HISTORIC AND DESIGN REVIEW COMMISSION

March 06, 2015 Agenda Item No: 1

HDRC CASE NO: COMMON NAME: LEGAL DESCRIPTION:

ZONING: CITY COUNCIL DIST.: APPLICANT: OWNER: TYPE OF WORK:

2015-082

18402 Corporate Woods Drive / Gold Canyon Park
NCB 34952 BLK LOT P-8A 16.672 & NCB 34954 BLK LOT P-4H 32.728 "REDLAND WOODS" ANNEXATION 2008
RESURVEY PER DEED 13239/1127
R6 ERZD
9
Chuck Shine
City of San Antonio, City of San Antonio
Park Development

REQUEST:

The applicant is requesting a Certificate of Appropriateness for approval to:

- 1. Construct a new concrete driveway and asphalt parking lot (12 spaces). The proposed parking lot will be located near the southwest entrance of the park.
- 2. Install new wayfinding and trailhead signs.
- 3. Install new seating. The seating will consist of inconspicuous, natural-looking stone blocks. The proposed design of the seating is meant to blend in with the landscape.
- 4. Create approximately 6,000 linear square feet of eight-foot wide concrete trails.
- 5. Install park amenities including bike racks, exercise equipment, and drinking fountains.
- 6. Construct a portable toilet enclosure.
- 7. Install a new fence. The fence will border Redland Woods HOA Park and Gold Canyon Dr.

APPLICABLE CITATIONS:

UDC Section 35-642 – New Construction of Buildings and Facilities:

a. Site and Setting

- 1. Building sites should be planned to take into consideration existing natural climatic and topographical features. The intrusive leveling of the site should be avoided. Climatic factors such as sun, wind, and temperature should become an integral part of the design to encourage design of site-specific facilities which reinforces the individual identity of a neighborhood and promotes energy efficient facilities.
- 2. Accessibility from streets should be designed to accommodate safe pedestrian movement as well as vehicular traffic. Where possible, parking areas should be screened from view from the public right-of-way by attractive fences, berms, plantings or other means.
- 3. Historically significant aspects of the site shall be identified and if possible incorporated into the site design. Historic relationships between buildings, such as plazas or open spaces, boulevards or axial relationships should be maintained.
- b. Building Design
 - 1. Buildings for the public should maintain the highest quality standards of design integrity. They should elicit a pride of ownership for all citizens. Public buildings should reflect the unique and diverse character of San Antonio and should be responsive to the time and place in which they were constructed.
 - Buildings shall be in scale with their adjoining surroundings and shall be in harmonious conformance to the identifying quality and characteristics of the neighborhood. They shall be compatible in design, style and materials. Reproductions of styles and designs from a different time period are not encouraged, consistent with the secretary of the interior's standards. Major horizontal and vertical elements in adjoining sites should be respected.
 - 3. Materials shall be suitable to the type of building and design in which they are used. They shall be durable and easily maintained. Materials and designs at pedestrian level shall be at human scale, that is they shall be designed to be understood and appreciated by someone on foot. Materials should be selected that respect the historic character of the surrounding area in texture, size and color.

- 5. Colors shall be harmonious with the surrounding environment, but should not be dull. Choice of color should reflect the local and regional character. Nearby historic colors shall be respected.
- 8. Auxiliary design. The site should take into account the compatibility of landscaping, parking facilities, utility and service areas, walkways and appurtenances. These should be designed with the overall environment in mind and should be in visual keeping with related buildings, structures and places.

FINDINGS:

- a. The design and layout of the proposed park development considers the existing natural climatic and topographical features of the site. This is consistent with the UDC Section 35-642.a.1. and b.8.
- b. The proposed park development and amenities are appropriate to help make the park accessible and inviting to users. This is consistent with the UDC Section 35-642.b.1 in terms of creating high design quality standards for public facilities.
- c. The proposed new parking area is consistent with the UDC Section 35-642.a.2-3.
- d. The design, materials and color of the proposed signs, seating and fence are consistent with the UDC Section 25-642.b.3. and 5.
- e. The size and scale of the proposed signs and fence is consistent with UDC height regulations.
- f. The proposed trail is appropriate for its location and will improve accessibility to the park. This is consistent with the UDC Section 35-642.a.3.
- g. The Project has been reviewed by the City Archeologist.

RECOMMENDATION:

Staff recommends approval of all items based on findings a through g.

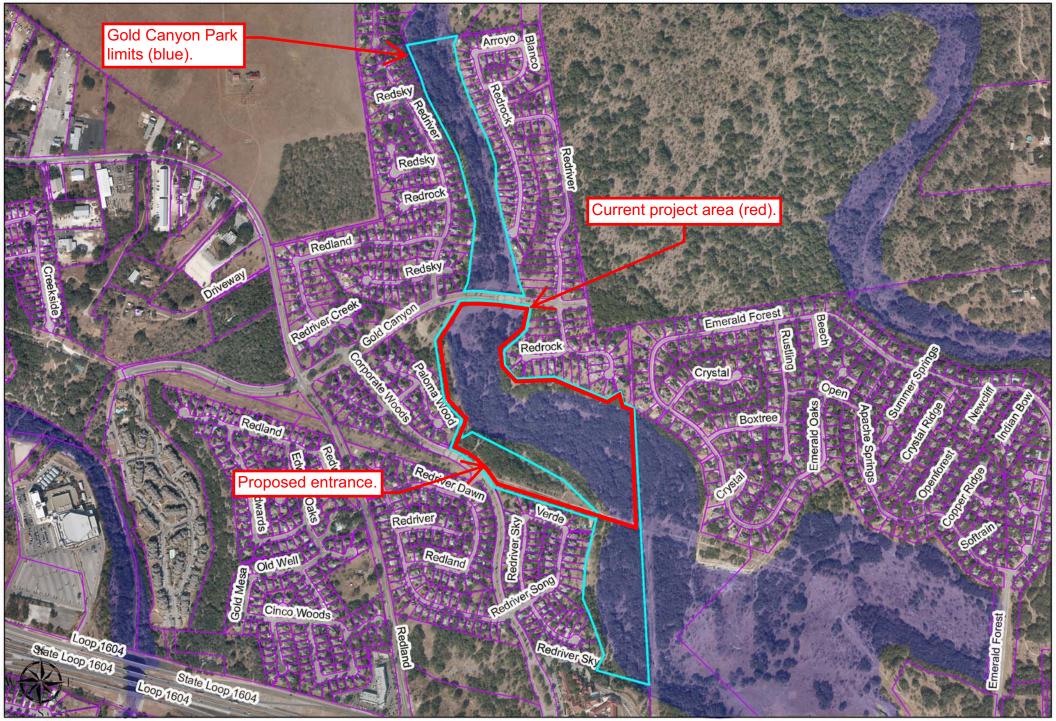
CASE MANAGER:

Alyson Smith





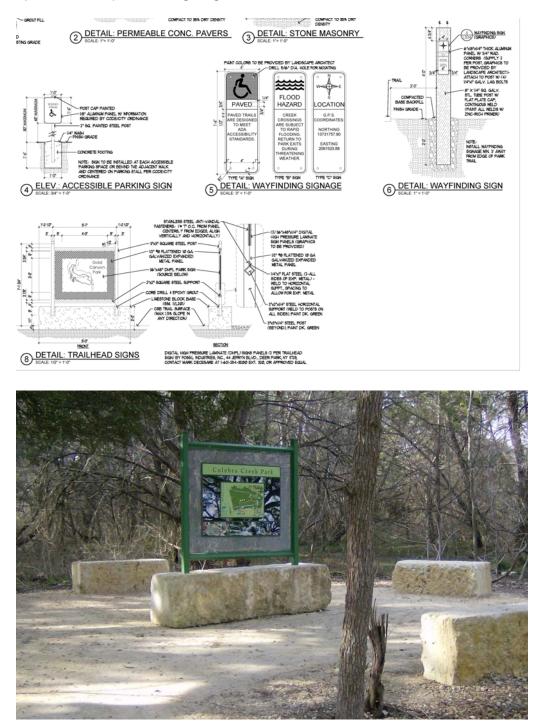
The City of San Antonio does not guarantee the accuracy, adequacy, completeness or usefulness of any information. The City does not warrant the completeness, timeliness, or positional, thematic, and attribute accuracy of the GIS data. The GIS data, cartographic products, and associated applications are not legal representations of the depicted data. Information shown on these maps is derived from public records that are constantly undergoing revision. Under no circumstances should GIS-derived products be used for final design purposes. The City provides this information on an "as is" basis without warranty of any kind, express or implied, including but not limited to warranties of merchantability or fitness for a particular purpose, and assumes no responsibility for anyone's use of the information.



Gold Canyon Park Sample of Proposed Seating



Gold Canyon Park Samples of Proposed Signage





Gold Canyon Park Sample of Proposed Trail





GOLD CANYON PARK SITE DEVELOPMENT NARRATIVE November 11, 2014

Gold Canyon Park will become a new city park in the Redland Road area of San Antonio North. Situated in classic Texas Hill Country terrain the property includes both hilltop elevations and wooded bottomland. The lower portions of the property rest on an alluvial floodplain of West Elm Creek, enjoys some 6000 feet of creek frontage and is bisected by Gold Canyon Road. Vegetation is comprised of mature hardwoods and juniper thickets along the creek channel giving way to dense oak and juniper stands on the terraced areas above. Environmental assessment has found no sensitive areas on the property.

This is a phased development with current emphasis on the portion lying between Gold Canyon Road to the north and an overhead utility easement to the south. The property is bordered on the east, south and west by residential neighborhoods and HOA-controlled open space. Access to the park will be a park entrance at the intersection of Corporate Woods Drive and Palo Crest Street. Work at this location will include a new concrete driveway and asphalt parking (12 spaces) along with signage, seating, trailhead, bike racks, portable toilet enclosure, and approximately 6000 lineal feet of eight-foot wide concrete trial. Additional features including exercise equipment and a drinking fountain will be included in the bid advertisement as add alternate items. The trail system will descend some 55 feet from the park entrance to creek bottom, winding through wooded hillsides and crossing West Elm Creek at two locations. The entire trail system is designed within TAS guidelines. The park entrance, parking and trailhead are situated on high ground, above the 100 yr. flood line, and afford numerous vantage points of the valley below. Minimal clearing will be necessary for trail construction as the chosen route largely aligns with impromptu user trails already in place. Additional selective (and supervised) clearing will augment views along the trail and also provide needed sunlight exposure for water pollution abatement-required re-vegetation.

The proposed park is upstream from McAllister Park and inclusion in a potential creek-side trail way system in the future is possible.

Gold Canyon Park Site Photos

West Creek Character



Existing Usage Patterns



Proposed Park Entrance and Trailhead Sites



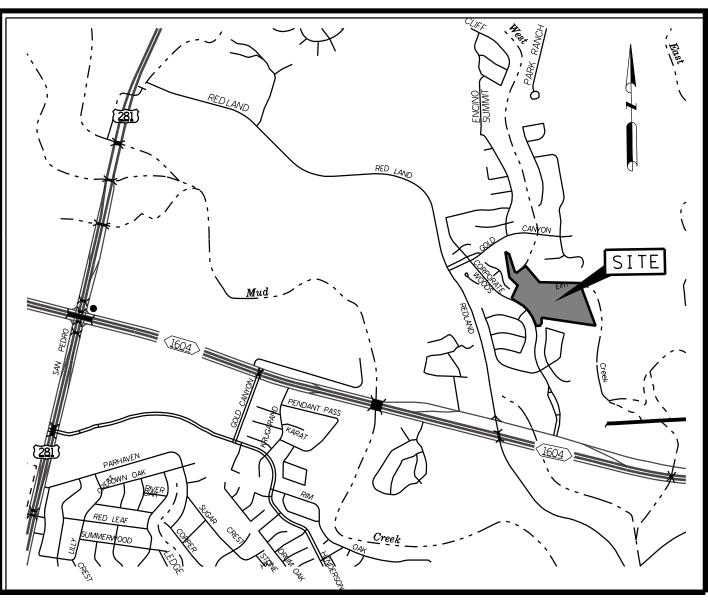


Woodland Character









LOCATION MAP

DATE OF ISSUE: 11.07.2014

PROJECT NUMBER

422 - 0300

FUNDING 2012 CITY BOND PROGRAM

CITY COUNCIL

MAYOR

IVY R. TAYLOR

COUNCIL

DIEGO BERNAL	DISTRICT 1
IVY R. TAYLOR	DISTRICT 2
REBECCA J. VIAGRAN	DISTRICT 3
REY SALDANA	DISTRICT 4
SHIRLEY GONZALES	DISTRICT 5
RAY LOPEZ	DISTRICT 6
	DISTRICT 7
RON NIRENBERG	DISTRICT 8
	DISTRICT 9
MIKE GALLAGHER	DISTRICT 10



OUR MISSION: TOGETHER, DEDICATED TO OUR COMMUNITY...BUILDING A GREAT SAN ANTONIO **TRANSPORTATION AND CAPITAL IMPROVEMENTS**

MUNICIPAL PLAZA BUILDING

114 W. COMMERCE SAN ANTONIO, TX 78238 PH # 210-207-8140 FAX # 210-207-2197

TCI

CITY OF SAN ANTONIO

GOLD CANYON PARK **18402 CORPORATE WOODS DRIVE** SAN ANTONIO, TEXAS

CITY MANAGER

SHERYL SCULLEY

PARKS & RECREATION DIRECTOR

XAVIER URRUTIA

TCI DIRECTOR

MIKE FRISBIE

PROJECT MANAGER

JAMAAL MORENO LANDSCAPE ARCHITECT PH. # 210-207-6924 FAX # 210-207-2197

CONSULTANT

IDC, INC. PLANNERS, ENGINEERS, PROGRAM MANAGERS PH. # 210-448-1800 FAX # 210-448-1829

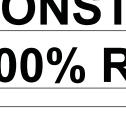








CITY OF SAN ANTONIO TRANSPORTATION & CAPITAL IMPROVEMENTS



SHEET INDEX

G101	OVERAL
G102	GENERA
G103	SUPPLE
G104	OVERAL
TP100	TREE ST
TP101	TREE PR
TP102	TREE PR
TP103	TREE PR
C100	PARKING
C101	CIVIL DET
C102	CIVIL DET
C103	CIVIL DET
C200	STORMW
C201	DETAILED
C202	STORMW
C203	PAVEMEN
C300	CIVIL UTI
C301	CIVIL UTI
C400	TRAFFIC
C401	TRAFFIC
C500	FEMA DR
L100	LANDSCA
L101-L1	09 LAND
L200	LANDSCA
L201	LANDSCA
L202	LANDSCA
L203	LANDSCA
L204	LANDSCA
L205	LANDSCA
L300	LANDSCA
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SAN ANTONIO



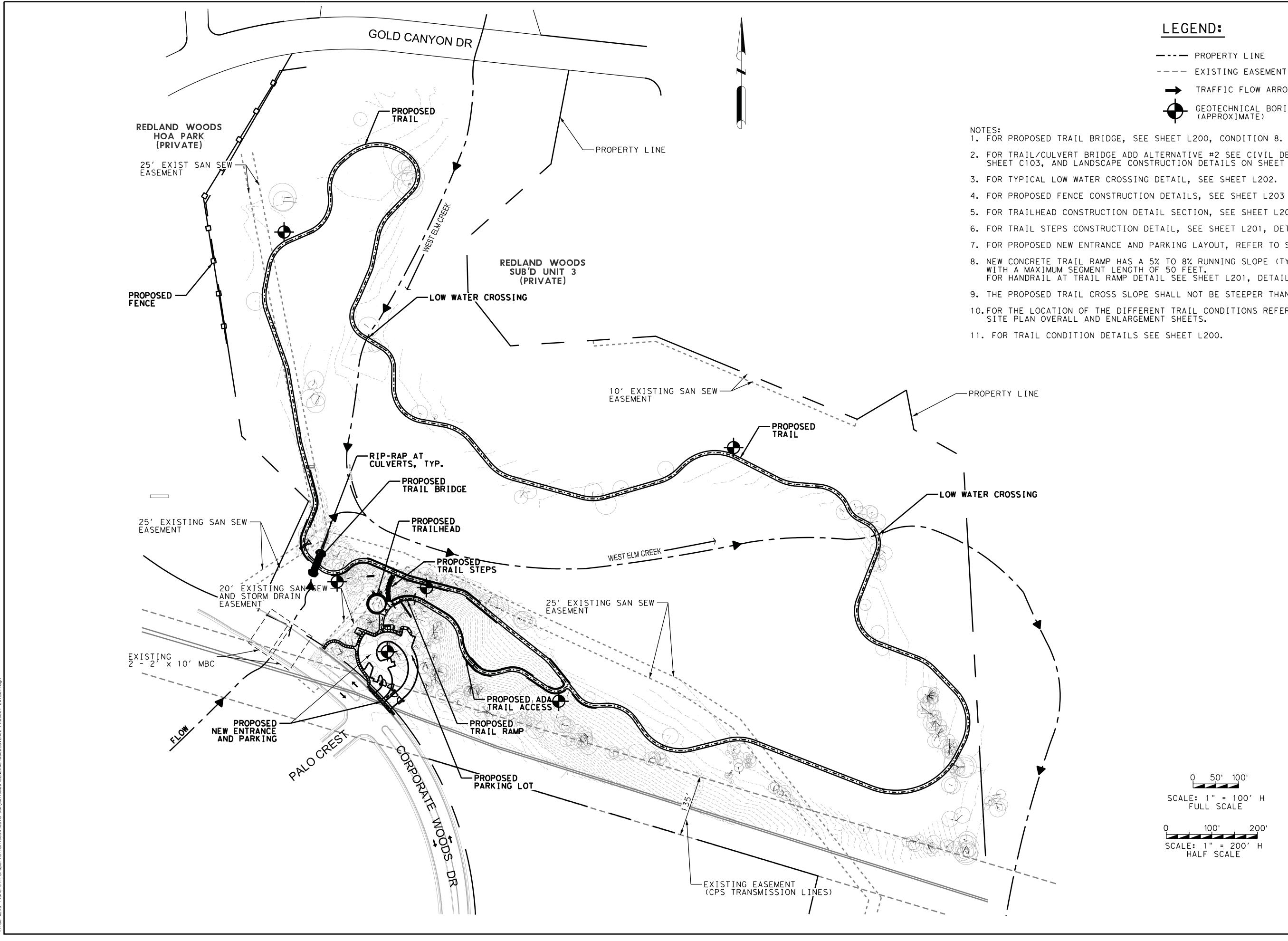
CONSTRUCTION DOCUMENT 100% REVIEW SET

OVERALL PROJECT LAYOUT AL NOTES EMENTAL GENERAL NOTES LL PROJECT SUMMARY TAND DELINEATION ROTECTION PLAN OVERALL ROTECTION PLAN ENLARGEMENT ROTECTION DETAILS IG LAYOUT ETAILS ETAILS ETAILS WATER POLLUTION PREVENTION PLAN ED STORMWATER POLLUTION PREVENTION PLAN WATER POLLUTION PREVENTION PLAN NARRATIVE ENT MARKINGS AND SIGNING FOR ACCESSIBLE PARKING PM(AP) - 98 ILITY/DEMO PLAN FILITY DETAILS CONTROL PLAN ; PLAN RAINAGE AREA EXHIBIT CAPE SITE PLAN OVERALL DSCAPE SITE PLANS ENLARGEMENT CAPE TRAIL CONDITIONS CAPE CONSTRUCTION DETAILS CAPE CODE COMPLIANCE PLAN

RALL WATER POLLUTION ABATEMENT PLAN

ANDSCAPE ARCHITECTS:	RIALTO STUDIO, INC LANDSCAPE ARCHITECTS 2425 BROADWAY SA, TX 78215 PH # 210-828-1155
	FAX# 210-828-1399
IVIL ENGINER:	VICKERY AND ASSOCIATES, INC. CONSULTING ENGINEERS 12940 COUNTRY PKWY SA, TX 78216 PH# 210-349-3271
•	nsibility of the City to provide sets of drawings and/or

City may provide extra or returned sets that are available, if any from the bidding process. All other sets as deemed required by the Contractor, for the purposes of construction of this project, shall be obtained and paid by the Contractor."



LEGEND:

---- PROPERTY LINE ---- EXISTING EASEMENT TRAFFIC FLOW ARROW GEOTECHNICAL BORING (APPROXIMATE)

2. FOR TRAIL/CULVERT BRIDGE ADD ALTERNATIVE #2 SEE CIVIL DETAILS SHEET C103, AND LANDSCAPE CONSTRUCTION DETAILS ON SHEET L205. 3. FOR TYPICAL LOW WATER CROSSING DETAIL, SEE SHEET L202. 4. FOR PROPOSED FENCE CONSTRUCTION DETAILS, SEE SHEET L203 DETAIL 6. 5. FOR TRAILHEAD CONSTRUCTION DETAIL SECTION, SEE SHEET L204, DETAIL 1. 6. FOR TRAIL STEPS CONSTRUCTION DETAIL, SEE SHEET L201, DETAIL 3. 7. FOR PROPOSED NEW ENTRANCE AND PARKING LAYOUT, REFER TO SHEET C100. 8. NEW CONCRETE TRAIL RAMP HAS A 5% TO 8% RUNNING SLOPE (TYPICAL), WITH A MAXIMUM SEGMENT LENGTH OF 50 FEET. FOR HANDRAIL AT TRAIL RAMP DETAIL SEE SHEET L201, DETAIL 9. 9. THE PROPOSED TRAIL CROSS SLOPE SHALL NOT BE STEEPER THAN 1:48 OR 2%. 10.FOR THE LOCATION OF THE DIFFERENT TRAIL CONDITIONS REFER TO LANDSCAPE SITE PLAN OVERALL AND ENLARGEMENT SHEETS. 11. FOR TRAIL CONDITION DETAILS SEE SHEET L200.

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	GENERAL NOTES
1.	ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICA FOR CONSTRUCTION JUNE 2008, OR LATEST.
2.	NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NO INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL I INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
3.	THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTA SERVICE.
4.	THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER (ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHR BUSHES OR DRIVEWAYS. (NO SEPARATE PAY ITEM).
5.	IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE THAT ALL SIGNS AND BARRICADES ARE PROPERLY INSTALLED AND MAINTAINED. ALL LOCATIONS AND DISTANCES WILL BE DECIDED UPON IN THE FIELD BY THE CONTRACTOR, USING THE "TEXAS MANUAL ON UNIFORM TRAF CONTROL DEVICES". THE CITY'S CONSTRUCTION INSPECTOR AND TRAFFIC ENGINEERING REPRESENTATIVE WILL ONLY BE RESPONSIBLE TO INSPECT BARRICADES AND SIGNS. IF, IN THE OPINION OF THE TRAFFIC ENGINEERING REPRESENTATIVE AND THE CONSTRUCTION INSPECTOR, THE BARRICADES AND SIGNS DO NOT CONFORM TO ESTABLISHED STANDARDS ARE INCORRECTLY PLACED OR ARE INSUFFICIENT IN QUANTITY TO PROTECT THE GENERAL PUBLIC, THE CONSTRUCTION INSPECTOR SHALL HAVE THE OPTION TO STOP OPERATIONS UNTIL SUCH TIME AS THE CONDITIONS ARE CORRECTED.
6.	IF THE NEED ARISES, ADDITIONAL BARRICADES AND DIRECTIONAL DEVICES MAY BE ORDERE BY THE TRAFFIC ENGINEERING REPRESENTATIVE AT THE CONTRACTOR'S EXPENSE.
7.	DUE TO FEDERAL REGULATIONS TITLE 49, PART 192.171 C.P.S. MUST MAINTAIN ACCESS TO GAS VALVES AT ALL TIMES. THE CONTRACTOR MUST PROTECT AND WORK AROUND ANY GAS VALVES THAT ARE IN THE PROJECT AREA.
8.	CONTRACTOR SHALL NOTIFY THE CITY INSPECTOR TWENTY FOUR (24) HOURS PRIOR TO BAG ANY UTILITY TRENCHES TO SCHEDULE FOR DENSITY TEST AS REQUIRED.
9.	CONTRACTOR SHALL PRESERVE ALL CONSTRUCTION STAKES, MARKS, ETC. IF ANY ARE DESTROYED OR REMOVED BY THE CONTRACTOR OR HIS EMPLOYEES, THEY SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
10.	CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO DETERM THE LOCATION OF EXISTING UTILITIES. CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST FORTY-EIGHT (48) HOURS PRIOR TO EXCAVATION OPERATION: SAN ANTONIO WATER SYSTEM (SAWS) 233-2010 BEXAR METROPOLITAN WATER DISTRICT (BEXAR MET) 354-6538 / 357-5741 COSA DRAINAGE 207-8048 COSA SIGNAL OPERATIONS 207-7720 / 207-7765 TEXAS STATE WIDE ONE CALL LOCATOR 1-800-344-8377 - CITY PUBLIC SERVICE ENERGY - TIME WARNER - AT&T - MCI
11.	THE EXISTENCE AND LOCATION OF UNDERGROUND UTILITIES INDICATED ON THE PLANS AF TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATE AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION THE EXISTING UTILITIES EVEN IF THEY ARE NOT SHOWN ON THE PLANS. LOCATION AND DEPTH OF EXISTING UTILITIES SHOWN HERE ARE APPROXIMATE ONLY. ACTUAL LOCATIONS AND DEPTHS MUST BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION AND HE SHALL BE RESPONSIBLE FOR PROTECTION OF SAME DURING CONSTRUCTION.
12.	ALL WASTE MATERIAL SHALL BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE HIS REPONSIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WAS RIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF ARTIFICIAL OR NATURAL DRAINAGE.
13.	THE CONTRACTOR SHALL NOT PLACE ANY WASTE MATERIAL IN THE 100-YEAR FLOOD PLAIN WITHOUT FIRST OBTAINING AN APPROVED FLOOD PLAIN DEVELOPMENT PERMIT.
14.	THE CONTRACTOR SHALL MAINTAIN ALL ADJOINING STREETS AND TRAVELED ROUTES FREE SPILLED AND /OR TRACKED CONSTRUCTION MATERIALS AND /OR DEBRIS.
15.	IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTIO OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 207–7306 OR 207–3327 AN ARCHAEOLOGICAL INVESTIGATION. THE CONTRACTOR CANNOT BEGIN EXCAVATION AGAIN WITHOUT WRITTEN PERMISSION FROM THE CITY. IF MORE THAN THREE (3) DAYS ARE REQUIRED FOR INVESTIGATION (NOT INCLUDING H AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN T
	CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPC WRITTEN REQUEST WITHIN TEN (10) DAYS AFTER THE FIRST NOTICE TO THE CITY OF ARCHAEOLOGICAL INVESTIGATION FOR EACH EVENT. IF THE TIME REQUIRED FOR INVESTIGATION IS LESS THAN OR EQUAL TO THREE (3) D EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
16	IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS C.(

16. IF SUSPECTED CONTAMINATION IS ENCOUNTERED DURING CONSTRUCTION OPERATIONS, C.O.S.A. SHALL BE NOTIFIED IMMEDIATELY WHEN CONTAMINATED SOILS AND / OR GROUNDWATER ARE ENCOUNTERED AT LOCATIONS NOT IDENTIFIED IN THE PLANS. THE NOTIFICATION SHOULD INCLUDE THE STATION NUMBER, TYPE OF CONTAMINATED MEDIA, EVIDENCE OF CONTAMINATION AND MEASURES TAKEN TO CONTAIN THE CONTAMINATED MEDIA AND PREVENT PUBLIC ACCESS. THE CONTAMINATED SOIL AND / OR GROUNDWATER SHALL NOT BE REMOVED FROM THE LOCATION WITHOUT PRIOR C.O.S.A. APPROVAL

THE CONTRACTOR MUST STOP THE EXCAVATION IMMEDIATELY AND CONTACT THE C.O.S.A. INSPECTOR. THE CONTRACTOR CANNOT BEGIN EXCAVATION ACTIVITIES WITHOUT WRITTEN PERMISSION FROM THE CITY.

17. CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB. BLOCKOUTS ARE PROVIDED FOR FUTURE USE BY THE POST OFFICE.

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18. CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT. PLEASE PROVIDE THIRTY DAYS PRIOR NOTICE FOR SHELTER REMOVAL (TELEPHONE NOS: (210) 362-2155 OR (210) 362-2096). THE CONTRACT-OR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA. THE CON-TRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.

TREE PROTECTION AND PRESERVATION GENERAL NOTES

- 1. NO UTILITY OR STREET EXCAVATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.
- 2. TREE PROTECTION FENCING SHALL BE REQUIRED. TREE PROTECTION FENCING SHALL BE INSTALLED, MAINTAINED AND REPAIRED BY THE CONTRACTOR DURING SITE CONSTRUCTION. DURING CONSTRUCTION ACTIVITY, AT LEAST A SIX-INCH LAYER OF COARSE MULCH SHALL BE PLACED AND MAINTAINED OVER THE ROOT PROTECTION ZONE (NO SEPARATE PAY ITEM).
- 3. THE CONTRACTOR SHALL AVOID CUTTING ROOTS LARGER THAN ONE INCH IN DIAMETER WHEN EXCAVATING NEAR EXISTING TREES. EXCAVATION IN THE VICINITY OF TREES SHALL PROCEED WITH CAUTION. THE CONTRACTOR SHALL CONTACT THE CITY INSPECTOR FOR GUIDANCE.
- 4. ROOTS WILL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.
- 5. ALL CURB AND SIDEWALK WORK SHALL USE ALTERNATIVE CONSTRUCTION METHODS TO MINIMIZE EXTENSIVE ROOT DAMAGE TO TREES (REFER TO DETAILS)
- 6. EXPOSED ROOTS SHALL BE COVERED AT THE END OF THE DAY USING TECHNIQUES SUCH AS COVERING WITH SOIL, MULCH, OR WET BURLAP.
- 7. NO EQUIPMENT, VEHICLES OR MATERIALS SHALL OPERATE OR BE STORED WITHIN THE ROOT PROTECTION ZONE OF ANY TREE NEAR THE PROJECT. ROOT PROTECTION ZONE IS 1 FOOT OF RADIUS PER INCH OF TREE'S DIAMETER. A 10-INCH DIAMETER TREE WOULD HAVE A 10 FOOT RADIUS ROOT PROTECTION ZONE AROUND THE TREE. ROOTS OR BRANCHES IN CONFLICT WITH THE CONSTRUCTION SHALL BE CUT CLEANLY ACCORDING TO PROPER PRUNING METHODS. OAK WOUNDS SHALL BE PAINTED OVER WITHIN 30 MINUTES TO PREVENT OAK WILT.
- 8. SAPLINGS, SHRUBS OR BUSHES TO BE CLEARED FROM THE PROTECTED ROOT ZONE AREA OF A LARGE TREE SHALL BE REMOVED BY HAND AS DESIGNATED BY THE INSPECTOR.
- 9. NO WIRES, NAILS OR OTHER MATERIAL MAY BE ATTACHED TO PROTECTED TREES.
- 10. TREES, TREE LIMBS, BUSHES AND SHRUBS LOCATED IN THE CITY STREET OR ALLEY RIGHT-OF-WAY OR PERMANENT EASEMENTS WHICH INTERFERE WITH PROPOSED CONSTRUCTION ACTIVITIES SHALL BE PROPERLY PRUNED FOLLOWING THE ANSIA-300 STANDARDS FOR PRUNING. ALL TREE PRUNING SHALL BE COMPLETED BY A CITY OF SAN ANTONIO TREE MAINTENANCE LICENSED CONTRACTOR (ARTICLE 21-171, CITY CODE) ONLY AFTER APPROVAL FROM THE CAPITAL PROJECTS MANAGEMENT THROUGH THE INSPECTOR
- 11. NO EXCESSIVE TREE TRIMMING WILL BE PERMITTED.
- 12. ALL DEBRIS GENERATED BY THE PRUNING AND TRIMMING OF THE TREES AND /OR BUSHES SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY (NO SEPARATE PAY ITEM).
- 13. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE, BUT NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT.
- 14. ANY TREE REMOVAL SHALL BE APPROVED BY THE CITY ARBORIST. (207–0278)
- 15. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED TO THE CITY'S SATISFACTION.
- 16. TREE PLANTING FOR MITIGATION OR ENHANCEMENT: ALL PLANTED TREES SHALL BE MAINTAINED IN A HEALTHY CONDITION AT ALL TIMES. THIS INCLUDES IRRIGATION, FERTILIZING, PRUNING AND OTHER MAINTENANCE AS NEEDED ON THE PROJECT. TREES THAT DIE WITHIN TWELVE (12) MONTHS SHALL BE REPLACED WITH A TREE OF EQUAL SIZE AND SPECIES.

ACCESSIBILITY REQUIREMENTS

- 1. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN VEHICULAR AND PEDESTRIAN ACCESS AT ALL TIMES TO LOCAL RESIDENCES AND BUSINESSES.
- 2. WHEN THE WORK REQUIRES THE EXCAVATION OF THE STREET AND THE REMOVAL OF THE EXISTING DRIVEWAY APPROACHES AND SIDEWALKS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY ALL-WEATHER ACCESS TO THE BUSINESSES AND RESIDENCES. THE TEMPORARY DRIVEWAY APPROACHES SHALL BE CONSTRUCTED WITH FLEXIBLE BASE OR GRAVEL MATERIAL AT NO SEPARATE COST TO THE CITY.
- 3. PRIOR TO INITIATING THE CONSTRUCTION OF NEW DRIVEWAY APPROACHES, THE CONTRACTOR SHALL GIVE ADVANCE WARNING IN PERSON, OR IN WRITING, OF AT LEAST 48 HOURS TO EACH RESIDENCE THAT WILL BE IMMEDIATELY AFFECTED, SO THAT ALTERNATE PLANS MAY BE MADE BY THE RESIDENTS.
- 4. FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED. FOR BUSINESSES WITH ONLY ONE DRIVEWAY, THE NEW DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN HALF WIDTHS, UNLESS A TEMPORARY ASPHALT DRIVEWAY IS FIRST INSTALLED AT NO SEPARATE COST TO THE CITY.

DECEMBER 2009

CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CITY OF SAN ANTONIO GENERAL NOTES

% SUBMITTAL	PROJECT NO.:		G102
DRWN. BY:	DSGN. BY:	CHKD. BY:	0102

THE FOLLOWING CHANGES ARE MADE TO THE CITY OF SAN ANTONIO'S GENERAL NOTES:

DELETED NOTES

- 1. DELETE NOTE NO. 17 CONTRACTOR IS TO INCLUDE A MAILBOX POST BLOCKOUT FOR VACANT LOTS AND ALL RESIDENCES WHICH DO NOT HAVE MAILBOXES AT THE CURB. BLOCKOUTS ARE PROVIDED FOR FUTURE USE BY THE POST OFFICE.
- 2. DELETE NOTE NO. 18 CONTRACTOR SHALL NOT REMOVE OR ADJUST ANY VIA FACILITIES. THE CONTRACTOR MUST CONTACT VIA FOURTEEN DAYS PRIOR, FOR THE REMOVAL OF BENCHES, STOP POLES OR ANY OTHER VIA FACILITIES THAT MAY BE PRESENT. PLEASE PROVIDE THIRTY DAYS PRIOR NOTICE FOR SHELTER REMOVAL (TELEPHONE NOS: (210) 362-2155 OR (210) 362-2096). THE CONTRACT- OR WILL BE LIABLE FOR ANY DAMAGES TO VIA FACILITIES NOT REMOVED BY VIA. THE CONTRACTOR IS REQUIRED TO REPLACE ALL FLATWORK REMOVED OR DAMAGED IN THE COURSE OF EXECUTING THE CONTRACT UNLESS OTHERWISE NOTED BY VIA. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROTECTING VIA FACILITIES IF ADJACENT TO WORK AREA.
- 3. DELETE NOTE NO. 4 FOR BUSINESSES WITH MORE THAN ONE DRIVEWAY, AT LEAST ONE DRIVEWAY SHALL REMAIN OPEN WHILE THE OTHER NEW DRIVEWAY APPROACHES ARE CONSTRUCTED. FOR BUSINESSES WITH ONLY ONE DRIVEWAY, THE NEW DRIVEWAY APPROACH SHALL BE CONSTRUCTED IN HALF WIDTHS, UNLESS A TEMPORARY ASPHALT DRIVEWAY IS FIRST INSTALLED AT NO SEPARATE COST TO THE CITY.

ADDED NOTES

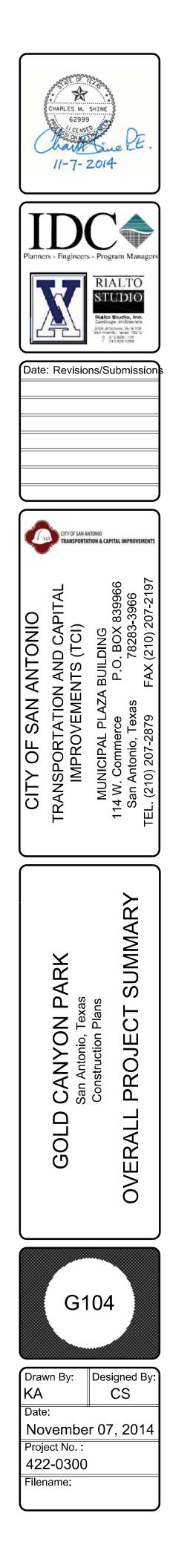
- 1. SIDEWALK DRAINS WILL NOT BE PAID FOR DIRECTLY BUT WILL BE INCLUDED IN THE PRICE FOR ITEM 502, SIDEWALKS.
- 2. PREPARING ROW WILL INCLUDE CLEARING OF VEGETATION REQUIRED FOR THE CONSTRUCTION OF THE TRAIL, SIDEWALKS, STAIRS, AND PARKING LOT AREAS.
- 3. FLEXIBLE BASE FOR THE TRAIL AND SIDEWALK WILL BE TYPE E AS SHOWN IN THE PLANS.

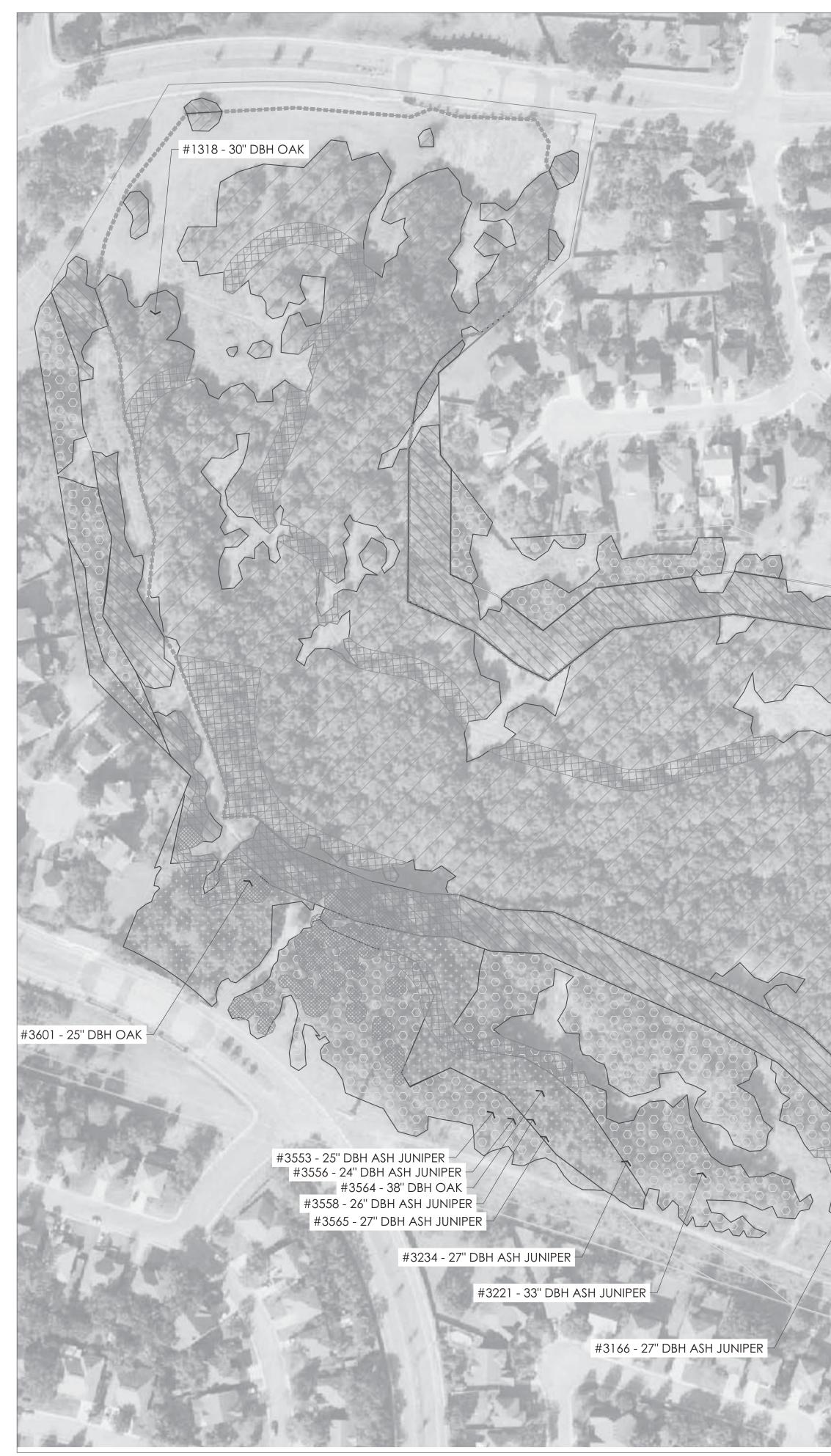
IDC, INC. 8632 FREDERICKSBURG RD., SUITE 203 SAN ANTONIO,TEXAS 78240 (210) 448–1800			
CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT			
PROJECT TITLE SUPPLEMENTAL GENERAL NOTES			
PROJECT NO.: DSGN. BY: CHKD. BY:	G103		
	8632 FREDERICKSBURG RD., SUITE 203 SAN ANTONIO, TEXAS 78240 (210) 448–1800 CITY OF SAN ANTON PROVEMENTS MANAGEMENT SERVICES I PROJECT TITLE MENTAL GENERAL N PROJECT NO.:		

	PROJECT SUMMARY		
SECTION 1	- EARTHWORK		
ITEM	DESCRIPTION	UNIT	QUANTIT
	EROSION CONTROL (WATER QUALITY)		
164.1	BROADCAST SEEDING	SY	6400
166.1	FERTILIZER (MONTHLY)	AC	8.1
168.1	VEGETATIVE WATERING (WEEKLY) (6 MONTHS)	MG	520
SECTION 2	- BASE AND SURFACE COURSES		
	PARKING LOT		
103.3	REMOVE SIDEWALK & DRIVEWAYS (< 1000 SF)	SF	192
200.1	FLEXIBLE BASE (8" COMPACTED DEPTH)	SY	1412.5
205.4	HOT MIX ASPHALTIC BASE, TYPE D (2" COMP DEPTH)	SY	1130
SECTION 3-	- CONCRETE AND CONCRETE STRUCTURES		
	Trail - Storm Drain Crossing (south)		
307.4	CONCRETE STRUCTURES (MISC -RETG WALLS) (3'-5')	SF	2568
307.4	CONCRETE STRUCTURES (MISC-RETG WALLS) (1'-2.5')	SF	1447.25
307.5	CONCRETE STRUCTURES (MISCELLANEOUS)	EA	2
SECTION 4	- STORM SEWERS		
	Culvert Bridge - Add Alternative #2		
401.1	REINFORCED CONCRETE PIPE (CLASS III) (48" DIA)	LF	20
401.1	REINFORCED CONCRETE PIPE (CLASS III) (54" DIA)	LF	10
404.1	CORREGATED METAL PIPE (GALV STEEL) (24")	LF	12
412.1	CEMENT STABILIZED SAND	CY	30
SECTION 5	- INCIDENTAL CONSTRUCTION		
	MISCELLANEOUS WORK FOR PARKING LOT AREA		
200.1	FLEXIBLE BASE (2" COMPACTED DEPTH)	LF	379
500.1	CONCRETE CURBING (<1000 LF)	SY	850
502.1	CONCRETE SIDEWALKS (<150 SY)	SY	379
503.2	PORTLAND CEMENT CONCRETE DRIVEWAYS - COMMERCIAL	SY	70
505.1	CONCRETE RIPRAP (4" THICK)		27.8
	WHEEL STOPS		30
	TRAFFIC CONTROL		
530.1	BARRICADES, SIGNS, AND TRAFFIC HANDLING	LS	1
531.3	R1-1 STOP (30") (HIGH DENSITY)	EA	1
535.17	BICYCLE RIDER SYMBOL	EA	1
536.2	4" WIDE WHITE LINE	LF	228
539.13	STRAIGHT WHITE ARROW	EA	1
	SWPPP		
540.1	ROCK FILTER DAM (TYPE 4)	LF	40
540.6	CONSTRUCTION EXITS (INSTALL/REMOVE)	SY	155
540.8	SANDBAGS FOR EROSION CONTROL FENCE (6")	LF	10
540.9	TEMPORARY SEDIMENT CONTROL FENCE	LF	5765
540.10	CURB INLET GRAVEL FILTERS	LF	25
	TRAILS		
107.1	EMBANKMENT (TYPE B, C, OR D)	EA	200
200.1	FLEXIBLE BASE (4" COMPACTED DEPTH)	SY	5179
502.1	CONCRETE SIDEWALKS (1000 SY < X,10000 SY) (2500 PSI)	EA	5179
	CONCRETE SIDEWALKS (150 SY < X< 1000 SY) (3000 PSI)	SF	130
502.1			144
	SIDEWALK PIPE RAILING (HANDRAIL)	SF	
502.1	GRADE BEAMS	LF	614
502.1			

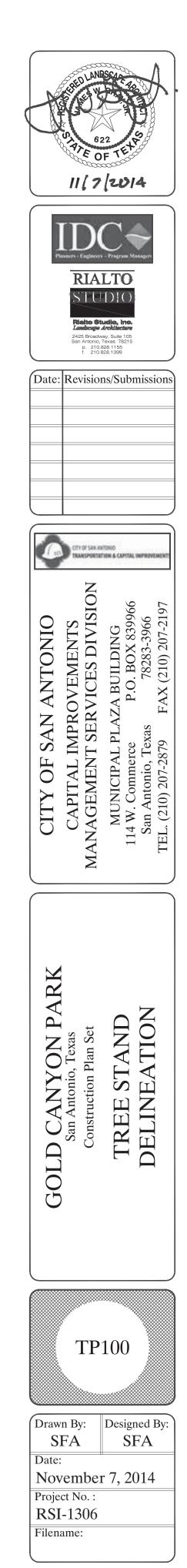
	- LANDSCAPE ARCHITECTURE DESCRIPTION	UNIT	
ITEM		UNII	QUANTIT
507.5	GATES GATES - VEHICULAR	OPEN	4
507.5	GATES - VERICULAR	OPEN	4
	TOILET ENCLOSURE		
	DRILL ANCHORS	EA	4
	STEEL FABRICATION	EA	1
	PRIME & PAINT	LS	1
	TRAILHEAD		
	CLEARING	LS	1
	SUBGRADE PREP	SY	170
	GRADED BASE (8" compacted)	SY	119
	CONCRETE FOOTING	SY	44
	MASONRY WALL	SF	728
307.4	CONCRETE STRUCTURES (MISC-RETG WALLS) (1'-2')(Fill)	SF	135
	STONE BENCHES	EA	4
	TRASH RECEPTACLES (installation only)	EA	2
	PAVERS ON SAND	SF	1070
	TRAIL STAIRS		
413.1	FLOWABLE FILL (LOW STRENGTH)	СҮ	9.5
110.1	SUBGRADE PREP	EA	57
	STAKES	LF	60
	HANDRAIL (painted)	LF	132
	SALVAGE & PLACE BOULDERS	EA	1
	SIGNAGE		
	WAYFINDING	EA	10
	PARK ENTRANCE SIGN (installation only)	EA	10
	INTERPRETIVE	EA	2
	PLANTING		
	SEED MIX	SF	100000
			10000
	FENCE (STEEL)		
	CONCRETE FOOTINGS	EA	73
	FENCE (FABRICATE AND INSTALL ON SITE)	LF	720
	PRIME & PAINT	LS	1

	ADD ALTERNATIVES		
ITEM	DESCRIPTION	UNIT	QUANTITY
	ADD/ALTERNATE #1		
	EXERCISE EQUIPMENT (w/bark much base)	LS	1
	ADD/ALTERNATE #2		
	BRIDGE CULVERT		
307.1	CONCRETE STRUCTURE (HEADWALLS OR OUTFALL STRUCTURES)	CY	36
412.1	CEMENT STABILIZED SAND	CY	25
522.1	SIDEWALK PIPE RAILING	LF	132
	ADD/ALTERNATE #3		
	UTILITY SERVICE		
822	LONG YARD PIPING	LF	120
824	NEW 1" LONG SERVICE (BORE OR TUNNELING)	EA	1
833	NEW METER AND METER BOX INSTALLATION	EA	1
841	HYDROSTATIC TESTING	EA	1
	SAWS IMPACT FEES	EA	1
	WATER FOUNTAIN		
	VALVE	EA	1
	PLUMBING	LS	1
	FOUNTAIN	EA	1
	BRICK PAVERS (on sand base)	SF	13
	DRY WELL	LS	1





	LEGEND AND CANOPY CALC	ULATIONS			
	EXISTING TREE CANOPY TO BE REMOVED AT 100% DENSITY				
	EXISTING TREE CANOPY TO BE REMOVED AT 50% DENSITY				
		UPLAN	D TREE INVENTOR	RY	
A A R I A SHE REAL AND A SHE	UPLAND EXISTING TREE CANOPY PRESERVED				
			Heritage 3:1	Heritage 1:1	Action to be taken
	UPLAND AREAS:	Tag # Species 3166 Ash Juniper	Not Preserved Preserved	Not Preserved Preserved 27	d
	TOTAL CANOPY (100%)7.52 acMIN. PRESERVATION REQD. (40%)3.01 ac	3221 Ash Juniper 3234 Ash Juniper		33 27	Protect
A SHARE AND A STATE ALL ALL AND A	CANOPY PRESERVED (88.3%)6.64 acOVER/UNDER3.63 ac OVER	3553 Ash Juniper		25	Protect
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		3556 Ash Juniper Sub. Tot. Inches=	0 0	24 0 136	Protect
		Total inches by category=	0	136	
and the second sec		Preservation percentage= Mitigation required (Commercial) =	Heritage Preserv	ation 100%	
all a set a set of the		Mitigation required (Residential) =	Heritage Mitigation	(inches) none	
		No category to fall below 20% pres Preserved- Tree to remain that mee Mitigation 1:1 for significant trees b * Small species: Condalia, Redbud	ets root protection zone requi below minimum preservation I, Tx. Mountain Laurel, Tx. P	requirements; lersimmon, Hawthorn, Pos	
		** Ashe Juniper, Huisache, Mesqui *** Mitigation Trees: Unprotected-s	ized trees to be used for mil	tigation calculations; subl	
		E.S.A. (RIPARIAN	BARRIER) TREE I		Action to be
	RIPARIAN BUFER E.S.A. EXISTING TREE CANOPY	Tag # Species	Heritage 3:1 Not Preserved Preserved	Heritage 1:1 Not Preserved Preserved	d
LEARLY & THE PRICE THE REAL OF THE		Sub. Tot. Inches=	0 0	0	0
		Total inches by category=	0		
	RIPARIAN BUFFER E.S.A.:TOTAL CANOPY (100%)6.12 ac	Preservation percentage= Mitigation required (Commercial) =	Heritage Preserv	ation N/A	
	MIN. PRESERVATION REQD. (80%) 4.90 ac CANOPY PRESERVED (92.8%) 5.68 ac	Mitigation required (Residential) =	Heritage Mitigation	(inches) none	1
	OVER/UNDER(52.0%)5.00 acOVER/UNDER0.78 ac OVER	No category to fall below 20% pres			-
		Preserved- Tree to remain that mee Mitigation 1:1 for significant trees b			
		* Small species: Condalia, Redbud ** Ashe Juniper, Huisache, Mesqui *** Mitigation Trees: Unprotected-si	l, Tx. Mountain Laurel, Tx. P ite, Arizona Ash, Hackberry	Persimmon, Hawthorn, Pos protected at 10" dbh and	í r
		E.S.A. (STEEP	SLOPE) TREE INV	/ENTORY	1
			Heritage 3:1	Heritage 1:1	Action to be taken
	* * * * * * * * * * * * * * * * * * *	Tag # Species 3558 Ash Juniper	Not Preserved Preserved	Not Preserved Preserved 26	d.
		3564 Oak	38		P 16 18 41
	STEEP SLOPE E.S.A.:	3565 Ash Juniper 3601 Oak	25	27	P 10 10 11
	TOTAL CANOPY (100%)1.95 acMIN. PRESERVATION REQD. (80%)1.56 ac	Sub. Tot. Inches=	0 63	0 5	3
	CANOPY PRESERVED (91.3%) 1.78 ac	Total inches by category=	63	5	3
	OVER/UNDER 0.22 ac OVER	Preservation percentage= Mitigation required (Commercial) = Mitigation required (Residential) =	Heritage Preserv Heritage Mitigation	Marcana and Analas	
		No category to fall below 20% pres		inements days	
		Preserved- Tree to remain that mee Mitigation 1:1 for significant trees b			
		* Small species: Condalia, Redbud ** Ashe Juniper, Huisache, Mesqui *** Mitigation Trees: Unprotected-st	l, Tx. Mountain Laurel, Tx. P ite, Arizona Ash, Hackberry	Persimmon, Hawthorn, Pos protected at 10" dbh and	í r
		1% CHANCE FLC	ODPLAIN TREE I	NVENTORY	
	1% CHANCE FLOODPLAIN	Tes 4	Heritage 3:1	Heritage 1:1	A stien to he taken
	EXISTING TREE CANOPY	Tag # Species 1318 Oak	Not Preserved Preserved 30	Not Preserved Preserved	d Printers
		Sub. Tot. Inches=	0 30	0	0
	1% CHANCE FLOODPLAIN:	Total inches by category=			-
	TOTAL CANOPY (100%) 27.24 ac MIN. PRESERVATION REQD. (80%) 21.79 ac	Preservation percentage= Mitigation required (Commercial) =	Heritage Preserv	ation 100%	-
	CANOPY PRESERVED (95.0%) 25.88 ac OVER/UNDER 4.09 ac OVER	Mitigation required (Residential) =	Heritage Mitigation	(inches) none	
		Preserved- Tree to remain that mee Mitigation 1:1 for significant trees b * Small species: Condalia, Redbud ** Ashe Juniper, Huisache, Mesqui *** Mitigation Trees: Unprotected-si	ets root protection zone required below minimum preservation 1, Tx. Mountain Laurel, Tx. P ite, Arizona Ash, Hackberry	requirements; ersimmon, Hawthorn, Pos protected at 10° dbh and	f r
	CANOPY	MITIGATION IS NOT REQUIR			
(S) SU/////	L				
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and the second the second s					





EXISTING TREE CANOPY TO BE REMOVED AT 100% DENSITY: REFER TO SHEET TP102 EXISTING TREE CANOPY TO BE REMOVED AT UP TO INCLUDES LIMB REMOVAL AND/OR COMPLETE TREE REMOVAL. REMAINING TREES TO BE PRESERVED SHALL BE PROTECTED BY TREE TRUNK PROTECTION OR ROOT PROTECTION FENCING PER DETAILS SHEET TP103. LANDSCAPE ARCHITECT WILL PROVIDE FIELD DIRECTION FOR TREE PROTECTION, TREE PRUNING, AND TREE REMOVAL. PROPOSED TRAIL PROJECT STAGING WILL OCCUR AT THE PROPOSED PARKING

TREE PROTECTION NOTES

- 3.
- 4.
- 7. BARRIER.
- 8.
- THE RPZ.

- MITIGATION.

ALL TREES SHALL REMAIN UNLESS NOTED ON THE PLANS. 2. NO SITE PREPARATION WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED. CALL 1-210-207-2222 TO SCHEDULE TREE PROTECTION FENCING INSPECTION. ALL EXISTING TREES DENOTED TO REMAIN SHALL BE PROTECTED AT THE ROOT PROTECTION ZONE(RPZ). THE RPZ SHALL BE DETERMINED BY TREE SIZE (RECOMMENDED 12" RADIUS FROM TRUNK FOR EVERY 1" IN DIAMETER OF TRUNK AT 4.5' FROM GROUND) WITH A MINIMUM OF HALF THE ROOT PROTECTION ZONE RADIUS.

AN ORANGE MESH BARRIER DELINEATING THE RPZ SHALL BE ERECTED AND MAINTAINED BY THE CONTRACTOR UNTIL CONSTRUCTION IS COMPLETED. 5. RPZ SHALL BE SUSTAINED IN A NATURAL STATE AND SHALL BE FREE FROM VEHICULAR OR MECHANICAL TRAFFIC.

6. THE RPZ SHALL BE COVERED WITH MULCH AND BE MAINTAINED BY GENERAL CONTRACTOR DURING CONSTRUCTION PHASE TO REDUCE MOISTURE STRESS. DURING CONSTRUCTION, NO EXCESS SOIL, ADDITIONAL FILL MATERIAL, EQUIPMENT, LIQUIDS, OR CONSTRUCTION DEBRIS SHALL BE PLACED INSIDE THE PROTECTION BARRIER, NOR SHALL ANY SOIL BE REMOVED FROM WITHIN THE

ANY DAMAGE DONE TO EXISTING TREE CROWNS OR ROOT SYSTEMS SHALL BE CUT CLEANLY IMMEDIATELY AFTER INJURY. ALL WOUNDS TO OAKS SHALL BE PAINTED WITH PRUNING PAINT WITHIN 30 MINUTES AFTER DAMAGE. ROOTS EXPOSED DURING CONSTRUCTION OPERATIONS WILL BE CUT CLEANLY. 9. THE PROPOSED FINISH GRADE AND ELEVATION OF LAND WITHIN THE RPZ OF ANY TREE TO BE PRESERVED SHALL NOT BE RAISED OR LOWERED MORE THAN THREE INCHES. WELLING AND RETAINING METHODS ARE ALLOWED OUTSIDE

10. THE RPZ SHALL REMAIN PERVIOUS, I.E. GROUNDCOVER OR TURF AT COMPLETION OF LANDSCAPE INSTALLATION.

11. THE ASSOCIATED TREE PROTECTION DETAIL COMPLIES WITH THE MINIMUM TREE PROTECTION GUIDELINES FROM THE CITY OF SAN ANTONIO. WHERE POSSIBLE, PROVIDE FENCE TO TREE DRIP LINE OR GROUP TREES IN FENCE PERIMETER TO PROVIDE INCREASED PROTECTION.

12. NO WORK SHALL BEGIN IN AREAS WHERE TREE PRESERVATION AND TREATMENT MEASURES HAVE NOT BEEN COMPLETED AND APPROVED.

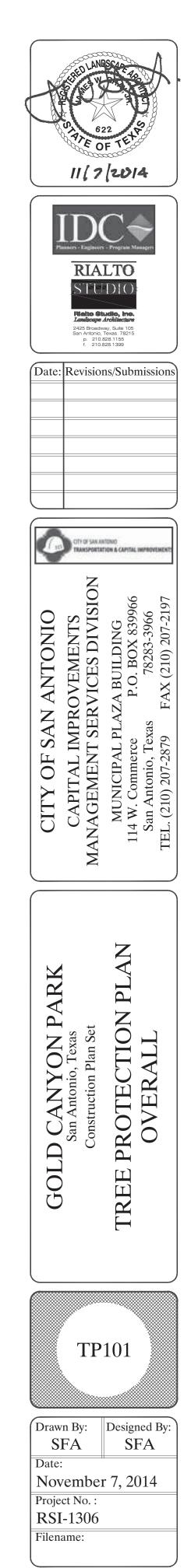
13. TREES WHICH ARE DAMAGED OR LOST DUE TO THE CONTRACTOR'S

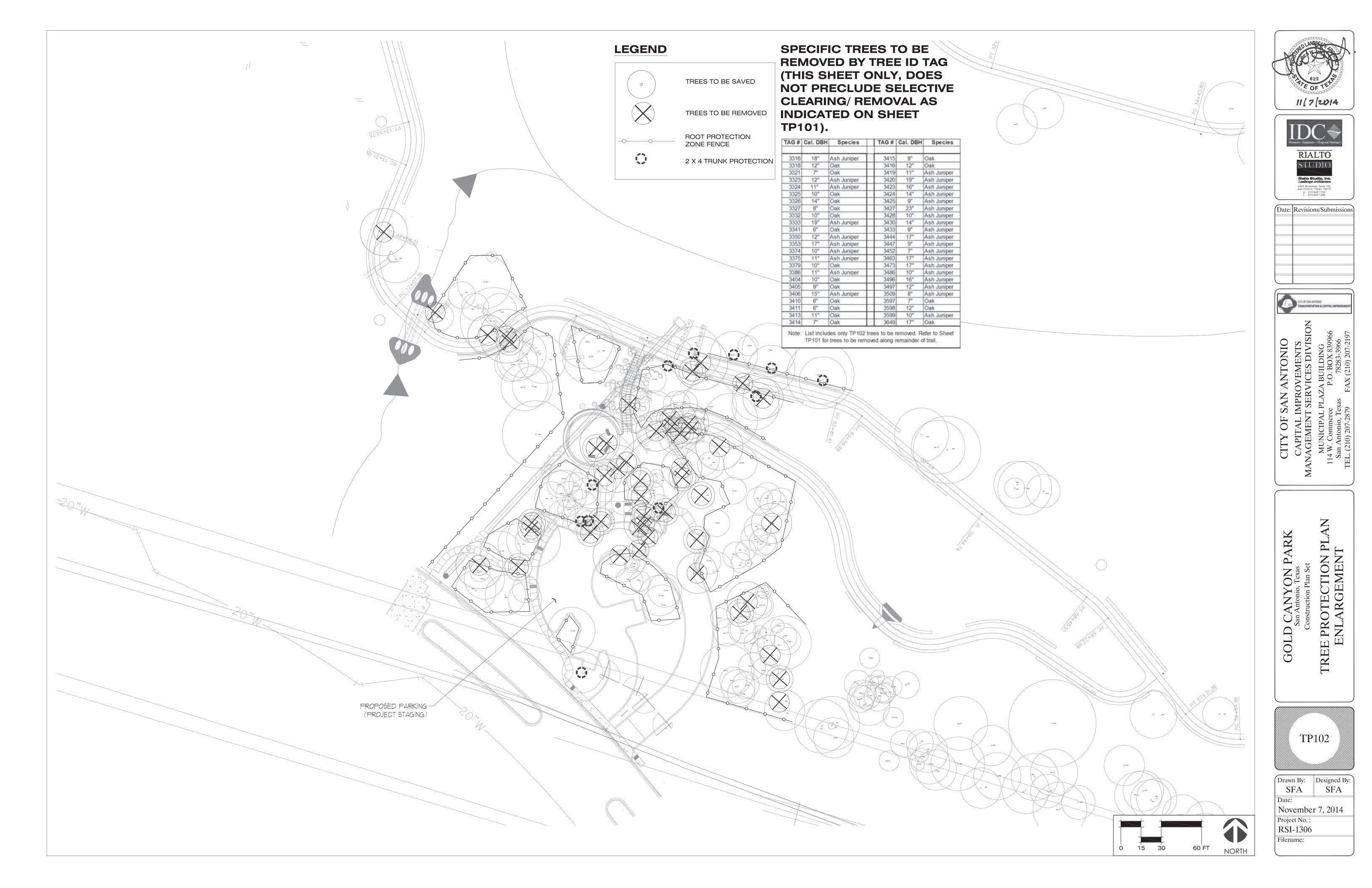
NEGLIGENCE DURING CONSTRUCTION SHALL BE MITIGATED PER UDC 35-523 (f)

14. TREES MUST BE MAINTAINED IN GOOD HEALTH THROUGHOUT THE CONSTRUCTION PROCESS. MAINTENANCE MAY INCLUDE BUT IS NOT LIMITED TO: WATERING THE ROOT PROTECTION ZONE, WASHING FOLIAGE, FERTILIZATION, PRUNING, ADDITIONAL MULCH APPLICATIONS AND OTHER

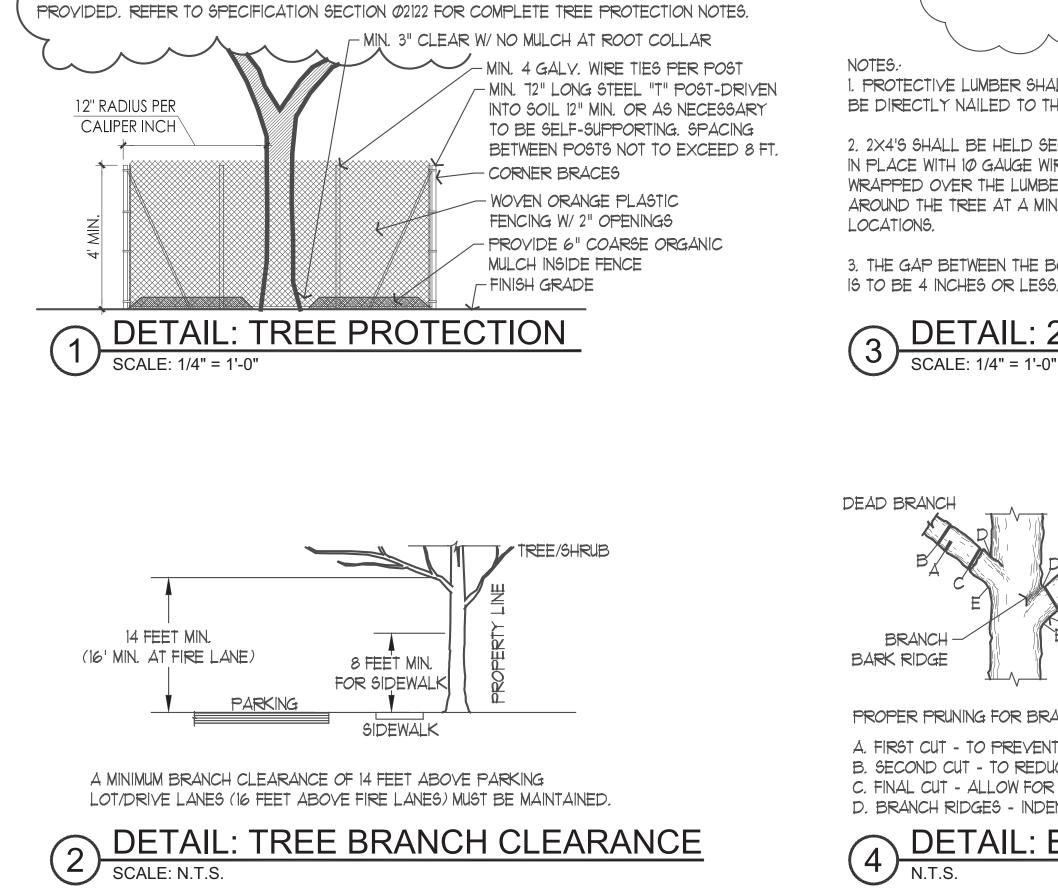
MAINTENANCE AS NEEDED ON THE PROJECT.

15. ROOTS SHALL BE CUT WITH A ROCK SAW OR BY HAND, NOT BY AN EXCAVATOR OR OTHER ROAD CONSTRUCTION EQUIPMENT.





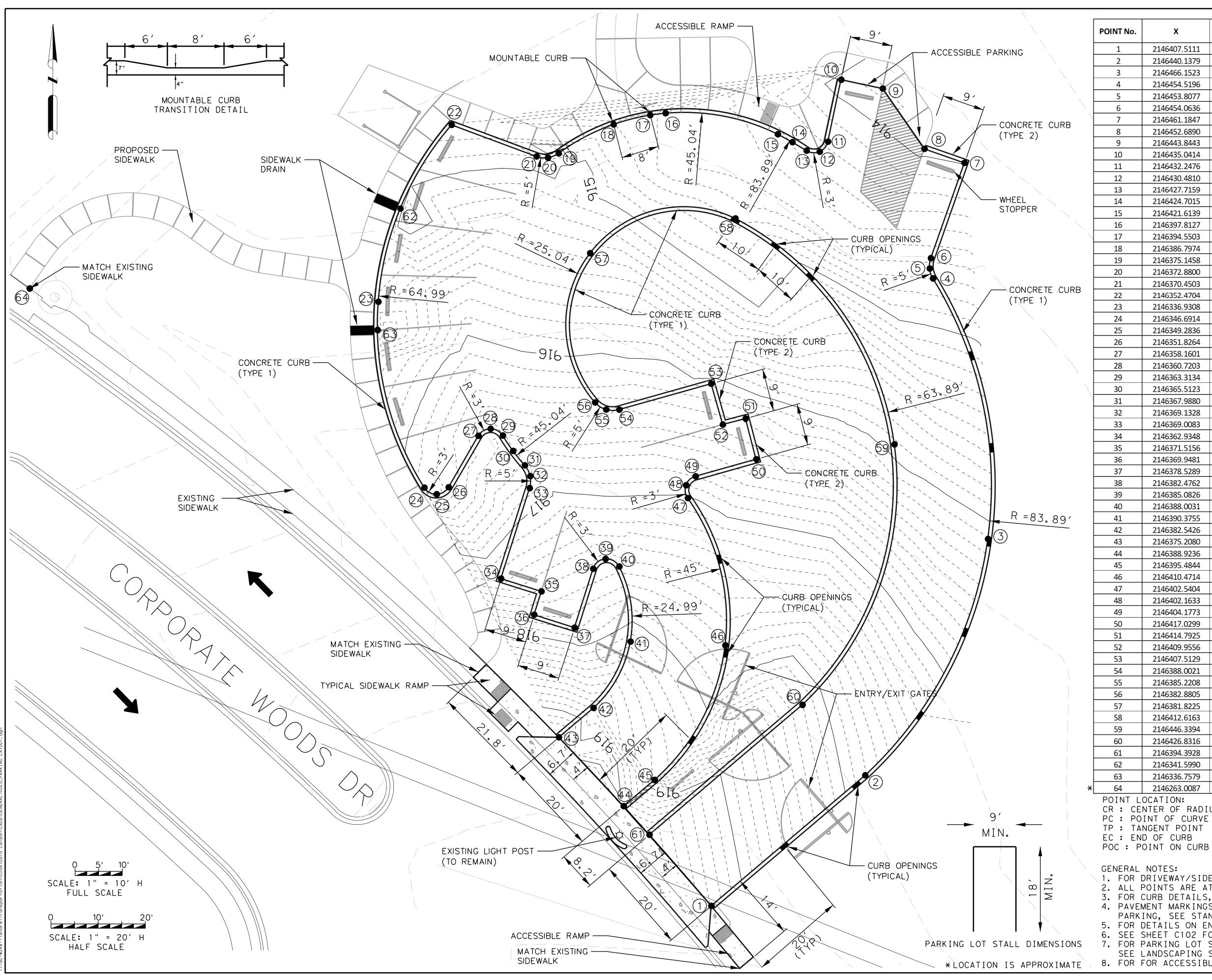




NOTE. THE DRAWING BELOW DETAILS COMPLIANCE WITH THE MINIMUM TREE PROTECTION

, GUIDELINES FROM THE CITY OF SAN ANTONIO. WHERE POSSIBLE, EXTEND FENCE TO TREE DRIP LINE. IN CASES WHERE TREES ARE CLOSELY-SPACED, A COMMON FENCE PERIMETER MAY BE

HALL NOT THE TREE. SECURELY WIRE BER AND VIN. OF 2 BOARDS 59. CX4 TREE PROTECTION	<image/>
NOTE: DO NOT CUT FROM D TO E. Image: Decision of the branch Image: Decision of the branch </th <th>CITY OF SAN ANTONIO CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DIVISION MUNICIPAL PLAZA BUILDING 114 W. Commerce P.O. BOX 839966 San Antonio, Texas 78283-3966 TEL. (210) 207-2879 FAX (210) 207-2197</th>	CITY OF SAN ANTONIO CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DIVISION MUNICIPAL PLAZA BUILDING 114 W. Commerce P.O. BOX 839966 San Antonio, Texas 78283-3966 TEL. (210) 207-2879 FAX (210) 207-2197
	GOLD CANYON PARK San Antonio, Texas Construction Plan Set TREE PROTECTION DETAILS
	TP103Drawn By: SFADesigned By: SFADate: November 7, 2014Date: Project No. : RSI-1306Filename:

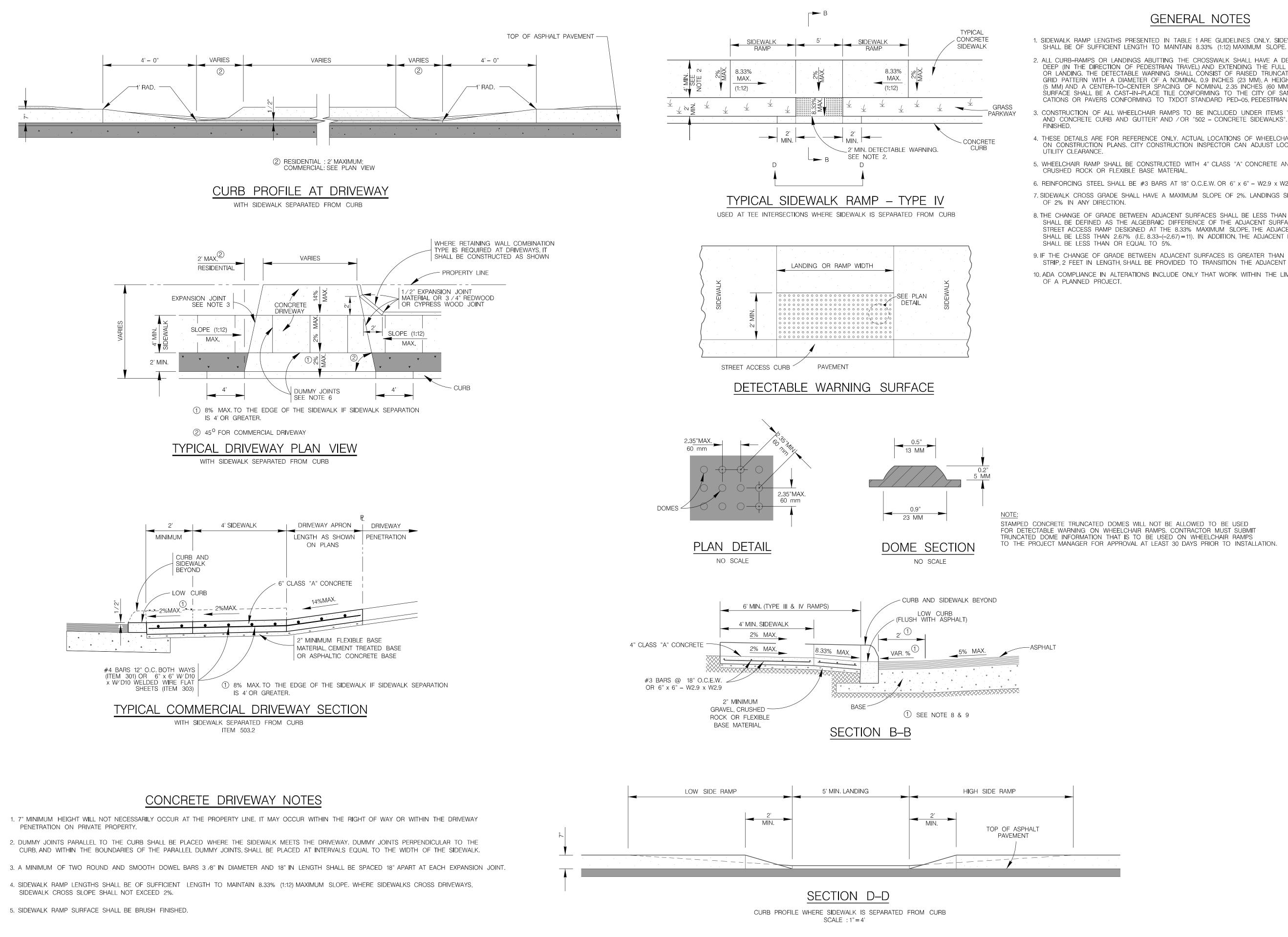


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POINT No.	X Y		ELEVATION	POINT LOCATION	
1	2146407.5111	13771735.1388	919.29	EC	
2	2146440.1379	13771762.8320	917.81	PC	
3	2146466.1523	13771812.9566	916.11	CR	
4	2146454.5196	13771868.2227	914.70	PC	
5	2146453.8077	13771870.3107	914.63	CR	
6	2146454.0636	13771872.5019	914.57	PC	
7	2146461.1847	13771892.7164	913.99	ТР	
8	2146452.6890	13771895.6869	913.96	EC	
9	2146443.8443	13771908.4793	913.87	ТР	
10	2146435.0414	13771910.3525	913.93	EC	
11	2146432.2476	13771897.2232	914.18	PC	
12	2146430.4810	13771895.0842	914.22	CR	
13	2146427.7159	13771895.3083	914.26	PC	
14	2146424.7015	13771897.1175	914.29	CR	
15	2146421.6139	13771898.7988	914.32	PC	
15					
	2146397.8127	13771903.2513	914.58	CR	
17	2146394.5503	13771902.8456	914.62	POC	
18	2146386.7974	13771900.8727	914.70	POC	
19	2146375.1458	13771894.7348	914.85	PC	
20	2146372.8800	13771893.8176	914.87	CR	
21	2146370.4503	13771894.0841	914.90	PC	
22	2146352.4704	13771900.7732	914.72	PC	
23	2146336.9308	13771863.2589	915.44	CR	
24	2146346.6914	13771823.8441	916.15	PC	
25	2146349.2836	13771822.4393	916.19	CR	
26	2146351.8264	13771823.9317	916.22	PC	
27	2146358.1601	13771834.8325	916.46	PC	
28	2146360.7203	13771836.3252	916.47	CR	
29	2146363.3134	13771834.8904	916.48	PC	
30	2146365.5123	13771831.6244	916.60	CR	
31	2146367.9880	13771828.5629	916.71	PC	
32	2146369.1328	13771826.2877	916.79	CR	
33	2146369.0083	13771823.7438	916.86	PC	
34	2146362.9348	13771804.5473	917.25	TP	
35	2146371.5156	13771801.8324	917.53	TP	
36	2146369.9481	13771796.8783	917.70	ТР	
37	2146378.5289	13771794.1635	917.77	ТР	
38	2146382.4762	13771806.6395	917.53	PC	
39	2146385.0826	13771808.7238	917.54	CR	
40	2146388.0031	13771807.1088	917.54	PC	
40	2146390.3755	13771791.1837	918.16	CR	
41	2146382.5426	13771777.1166	918.78	PC	
43	2146375.2080	13771770.8914	919.39	EC	
44	2146388.9236	13771756.2973	918.97	EC	
45	2146395.4844	13771761.8683	918.38	PC	
46	2146410.4714	13771790.3957	917.70	CR	
47	2146402.5404	13771821.6290	917.02	PC	
48	2146402.1633	13771824.3619	916.91	CR	
49	2146404.1773	13771826.2472	916.79	PC	
50	2146417.0299	13771829.8684	916.47	TP	
51	2146414.7925	13771838.4819	916.28	TP	
52	2146409.9556	13771837.2256	916.36	ТР	
53	2146407.5129	13771845.8878	916.08	ТР	
54	2146388.0021	13771840.3906	916.42	PC	
55	2146385.2208	13771840.4107	916.37	CR	
56	2146382.8805	13771841.9139	916.31	PC	
57	2146381.8225	13771873.5607	915.36	CR	
58	2146412.6163	13771880.9352	914.66	PC	
59	2146446.3394	13771833.0204	915.93	CR	
60	2146426.8316	13771777.7708	918.20	PC	
61	2146394.3928	13771750.2353	919.69	EC	
62	2146341.5990	13771883.0270	915.06	POC	
63	2146336.7579	13771857.2657	915.53	POC	
64	2146263.0087	13771866.0783		TP	



GENERAL NOTES:
1. FOR DRIVEWAY/SIDEWALK RAMP DETAILS, SEE SHEET C101.
2. ALL POINTS ARE AT THE EDGE OF PAVEMENT.
3. FOR CURB DETAILS, SEE SHEET C102.
4. PAVEMENT MARKINGS AND SIGNING FOR ACCESSIBLE PARKING, SEE STANDARD PM(AP)-98.
5. FOR DETAILS ON ENTRY/EXIT GATES, SEE SHEET L202
6. SEE SHEET C102 FOR TYPICAL CURB OPENING DETAIL.
7. FOR PARKING LOT SIDEWALK AND TRAIL INFORMATION SEE LANDSCAPING SHEETS.
8. FOR FOR ACCESSIBLE RAMP, SEE SHEET L201 DETAIL 2.



GENERAL NOTES

1. SIDEWALK RAMP LENGTHS PRESENTED IN TABLE 1 ARE GUIDELINES ONLY. SIDEWALK RAMP LENGTHS

2. ALL CURB-RAMPS OR LANDINGS ABUTTING THE CROSSWALK SHALL HAVE A DETECTABLE WARNING 24 INCHES DEEP (IN THE DIRECTION OF PEDESTRIAN TRAVEL) AND EXTENDING THE FULL WIDTH OF THE CURB RAMP OR LANDING. THE DETECTABLE WARNING SHALL CONSIST OF RAISED TRUNCATED DOMES, ALIGNED IN A GRID PATTERN WITH A DIAMETER OF A NOMINAL 0.9 INCHES (23 MM), A HEIGHT OF NOMINAL 0.2 INCHES (5 MM) AND A CENTER-TO-CENTER SPACING OF NOMINAL 2.35 INCHES (60 MM). THE DETECTABLE WARNING SURFACE SHALL BE A CAST-IN-PLACE TILE CONFORMING TO THE CITY OF SAN ANTONIO STANDARD SPECIFI-CATIONS OR PAVERS CONFORMING TO TXDOT STANDARD PED-05, PEDESTRIAN FACILITIES.

CONSTRUCTION OF ALL WHEELCHAIR RAMPS TO BE INCLUDED UNDER ITEMS "500 - CONCRETE CURB, GUTTER, AND CONCRETE CURB AND GUTTER" AND / OR "502 - CONCRETE SIDEWALKS". RAMP SURFACE SHALL BE BRUSH

4. THESE DETAILS ARE FOR REFERENCE ONLY. ACTUAL LOCATIONS OF WHEELCHAIR RAMPS TO BE SHOWN ON CONSTRUCTION PLANS. CITY CONSTRUCTION INSPECTOR CAN ADJUST LOCATIONS FOR SAFETY OR

5. WHEELCHAIR RAMP SHALL BE CONSTRUCTED WITH 4" CLASS "A" CONCRETE AND 2" MINIMUM GRAVEL,

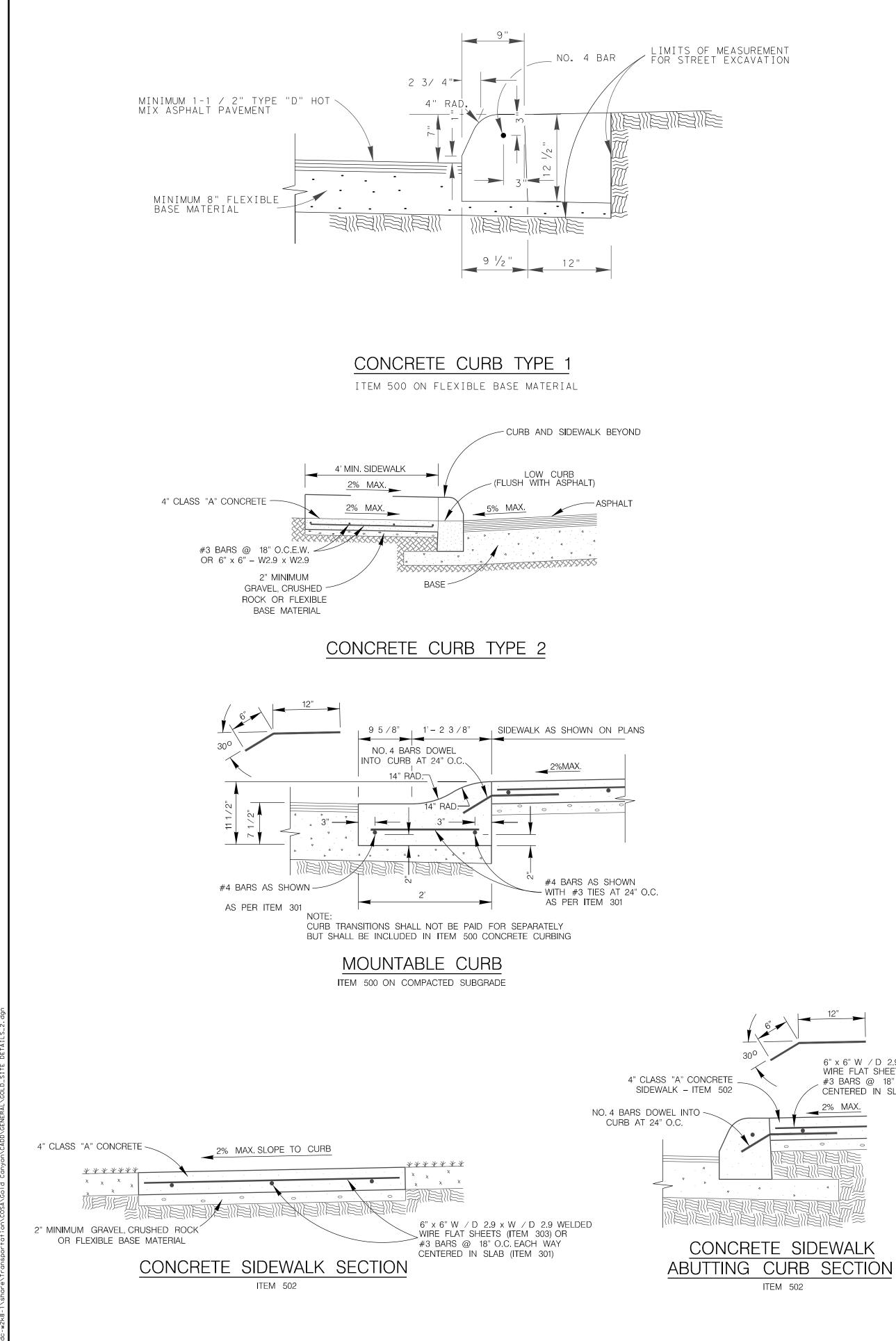
6. REINFORCING STEEL SHALL BE #3 BARS AT 18" O.C.E.W. OR 6" x 6" - W2.9 x W2.9 WIRE MESH. 7. SIDEWALK CROSS GRADE SHALL HAVE A MAXIMUM SLOPE OF 2%. LANDINGS SHALL HAVE A MAXIMUM SLOPE

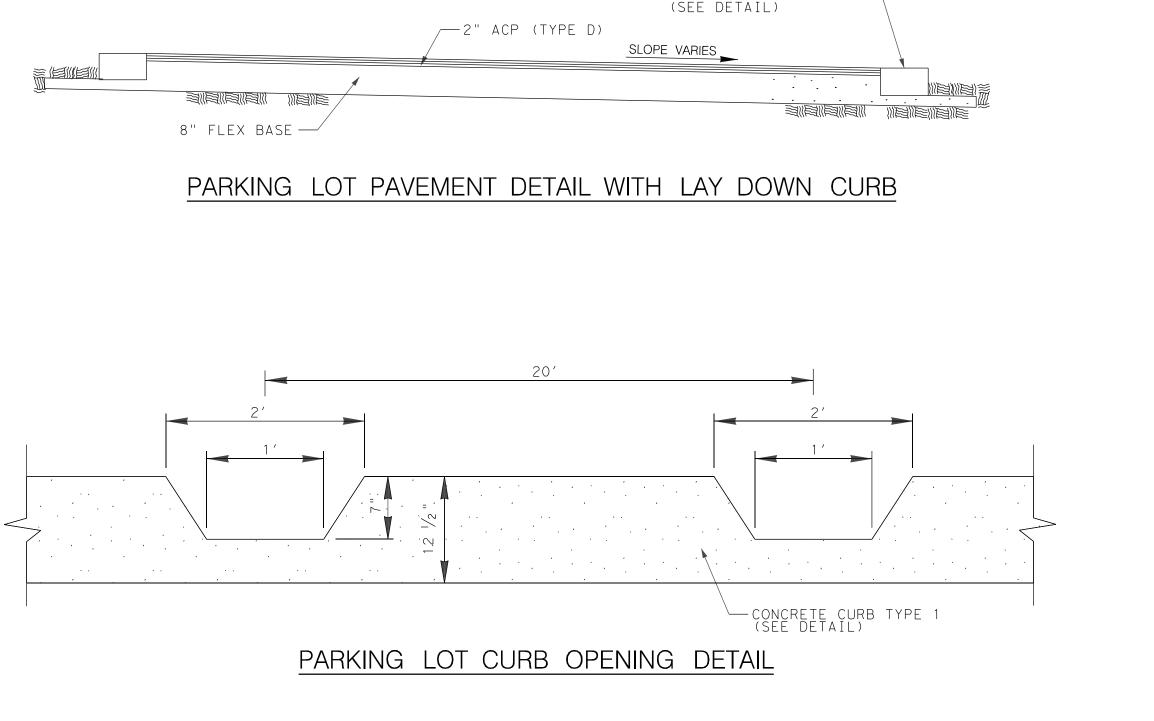
8. THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES SHALL BE LESS THAN 11%. THE CHANGE OF GRADE SHALL BE DEFINED AS THE ALGEBRAIC DIFFERENCE OF THE ADJACENT SURFACE SLOPES. IN THE CASE OF A STREET ACCESS RAMP DESIGNED AT THE 8.33% MAXIMUM SLOPE, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN 2.67% (I.E. 8.33-(-2.67)=11). IN ADDITION, THE ADJACENT PAVEMENT CROSS SLOPE

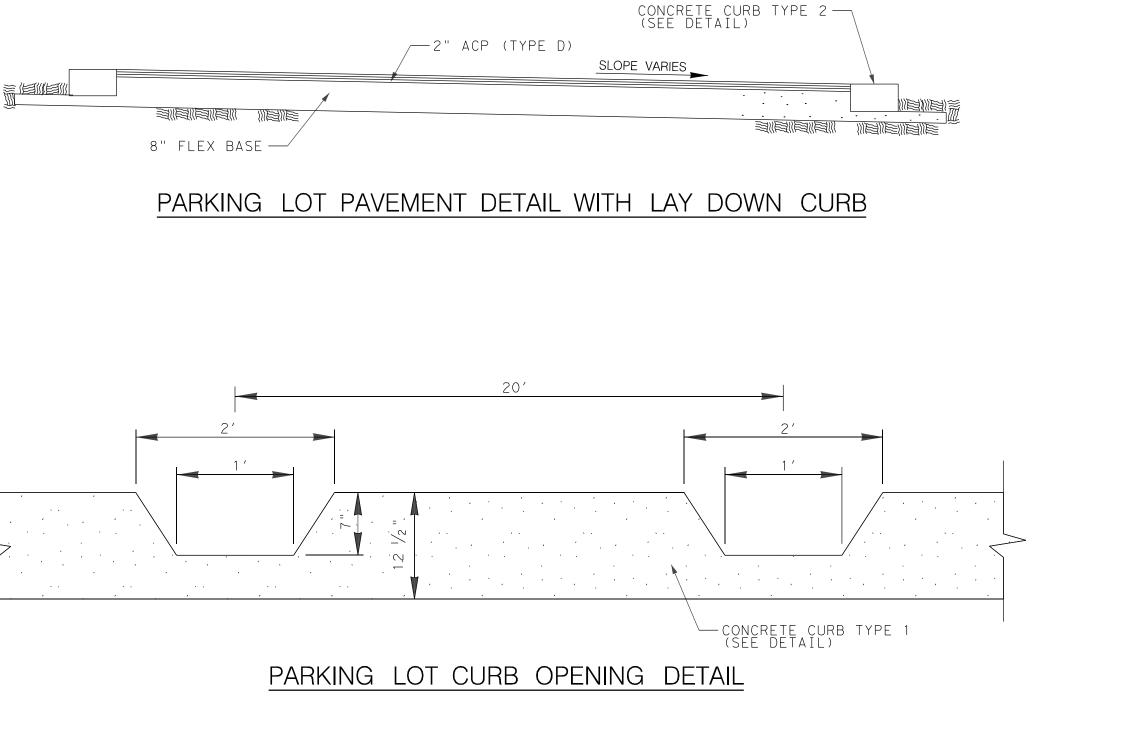
9. IF THE CHANGE OF GRADE BETWEEN ADJACENT SURFACES IS GREATER THAN OR EQUAL TO 11%, A LEVELING STRIP. 2 FEET IN LENGTH, SHALL BE PROVIDED TO TRANSITION THE ADJACENT SURFACES. 10. ADA COMPLIANCE IN ALTERATIONS INCLUDE ONLY THAT WORK WITHIN THE LIMITS, BOUNDARIES OR SCOPE

STAMPED CONCRETE TRUNCATED DOMES WILL NOT BE ALLOWED TO BE USED FOR DETECTABLE WARNING ON WHEELCHAIR RAMPS. CONTRACTOR MUST SUBMIT TRUNCATED DOME INFORMATION THAT IS TO BE USED ON WHEELCHAIR RAMPS TO THE PROJECT MANAGER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO INSTALLATION.

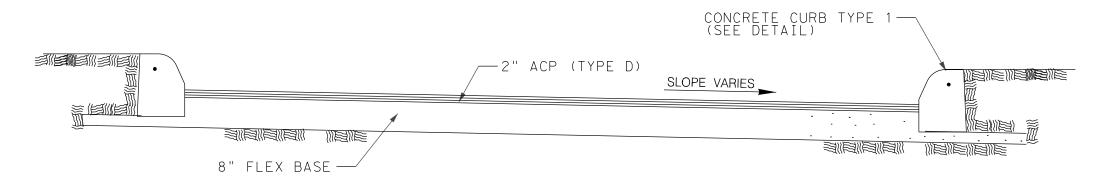






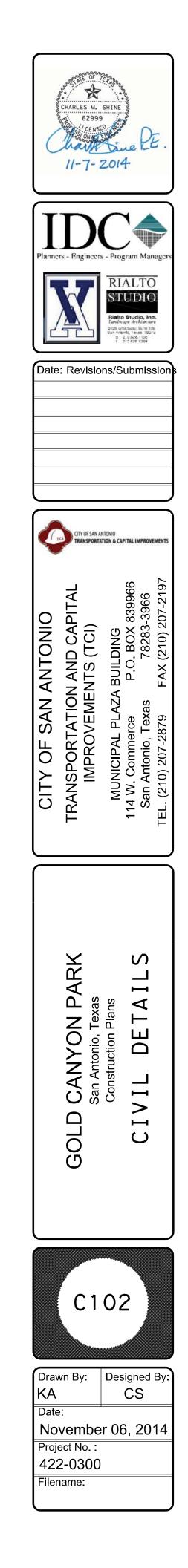


PARKING LOT PAVEMENT DETAIL WITH RAISED CURB



6" x 6" W / D 2.9 x W / D 2.9 WELDED WIRE FLAT SHEETS (ITEM 303) OR / #3 BARS @ 18" O.C. EACH WAY CENTERED IN SLAB (ITEM 301)

2% MAX.



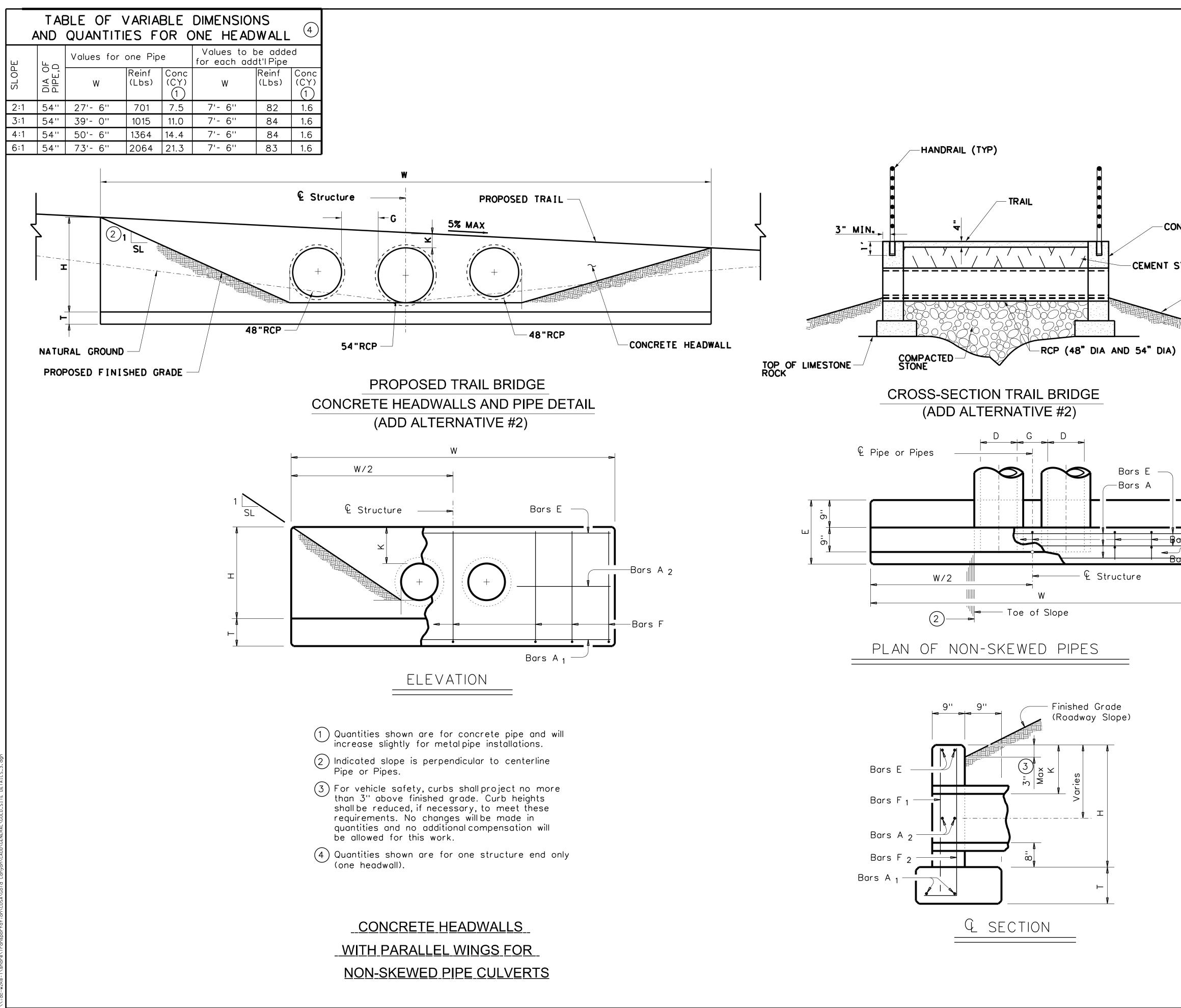


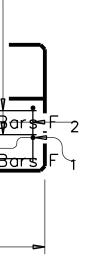
	TABLE OF CONSTANT DIMENSIONS									
	DIA OF PIPE,D	G	к		Т		Т	E		
	54"	3'-0"	1 ′	- 3" 6' - 5"			1′-0″	3'- 3"		
TABLE OF (REINFORCING STEEL										
				Bar		Size	Spa	No.		
				A1		# 5	~	2		
				A2		# 5	1'-6''	~		
			E		# 5	~	2			
				F		# 5	1'-0''	~		
с .										

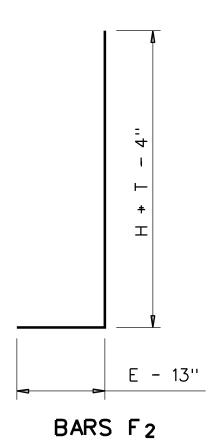
-CONCRETE HEADWALL

-CEMENT STABILIZED SAND

-FINISHED GRADE

ADD ALTERNATIVE #2



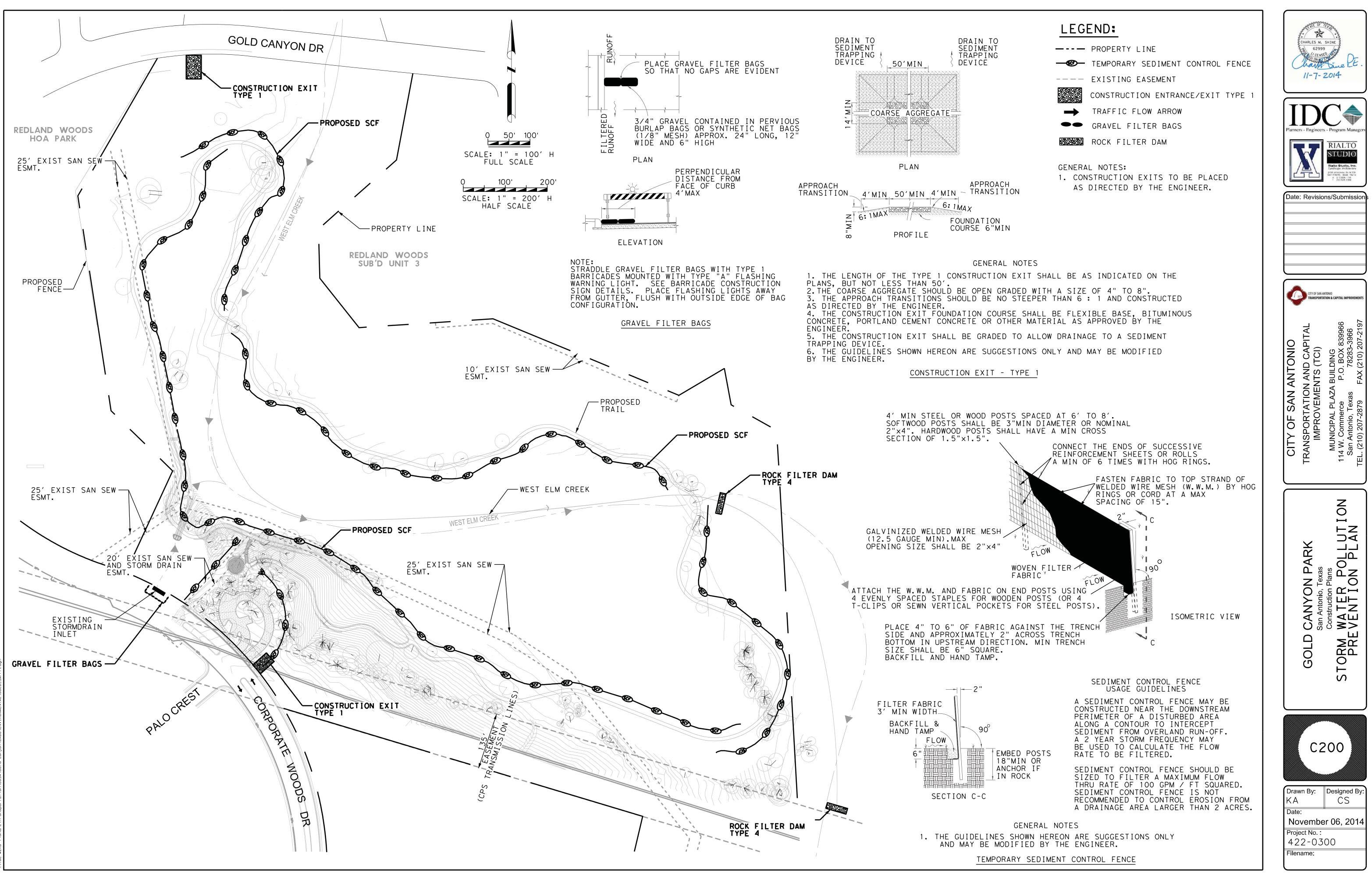


GENERAL NOTES:

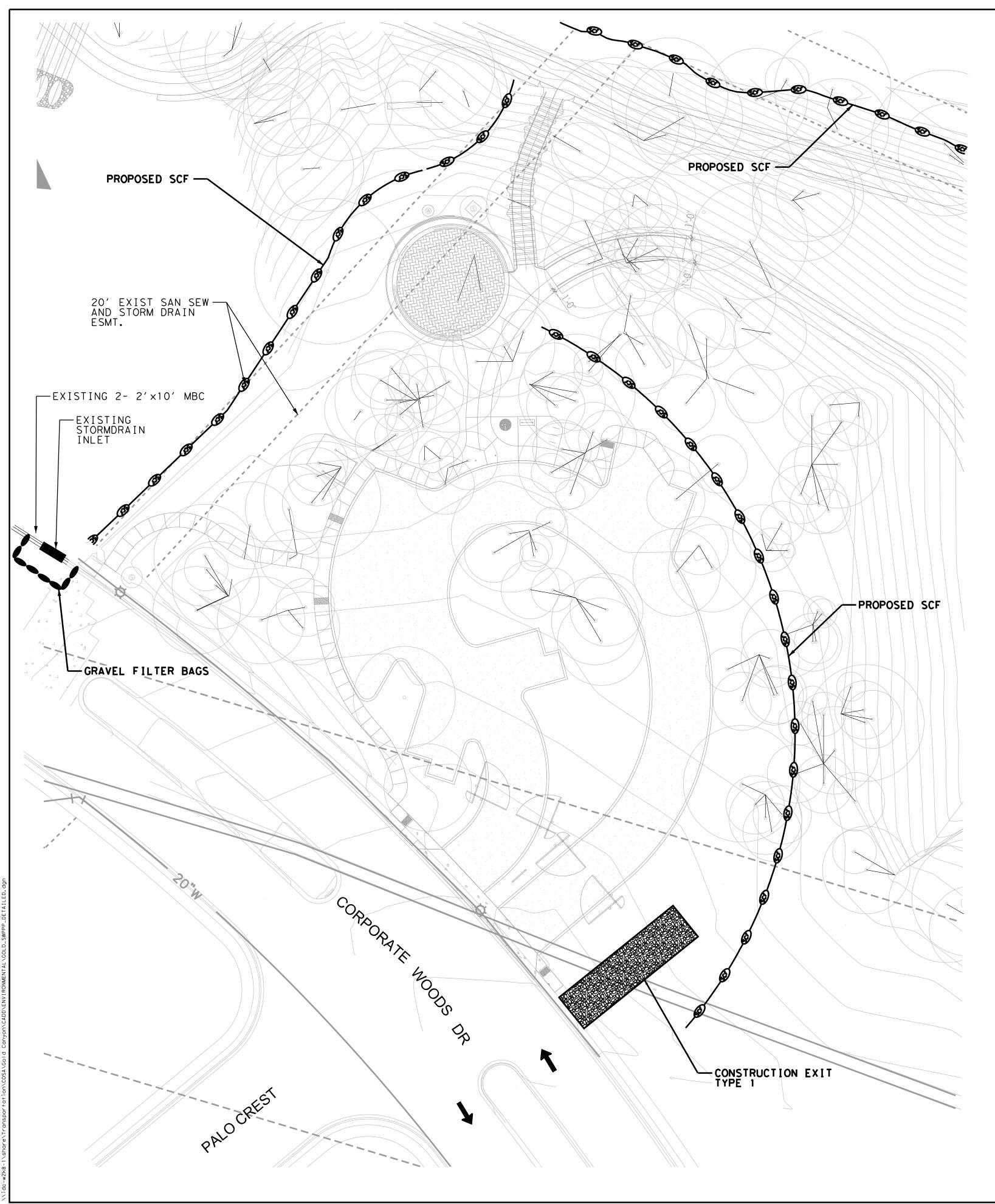
Designed according to AASHTO LRFD Specifications. Reinforcing steel shall be placed with the center of the outside layer of bars 2" from the surface of the concrete. All reinforcing steel shall be Grade 60.

All concrete shall be Class "C" and shall have a minimum compressive strength of 3600 psi.

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	CITY OF SAN AN	TONIO		
CITY OF SAN ANTONIO	TRANSPORTATION AND CAPITAL IMPROVEMENTS (TCI)	MUNICIPAL PLAZA BUILDING	as	1 EL. (210) 201-2013 FAA (210) 201-2131
	GOLD CANYON PARK San Antonio, Texas	tru	CIVIL DETAILS	
KA Date No Proje 422	vn By: e: vembe ect No. : 2-0300	Desig C	ined B S 2014	-



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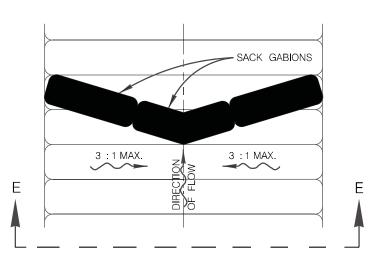


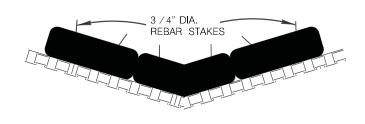
TYPE 4 (SACK GABIONS) :

TYPE 4 MAY BE USED IN DITCHES AND SMALLER CHANNELS TO FORM AN EROSION CONTROL DAM.

- TO COLLECT SEDIMENT.
- 3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE STORM WATER POLLUTION PREVENTION PLANS.

- 7. THE SEDIMENT TRAP FOR PONDING OF SEDIMENT LADEN RUNOFF SHALL BE OF THE DIMENSIONS SHOWN ON THE PLANS.
- 8. ROCK FILTER DAM TYPES 2 & 3 SHALL BE SECURED WITH 20 GAUGE GALVANIZED WOVEN WIRE MESH WITH 1" DIAMETER HEXAGONAL OPENINGS. THE AGGREGATE SHALL BE PLACED ON THE MESH TO THE HEIGHT AND SLOPES SPECIFIED. THE MESH SHALL BE FOLDED AT THE UPSTREAM SIDE OVER THE AGGREGATE AND TIGHTLY SECURED TO ITSELF ON THE DOWNSTREAM SIDE USING WIRE TIES OR HOG RINGS. IN STREAM USE, THE MESH SHOULD BE SECURED OR STAKED TO THE STREAM BED PRIOR TO AGGREGATE PLACEMENT.
- 9. SACK GABIONS SHOULD BE STAKED DOWN WITH 3 / 4" DIA. REBAR STAKES.
- 11. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.



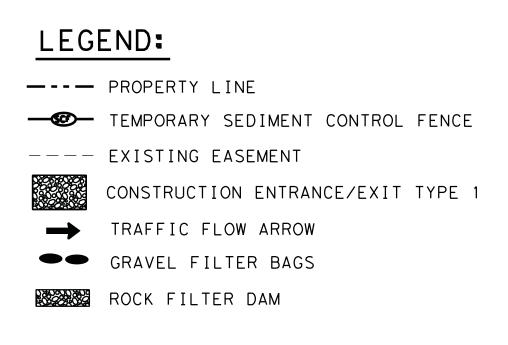


SECTION E-E

0 10' 20'

SCALE: 1" = 20' H FULL SCALE

SCALE: 1" = 40' H HALF SCALE



ROCK FILTER DAM USAGE GUIDELINES

GENERAL NOTES

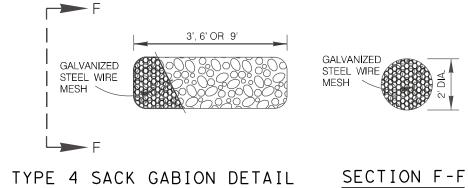
1. IF SHOWN ON THE PLANS OR DIRECTED BY THE ENGINEER, FILTER DAMS SHOULD BE PLACED NEAR THE TOE OF SLOPES WHERE EROSION IS ANTICIPATED, UPSTREAM AND / OR DOWNSTREAM AT DRAINAGE STRUCTURES, AND IN ROADWAY DITCHES AND CHANNELS

2. MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATION FOR ROCK FILTER DAMS FOR EROSION AND SEDIMENTATION CONTROL.

4. SIDE SLOPES SHOULD BE 2 : 1 OR FLATTER. DAMS WITHIN THE SAFETY ZONE SHALL HAVE SIDE SLOPES OF 6 : 1 OR FLATTER. 5. MAINTAIN A MINIMUM OF 1' BETWEEN TOP OF ROCK FILTER DAM WEIR AND TOP OF EMBANKMENT FOR FILTER DAMS AT SEDIMENT TRAPS. 6. FILTER DAMS SHOULD BE EMBEDDED A MINIMUM OF 4" INTO THE EXISTING GROUND.

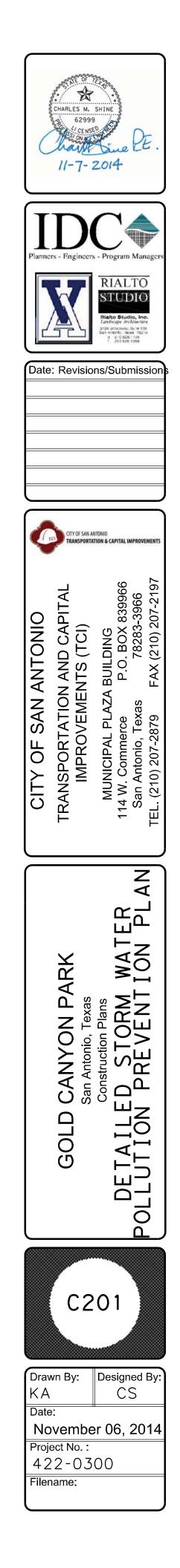
10. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.).

PLAN VIEW



TYPE 4 FILTER DAM AT DITCHES & SMALLER CHANNELS PLAN VIEW

ROCK FILTER DAMS



SITE DESCRIPTION

PROJECT NAME AND LOCATION: Gold Canyon Park; Corporate Woods Drive, San Antonio, Texas

CONTACT AND PHONE NO.: Jamaal Moreno, Phone No: 210–207–6924

PROJECT DESCRIPTION: Project consists on the construction of a parking lot with 12 spaces, 2 trails heads including an exercise area, and a hiking/walking trail within the project limits.

MAJOR SOIL DISTURBING ACTIVITIES: Cut and fill for parking layout, trail heads, and trail profiles. Pavement placement for parking lot and installation of concrete trails ans sidewalks.

TOTAL PROJECT AREA (ACRES): 56.5 ACRES

TOTAL AREA TO BE DISTURBED: 1.54 ACRES

WEIGHTED RUNOFF COEFFICIENT: C = 0.22 (C (unimproved) = 0.2 and C (impervious) = 0.9 at 56.517 Acres and 1.54 Acres respectively.)

EXISTING CONDITION OF SOIL, VEGETATIVE Soils consists of Crawford and Bexar Stony Soils (CB), and COVER AND % OF VEGETATIVE COVER: Terrant Association (TaC) both consisting of stony clay allowing water to move rapidly when soild is dry/cracked but very slow when soil is wet. Vegetation cover is moderately dense to dense stand (approx. 90% veg. cover) with several small open grassy areas. DESCRIPTION OF WATER DISCHARGED NOT ASSOCIATED WITH CONSTRUCTION: Runoff is discharged and conveyed through West Elm Creek, located within the project limits, which serves as a tributary to the Salado Creek. The Elm Creek discharges into Salado Creek.

NAME OF RECEIVING WATERS: The site is located within the West Elm Creek watershed and the West Elm Creek passes through the project. The ElmCreek will receive discharges from the disturbed areas of the project.

IDENTIFY STORMWATER DISCHARGE POINTS: West Elm Creek discharges downstream to the Elm Creek, Elm Waterhole Creek, Mud Creek, and to Salado Creek.

A DESCRIPTION AND TIME FRAME FOR INSTALLATION OF STABILIZATION PRACTICES IN CONJUNCTION WITH CONSTRUCTION: SOIL ST

_____ \checkmark \checkmark

 \checkmark OTHER:

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OTHER:

NARRATI (STORM) THE ORDER at drive prior to

A DESCI PROCED

STORMWATER MANAGEMENT: Upgradient storm will maintain a natural flow path during all phases of construction.

	EROSION	AND	SEDI	MENTATION	CONTROLS
SOIL STABILIZATION PRACTICES:					ND SEDIMENTATION CONTROLS
HYDROMULCHING				MAINTENANCE:	
TEMPORARY SEEDING				ALL EROSION AND SEDIMEN	T CONTROLS WILL BE MAINTAINED IN GOOD WORKING
PERMANENT PLANTING, SODDING OR SEEDING				LATER THAN 7 CALENDAR D. SUFFICIENTLY TO PREVENT F	IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BU AYS AFTER THE SURROUNDING EXPOSED GROUND HA URTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREA
MULCHING				ADJACENT TO CREEKS AND DEVICES PROTECTING STORM	DRAINAGEWAYS SHALL HAVE PRIORITY, FOLLOWED BY A SEWER INLETS.
SOIL RETENTION BLANKET				INSPECTION:	
BUFFER ZONES				OF RAIN (RECORDED ON A MAINTENANCE REPORT WILL	RFORMED BY THE CONTRACTOR EVERY 14 DAYS AS WE NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE BE MADE PER INSPECTION. BASED ON THE INSPECTIO
PRESERVATION OF NATURAL RESOURSES				BE CORRECTED BEFORE THE	E NEXT SCHEDULED INSPECTION.
OTHER:				WASTE MATERIALS:	
DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED OR PERMANENTLY, SHALL BE STABILIZED WITHIN 14 DAYS UNLESS AC SCHEDULED TO RESUME AND DONE WITHIN 21 DAYS.				THE DUMPSTER WILL MEET A ALL TRASH AND CONSTRUCT THE DUMPSTER WILL BE EMI	BE COLLECTED AND STORED IN A SECURELY LIDDED ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMEN TON DEBRIS FROM THE SITE WILL BE DEPOSITED IN T PTIED AS NECESSARY OR AS REQUIRED BY LOCAL REC A LOCAL DUMP. NO CONSTRUCTION MATERIALS WILL
STRUCTURAL PRACTICES:					
SILT FENCES				HAZARDOUS WASTE (INCLUDI	
HAY BALES GRAVEL FILTRATION BAGS ROCK BERMS				ACIDS FOR CLEANING MASO CHEMICAL ADDITIVES FOR SO EVENT OF A SPILL WHICH M	TS IN THE FOLLOWING CATEGORIES ARE CONSIDERED NRY SURFACES, GASOLINE, MOTOR OIL, CLEANING SOLV DIL STABILIZATION OR CONCRETE CURING COMPOUNDS AY BE HAZARDOUS AND MEETS REPORTING REQUIREM CTED AT 800–424–8802, AND ANY REQUIRED CHANGES
DIVERSION, INTERCEPTOR OR PERIMETER DIKES					NG SPILL THE SAN ANTONIO FIRE DEPARTMENT SHOU
DIVERSION, INTERCEPTOR OR PERIMETER SWALES					
PAVED FLUMES				SANITARY WASTE	
ROCK BEDDING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)					
TIMBER MATTING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)					
CHANNEL LINERS SEDIMENT TRAPS					
SEDIMENT BASINS				OFESITE EXCAVATION SOURC	E LOCATION
STORM INLET SEDIMENT TRAP				OF SHE EXCAVATION SOUTH	
STONE OUTLET SEDIMENT STRUCTURES					
CURBS AND GUTTERS STORM SEWERS					
VELOCITY CONTROL STRUCTURES					
GEOTEXTILES				OFFSITE FILL SOURCE LOCAT	[ION
OTHER:					
				OFFSITE VEHICLE TRACKING	
NARRATIVE – SEQUENCE OF CONSTRUCTION (STORMWATER MANAGEMENT) ACTIVITIES:					
	on with no impact	to traffic, ex	kcept	HAUL ROADS DAM	IPENED FOR DUST CONTROL.
at driveway tie-in with Corporate Drive. All BMP's	shown in plans v	will be install	ed	LOADED HAUL TR	UCKS TO BE COVERED WITH TARPAULIN
prior to construction, and will remain until comple	•				ROAD TO BE REMOVED DAILY TRUCTION ENTRANCE.
				OTHER:	
A DESCRIPTION OF MAINTENANCE					STURBANCE AND / OR DISCHARGES WILL NOT EFFECT
PROCEDURES FOR CONTROL MEASURES USED: All BI	VP's shown in pla	ans will be		AND THEIR HABITAT.	SATISFY THE ENDANGERED SPECIES REQUIREMENTS?

cleaned or replaced after each rain event or as needed following daily inspections.

A DESCRIPTION OF PERMANENT STORM WATER MANAGEMENT CONTROLS: Curbs, Storm Filter Vegetative Filter Strips.

REMARKS:

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

CONTROLS

AINED IN GOOD WORKING ORDER. RLIEST DATE POSSIBLE, BUT NO NG EXPOSED GROUND HAS DRIED AVY EQUIPMENT. THE AREAS PRIORITY, FOLLOWED BY

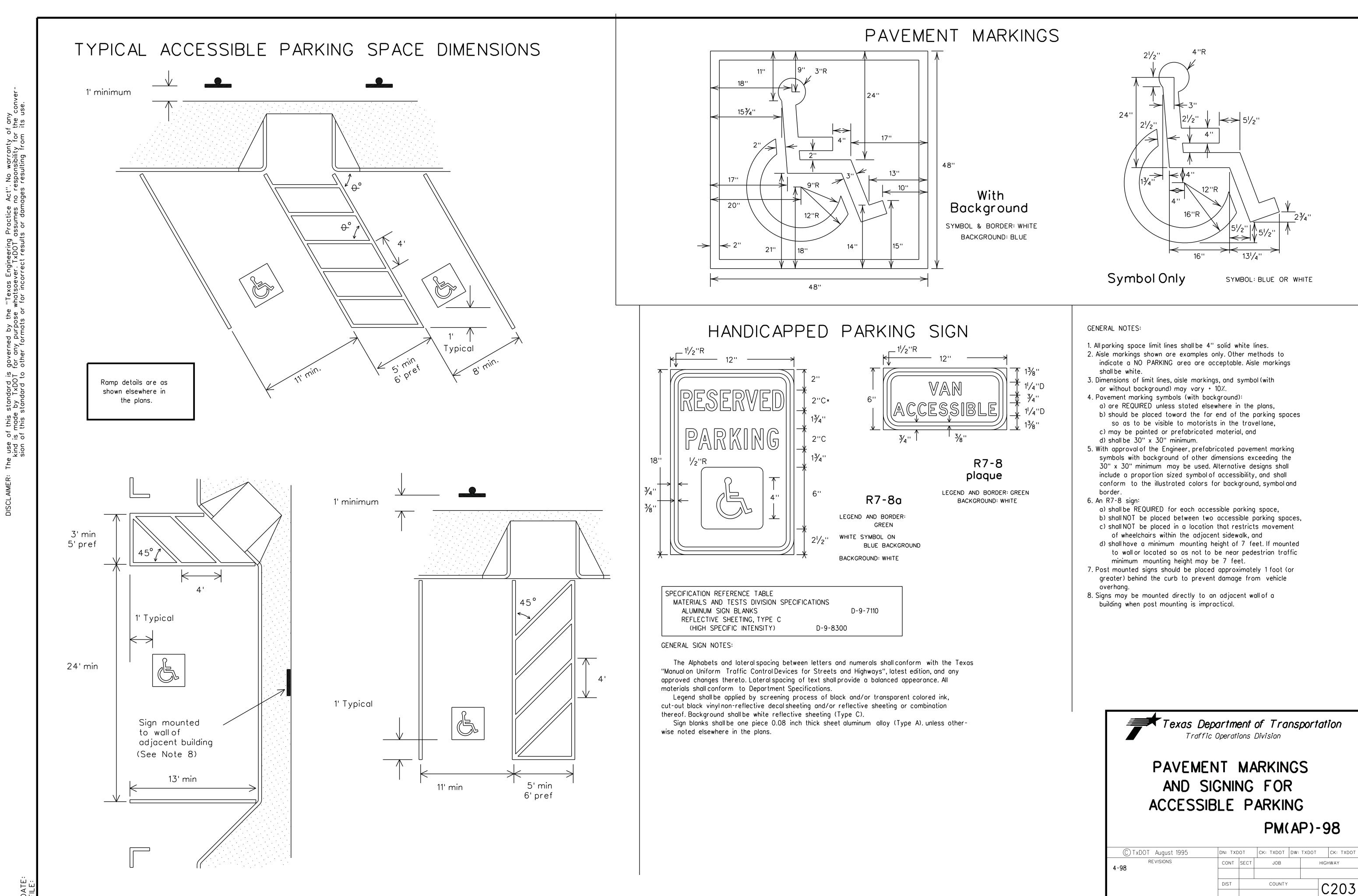
TOR EVERY 14 DAYS AS WELL AS AFTER EVERY 1/2" OR MORE TO BE LOCATED AT THE PROJECT SITE). AN INSPECTION AND BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL

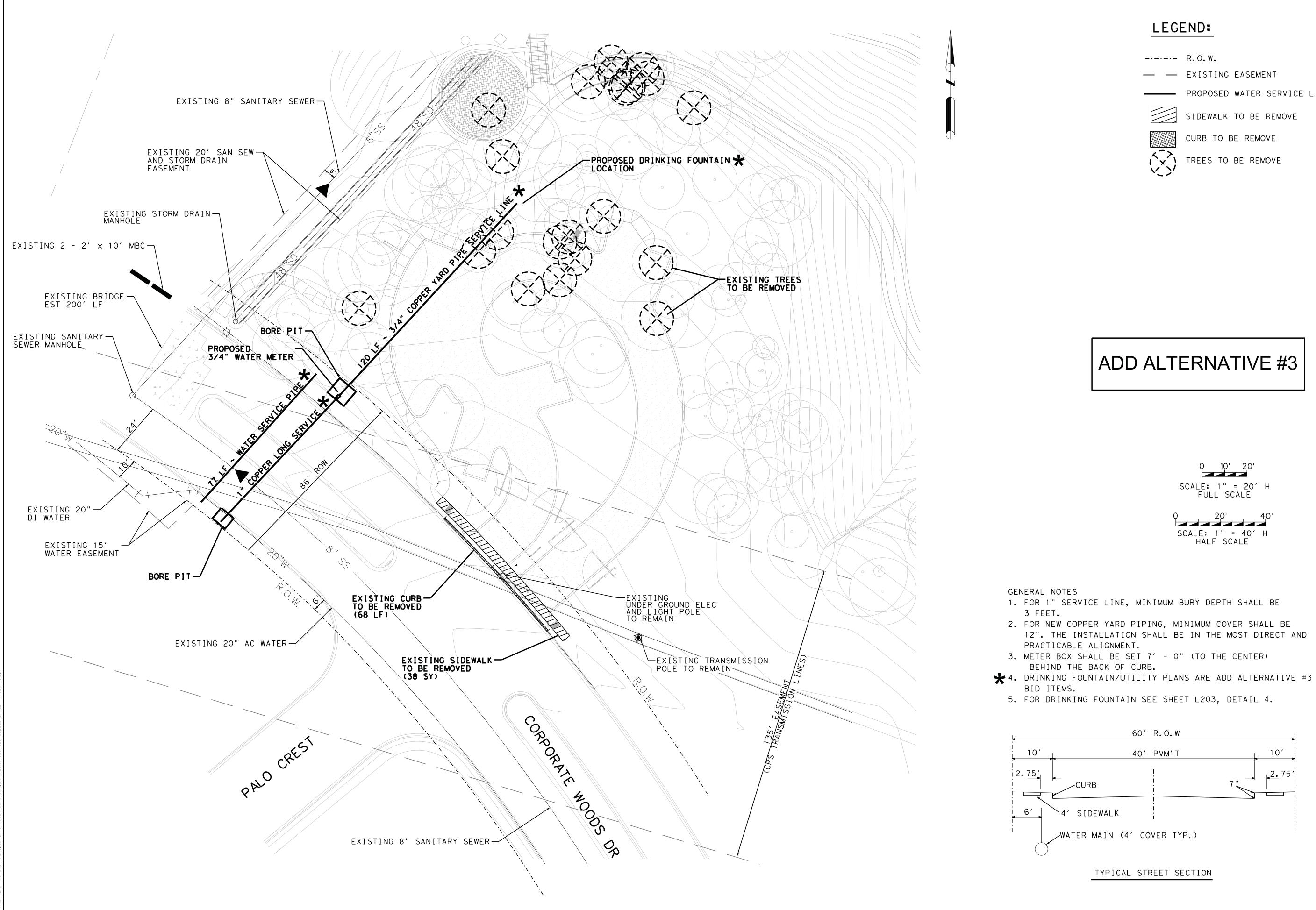
IN A SECURELY LIDDED METAL DUMPSTER. SOLID WASTE MANAGEMENT REGULATIONS. WILL BE DEPOSITED IN THE DUMPSTER. REQUIRED BY LOCAL REGULATION AND THE TRUCTION MATERIALS WILL BE BURIED ON SITE.

EGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, DTOR OIL, CLEANING SOLVENTS, ASPHALT PRODUCTS, RETE CURING COMPOUNDS AND ADDITIVES. IN THE ETS REPORTING REQUIREMENTS, THE NATIONAL RESPONSE ANY REQUIRED CHANGES MADE TO THE SWPPP. IN THE FIRE DEPARTMENT SHOULD BE NOTIFIED AS WELL

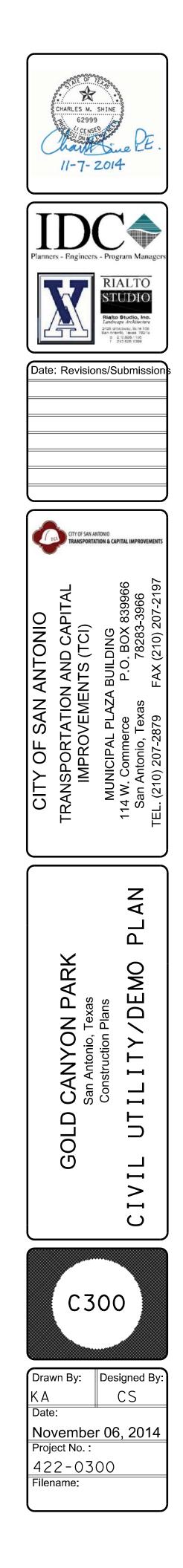
ARGES WILL NOT EFFECT LISTED ENDANGERED SPECIES

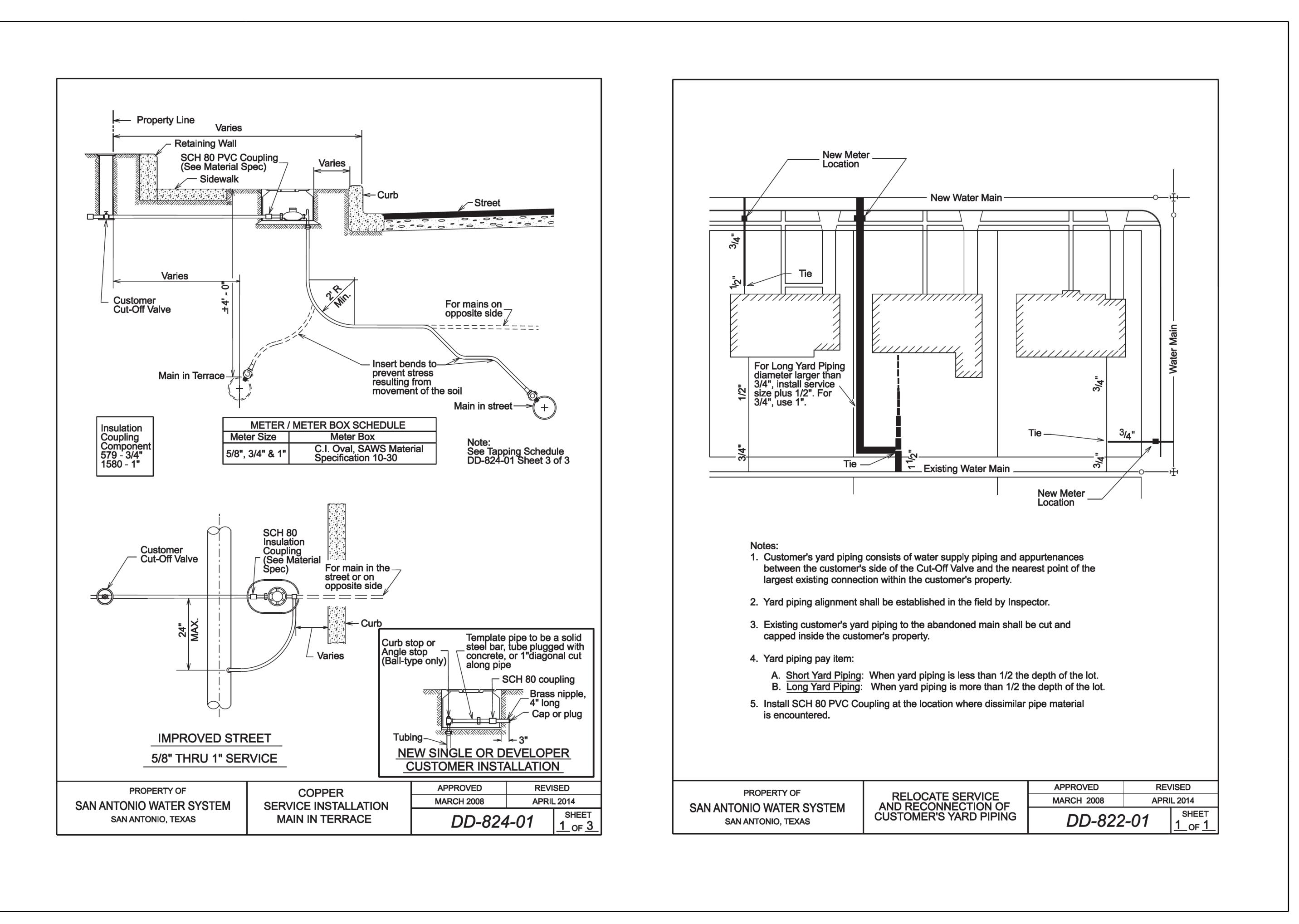
JANUARY 2005							
CAPITAL	-			ANTON NT SERVICES D	-		
STORM WATER POLLUTION PREVENTION PLAN (SWP3) NARRATIVE							
% SUBMITTAL	PROJECT NC).:			C202		
DRWN. BY: <u>V. VASQUEZ</u>	DSGN. BY:		CHKD. B	Y:	0202		



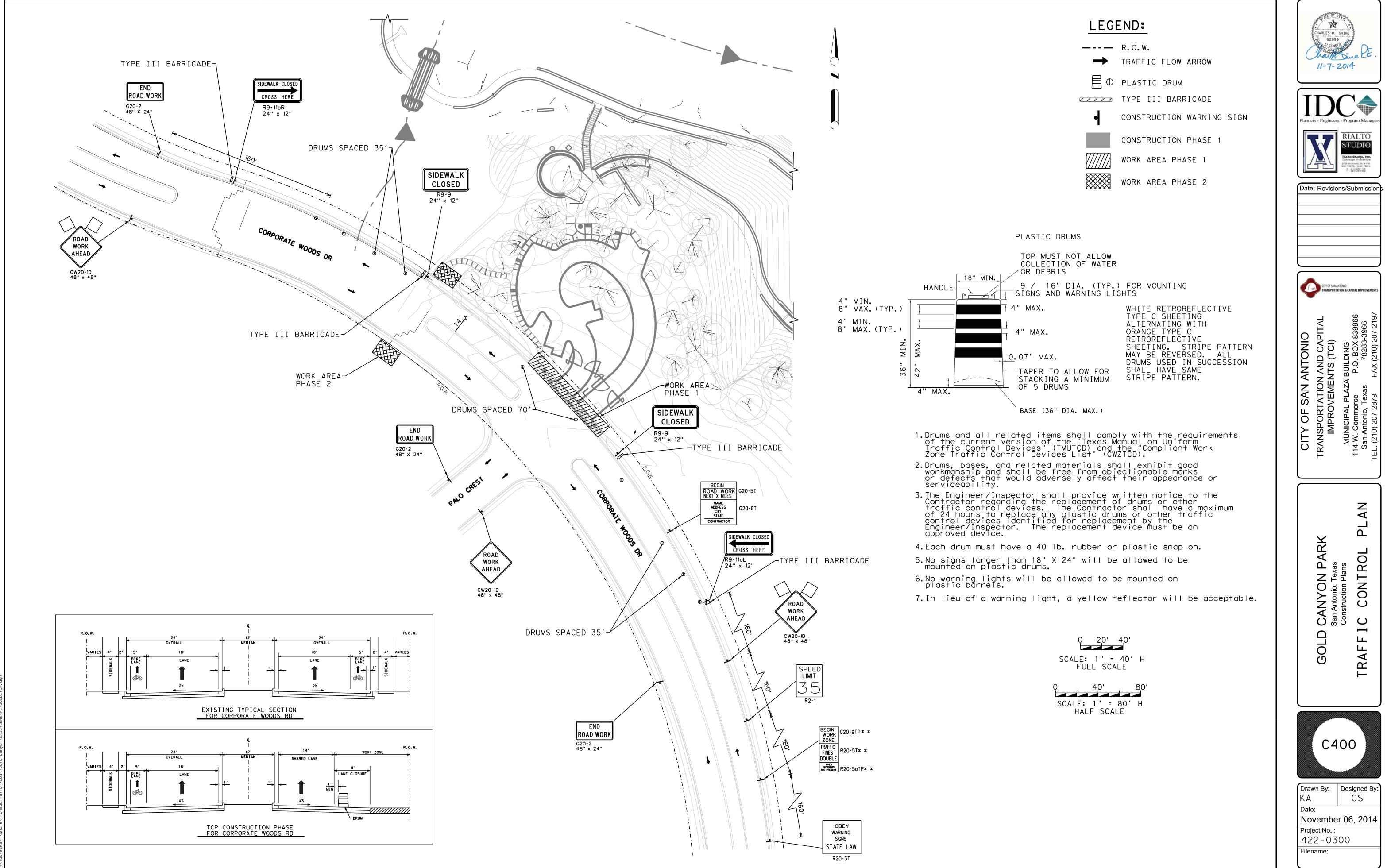


PROPOSED WATER SERVICE LINE



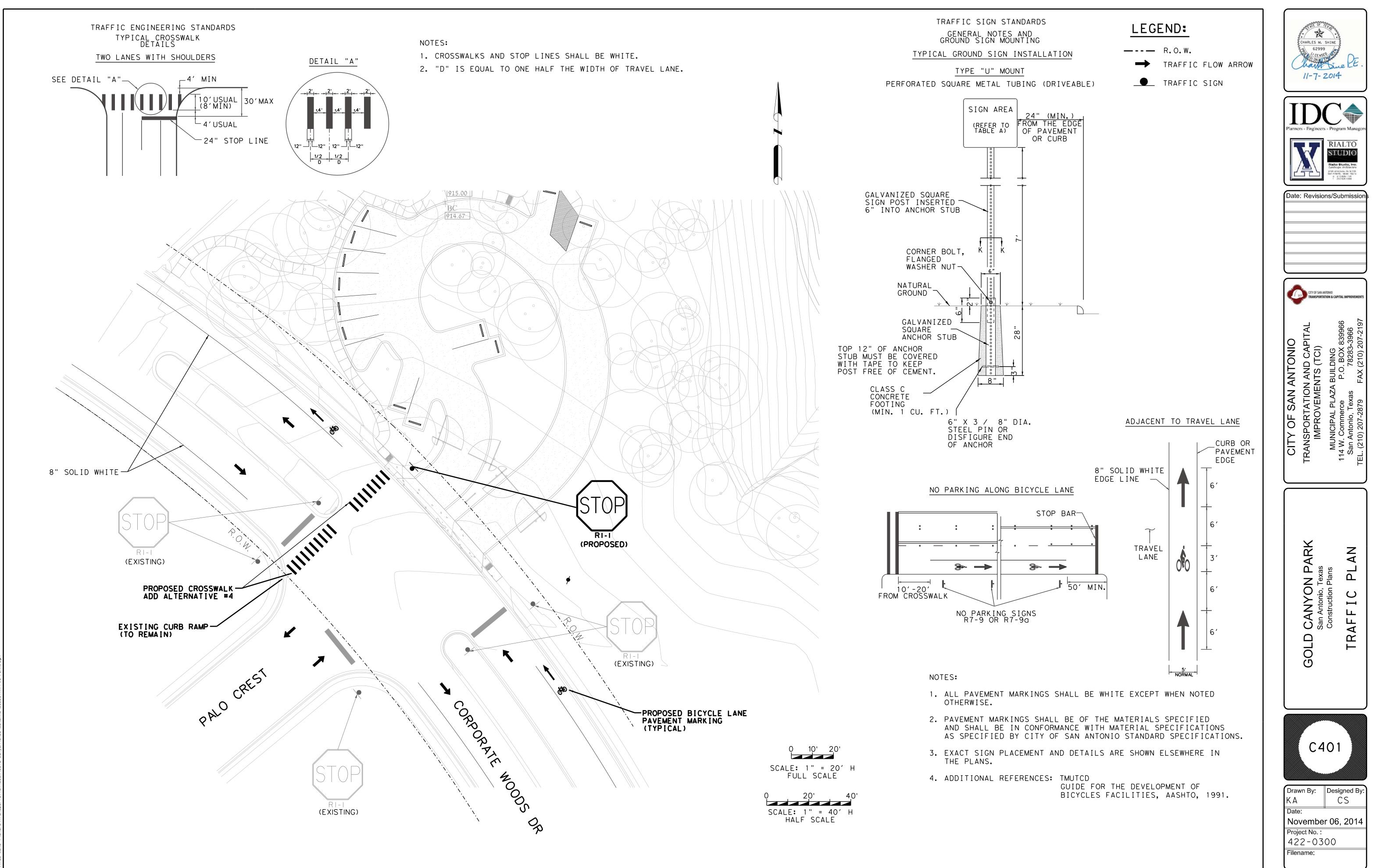


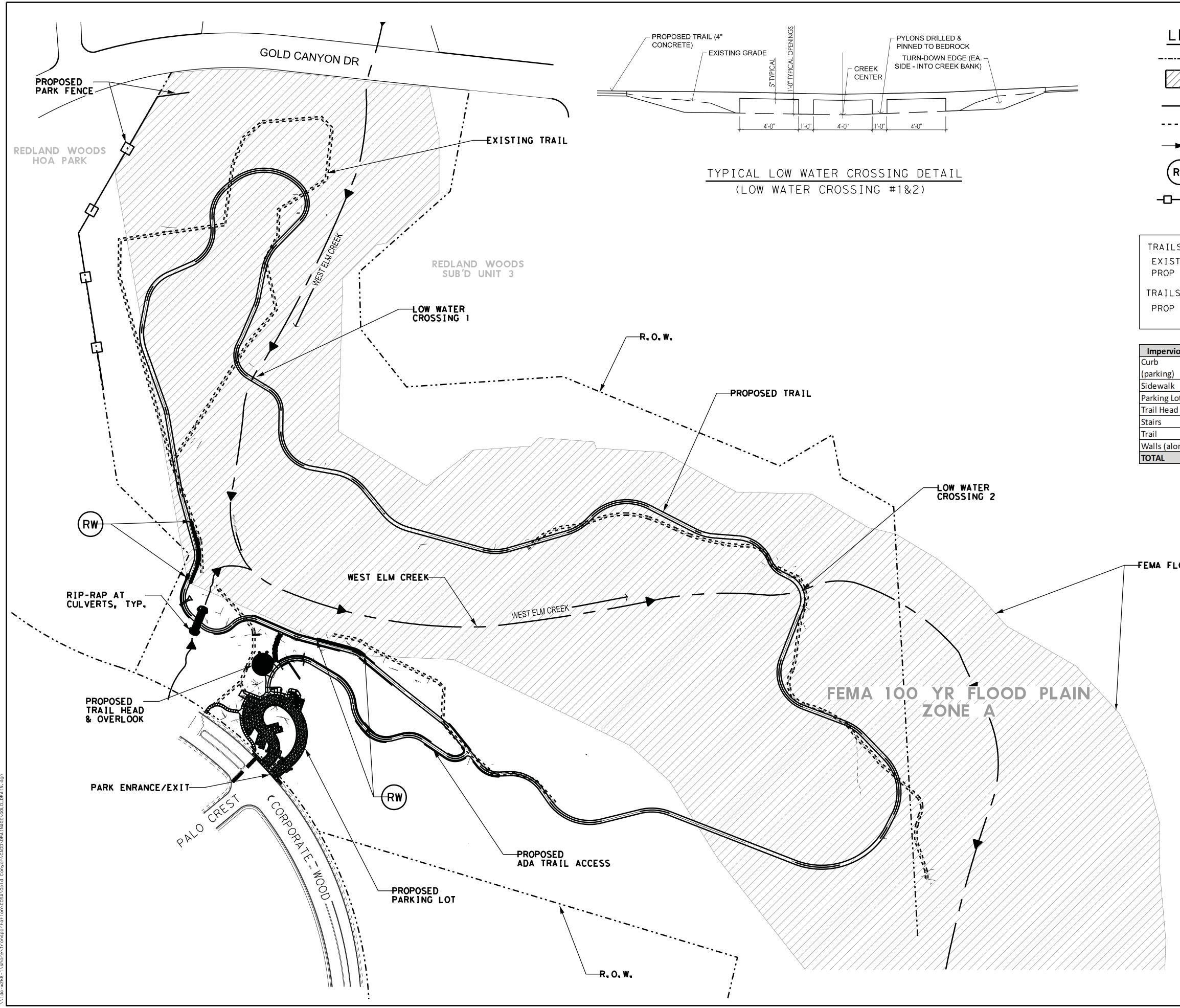
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CITY OF SAN ANTONIO	TRANSPORTATION AND CAPITAL IMPROVEMENTS (TCI)	AZA	114 W. Commerce P. O. BOX 839966 San Antonio, Texas 78283-3966	TEL. (210) 207-2879 FAX (210) 207-2197
	GOLD CANYON PARK San Antonio, Texas	Construction Plans	CIVIL UTILITY DETAILS	
K A Date Nov Proje	vn By:	r 06	gned CS	



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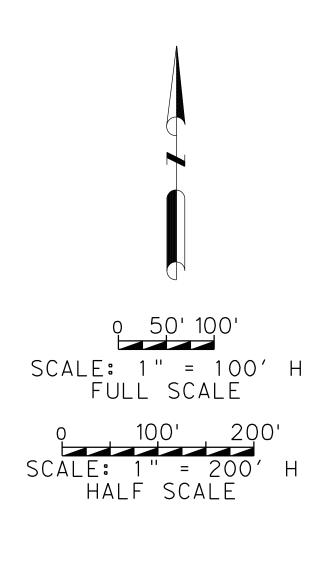
LEGEND:

	PROPERTY LINE
	ZONE A FEMA 100 YEAR FLOOD PLAIN
	PROPOSED TRAIL
	EXISTING TRAIL
	FLOW LINE OF FLOODWAY
RW	RETAINING WALL (INSIDE FLOODPLAIN)
-0	PROPOSED PARK FENCE

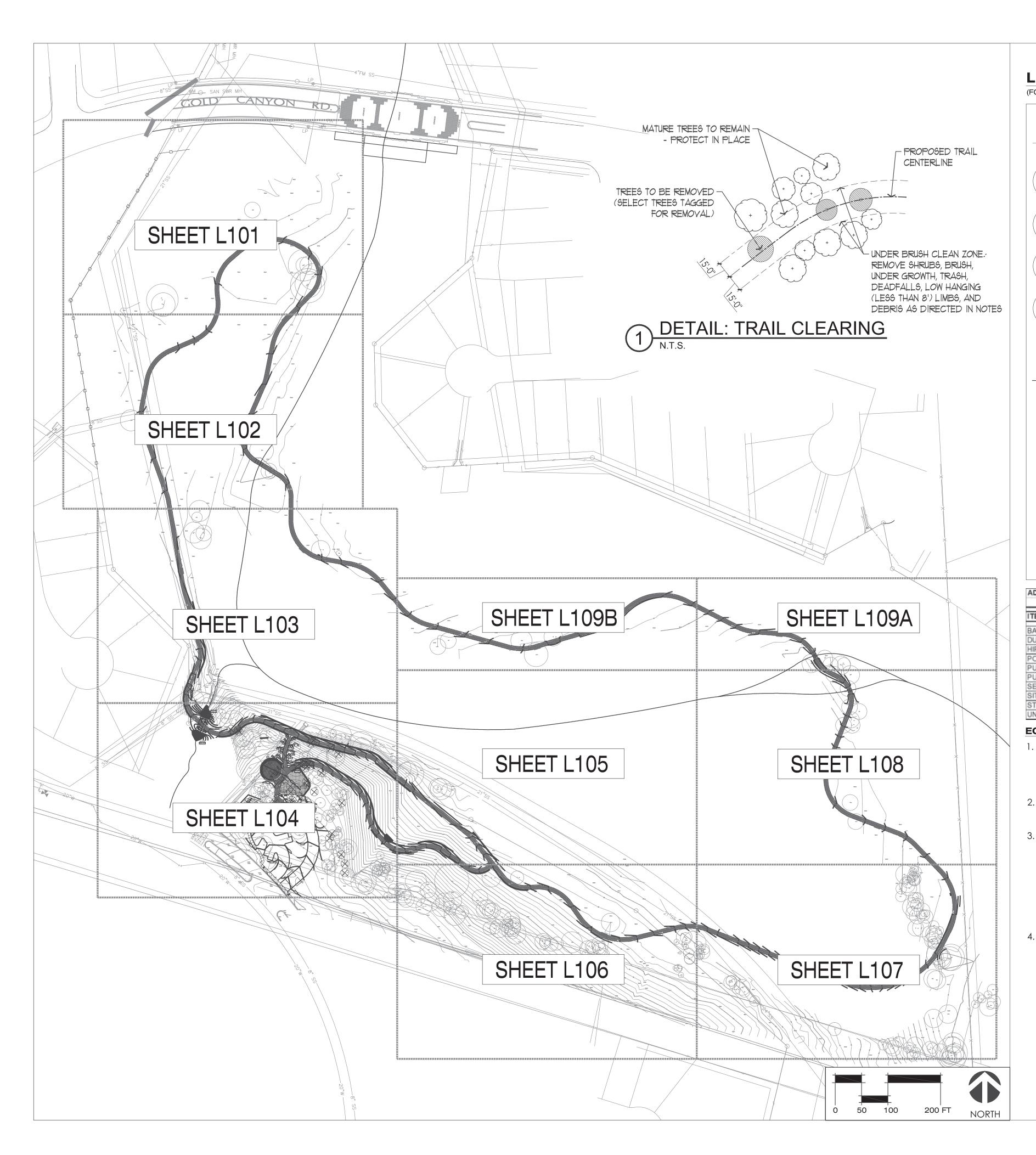
TRAILS WITHIN FEMA FLOOD PLAIN EXIST TRAIL - 3,619 LF PROP TRAIL - 3,946 LF 31,568.76 SF TRAILS OUTSIDE FEMA FLOOD PLAIN PROP TRAIL - 1772 LF 14,179.46 SF

ious Area Outside the Flood Plain				
	SF	710.29		
(SF	3,408.78		
.ot	SF	10,166.00		
d	SF	1,407.95		
	SF	509.37		
	SF	14,179.46		
ong trail)	SF	2,855.84		
	SF	33,237.69		

FEMA FLOOD PLAIN LIMITS



	D rs - Engincers	198
	CITY OF SAN AN TRANSPORTAT	NTONIO Ition & Capital Improvements
CITY OF SAN ANTONIO	TRANSPORTATION AND CAPITAL IMPROVEMENTS (TCI)	MUNICIPAL PLAZA BUILDING 114 W. Commerce P.O. BOX 839966 San Antonio, Texas 78283-3966 TEL. (210) 207-2879 FAX (210) 207-2197
	GOLD CANYON PARK San Antonio, Texas	Construction Plans FEMA DRAINAGE AREA EXHIBIT
K A Date No	vn By:	00 Designed By: CS 06, 2014



	ID AN ENLARGEMENT SHEETS)	GE
+ 100 + 100	EXISTING SPOT ELEV. PROPOSED SPOT ELEV. - EXISTING CONTOUR LINE	1. P T F C
$\langle \mathbf{X} \rangle$	EXISTING TREE (TO BE REMOVED)	2. T C C
0	EXISTING TREE TO BE SAVED - NO TREE PROTECTION REQD.	3. T A P C
	EXISTING TREE TO BE SAVED - W/ ROOT PROTECTION FENCING AND MULCH	4. P P P N
Ø	EXISTING TREE TO BE SAVED - W/ 2x4 TRUNK PROTECTION	C
	TRAIL	GE
-oo	FENCE	E D 2. <i>A</i>
	SELECTIVE CLEARING FOR AESTHETIC AND WATER QUALITY ENHANCEMENT TO BE DIRECTED IN FIELD BY L.A. SELECTIVE CLEARING FOR AESTHETIC AND WATER QUALITY ENHANCEMENT TO BE DIRECTED IN FIELD BY L.A. SELECTIVE CLEARING FOR AESTHETIC AND WATER QUALITY ENHANCEMENT TO	L P 3. C / / II T 4. P C 5. C
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PRUNE TR OR AS DI ARCHITE FALLEN L (GREATEI INSTALL E MANUFA DIRECTEI INSTALL E ("KIDDIE O COMPO APPROV 6" COMF 1.25" DIA SEPARAT AND SOI FOR L.A. BRING C FIBER TO INTENT IS AND WA	STALLATION NOTES REF LIMBS CLEAR TO 8 FEET HT. IRECTED BY LANDSCAPE CT. CLEAR AREA OF ROOTS, IMBS, OTHER DEBRIS AND ROCKS R THAN 1" DIAMETER). EXERCISE EQUIPMENT PER CTURER'S INSTRUCTION AS D BY LANDSCAPE ARCHITECT. ENGINEERED WOOD FIBER CUSHION" BY NEW EARTH SOILS & ST, SAN ANTONIO, TEXAS, OR ED AND ACCEPTED EQUAL) TO PACTED DEPTH OVER 2" LAYER OF WOOD FIBER, AGGREGATE L WITH FILTER FABRIC (SUBMIT APPROVAL). OMPACTED ENGINEERED WOOD GRADES INDICATED ON PLANS, TO MATCH TOP OF CONCRETE LL SURFACES WITH MAX. 2% D DRAIN.	5' AN MIX", VEGE FEET. BLENI DESIG EROS FOR A AS FO SHAD POUN 1/2 PO SUNN ENSU DEBR BROA INCO HARD EROS ALL S TEXAS
		TEXAS GUAI QUAI

ENERAL CONSTRUCTION NOTES

- PORTIONS OF THE PARK MAY BE RELEASED FOR PUBLIC USE PRIOR TO CLOSE OF CONTRACT. THE CONTRACTOR WILL BE RESPONSIBLE FOR BARRICADES AND SIGNAGE TO ENSURE SAFETY OF THE
- GENERAL PUBLIC AT ALL TIMES. THE CONTRACTOR SHALL MONITOR CONSTRUCTION ACCESS AND EGRESS TO PROVIDE SAFE PASSAGE OF THE PUBLIC TO NON-WORK RELATED AREAS.
- THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE ACCURACY OF INFORMATION HEREIN AND REPORTING ANY DISCREPANCY OR CONDITION(S) THAT MIGHT AFFECT INSTALLATION OF THE INTENDED IMPROVEMENTS PRIOR TO BEGINNING CONSTRUCTION.
- THE CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OR DIMENSIONS NECESSARY FOR THE CONSTRUCTION OF PROJECT IMPROVEMENTS.
- PRIOR TO MAKING ANY EXCAVATION, THE CONTRACTOR SHALL PREPARE A STORM WATER POLLUTION ABATEMENT PLAN, INSTALL POLLUTION PREVENTION MATERIALS, INSTALL TREE PROTECTION MATERIALS, AND CONTACT ALL UTILITY COMPANIES FOR LOCATION OF UNDERGROUND UTILITIES. THE CONTRACTOR SHALL TAKE STEPS NECESSARY TO PROTECT EXISTING UTILITIES AT ALL TIMES.

ENERAL NOTES

- CONTRACTOR SHALL NOTIFY LANDSCAPE ARCHITECT OF ANY EXISTING CONDITIONS THAT WILL PREVENT CONSTRUCTION AS DETAILED.
- ALL ROW DIMENSIONS SHALL BE VERIFIED ON SITE. NOTIFY THE LANDSCAPE ARCHITECT IF THERE ARE ANY DISCREPANCIES BEFORE PROCEEDING WITH THE WORK.
- CONTRACTOR SHALL IMMEDIATELY NOTIFY THE LANDSCAPE ARCHITECT OF ANY QUESTIONS THAT MAY ARISE CONCERNING THE INTENT, PLACEMENT, OR LIMITS OF DIMENSIONS NECESSARY FOR THE CONSTRUCTION OF THIS PROJECT.
- PRIOR TO MAKING ANY EXCAVATION, CONTACT ALL UTILITY COMPANIES TO LOCATE UNDERGROUND UTILITIES. CONTRACTOR SHALL TAKE ALL STEPS NECESSARY TO PROTECT
- EXISTING UTILITIES AT ALL TIMES. ANY EXISTING SITE IMPROVEMENT OR UTILITY REMOVED, DAMAGED
- OR UNDERCUT BY CONTRACTOR'S OPERATIONS SHALL BE REPAIRED OR REPLACED AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND APPROVED BY THE RESPECTIVE UTILITY AT THE CONTRACTOR'S EXPENSE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGES DONE TO EXISTING FENCES, CONCRETE, STREET PAVING, CURBS, SHRUBS, BUSHES, DRIVEWAYS, ETC., SCHEDULED TO REMAIN (NO SEPARATE PAY ITEM).

NDSCAPE PLANTING NOTES

ERENCE: WATER POLLUTION ABATEMENT PLAN, E100: TO ALL GETATED AREAS'' ADD AS FOLLOWS:

EGETATED SHOULDER: "SHADE-FRIENDLY WILDFLOWER MIX" AT 1 JND PER 1000 SQUARE FEET.

ND 6' VEGETATED SHOULDER: "TEXAS-OKLAHOMA NATIVE ROADSIDE " AT 1 POUND PER 1000 SQUARE FEET.

GETATED BUFFER: "NATIVE TEXAS MIX" AT 1 POUND PER 1000 SQUARE

ND WITH AND APPLY IN CONJUNCTION WITH ENGINEER'S IGNATED SEED MIX. FOLLOW ENGINEER'S RECOMMENDATION ON ISION CONTROL AND TEMPORARY WATERING.

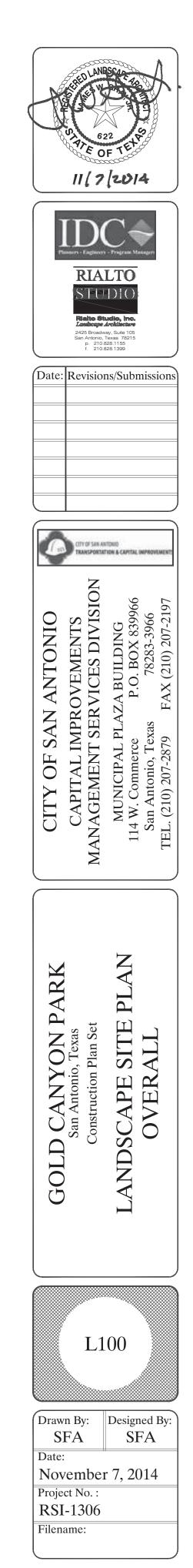
ALL OTHER AREAS DISTURBED BY CONSTRUCTION ACTIVITIES APPLY FOLLOWS (RE: L100- L109):

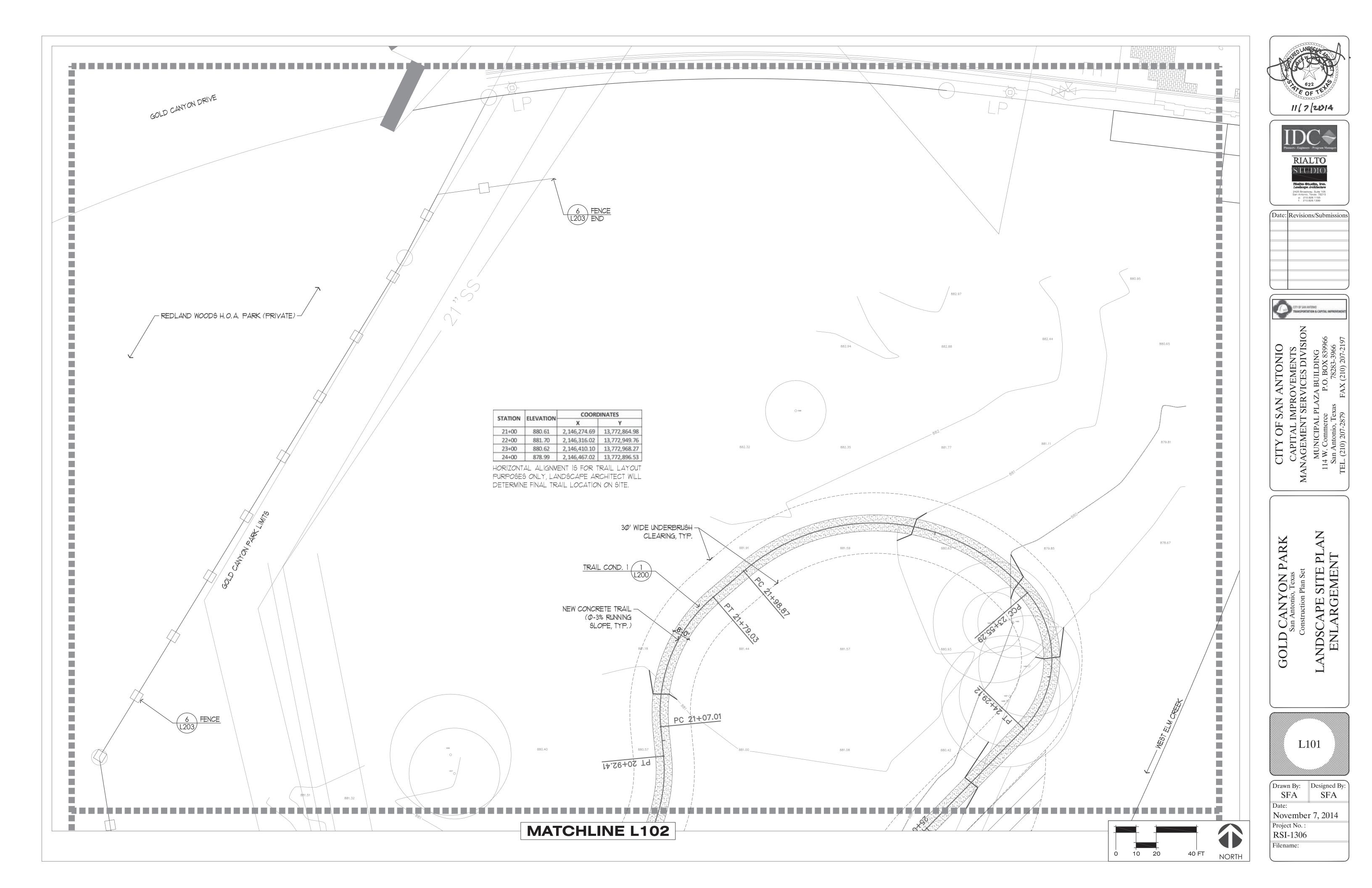
DED AREAS: A MIXTURE OF "SHADE-FRIENDLY WILDFLOWER MIX" AT 1 IND PER 1000 SQUARE FEET, AND "SHADE-FRIENDLY GRASS MIX" AT POUND PER 1000 SQUARE FEET.

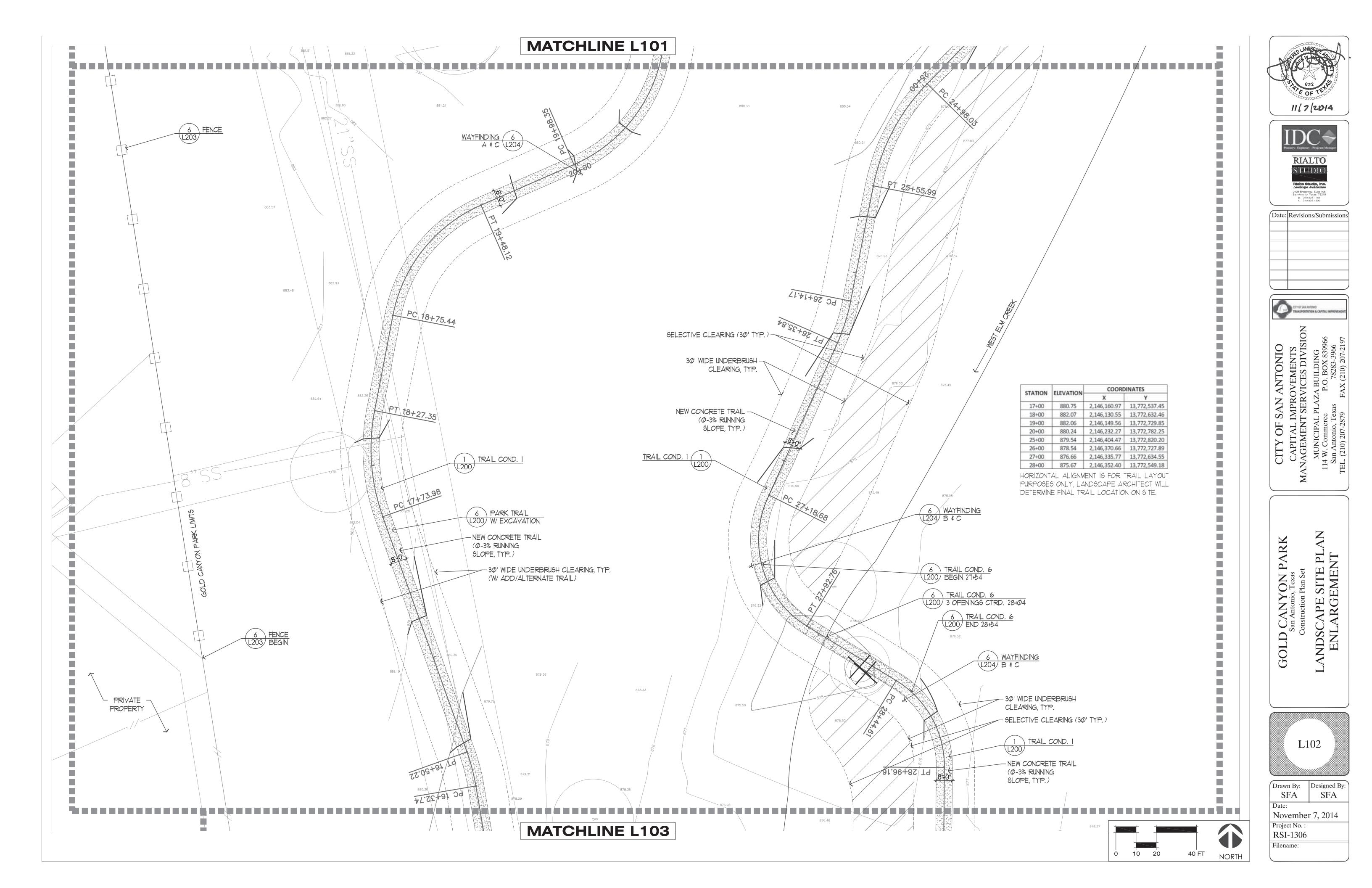
INY AREAS: "NATIVE TRAIL MIX" AT 1 POUND PER 1000 SQUARE FEET.

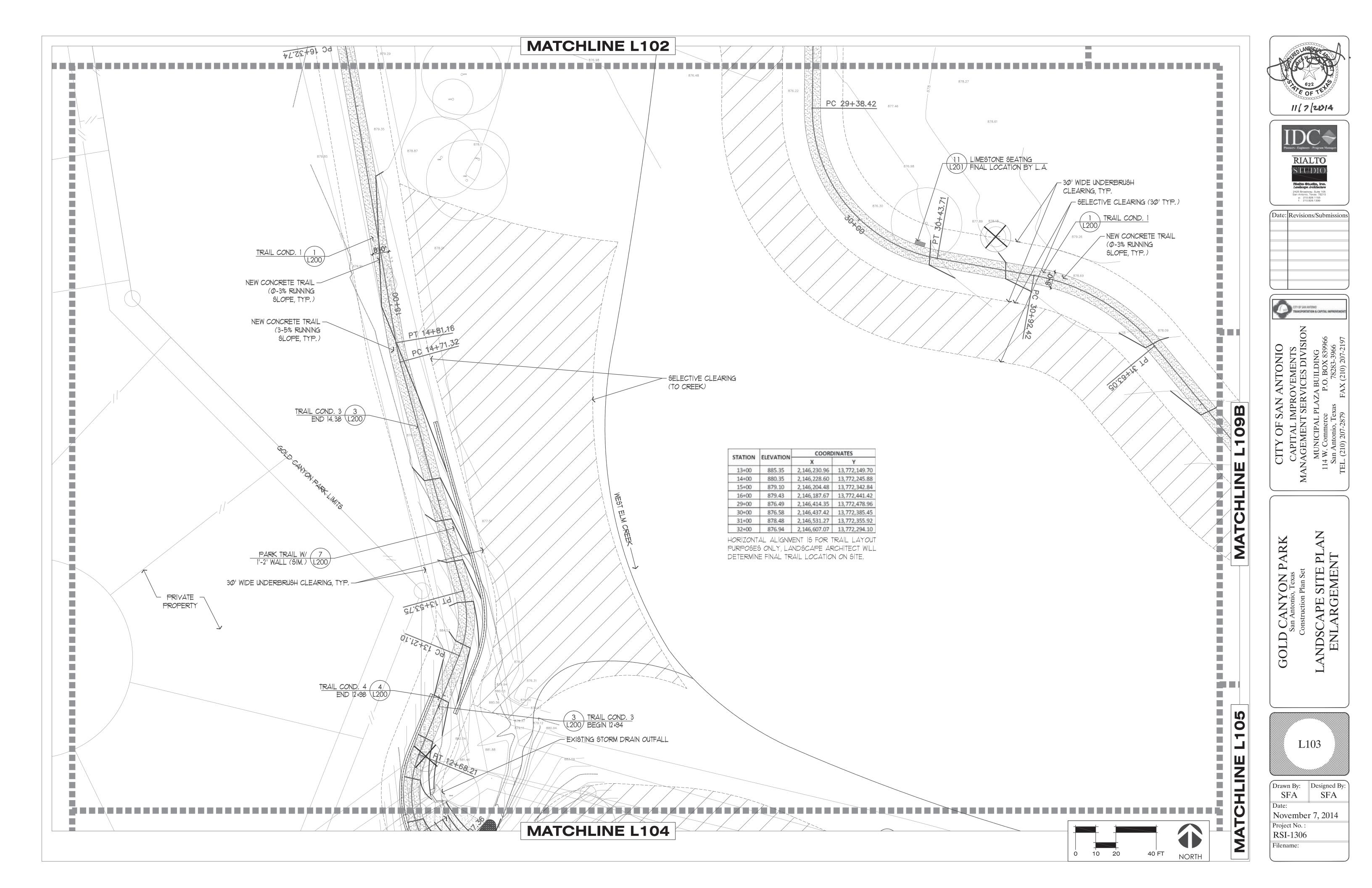
URE ADEQUATE NATIVE SOIL IS PRESENT (MIN. 4" DEPTH) OR INSTALL IMPORTED TOPSOIL TO MIN. 4" DEPTH PRIOR TO SEEDING. REMOVE RIS AND ROCKS GREATER THAN 1" DIAMETER, FINE GRADE, DADCAST SEED AT RATES SPECIFIED, LIGHTLY RAKE TO ORPORATE, AND DUST WITH 1" DEPTH DOUBLE SHREDDED NATIVE 2DWOOD MULCH. FOLLOW ENGINEER'S RECOMMENDATION ON DISION CONTROL AND TEMPORARY WATERING.

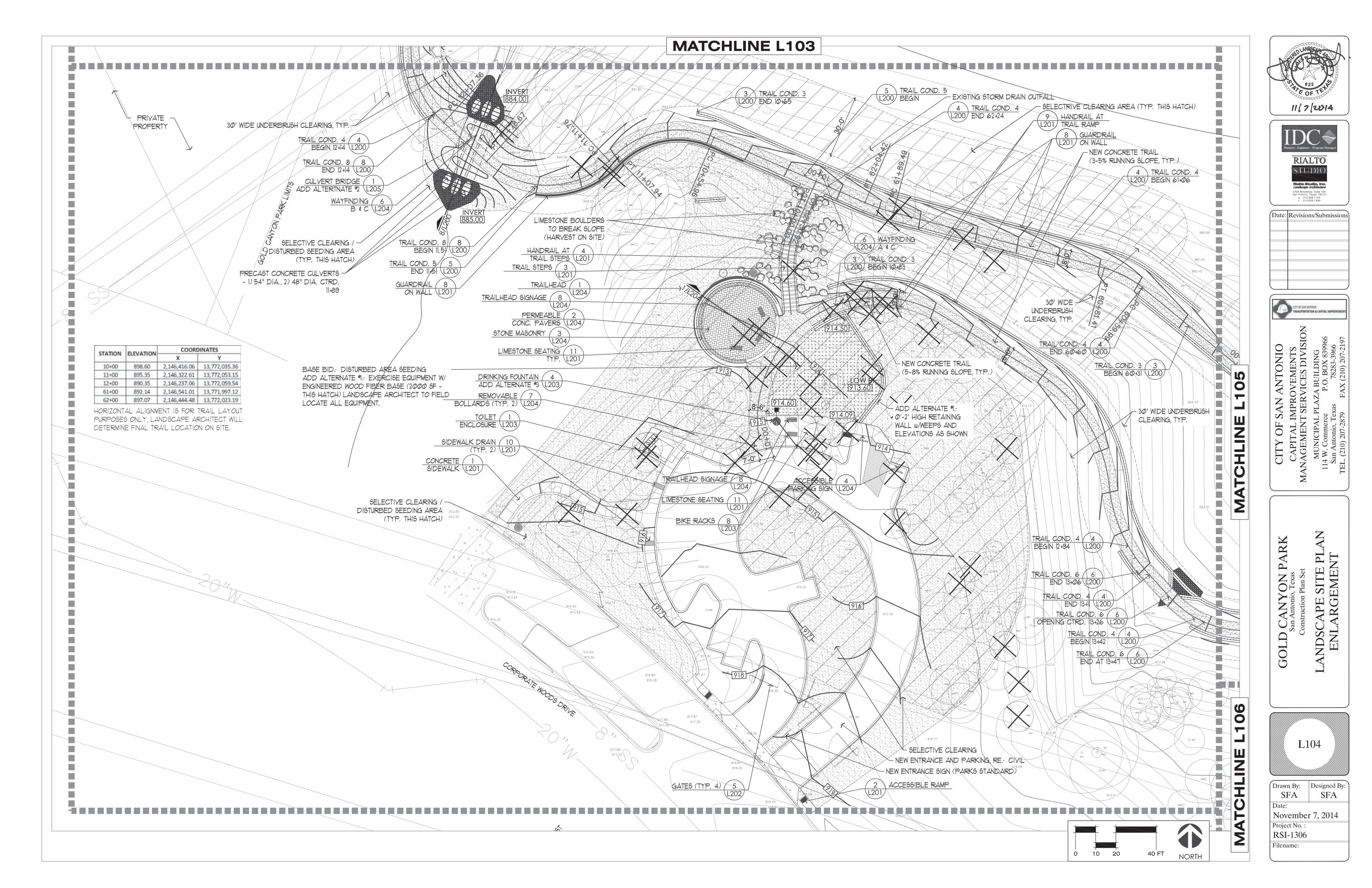
SEED MIXES AS SUPPLIED BY NATIVE AMERICAN SEED, JUNCTION, AS 800.728.4043, OR APPROVED AND ACCEPTED EQUAL. SUPPLY ARANTEED ANALYSIS AND PROOF OF PURCHASE (INCLUDING ANTITY) AT SUBSTANTIAL COMPLETION FOR VERIFICATION.

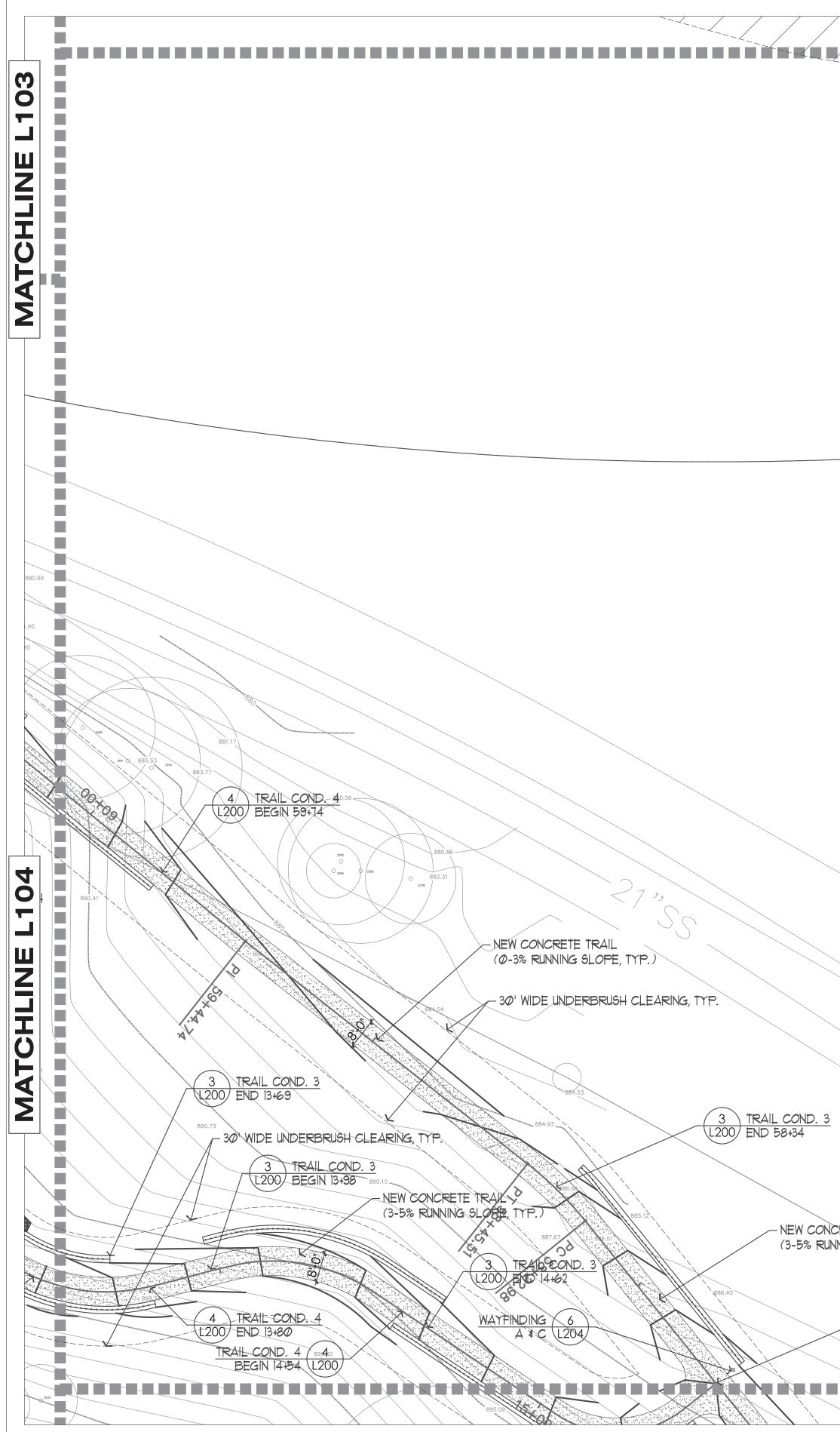












MATCHLINE L109B

WEST ELM CREEK	

883.08

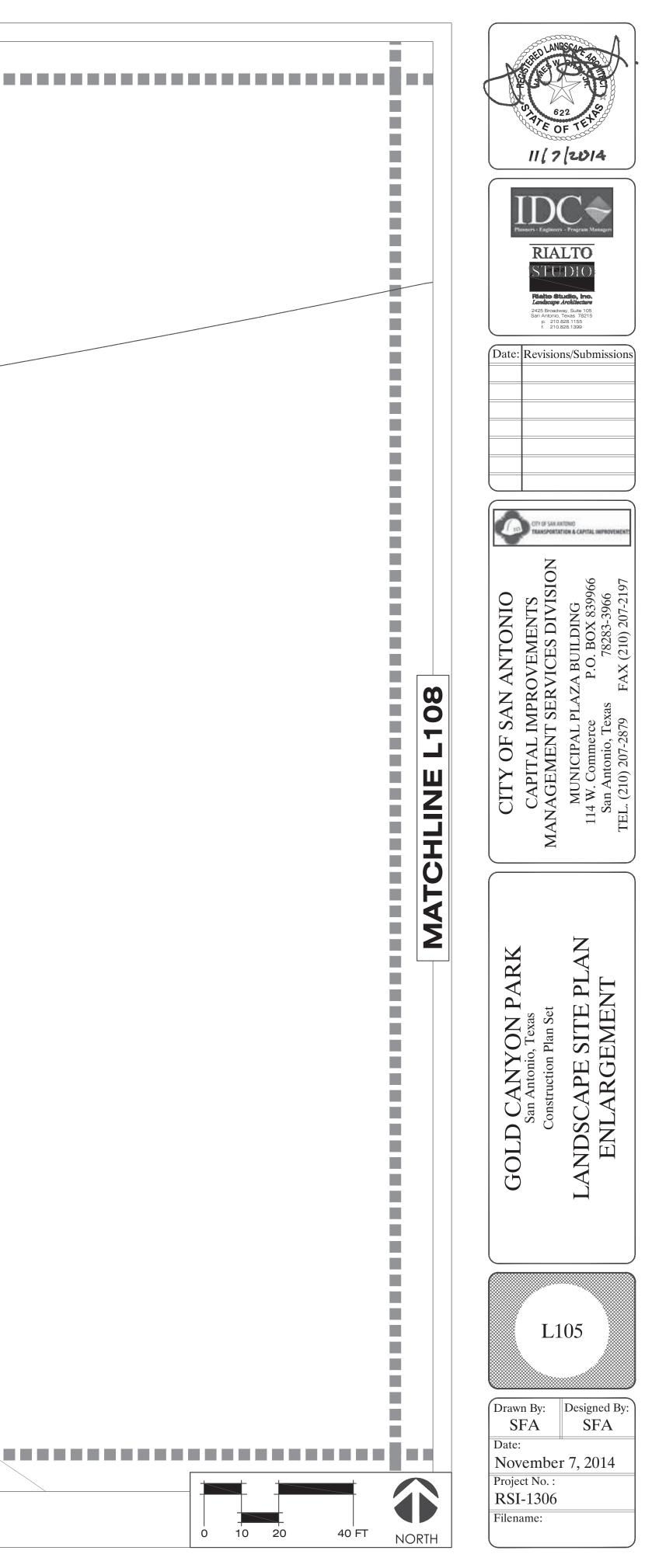
STATION	ELEVATION	COORDINATES		
STATION		х	Y	
59+00	885.50	2,146,702.18	13,771,881.93	
60+00	888.66	2,146,624.30	13,771,944.66	

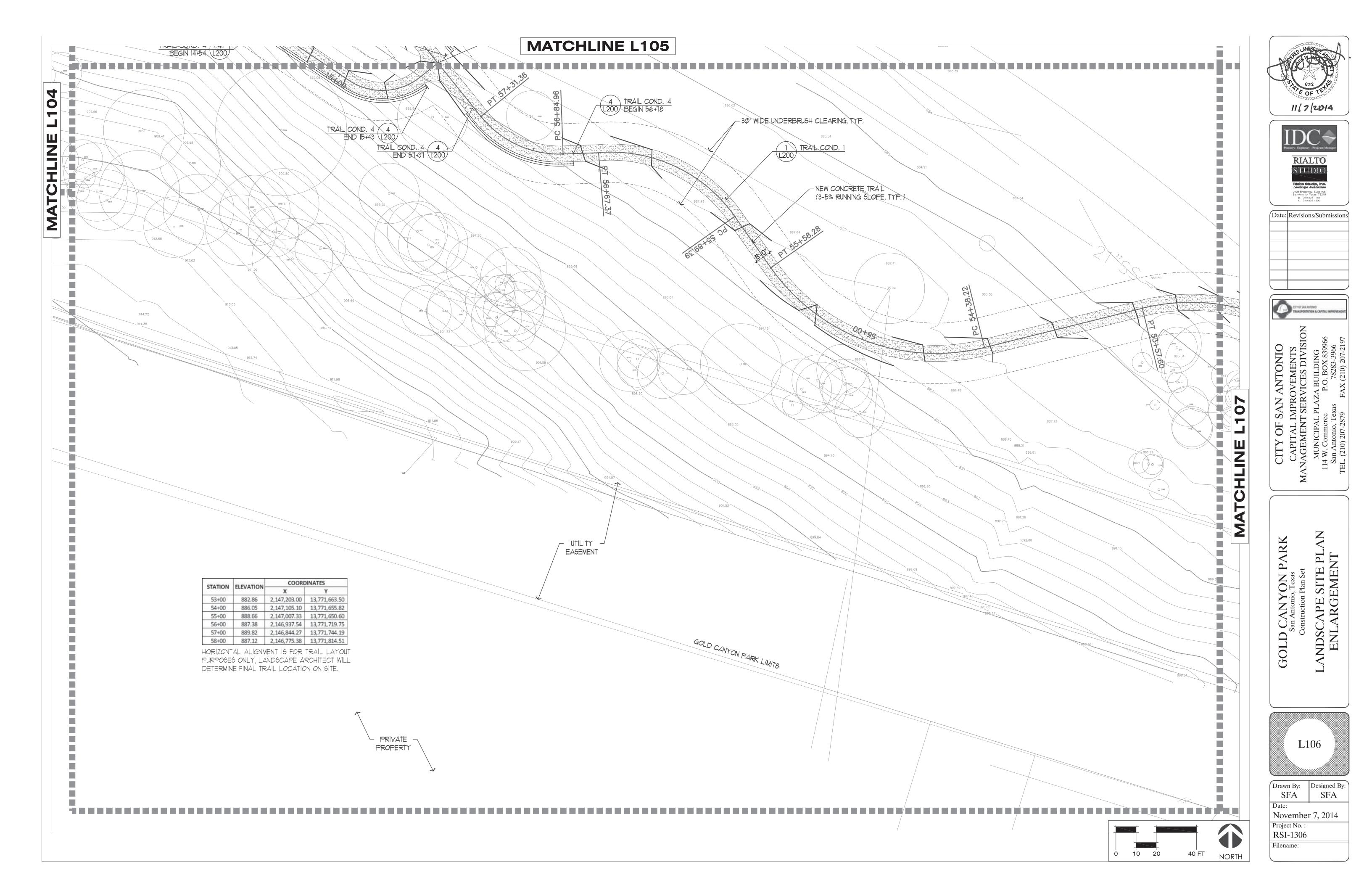
DETERMINE FINAL TRAIL LOCATION ON SITE.

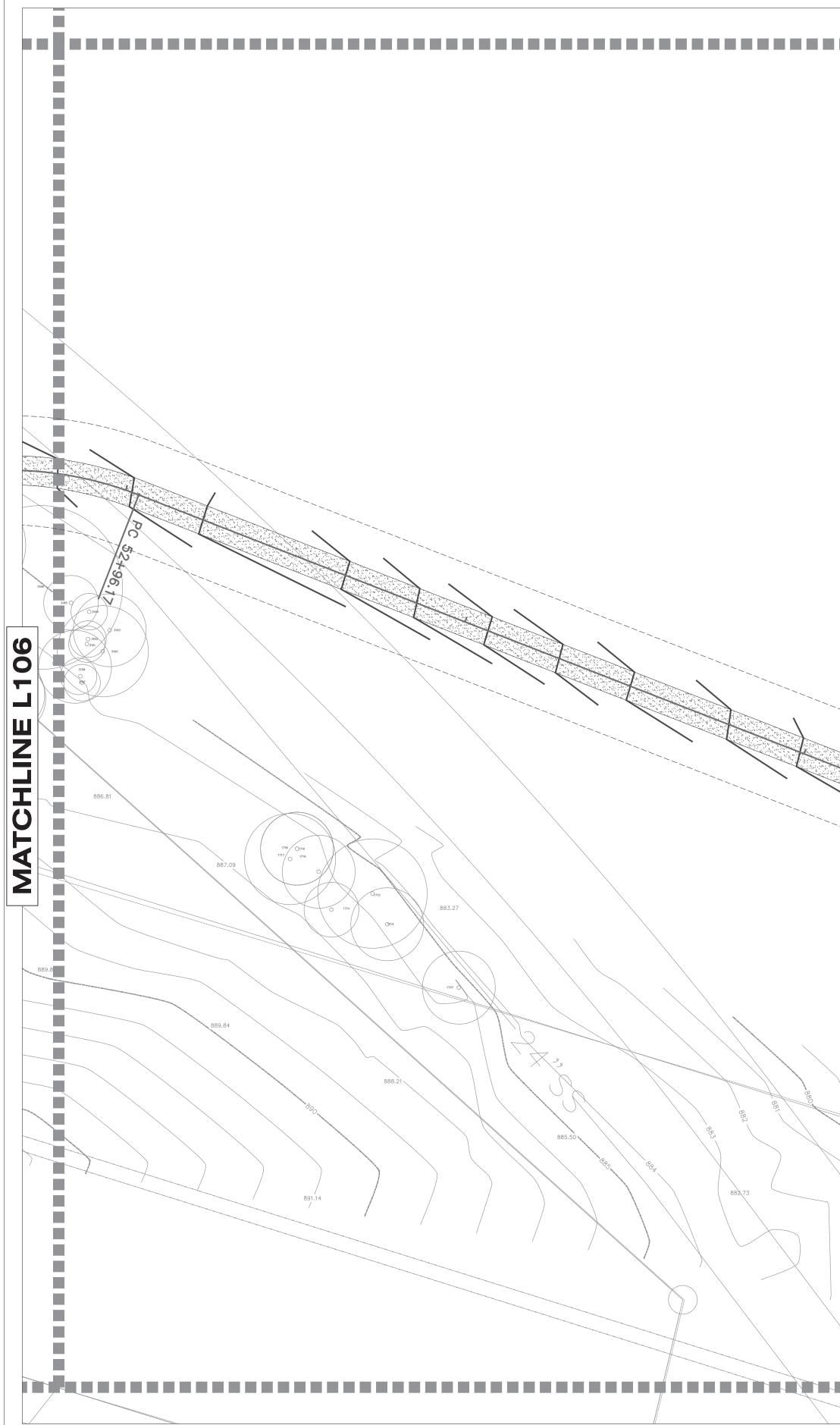
- NEW CONCRETE TRAIL (3-5% RUNNING SLOPE, TYP.)

> 3 TRAIL COND. 3 L200 BEGIN 57+66

MATCHLINE L106





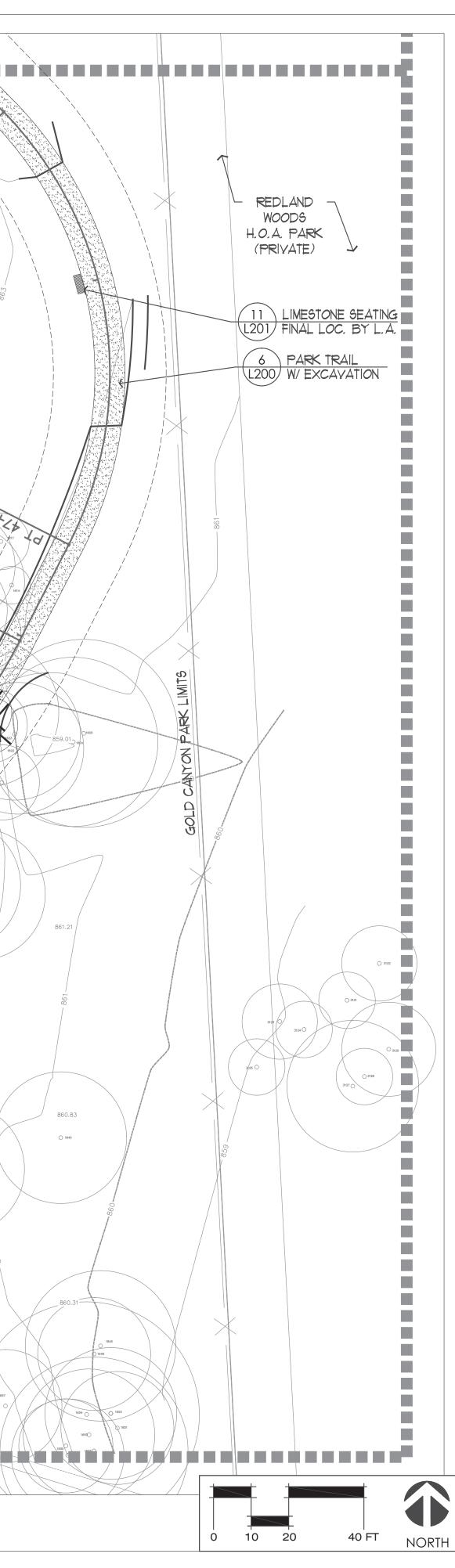


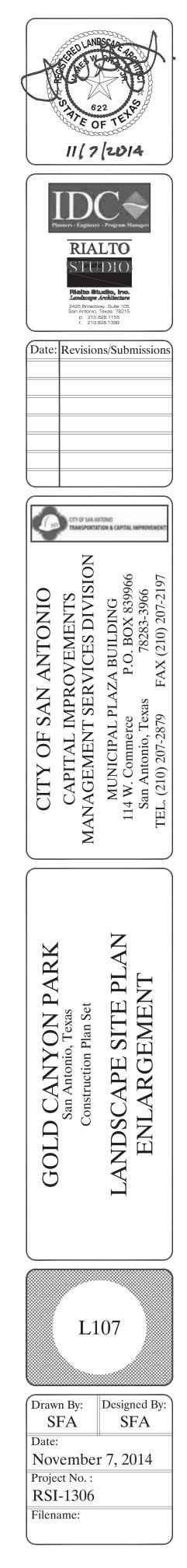
		C. C. C.
STATION ELEVATION COORDINATES X Y 47+00 862.36 2,147,671.11 13,771,730.41		863.46
48+00 862.47 2,147,650.90 13,771,635.41 49+00 866.72 2,147,580.70 13,771,566.80 50+00 871.22 2,147,483.11 13,771,556.28 51+00 876.22 2,147,389.41 13,771,591.05 52+00 880.91 2,147,296.22 13,771,627.30 HORIZONTAL ALIGNMENT IS FOR TRAIL LAYOUT PURPOSES ONLY, LANDSCAPE ARCHITECT WILL DETERMINE FINAL TRAIL LOCATION ON SITE.		
	NEW CONCRETE TRAIL @@-3% RUNNING SLOPE, TYP. TRAIL COND. 1 1 L200	
30' WIDE UNDERBRUSH CLEARING, TYP.	NEW CONCRETE TRAIL (3-5% RUNNING SLOPE, TYP.)	
WAYFINDING 6 A & C (L204)		1620

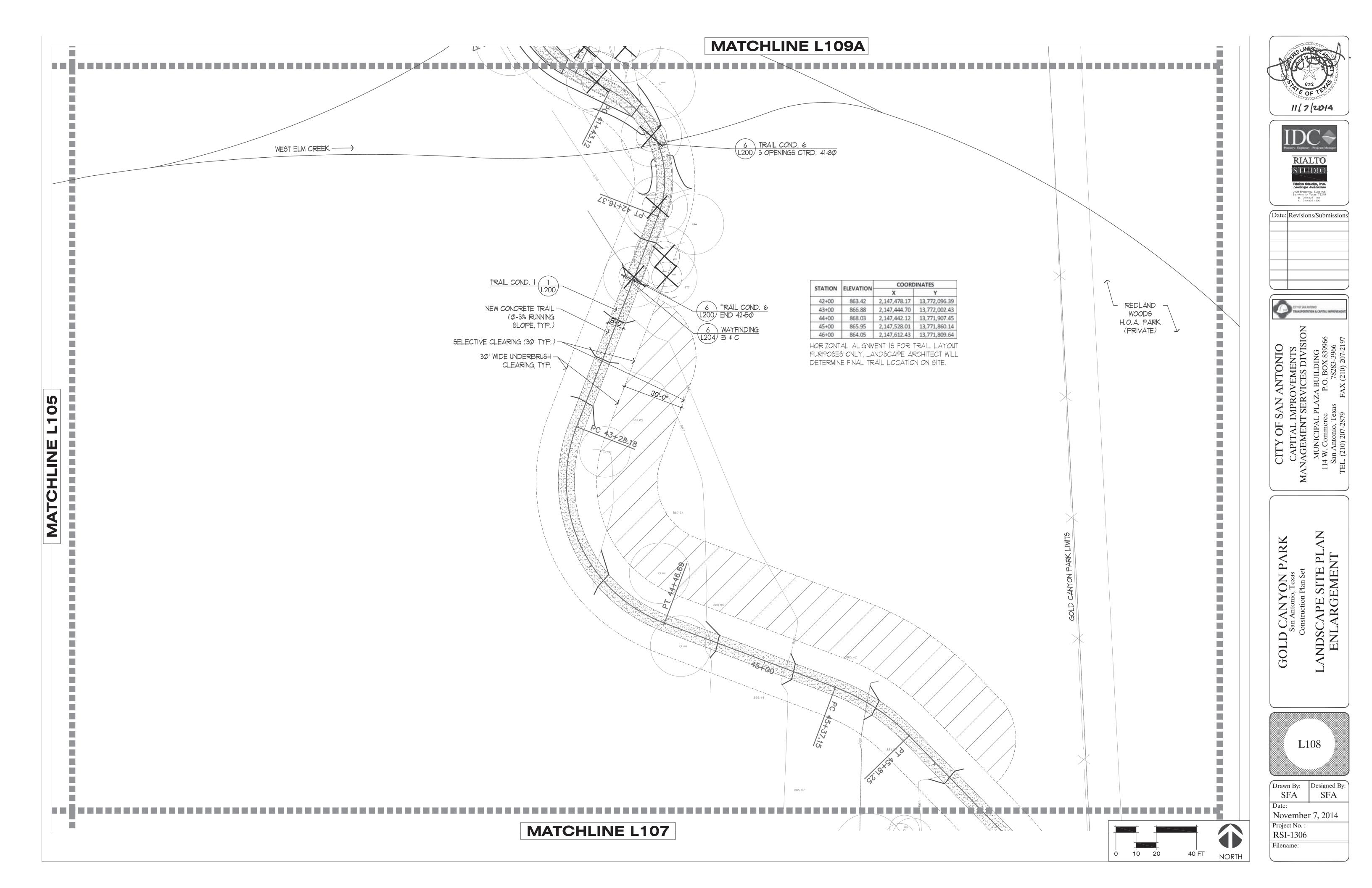
876.65

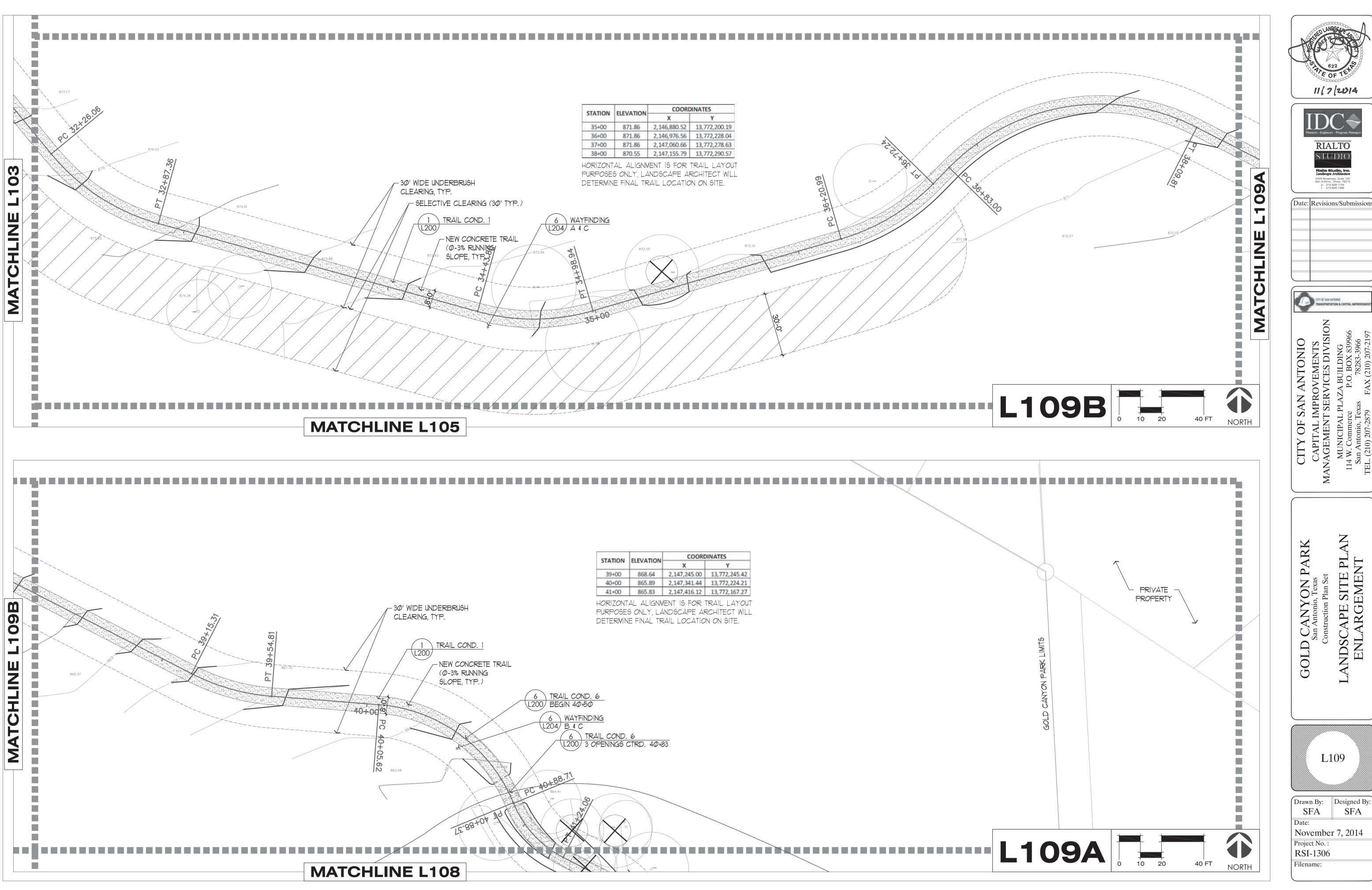
873.90

871.12



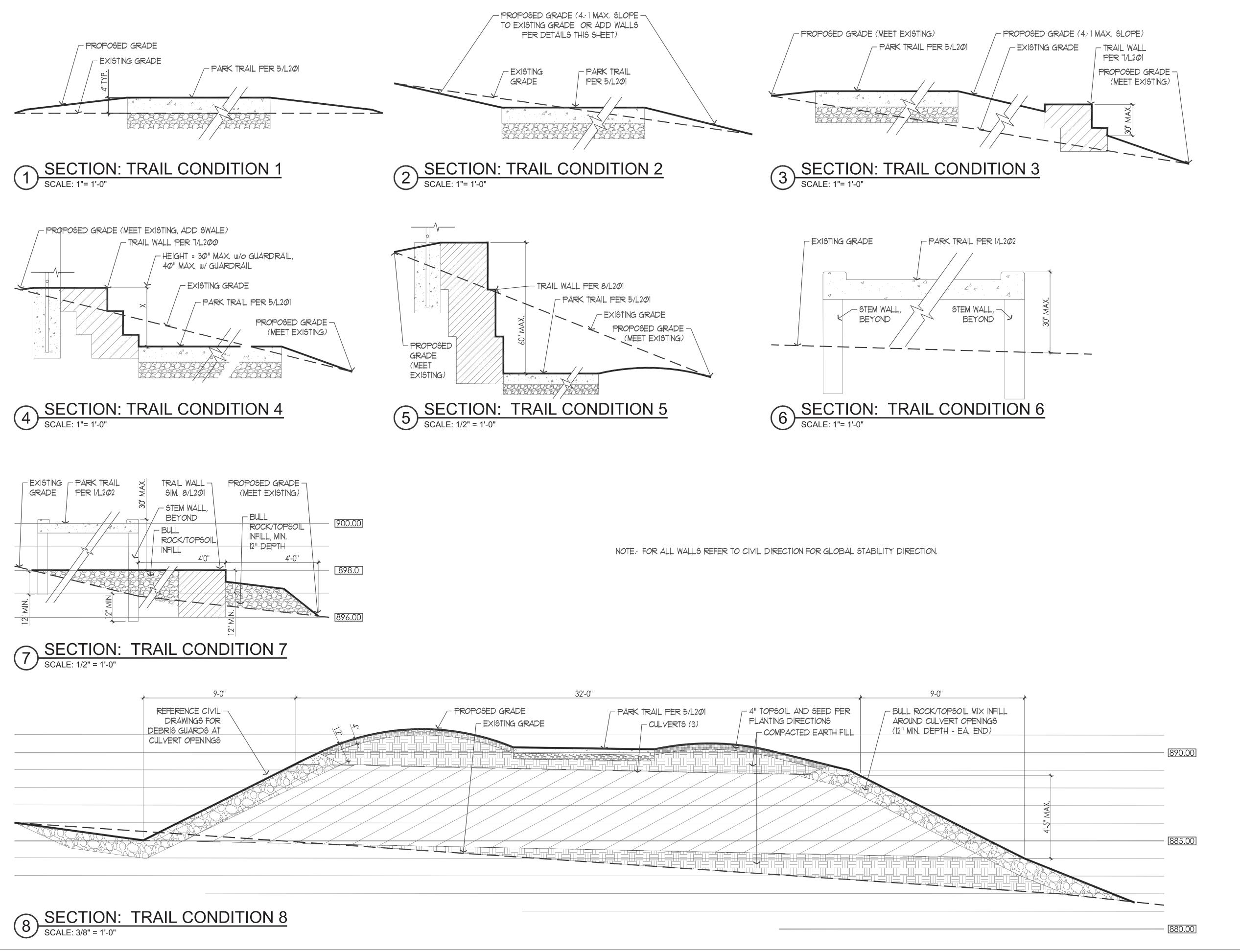




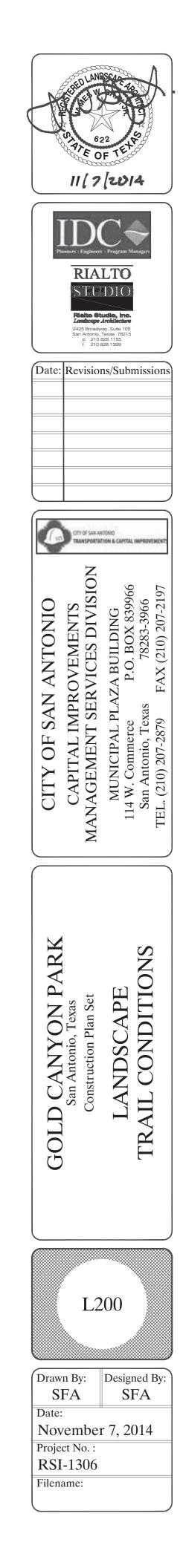


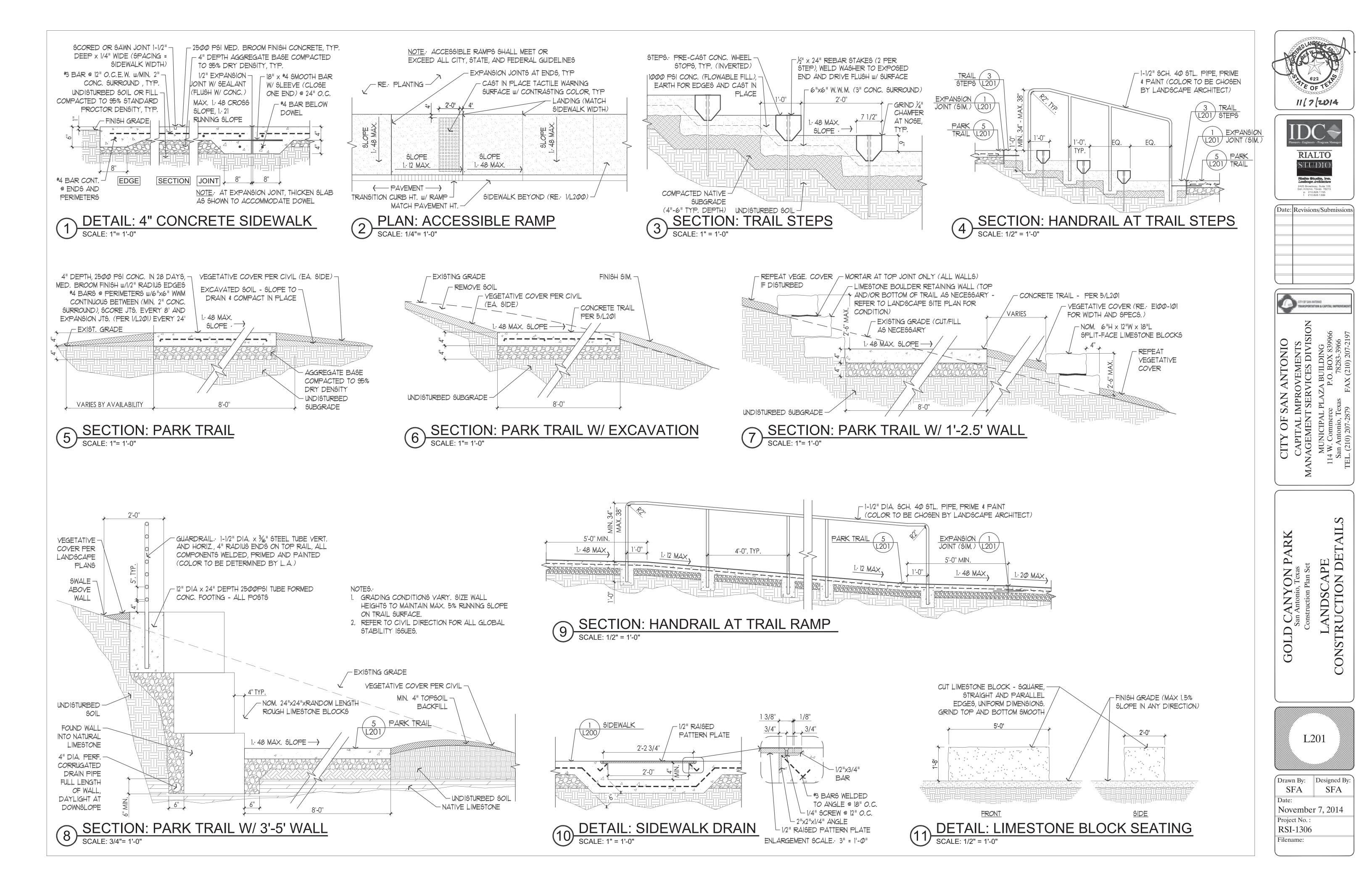
STATION	ELEVATION	COORDINATES	
STATION		x	Y
35+00	871.86	2,146,880.52	13,772,200.19
36+00	871.86	2,146,976.56	13,772,228.04
37+00	871.86	2,147,060.66	13,772,278.63
38+00	870.55	2,147,155.79	13,772,290.57

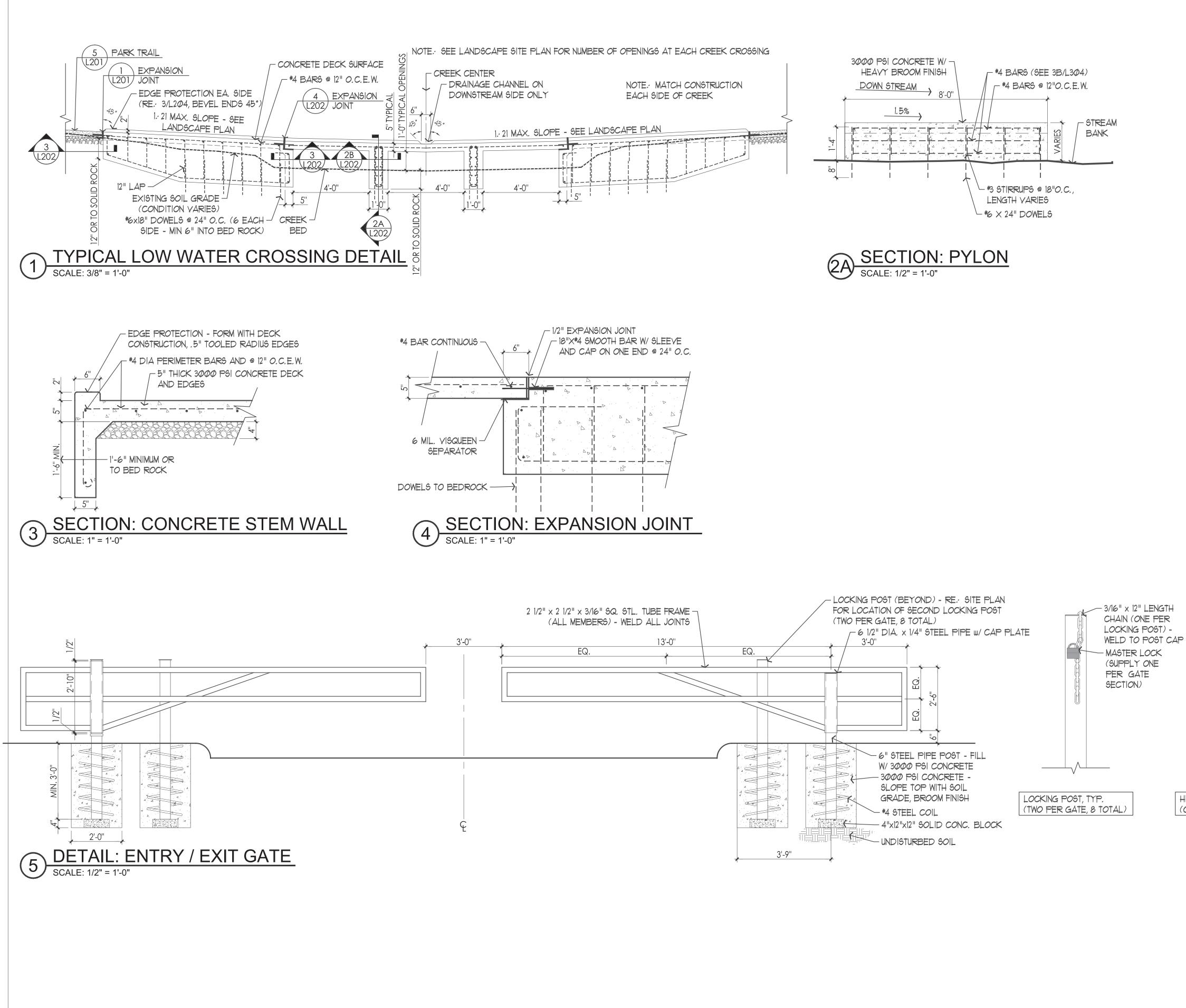
STATION	ELEVATION	COORDINATES		
STATION	ELEVATION	x	Y	
39+00	868.64	2,147,245.00	13,772,245.42	
40+00	865.89	2,147,341.44	13,772,224.21	
41+00	865.83	2,147,416.12	13,772,167.27	

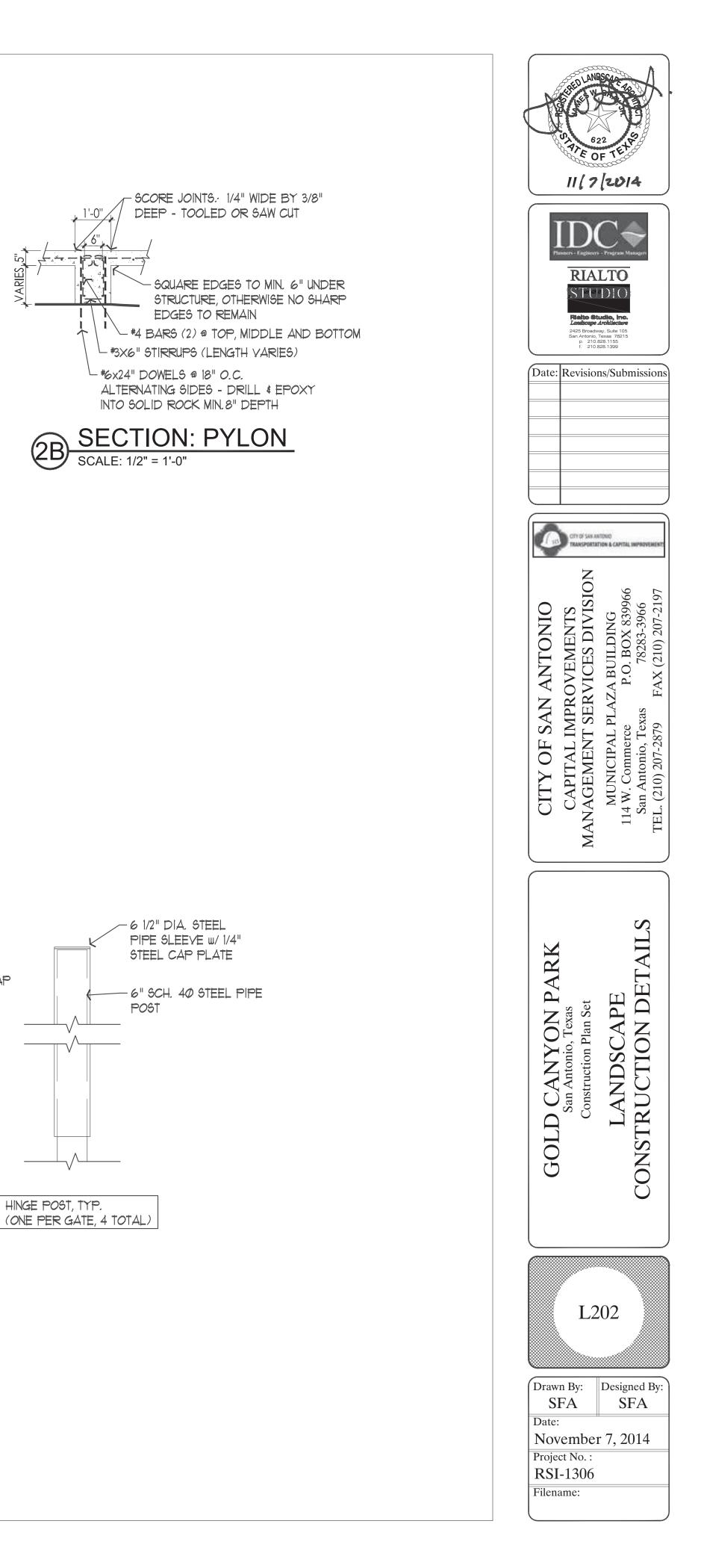


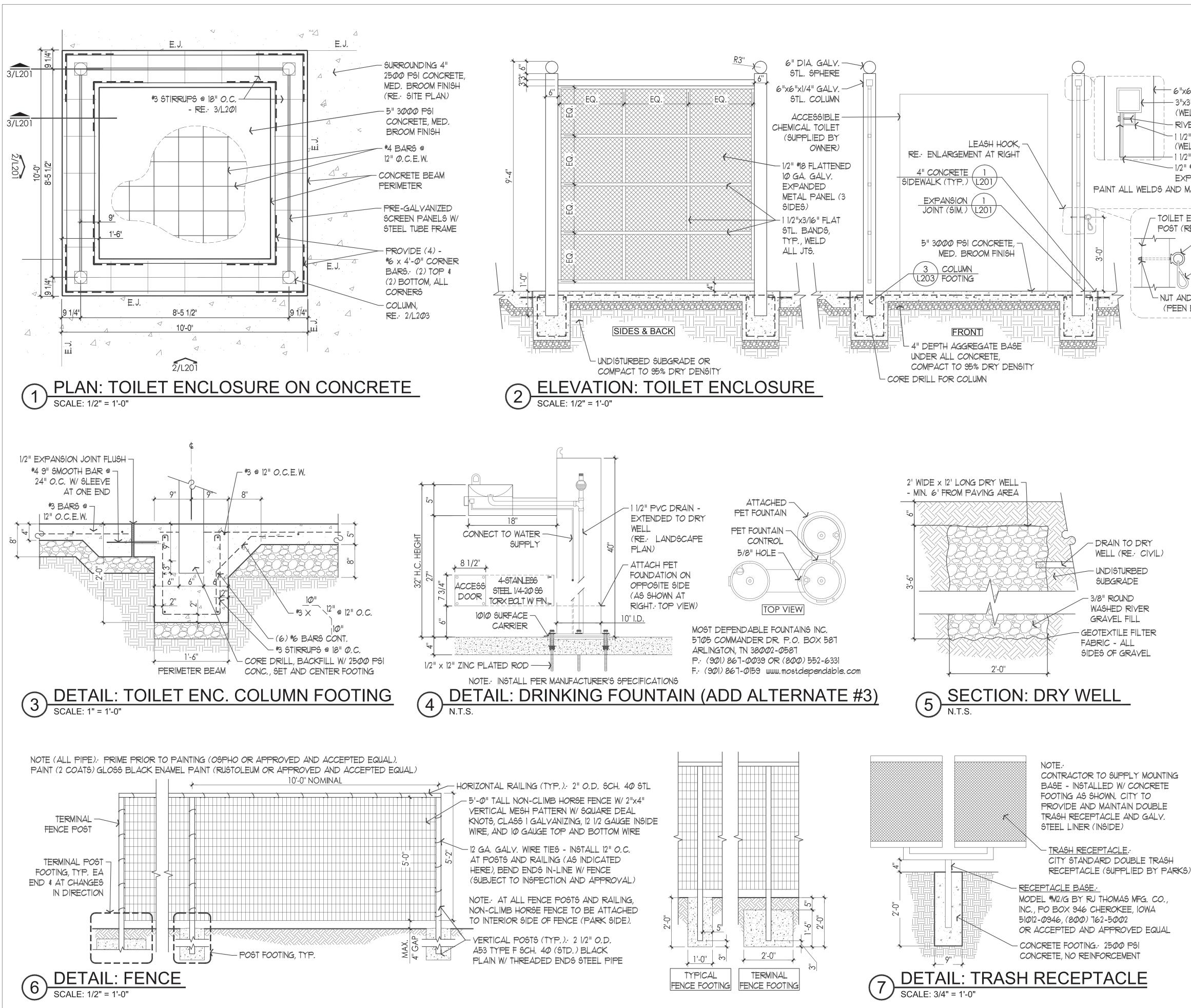
32'-0''			9-0''	- <i>#</i>
RADE	PARK TRAIL PER 5/L2Ø1	- 4" TOPSOIL AND SEED PER PLANTING DIRECTIONS COMPACTED EARTH FILL	- BULL ROCK/TOPSOIL MIX INFILL AROUND CULVERT OPENINGS (12" MIN. DEPTH - EA. END)	
				\
				X
				4'-5" M
		╧╢╧ ╫ ╧╢╧║╧║╧║╧║╧║ ┶╾┶╾╙═╙╞═╢ _╤ ║╤║╤║═║		







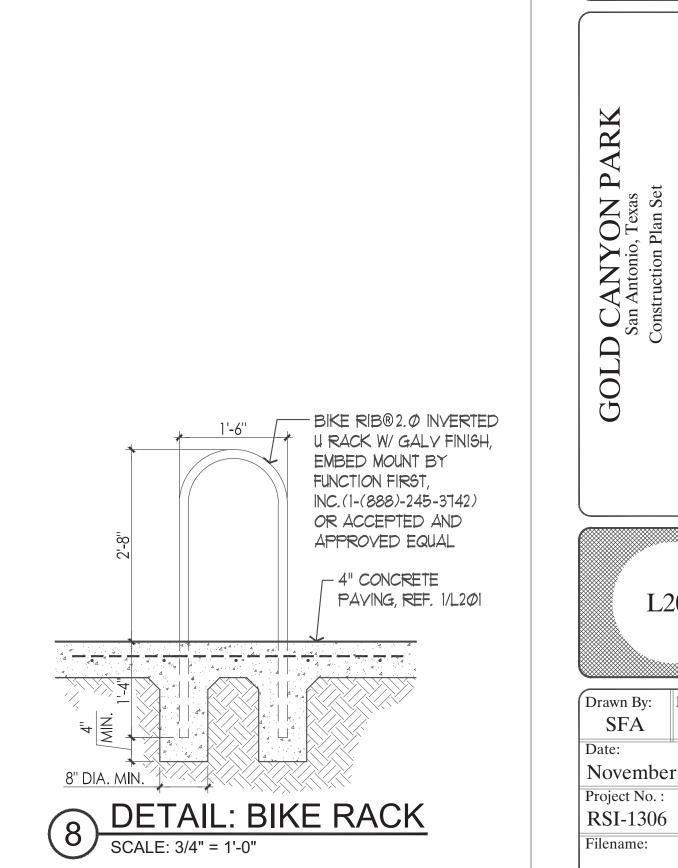


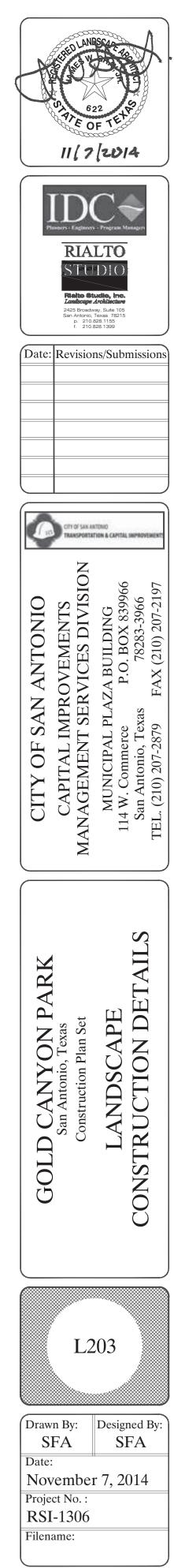


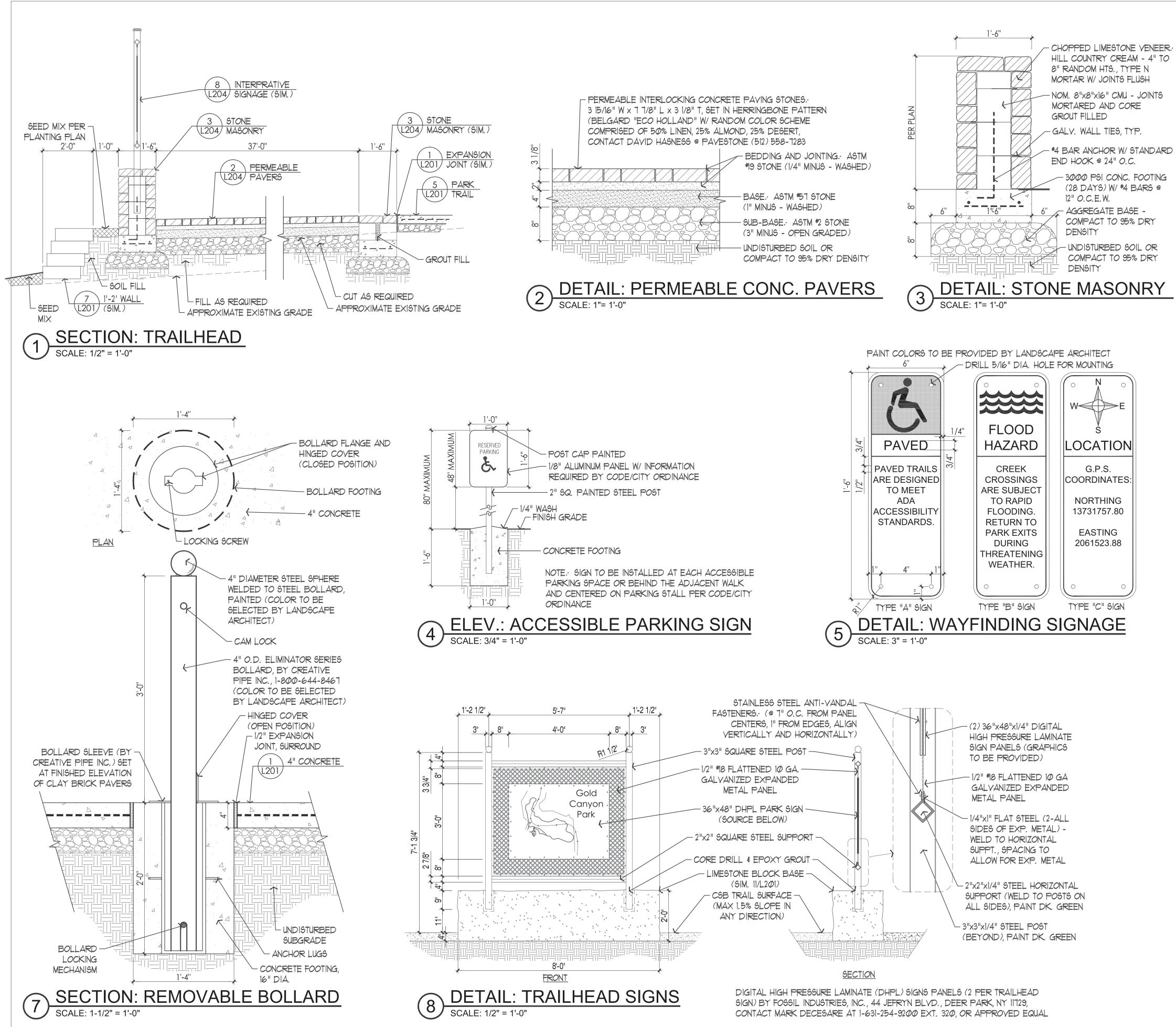
A STL. COLUMN 3"x3"x1/4" SQ. STL. COLUMN 3"x3"x1/4" SQ. STL. SUPPORT (WELD TO POSTS) RIVET 1 1/2"x1 1/2"x3%" SQ. STL. SUPPORT (WELD TO 3X3 @ 12" O.C.) 1 1/2"x3/16" FLAT STL. BAND 1/2" #18 FLATTENED 10 GA. GALV. EXPANDED METAL PANEL PAINT ALL WELDS AND MARKS, ETC. W/ ZINC-RICH PRIMER

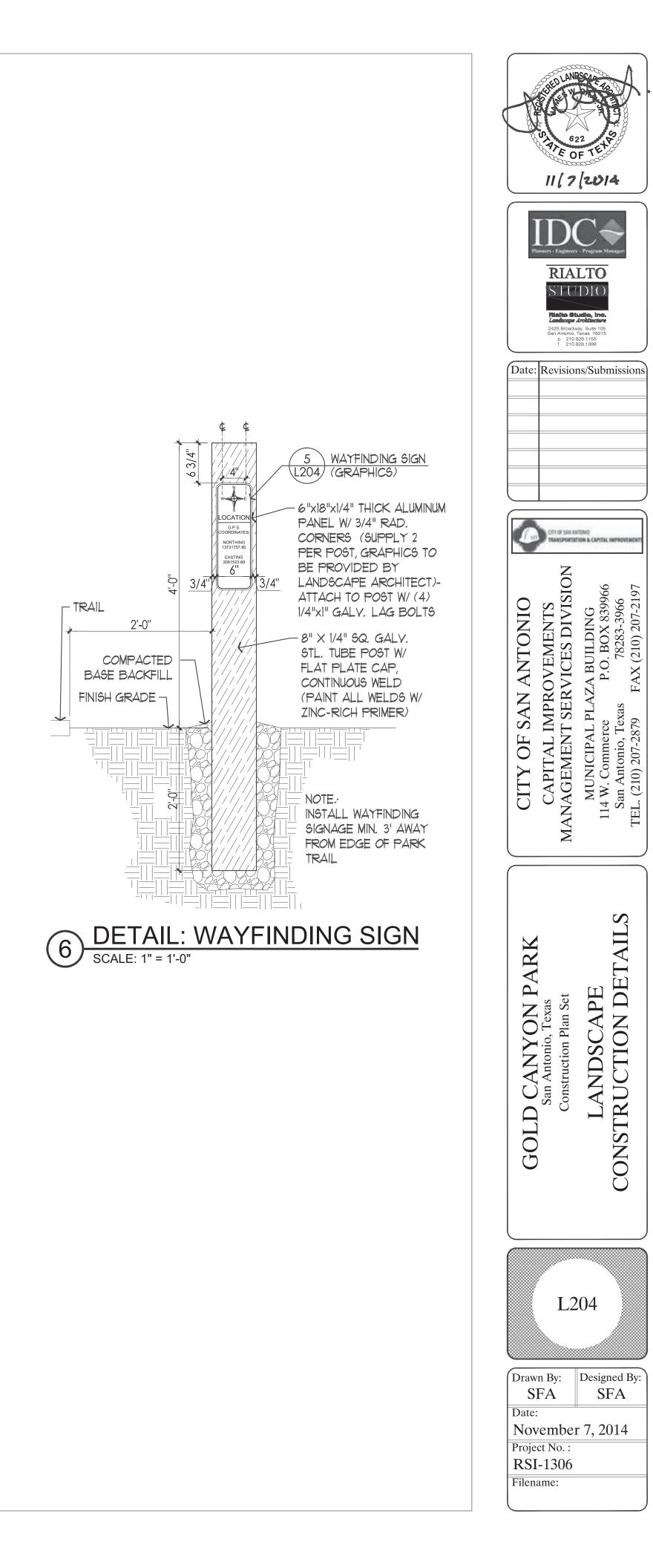
> TOILET ENCLOSURE POST (RE. 2/L202) - 3/8" x 1" EYE BOLT BRASS SNAP SWIVEL

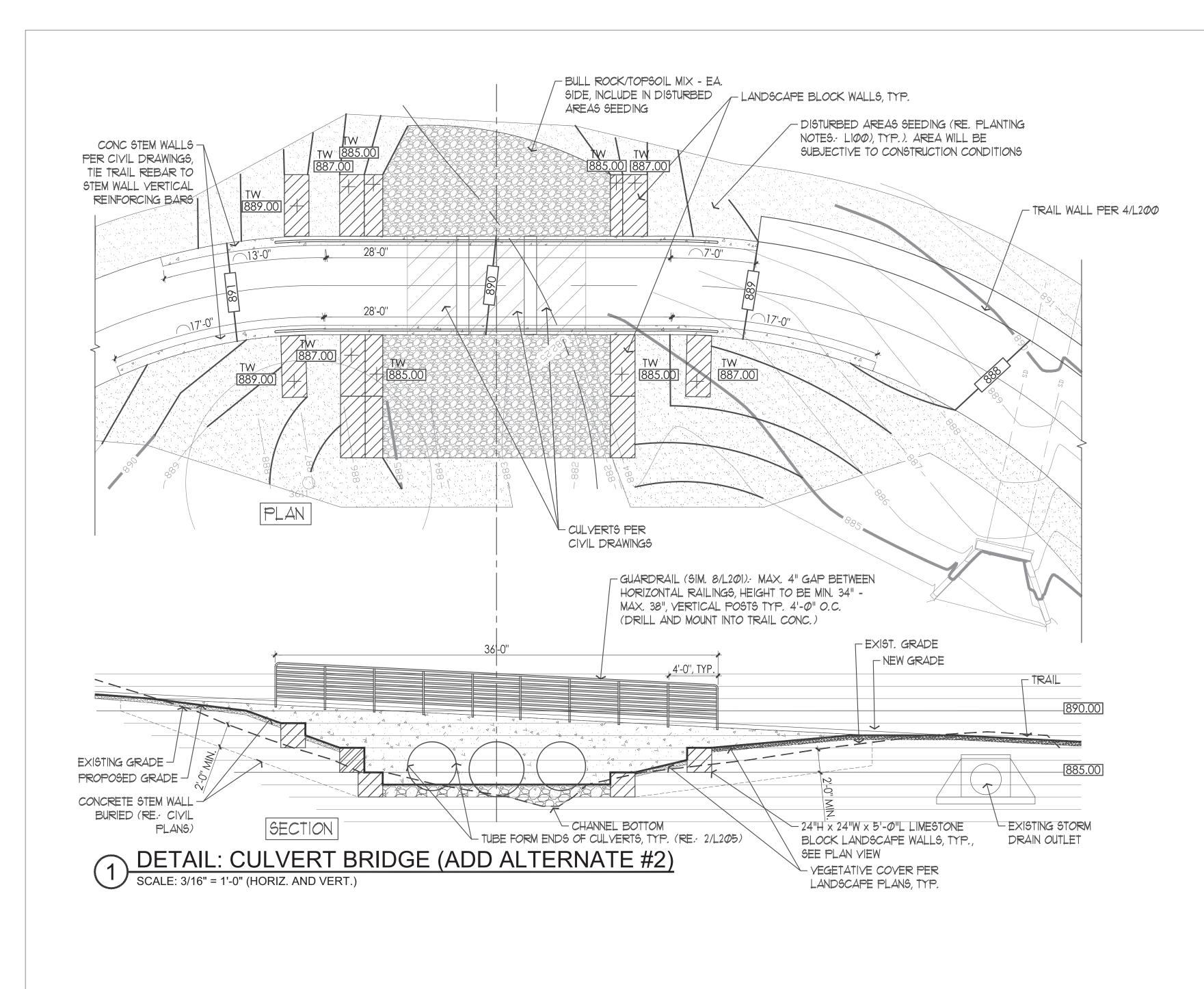
(PEEN BOLT THREADS)

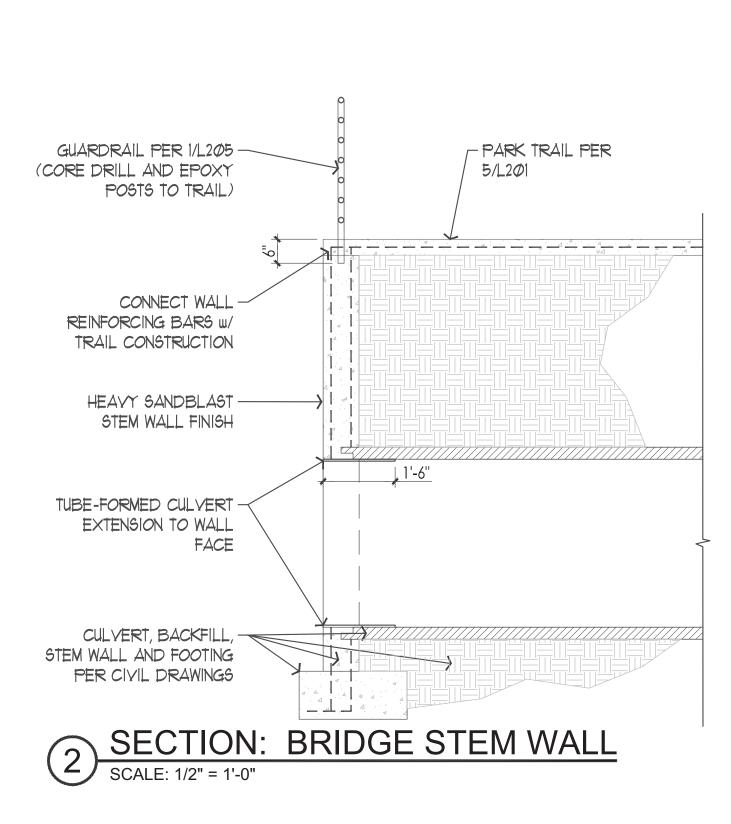


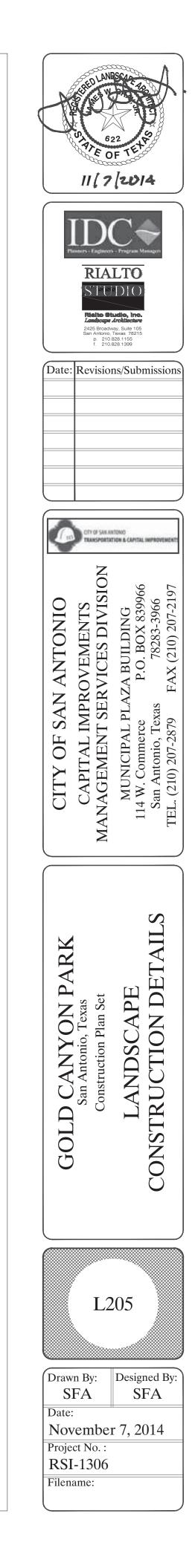


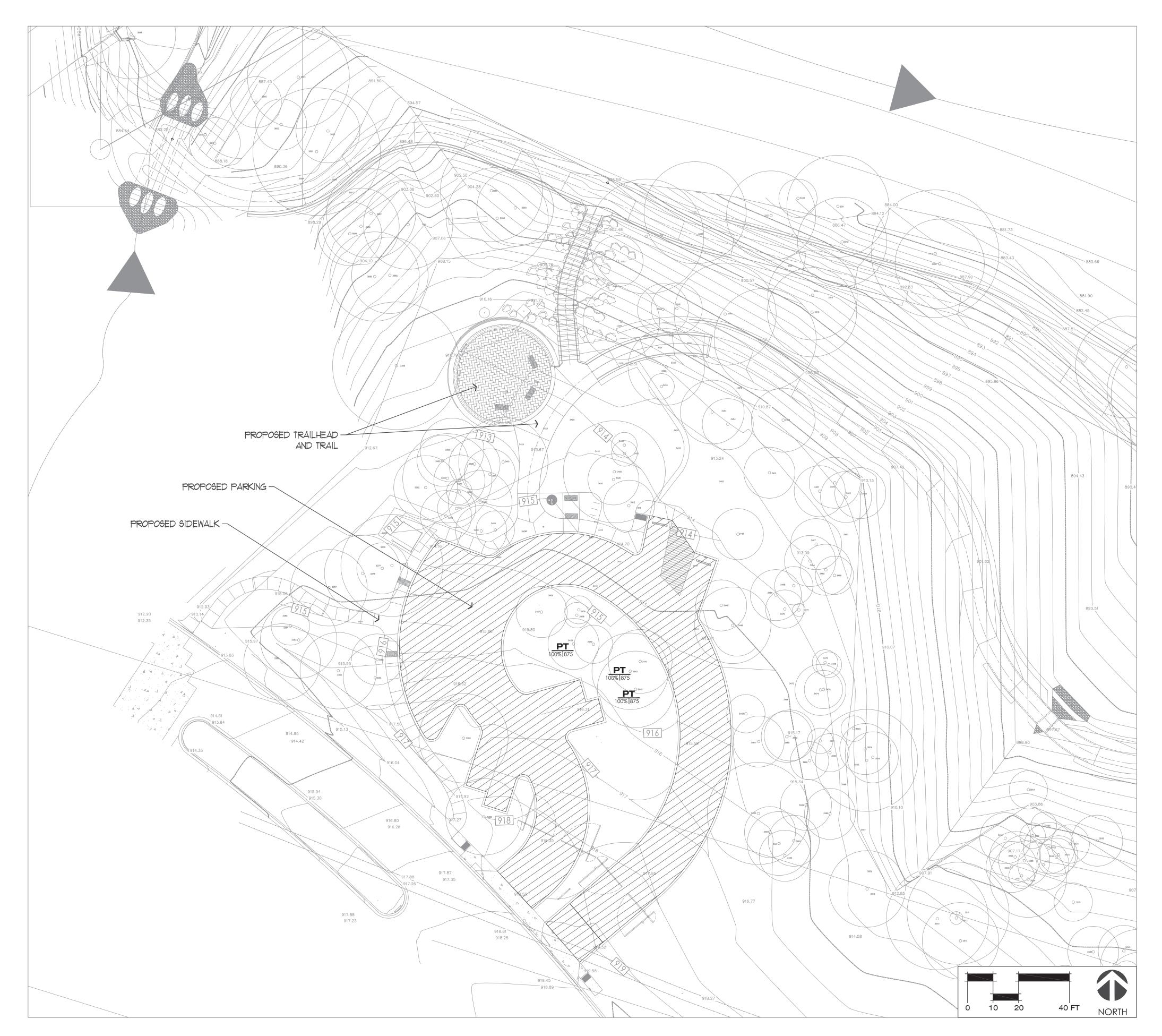








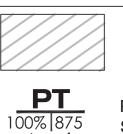




LEGEND

Total paved area for new parking: Square feet of shade required for 25 points: (10,166 SF x 25% = 2,542 SF)

POINTS EARNED 25 POINTS



PARKING LOT SHADING AREA

PARKING LOT SHADE TREE

– TOTAL SF OF SHADE CREDIT └── PERCENTAGE OF SHADE CREDIT

LANDSCAPE ORDINANCE COMPLIANCE

MANDATORY CRITERIA

PARKING LOT SHADING

Shading shall be required for parking lots that are located within the project area and any parking areas (excluding driveways or garages) in residential areas. Canopy Trees, as defined in Appendix A, shall be provided to shade a minimum of twenty-five (25) percent of a parking lot for twenty (20) points. Medium or large trees may be used.

Fifteen (15) points are awarded when surface parking lots include canopy trees, which shade a minimum of fifty (50) percent of any individual parking lot.

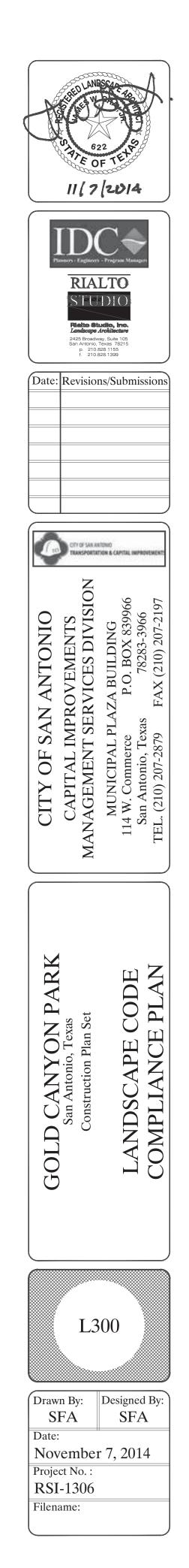
10,166 SF 2,542 SF

Existing trees preserved on a site within 12 feet of any edge of a parking lot or in an island or peninsula not less than 9 feet by 18 feet shall be calculated at 100% of the shade coverage shown in Appendix E, under "Shade Area":

#3438 Live Oak #3441 Live Oak #3442 Live Oak Total = 4 x 875 SF

TOTAL Square feet of shade provided:

2,625 SF





TEMPORARY VEGETATION

DESCRIPTION: VEGETATION CAN BE USED AS A TEMPORARY OR PERMANENT STABILIZATION TECHNIQUE FOR AREAS DISTURBED BY CONSTRUCTION. VEGETATION EFFECTIVELY REDUCES EROSION IN SWALES, STOCKPILES, BERMS, MILD TO MEDIUM SLOPES, AND ALONG ROADWAYS. OTHER TECHNIQUES SUCH AS MATTING, MULCHES, AND GRADING MAY BE REQUIRED TO ASSIST IN THE ESTABLISHMENT OF VEGETATION.

MATERIALS:

THE TYPE OF TEMPORARY VEGETATION USED ON A SITE IS A FUNCTION OF THE SEASON AND THE AVAILABILITY OF WATER FOR IRRIGATION.

TEMPORARY VEGETATION SHOULD BE SELECTED APPROPRIATELY FOR THE AREA.

COUNTY AGRICULTURAL EXTENSION AGENTS ARE A GOOD SOURCE FOR SUGGESTIONS FOR TEMPORARY VEGETATION. ALL SEED SHOULD BE HIGH QUALITY, U.S. DEPT. OF AGRICULTURE CERTIFIED SEED.

INSTALLATION:

- GRADING MUST BE COMPLETED PRIOR TO SEEDING.
- SLOPES SHOULD BE MINIMIZED.
- EROSION CONTROL STRUCTURES SHOULD BE INSTALLED.
- SEEDBEDS SHOULD BE WELL PULVERIZED, LOOSE, AND UNIFORM. FERTILIZERS SHOULD BE APPLIED AT APPROPRIATE RATES.
- SEEDING RATES SHOULD BE APPLIED AS RECOMMENDED BY THE COUNTY AGRICULTURAL EXTENSION AGENT.
- THE SEED SHOULD BE APPLIED UNIFORMLY.
- STEEP SLOPES SHOULD BE COVERED WITH APPROPRIATE SOIL STABILIZATION MATTING.

BLANKETS AND MATTING

DESCRIPTION: BLANKETS AND MATTING MATERIAL CAN BE USED AS AN AID TO CONTROL EROSION ON CRITICAL SITES DURING THE ESTABLISHMENT PERIOD OF PROTECTIVE VEGETATION. THE MOST COMMON USES ARE IN CHANNELS, INTERCEPTOR SWALES, DIVERSION DIKES, SHORT, STEEP SLOPES, AND ON TIDAL OR STREAM BANKS.

MATERIALS:

NEW TYPES OF BLANKETS AND MATTING MATERIALS ARE CONTINUOUSLY BEING DEVELOPED. THE TEXAS DEPARTMENT OF TRANSPORTATION (TXDOT) HAS DEFINED THE CRITICAL PERFORMANCE FACTORS FOR THESE TYPES OF PRODUCTS AND HAS ESTABLISHED MINIMUM PERFORMANCE STANDARDS WHICH MUST BE MET FOR ANY PRODUCT SEEKING TO BE APPROVED FOR USE WITHIN ANY OF TXDOT'S CONSTRUCTION OR MAINTENANCE ACTIVITIES. THE PRODUCTS THAT HAVE BEEN APPROVED BY TXDOT ARE ALSO APPROPRIATE FOR GENERAL CONSTRUCTION SITE STABILIZATION. TXDOT MAINTAINS A WEB SITE AT HTTP://WWW.DOT.STATE.TX.US/INSDTDOT/ORGCHART/CMD/EROSION/CONTENTS.HTTM WHICH IS UPDATED AS NEW PRODUCTS ARE EVALUATED.

INSTALLATION: INSTALL IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS. PROPER ANCHORING OF THE MATERIAL. PREPARE A FRIABLE SEED BED RELATIVELY FREE FROM CLODS AND ROCKS AND ANY FOREIGN MATERIAL. FERTILIZE AND SEED IN ACCORDANCE WITH SEEDING OR OTHER TYPE OF PLANTING PLAN. EROSION STOPS SHOULD EXTEND BEYOND THE CHANNEL LINER TO FULL DESIGN CROSSSECTION OF THE CHANNEL. A UNIFORM TRENCH PERPENDICULAR TO LINE OF FLOW MAY BE DUG WITH A SPADE OR A MECHANICAL TRENCHER. EROSION STOPS SHOULD BE DEEP ENOUGH TO PENETRATE SOLID MATERIAL OR BELOW LEVEL OF RULING IN SANDY SOILS. EROSION STOP MATS SHOULD BE WIDE ENOUGH TO ALLOW TURNOVER AT BOTTOM OF TRENCH FOR STAPLING, WHILE MAINTAINING THE TOP EDGE FLUSH WITH CHANNEL SURFACE.

MULCH

MATERIALS:

DESCRIPTION: MULCHING IS THE PROCESS OF APPLYING A MATERIAL TO THE EXPOSED SOIL SURFACE TO PROTECT IT FROM EROSIVE FORCES AND TO CONSERVE SOIL MOISTURE UNTIL PLANTS CAN BECOME ESTABLISHED. WHEN SEEDING CRITICAL SITES, SITES WITH ADVERSE SOIL CONDITIONS OR SEEDING ON OTHER THAN OPTIMUM SEEDING DATES, MULCH MATERIAL SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING. SEEDING DURING OPTIMUM SEEDING DATES AND WITH FAVORABLE SOILS AND SITE CONDITIONS WILL NOT NEED TO BE MULCHED.

MULCH MAY BE SMALL GRAIN STRAW WHICH SHOULD BE APPLIED UNIFORMLY. ON SLOPES 15 PERCENT OR GREATER, A BINDING CHEMICAL MUST BE APPLIED TO THE SURFACE. WOODFIBER OR PAPERFIBER MULCH MAY BE APPLIED BY HYDROSEEDING. MULCH NETTINGS MAY BE USED. WOOD CHIPS MAY BE USED WHERE APPROPRIATE.

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AQUIFER PROTECTION PLAN GENERAL CONSTRUCTION NOTES

I. WRITTEN CONSTRUCTION NOTIFICATION MUST BE GIVEN TO THE APPROPRIATE TCEQ REGIONAL OFFICE NO LATER THAN 48 HOURS PRIOR TO COMMENCEMENT OF THE REGULATED ACTIVITY. INFORMATION MUST INCLUDE THE DATE ON WHICH THE REGULATED ACTIVITY WILL COMMENCE, THE NAME OF THE APPROVED PLAN FOR THE REGULATED ACTIVITY, AND THE NAME OF THE PRIME CONTRACTOR AND THE NAME AND TELEPHONE NUMBER OF THE CONTACT PERSON.

2. ALL CONTRACTORS CONDUCTING REGULATED ACTIVITIES ASSOCIATED WITH THIS PROJECT MUST BE PROVIDED WITH COMPLETE COPIES OF THE APPROVED WATER POLLUTION ABATEMENT PLAN AND THE TCEQ LETTER INDICATING THE SPECIFIC CONDITIONS OF ITS APPROVAL. DURING THE COURSE OF THESE REGULATED ACTIVITIES, THE CONTRACTORS ARE REQUIRED TO KEEP ON-SITE COPIES OF THE APPROVED PLAN AND APPROVAL LETTER.

3. IF ANY SENSITIVE FEATURE IS DISCOVERED DURING CONSTRUCTION, ALL REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MUST BE SUSPENDED IMMEDIATELY. THE APPROPRIATE TCEQ REGIONAL OFFICE MUST BE IMMEDIATELY NOTIFIED OF ANY SENSITIVE FEATURES ENCOUNTERED DURING CONSTRUCTION. THE REGULATED ACTIVITIES NEAR THE SENSITIVE FEATURE MAY NOT PROCEED UNTIL THE TCEQ HAS REVIEWED AND APPROVED THE METHODS PROPOSED TO PROTECT THE SENSITIVE FEATURE AND THE EDWARDS AQUIFER FROM ANY POTENTIALLY ADVERSE IMPACTS TO WATER QUALITY.

4. NO TEMPORARY ABOVEGROUND HYDROCARBON AND HAZARDOUS SUBSTANCE STORAGE TANK SYSTEM IS INSTALLED WITHIN 150 FEET OF A DOMESTIC, INDUSTRIAL, IRRIGATION, OR PUBLIC WATER SUPPLY WELL, OR OTHER SENSITIVE FEATURE.

5. PRIOR TO COMMENCEMENT OF CONSTRUCTION, ALL TEMPORARY EROSION AND SEDIMENTATION (E&S) CONTROL MEASURES MUST BE PROPERLY SELECTED, INSTALLED, AND MAINTAINED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND GOOD ENGINEERING PRACTICES. CONTROLS SPECIFIED IN THE TEMPORARY STORM WATER SECTION OF THE APPROVED EDWARDS AQUIFER PROTECTION PLAN ARE REQUIRED DURING CONSTRUCTION. IF INSPECTIONS INDICATE A CONTROL HAS BEEN USED INAPPROPRIATELY, OR INCORRECTLY, THE APPLICANT MUST REPLACE OR MODIFY THE CONTROL FOR SITE SITUATIONS. THE CONTROLS MUST REMAIN IN PLACE UNTIL DISTURBED AREAS ARE REVEGETATED AND THE AREAS HAVE BECOME PERMANENTLY STABILIZED.

6. IF SEDIMENT ESCAPES THE CONSTRUCTION SITE, OFFSITE ACCUMULATIONS OF SEDIMENT MUST BE REMOVED AT A FREQUENCY SUFFICIENT TO MINIMIZE OFFSITE IMPACTS TO WATER QUALITY (E.G., FUGITIVE SEDIMENT IN STREET BEING WASHED INTO SURFACE STREAMS OR SENSITIVE FEATURES BY THE NEXT RAIN).

7. SEDIMENT MUST BE REMOVED FROM SEDIMENT TRAPS OR SEDIMENTATION PONDS NOT LATER THAN WHEN DESIGN CAPACITY HAS BEEN REDUCED BY 50%. A PERMANENT STAKE MUST BE PROVIDED THAT CAN INDICATE WHEN THE SEDIMENT OCCUPIES 50% OF THE BASIN VOLUME.

8. LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORMWATER SHALL BE PREVENTED FROM BECOMING A POLLUTANT SOURCE FOR STORMWATER DISCHARGES (E.G., SCREENING OUTFALLS, PICKED UP DAILY).

9. ALL SPOILS (EXCAVATED MATERIAL) GENERATED FROM THE PROJECT SITE MUST BE STORED ON-SITE WITH PROPER E&S CONTROLS. FOR STORAGE OR DISPOSAL OF SPOILS AT ANOTHER SITE ON THE EDWARDS AQUIFER RECHARGE ZONE, THE OWNER OF THE SITE MUST RECEIVE APPROVAL OF A WATER POLLUTION ABATEMENT PLAN FOR THE PLACEMENT OF FILL MATERIAL OR MASS GRADING PRIOR TO THE PLACEMENT OF SPOILS AT THE OTHER SITE.

10. STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE IN PORTIONS OF THE SITE WHERE CONSTRUCTION ACTIVITIES HAVE TEMPORARILY OR PERMANENTLY CEASED, BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY TEMPORARY OR PERMANENTLY CEASE IS PRECLUDED BY WEATHER CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE. WHERE CONSTRUCTION ACTIVITY ON A PORTION OF THE SITE IS TEMPORARILY CEASED, AND EARTH DISTURBING ACTIVITIES WILL BE RESUMED WITHIN 21 DAYS, TEMPORARY STABILIZATION MEASURES DO NOT HAVE TO BE INITIATED ON THAT PORTION OF SITE. IN AREAS EXPERIENCING DROUGHTS WHERE THE INITIATION OF STABILIZATION MEASURES BY THE 14TH DAY AFTER CONSTRUCTION ACTIVITY HAS TEMPORARILY OR PERMANENTLY CEASED IS PRECLUDED BY SEASONAL ARID CONDITIONS, STABILIZATION MEASURES SHALL BE INITIATED AS SOON AS PRACTICABLE.

11. THE FOLLOWING RECORDS SHALL BE MAINTAINED AND MADE AVAILABLE TO THE TCEQ UPON REQUEST: THE DATES WHEN MAJOR GRADING ACTIVITIES OCCUR; THE DATES WHEN CONSTRUCTION ACTIVITIES TEMPORARILY OR PERMANENTLY CEASE ON A PORTION OF THE SITE; AND THE DATES WHEN STABILIZATION MEASURES ARE INITIATED.

12. THE HOLDER OF ANY APPROVED EDWARD AQUIFER PROTECTION PLAN MUST NOTIFY THE APPROPRIATE REGIONAL OFFICE IN WRITING AND OBTAIN APPROVAL FROM THE EXECUTIVE DIRECTOR PRIOR TO INITIATING ANY OF THE FOLLOWING:

A. ANY PHYSICAL OR OPERATIONAL MODIFICATION OF ANY WATER POLLUTION ABATEMENT STRUCTURE(S), INCLUDING BUT NOT LIMITED TO PONDS, DAMS, BERMS, SEWAGE TREATMENT PLANTS, AND DIVERSIONARY STRUCTURES:

B. ANY CHANGE IN THE NATURE OR CHARACTER OF THE REGULATED ACTIVITY FROM THAT WHICH WAS ORIGINALLY APPROVED OR A CHANGE WHICH WOULD SIGNIFICANTLY IMPACT THE ABILITY OF THE PLAN TO PREVENT POLLUTION OF THE EDWARDS AQUIFER:

C. ANY DEVELOPMENT OF LAND PREVIOUSLY IDENTIFIED AS UNDEVELOPED IN THE ORIGINAL WATER POLLUTION ABATEMENT PLAN.

THESE GENERAL CONSTRUCTION NOTES MUST BE INCLUDED ON THE CONSTRUCTION PLANS PROVIDED TO THE CONTRACTOR AND ALL SUBCONTRACTORS.

INSTALLATION:

MULCH ANCHORING SHOULD BE ACCOMPLISHED IMMEDIATELY AFTER MULCH PLACEMENT. THIS MAY BE DONE BY ONE OF THE FOLLOWING METHODS: PEG AND TWINE, MULCH NETTING, MULCH ANCHORING TOOL, OR LIQUID MULCH BINDERS.

SOD DESCRIPTION: SOD IS APPROPRIATE FOR DISTURBED AREAS WHICH REQUIRE IMMEDIATE VEGETATIVE COVERS, OR WHERE SODDING IS PREFERRED TO OTHER MEANS OF VEGETATED ESTABLISHMENT. LOCATIONS PARTICULARLY SUITED TO STABILIZATION WITH SOD ARE WATERWAYS CARRYING INTERMITTENT FLOW, AREAS AROUND DROP INLETS OR IN VEGETATEDED SWALES, AND RESIDENTIAL OR COMMERCIAL LAWNS WHERE QUICK USE OR AESTHETICS ARE FACTORS. SOD IS COMPOSED OF LIVING PLANTS AND THOSE PLANTS MUST RECEIVE ADEQUATE CARE IN ORDER TO PROVIDE VEGETATIVE STABILIZATION ON A DISTURBED AREA.

MATERIALS:

SOD SHOULD BE MACHINE CUT AT A UNIFORM SOIL THICKNESS. PIECES OF SOD SHOULD BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH. TORN OR UNEVEN PADS ARE NOT ACCEPTABLE. SECTIONS OF SOD SHOULD BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN

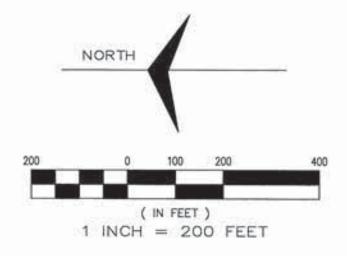
SUSPENDED FROM A FIRM GRASP. SOD SHOULD BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

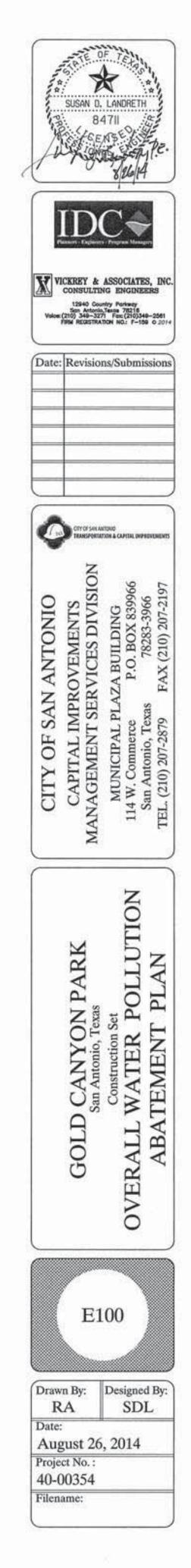
INSTALLATION: AREAS TO BE SODDED SHOULD BE BROUGHT TO FINAL GRADE. THE SURFACE SHOULD BE CLEARED OF ALL TRASH AND DEBRIS. FERTILIZE ACCORDING TO SOIL TESTS. FERTILIZER SHOULD BE WORKED INTO THE SOIL. SOD SHOULD NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER. SOD SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN. DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHOULD BE LIGHTLY IRRIGATED. THE FIRST ROW OF SOD SHOULD BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND

BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHOULD BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. WHEREVER EROSION MAY BE A PROBLEM, SOD SHOULD BE LAID WITH STAGGERED JOINTS AND SECURED. SOD SHOULD BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON THE CONTOUR). SOD SHOULD BE ROLLED OR TAMPED.

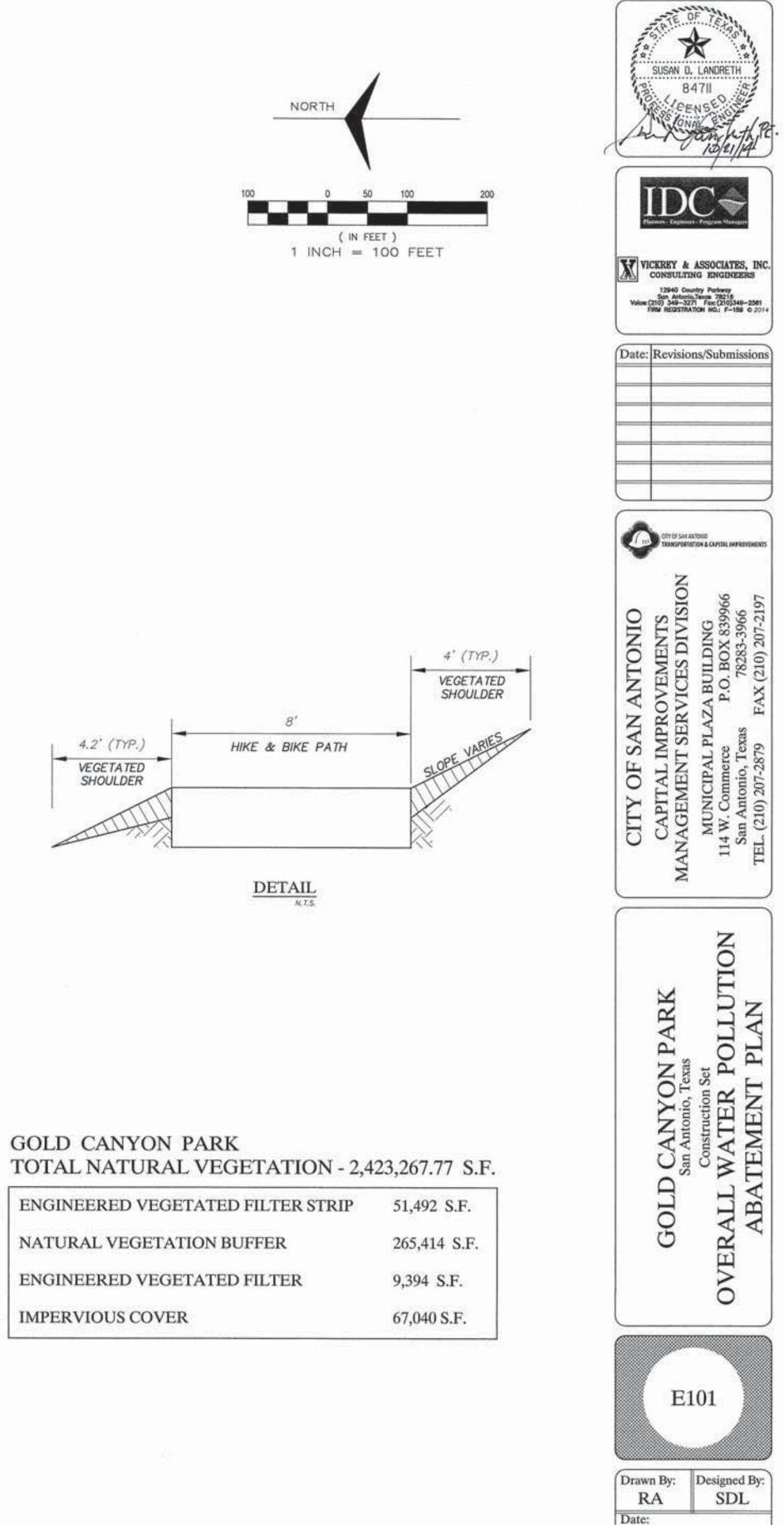
SOD SHOULD BE IRRIGATED TO A SUFFICIENT DEPTH. WATERING SHOULD BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN SOIL MOISTURE. THE FIRST MOWING SHOULD NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED.

NOT MORE THAN ONE THIRD OF THE VEGETATED LEAF SHOULD BE REMOVED AT ANY ONE CUTTING.









August 26, 2014

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Filename: