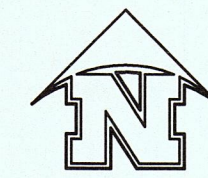


SIERRA DEL PUERTE UNIT ONE

SIERRA DEL PUERTE UNIT ONE



LOCATION MAP

SCALE 1" = 600'



STREET IMPROVEMENT ENGINEERING PACKAGE

INDEX OF SHEETS

SHEET TITLE	SHEET NO.
COVER SHEET	1
PLAT	2
GENERAL NOTES	3
GRADING PLAN	4
DRAINAGE PLAN	5
SECTIONS	6-7
MOUNTAIN LAUREL DRIVE EXISTING PLAN AND PROFILE	8-9
RETAINING ROCK WALL DETAILS	10
TYPICAL DETAILS	11-12
ILLUMINATION AND TRAFFIC SIGN PLAN	13
ILLUMINATION AND TRAFFIC SIGN DETAILS AND U.S.P.S. DETAILS	14-15
EROSION CONTROL	16

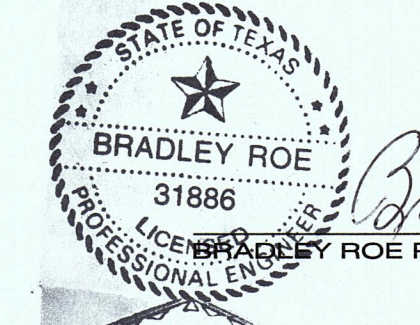
**CITY DEVELOPMENT
DEPARTMENT**

Reviewed For Conformance For Condition Related To:

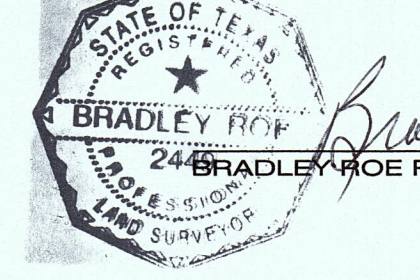
- Sidewalk
- Stormwater
- Grading & Drainage
- Retaining Rock Walls
- Wheelchair Ramps
- On Site Ponding of Storm Waters
- On Site Parking Layout

Contractor Must Call 24 Hours Prior To Construction for Inspections

By Paul Date 7/7/15



Bradley Roe 7/7/2015
DATE:



Bradley Roe 7/7/2015
DATE:

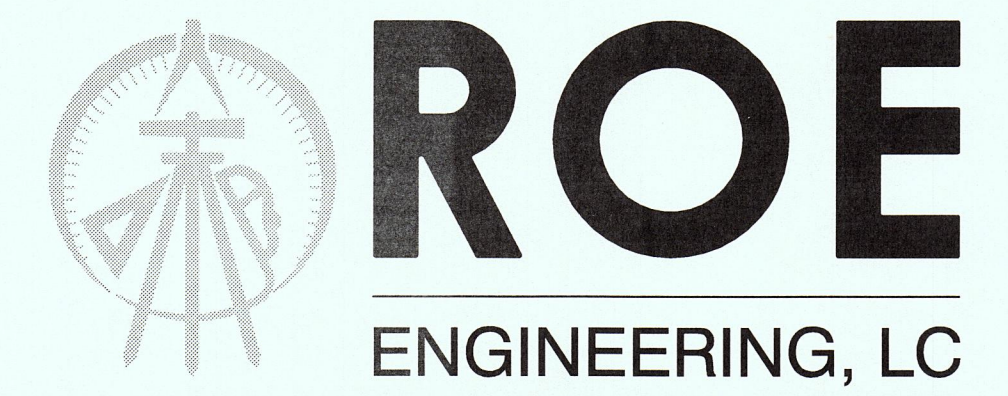
NAME	ADDRESS	CITY & ZIP	PHONE	FAX
OWNER/ DEVELOPER	GGOHL, LLC	1014 CEDAR STREET	EL PASO, TEXAS 79903	915-487-0383
ENGINEER	BRADLEY ROE, P.E. 31886	601 N. COTTON STREET, SUITE 6	EL PASO, TEXAS 79902	915-533-1418 915-533-4972
SURVEYOR	BRADLEY ROE, R.P.L.S. 2449	601 N. COTTON STREET, SUITE 6	EL PASO, TEXAS 79902	915-533-1418 915-533-4972

SIERRA DEL PUERTE UNIT ONE

REVISION NUMBER	SHEET NAME OR NUMBER	DESCRIPTION OF REVISION	DATE OF REVISION	REVISION APPROVED BY

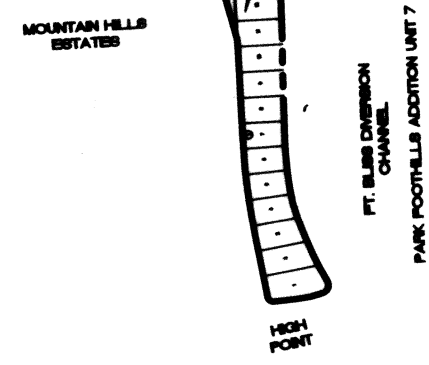
This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

REVISED 07-07-2015





SIERRA DEL PUERTE
UNIT ONE



EL PASO INDEPENDENT SCHOOL DISTRICT

LEGEND

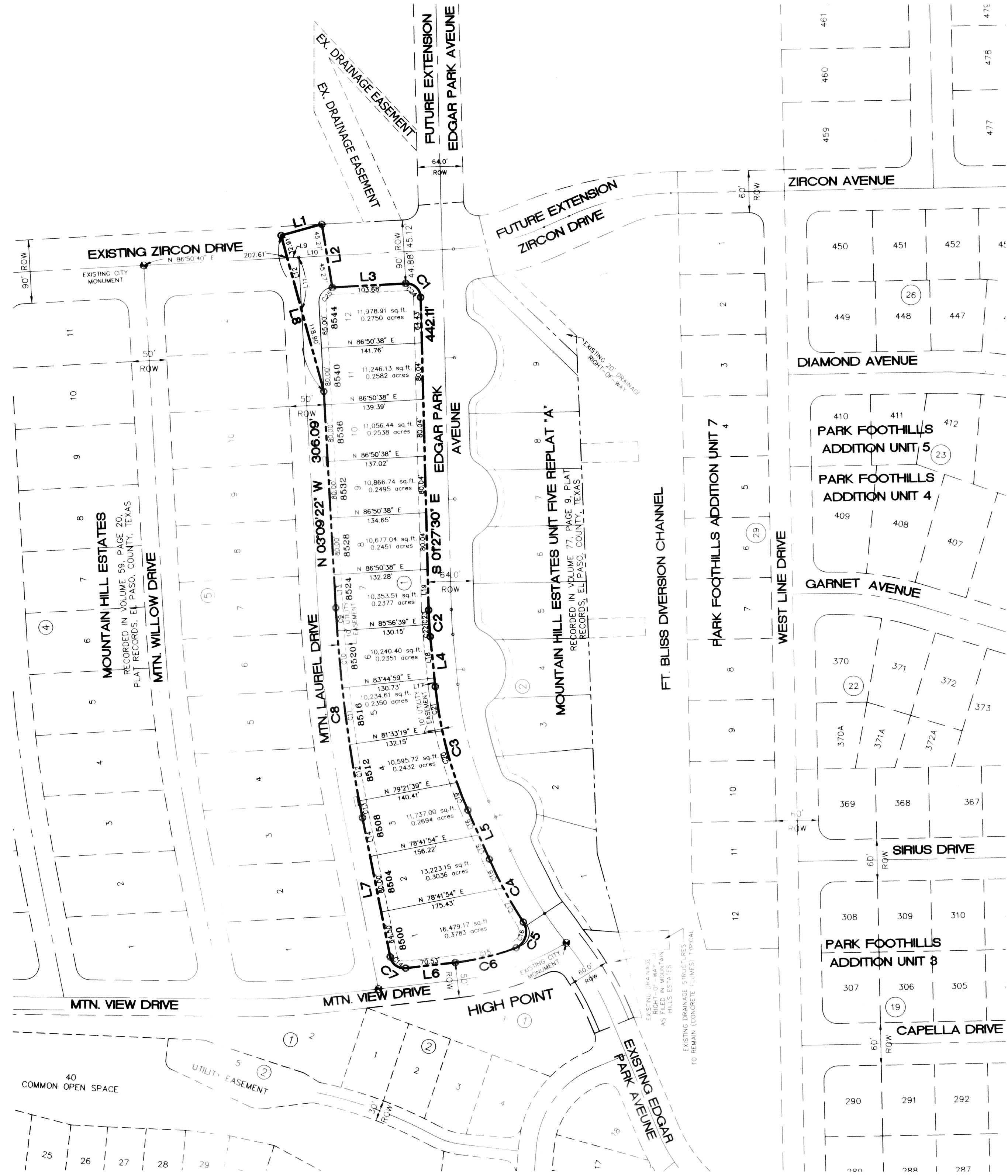
- ◻ EXISTING CITY MONUMENT
- DENOTES SET 5/8"Ø REBAR WITH YELLOW PLASTIC CAP STAMPED TX 2449. ROE ENGR., L.C. UNLESS OTHERWISE NOTED
- ◻ NEIGHBORHOOD DELIVERY AND COLLECTION BOX UNITS (NDCBUS)

GENERAL NOTES:

1. THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO SIERRA DEL PUERTE UNIT TWO BY THE EL PASO WATER UTILITIES 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 IN MOUNTAIN LAUREL DRIVE RIGHT-OF-WAY AND HAVE BEEN CONSTRUCTED TO SERVE THE SUBDIVISION.
2. "SIDEWALKS WITHIN THIS SUBDIVISION WILL BE PROVIDED BY BUILDER UNLESS OTHERWISE NOTED."
3. RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORD SECTION, INSTRUMENT NO. 2016007835, DATE 2-4-2016.
4. THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C" (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS. AS PER AREA COMMUNITY PANEL NO. 480214 0024B, DATED OCTOBER 15, 1982.
5. POSTAL DELIVERY SERVICE WITHIN THE SUBDIVISION WILL BE PROVIDED USING NEIGHBORHOOD DELIVERY SERVICE.
6. TEN FOOT UTILITY EASEMENT ALONG THE FRONT OF ALL PROPERTY LINES UNLESS OTHERWISE NOTED.
7. TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORDS SECTION, INSTRUMENT NO. 2016007835, DATE 2-4-2016.
8. VEHICULAR ACCESS TO LOTS 1-12, BLOCK 1, AS THEY ABUT ZIRCON DRIVE AND EDGAR PARK AVENUE AND MOUNTAIN VIEW DRIVE, SHALL BE FROM OTHER DEDICATED STREETS ONLY. THE INSTRUMENT ASSURING RELEASE OF ACCESS IS FILED IN THE OFFICE OF THE COUNTY CLERK, DEEDS AND RECORDS SECTION, INSTRUMENT NO. 2016007835, DATE 2-4-2016.
9. ALL STORM WATER RUNOFF SHALL BE ADDRESSED WITHIN THE SUBDIVISION LIMITS AND SHALL COMPLY WITH ALL PROVISIONS OF (CITY OF EL PASO'S DESIGN STANDARDS FOR CONSTRUCTION (DSC), 19.19.010A AND CITY OF EL PASO ENGINEERING DEPARTMENT DRAINAGE DESIGN MANUAL (AL (DDM), 11.1).
10. SET 5/8"Ø REBAR WITH YELLOW PLASTIC CAP STAMPED TX 2449. ROE ENGR., L.C. AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE NOTED.
11. ALL LOT CORNERS WILL BE SET UPON COMPLETION OF CONSTRUCTION OF ROADWAYS AND UTILITIES.
12. BEARINGS BASED ON MAP OF MOUNTAIN HILLS ESTATES UNIT FIVE REPLAT "A" RECORDED IN VOLUME 77, PAGE 90, FILE NUMBER 20020067195, PLAT RECORDS OF EL PASO COUNTY, TEXAS.

LINE No.	BEARING	LENGTH
L1	N 74°25'09" E	59.63
L2	S 09°22'45" E	90.53
L3	N 86°50'41" E	103.68
L4	S 05°48'41" E	70.94
L5	S 23°39'52" E	75.65
L6	S 83°31'51" W	70.53
L7	N 11°18'06" W	200.37
L8	N 15°17'53" W	278.43
L9	N 11°18'06" W	16.13
L10	N 86°50'41" E	40.09
L11	N 03°09'22" W	74.95
L12	N 15°17'53" W	76.62
L13	N 03°09'22" W	47.24
L14	N 11°18'06" W	55.87
L15	S 23°39'52" E	37.48
L16	S 23°39'52" E	38.17
L17	S 05°48'41" E	12.33
L18	S 05°48'41" E	58.61
L19	S 01°27'30" E	57.54

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	20.00	32.01	20.60	28.70	N 47°18'24" W	91°41'49"
C2	497.00	37.76	18.89	37.75	S 03°38'05" E	42°11'11"
C3	582.00	181.35	91.41	180.62	S 14°44'16" E	175°11'11"
C4	614.30	101.09	50.66	100.98	S 28°22'44" E	92°5'44"
C5	25.00	42.53	28.50	37.99	N 15°38'42" E	97°28'36"
C6	350.00	88.59	44.53	88.15	N 76°16'48" E	14°30'07"
C7	20.00	29.73	18.38	27.07	S 53°53'08" E	85°10'03"
C8	2106.06	299.41	149.96	299.16	S 07°13'44" E	80°8'44"
C9	2106.06	32.75	16.37	32.75	S 03°36'06" E	0°53'27"
C10	2106.06	80.94	40.47	80.93	S 05°08'53" E	21°2'07"
C11	2106.06	80.68	40.35	80.68	S 07°20'47" E	21°1'42"
C12	2106.06	80.68	40.35	80.68	S 09°32'29" E	21°1'42"
C13	2106.06	24.36	12.18	24.36	S 10°58'13" E	0°39'46"
C14	20.00	29.73	18.38	27.07	S 53°53'08" E	85°10'03"
C15	350.00	88.59	44.53	88.15	N 76°16'48" E	14°30'07"
C16	25.00	42.53	28.50	37.99	N 15°38'42" E	97°28'36"
C17	614.30	56.28	28.16	56.16	S 30°28'08" E	51°4'56"
C18	614.30	44.82	22.42	44.81	S 25°45'16" E	41°0'48"
C19	582.00	42.01	21.01	42.00	S 21°35'49" E	43°8'07"
C20	582.00	75.96	38.04	75.91	S 15°47'24" E	72°8'42"
C21	582.00	63.38	31.72	63.15	S 08°55'52" E	61°4'22"
C22	497.00	12.33	6.17	12.11	S 04°48'45" E	1°59'50"
C23	497.00	20.43	10.22	20.43	S 02°38'09" E	22°11'19"
C24	20.00	32.01	20.60	28.70	N 47°18'24" W	91°41'49"
C25	20.00	31.42	20.00	28.78	S 41°50'40" W	90°30'04"



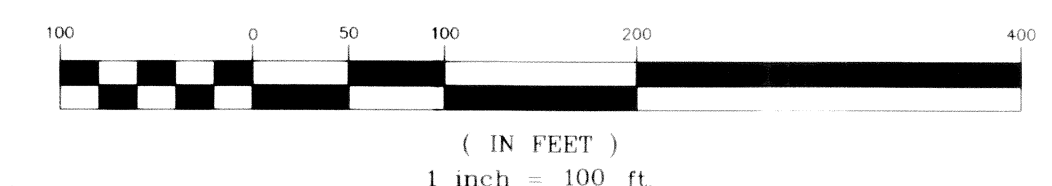
SIERRA DEL PUERTE UNIT ONE

BEING A REPLAT OF LOTS 1 THRU 12, BLOCK 11, AND PORTIONS OF MOUNTAIN LAUREL DRIVE AND ZIRCON DRIVE MOUNTAIN HILLS ESTATES UNIT FIVE REPLAT "A" CITY OF EL PASO, EL PASO COUNTY, TEXAS

CONTAINING IN ALL 145,740.83 SQUARE FEET OR 3.3457 ACRES MORE OR LESS



GRAPHIC SCALE



OWNER'S DEDICATION, CERTIFICATION

STATE OF TEXAS
COUNTY OF EL PASO

I, DANIEL T. KNAPP, MANAGER OF GCGOHL, LLC, OWNERS OF THIS LAND HEREBY PRESENT THIS MAP AND DEDICATE TO THE USE OF THE PUBLIC, STREETS AND EASEMENTS, INCLUDING EASEMENTS FOR OVERHANG OF SERVICE WIRES FOR POLE TYPE UTILITIES, AND BURIED SERVICE WIRES CONDUITS AND PIPES FOR UNDERGROUND UTILITIES AND THE RIGHT TO INGRESS AND EGRESS FOR SERVICE UNLESS OTHERWISE NOTED AND CONSTRUCTION AND THE RIGHT TO TRIM INTERFERING TREES AND SHRUBS

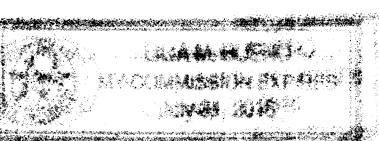
BY: *[Signature]*
DANIEL T. KNAPP, MANAGER
GCGOHL, LLC

ACKNOWLEDGMENT

STATE OF TEXAS
COUNTY OF EL PASO

BEFORE ME, THE UNDERSIGNED AUTHORITY, ON THIS DAY PERSONALLY APPEARED DANIEL T. KNAPP, MANAGER OF GCGOHL, LLC, KNOWN BY ME TO BE THE PERSON WHOSE NAME IS SUBSCRIBED TO THE FOREGOING INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE EXECUTED THE SAME FOR THE PURPOSES AND CONSIDERATIONS THEREIN STATED.

GIVEN UNDER MY HAND AND SEAL THIS 19 DAY OF JANUARY, 2016 A.D.
[Signature]
NOTARY PUBLIC IN AND FOR EL PASO COUNTY, TEXAS
MY COMMISSION EXPIRES 7/31/16



CITY PLAN COMMISSION

THIS SUBDIVISION IS HEREBY APPROVED AS TO THE PLATTING AND AS TO THE CONDITIONS OF THE DEDICATION IN ACCORDANCE WITH CHAPTER 212 OF THE LOCAL GOVERNMENT CODE OF TEXAS THIS 4 DAY OF JUNE, 2015 A.D.

EXECUTIVE SECRETARY: *[Signature]*
CHAIRPERSON: *[Signature]*

APPROVED FOR FILING THIS _____ DAY OF _____, 2016 A.D.

PLANNING AND INSPECTIONS DIRECTOR: *[Signature]*

COUNTY CLERK'S RECORDING CERTIFICATE

[Signature] COUNTY CLERK OF EL PASO COUNTY, CERTIFY THAT THE PLAT BEARING THIS CERTIFICATE WAS FILED AND RECORDED UNDER THE INSTRUMENT NO. 2016007835 IN THE PLAT RECORDS OF THE EL PASO COUNTY.

BY: *[Signature]* DATE 2-4-16 BY: *[Signature]* DATE 2-4-16
COUNTY CLERK DEPUTY COUNTY CLERK

I HEREBY CERTIFY THAT THIS PLAT REPRESENTS A SURVEY MADE ON THE GROUND UNDER MY SUPERVISION AND IS IN COMPLIANCE WITH THE CURRENT TEXAS BOARD OF PROFESSIONAL LAND SURVEYING, PROFESSIONAL AND TECHNICAL STANDARDS. REGISTERED PUBLIC LAND SURVEYOR NO. 2449



[Signature]
BRADLEY ROE, P.L.S. 2449
FIRM REGISTRATION /
LICENSE NO. 10060700

[Signature]
BRADLEY ROE, P.L.S. 31886
ROE ENGINEERING, L.C.
TEXAS REGISTERED
ENGINEERING FIRM F-2103

ROE
ENGINEERING, L.C.

601 N. Cotton Street, Suite No. 6 El Paso, Tx, 79902
(915) 533-1418 FAX: (915) 533-4972

PREPARED BY AND UNDER THE SUPERVISION OF BRADLEY ROE,
REGISTERED PROFESSIONAL ENGINEER NO. 31886

C:\Users\j22325\14_Survey\Del_Puerte_Unit_One\Del_Puerte_Unit_One.dwg (2/15/16 11:45AM)

NO. 022315-114
FILE NAME: SDR_U1_PLAT.DWG
PREPARATION DATE: APRIL 7, 2015
REVISION DATE:

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

GENERAL GRADING SPECS

- CLEARING AND GRUBBING: CLEAR SITE OF TREES, SHRUBS AND OTHER VEGETATION; COMPLETELY REMOVE STUMPS, ROOTS AND OTHER DEBRIS PROTRUDING 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.
- SATISFACTORY FILL MATERIAL: FILL MATERIAL SHALL BE GRANULAR, FREE OF CLAYEY AND ORGANIC MATERIAL AND SHALL NOT CONTAIN GRAVEL LARGER THAN ONE (1) INCH IN GREATEST DIMENSION AND SHALL BE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS GM, SM, AND SC.
- UNSATISFACTORY FILL MATERIAL ARE DEFINED AS THOSE COMPLYING WITH ASTM D2487 SOIL CLASSIFICATION GROUPS ML,MH,CL,CH, SP, OL, OH, AND PT, OR WHERE THE PLASTICITY INDEX EXCEEDS 12.
- EXCAVATION: IS UNCLASSIFIED AND INCLUDES EXCAVATION TO ELEVATIONS INDICATED, REGARDLESS OF CHARACTER OF MATERIAL AND OBSTRUCTIONS ENCOUNTERED.
- 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 10 INCHES, AND UNTIL THE SURFACE IS FREE FROM RUTS, HUMMOCKS, OR OTHER UNEVEN FEATURES WHICH WOULD PREVENT UNIFORM COMPACTION. PLOW STRIP, OR BREAK OR BREAK UP SLOPED SURFACES STEEPER THAN 1 VERTICAL TO 4 HORIZONTAL, SO THAT THE FILL MATERIAL WILL BE 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 95% OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D-1557.
- PLACEMENT OF FILL: PLACE BACKFILL AND FILL MATERIALS IN LAYERS OF 8 TO 10 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 APPROXIMATELY SAME ELEVATION IN EACH LIFT, COMPACT SOIL TO NOT LESS THAN 95% OF MAXIMUM DENSITY, IN ACCORDANCE WITH ASTM D1557.
- 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 3 PERCENT POINTS OF OPTIMUM MOISTURE CONTENT. REMOVE AND REPLACE, OR SCARIFY AND AIR DRY SOIL MATERIAL THAT IS TO WET TO PERMIT COMPACTION TO SPECIFIED COMPACTION.
- QUALITY CONTROL: THE OWNER SHALL PROVIDE A GEOTECHNICAL ENGINEER TO PERFORM FIELD DENSITY TEST OF THE COMPACTION OF EACH LAYER TO FILL. DENSITY TEST SHALL BE TAKEN IN COMPACTED MATERIAL BELOW THE DISTURBED SURFACE. WHEN THESE TESTS INDICATE THAT THE DENSITY OF ANY LAYER OF FILL OR PORTION THERE OF 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 COSTS RESULTING FROM THE 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.

GENERAL NOTES:

- THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING BIDS.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AUTOMOBILE AND PEDESTRIAN ACCESS TO THE USER AT ALL TIMES, INCLUDING SATURDAYS, SUNDAYS, AND HOLIDAYS. THIS INCLUDES BUT NOT LIMITED TO DRIVEWAYS, STREETS, PARKING AND WALKWAYS. THIS REQUIREMENT SHALL BE FULFILLED AT NO EXTRA COST TO THE OWNER.
- CONTRACTOR SHALL WATER CONSTRUCTION AREA A MINIMUM OF TWICE A DAY TO KEEP DUST TO A MINIMUM - ONCE IN THE MORNING AND AND BEFORE QUIETING TIME. THIS SHALL ALSO BE DONE DURING WEEKENDS AND HOLIDAYS.
- 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. SERVICE SHALL BE PROVIDED TO USER AT ALL TIMES.
- IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO SCHEDULE AND TO PERFORM HIS WORK SO AS TO ASSURE PROPER PASSAGE OF STORM RUNOFF DURING THE COURSE OF HIS OPERATIONS. ALL LABOR, TOOLS AND 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 CONTRACTOR.
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE USER, ALL UTILITIES AND ALL OTHER AGENCIES WITH THE JURISDICTION OVER THE PROJECT.
- ALL EXISTING PAVEMENT, ADJACENT UTILITIES, STRUCTURES, ECT., DISTURBED AS A RESULT OF THE NEW CONSTRUCTION, SHALL BE REPLACED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- THE OWNER WILL FURNISH HORIZONTAL AND VERTICAL CONTROL REFERENCED POINTS ONLY. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRADES BEFORE PROCEEDING WITH THE WORK. ALL DISCREPANCIES FOND SHALL BE REPORTED IMMEDIATELY TO THE ENGINEER OTHERWISE THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
- VIBRATORY ROLLERS WILL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY THE ENGINEER.
- ALL WORK REQUIRED BY THESE PLANS SHALL BE CONDUCTED IN CONFORMANCE WITH CURRENT SAFETY CODES AND STANDARDS WITH JURISDICTION OVER THE PROJECT.
- THE LOCATION OF THE FLUMES AND INLETS SHALL BE AT THE FIELD LOW POINT AND APPROVED BY THE ENGINEER.

TRENCH SAFETY NOTES:

- IN ACCORDANCE WITH THE LAWS OF THE STATE OF TEXAS AND THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, ALL TRENCHES OVER 5 FEET IN DEPTH IN EITHER HARD AND COMPACT OR SOFT AND UNSTABLE SOIL SHALL BE SLOPED, SHORED, SHEETED, BRACED OR OTHERWISE SUPPORTED. FURTHERMORE, ALL TRENCHES LESS THAN 5 FEET IN DEPTH SHALL ALSO BE EFFECTIVELY PROTECTED WHEN HAZARDOUS GROUND MOVEMENT MAY BE EXPECTED.
- IN ACCORDANCE WITH THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION REGULATIONS, WHEN EMPLOYEES ARE REQUIRED TO BE IN TRENCHES 4 FEET DEEP OR MORE, ADEQUATE MEAN EXIT, SUCH AS A LADDER OR STEPS, MUST BE PROVIDED AND LOCATED SO AS TO REQUIRE NO MORE THAN 25 FEET OF LATERAL TRAVEL.
- CONTRACTOR SHALL PROVIDE TO THE ENGINEER THE TRENCH SAFETY PLAN SEALED BY A REGISTERED ENGINEER.

GENERAL GRADING NOTES

- THIS GRADING PLAN SHALL BE COORDINATED WITH OTHER APPLICABLE CONSTRUCTION DRAWINGS FOR DIMENSIONS AND LAYOUT.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING IMPROVEMENTS IN THE PROJECT AREA AND ITS VICINITY. CONTRACTOR SHALL CONTACT UTILITY LOCATOR SERVICE FOR FILED LOCATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGES RESULTING FROM CONTRACTOR'S CONSTRUCTION WORK SHALL BE RESTRICTED TO ITS ORIGINAL CONDITION BY CONTRACTOR.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES IN THE PROJECT AREA. CONTRACTOR SHALL CONTACT UTILITY LOCATOR SERVICE FOR FILED LOCATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY OWNER BY CONTRACTOR.
- FILL MATERIALS FOR SITE GRADING AND BACKFILL MATERIALS MAY CONSIST OF ON-SITE AND/OR IMPORTED MATERIALS IN COMPLIANCE WITH THE FOLLOWING SPECIFICATIONS.
- FILL MATERIALS FOR SITE GRADING AND BACKFILL MATERIALS SHALL BE FREE OF ANY ORGANIC OR DELETERIOUS SUBSTANCE AND SHALL NOT CONTAIN ROCKS OR LUMPS OVER 4 INCHES IN GREATEST DIMENSION.
- FILL MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D-2487. SOILS WILL BE CONSIDERED SATISFACTORY FOR FILL MATERIAL WHEN CLASSIFIED AS FOLLOWS: GW, GP, GG, GM, GC-GM, GP-GG, SW, SP, SC, SM, SC-SM, SP-SM, SP-SC. SOILS WILL BE CONSIDERED UNSATISFACTORY FOR FILL MATERIAL WHEN CLASSIFIED AS FOLLOWS: PT, OL, OH, ML, CL, AND CH OR WHERE THE PLASTICITY INDEX EXCEEDS 12. (SEE SOILS REPORT FOR CLASSIFICATION)
- THE SURFACE ON WHICH FILL MATERIAL IS TO BE PLACED SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, WATERED TO ADD THE AMOUNT OF MOISTURE REQUIRED FOR OPTIMUM COMPACTION, AND THEN COMPACTED TO THE REQUIRED DENSITY. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES IN DEPTH AND THEN COMPACTED. MOISTURE CONTENT OF FILL MATERIALS SHALL BE UNIFORM AND WITHIN PLUS OR MINUS TWO PERCENT OF OPTIMUM VALUE AS DETERMINED BY ASTM D-1557.
- EACH LIFT OF FILL SHALL BE COMPACTED TO 95 PERCENT (85 PERCENT ON SLOPE ONLY) OF MAXIMUM DENSITY. MAXIMUM DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557 FIELD DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1556 OR D-2922.
- CONTRACTOR SHALL CO-ORDINATE WITH ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION AND/OR POSSIBLE RELOCATION OF UTILITIES ENCOUNTERED.
- CONTRACTOR SHALL EXCAVATION AND WATER DOWN GRADING AREA DAILY (MINIMUM), SO AS TO LIMIT THE DISTRIBUTION OF DUST FROM THE WORK SITE IN COMPLIANCE WITH THE CITY APPROVED GRADING ORDINANCE.
- DEVELOPER SHALL COMPLY WITH SECTION 13.08.090 EXCESSIVE PAVING CUTS.
- RETAINING ROCK WALLS 4' AND HIGHER SHALL BE CONSTRUCTED BY DEVELOPER AS PART OF SUBDIVISION IMPROVEMENT.
- DEVELOPER IS RESPONSIBLE TO MAINTAIN ALL SLOPE OUTSIDE SUBDIVISION LIMITS. PERMIT CLOSEOUT PROCEDURE.
- AFTER THE PERMITEE COMPLETES THE GRADING UNDER THE PERMIT, THE PERMIT SHALL BE CLOSED AS PART OF THE CLOSEOUT PROCEDURE, THE APPLICANT MUST SUBMIT THE FOLLOW TO THE CITY.
 - A-A STATEMENT FROM THE ENGINEER OF RECORDS THAT STATES, " THE GRADING OPERATION HAS BEEN SUBSTANTIALLY AND GENERALLY CONFORMS TO THE APPROVED SET OF PLANS." THE PERMITEE SHALL CALL THE PERMIT OFFICIAL TO ESTABLISH THE BEGINNING OF THE WARRANTY PERIOD AND TO NOTIFY THE PERMIT OFFICIAL THAT THE GSP HAS BEEN IMPLEMENTED.
 - B-A COPY OF THE NOTICE OF TERMINATION FILED WITH THE STATE OR DATED CONSTRUCTION SITE NOTICE, IF APPLICABLE, IN ACCORDANCE WITH CHAPTER 15. THE CITY WILL ISSUE A LETTER STATING GENERAL CONFORMANCE TO THE PERMIT HAS BEEN MET AND THE WARRANTY PERIOD REQUIREMENT WILL CONTINUE TO BE IN EFFECT.

WARRANTY. ANY PERSON ISSUED A PERMIT SHALL AGREE WARRANT AND MAINTAIN THE AREA DESCRIBED IN THE PERMIT FOR A PERIOD OF TWO YEARS AFTER THE PERMIT IS CLOSED BY THE CITY PURSUANT TO SECTION 18.44.220, OR UNTIL A BUILDING PERMIT IS ISSUED FOR THE PURPOSE OF MAINTAINING A STABILIZED SITE IN ACCORDANCE WITH THE APPROVED GSP. WHICH FIRST OCCURS (THE "WARRANTY" OR "WARRANTY PERIOD"). THE CITY MAY CONDUCT INSPECTIONS OF THE PERMITTED AREA THROUGHOUT THE WARRANTY PERIOD AND REQUIRE MAINTENANCE AND CORRECTION OF THE WORK BY THE PERMIT HOLDER. FAILURE OF THE PERMIT HOLDER TO CORRECT THE WORK SHALL CONSTITUTE A FAILURE TO COMPLY WITH THE PROVISIONS OF THIS CHAPTER.

LEGEND

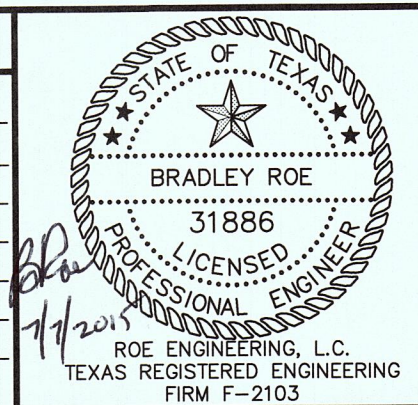
	EXISTING DRAINAGE HIGH-POINT		PROPOSED CITY MONUMENT
	EXISTING DRAINAGE LOW-POINT		EXISTING DRAINAGE FLOWS
	DENOTES EXISTING MANHOLE		35.32 TC PROPOSED TOP OF CURB ELEVATION
	PROPOSED 4' ROCKWALL		EXISTING CONTOURS
	PROPOSED RETAINING WALL		PROPOSED CONTOURS
	FG=3930.00 PROPOSED FINISHED GRADE ELEVATION		DENOTES EXISTING POWER POLE
	FF=3930.50 PROPOSED FINISHED FLOOR ELEVATION		DENOTES EXISTING LIGHT STANDARD
	DENOTES EXISTING WATER VALVE		DENOTES EXISTING STOP SIGN
	DENOTES EXISTING FIRE HYDRANT		

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48021400248. DATED OCTOBER 15, 1982.

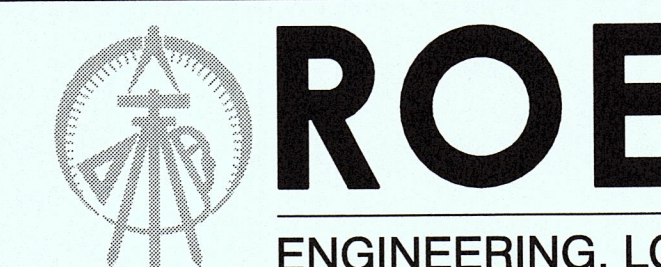
This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR		HOR: 1" = 50' VER: W.O. 022515-11A
			EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION : 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM	DATE: APRIL 2015 DESIGN BY: IR DRAWN BY: IR/LAJ CHKD. BY: H.P. APPD. BY: B.R.



SIERRA DEL PUERTE UNIT ONE

GENERAL NOTES



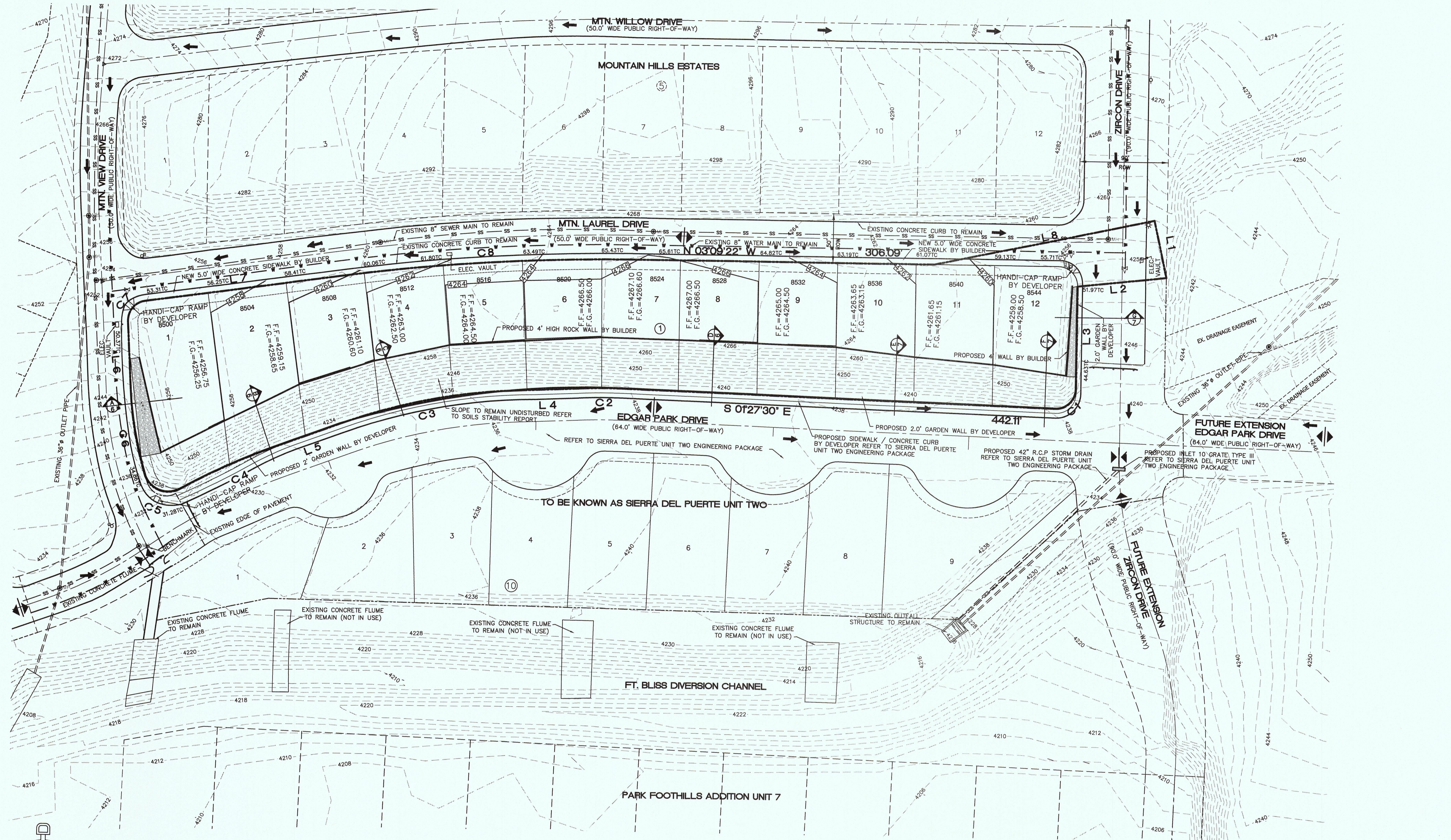
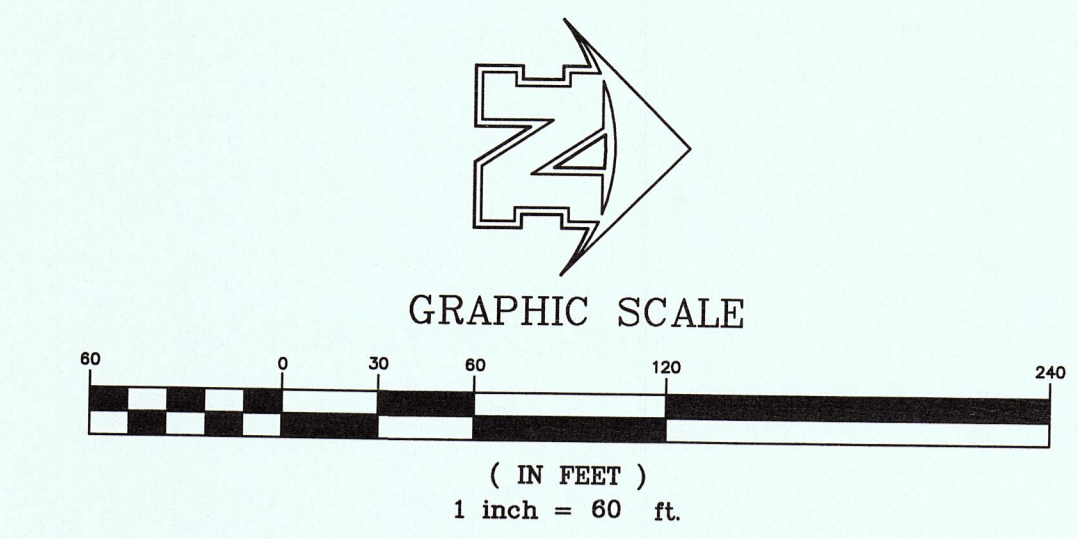
601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

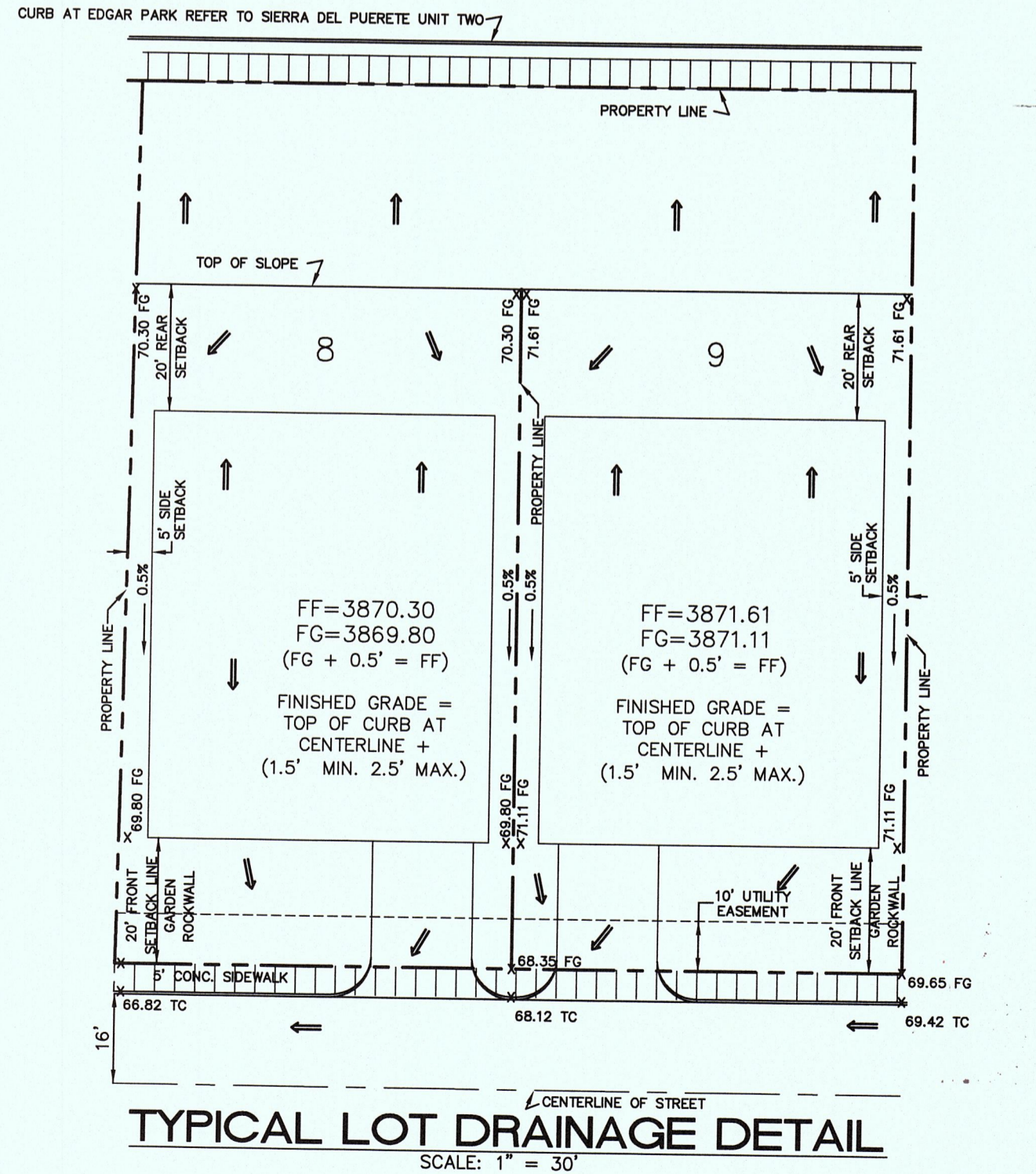
3
3 OF 16



SIERRA DEL PUERTE UNIT ONE



- ### GENERAL GRADING NOTES
- THIS GRADING PLAN SHALL BE COORDINATED WITH OTHER APPLICABLE CONSTRUCTION DRAWINGS FOR DIMENSIONS AND LAYOUT.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING IMPROVEMENTS IN THE PROJECT AREA AND ITS VICINITY. CONTRACTOR SHALL CONTACT UTILITY LOCATOR SERVICE FOR FILED LOCATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGES RESULTING FROM CONTRACTOR'S CONSTRUCTION WORK SHALL BE RESTRICTED TO ITS ORIGINAL CONDITION BY CONTRACTOR.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING UTILITIES IN THE PROJECT AREA. CONTRACTOR SHALL CONTACT UTILITY LOCATOR SERVICE FOR FILED LOCATION OF ALL UTILITIES PRIOR TO COMMENCING WORK. ANY DAMAGES SHALL BE REPAIRED IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY OWNER BY CONTRACTOR.
 - FILL MATERIALS FOR SITE GRADING AND BACKFILL MATERIALS MAY CONSIST OF ON-SITE AND/OR IMPORTED MATERIALS IN COMPLIANCE WITH THE FOLLOWING SPECIFICATIONS.
 - FILL MATERIALS FOR SITE GRADING AND BACKFILL MATERIALS SHALL BE FREE OF ANY ORGANIC OR DELETERIOUS SUBSTANCE AND SHALL NOT CONTAIN ROCKS OR LUMPS OVER 4 INCHES IN GREATEST DIMENSION.
 - FILL MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D-2487. SOILS WILL BE CONSIDERED SATISFACTORY FOR FILL MATERIAL WHEN CLASSIFIED AS FOLLOWS: GM, GP, GC, GM, GC-GM, GP-GC, SW, SP, SC, SM, SC-SM, SP-SM, SP-SM. SOILS WILL BE CONSIDERED UNSATISFACTORY FOR FILL MATERIAL WHEN CLASSIFIED AS FOLLOWS: PT, OL, OH, ML, CL, AND CH OR WHERE THE PLASTICITY INDEX EXCEEDS 12. (SEE SOILS REPORT FOR CLASSIFICATION)
 - THE SURFACE ON WHICH FILL MATERIAL IS TO BE PLACED SHALL BE SCARIFIED TO A DEPTH OF 6 INCHES, WATERED TO ADD THE AMOUNT OF MOISTURE REQUIRED FOR OPTIMUM COMPACTION, AND THEN COMPACTED TO THE REQUIRED DENSITY. FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 6 INCHES IN DEPTH AND THEN COMPACTED. MOISTURE CONTENT OF FILL MATERIALS SHALL BE UNIFORM AND WITHIN PLUS OR MINUS TWO PERCENT OF OPTIMUM VALUE AS DETERMINED BY ASTM D-1557.
 - EACH LIFT OF FILL SHALL BE COMPACTED TO 95 PERCENT (85 PERCENT ON SLOPE ONLY) OF MAXIMUM DENSITY. MAXIMUM DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1557 FIELD DENSITY SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D-1556 OR D-2922.
 - CONTRACTOR SHALL CO-ORDINATE WITH ALL UTILITY COMPANIES PRIOR TO ANY EXCAVATION AND/OR POSSIBLE RELOCATION OF UTILITIES ENCOUNTERED.
 - CONTRACTOR SHALL EXCAVATE AND WATER DOWN GRADING AREA DAILY (MINIMUM), SO AS TO LIMIT THE DISTRIBUTION OF DUST FROM THE WORK SITE IN COMPLIANCE WITH THE CITY APPROVED GRADING ORDINANCE.
 - DEVELOPER SHALL COMPLY WITH SECTION 13.08.090 EXCESSIVE PAVING CUTS.
 - RETAINING ROCK WALLS 4' AND HIGHER SHALL BE CONSTRUCTED BY DEVELOPER AS PART OF SUBDIVISION IMPROVEMENT.
 - DEVELOPER IS RESPONSIBLE TO MAINTAIN ALL SLOPE OUTSIDE SUBDIVISION LIMITS.
 - AFTER THE PERMITEE COMPLETES THE GRADING UNDER THE PERMIT, THE PERMIT SHALL BE CLOSED AS PART OF THE CLOSEOUT PROCEDURE. THE APPLICANT MUST SUBMIT THE FOLLOWING TO THE CITY:
 - A STATEMENT FROM THE ENGINEER OF RECORDS THAT STATES: "THE GRADING OPERATION HAS BEEN SUBSTANTIALLY AND GENERALLY CONFORMS TO THE APPROVED SET OF PLANS." THE PERMITEE SHALL CALL THE PERMIT OFFICIAL TO ESTABLISH THE BEGINNING OF THE WARRANTY PERIOD AND TO NOTIFY THE PERMIT OFFICIAL THAT THE GSP HAS BEEN IMPLEMENTED.
 - A COPY OF THE NOTICE OF TERMINATION FILED WITH THE STATE OR DATED CONSTRUCTION SITE NOTICE, IF APPLICABLE, IN ACCORDANCE WITH CHAPTER 15, THE CITY WILL ISSUE A LETTER STATING GENERAL CONFORMANCE TO THE PERMIT HAS BEEN MET AND THE WARRANTY PERIOD REQUIREMENT WILL CONTINUE TO BE IN EFFECT.
- WARRANTY. ANY PERSON ISSUED A PERMIT SHALL AGREE TO MAINTAIN THE AREA DESCRIBED IN THE PERMIT FOR A PERIOD OF TWO YEARS AFTER THE PERMIT IS CLOSED BY THE CITY PURSUANT TO SECTION 18.44.220, OR UNTIL A BUILDING PERMIT IS ISSUED FOR THE PURPOSE OF MAINTAINING A STABILIZED SITE IN ACCORDANCE WITH THE APPROVED GSP WHICH FIRST OCCURS (THE "WARRANTY" OR "WARRANTY PERIOD"). THE CITY MAY CONDUCT INSPECTIONS OF THE PERMITTED AREA THROUGHOUT THE WARRANTY PERIOD AND REQUIRE MAINTENANCE AND CORRECTION OF THE WORK BY THE PERMIT HOLDER. THE FAILURE OF THE PERMIT HOLDER TO CORRECT THE WORK SHALL CONSTITUTE A FAILURE TO COMPLY WITH THE PROVISIONS OF THIS CHAPTER.



UTILITY COMPANIES

TEXAS GAS SERVICE (NATURAL GAS)
4700 POLLARD STREET
EL PASO, TEXAS 79930
EMERGENCY 562-2003

SOUTHWESTERN BELL TELEPHONE (TELEPHONE)
11200 PELLICANO DRIVE
EL PASO, TEXAS 79935
828-5127

EL PASO PUBLIC SERVICE BOARD (WATER, SEWER)
1154 HAWKINS BOULEVARD
EL PASO, TEXAS 79925
MR. ALFONSO ORTIZ 594-5527

TIME WARNER COMMUNICATIONS (CABLE)
7010 AIRPORT ROAD
EL PASO, TEXAS 79906
775-7414

EL PASO ELECTRIC COMPANY (ELECTRIC)
501 WEST SAN ANTONIO STREET
EL PASO, TEXAS 79901
MR. PAT KEITH, 543-2917

LEGEND

- EXISTING DRAINAGE HIGH-POINT (TELEPHONE)
- EXISTING DRAINAGE LOW-POINT
- DENOTES EXISTING MANHOLE
- PROPOSED RETAINING WALL
- PROPOSED FINISHED GRADE ELEVATION
- PROPOSED FINISHED FLOOR ELEVATION
- DENOTES EXISTING WATER VALVE
- DENOTES EXISTING FIRE HYDRANT
- PROPOSED CITY MONUMENT
- EXISTING DRAINAGE FLOWS
- PROPOSED TOP OF CURB ELEVATION
- EXISTING CONTOURS
- PROPOSED CONTOURS
- DENOTES EXISTING POWER POLE
- DENOTES EXISTING LIGHT STANDARD
- DENOTES EXISTING STOP SIGN

NOTES

Bearing Basis
The Bearings shown hereon are based on the Texas State Plane Coordinate System, Texas Central Zone, NAD83 (93) HARN. The bearings shown are grid bearings. All distances shown are surface distances.

Vertical Datum
Elevations and contours shown are based on the North American Vertical Datum of 1988 (N.A.V.D. 88)

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2013. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



WARNING! BEFORE YOU DIG
TEXAS LAW REQUIRES TWO (2) WORKING DAYS NOTICE PRIOR TO ANY EXCAVATION
CALL TEXAS EXCAVATION SAFETY SYSTEM ANYWHERE IN TEXAS 1-800-344-8377
TEXAS EXCAVATION SAFETY SYSTEM DIG CONFIRMATION NUMBER (# _____) TO BE UPDATED EVERY 10 DAYS

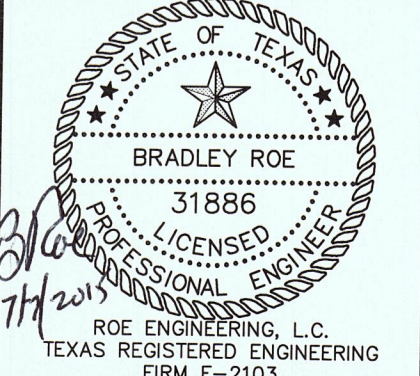
FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C" (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48021400248, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	
			EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4228.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'

SCALE
HOR: 1" = 60' VER:
W.O. 022515-11A
DATE: APRIL 2015
DESIGN BY: IR
DRAWN BY: IR/LAJ
CHKD. BY: H.P.
APPD. BY: B.R.



SIERRA DEL PUERTE UNIT ONE

GRADING PLAN



601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

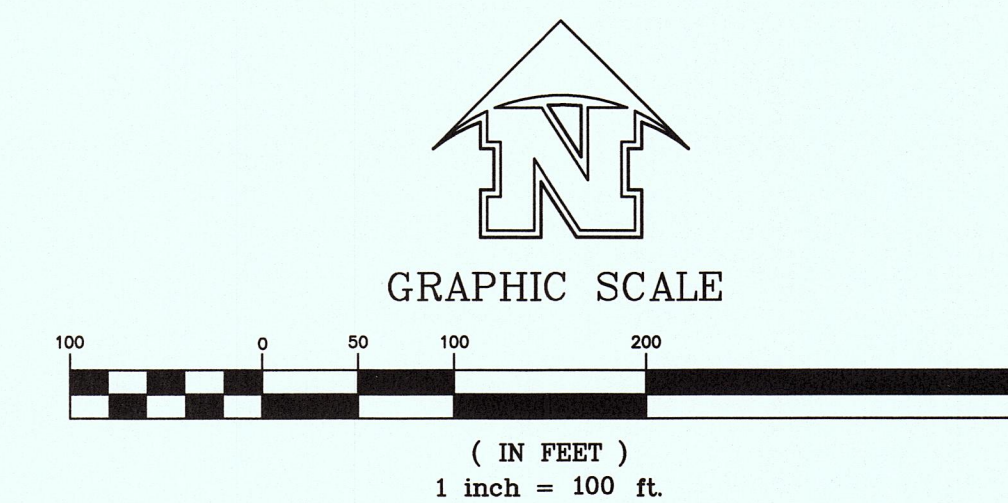
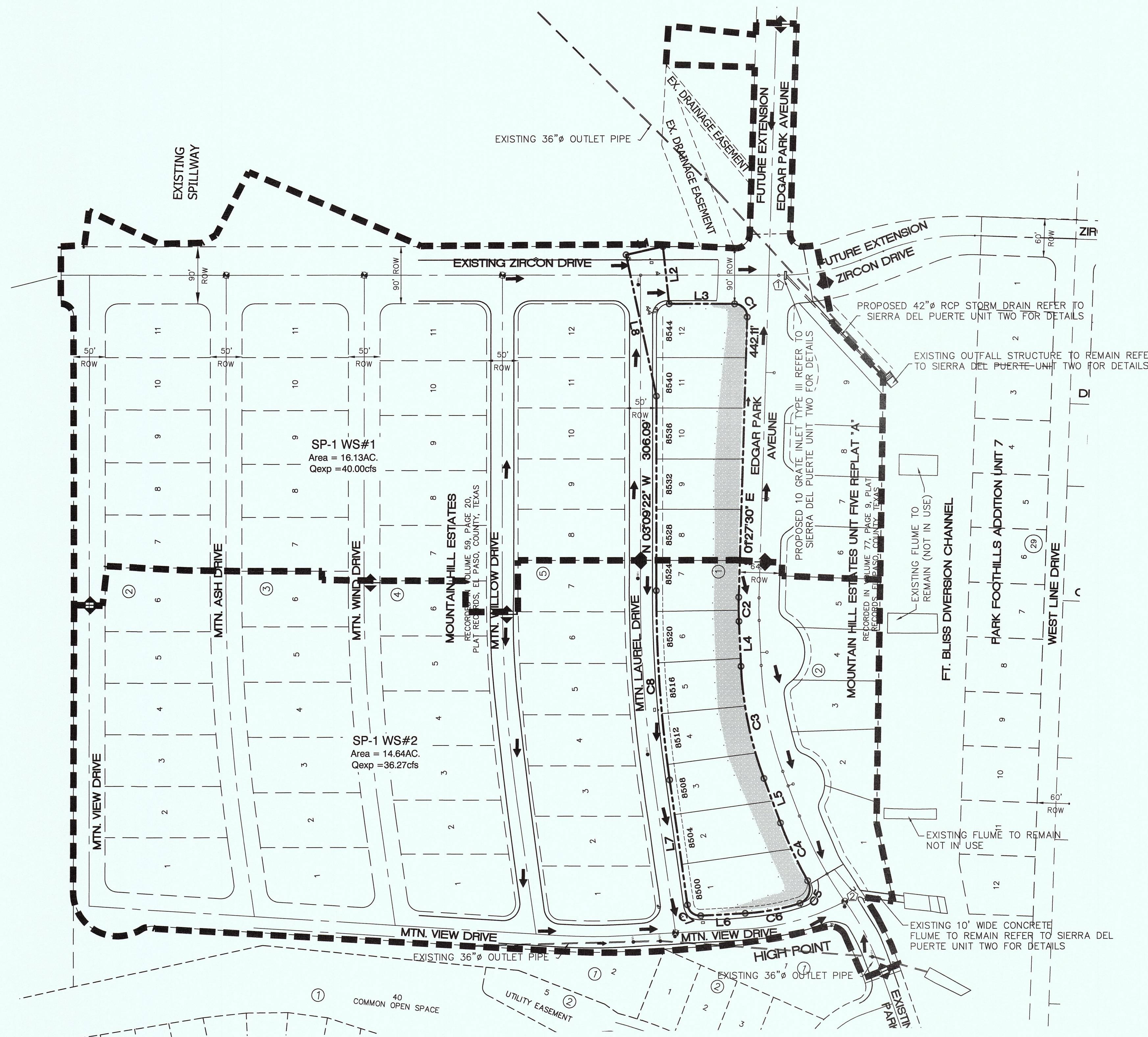
SHEET NO.

4

4 OF 16

E:\elena\paso\Verde\Properties\022515-11A_Sierra Del Puerte\07-Grading_Drainage_Final\CAD\07-Grading_Plan.dwg 07/07/15 8:33AM

SIERRA DEL PUERTE



DRAINAGE COMPUTATIONS									
COMPUTATIONS BASED ON RATIONAL FORMULA Q = C.I.A. - 100 YEAR STORM FREQUENCY									
WATERSHED AREA No.	TYPE	T _c MIN.	C COEFFICIENT	A AREA	I 100 INCHES/HOUR	Q 100 c.f.s. CU. FT. PER SECOND	15% ADDITIONAL SILT	CONCENTRATION POINT	
1	FT BLISS CHANNEL	3	10.00	0.60	16.13	4.13	40.00	46.00	①
2	FT BLISS CHANNEL	FLUME	10.00	0.60	14.64	4.13	36.27	41.71	②

- LEGEND
- EXISTING DRAINAGE FLOW
 - - - EXISTING WATERSHED BOUNDARY
 - ◆ EXISTING DRAINAGE HIGH-POINT
 - ▲ EXISTING DRAINAGE LOW-POINT



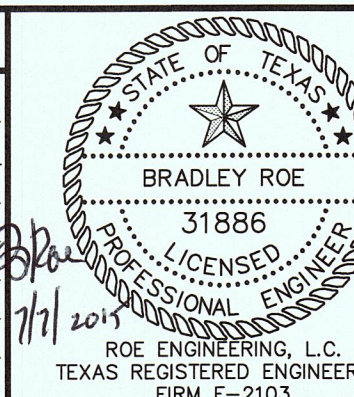
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015 ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B. DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM)	HOR: 1" = 100'. VER: 022515-11A DATE: APRIL 2015 DESIGN BY: IR DRAWN BY: IR/LAJ CHKD BY: H.P. APPD BY: B.R.



SIERRA DEL PUERTE UNIT ONE

DRAINAGE PLAN

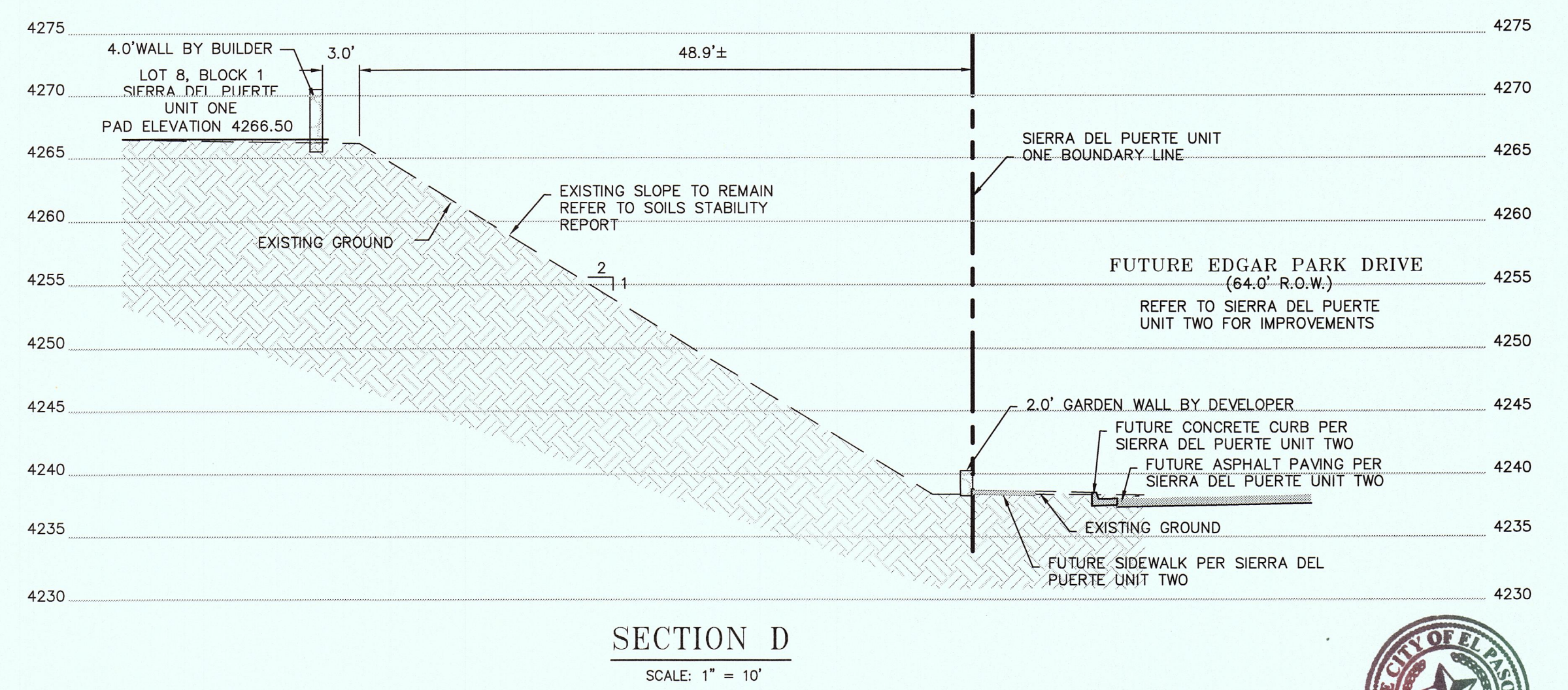
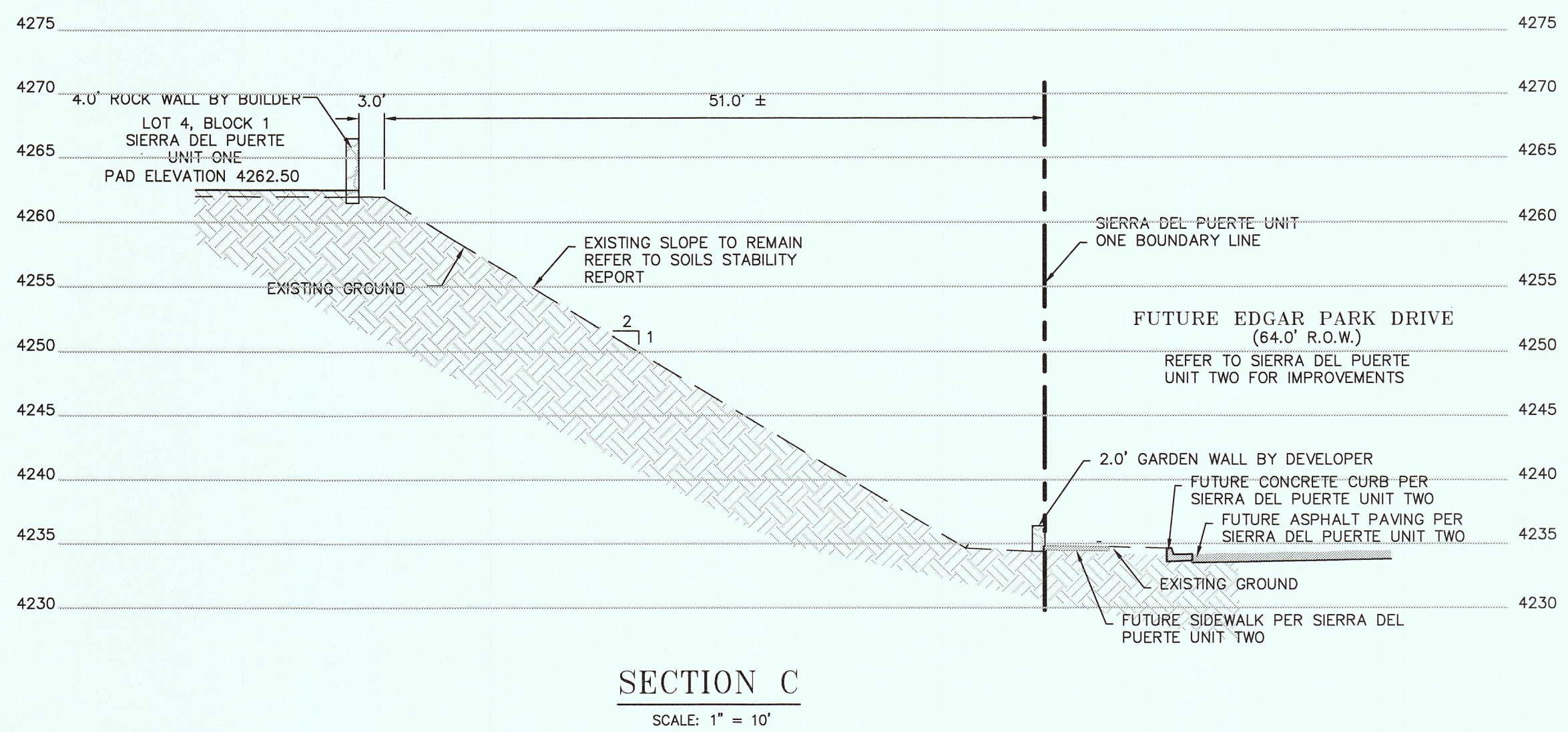
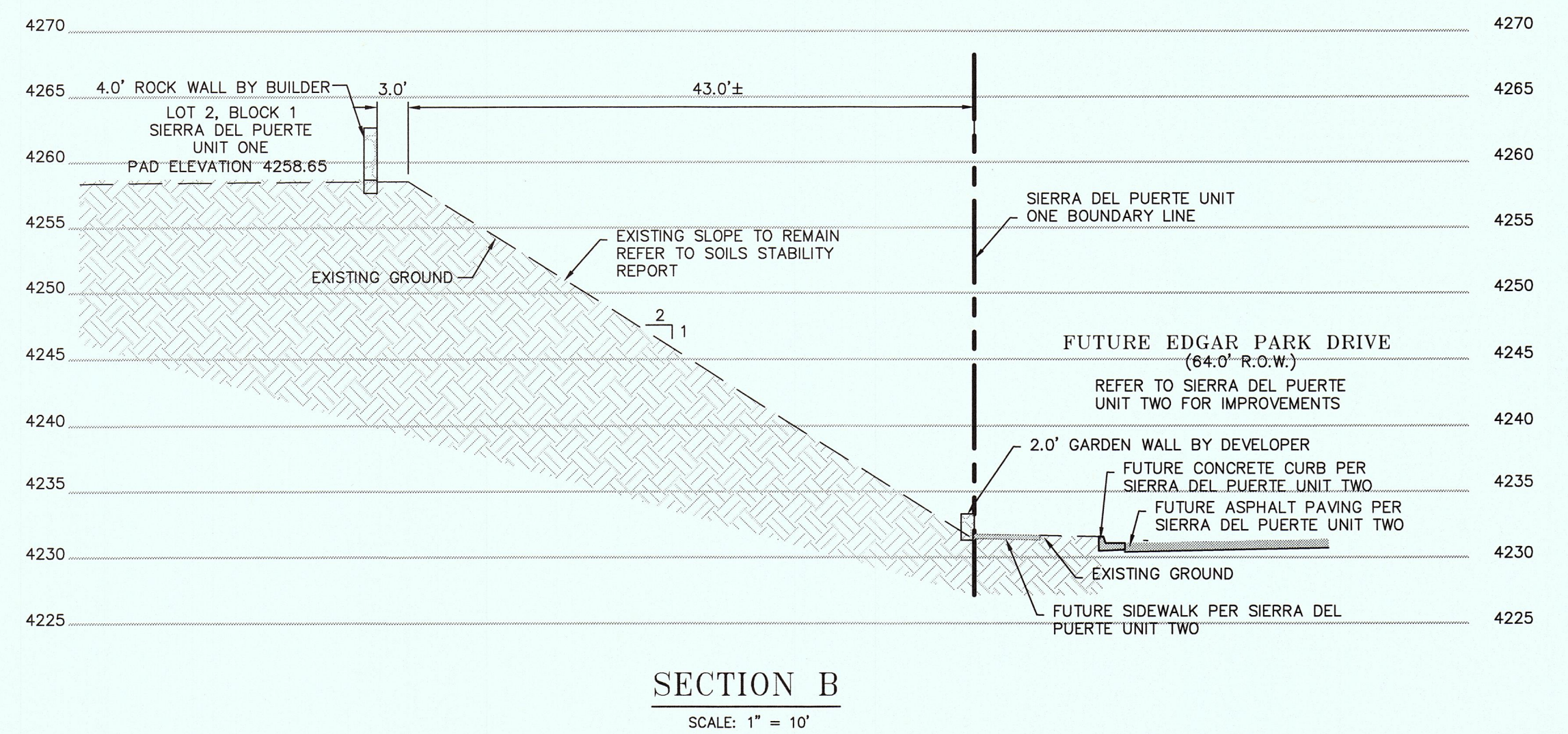
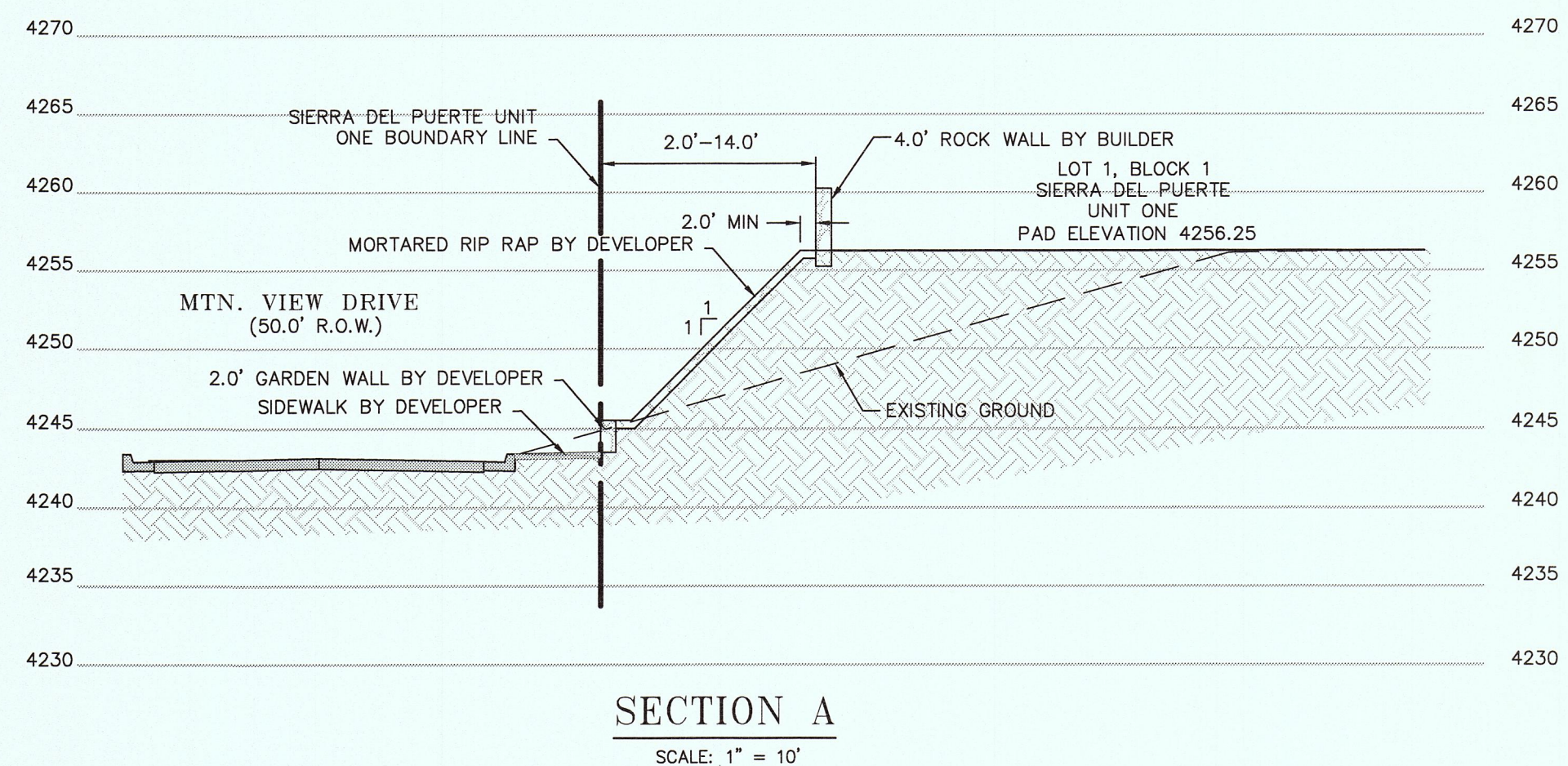


601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

5

5 OF 16



NOTE: REFER TO SHEET 10 FOR ROCK WALL / RIP RAP DETAILS

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

FLOOD NOTE:
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B, DATED OCTOBER 15, 1982.

DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE. ELEVATION: 4229.73 (NAVD 88) ELEVATION : 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'	HOR: 1" = 10' VER: 022515-11A DATE: APRIL 2015 DESIGN BY: IR DRAWN BY: IR/LAJ CHKD. BY: H.P. APPD. BY: B.R.

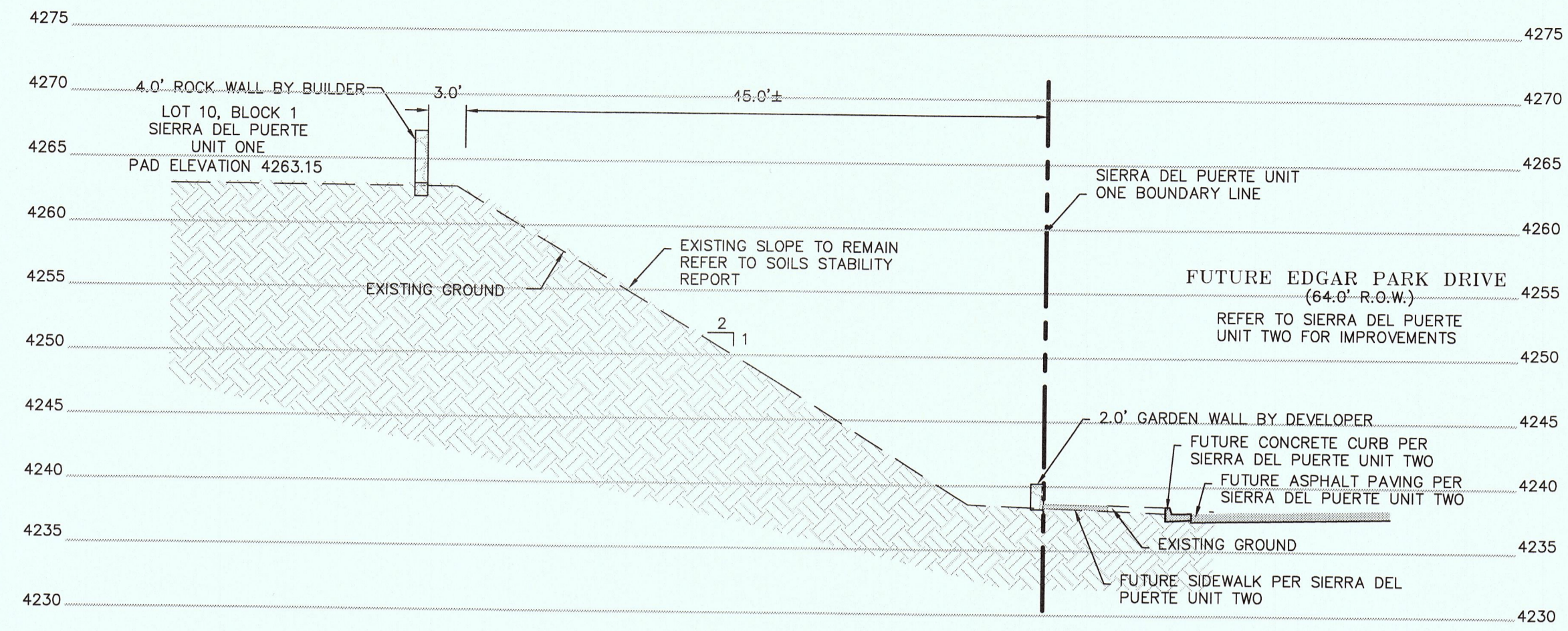
SIERRA DEL PUERTE UNIT ONE

SECTIONS

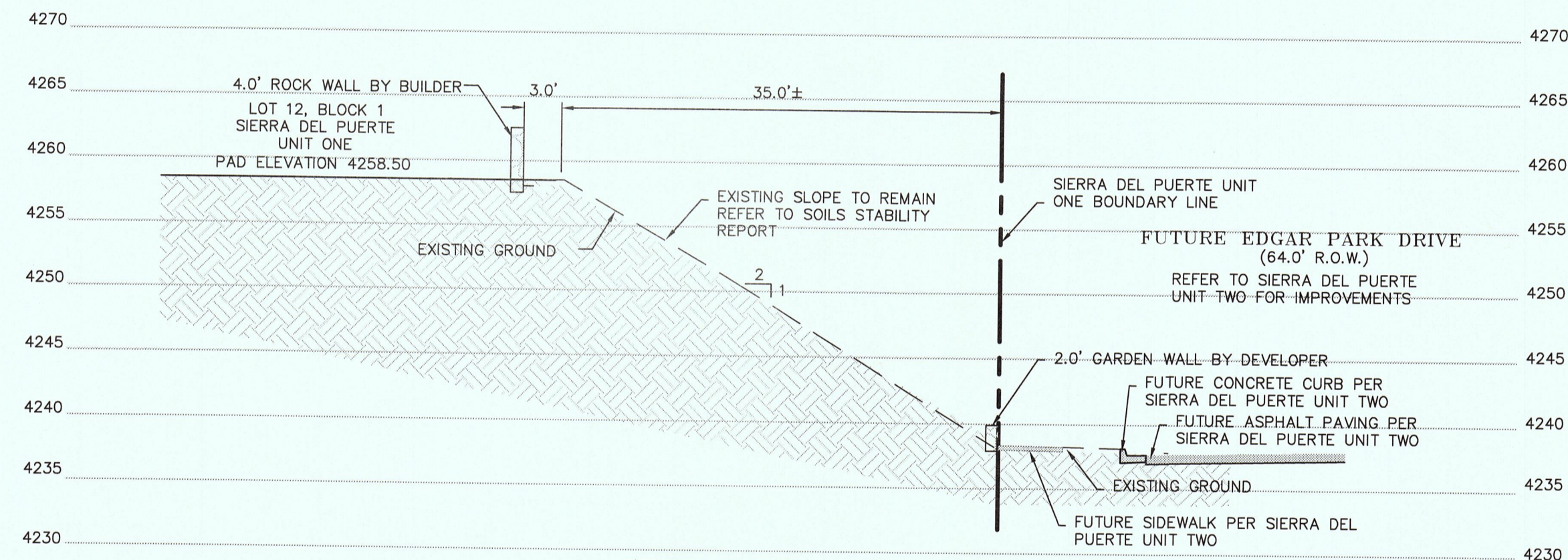
601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.
6
6 OF 16

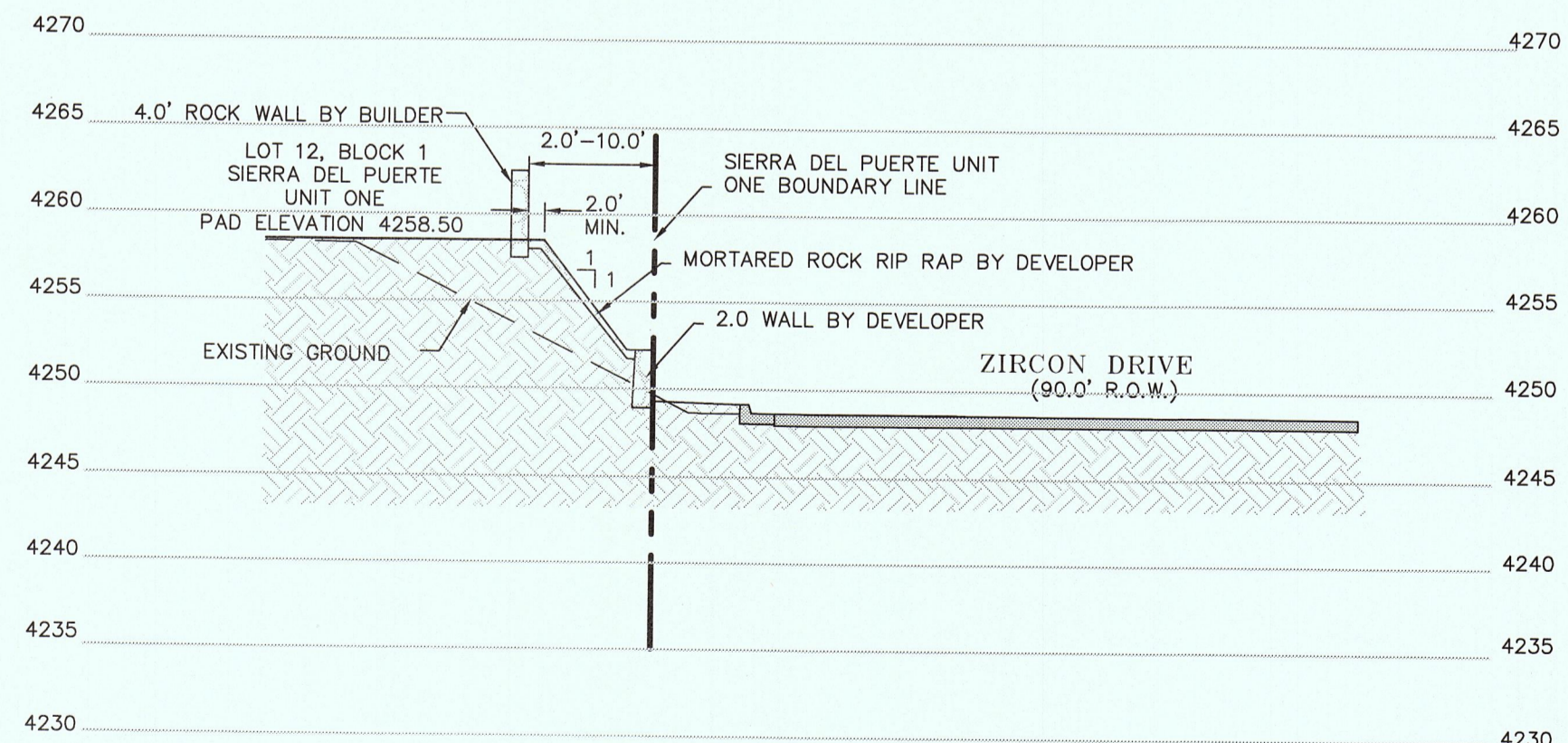
Z:\Clients\El Paso, Verde Properties\202515-11A Sierra Del Puerte Phase 1\06-CAD\06-CAD-Grading-Detail-Grading-Details-Grading-Details-07/07/15 10:11AM



SECTION E
SCALE: 1" = 10'



SECTION F
SCALE: 1" = 10'



SECTION G
SCALE: 1" = 10'



NOTE: REFER TO SHEET 10 FOR ROCKWALL / RIP RAP DETAILS

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY
BRADLEY ROE, P.E. 31886 ON 05-01-2015. ALTERATION OF A SEALED
DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS
AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

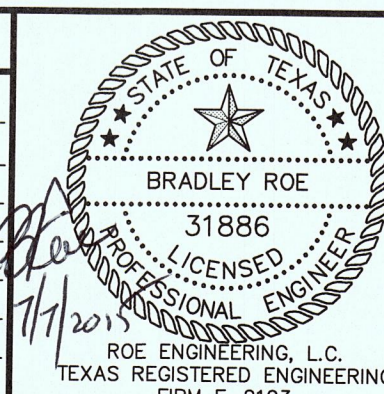
FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.75 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'

SCALE
HOR: 1" = 10' VER: W.O. 022515-11A DATE: APRIL 2015 DESIGN BY: IR DRAWN BY: IR/LAJ CHKD. BY: H.P. APPD. BY: B.R.



SIERRA DEL PUERTE UNIT ONE

SECTIONS

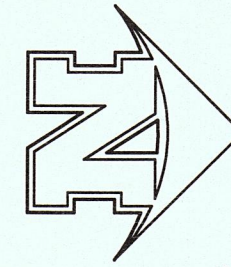


601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

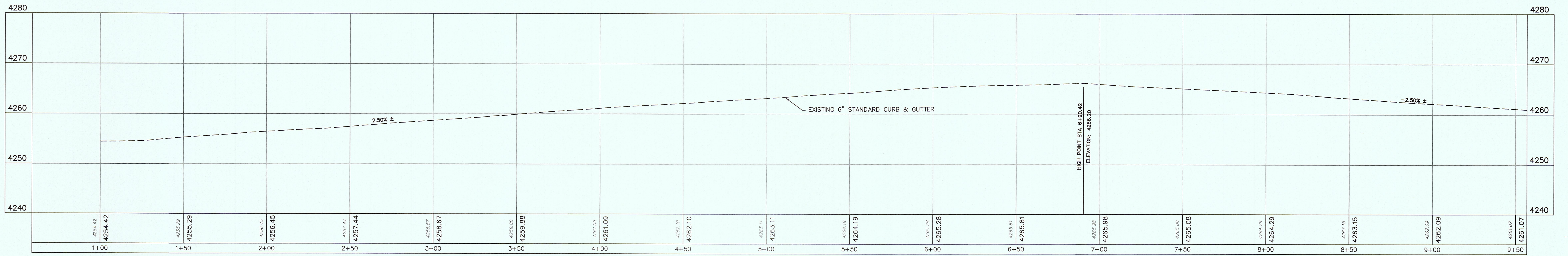
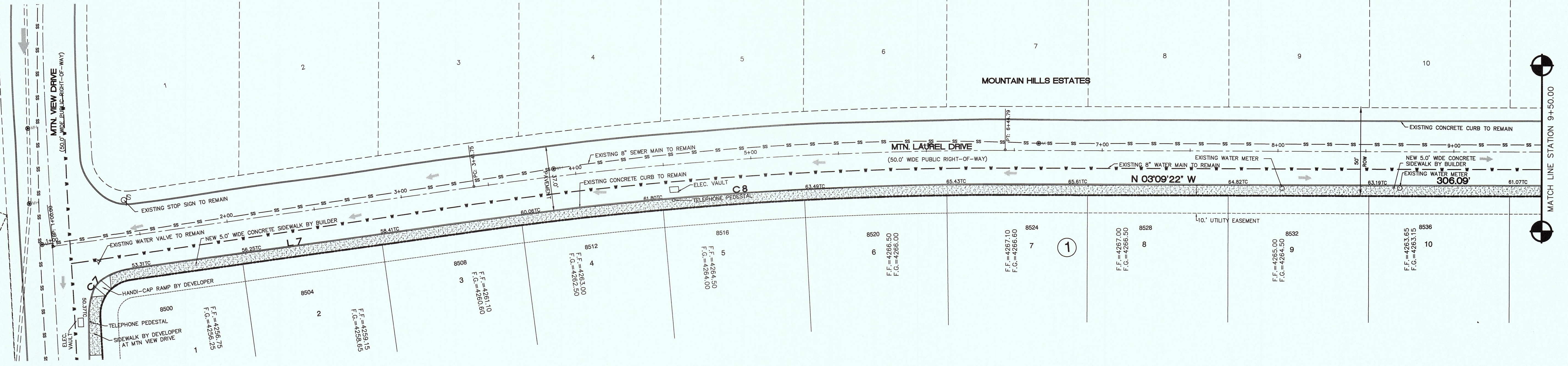
SHEET NO.

7

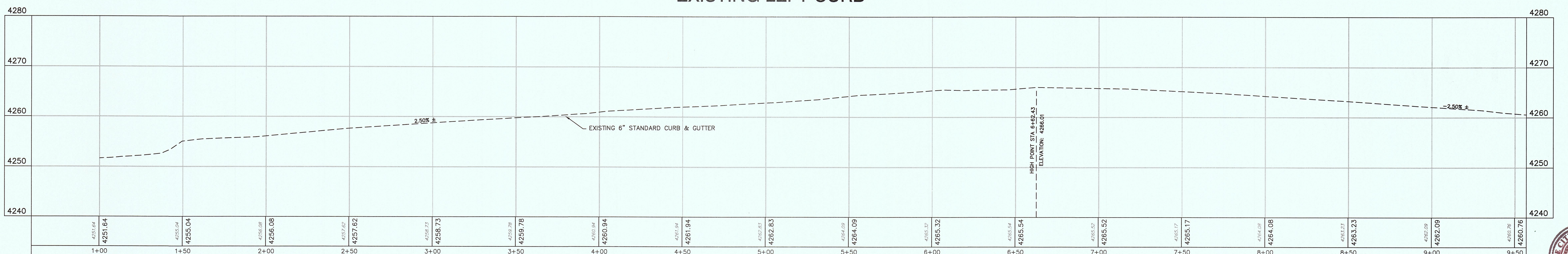
7 OF 16



SCALE: 1" = 30'



EXISTING LEFT CURB



EXISTING RIGHT CURB

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized to be used by any party on any project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C. for the specific purpose intended may be a violation of law, unauthorised use of this material may result in civil and/or criminal penalties.

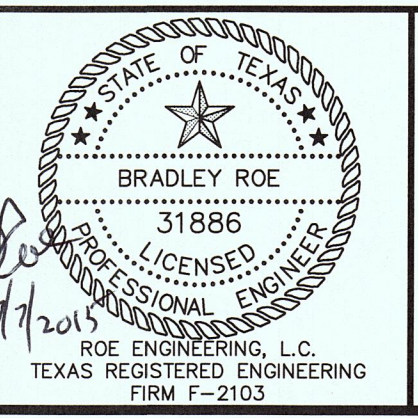
FLOOD NOTE:
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF ANNUAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48021400248, DATED OCTOBER 15, 1982.

LEGEND

- x 44.51 TRC PROPOSED TOP OF 4" ROLLOVER CURB
- x 44.27 FG PROPOSED FINISHED GRADE ELEVATION
- x 45.00 PV PROPOSED TOP OF PAVEMENT
- x 44.51 TC PROPOSED TOP OF 6" CURB
- PROPOSED DRAINAGE FLOW
- PROPOSED STREET CENTERLINE
- SUBDIVISION BOUNDARY LINE
- PROPOSED CITY MONUMENT

DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'

SCALE
HOR: 1" = 30' VER: 1" = 10'
W.O. 022515-11A
DATE: APRIL 2015
DESIGN BY: IR
DRAWN BY: IR/LAJ
CHKD. BY: H.P.
APPD. BY: B.R.



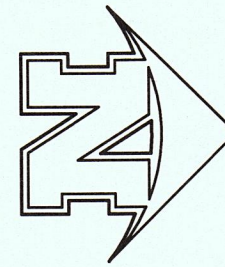
SIERRA DEL PUERTE UNIT ONE
EXISTING MOUNTAIN LAUREL PLAN AND PROFILE STA 1+00 TO 9+50

ROE ENGINEERING, L.C.
601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

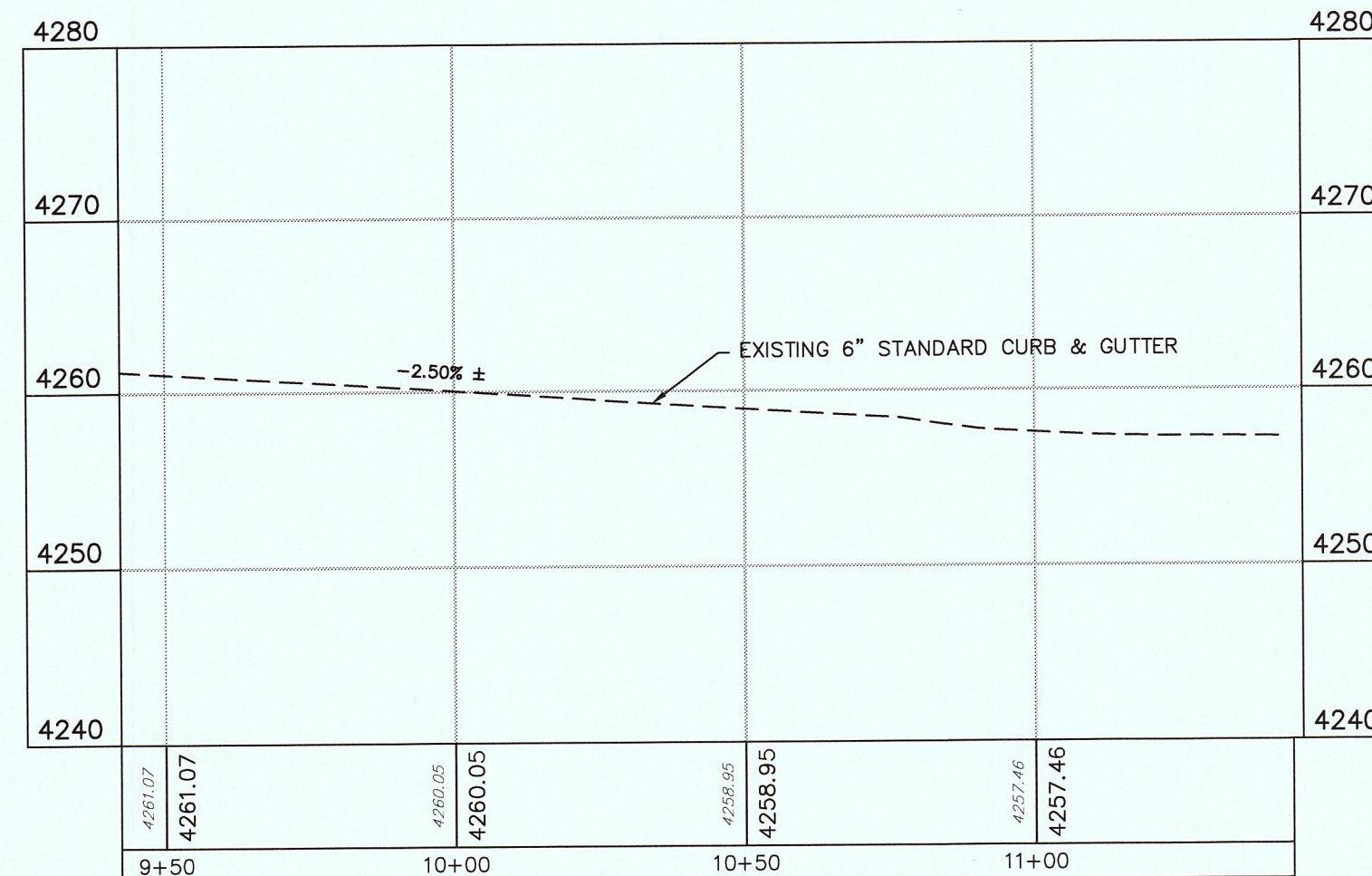
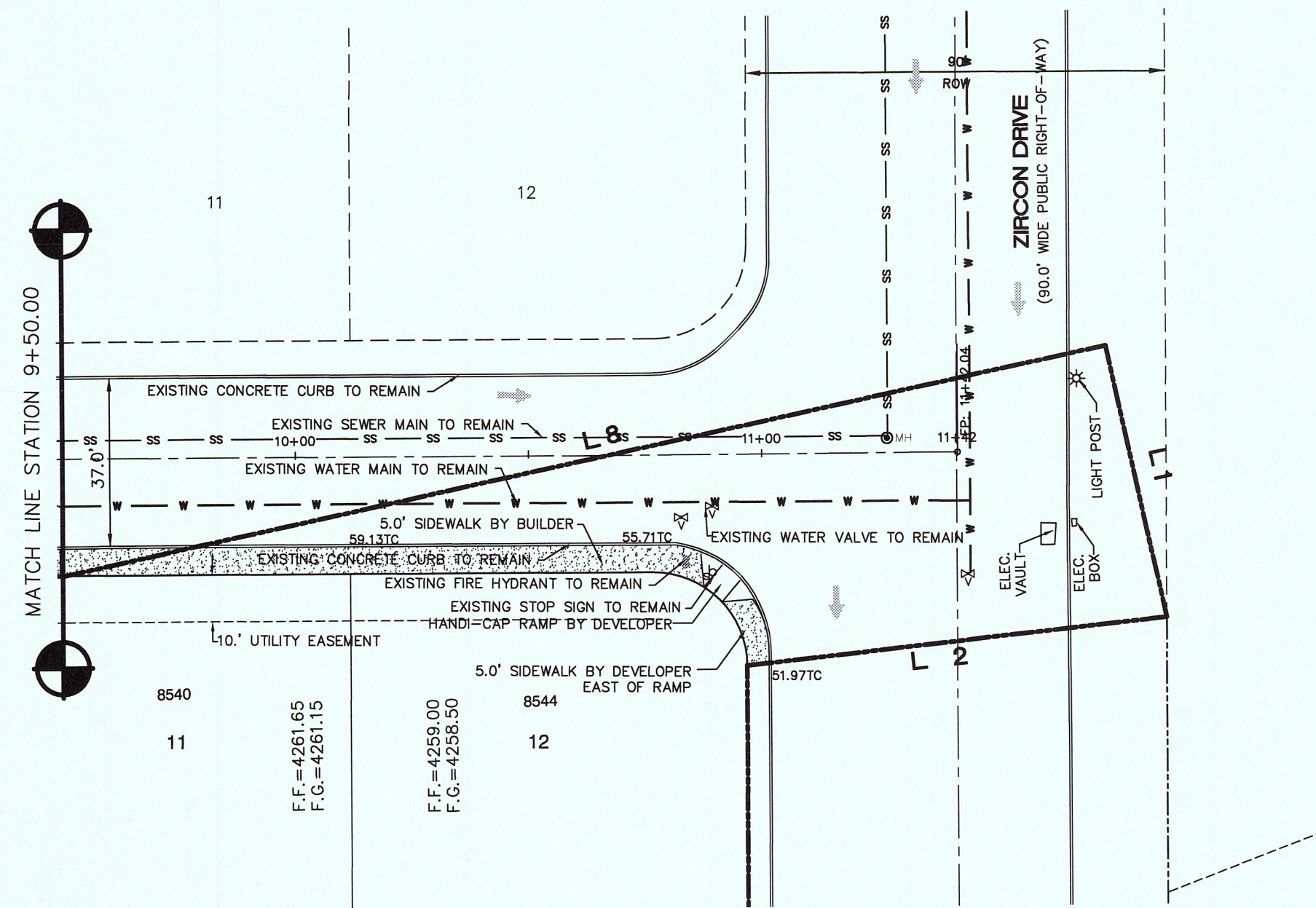
SHEET NO.
8
8 OF 16



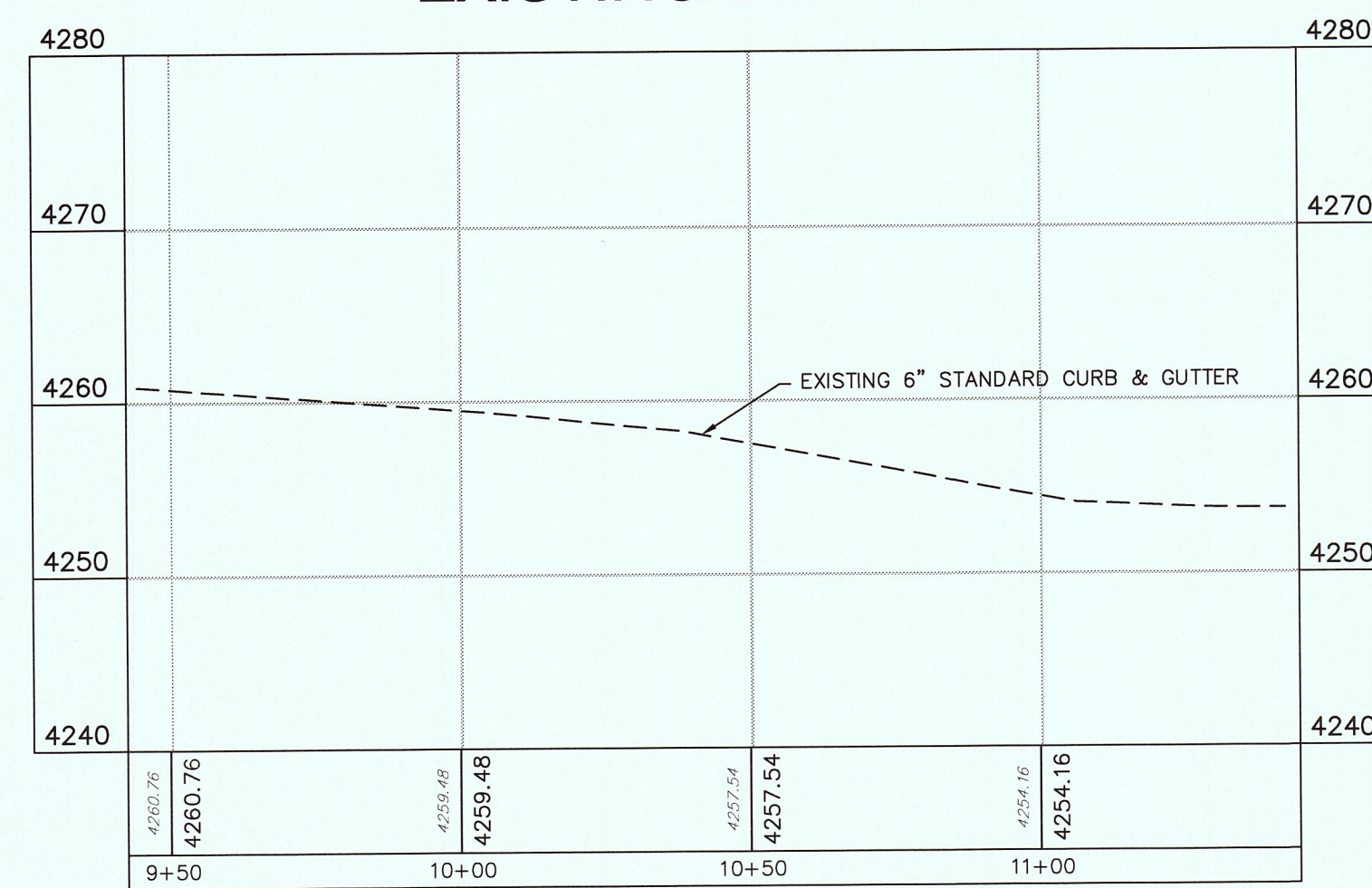
Z:\Projects\Sierra Del Puerte Phase 1\OR-CADD\10-Street Plan and Profile\C 08-09 SSP UT Mtn Laurel Plan and Profile.dwg 07/07/15 10:15AM



SCALE: 1" = 30'



EXISTING LEFT CURB



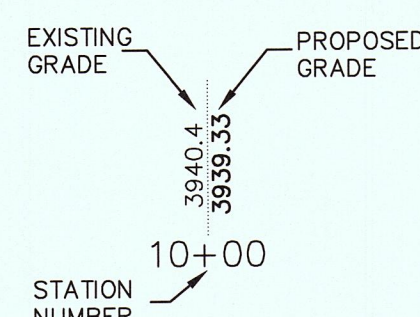
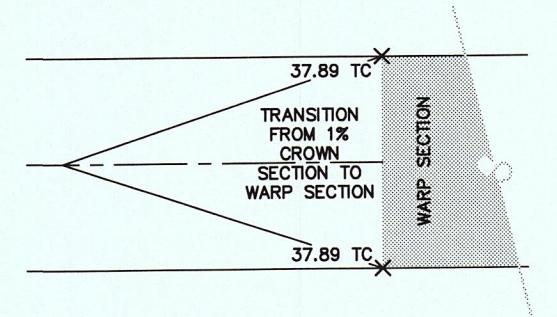
EXISTING RIGHT CURB

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48024400248, DATED OCTOBER 18, 1992.

LEGEND

- x 44.51 TRC PROPOSED TOP OF 4" ROLLOVER CURB
- x 44.27 FG PROPOSED FINISHED GRADE ELEVATION
- x 45.00 PV PROPOSED TOP OF PAVEMENT
- x 44.51 TC PROPOSED TOP OF 6" CURB
- PROPOSED DRAINAGE FLOW
- PROPOSED STREET CENTERLINE
- - - SUBDIVISION BOUNDARY LINE
- ▲ PROPOSED CITY MONUMENT



DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	

SCALE
HOR: 1" = 30' VER: 1" = 10'



SIERRA DEL PUERTE UNIT ONE

**EXISTING MOUNTAIN LAUREL
PLAN AND PROFILE
STA 9+50 TO 11+42**

601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

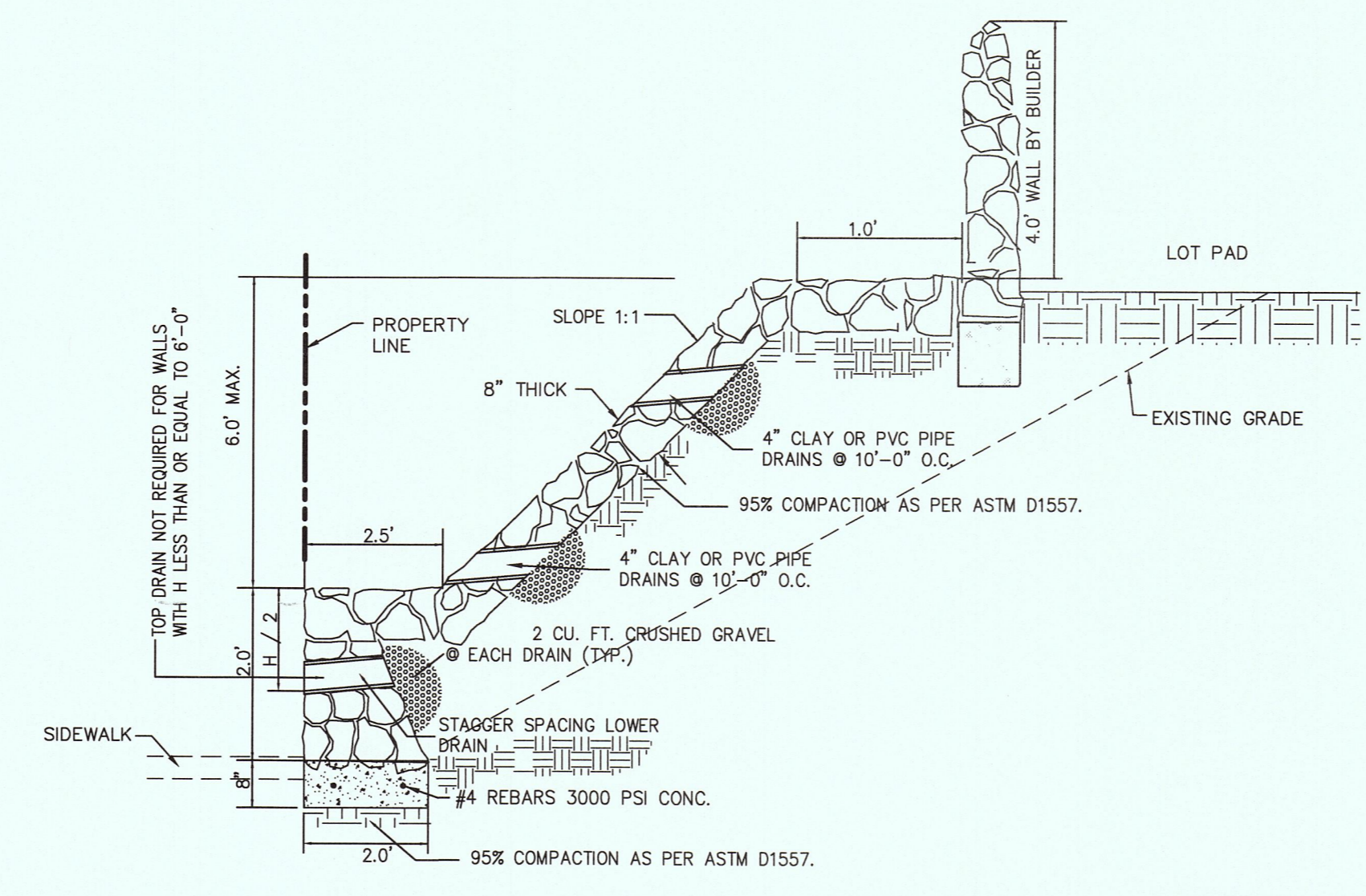
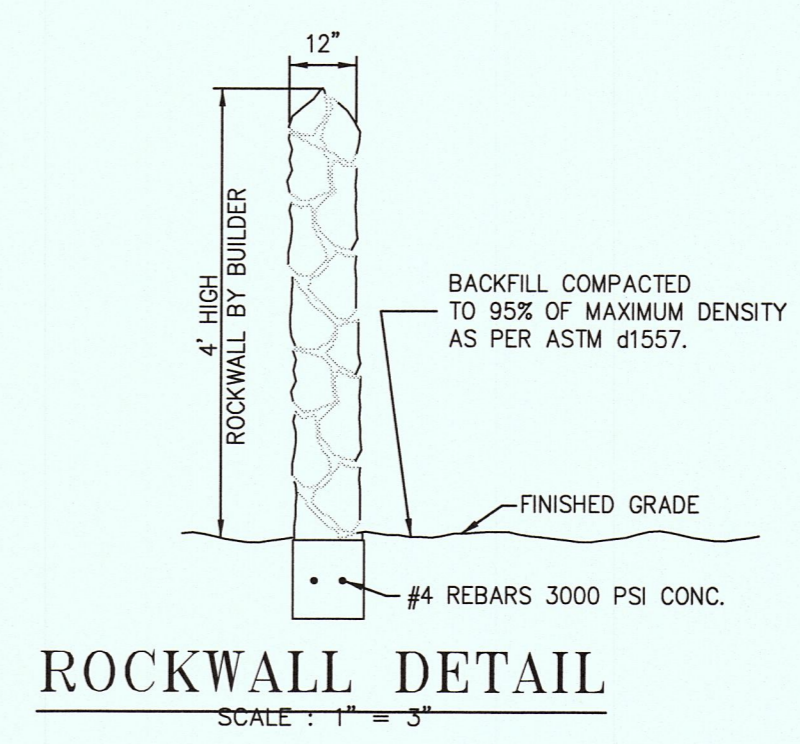
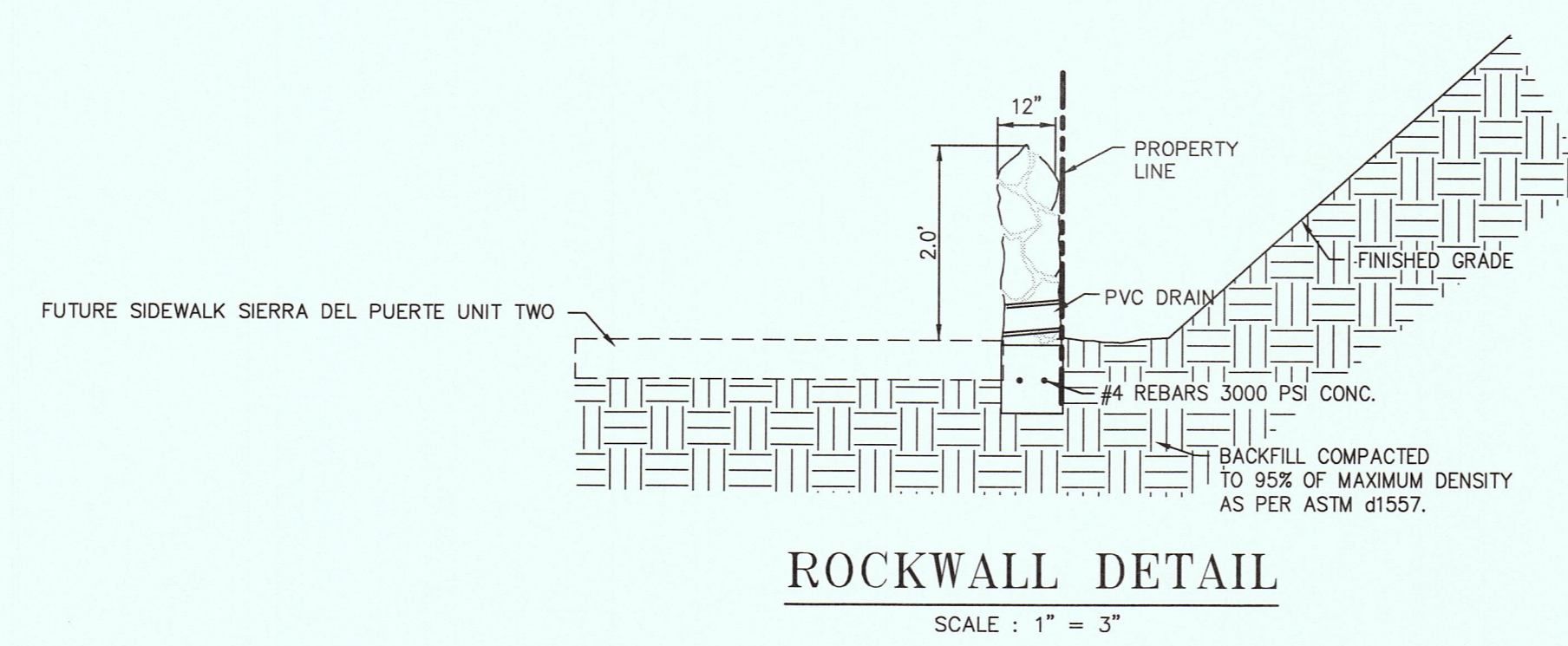
9

9 OF 16



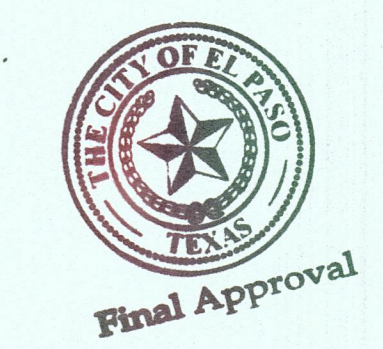
Z:\Client\Auto Works\Projects\022515-11A Sierra Del Puerte Phase 1\08-CADD\00-Street Plan and Profiles\08-08 SPP UT MTR LAUREL PLAN AND PROFILE.DWG 07/07/15 1:28PM

Z:\Clients\Info_Verde\Properties\022515-11A Sierra Del Puerte Phase 1\02-CAD\11-Typical Detail_Rockwall Sheet\010_SOP_U1 ROCKWALL DETAILS.dwg 07/07/15 1:28PM



GENERAL ROCKWALL NOTES

- 1 NATURAL STONE SHALL BE SOUND AND FREE FROM LOOSE OR FRABLE INCLUSIONS AND SHALL MEET REQUIRED STRENGTH AND DURABILITY FOR PROPOSED USE.
- 2 MORTAR SHALL BE ASTM C-270 TYPE S PROPORTION BY VOLUME:
 PORTLAND CEMENT 1 PART
 LIME 1/4 PART
 SAND 3-1/2 PARTS
- 3 CONCRETE F'c=3000 PSI @ 28 DAYS.
- 4 REINFORCING STEEL ASTM A615 GRADE 40, F_y+40,000 PSI.
- 5 ALLOWABLE SOIL BEARING PRESSURE _____ MINIMUM.
- 6 WALL FOOTING SHALL BEAR ON COMPACTED OR FIRM UNDISTURBED GROUND.
- 7 CHANGES IN WALL DIRECTION, WALL HEIGHT OR FOOTING ELEVATION WILL REQUIRE ADDITIONAL DESIGN.
- 8 BACKFILL MATERIAL SHALL CONSIST OF WELL-DRAINED, COARSE DRAINED SOILS, OR FINE SILTY SANDS WITH NO CLAY CONTENT. BACKFILL MATERIAL SHALL EXERT A HORIZONTAL FORCE OF AN EQUIVALENT FLUID PRESSURE NOT TO EXCEED 30#F+3.
- 9 SURCHARGE WILL REQUIRE ADDITIONAL DESIGN _____ YES
 _____ NO. IF SURCHARGED, DETAILS MUST BE SUBMITTED FOR REVIEW AND APPROVAL TO BUILDING INSPECTION DEPARTMENT AT THE TIME BUILDING CONSTRUCTION PLANS ARE SUBMITTED.
- 10 RETAINING WALL (S) WILL BE REQUIRED WHERE THE GRADE DIFFERENCE BETWEEN THE FINISHED GRADE OF ANY LOT WITHIN THIS SUBDIVISION AND/OR ADJOINING PROPERTY IS TWO (2) FEET OR GREATER.
- 11 SUBGRADE UNDER ALL RETAINING STRUCTURE SHALL BE COMPACTED TO 95% OF MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D-1557
- 12 24" SUBGRADE MATERIAL SHALL COMPACTED UNDER RETAINING STRUCTURE



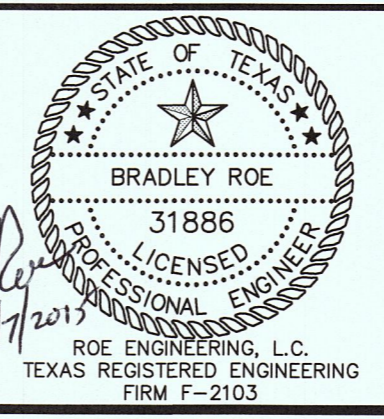
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015 ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

FLOOD NOTE:
 NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48021400248, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'

SCALE	
HOR:	VER:
W.O. 022515-11A	
DATE: APRIL 2015	
DESIGN BY: IR	
DRAWN BY: IR/LAJ	
CHKD. BY: H.P.	
APPD. BY: B.R.	



SIERRA DEL PUERTE UNIT ONE

ROCK WALL DETAILS

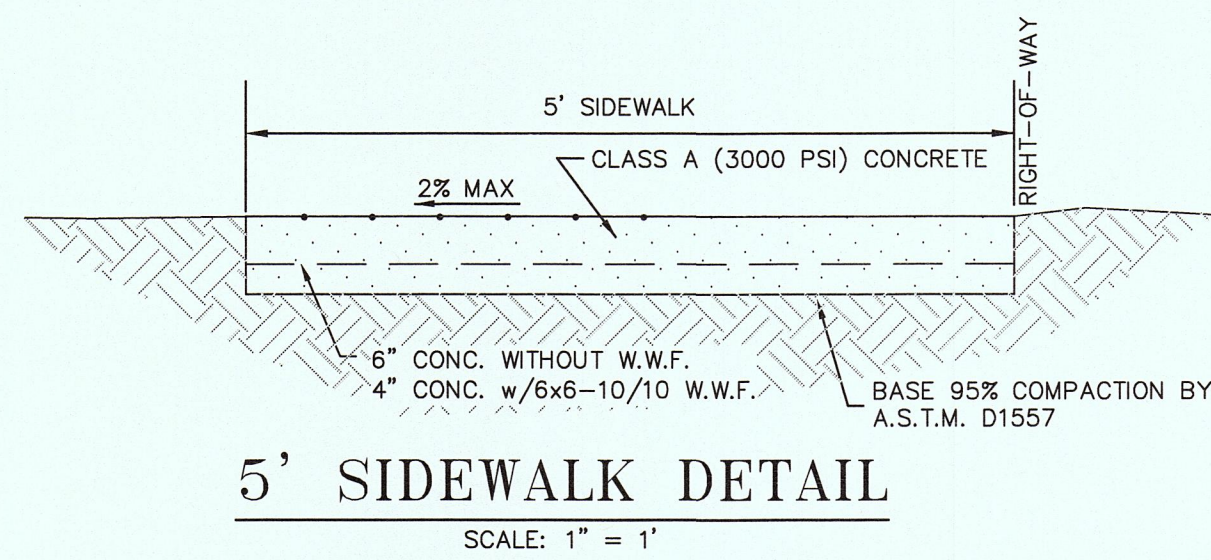
ROE
ENGINEERING, L.C.

601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

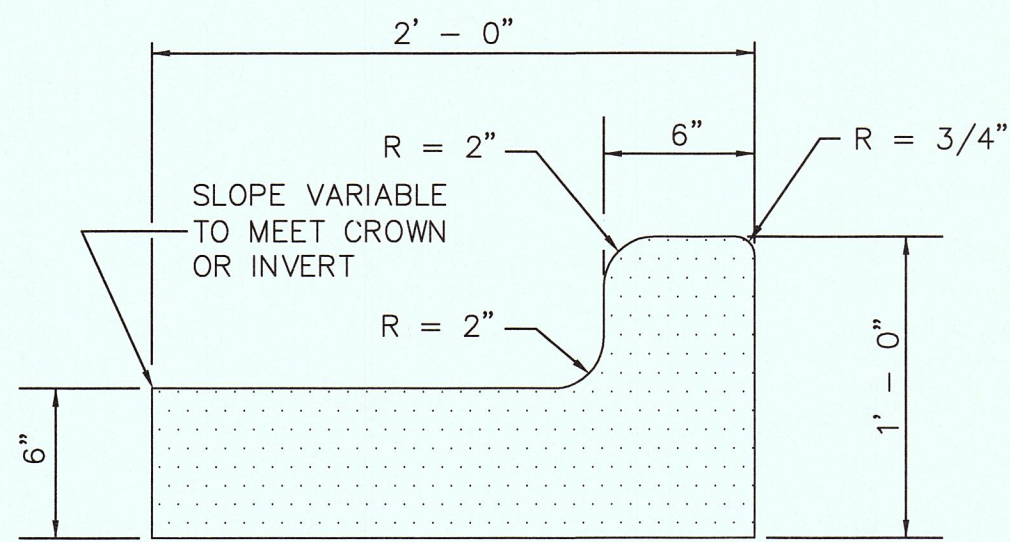
10

10 OF 16



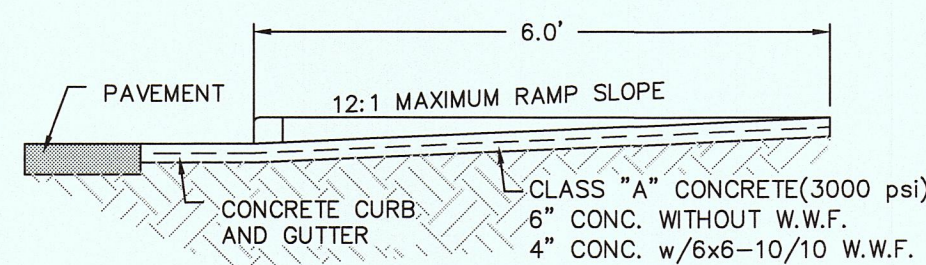
NOTES FOR CURB AND GUTTER:

1. EXPANSION JOINTS WILL BE REQUIRED AT THE END OF CURB RETURNS, AT 50' O.C. & POINT OF TANGENCY WITH STRAIGHT RUNS OF CURB AT EVERY INTERSECTION
2. CONTRACTION JOINTS (1/2 INCH MIN. SCORED JOINTS) MUST BE INSTALLED EVERY 10 FEET IN CURB OR CURB AND GUTTER.
3. ALL EXPANSION JOINTS WILL BE PREFORMED BITUMINOUS FIBER 1/2 INCH THICK.
4. CONCRETE TO BE CLASS "A", 3000 P.S.I.



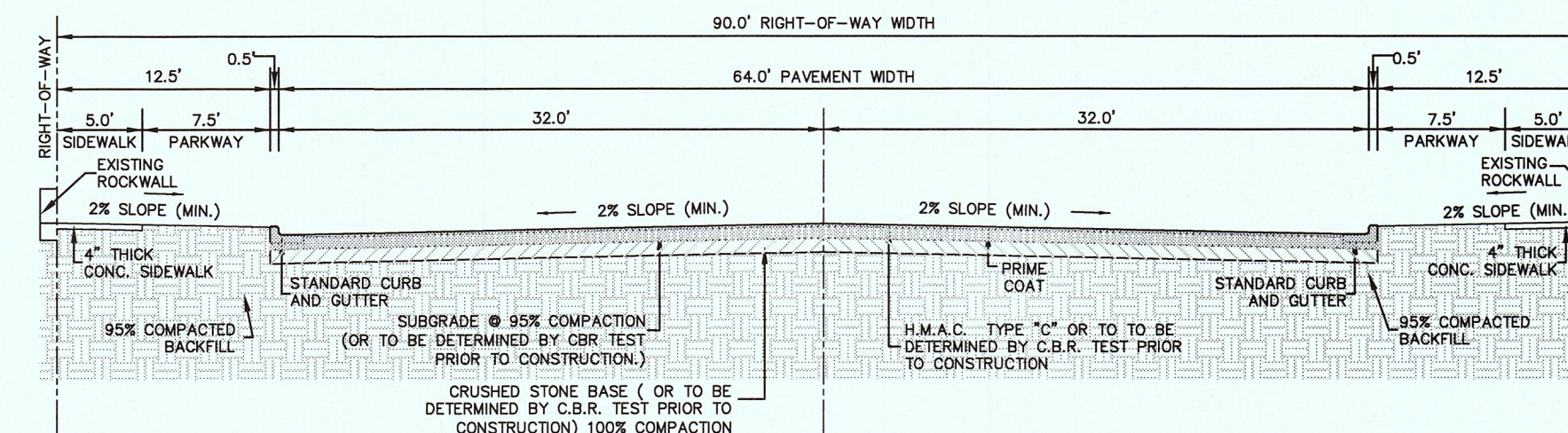
STANDARD CURB AND GUTTER DETAIL

SCALE: 1 1/2" = 1'



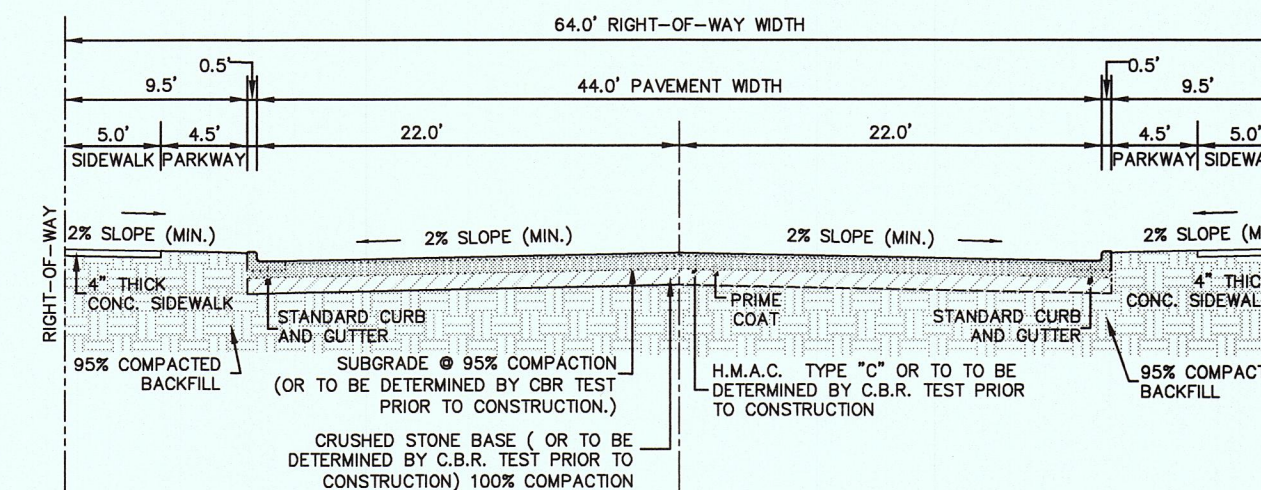
TYPICAL HANDICAP RAMP

SCALE: 1" = 2'



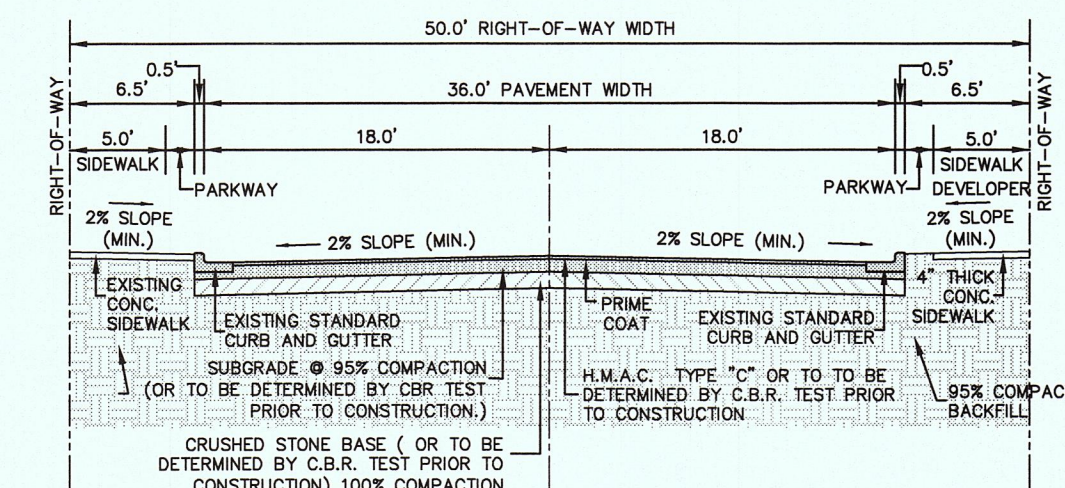
**EXISTING / FUTURE STREET SECTION
90' PUBLIC RIGHT-OF-WAY
(ZIRCON DRIVE)
MINOR ARTERIAL**

SCALE 1" = 10'



**EXISTING / FUTURE STREET SECTION
64' PUBLIC RIGHT-OF-WAY
(EDGAR PARK DRIVE)
RESIDENTIAL COLLECTOR**

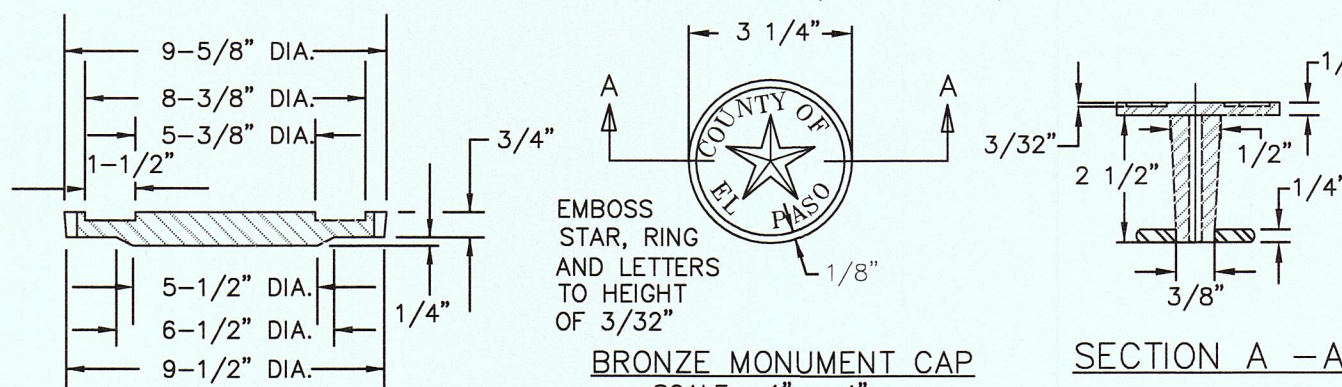
SCALE 1" = 10'



**EXISTING STREET SECTION
50' PUBLIC RIGHT-OF-WAY
(MOUNTAIN LAUREL DRIVE)
RESIDENTIAL COLLECTOR**

SCALE 1" = 10'

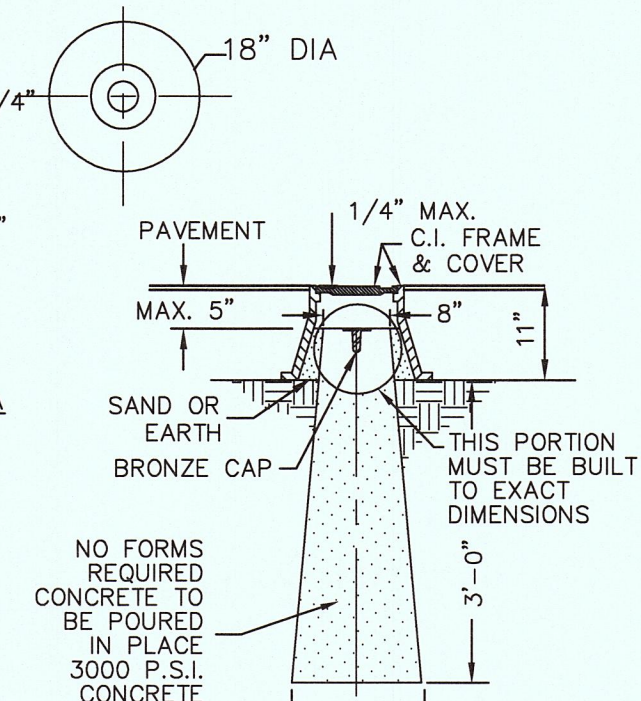
OUTSIDE RADIUS OF STAR = 3/4"
INSIDE RADIUS OF STAR = 5/16"
HEIGHT OF LETTERS = 7/16"
WIDTH OF LETTER BODY = 3/16"
RADI FOR POSITION OF LETTERING = 13/16" AND 1-1/4"



BRONZE MONUMENT CAP

SCALE: 1" = 4"

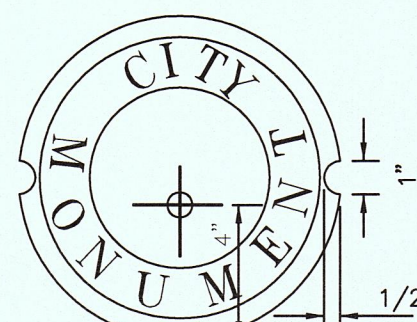
SECTION A - A



FRAME SECTION

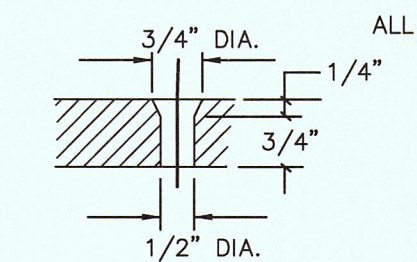
FRAME SECTION

SCALE: 1" = 6"



COVER

SCALE: 1" = 6"



COUNTERSUNK DETAIL

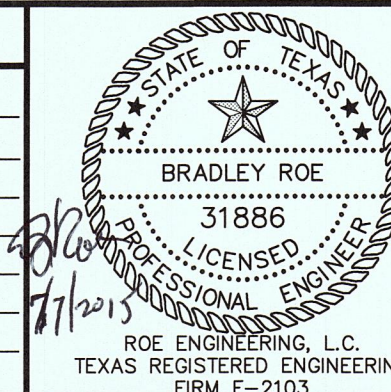
SCALE: 1" = 3"

COUNTY MONUMENT DETAIL

SIZE AND CONSTRUCTION:
THE STANDARD CITY MONUMENT SHALL BE POURED-IN-PLACE CONCRETE CONE, EIGHT (8) INCHES MINIMUM DIAMETER AT THE TOP, EIGHTEEN (18) INCHES MINIMUM DIAMETER AT THE BOTTOM, THIRTY-SIX (36) INCHES MINIMUM IN DEPTH WITH THE MONUMENT CAP IN PLACE ON TOP.
THE MONUMENT SHALL BE COVERED WITH A CAST IRON BOX AND COVER.
NUMBER AND LOCATIONS:
THE MONUMENTS SHALL BE INSTALLED WHERE SHOWN ON THE SUBDIVISION PLAT AS APPROVED BY THE CITY ENGINEER.
ANY MONUMENT MUST BE WITHIN THE LINE OF SIGHT OF ANY OTHER MONUMENT (2000 FEET MAXIMUM DISTANCE BETWEEN MONUMENTS).
THE SIZE, TOPOGRAPHY AND LAYOUT OF THE SUBDIVISION SHALL GOVERN THE NUMBER OF MONUMENTS REQUIRED.

NO FEWER THAN TWO MONUMENTS SHALL BE PLACED IN A ONE STREET SUB-DIVISION.
AT LEAST ONE (1) MONUMENT SHALL BE PLACED ON EACH HORIZONTAL CURVE. TWO SHALL BE PLACED IF THE POINT OF INTERSECTION (P.I.) OF THE TANGENTS LEADING INTO THE CURVE FALLS OUTSIDE OF CITY RIGHT-OF-WAY. MONUMENTS SHALL BE INSTALLED SO THAT ALL FRONT PROPERTY CORNERS OF ALL LOTS IN THE SUBDIVISION ARE WITHIN LINE OF SIGHT OF A MONUMENT, OR WITHIN LINE OF SIGHT BETWEEN TWO ADJACENT MONUMENTS.

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015, ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



SIERRA DEL PUERTE UNIT ONE

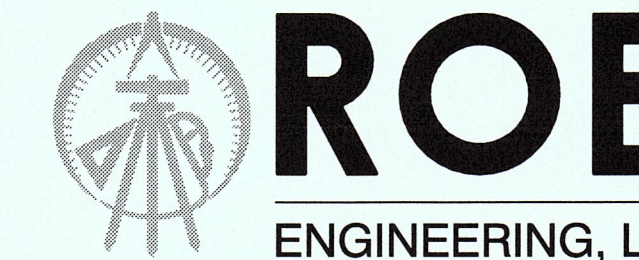
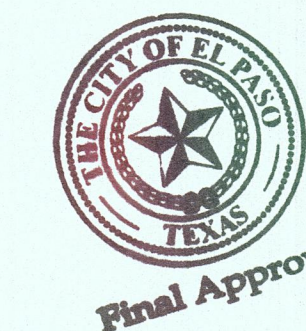
TYPICAL DETAILS

HOR: VER:
W.O. 022515-11A
DATE: APRIL 2015
DESIGN BY: IR
DRAWN BY: IR/LAJ
CHKD. BY: H.P.
APPD. BY: B.R.

EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE
ELEVATION: 4229.73 (NAVD 88)
ELEVATION: 4217.92 (CITY DATUM)
ELEVATIONS BASED ON NAVD 88 DATUM
CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'

FLOOD NOTE:
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.



601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

11

11 OF 16

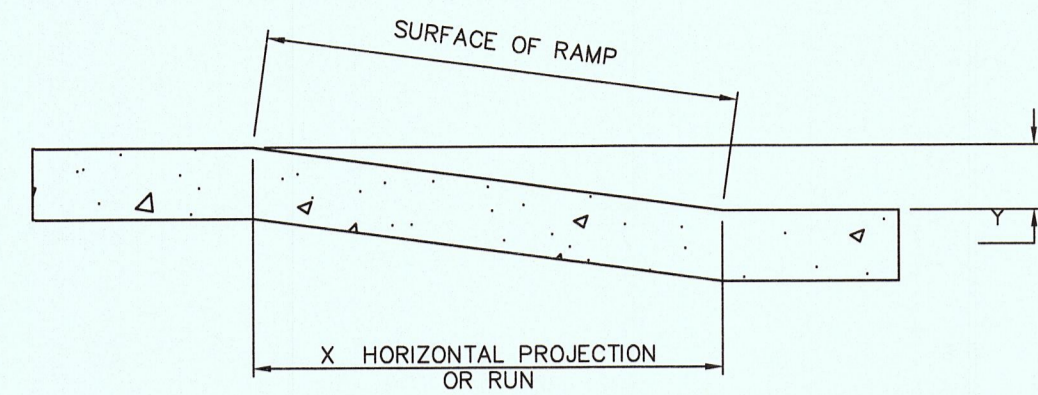
City of El Paso Dome Size and Spacing

CITY OF EL PASO
DOME SIZE AND SPACING

1. 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 (5MM), AND CENTER TO CENTER SPACING OF NOMINAL 2.35 INCHES (60 MM) MEASURED ALONG ONE SIDE OF A SQUARE ARRANGEMENT.
2. 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.
3. 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 THE SURFACE SHALL BE PERMITTED.

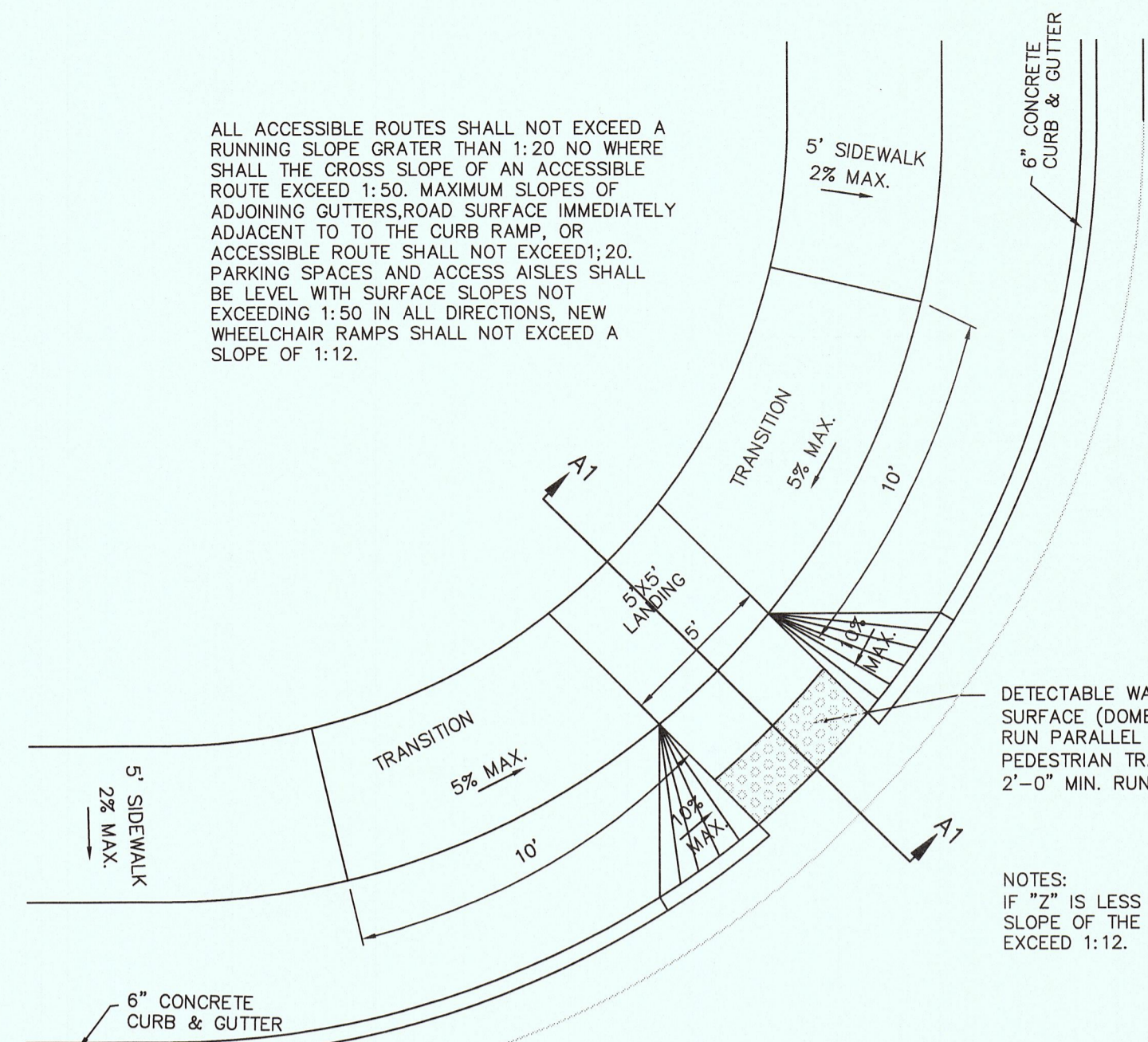
Pedestrian Facilities General Notes

1. All slopes are maximum allowable. The least possible slope that will still drain properly should be used. Adjust curb ramp length or grade of approach sidewalks as directed.
2. Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.
3. Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.
4. Maximum allowable cross slope on sidewalk and curb ramp surfaces is 2%.
5. Curb ramps with returned curbs may be used only where pedestrians would not normally walk across the ramps, either because the adjacent surface is planting or other non-walking surface or because the side approach is substantially obstructed. Otherwise, provide flared sides.
6. 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) and 16 TAC 68.102.
7. Separate curb ramp and landings from adjacent sidewalk and any other elements with precast with bituminous exp. joint or board joint of 3/4" unless otherwise directed by the Engineer.
8. Provide a smooth transition where the curb ramps connect to the street.
9. Flare slope shall not exceed 10% measured along curb line.



SECTION A1-A1

NOTES:
SLOPE = Y: X, WHERE X IS LEVEL PLANE
CROSS-SLOPE SHALL NOT EXCEED 1:50

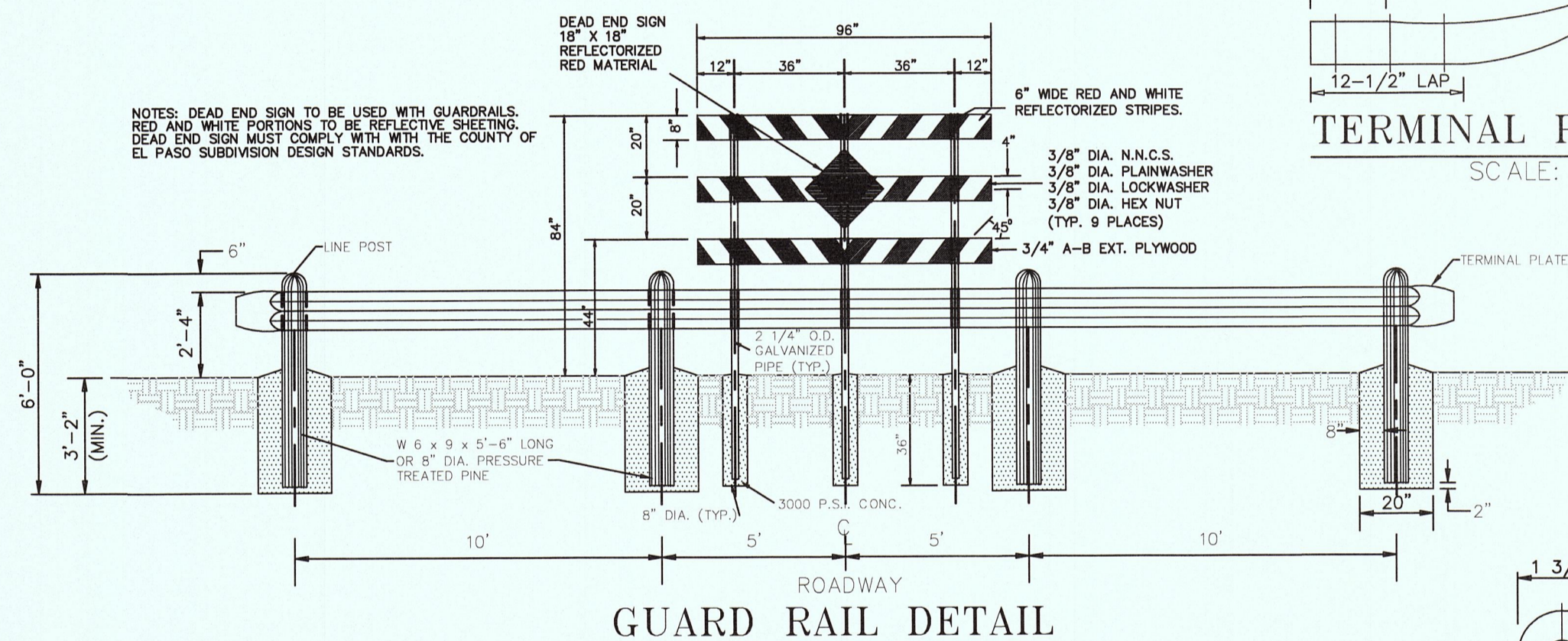


DIAGONAL CURB RAMP WITH FLARED SIDES

NOTES:
IF "2" IS LESS THAN 48 INCHES, THEN THE
SLOPE OF THE FLARED SIDE SHALL NOT
EXCEED 1:12.

GENERAL NOTES:

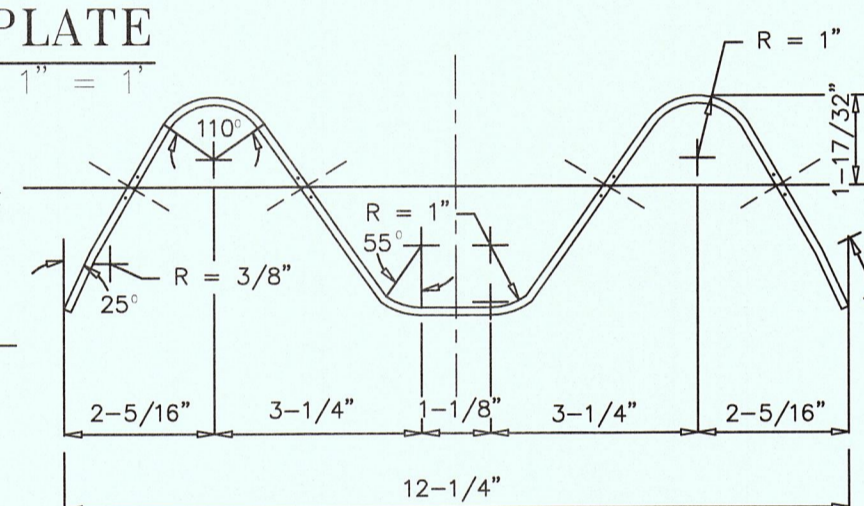
1. CONTRACTOR TO VERIFY ALL DIMENSIONS AND ELEVATIONS IN THE DRAWINGS AND SITE CONDITIONS BEFORE COMMENCING WORK.
2. ANY DISCREPANCIES FOUND AMONG THE DIFFERENT DISCIPLINE DRAWINGS SHALL BE REPORTED TO ENGINEER FOR PROPER ADJUSTMENT PRIOR TO PROCEEDING WITH WORK.
3. DETAILS ON THIS DRAWINGS ARE TYPICAL AND APPLY TO SIMILAR PROJECT CONDITIONS REGARDLESS OF WHETHER OR NOT THEY ARE SPECIFICALLY REFERENCED.



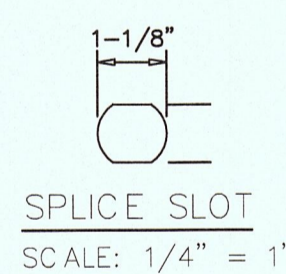
GUARD RAIL DETAIL

TERMINAL PLATE

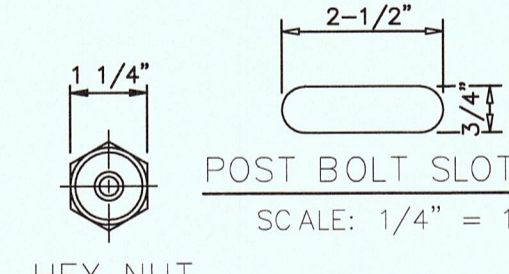
SCALE: 1" = 1'



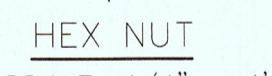
SCALE: 1/4" = 1'



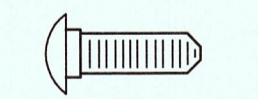
SCALE: 1/4" = 1'



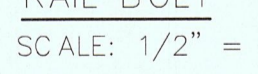
SCALE: 1/4" = 1'



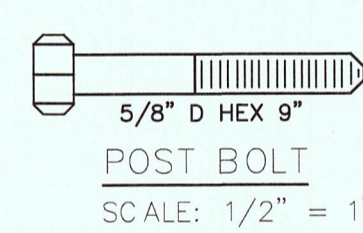
SCALE: 1/4" = 1'



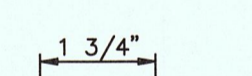
SCALE: 1/2" = 1'



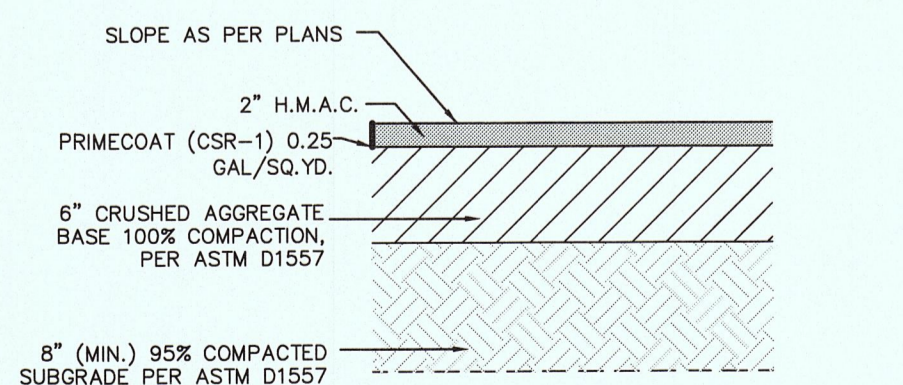
SCALE: 1/2" = 1'



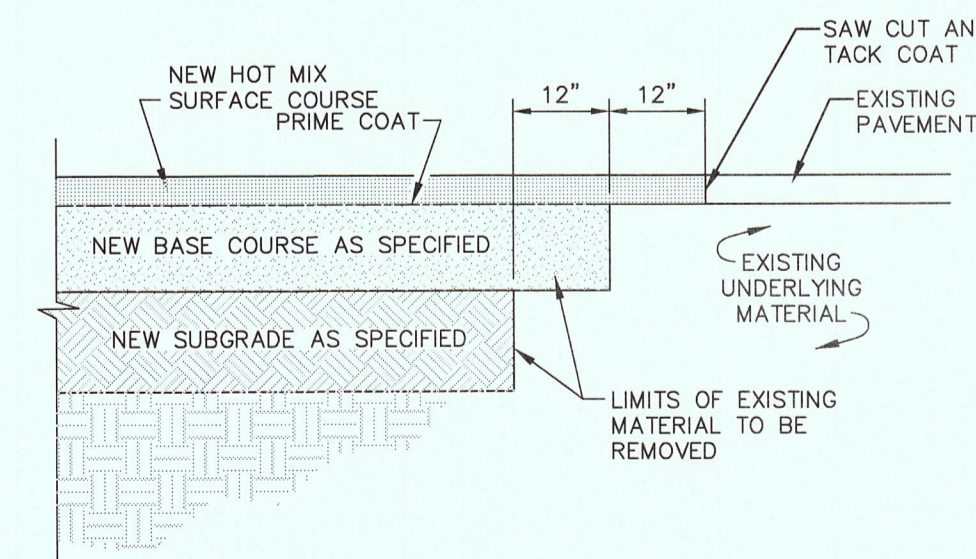
SCALE: 1/2" = 1'



SCALE: 1/4" = 1'

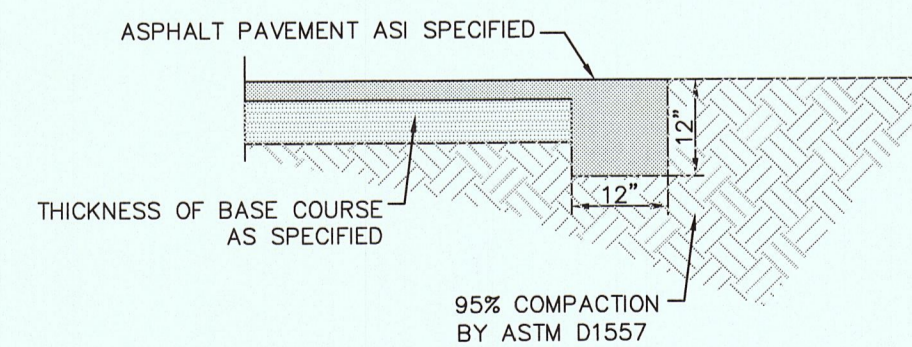


TYPICAL PAVEMENT SECTION
SCALE: 1" = 1'

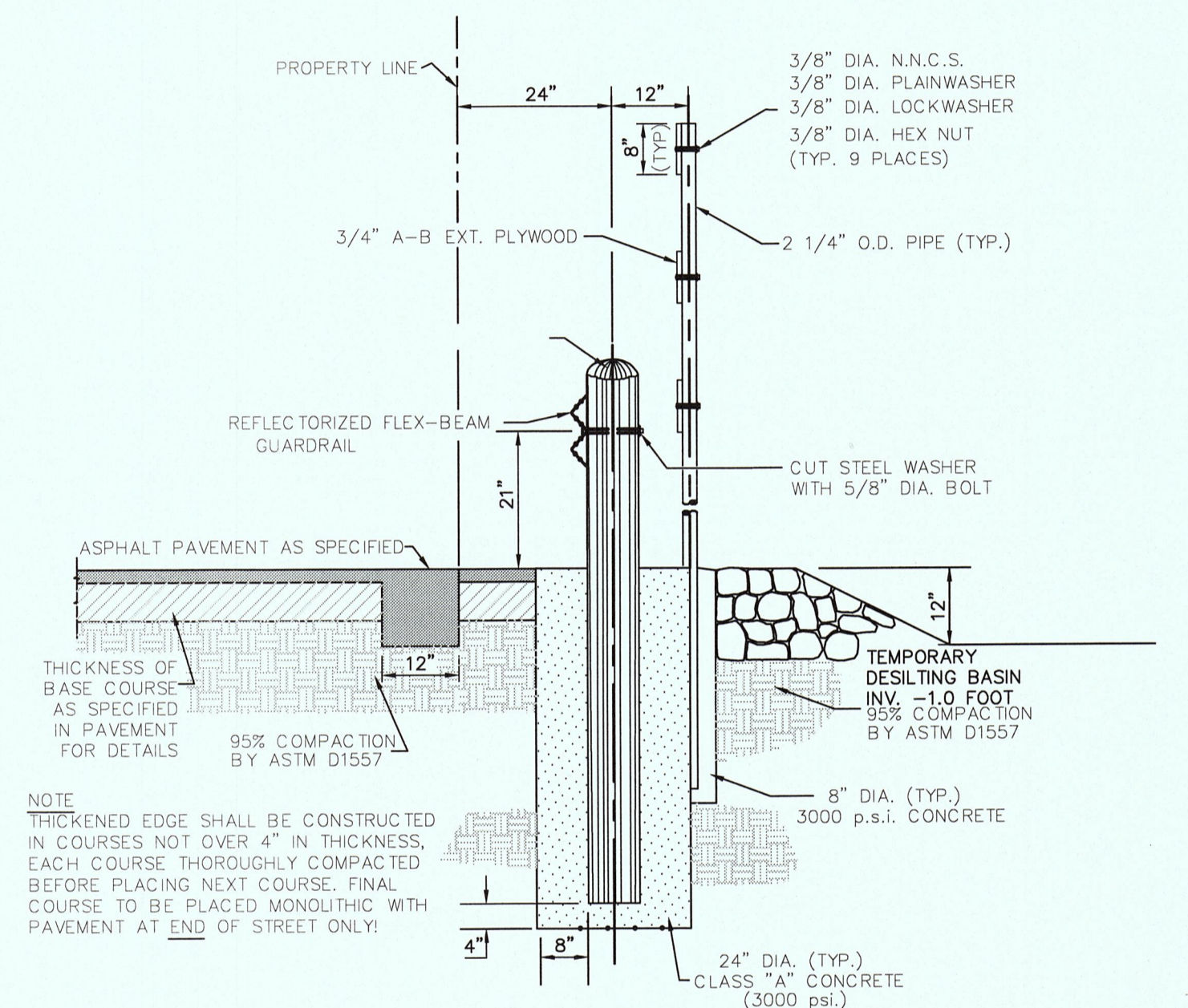


JUNCTURE OF NEW FLEXIBLE AND EXISTING FLEXIBLE PAVEMENT
SCALE: 1/2" = 1'

NOTE:
THICKENED EDGE SHALL BE CONSTRUCTED IN COURSES NOT OVER 4" IN THICKNESS. EACH COURSE THOROUGHLY COMPACTED BEFORE PLACING NEXT COURSE. FINAL COURSE TO BE PLACED MONOLITHIC WITH PAVEMENT AT END OF PARKING LOT ONLY!



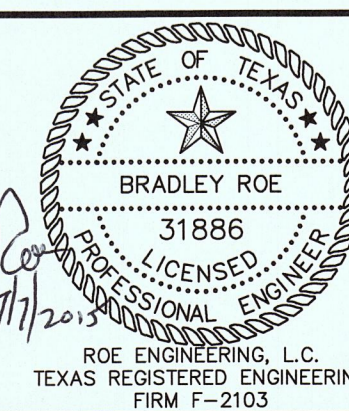
PAVEMENT TERMINUS
SCALE: 1" = 2'



TERMINUS OF STREET
SCALE: 1" = 2'

NOTE:
THICKENED EDGE SHALL BE CONSTRUCTED IN COURSES NOT OVER 4" IN THICKNESS. EACH COURSE THOROUGHLY COMPACTED BEFORE PLACING NEXT COURSE. FINAL COURSE TO BE PLACED MONOLITHIC WITH PAVEMENT AT END OF STREET ONLY!

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015, ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



SIERRA DEL PUERTE UNIT ONE

TYPICAL DETAILS

HOR: VER:
W.O. 022515-11A
DATE: APRIL 2015
DESIGN BY: IR
DRAWN BY: IR/LAJ
CHKD. BY: H.P.
APPD. BY: B.R.



601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972



SHEET NO.

12

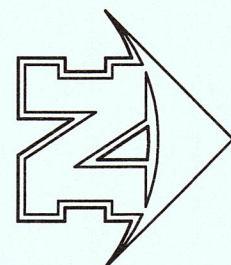
12 OF 16

FLOOD NOTE:

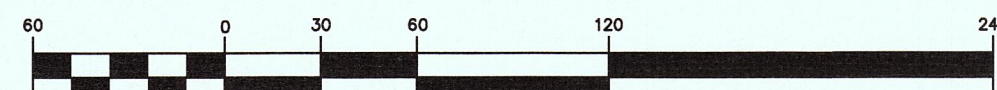
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 45021400248, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extension of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

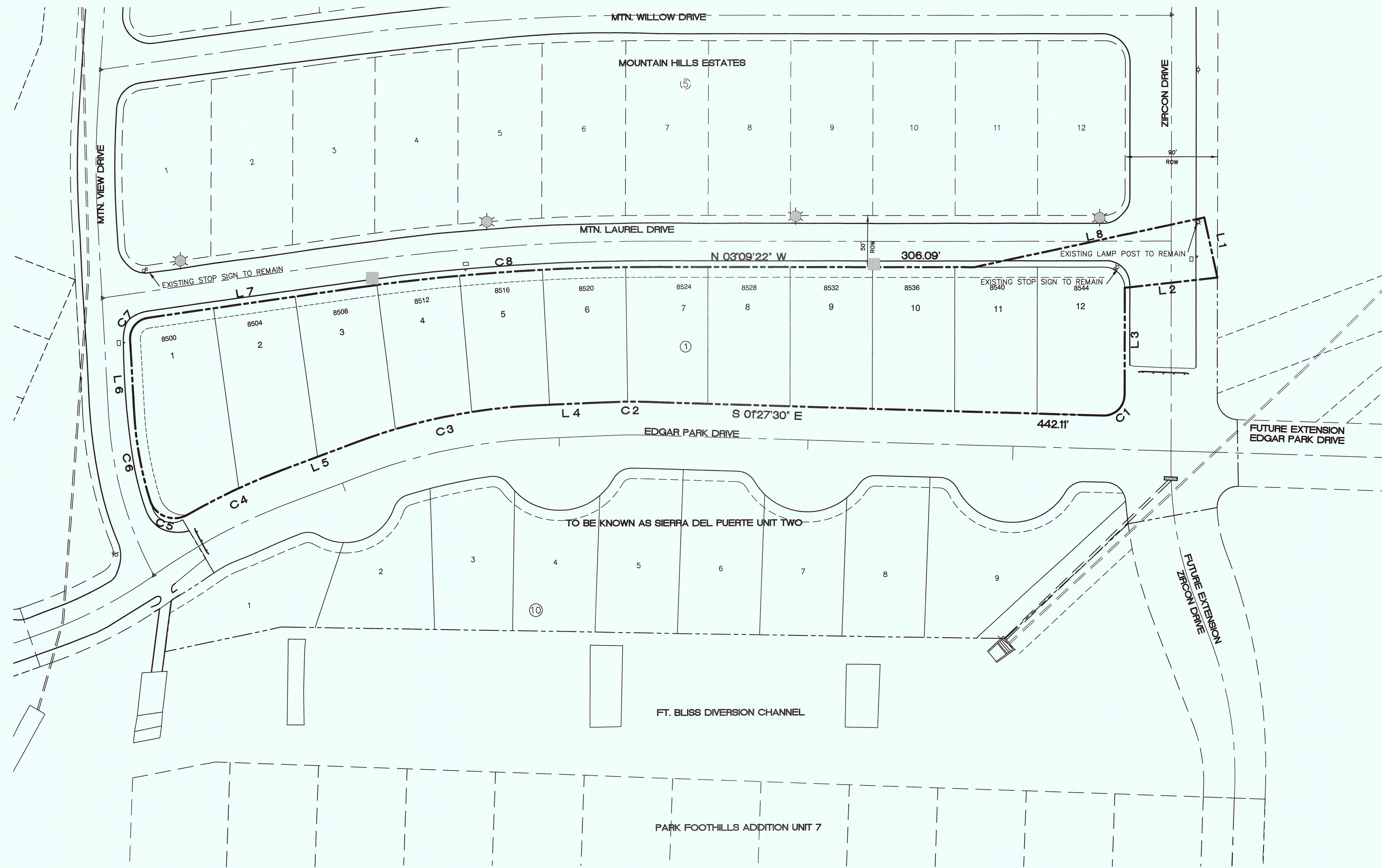
DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4213.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'	



GRAPHIC SCALE

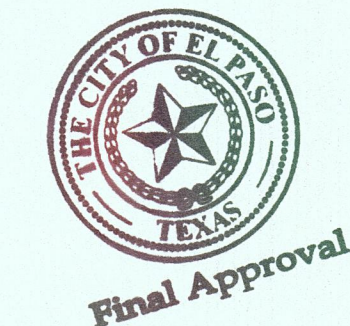


(IN FEET)
1 inch = 60 ft.



- DENOTES LOCATION OF PROPOSED LIGHT POLE
4 TOTAL
- DENOTES LOCATION OF NDCBU (4' X 6')

Z:\Client\Yolo_Vegetation\202515-11A_Sierr Del Puerte Phase 1\06-000\02-Illumination_Sierr Interaction Draft\A-C 13_SPP_U1_ILLUMINATION_PLAN.dwg 07/07/15 1:36PM



Final Approval

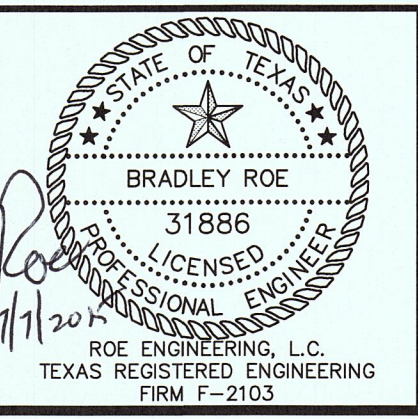
THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY
BRADLEY ROE, P.E. 31886 ON 05-01-2015 ALTERATION OF A SEALED
DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS
AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.

FLOOD NOTE:
NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK
06-11-15	CITY COMMENTS	IR	EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM

SCALE
HOR: 1" = 60' VER:
W.O. 022515-11A
DATE: APRIL 2015
DESIGN BY: IR
DRAWN BY: IR/LAJ
CHKD. BY: H.P.
APPD. BY: B.R.



SIERRA DEL PUERTE UNIT ONE

ILLUMINATION PLAN

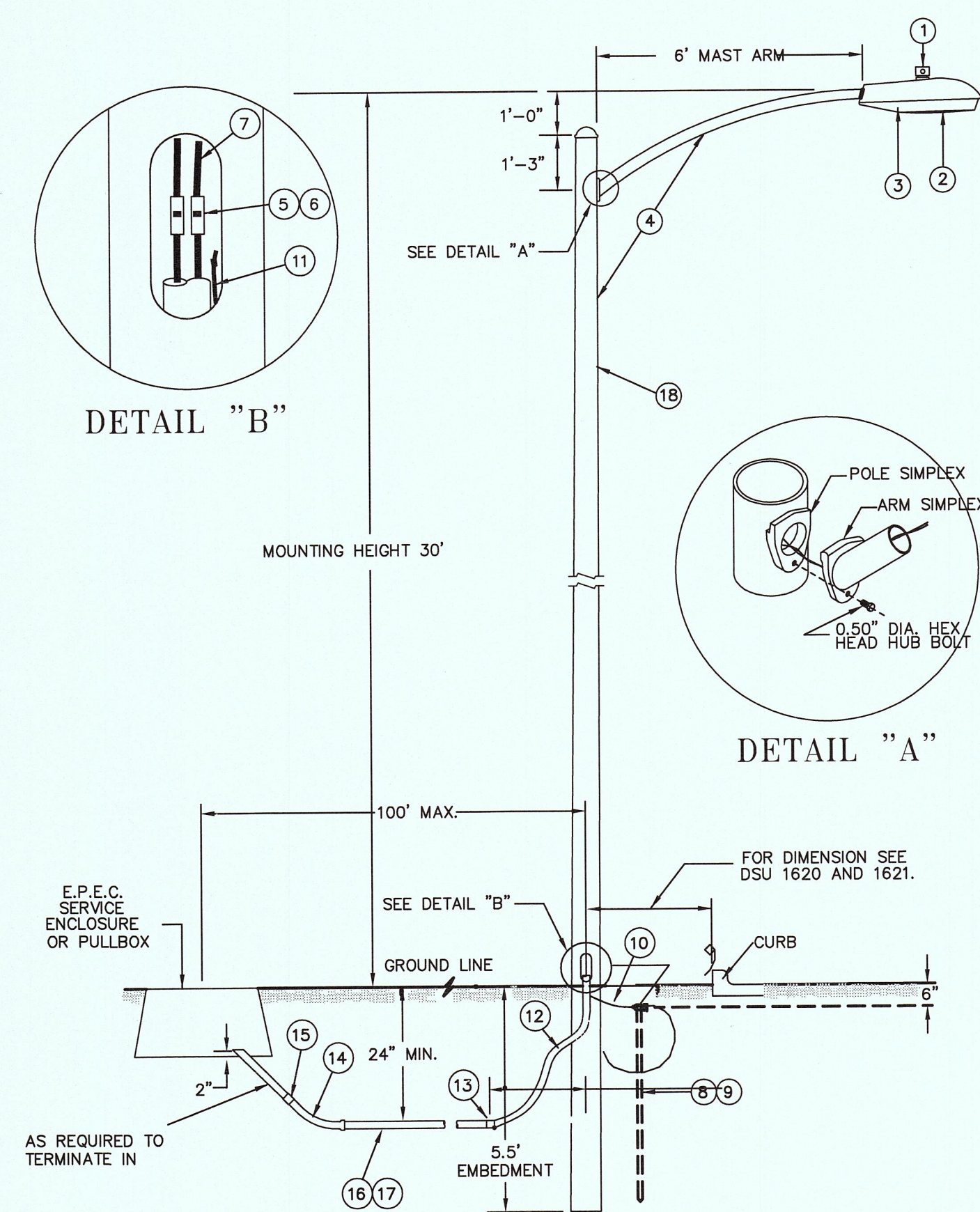
601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.
13
13 OF 16

NOTES:

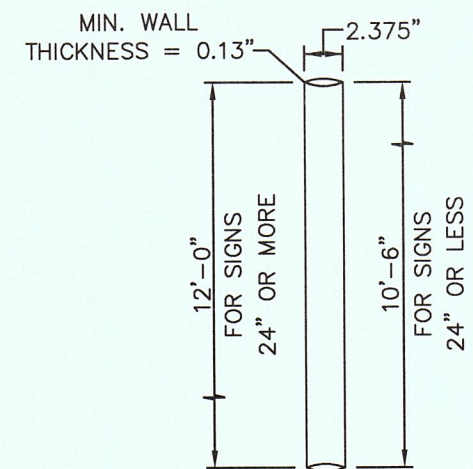
1. MOUNT SO THAT PHOTO CELL IS FACING NORTH.
2. INSTALLATION MUST COMPLY WITH LOCAL CODE REQUIREMENTS.
3. FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
4. ON STREET WHERE SIDEWALK IS ADJACENT TO CURB, STREET LIGHT POLE SHALL BE INSTALLED IN THE SIDEWALK NEXT TO PROPERTY LINE. 36 INCHES REQUIRED FROM BACK OF CURVE TO COMPLY WITH AMERICAN DISABILITY'S ACT AND LOCAL CODES.
5. A GROUND ROD MUST BE USED.
6. LOCK WASHER MUST BE INCLUDED ON ALL ANCHOR BOLTS.
7. FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
8. CONCRETE FOUNDATION DIMENSIONS ARE AS FOLLOWS:

	DIAMETER: (X)	DEPTH: (Y)
NORMAL SOIL:	24"	72"
ROCKY SOIL:	24"	60"
9. CONCRETE FOR FOUNDATION SHALL BE 3000 PSI. ¾" ROCK AGGREGATE AND HAVE 5" SLUMP.
10. 4 - ANCHOR BOLTS WITH 4" HOOKS, THREAD END GALVANIZED 1" DIA. X 36" LONG, EACH BOLT FURNISHED WITH 2 HEX NUTS AND 2 FLAT WASHERS ARE SUPPLIED WITH THE STEEL POLE.
11. ON STREET WHERE SIDEWALK IS ADJACENT TO CURB, 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.



WOOD POLE STREET LIGHT

EXHIBIT "B"



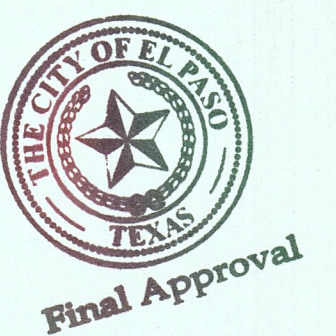
NOTES:

1. WELD ALONG ITS LENGTH TO FORM VIRTUALLY SEAMLESS.
2. POST SHALL BE HOT DIPPED ZINC GALVANIZED UNIFORMLY ON THE OUTSIDE WITH NOMINAL ZINC WEIGHT OF 1.0 OUNCE PER SQUARE FOOT.
3. THE ZINC COATING IS TO BE OVER-COATED WITH A CHROMITE CONVERSION AND ACRYLIC COATING TO PROVIDE RESISTANCE TO RUSTING AND CORROSION.
4. THE INSIDE OF THE POST SHALL BE COATED WITH AN ORGANIC MATERIAL FOR PROTECTION AGAINST RUST.
5. BOTH ENDS ARE TO BE SQUARELY CUT WITHOUT FLARE.
6. POST SHALL BE FREE OF WARPS, CORROSION, OR OTHER DEFECTS.
7. RING WELDS OR SPLICES WILL NOT BE ACCEPTABLE.
8. BENDING STRENGTH AS SPECIFIED BY AASHTO FOR SCHEDULE 40 PIPE.
9. POST SHALL BE BUNDLED WITH METAL STRAPS AND SHALL NOT EXCEED 37 POST PER BUNDLE.

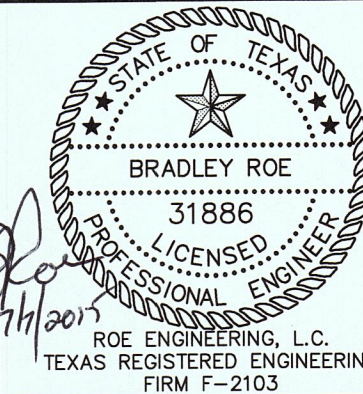
SIGN POSTS SPECIFICATIONS

SCALE : 1" = 1'

ITEM No.	DIRECT EMBEDDED SL STANDARD	STOCK / DSU No.	QTY.	C/U CODE	MACRO CODE
1	PHOTO CELL, 240 V - SEE NOTE 1	21-225	1		
2	HPS LAMP, 100W	21-085	1	LC0BRAHD	
3	LUMINAIRE, 100W H.P.S	21-335	1		
4	D.E. STANDARD, 34' 6" WITH 6' MAST ARM	09-310	1	L34STLUG	
5	FUSE 10A	21-240	2	LFUSE10A	
6	FUSEHOLDER - 30A	21-247	2	LFUSEHLD	
7	COPPER CABLE, #12, 19 SOLID, 600V, BLUE	13-702	70'	LC#12CU	
8	5/8" X 10' CU BONDED GROUND ROD	08-626	1		LSTLDEUG
9	5/8" GROUND ROD CLAMP	07-461	1		LGRNDROD
10	#4 BARE COPPER-CLAD	12-106	6'	L4ACW	
11	TRANSFORMER GROUND CLAMP	04-100	1	LGRNDCON	
12	1" PVC FLEX CONDUIT FITTING	21-214	1	LFLXFT1	
13	1" PVC FLEX CONDUIT	21-527	6'	LPVCFX1	
14	1" PVC 45 DEGREE ELBOW	17-298	1	LEL451	
15	1" PVC COUPLING	17-296	1	LCPLG1	
16	1" PVC CONDUIT	17-299	AS REQ	LPVC1	
17	COPPER CABLE, #12, 19 SOLID, 600V, BLUE	13-702	AS REQ	LC#12CU	
18	POLE, 35 FT.-CLASS IV	009-035	AS REQ	L34STLUG	

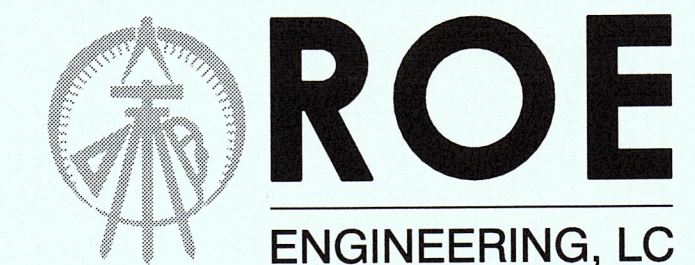


THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



SIERRA DEL PUERTE UNIT ONE

ILLUMINATION DETAILS



601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO.

14

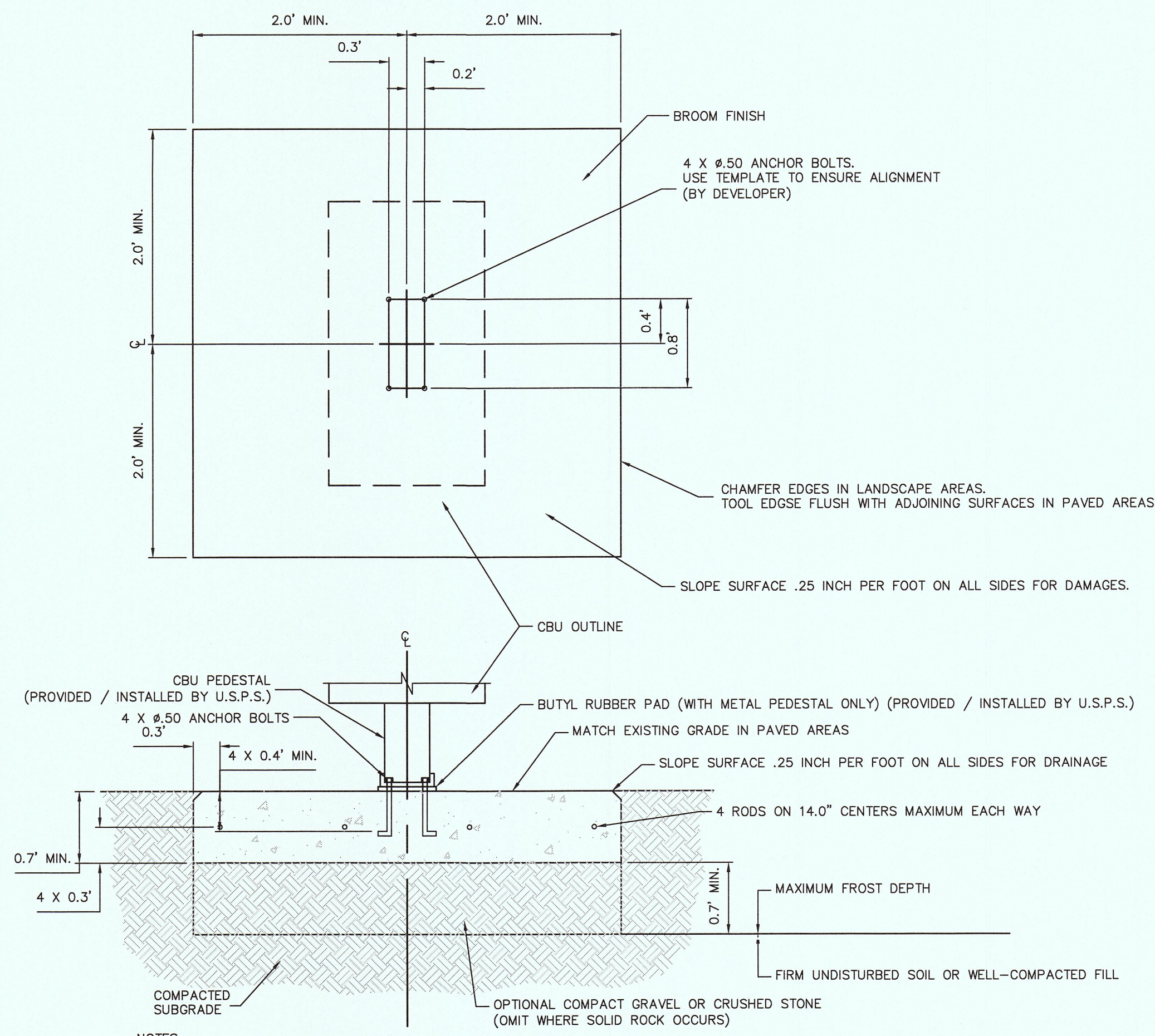
14 OF 16

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B. DATED OCTOBER 15, 1982.

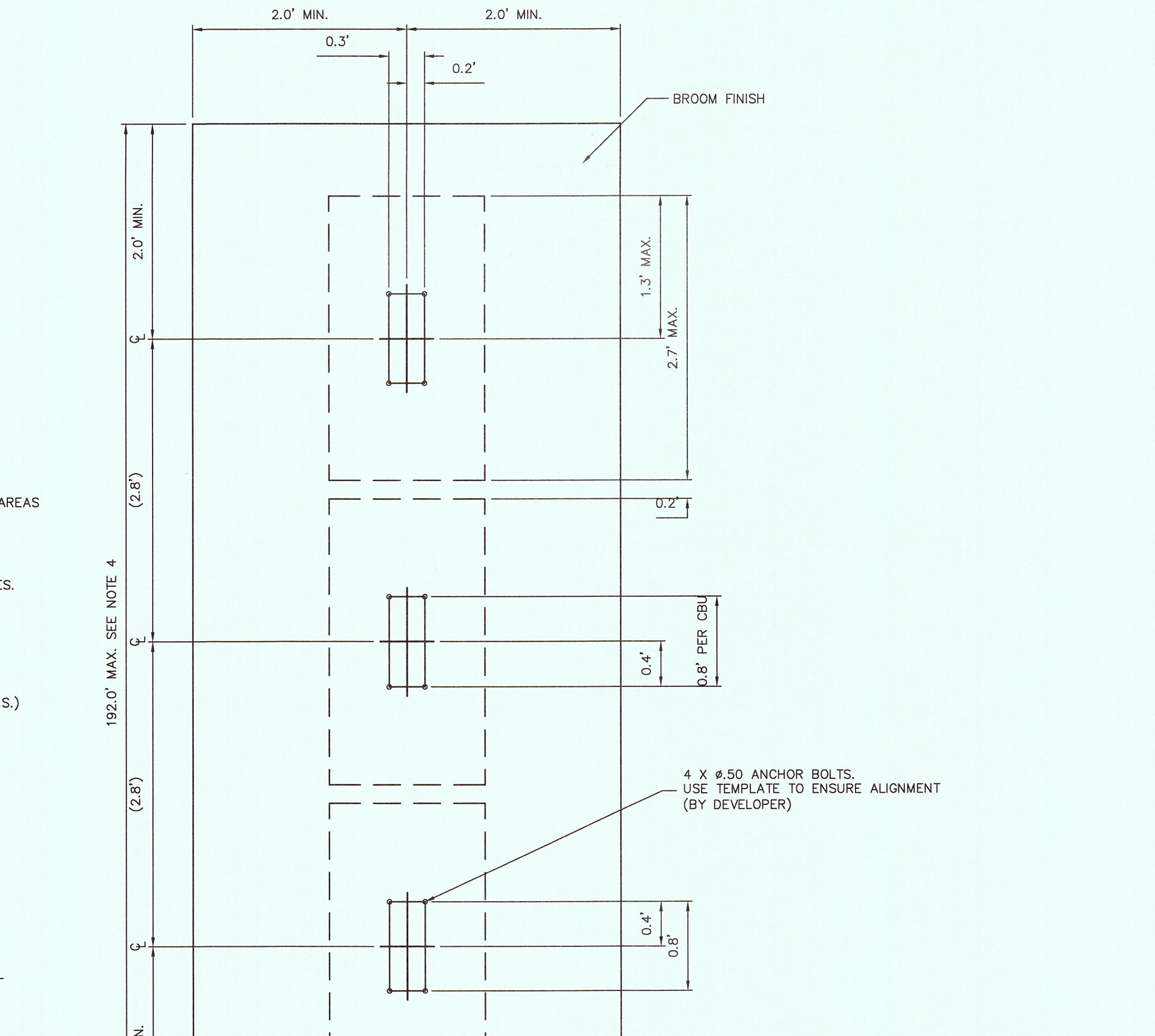
This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR		
			EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE	HOR: NA VER:
			ELEVATION: 4229.73 (NAVD 88)	W.O. 022515-11A
			ELEVATION : 4217.92 (CITY DATUM)	DATE: APRIL 2015
			ELEVATIONS BASED ON NAVD 88 DATUM	DESIGN BY: IR
			CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'	DRAWN BY: IR/LAJ
				CHKD. BY: H.P.
				APPD. BY: B.R.



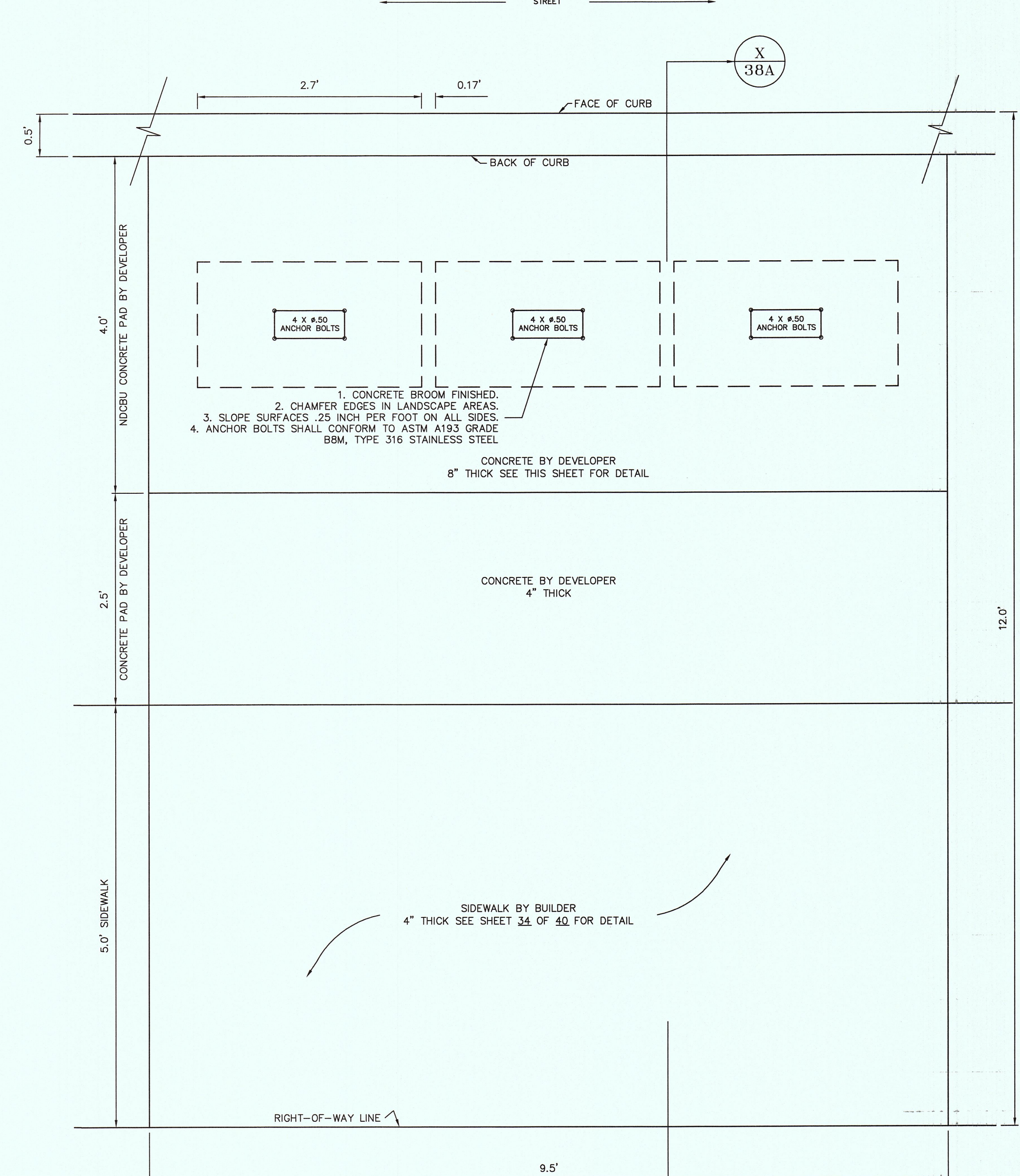
- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 SI @ 28 DAYS, CONTAIN 4% MIN - 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301. (BY DEVELOPER)
 2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615 GRADE 60. (BY DEVELOPER)
 3. ANCHOR BOLTS SHALL CONFORM TO ASTM A 193, GRADE B8M TYPE 316 STAINLESS STEEL. (BY DEVELOPER)

U.S.P.S. APPROVED SPECIFICATIONS - CONCRETE PAD (SINGLE UNIT)

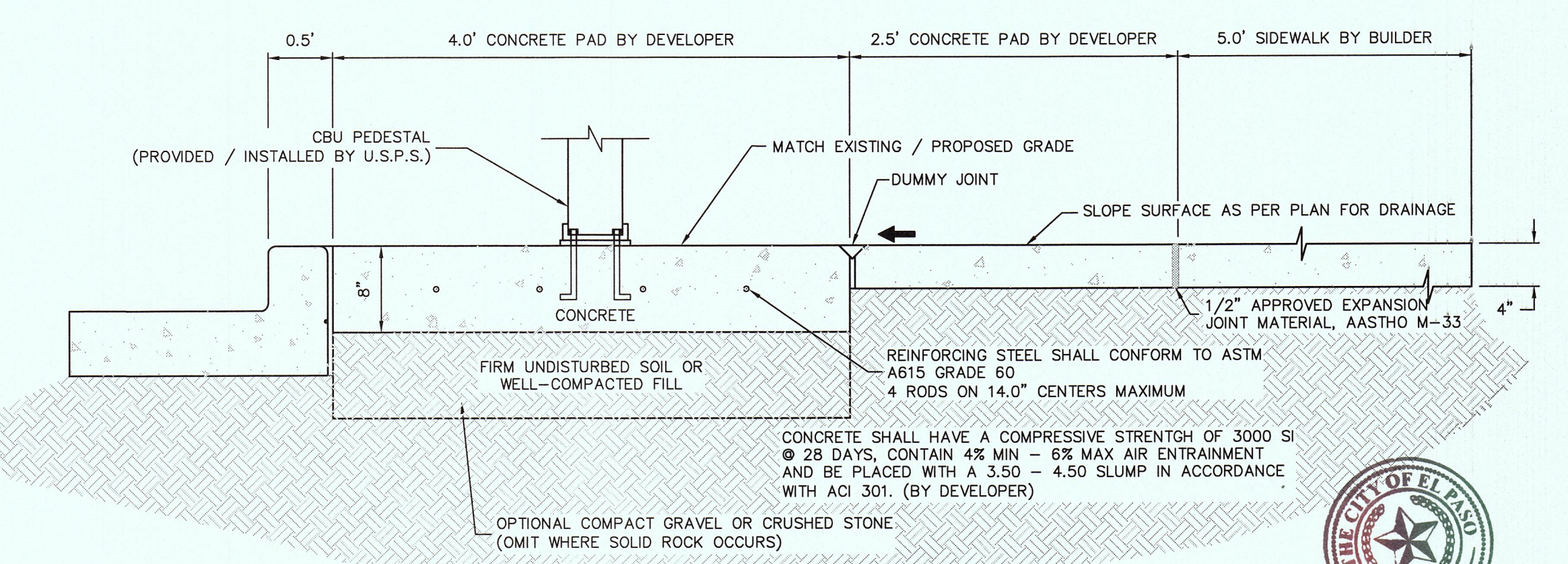


- NOTES:
1. CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH OF 3000 SI @ 28 DAYS, CONTAIN 4% MIN - 6% MAX AIR ENTRAINMENT AND BE PLACED WITH A 3.50 - 4.50 SLUMP IN ACCORDANCE WITH ACI 301. (BY DEVELOPER)
 2. REINFORCING STEEL RODS SHALL CONFORM TO ASTM A615 GRADE 60. (BY DEVELOPER)
 3. ANCHOR BOLTS SHALL CONFORM TO ASTM A 193, GRADE B8M TYPE 316 STAINLESS STEEL. (BY DEVELOPER)

U.S.P.S. APPROVED SPECIFICATIONS - CONCRETE PAD (MULTIPLE UNIT)



PLAN VIEW



CROSS SECTION X-X

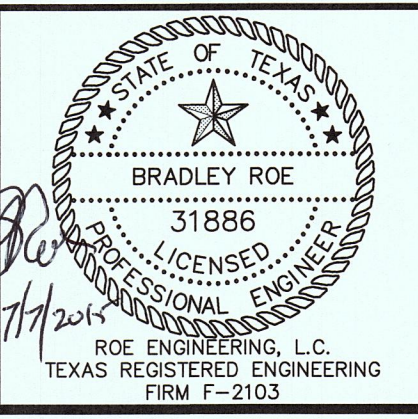
Z:\Clients\Yolo_Verde_Properties\022515-11A_Sierra Del Puerte Phase 1\06-CADD\12-Submittals\Street Intersection Detail\10-14-15 SDP UT ILLUMINATION USPS DETAILS.DWG 07/07/15 11:59PM

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 4802140024B, DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

DATE	REVISIONS	BY	PRIMARY BENCHMARK	SCALE
06-11-15	CITY COMMENTS	IR		
			EXISTING CITY MONUMENT LOCATED AT THE CENTERLINE INTERSECTION OF EDGAR PARK DRIVE AND MOUNTAIN VIEW DRIVE ELEVATION: 4229.73 (NAVD 88) ELEVATION: 4217.92 (CITY DATUM) ELEVATIONS BASED ON NAVD 88 DATUM CONTOUR INTERVAL: MINOR: 2' MAJOR: 10'	HOR: NA VER: W.O. 022515-11A DATE: APRIL 2015 DESIGN BY: IR DRAWN BY: IR/LAJ CHKD. BY: H.P. APPD. BY: B.R.



SIERRA DEL PUERTE UNIT ONE

U.S.P.S. DETAILS

ROE ENGINEERING, LC

601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO. 15 OF 16



STORM WATER POLLUTION PREVENTION PLAN NARRATIVE

Project Title: SIERRA DEL PUERTE UNIT ONE
Operator with Control Over Construction Plans and Specifications: GCGOHL, LLC DANIEL T. KNAPP
Operator's Representative: BRADLEY ROE
Prepared by: Roe Engineering, L.C.

Revisions to SWPPP table with columns for Revision No., Date, Description of Changes, and Signature.

Copy of NOI(s) or Site Notice(s) and TPDES General Permit TXR150000 attached?
Name of Receiving Water(s)

Name of Municipal Separate Storm Sewer System (MS4) Receiving Discharge (if applicable)

Form with fields for Total Area of Property, Total Area of Site to be Disturbed, and Total Area of Off-site Material Storage & Borrow/Fill Sites.

Description of Project/Construction Activity

Sequence of Major Construction Activities. Provide a description of the intended sequence of major activities that will disturb soils.

Table for Sequence of Major Construction Activities with columns for Activity/BMP, Estimated Start, and Estimated Completion.

Existing Topography and Drainage Features. Describe the existing topography, drainage patterns, and natural drainage features including channels, creeks, watercourses, etc.

Table for Existing Topography and Drainage Features with columns for Revision, Date, Page, and Description.

Existing (Pre-construction) Ground Cover. Describe existing vegetation on the drawing. Such features as tree clusters, grassy areas, and unique or sensitive vegetation should be shown.

Table for Existing (Pre-construction) Ground Cover with columns for Type of Grass/Vegetation/Trees, Approximate Density (%), and Site Coverage (%).

Critical Areas. Describe the location, size, and characteristics of any wetlands, streams, or lakes that are adjacent or in close proximity to the site.

Description of Potential Pollutants. Describe potential pollutants, including construction and waste materials, chemicals, paints, solvents, etc. expected to be stored on-site.

Storm Sewer System. Describe any existing onsite storm sewer systems including location of inlets and outfalls, pipe sizes, etc.

Permanent (Post-Construction) Storm Water Management Controls. Provide a description of measures that will be installed to control pollutants (sediment, oil, grease, fertilizer, pesticides, etc.) in storm water discharges that will occur after construction is complete.

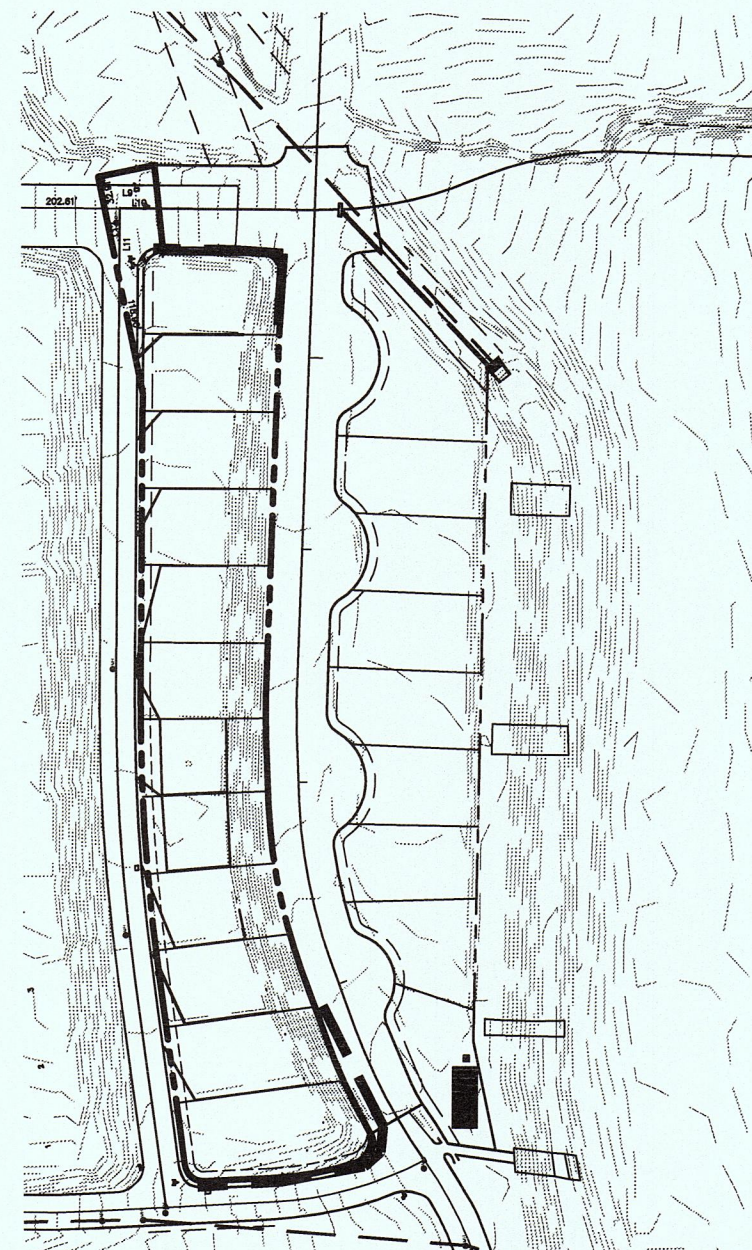
GENERAL CONTRACTOR CERTIFICATION

I Certify Under Penalty Of Law That I Understand The Terms And Conditions Of The National Pollution Discharge Elimination System (NPDES) General Permit That Authorizes Storm Water Discharges Associated With Construction Activity From The Construction Site Identified As Part Of This Certification.

Certification signature form with fields for Name, Address, Telephone, and Date.

LOCATION MAP

SCALE 1" = 200'



LEGEND

SILT FENCE LOCATION

TRAILER AND PORTABLE TOILET

TEN ELEMENTS OF A CONSTRUCTION SWPPP

For each of the following Ten Elements, describe the measures used to address the element. Include the type and location of BMPs used to satisfy the required element and the general timing or sequence for implementation.

1. Limit Soil Disturbance

Provide a description of the areas including natural drainage features, trees and other vegetation, and appropriate buffers that are to be preserved within the construction area and the measures to be implemented to ensure protection.

2. PREVENT SOIL EROSION

Describe the temporary and permanent stabilization practices for disturbed areas of the site, including a schedule of when the practices will be implemented.

1. Contractor Shall Water Down The Grading Area Periodically. So As To Limit The Distribution Of Dust From The Work Site in Compliance With The City Approved Grading Ordinance.
2. Contractor Shall Install Silt Fencing In Accordance With The Details And Specifications, Outlined On This Sheet.

3. PROTECT SLOPES

Describe practices used to protect slopes and divert flows away from exposed soils or disturbed areas.

4. MINIMIZE SEDIMENT LOSS FROM SITE

Describe the practices to lessen the off-site transport of sediment and to reduce generation of dust. Sediment basins are required, where feasible, for common drainage locations that serve an area with ten or more acres disturbed at one time.

Control Flow Rates and Stabilize Channels/Outfalls. Provide a description of velocity dissipation devices used at discharge locations and channel stabilization measures to provide non-erosive flows.

8. Establish Construction Access. Provide a description of measures to minimize the off-site tracking of sediment by vehicles.

7. Protect Drain Inlets. Provide a description of inlet protection measures to prevent sediment from entering the storm drain system.

8. Control Dewatering. Provide a description of controls to prevent the off-site transport of suspended sediments and other pollutants in discharges from dewatering operations.

9. Control Waste and Pollutants. Provide a description of controls to reduce pollutants and spill prevention and response procedures associated with construction and waste materials.

10. Construction Phasing and Project Management. Provide a description of considerations given to project phasing in order to reduce the amount of soil exposed at one time.

SUB - CONTRACTOR CERTIFICATION

I Certify Under Penalty Of Law That I Will Coordinate, Either Through The General Contractor, Owner, Or Directly With The Contractor(s) And/Or Subcontractor(s) Identified In The Pollution Prevention Plan Having Responsibility For Implementing Storm Water Control Measures To Minimize Any Impact My Actions May Have On The Effectiveness Of These Storm Water Control Measures.

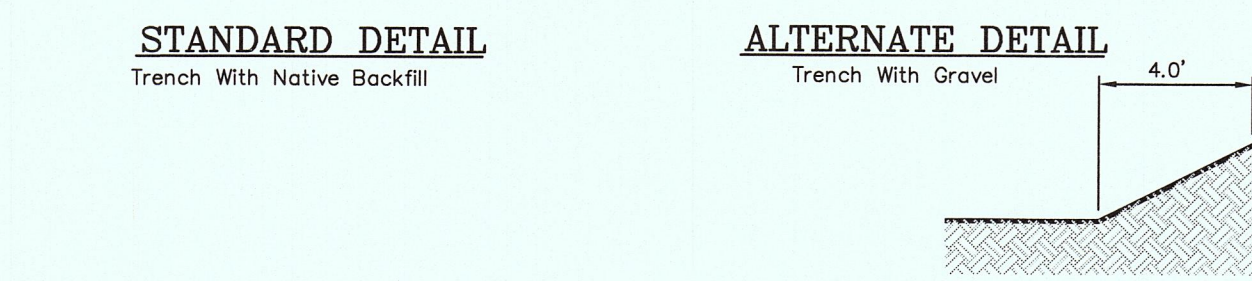
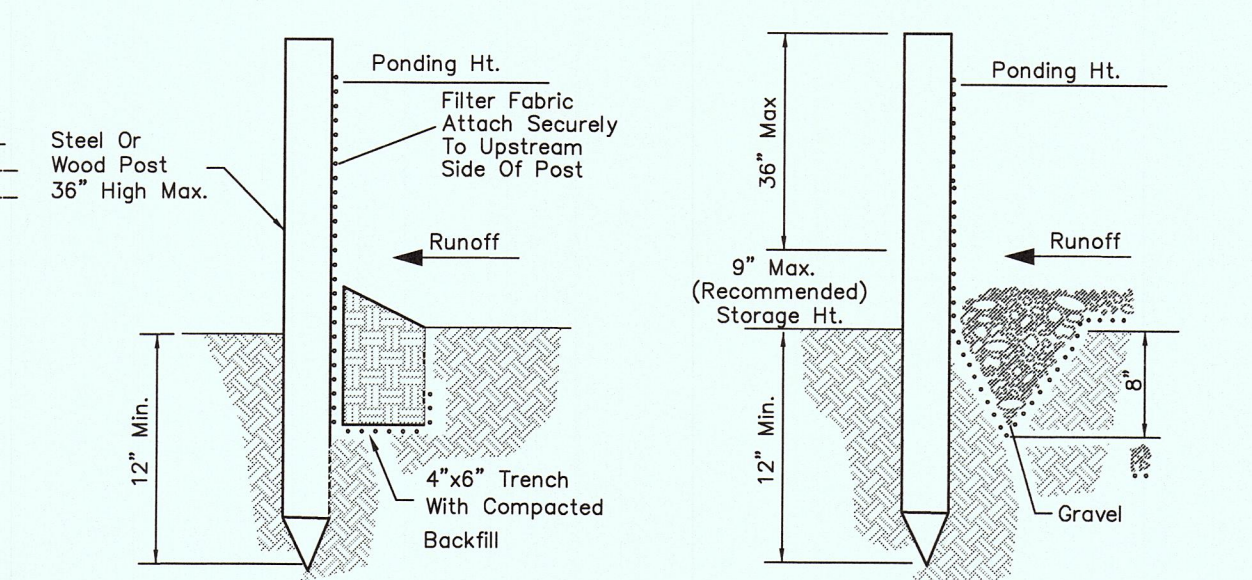
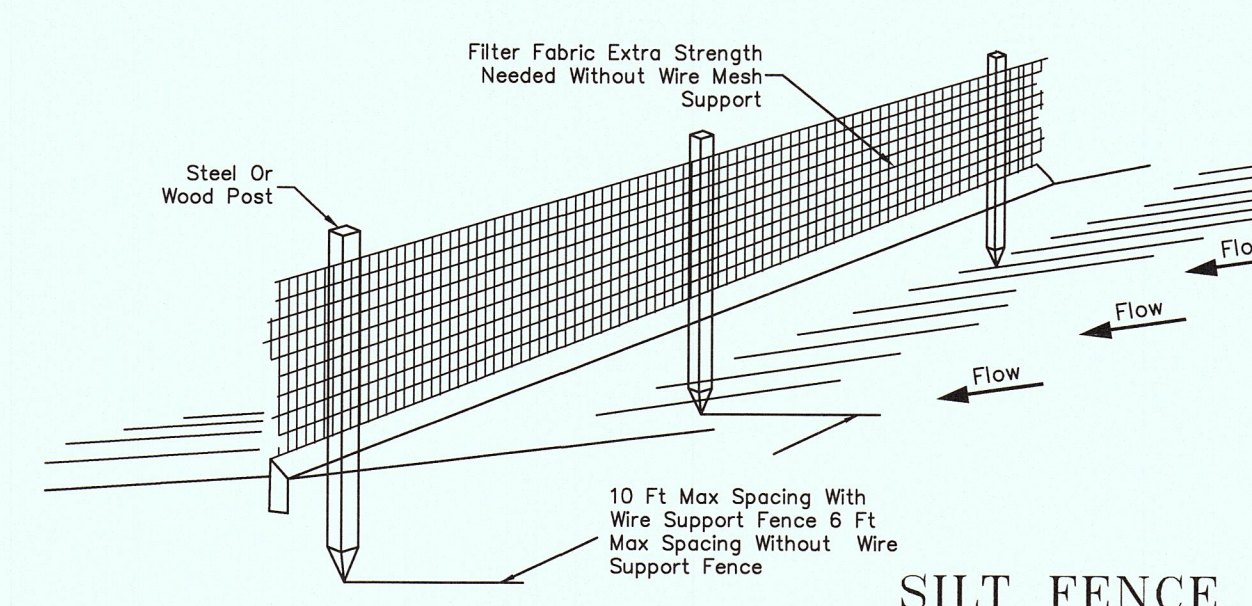
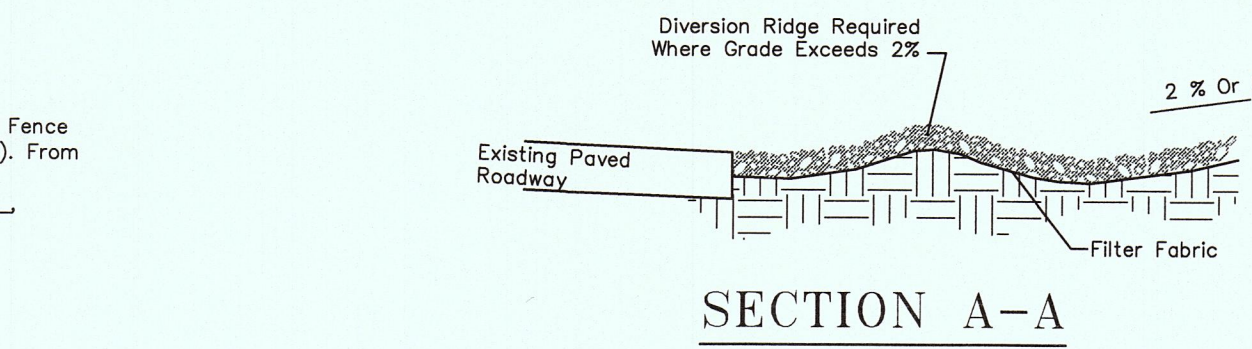
Subcontractor certification signature form with fields for Name, Address, Telephone, and Date.

No off-site Material Storage Areas will be used.

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). From to
2. Perform Roadway Clearing And Grubbing; From to
3. Excavation For Utilities; From to to
4. Complete Lot Grading; From to to
5. Construction Of Site Improvements; to to
6. After Stabilization Of 70% Of Site Is Complete, Remove Temporary Controls In # 1 Above And Submit Notice Of Termination Form To City Engineering And E.P.A.



EROSION AND SEDIMENT CONTROL

- Temporary Seeding
Permanent Planting, Sodding, Or Seeding
Mulching
Silt Retention Blanket
Buffer Zones
Preservation Of Natural Resources
Other:

STRUCTURAL PRACTICES:

- Silt Fences (Temporary)
Hay Bales
Rock Berms
Diversion, Interceptor, Or Perimeter Dikes
Diversion, Interceptor, Or Perimeter Swales
Diversion Dike And Swale Combinations
Pipe Slope Drains
Concrete Flumes
Rock Bedding At Construction Exit (Temporary)
Timber Matting At Construction Exit
Channel Liners
Sediment Traps
Sediment Basins
Storm Inlet Sediment Trap
Stone Outlet Structures
Curbs And Gutters (Permanent)
Storm Drains (Permanent)
Velocity Control Devices
Vegetated Swales & Natural Depressions
Other:

NON-STORMWATER DISCHARGES ALLOWED

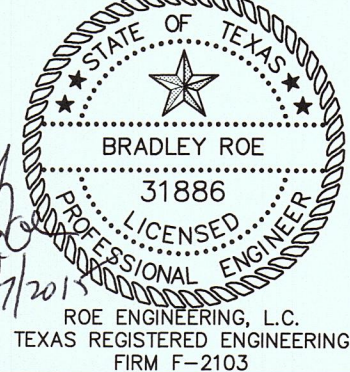
- A. No person shall introduce or cause to be introduced into the municipal separate storm sewer system (MS4) or waters within the jurisdiction of the city any discharge that is not composed entirely of stormwater.
B. It is an affirmative defense to any enforcement action for violation of subsection A of this section that the discharge was composed entirely of one or more of the following categories of discharges:
1. A discharge authorized by, and in full compliance with, an NPDES permit (other than the NPDES permit for discharges from the MS4);
2. A discharge resulting from firefighting;
3. Agricultural stormwater runoff;
4. A discharge from water line flushing, but not including a discharge from water line disinfection by superchlorination or other means unless it contains no harmful quantity of chlorine or any other chemical used in line disinfection;
5. A discharge from lawn watering, landscape irrigation, or other irrigation water;
6. A discharge from a diverted stream flow or natural spring;
7. A discharge from uncontaminated pumped groundwater or rising groundwater;
8. Uncontaminated groundwater infiltration (as defined as 40 CFR Section 35.2005 (20)) to the MS4;

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 gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage 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 there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Owner certification signature form with fields for Name, Address, Telephone, and Date.

THIS SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY BRADLEY ROE, P.E. 31886 ON 05-01-2015. ALTERATION OF A SEALED DOCUMENT WITHOUT PROPER NOTIFICATION TO RESPONSIBLE ENGINEER IS AN OFFENSE UNDER THE TEXAS ENGINEERING PRACTICE ACT.



SIERRA DEL PUERTE UNIT ONE

STORM WATER POLLUTION PREVENTION PLAN

Table with columns for Date, Revisions, By, Primary Benchmark, and Scale. Revision 1: 06-11-15, City Comments, IR, Existing City Monument located at the centerline intersection of Edgar Park Drive and Mountain View Drive.

Table with columns for Hours, Name, Version, Work Order, Date, Design By, Drawn By, Checked By, and Appended By. Hours: NA, Name: W.O., Version: 022515-11A, Work Order: APRIL 2015, Design By: IR, Drawn By: IR/LAJ, Checked By: H.P., Appended By: B.R.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE / EXIT

PLAN VIEW

1. The Entrance Shall Be Maintained In A Condition That Will Prevent Tracking Or Flowing Of Sediment Onto Public Rights-Of-Way. This May Require Top Dressing, Repair And/Or Cleanup Of Any Measures Used To Trap Sediment.
2. When Necessary, Wheels Shall Be Cleaned Prior To Entrance Onto Public Right-Of-Way.
3. When Washing Is Required, It Shall Be Done On An Area Stabilized With Crushed Stone That Drains Into An Approved Sediment Trap Or Sediment Basin.

TEMPORARY GRAVEL ENTRANCE/EXIT NOTES

- 1. The Entrance Shall Be Maintained In A Condition That Will Prevent Tracking Or Flowing Of Sediment Onto Public Rights-Of-Way. This May Require Top Dressing, Repair And/Or Cleanup Of Any Measures Used To Trap Sediment.
2. When Necessary, Wheels Shall Be Cleaned Prior To Entrance Onto Public Right-Of-Way.
3. When Washing Is Required, It Shall Be Done On An Area Stabilized With Crushed Stone That Drains Into An Approved Sediment Trap Or Sediment Basin.

CONSTRUCTION SPECIFICATIONS

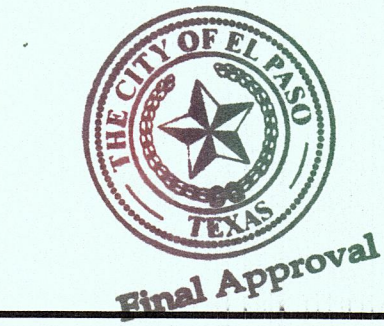
- 1. The Height Of A Silt Fence Shall Not Exceed 36 Inches. Storage Height Shall Never Exceed 18".
2. The Fence Line Shall Follow The Contour As Closely As Possible.
3. If Possible, The Filter Fabric Shall Be Cut From A Continuous Roll To Avoid The Use Of Joints. When Joints Are Necessary, Filter Cloth Shall Be Spliced Only At A Support Post, With A Minimum 6-inch Overlap And Both Ends Securely Fastened To The Post.
4. Posts Shall Be Spaced A Maximum Of 10 Feet Apart And Driven Securely Into The Ground (Minimum Of 12 Inches). When Extra-Strong Filter Fabric Is Used Without The Wire Support Fences, Post Spacing Shall Not Exceed 6 Feet.
5. Turn The Ends Of The Fence Uphill.
6. A Trench Shall Be Excavated Approximately 4 Inches Wide And 6 Inches Deep Along The Line Of Posts And Uphill From The Barrier.
7. When Standard-Strength Filter Fabric Is Used, A Wire Mesh Support Fence Shall Be Fastened Securely To The Uphill Side Of The Posts Using Heavy Duty Wire Staples At Least 1 Inch Long. The Wire Or Hog Rings The Wire Shall Extend Into The Trench A Maximum Of 2 Inches And Shall Not Extend More Than 36 Inches Above The Original Ground Surface.
8. The Standard-Strength Filter Fabric Shall Be Stapled Or Wired To The Fence, And 6 Inches Of The Fabric Shall Extend Into The Trench. The Fabric Shall Not Extend More Than 36 Inches Above The Original Ground Surface. Filter Fabric Shall Not Be Stapled To Existing Trees.
9. When Extra-Strength Filter Fabric And Closer Post Spacing Are Used, The Wire Mesh Support Fence May Be Eliminated In Such A Case, The Filter Fabric Is Stapled Or Wired Directly To The Posts.
10. The Trench Shall Be Backfilled And The Soil Compacted Over The Top Of The Filter Fabric.
11. Silt Fences Placed At The Toe Of A Slope Shall Be Set At Least 6 Feet From The Toe In Order To Increase Ponding Volume.
12. Silt Fences Shall Be Removed When They Have Served Their Useful Purpose, But Not Before The Uphill Area Has Been Permanently Stabilized, And Any Sediment Stored Behind The Silt Fence Has Been Removed.

VII 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 And Periods Will Be Conducted Monthly. Best Management Practices And Pollution Control Procedures Shall Be Inspected For Adequacy. A Report Summarizing The Scope Of Inspection Shall Be Done & Retained Along With The SWPPP.

VIII 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 Stopping 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, Fatsawork, Piling Debris Or Other Obstructions Placed During Construction Operations That Are Not A Part Of The Finished Work.
a. Manufacturer's Recommended Methods For Spill Cleanup Shall Be Cleared Posted And Site Personnel Shall Be Made Aware Of The Procedures.
b. Materials And Equipment Necessary For Spill 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



ROE ENGINEERING, LC

601 N. Cotton St. Suite No.6 El Paso, Tx, 79902
(915) 533-1418 - FAX: (915) 533-4972

SHEET NO. 16 OF 16

FLOOD NOTE:

NOTE: THE ABOVE REFERENCED PROPERTY IS WITHIN ZONE "C". (EXPLANATION: AREAS OF MINIMAL FLOODING) ACCORDING TO THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAPS, AS PER AREA COMMUNITY PANEL NO. 48021400248. DATED OCTOBER 15, 1982.

This document, whether in hard copy or machine readable format, is owned by Roe Engineering, L.C. and an instrument of services in respect to the project for which it was prepared. This document is not intended or authorized for reuse by any party on extensions of such project or any other project. Any reuse, including copying and/or modifying the document, without written permission from Roe Engineering, L.C., for the specific purpose intended may be a violation of law. Unauthorized use of this material may result in civil and/or criminal penalties.

2: \Clients\Voice Veech Properties\022515-11A Sierra Del Puerte Phase 1\06-11-15-Environ Control Plan\V.16-17 SWPP - PLAN\DWG 07/07/15 L150PW