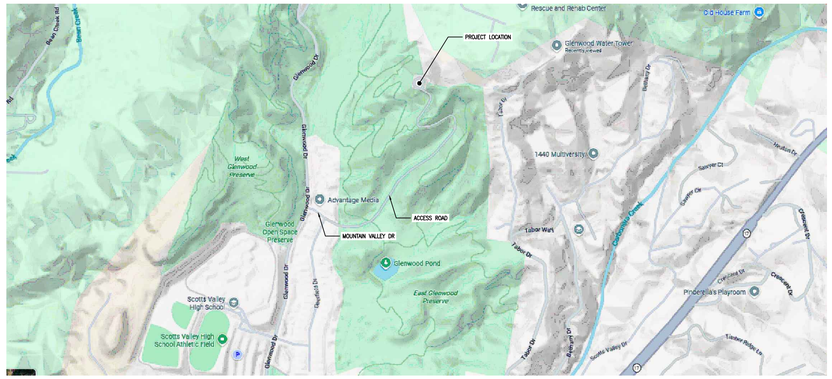
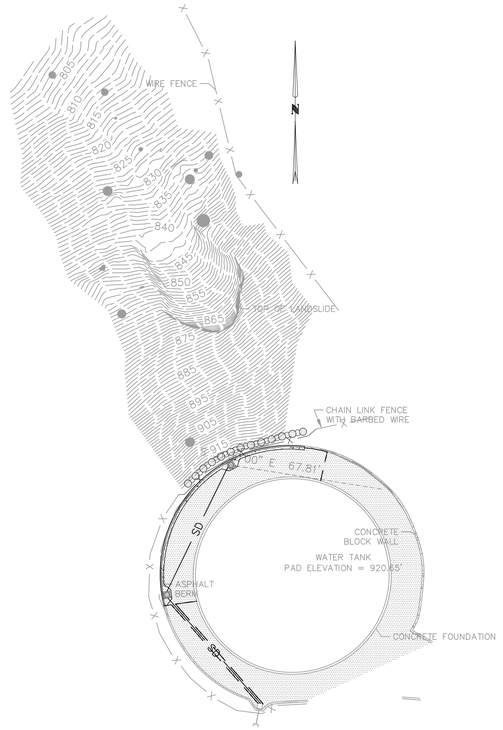
GLENWOOD TANK IMPROVEMENT PLANS
SLOPE STABILIZATION - SECANT WALL
SCOTTS VALLEY, CALIFORNIA



VICINITY MAP
SCALE: N.T.S.

SCOTTS VALLEY WATER DISTRICT



SITE PLAN
SCALE: 1'=30'

CLIENT:
SCOTT'S VALLEY WATER DISTRICT
2 CIVIC CENTER DRIVE
SCOTTS VALLEY, CA 95066
OFFICE: 831.438.2363

CIVIL ENGINEER:
C2G/CIVIL CONSULTANTS GROUP, INC
4444 SCOTTS VALLEY DRIVE, STE 6
SCOTTS VALLEY, CA 95066
OFFICE: 831.438.4420

STRUCTURAL ENGINEER:
R3 CONSULTING ENGINEERS
105 LOCUST STREET, STE A
SANTA CRUZ, CA 95060
OFFICE: 831.588.7628

UTILITY/NOTIFICATIONS

GAS AND ELECTRIC:	PACIFIC GAS AND ELECTRIC
SANITARY SEWER:	CITY OF SCOTTS VALLEY
STORM DRAIN SYSTEM:	CITY OF SCOTTS VALLEY
WATER:	SCOTTS VALLEY WATER DISTRICT

SURVEYOR:
ALPHA SURVEY
4444 SCOTTS VALLEY DRIVE, STE 6
SCOTTS VALLEY, CA 95066
OFFICE: 831.438.4453

GEOTECHNICAL ENGINEERS:
HARO, KASUNICH AND ASSOCIATES, INC.
116 EAST LAKE AVE
WATSONVILLE, CA 95076
OFFICE: 831.722.4175

R3 CONSULTING ENGINEERS
105 LOCUST STREET, STE A
SANTA CRUZ, CA 95060
OFFICE: 831.588.7628

ABBREVIATIONS

AC	ASPHALT CONCRETE
BFP	BACK FLOW PREVENTER
BFW	BOTTOM FACE OF WALL
BFC	BOTTOM FACE OF CURB
CB	CATCH BASIN
CL	CENTERLINE
CONC	CONCRETE
DI	DROP INLET/DITCH INLET
DIP	DUCTILE IRON PIPE
EC	EDGE OF CONCRETE
EP	EDGE OF PAVEMENT
EG	EXISTING GRADE
(E)	EXISTING
FF	FINISH FLOOR
FG	FINISH GRADE
FL	FLOW LINE
GB	GRADE BREAK
HP	HIGH POINT
INV	INVERT
LP	LOW POINT
ME	MATCH EXISTING
MIN	MINIMUM
PL	PROPERTY LINE
PSE	PUBLIC SERVICE EASEMENT
ROW	RIGHT OF WAY
TBW	TOP BACK OF WALL
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
WV	WATER VALVE

CIVIL SHEET INDEX

STRUCTURAL SHEET INDEX

GENERAL NOTES

1. NO CHANGE TO THE PLANS SHALL BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL BY THE OWNER OR OWNERS REPRESENTATIVES AND THE SCOTTS VALLEY WATER DISTRICT.
2. CONTRACTOR SHALL VERIFY LOCATIONS, ELEVATIONS AND INVERTS OF EXISTING UTILITY PRIOR TO COMMENCEMENT OF WORK AND SHALL NOTIFY OWNER OR OWNERS REPRESENTATIVES OF VARIANCE FROM THOSE SHOWN ON THE PLANS.
3. IF ANY INDICATIONS OF ARCHEOLOGICAL REMAINS ARE ENCOUNTERED DURING GRADING ACTIVITIES FOR ANY DEVELOPMENT WITHIN THE PROJECT SITE, ALL WORK SHALL BE HALTED WITHIN 200 FOOT RADIUS OF THE FIND. OWNER SHALL RETAIN A QUALIFIED ARCHEOLOGIST RETAINED TO DETERMINE THE NATURE OF THE DISCOVERY AND RECOMMEND APPROPRIATE EVALUATION PROCEDURES.
4. THE WITHIN PLANS ARE COPYRIGHTED AS AN UNPUBLISHED WORK BY C2G/CIVIL CONSULTANTS GROUP, INC. ALL IDEAS DESIGNS, ARRANGEMENTS AND PLANS INDICATED OR REPRESENTED BY THESE DRAWINGS ARE OWNED BY, AND THE PROPERTY OF C2G/CIVIL CONSULTANTS GROUP, INC. AND WERE CREATED, EVOLVED AND DEVELOPED FOR USE ON, AND IN CONNECTION WITH, THE SPECIFIED PROJECT. NONE OF SUCH IDEAS, DESIGNS, ARRANGEMENTS OR PLANS SHALL BE USED BY OR DISCLOSED TO ANY PERSON, FIRM OR CORPORATION FOR ANY PURPOSE WHATSOEVER WITHOUT THE WRITTEN PERMISSION OF C2G/CIVIL CONSULTANTS GROUP, INC. COPYRIGHT 2023 TODD R. CREAMER, D.B.A. AS C2G/CIVIL CONSULTANTS GROUP, INC.
5. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES TO VERIFY THE EXISTENCE AND/OR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK. AND SHALL NOTIFY U.S.A. @ (800) 227-2600 AT LEAST 48-HOURS IN ADVANCE OF EXCAVATION.

CONTRACTOR RESPONSIBILITY

CONTRACTOR AGREES THAT HE SHOULD ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS, INCLUDING THE SAFETY OF ALL PERSONS AND PROPERTY, DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, AND THAT REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED DURING WORKING HOURS. THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE DESIGN PROFESSIONALS HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR DESIGN PROFESSIONAL.

UNDERGROUND FACILITIES AND UTILITIES HAVE BEEN SHOWN BASED ON RECORD DRAWINGS AND VISIBLE EVIDENCE FOUND IN FIELD. NO WARRANTY IS MADE REGARDING THE COMPLETENESS OR ACCURACY OF SUCH INFORMATION. PRIOR TO CONSTRUCTION, DETERMINE THE EXACT LOCATION OF UNDERGROUND FACILITIES AND UTILITIES, AND PRESERVE SAME FROM DAMAGE. PRIOR TO CONSTRUCTION, VERIFY LOCATION AND ELEVATION OF EXISTING UNDERGROUND UTILITIES AT THE CROSSING POINTS WITH PROPOSED UTILITIES. THE CONTRACTOR SHALL NOTIFY THE OWNER OR OWNERS REPRESENTATIVES IF CONDITIONS DIFFER FROM THOSE SHOWN ON THE DRAWINGS AND SHALL NOT BEGIN CONSTRUCTION UNTIL THE CHANGED CONDITION HAS BEEN EVALUATED. CONTACT UNDERGROUND SERVICES ALERT (USA) (1-800-227-2600) TWO (2) WORKING DAYS PRIOR TO DIGGING. REPAIR UNDERGROUND UTILITIES DAMAGED BY CONSTRUCTION OPERATIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL DAMAGES ASSOCIATED WITH CONTRACTOR'S FAILURE TO EXACTLY LOCATED AND PRESERVE UNDERGROUND FACILITIES AND UTILITIES.

IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS WHICH WILL AFFECT THE WORK, THE CONTRACTOR SHALL BRING SUCH DISCREPANCIES TO THE DESIGN PROFESSIONAL FOR ADJUSTMENT BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER FITTING OF ALL WORK AND FOR THE COORDINATION OF ALL TRADES, SUBCONTRACTORS, AND PERSONS ENGAGED UPON THIS CONTRACT.

CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COORDINATION WITH THE APPROPRIATE UTILITY COMPANIES AND/OR AGENCIES TO VERIFY THE EXISTENCE AND/OR LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO COMMENCEMENT OF WORK. AND SHALL NOTIFY U.S.A. @ (800) 227-2600 AT LEAST 48-HOURS IN ADVANCE OF EXCAVATION.

CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL SURVEYING AND OR STAKING BY A LICENSED SURVEYOR FOR ALL CONSTRUCTION PURPOSES.

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NORTH

SCALE: 1"=30'
0 30 60 90 120

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BID SET	VL

COVER SHEET

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 58561
CIVIL
STATE OF CALIFORNIA

C2G / CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

GLENWOOD TANK IMPROVEMENT PLANS
GLENWOOD TANK SITE
SCOTTS VALLEY, CA 95066

Date:	06.04.26
Scale:	1" = 30'
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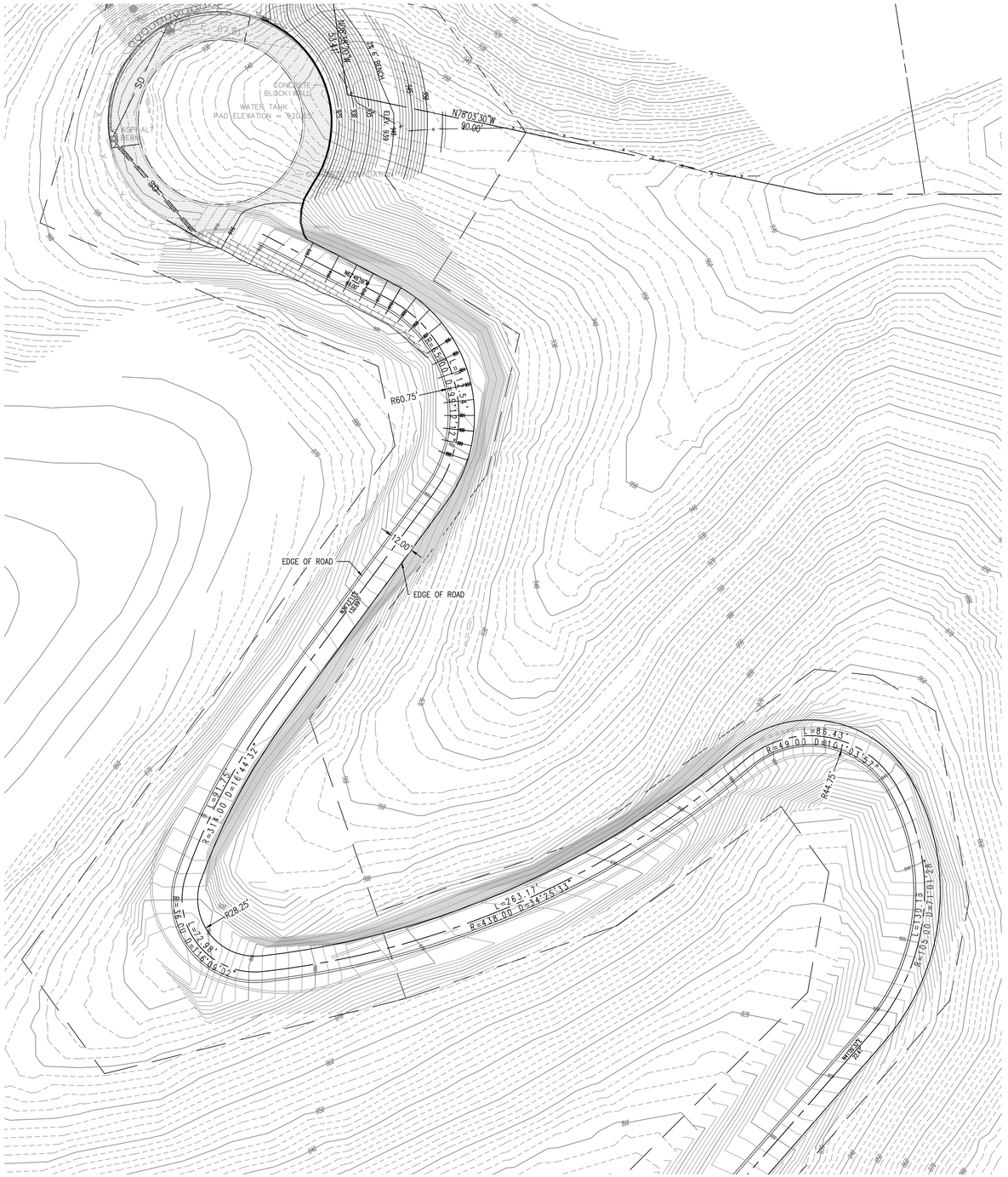
Job:	165-100
Sheet:	C0.1
Of	6 Sheets



1 ACCESS ROAD OVERVIEW

Scale: 1"=30'

NORTH

SCALE: 1"=30'

0 30 60 90 120

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OVERVIEW SHEET

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 87561
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

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Of	6 Sheets

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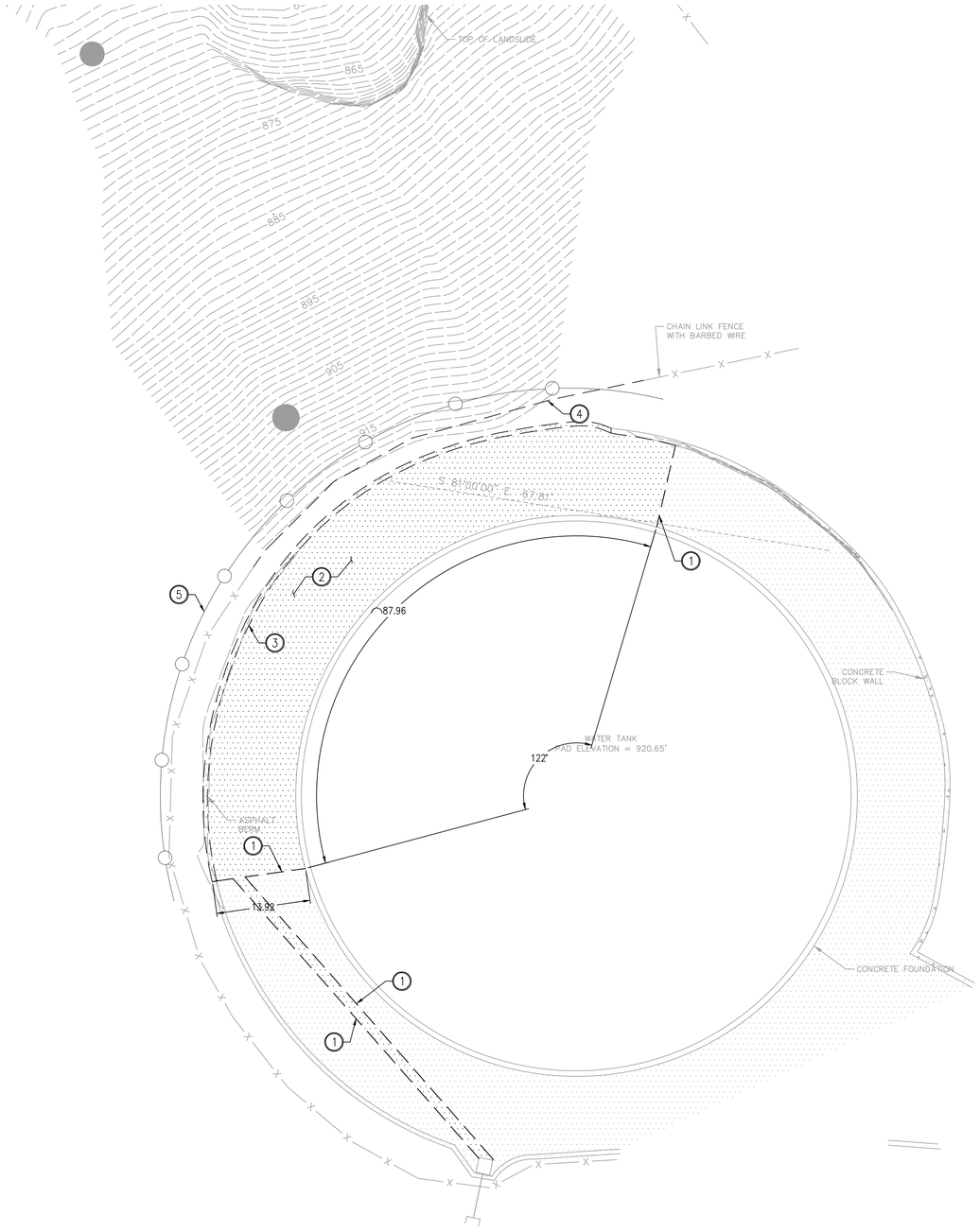

DEMOLITION AND SITE PREPARATION NOTES

THE CONTRACTOR SHALL INCLUDE IN THE BID THE COST OF REMOVING ANY EXISTING SITE FEATURES AND APPURTENANCES NECESSARY TO ACCOMPLISH THE CONSTRUCTION OF THE PROPOSED SITE IMPROVEMENTS. THE CONTRACTOR SHALL ALSO INCLUDE IN THE BID THE COST NECESSARY TO RESTORE SUCH ITEMS IF THEY ARE SCHEDULED TO REMAIN AS PART OF THE FINAL SITE IMPROVEMENTS. REFER TO PLANS TO DETERMINE EXCAVATION, DEMOLITION AND TO DETERMINE THE LOCATION OF THE PROPOSED SITE IMPROVEMENTS.

THE OWNER RESERVES THE RIGHT TO REVIEW ALL MATERIALS DESIGNATED FOR REMOVAL AND TO RETAIN OWNERSHIP OF SUCH MATERIALS. IF THE OWNER RETAINS ANY MATERIAL THE CONTRACTOR SHALL MAKE ARRANGEMENTS WITH THE OWNER TO HAVE THOSE MATERIALS REMOVED OFF SITE AT NO ADDITIONAL COST.

UNLESS SPECIFICALLY NOTED TO BE SAVED / STOCKPILED (R&S) OR REUSED / RELOCATED (R&R), ALL SITE FEATURES CALLED FOR REMOVAL SHALL BE REMOVED WITH THEIR FOOTINGS, ATTACHMENTS, BASE MATERIAL, ETC, TRANSPORTED FROM THE SITE TO BE DISPOSED OF IN A LAWFUL MANNER AT AN ACCEPTABLE DISPOSAL SITE AND AT NO COST TO THE OWNER.

ALL EXISTING SITE FEATURES TO REMAIN SHALL BE PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. ANY FEATURES DAMAGED DURING CONSTRUCTION OPERATIONS SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE AT NO ADDITIONAL COST.

DURING EARTHWORK OPERATIONS, CONTRACTOR SHALL TAKE CARE TO NOT DISTURB EXISTING MATERIALS TO REMAIN, OUTSIDE THE LIMITS OF GRADING AND BACKFILL AND SHALL TAKE WHATEVER MEASURES NECESSARY, AT THE CONTRACTOR'S EXPENSE, TO PREVENT ANY EXCAVATED MATERIAL FROM COLLAPSING. ALL BACKFILL MATERIALS SHALL BE PLACED AND COMPACTED AS SPECIFIED TO THE SUBGRADE REQUIRED FOR THE INSTALLATION OF THE REMAINDER OF THE CONTRACT WORK.

IT SHALL BE THE CONTRACTOR'S OPTION, WITH CONCURRENCE OF THE OWNER, TO REUSE EXISTING GRAVEL IF IT MEETS THE REQUIREMENTS OF THE SPECIFICATIONS FOR GRAVEL BORROW.

ALL ITEMS CALLED FOR REMOVAL SHALL BE REMOVED TO FULL DEPTH INCLUDING ALL FOOTINGS, FOUNDATIONS, AND OTHER APPURTENANCES, EXCEPT AS SPECIFICALLY NOTED OTHERWISE.

'CLEAR AND GRUB VEGETATION' SHALL INCLUDE REMOVAL OF GRASS, SHRUBS, AND UNDERBRUSH, REMOVAL OF ROOTS, ROUGH GRADING, INSTALLATION OF LOAM (IF APPLICABLE), FINE GRADING, SEEDING AND TURF ESTABLISHMENT BY THE CONTRACTOR.

TREES DESIGNATED FOR REMOVAL SHALL BE TAGGED BY CONTRACTOR AND APPROVED BY OWNER'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF CONSTRUCTION.

THE STORAGE OF MATERIALS AND EQUIPMENT WILL BE PERMITTED AT LOCATIONS DESIGNATED BY OWNER OR OWNER'S REPRESENTATIVE. PROTECTION OF STORED MATERIALS AND EQUIPMENT SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR.

STRIP & STORE EXISTING TOPSOIL FOR LATER REUSE WHERE APPROPRIATE, AND AS NOTED ON PLAN, WITH APPROPRIATE EROSION AND SEDIMENT CONTROLS.

LOAM / TOP SOIL DESIGNATED FOR REUSE AS GENERAL FILL SHALL BE BLENDED WITH SUITABLE BORROW MATERIAL AS SPECIFIED.

THE CONTRACTOR SHALL PROTECT EXISTING TREES TO REMAIN, CONTRACTOR SHALL INSTALL TREE PROTECTION BARRIER AFTER CLEARING UNDERBRUSH AND TAKE DUE CARE TO PREVENT INJURY TO TREES DURING CLEARING OPERATIONS.

LEGEND

- EXISTING CONCRETE TO REMAIN
- EXISTING AC PAVEMENT TO REMAIN
- EXISTING CONCRETE TO BE REMOVED
- EXISTING AC PAVEMENT TO BE REMOVED

ABBREVIATIONS

AC	ASPHALT CONCRETE	FH	FIRE HYDRANT
AD	AREA DRAIN	FL	FLOWLINE
APN	ASSESSORS PARCEL NUMBER	FNC	FENCE
BFC	BOTTOM FACE OF CURB	FW	FACE OF WALL
BFS	BOTTOM FACE OF STEP	HC	HANDICAP
BFW	BOTTOM FACE OF WALL	INV	INVERT
BLDG	BUILDING	LIP	LIP OF GUTTER
BR	BOTTOM OF RAMP	MTR	METER
CB	CATCH BASIN	N	NEW
CO	CLEANOUT	SDAD	STORM DRAIN AREA DRAIN
CNDT	CONDUIT	SDDI	STORM DRAIN DROP INLET
COMM	COMMUNICATION	SSCO	SANITARY SEWER CLEANOUT
CONC	CONCRETE	TC	TOP OF CURB
DBL	DOUBLE	TFC	TOP FACE OF CURB
DIA	DIAMETER	TBC	TOP BACK OF CURB
E	EXISTING	TBW	TOP BACK OF WALL
EC	EDGE OF CONCRETE	THRESH	THRESHOLD
EL	ELEVATION	TR	TOP OF RAMP
ELEC	ELECTRIC	TS	TOP OF STEP
EP	EDGE OF PAVEMENT	TYP	TYPICAL
EX	EXISTING	TW	TOP OF WALL
FC	FACE OF CURB	WM	WATER METER
		WV	WATER VALVE

(X) SITE DEMOLTION NOTES

1. SAWCUT LINE
2. REMOVE EXISTING AC PAVEMENT
3. REMOVE PORTION OF EXISTING AC BERM
4. REMOVE PORTION OF EXISTING FENCE TO NEAREST POST
5. INSTALL 4 FT POLYETHYLENE BARRICADE FENCING DURING DEMOLITION AND CONSTRUCTION

NORTH

SCALE: 1"=10'

0 10 20 30 40

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EXISTING SITE AND DEMOLITION PLAN

REGISTERED PROFESSIONAL ENGINEER
TODD R. CREAMER
No. C 87561
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS
Engineers/Planners
4445 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

GLENWOOD TANK IMPROVEMENT PLANS
GLENWOOD TANK SITE
SCOTTS VALLEY, CA 95066

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Of	6 Sheets

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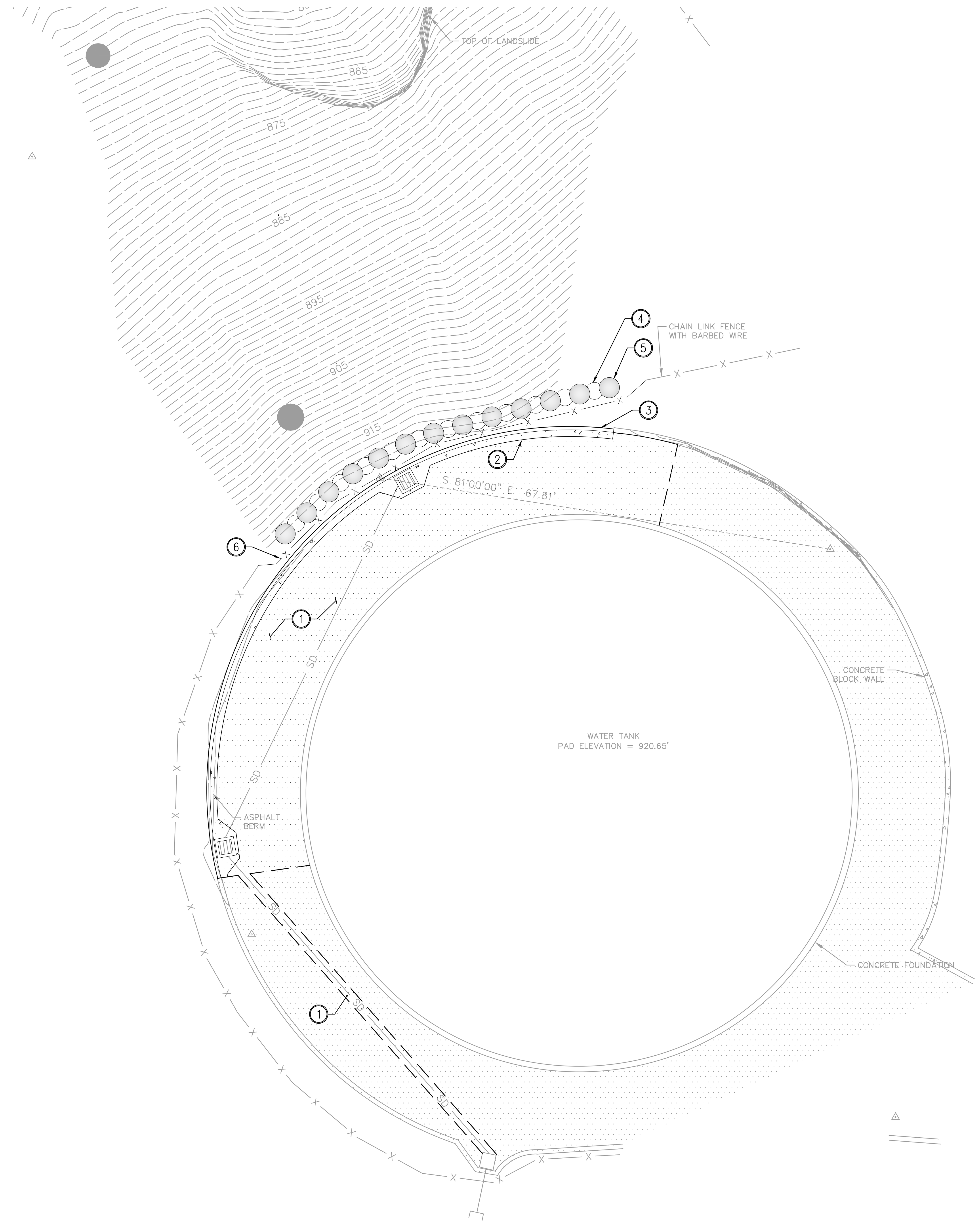
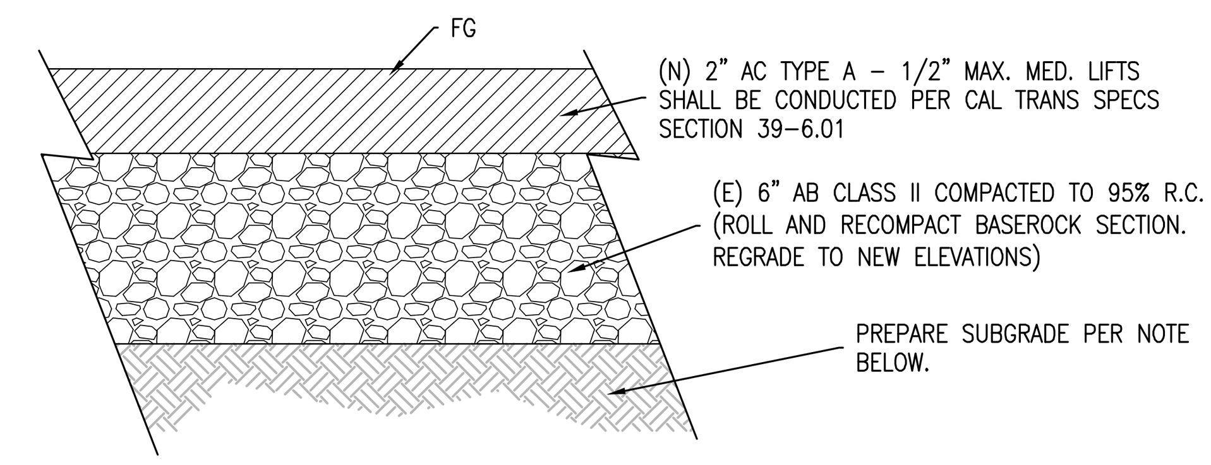


LEGEND

- (E) AC PAVEMENT
- (E) CONCRETE
- AC PAVEMENT
- CONCRETE
- STORM DRAIN DROP INLET
- CHAINLINK FENCE

SITE IMPROVEMENT NOTES

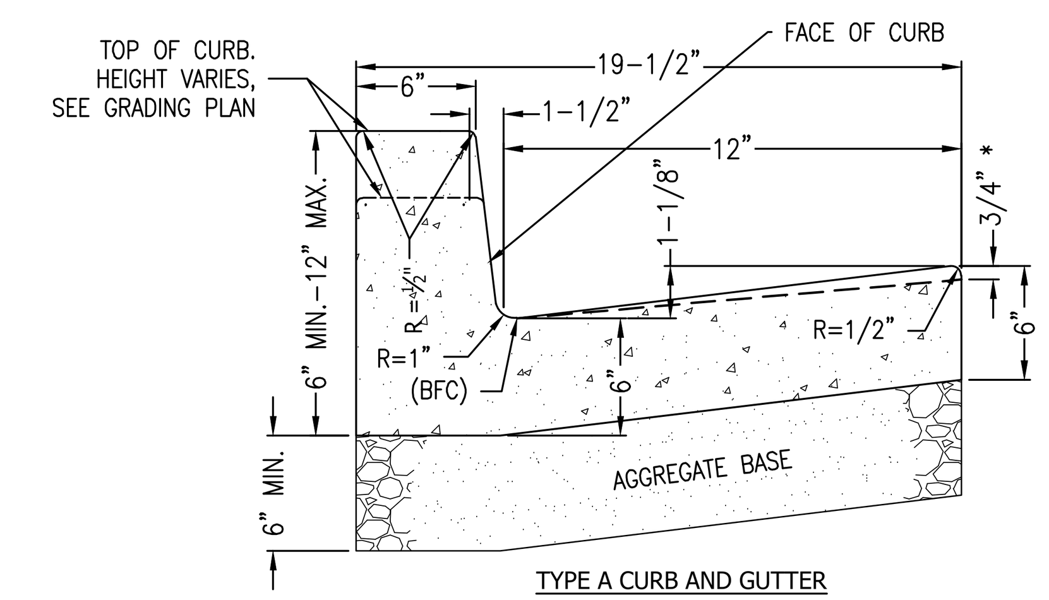
1. INSTALL AC PAVEMENT PER DETAIL 1 BELOW
2. INSTALL CONCRETE GUTTER PER DETAIL 2 BELOW
3. INSTALL CONCRETE CURB PER DETAIL 2 BELOW
4. SLURRY WALL, SEE STRUCTURAL PLANS
5. SECANT WALL (CONCRETE STRUCTURAL PILE), SEE STRUCTURAL PLANS
6. INSTALL NEW FENCE WITH BARBED WIRE PER DETAIL 3 BELOW



PAVEMENT SUBGRADE COMPACTION REQUIREMENTS (PER TABLE 5 OF THE GEOTECH REPORT)
LOW-EXPANSIVE SOIL SUBGRADE, COMPACTED TO 95% R.C. / EXPANSIVE SOIL SUBGRADE SHALL BE COMPACTED TO 87 - 92% WITH AT LEAST 3% OVER OPTIMUM.

1 AC PAVEMENT SECTION

Scale: NTS



TYPE A CURB AND GUTTER

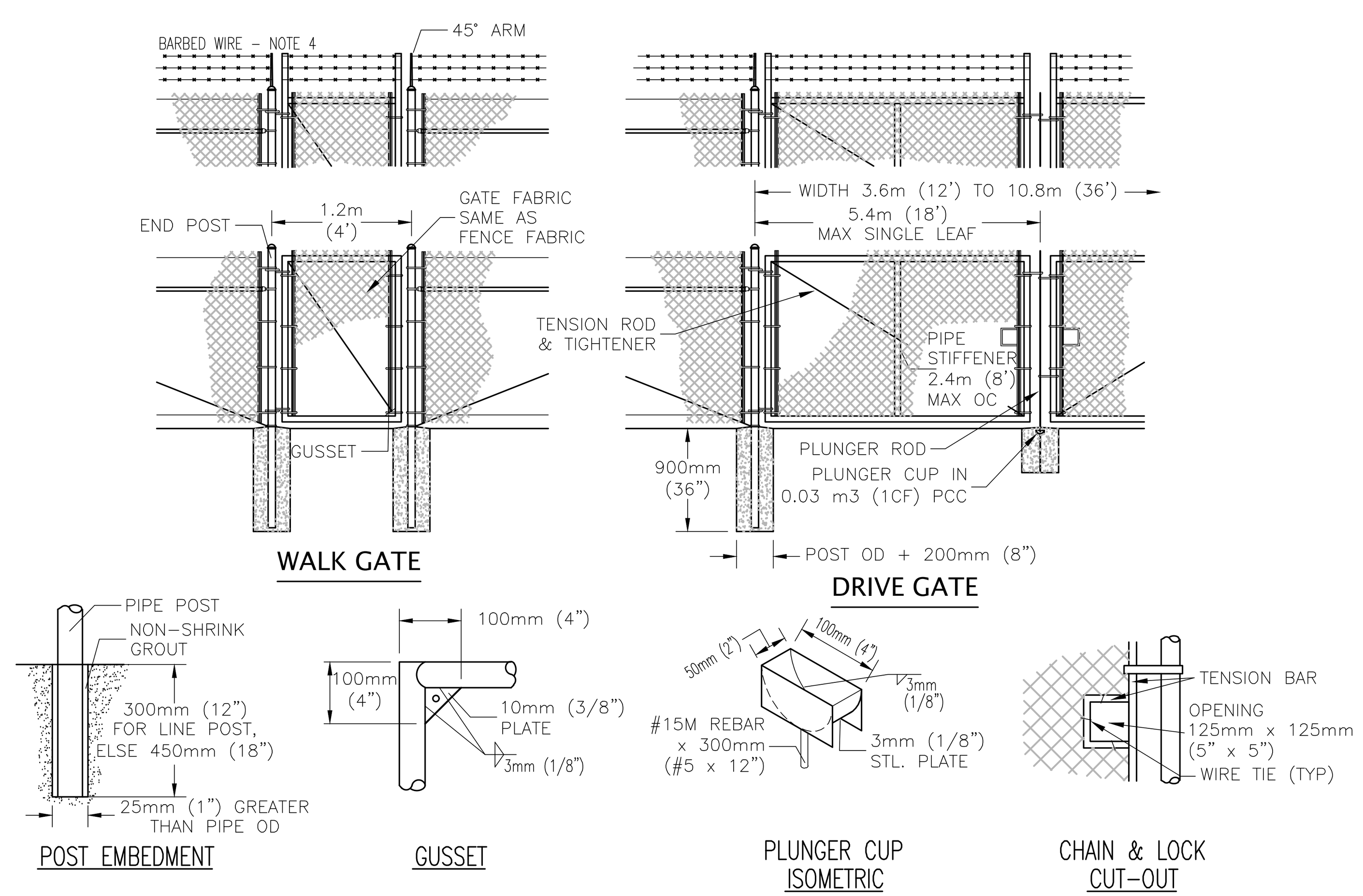
NOTES:

1. TYPE A CURB & GUTTER AND SIDEWALK ARE TO BE CONSTRUCTED OF CLASS B CONCRETE, 6 SACK MINIMUM.
2. WEAKENED PLANE JOINTS SHALL BE CONSTRUCTED AT 20° INTERVALS, AND AT THE ENDS OF RETURNS. EXPANSION JOINTS SHALL BE AT MAXIMUM 60 FEET SPACING.

* COUNTER SLOPE OF ADJOINING GUTTERS IMMEDIATELY ADJACENT TO AND WITHIN 24" OF THE CURB RAMP SHALL NOT BE STEEPER 1"V IN 20"H (CBC 11B-406.5.8). COUNTER SLOPE OF ADJOINING GUTTERS IMMEDIATELY ADJACENT TO AND WITHIN 24" OF ACCESSIBLE DROP-OFFS/LOADING ZONES SHAL NOT BE STEEPER 1"V IN 50"H OR 2.0% MAX.

2 CONCRETE CURB & GUTTER

Scale: NTS



NOTES:

1. SECURE DRIVE-FIT GALVANIZED CAP TO POST WITH 6 mm (1/4") ROUND-HEAD RIVET.
2. H DENOTES FABRIC WIDTH AND NOMINAL FENCE HEIGHT. H = 1.5 m (5') UNLESS OTHERWISE NOTED.
3. IF FENCE WITH TOP RAIL IS SPECIFIED, DELETE STEEL TENSION WIRE AT TOP, AND PIPE RAILS AT INTERMEDIATE, SLOPE, END AND CORNER POSTS. EXTEND TENSION ROD TO TOP RAIL.
4. BARBED WIRE SHALL BE USED ONLY WHEN SPECIFIED.
5. POST SPACING IS MAXIMUM 3.0 m (10').
6. FILL CLEAR OPENINGS GREATER THAN 75 mm (3") WITH FABRIC. FOR OPENINGS LESS THAN 450 mm (18'), TIE FABRIC TO POSTS.
7. USE ONE POST FOR COMBINED SLOPE AND CORNER POST IF TOP OF CHANNEL WALL IS CONSTRUCTED AS SHOWN FOR "ALTERNATE".
8. STEEL BANDS AT TENSION BARS SHALL BE 3 mm X 25 mm (1/8" x I"), MINIMUM, SPACED AT MAXIMUM 400 mm (16').
9. DIMENSIONS SHOWN ON THIS PLAN FOR METRIC AND ENGLISH UNITS ARE NOT EXACTLY EQUAL VALUES. IF METRIC UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE METRIC VALUES. IF ENGLISH UNITS ARE USED, ALL VALUES USED FOR CONSTRUCTION SHALL BE ENGLISH VALUES. HOWEVER, ASTM 615 REINFORCING STEEL MAY BE SUBSTITUTED FOR ASTM 615M STEEL.

3 CHAINLINK FENCE

Scale: NTS

NORTH

SCALE: 1"=10'
0 10 20 30 40

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BID SET	VL

SITE IMPROVEMENT PLAN

TODD R. CREAMER
REGISTERED PROFESSIONAL ENGINEER No. C 62561 CIVIL STATE OF CALIFORNIA

C2G / CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

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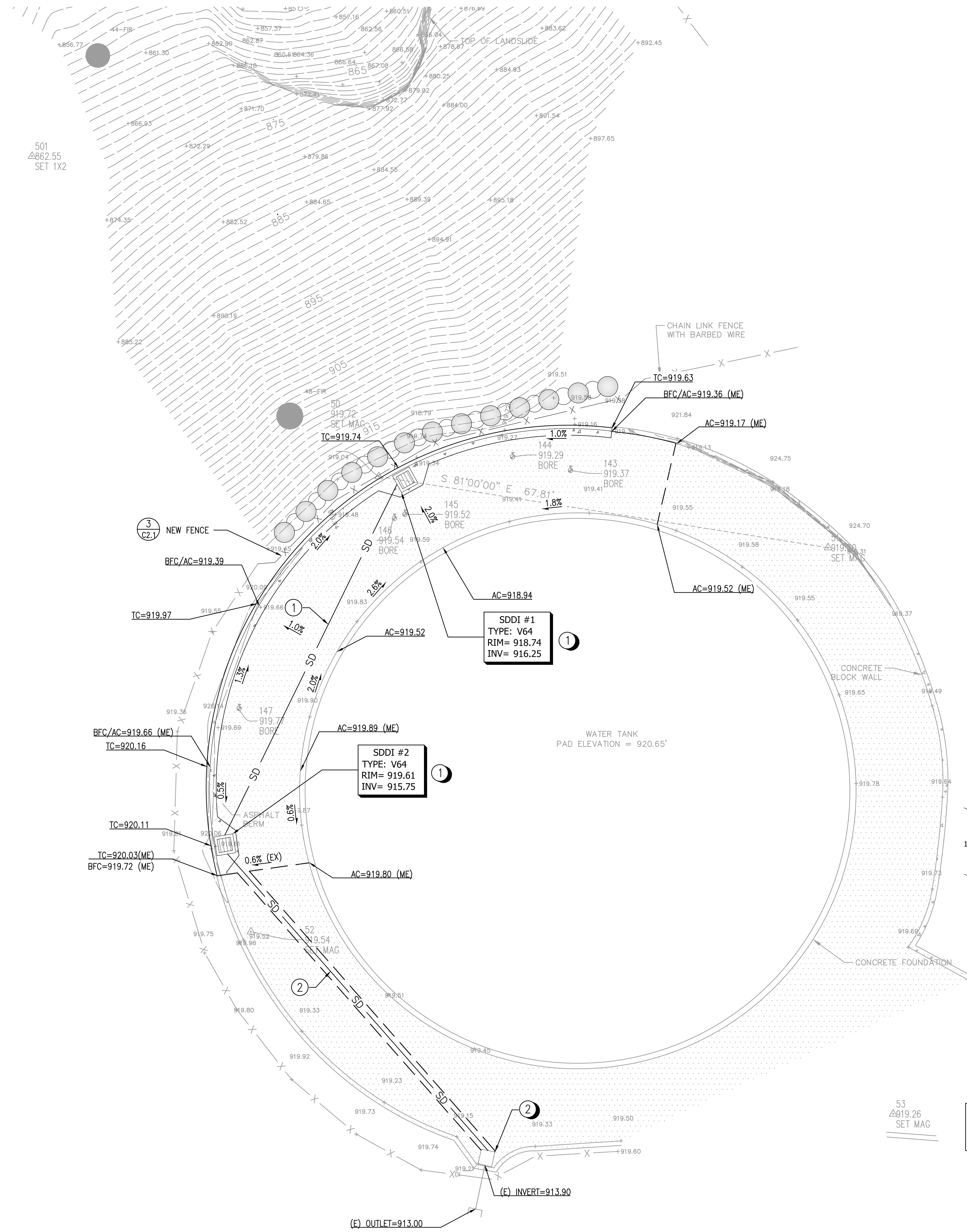


GENERAL GRADING NOTES

1. SURFACE VEGETATION PRESENT AT THE TIME OF CONSTRUCTION SHOULD BE STRIPPED TOGETHER WITH ORGANIC LADEN TOPSOIL. THE ACTUAL DEPTH SHOULD BE DETERMINED BY THE GEOTECHNICAL ENGINEER AT THE TIME OF CONSTRUCTION. FOR PLANNIG PURPOSES THE AVERAGE DEPTH MAY BE ASSUMED TO BE 3-INCHES IN VEGETATED AREAS.
2. ALL MATERIAL TO BE USED AS FILL WITHIN BUILDING PAD AREAS & PARKING OR DRIVEWAY AREAS TO BE FREE OF ALL VEGETATION & FOREIGN MATTER AND SHALL BE APPROVED BY THE SOILS ENGINEER.
3. THESE SOILS WILL NEED TO BE PROCESSED; MOISTURE CONDITIONED AND RECOMPACTED AS ENGINEERED FILL. AT A MINIMUM, SUBGRADE SHOULD BE SACRIFIED TO A DEPTH OF 8-INCHES; MOISTURE CONDITIONED AND RECOMPACTED AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
4. STRIPPINGS MAY BE PLACED IN PLANTING AREAS; ALL EXCESS STRIPPING SHALL BE HAULED OFF. PAVING DEBRIS SHALL BE HAULED OFF TO AN APPROVED DISPOSAL SITE.
5. ALL WORK SHOWN OR NOTED IN THESE PLANS SHALL BE IN STRICT ACCORDANCE WITH THE RECOMMENDATIONS OF THE GEOTECHNICAL ENGINEER, ALL LOCAL, STATE AND FEDERAL MINIMUM STANDARDS AND THE LATEST EDITION OF THE UNIFORM BUILDING CODE.
6. CONTRACTOR SHALL PROTECT ALL EXISTING SITE IMPROVEMENTS NOT IDENTIFIED FOR REMOVAL DURING CONSTRUCTION. THEY SHALL REPAIR ANY DAMAGE TO NEW CONDITION AT THEIR EXPENSE.
7. VERIFY ALL EXISTING SITE CONDITIONS, SITE DIMENSIONS AND GRADES PRIOR TO THE START OF CONSTRUCTION.
8. ALL GRADING AND RELATED WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT FOR THE PROJECT.
9. GRADING SLOPES FOR BOTH CUT AND FILL SHALL NOT EXCEED 2(H):1(V) UNLESS OTHERWISE DIRECTED BY THE GEOTECHNICAL ENGINEER.
10. ALL SOFTSCAPE GRADES ADJACENT TO NEW BUILDINGS SHALL BE 8" (MIN.) BELOW FINISH FLOOR.
11. CONTRACTOR SHALL GRADE TO ENSURE DRAINAGE FLOWS AWAY FROM EXISTING BUILDINGS.
12. IN AREAS WHERE SPACE LIMITATIONS PRECLUDE PERFORMING MECHANICAL COMPACTION, A FLOWABLE SAND-CEMENT SLURRY OR OTHER APPROVED CONTROLLED DENSITY FILL (CDF) OR CONTROLLED LOW STRENGTH MATERIAL (CLSM) MAY BE USED IN PLACE OF SOIL.
13. LEVEL LANDINGS SHALL BE PROVIDED AT ALL DOORS WITH A MAXIMUM SLOPE OF 2.0%. LANDINGS SHALL EXTEND A MINIMUM OF 5-FEET (60-INCHES) AWAY FROM THE DOOR.
14. DOOR LANDINGS SHALL EXTEND A MINIMUM OF 24" PAST THE DOOR AS MEASURED FROM THE DOOR LATCH SIDE OF THE DOOR (PER CBC 11B-404.2.4) UNLESS OTHERWISE STATED BY ENGINEER.
15. EXISTING CRAWL SPACE VENTILATION SHALL NOT BE COVERED COMPLETELY. REFER TO ARCHITECTURAL PLANS FOR MINIMUM CRAWL SPACE VENTILATION OPENING REQUIREMENTS.

LEGEND

- (E) AC PAVEMENT
- (E) CONCRETE
- AC PAVEMENT
- CONCRETE
- STORM DRAIN DROP INLET
- CHAINLINK FENCE

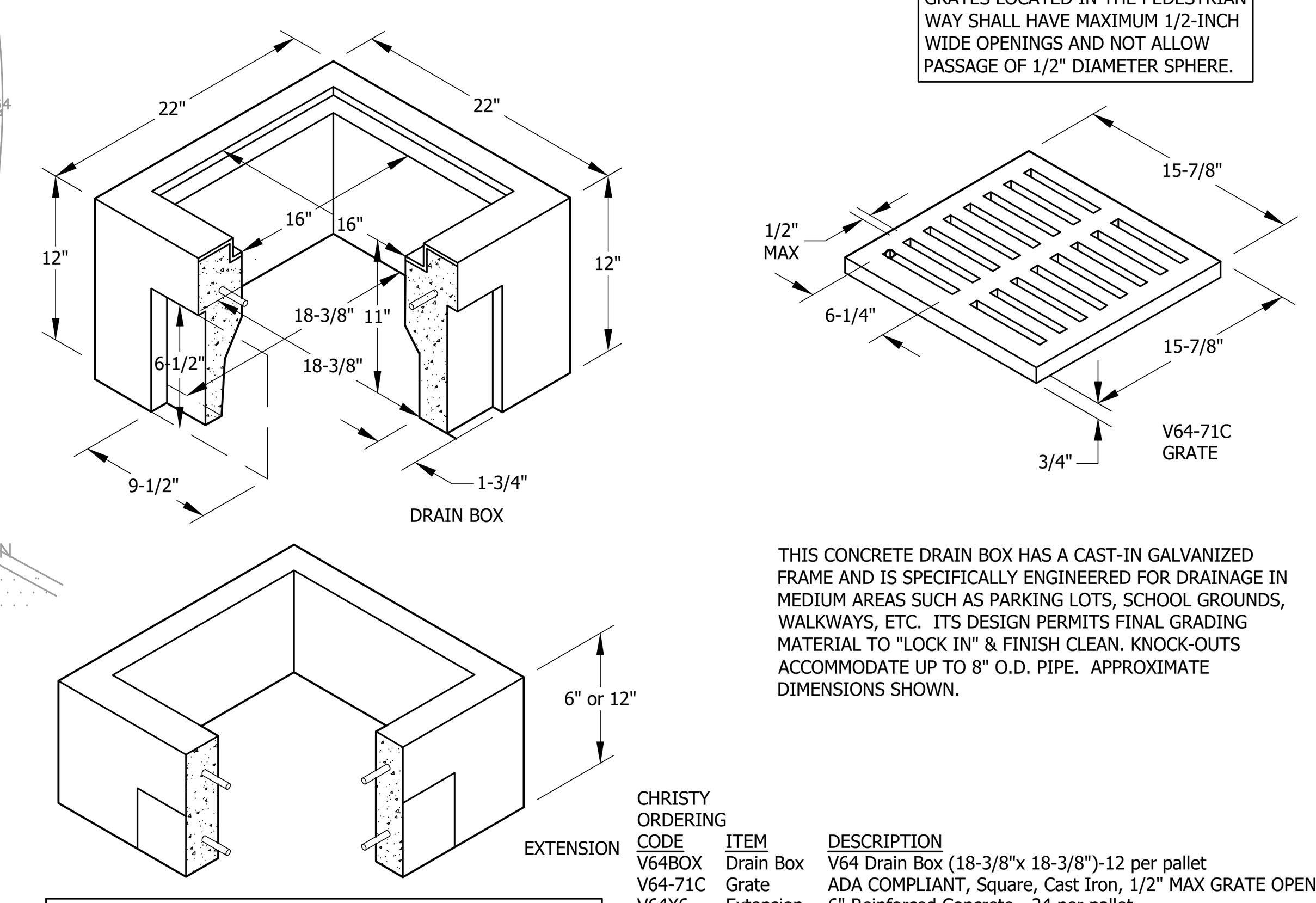
(X) STORM DRAINAGE PIPE DATA:

1. 59 LF OF 6" Ø SDR-35 PIPE @ 1.0% SLOPE
2. 59 LF OF 8" Ø SDR-35 PIPE @ 3.1% SLOPE

(X) STORM DRAINAGE NOTES:

1. V64 CHRISTY BOX PER DETAIL 1 BELOW
2. POINT OF CONNECTION TO EXISTING INLET

GRATE OPENING NOTE:
GRATES LOCATED IN THE PEDESTRIAN WAY SHALL HAVE MAXIMUM 1/2-INCH WIDE OPENINGS AND NOT ALLOW PASSAGE OF 1/2" DIAMETER SPHERE.



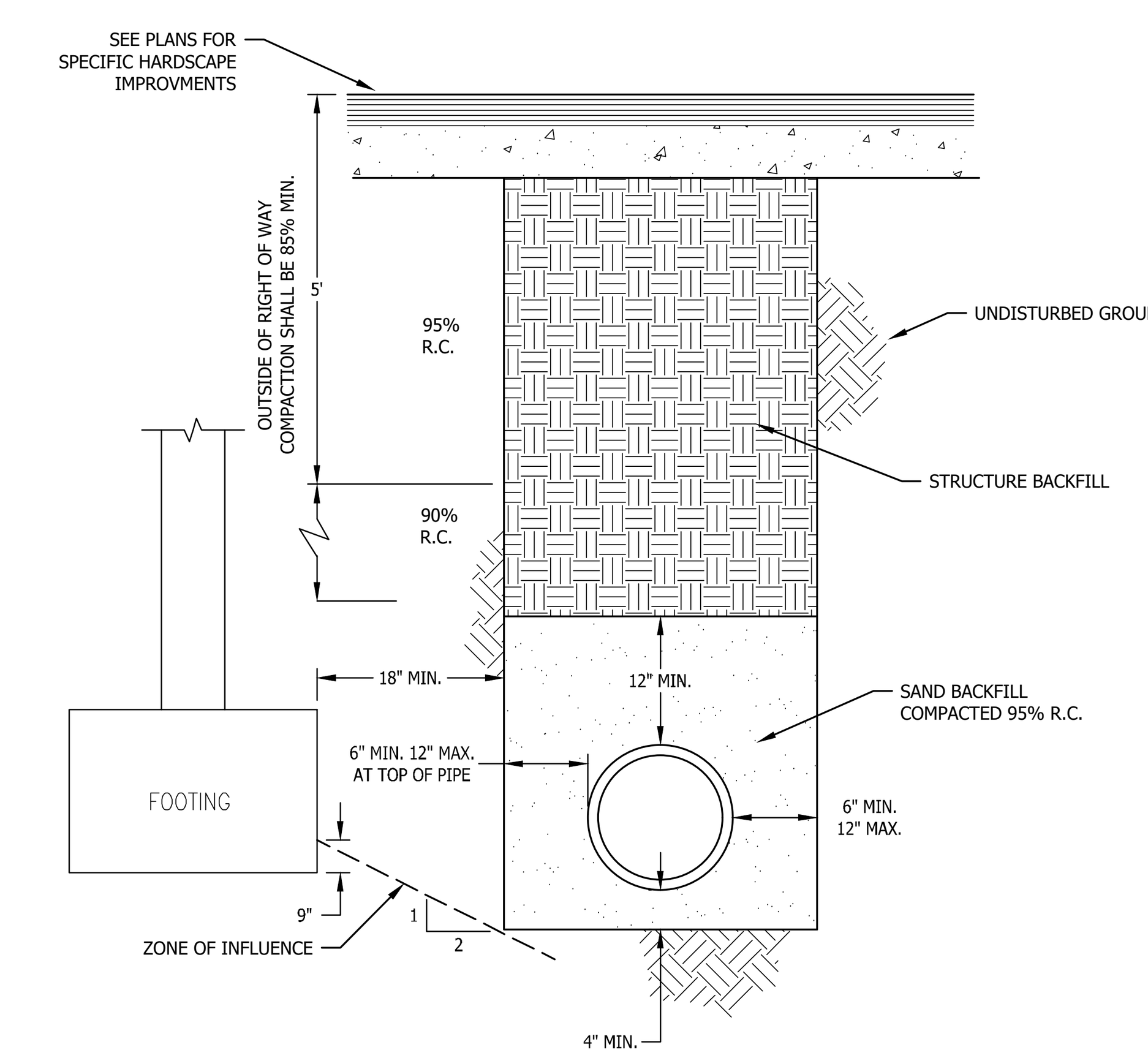
THIS CONCRETE DRAIN BOX HAS A CAST-IN GALVANIZED FRAME AND IS SPECIFICALLY ENGINEERED FOR DRAINAGE IN MEDIUM AREAS SUCH AS PARKING LOTS, SCHOOL GROUNDS, WALKWAYS, ETC. ITS DESIGN PERMITS FINAL GRADING MATERIAL TO "LOCK IN" & FINISH CLEAN. KNOCK-OUTS ACCOMMODATE UP TO 8" O.D. PIPE. APPROXIMATE DIMENSIONS SHOWN.

CHRISTY ORDERING CODE	ITEM	DESCRIPTION
V64BOX	Drain Box	V64 Drain Box (18-3/8"x 18-3/8")-12 per pallet
V64-71C	Grate	ADA COMPLIANT, Square, Cast Iron, 1/2" MAX GRATE OPENING
V64X6	Extension	6" Reinforced Concrete - 24 per pallet
V64X12	Extension	12" Reinforced Concrete - 12 per pallet

BASE NOTE:
CONTRACTOR SHALL POUR CONCRETE BASE. BASE SHALL BE MINIMUM 4" THICK AND EXTEND A MINIMUM OF 2" FROM OUTER EDGE OF DRAINAGE STRUCTURE. DRAINAGE STRUCTURE SHALL BE GROUTED TO CONCRETE BASE FOR WATER TIGHT SEAL

1 V64 CHRISTY BOX 22"x22" STORM DRAIN INLET

Scale: NTS



2 STANDARD TRENCH INSTALLATION

Scale: NTS

NORTH

SCALE: 1"=10'
0 10 20 30 40

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BID SET	VL

GRADING AND DRAINAGE PLAN

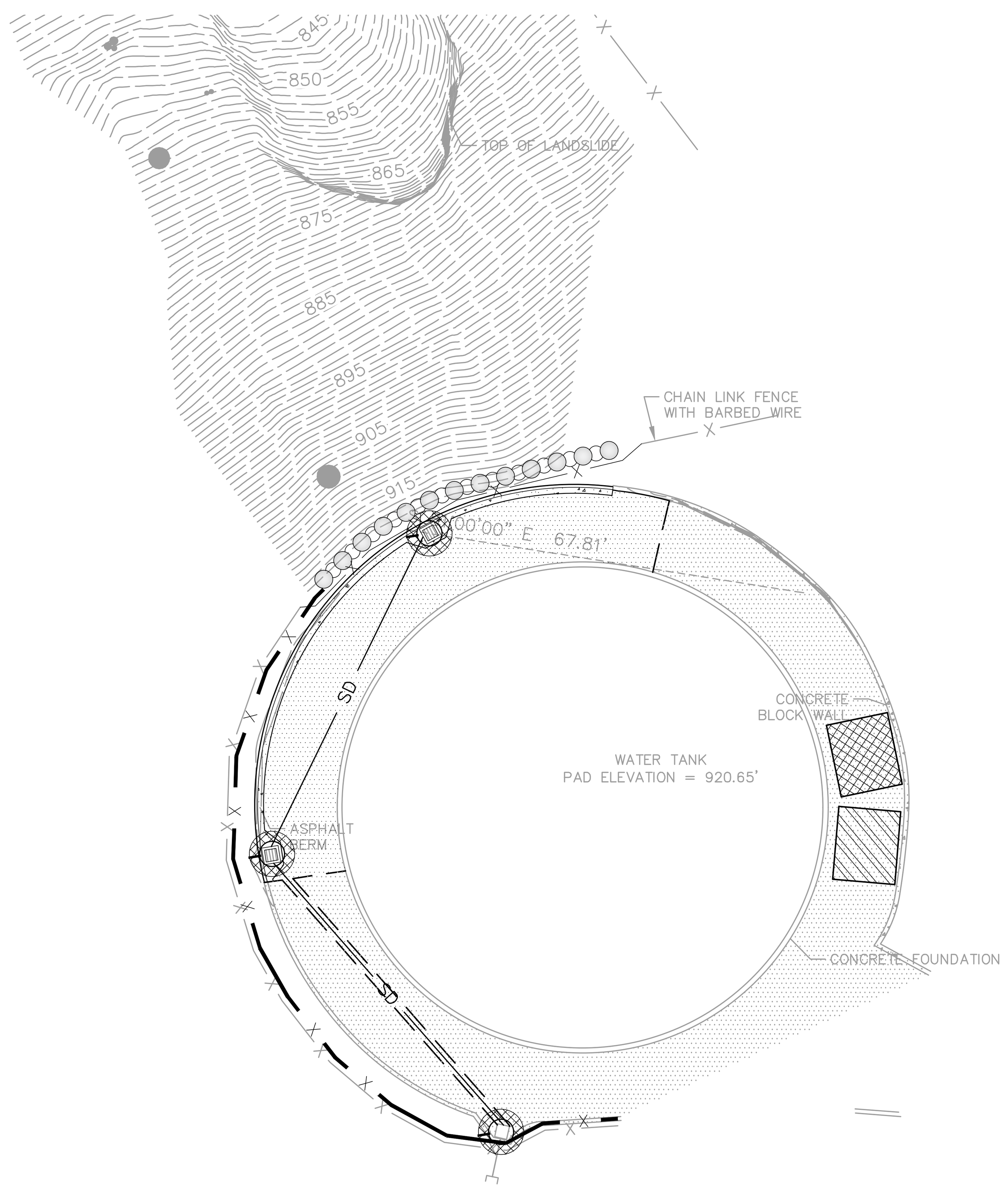
REGISTERED PROFESSIONAL ENGINEER TODD R. CREAMER No. C 64561 CIVIL STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

GLENWOOD TANK IMPROVEMENT PLANS
GLENWOOD TANK SITE
SCOTTS VALLEY, CA 95066

Date:	06.04.26
Scale:	1" = 10'
Drawn:	VL/TC
Job:	165-100
Sheet:	C3.1
Of 6 Sheets	

Drawing: Z:\Shared\CAD - SVWD\CAD\165-100 - Glenwood Tank - Secant Wall\Design\CAD\Sheets\165-100 - C3.1 - GRD & DRN.dwg Layout: C3.1 - GRD & DRN Last Saved: Thu Jun 04, 2026 - 5:36pm Last Plotted: Thu Jun 04, 2026 - 5:40pm By: Vanessa



EROSION CONTROL NOTES

1. BETWEEN OCTOBER 15 AND APRIL 15, EXPOSED SOIL SHALL BE PROTECTED FROM EROSION AT ALL TIMES. HAY BALES, FILTER BERMS, OR OTHER MEANS SHALL BE EMPLOYED TO PREVENT TURBID RUNOFF TO ADJOINING PROPERTIES.

2. ALL AREA ON AND OFF SITE, EXPOSED DURING CONSTRUCTION, IF NOT PERMANENTLY LANDSCAPED PER PLANS, SHALL BE PROTECTED BY MULCHING AND/OR PLANTING OF THE FOLLOWING APPROVED EROSION CONTROL MIX, AT A RATE OF 35 POUNDS PER ACRE:

BLANDO BROME	50%
ROSE CLOVER (PELLET INOCULATED)	35%
CREEPING RED FESCUE	15%
ZORRO ANNUAL FESCUE	TRACE
WILDFLOWERS	TRACE

3. UNNECESSARY GRADING AND DISTURBING OR SOIL SHALL BE AVOIDED.

4. ANY EXCESS MATERIAL SHALL BE DISPOSED OF OFF-SITE OR STOCKPILED IN A MANNER TO AVOID RUNOFF ONTO ADJOINING PROPERTIES.

5. UPON COMPLETION OF CONSTRUCTION, ALL REMAINING EXPOSED AREAS SHALL BE PERMANENTLY REVEGETATED PER LANDSCAPE PLANS.

6. ANY MATERIAL STOCKPILED DURING CONSTRUCTION SHALL BE COVERED WITH PLASTIC.

7. DURING CONSTRUCTION, NO TURBID SITE WATER SHALL BE PERMITTED TO ENTER STORM DRAIN SYSTEM. USE OF SILT AND GREASE TRAPS, FILTER BERMS, OR HAY BALES MAY BE USED TO PREVENT SUCH DISCHARGE.

8. CONTRACTOR SHALL NOTIFY COUNTY 48 HOURS BEFORE ANY EARTHWORK IS BEGUN.

9. ALL CONSTRUCTION SHALL CONFORM "EXCAVATION, GRADING, EROSION AND SEDIMENT CONTROL REGULATIONS" PER DSA. NO CLEARING, GRADING, OR EXCAVATION SHALL TAKE PLACE BETWEEN OCTOBER 15, AND APRIL 15 UNLESS THERE IS AN APPROVED WINTER EROSION CONTROL PLAN. ALL DISTURBED SOUL SHALL BE SEEDED, MULCHED, OR OTHERWISE PROTECTED BY OCTOBER 15.

LEGEND

SILT FENCE

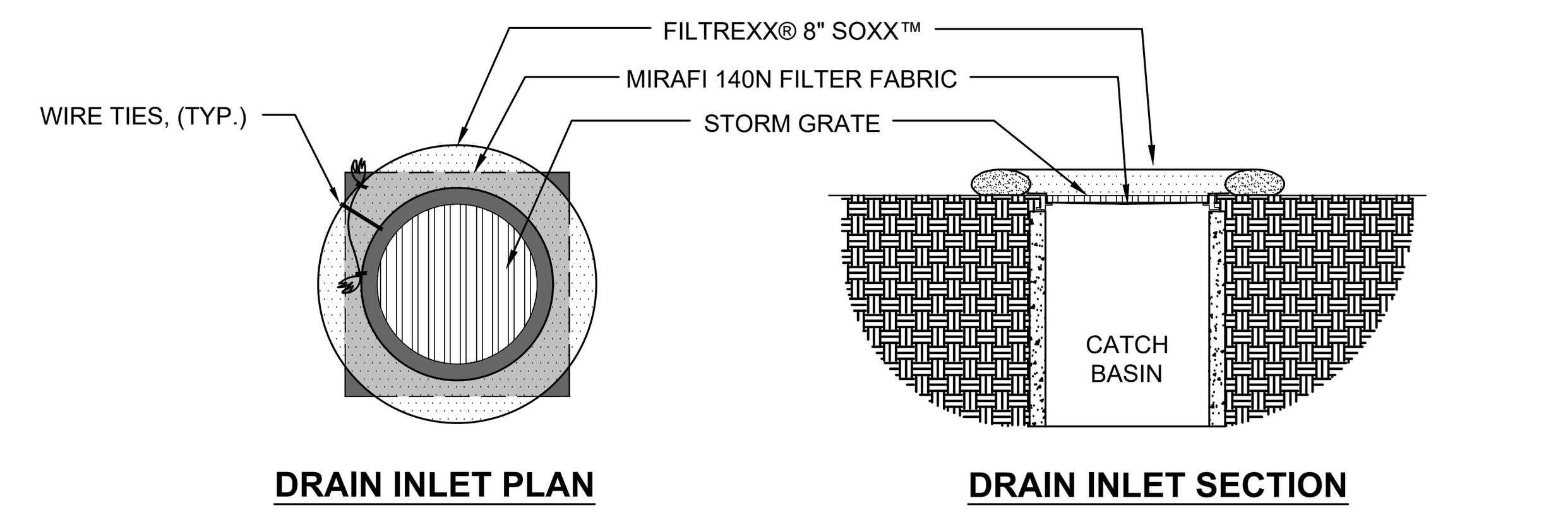
INLET PROTECTION

FIBER ROLL

SWPPP MANAGER TO MARK KNOWN LOCATIONS

MATERIALS & EQUIPMENT STORAGE AREA

SANITARY FACILITY



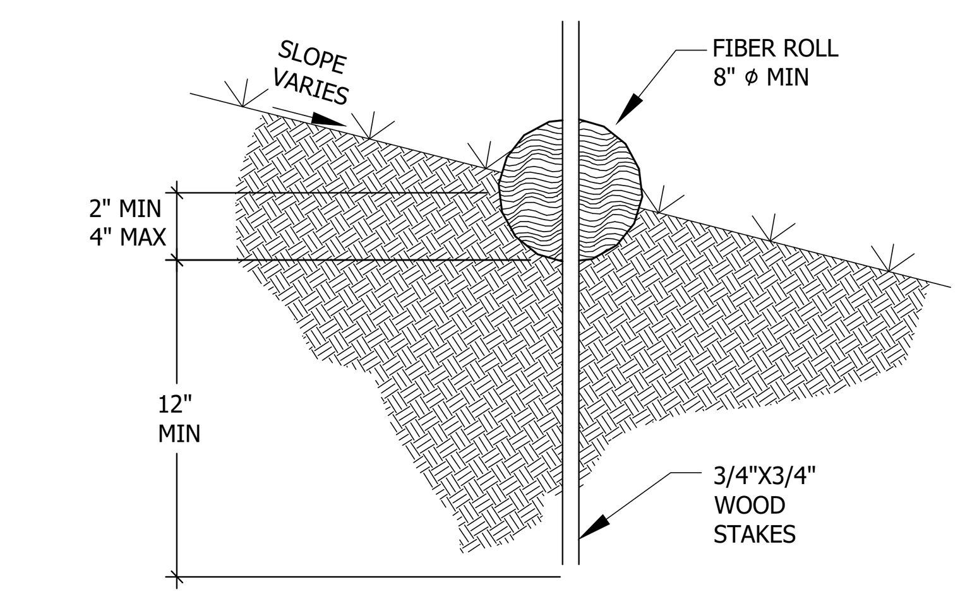
DRAIN INLET PLAN

DRAIN INLET SECTION

NOTES:
1. ALL MATERIAL TO MEET FILTREXX® SPECIFICATIONS.
2. FILTER MEDIA™ FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.
4. CONTRACTOR SHALL EXTEND MIRAFI 140N FABRIC 6" BEYOND CATCH BASIN AFTER PLACEMENT OF GRATE
5. CONTRACTOR SHALL REMOVE ALL FILTER FABRIC FROM ALL STORM DRAIN INLETS UPON COMPLETION OF PROJECT

1 FILTREX® INLET PROTECTION

Scale: NTS



CONSTRUCTION SPECIFICATIONS

LOCATE FIBER ROLLS ON LEVEL CONTOURS SPACED AS FOLLOWS:

- SLOPE INCLINATION OF 4 :1 (H:V) OR FLATTER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 20 FT.

- SLOPE INCLINATION BETWEEN 4:1 AND 2:1 (H:V) FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 15 FT. (A CLOSER SPACING IS MORE EFFECTIVE).

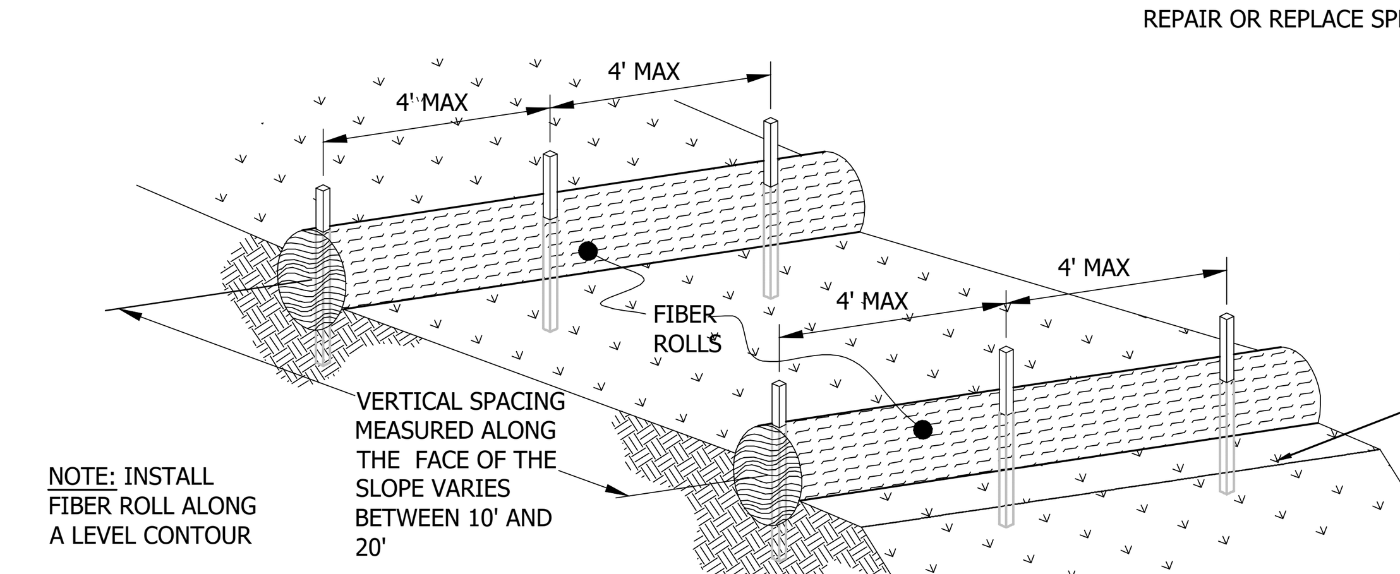
- SLOPE INCLINATION OF 2:1 (H:V) OR GREATER: FIBER ROLLS SHOULD BE PLACED AT A MAXIMUM INTERVAL OF 10 FT. (A CLOSER SPACING IS MORE EFFECTIVE).

- TURN THE ENDS OF THE FIBER ROLL UP SLOPE TO PREVENT RUNOFF FROM GOING AROUND THE ROLL. STAKE FIBER ROLLS INTO A 2 TO 4 IN. DEEP TRENCH WITH A WIDTH EQUAL TO THE DIAMETER OF THE FIBER ROLL.

- DRIVE STAKES AT THE END OF EACH FIBER ROLL AND SPACED 4 FT MAXIMUM ON CENTER.

- USE WOOD STAKES WITH A NOMINAL CLASSIFICATION OF 0.75 BY 0.75 IN. AND A MINIMUM LENGTH OF 24 IN.

- IF MORE THAN ONE FIBER ROLL IS PLACED IN A ROW, THE ROLLS SHOULD BE OVERLAPPED, NOT ABUTTED. REPAIR OR REPLACE SPLIT, TORN, UNRAVELING OR SLUMPING FIBER ROLLS.



IF THE FIBER ROLL IS USED AS A SEDIMENT CAPTURE DEVICE, OR AS AN EROSION CONTROL DEVICE TO MAINTAIN SHEET FLOWS, SEDIMENT THAT ACCUMULATES IN THE BMP MUST BE PERIODICALLY REMOVED IN ORDER TO MAINTAIN BMP EFFECTIVENESS. SEDIMENT SHOULD BE REMOVED WHEN SEDIMENT ACCUMULATION REACHES ONE-HALF THE DESIGNATED SEDIMENT STORAGE DEPTH, USUALLY ONE-HALF THE DISTANCE BETWEEN THE TOP OF THE FIBER ROLL AND THE ADJACENT GROUND SURFACE. SEDIMENT REMOVED DURING THE MAINTENANCE MAY BE INCORPORATED INTO EARTHWORK ON THE SITE OR DISPOSED AT AN APPROPRIATE LOCATION.

2 FIBER ROLLS

Scale: NTS

EROSION CONTROL BMP'S

ALL CONSTRUCTION SITES

DELINEATE CLEARING LIMITS, SENSITIVE OR CRITICAL AREAS, TREES, DRAINAGE COURSES, AND BUFFER ZONES TO PREVENT EXCESSIVE OR UNNECESSARY DISTURBANCE AND EXPOSURE OF SOIL.

1. IDENTIFY ALL STORM DRAINS, DRAINAGE SWALES AND CREEKS LOCATED NEAR THE CONSTRUCTION SITE AND MAKE SURE ALL SUBCONTRACTORS ARE AWARE OF THEIR LOCATIONS TO PREVENT POLLUTANTS FROM ENTERING THEM.
2. PRESERVE EXISTING VEGETATION, WHERE REQUIRED AND WHEN FEASIBLE, TO THE MAXIMUM EXTENT PRACTICABLE.
3. PHASE GRADING OPERATIONS, TO THE EXTENT POSSIBLE, TO LIMIT AREAS OF DISTURBANCE AND TIME OF EXPOSURE
4. AVOID AND/OR MINIMIZE IMPACTS OF EXCAVATION AND GRADING DURING WET WEATHER AND IMMEDIATELY PRECEDING EXPECTED WET WEATHER. EXTRA BMP MATERIALS WILL BE KEPT ONSITE FOR PRE-RAIN INSTALL BETWEEN OCTOBER 15 AND APRIL 15.
5. MINIMIZE CUTS AND FILLS.
6. IMPLEMENT MEASURES TO MINIMIZE EROSION, MANAGE STORM WATER RUNOFF, AND PREVENT POLLUTANTS FROM CONSTRUCTION ACTIVITIES FROM ENTERING STORM DRAINS.
7. ALIGN TEMPORARY AND PERMANENT ROADS AND DRIVEWAYS ALONG SLOPE CONTOURS.
8. WASH VEHICLES AT AN APPROPRIATE OFF-SITE FACILITY. IF EQUIPMENT MUST BE WASHED ON-SITE, USE WASH DOWN AREAS DEVELOPED FOR SPECIFIC SITE REQUIREMENTS AND APPROVED BY THE CITY REPRESENTATIVE. DO NOT USE SOAPS, SOLVENTS, DEGREASERS, OR STEAM CLEANING EQUIPMENT, AND PREVENT WASH WATER FROM ENTERING STORM DRAINS.

GOOD HOUSEKEEPING PRACTICES

1. DO NOT WASH DOWN PAVEMENT OR SURFACES WHERE SILT HAS BEEN DEPOSITED OR MATERIALS HAVE SPILLED. USE DRY CLEANUP METHODS.
2. AVOID CONTAMINATING CLEAN RUNOFF FROM AREAS ADJACENT TO YOUR SITE BY USING BERMS AND/OR TEMPORARY OR PERMANENT DRAINAGE DITCHES TO DIVERT WATER FLOW AROUND THE SITE.
3. COVER EXPOSED PILES OF SOIL, CONSTRUCTION MATERIALS AND WASTES WITH PLASTIC SHEETING OR TEMPORARY ROOFS. BEFORE IT RAINS, SWEEP AND REMOVE MATERIALS FROM SURFACES THAT DRAIN TO STORM DRAINS, CREEKS, OR CHANNELS.
4. PLACE TRASH CANS AROUND THE SITE TO REDUCE POTENTIAL LITTER. DISPOSE OF NON-HAZARDOUS CONSTRUCTION WASTES IN COVERED DUMPSTERS OR RECYCLING RECEPTACLES. RECYCLE LEFTOVER MATERIALS WHENEVER POSSIBLE.
5. DISPOSE OF ALL WASTES PROPERLY. MATERIALS THAT CAN NOT BE REUSED OR RECYCLED MUST BE TAKEN TO AN APPROPRIATE LANDFILL OR DISPOSED OF AS HAZARDOUS WASTE, AS APPROPRIATE.
6. COVER OPEN DUMPSTERS WITH PLASTIC SHEETING OR A TARP DURING RAINY WEATHER. SECURE THE SHEETING OR TARP AROUND THE OUTSIDE OF THE DUMPSTER. IF THE DUMPSTER HAS A COVER, CLOSE IT.
7. ANY DEWATERING MUST FIRST BE APPROVED BY THE CITY AND APPROPRIATE REGULATORY AGENCIES.
8. TRAIN YOUR EMPLOYEES AND INFORM CONTRACTORS AND SUBCONTRACTORS ABOUT STORM WATER MANAGEMENT REQUIREMENTS AND THEIR RESPONSIBILITIES FOR COMPLIANCE.

MINIMIZE SOIL MOVEMENT

1. STOCKPILED SOIL AND MATERIALS SHOULD BE COVERED AND STABILIZED WITH TARPS, GEOTEXTILE FABRIC, HYDROSEEDING AND/OR EROSION CONTROL BLANKETS.
2. CREATE A BERM AND/OR INSTALL SILT FENCING AROUND STOCKPILED MATERIALS TO PREVENT STORM WATER RUNOFF FROM TRANSPORTING SEDIMENT OFFSITE.
3. USE STANDARD EROSION CONTROL SEEDING, PLANTING, MULCHING, GEOTEXTILE FABRIC AND/OR EROSION CONTROL BLANKETS TO STABILIZE DISTURBED SOIL AND REDUCE THE POTENTIAL FOR EROSION.
4. USE OTHER SOIL STABILIZERS AS APPROVED BY THE CITY OF SAN MATEO.

STRUCTURES TO CONTROL AND CONVEY RUNOFF

1. CONVEY RUNOFF BY USE OF EARTH DIKES, DRAINAGE SWALES AND/OR DITCHES WHEN FEASIBLE.
2. USE SLOPE DRAINS TO COLLECT AND CONVEY WATER FOR DISCHARGE BELOW SLOPES WHEN FEASIBLE.
3. USE VELOCITY DISSIPATION DEVICES, FLARED CULVERT END SECTIONS AND/OR CHECK DAMS TO REDUCE RUNOFF VELOCITY AND MITIGATE EROSION WHEN FEASIBLE.

CAPTURE SEDIMENT

1. USE TERRACING, RIPRAP, SAND BAGS, ROCKS, APPROVED TEMPORARY VEGETATION AND/OR OTHER APPROVED BMP'S ON SLOPES TO REDUCE RUNOFF VELOCITY AND TRAP SEDIMENTS. DO NOT USE ASPHALT RUBBLE OR OTHER DEMOLITION DEBRIS FOR THIS PURPOSE.
2. PROTECT STORM DRAIN INLETS FROM SEDIMENT-LADEN RUNOFF. STORM DRAIN INLET PROTECTION DEVICES INCLUDE FILTREX 8" SOXX W/ FILTER FABRIC, FILTER FABRIC FENCES AND BLOCK AND GRAVEL FILTERS.
3. SAND BAGS, GRAVEL BAGS AND STRAW WATTLES AROUND STORM DRAIN INLETS THAT ARE EXPOSED VEHICULAR TRAFFIC ARE NOT ALLOWED.

OTHER RUNOFF CONTROLS

1. TEMPORARY SEDIMENT BASIN
2. SEDIMENT TRAP
3. BRUSH OR ROCK FILTER
4. SILT FENCE
5. SAND OR GRAVEL BAG BARRIER (NOT IN TRAFFIC AREAS)

TRACKING CONTROL

1. IMPLEMENT MEASURES AS NECESSARY TO MINIMIZE TRACKING OF SOIL OFF SITE
2. USE DRY SWEEPING METHODS WHEN CLEANING SEDIMENTS FROM STREETS, DRIVEWAYS AND PAVED AREAS BY HAND. WHEN USING MECHANICAL STREET SWEEPERS, USE FINE WATER SPRAY TO REDUCE DUST AND IMPROVE SEDIMENT REMOVAL WHILE MINIMIZING RUNOFF.

PAINT WORK

1. DO NOT CLEAN PAINT BRUSHES OR RINSE PAINT CONTAINERS INTO A STREET, GUTTER, STORM DRAIN, OR CREEK.
2. FOR WATER-BASED PAINTS, PAINT OUT BRUSHES TO THE EXTENT POSSIBLE AND RINSE TO A DRAIN LEADING TO THE SANITARY SEWER (I.E., INDOOR PLUMBING).
3. FOR OIL-BASED PAINTS, PAINT OUT BRUSHES TO THE EXTENT POSSIBLE, AND FILTER AND REUSE THINNERS AND SOLVENTS. DISPOSE OF UNUSABLE THINNERS, OIL-BASED PAINT, SLUDGES AND RESIDUE AS HAZARDOUS WASTE.
4. NON-HAZARDOUS PAINT CHIPS AND DUST FROM DRY STRIPPING AND SAND BLASTING MAY BE SWEPT UP OR COLLECTED IN PLASTIC DROP CLOTHS AND DISPOSED OF AS TRASH. CHEMICAL PAINT STRIPPING RESIDUE AND CHIPS AND DUST FROM MARINE PAINTS OR PAINTS CONTAINING LEAD OR TRIBUTYL TIN MUST BE DISPOSED OF AS A HAZARDOUS WASTE.
5. WHEN STRIPPING OR CLEANING BUILDING EXTERIORS WITH HIGH-PRESSURE WATER, COVER OR BERM STORM DRAIN INLETS. COLLECT (MOP OR VACUUM) BUILDING CLEANING WATER FOR DISPOSAL IN A PRE-AUTHORIZED MANNER.
6. RECYCLE, RETURN TO SUPPLIER OR DONATE UNWANTED WATER-BASED (LATEX) PAINT.
7. DRIED LATEX PAINT MAY BE DISPOSED OF IN THE TRASH.

CEMENT AND CONCRETE WORK

1. AVOID MIXING EXCESS AMOUNTS OF FRESH CONCRETE OR CEMENT MORTAR ON-SITE.
2. STORE DRY AND WET CONCRETE AND CEMENT UNDER COVER, PROTECTED FORM RAINFALL AND RUNOFF.
3. WASH OUT CONCRETE TRANSIT MIXERS ONLY IN DESIGNATED WASH-OUT AREAS. WHENEVER POSSIBLE, RECYCLE WASHOUT BY PUMPING BACK INTO MIXERS FOR REUSE. DO NOT DISPOSE OF WASHOUT INTO THE STREET, STORM DRAINS, DRAINAGE DITCHES, OR CREEKS. DESIGNATED WASH-OUT AREAS MUST BE MAINTAINED TO PREVENT OVER FLOW.
4. WHENEVER POSSIBLE, RETURN CONTENTS OF MIXER BARREL TO THE OFF-SITE YARD FOR RECYCLING. DISPOSE OF SMALL AMOUNTS OF EXCESS CONCRETE, GROUT, AND MORTAR IN THE TRASH.

ROADWORK/PAVEMENT

5. APPLY CONCRETE, ASPHALT, AND SEAL COAT DURING DRY WEATHER TO PREVENT CONTAMINANTS FROM CONTACTING STORMWATER RUNOFF.
6. COVER STORM DRAIN INLETS AND MANHOLES WHEN PAVING OR APPLYING SEAL COAT, SLURRY SEAL, FOG SEAL, AND SIMILAR MATERIALS.
7. ALWAYS PARK PAVING MACHINES OVER DRIP PANS OR ABSORBENT MATERIALS, SINCE THEY TEND TO DRIP CONTINUOUSLY.
8. WHEN MAKING SAW-CUTS IN PAVEMENT, USE AS LITTLE WATER AS POSSIBLE. COVER POTENTIALLY AFFECTED STORM DRAIN INLETS COMPLETELY WITH FILTER FABRIC DURING THE SAWING OPERATION AND CONTAIN THE SLURRY BY WET-VACUUMING, OR BY PLACING STRAW BALES, SANDBAGS, OR GRAVEL DAMS AROUND THE CATCH BASINS. AFTER THE LIQUID DRAINS OR EVAPORATES, SHOVEL OR VACUUM THE SLURRY RESIDUE FROM THE PAVEMENT OR GUTTER AND REMOVE FROM SITE.
9. WASH DOWN EXPOSED AGGREGATE CONCRETE ONLY WHEN THE WASH WATER CAN: (1) FLOW ONTO A DIRT AREA; (2) DRAIN ONTO A BERMED SURFACE FROM WHICH IT CAN BE PUMPED AND DISPOSED OF PROPERLY; OR (3) BE VACUUMED FROM THE AREA ALONG THE CURB WHERE SEDIMENT HAS ACCUMULATED BY BLOCKING A STORM DRAIN INLET.
10. ALLOW AGGREGATE RINSE TO SETTLE, AND PUMP THE WATER TO THE SANITARY SEWER IF ALLOWED BY YOUR LOCAL WASTEWATER AUTHORITY.
11. DO NOT WASH SWEEPINGS FROM EXPOSED AGGREGATE CONCRETE INTO A STREET OR STORM DRAIN. COLLECT AND RETURN TO AGGREGATE BASE STOCKPILE, OR DISPOSE WITH TRASH.
12. RECYCLE BROKEN CONCRETE AND ASPHALT.

HAZARDOUS MATERIAL SPILL PREVENTION, SPILL REPORTING AND RESPONSE

1. ALL HAZARDOUS MATERIALS SHALL BE STORED SO THAT THEY ARE PROTECTED FROM INCLEMENT WEATHER AND VANDALISM.
2. MOTOR VEHICLES SHALL NOT BE FUELED ON THE PROJECT SITE.
3. SPILL CONTAINMENT MEASURES MUST BE MADE PRIOR TO FUELING WHEN FUELING EQUIPMENT OTHER THAN MOTOR VEHICLES.
4. VEHICLE MAINTENANCE, OTHER THAN EMERGENCY REPAIRS, SHALL NOT BE PERFORMED ON THE PROJECT SITE.
5. ALL INACTIVE VEHICLES/EQUIPMENT SHALL USE COVERS AND/OR DRIP PANS.
6. APPROPRIATE EMERGENCY SPILL CONTAINMENT SUPPLIES SHALL BE MAINTAINED ON SITE BY THE CONTRACTOR.
7. SPILLS GREATER THAN ONE QUART SHALL BE IMMEDIATELY REPORTED TO THE CITY'S REPRESENTATIVE.
8. SPILLS SHALL BE DIKED OR CONTAINED BY TRAINED PERSONNEL TO PREVENT THE SPILLED HAZARDOUS MATERIAL FROM ENTERING THE STORM WATER SYSTEM OR LEAVING THE PROJECT SITE.
9. SPILLS OF LESS THAN FIVE (5) GALLONS SHALL BE ABSORBED USING AN APPROPRIATE MATERIAL. ALL CONTAMINATED MATERIALS SHALL BE CONTAINERIZED, REMOVED FROM THE JOBSITE AND DISPOSED IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.
10. SPILLS IN EXCESS OF FIVE (5) GALLONS SHALL BE ABSORBED USING AN APPROPRIATE MATERIAL AND PLACED IN CONTAINERS UNDER THE DIRECTION OF THE CITY OFFICE OF ENVIRONMENTAL HEALTH AND SAFETY.
11. ANY CONTAMINATED SOIL SHALL BE REMOVED BY THE CONTRACTOR AND REPLACED WITH ACCEPTABLE FRESH SOIL.
12. ANY CONTAMINATED STORMWATER WILL BE MANAGED AS NON-STORMWATER.
13. RESPONSE SHALL BE CARRIED OUT BY APPROPRIATELY TRAINED PERSONNEL UTILIZING SAFE PRACTICES.

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EROSION CONTROL PLAN

TODD R. CREAMER
REGISTERED PROFESSIONAL ENGINEER
No. C 67561
CIVIL
STATE OF CALIFORNIA

C2G /CIVIL CONSULTANTS GROUP, INC.
Engineers/Planners
4444 Scotts Valley Drive / Suite 6
Scotts Valley, CA 95066
831.438.4420

GLENWOOD TANK IMPROVEMENT PLANS
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A. GENERAL

1. MATERIALS AND WORKMANSHIP SHALL CONFORM WITH THE 2025 EDITION OF THE CALIFORNIA BUILDING CODE AND LOCALLY ENFORCED CODES. ALL BUILDING MATERIALS SHALL BE INSTALLED AS DIRECTED BY THE LATEST WRITTEN SPECIFICATIONS EXCEPT WHEN OTHERWISE NOTED.

3. PIN PILE WALL SPECIFICATIONS:
   - 3.1. MATERIALS
     - a. ACTIVE SOIL EFP = 60 PCF
     - b. PASSIVE SOIL EFP = 200 PCF
   - 3.2. DIMENSIONS
     - a. PIER DEPTH = 40 FT
     - b. SECANT DEPTH = 20 FT
     - c. PASSIVE PIER HEIGHT = 20 FT
     - d. GRADE BEAM DEPTH = 3 FT
     - e. GRADE BEAM WIDTH = 3 FT
     - f. PIER DIAMETER = 3 FT
     - g. SECANT DIAMETER = 2.5 FT
     - h. PIER SPACING = 4.5 FT
     - i. OVERLAP = 6 IN
   - 3.3. COEFFICIENTS
     - a. SEISMIC LOCATION COEF. = 0.5
     - b. SEISMIC LOAD COEF. = 16
     - c. PASSIVE PIER MULTIPLIER = 2

4. SOIL DESIGN SPECIFICATIONS (P-Y CURVE DATA):

SOIL TYPE (#)	DEPTH BELOW GRADE (FT)	COHESION (PSF)	FRICTION ANGLE (DEG)	UNIT WEIGHT (PCF)	E50	K (PY) (LB/IN^3)
WEATHERED TSC (1)	0 TO 15	432	36	107	0.01	150
UNWEATHERED TSC (2)	15 TO 50	100	45	110	0.004	600

5. THE CONTRACT STRUCTURAL DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE. THEY DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT THE STRUCTURE DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE, BUT NOT BE LIMITED TO, BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, ETC. OBSERVATION VISITS TO THE SITE BY THE STRUCTURAL ENGINEER SHALL NOT INCLUDE INSPECTION OF THE ABOVE ITEMS.

6. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF ALL DIMENSIONS WITH CONTRACT DRAWINGS AND THE EXISTING BUILDING PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING ALL EXISTING CONDITIONS OF THE STRUCTURE AND SITE PRIOR TO COMMENCING CONSTRUCTION. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER IN WRITING FOR INSTRUCTIONS ON HOW TO PROCEED. IF THE CONTRACTOR PROCEEDS WITHOUT THE WRITTEN DIRECTION FOR THE ENGINEER SHALL BE RESPONSIBLE FOR THE DEMOLITION AND RECONSTRUCTION OF SUCH ITEMS TO THE SATISFACTION OF THE ENGINEER.

7. WRITTEN DIMENSIONS ARE TO BE USED FOR THE CONSTRUCTION OF THE PROJECT. ALL WRITTEN DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS.

8. WHERE ANY DISCREPANCIES OCCUR BETWEEN PLANS, DETAILS, GENERAL STRUCTURAL SPECIFICATIONS, THE GREATER REQUIREMENTS SHALL GOVERN. MODIFICATION OF CERTAIN CONNECTION DETAILS AS PART OF THE SHOP DRAWING REVIEW PROCESS SHALL BE ANTICIPATED BY THE CONTRACTOR.

9. ALL MATERIAL STORED ON SITE SHALL BE PROPERLY STACKED AND PROTECTED TO PREVENT DAMAGE AND DETERIORATION.

10. CONSTRUCTION MATERIAL SHALL BE SPREAD OUT IF PLACED ON FRAMING. LOAD SHALL NOT EXCEED THE DESIGN LIVE LOAD PER SQUARE FOOT.

11. WHERE REFERENCE IS MADE TO VARIOUS TEST STANDARDS FOR MATERIALS, SUCH STANDARDS SHALL BE THE LATEST EDITION AND/OR ADDENDUM.

12. ESTABLISH AND VERIFY ALL OPENINGS AND INSERTS FOR ARCHITECTURAL, MECHANICAL, ELECTRICAL AND PLUMBING WITH APPROPRIATE TRADES, DRAWINGS AND SUBCONTRACTORS PRIOR TO CONSTRUCTION.

13. NOTES AND DETAILS ON DRAWINGS SHALL TAKE PRECEDENCE OVER GENERAL STRUCTURAL NOTES AND TYPICAL DETAILS. WHERE NO SPECIFIC DETAILS ARE SHOWN, CONSTRUCTION SHALL CONFORM TO SIMILAR WORK ON THE PROJECT.

14. TYPICAL DETAILS ARE NOT CUT ON DRAWINGS, BUT APPLY UNLESS NOTED OTHERWISE.

15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONFIRMING EXISTING CONDITIONS AND CAREFUL EXAMINATION OF THE PLANS AND SPECIFICATIONS. THE SUBMISSION OF A BID SHALL BE CONCLUSIVE EVIDENCE THAT THE CONTRACTOR HAS COMPLETE UNDERSTANDING OF THE SCOPE OF WORK, MATERIALS REQUIRED, AND THE QUALITY OF WORK REQUIRED TO COMPLETE THE CONTRACT.

16. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO DESIGN AND PROVIDE TEMPORARY SHORING, BRACING, FORM WORK AS REQUIRED FOR THE PROTECTION OF LIFE AND PROPERTY DURING CONSTRUCTION.

17. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY FRAMING FOR SUPPORT OF NON-STRUCTURAL ELEMENTS.

B. EXCAVATIONS

1. FOUNDATION EXCAVATIONS, FOOTINGS, SUBGRADE PREPARATION, ETC. SHALL BE PER THE PROJECT GEOTECHNICAL REPORT PREPARED BY HARO, KASUNICH AND ASSOCIATES, INC. PROJECT NO. SC12292 DATED JULY 2023.

2. PROVIDE MIN. 5% POSITIVE DRAINAGE AWAY FROM FOUNDATION ELEMENTS.

C. CONCRETE

1. CONTRACTOR SHALL SUBMIT CONCRETE MIX DESIGNS FOR FAVORABLE REVIEW PRIOR TO INSTALLATION OF CONCRETE.

2. ALL CONCRETE SHALL BE $5\frac{1}{2}$ SACK MIN. READY MIXED CONFORMING WITH ASTM C-94, 4" MAX. SLUMP, 0.45 W/C RATIO, AND ATTAIN THE FOLLOWING MINIMUM STRENGTHS AT 28 DAYS:

REINFORCED CONCRETE DRILLED PILES	4000 psi
UN-REINFORCED CONCRETE SLURRY SECANT PILE	2-SACK CEMENT-BENTONITE SLURRY, TARGET 500 TO 750 PSI, MAXIMUM 1,000 PSI.

3. ALL CONSTRUCTION SHALL COMPLY WITH APPLICABLE PROVISIONS OF THE FOLLOWING LATEST ACI STANDARDS:
   - a. ACI 301-SPECIFICATIONS FOR STRUCTURAL CONCRETE BUILDING.
   - b. ACI 318-BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.

4. CONCRETE FOOTINGS AND PADS MAY BE POURED AGAINST NEAT EXCAVATIONS.

5. MINIMUM CONCRETE COVER OVER REINFORCING BARS SHALL BE AS FOLLOWS:

CAST AGAINST AND EXPOSED TO EARTH			3 in
EXPOSED TO EARTH OR WEATHER			
	#6 - #18 BARS		2 in
	#5 BAR AND SMALLER		1½ in
NOT EXPOSED TO EARTH OR WEATHER			
	SLABS, WALLS, AND JOISTS		
		#14 AND #18 BARS	1½ in
		#11 BAR AND SMALLER	¾ in
	BEAMS, COLUMNS		
		PRIMARY REINFORCEMENT, TIES, STIRRUPS, SPIRALS	1½ in
	SHELLS, FOLDED PLATE MEMBERS		
		#6 BAR AND LARGER	¾ in
		#5 BAR AND SMALLER	½ in

6. ALL METAL ANCHORAGE DEVICES SHALL BE SECURED IN PLACE AND INSPECTED BY ENGINEER PRIOR TO PLACING CONCRETE.

7. CURING OF CONCRETE SHALL BE IN ACCORDANCE WITH ACI 308 LATEST EDITION. METHOD OF CURING SHALL BE REVIEWED AND APPROVED BY THE ENGINEER.

8. ALL REINFORCING BARS, ANCHOR BOLTS AND CONCRETE INSERTS SHALL BE SECURED IN POSITION PRIOR TO PLACING CONCRETE.

9. PROVIDE SLEEVES FOR PLUMBING AND ELECTRICAL OPENINGS IN CONCRETE BEFORE PLACING CONCRETE. VERIFY OPENINGS WITH ELECTRICAL AND MECHANICAL DRAWINGS. DO NOT CUT ANY REINFORCING WHICH MAY CONFLICT.

10. NO CONSTRUCTION JOINTS (OTHER THAN THOSE SHOWN ON DRAWINGS) SHALL BE INSTALLED WITHOUT APPROVAL OF THE ENGINEER. PROVIDE 3/4" CHAMFER AT ALL EXPOSED CORNERS.

11. CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER 24 HRS IN ADVANCE TO OBSERVE COMPLETED FOOTING EXCAVATION AND ALL REINFORCING BAR PLACEMENTS BEFORE ANY CONCRETE IS PLACED.

D. REINFORCEMENT

1. ALL REINFORCING STEEL SHALL BE DEFORMED BARS CONFORMING TO ASTM A-615 GRADE 40 FOR #3 OR LESS, GRADE 60 FOR #4 OR GREATER.

2. ALL REINFORCING IN CONCRETE SHALL BE CONTINUOUS OR LAPPED IN ACCORDANCE WITH ACI 318, AND NOT LESS THAN 48 DIAMETERS.

3. ACCURATELY POSITION, SUPPORT, AND SECURE REINFORCEMENT FROM DISPLACING DUE TO FORMWORK, CONSTRUCTION, OR CONCRETE PLACEMENT OPERATIONS. LOCATE AND SUPPORT REINFORCING BY METAL CHAIRS, RUNNER, BOLSTERS, SPACERS, AND HANGERS AT A MAXIMUM 3 FOOT SPACING.

4. ALL REINFORCING SHALL BE INSPECTED BY THE ENGINEER PRIOR TO PLACING ANY CONCRETE OR GROUT.

5. ALL WORK DONE UNDER THIS SECTION SHALL CONFORM WITH THE APPLICABLE PORTIONS OF ACI 318, LATEST EDITION, PARTICULARLY CHAPTER 7, "DETAILS OF REINFORCEMENT".

6. ALL REINFORCEMENT TO BE WELDED SHALL BE A706 GRADE 60.

7. TERMINATE REINFORCING STEEL IN STANDARD HOOKS, UNLESS OTHERWISE SHOWN.

8. PROVIDE REINFORCING SHOWN OR NOTED CONTINUOUS IN LENGTHS AS LONG POSSIBLE.

J. STRUCTURAL OBSERVATIONS CBC SECTION 1704.6

1. STRUCTURAL ENGINEER SHALL PERFORM STRUCTURAL OBSERVATION OF THE PRIMARY STRUCTURAL FRAMING AT THE FOLLOWING STAGES OF WORK:
   - a. FOUNDATION: PRIOR TO POURING CONCRETE BUT AFTER REINFORCING STEEL AND STEEL EMBEDMENTS ARE IN PLACE.

2. CONTRACTOR SHALL NOTIFY ENGINEER 48 HOURS MINIMUM PRIOR TO SCHEDULED OBSERVATION.

K. SPECIAL INSPECTIONS CBC SECTION 1705

◯ PER CBC SECTION 1705.2.2 - SPECIAL INSPECTION IS REQUIRED FOR THE WELDING OF STRUCTURAL STEEL.

◉ PER CBC SECTION 1705.3 - SPECIAL INSPECTION IS REQUIRED FOR CONCRETE WITH COMPRESSIVE STRENGTH f'c GREATER THAN 2,500 PSI.

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDAD	CBC REFERENCE
1. INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT	--	X	ACI 318: CH. 20, 25.2, 25.3, 26.6.1-26.6.3	1908.4
3. INSPECT ANCHORS CAST IN CONCRETE	--	X	ACI 318: 17.8.2.4	-
5. VERIFY USE OF REQUIRED DESIGN MIX	--	X	ACI 318: CH. 19, 26.4.3, 26.4.4	1904.1, 1904.2, 1908.2, 1908.3
6. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TEST, PERFORM SLUMP AND AIR CONTENT TEST, AND DETERMINE THE TEMPERATURE OF THE CONCRETE	X	--	ASTM C172, ASTM C31, ACI 318: 26.5, 26.4.4	1908.10
7. INSPECT CONCRETE AND SHOTCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES	X	--	ACI 318: 26.5	1908.6, 1908.7, 1908.8
8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	--	X	ACI 318: 26.5.3-26.5.5	1908.9
12. INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	--	X	ACI 318: 26.11.1.2(b)	-

◯ PER CBC TABLE 1705.3.4.b - SPECIAL INSPECTION IS REQUIRED FOR EPOXY GROUTED HOLDOWN ANCHOR BOLTS

TYPE	CONTINUOUS SPECIAL INSPECTION	PERIODIC SPECIAL INSPECTION	REFERENCED STANDAD	CBC REFERENCE
4. INSPECT ANCHORS POST INSTALLED IN HARDENED CONCRETE MEMBERS.				
a. ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATION TO RESIST SUSTAINED TENSION LOADS	X	--	ACI 318: 17.8.2.4	--
b. MECHANICAL ANCHORS AND ADHESIVE ANCHORSNOT DEFINED IN 4.a.	--	X	ACI 318: 17.8.2	--

◯ PER CBC SECTION 1705.13.1 - PERIODIC SPECIAL INSPECTION IS REQUIRED FOR NAILING, BOLTING, ANCHORING, AND OTHER FASTENING COMPONENTS WITHIN THE SEISMIC-FORCE-RESISTING SYSTEM, INCLUDING WOOD SHEAR WALLS, WOOD DIAPHRAGMS, COLLECTORS, AND HOLDOWNS WHERE THE ASSOCIATED FASTENER OF THE SHEATHING IS 4 INCHES OR CLOSER.

R3 ConsultingEngineers
105 Locust Street, Suite A | Santa Cruz, CA 95060
charlie@r3ce.com | www.r3ce.com
831 824 7323
C 68222

HILLSIDE STABILIZATION PROJECT FOR THE :

GLENWOOD TANK SITE

SCOTTS VALLEY, CA 95066

STRUCTURAL SPECIFICATIONS

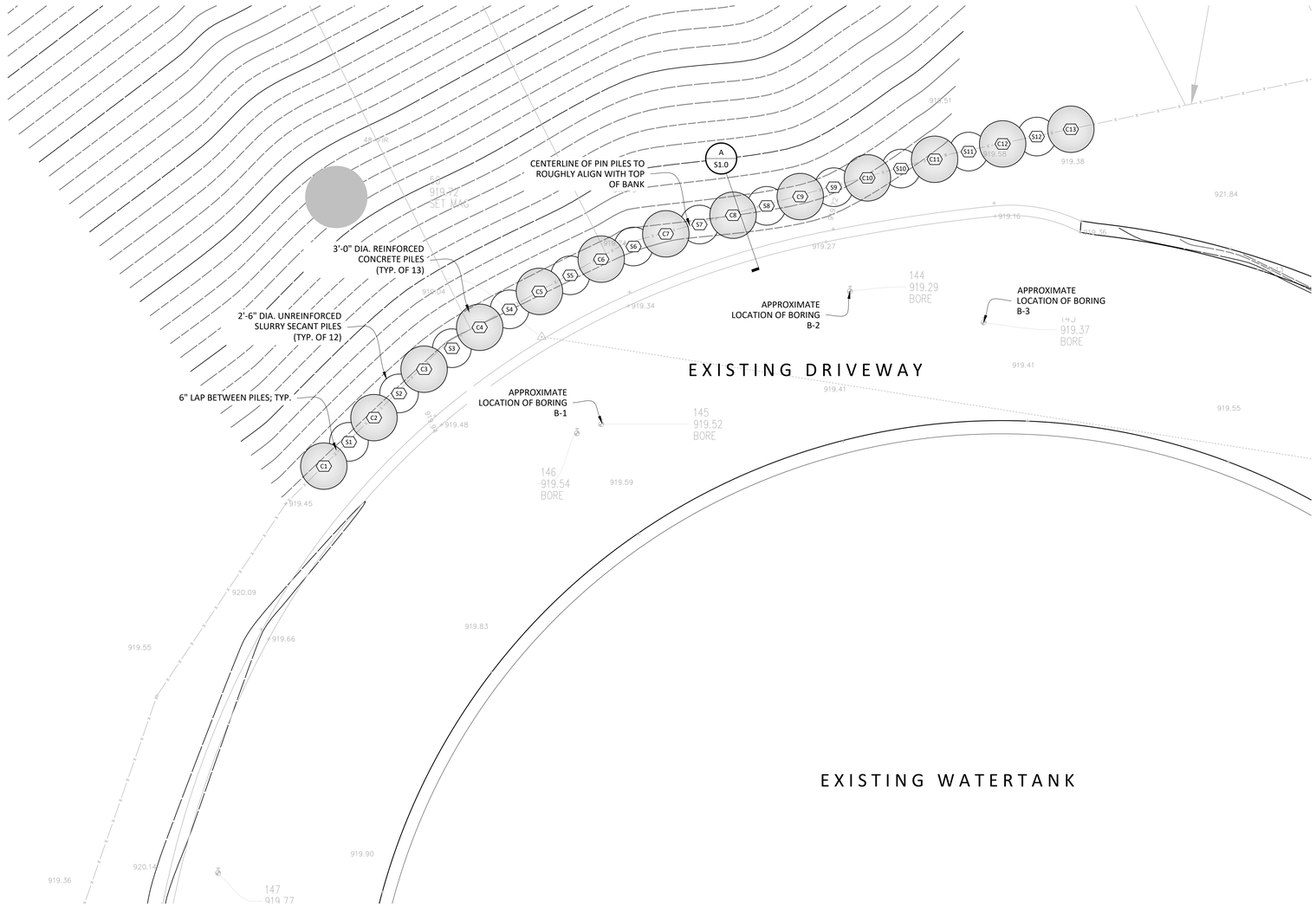
REVISIONS

#	DESCRIPTION	DATE
	BID SET	06/04/2026

DATE
JUNE 4, 2026

JOB NUMBER
1031-C-25-GLE

S0.0



1 SECANT PILE WALL PLAN

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

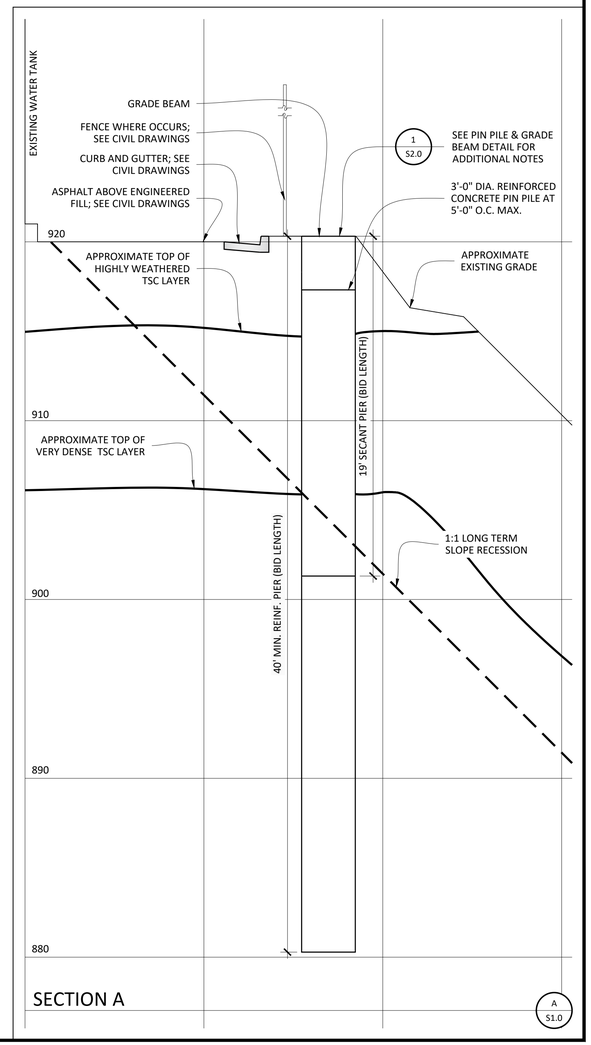
NORTH

FOUNDATION NOTES:

1 REFER TO STRUCTURAL SPECIFICATIONS AND TYPICAL STRUCTURAL DETAILS SHEET S0.0.

2 DIMENSIONS ARE TO FACE OF CONCRETE, CENTERLINE FOOTING AND POSTS, ETC., UNLESS NOTED OTHERWISE. NOTIFY ARCHITECT OF ANY DISCREPANCIES. VERIFY ALL DIMENSIONS WITH ARCHITECTURAL PLANS BEFORE BEGINNING WORK.

3 THE GEOTECHNICAL ENGINEER SHALL BE RETAINED TO PROVIDE OBSERVATION AND TESTING SERVICES DURING THE GRADING AND FOUNDATION PHASE OF CONSTRUCTION PER GEOTECHNICAL REPORT RECOMMENDATIONS AND INSPECTION AND TESTING REPORTS SHALL BE SUBMITTED TO THE BUILDING DEPARTMENT.



SECTION A

A
S1.0

R3 Consulting Engineers
105 Locust Street, Suite A | Santa Cruz, CA 95060
charlie@r3ce.com | www.r3ce.com
831 824 7323
C 68222

HILLSIDE STABILIZATION PROJECT FOR THE :

GLENWOOD TANK SITE

SCOTTS VALLEY, CA 95066

FOUNDATION PLAN

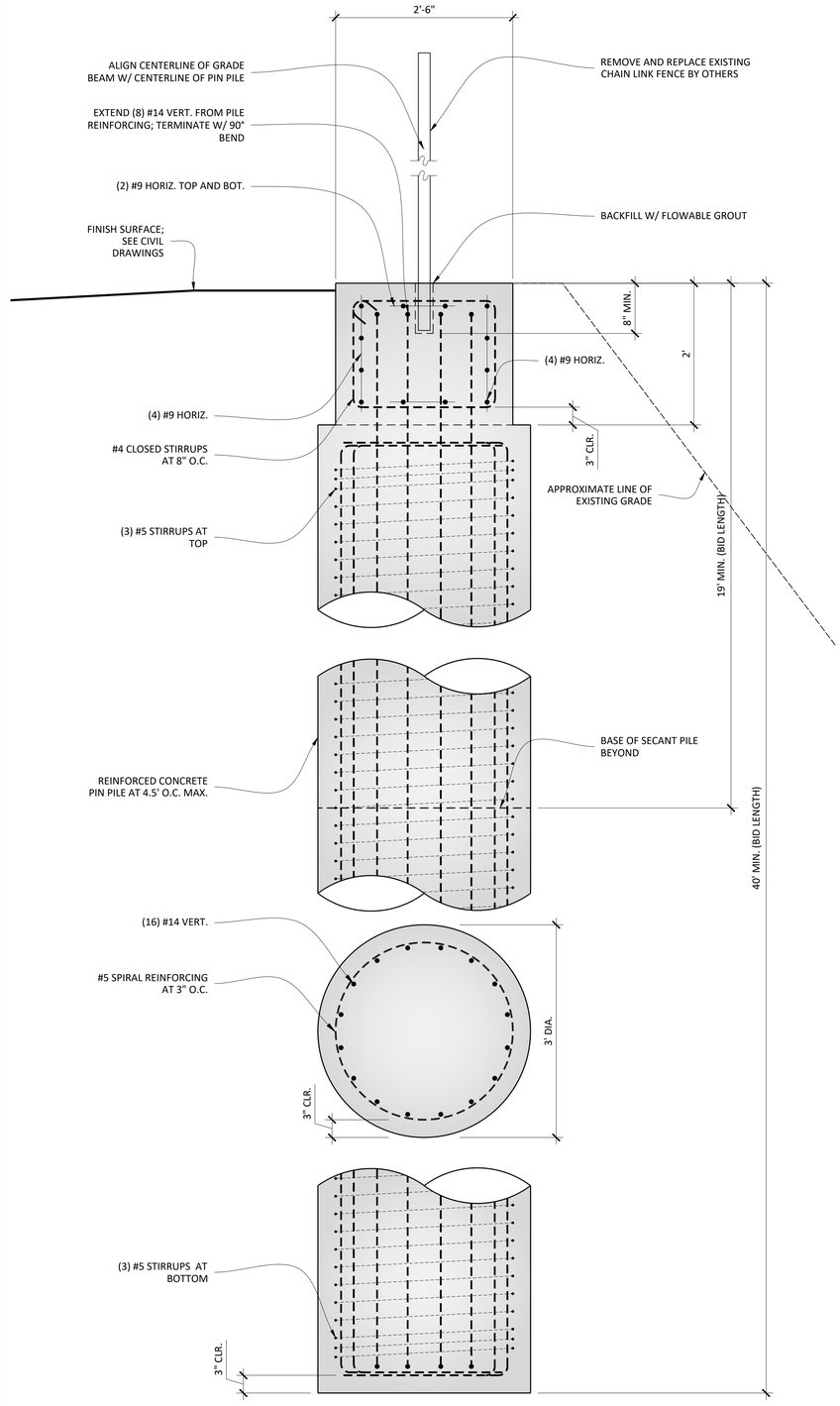
REVISIONS		
	DESCRIPTION	DATE
A	BID SET	06/04/2026

REGISTERED PROFESSIONAL ENGINEER
No. 68222
Exp. 09/30/2027
CIVIL
STATE OF CALIFORNIA

DATE
JUNE 4, 2026

JOB NUMBER
1031-C-25-GLE

S1.0



PIN PILE & GRADE BEAM

1
S2.0

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105 Locust Street, Suite A | Santa Cruz, CA 95060
charlie@r3ce.com | www.r3ce.com
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C 68222

HILLSIDE STABILIZATION PROJECT FOR THE :

GLENWOOD TANK SITE

SCOTTS VALLEY, CA 95066

FOUNDATION DETAILS

REVISIONS	DESCRIPTION	DATE
4	BID SET	06/04/2026

REGISTERED PROFESSIONAL ENGINEER
No. C 68222
Exp. 09/30/2027
CIVIL
STATE OF CALIFORNIA

DATE
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JOB NUMBER
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