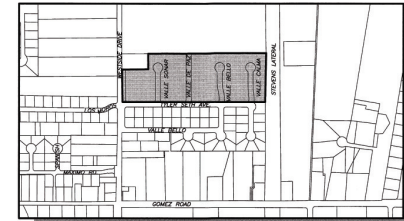
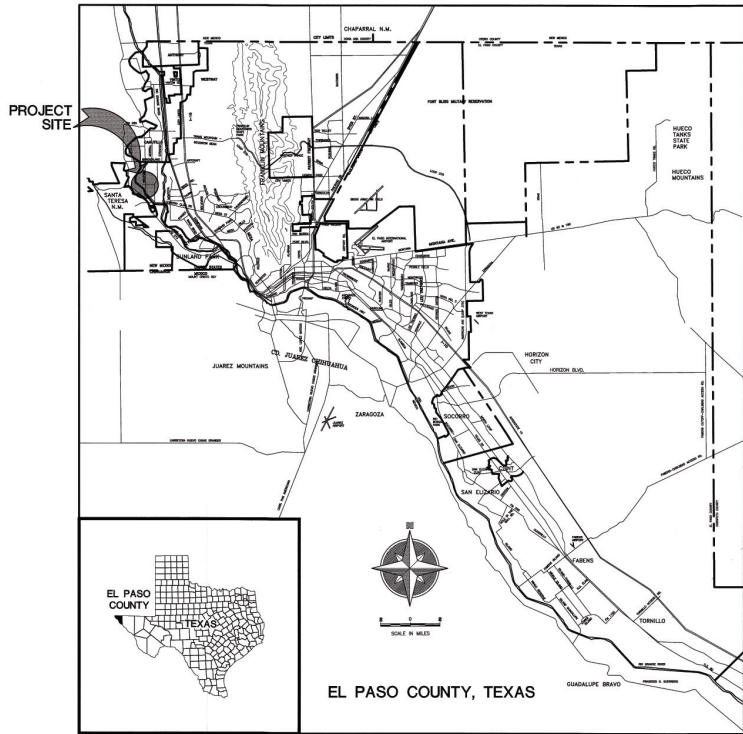


SERENO VALLEY ESTATES SUBDIVISION IMPROVEMENT PLANS

TRACTS 1-L-1 & 1-L-2, BLOCK 10, UPPER VALLEY SURVEYS,
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING: ±16.52-ACRES

CITY MAP

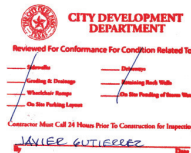


LOCATION MAP

SCALE: 1" = 600'

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PARKS DEPARTMENT
REVIEWED BY *Cheryl...* for 01/15/2015



PREPARED BY:
SITWORK
ENGINEERING, LLC
TX REG. # 7-5807
444 DESERTE CENTER, SUITE 134 - EL PASO, TX - 79902
PHONE: (915) 301-8033 - FAX: (915) 301-8055

OWNERS:
C&R PROPERTIES
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EL PASO, TX 79901

LANDSCAPE CONSULTANT:
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RIO AGUA DULCE, LP
664 SUNLAND PARK DR.
EL PASO, TX 79912



Land-Mark Professional
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(915) 588-1300
email: Land-MarkSurvey.com
"Serving Texas, New Mexico and Arizona"
CONTACT: LARRY DREWES, R.P.L.S.

SERENO VALLEY ESTATES

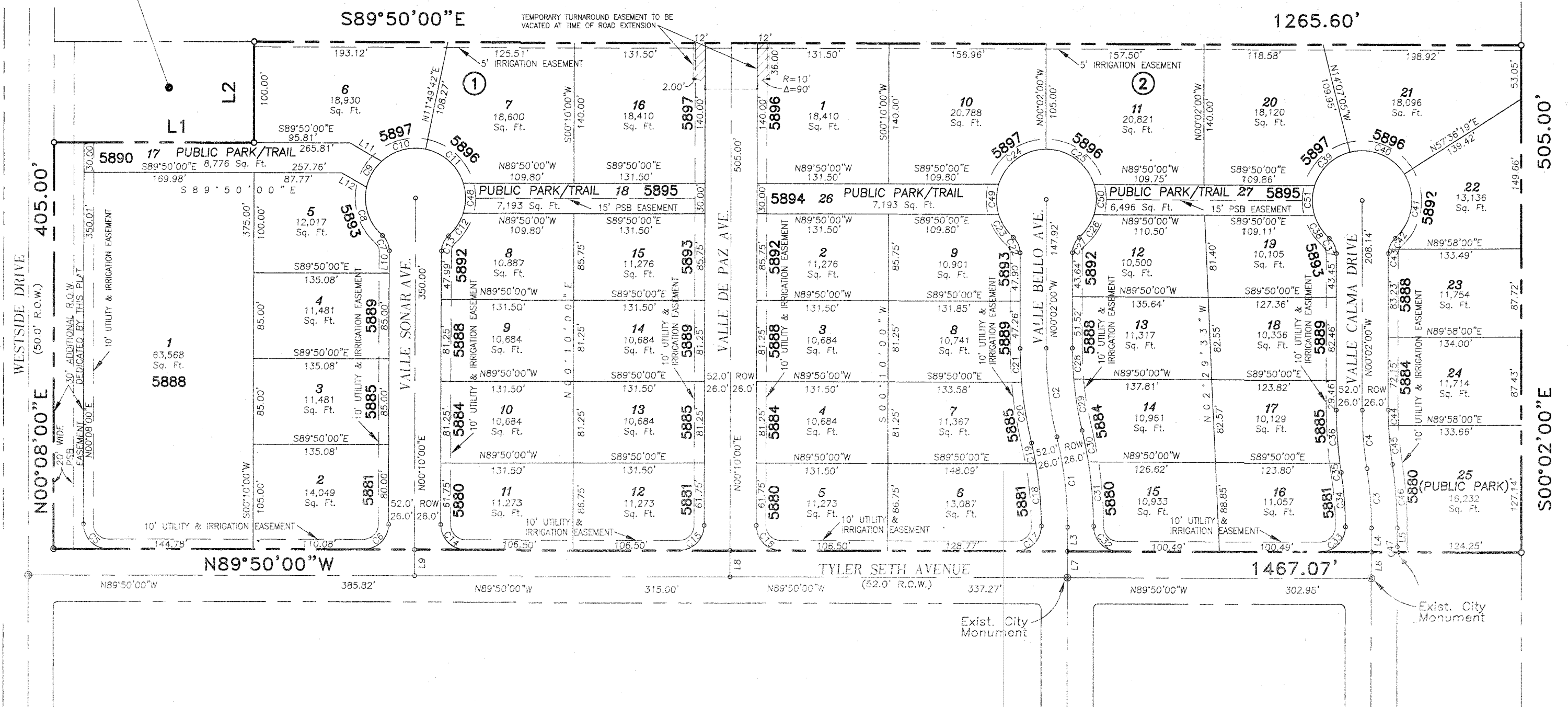
TRACTS 1L1 & 1L2, BLOCK 10, UPPER VALLEY SURVEYS,
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING 16.540± ACRES

PLAT NOTES AND RESTRICTIONS

- BEARINGS ARE BASED ON UNDERLYING DEEDS.
- ACCORDING TO THE FEDERAL EMERGENCY MAPPING AGENCY, FLOOD INSURANCE RATE MAP, PANEL No. 480212 0125B, DATED SEPTEMBER 4, 1991, BY GRAPHIC PLOTTING ONLY, THIS PROPERTY APPEARS TO LIE WITHIN ZONE "X" WHICH BY DEFINITIONS IS NOT A SPECIAL FLOOD HAZARD ZONE.
- SET 5/8" REBAR WITH CAP STAMPED "LAND-MARK TX 5710" AT ALL EXTERIOR BOUNDARY CORNERS UNLESS OTHERWISE NOTED.
- TAX CERTIFICATE(S) FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORDS SECTION.
INSTRUMENT No. 20170044272 DATE 12-20-17
- RESTRICTIVE COVENANTS FOR THIS SUBDIVISION ARE FILED IN THE OFFICE OF THE COUNTY CLERK, DEED AND RECORDS SECTION.
INSTRUMENT No. 20170094274 DATE 12-20-17
- THIS IS TO CERTIFY THAT WATER AND SEWER SERVICES WILL BE PROVIDED TO THE SERENO VALLEY ESTATES SUBDIVISION BY THE EL PASO WATER UTILITIES IN ACCORDANCE WITH ITS REGULATIONS, AND WATER AND SEWER SERVICES WILL BE EXTENDED TO THE SUBDIVISION FROM EXISTING FACILITIES LOCATED ON WESTSIDE DRIVE, AND WILL BE CONSTRUCTED TO SERVE THE SUBDIVISION.
- ALL LOTS IN THE SUBDIVISION ARE SUBJECT TO ON-SITE PONDING. LOT OWNERS ARE RESPONSIBLE FOR MAINTAINING ADEQUATE PROVISIONS TO ACCOMMODATE ALL STORMWATER RUNOFF GENERATED FROM THEIR RESPECTIVE LOT PLUS ONE-HALF THE RUNOFF GENERATED FROM ALL ADJUTING STREET RIGHT-OF-WAY DIRECTLY FRONTING THE LOT. THE POND DEPTH AND LOT GRADING REQUIREMENTS ARE AS PER APPROVED GRADING AND DRAINAGE PLAN FOR THE SUBDIVISION.
 - WALLS CONSTRUCTED ABUTTING STREET RIGHT-OF-WAYS SHALL BE CONSTRUCTED WITH A SERIES OF DRAIN PIPES ALLOWING THE STREET RUNOFF TO BE CONVEYED TO THE SUBJECT PROPERTY.
 - ON-SITE PONDING AREAS SHALL HAVE MAXIMUM ONE (VERTICAL) TO THREE (HORIZONTAL) SIDE SLOPES AND A MAXIMUM DEPTH OF TWELVE (12) INCHES BASED ON A ONE HUNDRED YEAR STORM.
 - PERMANENT ELEVATION MARKERS SHALL BE INSTALLED TO DEFINE THE LEVELS TO BE MAINTAINED TO ENSURE THE EFFECTIVENESS OF ON-SITE PONDING. PERMANENT ELEVATION MARKERS SHALL NOT BE MOVED, COVERED, OR ALTERED WITHOUT WRITTEN PERMISSION FROM CITY ENGINEER.
 - THE CITY AND/OR ITS REPRESENTATIVE IS GRANTED PERMANENT RIGHT OF ACCESS TO INSPECT THE PONDING AREAS AND PERMANENT ELEVATION MARKERS.
 - FILLING OR CHANGING THE POND, OR ALLOWING THE POND TO BE FILLED OR CHANGED TO AN ELEVATION GREATER THAN ESTABLISHED BY THE PERMANENT ELEVATION MARKERS, IS PROHIBITED.
 - ON-SITE PONDING AREAS AND PERMANENT ELEVATION MARKERS SHALL BE CONSTRUCTED AND INSPECTED PRIOR TO BUILDING OCCUPANCY. PERMANENT CERTIFICATE OF OCCUPANCY, REQUIRED TO OBTAIN UTILITY SERVICE, WILL BE ISSUED ONLY AFTER THE CITY OF EL PASO HAS PERFORMED THE INSPECTION.
 - NO PERSON SHALL BE PERMITTED TO IMPAIR THE FUNCTIONALITY OF AN ON-SITE POND. NO MORE THAN FIFTY PERCENT (50%) OF THE AREA OF ANY RESIDENTIAL LOT CONVEYED BY DEED SHALL BE COVERED BY IMPROVEMENTS, EITHER TEMPORARY OR PERMANENT, WHICH SHED STORMWATER, INCLUDING BUT NOT LIMITED TO, BUILDINGS, DRIVEWAYS, PATIOS, DECKS OR LANDSCAPING UNDERLAIN WITH PLASTIC SHEETING OR OTHER IMPERMEABLE MATERIAL.
 - IN THE EVENT THAT THE FUNCTIONALITY OF AN ON-SITE POND BECOMES IMPAIRED WHETHER BY ACT OF MAN OR NATURE, THE OWNER OF THE LOT ON WHICH THE IMPAIRED POND IS LOCATED SHALL PERFORM ALL CORRECTIVE ACTIONS REQUIRED TO RESTORE THAT FUNCTIONALITY.
 - ANY OWNER NOTIFIED IN WRITING BY THE CITY ENGINEER OF CORRECTIVE ACTIONS REQUIRED TO RESTORE THE FUNCTIONALITY OF AN ON-SITE POND OR DRAINAGE PROBLEM ON THE LOT SHALL COMPLY WITHIN FORTY-FIVE CALENDAR DAYS OF RECEIPT OF SUCH NOTICE, PROVIDED, HOWEVER, THAT NOTHING HEREIN SHALL PREVENT THE CITY FROM MANDATING AN EARLIER TIME FOR COMMENCEMENT OF COMPLETION DURING TIMES OF EMERGENCY, WHERE THERE IS IMMINENT DANGER OF LOSS OF LIFE, LIMB OR PROPERTY.
 - OWNER OF PROPERTY UTILIZING ON-SITE PONDING WAIVES ANY CLAIM OR CAUSE OF ACTION AGAINST THE CITY, EPWU-PSB, OFFICIALS OR EMPLOYEES, FOR ANY DEATH, INJURY OR PROPERTY DAMAGE RESULTING FROM ALTERATION OF THE PONDING CAPACITY FOR THAT LOT, INCLUDING LACK OF MAINTENANCE.
 - THESE ON-SITE PONDING REQUIREMENTS SHALL BE ENFORCED BY INJUNCTIVE RELIEF WITHOUT THE REQUIREMENT FOR BOND OR OTHER SECURITY.
 - THE CONVEYANCE OF PROPERTY PERMITTING ON-SITE PONDING SHALL DECLARE IN CONSPICUOUS LANGUAGE IN THE DEED THAT THE PROPERTY IS SUBJECT TO ON-SITE PONDING REQUIREMENTS, MAINTENANCE OF ELEVATION MARKERS, STANDING WATER ON LOT, AND INGRESS AND EGRESS FOR INSPECTION AS STATED ON THE PLAT.

TRACT 1L, BLOCK 10, UPPER VALLEY SURVEYS
GARCIA, BERNARDO & MARIA L.
VOLUME 4019, PAGE 0682

TRACT 1H, BLOCK 10, UPPER VALLEY SURVEYS
G.E. LAND DEVELOPMENT CORP.
VOLUME 3873, PAGE 0658



BLOCK 1,
WESTSIDE ADDITION
VOLUME 78, PAGE 22,
FILE No. 20030025177

BLOCK 2,
WESTSIDE ADDITION
VOLUME 78, PAGE 22,
FILE No. 20030025177

DEDICATION
PALO VERDE DEVELOPMENT, LLC, the owners of this land, do hereby present this map and dedicate their respective portions of property to the use of the public, the streets, drives, public park & public park/trails, and utility/irrigation easements and additional dedicated right-of-way as hereon laid down and designated, including easements for overhead of service wires for pole type utilities and the right for installation of service poles alongside lot lines as may be required, easements for buried service wires, conduits and pipes for underground utilities, and the right to ingress and egress for service and construction, and the right to trim interfering trees and shrubs. PALO VERDE DEVELOPMENT, LLC, hereby reserve for themselves and their successors and assigns, all surface water rights and all ground water available to, or that may be produced from any of the foregoing dedicated areas.
Witness my signature this 7th day of December 2017.
CARLOS MURQUIA
PALO VERDE DEVELOPMENT, LLC

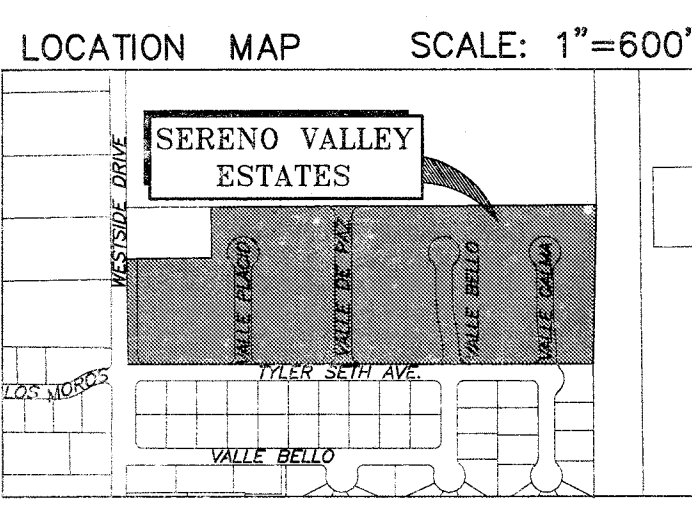
ACKNOWLEDGEMENT
STATE OF TEXAS
COUNTY OF EL PASO
Before me, the undersigned authority, on this day personally appeared _____ known to me to be the persons whose names are subscribed to the foregoing instrument and acknowledged to me that they executed the same as the act and deed for the purpose and consideration herein expressed.
Given under my hand and seal of office this 7th day of December 2017.
Notary Public in and for El Paso County My Commission Expires 9/31/2019

ACKNOWLEDGEMENT
STATE OF TEXAS
COUNTY OF EL PASO
Before me, the undersigned authority, on this day personally appeared _____ known to me to be the persons whose names are subscribed to the foregoing instrument and acknowledged to me that they executed the same as the act and deed for the purpose and consideration herein expressed.
Given under my hand and seal of office this _____ day of _____ 2017.
Notary Public in and for El Paso County My Commission Expires _____

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 19 day of DECEMBER 2017, A.D.
Approved for filing this _____ day of _____ 2017, A.D.
Executive Secretary _____ Chairperson _____
Planning Sections _____

FILING
Filed and recorded in the office of the County Clerk of El Paso County, Texas, this 20th day of DECEMBER, 2017, A.D. in File No. 20170094271
County Clerk _____
County Clerk _____ by Deputy _____

SCHOOL DISTRICT:
CANUTILLO INDEPENDENT SCHOOL DISTRICT



LINE TABLE

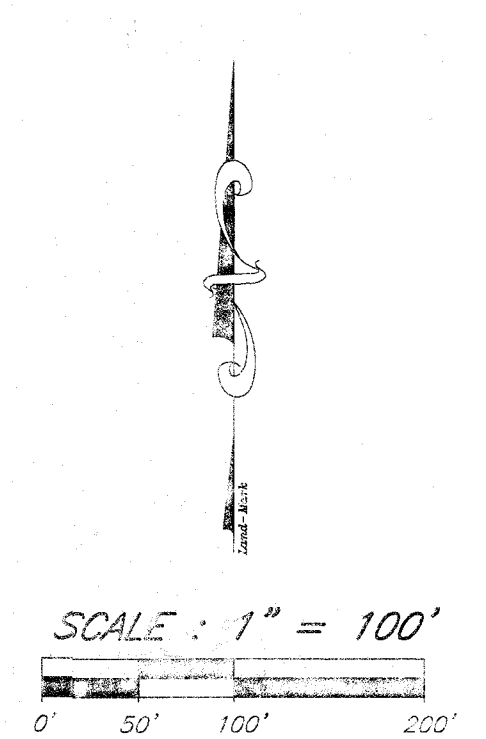
LINE	BEARING	LENGTH
L1	S89°50'00"E	200.00'
L2	N00°08'00"E	100.00'
L3	N00°10'00"E	24.05'
L4	N00°10'00"E	24.05'
L5	N00°10'00"E	18.71'
L6	N00°10'00"E	26.00'
L7	N00°10'00"E	26.00'
L8	N00°10'00"E	26.00'
L9	N00°10'00"E	26.00'
L10	S00°10'00"W	22.24'
L11	S59°50'00"E	36.32'
L12	S59°50'00"E	28.28'

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C1	375.00'	90.54'	45.49'	90.32'	N06°45'01"W	13°50'02"
C2	375.00'	89.23'	44.83'	89.02'	N06°51'01"W	13°38'03"
C3	375.00'	59.81'	29.97'	59.75'	N04°24'09"W	9°08'19"
C4	375.00'	58.50'	29.31'	58.44'	N04°30'09"W	8°56'19"
C5	25.00'	39.26'	24.99'	35.35'	N44°51'00"W	89°58'00"
C6	25.00'	39.27'	25.00'	35.36'	S45°10'00"W	90°00'00"
C7	20.00'	17.08'	9.10'	16.56'	S24°17'32"E	48°55'04"
C8	50.00'	53.63'	29.72'	51.10'	S18°01'15"E	61°27'36"
C9	50.00'	30.47'	15.72'	30.00'	S30°10'00"W	34°54'55"
C10	50.00'	47.30'	25.59'	45.56'	S74°43'35"W	54°12'15"
C11	50.00'	53.13'	29.38'	50.66'	N47°43'53"W	60°52'51"
C12	50.00'	27.45'	14.08'	27.11'	N33°21'15"E	31°27'36"
C13	20.00'	17.08'	9.10'	16.56'	N24°37'32"E	48°55'04"
C14	25.00'	39.27'	25.00'	35.36'	N44°50'00"W	90°00'00"
C15	25.00'	39.27'	25.00'	35.36'	S45°10'00"W	90°00'00"
C16	25.00'	39.27'	25.00'	35.36'	N44°50'00"W	90°00'00"
C17	25.00'	39.34'	25.07'	35.41'	S45°04'59"W	90°10'03"
C18	349.00'	62.02'	31.09'	61.94'	S05°05'30"E	10°10'54"
C19	349.00'	21.23'	10.62'	21.22'	S11°55'30"E	3°29'05"
C20	401.00'	61.39'	30.75'	61.33'	S09°16'54"E	8°42'17"
C21	401.00'	34.03'	17.03'	34.02'	S02°27'53"E	4°51'46"
C22	20.00'	17.08'	9.10'	16.56'	S24°29'32"E	48°55'04"
C23	50.00'	27.63'	14.18'	27.28'	S33°07'15"E	31°39'36"
C24	50.00'	33.13'	36.56'	59.02'	S53°47'44"W	72°20'33"
C25	50.00'	53.48'	36.82'	59.30'	N53°39'44"W	72°44'32"
C26	50.00'	37.28'	13.99'	25.94'	N33°15'16"E	37°13'36"

CURVE TABLE

CURVE	RADIUS	LENGTH	TANGENT	CHORD	BEARING	DELTA
C27	20.00'	17.08'	9.10'	16.56'	N24°25'32"E	48°55'04"
C28	349.00'	30.98'	15.50'	30.97'	N02°34'36"W	5°05'12"
C29	349.00'	52.06'	26.08'	52.02'	N09°23'37"W	8°32'51"
C30	401.00'	31.84'	15.93'	31.83'	N11°23'34"W	4°32'58"
C31	401.00'	64.09'	32.11'	64.02'	N04°32'22"W	8°09'26"
C32	25.00'	39.21'	24.94'	35.32'	S45°10'00"W	90°00'00"
C33	25.00'	39.34'	25.07'	35.41'	S45°04'59"W	90°10'03"
C34	349.00'	54.64'	27.38'	54.59'	S04°29'11"E	8°58'16"
C35	401.00'	9.37'	4.69'	9.37'	S08°18'09"E	1°20'20"
C36	401.00'	53.19'	26.63'	53.15'	S03°49'59"E	7°35'59"
C37	20.00'	17.08'	9.10'	16.56'	S24°29'32"E	48°55'04"
C38	50.00'	27.63'	14.18'	27.28'	S33°07'15"E	31°39'36"
C39	50.00'	30.84'	27.86'	48.88'	S48°45'11"W	58°52'28"
C40	50.00'	62.59'	36.14'	58.58'	N68°15'23"W	71°43'23"
C41	50.00'	70.93'	42.92'	65.13'	N08°14'41"E	81°18'45"
C42	20.00'	12.54'	6.49'	12.34'	N30°55'00"E	35°55'06"
C43	20.00'	4.53'	2.28'	4.52'	N06°27'28"E	12°58'56"
C44	349.00'	15.29'	7.64'	15.29'	N01°12'17"W	2°30'35"
C45	349.00'	39.15'	19.60'	39.14'	N05°45'27"W	6°25'44"
C46	401.00'	63.96'	32.05'	63.88'	N04°24'09"W	8°08'19"
C47	20.00'	5.40'	2.72'	5.39'	N07°35'23"W	15°28'47"
C48	50.00'	30.47'	15.72'	30.00'	S00°10'00"W	34°54'55"
C49	30.00'	30.47'	15.72'	30.00'	N00°10'00"E	34°54'55"
C50	50.00'	30.47'	15.72'	30.00'	S00°10'00"W	34°54'55"
C51	50.00'	30.47'	15.72'	30.00'	N00°10'00"E	34°54'55"



Subdivision Improvement plans prepared by and under the supervision of Sitework Engineering, LLC

PREPARED BY: **SITWORK ENGINEERING, LLC**
1420 Bassamer Drive, Suite "A", El Paso, Texas 79902
PHONE: (915) 598-1300 FAX: (915) 598-1300

ENGINEERING AND PLANNING CONSULTATION BY: **SITWORK ENGINEERING, LLC**
444 EXECUTIVE CENTER, SUITE 134 EL PASO, TX 79902
(915) 351-8033

OWNERS: PALO VERDE DEVELOPMENT, LLC
303 N. OREGON, SUITE 200 EL PASO, TEXAS 79901
CONTACT: MR. CARLOS MURQUIA

ENGINEER: **LARRY L. DREWES, R.P.L.S.**
1420 Bassamer Drive, Suite "A", El Paso, Texas 79902
(915) 598-1300
"Serving Texas, New Mexico and Arizona"
CONTACT: LARRY L. DREWES, R.P.L.S.

SURVEYOR: **LARRY L. DREWES, R.P.L.S.**
1420 Bassamer Drive, Suite "A", El Paso, Texas 79902
(915) 598-1300
"Serving Texas, New Mexico and Arizona"
CONTACT: LARRY L. DREWES, R.P.L.S.

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

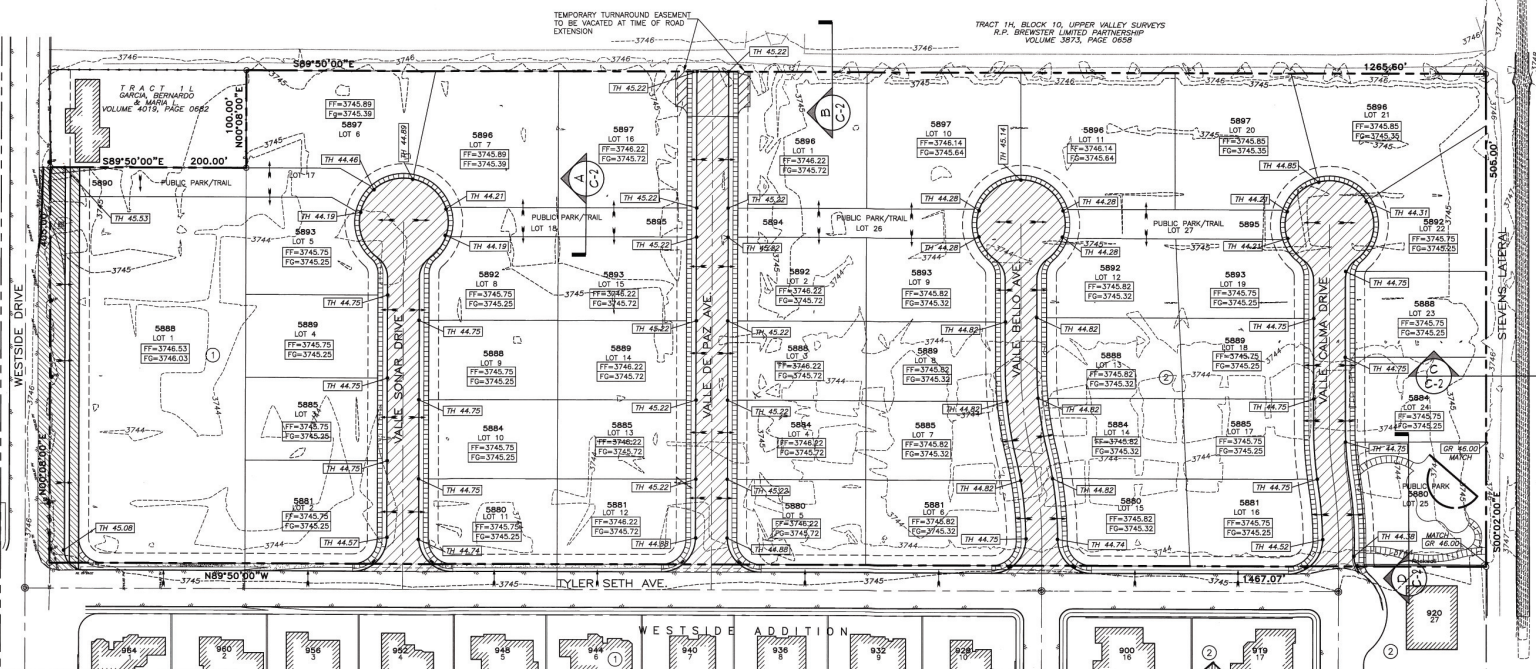
JORGE A. GARCIA, P.E.
Licensed Professional Engineer
Texas License No. 86437

LARRY L. DREWES, R.P.L.S.
Registered Professional Land Surveyor
Texas License No. 4869

12-06-17
REGISTERED PROFESSIONAL LAND SURVEYOR
4869
LARRY L. DREWES

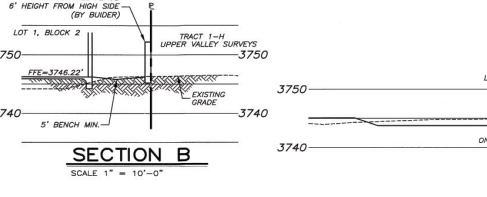
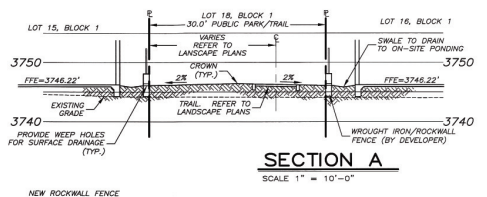
GENERAL NOTES:

- THE EXISTING TOPOGRAPHIC/BOUNDARY INFORMATION ON THIS DRAWING WAS PROVIDED BY LANDMARK SURVEYING. THE PROJECT CIVIL ENGINEER MAKES NO GUARANTEE AS TO THE ACCURACY OF THIS INFORMATION.
- THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO THE WORK. ANY DISCREPANCIES NOTED SHALL BE REPORTED IMMEDIATELY TO THE PROJECT CIVIL ENGINEER. OTHERWISE, THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR THEIR CORRECTNESS.
- ALL REQUIRED LABOR, TOOLS, EQUIPMENT, AND SUPERVISION SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE PROVIDED AT NO ADDITIONAL COST TO OWNER.
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH THE OWNER. ALL APPLICABLE SAFETY CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO OSHA REQUIREMENTS, SHALL BE STRICTLY ENFORCED. THE CONTRACTOR SHALL LOCATE AND PROTECT ALL UNDERGROUND UTILITY LINES. CONTRACTOR SHALL REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL WATER CONSTRUCTION SITE AREA A MINIMUM OF TWICE A DAY TO KEEP SOIL TO A MINIMUM - ONCE IN THE MORNING AND ONCE IN THE AFTERNOON. THIS SHALL ALSO BE DONE ON WEDNESDAYS AND HOLIDAYS.
- CONTRACTOR SHALL PREVENT THE EROSION OF SILT, SEDIMENT, AND DEBRIS FROM THE CONSTRUCTION SITE ONTO ADJACENT PROPERTIES AND STREETS. THIS MAY BE ACCOMPLISHED BY ERECTING EARTHEN BERM AND/OR SILT FENCES, AND CONSTRUCTING A TYPE 1 CONSTRUCTION ERTI REFER TO STORMWATER POLLUTION PREVENTION PLAN FOR ADDITIONAL INFORMATION.
- ALL GRADING WORK SHALL CONFORM TO THE CITY OF EL PASO GRADING ORDINANCE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING IMPROVEMENTS IN THE PROJECT AREA AND HIS WORTHY. ANY DAMAGES RESULTING FROM CONTRACTORS WORK SHALL BE REPAIRED TO ITS ORIGINAL CONDITION OR BETTER BY CONTRACTOR, AT NO COST TO OWNER.
- CONTRACTOR SHALL INSURE THAT THE SLOPE WITHIN ALL WHEELCHAIR ACCESSIBLE PARKING STALLS AND AISLES DOES NOT EXCEED 2% IN ANY DIRECTION.
- FILL MATERIALS FOR SITE GRADING AND BACKFILL WILL CONFORM TO THE SPECIFIED REQUIREMENTS IN THE PROJECT GEOTECHNICAL RECOMMENDATIONS. IN THE ABSENCE OF GEOTECHNICAL RECOMMENDATIONS, FILL MATERIAL MAY CONSIST OF ON-SITE AND/OR IMPORTED MATERIALS IN COMPLIANCE WITH THE FOLLOWING:
 - FILL MATERIALS SHALL BE FREE OF ANY ORGANIC OR DELETERIOUS SUBSTANCES AND SHALL NOT CONTAIN ROCKS OR LUMPS OVER 4 INCHES IN GREATEST DIMENSION.
 - FILL MATERIALS SHALL BE CLASSIFIED IN ACCORDANCE WITH ASTM D2487. SOILS CLASSIFIED AS OK, GP, CC, GM, GC, GM-0, SC, SM, SC-0, SM-0, SC-0, SM-0, SP, OR SH, AND CONSIDERED SATISFACTORY. SOILS WITH A PLASTICITY INDEX OF GREATER THAN 12 OR OF CLASSIFIED AS FI, CI, OH, ML, CL, OR CH SHALL BE CONSIDERED UNSATISFACTORY.
 - THE SURFACE ON WHICH FILL MATERIAL IS TO BE PLACED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES, WATERED TO ADD THE AMOUNT OF MOISTURE REQUIRED FOR OPTIMUM COMPACTION, AND THEN COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
 - FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES UNCOMPACTED DEPTH, WITH MOISTURE CONTENT AT PLUS OR MINUS 2 PERCENT OF OPTIMUM. EACH LIFT SHALL BE COMPACTED TO 95 PERCENT OF MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
- CONTRACTOR TO INSTALL ALL TRAFFIC CONTROL DEVICES DURING THE CONSTRUCTION OF THE NEW DRIVEWAY PER THE CURRENT MUTCD STANDARD APPLICABLE FOR SHOULDER WORK.
- RETAINING WALLS WILL BE REQUIRED WHERE THERE IS A GRADE DIFFERENCE OF 2 OR MORE FEET BETWEEN LOTS AND STREET.
- DEVELOPER SHALL COMPLY WITH SECTION 13.08 OF THE EL PASO MUNICIPAL CODE REGARDING EXCAVATIONS ON PUBLIC R.O.W.
- 85% COMPACTION REQUIRED ON CUTS AND 95% COMPACTION ON FILLS. 95% COMPACTION REQUIRED FOR STRUCTURES PER ASTM D-1557.
- THE CONTRACTOR SHALL NOTIFY THE OWNER, OR ITS REPRESENTATIVE, IN SUFFICIENT TIME IN ADVANCE OF DELIVERY OF MATERIALS TO BE SUPPLIED BY HIM UNDER THIS PROJECT, IN ORDER THAT THE OWNER MAY ARRANGE, IF DESIRED, INSPECTION AND TESTING OF MATERIALS.
- ALL WASTE MATERIALS INCLUDING EXCAVATION, CURBING, PAVEMENT, ETC. SHALL BE DISPOSED OF AS DESIGNATED BY THE OWNER OR HIS REPRESENTATIVE.
- DEVELOPER SHALL COMPLY WITH ADA REQUIREMENTS FOR THE SUBDIVISION IMPROVEMENTS.
- DEVELOPER IS RESPONSIBLE FOR THE CONSTRUCTION OF ALL ACCESSIBLE RAMPS AND ALL ROADS RETAINING WALLS, EQUAL TO OR HIGHER THAN 4 FT.



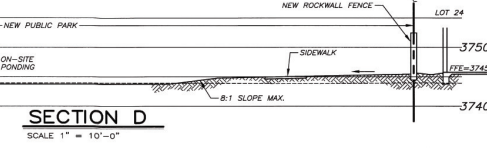
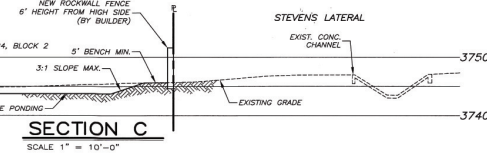
PERMIT CLOSEOUT PROCEDURE

- CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE CITY REQUIRED WARRANTY AND GRADING PERMIT CLOSE-OUT PROCEDURE. REFER TO THE FOLLOWING CITY ORDINANCE EXCERPTS:
 - 18.44.000 - Warranty: Any person issued a permit shall agree to 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 OSP (Grading Stabilization Plan), whichever 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.
 - 18.44.220 - Permit close-out procedure: After the permittee completes the grading under the permit, the permit shall be closed. As part of the close-out procedure, the applicant must submit the following to the city:
 - A statement from the engineer of record that states: "The grading operation has been substantially completed and generally conforms to the approved set of plans." The permittee shall call the permit official to establish the beginning of the warranty period and to notify the permit official that the OSP has been implemented.
 - A copy of the notice of termination filed with the state or state 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 that the warranty period requirements will continue to be in effect.
 - AT THE TIME OF SUBSTANTIAL COMPLETION, THE CONTRACTOR IS RESPONSIBLE TO RETAIN A REGISTERED PROFESSIONAL LAND SURVEYOR OR TO PERFORM AN INSURABLE SURVEY. SUCH SURVEY WILL BE PROVIDED TO SITEWORK ENGINEERING, LLC TO DETERMINE THE CONFIRMATION OF THE APPROVED GRADING SET OF PLANS.
 - CONTRACTOR SHALL NOTIFY SITEWORK ENGINEERING AT THE TIME OF SUBSTANTIAL COMPLETION TO PERFORM THE FIELD OBSERVATION ACCORDING TO §18.44.220.
 - IF THE POST-CONSTRUCTION CONDITIONS ARE FOUND SUBSTANTIALLY DIFFERENT THAN THE GRADING SET OF PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD RECTIFICATION EXPENSES, ADDITIONAL ENGINEERING SERVICES AND/OR ADDITIONAL SURVEYING SERVICES (AS APPLICABLE).



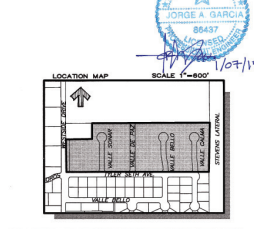
PUBLIC PARK SITE GRADING NOTES:
THE FOLLOWING NOTES APPLY FOR ONLY THE PUBLIC PARK SITE.

- WHERE POSSIBLE, UTILITY EASEMENTS SHALL NOT BE PLACED WITHIN PARK.
- ALL UTILITIES SHALL BE AT MINIMUM FIVE (5') FEET DEEP.
- WHERE POSSIBLE AND PREFERABLY, UTILITIES SHALL BE PLACED UNDERNEATH THE PROPOSED 7' WIDE SIDEWALK TO AVOID FUTURE CONFLICT WITH THE PROPOSED STREET TREE LINE OR DAMAGE TO THE UTILITIES.
- NO TRANSFORMERS, PEDESTAL OR JUNCTION BOXES SHALL BE INSTALLED WITHIN PARK.
- PROVIDE NOTE FOR ANY UNSUITABLE SOIL CONDITIONS TO BE REMEDIATED TO ELIMINATE HARD SOILS, STONY SOILS, HIGH CALICHE SOILS, CLAY SOILS AND CONTAMINATED SOILS TO A MINIMUM DEPTH OF 12 INCHES AS REQUIRED FOR PROPER PLANTING AS PER PARKS DESIGN & CONSTRUCTION STANDARDS.
- PROVIDE NOTE FOR CONTRACTOR TO BE REQUIRED TO APPLY FOR AND OBTAIN GRADING PERMIT FROM LAND DEVELOPMENT SERVICES.
- PLAYGROUND AND SIDEWALKS WITHIN THE PARK SITE SHALL BE 4-INCHES ABOVE THE TOP OF HEADER ELEVATION.

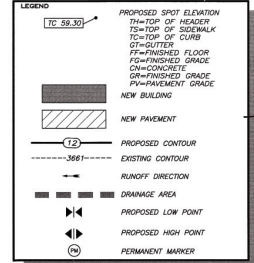


GRADING PLAN

DISTURBED AREA = 21.6-ACRES
SCALE 1" = 60'-0"



FLOOD ZONE
ACCORDING TO FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP PLAN 480212 0125 8 THIS PROPERTY LIES IN FLOOD HAZARD ZONE "X" DATED SEPT 4, 1991.



CITY DEVELOPMENT DEPARTMENT

Reviewed For Conformance For Condition Related To:

- Grading & Erosion Control
- Grading & Erosion Control
- On-Site Parking of Motor Vehicles

City of El Paso, Texas

Final Approval

REFERENCE INFORMATION:

DATE AND TIME WITH FIELD AT THE INTERSECTION MEASURE DATA (CLOSURE FT MAP OF 80 INCH).

1	1/27/24	BY: JG	COMMENTS:
2	1/27/24	BY: JG	COMMENTS:
3	1/27/24	BY: JG	COMMENTS:

SERENO VALLEY ESTATES

TRACTS 1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEYS, CITY OF EL PASO, EL PASO COUNTY, TEXAS

CONTAINING: ± 16.52-ACRES

PROJECT NAME: SERENO VALLEY ESTATES

PROJ. NO.: 13043

SCALE: SHOWN

ISSUE DATE: 01/23/24

DESIGN PURPOSE: CITY APPROVAL

SITEWORK

FOR THE CITY OF EL PASO

18.44.000 - Warranty: Any person issued a permit shall agree to 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 OSP (Grading Stabilization Plan), whichever 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.

18.44.220 - Permit close-out procedure: After the permittee completes the grading under the permit, the permit shall be closed. As part of the close-out procedure, the applicant must submit the following to the city:

- A statement from the engineer of record that states: "The grading operation has been substantially completed and generally conforms to the approved set of plans." The permittee shall call the permit official to establish the beginning of the warranty period and to notify the permit official that the OSP has been implemented.
- A copy of the notice of termination filed with the state or state 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 that the warranty period requirements will continue to be in effect.

AT THE TIME OF SUBSTANTIAL COMPLETION, THE CONTRACTOR IS RESPONSIBLE TO RETAIN A REGISTERED PROFESSIONAL LAND SURVEYOR OR TO PERFORM AN INSURABLE SURVEY. SUCH SURVEY WILL BE PROVIDED TO SITEWORK ENGINEERING, LLC TO DETERMINE THE CONFIRMATION OF THE APPROVED GRADING SET OF PLANS.

CONTRACTOR SHALL NOTIFY SITEWORK ENGINEERING AT THE TIME OF SUBSTANTIAL COMPLETION TO PERFORM THE FIELD OBSERVATION ACCORDING TO §18.44.220.

IF THE POST-CONSTRUCTION CONDITIONS ARE FOUND SUBSTANTIALLY DIFFERENT THAN THE GRADING SET OF PLANS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE FIELD RECTIFICATION EXPENSES, ADDITIONAL ENGINEERING SERVICES AND/OR ADDITIONAL SURVEYING SERVICES (AS APPLICABLE).

PREPARED BY: JORGE A. GARCIA

SCALE: 1" = 60'-0"

DATE: 01/23/24

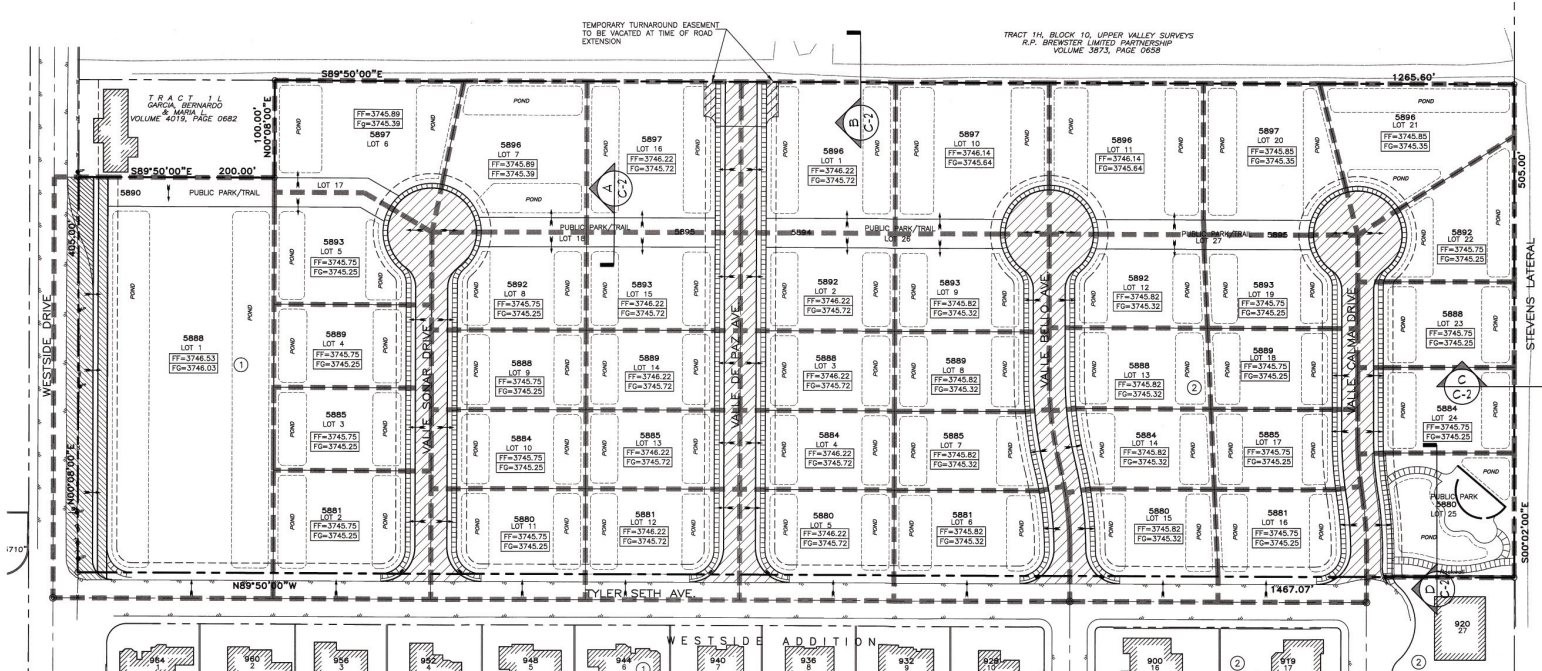
PROJECT NO.: 13043

DATE: 01/23/24

GRADING PLAN

SHEET NO. C-2

OF 11



REFERENCE BENCHMARK: 100.00' DATUM (CROSSER FT. M.D. DATUM)

TRACTS 14-1-1 & 14-1-2, BLOCK 10, UPPER VALLEY SURVEYS, CITY OF EL PASO, EL PASO COUNTY, TEXAS, CONTAINING .81652-ACRES

PROJECT NAME: SERENO VALLEY ESTATES

PROJECT NO.: 13043

SCALE: SHOWN

ISSUED DATE:

ISSUED TO: CITY APPROVAL

PREPARED BY: JAC

CHECKED BY: JAC

DATE: 12/21/24

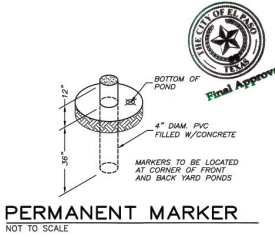
SHEET NO. 3 OF 11

DRAINAGE PLAN
SCALE 1" = 60'-0"

NO MORE THAN 50% OF THE AREA OF ANY RESIDENTIAL LOT SHALL BE COVERED BY IMPROVEMENTS OR IMPERVIOUS AREAS.

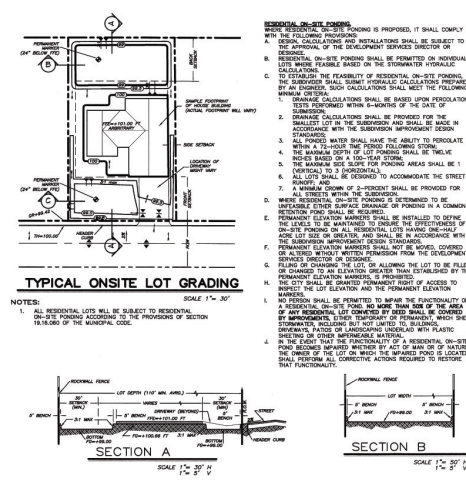
DRAINAGE CALCULATIONS:
CITY OF EL PASO STANDARD DESIGN / 4" RAINFALL
RUNOFF COEFFICIENT "C"
C = 0.8 RESIDENTIAL USE

LOT	BK	WATERSHED AREA (AC)	REQ. PONDING "C"	RED. POND CAPACITY (AC-FT)	PROVIDED PONDING CAPACITY (AC-FT)	MARKER ELEV (FT)	FLOOD ELEV (FT)	
1	1	2,225	0.60	0.445	0.489	3744.53	9.9	3743.7
2	1	0.484	0.60	0.297	0.108	3743.75	10.8	3744.8
3	1	0.314	0.60	0.063	0.085	3743.75	8.9	3744.5
4	1	0.314	0.60	0.063	0.085	3743.75	8.9	3744.5
5	1	0.303	0.60	0.078	0.083	3743.75	11.4	3744.7
6	1	0.514	0.60	0.103	0.143	3743.89	8.6	3744.6
7	1	0.504	0.60	0.101	0.133	3743.89	9.1	3744.6
8	1	0.364	0.60	0.073	0.076	3743.75	11.5	3744.8
9	1	0.294	0.60	0.059	0.078	3743.75	9.1	3744.5
10	1	0.294	0.60	0.059	0.078	3743.75	9.1	3744.5
11	1	0.408	0.60	0.082	0.083	3743.75	11.9	3744.7
12	1	0.408	0.60	0.082	0.083	3743.75	11.9	3744.7
13	1	0.294	0.60	0.059	0.078	3744.22	9.1	3745.0
14	1	0.408	0.60	0.082	0.083	3744.22	11.9	3744.9
15	1	0.364	0.60	0.073	0.083	3744.22	9.9	3744.9
16	1	0.560	0.60	0.112	0.145	3744.22	9.3	3744.8
17	2	0.560	0.60	0.112	0.145	3744.22	9.3	3744.8
18	2	0.364	0.60	0.073	0.083	3744.22	9.9	3745.1
19	2	0.294	0.60	0.059	0.078	3744.22	9.1	3744.5
20	2	0.408	0.60	0.082	0.083	3744.22	11.9	3744.9
21	2	0.294	0.60	0.059	0.078	3744.22	9.1	3744.5
22	2	0.408	0.60	0.082	0.083	3744.22	11.9	3744.9
23	2	0.408	0.60	0.082	0.083	3743.82	11.5	3744.8
24	2	0.294	0.60	0.059	0.078	3743.82	9.1	3744.6
25	2	0.364	0.60	0.073	0.076	3743.75	11.5	3744.8
26	2	0.408	0.60	0.082	0.083	3743.82	11.9	3744.9
27	2	0.408	0.60	0.082	0.083	3743.82	11.9	3744.9
28	2	0.408	0.60	0.082	0.083	3743.75	12.0	3744.8
29	2	0.281	0.60	0.056	0.073	3743.75	10.2	3744.5
30	2	0.287	0.60	0.057	0.075	3743.75	9.1	3744.5
31	2	0.344	0.60	0.068	0.089	3743.21	9.3	3744.0
32	2	0.481	0.60	0.088	0.110	3743.82	10.7	3744.7
33	2	0.451	0.60	0.090	0.123	3743.85	8.8	3744.6
34	2	0.344	0.60	0.074	0.084	3743.82	8.9	3744.6
35	2	0.322	0.60	0.064	0.088	3743.75	8.7	3744.5
36	2	0.322	0.60	0.064	0.088	3743.75	8.7	3744.5
37	2	0.448	0.60	0.090	0.162	3743.75	6.7	3744.3



LEGEND

- PROPOSED SPOT ELEVATION
- PROPOSED CONTOUR
- EXISTING CONTOUR
- RUNOFF DIRECTION
- DRAINAGE LINE
- PROPOSED LOW POINT
- PROPOSED HIGH POINT
- PERMANENT MARKER
- NEW BUILDING
- NEW PAVEMENT
- PROPOSED GUTTER
- PROPOSED FINISHED FLOOR
- ON-CONCRETE OR FINISHED GRADE



WARNING!!! BEFORE YOU DIG

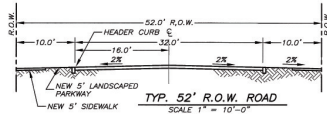
COORDINATION WITH UTILITIES
CONTRACTOR SHALL CONTACT ALL UTILITIES COMPANIES PRIOR TO ANY EXCAVATION AND/OR RELOCATION OF EXISTING UTILITIES DOCUMENTING ALL CONSTRUCTION WORK.

UTILITY COMPANIES:
AT&T, TEXAS POWER & LIGHT, TEXAS GAS, TEXAS ELECTRIC, TEXAS WATER UTILITIES, TEXAS TELEPHONE, TEXAS CABLE, TEXAS POST, TEXAS RAILROAD, TEXAS POWER & LIGHT, TEXAS GAS, TEXAS ELECTRIC, TEXAS WATER UTILITIES, TEXAS TELEPHONE, TEXAS CABLE, TEXAS POST, TEXAS RAILROAD.

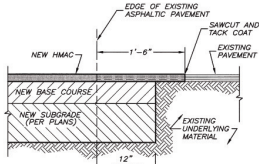
THE WARNER COMMUNICATIONS
1300 PELLERANO DR.
EL PASO, TEXAS 79805
TEL: 910-846-7800
FAX: 910-846-7800

TEXAS EXCAVATION SAFETY SYSTEM
1800-214-8377

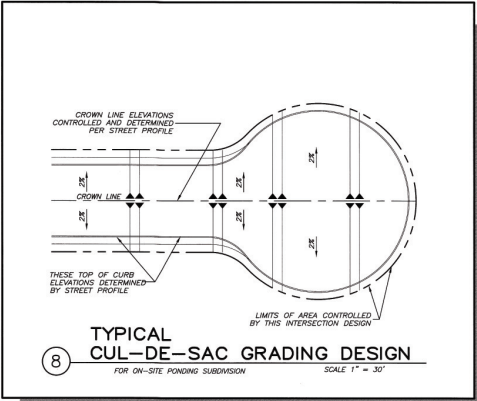
DRAINAGE PLAN
SHEET NO. 3 OF 11



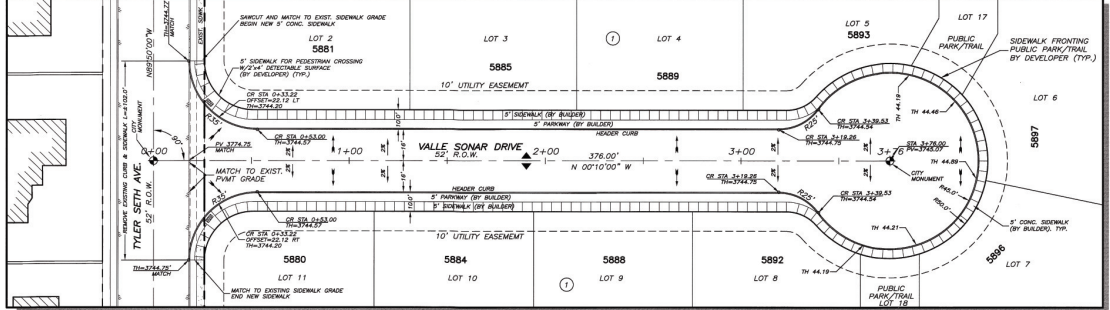
TYP. 52' R.O.W. ROAD
SCALE 1" = 10'-0"



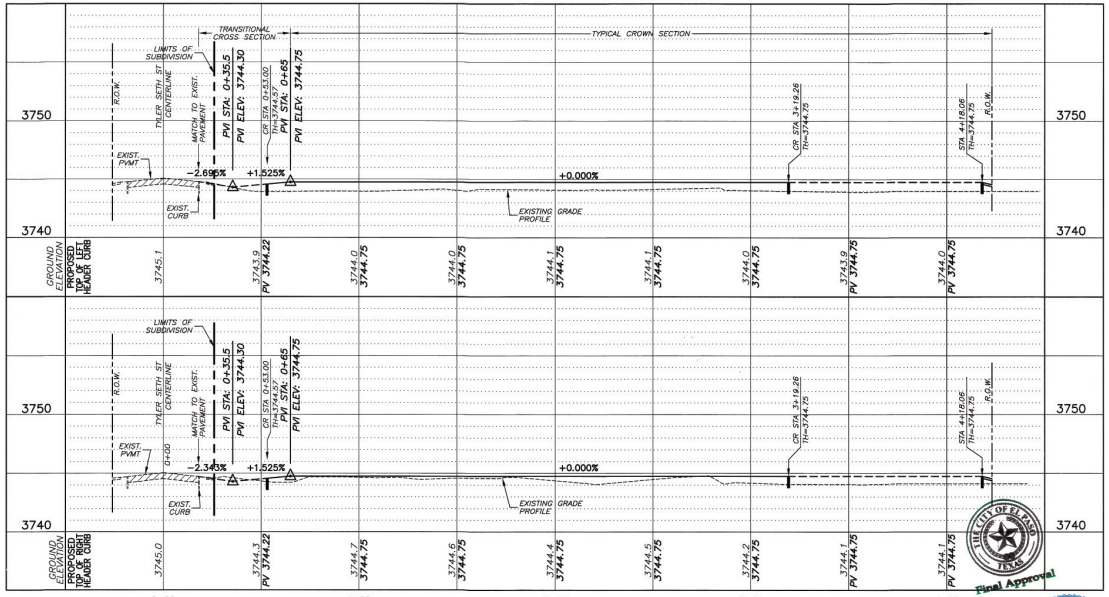
DETAIL
NOT TO SCALE



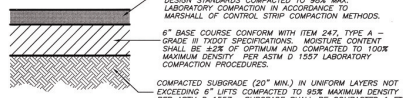
8 TYPICAL CUL-DE-SAC GRADING DESIGN
FOR ON-SITE PONDING SUBDIVISION
SCALE 1" = 30'



VALLE SONAR DR. - PLAN VIEW
SCALE 1" = 30'



VALLE SONAR DR. - PROFILE VIEW
SCALE: H 1" = 30' / SCALE: V 1" = 5'

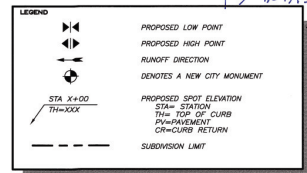


PAVEMENT RECOMMENDATION BASED ON THE GEOTECHNICAL REPORT PREPARED BY SPEESOL INC., DATED JULY 31, 2013, NO. SP013098.
FINAL PAVEMENT DESIGN TO BE APPROVED BY CITY ENGINEERING BASED ON CBR TEST RESULTS.

(FOR VALLE SONAR, VALLE CALMA, VALLE BELLO & VALLE DE PAZ)

PAVEMENT STRUCTURE
NOT TO SCALE

- NOTES:
- IT IS THE CONTRACTOR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES INCLUDING UTILITIES NOT SHOWN ON PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD STRUCTURES AND UTILITIES DURING CONSTRUCTION.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES, OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
 - THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.



REFERENCE: SERENO VALLEY ESTATES (SERENO VALLEY ESTATES) TRACTS 1-1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEYS, CITY OF EL PASO, EL PASO COUNTY, TEXAS, CONTAINING ± 6.52-ACRES.

NO.	DATE	DESCRIPTION
1	10/7/15	CITY COMMENTS
2	10/7/15	CITY COMMENTS
3	10/7/15	CITY COMMENTS

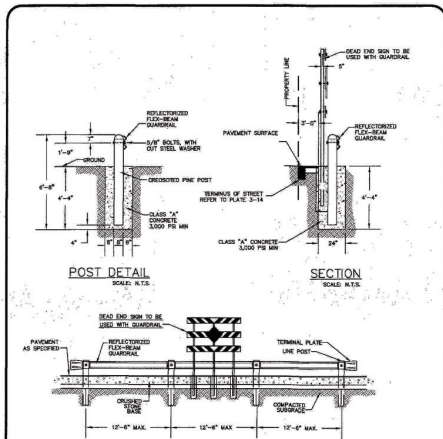
PROJECT NAME:
SERENO VALLEY ESTATES
TRACTS 1-1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEYS,
CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING ± 6.52-ACRES

PROJ. NO.: 13043
SCALE: SHOWN

ISSUED FOR: CITY APPROVAL



SHEET TITLE:
VALLE SONAR DR. PLAN AND PROFILE
SHEET NO.:
C-4
SHEET 4 OF 11

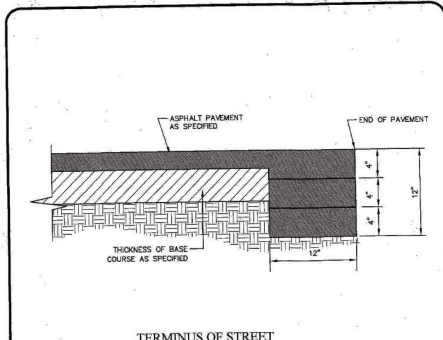


GUARDRAIL/SIGN ASSEMBLY AT DEAD END STREET DETAIL

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

GUARDRAIL/SIGN ASSEMBLY AT DEAD END 7-17B

Approved by: S. A. BISHOP Date: 03/28/2014 Drawn by: J. M. E. Date: 03/28/2014



TERMINUS OF STREET

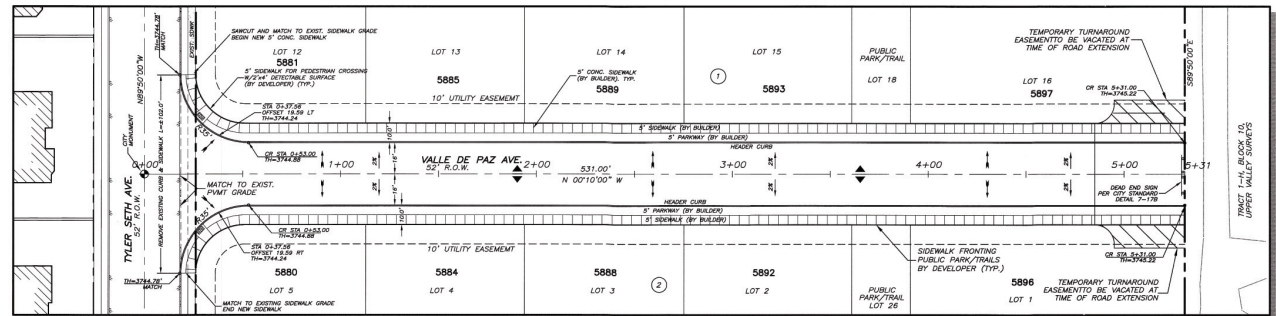
NOTE:
TERMINUS MUST BE CONSTRUCTED IN 4\"/>

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

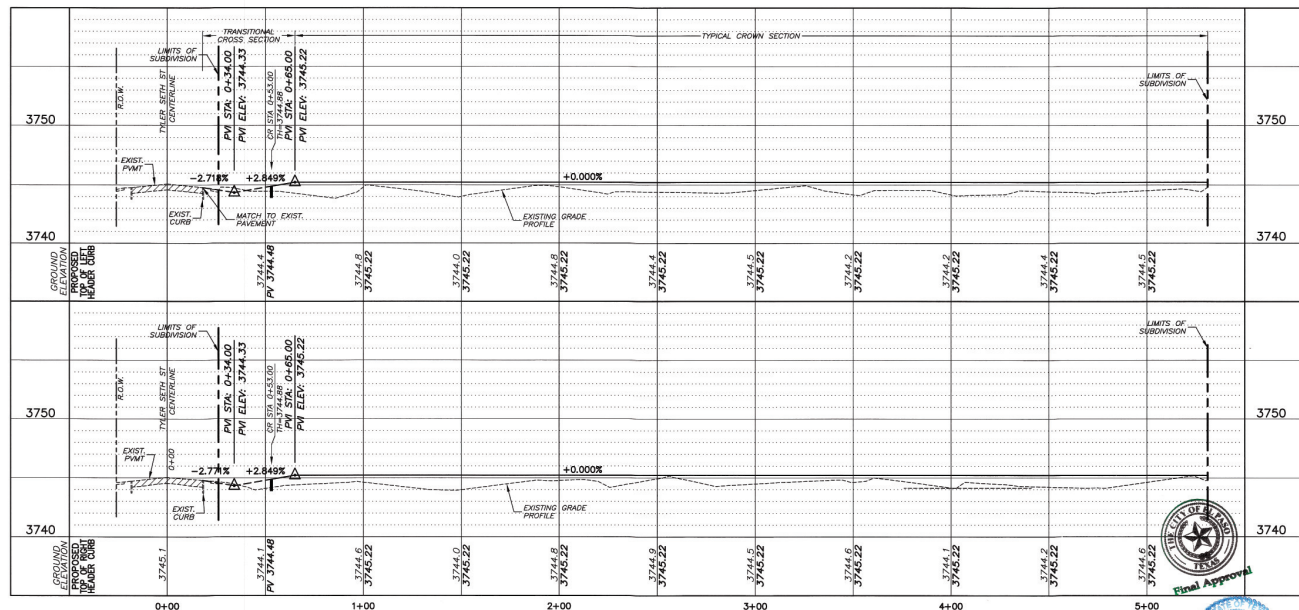
TERMINUS OF STREET 3-14

Approved by: S. A. BISHOP Date: 03/28/2014 Drawn by: J. M. E. Date: 03/28/2014

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VALLE DE PAZ AVE. - PLAN VIEW
SCALE: 1" = 30'



VALLE DE PAZ AVE. - PROFILE VIEW

SCALE: H 1" = 30' / V 1" = 5'

NOTES:
1. IT IS THE CONTRACTOR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES INCLUDING UTILITIES NOT SHOWN ON PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD STRUCTURES AND UTILITIES DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.

LEGEND

PROPOSED LOW POINT
PROPOSED HIGH POINT
RUNOFF DIRECTION
DENOTES A NEW CITY MONUMENT

PROPOSED SPOT ELEVATION
STA = STATION
TM = TOP OF CURB
PW = PAVEMENT
CW = CURB RETURN

SUBDIVISION LIMIT

REFERENCE INFORMATION:
COMPS AT THE INTERSECTION W/ SERENO DRIVE AND TRAILS WITH DRIVE ELEVATION: 3745.48 FT CITY DATA (CROSSBUT W/ NB AND SB DRIVE).

REVISIONS:

NO.	DATE	DESCRIPTION
1	10/27/14	CITY COMMENTS
2	11/25/14	CITY COMMENTS
3	11/25/14	CITY COMMENTS

PROJECT NAME:
SERENO VALLEY ESTATES

TRACTS 1-1, 1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEY, CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING: ± 16.32-ACRES

PROJ. NO.: 13043
SCALE: SHOWN

ISSUED FOR: CITY APPROVAL

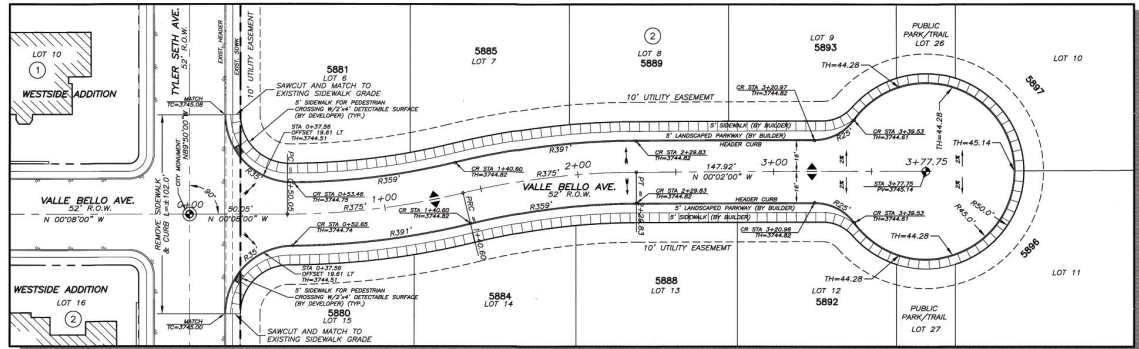
PREPARED BY:
SITEWORK
14400 CALLE GARDNER, SUITE 100, EL PASO, TEXAS 79906
PHONE: (972) 261-2020 FAX: (972) 261-1000

FORGE A GARD
86437
11/07/15

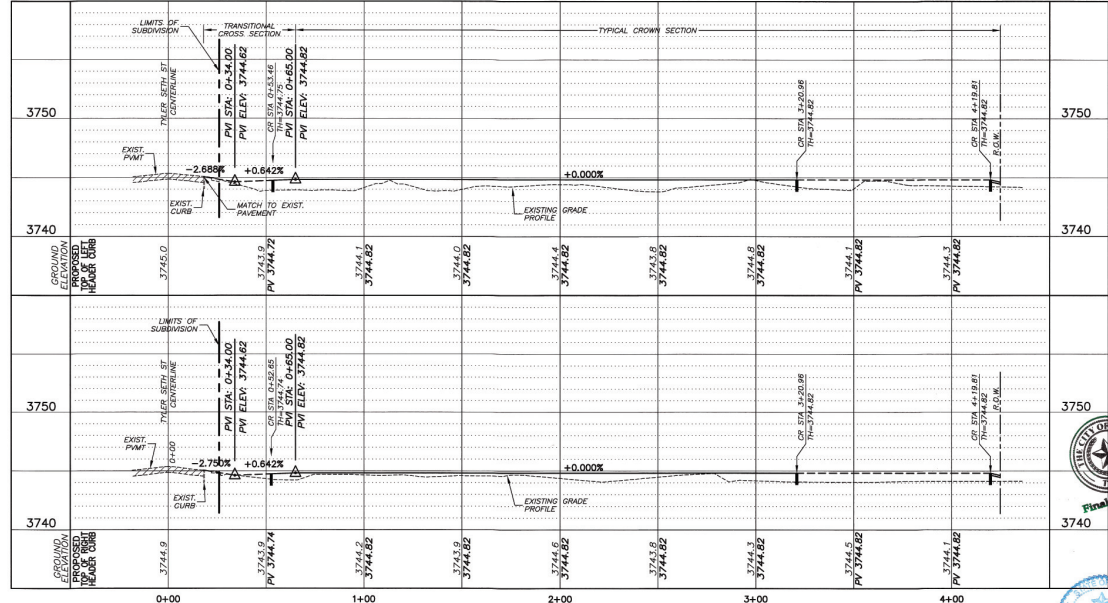
SHEET TITLE:
VALLE DE PAZ PLAN AND PROFILE

SHEET NO.: **C-5**

OF 11



VALLE BELLO AVE. - PLAN VIEW
SCALE 1" = 30'



VALLE BELLO AVE. - PROFILE VIEW
SCALE: H 1" = 30' / SCALE: V 1" = 5'

NOTES:
1. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES INCLUDING UTILITIES NOT SHOWN ON PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD STRUCTURES AND UTILITIES DURING CONSTRUCTION.
2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES, OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
3. THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.

LEGEND

- PROPOSED LOW POINT
- PROPOSED HIGH POINT
- RUNOFF DIRECTION
- NEW CITY MONUMENT
- STA X+00
- STA+XXX
- TH=XXX
- PROPOSED SPOT ELEVATION
- STATION
- TOP OF CURB
- FINISH ELEVATION
- CR=CURB RETURN
- SUBDIVISION LIMIT

REFERENCE ELEVATIONS:
DRAINAGE AND UTILITY ELEVATIONS: 1984.00 FT. CITY DATUM (CLOSEST IT MAY BE DATUM).
ELEVATIONS:
1. 1/27/14
2. 1/27/14
3. 1/27/14
4. 1/27/14
5. 1/27/14
6. 1/27/14
7. 1/27/14
8. 1/27/14
9. 1/27/14
10. 1/27/14
11. 1/27/14
12. 1/27/14
13. 1/27/14
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99. 1/27/14
100. 1/27/14

PROJECT NAME:
SERENO VALLEY ESTATES
TRACTS 14-1 & 14-2, BLOCK 10, UPPER VALLEY SURVEYS, CITY OF EL PASO, EL PASO COUNTY, TEXAS CONTAINING .81632-ACRES

PROJECT NO.: 13043
SCALE: SHOWN

ISSUED FOR: CITY APPROVAL

PREPARED BY: SITEWORK
444 MADISON CENTER, WILLY TA... EL PASO, TX 79902
TEL: 915.762.1500
FAX: 915.762.1600

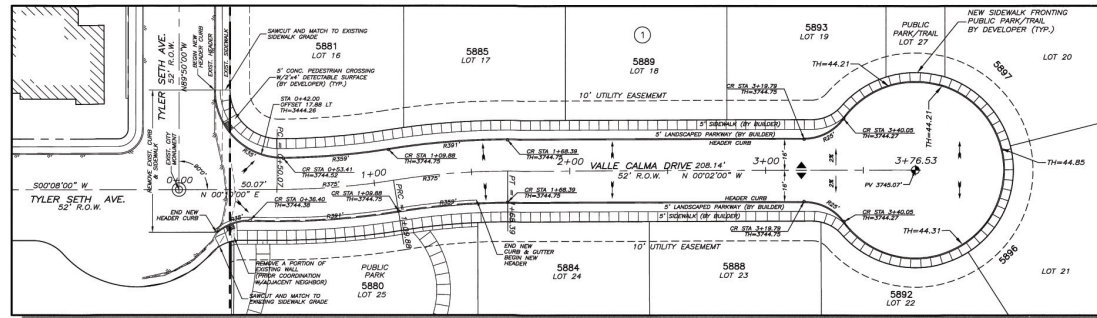


DATE: 1/27/14

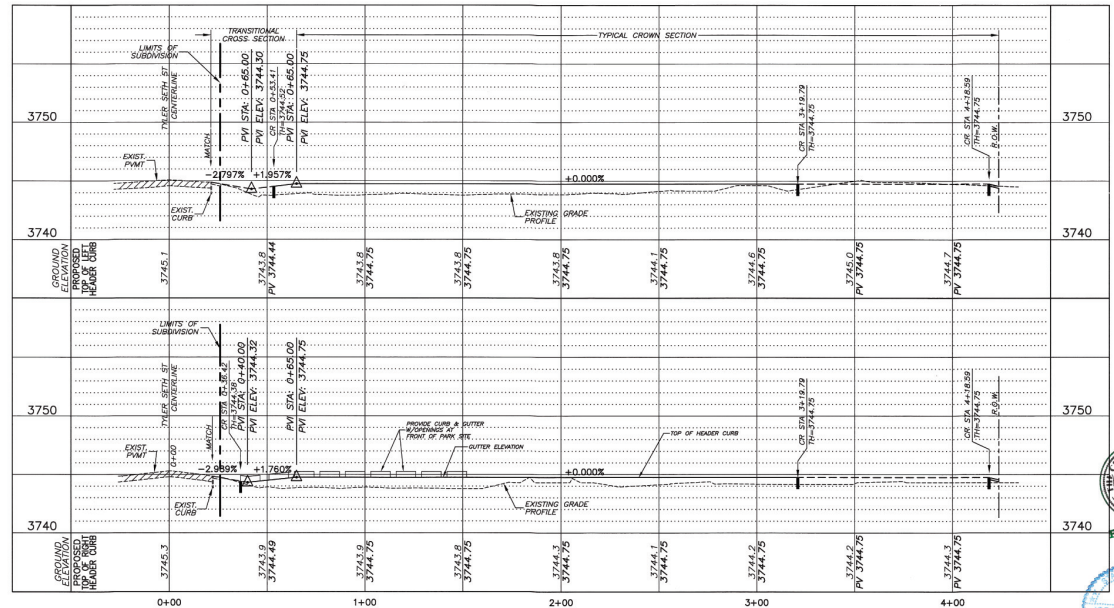
SHEET TITLE:
VALLE BELLO PLAN & PROFILE
SHEET NO.: **C-6**
SHEET 6 OF 11

213043 Sereno Valley Estates/Plan/Profile Comments 3/13/2014 9:26:32 AM Adobe PDF.pdf
 JAG

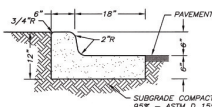
THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES, OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
 THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.



VALLE CALMA DRIVE - PLAN VIEW
 SCALE: 1" = 30'

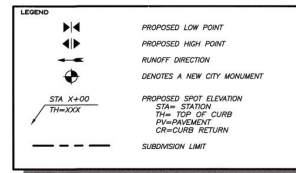


VALLE CALMA DR. - PROFILE VIEW
 SCALE: H 1" = 30' / SCALE: V 1" = 5'



- NOTES:**
1. CONCRETE TO BE 3000 PSI MIN.
 2. DIMMY JOINT REQUIRED AT 10' O.C.
 3. EXPANSION MATERIAL REQUIRED AT CURB RETURNS WITH 1/2" PREMOLDED ASPHALT IMPREGATED EXPANSION MATERIAL OR EQUAL.
 4. EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING.

- NOTES:**
1. IT IS THE CONTRACTOR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES INCLUDING UTILITIES NOT SHOWN ON PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD STRUCTURES AND UTILITIES DURING CONSTRUCTION.
 2. CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES, OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
 3. THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.



REFERENCE BENCHMARK:
 BENCH MARK: 5885 (ELEV. 5208.11)
 DATE: 10/27/14
 BY: JAG

SERENO VALLEY ESTATES
 TRACTS 1-1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEYS,
 CITY OF EL PASO, EL PASO COUNTY, TEXAS
 CONTAINING: 316.52+/- ACRES

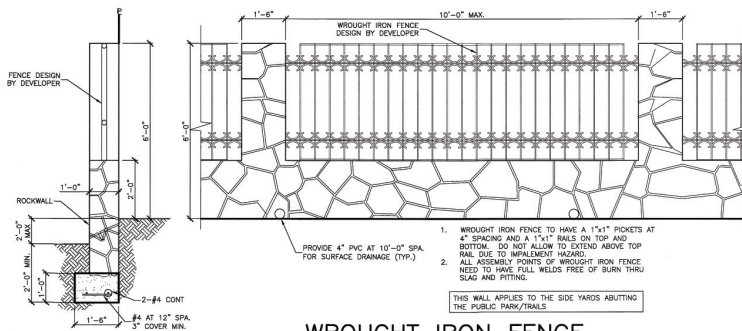
PROJ. NO. 13043
 SCALE: SHOWN
 REVISION DATE:

ISSUE PURPOSE:
 CITY APPROVAL

SITENETWORK
 PREPARED BY: JORGE A. GARCIA
 LICENSE NO. 85437
 DATE: 10/27/14

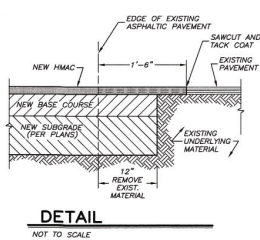


VALLE CALMA DR. PLAN AND PROFILE
 SHEET NO. C-7
 OF 11



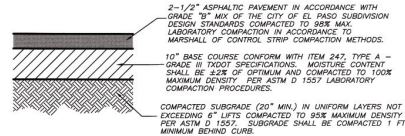
WROUGHT IRON FENCE

SCALE: 1/2" = 1'-0"



DETAIL

NOT TO SCALE

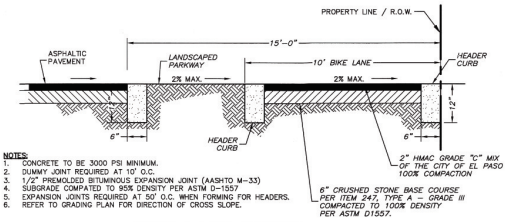


PAVEMENT RECOMMENDATION BASED ON THE GEOTECHNICAL REPORT PREPARED BY SPESSOL INC., DATED JULY 31, 2013, NO. SPG1309R.

FINAL PAVEMENT DESIGN TO BE APPROVED BY CITY ENGINEERING BASED ON CBR TEST RESULTS.

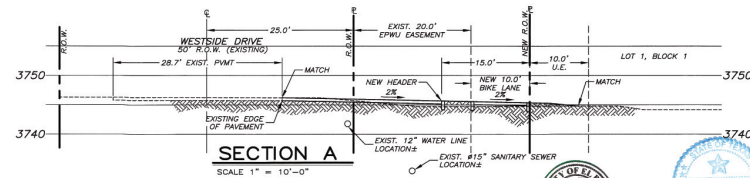
**(FOR WESTSIDE DRIVE)
PAVEMENT STRUCTURE**

NOT TO SCALE



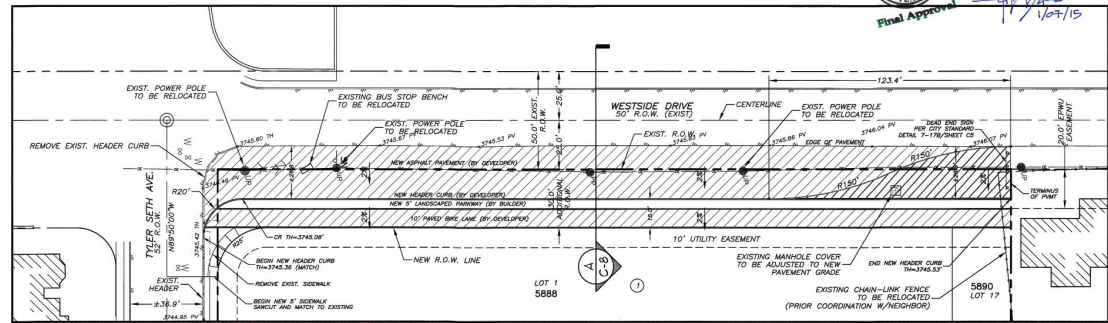
BIKE LANE DETAIL

NOT TO SCALE



SECTION A

SCALE 1" = 10'-0"

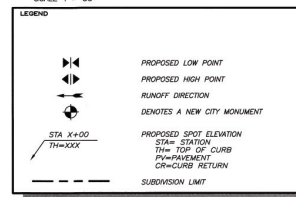


WESTSIDE DRIVE - PLAN VIEW

SCALE 1" = 30'

NOTES:

- IT IS THE CONTRACTOR RESPONSIBILITY TO CONTACT ALL UTILITY COMPANIES FOR THE EXACT LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES INCLUDING UTILITIES NOT SHOWN ON PLANS. THE CONTRACTOR SHALL PROTECT ALL EXISTING UNDERGROUND AND OVERHEAD STRUCTURES AND UTILITIES DURING CONSTRUCTION.
- CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS AND ELEVATIONS ON SITE AND SHALL CONTACT THE DESIGN ENGINEER TO REPORT ANY DISCREPANCIES OMISSIONS AND/OR ERRORS ON PLANS PRIOR TO COMMENCING WORK.
- THE CONTRACTOR SHALL COORDINATE ALL UTILITY REMOVAL AND RELOCATIONS WITH THE APPROPRIATE UTILITY COMPANIES.



REFERENCE INFORMATION:

FORMS AT THE INTERSECTION WESTSIDE DRIVE AND TITUS BETH DRIVE ELEVATION: 3745.8 FT CITY DATUM (3752.68 FT NAD 83 DATUM).

PROPOSED DATE	11/07/15	DESIGNER	JG & S
REVISION NO.	1	CITY COMMENTS	
REVISION NO.	2	CITY COMMENTS	
REVISION NO.	3	CITY COMMENTS	

SERENO VALLEY ESTATES

TRACTS 10-1-1 & 1-1-2, BLOCK 10, UPPER VALLEY SURVEYS, CITY OF EL PASO, EL PASO COUNTY, TEXAS

CONTAINING: 31.632-ACRES

PROJECT NAME: SERENO VALLEY ESTATES

PROJ. NO.: 13043

SCALE: SHOWN

ISSUED DATE: 11/07/15

ISSUED PURPOSE: CITY APPROVAL

PREPARED BY: SITEMWORK

144 GARDNER CENTER, WILSON, TX 75703-1000

PHONE: (972) 261-2222 FAX: (972) 261-1000

APPROVED BY: JG & S

11/07/15

SHEET TITLE: WESTSIDE ST. IMPROVEMENTS

SHEET NO.: C-8

SHEET 8 OF 11

Z:\13043 Sereno Valley Estates\Sub Improv\Plan\City Comments\11102014 9:36:34 AM_Acshb PDF.pct

BRONZE MONUMENT CAP

MONUMENT BOX

BOX COVER

SECTION VIEW

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

CITY SURVEY MONUMENT
3-52

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

ROCK WALL ADJACENT TO RESIDENTIAL LOTS

NOTES:

- STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTIONS AS IS PRACTICABLE. THE STONE SHALL BE DENSE AND RESISTANT TO AIR AND WATER.
- MORTAR SHALL BE TYPE "M" 1800 P.S.I. AS PER ASTM C270
- MASONRY WALLS OVER SIX (6) FEET IN HEIGHT AND THOSE USED FOR EARTH RETENTION OVER TWO (2) FEET SHALL BE DESIGNED AS STRUCTURAL WALLS.
- WALLS ADJACENT TO PONDING AREAS OR DRAINAGE DITCHES MAY BE CONSTRUCTED OF BRICK OR CONCRETE BLOCK AND SHALL NOT BE LESS THAN SIX (6) FEET HIGH.
- ROCKWALL MORTAR JOINTS SHALL NOT EXCEED TWO (2) INCHES.
- PROVIDE ONE (1) INCH EXPANSION JOINTS AT EVERY 100 FEET.
- ALL STONE SHALL BE THOROUGHLY SOAKED BEFORE BEING PLACED.
- NO RIVER ROCK SHALL BE ALLOWED FOR ROCKWALLS.

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

ROCKWALL DESIGN
4-3

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

PENETRATION APRON

CONSTRUCTION NOTES:

- CONCRETE SHALL BE 3000 P.S.I. MIN. FOR ALL PENETRATIONS.
- REINFORCING STEEL SHALL BE #3 OR #4 BARS.
- CONCRETE SHALL BE PLACED IN LAYERS NOT EXCEEDING 4" PER LAYER.
- CONCRETE SHALL BE CURED PROPERLY.
- CONCRETE SHALL BE FINISHED TO MATCH ADJACENT SURFACES.
- CONCRETE SHALL BE PLACED IN LAYERS NOT EXCEEDING 4" PER LAYER.
- CONCRETE SHALL BE CURED PROPERLY.
- CONCRETE SHALL BE FINISHED TO MATCH ADJACENT SURFACES.

GENERAL NOTES:

- CONCRETE SHALL BE 3000 P.S.I. MIN.
- CONCRETE SHALL BE PLACED IN LAYERS NOT EXCEEDING 4" PER LAYER.
- CONCRETE SHALL BE CURED PROPERLY.
- CONCRETE SHALL BE FINISHED TO MATCH ADJACENT SURFACES.
- CONCRETE SHALL BE PLACED IN LAYERS NOT EXCEEDING 4" PER LAYER.
- CONCRETE SHALL BE CURED PROPERLY.
- CONCRETE SHALL BE FINISHED TO MATCH ADJACENT SURFACES.

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

PENETRATION APRON
2-19

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

PERMANENT ELEVATION MARKER FOR ON-SITE PONDING

MARKERS TO BE PLACED AT CORNER OF FRONT AND BACK YARDS.

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

PERMANENT ELEVATION MARKER FOR ON-SITE PONDING
2-7

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

DRIVEWAY PLAN

DRIVEWAY SECTION

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

DRIVEWAY WITH ON-SITE PONDING
6-18

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

HEADER FOR EXPANSIVE SOIL

HEADER FOR ROCKY OR MOUNTAINOUS TERRAIN

NOTES:

- CONCRETE TO BE 3000 P.S.I. MIN.
- DUMMY JOINT REQUIRED AT 10' O.C. FOR HEADERS AND 3' O.C. FOR SIDEWALKS.
- EXPANSION MATERIAL REQUIRED AT CURB RETURNS AND AT 20' O.C. FOR SIDEWALKS WITH 1/2" PROPOSED ASPHALT IMPREGATED EXPANSION MATERIAL OF EQUAL.
- EXPANSION JOINTS REQUIRED AT 50' O.C. WHEN FORMING FOR HEADERS.
- EXPANSION JOINTS REQUIRED FOR SIDEWALK AT 20' O.C.

TITLE 19 - SUBDIVISION ORDINANCE
ENGINEERING DEPARTMENT
DESIGN STANDARDS FOR CONSTRUCTION

CONCRETE HEADER WITH SIDEWALK SECTION
6-12

Approved By: *[Signature]* Checked By: *[Signature]*
Date: 02/08/2008 Drawn By: GRC/J.L.R.

REFERENCE BENCHMARK: POINTS AT THE INTERSECTION OF THE DRIVE AND TUBER WITH DRIVE ELEVATION: 2428.87 FT CITY DATUM (CYRUS FT MAG IS DATUM).

REVISIONS:

NO.	DATE	DESCRIPTION
1	11/11/04	ISSUED FOR PERMITS
2	02/08/08	REVISED TO MEET CITY REQUIREMENTS
3	02/08/08	REVISED TO MEET CITY REQUIREMENTS

PROJECT NAME: SERENO VALLEY ESTATES

TRACTS 10-1-1, 9-1-1-2, BLOCK 10, UPPER VALLEY SURVEY, CITY OF EL PASO, EL PASO COUNTY, TEXAS

CONTAINING: ±16.52± ACRES

PROJ. NO.: 13043

SCALE: SHOWN

ISSUED DATE:

PREPARED BY: SITEWORK

444 EASTLARK DRIVE, SUITE 100, EL PASO, TEXAS 79906

PHONE: (972) 781-8533 FAX: (972) 781-8800

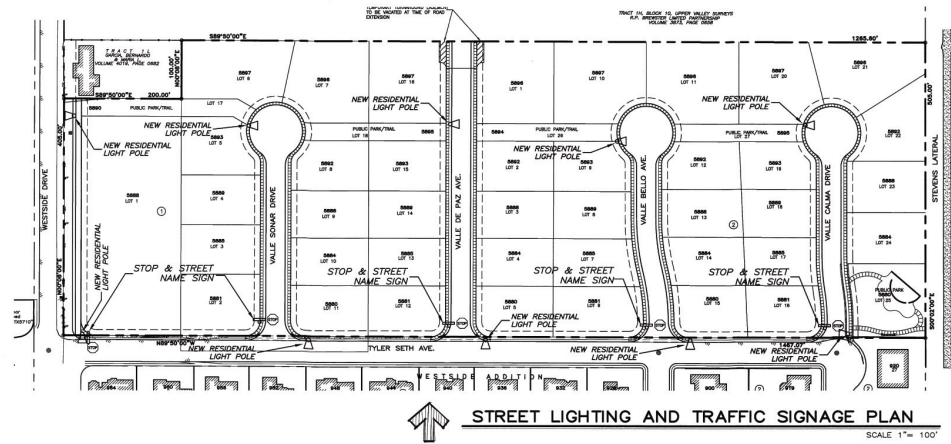
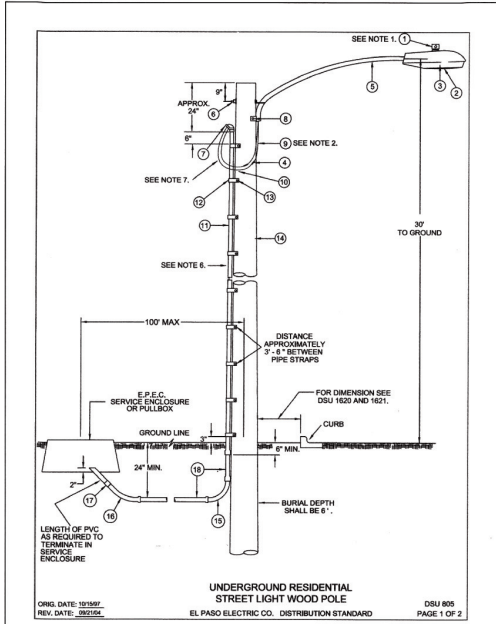
APPROVED BY: [Signature]

1/27/15

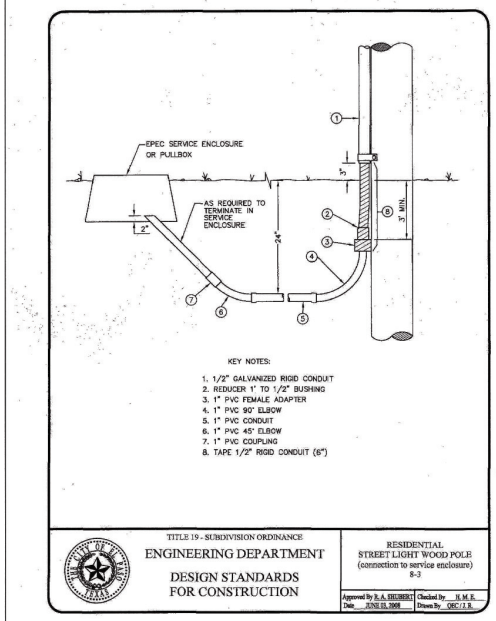
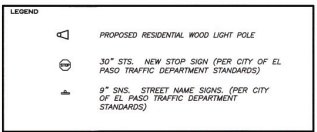
SHEET TITLE: STANDARD DETAILS

SHEET NO.: C-9

OF 11



NOTE:
ALL ROADWAY INTERSECTING EXISTING PUBLIC ROADWAYS SHALL REMAIN COMPLETELY CLOSED FOR PUBLIC USE UNTIL ACCEPTED FOR MAINTENANCE BY THE CITY.



ITEM No.	DESCRIPTION	STOCK/OSU No.	Qty.	CU Code	MACRO Code
1	PHOTO CELL, 240 V - SEE NOTE 1	21-225	1		
2	HPS LAMP, 100W	21-085	1	LCOBRAHD	
3	LUMINAIRE, 100W H.P.S.	21-535	1		
4	SLEEVES, #12-10	05-140	2	LSLV1210	
5	MAST ARM, 6" x 1 1/4"	21-200	1	LBKRT18	
6	MACHINE BOLT, 5/8" x 12"	02-470	1		
6	SQUARE GALV. WASHER, 2 1/4" x 2 1/4"	02-760	1	LMB5812	
6	COIL SPRING WASHER, 5/8"	02-786	1		
6	LOCK NUT, 5/8"	02-755	1		
7	SERVICE ENTRANCE CAP FOR 1" PVC CONDUIT	17-281	1	LSVCCAP1	
8	LAG BOLT, 3/8" x 3"	02-343	2	LLAG38P3	
9	CABLE #10, 2 CONDUCTOR, 600V, LP	13-650	6'	LCP10S	
10	COPPER CABLE #12, SOLID, 600V, BLUE	13-702	60'	LC#12CU	
11	SCHEDULE 80 1" PVC CONDUIT	17-280	30'	LSC80S1	
12	PIPE STRAP FOR 1" PVC CONDUIT, 2-HOLE	17-283	9	LPVCS1PP	
13	NAIL, STAINLESS STEEL SCREW 2.5 IN.	14-427	25#	LNAL14*2	
14	POLE, 35 FT. - CLASS 4	09-035	1	L354UG	
15	1" PVC 90 DEGREE ELBOW	17-297	1	LEL901	
16	1" PVC 45 DEGREE ELBOW	17-298	1	LEL451	
17	1" PVC COUPLING	17-296	1	LOPLG1	
18	1" PVC CONDUIT	17-289	AS REQ	LPVC1	

- NOTES:**
- MOUNT SO THAT PHOTO CELL IS FACING NORTH.
 - ITEM # 9 SHALL NOT BE SPLICED INSIDE ITEM # 5.
 - INSTALLATION MUST COMPLY WITH LOCAL CODE REQUIREMENTS.
 - FOR ANY CLARIFICATION, EXCEPTIONS OR QUESTIONS REGARDING THIS STANDARD, CALL THE EL PASO ELECTRIC COMPANY DISTRIBUTION DESIGN DEPARTMENT.
 - ON STREETS WHERE SIDEWALK IS ADJACENT TO CURB, STREET LIGHT POLE SHALL BE INSTALLED IN THE SIDEWALK NEXT TO PROPERTY LINE. 18 INCHES REQUIRED FROM BACK OF CURB TO COMPLY WITH AMERICAN DISABILITY'S ACT AND LOCAL CODES.
 - THE CONDUIT RISER SHALL BE INSTALLED ON THE BACK OF THE WOOD POLE (AWAY FROM THE STREET)
 - THE WIRE LEADS FROM THE WEATHER HEAD TO THE MAST ARM SHALL HAVE A MINIMUM 4" DRIP LOOP BELOW THE WEATHER HEAD.

ORIG. DATE: 10/15/97
REV. DATE: 09/21/04
EL PASO ELECTRIC CO. DISTRIBUTION STANDARD
DSU 805
PAGE 2 OF 2

REFERENCE BENCHMARK: 10000 FT ELEVATION AT THE INTERSECTION, WINDY DRIVE AND TYLER SETH DRIVE. ELEVATION: 7245.48 FT CITY DATUM (7205.8 FT NAVD 83 DATUM).

REVISIONS:

1	10/27/14	REV. COMMENTS
2	10/27/14	REV. COMMENTS
3	10/27/14	REV. COMMENTS

SERENO VALLEY ESTATES
TRACTS 10, 11-1 & 11-2, BLOCK 10, UPPER VALLEY SURVEY, CITY OF EL PASO, EL PASO COUNTY, TEXAS
CONTAINING: ± 16.52-ACRES

PROJECT NAME:
PROJ. NO. 13043
SCALE: SHOWN
REVISION DATE:

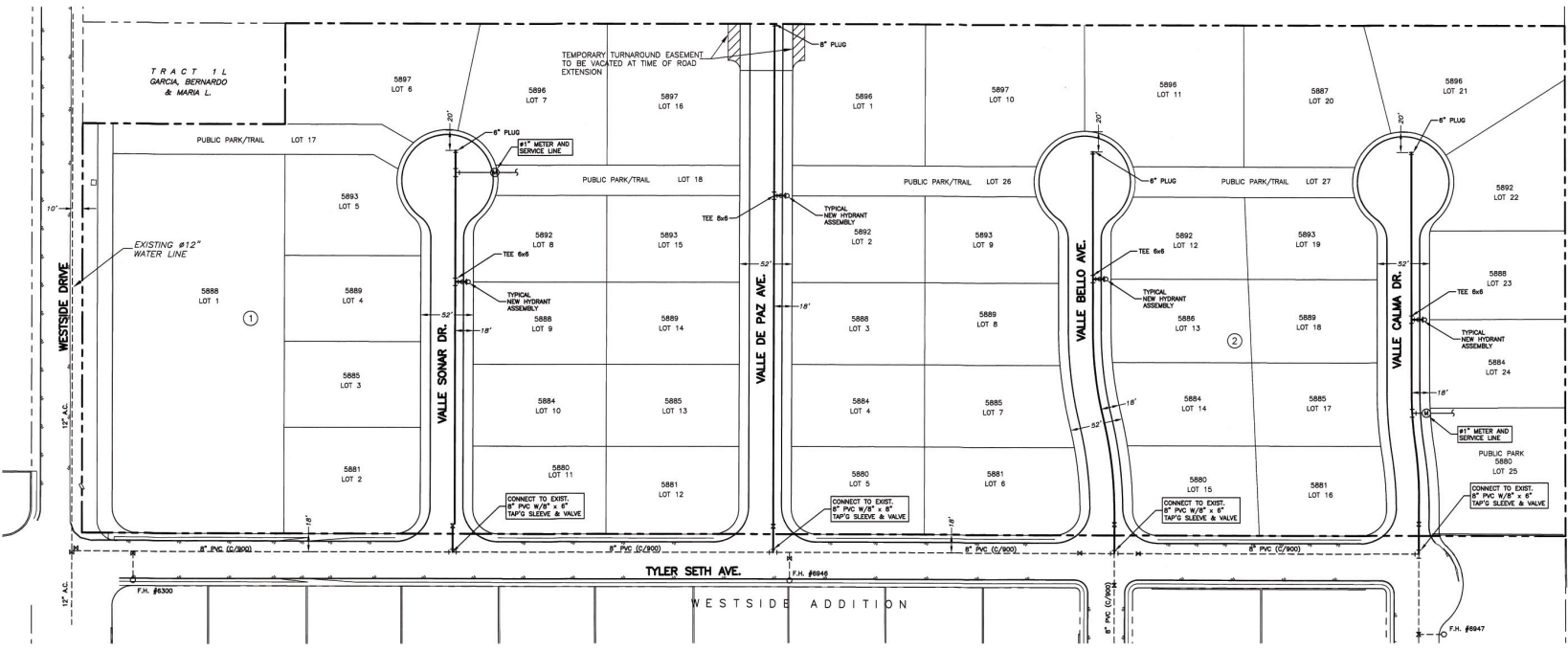
TITLE: SERENOSION
CITY APPROVAL

PREPARED BY:
SITENWORK
144 MADISON DRIVE, WILEY, TX 79792
PHONE: (817) 390-3400 FAX: (817) 390-3400

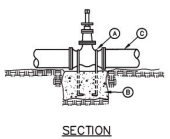
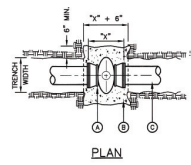


SHEET TITLE:
SITE LIGHTING & TRAFFIC SIGNAGE
SHEET NO. **C-10**
OF 11

21:30:00 Sereno Valley Estates/Sub Improv/Plan/City Comments 3/13/2014 5:37:59 AM. Add:ser PDF p.cj. JAG

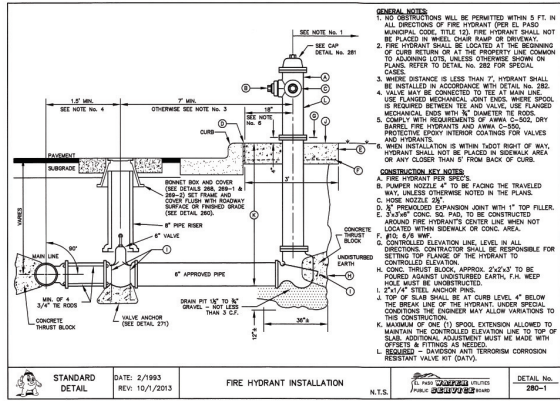


WATER SYSTEM PLAN
SCALE 1" = 50'



VALVE ANCHOR
DETAIL NO. 271

- GENERAL NOTES:**
- THE ENGINEER SHALL PROVIDE DESIGN FOR ALL VALVES GREATER THAN 12\"/>
 - COMPLY WITH REQUIREMENTS OF AWWA C-550, PROTECTIVE EPOXY INTERIOR COATINGS FOR VALVES.
- CONSTRUCTION KEY NOTES:**
- TWO NO. 5 REBAR HAIR PINS, PAINT UNREINFORCED PORTION OF REBAR WITH TWO COATS OF COAL-TAR EPOXY.
 - CONCRETE VALVE SUPPORT, 2500 PSI CONCRETE.
 - APPROVED PIPE.



FIRE HYDRANT INSTALLATION
DATE: 2/1993
REV: 10/7/2013
N.T.S. DETAIL NO. 280-1

STREET NAME	LENGTH, SIZE & TYPE OF PIPE
SHADY PL.	INST. 400 FT OF 8" P.V.C. PIPE (CLASS 230)
VALLE DE PAZ	INST. 528 FT OF 8" P.V.C. PIPE (CLASS 305)
VALLE BELLO	INST. 389 FT OF 8" P.V.C. PIPE (CLASS 305)
VELMA PL.	INST. 387 FT OF 8" P.V.C. PIPE (CLASS 305)

REMARKS:
EXISTING CITY MONUMENT FOUND AT THE INTERSECTION WESTSIDE DRIVE AND TYLER SETH DRIVE ELEVATION 3745.49 FT CITY DATUM (3746.32 FT EPW/P&B DATUM). ALL ELEVATION ON THIS SHEET SHOWN ARE BASED ON EPW DATUM.
ELEVATIONS SHOWN ON THE SUBDIVISION IMPROVEMENT PLANS ARE BASED ON CITY DATUM.
EQUATION BETWEEN CITY DATUM AND EPW IS FOUND TO BE APPROXIMATELY +0.17 FT FOR THIS PROJECT. PARTICULAR BASED ON THE ABOVE COMPARISON OF 4-DISTING MANHOLE ELEVATIONS.

- WATER NOTES:**
- CONTACT UTILITY COMPANIES FOR EXACT LOCATION OF AND UNDERGROUND UTILITIES IN THIS AREA BEFORE EXCAVATION.
 - INSTALL A TRENCH SAFETY SYSTEM TO PROVIDE FOR THE SAFE EXCAVATION OF ALL TRENCHES EXCEEDING A DEPTH OF FIVE (5) FEET AS PER O.S.H.A. REQUIREMENTS.
 - PROVIDE ADEQUATE CONCRETE THRUST BLOCKING AT THE FOLLOWING TAPPING SLEEVES, TEES, BRANCH PLUGS AND ALL FITTINGS.
 - ALL WELDES ON P.V.C. WATER SHALL BE ANCHORED IN CONCRETE. SEE DETAIL ON THIS SHEET.
 - P.V.C. PIPE SHALL BE PLACED WITH SELECT BEDDING MATERIAL AROUND.
 - WATER & SANITARY SEWER MAIN SEPARATION REQUIREMENTS SHALL COMPLY WITH T.C.D.'S MINIMUM VERTICAL SEPARATION REQUIREMENTS (REFER TO SPECIFICATIONS).
 - CONSTRUCTION OF THE PUBLIC WATER AND SEWER SYSTEM INCLUDING MATERIALS AND TESTING SHALL CONFORM TO EPW/P&B STANDARD SPECIFICATIONS.
 - ALL NEW WATER MAINS SHALL HAVE A MINIMUM OF 5-FT BELOW PAVEMENT SPRING. CONTRACTOR MUST MAINTAIN A MINIMUM COVER OF THREE FEET OVER THE WATER AND SEWER MAINS DURING THE CONSTRUCTION PHASE OF THE SUBDIVISION.

REVISIONS:

NO.	DATE	DESCRIPTION
1	11/17/2013	CITY COMMENTS
2	11/17/2013	CITY COMMENTS
3	11/17/2013	CITY COMMENTS
4	11/17/2013	CITY COMMENTS

PROJECT NAME:
SERENO VALLEY ESTATES
TRACTS 1, 1-L, 1-L-1, & 1-L-2, BLOCK 10, UPPER VALLEY, SHERBETS, CITY OF WEST VALLEY, CALIF. CONTAINING 418.55+/- ACRES.

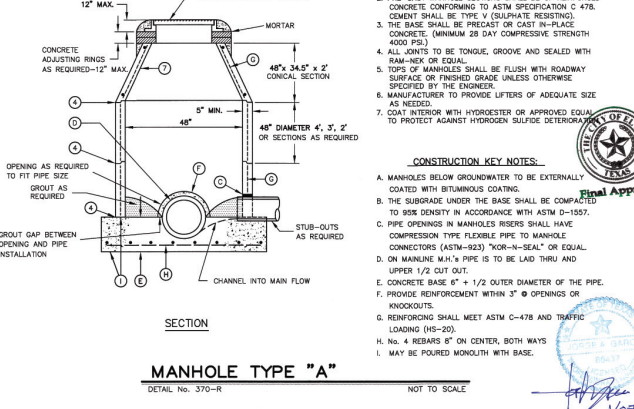
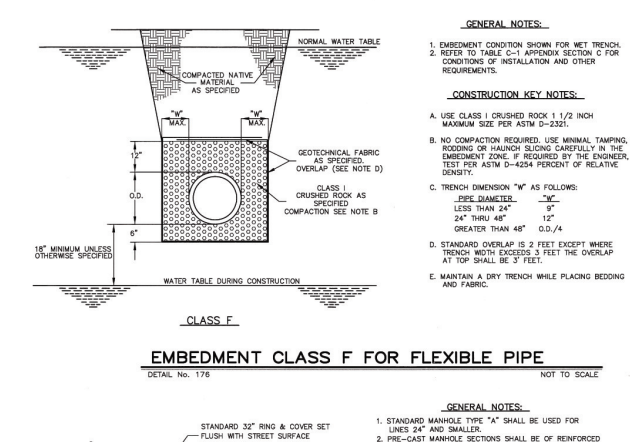
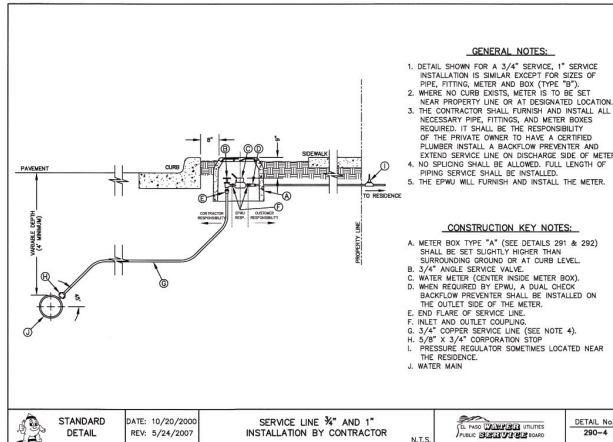
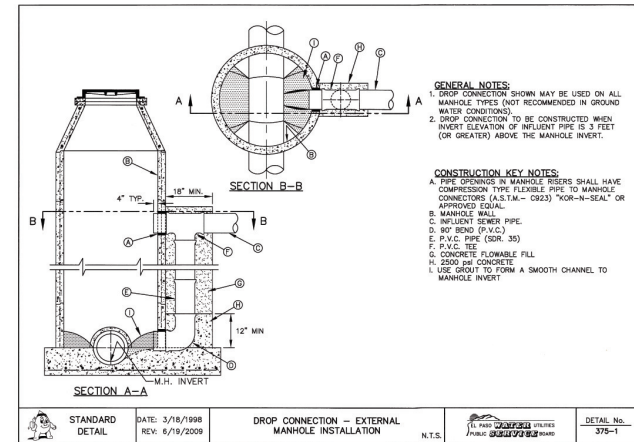
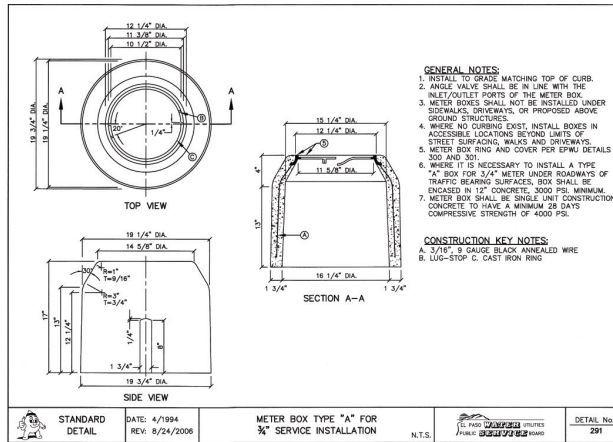
PROJECT NO.: 13043
SCALE: SHOWN
ISSUED DATE:
DESIGNED FOR: CITY APPROVAL

PREPARED BY:
SITENWORK
SITENWORK ENGINEERING, INC.
1445 WEST VALLEY AVENUE, SUITE 100, WEST VALLEY, CA 94798
TEL: (925) 255-1100 FAX: (925) 255-1101



DRAWING TITLE:
WATER SYSTEM
SHEET NO.: U-1
PART 1 OF 3





REFERENCE BENCHMARK: 1000 FT. ELEVATION AT THE INTERSECTION WESTSIDE DRIVE AND TOWER BELL DRIVE. ELEVATION: 3745.48 FT. CITY DATUM

REVISION	DATE	DESCRIPTION
1	12/07/14	ISSUE FOR CONSTRUCTION
2	02/27/14	ISSUE FOR CONSTRUCTION
3	02/27/14	ISSUE FOR CONSTRUCTION

SERENO VALLEY ESTATES
TRACTS 10, 11, 12, 13, 14 & 15, BLOCK 10, UPPER VALLEY SURVEY, CITY OF PASO COUNTY, TEXAS
CONTAINING: 31.632-ACRES

PROJECT NAME: SERENO VALLEY ESTATES
PROJECT NO.: 1304-3
SCALE: SHOWN
ISSUED DATE:

ISSUED PURPOSE: CITY APPROVAL

PREPARED BY: SATEWORK
DATE: 10/27/14
14400 GARDNER DRIVE, SUITE 100, EL PASO, TX 79907
PHONE: (951) 361-1100 FAX: (951) 361-1000



SHEET TITLE: UTILITY DETAILS
SHEET No.: U-3
SHEET 3 OF 3

E:\13043 Sereno Valley Estates\Sub Improv\Plan\City Comments\13043 Utility.dwg, 3/27/2014 3:32:29 PM

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SODDING NOTES - CITY OF EL PASO PARKS

- SUBMIT THE FOLLOWING:
- SOD CERTIFICATION FOR GRASS SPECIES AND NAME AND LOCATION OF SOD SOURCE. SODDING SCHEDULE, INCLUDING DATES AND TYPE OF WORK TO BE PERFORMED. PRIOR TO ORDERING, NAME OF SUPPLIER OF SOD, AMENDMENTS MATERIALS.
 - QUALITY ASSURANCE
 - MINIMUM AGE IS MONTHS, WITH ROOT DEVELOPMENT THAT WILL SUPPORT ITS OWN WEIGHT WITHOUT DELIVERY, STORAGE AND HANDLING.
 - DELIVERY TO SITE WITHIN 24 HOURS OF DELIVERY AT SITE. PROTECT AGAINST DRYING AND BREAKING OF ROLLED STRIPS.
 - DELIVER PACKAGED MATERIALS IN CONTAINERS SHOWING HEIGHT, ANALYSIS AND NAME OF MANUFACTURER. PROTECT MATERIALS FROM DETRIORATION DURING DELIVERY AND WHILE STORED ON SITE.
- SITE CONDITIONS
- PROCEED WITH AND COMPLETE LANDSCAPE WORK AS RAPIDLY AS PORTIONS OF SITE BECOME AVAILABLE. WORKING WITHIN SEASONAL LIMITATIONS FOR EACH KIND OF LANDSCAPE WORK REQUIRED.
 - WHEN CONDITIONS DETRIMENTAL TO PLANT GROWTH ARE ENCOUNTERED, SUCH AS REDBILT FILL, ADVERSE DRAINAGE CONDITIONS, OR OBSTRUCTIONS CONSULT THE LANDSCAPE DESIGNER AND CITY OF EL PASO PARKS AND RECREATION BEFORE PLANTING.
 - PLANT OR INSTALL MATERIALS DURING NORMAL PLANTING SEASONS FOR EACH TYPE OF LANDSCAPE WORK REQUIRED. CORRELATE PLANTING WITH SPECIFIC MAINTENANCE PERIODS TO PROVIDE MAINTENANCE FROM DATE OF FINAL ACCEPTANCE.
- SOIL AMENDMENTS
- PROVIDE SOIL ANALYSIS BEFORE ADDITION OF SOIL AMENDMENTS. ANALYSIS OF SOIL AMENDMENTS. DRIVING AMENDMENTS SHALL CONSIST OF WELL-AERED ORGANIC COMPOST OR APPROVED EQUAL.
- FERTILIZER
- SLOW-RELEASE STARTER FERTILIZER ANALYSIS AS RECOMMENDED BY LANDSCAPE ARCHITECT BY WEIGHT AT A RATE OF 1 LB OF ACTUAL NITROGEN PER 1000 SQUARE FEET BY WEIGHT.
- GRASS MATERIALS
- PROVIDE STRONGLY ROOTED SOD, NOT LESS THAN 8 MONTHS OLD AND FREE OF WEEDS AND UNDESIRABLE NUTRIVE BRASSES AND MAGNOLIA CUT TO FIVE THIRDS OF 3/4 INCH PLUS OR MINUS 1/4 INCH, INCLUDING TOP GROWTH AND TAPROOT. PROVIDE SOD CAPABLE OF GROWTH AND DEVELOPMENT WHEN PLANTED. CUT SOD PIECES A MINIMUM OF 8 INCHES WIDE.
- PREPARATION
- PRIOR TO START OF SOIL PREPARATION, ALL FINISH GRASSES SHALL BE ESTABLISHED AND APPROVED AS SETTING THE REQUIREMENTS OF THE GRASS PLAN. APPLY A UNIFORM ONE-INCH LAYER OF 5 CY/1000 SQUARE FEET OF ORGANIC SOIL AMENDMENT. AFTER APPLICATION OF ORGANIC AMENDMENT AND STARTER FERTILIZER, ALL AREAS TO BE SODDED SHALL BE THOROUGHLY ROTOTILLED TO A MINIMUM DEPTH OF 12 INCHES. AFTER ROTOTILLING IS COMPLETE, ALL CROSS DIRECTIONS, DRAGS, AND LASER LEVEL TO AN EVEN GRADE. THEN ROLL FOR FINISH GRADE. FILL AREA AND REMOVE STONES OVER 1 INCH IN ANY DIMENSION. STICKS, ROOTS, RUBBISH AND OTHER EXTRANEOUS MATTER. ROLL ENTIRE AREA WITH HEAVY ROLLER.
- SODDING OPERATIONS
- LAY SOD WITHIN 24 HOURS OF DELIVERY AT SITE. DO NOT PLANT DORMANT SOD OR ON FROZEN GROUND.
 - IF SOIL IS DRY, MOISTEN AREAS BEFORE SODDING. WATER THOROUGHLY AND ALLOW SURFACE MOISTURE TO DRY. DO NOT CREATE A HARDY SOIL CONDITION.
 - REMOVE FEEDER WHEELS OF SOD PARRY TO TRANSPORT SOD ROLLS AS SOIL IS BEING INSTALLED.
 - LAY SOD TO FORM A SOLID MASS WITH TIGHTLY FITTED JOINTS. NO JOINT SHALL BE MORE THAN 1/8" GAP OVER MOISTENED SOIL, LIGHTLY RAKE THE SOIL AHEAD OF EACH SOD STRIP. BUTT ENDS AND SIDES OF SOD STRIPS. DO NOT OVERLAY. STAGGER STRIPS TO OFF-SET JOINTS IN ADJACENT COURSES. LAY SOD PARALLEL TO CONTOURS OF SLOPE. WORK FROM BORDERS TO AVOID DAMAGE TO SUBSOIL OR SOD. TAMP FIRMLY AND EVENLY BY HAND TO ENSURE CONTACT WITH SUBSOIL. WORK SIFTED TOPSOIL OR SAND INTO JOINTS CRACKS BETWEEN PIECES OF SOD.
 - WATER SOD THOROUGHLY WITH A FINE SPRAY IMMEDIATELY AFTER PLANTING.
- MAINTENANCE
- BEGAN MAINTENANCE IMMEDIATELY AFTER PLANTING.
 - MAINTAIN LAWNS FOR NOT LESS THAN A PERIOD OF AT LEAST 60 DAYS AFTER COMPLETION AND ACCEPTANCE OF SOD. INSPECTION TO DETERMINE ACCEPTANCE OF SODDED LAWNS WILL BE MADE BY PARKS STAFF AND SITES SUPERVISOR REPRESENTATIVE UPON CONTRACTOR'S REQUEST. PROVIDE NOTIFICATION AT LEAST 10 WORKING DAYS BEFORE REQUESTED INSPECTION DATE AND LONGER AS REQUIRED TO ESTABLISH AN ACCEPTABLE LAWN.
 - SODDED LAWNS TO BE MAINTAINED NOT LESS THAN 60 DAYS AFTER COMPLETION AND ACCEPTANCE OF SODDING OPERATIONS.
 - MAINTENANCE TO INCLUDE:
 - WATER SOD THOROUGHLY EVERY 2 TO 3 DAYS MIN. AS REQUIRED TO ESTABLISH PROPER ROOTING. REPAIR, REMOVE, AND RESEED AREAS THAT HAVE DIED OR ENDED.
 - REPLACE DEAD OR UNDESIRABLE SOD SECTIONS WITH NEW SOD.
 - MON LAWN AREAS WHEN THE GRASS IS OVER 2 INCHES HIGH FOR FIRST CUTTING.
 - FERTILIZE LAWN WITH TOP DRESSING FERTILIZER AT 1 LB. PER 1000 SQ.FT. OF NITROGEN, WATER THOROUGHLY.
 - ADDITIONAL LAWN MAINTENANCE CONSISTS OF WEEDING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGRASSING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN. FREE OF BROODS OR BARE AREAS.
- CLEANUP AND PROTECTION
- DURING THE WORK, KEEP PAVEMENTS CLEAN AND WORK AREA IN AN ORDERLY CONDITION.
 - PROTECT WORK AND MATERIALS FROM DAMAGE DUE TO SODDING OPERATIONS, OPERATIONS BY OTHER CONTRACTORS AND TRACES AND TRESPASSERS. MAINTAIN PROTECTION DURING INSTALLATION AND MAINTENANCE PERIODS. TRUCK, REPAIR OR REPLACE DAMAGED WORK AS DIRECTED.
- INSPECTION AND ACCEPTANCE
- WHEN INSPECTED WORK DOES NOT COMPLY WITH REQUIREMENTS, REPLACE REJECTED WORK AND CONTINUE SPECIFIED MAINTENANCE UNTIL REINSPECTED BY THE LANDSCAPE DESIGNER AND CITY OF EL PASO PARKS AND RECREATION AND FOUND TO BE ACCEPTABLE. REMOVE REJECTED SOD AND MATERIALS PROMPTLY FROM PROJECT SITE.

PLANS MUST BE SUBMITTED TO TEXAS DEPT OF LICENSING AND REGULATION FOR COMPLIANCE WITH TEXAS ACCESSIBILITY STANDARDS.

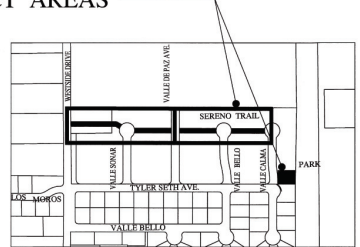
ALL PARK IMPROVEMENTS SHALL COMPLY WITH ADAAG AND TAS RULES AND REGULATIONS AS THEY APPLY.

TDLR # EABRJ5802179(8/14)

GENERAL IRRIGATION NOTES

- ALL MATERIALS LISTED BY BRAND NAME MAY BE SUBSTITUTED BY EQUAL OR BETTER PRODUCTS AS APPROVED BY THE CITY OF EL PASO PARKS AND RECREATION DEPT.
- THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING AND PROPOSED UTILITIES AND ALL SITE CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. ANY DAMAGE CAUSED BY THE CONTRACTOR SHALL BE REPAIRED OR REPLACED AT NO ADDITIONAL COST TO THE OWNER.
- THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE OTHER CONTRACTORS WORKING ON THE SITE. COORDINATE INSTALLATION OF SLEEVES!
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY WATER PRESSURE, WATER SOURCE AND SIZE IN THE FIELD PRIOR TO CONSTRUCTION. SHOULD A DISCREPANCY EXIST BETWEEN DESIGN PRESSURE AND FIELD PRESSURE THE LANDSCAPE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY.
- IF PRESSURE IS MORE THAN 85 PSI DOWNSTREAM OF METER NOTIFY THE PROJECT MANAGER AND LANDSCAPE ARCHITECT IMMEDIATELY.
- CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS.
- LOCATION OF THE CONTROLLER AND BACKFLOW SHALL BE APPROVED BY THE CITY OF EL PASO PARKS AND RECREATION DEPT.
- STAKE OUT ROTOR HEAD AND PIPING LOCATIONS PRIOR TO TRENCHING. AFTER APPROVAL BY CITY OF EL PASO PARKS AND RECREATION DEPT., TRENCHING AND EQUIPMENT INSTALLATION MAY BEGIN.
- THE CONTRACTOR SHALL NOT WEDGE DRAINAGE IN ANY WAY. THE CONTRACTOR SHALL ALWAYS MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDINGS, WALLS, ETC.
- ALL PIPING/WIRING RUNNING BENEATH PAVED SURFACES (DRIVES, PARKS, ETC.) SHALL BE INSTALLED IN SCHEDULE 40 PVC SLEEVES. SLEEVES MUST BE 2 IN THE DIAMETER SIZE OF PIPE ENCASED. REMOTE CONTROL WIRING MUST BE RUN IN SEPARATE SLEEVES FROM IRRIGATION PIPE SLEEVES. EXTEND SLEEVES TWENTY-FOUR INCHES FROM EACH END OF HARD SURFACES. WRAP ENDS WITH FOUR (4) MILS PLASTIC AND GOOD QUALITY PLASTIC TAPE. GRAY, CLOTH DUST TAPE IS NOT ACCEPTABLE.
- DIRECT BURIAL, 24" ELECTRIC CONTROL WIRE (RASH) AND COMMON GROUND (RSH) SHALL BE STANDARD COLORS. REPORTS AND INTERSECTION INSTALL WITH SLOTTED ALUMINUM TUBING. TRENCHING AND CORRELATION LABEL. ALL WIRE ENDS AT CONTROLLER AND IN VALVE BOX. PROVIDE THREE SPARE REMOTE CONTROL VALVE WIRES FOR EACH CONTROLLER AND EXTEND TO FURFEST VALVE. WIRES SHALL BE IN SEPARATE TRENCH FIVE FEET (5') FROM PRESSURE MAIN LINE ON NORTH AND WEST SIDE OF MAIN. PROVIDE EXPANSION LOOPS FOR WIRES EVERY 200' WIRES SHALL NOT BE STRETCHED TIGHT. USE ORANGE-GLASS CONNECTORS FACTORY FILLED WITH SILICONE FOR VALVE WIRE. SPLICES ARE NOT ALLOWED BETWEEN CONTROLLERS AND VALVES. SPARE REMOTE CONTROL VALVE WIRES MUST BE OTHER THAN STANDARD RED IN COLOR.
- ALL VALVES SHALL BE TAGGED WITH A WATERPROOF TAG SHOWING VALVE NUMBER, LABEL, ALL WIRING AT CONTROLLERS AND PANELS.
- ALL PIPE GITS SHALL BE HITTED TO 90 DEGREES TO ASSURE PROPER SOLVENT WELD. ALL BIRRS SHALL BE REMOVED PRIOR TO GUNNING AND MUST HAVE A FILED BEVELLED EDGE A MINIMUM OF ONE FOURTH (1/4) THE WIDTH OF PIPE. USE "S-33" SLUING PROCESS. PIPE MUST BE CLEAN AND PRIMER APPLIED AS RECOMMENDED BY MANUFACTURER WITH GUNNING PROCESS IS UNACCEPTABLE. PRIMER SHOULD BE MOST AS AVAILABLE AND PVC PIPING IS ASSEMBLED USE PVS WELD-ON PURPLE PRIMER FOR PVC. USE PVS HELD-ON GRAY GUE WITH HEAVY DUTY. PIPE OFF ALL EXCESS CEMENT AND LET SET PER MANUFACTURER'S RECOMMENDATIONS. INSTALL SET THIS SHALL BE MINIMUM OF 3 MIN. FOR 1/2 TO 1 1/4" PIPE. 8 MIN. FOR 1 1/2" PIPE TO 2" PIPE. 2 HOURS FOR 2 1/2" TO 4" PIPE. 4 HOURS FOR 4" TO 6" PIPE. 8 HOURS FOR 6" TO 8" PIPE. 24 HOURS FOR 8" TO 12" PIPE. 48 HOURS FOR 12" TO 24" PIPE. WHEN HUMIDITY EXCEEDS 60% INCREASE TIME BY 50%. ONCE WELD IS SET, PIPE SHALL NOT BE MOVED FOR ANY REASON UNTIL SET TIME HAS BEEN ACHIEVED. WATER SHALL NOT BE TURED ON UNTIL ALL GITS HAVE BEEN ACHIEVED.
- A CITY OF EL PASO PARKS AND RECREATION DEPT. REPRESENTATIVE MUST BE PRESENT DURING ALL PLUMBING, TESTING AND ADJUSTING. THE CONTRACTOR MUST PROVIDE 24 HRS NOTICE TO THE CITY OF EL PASO PARKS AND RECREATION DEPT. PRIOR TO CONDUCTING THE TESTS. FLUSHING AND TESTING SHALL BE PERFORMED IN ACCORDANCE WITH PARKS AND RECREATION DEPARTMENT DESIGN AND CONSTRUCTION STANDARDS.
- THE FINISH GRADE OF ALL TRENCHED AREAS SHALL BE SMOOTH, EVEN AND CONSISTENT. FREE OF ANY HAPPS, DEPRESSIONS OR OTHER GRADING IRREGULARITIES. OVERWELL TRENCHES AND CONDUIT SO NOT TO CRASH THE PIPING TO SODDING INSPECT TRENCHES FOR SETTLING AND BACKFILL, AND REGRADE IF NECESSARY. DO NOT STOP SOD UNTIL TRENCHES ARE ACCEPTABLE.
- THE CONTRACTOR SHALL TIME AND ADJUST THE IRRIGATION SYSTEM SO THAT NO WATER WILL RUN ONTO THE STREET OR PARKS.
- THE CONTRACTOR SHALL PROVIDE A WATER ADJUST CONDUCTED IN THE PRESENCE OF THE CITY OF EL PASO PARKS AND RECREATION DEPT. REPRESENTATIVE.
- THE CONTRACTOR SHALL MAINTAIN ALL WORK UNTIL ALL WORK IS COMPLETE AND ACCEPTED BY THE CITY OF EL PASO PARKS AND RECREATION DEPT.
- WATERING TIME, TO SET TIME STATIONS. SEE TIME IRRIGATION SYSTEM DESIGN CRITERIA SET FOR LOCAL WATERING CODES.
- WARRANTY PERIOD IS ONE YEAR FROM DATE OF ACCEPTANCE.

PROJECT AREAS



SITE MAP

SCALE: 1"=600'-0"

GENERAL NOTES:

- THE CONTRACTOR SHALL VISIT AND FAMILIARIZE HIMSELF WITH THE PROJECT SITE PRIOR TO SUBMITTING HIS BID.
- CONTRACTOR SHALL BE FAMILIAR WITH PLANS, DETAILS AND SPECIFICATIONS AS THEY PERTAIN TO THE SITE. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE OWNER'S REPRESENTATIVE IF ANY ITEMS CONTAINED WITHIN THE SCOPE OF WORK DEFINED HEREIN ARE IN CONFLICT WITH THE PROPOSED CONTRACT.
- EXISTING UTILITY LINES ARE TO BE BLUE STAKED PRIOR TO EXCAVATION, CURE, AND FIELD VERIFY ALL SITE CONDITIONS, UTILITIES AND SERVICES PRIOR TO EXCAVATION. CONSTRUCTION WORK IN CLOSE PROXIMITY TO UNDERGROUND UTILITIES SHALL BE COORDINATED WITH APPROPRIATE AGENCIES.
- THE CONTRACTOR SHALL COORDINATE THE CONSTRUCTION SCHEDULE WITH OWNER, ALL AFFECTED UTILITY COMPANIES, AND ALL OTHER ENTITIES HAVING JURISDICTION OVER THE PROJECT.
- THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND GRACES PRIOR TO COMMENCING WITH THE WORK. ANY DISCREPANCY NOTED SHALL BE REPORTED IMMEDIATELY TO THE PROJECT MANAGER. FAILURE OF THE CONTRACTOR TO REPORT ANY FIELD AND PLAN DISCREPANCIES SHALL MAKE THE CONTRACTOR RESPONSIBLE FOR WORK THAT IS PERFORMED.
- VIBRATORY ROLLERS SHALL NOT BE PERMITTED ON ANY PHASE OF THIS PROJECT, UNLESS APPROVED IN WRITING BY THE CITY ENGINEER.
- ALL WORK ON THIS PROJECT SHALL BE PERFORMED IN STRICT CONFORMANCE WITH ALL CURRENT SAFETY CODES AND STANDARDS, INCLUDING BUT NOT LIMITED TO OSHA REQUIREMENTS.
- BEFORE EXCAVATING, CONTRACTOR SHALL LOCATE AND PROTECT ALL UNDERGROUND UTILITIES LINES. CONTRACTOR SHALL REPLACE ANY UTILITIES DAMAGED DURING CONSTRUCTION AT NO ADDITIONAL COST TO OWNER.
- CONTRACTOR SHALL WATER CONSTRUCTION SITE AREA A MINIMUM OF TWICE A DAY TO DUST CONTROL, ONCE IN THE MORNING AND ONCE IN THE AFTERNOON. THIS SHALL ALSO BE DONE ON WEEKENDS AND HOLIDAYS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF EXISTING IMPROVEMENTS IN THE PROJECT AREA AND ITS VICINITY. ANY DAMAGE RESULTING FROM CONTRACTOR WORK SHALL BE RESTORED AT NO COST TO OWNER.
- CONTRACTOR SHALL COMPLY WITH ALL FEDERAL, STATE AND LOCAL ENVIRONMENTAL REGULATION DURING CONSTRUCTION ACTIVITY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ANY ENVIRONMENTAL FINES RESULTING FROM HISHER WORK AND HOLD THE OWNER HARMLESS IN SUCH CASES.
- CONTRACTOR SHALL SECURE THE SITE DURING CONSTRUCTION TO PROTECT THE AREA FROM VANDALISM AND ILLEGAL TRESPASSING. CONTRACTOR SHALL SECURE THE SITE AT HISHER OWN COST. CONTRACTOR SHALL SITE PROTECTION MEASURES SHALL BE SUBMITTED TO THE PARKS AND RECREATION DEPT. FOR APPROVAL.
- ALL EXISTING UTILITIES CURRENTLY IN SERVICE MUST REMAIN IN SERVICE THROUGHOUT CONSTRUCTION EXCEPT AS NOTED IN THE DRAWINGS. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING ALL EXISTING UTILITIES (INCLUDING SERVICE CONNECTIONS) FROM DAMAGE AS A RESULT OF CONSTRUCTION ACTIVITIES.
- PRIOR TO BEGINNING CONSTRUCTION, CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO VERIFY LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL CALL THE RESPECTIVE 1-CALL NUMBER FOR SUCH UTILITIES.
- CONTRACTOR SHALL MAINTAIN THE FOLLOWING: ALL ACCESSIBLE ROUTES SHALL NOT EXCEED A RUNNING SLOPE GREATER THAN 1:20 (5%). NO PIERRE SHALL THE CROSS SLOPE OF AN ACCESSIBLE ROUTE EXCEED 1:50 (2%). MAXIMUM SLOPE OF ADJOINING BUTTERS, ROAD SURFACE IMMEDIATELY ADJACENT TO THE CURB RAMP OR ACCESSIBLE ROUTE SHALL NOT EXCEED 1:20 (5%). MAXIMUM RUNNING SLOPE OF ANY CURB RAMP SHALL NOT EXCEED 1:12 (8.33%). ALL ACCESSIBLE PATHS SHALL COMPLY WITH TAS AND ADAAG.

PARKS DEPARTMENT
REVIEWED BY *Channing Jelleka* 01/15/2015

SHEET INDEX	
L1	SITE MAP, SHEET INDEX, NOTES
L2	PLANTING AND MATERIALS PLAN - SERENO TRAIL
L3	IRRIGATION - SERENO TRAIL
L4	LAYOUT PLAN - SERENO TRAIL
L5	LAYOUT PLAN - SERENO TRAIL
L6	PLANTING AND MATERIALS PLAN - SERENO PARK
L7	IRRIGATION PLAN - SERENO PARK
L8	LAYOUT PLAN - SERENO PARK
L9	PLAYGROUND EQUIPMENT
L10	PLANTING AND CONSTRUCTION DETAILS
L11	CONSTRUCTION DETAILS
L12	IRRIGATION DETAILS
L13	IRRIGATION DETAILS
L14	IRRIGATION DETAILS



REVISIONS	DATE

U.S.A. McNEELLS
LANDSCAPE ARCHITECT
1400 GREENSBORO HIGHWAY
DALLAS, TEXAS 75244
(972) 651-5092



PROJECT TITLE
SERENO VALLEY ESTATES LANDSCAPE IMPROVEMENTS

Scale: Horizontal: 1"=100'-0", Vertical: 1"=10'-0", Contour Interval: 1/4"=1'-0"
DATE: 01/15/14
DRAWN BY: LM
CHKD. BY: LM
APPROV. BY: LM
JOB NO.

SHEET TITLE
L1

NOTES AND INDEX

SHEET 1 OF 14

TREE LEGEND/SCHEDULE SERENO TRAIL PROJECT TOTAL							
SYM	KEY	COMMON NAME	BOTANICAL NAME	CONT.	SIZE	QTY	REMARKS
⊕	LOT	LIVE OAK	QUERCUS VIRGINIANA	24"BOX	2' CAL-10HT-6' SPREAD	8	SINGLE-FILL
⊙	RAT	RAYWOOD ASH	FRAXINUS OXYCARPA	24"BOX	2' CAL-10HT-6' SPREAD	14	SINGLE TRUNK-FULL

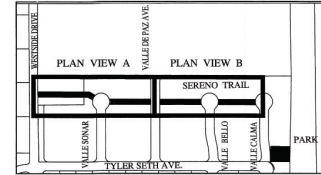
PROJECT TOTAL MATERIAL LEGEND INDICATED BY	
	1. 3/4" DESERT TAN GRAVEL 9" DEPTH 2" BELOW ALL CONCRETE SURFACES USE NEED BARRIER PROJECT TOTAL 15664 SF SEE DETAIL K ON SHEET II
	2. 7" WIDE CONCRETE WALKING TRAIL PROJECT TOTAL 1816 LF SEE DETAIL 9 ON SHEET ILO
	3. 2'-3" COBBLESTONE 9" DEPTH 2" BELOW ALL CONCRETE SURFACES USE NEED BARRIER PROJECT TOTAL 5378 SF SEE DETAIL K ON SHEET II
	4. RECESSED AREA 6'-8" DEPTH FOR WATER HARVESTING
	5. 6'-0" DIAMOR 3/4 SERIES BENCH - BRONZE WITH ADA SEATING AREA SEE DETAIL J ON SHEET II
	6. ROCK WALL - USE COMBINATION FENCE ON SIDE OF SUBDIVISION LOTS FOR FIRST 20' THEN STONE SEE DETAIL M ON SHEET III

NOTE: KEEP BARRIER SHALL BE DENSITY PRO 3" OR APPROVED EQUAL. KEEP BARRIER TO BE FINED ON 3' CENTERS WITH U-SHAPE PINS.

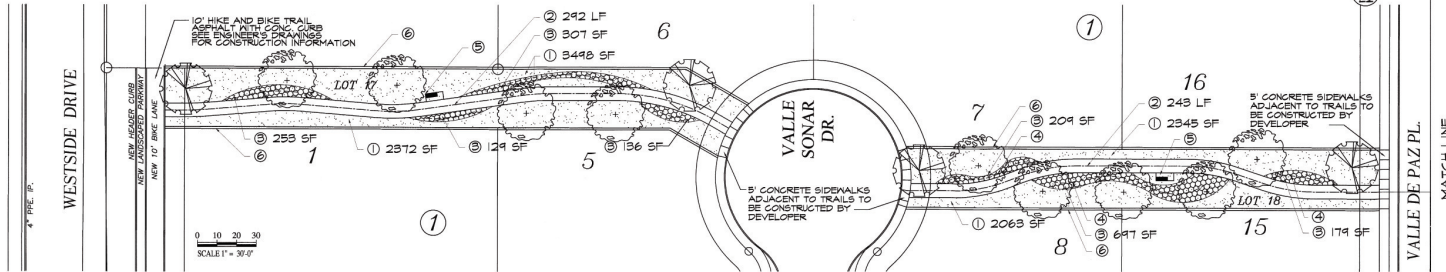
TREE NOTES:
MINIMUM BRANCHING CLEARANCE IS 1' OVER SIDEWALK
DO NOT SELECT TREES WITH LOW FORK BRANCHING PATTERN.
PRUNING TO MEET CLEARANCE REQUIREMENTS WILL DESTROY FORM OF TREES WITH THAT GROWTH HABIT.
MINIMUM HEIGHT 10' 2" CALIPER AT 6' ABOVE TOP ROOT.

PARKS DEPT. NOTES FOR PLANTING:

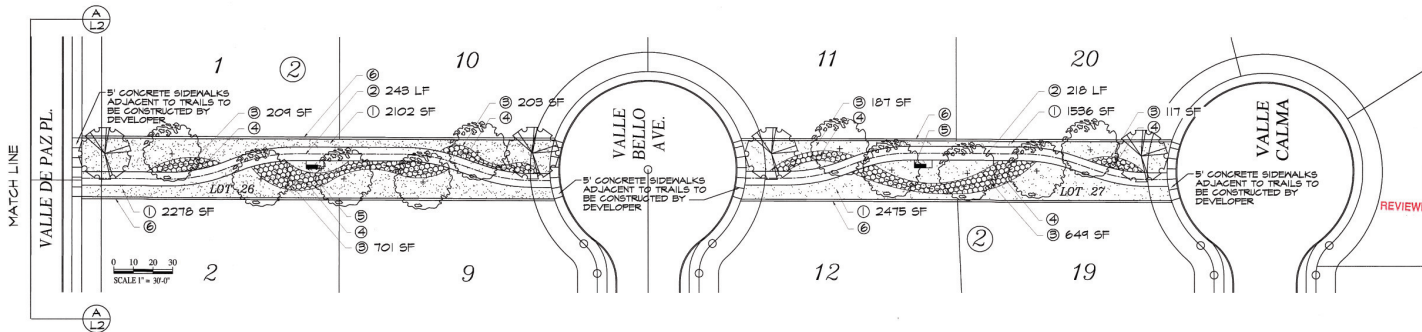
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER AND TO STRAIGHTEN OR REPLANT ALL PLANTS WHICH ARE DAMAGED DUE TO PIND. PLANTS BLOWN OVER BY HIGH WINDS SHALL NOT BE A CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE FINANCIAL RESPONSIBILITY OF CONTRACTOR.
- TOPSOIL MATERIAL FOR PLANTINGS SHALL BE FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, STONES LARGER THAN 1" IN DIAMETER, NOXIOUS WEEDS AND PLANTS, SOIL PARTIALLY DISINTEGRATED DEBRIS, INSECTS OR ANY OTHER UNDESIRABLE MATERIAL. PLANTS OR SEEDS THAT WOULD BE TOXIC OR HARMFUL TO GROWTH.
- CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF PLANT MATERIAL QUANTITIES.
- IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS THE PLANS SHALL CONTROL. IMPROPER PLANT COUNT MADE BY THE LANDSCAPE CONTRACTOR SHALL BE NO CAUSE FOR ADDITIONAL COSTS TO THE OWNER.
- THE CONTRACTOR SHALL MEET BOTH THE CONTAINER SIZE AND CALIPER SIZE, AS WELL AS HEIGHT AND SPREAD SPECIFICATIONS SPECIFIED.
- EXCAVATE TWO TIMES GREATER THAN THE ROOT BALL-DIAMETER OF THE SHRUB TWO TIMES GREATER THAN THE ROOT BALL FOR TREES. SCARIFY BOTTOM OF PLANTING PIT BEFORE PLACING PLANT. PLACEMENT OF PLANT SHALL BE PERPENDICULAR TO GROUND.
- CONTRACTOR WILL NOT PLANT MATERIAL SHOWN ON PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS HAVE CHANGED SINCE PLANS WERE DRAWN. ANY CHANGES ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE DESIGNER BEFORE ANY PLANTING IS DONE IN THE AREA.
- PLANT SUBSTITUTIONS WILL BE PERMITTED. REQUEST SUBSTITUTION IN WRITING GIVING REASONS FOR SUCH SUBSTITUTIONS.
- TURF QUANTITY TAKE-OFF ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- TREAT ALL PLANTING AREAS WITH AN APPLICATION OF BURLAP. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR APPLICATION.
- REMOVE ALL WIRE, STRING, WIRE BASKETS, BURLAP, CONTAINERS, ETC. FROM THE ROOTBALL OF PLANTS BEFORE BACKFILLING THE PLANTING HOLE.
- SEEDED AREAS SHOULD BE MAINTAINED UNTIL A FULL GROWTH OF WILD GRASS OR SEEDED MATERIAL IS ACHIEVED.
- WARRANTY FOR THE PLANTING MATERIAL SHALL BE ONE YEAR FROM THE DATE OF ACCEPTANCE (TREES, SHRUBS AND GROUNDCOVER).



DRAWING KEY
SCALE: 1" = 600'-0"



PLAN VIEW A - PLANTING AND MATERIALS
SCALE: 1" = 30'-0"



PLAN VIEW B - PLANTING AND MATERIALS
SCALE: 1" = 30'-0"

REVISIONS

DATE

ARCHITECT'S SEAL

SCALE: 1" = 600'-0"

Vertical Contour Interval: 3/4"

DATE: DEC. 1, 2014

DRAWN BY: LM

CHECKED BY: LM

APPROVED BY: LM

PROJECT TITLE

SERENO TRAIL
LOTS 17 AND 18, BLOCK 1 AND LOTS 26 AND 27, BLOCK 2
SERENO VALLEY ESTATES
EL PASO, TEXAS
AREA: 237,924 SQ. FT. - .88 ACRES

Final Approval

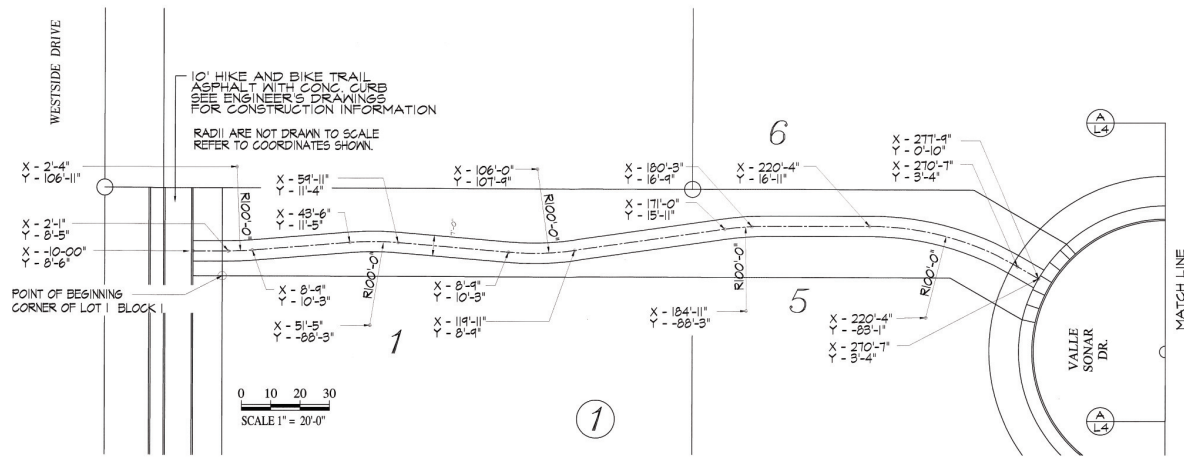
PARKS DEPARTMENT
REVIEWED BY: [Signature] 01/15/2015

SHEET TITLE

L2

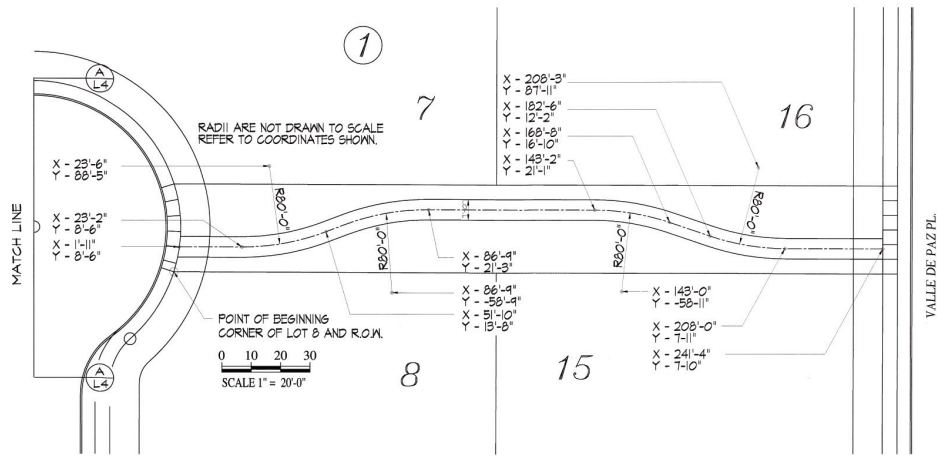
PLANTING AND MATERIALS

SHEET 2 OF 14



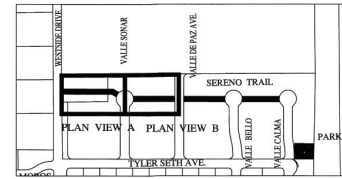
PLAN VIEW A - LAYOUT

SCALE: 1" = 20'-0"



PLAN VIEW B - LAYOUT

SCALE: 1" = 20'-0"



DRAWING KEY
SCALE: 1" = 600'

REVISIONS

DATE

LISA McNEELIS
Landscape Architect
11875 621-5292

ARCHITECT'S SEAL



SCALE

Vertical Interval: N/A
Contour Interval: 1/4
DATE: DEC. 1, 14
DRAWN BY: LM
CHKD. BY: LM
APP'D. BY: LM
JOB No.:

PROJECT TITLE

SERENO TRAIL
LOTS 17 AND 18, BLOCK 1 AND LOTS 26 AND 27, BLOCK 2
SERENO VALLEY ESTATES
EL PASO, TEXAS
AREA: 25.762 ACFT, 1.88 ACRES



PARKS DEPARTMENT
REVIEWED BY: *Christy de la Cruz* 01/15/2015



SHEET TITLE

L4
LAYOUT PLAN

SHEET 4 OF 14

SERENO PARK MATERIAL LEGEND AND DETAIL KEY:

- MESA RED GRAVEL, CRASHER FINES 3" DEPTH
2" BELOW ALL CONCRETE SURFACES USE WEED BARRIER. PROJECT TOTAL [3262 SF]
SEE DETAIL (C) ON SHEET L11.
- COMBINATION FENCE WITH ROYAL STONE FENCE
ENTIRE EAST PROPERTY LINE AND FIRST 20' OF NORTH AND SOUTH PROPERTY LINES. USE ONLY STONE FOR REMAINING LENGTH OF PROPERTY LINES. SEE PLAN COMBINATION FENCE PROJECT TOTAL [602 LF]
SEE DETAIL (C) SHEET L11.
- ENHANCED TREK WOOD CHIPS. INSTALL PER MANUFACTURER'S SPECIFICATIONS. PROJECT TOTAL [1400 SF]
PLACE 18" DEPTH OF CHIPS AND COMPACT TO 12" DEPTH.
- SANTA ANA BERMEJA GRASS. PROJECT TOTAL [580 SF]
TOP OF SOD 2" BELOW TOP OF SIDEWALK.
- CONCRETE WALKWAY. PROJECT TOTAL [526 SF]
SEE DETAIL (C) ON SHEET L10.
- PLAY STRUCTURE - PLAYBOOSTER DESIGN FIRST COLORS - TANGERINE FLAM LION COLOR PALETTE. MUST BE APPROVED BY PARKS PRIOR TO ORDERING. SEE SHEET L14 FOR MORE INFORMATION.
- 18" HT. ROCK WALL. PROJECT TOTAL [48 LF]
SEE DETAILS (E) AND (F) ON SHEET L10.
- 4'-0" DIMOR BH SERIES BENCH+GROUND MOUNT. TOTAL [1] BROWN MATCH COLORS TO TABLE AND TRASH RECEPTACLE. SEE DETAIL (C) ON SHEET L11.
- ADA ACCESSIBLE RAMP. SEE DETAIL (G) AND (H) ON SHEET L11.
- 6'-8" RECESSED AREA FOR WATER HARVESTING. PARKS AND RECREATION REPRESENTATIVE MUST APPROVE GRADING PRIOR TO INSTALLING SOD OR GRAVEL.
- ACCESSIBLE PONG TABLE - PROJECT TOTAL [2] BROWN MATCH COLORS TO BENCH AND TRASH RECEPTACLE. SEE DETAIL (C) ON SHEET L11.
- 7" DIAMETER PLANTING SPACE IN CONCRETE. REFER TO LAYOUT PLAN FOR LOCATION. MUST NOT BLOCK ADA ACCESSIBILITY.
- TRASH RECEPTACLE - PROJECT TOTAL [1] BROWN MATCH COLORS TO BENCH AND TRASH RECEPTACLE. SEE DETAIL (C) ON SHEET L11.
- PARK INFORMATION SIGN - LOCATION SHALL BE APPROVED BY PARKS DEPT REPRESENTATIVE. SEE DETAIL (C) ON SHEET L11.

- PARKS DEPT. NOTES FOR PLANTING:**
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PREVENT PLANTS FROM FALLING OR BEING BLOWN OVER AND TO STRAIGHTEN OR REPAIR ANY ALL PLANTS WHICH ARE DAMAGED DUE TO WIND. PLANTS BLOWN OVER BY HIGH WINDS SHALL NOT BE A CAUSE FOR ADDITIONAL EXPENSE TO THE OWNER, BUT SHALL BE THE FINANCIAL RESPONSIBILITY OF CONTRACTOR.
 - TOPSOIL MATERIAL FOR PLANTING SHALL BE FREE FROM HARD CLODS, STIFF CLAY, HARD PAN, STONES LARGER THAN 1" IN DIAMETER, NOXIOUS WEEDS AND PLANTS, SOD, PARTIALLY DISINTEGRATED DEBRIS, INSECTS OR ANY OTHER UNDESIRABLE MATERIAL. PLANTS OR SEEDS THAT WOULD BE TOXIC OR HARMFUL TO GROWTH.
 - CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF PLANT MATERIAL QUANTITIES.
 - IN THE EVENT OF VARIATION BETWEEN QUANTITIES SHOWN ON THE PLANT LIST AND THE PLANS, THE PLANS SHALL CONTROL. IMPROPER PLANT COUNT MADE BY THE LANDSCAPE CONTRACTOR SHALL BE NO CAUSE FOR ADDITIONAL COSTS TO THE OWNER.
 - THE CONTRACTOR SHALL MEET BOTH THE CONTAINER SIZE AND GAUZE SIZE, AS WELL AS HEIGHT AND SPREAD SPECIFICATIONS SPECIFIED.
 - EXCAVATE TWO TIMES GREATER THAN THE ROOT BALL DIAMETER OF THE SHRUB, TWO TIMES GREATER THAN THE ROOT BALL FOR TREES. SCARIFY BOTTOM OF PLANTING PIT BEFORE PLACING PLANT. PLACEMENT OF PLANT SHALL BE PERPENDICULAR TO GROUND.
 - CONTRACTOR WILL NOT PLANT MATERIAL SHOWN ON PLANS WHEN IT IS EVIDENT THAT FIELD CONDITIONS HAVE CHANGED SINCE PLANS WERE DRAWN. ANY CHANGES ARE TO BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE DESIGNER BEFORE ANY PLANTING IS DONE IN THE AREA.
 - PLANT SUBSTITUTIONS WILL BE PERMITTED. REQUEST SUBSTITUTION IN WRITING GIVING REASONS FOR SUCH SUBSTITUTIONS.
 - TURF QUANTITY TAKE-OFF ARE THE RESPONSIBILITY OF THE CONTRACTOR.
 - TREAT ALL PLANTING AREAS WITH AN APPLICATION OF SURFLAN. FOLLOW MANUFACTURER'S INSTRUCTIONS FOR APPLICATION.
 - REMOVE ALL WIRE, STRINGS, WIRE BASKETS, BURLAP, CONTAINERS, ETC., FROM THE ROOTBALL OF PLANTS BEFORE BACKFILLING THE PLANTING HOLE.
 - SEEDED AREAS SHOULD BE MAINTAINED UNTIL A FULL GROWTH OF WILD GRASS OR SEEDED MATERIAL IS ACHIEVED.
 - WARRANTY FOR THE PLANTING MATERIAL SHALL BE ONE YEAR FROM THE DATE OF ACCEPTANCE. (TREES, SHRUBS AND GROUNDCOVER).

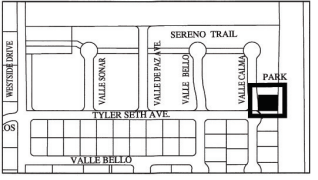
QUANTITIES ARE PROJECT TOTALS - VERIFY! PLANS TAKE PRECEDENCE

PLANT LEGEND/SCHEDULE

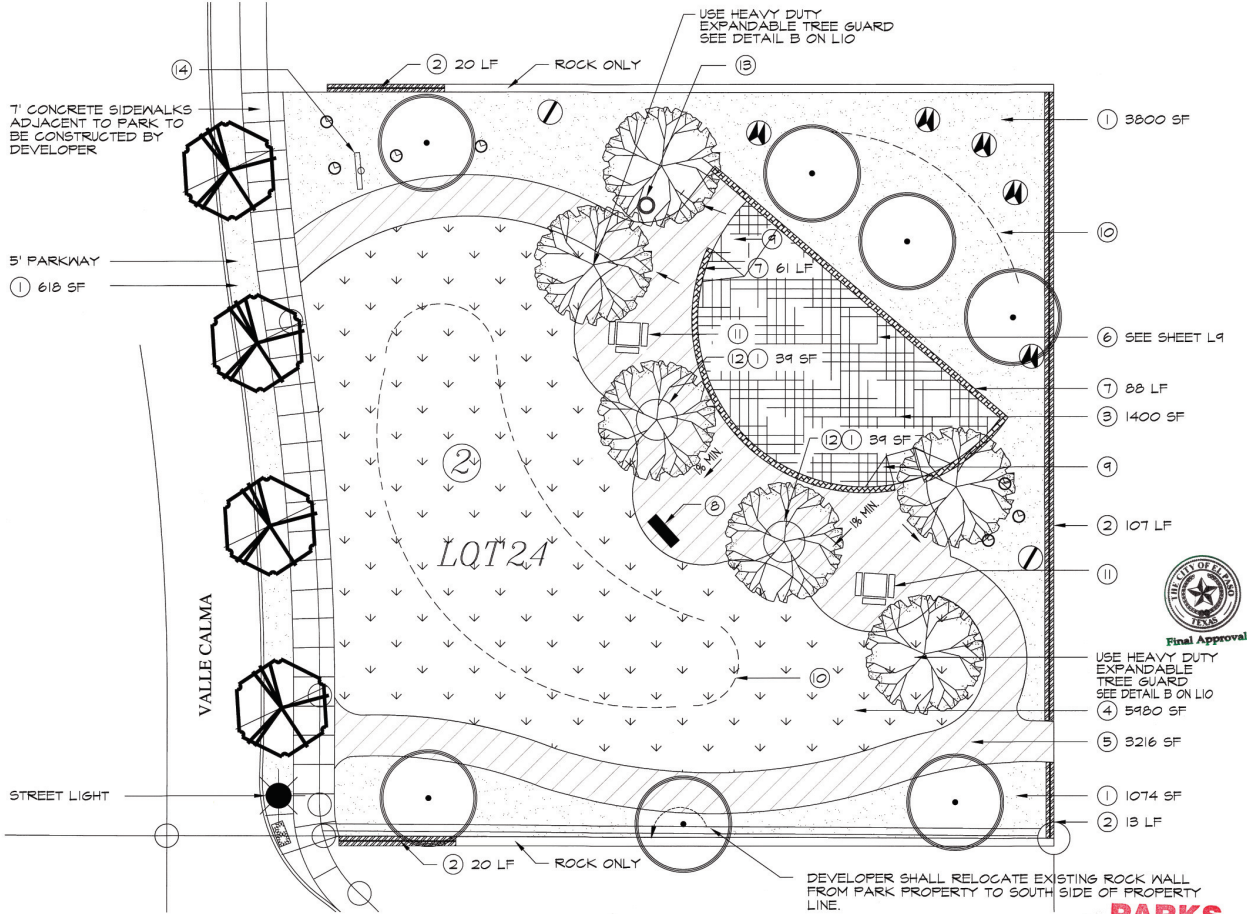
SYM	KEY	COMMON NAME	BOTANICAL NAME	CONT.	SPACING	QUANT.	SIZE	REMARKS
HC	GREENCLOUD TEXAS SAGE	LEUCOPHYLLUM FRUTICOSUM GREENCLOUD	5 GAL	10' OC	5	18" HT	00	
DM	DALLAS RED CREPTE MYRTLE	LASERISRODIA INDICA DALLAS RED	5 GAL	8' OC	2	18" HT		MAY SUBSTITUTE 'GENTENIAL'
YL	NEW GOLD LANTANA	LANTANA CAMERA NEW GOLD	5 GAL	4' OC	1	6" HT		CUT BACK MID FEB LAY SOD SO THAT NO LINES ARE VISIBLE TITRANT L MAY BE USED AS ALTERNATE
CS	SANTA ANA BERMEJA GRASS	C.DACTYLOX X TRANSVAALINENSIS	SOD			4501 SF	0	

TREE LEGEND/SCHEDULE PROJECT TOTAL

SYM	KEY	COMMON NAME	BOTANICAL NAME	CONT.	SIZE	QUANT.	REMARKS
LE1	LACEBARK ELM	ULMUS PARVIFLOIA	24"BOX	2' CAL-10HT-4'	SPREAD	4	SINGLE-FULL
OPT	CHINESE PISTACHE	FRAXINUS OXYCARPA	24"BOX	2' CAL-10HT-6'	SPREAD	1	SINGLE TRUNK-FULL
RAT	RAYWOOD ASH	FRAXINUS OXYCARPA	24"BOX	2' CAL-10HT-6'	SPREAD	6	SINGLE TRUNK-FULL



DRAWING KEY
SCALE: 1" = 600'-0"



PLAN VIEW - PLANTING AND MATERIALS

SCALE: 1" = 10' - 0"

DEVELOPER SHALL RELOCATE EXISTING ROCK WALL FROM PARK PROPERTY TO SOUTH SIDE OF PROPERTY LINE.

PARKS DEPARTMENT
REVIEWED BY [Signature] 01/15/2019

REVISIONS

DATE

ARCHITECT'S SEAL

SCALE

Vertical: Contour Interval: N/A, REC: 1' 4"

DATE: DEC 1, 14
DRAWN BY: LM
CHKD. BY: LM
APP'D. BY: LM
CDS No.

PROJECT TITLE

SERENO PARK
LOT 28, BLOCK 2
SERENO VALLEY ESTATES
EL PASO, TEXAS
AREA: 1622 SQ FT - 3789 ACRES

L6

PLANTING AND MATERIALS

SHEET 6 OF 14

MATERIAL LEGEND:

- 1/4" PRESSURE MAIN PVC SCHEDULE 40, DEPTH 24" TO TOP OF PIPE. SEE DETAIL 6 ON L12.
- LATERAL FOR SPRINK PVC CLASS 200, DEPTH 16" TO TOP OF PIPE. SEE DETAIL 6 ON L12.
- 3/4" LATERAL FOR DRIP PVC CLASS 200, DEPTH 16" TO TOP OF PIPE. SEE DETAIL 6 ON L12.
- 50# 40 SLEEVES UNDER ALL PAVED AREAS WHERE LINES ARE RUN. SLEEVES SHALL EXTEND 24" PAST PAVING. CHASE 1" MARK IN CONCRETE. CHASE OR MARK TO LOCATE SLEEVE AT EACH SIDE. SEE DETAIL 1 ON L15.
- JZRN WILKINS SOOL, PRESSURE REGULATOR WITH 5G OPTION. SEALED CASE OPTION IF WATER PRESSURE IS ABOVE 75 PSI. CONSTRUCTION OF BACKFLOW. SEE DETAIL 0 ON L14. SET TO 75 PSI.
- DRIP EMITTER FOR TREES. RAINBOW XSB-800 XSB-80 WITH FILTER. USE 1 XSB-20PC EMITTERS PER TREE. 21 GPH. SET IN EMITTER VALVE BOX. SEE DETAIL 5 AND F ON L12.
- DRIP EMITTER FOR PLANTS. RAINBOW XSB-800 XSB-80 WITH FILTER. USE 1 XSB-20PC EMITTER PER PLANT. SET IN EMITTER VALVE BOX. SEE DETAIL 5 ON L12.
- DRIP EMITTER FOR 5 GAL PLANTS - DO NOT EXCEED 30' OF MICRO TUBE. RAINBOW COMPENSATING EMITTER XSB-20. USE 1 EMITTER PER PLANT UNLESS OTHERWISE NOTED. PLACE ON UPHILL SIDE OF PLANT. 23 GPH. SEE DETAIL C ON SHEET L12 AND J ON L15.
- ELECTRIC REMOTE VALVE - WEATHERWATG 800000-10. SIZE ON PLAN. IN LOCATING VALVE BOX USE MPH ON VALVE #. SEE DETAIL 7 ON L12 AND J ON L15.
- HANTER 1-20-06-55 WITH 1/2" BLUE NOZZLE. WITH 6" STAINLESS STEEL RISER. 45 PSI @ 1" RADIUS - 1.9 GPM. MANUFACTURERS PRESCRIPTION RATE. 39. SEE DETAIL L ON L15.
- HANTER PRO-06-PR640 SPRAY BODY - 40 PSI. PRESSURE REGULATED BY TOPUP. USE PRO ADJ. NOZZLE WITH A GRAY. 1" RADIUS AT 40 PSI. MANUFACTURERS PRESCRIPTION RATE. 173. SEE DETAIL L ON L15.
- QUICK COUPLER - BUCKNER 1" DOUBLE LUG 6G WITH FACTORY ASSEMBLED LAGGERS AND 1/2" THAT HAS SNAP-LOCK BRASS STABILIZER FITTING. TO BE SET IN EMITTER VALVE BOX WITH PURPLE FLAT LID AND VANDAL PROOF BOLT. SHALL HAVE WEATHER PROOF TAG THAT READS "NONPOTABLE WATER. NOT SAFE FOR DRINKING". SEE DETAIL K ON L15.
- RAINBOW RAIN SENSOR. RES-BEK. LOCATION TO BE APPROVED BY PARKS. SEE DETAIL N ON L14.
- WEATHERWATG 800000-10 BRASS VALVE. SEE DETAIL B ON L14.
- 1" METER. LOCATION ON THIS PLAN IS APPROXIMATE. FLOW: 31 GPM - STATIC PRESSURE: 62 PSI. SEE DETAIL H ON L15.
- BACKFLOW REDUCED PRESSURE 820V 1" SEE DETAIL H ON L15.
- RAINBOW ESP-125AT SATELLITE CONTROLLER. IN LOCATING STRONGBOX STAINLESS STEEL UNIT 20-2655 WITH PEDESTAL. SEE DETAILS M, N AND P ON L14.

IRRIGATION SCHEDULE									
VALVE	VALVE SIZE	TOTAL GPD	HANTER PREOP. RATE	CALCULATED PREOP. RATE	WATER REQUIREMENT	NOZZLE SIZE	# & TYPE OF HEADS	GPM PER HEAD	RUN TIME PER WEEK
1	1"	10.5	39 INHR	371 INHR	1.2"/WEEK	#1.5	1 PART	1.5	125 MIN
2	1"	6	75 INHR	39 INHR	1.2"/WEEK	#1.5	4 FULL	1.5	210 MIN
3	1"	4.83	DRIP	N/A	N/A	N/A	N/A	240 MIN	
4	1"	1.5	39 INHR	371 INHR	1.2"/WEEK	#1.5	6 PART	1.5	125 MIN
5	1"	14.21	173 INHR	153 INHR	1.2"/WEEK	11A ADJ. 1 PRO ADJ.	VARIES	45 MIN	

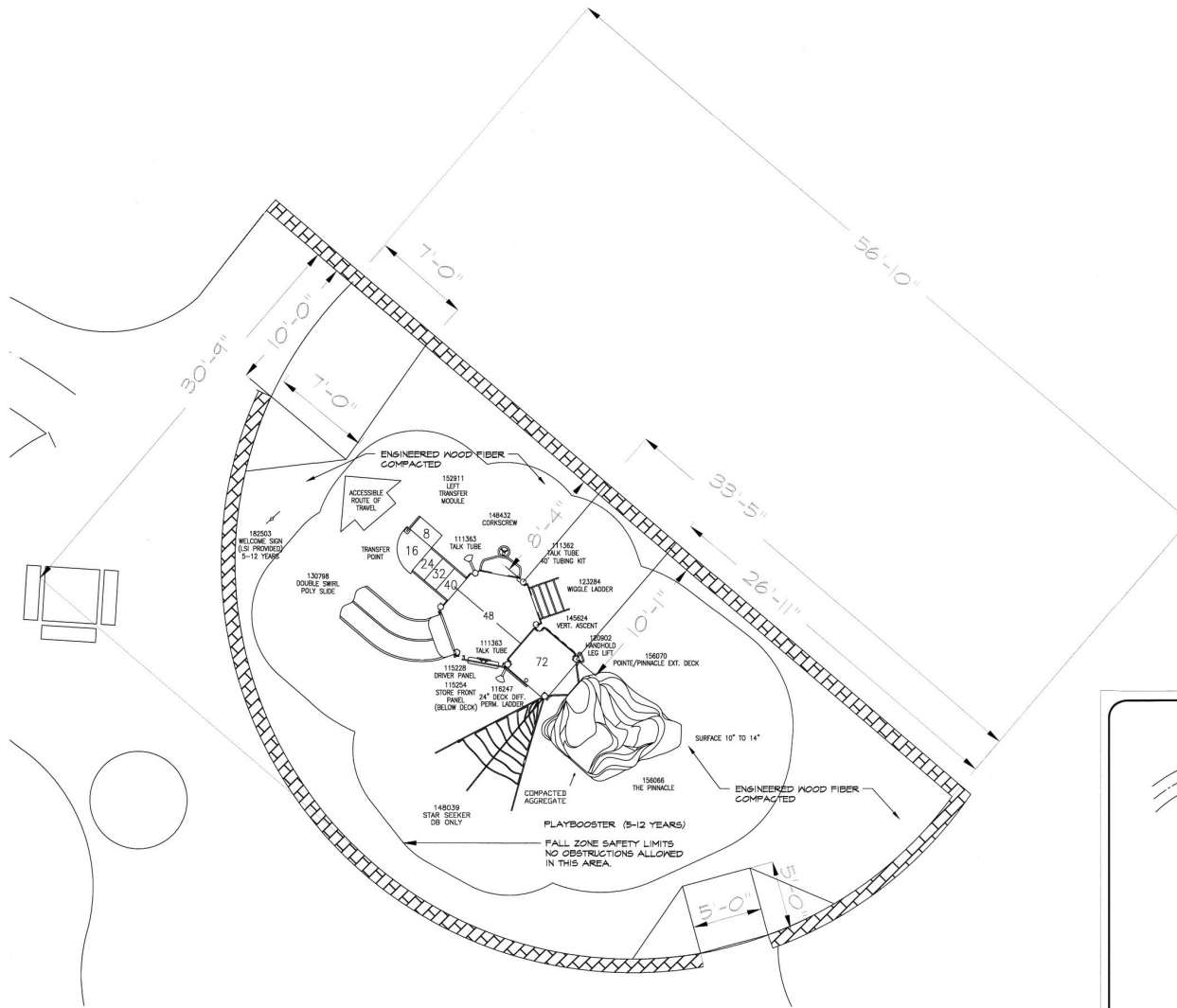
TURF IRRIGATION SYSTEM DESIGN CRITERIA

- WATER SOURCE**
- WATER MUST BE DELIVERED TO THE SITE AT SUFFICIENT PRESSURE AND FLOW TO PROVIDE MAXIMUM PERFORMANCE AS SHOWN BELOW.
 - PRESSURE REQUIREMENT - 82 PSI STATIC PRESSURE UPSTREAM OF METER AT FIELD LOCATION AND ELEVATION
 - 45 PSI AT BASE OF ROTOR HEAD
 - 40 PSI AT BASE OF SPRAY HEAD
 - MAX FLOW REQUIREMENT - 14.21 GPM MAXIMUM FLOW RATE
 - DIFFERENCES IN AVAILABLE FLOW AND/OR PRESSURE WILL REQUIRE DESIGN CHANGES (CONTRACTOR MUST VERIFY).
 - PROPOSED 1" WATER SERVICE LINE, PROPOSED 1" WATER METER.
 - HEAD LAY-OUT
 - ROTOR HEAD LAY-OUT AND SPACING IS BASED ON TRIANGULAR LAYOUT. DIAMETER OF THE HANTER 1-20 ROTOR WITH NOZZLE #1.5 @ 40 PSI IS 24" HEAD SPACING IS 36" FOR TRIANGULAR LAYOUT. 24" FOR LATERAL SPACING. ADJUSTED SPACING IS SHOWN AT EDGES OF TURF AND CONCRETE EDGING. IN GENERAL, HEAD SPACING IS AS FOLLOWS:
 - HEAD SPACING = 20' LATERAL SPACING = 24'
 - SPRAY HEAD SPACING IS LOCATED ON AREA PERIMETER. DIAMETER OF THE HANTER PRO-06 WITH NOZZLE #1.5 @ 40 PSI IS 17.0248 x 17" HEAD SPACING REQUIRED. SPACING ADJUSTED SPACING IS SHOWN AT EDGES OF TURF AND CONCRETE EDGING. IN GENERAL, HEAD SPACING IS AS FOLLOWS:
 - HEAD SPACING = 17' LATERAL SPACING = 14'
 - HEAD AND LATERAL SPACING WILL VARY WITH DIMENSIONS OF TURF. ADJUSTED SPACINGS WILL BE NECESSARY. HEAD SHALL BE SET BACK FROM PAVING TO PREVENT SPRAY GOTO SODMULCH.
 - PERFORMANCE STATISTICS

THE FOLLOWING PERFORMANCE STATISTICS WERE CALCULATED FOR PLAN CHANGES IN OPERATING PRESSURE, HEAD SPACING, AND/OR NOZZLE SELECTION WILL EFFECT RESULTS.

 - RUN TIME FOR 1.2" OF WATER - 180 ROTORS/25 MINUTES PER STATION PER WEEK
 - RUN TIME FOR 1.2" OF WATER - 360 ROTOR ZONES. 210 MINUTES PER STATION PER WEEK
 - RUN TIME FOR 1.2" OF WATER - POP UP ZONES. 45 MIN. PER WEEK.
- VALVES # AND #4**
 1.5" X 16.25" = 144
 (24" X 24X)0.66 = 499
- VALVE #2**
 1.5" X 16.25" = 144
 (21" X 24X)0.66 = 436.5
- VALVE #6 POP UP SPRAY - TOTAL AREA METHOD**
 1.5" X 16.25" = 144.96 = 194' INR
 165 = 165

PRESSURE LOSS CALCULATIONS									
SECTION # 1		SECTION # 2		SECTION # 3		SECTION # 4		SECTION # 5	
TYPE OF PIPE	LENGTH (FT)	DIAMETER (IN)	VELOCITY (FPS)	HEAD LOSS (FT)	TYPE OF PIPE	LENGTH (FT)	DIAMETER (IN)	VELOCITY (FPS)	HEAD LOSS (FT)
PVC CLASS 200	25	1.5	5.14	.22	0.619	0.619	0.619	0.619	0.619
PVC CLASS 200	25	3	5.14	.46	.746	.746	.746	.746	.746
PVC CLASS 200	25	4.5	5.14	1.14	.737	.737	.737	.737	.737
PVC CLASS 200	24	6	5.14	1.87	.4026	.8921	.8921	.8921	.8921
PVC CLASS 200	24	7.5	5.14	2.34	.674	.674	.674	.674	.674
PVC CLASS 200	24	9	5.14	3.93	.8472	2.8049	2.8049	2.8049	2.8049
PVC CLASS 200	15	10.5	1	1.59	.2740	.2740	.2740	.2740	.2740
TOTAL				10.00	2.6438	2.6438	2.6438	2.6438	2.6438
MINOR LOSS				1.8	1.8	1.8	1.8	1.8	1.8
TOTAL LOSS				11.8	4.4835	4.4835	4.4835	4.4835	4.4835
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	28.93	28.93	28.93	28.93	28.93
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	17.9440	17.9440	17.9440	17.9440	17.9440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	18.4440	18.4440	18.4440	18.4440	18.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	18.9440	18.9440	18.9440	18.9440	18.9440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	19.4440	19.4440	19.4440	19.4440	19.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	20.4440	20.4440	20.4440	20.4440	20.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	21.4440	21.4440	21.4440	21.4440	21.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	22.4440	22.4440	22.4440	22.4440	22.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	23.4440	23.4440	23.4440	23.4440	23.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	24.4440	24.4440	24.4440	24.4440	24.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	25.4440	25.4440	25.4440	25.4440	25.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	26.4440	26.4440	26.4440	26.4440	26.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	27.4440	27.4440	27.4440	27.4440	27.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	28.4440	28.4440	28.4440	28.4440	28.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	29.4440	29.4440	29.4440	29.4440	29.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	30.4440	30.4440	30.4440	30.4440	30.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	31.4440	31.4440	31.4440	31.4440	31.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	32.4440	32.4440	32.4440	32.4440	32.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	33.4440	33.4440	33.4440	33.4440	33.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	34.4440	34.4440	34.4440	34.4440	34.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	35.4440	35.4440	35.4440	35.4440	35.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	36.4440	36.4440	36.4440	36.4440	36.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	37.4440	37.4440	37.4440	37.4440	37.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	38.4440	38.4440	38.4440	38.4440	38.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	39.4440	39.4440	39.4440	39.4440	39.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	40.4440	40.4440	40.4440	40.4440	40.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	41.4440	41.4440	41.4440	41.4440	41.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	42.4440	42.4440	42.4440	42.4440	42.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	43.4440	43.4440	43.4440	43.4440	43.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	44.4440	44.4440	44.4440	44.4440	44.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	45.4440	45.4440	45.4440	45.4440	45.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	46.4440	46.4440	46.4440	46.4440	46.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	47.4440	47.4440	47.4440	47.4440	47.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	48.4440	48.4440	48.4440	48.4440	48.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	49.4440	49.4440	49.4440	49.4440	49.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	50.4440	50.4440	50.4440	50.4440	50.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	51.4440	51.4440	51.4440	51.4440	51.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	52.4440	52.4440	52.4440	52.4440	52.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	53.4440	53.4440	53.4440	53.4440	53.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	54.4440	54.4440	54.4440	54.4440	54.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	55.4440	55.4440	55.4440	55.4440	55.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	56.4440	56.4440	56.4440	56.4440	56.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	57.4440	57.4440	57.4440	57.4440	57.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	58.4440	58.4440	58.4440	58.4440	58.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	59.4440	59.4440	59.4440	59.4440	59.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	60.4440	60.4440	60.4440	60.4440	60.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	61.4440	61.4440	61.4440	61.4440	61.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	62.4440	62.4440	62.4440	62.4440	62.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	63.4440	63.4440	63.4440	63.4440	63.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	64.4440	64.4440	64.4440	64.4440	64.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	65.4440	65.4440	65.4440	65.4440	65.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	66.4440	66.4440	66.4440	66.4440	66.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	67.4440	67.4440	67.4440	67.4440	67.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	68.4440	68.4440	68.4440	68.4440	68.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	69.4440	69.4440	69.4440	69.4440	69.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	70.4440	70.4440	70.4440	70.4440	70.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	71.4440	71.4440	71.4440	71.4440	71.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	72.4440	72.4440	72.4440	72.4440	72.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	73.4440	73.4440	73.4440	73.4440	73.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	74.4440	74.4440	74.4440	74.4440	74.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	75.4440	75.4440	75.4440	75.4440	75.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	76.4440	76.4440	76.4440	76.4440	76.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	77.4440	77.4440	77.4440	77.4440	77.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	78.4440	78.4440	78.4440	78.4440	78.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	79.4440	79.4440	79.4440	79.4440	79.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	80.4440	80.4440	80.4440	80.4440	80.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	81.4440	81.4440	81.4440	81.4440	81.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	82.4440	82.4440	82.4440	82.4440	82.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	83.4440	83.4440	83.4440	83.4440	83.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	84.4440	84.4440	84.4440	84.4440	84.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	85.4440	85.4440	85.4440	85.4440	85.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	86.4440	86.4440	86.4440	86.4440	86.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	87.4440	87.4440	87.4440	87.4440	87.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	88.4440	88.4440	88.4440	88.4440	88.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	89.4440	89.4440	89.4440	89.4440	89.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	90.4440	90.4440	90.4440	90.4440	90.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	91.4440	91.4440	91.4440	91.4440	91.4440
TOTAL PRESSURE LOSS TO THE CITY MAIN				11.8	92.4440	92.4440	92.4440	92.4440	92.4440

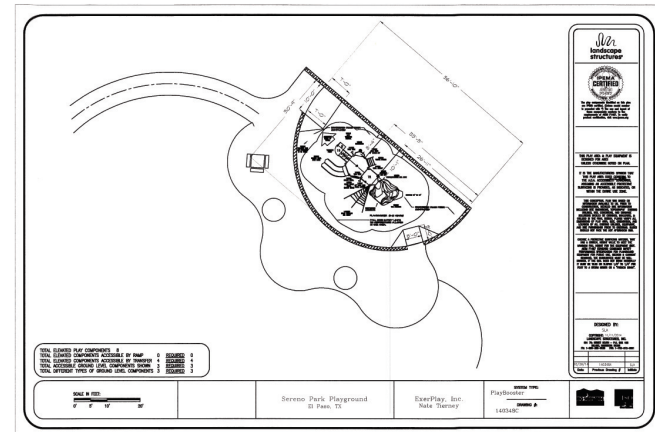


PLAN VIEW - PLAYGROUND

SCALE: 1/4" = 1' - 0"

- PLAYGROUND EQUIPMENT NOTES:**
1. VERIFY LOCATION AND DIMENSIONS OF PLAYGROUND EQUIPMENT BEFORE FINAL INSTALLATION.
 2. ACTUAL CONDITIONS IN THE FIELD MAY REQUIRE ADDING OR ADJUSTING COMPONENTS OF THE PLAYGROUND EQUIPMENT TO MEET ALL CPSC, ASTM AND ADAAS REQUIREMENTS. ALL CHANGES SHALL BE REVIEWED AND ACCEPTED BY PARKS STAFF PRIOR TO THEIR EXECUTION.
 3. CONTRACTOR SHALL MEET ALL APPLICABLE ADA AND TAA REQUIREMENTS FOR ACCESS TO PLAYGROUND TO INCLUDE CONCRETE SIDEWALKS. THE CONTRACTOR IS RESPONSIBLE TO INSURE THAT RUNNING SLOPE (8%), CROSS-SECTION (6/8") AND FINISHED SURFACE TEXTURE COMPLY WITH ACCESSIBILITY REQUIREMENTS.
 4. CONTRACTOR SHALL PROVIDE A MINIMUM FALL ZONE AS NOTED ON THE DRAWINGS FROM THE EDGE OF THE EQUIPMENT TO THE INNER FACE OF THE CONTAINMENT ROCKWALL.
 5. CONTRACTOR IS RESPONSIBLE TO INSURE THAT PLAYGROUND AREA IS FENCE-IN THROUGHOUT THE DURATION OF THE CONSTRUCTION PROJECT. FENCE IS REQUIRED TO BE MINIMUM OF 6 FEET HIGH AND MAINTAINED IN A STABLE AND SECURE CONDITION.
 6. CONTRACTOR SHALL PROTECT ALL CONCRETE WORK TO AVOID VANDALISM OR DAMAGE DURING CURING. THE ANY DAMAGE DONE TO THE CONCRETE DUE TO VANDALISM DAMAGE MUST BE RESTORED TO GOOD FINISHED QUALITY APPEARANCE.
 7. CONTRACTOR SHALL BE RESPONSIBLE TO HAVE ANY VEGETATION TREATED AND REMOVED PRIOR TO THE EXCAVATION OF THE SITE FOR THE PLAYGROUND EQUIPMENT, CONTAINMENT ROCKWALL AND SIDEWALK.
 8. AT COMPLETION OF PROJECT INSTALLATION CONTRACTOR SHALL PROVIDE MANUFACTURER CERTIFICATION AND OBTAIN AN INDEPENDENT AGENCY TO PROVIDE A SAFETY AUDIT OF PLAYGROUND EQUIPMENT AND PLAY SURFACE.
 9. CONTRACTOR IS RESPONSIBLE TO MAINTAIN SITE CLEAN AND FREE OF CONSTRUCTION DEBRIS. DAILY CLEANUP OF SITE WILL BE REQUIRED TO BE PROVIDED BY CONTRACTOR. NO STOCK PILING OF CONSTRUCTION DEBRIS WILL BE PERMITTED ON SITE.
 10. CONTRACTOR IS RESPONSIBLE TO INSURE THAT CONSTRUCTION EQUIPMENT WILL NOT BE CLEANED AT THE SITE UNLESS PROPER CONTAINERS ARE PROVIDED TO STORE WASTE. THIS INCLUDES MORTAR, CONCRETE, RUBBERIZED RESILIENT SURFACING, ETC. WASTE MATERIAL MUST BE REMOVED FROM SITE ON A DAILY BASIS.
 11. CONTRACTOR IS RESPONSIBLE TO INSURE THAT ANY CONSTRUCTION MASONRY MATERIALS THAT ARE HAND MIXED AT JOB SITE ARE DONE IN AN APPROPRIATE CONTAINER AND ANY SPILLAGE IS CLEANED AND REMOVED IMMEDIATELY.

AGE APPROPRIATE SIGNAGE MUST BE INCLUDED.



PLAN VIEW - PLAYGROUND

NO SCALE



REVISIONS	
DATE	
LISA Mc NELLIS LANDSCAPE ARCHITECT 100 PROGRESS ROAD, WILCOX, TEXAS 79789 (817) 651-3092	
ARCHITECT'S SEAL	
SCALE	Horizontal: 1/4" = 1' - 0" Vertical: 1/2" = 1' - 0"
PROJECT TITLE	SERENO PARK
	LOT 26 BLOCK 2 SERENO VALLEY ESTATES EL PASO, TEXAS AREA: 16,228 SQ. FT. - 3729 ACRES
SHEET TITLE	L9
	PLAYGROUND EQUIPMENT
	SHEET 9 OF 14

STAKING IS NOT REQUIRED BUT IF DEEMED NECESSARY THE STAKING DETAIL SHALL BE FOLLOWED.
STAKING IS AT THE DISCRETION OF THE CONTRACTOR, LANDSCAPE ARCHITECT AND PARKS DEPT.
BUT SHOULD BE REQUIRED BY THE CONTRACTOR SHALL INCLUDE THE COST OF THE STAKING IN THE COST OF THE TREE.

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE STAKES AT END OF THE GUARANTEE PERIOD AT NO COST TO THE OWNER.
TREES THAT ARE DAMAGED DUE TO IMPROPER OR LACK OF STAKING MUST BE REPLACED BY THE CONTRACTOR AT NO COST TO THE OWNER.

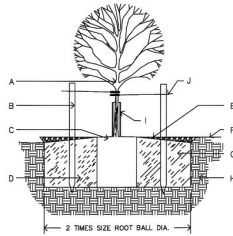
WIRES SHALL NOT BE TAUT BUT SHOULD ALLOW MOVEMENT OF 5 - 10 DEGREES FROM VERTICAL.

STAKES SHALL NOT BE DRIVEN INTO ROOTBALL OF TREES.



A TYPICAL TREE GUYING DETAIL - PLAN VIEW
NOT TO SCALE

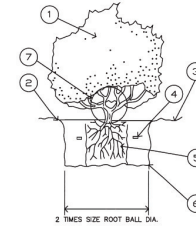
1. 2 STRAND TWIST #4 GUARD WIRE
2. 1/2" RUBBER HOSE
3. #6 WOOD STAKE SET INTO GROUND 2'
4. ROOTBALL



B TREE PLANTING DETAIL - SECTION
NOT TO SCALE

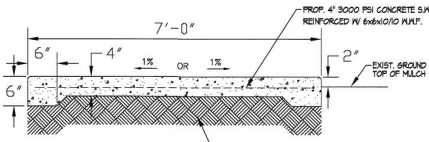
- A. TREE
- B. STAKING NEEDED
- C. 4" SPACE BETWEEN MULCH AND TREE
- D. SLOPE ON SIDES OF PLANTING HOLE
- E. DEPTH OF BARK MULCH-SEE PLAN
- F. FINISH SOIL GRADE
- G. BACKFILL WITH EXISTING NATIVE SOIL
- H. UNDISTURBED SOIL
- I. USE EXPANDABLE TREE GUARDS TO PROTECT TREES PLANTED IN LAWN AREAS. GUARDS MUST BE APPROVED BY THE PARKS DEPT.
- J. TIES TO STAKES TO HAVE RUBBER HOSE TO PROTECT TREE TRUNK FROM DAMAGE BY WIRE. WIRE TIES TO BE LOOSE TO PROTECT TREE TRUNK FROM DAMAGE. WIRE TIES TO BE SET ON SAME TRUNK OR MAIN TRUNK.

1. KEEP SOIL BELOW ROOT BALL UNDISTURBED TO PREVENT TREE FROM SETTLING.
2. REMOVE ANY EXCESS SOIL FROM TOP OF ROOTBALL TO EXPOSE ROOT FLARE (WHERE TOP MOST ROOT EMERGES FROM THE TRUNK). PLANT WITH ROOT FLARE THAN FINISH GRADE 1"-2" HIGHER.
3. REMOVE CONTAINER AND CUT ANY ROOTS THAT ARE CIRCLING THE CONTAINER PRIOR TO SETTING TREE IN PLANTING HOLE (S).
4. TAMP SOIL FIRMLY AROUND BASE OF ROOTBALL WITH FOOT PRESSURE.
5. AT TIME OF PLANTING, ONLY PRUNE GO-DOWNY LEADERS (DOES NOT APPLY TO MULTI-TRUNK SPECIMENS), GROSSOVER LIMBS, AND DEAD OR BROKEN BRANCHES.
6. DO NOT ALLOW MULCH IN CONTACT WITH TREE TRUNK. KEEP AT LEAST 4" AWAY FROM TRUNK.
7. INSTALL TREE GUARD.
8. WHEN DONE, THOROUGHLY WATER TO ELIMINATE AIR POCKETS.
9. STAKING IS NOT REQUIRED - STAKE TREES ONLY IF TREE CANNOT STAND ALONE AND WITH APPROVAL OF THE LANDSCAPE ARCHITECT. CONTRACTOR SHALL NOT STAKE ALL TREES INDISCRIMINATELY. APPROVAL MUST BE OBTAINED TO STAKE TREES.
10. WITH APPROVAL, PROVIDE MIN 3 STAKES/TREE (TYP) IN A TRIANGULAR PATTERN, STAKED INTO UNDISTURBED SOIL WITH CLARK'S TREE STAKE KIT OR APPROVED EQUAL. REMOVE AFTER ONE GROWING SEASON.
11. TOP OF ROOT BALL SHALL BE LEVEL WITH TOP OF MULCH OR BARK MULCH SHALL BE FEATHERED TO FULL DEPTH.



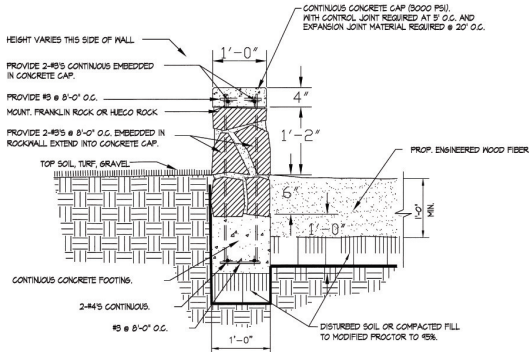
C SHRUB PLANTING DETAIL - SECTION
NOT TO SCALE

- LEGEND**
1. SHRUB OR VINE PER PLAN
 2. EARTH WATERING BASIN (COVER WITH SPECIFIED MULCH ON PLAN)
 3. FINISH GRADE
 4. 1 GRAM PLANT TABLETS (1 GAL = 3, 5 GAL = 6, 10-15 GAL = 9)
 5. ROOTBALL (SET CROWN FLUSH WITH FINISH GRADE) COVER 2" SPECIFIED MULCH
 6. UNDISTURBED NATIVE SOIL
 7. DO NOT BURY PLANT BASE IN GRAVEL
- EXCAVATE AND REPLACE WITH SAME SOIL. REMOVE STAKES 2' OR LARGER.



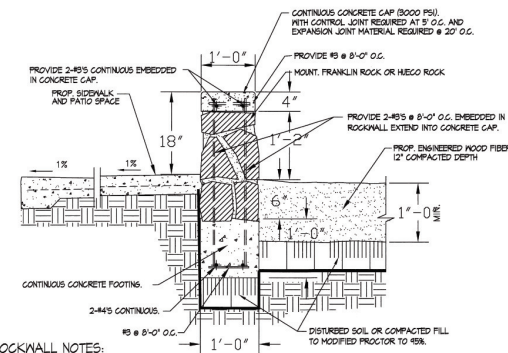
- NOTES:**
1. CONCRETE SHALL BE 3000 PSI MINIMUM
 2. CONTROL JOINT REQUIRED AT 5' O.C. FOR SIDEWALKS. CONTROL JOINTS SHALL BE 1/8" THICK AND 1" DEEP.
 3. EXPANSION JOINT MATERIAL REQUIRED @ 20' O.C. FOR SIDEWALKS.
 4. DO NOT CROSS REINFORCEMENT THRU EXPANSION MATERIAL.
 5. PROVIDE EXPANSION JOINT MATERIAL WHERE SIDEWALKS MEET, EXISTING SIDEWALKS AND CURBS.

D TRAIL AND PARK CONCRETE SIDEWALK DETAIL - SECTION
NOT TO SCALE



- ROCKWALL NOTES:**
1. STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTION AS IS PRACTICABLE. THE STONE SHALL BE DENSE AND RESISTANT TO AIR AND WATER.
 2. MORTAR SHALL BE TYPE 'S' (8000 P.S.I.), AS PER ASTM C270-15. MORTAR SHALL CONSIST BY VOLUME OF 1 PART PORTLAND CEMENT, 3 1/2 PARTS OF CLEAN, HARD, DURABLE SAND AND 1/4 PART (MORTAR) LIME THOROUGHLY MIXED WITH WATER.
 3. ROCKWALL MORTAR JOINTS SHALL NOT EXCEED 3/4" TO 1 1/4".
 4. STONE SHALL BE CLEANED, FREE OF DIRT PRIOR TO INSTALLATION.
 5. NO RIVER ROCK SHALL BE ALLOWED FOR ROCKWALLS.

E PLAYGROUND ROCK WALL ADJACENT TO GRAVEL AREA - SECTION
NOT TO SCALE



- ROCKWALL NOTES:**
1. STONE FOR ROCKWALL SHALL BE AS NEARLY UNIFORM IN SECTION AS IS PRACTICABLE. THE STONE SHALL BE DENSE AND RESISTANT TO AIR AND WATER.
 2. MORTAR SHALL BE TYPE 'S' (8000 P.S.I.), AS PER ASTM C270-15. MORTAR SHALL CONSIST BY VOLUME OF 1 PART PORTLAND CEMENT, 3 1/2 PARTS OF CLEAN, HARD, DURABLE SAND AND 1/4 PART (MORTAR) LIME THOROUGHLY MIXED WITH WATER.
 3. ROCKWALL MORTAR JOINTS SHALL NOT EXCEED 3/4" TO 1 1/4".
 4. STONE SHALL BE CLEANED, FREE OF DIRT PRIOR TO INSTALLATION.
 5. NO RIVER ROCK SHALL BE ALLOWED FOR ROCKWALLS.
 6. ROCKWALL TO BE EMBEDDED IN THE CONCRETE FOOTING.

F PLAYGROUND ROCK WALL ADJACENT TO CONCRETE - SECTION
NOT TO SCALE

DATE: _____

ARCHITECT'S SEAL: _____

SCALE: Horizontal: _____ Vertical: _____

PROJECT TITLE: **SERENO VALLEY ESTATES SERENO TRAIL AND SERENO PARK**
LOTS 17 AND 18, BLOCK 18 AND 27, BLOCK 2, EL PASO, TEXAS

DESIGN BY: _____
CHECKED BY: _____
APPROVED BY: _____
JOB No. _____

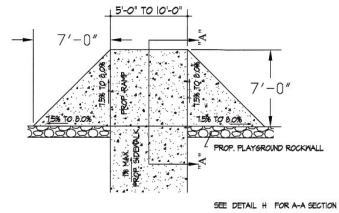
SHEET TITLE: **L10**

CONSTRUCTION DETAILS

SHEET 10 OF 14

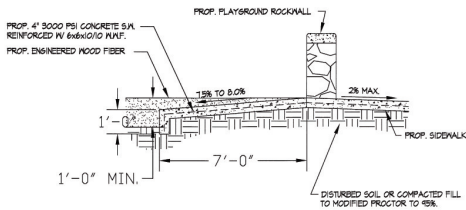
PARKS DEPARTMENT
REVIEWED BY: *Chapman del Rio* 01/15/2015



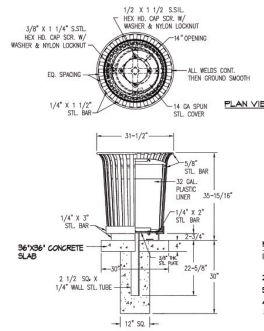


SEE DETAIL H FOR A-A SECTION

G PLAYGROUND ENTRANCE RAMP - PLAN VIEW
NOT TO SCALE

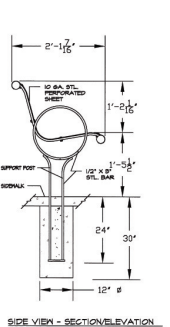
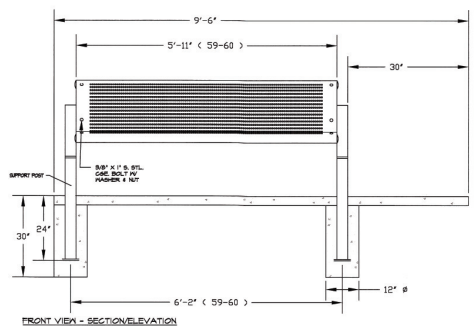


H SECTION A - A
NOT TO SCALE

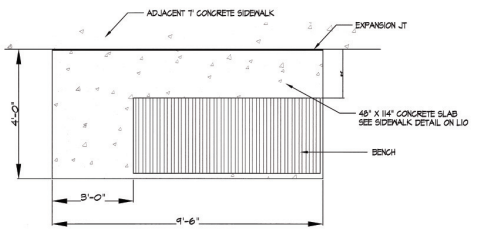


I TRASH RECEPTACLE DETAIL - SECTION
NOT TO SCALE

- NOTES
1. ALL STL. MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED IN POLYESTER POWDER COATING.
 2. ALL WELDS CONT. THEN GROUND SMOOTH.
 3. COLOR IS BROWN, MATCH WITH TABLE AND BENCH TO BE APPROVED.
 4. 32 GAL CAPACITY WITH LINER AND FLAT LID W/ 1/4\"/>

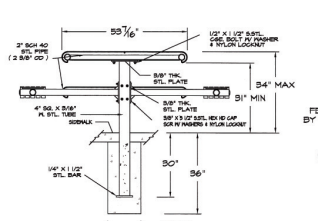
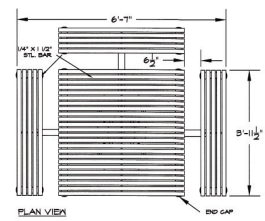
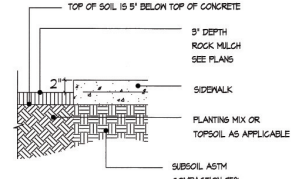


J ADA BENCH DETAIL
NOT TO SCALE



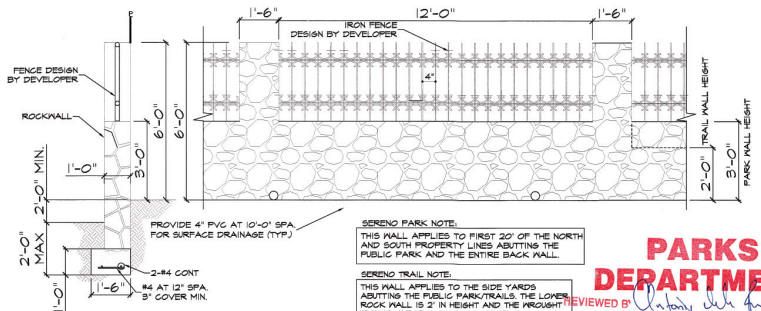
- NOTES: DIMOR 34 SERIES 6\"/>
 - 1) ALL STL. MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED IN POLYESTER POWDER COATING.
 - 2) BROWN COLOR ON SERENO PARK BENCHES - MATCH WITH TABLES.
 - 3) BROWN COLOR ON SERENO TRAIL BENCHES - MATCH WITH TABLES.
 - 4) ADDITIONAL SIDEWALK PAVING IS NOT REQUIRED FOR SERENO PARK BENCH.

K GRAVEL MULCH AT PAVING DETAIL
NOT TO SCALE



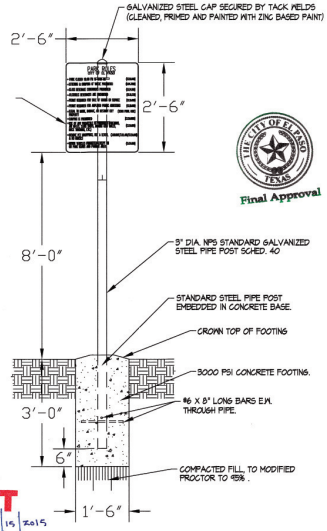
- NOTES: DIMOR 448-59\"/>
 - 1) ALL STL. MEMBERS COATED WITH ZINC RICH EPOXY THEN FINISHED IN POLYESTER POWDER COATING.
 - 2) BROWN COLOR - MATCH WITH BENCH AND TRASH RECEPTACLES. COLOR TO BE APPROVED BY PARKS DEPT.

L ADA PICNIC TABLE DETAIL
NOT TO SCALE



M COMBINATION ROCK WALL/WROUGHT IRON FENCE
NOT TO SCALE

- SERENO PARK NOTE:
THIS WALL APPLIES TO FIRST 20' OF THE NORTH AND SOUTH PROPERTY LINES ABUTTING THE PUBLIC PARK AND THE ENTIRE BACK WALL.
- SERENO TRAIL NOTE:
THIS WALL APPLIES TO THE SIDE YARDS ABUTTING THE PUBLIC PARK/TRAILS. THE LOWER ROCK WALL IS 2' IN HEIGHT AND THE WROUGHT IRON IS 4' FOR A TOTAL OF 6' HEIGHT.



N PARK INFORMATION SIGN
NOT TO SCALE

PARKS DEPARTMENT
REVIEWED BY [Signature] 01/15/2015

DATE: _____

PROJECT TITLE: **SERENO VALLEY ESTATES SERENO TRAIL AND SERENO PARK**
LOTS 17 AND 18, BLOCK 18, SERENO VALLEY ESTATES, EL PASO, TEXAS

SCALE: Horizontal: _____ Vertical: _____

DATE: DEC. 1, 14
DESIGN BY: LW
CHECKED BY: LW
APPROVED BY: LW
JOB NO. _____

ARCHITECT'S SEAL: [Seal of Lisa McNellis Landscapes Architects]

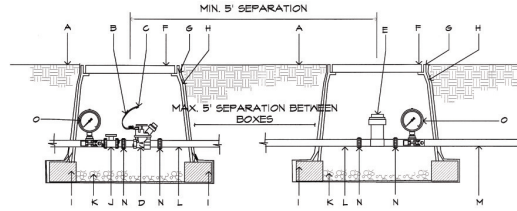
12/1/14

SHEET TITLE: **L11**

CONSTRUCTION DETAILS

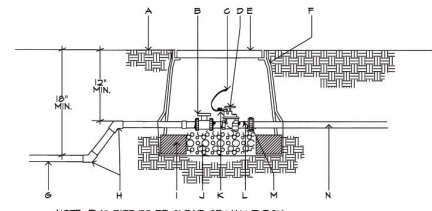
SHEET 11 OF 14

- A. SERENO TRAIL - DO NOT USE PRESSURE REGULATING BASKET FILTER
- B. SERENO PARL - USE PRESSURE REGULATING BASKET FILTER



NOTE: PROVIDE 1 PRESSURE GAUGE ON MAIN LINE UPSTREAM OF BALL VALVE AND ANOTHER DOWNSTREAM OF BASKET FILTER. PROVIDE 5' SEPARATION BETWEEN BOXES. IF SPACE IS NOT AVAILABLE, PROVIDE A MIN. 5' SEPARATION AT CENTER LINES OF BOXES. SET GAGES HORIZONTAL TO BE READABLE FROM ABOVE.

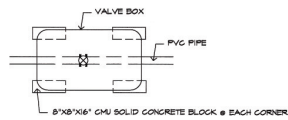
- A. FINISH GRADE.
- B. 24" WIRE LOOP.
- C. DRY SPlice CONNECTOR OR EQUAL.
- D. AUTOMATIC VALVE - SEE IRRIGATION LEGEND.
- E. RAINBIRD PRESSURE BASKET FILTER STRAINER SHALL BE INSTALLED TO PROVIDE ACCESS FOR MAINTENANCE AND REPLACEMENT AND PRESSURE REGULATION FOR DRIP IRR.
- F. LOCKING VALVE BOX COVER FLAT LID WITH BOLT.
- G. CARSON PRODUCTS INC. 1419-B BODY (ABS) VALVE BOX W/BOLT DOWN COVER (COVER COLOR TO MATCH FINISH MATERIAL AND EXTENSION AS NECESSARY).
- H. PROVIDE DEWITT PRO 5 NEED CLOTH ALONG SIDES AND BASE OF VALVE BOX AND BLOCKS.
- I. TAPE TO ALL INLET & OUTLET PIPE WITH 3M HEAVY DUTY PLASTIC TAPE.
- J. 8"X8"X16" CMU SOLID CONCRETE BLOCK @ EACH CORNER.
- K. BALL VALVE, INCLUDED IN CONTROL ZONE KIT, SEE IRRIGATION LEGEND.
- L. 4" LAYERS OF 3/8" WASHED PEA GRAVEL.
- M. LATERAL LINE.
- N. PROVIDE FVG UNION FOR PIPE SIZES LESS THAN THREE INCHES IN DIAMETER OR PROVIDE FLANGES FOR PIPE SIZES THREE INCHES IN DIAMETER OR LARGER.
- O. HORIZONTAL HYDRING PRESSURE GAUGE.



NOTE: FVG PIPE TO BE CLEAR OF VALVE BOX AND SOLID CMU BLOCK.

- A. FINISH GRADE.
- B. BALL VALVE.
- C. DRY SPlice CONNECTOR OR EQUAL.
- D. ELECTRIC VALVE - SEE IRRIGATION LEGEND.
- E. CARSON PRODUCTS INC. 1419-B BODY (ABS) VALVE BOX WITH BOLT DOWN FLAT LID COVER TO MATCH COLOR OF FINISHED MATERIAL AND 5" EXTENSIONS AS NECESSARY.
- F. PROVIDE DEWITT PRO 5 NEED CLOTH ALONG SIDES AND BASE OF VALVE BOX INSTALLATION. TAPE TO ALL INLET AND OUTLET PIPE AND VALVE BOX WITH HEAVY DUTY PLASTIC 3M TAPE.
- G. FVG MAINLINE - SEE IRRIGATION LEGEND.
- H. SCH 80 - 45 DEGREE FITTINGS.
- I. 8"X8"X16" SOLID CMU BLOCK @ EACH CORNER.
- J. 4" DEPTH 3/8" DIAMETER WASHED PEA GRAVEL.
- K. 3/4" WIRE EXPANSION COIL, EXTEND WIRE 12" ABOVE VALVE BOX FOR SERVICE.
- L. SCHEDULE 80 FVG CLOSE NIPPLE.
- M. FLANGE (5" AND ABOVE) AND UNION (BELOW 3" PIPE SIZE)
- N. LATERAL LINE.

THIS DETAIL SHALL TAKE PRECEDENCE TO ANY OTHER DETAIL SHOWING VALVE BOX INSTALLATION.

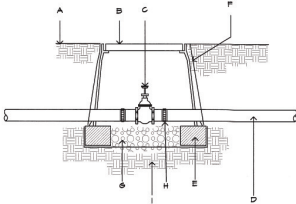


NOTE: BLOCKS TO SIT ON NEED CLOTH ON UNDISTURBED SOIL. DISTURBED SOILS SHALL BE COMPACTED WITH TAMPER PRIOR TO SETTING NEED CLOTH & BLOCKS. VALVE BOX AND EXTENSIONS TO SIT ON BLOCKS. VALVE BOX AND EXTENSIONS TO HAVE A MINIMUM 2" CLEARANCE TO THE TOP OF FVG PIPE.

(A) BLOCK PLACEMENT ON VALVE BOXES
NOT TO SCALE

(B) DRIP VALVE W/ BASKET FILTER
NOT TO SCALE

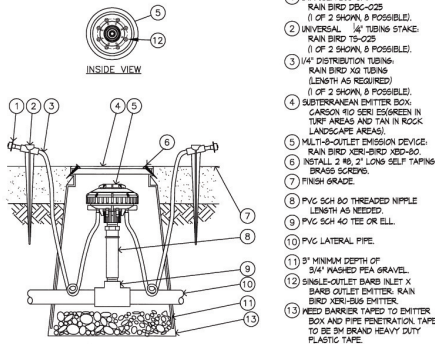
(C) IRRIGATION CONTROL VALVE
NOT TO SCALE



NOTE: FVG PIPE TO BE CLEAR OF VALVE BOX AND SOLID CMU BLOCK.

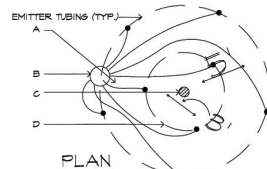
- A. FINISH GRADE.
- B. CARSON PRODUCTS INC. 1419-B BODY (ABS) VALVE BOX WITH BOLT DOWN FLAT LID COVER TO MATCH COLOR OF FINISH MATERIAL AND 5" EXTENSIONS AS NECESSARY.
- C. BRASS ISOLATION VALVE - TO BE APPROVED BY PARKS AND REC.
- D. IRRIGATION MAINLINE.
- E. 8"X8"X16" SOLID CMU SOLID BLOCK @ EACH CORNER.
- F. PROVIDE DEWITT PRO 5 NEED CLOTH ALONG SIDES AND BASE OF VALVE BOX INSTALLATION. TAPE TO ALL INLET AND OUTLET PIPE AND VALVE BOX WITH HEAVY DUTY PLASTIC 3M TAPE.
- G. 4" DEPTH 3/8" WASHED PEA GRAVEL.
- H. FLANGE (5" AND ABOVE) AND UNION (BELOW 3" PIPE SIZE)
- I. EXISTING SOIL.

(D) ISOLATION VALVE
NOT TO SCALE



NOTES:
1. COIL ADDITIONAL 4" OF TUBING IN EMITTER BOX TO FACILITATE MAINTENANCE.
2. RAIN BIRD XERI-BIRD BARB & BARS EMITTERS ARE AVAILABLE IN THE FOLLOWING MODELS:
XB-25PC 0.5 GPH XB-10PC 1.0 GPH XB-20PC 2.0 GPH

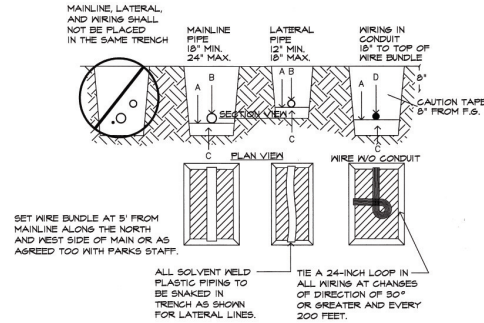
(E) DRIP EMITTER FOR TREES AND PLANTS RAIN BIRD XERI-BIRD & MULTI OUTLET EMISSION DEVICE
NOT TO SCALE



INSTALL (8) EMITTERS PER TREE. SPACE EVENLY AROUND ROOTBALL. IN OFFSET TRIANGULAR PATTERN FOR TREES. SEE IRRIGATION LEGEND FOR OUTLET EMITTER SIZE.

- A. EMITTER TUBING.
- B. MULTI OUTLET EMITTER DEVICE. INSTALL 5" FROM TREE TRUNK ON WEST SIDE.
- C. TREE TRUNK.
- D. TREE ROOTBALL.

(F) EMITTER PLACEMENT FOR TREES
NOT TO SCALE



SET WIRE BUNDLE AT 5' FROM MAINLINE ALONG THE NORTH AND WEST SIDE OF MAIN OR AS AGREED TOO WITH PARKS STAFF.

ALL SOLVENT WELD PLASTIC PIPING TO BE SNAKED IN TRENCH AS SHOWN FOR LATERAL LINES.

NOTES: A. BOTTOM OF EXCAVATED TRENCH WHERE NONE ROCKY SOILS ARE EXPOSED (ENCOUNTERED).
B. IRRIGATION SYSTEM PIPING.
C. MINIMUM 4" DEEP BEDDING SANDY SOILS MATERIAL WHERE ROCKY SOILS ARE EXPOSED.
D. IRRIGATION SYSTEM VALVE PIPING.
E. BACKFILL SOILS MATERIAL MAY BE NATIVE SOILS IF IT IS FREE OF CALICHE OR STONES LARGER THAN 1" IN SIZE AND ORGANIC MATTER OR MASTE DEBRIS. SOILS COMPACTION IN TURE AREAS TO BE 90% TO 95% DENSITY BY ASTM D-1587 STANDARD AND AT 95% DENSITY UNDER PAVED OR HARDCAPE SURFACES.

(G) PIPE IN TRENCH
NOT TO SCALE

PARKS DEPARTMENT
REVIEWED BY *Anthony...* 01/15/2015

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TECO 512-239-6719
CHAPTER 34, TEXAS WATER CODE
IRRIGATOR'S LIC. #8947



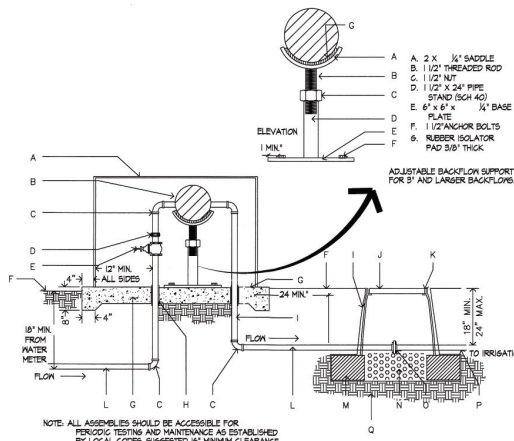
DATE: 12/1/14

ARCHITECT'S SEAL: LISA MC NELLIS, L.A.S.P.C.A.F.E. ARCHITECT, L.A.S. LICENSE #00818, L.A.S. LICENSE #00818, (979) 621-5029

PROJECT TITLE: SERENO VALLEY ESTATES, SERENO TRAIL AND SERENO PARK, LOTS 17 AND 18, BLOCK 2 AND 27, BLOCK 2, LOT 26, BLOCK 2, EL PASO, TEXAS

SHEET TITLE: IRRIGATION DETAILS

SHEET 12 OF 14

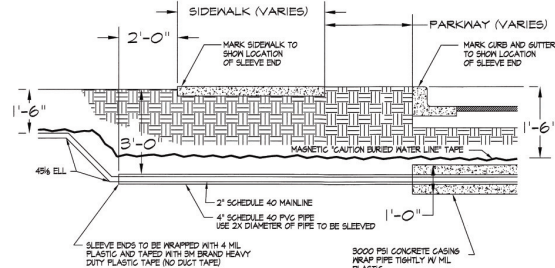


NOTE: ALL ASSEMBLIES SHOULD BE ACCESSIBLE FOR PERIODIC TESTING AND MAINTENANCE AS ESTABLISHED BY LOCAL CODES. SUGGESTED 16" MINIMUM CLEARANCE FROM TEST/COCK SIDE OF ASSEMBLY AND 12" MINIMUM CLEARANCE FROM VALVE BODY.

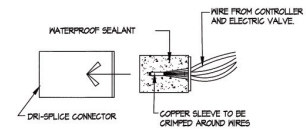
H REDUCED PRESSURE ASSEMBLY BACKFLOW
NOT TO SCALE

- A. 2 X 1/2" SADDLE
- B. 1/2" THREADED ROD
- C. 1/2" NUT
- D. 1/2" X 24" PIPE STAND (SGH 40)
- E. 6" X 6" X 1/4" BASE PLATE
- F. 1/2" ANCHOR BOLTS
- G. RUBBER ISOLATOR PAD 3/8" THICK
- H. STAINLESS STEEL INSULATED HOT BOX ENCLOSURE R-25 (SEE IRRIGATION LEGEND)
- I. REDUCED PRESSURE ASSEMBLY BACKFLOW PREVENTER (SEE PARTS LIST)
- J. COPPER FITTINGS
- K. CARBON PRODUCTS INC. 1/4"-ID BODY (ABS) VALVE BOX (OR APPROVED EQUAL) EXTENSION AS NEEDED
- L. TYPE K COPPER PIPING
- M. 3" X 8" X 1/2" SOLID CU BLOCK
- N. 3/8" WASHED PEA GRAVEL, 4" DEPT.
- O. FLANGE
- P. PVC MAINLINE
- Q. UNDISTURBED OR COMPACTED SOILS

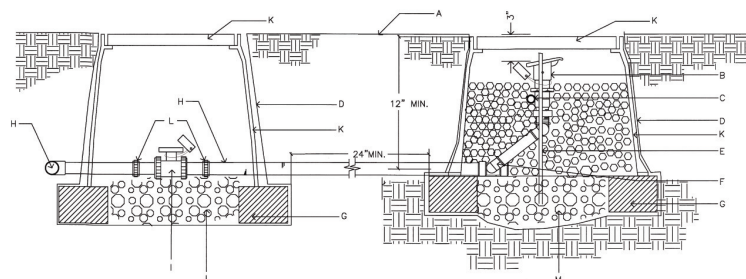
INSTALL AN 8" X 8" X 1/2" SOLID CU BLOCK AT EACH CORNER OF THE VALVE BOX. INSULATE (R-25 MIN) FROM FREEZING WEATHER. PROVIDE 2" CLEARANCE BETWEEN VALVE BOXES AND COPPER PIPING.



I STREET CROSSING SLEEVE DETAIL
NOT TO SCALE



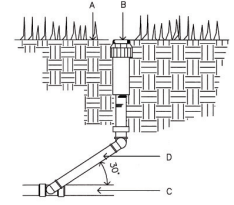
L WIRE CONNECTORS
NOT TO SCALE



- A. FINISH GRADE
- B. 1" BIGGER QUICK COUPLER VALVE, DOUBLE LUG WITH LASSO SNAP-LOCK
- C. 1/2" BRASS STABILIZER ELBOW
- D. MIN. 1/2" SECTION 1" DIA. PVC. SECTION SHOULD EXTEND BEYOND BOTH REBAR
- E. CARBON STABILIZER IN GRAVEL
- F. PROVIDE DENT NUT 3/8" DIA. PVC. SECTION SHOULD EXTEND BEYOND BOTH REBAR
- G. 1/2" OR 3/8" REBAR, MIN. 30" LENGTH, ONE ON EITHER SIDE OF QUICK COUPLER FOR STABILITY
- H. LASSO SPRING JOINT (PRE-ASSEMBLED)
- I. 3/8" X 8" X 1/2" SOLID CU BLOCK
- J. ISOLATION BALL VALVE, SEE IRRIGATION LEGEND
- K. 3/8" DEPTH OF 3/8" WASHED PEA GRAVEL
- L. LASSO SPRING JOINT (PRE-ASSEMBLED)
- M. PROVIDE PVC UNION FOR PIPE SIZES LESS THAN THREE INCHES IN DIAMETER OR PROVIDE FLANGES FOR PIPE SIZES THREE INCHES IN DIAMETER OR LARGER
- N. 3/8" WASHED PEA GRAVEL FILLED TO QUICK COUPLER FOR STABILITY
- O. PROVIDE PURPLE COLOR WEATHER-PROOF TAP THAT READS "NON-POTABLE WATER, NOT SAFE FOR DRINKING". SECURE TO VALVE AND QUICK COUPLER.

NOTE: INSTALL AN 8" X 8" X 1/2" SOLID CU BLOCK AT EACH CORNER OF THE VALVE BOX. INSTALL 3/8" PEA GRAVEL BELOW THE 1/4"-ID VALVE BOX WITH BOLT DOWN COVER. EXTEND PEA GRAVEL UP TO COLLAR OF QUICK COUPLER VALVE. INSTALL A TEE FLANGE & BALL VALVE OFF OF THE MAIN LINE IMMEDIATELY UPSTREAM OF THE QUICK COUPLER VALVE.

K QUICK COUPLER VALVE
NOT TO SCALE



- A. FINISH GRADE
- B. SPRINKLER HEAD (SEE PLAN)
- C. LATERAL LINE (SEE PLAN)
- D. LASSO PRE-ASSEMBLED SPRING JOINT

THIS DETAIL SHALL BE USED FOR POP-UP SHRUB SPRAY, POP-UP LAWN SPRAY, BEAR DRIVEN AND ROTARY SPRINKLER HEADS. TOP OF SPRINKLER HEAD SHALL BE SET FLUSH WITH FINISH GRADE. SPRING JOINT INSTALLATION TO COMPLY WITH MANUFACTURER'S RECOMMENDATION.

L HUNTER 1-20 ROTOR HEAD
NOT TO SCALE

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TCEQ 512-239-6719
CHAPTER 34, TEXAS WATER CODE
IRRIGATOR'S LIC. #8947



PARKS DEPARTMENT
REVIEWED BY: *Anthony Cole* 01/19/2015

DATE: _____

PROJECT TITLE: **SERENO VALLEY ESTATES SERENO TRAIL AND SERENO PARK**
LOTS 17 AND 18, BLOCK 1 AND LOTS 8 AND 21, BLOCK 2
LOT 26, BLOCK 2
EL PASO, TEXAS

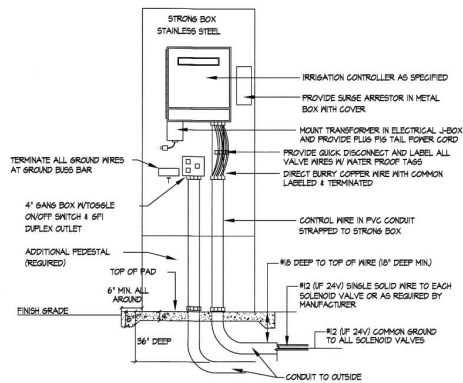
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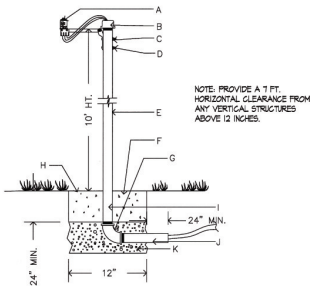
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CHKD. BY: LM
APP. BY: LM

SHEET TITLE: **L13**
IRRIGATION DETAILS

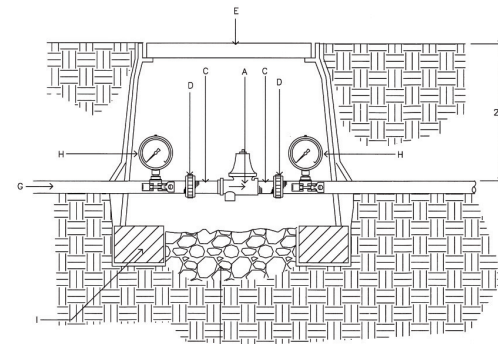
SHEET 13 OF 14



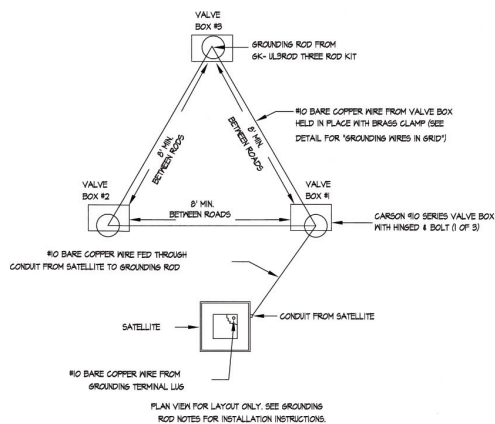
M CONTROLLER IN PEDESTAL ENCLOSURE DETAIL
NOT TO SCALE



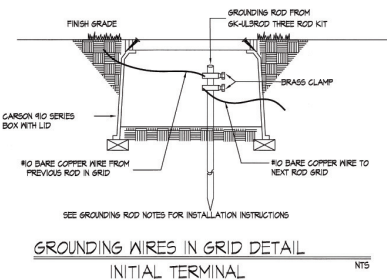
- N** RAIN SENSOR
NOT TO SCALE
- RAIN BIRD RES-BEK RAIN SENSOR SET TO 1/8"
 - 3/4" PIPE CAP WITH HOLE FOR WIRES AND SEAL WITH EXTERIOR GRADE SILICONE SEALANT.
 - DRILL TWO 3/16" HOLES IN PIPE FOR SENSOR BRACKET.
 - 2" NO. 8-32 MACHINE SCREWS WITH WASHER, LOCK WASHER AND NUT.
 - 2" 12" 5/8" 40 GALVANIZED PIPE 10 FT. HT. A.S.
 - 17/64" CONCRETE BASE, MIN. 24" DEEP.
 - PIPE ELBOW.
 - FINISH GRADE.
 - PIPE TO BE SEALED AFTER CABLE IS RUN USE 4 MIL. PLASTIC AND TAPED NIPPLE AND THE CABLE WITH HIGH GRADE 3M HEATHER PROOF PLASTIC TAPE.
 - NIPPLE GALVANIZED PIPE IN CONCRETE FOOTING TO BE WRAPPED WITH HEATHER PROOF TAPE TO PROTECT FROM CORROSION.
 - 6" THICK, 3/8" DIAMETER WASHED PEA GRAVEL.



- O** IN-LINE PRESSURE REGULATOR
NOT TO SCALE
- CONSTRUCTION NOTES:**
- PRESSURE REGULATOR, SEE IRRIGATION LEGEND
 - 2 CU. FT. 1" DIAMETER WASHED PEA GRAVEL.
 - SOI 80 PVC NIPPLE
 - FLANGE 8" (AND ABOVE) AND UNION (BELOW 8" PIPE SIZE)
 - CARSON PRODUCTS INC. 441 OR 130 PSI-B BODY (ABS) VALVE BOX WITH 414 OR 130 BOLT DOWN COVER (ABS) TO MATCH FINISHED MATERIAL AND (1) 8" INCH EXTENSION.
 - DENTIT PRO 5 NEED CLOTH ALONG SIDES AND BASE OF VALVE BOX INSTALLATION TAPE TO ALL INLET AND OUTLET PIPE AND VALVE BOX WITH HEAVY DUTY PLASTIC 3M TAPE.
 - MAINLINE
 - HORIZONTAL HYDRING PRESSURE GAUGE
NOTE: PROVIDE 1 PRESSURE GAUGE ON MAIN LINE UPSTREAM AND DOWNSTREAM OF PRESSURE REDUCING VALVE. SET IT IN HORIZONTAL TO BE READABLE.
 - 8"X8"X6" SOLID CHU BLOCK @ EACH CORNER.



P TRIANGULAR GROUNDING GRID DETAIL
NOT TO SCALE



- GROUNDING ROD NOTES:**
- GROUNDING RODS SERVE AS ELECTRODES FOR DEVICES TO DISSIPATE THE SURGE INTO THE EARTH. CAREFULLY READ THE FOLLOWING INSTALLATION INSTRUCTIONS:
- ALWAYS USE A 5/8" X 8" COPPER GLAD ROD.
 - RUN A #10 OF LARGER BARE COPPER WIRE FROM THE DEVICE TO THE ROD.
 - KEEP THE GROUND WIRES AS SHORT AND STRAIGHT AS POSSIBLE FROM THE DEVICE TO THE FIRST ROD.
 - CLAMP ALL WIRES TO THE GROUNDING ROD. DO NOT SOLDER OR TAPE THEM TO THE ROD.
 - TO INSTALL GROUNDING ROD USE 6K-TOOLS ROD DRIVING SLEEVE.
 - SPACE THREE RODS IN A TRIANGULAR GRID AT LEAST 8' APART FROM THE OTHERS IN THE GRID. CONNECT ALL THREE RODS WITH A SOLID #10 COPPER WIRE.
 - WHEN TESTED WITH THE PROPER EQUIPMENT, GRIDS SHOULD HAVE AN EARTH RESISTANCE NO GREATER THAN 10 OHMS.
 - WHENEVER MORE THEN ONE WIRE IS ATTACHED TO A GROUNDING ROD ALWAYS USE A SEPARATE CLAMP FOR EACH WIRE. TRYING TO INSTALL MORE THAN ONE WIRE PER CLAMP COULD CAUSE A POOR CONNECTION RESULTING IN HIGH RESISTANCE LEVELS.
 - GROUNDING RODS SERVE AS ELECTRODES FOR THE SURGE DEVICES TO DISSIPATE THE SURGE INTO THE EARTH. REMEMBER THESE TIPS WHEN INSTALLING THEM.

IRRIGATION IS REGULATED BY:
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TXSD 512-239-6719
CHAPTER 54, TEXAS WATER CODE
IRRIGATOR'S LIC. #8947



12/1/14
Justin Miller

DATE

LISA Mc NELLIS
LANDSCAPE ARCHITECT
100 S. GILBERT ST. SUITE 200
MCKINNEY, TEXAS 75069
(972) 621-5092

ARCHITECT'S SEAL



Horizontal Scale
Contour Interval: 1/4"

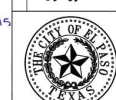
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DESIGN BY: LM
CHKD. BY: LM
APP'D. BY: LM
JOB NO.

PROJECT TITLE
SERENO VALLEY ESTATES
SERENO TRAIL AND SERENO PARK
LOTS 17 AND 18, BLOCK 2, PHASE 2B AND 27, BLOCK 2
LOT 28, BLOCK 2
EL PASO, TEXAS



Final Approval

PARKS DEPARTMENT
REVIEWED BY *Anthony Dale* on 01/15/2015



SHEET TITLE

L14

IRRIGATION DETAILS

SHEET 14 OF 14