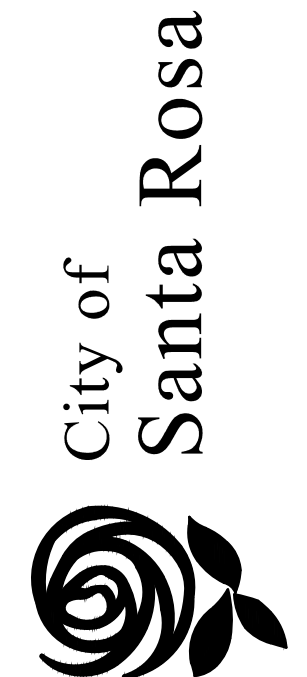


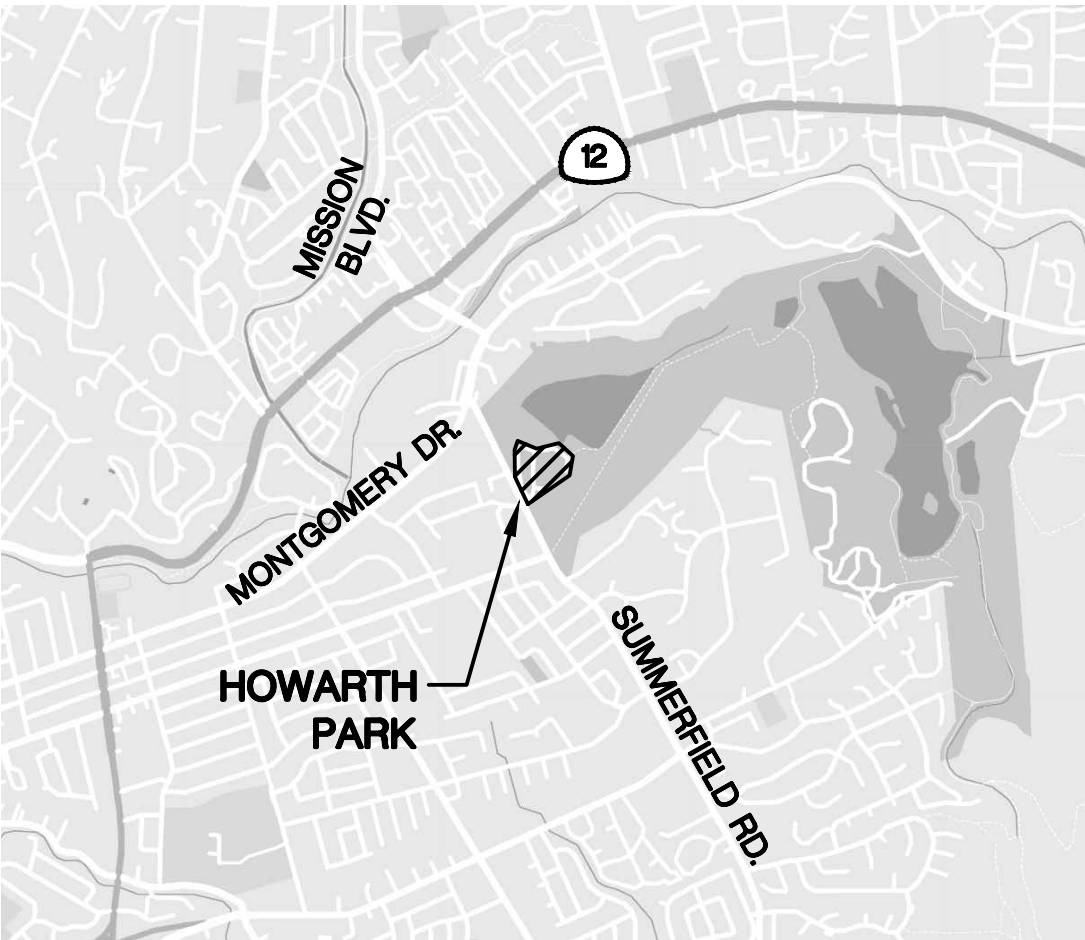


CITY OF SANTA ROSA
IMPROVEMENT PLANS FOR

HOWARTH COURTS RENOVATION
BID SET
CONTRACT No. C00714
JUNE 20, 2025

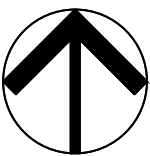


LOCATION MAP



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VICINITY MAP



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N.T.S.



INDEX TO SHEETS

SHEET NO.	TITLE	PAGE #
LANDSCAPE DRAWINGS		
L1.0	COVER SHEET	1
L2.0	EXISTING CONDITIONS PLAN	2
L3.0-L3.1	DEMOLITION AND EROSION CONTROL PLAN	3-4
L4.0	GRADING AND DRAINAGE PLAN	5
L5.0	SITE CONSTRUCTION PLAN	6
L6.0	IRRIGATION PLAN	7
L6.1	LANDSCAPE DOCUMENTATION	8
L7.0	PLANTING PLAN	9
H8.0-H8.5	CONSTRUCTION DETAILS	10-15
S0.1	STRUCTURAL TYPICAL NOTES AND DETAIL	16

PROJECT DIRECTORY

CLIENT CITY OF SANTA ROSA	LANDSCAPE ARCHITECT/PRIME CONSULTANT CALLANDER ASSOCIATES CONTACT: NATE RITCHIE 1633 BAYSHORE HIGHWAY, SUITE 133 BURLINGAME, CA 94010 PHONE: (650) 375-1313
RECREATION AND PARKS CONTACT: SCOTT WILKINSON 55 STONY POINT ROAD SANTA ROSA, CA 95401 PHONE: (707) 543-3953	TOPOGRAPHIC SURVEY & STAKING SURVEY DIVISION SANTA ROSA TRANSPORTATION & PUBLIC WORKS 69 STONY CIRCLE SANTA ROSA, CA 95401 PHONE: (707) 543-3851
TRANSPORTATION AND PUBLIC WORKS CONTACT: DANNY CHEN 69 STONY CIRCLE SANTA ROSA, CA 95401 PHONE: (707) 543-3911	STRUCTURAL ENGINEER RW CONSULTING ENGINEERS CONTACT: DUSTIN HAYES 1450 HARBOR BOULEVARD, SUITE F WEST SACRAMENTO, CA 95691 PHONE: (916) 716-6910
GEOTECHNICAL ENGINEER RGH CONSULTANTS CONTACT: ERIC CHASE 3501 INDUSTRIAL DRIVE, SUITE A SANTA ROSA, CA 95403 PHONE: (707) 544-0188	

GENERAL NOTES

- STANDARDS:** ALL WORKMANSHIP, MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE CITY OF SANTA ROSA STANDARD PLANS, THE CONSTRUCTION SPECIFICATIONS FOR PUBLIC IMPROVEMENTS, THE SPECIAL PROVISIONS FOR THIS PROJECT AND THE STATE STANDARD SPECIFICATIONS AND STANDARD PLANS. THE CONTRACTOR IS RESPONSIBLE FOR UNDERSTANDING ALL STANDARDS PERTAINING TO THIS PROJECT.
- COMPOSITE BASE SHEET:** THE PROPOSED IMPROVEMENTS SHOWN ON THESE DRAWINGS ARE SUPERIMPOSED ON A BASE SHEET COMPOSED OF BOUNDARY, TOPOGRAPHIC, AND UNDERGROUND UTILITY INFORMATION PROVIDED BY CITY OF SANTA ROSA. THIS BASE SHEET INFORMATION IS SHOWN IN HALF TONE ON THE PLANS. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS ON THESE BASE SHEETS. THE COMPOSITE BASE SHEET IS PROVIDED AS AN AID ONLY AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING THESE DOCUMENTS AND INCORPORATING/INTEGRATING ALL CONSTRUCTION AS REQUIRED TO ACCOMMODATE SAME.

THE BASE SHEET SOURCE FOR THESE DRAWINGS IS:
'TOPOGRAPHIC MAP OF TENNIS COURT RESURFACING OF HOWARTH PARK', PREPARED BY CITY OF SANTA ROSA, DATED 4/16/2024.
- FIELD CONDITIONS:** FIELD CONDITIONS MAY VARY FROM THE INFORMATION SHOWN ON THE PLANS. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING FIELD CONDITIONS AND FOR REVIEWING DISCREPANCIES WITH THE CITY'S REPRESENTATIVE. THE CITY AND CITY'S REPRESENTATIVE ASSUME NO RESPONSIBILITY FOR FIELD CONDITIONS AND REQUIRED MODIFICATIONS.
- EXCAVATION:** THE CONTRACTOR SHALL CALL UNDERGROUND SERVICE ALERT (USA) AT 1-800-227-2600 NO LESS THAN 2 WORKING DAYS PRIOR TO ANY EXCAVATION FOR MARK OUTS OF EXISTING UNDERGROUND FACILITIES IN ACCORDANCE WITH SECTION 5-1.36E OF THE SPECIAL PROVISIONS. EXCAVATION IS DEFINED AS BEING 18 OR MORE INCHES IN DEPTH BELOW THE EXISTING SURFACE.
- UTILITIES:** THE LOCATIONS OF UNDERGROUND UTILITIES AND OTHER OBSTACLES SHOWN ON THE PLANS ARE BASED ON THE BEST AVAILABLE INFORMATION. THE CONTRACTOR SHALL POTHOLE AND DETERMINE THE EXACT LOCATION OF ALL POTENTIAL CONFLICTS IN ACCORDANCE WITH U.S.A. LAWS AND THESE SPECIAL PROVISIONS AND THE STANDARD SPECIFICATIONS. IF ANY UNMARKED UTILITIES ARE ENCOUNTERED, OR IF UNABLE TO LOCATE A MARKED UTILITY AFTER POT HOLING, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE OWNER OF THAT UTILITY AND THE CITY'S REPRESENTATIVE.

THE CITY'S REPRESENTATIVE ASSUMES NO RESPONSIBILITY FOR THE COMPLETENESS OR ACCURACY OF DELINEATION OF UNDERGROUND UTILITIES, NOR FOR THE EXISTENCE OF OTHER BURIED OBJECTS OR UTILITIES WHICH ARE NOT SHOWN ON THESE DRAWINGS.
- CITY MONUMENTS:** THE CONTRACTOR SHALL PROTECT AND PRESERVE CITY MONUMENTS. THE CONTRACTOR SHALL COORDINATE WITH THE CITY'S REPRESENTATIVE 10 WORKING DAYS IN ADVANCE FOR REFERENCING OF EXISTING MONUMENTS TO BE DISTURBED. THE CONTRACTOR SHALL RECONSTRUCT DISTURBED MONUMENTS IN ACCORDANCE WITH CITY STANDARD-280.
- OVERHEAD UTILITIES:** OVERHEAD UTILITY SERVICE DROPS ARE NOT SHOWN ON THE PLANS. THE CONTRACTOR SHALL INVESTIGATE THE SITE AND BE AWARE OF LIMITED CLEARANCES UNDER OVERHEAD UTILITY LINES AND LOW HANGING TREE BRANCHES. THE CONTRACTOR'S TRUCKS AND EXCAVATION EQUIPMENT SHALL BE SIZED SO THAT OVERHEAD WIRES AND TREE BRANCHES ARE NOT DAMAGED.
- DISPOSAL:** ALL EXCAVATED MATERIAL SHALL BE DISPOSED OF AS GENERATED AND AT NO TIME SHALL THE CONTRACTOR PLACE EXCAVATED MATERIAL AT THE WORK SITE.
- TREE PROTECTION AND MAINTENANCE REQUIREMENTS:** SHALL BE PER TREE PROTECTION NOTES, SHEET L3.2. THE CONTRACTOR SHALL ONLY REMOVE EXISTING TREES OR SHRUBS AS NOTED ON THE PLANS OR AS DIRECTED BY THE CITY'S REPRESENTATIVE.



Know what's below.
Call before you dig.

APPROVED: DIRECTOR OF TRANSPORTATION AND PUBLIC WORKS BY: Dan Hennessey (Aug 7, 2025 11:58:09 PDT) DATE: 08/07/2025	CHK BY: NR DATE: 6/20/25 DWN BY: IC/DC SCALE: AS SHOWN
DESIGN/CONST: Gregory Mariscal (Aug 7, 2025 11:58:41 PDT) DATE: 08/07/2025	CONTRACT NO. C00714 SHEET 1 OF 16
MATERIALS LAB: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	FILE NO. 2024-0014
PARKS & REC: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
SURVEY: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
TRAFFIC: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
TRANSIT: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
WATER - ENG: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
WATER - OPS: Darryl Melvin (Aug 11, 2025 13:55:10 PDT) DATE: 08/07/2025	
DEPT. SIGNATURE DATE	

CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION

COVER SHEET

L1.0

File Path: N:\Projects\2024\Projects\24023_HowarthParkCourtsRenovation\3_ConstructionDocuments\24023_Bk.dwg Plot Date: 7/2/25 Saved By: lcalero
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EXISTING CONDITIONS LEGEND
(ALL MAY NOT APPLY)

- FOUND IRON PIPE AS NOTED
- ⊙ FOUND CENTERLINE MONUMENT, SIZE AS NOTED
- FOUND NAIL & TAG, STAMPED AS NOTED
- △ SET SURVEY CONTROL POINT AS NOTED
- BARRICADE - BOLLARD
- TV—TV— BIKE DETECT
- TV—TV— CABLE TV - MARKOUT
- TV CABLE TV - PULLBOX
- TV CABLE TV - SERVICE RISER
- E ELECTRIC - PULLBOX
- ELECTRIC - JOINT POLE
- ⊕ ELECTRIC - JOINT POLE WITH LIGHT
- ⊕ ELECTRIC - JOINT POLE WITH RISER
- ⊕ ELECTRIC - JOINT POLE WITH RISER & LIGHT
- ⊕ ELECTRIC - GUY ANCHOR
- E-E-E- ELECTRIC - MARKOUT
- OHW--- ELECTRIC - OVERHEAD WIRE
- ELECTRIC - CABINET
- ELECTRIC - METER
- ELECTRIC - SURFACE TRANSFORMER
- ELECTRIC - VAULT
- O-O-O- FENCE - CHAINLINK
- X-X-X- FENCE - WIRE
- W-W-W- FENCE - WOOD
- ⊗ FENCE - GATE POST
- ⊕ GAS - ETS
- G-G-G- GAS - MARKOUT
- GM GAS - METER
- ⊕ GAS - VALVE
- MB GAS - VAULT
- MAILBOX
- ROCK
- SANITARY SEWER - CLEANOUT (MAIN)
- SANITARY SEWER - CLEANOUT (SERVICE)
- SANITARY SEWER - MANHOLE
- SS SANITARY SEWER - SCRIBED "S" (SERVICE)
- SS-SS- SANITARY SEWER - MARKOUT
- SHRUB
- SIGN
- STREET LIGHT - STREET LIGHT
- STREET LIGHT - ELECTROLIER
- SL-ST- STREET LIGHT - MARKOUT
- SL STREET LIGHT - PULLBOX
- STORM DRAIN - CATCH BASIN
- STORM DRAIN - DROP INLET
- STORM DRAIN - MANHOLE
- SD SURFACE LIGHT
- SD-SD- STORM DRAIN - MARKOUT
- TELEPHONE - MANHOLE
- TEL-TEL- TELEPHONE - MARKOUT
- TEL TELEPHONE - PULLBOX
- TEL TELEPHONE - SERVICE RISER
- TEL TELEPHONE - VAULT
- TREE - DRIP LINE
- TREE - PALM
- TS TRAFFIC SIGNAL - CABINET, CONTROL
- TS TRAFFIC SIGNAL - CABINET, SERVICE
- TS TRAFFIC SIGNAL - DETECTOR LOOP
- SYL TRAFFIC SIGNAL - DETECTOR LOOP, BIKE
- IC-IC- TRAFFIC SIGNAL - INTERCONNECT MARKOUT
- TRAFFIC SIGNAL - LOOPWIRE HANDHOLE
- TS-TS- TRAFFIC SIGNAL - MARKOUT
- TS TRAFFIC SIGNAL - PEDESTRIAN SIGNAL POLE
- TS TRAFFIC SIGNAL - PEDESTRIAN FLASHING LIGHT
- TS TRAFFIC SIGNAL - PULLBOX
- TS TRAFFIC SIGNAL - POLE 1A/1B
- TS TRAFFIC SIGNAL - POLE W/15' MAST ARM
- TS TRAFFIC SIGNAL - POLE W/20' MAST ARM
- TS TRAFFIC SIGNAL - POLE W/25'-55' MAST ARM
- TS TRAFFIC SIGNAL - REFLECTOR POST
- TS TRAFFIC SIGNAL - VAULT
- TRUNCATED DOMES
- UT-UT- UTILITY TRENCH - CENTERLINE
- WATER - BLOW OFF VALVE
- WATER - FIRE HYDRANT
- WATER - IRRIGATION VALVE
- W-W-W- WATER - MARKOUT
- WATER - METER
- WATER - MONITORING WELL
- WATER - SPRINKLER HEAD
- WATER - VALVE
- WATER - VAULT
- WHEEL STOP
- 2 WY LT TWO WAY LEFT
- ABD ABANDON
- AC ASPHALT CONCRETE
- AG/CONC AGGREGATE CONCRETE
- B/F BASE ○ FACE
- BBF BERM BASE FACE
- BFP BACK FLOW PREVENTION VALVE
- BFW BOTTOM FACE OF WALL
- B.D. BRASS DISK
- BLDG BUILDING

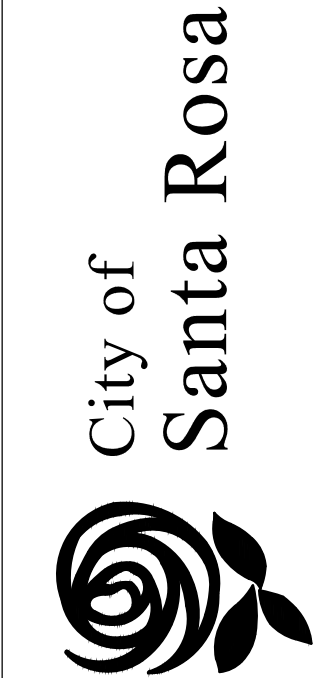
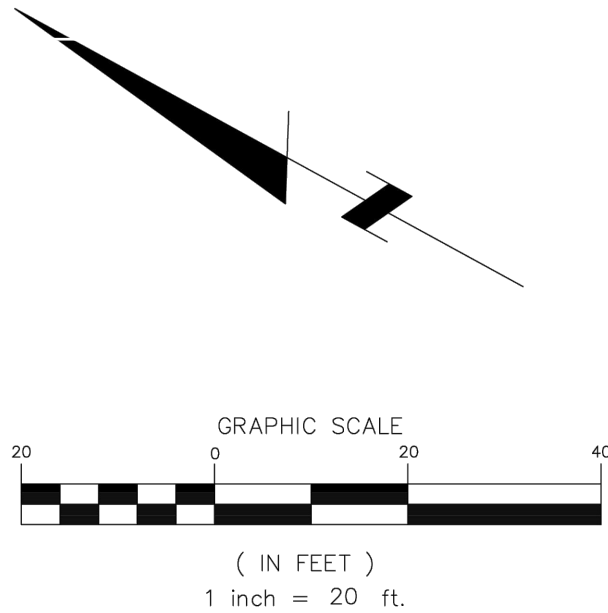
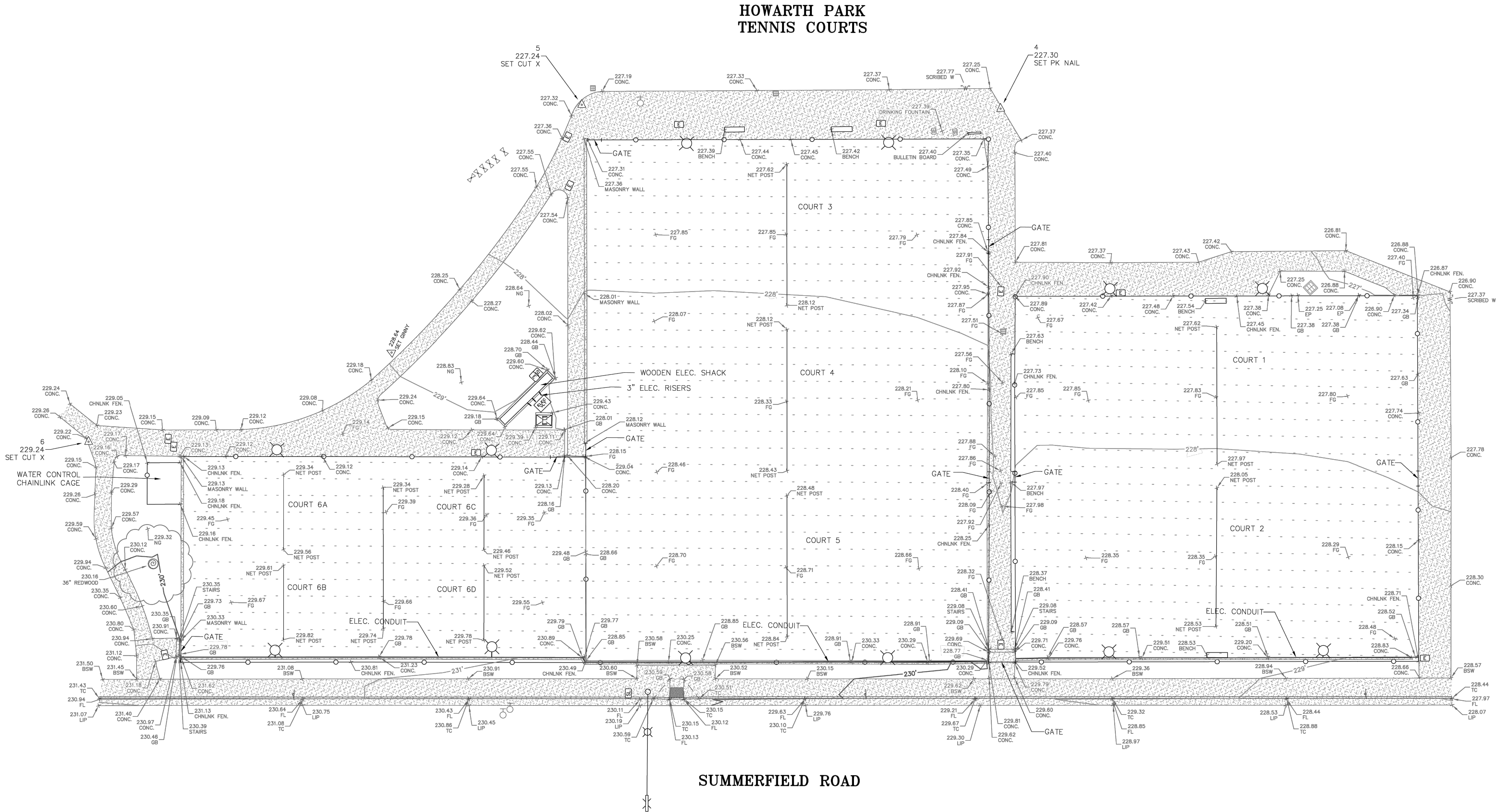
- BSW BACK OF SIDEWALK
- BTB BERM TOP FACE
- B.T. BRASS TAG
- CAB CABINET
- CB CATCH BASIN
- CL CENTERLINE
- CL/T CENTERLINE/TOP
- CSR CITY OF SANTA ROSA
- CMP CORRUGATED METAL PIPE
- CONC. CONCRETE
- C.S.S.C. COUNTY SURVEYOR SONOMA COUNTY
- BFP BACK FLOW PREVENTION VALVE
- DETECT DETECTOR
- DI DROP INLET
- DW DASHED WHITE
- DWY DRIVEWAY
- DY DASHED YELLOW
- EDGE EDGE/CONCRETE BAND
- ELEC. ELECTRIC
- EP EDGE OF PAVEMENT
- EVGRN EVERGREEN
- F/C FACE OF CURB
- FDC FIRE DEPARTMENT CONNECT
- FEN FENCE
- FG FINISH GRADE
- FH FIRE HYDRANT
- FL FLOW LINE
- FND FOUND
- GB GRADE BREAK
- GM GAS METER
- GV GAS VALVE
- HDPE HIGH DENSITY POLYETHYLENE
- HWL HEADWALL
- IC INTERCONNECT
- INV INVERT
- I.P. IRON PIPE
- IRR IRRIGATION
- JB JUNCTION BOX
- JP JOINT POLE
- LIP LIP OF GUTTER
- MH MANHOLE
- M/O MARKOUT
- MON. MONUMENT
- NG NATURAL GROUND
- NT NO TAG
- OHW OVERHEAD WIRE
- PB PULLBOX
- PB_POST PUSH BUTTON POST
- PIV POST INDICATOR VALVE
- PVC PVC PIPE
- RCP REINFORCED CONCRETE PIPE
- RPM RAISED PAVEMENT MARKER
- RR RAILROAD
- RSR RISER
- SERV. SERVICE
- SD STORM DRAIN
- SDMH STORM DRAIN MANHOLE
- SL STREET LIGHT
- SS SANITARY SEWER
- SSMH SANITARY SEWER MANHOLE
- S/W SIDEWALK
- SWL SOLID WHITE LINE
- SYL SOLID YELLOW LINE
- TB TOP OF BANK
- TC TOP OF CURB
- TEL TELEPHONE
- TFW TOP FACE OF WALL
- TG TOP GRATE
- TOE TOE OF BANK OR SLOPE
- TREE W TREE WELL
- T. PATCH TRENCH PATCH
- TS TRAFFIC SIGNAL
- UT UTILITY TRENCH
- VG VALLEY GUTTER
- VLV VAULT
- WM WATER METER
- WTR WATER
- WV WATER VALVE
- Y-Y DOUBLE YELLOW
- #xxx STRUCTURE NUMBER

BASIS OF BEARINGS

SOUTH 49° 06' 01" EAST BETWEEN CITY OF SANTA ROSA HORIZONTAL CONTROL NETWORK COORDINATE MONUMENTS G-1008 & G-63.
NAD83 - ZONE 2 - EPOCH 2010.00

BENCHMARK

CITY OF SANTA ROSA VERTICAL CONTROL NETWORK BENCHMARK B-279.
ELEVATION = 231.16 FEET (NGVD 29).



CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION

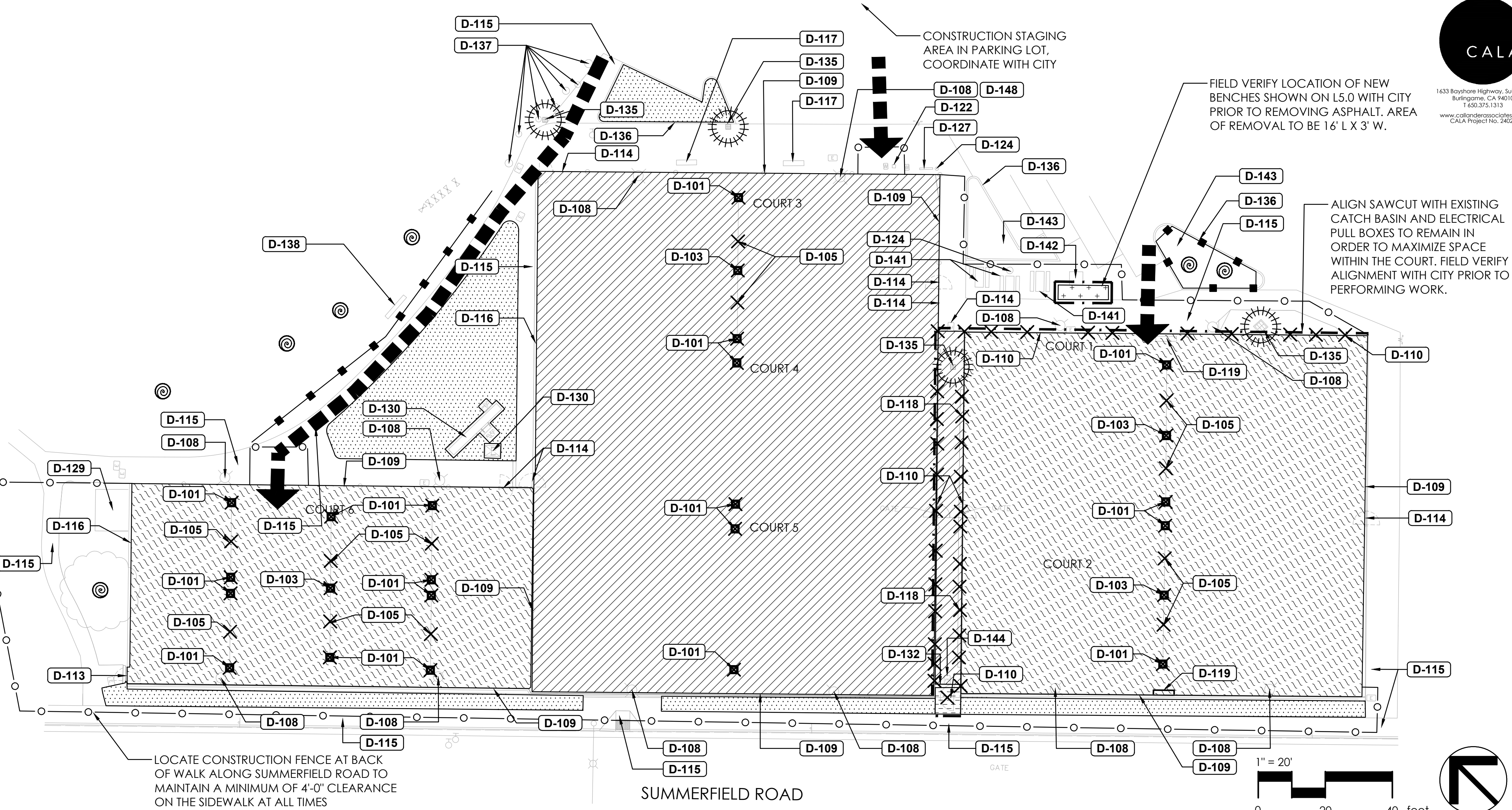
EXISTING CONDITIONS PLAN

CHK BY:	NR
DATE:	6/20/25
DWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET	2 OF 16
FILE NO.	2024-0014

L2.0

TREE PROTECTION NOTES

- CITY STANDARDS: TREE PROTECTION SHALL COMPLY WITH THE SPECIFICATIONS. WHERE CITY REQUIREMENTS CONFLICT WITH THE CONSTRUCTION DOCUMENTS, THE MORE STRINGENT REQUIREMENT SHALL APPLY.
- PROJECT STARTUP: PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL MEET ON-SITE WITH THE CITY'S REPRESENTATIVE TO REVIEW ALL WORK PROCEDURES, ACCESS ROUTES, STORAGE AREAS, AND TREE PROTECTION MEASURES.
- ROOT PROTECTION ZONE: ROOT PROTECTION ZONES SHOWN ON THE PLANS ARE APPROXIMATE. VERIFY IN FIELD. THE ROOT PROTECTION ZONE (RPZ) SHALL BE REGARDED AS THE AREA BENEATH A TREE'S CANOPY, OR EXTENDING FROM THE FACE OF THE TRUNK TO TEN (10) TIMES THE TREE'S DIAMETER AT BREAST HEIGHT (DBH), WHICHEVER IS GREATER. THERE SHALL BE NO DUMPING, WASHING OUT, OR STORAGE OF EQUIPMENT OR MATERIALS WITHIN THE RPZ OF ANY TREE. WORK WITHIN THE RPZ SHALL BE PERFORMED BY HAND, INCLUDING CLEAR AND GRUBBING.
- TREE PROTECTION FENCING: ROOT PROTECTION ZONES SHALL BE FENCED ACCORDING TO TREE PROTECTION DETAIL IN THE LOCATIONS SHOWN ON THE PLANS. FENCING SHALL BE ERECTED PRIOR TO ANY DEMOLITION OR CONSTRUCTION ON SITE AND SHALL NOT BE REMOVED OR MODIFIED BEFORE PROJECT COMPLETION WITHOUT AUTHORIZATION FROM THE CITY'S REPRESENTATIVE. FENCING MAY BE INSTALLED IN A SINGLE RUN AROUND MULTIPLE TREES.
 - TREE PROTECTION MEASURES SHALL NOT BE MODIFIED TO FACILITATE CONSTRUCTION ACTIVITIES, EXCEPT WITH PRIOR REVIEW AND APPROVAL BY THE CITY'S REPRESENTATIVE.
- DEMOLITION: ALL EXISTING, UNUSED LINES OR PIPES BENEATH THE CANOPIES OF RETAINED TREES SHALL BE ABANDONED OR CUT OFF AT EXISTING SOIL GRADE.
- MAINTENANCE DURING CONSTRUCTION: APPLY A SIX INCH LAYER OF ARBOR MULCH WITHIN THE RPZ.
 - ANY ACCUMULATED CONSTRUCTION DUST ON LIMBS OR FOLIAGE IS TO BE REMOVED WITH WATER PERIODICALLY OR AS DIRECTED BY THE CITY'S REPRESENTATIVE.
- TRENCHING AND GRADING: THERE SHALL BE NO TRENCHING OR GRADING WITHIN THE RPZ EXCEPT WITH PRIOR APPROVAL OF THE CITY'S REPRESENTATIVE. WHERE TRENCHING HAS BEEN APPROVED, FOLLOW THE PROCEDURE OUTLINED IN NOTE #8 BELOW. ANY EQUIPMENT USED SHALL BE OPERATED OUTSIDE THE RPZ.
 - ALL UTILITIES, BOXES, METERS, VAULTS AND SERVICES ARE TO BE ROUTED BEYOND RPZ UNLESS SPECIFICALLY NOTED ON PLANS TO ROUTE WITHIN RPZ.
 - ANY GRADE CHANGES OUTSIDE THE RPZ SHALL NOT SIGNIFICANTLY ALTER DRAINAGE TO OR FROM THE TREE. NO GRADING SHALL OCCUR WITHIN THE RPZ. IF GRADING CONFLICTS ARISE, NOTIFY THE CITY'S REPRESENTATIVE PRIOR TO COMMENCING ADJACENT GRADING OPERATIONS.
- ROOT CUTTING: PRIOR TO EXCAVATING WITHIN A RPZ, A TRENCH SHALL BE DUG ALONG THE EDGE OF THE EXCAVATION CLOSEST TO THE TREE TRUNK. THIS TRENCH SHALL BE DUG BY HAND OR WITH AN AIR SPADE TO A DEPTH OF 30 INCHES, AND SHALL BE OF A SUFFICIENT WIDTH TO MANUALLY SEVER ANY ROOTS ENCOUNTERED GREATER THAN 2" DIAMETER. CUTS SHALL BE MADE PERPENDICULAR TO THE DIRECTION OF THE ROOT'S GROWTH, USING A CLEAN HAND SAW. AFTER ROOTS ARE CLEANLY SEVERED, EXCAVATION EQUIPMENT MAY BE USED AS REQUIRED ON THE SIDE OF THE TRENCH FARTHEST FROM THE TREE.
 - WITHIN ONE HOUR, CUT OR EXPOSED ROOTS SHALL BE COVERED WITH MOIST SOIL OR WITH BURLAP THAT IS KEPT WET UNTIL THE EXCAVATION CAN BE BACK-FILLED AND WATERED THOROUGHLY.
- SOIL PREPARATION: NO RIPPING OR ROTOTILLING SHALL OCCUR WITHIN THE RPZ, UNLESS APPROVED BY THE CITY'S REPRESENTATIVE.
- PLANTING AND IRRIGATION: NO PLANTING OR IRRIGATION SHALL BE INSTALLED WITHIN 6 FEET OF TRUNKS OF EXISTING TREES UNLESS OTHERWISE INDICATED ON PLANS. NEWLY PLANTED TREES SHALL BE IRRIGATED PER IRRIGATION DRAWINGS. MULCH SHALL NOT BE PLACED DIRECTLY AGAINST TRUNKS.
- PRUNING: AT NO TIME SHALL TREE LIMBS BE CUT BY CONSTRUCTION PERSONNEL. NO PRUNING SHALL TAKE PLACE EXCEPT AS DIRECTED BY THE CITY'S REPRESENTATIVE. WORK MUST BE PERFORMED BY A CERTIFIED ARBORIST IN ACCORDANCE WITH THE ISA TREE PRUNING GUIDELINES.
- DAMAGE: THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE TO EXISTING TREES, I.E. TRUNK WOUNDS, BROKEN LIMBS, POURING OF ANY DELETERIOUS MATERIALS, OR CONCRETE WASHOUT UNDER THE DRIPLINE OF THE TREES. DAMAGES WILL BE ASSESSED USING THE "GUIDE TO PLANT APPRAISAL" 9TH EDITION, PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE. ANY DAMAGE OR INJURY TO TREES DURING CONSTRUCTION SHALL BE REPORTED TO THE CITY'S REPRESENTATIVE IMMEDIATELY SO THAT REMEDIAL ACTION CAN BE TAKEN.



DEMOLITION LEGEND

	CLEAR AND GRUB
	REMOVE AND DISPOSE OF EXISTING COURT SURFACING, ASPHALT, AND A PORTION OF THE UNDERLYING BASE ROCK DOWN TO 11 INCH DEPTH.
	REMOVE AND DISPOSE OF EXISTING COURT SURFACING AND ASPHALT PAVEMENT DOWN TO 3 INCH DEPTH.
	REMOVE AND DISPOSE OF CONCRETE PAVEMENT AND ASSOCIATED BASE ROCK. FOR BIDDING PURPOSES ASSUME 8 INCH DEPTH TOTAL.
	REMOVE AND DISPOSE OF ASPHALT PAVEMENT AND ASSOCIATED BASE ROCK. FOR BIDDING PURPOSES ASSUME 12 INCH DEPTH TOTAL.
	EXISTING TREE TO REMAIN, PROTECT IN PLACE AND INSTALL TREE PROTECTION FENCING WHERE SHOWN ON PLAN 1 H8.0
	REMOVE AND DISPOSE OF ITEM
	CONSTRUCTION FENCING, PER SPECS.
	TREE PROTECTION FENCING 1 H8.0
	SAWCUT
	TO REMAIN, PROTECT IN PLACE
	TO BE REMOVED AND DISPOSED OF
	CONSTRUCTION ACCESS ROUTE
	STORM DRAIN INLET PROTECTION 2 H8.0

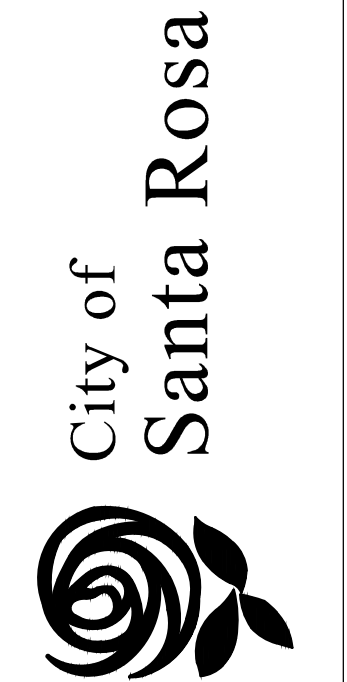
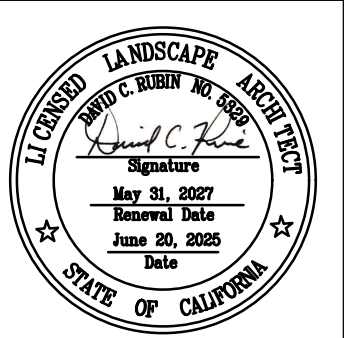
EROSION CONTROL LEGEND

DEMOLITION KEY NOTES

CODE	DESCRIPTION
D-101	NET POST AND ASSOCIATED FOOTINGS, T.B.R.
D-103	CENTER ANCHOR TIE DOWN AND ASSOCIATED FOOTINGS, T.B.R.
D-105	EXISTING COURT NET, T.B.R.
D-108	COURT LIGHTING AND ASSOCIATED PULL BOX, T.R.
D-109	PERIMETER CHAIN LINK FENCE, INCLUDING ASSOCIATED CONCRETE BAND AND FOOTINGS, T.R. EXCEPT IN LOCATIONS WHERE FENCE REPAIR IS INDICATED ON SITE CONSTRUCTION PLAN, OR REMOVAL AND REPLACEMENT IS REQUIRED FOR CONSTRUCTION ACCESS. RETURN ALL EXISTING SIGNAGE HUNG ON THE FENCE TO THE CITY.
D-110	10 FT. TALL CHAIN LINK FENCE, INCLUDING ASSOCIATED GATES, POSTS, AND FOOTINGS, T.B.R. FOR BIDDING PURPOSES ASSUME 350 L.F.
D-113	CHAIN LINK GATE, T.R.
D-114	CHAIN LINK GATE MODIFICATION, SEE SITE CONSTRUCTION PLAN.
D-115	CONCRETE PAVEMENT, T.R.
D-116	BALL WALL, T.R.
D-117	BENCH, T.R.
D-118	BENCH, INCLUDING ASSOCIATED POSTS, T.B.R. FOR BIDDING PURPOSES ASSUME 85 L.F.
D-119	SALVAGE BENCH AND RELOCATE PER SITE CONSTRUCTION PLAN.
D-122	DRINKING FOUNTAIN, T.B.R. PROTECT EXISTING WATER LINE AND WASTE LINE FOR CONNECTION TO NEW FOUNTAIN.
D-124	TRASH RECEPTACLE, T.R.

DEMOLITION KEY NOTES CONTINUED

CODE	DESCRIPTION
D-127	BULLETIN BOARD SIGN, T.R.
D-129	CHAIN LINK ENCLOSURE, T.R.
D-130	UTILITY CABINET, T.R.
D-132	CONCRETE STAIRS, T.B.R. REVIEW WITH CITY PRIOR TO PERFORMING WORK. FOR MORE INFORMATION, SEE 4 H8.0
D-135	REPLACE STORM DRAIN CATCH BASIN GRATE WITH SOLID CONCRETE COVER AND RAISE TO BE FLUSH WITH THE SURFACE OF THE NEW COURT PAVEMENT.
D-136	CONCRETE CURB, T.R.
D-137	SALVAGE LANDSCAPE BOULDER AND REINSTALL AFTER CONSTRUCTING IMPROVEMENTS. FOR BIDDING PURPOSES ASSUME 7 BOULDERS.
D-138	SCOREBOARD, T.R.
D-141	PICNIC TABLE, T.R.
D-142	PLANTER BOX, T.R.
D-143	PLANTER AREA, T.R.
D-144	REPLACE ELECTRICAL BOX COVER WITH SOLID CONCRETE COVER AND RAISE TO BE FLUSH WITH THE SURFACE OF THE NEW COURT PAVEMENT.
D-145	STORM DRAIN CATCH BASIN, T.R.
D-146	ELECTRICAL PULL BOX, T.R.
D-147	NEAREST EXISTING FENCE POST TO REMAIN. SEE SITE CONSTRUCTION PLAN FOR FENCE REPAIR BETWEEN EXISTING POST AND BALL WALL.
D-148	10 FT. TALL CHAIN FENCE POST AND ASSOCIATED CONCRETE FOOTING T.B.R. REVIEW ON-SITE WITH CITY PRIOR TO REMOVAL. SEE SITE CONSTRUCTION PLAN FOR FENCE POST REPLACEMENT.



NO.	DATE	REVISION	BY

CITY OF SANTA ROSA HOWARTH COURTS RENOVATION	DEMOLITION AND EROSION CONTROL PLAN
CHK BY: NR	DATE: 6/20/25
DWN BY: IC/DC	SCALE: AS SHOWN
CONTRACT NO. C00714	
SHEET 3 OF 16	
FILE NO. 2024-0014	
L3.0	

DEMOLITION NOTES

1. **CLEAR AND GRUB:** CLEAR AND GRUB ALL EXISTING VEGETATION, UNLESS OTHERWISE INDICATED, AS REQUIRED FOR THE SITE CONSTRUCTION, IRRIGATION, AND PLANTING OPERATIONS. LIMITS OF CLEARING SHALL BE REVIEWED WITH THE CITY'S REPRESENTATIVE PRIOR TO COMMENCEMENT OF WORK. STRIP ALL ORGANIC MATTER TO A SUFFICIENT DEPTH TO COMPLETELY REMOVE SUCH MATERIAL.

REVIEW DEMOLITION, AND CLEARING AND GRUBBING REQUIREMENTS ON SITE WITH CITY'S REPRESENTATIVE PRIOR TO COMMENCING DEMOLITION OPERATIONS.

ALL DEMOLITION OPERATIONS WITHIN THE DRIP LINE OF TREES SHALL CONFORM TO TREE PROTECTION REQUIREMENTS.

EXISTING SITE FURNISHINGS AND IRRIGATION EQUIPMENT TO BE REMOVED SHALL BE RETURNED TO THE CITY UNLESS OTHERWISE SPECIFIED.
2. **IRRIGATION EQUIPMENT:** REMOVE ALL VISIBLE EXISTING IRRIGATION EQUIPMENT AND ANY BELOW-GRADE COMPONENTS THAT WOULD INTERFERE WITH THE PLANTING AND IRRIGATION IMPROVEMENTS. CONTRACTOR SHALL REQUEST AN INSPECTION PRIOR TO BEGINNING WORK, WITH FIVE (5) WORKING DAYS MINIMUM NOTICE, TO REVIEW THE OPERATION AND LOCATION OF EXISTING IRRIGATION COMPONENTS WITH CITY STAFF PRESENT. OPERATE EACH STATION WITHIN THE WORK AREA TO DOCUMENT THE CONDITION OF EXISTING IRRIGATION EQUIPMENT. DAMAGE TO EXISTING IRRIGATION EQUIPMENT CAUSED BY THE CONTRACTOR'S ACTIVITIES SUBSEQUENT TO THIS REVIEW SHALL BE REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.
3. **SAWCUTTING:** ALL PAVEMENT REMOVAL AS SHOWN ON THE PLAN SHALL BE ACCOMPLISHED BY SAWCUTTING.

SAWCUTS SHALL BE NEAT AND CLEAN AND SHALL PROVIDE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING FEATURES.
4. **WINDSCREEN REMOVAL:** REMOVE ALL WINDSCREEN ON EXISTING FENCE SURROUNDING ALL COURTS. FOR BIDDING PURPOSES ASSUME 620 LINEAR FEET. COORDINATE WITH CITY PRIOR TO REMOVAL TO DETERMINE IF ANY WINDSCREEN WILL BE SALVAGED.

EROSION CONTROL NOTES

1. RAIN EVENT ACTION PLAN: CONTRACTOR MUST ENSURE THAT THE CONSTRUCTION SITE IS PREPARED PRIOR TO THE ONSET OF ANY STORM. A RAIN EVENT ACTION PLAN (REAP), MUST BE IMPLEMENTED TO PROTECT ALL EXPOSED PORTIONS OF THE SITE WITHIN 48 HOURS PRIOR TO ANY LIKELY PRECIPITATION EVENT. CONTRACTOR SHALL HAVE ALL EROSION AND SEDIMENT CONTROL MEASURES IN PLACE FOR CONSTRUCTION.
2. EROSION AND SEDIMENT CONTROL: ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE STABILIZED. CHANGES TO THE EROSION AND SEDIMENT CONTROL PLAN SHALL BE MADE TO MEET FIELD CONDITIONS ONLY WITH THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE CITY.
3. FIELD CHANGES: THIS PLAN MAY NOT COVER ALL THE SITUATIONS THAT ARISE DURING CONSTRUCTION DUE TO UNANTICIPATED FIELD CONDITIONS. VARIATIONS MAY BE MADE TO THE PLAN IN THE FIELD SUBJECT TO THE APPROVAL OF OR AT THE DIRECTION OF A REPRESENTATIVE OF THE CITY.
4. MAINTENANCE MEASURES: ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED WEEKLY DURING PERIODS OF HEAVY USAGE, BI-WEEKLY DURING PERIODS OF NORMAL USAGE AND BEFORE AND AFTER ALL STORM EVENTS TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
5. ROAD AND TIRE CLEANING: ALL SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AT THE END OF EACH WORKING DAY. ALL TRUCK TIRES SHALL BE CLEANED PROPERLY BEFORE LEAVING THE SITE.
6. TRENCHES: AFTER UTILITY TRENCHES ARE BACKFILLED AND COMPACTED, THE SURFACES OVER SUCH TRENCHES SHALL BE MOUNDLED SLIGHTLY TO PREVENT CHANNELING OF

WATER IN THE TRENCH AREA. CARE SHOULD BE EXERCISED TO PROVIDE FOR CROSS-FLOW AT FREQUENT INTERVALS.

CONTRACTOR RESPONSIBILITY: THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED WITH ALL TEMPORARY AND PERMANENT EROSION AND SEDIMENT CONTROL MEASURE MAINTENANCE THROUGHOUT THE DURATION OF THE PROJECT.

DAMAGED EROSION CONTROL DEVICES; DAMAGED EROSION CONTROL DEVICES SHALL BE REPAIRED OR REPLACED BY THE CONTRACTOR AS SOON AS PRACTICAL AFTER THE DAMAGE OCCURS.

DAILY WATERING; DURING GRADING OPERATIONS THE SITE SHALL BE WATERED ON A DAILY BASIS TO MINIMIZE THE RELEASE OF DUST AND OTHER PARTICULATE MATTER.



CITY OF SANTA ROSA HOWARTH COURTS RENOVATION						
DEMOLITION AND EROSION CONTROL PLAN						
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CONTRACT NO. C00714						
SHEET	4	OF 16				
FILE NO. 2024-0014						
L3.1						

GRADING LEGEND

- 278.02

(278.47)

2%

+

TW

BW
- PROPOSED SPOT ELEVATION (EXISTING SPOT ELEVATIONS ARE SCREENED ON PLAN)

SPOT ELEVATION EQUAL TO EXISTING GRADE, FIELD VERIFY

DIRECTION AND PERCENT SLOPE OF SHEET DRAINAGE

FLUSH CONDITION

BENCHMARK

TOP OF WALL

BOTTOM OF WALL (AT COURT PAVEMENT)
- GRADING AND DRAINAGE NOTES
1. GRADING AND DRAINAGE: ALL PROPOSED PAVING, BANDS, WALLS, AND PLANTING AREAS SHALL SMOOTHLY CONFORM TO EXISTING ADJACENT FEATURES TO REMAIN. PROVIDE POSITIVE DRAINAGE ON ALL PAVING AND THROUGHOUT ALL PLANTING AREAS. CONTRACTOR SHALL FLOOD PAVED AREAS UPON COMPLETION AND RECONSTRUCT ANY LOW SPOTS AS DIRECTED.

2. TOPSOIL STOCKPILE: STRIP AND STOCKPILE NATIVE TOPSOIL IN AN AMOUNT SUFFICIENT TO INSTALL A 6" LAYER OF TOPSOIL IN ALL PROPOSED PLANTING AREAS. STOCKPILE LOCATION(S) TO BE DETERMINED DURING CONSTRUCTION.

3. TOPSOIL PLACEMENT: CROSS-RIP ALL CLEARED AND GRUBBED PLANTING AREA SUBSOILS AS SPECIFIED PRIOR TO TOPSOIL PLACEMENT.

4. BACKFILL: EXCAVATED MATERIAL NOT SUITABLE FOR BACKFILLING SHALL BE REMOVED AND LEGALLY DISPOSED OF OFF-SITE.

5. GRADING: CONTRACTOR SHALL PERFORM ALL EARTHWORK AND GRADING PER GEOTECHNICAL ENGINEER'S RECOMMENDATIONS AND PROJECT SPECIFICATIONS.
-
- CALA

1633 Bayshore Highway, Suite 133
Burlingame, CA 94010
T 650.375.1313
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CALA Project No. 24023

LANDSCAPE ARCHITECT

Signature

May 31, 2027

Reseal Date

June 30, 2025

Date

STATE OF CALIFORNIA
- CITY OF SANTA ROSA

HOWARTH COURTS RENOVATION

GRADING AND DRAINAGE PLAN
- | NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |
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- | | |
|--------------|-----------|
| CHK BY: | NR |
| DATE: | 6/20/25 |
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| SCALE: | AS SHOWN |
| CONTRACT NO. | C00714 |
| SHEET | 5 OF 16 |
| FILE NO. | 2024-0014 |
| L4.0 | |
- File path: N:\Projects\2024\Projects\24023_HowarthAndGawwPascCourtRenovation\3_ConstructionDocuments\24023_03.dwg Plot Date: 7/3/25 Saved By: lcorera Copyright © 2025 Collander Associates Landscape Architecture, Inc.

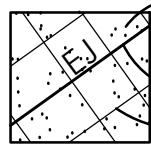
SITE CONSTRUCTION LEGEND



COURT PAVEMENT



COURT PAVEMENT OVERLAY



CONCRETE PAVEMENT
EXPANSION JOINT, TYP.
SCORE JOINT, TYP.



CHAIN LINK FENCE, 4' HIGH



COURT BAND TYPE 1 WITH 4' HIGH CHAIN LINK FENCE



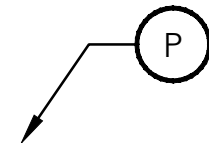
CHAIN LINK SINGLE GATE, 4' HIGH



GATE MODIFICATION



CHAIN LINK FENCE REPAIR, SEE SITE CONSTRUCTION NOTE 1



CHAIN LINK FENCE POST REPLACEMENT



REINSTALL EXISTING BENCH



BENCH, TYPE 1



BENCH, TYPE 2



PICKLEBALL NET POST



TENNIS NET POST



CENTER ANCHOR TIE DOWN



PLANTING AREA



WINDSCREEN, PER SPECS. TYPE 2 AT BALL WALL AND
TYPE 1 IN ALL OTHER LOCATIONS.



BALL WALL WITH 10' HIGH CHAIN LINK FENCE,
COURT BAND TYPE 2, AND WINDSCREEN, TYPE 2



DRINKING FOUNTAIN



ALIGN



EQUAL



CENTERLINE

2

H8.1

1

H8.1

1

H8.5

2

H8.5

3

H8.5

4

H8.1

6

H8.1

5

H8.1

1

H8.2

2

H8.2

3

H8.1

2

H8.2

3

H8.2

4

H8.2

3

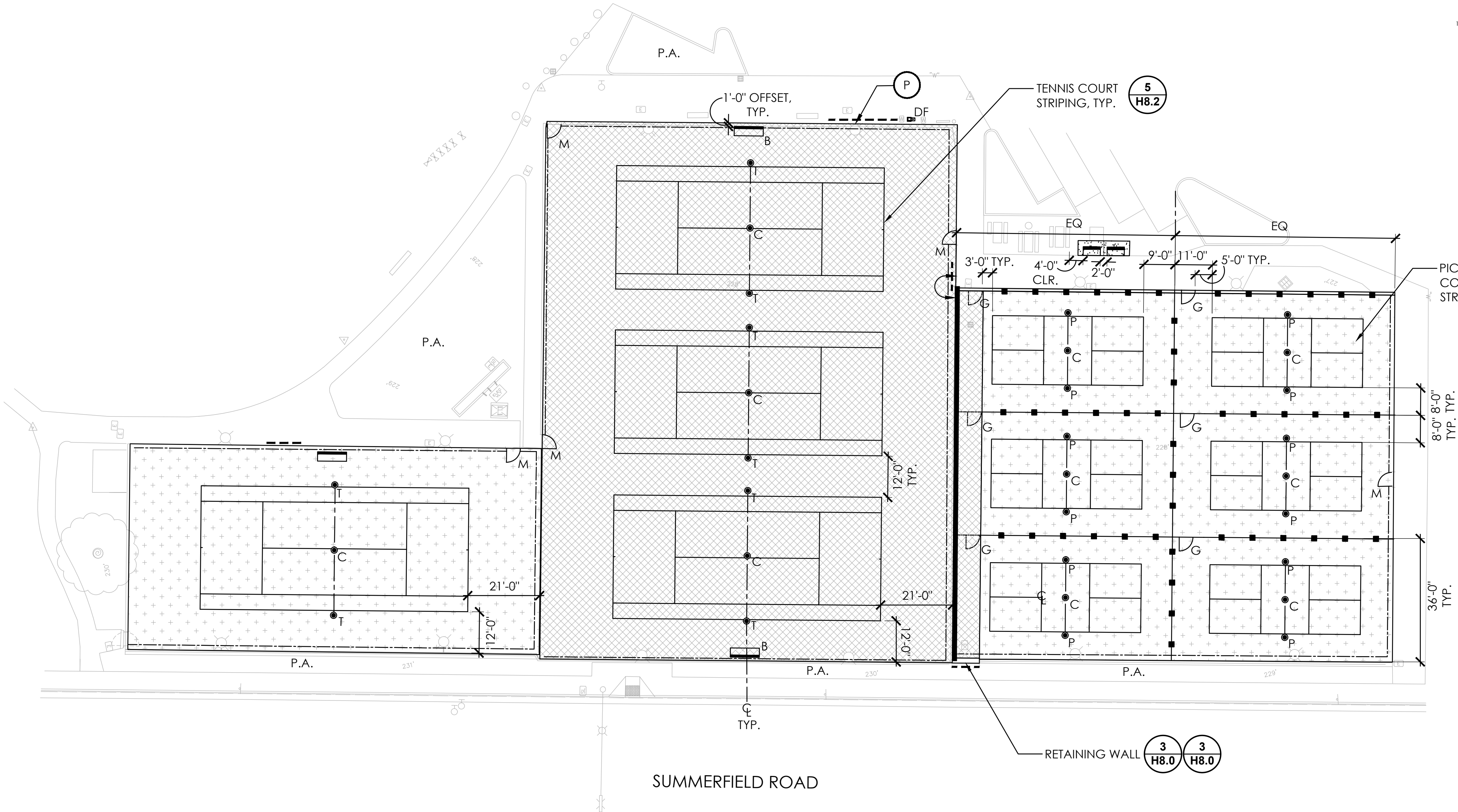
H8.0

5

H8.4

SITE CONSTRUCTION NOTES

1. **CHAIN LINK FENCE REPAIR:** REPAIR EXISTING 10'-0" TALL CHAIN LINK FENCE AT THE LOCATIONS SHOWN ON THE PLAN AND AS DIRECTED BY THE CITY. FOR BIDDING PURPOSES ASSUME REMOVAL AND REPLACEMENT OF 50 LINEAR FEET OF GALVANIZED CHAIN LINK FABRIC.
2. **DIMENSIONS:** ALL DIMENSIONS SHOWN SUPERSEDE SCALED DIMENSIONS. ALL DIMENSIONS ARE TO FACE OF CURB, EDGE OF CONCRETE FLATWORK/BAND, OR CENTERLINE OF FENCE.
3. **PROJECT STAKING:** ALL PROPOSED SITE FEATURES SHALL BE STAKED IN FIELD BY THE CONTRACTOR FOR REVIEW BY THE CITY'S REPRESENTATIVE PRIOR TO CONSTRUCTION.

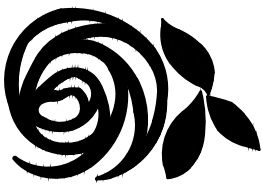


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City of
Santa Rosa



NO.	DATE	REVISION	BY

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FILE NO. 2024-0014	

 IN-LINE DRIP IRRIGATION, NETAFIM, TECHLINE CV DRUPLINE, 0.6 GPH EMITTER FLOW AND 18-INCH EMITTER SPACING. SPACE EMITTER LINE ROWS AT 18-INCHES ON CENTER. INSTALL ALL LINES AT GRADE AND COVER WITH MULCH PER PLANTING PLAN. USE ONLY NETAFIM DRUPLINE TECHLOCK FITTINGS.

— — — SLEEVE, SCHEDULE 40 PVC 2" SIZE WHEN ONLY
CONTROL WIRES

■■■■■ MAINLINE, PIPE MATERIAL PER SPECS, MATCH EXISTING
 PIPE SIZE, FOR BIDDING PURPOSES ASSUME 3"

_____ LATERAL LINE, PIPE MATERIAL PER SPECS, SIZE PER
 PLAN, 3/4" MIN.

4
 H8.3

---● DRIP HEADER, SCH 40 PVC, 3/4" SIZE UNLESS OTHERWISE SHOWN
LATERAL / HEADER CONNECTION

5
H8.3

5
H8.3

—c— CONTROL WIRES, DIRECT BURIAL TYPE FOR REMOTE
CONTROL VALVES, INSTALL FLOW SENSOR AND
MASTER VALVE WIRES IN CONDUIT, 1'-6" MIN. DEPTH,
INSTALL IN CONDUIT UNDER PAVEMENT

① DRIP IRRIGATION INDICATOR, RAINBIRD, OPERIND $\frac{2}{H8.4}$

⑦ DRIP FLUSH VALVE, NETAFIM, TISOV 

 VALVE NUMBER FOR DRIP AREA

C CONTROLLER EXPANSION, INSTALL NEW WEATHERTRAK WTPRO-6STA-KEY MODULE ON EXISTING WEATHERTRAK ET PRO 3 CONTROLLER TO UPGRADE FROM 12 STATIONS TO 18 STATIONS

 MASTER VALVE, SUPERIOR, 3300, NORMALLY OPEN, 2" SIZE

FS FLOW SENSOR, FLOMEC, QS200-20, 2" SIZE

RS WIRELESS RAIN SENSOR, HUNTER, WIRELESS RAIN-CLIK,
COORDINATE WITH CITY ON LOCATION WITHIN CHAIN
LINK ENCLOSURE TO ENSURE EXPOSURE TO RAIN.
CONNECT RECEIVER TO EXISTING CONTROLLER.

 VALVE CALLOUT

Diagram illustrating the components of a water meter:

- VALVE NUMBER
- VALVE SIZE
- VALVE FLOW
- PRECIPITATION RATE
- WATER-USE

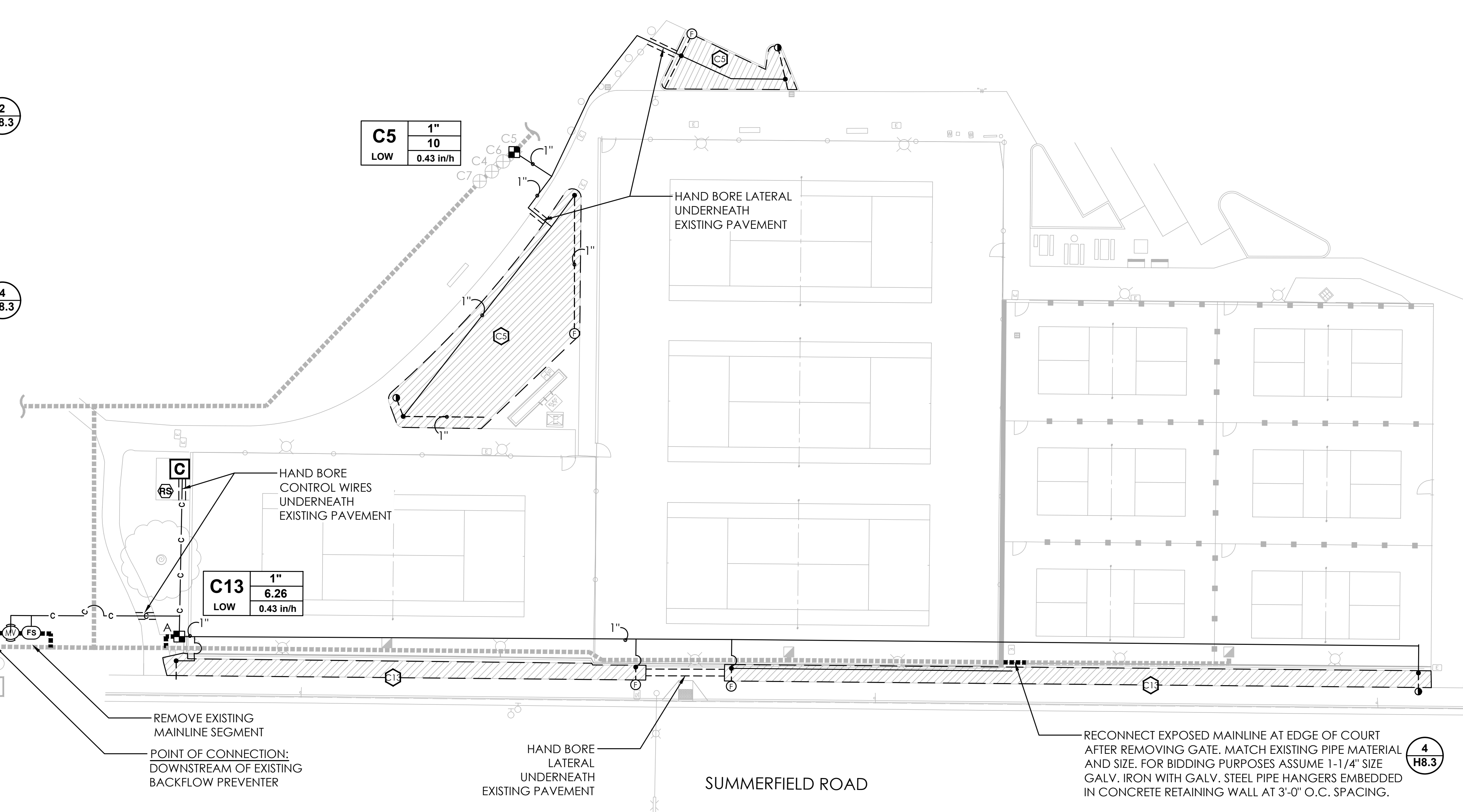
EXISTING COMPONENTS

M WATER METER, 4" SIZE, NUMBER 83491962

 BACKFLOW PREVENTER, WATTS, 4" SIZE

MAINLINE, 3" SIZE

⊕_{C7} REMOTE CONTROL VALVE
() EXISTING VALVE NUMBER



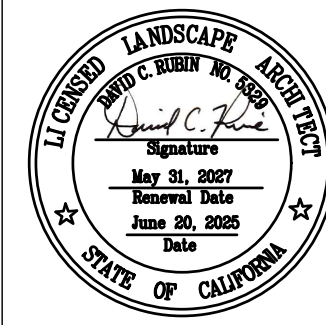
1. **SPECIFICATIONS:** SEE IRRIGATION SPECIFICATIONS FOR ADDITIONAL INFORMATION.
2. **VERIFICATION:** SYSTEM DESIGN IS BASED ON 88 P.S.I AND 10 G.P.M. AVAILABLE AT THE POINT OF CONNECTION. CONTRACTOR SHALL VERIFY SAME AND NOTIFY THE CITY'S REPRESENTATIVE IF SUCH DATA ADVERSELY AFFECTS THE OPERATION OF THE SYSTEM. SUCH NOTICE SHALL BE MADE IN WRITING AND PRIOR TO COMMENCING ANY IRRIGATION WORK.
3. **UTILITIES:** CONTRACTOR SHALL VERIFY LOCATION OF ALL ON-SITE UTILITIES. RESTORATION OF DAMAGED UTILITIES SHALL BE MADE AT THE CONTRACTOR'S EXPENSE TO THE SATISFACTION OF THE OWNER.
4. **SCHEMATIC:** SYSTEM FEATURES ARE SHOWN SCHEMATICALLY FOR GRAPHIC CLARITY. INSTALL ALL PIPING AND VALVES IN COMMON TRENCHES WHERE FEASIBLE AND INSIDE PLANTING AREAS WHENEVER POSSIBLE. ALL VALVES SHALL BE LOCATED IN GROUND COVER OR SHRUB AREAS WHENEVER POSSIBLE.
5. **CODES AND MANUFACTURER'S SPECIFICATIONS:** IRRIGATION SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL HEALTH CODES AND MANUFACTURER'S SPECIFICATIONS. NOTIFY CITY'S REPRESENTATIVE IF SITE CONDITIONS OR INFORMATION IN THE PROJECT PLANS AND SPECIFICATIONS ARE IN CONFLICT WITH THESE REQUIREMENTS.
6. **SLEEVEING:** CONTRACTOR SHALL SIZE ALL SLEEVES TO BE A MINIMUM TWO TIMES THE SIZE OF THE INTERIOR PIPE. SLEEVES SHALL BE INSTALLED AT THE NECESSARY DEPTHS PRIOR TO PAVEMENT CONSTRUCTION. SLEEVEING SHALL EXTEND 1'-0" FROM EDGE OF PAVEMENT INTO LAWN OR PLANTING AREA, AND SHALL HAVE ENDS CLEARLY MARKED ABOVE GRADE.
7. **HEAD ALLOWANCE:** CONTRACTOR SHALL ALLOW IN BID PRICE AN AMOUNT SUFFICIENT TO PROVIDE AND INSTALL AN ADDITIONAL 50 FEET OF DRIPLINE TO ACCOMMODATE FIELD

CHANGES. EQUIPMENT SHALL BE LOCATED AS DIRECTED BY THE CITY'S REPRESENTATIVE. CONTRACTOR SHALL DELIVER TO THE CITY ANY UN-USED ADDITIONAL DRIPLINE AT THE END OF THE MAINTENANCE PERIOD.

8. **MAINTAINING EXISTING IRRIGATION:** SHOULD THE EXISTING MAINLINE BREAK OR BE SHUT OFF FOR ANY REASON DURING THE COURSE OF CONSTRUCTION THE CONTRACTOR SHALL HAND WATER ALL TREES, SHRUBS, TURF, AND GROUND COVER THAT THE EXISTING IRRIGATION SYSTEM WATERS. THE CONTRACTOR SHALL CONTINUE TO DO SO UNTIL THE IRRIGATION SYSTEM IS OPERABLE.
9. **EXISTING IRRIGATION VERIFICATION:** REVIEW THE LAYOUT OF THE EXISTING IRRIGATION SYSTEM WITH THE CITY'S REPRESENTATIVE TO CONFIRM OPERATIONAL STATUS OF ALL ZONES NEAR THE WORK AREA PRIOR TO COMMENCING DEMOLITION AND IRRIGATION WORK. VERIFY LIMITS OF EXISTING VALVE ZONES AND CONFIRM FIELD CONDITIONS MATCH WHAT IS SHOWN ON THE PLANS. REPORT ANY DISCREPANCIES AND NON-FUNCTIONAL COMPONENTS TO THE CITY'S REPRESENTATIVE IN WRITING.
10. **POST-CONSTRUCTION OPERATIONAL TEST:** REVIEW THE FUNCTIONALITY OF THE IRRIGATION SYSTEM (BOTH NEW AND EXISTING COMPONENTS) WITH THE CITY'S REPRESENTATIVE TO CONFIRM SUCCESSFUL OPERATION AFTER THE NEW SYSTEM COMPONENTS HAVE BEEN INSTALLED. CORRECT ANY DEFICIENCIES FOUND THAT WERE CAUSED TO THE EXISTING SYSTEM AS A RESULT OF CONSTRUCTION.

1" = 20'

0 20 40 feet



City of
Santa Rosa

[illegible]

CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION

IRRIGATION PLAN

CHK BY:	NR
DATE:	6/20/25
DWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET	7 OF 16
FILE NO.	2024-0014

L6.0

A. DATE: SEE TITLE BLOCK

B. PROJECT APPLICANT: CITY OF SANTA ROSA

C. PROJECT ADDRESS: 630 SUMMERFIELD RD, SANTA ROSA, CA 95405

1. ☒ PROJECT INFORMATION
2. ☒ WATER EFFICIENT LANDSCAPE WORKSHEET
3. ☒ SOIL ANALYSIS REPORT
4. ☒ LANDSCAPE DESIGN PLAN (SEE SHEET L7.0)
5. ☒ IRRIGATION DESIGN PLAN (SEE SHEET L6.0)
6. ☒ GRADING DESIGN (SEE SHEET L4.0)
7. ☐ *CERTIFICATE OF COMPLETION
8. ☐ *IRRIGATION SCHEDULE
9. ☐ *MAINTENANCE SCHEDULE
10. ☐ **LANDSCAPE IRRIGATION AUDIT

* CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF IRRIGATION AUDIT BY THE LOCAL AGENCY, OR A THIRD PARTY CERTIFIED LANDSCAPE IRRIGATION AUDITOR. LANDSCAPE AUDITS SHALL NOT BE CONDUCTED BY THE PERSON WHO DESIGNED THE LANDSCAPE OR INSTALLED THE LANDSCAPE. CONTRACTOR IS RESPONSIBLE TO PAY FOR ALL ASSOCIATED FEES.

OWNER/CITY:	LANDSCAPE ARCHITECT:
CITY OF SANTA ROSA	CALLANDER ASSOCIATES
SCOTT WILKINSON	DAVID RUBIN
55 STONY POINT ROAD	1633 BAYSHORE HIGHWAY, SUITE 133
SANTA ROSA, CA 95401	BURLINGAME, CA 94010
PHONE: (707) 543-3953	PHONE: (650) 375-1313

1. WELO CODES AND REFERENCES: A COPY OF THE CITY OF SANTA ROSA WATER EFFICIENT LANDSCAPE ORDINANCE (WELO) AND SUPPORTING DOCUMENTS CAN BE FOUND AT WWW.SRCITY.ORG/2428/LANDSCAPE-STANDARDS.
2. IRRIGATION PLAN CONTROLLER COPY: THE CONTRACTOR SHALL PLACE A LAMINATED 11X17 COPY OF THE IRRIGATION PLAN SHOWING THE HYDROZONES WITHIN THE IRRIGATION CONTROLLER(S) CABINET FOR FUTURE MANAGEMENT USE.
3. CERTIFICATE OF COMPLETION AND IRRIGATION AUDIT: UPON COMPLETION OF THE INSTALLATION, THE CONTRACTOR SHALL SUBMIT TO THE ENGINEERING DEVELOPMENT SERVICES INSPECTOR A COMPLETED AND SIGNED "CERTIFICATE OF COMPLETION" STATING THAT THE PROJECT HAS BEEN INSTALLED AS DESIGNED. THE CERTIFICATE OF COMPLETION SHALL BE ACCOMPANIED BY AN IRRIGATION AUDIT, IRRIGATION SCHEDULE AND MAINTENANCE SCHEDULE, AS DESCRIBED IN THE CITY WATER EFFICIENT LANDSCAPE ORDINANCE 4521.

HYDROZONE	VALVE NUMBER	IRRIGATION METHOD	AREA (SQ. FT.)	% LANDSCAPE AREA
LOW	C5	DRIP	2275	57%
LOW	C13	DRIP	1745	43%
		TOTAL	4020	100%

HYDROZONE	AREA (SQ. FT.)	% LANDSCAPE AREA
HIGH WATER USE	0	0%
MODERATE WATER USE	0	0%
LOW WATER USE	4020	100%

WATER EFFICIENCY WORKSHEET							
This worksheet is filled out by the project applicant and it is a required element of the Landscape Documentation Package.							
Reference Evapotranspiration (ET_o)		42.0					
Hydrozone # /Planting Description ^a	Plant Factor (PF) ^f	Irrigation Method ^b	Irrigation Efficiency (IE) ^c	ETAF (PF/IE)	Landscape Area (sq. ft.)	ETAF x Area	Estimated Total Water Use (ETWU) ^d
Regular Landscape Areas							
Low Water Use Plantings	0.2	Drip	0.81	0.25	3,975	981	25,558
Totals					3,975 (A)	981 (B)	
Special Landscape Areas							
				1			
				1			
				1			
Totals					0 (C)	0 (D)	
						ETWU Total	25,558
Maximum Applied Water Allowance (MAWA)^e						46,579	
*Hydrozone #/Planting Description E.g. 1.) front lawn 2.) low water use plantings 3.) medium water use planting		^bIrrigation Method overhead spray or drip	^cIrrigation Efficiency 0.75 for spray head 0.81 for drip	^dETWU (Annual Gallons Required) = Eto x 0.62 x ETAF x Area where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year.			
*MAWA (Annual Gallons Allowed) = (Eto) (0.62) [(ETAF x LA) + ((1-ETAF) x SLA)] where 0.62 is a conversion factor that converts acre-inches per acre per year to gallons per square foot per year, LA is the total landscape area in square feet (including SLA), SLA is the total special landscape area in square feet, and ETAF is .55 for residential areas and 0.45 for non-residential areas.		^fPlant Factor (0.0 - 0.1) very low water use (0.2 - 0.3) low water use (0.4 - 0.6) medium water use (0.7 - 1.0) high water use					
ETAF Calculations							
Regular Landscape Areas							
Total ETAF x Area	981	(B)					
Total Area	3,975	(A)					
Average ETAF	0.25	B ÷ A					
Average ETAF for Regular Landscape Areas must be 0.55 or below for residential areas, and 0.45 or below for non-residential areas.							
All Landscape Areas							
Total ETAF x Area	981	(B + D)					
Total Area	3,975	(A + C)					
Sitewide ETAF	0.25	(B + D) ÷ (A + C)					


SIGNATURE

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CITY OF SANTA ROSA
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LANDSCAPE DOCUMENTATION

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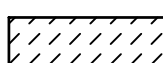
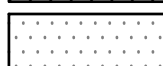
PLANTING LEGEND

-  EXISTING TREE TO REMAIN
-  MULCH ONLY, NO PLANTING OR SOIL PREPARATION

PLANTING NOTES

1. **MULCH:** INSTALL A UNIFORM THREE INCH COVERING OF MULCH IN ALL PLANTING AREAS, PER SPECIFICATIONS.
2. **EXISTING PLANT MATERIAL:** PROTECT ALL EXISTING PLANT MATERIAL AND TURF GRASS TO REMAIN. REPAIR ANY DAMAGES INCURRED AS A DIRECT RESULT OF THIS CONTRACT TO THE CITY'S SATISFACTION AT NO ADDITIONAL COST.
3. **GROUND COVER:** PROVIDE GROUND COVER AT INDICATED ON-CENTER SPACING THROUGHOUT ALL AREAS TO BE PLANTED. GROUND COVER SHALL BE PROVIDED UP TO THE WATERING BASIN OF ALL SHRUBS.
4. **QUANTITIES:** THE QUANTITIES SHOWN ON THE LABELS ARE NOT TO BE CONSTRUED AS THE COMPLETE AND ACCURATE LIMITS OF THE CONTRACT. FURNISH AND INSTALL ALL PLANTS SHOWN SCHEMATICALLY ON THE DRAWINGS.
5. **TOP SOIL:** ALL PLANTING AREAS TO RECEIVE A SIX INCH LAYER OF NATIVE TOP SOIL PER SPECIFICATIONS.
6. **SOILS TESTING:** SEE SPECIFICATIONS FOR TESTING OF SOIL AMENDMENTS. CONTRACTOR SHALL ALLOW SUFFICIENT TIME FOR TESTING PRIOR TO CONSTRUCTION.
7. **SOIL PREPARATION:** A MINIMUM OF 8" NON-MECHANICALLY COMPACTED SOIL SHALL BE AVAILABLE FOR WATER ABSORPTION AND ROOT GROWTH IN PLANTING AREAS. INCORPORATE COMPOST AND NATURAL FERTILIZER INTO THE SOIL TO A MINIMUM DEPTH OF 8" AT A MINIMUM RATE OF 6 CUBIC YARDS PER 1000 SQUARE FEET. REFER TO SPECIFICATION SECTION 20-6.03E FOR SPECIFIC AMENDMENT RECOMMENDATIONS FROM A SOILS LABORATORY REPORT.

PLANT LIST

		<u>CODE</u>	<u>BOTANICAL / COMMON NAME</u>	<u>SIZE</u>	<u>WATER USE</u>	<u>SPACING</u>
3 H8.4	SHRUBS					
		JUN SKY	JUNIPERUS SCOPULORUM 'SKYROCKET' / SKYROCKET JUNIPER	15 GAL	LOW	48" o.c.
		PHO AMR	PHORMIUM X 'AMAZING RED' / AMAZING RED NEW ZEALAND FLAX	1 GAL	LOW	36" o.c.
		PHO DUE	PHORMIUM X 'DUET' / DUET NEW ZEALAND FLAX	1 GAL	LOW	36" o.c.
		RHA MOU	RHAMNUS CALIFORNICA 'MOUND SAN BRUNO' / MOUND SAN BRUNO COFFEEBERRY	5 GAL	LOW	72" o.c.
		SAL POZ	SALVIA X 'POZO BLUE' / POZO BLUE SAGE	5 GAL	LOW	48" o.c.
4 H8.4	SHRUB / GROUND COVER AREAS					
		HEL SEM	HELICTOTRICHON SEMPERVIRENS / BLUE OAT GRASS	1 GAL	LOW	24" o.c.
		CIS PUL	CISTUS X PULVERULENTUS 'SUNSET' / SUNSET ROCKROSE	5 GAL	LOW	72" o.c.

I HAVE COMPILED WITH THE CRITERIA OF THE ORDINANCE AND APPLIED THEM ACCORDINGLY FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

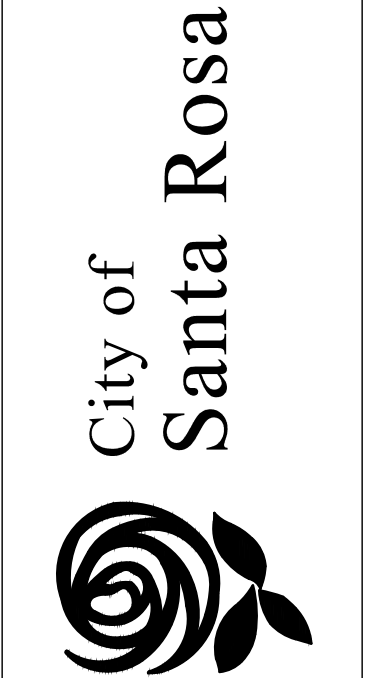


SIGNATURE

DAVID RUBIN

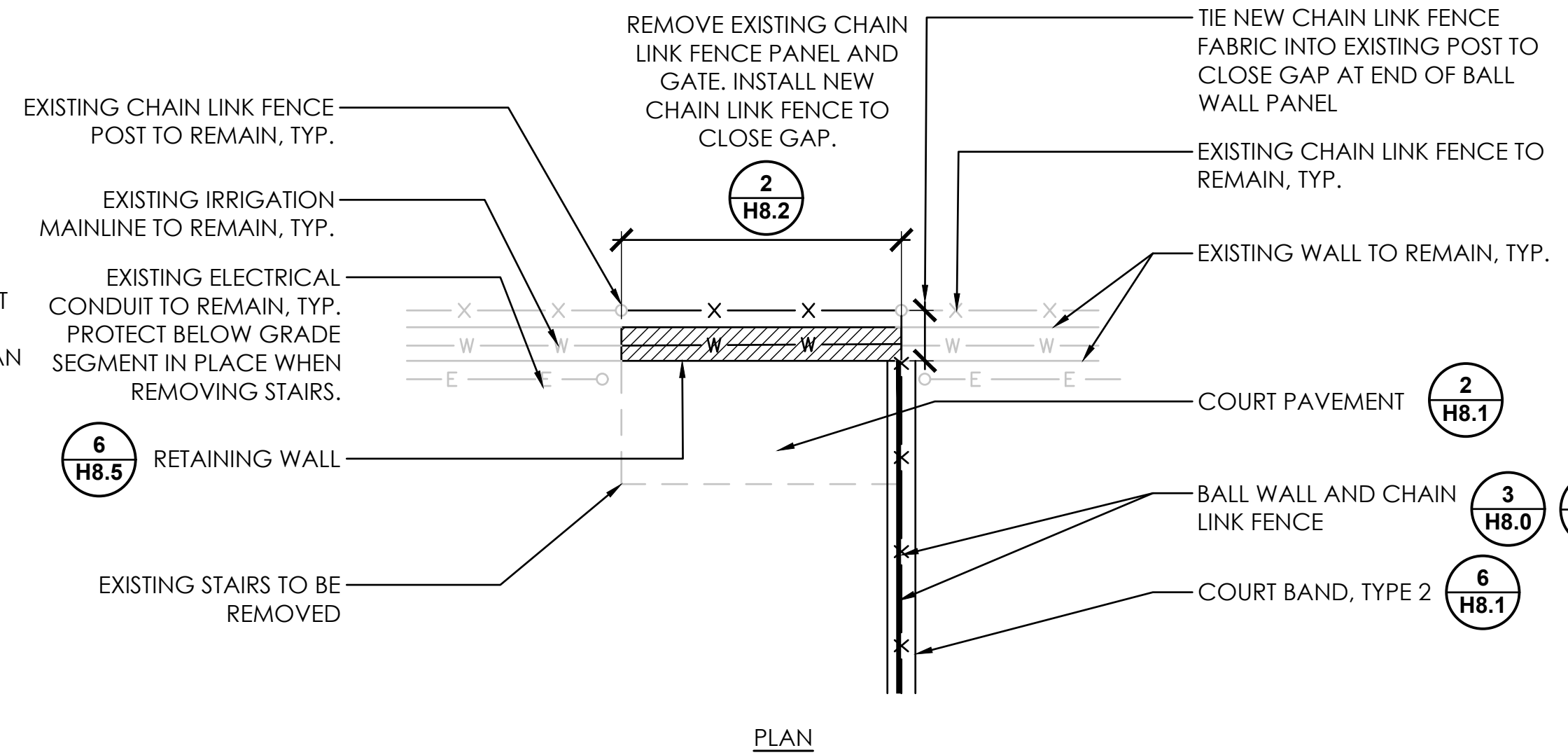
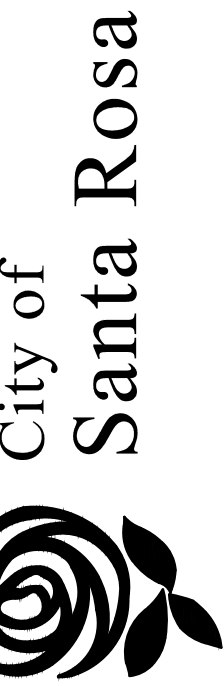
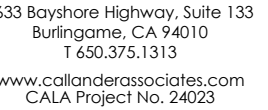


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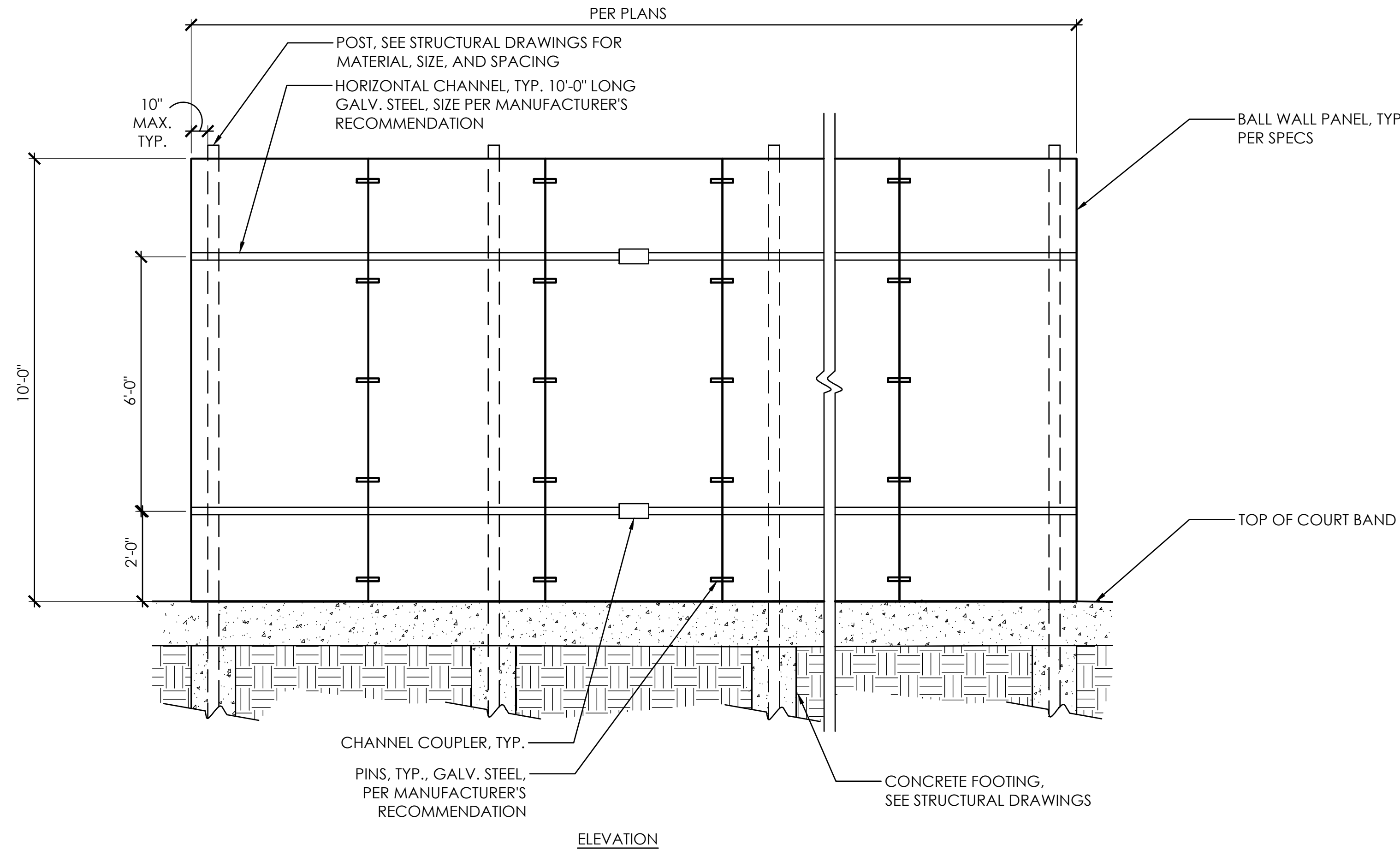


NO.	DATE	REVISION	BY

CITY OF SANTA ROSA HOWARTH COURTS RENOVATION	PLANTING PLAN	CHK BY:	NR
		DATE:	6/20/25
		DWN BY:	IC/DC
		SCALE:	AS SHOWN
		CONTRACT NO. C00714	
		SHEET 9 OF 16	
		FILE NO. 2024-0014	



4 STAIRS REMOVAL
H8.0 1/4" = 1'-0"



PROP-PP-P2911-95

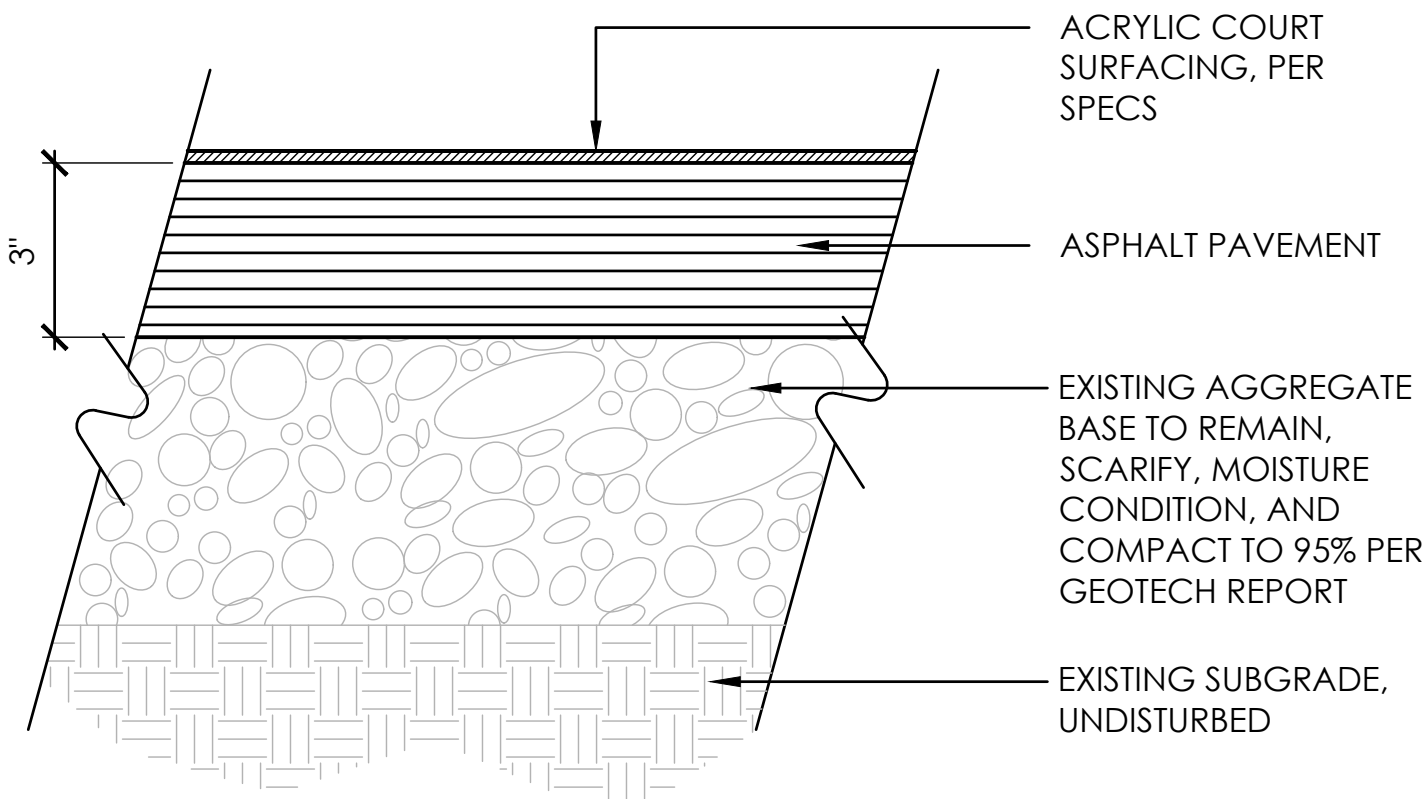
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HOWARTH COURTS RENOVATION

CONSTRUCTION DETAILS

HK BY:	NR
DATE:	6/20/25
OWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET 10 OF 16	
FILE NO.	2024-0014

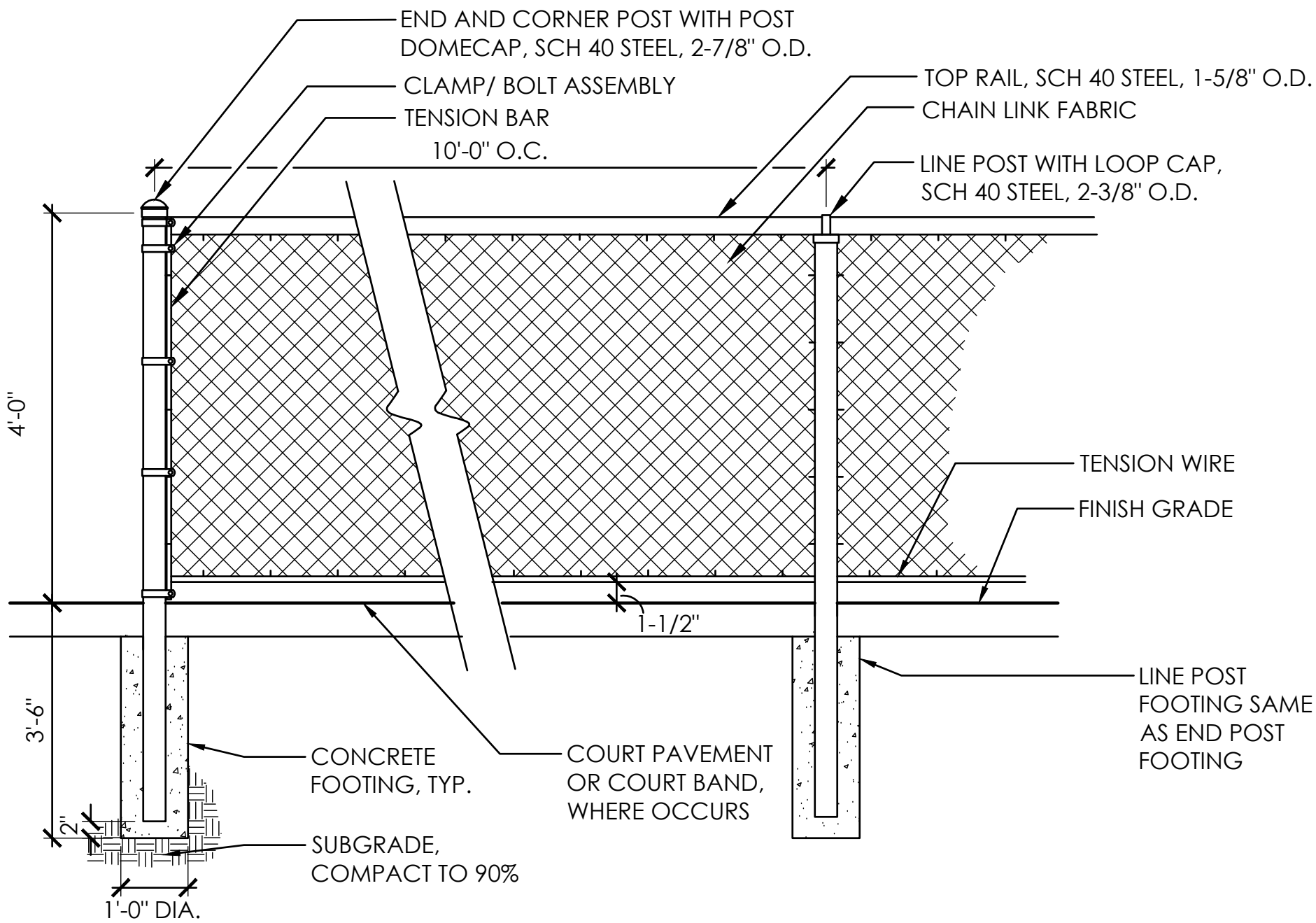
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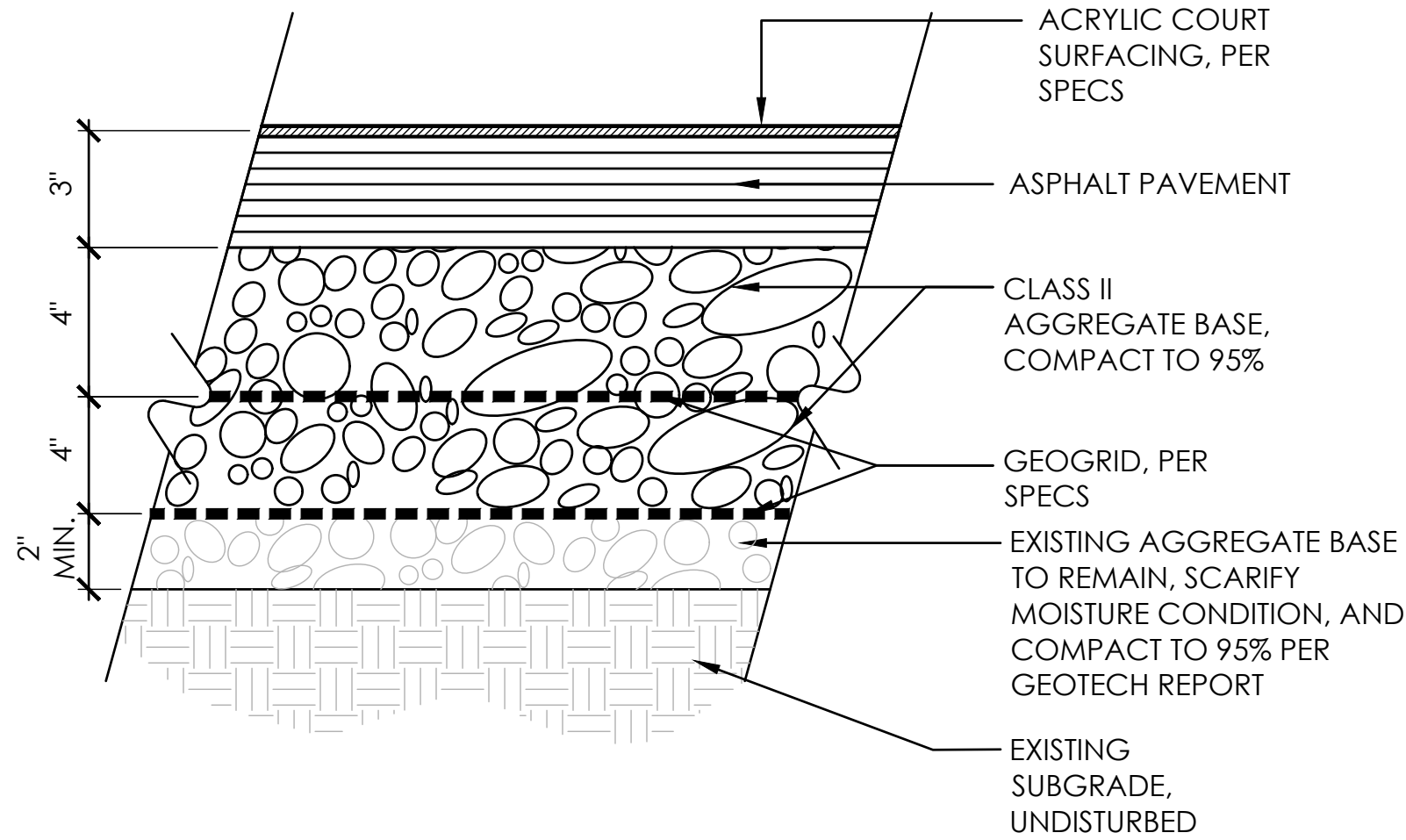


1
H8.1 COURT PAVEMENT OVERLAY
3" = 1'-0" PROP-PP-P2911-56

NOTE: SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.

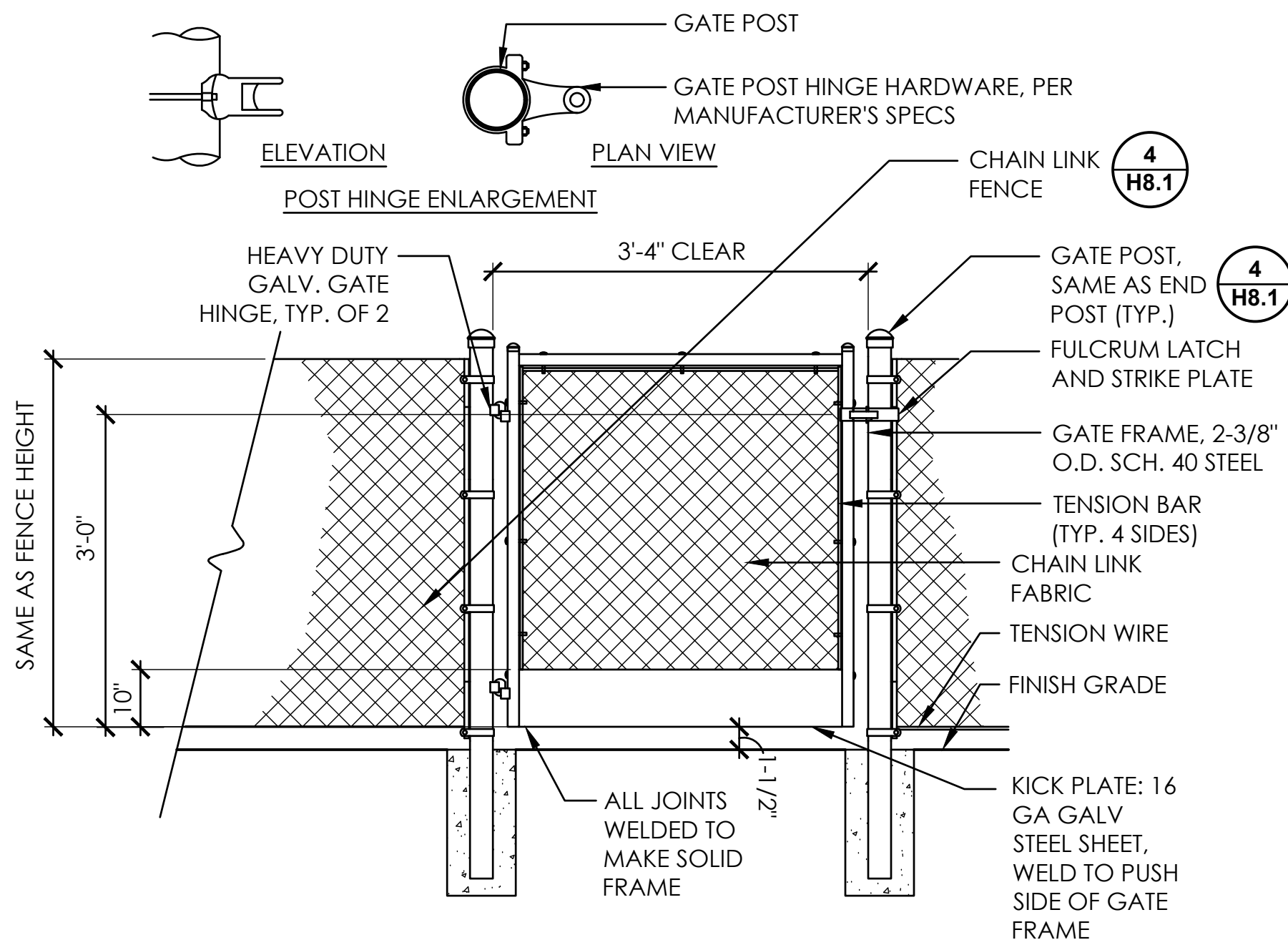


4
H8.1 CHAIN LINK FENCE, 4' HEIGHT
1/2" = 1'-0" PROP-PP-P2911-68



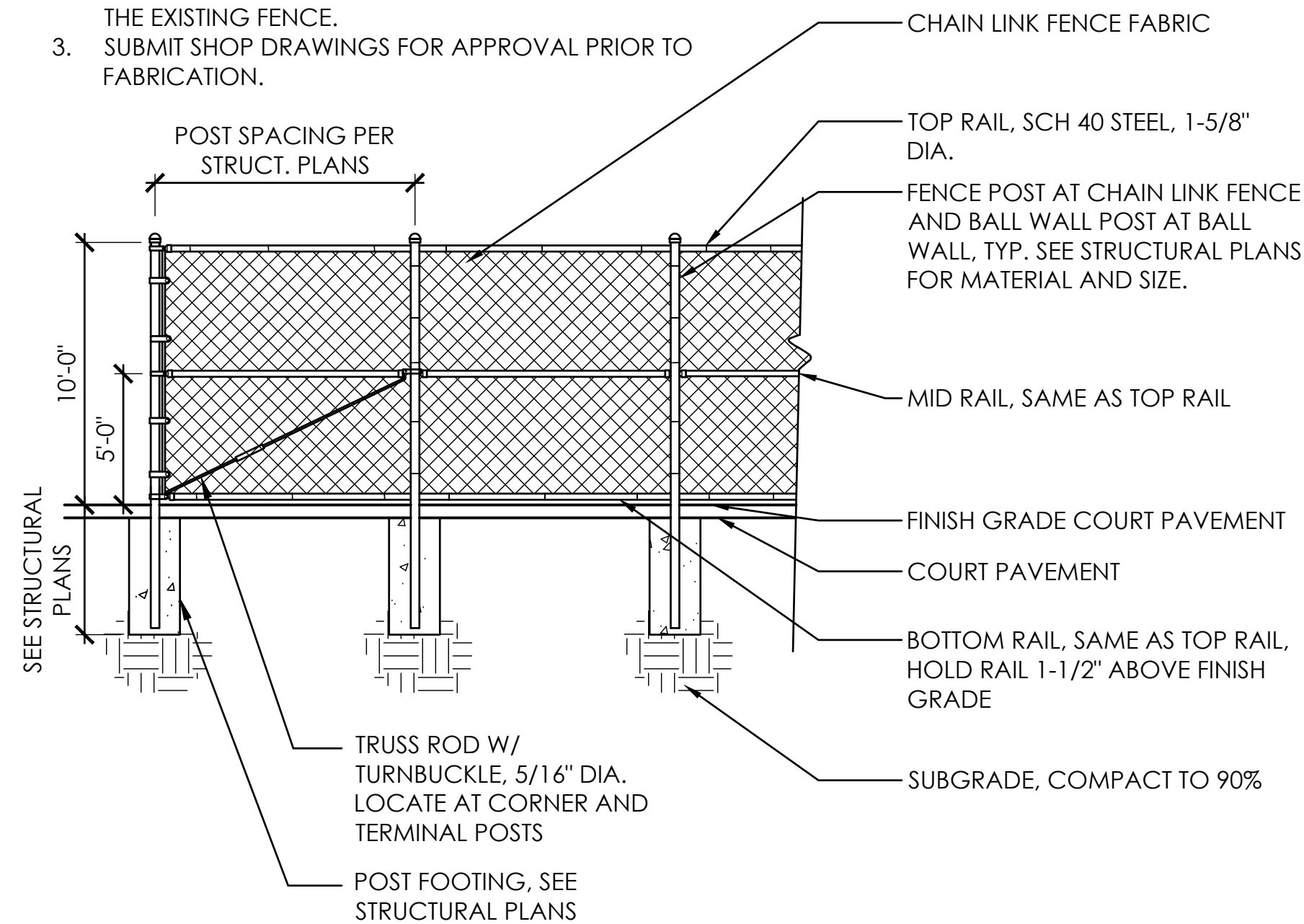
2
H8.1 COURT PAVEMENT
3" = 1'-0" PROP-PP-P2911-58

- NOTES:
- THE MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN THE GATE SHALL NOT EXCEED 5 POUNDS PER CBC 11B-404.2.9.
 - SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.



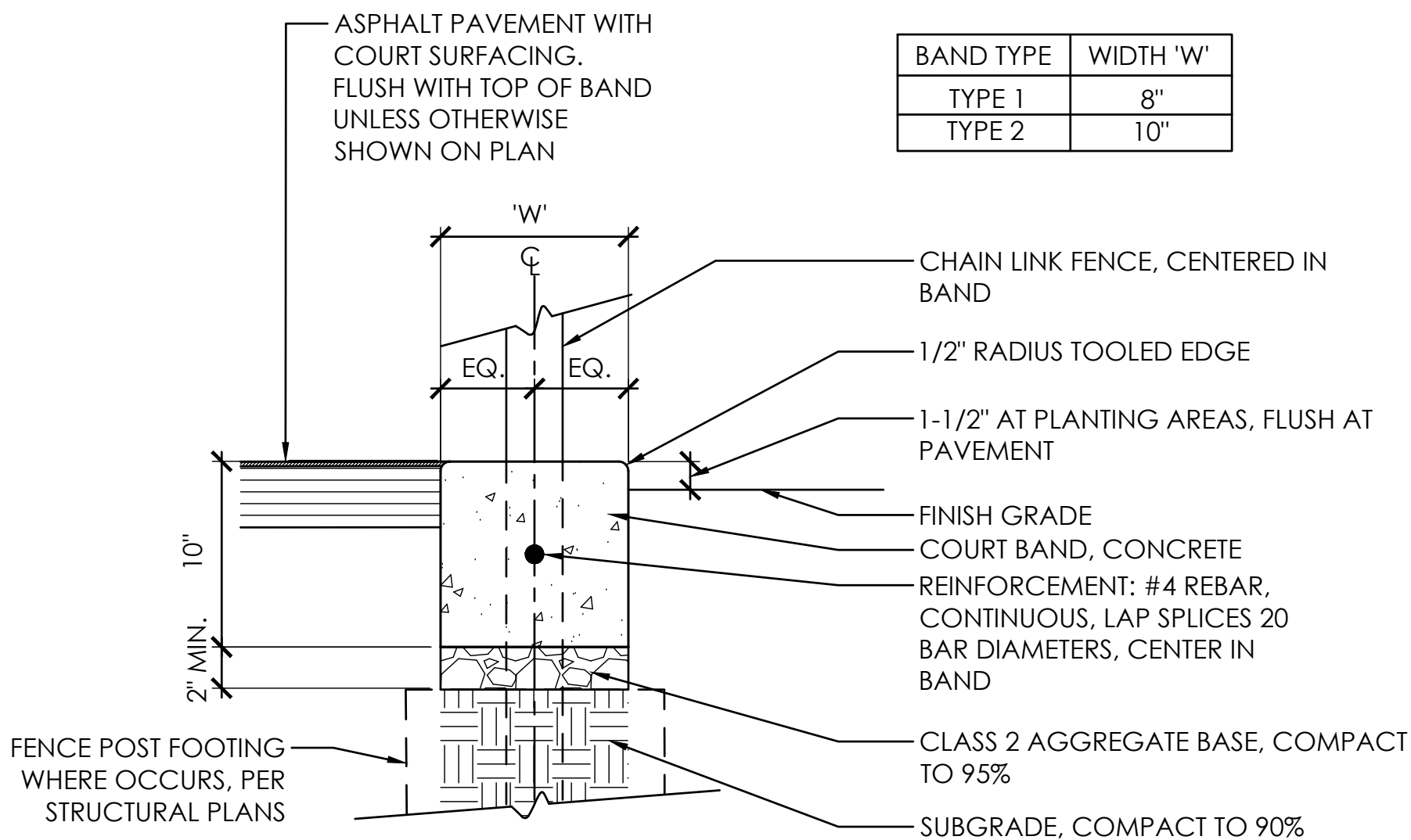
5
H8.1 CHAIN LINK SINGLE GATE, 4' HEIGHT
1/2" = 1'-0" PROP-PP-P2911-71

- NOTE:
- INSTALL FENCE FABRIC ON THE COURT SIDE OF THE FENCE FRAME.
 - WHEN FENCE IS ADJACENT TO AN EXISTING FENCE THAT IS LESS THAN 10 FEET TALL, THE NEW FENCE SHALL MATCH THE HEIGHT OF THE EXISTING FENCE.
 - SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION.



3
H8.1 CHAIN LINK FENCE, 10' HEIGHT
3/16" = 1'-0" PROP-PP-P2911-67

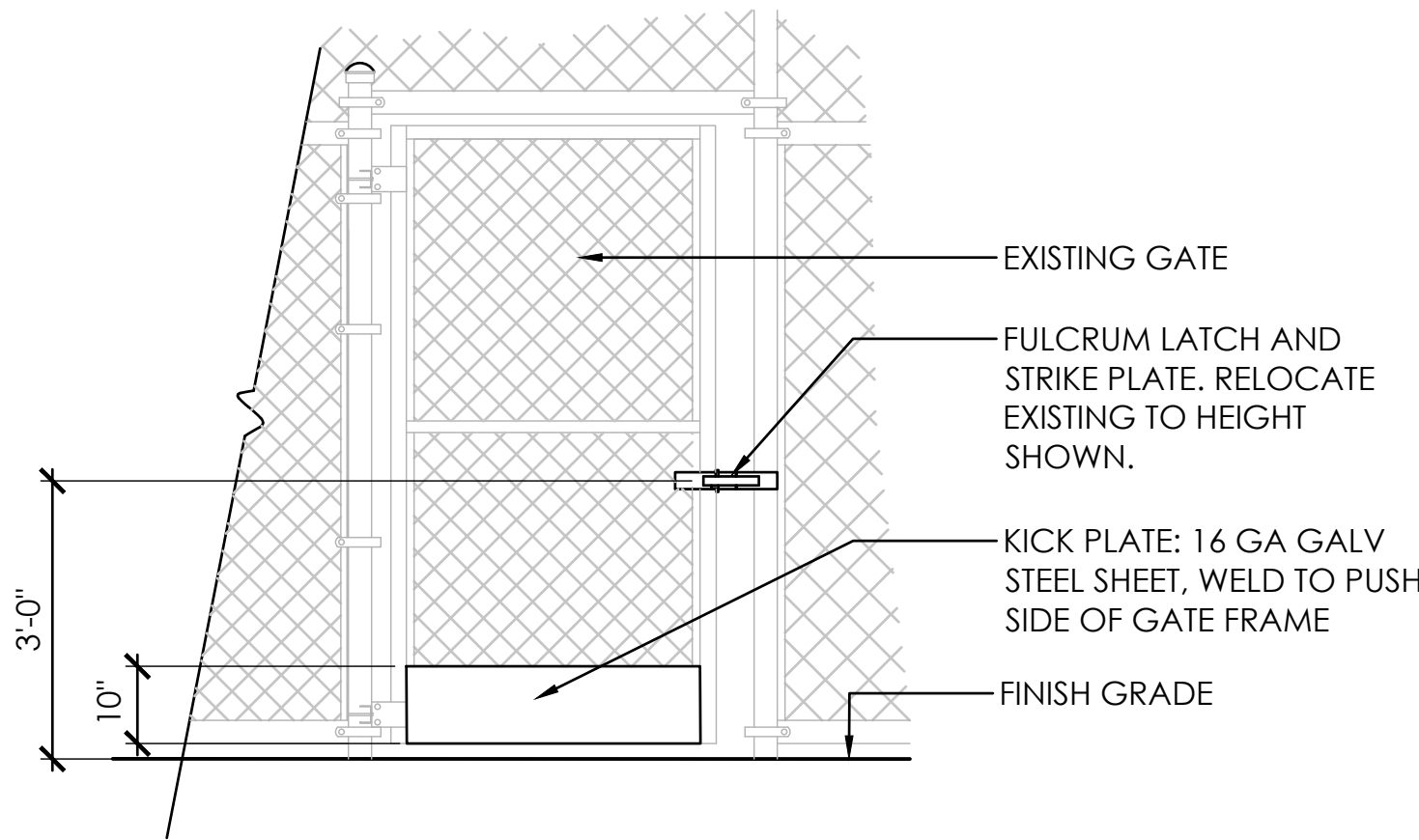
NOTE: INSTALL SCORE JOINTS AT 5'-0" O.C. WITH EVERY OTHER JOINT CENTERED ON FENCE POSTS. INSTALL EXPANSION JOINTS NO GREATER THAN 20'-0" O.C. AND CENTERED ON FENCE POST AND AT ALL CORNERS.



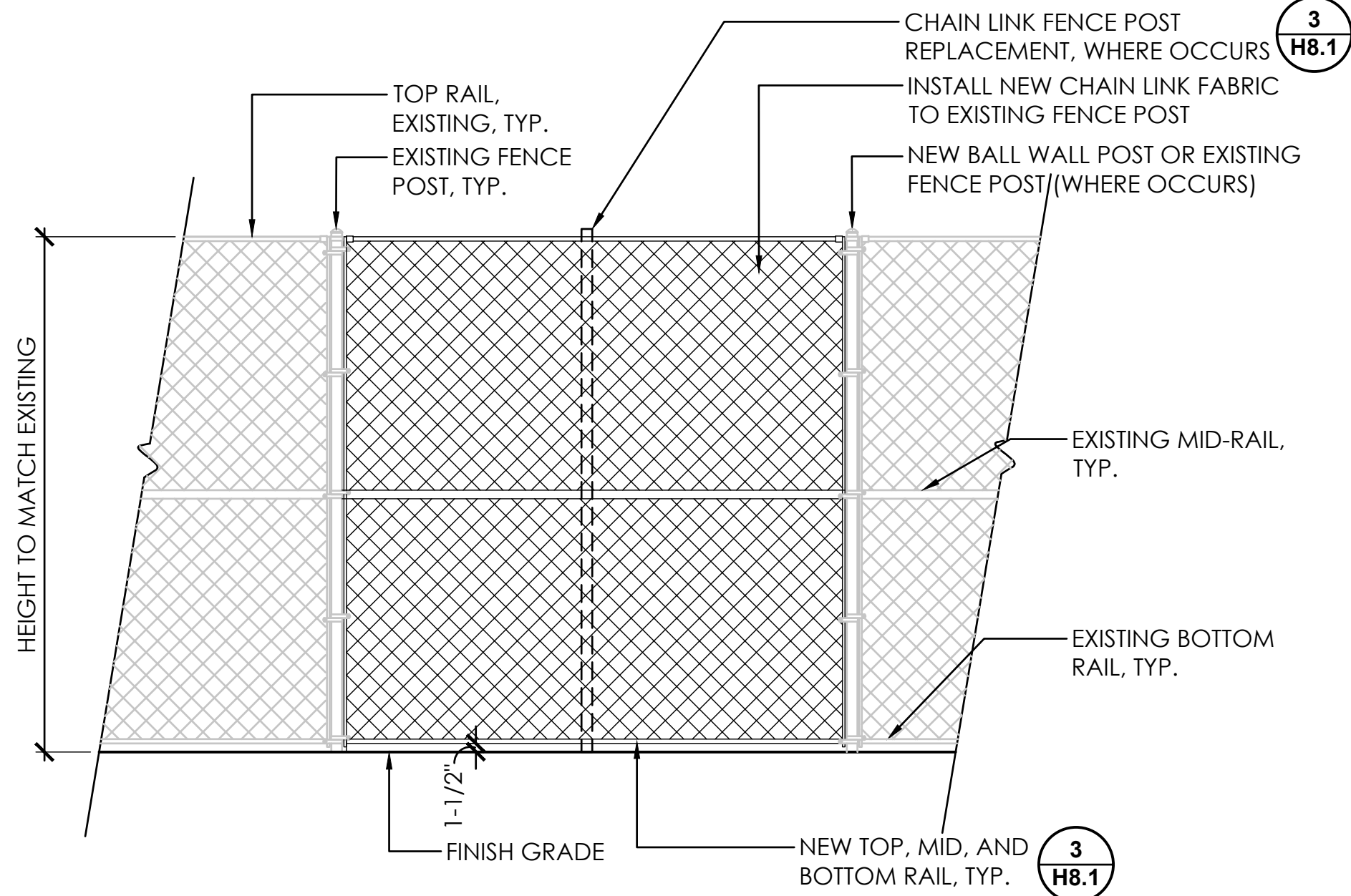
6
H8.1 COURT BAND, TYPE 1 AND 2
1 1/2" = 1'-0" PROP-PP-P2911-70

NO.	DATE	REVISION	BY

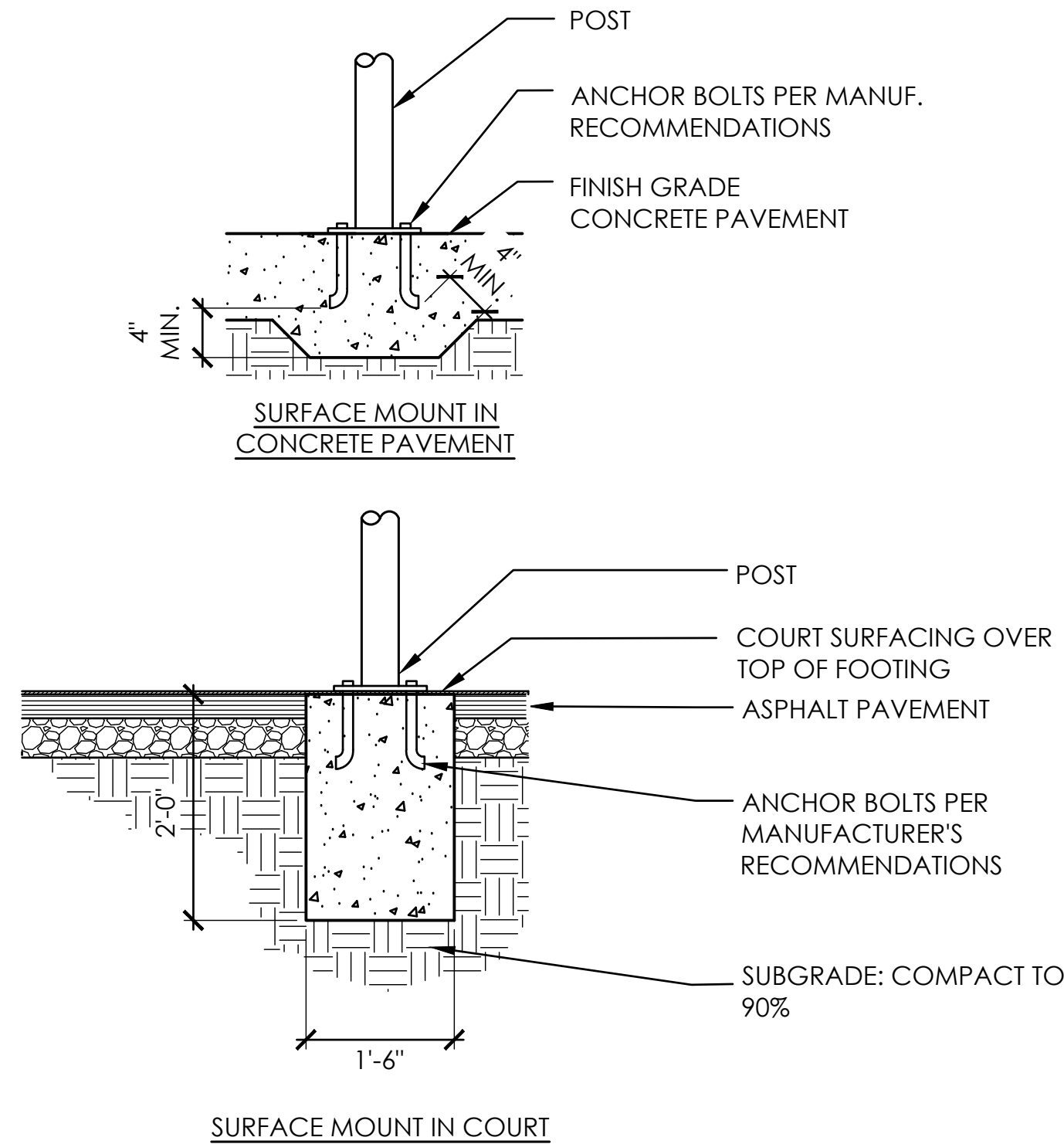
NOTE: THE MAXIMUM FORCE REQUIRED TO PUSH OR PULL OPEN THE GATE SHALL NOT EXCEED 5 POUNDS PER CBC 11B-404.2.9.



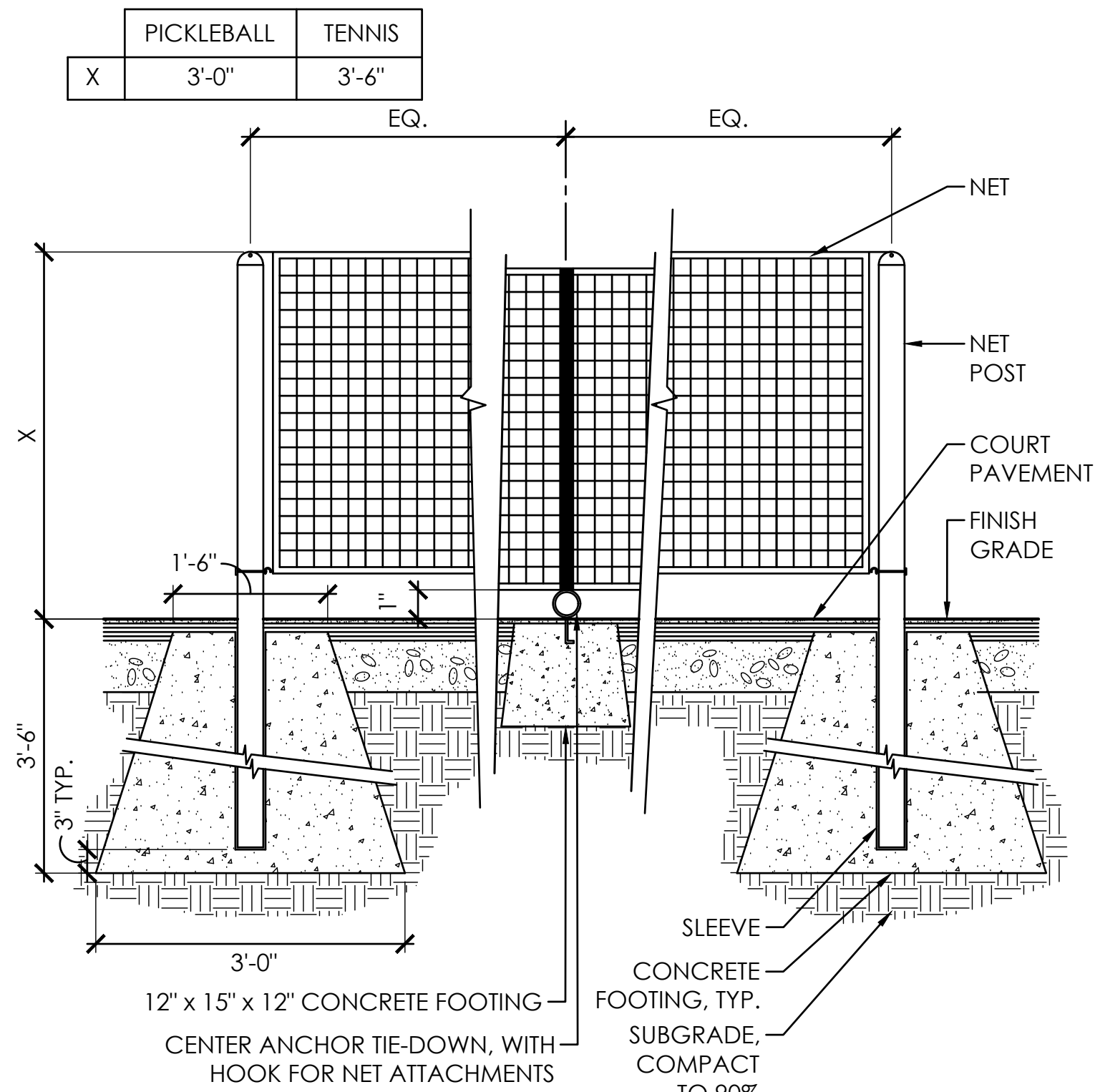
1 CHAIN LINK SINGLE GATE MODIFICATION
1/2" = 1'-0" PROP-PP-P2911-72



2 CHAIN LINK FENCE REPAIR
3/8" = 1'-0" PROP-PP-P2911-73

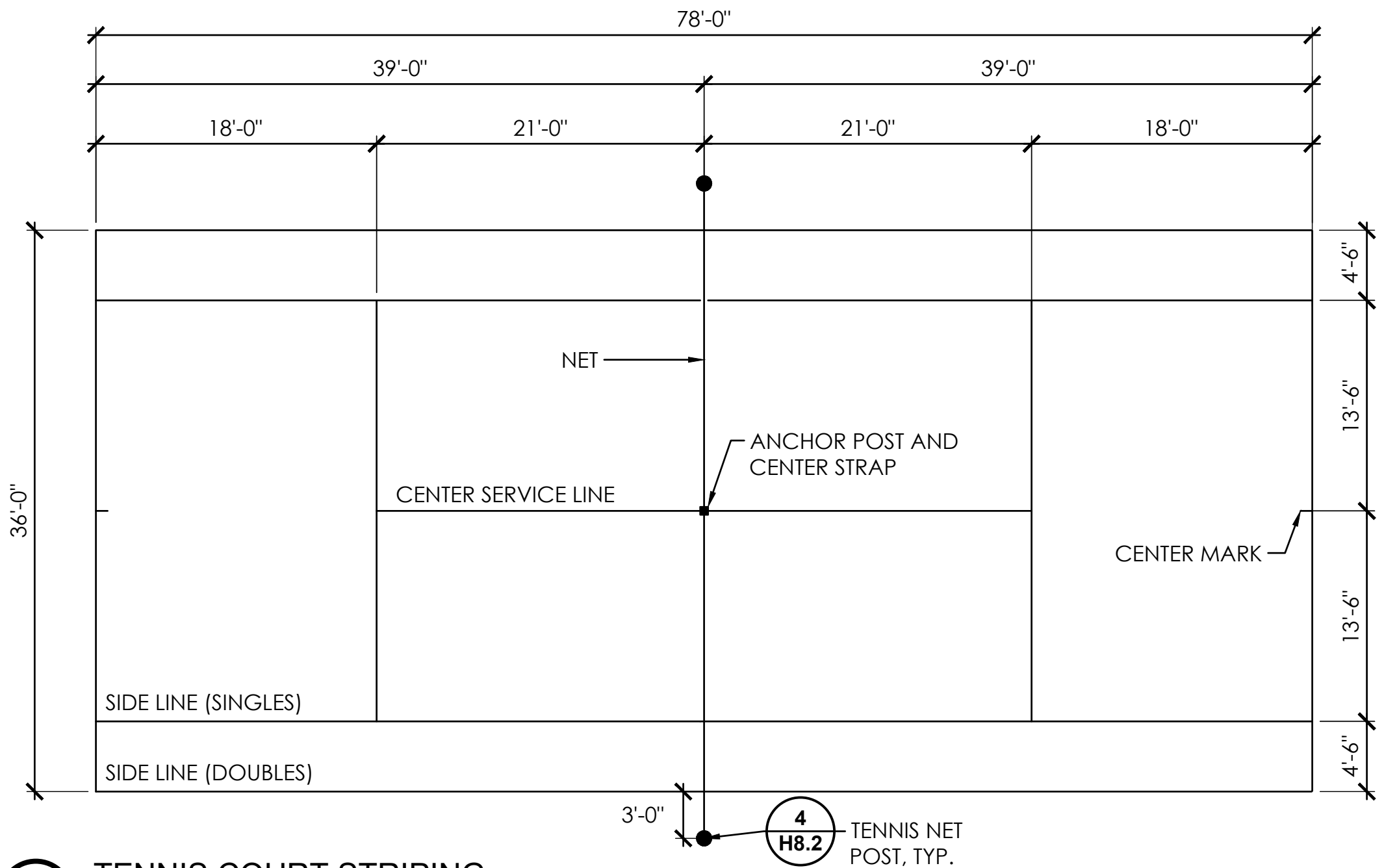


3 SITE FURNISHING FOOTING
1" = 1'-0" PROP-PP-P2911-74



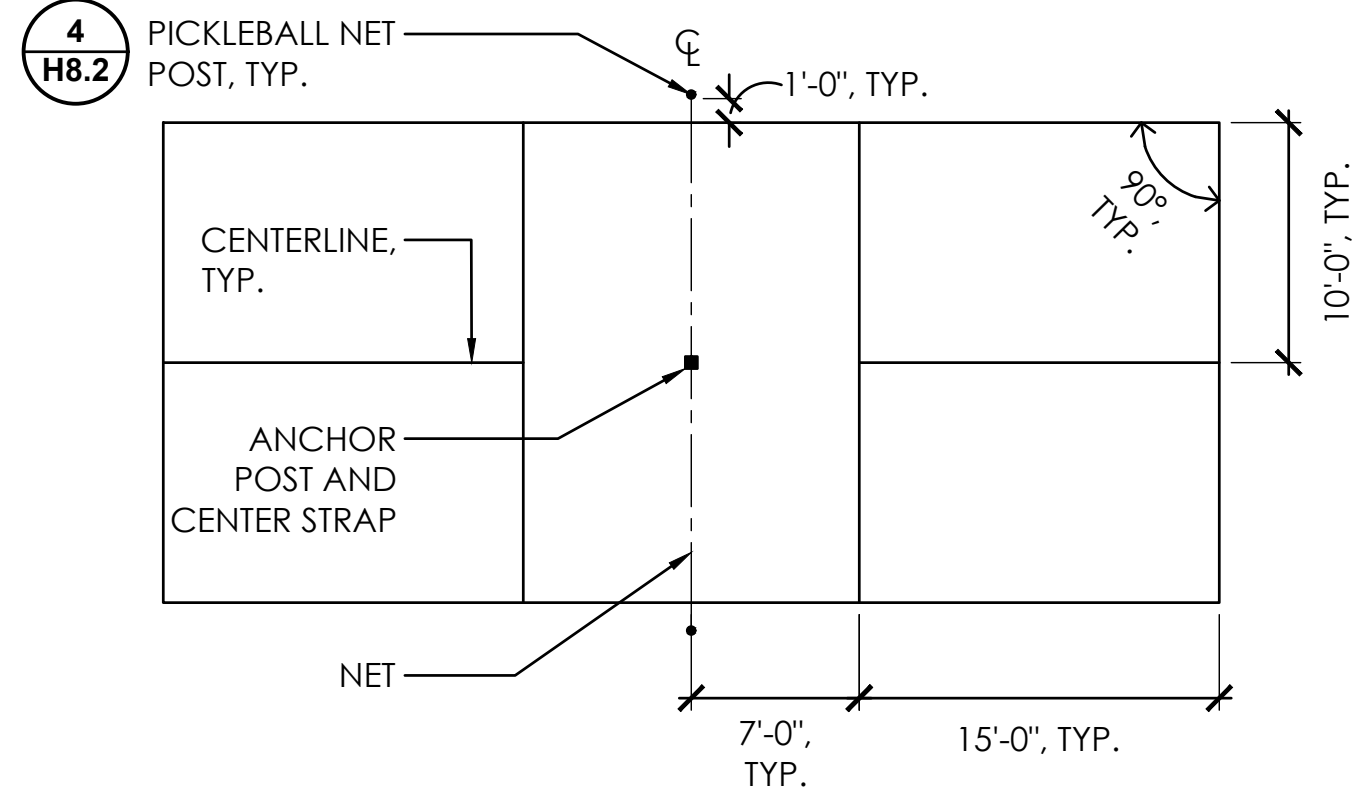
4 NET, POST, AND CENTER TIE-DOWN
3/4" = 1'-0" PROP-PP-P2911-75

NOTES:
1. ALL STRIPING IS 2" WIDE, COLOR WHITE.
2. DIMENSIONS ARE TO THE OUTER EDGE OF STRIPING FOR COURT PERIMETER AND TO THE CENTERLINE OF STRIPING WITHIN THE COURT INTERIOR.

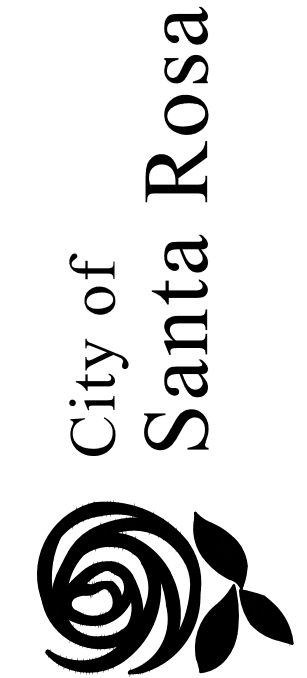


5 TENNIS COURT STRIPING
1/8" = 1'-0" PROP-PP-P2911-77

NOTES:
1. ALL STRIPING IS 2" WIDE, COLOR WHITE.
2. DIMENSIONS ARE TO THE OUTER EDGE OF STRIPING FOR COURT PERIMETER AND TO THE CENTERLINE OF STRIPING WITHIN THE COURT INTERIOR.



6 PICKLEBALL COURT STRIPING
1/8" = 1'-0" PROP-PP-P2911-76



NO.	DATE	REVISION	BY

CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION
CONSTRUCTION DETAILS

CHK BY:	NR
DATE:	6/20/25
DWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET	12 OF 16
FILE NO.	2024-0014

H8.2

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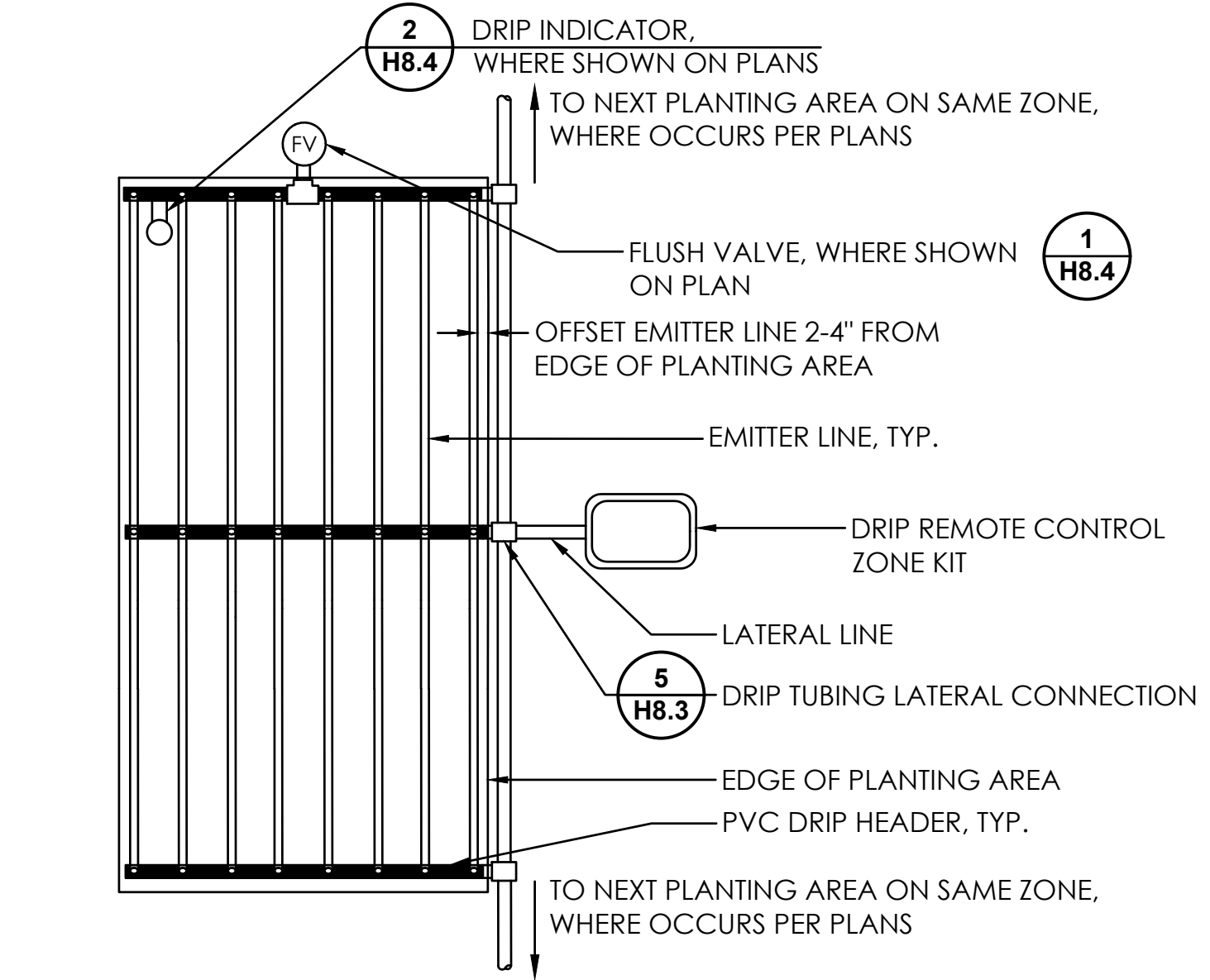
NO.	DATE	REVISION	BY

CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION
CONSTRUCTION DETAILS

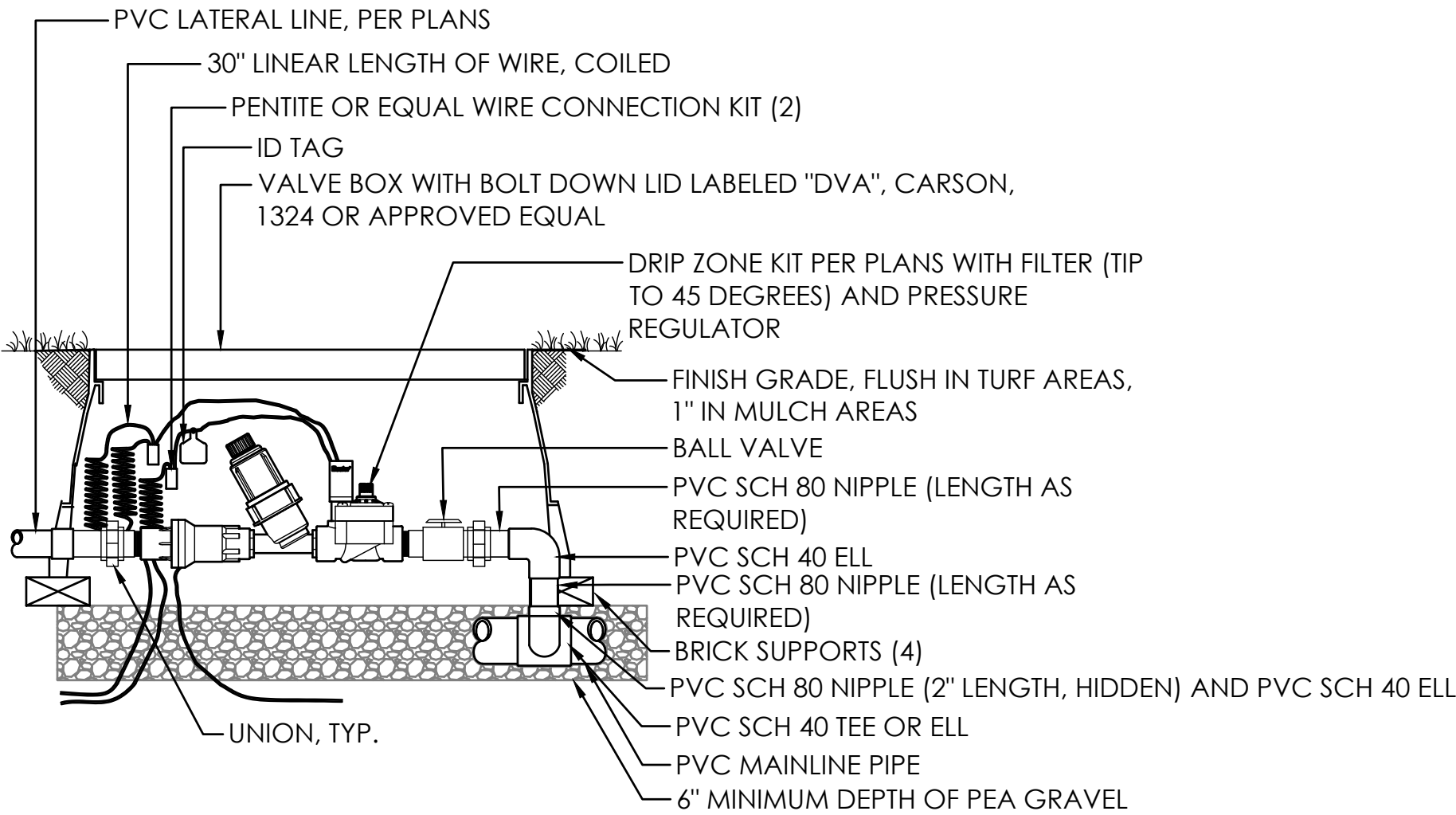
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DATE:	6/20/25
DWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET	13 OF 16
FILE NO.	2024-0014

H8.3

- NOTES:
1. STAKE EMITTER LINE EVERY 4 FEET.
 2. LATERAL LINE, FLUSH VALVE AND DRIP REMOTE CONTROL ZONE KIT SHOWN OUTSIDE OF PLANTING AREA FOR GRAPHIC PURPOSES ONLY. LOCATE WITHIN PLANTING AREA WHERE POSSIBLE.

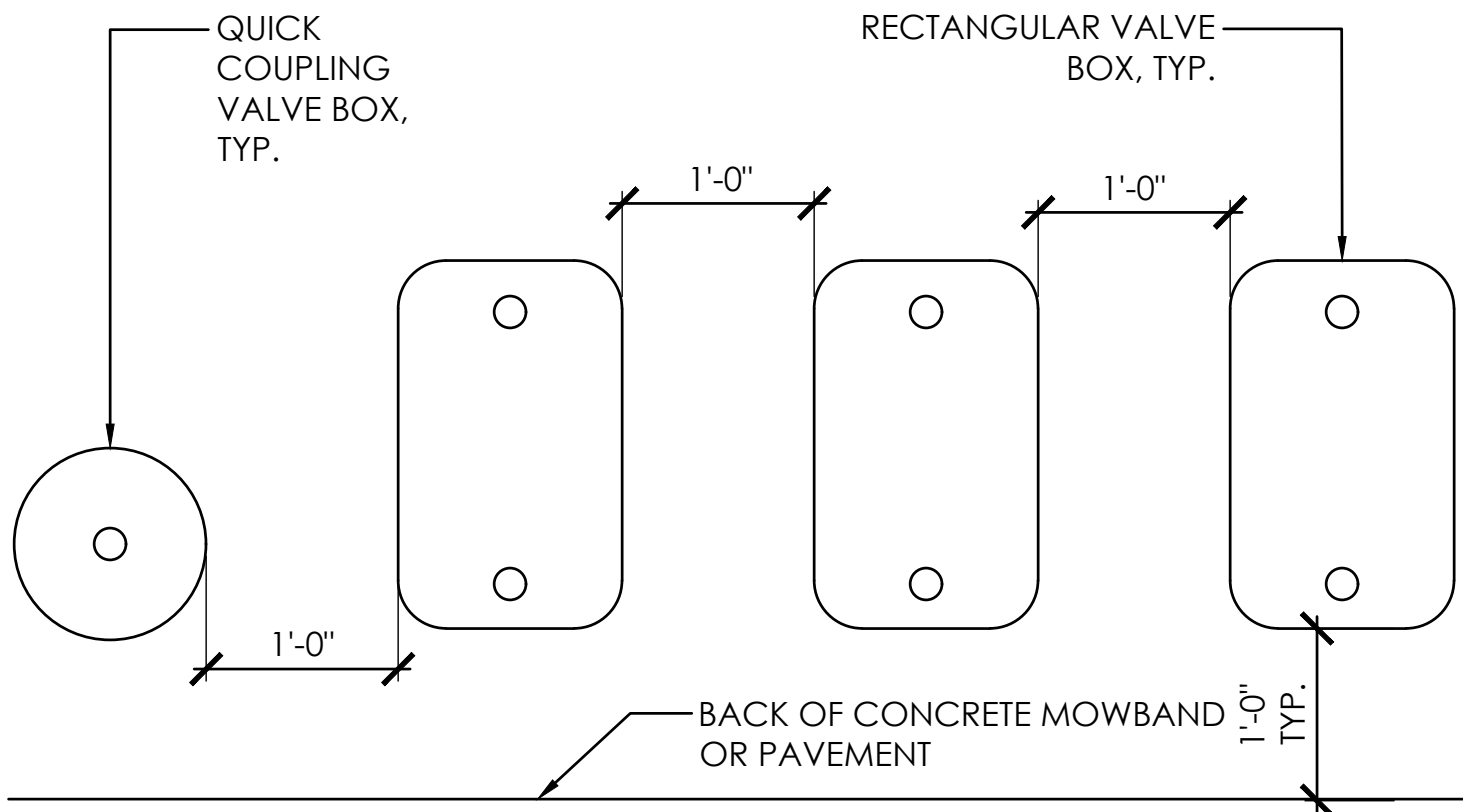


1
H8.3
1" = 1"
PROP-PP-P2911-82



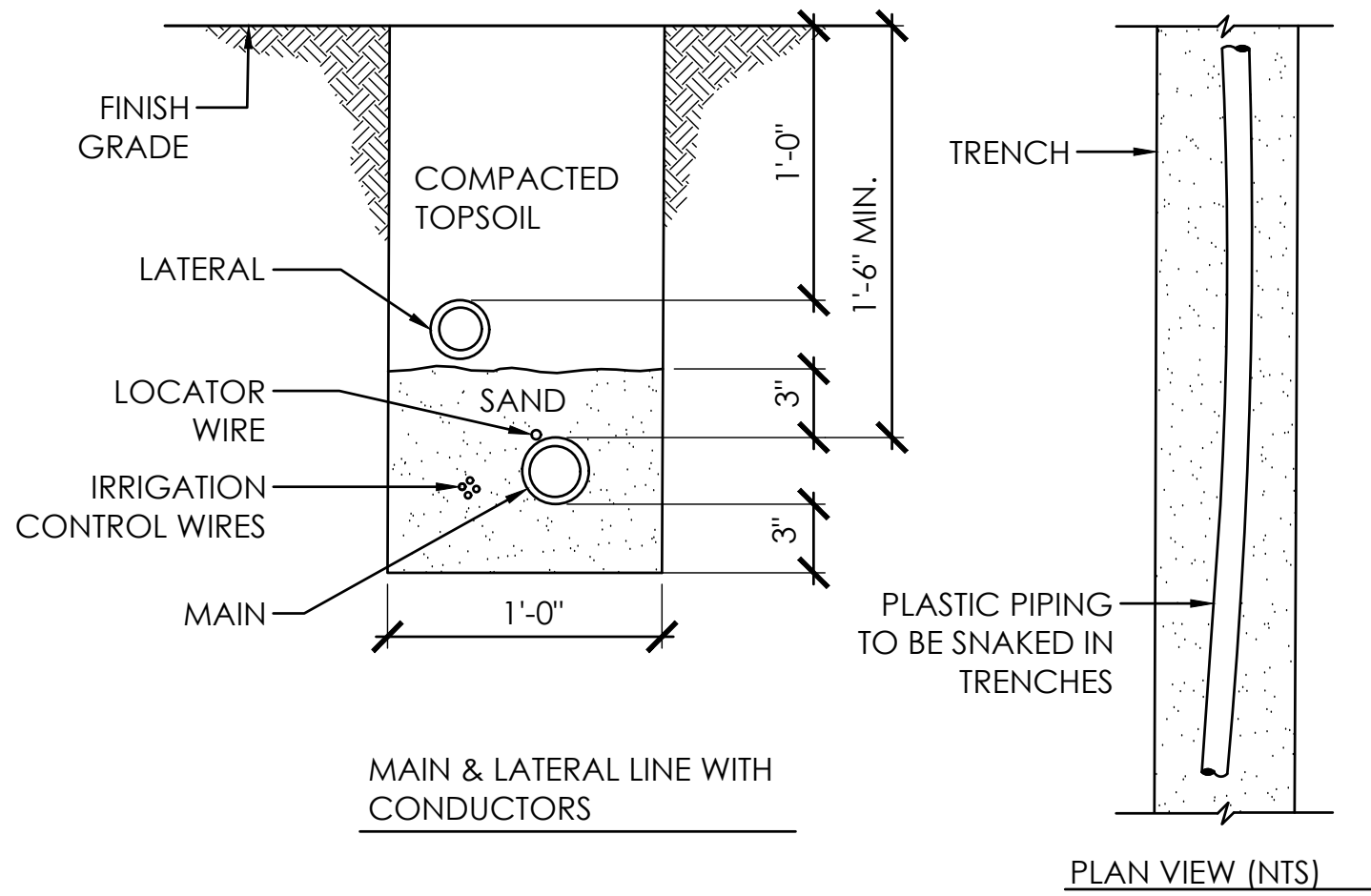
2
H8.3
1 1/2" = 1'-0"
PROP-PP-P2911-80

- NOTES:
1. CENTER VALVE BOX OVER REMOTE CONTROL VALVE TO FACILITATE SERVICING VALVE.
 2. SET RCV AND VALVE BOX ASSEMBLY IN GROUND COVER/SHRUB AREAS.
 3. SET BOXES PARALLEL TO EACH OTHER AND PERPENDICULAR TO EDGE OF ADJACENT PAVEMENT
 4. AVOID HEAVILY COMPACTING SOIL AROUND VALVE BOXES TO PREVENT COLLAPSE AND DEFORMATION OF VALVE BOXES.

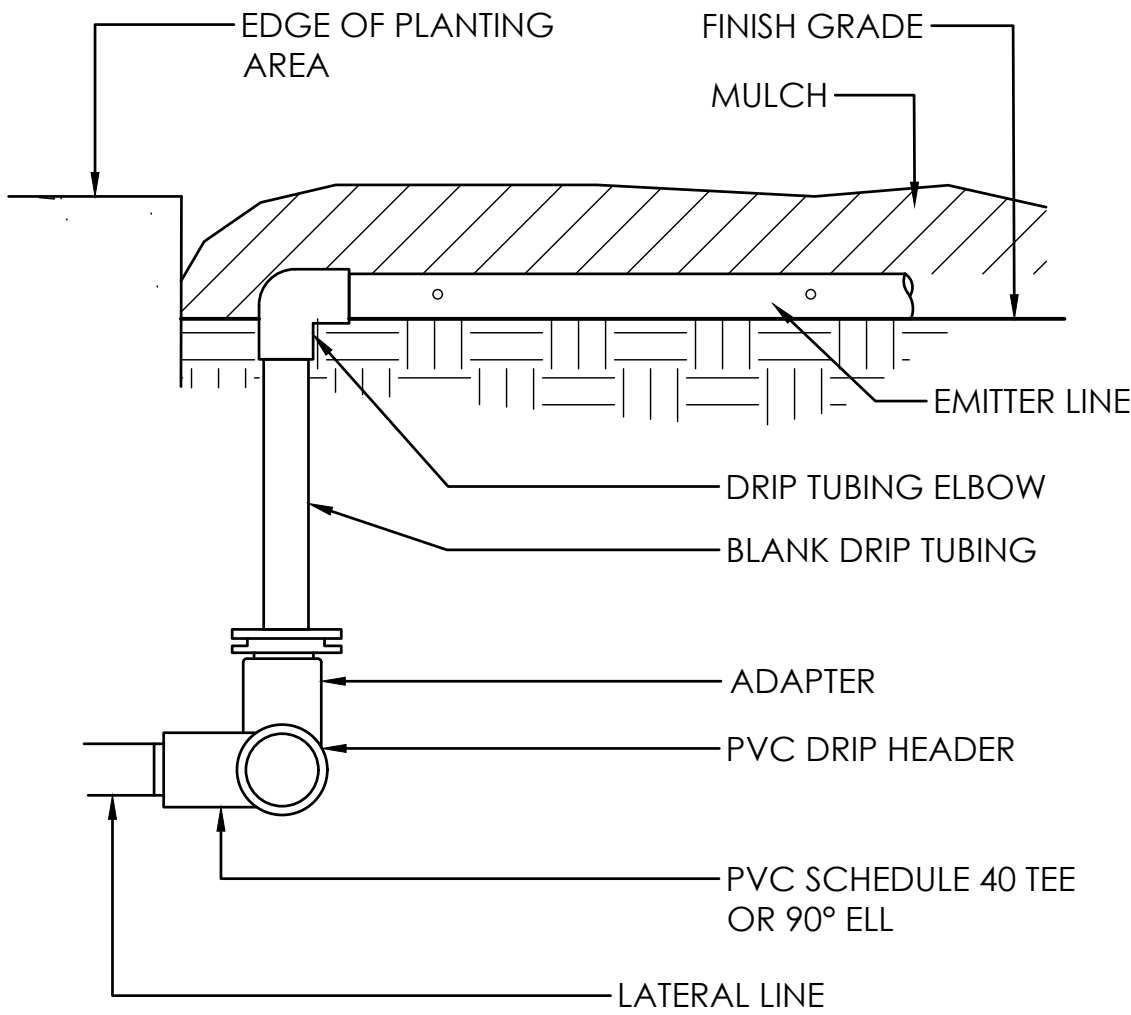


3
H8.3
1" = 1'-0"
PROP-PP-P2911-78

NOTE: TAPE AND BUNDLE WIRING AT 10'-0" INTERVALS.

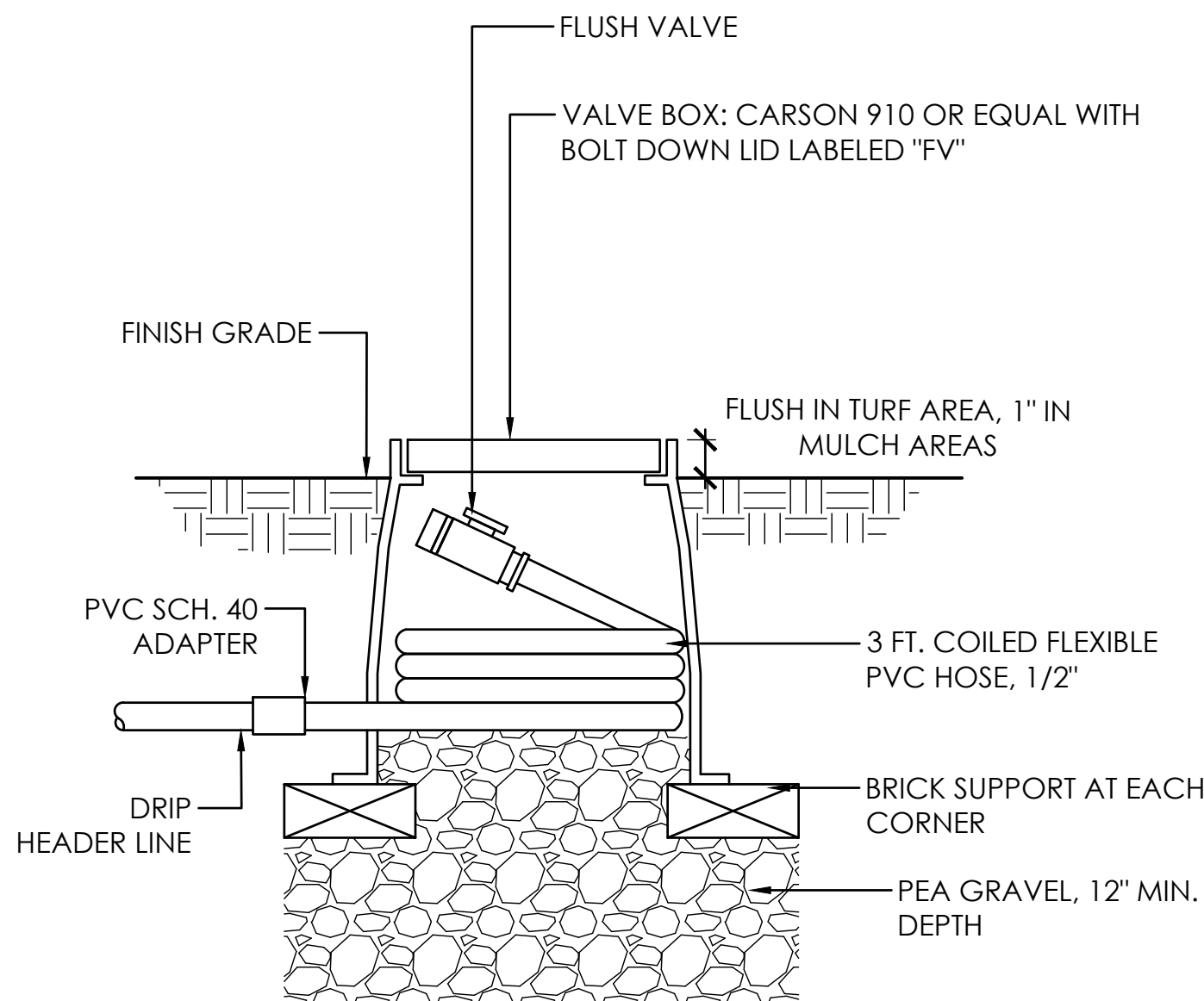


4
H8.3
1 1/2" = 1'-0"
PROP-PP-P2911-79

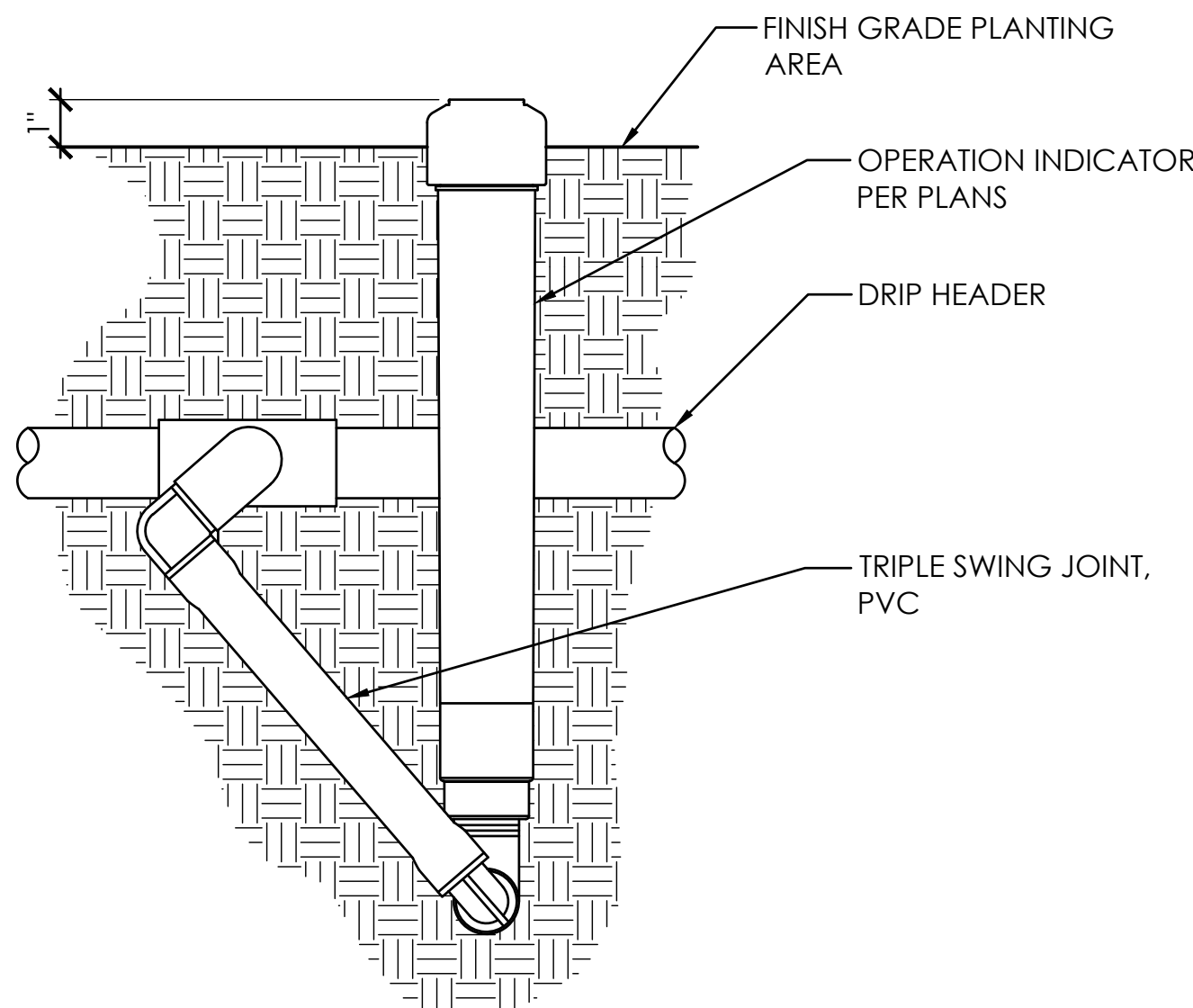


5
H8.3
1 1/2" = 1'-0"
PROP-PP-P2911-81

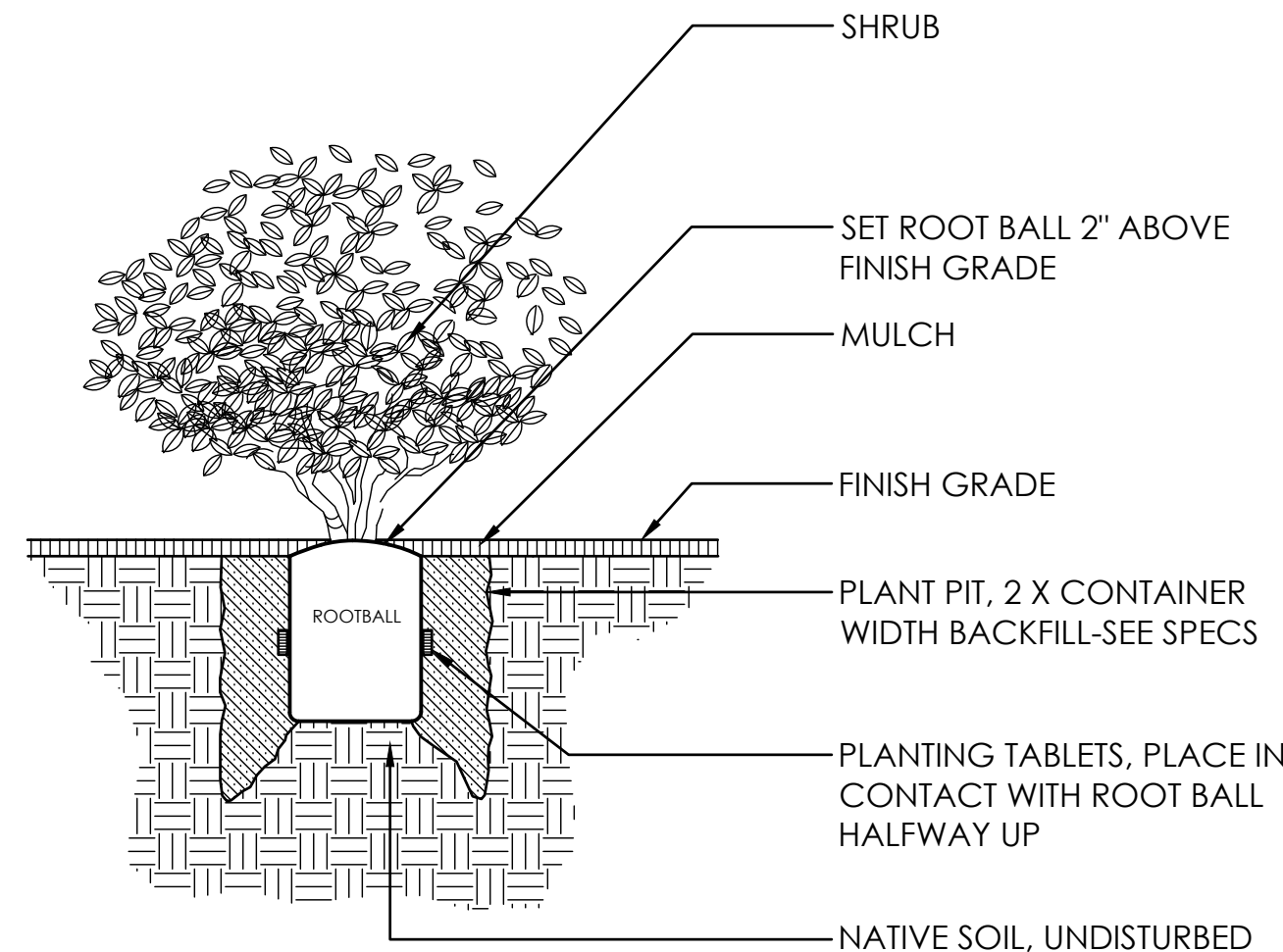
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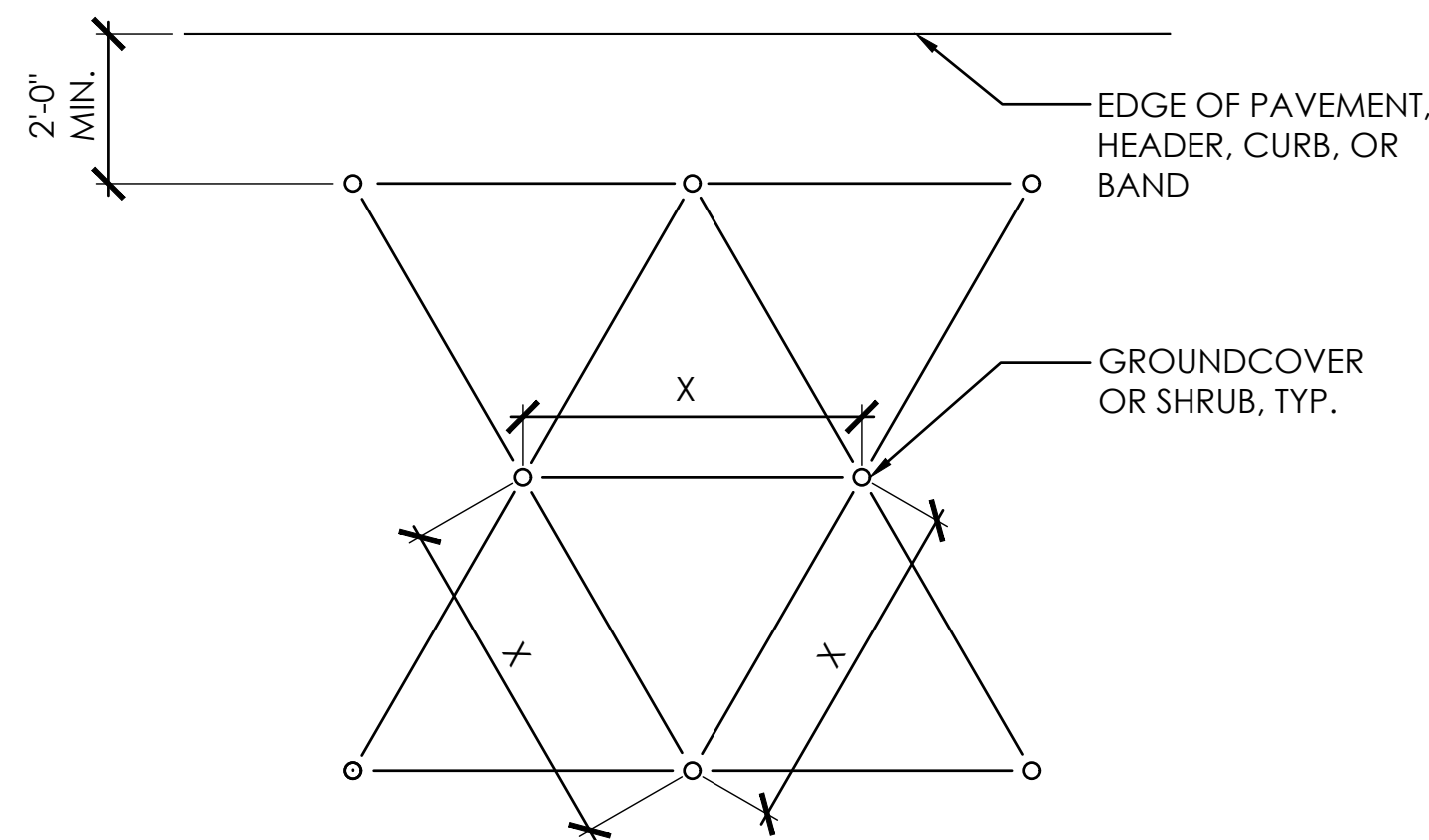
1
H8.4 **DRIP FLUSH VALVE**
1 1/2" = 1'-0" PROP-PP-P2911-84



2
H8.4 **DRIP INDICATOR**
1" = 1" PROP-PP-P2911-83

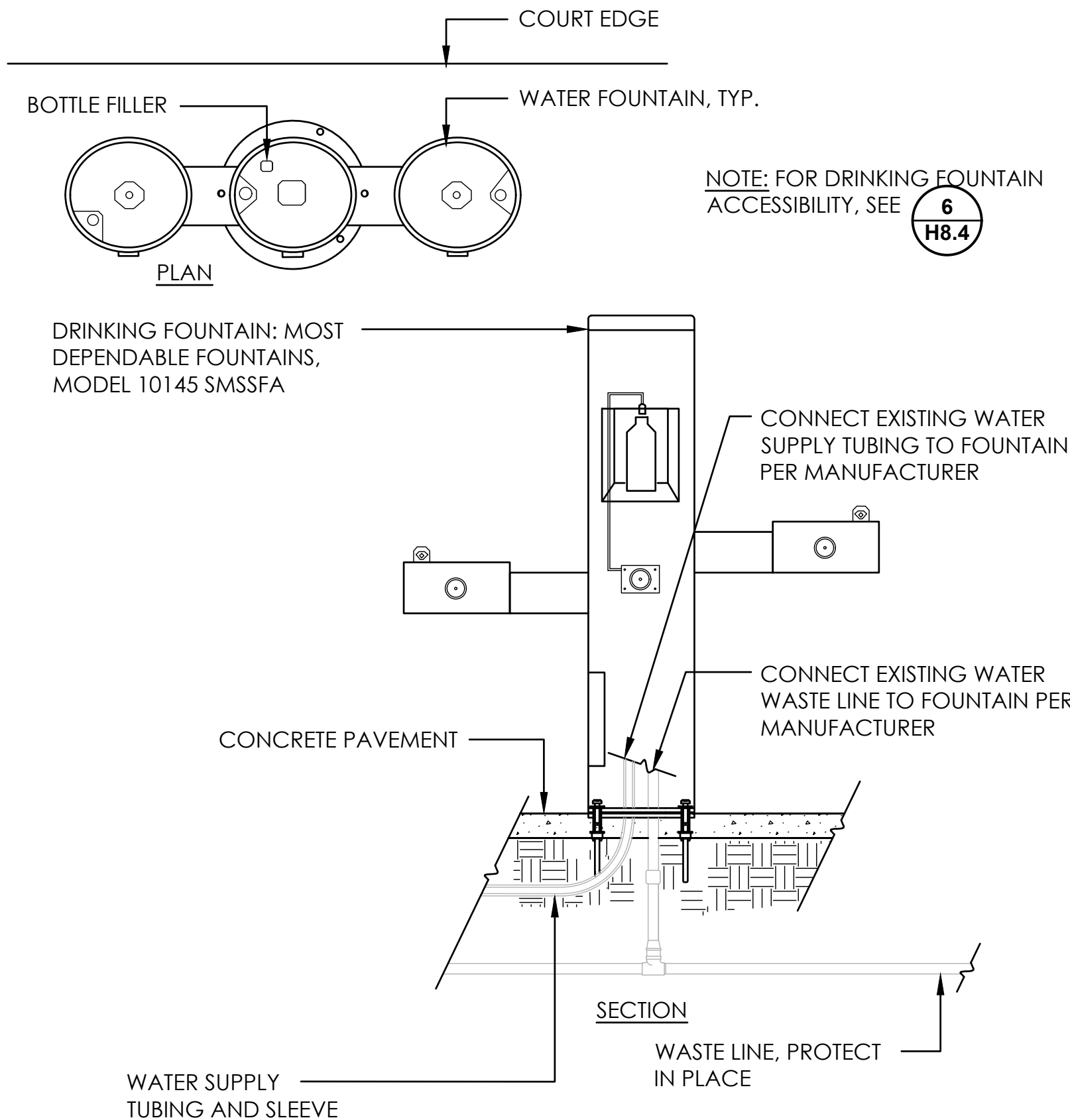


3
H8.4 **SHRUB PLANTING**
1/4" = 1'-0" PROP-PP-P2911-86

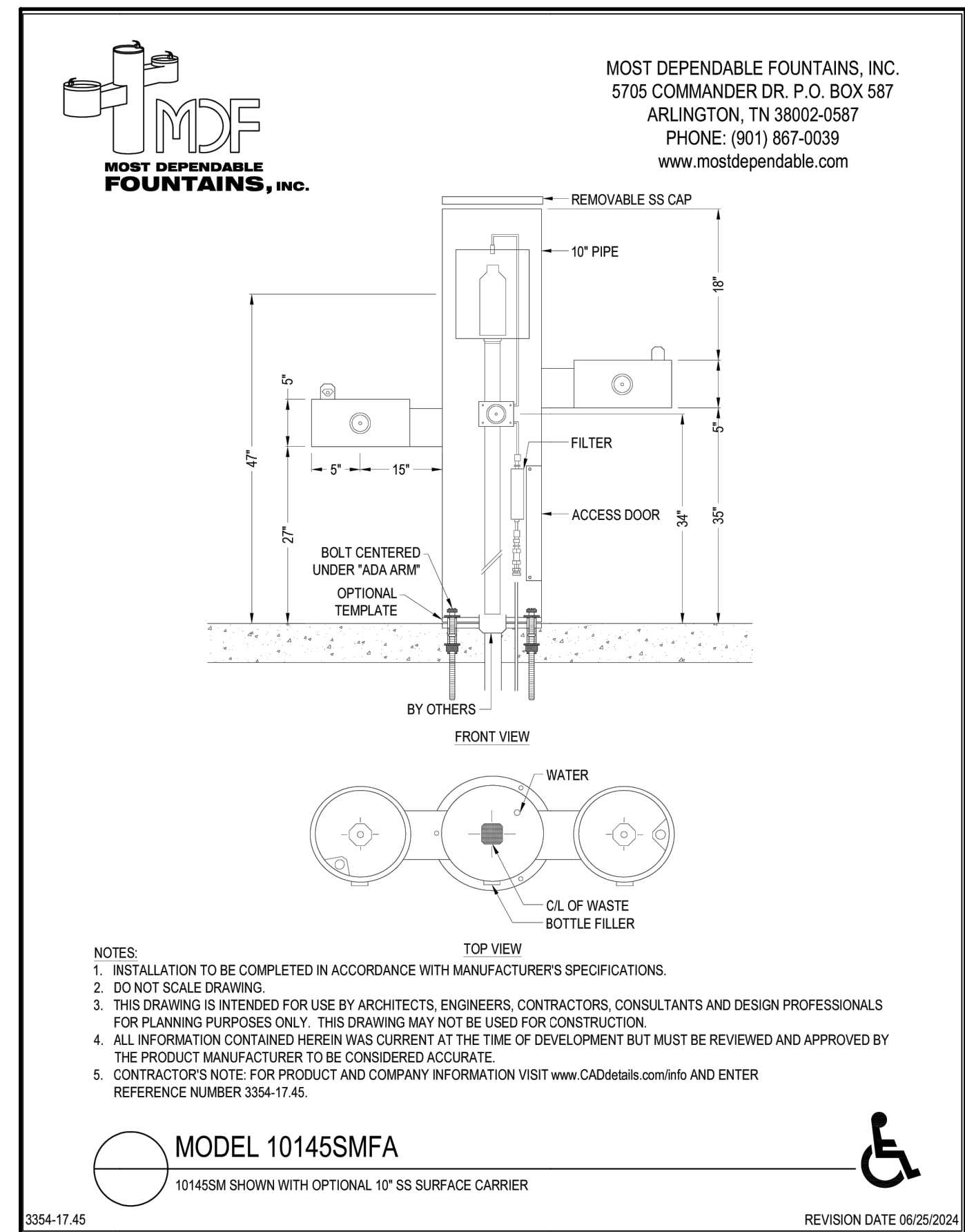


NOTE:
FOR PLANT SPACING 'X' SEE PLANTING PLAN

4
H8.4 **SHRUB / GROUND COVER SPACING**
1/4" = 1'-0" PROP-PP-P2911-87



5
H8.4 **DRINKING FOUNTAIN**
1" = 1" PROP-PP-P2911-96



6
H8.4 **DRINKING FOUNTAIN ACCESSIBILITY REFERENCE**
1" = 1" PROP-PP-P2911-97

NO.	DATE	REVISION	BY

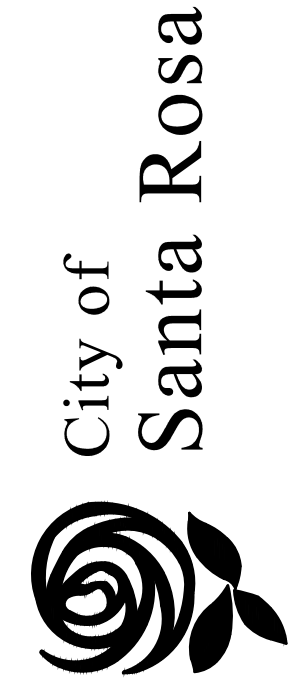
CITY OF SANTA ROSA
HOWARTH COURTS RENOVATION

CONSTRUCTION DETAILS

CHK BY:	NR
DATE:	6/20/25
DWN BY:	IC/DC
SCALE:	AS SHOWN
CONTRACT NO.	C00714
SHEET	14 OF 16
FILE NO.	2024-0014



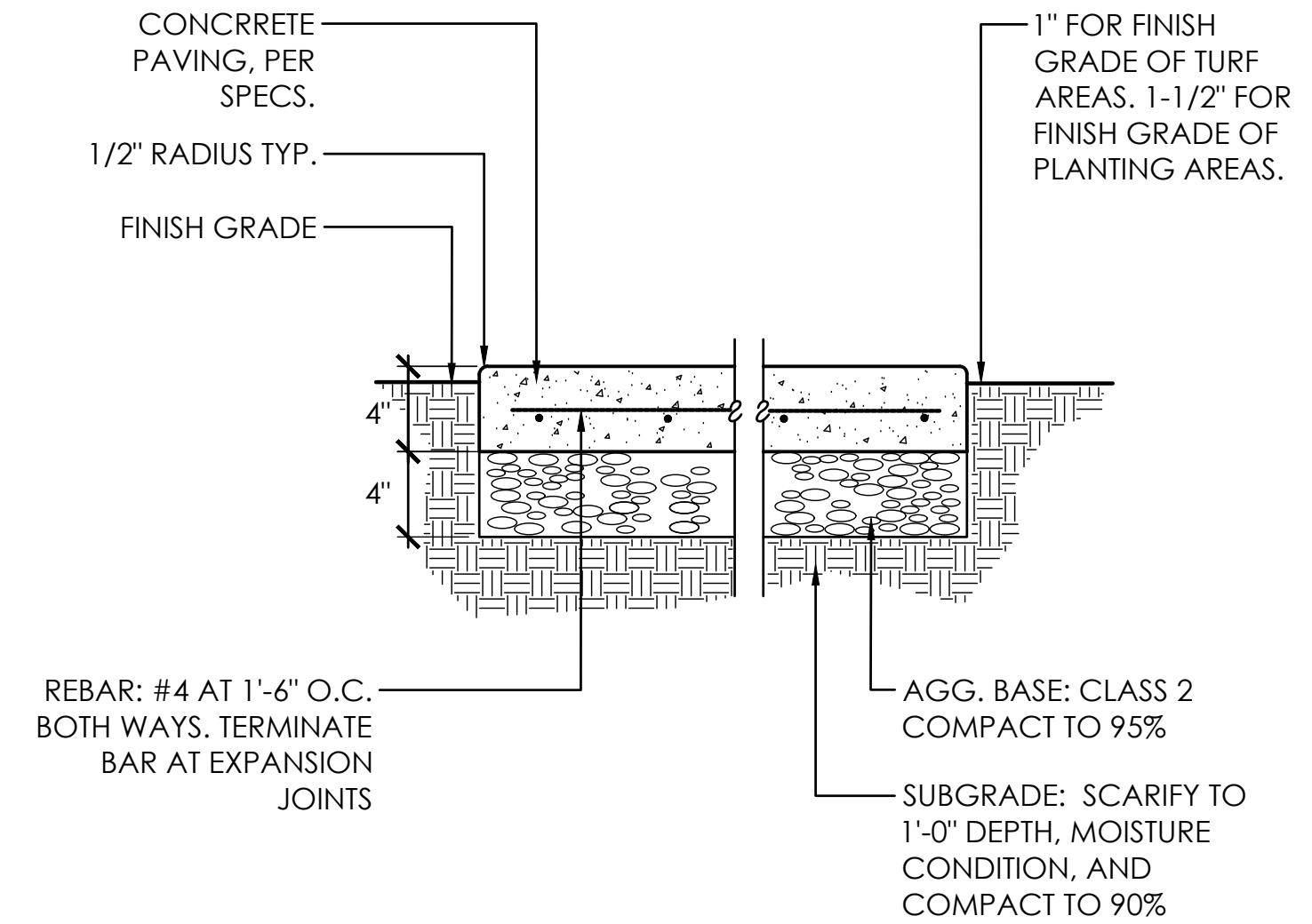
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CALA Project No. 24023



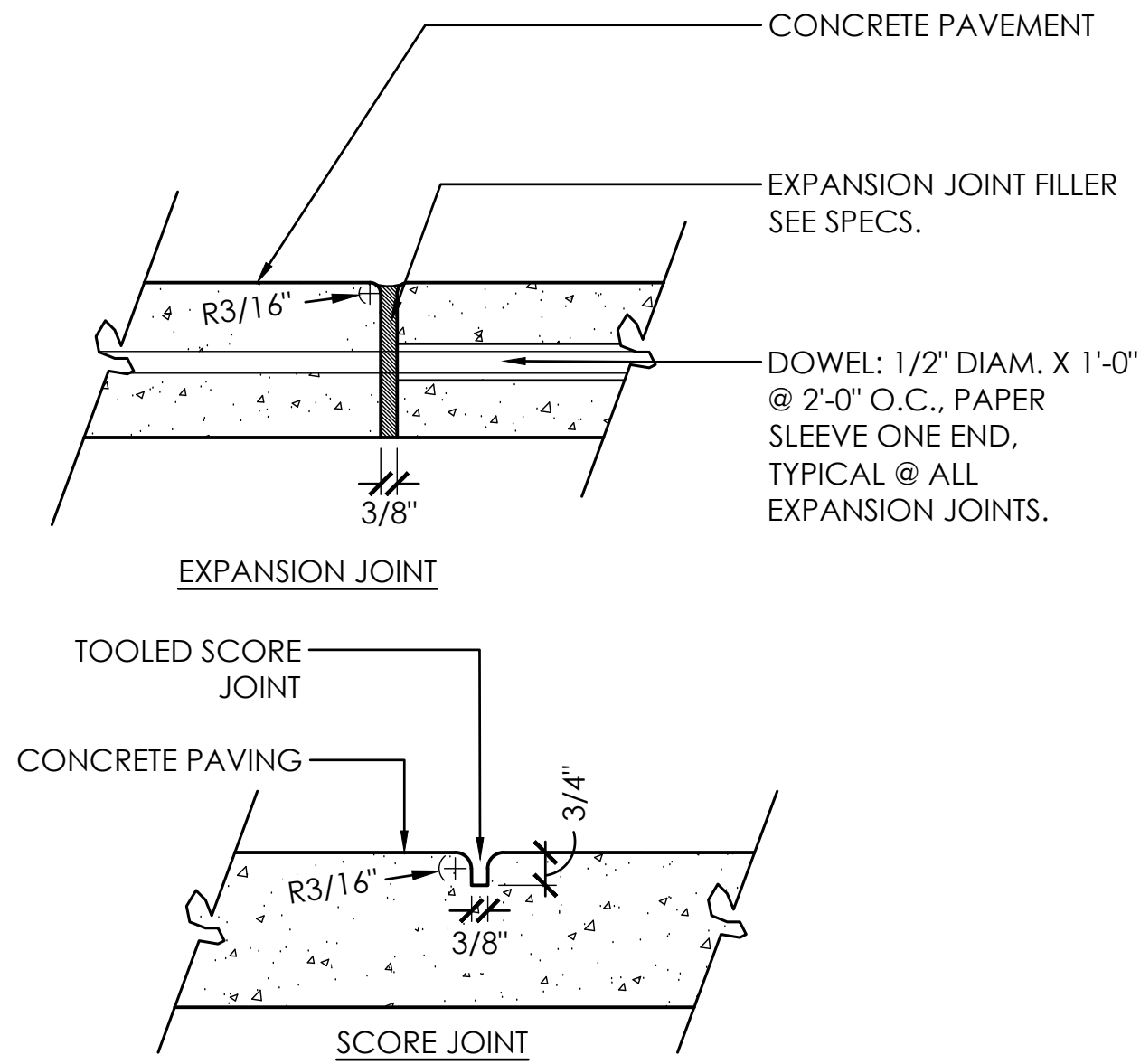
NO.	DATE	REVISION	BY

CITY OF SANTA ROSA HOWARTH COURTS RENOVATION	CONSTRUCTION DETAILS
CHK BY: NR	DATE: 6/20/25
DWN BY: IC/DC	SCALE: AS SHOWN
CONTRACT NO. C00714	SHEET 15 OF 16
FILE NO. 2024-0014	

H8.5

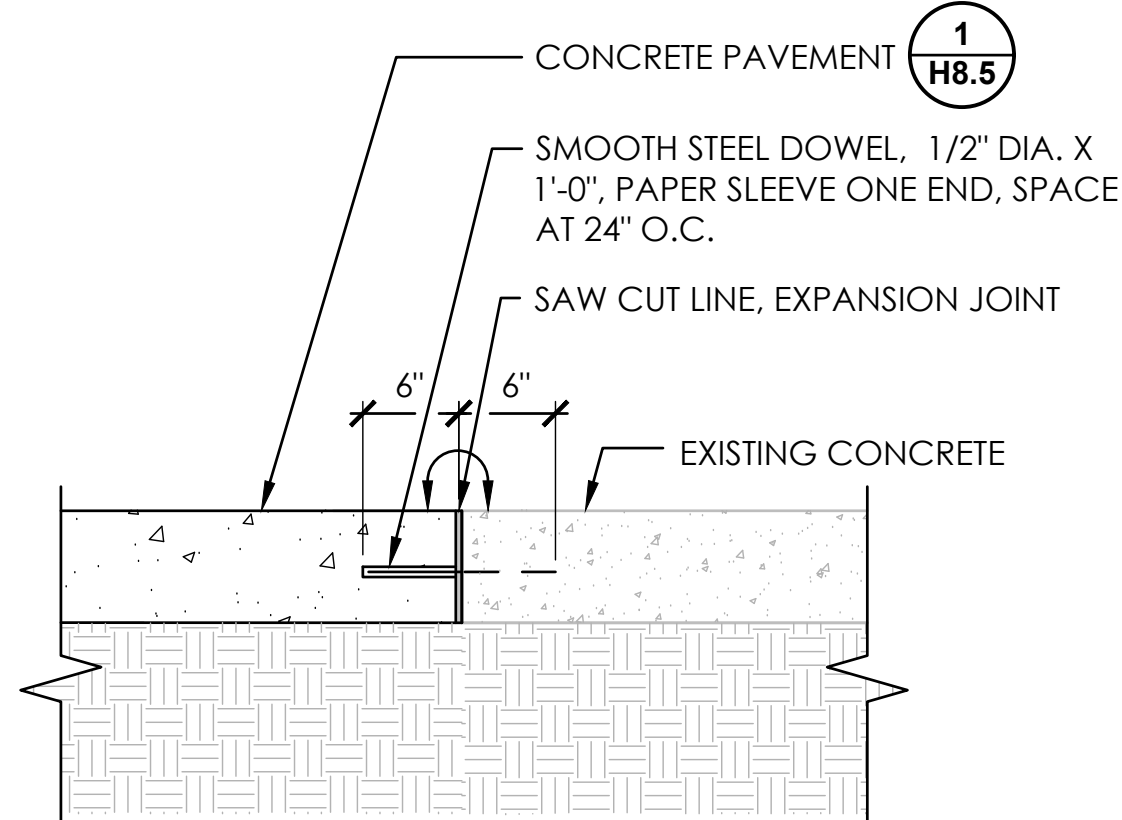


1
H8.5
1" = 1'-0"
PROP-PP-P2911-49



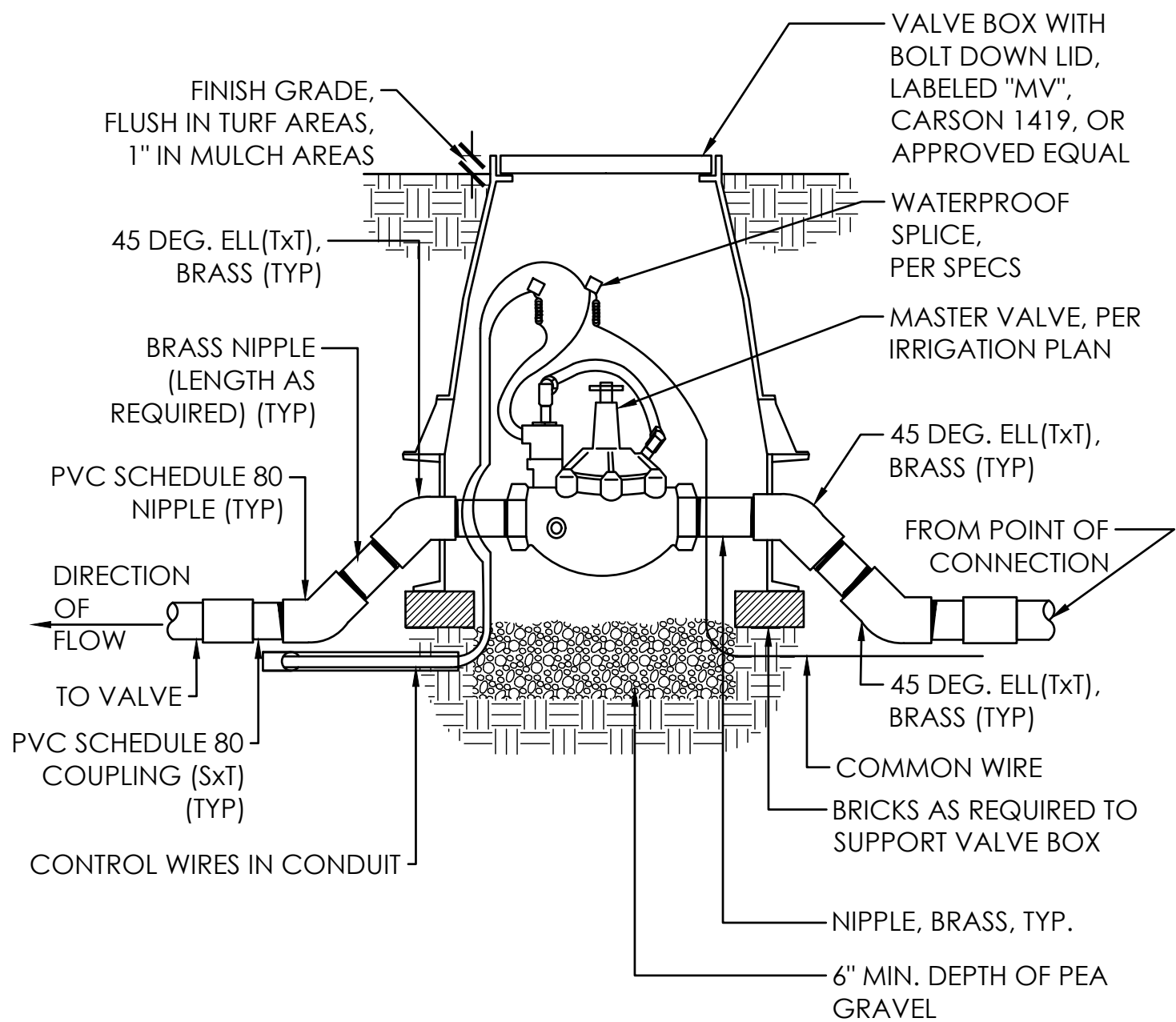
2
H8.5
3" = 1'-0"
PROP-PP-P2911-50

NOTE: INSTALL FLOW SENSOR SO THE TOP IS TILTED AT AN ANGLE PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.

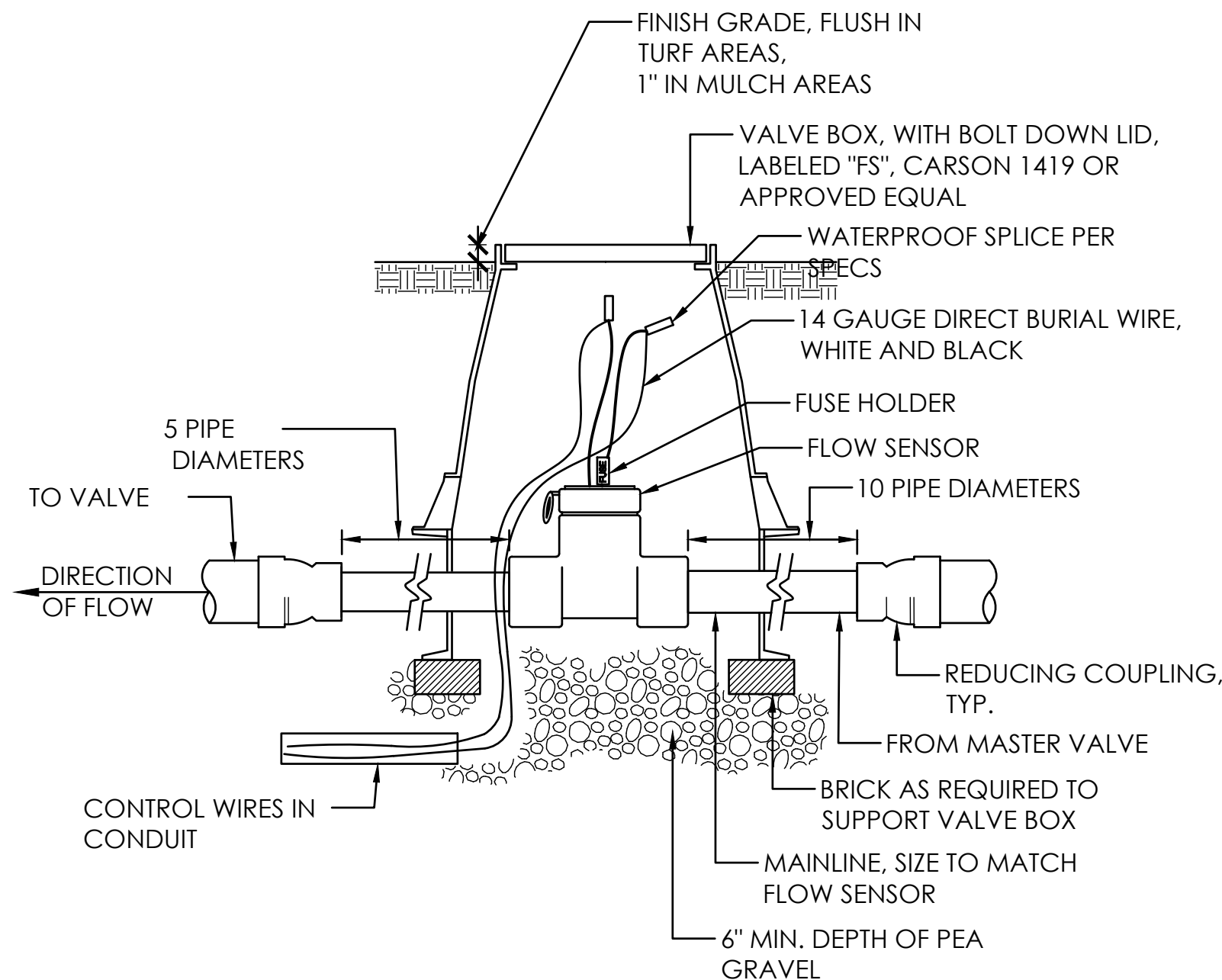


NOTE: DRILL & EPOXY DOWEL INTO EXISTING P.C.C. & GREASE OTHER END TO SET INTO NEW CONCRETE.

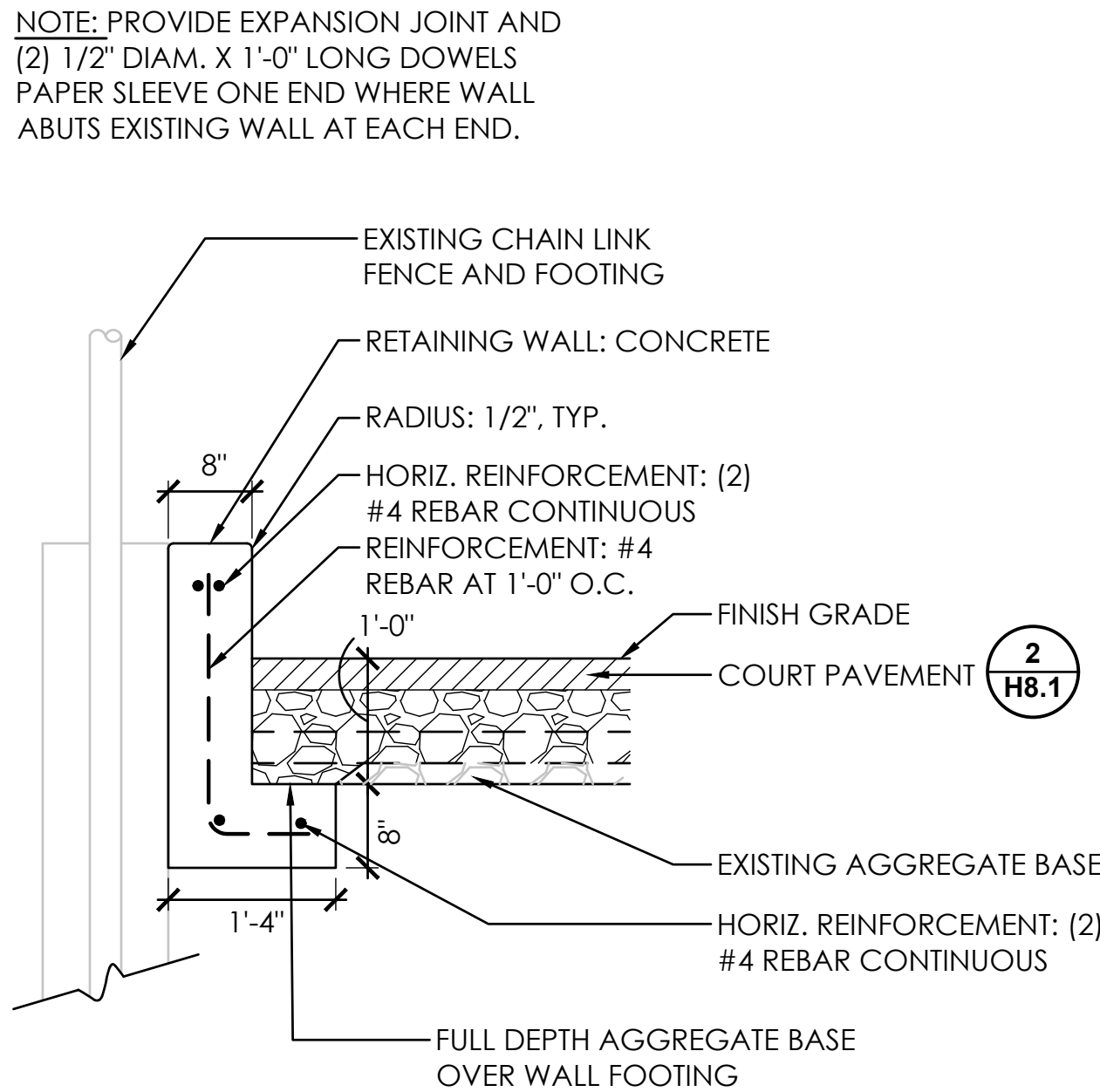
3
H8.5
1" = 1'-0"
PROP-PP-P2911-98



4
H8.5
1/4" = 1'-0"
PROP-PP-P2911-47



5
H8.5
1/4" = 1'-0"
PROP-PP-P2911-48



6
H8.5
3/4" = 1'-0"
PROP-PP-P2911-99

NO.	DATE	REVISION	BY

STRUCTURAL SHEET INDEX:

S0.1 STRUCTURAL TYPICAL NOTES & DETAILS

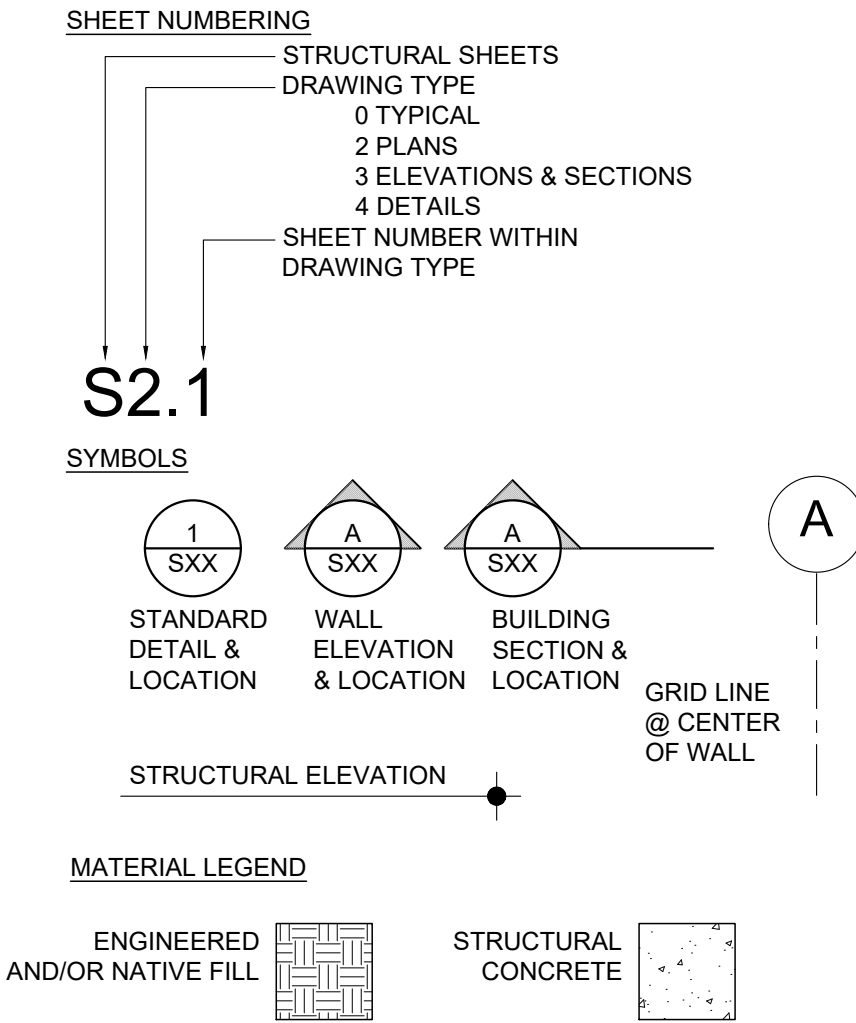
ABBREVIATIONS:

@	AT	LS	LAG SCREW
AB	ANCHOR BOLT		
approx	APPROXIMATE	MAX	MAXIMUM
Arch	ARCHITECT/URAL	MFGR	MANUFACTURER
BC	BOTTOM CHORD	MIN	MINIMUM
BLK	BLOCK OR BLOCKING	(N)	NEW
BO	BOTTOM OF	#	NUMBER
CBC	CALIFORNIA BUILDING CODE	NTS	NOT TO SCALE
oc	ON CENTER	OD	OUTSIDE DIAMETER
CIP	CAST IN PLACE	OH	OPPOSITE HAND
CJ	CONSTRUCTION JOINT	OV	OVER
CL	CENTER LINE	PL	PLATE
CMU	CONCRETE MASONRY UNIT	PT	PRESSURE TREATED
CONC	CONCRETE	REIN	REINFORCEMENT
CONT	CONTINUOUS	SIM	SIMILAR
DF	DOUGLAS FIR	SP	STRUCTURAL PANEL
Ø	DIAMETER	SW	SHEAR WALL
DL	DEAD LOAD	T&B	TOP AND BOTTOM
DT	DRAG TRUSS	T&G	TONGUE AND GROOVE
(E)	EXISTING	thru	THROUGH
EN	EDGE NAIL	TN	TOE NAIL
EOR	ENGINEER OF RECORD	TOS	TOP OF STEEL
FDN	FOUNDATION	TYP	TYPICAL
FF	FINISH FLOOR		
FO	FACE OF	W/O	WITHOUT
FOOT	FOOT/FEET	VIF	VERIFY IN FIELD
FTG	FOOTING	W/O	WITHOUT
FRMG	FRAMING	WWF	WELDED WIRE FABRIC
GLB	GLUE LAMINATED BEAM		
HD	HOLD DOWN		
HDG	HOT-DIPPED GALVANIZED		
HDR	HEADER		

GENERAL NOTES:

- ALL CONSTRUCTION SHALL CONFORM TO 2022 CBC W/AMENDMENTS AND ALL OTHER APPLICABLE CODES AND REGULATIONS.
- NOTES ON THIS SHEET ARE TYPICAL AND SHALL APPLY UNLESS OTHERWISE NOTED OR SHOWN. TYPICAL DETAILS SHALL APPLY FOR ALL LIKE CONDITIONS UNLESS OTHERWISE NOTED OR DETAILED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL DIMENSIONS, ELEVATIONS, EXISTING CONDITIONS, AND OTHER RELATED ITEMS. THE CONTRACTOR SHALL REVIEW THE CONTRACT DOCUMENTS PRIOR TO CONSTRUCTION AND SHALL NOTIFY THE ENGINEER OF RECORD IF ANY CONFLICTS ARE SHOWN OR NOTED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONFORM TO RELEVANT SECTIONS OF THE CALIFORNIA "CONSTRUCTION SAFETY ORDERS" AND ALL OSHA REQUIREMENTS. THE ENGINEER OF RECORD ACCEPTS NO RESPONSIBILITY FOR THE CONTRACTOR'S FAILURE TO COMPLY W/ THESE REQUIREMENTS.
- DESIGN AND CONSTRUCTION OF ALL TEMPORARY BRACING, SHORING, FORMING, ETC REQUIRED SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- OVERALL DIMENSIONS ARE SHOWN TO FACE OF STUD OR CONCRETE UNLESS NOTED OTHERWISE.

DRAWING STANDARDS:



DESIGN CRITERIA:

- PROJECT ADDRESS: HOWARTH MEMORIAL COMMUNITY PARK 630 SUMMERFIELD, SANTA ROSA
- BUILDING CODE 2022 CALIFORNIA BUILDING CODE
- LATERAL LOADS:
RISK CATEGORY I
WIND LOADS
BASIC WIND SPEED 86 MPH (LRFD), 66 MPH (ASD)
EXPOSURE C
SEISMIC LOADS
SITE CLASS D
SEISMIC DESIGN CATEGORY D
IMPORTANCE FACTOR 1.00
REDUNDANCY, RHO 1.00
R = 1.25
S_s = 2.539
S_i = 0.988
S_{DS} = 1.693
S_{D1} = NA
V = 1.625W(USD); 1.138W(ASD)

CONCRETE NOTES:

- ALL CONCRETE SHALL BE NORMAL WEIGHT PER ACI 301 AND HAVE PROPORTIONS OF CEMENT, COARSE AND FINE AGGREGATE, WATER AND ADMIXTURES TO PRODUCE THE PROPERTIES SPECIFIED FOR EACH CONCRETE MIX TYPE PER ACI 301 ON THE BASIS OF PREVIOUS FIELD EXPERIENCE AND SUPPORTED BY PREVIOUS TEST RECORDS.
- CONCRETE SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES. REFER TO PROJECT SPECIFICATIONS (WHERE APPLICABLE) FOR ADDITIONAL REQUIREMENTS.

CLASS	APPLICATION	STRENGTH f _c (psi)	MAX W/C Ratio
CLASS A	FOOTINGS	4500	0.45
TEST CONCRETE STRENGTH PER 2022 CBC CH. 17			

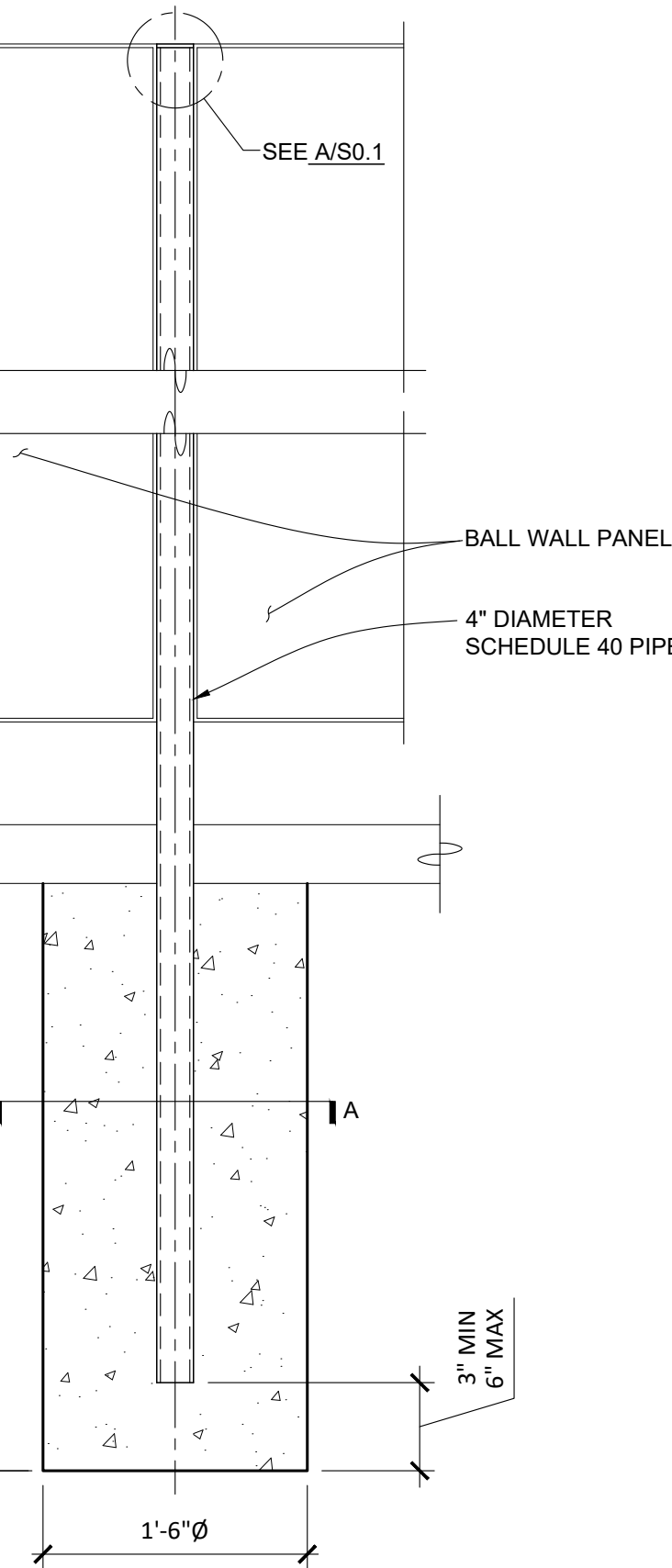
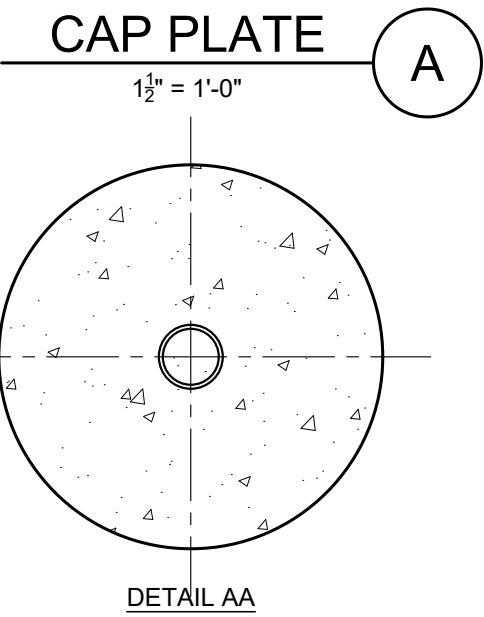
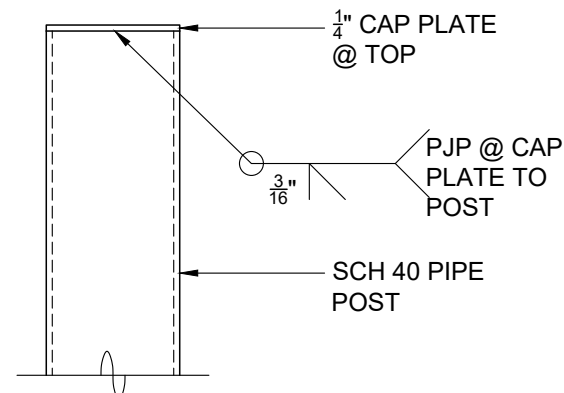
- THE APPROVED PROPORTIONS SHALL BE CAREFULLY MAINTAINED. NO DEVIATION FROM THE APPROVED PROPORTIONS SHALL BE MADE WITHOUT WRITTEN APPROVAL BY ENGINEER.
 - USE ADMIXTURES IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS. USE WATER-REDUCING ADMIXTURE THAT WILL NOT RESULT IN SEGREGATION, HONEYCOMBING, OR ROCK POCKETS.
 - ANY OF THE ABOVE MIXES CAN BE USED FLOWABLE (8" MAX SLUMP) IF THE PROPER ADDITION OF ADMIXTURES IS INCLUDED AND THE WATER TO CEMENT RATIO IS NOT INCREASED.
 - CEMENT PER ASTM C-150 TYPE I OR II FLY ASH PER ASTM C-618 CLASS N OR CLASS F UP TO 20% OF PORTLAND CEMENT MAY BE SUBSTITUTED WITH FLY ASH
 - COARSE AND FINE AGGREGATES PER ASTM-C-33
 - ADMIXTURES AND DOSAGES WILL VARY WITH CLIMATE AND JOB SITE REQUIREMENTS. CONTRACTOR IS RESPONSIBLE FOR PROVIDING MIX DESIGN SUITABLE FOR JOB SITE CONDITIONS. ADMIXTURES CONTAINING CHLORIDES ARE NOT PERMITTED.
- ALL DEBRIS SHALL BE REMOVED FROM FORMS AND FOOTING EXCAVATIONS PRIOR TO POURING CONCRETE. NO WOOD STAKES OR FORM SPREADERS SHALL BE PERMITTED IN CONCRETE.
 - BALL REINFORCEMENT, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS SHALL BE SECURED IN POSITION SHOWN ON DRAWINGS PRIOR TO PLACING CONCRETE.
 - CONCRETE SHALL BE CONSOLIDATED BY MECHANICAL VIBRATION PER ACI 309 BY MEANS SUITABLE FOR ON SITE CONDITIONS. USE HAND RODDING OR TAMPING AS REQUIRED.
 - CONSTRUCTION JOINTS SHALL HAVE ALL LOOSE MATERIAL REMOVED AND SHALL BE INTENTIONALLY ROUGHENED TO 1/4" AMPLITUDE PRIOR TO POURING CONCRETE. CONTRACTOR SHALL SUBMIT CONSTRUCTION JOINT LOCATIONS TO ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
 - ALL FORMWORK TO REMAIN IN PLACE FOR DURATION AS REQUIRED BY LATEST EDITION OF ACI 318
 - REFER TO ACI RECOMMENDATIONS FOR PLACING AND CURING CONCRETE IN COLD AND HOT WEATHER CONDITIONS. CONTRACTOR IS RESPONSIBLE FOR COORDINATING CONCRETE MIX DESIGN WITH BATCH PLANT TO PROVIDE CONCRETE MIX APPROPRIATE FOR SITE CONDITIONS.
 - CONTRACTOR IS RESPONSIBLE FOR DETERMINING AND IMPLEMENTING APPROPRIATE CURING PROCEDURES FOR ACTUAL SITE/WEATHER CONDITIONS AND SHALL INCLUDE PROVISIONS FOR INCLEMENT WEATHER. REFER TO ACI 308R.
 - ALL SLABS SHALL BE FLAT AND LEVEL W/A TOLERANCE OF 3/16" IN 10' FOR FLATNESS AND MINIMUM LOCAL VALUE F = 32 PER ASTM 1155. THE PROJECT OWNER MAY REJECT ANY CONSTRUCTION THAT DOES NOT MEET THE FLATNESS CRITERIA NOTED WITH REPLACEMENT AT CONTRACTOR'S EXPENSE.
 - CONDUITS AND PIPES EMBEDDED IN THE SLAB (OTHER THAN THOSE PASSING VERTICALLY THROUGH) SHALL NOT BE PERMITTED. CONTRACTOR TO SUBMIT FOOTING PENETRATIONS TO STRUCTURAL ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION.

CONCRETE REINFORCEMENT NOTES:

- DETAIL, FABRICATE, AND PLACE REINFORCING PER ACI 315 AND ACI 318. SUPPORT REINFORCEMENT W/APPROVED CHAIRS, SPACERS, OR TIES.
- REINFORCEMENT SHALL BE DEFORMED BILLET STEEL PER ASTM A-615, GRADE 60. ALL REINFORCEMENT AT BOUNDARY ELEMENTS AND REINFORCEMENT TO BE WELDED SHALL BE ASTM A-706, GRADE 60.
- ALL BENDING OF REINFORCEMENT PER ACI. FIELD BENDING OF REINFORCEMENT SHALL NOT BE PERMITTED.
- REINFORCEMENT IN WALLS, SLABS, BEAMS AND FOOTINGS SHALL BE CONTINUOUS AROUND CORNERS OR CORNER BARS PROVIDED.
- LAP ALL REINFORCEMENT 48DB FOR #6 AND SMALLER BARS, 60DB FOR #7 AND LARGER BARS. INCREASE LAP LENGTH 30% WHERE MORE THAN 12" OF FRESH CONCRETE IS POURED UNDER REINFORCEMENT.
- TRIM REINFORCING AROUND OPENINGS SHALL BE A MINIMUM 2-#5 TOP AND BOTTOM EXTENDING 40" BEYOND OPENING AT EACH CORNER. PROVIDE 90° HOOK AT CORNERS WHERE STRAIGHT EMBEDMENT NOT POSSIBLE.
- REINFORCING SHALL BE TIED IN PLACE. TACK WELDING OF REINFORCING IS NOT PERMITTED.
- CONTRACTOR TO TAKE NECESSARY PRECAUTIONS TO INSURE CONCRETE IS PROPERLY CONSOLIDATED AROUND ALL BOLTS, ANCHORAGES, ETC.
- WHERE REINFORCING IS NOT SPECIFIED, REFER TO ACI 318 FOR MINIMUM REINFORCEMENT.
- WELDED WIRE FABRIC PER ASTM A-185 AND ASTM A-82.
- DEFORMED BAR ANCHORS PER ASTM A-496
- PROVIDE MINIMUM COVER FOR ALL REINFORCING AS FOLLOWS:

APPLICATION	COVER
CONCRETE CAST AGAINST EARTH	3"
CONCRETE EXPOSED TO EARTH OR WEATHER: #5 AND SMALLER #6 AND LARGER	1 1/2" 2"
CONCRETE NOT EXPOSED TO EARTH OR WEATHER: SLABS AND WALLS BEAMS AND COLUMNS	3/4" 1 1/2"

- STAGGER LAPS IN ADJACENT BARS 6'-0" MINIMUM
- PROVIDE FOOTING DOWELS TO MATCH SIZE AND SPACING OF VERTICAL REINFORCEMENT UNO.
- ALL REINFORCING TO BE WELDED SHALL BE ASTM A-706 AND CONTINUOUSLY INSPECTED AND PERFORMED PER AWS STANDARDS.
- REINFORCING WHICH IS TO BE DOWELED INTO EXISTING CONCRETE SHALL BE INSTALLED W/SIMPSON AT-XP PER IAPMO ER-263 UNO



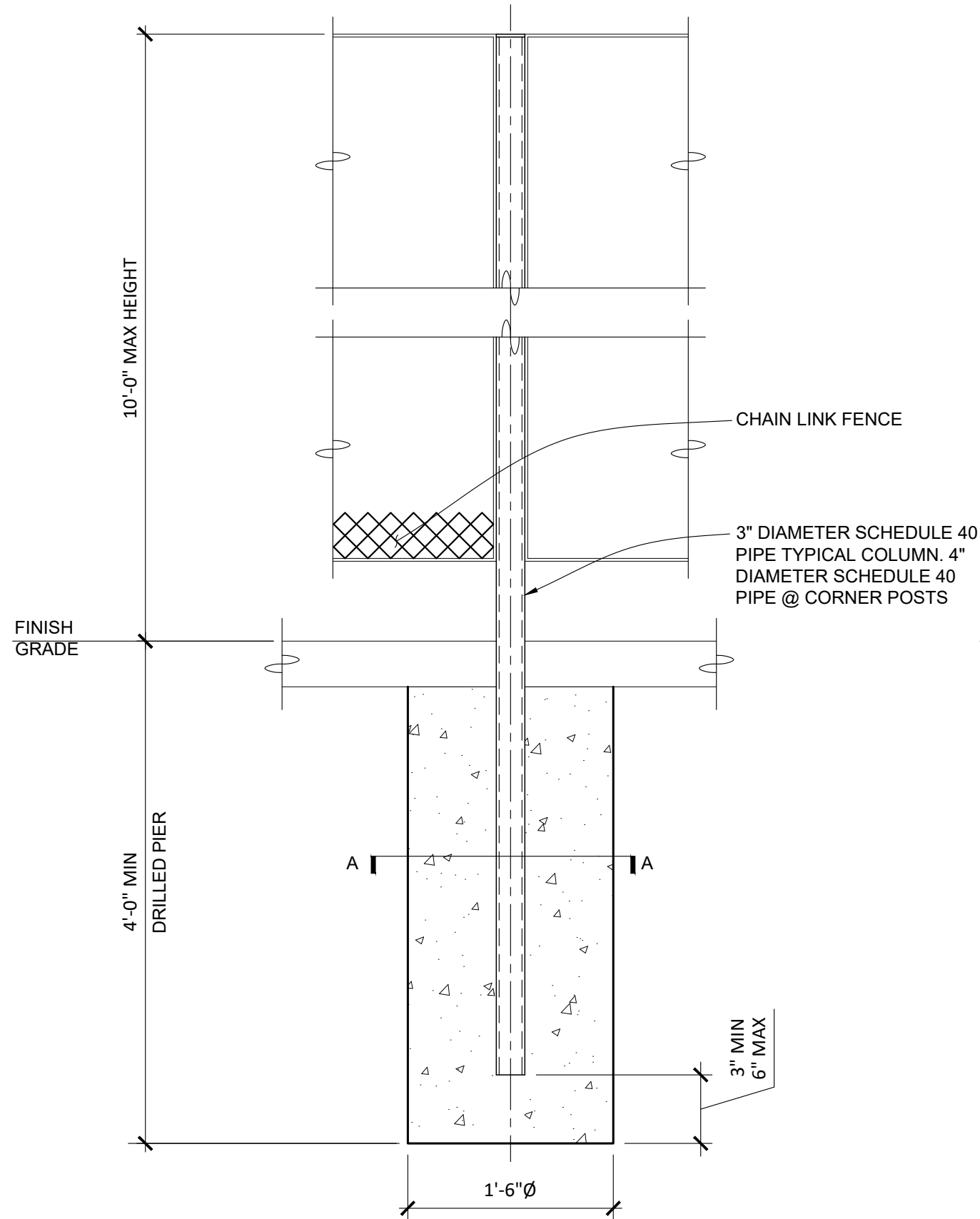
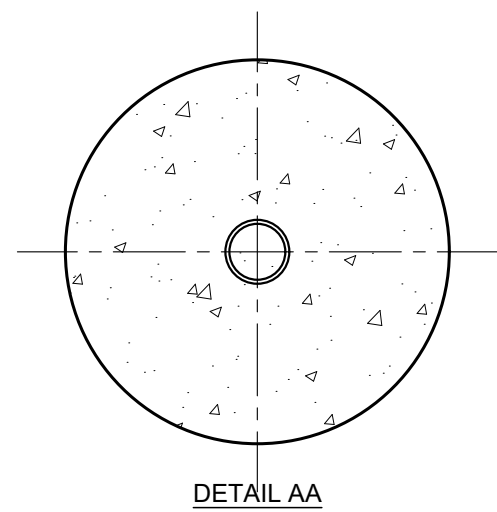
NOTES:

- THIS DETAIL IS TO BE USED FOR THE 10'-0" TALL (MAX) BALL WALL.
- POSTS ARE TO BE SPACED NO MORE THAN 7'-6"cc, TYP.
- POSTS ARE TO BE SCHEDULE 40 PIPE PER S0.1
- PANELS ARE BALL WALL BAKKO SOLID FIBERGLASS
- STEEL POSTS ARE TO BE HOT-DIPPED GALVANIZED.

POST & FOOTING FOR 10' TALL BALL WALL

1" = 1'-0"

2



NOTES:

- THIS DETAIL IS TO BE USED FOR THE 10'-0" TALL (MAX) CHAINLINK FENCE
- POSTS ARE TO BE SPACED NO MORE THAN 10'-0"cc, TYP.
- POSTS ARE TO BE SCHEDULE 40 PIPE PER S0.1
- STEEL POSTS ARE TO BE HOT-DIPPED GALVANIZED.

POST & FOOTING FOR 10' TALL FENCE

1" = 1'-0"

1