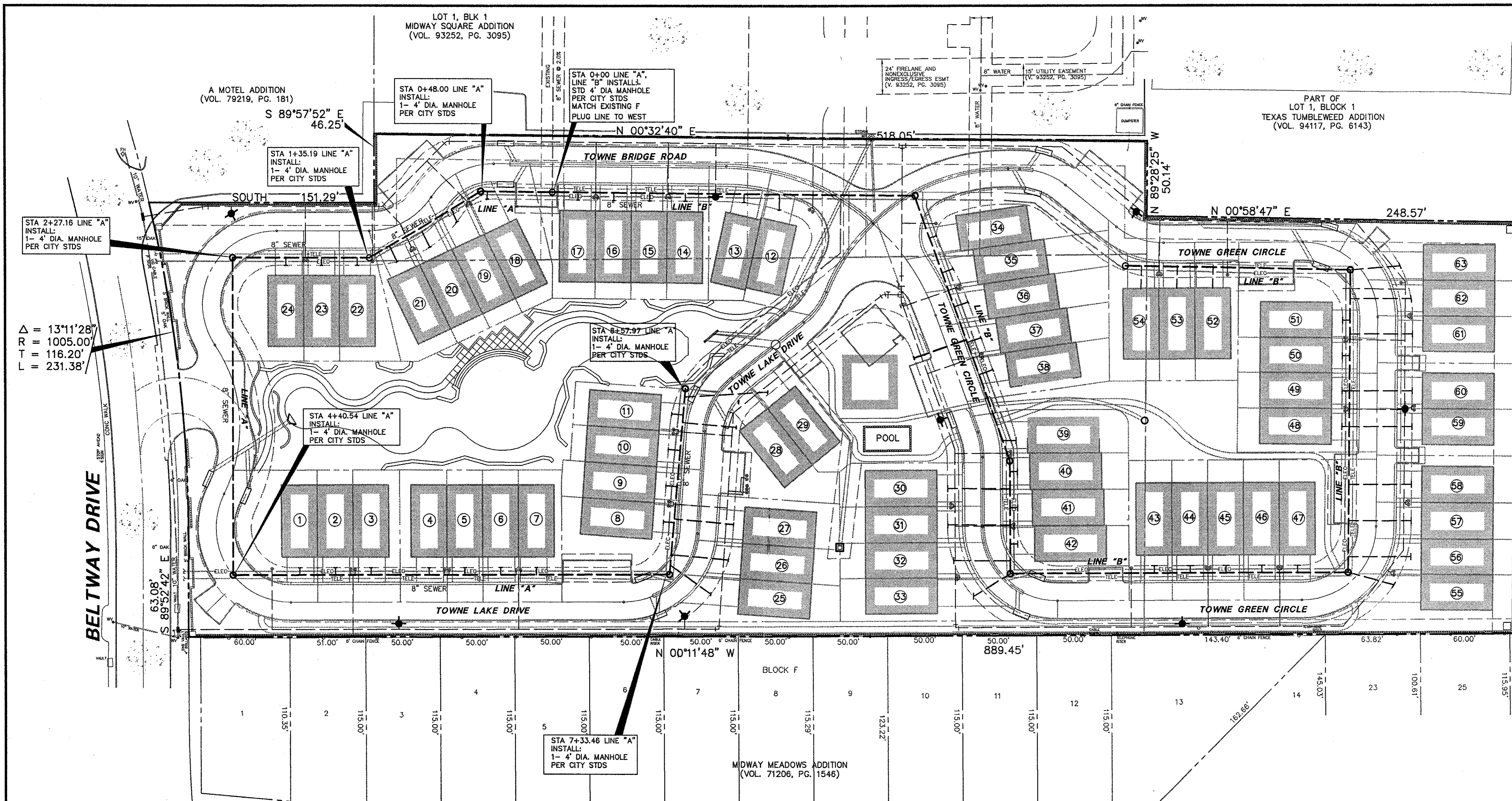
TOWNE LAKE ADDITION

THOMAS L. CHENOWETH SURVEY

ABSTRACT No. 273

CITY OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	JSN	02/10/97	1"=40'			C-4.1



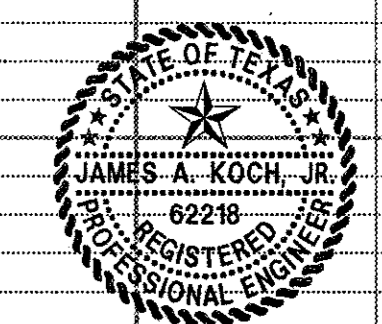
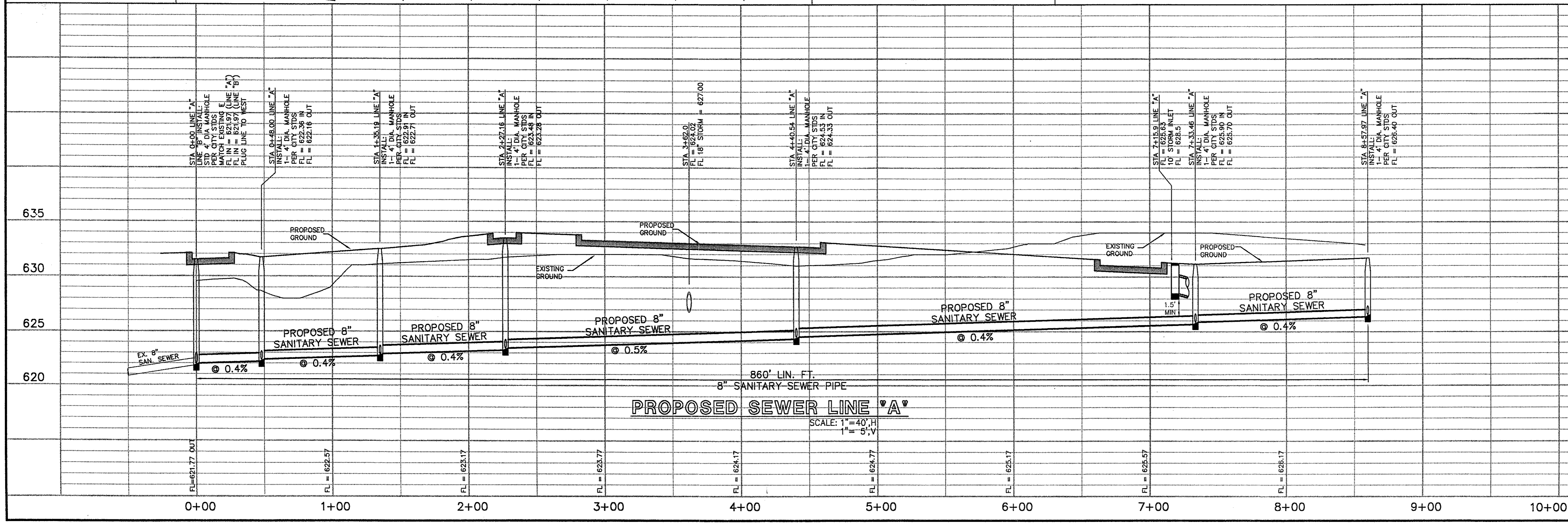
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CAUTION!
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CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/99

- BENCHMARK LIST**
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 - "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
 - "□" CUT ON TOP OF CURB OF SOUTHWEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 628.75



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Civil Engineering • Land Surveying

SANITARY SEWER LINE "A"
TOWNE LAKE ADDITION
STA 0+00 TO STA 8+57.97
TOWNES OF ADDISON
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	JSN	12/16/96	1" = 40' H 1" = 5' V			C-4.2

LOT 1, BLK 1
MIDWAY SQUARE ADDITION
(VOL. 93252, PG. 3095)

A MOTEL ADDITION
(VOL. 79219, PG. 181)

PART OF
LOT 1, BLOCK 1
TEXAS TUMBLEWEED ADDITION
(VOL. 94117, PG. 6143)

24" FIRELINE AND
NON-RESILIENT
NON-RECYCLED CSST
(V. 93252, PG. 3095)

STA 0+00 LINE "A" & "B"
INSTALL:
STD 4" DIA MANHOLE
PER CITY STDS
MATCH EXISTING E
PLUG LINE TO WEST

STA 2+42.80 LINE "B"
INSTALL:
1- 4" DIA. MANHOLE
PER CITY STDS

STA 10+87.11 LINE "B"
INSTALL:
1- 4" DIA. MANHOLE
PER CITY STDS

STA 9+36.28 LINE "B"
INSTALL:
1- 4" DIA. MANHOLE
PER CITY STDS

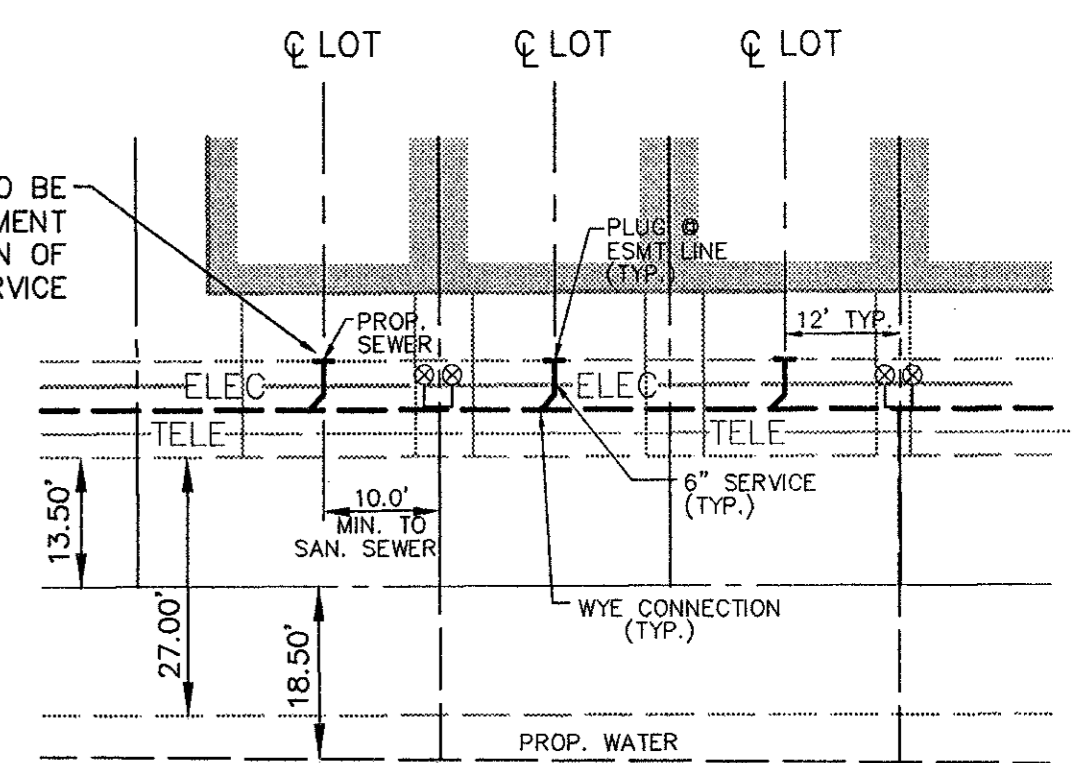
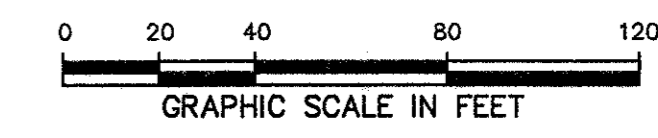
STA 4+32.16 LINE "B"
INSTALL:
1- 4" DIA. MANHOLE
PER CITY STDS

INSTALL:
STA 5+07.14 LINE "B"
1- 4" DIA. MANHOLE
PER CITY STDS

STA 7+33.53 LINE "B"
INSTALL:
1- 4" DIA. MANHOLE
PER CITY STDS

LEGEND

- PH FIRE HYDRANT
- PP POWER POLE
- LS LIGHT STANDARD
- WM WATER METER
- WV WATER VALVE
- CL CLEANOUT
- MH MANHOLE
- GM GAS METER
- PROPERTY LINE
- - - - - INDICATES 6" CONCRETE CURB
- - - - - INDICATES 18" CONCRETE CURB



TYPICAL SERVICE LATERAL DETAIL

CLEAN-OUT TO BE
INSTALL AT EASEMENT
LINE UPON EXTENSION OF
SANITARY SEWER SERVICE

- CAUTION!!!**
GAS LINE IN AREA-CONTACT
ONE STAR GAS 48 HOURS
PRIOR TO CONSTRUCTION
PHONE: 263-3444
- CONTACT:**
MR ED KEAH, OPERATING SUPPORT SECTION
DISTRIBUTION DEPARTMENT, 2 WORKING
DAYS PRIOR TO EXCAVATING TLU ELECTRIC
FACILITIES.
PHONE: 698-7239 OR 698-7207
- CAUTION!!!**
UNDERGROUND TELEPHONE
IN AREA - CONTACT S.W.B.T.
48 HOURS PRIOR TO CONSTRUCTION
PHONE: 698-7239 (UNDERGROUND)
PHONE: 698-7240 (OVER-HEAD)

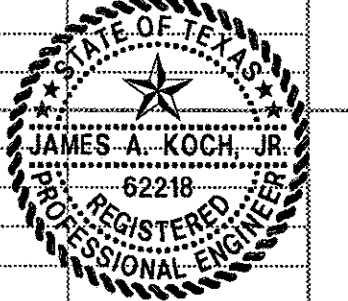
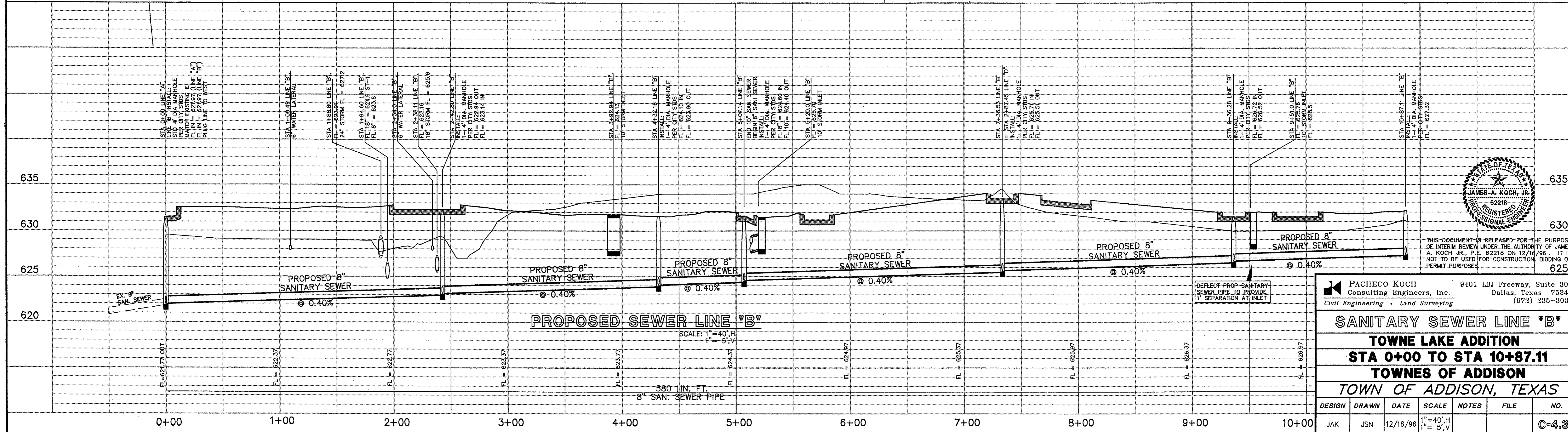
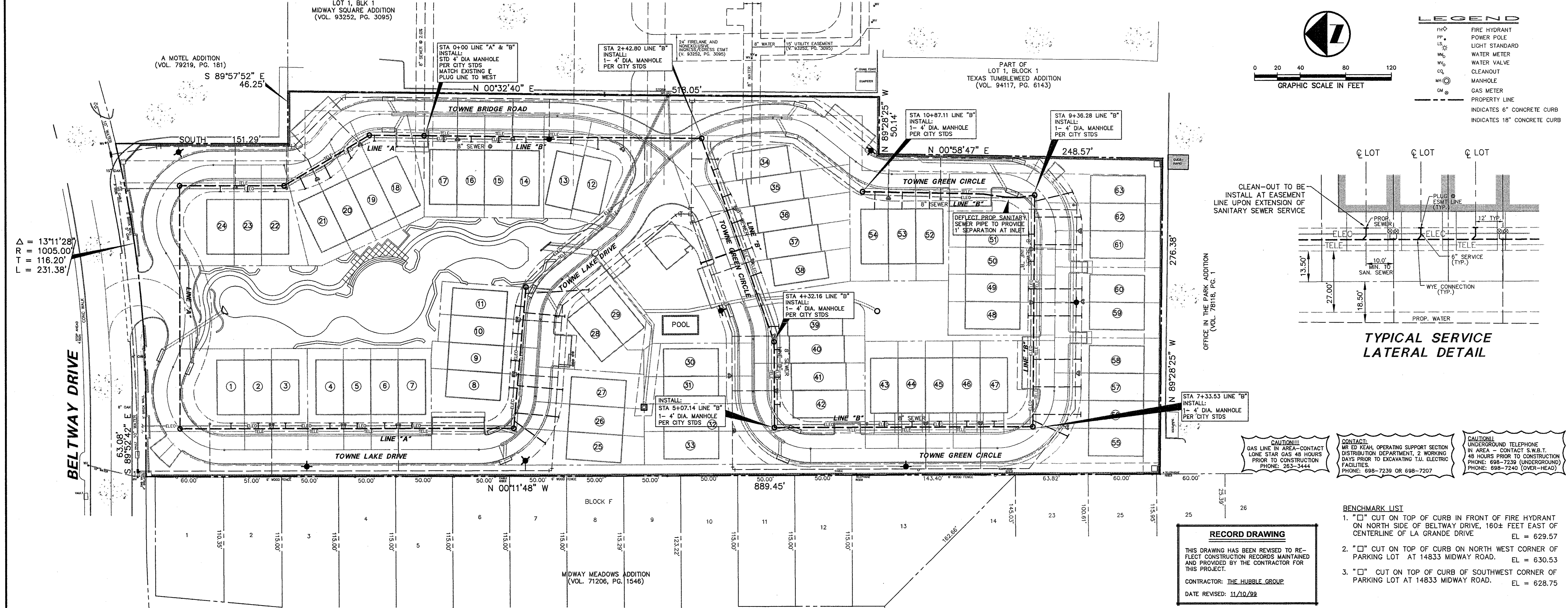
BENCHMARK LIST

1. "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT
ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF
CENTERLINE OF LA GRANDE DRIVE EL = 629.57
2. "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF
PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
3. "□" CUT ON TOP OF CURB OF SOUTHWEST CORNER OF
PARKING LOT AT 14833 MIDWAY ROAD. EL = 628.75

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO RE-
FLECT CONSTRUCTION RECORDS MAINTAINED
AND PROVIDED BY THE CONTRACTOR FOR
THIS PROJECT.
CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/99

Δ = 13°11'28"
R = 1005.00'
T = 116.20'
L = 231.38'

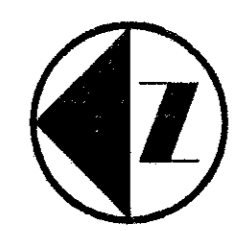
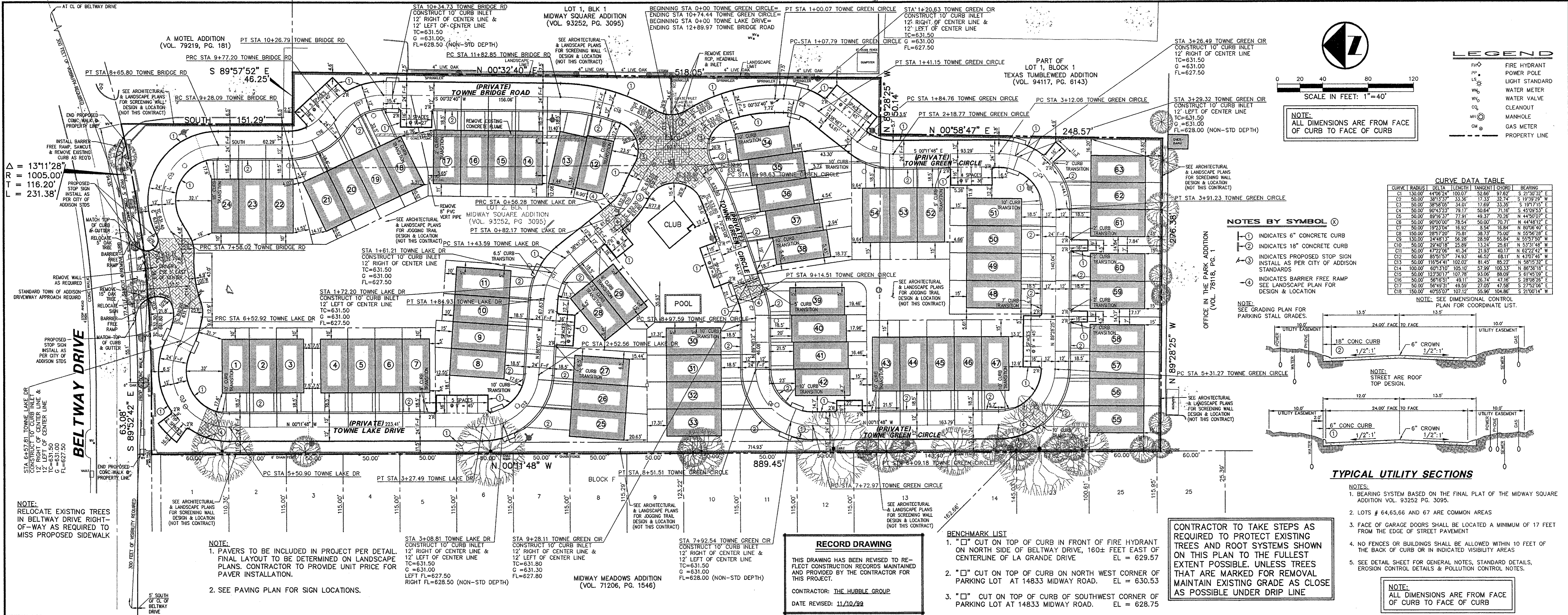


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A. KOCH, JR., P.E. 62218 ON 12/16/96. IT IS
NOT TO BE USED FOR CONSTRUCTION, BIDDING OR
PERMIT PURPOSES.

PACHECO KOCH 9401 LBJ Freeway, Suite 300
Consulting Engineers, Inc. Dallas, Texas 75243
Civil Engineering • Land Surveying (972) 235-3031

SANITARY SEWER LINE "B"
TOWNE LAKE ADDITION
STA 0+00 TO STA 10+87.11
TOWNES OF ADDISON
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	JSN	12/16/96	1"=40', 1"=5',V			C-4.3



SCALE IN FEET: 1"=40'

NOTE: ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

LEGEND

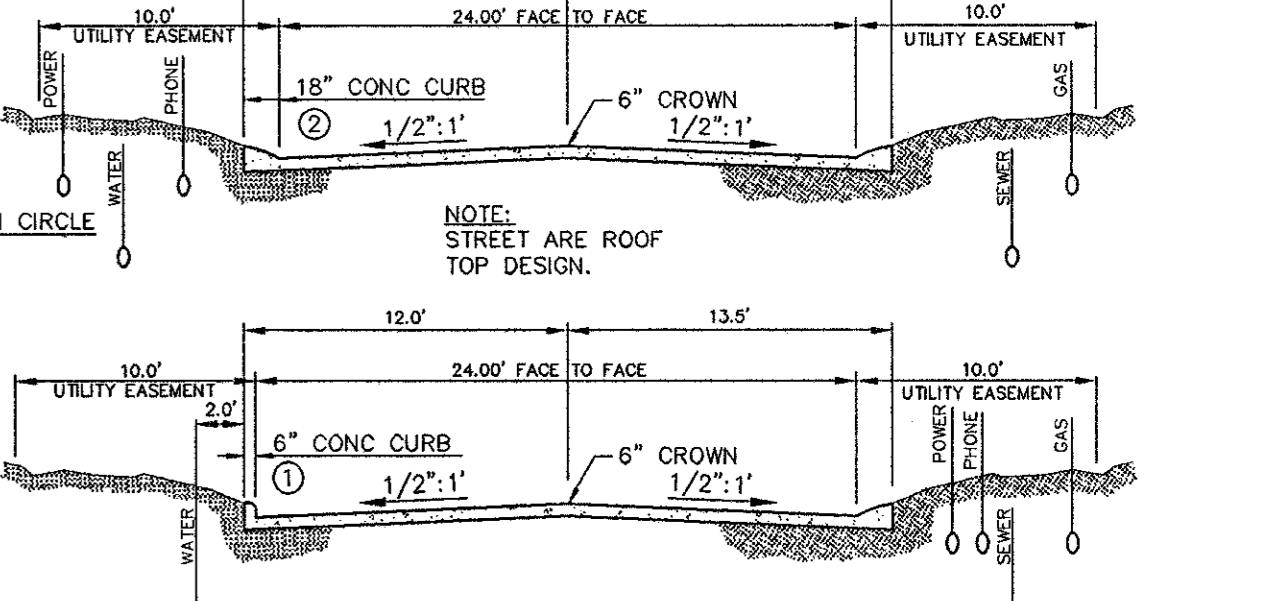
⊕	FIRE HYDRANT
⊕	POWER POLE
⊕	LIGHT STANDARD
⊕	WATER METER
⊕	WATER VALVE
⊕	CLEANOUT
⊕	MANHOLE
⊕	GAS METER
---	PROPERTY LINE

CURVE DATA TABLE

CURVE	RADIUS	DELTA	LENGTH	TANGENT	CHORD	BEARING
C1	150.00	44°06'24"	100.07	52.66	97.62	S 21°30'32" E
C2	50.00	38°18'05"	33.30	17.33	32.74	S 21°30'32" E
C3	50.00	38°18'05"	33.30	17.33	32.74	S 191°17'15" E
C4	50.00	80°43'23"	79.17	50.64	71.16	S 42°09'53" E
C5	50.00	80°43'23"	79.17	50.64	71.16	N 45°05'01" E
C6	50.00	90°00'00"	78.54	50.00	70.71	N 44°48'12" E
C7	50.00	192°30'4"	16.92	8.54	16.84	N 80°06'40" E
C8	150.00	89°23'04"	76.01	38.73	70.26	N 80°06'40" E
C9	50.00	472°706"	41.34	21.83	40.17	N 22°42'42" W
C10	150.00	24°48'11"	56.28	28.59	55.54	N 52°57'50" W
C11	50.00	29°40'18"	25.89	13.24	26.61	N 53°31'48" W
C12	50.00	85°51'57"	74.93	45.52	88.11	N 43°07'46" W
C13	50.00	116°54'41"	102.02	81.45	85.22	N 58°15'32" E
C14	100.00	60°31'00"	105.10	59.99	100.31	N 68°16'19" E
C15	50.00	123°50'17"	107.78	84.96	88.09	S 61°45'09" E
C16	50.00	56°16'51"	49.11	26.74	47.16	S 28°06'26" E
C17	50.00	58°43'31"	49.29	27.05	47.50	S 27°02'26" E
C18	150.00	402°50'07"	102.12	52.86	104.86	S 21°00'14" W

- NOTES BY SYMBOL**
- ⊕ INDICATES 6" CONCRETE CURB
 - ⊕ INDICATES 18" CONCRETE CURB
 - ⊕ INDICATES PROPOSED STOP SIGN INSTALL AS PER CITY OF ADDISON STANDARDS
 - ⊕ INDICATES BARRIER FREE RAMP

NOTE: SEE GRADING PLAN FOR PARKING STALL GRADES.



TYPICAL UTILITY SECTIONS

- NOTES:
- BEARING SYSTEM BASED ON THE FINAL PLAN OF THE MIDWAY SQUARE ADDITION VOL. 93252 PG. 3095.
 - LOTS # 64,65,66 AND 67 ARE COMMON AREAS
 - FACE OF GARAGE DOORS SHALL BE LOCATED A MINIMUM OF 17 FEET FROM THE EDGE OF STREET PAVEMENT
 - NO FENCES OR BUILDINGS SHALL BE ALLOWED WITHIN 10 FEET OF THE BACK OF CURB OR IN INDICATED VISIBILITY AREAS
 - SEE DETAIL SHEET FOR GENERAL NOTES, STANDARD DETAILS, EROSION CONTROL DETAILS & POLLUTION CONTROL NOTES.

NOTE: ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

RECORD DRAWING

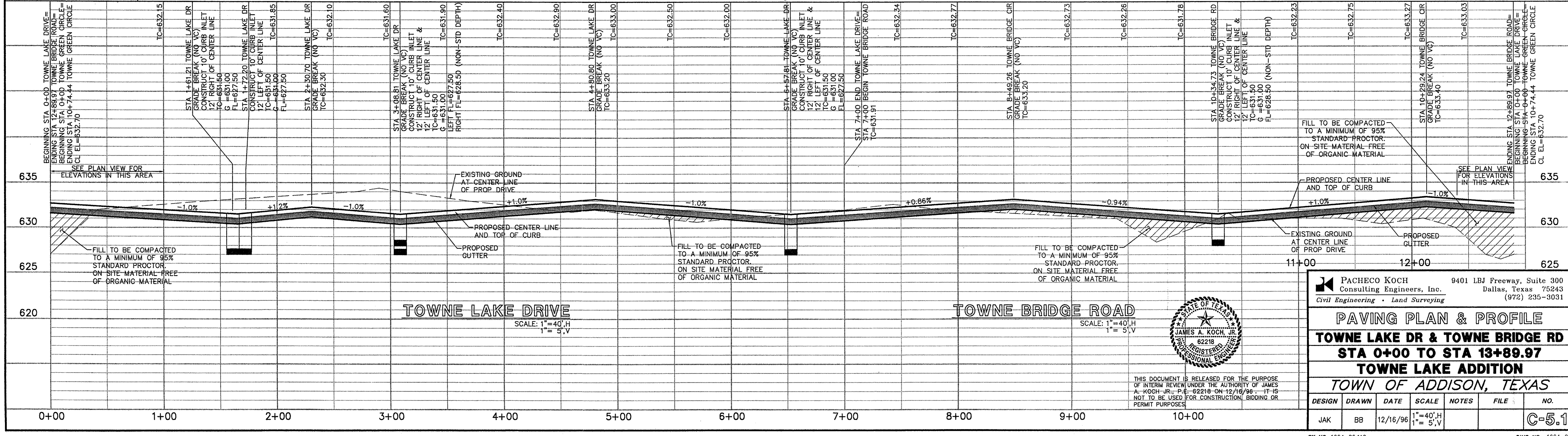
THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.

CONTRACTOR: THE HUBBLE GROUP

DATE REVISED: 11/10/98

CONTRACTOR TO TAKE STEPS AS NECESSARY TO PROTECT EXISTING TREES AND ROOT SYSTEMS SHOWN ON THIS PLAN TO THE FULLEST EXTENT POSSIBLE, UNLESS TREES THAT ARE MARKED FOR REMOVAL MAINTAIN EXISTING GRADE AS CLOSE AS POSSIBLE UNDER DRIP LINE

- BENCHMARK LIST**
- "□" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE. EL = 629.57
 - "□" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
 - "□" CUT ON TOP OF CURB OF SOUTHWEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 628.75



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PAVING PLAN & PROFILE

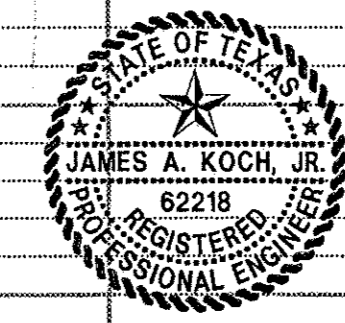
TOWNE LAKE DR & TOWNE BRIDGE RD

STA 0+00 TO STA 13+89.97

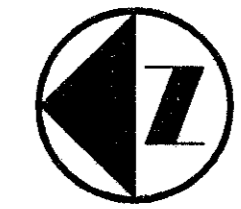
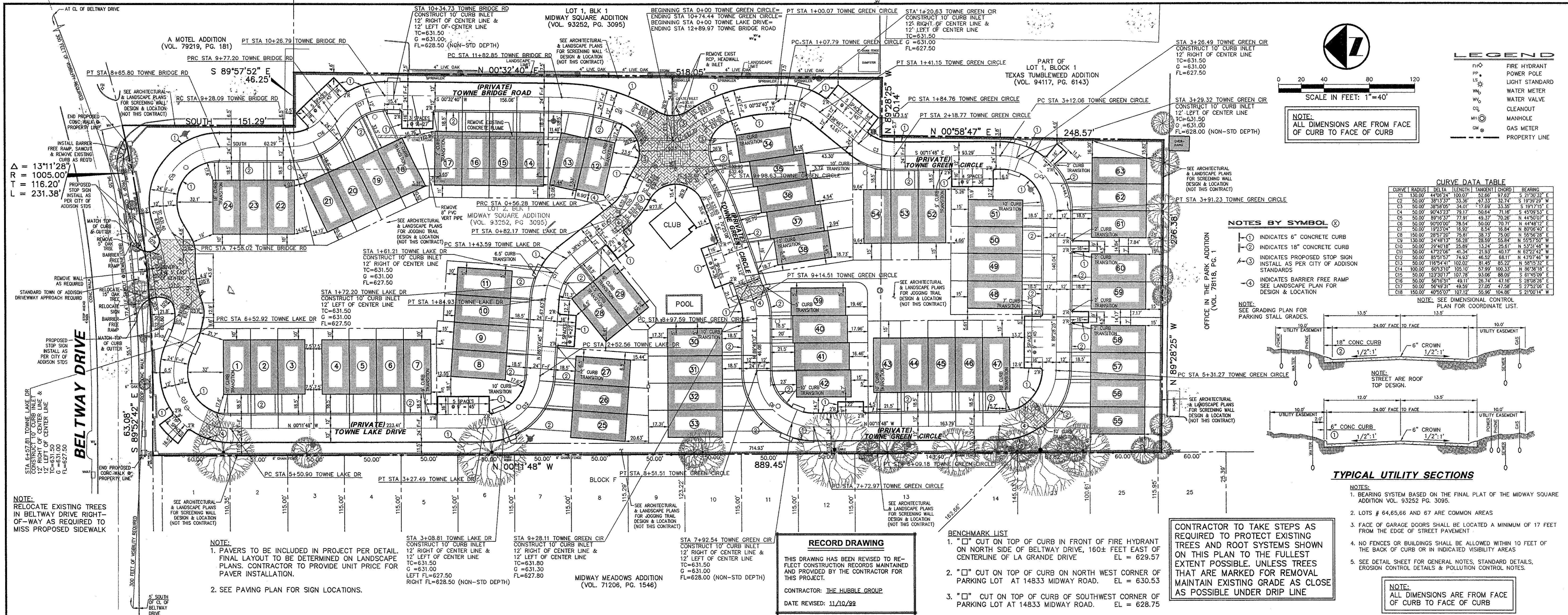
TOWNE LAKE ADDITION

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	12/16/96	1"=40',H 1"=5',V			C-5.1



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SCALE IN FEET: 1"=40'

NOTE: ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

LEGEND

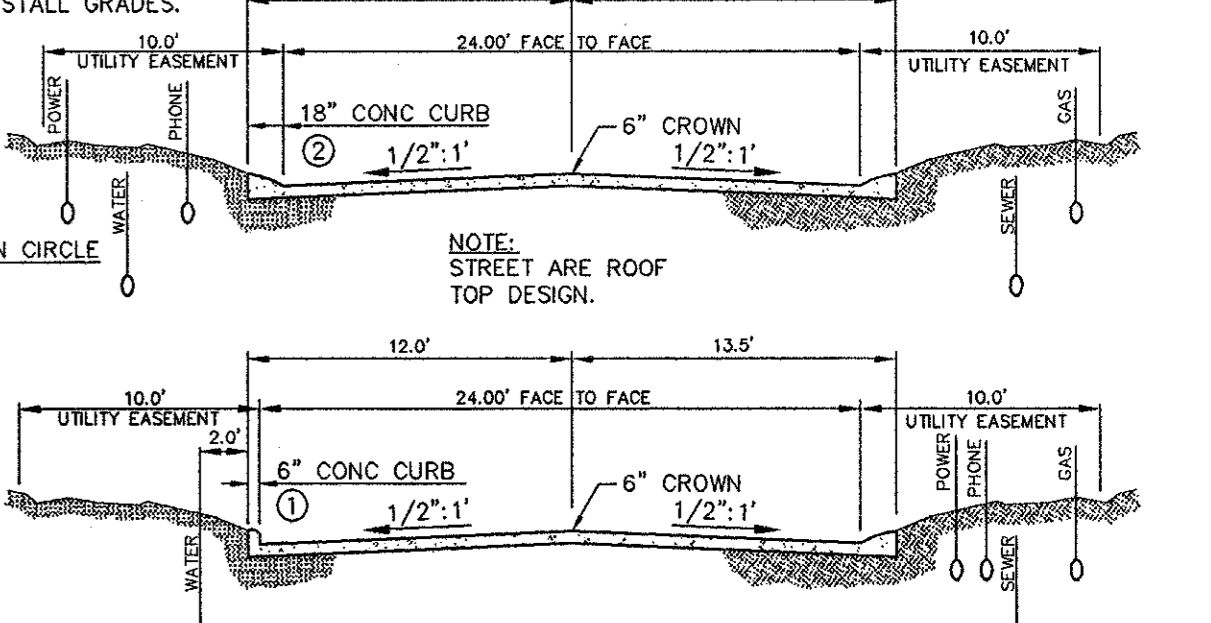
⊕	FIRE HYDRANT
⊕	POWER POLE
⊕	LIGHT STANDARD
⊕	WATER METER
⊕	WATER VALVE
⊕	CLEANOUT
⊕	MANHOLE
⊕	GAS METER
---	PROPERTY LINE

CURVE DATA TABLE

CURVE	RADIUS	DELTA	LENGTH	TANGENT CHORD	BEARING
C1	130.00	44°09'24"	100.97	52.66	97.62 S 21°30'32" E
C2	50.00	38°13'39"	33.36	17.33	32.74 S 19°20'29" W
C3	50.00	38°13'39"	34.01	17.69	33.92 S 19°17'16" W
C4	50.00	80°43'23"	79.17	50.64	71.16 S 45°09'53" E
C5	50.00	89°16'39"	77.91	49.37	70.26 S 44°50'07" E
C6	50.00	80°00'00"	78.54	50.00	70.71 N 44°50'07" E
C7	50.00	192°31'04"	16.92	8.54	16.84 N 80°09'40" E
C8	150.00	28°52'20"	75.61	38.73	75.00 S 55°56'28" E
C9	130.00	24°48'15"	58.29	28.69	53.84 S 45°27'29" W
C10	50.00	29°40'18"	25.89	13.24	25.61 N 53°51'48" W
C11	50.00	47°22'08"	41.34	21.93	40.17 S 62°22'42" W
C12	50.00	83°51'57"	74.93	46.92	68.11 N 43°01'46" W
C13	50.00	116°54'41"	102.02	81.45	85.22 N 58°53'52" E
C14	100.00	80°31'10"	105.10	57.99	100.33 S 36°36'15" E
C15	50.00	123°01'17"	107.78	83.66	88.69 S 41°50'07" E
C16	50.00	56°16'51"	49.11	26.74	47.16 S 28°08'26" E
C17	50.00	56°16'51"	49.59	27.02	47.28 S 27°52'06" E
C18	150.00	49°52'07"	107.12	55.96	104.86 S 21°04'14" W

NOTE: SEE DIMENSIONAL CONTROL PLAN FOR COORDINATE LIST.

- NOTES BY SYMBOL**
- ① INDICATES 6" CONCRETE CURB
 - ② INDICATES 18" CONCRETE CURB
 - ③ INDICATES PROPOSED STOP SIGN INSTALL AS PER CITY OF ADDISON STANDARDS
 - ④ INDICATES BARRIER FREE RAMP SEE LANDSCAPE PLAN FOR DESIGN & LOCATION
- NOTE: SEE GRADING PLAN FOR PARKING STALL GRADES.



- CONTRACTOR TO TAKE STEPS AS REQUIRED TO PROTECT EXISTING TREES AND ROOT SYSTEMS SHOWN ON THIS PLAN TO THE FULLEST EXTENT POSSIBLE. UNLESS TREES THAT ARE MARKED FOR REMOVAL MAINTAIN EXISTING GRADE AS CLOSE AS POSSIBLE UNDER DRIP LINE.**
- NOTE:** ALL DIMENSIONS ARE FROM FACE OF CURB TO FACE OF CURB

NOTE: RELOCATE EXISTING TREES IN BELTWAY DRIVE RIGHT-OF-WAY AS REQUIRED TO MISS PROPOSED SIDEWALK

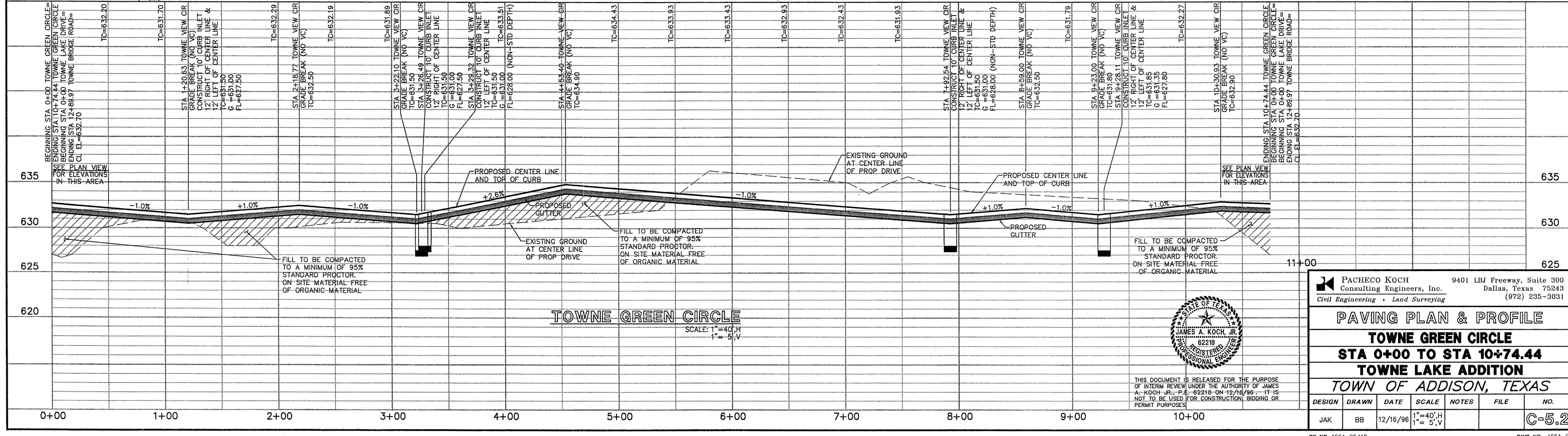
- NOTE:**
- PAVERS TO BE INCLUDED IN PROJECT PER DETAIL. FINAL LAYOUT TO BE DETERMINED ON LANDSCAPE PLANS. CONTRACTOR TO PROVIDE UNIT PRICE FOR PAVER INSTALLATION.
 - SEE PAVING PLAN FOR SIGN LOCATIONS.

RECORD DRAWING

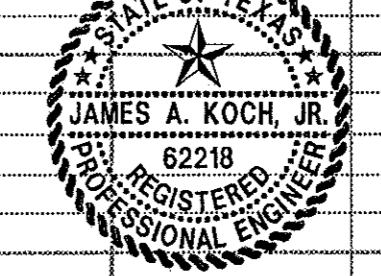
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CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/99

- BENCHMARK LIST**
- "I" CUT ON TOP OF CURB IN FRONT OF FIRE HYDRANT ON NORTH SIDE OF BELTWAY DRIVE, 160± FEET EAST OF CENTERLINE OF LA GRANDE DRIVE. EL = 629.57
 - "I" CUT ON TOP OF CURB ON NORTH WEST CORNER OF PARKING LOT AT 14833 MIDWAY ROAD. EL = 630.53
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Civil Engineering • Land Surveying



PAVING PLAN & PROFILE

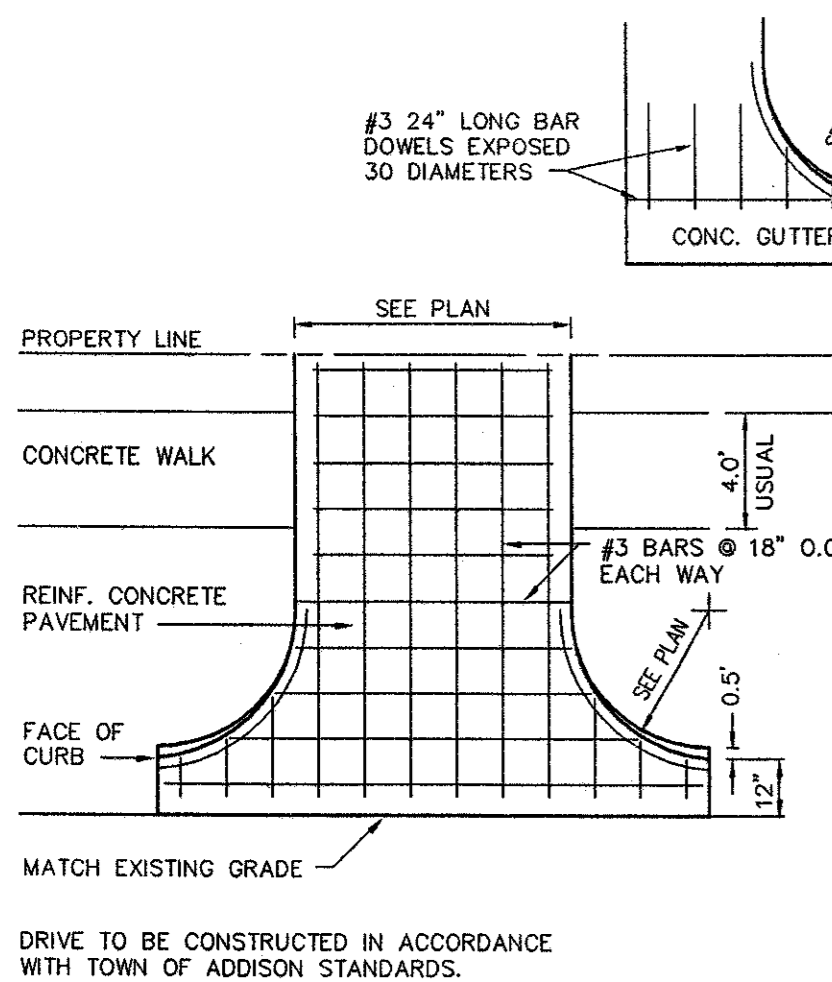
TOWNE GREEN CIRCLE

STA 0+00 TO STA 10+74.44

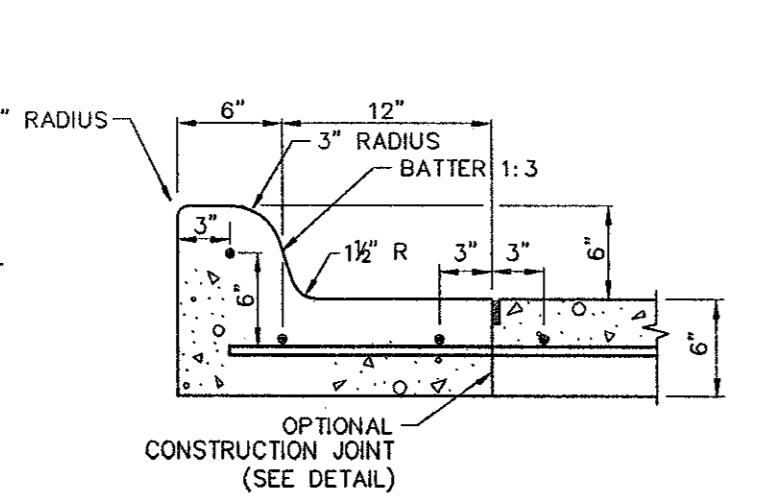
TOWNE LAKE ADDITION

TOWN OF ADDISON, TEXAS

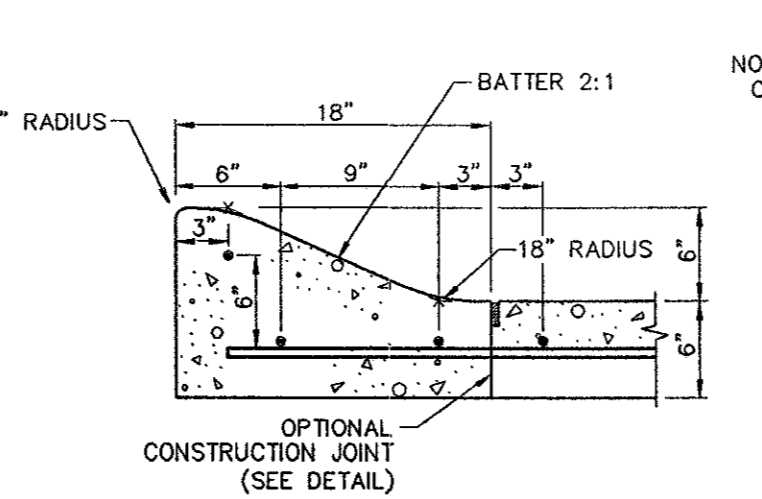
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	12/16/96	1"=40' H 1"=5' V			C-5.2



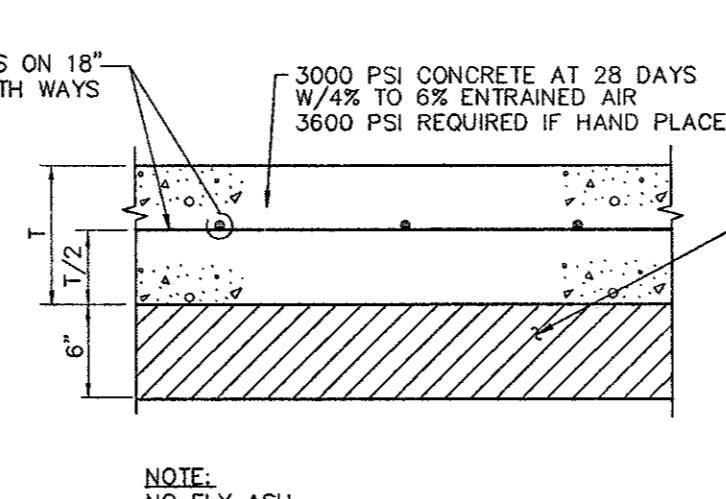
1 DRIVEWAY APPROACH
NOT TO SCALE



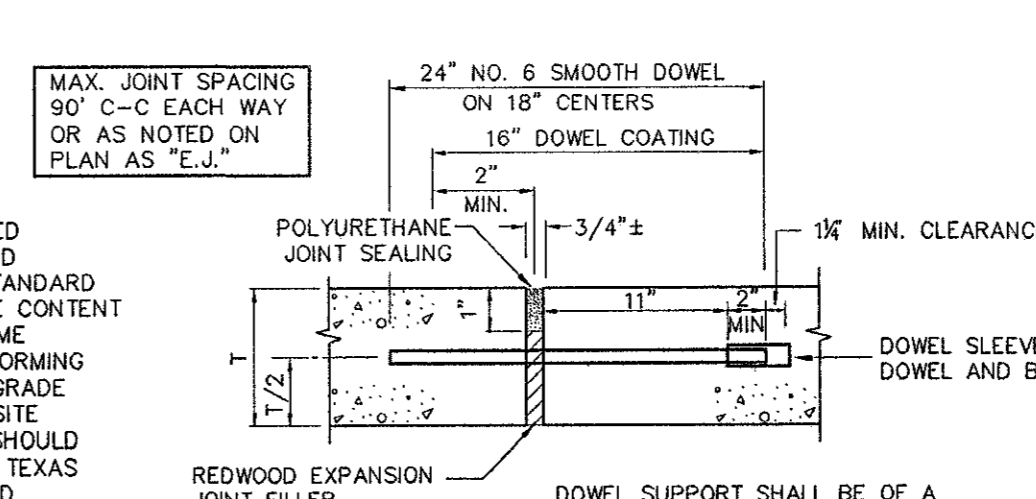
2 6\"/>



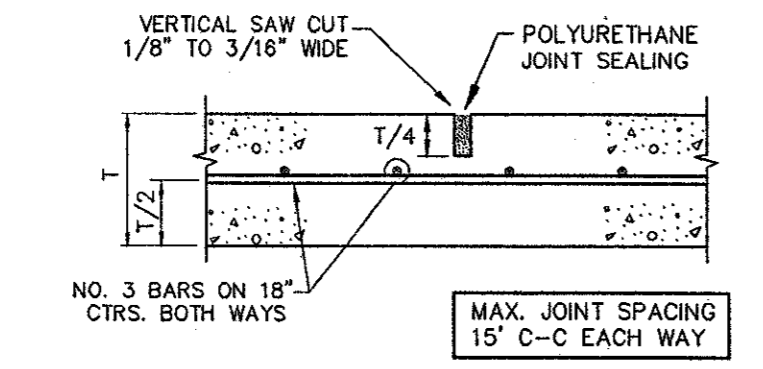
3 18\"/>



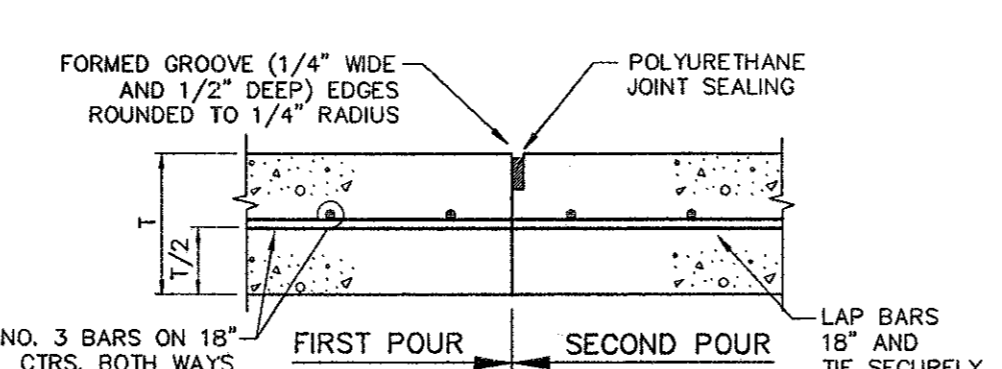
4 PAVEMENT SECTION
NOT TO SCALE



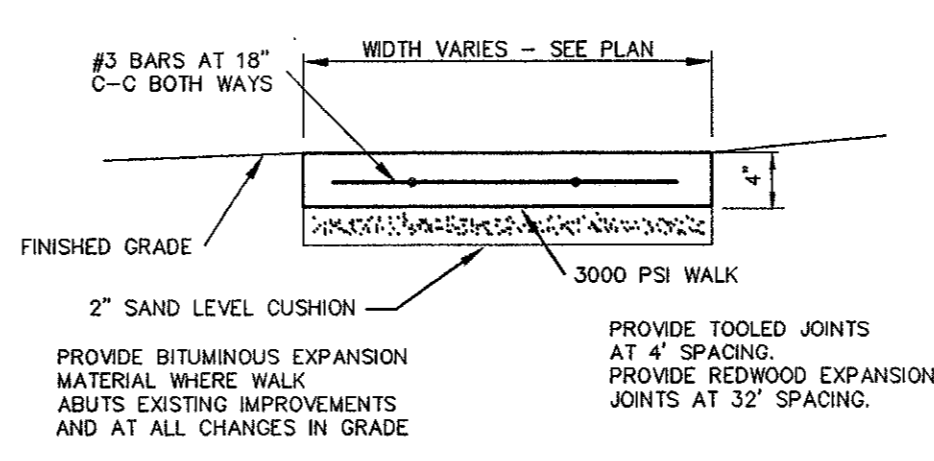
5 EXPANSION JOINT
NOT TO SCALE



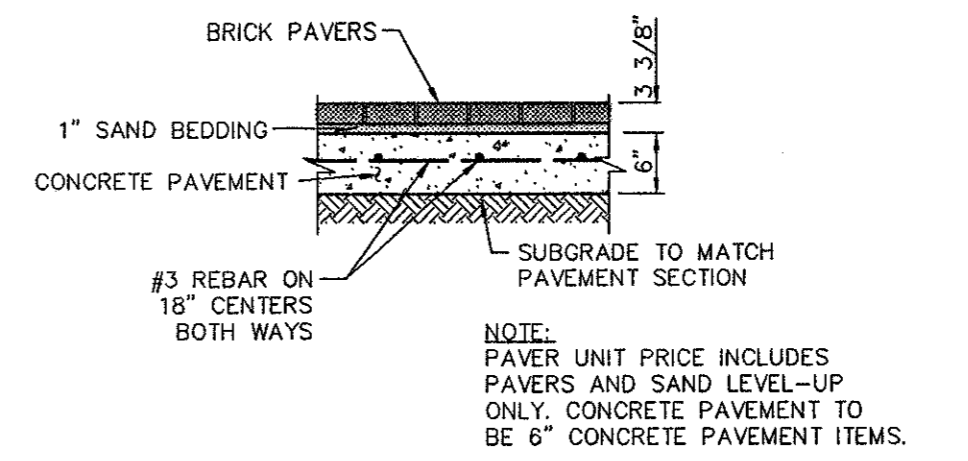
6 SAWED DUMMY JOINT
NOT TO SCALE



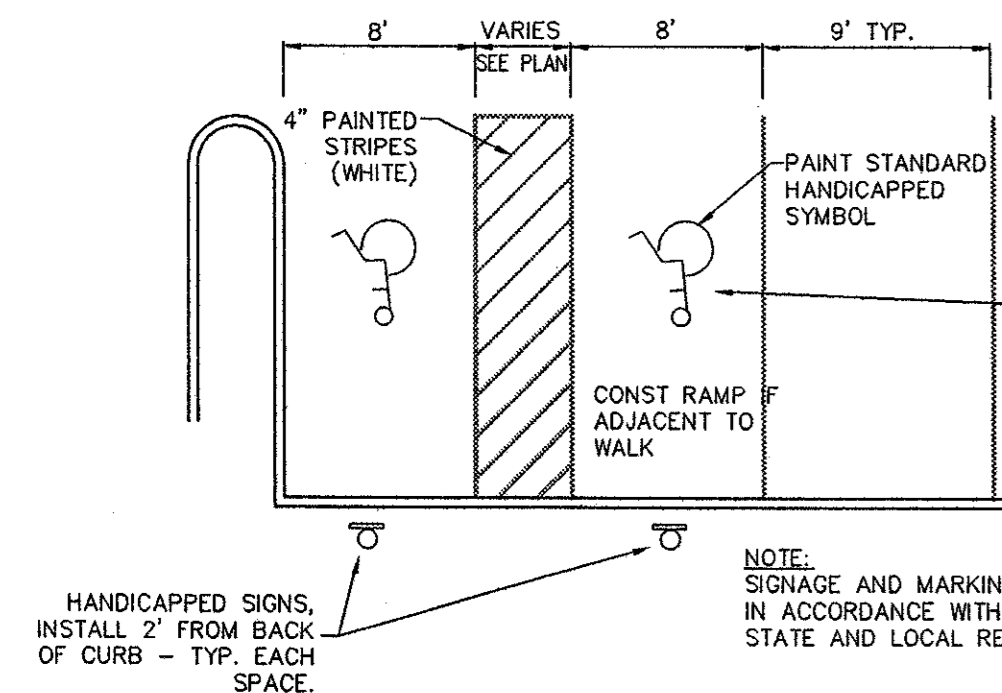
7 CONSTRUCTION JOINT
NOT TO SCALE



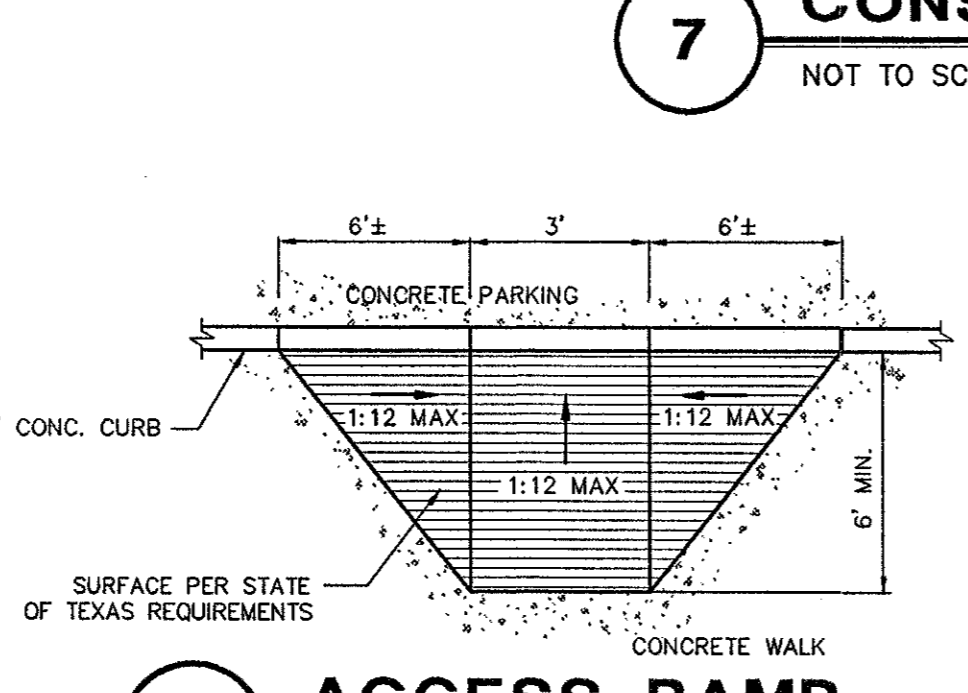
8 CONCRETE WALK
NOT TO SCALE



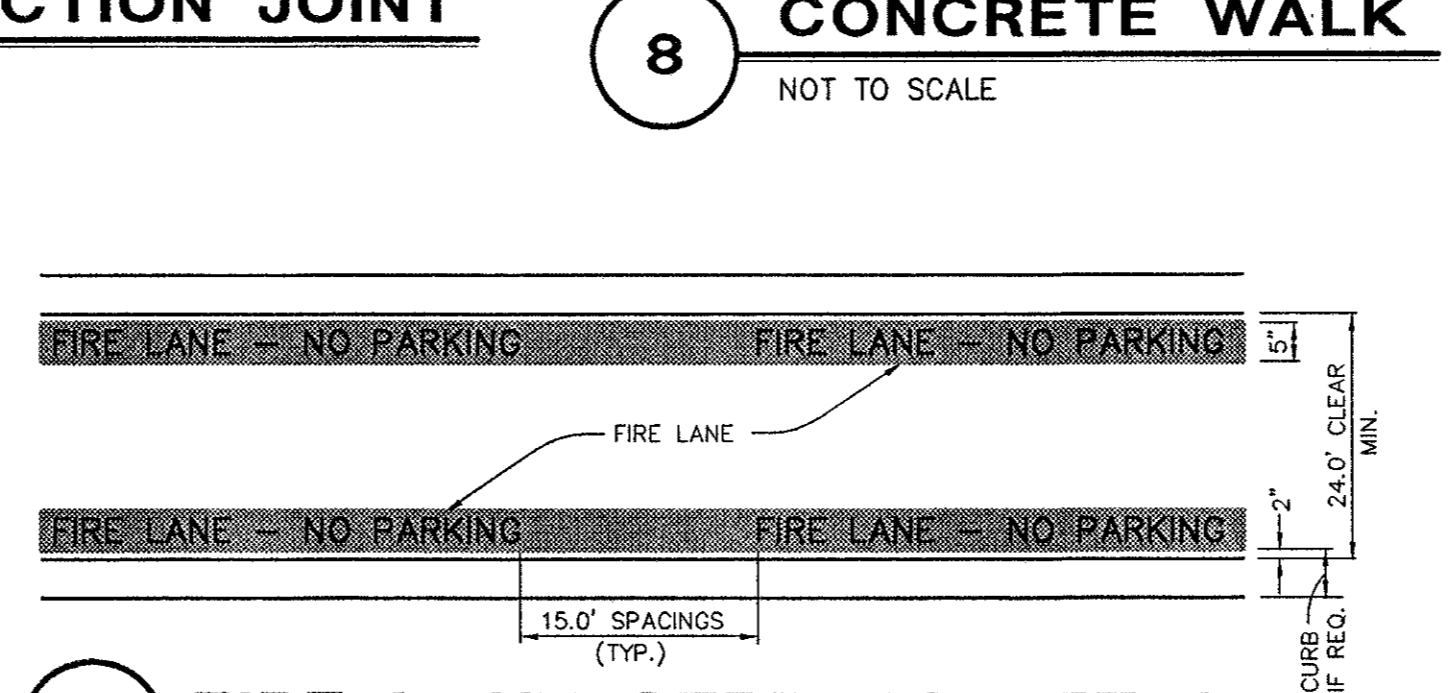
9 BRICK PAVER SECTION
NOT TO SCALE



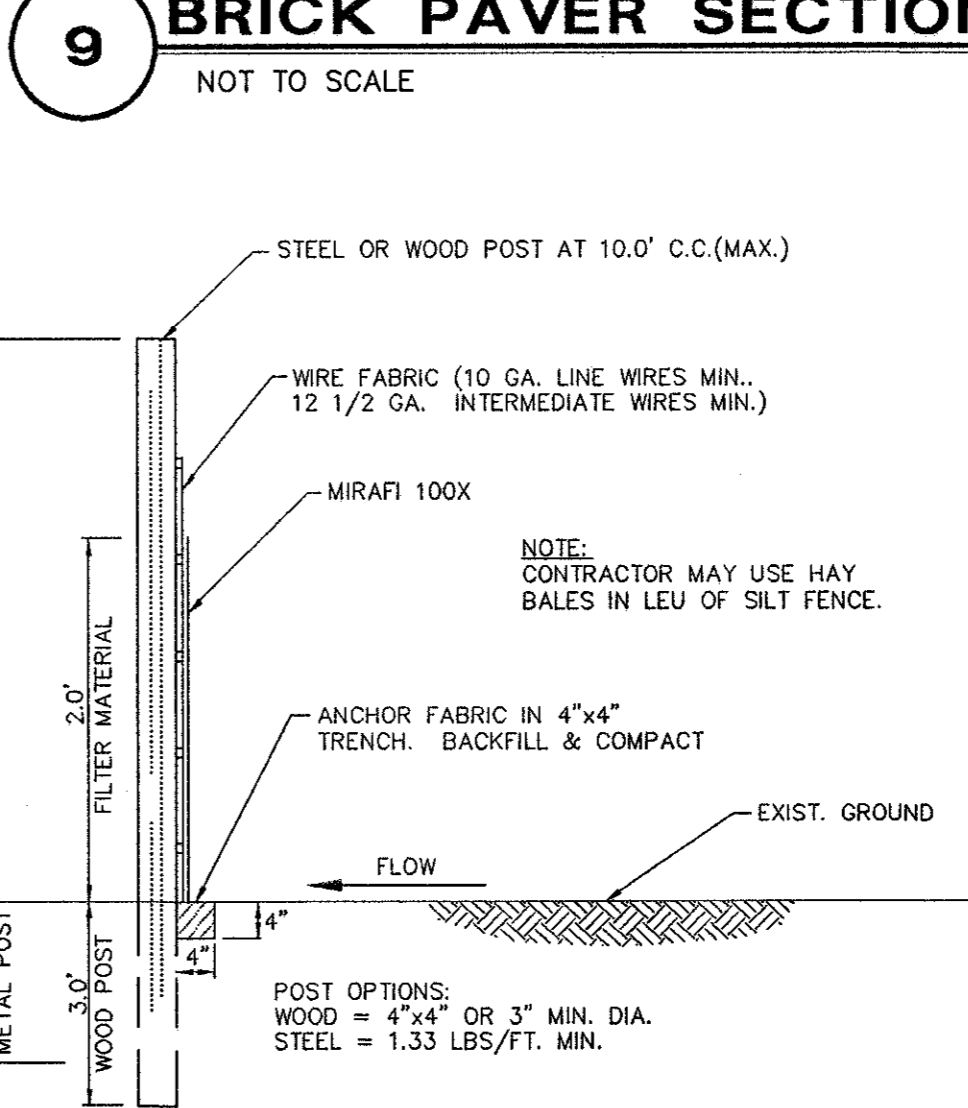
10 HANDICAPPED PARKING LAYOUT



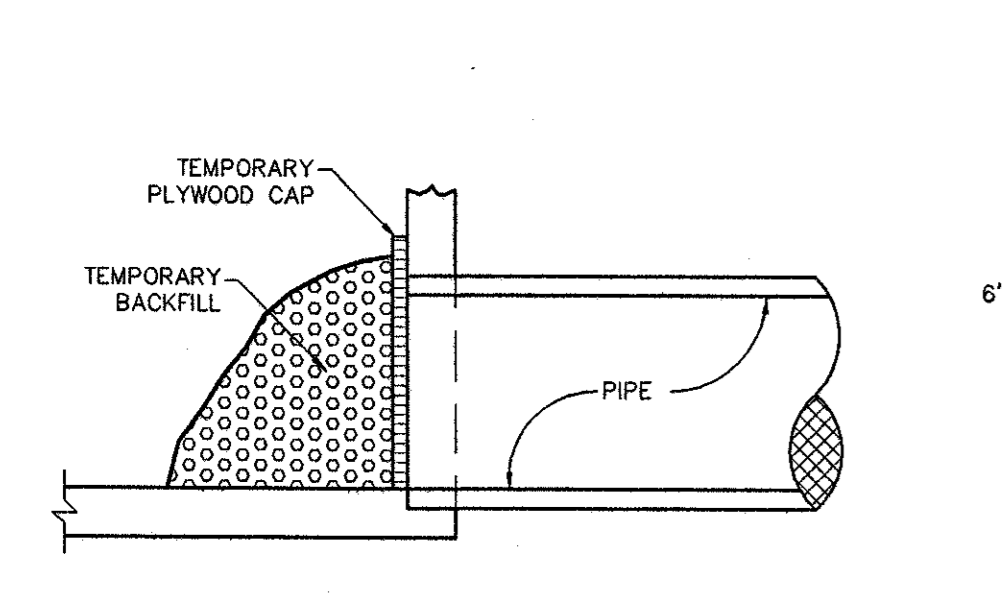
11 ACCESS RAMP
NOT TO SCALE



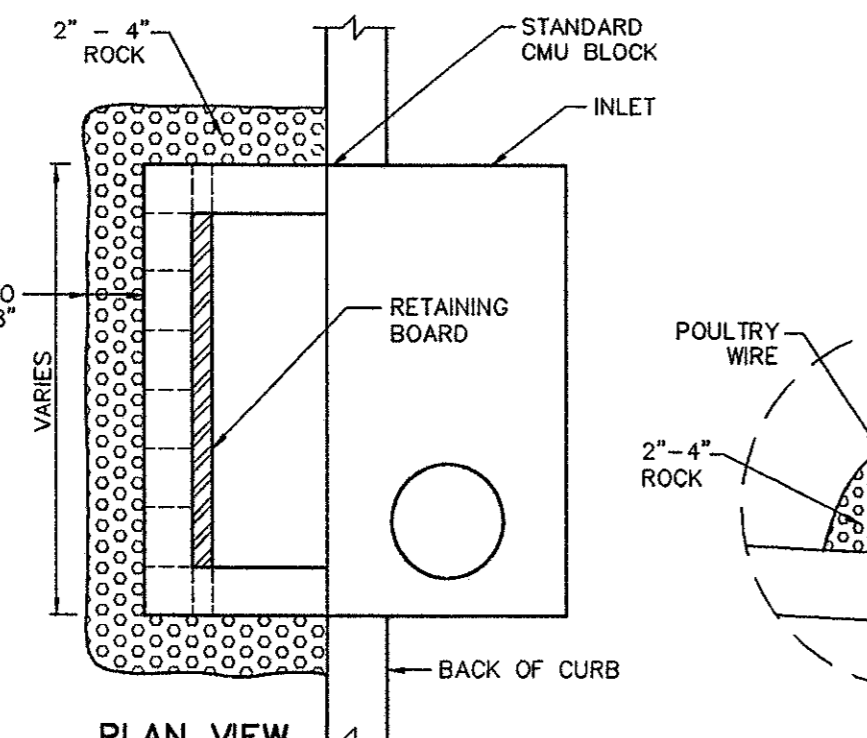
12 FIRE LANE STRIPING DETAIL



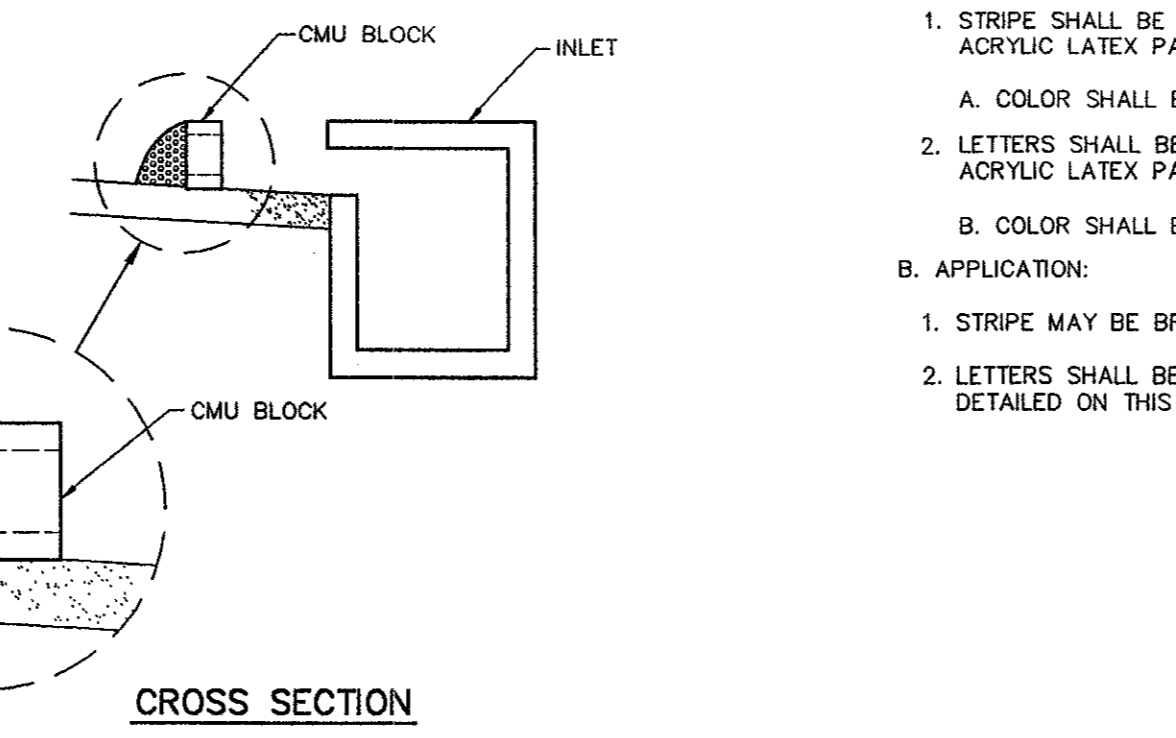
SILT FENCE DETAIL:
TYPICAL TEMPORARY FILTER FABRIC WITHOUT WIRE FABRIC
N.T.S.



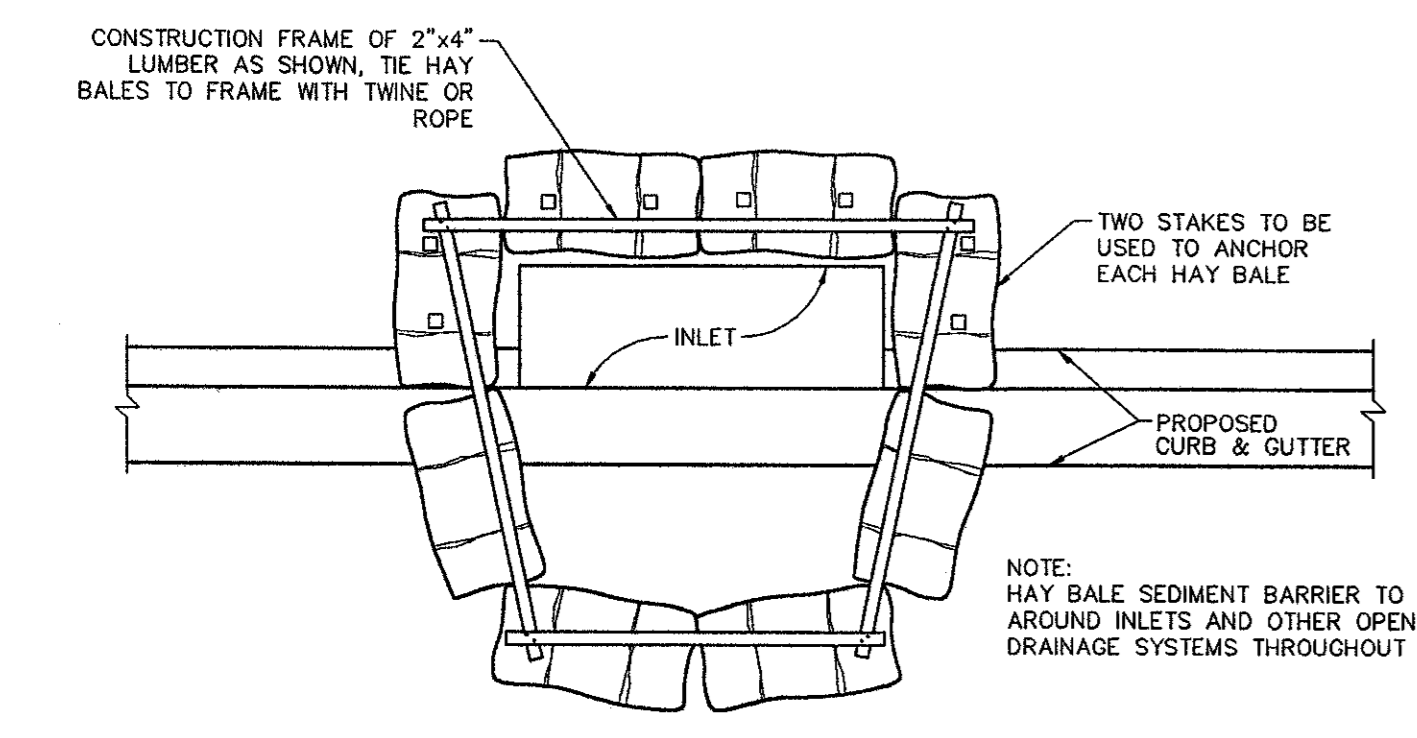
PHASE ONE CURB INLET PROTECTION
N.T.S.



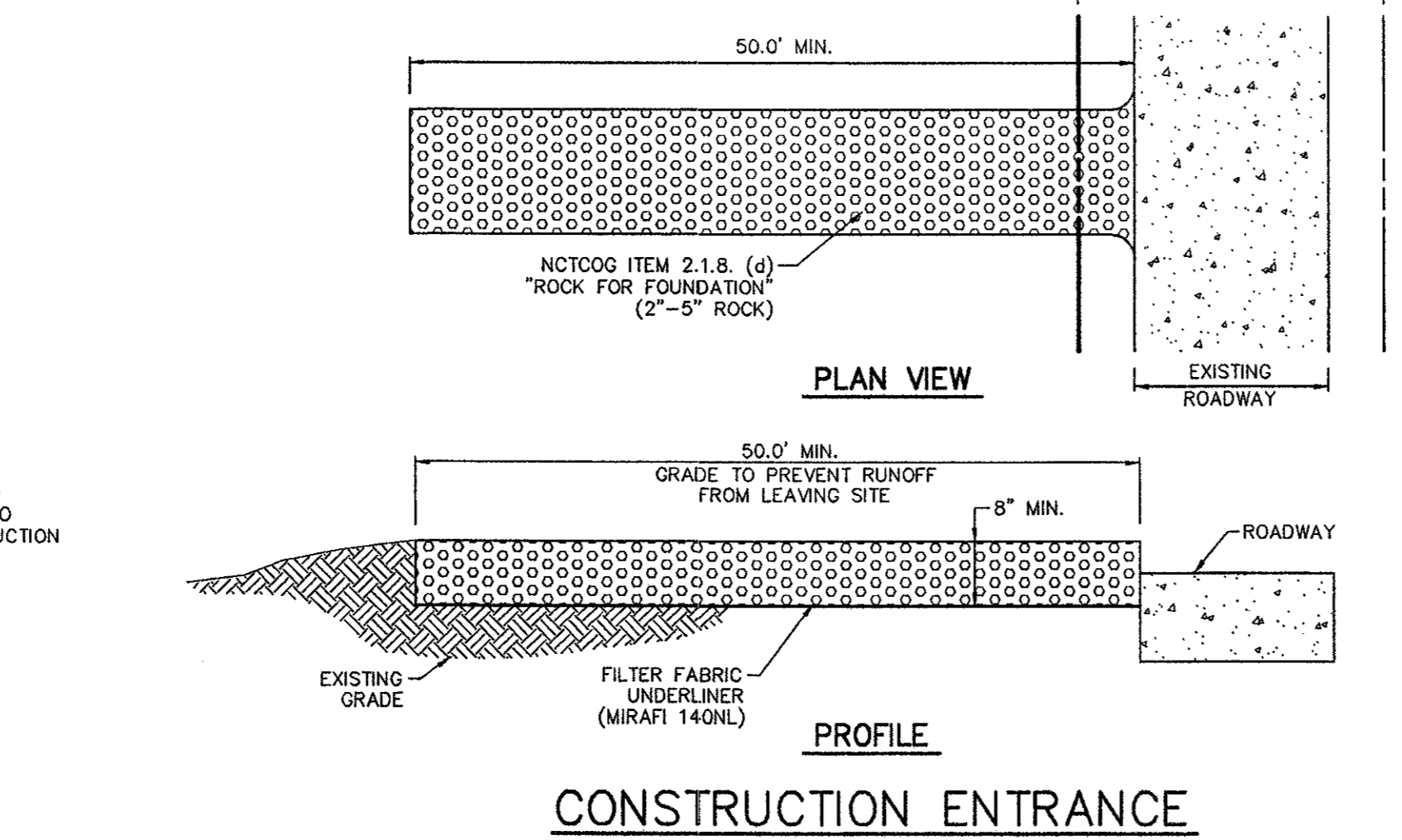
PHASE TWO CURB INLET PROTECTION
N.T.S.



ALTERNATE 1 CURB INLET PROTECTION
N.T.S.



ALTERNATE 2 CURB INLET PROTECTION
N.T.S.



CONSTRUCTION ENTRANCE
N.T.S.

LIGHT TRAFFIC (PARKING AREAS)
PORTLAND CEMENT CONCRETE T = 5"
LIME STABILIZED SUBGRADE T = 6"

HEAVY TRAFFIC (FIRELANES)
PORTLAND CEMENT CONCRETE T = 6"
LIME STABILIZED SUBGRADE T = 6"

SUBGRADE SOILS SHOULD BE LIME STABILIZED TO A DEPTH OF SIX INCHES AND COMPACTED TO A MINIMUM OF 95% OF THE MAXIMUM STANDARD DRY DENSITY (ASTM D 698) AT A MOISTURE CONTENT WITHIN 3% OF OPTIMUM. THE AMOUNT OF LIME REQUIRED SHOULD BE DETERMINED BY PERFORMING A LIME SERIES TEST ON THE EXPOSED SUBGRADE MATERIAL AFTER THE COMPLETION OF THE SITE GRADING OPERATIONS. LIME STABILIZATION SHOULD BE IN ACCORDANCE WITH ITEM 260 OF THE TEXAS DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION OF HIGHWAYS, STREETS AND BRIDGES (1992). STABILIZATION OF THE SUBGRADE MUST ATTAIN A PI OF LESS THAN 15. (BID @ AVERAGE 6% LIME)

PAVING AND DRAINAGE GENERAL NOTES

- ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT.
- CONTRACTOR SHALL MAINTAIN ONE SET OF "RECORD DRAWINGS" ON SITE WHICH WILL BE SUBMITTED TO OWNER OR ENGINEER UPON COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL INDICATE THE LOCATION OF ALL SUBTERRANEAN UTILITY IMPROVEMENTS, AND INDICATE TIES TO ALL MANHOLES, CULVERTS, INLETS, JUNCTION BOXES, ETC.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
- STORM DRAIN LINES MAY BE OF THE FOLLOWING:
 - RCP C-76, CLASS III (RCP ONLY UNDER PAVEMENT)
 - ADS N-12 (DO NOT USE UNDER PAVEMENT)
 - HANCOR HI-Q (DO NOT USE UNDER PAVEMENT)
 INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- BARRICADING AND PROJECT SIGNS SHALL CONFORM TO STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION BARRICADING AND CONSTRUCTION STANDARDS.
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
- CONCRETE PAVEMENT PLACED BY A PAVING MACHINE SHALL BE AT LEAST 3000 PSI. PAVEMENT HAND POURED SHALL BE AT LEAST 3600 PSI. NO FL ASH ALLOWED IN MIX DESIGN, WHICH MUST BE SUBMITTED FOR TOWN'S APPROVAL.
- DEPTH OF SAWED AND CONSTRUCTION JOINTS SHOULD BE ONE-FOURTH OF PAVEMENT THICKNESS.
- ALL CURB INLETS AND MANHOLES SHALL BE CAST IN PLACE. CATCH BASINS MAY BE PRE-CAST.
- LINER FOR POND SHOULD CONSIST OF AT LEAST TWO NINE INCH (2-9") THICK COMPACTED LIFTS OF NEAR SURFACE CLAY FREE OF ROCK PARTICLES. EACH LIFT SHOULD BE INDIVIDUALLY COMPACTED TO A DENSITY EQUIVALENT OR HIGHER THAN 95 PERCENT OF THE STANDARD PROCTOR DENSITY AT A MOISTURE CONTENT HIGHER THAN OPTIMUM.

WATER AND SANITARY SEWER GENERAL NOTES

- ALL WORK, UNLESS OTHERWISE NOTED, SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, ISSUED BY THE NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS, AND TOWN OF ADDISON STANDARD CONSTRUCTION SPECIFICATIONS.
- UNLESS OTHERWISE NOTED, ALL CONCRETE SHALL BE CLASS "A", (3000 PSI).
- THE HORIZONTAL AND VERTICAL LOCATIONS OF EXISTING SUBSURFACE UTILITIES HAVE BEEN DETERMINED FROM DATA RECORDED BY OTHERS. CONTRACTOR SHALL VERIFY THAT NECESSARY CROSSING CLEARANCES BETWEEN EXISTING AND PROPOSED UTILITIES EXIST PRIOR TO CONSTRUCTION OF ANY SUCH CROSSING. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT ALL PUBLIC UTILITIES IN THE CONSTRUCTION OF THIS PROJECT.
- CONTRACTOR SHALL MAINTAIN ONE SET OF "RECORD DRAWINGS" ON SITE WHICH WILL BE SUBMITTED TO OWNER OR ENGINEER UPON COMPLETION OF THE PROJECT. RECORD DRAWINGS SHALL INDICATE THE LOCATION OF ALL SUBTERRANEAN UTILITY IMPROVEMENTS, AND INDICATE TIES TO ALL MANHOLES, CULVERTS, INLETS, JUNCTION BOXES, ETC.
- ALL WATER MAINS SHALL BE PVC C-900, OR DR 18, CLASS 150.
- ALL WATER MAINS UNLESS OTHERWISE NOTED SHALL HAVE A MINIMUM COVER OF 48" BELOW FINISHED GRADE.
- SANITARY SEWER PIPE SHALL BE ASTM 2241 OR PVC C-900.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS REGARDING TRENCH SAFETY.
- BARRICADING AND PROJECT SIGNS SHALL CONFORM TO "STATE DEPARTMENT OF HIGHWAYS AND PUBLIC TRANSPORTATION BARRICADING AND CONSTRUCTION STANDARDS."
- PRIOR TO COMMENCEMENT OF CONSTRUCTION, BONDS AND THREE-WAY CONTRACTS SHALL BE SUBMITTED TO THE CITY AS REQUIRED.
- WHERE A SANITARY SEWER PARALLELS A WATERLINE, THE SEWER SHALL BE CONSTRUCTED AS ASTM 2241 OR PVC C-900 SPECIFICATIONS WITH A PRESSURE RATING FOR BOTH THE PIPE AND JOINTS OF 150 PSI. THE VERTICAL SEPARATION SHALL BE MINIMUM OF TWO FEET BETWEEN OUTSIDE DIAMETERS AND THE HORIZONTAL SEPARATION SHALL BE A MINIMUM OF FOUR FEET BETWEEN OUTSIDE DIAMETERS. THE SEWER SHALL BE LOCATED BELOW THE WATERLINE.
- VALVES SHALL BE RESILIENT SEAT.

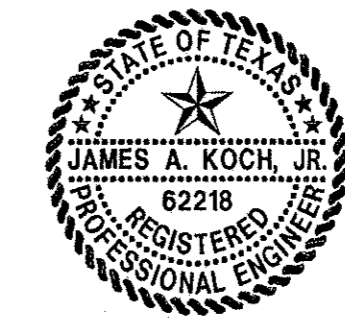
POLLUTION CONTROL GENERAL NOTES

- THIS PLAN HAS BEEN PREPARED TO PROVIDE MEANS TO PREVENT OR MINIMIZE POLLUTION OF STORM WATER.
- THE CONSTRUCTION ACTIVITY INCLUDED IN THIS PLAN WILL INCLUDE:
 - CLEARING AND GRUBBING
 - ROUGH GRADING
 - FINAL GRADING
 - UTILITY INSTALLATION
 - PAVEMENT INSTALLATION
 - BUILDING CONSTRUCTION
- THE TOTAL ESTIMATED LAND AREA TO BE DISTURBED IS 6.5 ACRE.
- THE ESTIMATED RUNOFF COEFFICIENT UPON COMPLETION OF THE PROJECT IS 0.80%.
- THE STORM WATER EXITING THE SITE IS COLLECTED IN AN EXISTING DRAINAGE SYSTEM MAINTAINED BY THE TOWN OF ADDISON, TEXAS.
- THE SOILS ON THE SITE ARE GENERALLY EXPANSIVE CLAYS.
- THE CONTRACTOR SHALL PROVIDE EROSION PROTECTION AROUND THE WORK AREA PERIMETER AND AT ALL INLET MOUTHS DURING CONSTRUCTION.
- THE CONTRACTOR WILL REMOVE ALL EXCESS SOIL FROM CONSTRUCTION VEHICLES PRIOR TO EXITING THE SITE.
- ALL DISTURBED AREAS WHICH WILL NOT BE RE-DISTURBED FOR A MINIMUM OF 21 DAYS MUST BE STABILIZED BY THE CONTRACTOR TO CONTROL EROSION.
- THE CONTRACTOR SHALL UNDERTAKE PROPER METHODS TO REDUCE DUST GENERATION FROM THE SITE.
- THE CONTRACTOR MUST COMPLY WITH FEDERAL, STATE AND LOCAL REGULATIONS REGARDING SEDIMENT AND EROSION CONTROL.
- A COPY OF THIS PLAN MUST BE KEPT AT THE CONSTRUCTION FACILITY DURING THE ENTIRE CONSTRUCTION PERIOD.

RECORD DRAWING

THIS DRAWING HAS BEEN REVISED TO REFLECT CONSTRUCTION RECORDS MAINTAINED AND PROVIDED BY THE CONTRACTOR FOR THIS PROJECT.

CONTRACTOR: THE HUBBLE GROUP
DATE REVISED: 11/10/98



THIS DOCUMENT IS FOR THE PURPOSE OF INTERIM REVIEW UNDER THE AUTHORITY OF JAMES A. KOCH JR., P.E. 62218 ON 12/16/96. IT IS NOT TO BE USED FOR CONSTRUCTION, BIDDING OR PERMIT PURPOSES.

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Civil Engineering • Land Surveying (972) 235-3031

DETAIL SHEET

TOWNE LAKE ADDITION

THOMAS L. CHENOWETH SURVEY

ABSTRACT No. 273

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NO.
JAK	BB	12/16/96	1"=40'			C-6.1

PK NO: 1664-96.112 DWG NO: 1664-108

