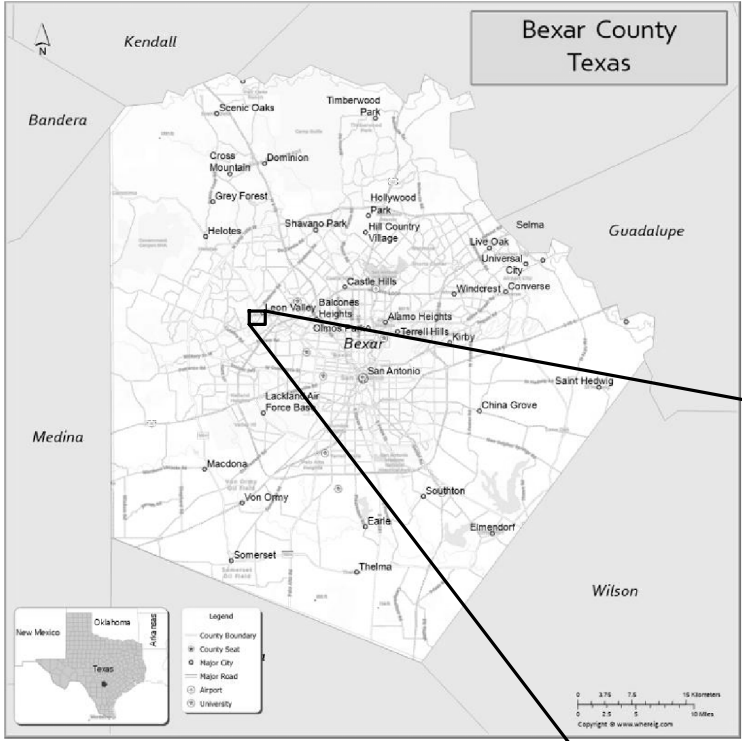


LEON VALLEY BAPTIST CHURCH

7990 GRISSOM RD, SAN ANTONIO, TX 78251

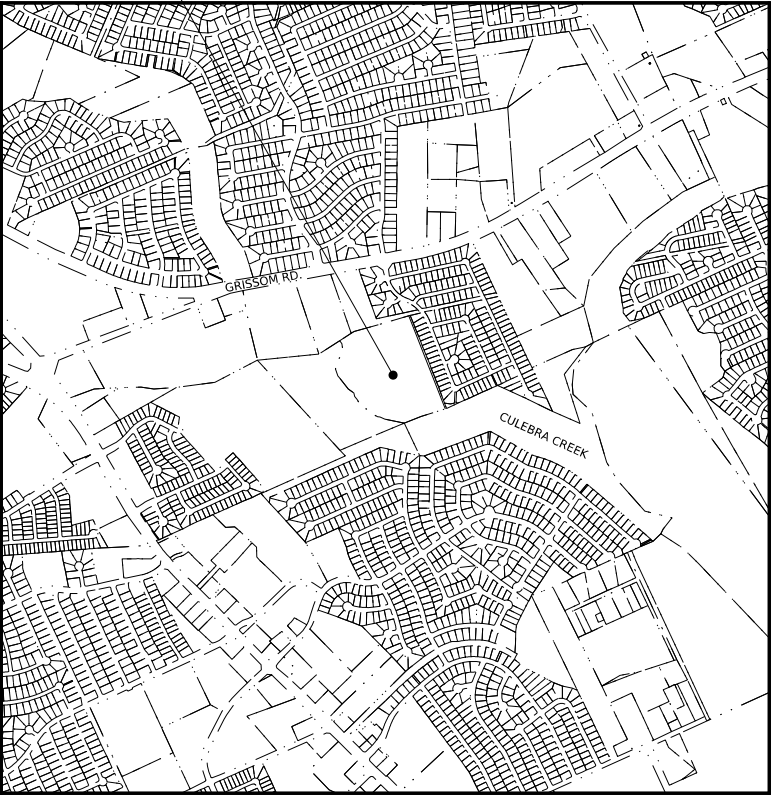
RECREATIONAL FACILITY

WORK CONSISTING OF: STEEL BUILDING, CONCRETE
FOUNDATION AND SIDEWALK, UTILITIES, GRADING,
DETENTION BASIN & ASPHALT PARKING LOT.



PROJECT LOCATION

LOCATION MAP



PLANS PREPARED BY:

LONESTAR ENGINEERING



TRANSPORTATION: CONRAD MONTES, PE
WATER RESOURCES: BRIAN DERINGER, PE
ENVIRONMENTAL: JOSE ARVIZU, PE
UTILITIES: SKYLAR LEISEY, PE
FOUNDATIONS: ANA SERRANO, PE
STRUCTURAL: ROLAND GUTIERREZ, PE

INDEX OF SHEETS

SHEET NO.	DESCRIPTION
C0.0	TITLE SHEET
C0.1	GENERAL NOTES
C0.2	PLAT MAP
C1.1	REMOVAL PLAN
C2.0	OVERALL PROJECT LAYOUT
C2.1	PROPOSED SITE LAYOUT
C2.2	PAVEMENT MARKING PLAN
C2.3	FIRE PROTECTION ACCESS PLAN
C3.0	GRADING PLAN
C3.1	EXISTING DRAINAGE AREA MAP
C3.2	PROPOSED DRAINAGE AREA MAP
C3.3	DETENTION POND LAYOUT
C4.0	OVERALL WATER PLAN
C4.1	OVERALL SEWER PLAN
C4.2	FIRE PROTECTION UTILITY PLAN
C5.0	SW3P NARRATIVE
C5.1	EROSION CONTROL PLAN
C5.2	TREE PRESERVATION PLAN
C6.0	MISC CONSTRUCTION STDS I
C6.1	MISC CONSTRUCTION STDS II
C6.2	WHEEL CHAIR RAMP STD
C6.3	CHAIN LINK FENCE STD
C6.4	PIPE BEDDING MISC DRAINAGE DETAILS
C6.5	TEMP SEDIMENT CONTROL STD I
C6.6	TEMP SEDIMENT CONTROL STD II
S0.0	GEOTECH BORING MAP
S1.0	FOUNDATION PLAN
S1.1	FOUNDATION DETAILS
S2.0	FLOOR PLAN
S2.1	COLUMN LAYOUT
S2.2	ROOF FRAMING PLAN
S3.0	EXTERIOR ELEVATIONS
S3.1	NON-LOAD BEARING WALL SECTIONS
S3.2	LOAD BEARING WALL SECTIONS
S3.3	CONNECTION DETAILS
S3.4	CONNECTION DETAILS

FINAL PLANS

LETTING DATE: _____
DATE CONTRACTOR BEGAN WORK: _____
DATE WORK ACCEPTED: _____
FINAL CONTRACT COST: \$ _____
CONTRACTOR: _____

SPECIFICATIONS ADOPTED BY THE CITY OF SAN ANTONIO UNIFIED
DEVELOPMENT CODE DATED, JUNE 2025 AND SPECIFICATION ITEMS
LISTED AND DATED AS FOLLOWS, SHALL GOVERN ON THIS.

COUNTY: BEXAR PROJ. NO. _____
HWY. NO. _____ LETTING DATE: _____
DATE ACCEPTED: _____

GENERAL NOTES

1. ALL CONSTRUCTION SHALL CONFORM TO THE CITY OF SAN ANTONIO STANDARD SPECIFICATIONS FOR CONSTRUCTION JUNE 2008, OR LATEST.
2. NO EXTRA PAYMENT SHALL BE ALLOWED FOR WORK CALLED FOR ON THE PLANS, BUT NOT INCLUDED IN THE BID PROPOSAL. THIS INCIDENTAL WORK WILL BE REQUIRED AND SHALL BE INCLUDED IN THE PAY ITEM TO WHICH IT RELATES.
3. THE CONTRACTOR SHALL PROVIDE ACCESS FOR THE DELIVERY OF MAIL BY THE U.S. POSTAL SERVICE.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING TO ITS ORIGINAL OR BETTER CONDITION ANY DAMAGE DONE TO EXISTING FENCES, CONCRETE ISLANDS, STREET PAVING, CURBS, SHRUBS, 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 TRAFFIC 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 OR 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 ORDERED 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 BACKFILL OF 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 DETERMINE 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 ARE TAKEN FROM AVAILABLE RECORDS AND ARE NOT GUARANTEED, BUT SHALL BE INVESTIGATED AND VERIFIED BY THE CONTRACTOR BEFORE STARTING WORK. THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY DAMAGE TO AND FOR THE MAINTENANCE AND PROTECTION OF 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 SOLE REPONIBILITY TO DISPOSE OF THIS MATERIAL OFF THE LIMITS OF THE PROJECT. NO WASTE MATE-RIAL SHALL BE PLACED IN EXISTING LOWS THAT WILL BLOCK OR ALTER FLOW LIMITS OF EXISTING 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 FROM SPILLED AND /OR TRACKED CONSTRUCTION MATERIALS AND /OR DEBRIS.
15. IF THE CONTRACTOR ENCOUNTERS ANY ARCHAEOLOGICAL DEPOSITS DURING CONSTRUCTION OPERATIONS, THE CONTRACTOR MUST STOP EXCAVATION IMMEDIATELY, CONTACT THE CITY INSPECTOR, AND CALL THE CITY HISTORIC PRESERVATION OFFICE AT 207-7306 OR 207-3327 FOR 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 HOLIDAY AND WEEKENDS) AND IF THE CONTRACTOR IS UNABLE TO WORK IN OTHER AREAS, THEN THE CONTRACTOR WILL BE ALLOWED TO NEGOTIATE FOR ADDITIONAL CONSTRUCTION TIME UPON 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) DAYS FOR EACH EVENT, CONTRACT DURATION WILL NOT BE EXTENDED.
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.

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 ANSI A-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

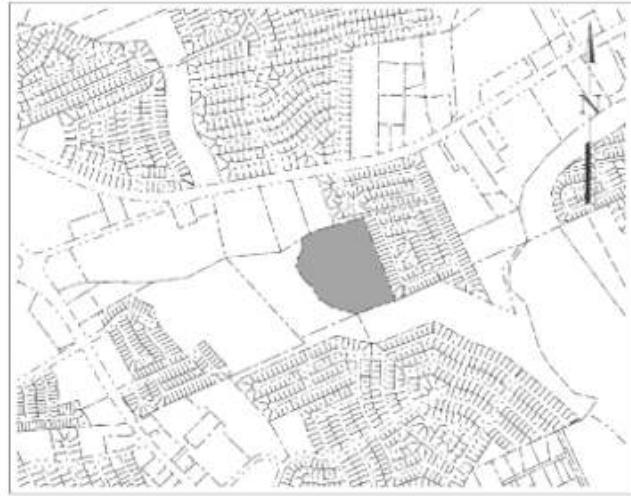
CITY OF SAN ANTONIO

CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CITY OF SAN ANTONIO
GENERAL NOTES

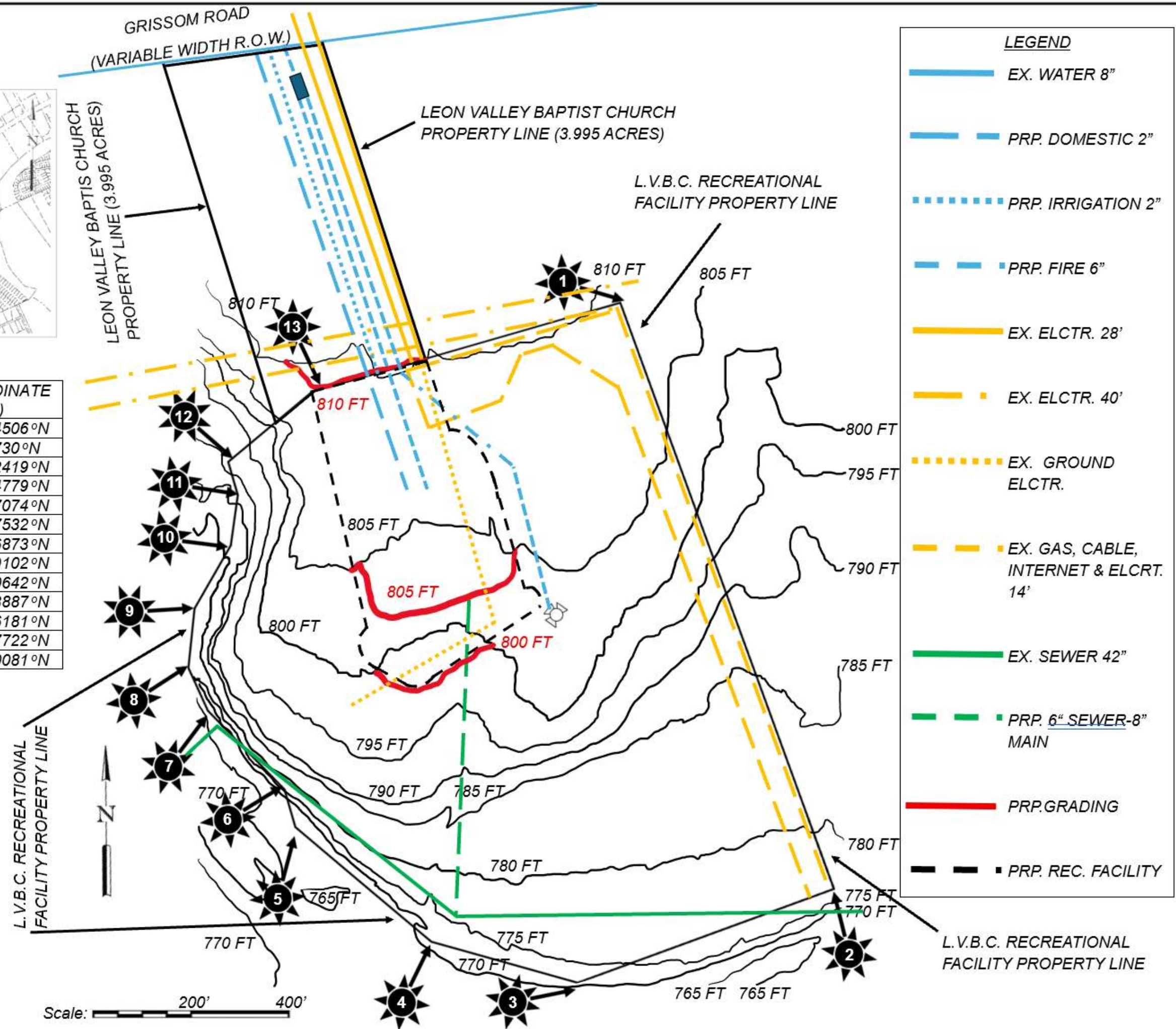
% SUBMITTAL	PROJECT NO.:	DATE:
DRWN. BY:	DSGN. BY:	CHKD. BY:
		SHEET NO.: OF

PROPERTY LOCATION:



POINT	COORDINATE (LAT.)	COORDINATE (LONG.)
1	98.6424686°W	29.4764506°N
2	98.6413241°W	29.473730°N
3	98.6426643°W	29.4732419°N
4	98.6434775°W	29.4734779°N
5	98.6438841°W	29.4737074°N
6	98.6440610°W	29.4737532°N
7	98.6448065°W	29.4746873°N
8	98.6448065°W	29.4749102°N
9	98.6447387°W	29.4750642°N
10	98.6445956°W	29.4753887°N
11	98.6445542°W	29.4756181°N
12	98.6446370°W	29.4757722°N
13	98.6442719°W	29.4760081°N

LINE	LENGTH (FT)
1-2	684.25
2-3	1215
3-4	313
4-5	176.9
5-6	67.42
6-7	183.8
7-8	299
8-9	93.5
9-10	69.2
10-11	80.8
11-12	97.44
12-13	131.3
AREA (ACRES):	17.434 (ACRES)



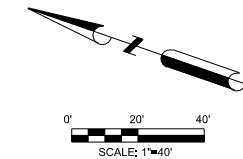
LEGEND

- EX. WATER 8"
- PRP. DOMESTIC 2"
- PRP. IRRIGATION 2"
- PRP. FIRE 6"
- EX. ELCTR. 28"
- EX. ELCTR. 40"
- EX. GROUND ELCTR.
- EX. GAS, CABLE, INTERNET & ELCTR. 14"
- EX. SEWER 42"
- PRP. 6" SEWER-8" MAIN
- PRP. GRADING
- PRP. REC. FACILITY

LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

PLAT

JOB NO. _____
DATE _____
CHECKED _____
CIVIL JOB NO. _____
REFERENCE _____
SHEET C0.2

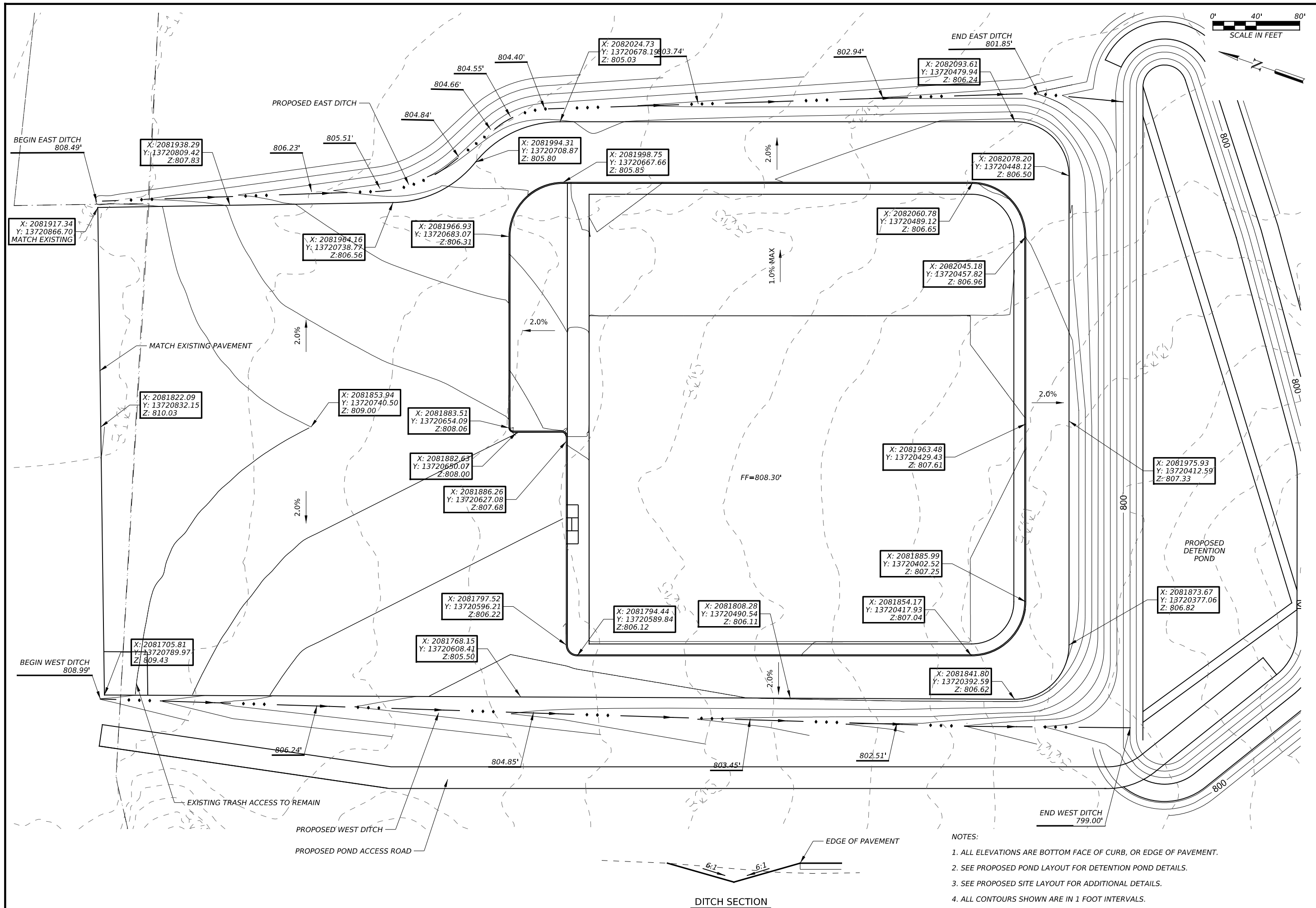


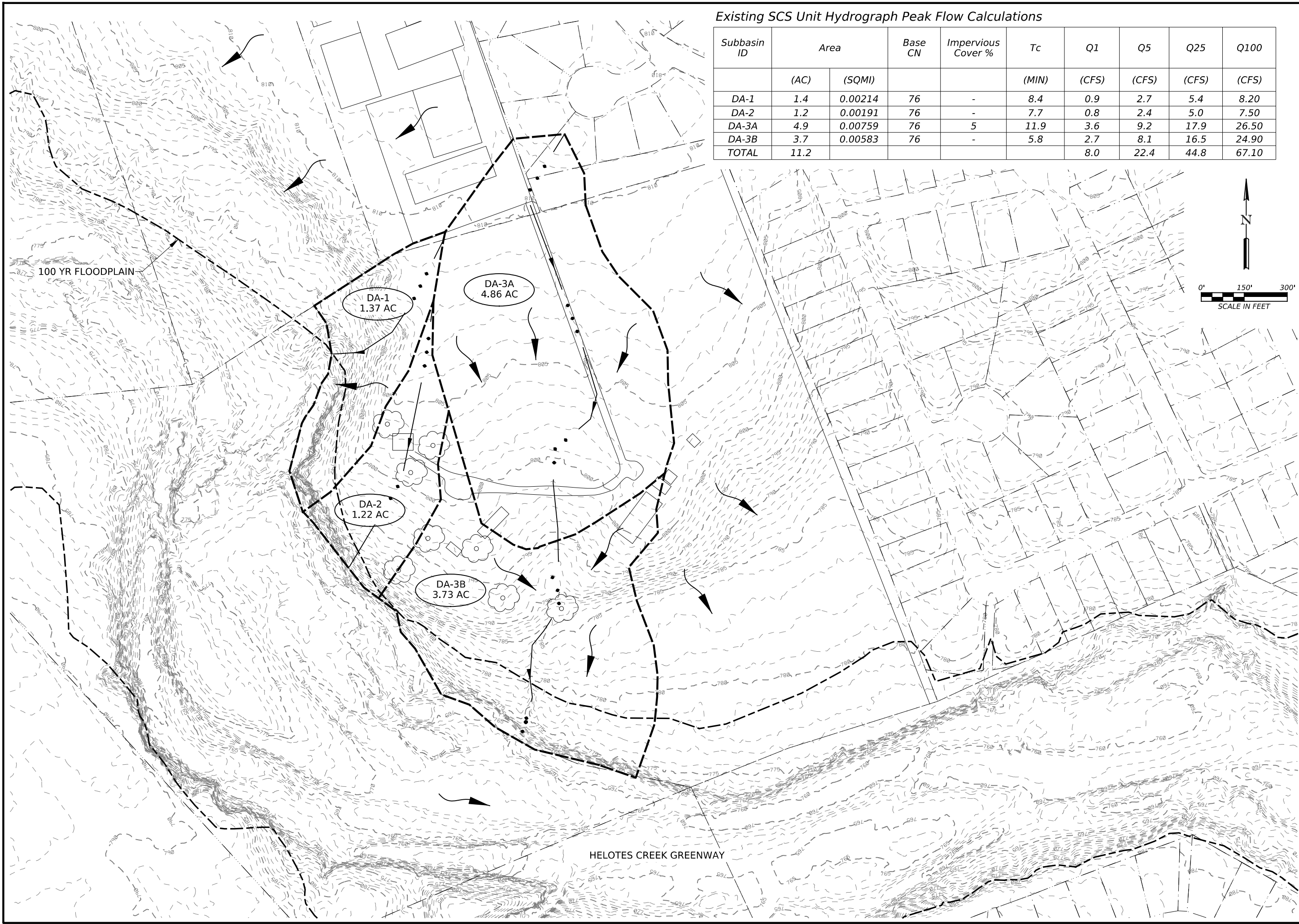
1. THE EXISTENCE AND LOCATION OF UNDERGROUND AND OVERHEAD UTILITIES SHOWN ARE APPROXIMATE AND BASED OF THE BEST AVAILABLE RECORDS. IT IS THE CONTRACTOR RESPONSIBILITY TO LOCATE AND VERIFY ALL UTILITIES PRIOR TO STARTING WORK. ANY COST, DELAYS, OR DAMAGES RESULTING FROM FAILURE TO PROPERLY LOCATE, PROTECT, OR PRESERVE UTILITIES ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

[illegible]

LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
PAVEMENT MARKING PLAN

JOB NO. _____
DATE _____
CHECKED _____ DRAWN _____
CIVIL JOB NO. _____
REFERENCE: _____
SHEET **C2.2** _____

[illegible]



Existing SCS Unit Hydrograph Peak Flow Calculations

Subbasin ID	Area		Base CN	Impervious Cover %	Tc	Q1	Q5	Q25	Q100
	(AC)	(SQMI)				(CFS)	(CFS)	(CFS)	(CFS)
DA-1	1.4	0.00214	76	-	8.4	0.9	2.7	5.4	8.20
DA-2	1.2	0.00191	76	-	7.7	0.8	2.4	5.0	7.50
DA-3A	4.9	0.00759	76	5	11.9	3.6	9.2	17.9	26.50
DA-3B	3.7	0.00583	76	-	5.8	2.7	8.1	16.5	24.90
TOTAL	11.2					8.0	22.4	44.8	67.10

DATE

NO.

REVISION

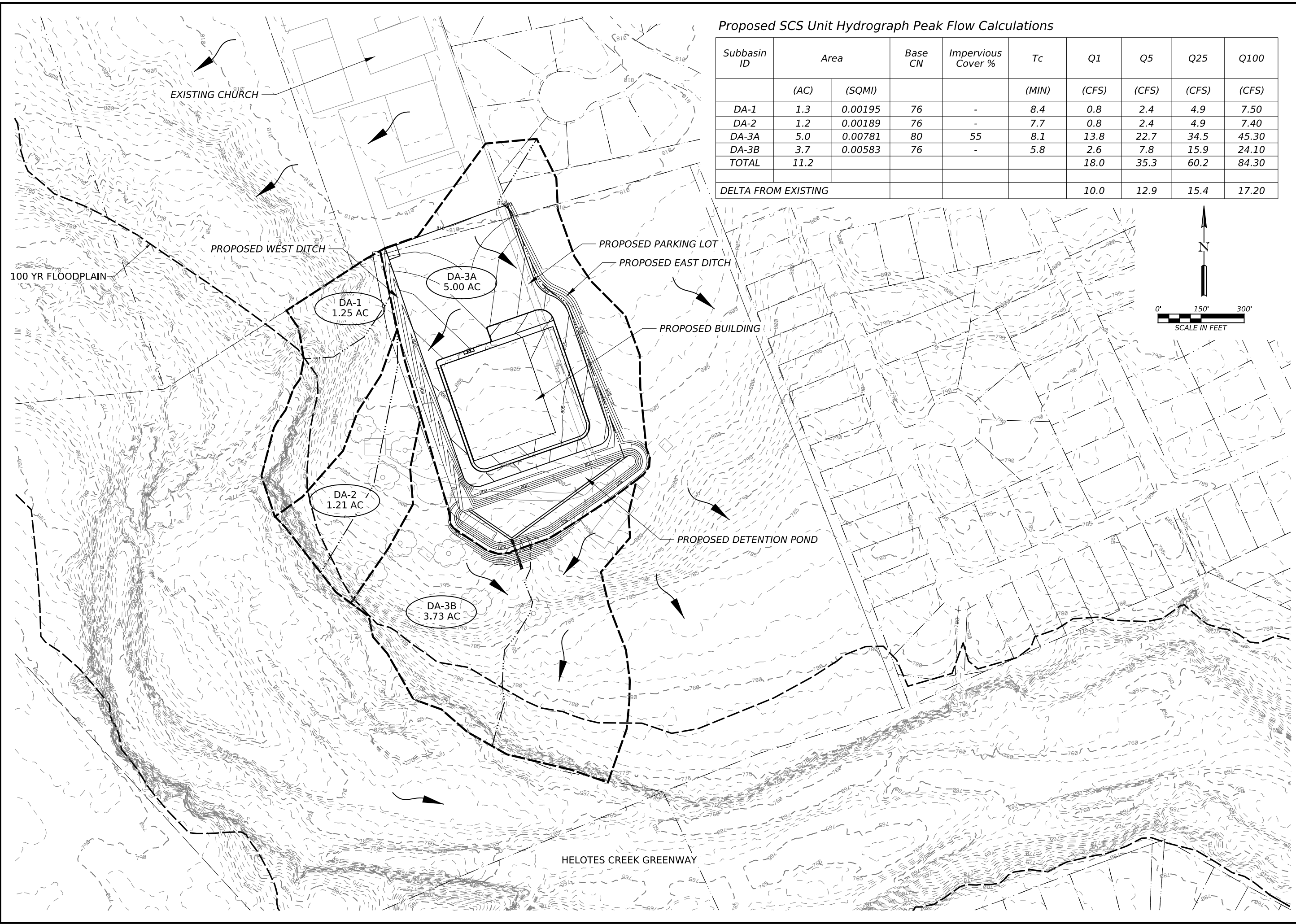


LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

EXISTING DRAINAGE AREA MAP

SHEET

C3.1



Proposed SCS Unit Hydrograph Peak Flow Calculations

Subbasin ID	Area		Base CN	Impervious Cover %	Tc	Q1	Q5	Q25	Q100
	(AC)	(SQMI)				(CFS)	(CFS)	(CFS)	(CFS)
DA-1	1.3	0.00195	76	-	8.4	0.8	2.4	4.9	7.50
DA-2	1.2	0.00189	76	-	7.7	0.8	2.4	4.9	7.40
DA-3A	5.0	0.00781	80	55	8.1	13.8	22.7	34.5	45.30
DA-3B	3.7	0.00583	76	-	5.8	2.6	7.8	15.9	24.10
TOTAL	11.2					18.0	35.3	60.2	84.30
DELTA FROM EXISTING						10.0	12.9	15.4	17.20

DATE

REVISION

NO.

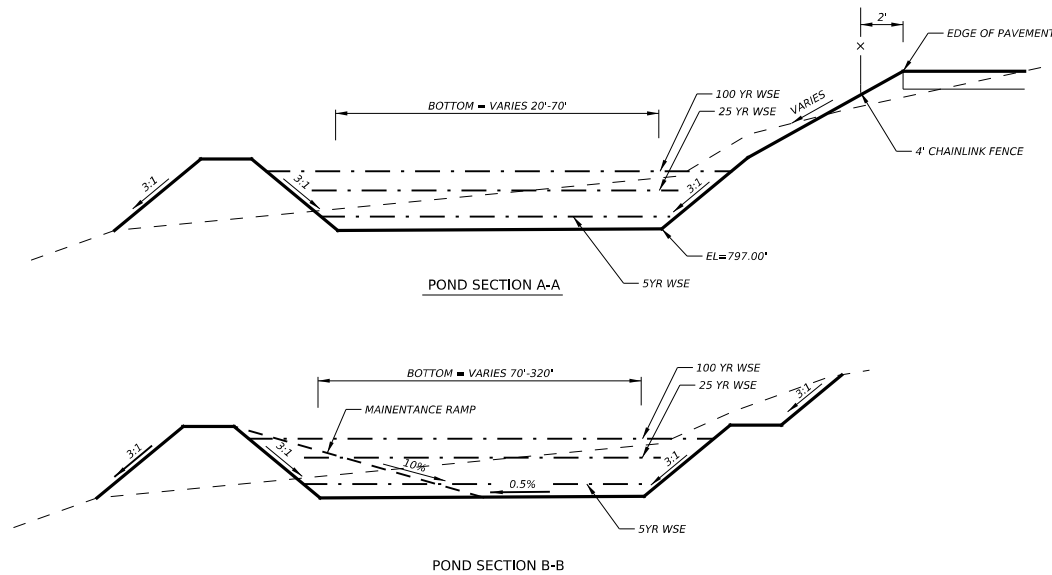
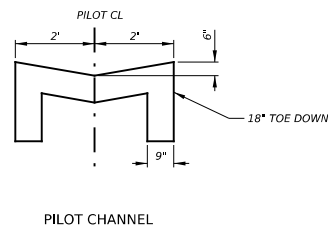


LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

PROPOSED DRAINAGE AREA MAP

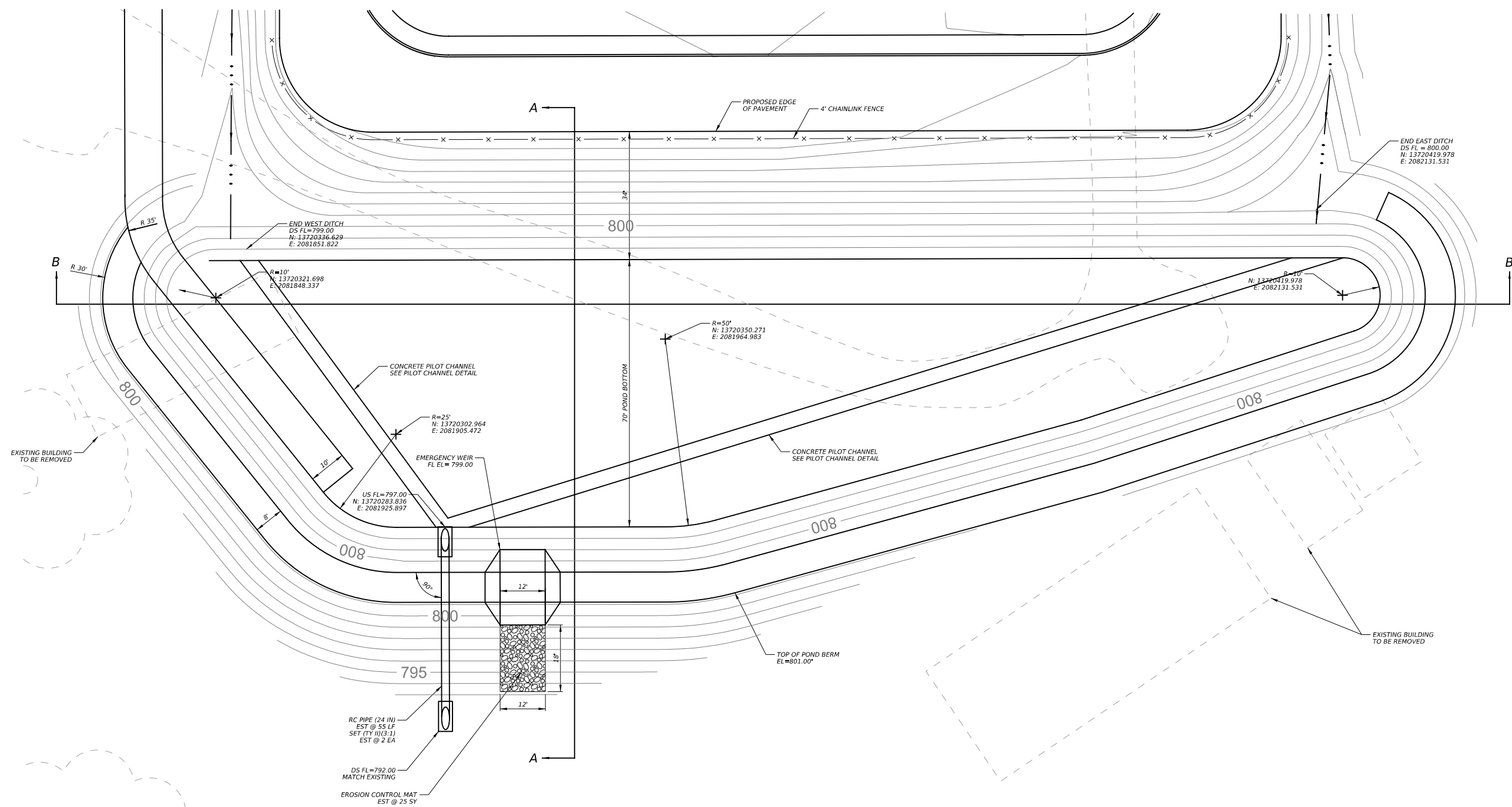
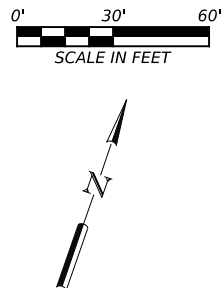
SHEET

C3.2

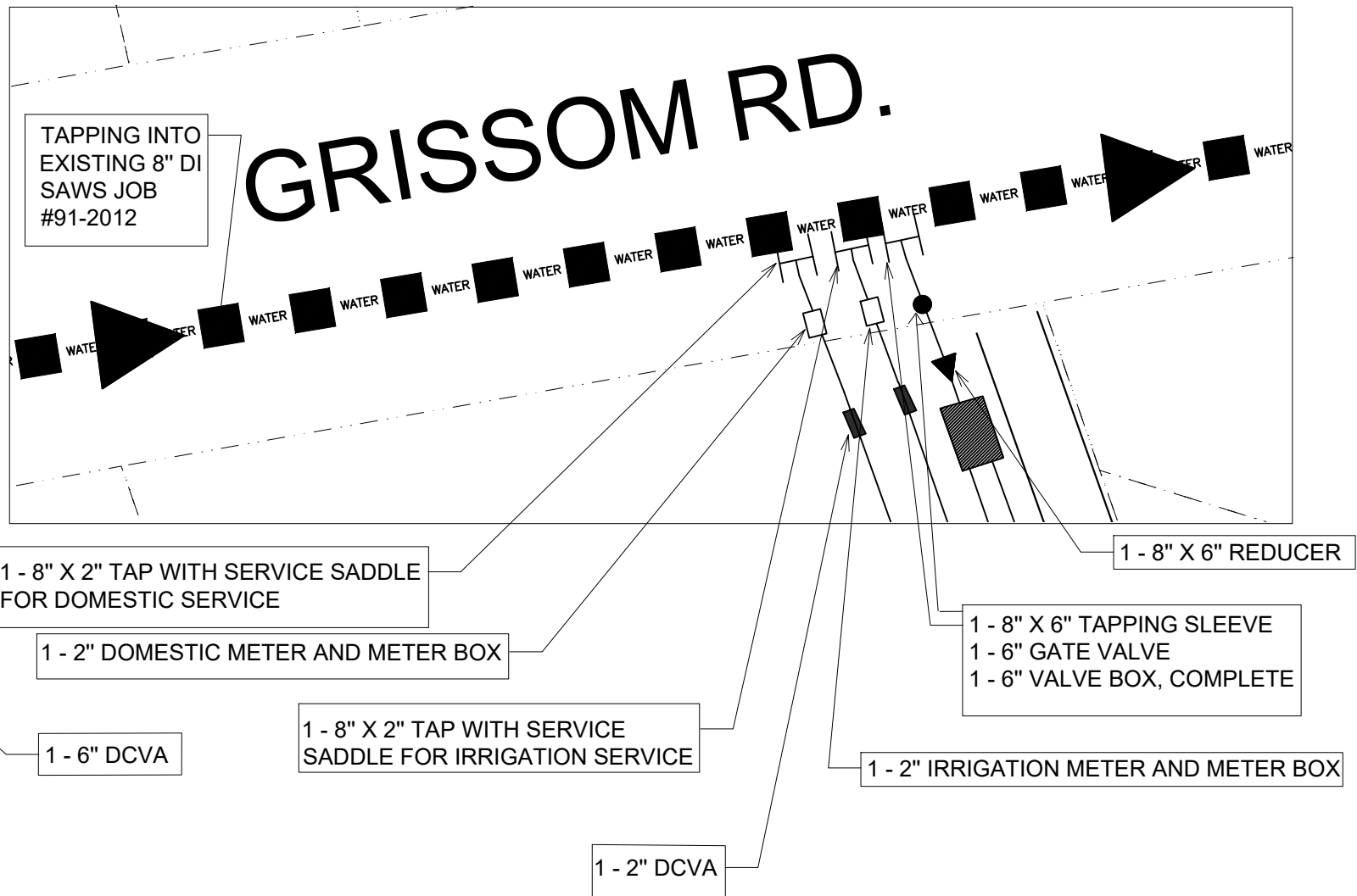
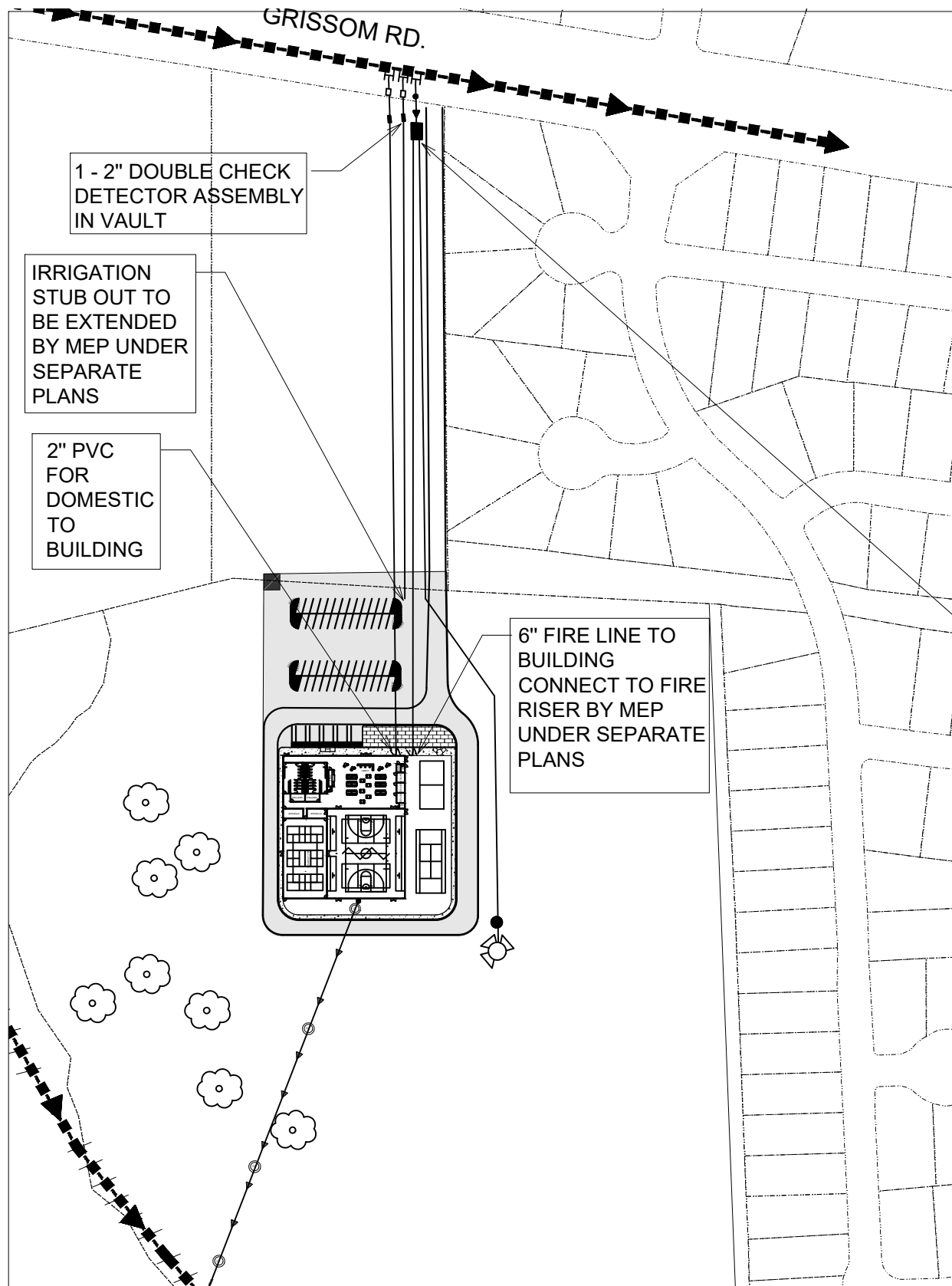
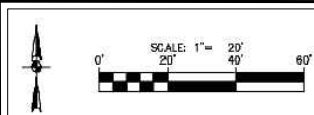


POND ELEVATION/STORAGE SUMMARY					
Elevation (FT)	Incremental Volume (CF)	Cumulative Volume (CF)	Acre Feet	Surface Area (SF)	Acre
797.00	0.77	0.77	0.00	16632.43	0.38
797.50	8576.69	8577.46	0.20	17679.55	0.41
798.00	9104.33	17681.79	0.41	18742.08	0.43
798.50	9639.00	27320.79	0.63	19818.56	0.45
799.00	10180.76	37501.55	0.86	20909.07	0.48
799.50	10729.57	48231.12	1.11	22013.78	0.51
800.00	11285.29	59516.41	1.37	23132.56	0.53
800.50	11848.45	71364.86	1.64	24265.58	0.56
801.00	12418.55	83783.41	1.92	25412.73	0.58

Storm	WSE (FT)	Peak Inflow (CFS)	Peak Discharge (CFS)
5 YR	798.20	22.70	4.70
25 YR	798.70	34.50	8.00
100 YR	799.10	45.30	10.80

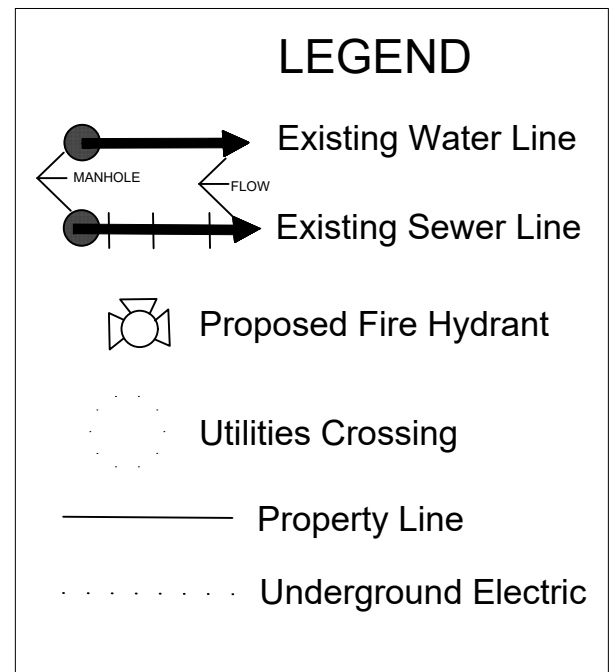


LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
PROPOSED DETENTION POND LAYOUT



WATER GENERAL NOTES

1. ALL 2" WATER SERVICES (DOMESTIC & IRRIGATION) SHALL BE PVC C900 PER SAWS SPECIFICATIONS.
2. ALL TAPS TO SAWS MAINS SHALL BE PERFORMED BY SAWS.
3. ALL METERS ARE SAWS-OWNED. ALL BACKFLOW PREVENTERS (DCVAs) ARE PRIVATE AND SHALL BE MAINTAINED BY OWNER.
4. CONTRACTOR SHALL VERIFY ALL UTILITY LOCATIONS, DEPTHS, AND INVERTS IN FIELD PRIOR TO CONSTRUCTION.
5. WATER SERVICE ROUTING, METER LOCATIONS, AND BACKFLOW ASSEMBLIES SHALL COMPLY WITH SAWS UTILITY STANDARDS AND CITY OF SAN ANTONIO REQUIREMENTS.
6. APPROXIMATE SERVICE LINE LENGTHS SHALL BE VERIFIED BY CONTRACTOR IN FIELD.

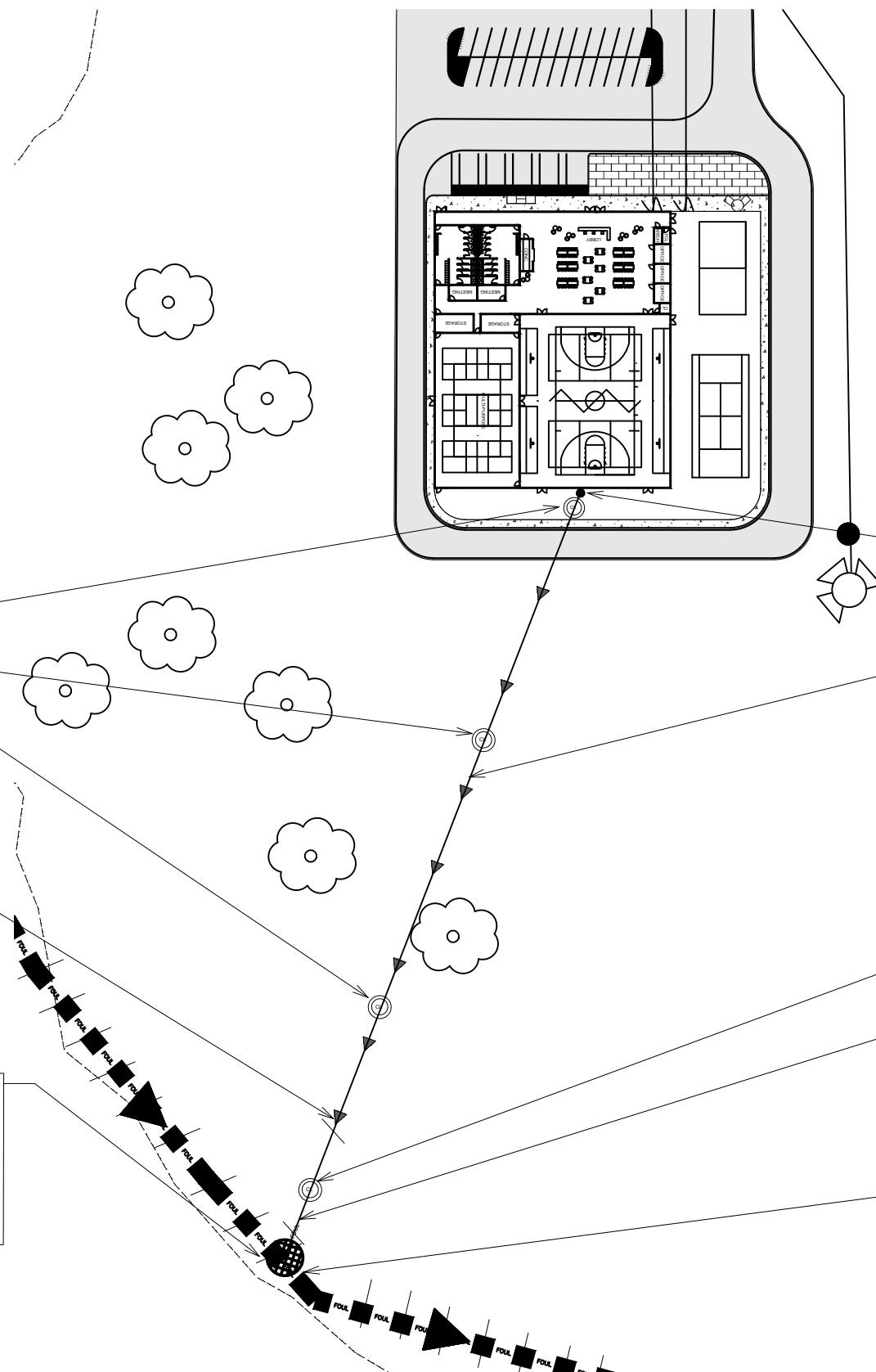


DATE	
REVISION	
NO.	



LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
OVERALL WATER PLAN

JOB NO. _____
DATE _____
CHECKED _____ DRAWN _____
CIVIL JOB NO. _____
REFERENCE: _____
SHEET C4.0



1. ALL 8" SANITARY SEWER MAINS SHALL BE PVC SDR-26 PER ASTM D3034.
2. ALL 6" SANITARY SEWER LATERALS SHALL BE PVC SDR-26 PER ASTM D3034.
3. ALL SANITARY SEWER FITTINGS SHALL BE PVC SDR-26 PER ASTM D3034.
4. ALL CONNECTIONS TO EXISTING SAWS INFRASTRUCTURE SHALL COMPLY WITH SAWS STANDARD DETAILS.
5. CONTRACTOR SHALL VERIFY ALL SEWER PIPE LOCATIONS, DEPTHS, AND INVERT ELEVATIONS IN THE FIELD PRIOR TO CONSTRUCTION.

1. CLEANOUTS PROVIDED AT:
 - BUILDING SEWER EXIT,
 - AT APPROX. 100 FT SPACING ALONG 6" LATERAL.
2. TOTAL CLEANOUTS = 4 ALONG 321 LF LATERAL.
3. INSTALL CLEANOUTS PER IPC, TCEQ, AND SAWS STANDARD DETAILS.
4. CLEANOUTS TO BE FULL-SIZE (6") WITH TRAFFIC-RATED BOXES WHERE REQUIRED.

6" SEWER LATERAL
TOTAL LENGTH $\approx$ 321 LF
SLOPE = 9.0%
INV @ BUILDING = 804.30'
INV @ CONNECTION TO 8" MAIN = 775.56'

8" PRIVATE SEWER MAIN
EXTENSION
L = 15 LF
INV @ START = 775.56'
INV @ END = 775.50'
SLOPE = 0.40%

LEGEND

 Existing Water Line

 FLOW

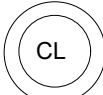
 Existing Sewer Line

 Proposed Fire Hydrant

 Utilities Crossing

 Property Line

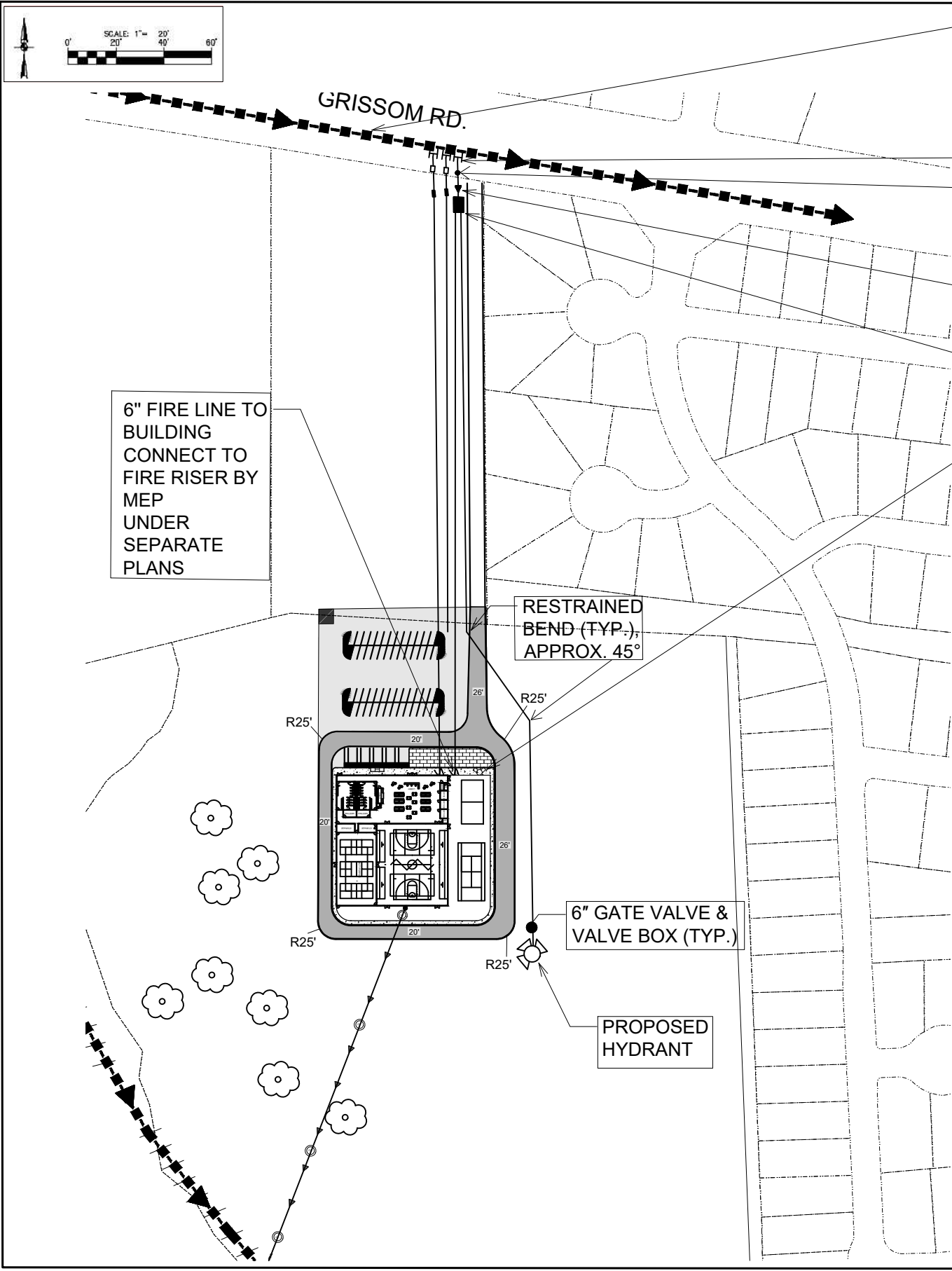
 Underground Electric

 Sanitary Cleanout

[illegible]

LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
OVERALL SEWER PLAN

JOB NO. _____
 DATE _____
 CHECKED _____ DRAWN _____
 CIVIL JOB NO. _____
 REFERENCE: _____
 SHEET C4.1



TAPPING INTO
EXISTING 8" DI
SAWS JOB
#91-2012

1 - 8" X 6" TAPPING SLEEVE
1 - 6" GATE VALVE
1 - 6" VALVE BOX, COMPLETE

1 - 8" X 6" REDUCER

1 - 6" DOUBLE CHECK
DETECTOR ASSEMBLY
IN VAULT

FIRE DEPARTMENT
CONNECTION (FDC) TO BE
LOCATED ON EXTERIOR
WALL ADJACENT TO FIRE
RISER ROOM, FACING FIRE
LANE. FINAL LOCATION TO
BE COORDINATED WITH
MEP AND FIRE MARSHAL.

- FIRE PROTECTION GENERAL NOTES
1. PRIVATE FIRE LINES SHALL BE PVC C900 DR-14, INSTALLED PER NFPA 24 & SAWS SPECS.
 2. FDC TO BE LOCATED ON BUILDING EXTERIOR NEAR RISER ROOM; COORDINATE WITH MEP AND FIRE MARSHAL.
 3. REQUIRED 1,500 GPM @ 20 PSI FIRE FLOW TO BE VERIFIED BY SAWS FLOW TEST.
 4. HYDRANT, VALVES & FIRE MAIN INSTALLATION SHALL COMPLY WITH NFPA 24 & COSA AMENDMENTS.

PROPOSED FIRE PROTECTION:
PROPOSED BUILDING SIZE: 26,250 SF
REQUIRED FIRE FLOW: 1,500 GPM @ 2 HOURS
FIRE FLOW BASIS: FULLY SPRINKLERED, 1-STORY
BUILDING, PROTECTED STEEL
REQUIRED FIRE HYDRANTS: 1
AVAILABLE HYDRANTS: 2
MAX ALLOWED DISTANCE TO HYDRANT (TRUCK
SUPPLY LINE): 550 FT
MAX ALLOWED HAND PULL: 200 FT

FIRE PROTECTION NOTES

1. FIRE LANES SHALL HAVE A MINIMUM 20 FT. WIDTH, A MINIMUM INSIDE TURNING RADIUS OF 25 FT., & A MINIMUM OUTSIDE TURNING RADIUS OF 50 FT., UNLESS OTHERWISE NOTED.
2. FIRE LANES NEXT TO FIRE HYDRANTS OR DESIGNATED FOR AERIAL APPARATUS SHALL BE A MINIMUM OF 25 FT.
3. FIRE LANES SHALL BE DESIGNATED IN ACCORDANCE TO THE LATEST INTERNATIONAL FIRE CODE AND PER APPLICABLE LOCAL AMENDMENTS.
4. CONTRACTOR SHALL COORDINATE WITH THE FIRE MARSHAL TO CONFIRM EXISTING FIRE LANE SIGNAGE MEETS CODE REQUIREMENTS AND/OR TO CONFIRM LOCATION OF ANY NEW SIGNAGE REQUIRED.
5. NON-SPRINKLERED BUILDINGS TRUCK HOSE LAY WILL CONSIST OF 350 FT. OF SUPPLY LINE AS DEPLOYED BY TRUCK, AND 150 FT. OF HOSE DEPLOYED BY HAND.
6. SPRINKLERED BUILDINGS WILL BE INCREASED TO 550 FT. OF SUPPLY LINE AS DEPLOYED BY TRUCK, AND 200 FT. OF HOSE DEPLOYED BY HAND.

LEGEND

MANHOLE

FLOW

Existing Water Line

Existing Sewer Line

Proposed Fire Hydrant

Utilities Crossing

Property Line

Underground Electric

Proposed Fire Lane

SITE DESCRIPTION

PROJECT NAME AND LOCATION: Leon Valley Baptist Church Recreational Facility 7990 Grissom Rd, San Antonio Texas 78251

CONTACT AND PHONE NO.: Jose Arvizu 210-755-9000

PROJECT DESCRIPTION: Construction of a recreational facility addition to a church that will have a parking lot, underground utilities, and swales that will feed into a detention pond.

MAJOR SOIL DISTURBING ACTIVITIES: Clearing and grubbing, utility installations, detention pond construction, excavation and fill (medium-dense clayey sand and select fill respectively).

TOTAL PROJECT AREA (ACRES): ± 17.839 acres

TOTAL AREA TO BE DISTURBED: ± 4.2 acres

WEIGHTED RUNOFF COEFFICIENT: 0.51

EXISTING CONDITION OF SOIL, VEGETATIVE COVER AND % OF VEGETATIVE COVER: At the proposed building area the slope is ± 2.50%. Impervious cover will be ± 55%, and the understorey is limited. In the area being developed and trees will be present and will have to be removed.

DESCRIPTION OF WATER DISCHARGED NOT ASSOCIATED WITH CONSTRUCTION:

NAME OF RECEIVING WATERS: Culebra Creek

IDENTIFY STORMWATER DISCHARGE POINTS: Detention Pond

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

Stabilization measures will be enacted when feasible after the portion of the site in question is no longer being disturbed. In either the case of permanent or temporary stabilization measures they must be implemented no later than 14 days after disruption has ceased. Temporary stabilization will consist of silt fencing and seed and mulch. Permanent stabilization will consist of sod, buildings, sidewalks and pavement. Both seed and sod will be irrigated until 85% establishment is achieved (minimum).

EROSION AND SEDIMENTATION CONTROLS

SOIL STABILIZATION PRACTICES:

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

OTHER:

DISTURBED AREAS ON WHICH CONSTRUCTION ACTIVITY HAS CEASED TEMPORARILY OR PERMANENTLY, SHALL BE STABILIZED WITHIN 14 DAYS UNLESS ACTIVITIES ARE SCHEDULED TO RESUME AND DONE WITHIN 21 DAYS.

STRUCTURAL PRACTICES:

X SILT FENCES
X HAY BALES
GRAVEL FILTRATION BAGS
ROCK BERMS
X DIVERSION INTERCEPTOR OR PERIMETER DIKES
DIVERSION INTERCEPTOR OR PERIMETER SWALES
DIVERSION DIKE AND SWALE COMBINATIONS
PAVED FLUMES
X ROCK BEDDING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)
TIMBER MATTING AT CONSTRUCTION EXIT (STABILIZED ENTRANCE)
CHANNEL LINERS
SEDIMENT TRAPS
SEDIMENT BASINS
STORM INLET SEDIMENT TRAP
STONE OUTLET SEDIMENT STRUCTURES
X CURBS AND GUTTERS
STORM SEWERS
VELOCITY CONTROL STRUCTURES
GEOTEXTILES

NARRATIVE – SEQUENCE OF CONSTRUCTION (STORMWATER MANAGEMENT) ACTIVITIES:

THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS: 1-Construction of temporary entrance and exit, 2-Installation of erosion and sediment controls, 3-site clearing and grubbing, 4- Grading/excavation and fill, 5- Permanent erosion control construction, 6- Site clean up. Note: Temporary erosion controls will be removed once no longer deemed necessary by engineer.

A DESCRIPTION OF MAINTENANCE PROCEDURES FOR CONTROL MEASURES USED:

Erosion controls need to be maintained such that they perform as intended. If a structure is not fulfilling its purpose it should be repaired or replaced. Sedimentation will not be allowed to accumulate to a height greater than 1/3 the original height for any structure, and a inclination change greater than 30 % will also not be allowed.

STORMWATER MANAGEMENT: A SWPPP will be required to inspect and maintain stormwater structures to the best of their abilities

A DESCRIPTION OF PERMANENT STORM WATER MANAGEMENT CONTROLS:

The prominent control is a detention basin that will be fed by swales running along the east, west and south of the property and will have sod. Impermeable cover has been accounted for in the design of the detention pond.

OTHER EROSION AND SEDIMENTATION CONTROLS

MAINTENANCE:

ALL EROSION AND SEDIMENT CONTROLS WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE DONE AT THE EARLIEST DATE POSSIBLE, BUT NO LATER THAN 7 CALENDAR DAYS AFTER THE SURROUNDING EXPOSED GROUND HAS DRIED SUFFICIENTLY TO PREVENT FURTHER DAMAGE FROM HEAVY EQUIPMENT. THE AREAS ADJACENT TO CREEKS AND DRAINAGEWAYS SHALL HAVE PRIORITY, FOLLOWED BY DEVICES PROTECTING STORM SEWER INLETS.

INSPECTION:

AN INSPECTION WILL BE PERFORMED BY THE CONTRACTOR EVERY 14 DAYS AS WELL AS AFTER EVERY 1/2" OR MORE OF RAIN (RECORDED ON A NON-FREEZING RAIN GAUGE TO BE LOCATED AT THE PROJECT SITE). AN INSPECTION AND MAINTENANCE REPORT WILL BE MADE PER INSPECTION. BASED ON THE INSPECTION RESULTS, THE CONTROLS SHALL BE CORRECTED BEFORE THE NEXT SCHEDULED INSPECTION.

WASTE MATERIALS:

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN A SECURELY LIDDED METAL DUMPSTER. THE DUMPSTER WILL MEET ALL STATE AND LOCAL CITY SOLID WASTE MANAGEMENT REGULATIONS. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE WILL BE DEPOSITED IN THE DUMPSTER. THE DUMPSTER WILL BE EMPTIED AS NECESSARY OR AS REQUIRED BY LOCAL REGULATION AND THE TRASH WILL BE HAULED TO A LOCAL DUMP. NO CONSTRUCTION MATERIALS WILL BE BURIED ON SITE.

HAZARDOUS WASTE (INCLUDING SPILL REPORTING):

AT A MINIMUM, ANY PRODUCTS IN THE FOLLOWING CATEGORIES ARE CONSIDERED TO BE HAZARDOUS: PAINTS, ACIDS FOR CLEANING, MASONRY SURFACES, GASOLINE, MOTOR OIL, CLEANING SOLVENTS, ASPHALT PRODUCTS, CHEMICAL ADDITIVES FOR SOIL STABILIZATION OR CONCRETE CURING COMPOUNDS AND ADDITIVES. IN THE EVENT OF A SPILL WHICH MAY BE HAZARDOUS AND MEETS REPORTING REQUIREMENTS, THE NATIONAL RESPONSE CENTER SHOULD BE CONTACTED AT 800-424-8802, AND ANY REQUIRED CHANGES MADE TO THE SWPPP. IN THE EVENT OF A LIFE THREATENING SPILL THE SAN ANTONIO FIRE DEPARTMENT SHOULD BE NOTIFIED AS WELL AS THE APPROPRIATE CITY INSPECTORS.

SANITARY WASTE Local, state and federal requirements will be met for the collection and disposal of jobsite waste.

OFFSITE EXCAVATION SOURCE LOCATION

OFFSITE FILL SOURCE LOCATION

OFFSITE VEHICLE TRACKING

HAUL ROADS DAMPENED FOR DUST CONTROL.
LOADED HAUL TRUCKS TO BE COVERED WITH TARPULIN
EXCESS DIRT ON ROAD TO BE REMOVED DAILY
STABILIZED CONSTRUCTION ENTRANCE.

OTHER:

CERTIFICATION THAT SITE DISTURBANCE AND / OR DISCHARGES WILL NOT EFFECT LISTED ENDANGERED SPECIES AND THEIR HABITAT. WHAT METHOD IS USED TO SATISFY THE ENDANGERED SPECIES REQUIREMENTS? A habitat compliance form will be completed and submitted to the U.S. Fish and Wildlife Service and to the Texas Parks and Wildlife Department.

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.

JANUARY 2005

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

STORM WATER POLLUTION PREVENTION PLAN (SWP3) NARRATIVE

% SUBMITTAL	PROJECT NO.:	DATE:
DRWN. BY: V. VASQUEZ	DSGN. BY:	CHKD. BY:
		SHEET NO.: OF

LEGEND

TREES TO BE REMOVED



TREES TO BE PRESERVED



HERITAGE TREES



100-YEAR FLOOD PLAIN



PROPERTY LINE



CULEBRA CREEK

HERITAGE TREES	DIAMETER
#1	25"
#2	25"
#3	30"
#4	26"
#5	34"
#6	30"
#7	42"
#8	27"
TOTAL	239" (19.9')

THE 100 YEAR FLOODPLAIN IS 14 % OF THE PROPERTY

THE DEVELOPMENT TAKES UP 17.5% OF THE NON-FLOODPLAIN AREA

8 EXISTING HERITAGE TREES

TREE PRESERVATION (NON-FLOODPLAIN) = 82.5%

FLOOD PLAIN TREE PRESERVATION = 100%

HERITAGE TREE PRESERVATION = 100%



Scale:



ROOT PROTECTION ZONE:

THE ROOT PROTECTION ZONE MUST BE ESTABLISHED AT AN OFFSET OF 4 FEET FROM THE BERM EDGE WITH ORANGE FENCING WITH A CLEARING OF 34 FEET FROM THE OUTER DIAMETER OF THE TREE TO THE FENCING. 6" COARSE MULCH WILL BE MAINTAINED OVER THE ROOT PROTECTION ZONE.

HABITAT COMPLIANCE FORM:

A TREE PRESERVATION PLAN SUBMITTAL TO ATTAIN A TREE PERMIT USING THE STAND DELINEATION METHOD REQUIRES A HABITAT COMPLIANCE FORM TO BE TURNED INTO THE FWS AND TO THE TPWD. THE PROPERTY IS NOT WITHIN KARST ZONES 1 OR 2 (3B) AND NOT WITHIN THE CRITICAL OR LIKELY HABITAT OF THE GOLDEN CHEEKED WARBLER.

NOTES:

**STAND DELENIATION METHOD REQUIRES AN
AREIAL PHOT WITH 6" PIXEL RESOLUTION AND 1"
TO 400' SCALE**

VEGETATION TYPE IS SPARSE AND MOSTLY
LOCATED IN THE SOUTHWEST PORTION OF THE
PROPERTY

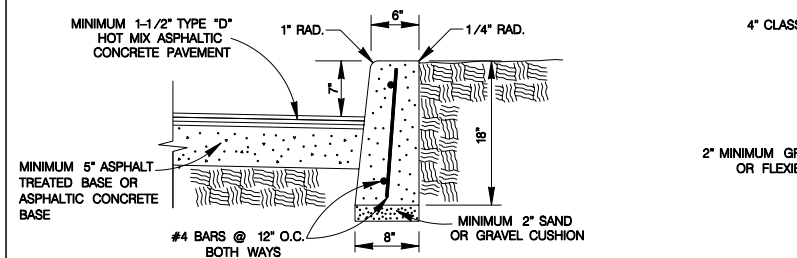
UNDERSTORY IS MOSTLY SPARSE AND SITUATED
IN THE SOUTHWEST PORTION OF THE PROPERTY

REQUIREMENTS FOR ADDITIONS OVER 2500 SQ-FT (2650 SQ-FT): FNAL TREE CANOPY COVER FOR RESIDENTIAL IS 38%, TREE PRESERVATION OF 35%, TREE CANOPY OUTSIDE OF THE FLOOD PLAIN FOR NON-HERITAGE -35% AND HERITAGE TREES-100%, IN THE FLOODPLAIN/ENVIRONMENTALLY SENSITIVE AREAS FOR NON-HERITAGE-80% FOR HERITAGE-100%.

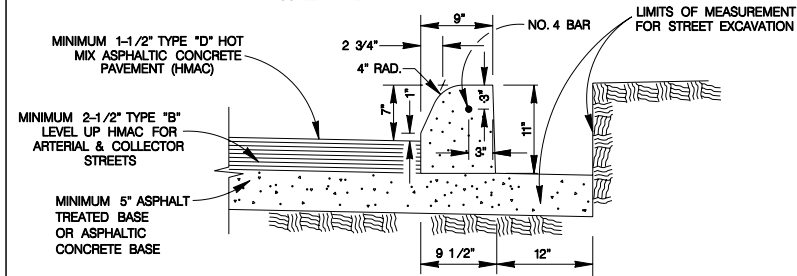
UP TO 80% OF TOTAL CANOPY AREA AND 80% OF HERITAGE TREES MAY BE MITIGATED

A TREE THAT DIES TO NON-NATURAL AND NON-PUBLIC UTILITY REASONS MUST BE MITIGATED AT THE SAME DBH OR BETTER WITHIN 90 DAYS OF NOTIFICATION BY THE CITY (THIS DEADLINE CAN BE EXTENDED UP TO 90 DAYS DUE TO WEATHER CONSIDERATIONS).

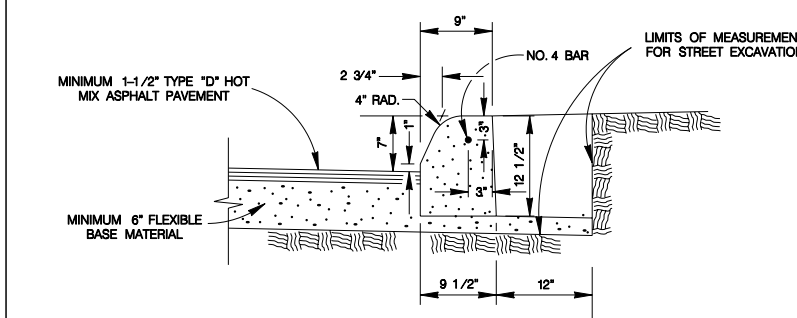
FOR UTILITY WORK TREES MAY BE RELOCATED
TEMPORARILY UNTIL UTILITY WORK IS DONE IF THE
TREE SHOWS SIGNS OF WILTING/DYING.



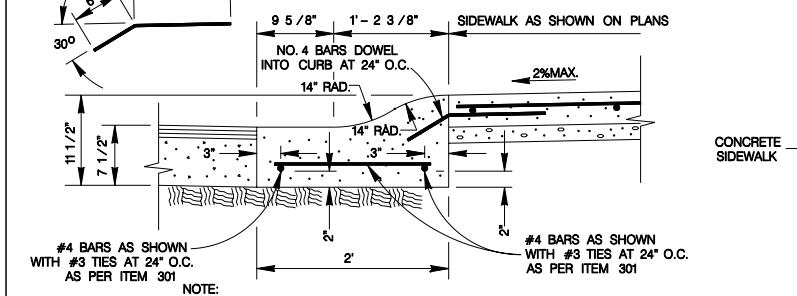
HEADER CURB
ITEM 500 ON SAND OR GRAVEL
SCALE : 1"=2'



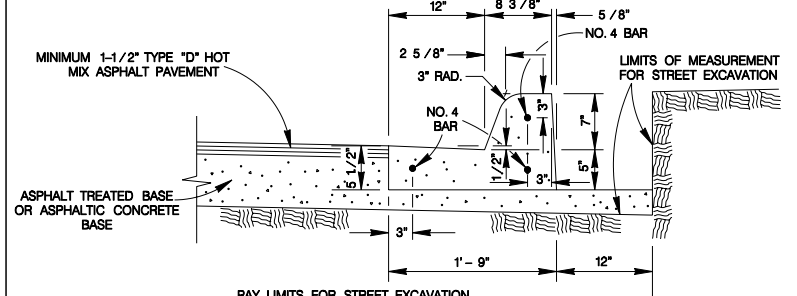
CONCRETE CURB
ITEM 500 ON ASPHALT TREATED BASE OR ASPHALTIC CONCRETE BASE
SCALE : 1"=2'



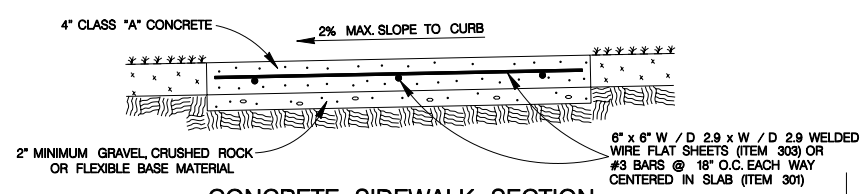
CONCRETE CURB
ITEM 500 ON FLEXIBLE BASE MATERIAL
SCALE : 1"=2'



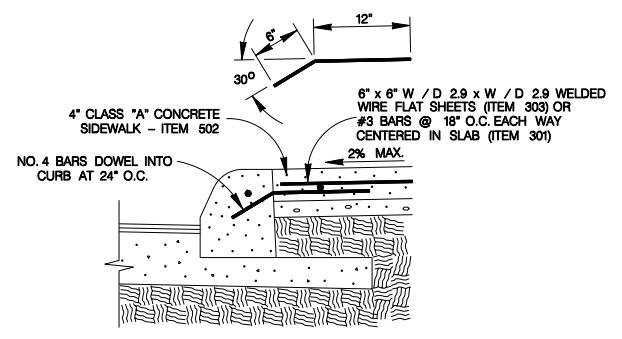
MOUNTABLE CURB
ITEM 500 ON COMPACTED SUBGRADE
SCALE : 1"=2'



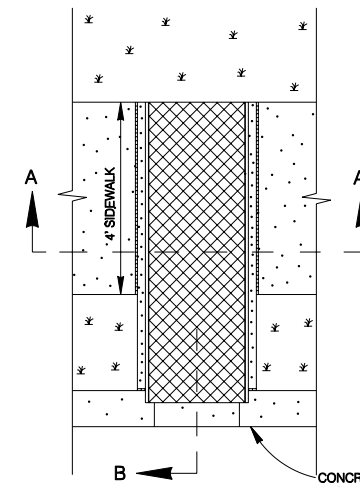
TYPICAL CURB & GUTTER DETAIL
ITEM 500 ON ASPHALT TREATED BASE OR ASPHALTIC CONCRETE BASE
SCALE : 1"=2'



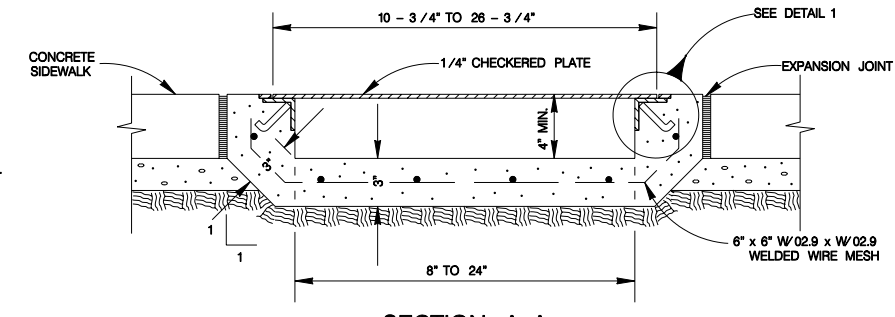
CONCRETE SIDEWALK SECTION
ITEM 502
SCALE : 1"=2'



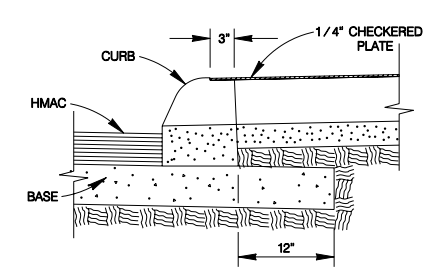
CONCRETE SIDEWALK ABUTTING CURB SECTION
ITEM 502
SCALE : 1"=2'



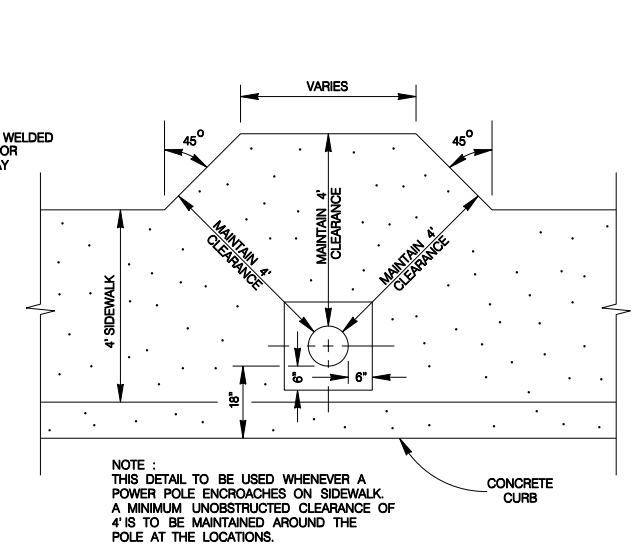
CONCRETE SIDEWALK DRAIN DETAIL
SCALE : 1"=4'



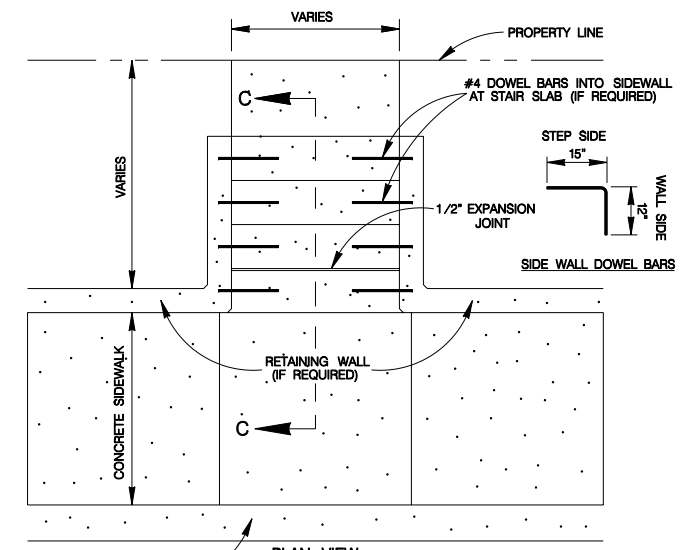
SECTION A-A
SCALE=1:12



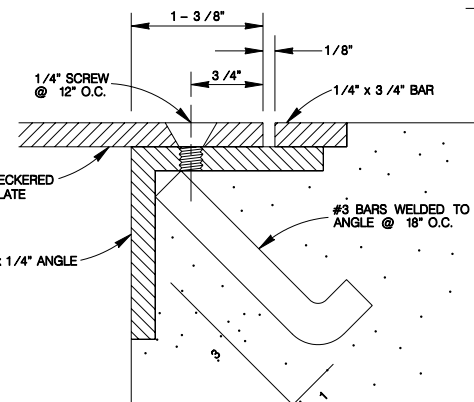
SECTION B
SCALE : 1"=2'



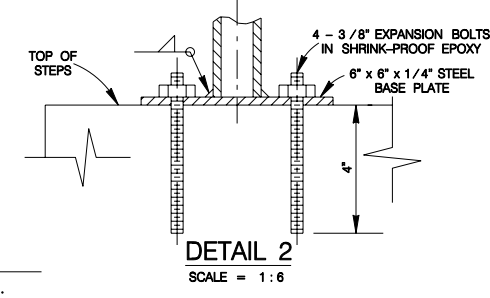
CONCRETE SIDEWALK @ UTILITY POWER POLE DETAIL
SCALE : 1"=4'



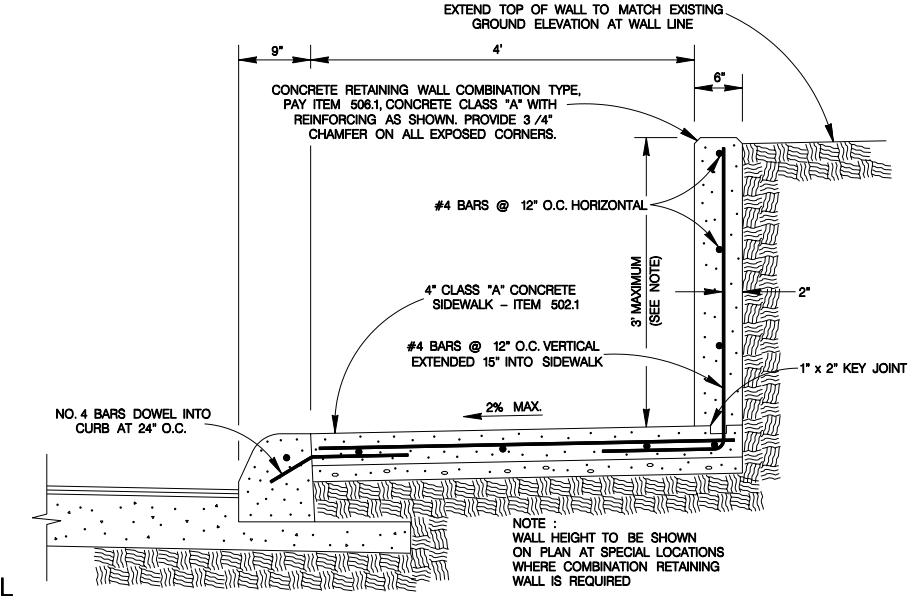
CONCRETE STEPS
ITEM 524
SCALE : 1"=4'



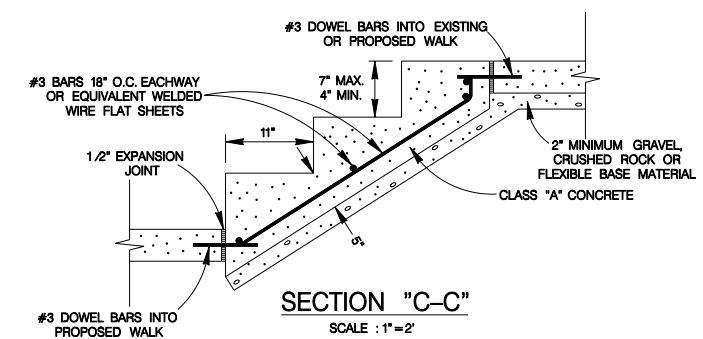
DETAIL 1
SCALE=1:1



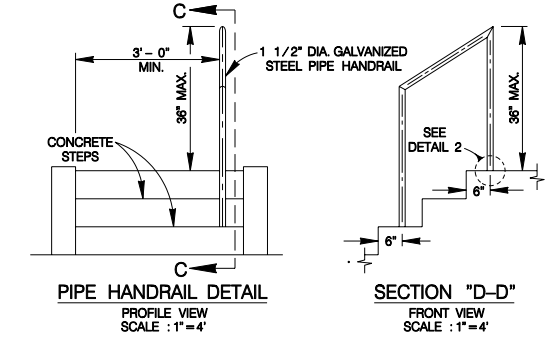
DETAIL 2
SCALE = 1:6



CONCRETE RETAINING WALL - COMBINATION TYPE
ITEM 506
SCALE : 1"=2'



SECTION "C-C"
SCALE : 1"=2'



PIPE HANDRAIL DETAIL
PROFILE VIEW
SCALE : 1"=4'

SECTION "D-D"
FRONT VIEW
SCALE : 1"=4'

- NOTES :
1. PLACE STEPS TO CONFORM WITH PROPOSED PARKWAY GRADING
 2. 1-1/2" DIA GALVANIZED STEEL PIPE HANDRAIL REQUIRED ON ONE SIDE OF THE STEPS WHEN 3 OR MORE RISERS ARE USED, OR AS DESIGNED BY ENGINEER. TO BE PAID UNDER ITEM 522

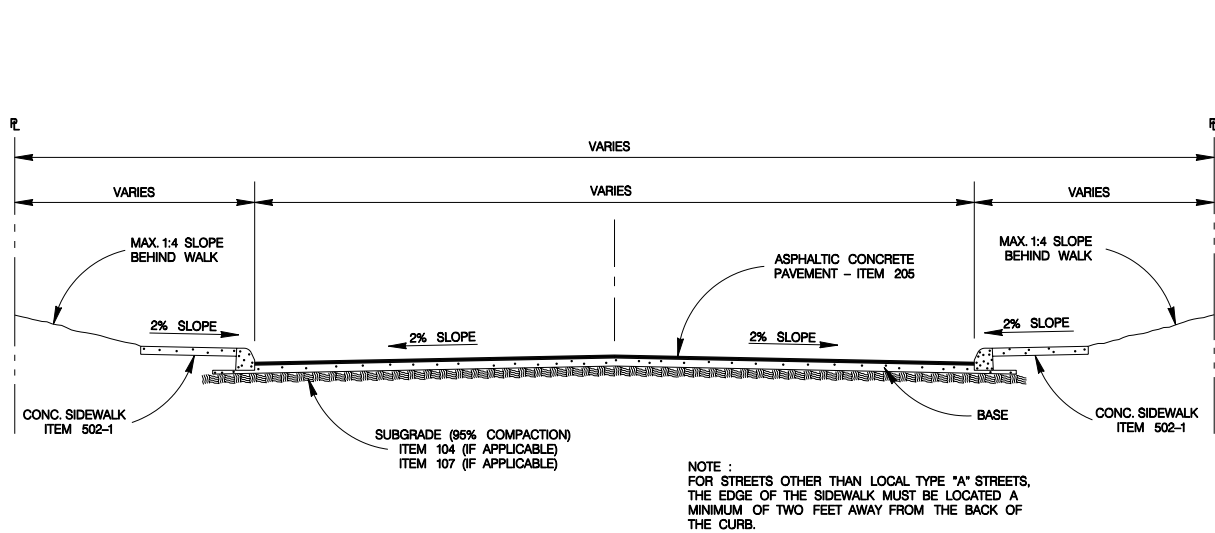
HANDRAIL FOR CONCRETE STEPS
ITEM 522

MAY 2009

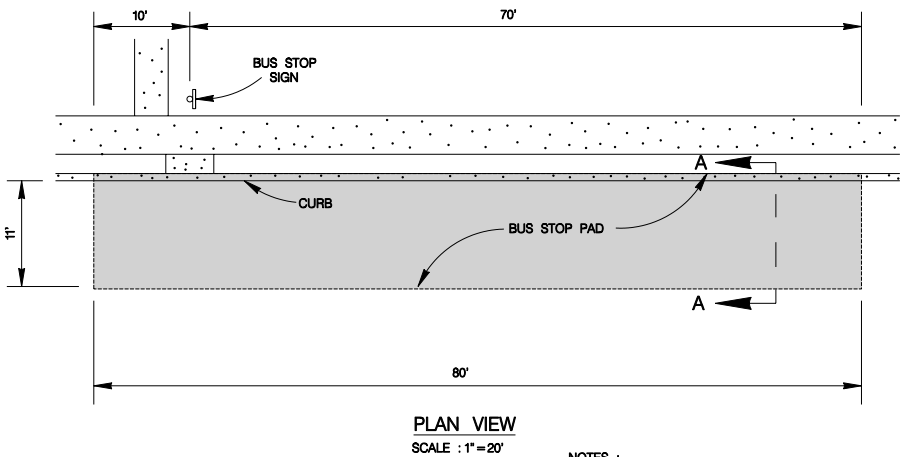
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

MISCELLANEOUS CONSTRUCTION STANDARDS I

% SUBMITTAL	PROJECT NO.:	DATE:
DRWN. BY: V. VASQUEZ	DSGN. BY:	CHKD. BY: R.S. HOSSEINI, P.E.
		SHEET NO.: OF

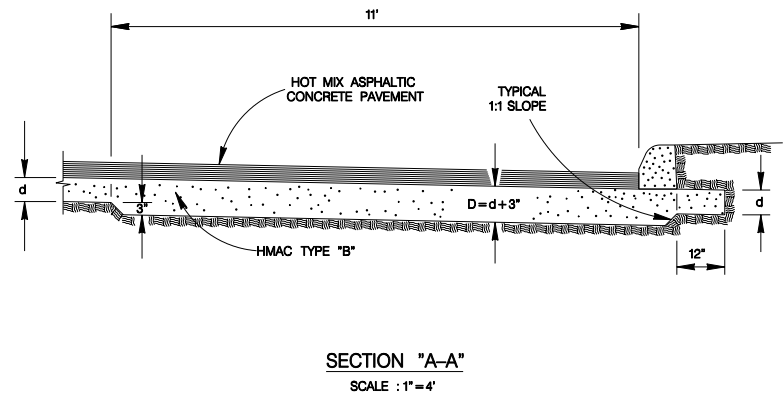


TYPICAL STREET SECTION
SCALE : 1"=8'

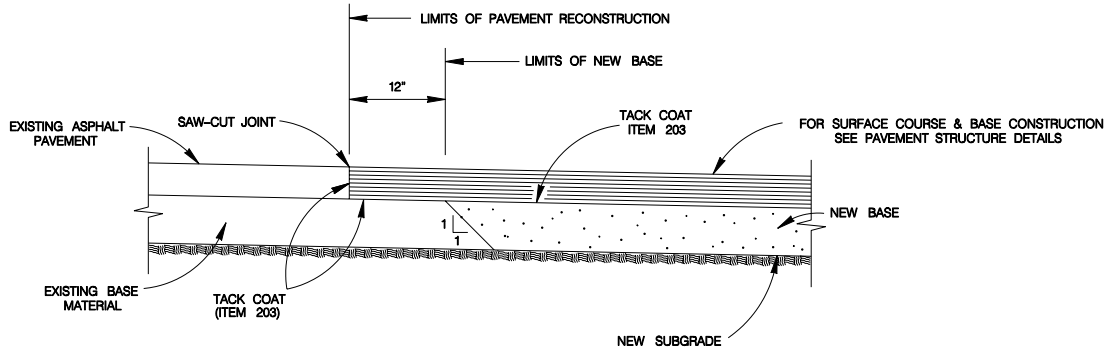


PLAN VIEW
SCALE : 1"=20'

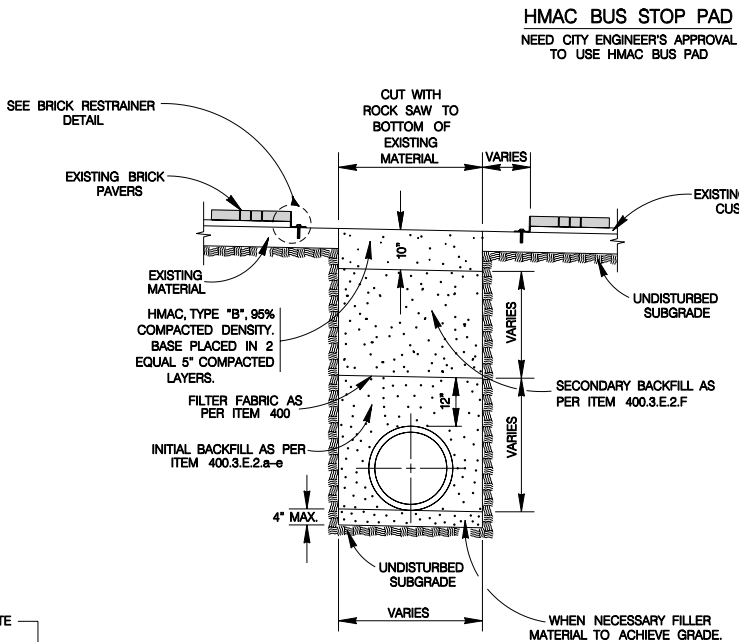
- NOTES :
- EXCAVATION FOR THICKENED PAVEMENT SECTION WILL BE PAID UNDER ITEM NO.104 "STREET EXCAVATION".
 - BASE MATERIALS :
 - IF THE MEASUREMENT FOR THE HMAC MATERIAL IS PER TON, THICKENED PAVEMENT SECTION WILL BE PAID FOR UNDER ITEM NO.205, TYPE "B" - PER TON.
 - IF THE MEASUREMENT FOR THE HMAC MATERIAL IS PER SQUARE YARD, NO EXTRA PAYMENT WILL BE MADE FOR THE THICKENED PAVEMENT.



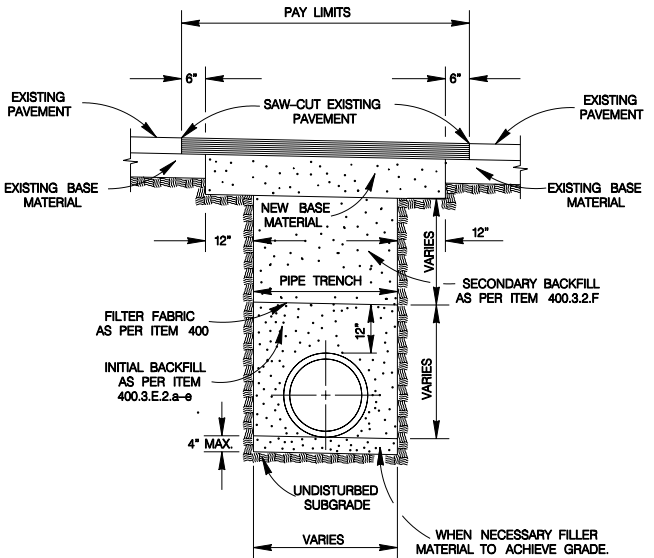
SECTION "A-A"
SCALE : 1"=4'



PAVEMENT JUNCTION DETAILS
SCALE : 1"=2'

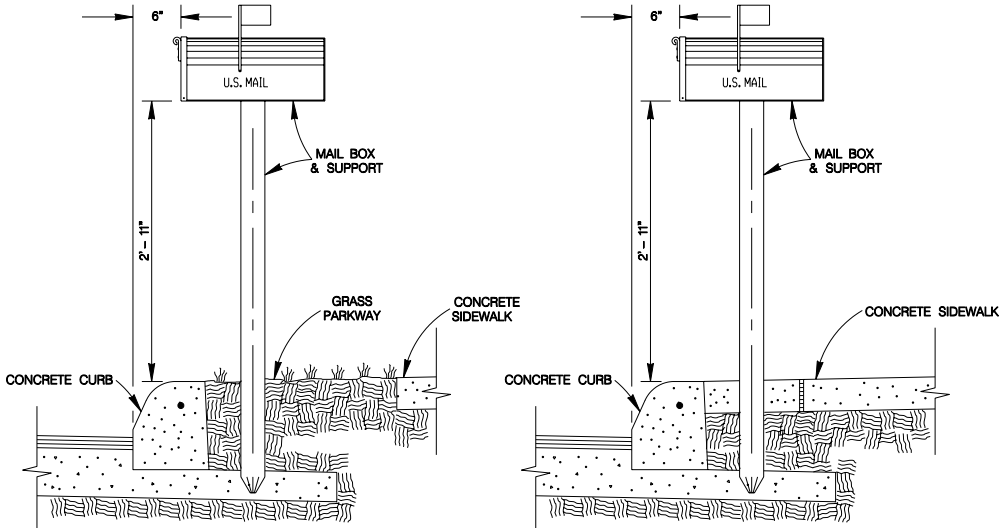


TYPICAL BASE REPLACEMENT FOR
BRICK SURFACED STREET SECTION
ITEM 511.3
SCALE : 1"=4'



- NOTES :
- FOR LOCAL TYPE "A" & "B" STREETS (RESIDENTIAL) USE 6" ASPHALT CONCRETE BASE TYPE "B" WITH 1-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT.
 - FOR ARTERIAL & SECONDARY STREETS (COMMERCIAL) USE 12.5" TYPE "B" HOT MIX ASPHALTIC CONCRETE PAVEMENT LEVELING-UP COURSE & 1-1/2" TYPE "D" HOT MIX ASPHALTIC CONCRETE PAVEMENT SURFACE COURSE.

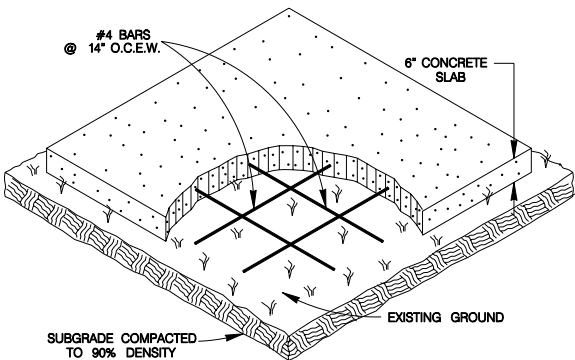
TYPICAL PAVEMENT REPLACEMENT
ITEM 511
SCALE : 1"=4'



MAIL BOX PERPENDICULAR TO CURB
WHEN SIDEWALK IS DETACHED FROM CURB
SCALE : 1"=2'

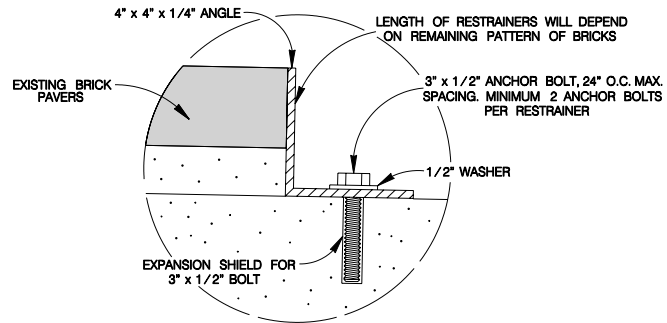
MAIL BOX PERPENDICULAR TO CURB
WHEN SIDEWALK IS ATTACHED TO CURB
SCALE : 1"=2'

MAIL BOX LOCATION
ITEM 513.1



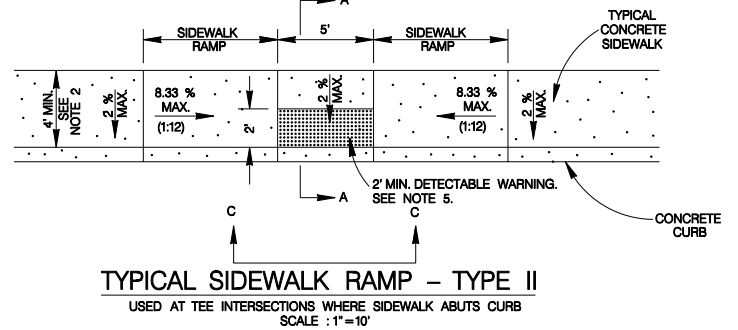
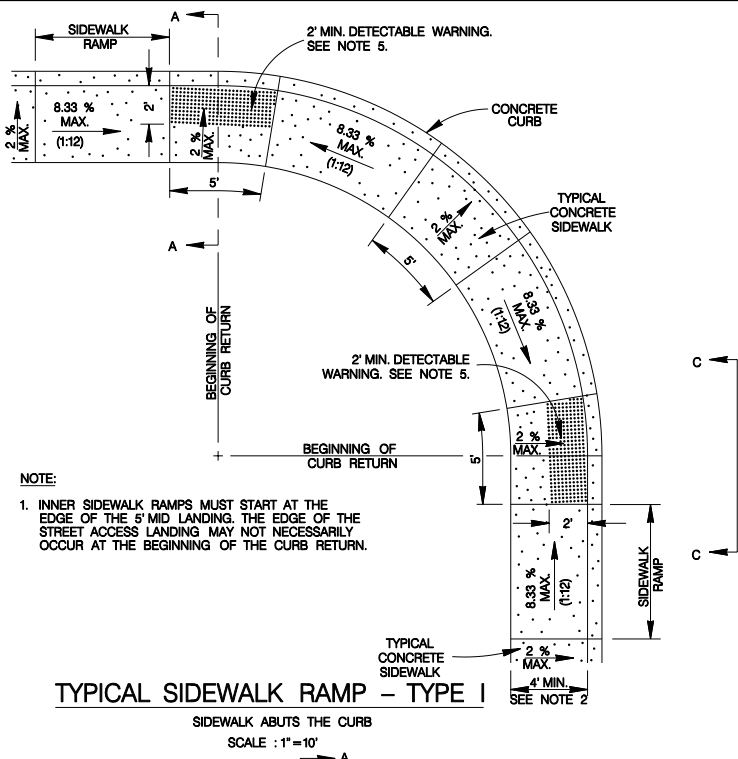
- MAIL BOX PAD NOTES :
- THE CONTRACTOR WILL CONSTRUCT SLABS FOR "TEMPORARY MAIL BOX COLLECTION PAD" FOR THE UNITED STATES POSTAL SERVICE WITH LOCATIONS AND SIZES SPECIFIED BY THE CITY ENGINEER DURING CONSTRUCTION.
 - THE CONSTRUCTION OF SLABS SHALL CONFORM TO ITEM 513 "REMOVING AND RELOCATING MAILBOXES".
 - PAYMENT WILL BE MADE UNDER ITEM 513.2 "COMMUNITY MAILBOX SLAB - PER SQUARE YARD".
 - UNIT PRICE WILL INCLUDE REMOVAL OF "TEMPORARY MAIL BOX COLLECTION PAD" SLABS AT THE END OF THE PROJECT. NO SEPARATE PAY ITEM.

COMMUNITY
MAIL BOX SLAB
ITEM 513.2
SCALE : 1"=4'



BRICK RESTRAINER DETAIL
SCALE = 1:6

FEBRUARY 2010
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT
MISCELLANEOUS
CONSTRUCTION STANDARDS II



GENERAL NOTES

1. WHEN POSSIBLE SIDEWALKS SHOULD BE PLACED NEXT TO THE PROPERTY LINE, ALLOWING A MINIMUM OF 1 FOOT BUFFER. DEVIATION OF THE PATHWAY FROM A STRAIGHT LINE IS ENCOURAGED TO AVOID TREES OR OTHER OBSTRUCTIONS.
2. FOR LOCAL TYPE "A" STREETS, SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND IF SEPARATED FROM THE CURB, THE SIDEWALK SHALL BE LOCATED A MINIMUM OF 2' FROM THE BACK OF CURB.
3. FOR OTHER THAN LOCAL TYPE "A" STREETS, SIDEWALKS SHALL HAVE A MINIMUM UNOBSTRUCTED WIDTH OF 4' AND SEPARATED A MINIMUM OF 2' FROM THE BACK OF CURB OR AS AN OPTION, THE SIDEWALK SHALL HAVE A MINIMUM WIDTH OF 6' WHEN LOCATED AT THE BACK OF CURB.
4. SIDEWALK RAMP LENGTHS PRESENTED IN TABLE 1 ARE GUIDELINES ONLY. SIDEWALK RAMP LENGTHS SHALL BE OF SUFFICIENT LENGTH TO MAINTAIN 8.33% (1:12) MAXIMUM SLOPE.
5. 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 SPECIFICATIONS OR PAVERS CONFORMING TO TxDOT STANDARD PED-05, PEDESTRIAN FACILITIES.
6. DETECTABLE WARNINGS SHALL CONTRAST VISUALLY WITH ADJOINING SURFACES, EITHER LIGHT-ON-DARK, OR DARK-ON-LIGHT. THE MATERIAL USED TO PROVIDE CONTRAST SHALL BE AN INTEGRAL PART OF THE WALKING SURFACE.
7. SIDEWALK RAMP TYPE V SHALL BE USED ONLY WHERE THERE IS SIGNIFICANT RESTRICTION WITHIN THE PARKWAY TO CONSTRUCT TYPE I OR TYPE III RAMPs.
8. 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 FINISHED.
9. 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 UTILITY CLEARANCE.
10. SIDEWALKS LESS THAN 5 FEET IN WIDTH SHALL BE PROVIDED WITH A PASSING SPACE AT A MAXIMUM SPACING OF 200 FEET.
11. WHEELCHAIR RAMP SHALL BE CONSTRUCTED WITH 4" CLASS "A" CONCRETE AND 2" MINIMUM GRAVEL, CRUSHED ROCK OR FLEXIBLE BASE MATERIAL.
12. REINFORCING STEEL SHALL BE #3 BARS AT 18" O.C.E.W. OR 6" x 6" - W2.9 x W2.9 WIRE MESH.
13. SIDEWALK GRADES SHALL NOT EXCEED THE GRADE ESTABLISHED FOR THE ADJACENT ROADWAY, ANY SIDEWALK CONSTRUCTION THAT DEVIATES FROM THE NATURAL GRADE OF THE ROADWAY TO CREATE A GRADE STEEPER THAN THE EXISTING ROADWAY WILL REQUIRE RAMPs, HANDRAILS AND RESTING PLATFORMs TO BE CONSTRUCTED IN ACCORDANCE WITH ADA AND TAS STANDARDS.
14. SIDEWALK CROSS GRADE SHALL HAVE A MAXIMUM SLOPE OF 2%. LANDINGS SHALL HAVE A MAXIMUM SLOPE OF 2% IN ANY DIRECTION.
15. 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% = 5.66%). IN ADDITION, THE ADJACENT PAVEMENT CROSS SLOPE SHALL BE LESS THAN OR EQUAL TO 5%.
16. 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.
17. ADA COMPLIANCE IN ALTERATIONS INCLUDE ONLY THAT WORK WITHIN THE LIMITS, BOUNDARIES OR SCOPE OF A PLANNED PROJECT.

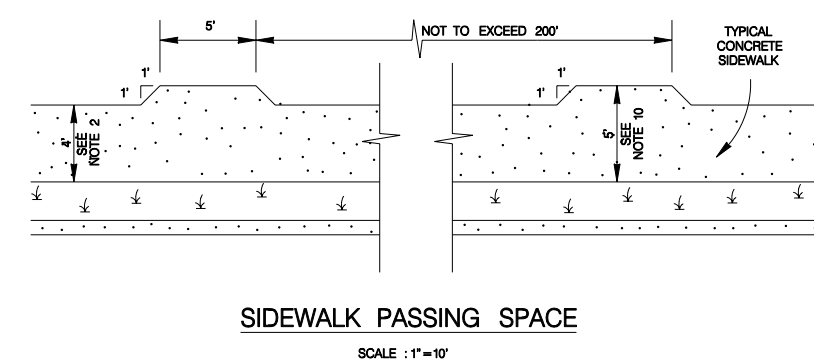
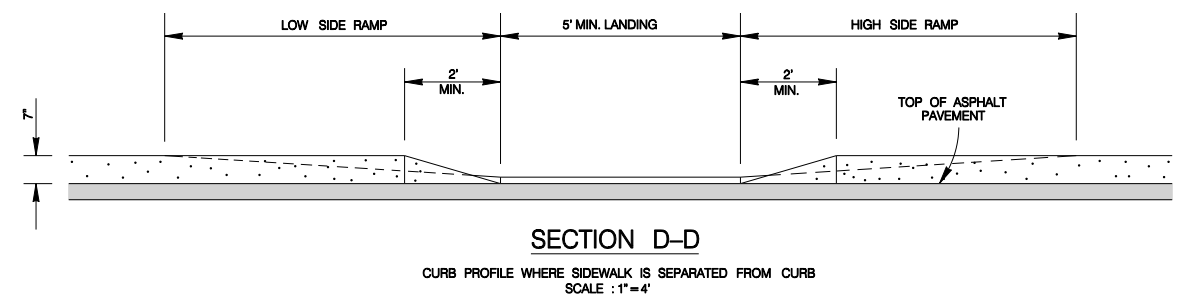
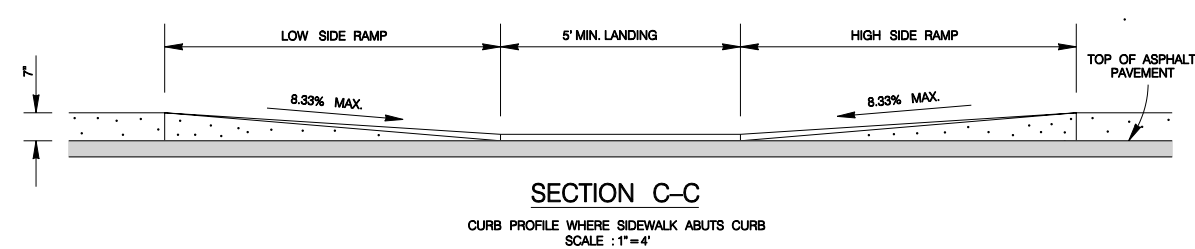
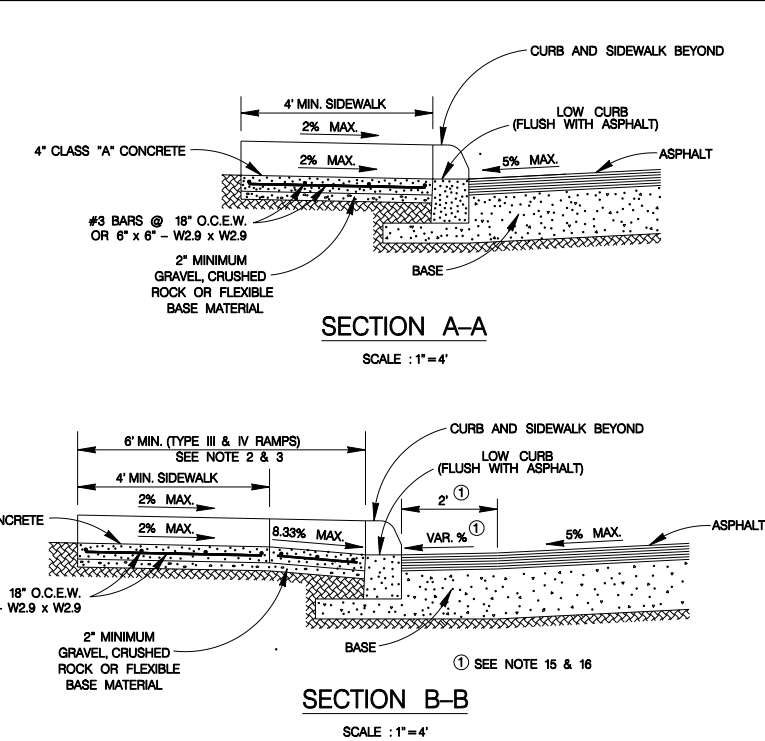
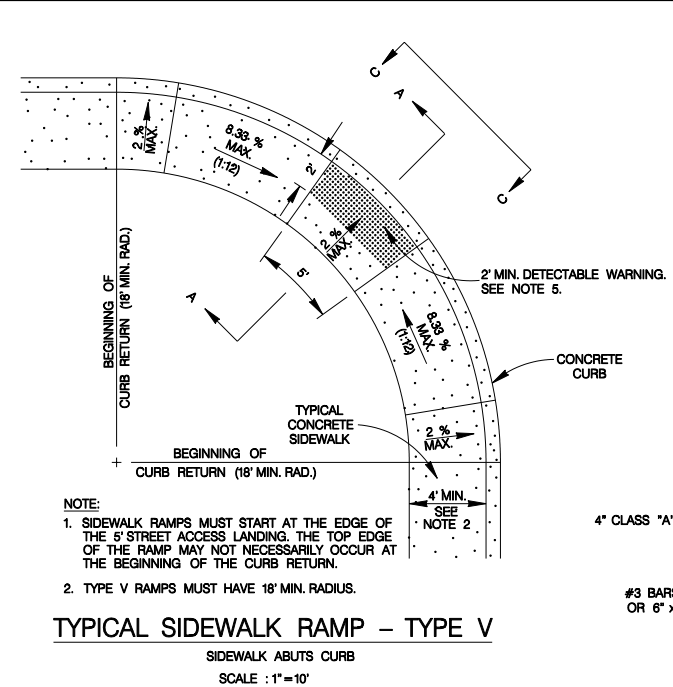
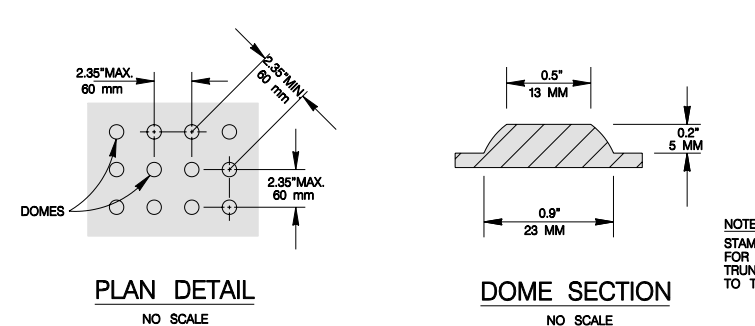
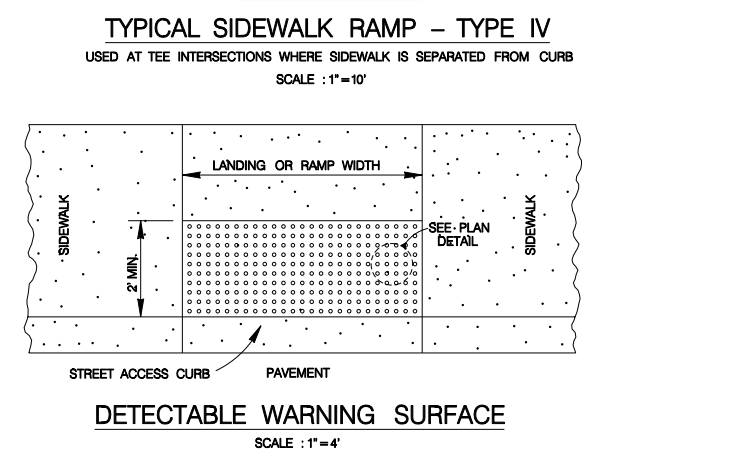
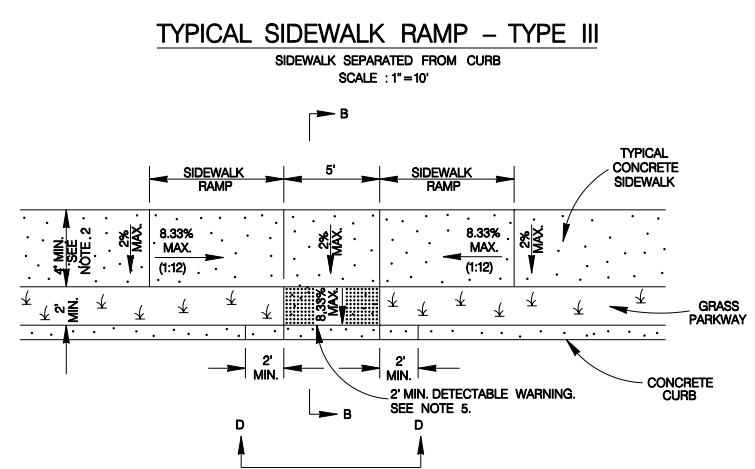
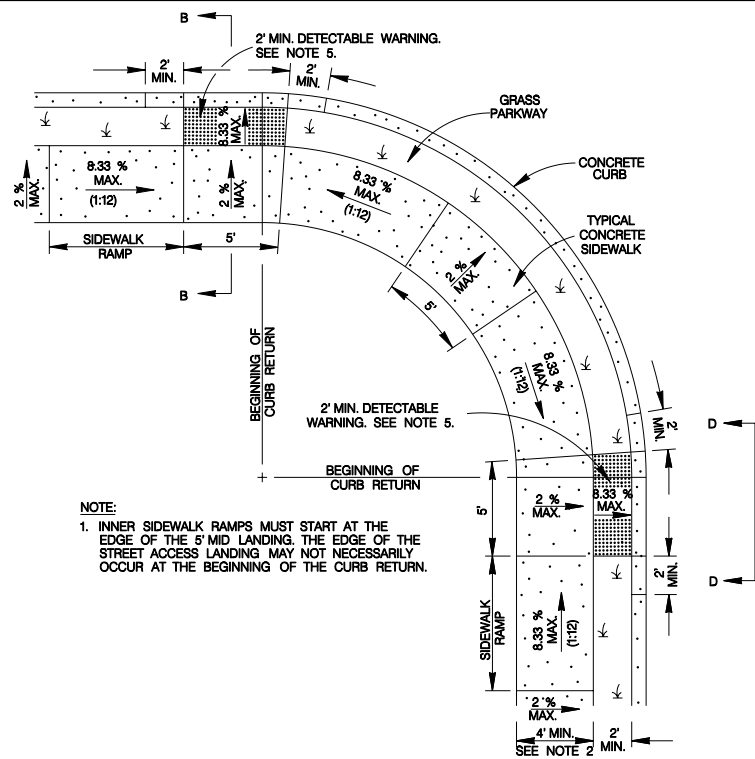


TABLE 1 (SEE NOTE 4)		
GUTTER SLOPE	SIDEWALK RAMP LENGTH (1:12)	
	LOW SIDE	HIGH SIDE
1%	5'-6"	7'-2"
2%	5'-0"	8'-4"
3%	4'-6"	10'-0"
4%	4'-2"	12'-6"
5%	3'-10"	16'-8"

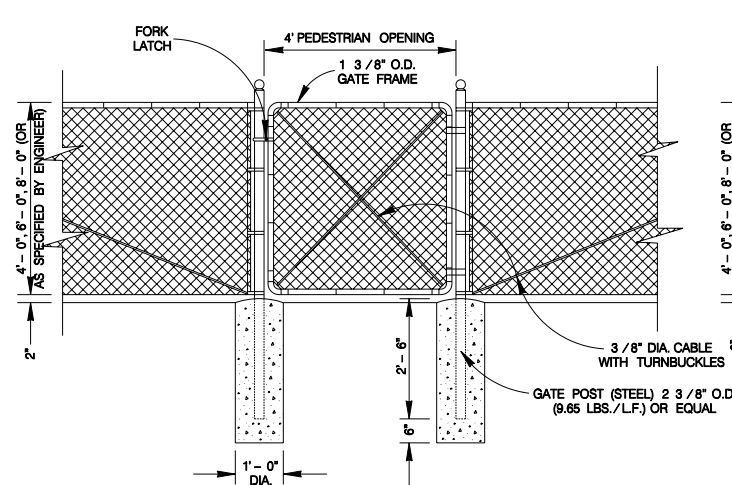
MAY 2009

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

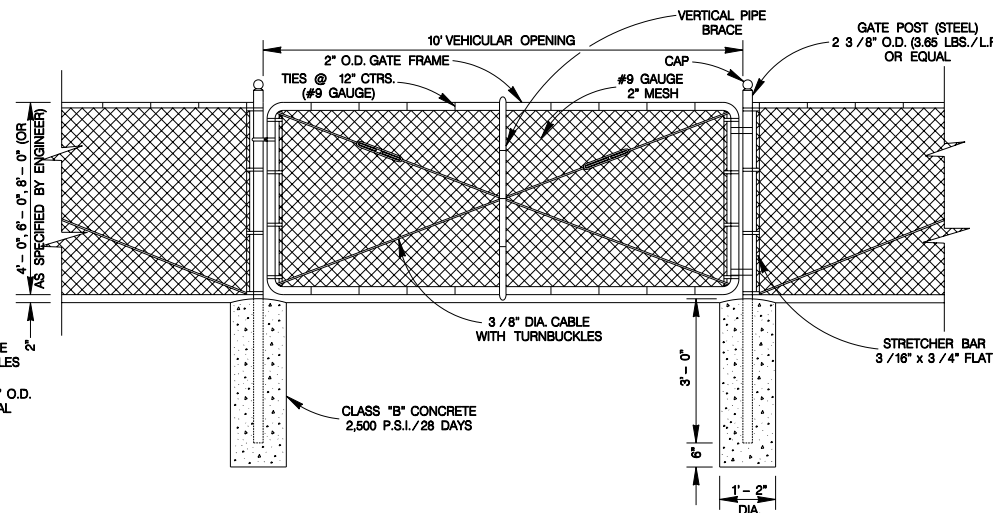
WHEELCHAIR RAMP STANDARDS

% SUBMITTAL PROJECT NO.: DATE:
DRWN. BY: V. VASQUEZ DSGN. BY: CHKD. BY: R.S. HOSSEINI, P.E. SHEET NO.: OF

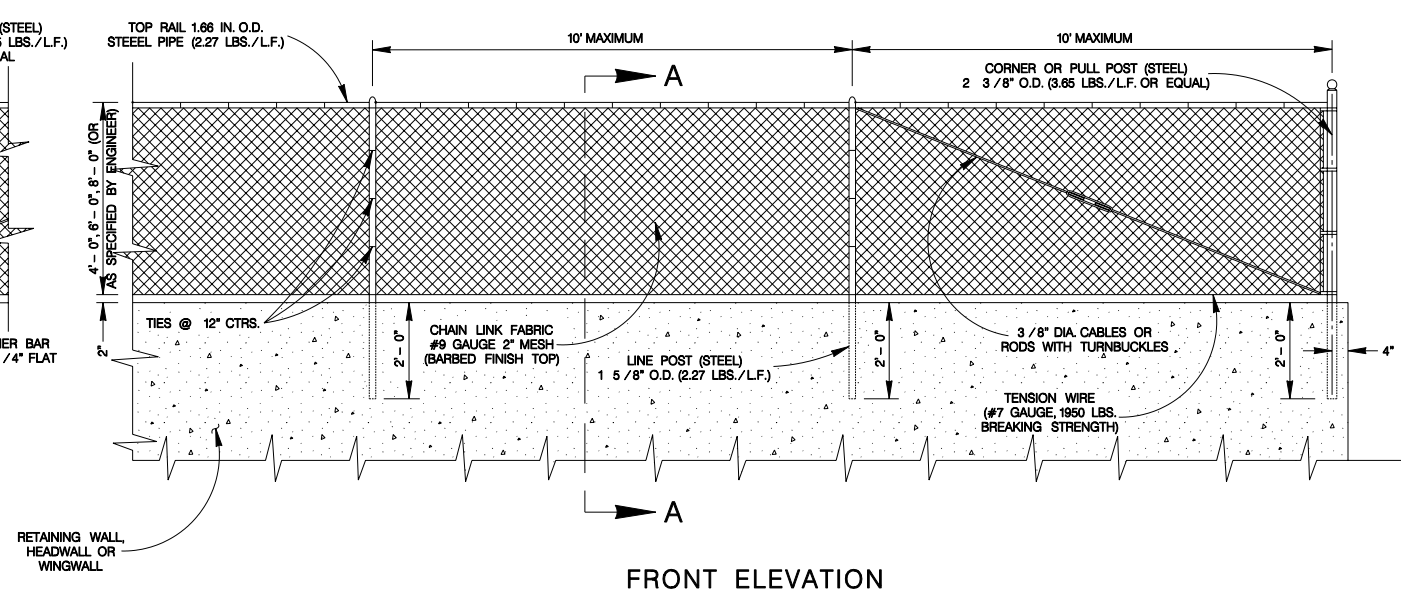
NOTE:
STAMPED CONCRETE TRUNCATED DOMES WILL NOT BE ALLOWED TO BE USED FOR DETECTABLE WARNING ON WHEELCHAIR RAMPs. CONTRACTOR MUST SUBMIT TRUNCATED DOME INFORMATION THAT IS TO BE USED ON WHEELCHAIR RAMPs TO THE PROJECT MANAGER FOR APPROVAL AT LEAST 30 DAYS PRIOR TO INSTALLATION.



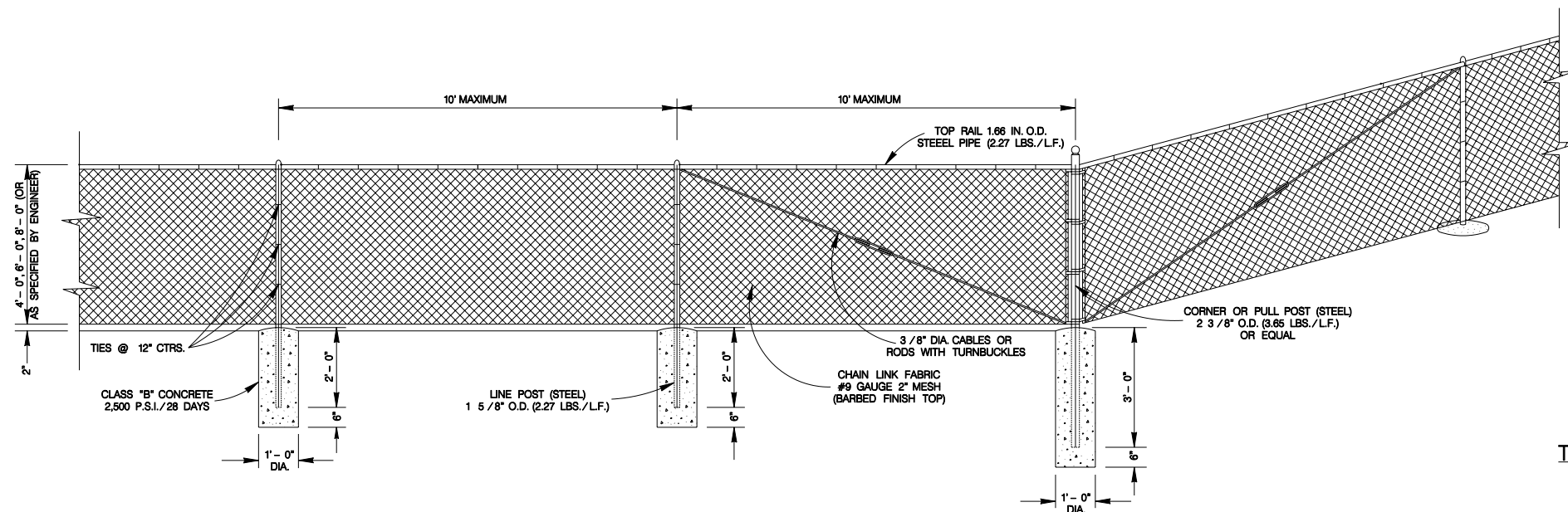
PEDESTRIAN GATE
ITEM 507.4
SCALE : 1" = 4'



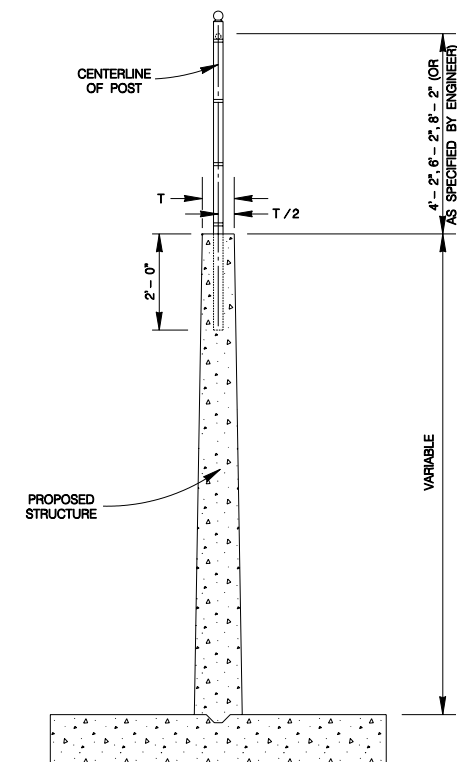
VEHICULAR GATE
ITEM 507.5
SCALE : 1" = 4'



FRONT ELEVATION
SCALE : 1" = 4'



TYPICAL FENCE DETAIL
SCALE : 1" = 4'



SECTION VIEW "A-A"
SCALE : 1" = 4'

TYPICAL FOR FENCING IN RETAINING WALLS, HEADWALLS & WINGWALLS

GENERAL NOTES

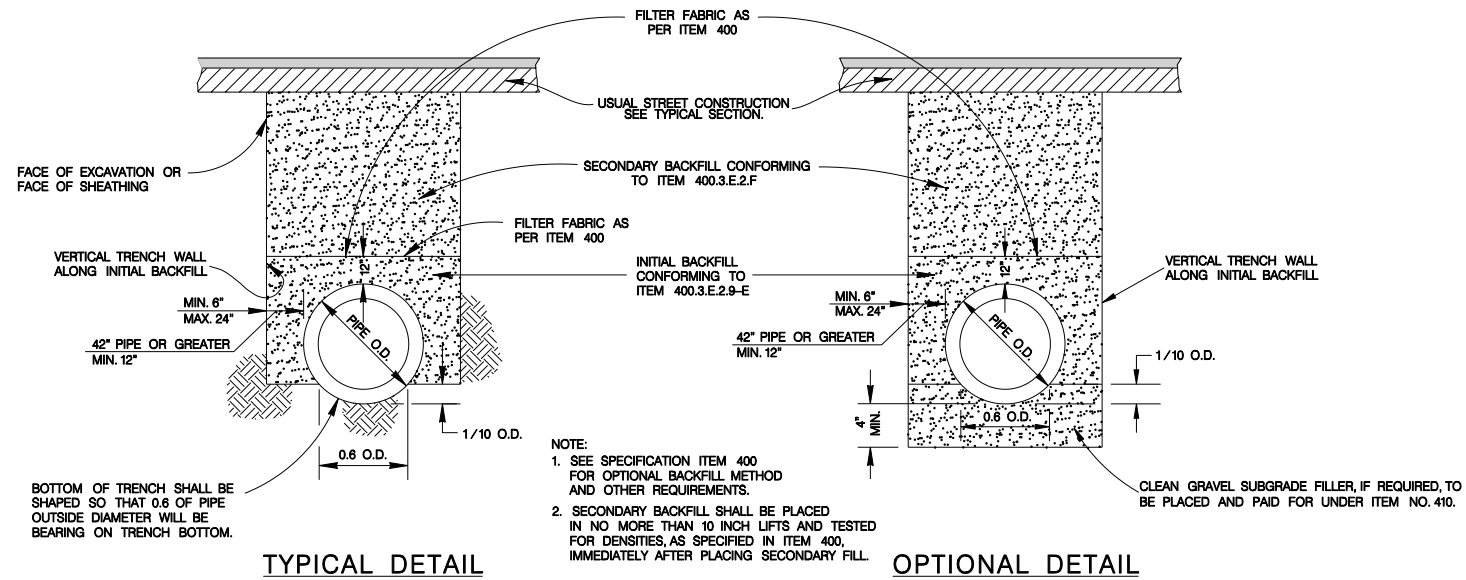
- ALL CONCRETE FOOTINGS SHALL BE CROWNED A MINIMUM OF 1" ABOVE THE EXISTING GROUND, WHERE FOOTINGS ARE REQUIRED ONLY.
- FENCING SHALL BE LOCATED IN RETAINING WALLS, HEADWALLS & WINGWALLS AT LOCATIONS SHOWN ON THE PLANS.
- CORNER OR PULL POSTS WILL BE REQUIRED AT ALL END POINTS AND ANGLE POINTS.
- CONCRETE FOR SEPARATE POST FOOTINGS SHALL BE IN ACCORDANCE WITH ITEM 300-B CLASS B CONCRETE.
- PAYMENT SHALL BE MADE AS SPECIFIED IN ITEM NO. 507 "CHAIN LINK WIRE FENCE OF CITY OF SAN ANTONIO" STANDARD SPECIFICATIONS FOR CONSTRUCTION.

MAY 2009

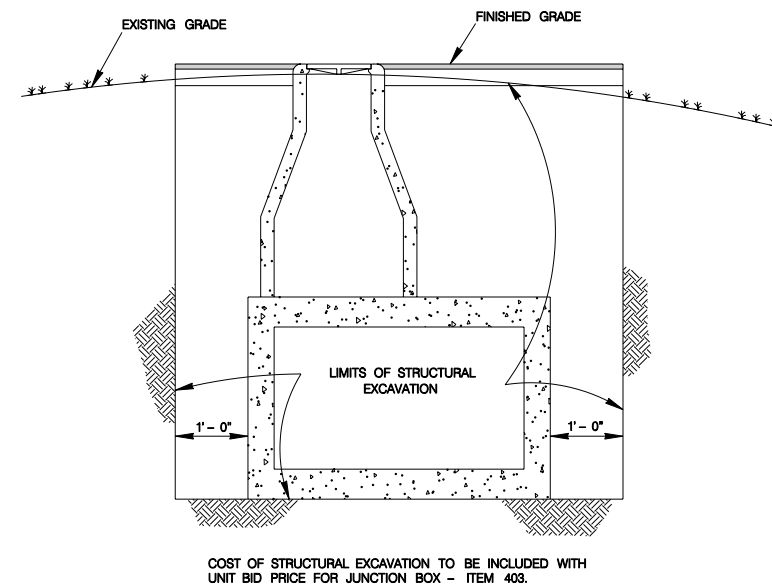
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

CHAIN LINK WIRE FENCE STANDARDS

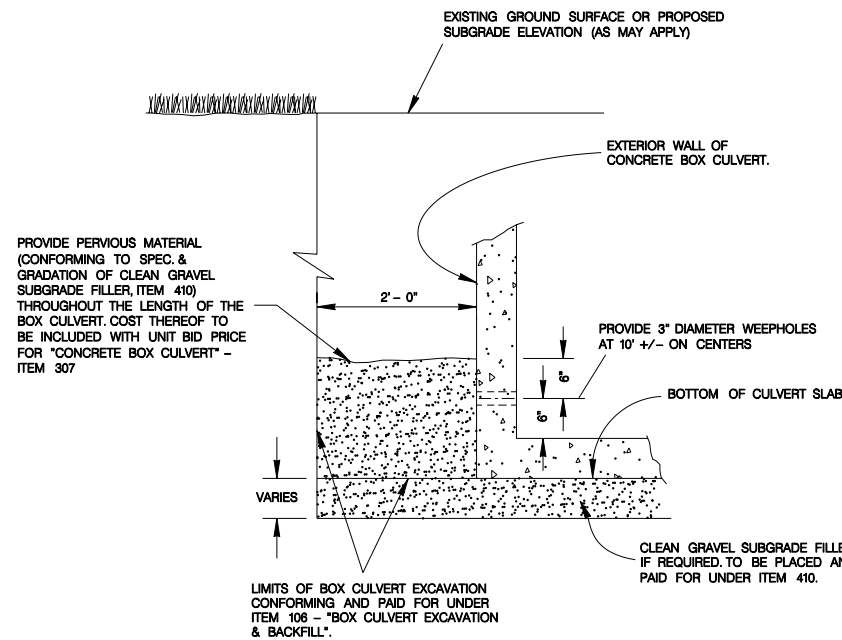
% SUBMITTAL PROJECT NO.:	DATE:
DRWN. BY: V. VASQUEZ DSGN. BY:	CHKD. BY: R.S. HOSSEINI, P.E. SHEET NO.: OF



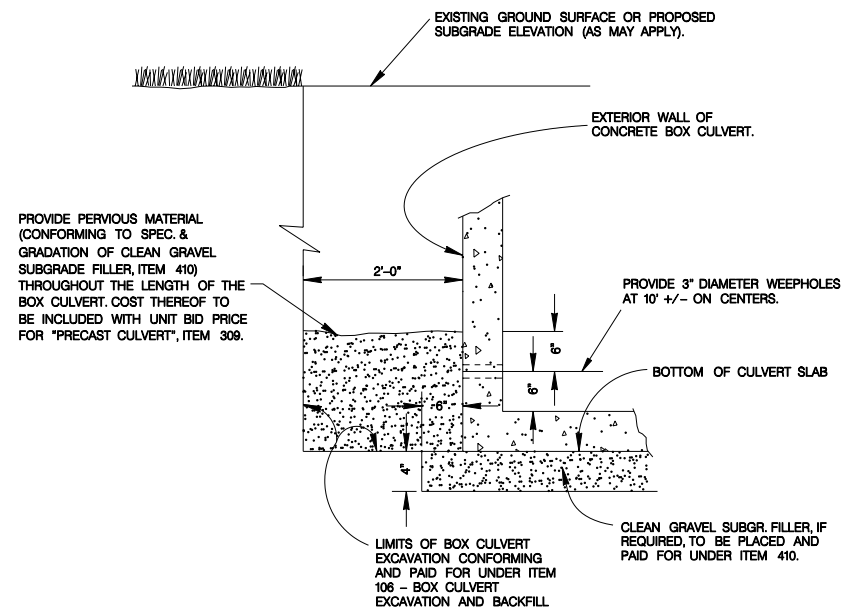
PIPE BEDDING & BACKFILL DETAILS



STRUCTURAL EXCAVATION AT JUNCTION BOXES
NO SCALE

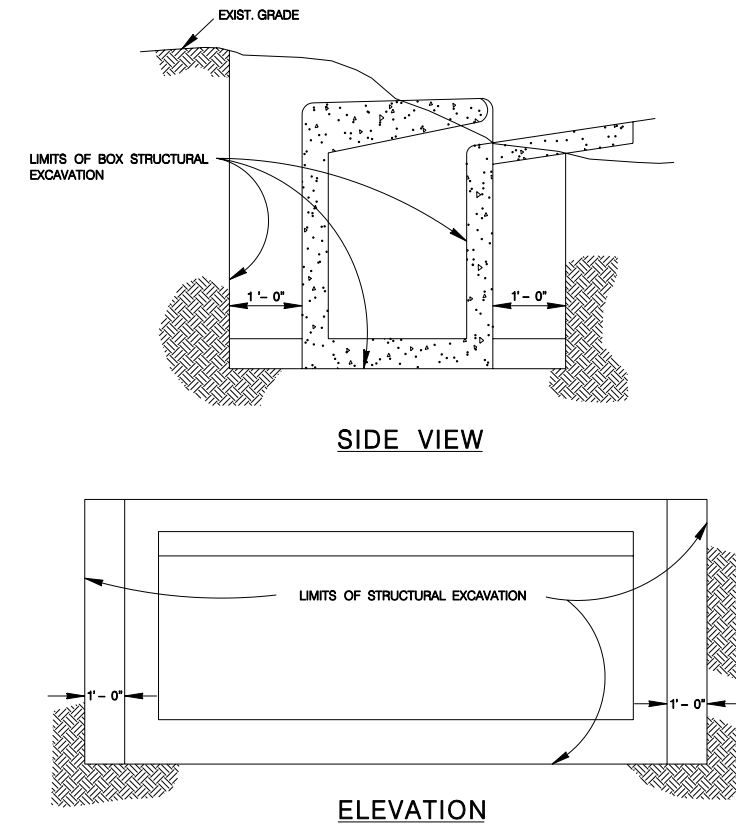


CAST-IN-PLACE BOX CULVERT



PRECAST BOX CULVERT

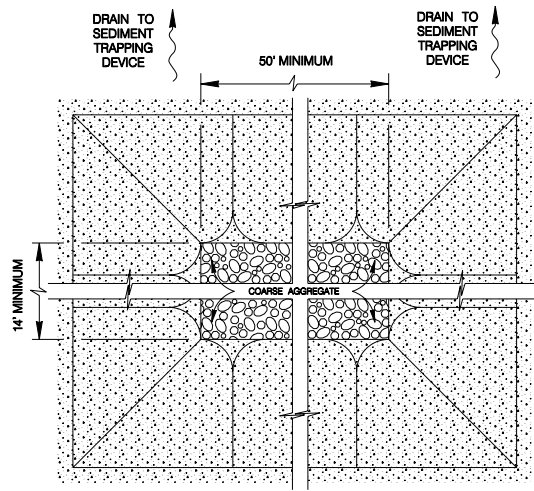
CONCRETE BOX CULVERT



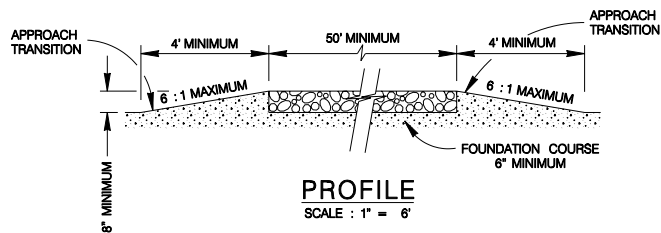
STRUCTURAL EXCAVATIONS
AT DRAINAGE INLETS
NO SCALE

MAY 2009

CITY OF SAN ANTONIO CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT			
PIPE BEDDING & MISCELLANEOUS DRAINAGE DETAILS			
% SUBMITTAL	PROJECT NO.:	DATE:	
DRWN. BY:	DSGN. BY:	CHKD. BY:	SHEET NO.: OF



PLAN
SCALE : 1" = 6'

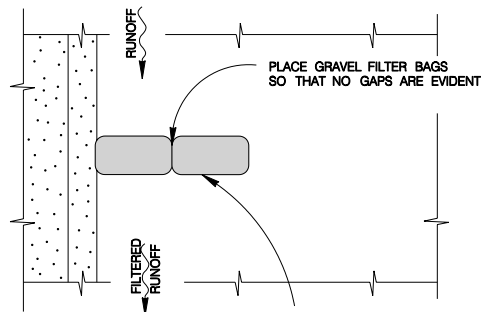


PROFILE
SCALE : 1" = 6'

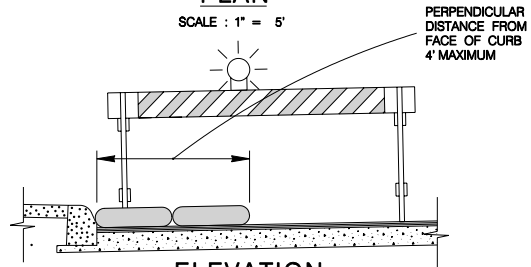
GENERAL NOTES

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

CONSTRUCTION EXIT - TYPE 1



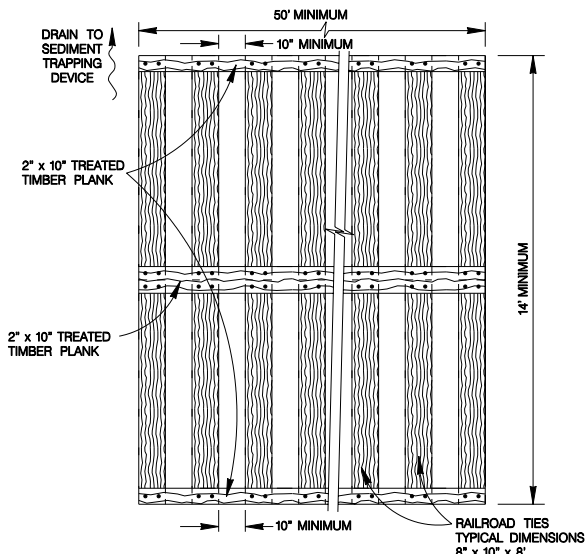
PLAN
SCALE : 1" = 5'



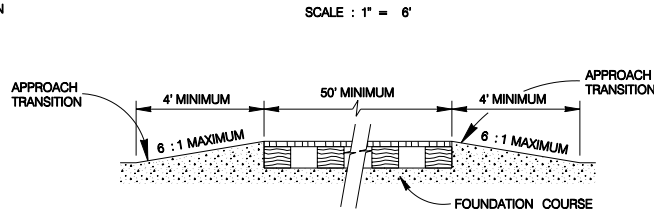
ELEVATION
SCALE : 1" = 5'

NOTE: STRADDLE GRAVEL FILTER BAGS WITH TYPE 1 BARRICADES MOUNTED WITH TYPE "A" FLASHING WARNING LIGHT. SEE BARRICADE CONSTRUCTION SIGN DETAILS. PLACE FLASHING LIGHTS AWAY FROM GUTTER, FLUSH WITH OUTSIDE EDGE OF BAG CONFIGURATION.

GRAVEL FILTER BAGS



PLAN
SCALE : 1" = 6'

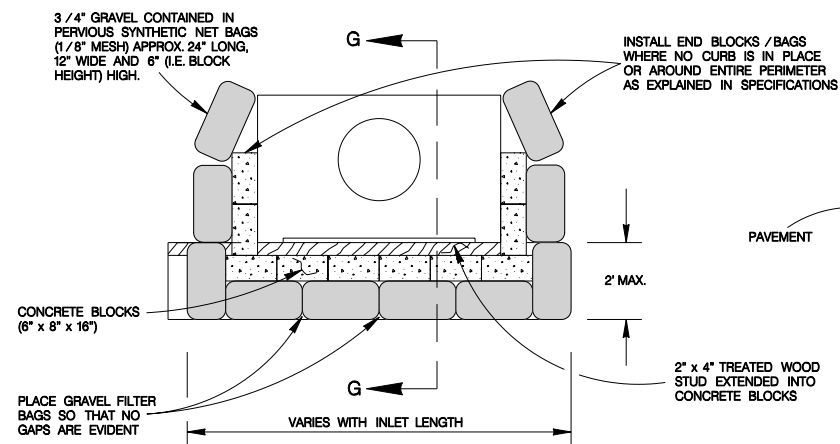


PROFILE
SCALE : 1" = 6'

GENERAL NOTES

1. THE LENGTH OF THE TYPE 2 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, BUT NOT LESS THAN 50'.
2. THE TREATED TIMBER PLANKS SHALL BE ATTACHED TO THE RAILROAD TIES WITH 1/2" x 6" MIN. LAG BOLTS. OTHER FASTENERS MAY BE USED AS APPROVED BY THE ENGINEER.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MIN. AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE APPROACH TRANSITIONS SHOULD BE NO STEEPER THAN 6:1 AND CONSTRUCTED AS DIRECTED BY THE ENGINEER.
5. THE CONSTRUCTION EXIT FOUNDATION COURSE SHALL BE FLEXIBLE BASE, BITUMINOUS CONCRETE, PORTLAND CEMENT CONCRETE OR OTHER MATERIAL AS APPROVED BY THE ENGINEER.
6. THE CONSTRUCTION EXIT SHOULD BE GRADED TO ALLOW DRAINAGE TO A SEDIMENT TRAPPING DEVICE.
7. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

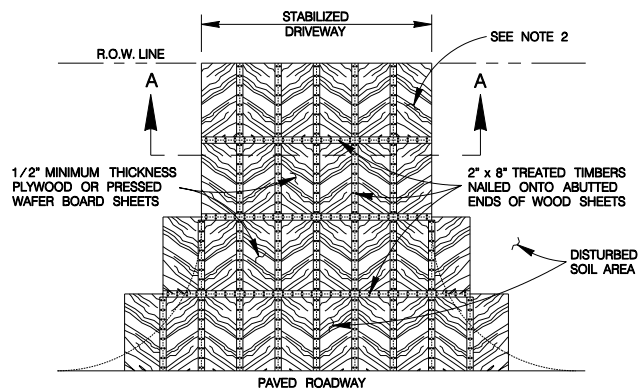
CONSTRUCTION EXIT - TYPE 2



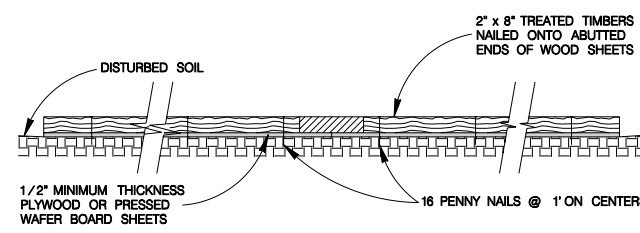
PLAN
SCALE : 1" = 5'

NOTE: GRAVEL FILTERS CAN BE USED ON PAVEMENT OR BARE GROUND.

CURB INLET GRAVEL FILTER



PLAN
SCALE : 1" = 20'

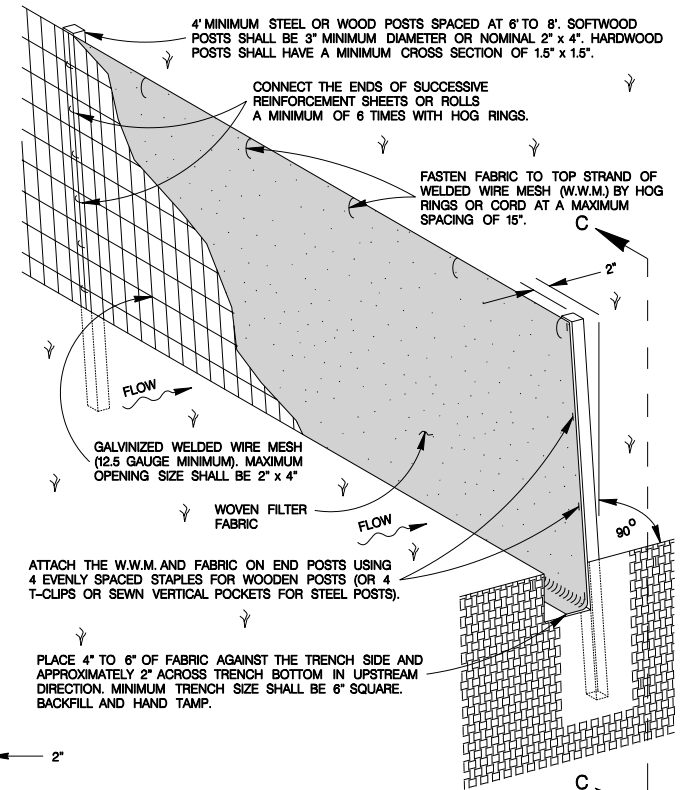


SECTION A-A
SCALE : 1" = 2'

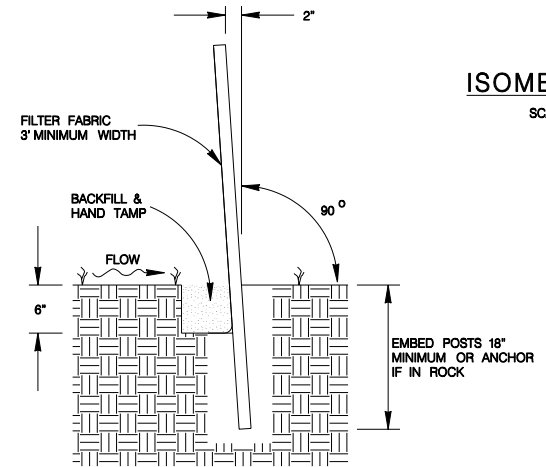
GENERAL NOTES

1. THE LENGTH OF THE TYPE 3 CONSTRUCTION EXIT SHALL BE AS INDICATED ON THE PLANS, OR AS DIRECTED BY THE ENGINEER.
2. THE TYPE 3 CONSTRUCTION EXIT MAY BE CONSTRUCTED FROM OPEN GRADED CRUSHED STONE WITH A SIZE OF 2 TO 4 INCHES SPREAD A MINIMUM OF 4 INCHES THICK TO THE LIMITS SHOWN ON THE PLANS.
3. THE TREATED TIMBER PLANKS SHALL BE #2 GRADE MIN. AND SHOULD BE FREE FROM LARGE AND LOOSE KNOTS.
4. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

CONSTRUCTION EXIT - TYPE 3



ISOMETRIC VIEW
SCALE : 1" = 2'



SECTION C-C
SCALE : 1" = 2'

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A SEDIMENT CONTROL FENCE MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUN-OFF. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED.

SEDIMENT CONTROL FENCE SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 100 GPM /FT SQUARED. SEDIMENT CONTROL FENCE IS NOT RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA LARGER THAN 2 ACRES.

GENERAL NOTES

1. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

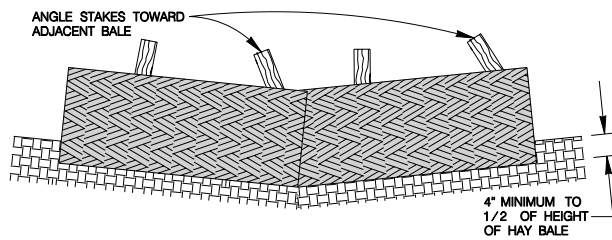
TEMPORARY SEDIMENT CONTROL FENCE

JANUARY 2005

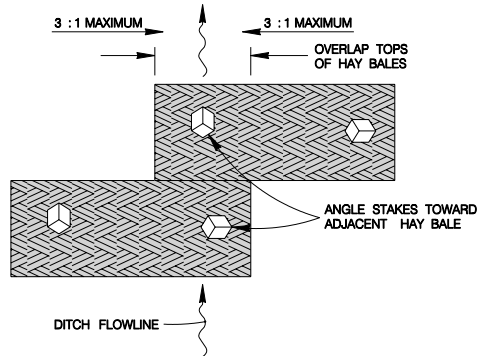
CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

TEMPORARY EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES STANDARDS 1

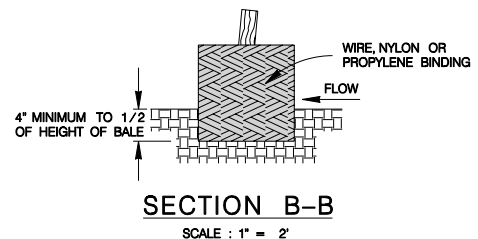
% SUBMITTAL PROJECT NO.: _____ DATE: _____
DRWN. BY: V. VASQUEZ DSGN. BY: _____ CHKD. BY: _____ SHEET NO.: _____ OF _____



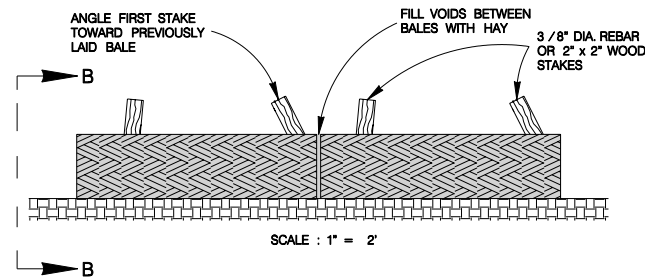
PROFILE VIEW
SCALE : 1" = 2'



PLAN VIEW
SCALE : 1" = 2'



SECTION B-B
SCALE : 1" = 2'



SCALE : 1" = 2'

BALED HAY USAGE GUIDELINES

A BALED HAY INSTALLATION MAY BE CONSTRUCTED NEAR THE DOWNSTREAM PERIMETER OF A DISTURBED AREA ALONG A CONTOUR TO INTERCEPT SEDIMENT FROM OVERLAND RUNOFF. A TWO YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE TO BE FILTERED. THE INSTALLATION SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 5 GPM /FT SQUARED OF CROSS SECTIONAL AREA. BALED HAY MAY BE USED AT THE FOLLOWING LOCATIONS:

1. WHERE THE RUNOFF APPROACHING THE BALED HAY FLOWS OVER DISTURBED SOIL FOR LESS THAN 100'. IF THE SLOPE OF THE DISTURBED SOIL EXCEEDS 10 %, THE LENGTH OF SLOPE UPSTREAM OF THE BALED HAY SHOULD BE LESS THAN 50'.
2. WHERE THE INSTALLATION WILL BE REQUIRED FOR LESS THAN 3 MONTHS.
3. WHERE THE CONTRIBUTING DRAINAGE AREA IS LESS THAN 1/2 ACRE.

FOR BALED HAY INSTALLATIONS IN SMALL DITCHES, THE FOLLOWING ADDITIONAL CONDI-
TIONAL CONSIDERATIONS APPLY:

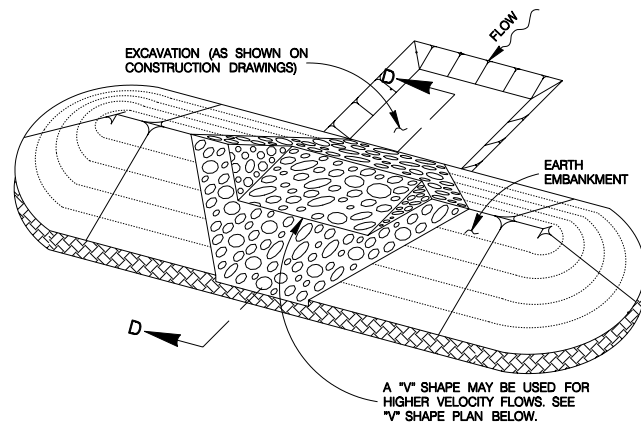
1. THE DITCH SIDESLOPES SHOULD BE GRADED AS FLAT AS POSSIBLE TO MAXIMIZE THE DRAINAGE FLOW RATE THRU THE HAY.
2. THE DITCH SHOULD BE GRADED LARGE ENOUGH TO CONTAIN THE OVERLAPPING DRAINAGE WHEN SEDIMENT HAS FILLED TO THE TOP OF THE BALED HAY.

BALES SHOULD BE REPLACED USUALLY EVERY 2 MONTHS OR MORE OFTEN DURING WET WEATHER WHEN LOSS OF STRUCTURAL INTEGRITY IS ACCELERATED.

GENERAL NOTES

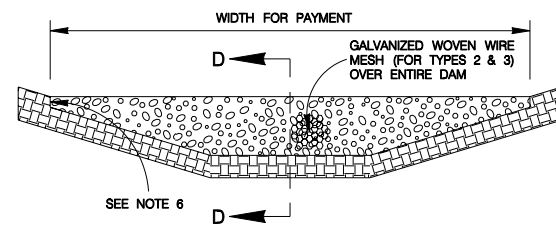
1. HAY BALES SHALL BE A MINIMUM OF 30" IN LENGTH AND WEIGH A MINIMUM OF 50 LBS.
2. HAY BALES SHALL BE BOUND BY EITHER WIRE OR NYLON OR POLYPROPYLENE STRING. THE BALES SHALL BE COMPOSED ENTIRELY OF VEGETABLE MATTER.
3. HAY BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4" AND, WHERE POSSIBLE, ONE-HALF THE HEIGHT OF THE BALE.
4. HAY BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
5. HAY BALES SHALL BE SECURELY ANCHORED IN PLACE WITH 3/8" DIA. REBAR OR 2" x 2" WOOD STAKES DRIVEN THROUGH THE BALES. THE FIRST STAKE SHALL BE ANGLED TO-
WARDS THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
6. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

BALED HAY FOR EROSION CONTROL



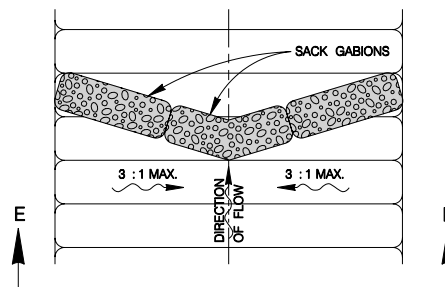
TYPE 1 & 2 FILTER DAM AT
SEDIMENT TRAP

SCALE : 1" = 10'



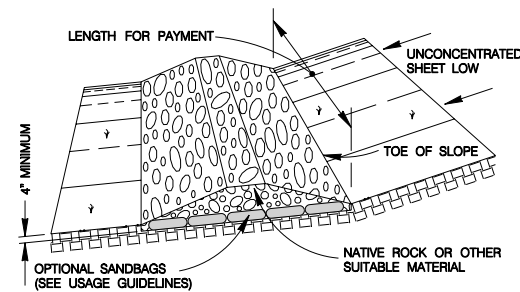
TYPE 1, 2 & 3 FILTER DAM
AT CHANNEL SECTIONS

SCALE : 1" = 6'



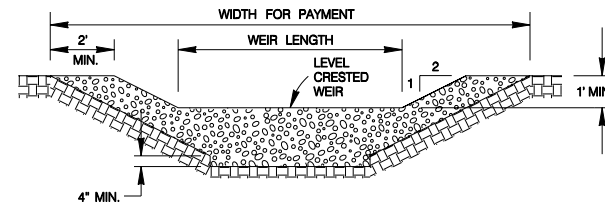
PLAN VIEW

SCALE : 1" = 10'



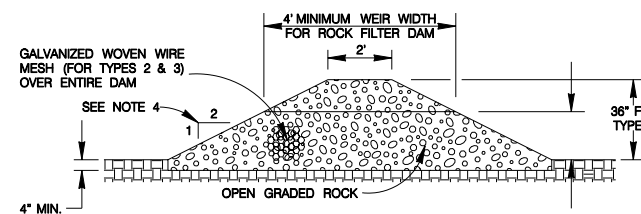
TYPE 1 FILTER DAM AT
TOE OF SLOPE

SCALE : 1" = 10'



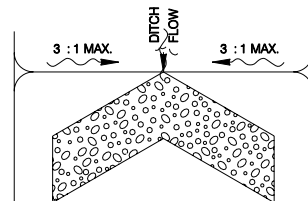
PROFILE OF TYPE 1 & 2 FILTER
DAM AT SEDIMENT TRAP

SCALE : 1" = 6'



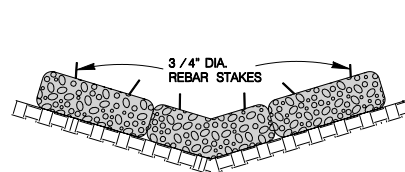
SECTION D-D

SCALE : 1" = 6'



"V" SHAPE
PLAN VIEW

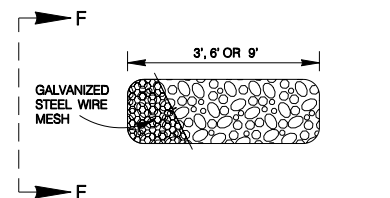
NOT TO SCALE



SECTION E-E

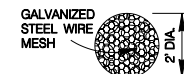
SCALE : 1" = 10'

TYPE 4 FILTER DAM AT DITCHES
& SMALLER CHANNELS PLAN VIEW



TYPE 4 SACK GABION DETAIL

SCALE : 1" = 6'



SECTION F-F

SCALE : 1" = 6'

ROCK FILTER DAM USAGE GUIDELINES

ROCK FILTER DAMS SHOULD BE CONSTRUCTED DOWNSTREAM FROM DISTURBED AREAS TO INTERCEPT SEDIMENT FROM OVERLOAD RUNOFF AND /OR CONCENTRATED FLOW. THE DAMS SHOULD BE SIZED TO FILTER A MAXIMUM FLOW THRU RATE OF 60 GPM /FT SQUARED OF CROSS SECTIONAL AREA. A 2 YEAR STORM FREQUENCY MAY BE USED TO CALCULATE THE FLOW RATE.

TYPE 1 (18" HIGH WITH NO WIRE MESH) :

TYPE 1 MAY BE USED AT THE TOE OF SLOPES, AROUND INLETS, IN SMALL DITCHES AND AT DIKE OR SWALE OUTLETS. THIS TYPE OF DAM IS RECOMMENDED TO CONTROL EROSION FROM A DRAINAGE AREA OF 5 ACRES OR LESS. TYPE 1 MAY NOT BE USED IN CONCENTRATED HIGH VELOCITY FLOWS (APPROXIMATELY 8 FT./SEC. OR MORE) IN WHICH AGGREGATE WASH OUT MAY OCCUR. SANDBAGS MAY BE USED AT THE EMBEDDED FOUNDATION (4" DEEP MIN.) FOR BETTER FILTERING EFFICIENCY OF LOW FLOWS IF CALLED FOR ON THE PLANS OR AS DIRECTED BY THE ENGINEER.

TYPE 2 (18" HIGH WITH WIRE MESH) :

TYPE 2 MAY BE USED IN DITCHES AND AT DIKE OR SWALE OUTLETS.

TYPE 3 (36" HIGH WITH WIRE MESH) :

TYPE 3 MAY BE USED IN STREAM FLOW AND SHOULD BE SECURED TO THE STREAM BED.

TYPE 4 (SACK GABIONS) :

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

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 TO COLLECT SEDIMENT.
2. MATERIALS (AGGREGATE, WIRE MESH, SANDBAGS, ETC.) SHALL BE AS INDICATED BY THE SPECIFICATION FOR ROCK FILTER DAMS FOR EROSION AND SEDIMENTATION CONTROL.
3. THE ROCK FILTER DAM DIMENSIONS SHALL BE AS INDICATED ON THE STORM WATER POLLUTION PREVENTION PLANS.
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.
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.
10. FLOW OUTLET SHOULD BE ONTO A STABILIZED AREA (VEGETATION, ROCK, ETC.).
11. THE GUIDELINES SHOWN HEREON ARE SUGGESTIONS ONLY AND MAY BE MODIFIED BY THE ENGINEER.

JANUARY 2005

CITY OF SAN ANTONIO
CAPITAL IMPROVEMENTS MANAGEMENT SERVICES DEPARTMENT

TEMPORARY EROSION, SEDIMENT & WATER POLLUTION CONTROL MEASURES STANDARDS 2

% SUBMITTAL PROJECT NO.: _____ DATE: _____
DRWN. BY: V. VASQUEZ DSGN. BY: _____ CHKD. BY: _____ SHEET NO.: _____ OF _____

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

B-7: Parking Lot (x:2081842.88,y:13720704.72)

7 borings total (one near each corner and one at the center)

B-1: (x:2081984.69 ,y:13720610.80)

B-2: (x:2081984.69 ,y:13720495.46)

B-3: (x:2081852.04 ,y:137200562.55)

B-4: (x:2081892.83,y:137200562.55)

B-5: (x:2081984.69 ,y:13720610.80)

B-6: Parking Lot (x:2081817.30,y:13720776.52)

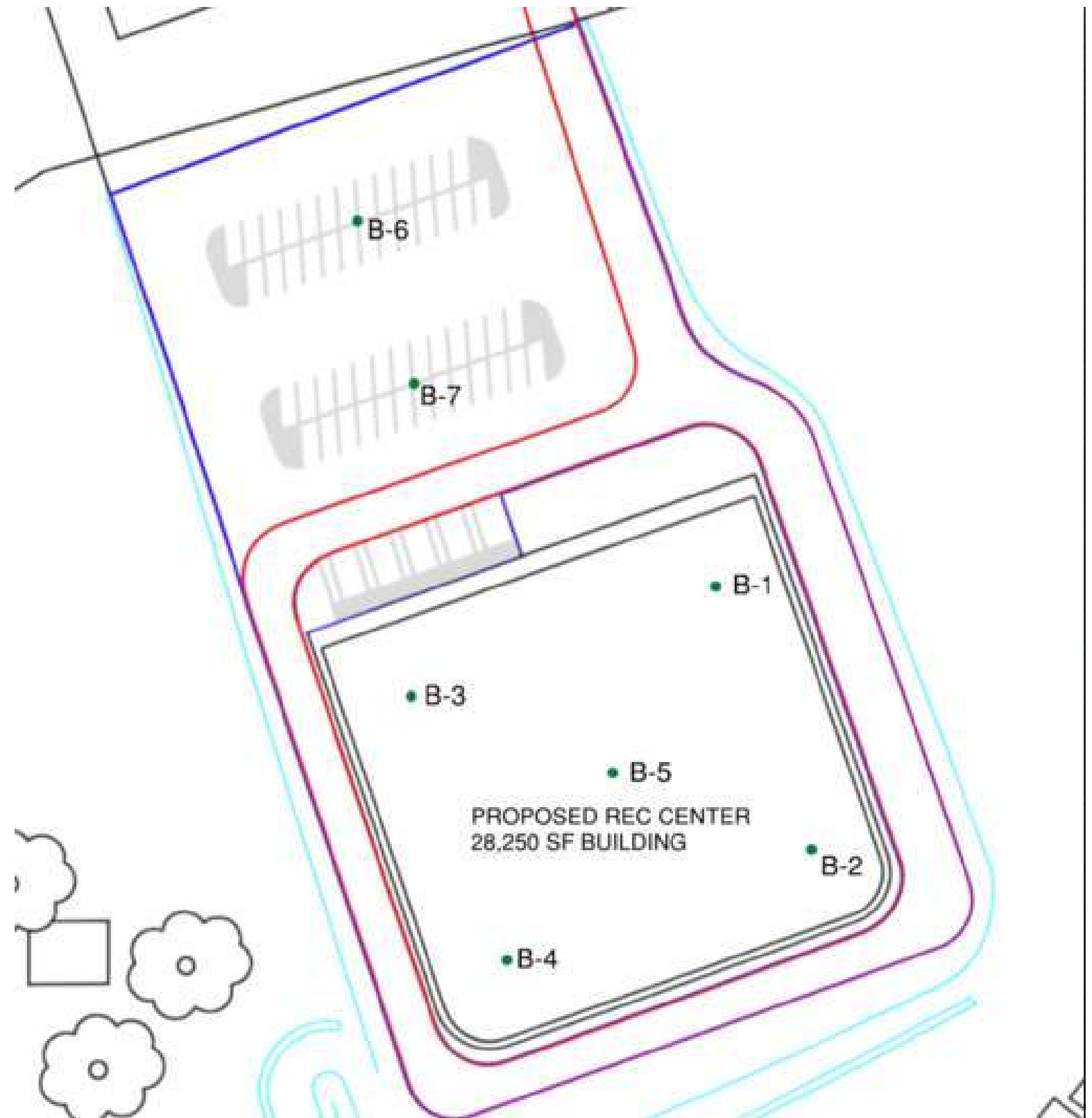
B-7: Parking Lot (x:2081842.88,y:13720704.72)

NOTE:

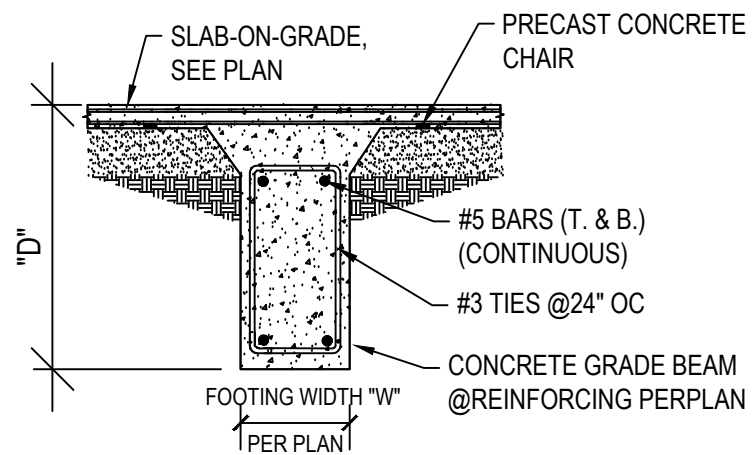
REFER TO THE GEOTECHNICAL REPORT FOR ALL SUBSURFACE INFORMATION, INCLUDING BORING LOGS, SOIL CLASSIFICATIONS, SITE CONDITIONS, AND FOUNDATION RECOMMENDATIONS. CONTRACTOR SHALL REVIEW AND INCORPORATE ALL GEOTECHNICAL REQUIREMENTS INTO THE WORK.

NOTE:

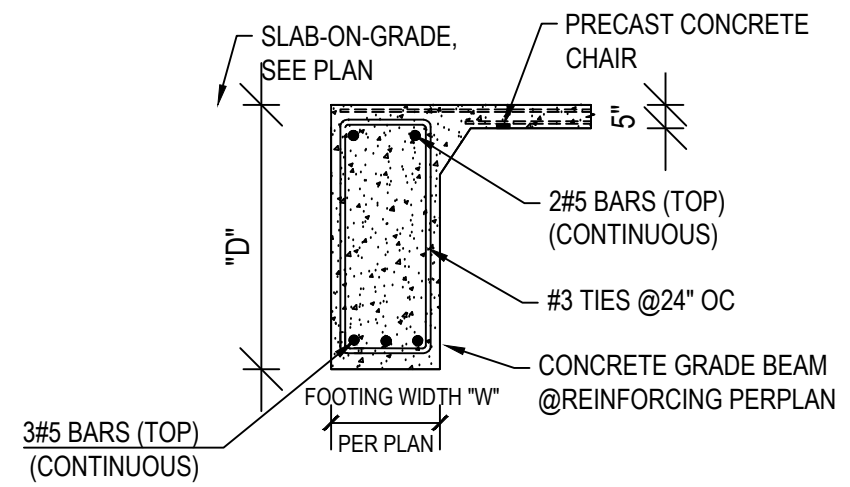
REFER TO THE GEOTECHNICAL REPORT FOR ALL SUBSURFACE INFORMATION, INCLUDING BORING LOGS, SOIL CLASSIFICATIONS, SITE CONDITIONS, AND FOUNDATION RECOMMENDATIONS. CONTRACTOR SHALL REVIEW AND INCORPORATE ALL GEOTECHNICAL REQUIREMENTS INTO THE WORK.



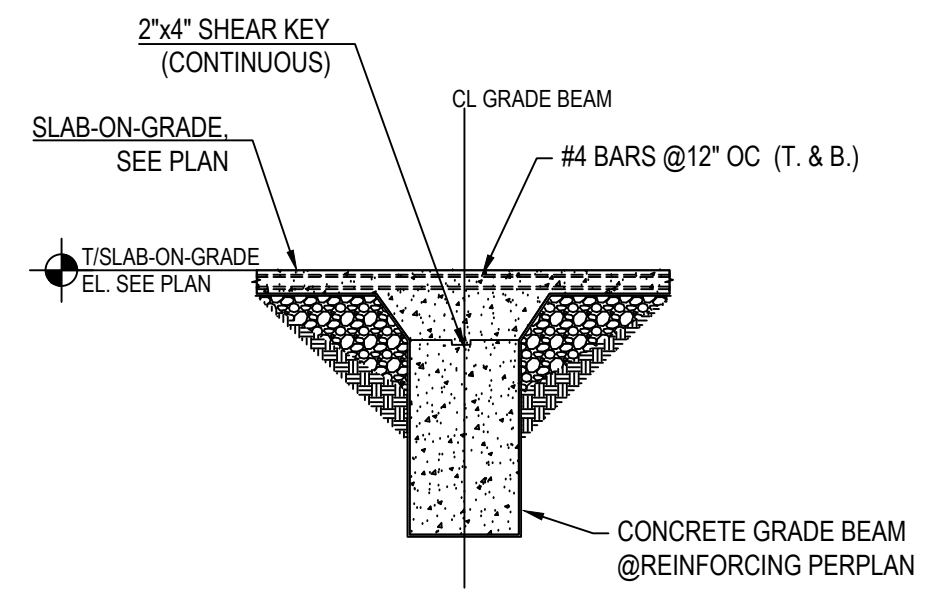
7990 GRISSOM RD, SAN ANTONIO, TX 78251 RECREATIONAL FACILITY LEON VALLEY BAPTIST CHURCH GEOTECHNICAL BORING LOCATION MAP		DATE NO. REVISION
JOB NO. _____ DATE _____ CHECKED _____ DRAWN _____ REFERENCE: _____	SHEET S0.0	



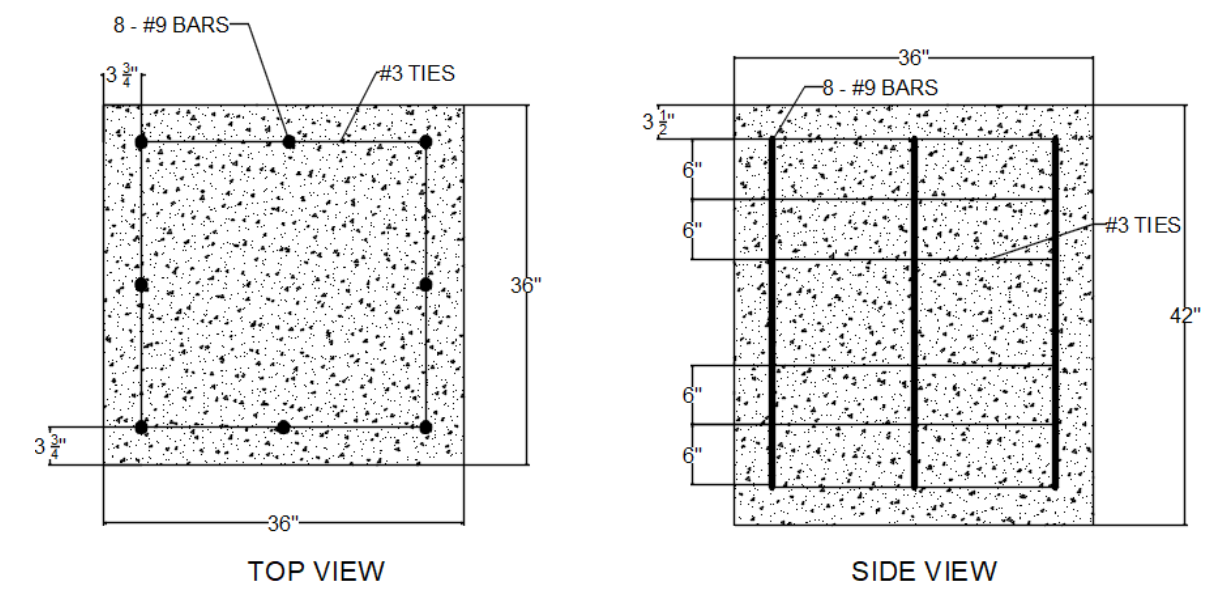
1 TYP. INTERIOR BEAM



2 TYP. EXTERIOR BEAM



3 TYP. SLAB-ON-GRADE AT BEAM DETAIL



4 TYP. PEDESTAL DETAIL

CONCRETE GRADE BEAM SCHEDULE				
	WIDTH "W"	DEPTH "D"	REINFORCING	REMARKS
B1 BEAM	12"	24"	4-#5 BARS (2 TOP & 2 BOTTOM) #3 TIES @ 24" oc	TYP. INTERIOR
B2	12"	24"	5-#5 BARS (2 TOP & 3 BOTTOM) #3 TIES @ 24" oc	TYP. EXTERIOR BEAM

DATE	
REVISION	
NO.	

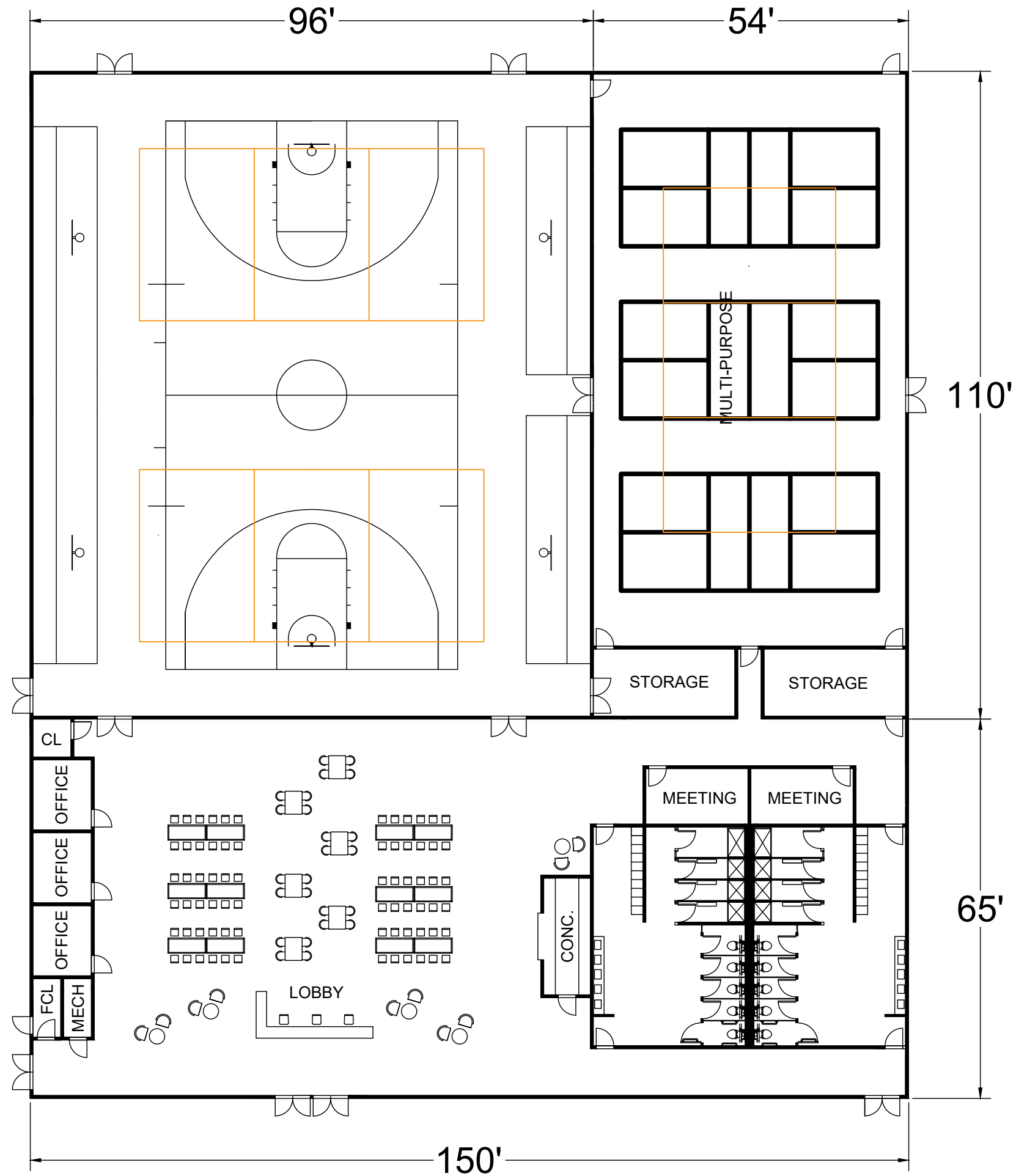
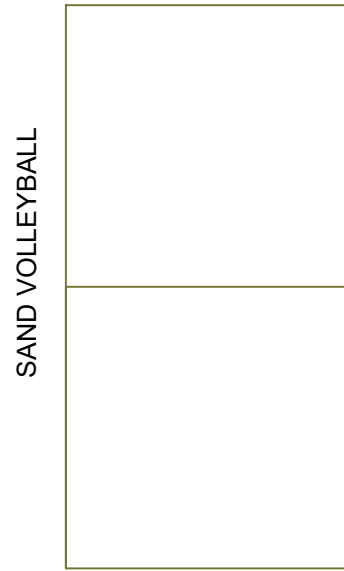
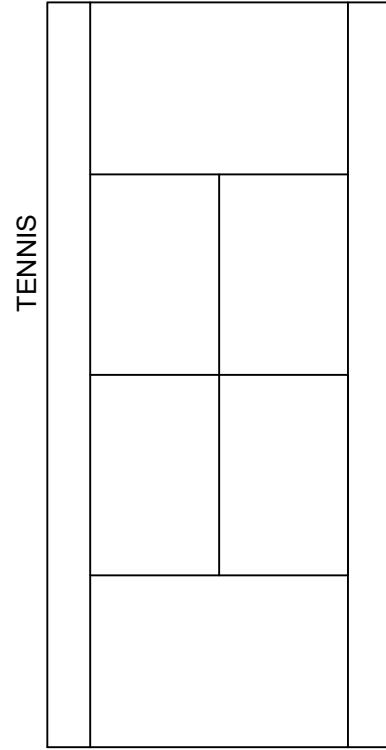


LONE STAR
ENGINEERING

LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

FOUNDATION DETAILS

JOB NO.	
DATE	
CHECKED	DRAWN
CIVIL JOB NO.	
REFERENCE:	
SHEET	S1.1



SCALE: 1" = 10'

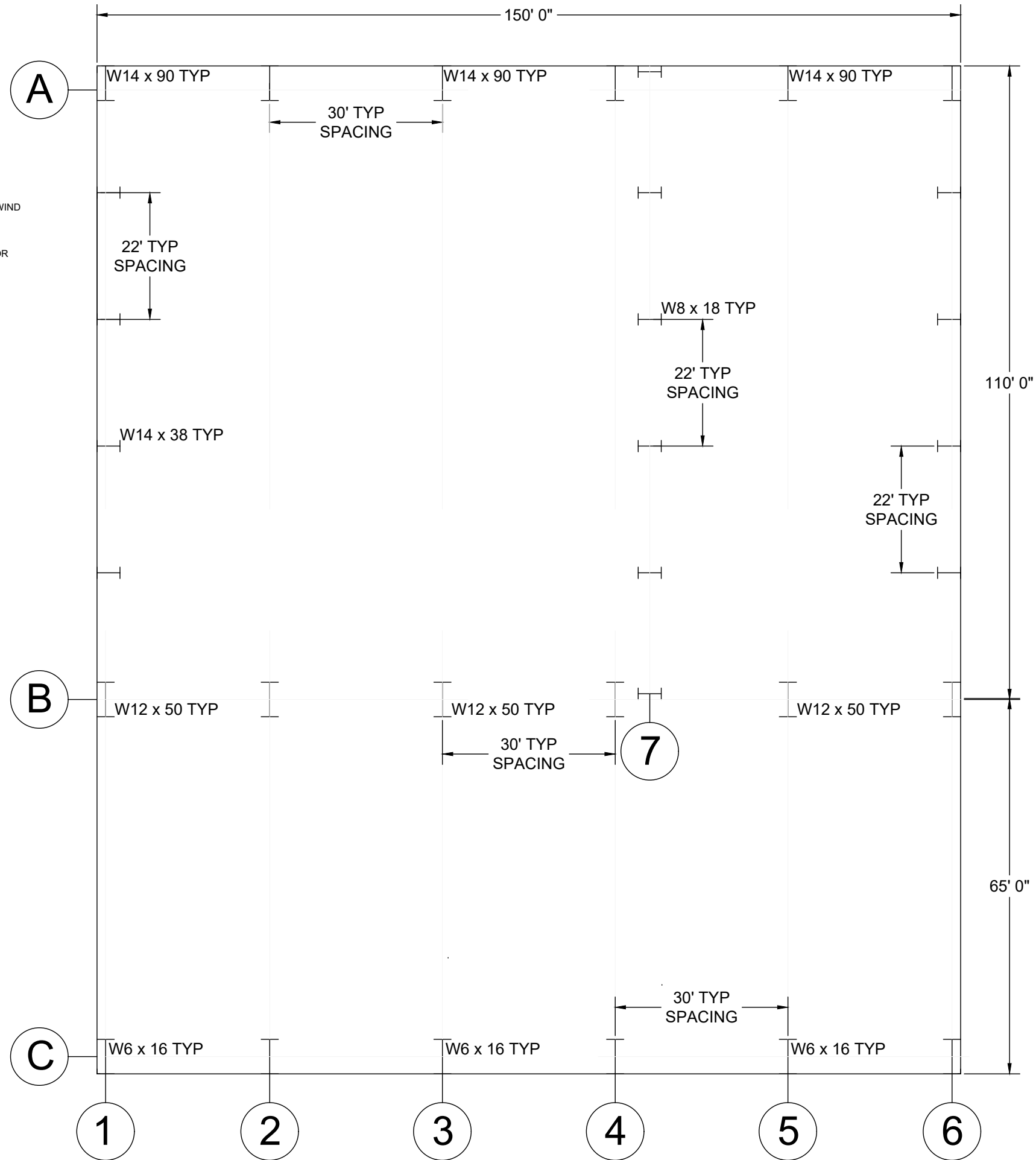
LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

FLOOR PLAN

[illegible]

JOB NO. _____
DATE _____
CHECKED _____ DRAWN _____
CIVIL JOB NO. _____
REFERENCE: _____
S2.0
SHEET _____

NOTES:
ALL DESIGNS IN ACCORDANCE WITH AISC 360
COLUMNS AT AA CROSS SECTION SHALL SATISFY A AXIAL LOAD OF 102.4K AND A LATERAL WIND PRESSURE LOAD OF 23.3PSF
COLUMNS AT BB CROSS SECTION SHALL SATISFY A AXIAL LOAD OF 160.8K
COLUMNS AT CC CROSS SECTION SHALL SATISFY A AXIAL LOAD OF 58.4K
COLUMNS AT 1AB, 7AB, AND 6AB ARE NON LOAD BEARING HOWEVER COLUMNS ON EXTERIOR WALLS SHALL SATISFY LATERAL WIND PRESSURE OF 23.3 PSF.
ALL WIDE FLANGE BEAMS SHALL BE A992 STEEL
REFER TO CROSS SECTIONS SHEET FOR FUTHER DETAILS



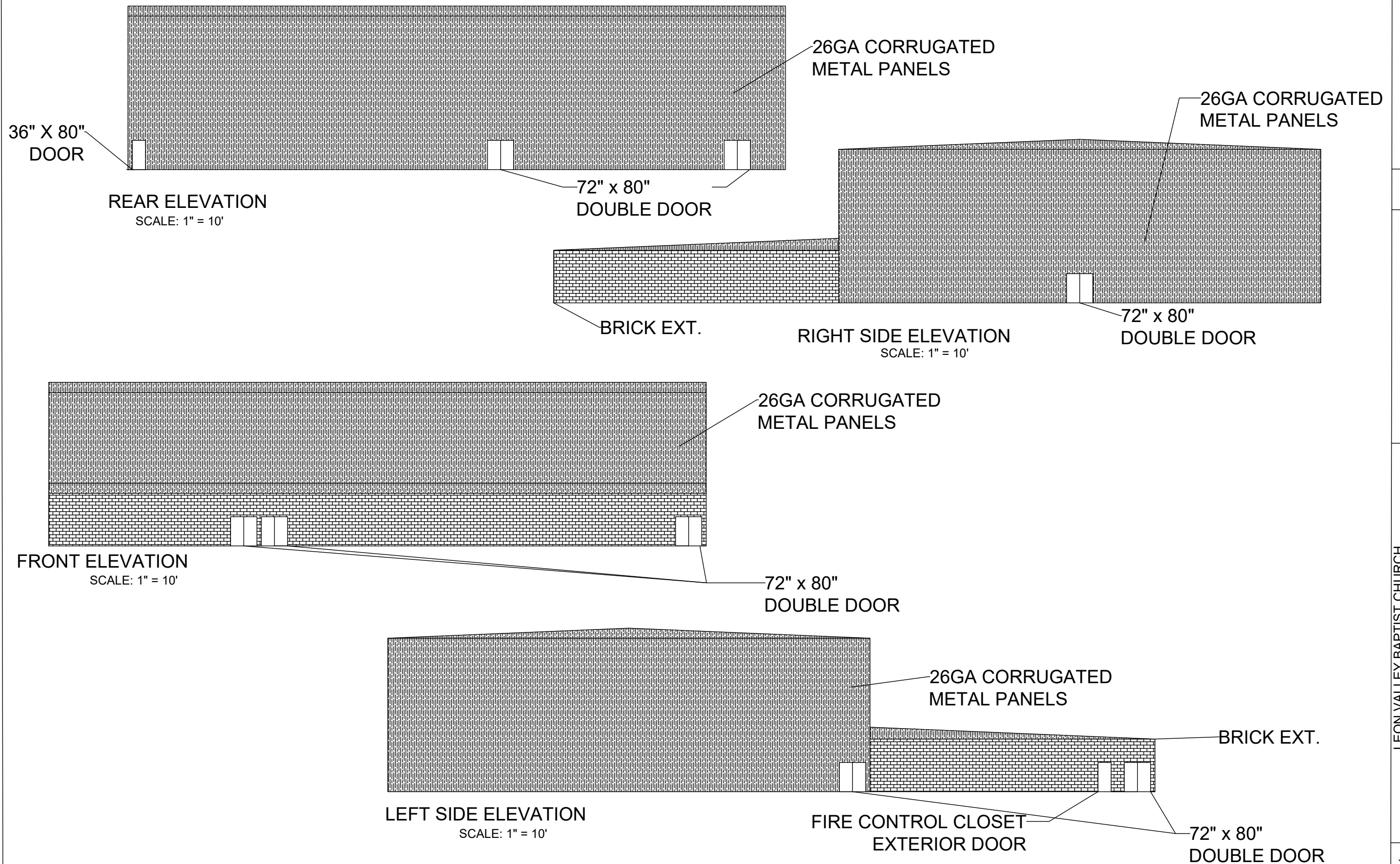
SCALE: 1" = 10'

NO.	DATE				
	1	2	3	4	5
REVISION					
	1	2	3	4	5



LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
COLUMN LAYOUT

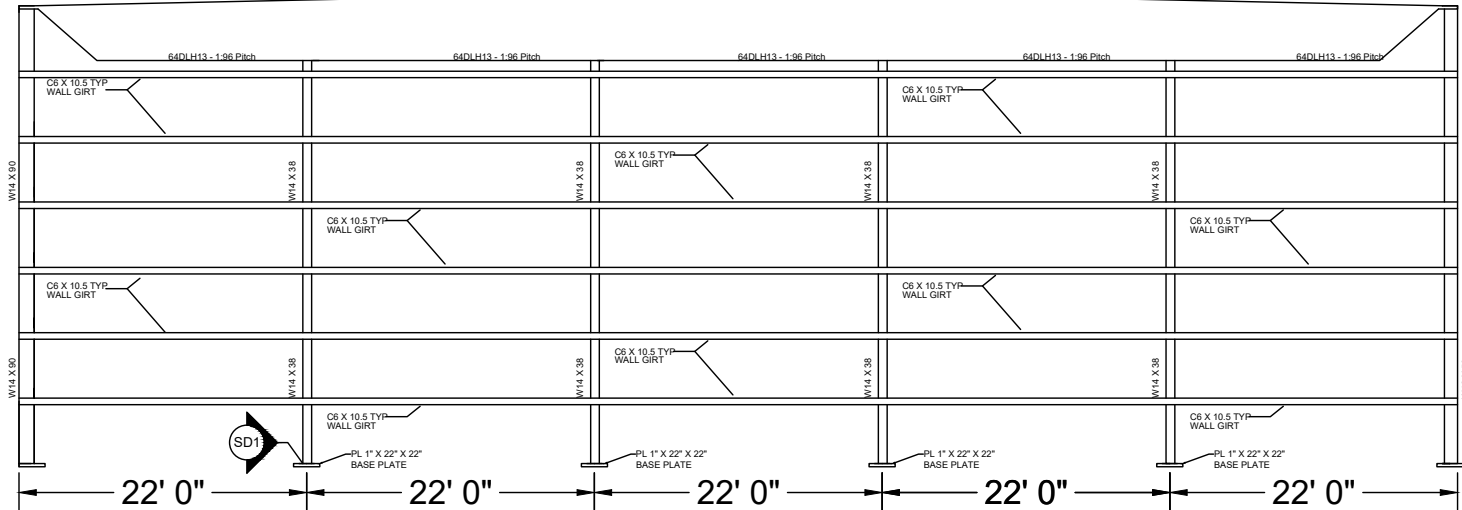
JOB NO.	_____
DATE	_____
CHECKED	_____ DRAWN
CIVIL JOB NO.	_____ ---
REFERENCE:	_____ ---
SHEET	S2.1 ---

[illegible]

RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

EXTERIOR ELEVATIONS

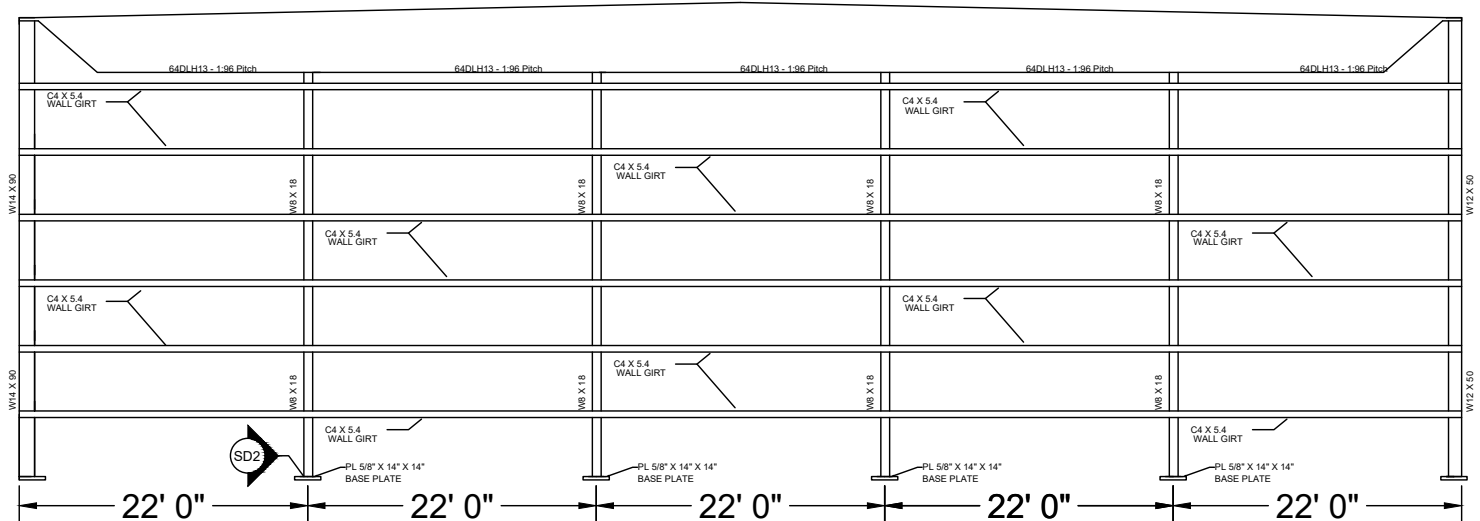
JOB NO. _____
DATE _____
CHECKED _____ DRAWN _____
CIVIL JOB NO. _____
REFERENCE: _____
S3.0
SHEET _____



1-AB X-SECTION
SCALE: NTS

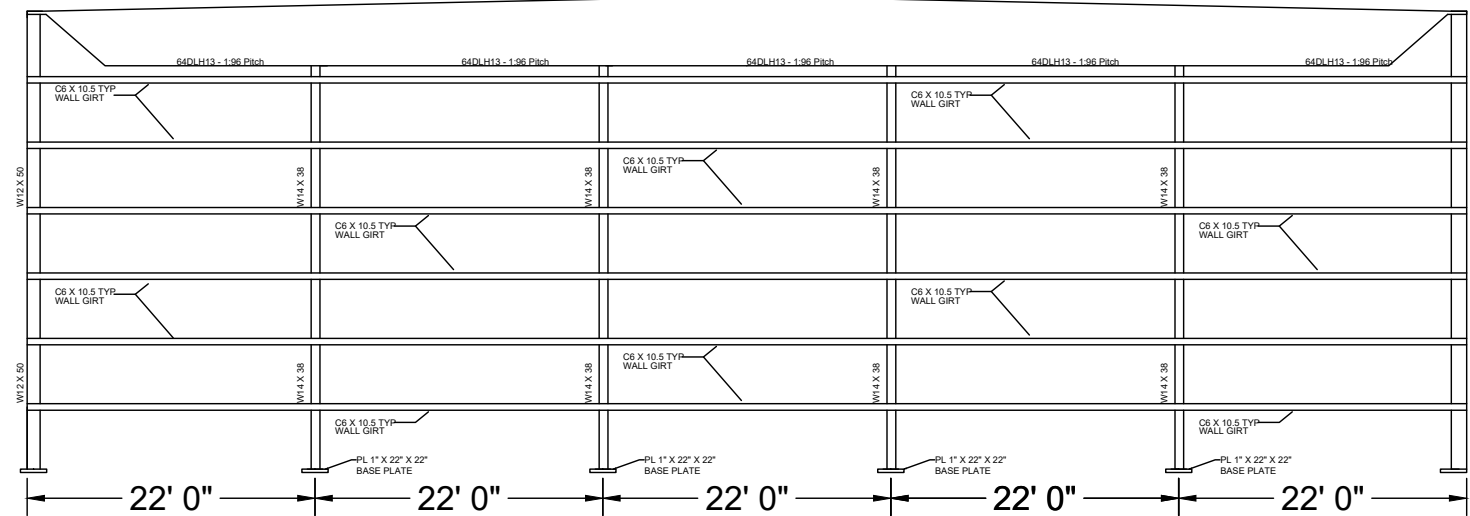
NOTES:
WALL GIRT SHALL BE DESIGNED BASED ON
LATERAL LOADING AND SATISFY
RECOMMENDED DEFLECTIONS.
C CHANNEL MEMBERS SHALL BE A36 STEEL.
WALL GIRT SHALL BE DIRECTLY ATTACHED TO
COLUMN FLANGE USING 2 - $\frac{3}{4}$ " DIA A325 BOLTS
SEE DETAIL SHEETS FOR BASE PLATE DETAILS

NOTES:
WALL GIRT SHALL BE DESIGNED BASED ON
LATERAL LOADING AND SATISFY
RECOMMENDED DEFLECTIONS.
C CHANNEL MEMBERS SHALL BE A36 STEEL.
WALL GIRT SHALL BE DIRECTLY ATTACHED TO
COLUMN FLANGE USING 2 - $\frac{3}{4}$ " DIA A325 BOLTS
SEE DETAIL SHEETS FOR BASE PLATE DETAILS



7-AB X-SECTION
SCALE: NTS

NOTES:
WALL GIRT SHALL BE DESIGNED BASED ON
LATERAL LOADING AND SATISFY
RECOMMENDED DEFLECTIONS.
C CHANNEL MEMBERS SHALL BE A36 STEEL.
WALL GIRT SHALL BE DIRECTLY ATTACHED TO
COLUMN FLANGE USING 2 - $\frac{3}{4}$ " DIA A325 BOLTS
SEE DETAIL SHEETS FOR BASE PLATE DETAILS



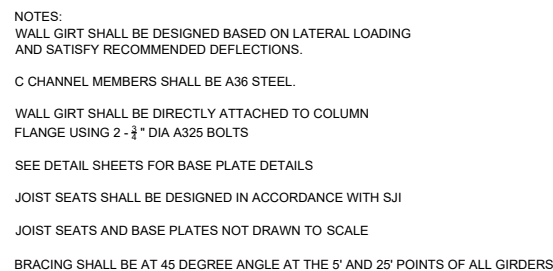
6-BA X-SECTION
SCALE: NTS



LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

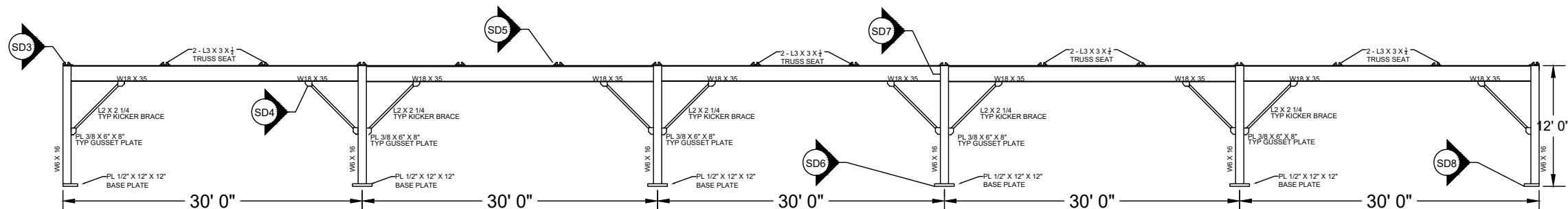
NON-LOAD BEARING WALLS

BRACING SHALL BE AT 45 DEGREE ANGLE AT THE 5' AND 25' POINTS OF ALL GIRDERS



BB X-SECTION

SCALE: NTS



NOTES:
WALL GIRT SHALL BE DESIGNED BASED ON LATERAL LOADING AND SATISFY RECOMMENDED DEFLECTIONS
C CHANNEL MEMBERS SHALL BE A36 STEEL
WALL GIRT SHALL BE DIRECTLY ATTACHED TO COLUMN FLANGE USING 2 - $\frac{3}{4}$ " DIA A325 BOLTS
SEE DETAIL SHEETS FOR BASE PLATE DETAILS
JOIST SEATS SHALL BE DESIGNED IN ACCORDANCE WITH SJI
JOIST SEATS AND BASE PLATES NOT DRAWN TO SCALE
BRACING SHALL BE AT 45 DEGREE ANGLE AT THE 5' AND 25' POINTS OF ALL GIRDERS

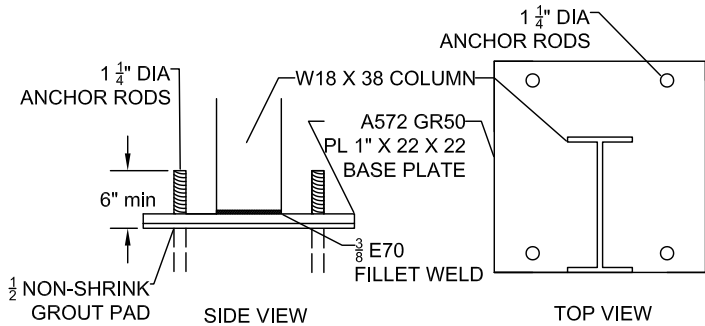
CC X-SECTION

SCALE: NTS

[illegible]

LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251
LOAD BEARING CROSS SECTIONS

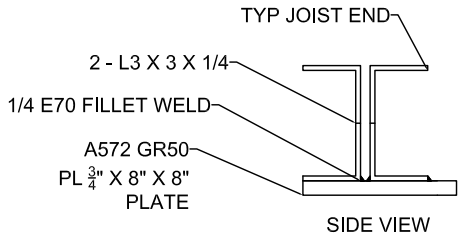
JOB NO. _____
DATE _____
CHECKED _____ DRAWN _____
CIVIL JOB NO. _____
REFERENCE: _____
S3.2
SHEET _____



STRUCTURAL DETAIL (SD) 1
W14 X 38 BASE PLATE CONNECTION
SCALE: 1" = 10"

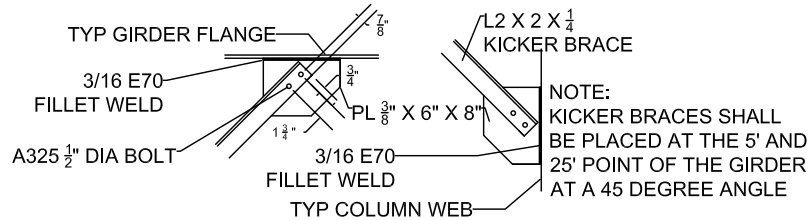
NOTE:
PROVIDE 18 - 24IN EMBEDMENT OF
ANCHOR RODS IN FOUNDATION

PROVIDE E70 3/8 FILLET WELD AROUND
PERIMETER OF COLUMN BASE



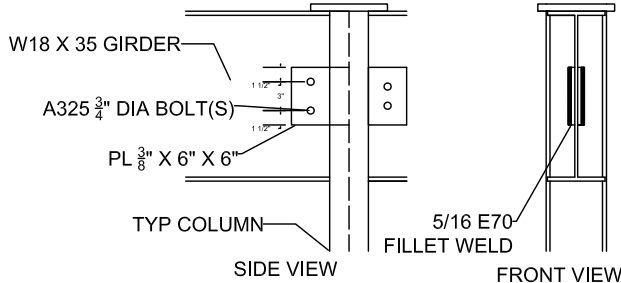
STRUCTURAL DETAIL (SD) 3
JOIST END TRUSS SEAT CONNECTION
SCALE: 1" = 2"

NOTE:
PLATE SHALL REST ON COLUMN AS CAP
FOR COLUMN TOP
PROVIDE 1/4 FILLET WELD AROUND
PERIMETER TO FASTEN PLATE TO
MEMBER
L BARS SHALL BE MIN 6" IN ACCORDANCE
WITH SJI
L BARS SHALL HAVE MIN 6" 1/4 FILLET
WELD ON BOTH SIDES TO PLATE
L BARS SHALL ALSO HAVE MIN 6" 1/4
FILLET WELD TO JOIST TO SATISFY UPLIFT



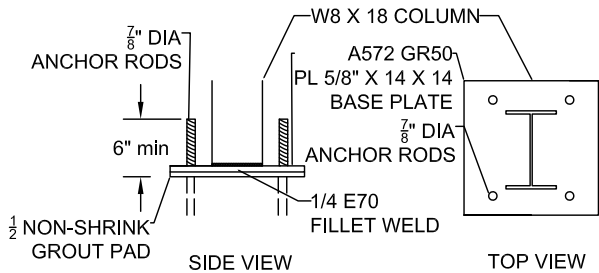
STRUCTURAL DETAIL (SD) 4
GUSSET PLATE CONNECTION
SCALE: 1" = 10"

NOTE:
GUSSET PLATE SHALL BE A572 GR 50
GUSSET PLATE SHALL HAVE 8" OF 3/16 FILLET WELD ON
BOTH SIDES OF PLATE TO MEMBER
L2 X 2 X 1/4 SHALL BE A36 STEEL
A325 1/2" DIA BOLTS SHALL HAVE 9/16 DIA STANDARD HOLE
WITH ALL SPACING AND EDGE DISTANCES FOLLOWING
AISC 360



STRUCTURAL DETAIL (SD) 7
W18 X 35 GIRDER TO COLUMN CONNECTION
SCALE: 1" = 10"

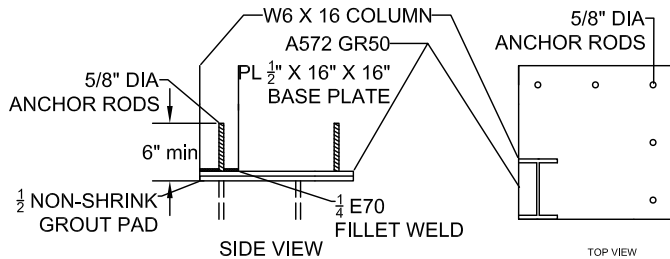
NOTE:
FOR W12 X 50 COLUMN USE PL 3/8" X 7" X 7" GUSSET
PLATES WITH MIN SAME WELD CONSIDERATIONS
NEW VERTICAL SPACING SHALL BE 4" BETWEEN BOLTS



STRUCTURAL DETAIL (SD) 2
W8 X 18 BASE PLATE CONNECTION
SCALE: 1" = 10"

NOTE:
PROVIDE 12 - 18IN EMBEDMENT OF
ANCHOR RODS IN FOUNDATION

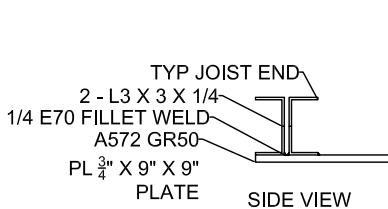
PROVIDE E70 1/4 FILLET WELD AROUND
PERIMETER OF COLUMN BASE



STRUCTURAL DETAIL (SD) 8
W6 X 16 BASE PLATE CONNECTION
SCALE: 1" = 10"

NOTE:
PROVIDE 12 - 18IN EMBEDMENT OF ANCHOR RODS IN
FOUNDATION

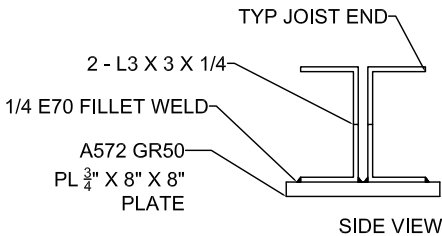
PROVIDE E70 1/4 FILLET WELD AROUND PERIMETER OF
COLUMN BASE



STRUCTURAL DETAIL (SD) 9
JOIST END TRUSS SEAT CONNECTION
SCALE: 1" = 10"

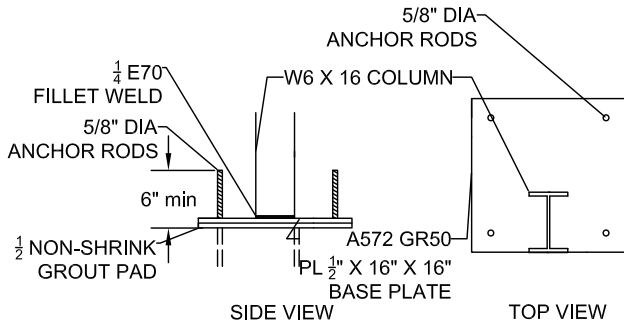
L BARS SHALL HAVE MIN 6" 1/4 FILLET WELD ON BOTH SIDES TO PLATE
L BARS SHALL ALSO HAVE MIN 6" 1/4 FILLET WELD TO JOIST TO SATISFY
UPLIFT FOR W12 X 50 USE PL 3/4 " X 9" X 9" FOR COLUMN CAP INSTEAD

NOTE:
PLATE SHALL REST ON
COLUMN AS CAP FOR
COLUMN TOP
PROVIDE 1/4 FILLET
WELD AROUND
PERIMETER TO FASTEN
PLATE TO MEMBER
L BARS SHALL BE MIN 6"
IN ACCORDANCE WITH
SJI



STRUCTURAL DETAIL (SD) 5
JOIST END TRUSS SEAT CONNECTION
SCALE: 1" = 10"

NOTE:
PLATE SHALL REST ON GIRDER OR
SIT AS CAP FOR COLUMN TOP
PROVIDE 1/4 FILLET WELD AROUND
PERIMETER TO FASTEN PLATE TO
MEMBER
L BARS SHALL BE MIN 6" IN
ACCORDANCE WITH SJI
L BARS SHALL HAVE MIN 6" 1/4
FILLET WELD ON BOTH SIDES TO
PLATE
L BARS SHALL ALSO HAVE MIN 6" 1/4
FILLET WELD TO JOIST TO SATISFY
UPLIFT



STRUCTURAL DETAIL (SD) 6
W6 X 16 BASE PLATE CONNECTION
SCALE: 1" = 10"

NOTE:
PROVIDE 12 - 18IN EMBEDMENT OF
ANCHOR RODS IN FOUNDATION

PROVIDE E70 1/4 FILLET WELD AROUND
PERIMETER OF COLUMN BASE



LEON VALLEY BAPTIST CHURCH
RECREATIONAL FACILITY
7990 GRISSOM RD, SAN ANTONIO, TX 78251

CONNECTION DETAILS

JOB NO. _____

DATE _____

CHECKED _____ DRAWN _____

CIVIL JOB NO. ----

REFERENCE: ----

SHEET ____ OF ____

