

GENERAL NOTES:

- ALL RESPONSIBILITY FOR THE ACCURACY OF THESE PLANS REMAINS WITH THE ENGINEER WHO PREPARED THEM. IN REVIEWING THESE PLANS, THE CITY OF SAN MARCOS MUST RELY ON THE ADEQUACY OF THE WORK OF THE DESIGN ENGINEER.
- CONTRACTOR SHALL CALL TEXAS 811 (811 OR 1-800-344-8377) FOR UTILITY LOCATIONS PRIOR TO ANY WORK IN CITY EASEMENTS OR STREET R.O.W.
- RELEASE OF THIS APPLICATION DOES NOT CONSTITUTE A VERIFICATION OF ALL DATA, INFORMATION, AND CALCULATIONS SUPPLIED BY THE APPLICANT. THE ENGINEER OF RECORD IS SOLELY RESPONSIBLE FOR THE COMPLETENESS, ACCURACY, AND ADEQUACY OF HIS/HER SUBMITTAL, WHETHER OR NOT THE APPLICATION IS REVIEWED FOR CODE COMPLIANCE BY CITY ENGINEERS.
- CONTRACTOR SHALL CALL (512) 353-7728 FOR ALL CITY OF SAN MARCOS INSPECTIONS.
- THIS PROJECT IS SUBJECT TO T.P.D.E.S. REGULATIONS. IF NOT DONE, SEEK APPLICABLE TPDES PERMIT TXR150000 CONVERGE IMMEDIATELY. TO SAVE TIME AND \$100, GO TO [HTTPS://WWW3.TCEQ.TEXAS.GOV/STEERS/PRE-CON](https://www3.tceq.texas.gov/steers/pre-con) MEETING AND KEPT ONSITE AND UPDATED TO MATCH SITE CONDITIONS DURING THE PROJECT.
- ALL CONSTRUCTION MUST COMPLY WITH ALL CITY OF SAN MARCOS CONSTRUCTION SPECIFICATIONS.

BENCHMARK LIST:

BENCHMARK
TOP OF IRON ROD
FOUND ELEVATION=652.55'
NAVD 1988 DATUM
PREVIOUSLY SET AT NORTH CORNER OF WONDER WORLD DR R.O.W.

TEMPORARY BENCH MARK
SQUARE CUT ON CURB ELEVATION = 644.29'
NAVD 1988 DATUM
SET AT NORTH EAST CORNER OF WONDER WORLD DR R.O.W.

SEQUENCE OF CONSTRUCTION:

- OBTAIN CITY APPROVED SITE PREPARATION PLANS AND TPDES PERMIT. (NOT A COPY OF THE TPDES APPLICATION TO TCEQ), IF APPLICABLE,
- PREPARE PROJECT - SPECIFIC SWPPP INCLUDING SITE MAP AND INSTALL TEMPORARY EROSION AND SEDIMENT CONTROLS.
- UPLOAD TO MYPERMITNOW OR OTHERWISE PROVIDE TO THE PERMIT CENTER THE TPDES LARGE CONSTRUCTION SITE NOTICE WITH A PROJECT SPECIFIC TPDES AUTHORIZATION NUMBER RECEIVED FROM TCEQ.
- SCHEDULE PRE-CON MEETING WITH CITY OF SAN MARCOS (512 805-2630).
- BEGIN DEMOLITION ACTIVITIES, IF APPLICABLE.
- BEGIN SITE CLEARING AND GRADING.
- INSTALL TEMPORARY SEDIMENTATION POND AS APPROPRIATE.
- RESTORE AND REVEGETATE ALL DISTURBED AREAS NOT UNDER IMPERMEABLE IMPROVEMENTS.
- COMPLETE ANY REMAINING "PUNCH LIST" ITEMS.
- CITY OF SAN MARCOS FINAL INSPECTION.
- CONTRACTOR SHALL REMOVE TEMPORARY EROSION CONTROLS AFTER PERMANENT STABILIZATION IS AT LEAST 70% EVENLY ESTABLISHED. RYE IS NOT ACCEPTED.
- UPLOAD TO MYPERMITNOW OR OTHERWISE PROVIDE TO PERMIT CENTER THE TPDES NOTICE OF TERMINATION (NOT).
- CITY ISSUES CERTIFICATE OF ACCEPTANCE OR OCCUPANCY.

AMERICANS WITH DISABILITIES ACT:

THE CITY OF AUSTIN HAS REVIEWED THIS PLAN FOR COMPLIANCE WITH CITY DEVELOPMENT REGULATIONS ONLY. THE APPLICANT AND PROPERTY OWNER ARE RESPONSIBLE FOR DETERMINING WHETHER THE PLAN COMPLIES WITH ALL OTHER LAWS, REGULATIONS, AND RESTRICTIONS WHICH MAY BE APPLICABLE TO THE PROPERTY AND ITS USE.

LEGAL:

HCAD PARCELS R11897, R11898, R11899, R11900, R11901, R11902, R11973
PORTIONS OF THE VERAMENDI SURVEY #1, ABS 17-1

STORMWATER MANAGEMENT:

ONSITE DETENTION

FLOODPLAIN:

NO PORTION OF THIS PROJECT SITE FALLS WITHIN THE 100-YR FLOODPLAIN, PER FEMA FLOODPLAIN MAP 48209C0477F. NO FLOODPLAIN MODIFICATIONS ARE PROPOSED IN CONJUNCTION WITH THIS DEVELOPMENT.

AQUIFER NOTE:

THIS PROJECT IS NOT IN THE EDWARDS AQUIFER RECHARGE ZONE OR EDWARDS AQUIFER CONTRIBUTING ZONE.

WATERSHED:

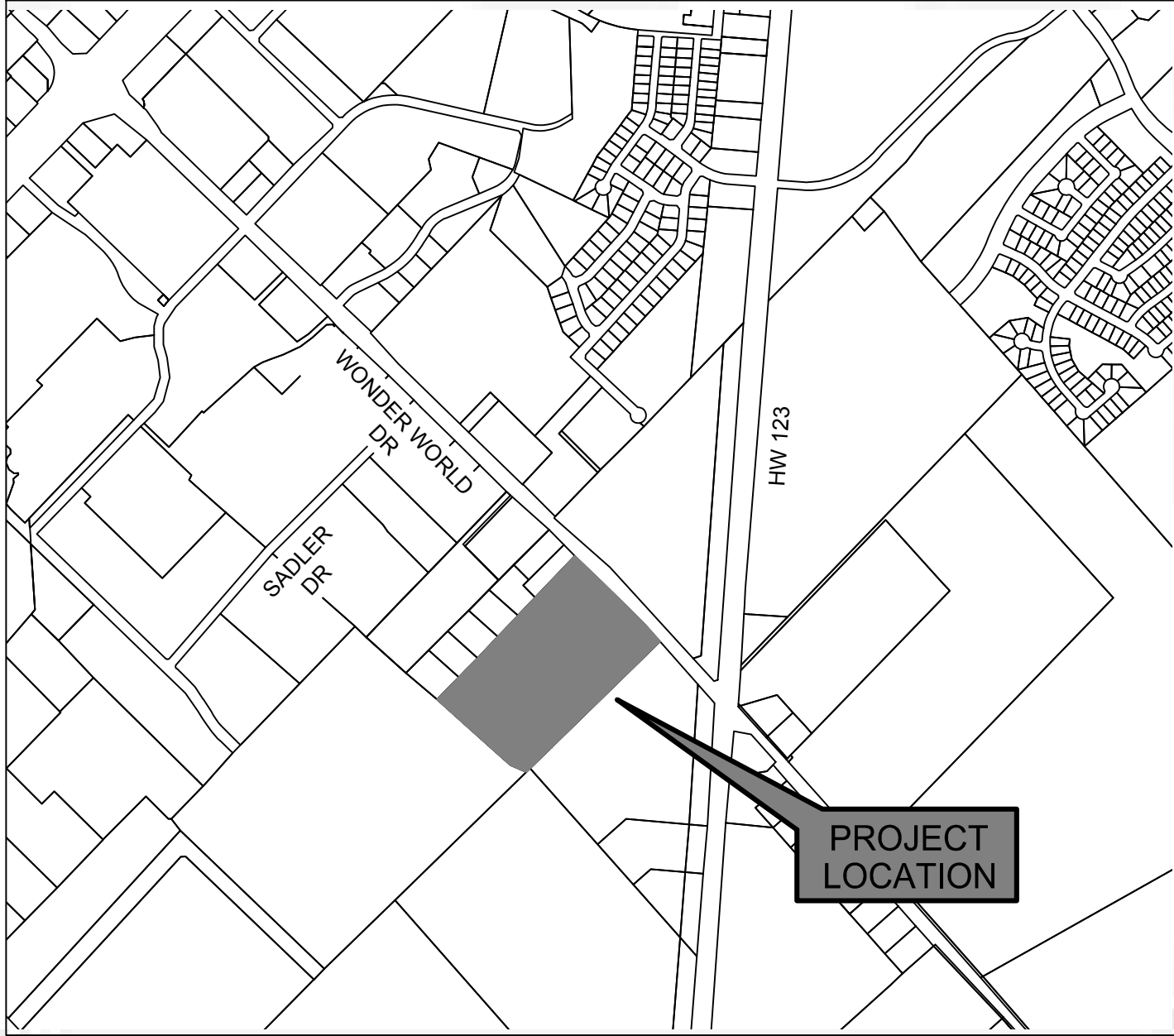
COTTONWOOD CREEK

ONSITE DEVELOPMENT PLANS

FOR

RIVERSTONE APARTMENTS

(COMPREHENSIVE REVIEW)



VICINITY MAP
SCALE: N.T.S.

MAPSCO PAGE: 674Y / 674Z / 704D / 704C

PROJECT DESCRIPTION:

336 MULTI-FAMILY RESIDENTIAL UNIT DEVELOPMENT WITH ASSOCIATED IMPROVEMENTS

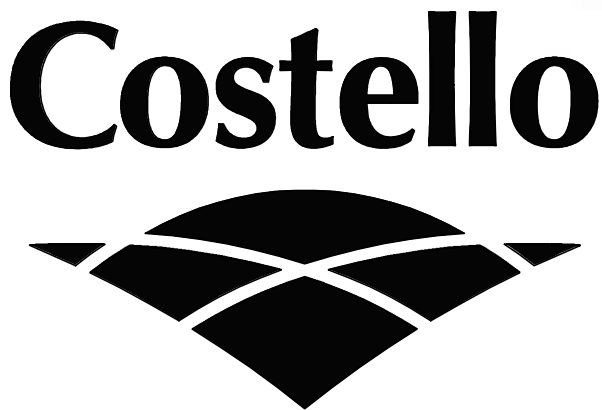
ADDRESS: 1430 WONDER WORLD DR.
SAN MARCOS, TX 78666

PERMIT NUMBER:

SUBMISSION NO.:

SUBMITTAL DATE: JULY 22, 2019

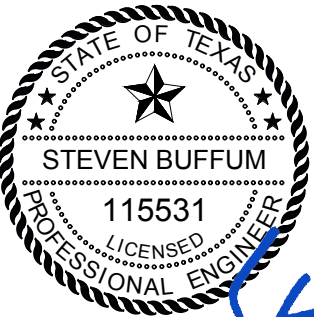
REVISIONS/CORRECTIONS							
NUMBER	DESCRIPTION	REVISE (R) ADD (A) VOID (V) SHEET NO.'S	TOTAL # SHEETS IN PLAN SET	NET CHANGE IMP. COVER (SQ. FT.)	TOTAL SITE IMP. COVER (SQ. FT.) / %	CITY OF AUSTIN APPROVAL DATE	DATE IMAGED



Engineering and Surveying
1016 La Posada Drive Suite 288
Austin, Texas 78752
(512)646-3456
TBPE FIRM REG. No. 280
TBPLS FIRM REG. No. 100486

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STEVEN BUFFUM, P.E.
COSTELLO, INC. TBPE NO. 280

07/22/2019

DATE

APPROVED:

DEVELOPMENT SERVICES DEPARTMENT

DATE

DEVELOPER INFORMATION:

OWNER / DEVELOPER: LDG DEVELOPMENT, LLC
1305 E. 6TH ST. #13
AUSTIN, TX 78702
502-931-5795

ARCHITECT: STUDIO A ARCHITECTURE, INC
2330 FRANKFORT AVE
LOUISVILLE, KY 40206
502-589-8007

ENGINEER: COSTELLO, INC. TBPE 280
1016 LA POSADA DRIVE, SUITE 288
AUSTIN, TX 78752
512-646-3456

LANDSCAPE ARCHITECT: 7 GEN PLANNING
1016 LA POSADA DRIVE, SUITE 288
AUSTIN, TX 78752
512-646-3454



* PLAT TO BE PROCESSED CONCURRENTLY UNDER SEPARATE APPLICATION



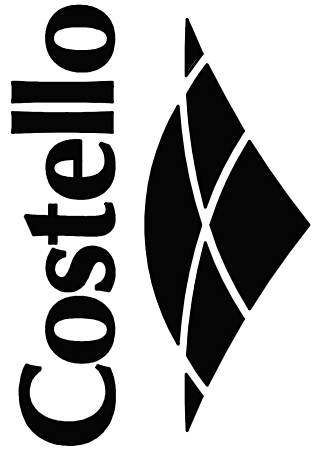
FOR
INFORMATION
ONLY

SHEET
OF 29 SHEETS

2

RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

PLAT



ENGINEERING AND SURVEYING
1016 LA POSADA DR. SUITE 288
AUSTIN, TEXAS 78752
(512)646-3456 (512) 514-0315 FAX
TBPE FIRM REG. No. 280
TBPLS FIRM REG. No. 100486

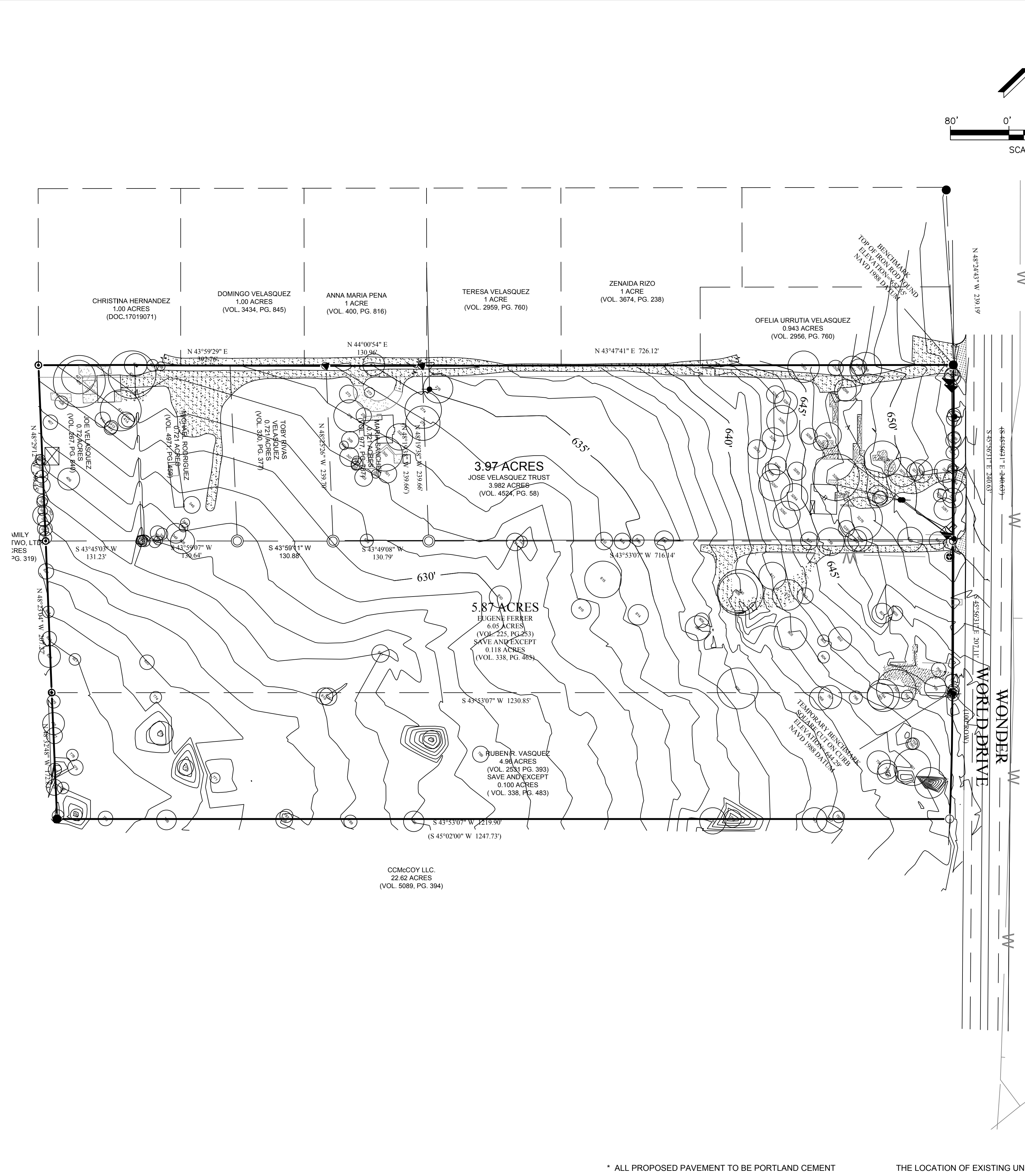
DESIGNED: _____
DESIGN CHECKED: _____
DRAWN: _____
COGO CHECKED: _____
SURVEY CHECKED: _____
QA/QC: _____ DATE: _____
QA/QC REVISIONS: _____

REVISION

DATE

BY

#	size (inches)	species	remain	remove	#	size (inches)	species	remain	remove
272	16.25	hack		x	791	18	hack		x
273	7	live oak		x	792	12	hack		x
274	25	ash	x		793	17	hack		x
275	27.5	ash	x		794	8	hack	x	
276	20.25	ash		x	795	8	hack	x	
277	15	hack		x	796	8	hack	x	
278	21	ash		x	797	10	hack	x	
279	10.5	tallow		x	798	10	hack		x
300	23.5	ash		x	799	15	elm		x
301	12.75	hack		x	800	10	tallow		x
302	6	hack		x	801	14	elm	x	
303	12.25	tallow		x	802	16	pecan		x
304	8	hack		x	803	8	hack		x
305	6	hack		x	804	8	hack		x
306	6	hack		x	805	22.5	ash	x	
307	13	tallow		x	806	28	ash	x	
308	6	hack		x	807	17	hack		x
309	11.75	hack		x	808	10	hack		x
322	18	pecan		x	809	27	ash	x	
346	11.5	ash		x	810	31.5	tallow	x	
347	6.25	hack		x	811	18.5	ash	x	
348	6	hack		x	812	21	ash	x	
349	13.5	hack		x	813	11	ash	x	
350	8	hack		x	814	14	hack		x
351	10	hack		x	815	25	cedar elm	x	
352	6	hack		x	816	13.5	cedar		x
354	6.25	hack		x	817	12	hack		x
355	6	hack		x	818	12	willow		x
359	8.5	hack		x	819	11.5	hack		x
360	6.5	hack		x	820	10	hack		x
361	10.25	hack		x	821	8	hack		x
362	9.25	hack		x	822	12	hack		x
363	14	hack		x	823	10	hack		x
364	6.5	hack		x	824	8	hack		x
365	7.25	hack		x	825	10.5	hack		x
366	7.5	hack		x	826	8	hack		x
367	11.5	hack		x	827	8	hack		x
368	8.5	hack		x	828	15.5	hack		x
369	12.75	hack		x	829	9	hack	x	
370	6	hack		x	830	15	hack		x
371	7	hack		x	831	12	hack		x
406	15	tallow		x	832	8	hack		x
407	10	hack		x	833	12	hack		x
408	9	hack		x	834	11	hack		x
409	35.5	cotton		x	835	8	hack		x
410	10.5	hack		x	836	13	hack		x
411	28	cotton	x		837	12	hack		x
412	9	hack		x	838	19	hack		x
413	9	hack		x	839	15	hack	x	
414	11.25	hack		x	840	17	mesq		x
415	9	hack		x	841	12	hack		x
421	22.5	ash		x	3261	15	pecan		x
422	32.5	ash		x	3262	9	pecan		x
424	15.5	ash		x	3263	13.5	mesq	x	
427	8	hack		x	3264	16	pecan	x	
428	6.5	hack		x	3265	6.5	mesq	x	
753	21	ash	x		3266	15.5	pecan		x
754	20.5	elm	x		3267	8.75	mesq	x	
755	14	elm	x		3268	10.5	mesq	x	
756	13	elm	x		3269	8	tallow	x	
757	18.5	hack		x	3270	10.5	hack	x	
758	8	cedar elm		x	3271	9	tallow	x	
759	8	elm		x	3272	11.5	hack		x
760	8	elm		x	3273	10	hack		x
761	25	hack		x	3274	15.75	pecan		x
762	8	hack		x	3275	12	pecan		x
763	27	elm		x	3276	20	pecan		x
764	22	elm		x	3277	9	china b		x
765	18	hack		x	3278	14	hack		x
766	9	hack		x	3279	30	pecan	x	
767	8	hack		x	3280	17	hack	x	
768	16	hack		x	3281	11	hack		x
769	11	live oak		x	3282	18.5	hack		x
770	12.5	hack		x	3284	18.5	hack		x
771	7	elm		x	3285	12.5	hack		x
772	11	hack		x	3286	32	pecan	x	
773	16.5	hack		x	3287	10	hack		x
774	8	hack		x	3288	18	hack		x
775	9	hack		x	3289	11	hack		x
776	13	hack		x	3290	21	hack		x
777	11	hack		x	3291	15.5	cedar elm		x
778	8	hack		x	3292	12	hack		x
779	10.5	hack		x	3293	13	hack		x
780	9	hack		x	3294	15	hack		x
781	11	hack		x	3295	12	china b		x
782	8	hack		x	3296	12.5	hack		x
783	8	hack		x	3297	21.5	hack		x
784	8	hack		x	3298	15	hack		x
785	10	hack		x	3299	21.78	hack		x
786	13.5	hack		x	3300	11	hack		x
787	9	hack		x	3301	17	hack		x
788	11.5	mesq		x	3302	10.5	a. elm		x
789	9	hack		x	3303	21.5	a. elm		x
790	14	mesq		x	3304	25	pecan		x



811

Know what's below. Call before you dig.

ENGINEERING AND SURVEYING

1016 LA POSADA DR. SUITE 288

AUSTIN, TEXAS 78752

(512) 646-3456 (512) 514-0315 FAX

TBPE FIRM REG. No. 280

TBPLS FIRM REG. No. 100486

DESIGNED: _____

DRAWN: _____

COGO CHECKED: _____

QA/QC: _____

DATE: _____

QA/QC REVISIONS: _____

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STATE OF TEXAS

STEVEN BUFFUM

115531

PROFESSIONAL ENGINEER

07/22/2019

SHEET

6

OF 29 SHEETS

EXISTING CONDITION NOTES:

1. SURVEY PROVIDED BY ALL-STAR SURVEYING ON AUGUST 16, 2018.

2. BEARING ORIENTATION IS BASED ON THE TEXAS STATE PLANE COORDINATE SYSTEM, SOUTH CENTRAL ZONE HARN HORIZONTAL CONTROL, NAD-83. COORDINATES AND DISTANCES SHOWN ARE SURFACE VALUES. COMBINED SCALE FACTOR IS 1.0000336419.

3. THE ENGINEER MAKES NO GUARANTEE AS TO THE TYPES OF TREES LISTED IN SURVEY. IF CRITICAL, IT MAT BE PRUDENT TO HAVE AN ARBORIST VERIFY THIS INFORMATION.

NOTES:

1. ONLY VISIBLE IMPROVEMENTS AND UTILITIES WERE PROVIDED FROM SURVEY (THE SURVEYOR/ENGINEER HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES). LOCATIONS OF EXISTING UTILITIES WHICH MAY NOT BE SHOWN, COULD IMPACT CONSTRUCTION MEANS AND METHODS.

2. ADDITIONALLY PRIOR TO BID AND CONSTRUCTION, AND SHALL NOTIFY THE ENGINEER IMMEDIATELY OF ANY DISCREPANCIES. CONTRACTOR TO CONTACT AUSTIN AREA "ONE CALL" SYSTEM AT 811, OR THE OWNER OF EACH INDIVIDUAL UTILITY FOR ASSISTANCE IN DETERMINING EXISTING UTILITY LOCATIONS.

3. THE SIZE AND LOCATION OF UTILITY STRUCTURES (IF SHOWN) MAY BE EXAGGERATED FOR GRAPHIC CLARITY. THE SURVEY SHOWS FIELD MEASURED SIZES AND DEPTHS AS OBSERVED FROM GROUND LEVEL OPENINGS. REFER TO COVER SHEET AND TREE LIST FOR ADDITIONAL INFORMATION.

BENCHMARK LIST:

BENCHMARK

TOP OF IRON ROD

FOUND ELEVATION=652.55'

NAVD 1988 DATUM

PREVIOUSLY SET AT NORTH CORNER OF WONDER WORLD DR R.O.W.

TEMPORARY BENCH MARK

SQUARE CUT ON CURB ELEVATION = 644.29'

NAVD 1988 DATUM

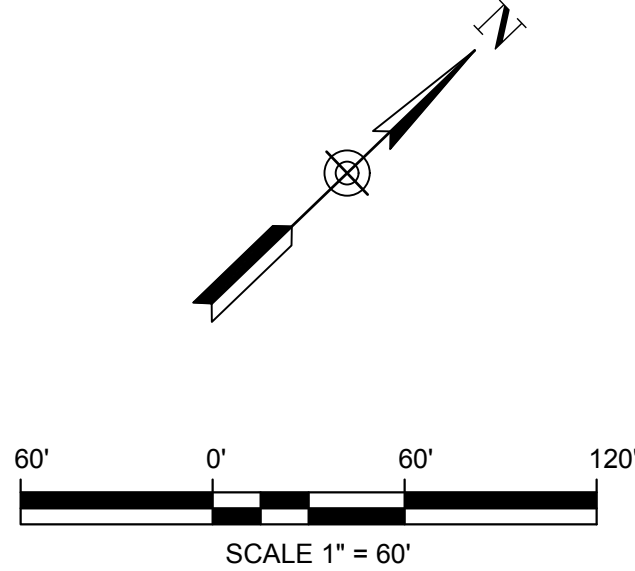
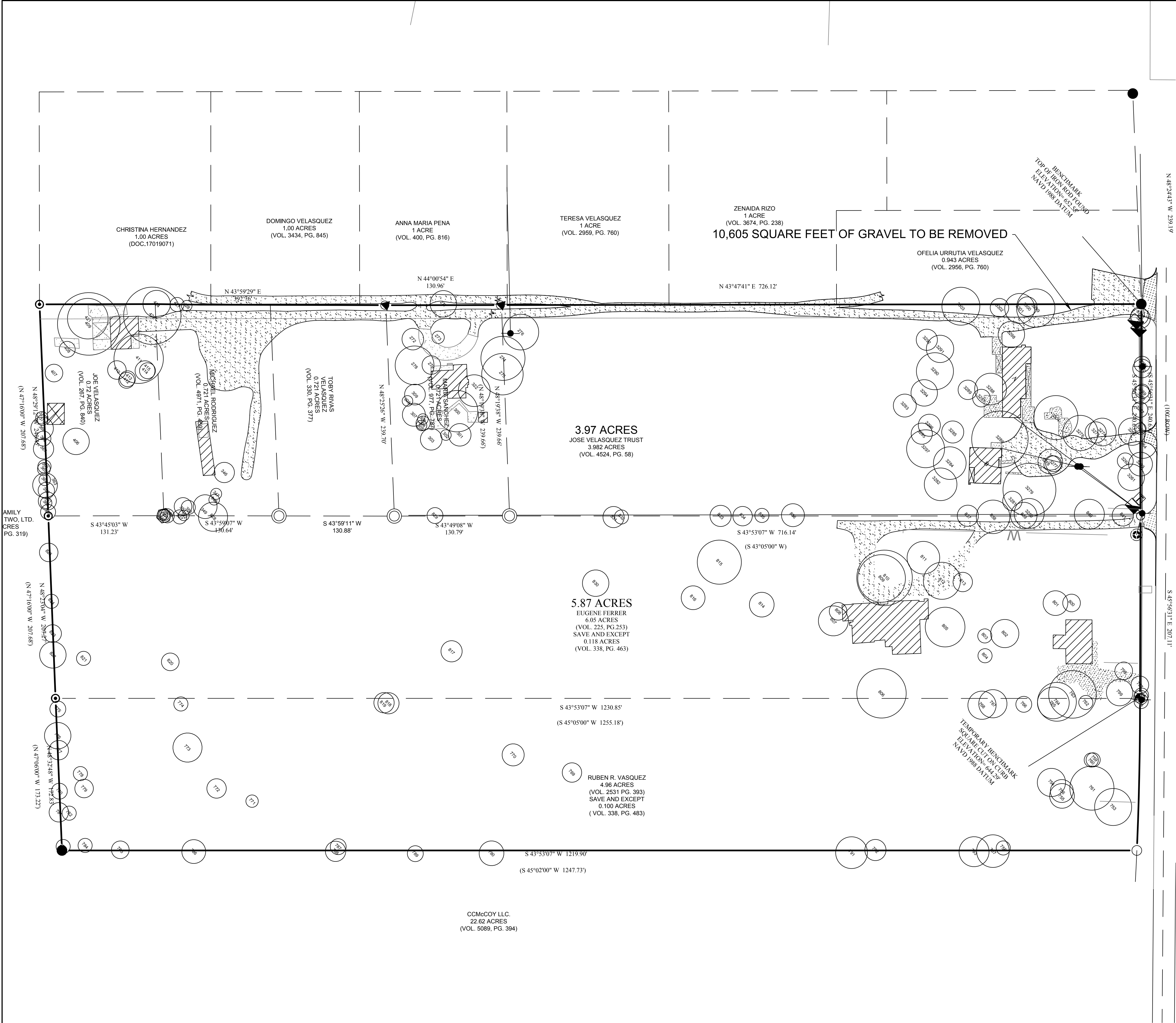
SET AT NORTH EAST CORNER OF WONDER WORLD DR R.O.W.

* ALL PROPOSED PAVEMENT TO BE PORTLAND CEMENT CONCRETE AND PLACED AS INDICATED ON THE PLANS. BUILDING AND PAVEMENT SECTIONS, REINFORCEMENT, SUBGRADE PREPARATION AND JOINT SPACING (IF APPLICABLE) TO BE CONSTRUCTED PER GEOTECHNICAL ENGINEERING RECOMMENDATIONS (BY OTHERS).

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FOR REGULATORY REVIEW ONLY - NOT FOR CONSTRUCTION

SP-2018-XXXX.SH



LEGEND	
EXISTING	PROPERTY LINE
—	EASEMENT
— W —	WATER
— SS —	WASTEWATER
— UO —	STORM SEWER
— UE —	OVERHEAD ELECTRIC
— G —	UNDERGROUND ELECTRIC
—	CURB & GUTTER
FW FH	FIRE HYDRANT ASSEMBLY
WB	WATER VALVE
WWMH	WASTEWATER MANHOLE
SSMH	STORM SEWER MANHOLE
— CWOZ —	CRITICAL WATER QUALITY ZONE
— EHZ —	ENVIRONMENTAL HAZARD ZONE
1032	TREE TO REMAIN
1032	TREE TO BE REMOVED
1032	TREE PROTECTION
	CONCRETE TO REMOVE
	GRAVEL/DIRT TO REMOVE
	STRUCTURE TO BE REMOVED

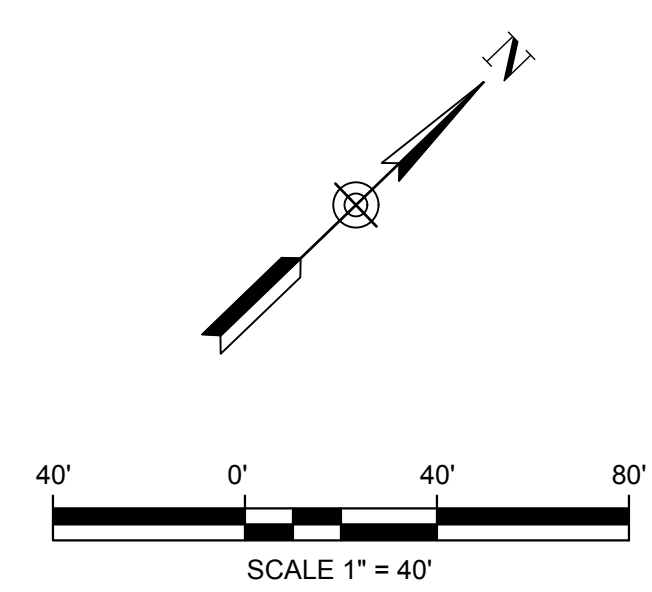
- NOTES:
1. EROSION/SEDIMENTATION CONTROLS AND TREE PROTECTION SHALL BE INSTALLED PRIOR TO ANY DEMOLITION ACTIVITY. REFER TO EROSION & SEDIMENTATION CONTROL PLAN SHEET FOR EROSION & SEDIMENTATION CONTROL AND TREE PROTECTION.
 2. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIG TEST" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN PER THE APPROPRIATE REMEDIAL ACTION AGREED UPON BY THE ENGINEER.
 3. NO SITE DISTURBANCE SHALL OCCUR UNTIL THE PRECONSTRUCTION MEETING WITH THE ENVIRONMENTAL INSPECTOR IS HELD.
 4. TREE PROTECTION FENCE MOVED DURING DEMOLITION MUST BE RE-INSTATED AS SOON AS DEMOLITION WORK IS COMPLETED. ANY WORK BEING DONE WITHIN THE TREE PROTECTION FENCE AREA SHALL NOT IMPACT TREES; NOT ROOT DAMAGE, BRANCH DAMAGE, OR TRUNK DAMAGE IS PERMITTED. ADD 12" LAYER OF MULCH WITHIN THE TREE PROTECTION FENCE AREA PRIOR TO CONDUCTING ANY WORK INSIDE FENCE AREA.
 5. ALL CONSTRUCTION OPERATIONS SHALL BE ACCOMPLISHED IN ACCORDANCE WITH APPLICABLE REGULATIONS OF THE US OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION." (OSHA STANDARDS MAY BE PURCHASED FROM THE GOVERNMENT PRINTING OFFICE..
 6. ANY DAMAGE TO EXISTING PAVEMENT, DRAINAGE OR EXISTING STRUCTURES SHALL BE REPAIRED TO PRE-CONSTRUCTION CONDITION AT THE CONTRACTOR'S EXPENSE.
 7. ALL SPOIL MATERIAL AND DEBRIS SHALL BE DISPOSED PER STATE, FEDERAL, AND LOCAL ORDINANCES.
 8. UNLESS OTHERWISE NOTED, ALL EXISTING UTILITY APPURTENANCES TO BE ADJUSTED TO FINAL GRADE.
 9. PRESENCE AND LOCATION PF PRIVATE SEPTIC SYSTEMS AND/OR DRAIN FIELDS UNKNOWN. ADDITIONAL APPROVALS MAY BE REQUIRED FOR REMOVAL AND/OR DISPOSAL OF ANY ONSITE SANITARY STRUCTURES.









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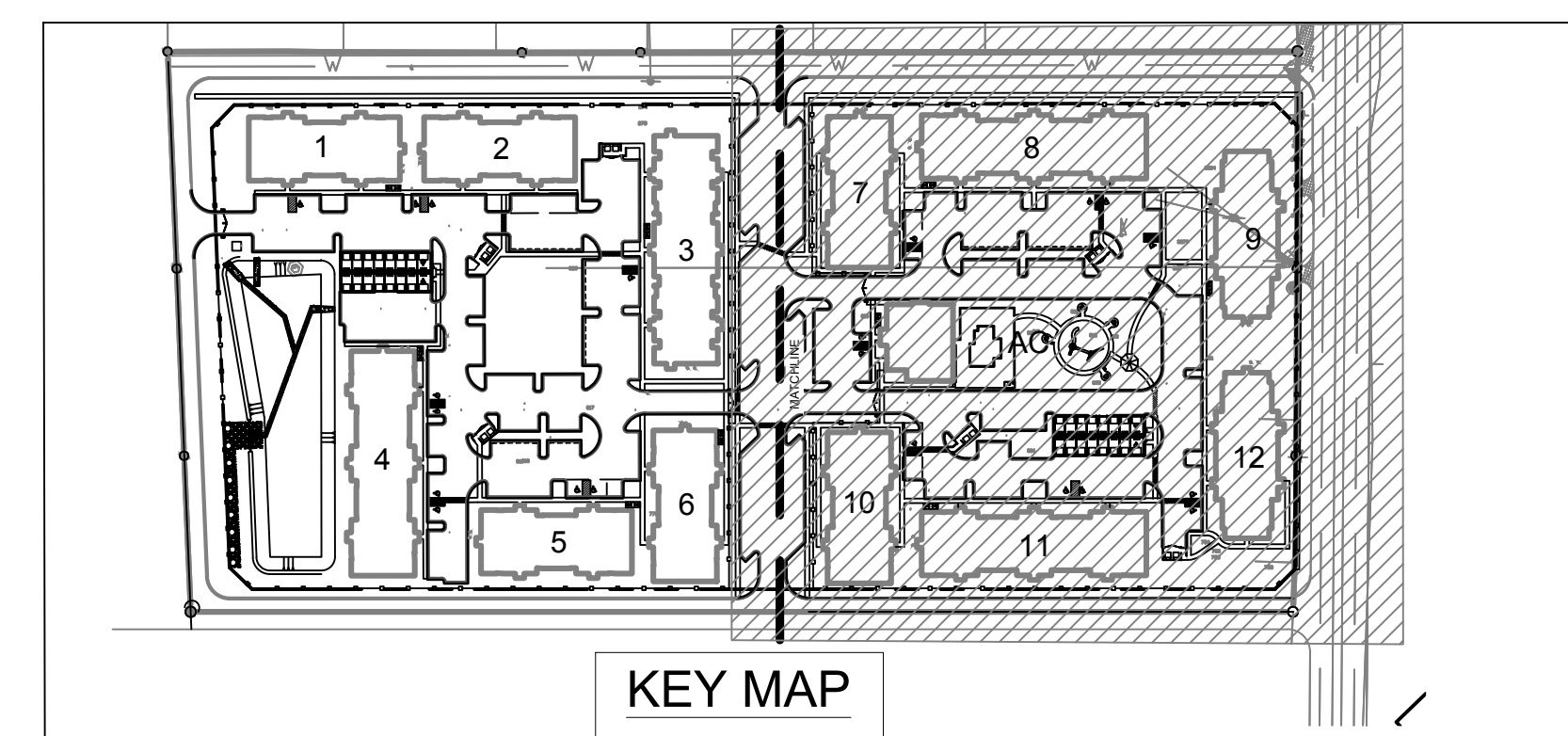


DESIGNED:	DRAWN:	COGO CHECKED:	SURVEY CHECKED:	DATE:	BY:
ENGINEERING AND SURVEYING 1016 LA POSADA DR. SUITE 288 AUSTIN, TEXAS 78752 (512)646-3456 (512) 514-0315 FAX					REVISION
TBPE FIRM REG. No. 280 TBPLS FIRM REG. No. 100486					NO
RIVERSTONE APARTMENTS 1420 WONDER WORLD DRIVE SAN MARCOS, TEXAS					DATE
DEMOLITION & TREE REMOVAL PLAN					
SHEET 7					
OF 29 SHEETS					
SP-2018-XXXX.SH					



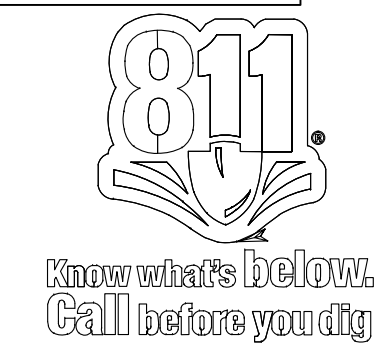
LEGEND		
EXISTING	PROPOSED	
—	—	PROPERTY LINE
—	—	EASEMENT
— W —	— W —	WATER
— SS —	— WW —	WASTEWATER
—	— SS —	STORM SEWER
— UO —		OVERHEAD ELECTRIC
— UE —		UNDERGROUND ELECTRIC
— G —		GAS
—		CURB & GUTTER
—		WOOD FENCE
—		METAL FENCE
—		100 YR FLOOD PLAIN
—	— LOC —	LIMITS OF CONSTRUCTION
—	— SF —	SILT FENCE
		INLET PROTECTION (5)
		FIRE HYDRANT ASSEMBLY
		WATER VALVE
		WASTEWATER MANHOLE
		GUY WIRE
		TREE TO REMAIN
		STABILIZED CONSTRUCTION ENT. (2)
		CONSTRUCTION STAGING/ SPOILS AREA
		CONCRETE WASHOUT AREA

1. REFER EROSION LANDSCAPE SHEETS FOR PERMANENT STABILIZATION PLAN.
2. SILT FENCE WILL BE INSTALLED BEHIND ALL ADA RAMP. CONTRACTOR TO COORDINATE WITH CITY INSPECTOR FOR PLACEMENT.
3. SPOILS WILL BE STORED ON THE LONG TERM SPOILS STORAGE AREA.
4. SAN MARCOS CITY CODE SUBPART A, CHAP. 14, ART. 2, SEC. 14.026, §3305.2 TRASH CONTAINMENT. CONTRACTORS SHALL ENSURE THAT EVERY CONSTRUCTION, REMODEL, REPAIR, OR RENOVATION SITE HAS A METHOD OF CONTAINMENT FOR TRASH AND DEBRIS. THE CONTRACTOR SHALL ENSURE THAT THE TRASH AND DEBRIS IS REMOVED FROM THE SITE ON A REGULAR BASIS SO THAT THE SITE IS MAINTAINED IN A CLEAN, SANITARY, AND SAFE CONDITION AT ALL TIMES.
5. SAN MARCOS CITY CODE SUBPART A, CHAP. 14, ART. 2, SEC. 14.026 §3305.4 STREET CLEANING, ADJACENT STREETS TO THE CONSTRUCTION SITE SHALL BE MAINTAINED AND FREE OF DIRT, MUD, ROCKS AND OTHER CONSTRUCTION DEBRIS AT ALL TIMES.
6. REFER TO "GENERAL NOTES" SHEETS FOR ADDITIONAL EROSION CONTROL NOTES.
7. REFER TO "TREE LIST" SHEET FOR TREE REMOVAL INFORMATION.
8. CONTRACTOR RESPONSIBLE FOR INSTALLING ALL EROSION CONTROL MEASURES AND BMP'S SHOWN ON THIS SHEET. CONTRACTOR RESPONSIBLE FOR MAINTAINING ALL EROSION CONTROL MEASURES UNTIL VEGETATION HAS BEEN FULLY RESTORED AND ENGINEER HAS INSPECTED AND APPROVED.
9. STABILIZATION OF DISTURBED SLOPES 3:1 OR STEEPER SHALL BE STABILIZED WITH SOIL RETENTION BLANKETS, OR EQUIVALENT BMP.
10. GRASS SEEDING TO BE TDPES REQUIREMENTS.

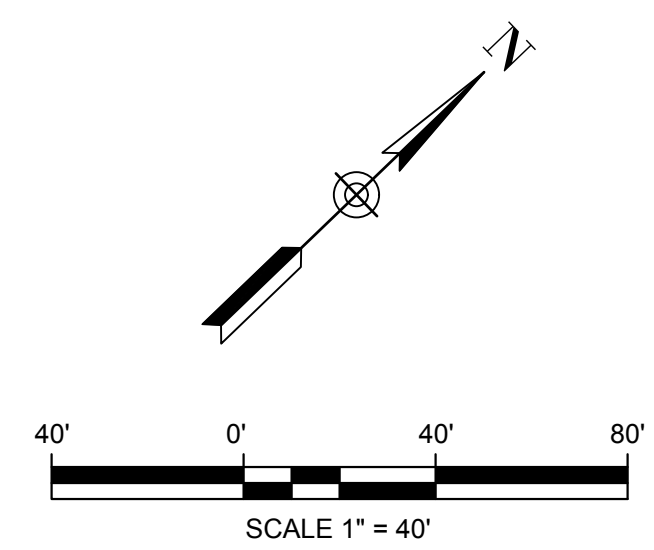


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[illegible]





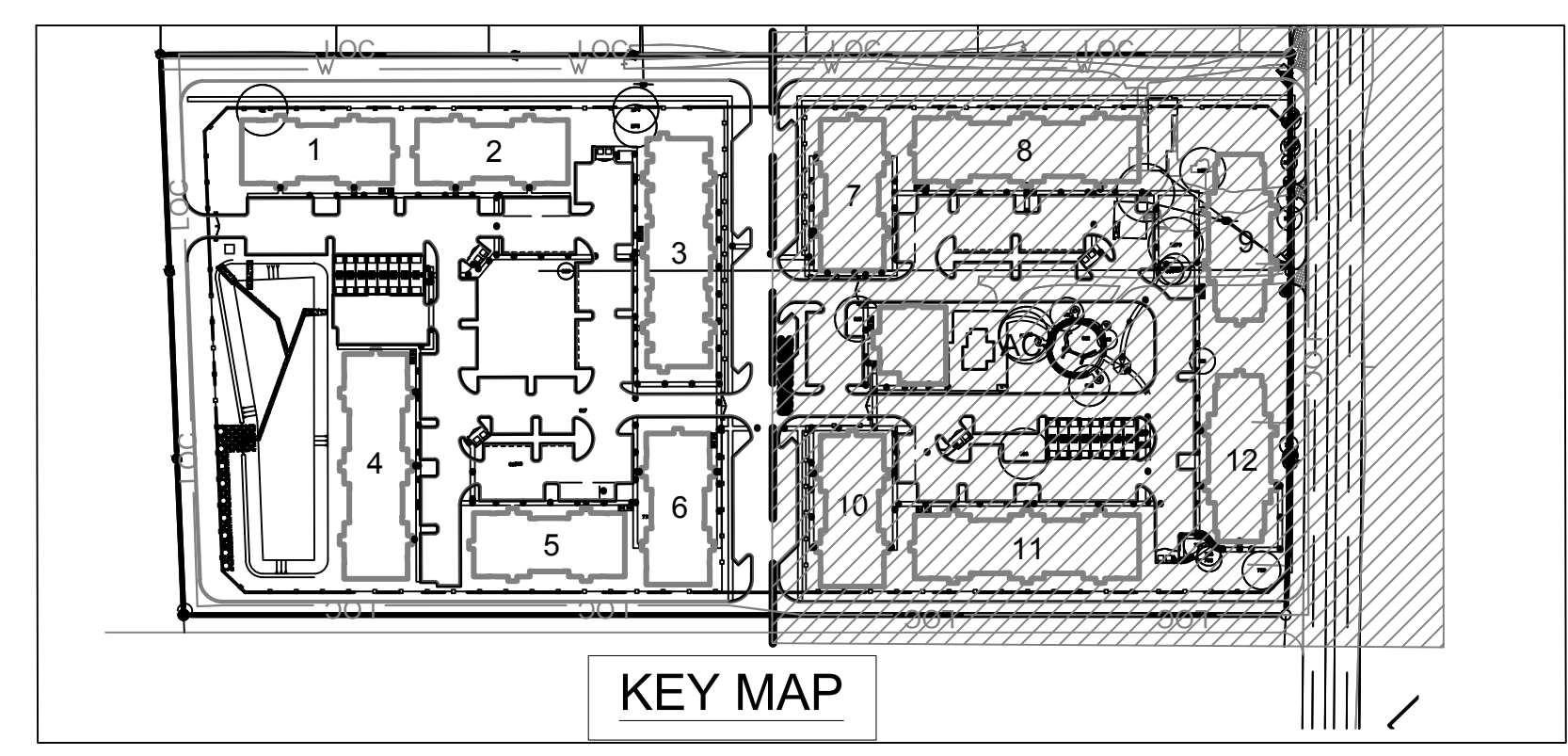
LEGEND	
EXISTING	PROPOSED

ANNOTATION LEGEND	
F/F	= PROP. FINISHED FLOOR
T/S	= PROP. TOP OF SIDEWALK
T/C	= PROP. TOP OF CURB ELEVATION
T/P	= PROP. TOP OF PAVEMENT ELEVATION
M/E	= MATCH EXIST PAVEMENT GRADE
T/G	= PROP. TOP OF GRATE ELEVATION
F/G	= PROP. FINISHED GRADE ELEVATION
* T/P 743.86	= EXIST. TOP OF CURB/TOP OF PAVEMENT SHOTS
* 750.0	= EXIST. GROUND SHOTS

****ALL ELEVATIONS ARE TOP OF CURB, UNLESS OTHERWISE NOTED.**

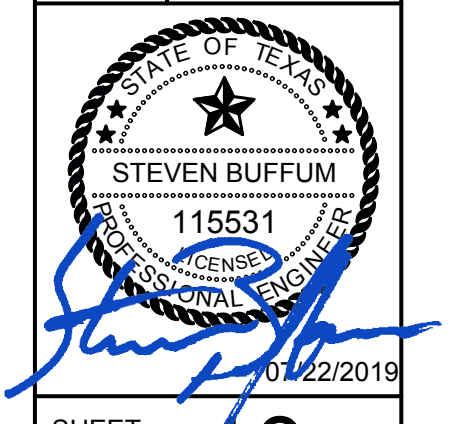
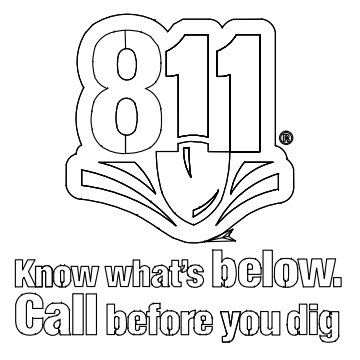
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 2. THE INFORMATION SHOWN ON THESE DRAWINGS INDICATING THE PRESENCE, TYPE, AND SIZE OF EXISTING UTILITIES ARE SHOWN FROM THE BEST AVAILABLE INFORMATION AND ARE FOR THE CONTRACTOR'S GUIDANCE ONLY. CONTRACTOR TO FIELD-VERIFY THE LOCATIONS AND TIE-IN ELEVATIONS OF ALL EXISTING UTILITIES PRIOR TO THE START OF CONSTRUCTION.
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 8. REFER TO ARCHITECTURAL DRAWINGS FOR GRADES WITHIN THE BUILDING ENVELOPE.
 9. CONTRACTOR TO MATCH EXISTING PAVEMENT SECTIONS AND GRADES AT ALL PROPOSED TIE-INS.
 10. UNLESS OTHERWISE NOTED, ALL GRADING CALLS ARE TO THE TOP, FACE OF THE CURB.

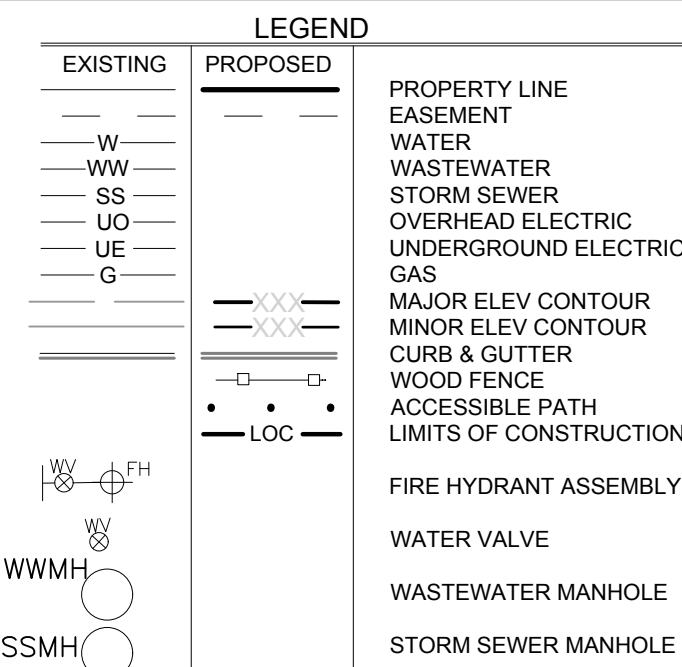
Building Summary					
Building ID	Use	Area (SF)	Height in Feet	Height in Stories	Finished Floor Elevation
1	Apartments	10,872	40	3	632.0'
2	Apartments	10,872	40	3	634.5'
3	Apartments	17,032	40	3	634.0'
4	Apartments	15,976	40	3	627.5'
5	Apartments	10,872	40	3	630.5'
6	Apartments	10,872	40	3	631.5'
7	Apartments	10,872	40	3	640.0'
8	Apartments	10,872	40	3	647.0'
9	Apartments	11,336	40	3	648.0'
10	Apartments	10,872	40	3	635.0'
11	Apartments	15,976	40	3	640.0'
12	Apartments	11,336	40	3	644.0'
Clubhouse	Clubhouse	6,061	15	1	636.0'



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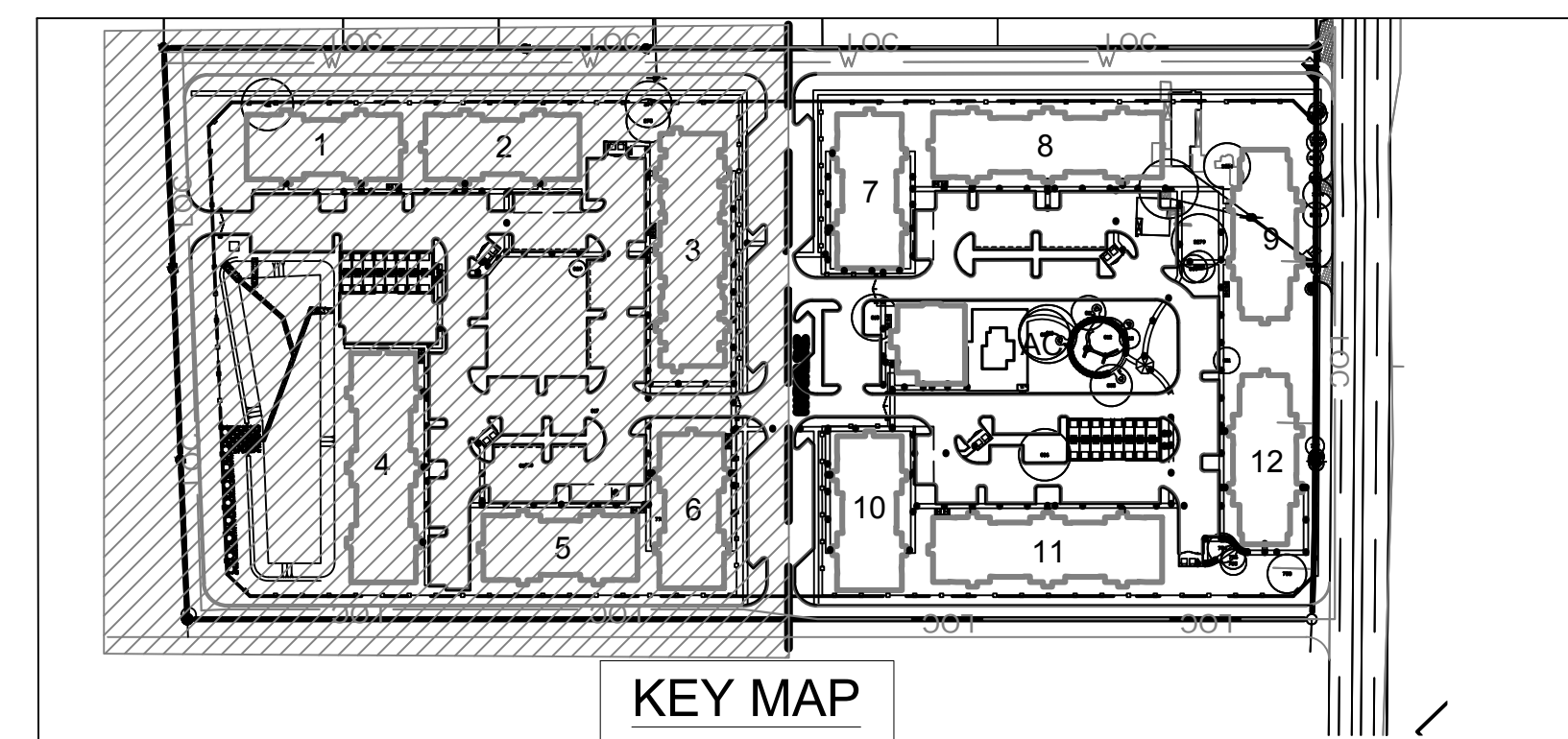


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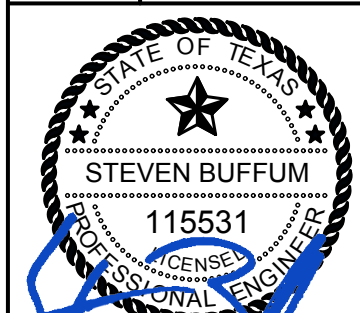
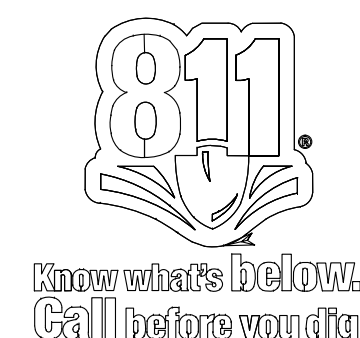
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SHEET **11**
OF **29** SHEETS

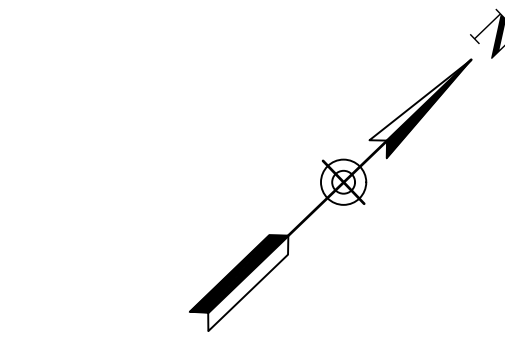
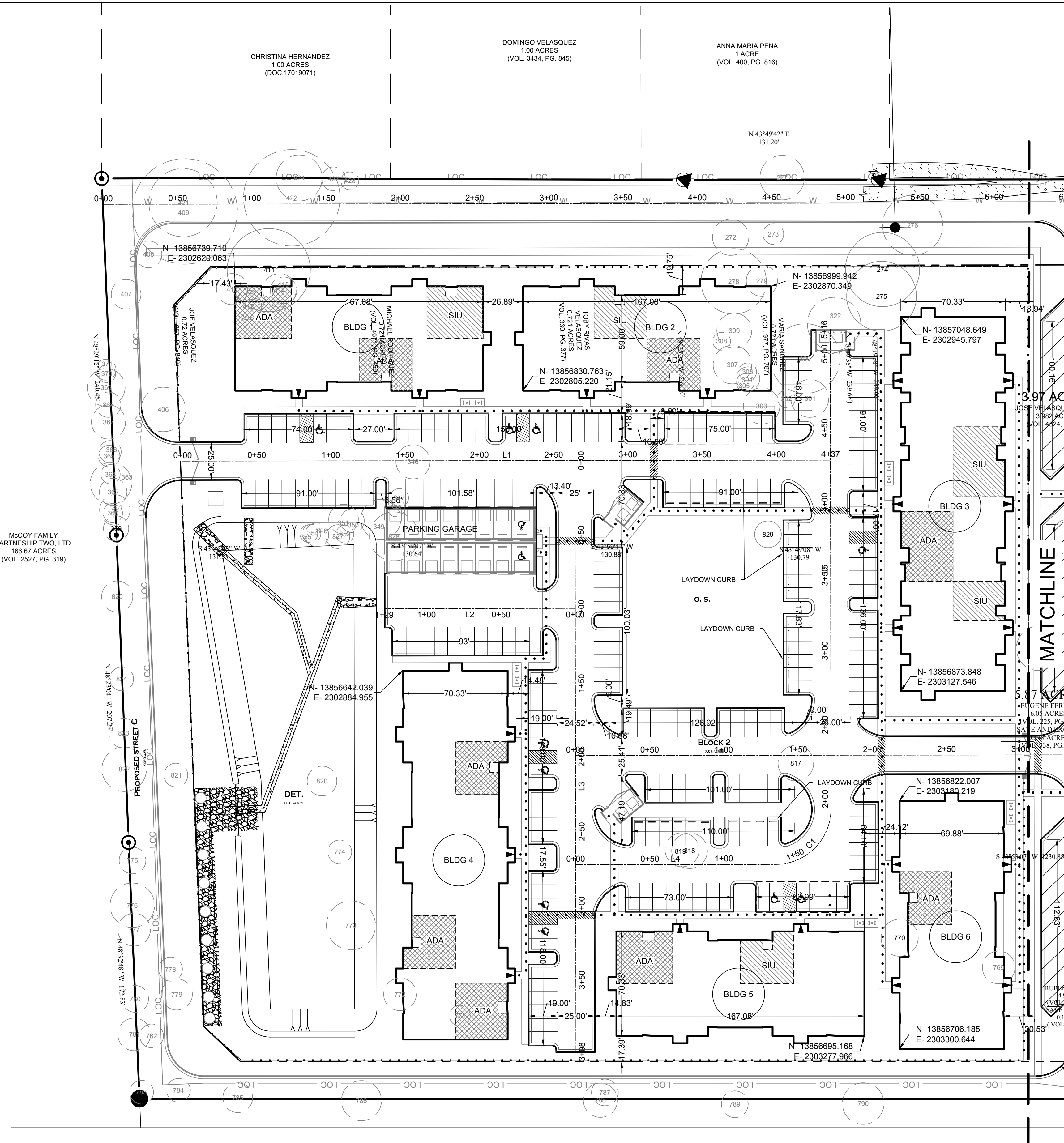
FOR REGULATORY REVIEW ONLY - NOT FOR CONSTRUCTION










SP-2018-XXXX.SH



RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

GRADING PLAN 2 OF 2






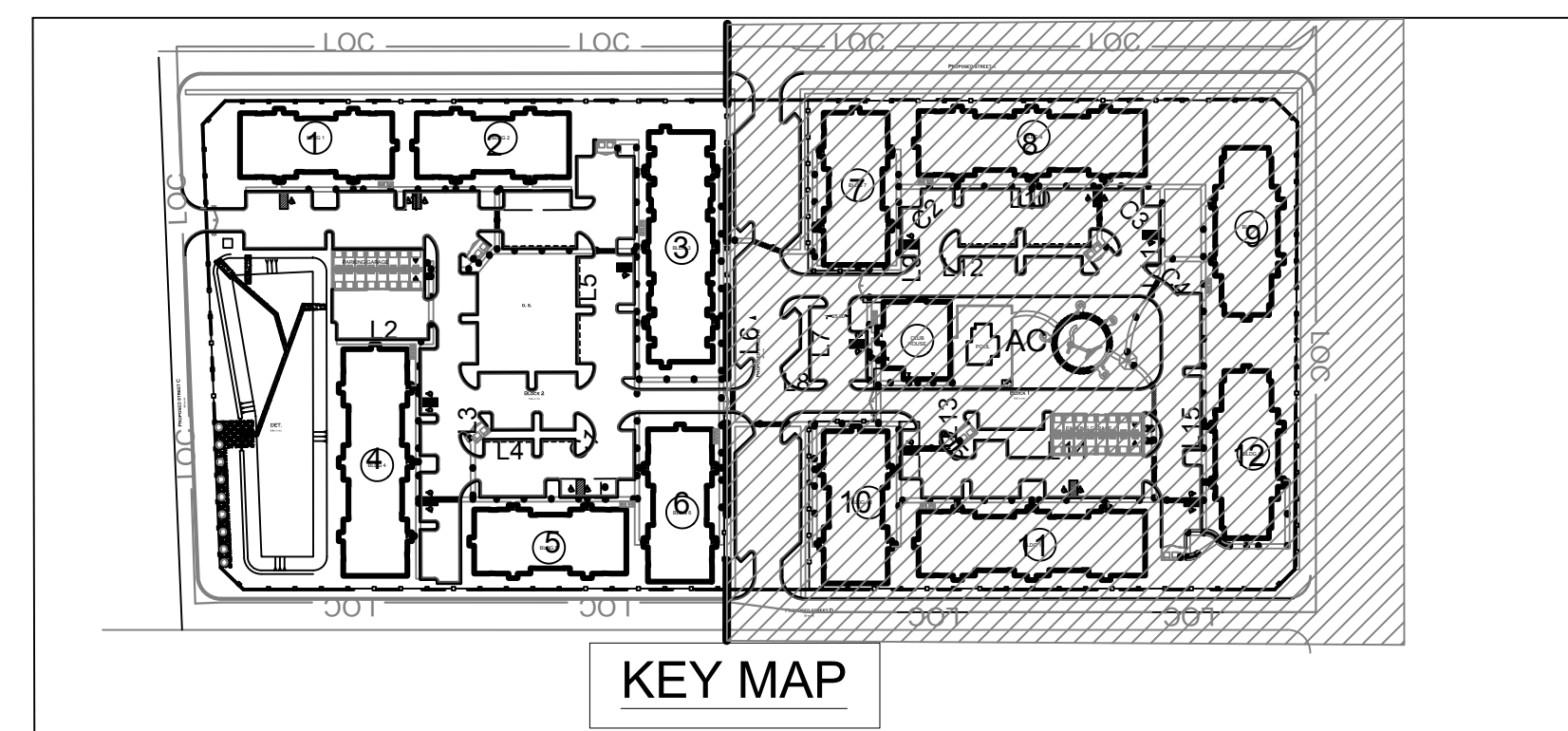
EXISTING	PROPOSED	
— W —	— W —	PROPERTY LINE
— WW —	— WW —	EASEMENT
— UC —	— SD —	WATER
— UE —		WASTEWATER
— G —		STORM SEWER
=====		OVERHEAD ELECTRIC
=====		UNDERGROUND ELECTRIC
=====		GAS
=====		CURB & GUTTER
=====		WOOD FENCE
=====		METAL FENCE
=====		100 YR FLOOD PLAIN
=====		LIMITS OF CONSTRUCTION
=====	— LOC —	FIRE LANE
=====	• • • • •	ACCESSIBLE ROUTE
		FIRE HYDRANT ASSEMBLY
		WATER VALVE
WMH — 	—  —	WASTEWATER MANHOLE
SDMH — 	—  —	STORM DRAIN MANHOLE
		DUMPSTER/STORM LOCATION
		INGRESS
		BICYCLE STALL (8 TYP.)

[illegible]

NOTES:

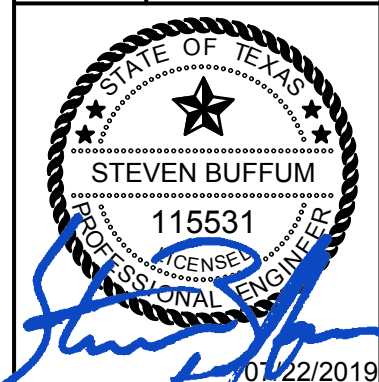
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<p><u>ACCESSIBLE UNITS:</u></p> <p>(17) TOTAL UNITS</p> <p>(2) 1BR</p> <p>(7) 2BR</p> <p>(6) 3BR-1</p> <p>(1) 3BR-2</p> <p>(1) 4BR</p>	
<p><u>SENSORY IMP. UNITS:</u></p> <p>(8) TOTAL UNITS</p> <p>(1) 1BR</p> <p>(3) 2BR</p> <p>(2) 3BR-1</p> <p>(1) 3BR-2</p> <p>(1) 4BR</p>	
<p><u>ACCESSIBLE PATH:</u></p>	

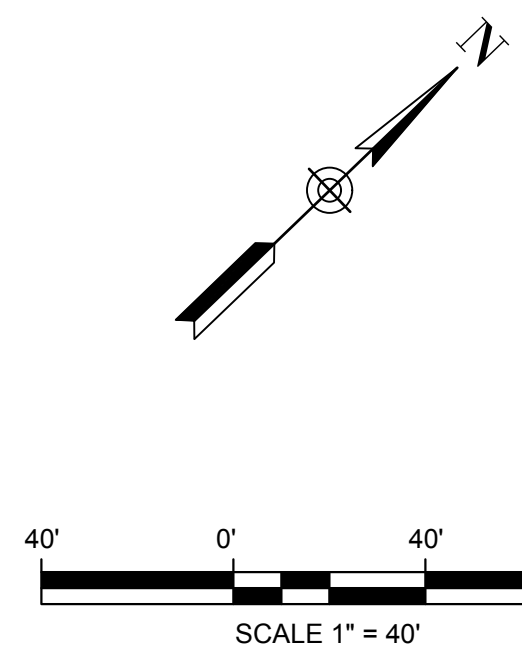
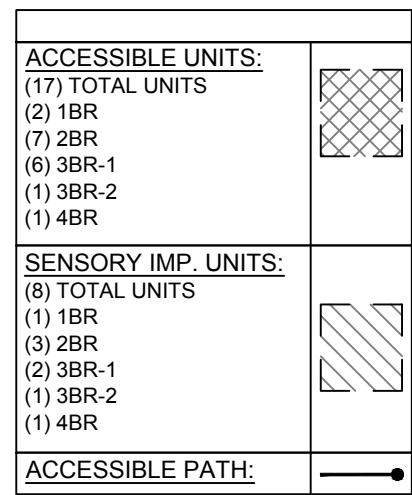








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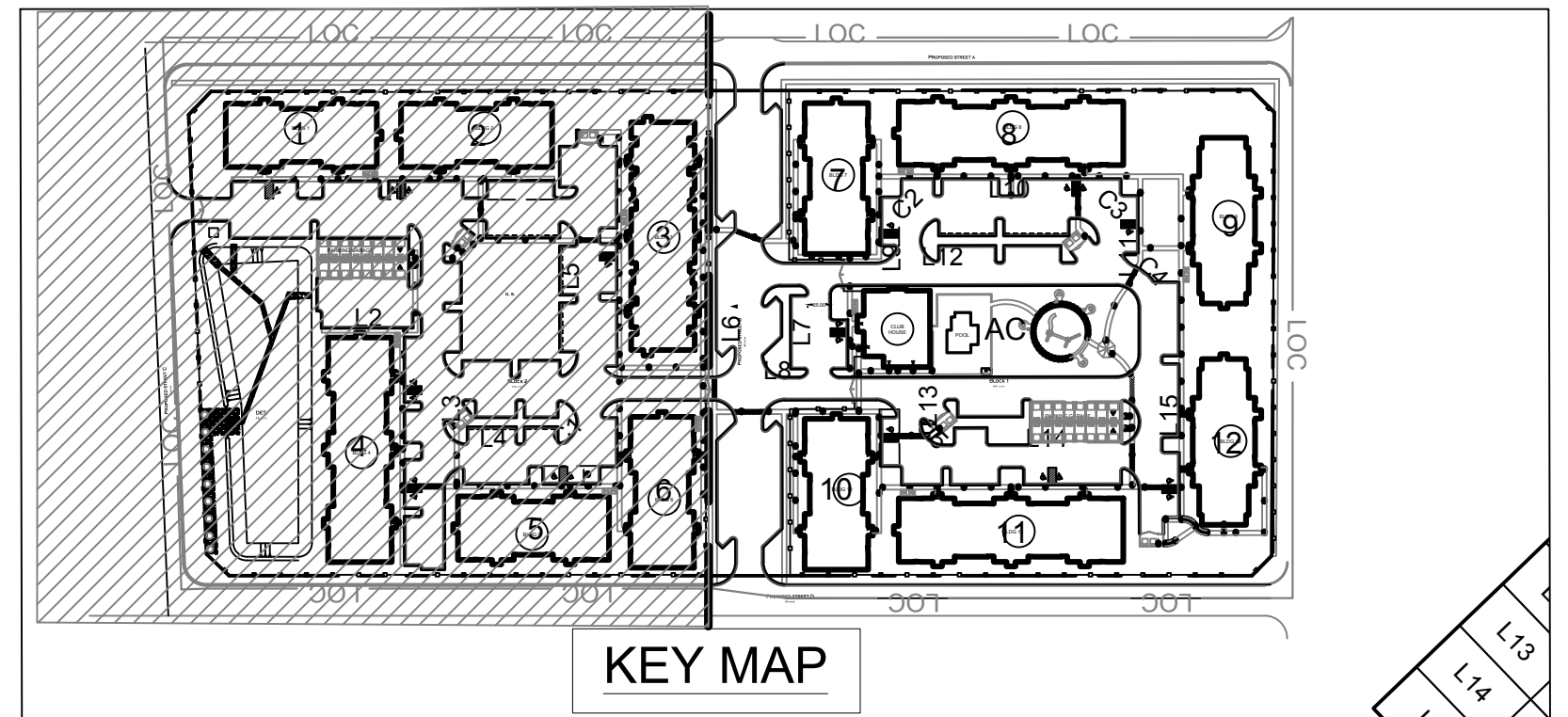


SHEET 12
OF 29 SHEETS



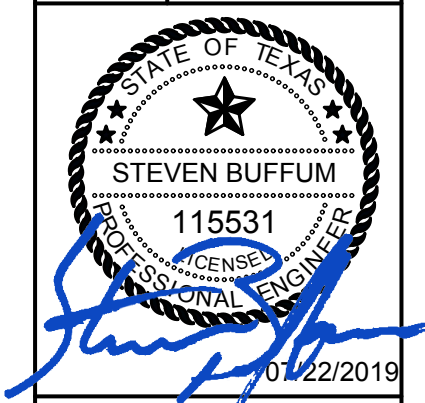
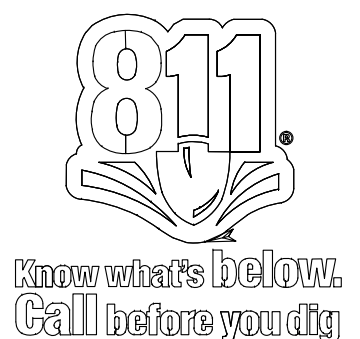
EXISTING	PROPOSED	
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— WW —	— WW —	EASEMENT
— SS —	— SD —	WATER
— UD —		WASTEWATER
— UE —		STORM SEWER
— G —		OVERHEAD ELECTRIC
=====		UNDERGROUND ELECTRIC
— . . . —		GAS
	— LOC —	CURB & GUTTER
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		METAL FENCE
		100 YR FLOOD PLAIN
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 FH		FIRE HYDRANT ASSEMBLY
WWMH		WATER VALVE
SDMH		WASTEWATER MANHOLE
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		INGRESS
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RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

SITE PLAN 2 OF 2

ENGINEERING AND SURVEYING
1016 LA POSADA DR. SUITE 288
AUSTIN, TEXAS 78752
(512)646-3456 (512) 514-0315 FAX

The logo for Costello, featuring the word "Costello" in a bold, sans-serif font next to a stylized diamond shape composed of several overlapping curved lines.

TBPE FIRM REG. No. 280
TBPL S FIRM REG. No. 100486

[illegible]

Line Table: Alignments				
Line #	Length	Direction	Start Point	End Point
L1	436.512	N43° 47' 41.17"E	(2302680.3811,13856632.5213)	(2302982.4814,13856947.6062)
L4	134.615	N43° 47' 41.15"E	(2303059.9628,13856634.8736)	(2303153.1265,13856732.0416)
L5	322.863	N46° 12' 18.82"W	(2303152.0110,13856785.0628)	(2302918.9609,13857008.5090)
L3	398.295	S46° 12' 18.82"E	(2302863.3648,13856823.3699)	(2303150.8638,13856547.7186)
L2	128.500	S43° 47' 41.18"W	(2302935.2432,13856754.4536)	(2302846.3113,13856661.6993)
L8	794.077	N43° 47' 41.18"E	(2303006.8978,13856685.7518)	(2303556.4602,13857258.9349)
L6	565.963	N46° 12' 04.91"W	(2303405.1804,13856788.6404)	(2302996.6814,13857180.3582)
L12	406.644	N43° 47' 41.18"E	(2303157.8176,13857025.8414)	(2303439.2466,13857319.3664)
L15	263.489	S46° 12' 28.06"E	(2303492.2666,13857320.4831)	(2303682.4671,13857138.1371)
L9	36.589	N46° 12' 18.82"W	(2303280.9024,13857154.2166)	(2303254.4917,13857179.5389)
L10	146.296	N43° 51' 31.54"E	(2303253.4052,13857232.5904)	(2303354.7709,13857338.0768)
L11	36.426	S46° 12' 18.82"E	(2303407.7632,13857339.1621)	(2303434.0560,13857313.9528)
L13	37.693	S46° 12' 18.82"E	(2303371.9687,13857066.5138)	(2303399.1765,13857040.4272)
L14	229.076	N43° 47' 41.11"E	(2303452.1978,13857041.5427)	(2303610.7363,13857206.8955)
L7	126.431	N46° 12' 18.82"W	(2303302.7248,13856994.2937)	(2303211.4640,13857081.7936)

Curve Table: Alignments					
Curve #	Radius	Length	Chord Direction	Start Point	End Point
C1	37.500	58.905	N01° 12' 18.84"W	(2303153.1265,13856732.0416)	(2303152.0110,13856785.0628)
C4	37.500	58.903	N88° 47' 36.56"E	(2303439.2466,13857319.3664)	(2303492.2666,13857320.4831)
C2	37.500	58.947	N01° 10' 23.64"W	(2303254.4917,13857179.5389)	(2303253.4052,13857232.5904)
C3	37.500	58.863	N88° 49' 36.36"E	(2303354.7709,13857338.0768)	(2303407.7632,13857339.1621)
C5	37.500	58.905	N88° 47' 41.14"E	(2303399.1765,13857040.4272)	(2303452.1978,13857041.5427)

LOT AND MASSING COMPLIANCE	ZONING = MF-24			
	CRITERIA (SF / %)		PROPOSED (SF / %)	
STANDARD				
GROSS SITE AREA	765,349	100%	765,349	100%
IMPERVIOUS COVER	574,012	75%	478,407	63%
OPEN SPACE	-	-	286,942	37%
BLDG HEIGHT	4 STORIES		40 FT (MAX.)/ 3 STORIES	
MINIMUM SETBACKS	SHOWN ON PLANS			
LOT AND MASSING STANDARDS ACCORDING TO DC ZONING REGULATIONS AND CONDITIONAL OVERLAYS ESTABLISHED IN ZONING ORDINANCE CH 9-1				

PARKING SPACES REQUIRED BY UNIT MIX:	# UNITS 336 TOTAL	PARKING RATE	PARKING REQUIRED	PROPOSED PARKING	DIFFERENCE
SINGLE BEDROOM	36	1	36		
TWO BEDROOM	144	1	144		
THREE BEDROOM	132	1	132		
FOUR BEDROOM	24	1	24		
PARKING SUBTOTAL =			336	393	57
ACCESSIBLE SPACES =			21 (4 VAN)	25 (12 VAN)	4 (8 VAN)

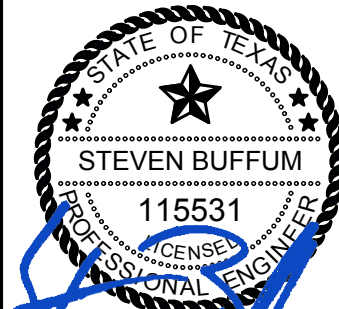
PARKING SUMMARY	REQUIRED	PROPOSED
TOTAL VEHICULAR SPACES	336	418
- GARAGE	--	14
- COVERED	--	0
- CAR SHARING	--	0
- STANDARD	--	379
- COMPACT	--	0
- ACCESSIBLE	21(4 VAN)	25 (12 VAN)
BICYCLE	67	72
OFF-STREET LOADING	N/A	N/A

Building Summary				
Building ID	Use	Area (SF)	Height in Feet	Height in Stories
1	Apartments	10,872	40	3
2	Apartments	10,872	40	3
3	Apartments	17,032	40	3
4	Apartments	15,976	40	3
5	Apartments	10,872	40	3
6	Apartments	10,872	40	3
7	Apartments	10,872	40	3
8	Apartments	10,872	40	3
9	Apartments	11,336	40	3
10	Apartments	10,872	40	3
11	Apartments	15,976	40	3
12	Apartments	11,336	40	3
Clubhouse	Clubhouse	6,061	15	1

UNITS	ACCESSIBLE UNITS - 5%		SENSORY - 2%	
	REQUIRED	PROVIDED	REQUIRED	PROVIDED
1BR	1.8 UNITS	2 UNITS	0.7 UNITS	1 UNITS
2BR	7.2 UNITS	7 UNITS	2.9 UNITS	3 UNITS
3BR-1	6.0 UNITS	6 UNITS	2.4 UNITS	2 UNITS
3BR-2	0.6 UNITS	1 UNITS	0.2 UNITS	1 UNITS
4BR	1.2 UNITS	1 UNITS	0.5 UNITS	1 UNITS
TOTAL	16.8 UNITS	17 UNITS	6.7 UNITS	8 UNITS

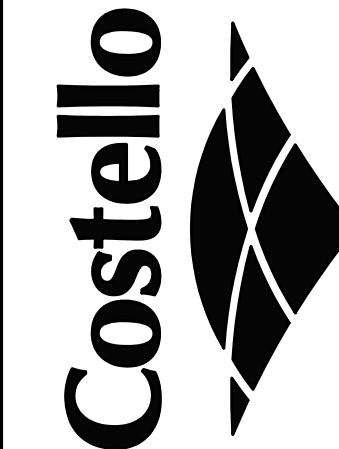
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RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

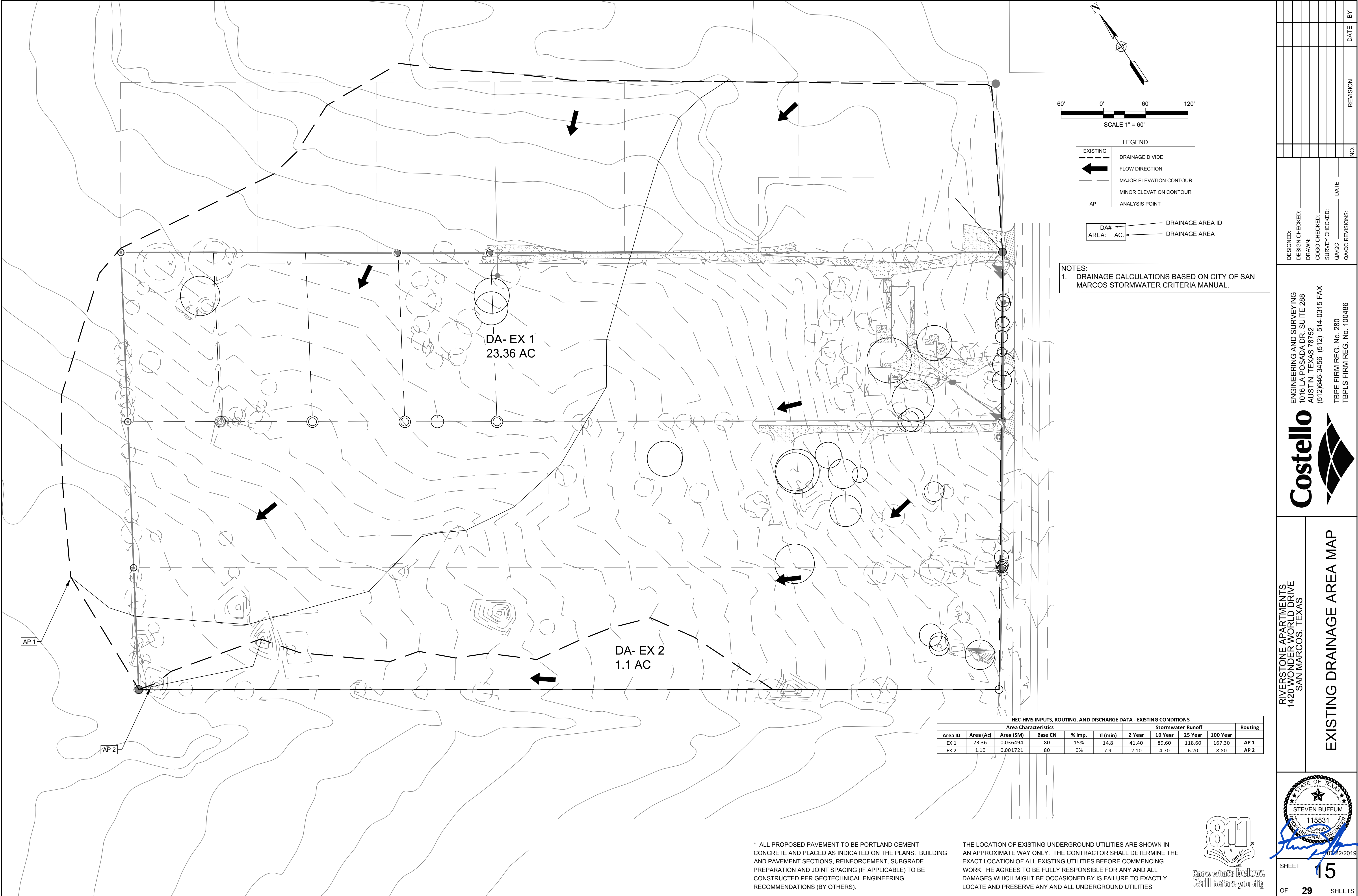
SITE PLAN NOTES & DETAILS



ENGINEERING AND SURVEYING
1016 LA POSADA DR. SUITE 288
AUSTIN, TEXAS 78752
(512)646-3456 (612) 514-0315 FAX

TBPE FIRM REG. No. 280
TBPLS FIRM REG. No. 100486

DESIGNED:	DESIGN CHECKED:	DRAWN:	COGO CHECKED:	SURVEY CHECKED:	DATE:	QA/QC:	QA/QC REVISIONS:	NO.	REVISION	DATE	BY



LEGEND

EXISTING
DRAINAGE DIVIDE
FLOW DIRECTION
MAJOR ELEVATION CONTOUR
MINOR ELEVATION CONTOUR
AP ANALYSIS POINT

DA#
AREA: __AC.

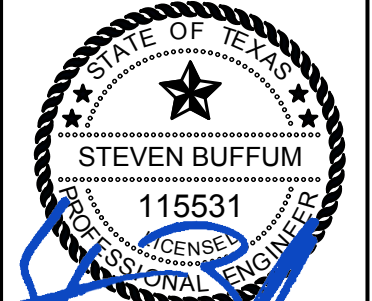
DRAINAGE AREA ID
DRAINAGE AREA

NOTES:
1. DRAINAGE CALCULATIONS BASED ON CITY OF SAN MARCOS STORMWATER CRITERIA MANUAL.

HEC-HMS INPUTS, ROUTING, AND DISCHARGE DATA - EXISTING CONDITIONS										
Area Characteristics						Stormwater Runoff				
Area ID	Area (Ac)	Area (SM)	Base CN	% Imp.	Tl (min)	2 Year	10 Year	25 Year	100 Year	Routing
EX 1	23.36	0.036494	80	15%	14.8	41.40	89.60	118.60	167.30	AP 1
EX 2	1.10	0.001721	80	0%	7.9	2.10	4.70	6.20	8.80	AP 2

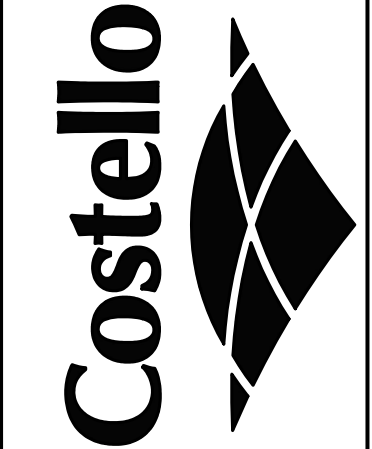
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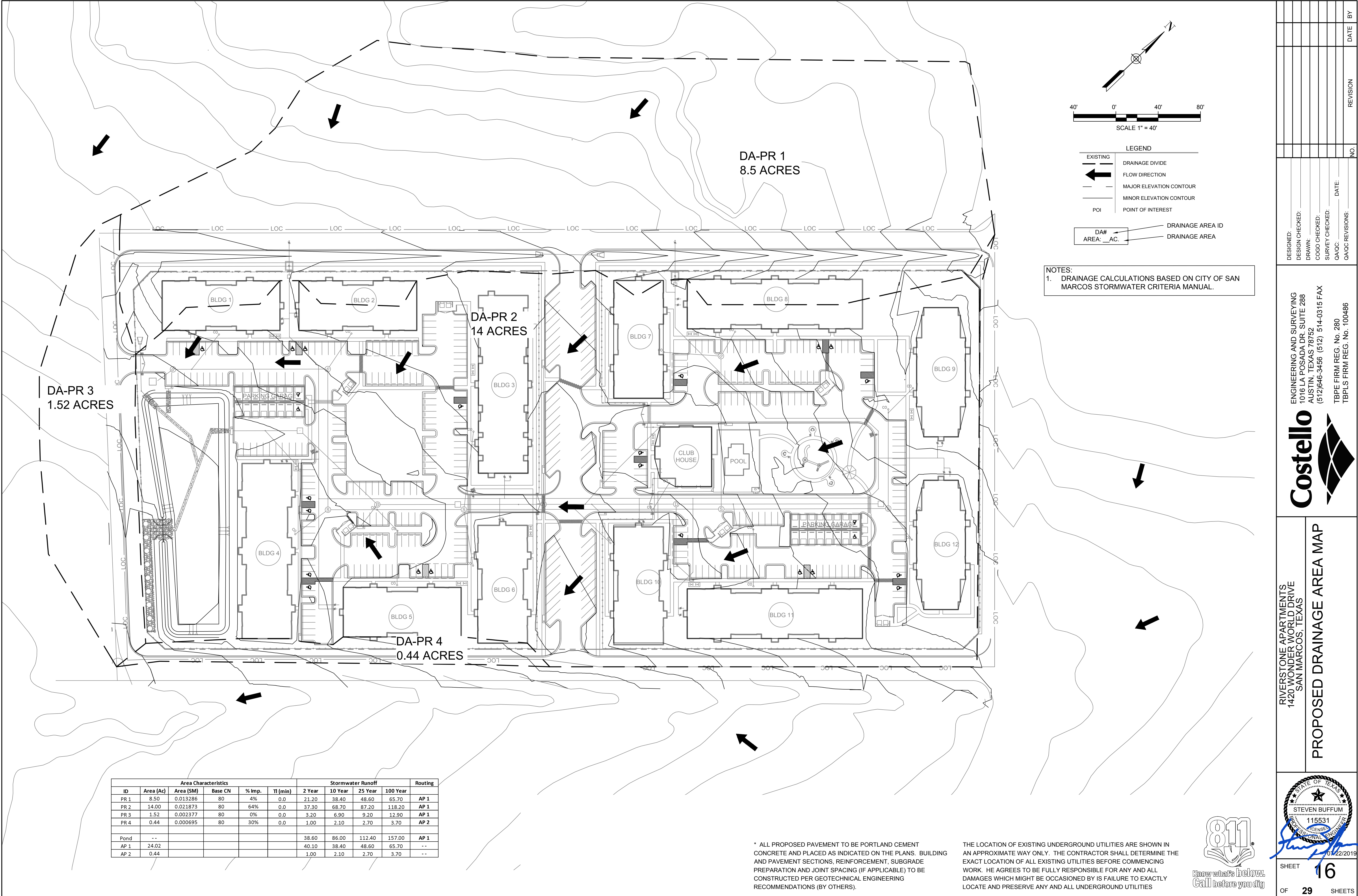
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TBPLS FIRM REG. No. 100486



RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

EXISTING DRAINAGE AREA MAP

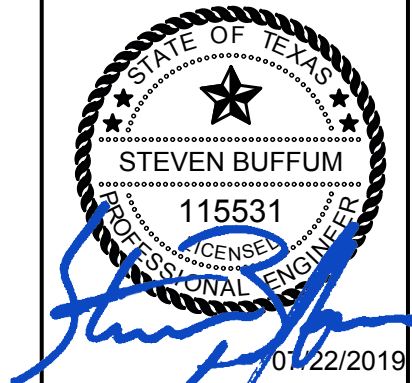


NOTES:
1. DRAINAGE CALCULATIONS BASED ON CITY OF SAN MARCOS STORMWATER CRITERIA MANUAL.

Area Characteristics						Stormwater Runoff				Routing
ID	Area (Ac)	Area (SM)	Base CN	% Imp.	Tl (min)	2 Year	10 Year	25 Year	100 Year	
PR 1	8.50	0.013286	80	4%	0.0	21.20	38.40	48.60	65.70	AP 1
PR 2	14.00	0.021873	80	64%	0.0	37.30	68.70	87.20	118.20	AP 1
PR 3	1.52	0.002377	80	0%	0.0	3.20	6.90	9.20	12.90	AP 1
PR 4	0.44	0.000695	80	30%	0.0	1.00	2.10	2.70	3.70	AP 2
Pond	--					38.60	86.00	112.40	157.00	AP 1
AP 1	24.02					40.10	38.40	48.60	65.70	--
AP 2	0.44					1.00	2.10	2.70	3.70	--

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DATE: _____

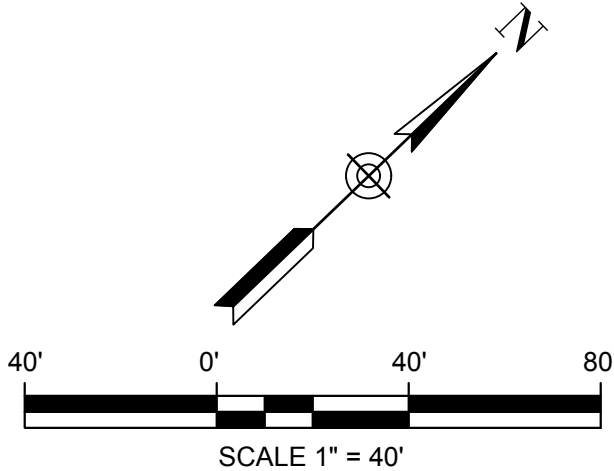
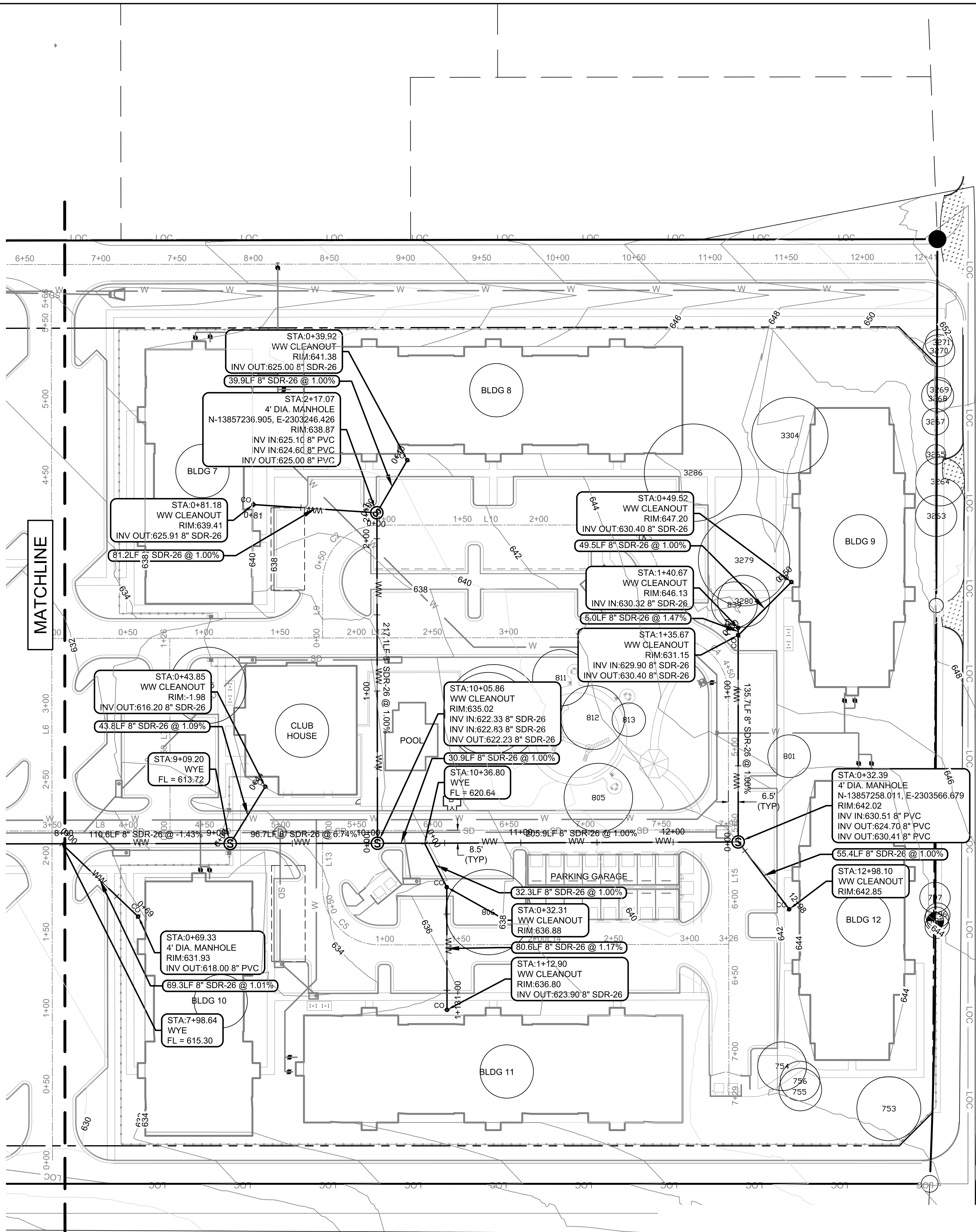
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TBPE FIRM REG. No. 280
TBPLS FIRM REG. No. 100486

Costello

RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

PROPOSED DRAINAGE AREA MAP

NO. _____
REVISION _____
DATE _____
BY _____



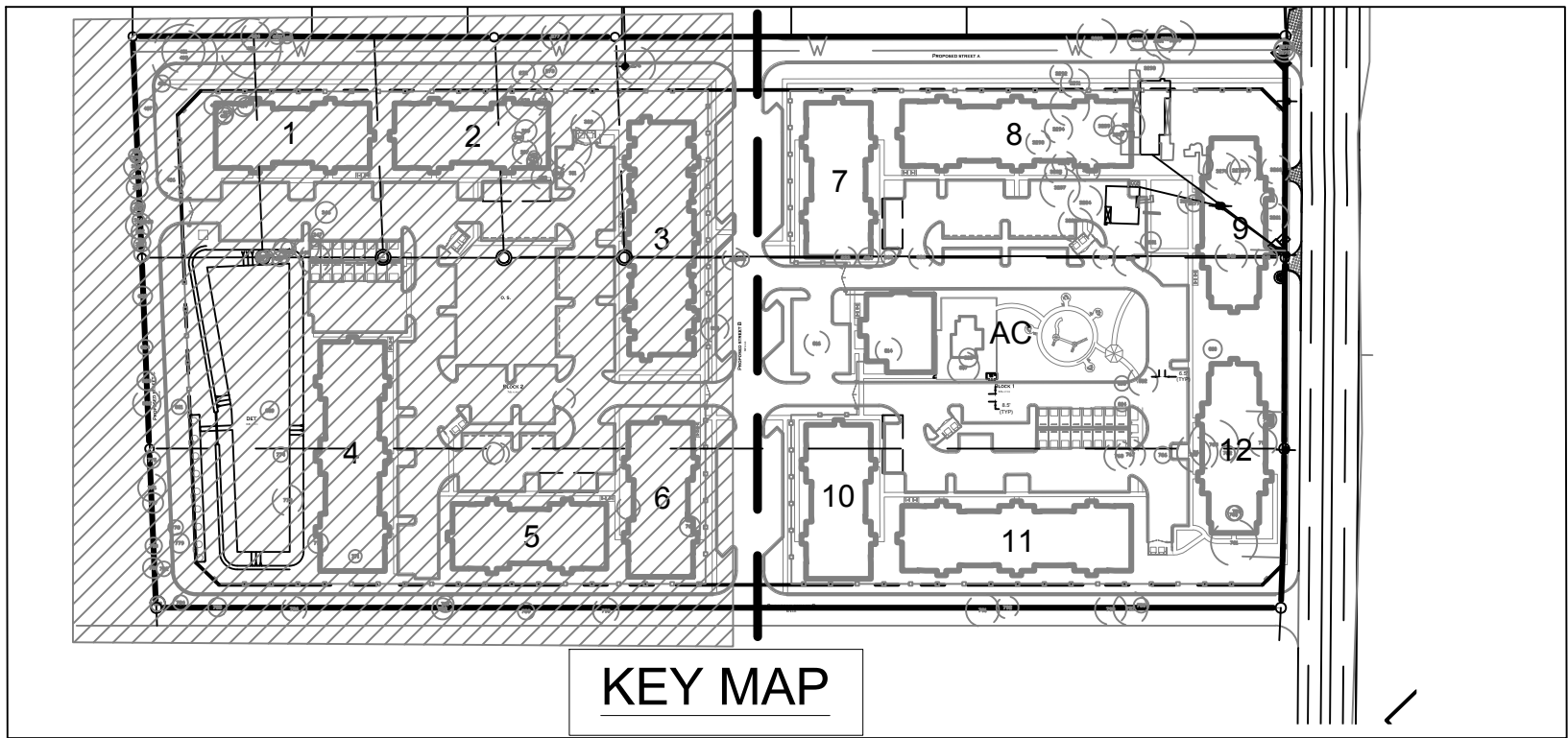
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— UE —	
— G —	
	— LOC —
	— WM —
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	— CO —
	— D —
	PROPERTY LINE
	EASEMENT
	WATER
	WASTEWATER
	STORM SEWER
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	GAS
	CURB & GUTTER
	WOOD FENCE
	LIMITS OF CONSTRUCTION
	FIRE HYDRANT ASSEMBLY
	WATER METER
	WATER VALVE
	BACKFLOW PREVENTER
	WASTEWATER MANHOLE
	WASTEWATER CLEANOUT
	STORM SEWER MANHOLE

WATER LINE NOTE:

ALL WATER LINE C900 PVC UNLESS OTHERWISE NOTED.

NOTES:

- CONTRACTOR SHALL FURNISH AND INSTALL ALL MATERIALS AND APPURTENANCES ARE CALLED OUT ON PLANS.
- NO COMBUSTIBLE CONSTRUCTION WILL BEGIN ON THIS SITE PLAN UNTIL THE WATER LINE EXTENSION IS COMPLETED AND THE REQUIRED FLOW IS AVAILABLE.
- EXISTING SERVICE LINE LOCATIONS ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED.
- LIMITS OF CONSTRUCTION ARE SHOWN ON EROSION AND SEDIMENTATION CONTROL PLANS.
- UNDERGROUND MAINS FEEDING PRIVATE HYDRANTS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, AND THE FIRE CODE BY A LICENSED CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED IN BETWEEN TESTED SECTIONS.
- REFERENCE GENERAL NOTES FOR ADDITION UTILITY NOTES.
- THIS SHEET IS AN OVERALL VIEW OF UTILITIES, PLEASE REFER TO PLAN AND PROFILE VIEWS FOR DETAILED INFORMATION.
- UNLESS OTHERWISE NOTED, ALL EXISTING SURFACE UTILITY APPURTENANCES TO BE ADJUSTED TO FINAL GRADE.
- ALL PRIVATE HYDRANTS ARE TO BE PAINTED RED.
- UNDERGROUND MAINS FEEDING NFPA 13 SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED BETWEEN TESTED SECTIONS.
- A DC FIRE BACKFLOW PREVENTOR WILL BE PROVIDED IN EACH BUILDING. SEE MEP PLANS.
- TYPICAL WATERLINE FLOWLINE= 4.0 FEET BELOW FINISHED FLOOR.

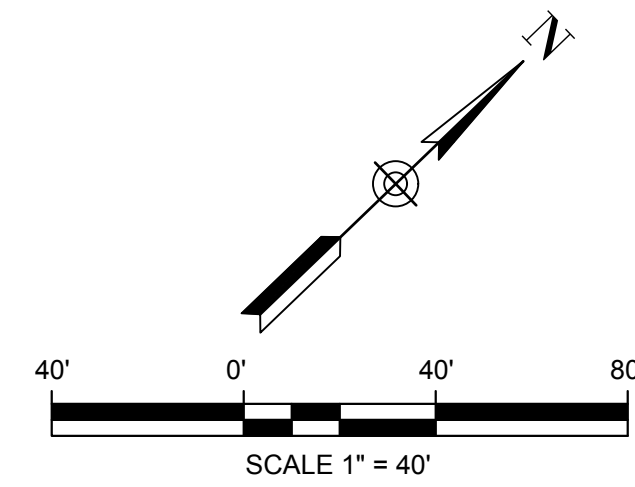


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DESIGNED:	ENGINEERING AND SURVEYING	1016 LA POSADA DR. SUITE 288	AUSTIN, TEXAS 78752	(512) 646-3456 (612) 514-0315 FAX	DATE:	NO.	REVISION	DATE	BY
DRAWN:									
CHECKED:									
QA/QC:									
QA/QC REVISIONS:									
RIVERSTONE APARTMENTS 1420 WONDER WORLD DRIVE SAN MARCOS, TEXAS		WASTEWATER PLAN 2 OF 2							
STATE OF TEXAS STEVEN BUFFUM 115531 LICENSED PROFESSIONAL ENGINEER		07/22/2019							
SHEET 18									
OF 29 SHEETS									
SP-2018-XXXX.SH									



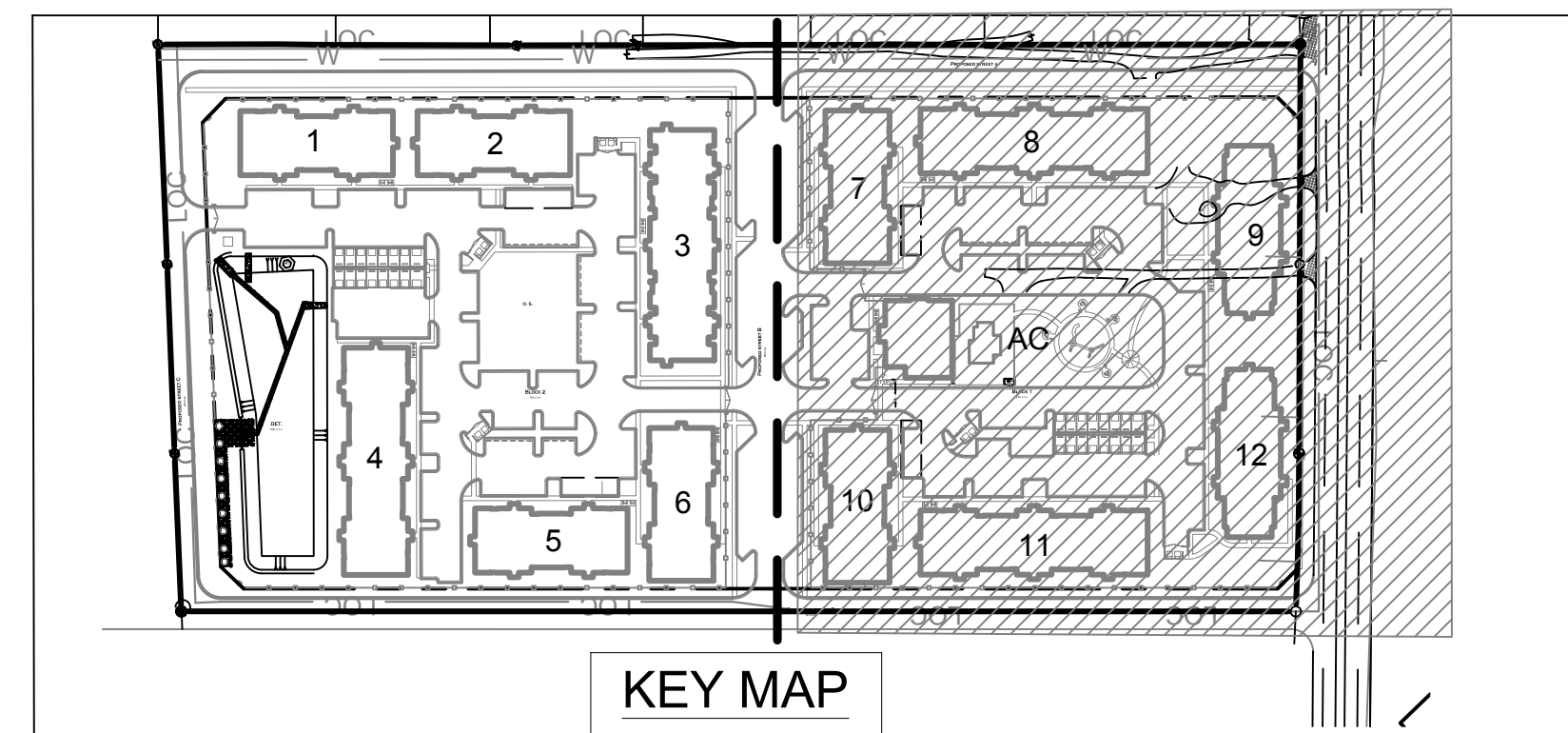
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WM ⊗	
WWMM ○	
SSMM ○	
	PROPERTY LINE
	EASEMENT
	WATER
	WASTEWATER
	STORM SEWER
	OVERHEAD ELECTRIC
	UNDERGROUND ELECTRIC
	GAS
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	WOOD FENCE
	LIMITS OF CONSTRUCTION
	FIRE HYDRANT ASSEMBLY
	WATER METER
	WATER VALVE
	BACKFLOW PREVENTER
	WASTEWATER MANHOLE
	WASTEWATER CLEANOUT
	STORM SEWER MANHOLE

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2. NO COMBUSTIBLE CONSTRUCTION WILL BEGIN ON THIS SITE PLAN UNTIL THE WATER LINE EXTENSION IS COMPLETED AND THE REQUIRED FLOW IS AVAILABLE.
3. EXISTING SERVICE LINE LOCATIONS ARE APPROXIMATE AND NEED TO BE FIELD VERIFIED.
4. LIMITS OF CONSTRUCTION ARE SHOWN ON EROSION AND SEDIMENTATION CONTROL PLANS.
5. UNDERGROUND MAINS FEEDING PRIVATE HYDRANTS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 24, AND THE FIRE CODE BY A LICENSED CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED IN BETWEEN TESTED SECTIONS.
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7. THIS SHEET IS AN OVERALL VIEW OF UTILITIES, PLEASE REFER TO PLAN AND PROFILE VIEWS FOR DETAILED INFORMATION.
8. UNLESS OTHERWISE NOTED, ALL EXISTING SURFACE UTILITY APPURTENANCES ARE TO BE REMOVED TO FIELD GRADE.
9. ALL PRIVATE HYDRANTS ARE TO BE PAINTED RED.
10. UNDERGROUND MAINS FEEDING NFPA 13 SPRINKLER SYSTEMS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFPA 13, AND THE FIRE CODE, BY A LICENSED SPRINKLER CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTED AT ONE TIME, UNLESS ISOLATION VALVES ARE PROVIDED IN BETWEEN TESTED SECTIONS.
11. A DC FIRE BACKFLOW PREVENTOR WILL BE PROVIDED IN EACH BUILDING. SEE MEP PLANS.
12. TYPICAL WATERLINE FLOWLINE = 4.0 FEET BELOW FINISHED FLOOR.

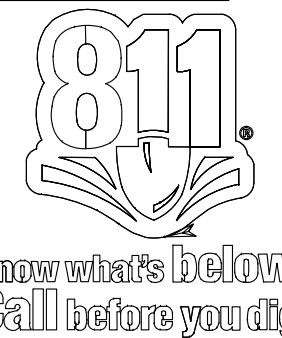
ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO THE AUSTIN WATER UTILITY.

PRIVATE HYDRANT NOTE
THIS PROJECT HAS PRIVATE HYDRANTS LOCATED WITHIN THE PROPERTY. THE PROPERTY OWNER IS REQUIRED TO COMPLY WITH AUSTIN FIRE CODE. FAILURE TO COMPLY MAY RESULT IN CIVIL AND/OR CRIMINAL REMEDIES AVAILABLE TO THE CITY. THE PERFORMANCE OF THIS ONLIGATION SHALL ALWAYS REST WITH THE OWNER OF RECORD. FIRE HYDRANTS ON PRIVATE PROPERTY ARE REQUIRED TO BE SERVICED, MAINTAINED AND FLOWED ANNUALLY. USING A CONTRACTOR REGISTERED WITH THE CITY TO PROVIDE THE SERVICE. THIS PROJECT HAS 5 PRIVATE HYDRANTS

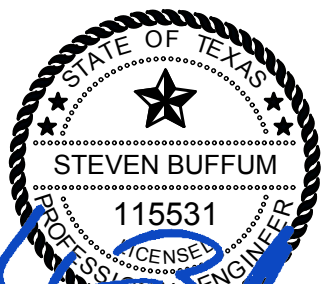


KEY MAP

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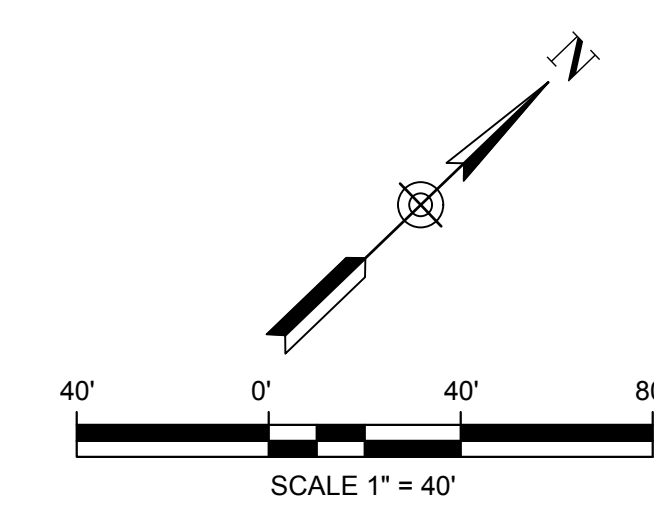
The logo for Costello, featuring the word "Costello" in a bold, sans-serif font next to a stylized diamond shape composed of several curved segments.

WATER PLAN 1 OF 2



SHEET 19
OF 29 SHEETS

SP-2018-XXXX.SH



WATER LINE NOTE:

ALL WATER LINE C900 PVC UNLESS OTHERWISE NOTED.

NOTES:

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4. LIMITS OF CONSTRUCTION ARE SHOWN ON EROSION AND SEDIMENTATION CONTROL PLANS.
5. UNDERGROUND MAINS FEEDING PRIVATE HYDRANTS MUST BE INSTALLED AND TESTED IN ACCORDANCE WITH NFA 13, AND THE FIRE CODE BY A LICENSED CONTRACTOR WITH A PLUMBING PERMIT. THE ENTIRE MAIN MUST BE HYDROSTATICALLY TESTS AT ONE TIME UNLESS ISOLATION VALVES ARE PROVIDED IN BETWEEN TESTED SECTIONS.
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FIRE HYDRANT AND VALVE - ABANDONMENT AND SALVAGING

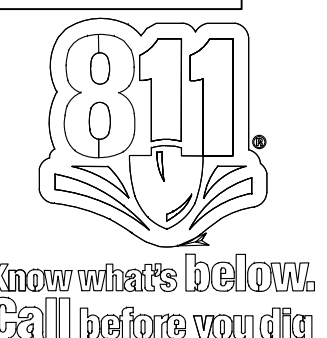
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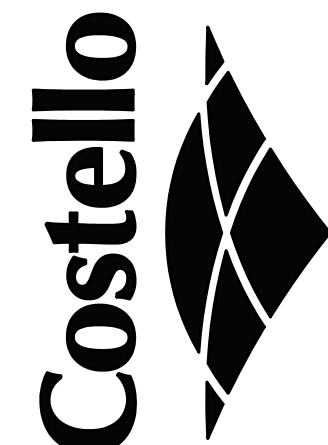
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QA/QC REVISIONS:						
	NO.	REVISION			DATE	BY

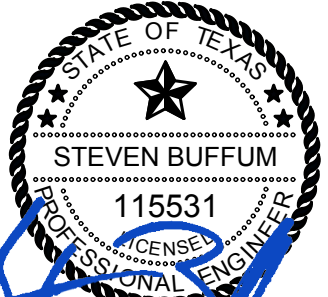
ENGINEERING AND SURVEYING
101016 LA POSADA DR. SUITE 288
AUSTIN, TEXAS 78752
(512)646-3456 (512) 514-0315 FAX

TBPE FIRM REG. No. 280
TBPLS FIRM REG. No. 100486

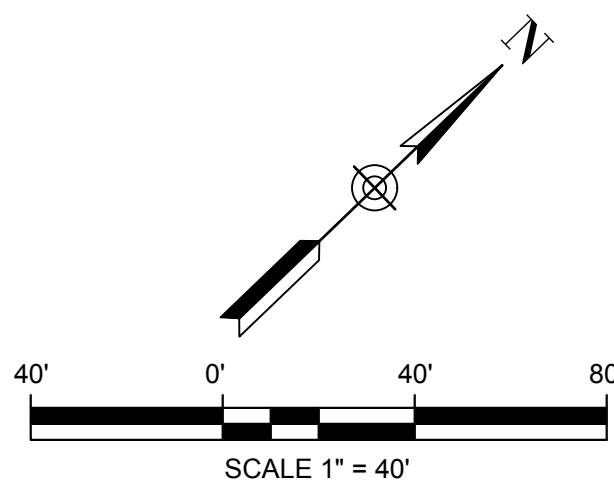
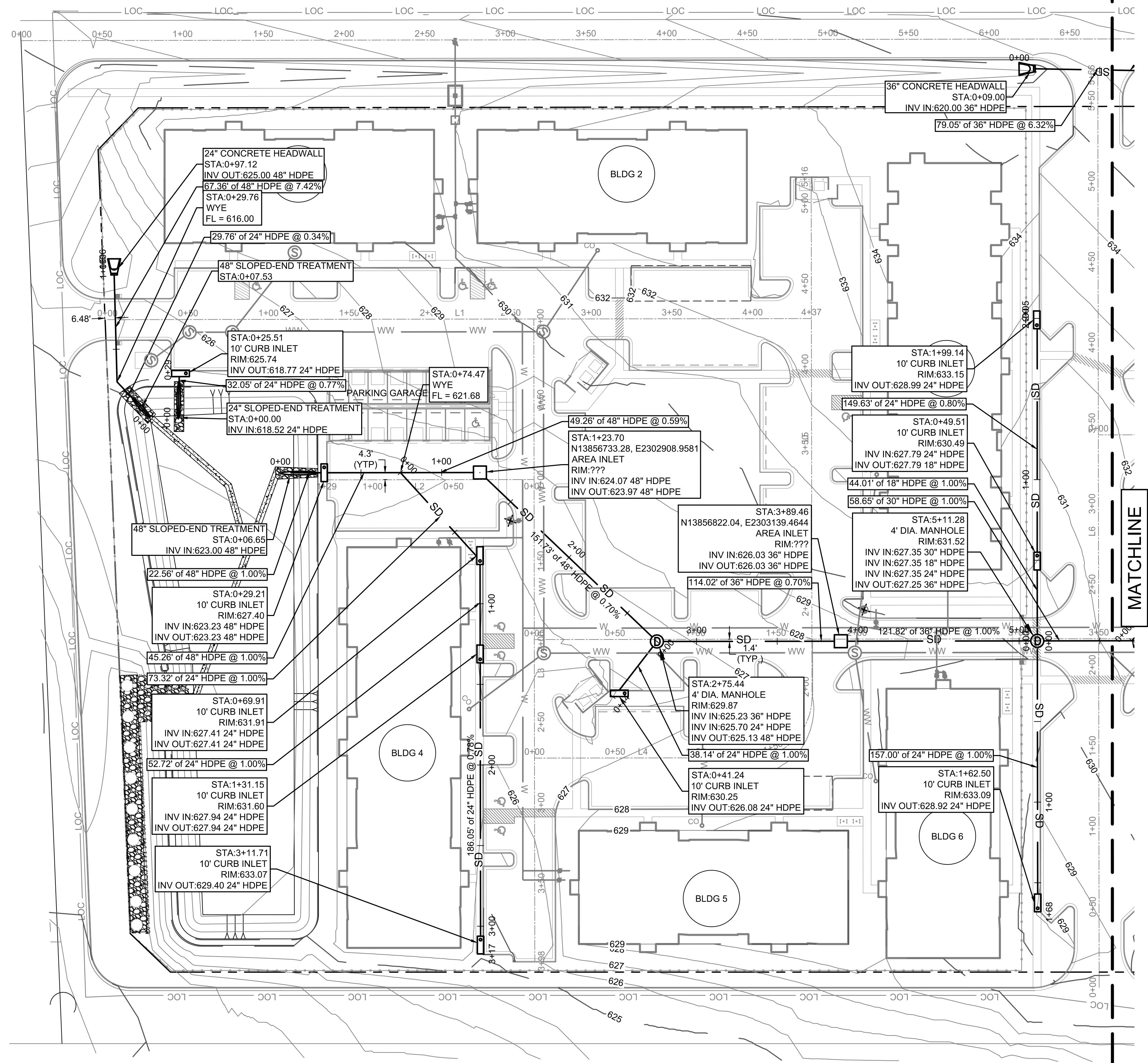


RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

WATER PLAN 2 OF 2



SHEET **20**
OF **29** SHEETS



LEGEND	
EXISTING	PROPOSED
W	W
WW	WW
SS	SS
UO	
UE	
G	
	WM
	WW
	SSMH
	SD
	HEADWALL
	CURB INLET
	AREA INLET
	SLOPED-END HEADWALL

PROPERTY LINE
EASEMENT
WATER
WASTEWATER
STORM SEWER
OVERHEAD ELECTRIC
UNDERGROUND ELECTRIC
GAS
CURB & GUTTER
WOOD FENCE
LIMITS OF CONSTRUCTION
FIRE HYDRANT ASSEMBLY
WATER METER
WATER VALVE
BACKFLOW PREVENTER
WASTEWATER MANHOLE
WASTEWATER CLEANOUT
STORM SEWER MANHOLE
HEADWALL
CURB INLET
AREA INLET
SLOPED-END HEADWALL

NOTES:

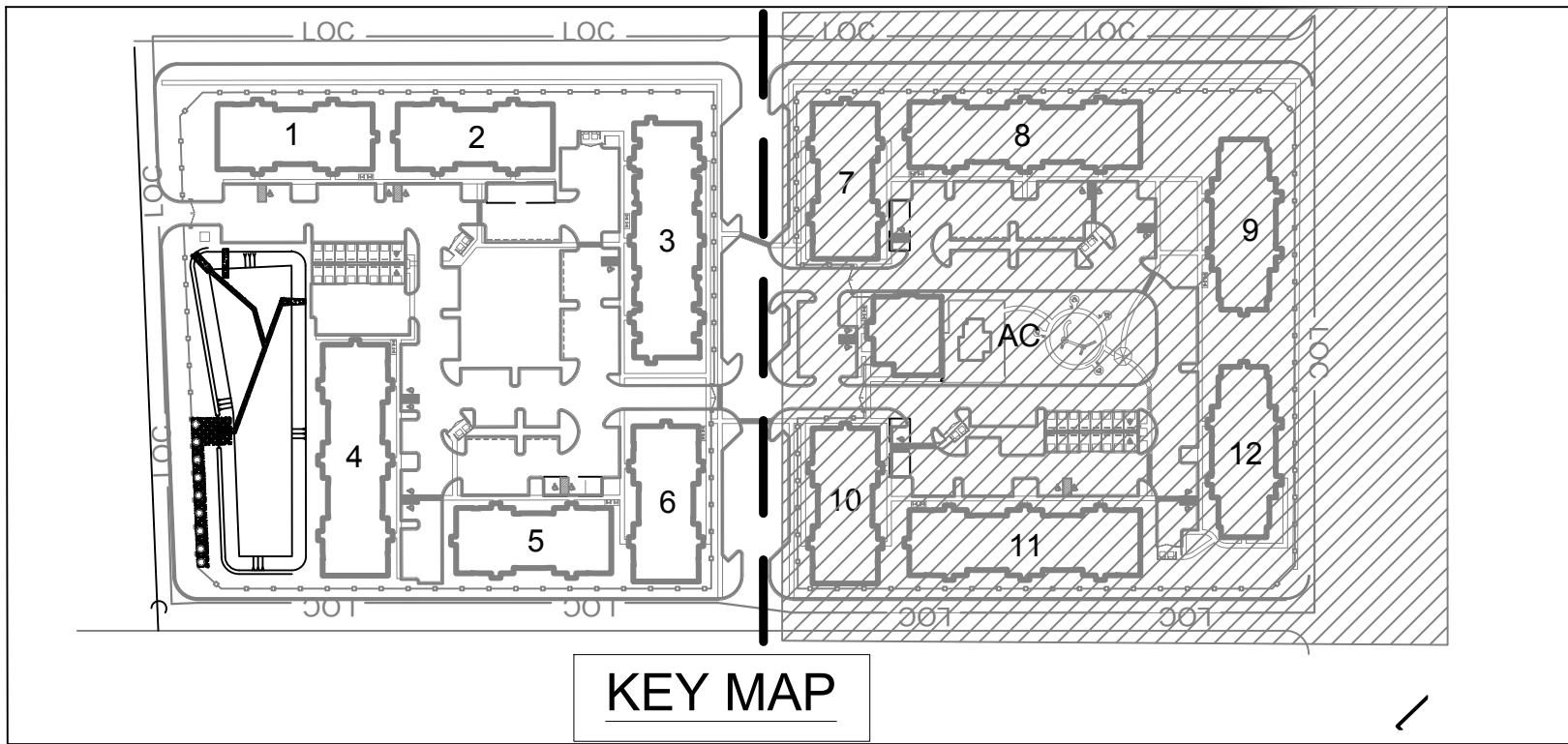
- ALL CURB INLETS SHALL BE PER COSM STANDARD DETAIL 508S-3-SM.
- ALL JUNCTION BOXES AND LIDS SHALL BE PER:
 - TXDOT PRECAST BASE (PB) DETAIL
 - TXDOT PRECAST SLAB LID (PSL) DETAIL
 - TXDOT DESIGN DATA FOR PRECAST BASE AND JUNCTION BOX (PDD) DETAIL
 - COSM STORM DRAIN MANHOLE AND RING COVER (503-4S-SM) DETAIL
 - COSM CONCRETE RISER COLLAR (1100S-1-SM) DETAIL
- CONTRACTOR TO USE FORTERRA REINFORCED CONCRETE PIPE TONGUE AND GROOVE REDUCING STOPPER - OPTION 2 AT STUB.

FIRE HYDRANT AND VALVE - ABANDONMENT AND SALVAGING

ALL FIRE HYDRANTS AND VALVES THAT ARE TO BE ABANDONED SHALL BE REMOVED, SALVAGED AND RETURNED TO THE AUSTIN WATER UTILITY.

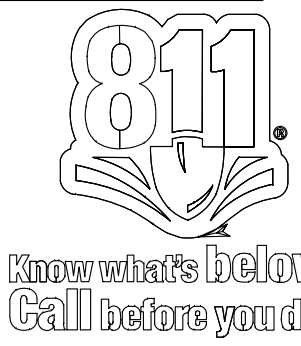
PRIVATE HYDRANT NOTE

THIS PROJECT HAS PRIVATE HYDRANTS LOCATED WITHIN THE PROPERTY. THE PROPERTY OWNER IS REQUIRED TO COMPLY WITH AUSTIN FIRE CODE. FAILURE TO COMPLY MAY RESULT IN CIVIL AND/OR CRIMINAL REMEDIES AVAILABLE TO THE CITY. THE PERFORMANCE OF THIS OBLIGATION SHALL ALWAYS REST WITH THE OWNER OF RECORD. FIRE HYDRANTS ON PRIVATE PROPERTY ARE REQUIRED TO BE SERVICED, MAINTAINED AND FLOWED ANNUALLY, USING A CONTRACTOR REGISTERED WITH THE CITY TO PROVIDE THE SERVICE. THIS PROJECT HAS 5 PRIVATE HYDRANTS



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DESIGNED:	ENGINEERING AND SURVEYING	1016 LA POSADA DR. SUITE 288	AUSTIN, TEXAS 78752	(512)646-3456 (612) 514-0315 FAX	DATE:	NO	REVISION	BY	DATE
DRAWN:									
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Costello

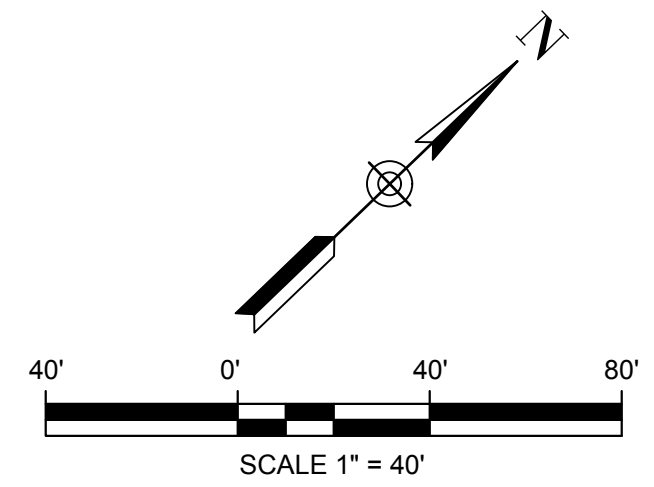
RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

STORM SEWER PLAN 1 OF 2

STATE OF TEXAS
STEVEN BUFFUM
115531
Professional Engineer
07/22/2019

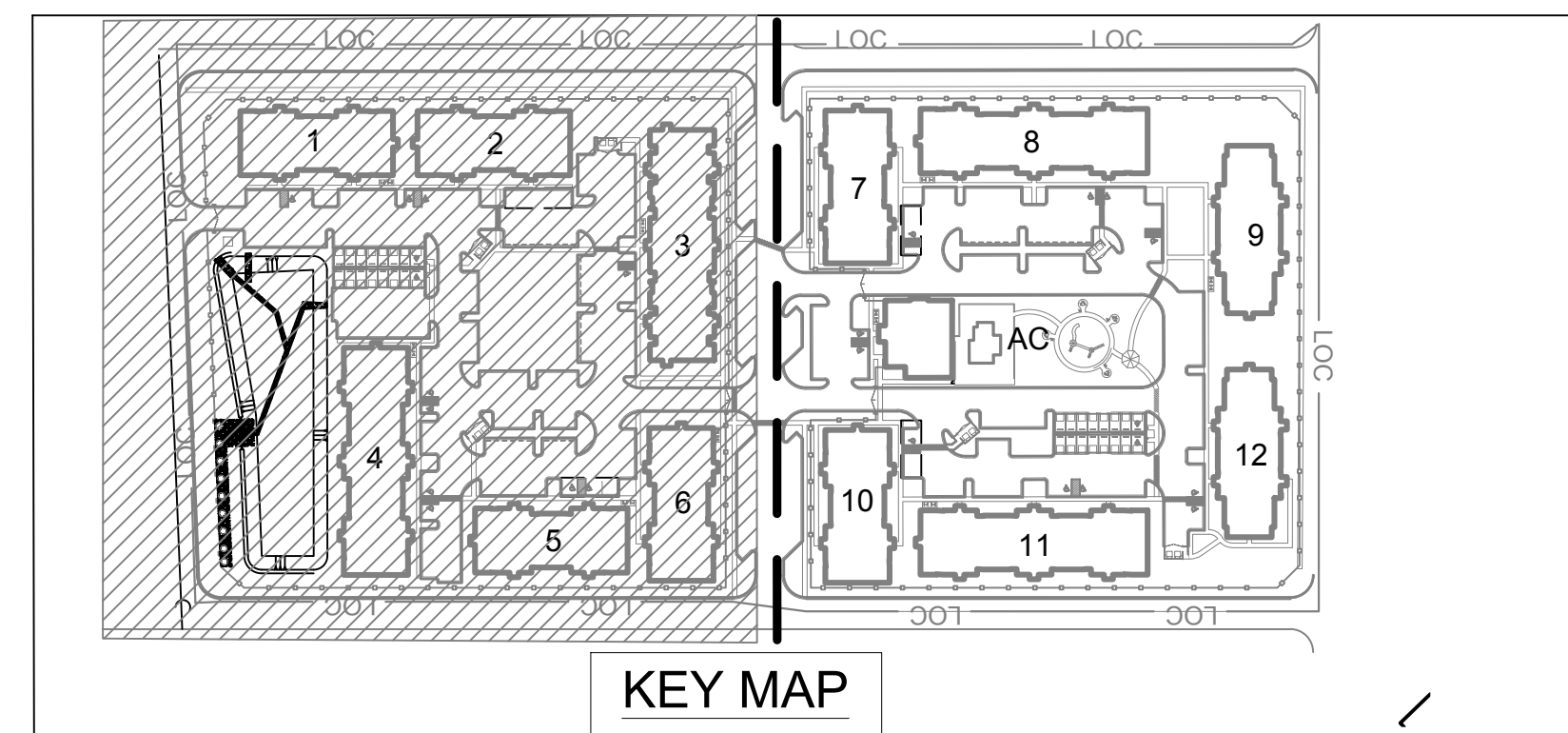
SHEET 21 OF 29 SHEETS

SP-2018-XXXX.SH



EXISTING	PROPOSED	
		PROPERTY LINE
		EASEMENT
		WATER
		WASTEWATER
		STORM SEWER
		OVERHEAD ELECTRIC
		UNDERGROUND ELECTRIC
		GAS
		CURB & GUTTER
		WOOD FENCE
		LIMITS OF CONSTRUCTION
		FIRE HYDRANT ASSEMBLY
		WATER METER
		WATER VALVE
		BACKFLOW PREVENTER
		WASTEWATER MANHOLE
		WASTEWATER CLEANOUT
		STORM SEWER MANHOLE
		HEADWALL
		CURB INLET
		AREA INLET
		SLOPED-END HEADWALL

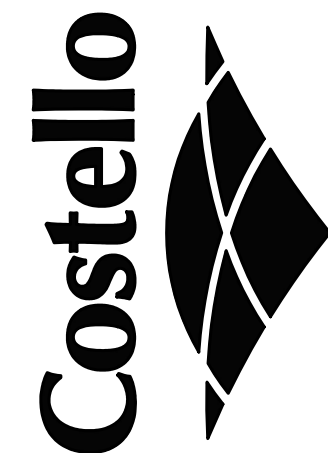
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- 2.4. COSM STORM DRAIN MANHOLE AND RING COVER (503-4S-SM) DETAIL
- 2.5. COSM CONCRETE RISER COLLAR (1100S-1-SM) DETAIL
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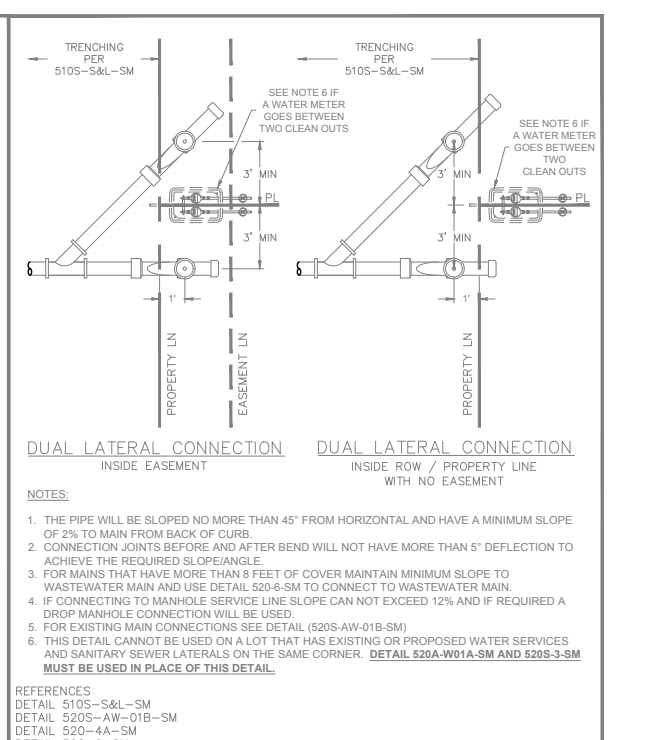
STORM SEWER PLAN 2 OF 2



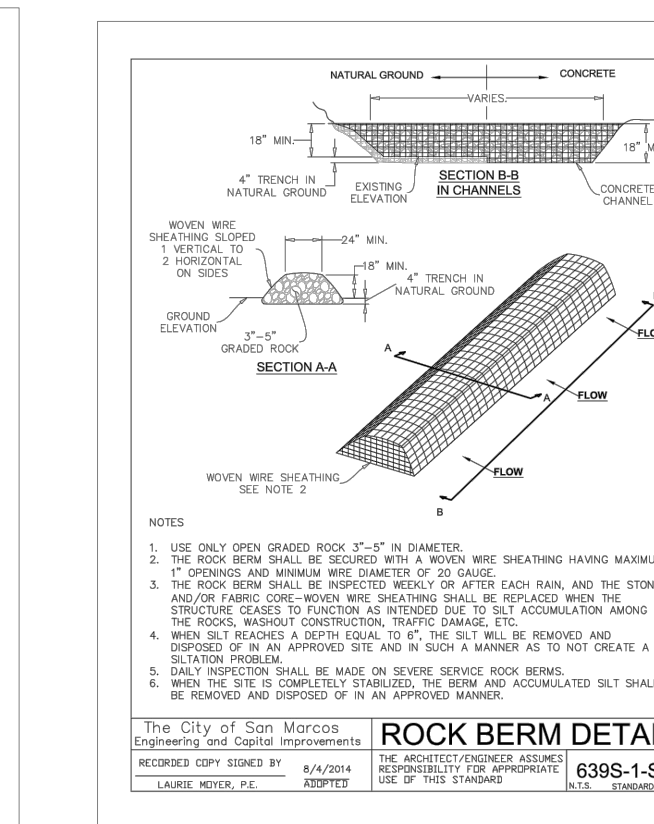
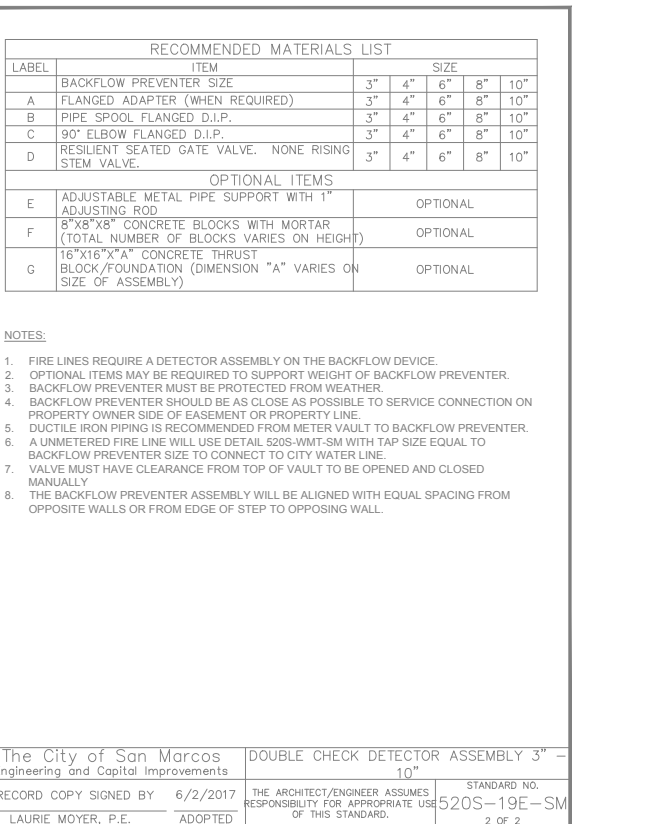
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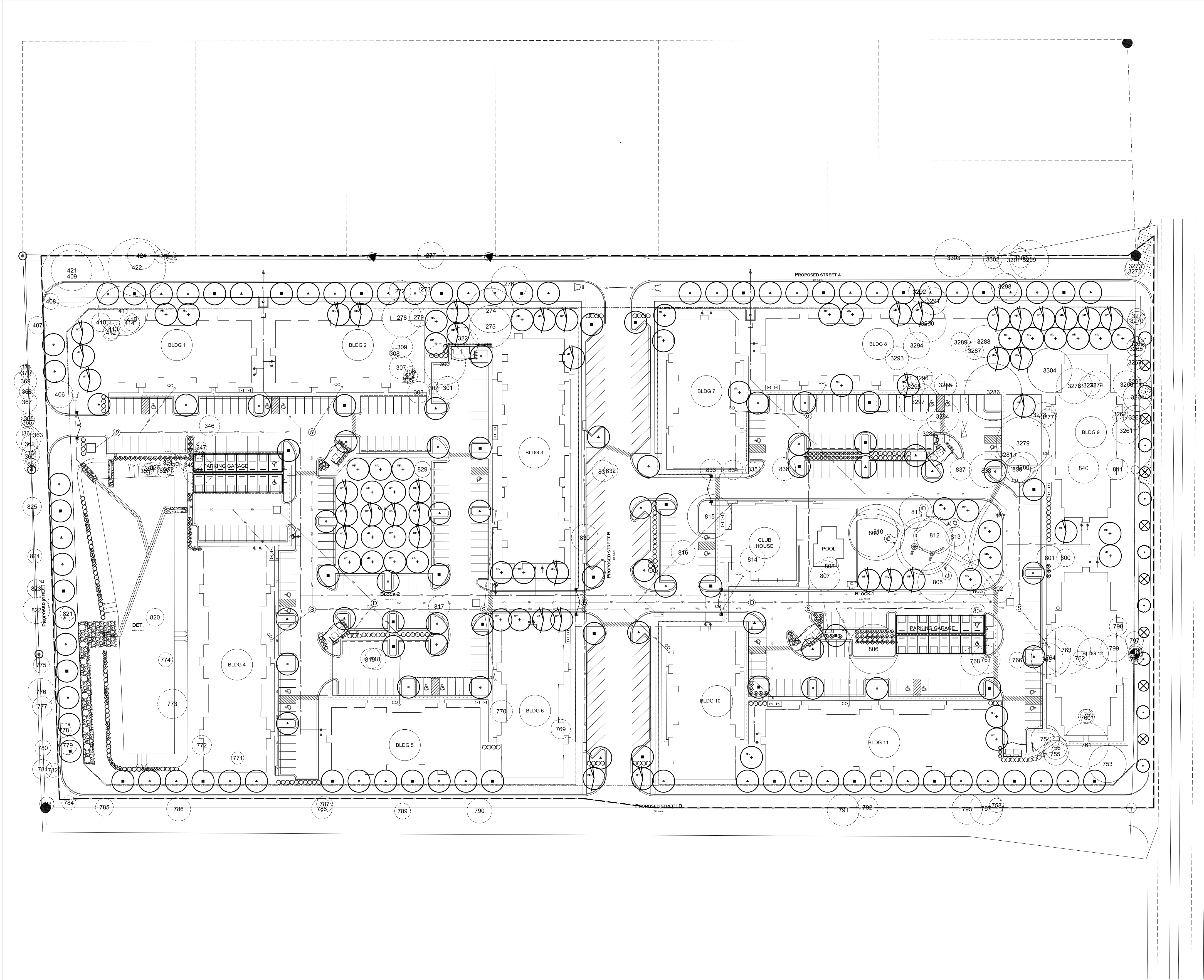
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	NO.	REVISION	DATE	BY	



DETAIL 520-6-SM		DUAL LATERAL CONNECTION	
The City of San Marcos Engineering and Capital Improvements		STANDARD NO. 520S-3-SM	
RECORD COPY SIGNED BY	2/15/2019	THE ARCHITECT/ENGINEER ASSUMES RESPONSIBILITY FOR APPROPRIATE USE OF THIS STANDARD.	2 OF 2
LAURE MOYER, P.E.	ADOPTED		





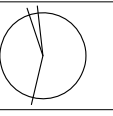
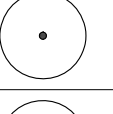
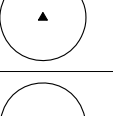
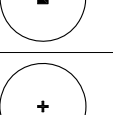
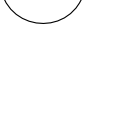
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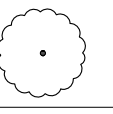
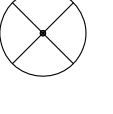


PLANT MATERIALS SCHEDULE

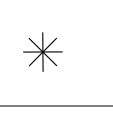
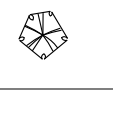
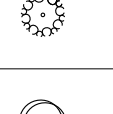
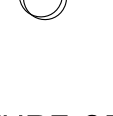
SHADE TREES

SYMBOL	QTY	COMMON / Scientific	SIZE	NOTES
 QUM 39		CHINQUAPIN OAK <i>Quercus muhlenbergii</i>	4" cal. min. @ 6" from root collar, 45-gal min., and 20'-0" tall at install	B&B or container grown; single straight leader; Min. 5' Clear trunk; full symmetrical canopy
 ACG 46		BIGTOOTH MAPLE <i>Acer grandidentatum</i>	2.5" cal. min. @ 6" from root collar, 45-gal min., and 16'-0" tall at install	B&B or container grown; single straight leader; Min. 5' Clear trunk; full symmetrical canopy
 OUT 42		TEXAS RED OAK <i>Quercus texana</i>	2.5" cal. min. @ 6" from root collar, 45-gal min., and 16'-0" tall at install	B&B or container grown; single straight leader; Min. 5' Clear trunk; full symmetrical canopy
 ULC 47		CEDAR ELM <i>Ulmus crassifolia</i>	2.5" cal. min. @ 6" from root collar, 45-gal min., and 16'-0" tall at install	B&B or container grown; single straight leader; Min. 5' Clear trunk; full symmetrical canopy
 PLM 42		MEXICAN SYCAMORE <i>Platanus mexicana</i>	4" cal. min. @ 6" from root collar, 45-gal min., and 20'-0" tall at install	B&B or container grown; single straight leader; Min. 5' Clear trunk; full symmetrical canopy

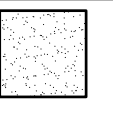
ORNAMENTAL TREES

SYMBOL	QTY	COMMON / Scientific	SIZE	NOTES
 CEC 9		TEXAS REDBUD <i>Cercis canadensis</i> var. <i>texensis</i>	2" cal. min. @ root collar, 20-gal. min., and 6'-0" tall min. at install	B&B or container grown; single-trunk
 LAI 8		GRAPE MYRTLE <i>Lagerstroemia indica</i>	20-gal. min., 6'-0" tall min. at install	B&B or container grown; multi-trunk

SHRUBS

SYMBOL	QTY	COMMON / Scientific	SIZE	NOTES
 ASE 68		CAST IRON PLANT <i>Aspidistra elatior</i>	1-gal. min. @ 3'-0" o.c.	
 ABG 103		GLOSSY ABELIA <i>Abelia x grandiflora</i>	1-gal. min. @ 5'-0" o.c.	
 COS 52		COTONEASTER <i>Cotoneaster</i> spp.	1-gal. min. @ 4'-0" o.c.	
 ILV 159		DWARF YAUPOON HOLLY <i>Ilex vomitoria</i> 'Nana'	1-gal. min. @ 4'-0" o.c.	

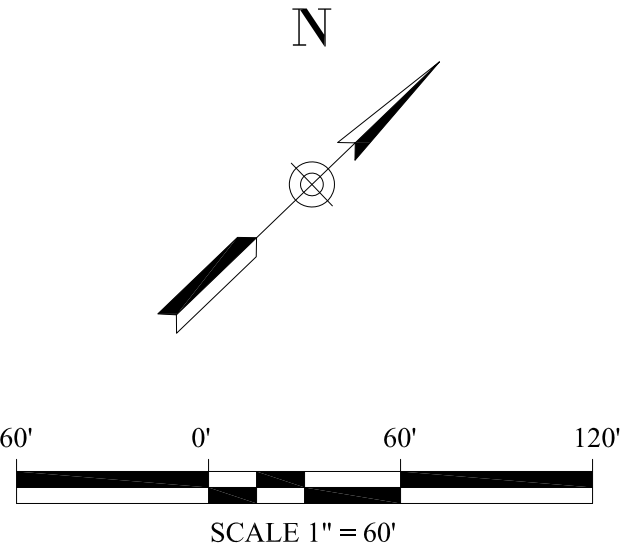
TURF GRASSES

SYMBOL	QTY	COMMON / Scientific	SIZE	NOTES
 BER 127,983 sf		BERMUDA <i>Cynodon dactylon</i>		seeded

LANDSCAPE CALCULATIONS

TOTAL SITE (excluding ROW dedication): 14.6 ac / 637,830 sf
INTERIOR LANDSCAPE REQ.: 127,566 sf turf, 127 trees, 382 shrubs
INTERIOR LANDSCAPE PROP.: 127,983 sf turf, 152 trees, 382 shrubs
TOTAL TREES REMOVED: 1,262.5"
EXISTING TREES TO REMAIN: 412"
MITIGATION REQUIRED: 850.5"
MITIGATION PROVIDED: 324"
FEE-IN-LIEU: 526.5" x \$158 = \$83,187

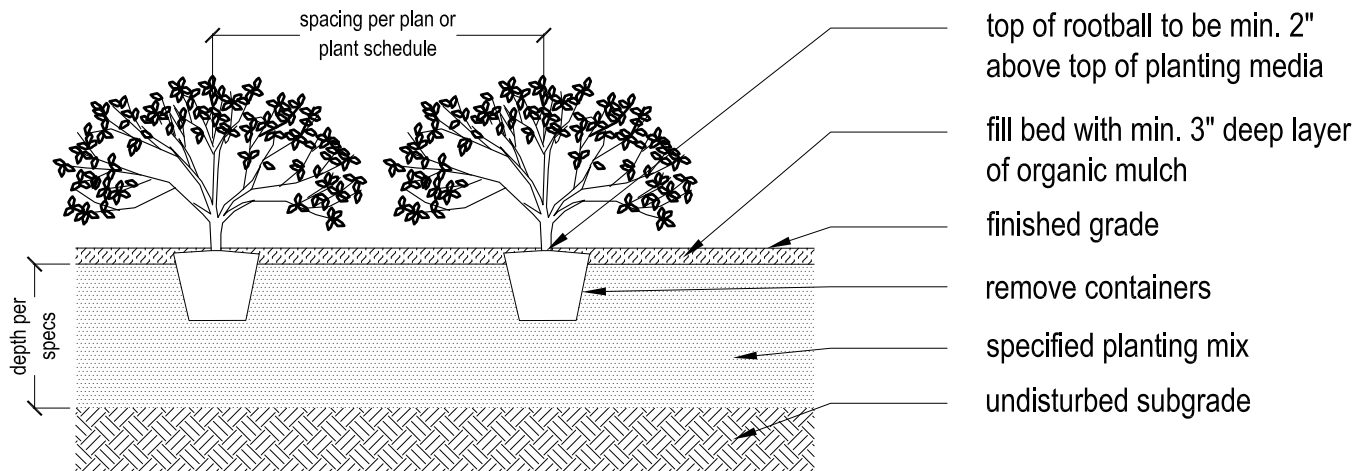
NOTE: MIT signifies a mitigation tree



1 TREE PLANTING DETAIL

SECTION

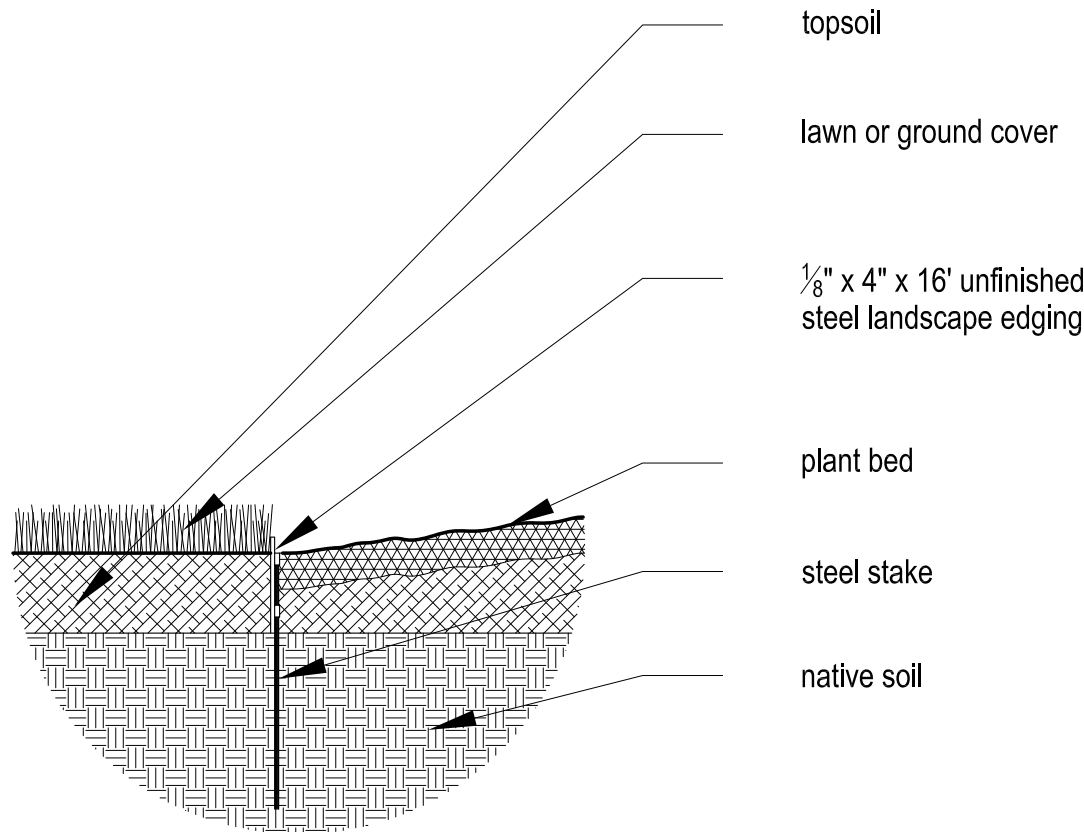
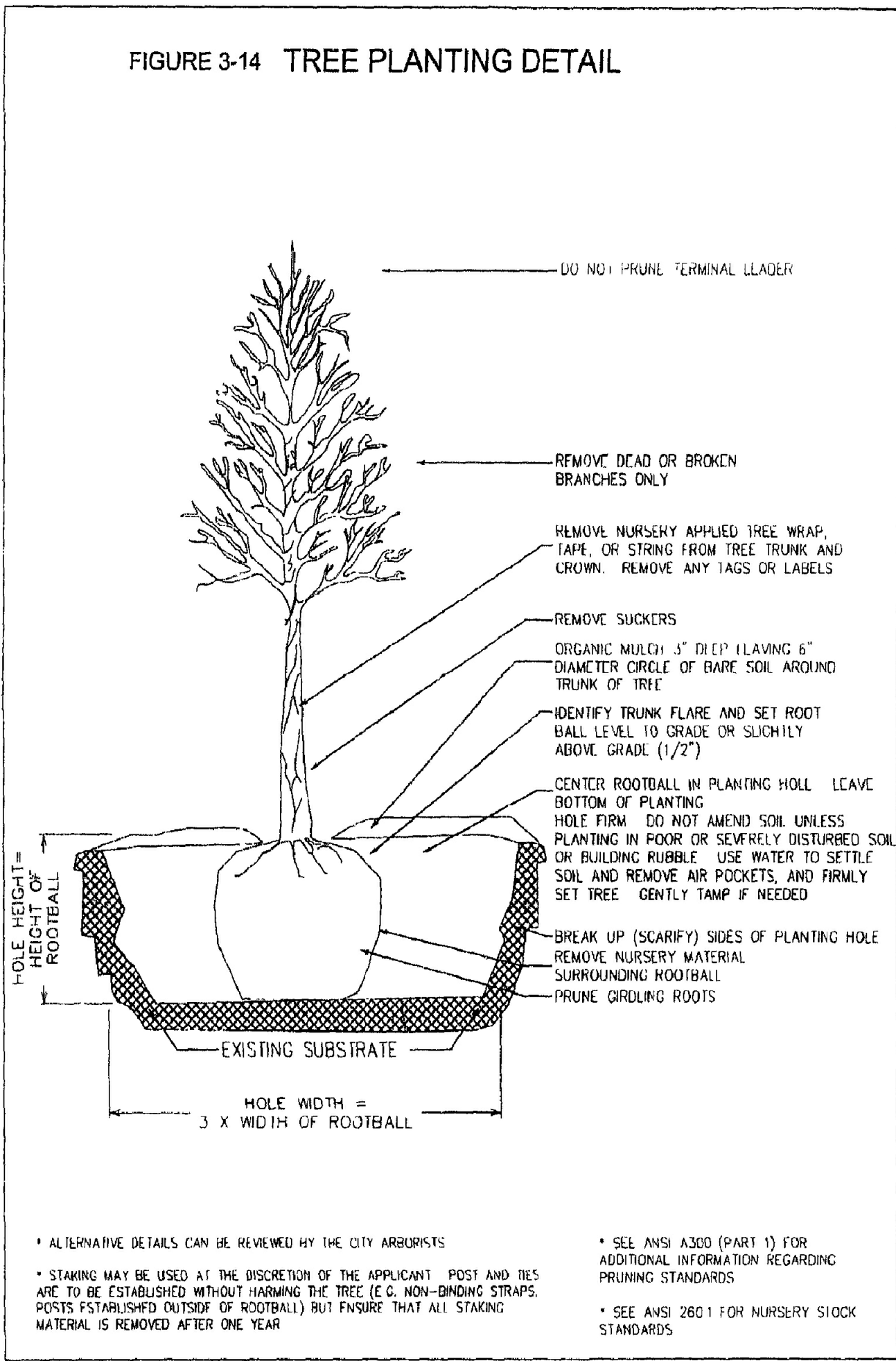
SCALE: 1/2" = 1'



2 SHRUB PLANTING DETAIL

SECTION

SCALE: 1/2" = 1'



3 PLANT BED EDGING DETAIL

SECTION

SCALE: 1" = 1'

LANDSCAPE NOTES:

- All plant material shall conform to the sizes given in the plant list and shall be nursery grown in accordance with the "American Standard for Nursery Stock, 2004."
- All planting shall be in accordance with standard American Nursery & Landscape Association (ANLA) procedures and specifications.
- Contractor shall verify the correct location of all underground utilities in the field prior to installation of any plant materials.
- Plant Materials location to be staked in the field and approved by the Landscape Architect prior to planting.
- All plant beds to be mulched to a depth of 3 inch unless otherwise noted on drawings or specifications.
- All areas disturbed by planting operations shall be fine graded and seeded.
- Obtain approval from Landscape Architect or Owner's Representative before making any substitutions or changes.
- Should no steel edging be specified then plant bed shall be contained with a spaded edge.
- Should steel edging be specified, then plant bed shall be contained with a steel edging per plans and in accordance with details.
- Quantities shown on the plant list are for the Contractor's convenience only and are not guaranteed to be accurate. In the event of a discrepancy between quantities shown on the plan and quantities shown on the plant list, the quantities on the plan shall apply.
- All landscaped areas are to be protected by 6-inch wheel curbs, wheelstops or other approved barriers as per ECM 2.4.7.
- Screening for solid waste collection and loading areas shall be the same as, or of equal quality to, principal building materials.

IRRIGATION NOTES:

Automatic irrigation systems shall comply with TCEQ Chapter 344, as well as the following requirements:

- These requirements shall be noted on the Site Development Permit and shall be implemented as part of the landscape inspection:
 - the system must provide a moisture level adequate to sustain growth of the plant materials;
 - the system does not include spray irrigation on areas less than ten (10) feet wide (such as medians, buffer strips, and parking lot islands);
 - circuit remote control valves have adjustable flow controls;
 - serviceable in-head check valves area adjacent to paved areas where elevation differences may cause low head drainage;
 - a master valve installed on the discharge side of the backflow preventer;
 - above-ground irrigation emission devices are set back at least six (6) inches from impervious surfaces;
 - an automatic rain shut-off device shuts off the irrigation system automatically after more than a one-half inch (1/2") rainfall; and
 - newly planted trees shall have permanent irrigation consisting of drip or bubblers.
- The irrigation installer shall develop and provide an as-built design plan to the City at the time the final irrigation inspection is performed;
 - unless fiscal security is provided to the City for the installation of the system, it must be operational at the time of the final landscape inspection.
- The irrigation installer shall also provide exhibits to be permanently installed inside or attached to the irrigation controller, including:
 - a laminated copy of the water budget containing zone numbers, precipitation rate, gallons per minute and the location of the isolation valve; and an as built plan.
- The irrigation installer shall provide a report to the City on a form provided by Austin Water certifying compliance with Subsection 1. When the final plumbing inspection is performed by the City.

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SHEET 29 OF 29 SHEETS

SP-2018-XXXX.SH

RIVERSTONE APARTMENTS
1420 WONDER WORLD DRIVE
SAN MARCOS, TEXAS

LANDSCAPE DETAILS AND NOTES



PLANNING & LANDSCAPE ARCHITECTURE
2107 CITYWEST BLVD, 4TH FLOOR HOUSTON, TEXAS 77042
713.783.7788
1016 LA POSADA DR., SUITE 288 AUSTIN, TEXAS 78752
512.646.3456

DESIGNED:	DESIGN CHECKED:	DRAWN:	COGO CHECKED:	SURVEY CHECKED:	QA/QC:	DATE: 07/21/19	NO.	REVISION	DATE	BY