

# CITY OF PETALUMA

POST OFFICE BOX 61  
PETALUMA, CA 94953-0061

Teresa Barrett  
Mayor

D'Lynda Fischer  
Mike Healy  
Gabe Kearney  
Dave King  
Kevin McDonnell  
Kathy Miller  
Councilmembers

September 10, 2020

To: All Planholders (via email)

Payran Lift Station Rehabilitation  
City Project No. C66501519

ADDENDUM NO. 1

## **BID SUBMITTAL DATE CHANGE**

The bid submittal date has been changed from *2:00 PM on Thursday, September 24, 2020* to **2:00 PM on Wednesday, September 30, 2020**. This date and time shall be changed on all pertinent portions of the bid documents.

## **NOTICE INVITING BID CHANGE**

### **Public Works & Utilities**

City Engineer  
11 English Street  
Petaluma, CA 94952  
Phone (707) 778-4303

Environmental Services  
Ellis Creek –  
Water Recycling Facility  
3890 Cypress Drive  
Petaluma, CA 94954  
Phone (707) 776-3777  
Fax (707) 656-4067

Parks & Facility Maintenance  
840 Hopper St. Ext.  
Petaluma, CA 94952  
Phone (707) 778-4303  
Fax (707) 206-6065

Transit Division  
555 N. McDowell Blvd.  
Petaluma, CA 94954  
Phone (707) 778-4421

Utilities & Field Operations  
202 N. McDowell Blvd.  
Petaluma, CA 94954  
Phone (707) 778-4546  
Fax (707) 206-6034

E-Mail:  
[publicworks@cityofpetaluma.org](mailto:publicworks@cityofpetaluma.org)

Refer to page 1, item 2 of the Notice of Inviting Bids. The Bids will be opened and read at **2:00 PM (enter time) on Thursday, September 24, 2020**, at the office of the CITY. The CITY reserves the right to postpone the date and time for opening of Bids at any time prior to the aforesaid date and time.

The following paragraphs of the “Notice Inviting Bids” will be modified as described.

- 1. RECEIPT OF BIDS:** Bids for this project will be submitted by email before 2:00 PM on **Wednesday, September 30, 2020**. The emailed bid will include all of the completed documents found in the BID FORMS section of the Contract Documents. The bids will be emailed to: [CITYCLERK@cityofpetaluma.org](mailto:CITYCLERK@cityofpetaluma.org). The email subject line will be “Bid for Payran Lift Station Rehabilitation, C66501519”. The response email from the City Clerk will indicate the time stamp of the bid receipt.

**Original copies of the Sealed Bids** will be sent by standard United States Postal Service (USPS) mail services and received by the mail clerk at 11 English Street, Petaluma CA 94952. The Sealed Bids will be postmarked at USPS not later than the date of September 30, 2020. Sealed Bids postmarked after September 30, 2020, may not be considered. The Sealed Bids sent via USPS will

include all of the original signed and sealed documents included in the Bid Form section of the Contract Documents. This packet will be clearly marked on the outside of the package “Sealed Bid for Payran Lift Station Rehabilitation, C66501519”.

**2. OPENING OF BIDS:** The emailed bids will be opened by the Project Manager and the City Clerk. The bids will be documented on the Bid Result template with the name of the bidding contractor and ranked by the Base Bid dollar amount. The Bid results will be posted on the City’s webpage at <https://cityofpetaluma.org/bid-opportunities-2/>

### **CHANGES TO TECHNICAL SPECIFICATIONS**

1. Technical Specification Section 17200-2.01D shall be revised to read “Pump Control Panel shall be provided by UL Listed 508A panel shop. Pump Control Panel shall be supplied by Tesco Controls, KBL Associates, Technical Systems Inc. (TSI), and Control Systems West Inc., no equal”. In summary Control Systems West of Petaluma, CA is being added as an acceptable systems integrator.

### **CLARIFICATIONS TO CONTRACTORS**

1. The bypass system shall be capable of flows stated in the contract documents and drawings. The contractor shall submit a bypass plan which includes redundant back-up pumps, auto-dialer, and method. It is the Contractor’s responsibility to determine the lift station shut down time and bypass methods to ensure the waste water flow does not exceed the capacity within the sewer infrastructure in the area.
2. The approved shut down time for the pump station is shown on the Contract Drawings and is listed as no longer than 30 minutes and four times per day. Any shutdowns lasting longer than this for installation of bypass pumping equipment must be approved by City Staff. The City must be notified and approve of all pump station shutdowns.
3. The existing generator located within the building will become property of the Contractor as part of the Contract. The exterior generator will be removed during construction and will not be used by Contractor. The Contractor is responsible to provide any temporary or emergency backup power if needed.
4. The project site can be used for staging, as long as all areas of storm and sewer pumps are accessible to City Staff. The street directly in front of the project side is also available for staging. The Contractor shall not obstruct sidewalk or pedestrian/vehicular traffic during construction. Site security is also the responsibility of the Contractor. There is no securing fencing at the site. The Contractor shall install security fencing to protect their equipment.
5. There are two sets of as-builts for the pump station that are included in the contract documents and part of this addendum. The as-built completed in 1988 is for the original pump station and shows the existing wet well and dry vaults for the pump station. The as-built completed in 1999 shows the existing sewer/storm pump station building and all relevant information within.

6. The non-mandatory pre-bid meeting is scheduled for September 17<sup>th</sup>, 2020. If a contractor cannot make this meeting but wishes to visit the site prior to bidding, the Contractor may contact the project manager and schedule a site visit if available. There is no guarantee City Staff will be available to show the site on a different date, and the Contractor is advised to utilize the non-mandatory pre-bid meeting date shown in the notice inviting bids.
7. The engineer's estimate for this project is \$1,000,000.

### **SUBMITTAL CLARIFICATION TO CONTRACTORS – QUESTION AND ANSWER**

*Q: Can I submit the original copies of the sealed bid by FedEx, UPS, courier, other delivery service or drop the packet off myself?*

**A:** Due to the COVID-19 Shelter in Place Order, the City of Petaluma has closed City Hall to the general public to continue the practice of “social distancing”. We will only accept the sealed bid packet by the daily mail delivery of the United States Postal Service (USPS).

*Q: What if the USPS delivers my original copies a week, or more, later?*

**A:** As long as the USPS postmark on the exterior of the package shows September 30, 2020, or earlier we will accept your original copies.

*Q: What if my email doesn't go through the internet system because the attachments have too many megabytes?*

**A:** You may send multiple emails to CityClerk@cityofpetaluma.org. All emails and all attachments must be received and acknowledged by the City Clerk's response before 2:00PM on September 30, 2020. All emails must be titled “Bid for Payran Lift Station Rehabilitation, C66501519”.

*Q: What attachment file will you accept?*

**A:** .PDF is preferred. Other common file formats are JPG, TIF, DOC, XLS.

*Q: Will you video the bid opening?*

**A:** The bid opening will not be video taped.

*Q: How am I assured that you are really choosing the lowest bid?*

**A:** The bid packets are kept by the City Clerk for the duration of the project. You may call the project manager after the low bid is posted if you want to see the bid information.

*Q: Why are you doing it this way?*

**A:** Due to the COVID-19 Shelter in Place Order we are trying to minimize person to person contact as much as possible to keep everyone as healthy as possible.

*Q: What if my email goes to the junk or spam folder?*

**A:** You may send a trial email in advance of the bid submittal date. Please send your email to CityClerk@cityofpetaluma.org.

This Addendum No. 1 shall become part of the Contract and all provisions of the Contract shall apply thereto. Bidders shall acknowledge all Addendums in the Bid Schedule.

City of Petaluma,

A handwritten signature in black ink, appearing to read 'Daniel Herrera', written over a horizontal line.

Daniel Herrera  
Senior Civil Engineer  
Public Works & Utilities Department

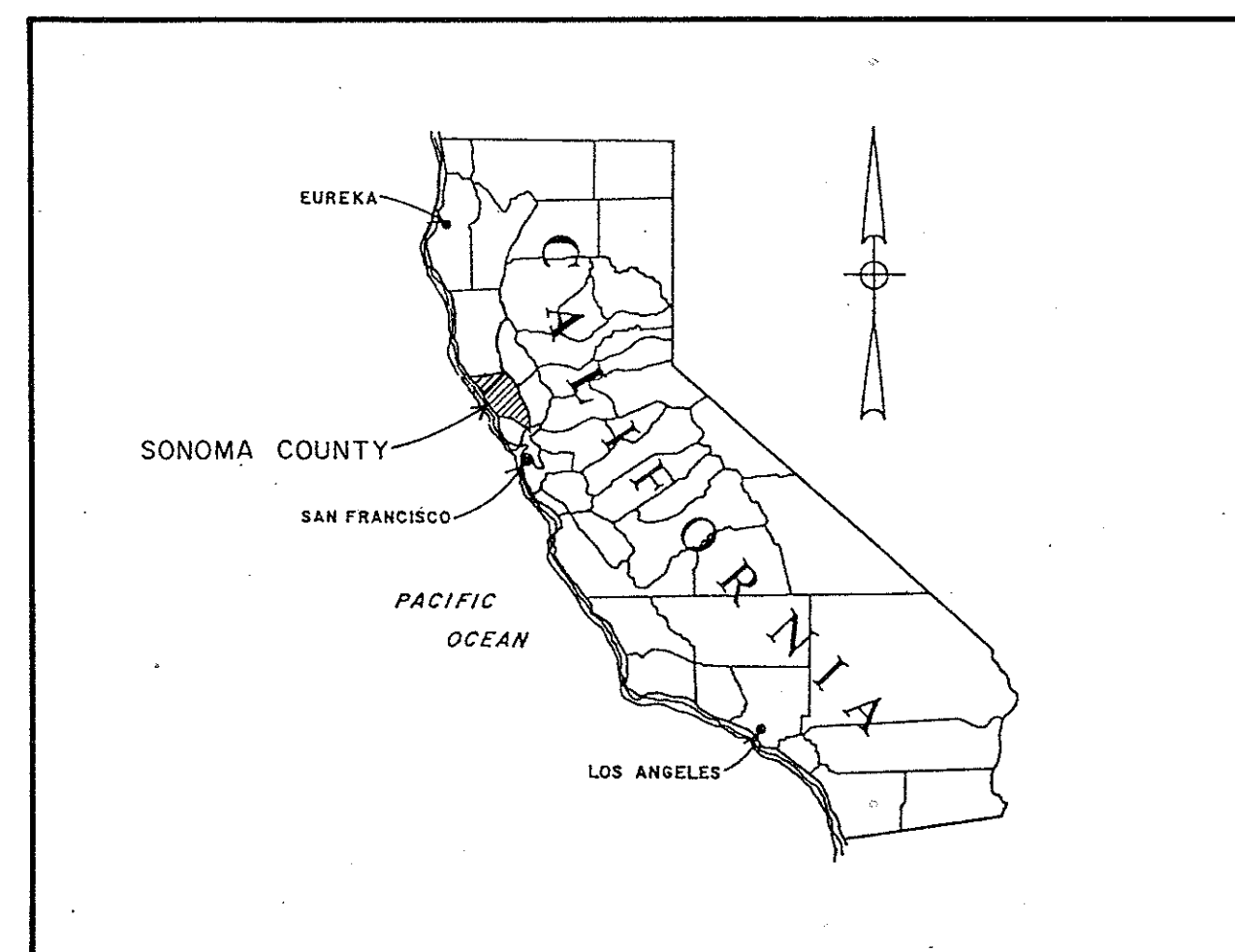


# CITY OF PETALUMA

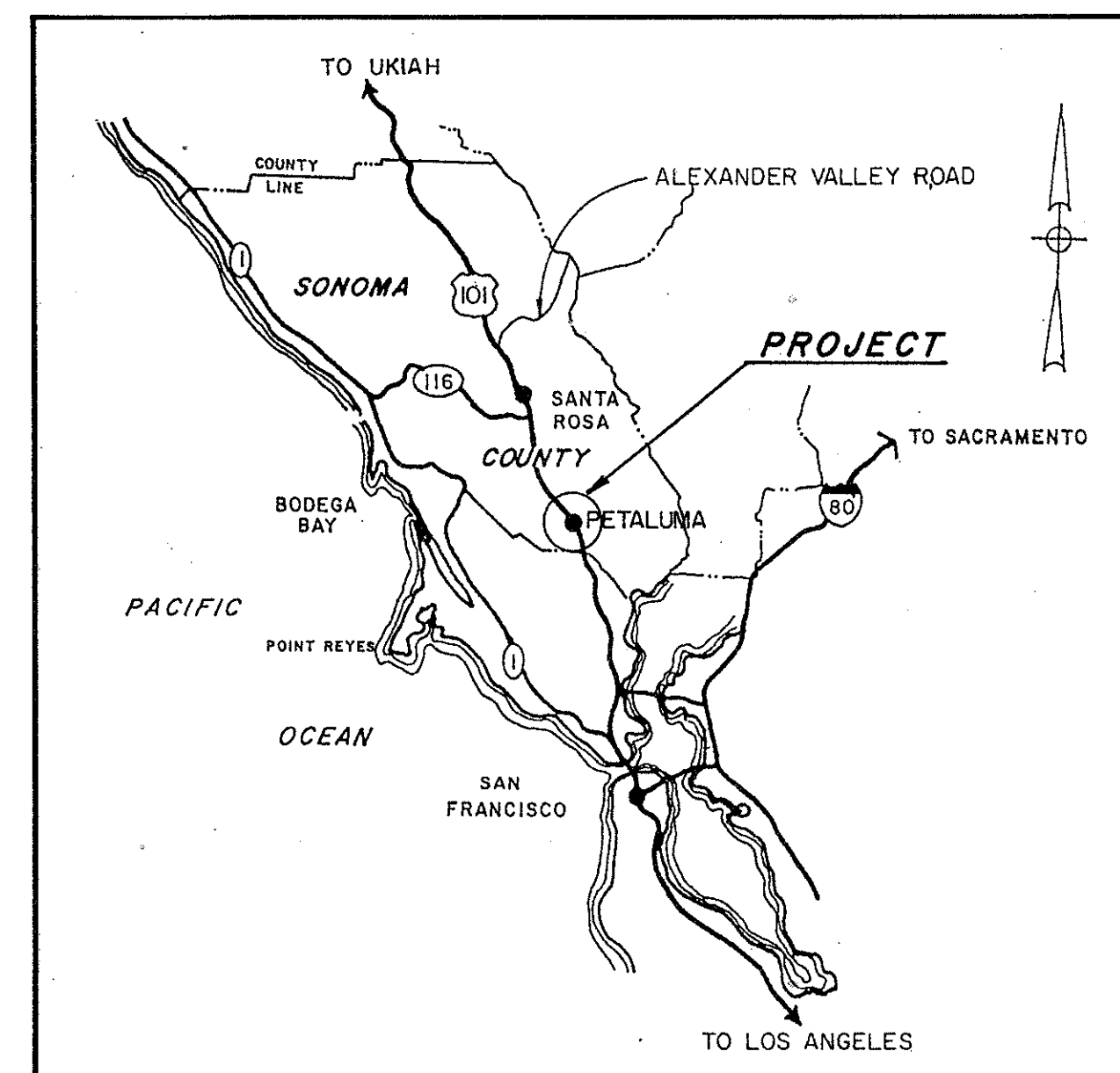
## PAYRAN STREET PUMP STATION REPLACEMENT

AUGUST, 1988

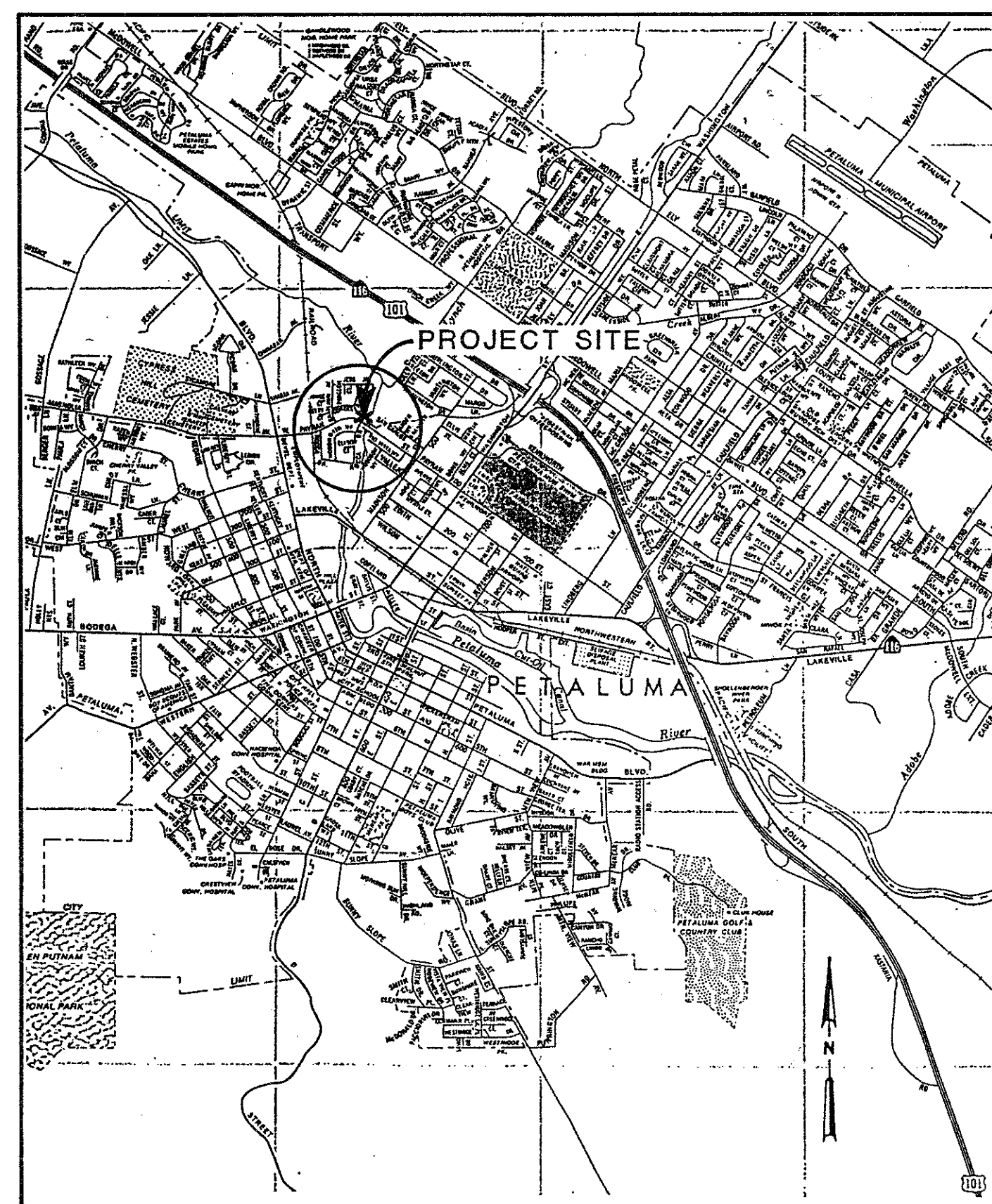
### PROJECT NO. 9684



AREA MAP  
N.T.S.



LOCATION MAP  
N.T.S.



VICINITY MAP  
N.T.S.

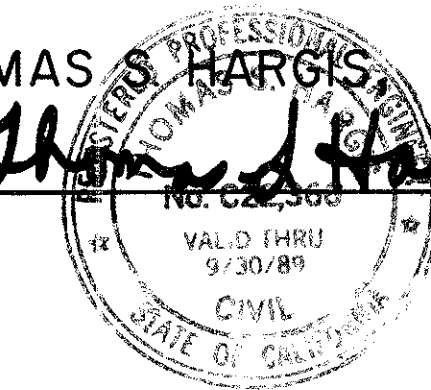
SHEET INDEX	
SHEET NO.	TITLE
1	TITLE SHEET
2	PLAN AND PROFILE
3	PUMP STATION DETAILS
4	ELECTRICAL PLAN
5	ELECTRICAL DETAILS
6-15	CITY OF PETALUMA STANDARD DETAILS

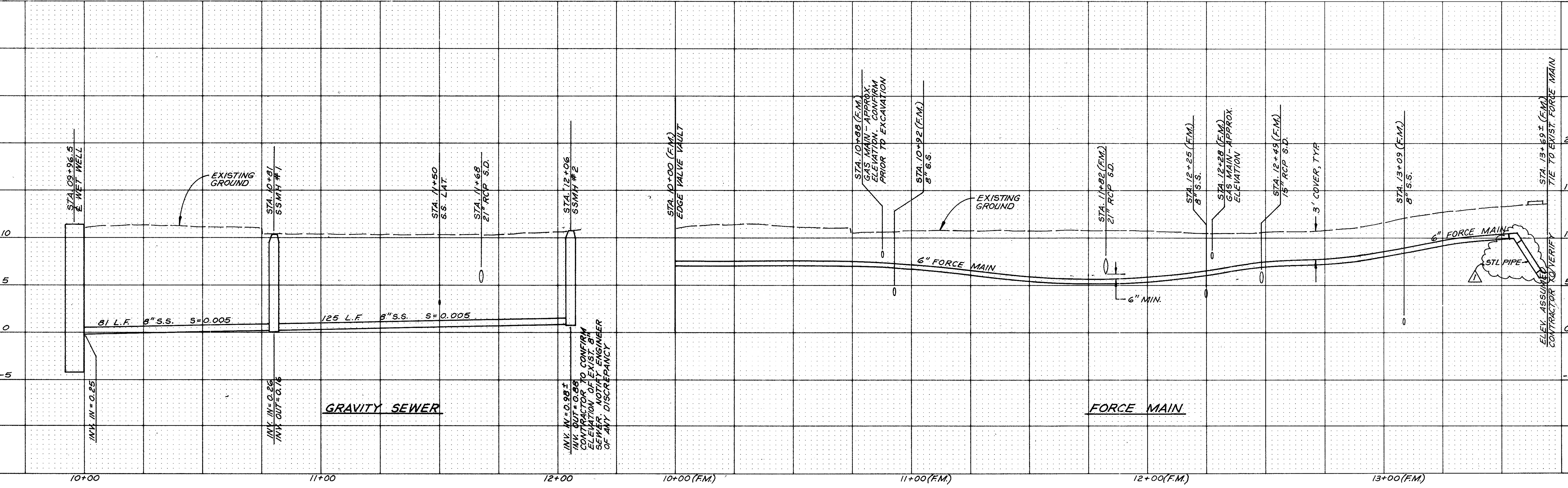
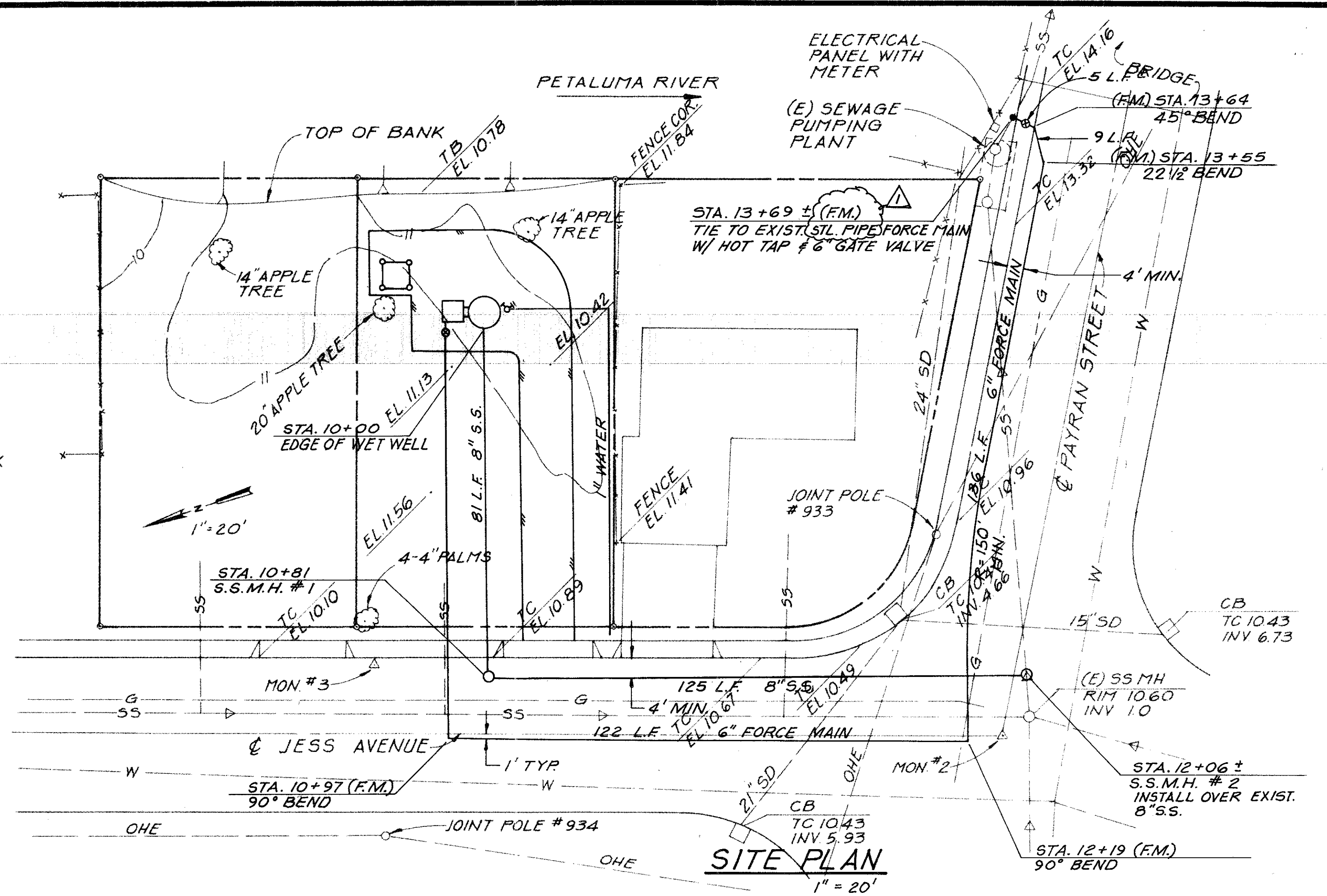
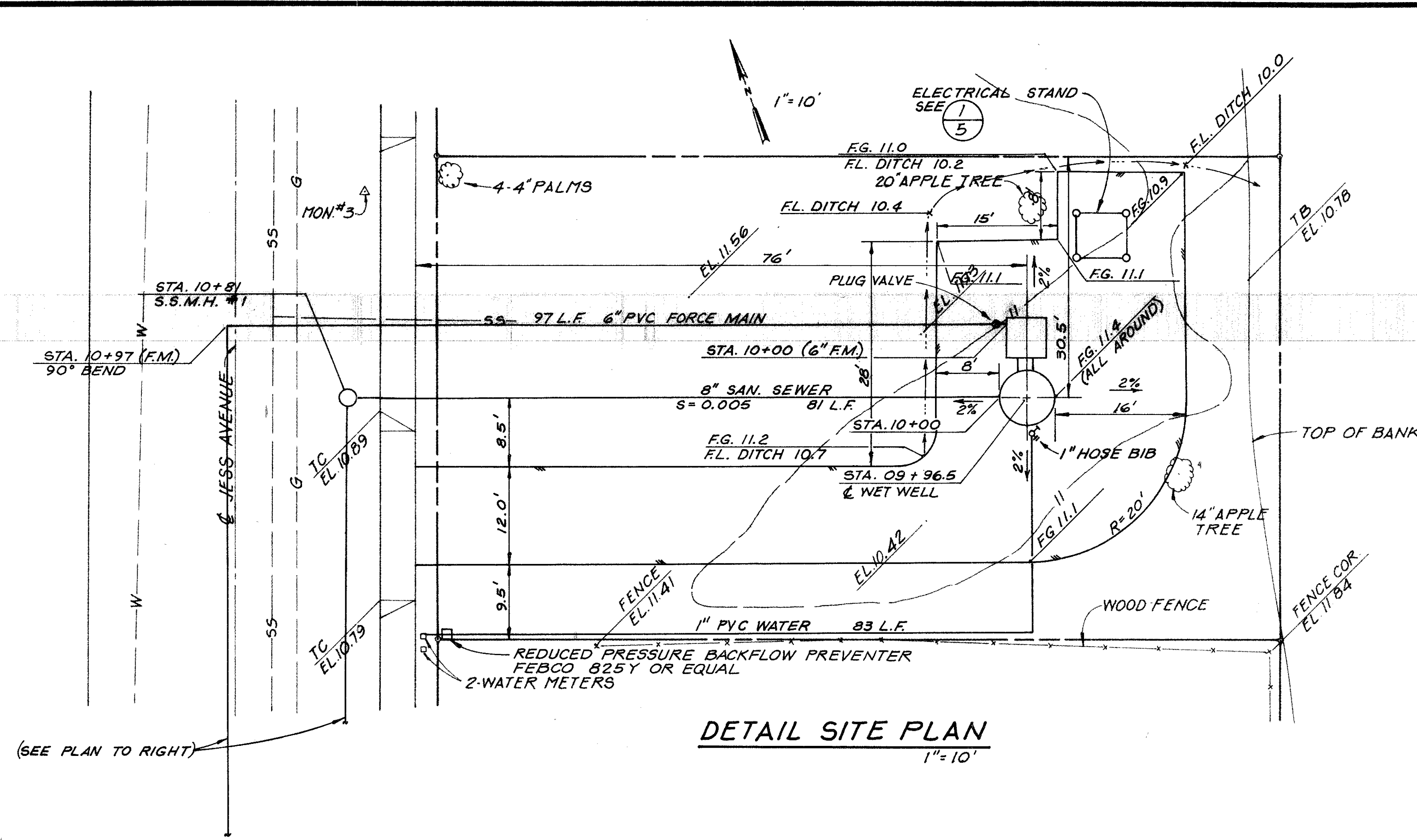
#### RECORD DRAWING

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED AND FURNISHED BY THE PROJECT CONTRACTOR AND OTHERS. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THIS DOCUMENT AS A RESULT. FIELD VERIFICATION OF CRITICAL FACTS AND DATA SHOULD BE MADE IF THESE DOCUMENTS ARE TO BE USED AS A BASIS FOR FUTURE WORK.

AS-BUILT  
4-25-89

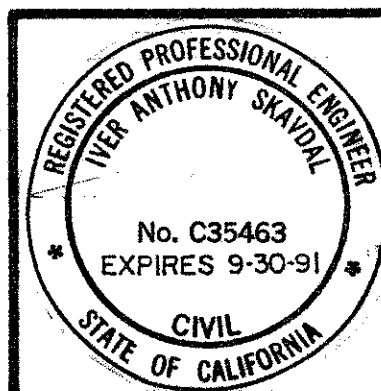
THOMAS HARGIS, DIRECTOR OF PUBLIC WORKS, CITY ENGINEER  
BY *Thomas Hargis* RCE 22366, DATE 8-31-88





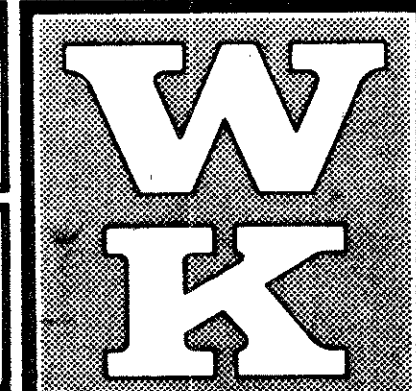
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4-26-89	AS-BUILTS			
NO.	DATE	REVISIONS	BY	APPR.



DSGN	SK	CHKD	IS
DRWN	D.H.D.	SCALE	1" = 20' HORIZ 1" = 5' VERT
APPROVED	DATE 02/1/89		

**WINZLER & KELLY**  
CONSULTING ENGINEERS  
495 TESUONI CIRCLE SANTA ROSA, CALIFORNIA 1707-523-1010

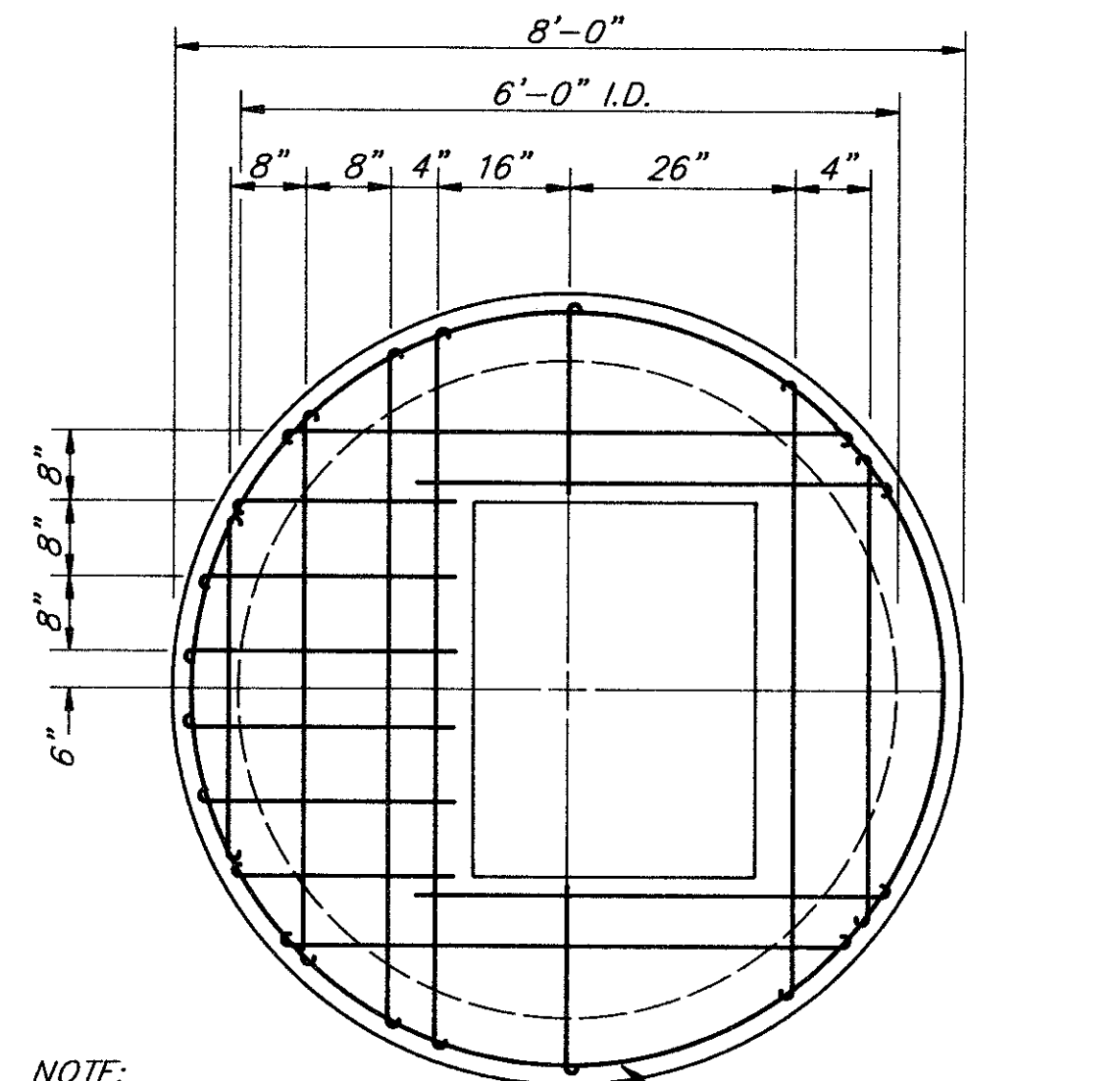


CITY OF PETALUMA  
PAYRAN STREET PUMP STATION  
REPLACEMENT  
**PLAN & PROFILE**

JOB NO	87-836-A
SHEET	2
	15

7-153-A

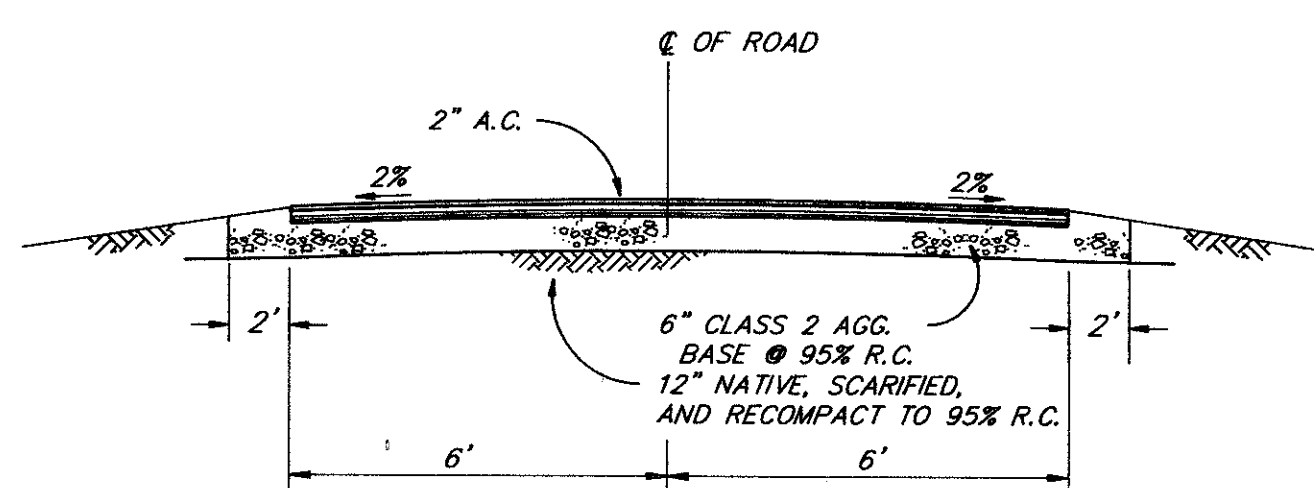




NOTE:  
ALL STEEL TO BE #4 AND PLACED AT BOTTOM OF COVER SLAB. SEE SLAB SECTION ON THIS SHEET.

**WET WELL SLAB DETAIL**

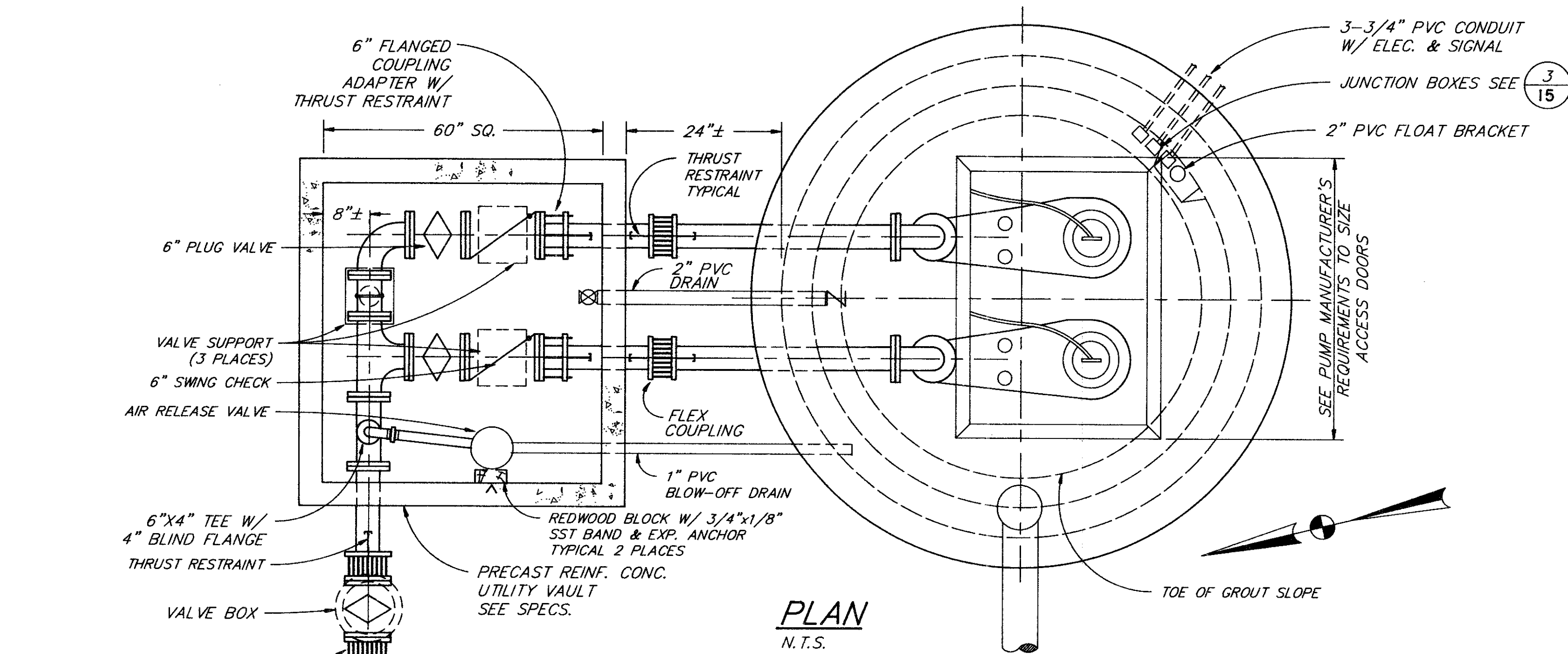
N.T.S.



NOTE:  
ROAD CROSS SLOPE MAY VARY. SEE PLANS

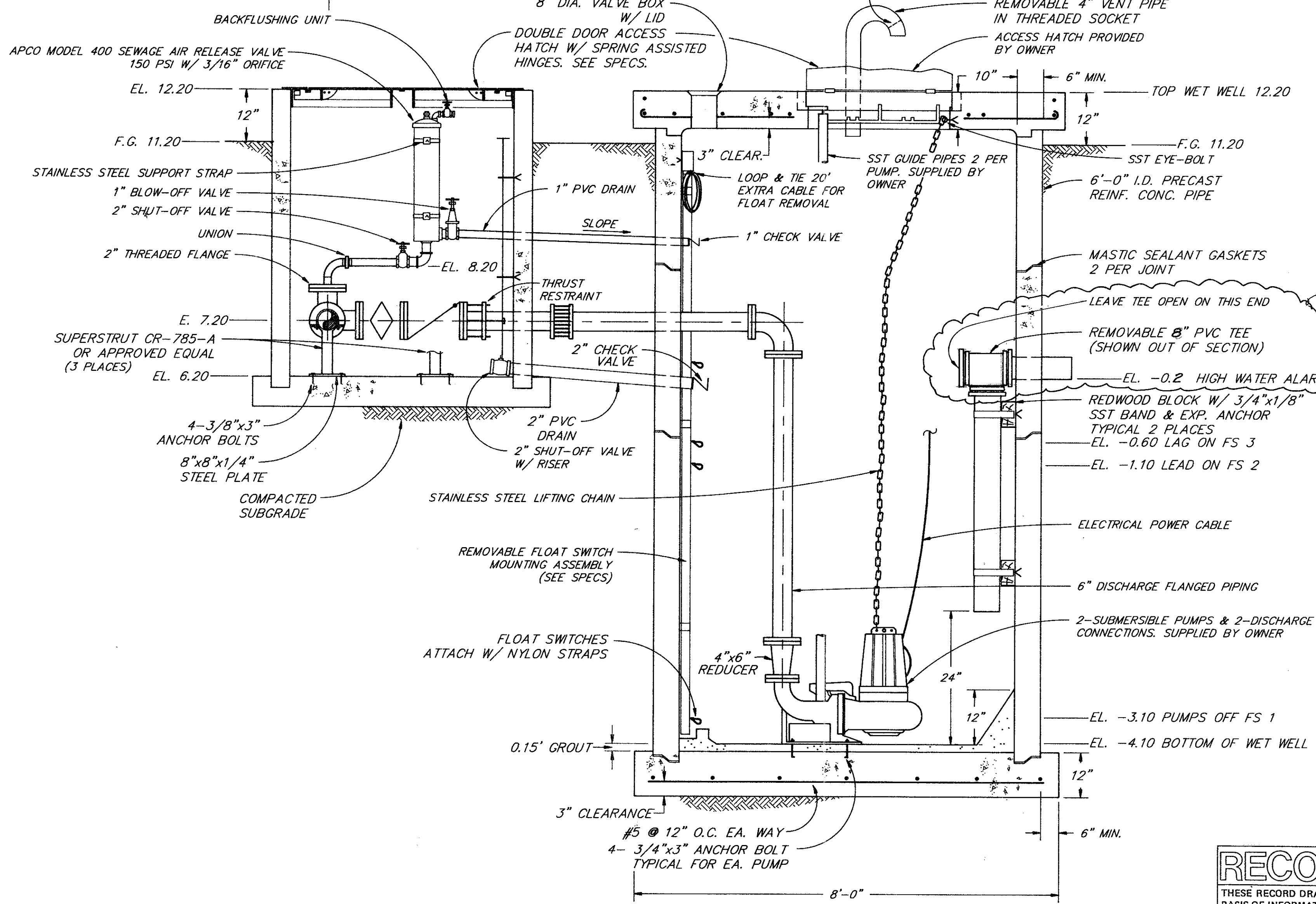
**ACCESS ROAD, TYPICAL CROSS SECTION**

N.T.S.



**PLAN**

N.T.S.



**SECTION**

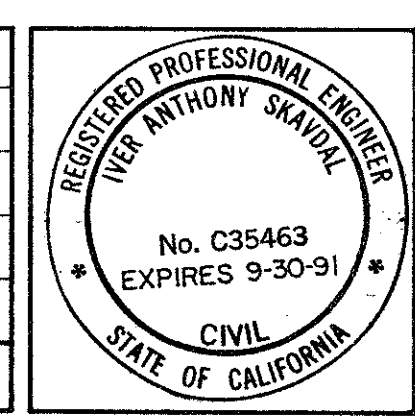
N.T.S.

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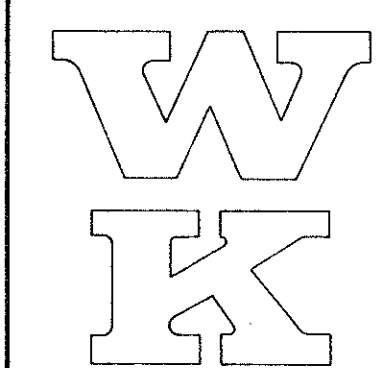
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DATE: 08/31/88

4/26/89	AS-BUILTS		
NO.	DATE	REVISIONS	BY APPR.



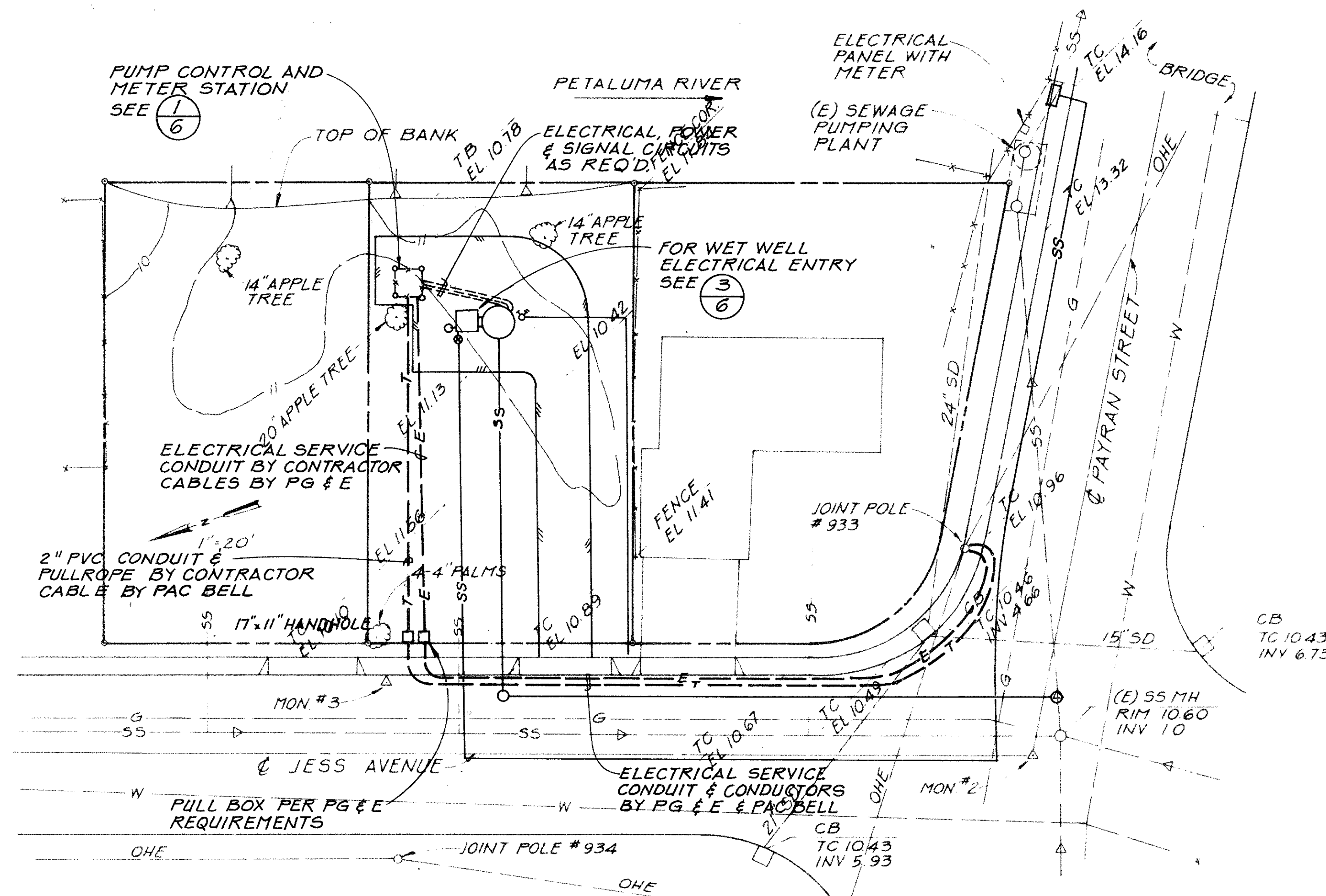
DSGN	SR	CHKD	IS
DRWN	PS	SCALE	NOTED
approved		date	
approved		date	

**WINZLER & KELLY**  
CONSULTING ENGINEERS  
495 TESCONI CIRCLE SANTA ROSA, CALIFORNIA (707) 523-1010

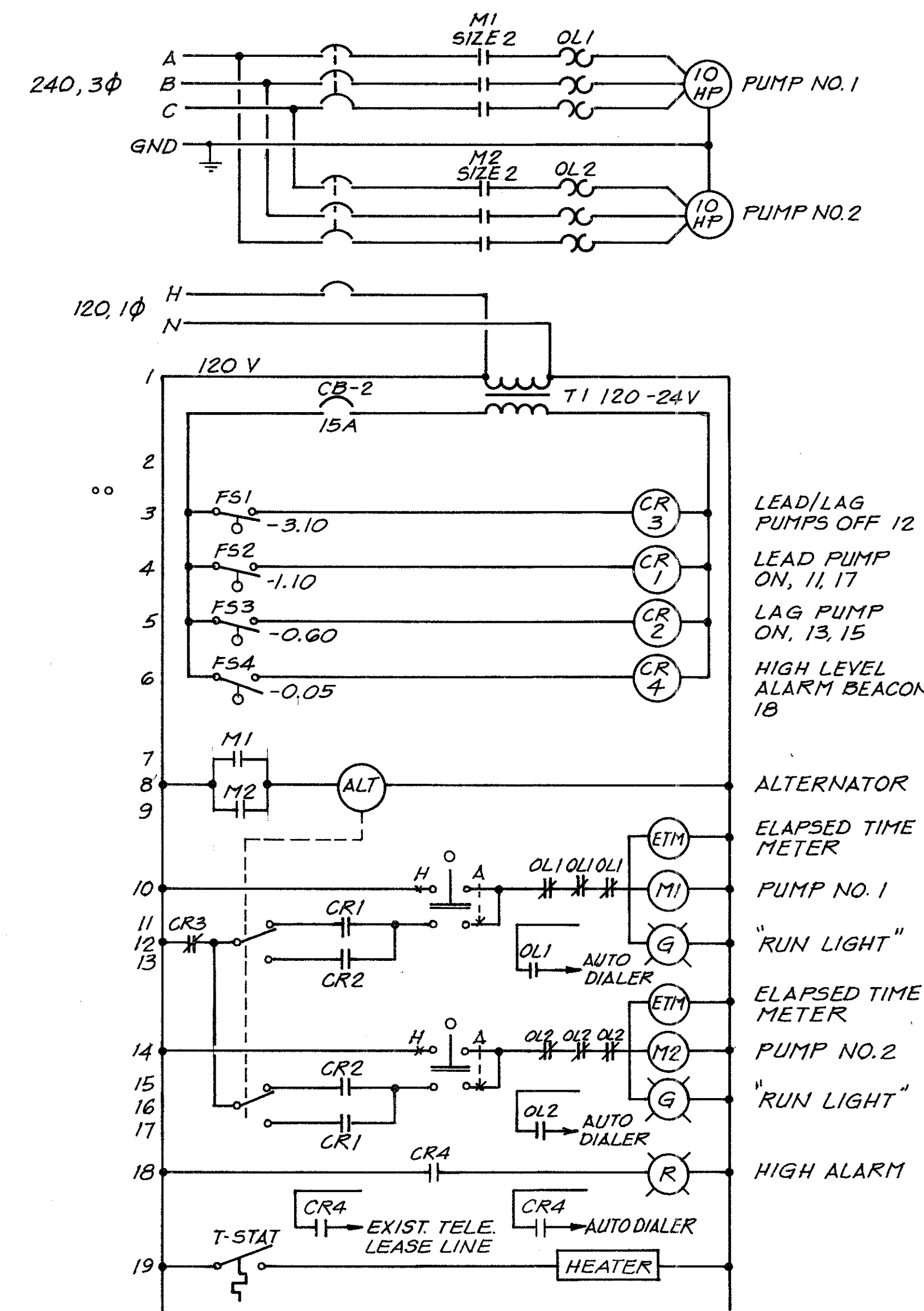


CITY OF PETALUMA  
PAYRAN STREET PUMP STATION  
REPLACEMENT  
PUMP STATION DETAILS

JOB NO. 87-836-A
SHEET 3
15



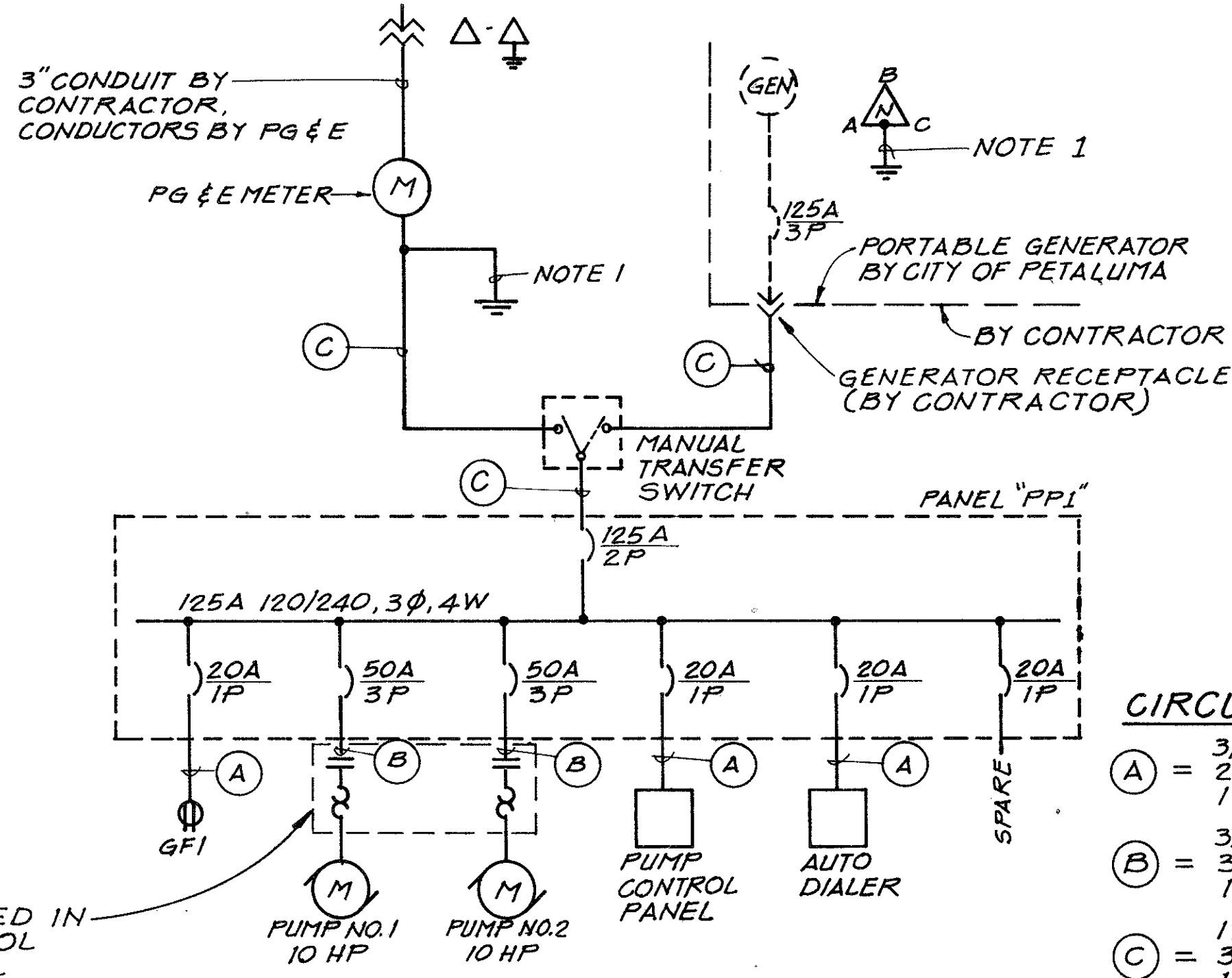
**SITE PLAN**  
1"=20'



**PUMP CONTROL SCHEMATIC**  
N.T.S.

**NOTES:**  
1. COORDINATE SERVICES WITH UTILITY COMPANIES:  
- PG & E  
210 CORONA RD.  
P.O. BOX 750-429  
PETALUMA, CA 94975-6429  
707-763-3311  
ATTN: PATRICK F. HAYES  
  
- PAC BELL  
5900 STATE FARM DR.  
ROOM 201  
ROHNERT PARK, CA 94928  
707-585-4287  
ATTN: SCOTT POTTER

- LEGEND:**
- FLOAT SWITCH CLOSE AT LEVEL INDICATED
  - INDICATOR LIGHT
  - OPEN CONTACT
  - CLOSE CONTACT
  - HAND, OFF, AUTO SWITCH
  - CONTROL RELAY
  - ELAPSED TIME METER
  - CIRCUIT BREAKER
  - THERMOSTAT
  - CONTROL TRANSFORMER
  - MOTOR CONTACTOR & OVERLOAD SIZE AS INDICATED
  - CIRCUIT INDICATION SEE CIRCUIT LEGEND



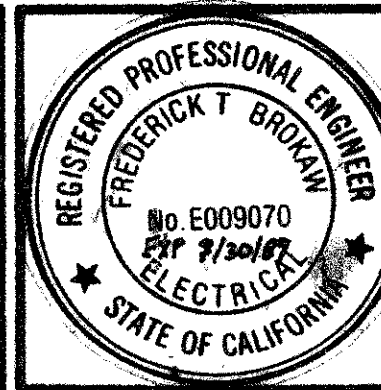
**SINGLE LINE DIAGRAM**  
N.T.S.

**NOTES:**  
1. CONNECT GENERATOR NEUTRAL TO SYSTEM NEUTRAL ONLY. CONNECT GENERATOR FRAME TO SYSTEM GROUND ONLY. DO NOT CONNECT GENERATOR NEUTRAL & GROUND TOGETHER AT GENERATOR. THE NEUTRAL SHALL BE GROUNDED ONLY ONE TIME AT SERVICE ENTRANCE.

- CIRCUIT LEGEND**
- (A) = 3/4" C  
2# 12 AWG  
1# 12 GND
  - (B) = 3/4" C  
3# 8 AWG  
1# 8 GND
  - (C) = 1/2" C  
3# 1 AWG  
1# 1 GND

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NO.	DATE	REVISIONS	BY	APPR.



DESIGN	M	CHKD	FTD
DRWN	R.M.	SCALE	SHOWN
DATE	8/31/86	DATE	

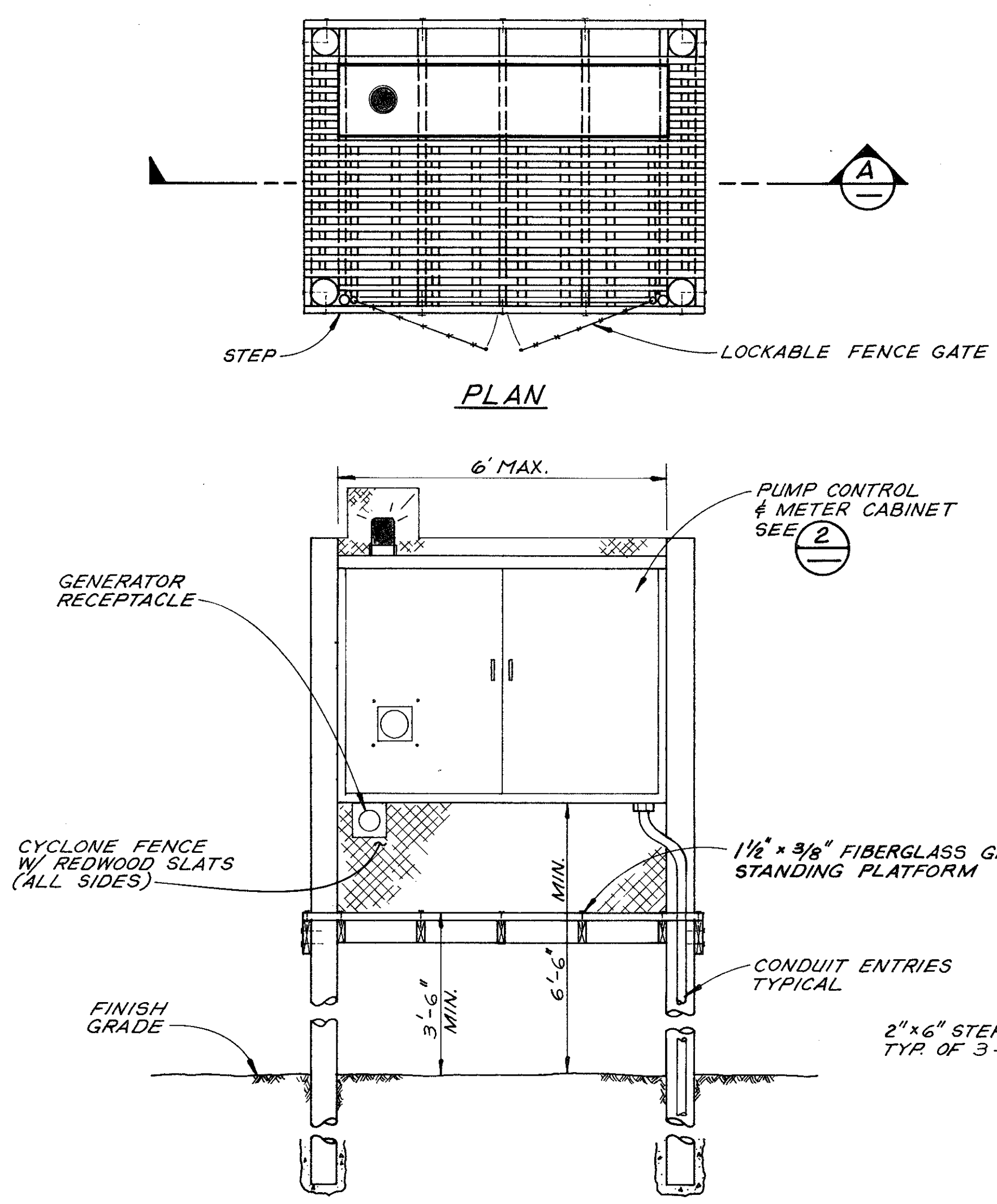
**WINZLER & KELLY**  
CONSULTING ENGINEERS  
495 TESCOMI CIRCLE, #9 PARK CTR. SANTA ROSA, CA 95401 (707) 523-1010



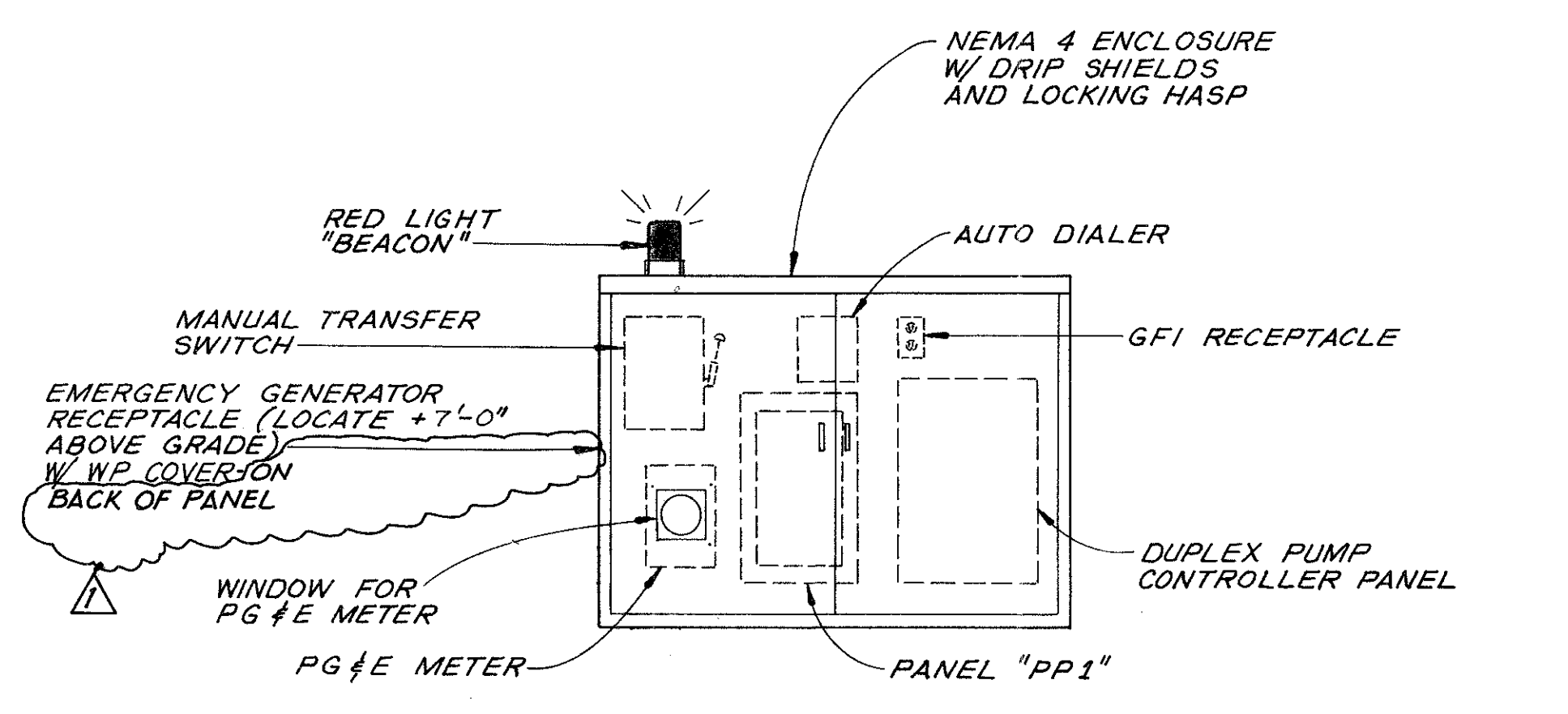
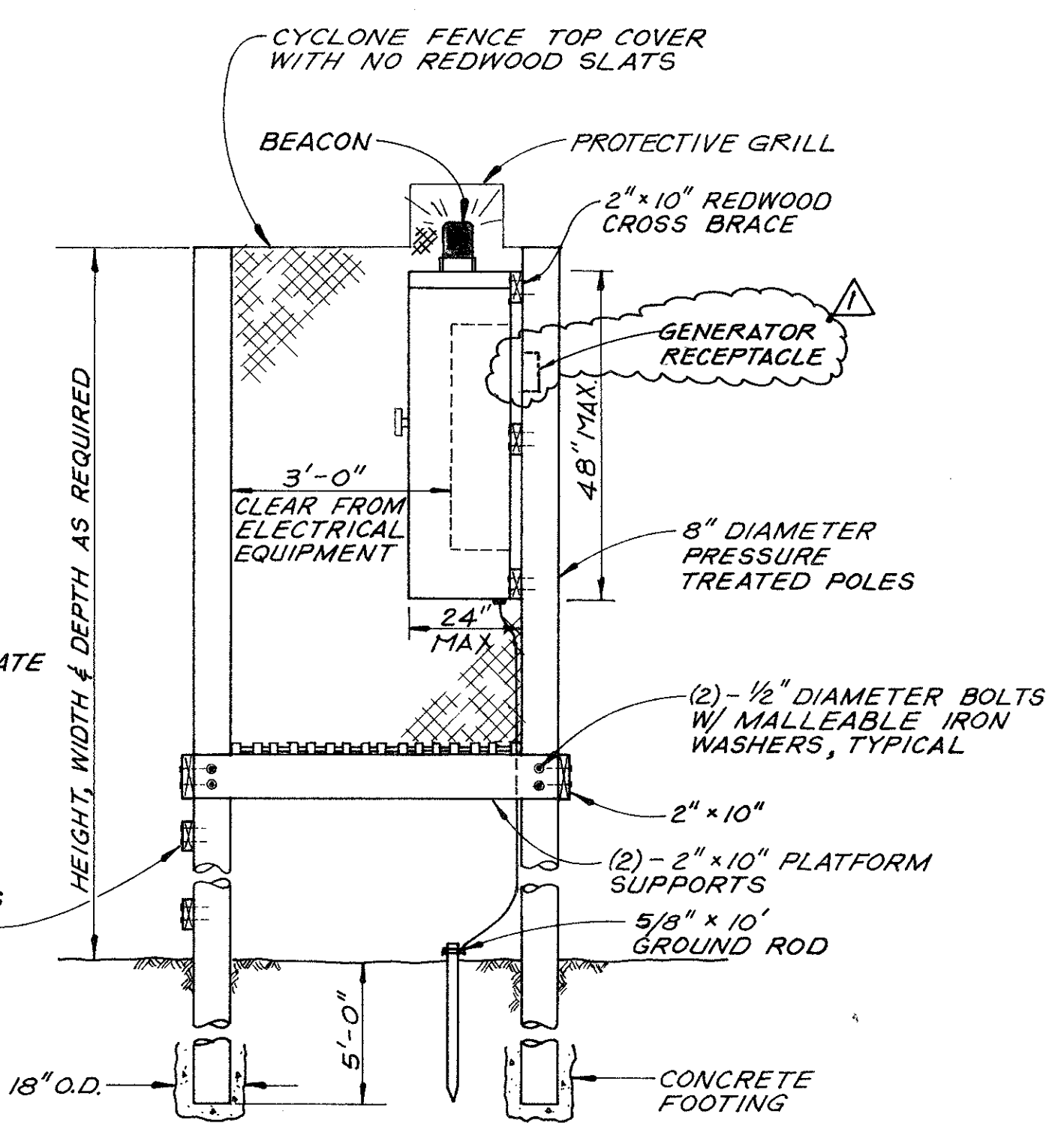
CITY OF PETALUMA  
PAYRAN STREET PUMP STATION REPLACEMENT  
ELECTRICAL PLAN

JOB NO.	87-836-A
SHEET	4
	15

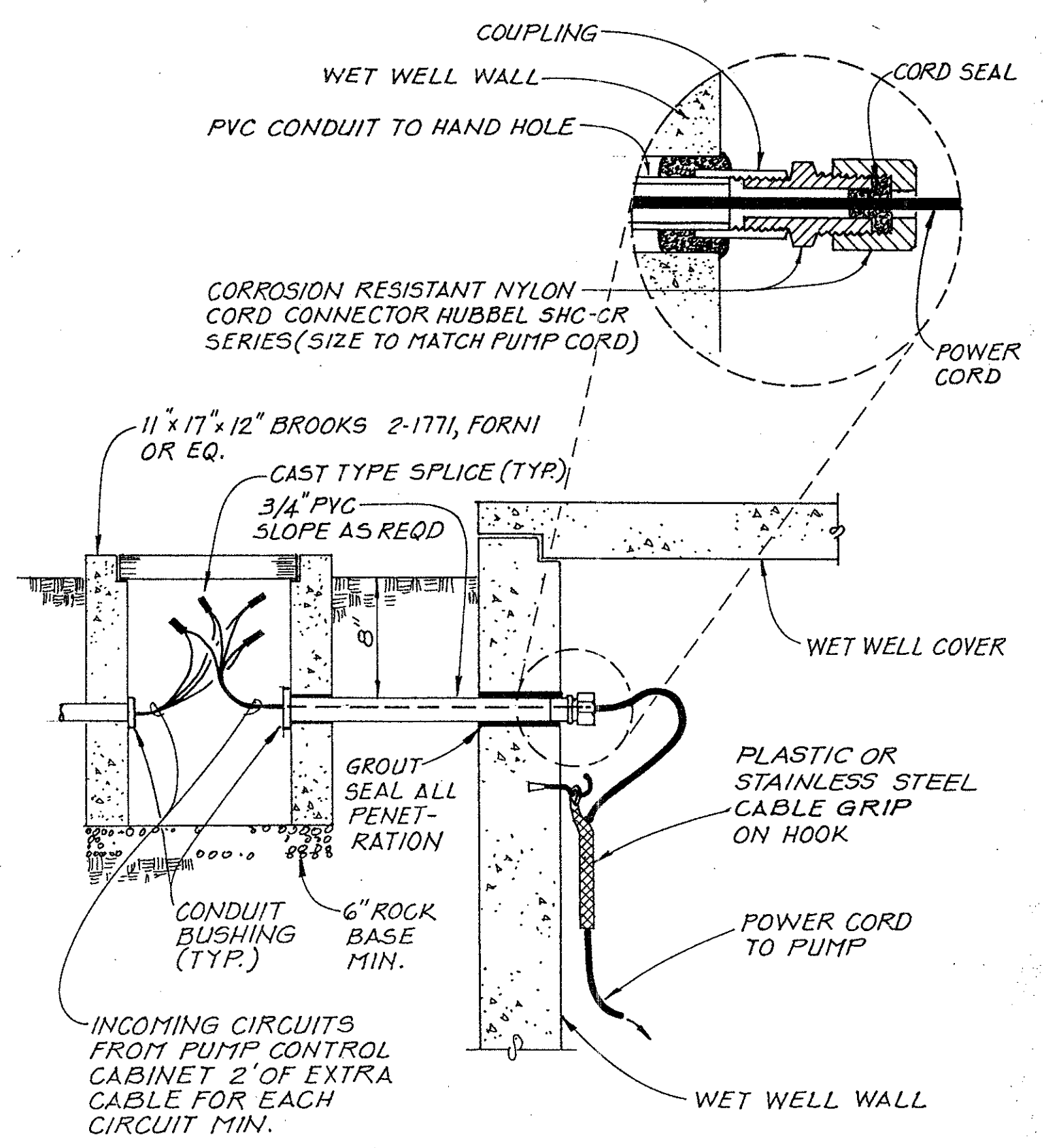




**1** PUMP CONTROL AND METER STATION  
N.T.S.



**2** PUMP CONTROL AND METER CABINET  
N.T.S.

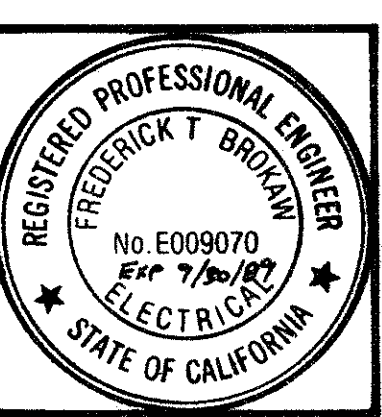


**3** WET WELL ELECTRICAL ENTRY (TYP.)  
N.T.S.

**RECORD DRAWING**

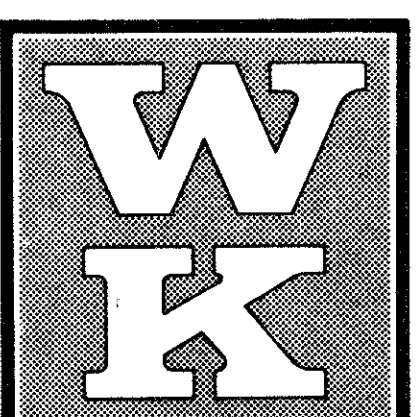
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4/24/09	AS-BUILTS		
NO.	DATE	REVISIONS	BY APPR.



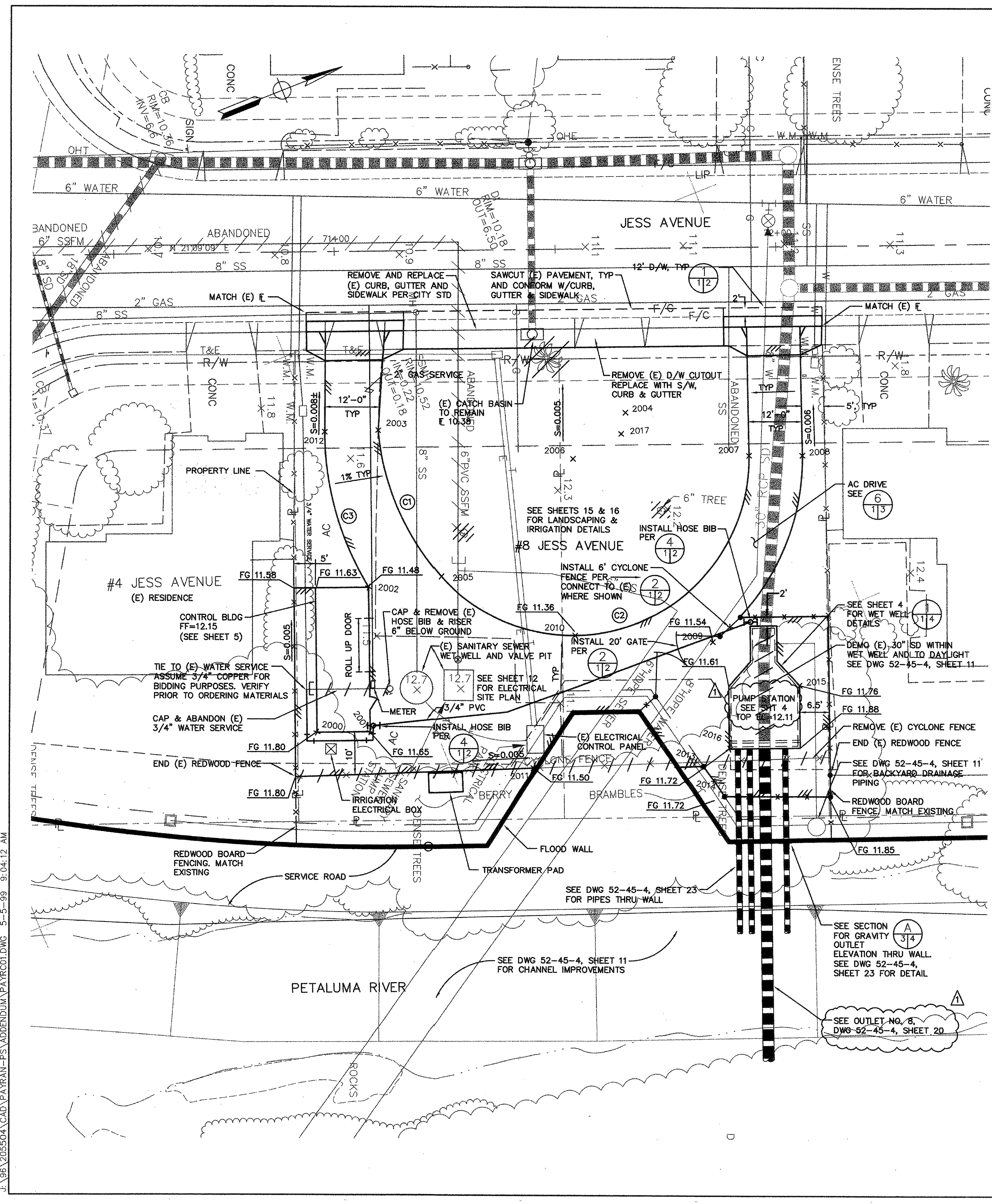
DSGN	Mj	CHKD	FTB
DRWN	D.H.D.	SCALE	NONE
APPROVED	<i>Frederick T. Brockway</i>	DATE	8/31/88

**WINZLER & KELLY**  
CONSULTING ENGINEERS  
495 TESCONI CIRCLE, #9 PARK CTR. SANTA ROSA, CA 95401 (707) 523-1010



CITY OF PETALUMA	JOB NO. 87-836-A
PAYRAN STREET PUMP STATION REPLACEMENT	SHEET 5
ELECTRICAL DETAILS	15



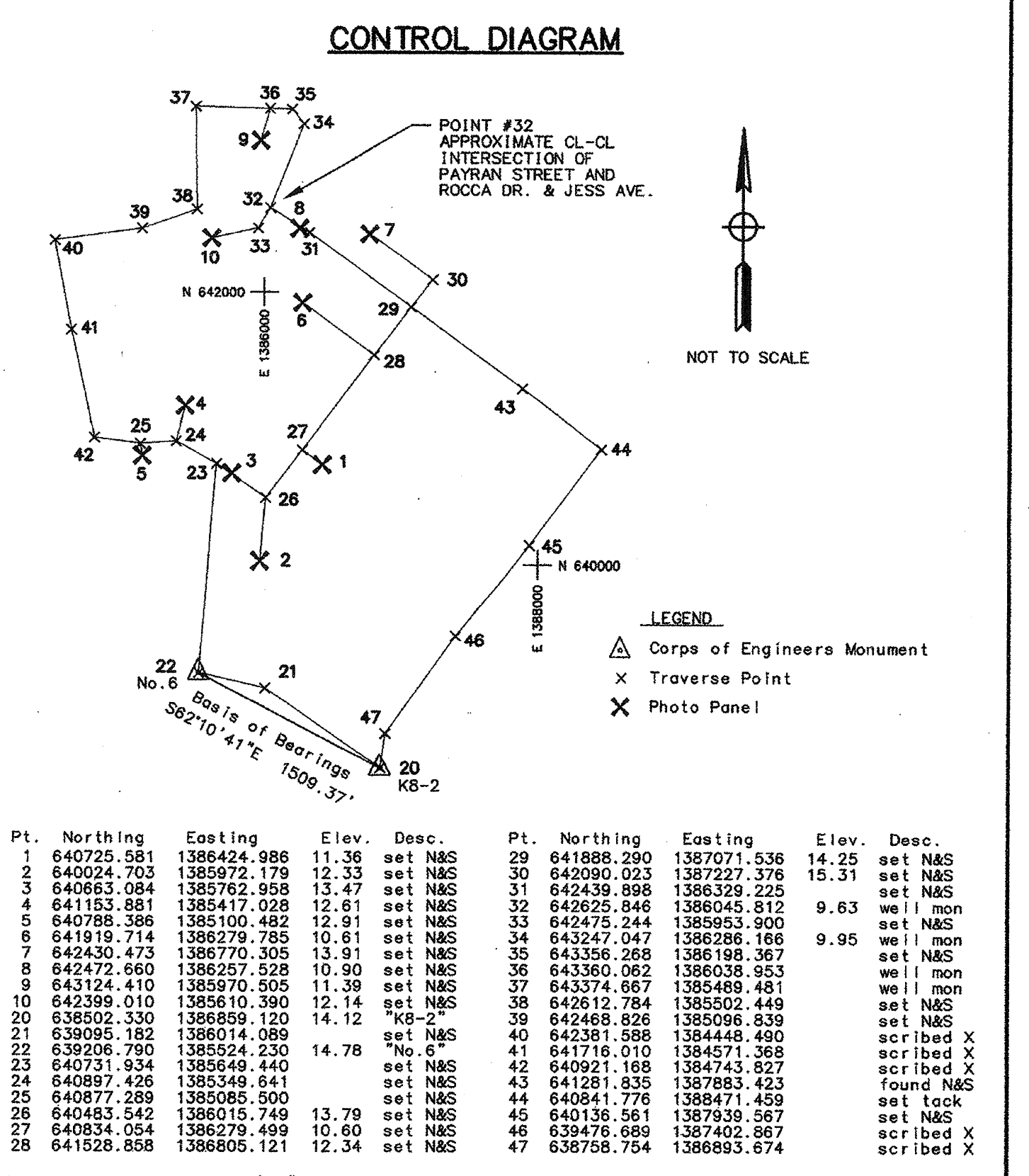


### COORDINATE DATA

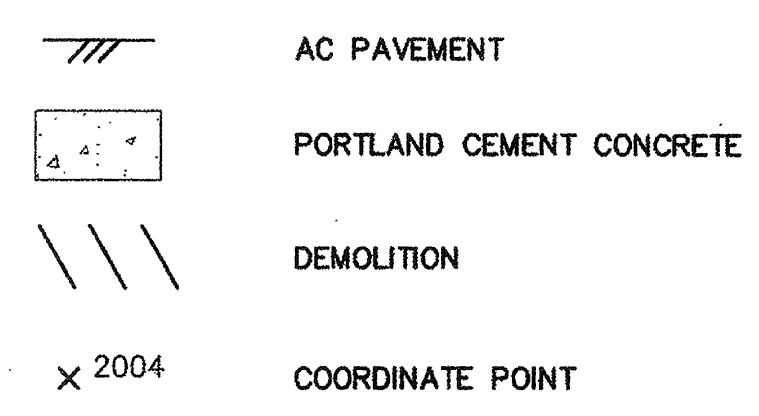
POINT	NORTHING	EASTING	DESCRIPTION
2000	642674.907	1386182.067	BLDG COR
2001	642686.099	1386186.397	BLDG COR
2002	642697.885	1386155.930	BLDG COR
2003	642713.273	1386123.478	BC PAVEMENT
2004	642766.631	1386140.474	RP PAVEMENT
2005	642714.084	1386159.833	EC/BC PAVEMENT
2006	642751.618	1386148.005	RP PAVEMENT
2007	642789.022	1386160.181	EC PAVEMENT
2008	642800.167	1386164.634	BC PAVEMENT
2009	642765.709	1386196.319	EC PAVEMENT
2010	642737.184	1386183.310	POC PAVEMENT
2011	642717.357	1386207.845	EDGE PAVEMENT
2012	642701.885	1386119.303	BC PAVEMENT
2013	642753.318	1386221.798	COR PAVEMENT
2014	642755.168	1386229.979	COR PAVEMENT
2015	642780.287	1386212.681	COR PUMP STA
2016	642760.193	1386220.275	COR PUMP STA
2017	642763.922	1386144.611	RP PAVEMENT

### CURVE TABLE

CURVE	RADIUS	LENGTH	DELTA
C1	56.00	37.04	37°53'32"
C2	40.00	97.05	139°01'11"
C3	67.00	37.33	31°55'11"



### SYMBOLS

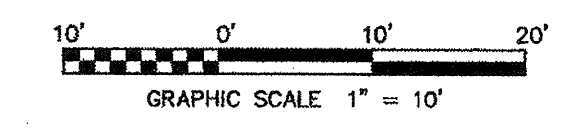


### ABBREVIATIONS

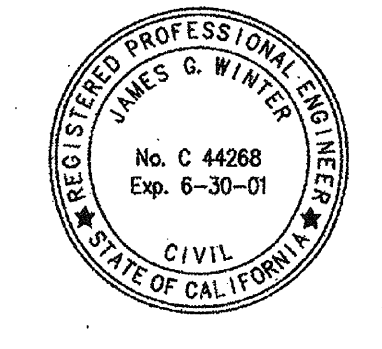
AC	AGGREGATE BASE	MAX	MAXIMUM
AB	ASPHALT CONCRETE	MFR	MANUFACTURER
ALUM	ALUMINUM	MIN	MINIMUM
ARV	AIR RELEASE VALVE	N&S	NAIL & SHINER
BC	BEGIN CURVE	OC	ON CENTER
BFV	BUTTERFLY VALVE	OHE	OVERHEAD ELECTRIC
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CL	CLASS	R	PROPERTY LINE, PLATE
CLR	CLEAR	POC	POINT ON CURVE
COE	CORP OF ENGINEERS	PVC	POLYVINYL CHLORIDE CONDUIT
CONC	CONCRETE	RC	RELATIVE COMPACTION
COR	CORNER	RCP	REINFORCED CONCRETE PIPE
CTR	CENTERED	REQ'D	REQUIRED
CV	CHECK VALVE	RFS	RUBBER FLAPPER SWING
DIP	DUCTILE IRON PIPE	RP	RADIUS POINT
D/W	DRIVEWAY	R/W	RIGHT OF WAY
(E)	EACH, EXISTING	S	SLOPE
EC	END CURVE	SCH	SCHEDULE
EF	EACH FACE	SD	STORM DRAIN
EL	ELEVATION	SQ	SQUARE
EW	EACH WAY	SS	SANITARY SEWER
F/C	FACE OF CURB	SSFM	SANITARY SEWER FORCE MAIN
FCA	FLANGE COUPLING ADAPTER	SST	STAINLESS STEEL
FG	FINISH GRADE	S/W	SIDEWALK
FL	FLOW LINE	T&E	TELEPHONE & ELECTRIC
GALV	GALVANIZED	TYP	TYPICAL
HDPE	HIGH DENSITY POLYETHYLENE	W/	WITH
		WM	WATER METER
		UNO	UNLESS NOTED OTHERWISE

### NOTES:

- (E) SANITARY SEWER PUMP STATION TO REMAIN IN SERVICE. REFER TO NOTE 1, SHEET 12.
- UPON ELECTRICAL CONTROL RELOCATION TO CONTROL BLDG, DEMO EXISTING ELECTRICAL CONTROL STRUCTURE.
- PAVEMENT SECTIONS: 3" AC ON 12" CL 2 AB. SCARIFY AND COMPACT TOP 6" OF NATIVE TO 95% RC.
- REMOVE ALL EXISTING AC ON SITE.
- STREET AC CONFORM 3" AC ON 12" CL II AB PER CITY STD.
- REMOVE AND REPLACE (E) CURB, GUTTER, SIDEWALK & DRIVEWAY PER CITY STD. GRADE GUTTER FLOWLINE TO (E) CATCH BASIN.
- COORDINATE INSTALLATION OF GAS SERVICE WITH PG&E.



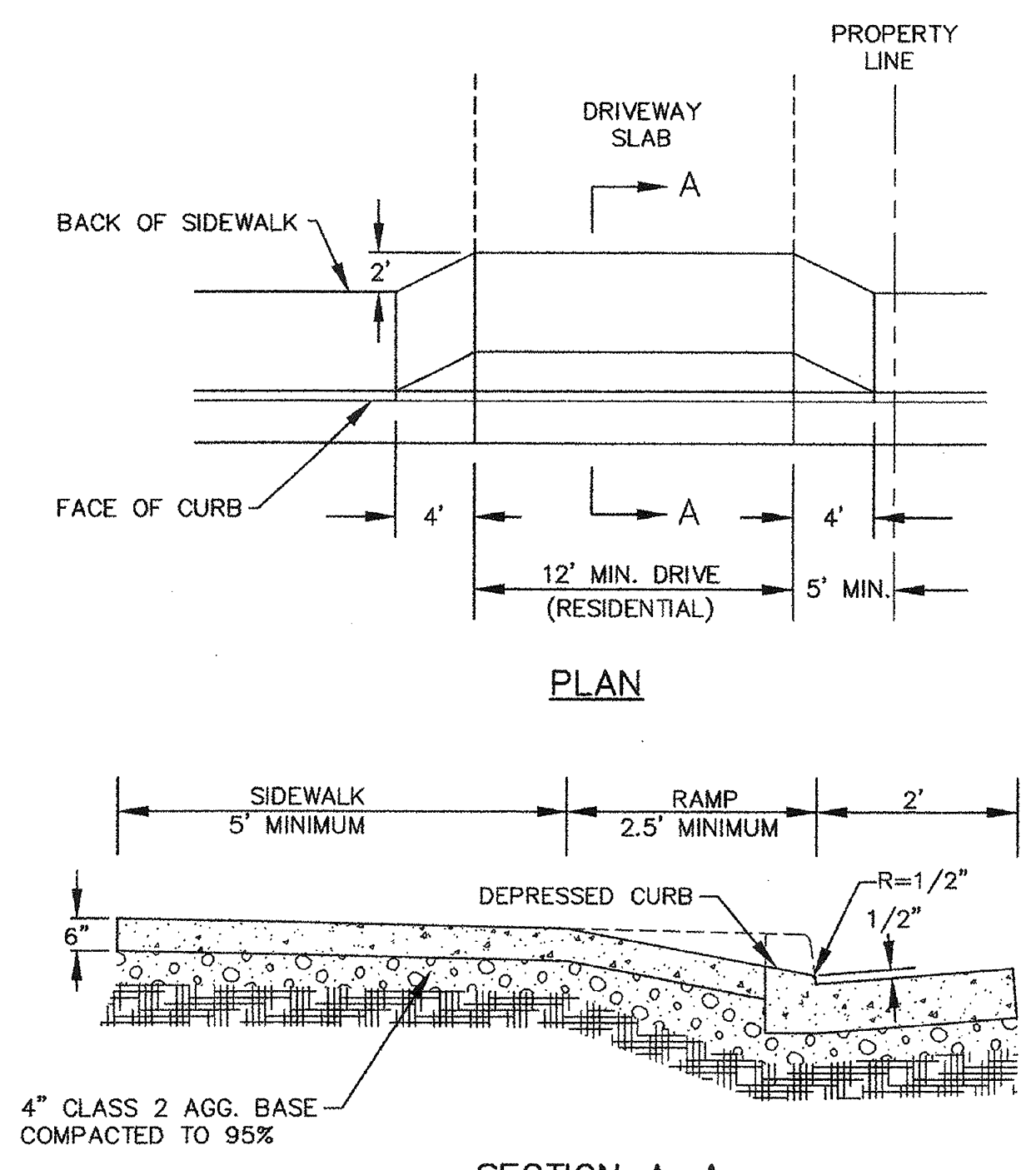
ADDENDUM #1	4/19/99	APPROVAL
SYMBOL	DESCRIPTION	DATE
REVISIONS		
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA		
DRAWN BY: SB CHECKED BY: JW DESIGNED BY: JW PROJECT COORDINATOR:	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION	CALIFORNIA
CIVIL-SITE PLAN		
PREPARED UNDER THE DIRECTION OF PETER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		DATE: 5/13/99 SCALE: 1"=10' JOB NO.: 96205504 DRAWING NUMBER: 52 42 1 SHEET: 1



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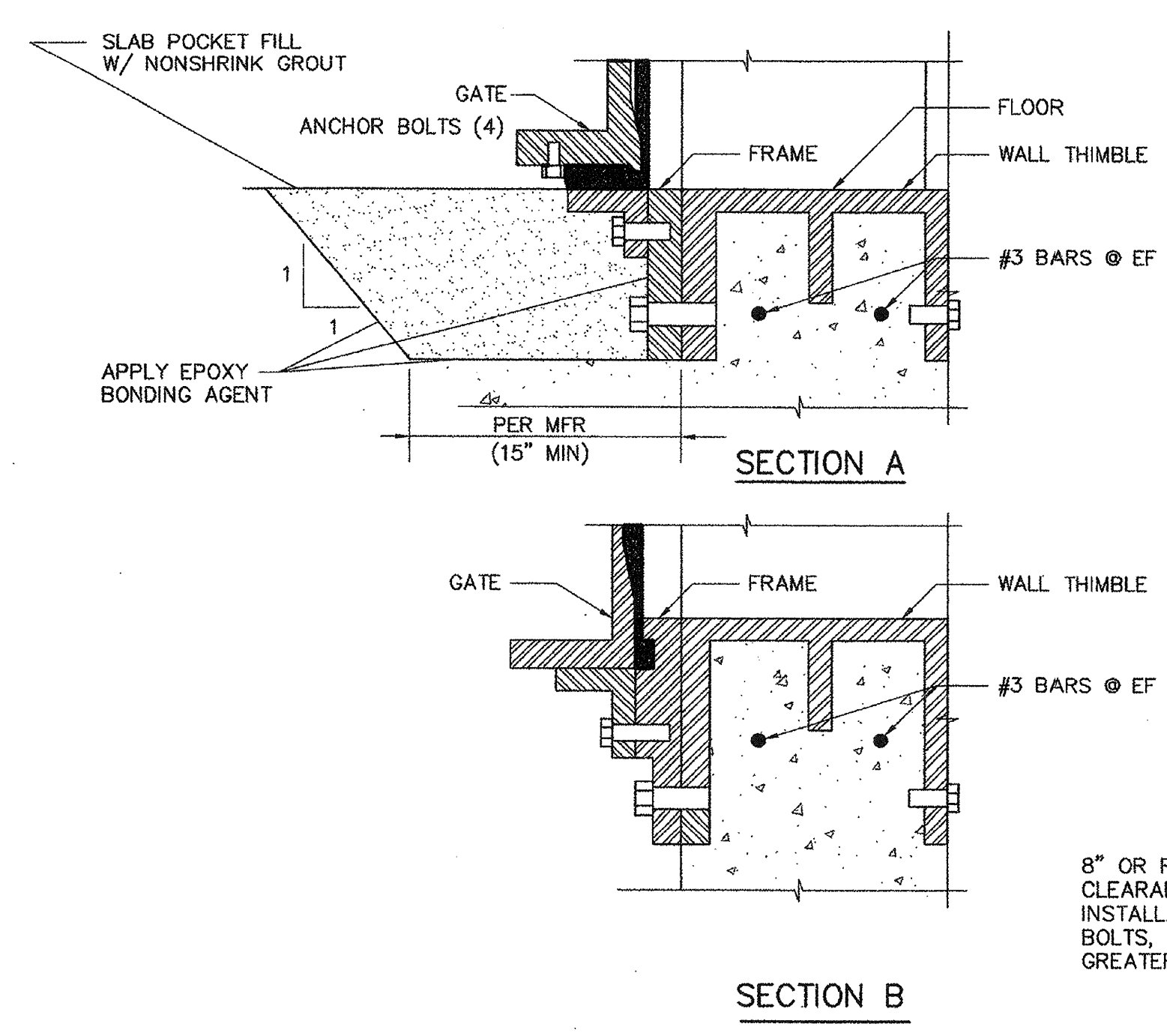
CONTRACT RECORD DWG





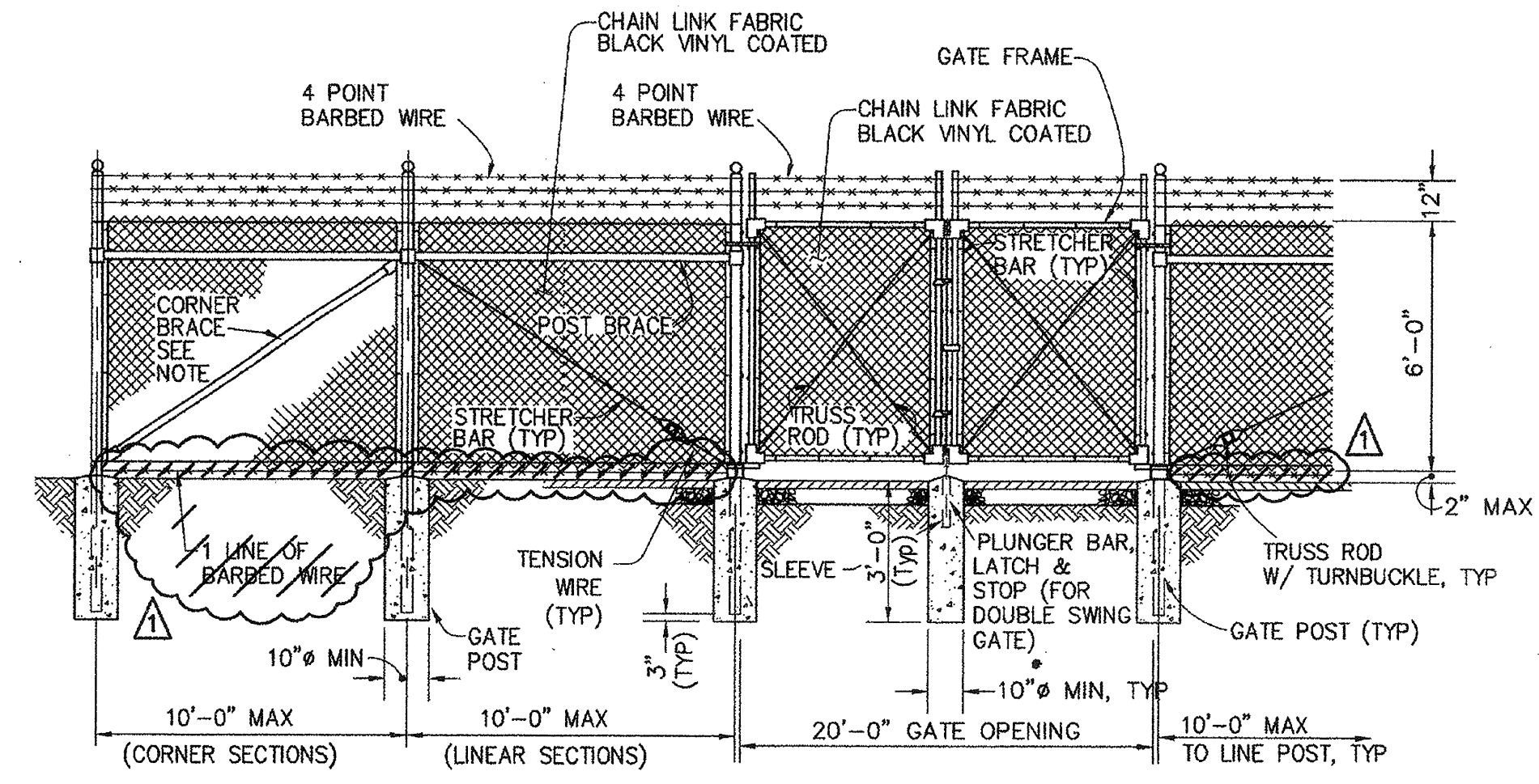
- NOTES:**
- WEAKENED PLANE JOINTS SHALL BE INSTALLED AT THE CENTER OF ALL DRIVEWAYS OVER 20' WIDE.
  - MAXIMUM SIDEWALK CROSS SLOPE (1/4" PER FOOT).
  - WIDEN OR MEANDER SIDEWALK AT OBSTRUCTIONS (INCLUDING DRIVEWAYS) TO MAINTAIN 5' MINIMUM CLEARANCE.
  - ALL CONCRETE SHALL BE CLASS A.
  - WELDED WIRE FABRIC (4"x4" 10/10) SHALL BE PLACED THROUGHOUT COMMERCIAL AND INDUSTRIAL DRIVEWAYS WITHIN THE STREET RIGHT OF WAY.

**1 DRIVEWAY**  
1 2 NTS



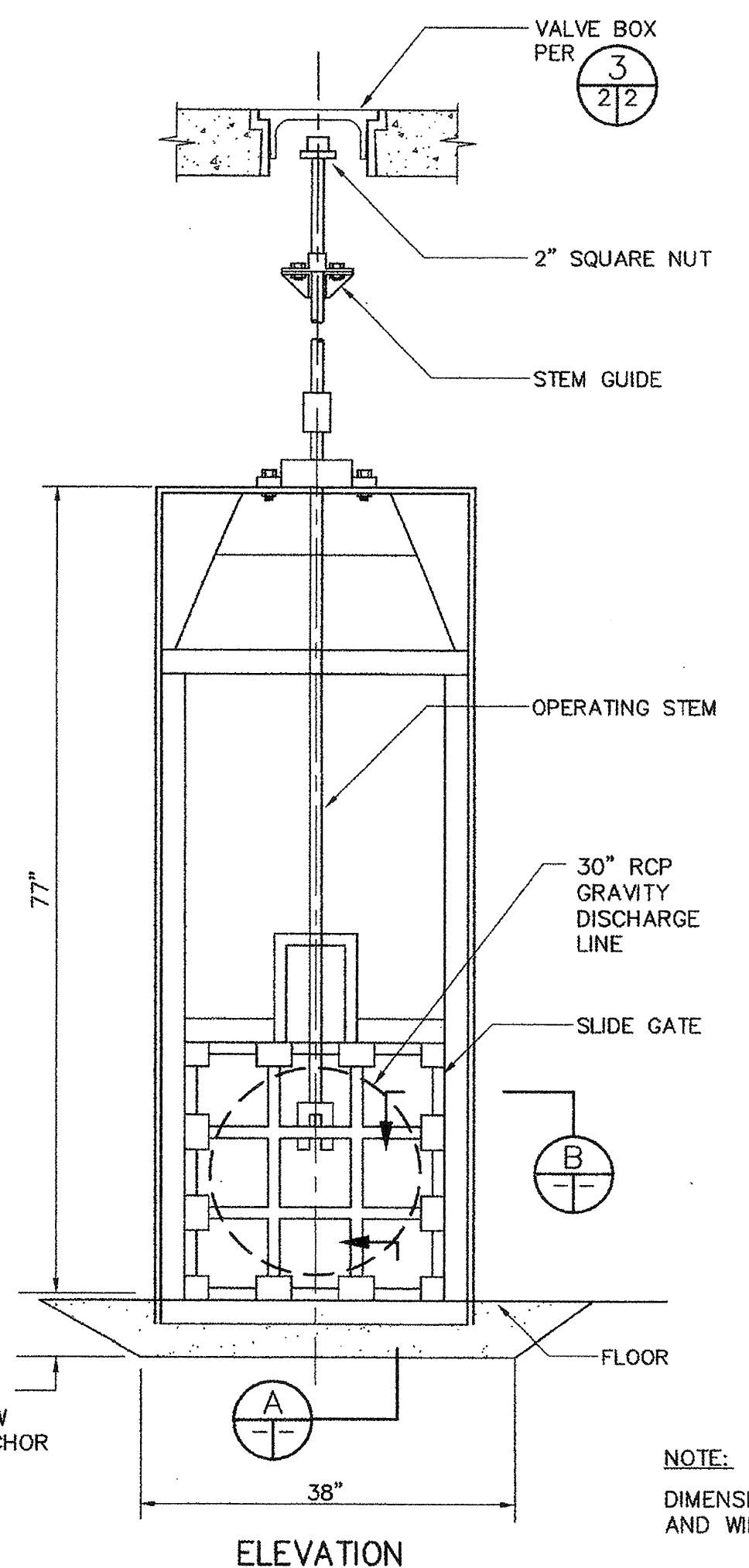
**5 SLIDE GATE INSTALLATION DETAIL**  
4 2 NTS

8" OR RECOMMENDED CLEARANCE TO ALLOW INSTALLATION OF ANCHOR BOLTS, WHICHEVER IS GREATER

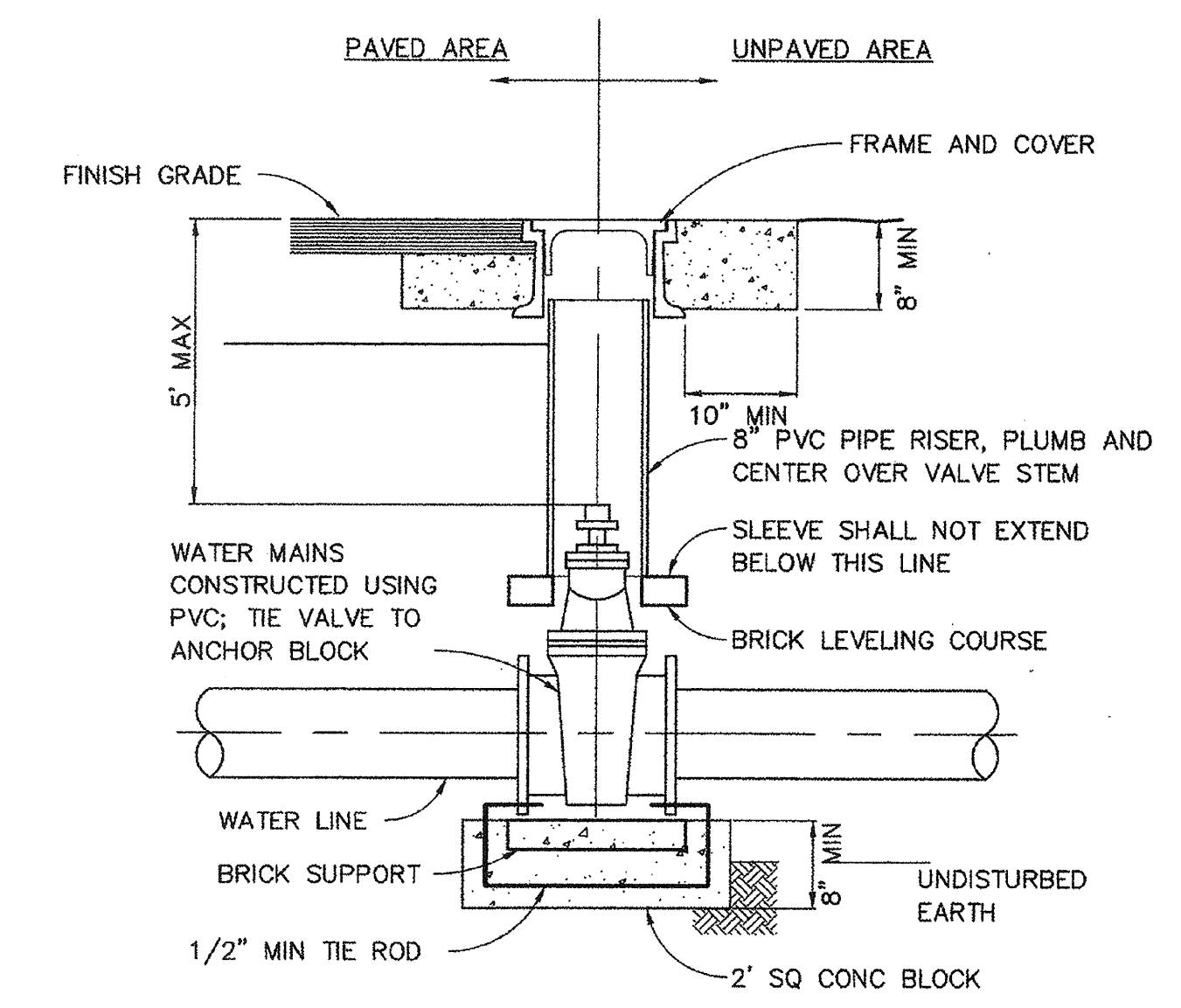


- NOTES:**
- TO BE INSTALLED AT ALL ANGLE POINTS W/A DEFLECTION OF MORE THAN 15' AND AT ENDS
  - PROVIDE TAPE OR MASTIC 2" ABOVE AND BELOW POST AT CONC ANCHOR
  - PROVIDE GATE KEEPER FOR EACH GATE (2) AND INSTALL AT EDGE OF PAVEMENT TO HOLD OPEN GATE

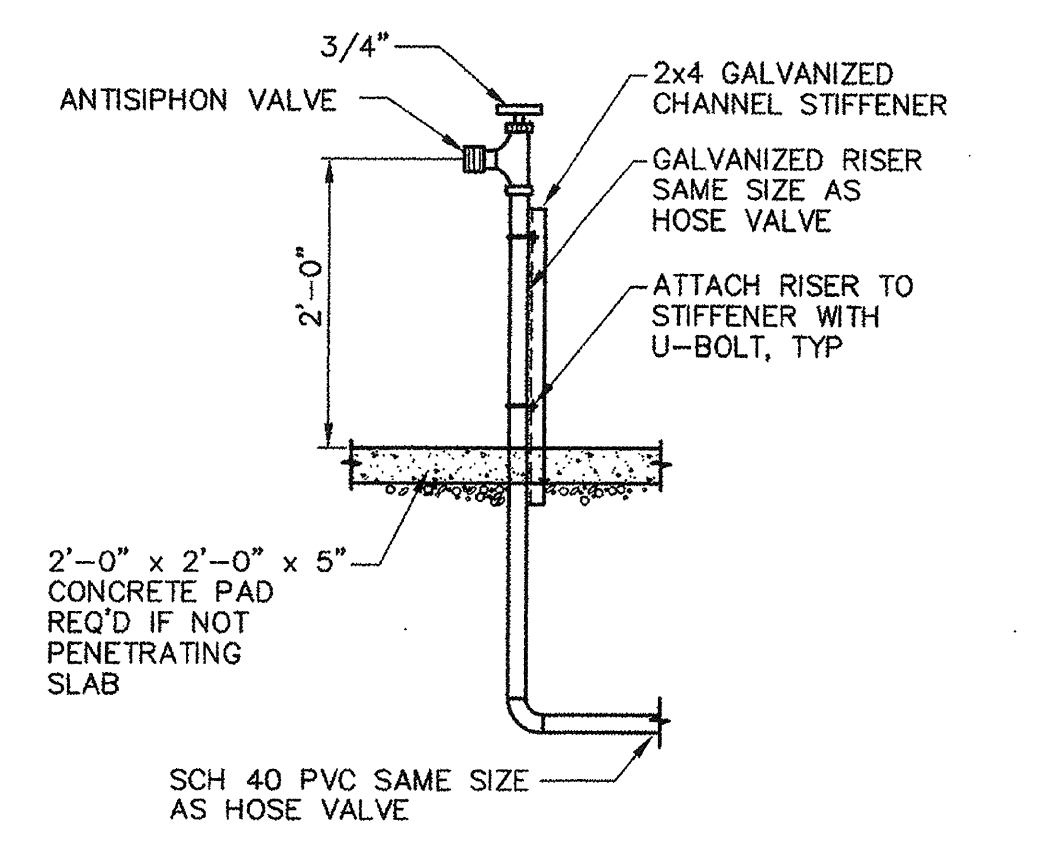
**2 SECURITY GATE AND FENCE**  
1 2 NTS



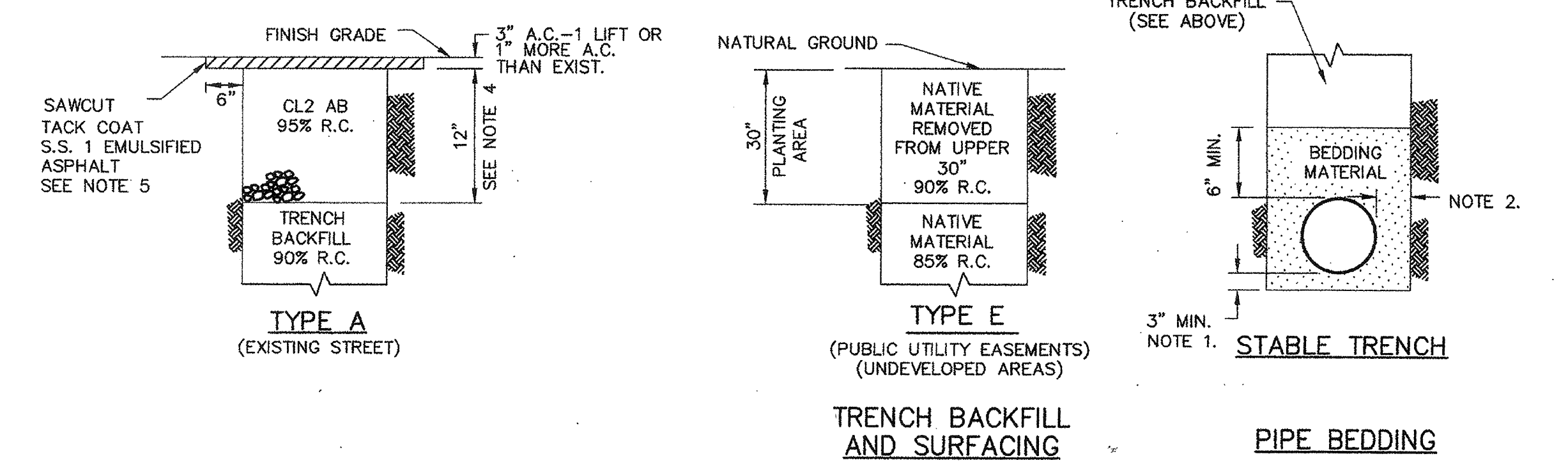
**NOTE:**  
DIMENSIONS ARE APPROXIMATE AND WILL VARY WITH MANUFACTURER



**3 GATE VALVE AND VALVE BOX INSTALLATION**  
4 2 NTS



**4 HOSE BIB**  
1 2 NTS



- NOTES:**
- 1/4" PIPE O.D. OR 4" MIN. WHEN EXCAVATION IS IN ROCKY GROUND.
  - PIPE DIAMETER 18" OR LESS: 6" MIN., 9" MAX. PIPE DIAMETER GREATER THAN 18": 6" MIN., 12" MAX. (PLUS SHIELD ALLOWANCE)
  - RELATIVE COMPACTION DESIGNATED R.C.
  - THE STREET STRUCTURAL SECTION SHALL BE A MIN. OF 3" A.C. ON 12" A.B. OR MATCH EXISTING PAVEMENT THICKNESS PLUS 1" A.C., WHICHEVER IS THICKER OR AS SPECIFIED ON PLANS.
  - SAWCUT PAVEMENT SIX INCHES FROM EDGE OF TRENCH AFTER TRENCH IS BACKFILLED.

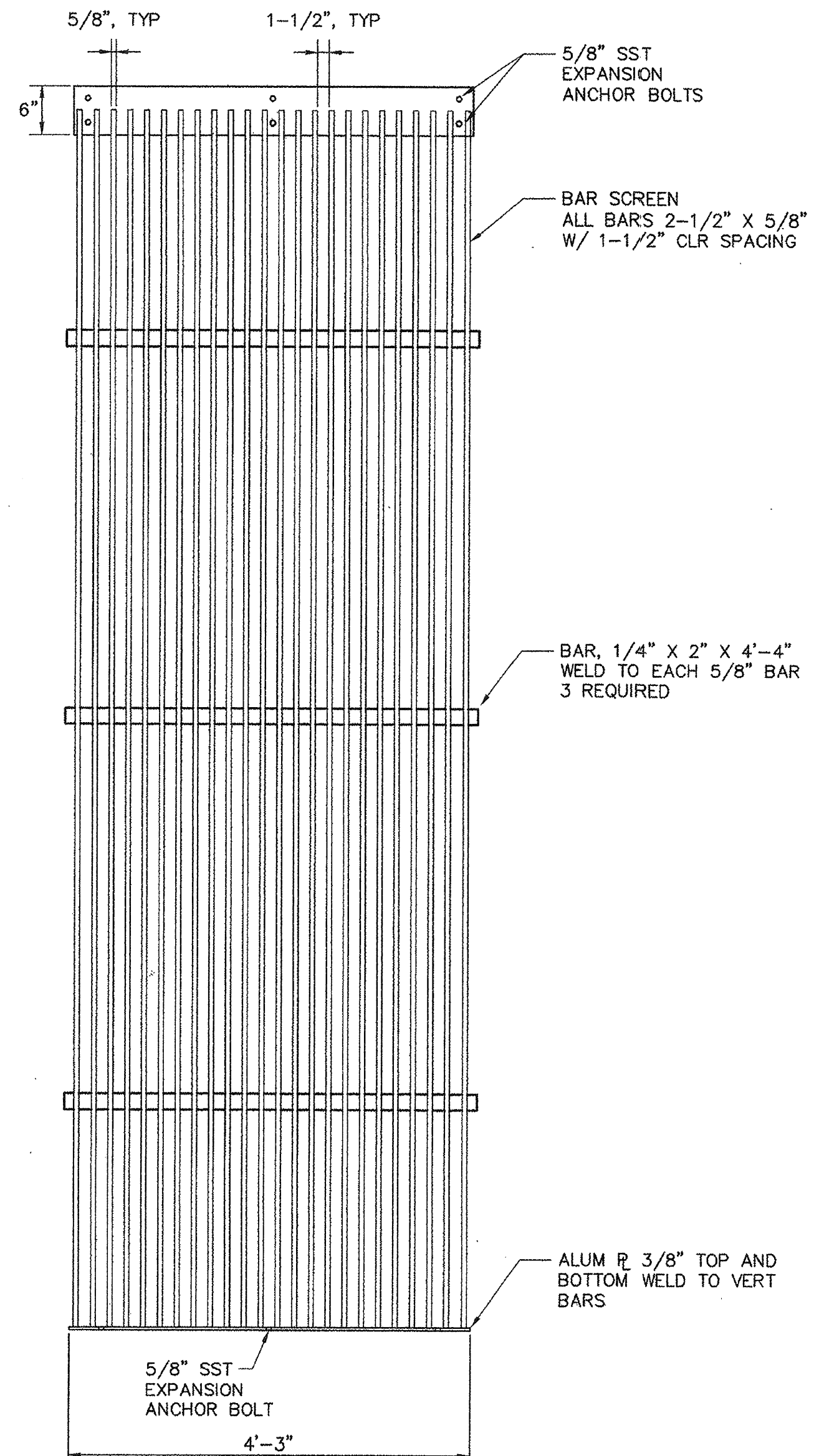
**6 STANDARD TRENCH DETAILS**  
2 2 NTS

ADDENDUM #1	4/19/99	APPROVAL
<b>WINZLER &amp; KELLY</b> 405 TOWN SQUARE, SANTA ROSA, CA 95401 TEL: (707) 535-1000 FAX: (707) 535-0570		
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA		DATE: 5/13/99
DRAWN BY: TP CHECKED BY: JW DESIGNED BY: TC	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION	CIVIL - DETAILS JOB NO: 06205504 SHEET 2 OF 52
PREPARED UNDER THE DIRECTION OF PETER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		

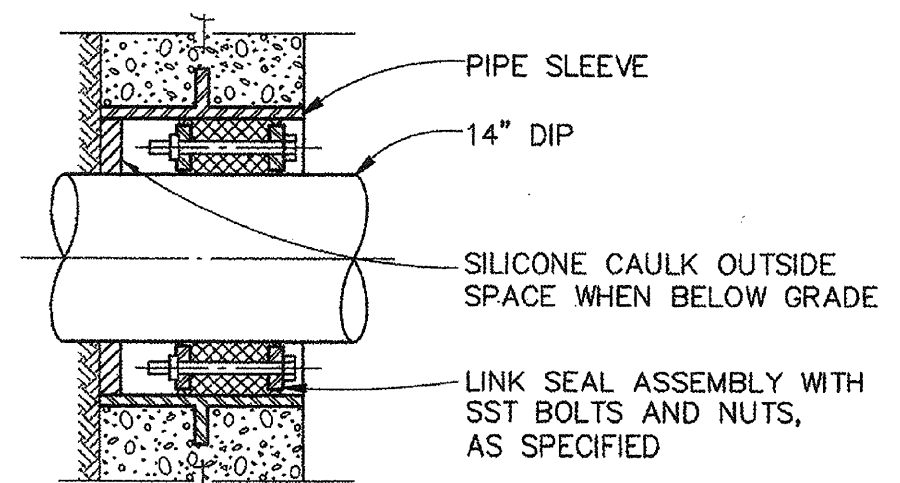


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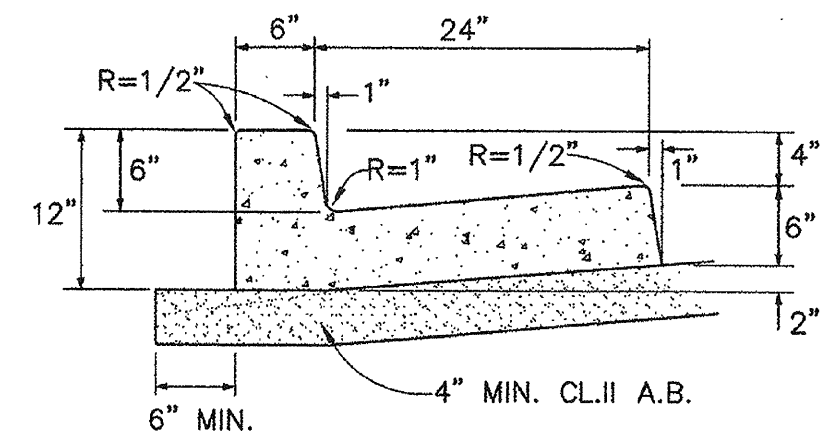




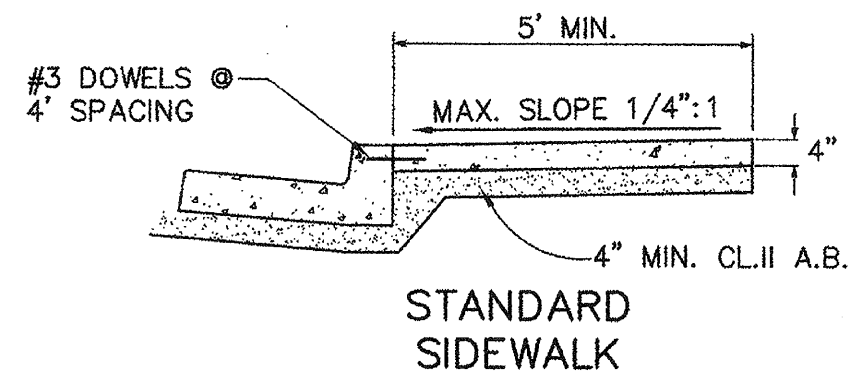
**1 BAR SCREEN FRONT VIEW**  
4 3 NTS



**2 WALL PENETRATION W/LINK SEAL DETAIL**  
4 3 NTS



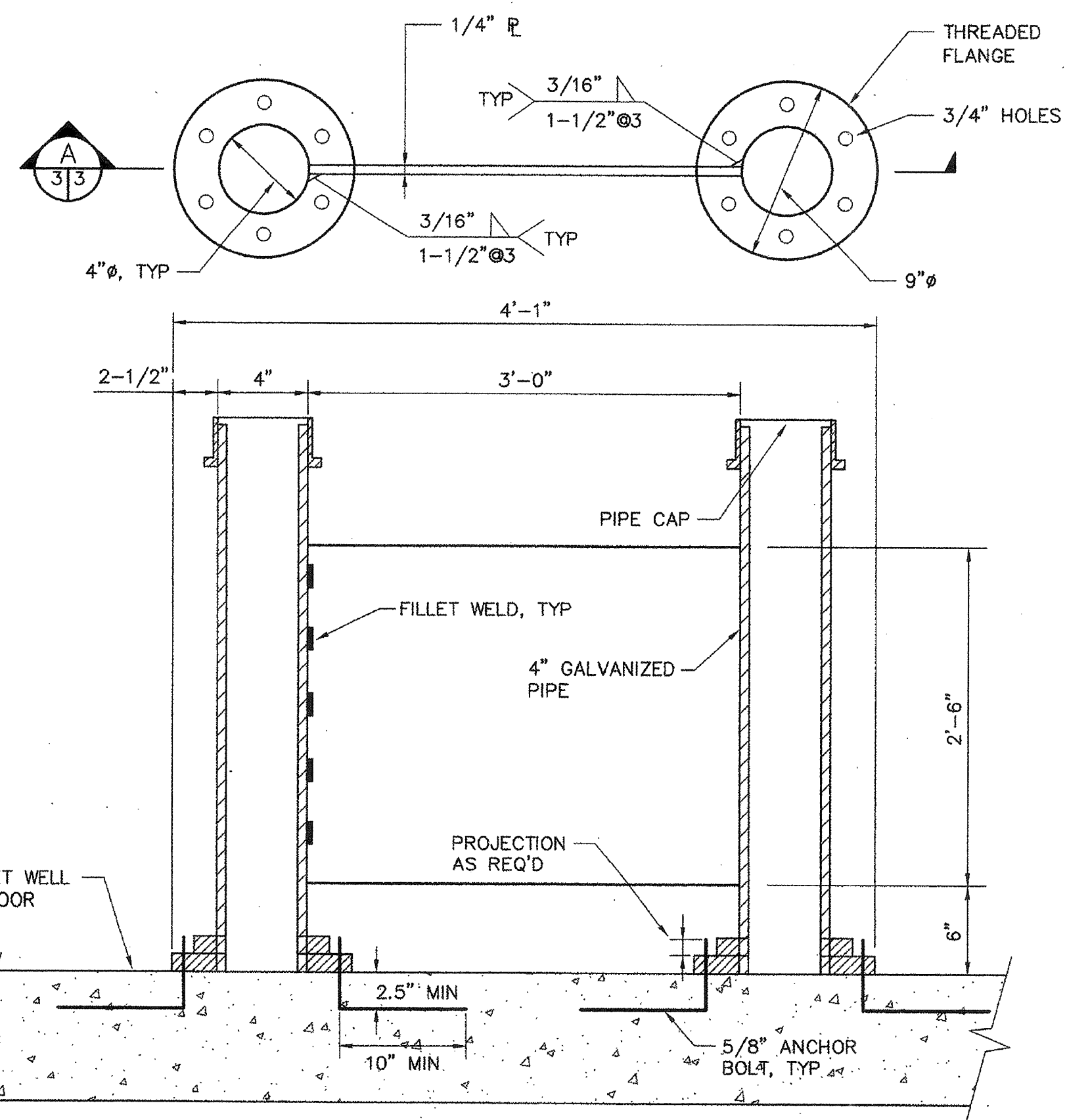
**STANDARD CURB AND GUTTER**



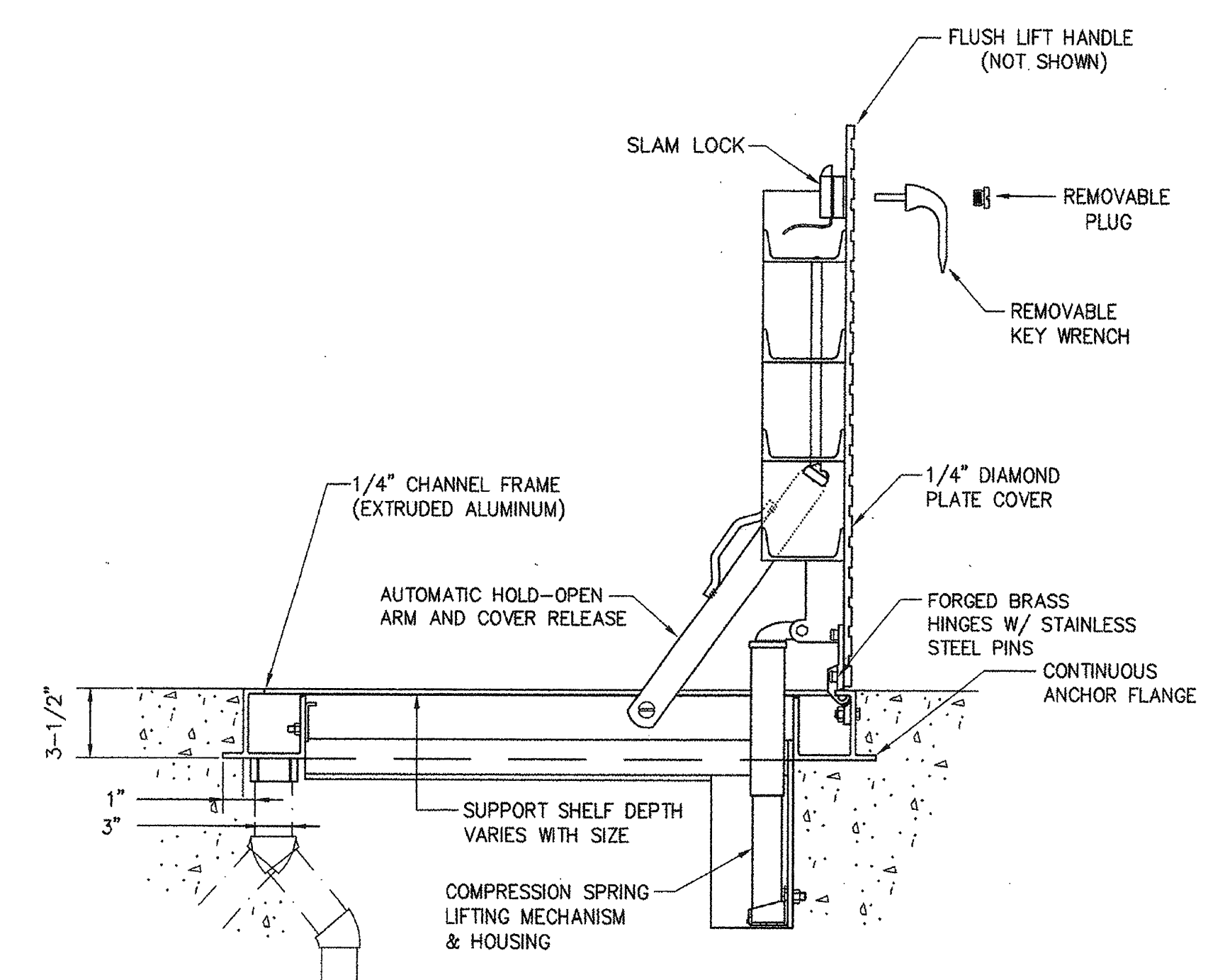
**STANDARD SIDEWALK**

- NOTES:**
1. EXPANSION JOINTS, 1/4 INCH WIDE, SHALL BE INSTALLED AT EACH SIDE OF STRUCTURES, AT ENDS OF CURB RETURNS AND AT THE TOP OF DRIVEWAY TAPERS.
  2. EXPANSION JOINTS SHALL BE INSTALLED AT 60 FOOT INTERVALS, WITH WEAKENED PLANE JOINTS EVERY 15 FEET.
  3. SIDEWALKS SHALL BE SCORED INTO 5 FOOT SQUARES.
  4. IF EXTRUSION MACHINE IS USED EXPANSION JOINTS SHALL BE DEEP SCORE 1/3 THE THICKNESS.

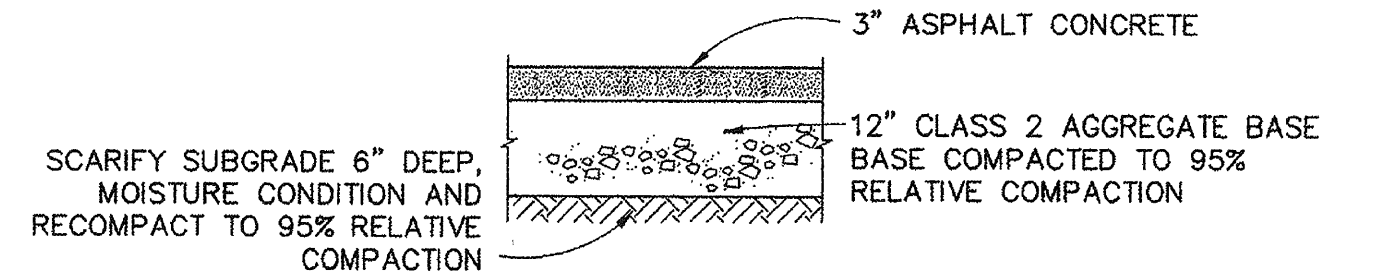
**3 SIDEWALK, CURB, AND GUTTER DETAIL**  
1 3 NTS



**4 BAFFLE DETAIL**  
4 3 NTS



**5 HATCH**  
4 3 NTS



**DRIVEWAY AND STREETS**

**6 TYPICAL ROAD SECTION**  
1 3 NTS

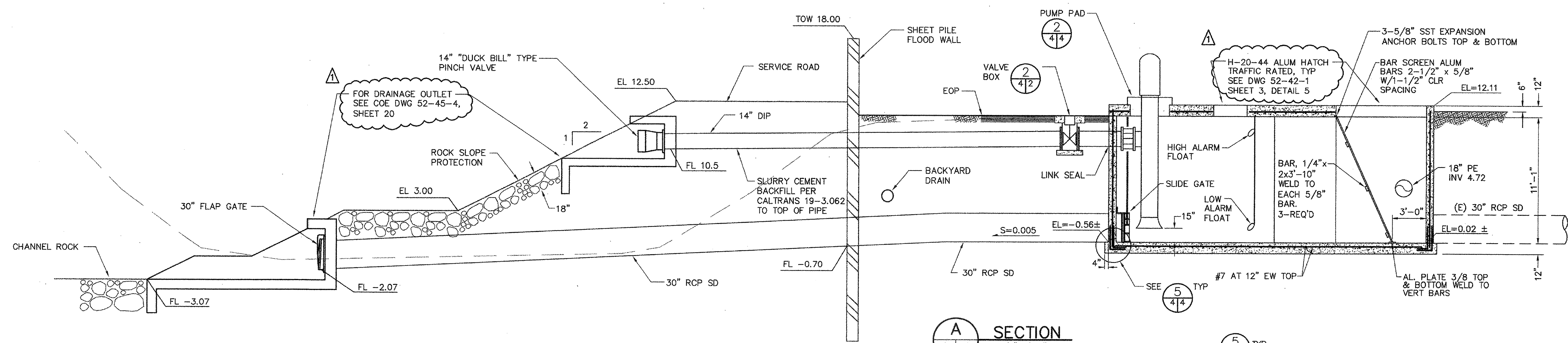
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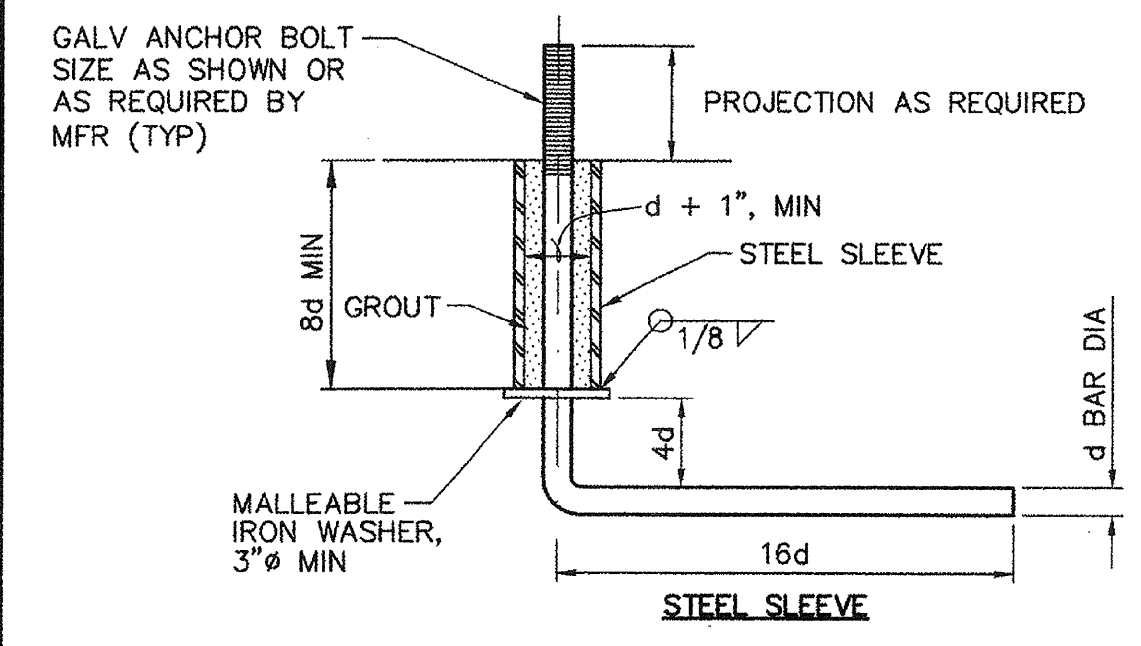
ADDENDUM #1		4/19/99	
SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 410 TEBBINS DRIVE, SANTA ROSA, CA 95401 TEL: (707) 532-1000 FAX: (707) 532-6675		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: SB	SONOMA COUNTY	CALIFORNIA	
CHECKED BY: JW	PETALUMA RIVER		
DESIGNED BY: TC	PAYRAN ST. STORM DRAIN PUMP STATION		
APPROVED: [Signature]		DATE: 5/13/99	
PREPARED UNDER THE DIRECTION OF: PETER T. GRASS		SCALE: SHOWN	JOB NO.: 96205504
LT. COLONEL, C.E., DISTRICT ENGINEER		DRAWING NUMBER	
		SHEET 3	52 42 1

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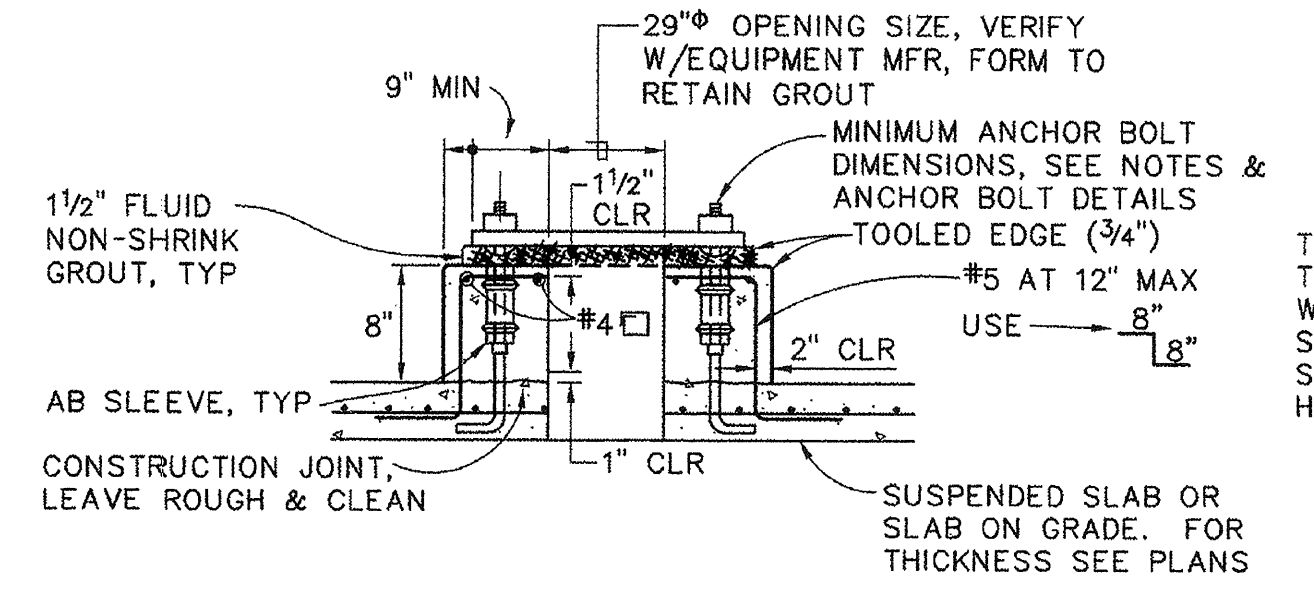




**A SECTION**  
1/4"=1'-0"

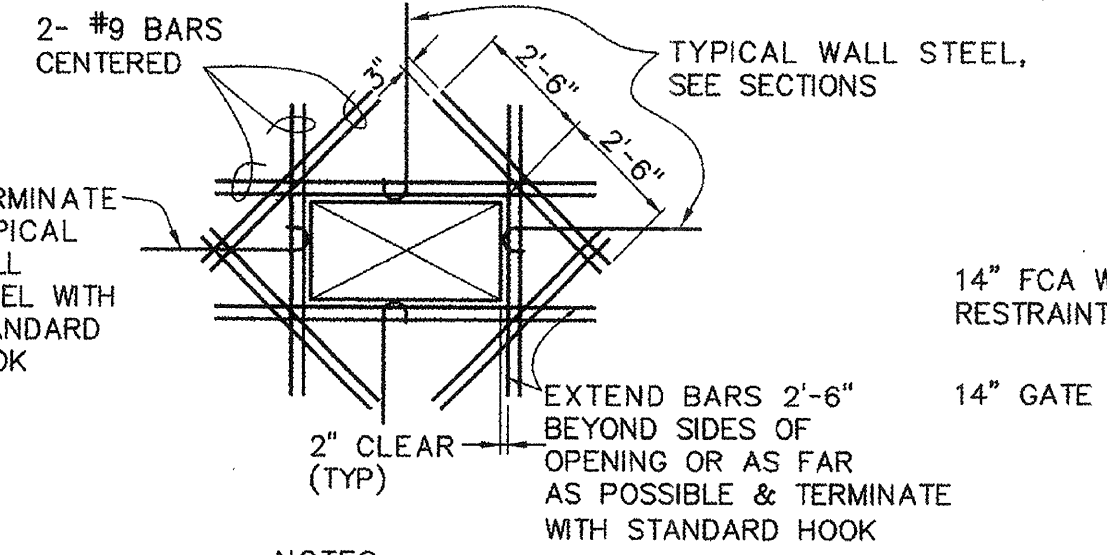


**1 ANCHOR BOLT**  
NTS



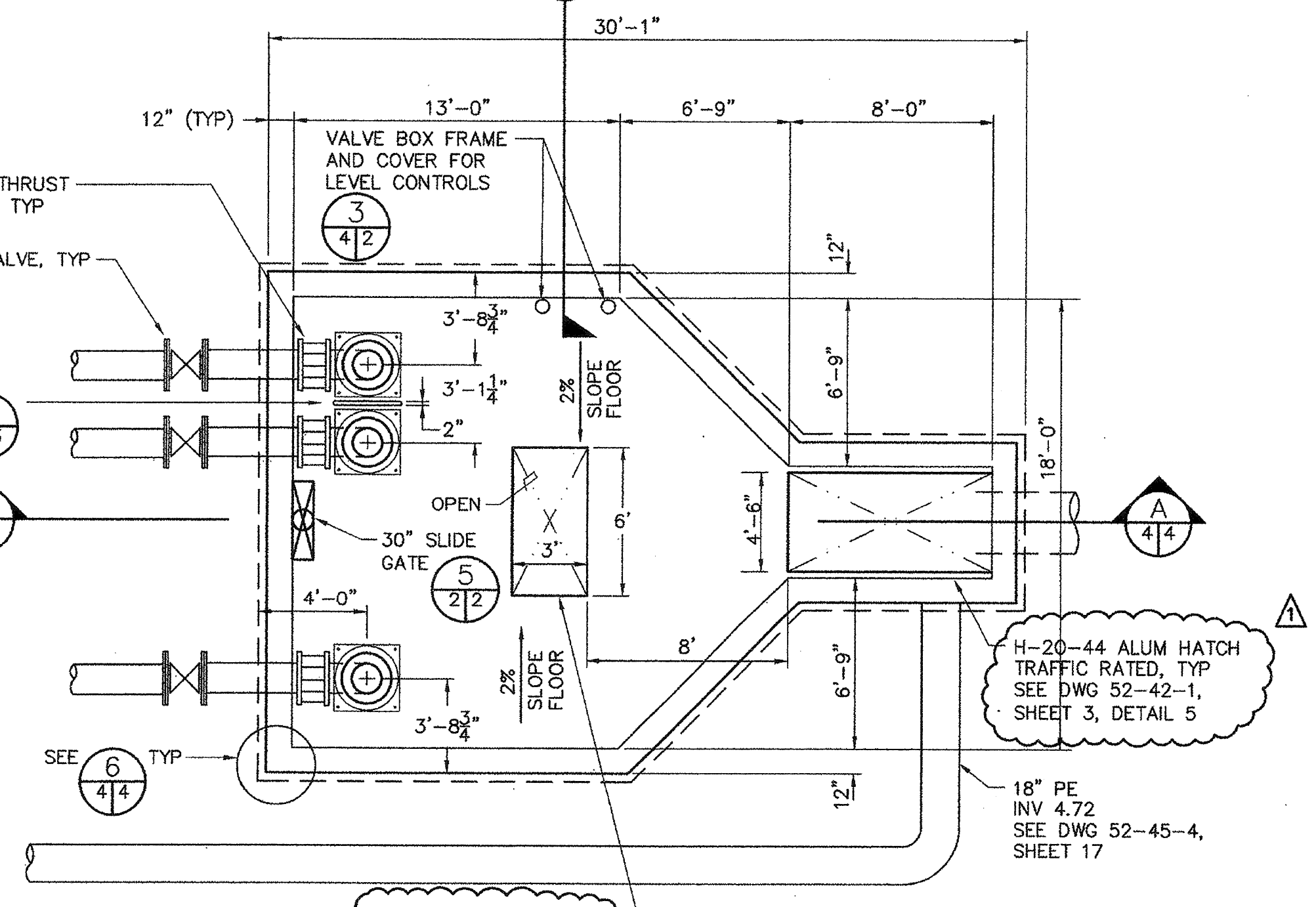
1. THE SIZE, NUMBER, TYPE, LOCATION AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER, AND SHALL BE AS APPROVED BY THE ENGINEER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A TEMPLATE WHILE PAD IS BEING POURED.
2. ANCHOR BOLT SLEEVES SHALL BE USED TO PROVIDE THE ANCHOR BOLT A MINIMUM MOVEMENT OF 1/2" IN ALL DIRECTIONS.
3. ANCHOR BOLT SLEEVES SHALL HAVE A MINIMUM INTERNAL DIAMETER 1" GREATER THAN BOLT DIAMETER AND A MAXIMUM INTERNAL DIAMETER 3" GREATER THAN ANCHOR BOLT DIAMETER.
4. EQUIPMENT BASES SHALL BE INSTALLED LEVEL.
5. WEDGES OR SHIMS SHALL BE USED TO SUPPORT THE BASE WHILE THE NON-SHRINK GROUT IS PLACED. TEMPORARY LEVELING NUTS SHALL BE BACKED OFF. IF LEFT IN, THE WEDGES OR SHIMS SHALL NOT BE EXPOSED TO VIEW.

**2 PUMP PAD**  
NTS

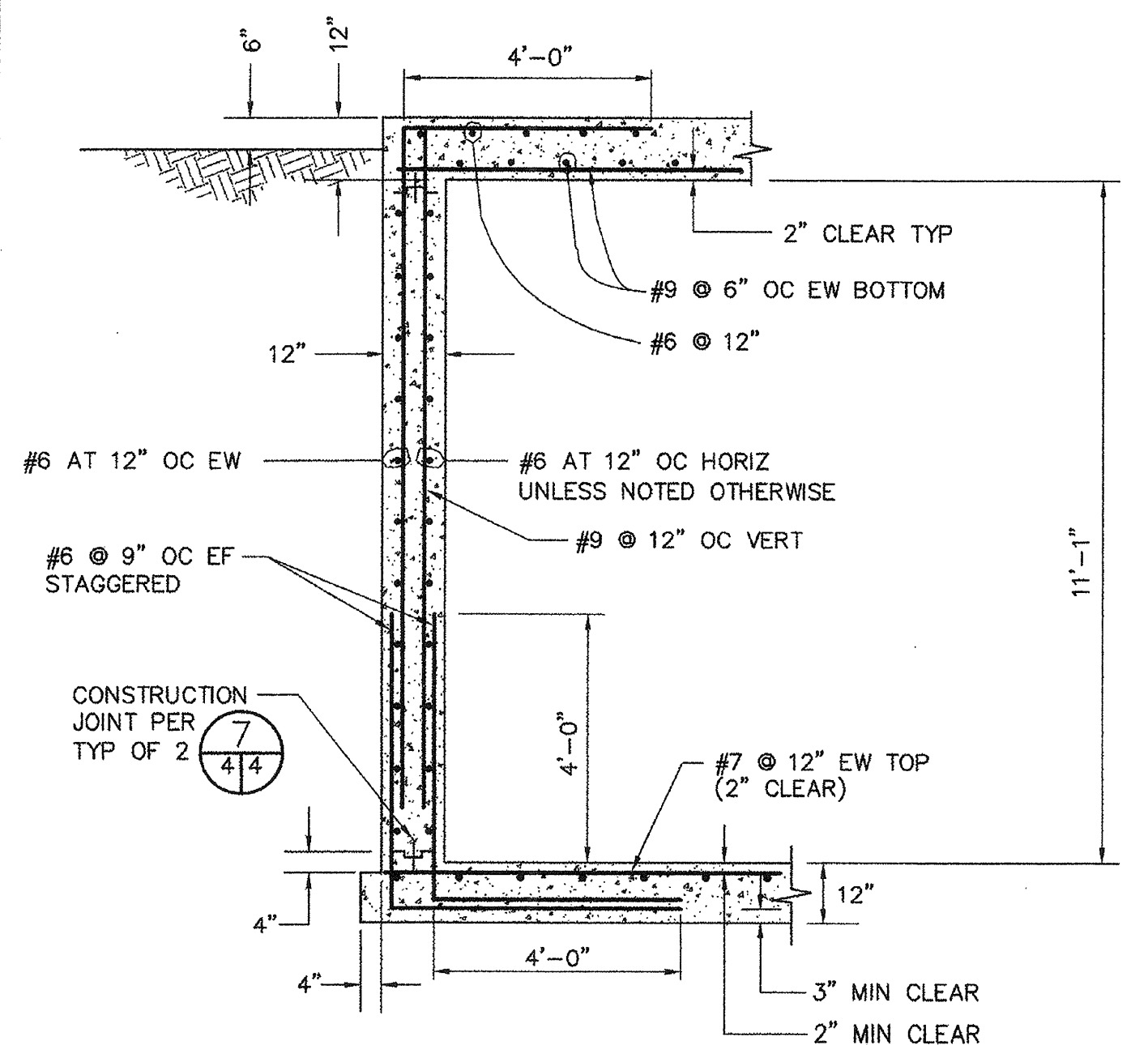


- NOTES:**
1. FOR ROUND OPENING USE CIRCUMSCRIBING RECTANGLE FOR REINFORCING APPLICATION
  2. PROVIDE EXTRA BARS (NOT SHOWN) PARALLEL TO SIDES OF OPENINGS EQUAL TO AREAS OF INTERRUPTED SLAB BARS. EXTEND FULL LENGTH OF SPAN AND/OR LENGTH OF TOP BARS AS APPLICABLE
  3. PIPE PENETRATIONS SHALL BE MADE THROUGH STEEL SLEEVES W/3" WEEP RINGS. VOID BETWEEN PIPE AND SLEEVE SHALL BE SEALED WITH "LINK SEAL"

**3 TYPICAL OPENING REINFORCING**  
NTS

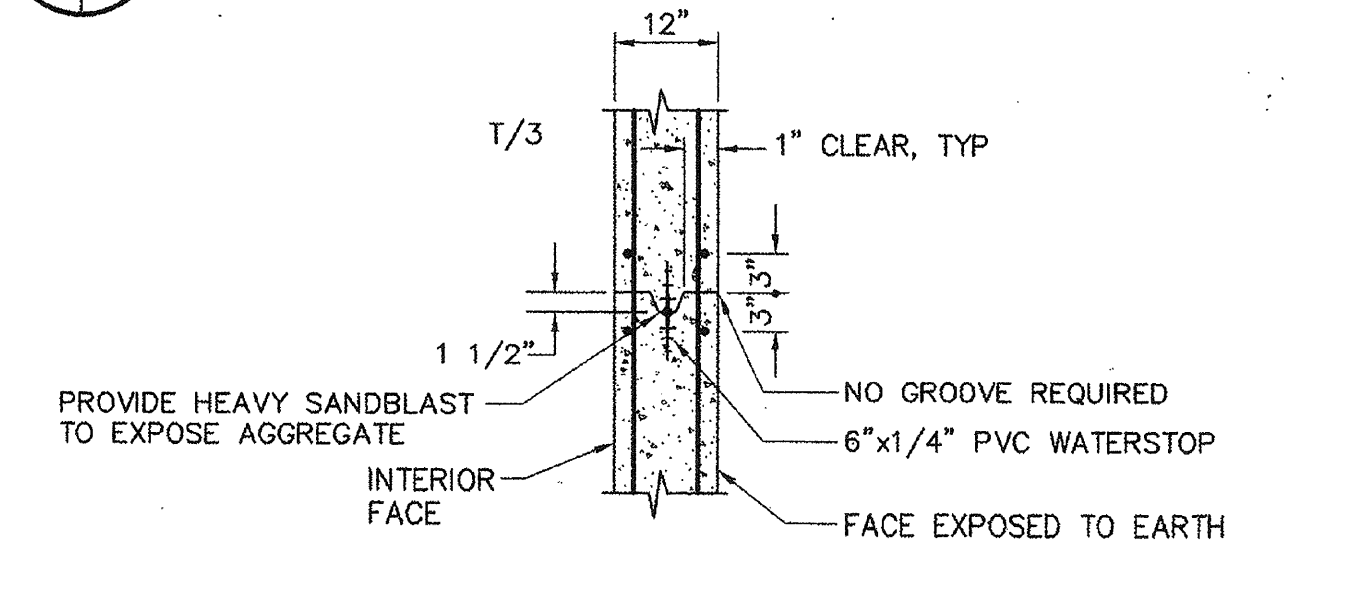


**4 WET WELL PLAN**  
1/4"=1'-0"



**5 WALL SECTION**  
1/2"=1'-0"

**6 PLAN - REINFORCEMENT AT CORNER**  
1/2"=1'-0"

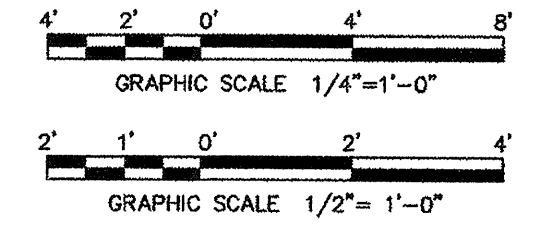


**7 TYPICAL WALL CONSTRUCTION JOINT**  
NTS

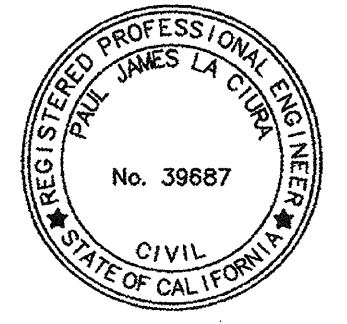
**PUMP ON/OFF & ALARM LEVELS**

BOTTOM OF WET WELL	-EL -0.6
LOW ALARM	-EL +2.0
PUMP 1 OFF	-EL +3.5
PUMP 2 OFF	-EL +3.5
PUMP 3 OFF	-EL +3.5
PUMP 1 ON	-EL +7.0
PUMP 2 ON	-EL +7.5
PUMP 3 ON	-EL +8.0
HIGH ALARM	-EL +10.0

- NOTES:**
1. CONTRACTOR TO VERIFY THAT EQUIPMENT & FITTING SUPPLIED WILL FIT IN WET WELL - BOTH LENGTH AND DEPTH.
  2. ALL PIPING SHALL BE FLANGED DIP.
  3. CONTRACTOR TO VERIFY EXISTING 30" RCP ELEVATIONS AT WET WELL LOCATION PRIOR TO CONSTRUCTION.



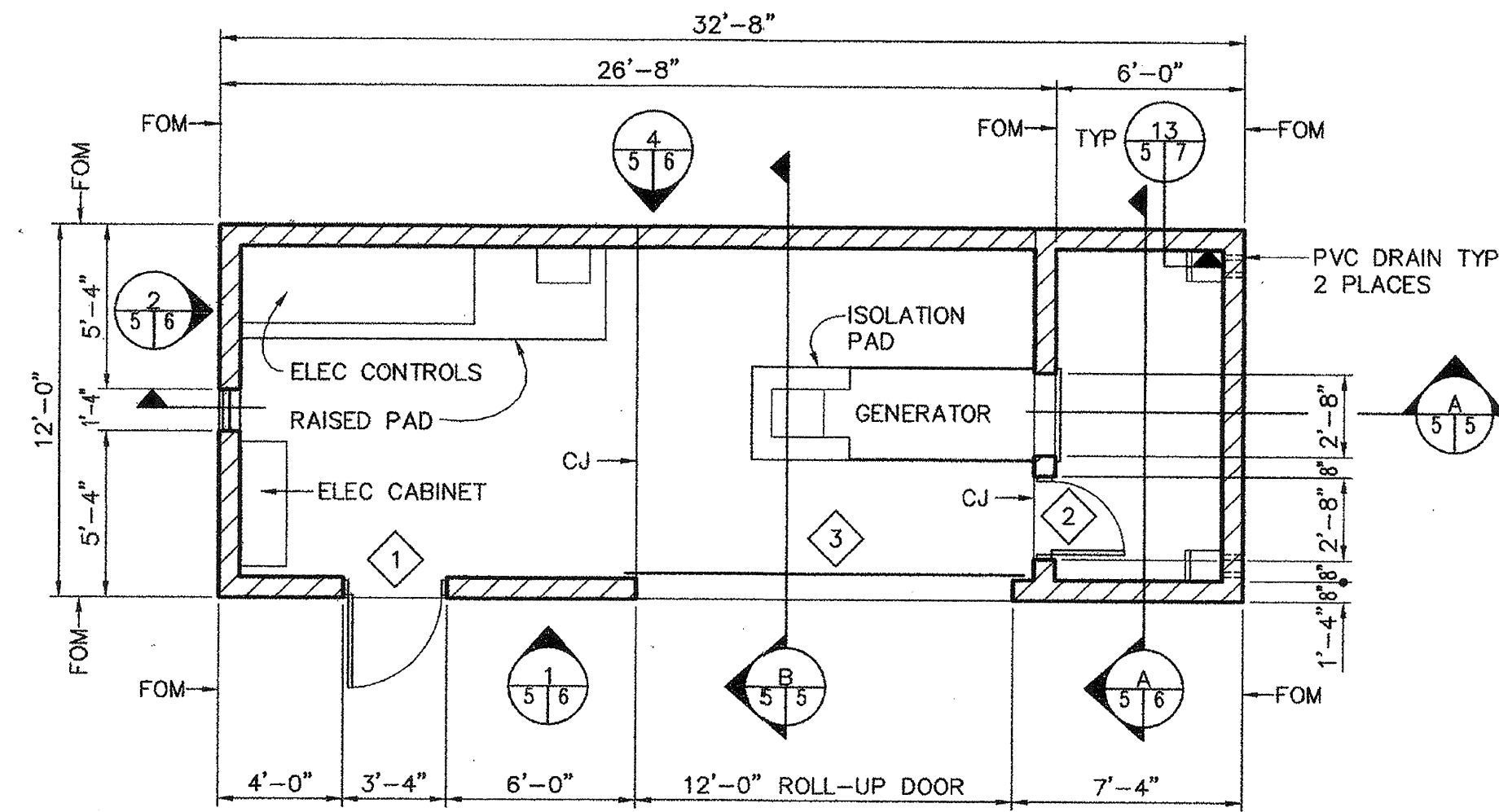
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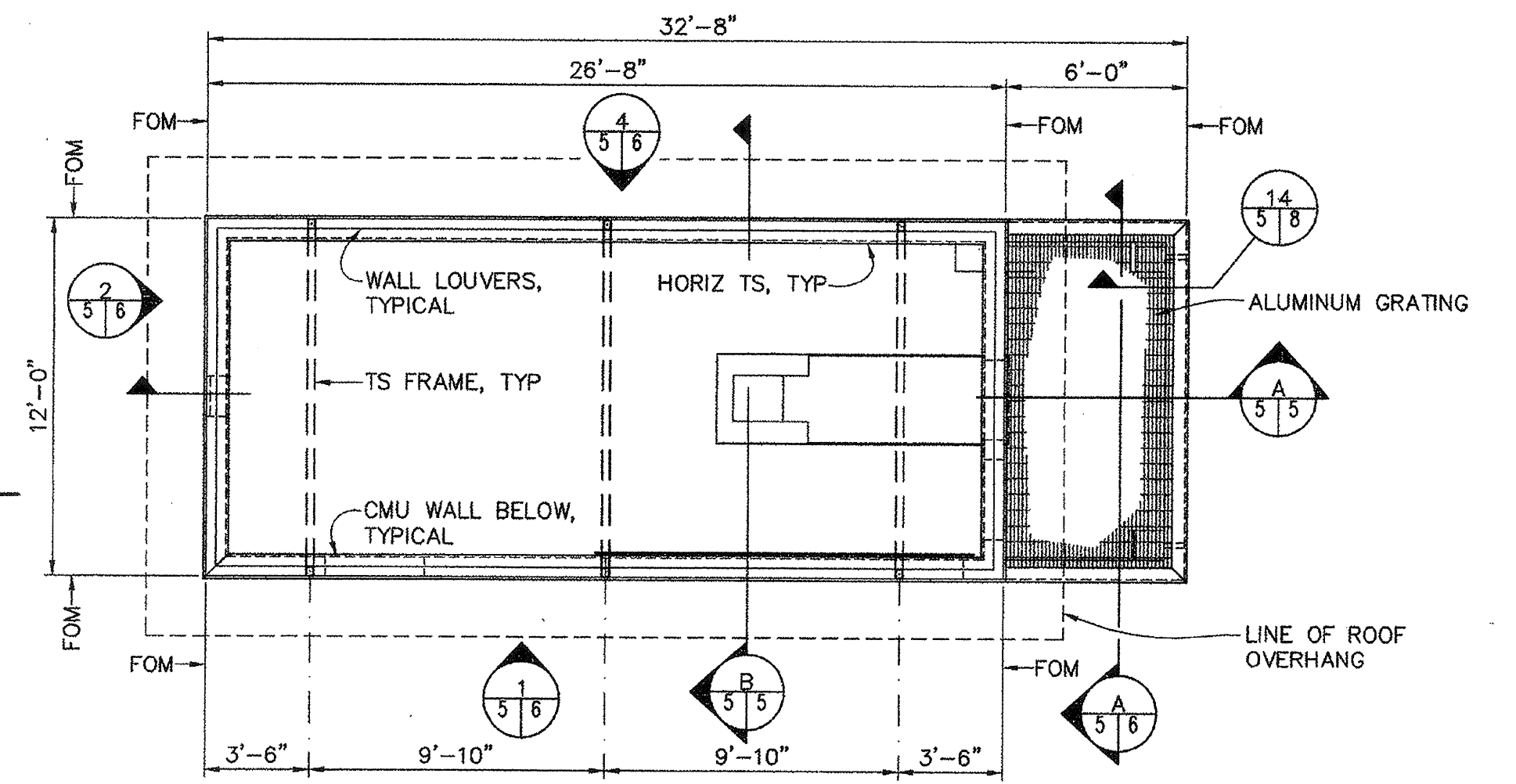
ADDENDUM #1		4/19/99	SW
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 400 RIVER STREET, SUITE 200, SAN FRANCISCO, CA 94109 TEL: (415) 774-1100 FAX: (415) 774-1101			
SONOMA COUNTY		CALIFORNIA	
PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION			
CIVIL - DETAILS			
PREPARED UNDER THE DIRECTION OF		SCALE	DATE
PETER T. GRASS		SHOWN	5/13/99
L.T. COLONEL, C.E., DISTRICT ENGINEER		DRAWING NUMBER	JOB NO.
		SHEET 4	96205504

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**FLOOR PLAN**  
SCALE: 1/4"=1'-0"



**FLOOR PLAN AT EL(+10'-0")**  
SCALE: 1/4"=1'-0"

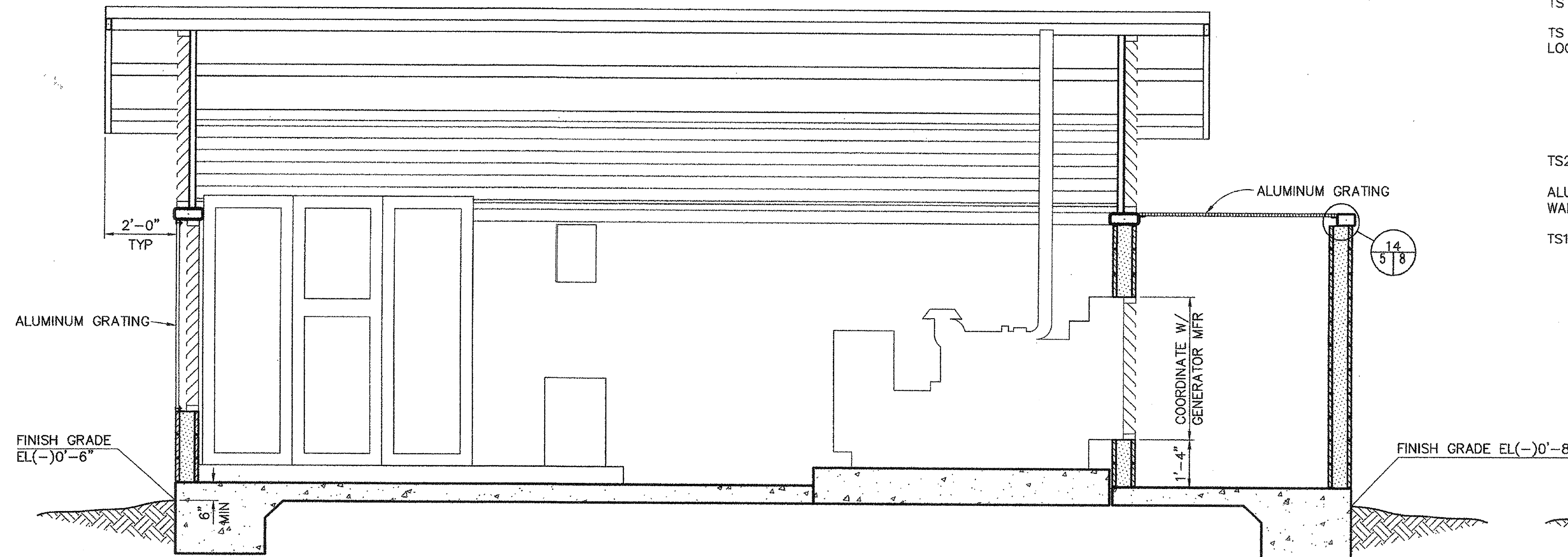
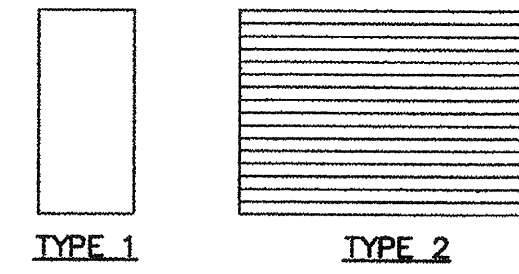
**PLAN NOTES**

1. ABBREVIATIONS PER SHEET 9
2. REFER TO STRUCTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS, AND ADDITIONAL INFORMATION
3. DATUM FINISH FLOOR ELEVATION (+)0'-0"= EL 12.15

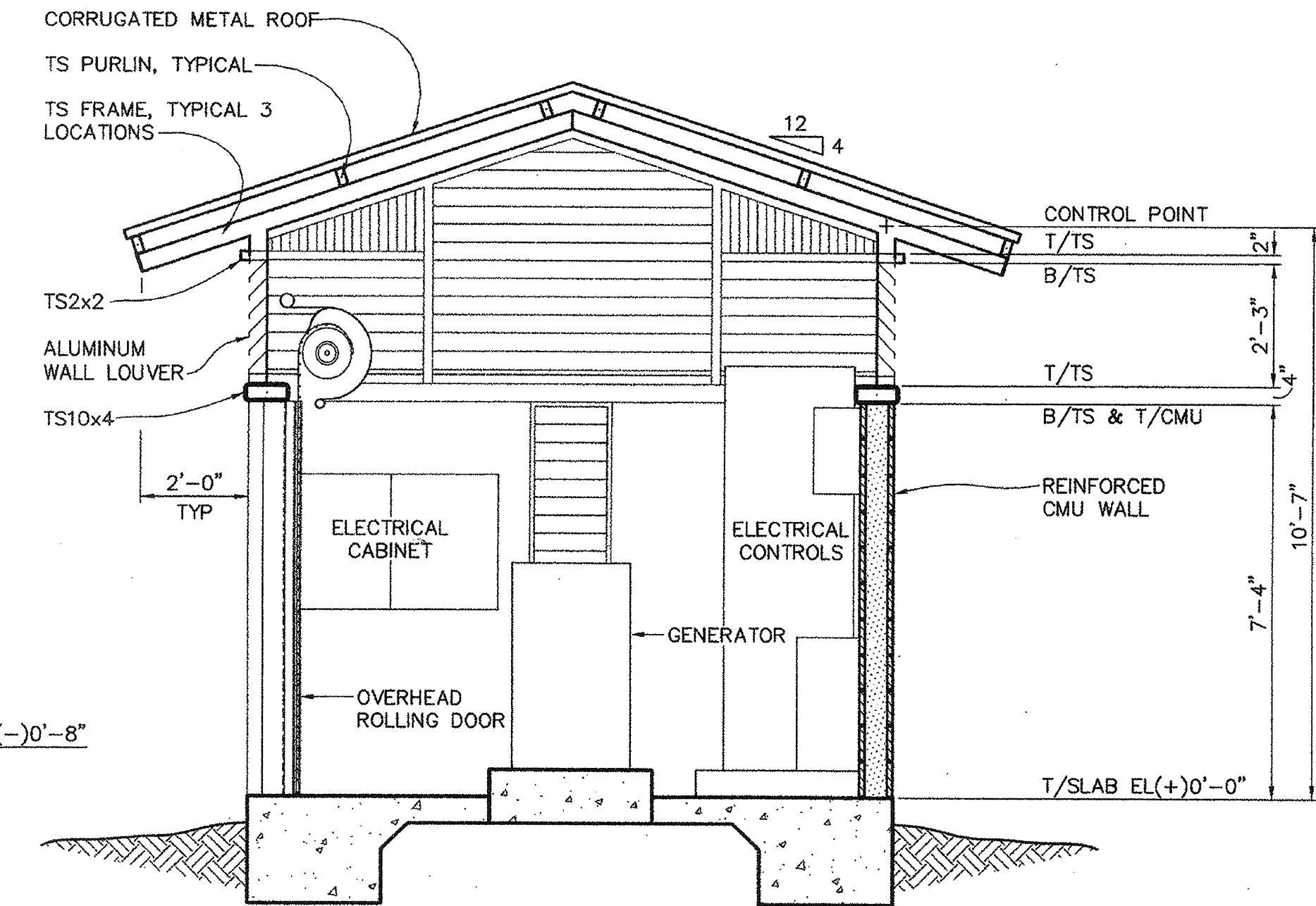
**BUILDING SUMMARY**

1. BUILDING SIZE = 392 SQ. FEET
2. OCCUPANCY GROUP IS F1
3. TYPE OF CONSTRUCTION IS CMU.
4. THE BUILDING IS SINGLE STORY
5. THERE ARE NO AUTOMATIC SPRINKLERS

DOOR SCHEDULE												
NO.	TYPE	HARDWARE GROUP	DOOR	FRAME	SIZE			DETAILS			FRAME FINISH	REMARKS
					W	H	T	HEAD	JAMB	SILL		
1	1	HW-1	HM	HM	3'-0"	7'-0"	1 3/4"	16/S-5	16/S-5	21/S-5	PAINT	
2	1	HW-1	HM	HM	2'-4"	7'-0"	1 3/4"	16/S-5	16/S-5	21/S-5	PAINT	
3	2	-	ALUM	-	12'-0"	7'-4"	-	16/S-5	16/S-5	21/S-5	-	

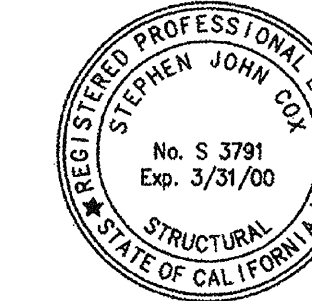


**BUILDING SECTION**  
SCALE: 1/2"=1'-0"



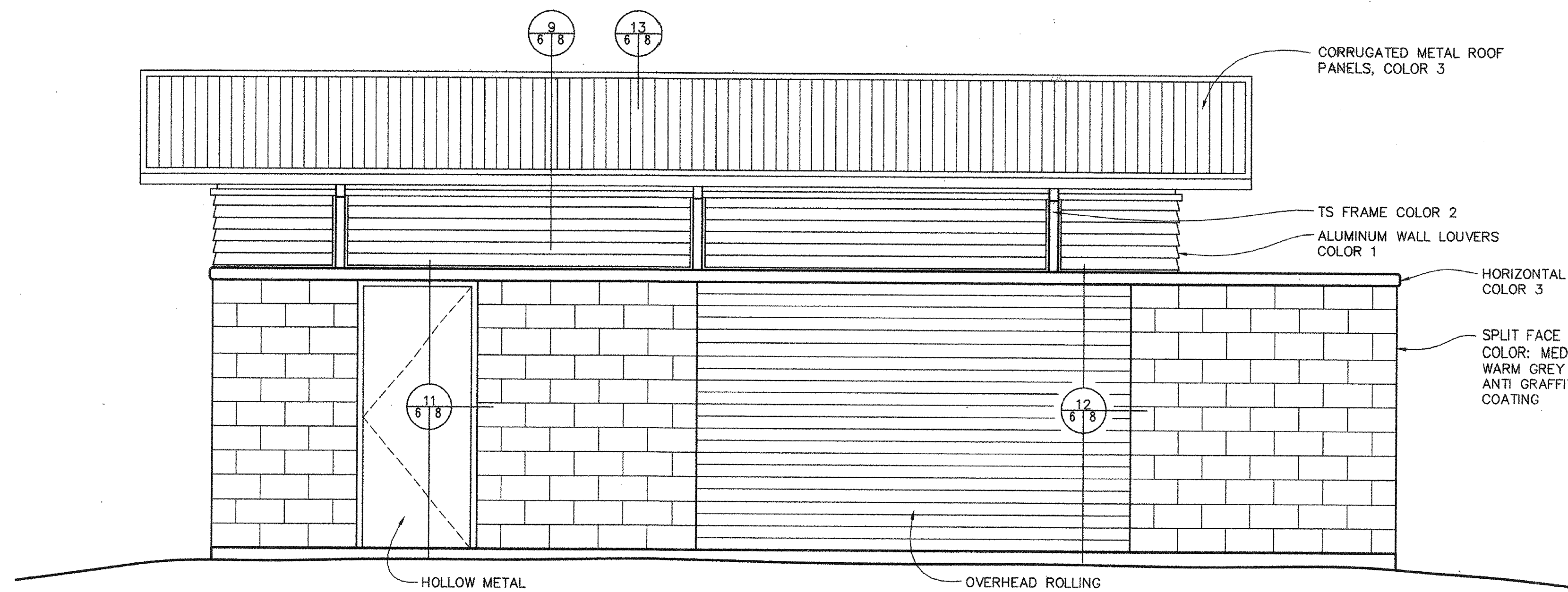
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SCALE: 1/2"=1'-0"

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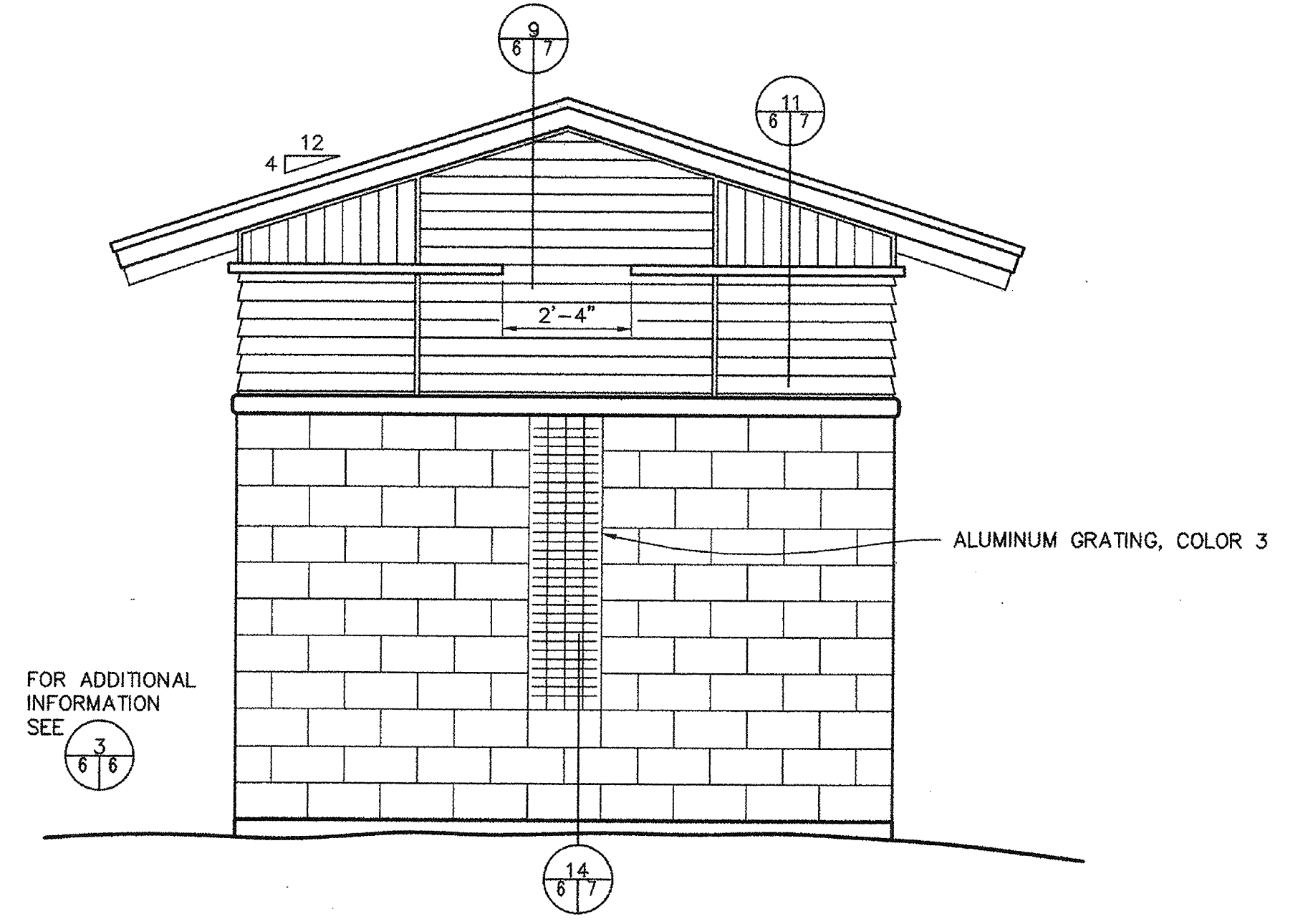


ADDENDUM #1	DATE: 4/19/99	APPROVAL: [Signature]
REVISIONS		
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 400 RIVER STREET, SUITE 200, CA 94901 PH (415) 222-0112 FAX (415) 222-0112		
U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA		
DRAWN BY: SB CHECKED BY: SC DESIGNED BY: SB APPROVED BY: [Signature]	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION FLOOR PLANS AND BUILDING SECTIONS	CALIFORNIA DATE: 5/13/99
PREPARED UNDER THE DIRECTION OF PETER T. GRASS L.T. COLONEL, C.E., DISTRICT ENGINEER		
SCALE: SHOWN	SHEET: 5	TOTAL SHEETS: 52 42 1

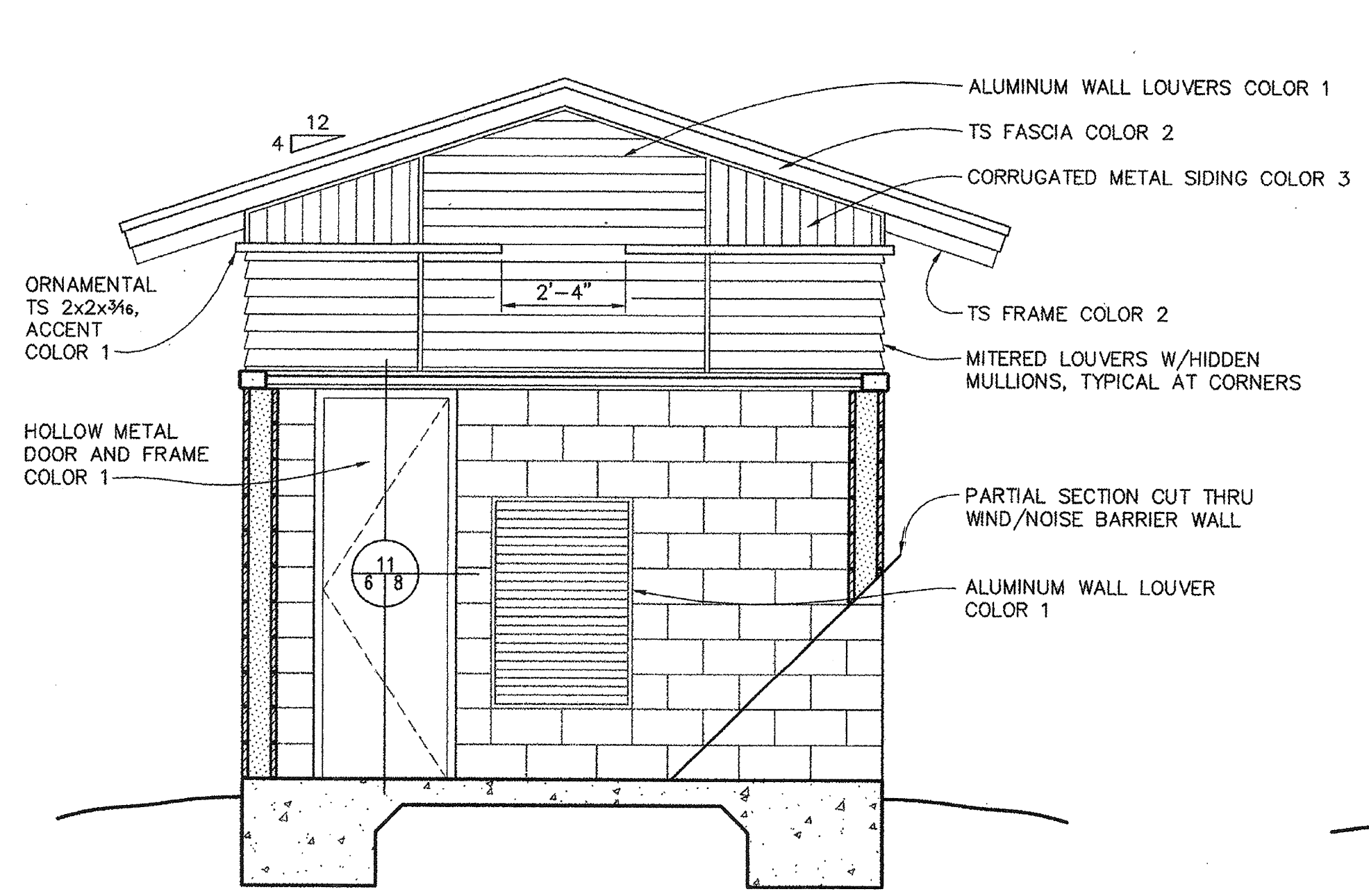
CONTRACT RECORD DWG



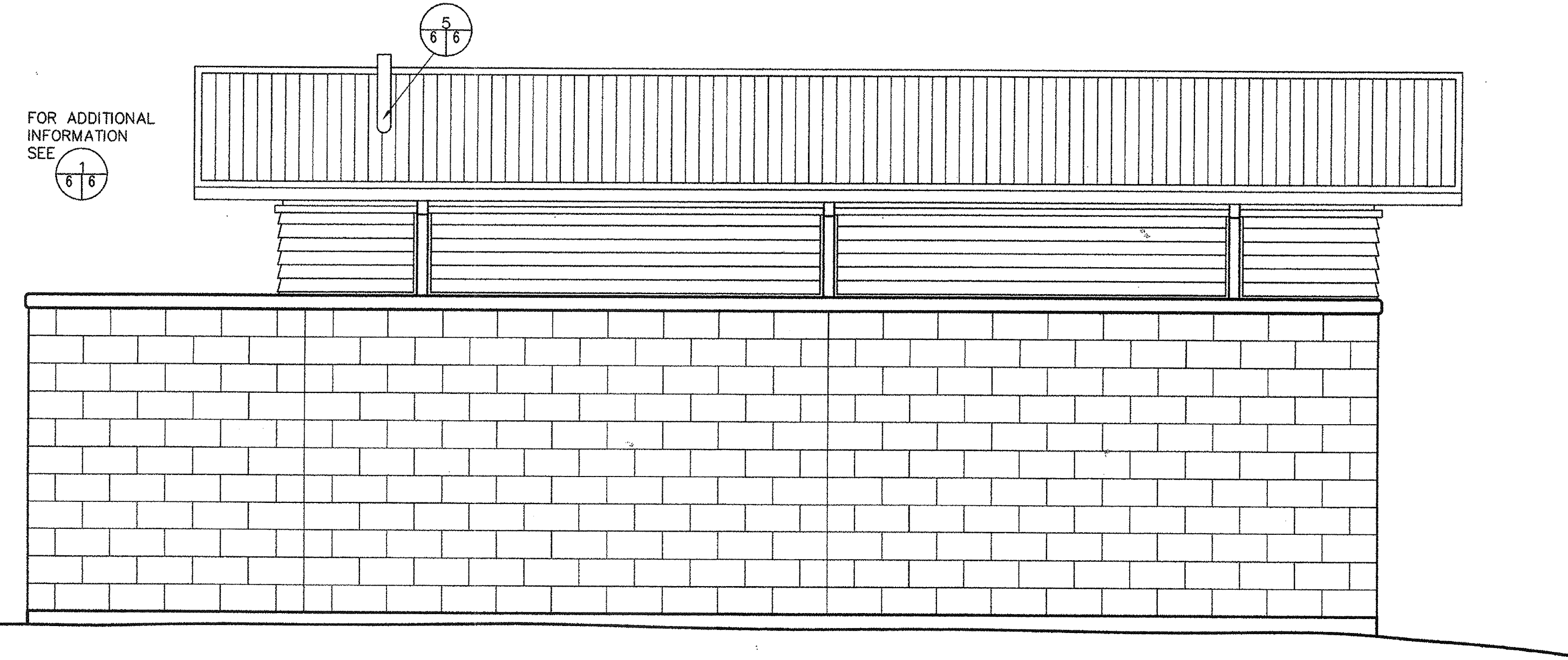
**1 BUILDING ELEVATION**  
SCALE: 1/2"=1'-0"



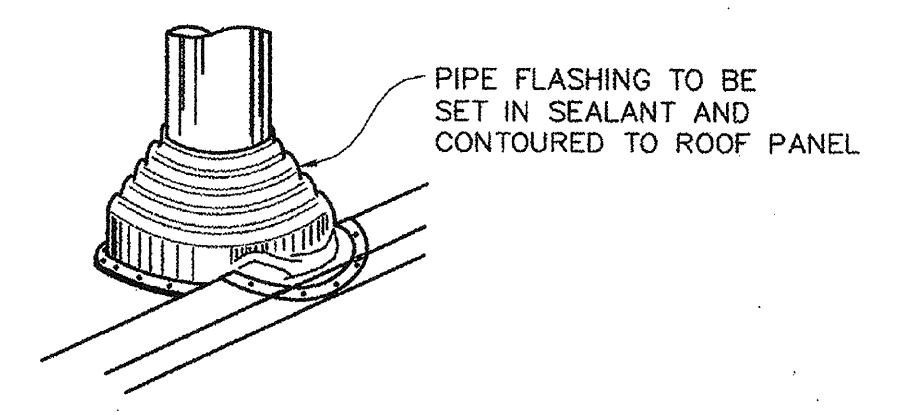
**2 BUILDING ELEVATION**  
SCALE: 1/2"=1'-0"



**A BUILDING SECTION**  
SCALE: 1/2"=1'-0"

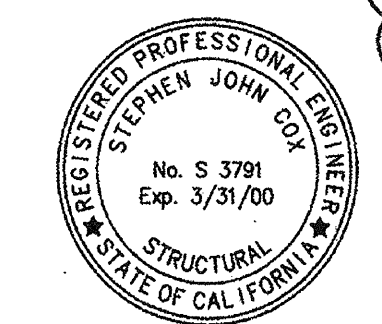


**4 BUILDING ELEVATION**  
SCALE: 1/2"=1'-0"



**5 PIPE FLASHING**  
SCALE: NONE

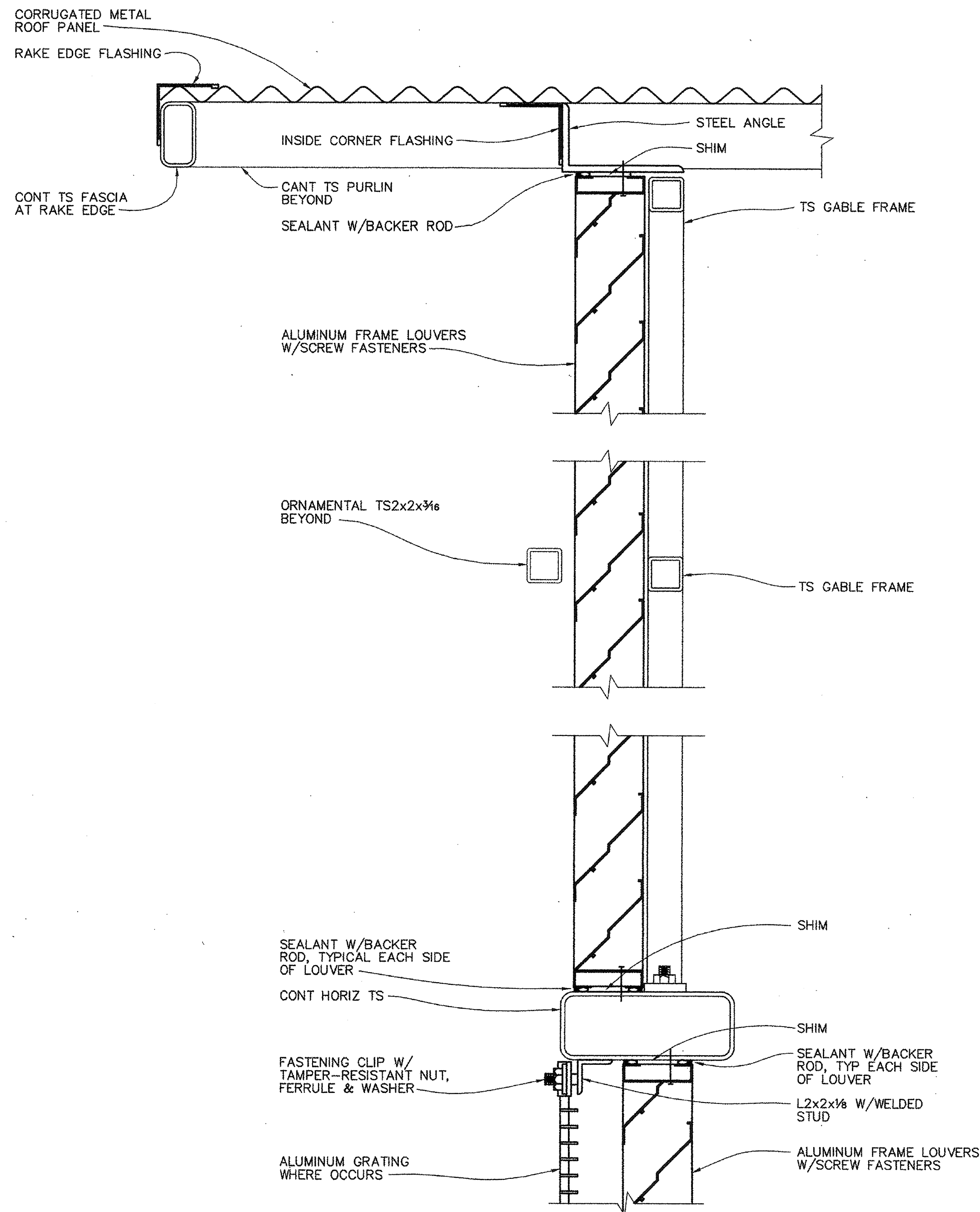
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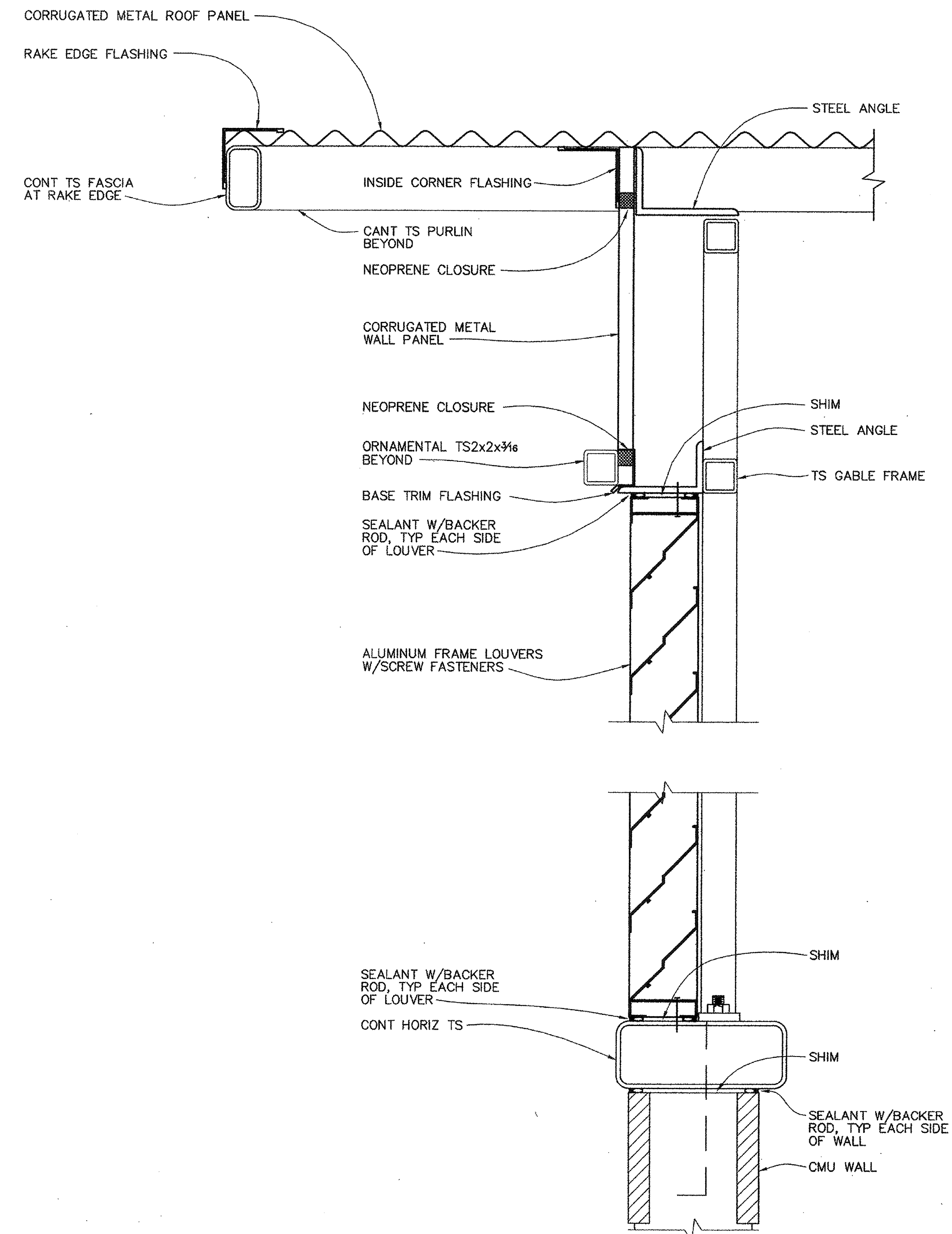
ADDENDUM #1		DATE	4/19/99
REVISIONS		DATE	APPROVAL
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 488 TEBBON CIRCLE, SAN FRANCISCO, CA 94141 P.O. BOX 8768, SAN FRANCISCO, CA 94168		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY:	SB	SONOMA COUNTY	CALIFORNIA
CHECKED BY:	SC	PETALUMA RIVER	
PROJECT COORDINATOR:	SB	PAYRAN ST. STORM DRAIN PUMP STATION	
PREPARED UNDER THE DIRECTION OF PETER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		BUILDING ELEVATIONS DATE: 5/13/99 SCALE: 1/2"=1'-0" JOB NO.: 9620504 DRAWING NUMBER SHEET 6 52 42 1	

CONTRACT RECORD DWG

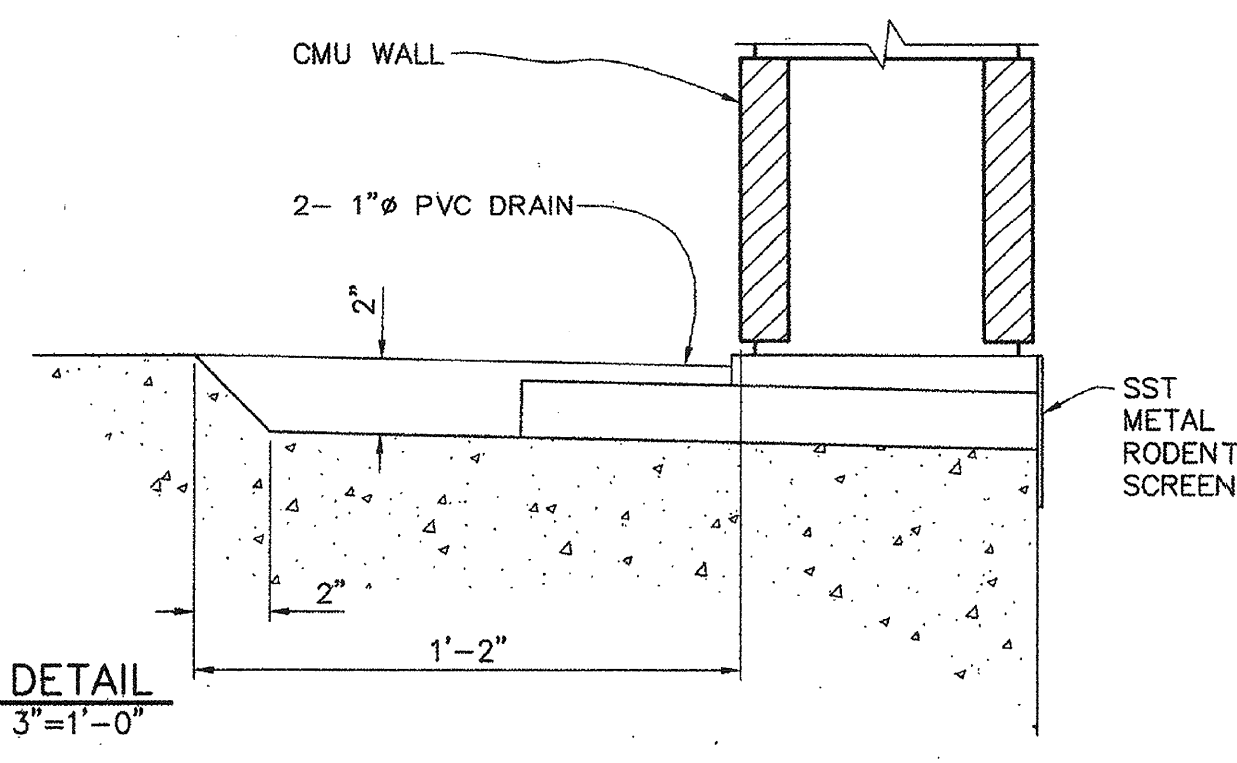




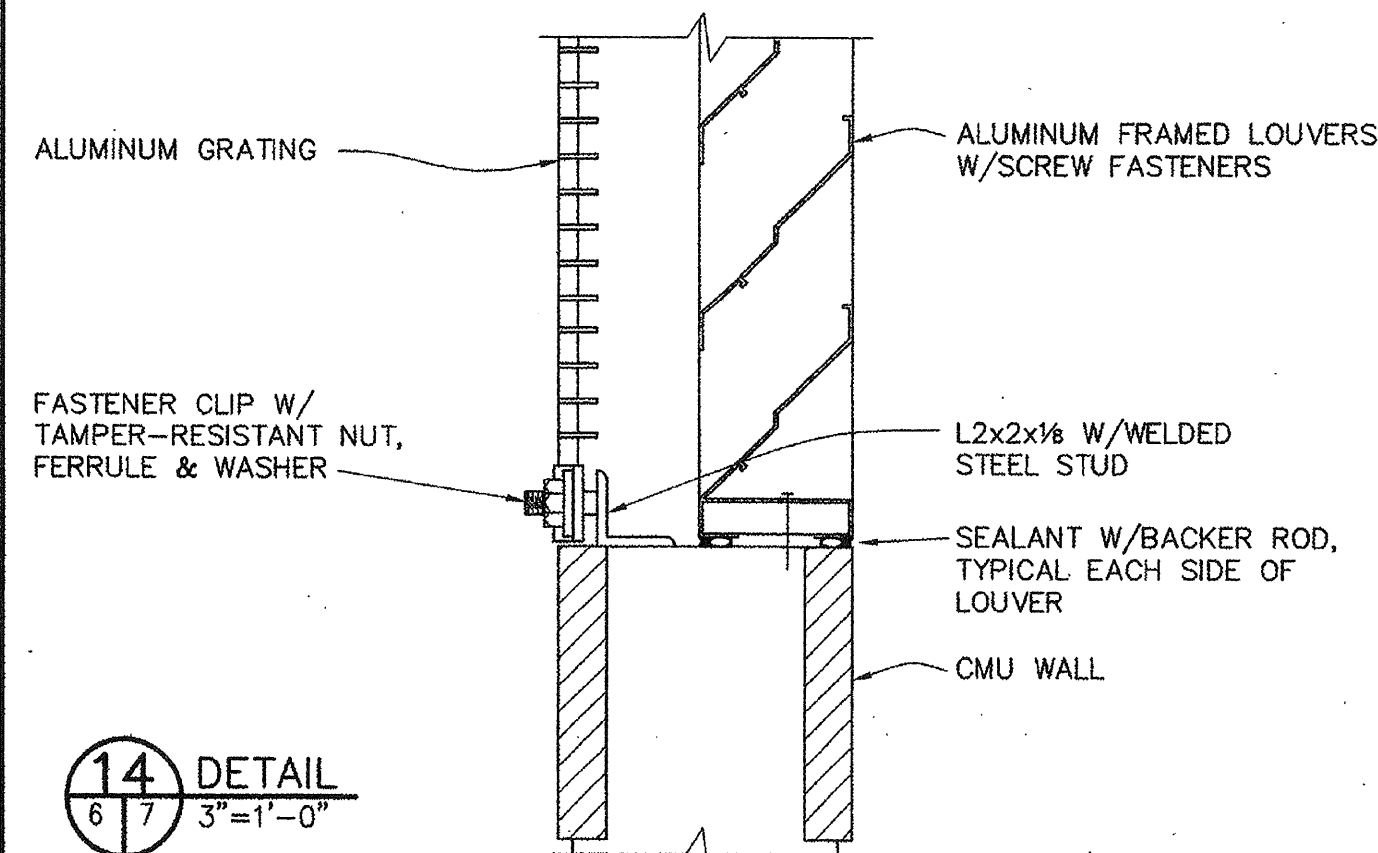
9 DETAIL  
3"=1'-0"



11 DETAIL  
3"=1'-0"

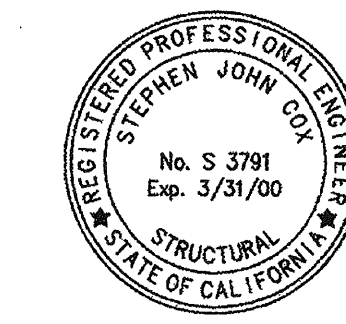


13 DETAIL  
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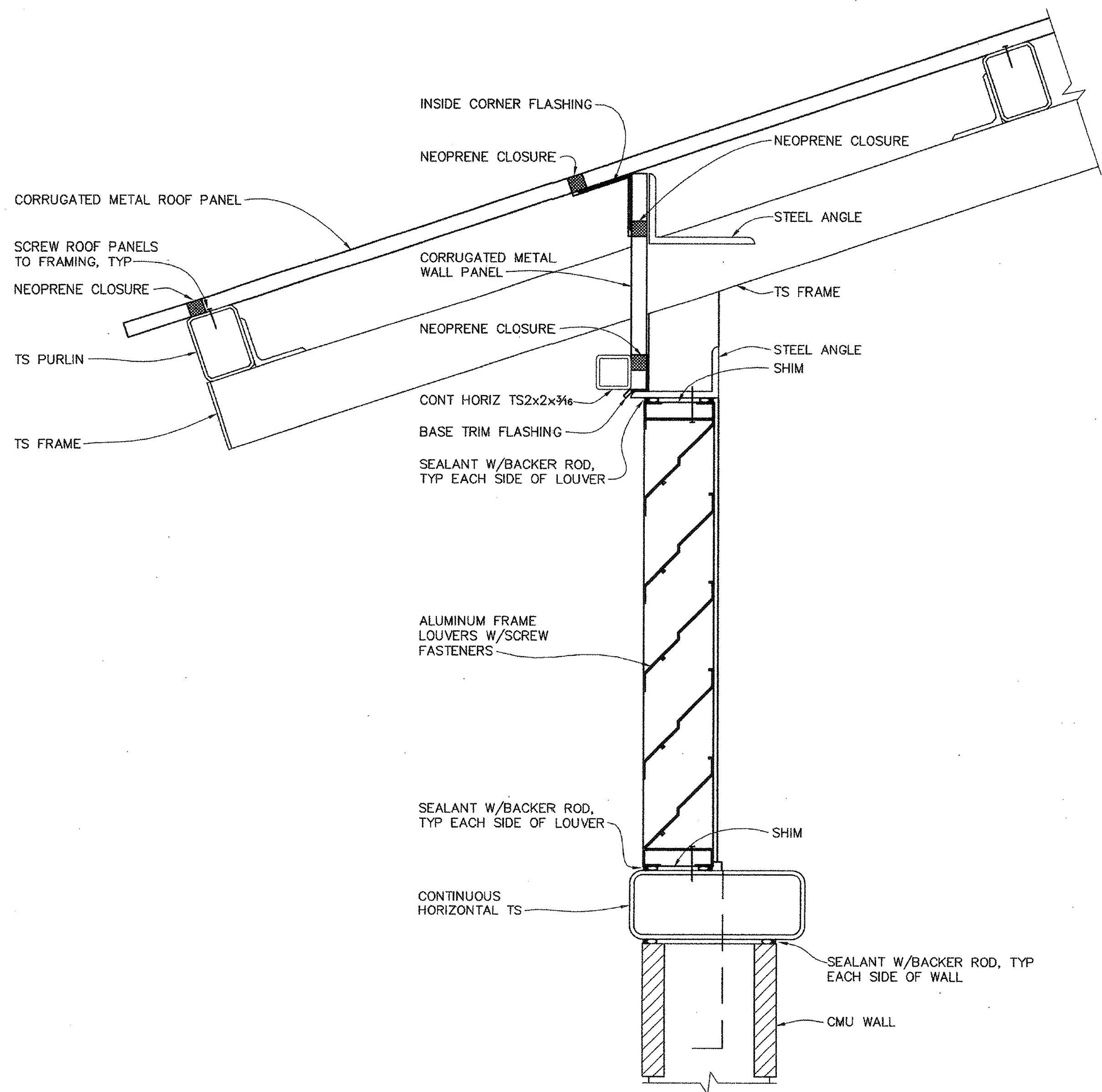


14 DETAIL  
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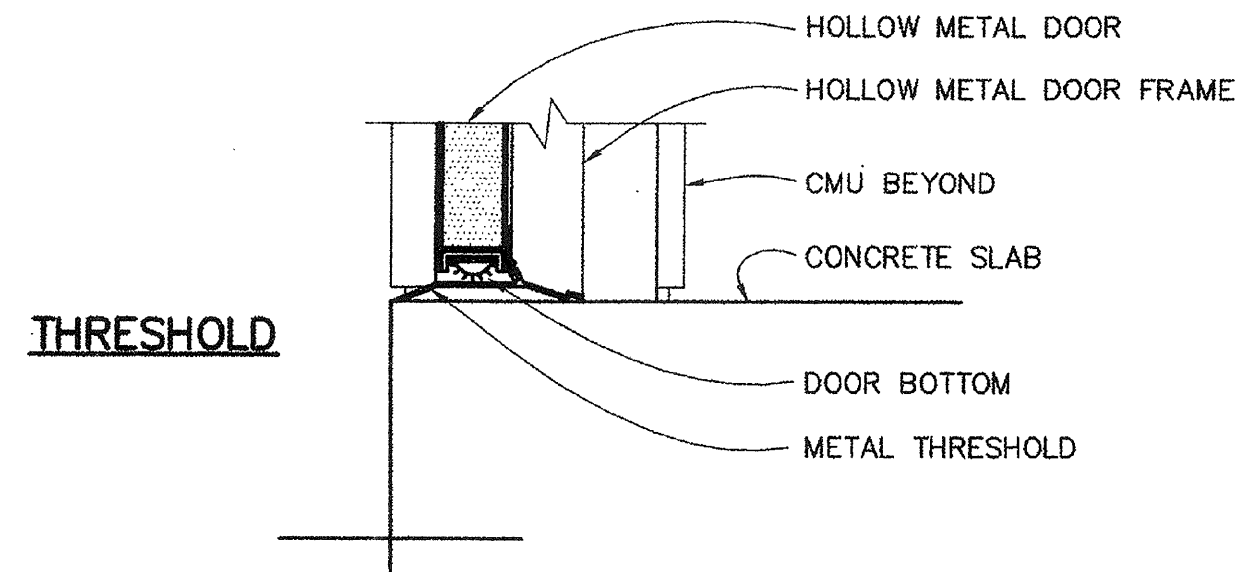
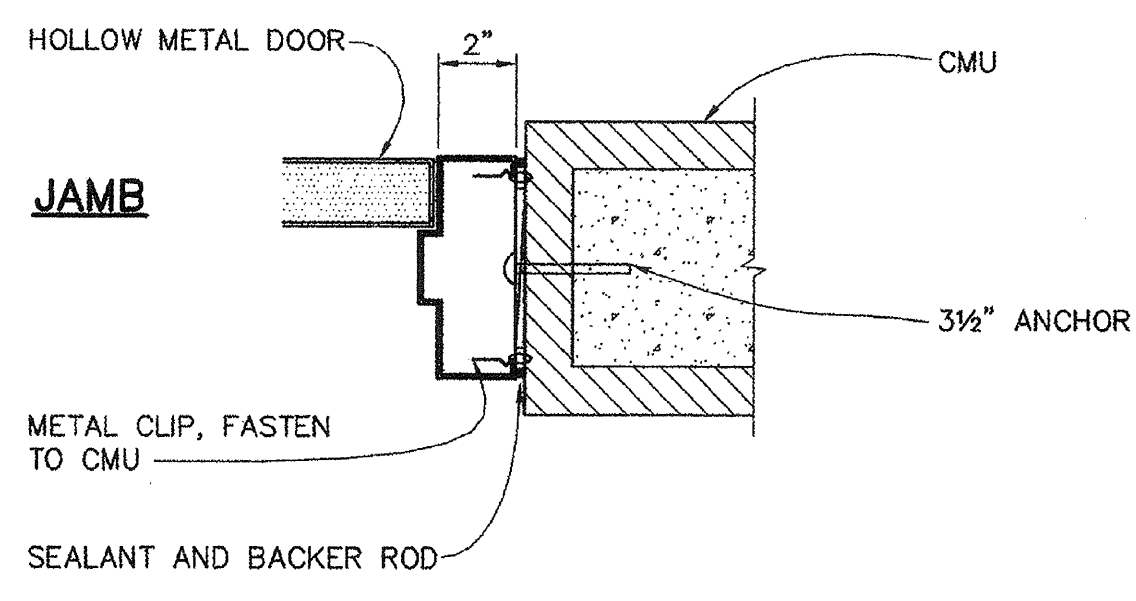
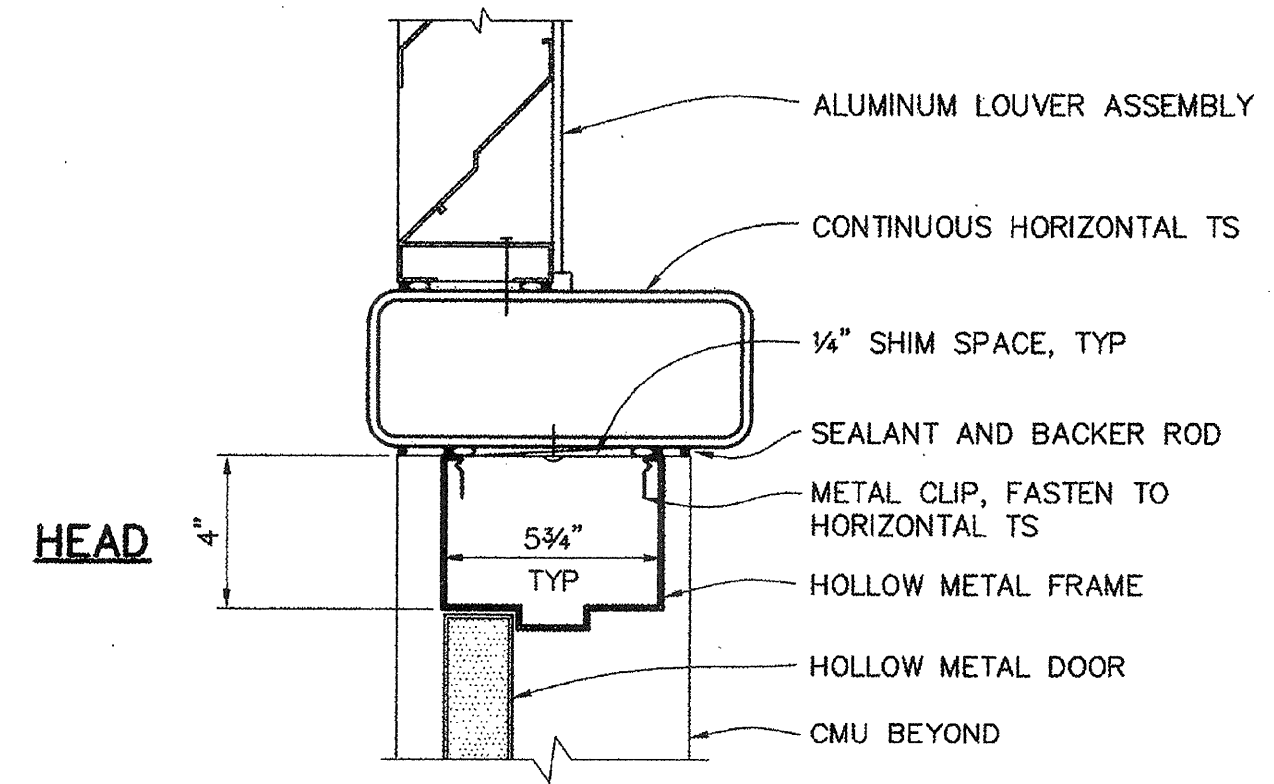
ADDENDUM #1		4/19/99	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 400 TISSOT DRIVE, SANTA ROSA, CA 95401 P.O. BOX 8706, SANTA ROSA, CA 95405 TEL: (707) 532-9100 FAX: (707) 532-9676		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: SB	SONOMA COUNTY	CALIFORNIA	
CHECKED BY: SC	PETALUMA RIVER		
DESIGNED BY: SB	PAYRAN ST. STORM DRAIN PUMP STATION		
ARCHITECTURAL DETAILS			
APPROVAL RECOMMENDED BY: <i>[Signature]</i> APPROVED BY: <i>[Signature]</i>		DATE: 5/13/99	
PREPARED UNDER THE DIRECTION OF		SCALE: SHOWN	JOB NO: 96205504
PETER T. GRASS		DRAWING NUMBER	
LT. COLONEL, C.E., DISTRICT ENGINEER		SHEET 7	52 42 1



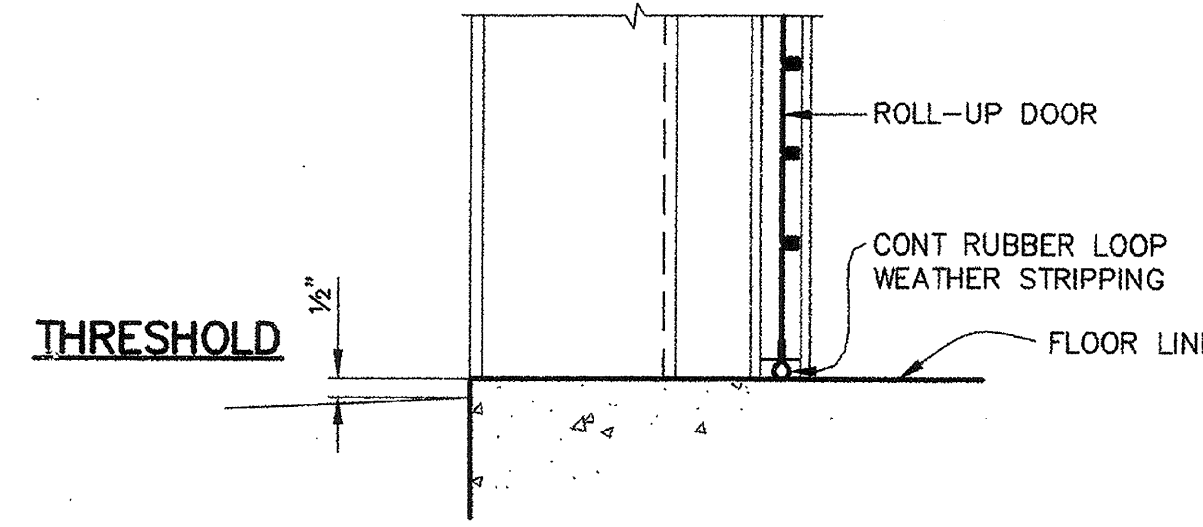
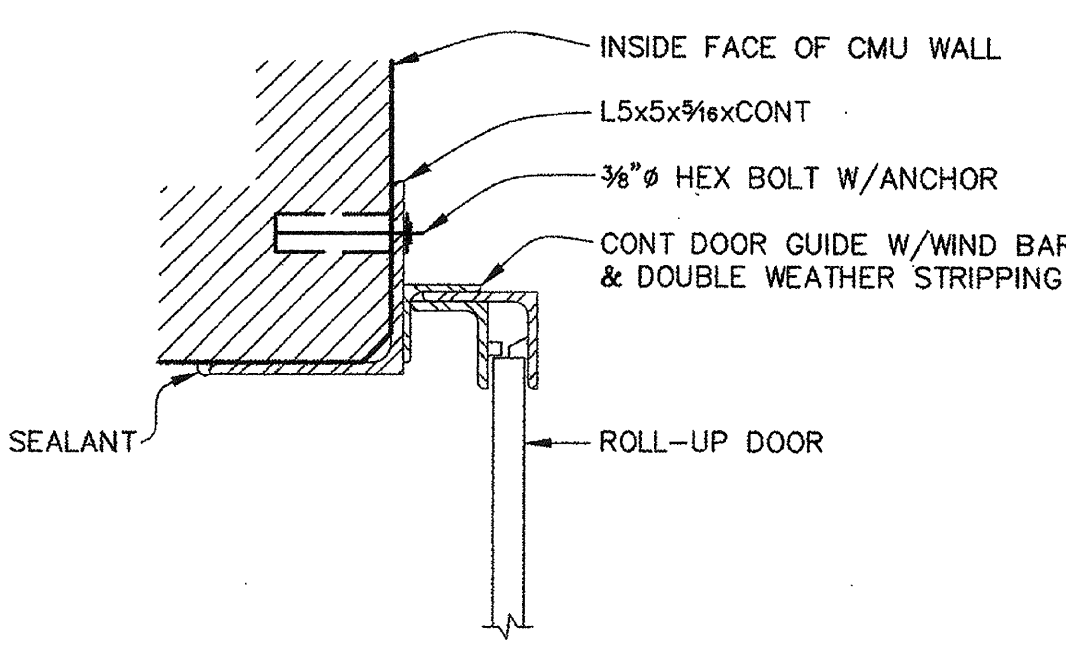
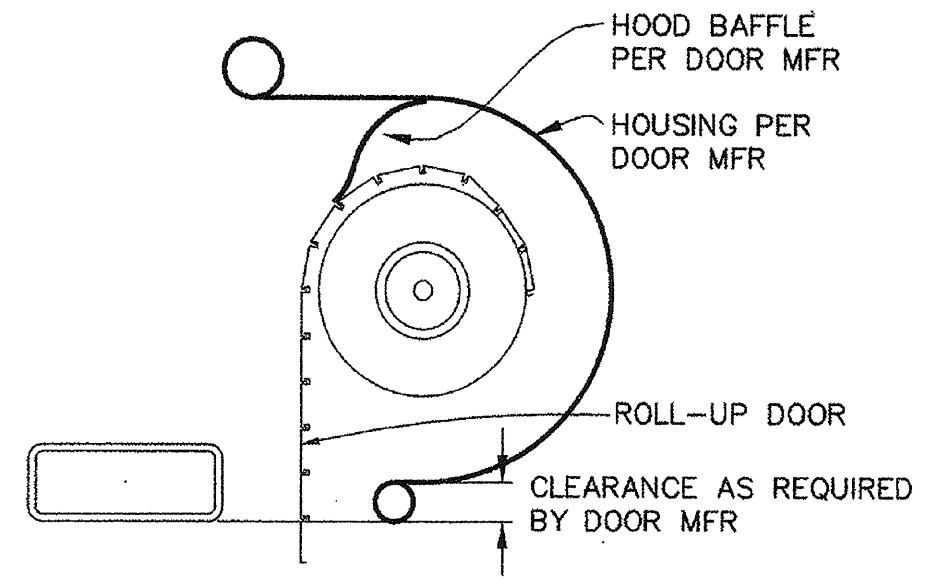
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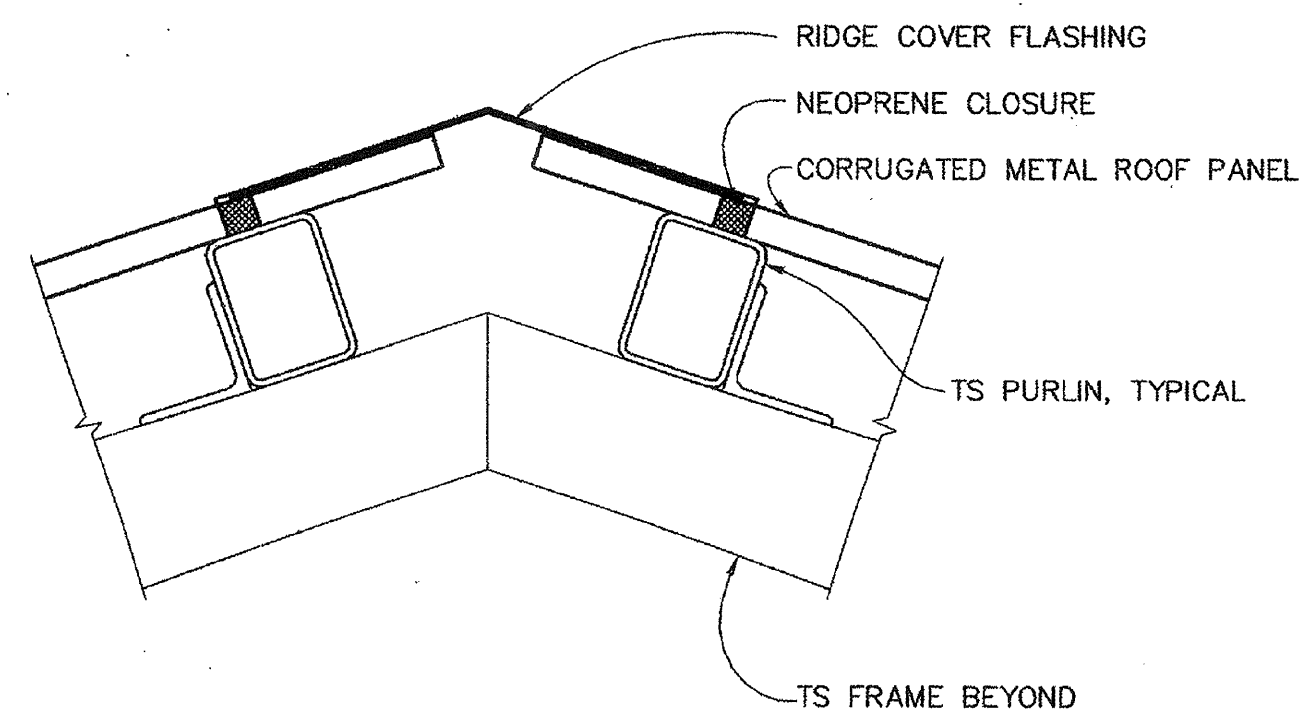
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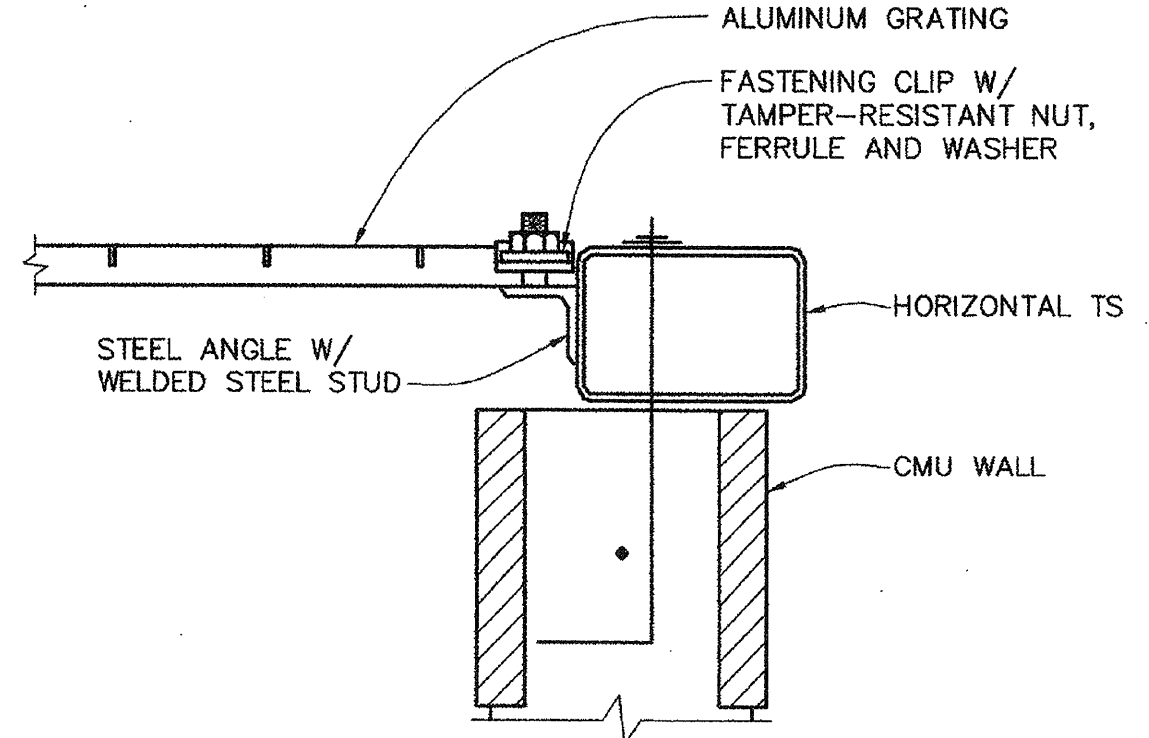
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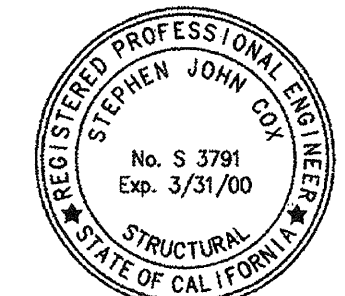
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13 DETAIL  
6 8 3"=1'-0"



14 DETAIL  
5 8 3"=1'-0"



ADDENDUM #1		4/19/99	
SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 408 TEBBON AVENUE, SUITE 100A, SAN FRANCISCO, CA 94102 TEL: (415) 398-1000 FAX: (415) 398-1001		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
SCALE:	SONOMA COUNTY	CALIFORNIA	
CHECKED BY:	SC	PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION	
DESIGNED BY:	SB	ARCHITECTURAL DETAILS	
APPROVED:	DATE:		5/13/99
PREPARED UNDER THE DIRECTION OF		SCALE:	JOB NO. 96205504
PETER T. GRASS		SHOWN	DRAWING NUMBER
LT. COLONEL, C.E., DISTRICT ENGINEER		SHEET 8	52 42 1

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## ABBREVIATIONS

AB	ANCHOR BOLT	JST	JOIST
ABC	AGGREGATE BASE COARSE	JT	JOINT
ABV	ABOVE	K	KIPS
ACI	AMERICAN CONCRETE INSTITUTE	KLF	KIPS PER LINEAL FOOT
ADD'L	ADDITIONAL	L	ANGLE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	LB	POUND
ASIS	AMERICAN IRON AND STEEL INSTITUTE	LF	LINEAR FEET
AITC	AMERICAN INSTITUTE OF TIMBER CONSTRUCTION	LG	LONG
ALT	ALTERNATE	LL	LIVE LOAD
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE	LLH	LONG LEG HORIZONTAL
APA	AMERICAN PLYWOOD ASSOCIATION	LLV	LONG LEG VERTICAL
ARCH	ARCHITECT/ARCHITECTURAL	LOC	LOCATION
ASTM	AMERICAN SOCIETY FOR TESTING & MATERIALS	LONGIT	LONGITUDINAL
AWS	AMERICAN WELDING SOCIETY	LP	LOW POINT
&	AND	LSL	LONG SLOTS
@	AT	LT	LEFT
B	BOTTOM	MACH	MACHINE
B/	BOTTOM OF	MAINT	MAINTENANCE
BB	BOTTOM BARS	MAS	MASONRY
BD	BOND	MAX	MAXIMUM
BLDG	BUILDING	MB	MACHINE BOLT
BLKG	BLOCKING	MC	CHANNEL
BM	BEAM	MCJT	MASONRY CONTROL JOINT
BN	BOUNDARY NAIL	MECH	MECHANICAL
BRG	BEARING	MFR	MANUFACTURE
BS	BOTH SIDES	MIN	MINIMUM
BTWN	BETWEEN	MINTG	MOUNTING
C	CHANNEL	MO	MASONRY OPENING
C/C	CENTER TO CENTER	MOD	MODIFIED
CANT	CANTILEVER	MTL	METAL
CAP	CAPACITY	N	NEW
CF	CONTRACTOR FURNISHED	NIC	NOT IN CONTRACT
CI	CONTRACTOR INSTALLED	NOM	NOMINAL
CJ	CONSTRUCTION JOINT	NS	NEAR SIDE
CL	CENTERLINE	NTS	NOT TO SCALE
CLG	CEILING	#	NUMBER
CLR	CLEAR	OC	ON CENTER
CMU	CONCRETE MASONRY UNIT	OD	OUTSIDE DIAMETER
COL	COLUMN	OF	OUTSIDE FACE
CONC	CONCRETE	OPG	OPENING
CONN	CONNECTION	OPP	OPPOSITE
CONSTR	CONSTRUCTION	PL	PLATE
CONT	CONTINUOUS	PLCS	PLACES
COORD	COORDINATE	PLF	POUND PER LINEAL FOOT
CRSI	CONCRETE REINFORCING STEEL INSTITUTE	PLUMB	PLUMBING
CTR/CTR'D	CENTER/CENTERED	PLYWD	PLYWOOD
CU YD	CUBIC YARD	PNL	PANEL
d	PENNY (NAIL SIZE)	PSF	POUNDS PER SQUARE FOOT
DBL	DOUBLE	PSI	POUNDS PER SQUARE INCH
DET	DETAIL	PT	POINT
DF	DOUGLAS FIR	PVMT	PAVEMENT
DIA	DIAMETER	QTY	QUANTITY
DIAG	DIAGONAL	R	RADIUS
DIM	DIMENSION	REF	REFERENCE
DISCONT	DISCONTINUE	REG	REGULAR
DL	DEAD LOAD	REINF	REINFORCING
DN	DOWN	REQD	REQUIRED
Do	DITTO	RF	ROOF
DP	DEEP	RM	ROOM
DWG	DRAWING	RT	RIGHT
DWL	DOWEL	S	I-BEAM
(E)	EXISTING	SC	SLIP-CRITICAL
EA	EACH	SCHED	SCHEDULE
EAF	EACH FACE	SECT	SECTION
EL	ELEVATION	SF	STEPPED FOOTING
ELEC	ELECTRICAL	SHT	SHEET
EMBED	EMBEDMENT	SH	SIMILAR
ENG	ENGINEER	SLP	SLOPE
EQ	EQUAL	SP	SOIL PRESSURE
EQUIP	EQUIPMENT	SPC	SPACE/SPACES
ETC	ET CETERA	SPC'G	SPACING
EW	EACH WAY	SPEC	SPECIFICATIONS
EWEF	EACH WAY EACH FACE	SQ	SQUARE
EXP	EXPOSED	STD	STANDARD
EXP BLT	EXPANSION BOLT	STIFF	STIFFENER
EXT	EXTERIOR	STL	STEEL
FF	FINISHED FLOOR	STRUCT	STRUCTURAL
FG	FINISHED GRADE	SYMM	SYMMETRICAL
FH	FULL HEIGHT	T	TOP
FIN	FINISH	T/	TOP OF
FL	FLOOR	T & G	TONGUE AND GROOVE
FLG	FLANGE	T & B	TOP AND BOTTOM
FN	FACE NAIL	TB	TOP BAR
FND	FOUNDATION	TECH	TECHNICAL
FO	FACE OF	TG	TEMPERED GLASS
FOM	FACE OF MASONRY	THD	THREAD
FOW	FACE OF WALL	THK	THICK
FRMG	FRAMING	TL	TOTAL LOAD
FS	FAR SIDE	TOC	TOP OF CONCRETE
FT	FEET	TOS	TOP OF STEEL
FTG	FOOTING	TRANS	TRANSVERSE
GA	GAUGE	TS	TUBE STEEL
GALV	GALVANIZED	TYP	TYPICAL
GRT	GROUT	UBC	UNIFORM BUILDING CODE
GSN	GENERAL STRUCTURAL NOTES	UNO	UNLESS NOTED OTHERWISE
GYP	GYPSONUM	VEF	VERTICAL EACH FACE
HAS	HEADED ANCHOR STUDS	VERT	VERTICAL
HD	HAND	W/	WITH
HEF	HORIZONTAL EACH FACE	W/	WIDE FLANGE (BEAM)
HIF	HORIZONTAL INSIDE FACE	W/O	WITHOUT
HK	HOOK	WP	WORK POINT
HM	HOLLOW METAL	WS	WATERSTOP
HOF	HORIZONTAL OUTSIDE FACE	WT	WEIGHT
HORIZ	HORIZONTAL	WWF	WELDED WIRE FABRIC
HP	HIGH POINT		
HT	HEIGHT		
ID	INSIDE DIAMETER		
IE	FOR EXAMPLE		
INCH	INCH		
INFO	INFORMATION		
INT	INTERIOR		
INTERMED	INTERMEDIATE		
INTERSECT	INTERSECTION		
INV	INVERT		

## GENERAL STRUCTURAL NOTES

**DESIGN DATA**

Code: 1994 Uniform Building Code

Roof Dead Load: 3 psf  
Roof Live Load: 16 psf

Wind Load: Basic wind speed: 80 mph  
Exposure: C  
I= 1.0

Seismic Load: Zone 4, Z= 0.4  
I= 1.0  
Rw= 6  
C= 2.75

Geotechnical Data:  
Assumed allowable soil bearing pressure= 1000 psf, per UBC Table No. 18-1-A

**EARTHWORK**

Minimum depth to bottom of footings shall be 1'-6" below lowest adjacent finish grade.

Provide 4" thick aggregate base course below concrete slabs on grade, u.n.o.

**CONCRETE**

Minimum 28-day Compressive Strengths:  
Foundations: 4000 psi  
Slabs on Grade: 4000 psi  
All Other Concrete: 4000 psi

**CONCRETE REINFORCING**

Bars: ASTM A615, Grade 60

Concrete protection for reinforcing:  
Concrete cast against earth without forms.....3"  
Concrete exposed to earth or weather:  
#6 and larger.....2"  
#5 and smaller.....1 1/2"

Concrete not exposed to earth or weather:  
Slabs, walls, joists.....3/4"  
Beams, columns: primary reinforcement, ties, stirrups, spirals.....1 1/2"

**MASONRY**

Specified Compressive Strength of Masonry: f'm= 1500 psi  
Compressive Strength of Masonry Units: 1900 psi  
Mortar: Type S  
Grout: Coarse, 2000 psi at 28 days.

Lay block in running bond.

Solid grout all cells, embed anchor bolts in reinforced cells.

**MASONRY REINFORCING**

Bars: ASTM A615, Grade 60

Bar Laps (u.o.n): .....48 bar diameters

Horizontal Reinforcing in Bond Beams: 2- #4 at 48" in 8" deep bond beam, at top of wall and at sills, extend bars a minimum of 24" past each end of sill.

Vertical Reinforcing: As indicated and a minimum of one #5 vertical continuous at all wall ends, corners and intersections, each side of openings and control joints and #4 at 28" maximum spacing elsewhere.

**STEEL**

Rolled Shapes & Plates: Per ASTM A36. Fy=36 ksi.

Structural Tubing: Per ASTM A500, Grade B Fy=46 ksi. Provide 3/8" cap plates seal welded to ends of all exposed tube sections, u.n.o.

**WELDING**

AWS A5.1, E-70 series electrodes.

**BOLTING**

Bolts: ASTM A307

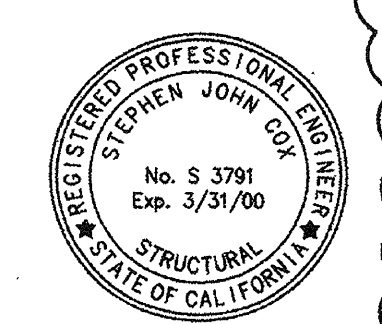
Anchor bolts and plain threaded bars: ASTM A36 or ASTM A307

**PAINTING**

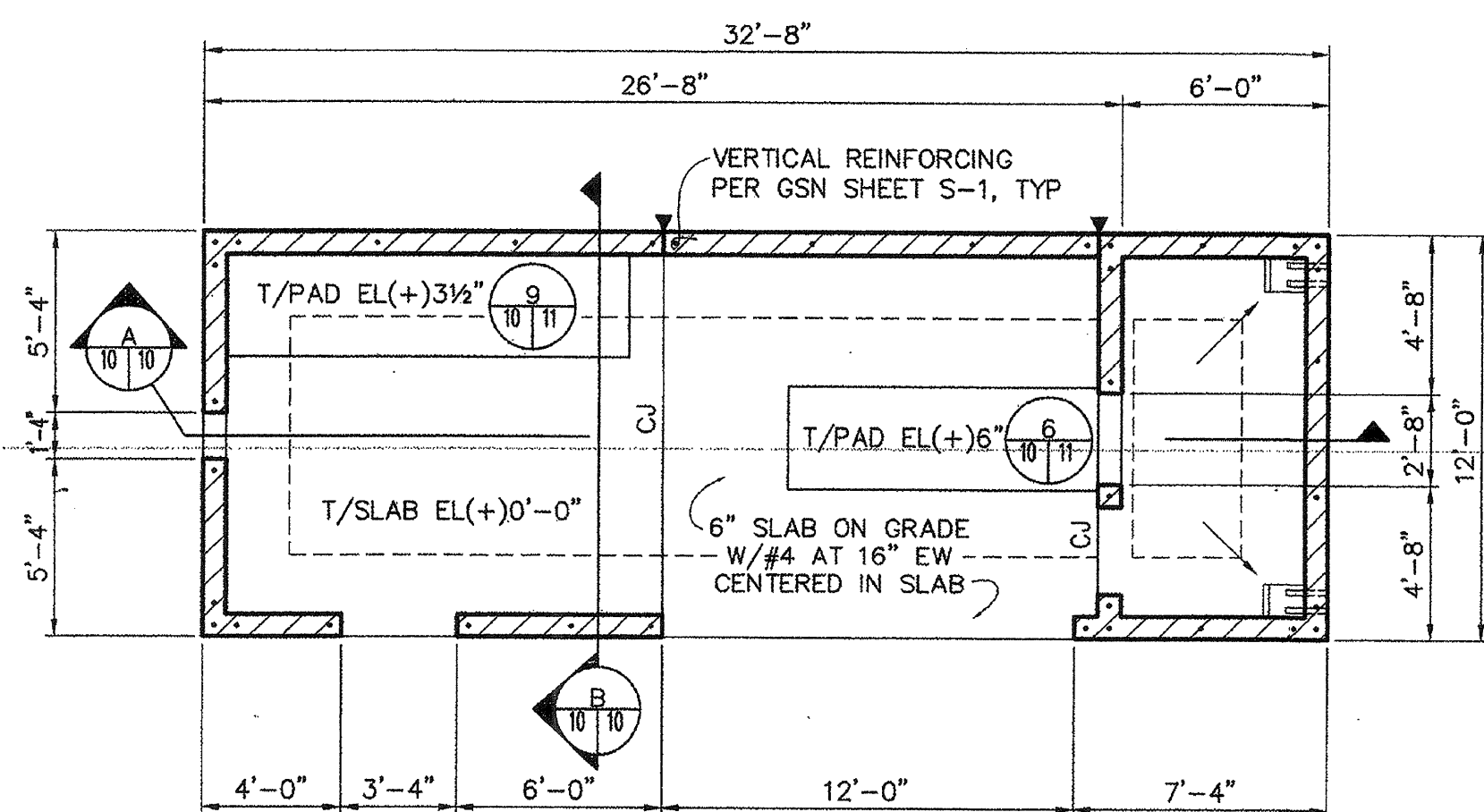
Shop prime paint all structural steel and steel fabrications except galvanized steel, surfaces in contact with concrete surfaces to be welded, or faying surfaces of slip critical connections.

Field paint all exposed fabrications except surfaces in contact with concrete. Surfaces that will be concealed or made inaccessible by adjoining construction shall be field painted prior to installation of such work.

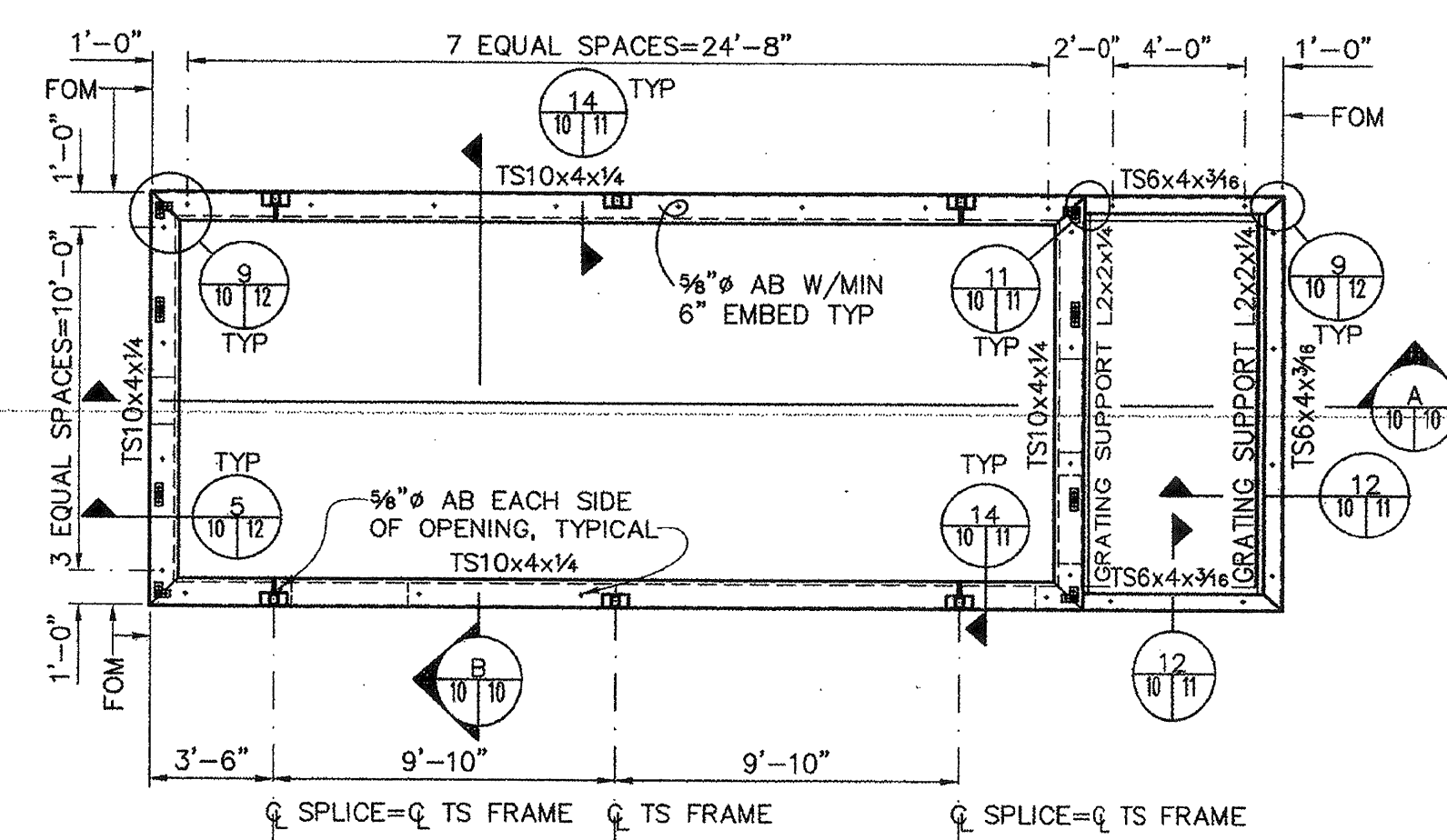
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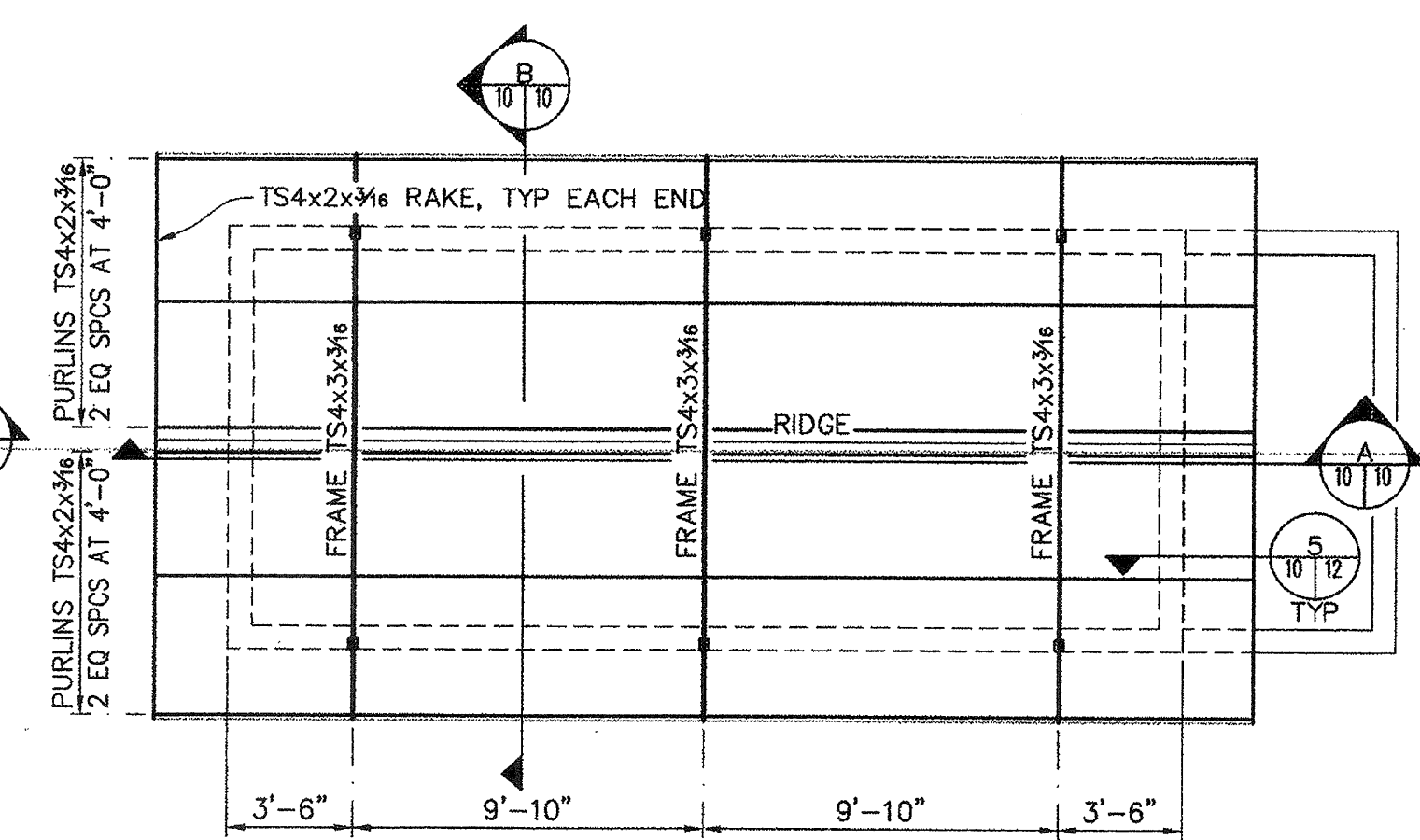
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SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> REGISTERED PROFESSIONAL ENGINEERS 405 TEBBINS CIRCLE, SAN FRANCISCO, CA 94101 P.O. BOX 8758, SAN FRANCISCO, CA 94133		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY:	SB	SONOMA COUNTY	CALIFORNIA
DESIGNED BY:	SC	PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION	
GENERAL STRUCTURAL NOTES AND ABBREVIATIONS			
APPROVED BY:	SB	DATE:	5/13/99
PREPARED UNDER THE DIRECTION OF		SCALE:	NONE
PETER T. GRASS		JOB NO.:	96205504
LT. COLONEL, C.E., DISTRICT ENGINEER		DRAWING NUMBER	
SHEET	9	52	42 1



**FOUNDATION PLAN**  
SCALE: 1/4"=1'-0"

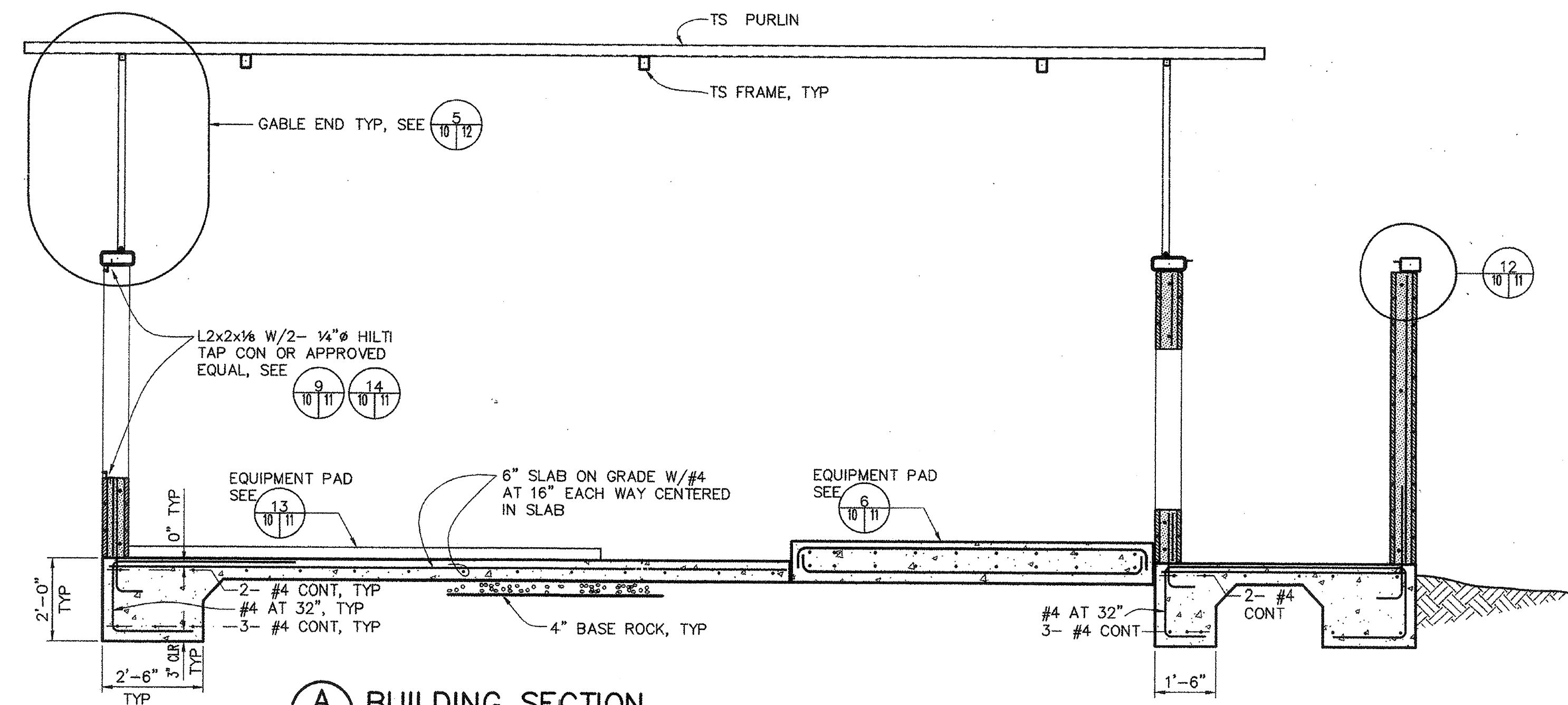


**FRAMING PLAN AT EL(+10'-0"**  
SCALE: 1/4"=1'-0"

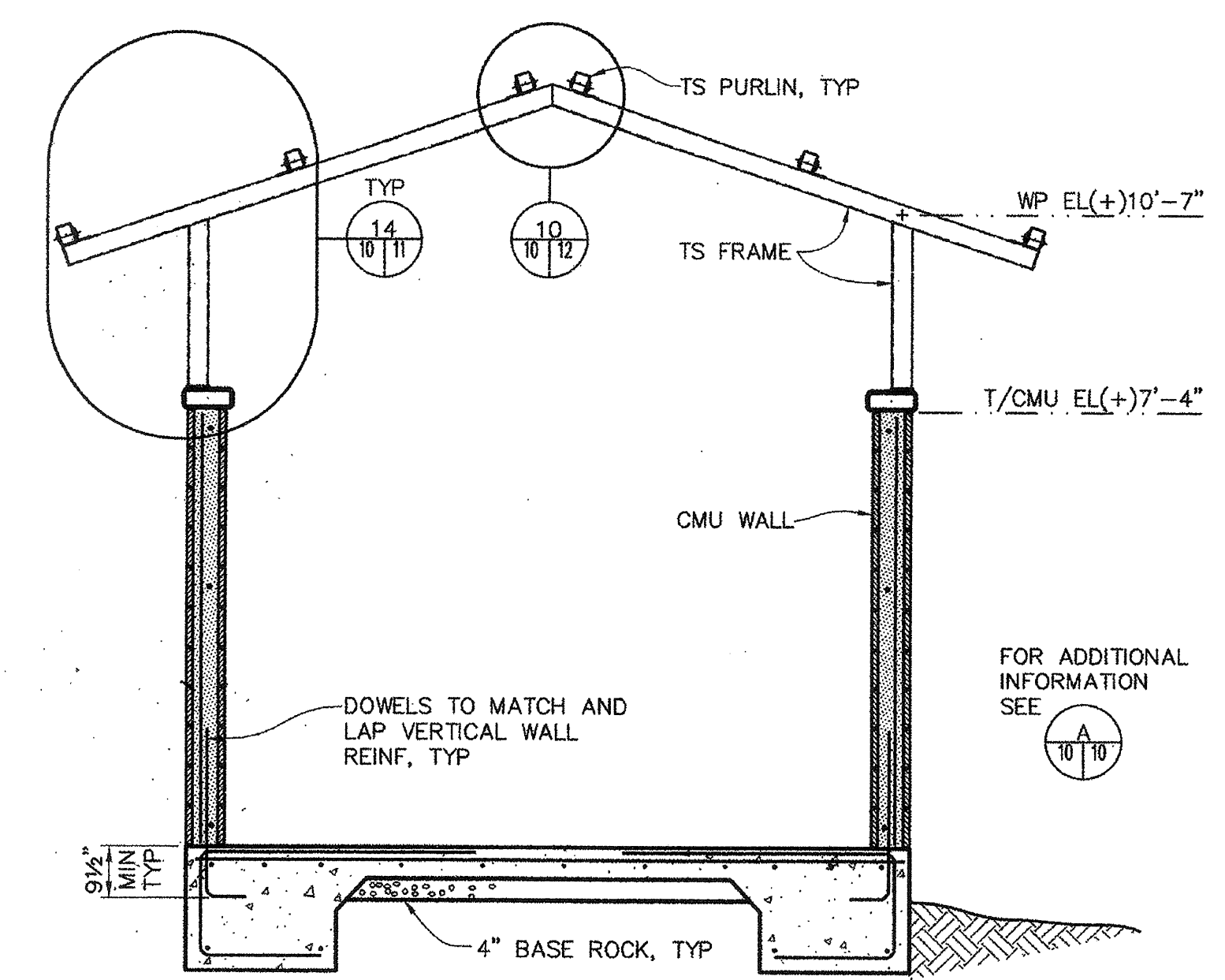


**ROOF FRAMING PLAN**  
SCALE: 1/4"=1'-0"

- PLAN NOTES**
1. REFER TO GENERAL STRUCTURAL NOTES DWG S-1, AND TYPICAL DETAILS
  2. REFER TO ARCHITECTURAL DRAWINGS FOR DIMENSIONS, ELEVATIONS AND ADDITIONAL INFORMATION
  3. DATUM FINISH FLOOR EL(+10'-0")=ELEVATION 12.15
  4. ▲ DENOTES MASONRY CONTROL JOINT
  5. CJ INDICATES CONCRETE SLAB CONTRACTION JOINT
  6. CAP ALL EXPOSED TS ENDS PER 8/10/11
  7. 1/4" / FT INDICATES SLAB SLOPE, 8/10/11

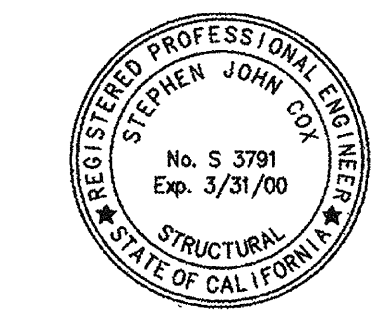


**A BUILDING SECTION**  
SCALE: 1/2"=1'-0"



**B BUILDING SECTION**  
SCALE: 1/2"=1'-0"

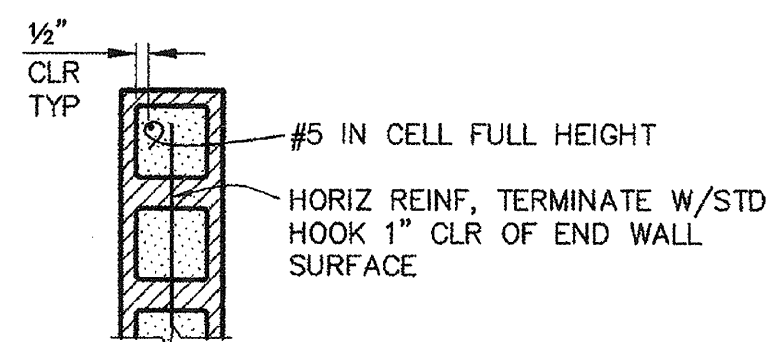
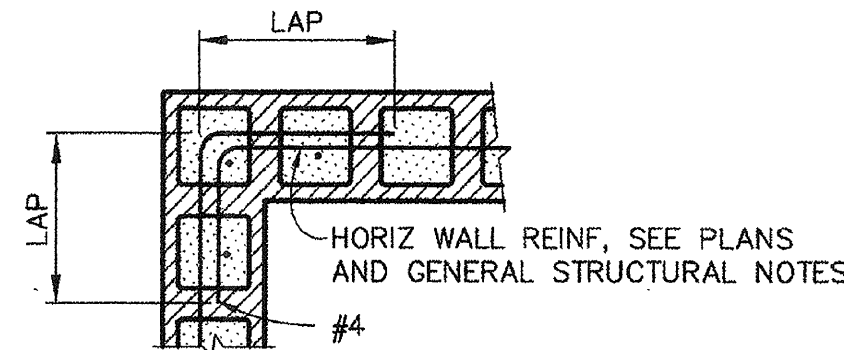
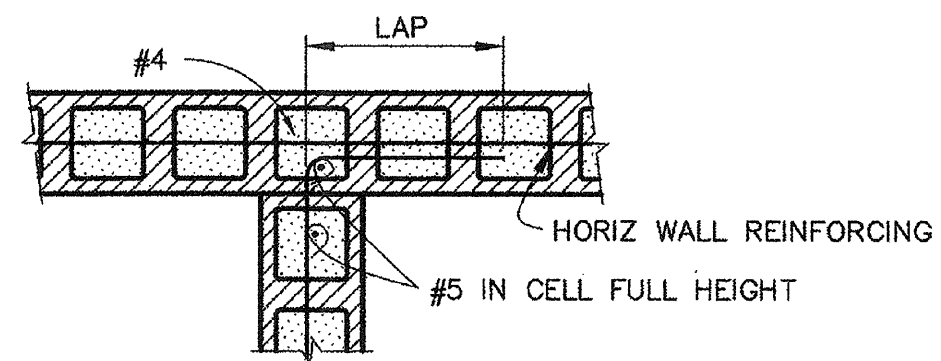
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REVISIONS			
WINZLER & KELLY CONSULTING ENGINEERS 480 REDWOOD GLEN, SAN RAFAEL, CA 94901 P.O. BOX 2748, SAN RAFAEL, CA 94902		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: SB	SONOMA COUNTY	CALIFORNIA	
CHECKED BY: SC	PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION		
DESIGNED BY: SB	PLANS AND BUILDING SECTIONS		
APPROVED: [Signature]	DATE: 5/13/99	JOB NO: 96205504	
PREPARED UNDER THE DIRECTION OF PETER T. GRASS		SCALE: SHOWN	DRAWING NUMBER: 52 42 1
LT. COLONEL, C.E., DISTRICT ENGINEER		SHEET: 10	DATE: 5/13/99

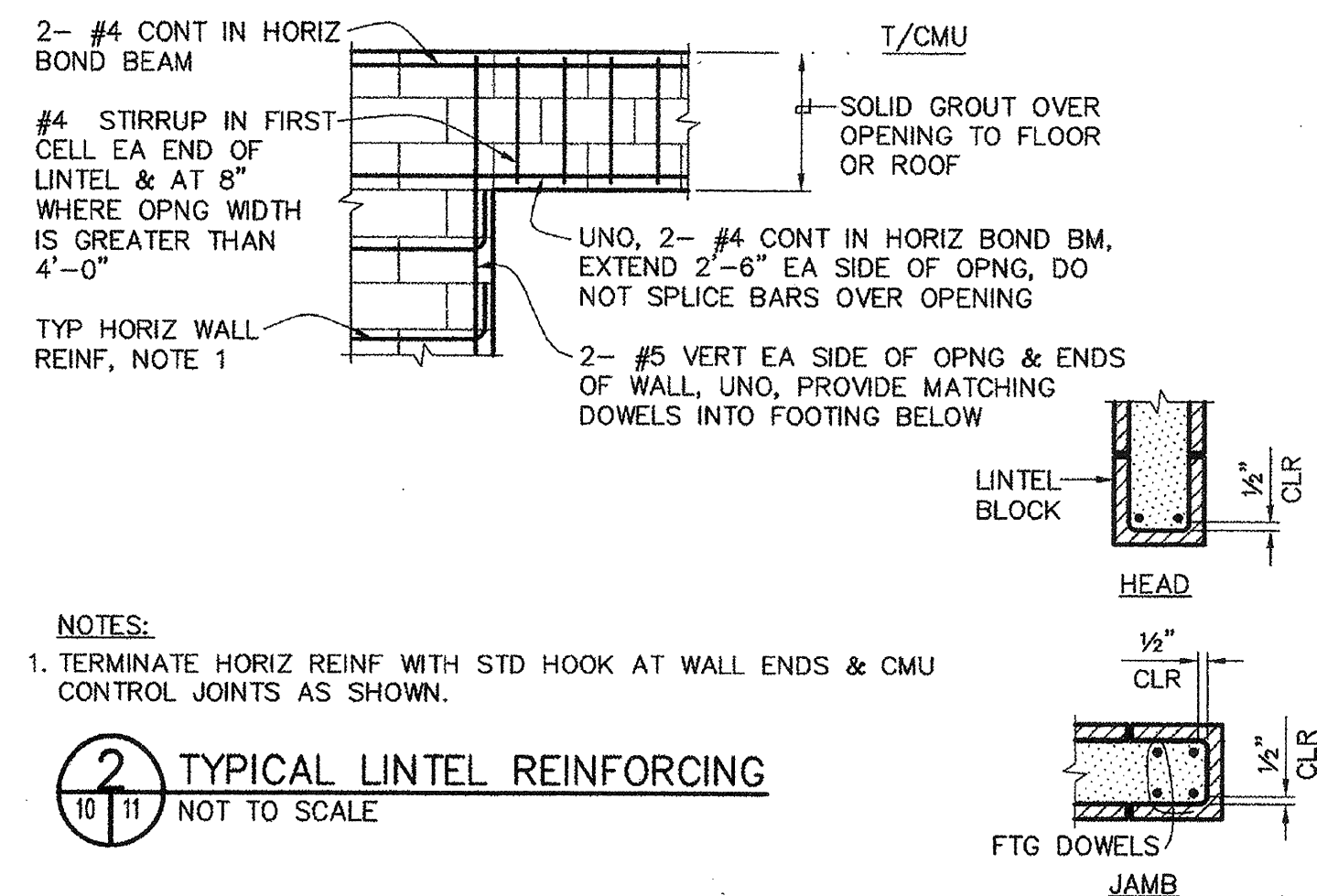
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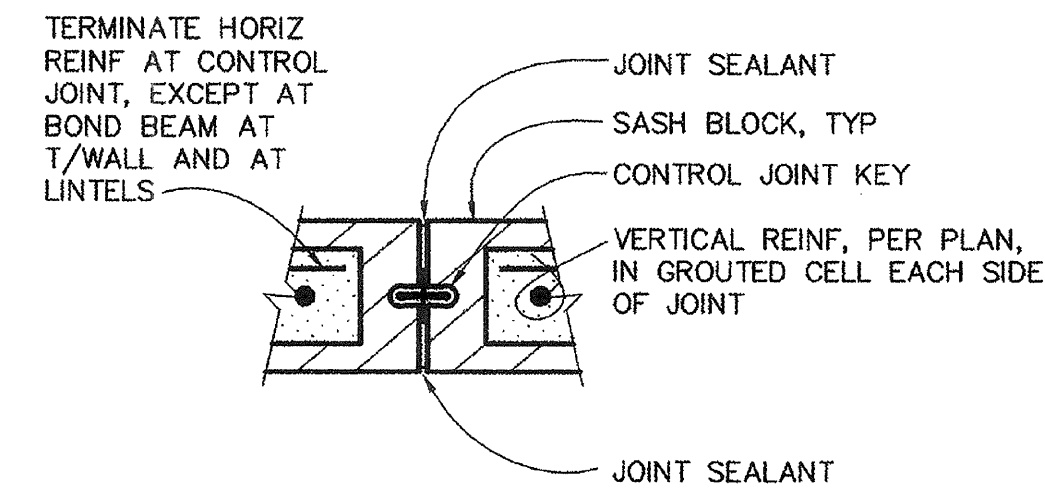
NOTES:  
1. LAP EQUALS 48 BAR DIAMETERS, UNO

5 TYPICAL CMU WALL ENDS & CORNERS  
10 11 NOT TO SCALE

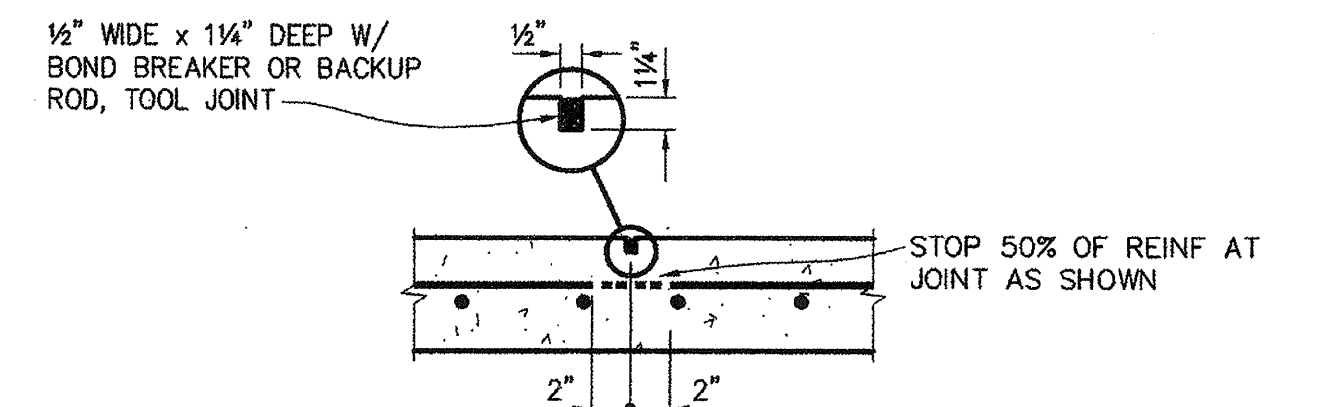


NOTES:  
1. TERMINATE HORIZ REINF WITH STD HOOK AT WALL ENDS & CMU CONTROL JOINTS AS SHOWN.

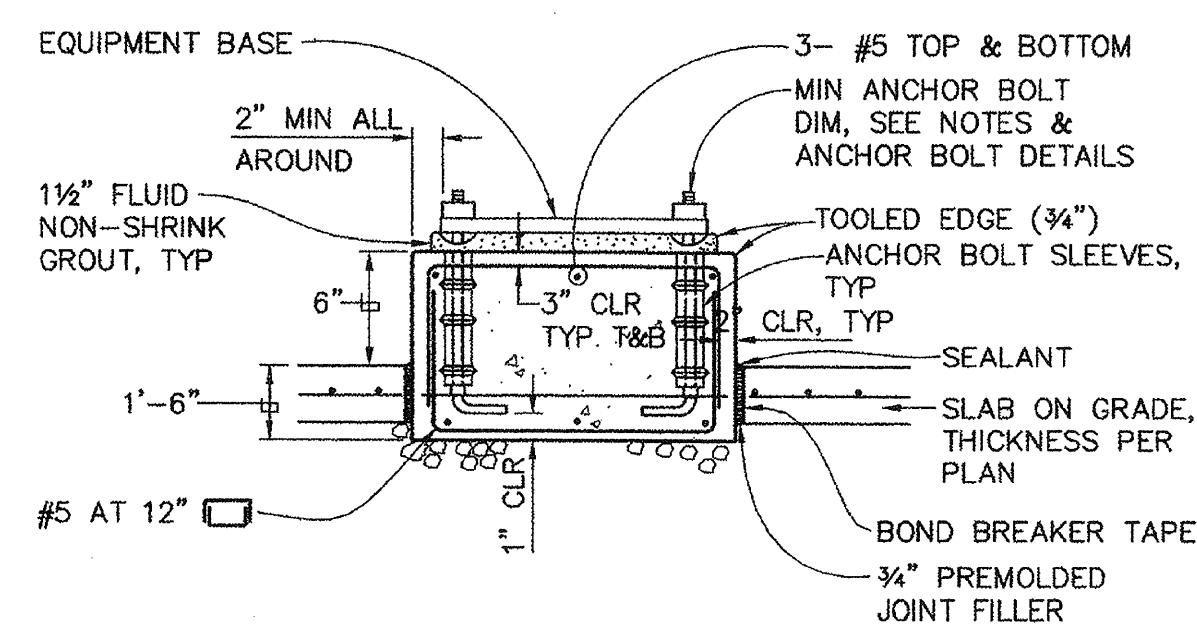
2 TYPICAL LINTEL REINFORCING  
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3 MASONRY CONTROL JOINT (MCJT)  
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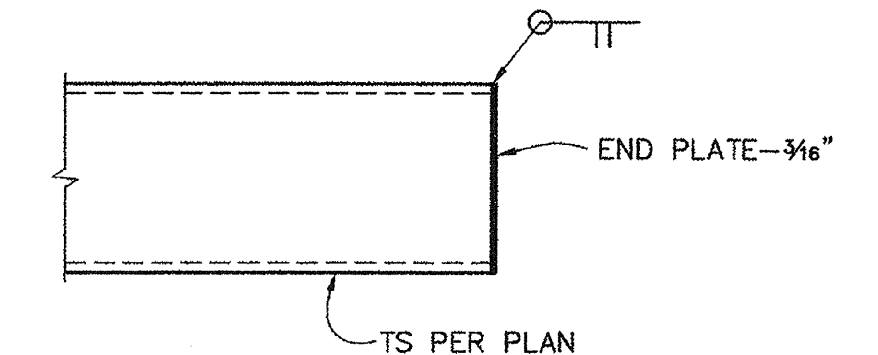


4 TYPICAL CONTRACTION JOINT  
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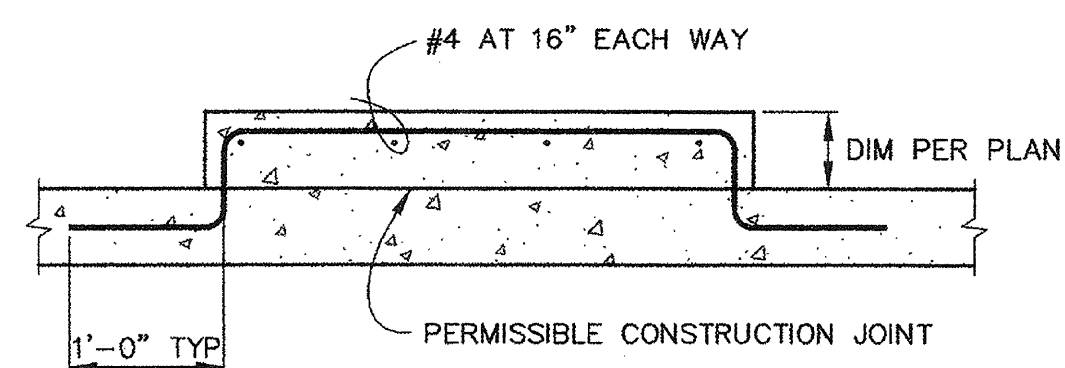


6 EQUIPMENT PAD  
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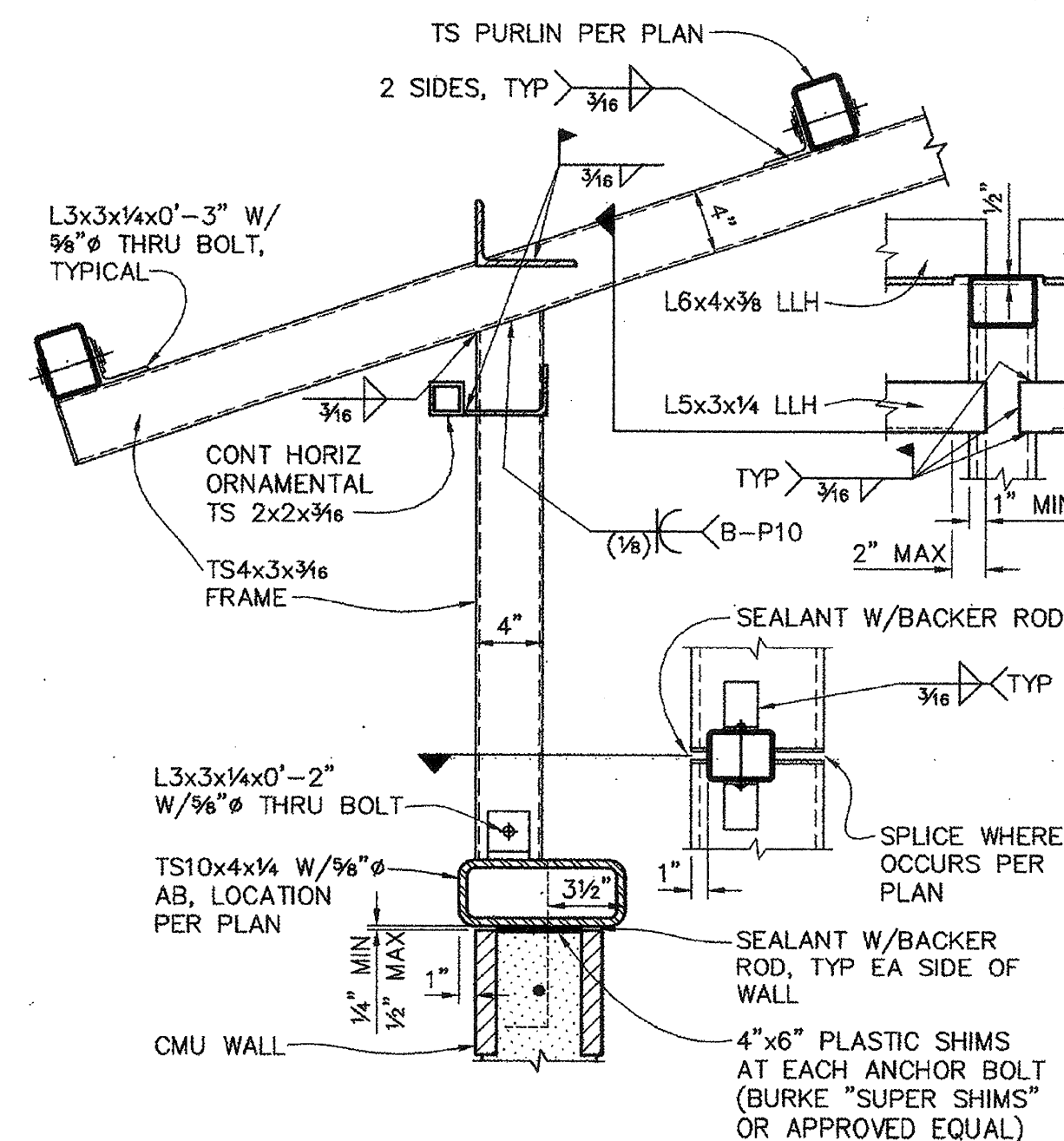
1. THE SIZE, NUMBER, TYPE, LOCATION AND THREAD PROJECTION OF THE ANCHOR BOLTS SHALL BE DETERMINED BY THE EQUIPMENT MANUFACTURER, AND SHALL BE AS APPROVED BY THE ENGINEER. ANCHOR BOLTS SHALL BE HELD IN POSITION WITH A TEMPLATE WHILE PAD IS BEING POURED.
2. ANCHOR BOLT SLEEVES SHALL BE USED TO PROVIDE THE ANCHOR BOLT A MIN MOVEMENT OF 1/2" IN ALL DIRECTIONS. THE MIN SLEEVE LENGTH SHALL BE 6 TIMES THE BOLT DIAMETER, SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT.
3. ANCHOR BOLT SLEEVES SHALL HAVE A MINIMUM INTERNAL DIAMETER 1" GREATER THAN BOLT DIAMETER AND A MAXIMUM INTERNAL DIAMETER 3" GREATER THAN ANCHOR BOLT DIAMETER. SLEEVES SHALL BE FILLED WITH NON-SHRINK GROUT.
4. EQUIPMENT BASES SHALL BE INSTALLED LEVEL UNLESS NOTED OTHERWISE.
5. PLACE EQUIPMENT PADS BEFORE PLACING FLOOR SLAB.
6. WEDGES OR SHIMS SHALL BE USED TO SUPPORT THE BASE WHILE THE NON-SHRINK GROUT IS PLACED. TEMPORARY LEVELING NUTS SHALL BE BACKED OFF. IF LEFT IN, THE WEDGES OR SHIMS SHALL NOT BE EXPOSED TO VIEW.



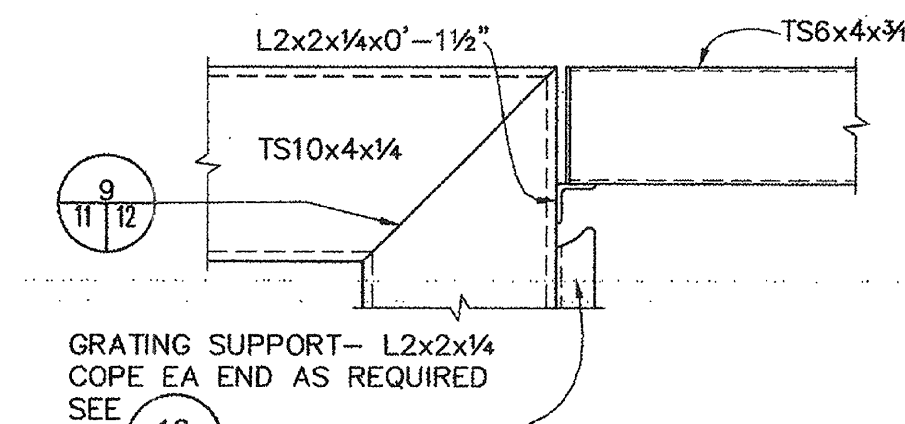
8 TYPICAL TS END CAP  
10 11 NOT TO SCALE



9 DETAIL  
10 11 NOT TO SCALE

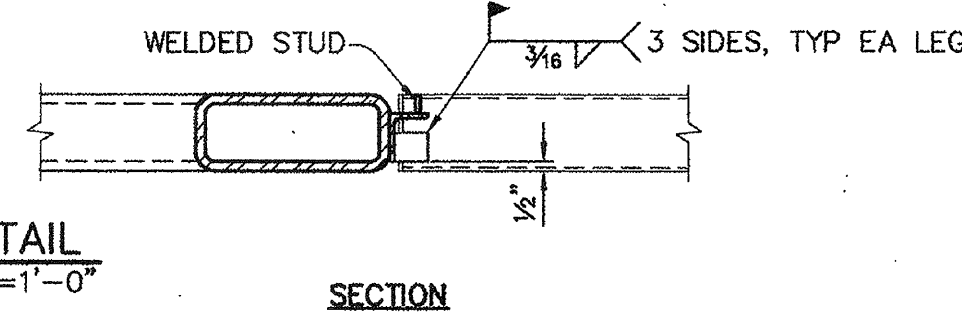


14 DETAIL  
10 11 1 1/2\"/>

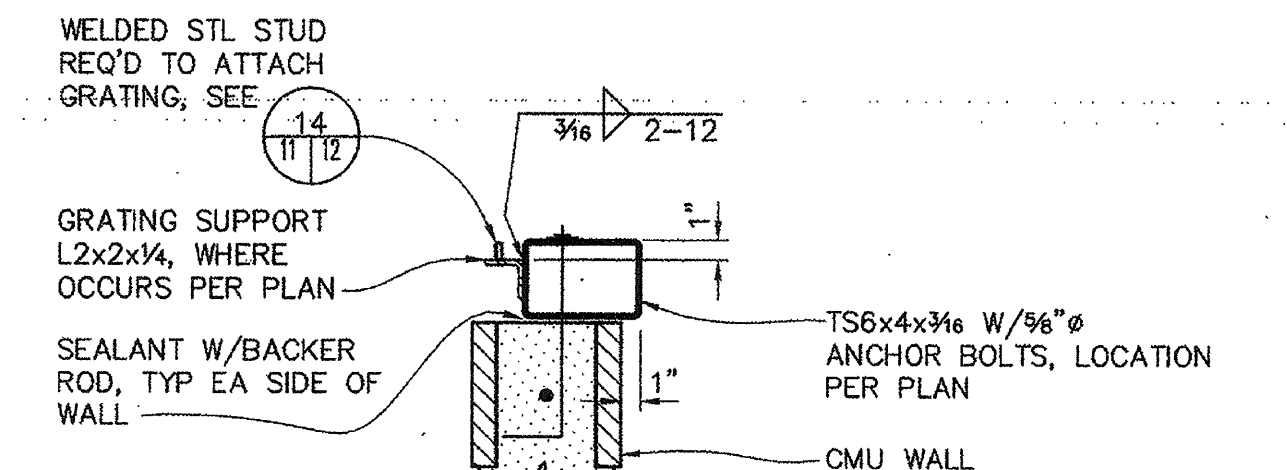


NOTE:  
GABLE FRAME NOT SHOWN FOR CLARITY

11 DETAIL  
10 11 1 1/2\"/>

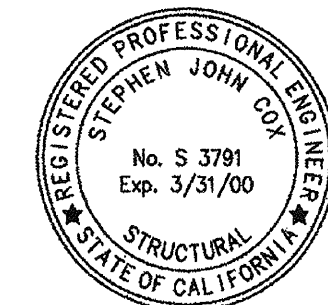


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10 12 NOT TO SCALE



12 DETAIL  
10 12 NOT TO SCALE

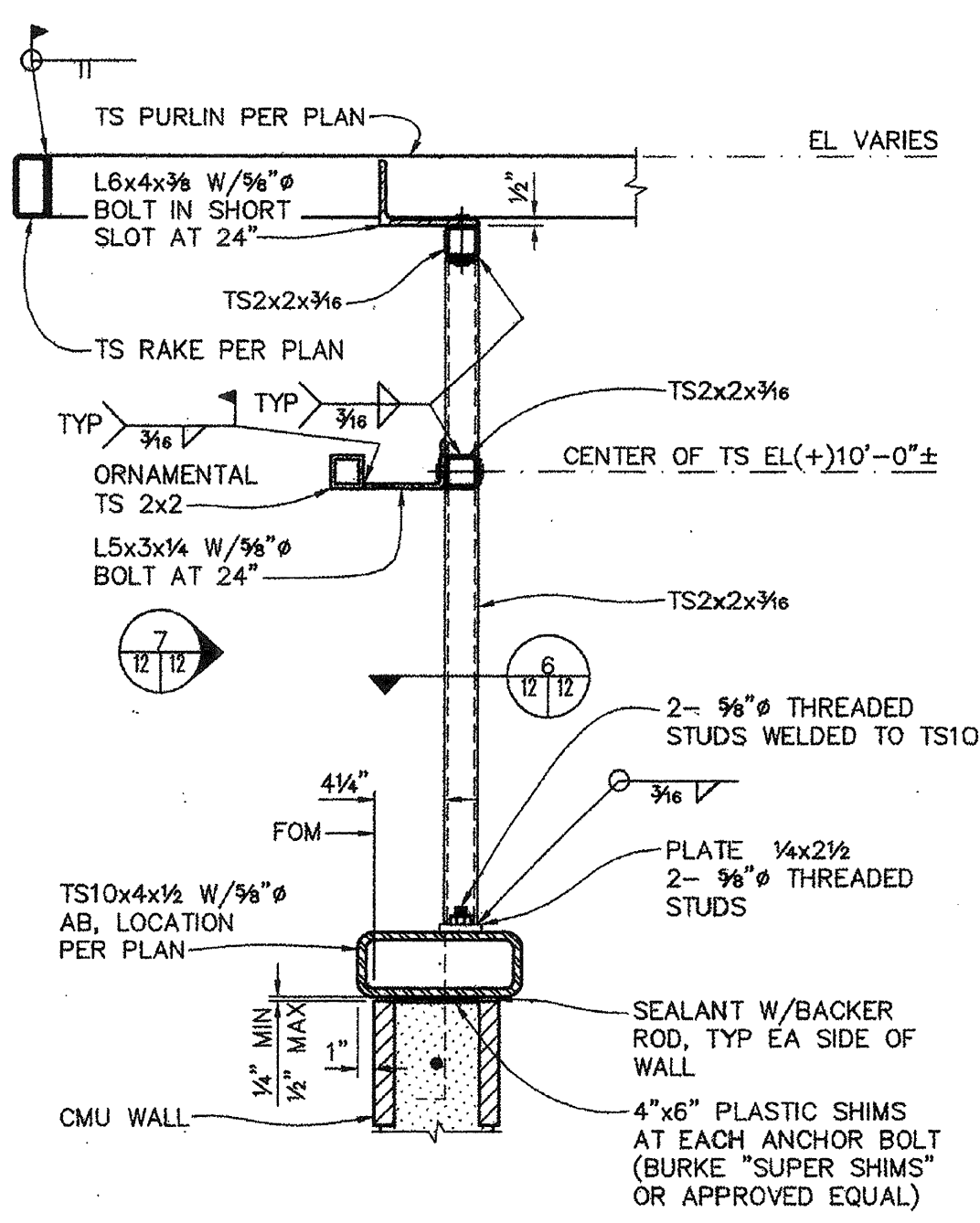
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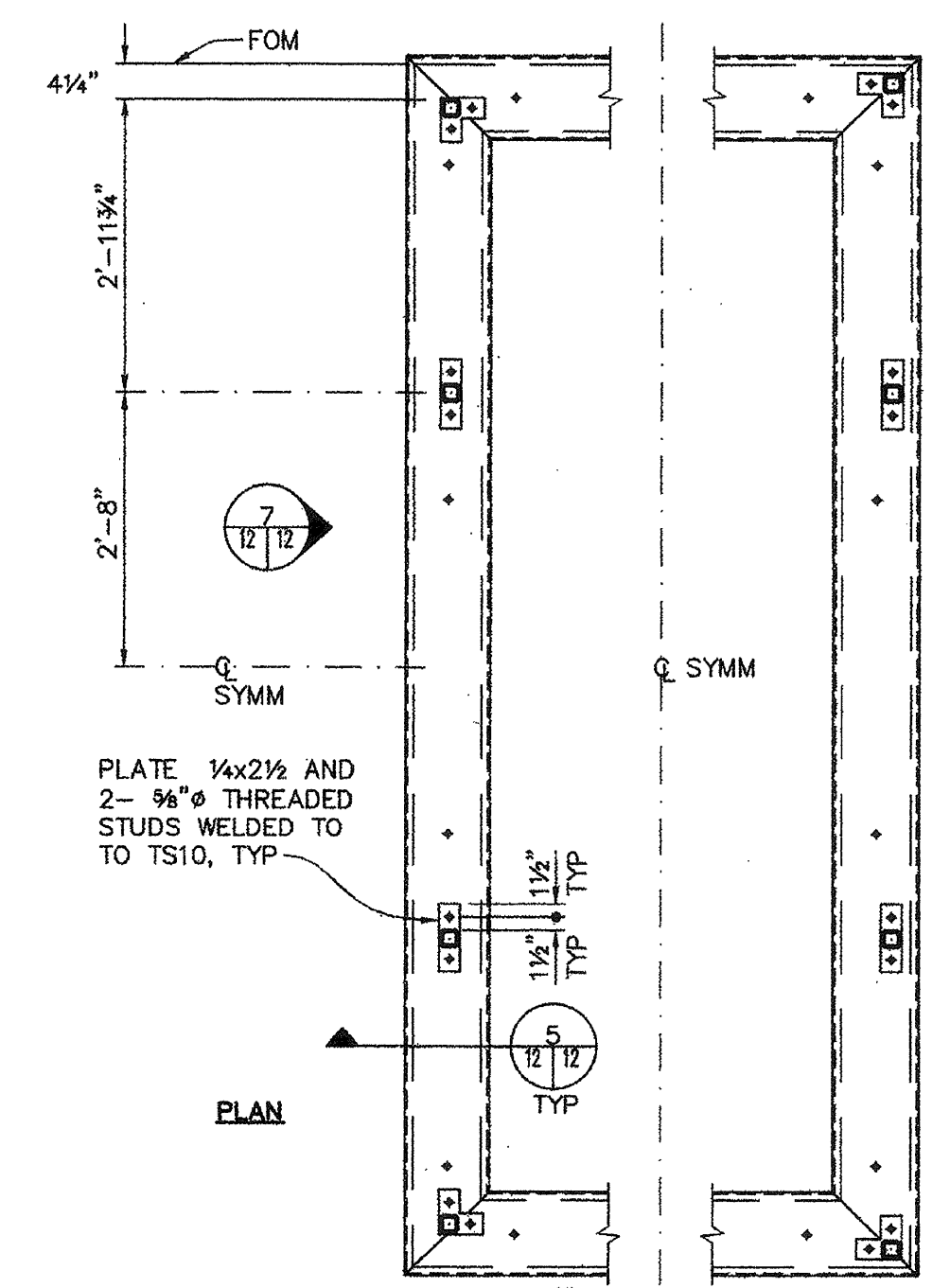
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REVISIONS			
SYMBOL	DESCRIPTION	DATE	APPROVAL
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 445 TESSERA DRIVE, SANTA ROSA, CA 95401 TEL (707) 532-9100 P.O. BOX 8798, SANTA ROSA, CA 95402 FAX (707) 532-9279			
DRAWN BY: SB	SONOMA COUNTY	CALIFORNIA	
CHECKED BY: SC	PETALUMA RIVER		
DESIGNED BY: SB	PAYRAN ST. STORM DRAIN PUMP STATION		
STRUCTURAL DETAILS			
APPROVAL RECOMMENDED: [Signature]	APPROVED: [Signature]	DATE: 5/13/99	
PREPARED UNDER THE DIRECTION OF		SCALE: SHOWN	DWG NO: 96205504
PETER T. GRASS		DRAWING NUMBER	
LT. COLONEL, C.E., DISTRICT ENGINEER		SHEET 11	52 42 1

CONTRACT RECORD DWG

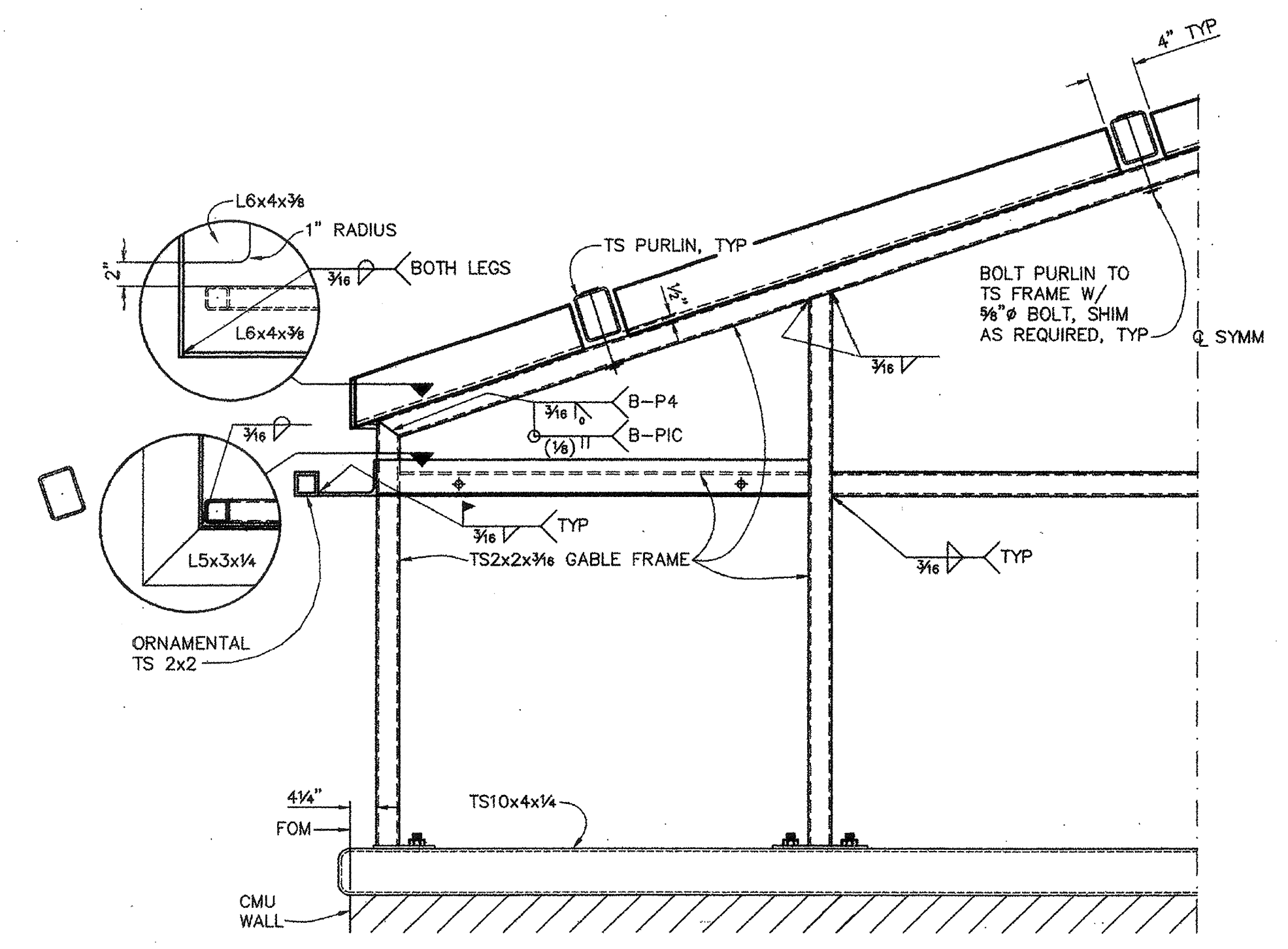




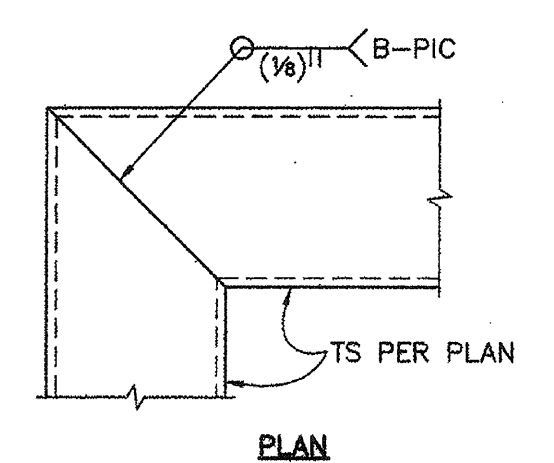
5 DETAIL  
10 | 12 1 1/2" = 1'-0"



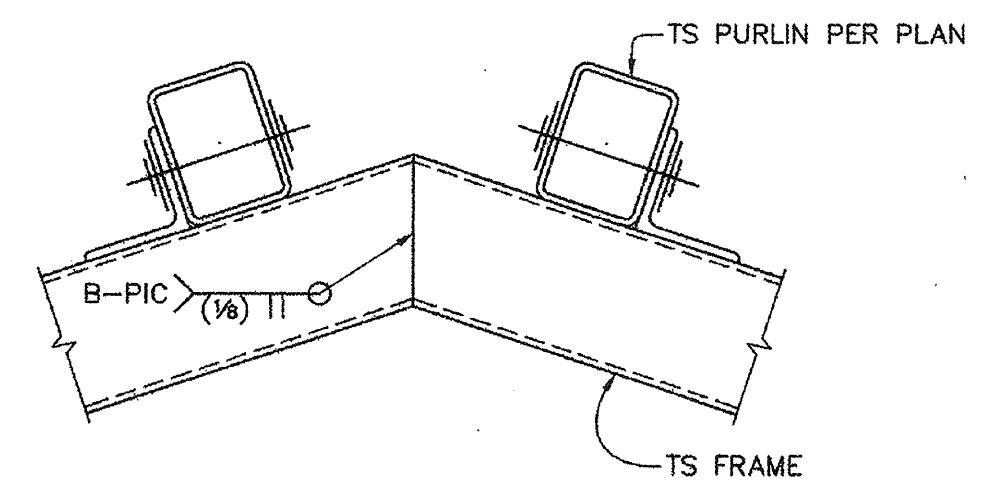
6 DETAIL  
10 | 12 3/4" = 1'-0"



7 DETAIL  
10 | 12 1 1/2" = 1'-0"

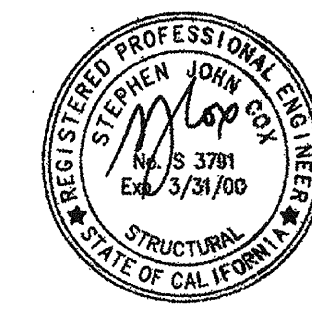


9 DETAIL  
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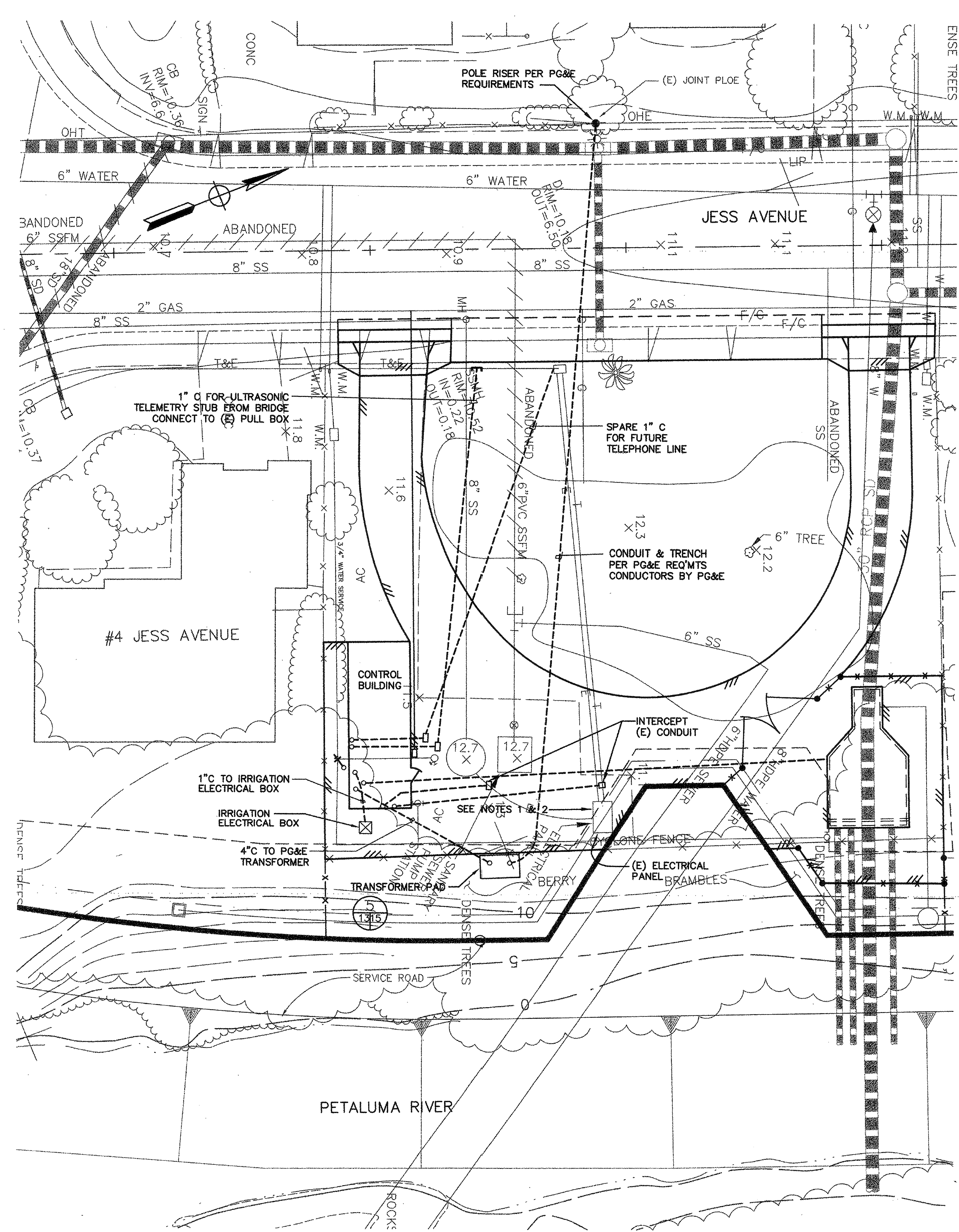
10 DETAIL  
10 | 12 3" = 1'-0"

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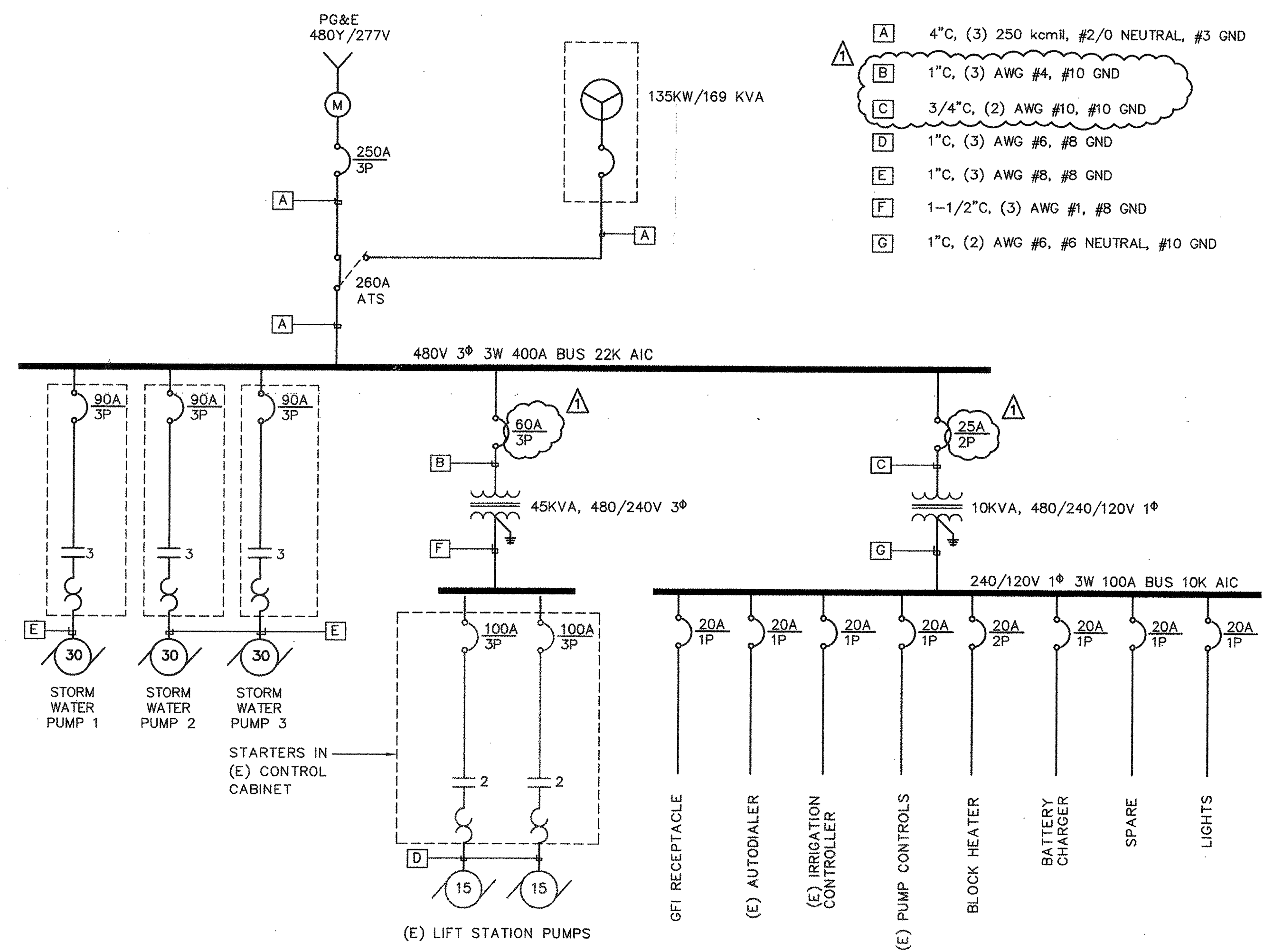


SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 405 TUDOR CIRCLE, SANTA ROSA, CA 95401 TEL: (707) 535-1012 FAX: (707) 535-1012 1400 WOODLAND AVENUE, SAN FRANCISCO, CA 94133 TEL: (415) 972-8878 FAX: (415) 972-8878		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: SB CHECKED BY: SC DESIGNED BY: [Signature] PROJECT COORDINATOR: [Signature]	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION	CALIFORNIA	
ARCHITECTURAL-DETAILS			
APPROVAL RECOMMENDED: [Signature] PREPARED UNDER THE DIRECTION OF: PETER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		DATE: 3/31/99 SCALE: SHOWN JOB NO.: DRAWING NUMBER:	SHEET 12 OF 52 42 1

CONTRACT RECORD DWG



**SITE PLAN**  
1"=10'



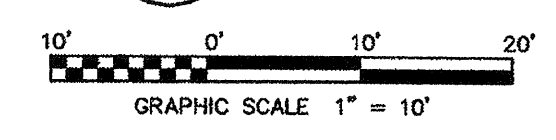
**SINGLE LINE DIAGRAM**  
NTS

**NOTES**

1. REMOVE LIFT STATION PUMP CONTROLS CABINET FROM THE EXISTING CONTROL PEDESTAL AND REINSTALL IN CONTROL BUILDING. RECONNECT CONTROLS TO LIFT STATION PUMPS. CONSTRUCTION WINDOW IS APPROXIMATELY 3 HOURS, DURING OFF PEAK FLOWS. COORDINATE OUTAGE WITH CHRIS Mc AULIFFE WITH EOS (707) 762-5892.
2. REMOVE IRRIGATION CONTROLLER AND AUTODIALLER FROM EXISTING CONTROL PEDESTAL. REINSTALL EQUIPMENT IN GENERATOR BUILDING. DEMOLISH CONTROL PEDESTAL AND REMAINING EQUIPMENT.
3. CONDUITS SHOWN ARE SCHEMATIC. ADJUST ACTUAL LOCATION TO MEET PROJECT CONDITIONS.
4. COORDINATE POWER WITH PAT HAYES/PG&E (707) 765-5162.
5. INTERIOR OF THE WET WELL IS CLASSIFIED AS A CLASS 1, DIVISION 2 HAZARDOUS LOCATION.
6. CUT AND PATCH EXISTING PAVEMENT, GUTTER, AND SIDEWALK WHERE CONDUIT CROSSES JESS AVENUE TO MATCH EXISTING.

**LEGEND**

- UNDERGROUND CONDUITS
- DEMOLITION
- CONDUIT STUB UP
- PULLBOX, 10"x17" U.N.O.
- TRANSFORMER
- CIRCUIT BREAKER
- MOTOR STARTER, SIZE AS INDICATED
- ⊕ DUPLEX RECEPTACLE
- LIGHT SWITCH
- 1x4 FLUORESCENT FIXTURE
- ⊙ GENERATOR
- ⊙ METER
- ⊙ DOOR SWITCH (MAGNETIC)

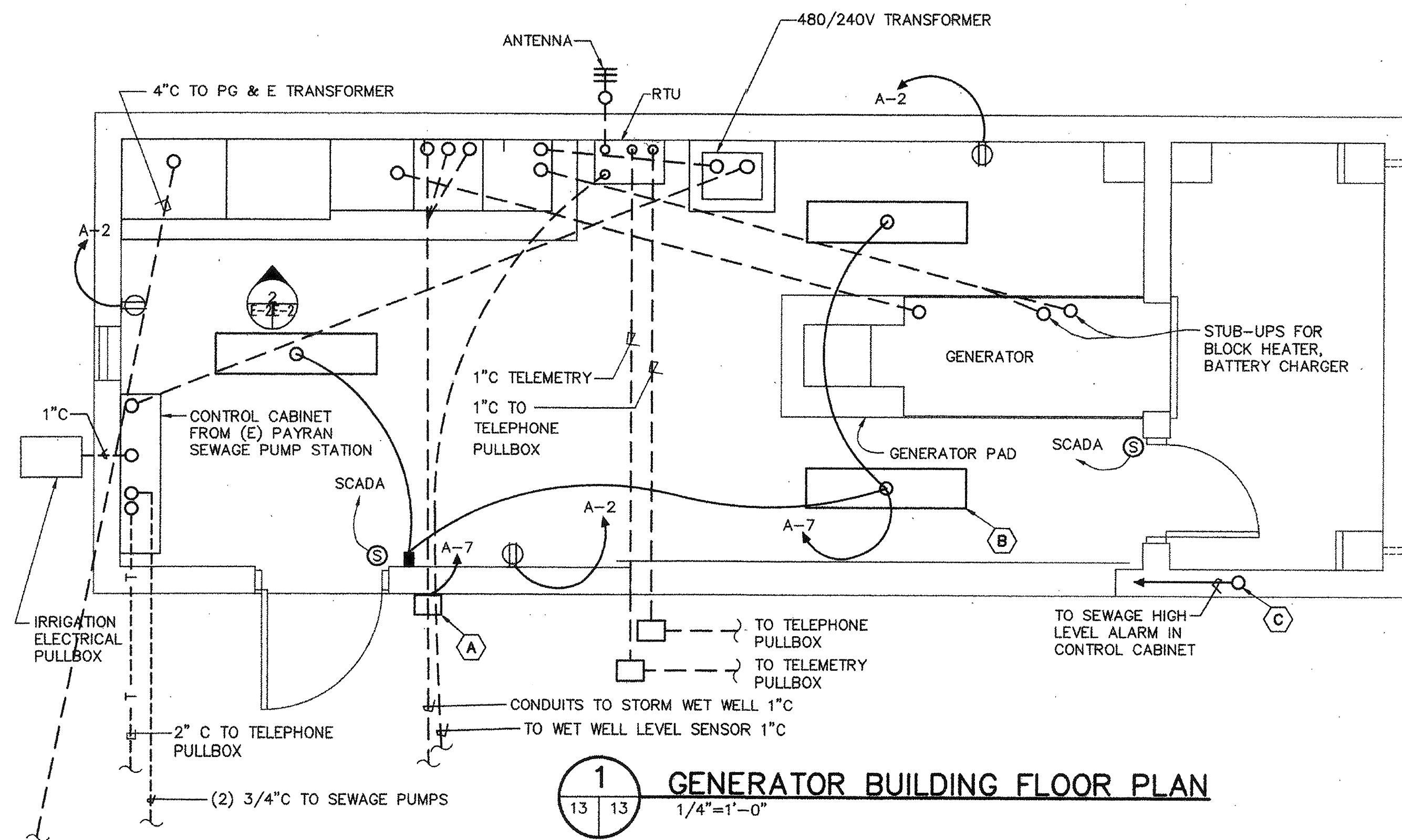


ADDENDUM #1	4/19/99	APPROVAL
<b>WINZLER &amp; KELLY</b> U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA		
PROJECT COORDINATOR	SONOMA COUNTY CALIFORNIA	
<b>PAYRAN ST. STORM DRAIN PUMP STATION</b> <b>ELECTRICAL-SITE PLAN</b> <b>AND SINGLE LINE DIAGRAM</b>		
DATE	5/13/99	
SCALE	SHOWN	JOB NO: 98205504
DRAWING NUMBER		SHEET 13 52 42 1

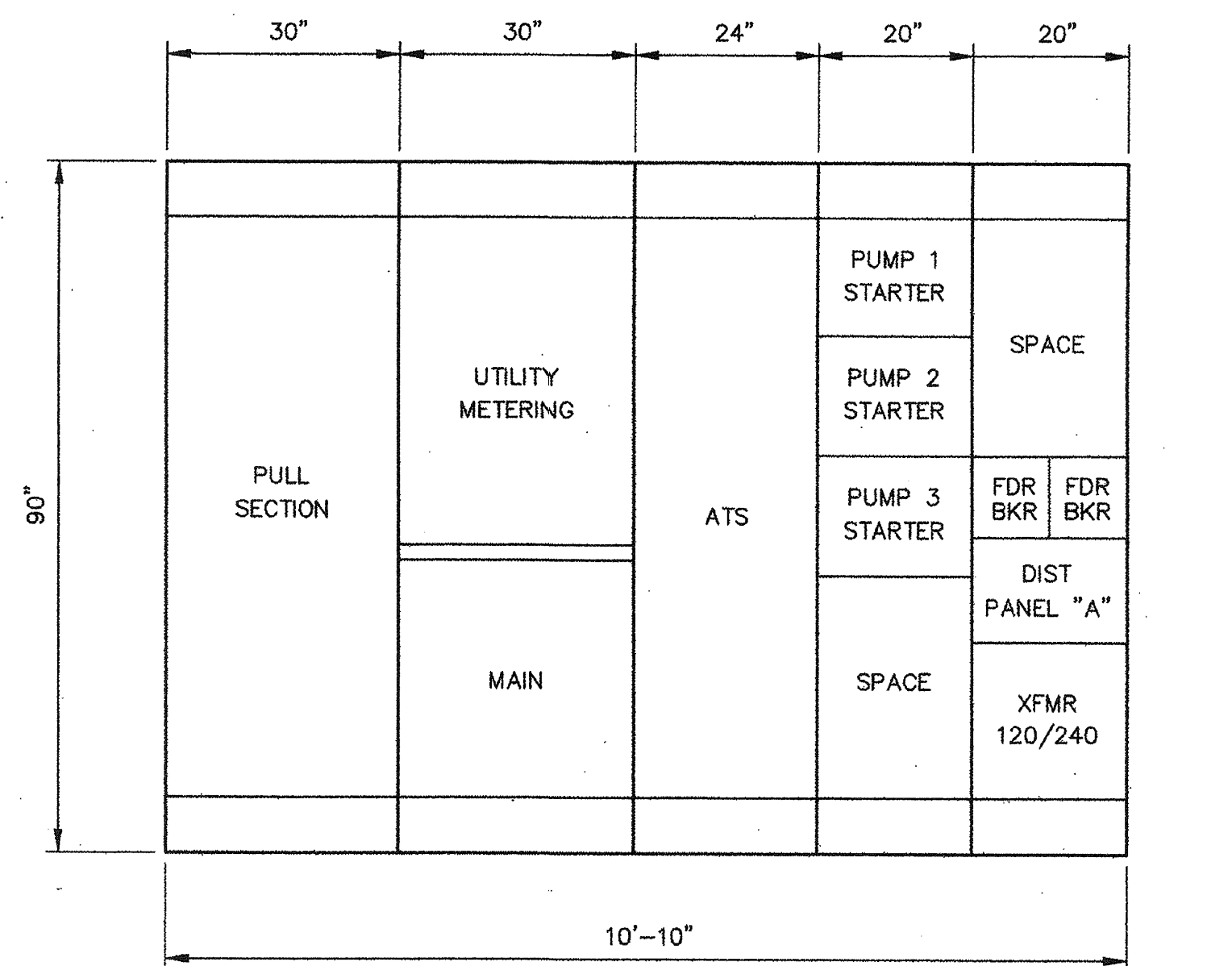
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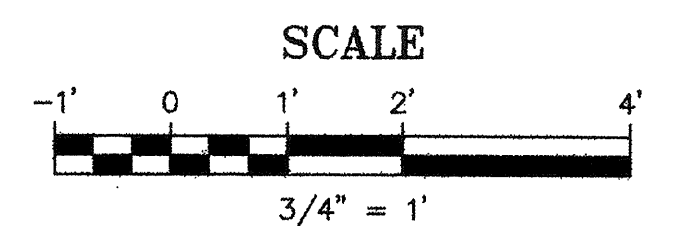
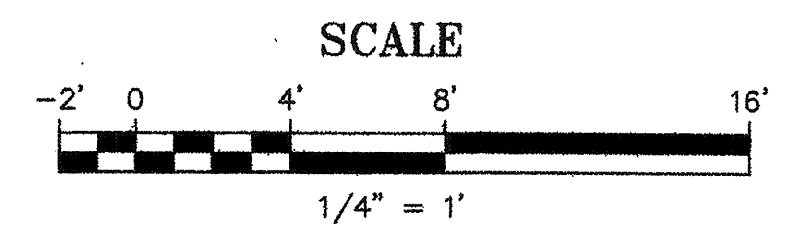




SCHEDULE PANEL A				TYPE 100A MCB 100A BUS 120/240V 1Ø 3W 10K AIC				MOUNTING SURFACE			
POLE No	CIRCUIT SIZE	SERVING	CKT LOAD			BREAKER			SERVING	CIRCUIT SIZE	POLE No
			A	B	C	FR	TRIP	A			
1	#12 AWG	PUMP CONTROL PANEL	5			20			RECEPTACLE	#12 AWG	2
3	#12 AWG	AUTODIAL UNIT		5		20			BATTERY CHARGER	#12 AWG	4
5	#12 AWG	IRRIGATION CONTROLLER	5			20			BLOCK HEATER	#12 AWG	6
7	#12 AWG	LIGHTS		2		20			SPACE		8
9	#12 AWG	RTU	2			20			SPACE		10
11		SPARE				20			SPACE		12
13											14
15											16
17											18
19											20
21											22
23											24
25											26
27											28
29											30
31											32
33											34
35											36
37											38
39											40
41											42
CONNECTED LOAD			12	7		24.5		22.5	12.5	15.5	
KVA			7.5								



FIXTURE SCHEDULE				
TYPE	MOUNTING TYPE	MANUFACTURER & CATALOG NUMBER	LAMPS	VOLTS
(A)	WALL AT +84"	AREA LIGHT - WALL PACK HUBBELL NO. NRG-308-W4-PC	28WPL	120
(B)	SUSPENDED AT 96"	INDUSTRIAL 4" FLUORESCENT HUBBELL IG-042R-PA10-L1	2-T8	120
(C)	SURFACE	INDUSTRIAL AREA STROBE SIGNAL HUBBELL GSR-B-X-A1	XENON	120

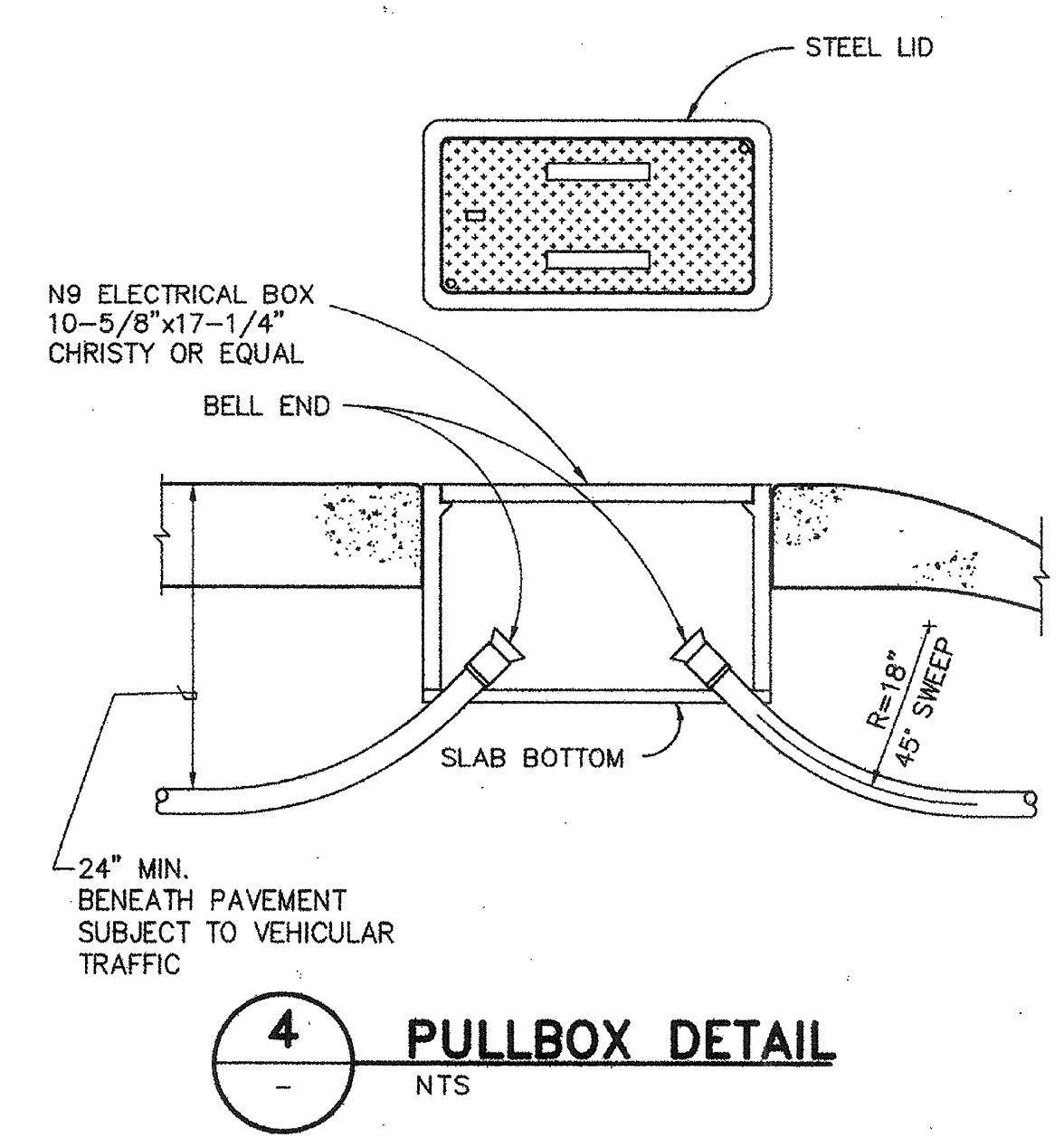
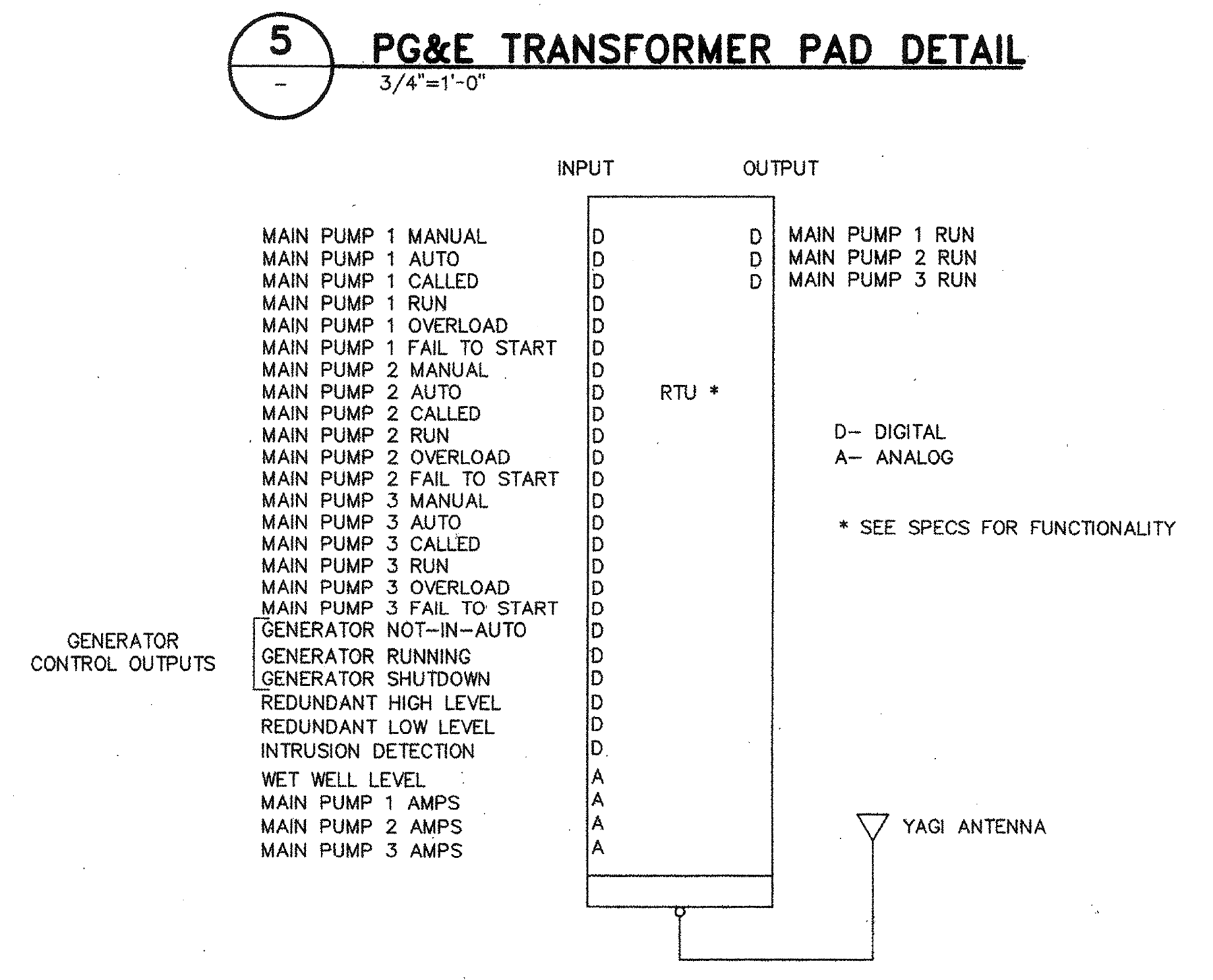
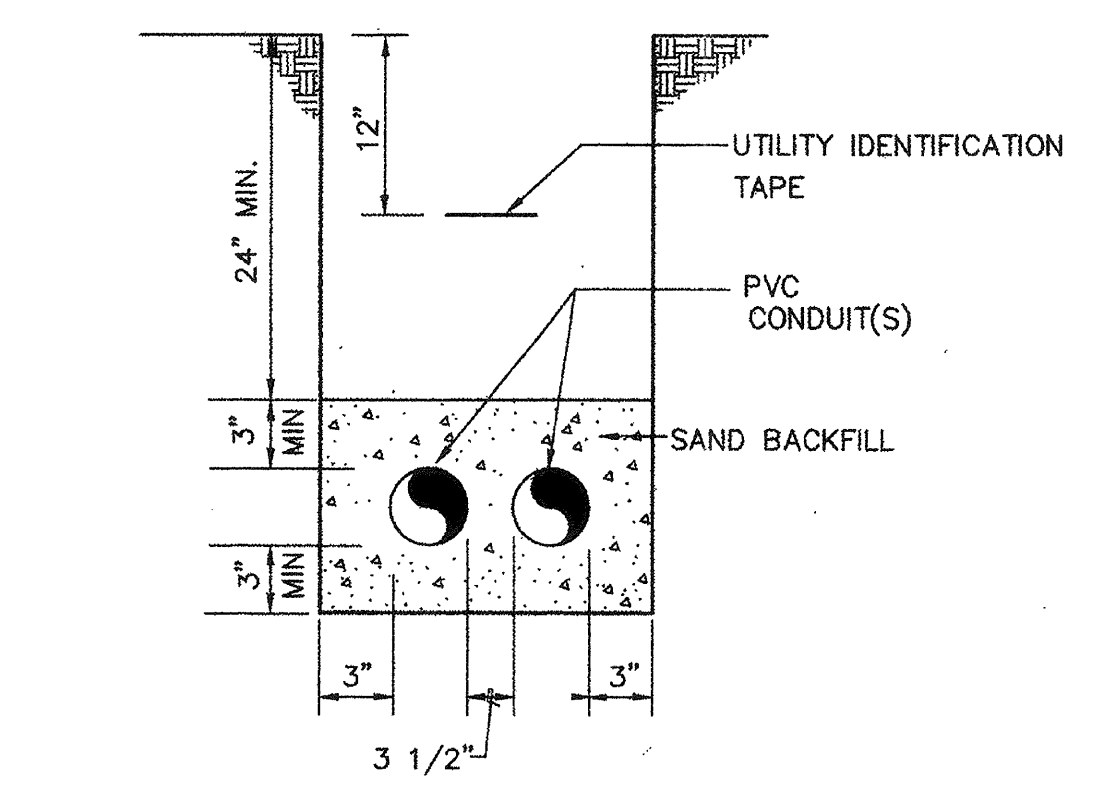
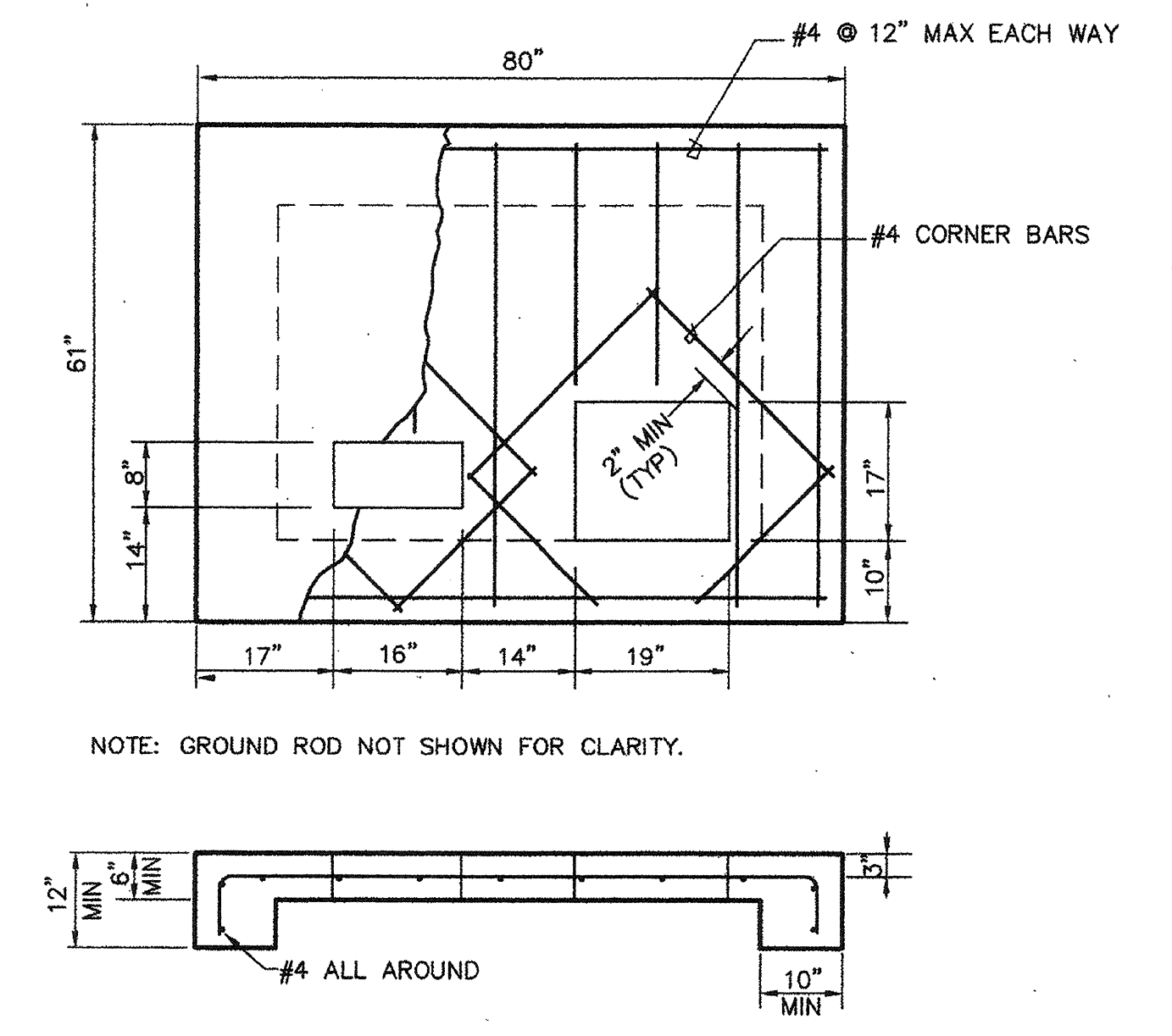
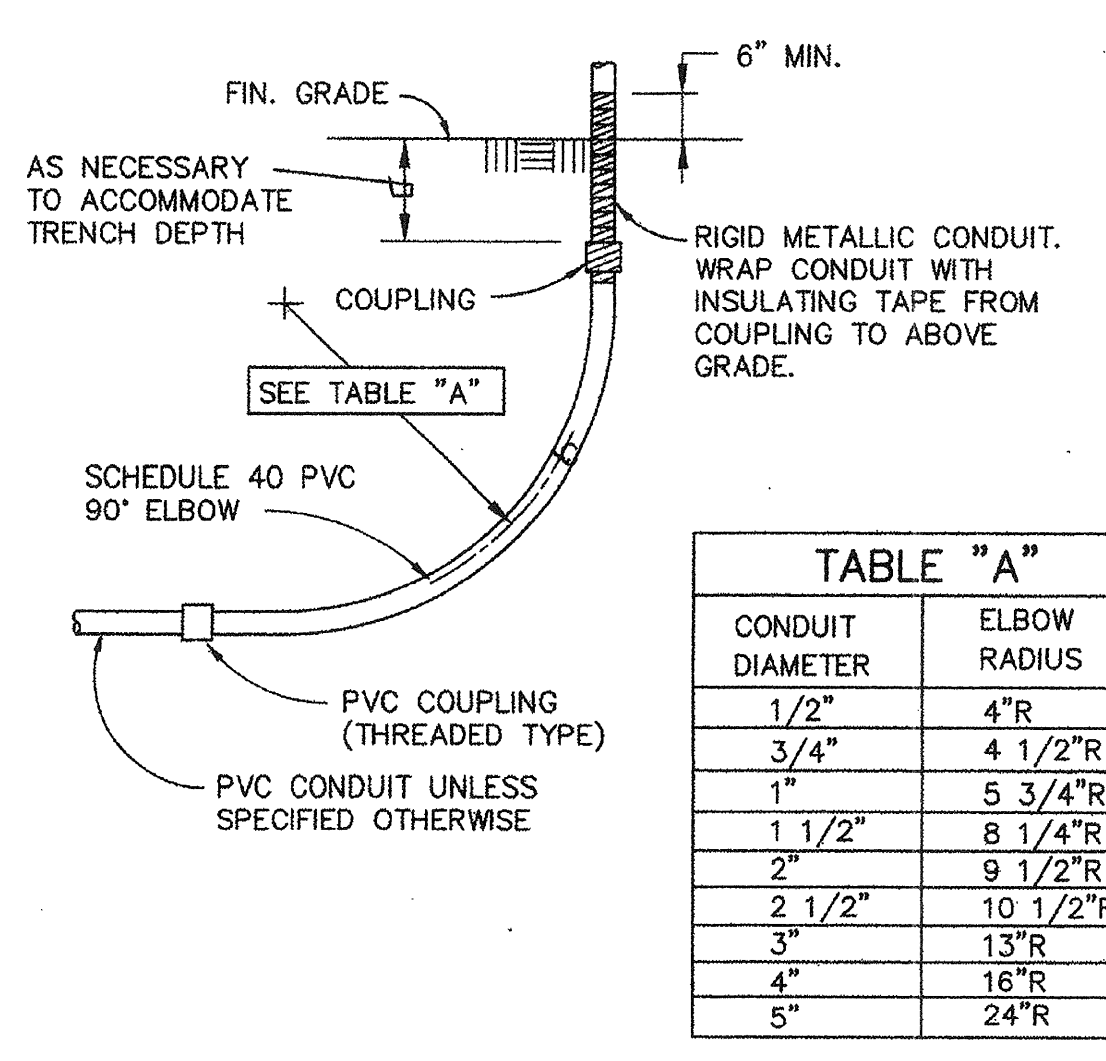
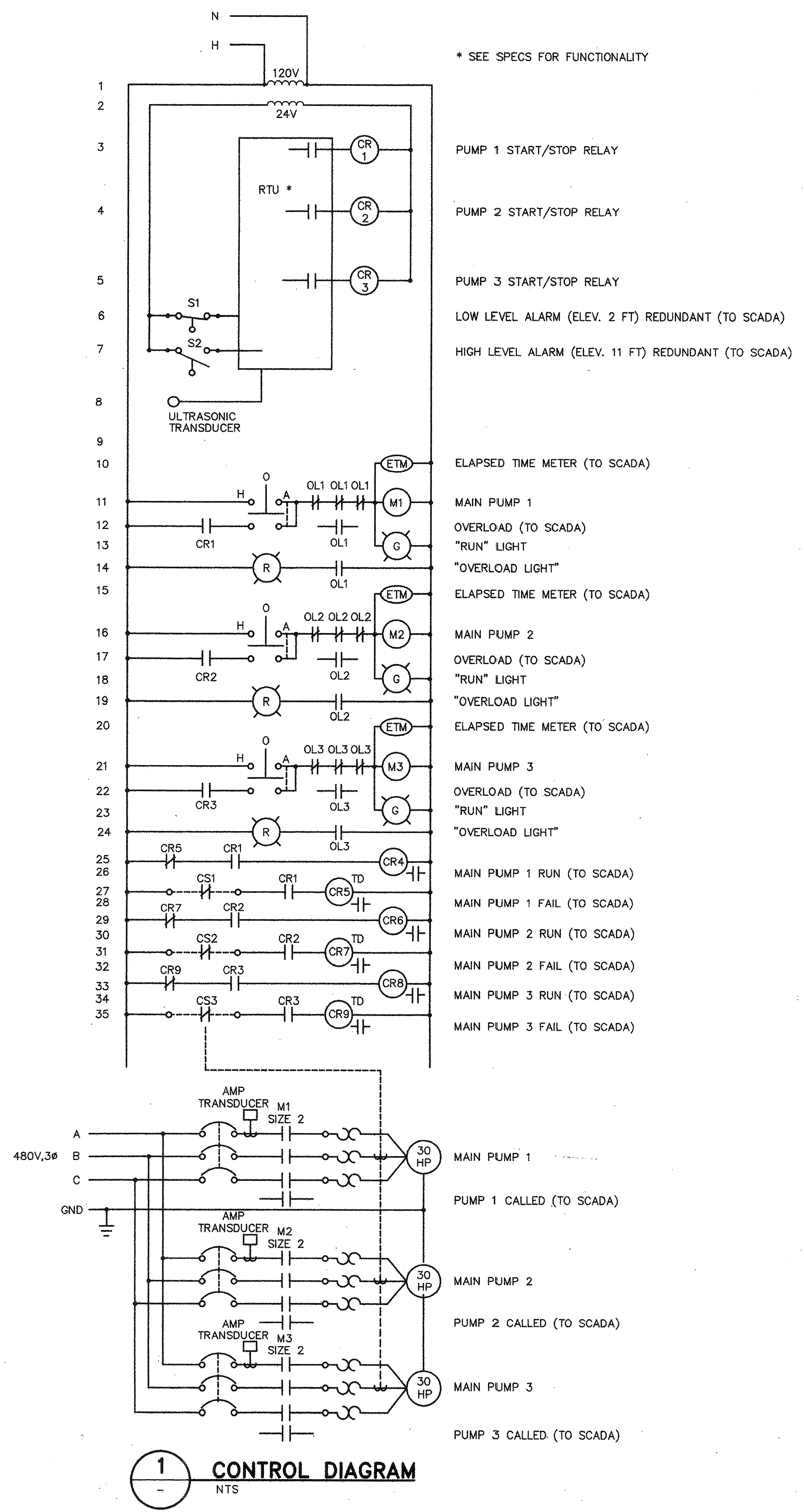


		<b>WINZLER KELLY</b> CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: RM CHECKED BY: FTB DESIGNED BY: RG	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION ELECTRICAL-GENERATOR BUILDING AND EQUIPMENT	U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	DATE: 3/31/99 SHEET: 14 52 42 1

CONTRACT RECORD DWG

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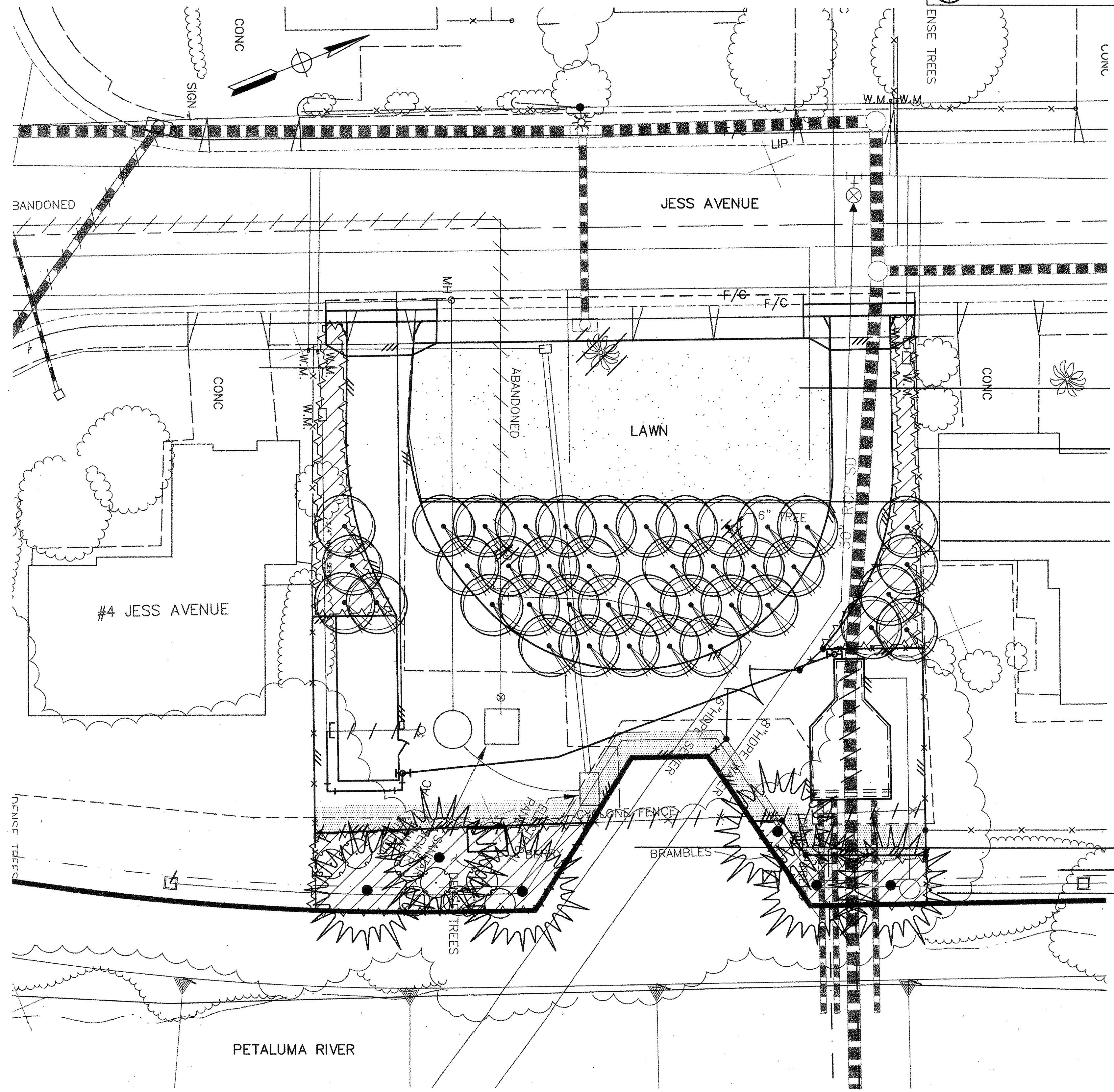
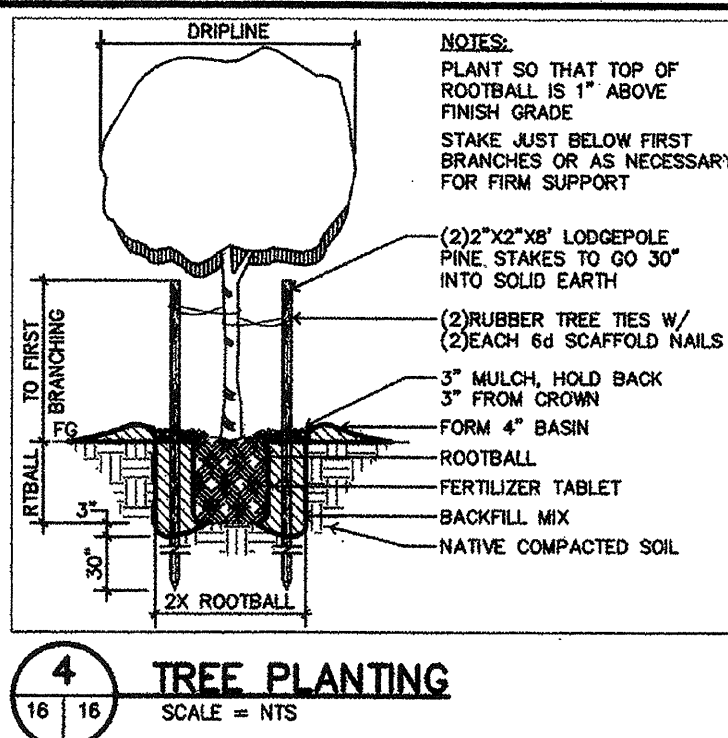
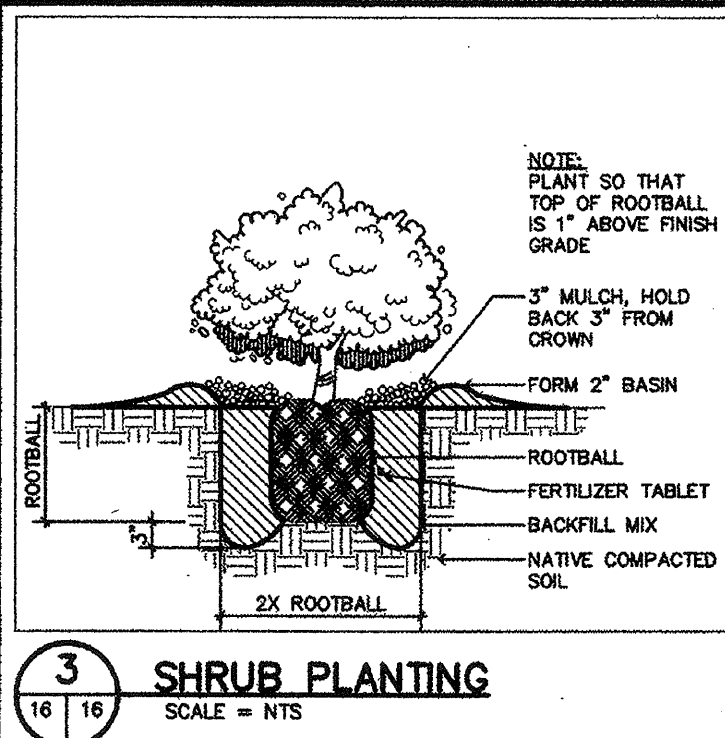
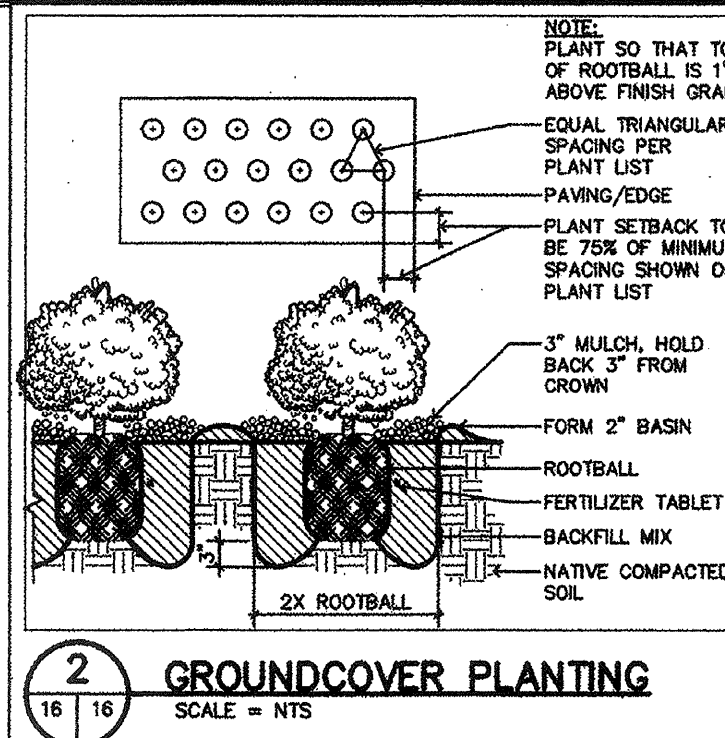
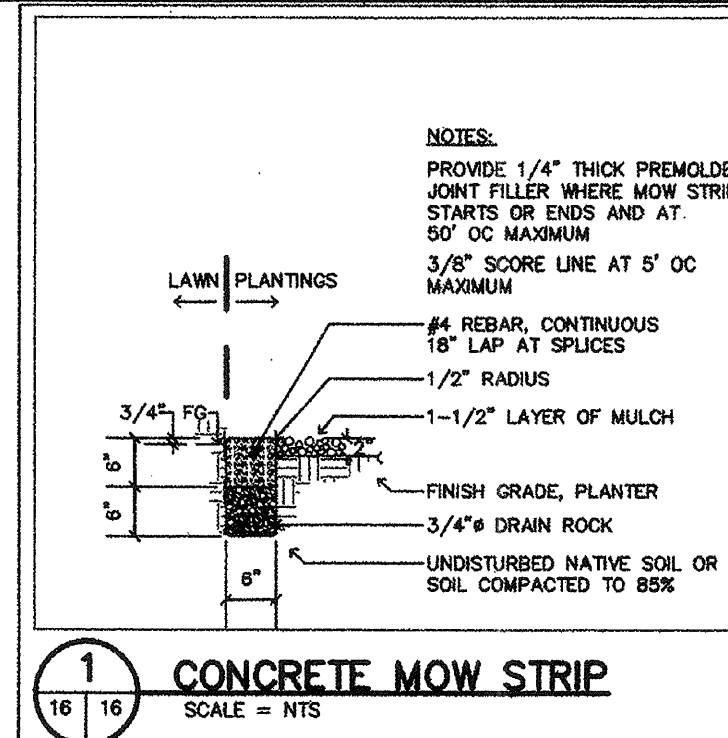
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SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER KELLY</b> CORP'S OF ENGINEERS 400 REDWOOD CIRCLE, SUITE 100, SAN FRANCISCO, CA 94112 TEL: (415) 774-1100 FAX: (415) 774-1101		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORP'S OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: RM CHECKED BY: FTB PROJECT COORDINATOR:	SONOMA COUNTY <b>PETALUMA RIVER</b> <b>PAYRAN ST. STORM DRAIN PUMP STATION</b> <b>ELECTRICAL-CONTROL DIAGRAM AND DETAILS</b>	CALIFORNIA	DATE: 3/31/99
PREPARED UNDER THE DIRECTION OF PETER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		SCALE: SHOWN DRAWING NUMBER:	SHEET: 15 52 42 1

CONTRACT RECORD DWG



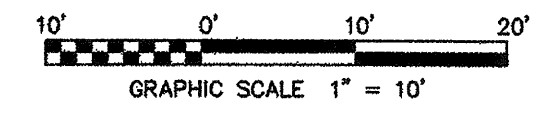


**PLANT LIST:**

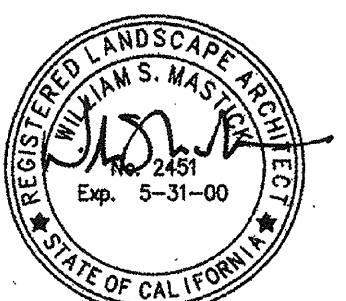
SYMBOL	QUAN.	BOTANICAL NAME	COMMON NAME	SIZE	NOTES
<b>TREES:</b>					
⊙	40	ACER RUBRUM 'ARMSTRONG'	RED MAPLE	16 GAL	
⊙	6	SEQUOIA SEMPERVIRENS 'SEQUOI'	REDWOOD	16 GAL	
<b>SHRUBS:</b>					
⊙	11	BERBERIS T. 'ATROPURPUREA'	BARBERY	5 GAL	
<b>GROUNDCOVERS:</b>					
▨		COTONEASTER	COTONEASTER	1 GAL 96" OC	
▨		TRACHELOSPERMUM JASMINOIDES	STAR JASMINE	1 GAL 96" O.C.	
▨		FESTUCA SPP.	DWARF FESCUE TURF	SOD	

**PLANT NOTES:**

- A. THE PLANTING PLAN IS DIAGRAMMATIC. ALL PLANT LOCATIONS ARE APPROXIMATE. PLANT SYMBOLS TAKE PRECEDENCE OVER PLANT QUANTITIES SPECIFIED.
- B. QUANTITIES SHOWN ON THE PLANTING PLAN ARE APPROXIMATE AND ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY.
- C. CONTRACTOR SHALL NOTIFY THE LANDSCAPE ARCHITECT OF DISCREPANCIES BETWEEN QUANTITIES AND SYMBOLS SHOWN.
- D. TREES LOCATED WITHIN 5 FEET OF OVERHEAD ELECTRICAL LINES SHALL, PRIOR TO PLANTING, BE BROUGHT TO THE ATTENTION OF THE CONTRACTING OFFICER FOR ADJUSTMENT.
- CONTRACTOR SHALL APPLY A CONTACT HERBICIDE, WHERE WEEDS ARE PRESENT, PER MANUFACTURER'S SPECIFICATIONS, A MINIMUM OF TEN (10) DAYS PRIOR TO COMMENCEMENT OF ANY PLANTING OR IRRIGATION WORK. WEEDS SHALL BE ALLOWED TO COMPLETELY DIE BACK, INCLUDING THE ROOTS, BEFORE SOIL AMENDING AND PLANTING COMMENCES.
- A. STAKE OR GUY ALL TREES PER DETAIL.
- B. REMOVE NURSERY STAKES ON ALL VINES AND ATTACH TO ADJACENT WALLS OR FENCES WITH NON-METALLIC TIES.
- C. REMOVE NURSERY STAKES AND TIES FROM ALL CONTAINER STOCK, MAINTAIN SIDE GROWTH ON ALL TREES.
- PLANTS SHALL NOT BE PLACED WITHIN TWELVE (12") INCHES OF SPRINKLER HEADS.
- SHRUBS SHOWN IN PLANT AREAS SHALL BE UNDER-PLANTED WITH GROUND COVER SHOWN BY ADJACENT SYMBOL, TO WITHIN 12" OF MAIN PLANT STEM.
- INSTALL 1 1/2" LAYER OF 'ARBOR MULCH' AROUND WATERING BASINS AND THRU-OUT ALL PLANTING AREAS, EXCEPT LAWN AREAS AND 2:1 SLOPES. 'ARBOR MULCH' AVAILABLE THRU:  
  
GRAB N GROW SOIL PRODUCTS  
2759 LLANO ROAD  
SANTA ROSA, CA 95407  
707/576-7276
- CONTRACTOR SHALL TAKE A MINIMUM OF THREE SOIL SAMPLES FROM PLANTING AREAS. A SOIL ANALYSIS SHALL BE PERFORMED BY A TESTING LAB APPROVED BY THE CONTRACTING OFFICER. SUBMIT ANALYSIS TO THE CONTRACTING OFFICER PRIOR TO INCORPORATION OF SPECIFIED SOIL AMENDMENTS INTO THE PROJECT. SOIL AMENDMENT ADJUSTMENT MAY BE REQUIRED DEPENDING ON THE OUTCOME OF ANALYSIS.
- CONTRACTOR SHALL INCLUDE UNIT PRICES IN BASE BID FOR ALL SOIL AMENDMENTS (i.e. SOIL CONDITIONER, FERTILIZER, ETC).
- ALL PLANT MATERIAL SHALL BE APPROVED AT THE PROJECT SITE BY THE CONTRACTING OFFICER PRIOR TO PLANTING. ALL PLANT MATERIAL REJECTED BY THE OWNER OR THE CONTRACTING OFFICER SHALL BE REMOVED FROM THE PROJECT SITE AT NO ADDITIONAL COST. NO TREES SHALL BE PLANTED WITHOUT APPROVAL. THE CONTRACTOR IS RESPONSIBLE FOR HAVING ALL TREES AT THE PROJECT SITE FOR CHECKING AT ONE TIME.
- JUTE MATTING SHALL BE INSTALLED ON ALL SLOPES 2:1 OR GREATER. OVERLAP EDGES OF JUTE MATTING TWO INCHES. INSTALL JUTE MATTING STAPLES AT A RATE OF 200 STAPLES PER 900 SQUARE FEET OF JUTE MATTING.

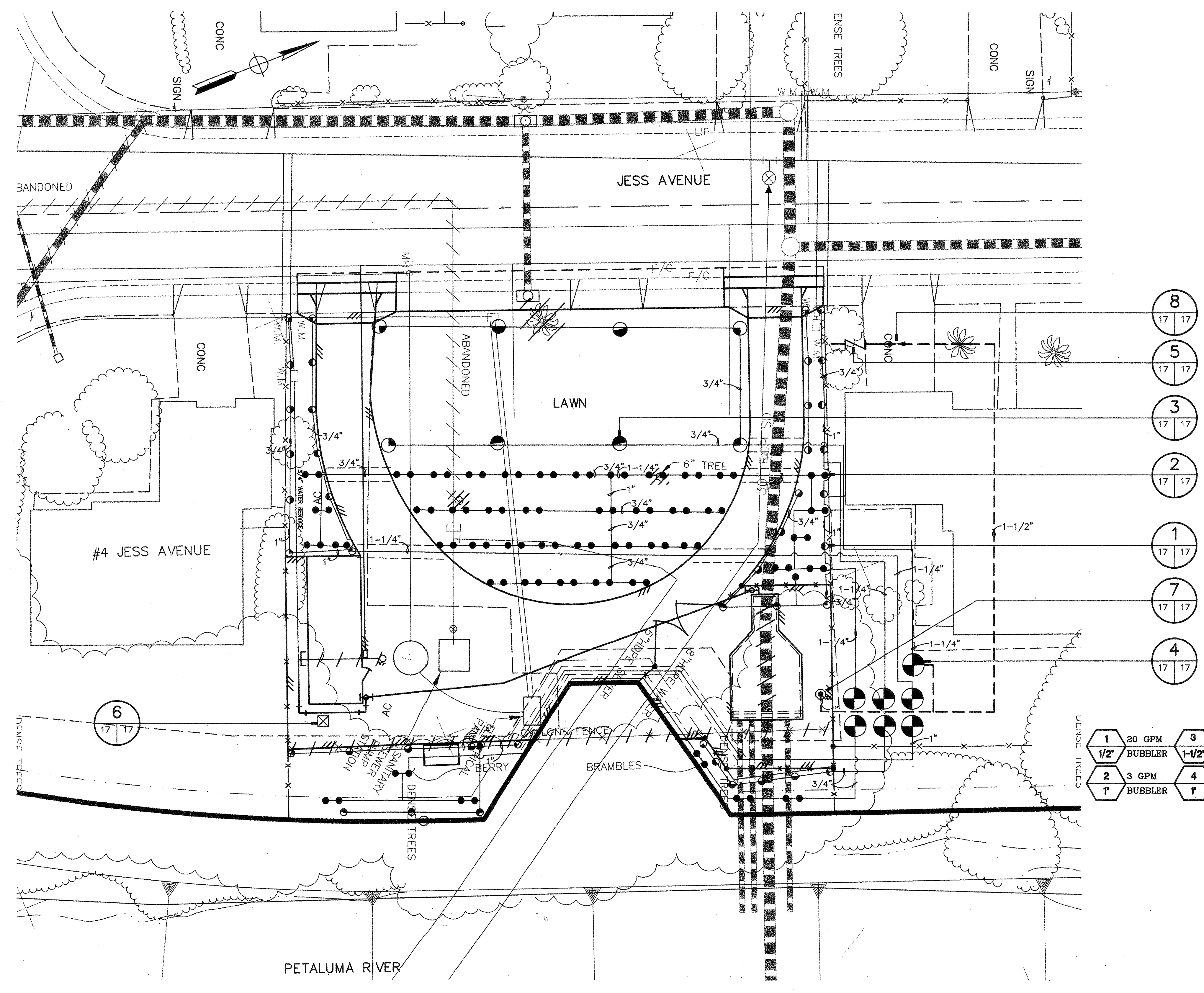
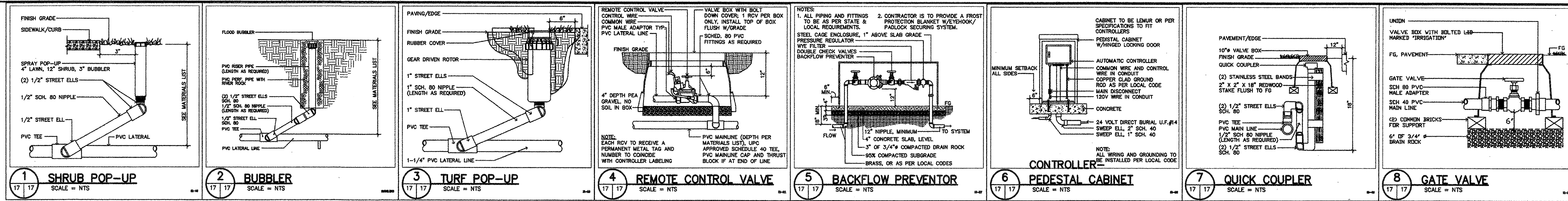


SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
WINZLER & KELLY CORPS OF ENGINEERS 405 TROCKEN BRIDGE, SANTA ROSA, CA 95401 TEL (707) 523-1212 FAX (707) 523-1213		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: BM	SONOMA COUNTY	CALIFORNIA	
CHECKED BY: LE	PETALUMA RIVER		
APPROVED BY: BM	PAYRAN ST. STORM DRAIN PUMP STATION		
LANDSCAPING - PLANTING PLAN			
APPROVAL RECORD:	DATE:	3/31/99	
PREPARED UNDER THE DIRECTION OF:	SCALE:	SHOWN	JOB NO: 96205504
PETER T. GRASS			DRAWING NUMBER
LT. COLONEL, C.E., DISTRICT ENGINEER	SHEET	16	52 42 1



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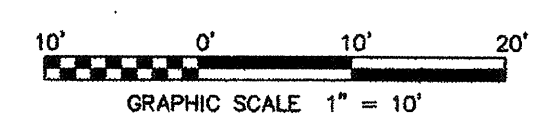
**MATERIALS LIST:**

SYMBOL	QUAN.	DESCRIPTION	MANUFACTURER'S NUMBERS & NOTES
IRRIGATION:			
POC	-	POINT OF CONNECTION	POINT OF CONNECTION TO BE PER LOCAL CITY STANDARDS
Z	-	BACKFLOW PREVENTOR	WELKINS 975XL, 1" W/WEATHERGUARD JACKET & LOCK
---	-	MAINLINE, PVC SCHEDULE 40	24" UNDER PAVEMENT W/6" SAND BED IN CHASE 18" UNDER EARTH
AC	1	AUTOMATIC CONTROLLER - PEDestal MOUNT	IRIBITROL 8 STATION
V	1	GATE VALVE	STOCKHAM B-110, SIZE TO MATCH MAINLINE
RV	7	REMOTE CONTROL VALVE	RANBERD INSTALLED IN RECTANGULAR VALVE BOX
QC	1	QUICK COUPLER	NELSON 7645, 1" W/SWIVEL ELLS AND KEYS
---	-	LATERAL LINE, PVC CLASS 200 ALL SIZES AT 3/4" UNLESS NOTED ON PLAN	18" UNDER PAVEMENT W/6" SAND BED IN CHASE 12" UNDER EARTH
---	-	IRRIGATION LINES IN PVC SCHEDULE 40 CHASE	CHASE TO BE TWICE THE SIZE OF LINE(S)
●	-	SPRAY POP UP	TORO 8702-10-31-COM-15 W/CHECK VALVES AS REQ. TO PREVENT LOW HEAD DRAINAGE
○	-	LAWN POP UP	HUNTER I-20-ADS-03 (1.2 GPM) (160" PATTERN) HUNTER I-20-ADS-01 (0.7 GPM) (160" PATTERN)
●	-	FLOOD RUBBLER	RANBERD 1401 (85 GPM) NOZZLES:

**IRRIGATION NOTES:**

- THE IRRIGATION SYSTEM IS BASED ON THE MINIMUM OPERATING PRESSURE AND THE MAXIMUM FLOW DEMAND SHOWN ON THE IRRIGATION DRAWINGS AT EACH POINT OF CONNECTION. THE CONTRACTOR SHALL VERIFY WATER PRESSURE PRIOR TO CONSTRUCTION. REPORT TO THE CONTRACTING OFFICER ANY DIFFERENCE BETWEEN THE WATER PRESSURE SHOWN ON THE DRAWINGS AND THE ACTUAL PRESSURE READING AT THE IRRIGATION POINT OF CONNECTION. IN THE EVENT PRESSURE DIFFERENCES ARE NOT REPORTED PRIOR TO THE START OF CONSTRUCTION, THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY REVISIONS NECESSARY.
- THIS DESIGN IS DIAGRAMMATIC. ALL PIPING, VALVES, ETC. SHOWN WITHIN PAVED AREAS ARE FOR DESIGN CLARIFICATION ONLY. INSTALL PIPING AND VALVES IN PLANTING AREAS WHERE POSSIBLE, AND LOCATE ELECTRIC CONTROL AND QUICK COUPLING VALVES IN GROUND COVER/SHRUB AREAS, 6" TO 12" AWAY FROM HARD-SCAPE OR TURF AREA FOR EASY ACCESS.
- THE CONTRACTOR SHALL FLUSH AND ADJUST ALL LATERAL LINES AND HEADS FOR OPTIMUM PERFORMANCE. THIS SHALL INCLUDE THROTTLING THE FLOW CONTROL AT EACH VALVE.
- IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO FAMILIARIZE HIMSELF WITH ALL GRADE DIFFERENCES, EXISTING METERS, CONTROLLERS AND BACKFLOW DEVICES, LOCATION OF WALLS, STRUCTURES, AND UTILITIES. THE CONTRACTOR SHALL EXERCISE EXTREME CARE, AND BE RESPONSIBLE FOR ANY DAMAGE IN EXCAVATING AND WORKING NEAR UTILITIES. HE SHALL COORDINATE HIS WORK WITH THE GENERAL CONTRACTOR AND OTHER SUB-CONTRACTORS FOR THE LOCATION OF UTILITIES AND THE INSTALLATION OF PIPE SLEEVES THROUGH WALLS, UNDER ROADWAYS, AND NEAR STRUCTURES. PRIOR TO CONSTRUCTION, CONTACT ALL APPLICABLE AGENCIES AND U.S.A. AT 1-800-642-2444 TO FIELD LOCATE ALL EXISTING UTILITIES. ALSO, THE CONTRACTOR SHALL CONSULT WITH THE OWNERS TO FAMILIARIZE HIMSELF WITH EXISTING UNDERGROUND UTILITIES, STRUCTURES, WALLS AND GRADES PRIOR TO CONSTRUCTION.
- FIELD ADJUSTMENTS MAY BE REQUIRED TO PROVIDE OPTIMUM OPERATING EFFICIENCY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTRACTING THE CONTRACTING OFFICER TO REVIEW FIELD ADJUSTMENTS PRIOR TO INSTALLATION. IN THE EVENT THAT NO CONTACT IS MADE WITH THE CONTRACTING OFFICER, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY REVISIONS.
- SLEEVES ALL PRESSURE MAIN LINE PIPE AND CONTROL WIRE UNDER STREETS AND WALKWAYS WITH THE PROPER SIZE SCHEDULE 40 PVC PIPE TO DEPTH AS SPECIFIED.
- CONFORM TO ALL LOCAL CODES.
- FOR ADDITIONAL INFORMATION, SEE PROJECT DETAILS AND SPECIFICATIONS.
- IF A CONFLICT, PROBLEM OR FAILURE ARISES DURING IRRIGATION INSTALLATION, THE EQUIPMENT MANUFACTURER'S SPECIFICATIONS AND REQUIREMENTS FOR THE USE OF THEIR PRODUCTS WILL TAKE PRECEDENT OVER THE CONTRACTING OFFICER'S CONSTRUCTION DOCUMENTS.

1	20 GPM	3	27 GPM	6	17 GPM
1/2"	BUBBLER	1-1/2"	SPRAY	1-1/2"	SPRAY
2	3 GPM	4	9 GPM	5	11 GPM
1"	BUBBLER	1"	SPRAY	1"	SPRAY



SYMBOL	DESCRIPTION	DATE	APPROVAL
REVISIONS			
<b>WINZLER &amp; KELLY</b> CONSULTING ENGINEERS 405 TOLON DRIVE, SANTA ROSA, CA 95401 TEL: 509-274-1200 FAX: 509-274-1205		U.S. ARMY ENGINEER DISTRICT, SAN FRANCISCO CORPS OF ENGINEERS SAN FRANCISCO, CALIFORNIA	
DRAWN BY: MB DESIGNED BY: LE CHECKED BY: MB APPROVAL: <i>[Signature]</i>	SONOMA COUNTY PETALUMA RIVER PAYRAN ST. STORM DRAIN PUMP STATION LANDSCAPING - IRRIGATION PLAN	CALIFORNIA	DATE: 3/31/99
PREPARED UNDER THE DIRECTION OF FEISER T. GRASS LT. COLONEL, C.E., DISTRICT ENGINEER		SCALE: SHOWN JOB NO.: DRAWING NUMBER:	SHEET: 17 52 42 1

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