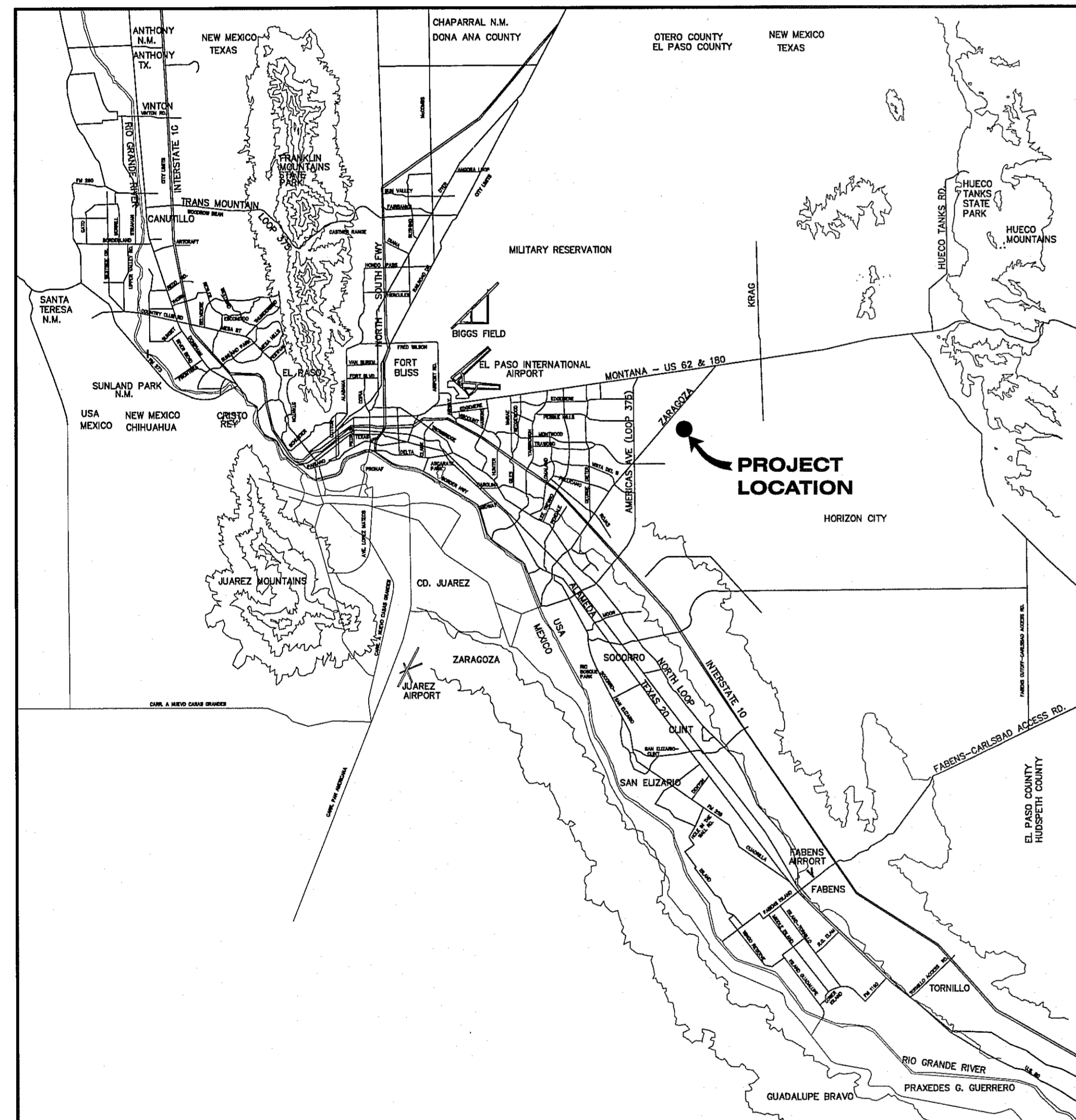


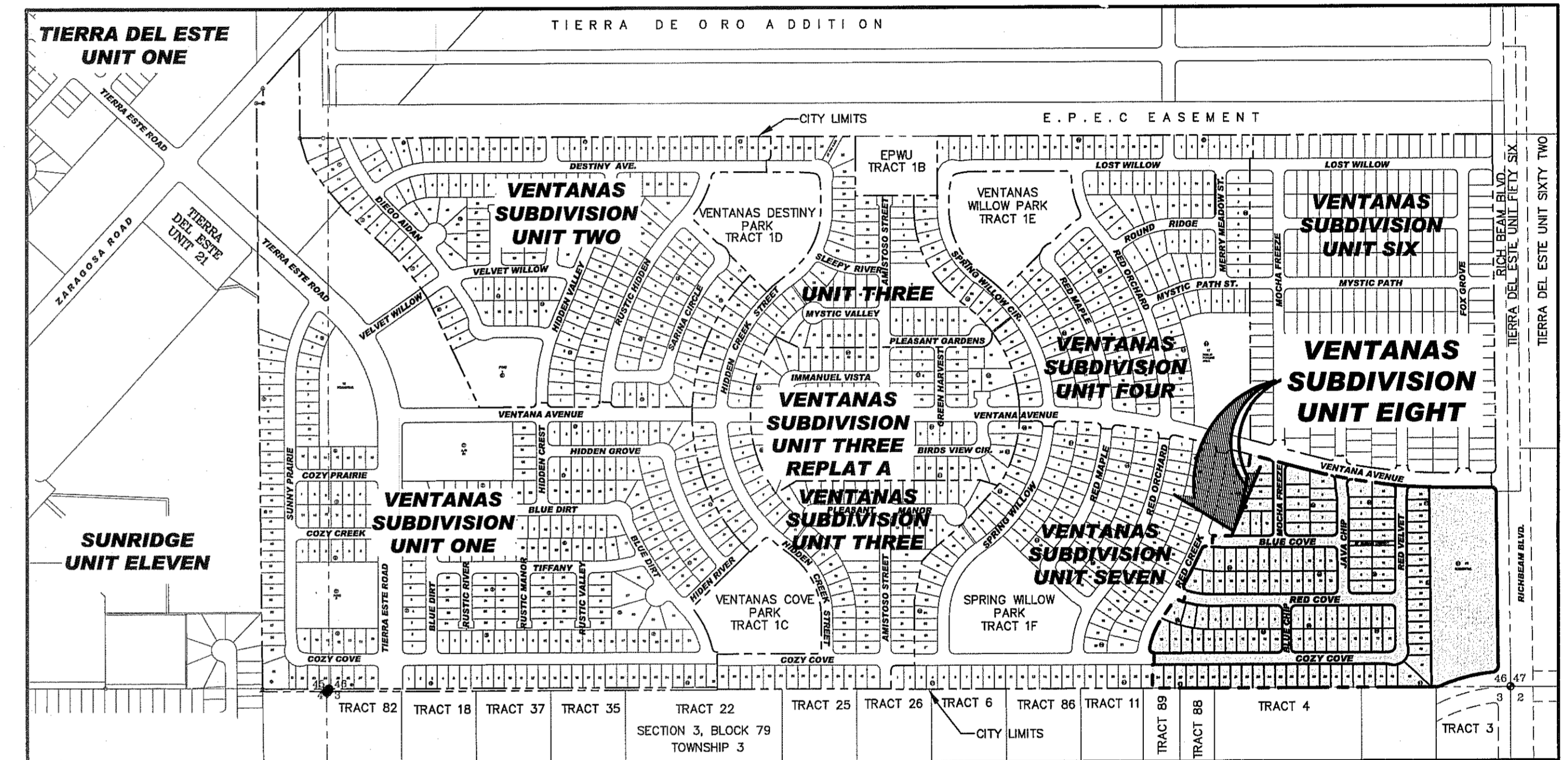
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

BEING A PORTION OF SECTION 46, BLOCK 79, TOWNSHIP 2, TEXAS AND
PACIFIC RAILROAD SURVEY, CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 30.479 ACRES ±

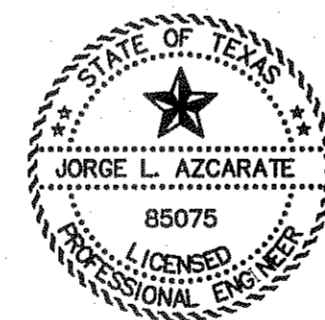


VICINITY MAP
APPROXIMATE SCALE:
1" = 2 MILES

SHEET NUMBER	SHEET TITLE
CVR	COVER SHEET
C1.1	GENERAL INFORMATION
C2.1, C2.2	FINAL PLAT
C3.1	GRADING PLAN
C4.1	DRAINAGE PLAN
C5.1	GRADING SECTIONS
C6.1-C6.11	STREET PLAN & PROFILES
C7.1	STORM SEWER PLAN & PROFILES
C8.1-C8.3	STANDARD DETAILS
C9.1-C9.2	DRAINAGE DETAILS
C10.1	ILLUMINATION PLAN
C11.1	WATER INDEX / GENERAL INFORMATION
C12.1-C12.5	WATER DETAILS
C13.1	SANITARY SEWER INDEX / GENERAL INFORMATION
C14.1-C14.4	SANITARY SEWER PLAN & PROFILES
C15.1-C15.3	SANITARY SEWER DETAILS
C16.1-C16.3	STORM WATER POLLUTION PREVENTION PLANS



LOCATION MAP
APPROXIMATE SCALE: 1" = 600'



JORGE L. AZCARATE, P.E. PROJECT MANAGER



PRINCIPAL CONTACTS:

	NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER:	GFA, LLC.	1525 GOODYEAR DRIVE	EL PASO, TX 79936	(915) 598-1105	(915) 591-4985
ENGINEER:	CEA GROUP	4712 WOODROW BEAN DR. STE. F	EL PASO, TX 79924	(915) 544-5232	(915) 544-5233
SURVEYOR:	BARRAGAN & ASSOCIATES	10950 PELLICANO DR. BUILDING F	EL PASO, TX 79936	(915) 591-5709	(915) 591-5706



CITY DEVELOPMENT DEPARTMENT

Reviewed For Conformance For Condition Related To:
 Easements
 Utility or Easement
 Wetland or Flood Hazard
 Other Site Parking Layout
 Easements
 Retaining Wall Walls
 On Site Pooling of Storm Water

Contractor Must Call 24 Hours Prior To Construction For Inspections
 JAVIER GUTIERREZ 10/25/14
 Date

GENERAL NOTES

1. THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.
2. CONTRACTOR SHALL WATER CONSTRUCTION AREA A MINIMUM OF TWICE A DAY TO KEEP DUST TO A MINIMUM - ONCE IN THE MORNING AND BEFORE QUITTING TIME. THIS SHALL ALSO BE DONE DURING WEEKENDS AND HOLIDAYS.
3. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE, PROTECT, AND REPLACE ALL UNDERGROUND UTILITY LINES AT NO EXTRA COST TO THE OWNER WHEN LINES ARE DISTURBED AS A RESULT OF THE WORK.
4. IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND PERFORM HIS WORK SO AS TO ASSURE PROPER PASSAGE OF STORM RUNOFF DURING THE COURSE OF HIS OPERATIONS. ALL LABOR, TOOLS, EQUIPMENT, AND SUPERVISION REQUIRED TO ASSURE SUCH PROPER PASSAGE OF RUNOFF WATER AND ANY REMOVAL OR HANDLING OF WATER IN ORDER TO MAINTAIN DRY CONDITIONS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE AT THE EXPENSE OF THE CONTRACTOR.
5. THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE USER, ALL UTILITIES, AND ALL OTHER AGENCIES WITH JURISDICTION OVER THE PROJECT.
6. ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ETC., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
7. THE OWNER WILL FURNISH HORIZONTAL AND VERTICAL CONTROL REFERENCED POINTS ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. ANY DISCREPANCIES FOUND SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER, OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
8. SEE REFERENCED BENCHMARK ON TITLE BLOCK FOR DATUM ELEVATIONS.
9. VIBRATORY ROLLERS WILL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY THE ENGINEER.
10. ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THE PROJECT.
11. THE LOCATION OF THE INLETS SHALL BE AT THE FIELD LOW POINT AND APPROVED BY THE ENGINEER.

LEGEND

	SUBDIVISION BOUNDARY
	ROW LINE
	CURB LINE
	PROPERTY LINE
	STREET CENTERLINE
	EASEMENT LINE
	MATCH LINE
	STORM SEWER LINE
	HIGH WATER MARK
	CURB AND GUTTER DROP INLET
	STORM SEWER MANHOLE
	FINISHED GROUND CONTOUR ELEVATION (INDEX)
	FINISHED GROUND CONTOUR ELEVATION (INTERMEDIATE)
	EXISTING GROUND CONTOUR ELEVATION (INDEX)
	EXISTING GROUND CONTOUR ELEVATION (INTERMEDIATE)
	NEW RETAINING ROCKWALL (2'-3' IN HEIGHT)
	NEW RETAINING ROCKWALL (3'-9' IN HEIGHT)
	STANDARD DETAIL/SECTION NUMBER
	SHEET NUMBER WHERE STANDARD/SECTION DETAIL IS LOCATED
	FINISHED SPOT ELEVATION
	LOT FINISHED GROUND ELEVATION
	TOP OF CURB ELEVATION
	TOP OF PAVEMENT ELEVATION
	SUBDIVISION LOT AND BLOCK NUMBER
	DRAINAGE FLOW
	HIGH POINT
	LOW POINT
	EXISTING HIGH POINT
	EXISTING LOW POINT
	HEADWALL WITH WINGWALLS
	DRAINAGE AREA
	HORIZONTAL: VERTICAL SLOPE RATIO
	WHEELCHAIR RAMP

GRADING SPECIFICATIONS

1. CLEARING AND GRUBBING: CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION; COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS FROTHING THROUGH GROUND SURFACE; FILL DEPRESSIONS CAUSED BY CLEARING AND GRUBBING OPERATIONS WITH SATISFACTORY FILL MATERIAL, UNLESS FURTHER EXCAVATION OF EARTHWORK IS INDICATED; REMOVE EXISTING ABOVE-GRADE AND BELOW-GRADE IMPROVEMENTS AS INDICATED AND AS NECESSARY TO FACILITATE NEW CONSTRUCTION. BURNING IS NOT PERMITTED ON OWNER'S PROPERTY. REMOVE WASTE MATERIALS FROM OWNER'S PROPERTY.
2. SATISFACTORY FILL MATERIALS: FILL MATERIALS SHALL BE FREE OF ANY ORGANIC OR DELETERIOUS SUBSTANCE AND SHALL NOT CONTAIN ROCKS OR LUMPS OVER 3 INCHES IN GREATEST DIMENSION AND SHALL BE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS GW, GP, GM, GC, SM, SP, SM, AND SC.
3. UNSATISFACTORY FILL MATERIAL: ARE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS ML, MH, CL, CH, OL, OH, AND PT, OR WHERE THE PLASTICITY INDEX EXCEEDS 12, UNLESS OTHERWISE APPROVED BY ENGINEER, OR CITY ENGINEER.
4. EXCAVATION: IS UNCLASSIFIED AND INCLUDES EXCAVATION TO ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIAL AND OBSTRUCTIONS ENCOUNTERED.
5. GROUND SURFACE PREPARATION FOR FILL: REMOVE VEGETATION, DEBRIS, UNSATISFACTORY SOIL MATERIAL, OBSTRUCTIONS, AND DELETERIOUS MATERIAL FROM GROUND SURFACE UPON WHICH THE FILL IS TO BE PLACED. THE SURFACE SHALL THEN BE SCARIFIED TO A DEPTH OF AT LEAST 6-INCHES, AND UNTIL THE SURFACE IS FREE FROM RUTS, HUMMOCKS OR OTHER UNEVEN FEATURES WHICH WOULD PREVENT UNIFORM COMPACTION. PLOW STRIP OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL SO THAT FILL MATERIAL WILL BOND WITH 1 VERTICAL TO 4 HORIZONTAL SO THAT FILL MATERIAL WILL BOND WITH EXISTING SURFACE. AFTER PLOWING AND SCARIFYING FILL AREA, IT SHALL THEN BE DISCED OR BLADED UNTIL IT IS UNIFORM AND FREE FROM LARGE CLODS, BROUGHT TO OPTIMUM MOISTURE, AND COMPACTED TO 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557.
6. PLACEMENT OF FILL: PLACE BACKFILL AND FILL MATERIALS IN LAYERS NOT MORE THAN 8 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HEAVY COMPACTION EQUIPMENT, AND NOT MORE THAN 4 INCHES IN LOOSE DEPTH FOR MATERIAL COMPACTED BY HAND-OPERATED TAMPERS. BEFORE COMPACTION, MOISTEN OR AERATE EACH LAYER AS NECESSARY TO PROVIDE OPTIMUM MOISTURE CONTENT. PLACE FILL MATERIALS EVENLY ADJACENT TO SITE APPURTENANCES, PIPING, OR CONDUIT TO REQUIRED ELEVATIONS. PREVENT WEDGING ACTION OF BACKFILL AGAINST SITE APPURTENANCES OR DISPLACEMENT OF PIPING OR CONDUIT BY CARRYING MATERIAL UNIFORMLY AROUND SITE APPURTENANCES, PIPING, OR CONDUIT TO APPROXIMATELY SAME ELEVATION IN EACH LIFT. COMPACT SOIL TO NOT LESS THAN 95% OF MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D-1557.
7. MOISTURE CONTROL: WHERE SUBGRADE OR LAYER OF SOIL MATERIAL MUST BE CONDITIONED FOR OPTIMUM MOISTURE BEFORE COMPACTION, UNIFORMLY APPLY WATER TO SURFACE OF SUBGRADE OR LAYER OF SOIL MATERIAL. APPLY WATER IN MINIMUM QUANTITY AS NECESSARY TO PREVENT FREE WATER FROM APPEARING ON SURFACE DURING OR SUBSEQUENT TO COMPACTION OPERATIONS. WATER CONTENT SHALL BE WITHIN 2 PERCENTAGE POINTS OF OPTIMUM MOISTURE CONTENT. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY SOIL MATERIAL THAT IS TOO WET TO PERMIT COMPACTION TO SPECIFIED DENSITY.
8. QUALITY CONTROL: THE OWNER SHALL PROVIDE A GEOTECHNICAL ENGINEER TO PERFORM FIELD DENSITY TEST OF THE COMPACTION OF EACH LAYER OF FILL. DENSITY TESTS SHALL BE TAKEN IN THE COMPACTED MATERIAL BELOW THE DISTURBED SURFACE. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THEREOF IS BELOW THE REQUIRED DENSITY, THE PARTICULAR LAYER OR PORTION SHALL BE REWORKED UNTIL THE REQUIRED DENSITY HAS BEEN OBTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ADDITIONAL TESTING AND WHEN REQUIRED DENSITIES ARE NOT MET, SUPERVISION BY THE GEOTECHNICAL ENGINEER DURING THE GRADING OPERATIONS TO ENSURE GRADING WORK IN ACCORDANCE WITH THIS PLAN AND SPECIFICATIONS.

ABBREVIATIONS

LP	LOW POINT
HP	HIGH POINT
ELEV	ELEVATION
STA	STATION
VCS	VERTICAL CURVE STATION
VCE	VERTICAL CURVE ELEVATION
TC	TOP OF CURB
TM	TOP OF MEDIUM
TP	TOP OF PAVEMENT
TYP	TYPICAL
PVC	POINT OF VERTICAL CURVE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENT
AD	ALGEBRAIC DIFFERENCE
CR	CURVE RETURN
ROW	RIGHT OF WAY
CL	CENTER LINE
PL	PROPERTY LINE
FG	FINISH GRADE
FF	FINISH FLOOR
EG	EXISTING GRADE
MIN.	MINIMUM
MAX.	MAXIMUM
RCP	REINFORCED CONCRETE PIPE
Q	QUANTITY
CAP	CAPACITY
EXP	EXPECTED
INV	INVERT
CFS	CUBIC FEET PER SECOND
A	AREA
DA	DRAINAGE AREA
LF	LINEAR FEET
STD	STANDARD
CONC	CONCRETE
PC	POINT OF CURVATURE
PI	POINT OF INTERSECTION
PT	POINT OF TANGENT
L	LENGTH
R	RADIUS
T	TANGENT
V	DELTA ANGLE
S	SLOPE
TEMP	TEMPORARY
V	VELOCITY IN FEET PER SECOND
HGL	HYDRAULIC GRADE LINE
HWE	HIGH WATER ELEVATION

INDEX OF DRAWINGS

DRAWING NAME	SHEET NO.
COVER	-
GENERAL INFORMATION	.C1.1
PLAT (SHEET 1 OF 2)	.C2.1
PLAT (SHEET 2 OF 2)	.C2.2
GRADING PLAN	.C3.1
DRAINAGE PLAN	.C4.1
GRADING SECTIONS	.C5.1
COZY COVE AVENUE PLAN & PROFILE FROM STA. 34+34.81 TO STA. 42+00.00	.C6.1
COZY COVE AVENUE PLAN & PROFILE FROM STA. 42+00.00 TO STA. 45+31.84	.C6.2
RED VELVET PLACE PLAN & PROFILE FROM STA. 45+31.84 TO STA. 50+00.00	.C6.3
RED VELVET PLACE PLAN & PROFILE FROM STA. 50+00.00 TO STA. 53+05.04	.C6.3
RED COVE DRIVE PLAN & PROFILE FROM STA. 0+57.21 TO STA. 7+00.00	.C6.4
RED COVE DRIVE PLAN & PROFILE FROM STA. 7+00.00 TO STA. 10+29.88	.C6.5
BLUE COVE DRIVE PLAN & PROFILE FROM STA. 0+58.83 TO STA. 6+45.61	.C6.6
JAVA CHIP PLACE PLAN & PROFILE FROM STA. 0+22.42 TO STA. 5+83.30	.C6.7
MOCHA FREEZE STREET PLAN & PROFILE FROM STA. 0+22.78 TO STA. 3+89.06	.C6.8
BLUE CHIP STREET PLAN & PROFILE FROM STA. 0+00.00 TO STA. 2+62.00	.C6.9
RICH BEAM BOULEVARD PLAN & PROFILE FROM STA. 0+00.00 TO STA. 6+50.00	.C6.10
RICH BEAM BOULEVARD PLAN & PROFILE FROM STA. 6+50.00 TO STA. 8+76.81	.C6.11
LINE J PLAN & PROFILE FROM STA. 0+00.00 TO STA. 1+33.47	.C7.1
STANDARD DETAILS (SHEET 1 OF 3)	.C8.1
STANDARD DETAILS (SHEET 2 OF 3)	.C8.2
STANDARD DETAILS (SHEET 3 OF 3)	.C8.3
DRAINAGE DETAILS (SHEET 1 OF 2)	.C9.1
DRAINAGE DETAILS (SHEET 2 OF 2)	.C9.2
ILLUMINATION & SIGNAGE PLAN	.C10.1
WATER INDEX / GENERAL INFORMATION	.C11.1
WATER DETAILS (SHEET 1 OF 5)	.C12.1
WATER DETAILS (SHEET 2 OF 5)	.C12.2
WATER DETAILS (SHEET 3 OF 5)	.C12.3
WATER DETAILS (SHEET 4 OF 5)	.C12.4
WATER DETAILS (SHEET 5 OF 5)	.C12.5
SEWER INDEX / GENERAL INFORMATION	.C13.1
SANITARY SEWER PLAN & PROFILE: LINE A	.C14.1
SANITARY SEWER PLAN & PROFILE: LINE B & C	.C14.2
SANITARY SEWER PLAN & PROFILE: LINE D & E	.C14.3
SANITARY SEWER PLAN & PROFILE: LINE F	.C14.4
SANITARY SEWER DETAILS (SHEET 1 OF 3)	.C15.1
SANITARY SEWER DETAILS (SHEET 2 OF 3)	.C15.2
SANITARY SEWER DETAILS (SHEET 3 OF 3)	.C15.3
STORM WATER POLLUTION PREVENTION PLAN: GENERAL NOTES	.C16.1
STORM WATER POLLUTION PREVENTION PLAN: SITE PLAN	.C16.2
STORM WATER POLLUTION PREVENTION PLAN: DETAILS	.C16.3

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 690-7200
SEC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

DATE	REVISIONS	BY

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-6684
4712 Woodrow Bham, Ste. F El Paso, TX 79904
Office: 915.544.5232 Fax: 915.544.5233 www.csaeng.com

ENGINEER'S SEAL

SCALE	Horizontal:	Vertical:
N/A	N/A	N/A
N/A	N/A	N/A
DATE:	AUGUST 2014	DESIGN BY: J.M.
DRAWN BY:	J.M.	CHKD. BY: J.L.A.
APP'D. BY:	J.L.A.	J.L.A.
JOB No.	2260-018-LD	

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS



SPECIAL CONDITIONS

1. CONTRACTOR SHALL HAVE A QUALIFIED PROJECT SUPERINTENDENT AT THE PROJECT SITE AT ALL TIMES DURING THE CONSTRUCTION DURATION.
2. CONTRACTOR SHALL PREPARE CURB GRADES WITHIN 0.10- FEET.
3. CONTRACTOR TO INSTALL AND MAINTAIN SW3P BEST MANAGEMENT PRACTICES AS INDICATED ON THE PLANS. CONTRACTOR SHALL COMPLY WITH THE SW3P SPECIFICATIONS, AND TCEQ RULES AND REGULATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR CONFORMING TO ALL SWP3 REGULATIONS.
4. CONTRACTOR SHALL CONSTRUCT TEMPORARY SLOPES BETWEEN LOTS THAT HAVE A VERTICAL GRADE DIFFERENTIAL OF OVER 4- FEET.

SHEET TITLE

GENERAL INFORMATION

SHEET NO.

C1.1

VENTANAS SUBDIVISION UNIT EIGHT

BEING A PORTION OF SECTION 46, BLOCK 79,
TOWNSHIP 2, TEXAS AND PACIFIC RAILROAD SURVEY,
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 30.479 ACRES ±

SHEET 1 OF 2

DEDICATION

CFA, LLC the owners of this land, do hereby present this map and dedicate their respective portions of property to the use of the public, the streets, PSB easement & utility easements as hereon laid down and designated, including easements for overhead of service wires for pole utility and the right for installation of service poles alongside lot lines as may be required, easements for buried service wires, conduits and pipes for underground utilities, and the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs.

Witness my signature this 30th day of DECEMBER, 2014.

Albert Gamboa
ALBERT GAMBOA, President

ACKNOWLEDGEMENT

STATE OF TEXAS
COUNTY OF EL PASO

Before me, the undersigned authority, on this day personally appeared Albert Gamboa, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same as the act and deed for the purpose and consideration herein expressed.

Given under my hand and seal of office this 30th day of DECEMBER, 2014.

Denise Demie
Notary Public in and for El Paso County My Commission Expires 3-29-2015

CITY PLANNING COMMISSION

This subdivision is hereby approved as to the platting and as to the condition of the dedication in accordance with Chapter 212 of the Local

Government Code of Texas this 28 day of JANUARY, 2015.

Angela Chairperson
Clayton Executive Secretary

Approved for filing this 28 day of JANUARY, 2015.

Man
City Development Director

FILING

Filed and recorded in the office of the County Clerk of El Paso County, Texas, this 18 day of February, 2015, in File No. 2015010412 of the Plat Records.

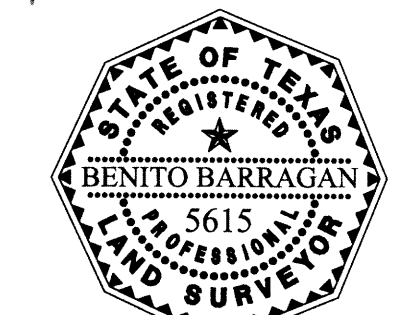
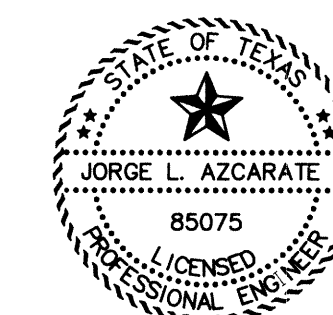
Christian Lopez
County Clerk by Deputy

Subdivision improvement plans prepared by and under the supervision of CEA Group.

This plat represents a survey made on the ground by me or under my supervision and complies with the current Texas Board of Professional Land Survey Professional and Technical Standards.

Jorge L. Azcarate
JORGE L. AZCARATE, P.E.
Licensed Professional Engineer
Texas License No. 85075

Benito Barragan
Benito Barragan TX, R.P.L.S. No. 56157

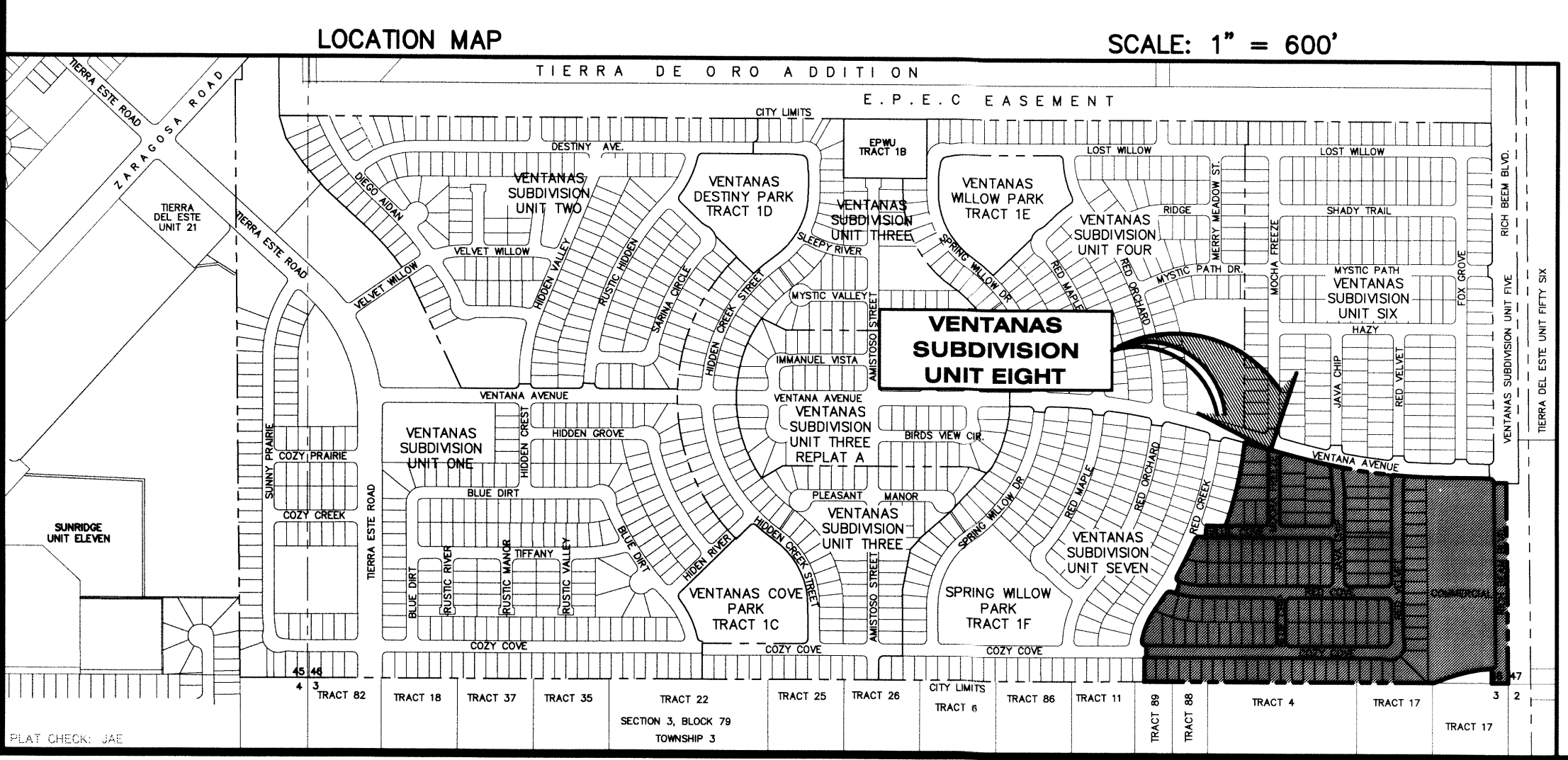
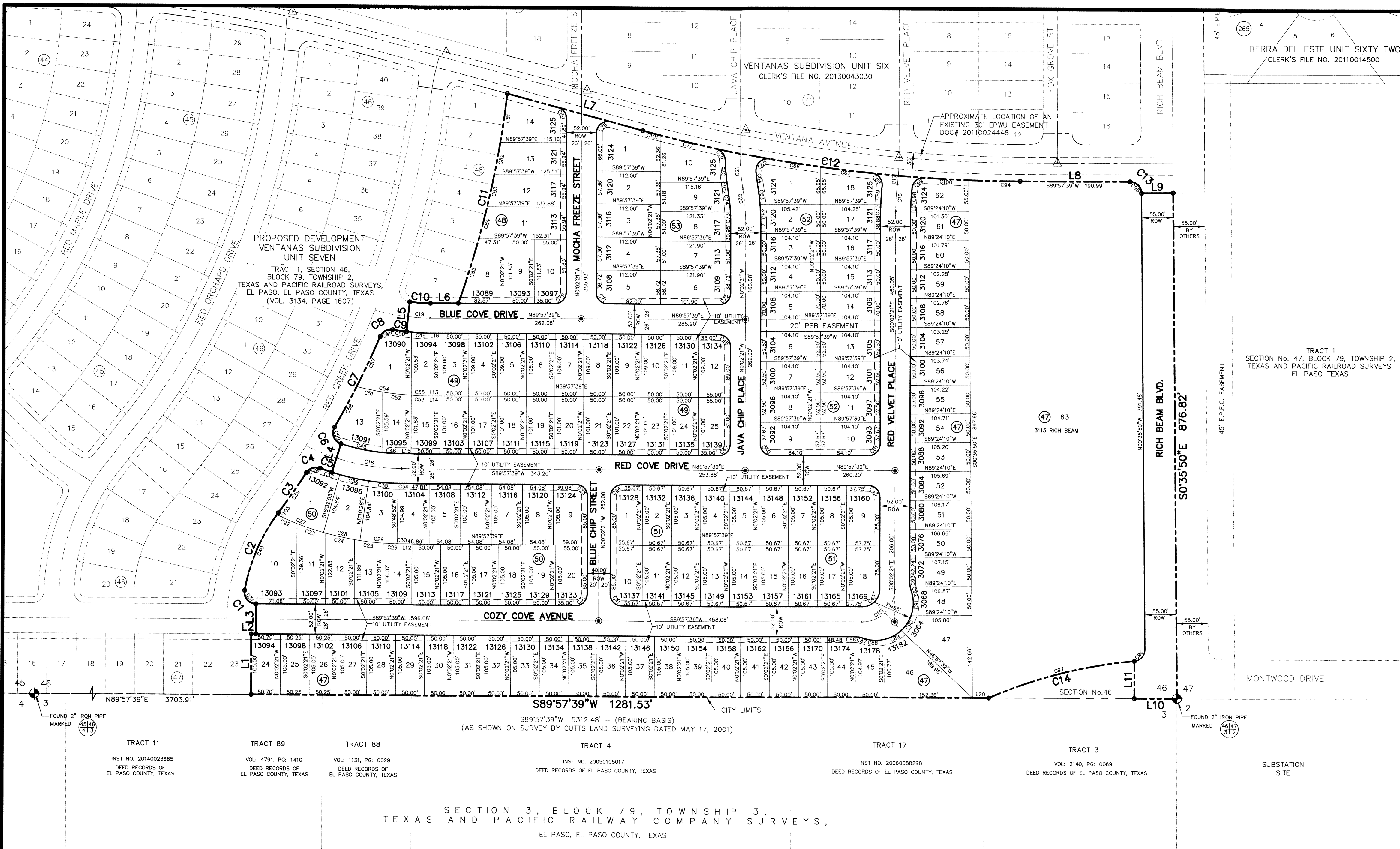


ENGINEER
cea
GROUP
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4564

SURVEYOR
Barragan & Associates Inc.
LAND PLANNING & LAND SURVEYING
10950 Pellicano Dr. Bldg. F - El Paso TX 79935
Phone (915) 591-5709 Fax (915) 591-5706
CONTACT: BENITO BARRAGAN, R.P.L.S.

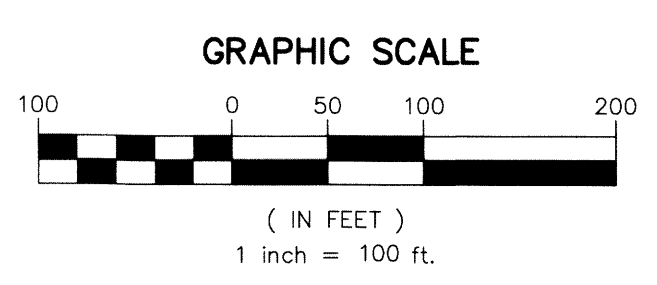
CONTACT: JORGE L. AZCARATE, P.E.

DATE OF PREPARATION: SEPTEMBER 2014



NOTES:

- THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO VENTANAS SUBDIVISION UNIT EIGHT BY THE EL PASO WATER UTILITIES/PUBLIC SERVICE BOARD IN ACCORDANCE WITH THEIR RULES AND REGULATIONS AND WITH SECTION 16.343 OF THE TEXAS WATER CODE. WATER AND SEWER SERVICES WILL BE EXTENDED TO THE SUBDIVISION FROM EXISTING FACILITIES LOCATED ON VENTANA AVENUE AND WILL BE CONSTRUCTED TO SERVE THE SUBDIVISION.
- TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION.
INSTRUMENT No. 2015010413 DATE 2/18/15
- RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION.
INSTRUMENT No. 2015010414/15 DATE 2/18/15
- SUBDIVISION IMPROVEMENTS AGREEMENT & GUARANTEE FOR THIS SUBDIVISION IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION.
INSTRUMENT No. 2015010417 DATE 2/18/15
- INTERIOR LOT CORNERS WILL BE SET UP UPON COMPLETION OF CONSTRUCTION OF ROADWAYS AND UTILITIES. (BY OTHERS) SET 1/2" REBAR WITH CAP STAMPED "B&A INC" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE SHOWN.
- "U.S. POSTAL SERVICE DELIVERY WILL BE PROVIDED THROUGH NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS."
- THIS SUBDIVISION LIES WITH IN ZONE "X" AS DESIGNATED IN PANEL NO. 480212 0175B, DATED SEPTEMBER 4, 1991, OF THE FLOOD INSURANCE RATE MAPS, EL PASO COUNTY, TEXAS. ZONE "X" INDICATES AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.
- VEHICULAR ACCESS TO THOSE RESIDENTIAL LOTS ABUTTING VENTANA AVENUE SHALL BE FROM OTHER DEDICATED STREETS ONLY. THE INSTRUMENT ASSURING RELEASE OF ACCESS IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION.
INSTRUMENT No. 2015010416 DATE 2/18/15
- DEED REFERENCE: VOL. 3134, PG. 1607, REAL PROPERTY RECORDS OF EL PASO COUNTY, TEXAS.
- △ DENOTES EXISTING MONUMENT.
- ⊙ DENOTES PROPOSED CITY MONUMENT AS PER VENTANAS SUBDIVISION UNIT EIGHT. (NOT IN PLACE AS OF DATE OF PREPARATION) MAY BE SUBJECT TO RELOCATION AT TIME OF CONSTRUCTION. FOR EXACT LOCATION PLEASE CONTACT THE CITY OF EL PASO.



VENTANAS SUBDIVISION

UNIT EIGHT

BEING A PORTION OF SECTION 46, BLOCK 79,
TOWNSHIP 2, TEXAS AND PACIFIC RAILROAD SURVEY,
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 30.479 ACRES ±

SHEET 2 OF 2

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	20.00'	35.01'	23.97'	30.71'	N39°53'03"W	100°18'36"
C2	324.00'	147.71'	75.16'	146.43'	N23°19'51"E	026°07'13"
C3	1546.00'	85.52'	42.77'	85.51'	N34°48'23"E	003°10'10"
C4	20.00'	27.04'	16.04'	25.02'	N71°56'48"E	077°27'01"
C5	401.00'	21.57'	10.79'	21.56'	S70°52'08"E	003°04'54"
C6	20.00'	35.67'	24.78'	31.13'	N21°19'00"W	102°11'10"
C7	1546.00'	176.88'	88.53'	176.78'	N26°29'55"E	006°33'19"
C8	20.00'	26.58'	15.66'	24.66'	N61°17'25"E	076°08'19"
C9	401.00'	24.27'	12.14'	24.27'	S82°22'27"E	003°28'04"
C10	349.00'	36.13'	18.08'	36.11'	S87°04'25"E	005°55'52"
C11	1651.00'	374.99'	188.31'	374.19'	N12°59'22"E	013°00'49"
C12	2532.00'	662.88'	333.34'	660.98'	S82°32'21"E	015°00'00"
C13	20.00'	31.22'	19.81'	28.15'	S45°19'05"E	089°26'31"
C14	818.00'	262.28'	132.27'	261.16'	S75°37'08"W	018°22'15"
C15	56.00'	87.96'	56.00'	79.20'	N44°57'39"E	090°00'00"
C16	375.00'	47.04'	23.55'	47.01'	S03°33'17"W	007°11'16"
C17	375.00'	15.01'	7.50'	15.01'	N06°00'08"E	002°17'34"
C18	375.00'	115.38'	58.15'	114.93'	S81°13'28"E	017°37'46"
C19	375.00'	38.82'	19.43'	38.80'	S87°04'25"E	005°55'52"
C20	375.00'	61.00'	30.57'	60.94'	N04°41'58"W	009°19'15"
C21	375.00'	61.00'	30.57'	60.94'	S04°41'58"E	009°19'15"
C22	503.00'	38.31'	19.16'	38.30'	S66°33'25"E	004°21'49"
C23	503.00'	52.69'	26.37'	52.66'	S71°44'22"E	006°00'05"
C24	503.00'	51.21'	25.63'	51.19'	S77°39'25"E	005°50'01"
C25	503.00'	50.35'	25.20'	50.33'	S83°26'30"E	005°44'09"
C26	503.00'	32.74'	16.38'	32.74'	S88°10'28"E	003°43'46"
C27	503.00'	86.90'	43.56'	86.79'	S69°19'27"E	009°53'53"
C28	503.00'	64.96'	32.53'	64.92'	S77°58'24"E	007°24'00"
C29	503.00'	64.99'	32.54'	64.94'	S85°22'28"E	007°24'09"
C30	503.00'	8.46'	4.23'	8.46'	S89°33'27"E	000°57'48"
C31	20.00'	35.01'	23.97'	30.71'	S39°53'03"E	100°18'36"
C32	20.00'	31.42'	20.00'	28.28'	N44°57'39"E	090°00'00"
C33	20.00'	31.42'	20.00'	28.28'	N45°02'21"W	090°00'00"
C34	401.00'	5.97'	2.99'	5.97'	N89°36'44"W	000°51'13"
C35	401.00'	51.51'	25.79'	51.47'	N85°30'20"W	007°21'35"

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C36	401.00'	51.51'	25.79'	51.47'	N78°08'45"W	007°21'35"
C37	401.00'	35.96'	17.99'	35.94'	N71°53'49"W	005°08'15"
C38	20.00'	27.04'	16.04'	25.02'	S71°56'48"W	077°27'01"
C39	1546.00'	85.52'	42.77'	85.51'	N34°48'23"E	003°10'10"
C40	324.00'	143.53'	72.96'	142.36'	S22°57'42"W	025°22'55"
C41	20.00'	31.42'	20.00'	28.28'	S45°02'21"E	090°00'00"
C42	30.00'	47.12'	30.00'	42.43'	N44°57'39"E	090°00'00"
C43	20.00'	31.42'	20.00'	28.28'	N45°02'21"W	090°00'00"
C44	20.00'	31.42'	20.00'	28.28'	S44°57'39"W	090°00'00"
C45	349.00'	72.93'	36.60'	72.80'	S78°23'48"E	011°58'25"
C46	349.00'	34.45'	17.24'	34.44'	S87°12'41"E	005°39'21"
C47	20.00'	31.42'	20.00'	28.28'	N44°57'39"E	090°00'00"
C48	20.00'	31.42'	20.00'	28.28'	N45°02'21"W	090°00'00"
C49	401.00'	33.08'	16.55'	33.07'	S87°40'34"E	004°43'34"
C50	401.00'	32.70'	16.36'	32.69'	S82°58'36"E	004°40'22"
C51	505.00'	45.27'	22.65'	45.26'	S78°25'09"E	005°08'12"
C52	505.00'	50.79'	25.42'	50.77'	S83°52'07"E	005°45'44"
C53	505.00'	28.99'	14.50'	28.99'	S88°23'40"E	003°17'22"
C54	505.00'	96.06'	48.18'	95.92'	S81°18'01"E	010°53'56"
C55	505.00'	28.99'	14.50'	28.99'	S88°23'40"E	003°17'22"
C56	20.00'	26.58'	15.66'	24.66'	S61°17'25"W	076°08'19"
C57	1546.00'	96.20'	48.12'	96.19'	N25°00'14"E	003°33'55"
C58	1546.00'	80.67'	40.35'	80.66'	N28°16'53"E	002°59'23"
C59	20.00'	35.67'	24.78'	31.13'	S21°19'00"E	102°11'10"
C60	20.00'	31.42'	20.00'	28.28'	S45°02'21"E	090°00'00"
C61	20.00'	31.42'	20.00'	28.28'	N44°57'39"E	090°00'00"
C62	401.00'	32.53'	16.27'	32.52'	N02°21'46"W	004°38'51"
C63	401.00'	32.71'	16.36'	32.70'	N07°01'24"W	004°40'24"
C64	349.00'	25.88'	12.94'	25.87'	S07°14'09"E	004°14'53"
C65	20.00'	36.64'	26.05'	31.73'	S47°22'30"W	104°58'26"
C66	2532.00'	90.36'	45.19'	90.36'	S81°09'38"E	002°02'41"
C67	2532.00'	89.32'	44.67'	89.32'	S83°11'37"E	002°01'16"
C68	20.00'	31.58'	20.16'	28.40'	N38°58'13"W	090°28'04"
C69	401.00'	33.00'	16.51'	32.99'	S03°54'23"W	004°42'52"
C70	401.00'	11.12'	5.56'	11.12'	S00°45'18"W	001°35'18"

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C71	20.00'	31.42'	20.00'	28.28'	S45°02'21"E	090°00'00"
C72	20.00'	31.42'	20.00'	28.28'	N44°57'39"E	090°00'00"
C73	349.00'	20.06'	10.03'	20.05'	S01°41'08"E	003°17'34"
C74	349.00'	36.72'	18.38'	36.70'	S06°20'45"E	006°01'40"
C75	401.00'	39.86'	19.94'	39.84'	S04°23'22"E	005°41'41"
C76	20.00'	26.69'	15.76'	24.75'	N39°46'30"W	076°27'57"
C77	2532.00'	98.91'	49.46'	98.91'	S76°53'19"E	002°14'18"
C78	20.00'	36.65'	26.06'	31.73'	S52°27'39"W	105°00'00"
C79	20.00'	31.42'	20.00'	28.28'	N44°57'39"E	090°00'00"
C80	20.00'	26.18'	15.35'	24.35'	N37°32'21"W	075°00'00"
C81	1651.00'	85.74'	42.88'	85.73'	N07°58'14"E	002°58'32"
C82	1651.00'	56.90'	28.45'	56.89'	N10°26'44"E	001°58'28"
C83	1651.00'	57.30'	28.65'	57.29'	N12°25'37"E	001°59'18"
C84	1651.00'	57.78'	28.89'	57.77'	N14°25'25"E	002°00'18"
C85	1651.00'	117.28'	58.67'	117.26'	N17°27'41"E	004°04'12"
C86	40.00'	1.52'	0.76'	1.52'	S88°57'07"E	002°10'28"
C87	40.00'	12.31'	6.20'	12.26'	S79°02'50"E	017°38'05"
C88	65.00'	38.57'	19.87'	38.01'	S87°13'47"E	033°59'58"
C89	65.00'	32.44'	16.57'	32.11'	N61°18'17"E	028°35'53"
C90	65.00'	30.95'	15.77'	30.65'	N33°32'01"E	027°16'40"
C91	65.00'	45.09'	23.49'	44.19'	N00°01'23"E	039°44'35"
C92	40.00'	6.02'	3.02'	6.02'	N15°32'04"W	008°37'39"
C93	40.00'	7.81'	3.92'	7.79'	N05°37'48"W	011°10'54"
C94	2532.00'	89.25'	44.63'	89.25'	S89°01'46"E	002°01'11"
C95	20.00'	31.22'	19.81'	28.15'	N45°19'05"W	089°26'31"
C96	20.00'	29.81'	18.46'	27.13'	N42°06'13"E	085°24'06"
C97	818.00'	262.28'	132.27'	261.16'	S75°37'08"W	018°22'15"
C98	349.00'	40.95'	20.50'	40.93'	N03°19'20"E	006°43'22"
C99	20.00'	30.38'	18.99'	27.55'	N50°12'23"E	087°02'45"
C100	2532.00'	77.29'	38.65'	77.28'	N87°08'42"W	001°44'56"
C101	2532.00'	32.28'	16.14'	32.28'	S75°24'16"E	000°43'49"
C102	401.00'	14.86'	7.43'	14.86'	S08°17'54"E	002°07'23"
C103	324.00'	4.18'	2.09'	4.18'	S36°01'18"W	000°44'19"

LINE TABLE		
LINE	BEARING	LENGTH
L1	N00°02'21"W	105.00'
L2	N89°57'39"E	7.89'
L3	N00°02'21"W	52.00'
L4	N17°35'25"E	52.00'
L5	N05°53'31"E	52.00'
L6	N89°57'39"E	48.49'
L7	S75°02'21"E	244.31'
L8	N89°57'39"E	190.99'
L9	N89°24'10"E	55.00'
L10	S89°57'39"W	74.03'
L11	N00°02'21"W	64.69'
L12	N89°57'39"E	17.28'
L13	N89°57'39"E	21.02'
L14	N89°57'39"E	21.02'
L15	N89°57'39"E	16.08'
L16	N89°57'39"E	16.96'
L17	N00°02'21"W	17.51'
L20	S89°57'39"W	27.97'
L21	N00°02'21"W	1.41'

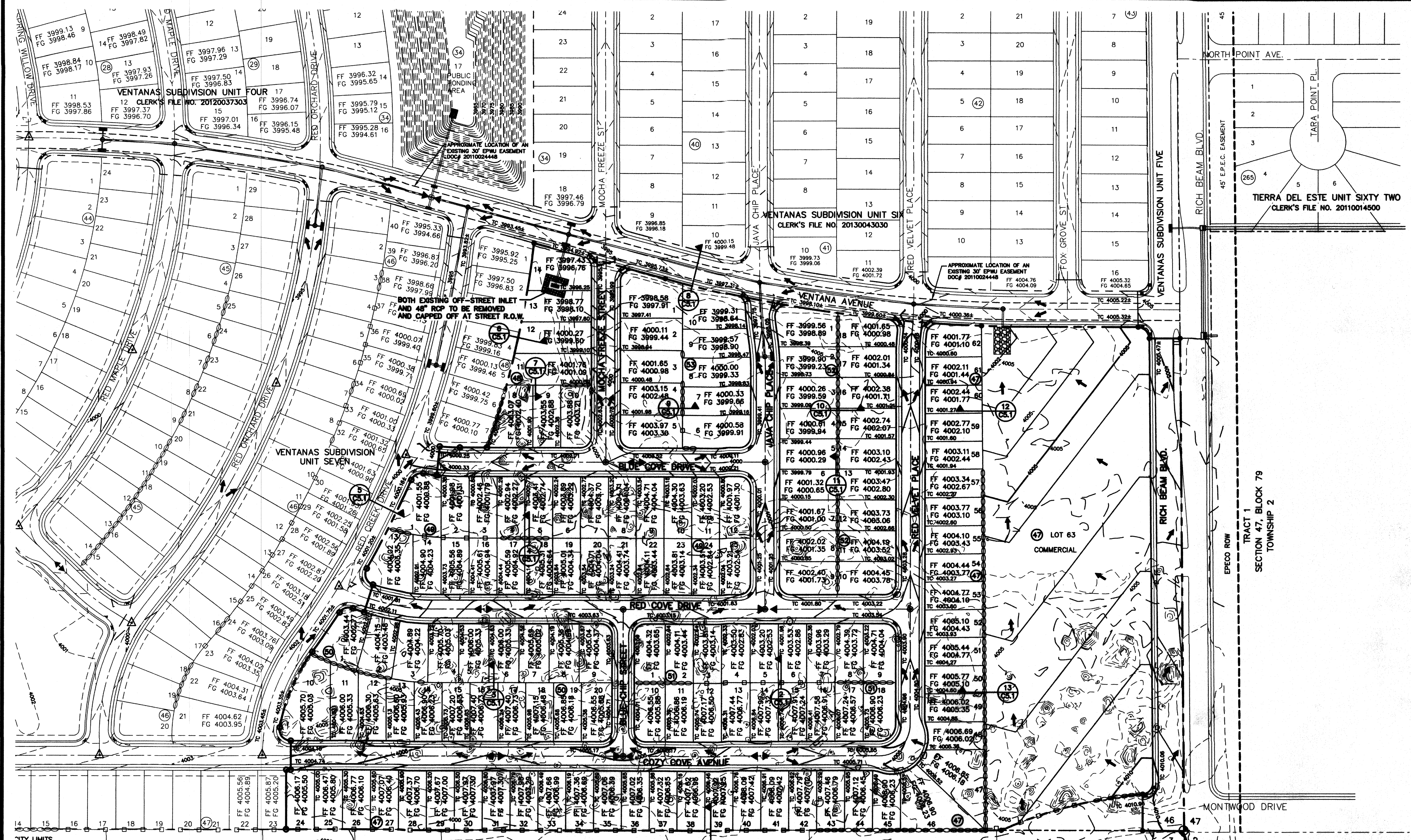
LOT AREAS		
BLOCK NO.	LOT NO.	AREA
47	24	5324 sq.ft.
47	25	5276 sq.ft.
47	26	5276 sq.ft.
47	27	5250 sq.ft.
47	28	5250 sq.ft.
47	29	5250 sq.ft.
47	30	5250 sq.ft.
47	31	5250 sq.ft.
47	32	5250 sq.ft.
47	33	5250 sq.ft.
47	34	5250 sq.ft.
47	35	5250 sq.ft.
47	36	5250 sq.ft.
47	37	5250 sq.ft.
47	38	5250 sq.ft.
47	39	5250 sq.ft.
47	40	5250 sq.ft.
47	41	5250 sq.ft.
47	42	5250 sq.ft.
47	43	5250 sq.ft.

LOT AREAS		
BLOCK NO.	LOT NO.	AREA
47	44	5250 sq.ft.
47	45	5042 sq.ft.
47	46	10222 sq.ft.
47	47	10079 sq.ft.
47	48	5167 sq.ft.
47	49	5368 sq.ft.
47	50	5345 sq.ft.
47	51	5321 sq.ft.
47	52	5296 sq.ft.
47	53	5272 sq.ft.
47	54	5248 sq.ft.
47	55	5223 sq.ft.
47	56	5199 sq.ft.
47	57	5175 sq.ft.
47	58	5150 sq.ft.
47	59	5126 sq.ft.
47	60	5102 sq.ft.
47	61	5077 sq.ft.
47	62	5076 sq.ft.
47	63	257481 sq.ft.

LOT AREAS		
BLOCK NO.	LOT NO.	AREA
48	8	7180 sq.ft.
48	9	5591 sq.ft.
48	10	6065 sq.ft.
48	11	8107 sq.ft.
48	12	7358 sq.ft.
48	13	6723 sq.ft.
48	14	7765 sq.ft.
49	1	7787 sq.ft.
49	2	5457 sq.ft.
49	3	5450 sq.ft.
49	4	5450 sq.ft.
49	5	5450 sq.ft.
49	6	5450 sq.ft.
49	7	5450 sq.ft.
49	8	5450 sq.ft.
49	9	5450 sq.ft.
49	10	5450 sq.ft.
49	11	5450 sq.ft.
49	12	5909 sq.ft.
49	13	7270 sq.ft.

LOT AREAS		
BLOCK NO.	LOT NO.	AREA
49	14	5236 sq.ft.
49	15	5058 sq.ft.
49	16	5050 sq.ft.
49	17	5050 sq.ft.
49	18	5050 sq.ft.
49	19	5050 sq.ft.
49	20	5050 sq.ft.
49	21	5050 sq.ft.
49	22	5050 sq.ft.
49	23	5050 sq.ft.
49	24	5050 sq.ft.
49	25	5469 sq.ft.
51	1	5759 sq.ft.
51	2	5320 sq.ft.
51	3	5320 sq.ft.
51</		

S:\2260\2260-018D-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C3.1-Grading Plan, 11/6/2014, 2:26:55 PM

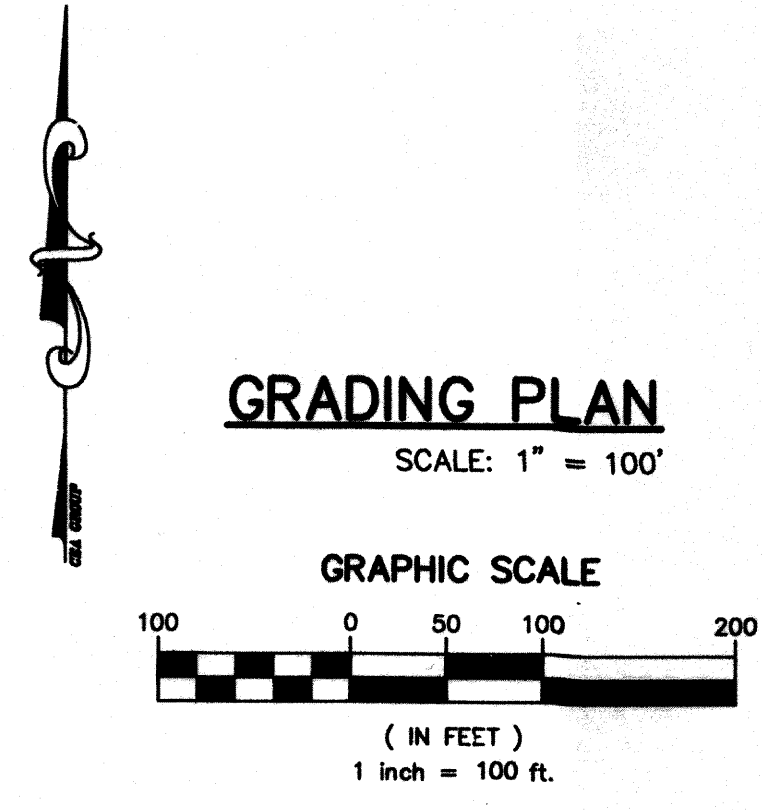
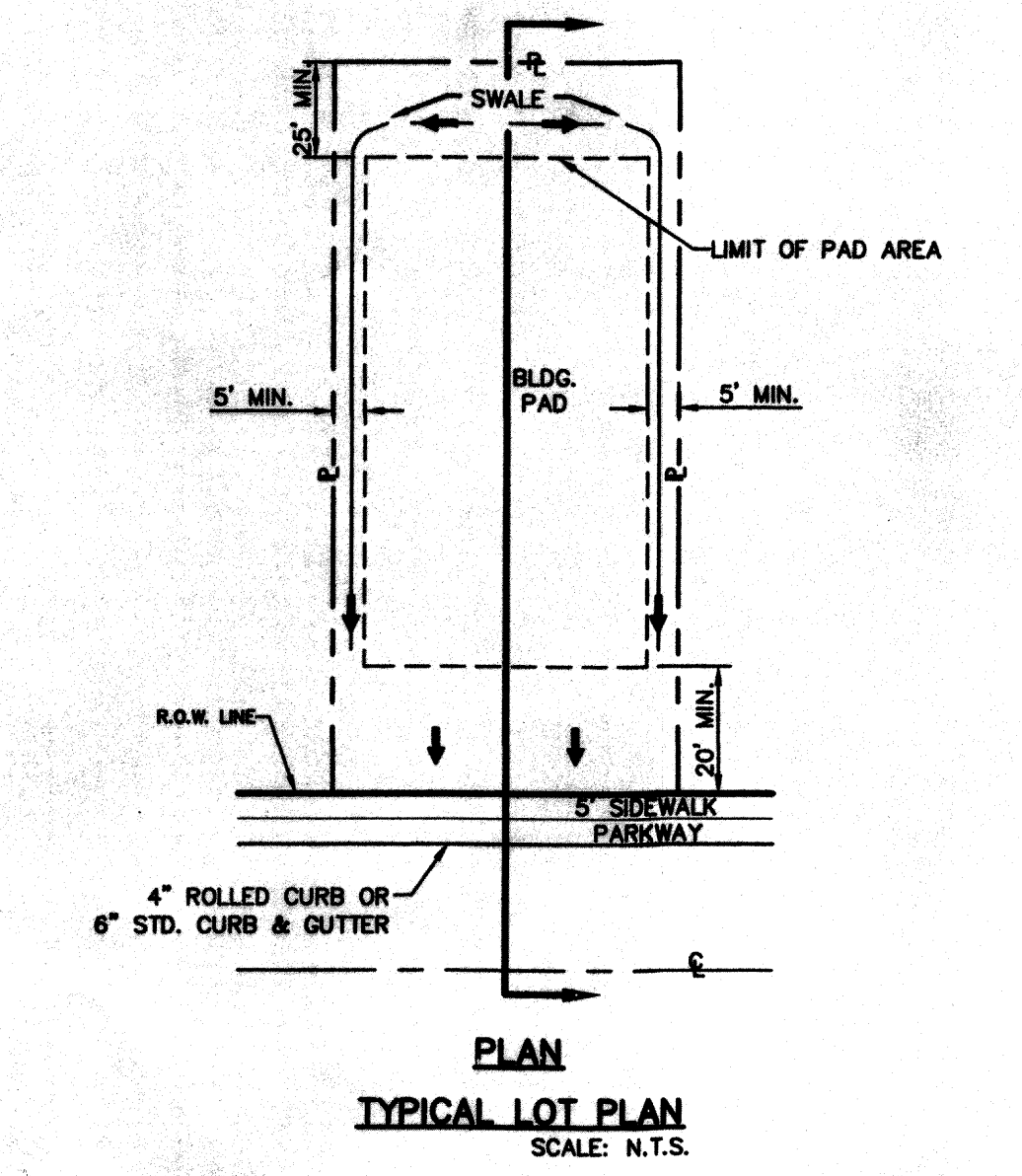
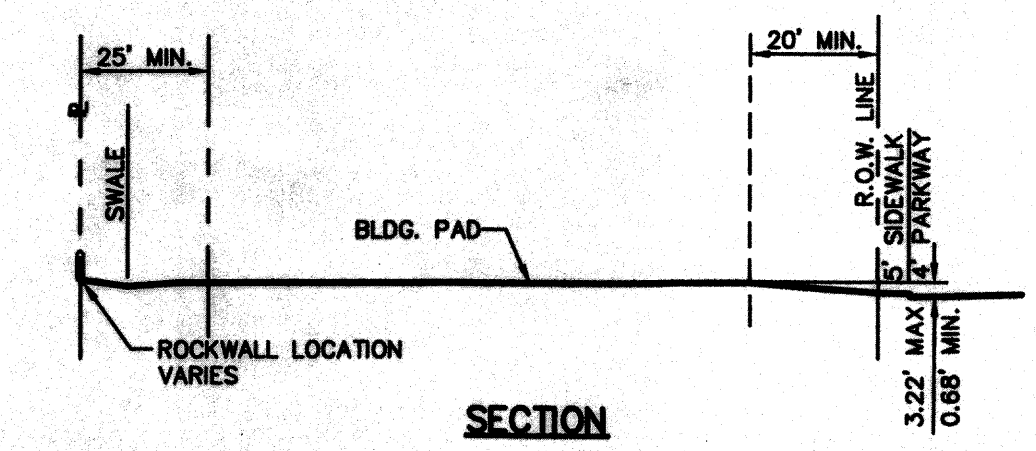


- NOTES:**
- RETAINING WALLS SHALL BE CONSTRUCTED FOR VERTICAL GRADES GREATER THAN 2-FEET.
 - SLOPED AREAS SHALL BE MAINTAINED BY THE PROPERTY OWNERS.
 - ALL RETAINING WALLS NOT SPECIFIED TO BE CONSTRUCTED BY DEVELOPER, SHALL BE BUILT BY BUILDER.
 - RETAINING WALLS (RETAINING PORTIONS ONLY) IN EXCESS OF 4' HIGH TO BE BUILT BY DEVELOPER.
 - DEVELOPER SHALL COMPLY WITH SECTION 13.08.070 (EXCESSIVE PAVING CUTS) OF THE EL PASO MUNICIPAL CODE.
 - IMPROVEMENTS SHALL NOT BE PLACED ON SIDEWALK (NDBCU'S, SIGNS, POLES, FIRE HYDRANTS, ETC.) REFER TO STANDARD DETAIL SHEETS.
 - IMPROVEMENTS SHALL COMPLY WITH T.A.S./A.D.A.
 - WHEELCHAIR RAMPS WILL BE CONSTRUCTED BY DEVELOPER AS PART OF SUBDIVISION IMPROVEMENTS.

BENCHMARK
BENCHMARK IS CITY MONUMENT AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE ELEVATION = 3970.52 (CITY DATUM).

FLOOD ZONE:
THIS SUBDIVISION LIES WITH IN ZONE "X" AS DESIGNATED IN PANEL NO. 48012 0175 B, DATED SEPTEMBER 4, 1991, OF THE FLOOD INSURANCE RATE MAPS, EL PASO COUNTY, TEXAS. ZONE "X" INDICATES AREAS DETERMINED TO BE OUTSIDE 500-YEAR FLOODPLAIN.

- LEGEND:**
- NEW 6' HIGH RETAINING ROCKWALL (2'-3' RETAINING HEIGHT)
 - NEW 6' HIGH RETAINING ROCKWALL (3'-9' RETAINING HEIGHT)
 - EXISTING 6' HIGH RETAINING ROCKWALL (2'-3' RETAINING HEIGHT)
 - EXISTING 6' HIGH RETAINING ROCKWALL (3'-9' RETAINING HEIGHT)
 - PROPOSED MAJOR CONTOURS
 - PROPOSED MINOR CONTOURS
 - EXISTING MAJOR CONTOURS
 - EXISTING MINOR CONTOURS
 - TOP OF CURB ELEVATION
 - FINISH GROUND ELEVATION
 - FINISH FLOOR ELEVATION
 - EXISTING FINISH GROUND ELEVATION
 - EXISTING FINISH FLOOR ELEVATION
 - DRAINAGE FLOW
 - HIGH POINT
 - LOW POINT
 - CITY MONUMENT



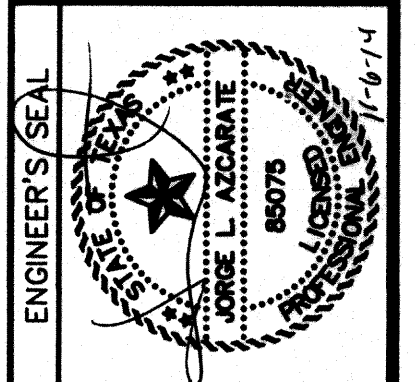
REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

DATE	REVISIONS	BY

cea
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-694
4713 Woodloch Plaza, Ste. E El Paso, TX 79904
Office: 915.541.5222 Fax: 915.541.5223 www.cea.com



SCALE = 1" = 100'

Horizontal: N/A

Vertical: N/A

Contour Interval: N/A

DATE: AUGUST 2014

DESIGN BY: J.M.

DRAWN BY: J.M.

CHKD. BY: J.L.A.

APP'D. BY: J.L.A.

JOB No. 2260-018-D

PROJECT TITLE

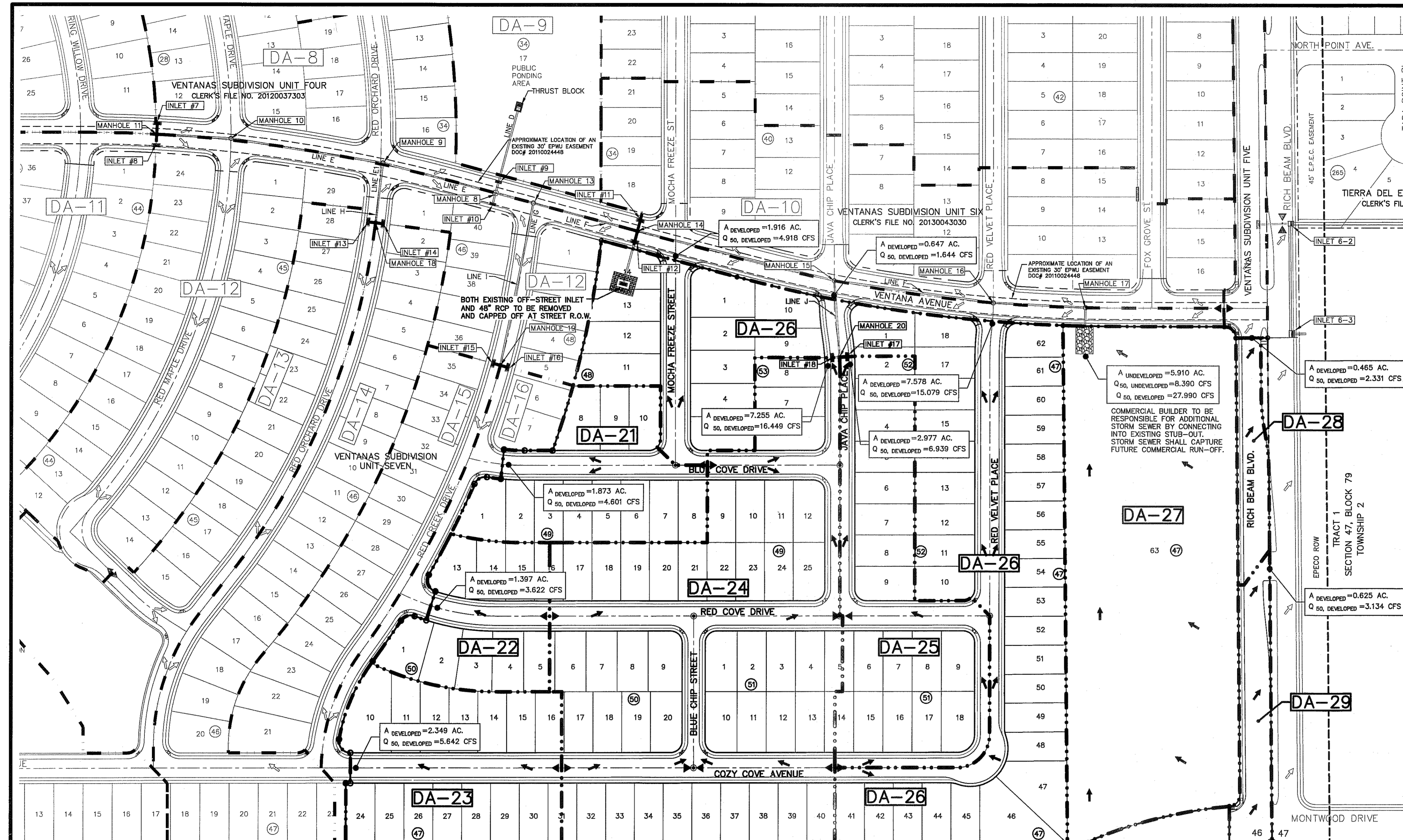
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE

GRADING PLAN

SHEET NO.

C3.1



UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

- LEGEND:**
- DRAINAGE AREA BOUNDARY
 - - - EXISTING DRAINAGE AREA BOUNDARY
 - DRAINAGE FLOW
 - EXISTING DRAINAGE FLOW
 - HIGH POINT
 - LOW POINT
 - PROPOSED DROP INLET
 - PROPOSED STORM SEWER MANHOLE
 - PROPOSED RCP
 - EXISTING DROP INLET
 - EXISTING STORM SEWER MANHOLE
 - EXISTING RCP
 - PROPOSED CURB & GUTTER
 - PROPOSED ROLLED CURB
 - DA-10 DRAINAGE AREA
 - DA-10 EXISTING DRAINAGE AREA

DRAINAGE PLAN
 SCALE: 1" = 100'

PROPOSED 50 YEAR STORM CALCULATIONS FOR WATERSHED AREAS

DRAINAGE AREA NO. (1)	DRAINAGE AREA (AC) (2)	DESIGN STORM INTENSITY (ISO) (3)	TIME OF CONCENTRATION (4)	RUNOFF COEFF. (C) (5)	Q50 (CFS) (6)
DA-16	6.563	3.700	22.67	0.600	14.569
DA-21	1.873	3.717	22.50	0.661	4.601
DA-22	1.397	3.977	20.00	0.652	3.622
DA-23	2.349	3.662	23.50	0.656	5.642
DA-24	7.255	3.349	26.73	0.677	16.449
DA-25	2.977	3.413	25.92	0.683	6.939
DA-26	7.578	3.015	31.52	0.660	15.079
DA-27	5.910	5.572	10.00	0.850	27.990
DA-28	0.465	5.572	10.00	0.900	2.331
DA-29	0.625	5.572	10.00	0.900	3.134

*WATERSHED CALCULATIONS ARE BASED ON DRAINAGE AREAS 16,21,22 & 23 COMBINED, TO DETERMINE TRUE DRAINAGE RUNOFF TO INLET.

(D) DEVELOPED RUN-OFF THAT WILL BE CAPTURED BY SEPARATE STORM SYSTEM
 (U) UNDEVELOPED RUN-OFF

REFERENCE: CITY OF EL PASO SUBDIVISION STANDARDS (3-11-97)

(1) WATERSHED AREA IDENTIFICATION
 (2) AREA FROM DRAINAGE PLAN
 (3) RAINFALL INTENSITY, 50 YEAR STORM => PLATE NO. 2-14
 (4) TIME OF CONCENTRATION: TC = T (OVERLAND) + T (GUTTER)
 (5) RUNOFF COEFFICIENT => PLATE NO. 2-10 TABLE A
 RESIDENTIAL AREA = 0.60
 PAVEMENT AREA = 0.90
 (6) $Q_{50} = C \times A \times I^{.50}$

MOMENTUM COMPUTATION

LOCATION @ INLET (1)	DEPTH (2)	VELOCITY (3)	PRODUCT NUMBER (4)
17	0.364	2.918	1.062
18	0.364	2.918	1.062

(1) LOCATION
 (2) DEPTH
 (3) VELOCITY

DROP INLETS

NO.	REQ. FLOW Q REQ. (CFS)	ADDITIONAL FLOW Q (CFS) FROM INLET	Q(CFS) OVERTOP AT CROWN	Q EXP. (CFS)	AVAIL. FLOW CAPACITY Q AVAIL. (CFS)	Q(CFS) BYPASS TO INLET	# OF GRATES	# OF TYPE OF INLET	INLET LOCATION
17	6.939	4.755 FROM INLET #18	0	11.694	11.776	0	3	1	ON-GRADE
18	16.449	0	4.755	11.694	11.776	4.755 TO INLET #17	3	1	ON-GRADE

THESE CAPACITIES CORRESPOND TO A CLOGGING FACTOR OF 0.5
 AVAILABLE FLOW CAPACITIES SHOWN AT ON-GRADE INLETS
 REFLECTS CAPACITIES WITH INLET GRATE EFFICIENCIES.

EXISTING VENTANAS UNIT SEVEN 50 YEAR STORM CALCULATIONS FOR WATERSHED AREAS

DRAINAGE AREA NO. (1)	DRAINAGE AREA (AC) (2)	DESIGN STORM INTENSITY (ISO) (3)	TIME OF CONCENTRATION (4)	RUNOFF COEFF. (C) (5)	Q50 (CFS) (6)
DA-15	2.429	3.473	25.20	0.655	5.525
*DA-16	6.563	3.700	22.67	0.600	14.569

*WATERSHED CALCULATIONS INCLUDE RUNOFF FROM FUTURE VENTANAS UNIT 8 DEVELOPMENT

(D) DEVELOPED RUN-OFF THAT WILL BE CAPTURED BY SEPARATE STORM SYSTEM
 (U) UNDEVELOPED RUN-OFF

REFERENCE: CITY OF EL PASO SUBDIVISION STANDARDS (3-11-97)

(1) WATERSHED AREA IDENTIFICATION
 (2) AREA FROM DRAINAGE PLAN
 (3) RAINFALL INTENSITY, 50 YEAR STORM => PLATE NO. 2-14
 (4) TIME OF CONCENTRATION: TC = T (OVERLAND) + T (GUTTER)
 (5) RUNOFF COEFFICIENT => PLATE NO. 2-10 TABLE A
 RESIDENTIAL AREA = 0.60
 PAVEMENT AREA = 0.90
 (6) $Q_{50} = C \times A \times I^{.50}$

VENTANAS UNIT SEVEN EXISTING DROP INLETS

INLET #	REQ. FLOW CAPACITY Q REQ. (CFS)	AVAIL. FLOW CAPACITY Q AVAIL. (CFS)	ADDITIONAL FLOW (CFS)	# OF BYPASS GRATES	# OF TYPE OF INLET	INLET LOCATION
15	10.047	10.933	0	0	3	1 ON-GRADE
16	10.047	10.933	0	0	3	1 ON-GRADE

THESE CAPACITIES CORRESPOND TO A CLOGGING FACTOR OF 0.5
 AVAILABLE FLOW CAPACITIES SHOWN AT ON-GRADE INLETS
 REFLECTS CAPACITIES WITH INLET GRATE EFFICIENCIES.

VENTANAS UNIT FOUR EXISTING DROP INLETS

INLET #	REQ. FLOW CAPACITY Q REQ. (CFS)	AVAIL. FLOW CAPACITY Q AVAIL. (CFS)	ADDITIONAL FLOW (CFS)	# OF BYPASS GRATES	# OF TYPE OF INLET	INLET LOCATION
9	11.242	19.267	0	0	2	1 SLUMP
*10	17.096	19.267	3.728	0	2	1 SLUMP
11	11.240	11.824	0	1.009	2	1 ON-GRADE
12	15.079	13.288	0	1.793	2	1 ON-GRADE

THESE CAPACITIES CORRESPOND TO A CLOGGING FACTOR OF 0.5
 AVAILABLE FLOW CAPACITIES SHOWN AT ON-GRADE INLETS
 REFLECTS CAPACITIES WITH INLET GRATE EFFICIENCIES.
 * INLET INCLUDES 13,368 CFS FROM PROPOSED DRAINAGE AREA 12, 1,935 CFS BY PASS FROM PROPOSED INLET 13 AND 1.793 CFS FROM EXISTING INLET 12.

TERRA DEL ESTE UNIT FIFTY SIX REPLAT A

INLET #	REQ. FLOW CAPACITY Q REQ. (CFS)	AVAIL. FLOW CAPACITY Q AVAIL. (CFS)	ADDITIONAL FLOW (CFS)	# OF BYPASS GRATES	# OF TYPE OF INLET	INLET LOCATION
6-2	14.96	43.36	*2.331	0	4	1 SLUMP
6-3	32.00	65.04	*3.134	0	6	1 ON-GRADE

*ADDITIONAL RUN-OFF CAPTURED BY PROPOSED RICH BEAM BOULEVARD DEVELOPMENT.

FOR MORE INFORMATION REFERENCE TERRA DEL ESTE UNIT SIXTY TWO DRAINAGE STRUCTURE 6 SHEET 12.

EXISTING POND #1 AREAS

CONTOUR	ACCUMULATED VOLUME (AC.-FT.)
3993	40.309
3992	37.637
3991	35.067
3990	32.598
3989	30.228
3988	27.858
3987	25.478
3986	23.095
3985	21.705
3984	19.804
3983	17.993
3982	16.270
3981	14.631
3980	13.077
3979	11.672
3978	10.411
3977	9.227
3976	8.118
3975	7.081
3974	6.115
3973	5.219
3972	4.391
3971	3.628
3970	2.930
3969	2.295
3968	1.721
3967	1.206
3966	0.749
3965	0.347
3964	0.000

EXISTING POND #1 CALCULATIONS

QT = (ARC)/12
 QT = 26.982 AC-FT
 A = 128.455*
 R = 4
 Cw = 0.63
 QT X 25% = 6.745
 26.982 + 6.745 = 33.727

SILT VOLUME = 1.542
 0.012 AC-FT/AC
 33.727 + 1.542 = 35.269 AC-FT

TOTAL reqd = 35.269 AC-FT

EXISTING POND #1

BASIN NO.	REQUIRED CAPACITY (AC.-FT.)	AVAILABLE CAPACITY (AC.-FT.)	PEAK INFLOW (CFS)	OUTLET TOWER FLOW (CFS)	HIGH WATER SURFACE ELEV. (FT.)	BOTTOM ELEVATION (FT.)	FREE BOARD (FT.)	TOP ELEVATION
1	35.269	40.309	333.99	0	3991.08	3964	1.71	3993

NOTE:
 1. THE HWSE REFLECTS THE ELEVATION AS REQUIRED BY THE CITY OF EL PASO. THE HWSE DOES NOT INCLUDE 25% FREEBOARD. HOWEVER, THE TOTAL POND CAPACITY SHALL HOLD TOTAL REQUIRED STORM WATER RUNOFF.

HWSE 1 = QT+SILT VOLUME
 HWSE 1 = 26.982+1.542=28.524 AC-FT
 CONTOUR 3988, ACCUMULATED VOLUME=27.955 AC-FT
 CONTOUR 3989, ACCUMULATED VOLUME=30.228 AC-FT
 HIGH WATER SURFACE ELEVATION=3988.25

HWSE 2 = QT+SILT VOLUME+25% EMERGENCY
 HWSE 2 = 26.982+1.542+6.745=35.269 AC-FT
 CONTOUR 3991, ACCUMULATED VOLUME=35.067 AC-FT
 CONTOUR 3992, ACCUMULATED VOLUME=37.637 AC-FT
 HIGH WATER SURFACE ELEVATION=3991.08

REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).
 DATE _____ REVISIONS _____ BY _____

ENGINEER'S SEAL

 ENGINEERS • ARCHITECTS • PLANNERS
 TEXAS REGISTERED ENGINEERING FIRM F-4664
 4712 Woodrow Blank, Ste. F El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.oasgroup.net

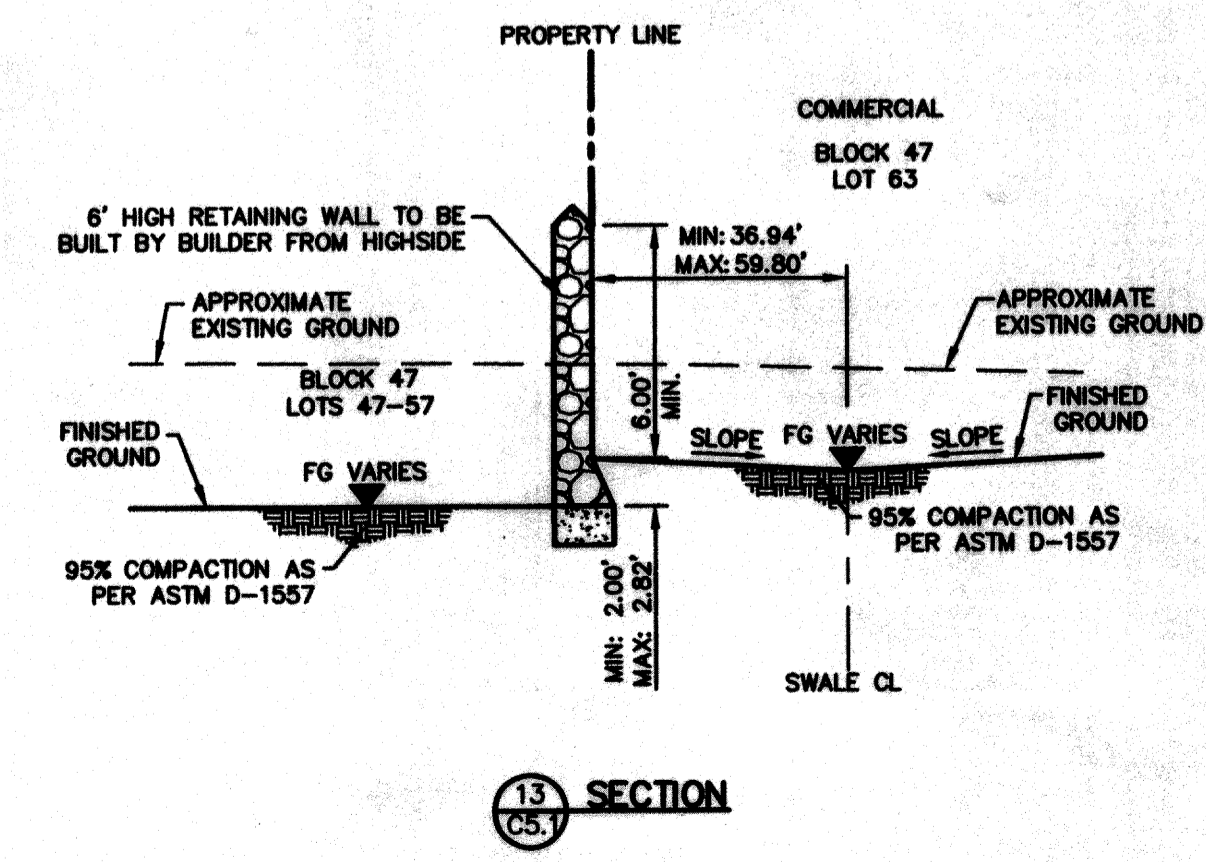
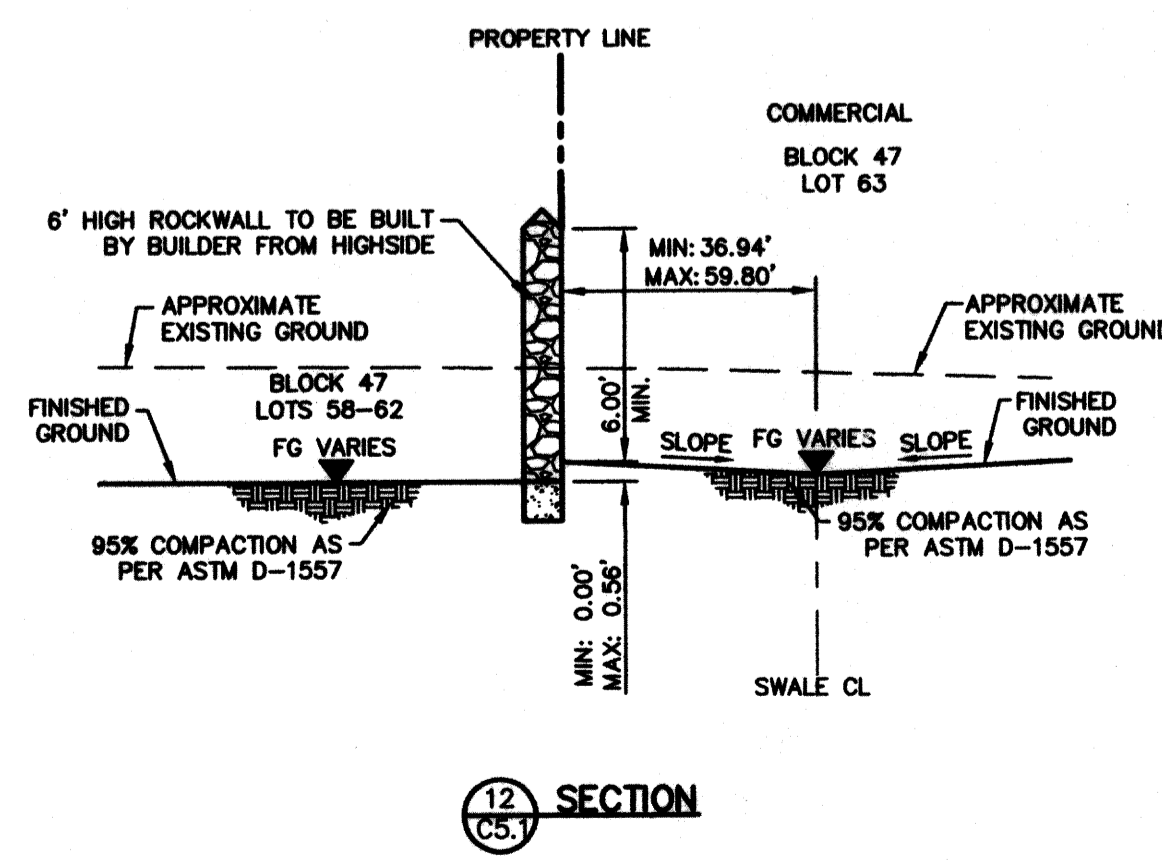
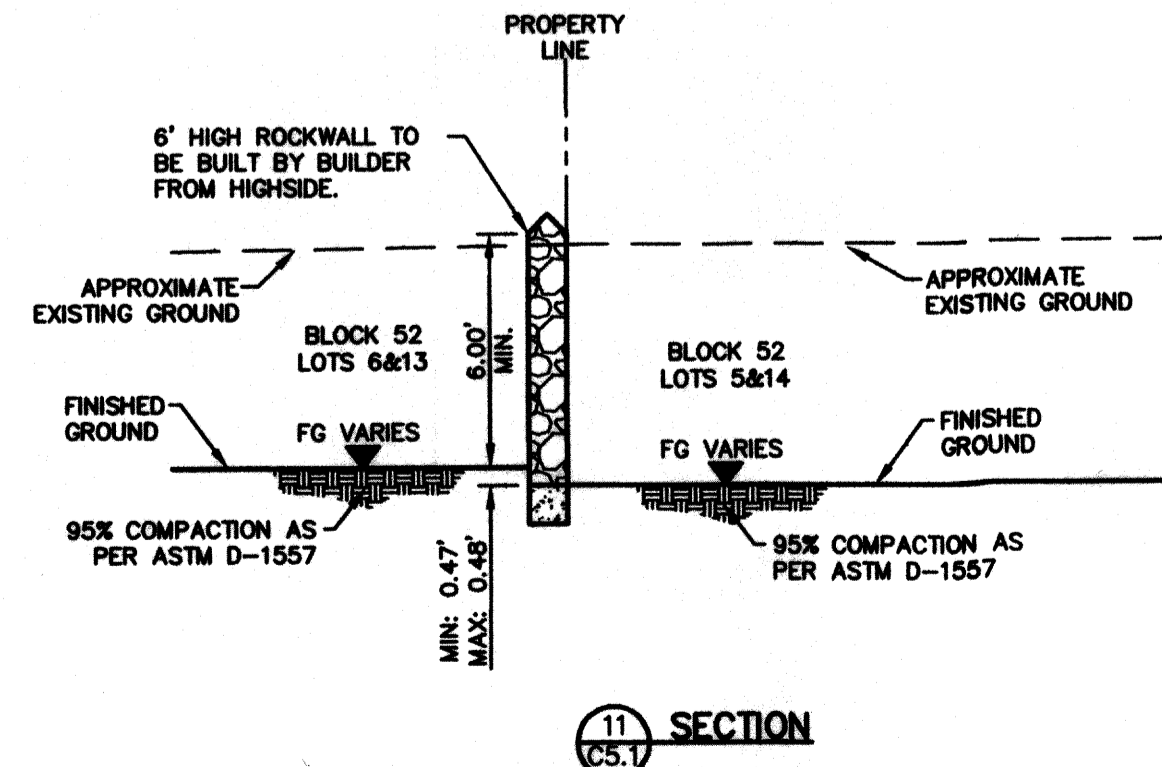
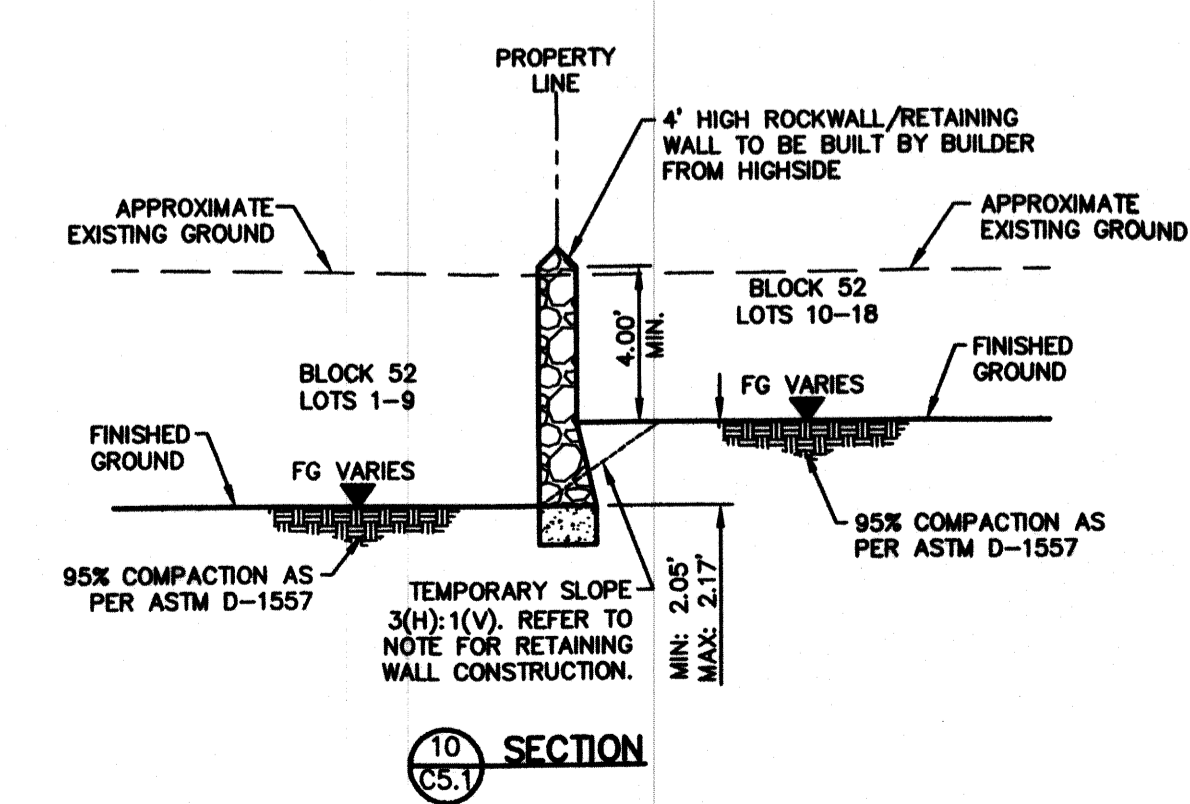
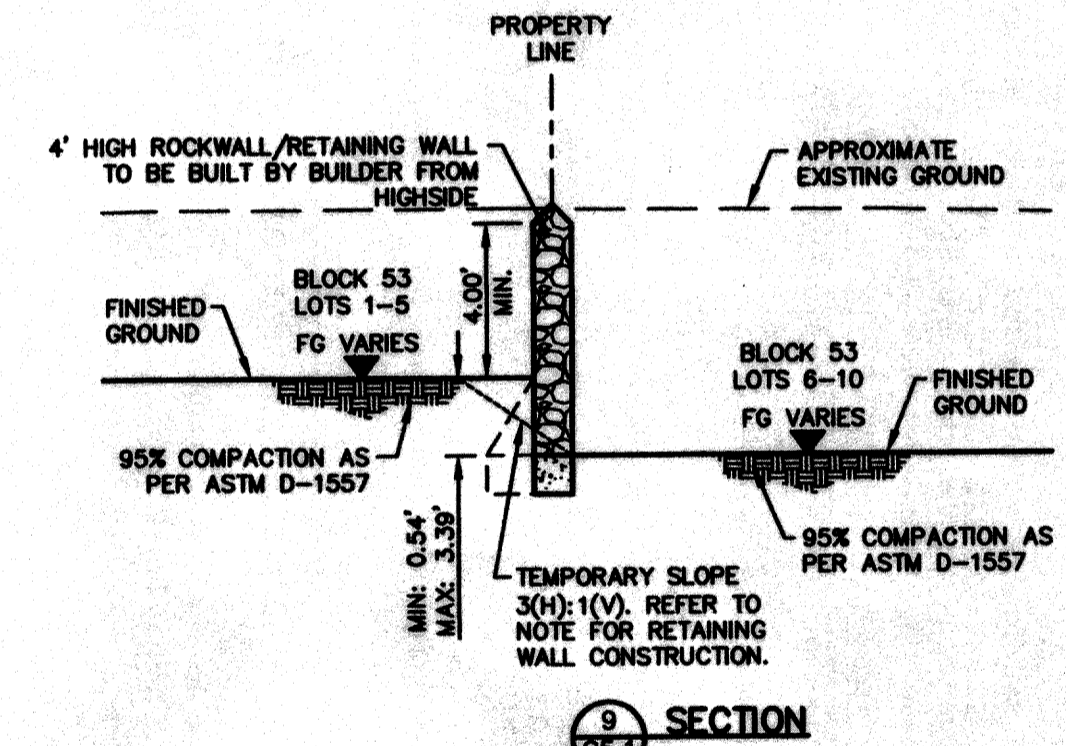
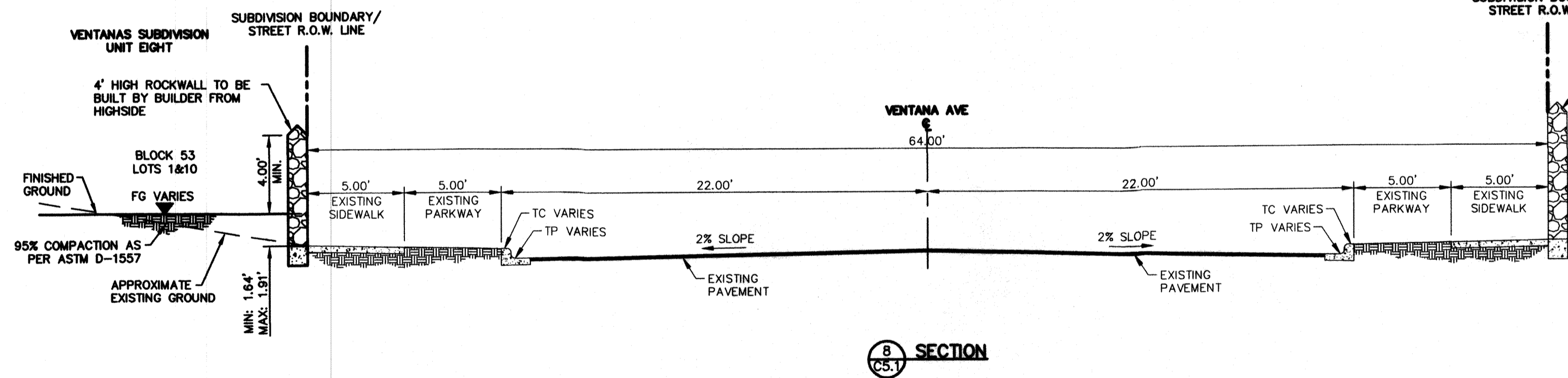
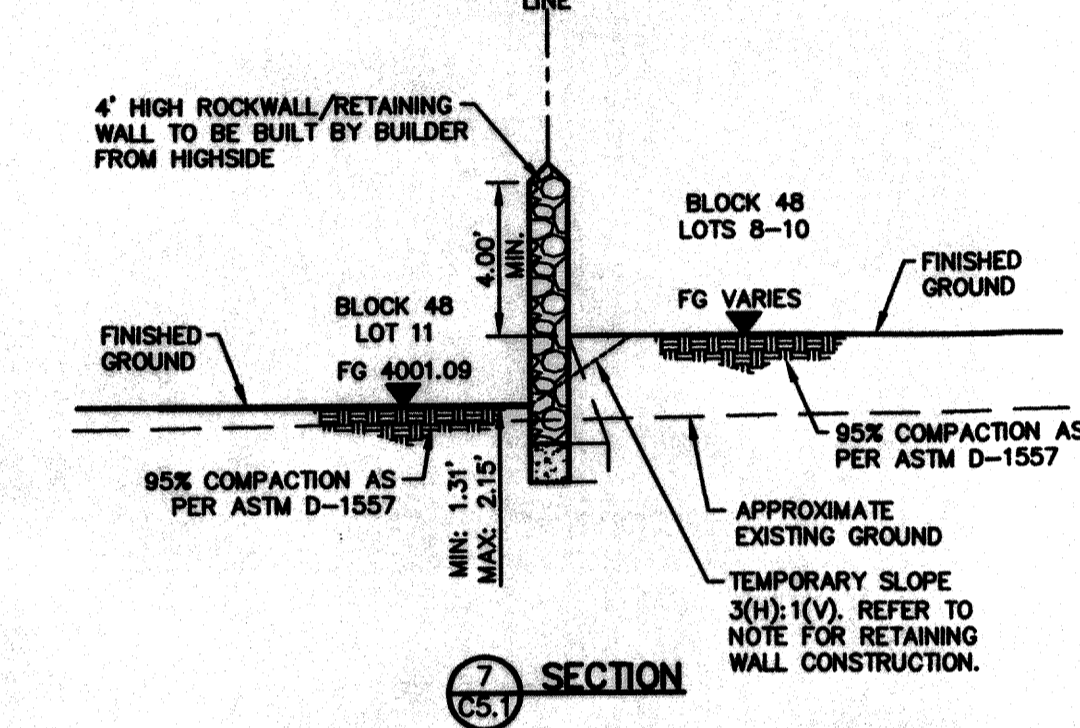
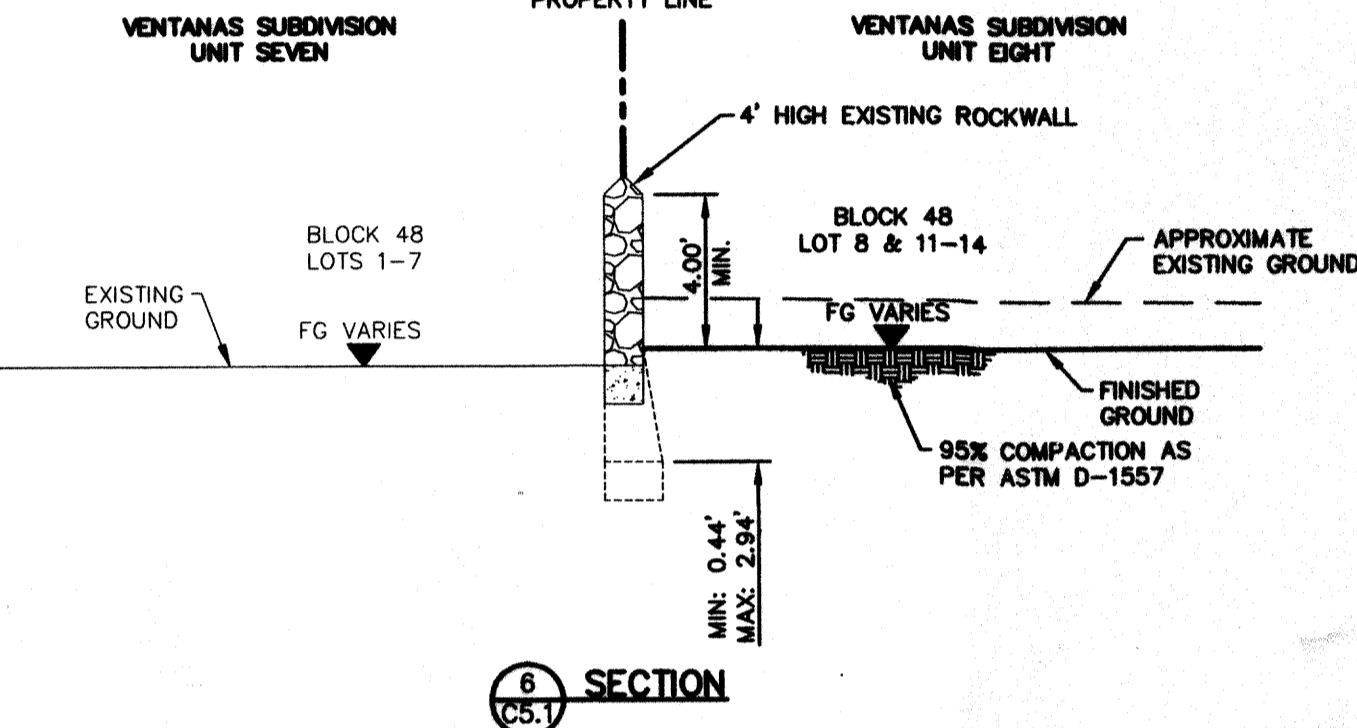
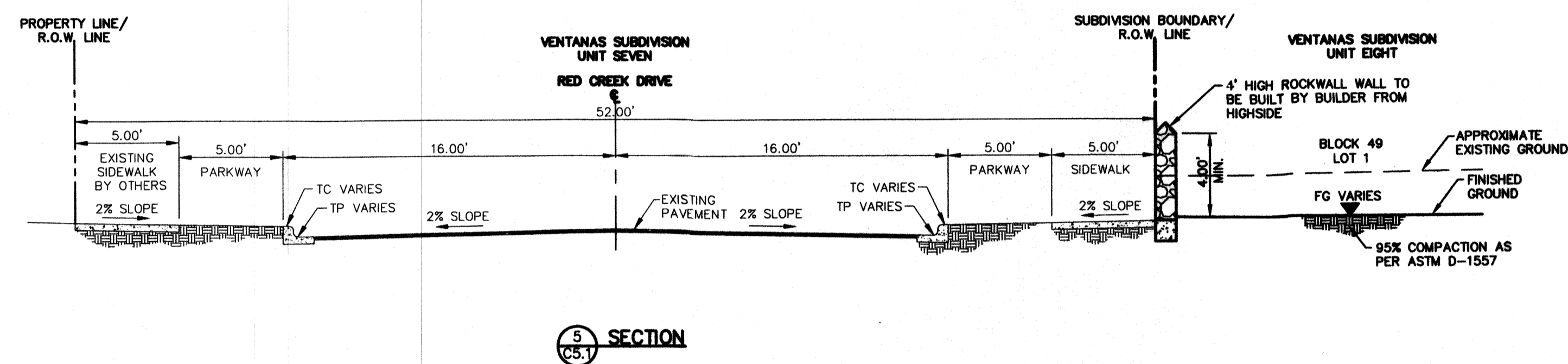
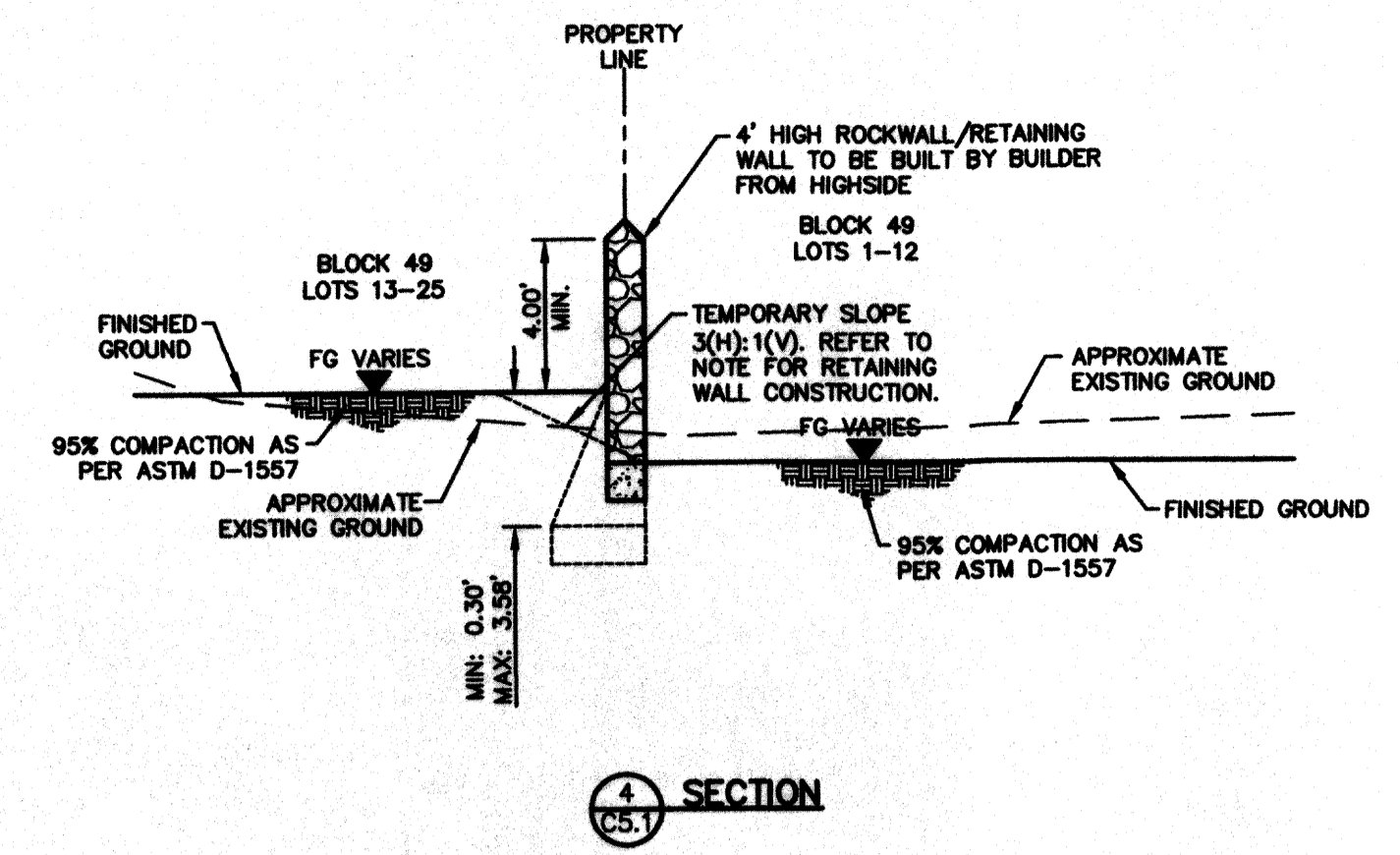
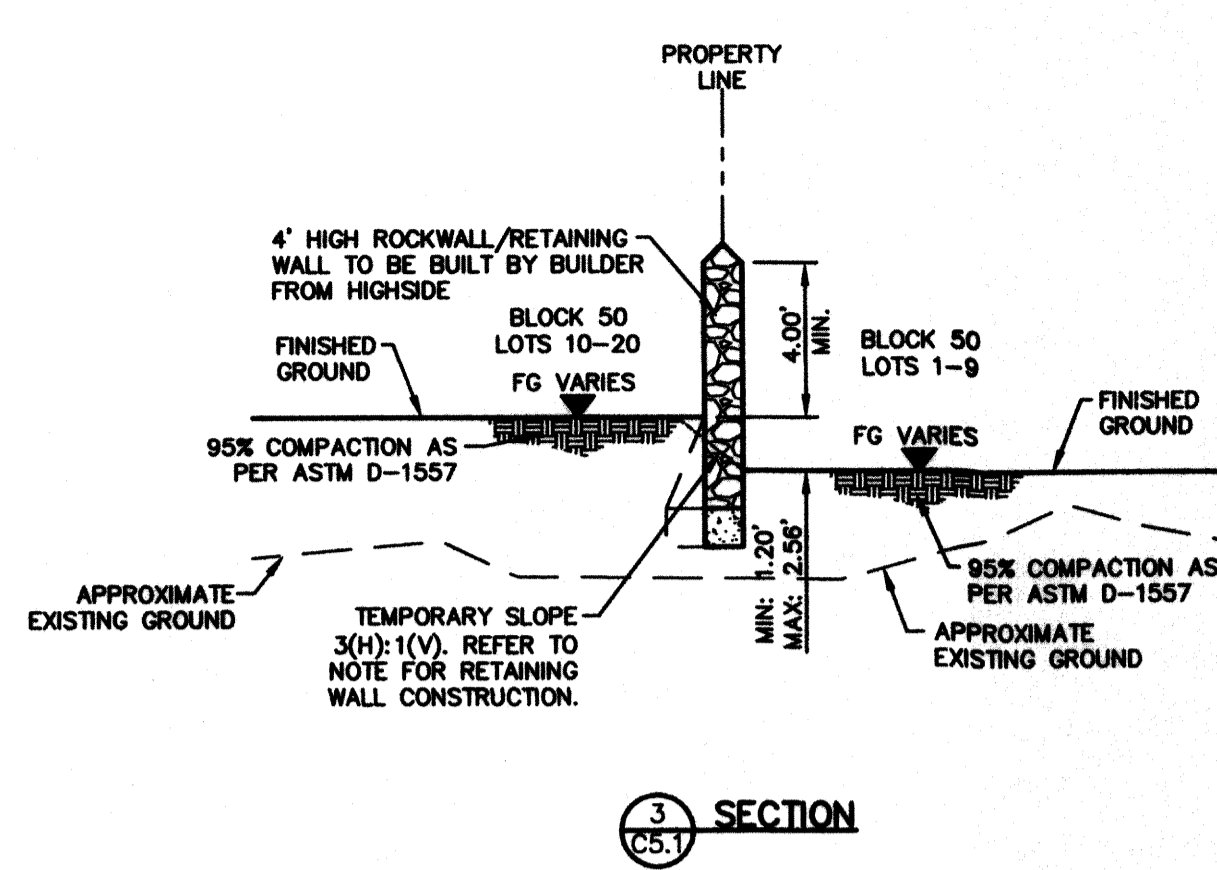
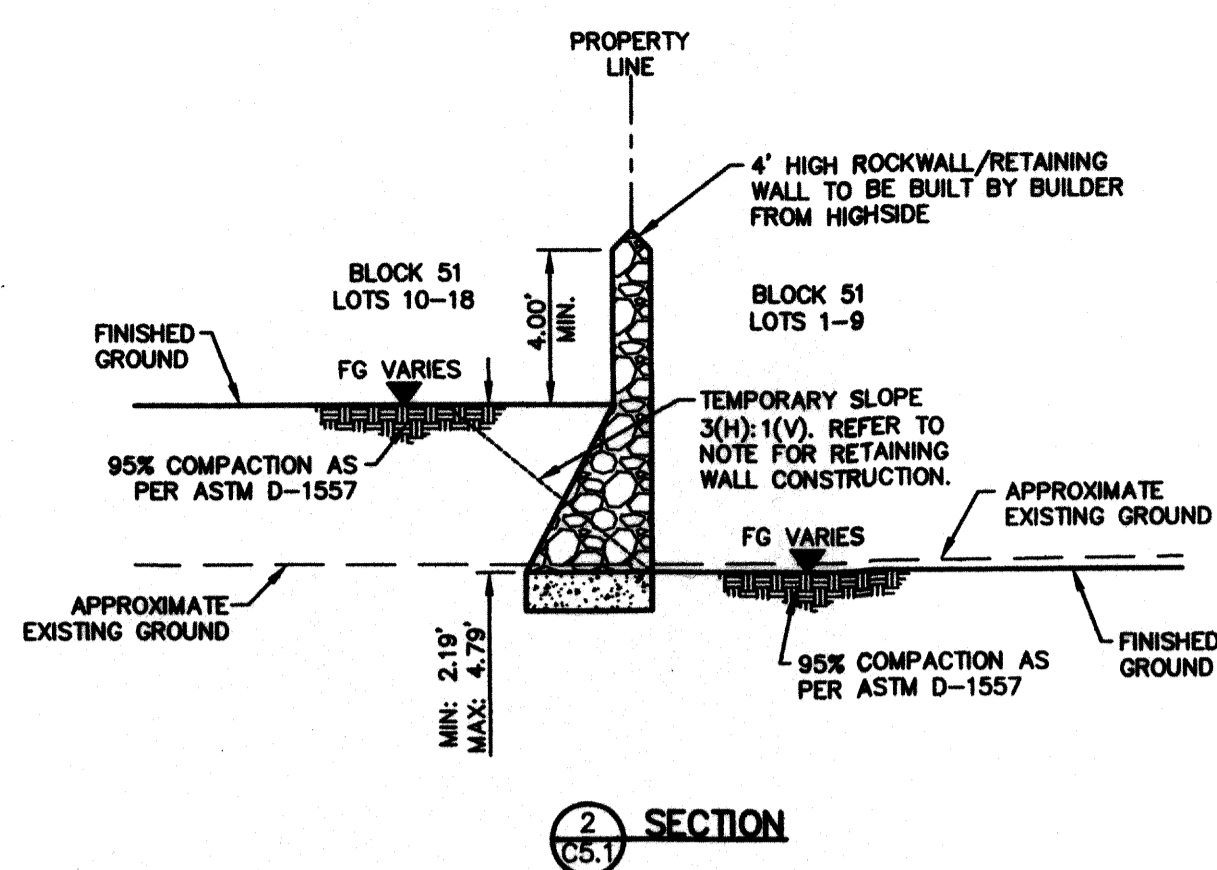
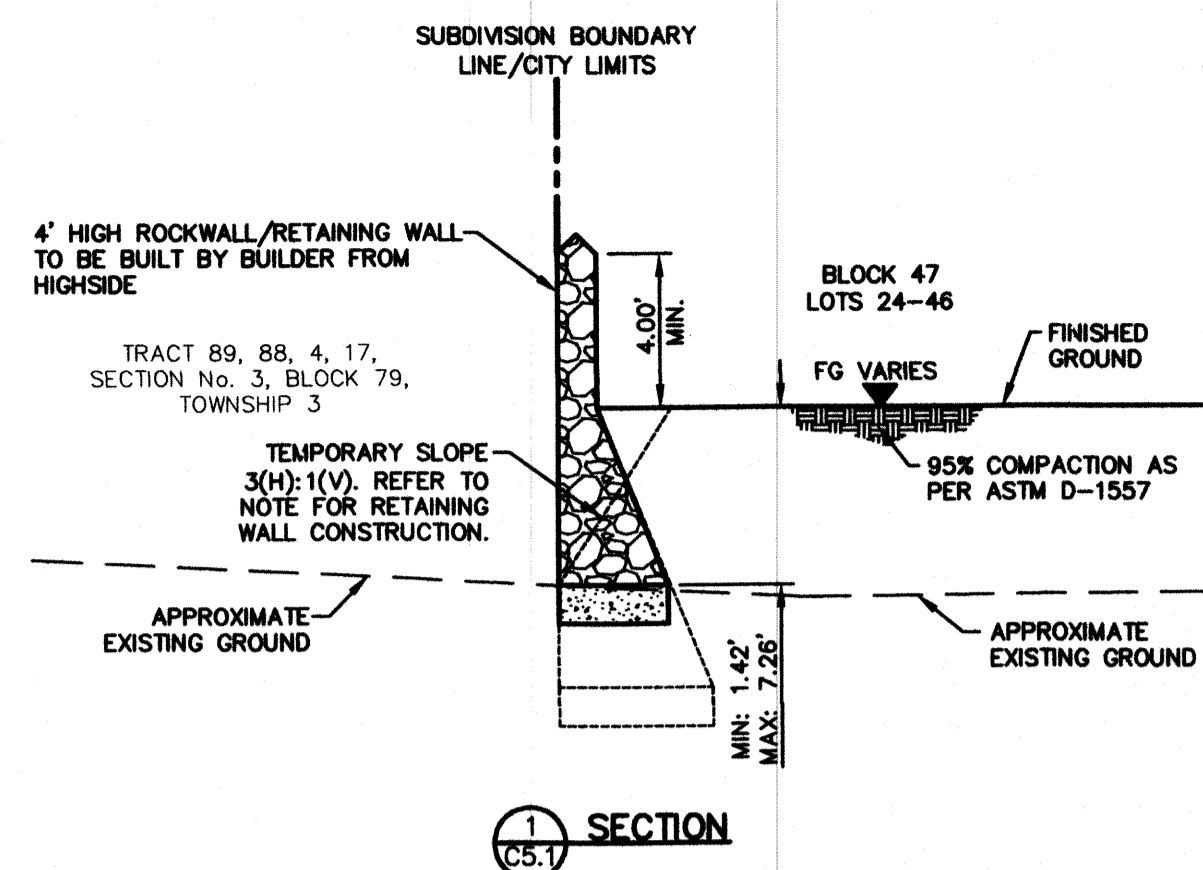
SCALE: 1" = 100'
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.L.A.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB NO. 2260-018-LD

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

SHEET TITLE
DRAINAGE PLAN

SHEET NO.
C4.1

S:\2260\2260-018-LD-Ventanas Unit Eight\DWG5\Construction Drawings\Improvement Plans\2260-018-C4.1-DRAINAGE PLAN.dwg, Drainage Plan Sheet 1, 10/16/2014, 2:21:32 PM



GENERAL NOTES:

- WHENEVER THE RETAINING HEIGHT OF A ROCKWALL/RETAINING WALL EXCEEDS FOUR (4) FEET OR MORE, THE DEVELOPER SHALL BUILD THE RETAINING PORTION OF THE WALL (INCLUDING NECESSARY REINFORCED CONCRETE FOOTING) TO HIGHEST FINISHED GROUND. THE BUILDER SHALL FINISH THE REMAINING OF THE STEM WALL. IF THE RETAINING HEIGHT DOES NOT EXCEED THE FOUR (4) FEET, THEN THE DEVELOPER MUST BUILD A TEMPORARY SLOPE AT 3(H):1(V).

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

SHEET TITLE
GRADING SECTIONS

SHEET NO.
C5.1

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.32 (CITY DATUM).
DATE _____
REVISIONS _____
BY _____

SCALE
Horizontal: 1" = 5'
Vertical: 1" = 5'
Contour Interval: N/A

DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.

DATE: AUGUST 2014

ENGINEER'S SEAL
JAMES L. AZCARRATE
REGISTERED PROFESSIONAL ENGINEER
NO. 18075
EXPIRES 12/31/19

o.e.a.
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM #484
4712 Woodrow Breen, Ste. F El Paso, TX 79924
Office: 915.834.6222 Fax: 915.834.6223 www.o.e.a.net

S:\2260\2260-018D-018D-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C5.1-Cross Sections.dwg, Grading Sections, 11/6/2014 2:18:31 PM

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-8720
EL PASO ENERGY CORPORATION	(915) 498-8244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDoT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

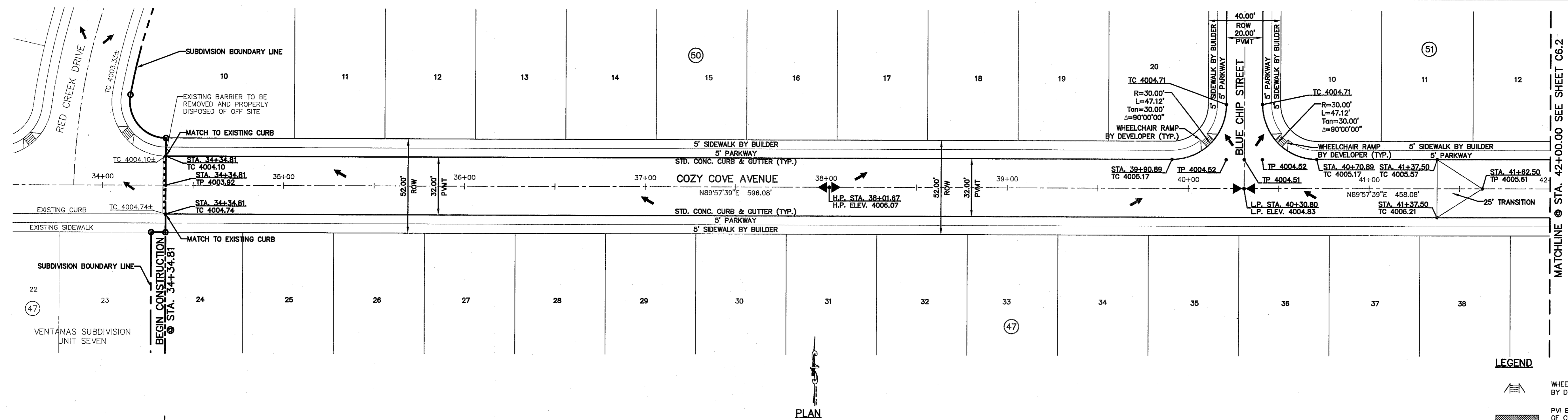
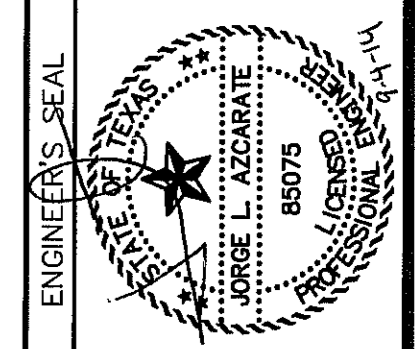
WARNING I BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

DATE	REVISIONS	BY

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM #484
4712 Woodrow Bean, Ste. F, El Paso, TX 79924
Office: 915.544.8302 Fax: 915.544.8303 www.daggroup.com

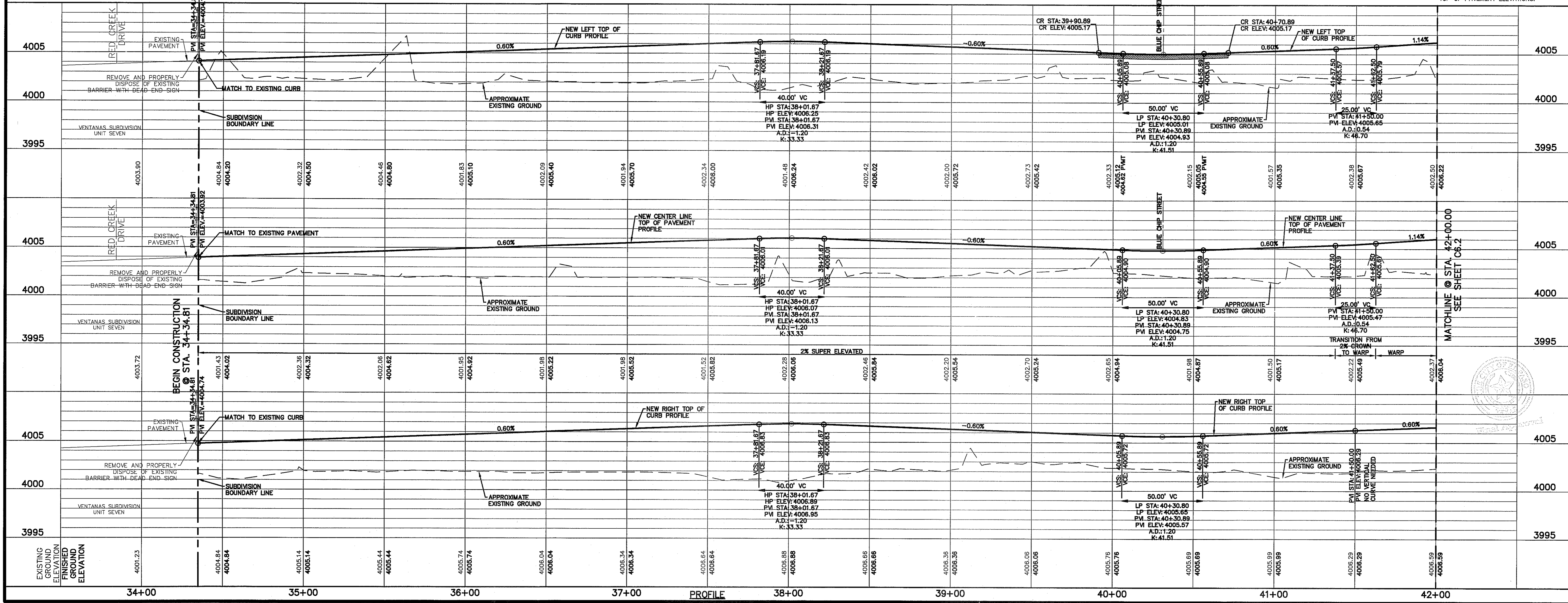


LEGEND

WHEELCHAIR RAMP BY DEVELOPER (TYP.)

PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.

PLAN



SCALE: 1"=30'
Horizontal: 1"=50'
Vertical: 1"=5'
Contour Interval: N/A

DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2260-018-LD

PROJECT TITLE

VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

SHEET TITLE

COZY COVE AVENUE
PLAN & PROFILE
FROM STA. 34+34.81
TO STA. 42+00.00

SHEET NO.

C6.1

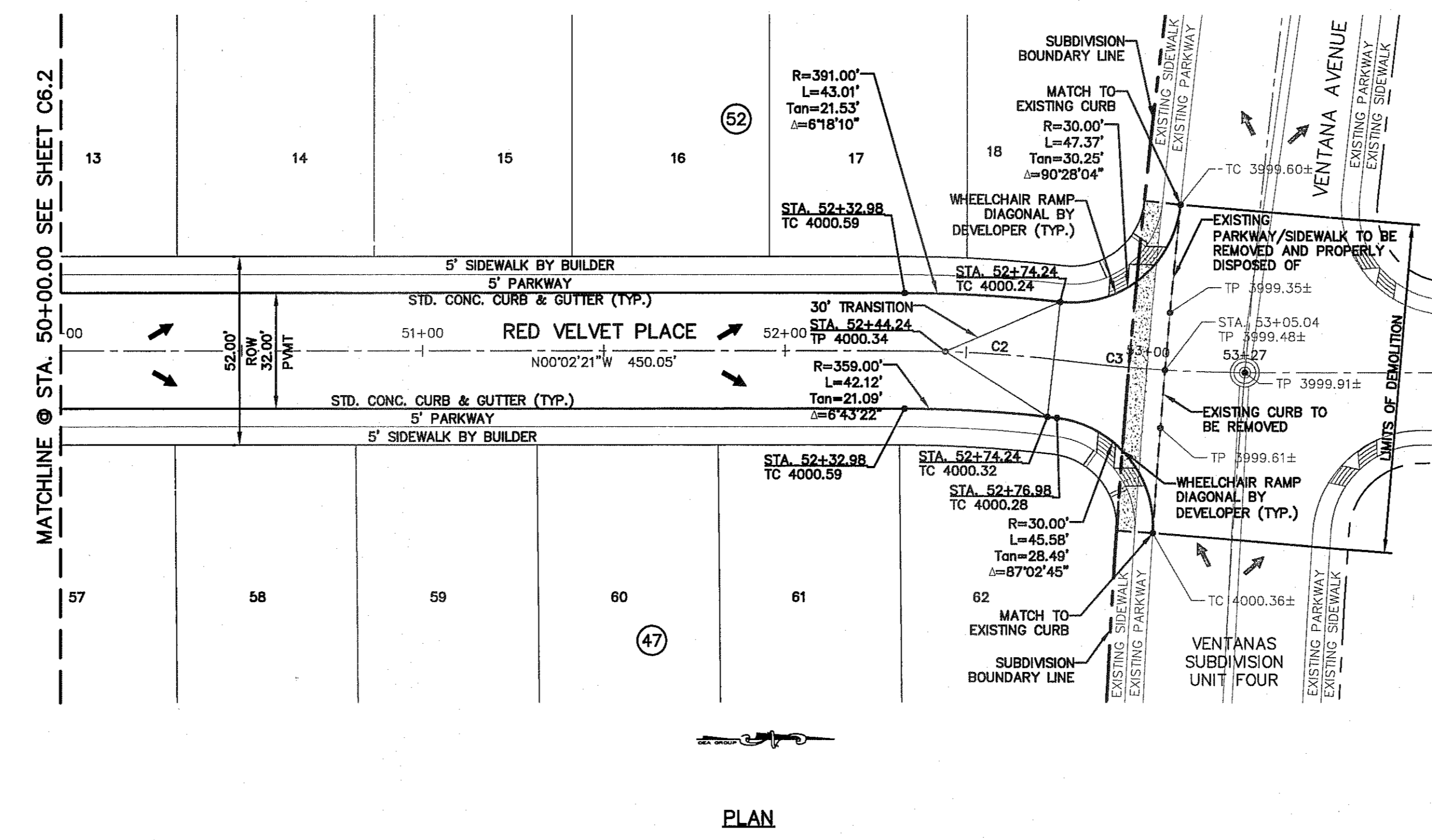
S:\2260\2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C6.1-C6.3-Cozy Cove & Red Velvet P&P.dwg, Cozy Cove (1), 8/19/2014 9:23:13 AM

S:\2260\2260-018\0 - Ventanas Unit Eight\DMCS\Construction Drawings\Improvement Plans\2260-018-C6.3-C6.3-Cozy Cove & Red Velvet P&P.dwg, Red Velvet (3), 10/16/2014 2:23:32 PM

CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	56.00'	87.96'	56.00'	79.20'	N44°57'39"E	090°00'00"
C2	375.00'	47.04'	23.55'	47.01'	N03°33'17"E	007°11'16"
C3	375.00'	25.01'	12.51'	25.00'	N05°14'17"E	003°49'15"

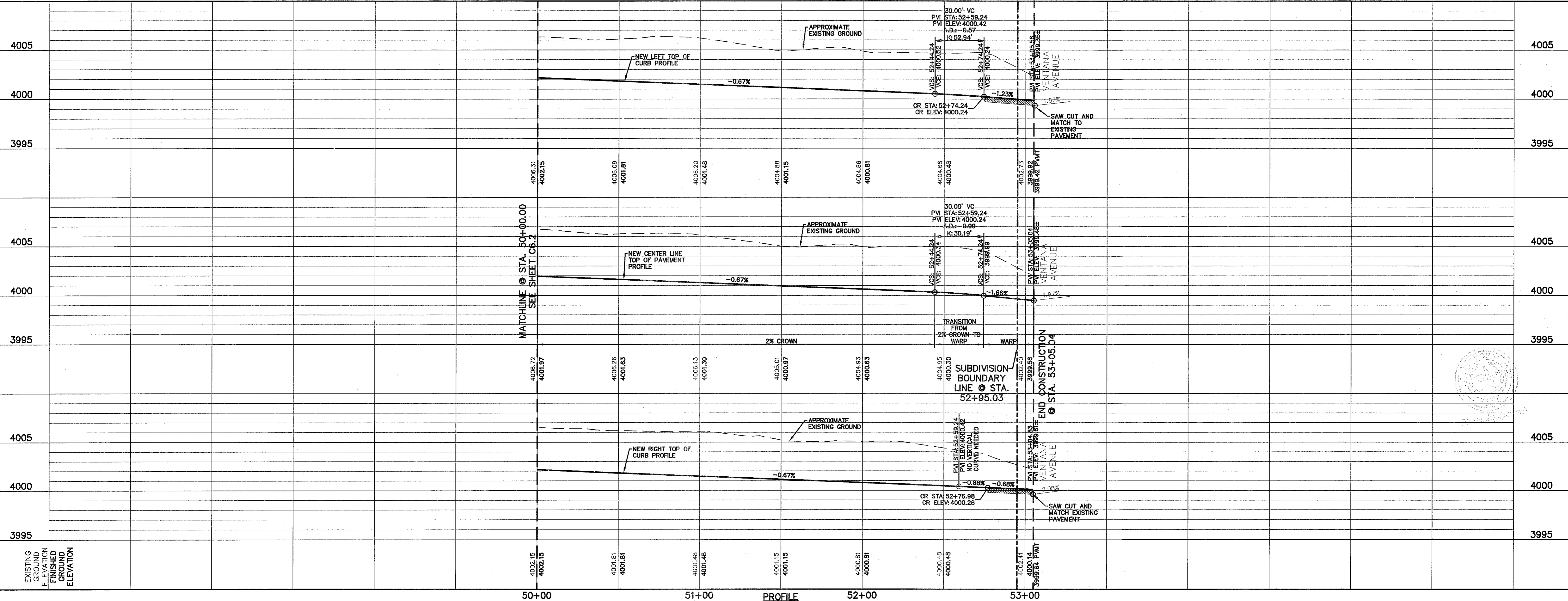
UTILITY LOCATOR SERVICES		
EL PASO ELECTRIC COMPANY	(915) 543-5720	
EL PASO ENERGY CORPORATION	(915) 496-5244	
EL PASO WATER UTILITIES	(915) 594-5500	
MCI SURVEILLANCE	(800) MCI-WORK	
TIME WARNER COMMUNICATIONS	(915) 772-1123	
TEXAS GAS SERVICE	(915) 680-7200	
SBC	(800) 545-6005	
AT&T	(800) 852-3786	
U.S. SPRINT TELECOMM	(800) 821-0579	
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750	
(AFTER HOURS)	(915) 240-3220	

WARNING!
BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES



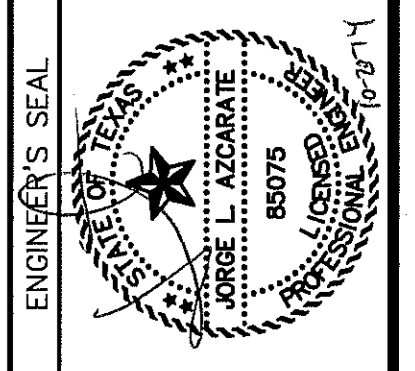
LEGEND

- WHEELCHAIR RAMP BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.
- LIMITS OF DEMOLITION, CURB & GUTTER TO BE REMOVED AND PROPERLY DISPOSED OF BY CONTRACTOR. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT.



DATE	REVISIONS	BY

engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM #6594
 4712 Woodrow Bean, Ste. F El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.osaeng.com



SCALE
 Horizontal: 1"=30'
 Vertical: 1"=5'
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-018-1D

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

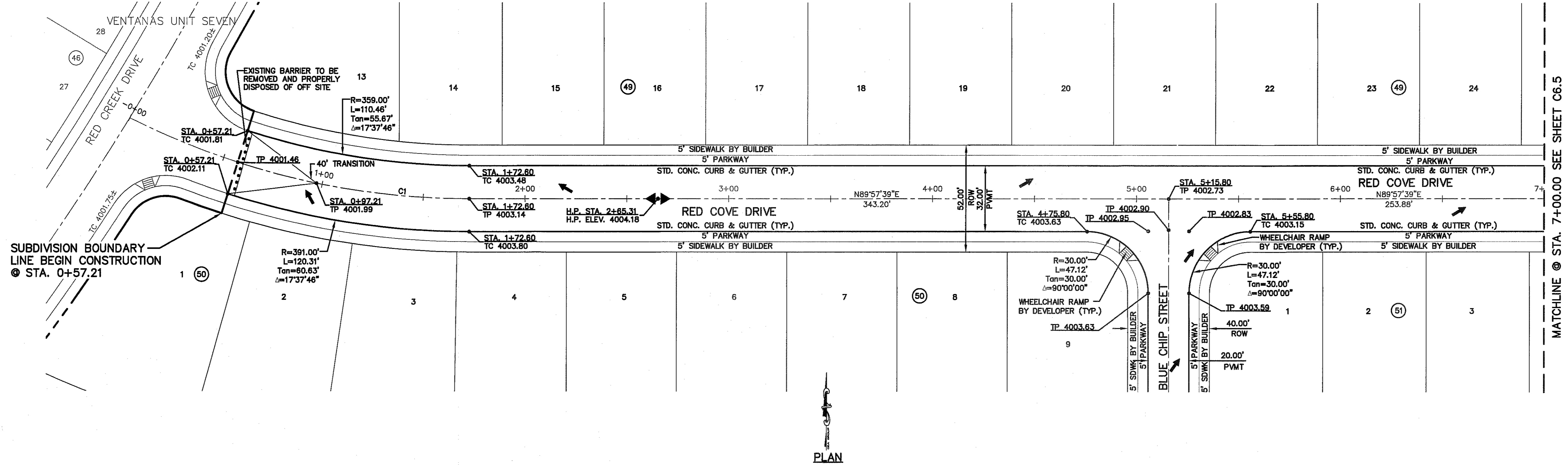
SHEET TITLE
RED VELVET PLACE PLAN & PROFILE FROM STA. 50+00.00 TO STA. 53+05.04

SHEET NO.
C6.3

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

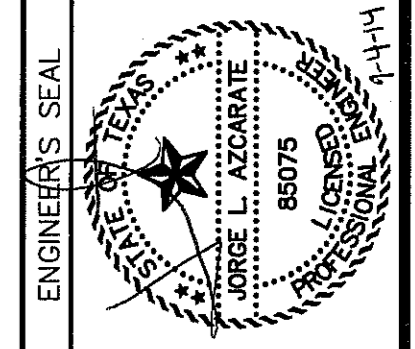
CURVE TABLE						
CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	375.00'	115.38'	58.15'	114.93'	S81°13'28"E	017°37'46"



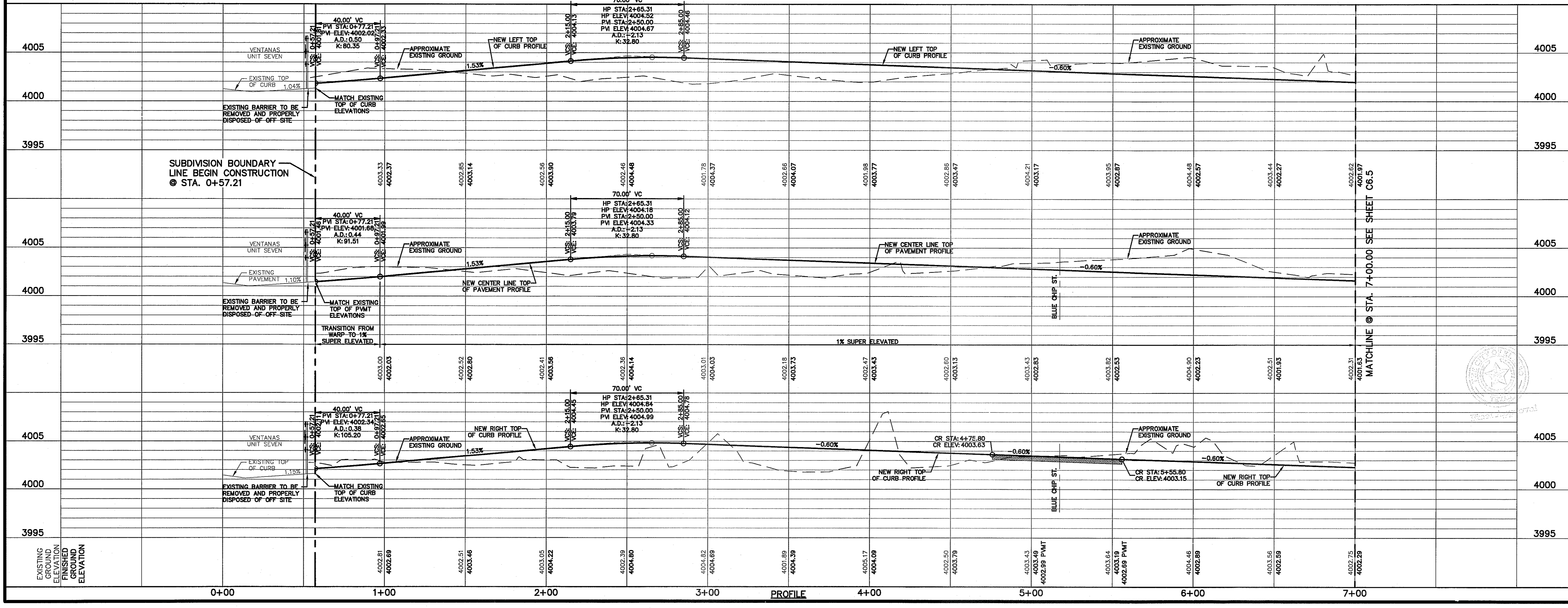
LEGEND:
 WHEELCHAIR RAMP BY DEVELOPER (TYP.)
 PROFILE DEPICTS 6" DROP AT INTERSECTION CURB RETURNS. REFER TO PVI STATIONS FOR ACTUAL PAVEMENT ELEVATIONS.

REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).
 DATE _____ BY _____
 REVISIONS _____

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4684
 4712 Woodrow Branch, Ste. F, El Paso, TX 79924
 Office: 915.541.5222 Fax: 915.541.5225 www.csaonline.com



S:\2260\2260-018.D-ventanas unit eight\DWG\Construction Drawings\Improvement Plans\2260-018-C6.46-Red Cove P&P.dwg, RED COVE, 1, 8/19/2014 9:49:38 AM



SCALE: Horizontal: 1"=30'
 Vertical: 1"=5'
 Contour interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 CHKD. BY: J.L.A.
 APP'D. BY: J.L.A.
 JOB No. 2260-018-ID

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT
SUBDIVISION IMPROVEMENTS

SHEET TITLE
RED COVE AVENUE PLAN & PROFILE FROM STA. 0+57.21 TO STA. 7+00.00

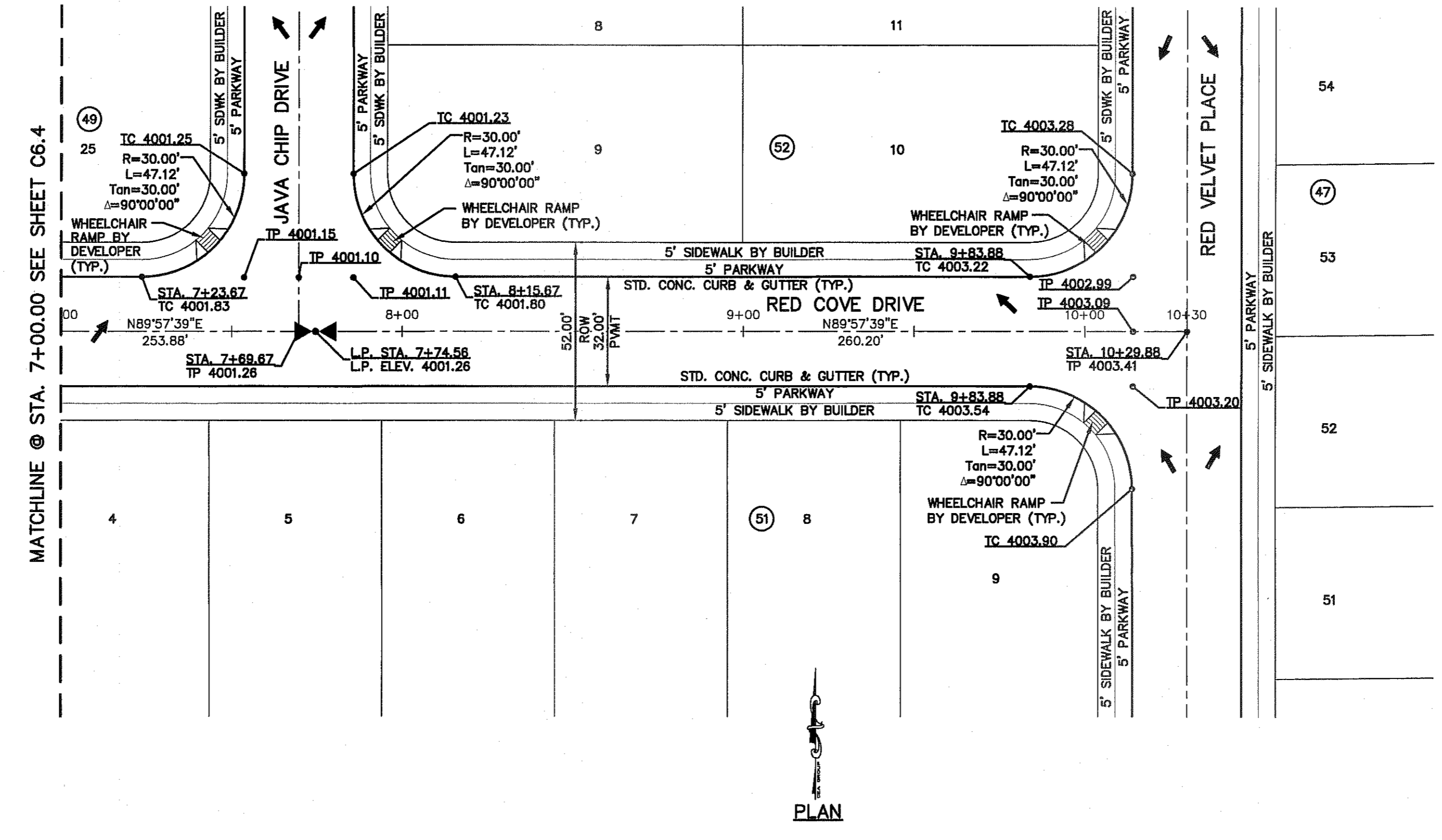
SHEET NO.
C6.4

S:\2260\2260-018\0-018-018-C6.485-Red Cove P&P.dwg, RED COVE 2, 8/19/2014 9:51:19 AM

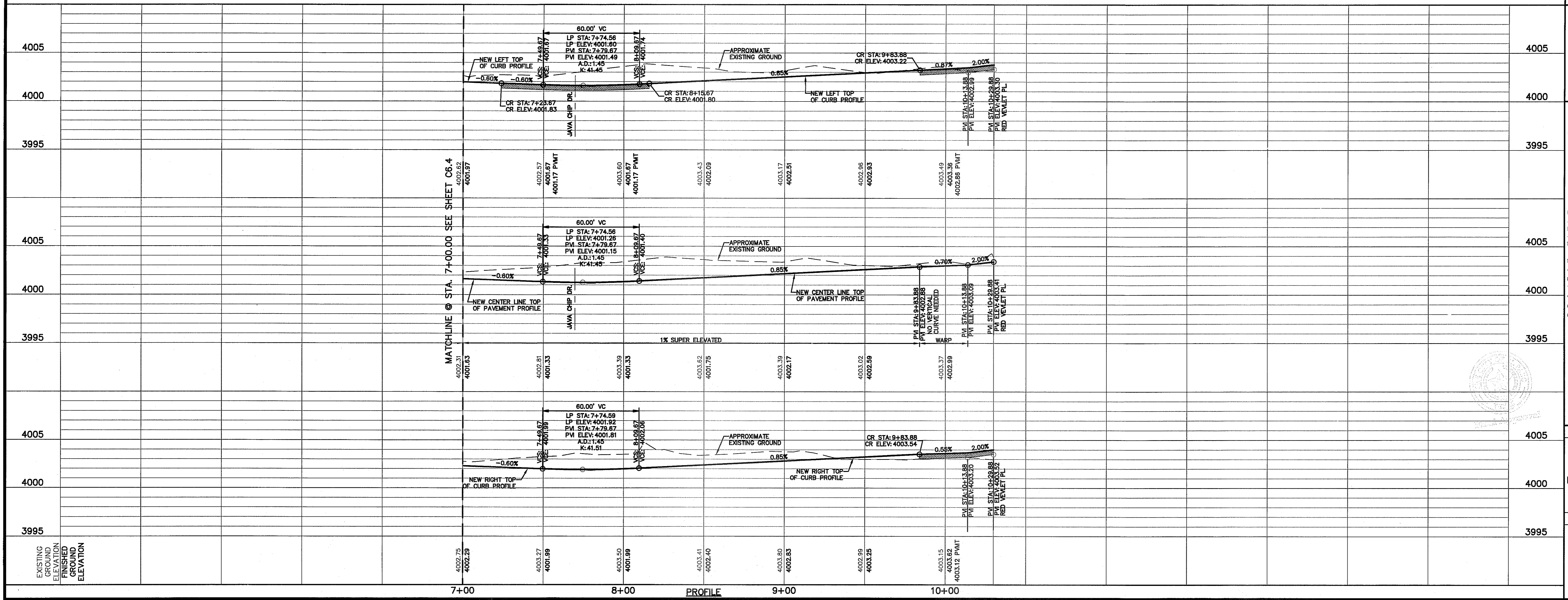
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3766
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS	BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
DATE	ELEVATION = 3970.52 (CITY DATUM)
REVISIONS	BY



LEGEND:
 WHEELCHAIR RAMP BY DEVELOPER (TYP.)
 PROFILE DEPICTS 6" DROP AT INTERSECTION CURB RETURNS. REFER TO PVI STATIONS FOR ACTUAL PAVEMENT ELEVATIONS.



SCALE: Horizontal: 1"=30'
 Vertical: 1"=5'
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 APP'D. BY: J.L.A.
 JOB NO. 2260-018-1D

ENGINEER'S SEAL

PROJECT TITLE
**VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**RED COVE AVENUE
 PLAN & PROFILE
 FROM STA. 7+00.00
 TO STA. 10+29.88**

SHEET NO.
C6.5

S:\2260\2260-018\DWG\Construction\Drawings\Improvement\Plans\2260-018-C6.7 - Java Chip P&P.dwg, JAVA CHIP, 10/16/2014 2:30:03 PM

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING ! BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS

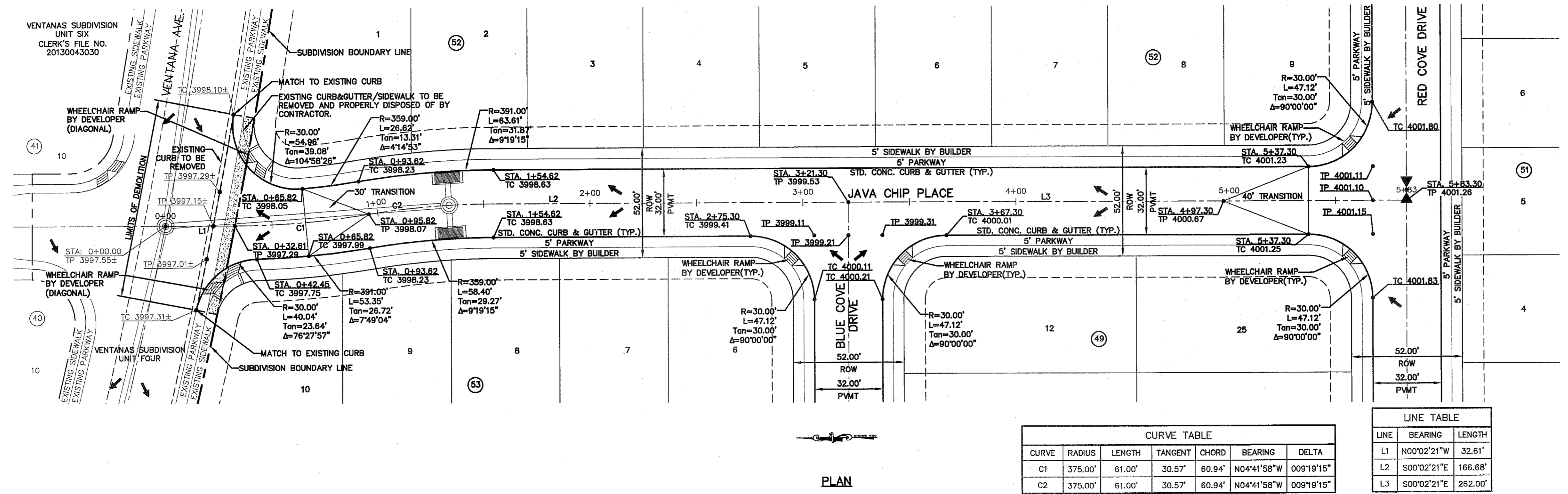
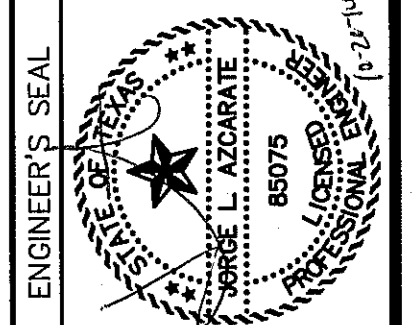
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTRIC INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE	ELEVATION = 3970.52 (CITY DATUM)
---	----------------------------------

osa

engineers • architects • planners

TEXAS REGISTERED ENGINEERING FIRM #484

4712 Woodrow Bean, Ste. F, El Paso, TX 79904
Office: 915.544.5202 Fax: 915.544.5233 www.osainc.net



CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	375.00'	61.00'	30.57'	60.94'	N04°41'58"W	009°19'15"
C2	375.00'	61.00'	30.57'	60.94'	N04°41'58"W	009°19'15"

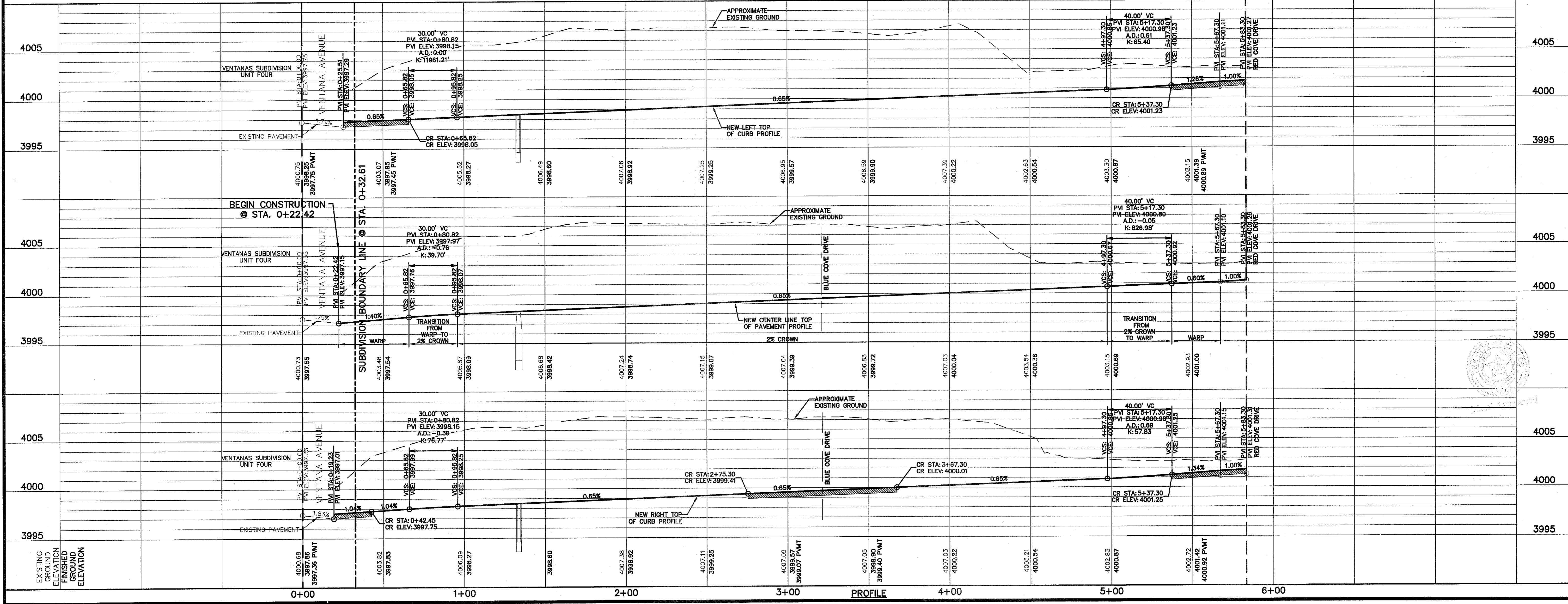
LINE TABLE

LINE	BEARING	LENGTH
L1	N00°02'21"W	32.61'
L2	S00°02'21"E	166.68'
L3	S00°02'21"E	262.00'

LEGEND

- WHEELCHAIR RAMP BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB; REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.
- LIMITS OF DEMOLITION, CURB & GUTTER TO BE REMOVED AND PROPERLY DISPOSED OF BY CONTRACTOR. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT.

PLAN



SCALE

Horizontal: 1"=30'
Vertical: 1"=5'

DATE: JULY 2014
DESIGN BY: J.M. J.A.
DRAWN BY: J.S.
CHKD. BY: J.L.A.
APP'D. BY: J.L.A.
JOB No. 2260-017-LD

PROJECT TITLE

VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

SHEET TITLE

JAVA CHIP PLACE
PLAN & PROFILE
FROM STA. 0+22.42
TO STA. 5+83+30

SHEET NO.

C6.7

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3788
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPoT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

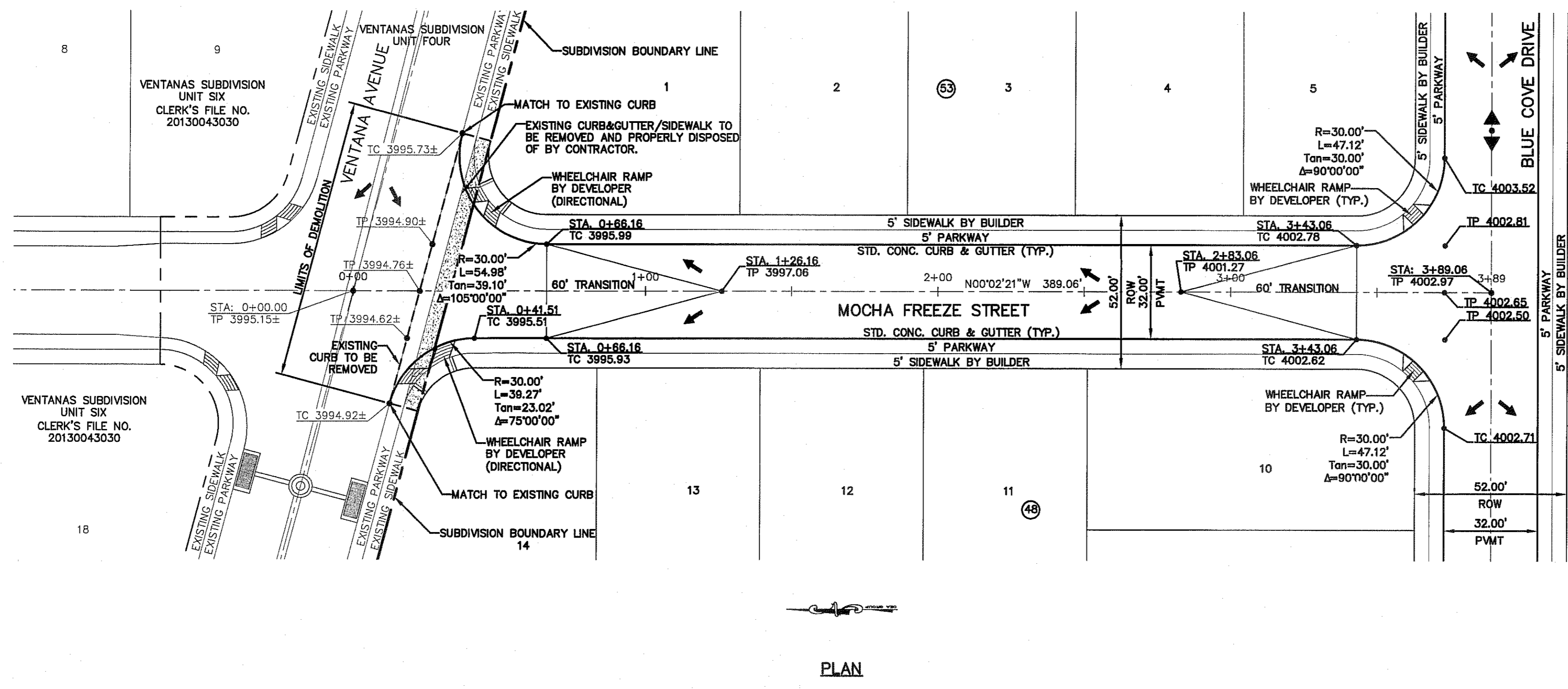
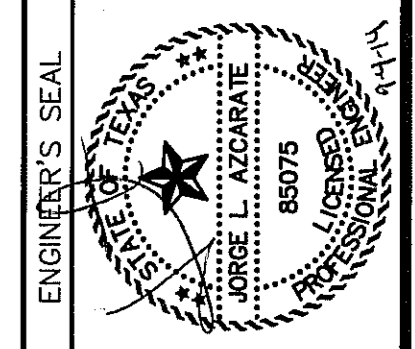
WARNING I BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

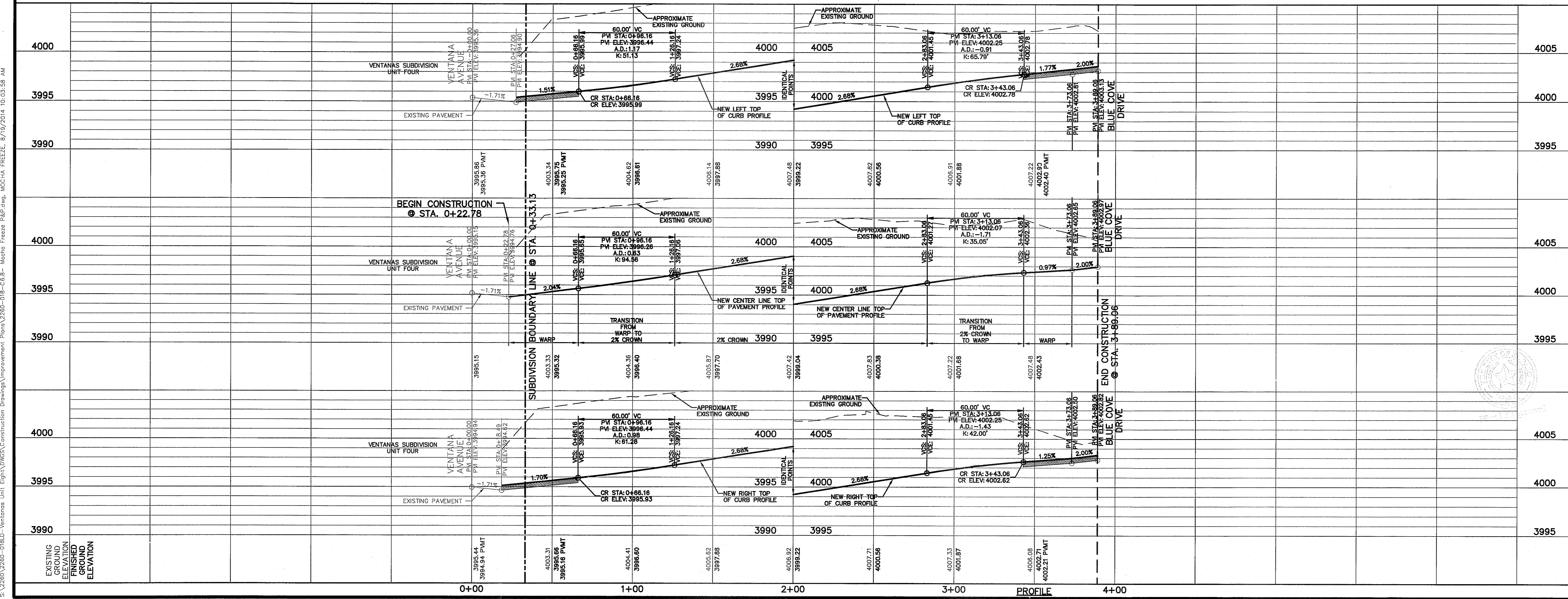
REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).

cea
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-454
4712 Woodrow Bean, Ste. F, El Paso, TX 79904
Office: 915.544.5222 Fax: 915.544.5225 www.ceaonline.com



LEGEND

- WHEELCHAIR RAMP BY DEVELOPER (TYP.)
- PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.
- LIMITS OF DEMOLITION, CURB & GUTTER TO BE REMOVED AND PROPERLY DISPOSED OF BY CONTRACTOR. CONTRACTOR SHALL SAW CUT EXISTING PAVEMENT.



SCALE
Horizontal: 1"=50'
Vertical: 1"=5'
Contour Interval: N/A

DATE: JULY 2014
DESIGN BY: J.M.
DRAWN BY: J.S.
CHKD. BY: J.L.A.
APP'D. BY: J.L.A.
JOB NO. 2280-017-ID

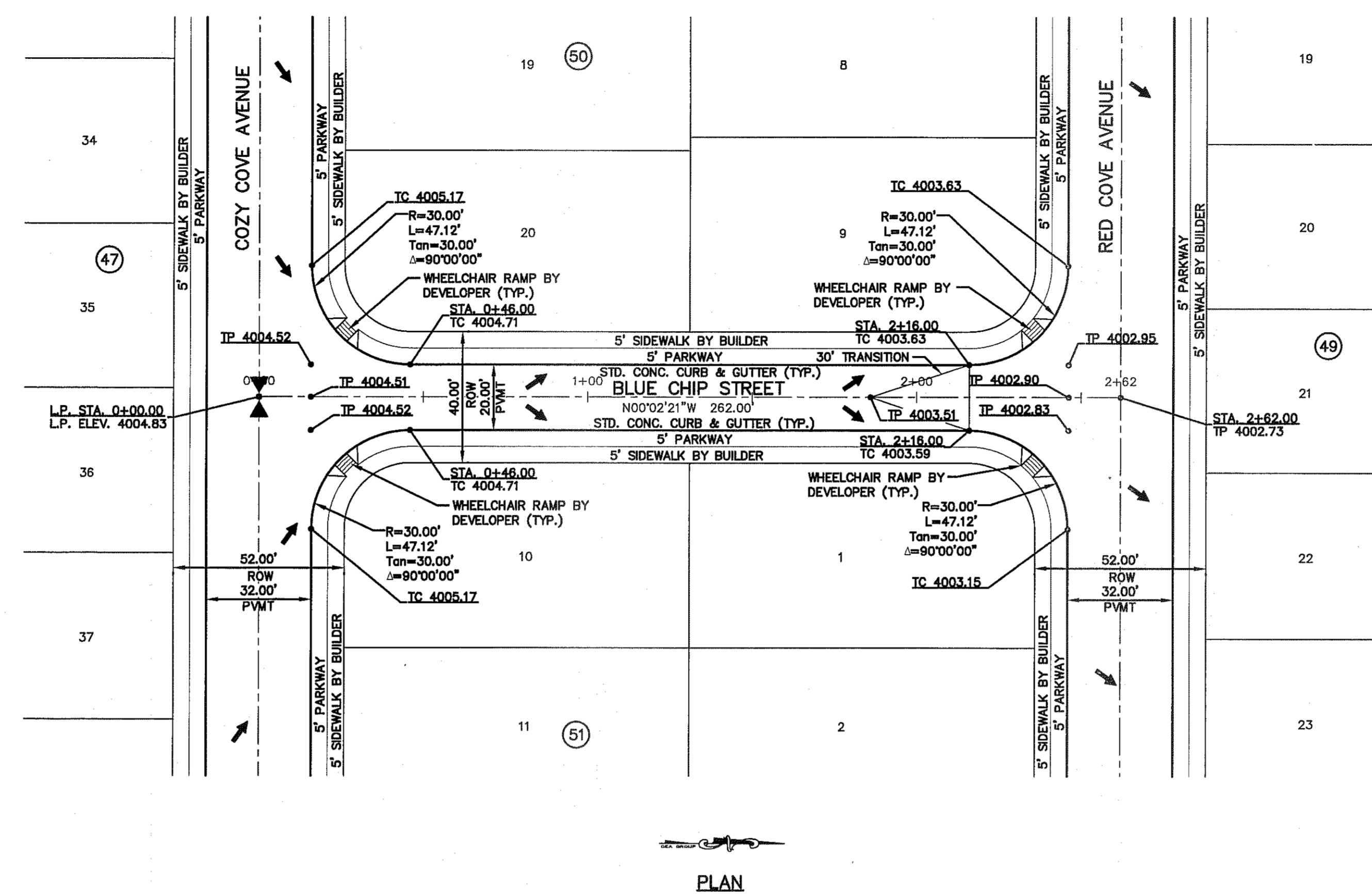
PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

SHEET TITLE
MOCHA FREEZE STREET PLAN & PROFILE FROM STA. 0+22.78 TO STA. 3+89.06

SHEET NO.
C6.8

S:\2280\2280-018-ID-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2280-018-C6.8-Mocha Freeze P&P.dwg, MOCHA FREEZE, 8/19/2014 10:03:58 AM

S:\2260\2260-018\0-Construction Drawings\Improvement Plans\2260-018-C6.9-Blue Chip P&P.dwg, BLUE CHIP, 8/19/2014 10:05:28 AM



PLAN

UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

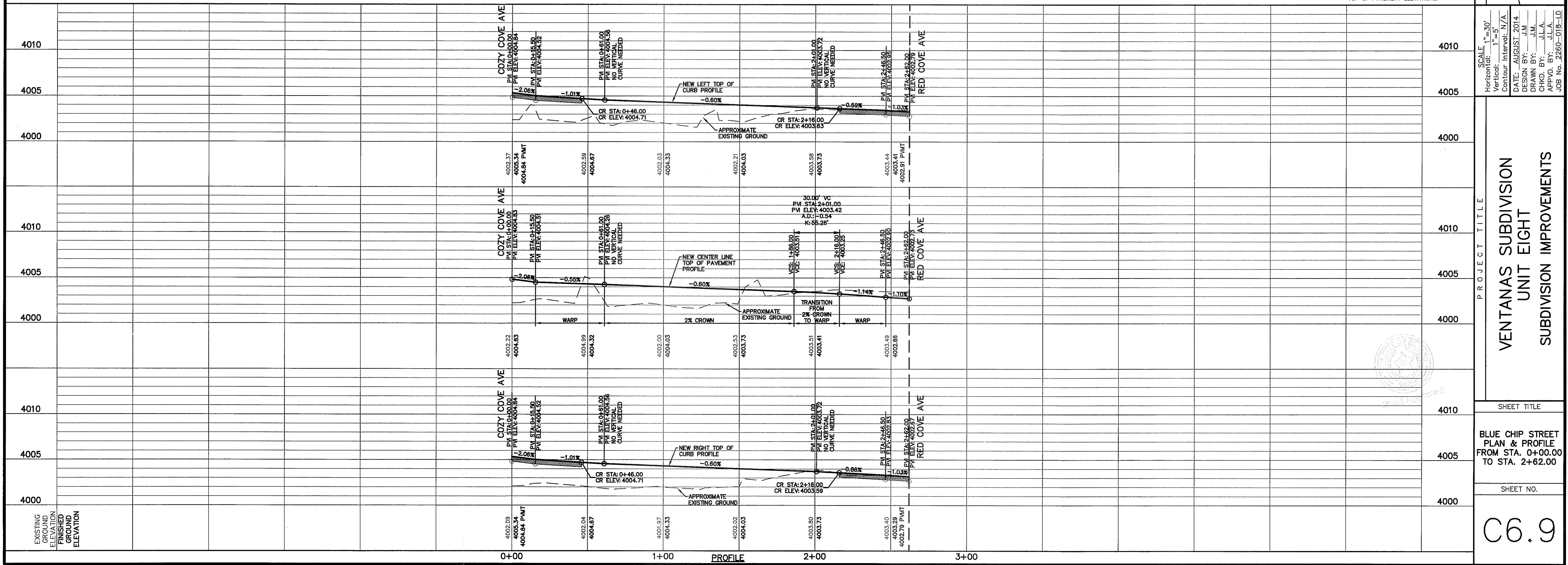
ELEVATION = 3970.52 (CITY DATUM).

DATE	REVISIONS	BY

LEGEND

WHEELCHAIR RAMP BY DEVELOPER (TYP.)

PVI ELEVATIONS ARE SHOWN AT TOP OF CURB. REFER TO PLAN VIEW FOR TOP OF PAVEMENT ELEVATIONS.



SCALE: Horizontal: 1"=30' Vertical: 1"=5'

Contour Interval: N/A

DATE: AUGUST 2014

DESIGN BY: J.M.

DRAWN BY: J.M.

CHECKED BY: J.L.A.

APP'D. BY: J.L.A.

JOB No. 2260-018-LD

PROJECT TITLE

VENTANAS SUBDIVISION UNIT EIGHT SUBDIVISION IMPROVEMENTS

SHEET TITLE

BLUE CHIP STREET PLAN & PROFILE FROM STA. 0+00.00 TO STA. 2+62.00

SHEET NO.

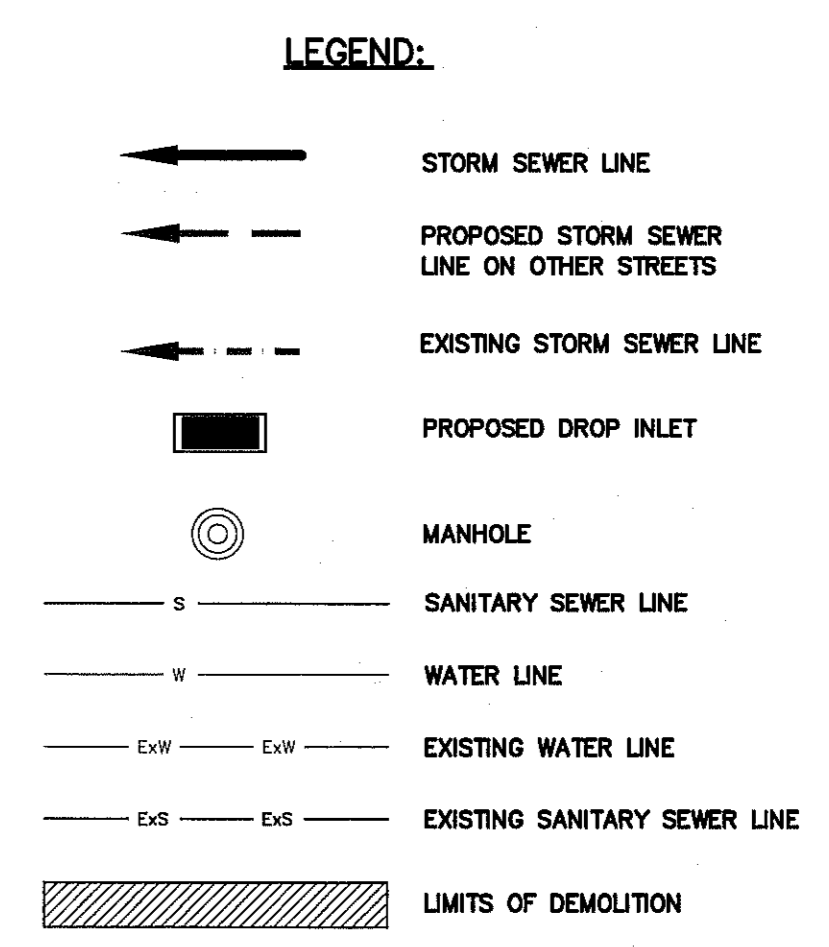
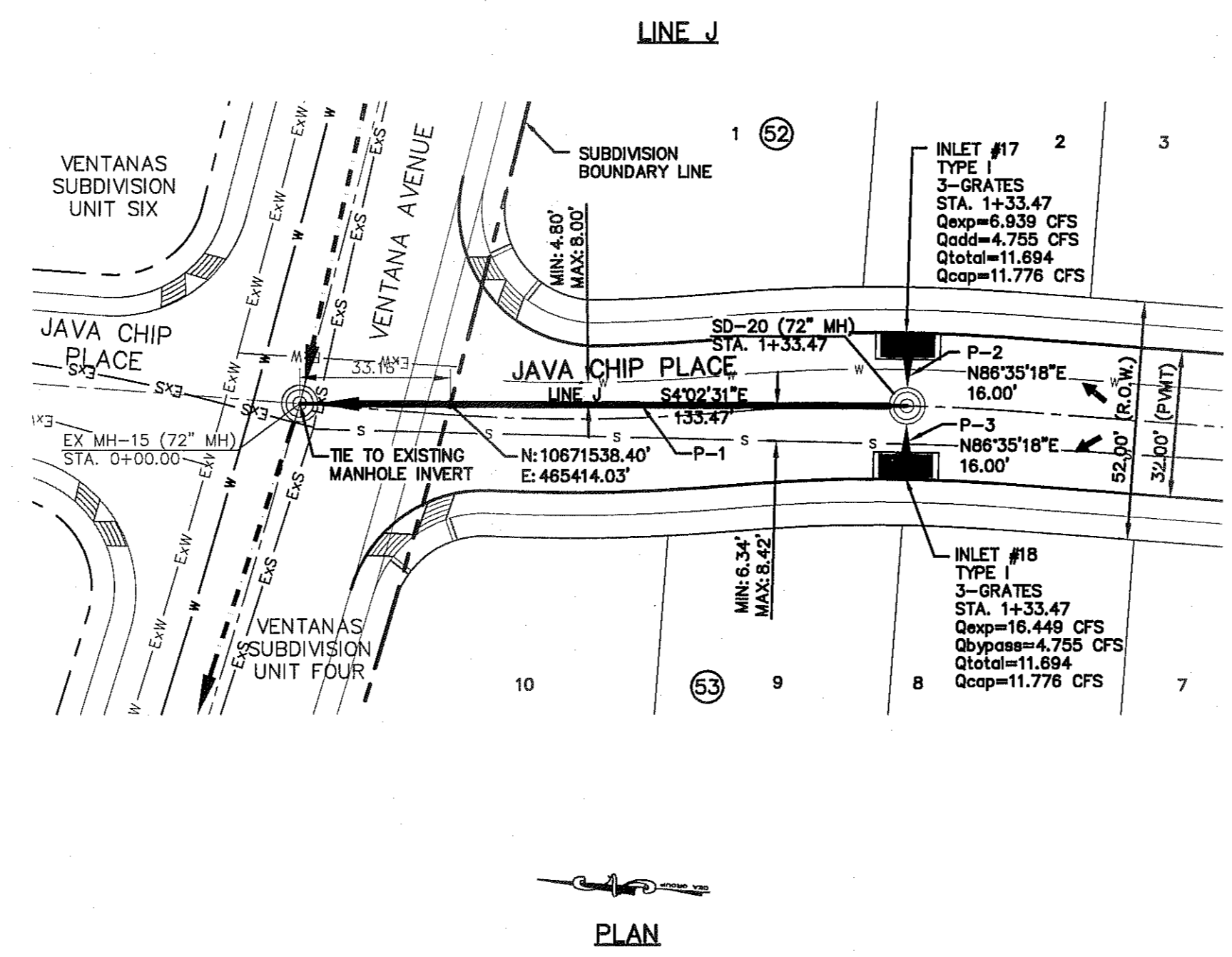
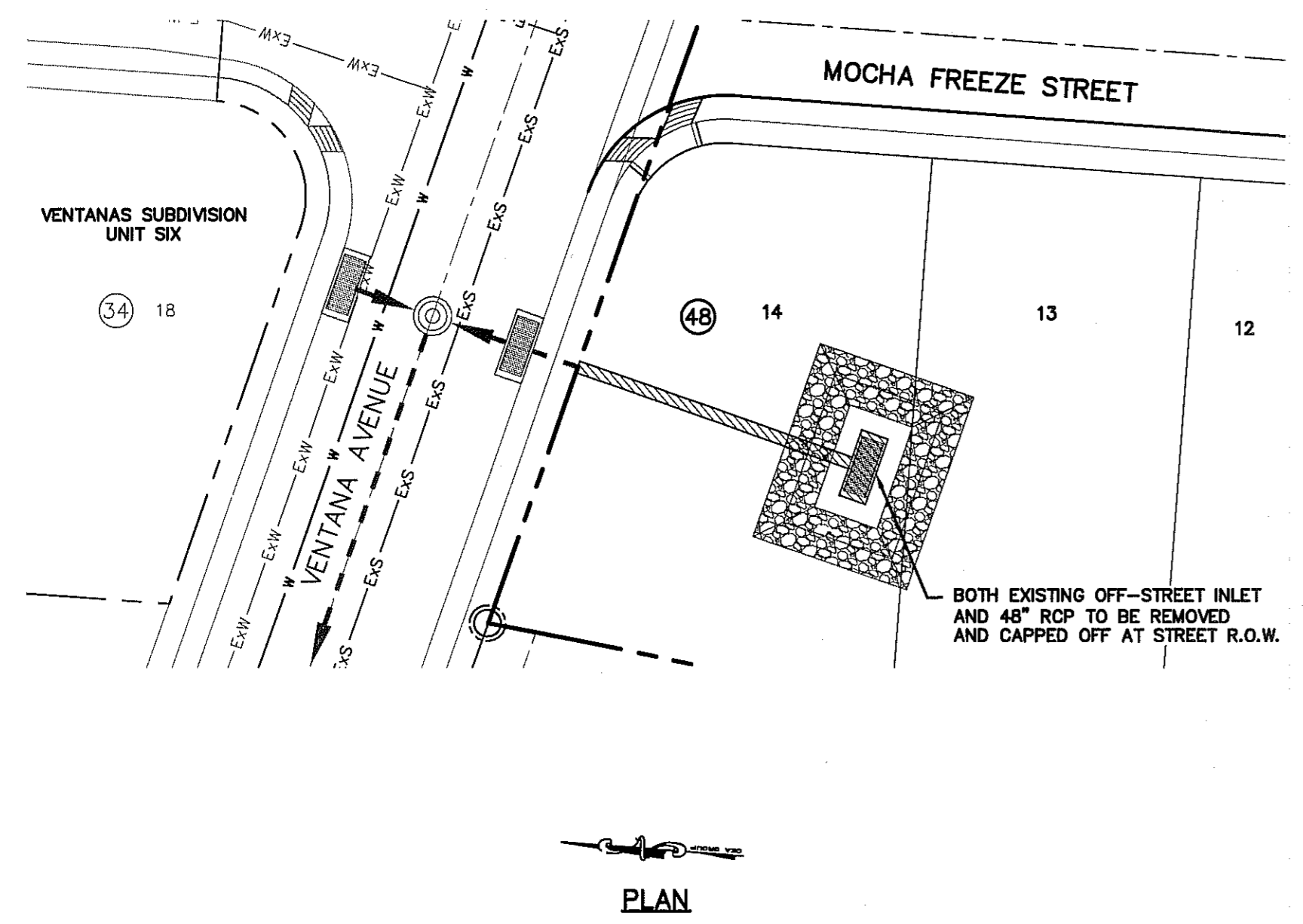
C6.9

STORM PIPE LINE J OUTPUT INFORMATION						
PIPE	DOWNSTREAM INVERT ELEVATION (ft)	UPSTREAM INVERT ELEVATION (ft)	HYDRAULIC GRADE DOWNSTREAM (ft)	HYDRAULIC GRADE UPSTREAM (ft)	Q(50) Expected (cfs)	Q(50) Capacity (cfs)
P-1	3989.50	3992.60	3997.53	3997.97	23,388 CFS	62,507 CFS
P-2	3992.60	3992.78	3998.25	3998.29	11,694 CFS	23,993 CFS
P-3	3993.60	3993.78	3998.25	3998.29	11,694 CFS	23,993 CFS

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
 CALL
1-800-DIG-TESS
1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

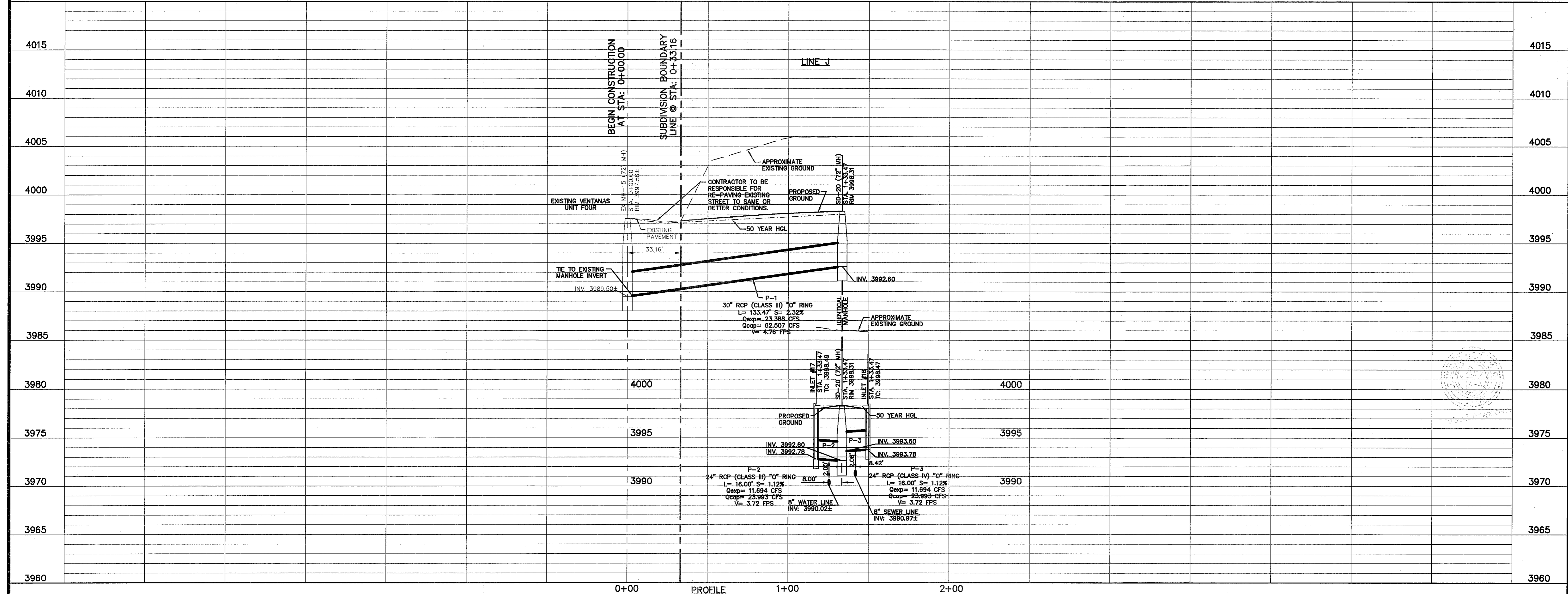
DATE	REVISIONS	BY



REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-654
 4712 Woodrow Bean, Ste. F El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.csaengr.com

ENGINEER'S SEAL
 STATE OF TEXAS
 JORGE L. AZCARRATE
 86075
 1-17-14



SCALE
 Horizontal: 1"=30'
 Vertical: 1"=5'
 Contour Interval: N/A

DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 CHKO. BY: J.L.A.
 APPVD. BY: J.L.A.

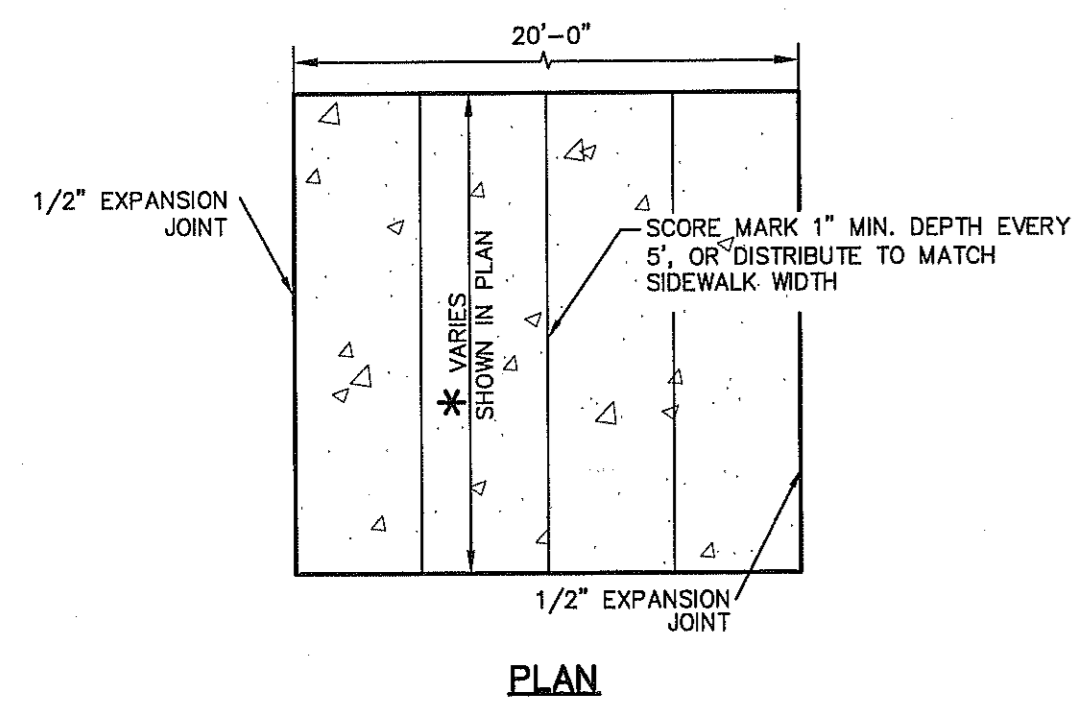
JOB No. 2260-018-LD

PROJECT TITLE
VENTANAS SUBDIVISION UNIT EIGHT
SUBDIVISION IMPROVEMENTS

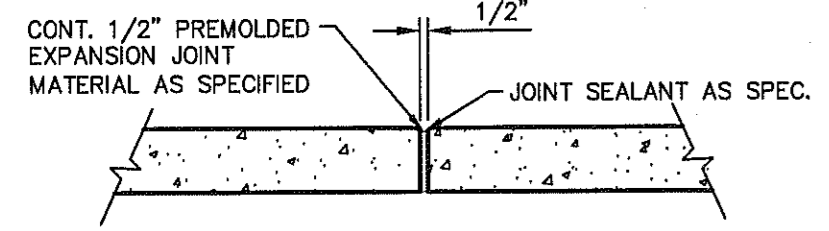
SHEET TITLE
LINE J PLAN & PROFILE FROM STA. 0+00.00 TO STA. 1+33.47

SHEET NO.
C7.1

S:\2260\2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C7.1-Storm Sewer Line J.dwg, Layout1, 9/9/2014 1:58:42 PM



PLAN

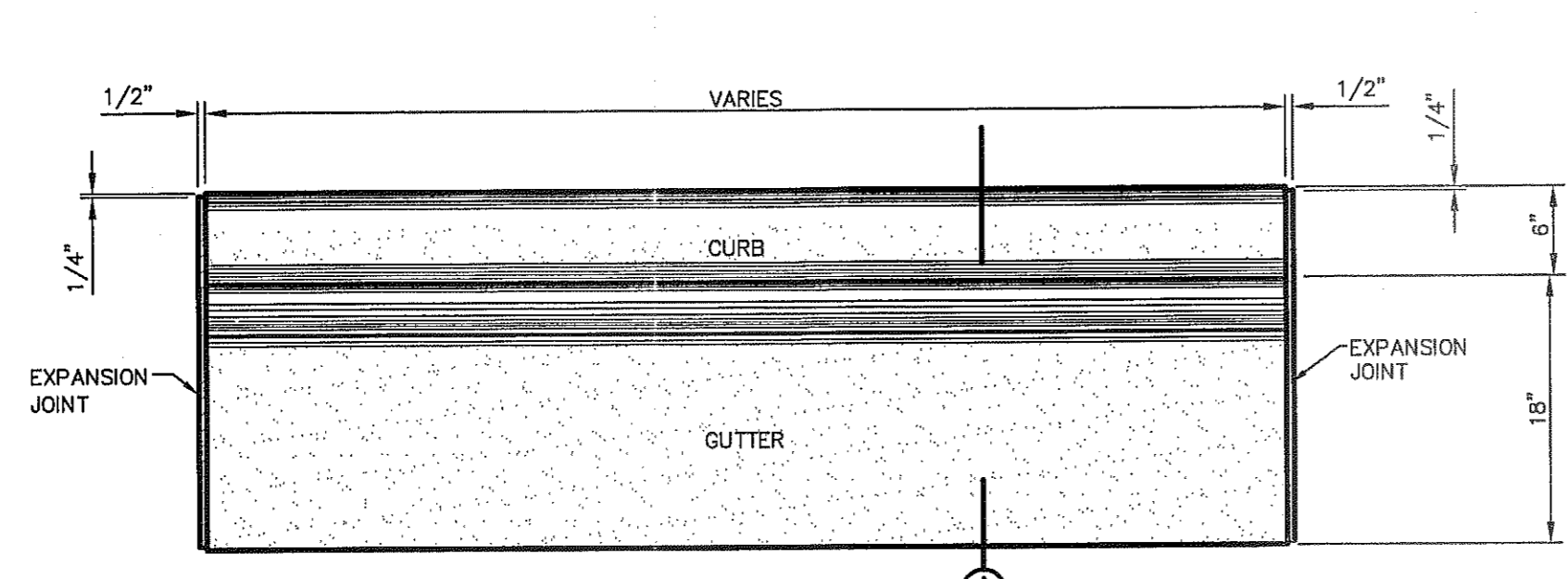


- NOTES:**
- EXPANSION JOINT FILLER SHALL BE 1/2" BITUMINOUS TYPE PREFORMED JOINT FILLER (AASHTO M-33)
 - EXPANSION JOINTS SHALL BE SPACED AT 20'-0" MAX.
 - WHEREVER SIDEWALK ABUTS ROCK OR MASONRY STRUCTURES SUCH AS CURBS OR BUILDINGS, EXPANSION JOINTS FILLER SHALL BE PLACED IN ACCORDANCE WITH STANDARD SPECIFICATIONS.

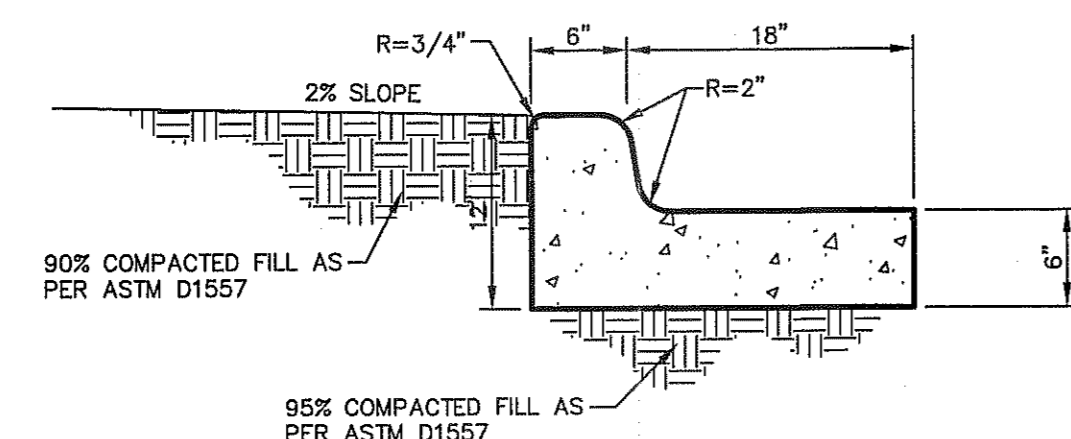
EXPANSION JOINT SECTION
SCALE: N.T.S.

SIDEWALK NOTES:

- CONCRETE SIDEWALK SHALL BE 3,000 P.S.I.
- DUMMY JOINTS REQUIRED AT 5' O.C.
- EXPANSION JOINTS SHALL BE AT 20' O.C. MAXIMUM, USE 1/2" PREMOLDED BITUMINOUS EXPANSION JOINTS (AASHTO M-33)
- EXPANSION JOINT FILLER SHALL BE PLACED WHEREVER SIDEWALK ABUTS ROCK OR MASONRY STRUCTURES SUCH AS CURBS OR BUILDINGS
- SUBGRADE TO BE COMPACTED TO 95% AS PER ASTM D1557
- REINFORCEMENT (6X6-10/10 W.W.F.) SHALL BE PLACED WHEREVER SIDEWALK ABUTS A PEDESTRIAN WALKWAY AND/OR PARK.
- * SIDEWALK SHALL BE SEVEN (7) FEET WHEN ABUTTING PARKS. IT SHALL ALSO BE 4" CONCRETE REINFORCED WITH 6X6-10/10 W.W.F.



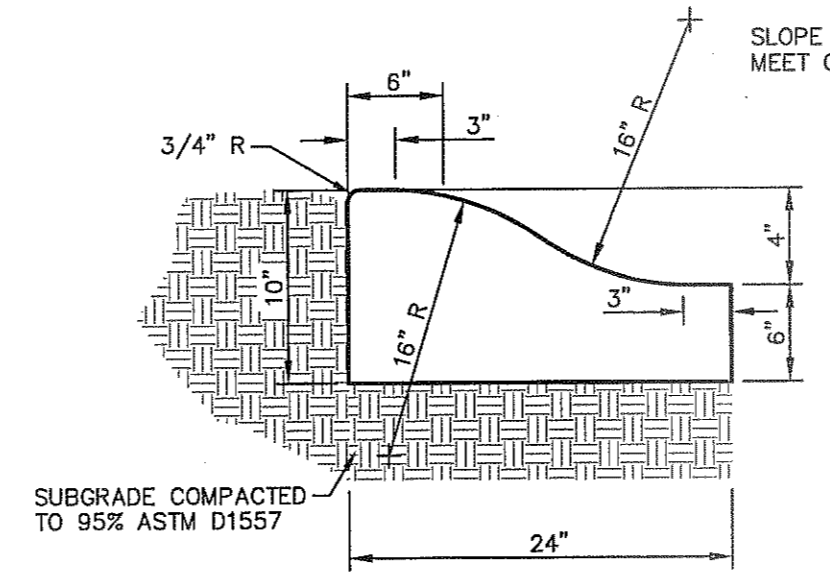
PLAN



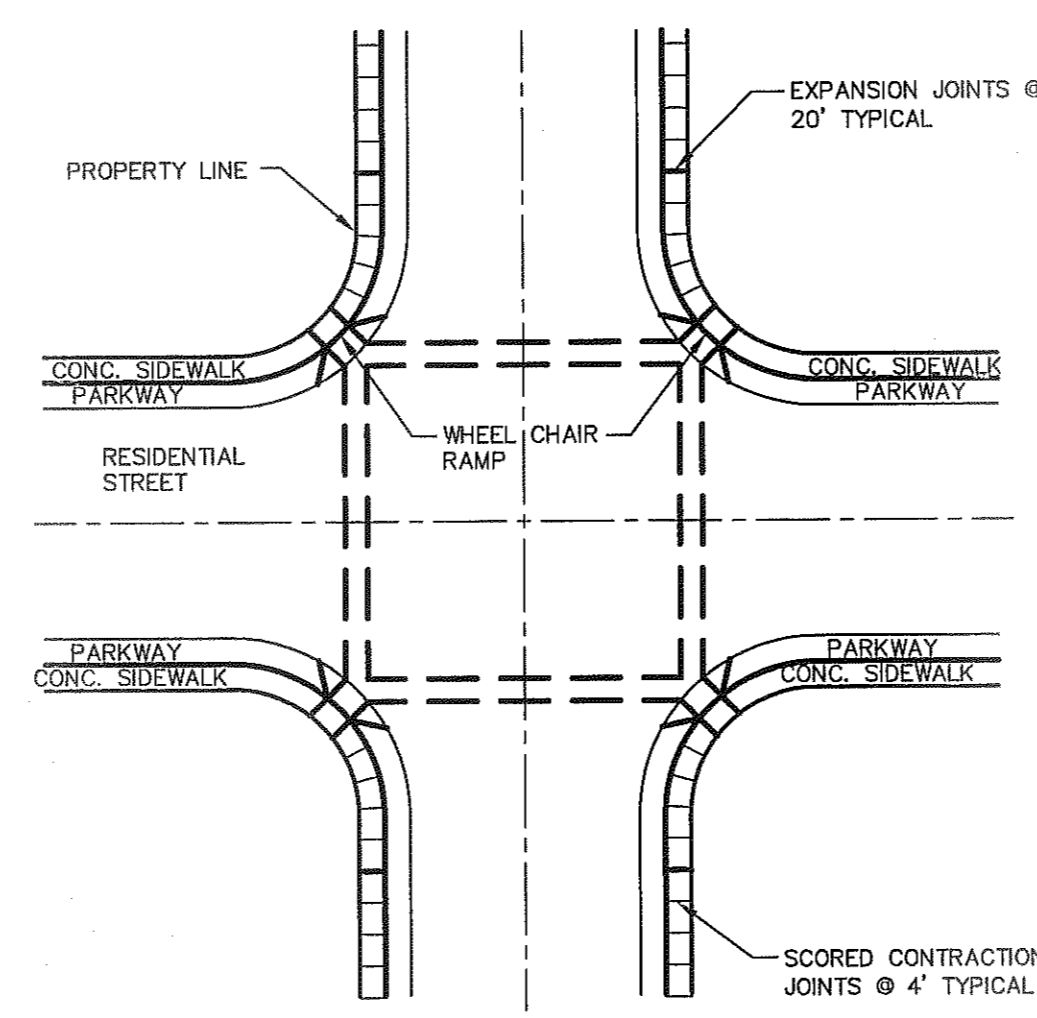
SECTION

- NOTES:**
- CONCRETE SHALL BE 3,000 P.S.I. MIN.
 - DUMMY JOINT REQUIRED AT 10' O.C. FOR CURB & GUTTER, AND 5' O.C. FOR SIDEWALK
 - EXPANSION MATERIAL REQUIRED AT CURB RETURNS AND AT 20' ON CENTER FOR SIDEWALKS WITH 1/2" PREMOLDED ASPHALT IMPREGNATED EXPANSION MATERIAL OR EQUAL
 - EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING FOR CURBS.

2 CURB & GUTTER DETAIL
SCALE: 1"=1'-0"

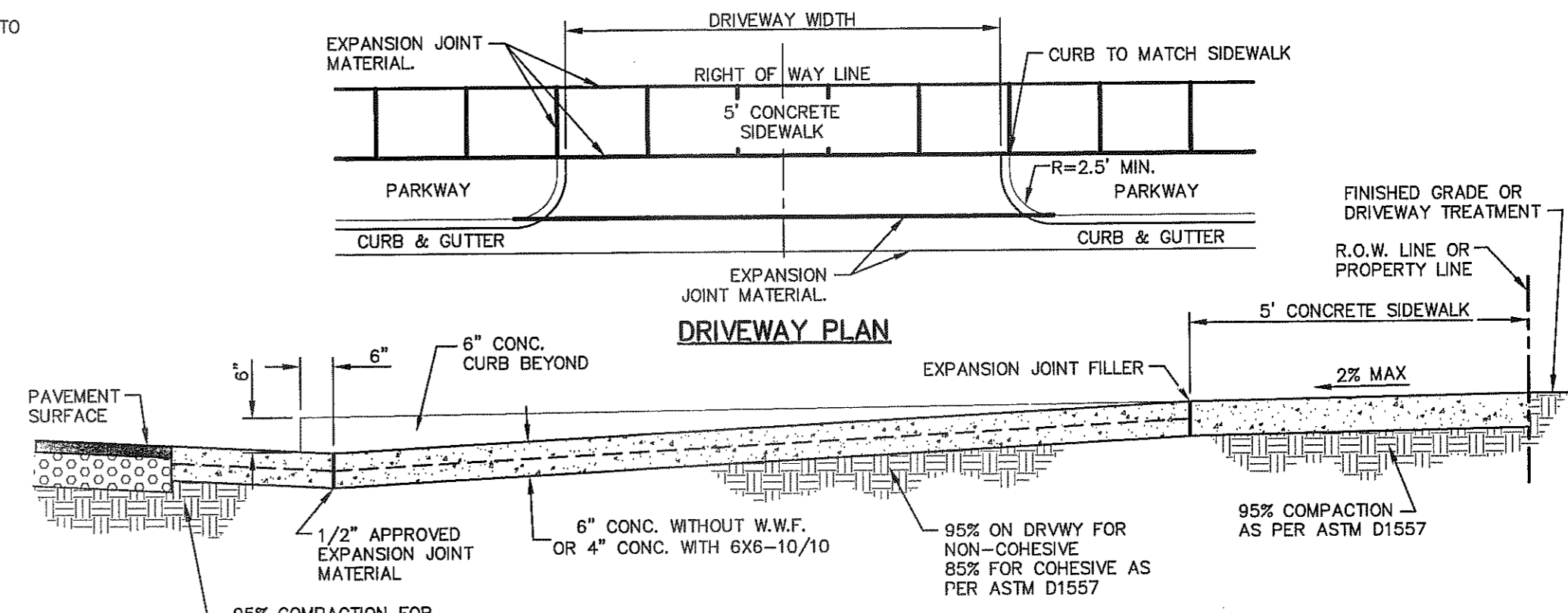


3 4" CONCRETE ROLLED CURB DETAIL
SCALE: 1"=1'-0"

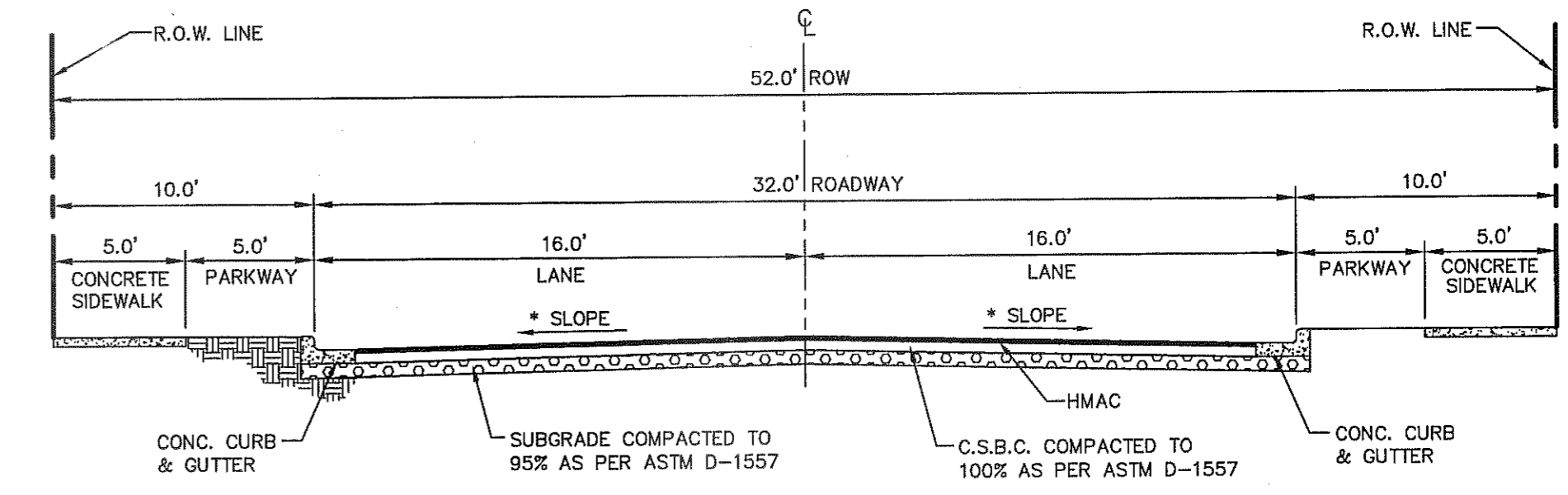


- NOTES:**
- RAMPS MAY BE PLACED AS SUGGESTED, HOWEVER EXISTING LIGHT POLES, FIREHYDRANTS, DROP INLETS, ETC., MAY AFFECT PLACEMENT.
 - THE CONCRETE SURFACE SHALL HAVE A ROUGH, NONSKID TYPE FINISH.
 - CONSTRUCTION METHODS SHALL CONFORM WITH THE CITY OF EL PASO SPECIFICATIONS.
 - ALL PARKING AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH CURRENT CITY OF EL PASO STANDARDS.

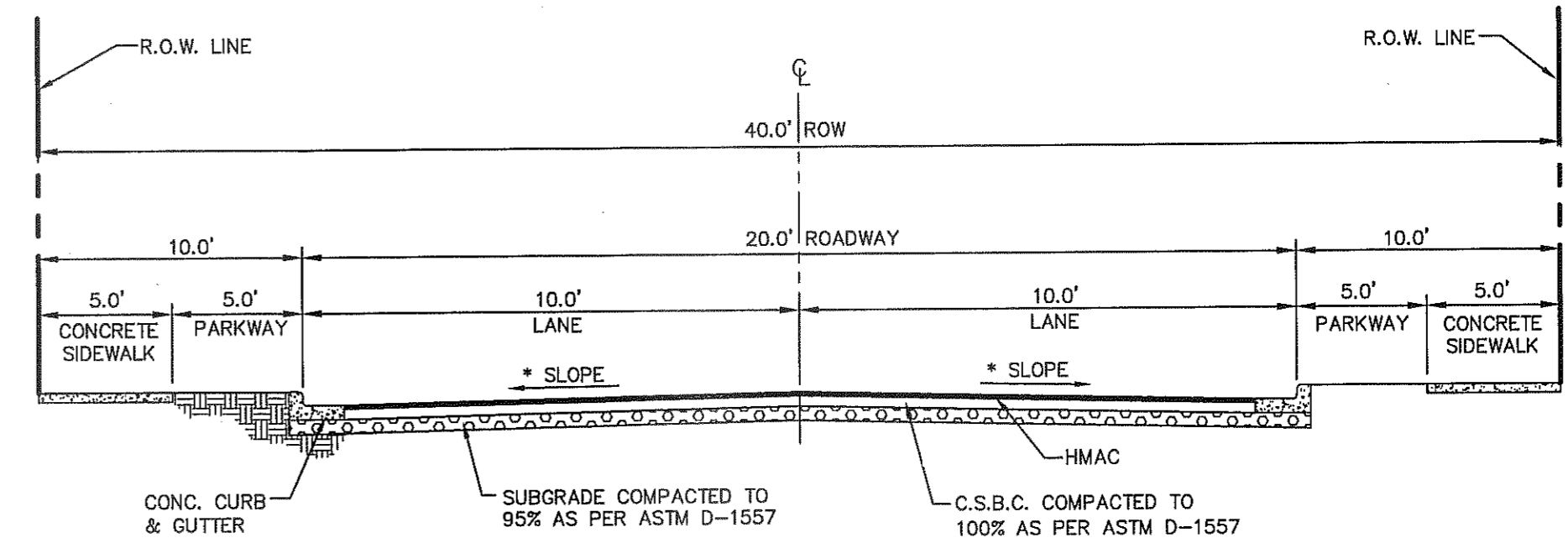
7 WHEELCHAIR RAMP STREET PLAN
SCALE: 1" = 30'-0"



4 TYPICAL DRIVEWAY DETAIL
SCALE: N.T.S.



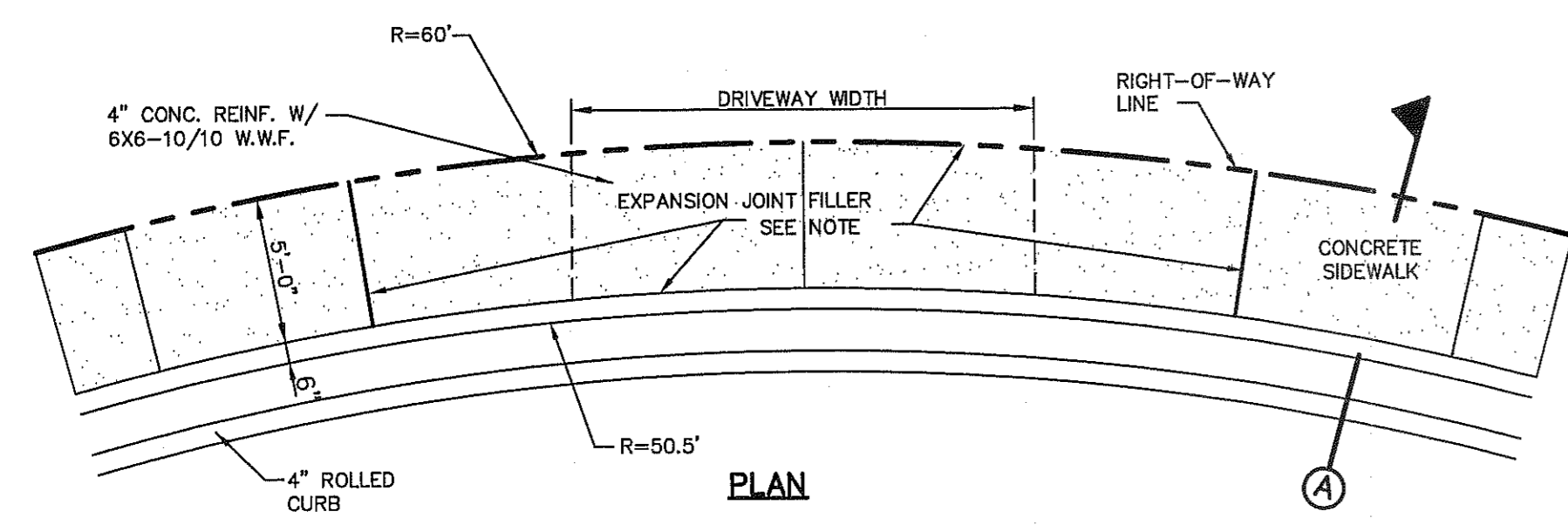
9 TYPICAL 52' ROW STREET SECTION DETAIL
SCALE: N.T.S.



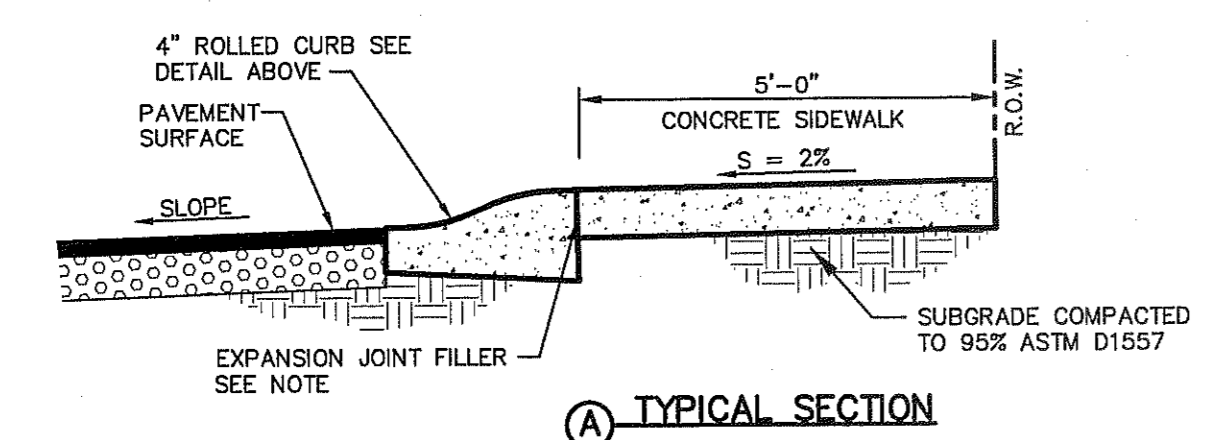
10 TYPICAL 40' ROW STREET SECTION DETAIL
SCALE: N.T.S.

STREETS NOTES:

- (*) STREET TRANSVERSE SLOPE AS SHOWN IN PLANS.
- SIDEWALK WIDTH IS REQUIRED TO COMPLY WITH ADA/TAS REGULATIONS.
- STREET IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH CURRENT CITY OF EL PASO PAVING CONSTRUCTION DETAILS AND STANDARD SPECIFICATIONS; CBR @ EVERY 500' RESULTS TO BE SUBMITTED TO THE CITY OF EL PASO FOR REVIEW AND APPROVAL PRIOR TO PLACEMENT OF PAVEMENT.



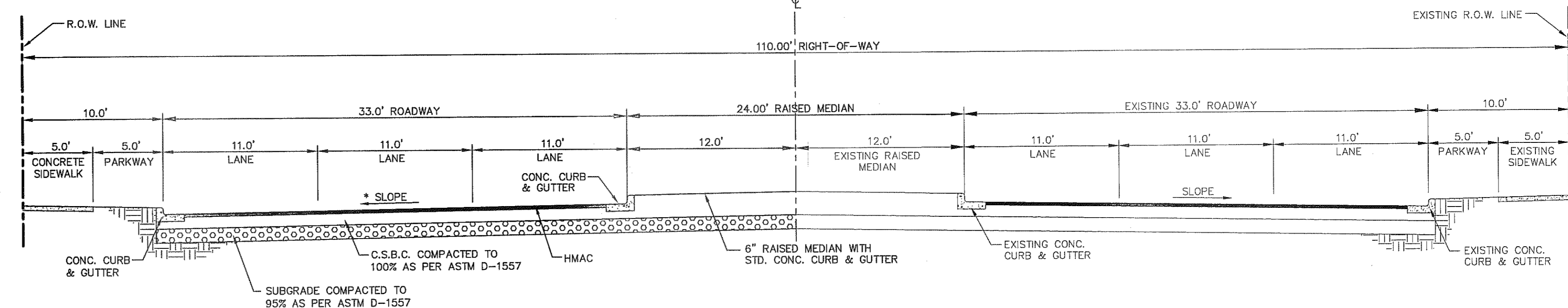
PLAN



TYPICAL SECTION

NOTE: EXPANSION JOINT FILLER SHALL CONSIST OF 1/2" BITUMINOUS TYPE PREFORMED (AASHTO M-33)

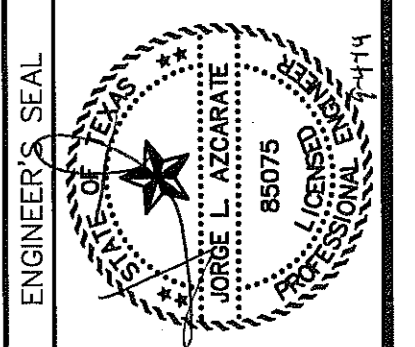
8 HEEL (60' R) DRIVEWAY DETAIL
SCALE: N.T.S.



11 TYPICAL 110' R.O.W. MAJOR ARTERIAL STREET SECTION DETAIL
SCALE: N.T.S.

REFERENCES - BENCHMARKS	BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.92 (CITY DATUM).	
DATE	REVISIONS
	BY

CSA
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-454
4712 Woodrow Bean, Ste. F El Paso, TX 79924
Office: 915.544.5292 Fax: 915.544.5233 www.csaengr.com



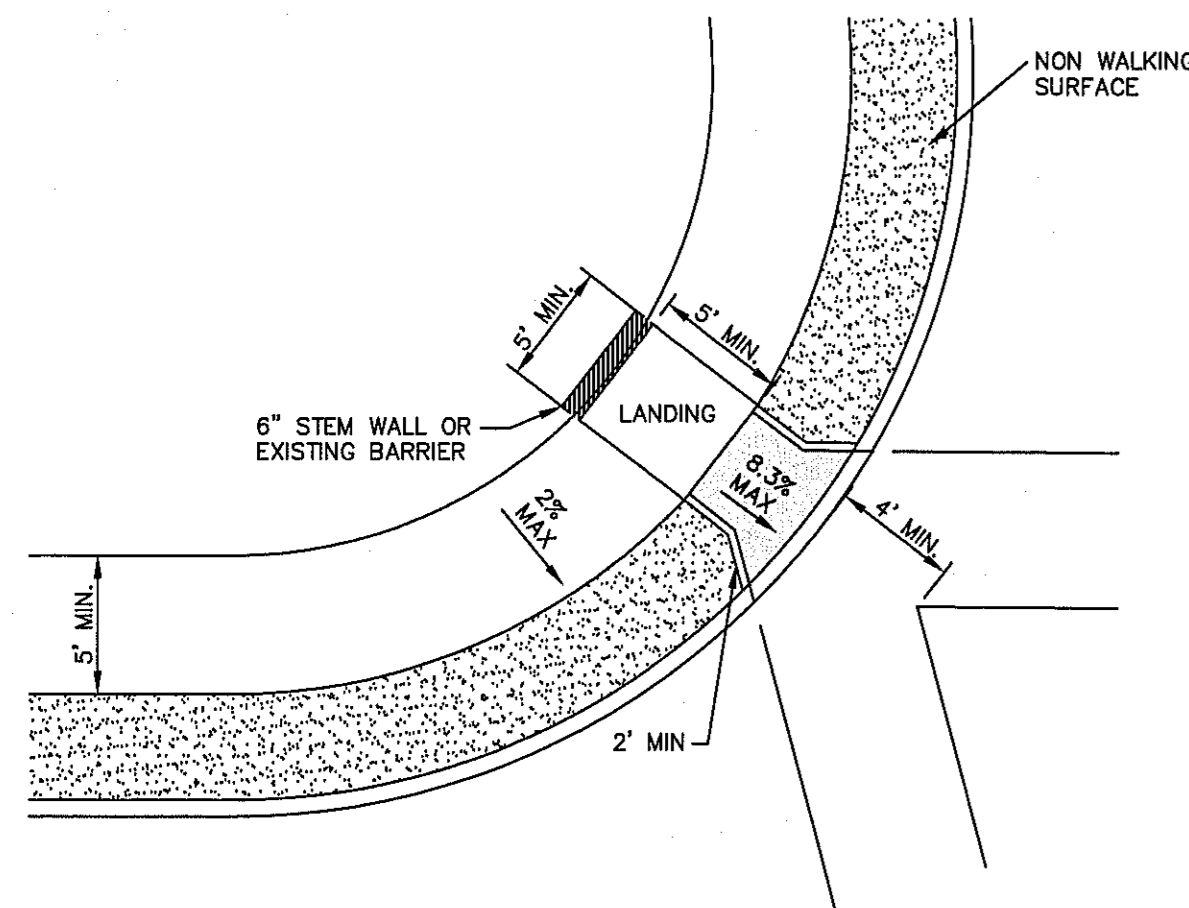
SCALE	Horizontal: N/A	Vertical: N/A
Contour Interval:	N/A	
DATE:	AUGUST 2014	
DESIGN BY:	J.M.	J.M.
DRAWN BY:	J.L.A.	J.L.A.
CHKD. BY:	J.L.A.	J.L.A.
APPVD. BY:	J.L.A.	J.L.A.
JOB No.	2260-018-LD	

PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

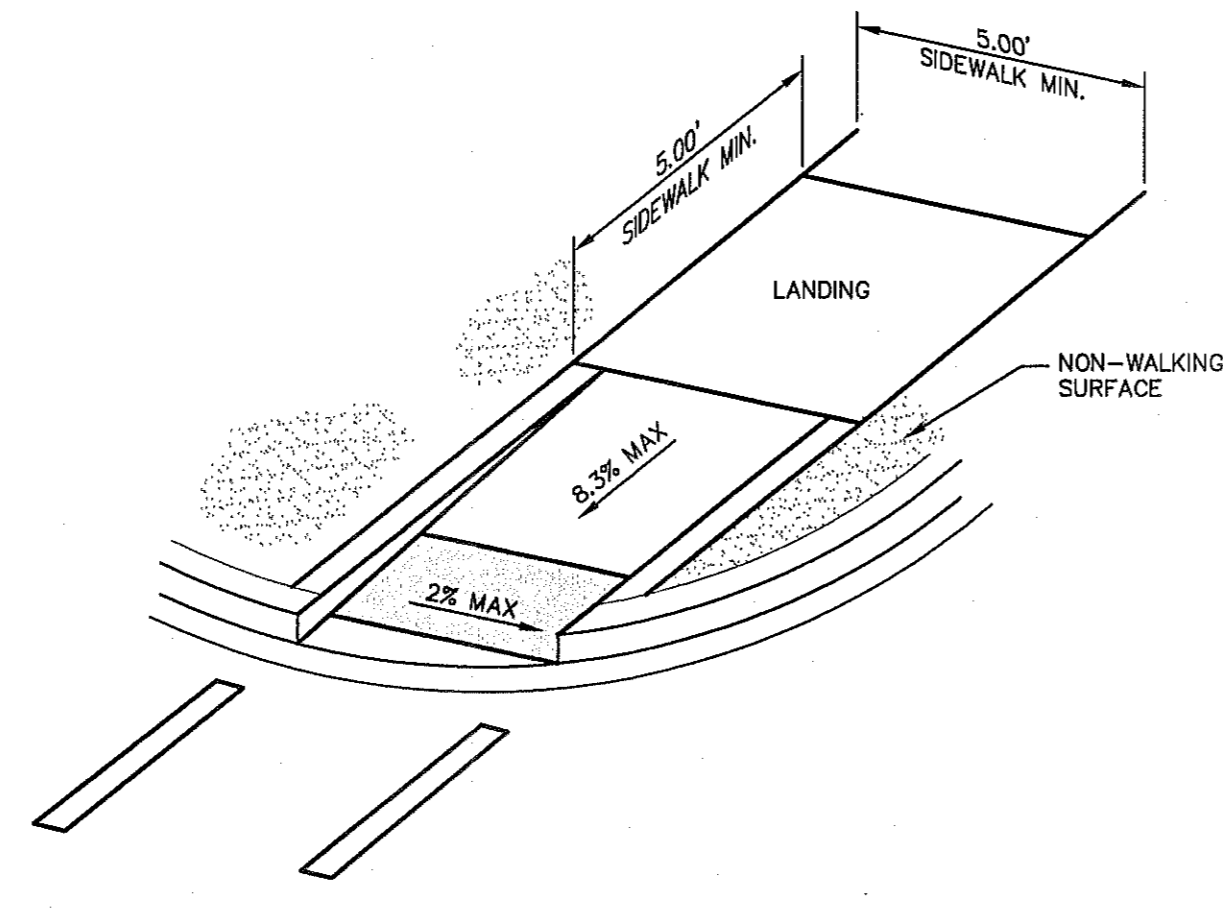
SHEET TITLE
**STANDARD
DETAILS**
(SHEET 1 OF 3)
SHEET NO.

C8.1

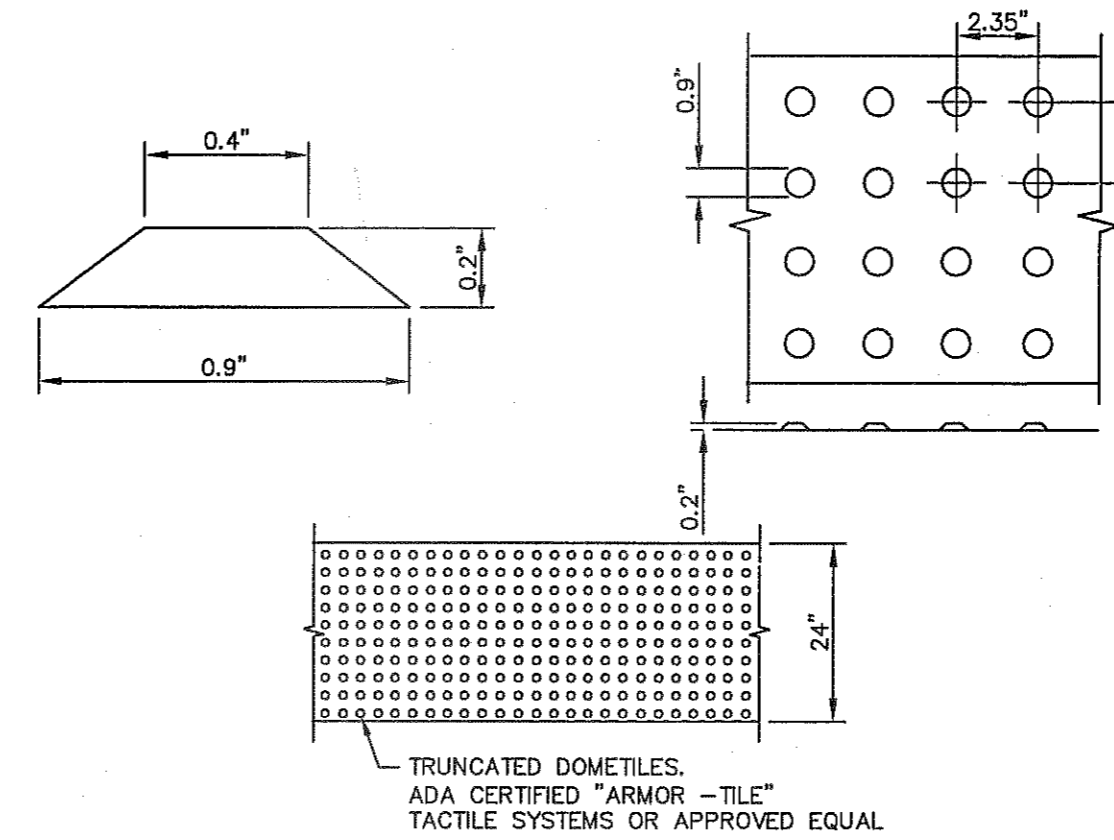
S:\2260\2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C8.1-C8.3-Standard Details.dwg, Layout1, 8/19/2014 10:12:41 AM



1 DIAGONAL CURB RAMP (RETURNED CURB) (TYPE VI)
SCALE: N.T.S.



2 DIRECTIONAL RAMP WITHIN RADIUS (TYPE IV)
SCALE: N.T.S.

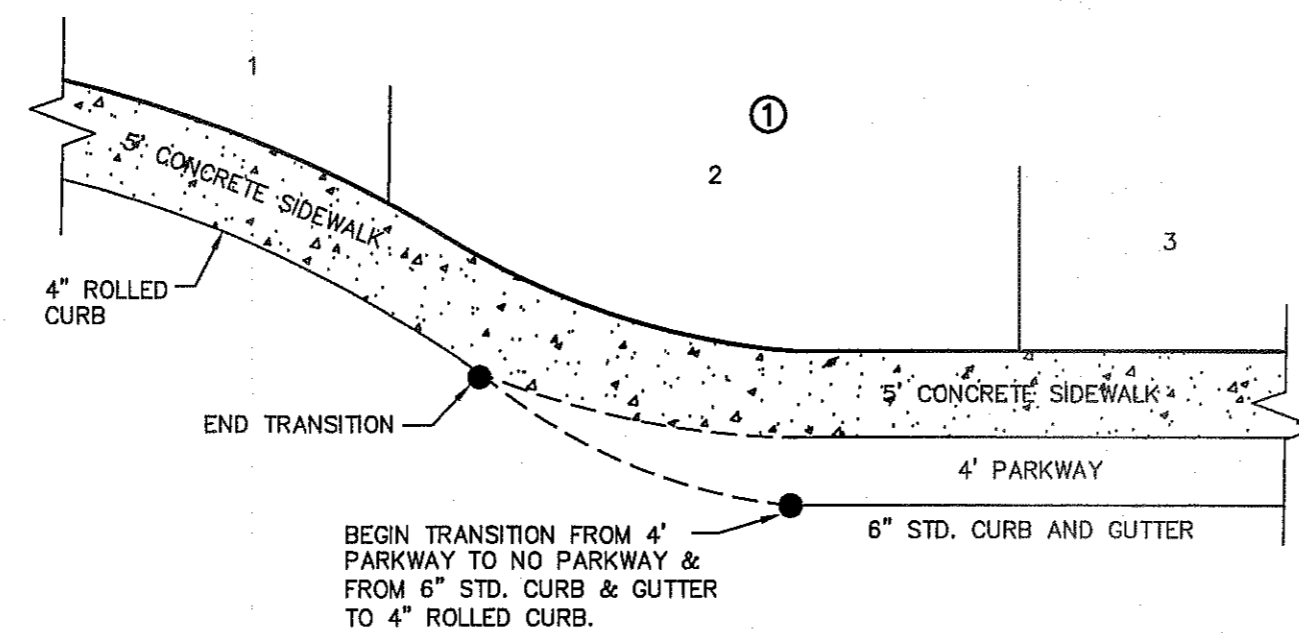


DOME SIZE AND SPACING. TRUNCATED DOMES SHALL HAVE A DIAMETER OF NOMINAL 0.9 INCHES (23 mm) AT THE BOTTOM, A DIAMETER OF 0.4 INCH (10 mm) AT THE TOP, A HEIGHT OF NOMINAL 0.2 INCHES (5 mm), AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 mm) MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.

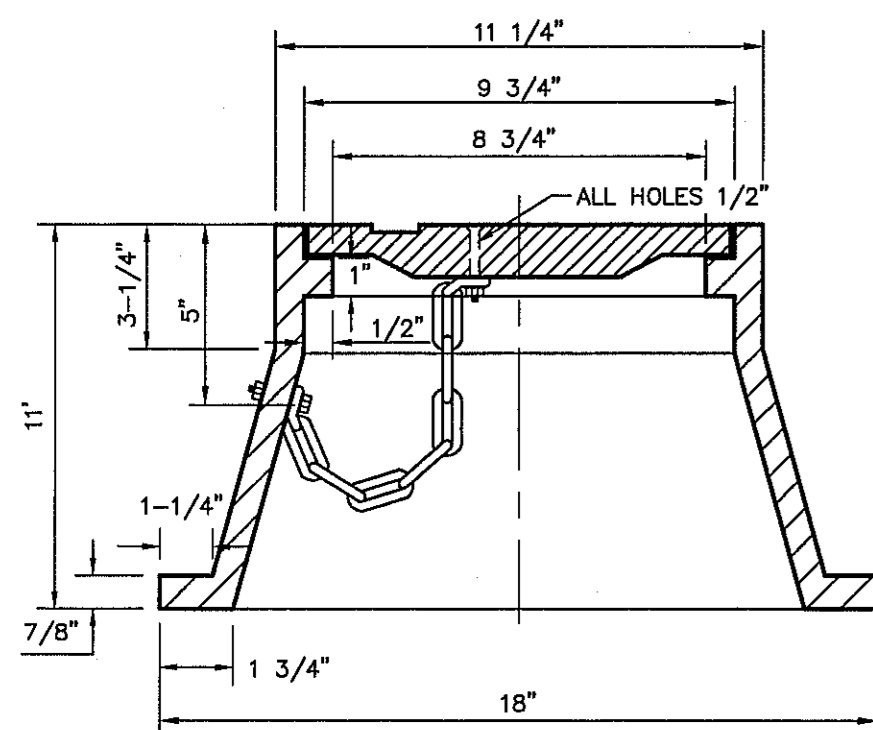
DOME ALIGNMENT. DOMES SHALL BE ALIGNED ON A SQUARE GRID IN THE PREDOMINANT DIRECTION OF TRAVEL TO PERMIT WHEELS TO ROLL BETWEEN DOMES. DETECTABLE WARNING SURFACES SHALL EXTEND 24 INCHES (610 mm) MINIMUM IN THE DIRECTION OF TRAVEL AND THE FULL WIDTH OF THE CURB RAMP, LANDING, OR BLENDED TRANSITION.

CONTRAST. THERE SHALL BE A MINIMUM OF 70 PERCENT CONTRAST IN LIGHT REFLECTANCE BETWEEN THE DETECTABLE WARNING AND AN ADJOINING SURFACE, OR THE DETECTABLE WARNING SHALL BE "RED BRICK" COLOR, UNLESS OTHERWISE DIRECTED BY THE OWNER. THE MATERIAL USED TO PROVIDE VISUAL CONTRAST SHALL BE AN INTEGRAL PART OF THE DETECTABLE WARNING SURFACE. CONTRAST SHALL BE PROVIDED BY PLACING AND MIXING TINT IN THE PLASTIC CONCRETE USED FOR THE DETECTABLE WARNING SURFACE. NO PAINTING OF SURFACE SHALL BE PERMITTED.

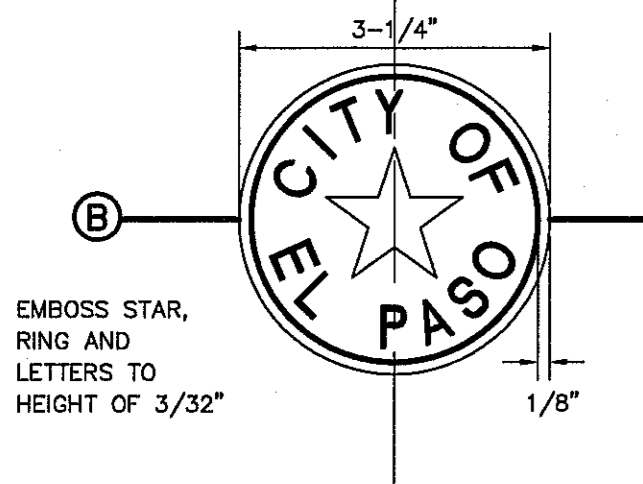
4 TRUNCATED DOME SIZE AND SPACING
SCALE: N.T.S.



3 TYPICAL HEEL/CUL-DE-SAC SIDEWALK TRANSITION
SCALE: N.T.S.

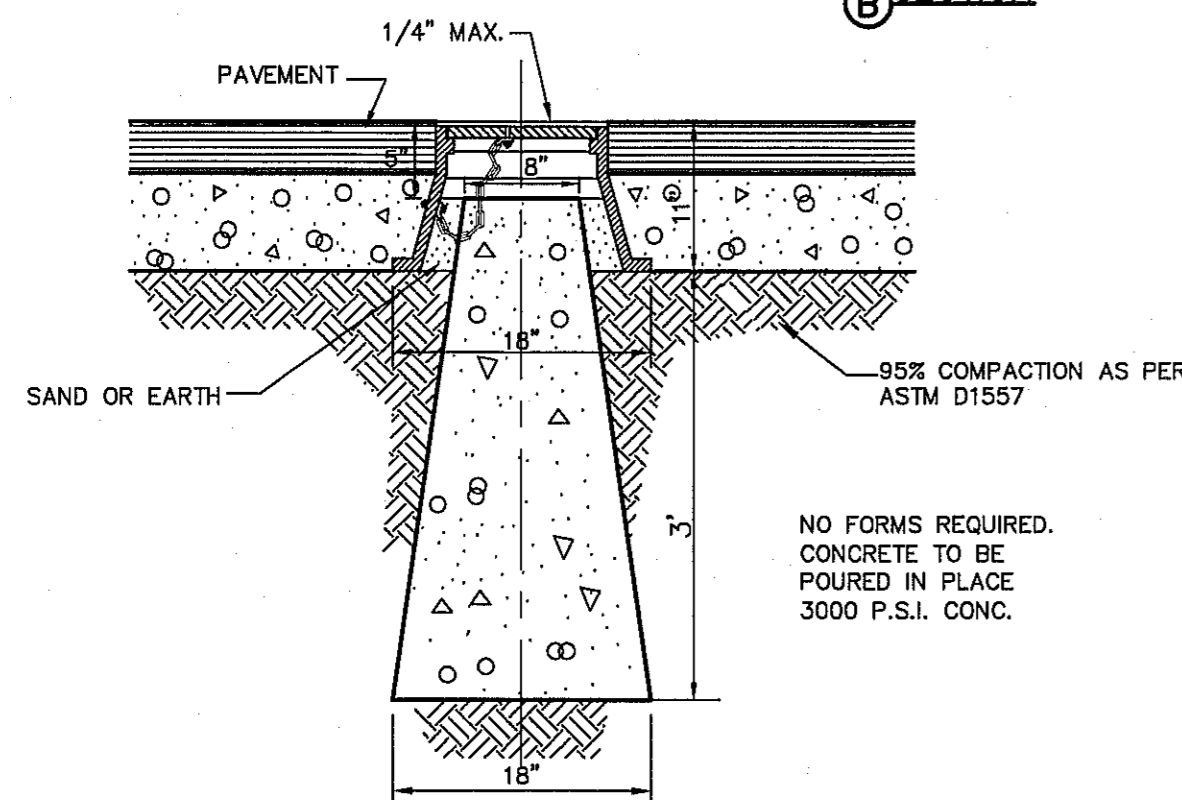


FRAME SECTION

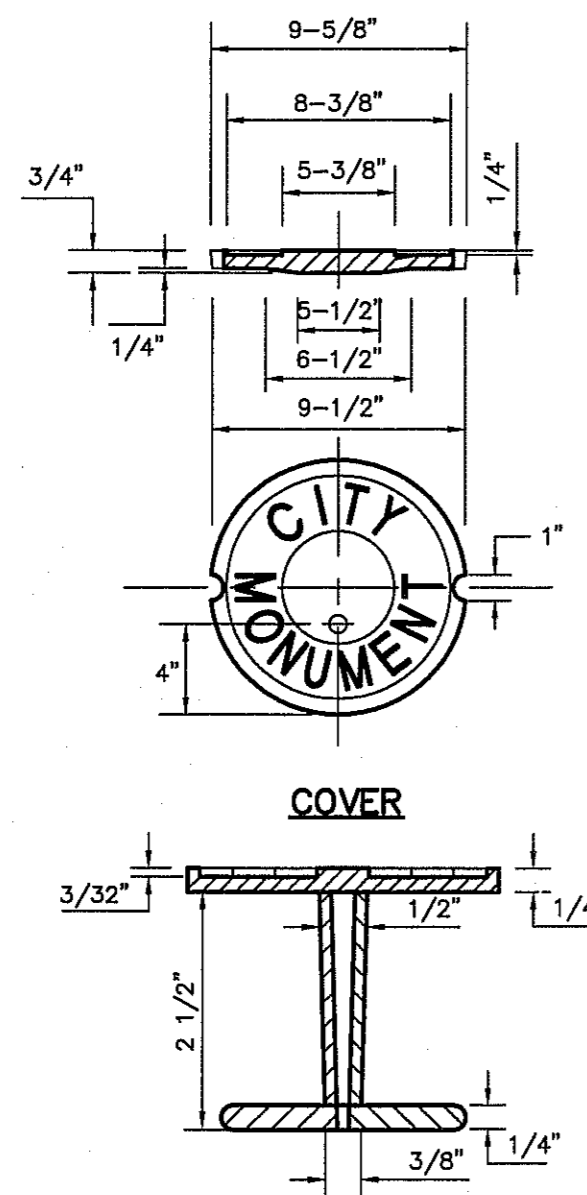


BRONZE MONUMENT CAP

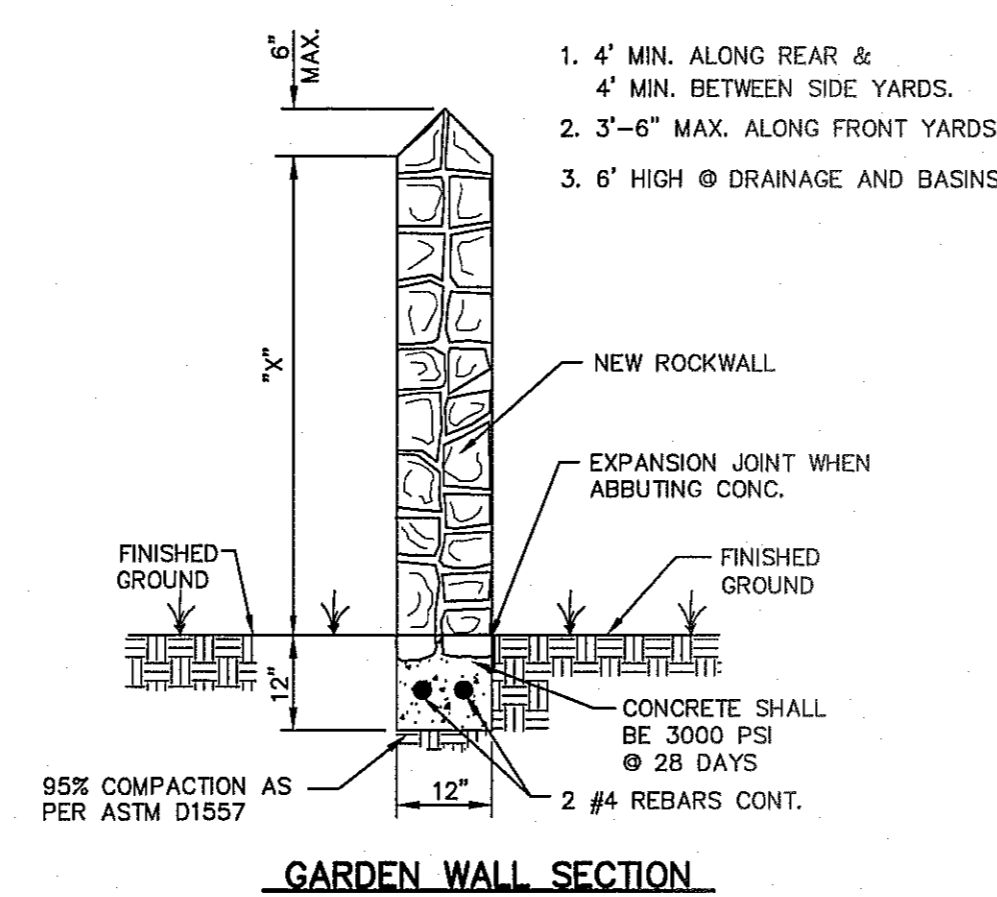
OUTSIDE RADIUS OF STAR = 3/4"
INSIDE RADIUS OF STAR = 3/16"



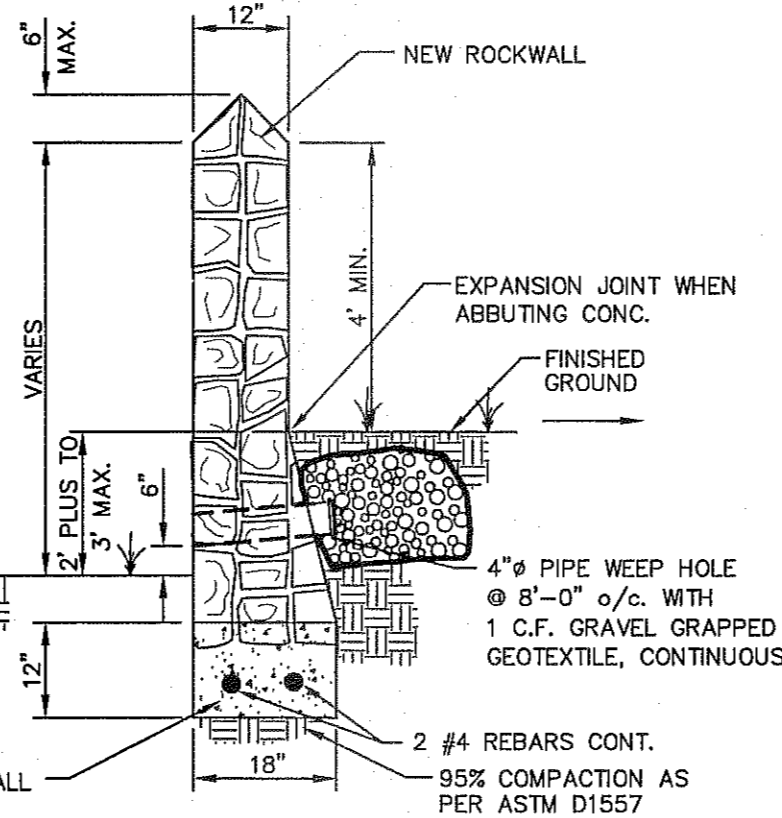
5 CITY SURVEY MONUMENT DETAILS
SCALE: N.T.S.



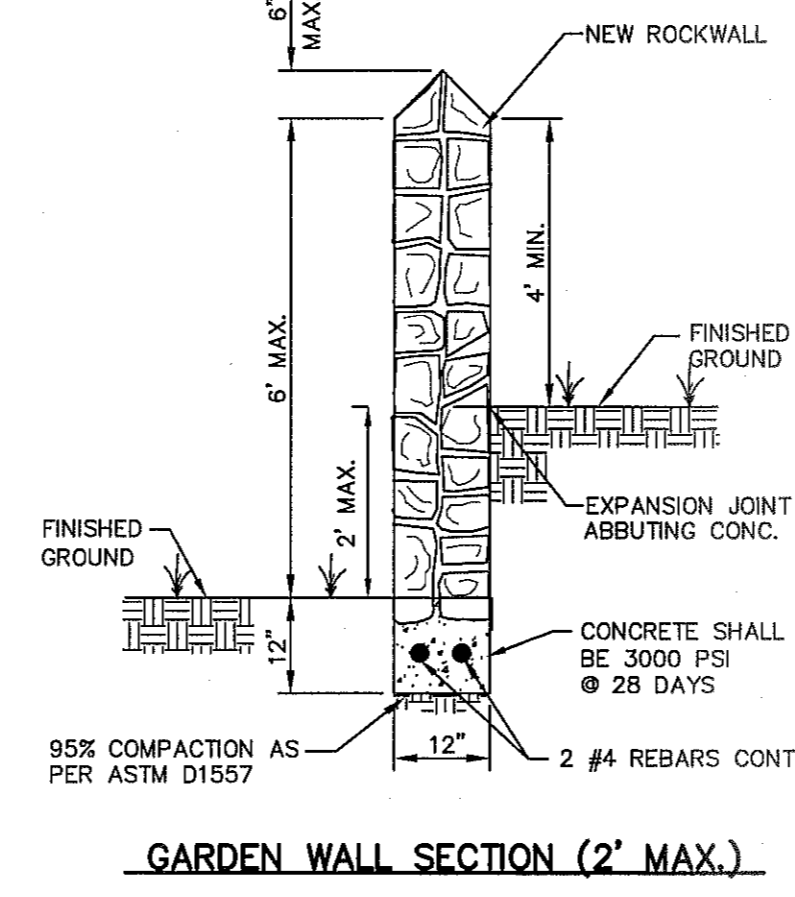
SECTION



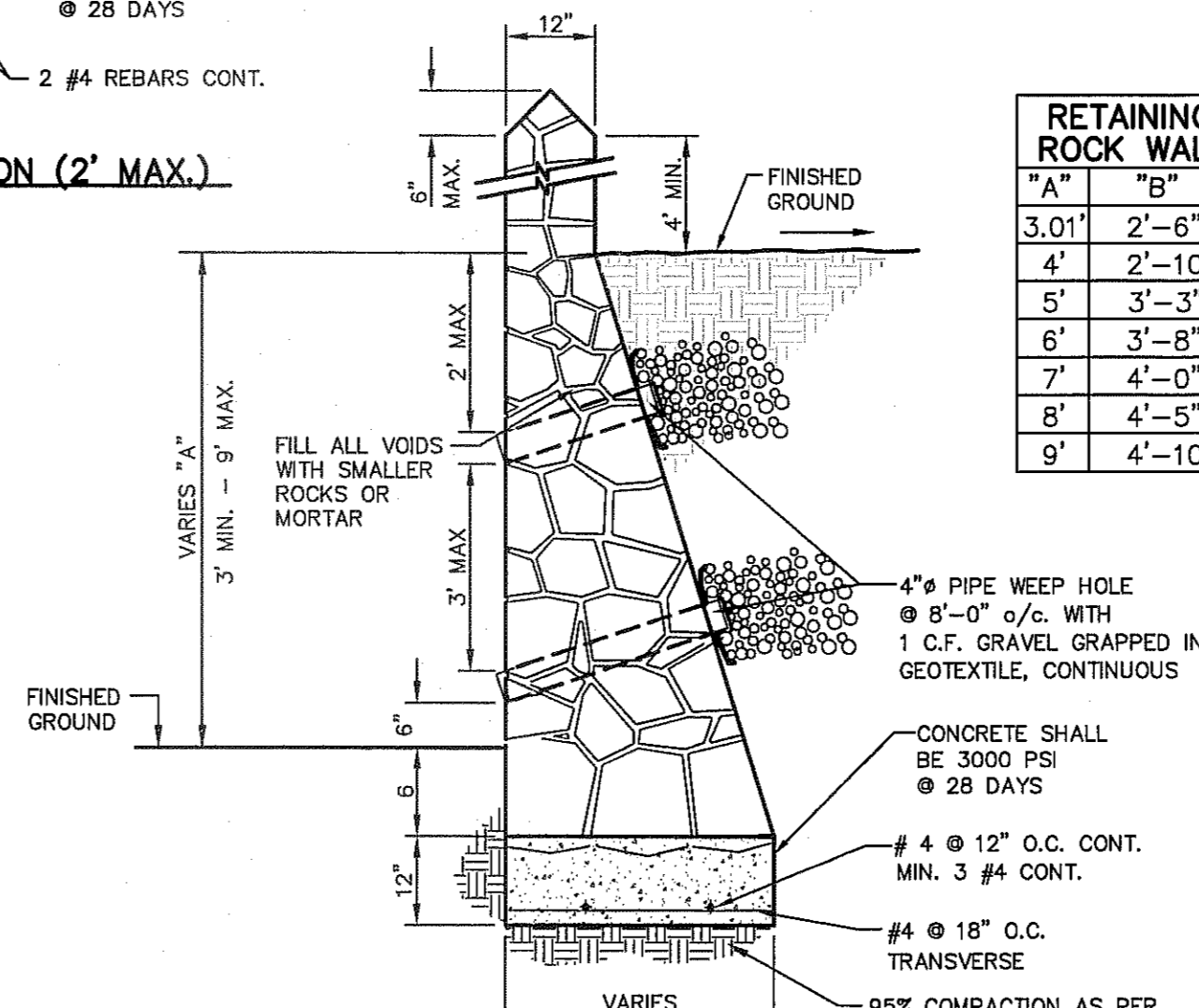
GARDEN WALL SECTION



RETAINING WALL SECTION (2' PLUS TO 3' MAX.)



GARDEN WALL SECTION (2' MAX.)



RETAINING WALL SECTION (3' MIN. TO 9' MAX.)

RETAINING ROCK WALL	"A"	"B"
3.01'	2'-6"	
4'	2'-10"	
5'	3'-3"	
6'	3'-8"	
7'	4'-0"	
8'	4'-5"	
9'	4'-10"	

RETAINING WALL NOTES

- STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTIONS AS IN PRACTICABLE. THE STONE SHALL BE DENSE AND RESISTANT OF AIR AND WATER.
- MORTAR MUST BE TYPE "S" 1800 P.S.I. AS PER ASTM C270.
- MASONRY WALL OVER SIX (6) FEET IN HEIGHT AND THOSE USED FOR EARTH RETENTION OVER TWO (2) FEET MUST BE DESIGNED AS STRUCTURAL WALLS.
- WALLS ADJACENT TO PONDING AREAS OR DRAINAGE DITCHES MAY BE CONSTRUCTED OF BRICK, ROCK, STONE, OR CONCRETE BLOCK AND SHALL NOT BE LESS THAN SIX (6) FEET HIGH.
- ROCKWALL MORTAR JOINTS MUST NOT EXCEED TWO (2) INCHES.
- PROVIDE ONE (1) INCH EXPANSION JOINTS AT EVERY 100 FEET.
- ALL STONE SHALL BE THOROUGHLY SOAKED BEFORE BEING PLACED.
- ALL STONE FOR ROCKWALLS SHALL BE FRACTURED QUARRIED ROCK OR ROUND ROCK, NO RIVER ROCK SHALL BE ALLOWED.
- REINFORCING STEEL SHALL BE ASTM A615 GRADE 40.
- ALLOWABLE SOIL BEARING PRESSURE = 2,500 PSI (MINIMUM).
- BACKFILL MATERIALS SHALL CONSIST OF COARSE GRAINED, WELL-DRAINED SOILS (WITH NO CLAY CONTENT).
- WHENEVER THE RETAINING HEIGHT OF A ROCKWALL/RETAINING WALL EXCEEDS FOUR (4) FEET OR MORE, THE DEVELOPER SHALL BUILD THE RETAINING PORTION OF THE WALL (INCLUDING NECESSARY REINFORCED CONCRETE FOOTING) TO HIGHEST FINISHED GROUND. THE BUILDER SHALL FINISH CONSTRUCTING THE REMAINING OF THE STEM WALL.
- WHENEVER PLANS SPECIFY A WROUGHT IRON FENCE, REFER TO DETAIL A.

6 TYPICAL ROCKWALL DETAILS
SCALE: N.T.S.

GENERAL NOTES:

- IMPROVEMENTS SHALL COMPLY WITH AMERICANS WITH DISABILITY ACT (ADA) AND TEXAS DEPARTMENT OF LICENSING AND REGULATION (TDLR) STANDARDS.
- ALL SLOPES ARE MAXIMUM ALLOWABLE. THE LEAST POSSIBLE SLOPE THAT WILL STILL DRAIN PROPERLY SHOULD BE USED. RAMP LENGTH OR GRADE OF APPROACH SIDEWALKS MAY BE ADJUSTED AS DIRECTED BY THE ENGINEER.
- THE MINIMUM SIDEWALK WIDTH IS FOUR (4') FEET. WHERE A FIVE (5') FEET SIDEWALK CAN NOT BE PROVIDED DUE TO SITE CONSTRAINTS, A MINIMUM THREE (3') FEET SIDEWALK WITH 5'x5' PASSING SPACE AREAS ARE REQUIRED TO BE LOCATED AT REASONABLE INTERVALS NOT TO EXCEED TWO-HUNDRED (200') FEET.
- LANDINGS SHALL BE 5'x5' MINIMUM WITH A MAXIMUM TWO (2%) PERCENT SLOPE IN ANY DIRECTION.
- MANEUVERING SPACE AT THE BOTTOM OF CURB RAMP SHALL BE A MINIMUM OF 4'x4' WHOLLY CONTAINED WITHIN THE CROSSWALK AND WHOLLY OUTSIDE THE PARALLEL VEHICULAR TRAVEL PATH.
- CURB RAMP WITH RETURNED CURBS MAY BE USED ONLY WHERE PEDESTRIANS WOULD NOT NORMALLY WALK ACROSS THE RAMP. OTHERWISE, FLARED SIDES SHALL BE PROVIDED WITH A MAXIMUM 100(H):1(V) SLOPE. IF THE LANDING DEPTH IS LESS THAN FOUR (4') FEET, THEN THE SLOPE OF THE FLARED SIDE SHALL NOT EXCEED 12(H):1(V) SLOPE.
- ALL CONCRETE SIDEWALK SURFACES SHALL RECEIVE A LIGHT BROOM FINISH UNLESS NOTED OTHERWISE IN THE PLANS.
- RAMP TEXTURES MUST CONSIST OF TRUNCATED DOMED SURFACES. TEXTURES ARE REQUIRED TO BE DETECTABLE UNDERFOOT. SURFACES THAT WOULD ALLOW WATER TO ACCUMULATE ARE PROHIBITED. REFER TO TRUNCATED DOME DETAIL.
- CROSSWALK DIMENSIONS, CROSSWALK MARKINGS AND STOP BAR LOCATIONS SHALL BE AS SHOWN ELSEWHERE IN THE PLANS. AT INTERSECTIONS WHERE CROSSWALK MARKINGS ARE NOT REQUIRED, RAMP MARKINGS SHALL BE ALIGNED WITH THEORETICAL CROSSWALKS, OR AS DIRECTED BY THE ENGINEER.
- ACCESSIBLE ROUTES WITH A RUNNING SLOPE GREATER THAN FIVE (5%) PERCENT IS A RAMP AND SHALL COMPLY WITH TDLR 4.8 - RAMP. MAXIMUM ALLOWABLE CROSS SLOPE ON SIDEWALK AND RAMP SURFACES IS TWO (2%) PERCENT.
- ADDITIONAL INFORMATION ON CURB RAMP LOCATION, DESIGN, LIGHT REFLECTIVE VALUE AND TEXTURE MAY BE FOUND IN THE CURRENT EDITION OF THE TEXAS ACCESSIBILITY STANDARDS (TAS) PREPARED AND ADMINISTERED BY TDLR.

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

DATE	REVISIONS	BY

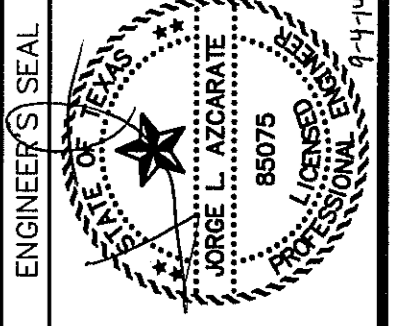
CSA

engineers • architects • planners

TEXAS REGISTERED ENGINEERING FIRM F-4664

4712 Woodrow Blinn, Ste. F, El Paso, TX 79924

Office: 915.544.5232 Fax: 915.544.5233 www.csaeng.com



SCALE:

Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	AUGUST 2014
DESIGN BY:	J.M.
DRAWN BY:	J.L.A.
CHKD. BY:	J.L.A.
APP'D. BY:	J.L.A.

JOB No. 2260-018-LD

PROJECT TITLE

VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

SHEET TITLE

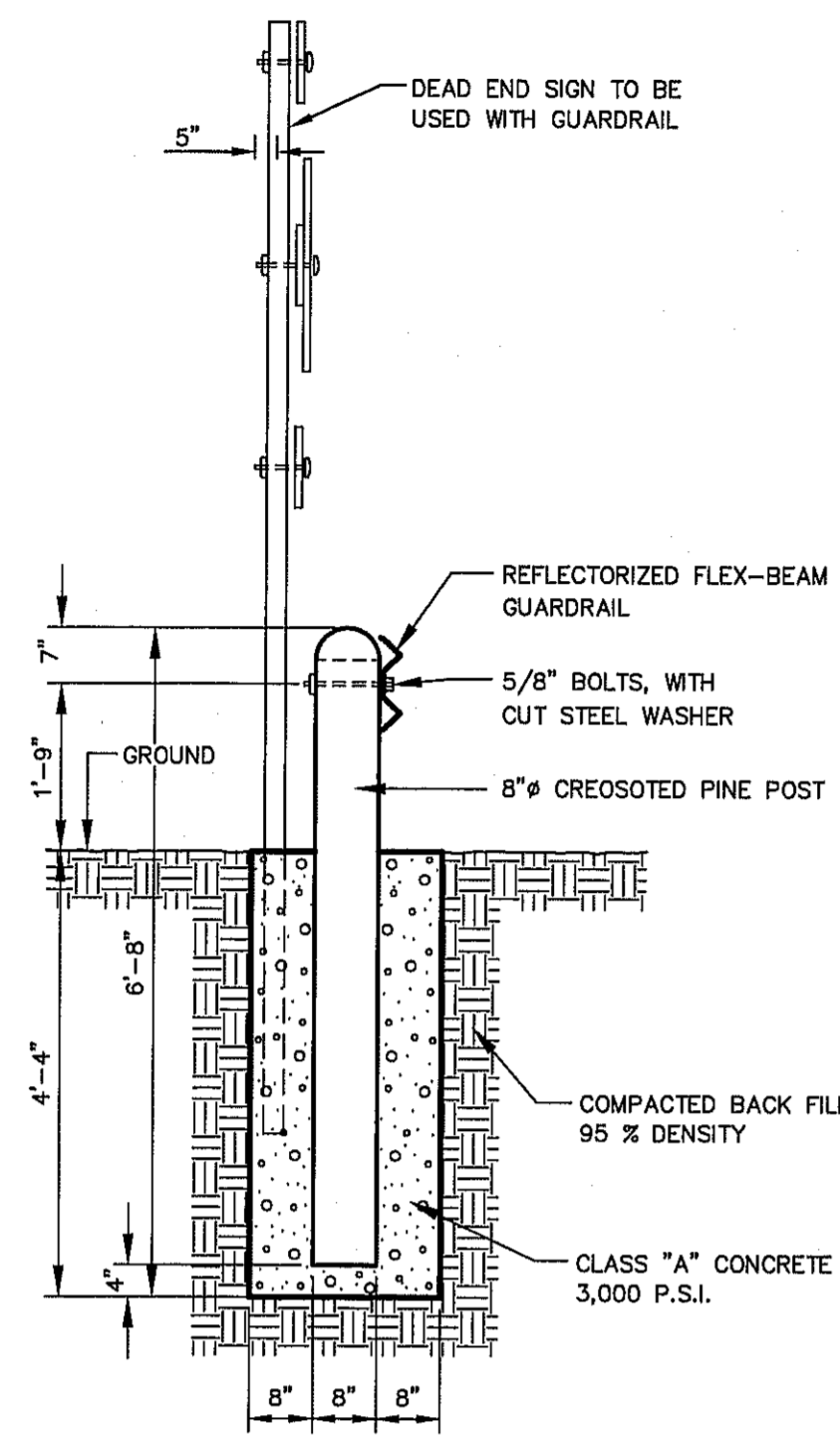
STANDARD
DETAILS

(SHEET 2 OF 3)

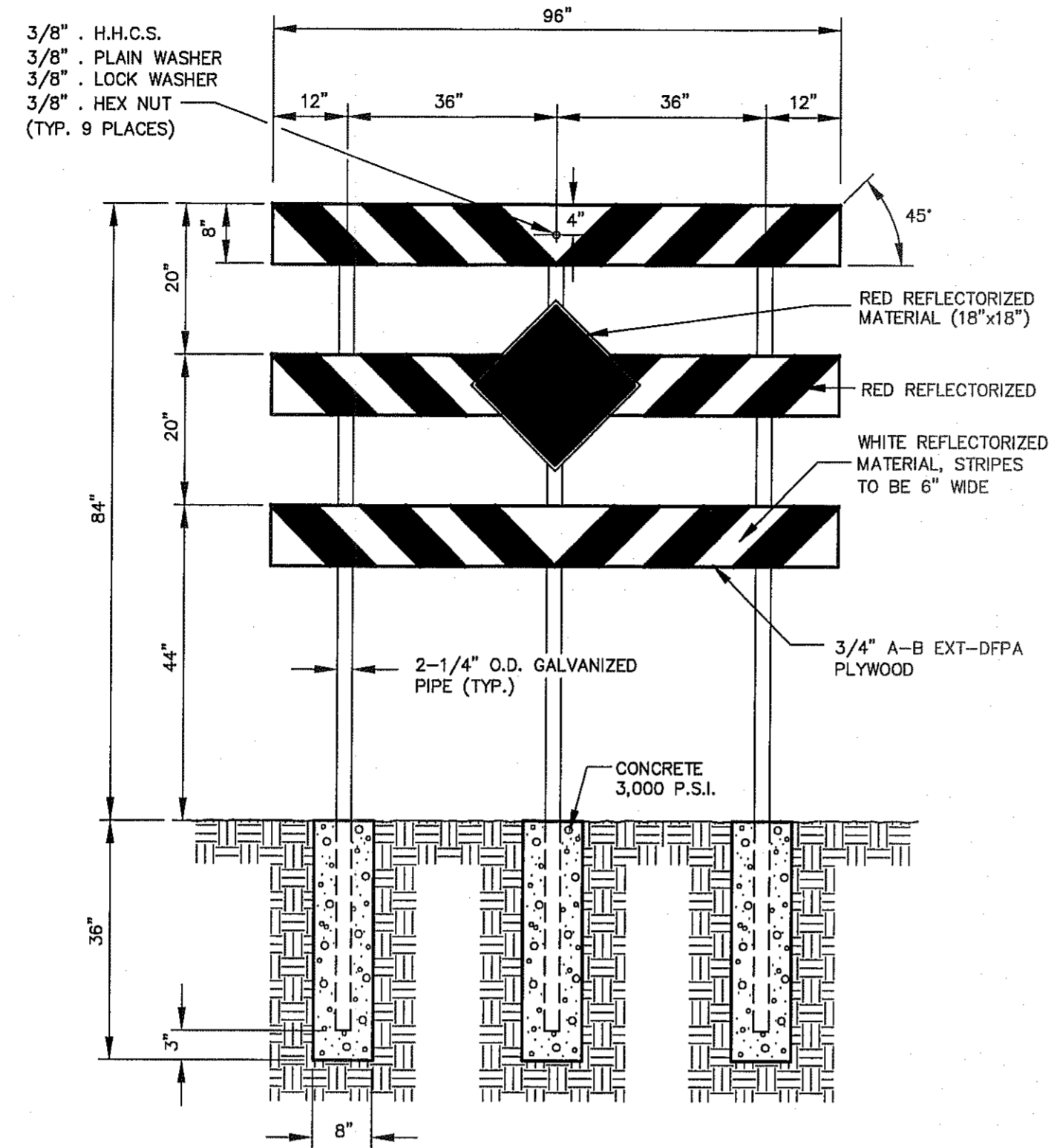
SHEET NO.

C8.2

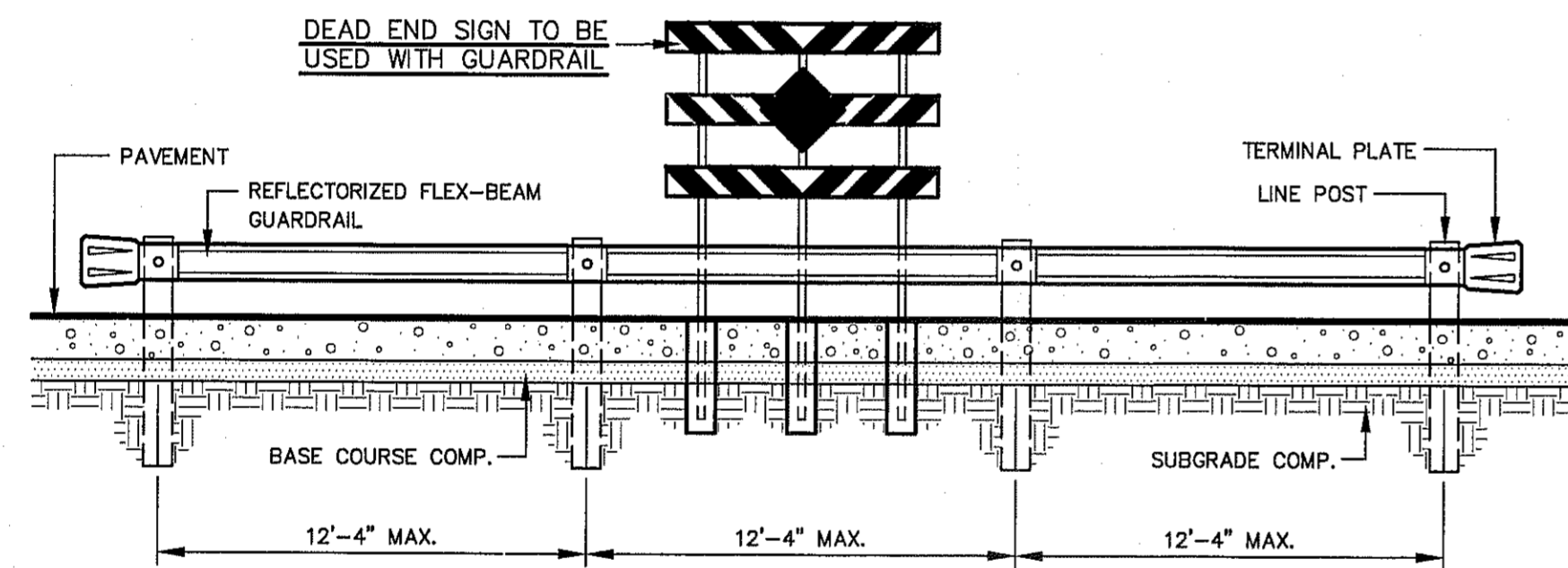
S:\2260\2260-018-LD-Ventanas\Improvement Plans\2260-018-C8.1-8.3-Standard Details.dwg, Layout2, 8/19/2014 10:12:55 AM



POST AND SIGN DETAIL
SCALE: N.T.S.



DEAD END SIGN DETAIL
SCALE: N.T.S.



ELEVATION
SCALE: 1" = 5'-0"

1 GUARD RAIL/SIGN ASSEMBLY AT DEAD END STREET DETAIL
SCALE: AS SHOWN

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

DATE	REVISIONS	BY

C&A
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM #484
4712 Woodrow Bean, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.cagroup.net



SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	AUGUST 2014
DESIGN BY:	J.M.
DRAWN BY:	J.L.A.
CHKD. BY:	J.L.A.
APP'D. BY:	J.L.A.
JOB No.	2260-01B-LD

PROJECT TITLE

**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE

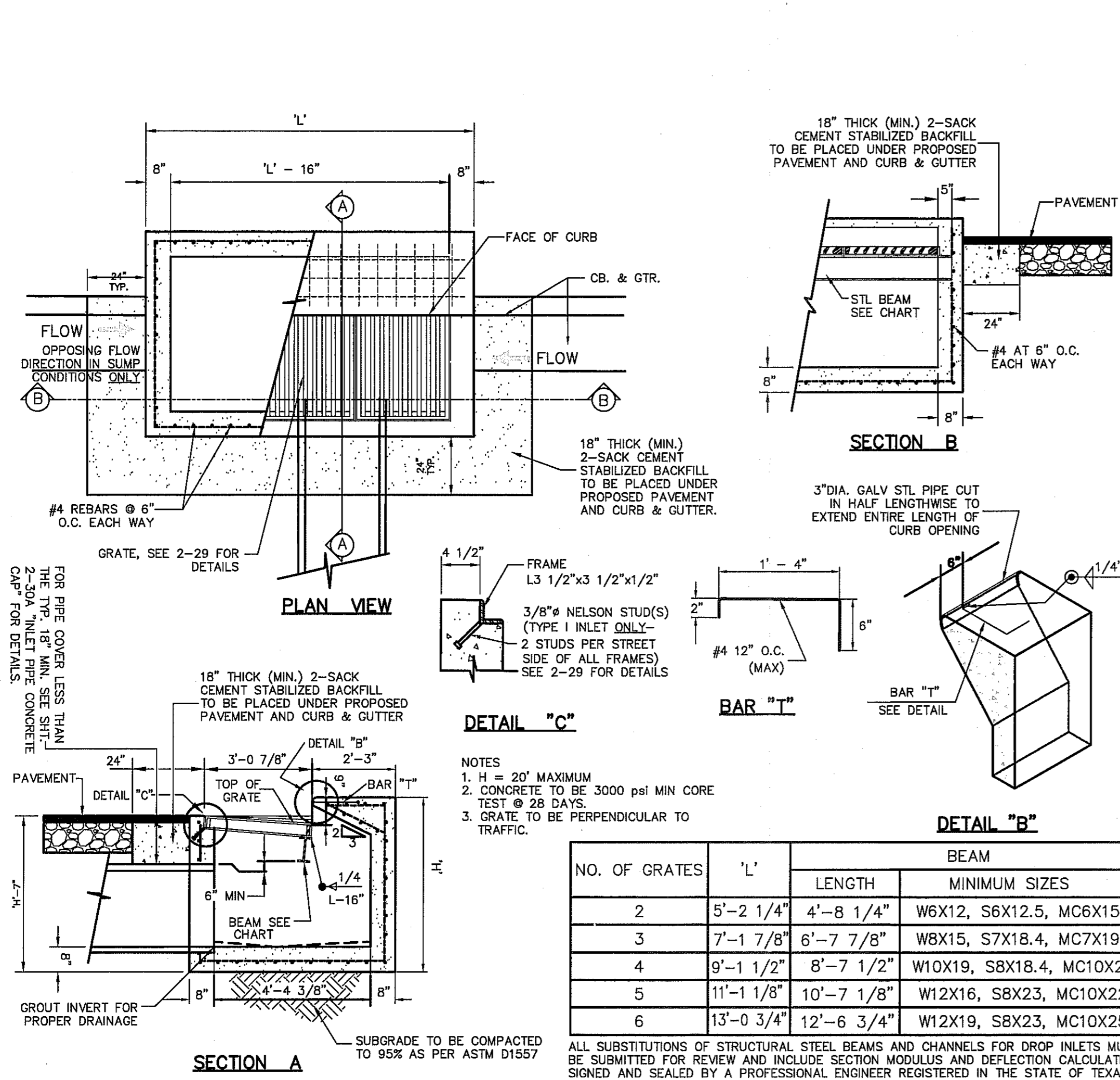
**STANDARD
DETAILS**

(SHEET 3 OF 3)

SHEET NO.

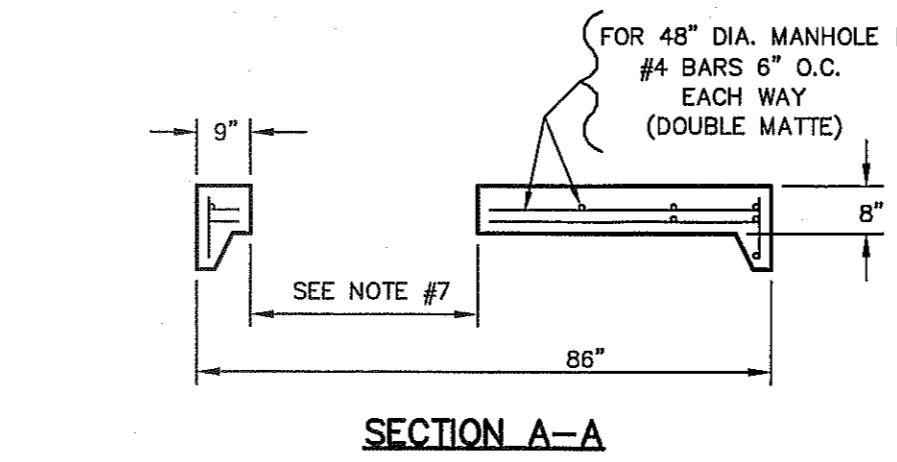
C8.3





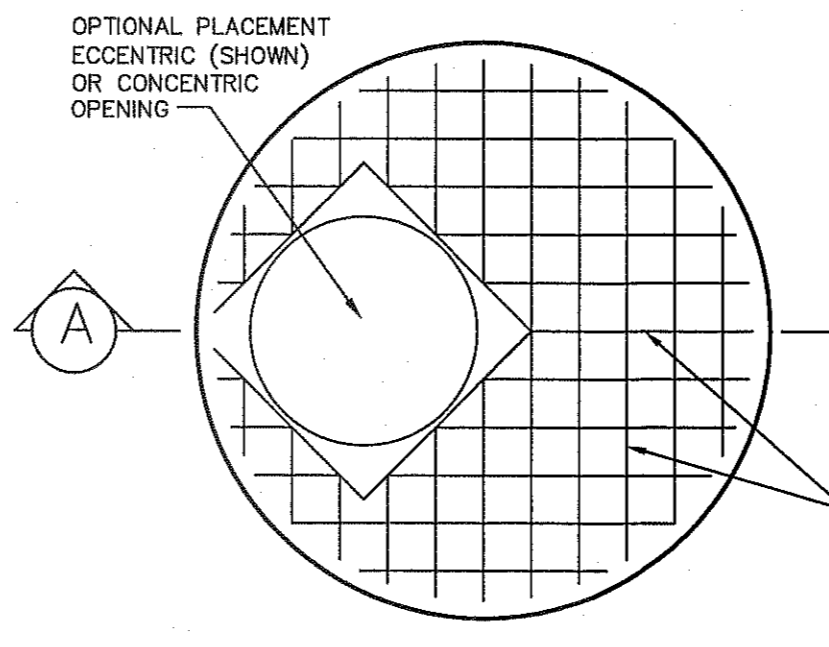
NO. OF GRATES	'L'	LENGTH	BEAM	
			MINIMUM SIZES	
2	5'-2 1/4"	4'-8 1/4"	W6X12, S6X12.5, MC6X15.1	
3	7'-1 7/8"	6'-7 7/8"	W8X15, S7X18.4, MC7X19.1	
4	9'-1 1/2"	8'-7 1/2"	W10X19, S8X18.4, MC10X22	
5	11'-1 1/8"	10'-7 1/8"	W12X16, S8X23, MC10X22	
6	13'-0 3/4"	12'-6 3/4"	W12X19, S8X23, MC10X25	

1 DROP INLET (TYPE I) DETAILS
SCALE: 1" = 2'-0"

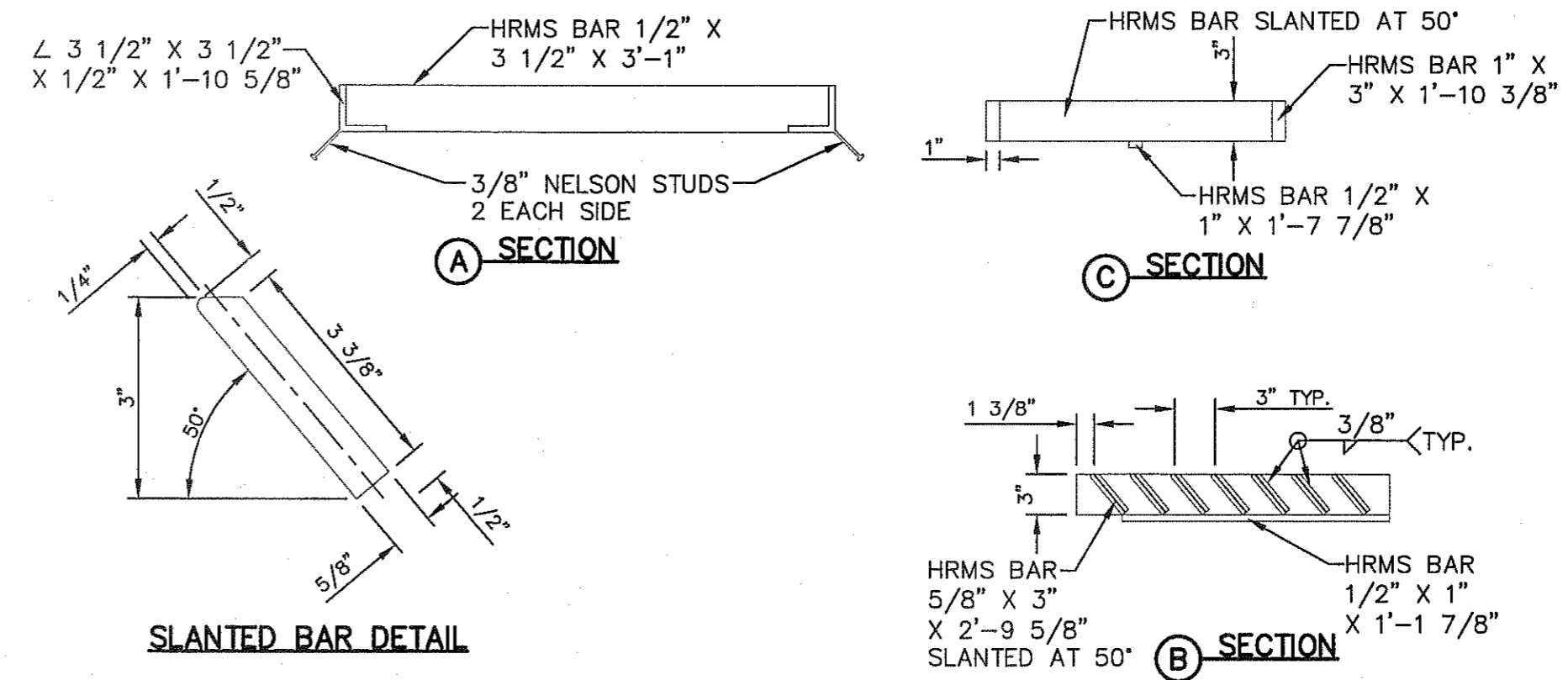


GENERAL NOTES:

- ALL JOINTS TO BE TONGUE AND GROOVE AND SEALED WITH RAM-NEK OR EQUAL.
- MANUFACTURER TO PROVIDE LIFTERS OF ADEQUATE SIZE AS NEEDED.
- 4000 P.S.I. CONCRETE 28 DAYS.
- KEYLOCK ADDS 8" TO VERTICAL HEIGHT.
- RING & COVER OR SPECIAL LIDS TO MEET REQUIREMENTS.
- REINFORCING SHALL MEET A.S.T.M. C478-87 AND TRAFFIC LOADING (HS-20).
- SIZED TO ACCOMMODATE APPLICABLE RING & COVER FOR 24" OR 32" MANHOLE COVER.



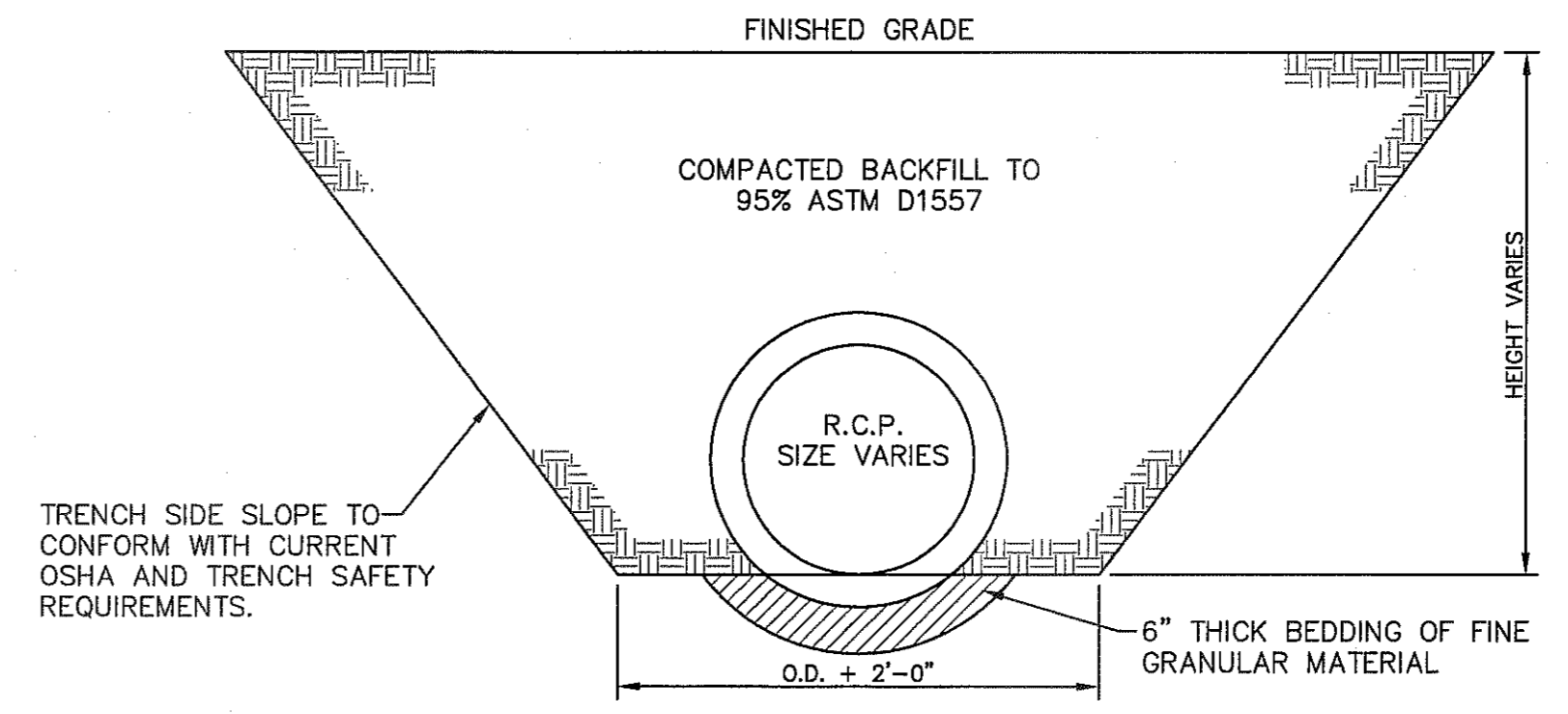
2 MANHOLE COVER FOR 48" & 72" MANHOLE
SCALE: N.T.S.



3 GRATE AND FRAME DETAILS
SCALE: N.T.S.

DROP INLET GENERAL NOTES:

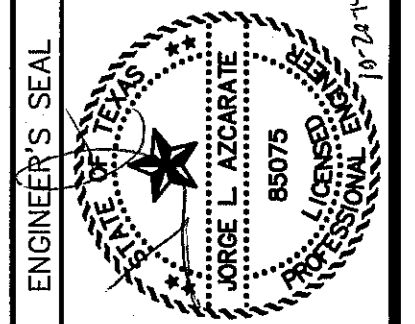
- WELDED STEEL OR CAST GRATES AS DETAILED ARE ALL ACCEPTABLE GRATES. MIXING OF ALTERNATE TYPES OF GRATES ON THE SAME PROJECT WILL BE PERMITTED WITH THE APPROVAL OF THE COUNTY ENGINEER.
- ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT STANDARD SPECIFICATIONS.
- SHARP EDGES RESULTING FROM FABRICATION SHALL BE DULLED BY ANY ACCEPTABLE METHOD FOR SAFETY IN HANDLING.
- GRATES SHALL BE INSTALLED IN FRAME WITH FLOW ARROW POINTING DOWNSTREAM OR TOWARD THE LOW POINT IN A SUMP.
- WELDED GRATES SHALL BE STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-183 OR OF CORROSION RESISTANT STRUCTURAL STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-161 OR M-222 OR BE MADE OF OTHER APPROVED STEELS OF EQUAL QUALITY. MIXING GRADES OF STEEL ON THE SAME GRATE WILL NOT BE PERMITTED.
- GRATES MADE OF M-183 STEEL SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M-111 SPECIFICATIONS OR SHALL BE PAINTED WITH INORGANIC ZINC PAINTS, MEETING THE REQUIREMENTS OF CURRENT STANDARD SPECIFICATIONS.
- ALL WELDS SHALL HAVE A MINIMUM OF 1/4" FILLET AND SHALL CONFORM TO THE SPECIFICATIONS FOR HIGHWAY CONSTRUCTION AND TO THE AWS STRUCTURAL WELDING CODE. ELECTRODES SHALL BE COMPATIBLE TO THE DIFFERENT GRADES OF STEEL THAT COMPRISE THE GRATE MEMBERS.
- CAST GRATES SHALL BE CAST STEEL CONFORMING TO THE REQUIREMENTS OF AASHTO M-103, GRADE 65-35 OR OF DUCTILE IRON CONFORMING TO THE REQUIREMENTS OF ASTM A-536, SPECIAL GRADE 60-45, OR OF GRAY IRON CONFORMING TO THE REQUIREMENTS OF AASHTO M-105, CLASS 35B OR ASTM A-48 CLASS 35B. THE SPECIFICATIONS OF GENERAL APPLICATION FOR CAST STEEL GRATES SHALL BE AASHTO M-103 SCOPE 1.2.1, GRADE N-1.
- FERROUS CASTINGS SHALL BE OF UNIFORM QUALITY, FREE OF BLOWHOLES, POROSITY, HARD SPOTS, SHRINKAGE DISTORTION OR OTHER DEFECTS. THEY SHALL BE SMOOTH AND WELL CLEANED BY SHOT BLASTING OR OTHER APPROVED CLEANING METHOD. AFTER CLEANING THEY SHALL BE COATED WITH ASPHALT BASE PAINT RESULTING IN A SMOOTH COATING, TOUGH AND TENACIOUS WHEN COLD, NOT TACKY OR BRITTLE.
- ALL CASTING SHALL BE MANUFACTURED TRUE TO PATTERN. COMPONENT PARTS SHALL FIT TOGETHER IN A SATISFACTORY MANNER.
- ALL CONCRETE TO BE 3000 PSI, CHAMFER ALL EXPOSED EDGES 3/4". ALL DIMENSIONS RELATING TO REINFORCING STEEL ARE TO CENTER OF BARS.
- MINIMUM CONCRETE COVER SHALL BE 1 1/2" FOR STEEL REINFORCING.
- EXPANSION MATERIAL TO BE 1/2" BITUMINOUS FIBER AND PLACED WHERE PROPOSED CONCRETE COMES IN CONTACT WITH ANY EXISTING OR PROPOSED CONCRETE OR MASONRY STRUCTURE.
- STRUCTURAL STEEL SHALL BE SHOP PAINTED IN ACCORDANCE WITH TxDOT ITEM 446 "PAINT AND PAINTING"
- SURFACE OF ALL EXPOSED CONCRETE SHALL CONFORM IN SLOPE AND GRADE TO EXISTING OR PROPOSED CURB AND WALK ADJACENT TO INLETS.
- GRATES WILL BE DEPRESSED 1" BELOW PROPOSED OR EXISTING GRADE.
- ALL REINFORCING BARS TO BE #4 BARS AT 6" O.C. GRADE 60. BEND BARS AROUND PIPE OPENINGS.
- INLETS TO BE DESIGNATED IN PLANS BY NUMBER OF GRATES REQUIRED.
- LOCATION OF SEWER PIPES SHOWN ELSEWHERE IN PLANS.
- TWO 1/2"x4"x4" LONG CONCRETE ANCHOR STUDS REQUIRED FOR EACH SIDE OF FRAME, WHERE RESTING ON CONCRETE, USE NELSON STUDS OR EQUAL.
- THE GRATES OF ALL INLETS WITHIN THE STREET PAVEMENT MUST BE CONSTRUCTED WITH THE GRATE BARS PERPENDICULAR TO THE CURB.



4 STORM SEWER BEDDING DETAIL
SCALE: 1/2" = 1'-0"

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).
DATE _____
REVISIONS _____
BY _____

osa
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM # 654
4712 Woodrow Plant, Ste. F El Paso, TX 79924
Office: 915.544.5222 Fax: 915.544.5223 www.osaeng.com

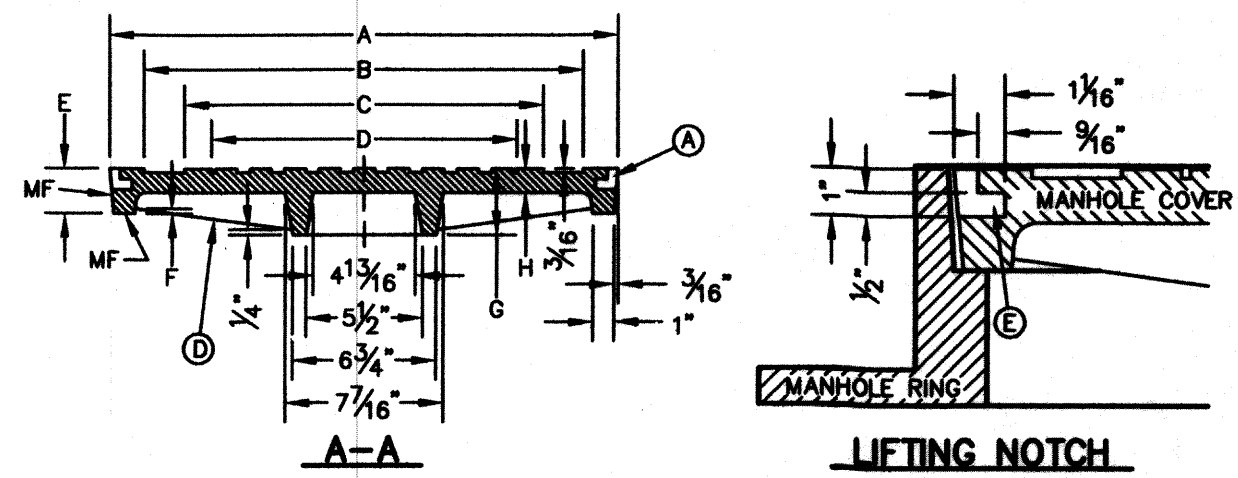
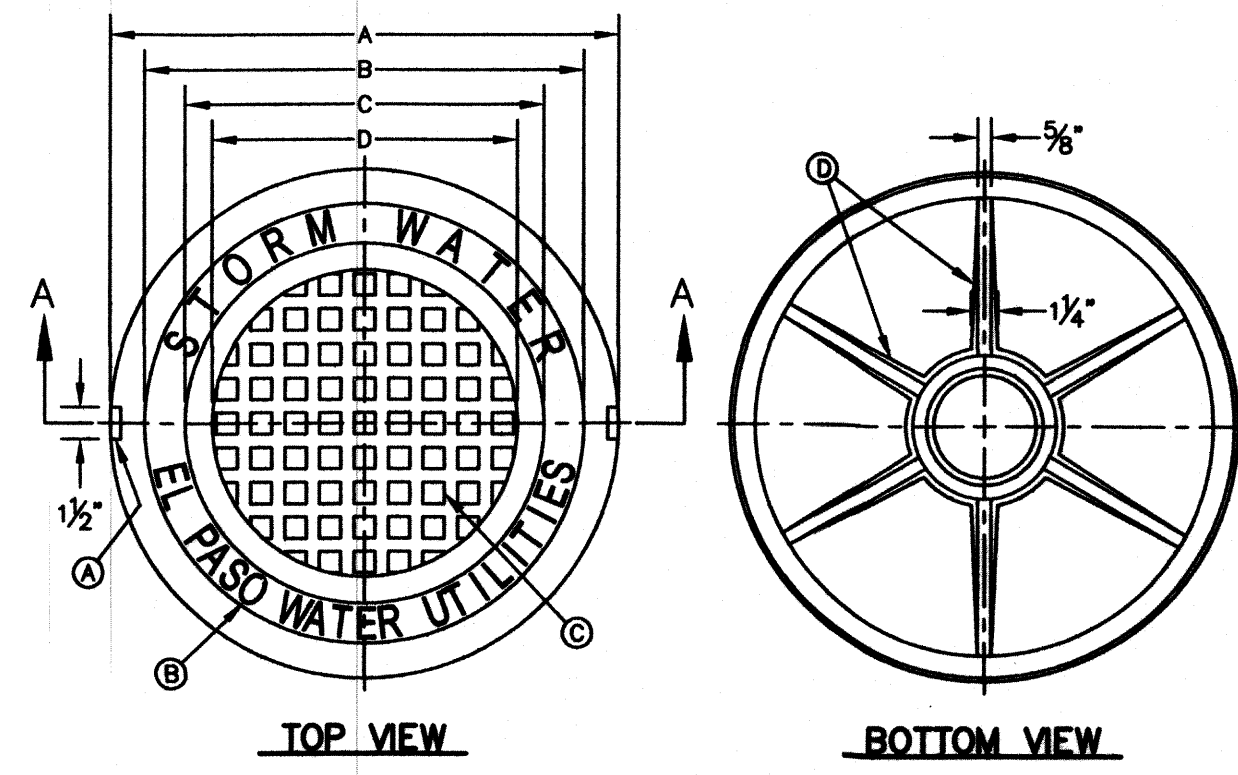


SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: AUGUST 2014
DESIGN BY: JLM
DRAWN BY: JLM
CHKD. BY: J.L.A.
APPROV. BY: J.L.A.
JOB No. 2260-018-LD

PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**DRAINAGE
DETAILS**
(SHEET 1 OF 2)
SHEET NO.

C9.1



GENERAL NOTES:

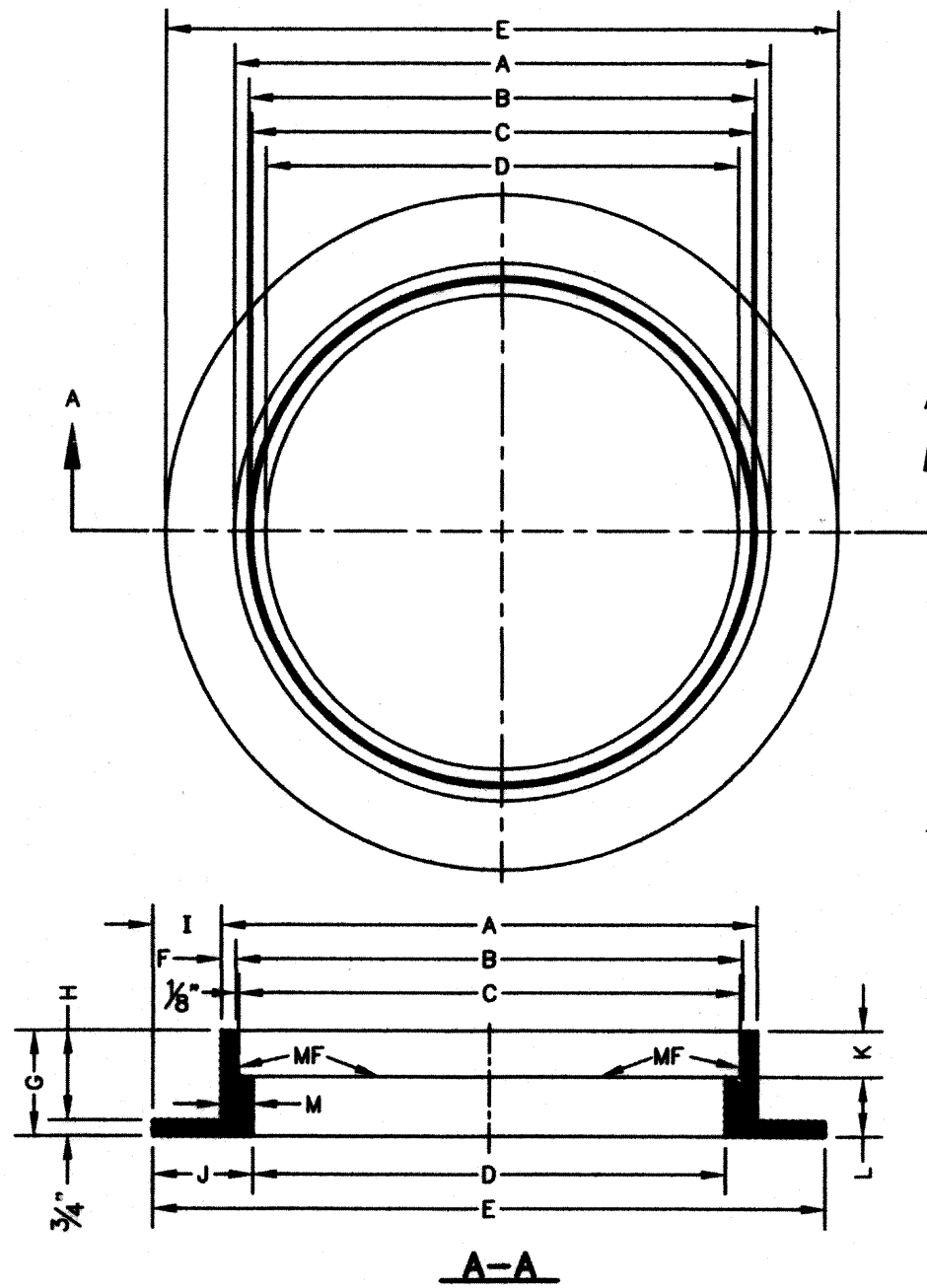
1. MATCHING SURFACES MARKED "MF" TO BE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
4. AS-CAST DIMENSIONS MAY VARY 1/16" ±/ PER FOOT (AASHTO M306-07).
5. WEIGHT MAY VARY 5% ± (AASHTO M306-07).
6. SHADED DIMENSIONS IN TABLE FOR REFERENCE ONLY. SOURCE: CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION, DETAIL 2-17.

CONSTRUCTION KEY NOTES:

- A. LIFTING NOTCH.
- B. 3/16" RAISED LETTERING.
- C. 1" SQUARES (5/16" TALL) WITH 5/8" SPACE BETWEEN.
- D. REINFORCING RIBS.
- E. SLOT.

SEE NOTE 6

MANHOLE COVER	MANHOLE - ALL TYPES	MANHOLE TYPE 46	MANHOLE TYPE 72
A	31 3/4"	23 3/4"	31 3/4"
B	28 3/4"	20 3/4"	28 3/4"
C	24 3/4"	16 3/4"	24 3/4"
D	21 3/4"	14 3/4"	21 3/4"
E	2 1/4"	3"	3"
F	1/4"	1/4"	1/4"
G	3 3/4"	3"	3"
H	1 1/4"	1"	1"
WEIGHT	265 lbs.	175 lbs.	310 lbs.



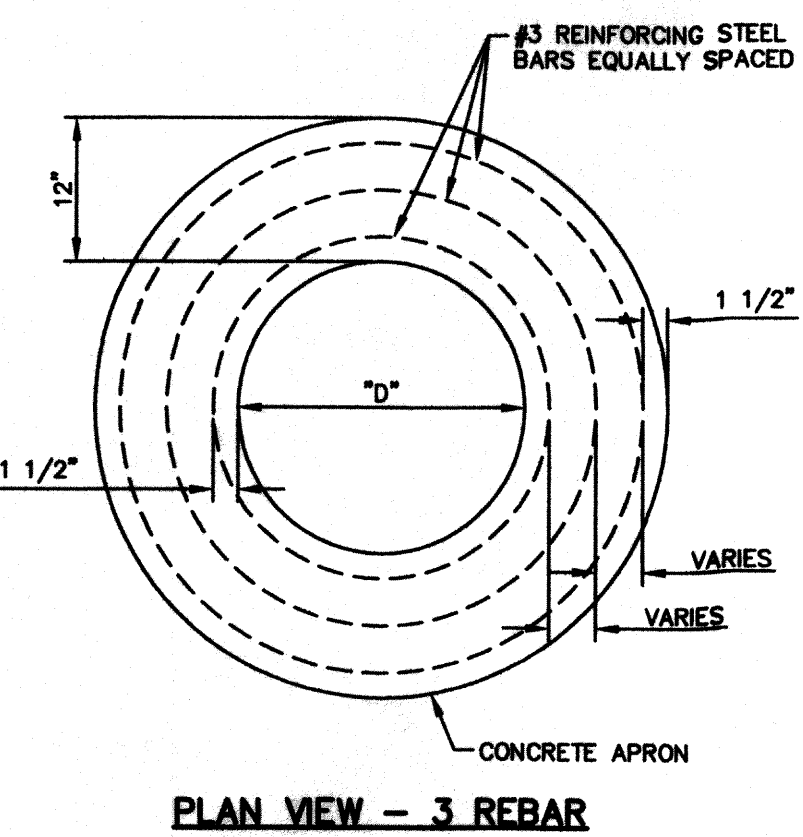
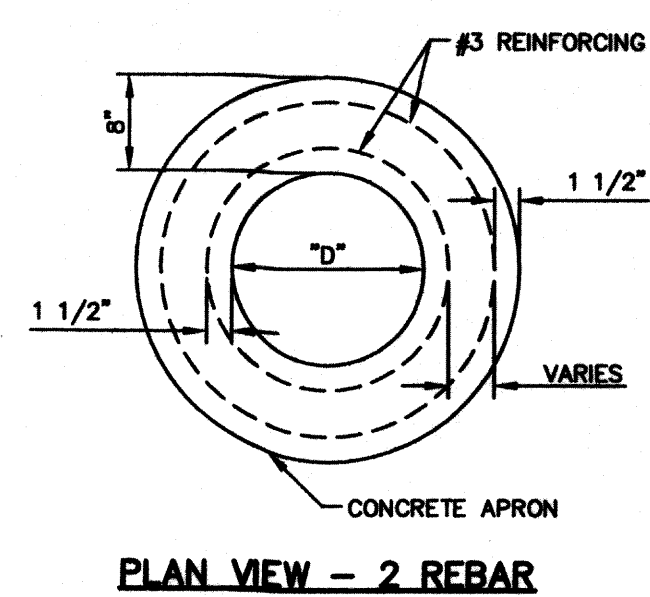
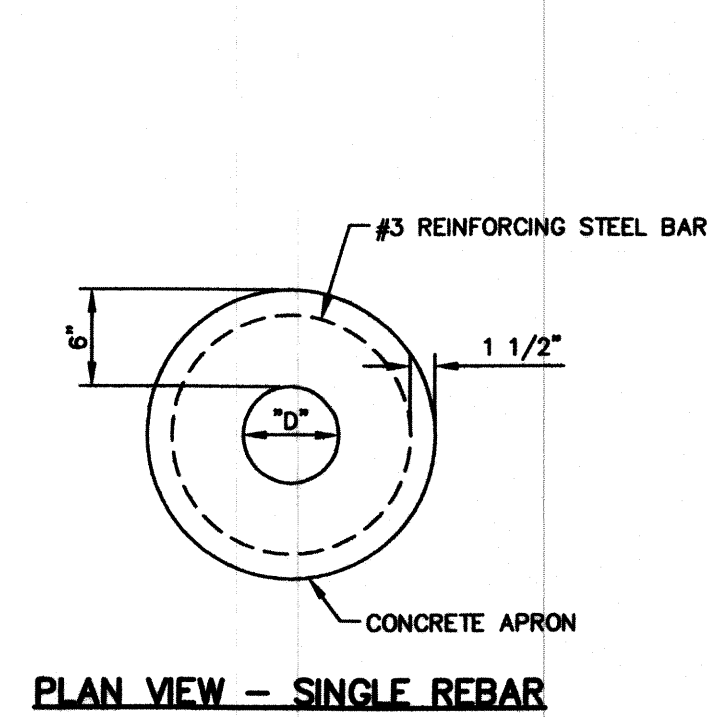
GENERAL NOTES:

1. MATCHING SURFACES MARKED "MF" TO BE FINISHED OF ANY IRREGULARITIES THAT WOULD PREVENT A SNUG FIT.
2. CASTING TO BE SMOOTH & VOID OF AIR HOLES.
3. CASTING MUST MEET REQUIREMENTS OF AASHTO M306-07.
4. AS-CAST DIMENSIONS MAY VARY 1/16" (AASHTO M306-07).
5. WEIGHT MAY VARY 5% ± (AASHTO M306-07).
6. SHADED DIMENSIONS IN TABLE FOR REFERENCE ONLY. SOURCE: CITY OF EL PASO DESIGN STANDARDS FOR CONSTRUCTION, DETAIL 2-17.

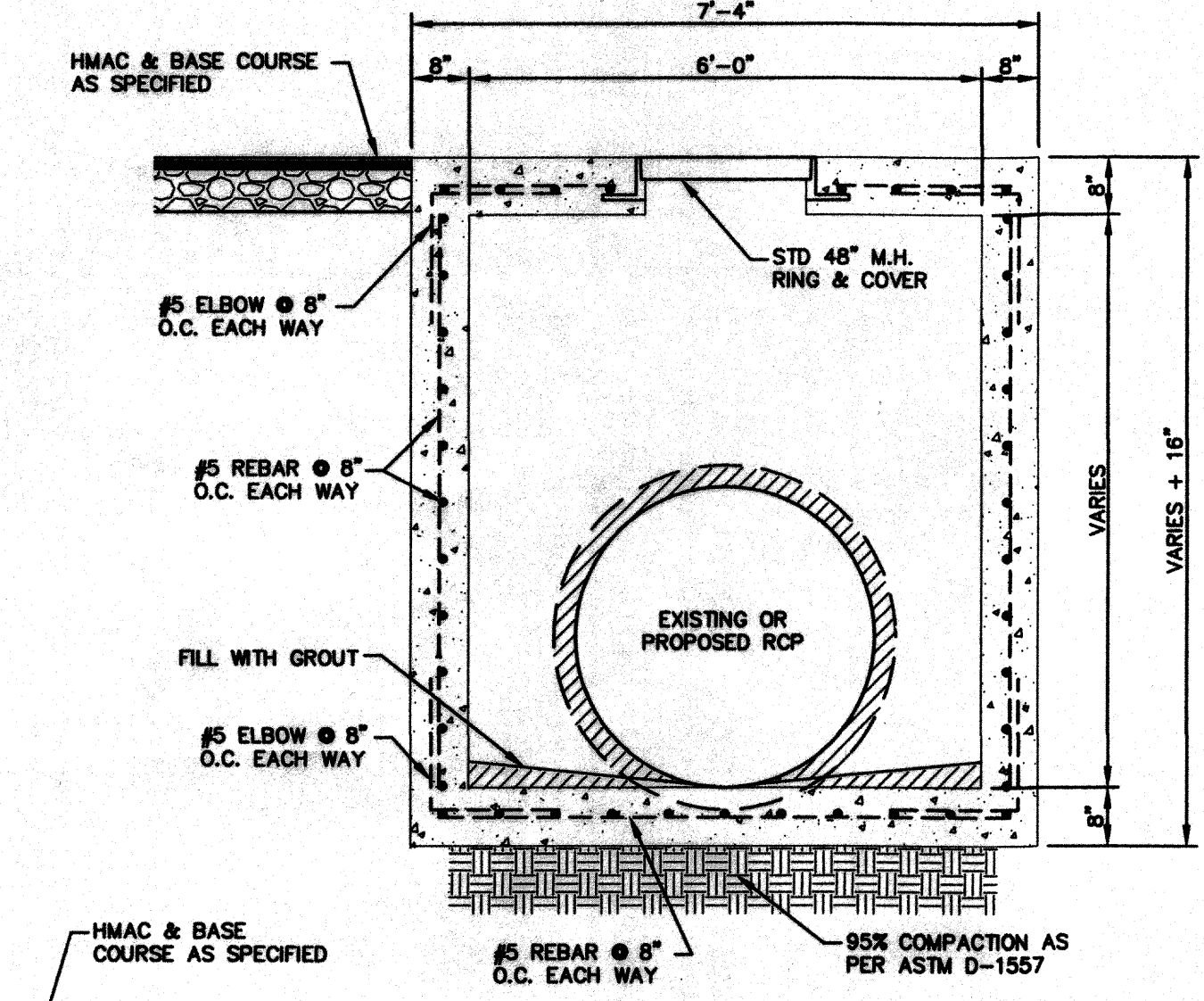
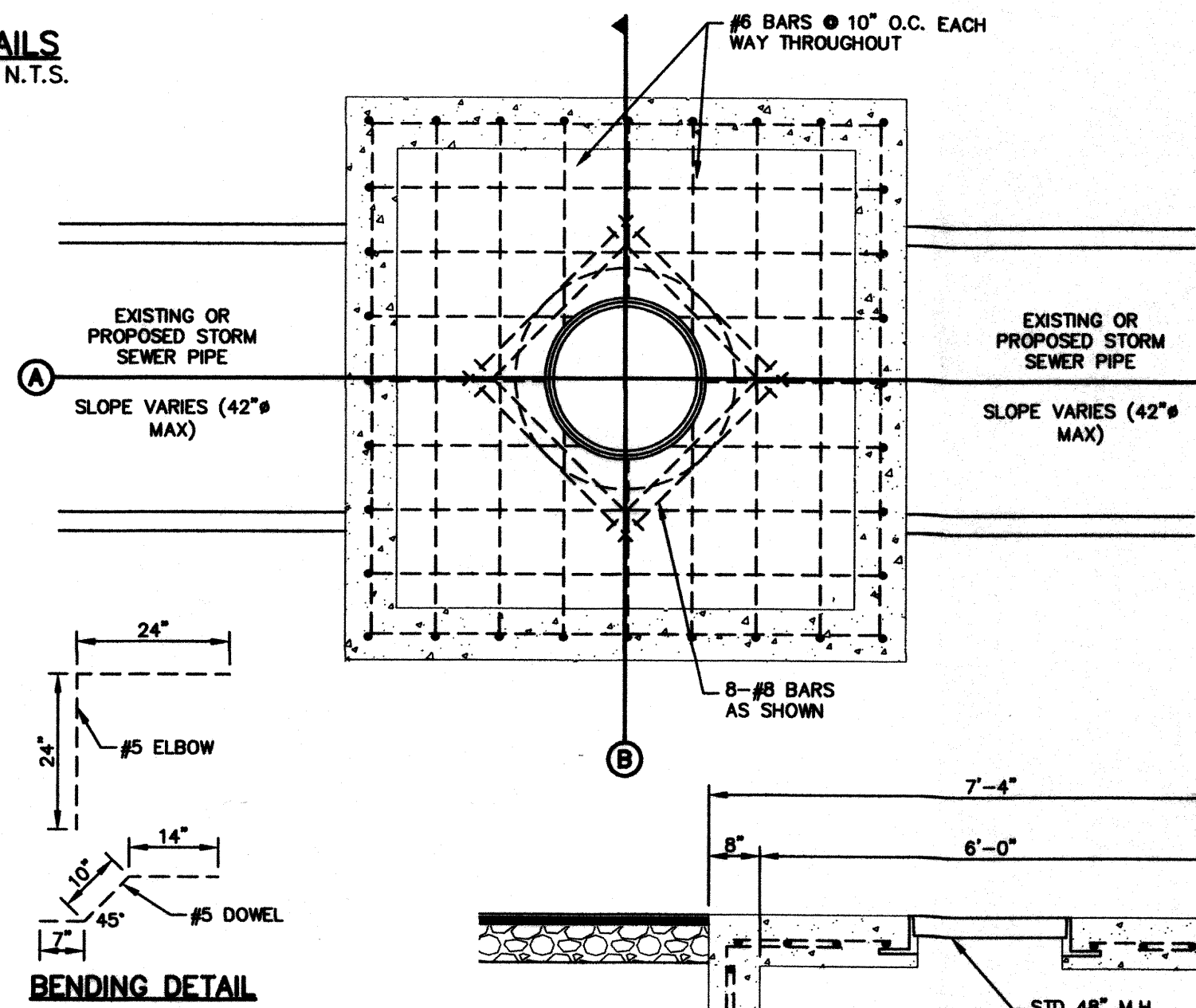
SEE NOTE 6

MANHOLE RING	MANHOLE - ALL TYPES	MANHOLE TYPE 46	MANHOLE TYPE 72
A	33"	23 3/4"	33"
B	31 3/4"	20 3/4"	31 3/4"
C	31 3/4"	20 3/4"	31 3/4"
D	30"	20 3/4"	30"
E	38 3/4"	34 3/4"	42"
F	5"	5"	5"
G	5"	5"	5"
H	4 3/4"	3 3/4"	5 1/4"
I	3 3/4"	3 3/4"	4 3/4"
J	4 3/4"	3 3/4"	5"
K	2 3/4"	3 3/4"	3 3/4"
L	2 3/4"	2 3/4"	2 3/4"
M	1 1/2"	1 1/2"	1 1/2"
WEIGHT	220 lbs.	186 lbs.	226 lbs.

STORMWATER MANHOLE RING



2 MANHOLE RING AND COVER DETAILS
SCALE: N.T.S.

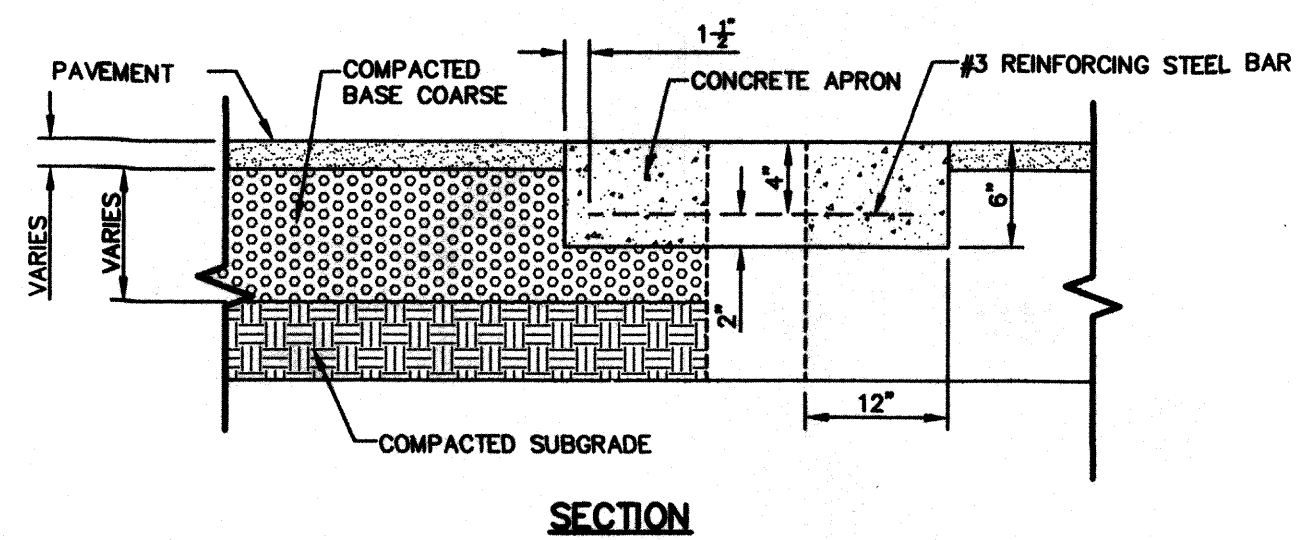


CONSTRUCTION NOTES:

1. ANY DISTURBED SUBGRADE UNDER THE CONCRETE APRON SHALL BE COMPACTED TO 95% DENSITY ±3% OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
2. ANY DISTURBED COARSE UNDER THE CONCRETE APRON SHALL BE COMPACTED TO 100% DENSITY ±2% OPTIMUM MOISTURE CONTENT IN ACCORDANCE WITH ASTM D-1557.
3. PROVIDE A MINIMUM OF 1 1/2" OF CONCRETE COVER FOR ALL REINFORCEMENT STEEL.
4. REINFORCING SHALL MEET ASTM C-478 AND TRAFFIC LOADING (HS-20).
5. NO. 3 REINFORCING STEEL HOOPS SHALL BE SPACED EQUALLY.

GENERAL NOTES:

1. THE PENETRATION APRON SHOULD BE CAST IN-PLACE CONCRETE. (MINIMUM 28 DAY COMPRESSIVE STRENGTH 4000 PSI. HIGH EARLY CONCRETE IS REQUIRED).
2. TOPS OF PENETRATION APRON SHALL BE FLUSH WITH ROADWAY SURFACE OR FINISHED GRADE, UNLESS OTHERWISE SPECIFIED BY THE CITY ENGINEER.

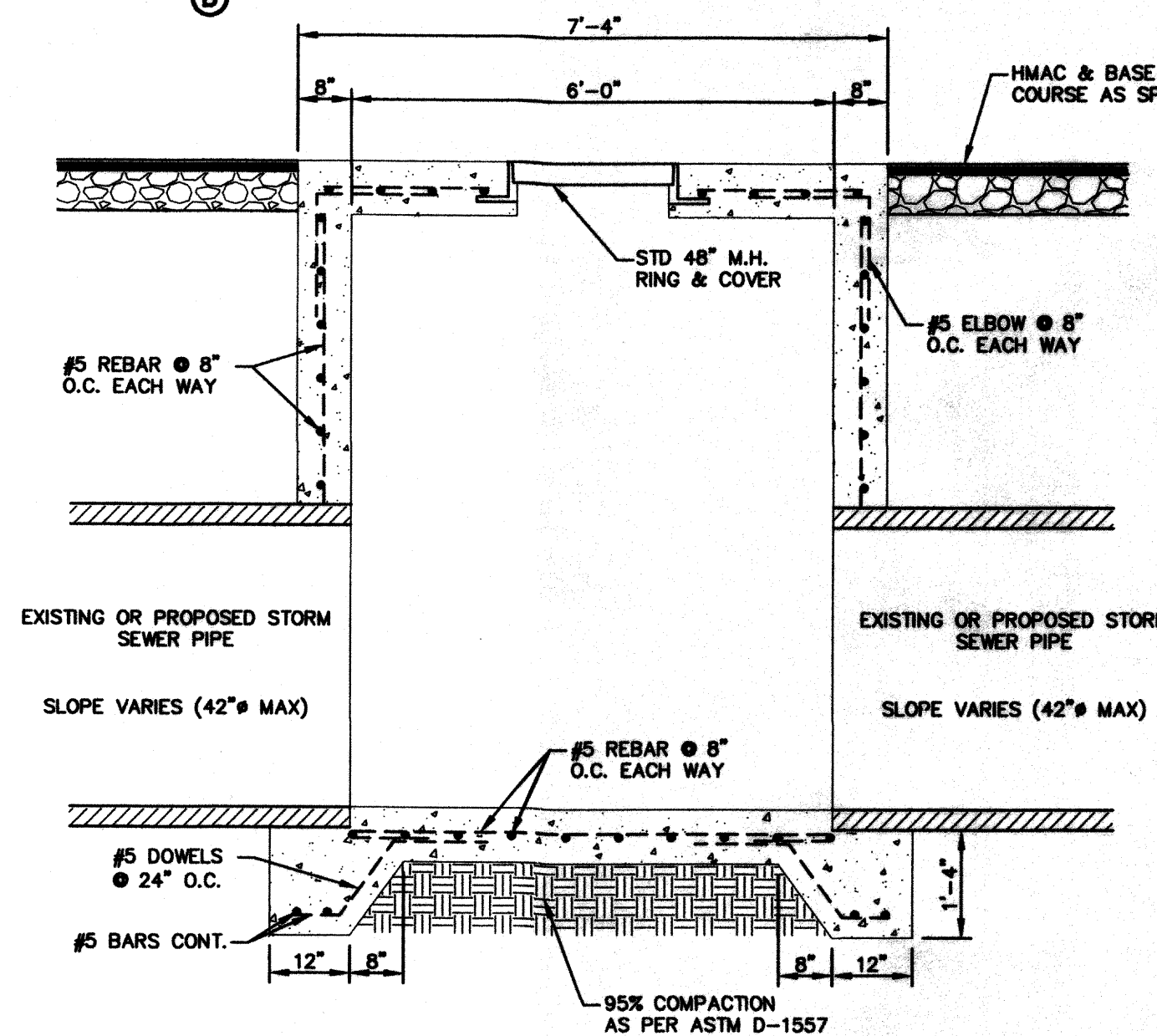
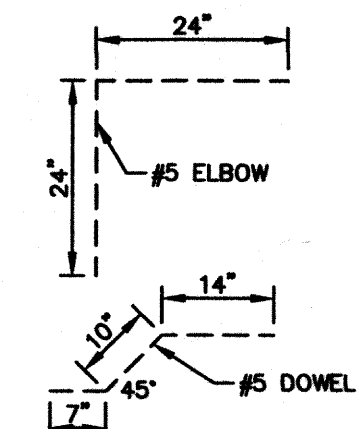


CONCRETE APRON FOR CIRCULAR PENETRATIONS IN ASPHALT PAVEMENTS

"D" DIAMETER OF PENETRATION (INCHES)	"A" CONCRETE HORIZONTAL DIMENSION FROM PENETRATION (INCHES)	NUMBER OF NO. 3 REINFORCING STEEL BARS (QUANTITY)	"B" MINIMUM CLEARANCE FROM EDGE OF CONCRETE APRON TO CENTER OF NEAREST REBAR (INCHES)	"C" MINIMUM CLEARANCE FROM PENETRATION EDGE TO CENTER OF NEAREST REBAR (INCHES)
0 TO 6.01	6	1	1 1/2	1 1/2
6.01 TO 18.01	8	2	1 1/2	1 1/2
18.01 AND OVER	12	3	1 1/2	1 1/2

3 PENETRATION APRON DETAILS
SCALE: N.T.S.

BENDING DETAIL



3 72" CAST-IN PLACE MANHOLE DETAIL
SCALE: 1" = 2'-0"

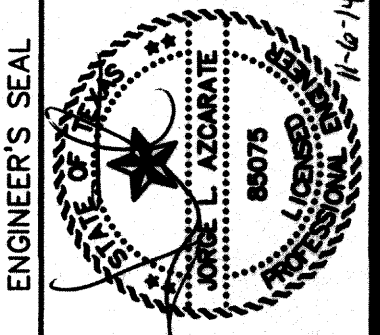


REFERENCES - BENCHMARKS

BENCHMARK IS CITY MOUNTAIN LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

DATE	REVISIONS	BY



SCALE

Horizontal: N/A

Vertical: N/A

Contour Interval: N/A

DATE: AUGUST 2014

DESIGN BY: J.M.

DRAWN BY: J.L.A.

CHKD. BY: J.L.A.

APPV. BY: J.L.A.

JOB No. 2260-018-LD

PROJECT TITLE

VENTANAS SUBDIVISION

UNIT EIGHT

SUBDIVISION IMPROVEMENTS

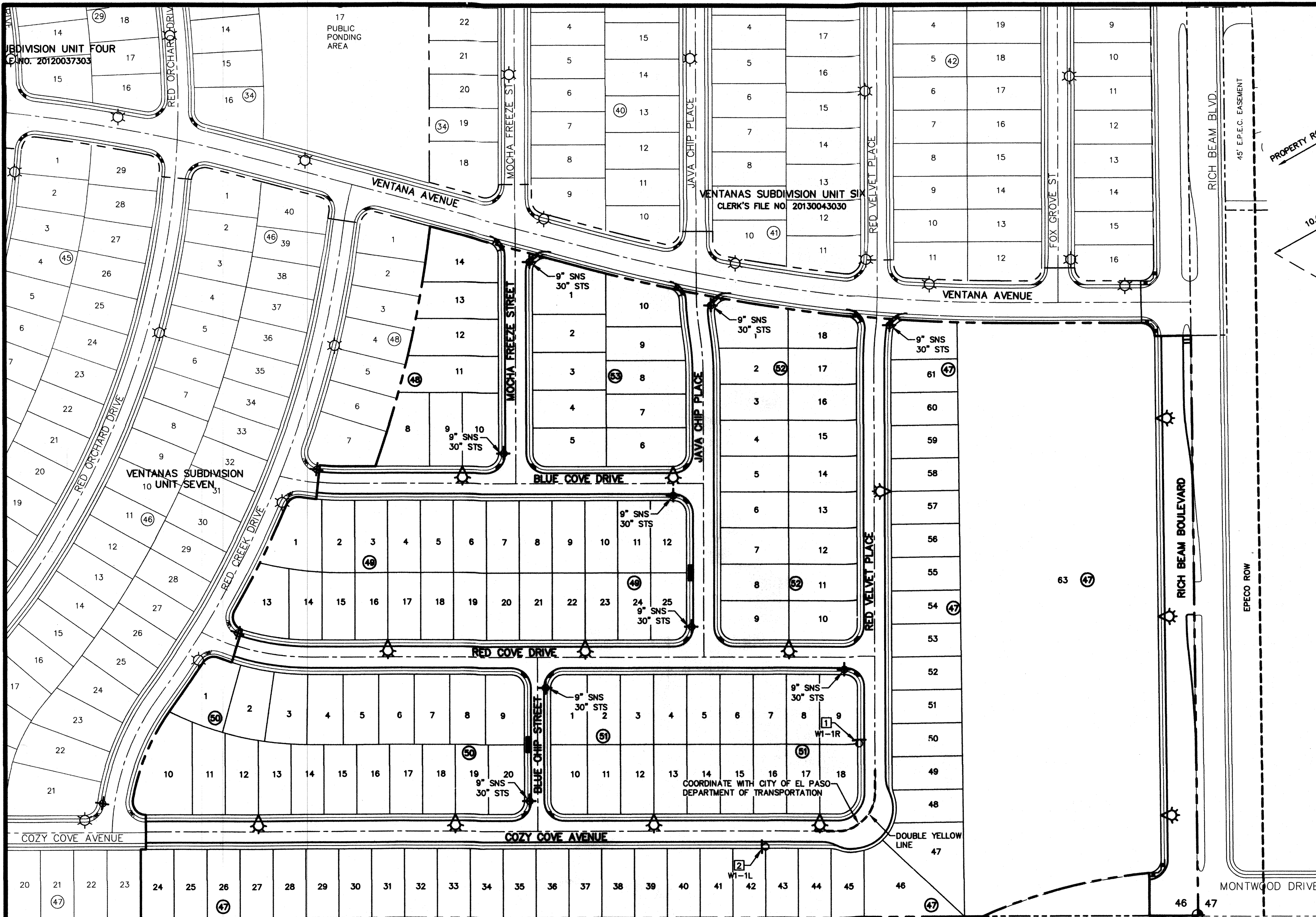
SHEET TITLE

DRAINAGE DETAILS

(SHEET 2 OF 2)

SHEET NO.

C9.2

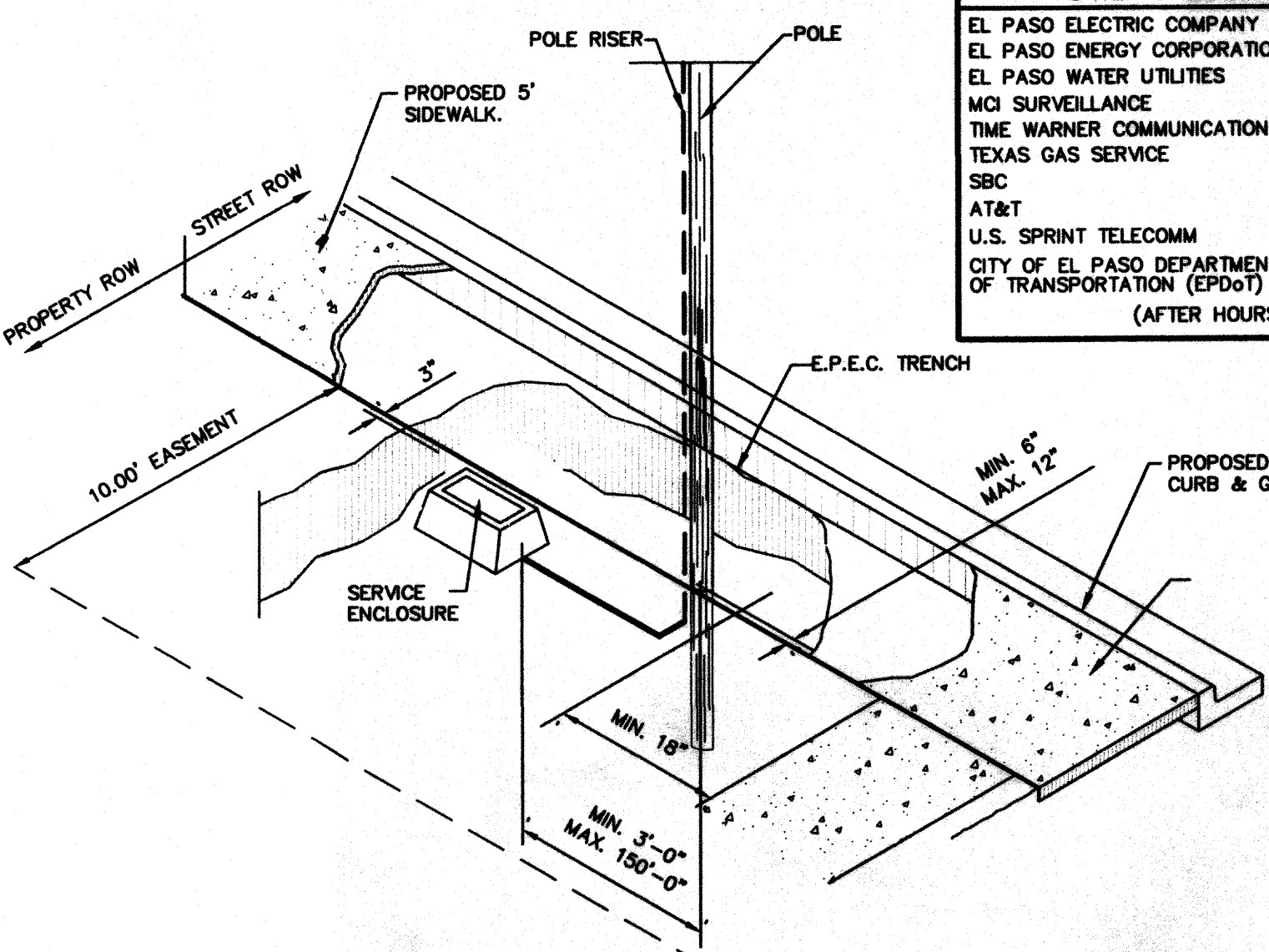


UTILITY LOCATOR SERVICES

EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MG-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 660-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT) (AFTER HOURS)	(915) 621-6750 (915) 240-3220

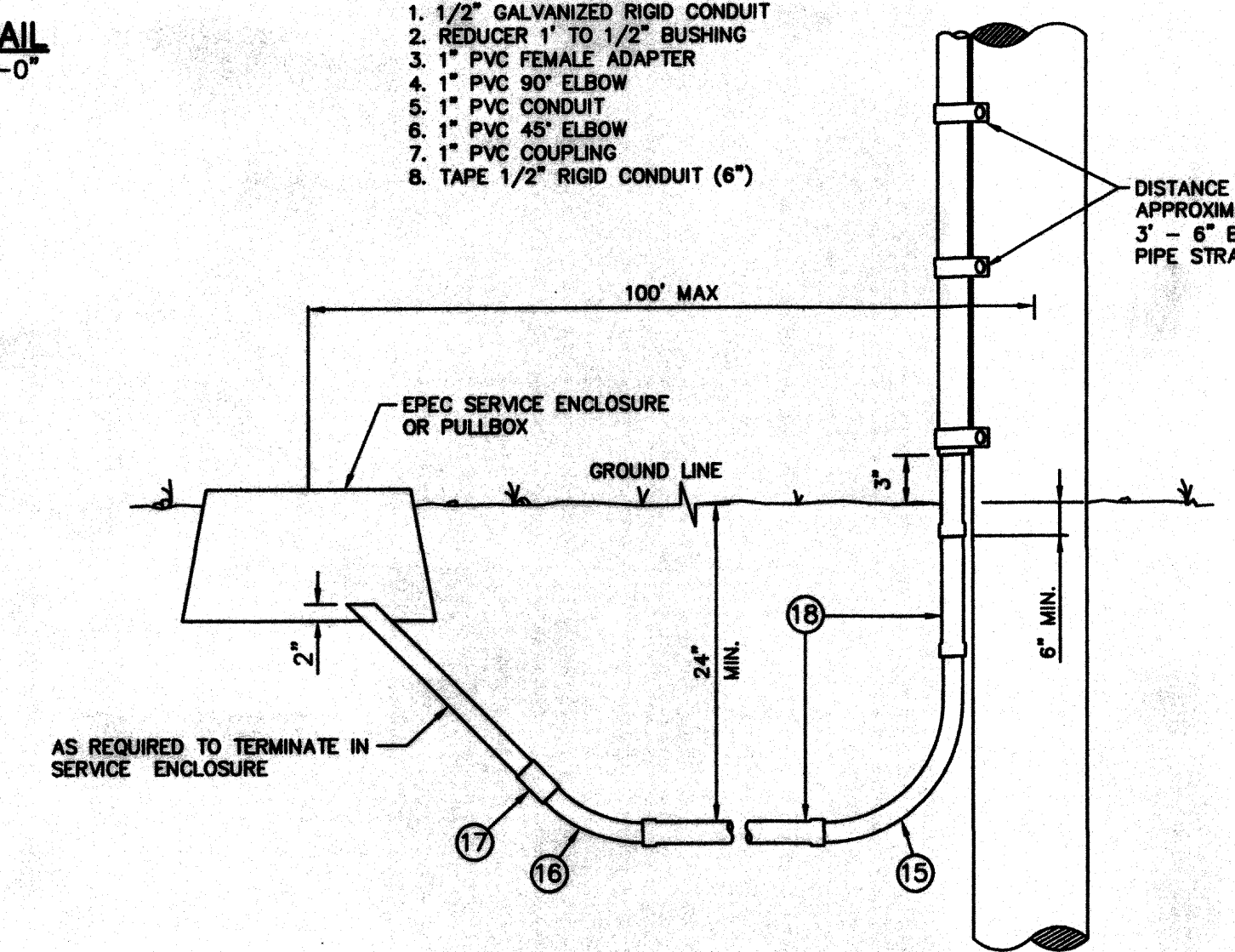
WARNING! BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

- LEGEND:**
- ☉ EXISTING RESIDENTIAL STREET LIGHT
 - ⬠ PROPOSED RESIDENTIAL STREET LIGHT
 - Ⓢ PROPOSED SIGN
 - ⚡ PROPOSED 9" STREET NAME SIGN (TWO SIGNS)
 - ⚡ EXISTING 9" STREET NAME SIGN (TWO SIGNS)
 - ⚡ PROPOSED 9" STREET NAME AND 30" STOP SIGN AND DEAD END SIGN
 - ✉ PROPOSED N.D.B.C.U. MAIL



POLE LOCATION DETAIL
SCALE: 1" = 5'-0"

- KEY NOTES:**
- 1/2" GALVANIZED RIGID CONDUIT
 - REDUCER 1" TO 1/2" BUSHING
 - 1" PVC FEMALE ADAPTER
 - 1" PVC 90° ELBOW
 - 1" PVC CONDUIT
 - 1" PVC 45° ELBOW
 - 1" PVC COUPLING
 - TAPE 1/2" RIGID CONDUIT (6")

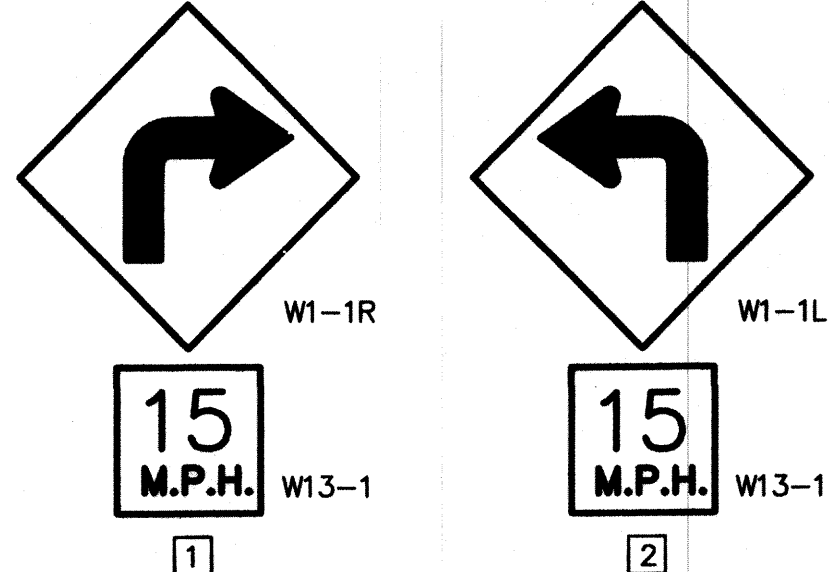


RESIDENTIAL STREET LIGHT WOOD POLE
SCALE: N.T.S.

TRACT 11 TRACT 89 TRACT 88 TRACT 4 TRACT 17

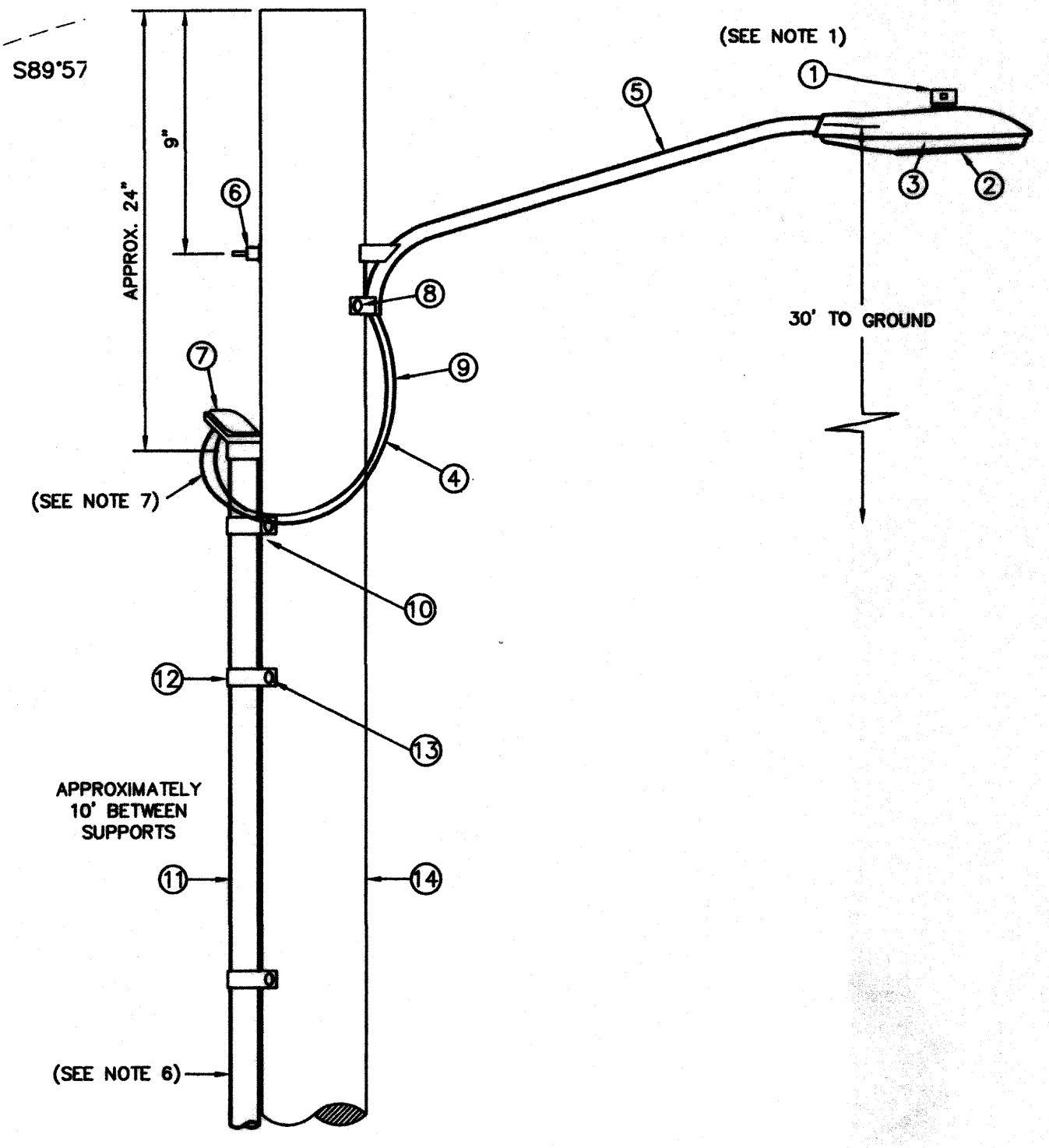
13 RESIDENTIAL STREET LIGHTS

NOTE
1. TRAFFIC STREET SIGNS MUST BE OF HIGH INTENSITY REFLECTIVE SHEETING.



NOTE:
SIGNS SHOULD COMPLY WITH THE TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
SIGNS DETAIL
SCALE: N.T.S.

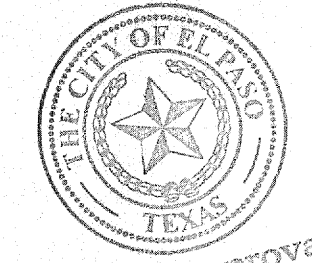
ILLUMINATION & SIGNAGE PLAN
SCALE: 1" = 100"



RESIDENTIAL STREET LIGHT WOOD POLE
SCALE: N.T.S.

ITEM NO.	DESCRIPTION	STOCK NO.	QTY.	
1	PHOTO CELL, 240 V--SEE NOTE 1	21-225	1	LCOBRAHD
2	HPS LASMP, 100W	21-085	1	
3	LUMINAIRE, 100W H.P.S.	21-335	1	
4	SLEEVES, #12-10	05-140	2	LSLV1210
5	MAST ARM, 6' X 1 1/4"	21-200	1	LBKRT1*6
6	MACHINE BOLT, 5/8" X 12"	02-470	1	
	SQUARE GALV. WASHER, 2 1/4" X 2 1/4"	02-760	1	LMB5/612
	COIL SPRING WASHER, 5/8"	02-766	1	
	LOCK NUT, 5/8"	02-705	1	
7	SERVICE ENTRANCE CAP FOR 1" PVC CONDUIT	17-281	1	LSVCCAP1
8	LAG BOLT, 3/8" X 3"	02-343	1	LLAG38*3
9	CABLE, #10, 2 CONDUCTOR, 600V, U/P	13-600	6'	L2C#10S
10	COPPER CABLE, #12, SOLID, 600V, BLUE	13-702	60'	LC#12CU
11	SCHEDULE 80 1" PVC CONDUIT	17-280	30'	LSCH80I
12	PIPE STRAP FOR 1" PVC CONDUIT, 2-HOLE	17-283	9'	LPVCSTRP
13	NAIL, STAINLESS STEEL SCREW 2.5 IN.	14-427	.25#	LNAL14*2
14	POLE, 35 FT. - CLASS 4	09-035	1	L354UG
15	1" PVC 90 DEGREE ELBOW	17-297	1	LEL901
16	1" PVC 45 DEGREE ELBOW	17-298	1	LEL451
17	1" PVC COUPLING	17-296	1	LOPLG1
18	1" PVC CONDUIT	17-299	AS REQ	LPVCI

- NOTES:**
- MOUNT SO THAT PHOTO CELL IS FACING NORTH.
 - ITEM # 9 SHALL NOT BE SPLICED INSIDE ITEM # 5.
 - INSTALLATION MUST COMPLY WITH LOCAL CODE REQUIREMENTS.
 - FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
 - ON STREETS WHERE SIDEWALK IS ADJACENT TO CURBS, STREET LIGHT POLE SHALL BE INSTALLED IN THE SIDEWALK NEXT TO PROPERTY LINE. 36 INCHES REQUIRED FROM BACK OF CURB TO COMPLY WITH AMERICAN DISABILITY'S ACT AND LOCAL CODES.
 - THE CONDUIT RISER SHALL BE INSTALLED ON THE BACK OF THE WOOD POLE (AWAY FROM THE STREET).
 - THE WIRE LEADS FROM THE WEATHER HEAD TO THE MAST ARM SHALL HAVE A MINIMUM 4" DRIP LOOP BELOW THE WEATHER HEAD.



REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE
ELEVATION = 3970.82 (CITY DATUM).
DATE _____
REVISIONS _____

PROJECT TITLE
VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

SHEET TITLE
ILLUMINATION & SIGNAGE PLAN

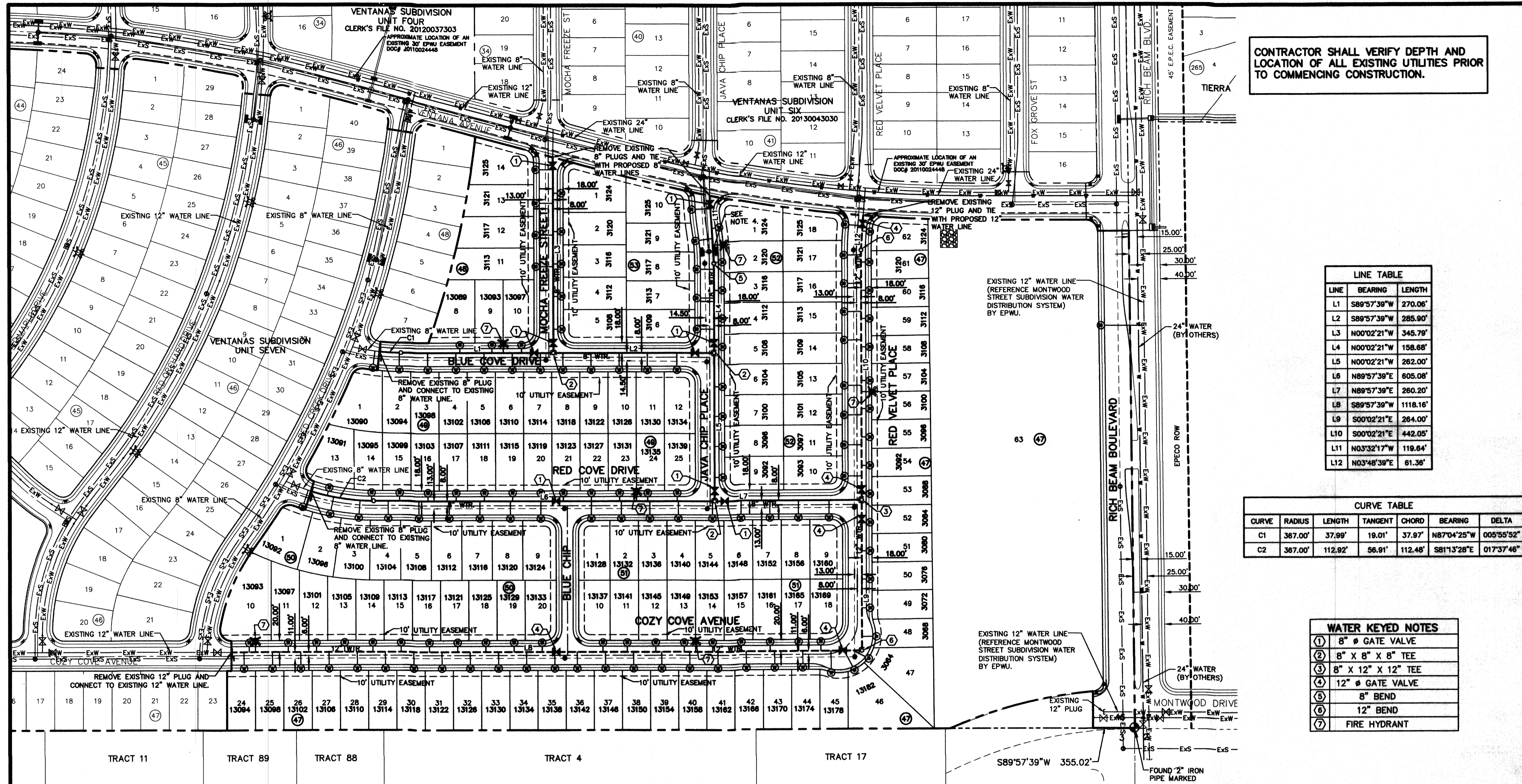
SHEET NO.
C10.1

BY _____
DATE _____

Scale: 1" = 100'
Vertical: N/A
Horizontal: N/A
Contour Interval: N/A
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPD. BY: J.L.A.
JOB NO. 2260-018-LD

o.e.a.
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM #464
4712 Woodrow Beam, Ste. F, El Paso, TX 79904
Phone: (915) 778-1222 Fax: (915) 778-1222 www.o.e.a.com

S:\2260\2260-018-LD-Ventanas\Improvement Plans\C10-Illumination Plan.dwg, Layout1, 11/5/2014, 8:45:13 AM



CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.

LINE	BEARING	LENGTH
L1	S89°57'39"W	270.06'
L2	S89°57'39"W	285.90'
L3	N00°02'21"W	345.79'
L4	N00°02'21"W	158.68'
L5	N00°02'21"W	262.00'
L6	N89°57'39"E	605.08'
L7	N89°57'39"E	260.20'
L8	S89°57'39"W	1118.16'
L9	S00°02'21"E	284.00'
L10	S00°02'21"E	442.05'
L11	N03°32'17"W	119.84'
L12	N03°48'39"E	61.36'

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	367.00'	37.99'	18.01'	37.97'	N87°04'25"W	005°55'52"
C2	367.00'	112.92'	56.91'	112.48'	S81°13'28"E	017°37'46"

SYMBOL	DESCRIPTION
(1)	8" # GATE VALVE
(2)	8" X 8" X 8" TEE
(3)	8" X 12" X 12" TEE
(4)	12" # GATE VALVE
(5)	8" BEND
(6)	12" BEND
(7)	FIRE HYDRANT

DESCRIPTION	QUANTITY	UNIT
8" PVC WATER LINE	2458.26	LF
8" GATE VALVE	9	EA
FIRE HYDRANT	6	EA
12" PVC WATER LINE	1885.57	LF
12" GATE VALVE	5	EA

WATER INDEX MAP

SCALE: 1" = 100'

- GENERAL NOTES**
- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE PROPOSED WATER MAINS SHALL BE INSTALLED NO LESS THAN 10' AWAY FROM EXISTING SEWER LINE. SEPARATION DISTANCES SHALL FOLLOW TCEQ STANDARD REQUIREMENTS (§290.44).
 - THE INTENT OF THE OWNER IS TO HAVE THE WATER MAINS INSTALLED TO SUCH A DEPTH THAT THEY WILL HAVE AT LEAST 60" FROM INVERT OF PIPELINE TO PROPOSED ELEVATIONS AT ALL LOCATIONS. THE PIPELINES SHALL HAVE NO DIPS, ELEVATIONS AT ALL LOCATIONS. THE PIPELINES SHALL HAVE NO DIPS, SAGS OR HUMPS OR OTHER IRREGULARITIES IN VERTICAL ALIGNMENT. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO INSTALLING THE WATER PIPELINE SO THAT AN ACCEPTABLE PROFILE CAN BE ESTABLISHED PRIOR TO INSTALLATION OF THE PIPELINE.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN IN THE PLANS, AND COORDINATE WORK WITH ALL UTILITY COMPANIES, EL PASO WATER UTILITIES AND CITY OF EL PASO PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY DEPTHS ARE UNKNOWN. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR ACQUIRING FIELD DEPTHS OF ALL UTILITIES WITHIN THE PROJECT AREAS.
 - TRENCH SAFETY REQUIREMENTS SHALL BE AS REQUIRED BY OSHA.
 - AS-BUILT STATIONING, OFFSET FROM R.O.W. AND INVERT ELEVATIONS SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR ON A CLEAN SET OF PLANS FOR EACH VALVE, FIRE HYDRANT, ELBOW, SERVICE CONNECTION AND/OR STUB-OUT, WITH RESPECT TO THE APPROPRIATE PROJECT CONTROL POINT.
 - THE EL PASO WATER UTILITIES AND CITY OF EL PASO MUST BE NOTIFIED 48 HOURS PRIOR TO COMMENCING ANY WORK IN AREAS WITHIN THEIR JURISDICTION.
 - EXISTING STREETS, DRIVEWAYS, PARKING LOTS, MAILBOXES, SIGNS, CHAIN-LINK FENCES, AND ALL OTHER MISCELLANEOUS STRUCTURES DAMAGE OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION AT NO COST TO OWNER.
 - TRAFFIC CONTROL SHALL BE IN PLACE PRIOR TO INITIATING WORK.
 - ALL TIE-INS SHALL BE CLOSELY COORDINATED WITH THE EL PASO WATER UTILITIES AT LEAST 48 HOURS PRIOR TO ACTUAL CONSTRUCTION.
 - CONTRACTOR SHALL PROVIDE THE REQUIRED COUPLINGS, ELBOWS AND NECESSARY PIPING APPURTENANCES FOR A COMPLETE AND OPERATIONAL WATER SYSTEM.
 - ALL NEW VALVES SHALL BE ALIGNED PERPENDICULAR TO PROPERTY LINES.
 - CONSTRUCTION OF THE PUBLIC WATER AND SEWER SYSTEM INCLUDING MATERIALS AND TESTING SHALL CONFORM EPWU-PSB SPECIFICATIONS FOR THE INSTALLATION OF WATER MAINS, SEWER MAINS AND RELATED APPURTENANCES.
 - FIRE HYDRANTS SHALL BE INSTALLED IN THE PARKWAY AREA.
 - THE WATER METERS FOR THE PROPOSED WATER SERVICE CONNECTIONS SHALL BE INSTALLED ON THE PARKWAYS. SYMBOLS ARE ONLY SHOWN FOR DEPICTION PURPOSES ONLY.

GENERAL UTILITIES:
TEXAS EXCAVATION SAFETY SERVICE
11804 GREENVILLE AVENUE
DALLAS, TX 75243
(800) 344-8377

CABLE TELEVISION:
TIME WARNER COMMUNICATIONS
7010 AIRPORT ROAD
EL PASO, TX 79906
(915) 772-1123

RESIDENTIAL GAS LINES:
TEXAS GAS SERVICE
4700 POLLARD ST.
EL PASO, TX 79930
(915) 680-7328
MR. JOSE DE ALBA

ENGINEER:
SEA GROUP
CASTNER CENTER @ TRANSMOUNTAIN
4712 WOODROW BOULEVARD
EL PASO, TX 79961
(915) 544-5233
MR. JORGE L. AZCARATE, P.E.

WATER & SEWER:
EL PASO WATER UTILITIES
1154 HAWKINS BOULEVARD
EL PASO, TX 79961
(915) 594-5530
MR. FELIPE LOPEZ, JR., P.E.

TELEPHONE:
SBC
11200 PELICANO
EL PASO, TX 79935
(915) 685-3788
MR. TIM BROWN

FIBER OPTICS:
AT&T
P.O. BOX 1650
EL PASO, TX 79949
(800) 852-3786
MS. DARLENE NORIS

ELECTRIC:
EL PASO ELECTRIC CO.
501 W. SAN ANTONIO ST.
EL PASO, TX 79902
(915) 543-2076
MR. FRANK WIGEL (DISTRIBUTION)

FIBER OPTICS:
MCI TELECOMMUNICATIONS CORP.
4045 DOWNSHIP PARK CIRCLE
EL PASO, TX 79922
(915) 542-2770 EXT. 201
MR. DANIEL HERNANDEZ

EL PASO STREETS
CITY OF EL PASO
DEPARTMENT OF TRANSPORTATION
7908 SAN PAULO DRIVE
EL PASO, TX 79907
(915) 621-6750
MR. DARYL W. COLE

WARNING!
BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

INDEX

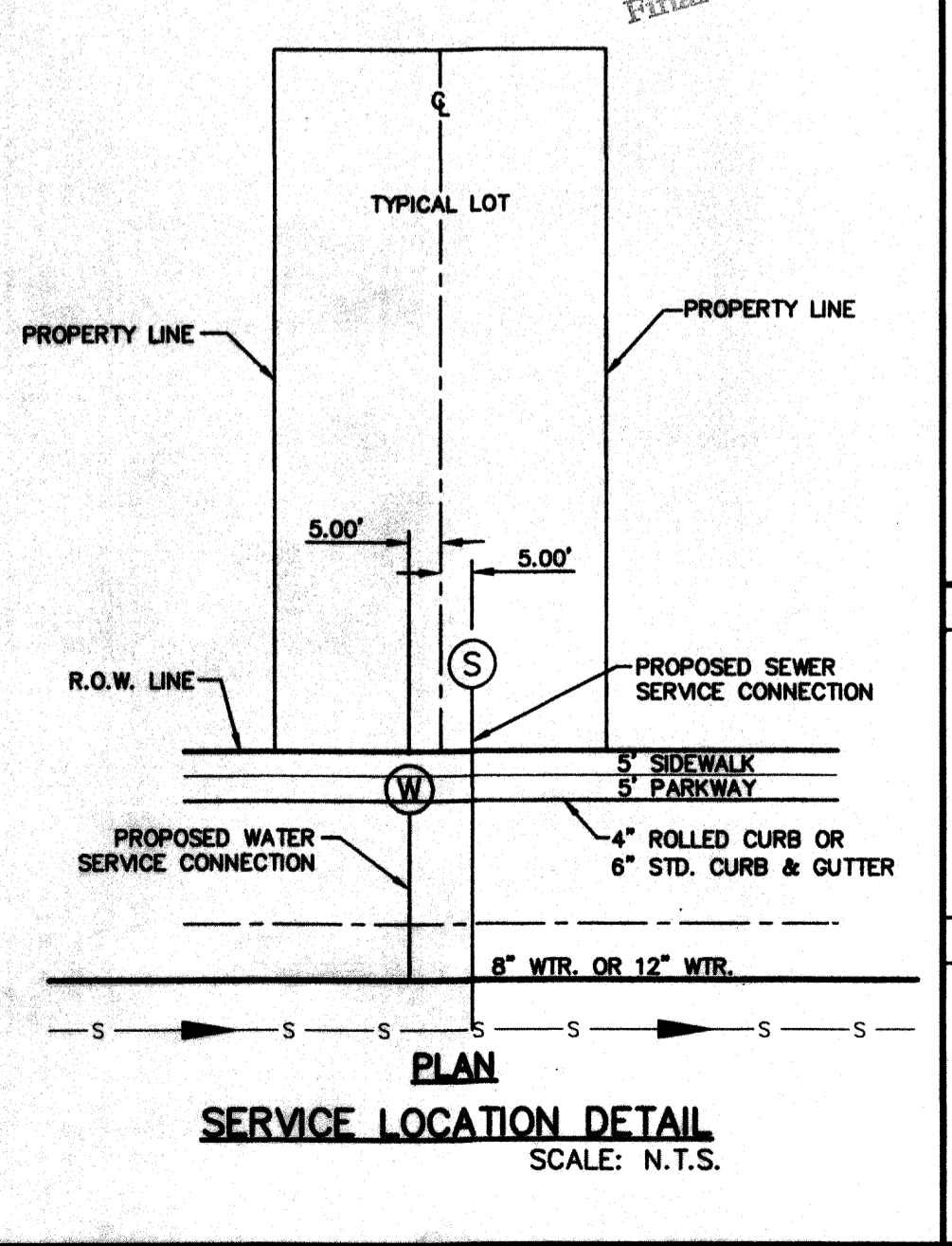
SHEET NO.	DESCRIPTION
C11.1	WATER MAIN PIPE LAYOUT
C12.1-C12.5	WATER DETAILS

NOTES:

- ALL LOTS SHALL BE PROVIDED WITH ONE SERVICE CONNECTION TO BE INSTALLED AT THE LOCATION AS SHOWN ON THE SERVICE LOCATION DETAIL.
- ALL WATER LINES SHALL BE PVC C-900, CLASS 150.
- REFERENCE WATER DETAILS FOR TYPICAL VALVE AND WATER LOCATIONS AT STREET INTERSECTIONS.
- REFERENCE WATER DETAILS FOR WATER LINE CROSSING STORM SEWER.

LEGEND

SYMBOL	DESCRIPTION
8" WTR.	PROPOSED 8" C-900, CLASS 150 P.V.C. PIPE
12" WTR.	PROPOSED 12" C-900 P.V.C. PIPE, UNLESS OTHERWISE SPECIFIED
---	SUBDIVISION BOUNDARY LINE
---	PROPERTY LINE
---	STREET CENTER LINE
8" SWR	PROPOSED SEWER LINE (PLAN VIEW)
---	PROPOSED STORM SEWER
---	PROPOSED SERVICE CONNECTION (PLAN VIEW)
---	PROPOSED FIRE HYDRANT, KENNEDY OR MUELLER MODEL
---	PROPOSED 8" PLUG
---	PROPOSED GATE VALVE
---	POINT OF TANGENCY
---	EXISTING GATE VALVE
---	EXISTING FIRE HYDRANT
---	EXISTING PLUG
ExS	EXISTING SEWER LINE
ExW	EXISTING WATER LINE
W	EXISTING 24" WATER LINE
ExW	EXISTING 8" WATER LINE



REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).
DATE _____
REVISIONS _____ BY _____

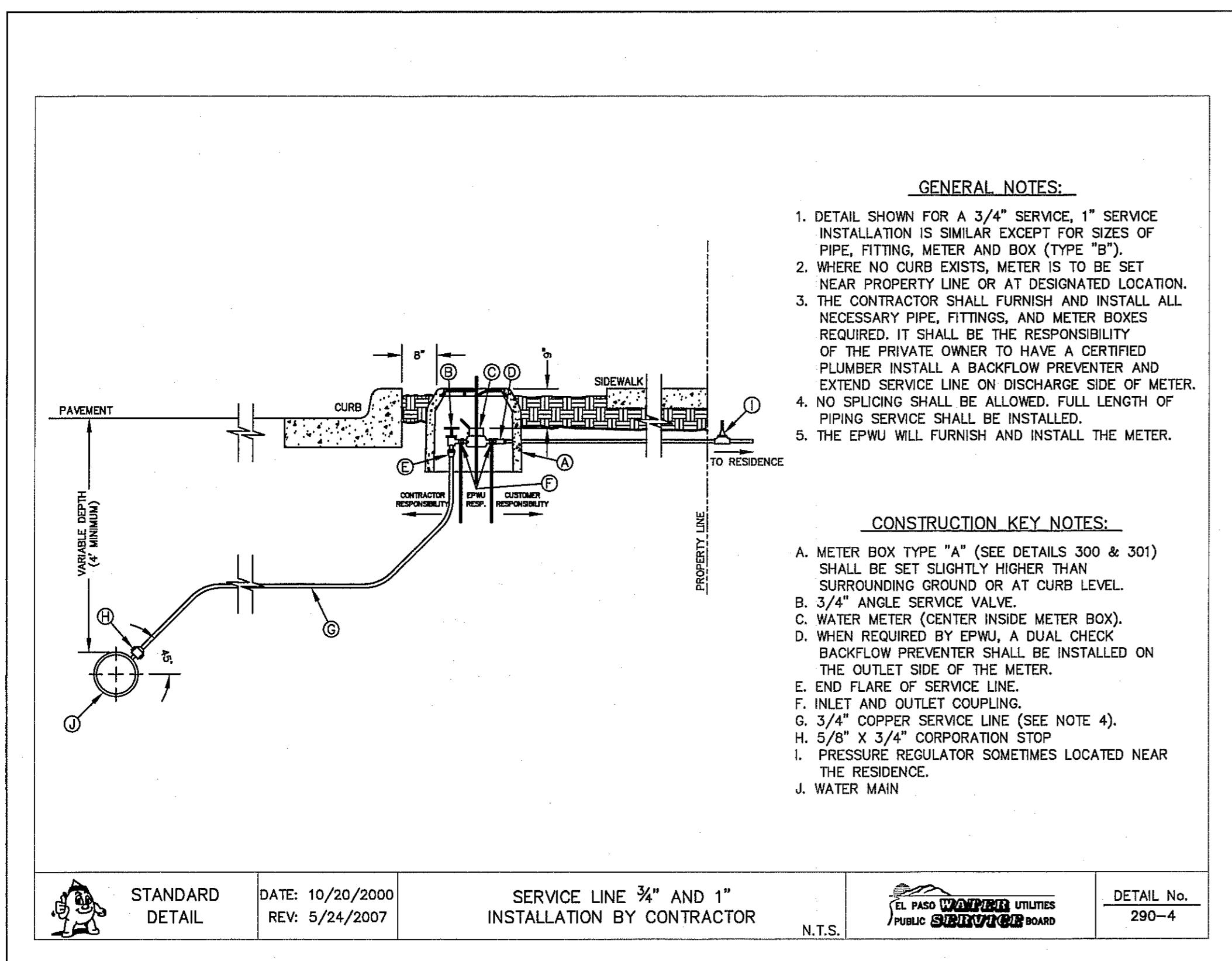
ENGINEER'S SEAL
J. AZCARATE
80075
TEXAS REGISTERED ENGINEERING FIRM F-484
4712 Woodrow Blvd., Ste. F El Paso, TX 79904
Office: 915.544.5232 Fax: 915.544.5233 www.seagroup.com

Horizontal: 1" = 100'
Vertical: N/A
Contour Interval: N/A
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APP'D. BY: J.L.A.
JOB No. 2280-018-LD

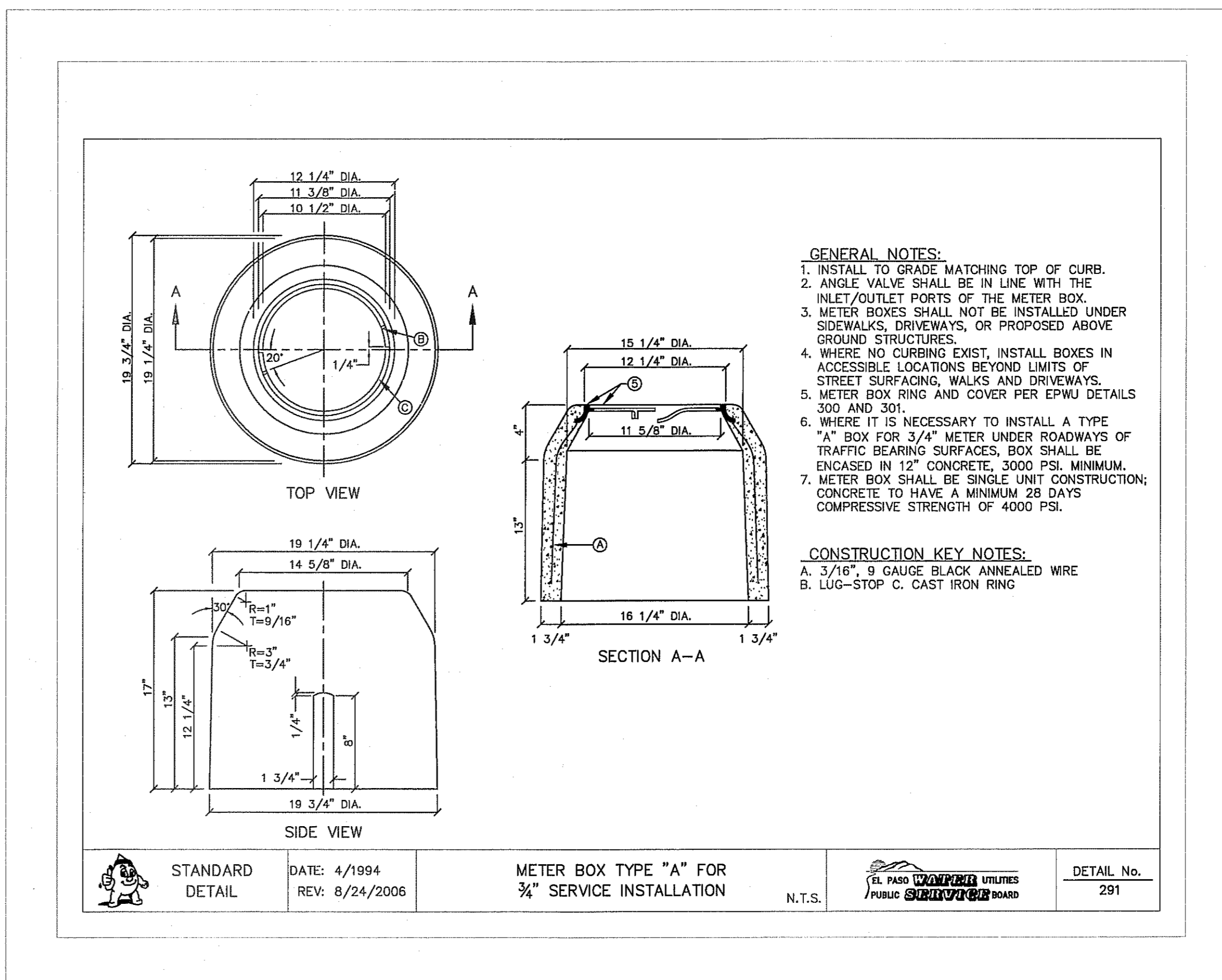
PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**WATER INDEX/
GENERAL
INFORMATION**

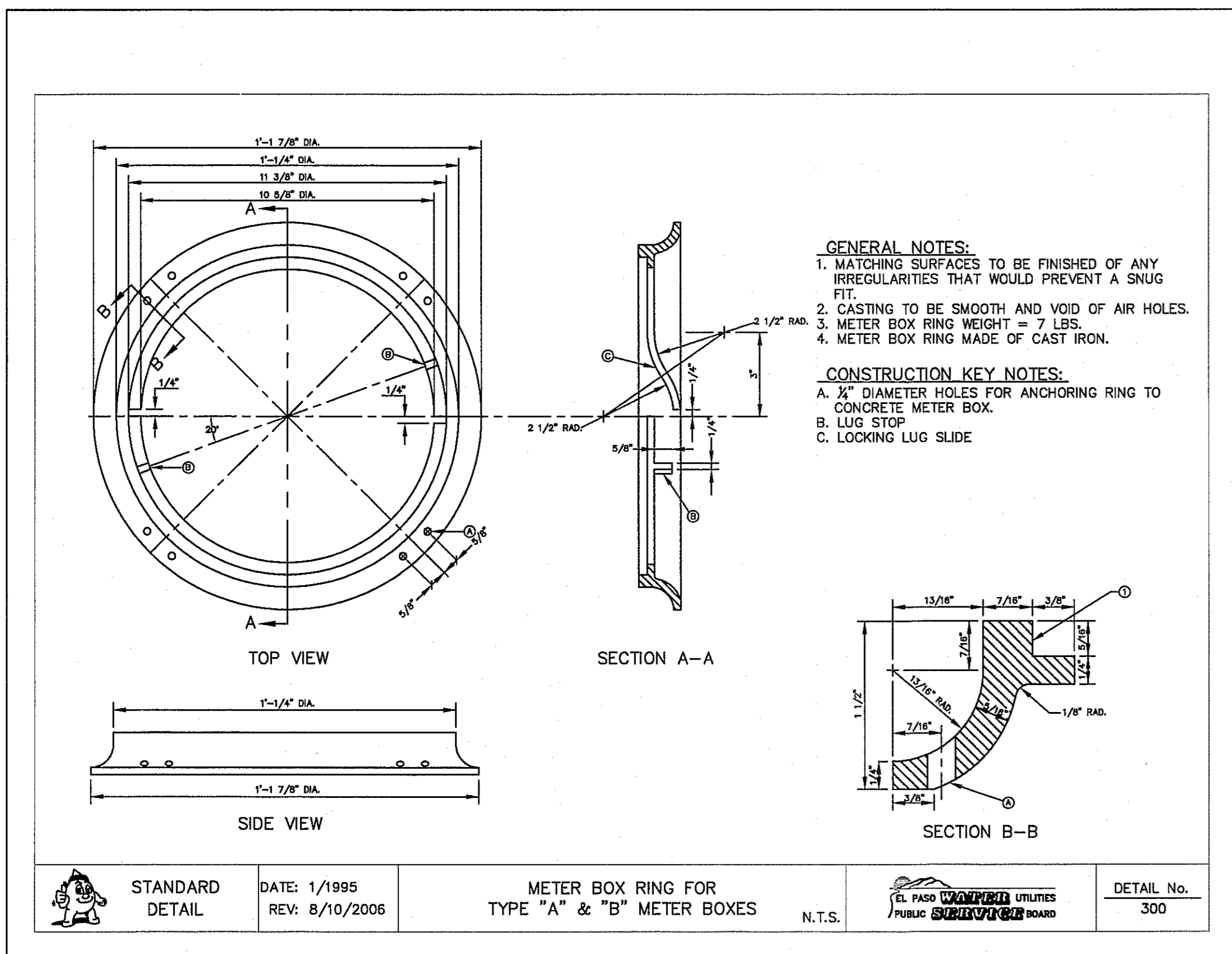
SHEET NO.
C11.1



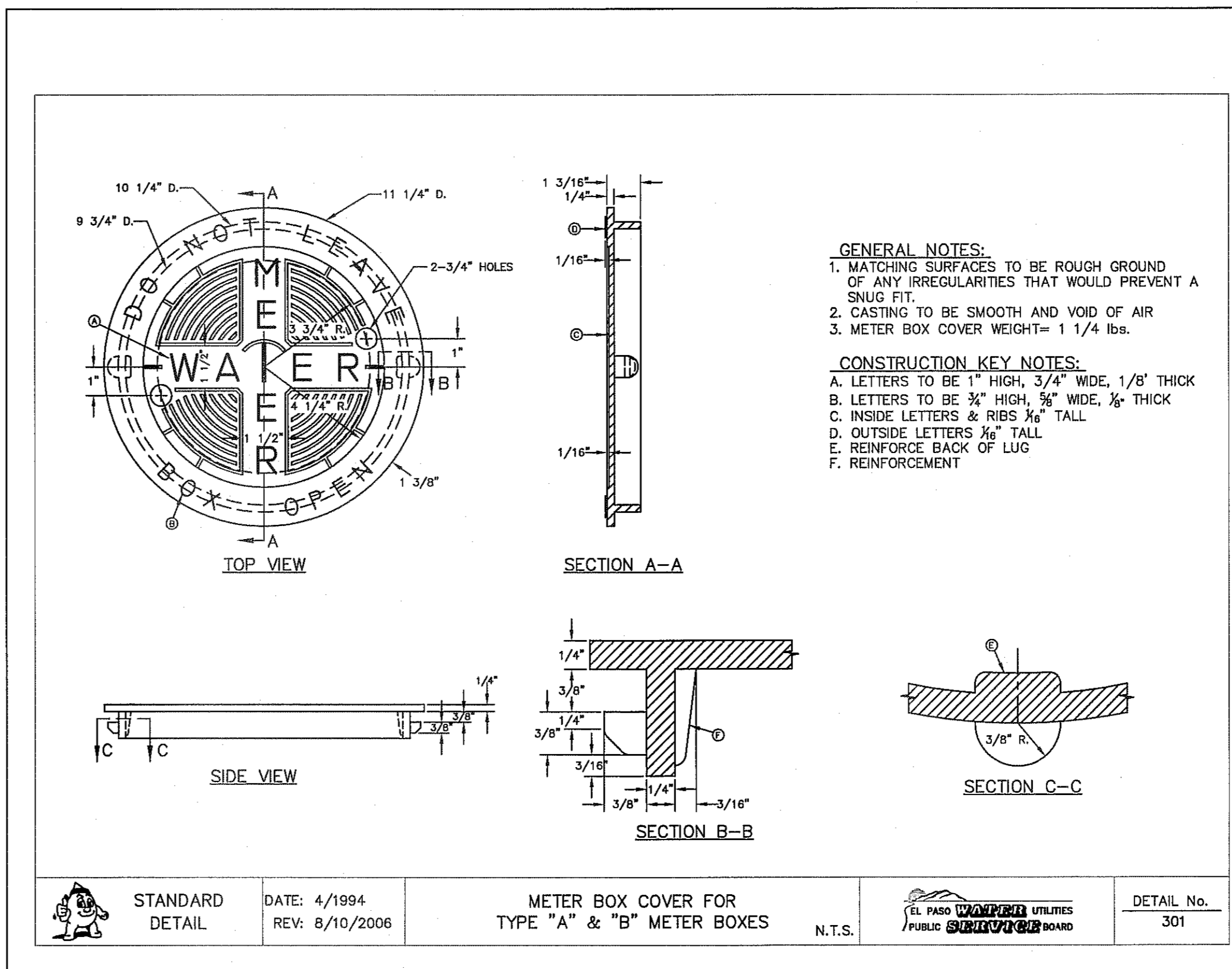
1 TYPICAL SERVICE LINE INSTALLATION
SCALE: N.T.S.



2 METER BOX DETAIL
SCALE: N.T.S.



4 METER BOX RING DETAIL
SCALE: N.T.S.



4 METER BOX COVER DETAIL
SCALE: N.T.S.

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).
DATE _____ BY _____
REVISIONS _____

CSA
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4684
4712 Woodrow Bark, Ste. F El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.csaengr.com

ENGINEER(S) SEAL
JORG L. AZARATE
86075
6075

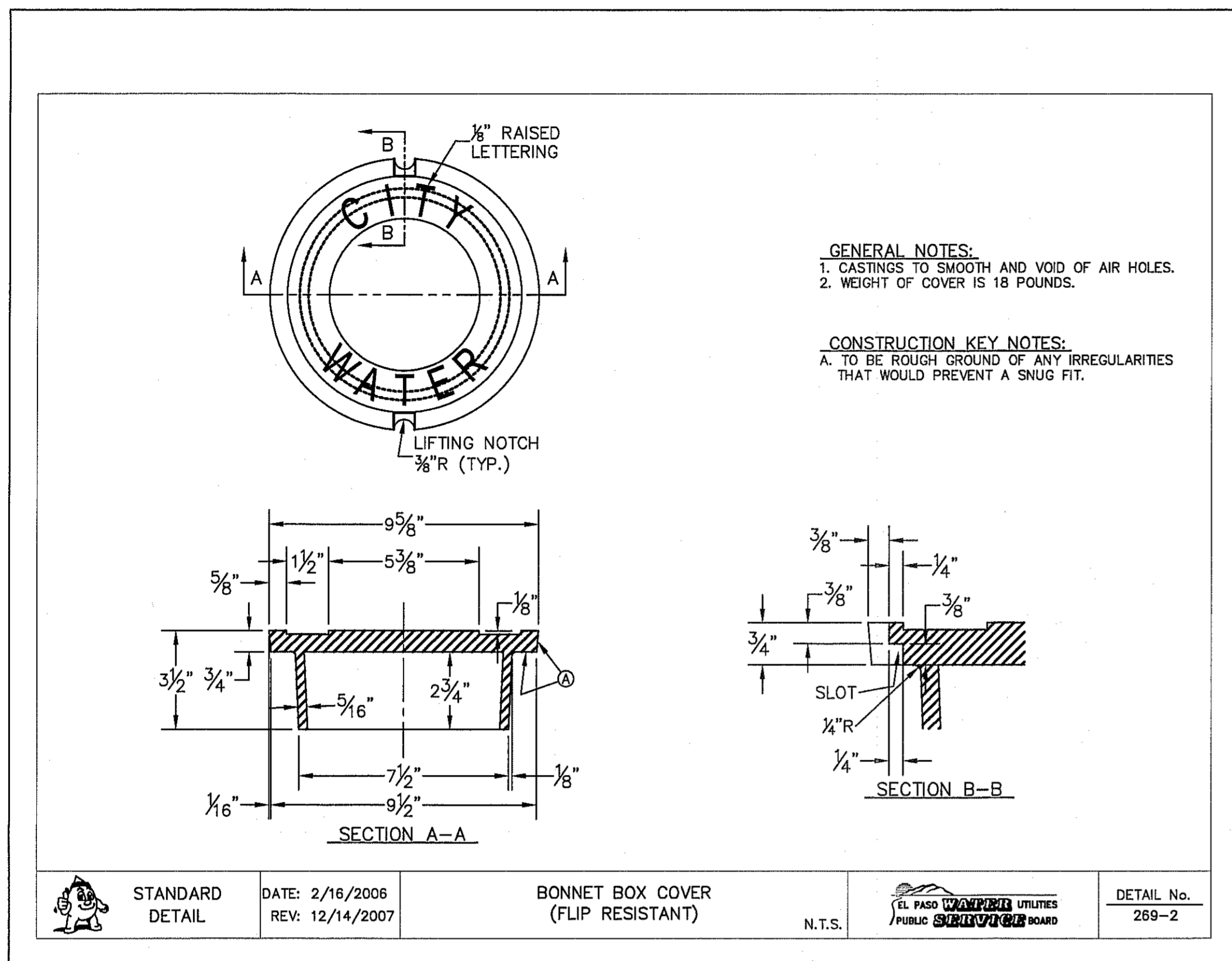
SCALE
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.L.A.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2260-016-LD

PROJECT TITLE
VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

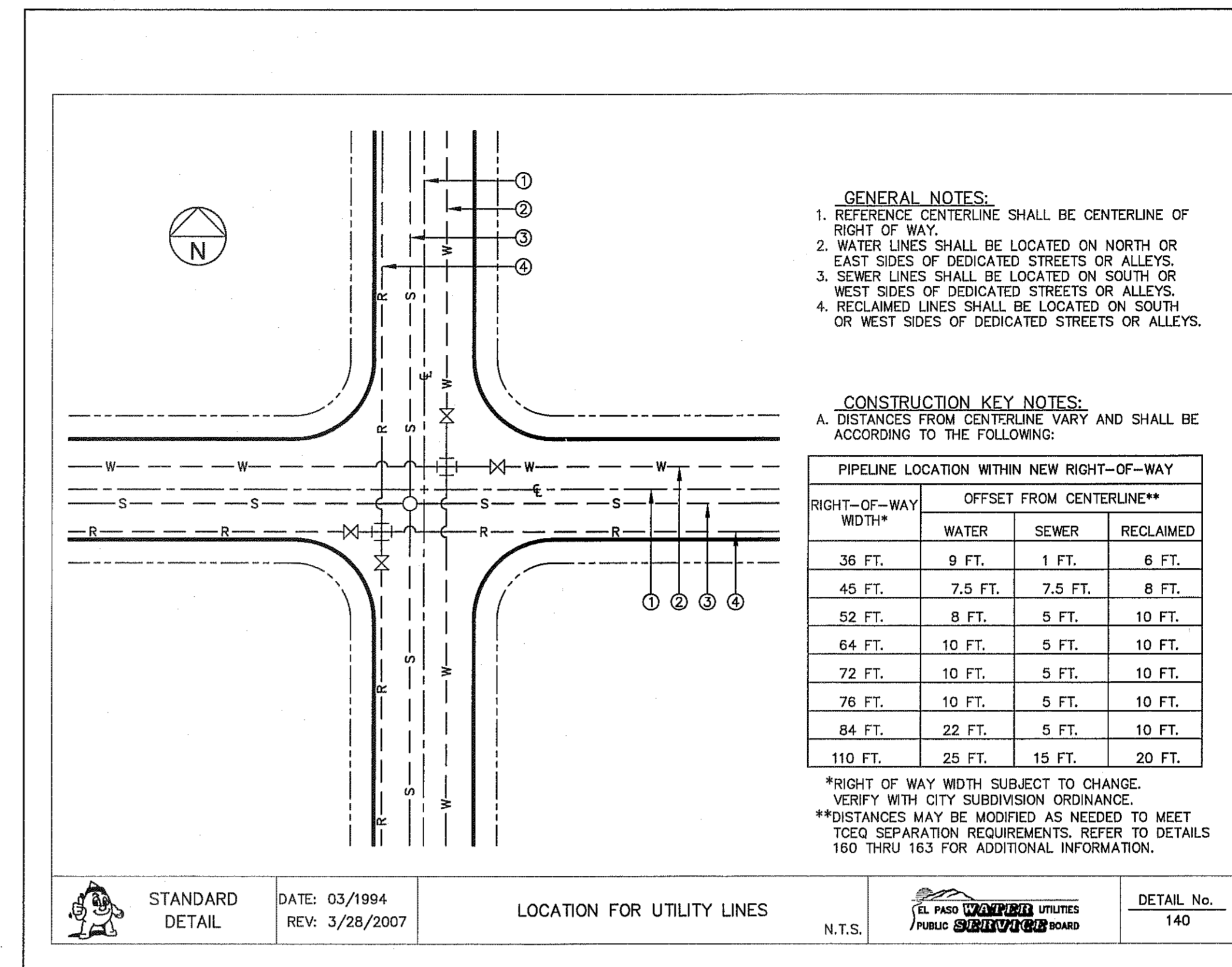
SHEET TITLE
WATER DETAILS
(SHEET 1 OF 5)
SHEET NO.

C12.1

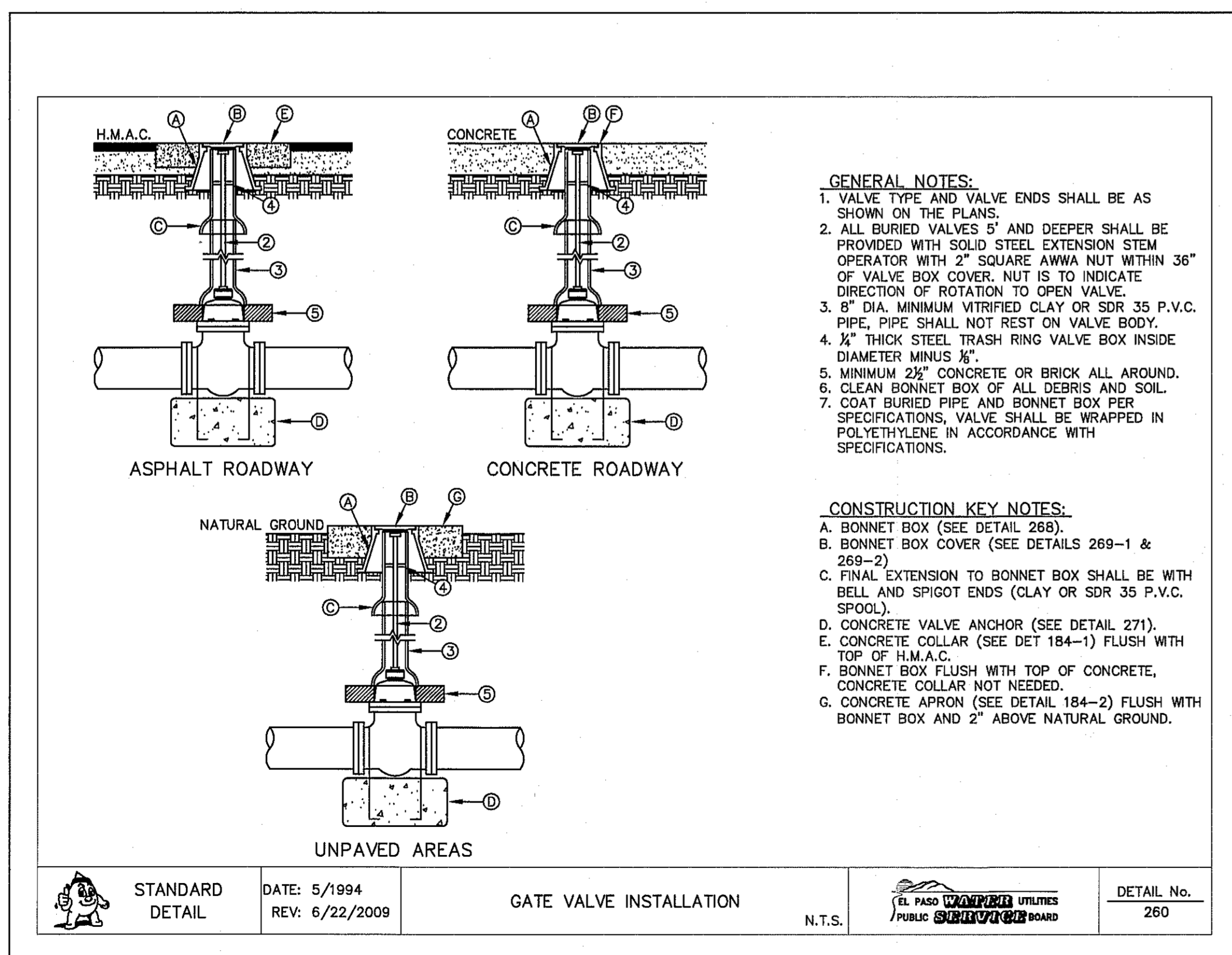
S:\2260-016-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-016-C12.1-1-12.5-Water Details.dwg, Layout1, 8/19/2014 10:16:11 AM



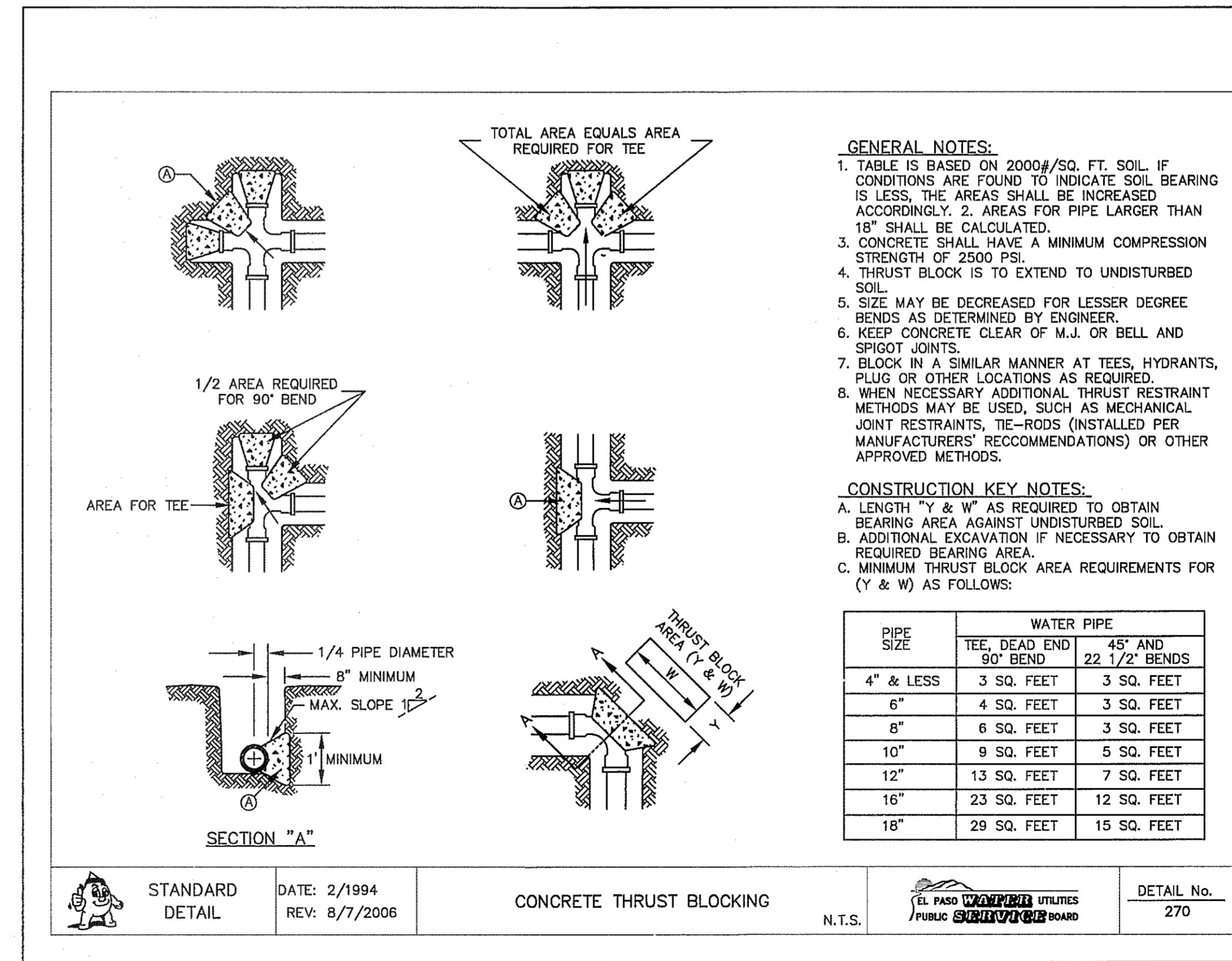
1 BONNET BOX COVER (FLIP RESISTANT)
 C12.2 SCALE: N.T.S.



2 STANDARD LOCATION FOR EXTENSIONS DETAIL
 C12.2 SCALE: N.T.S.



3 GATE VALVE INSTALLATION
 C12.2 SCALE: N.T.S.



4 THRUST BLOCKING
 C12.2 SCALE: N.T.S.

REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).
 DATE: _____ BY: _____
 REVISIONS: _____

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-464
 4712 Woodrow Blann, Ste. F El Paso, TX 79924
 Office: 915.544.5322 Fax: 915.544.5233 www.csaeng.com

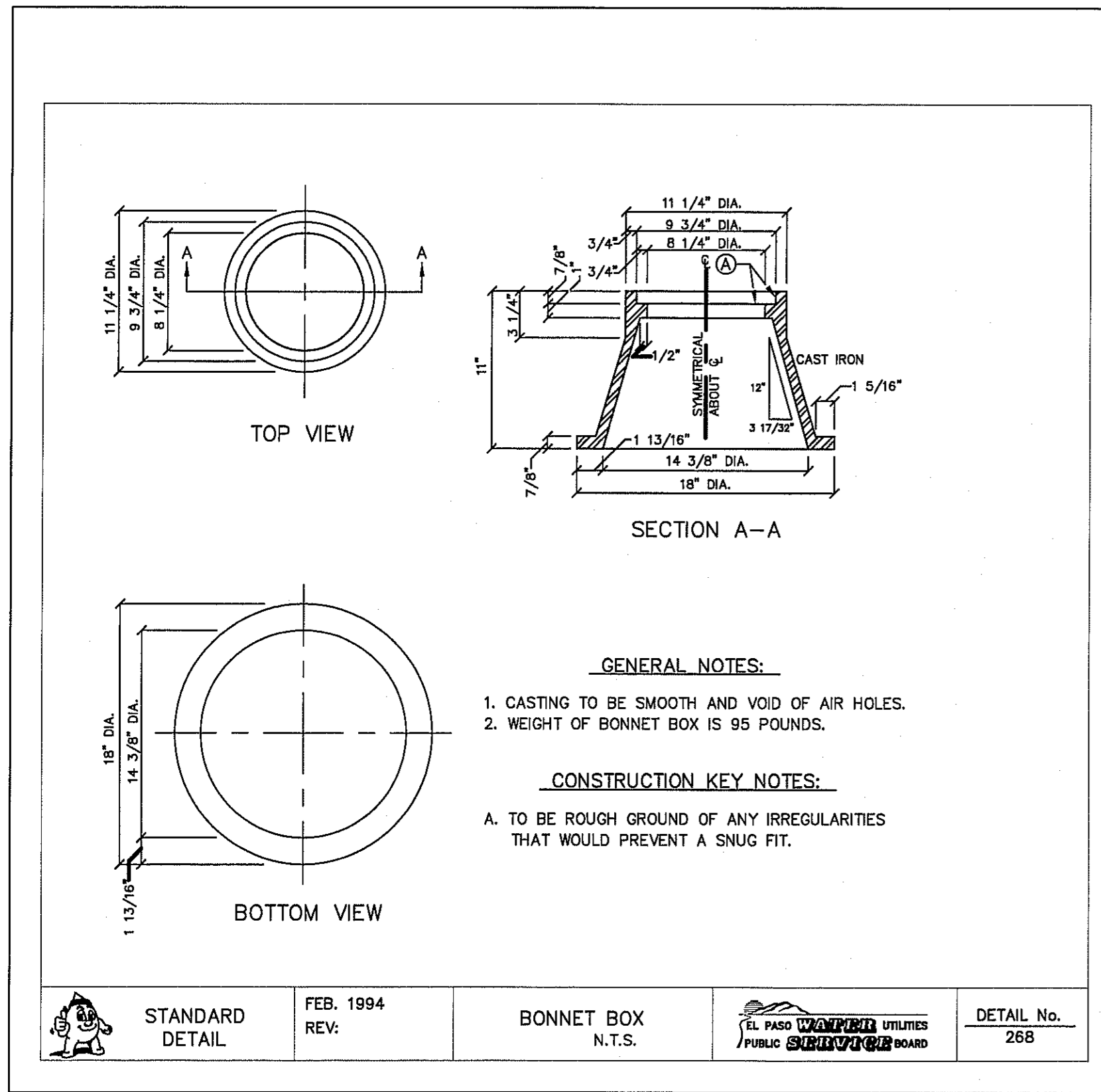
ENGINEER'S SEAL
 JORGE L. AZCARRATE
 8075
 EL PASO, TEXAS 79905
 11/14

SCALE:
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.L.A.
 CHKO. BY: J.L.A.
 APP'D. BY: J.L.A.
 JOB No. 2260-018-LD

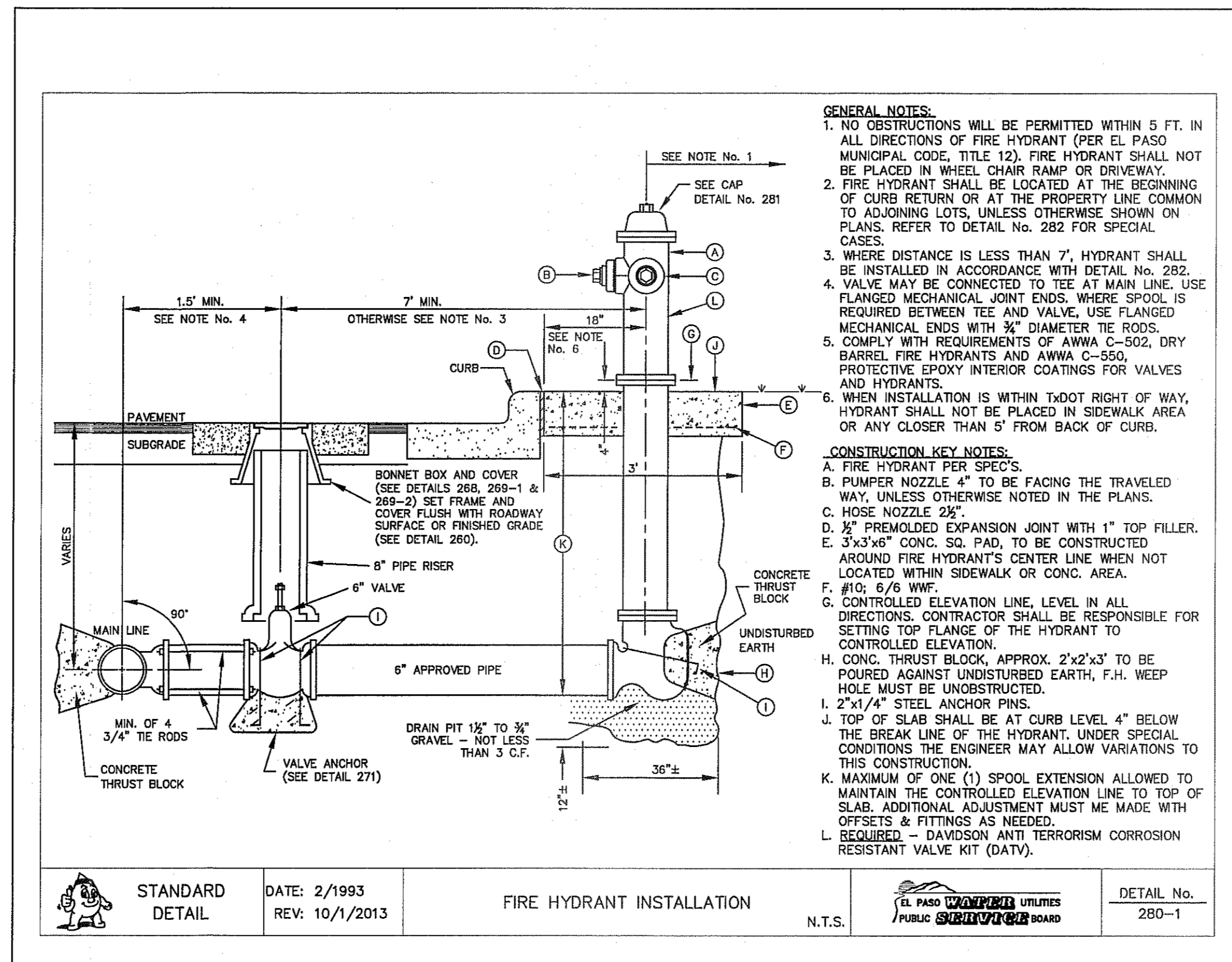
PROJECT TITLE
 VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
 WATER DETAILS
 (SHEET 2 OF 5)
 SHEET NO.

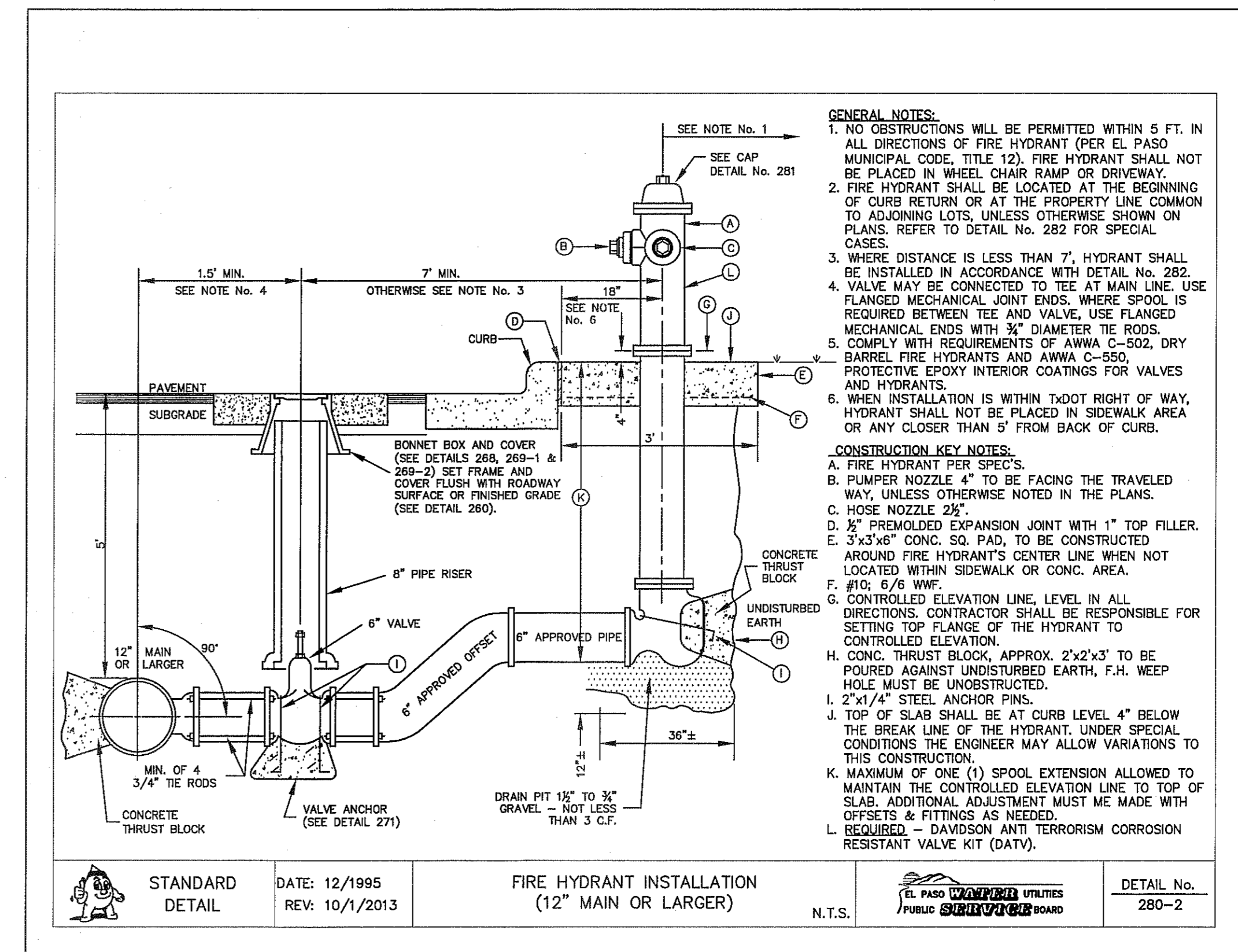
C12.2



1 **BONNET BOX**
SCALE: N.T.S.



2 **STANDARD FIRE HYDRANT INSTALLATION**
SCALE: N.T.S.



3 **12\"/>**

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTRELINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

DATE: _____ REVISIONS: _____ BY: _____

ENGINEER'S SEAL

SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

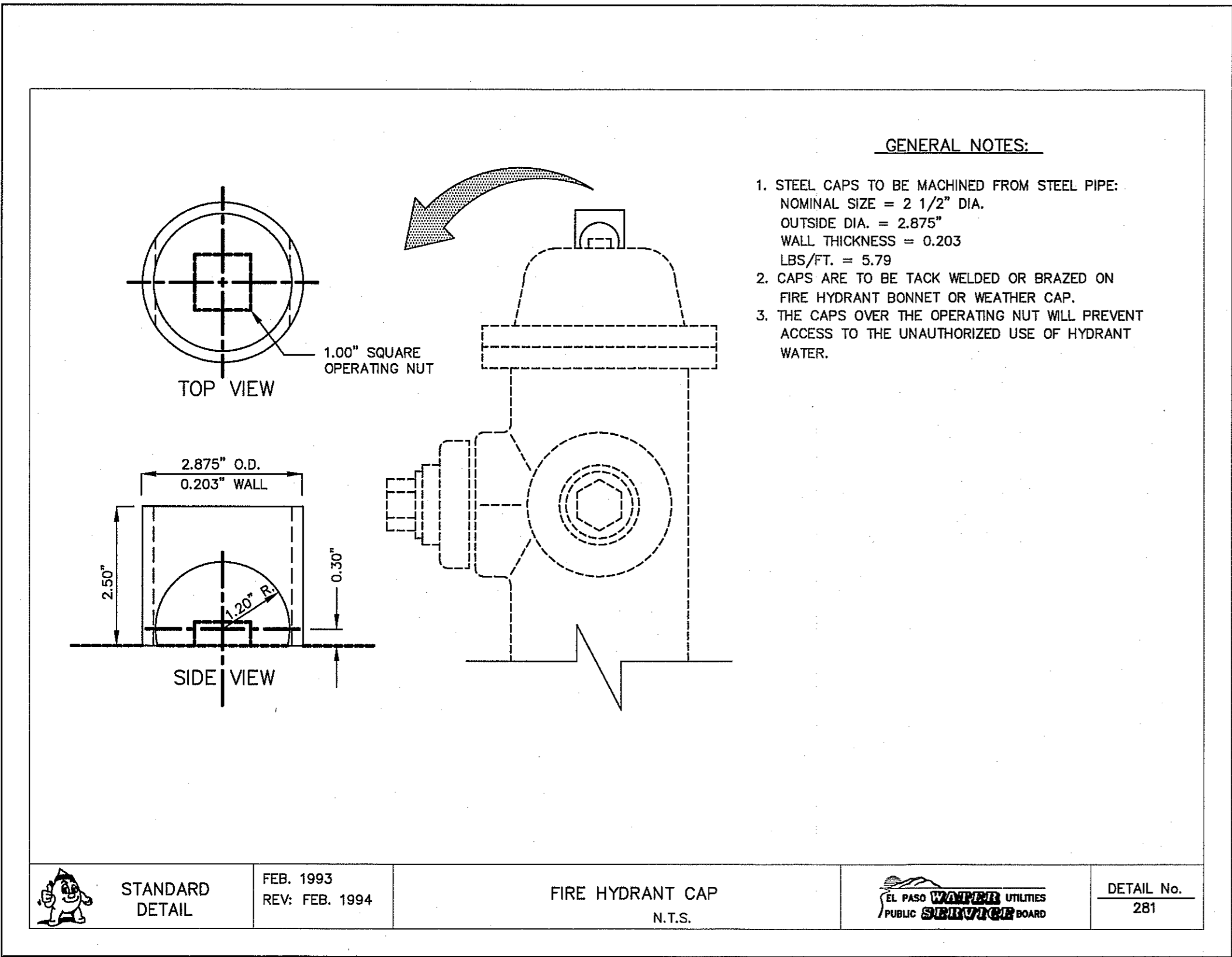
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPD. BY: J.L.A.

JOB No. 2260-018-ID

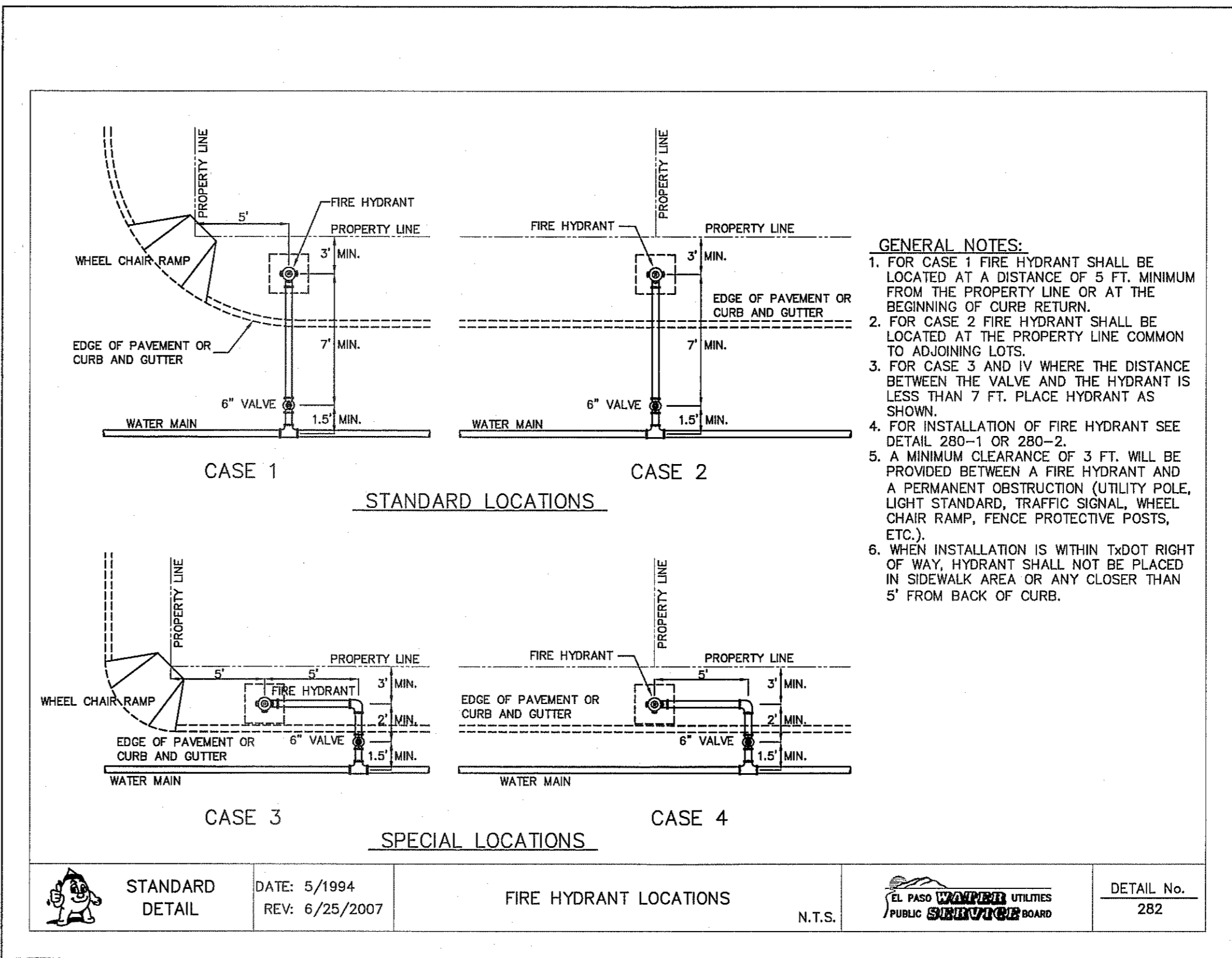
PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
WATER DETAILS
(SHEET 3 OF 5)
SHEET No.

C12.3

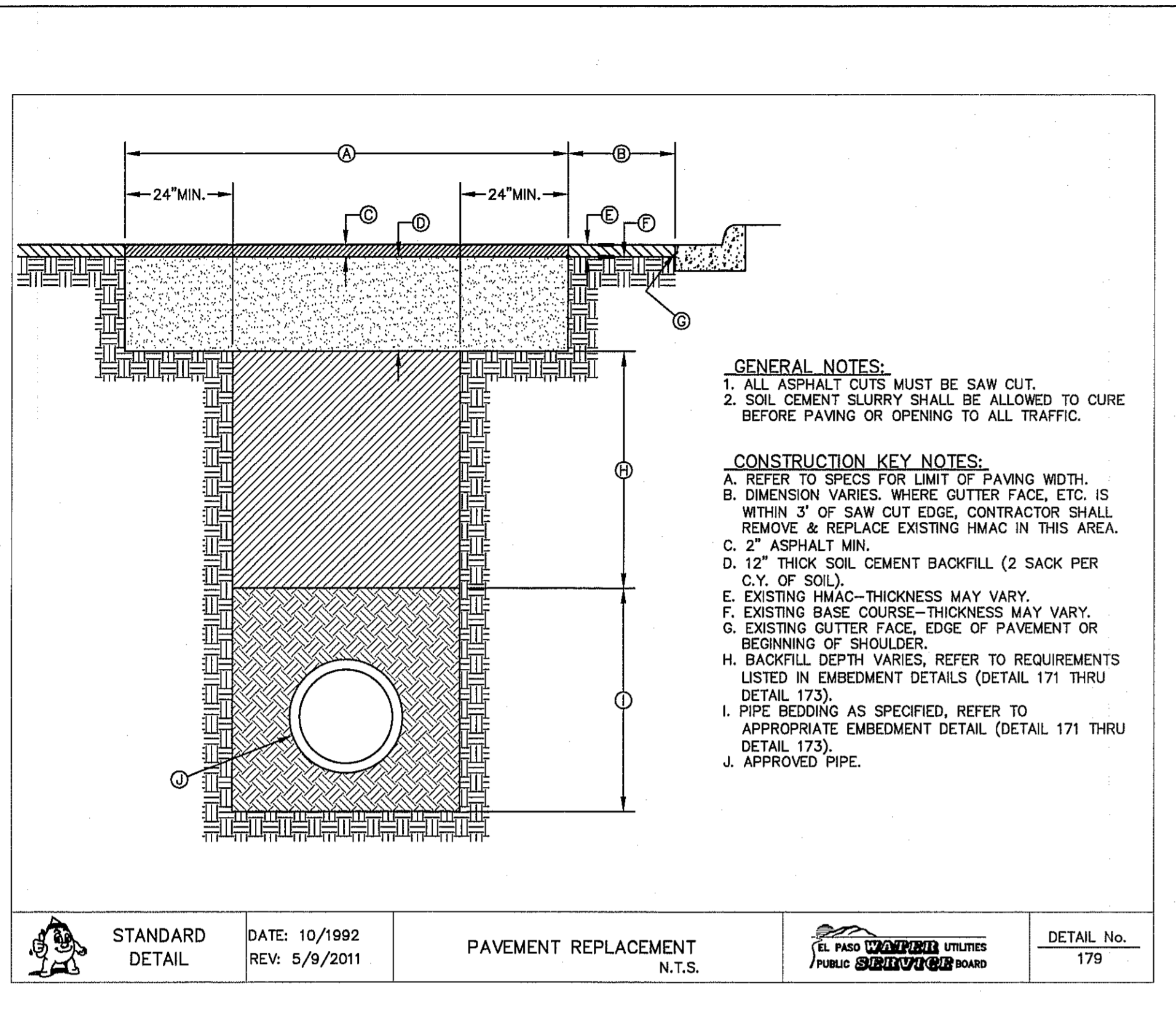


4 **FIRE HYDRANT CAP**
SCALE: N.T.S.

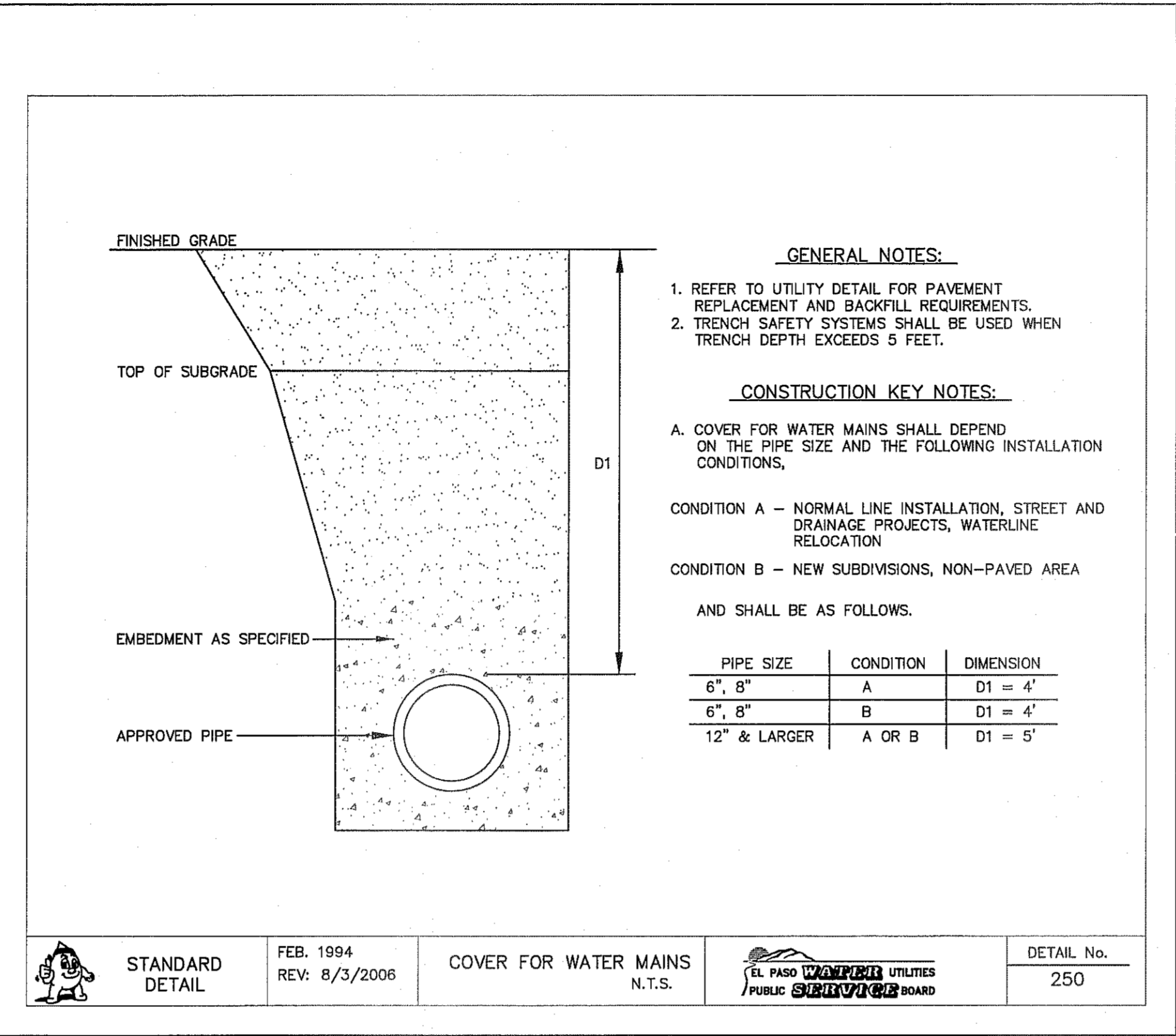


5 **FIRE HYDRANT LOCATIONS**
SCALE: N.T.S.

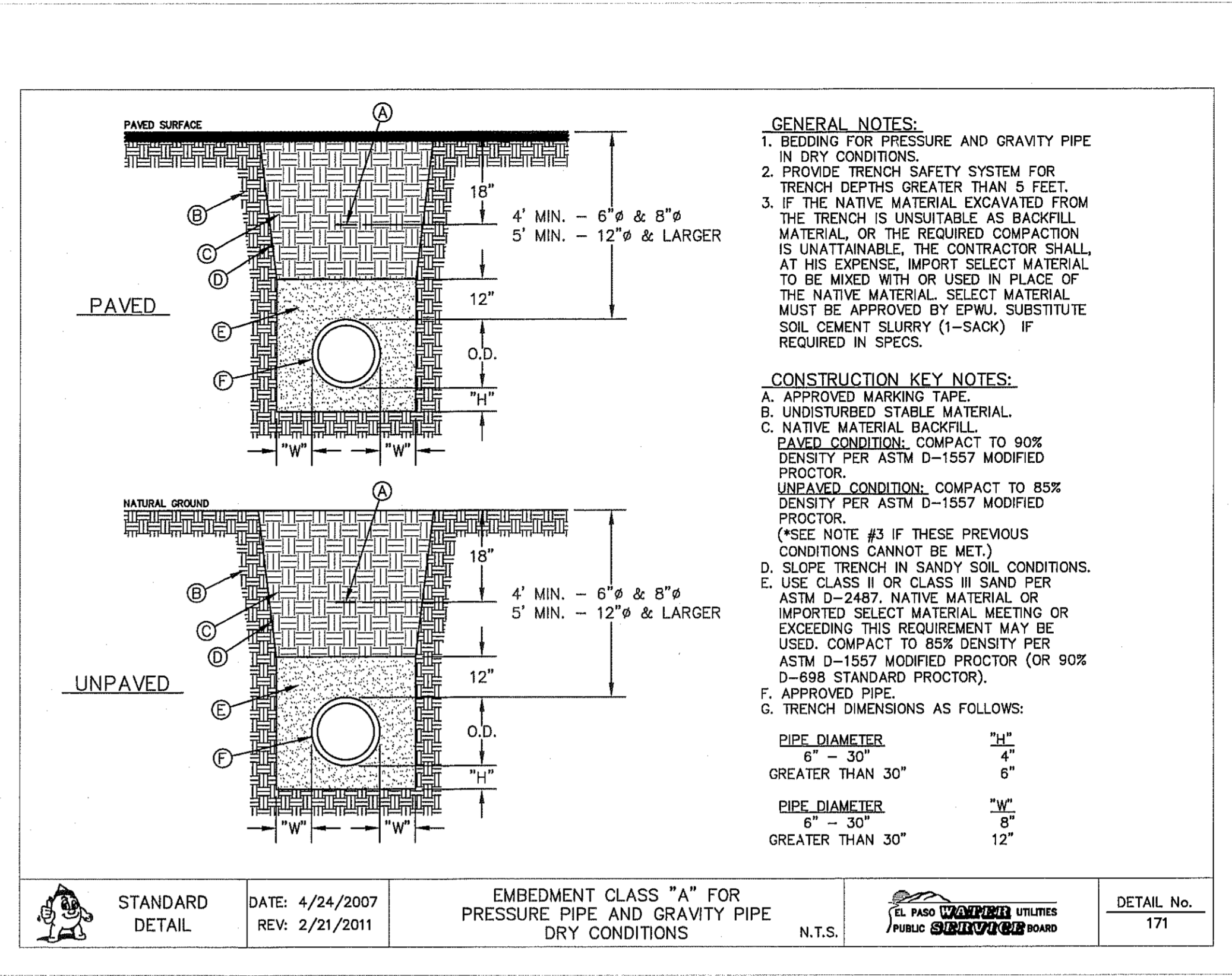
S:\2260\2260-018D-Ventanas Unit Eight\DWG5\Construction Drawings\Improvement Plans\2260-018-C12.1-12.5-Water Details.dwg, Lspaul3, 9/19/2014, 10:16:41 AM



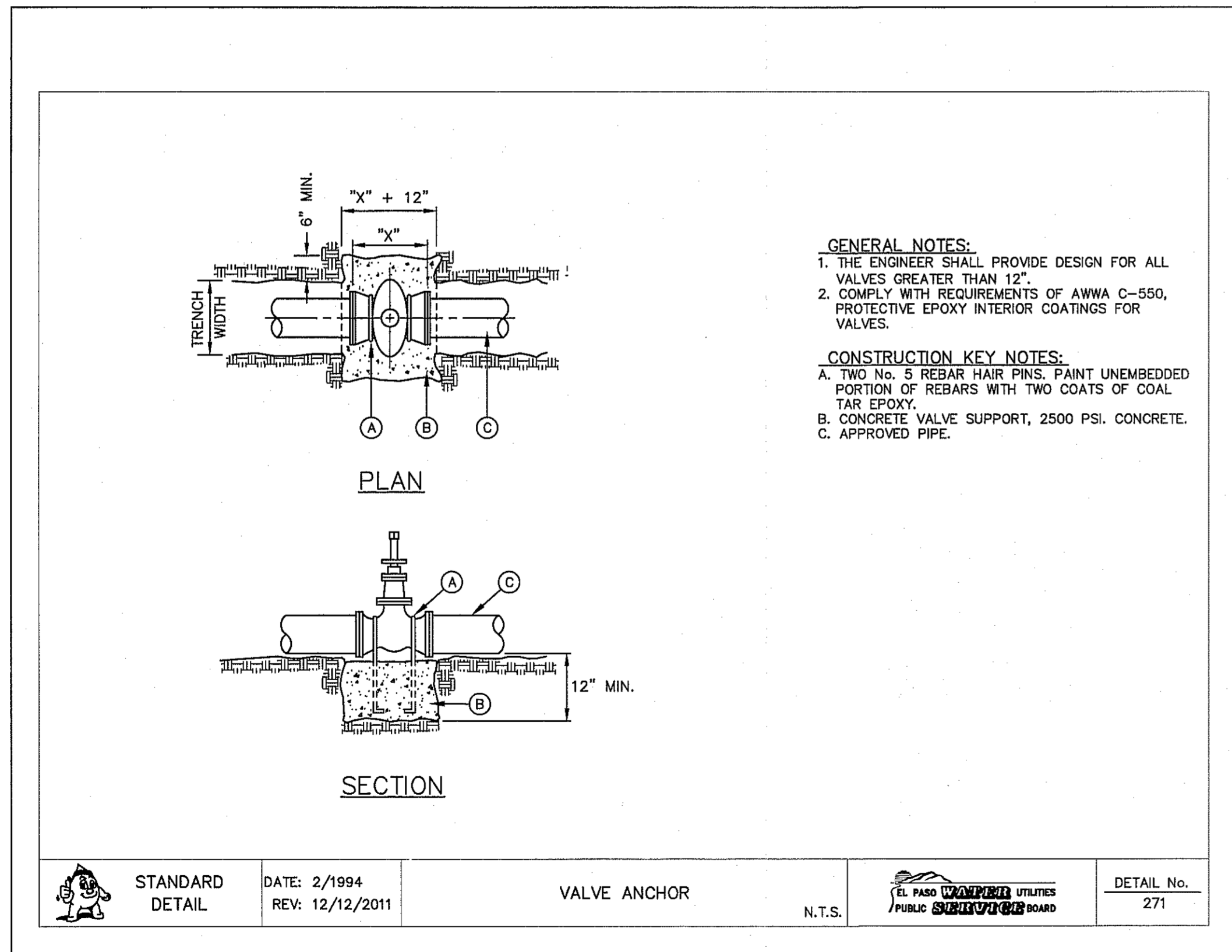
1 PAVEMENT REPAIR DETAIL
C12.4 SCALE: N.T.S.



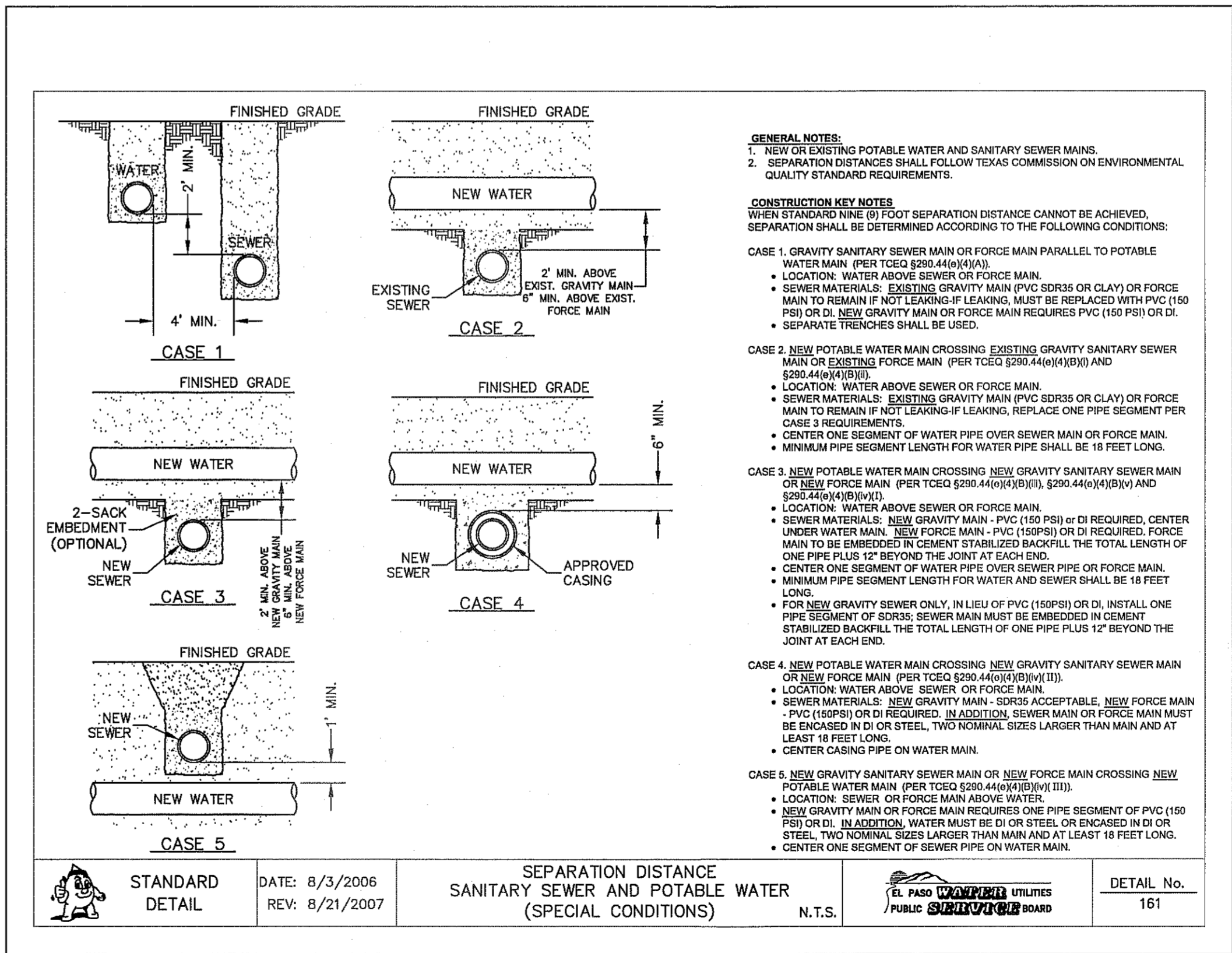
2 STANDARD COVER FOR WATER MAINS
C12.4 SCALE: N.T.S.



3 BEDDING CLASS DETAILS FOR P.V.C. PRESSURE PIPE
C12.4 SCALE: N.T.S.



4 VALVE ANCHOR
C12.4 SCALE: N.T.S.



5 SEPARATION DISTANCE - SANITARY SEWER AND POTABLE WATER
C12.4 SCALE: N.T.S.

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).
DATE _____ BY _____
REVISIONS _____

CSA
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM #464
4712 Woodrow Blinn, Ste. F El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.csaeng.com

EL PASO WATER UTILITIES
PUBLIC SUBDIVISION BOARD

ENGINEER'S SEAL
JORG L. AZCARRATE
68075

SCALE: N/A
Horizontal: N/A
Vertical: N/A
Contour Interval: N/A
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.L.A.
CHKD. BY: J.L.A.
APPROV. BY: J.L.A.
JOB No. 2260-018-LD

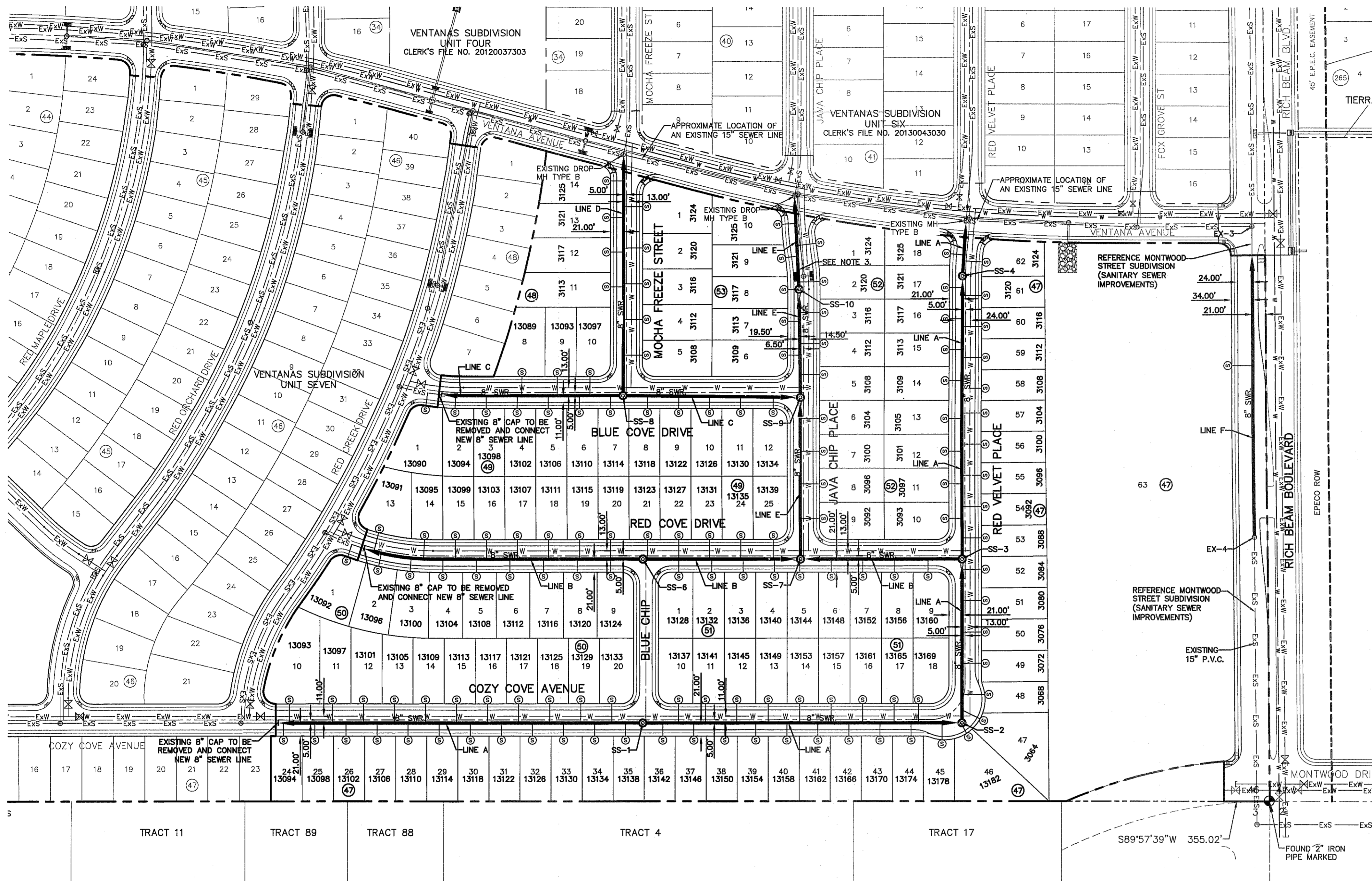
PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE
WATER DETAILS

(SHEET 4 OF 5)
SHEET NO.

C12.4

S: 2260-018-LD-Ventanas Unit Eight\DWG5\Construction Drawings\Improvement Plans\2260-018-C12.1-12.5-Water Details.dwg, Layout4, 8/19/2014 10:17:07 AM



WASTEWATER QUANTITIES			
ITEM NO.	DESCRIPTION	QUANTITY	UNIT
1	8" PVC SDR35 GRAVITY LINE	4,838.57'	LINEAR FEET
2	STANDARD WASTEWATER MANHOLE (0'-8" DEEP)	9	EACH
3	STANDARD WASTEWATER MANHOLE (8'-12" DEEP)	1	EACH
4	4" WASTEWATER SERVICE CONNECTION	138	EACH

CONTRACTOR SHALL VERIFY DEPTH AND LOCATION OF ALL EXISTING UTILITIES PRIOR TO COMMENCING CONSTRUCTION.

SANITARY SEWER INDEX MAP
SCALE: 1" = 100'

GENERAL NOTES

- UNLESS OTHERWISE SHOWN ON THE DRAWINGS, THE PROPOSED SEWER MAINS AND SEWER MANHOLES SHALL BE INSTALLED NO LESS THAN 10' AWAY FROM EXISTING WATER LINE. SEPARATIONS DISTANCES SHALL FOLLOW TCEQ STANDARD REQUIREMENTS (§290.44)
- THE INTENT OF THE OWNER IS TO HAVE THE SANITARY SEWER PIPELINES INSTALLED TO SUCH A DEPTH THAT THEY WILL HAVE AT LEAST 48" OF COVER BELOW PROPOSED GROUND AT ALL LOCATIONS. THE PIPELINES SHALL HAVE NO DIPS, SAGS OR HUMPS OR OTHER IRREGULARITIES IN VERTICAL ALIGNMENT. CONSIDERING UTILITIES AND OTHER CONDITIONS, VARIANCE FROM GRADE PROFILE IS NOT RECOMMENDED IF OTHER EXISTING UTILITIES OR OBSTRUCTIONS ARE ENCOUNTERED DURING THE WORK. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL EXISTING UTILITIES PRIOR TO INSTALLATION OF THE PIPELINE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD LOCATE ALL UNDERGROUND UTILITIES, SHOWN OR NOT SHOWN IN THE PLANS, AND COORDINATE HIS WORK WITH ALL UTILITY COMPANIES, EL PASO WATER UTILITIES AND CITY OF EL PASO PRIOR TO CONSTRUCTION. ALL EXISTING UTILITY DEPTHS ARE UNKNOWN. THE CONTRACTOR SHALL BE ULTIMATELY RESPONSIBLE FOR ACQUIRING FIELD DEPTHS OF ALL UTILITIES WITH THE PROJECT AREAS.
- TRENCH SAFETY REQUIREMENTS SHALL COMPLY WITH CURRENT OSHA REGULATIONS.
- AS-BUILT STATIONING, OFFSET FROM R.O.W. AND INVERT ELEVATIONS SHALL BE ACCURATELY RECORDED BY THE CONTRACTOR ON A CLEAN SET OF PLANS FOR EACH MANHOLE, SERVICE CONNECTION AND/OR STUB-OUT, WITH RESPECT TO THE APPROPRIATE PROJECT CONTROL POINT.
- THE EL PASO WATER UTILITIES AND CITY OF EL PASO MUST BE NOTIFIED 48 HOURS PRIOR TO COMMENCING ANY WORK IN AREAS WITHIN THEIR JURISDICTION. A COPY OF ALL FIELD SOIL DENSITY TESTS WITHIN THEIR RESPECTIVE R.O.W. SHALL BE FORWARDED TO THE DEVELOPER'S ENGINEER AND THE DEVELOPER BY THE CONTRACTOR.
- EXISTING STREETS, DRIVEWAYS AND ALL OTHER MISCELLANEOUS STRUCTURES DAMAGE OR REMOVED BY CONSTRUCTION ACTIVITIES SHALL BE RESTORED TO ORIGINAL OR BETTER THAN ORIGINAL CONDITION.
- CONSTRUCTION OF THE PUBLIC WATER AND SEWER SYSTEM INCLUDING MATERIALS AND TESTING SHALL CONFORM TO EPWU-PSB STANDARD SPECIFICATIONS FOR THE INSTALLATION OF WATER MAINS, SEWER MAINS AND RELATED APPURTENANCES.

GENERAL UTILITIES:
TEXAS EXCAVATION SAFETY SERVICE
11894 GREENVILLE AVENUE,
DALLAS, TX. 75243
(800) 344-8377

ENGINEER:
CEA GROUP
CASTNER CENTER @ TRANSMOUNTAIN
4712 WOODROW BEAN, STE. F
EL PASO, TX. 79902
(915) 544-5232
MR. JORGE L. AZCARATE, P.E.

FIBER OPTICS:
U.S. SPRINT
151 N. BOONE ST.
EL PASO, TX. 79905
(915) 534-7910
MR. RICK DERAGISCH

FIBER OPTICS:
MCI TELECOMMUNICATIONS CORPS.
4045 DONIPHAN PARK CIRCLE
EL PASO, TX. 79922
(915) 542-2770 EXT. 201
MR. DANIEL HERNANDEZ

WATER & SEWER:
EL PASO WATER UTILITIES
1154 HAWKINS BOULEVARD
EL PASO, TX. 79961
(915) 594-5530
MR. FELIPE LOPEZ, JR., P.E.

ELECTRIC:
AT&T
P.O. BOX 1650
EL PASO, TX. 79949
(1800) 852-3786
MR. DARLENE NORIS

EL PASO STREETS
CITY OF EL PASO
DEPARTMENT OF TRANSPORTATION
7969 SAN PAULO DRIVE
EL PASO, TX. 79907
(915) 621-6750
MR. DARYL W. COLE

CABLE TELEVISION:
TIME WARNER COMMUNICATIONS
7010 AIRPORT ROAD
EL PASO, TX. 79906
(915) 772-1123

TELEPHONE:
SBC
11200 PELICANO
EL PASO, TX. 79935
(915) 595-5151
MR. TIM BROWN

FIBER OPTICS:
AT&T
P.O. BOX 1650
EL PASO, TX. 79949
(1800) 852-3786
MR. DARLENE NORIS

RESIDENTIAL GAS LINES:
TEXAS GAS SERVICE
4700 POLLARD ST.
EL PASO, TX. 79930
(915) 680-7218
MR. JOSE DE ALBA

WARNING!
BEFORE YOU DIG
CALL
1-800-DIG-TESS
1-800-344-8377
FOR FIELD LOCATING EXISTING UTILITIES

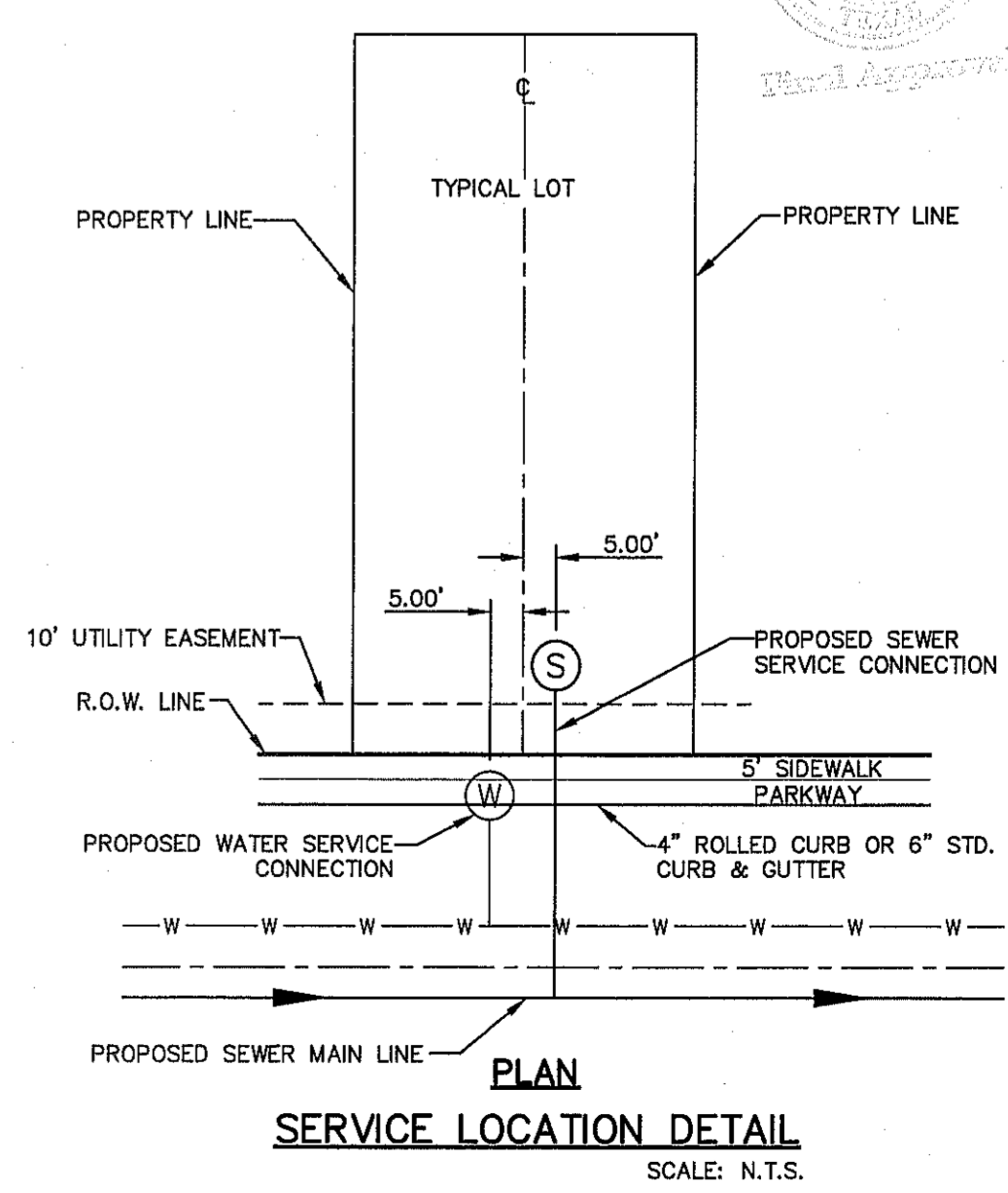
INDEX

SHEET NO.	DESCRIPTION
C13.1	VENTANAS SUBDIVISION UNIT EIGHT LEGEND INDEX GENERAL INFORMATION
C14.1	LINE A
C14.2	LINE B & C
C14.3	LINE D & E
C14.4	LINE F
C15.1	SANITARY SEWER DETAILS
C15.2	SANITARY SEWER DETAILS
C15.3	SANITARY SEWER DETAILS

- NOTES:**
- ALL LOTS SHALL BE PROVIDED WITH ONE SERVICE CONNECTION TO BE INSTALLED AT THE LOCATION AS SHOWN ON THE SERVICE LOCATION DETAIL.
 - ALL SANITARY SEWER PIPES SHALL BE PVC, SDR 35, (D 3034), UNLESS OTHERWISE SHOWN, AS REQUIRED BY THE EPWU/PSB RULES AND REGULATIONS AND DESIGN STANDARDS.
 - REFERENCE SANITARY SEWER DETAILS FOR SEWER CROSSINGS AT STORM SEWER.

LEGEND

SYMBOL	DESCRIPTION
	PROPOSED STORM SEWER
	EXISTING WATER LINE
	EXISTING SEWER LINE
	SUBD. BOUNDARY LINE
	PROPERTY LINE
	CENTER LINE
	PROPOSED WATER LINE
	PROPOSED SEWER LINE (PLAN VIEW)
	PROPOSED SEWER LINE ON ANOTHER SHEET (PLAN VIEW)
	PROPOSED SEWER LINE (PROFILE VIEW)
	PROPOSED MANHOLE (PLAN VIEW)
	PROPOSED SERVICE CONNECTION (PLAN VIEW)
	EXISTING MANHOLE (PLAN VIEW)
	PROPOSED MANHOLE (PROFILE VIEW)
	EXISTING MANHOLE (PROFILE VIEW)

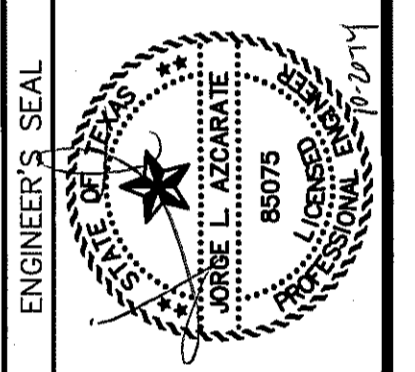


REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).

ENGINEER'S SEAL

CEA GROUP
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4684
4712 Woodrow Bean, Ste. F, El Paso, TX. 79902
Office: 915.544.5232 Fax: 915.544.5233 www.ceagroup.net



SCALE 1"=100'

Horizontal: N/A
Vertical: N/A
Contour Interval: N/A

DATE: JUNE 2014
DESIGN BY: F.Z./J.M.
DRAWN BY: J.L.A.
CHKD. BY: J.L.A.
APPRD. BY: J.L.A.
JOB NO. 2260-018-LD

PROJECT TITLE

**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE

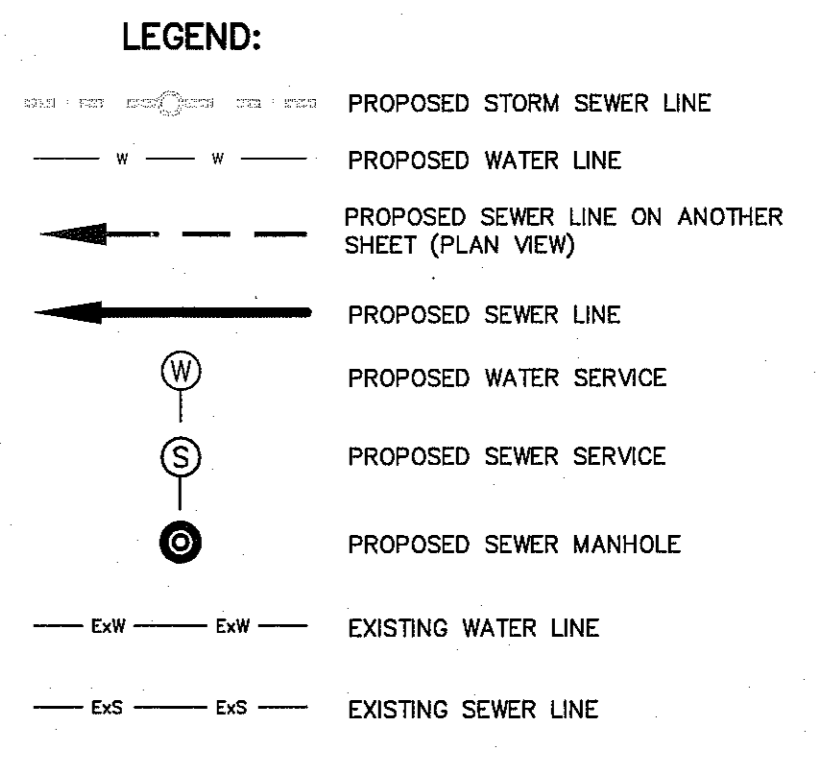
**SEWER INDEX/
GENERAL
INFORMATION**

SHEET NO.

C13.1

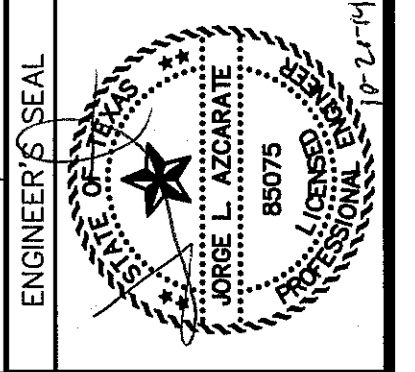
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 690-7200
SSC	(800) 545-8005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
 CALL
1-800-DIG-TESS
1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

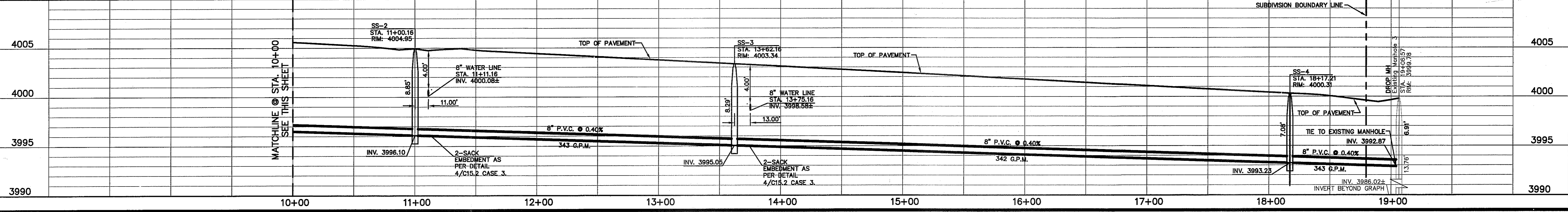
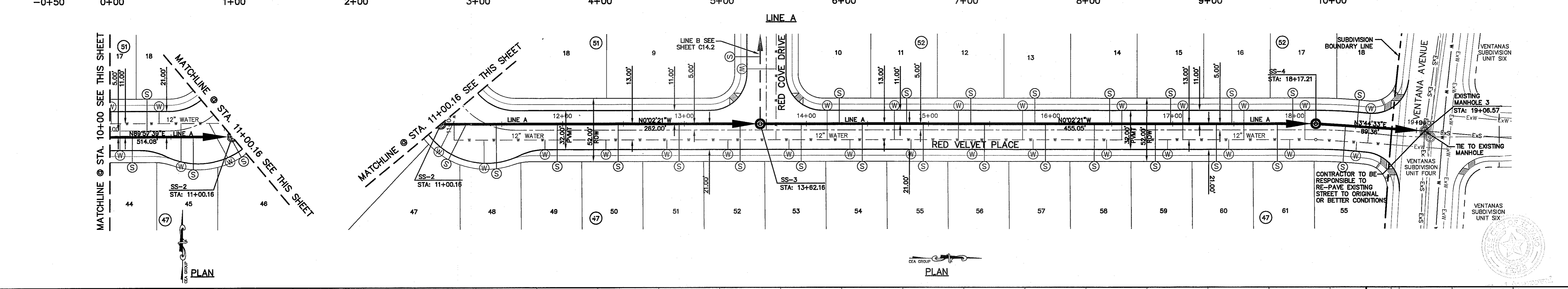
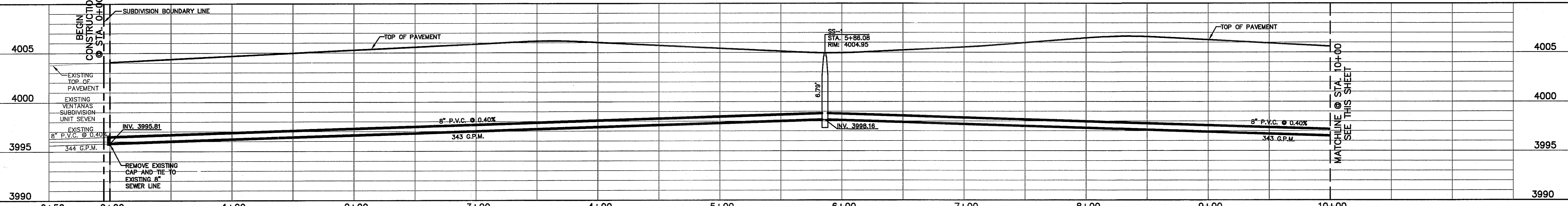
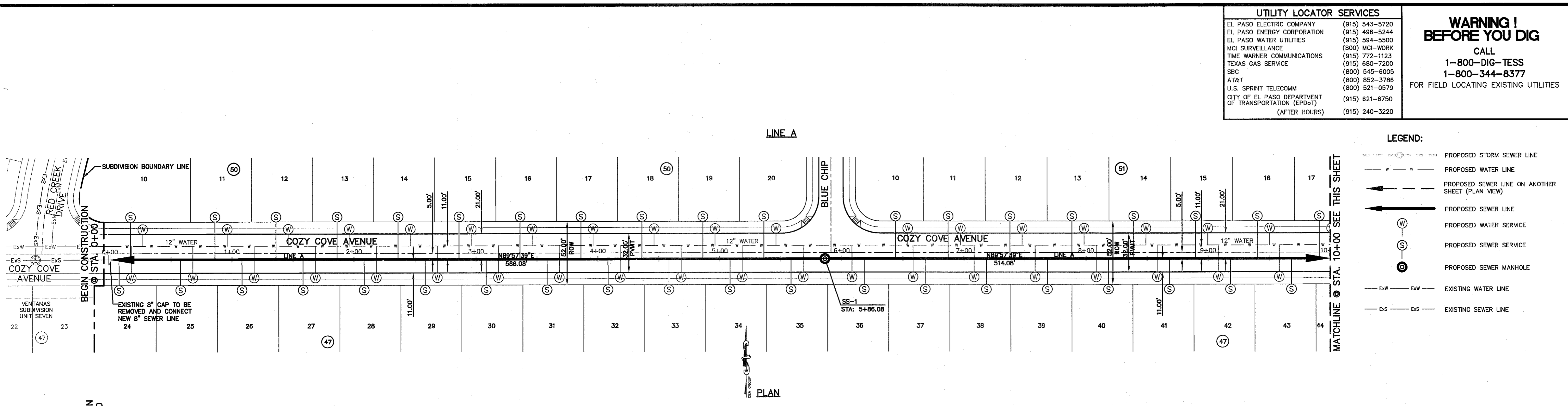


REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-4684
 4712 Woodrow Bean, Ste. F El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.csa-group.net



SCALE
 Horizontal: 1"=40'
 Vertical: 1"=5'
 Contour Interval: N/A
 DATE: JUNE 2014
 DESIGN BY: F.Z./JM
 DRAWN BY: J.L.S.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-018-LD



PROJECT TITLE
**VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**SANITARY SEWER
 PLAN & PROFILE
 LINE A**

SHEET NO.
C14.1

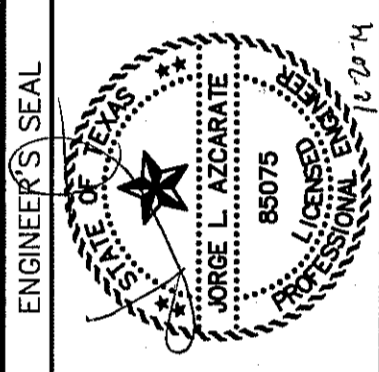
S: 2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C14.1-San Sewer Line Admg. LINE A, 10/16/2014, 2:52:34 PM

UTILITY LOCATOR SERVICES		
EL PASO ELECTRIC COMPANY	(915) 543-5720	
EL PASO ENERGY CORPORATION	(915) 496-5244	
EL PASO WATER UTILITIES	(915) 594-5500	
MCI SURVEILLANCE	(800) MCI-WORK	
TIME WARNER COMMUNICATIONS	(915) 772-1123	
TEXAS GAS SERVICE	(915) 680-7200	
SSC	(800) 545-6005	
AT&T	(800) 852-3786	
U.S. SPRINT TELECOMM	(800) 521-0579	
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750	
(AFTER HOURS)	(915) 240-3220	

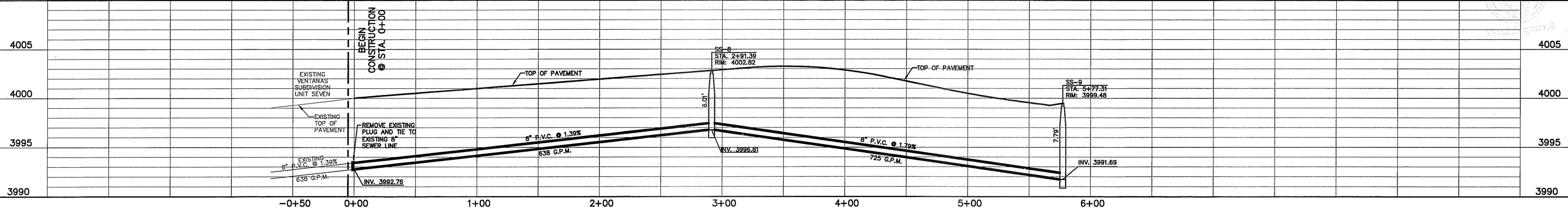
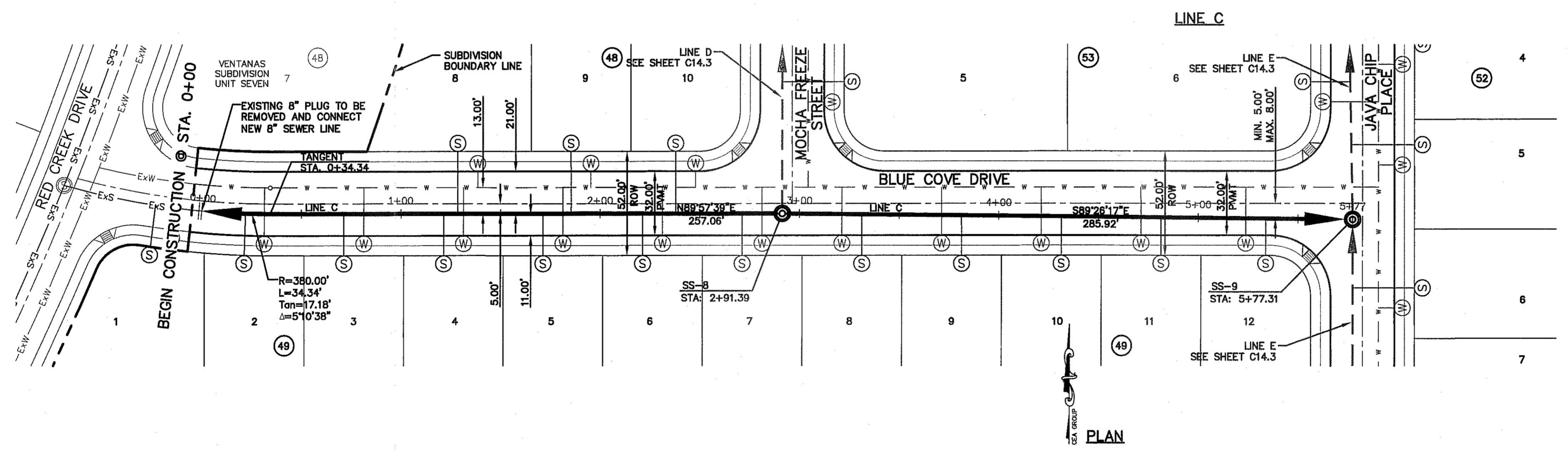
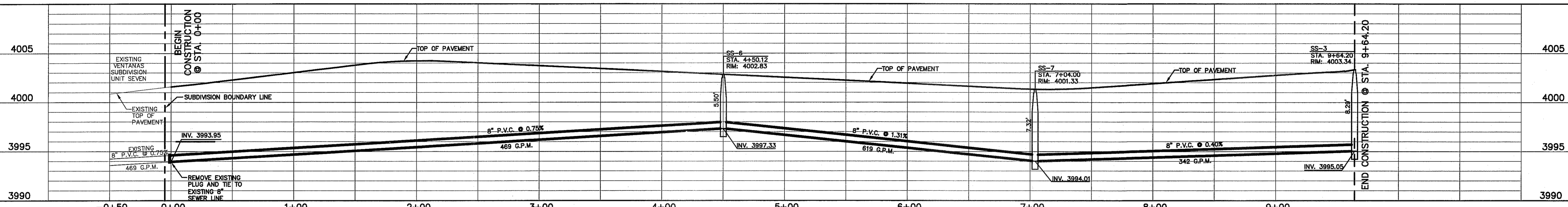
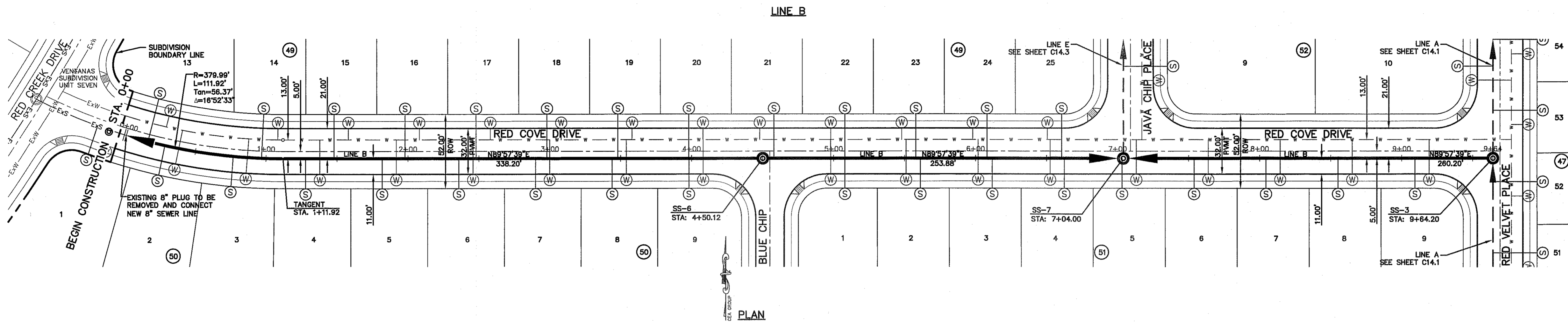
WARNING I BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-464
 4712 Woodrow Blain, Ste. F, El Paso, TX 79924
 Office: 915.544.5232 Fax: 915.544.5233 www.csaengr.com



SCALE: Horizontal: 1"=40'
 Vertical: 1"=5'
 Contour Interval: 5'/A
 DATE: JUNE 2014
 DESIGN BY: F.Z./J.M.
 DRAWN BY: F.S.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-018-LD



- LEGEND:**
- PROPOSED STORM SEWER LINE
 - PROPOSED WATER LINE
 - PROPOSED SEWER LINE ON ANOTHER SHEET (PLAN VIEW)
 - PROPOSED SEWER LINE
 - PROPOSED WATER SERVICE
 - PROPOSED SEWER SERVICE
 - PROPOSED SEWER MANHOLE
 - ExW --- EXISTING WATER LINE
 - ExS --- EXISTING SEWER LINE

PROJECT TITLE
**VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**SANITARY SEWER
 PLAN & PROFILE
 LINES B & C**

SHEET NO.
C14.2

UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDoT)	(915) 821-6750
(AFTER HOURS)	(915) 240-3220

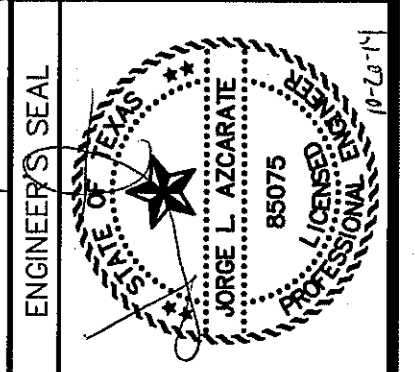
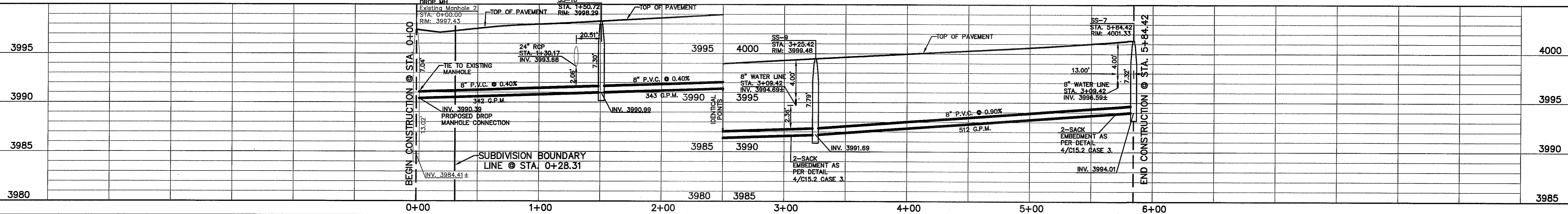
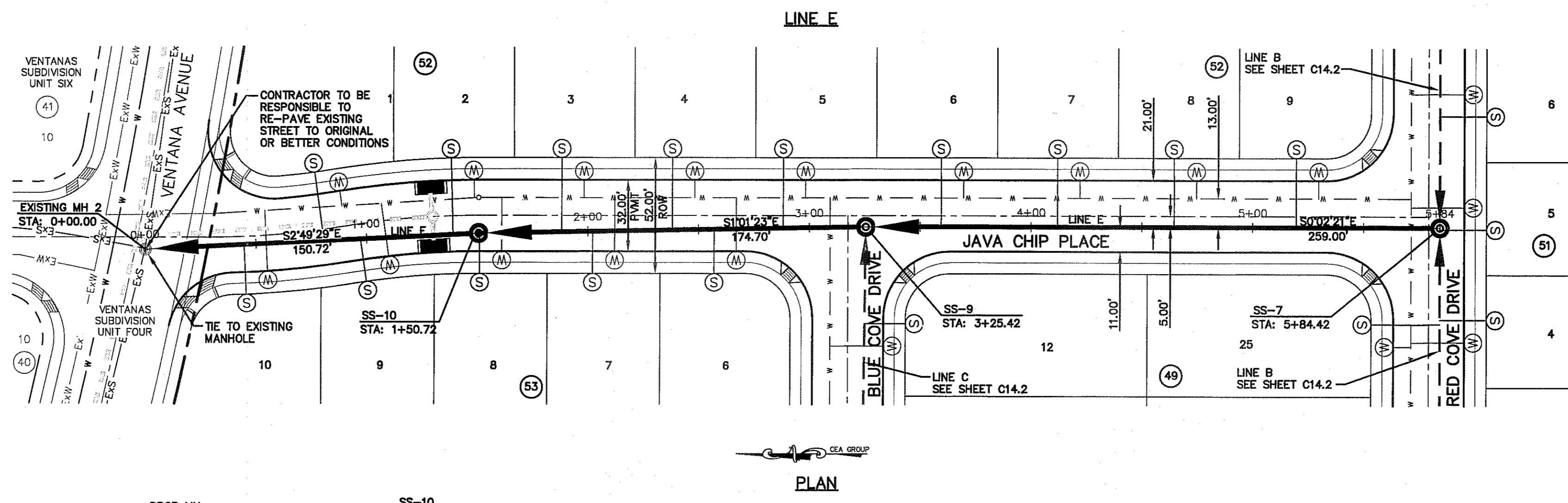
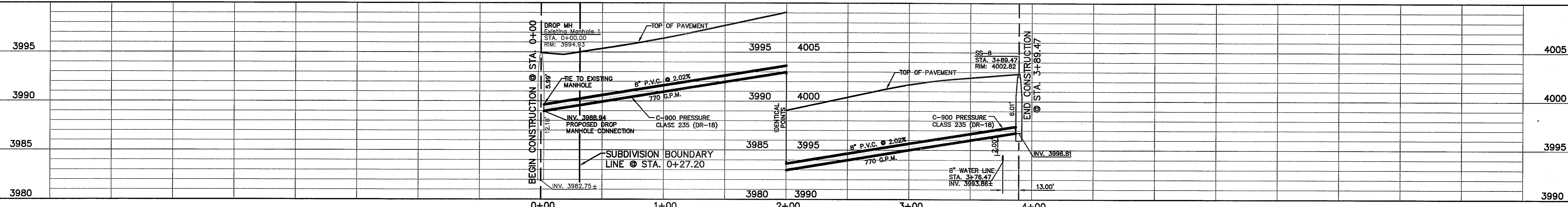
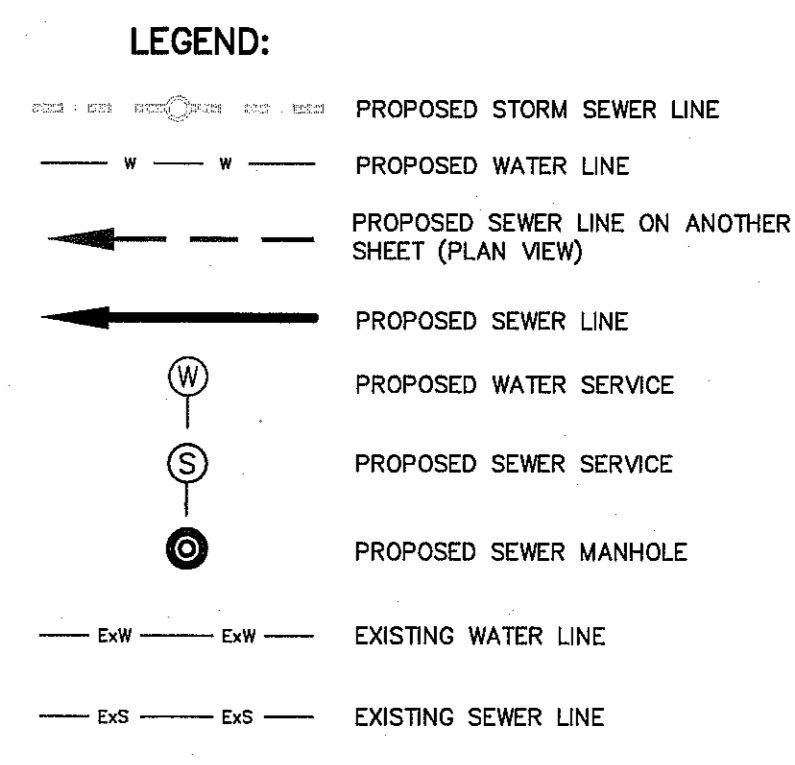
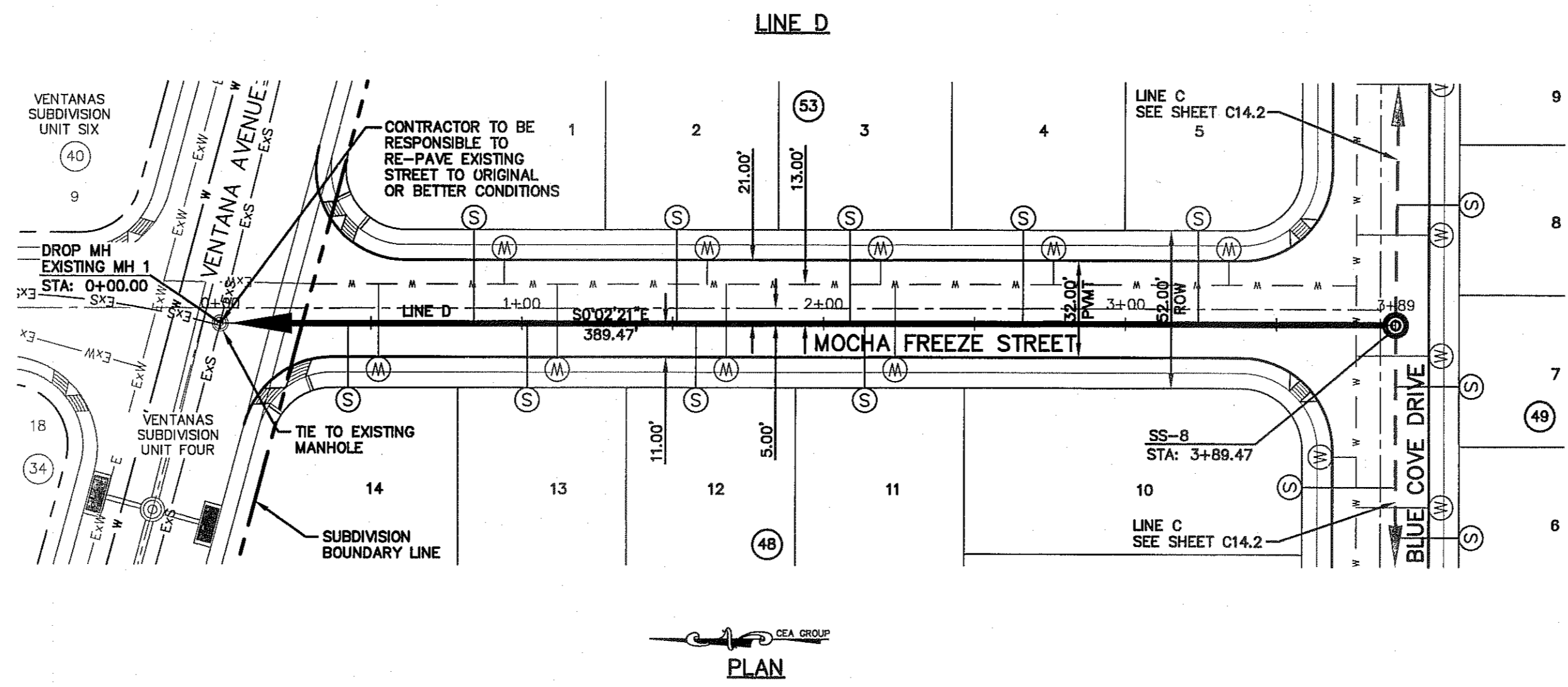
WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

FOR FIELD LOCATING EXISTING UTILITIES

REFERENCES - BENCHMARKS
BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (CITY DATUM).

osa
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-464
4712 Woodrow Bham, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.osaengineers.com



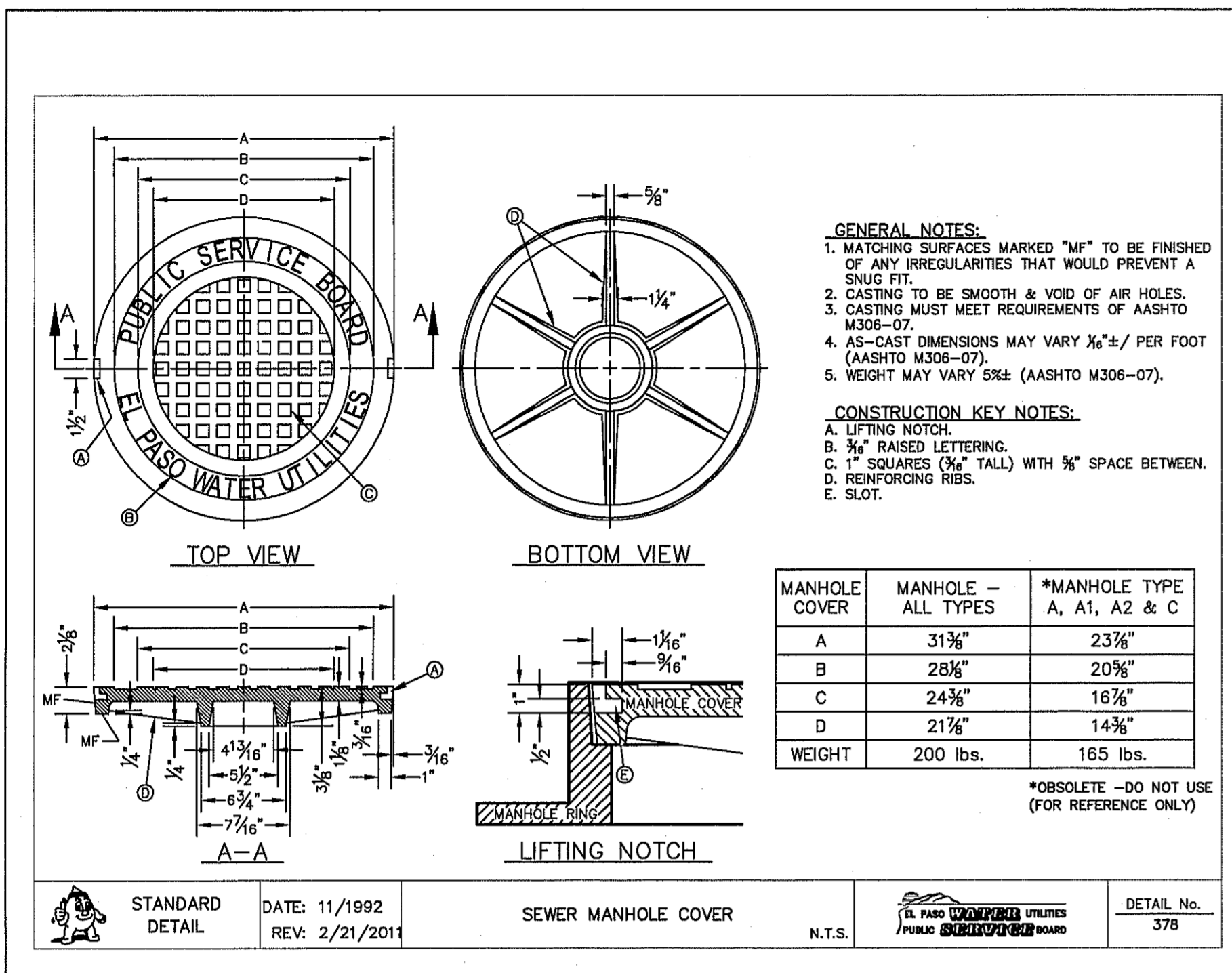
SCALE: Horizontal: 1"=40'
Vertical: 1"=5'
Contour Interval: N/A
DATE: JUNE 2014
DESIGN BY: F.Z./J.M.
DRAWN BY: J.L.A.
CHKD. BY: J.L.A.
APPROV. BY: J.L.A.
JOB No. 2260-018-LD

PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

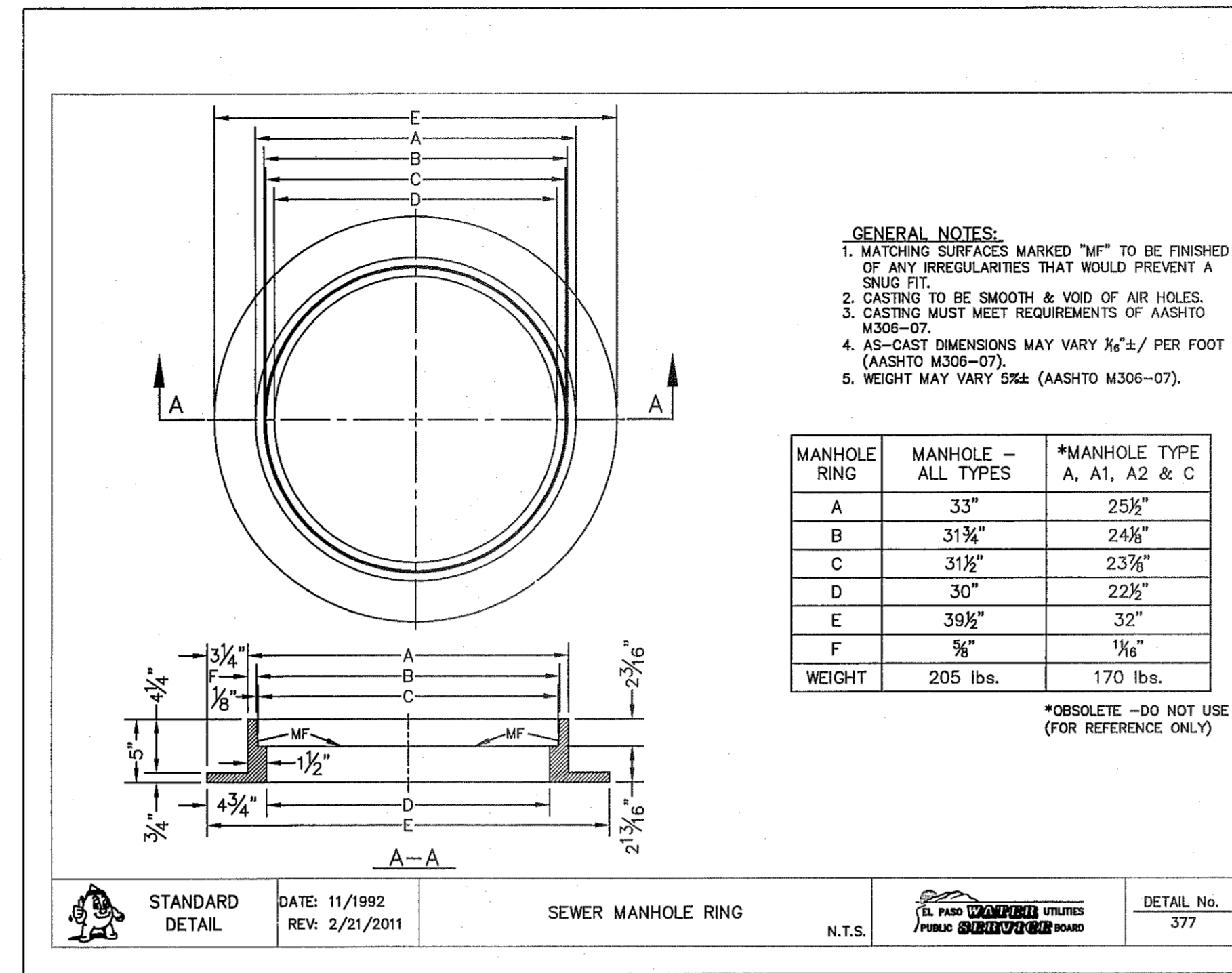
SHEET TITLE
**SANITARY SEWER
PLAN & PROFILE
LINES D & E**

SHEET NO.

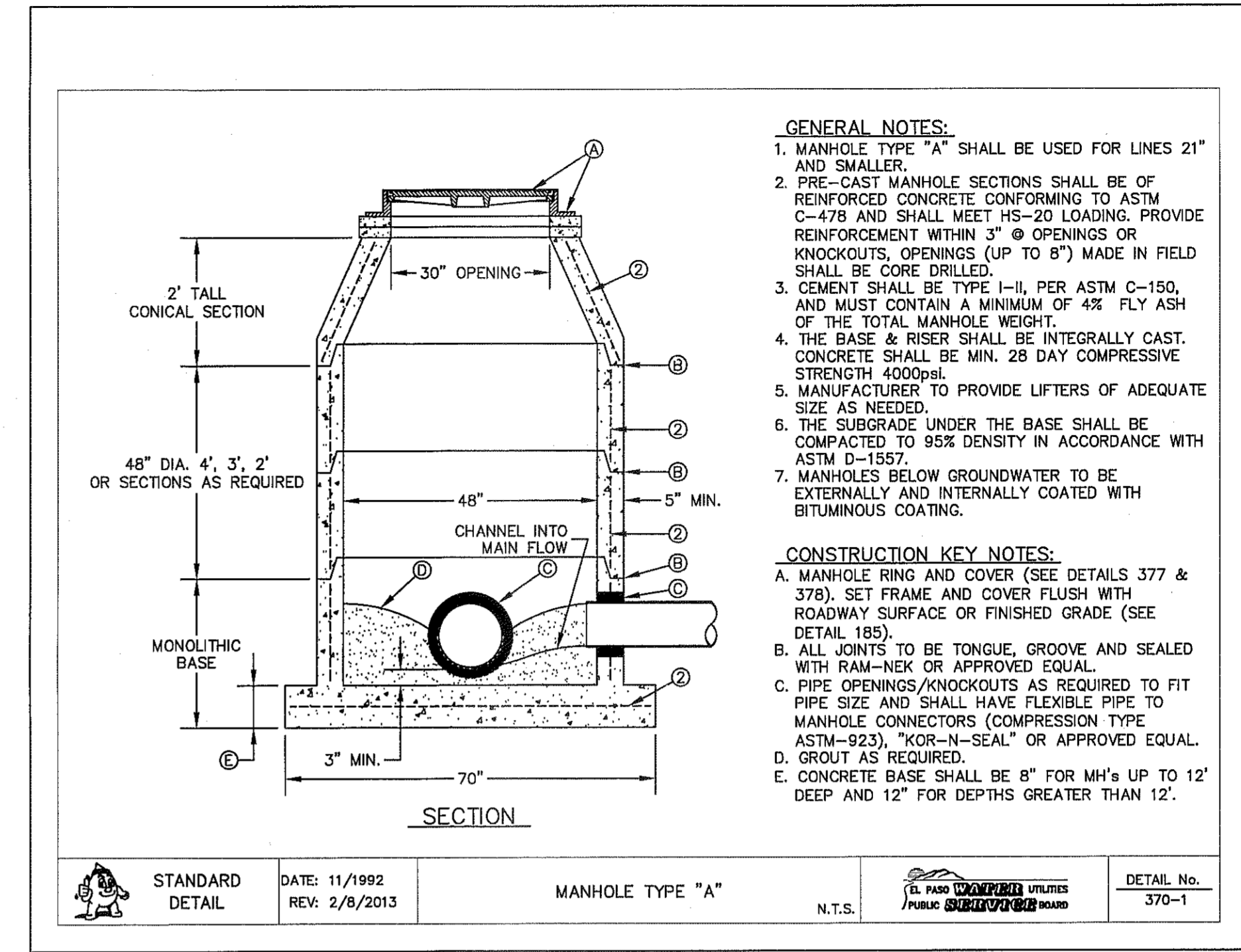
C14.3



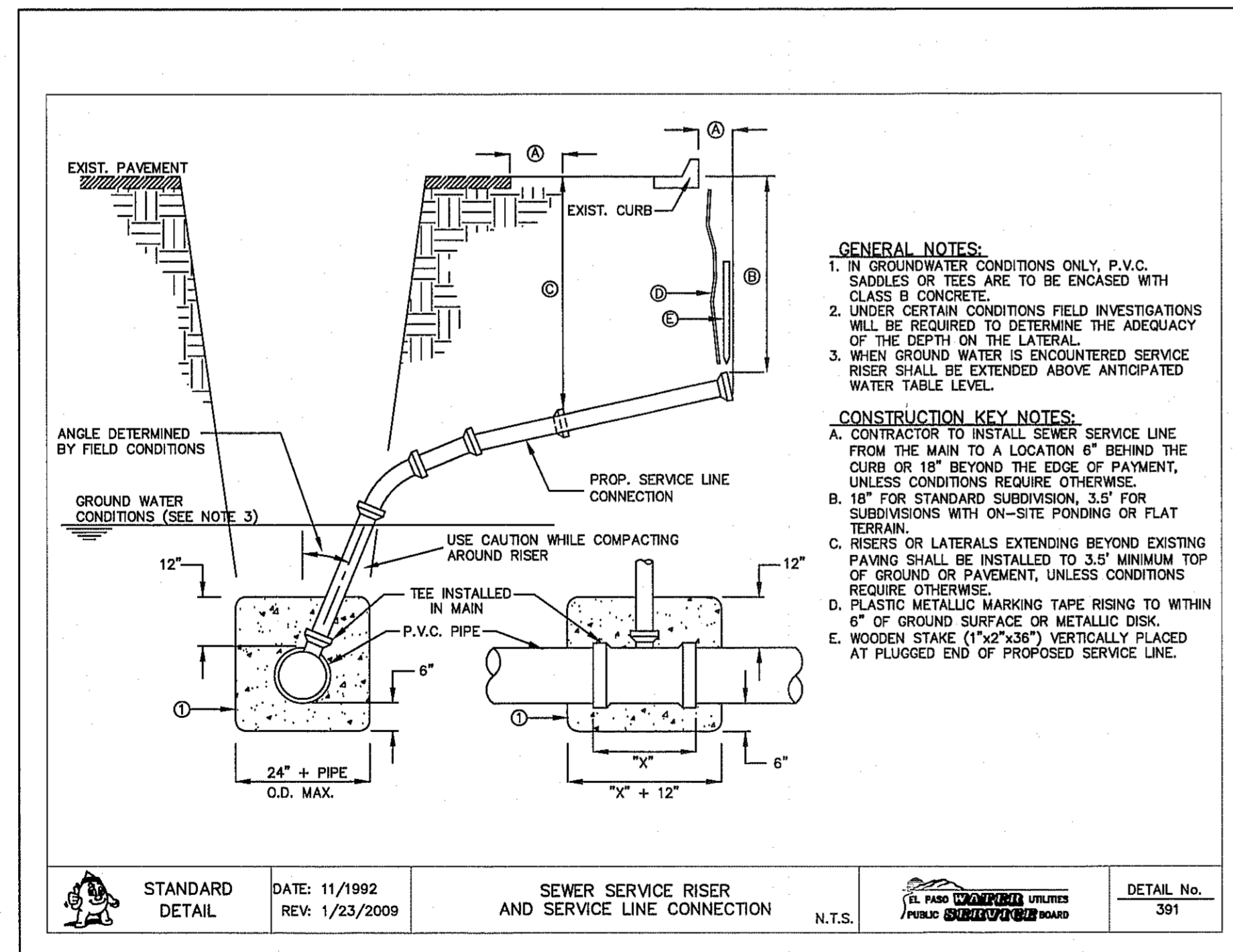
1 STANDARD MANHOLE COVER DETAIL SCALE: N.T.S.



2 STANDARD MANHOLE RING DETAIL SCALE: N.T.S.



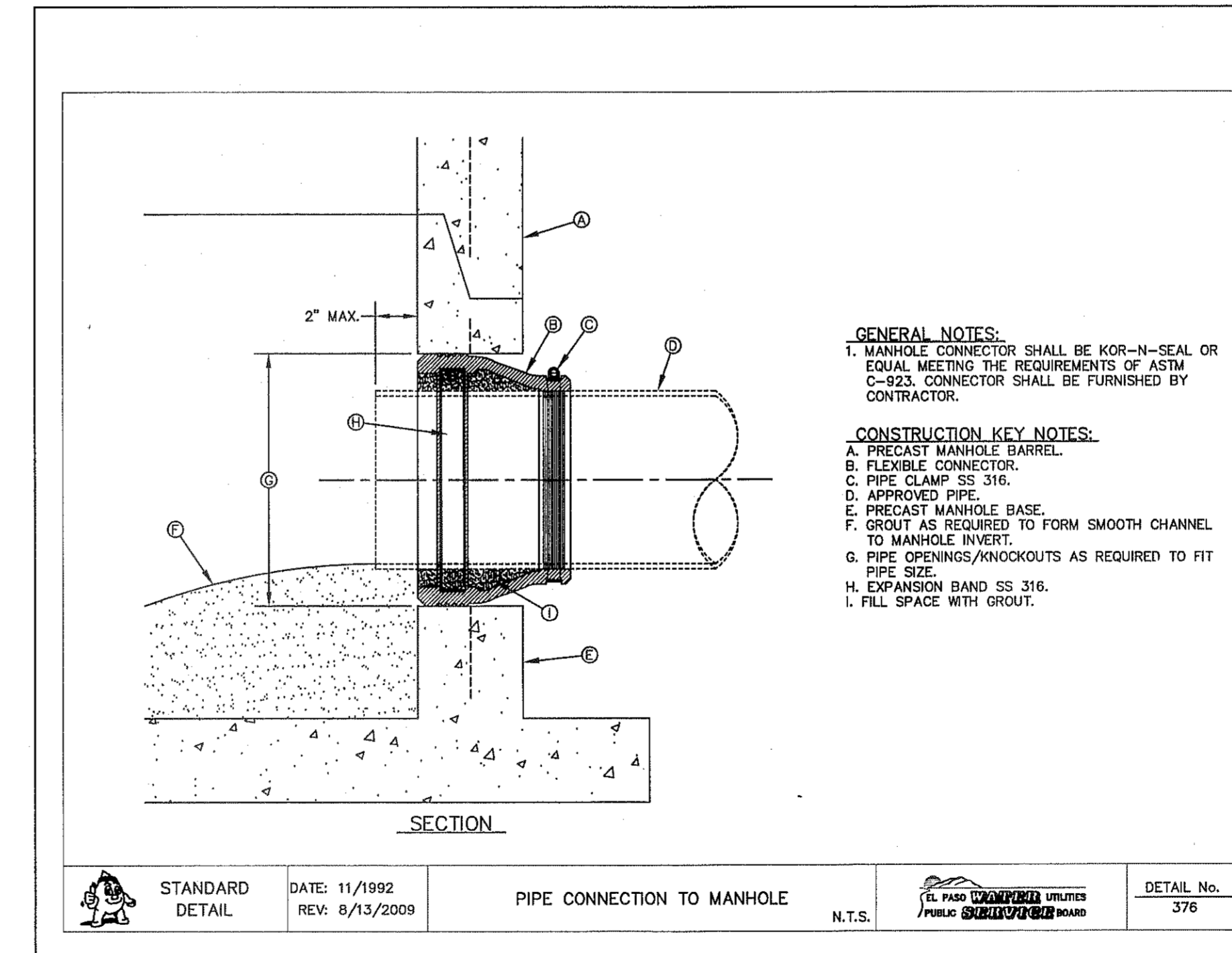
3 STANDARD MANHOLE TYPE "A" SCALE: N.T.S.



4 SEWER SERVICE RISER AND SERVICE LINE CONNECTION SCALE: N.T.S.

GENERAL NOTES:

- DEVELOPER SHALL ENSURE RESIDENTIAL SEWER SERVICE LINES HAVE BEEN EXTENDED TO THE PROPERTY LINE.
- BUILDER SHALL ENSURE SIDEWALKS ARE NOT CONSTRUCTED UNTIL THE RESIDENTIAL SEWER SERVICE LINES HAVE BEEN EXTENDED 10 PLUS FEET INTO PRIVATE PROPERTY FROM PROPERTY LINE.



5 PIPE CONNECTION TO MANHOLE SCALE: N.T.S.

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE CENTRAL INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.

ELEVATION = 3970.52 (CITY DATUM).

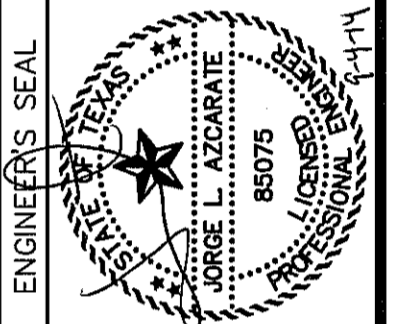
DATE	REVISIONS	BY

ca

engineers • architects • planners

TEXAS REGISTERED ENGINEERING FIRM F-4684

4712 Woodrow Bland, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.caegroup.net



SCALE: N/A

Horizontal: N/A

Vertical: N/A

Contour Interval: N/A

DATE: AUGUST 2014

DESIGN BY: J.M.

DRAWN BY: J.M.

CHKD. BY: J.L.A.

APPRO. BY: J.L.A.

JOB No. 2260-018-LD

PROJECT TITLE

VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

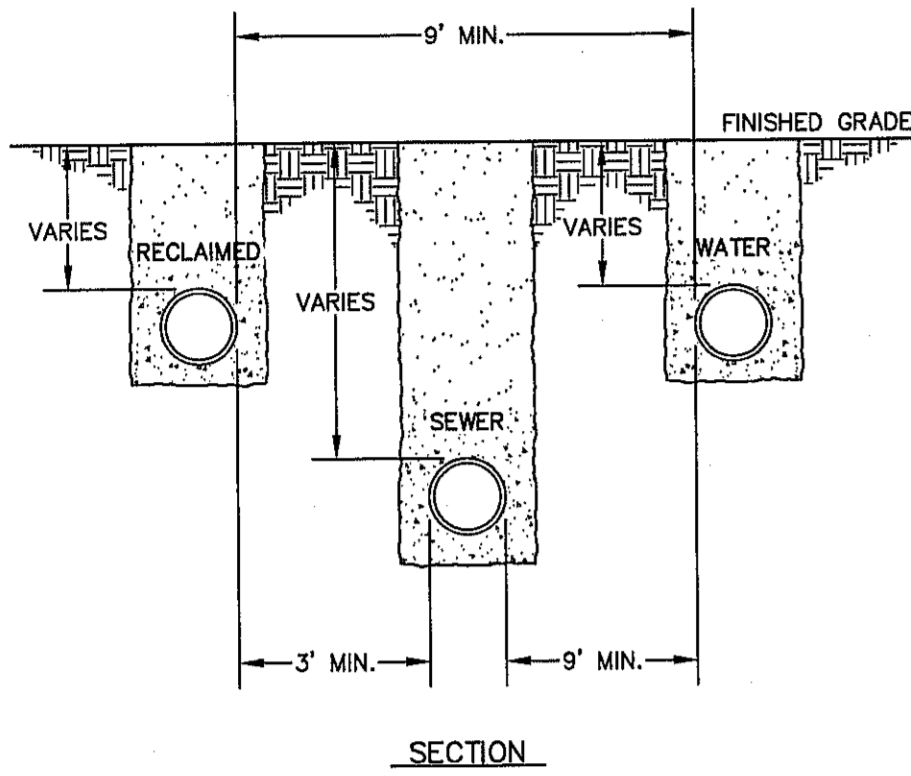
SHEET TITLE

SANITARY SEWER
DETAILS

(SHEET 1 OF 3)

SHEET NO.

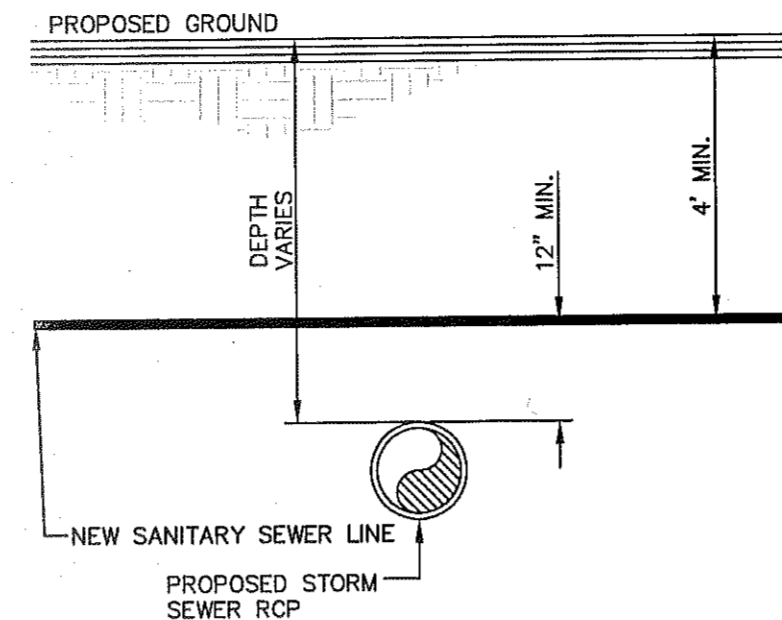
C15.1



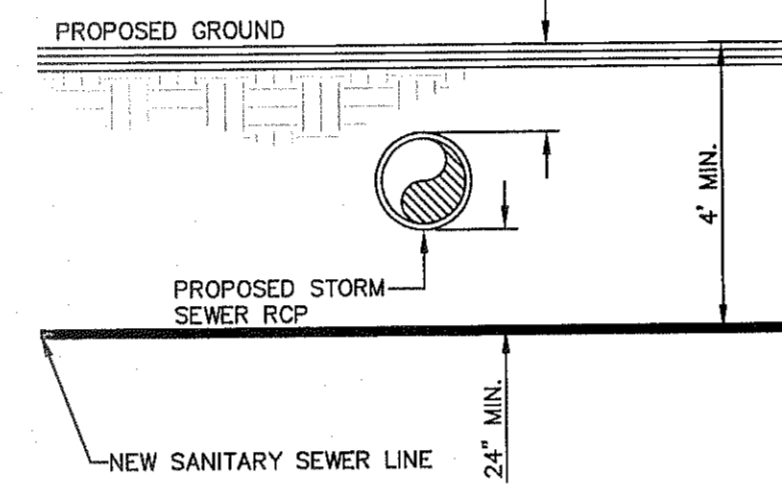
- GENERAL NOTES:**
- SEPARATION DISTANCES SHALL FOLLOW TEXAS COMMISSION ON ENVIRONMENTAL QUALITY STANDARD REQUIREMENTS.
 - MINIMUM SEPARATION DISTANCES SHOWN, IF CONDITIONS DO NOT ALLOW FOR INDICATED DISTANCES REFER TO DETAILS 161, 162 & 163.
 - RECLAIMED WATER LINE AT OR ABOVE SEWER LINE.

STANDARD DETAIL	DATE: 8/3/2006 REV: 3/28/2007	SEPARATION DISTANCE POTABLE WATER, SANITARY SEWER AND RECLAIMED WATER	N.T.S.	EL PASO UTILITY PUBLIC SUBDIVISION BOARD	DETAIL No. 160
-----------------	----------------------------------	---	--------	--	----------------

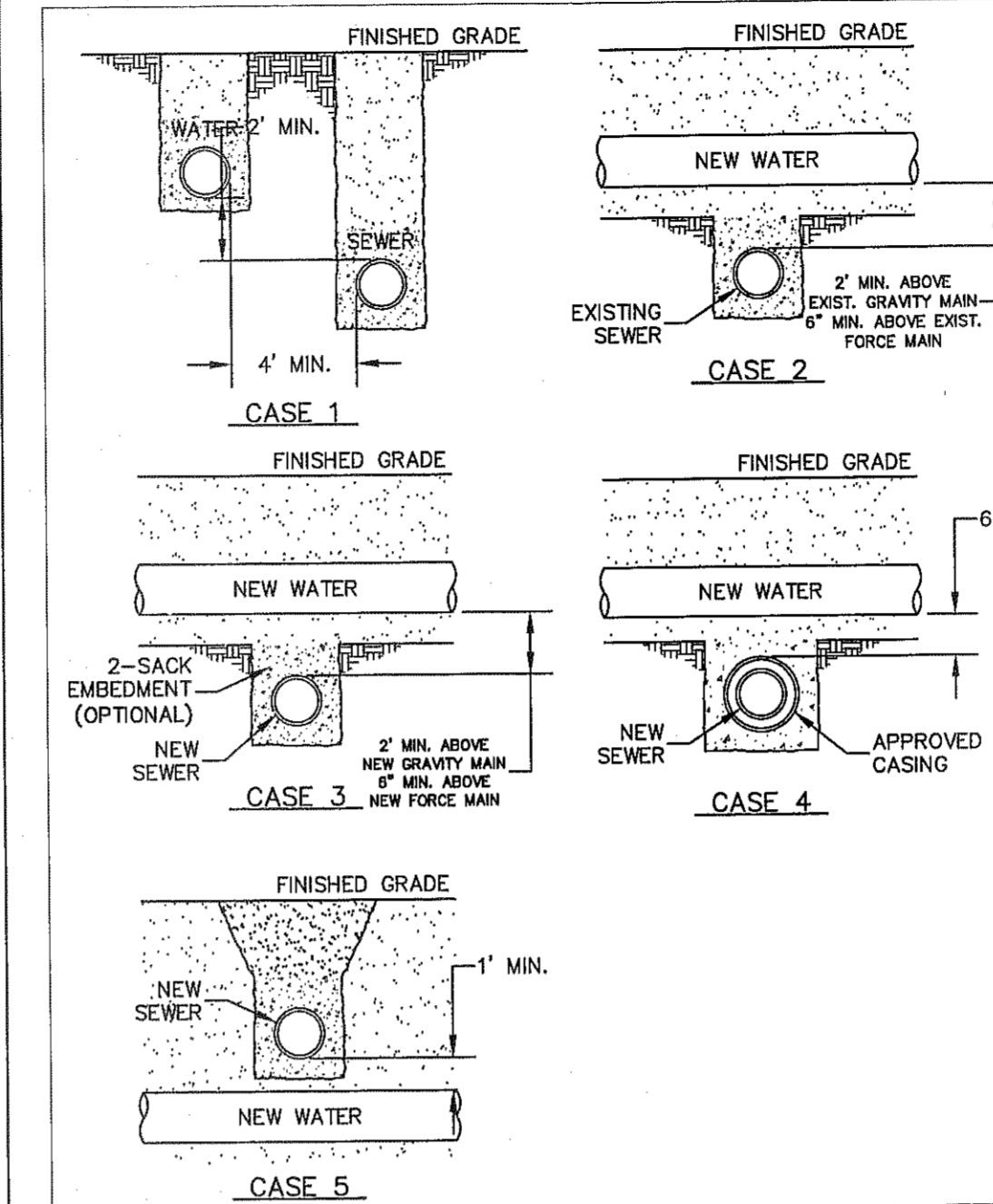
1 SEPARATION DISTANCE-NEW WATER AND NEW SEWER SCALE: N.T.S.



2 STORM SEWER CROSSING DETAIL SCALE: N.T.S.



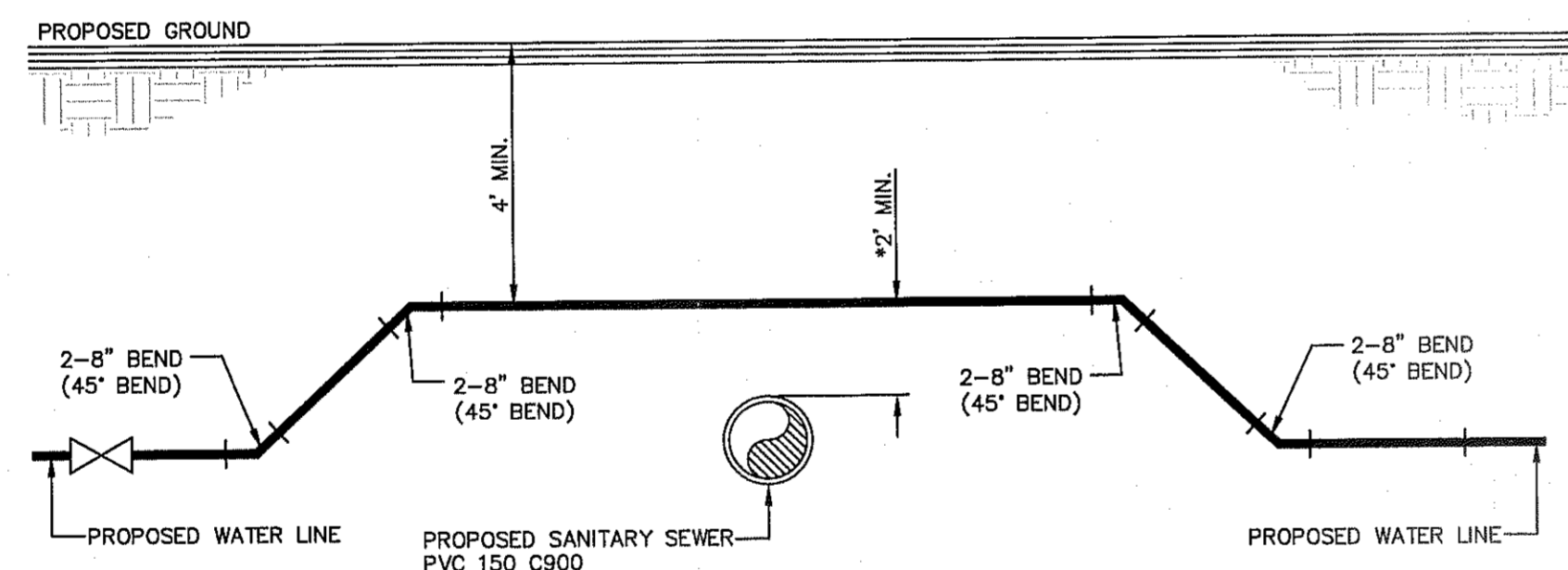
3 STORM SEWER CROSSING DETAIL SCALE: N.T.S.



- GENERAL NOTES:**
- NEW OR EXISTING POTABLE WATER AND SANITARY SEWER MAINS.
 - SEPARATION DISTANCES SHALL FOLLOW TEXAS COMMISSION ON ENVIRONMENTAL QUALITY STANDARD REQUIREMENTS.
- CONSTRUCTION KEY NOTES:**
- WHEN STANDARD NINE (9) FOOT SEPARATION DISTANCE CANNOT BE ACHIEVED, SEPARATION SHALL BE DETERMINED ACCORDING TO THE FOLLOWING CONDITIONS:
- CASE 1. GRAVITY SANITARY SEWER MAIN OR FORCE MAIN PARALLEL TO POTABLE WATER MAIN (PER TCEQ §290.44(a)(4)(B)(i) AND §290.44(a)(4)(B)(ii)).
- LOCATION: WATER ABOVE SEWER OR FORCE MAIN.
 - SEWER MATERIALS: EXISTING GRAVITY MAIN (PVC SDR35 OR CLAY) OR FORCE MAIN TO REMAIN IF NOT LEAKING-IF LEAKING, MUST BE REPLACED WITH PVC (150 PSI) OR DI. NEW GRAVITY MAIN OR FORCE MAIN REQUIRES PVC (150 PSI) OR DI.
 - SEPARATE TRENCHES SHALL BE USED.
- CASE 2. NEW POTABLE WATER MAIN CROSSING EXISTING GRAVITY SANITARY SEWER MAIN OR EXISTING FORCE MAIN (PER TCEQ §290.44(a)(4)(B)(i) AND §290.44(a)(4)(B)(ii)).
- LOCATION: WATER ABOVE SEWER OR FORCE MAIN.
 - SEWER MATERIALS: EXISTING GRAVITY MAIN (PVC SDR35 OR CLAY) OR FORCE MAIN TO REMAIN IF NOT LEAKING-IF LEAKING, REPLACE ONE PIPE SEGMENT PER CASE 3 REQUIREMENTS.
 - CENTER ONE SEGMENT OF WATER PIPE OVER SEWER MAIN OR FORCE MAIN.
 - MINIMUM PIPE SEGMENT LENGTH FOR WATER PIPE SHALL BE 18 FEET LONG.
- CASE 3. NEW POTABLE WATER MAIN CROSSING NEW GRAVITY SANITARY SEWER MAIN OR NEW FORCE MAIN (PER TCEQ §290.44(a)(4)(B)(i), §290.44(a)(4)(B)(ii) AND §290.44(a)(4)(B)(iii)).
- LOCATION: WATER ABOVE SEWER OR FORCE MAIN.
 - SEWER MATERIALS: NEW GRAVITY MAIN - PVC (150 PSI) OR DI REQUIRED. CENTER UNDER WATER MAIN. NEW FORCE MAIN - PVC (150 PSI) OR DI REQUIRED. CENTER UNDER WATER MAIN. NEW GRAVITY MAIN OR FORCE MAIN MUST BE ENCASED IN CEMENT STABILIZED BACKFILL THE TOTAL LENGTH OF ONE PIPE PLUS 12" BEYOND THE JOINT AT EACH END.
 - CENTER ONE SEGMENT OF WATER PIPE OVER SEWER PIPE OR FORCE MAIN.
 - MINIMUM PIPE SEGMENT LENGTH FOR WATER AND SEWER SHALL BE 18 FEET LONG.
 - FOR NEW GRAVITY SEWER ONLY, IN LIEU OF PVC (150 PSI) OR DI, INSTALL ONE PIPE SEGMENT OF SDR35 SEWER MAIN MUST BE ENCASED IN CEMENT STABILIZED BACKFILL THE TOTAL LENGTH OF ONE PIPE PLUS 12" BEYOND THE JOINT AT EACH END.
- CASE 4. NEW POTABLE WATER MAIN CROSSING NEW GRAVITY SANITARY SEWER MAIN OR NEW FORCE MAIN (PER TCEQ §290.44(a)(4)(B)(i)).
- LOCATION: WATER ABOVE SEWER OR FORCE MAIN.
 - SEWER MATERIALS: NEW GRAVITY MAIN - SDR35 ACCEPTABLE. NEW FORCE MAIN - PVC (150 PSI) OR DI REQUIRED. IN ADDITION, SEWER MAIN OR FORCE MAIN MUST BE ENCASED IN DI OR STEEL, TWO NOMINAL SIZES LARGER THAN MAIN AND AT LEAST 18 FEET LONG.
 - CENTER CASING PIPE ON WATER MAIN.
- CASE 5. NEW GRAVITY SANITARY SEWER MAIN OR NEW FORCE MAIN CROSSING NEW POTABLE WATER MAIN (PER TCEQ §290.44(a)(4)(B)(i)).
- LOCATION: SEWER OR FORCE MAIN ABOVE WATER.
 - NEW GRAVITY MAIN OR FORCE MAIN REQUIRES ONE PIPE SEGMENT OF PVC (150 PSI) OR DI. IN ADDITION, WATER MUST BE DI OR STEEL, TWO NOMINAL SIZES LARGER THAN MAIN AND AT LEAST 18 FEET LONG.
 - CENTER ONE SEGMENT OF SEWER PIPE ON WATER MAIN.

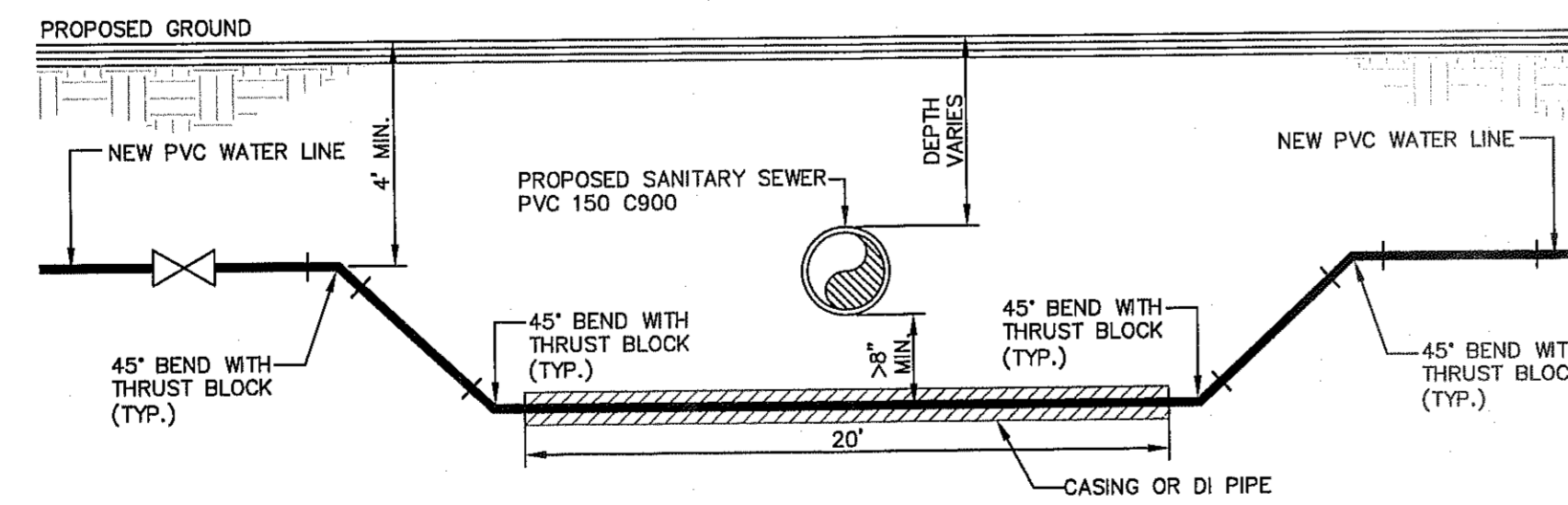
STANDARD DETAIL	DATE: 8/3/2006 REV: 8/21/2007	SEPARATION DISTANCE SANITARY SEWER AND POTABLE WATER (SPECIAL CONDITIONS)	N.T.S.	EL PASO UTILITY PUBLIC SUBDIVISION BOARD	DETAIL No. 161
-----------------	----------------------------------	---	--------	--	----------------

4 SEPARATION DISTANCE-SANITARY SEWER AND POTABLE WATER SCALE: N.T.S.

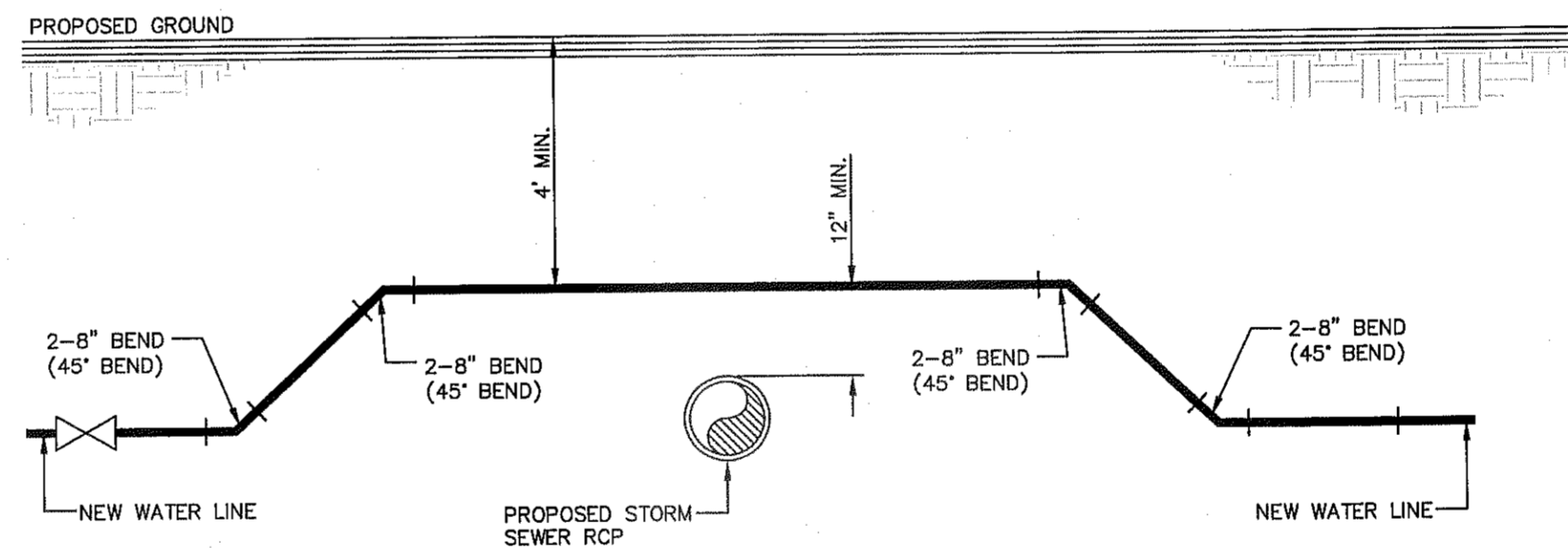


- NOTE:**
IF DISTANCE BETWEEN PROPOSED SANITARY SEWER AND PROPOSED WATER LINE IS BETWEEN 6"(MIN.)-2'(MAX.), SANITARY SEWER MUST BE ENCASED IN DUCTILE IRON PIPE AS PER SEPARATION DISTANCE (SPECIAL CONDITION) DETAIL.

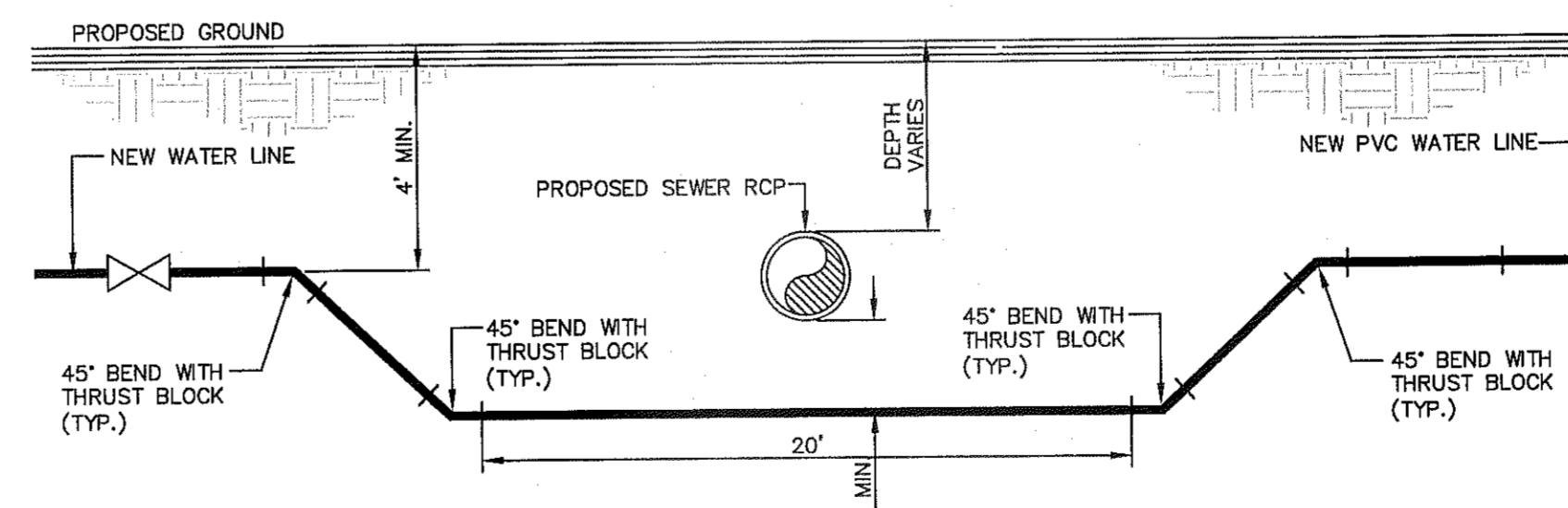
5 SANITARY SEWER CROSSING WATER LINE DETAIL SCALE: N.T.S.



6 SANITARY SEWER CROSSING DETAIL SCALE: N.T.S.



7 STORM SEWER CROSSING DETAIL SCALE: N.T.S.



8 STORM SEWER CROSSING DETAIL SCALE: N.T.S.

REFERENCES - BENCHMARKS

BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTLING SUN DRIVE.

ELEVATION = 3870.52 (CITY DATUM).

DATE	REVISIONS	BY

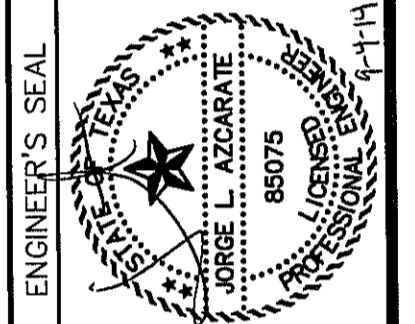
ca

engineers • architects • planners

TEXAS REGISTERED ENGINEERING FIRM #464

4772 Woodrow Bham, Ste. F, El Paso, TX 79924

Office: 915.544.5232 Fax: 915.544.5233 www.caegroup.net



SCALE:	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	AUGUST 2014
DESIGN BY:	J.M.
DRAWN BY:	J.M.
CHECK BY:	J.L.A.
APP'D BY:	J.L.A.
JOB No.	2260-018-LD

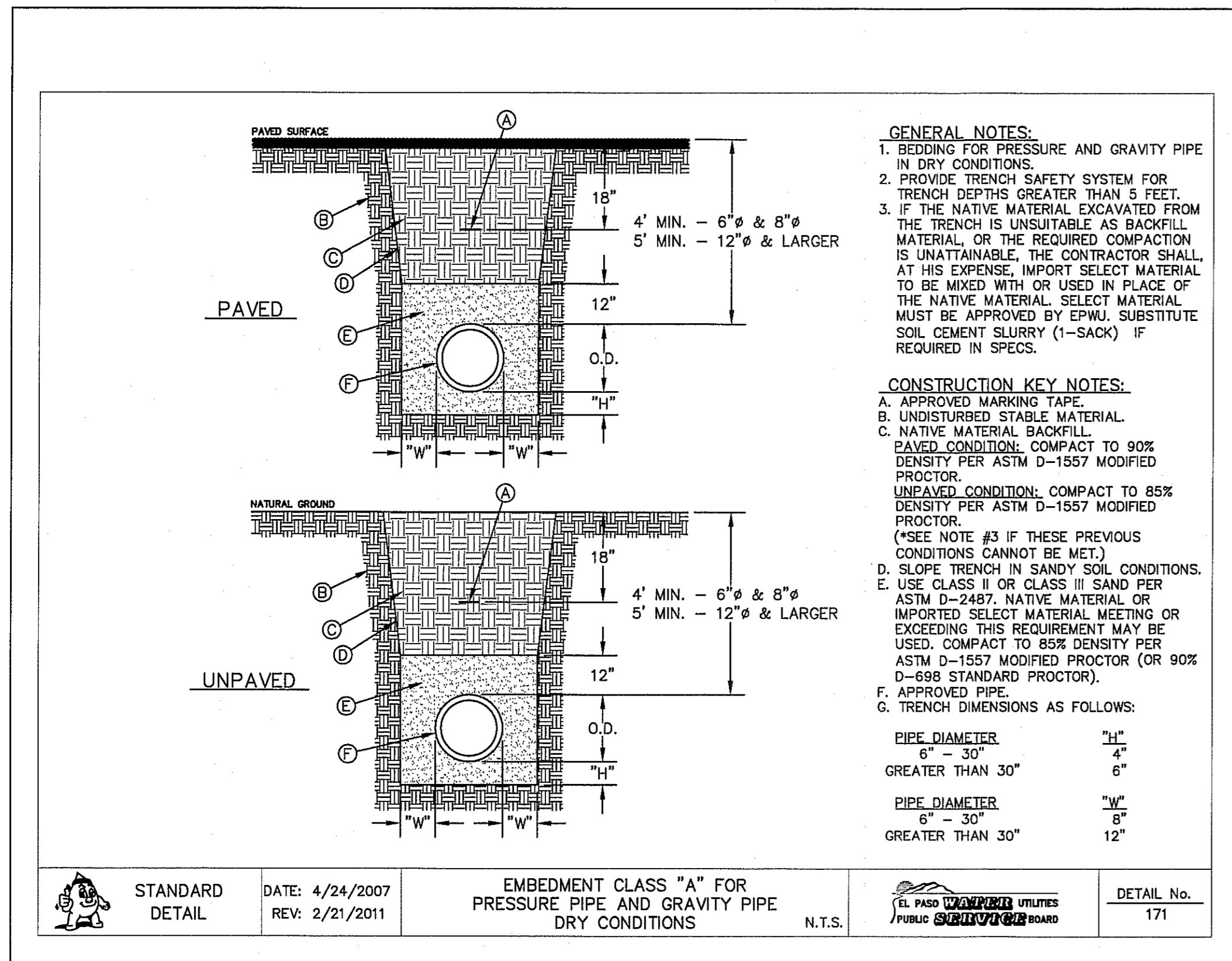
PROJECT TITLE

VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS

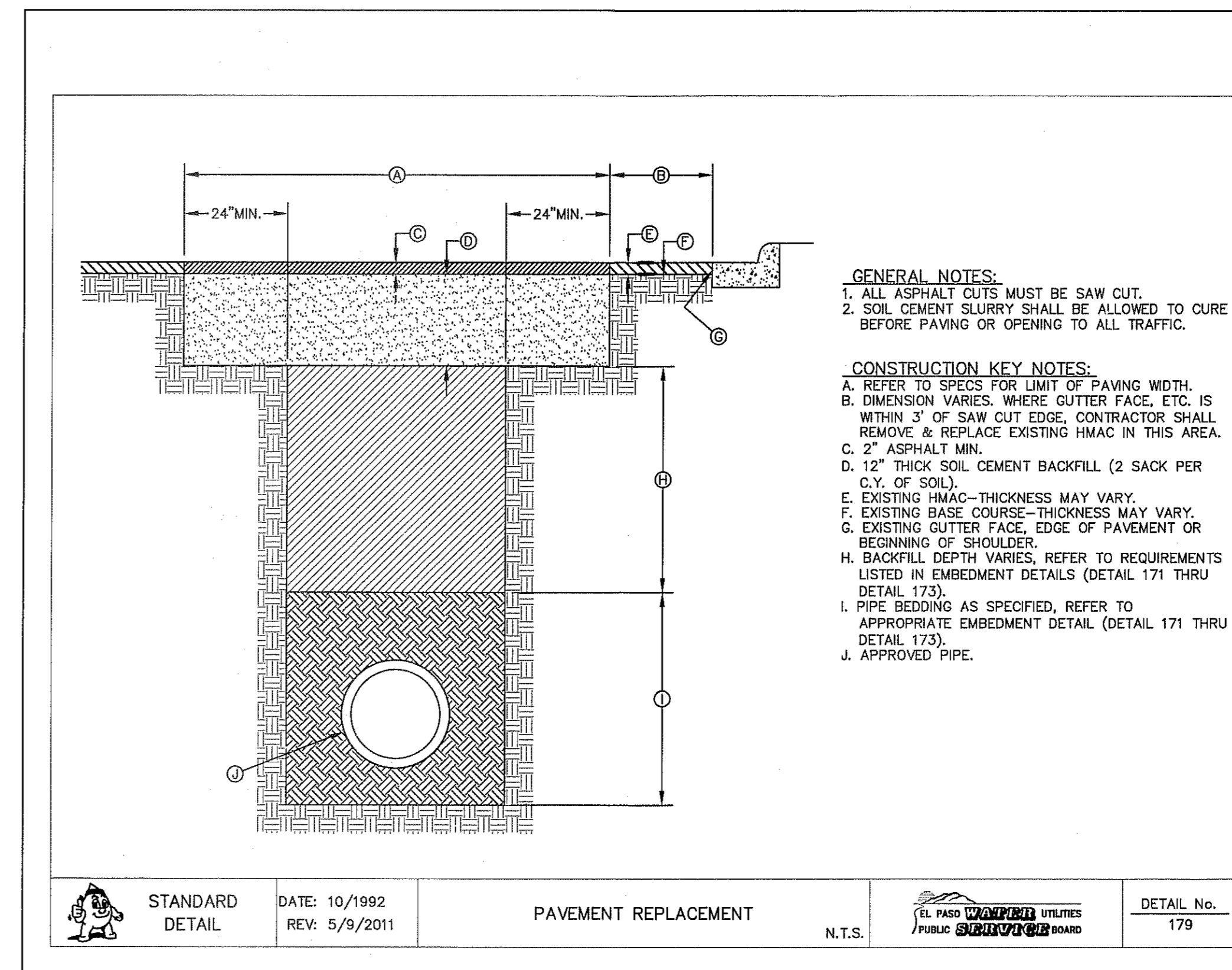
SHEET TITLE
SANITARY SEWER DETAILS
(SHEET 2 OF 3)
SHEET NO.

C15.2

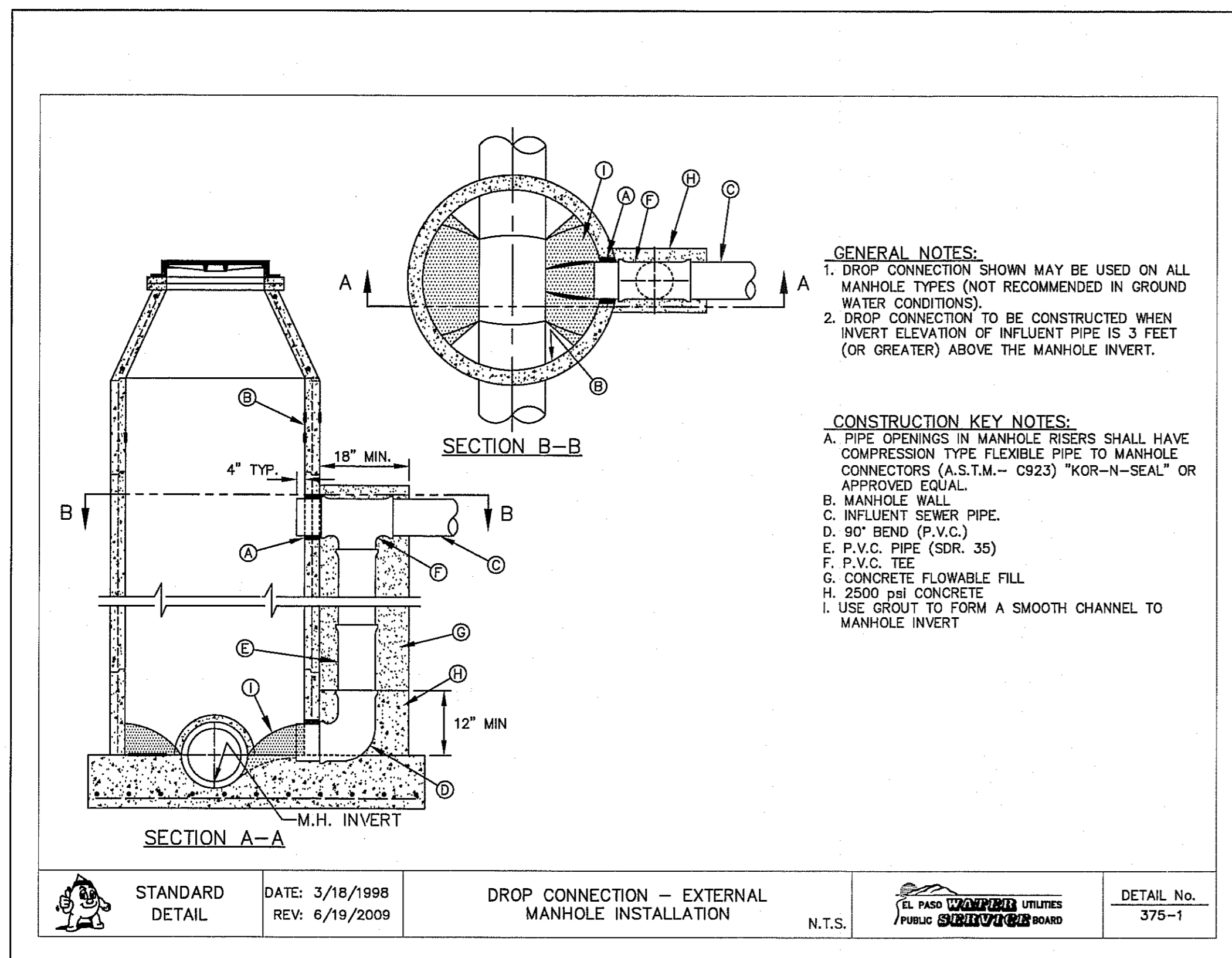
S:\2260\2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C15.1-15.3-Sewer Details.dwg, Layout2, 8/19/2014 10:33:37 AM



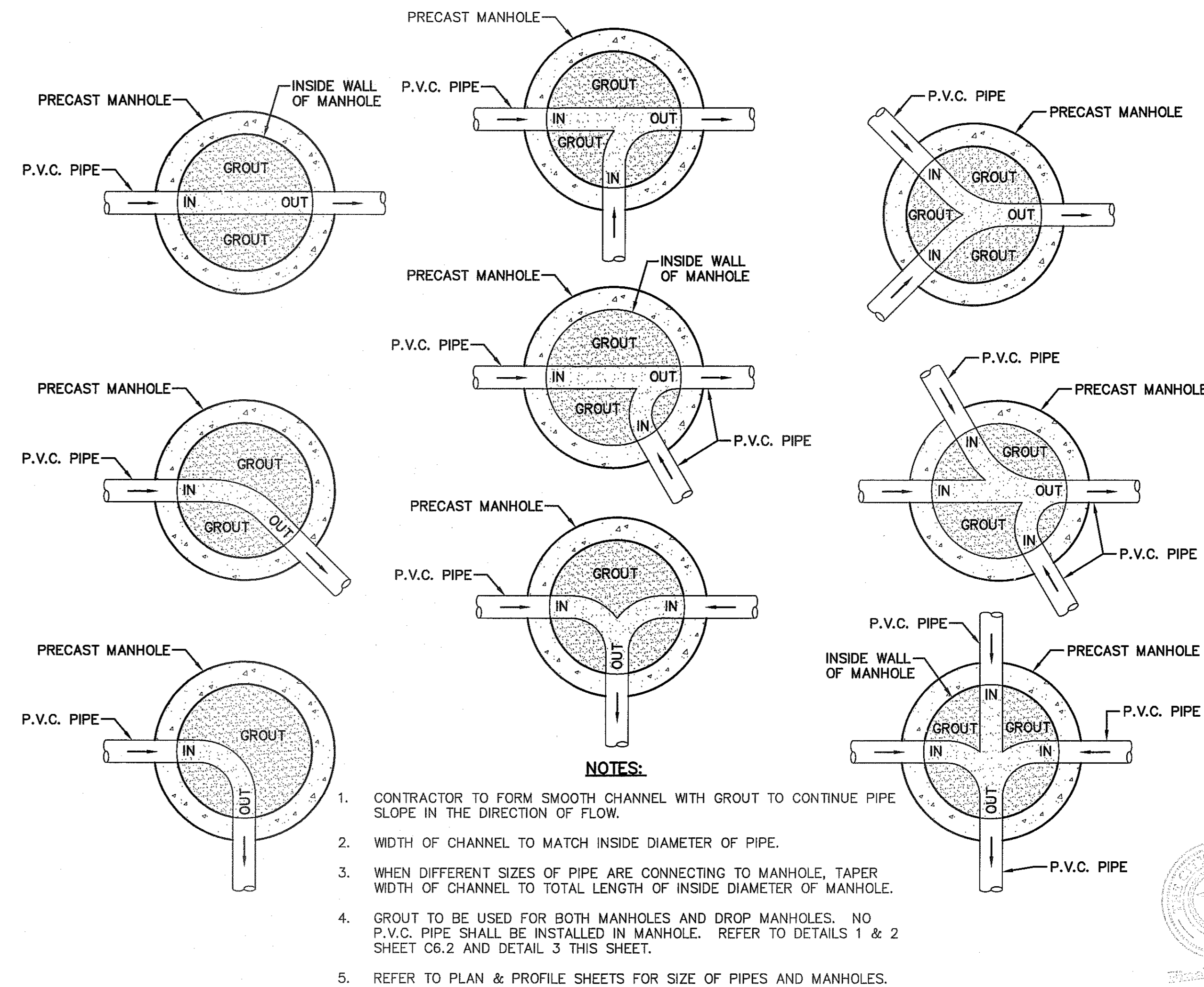
1 BEDDING CLASS DETAILS FOR P.V.C. PRESSURE PIPE SCALE: N.T.S.



2 PAVEMENT REPLACEMENT DETAIL SCALE: N.T.S.



3 DROP CONNECTION - EXTERNAL MANHOLE INSTALLATION SCALE: N.T.S.



4 TYPICAL INVERT PLANS SCALE: N.T.S.

REFERENCES - BENCHMARKS
 BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.
 ELEVATION = 3970.52 (CITY DATUM).
 DATE REVISIONS BY

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-464
 4712 Woodrow Bann, Ste. F, El Paso, TX 79904
 Office: 915.544.5232 Fax: 915.544.5233 www.csaengr.com

ENGINEER'S SEAL
 STATE OF TEXAS
 JORGE L. AZCARATE
 68075
 1-11-14

SCALE: N/A
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-018-1D

PROJECT TITLE
 VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS

SHEET TITLE
 SANITARY SEWER DETAILS
 (SHEET 3 OF 3)
 SHEET NO.

C15.3

S:\2260\2260-018D-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C15.1-15.3-Sewer Details.dwg, Layout3, 8/19/2014 10:35:52 AM

SITE DESCRIPTION

PROJECT NAME AND LIMITS: VENTANAS SUBDIVISION UNIT EIGHT IS BORDERED BY VENTANAS SUBDIVISION UNIT SIX TO THE NORTH, A PORTION OF TRACT 1, OF SECTION 46, BLOCK 79, TOWNSHIP 2, TEXAS AND PACIFIC RAILROAD COMPANY SURVEY TO THE EAST AND VENTANAS SUBDIVISION UNIT SEVEN TO THE WEST.

PROJECT DESCRIPTION: THE SITE FOR THE NEW SUBDIVISION WILL ENCOMPASS APPROXIMATELY 30.479± ACRES, AND WILL CONTAIN A TOTAL OF 137 RESIDENTIAL LOTS AND ONE COMMERCIAL LOT.

EXISTING CONDITIONS: THE SITE IS CLEAR OF SITE IMPROVEMENTS AND IS COVERED WITH ITS NATURAL SURROUNDINGS. EXISTING RUNOFF IS TO THE WEST.

MAJOR SOIL DISTURBING ACTIVITIES: MAJOR SOIL DISTURBING ACTIVITIES WILL CONSIST OF CLEARING AND GRUBBING, GRADING FOR BUILDING PAD ELEVATIONS, CONSTRUCTION OF STREETS AND EXCAVATION FOR UTILITIES.

TOTAL PROJECT AREA: 30.479±

TOTAL AREA TO BE DISTURBED: 30.479±

WEIGHTED RUNOFF COEFFICIENT (AFTER CONSTRUCTION): 0.60

EXISTING CONDITION OF SOIL AND VEGETATIVE COVER AND % OF EXISTING VEGETATIVE COVER: THE PROJECT SITE IS LOCATED IN THE VICINITY OF THE DELNORTE-CANUTO ASSOCIATION. THE SOIL IS NEARLY LEVEL TO STEEP SOILS THAT ARE SHALLOW OR VERY SHALLOW OVER CALICHE OR THAT ARE DEEP AND GRAVELLY THROUGHOUT; MAINLY ON AND NEAR FOOT SLOPES OF THE FRANKLIN MOUNTAINS.

NAME OF RECEIVING WATERS: VENTANAS SUBDIVISION UNIT EIGHT WILL DISCHARGE INTO AN ON-SITE STORM SEWER INFRASTRUCTURE AND ULTIMATELY DISCHARGE INTO AN EXISTING RETENTION BASIN. LOCATED IN VENTANAS SUBDIVISION UNIT FOUR.

CERTIFICATION

DEVELOPER/OWNER CERTIFICATION

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGES THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR: _____

SIGNATURE: _____

NAME (PRINT): _____

TITLE: _____

DATE: _____

CONTRACTOR'S CERTIFICATION

GENERAL CONTRACTOR

I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY GATHERED AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO MANAGES THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR GATHERING THE INFORMATION, THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

OPERATOR: _____

SIGNATURE: _____

NAME (PRINT): _____

TITLE: _____

DATE: _____

EROSION AND SEDIMENT CONTROL

SOIL STABILIZATION PRACTICES

- _____ TEMPORARY SEEDING
- _____ PERMANENT PLANTING, SODDING, OR SEEDING
- _____ MULCHING
- _____ SOIL RETENTION BLANKET
- _____ BUFFER ZONES
- _____ PRESERVATION OF NATURAL RESOURCES

OTHER: _____

STRUCTURAL PRACTICES:

- SILT FENCES
- HAY BALES
- _____ ROCK BERMS
- _____ DIVERSION, INTERCEPTOR, OR PERIMETER DIKES
- _____ DIVERSION, INTERCEPTOR, OR PERIMETER SWALES
- _____ DIVERSION DIKE AND SWALE COMBINATION
- _____ PIPE SLOPE DRAINS
- _____ CONCRETE FLUMES
- ROCK BEDDING AT CONSTRUCTION EXIT
- _____ TIMBER MATTING AT CONSTRUCTION EXIT
- _____ CHANNEL LINERS
- _____ SEDIMENT TRAPS
- _____ SEDIMENT BASINS
- _____ STORM INLET SEDIMENT TRAP
- _____ STONE OUTLET STRUCTURES
- CURBS AND GUTTERS
- STORM DRAINS
- _____ VELOCITY CONTROL DEVICES
- _____ VEGETATED SWALES & NATURAL DEPRESSIONS

OTHER: _____

NARRATIVE - SEQUENCE OF CONSTRUCTION (STORM WATER MANAGEMENT) ACTIVITIES:

1. INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS (e.g. SILT FENCE AND/OR EARTHEN BERM, AND STABILIZED CONSTRUCTION ENTRANCE);
2. PERFORM CLEARING AND GRUBBING;
3. EXCAVATION FOR UTILITIES;
4. COMPLETE STREET AND LOT GRADING;
5. CONSTRUCTION OF SUBDIVISION IMPROVEMENTS; AND,
6. WHEN ALL CONSTRUCTION ACTIVITY RELATED IN DEVELOPMENT OF THE SITE IS COMPLETE, REMOVE TEMPORARY CONTROLS IN 1. ABOVE.

SWPPP GENERAL NOTES:

1. PLACEMENT OF SILT FENCE SHALL BE ADJUSTED AS NECESSARY TO PREVENT THE BLOCKING OF DRIVEWAYS OR DRIVING LANES.
2. THE SWPPP MANUAL IDENTIFIES THE DUTIES AND RESPONSIBILITIES OF THE GENERAL CONTRACTOR IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. THIS ITEM SHALL BE SUBSIDIARY TO THE SWPPP BEST MANAGEMENT PRACTICES (COMPLETE IN PLACE) ITEMS. THE SWPPP PROJECT MANUAL IS AVAILABLE FOR REVIEWING AT THE CITY OF EL PASO-ENGINEERING DEPARTMENT. UPON SELECTION, THE CONTRACTOR WILL BE PROVIDED AN SWPPP MANUAL. THE CONTRACTOR SHALL MAINTAIN THIS MANUAL AT THE CONSTRUCTION SITE AT ALL TIMES THROUGHOUT THE CONSTRUCTION PERIOD.
3. THE CONTRACTOR SHALL COMPLETE AND SUBMIT ALL REGULATORY FORMS AND APPLICATIONS, AS PROVIDED IN THE SWPPP MANUAL, INCLUDING, BUT NOT LIMITED TO; NOI, NOT, SDPCP, AND ANY OTHER FORM REQUIRED BY THE CITY OF EL PASO AND TCEQ.
4. ALLOWABLE STORM WATER AND NON-STORMWATER DISCHARGE SHALL COMPLY WITH 15.20.080 (GENERAL PROHIBITION) AND 15.20.090 (SPECIFIC PROHIBITIONS AND REQUIREMENTS) OF THE CITY OF EL PASO STORM DRAIN POLLUTION CONTROL PLAN ORDINANCE. NON-STORMWATER DISCHARGES MAY CONSIST OF, BUT ARE NOT LIMITED TO, THE DISCHARGE RESULTING FROM FIREFIGHTING, LAWN WATERING, LANDSCAPE IRRIGATION, NATURAL SPRING, AND/OR AGRICULTURAL STORM WATER RUNOFF.
5. REFER TO DRAINAGE PLAN SHEET C4.1, FOR DETAILED INFORMATION ON WATERSHED AREAS AND RUNOFF QUANTITIES (Q).
6. THE FOLLOWING HAVE BEEN IDENTIFIED AS POTENTIAL CONTAMINATION SOURCES: CLEARED AND GRADED AREAS; CONSTRUCTION SITE ENTRANCE AND ASPHALT PARKING AREA CONSTRUCTION; ASPHALT LOADING/UNLOADING AREAS; CONCRETE LOADING/UNLOADING AREAS; AND, ALL UNDISTURBED AREAS.
7. THE FOLLOWING IS A LIST OF POTENTIAL CONSTRUCTION SITE STORM WATER POLLUTANTS: ASPHALT; CONCRETE; GLUE/ADHESIVE; PAINTS; CURING COMPOUNDS; WASTEWATER FROM CONSTRUCTION EQUIPMENT WASHING; HYDRAULIC OIL/FLUIDS; GASOLINE; DIESEL FUEL; KEROSENE; ANTIFREEZE/COOLANT; AND EROSION.

BEST MANAGEMENT PRACTICES CONTROLS

I. WASTE MATERIALS:

ALL WASTE MATERIALS, INCLUDING CONSTRUCTION DEBRIS, SHALL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. NO CONSTRUCTION WASTE MATERIAL SHALL BE BURIED ON SITE. THE TRANSIT DUMPSTER SHALL COMPLY WITH ORDINANCE 18.52.010 (ENCLOSURE AND REMOVAL OF WASTE MATERIALS DURING CONSTRUCTION). THE DUMPSTER SHALL BE EMPTIED AS NECESSARY OR AS REQUIRED BY ORDINANCE 9.04 (SOLID WASTE MANAGEMENT) AND THE TRASH SHALL BE HAULED TO A LICENSED LANDFILL.

II. HAZARDOUS WASTE:

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES SHALL BE CONSIDERED HAZARDOUS: PAINT, ACIDS FOR CLEANING MASONRY SURFACES, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SPILL STABILIZATION, CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS, THE CONTRACTOR SHALL TAKE IMMEDIATE ACTION AND CONTACT THE FIRE DEPT. AND TNRC.

III. SANITARY WASTE:

ALL SANITARY WASTE SHALL BE COLLECTED FROM THE CONSTRUCTION PORTABLE UNITS AS NECESSARY OR AS REQUIRED, CHAPTER 18.08 (BUILDING CODE), BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR. ALL WASTE MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

IV. SPILL PREVENTION:

THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURES OF MATERIALS TO STORM WATER RUNOFF.

V. GOOD HOUSEKEEPING:

- A. STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB
- B. NEATLY STORE MATERIALS ON-SITE IN AN ORDERLY MANNER
- C. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER
- D. DO NOT MIX SUBSTANCES WITH ONE ANOTHER, UNLESS OTHERWISE RECOMMENDED BY THE MANUFACTURER
- E. USE ENTIRE CONTENTS OF A PRODUCT BEFORE DISPOSING THE CONTAINER
- F. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL

VI. HAZARDOUS PRODUCTS:

PRACTICES USED TO REDUCE RISKS:

- A. KEEP PRODUCTS IN THEIR ORIGINAL CONTAINER IF AT ALL POSSIBLE
- B. RETAIN ORIGINAL LABELS, PRODUCT INFORMATION AND MATERIAL SAFETY DATA SHEETS (MSDS)
- C. DISPOSE SURPLUS PRODUCT IN ACCORDANCE WITH MANUFACTURER'S OR LOCAL & STATE RECOMMENDED METHODS

VII. PETROLEUM PRODUCTS:

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATION.

VIII. SPILL CONTROL PRACTICES:

- A. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES.
- B. MATERIALS AND EQUIPMENT NECESSARY FOR CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE.
- C. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY
- D. SPILL AREA SHALL BE WELL VENTILATED AND APPROPRIATE CLOTHING WILL BE WORN.
- E. ANY SPILL SHALL BE REPORTED TO THE APPROPRIATE GOVERNMENTAL AGENCY
- F. MEASURES SHALL BE TAKEN TO PREVENT A SPILL FROM REOCCURRING

IX. MAINTENANCE AND INSPECTION PROCEDURES:

ALL POLLUTION PREVENTION MEASURES SHALL BE INSPECTED AT LEAST ONCE A MONTH OR WITHIN 24-HOURS PRIOR TO ANTICIPATED STORM EVENT AND FOLLOWING A STORM EVENT OF 0.5 INCHES OR MORE. INSPECTION IN FINAL STABILIZED AREAS OR DURING ARID PERIODS WILL BE CONDUCTED MONTHLY, BEST MANAGEMENT PRACTICES AND POLLUTION CONTROL PROCEDURES SHALL BE INSPECTED FOR ADEQUACY.

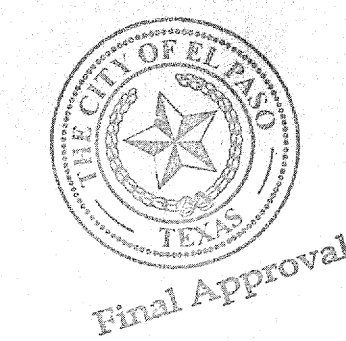
X. REMARKS:

DISPOSAL AREAS, STOCKPILES, AND HAUL ROADS SHALL BE CONSTRUCTED IN A MANNER THAT WILL MINIMIZE AND CONTROL THE AMOUNT OF SEDIMENT THAT MAY ENTER RECEIVING WATERS. DISPOSAL AREAS SHALL NOT BE LOCATED IN ANY WETLAND, WATERBODY OR STREAMBED. CONSTRUCTION STAGING AREAS AND VEHICLE MAINTENANCE AREAS SHALL BE CONSTRUCTED BY THE CONTRACTOR IN A MANNER TO MINIMIZE THE RUNOFF OF POLLUTANTS. ALL WATERWAYS SHALL BE CLEANED AS SOON AS PRACTICABLE OF TEMPORARY EMBANKMENT, TEMPORARY BRIDGES, MATTING, FALSEWORK, PILING DEBRIS OR OTHER OBSTRUCTIONS PLACED DURING CONSTRUCTION OPERATIONS THAT ARE NOT A PART OF THE FINISHED WORK.

XI. OFFSITE VEHICLE TRACKING:

IN ADDITION TO THE STABILIZED CONSTRUCTION ENTRANCES, THE FOLLOWING MEASURES SHALL BE OBSERVED DURING CONSTRUCTION:

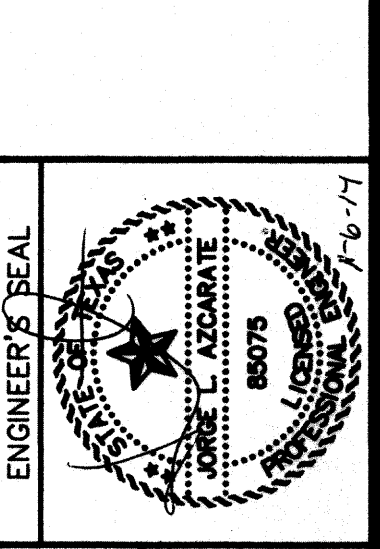
- HAUL ROADS SHALL BE DAMPENED FOR DUST CONTROL
- LOADED HAUL TRUCKS SHALL BE COVERED WITH TARP/AULIN
- EXCESS DIRT ON ROAD SHALL BE REMOVED IMMEDIATELY
- STABILIZED CONSTRUCTION ENTRANCE
- OTHER: _____



REFERENCES - BENCHMARKS

BENCHMARK IS CITY MOUNTAIN LOCATED AT THE CENTERLINE INTERSECTION OF SAN TRAIL DRIVE AND SETTING SUN DRIVE.
ELEVATION = 3970.52 (GTY DATUM).
DATE _____
REVISIONS _____
BY _____

CSA
engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-4584
4712 Woodrow Wilson, Ste. F El Paso, TX 79924
Office: 915.541.5222 Fax: 915.541.2228 www.csaeng.com



SCALE

Horizontal: N/A
Vertical: N/A
Contour Interval: 1/4"
DATE: AUGUST 2014
DESIGN BY: J.M.
DRAWN BY: J.M.
CHKD. BY: J.L.A.
APPVD. BY: J.L.A.
JOB No. 2260-018-LD

PROJECT TITLE
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

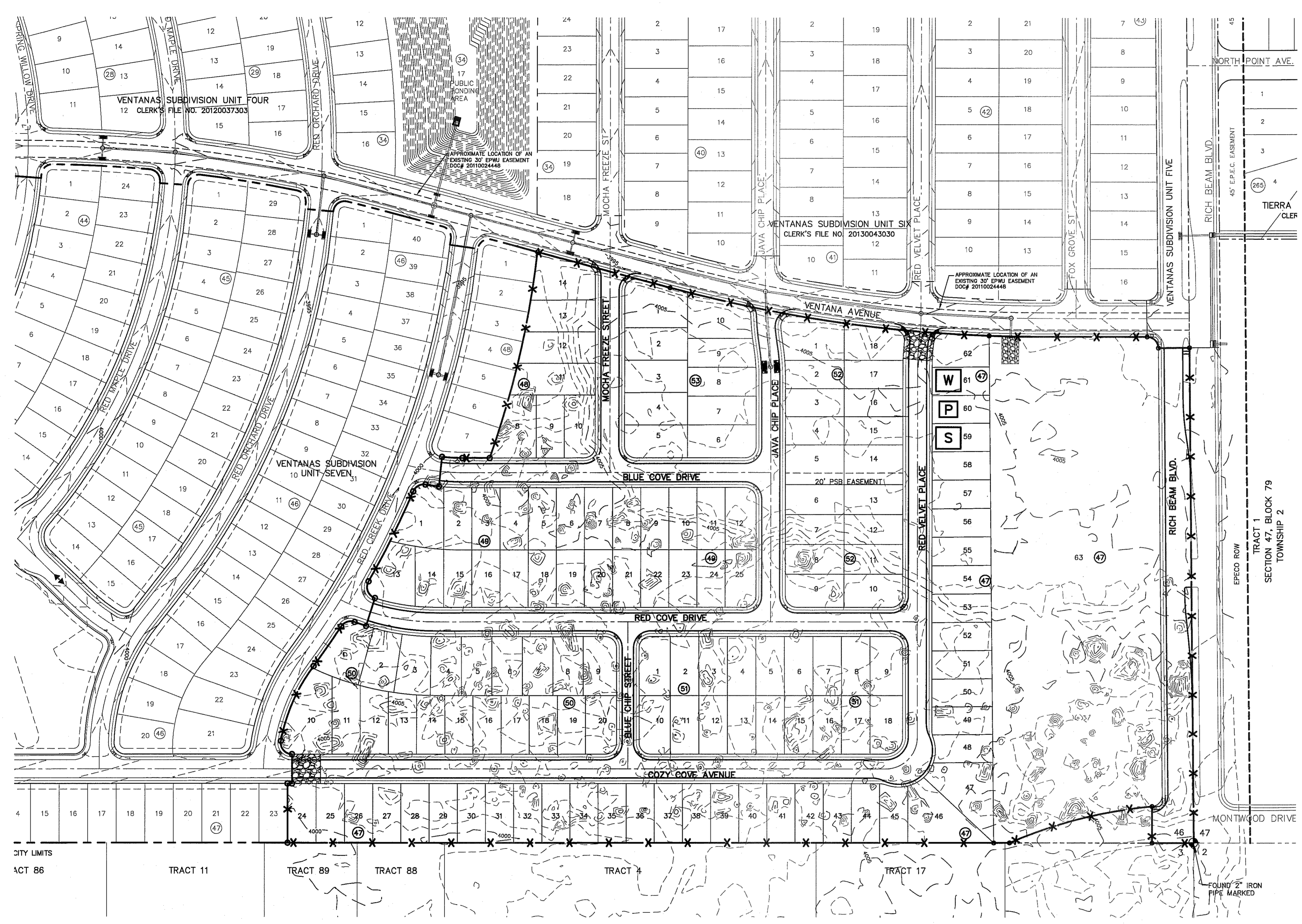
SHEET TITLE

**STORM WATER
POLLUTION
CONTROL PLAN:
GENERAL NOTES**

(SHEET 1 OF 3)
SHEET NO.

C16.1

S:\2260\2260-018LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C16.2-SWPPP Site Plan.dwg, SWPPP Site Plan, 8/19/2014 10:35:10 AM



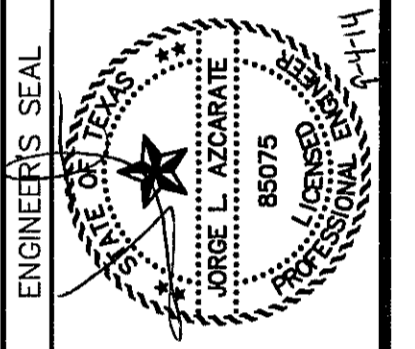
UTILITY LOCATOR SERVICES	
EL PASO ELECTRIC COMPANY	(915) 543-5720
EL PASO ENERGY CORPORATION	(915) 496-5244
EL PASO WATER UTILITIES	(915) 594-5500
MCI SURVEILLANCE	(800) MCI-WORK
TIME WARNER COMMUNICATIONS	(915) 772-1123
TEXAS GAS SERVICE	(915) 680-7200
SBC	(800) 545-6005
AT&T	(800) 852-3786
U.S. SPRINT TELECOMM	(800) 521-0579
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPd&T)	(915) 621-6750
(AFTER HOURS)	(915) 240-3220

WARNING I BEFORE YOU DIG
 CALL
 1-800-DIG-TESS
 1-800-344-8377
 FOR FIELD LOCATING EXISTING UTILITIES

- X-X- SILT FENCE OR EARTHEN BERM
- [Pattern] STABILIZED CONSTRUCTION ENTRANCE
- [S] STAGING AREA
- [P] PORTABLE TOILETS
- [W] WASH OUT
- [L] TEMPORARY WOOD CHIP FILLED MESH BAGS PLACED TO PROTECT INLET.

REFERENCES - BENCHMARKS	
BENCHMARK IS CITY MONUMENT LOCATED AT THE INTERSECTION OF SUN TRAIL DRIVE AND SETTING SUN DRIVE.	
ELEVATION = 3970.52 (CITY DATUM).	
DATE	REVISIONS
BY	

CSA
 engineers • architects • planners
 TEXAS REGISTERED ENGINEERING FIRM F-664
 4712 Woodrow Beam, Ste. F, El Paso, TX 79924
 Office: 915.541.8322 Fax: 915.541.8233 www.csaeng.com



SCALE: 1" = 100'
 Horizontal: N/A
 Vertical: N/A
 Contour Interval: N/A
 DATE: AUGUST 2014
 DESIGN BY: J.M.
 DRAWN BY: J.M.
 CHKD. BY: J.L.A.
 APPVD. BY: J.L.A.
 JOB No. 2260-018-LD

PROJECT TITLE
**VENTANAS SUBDIVISION
 UNIT EIGHT
 SUBDIVISION IMPROVEMENTS**

SHEET TITLE
**STORM WATER
 POLLUTION
 CONTROL PLAN:
 (SITE PLAN)**
 (SHEET 2 OF 3)
 SHEET NO.

SITE PLAN
 SCALE: 1" = 100'

C16.2

UTILITY LOCATOR SERVICES		
EL PASO ELECTRIC COMPANY	(915) 543-5720	
EL PASO ENERGY CORPORATION	(915) 496-5244	
EL PASO WATER UTILITIES	(915) 594-5500	
MCI SURVEILLANCE	(800) MCI-WORK	
TIME WARNER COMMUNICATIONS	(915) 772-1123	
TEXAS GAS SERVICE	(915) 880-7200	
SBC	(800) 545-6005	
AT&T	(800) 852-3786	
U.S. SPRINT TELECOMM	(800) 521-0579	
CITY OF EL PASO DEPARTMENT OF TRANSPORTATION (EPDOT)	(915) 621-6750	
(AFTER HOURS)	(915) 240-3220	

WARNING!
BEFORE YOU DIG

CALL
1-800-DIG-TESS
1-800-344-8377

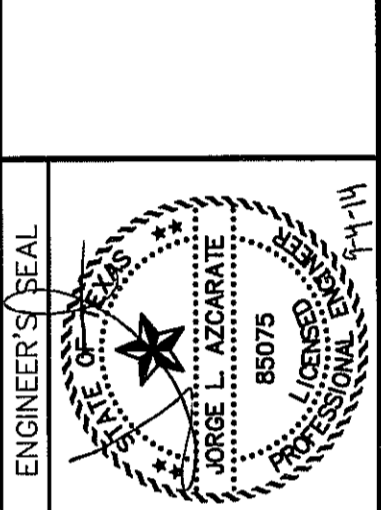
FOR FIELD LOCATING EXISTING UTILITIES

DATE	REVISIONS	BY

ENGINEERS SEAL

CA

engineers • architects • planners
TEXAS REGISTERED ENGINEERING FIRM F-454
4712 Woodrow Beam, Ste. F, El Paso, TX 79924
Office: 915.544.5232 Fax: 915.544.5233 www.caegroup.net



SCALE	N/A
Horizontal:	N/A
Vertical:	N/A
Contour Interval:	N/A
DATE:	AUGUST 2014
DESIGN BY:	J.M.
DRAWN BY:	J.L.A.
CHKD. BY:	J.L.A.
APPRD. BY:	J.L.A.
JOB NO.	2260-018-LD

PROJECT TITLE

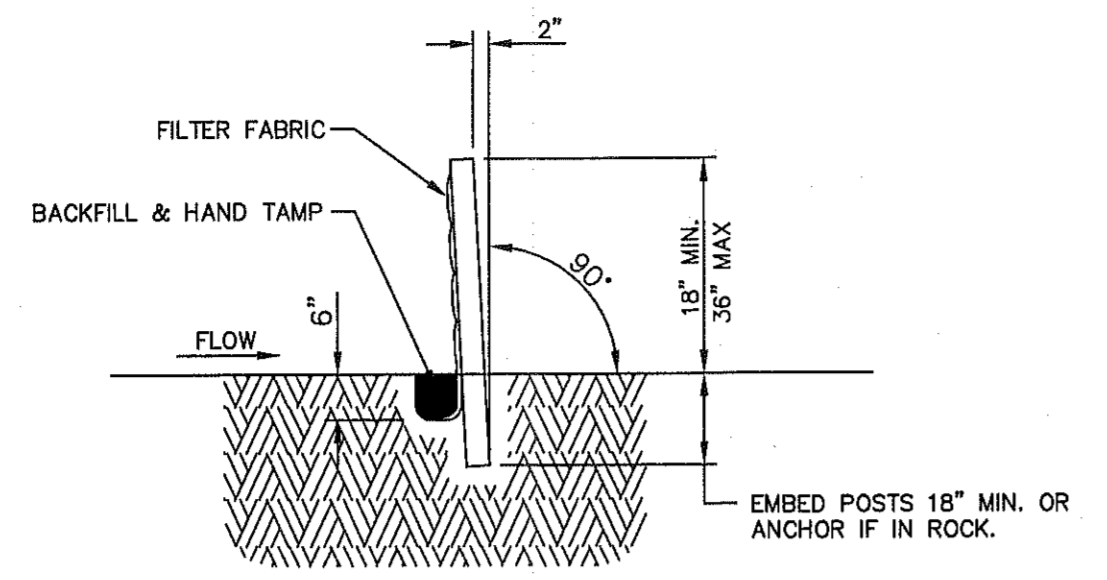
**VENTANAS SUBDIVISION
UNIT EIGHT
SUBDIVISION IMPROVEMENTS**

SHEET TITLE

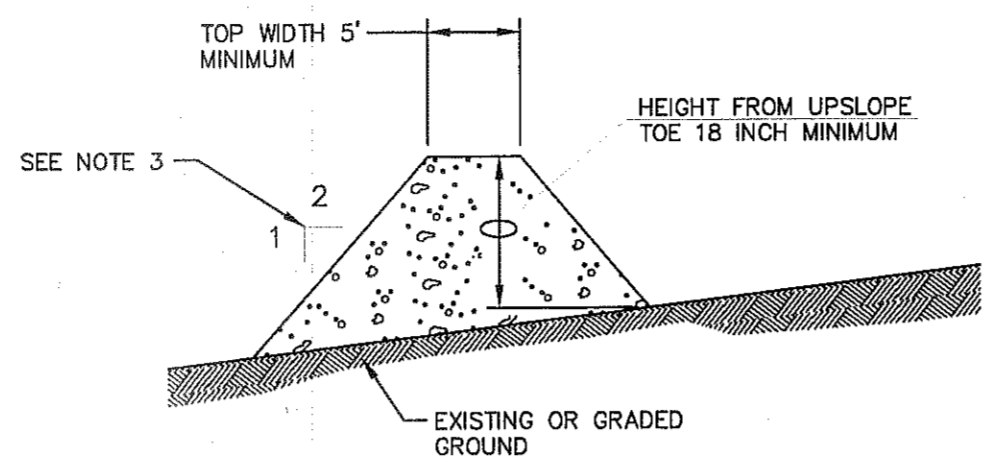
**STORM WATER
POLLUTION
PREVENTION PLAN:
(DETAILS)**

(SHEET 3 OF 3)
SHEET NO.

C16.3

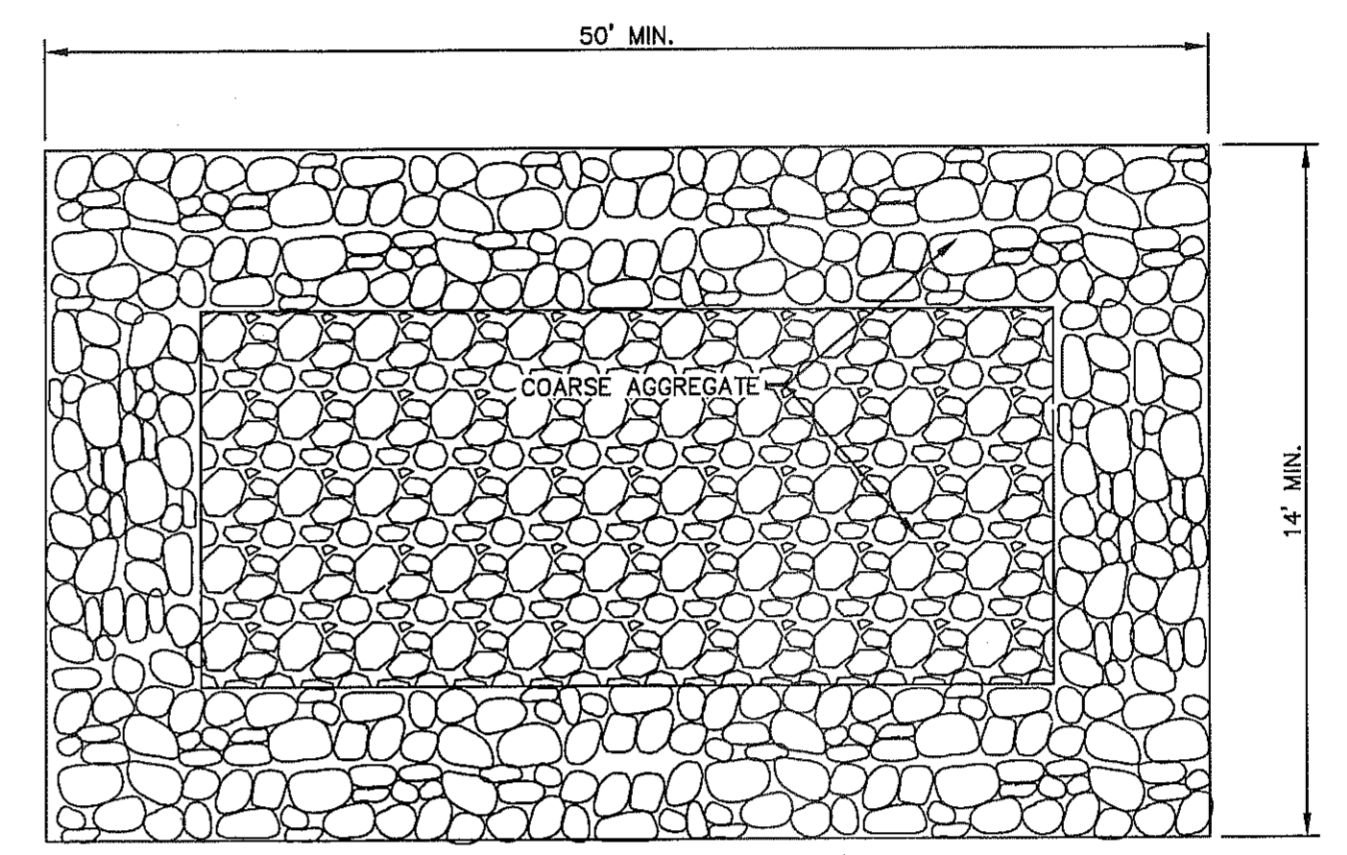


SECTION A-A

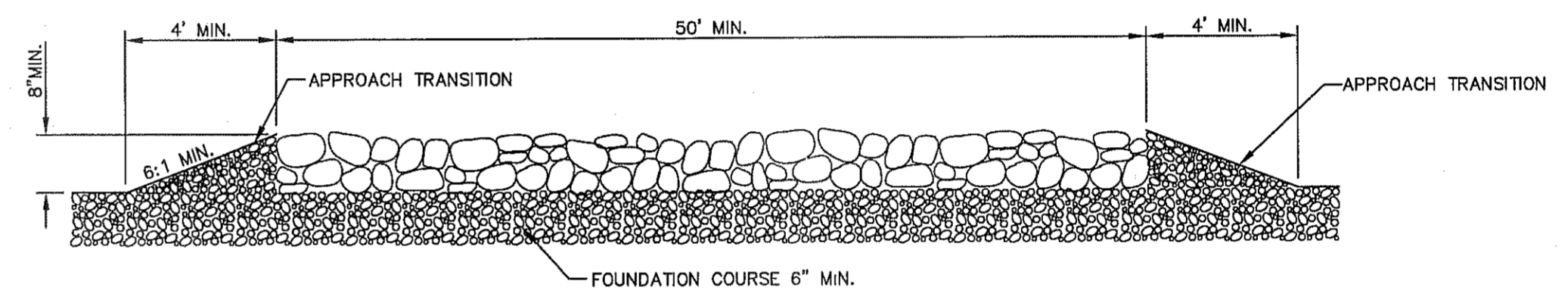


TYPICAL BERM CONFIGURATION

- GENERAL NOTES:**
- SOIL USED IN BERM CONSTRUCTION SHALL BE MACHINE COMPACTED.
 - TOP WIDTH AND HEIGHT OF BERM MAY BE MODIFIED WITH PRIOR APPROVAL OF THE ENGINEER.
 - SIDE SLOPES WITHIN THE SAFETY CLEAR ZONE OF A ROADWAY SHALL BE 6:1 OR FLATTER.
 - GRADING SHALL BE SHOWN ELSEWHERE IN THE PLANS OR AS DIRECTED BY THE ENGINEER.
 - THE ENGINEER RESERVES THE RIGHT TO MODIFY THE DIMENSIONS SHOWN FOR THE BERM DEPENDENT ON RUNOFF VOLUME CHARACTERISTICS.
 - BERM THAT ARE IN PLACE FOR MORE THAN 14 CALENDAR DAYS SHOULD BE STABILIZED TO PREVENT SEDIMENT RUNOFF.
 - THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



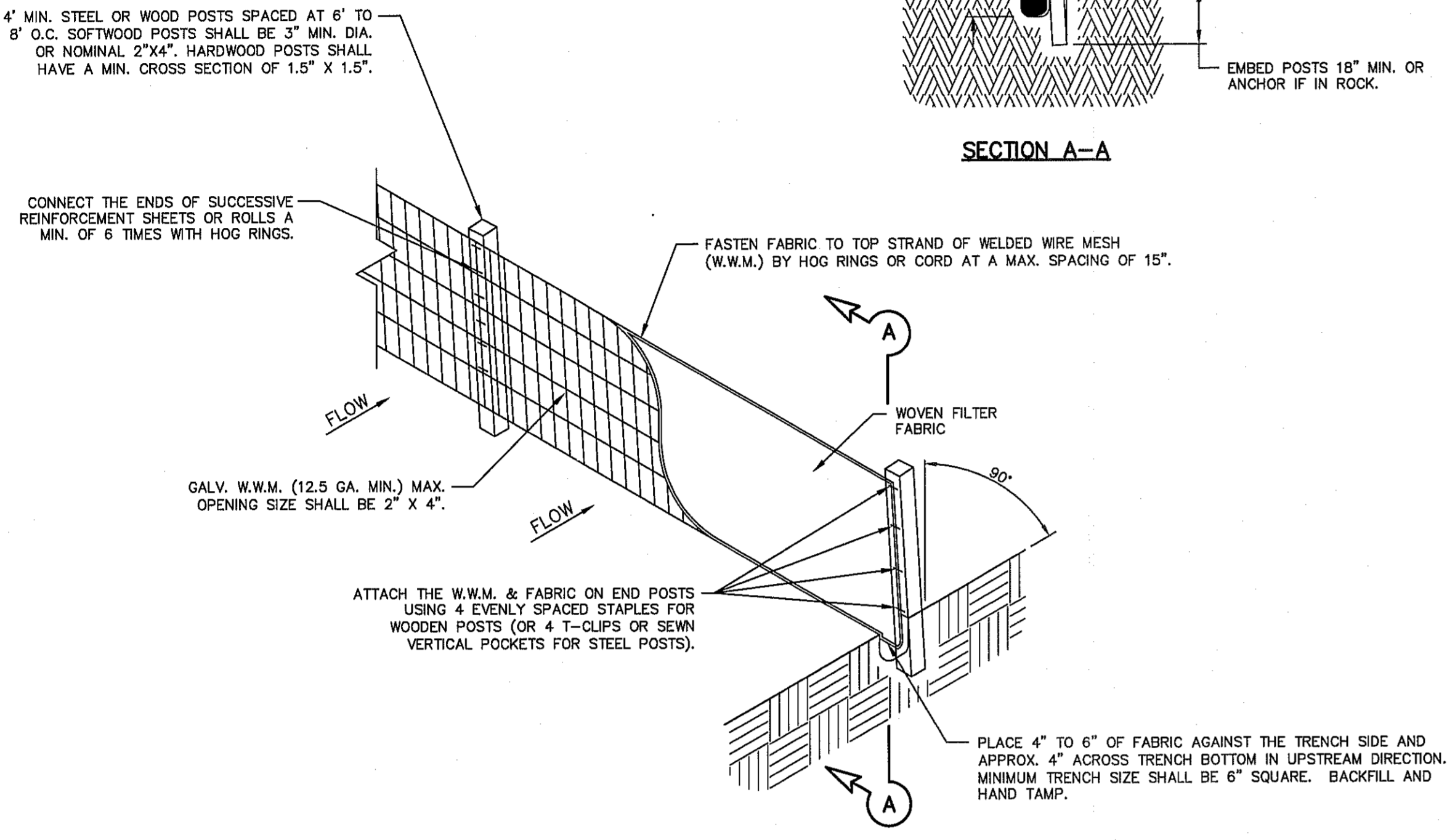
PLAN



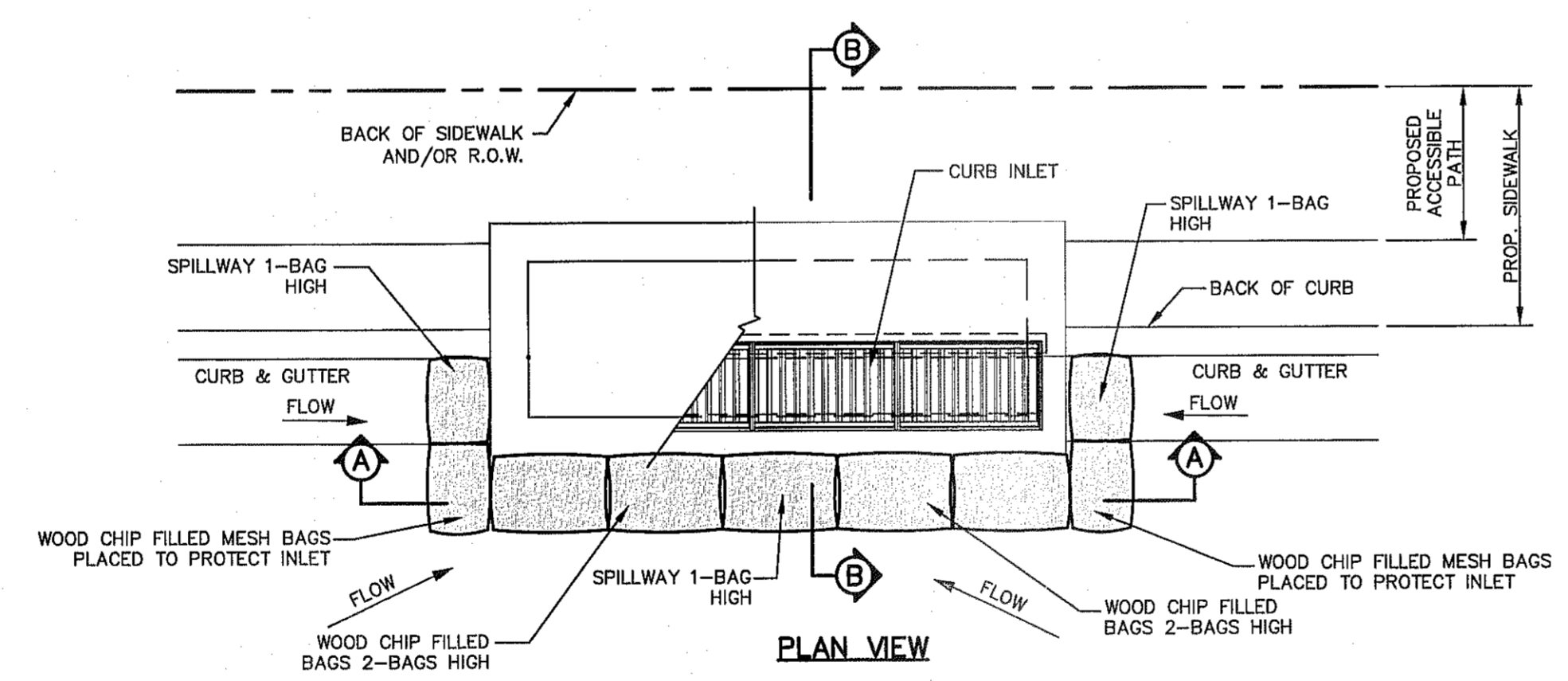
PROFILE

- GENERAL NOTES:**
- THE LENGTH OF THE TYPE 1 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
 - THE COARSE AGGREGATE SHOULD BE OPEN GRADED WITH A SIZE OF 4" TO 8".
 - THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
 - THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
 - THE CONSTRUCTION EXIT SHALL BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
 - THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

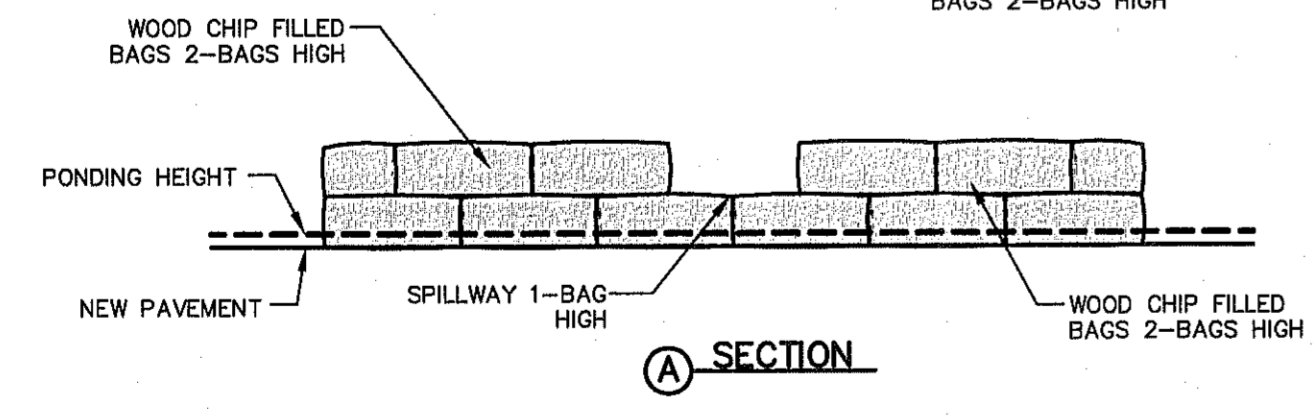
CONSTRUCTION EXIT (TYPE 1)



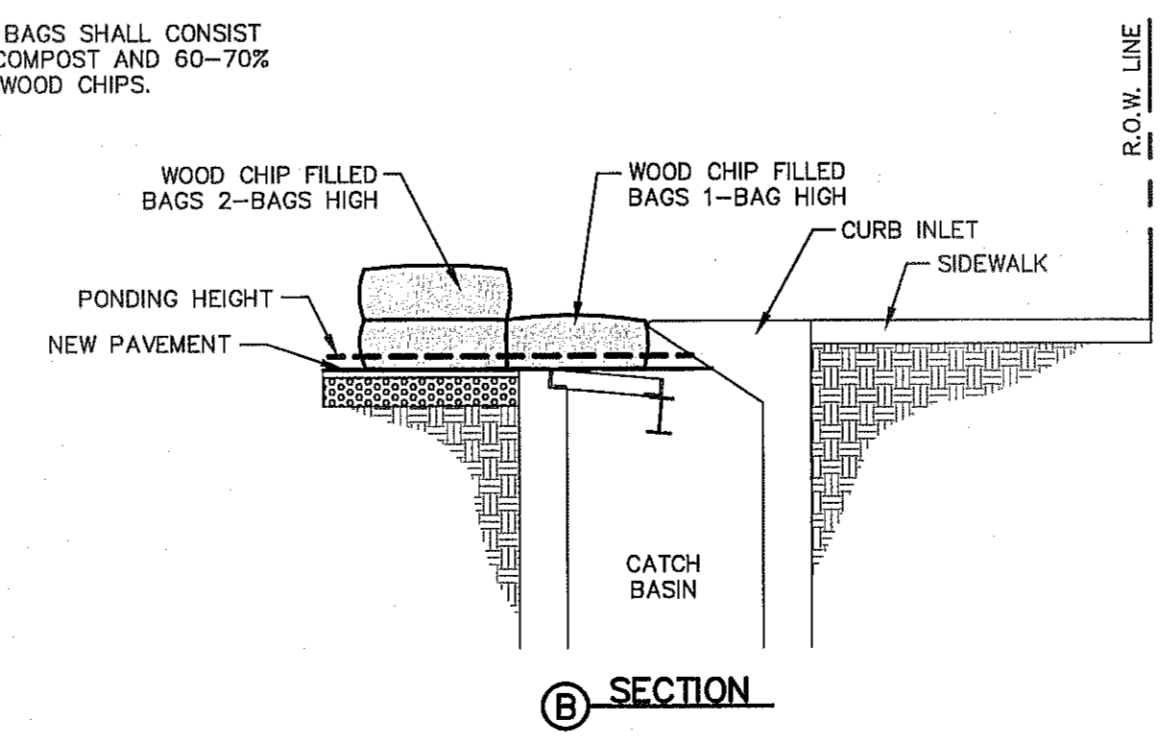
TEMPORARY SEDIMENT CONTROL FENCE



PLAN VIEW



SECTION A



SECTION B

NOTE:
WOOD CHIP FILLED MESH BAGS SHALL CONSIST OF 30-40% WEED FREE COMPOST AND 60-70% PARTIALLY DECOMPOSED WOOD CHIPS.

- GENERAL NOTES:**
- PLACE CURB TYPE SEDIMENT BARRIERS ON GENTLY SLOPING STREET SEGMENTS, WHERE WATER CAN POND AND ALLOW SEDIMENT TO SEPARATE FROM RUNOFF.
 - INSPECT BARRIERS AND REMOVE SEDIMENT AFTER EACH STORM EVENT. SEDIMENT AND GRAVEL MUST BE REMOVED FROM THE TRAVELED WAY IMMEDIATELY.

TEMPORARY INLET PROTECTION

S:\2260\2260-018-LD-Ventanas Unit Eight\DWG\Construction Drawings\Improvement Plans\2260-018-C16.3-SWPPP Details.dwg, SWPPP Details, 8/19/2014 10:35:46 AM