

CITY OF ALBUQUERQUE

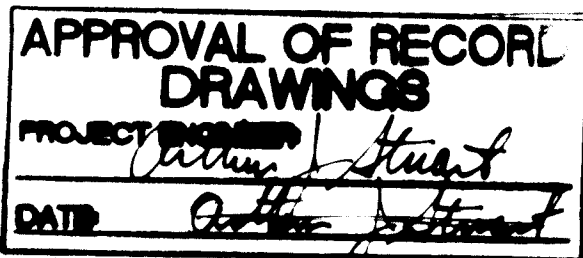
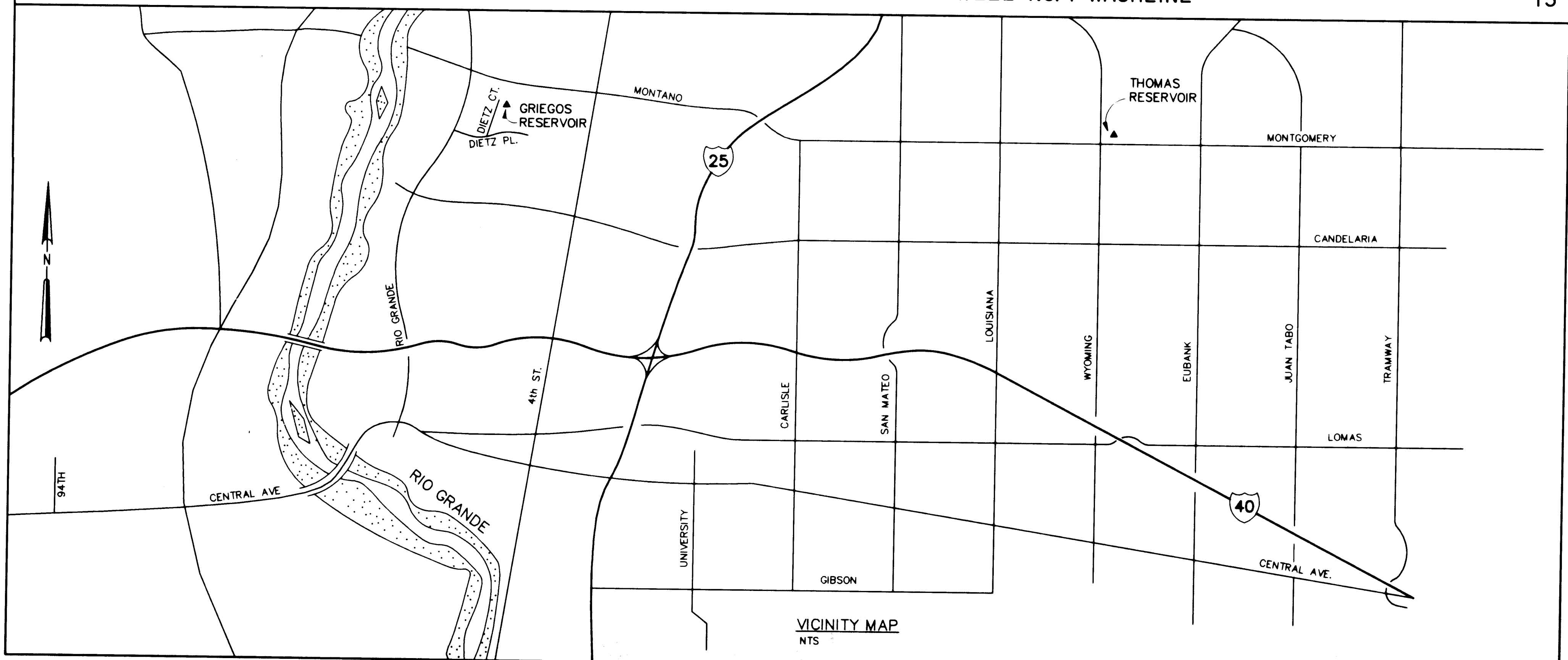
GRIEGOS AND THOMAS RESERVOIRS

WATER SYSTEM REHABILITATION



INDEX OF DRAWINGS

| TITLE | SHEET |
|--|-------|
| TITLE SHEET | 1 |
| GRIEGOS RESERVOIR SITE PLAN | 2 |
| THOMAS RESERVOIR SITE PLAN | 3 |
| ROOF PLATFORM DEMOLITION AND MODIFICATIONS | 4 |
| ROOF PLATFORM PLANS, SECTIONS AND DETAILS | 5 |
| RESERVOIR REPAIR DETAILS | 6 |
| STAIR AND BULKHEAD DETAILS | 7 |
| OVERFLOW WEIR BOX DETAILS | 8 |
| MISCELLANEOUS DETAILS | 9 |
| MISCELLANEOUS DETAILS | 10 |
| MISCELLANEOUS DETAILS | 11 |
| THOMAS BY-PASS VALVE VAULT | 12 |
| THOMAS WELL NO. 1 WASHLINE | 13 |



RECORD DRAWINGS

Revisions Drawn by R. GONZALEZ Date 10/12/94

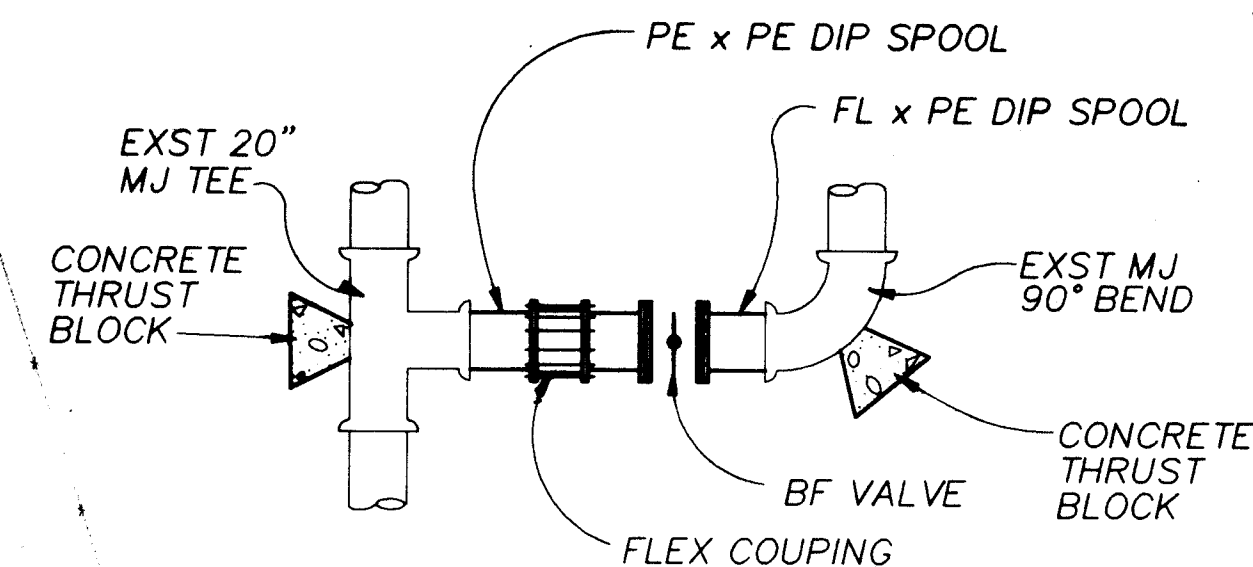
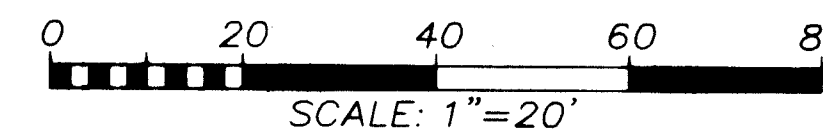
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

26 4366.930194

| | | | | | | | |
|-------------------------------|--------|---------------|------|---|------|-----------|------|
| REV | SHEETS | CITY ENGINEER | DATE | USER DEPT | DATE | USER DEPT | DATE |
| APPROVAL OF REVISIONS | | | | | | | |
| | | | | CH2M HILL 6121 Indian School Rd, NE Suite 122 Albuquerque, New Mexico 87110 (505) 884-5600 | | | |
| PROJECT NO. 4366.93 | | | | APPROVED FOR CONSTRUCTION 7-14-93 CE SHEET 1 OF 13 | | | |

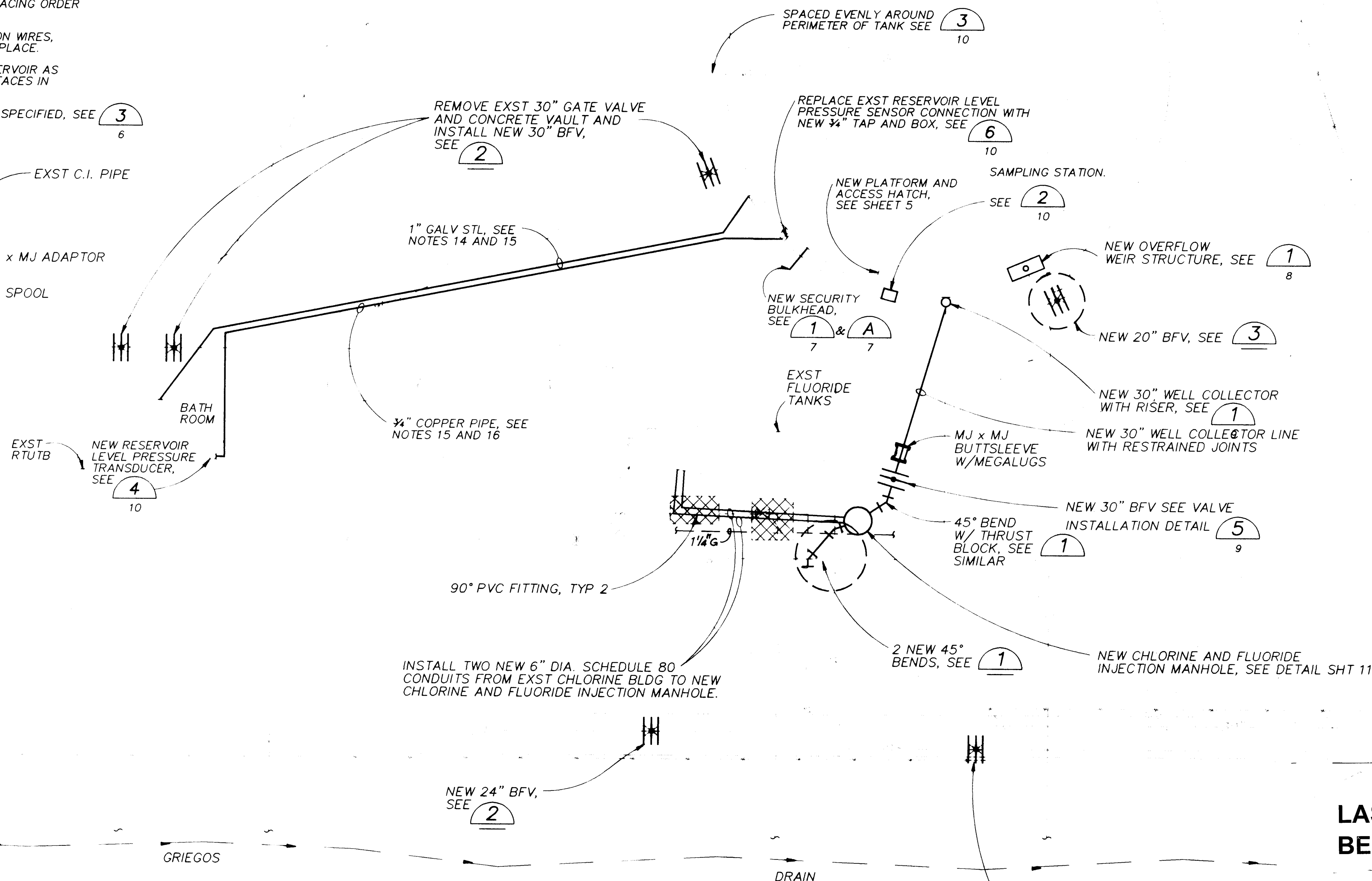
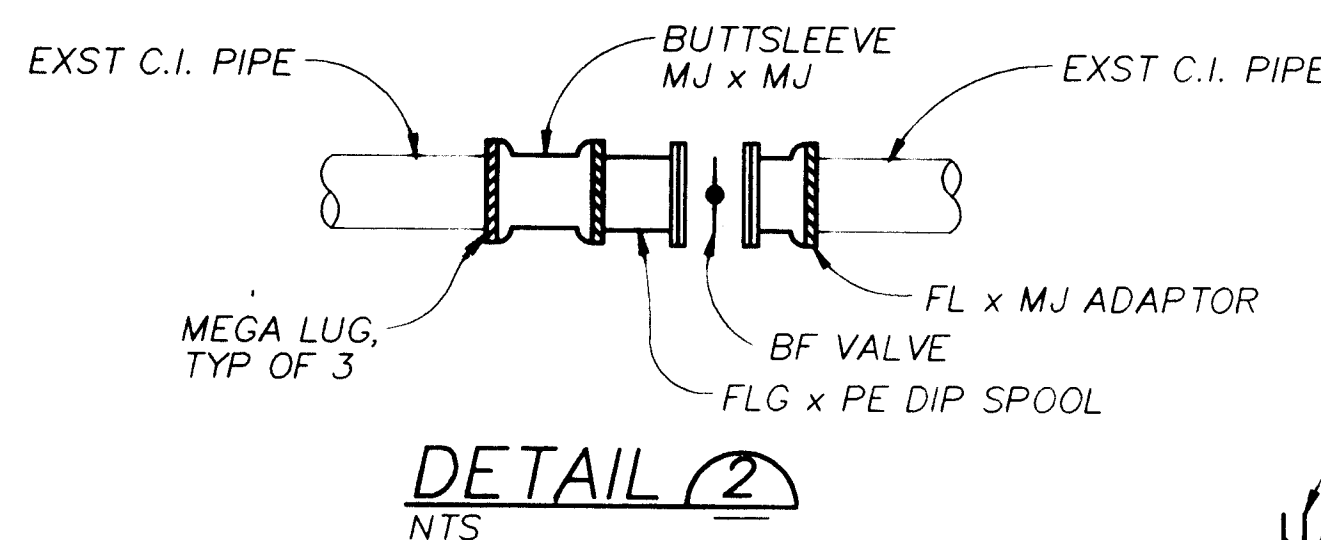
1. CONTRACTOR SHALL TAKE PRECAUTIONS SO AS NOT TO DAMAGE EXISTING FACILITIES, EQUIPMENT AND LANDSCAPING DURING CONSTRUCTION. ANY DAMAGE DUE TO CONSTRUCTION OPERATIONS SHALL BE REPAIRED AT THE SOLE COST OF THE CONTRACTOR. NOT ALL UTILITIES ARE SHOWN.
2. SITE PLAN LAYOUT SHOWING EXISTING LOCATIONS OF FACILITIES WAS DEVELOPED FROM ORIGINAL CONSTRUCTION DRAWINGS AND IN SOME CASES MORE RECENT INFORMATION AVAILABLE AT THE TIME OF DEVELOPMENT OF THESE DRAWINGS. THIS LAYOUT IS PROVIDED FOR GENERAL INFORMATION ONLY. ACTUAL LOCATIONS OF FACILITIES MAY VARY FROM THOSE SHOWN.
3. ITEMS REMOVED AS PART OF DEMOLITION WORK AND NOT SALVAGED BY THE OWNER BECOME PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE AT NO ADDITIONAL COST TO THE OWNER.
4. WHERE NEW WORK CROSSES EXISTING PIPING OR ELECTRICAL CONDUITS THE CONTRACTOR SHALL EXCAVATE BY HAND TO PREVENT DAMAGE OR DISRUPTION TO THE EXISTING FACILITIES.
5. PROVIDE WARNING TAPE FOR ALL BURIED PIPING AND CONDUIT. TAPE SHALL BE PLACED 12" BELOW FINISH GRADE.
6. CONTRACTOR SHALL INSTALL INSULATING FLANGES, COUPLINGS, OR UNIONS WHEREVER TWO DISSIMILAR METAL PIPES ARE CONNECTED.
7. CONTRACTOR SHALL EXCAVATE FOR AND EXPOSE EXST VALVES TO BE REPLACED TO DETERMINE CONFIGURATION PRIOR TO PLACING ORDER FOR NEW VALVES.
8. CONTRACTOR SHALL REMOVE ALL CATHODIC PROTECTION WIRES, ANODES AND CONDUIT. RECTIFIERS SHALL BE LEFT IN PLACE.
9. CONTRACTOR SHALL MAKE MODIFICATIONS TO THE RESERVOIR AS SHOWN AND SHALL COAT INTERIOR AND EXTERIOR SURFACES IN ACCORDANCE WITH THE SPECIFICATIONS.
10. REMOVE AND REPLACE RESERVOIR FLOOR PLATE AS SPECIFIED, SEE 3

12. REMOVE ALL SHRUBS AND GRASS FROM THE PERIMETER OF THE RESERVOIR FOR A WIDTH OF 15'. UNLESS OTHERWISE SHOWN, GRADE THE AREA AROUND THE TANK FLAT UPON COMPLETION OF THE CONSTRUCTION ACTIVITIES.
13. REPLACE ALL ASPHALT PAVEMENT DISTURBED BY CONSTRUCTION ACTIVITIES. ASPHALT REPLACEMENT SHALL BE IN ACCORDANCE WITH CITY STANDARD SPECIFICATIONS SECTION 116. ASPHALT REPAIR SHALL MATCH EXISTING PAVEMENT THICKNESS.
14. INSTALL A 1" GALV STL CONDUIT W/2 600V 16 GAUGE TWSTED SHIELDED PAIR (1 SPARE) FROM THE WATERPROOF BOX ON TOP OF RESERVOIR, AS SHOWN ON TO THE EXST RTUTB. CONDUIT FROM PUMP STATION TO STAIRWAY SHALL BE POLYWRAPPED AND BURIED 3' MIN. CONDUIT ROUTING WITHIN PUMP STATION SHALL BE DETERMINED BY OWNER. PROVIDE J-BOXES AS NECESSARY.
16. INSTALL A 3/4" SOFT COPPER TYPE K WATERLINE FROM RESERVOIR TO NEW RSVR PRESSURE TRANSDUCER IN THE PUMP STATION.
3' MIN BURIAL DEPTH.
17. EXST PIPES INTO STORAGE BLDG. SHALL BE CUT OFF FLUSH WITH EXTERIOR SURFACE OF THE WALL AND PORTIONS PENETRATING THROUGH THE WALL SHALL BE FILLED WITH GROUT AND FINISHED TO MATCH EXISTING SURFACE.
18. ALL BURIED VALVES SHALL BE INSTALLED WITH VALVE BOXES IN ACCORDANCE WITH THE CITY OF ALBUQUERQUE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION.



DETAIL 3
NTS

| | |
|------------|---------------------------|
| ® | AT |
| BRG | BEARING |
| C | CHANNEL |
| CCP | CONCRETE CYLINDER PIPE |
| CI | CAST IRON PIPE |
| Ⓒ | CENTERLINE |
| CONT | CONTINUOUS |
| CPLG | COUPLING |
| DIA | DIAMETER |
| DI | DUCTILE IRON PIPE |
| DN | DOWN |
| EA | EACH |
| EF | EACH FACE |
| EW | EACH WAY |
| EXST | EXISTING |
| FLG | FLANGE |
| GALV | GALVANIZED |
| L | ANGLE |
| MAX | MAXIMUM |
| MB | MACHINE BOLT |
| MG | MILLION GALLON |
| MH | MANHOLE |
| MIN | MINIMUM |
| MT | MALE THREAD |
| NTS | NOT TO SCALE |
| OC | ON CENTER |
| OD | OUTSIDE DIAMETER |
| OFE | OWNER FURNISHED EQUIPMENT |
| PJF | PREMOLDED JOINT FILLER |
| Ⓔ | PLATE |
| PP | POWER POLE |
| RCP | REINFORCED CONCRETE PIPE |
| REQD | REQUIRED |
| SCH. SCHED | SCHEDULE |
| SIM | SIMILAR |
| SST | STAINLESS STEEL |
| S x S | SOCKET BY SOCKET |
| STL | STEEL |
| T&B | TOP AND BOTTOM |
| TS | TUBE SHAPE |
| TYP | TYPICAL |
| V | VOLT |
| W | WATER |
| W/ | WITH |
| Ø | DIAMETER |



LASON 1-505-344-9404
BEST COPY AVAILABLE

26 4366.930294

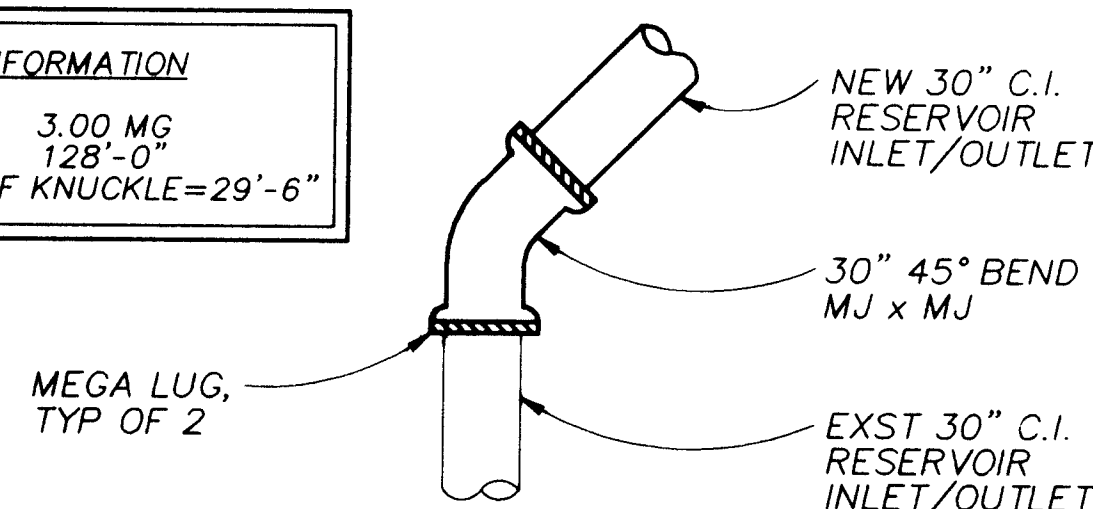
IS ONE INCH ON
ORIGINAL DRAWING
0 1
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY

[illegible]

THESE DRAWINGS
WERE MODIFIED USING
TODAY AND REPLOTTED
FOR RECORD PURPOSES
AND THEREFORE DO NOT
REFLECT THE ENGINEER'S STAMP
OR OTHER SIGNATURES THAT
APPEAR ON THE ORIGINAL
CONTRACT DRAWINGS.

| DESIGN | |
|------------------------|-------------|
| DESIGNED BY M. BREWER | DATE 5/4/93 |
| DRAWN BY C. O'NEIL | DATE 5/4/93 |
| CHECKED BY B. BROCKETT | DATE 7/6/93 |

CAPACITY 3.00 MG
DIAMETER 128'-0"
HEIGHT TO BOTTOM OF KNUCKLE=29'-6"



DETAIL 1

EXISTING PIPING
BELOW GRADE

EXISTING STRUCTURE

PROPERTY LINE

FENCE LINE

VALVE

TREES AND SHRUBS

$$1'' = 20'-0''$$

SCANNED BY
BY LASON

APPROVAL OF RECORD
DRAWINGS


PROJECT ENGINEER: *Arthur J. Stuard*

DA. 5 *Arthur J. Stuard*

RECORD DRAWINGS

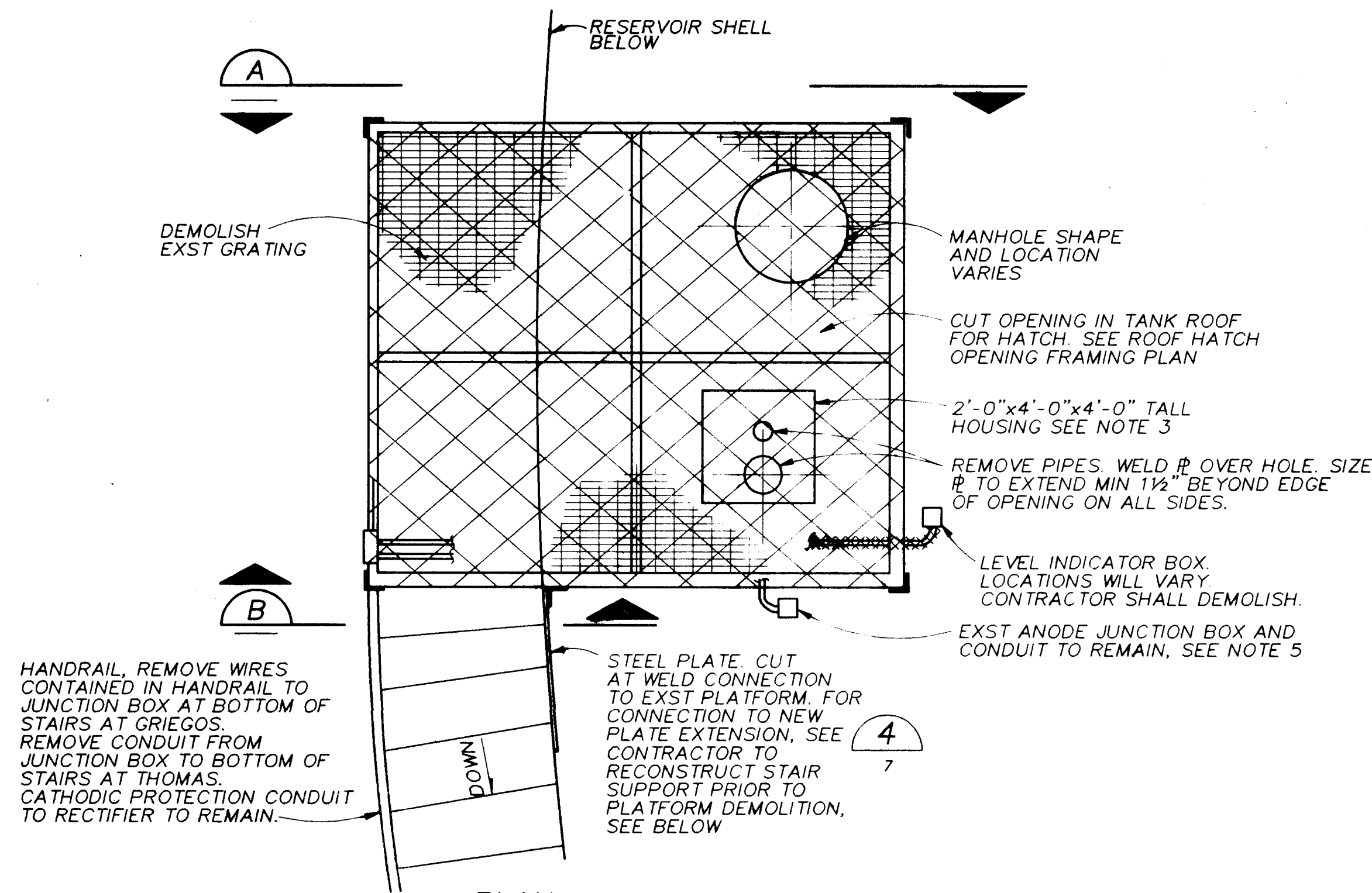
Revisions Drawn by R. GONZALES Date 10/12/94

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



CHRYSLER HILL

| | | | | | | |
|--------------------------------------|----------|---------|-------------|--------------|------|---------------|
| CITY OF ALBUQUERQUE | | | | | [] | |
| PUBLIC WORKS DEPARTMENT | | | | | [] | |
| ENGINEERING DIVISION | | | | | [] | |
| TITLE: GRIEGOS AND THOMAS RESERVOIRS | | | | | | |
| GRIEGOS RESERVOIR SITE PLAN | | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE | |
| D.R.C. Chair | | | Water | | | |
| Trans. Dev. | | | Waste Water | | | |
| Hydrology | | | | | | |
| DRAWING NO. | | 4366.93 | | MAP NO. F-13 | | SHEET 2 OF 13 |



PLAN

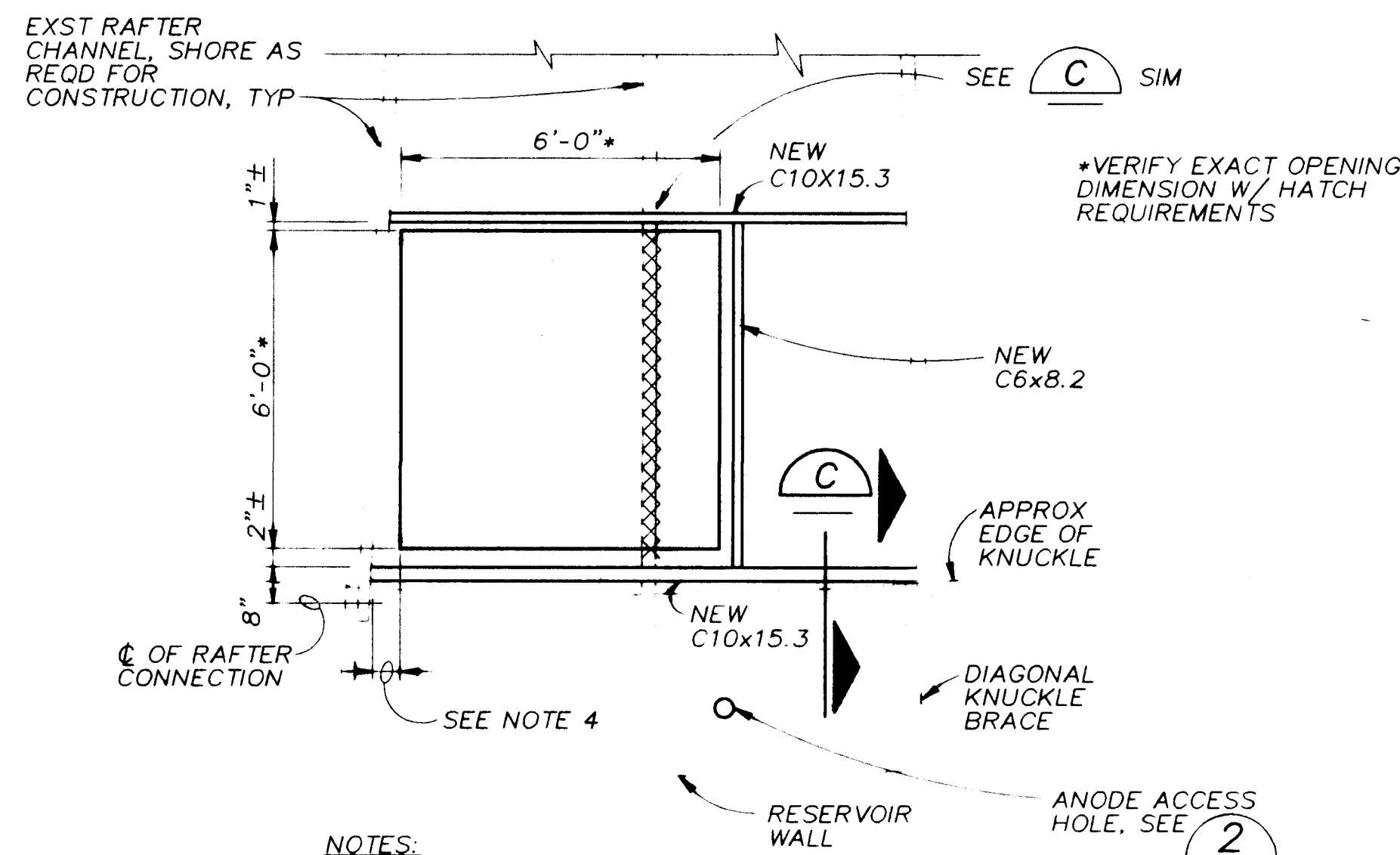
NOTES:

1. SIZE AND CONFIGURATION OF EXISTING ROOF PLATFORMS WILL VARY. CONTRACTOR SHALL VISIT SITE AND INCLUDE IN HIS DEMOLITION COSTS VARIATIONS IN SIZE AND CONFIGURATION OF PLATFORMS.
2. CONTRACTOR TO GRIND ALL FLAME CUT EDGES ON RESERVOIR FLUSH WITH SHELL.
3. CONTRACTOR SHALL REMOVE HOUSING AND INSTRUMENTATION.
4. CONTRACTOR SHALL SEAL ALL HOLES IN RESERVOIR ROOF WITH 1/4" STEEL # SEAL WELDED TO ROOF FOR ANODE ACCESS OPENINGS AND INSULATOR SUPPORT HOLES. SEE 2/6
5. EXST CATHODIC PROTECTION CONDUIT FROM RESERVOIR TO RECTIFIER SHALL REMAIN. ACTUAL LOCATIONS WILL VARY. CONTRACTOR SHALL VERIFY. 6
6. STAIR SHOWN IS FOR THOMAS. STAIR AT GRIEGOS IS LOCATED ON OPPOSITE SIDE OF PLATFORM.

RESERVOIR ROOF PLATFORM DEMOLITION PLAN

NTS

LEGEND

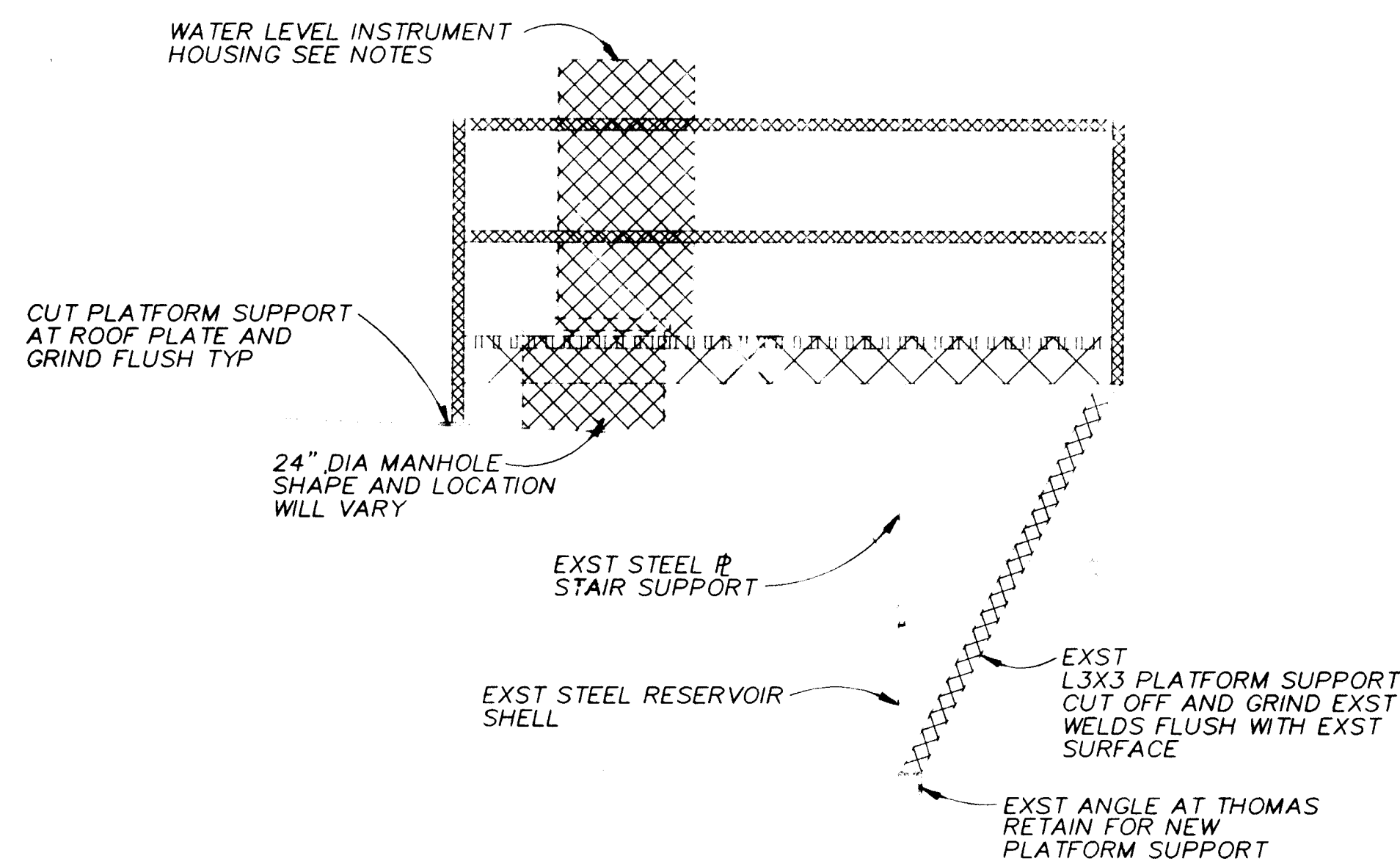


NOTES:

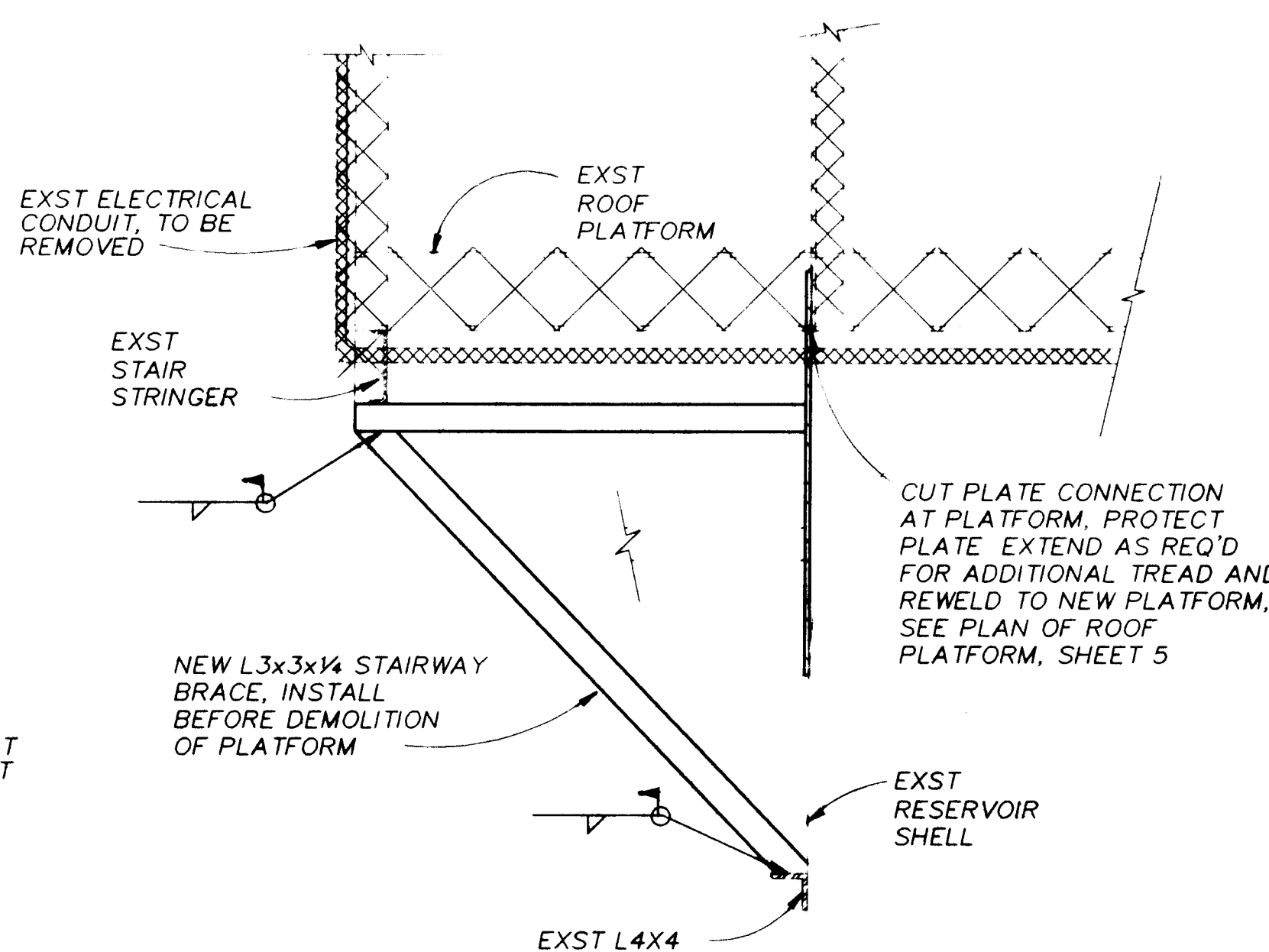
1. CONTRACTOR SHALL NOT CUT MORE THAN ONE RAFTER FOR ROOF OPENING. HATCH LOCATION SHALL BE SHIFTED BY CONTRACTOR AS REQUIRED FOR RAFTER CLEARANCE.
2. ROOF OPENING LOCATION SHOWN FOR MINIMUM RAFTER CLEARANCES ONLY. OPENING LOCATION WILL VARY AT EACH RESERVOIR.
3. ROOF OPENING SHALL NOT BE CUT INTO KNUCKLE AREA OF RESERVOIR. TEMPORARILY SUPPORT ROOF RAFTERS AS REQUIRED.
4. 6" MINIMUM. IF THIS DIMENSION EXCEEDS 1'-0", THEN PROVIDE C6x8.2 SUPPORT SIMILAR TO CHANNEL AT OPPOSITE SIDE OF OPENING.

ROOF HATCH OPENING FRAMING PLAN

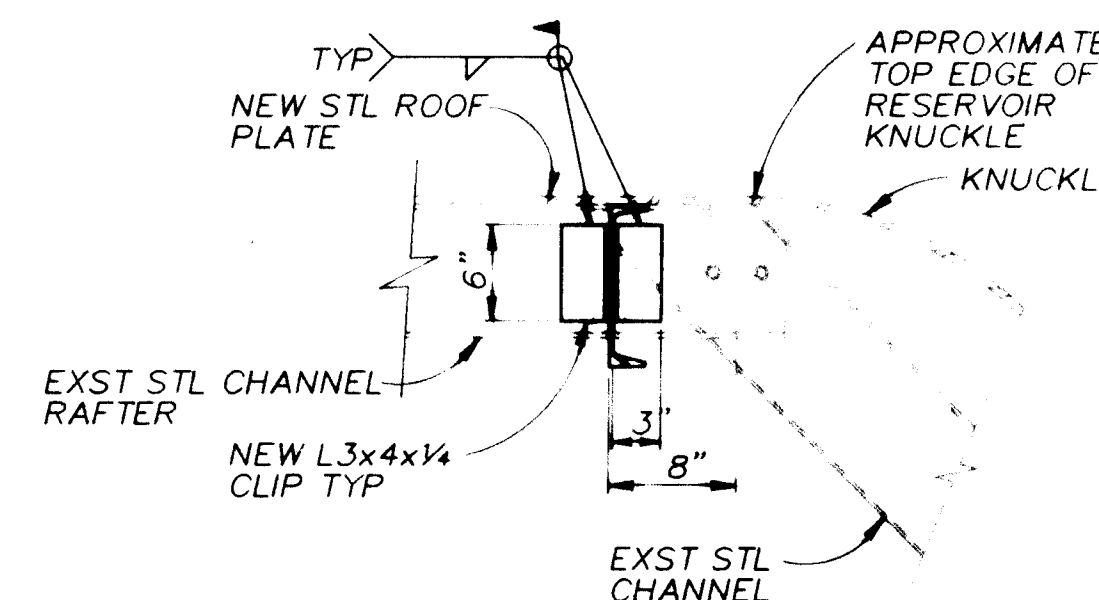
NTS



SECTION A-A
NTS



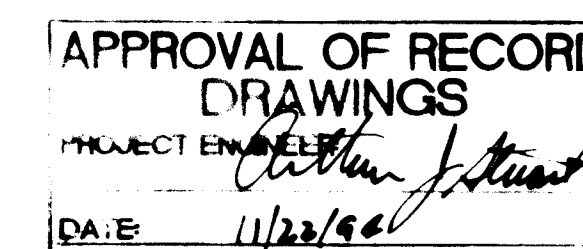
SECTION B-B
NTS



NOTES:

1. HEADER FLANGES TO FACE TOWARD RESERVOIR WALLS FOR DRAINAGE.
2. COPE ENDS OF HEADER CHANNEL FLANGES AS REQUIRED FOR FIT.

SECTION C-C
NTS



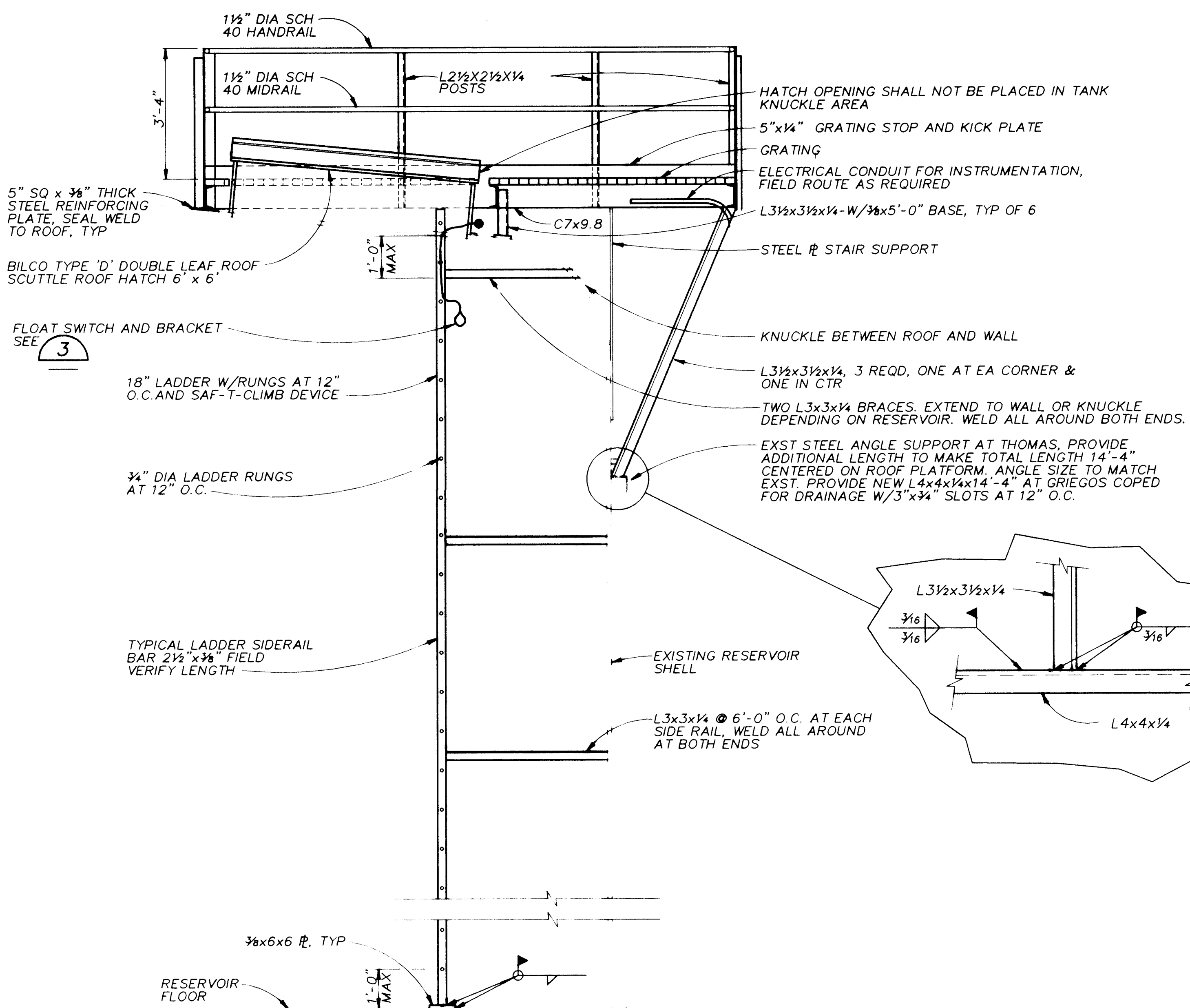
RECORD DRAWINGS

Revisions Drawn by R. GONZALES Date 10/12/94

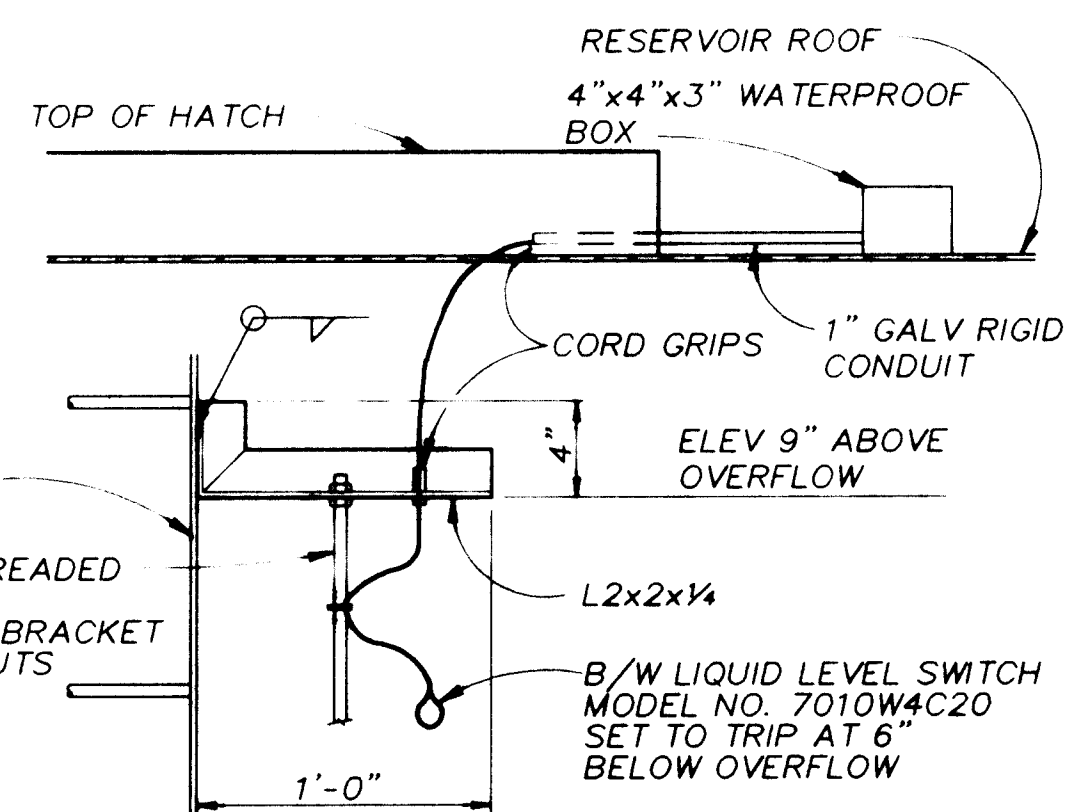
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

BAR IS ONE INCH ON ORIGINAL DRAWING
0 1"
IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION GRIEGOS AND THOMAS RESERVOIRS | | | | | |
|---|----------|---------|-----------|---------------|------|
| TITLE: ROOF PLATFORM DEMOLITION AND MODIFICATIONS | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| | | | | | |
| | | | | | |
| | | | | | |
| DRAWING NO. | 4366.93 | MAP NO. | | SHEET 4 OF 13 | |




- PLAN - ROOF PLATFORM
1/2"=1'-0"


$$\underline{V_2'' = 1' - 0'}$$

Revisions Drawn by R. GONZALES Date 10/12/24

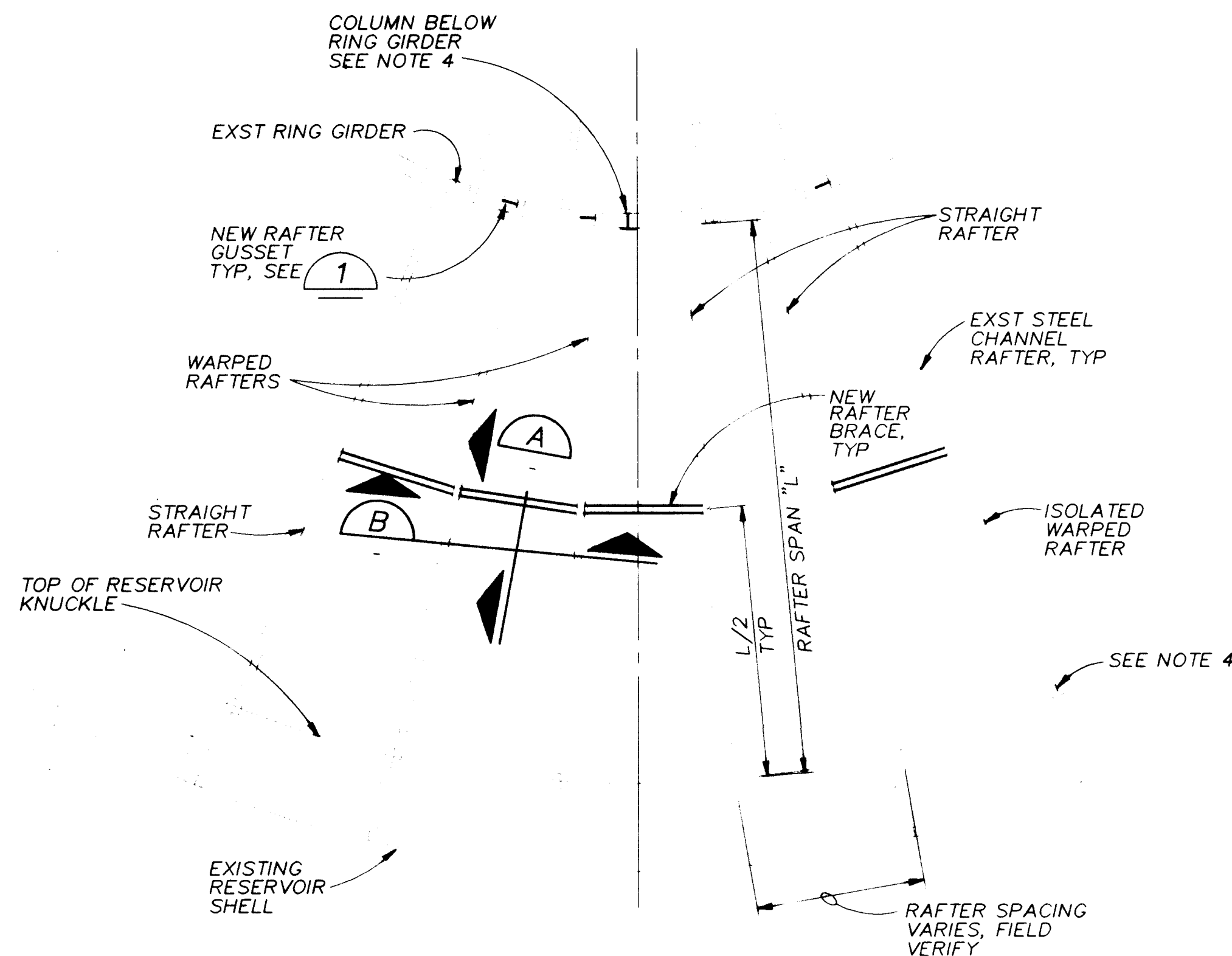
THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

VERIFY SCALES
 BAR IS ONE INCH ON
 ORIGINAL DRAWING
 0  1
 IF NOT ONE INCH ON
 THIS SHEET, ADJUST
 SCALES ACCORDINGLY

TITLE: GRIEGOS AND THOMAS RESERVOIRS
ROOF PLATFORM
PLANS SECTIONS AND DETAILS

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|---------------------|----------|---------|-----------|---------------|------|
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| DRAWING NO. 4366.93 | | MAP NO. | | SHEET 5 OF 13 | |

| ENGINEER'S SEAL | | SURVEY INFORMATION | | BENCH MARKS | | AS BUILT INFORMATION | |
|---|------|--------------------|----|-------------|----|----------------------|-------------------------------|
| | | FIELD NOTES | | | | | |
| NO. | DATE | REMARKS | BY | NO. | BY | DATE | |
| <p>THESE DRAWINGS WERE MODIFIED USING AUTOCAD AND REPLOTTED FOR RECORD PURPOSES AND THEREFORE DO NOT HAVE THE ENGINEER'S STAMP OR OTHER SIGNATURES THAT APPEAR ON THE ORIGINAL CONTRACT DRAWINGS.</p> | | | | | | | CONTRACTOR |
| | | | | | | | WORK STARTED BY |
| | | | | | | | DATE |
| | | | | | | | INSPECTOR'S ACCEPTANCE BY |
| | | | | | | | DATE |
| | | | | | | | FIELD VERIFICATION BY |
| | | | | | | | DATE |
| | | | | | | | DRAWINGS CORRECTED BY |
| | | | | | | | DATE |
| | | | | | | | <i>MICRO-FILM INFORMATION</i> |
| | | | | | | | RECORDED BY |
| | | | | | | | DATE |
| | | | | | | | NO. |

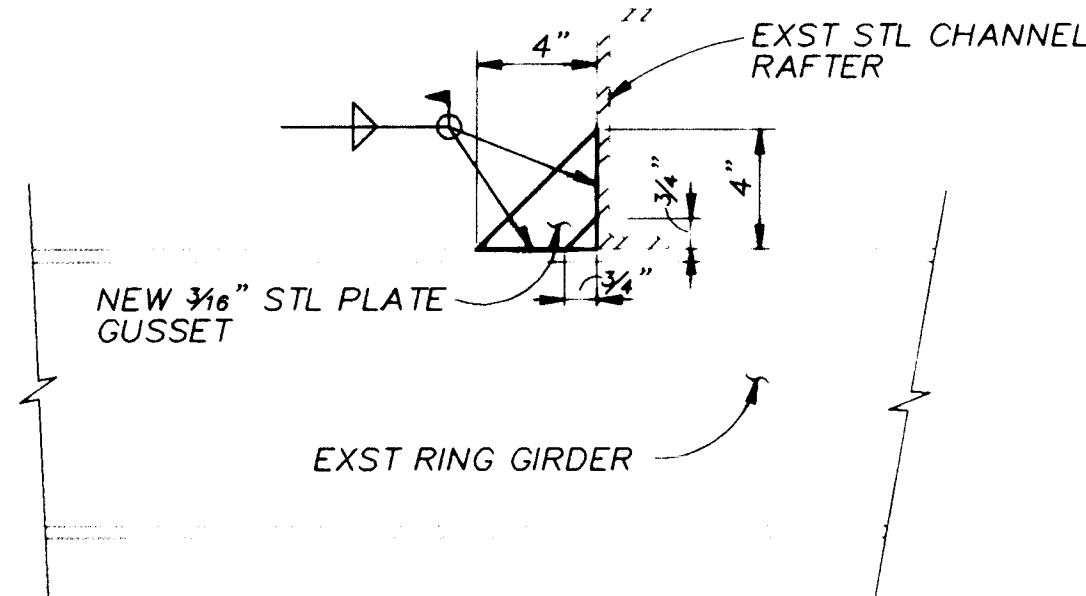


NOTES:

1. RAFTERS REQUIRING BRACING IN ACCORDANCE WITH DETAILS SHOWN ON THIS SHEET SHALL BE VERIFIED AND IDENTIFIED IN THE FIELD BY THE ENGINEER. CONTRACTOR IS DIRECTED TO THE BID PROPOSAL FOR APPROXIMATE NUMBER OF RAFTERS REQUIRING BRACING. CONTRACTOR SHALL PROVIDE LIFT TRUCK ACCESS FOR ENGINEER TO INSPECT AND IDENTIFY.
2. WARPED RAFTERS SHALL BE STRAIGHTENED AND BRACED TO NEAREST STRAIGHT RAFTER. WHERE MORE THAN A SINGLE RAFTER IS WARPED IN ONE AREA BRACE TO A MINIMUM OF ONE STRAIGHT RAFTER FOR EACH WARPED RAFTER.
3. STIFFEN ENDS OF EACH WARPED RAFTER AT CONNECTION TO RING GIRDER WITH RAFTER GUSSET AS SHOWN.
4. REPLACE EXISTING STEEL BOLTS IN ALL RAFTER CONNECTIONS AND AT COLUMN TO RING GIRDER CONNECTION WITH TYPE 316 SST BOLTS PRIOR TO RECOATING TANK INTERIOR. BOLT SIZE SHALL MATCH EXISTING. PROVIDE TWO 1/8"x2" DIA SST FLAT WASHERS WITH EACH BOLT. TEMPORARILY SUPPORT MEMBERS DURING INSTALLATION OF BOLTS AS REQUIRED. CONTRACTOR IS DIRECTED TO BID PROPOSAL FOR APPROXIMATE NUMBER OF BOLTS REQUIRED. WHERE EXISTING CONNECTIONS ARE WELDED NO BOLTS ARE REQUIRED. WHERE ONLY ONE BOLT EXISTS, REPLACE IT AND ADD A SECOND BOLT.

**RAFTER BRACING PLAN
INSTALLATION**

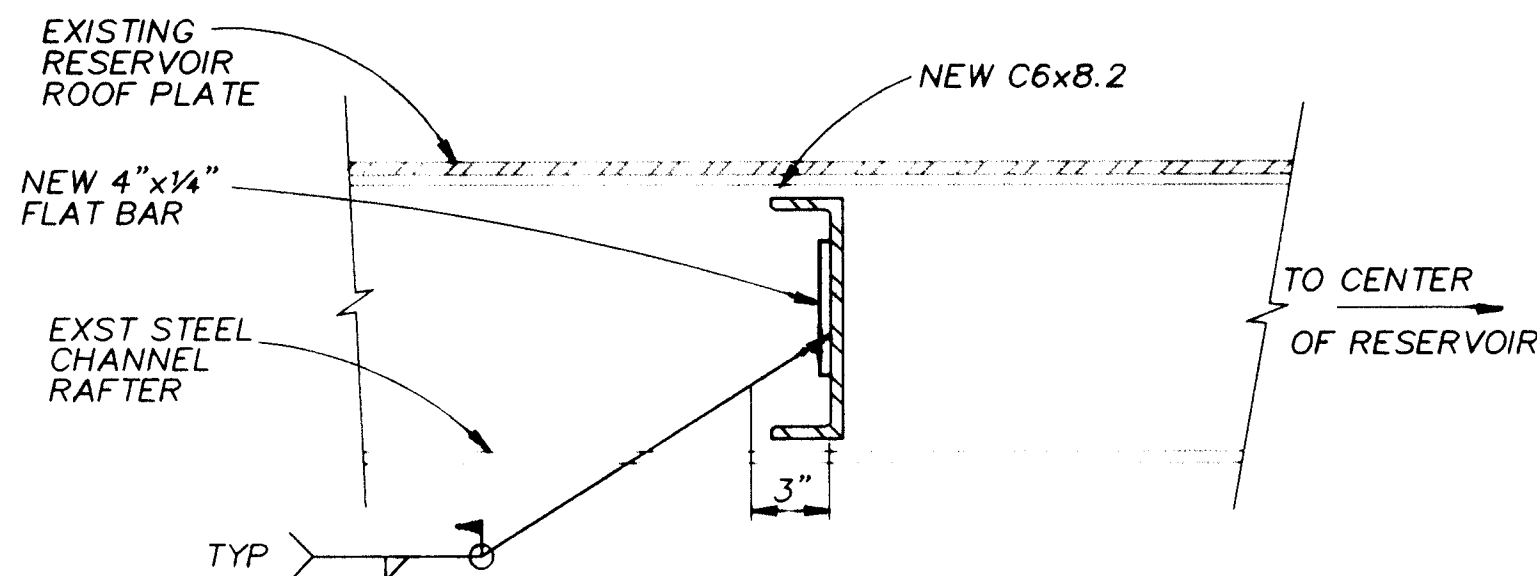
NTS



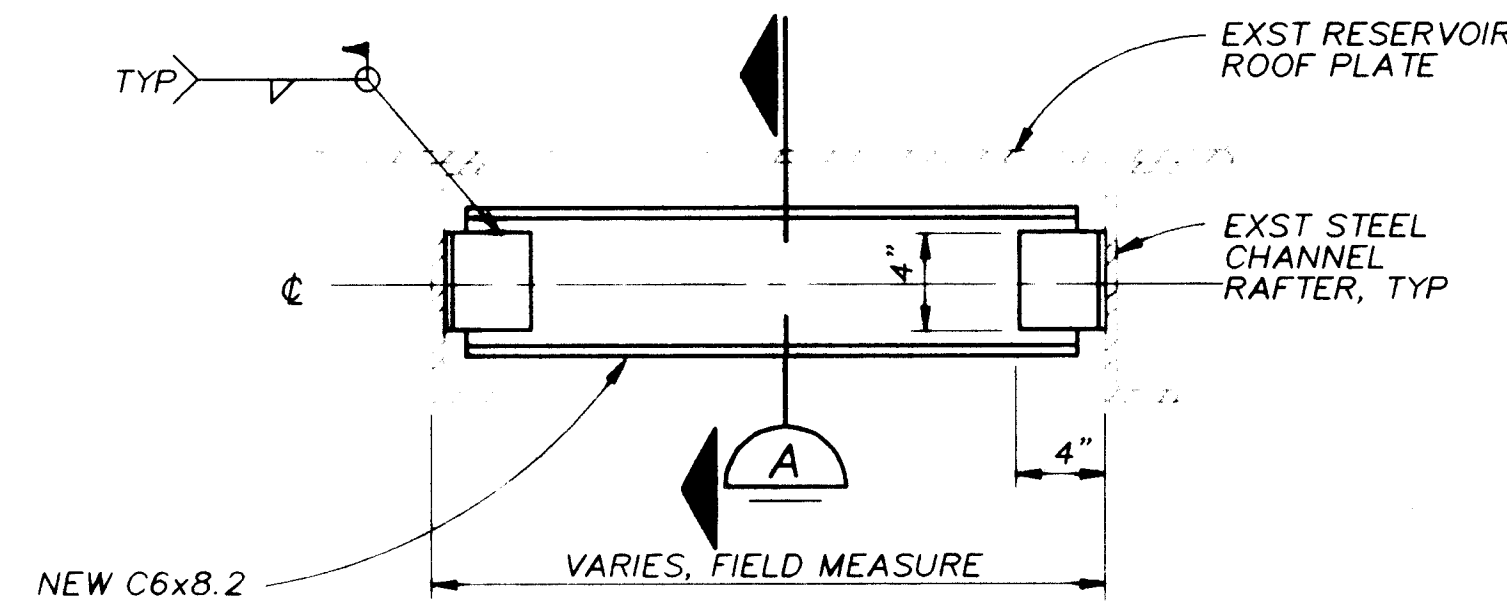
NOTES:

1. REALIGN RAFTER PERPENDICULAR TO RING GIRDER BEFORE WELDING GUSSET IN PLACE.
2. GUSSET IS REQUIRED AT EACH EXISTING WARPED RAFTER AT RING GIRDER CONNECTION.

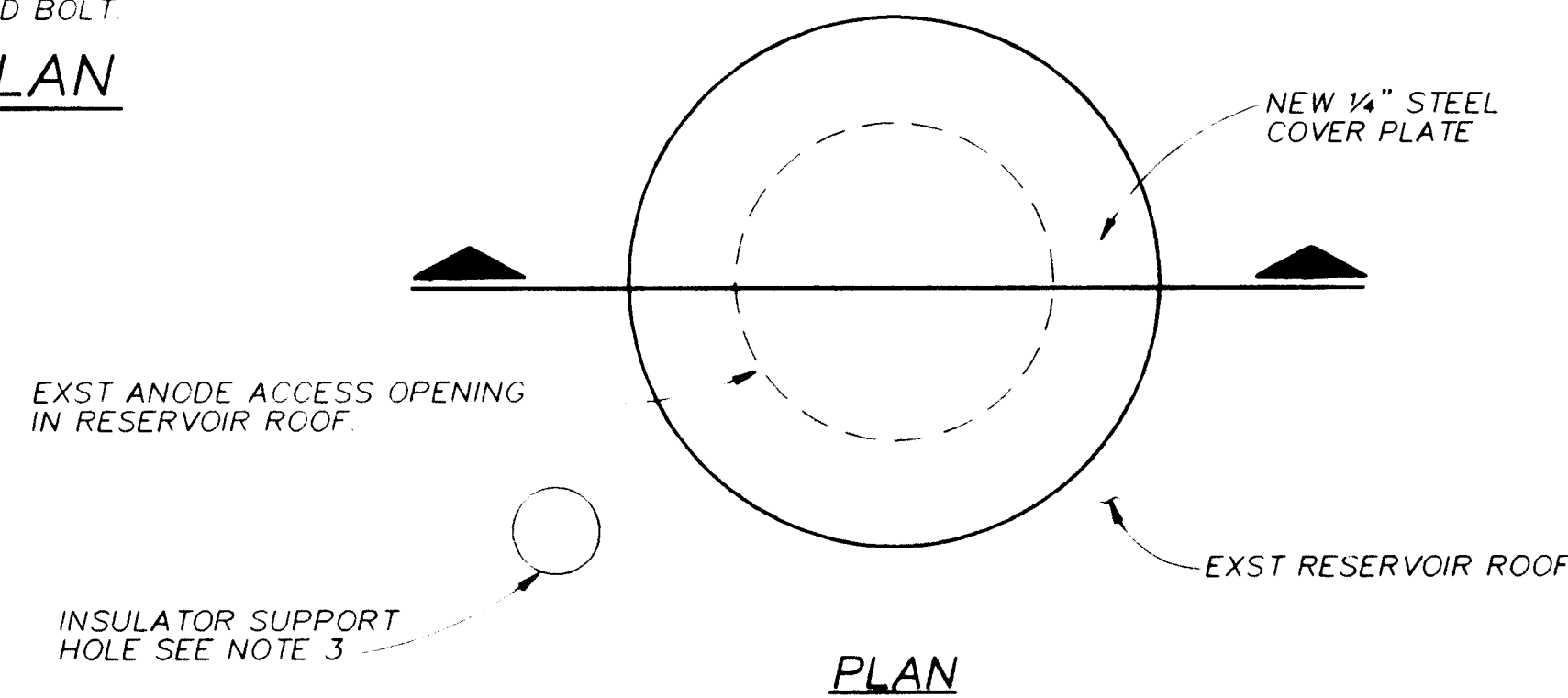
DETAIL 1
NTS



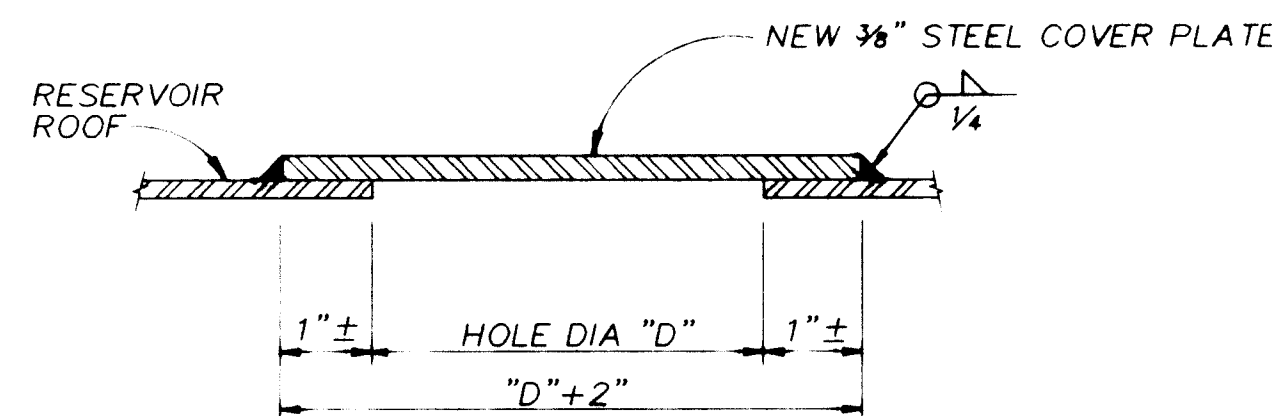
SECTION A
NTS



SECTION B
NTS



PLAN

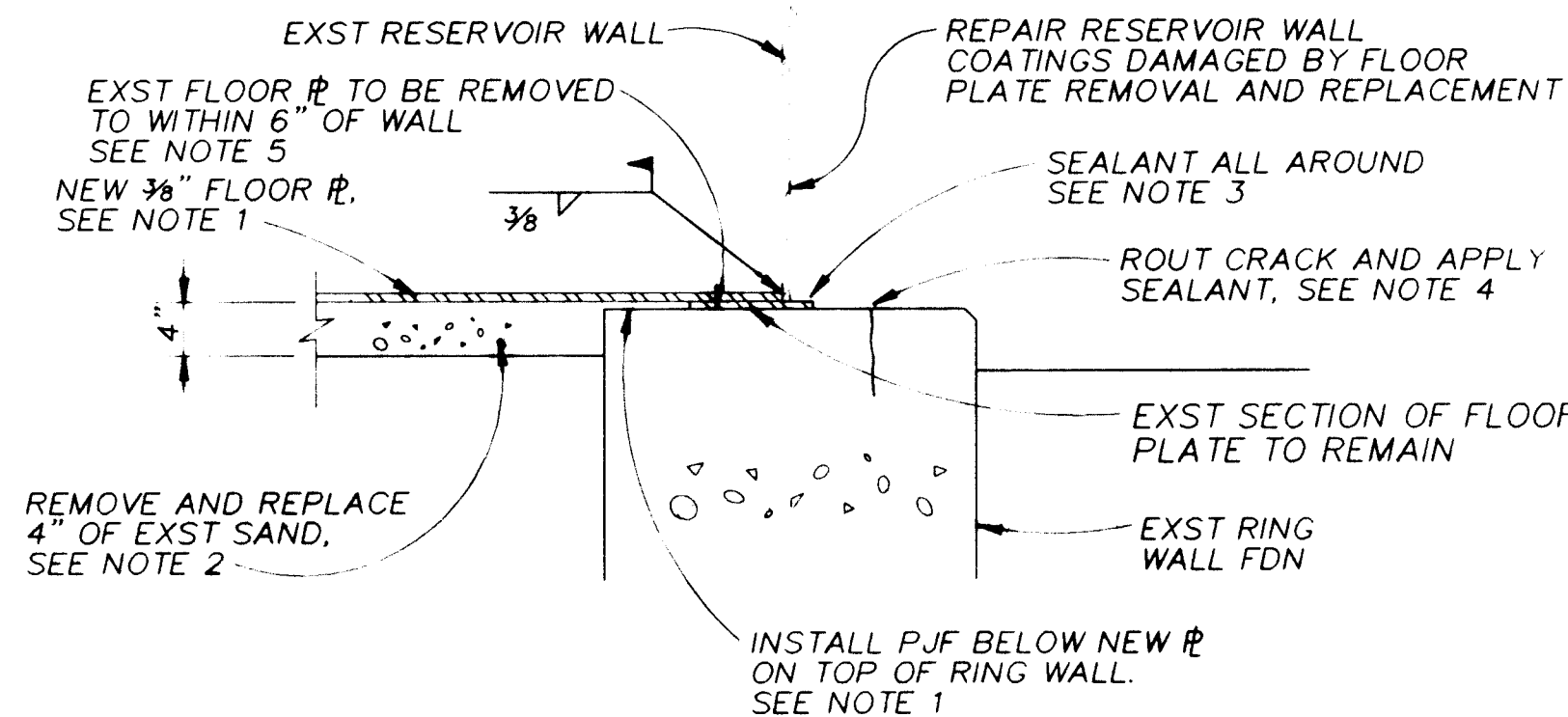


SECTION

NOTES:

1. REMOVE EXST RETAINER BAR AND BOLT AND COVER PLATE.
2. INSTALL NEW COVER PLATE AND WELD TO EXST RESERVOIR ROOF.
3. PLUG WELD INSULATOR SUPPORT HOLE AND GRIND SMOOTH WITH ADJACENT SURFACE AT BOTH INSIDE AND OUTSIDE OF RESERVOIR ROOF PLATE.

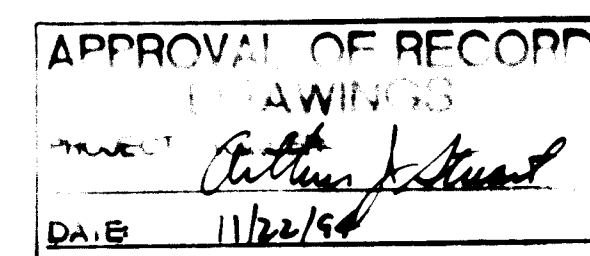
DETAIL 2
NTS



NOTES:

1. CONTRACTOR SHALL DEMOLISH, REMOVE AND REPLACE RESERVOIR FLOOR PLATE AS REQUIRED, SEE SPECIFICATIONS. MINIMUM SIDE LAPS SHALL BE 1 INCH. INSTALL PREMOLDED JOINT FILLER (PJF) AS REQUIRED TO FILL GAP BETWEEN TOP OF FOUNDATION AND BOTTOM OF NEW FLOOR PLATE. PJF SHALL BE BITUMINOUS TYPE CONFORMING TO ASTM D 994 OR D 1751.
2. SAND SHALL BE CLEAN WASHED NATURAL OR MANUFACTURED SAND CONFORMING TO THE REQUIREMENTS OF ASTM C144-84 WITH THE ADDITIONAL REQUIREMENT THAT THE PERCENT PASSING THE NO. 200 SIEVE NOT EXCEED 5 PERCENT. SAND SHALL BE FREE OF CHLORIDES OR OTHER CORROSIVE AND DELETERIOUS SUBSTANCES. RESISTIVITY OF SATURATED SAND SHALL BE LESS THAN 10,000 OHM-CM. SUBMIT GRADATION TEST RESULTS FOR ENGINEERS APPROVAL.
3. REMOVE JOINT MATERIAL OUTSIDE THE EDGE OF THE FLOOR PLATE ON TOP OF THE FOOTING ALL AROUND THE RESERVOIR AND PREPARE SURFACE AND CAULK WITH SEALANT. SEALANT SHALL BE PREMIUM GRADE HIGH PERFORMANCE 1 COMPONENT POLYURETHANE-BASE, NON-SAG ELASTOMERIC SEALANT, SIKAFLEX-1A OR EQUAL.
4. ROUT OUT CIRCUMFERENTIAL CRACKS GREATER THAN OR EQUAL TO 1/8-INCH IN WIDTH IN TOP OF RING WALL FOUNDATION. GROOVE SHALL BE APPROXIMATELY 3/8 INCHES IN WIDTH AND 1/4 INCH DEEP. SANDBLAST CRACK AFTER ROUTING AND CLEAN CRACK USING COMPRESSED AIR PRIOR TO APPLYING SEALANT. SEALANT SHALL BE SIKAFLEX-A1 OR EQUAL.
5. ABRASIVE BLAST OR CENTRIFUGAL WHEEL BLAST (SP-5) SURFACE OF EXISTING FLOOR PLATES FOR A DISTANCE 12" AWAY FROM THE WALL AROUND THE TANK PRIOR TO REMOVAL OF EXISTING FLOOR PLATE AND INSTALLATION OF NEW FLOOR PLATE.

DETAIL 3
NTS 2,3,4



RECORD DRAWINGS

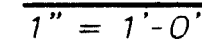
Revisions Drawn by R. GONZALES Date 10/12/94

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

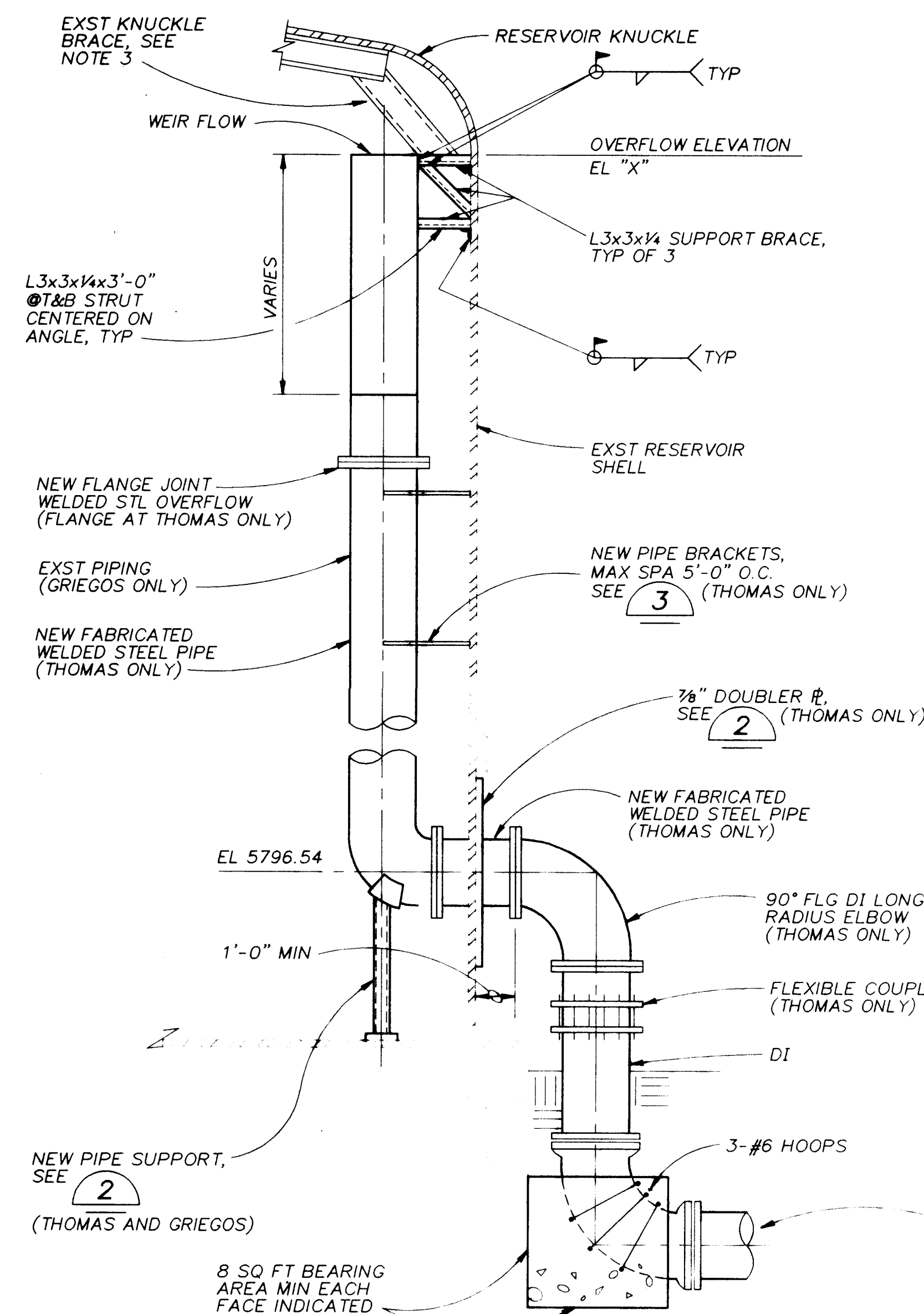
26 4366.930694



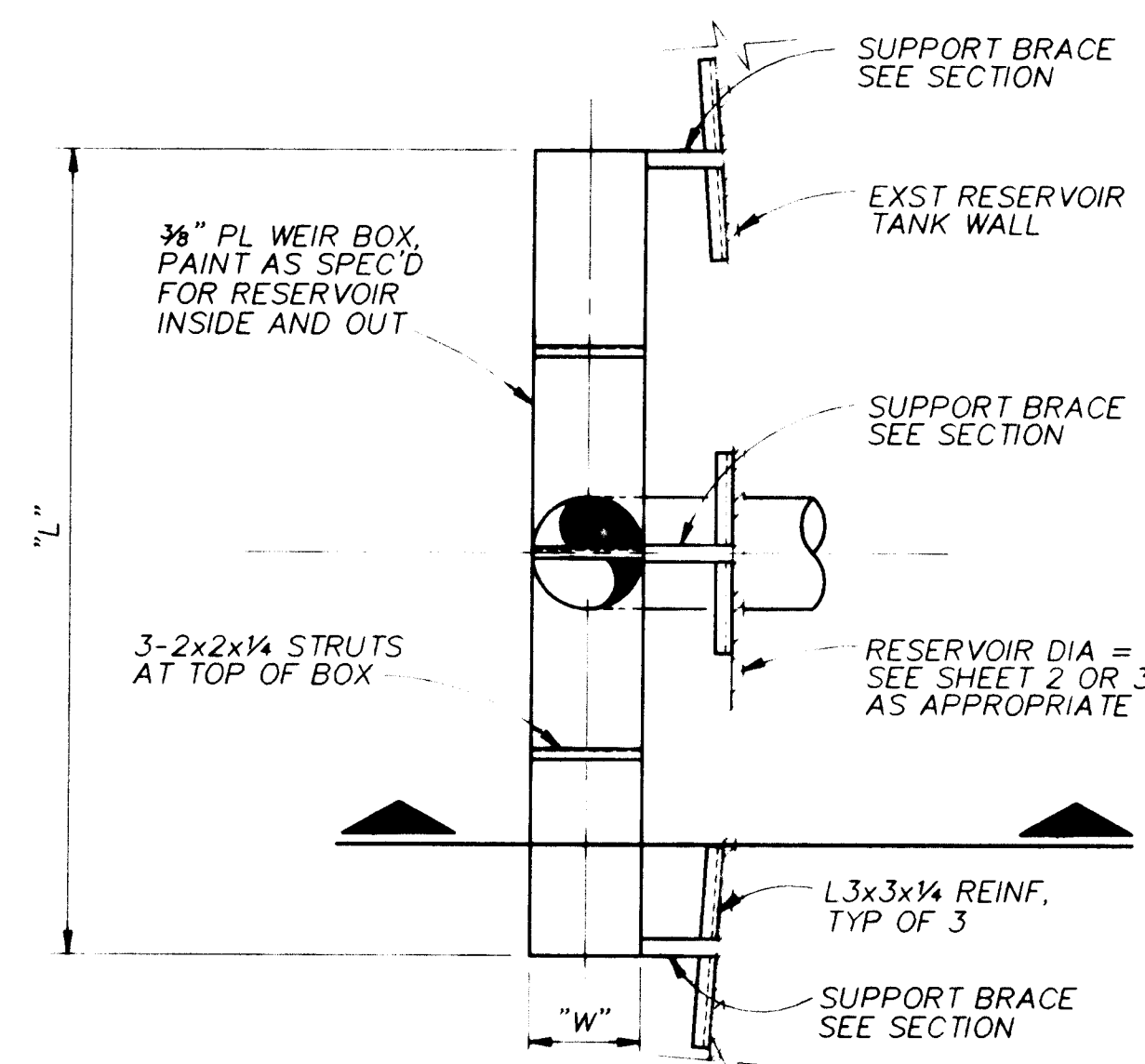
| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | | |
|--|----------|---------|-----------|---------------|------|
| GRIEGOS AND THOMAS RESERVOIRS | | | | | |
| TITLE: RESERVOIR REPAIR DETAILS | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| | | | | | |
| | | | | | |
| | | | | | |
| DRAWING NO. 4366.93 | | MAP NO. | | SHEET 6 OF 13 | |



4474S104.DWG 1=32



SECTION

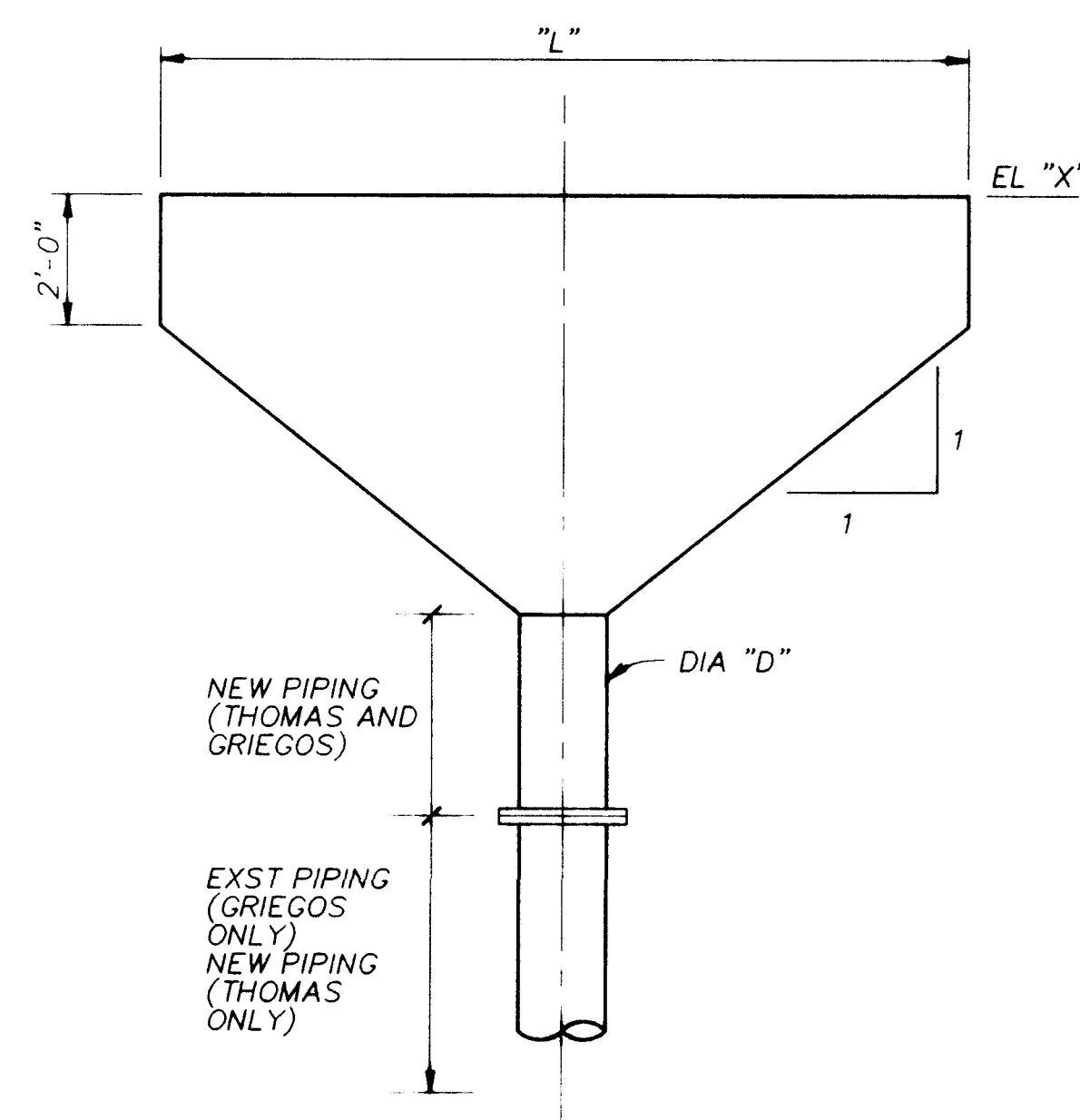


NOTE:
DISTANCE BETWEEN WEIR AND RESERVOIR WALL VARIES DUE TO CURVATURE OF WALL

PLAN

OVERFLOW DETAIL 1

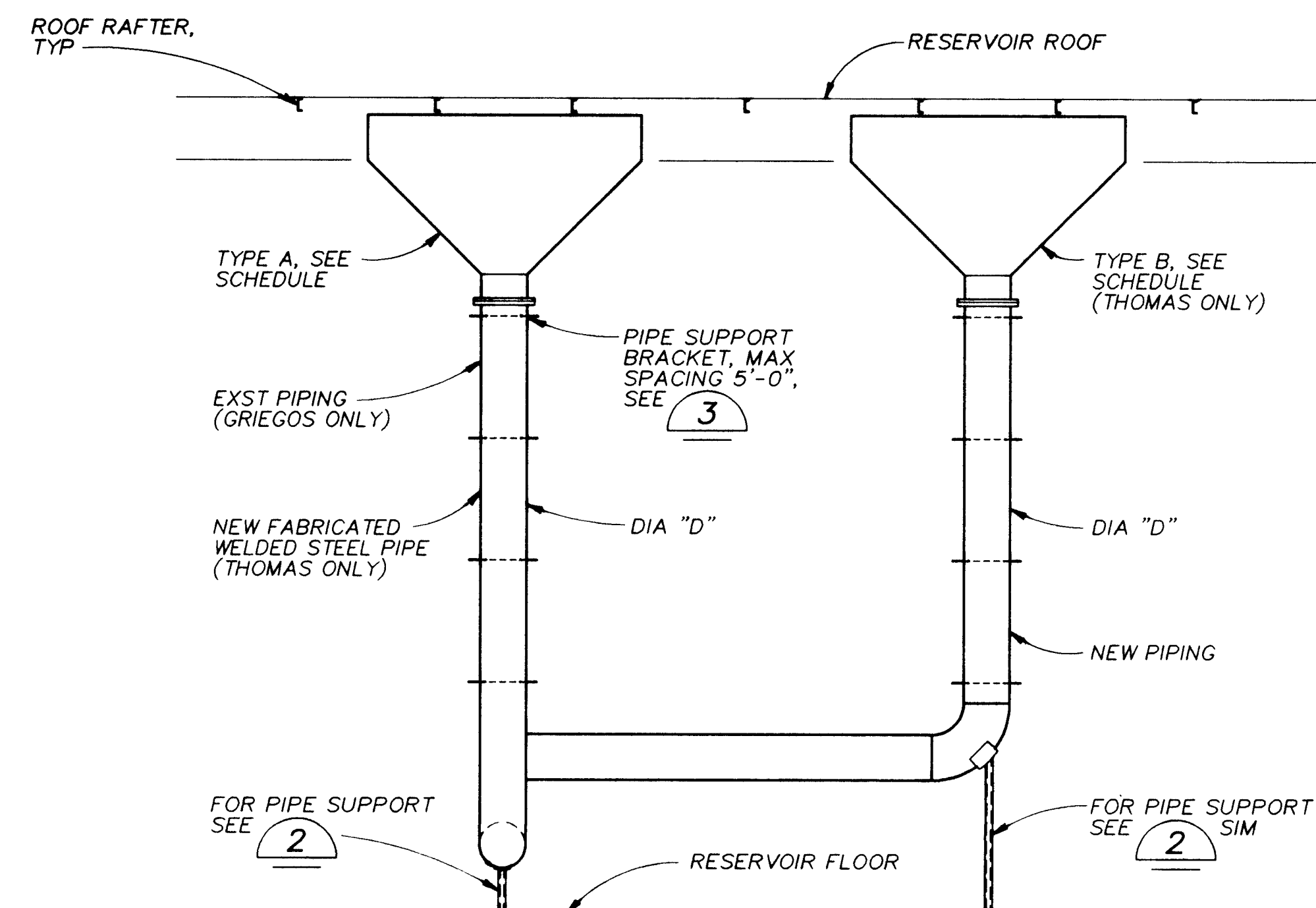
NTS 2.3



NOTE:
CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND ELEVATIONS PRIOR TO FABRICATION. CONSULT ENGINEER FOR RESOLUTION OF CONFLICTS PRIOR TO PROCEEDING WITH WORK

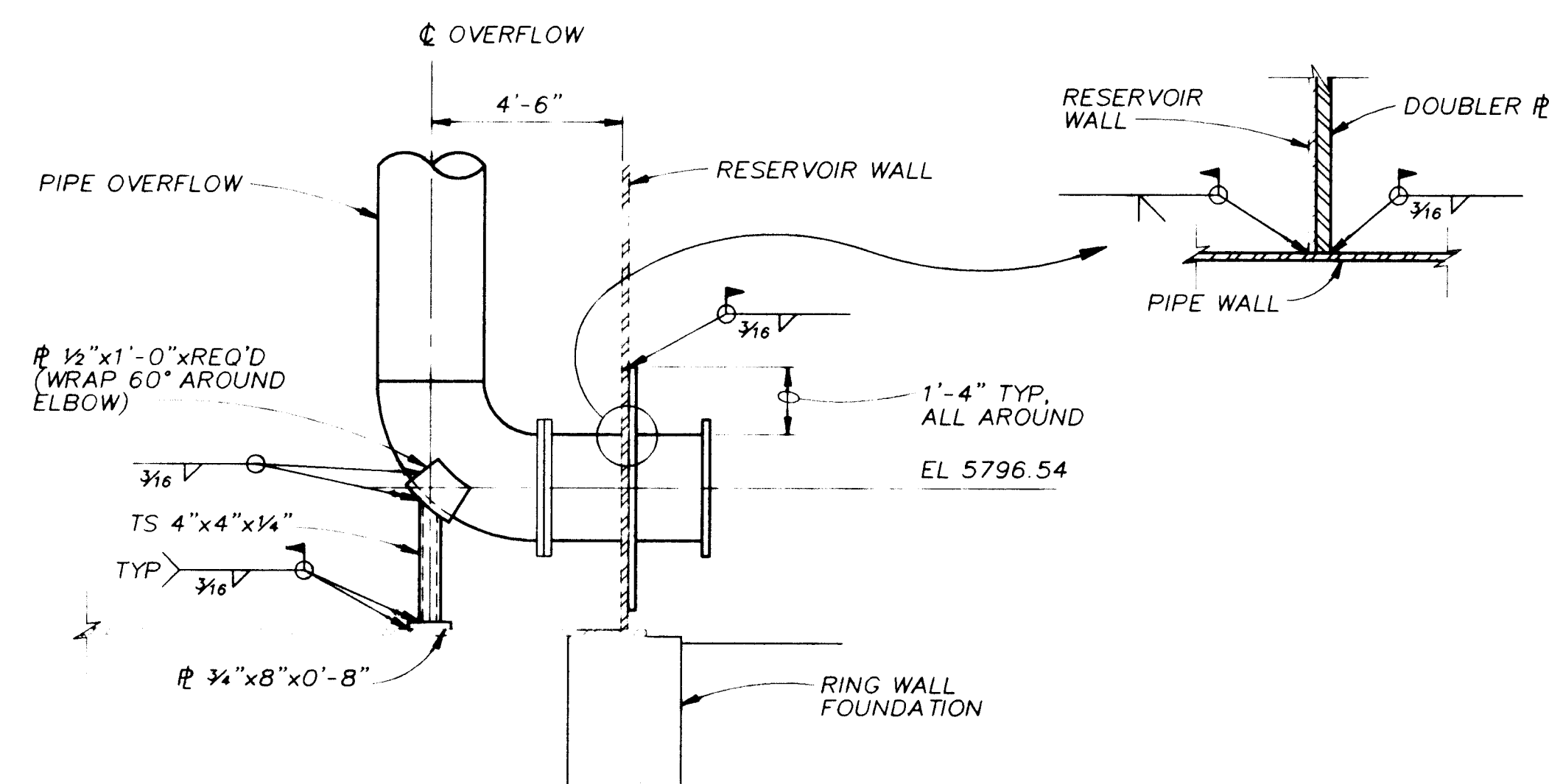
ELEVATION

| RESERVOIR OVERFLOW SCHEDULE | | | | |
|-----------------------------|---------|-----|--------|--------|
| RESERVOIR | GRIEGOS | | THOMAS | |
| OVERFLOW | A | B | A | B |
| LENGTH "L" | 7'-10" | N/A | 12'-0" | 12'-0" |
| WIDTH "W" | 1'-8" | N/A | 2'-0" | 2'-0" |
| PIPE DIA "D" | 20" | N/A | 24" | 24" |
| OVERFLOW EL "X" | 5006.0 | N/A | 5473.6 | 5473.6 |



OVERFLOW WEIR ELEVATION

NTS




OVERFLOW SUPPORT (2)

NTS (DETAIL SHOWN FOR THOMAS, PROVIDE
NEW PIPE SUPPORT ONLY @ GRIEGOS)

RECORD DRAWINGS

Revisions Drawn by R. GONZALES Date 10/12/94

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

BAR IS ONE INCH ON
ORIGINAL DRAWING
0  1"
IF NOT ONE INCH ON
THIS SHEET, ADJUST
SCALES ACCORDINGLY.

APPROVAL OF RECORD
DRAWINGS

PROJECT NUMBER: *11/22/64*

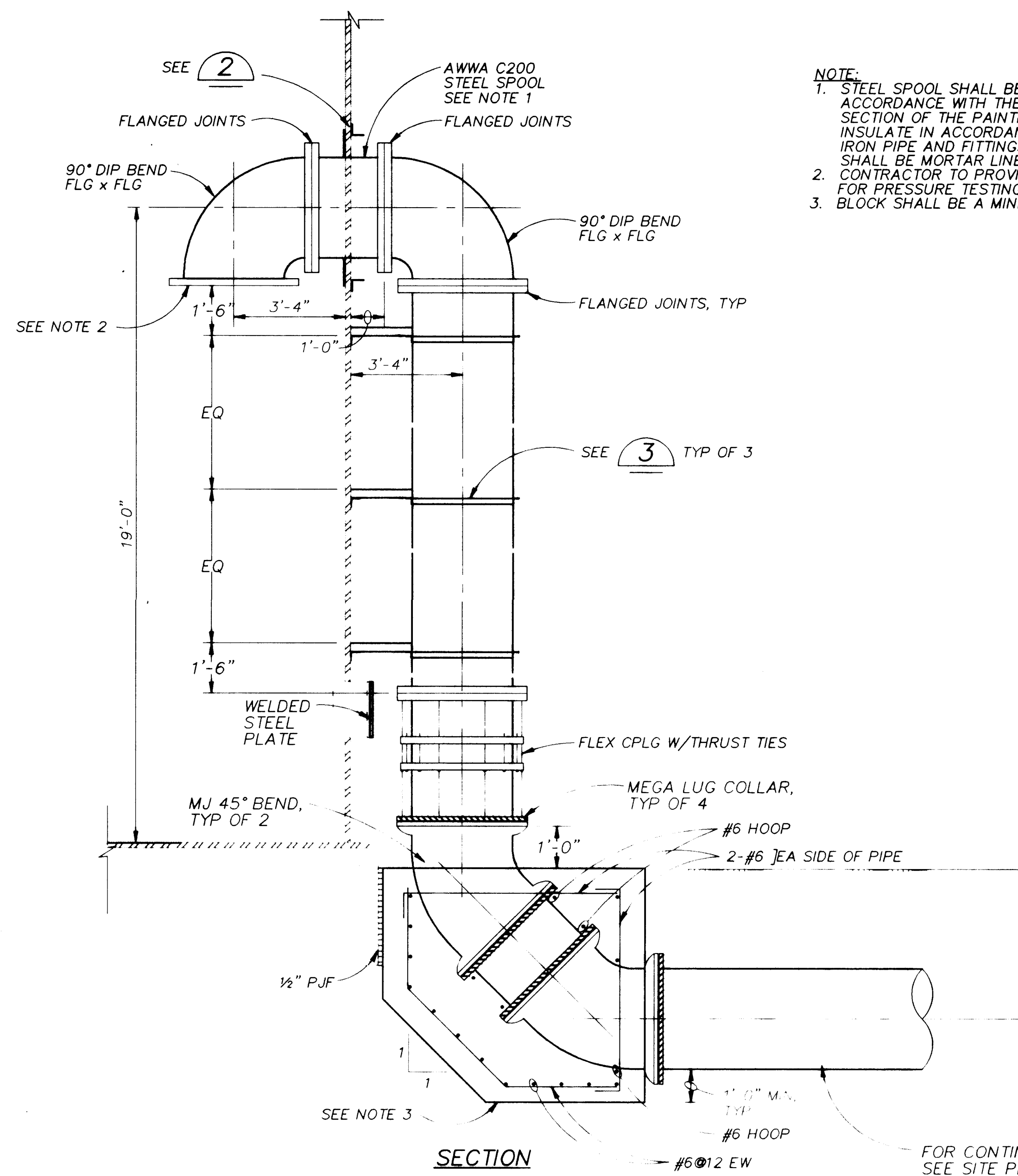
DATE: *11/22/64*

26 4366.930894

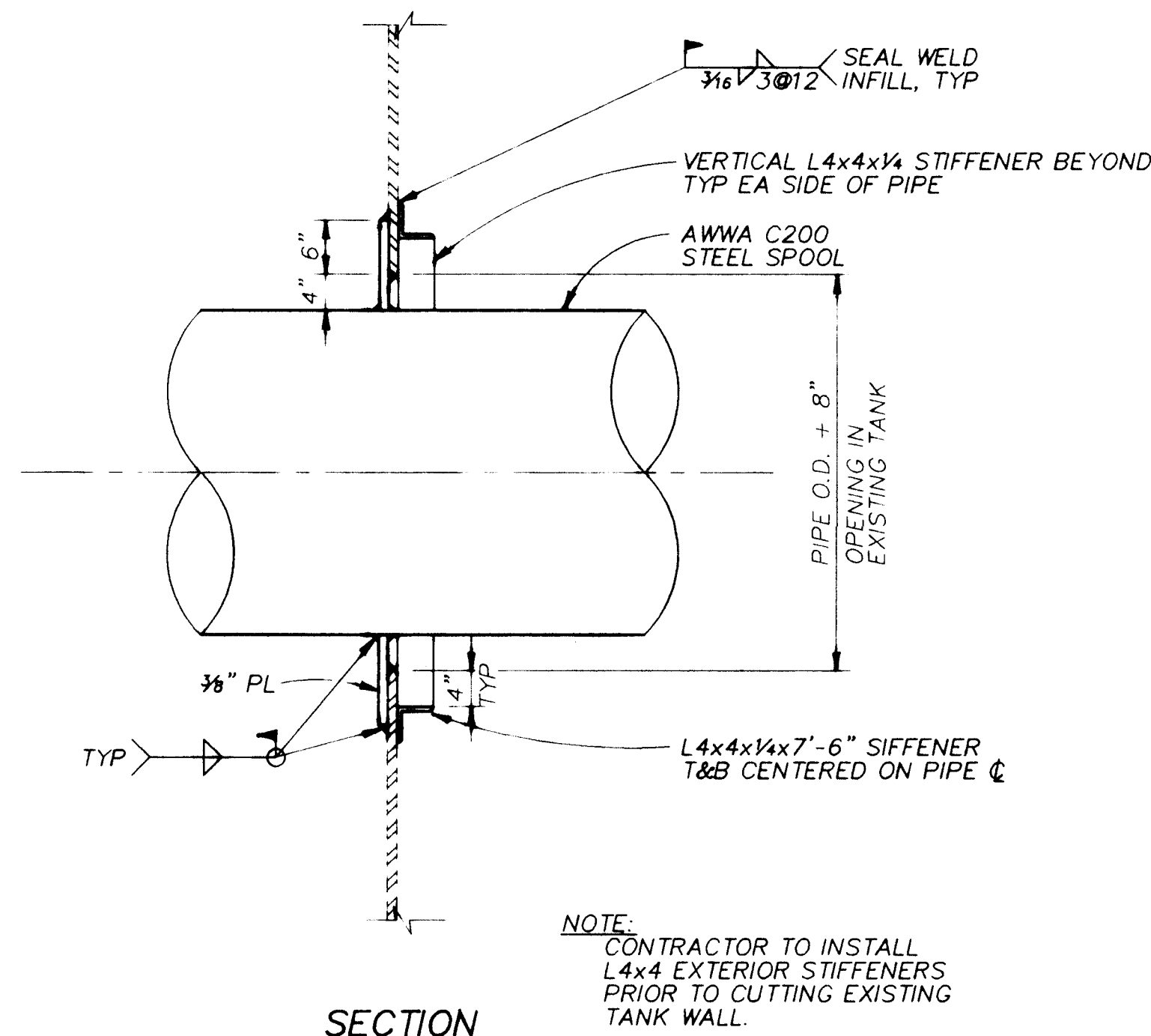
SCANNED BY
BY LASON



| | | | | | |
|--|----------|-------------------------------|-----------|---------------|------|
| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | | |
| TITLE: | | GRIEGOS AND THOMAS RESERVOIRS | | | |
| OVERFLOW WEIR BOX DETAILS | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| | | | | | |
| | | | | | |
| | | | | | |
| DRAWING NO. 4366.93 | | MAP NO. | | SHEET 8 OF 13 | |

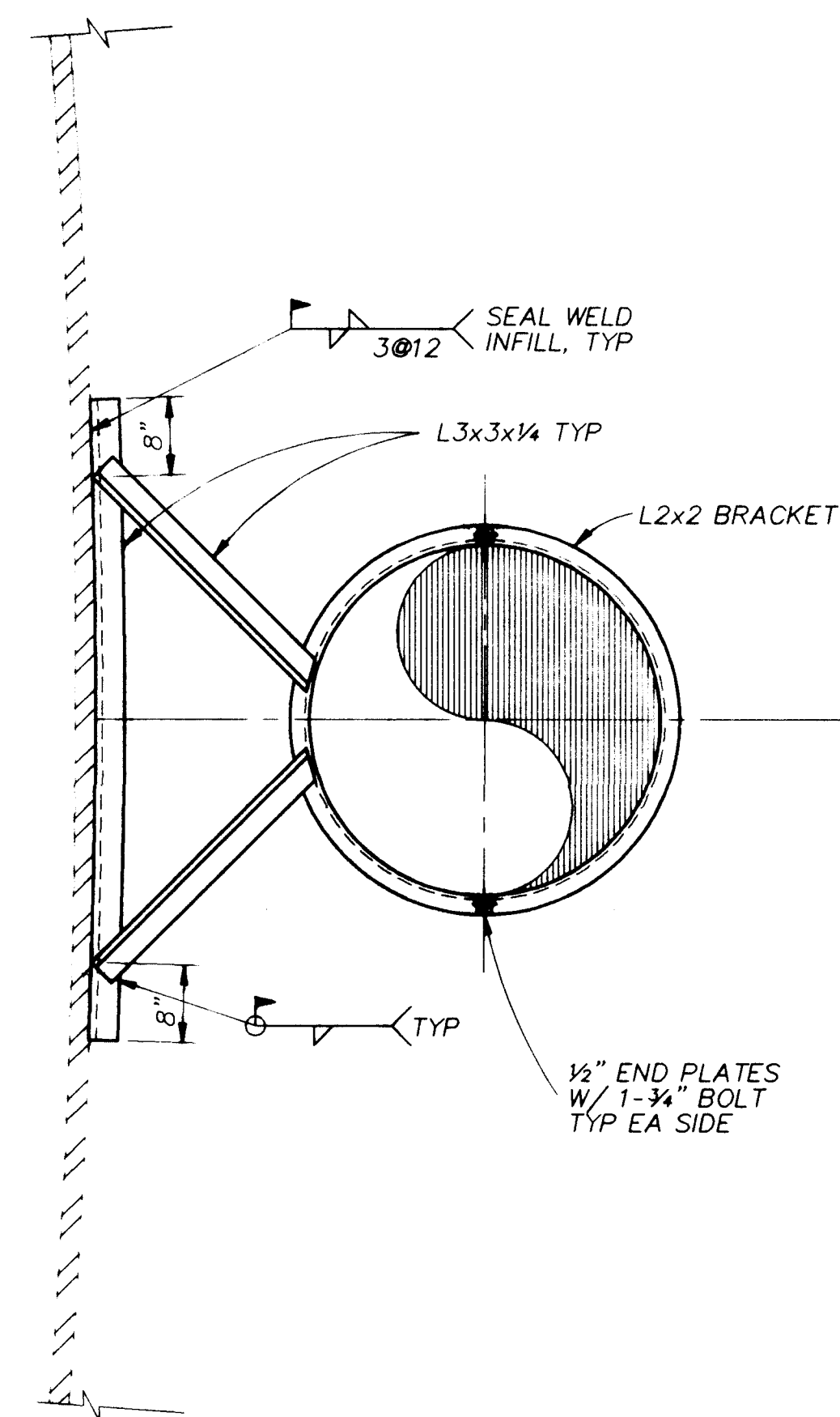


- NOTE:
1. STEEL SPOOL SHALL BE PAINTED IN ACCORDANCE WITH THE EXPOSED METAL SECTION OF THE PAINTING SPECIFICATION. INSULATE IN ACCORDANCE WITH DUCTILE IRON PIPE AND FITTINGS. THE SPOOL SHALL BE MORTAR LINED.
 2. CONTRACTOR TO PROVIDE TEMPORARY BLIND FLANGE FOR PRESSURE TESTING.
 3. BLOCK SHALL BE A MINIMUM 6'-0" IN WIDTH.



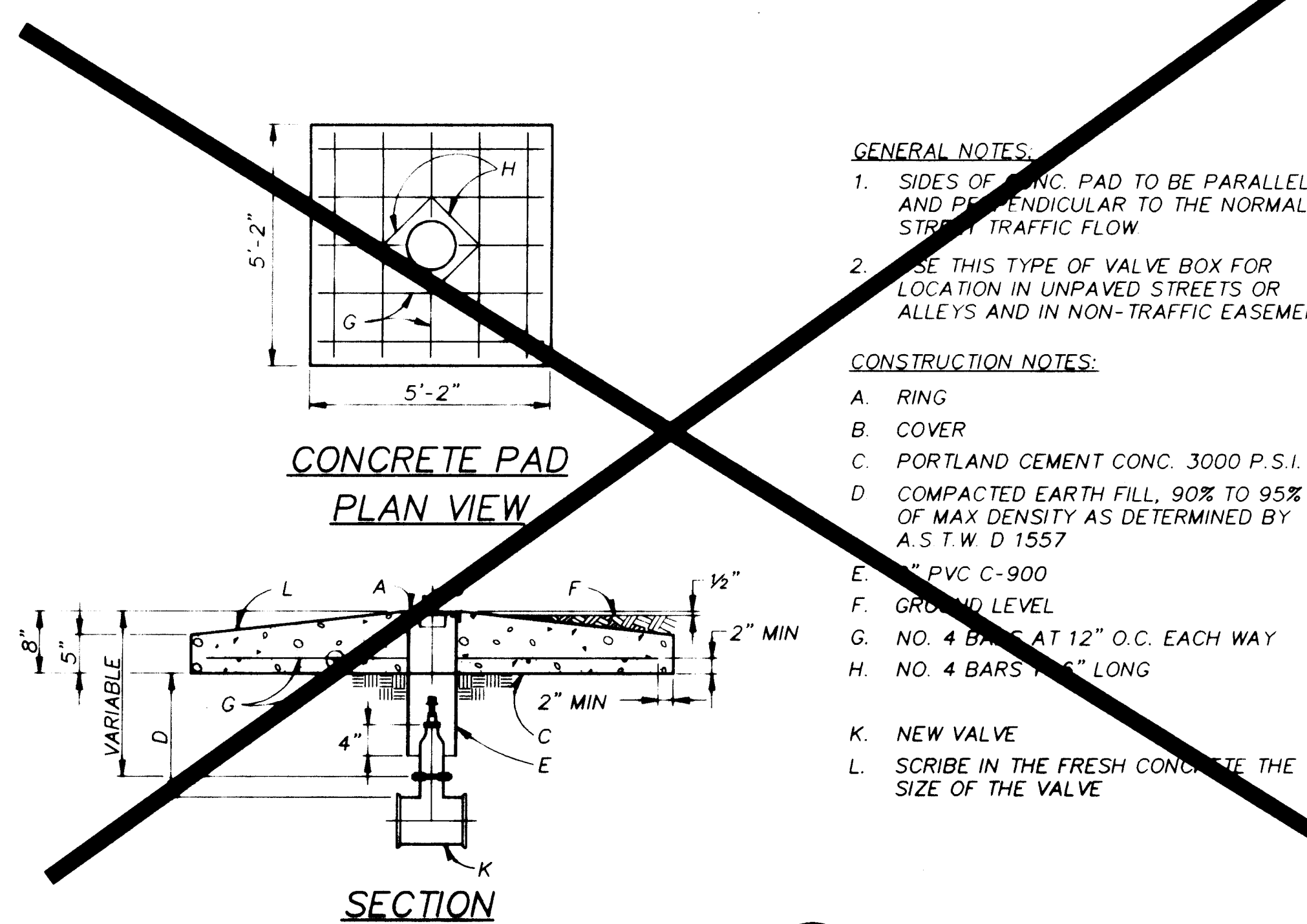
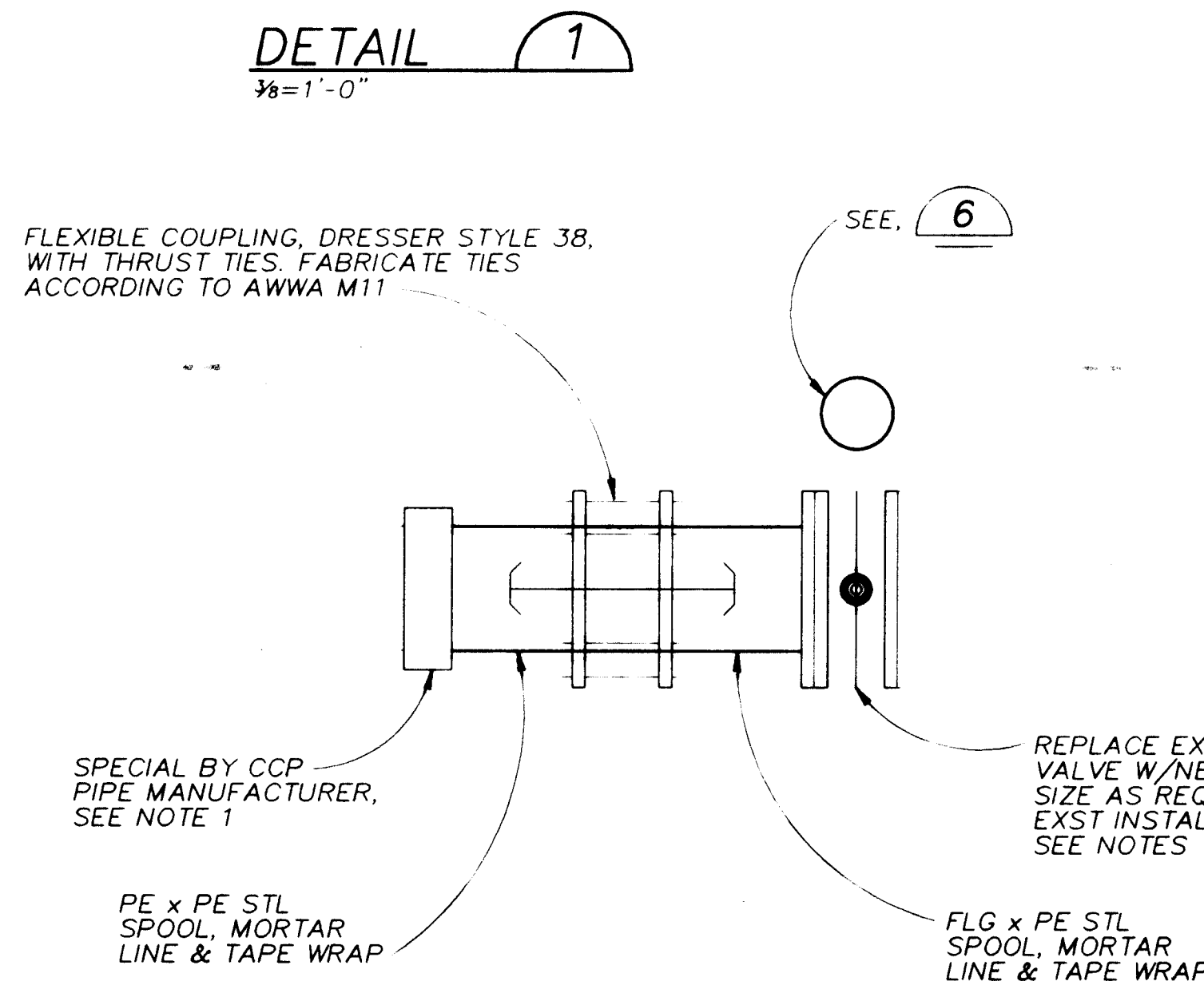
DETAIL 2

NTS



DETAIL 3

NTS



APPROVAL OF RECORD DRAWINGS

PROJ. *[Signature]*

DATE 11/22/93

RECORD DRAWINGS

Revisions Drawn by R. GONZALES Date 10/12/94

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

VERIFIED

BAR IS ONE INCH ON ORIGINAL DRAWING


0" 1"

IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY.

26 4366.930994

| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | | |
|--|----------|---------|-------------|----------|-------|
| TITLE: GRIEGOS AND THOMAS RESERVOIRS MISCELLANEOUS DETAILS | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| D.R.C. Chair | | | Water | | |
| Trans. Dev. | | | Waste Water | | |
| Hydrology | | | | | |
| DESIGNED BY M. NANNINGA DATE 5-4-93 DRAWN BY M. BREWER DATE 5-11-93 CHECKED BY L. EICK DATE 7-6-93 | | | | | |
| DRAWING NO. | 4366.93 | MAP NO. | SHEET | 9 | OF 13 |

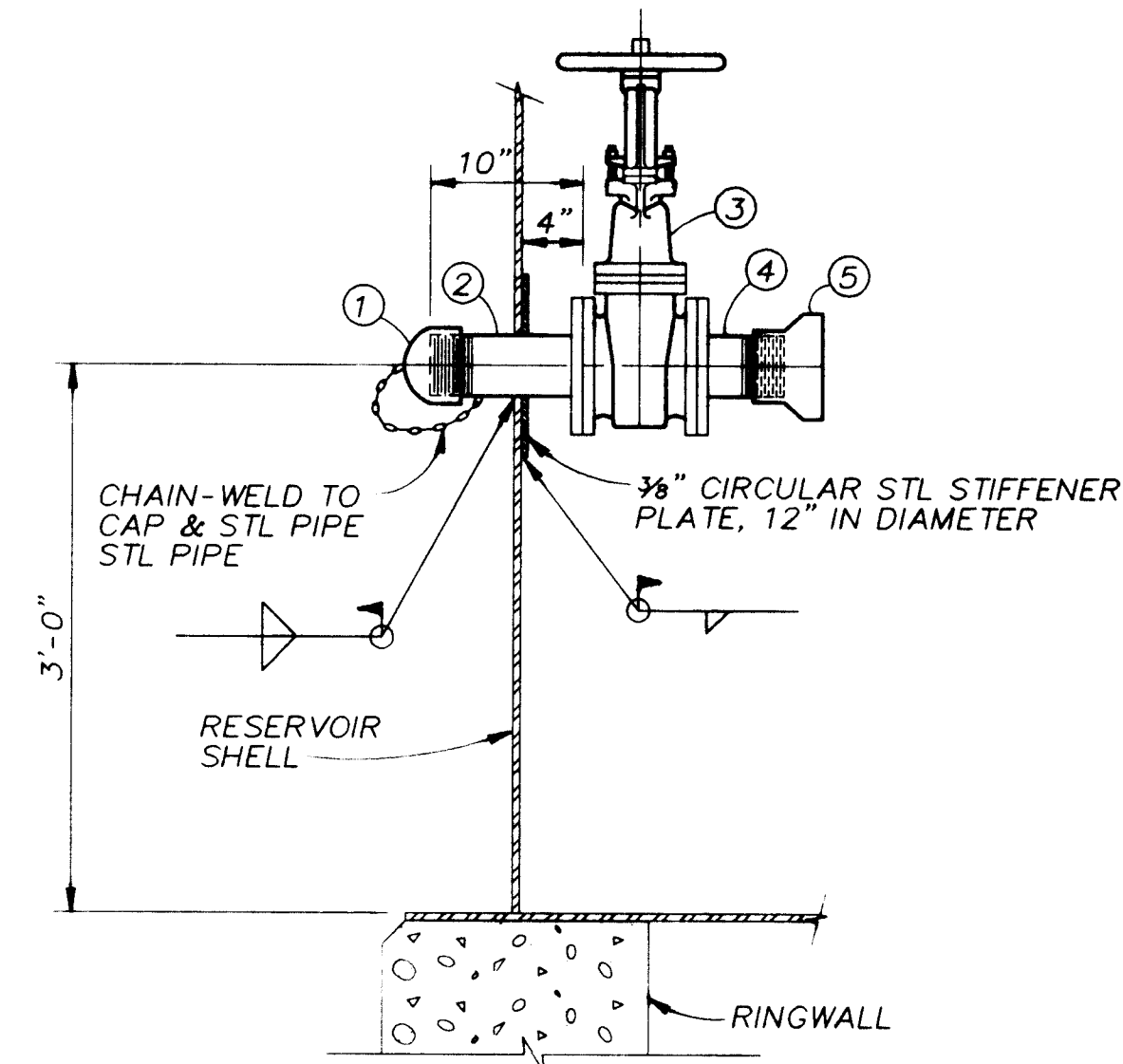


1. GRATING SPAN  SEE PLAN.
2. WIDTH OF GRATING SECTIONS SHALL NOT EXCEED 3'-6".
3. SHOP DRAWINGS BASED ON FIELD DIMENSIONS SHALL BE SUBMITTED TO THE ENGINEER PRIOR TO FABRICATION.
4. UNLESS NOTED OTHERWISE ON PLANS, GRATING THICKNESS SHALL BE AS TABULATED IN "GRATING THICKNESS TABLE" FOR APPLICABLE TRAFFIC.
5. BEARING BAR THICKNESS FOR GRATING TO BE $\frac{3}{16}$ " MINIMUM.
6. BAND ALL EDGES WITH $\frac{3}{16}$ x DEPTH OF BEARING BAR.
7. PROVIDE MISCELLANEOUS GRATING FASTENERS AS REQUIRED.
8. TYPE OF MATERIAL USED SHALL BE AS SHOWN ON PLANS OR AS SPECIFIED. THIS STANDARD DETAIL INCLUDES 3 TYPES, ALTHOUGH ALL 3 MAY NOT BE INCLUDED IN PROJECT.
9. THE HORIZONTAL CLEARANCE BETWEEN THE GRATING AND GRATING SUPPORTS SHALL NOT BE LESS THAN $\frac{1}{4}$ " NOT GREATER THAN $\frac{1}{2}$ ".
10. ALL GRATING SECTIONS, WHEN IN PLACE, SHALL ALWAYS BE FIRMLY ANCHORED TO THEIR SUPPORTS.
11. DO NOT REUSE EXISTING GRATING.

GRATING NOTES

| <h1 style="text-align: center;">FOOT TRAFFIC</h1> <h2 style="text-align: center;">GRATING THICKNESS TABLE</h2> | | | |
|--|----------------|-------------|------------------|
| MAXIMUM SPAN | ALUMINUM (IN.) | STEEL (IN.) | FIBERGLASS (IN.) |
| 3'-6" | 1 1/4" | 1" | 1 1/2" |
| 4'-0" | 1 1/2" | 1" | 1 1/2" |
| 4'-6" | 1 3/4" | 1" | MAXIMUM |
| 5'-0" | 1 3/4" | 1 1/4" | ALLOWABLE |
| 5'-6" | 2" | 1 1/4" | SPAN IS 4'-0" |
| 6'-0" | 2 1/4" | 1 1/2" | LIMIT |
| 6'-6" | 2 1/4" | 1 1/2" | DEFLECTION |
| 7'-0" | 2 1/2" | 1 3/4" | TO 1/4" MAX |

GRATING DETAIL 1
5



PUMP OUT VALVE PIPING SCHEDULE

| ITEM NO. | DESCRIPTION |
|----------|--|
| 1 | 3" THREADED STEEL CAP |
| 2 | 3" DIA THREADED x FLANGED STEEL SPOOL |
| 3 | FLANGED CAST IRON GATE VALVE, BRONZE STEM AND WEDGE, CRANE NO. 461 |
| 4 | 3" DIA x 0'-6" FLANGED x THREADED STEEL SPOOL |
| 5 | SEALFAST, 4D CAM & GROOVE TYPE FITTING (BOTH ENDS ARE FEMALE), STAINLESS STEEL, NP |

4" x 6" 16 GAUGE STAINLESS
STEEL PLATE MOUNTED ON WALL
NEXT TO TRANSDUCER
W/4-1/4" ADHESIVE ANCHORS.

3/16" LETTERING STAMPED

ELEVATIONS TO BE PROVIDED BY OWNER

RESERVOIR RINGWALL EL

TAP EL

TRANSDUCER CENTERLINE EL

— BOTTOM OF PLATE SET AT EL

ELEVATION PLATE

NTS

5

NOTES:

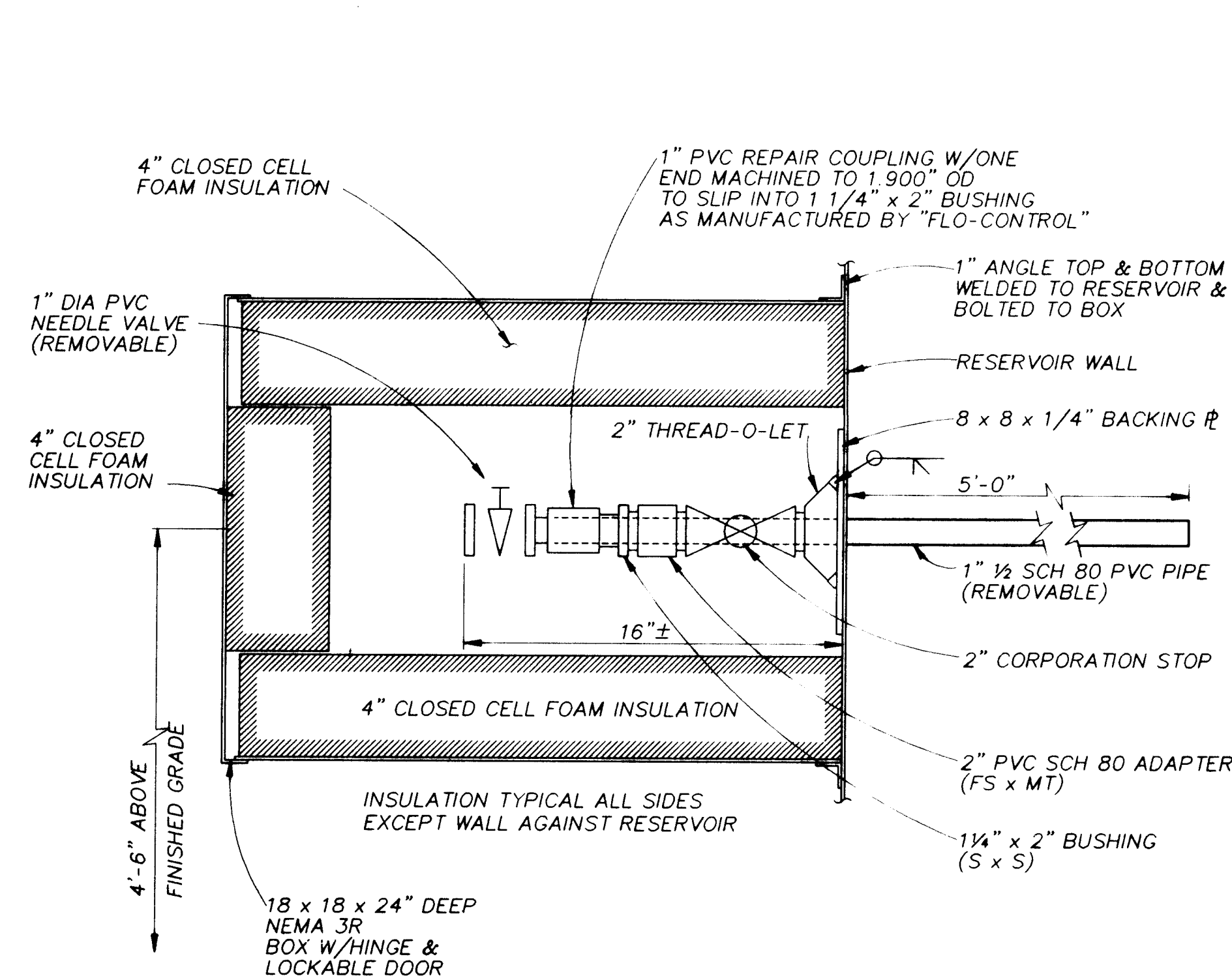
1. ALL THREADS ARE TO BE NATIONAL PIPE THREADS (NPT).
2. STEEL SHALL BE SCHEDULE 80, TREATED WITH SAME PAINT SYSTEM AS RESERVOIR. (INSIDE TANK AND OUTSIDE TANK)
3. TREAT INSIDE OF ITEM NOS. 1, 2 AND 4 W/ SAME PAINT SYSTEM AS RESERVOIR.

PUMP OUT VALVE DETAIL

NTS

3

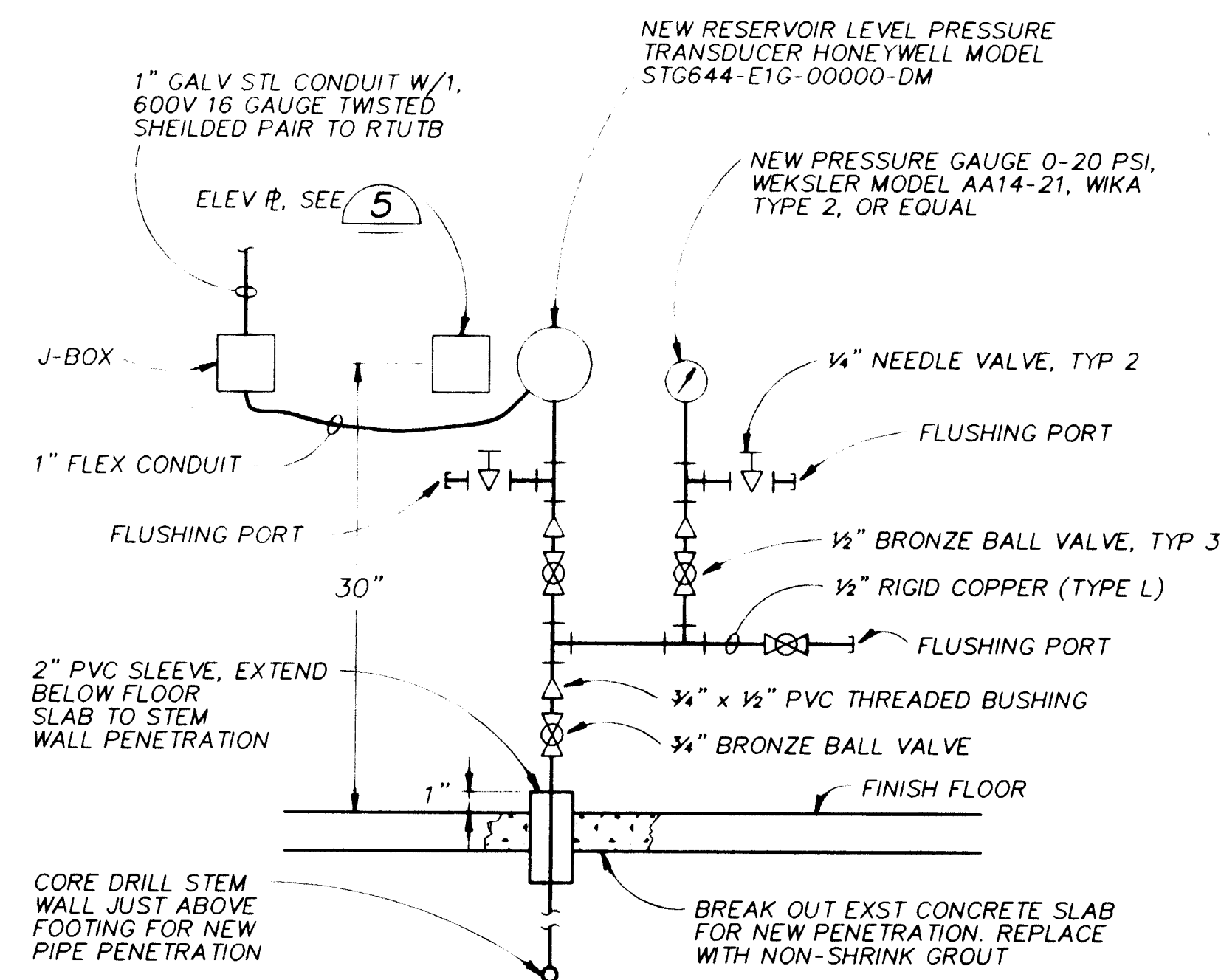
2.3



SAMPLING STATION DETAIL

NTS

2.3

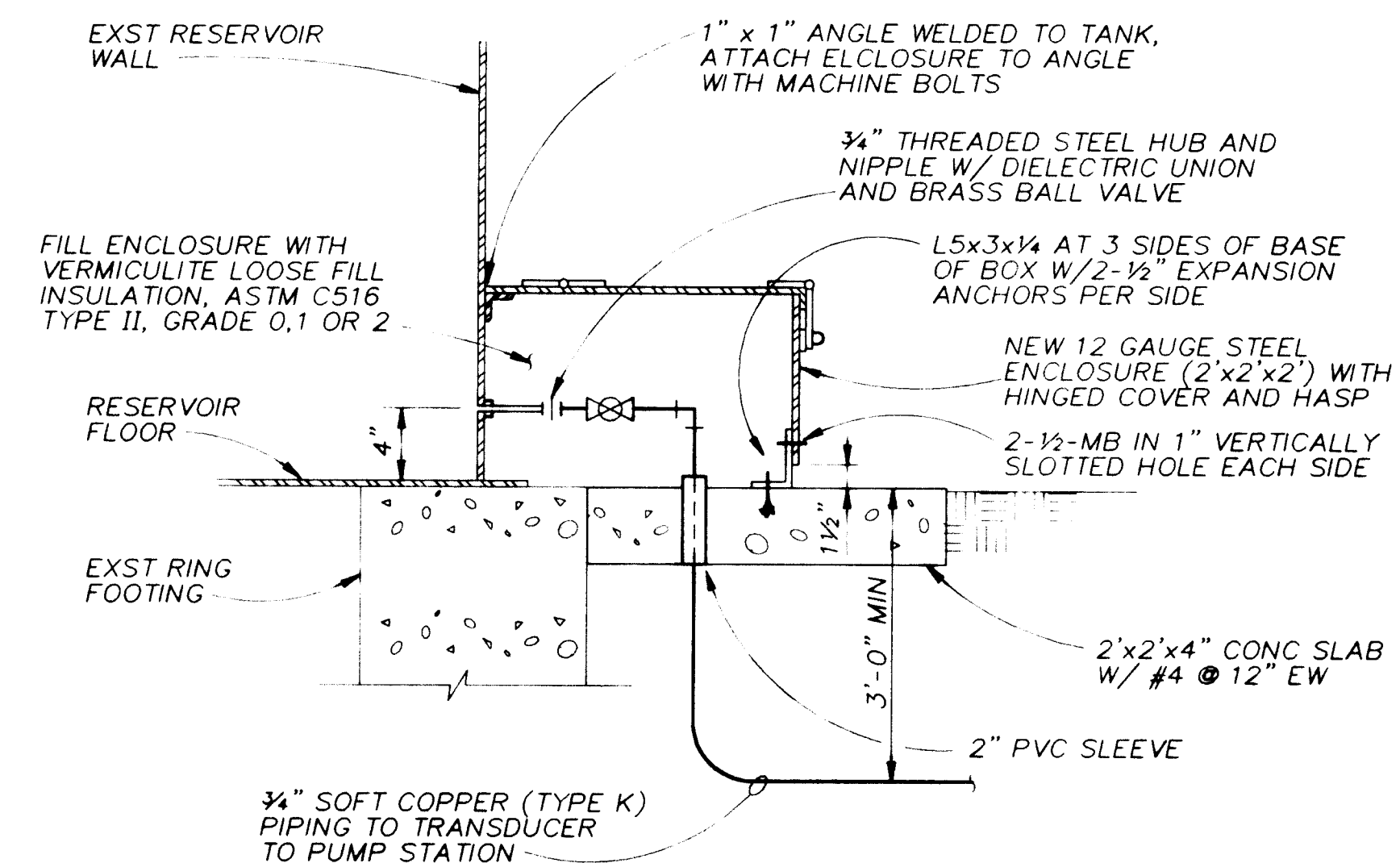


NOTE:
SUPPORT PRESSURE FROM REDUCER AND PIPING TO INTERIOR
WALL OF PUMP STATION VIA STEEL UNISTRUT AND 1/2"
STAINLESS STEEL ADHESIVE ANCHORS.

PRESSURE TRANSDUCER CONNECTION

NTS

2.3



RESERVOIR PRESSURE SENSOR BOX

NTS

2

APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER Arthur J. Stuart
DATE 11/22/94

26 4366.931094

SCANNED BY
RV:ASON

RECORD DRAWINGS

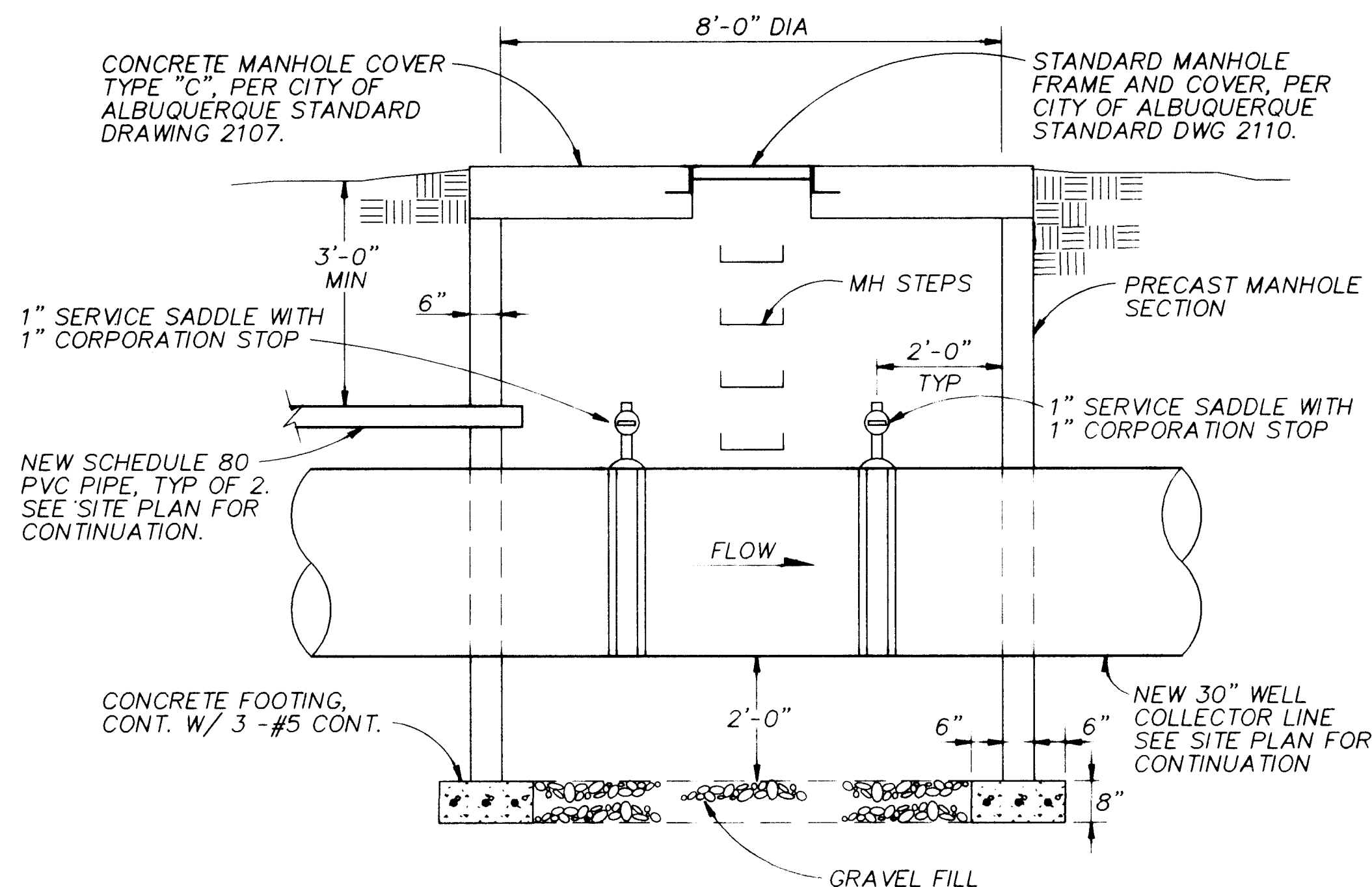
Revisions Drawn by R. GONZALES Date 10/12/04

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.



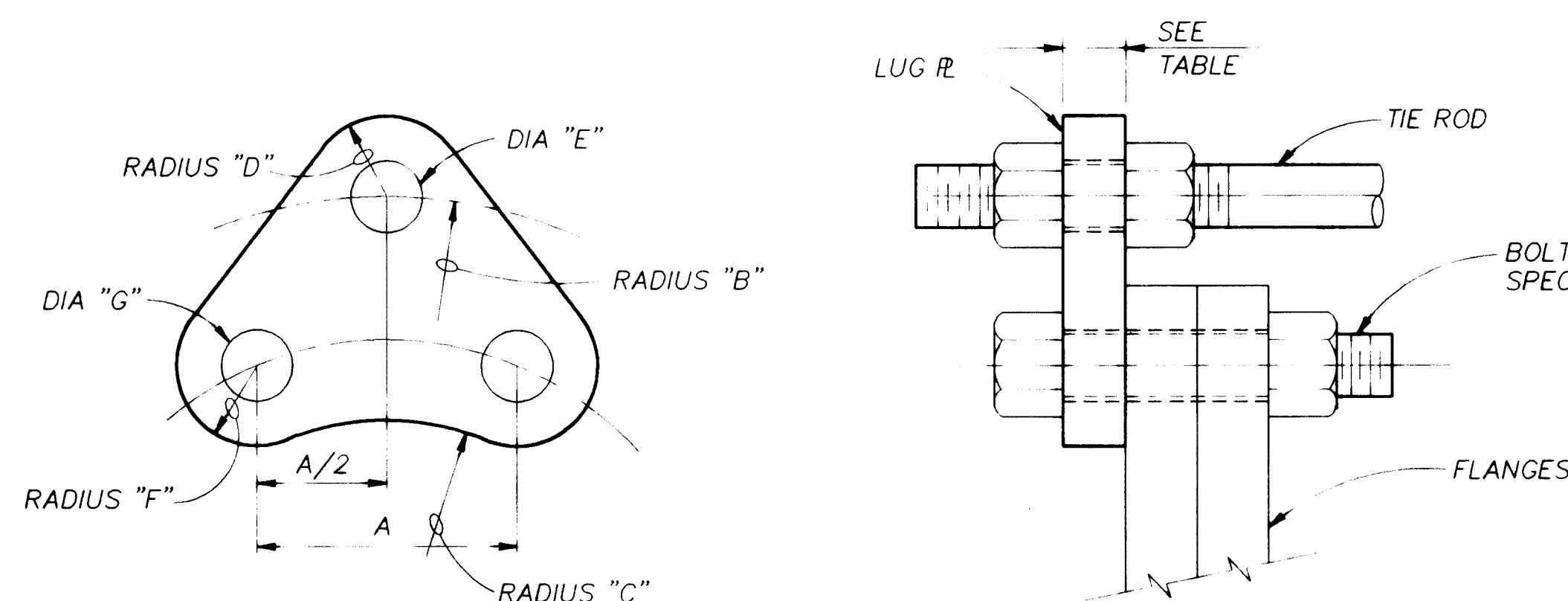
| | | | | | |
|--|----------|---------|-------------|----------------|------|
| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | | |
| TITLE: GRIEGOS AND THOMAS RESERVOIRS MISCELLANEOUS DETAILS | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| D.R.C. Chair | | | Water | | |
| Trans. Dev. | | | Waste Water | | |
| Hydrology | | | | | |
| | | | | | |
| DRAWING NO. 4366.93 | | MAP NO. | | SHEET 10 OF 13 | |

4474M102.DWG
1=1
10-12-94



CHLORINE AND FLUORIDE INJECTION MANHOLE

1/2" = 1' - 0"



FRONT VIEW

SIDE VIEW

| *SEE NOTES | FLANGE LUG TIE ROD SCHEDULE | | | | | | | | | | |
|---------------------------|-----------------------------|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| TIE ROD DIA. OR BOLT SIZE | 5/8 | 3/4 | 7/8 | 1 | 1 1/8 | 1 1/4 | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 3/4 |
| DIA G OR E | 3/4 | 7/8 | 1 | 1 1/8 | 1 1/4 | 1 3/8 | 1 5/8 | 2 | 2 1/4 | 2 1/2 | 3 |
| RADIUS D OR F | 7/8 | 1 | 1 1/8 | 1 1/4 | 1 3/8 | 1 1/2 | 1 3/4 | 2 | 2 1/4 | 2 3/8 | 2 1/2 |

| TEST PRESSURE (psi) | | | 25 | 50 | 100 | 150 | 225 | 375 |
|---------------------|----------------------|--------------|-----------------------|----|-----|-----|-----|-----|
| PIPE DIA. | MIN. PLATE THICKNESS | TIE ROD DIA. | MINIMUM RODS REQUIRED | | | | | |
| 12 | 7/8 | 1 | 2 | 2 | 2 | 2 | 2 | 4 |
| 14 | 7/8 | 1 | 2 | 2 | 2 | 2 | 4 | 4 |
| 16 | 7/8 | 1 1/8 | 2 | 2 | 2 | 2 | 4 | 4 |
| 18 | 7/8 | 1 1/8 | 2 | 2 | 2 | 4 | 4 | 4 |
| 24 | 1 1/8 | 1 1/4 | 2 | 2 | 4 | 4 | 5 | 5 |
| 30 | 1 3/8 | 1 1/2 | 2 | 2 | 4 | 4 | 7 | 7 |
| 36 | 1 5/8 | 1 3/4 | 4 | 4 | 4 | 4 | 8 | 8 |
| 42 | 1 5/8 | 1 5/8 | 4 | 4 | 6 | 9 | 9 | 9 |

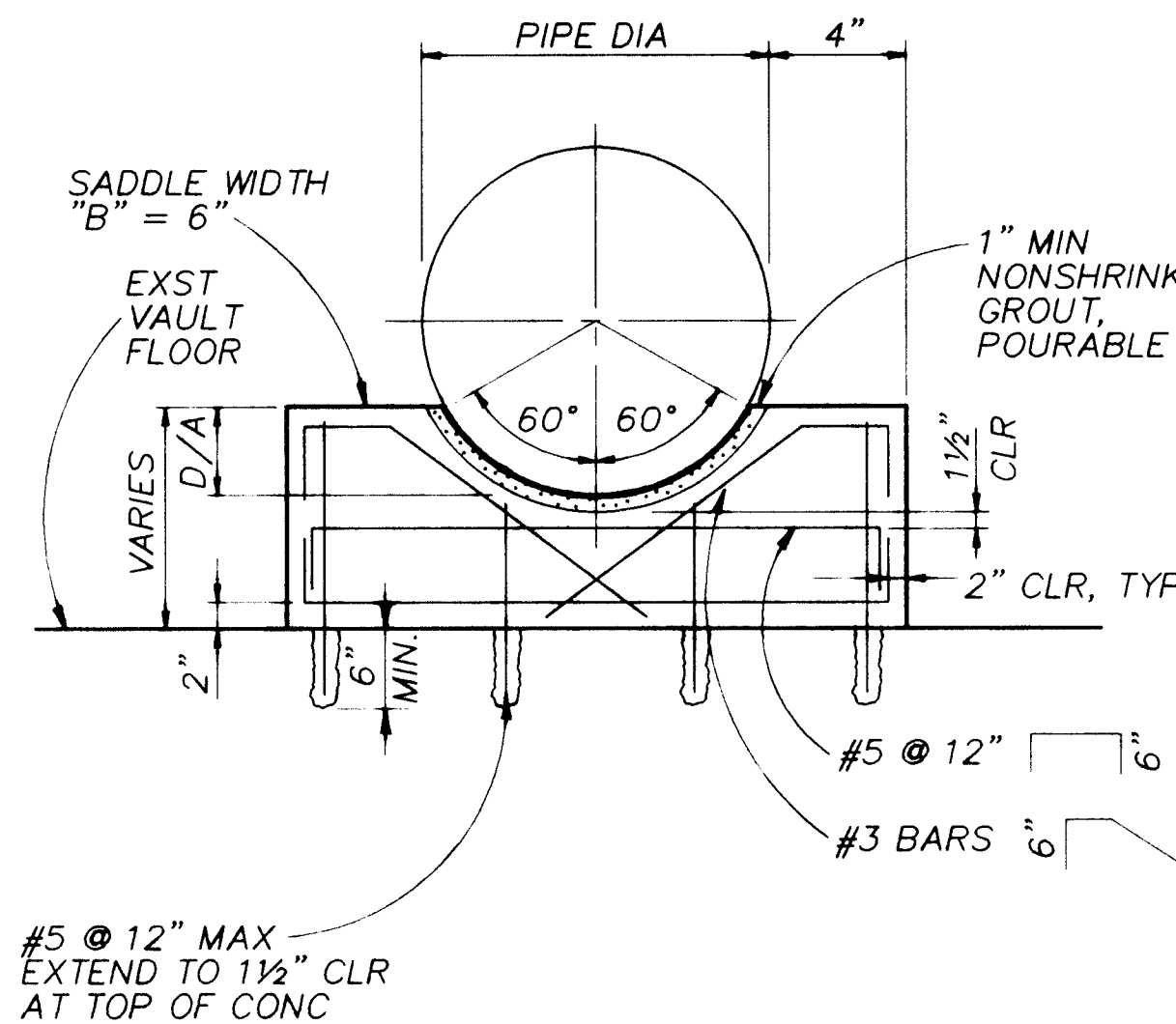
NOTES:

- ALL DIMENSIONS ARE IN INCHES.
- DIMENSION "A" AS REQUIRED BY FLANGE SPECIFIED.
- RADIUS "C" EQUALS 1/2 X (BOLT CIRCLE) - F
- RADIUS "B" EQUALS 1/2 X (FLANGE OD) + 2D + 1/8
- WHEN USING FLANGE LUGS WITH TIE ROD LUGS, RADIUS "B" EQUALS PIPE OD + E FROM TIE ROD LUG SCHEDULE, USE LARGEST DIAMETER ROD.
- INSTALL TIE ROD ASSEMBLIES SUCH THAT ALL RODS ARE EQUALLY SPACED AROUND FLANGE. ON PIPING 20" AND LARGER RODS MAY BE GROUPED IN PAIRS BUT GROUPS MUST BE EQUALLY SPACED AROUND FLANGE. THE TOTAL NUMBER OF TIE RODS SHALL BE INCREASED ABOVE THAT TABULATED AS NECESSARY TO MEET SPACING REQUIREMENTS.
- TIE RODS SHALL CONFORM TO ASTM A193 GRADE B7
- NUTS SHALL CONFORM TO ASTM A194 GRADE 2H
- PLATE SHALL CONFORM TO ASTM A283 GRADE D
- THIS DETAIL SUITABLE ONLY FOR EXPOSED PIPING.
- FLANGE LUGS MUST BE SHOP FABRICATED.

FLANGE LUG DETAIL/SCHEDULE

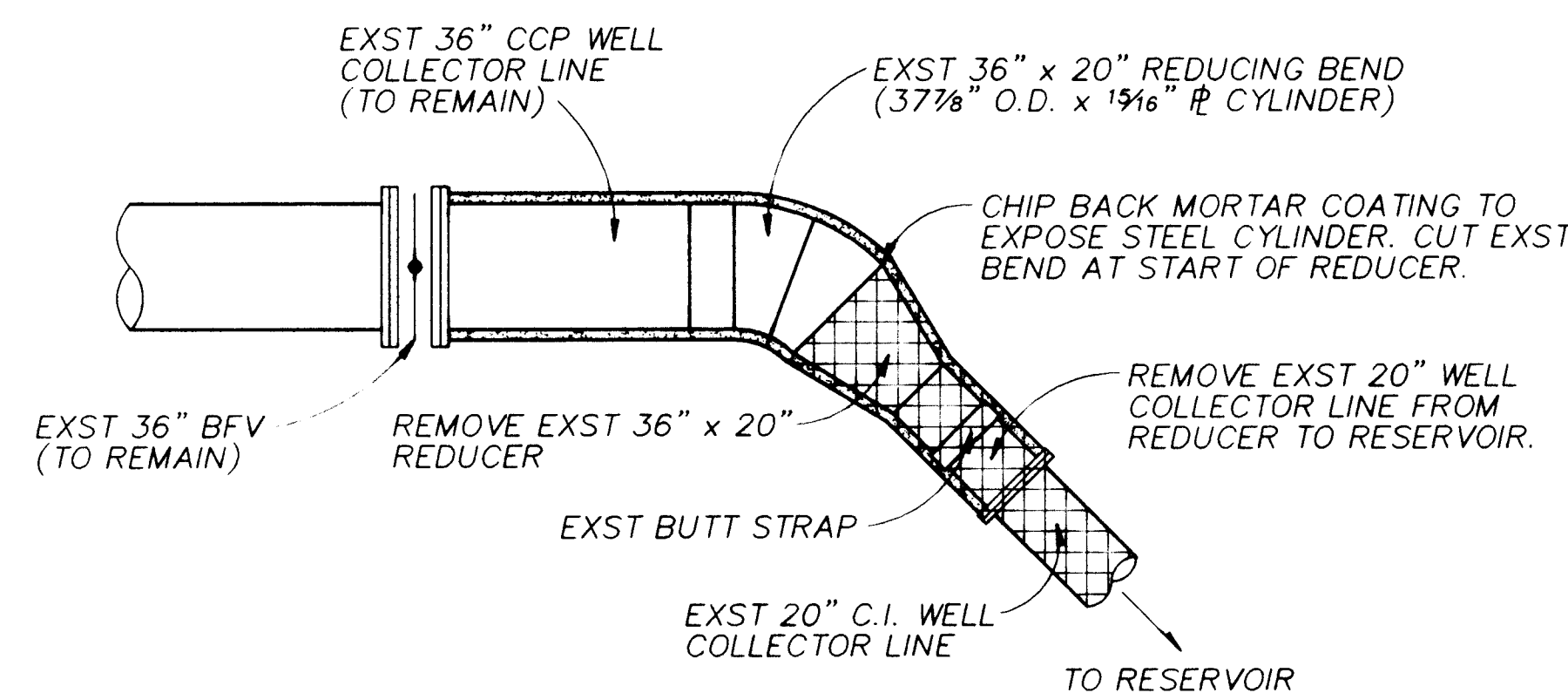
NTS

2/2



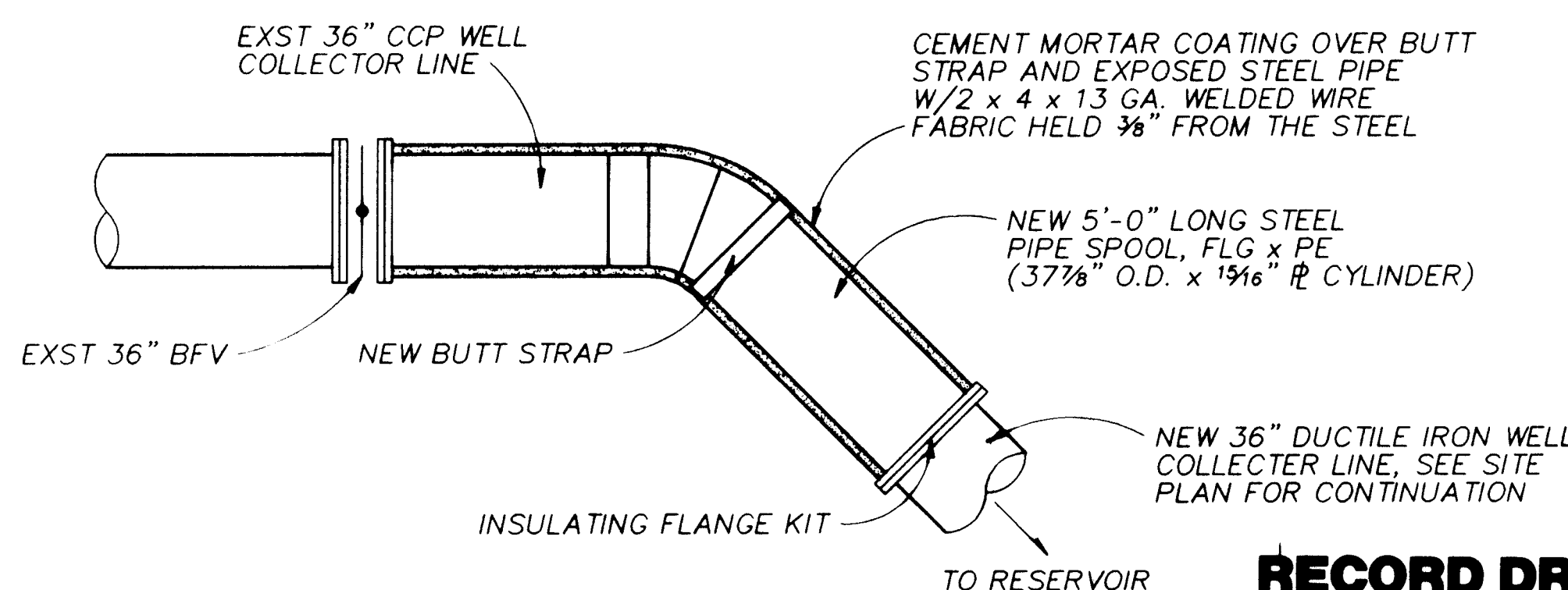
CONCRETE PIPE SUPPORT

NTS



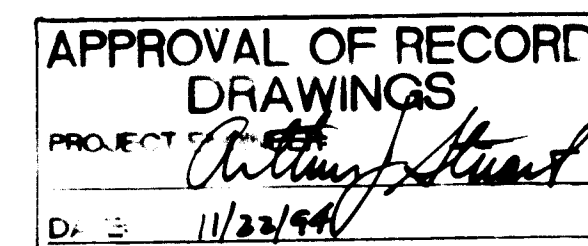
PLAN - EXISTING

NTS



PLAN - NEW

NTS



26 4366.931194

RECORD DRAWINGS

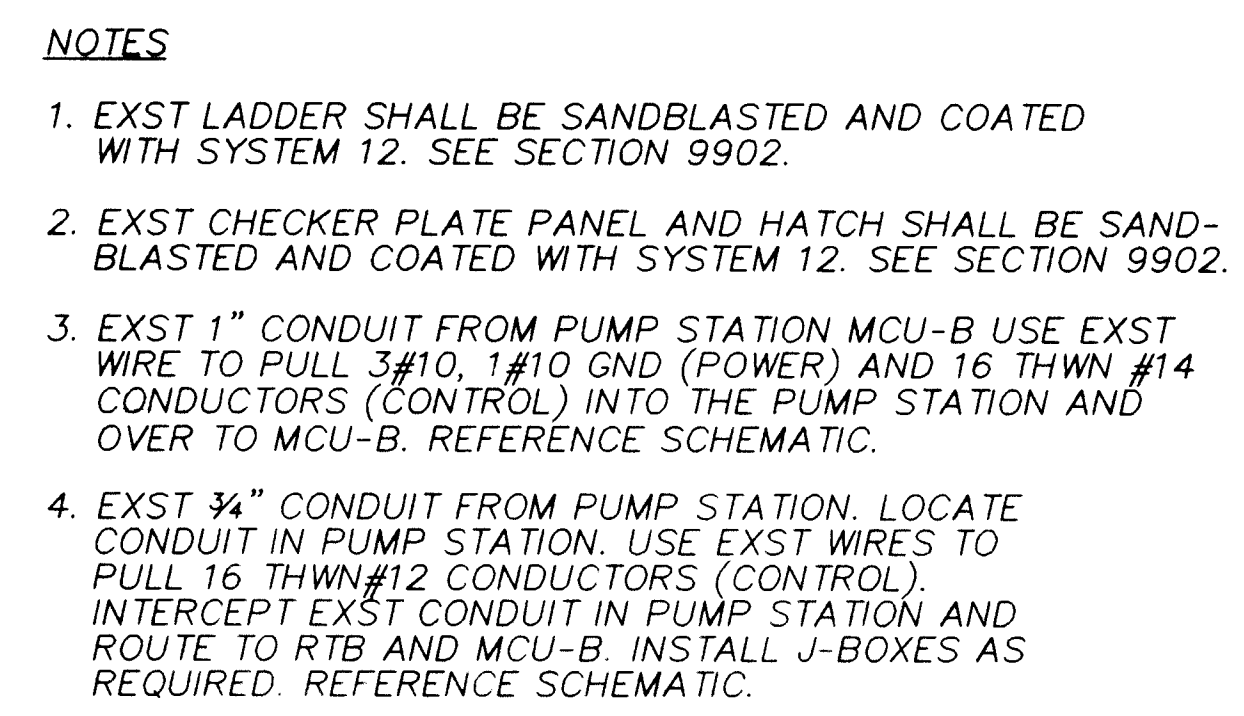
Revisions Drawn by R. GONZALES Date 10/12/94

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

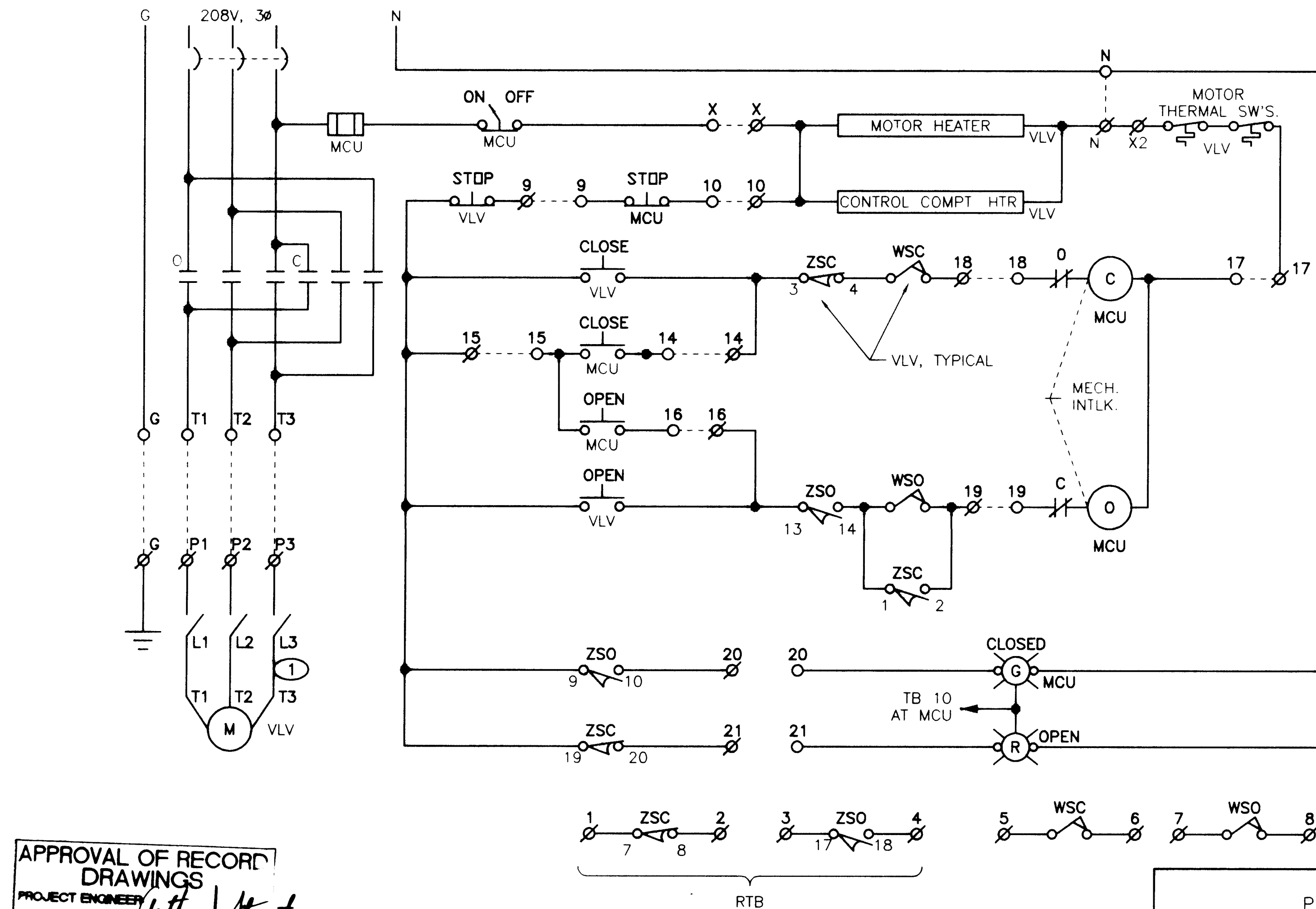


SCANNED BY RY LASON

| | | | | |
|--|----------|---------|-------------|----------|
| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | |
| TITLE: GRIEGOS AND THOMAS RESERVOIRS MISCELLANEOUS DETAILS | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER |
| D.R.C. Chair | | | Water | |
| Trans. Dev. | | | Waste Water | |
| Hydrology | | | | |
| DRAWING NO. | 4366.93 | MAP NO. | SHEET | OF |
| | | | 11 | 13 |



PLAN - NEW
1/4" = 1' - 0"

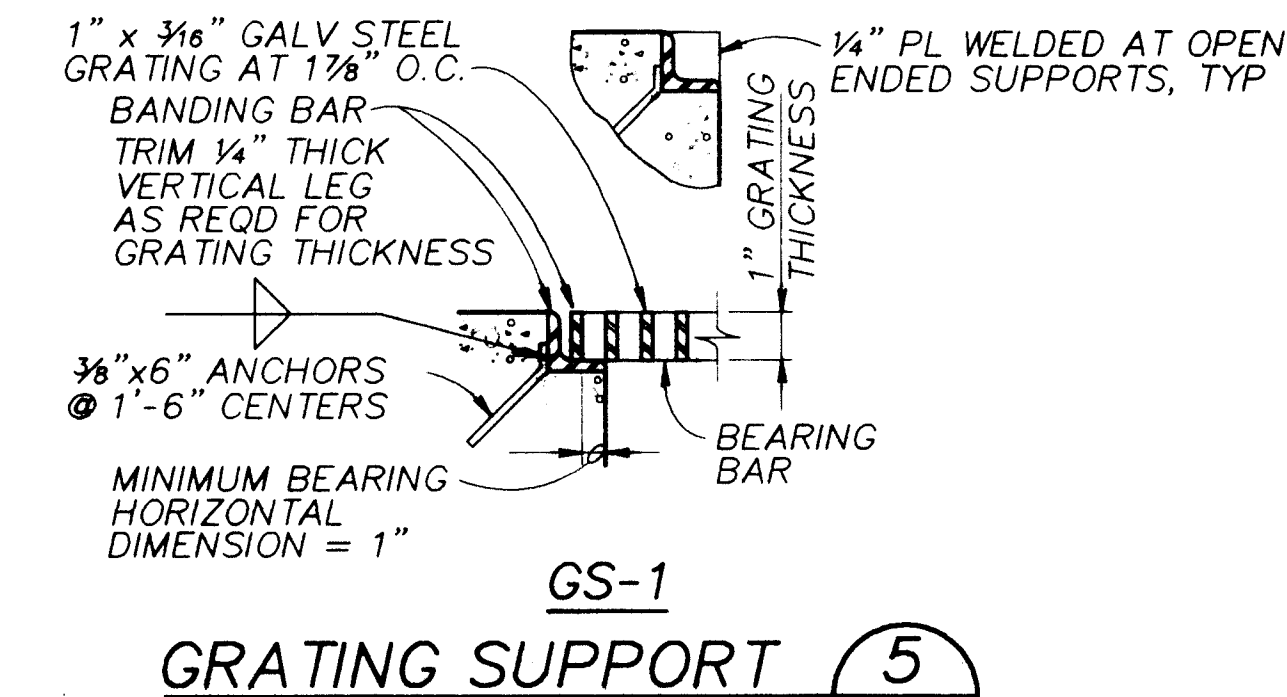
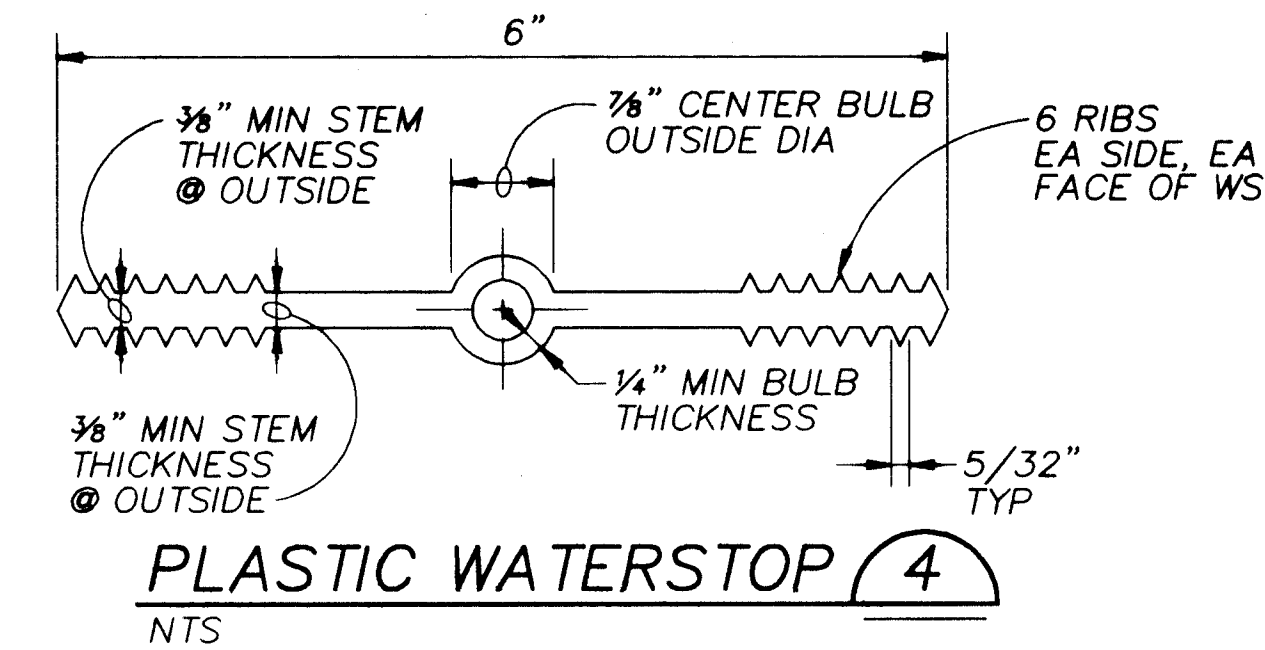
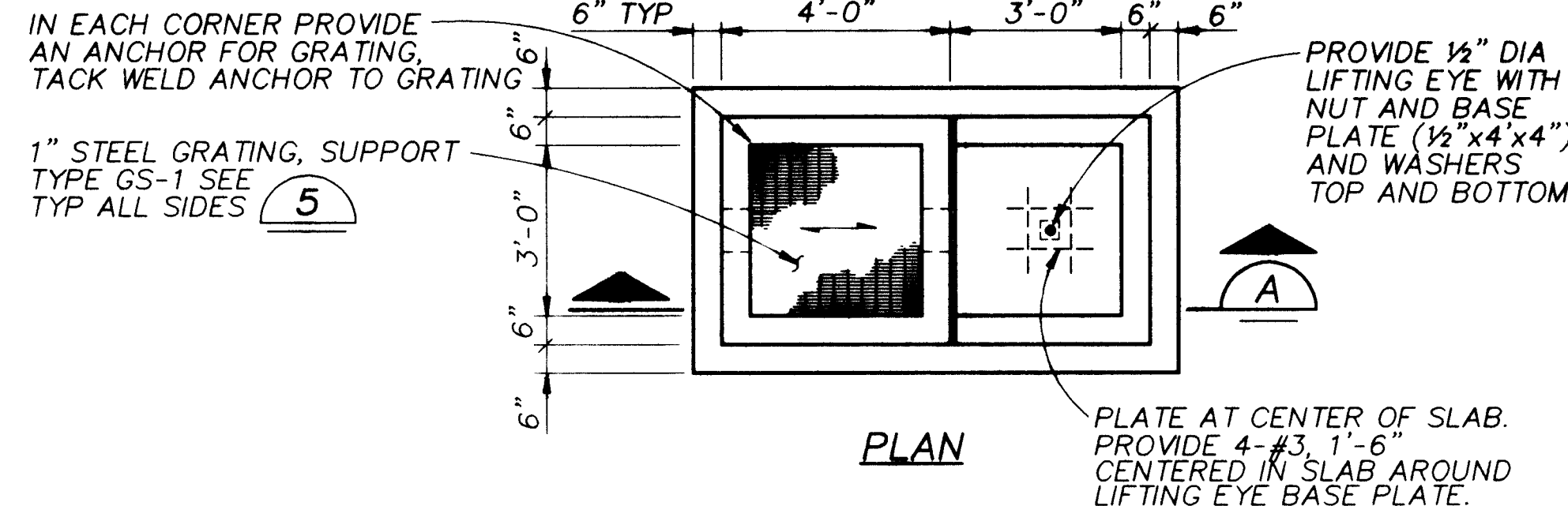
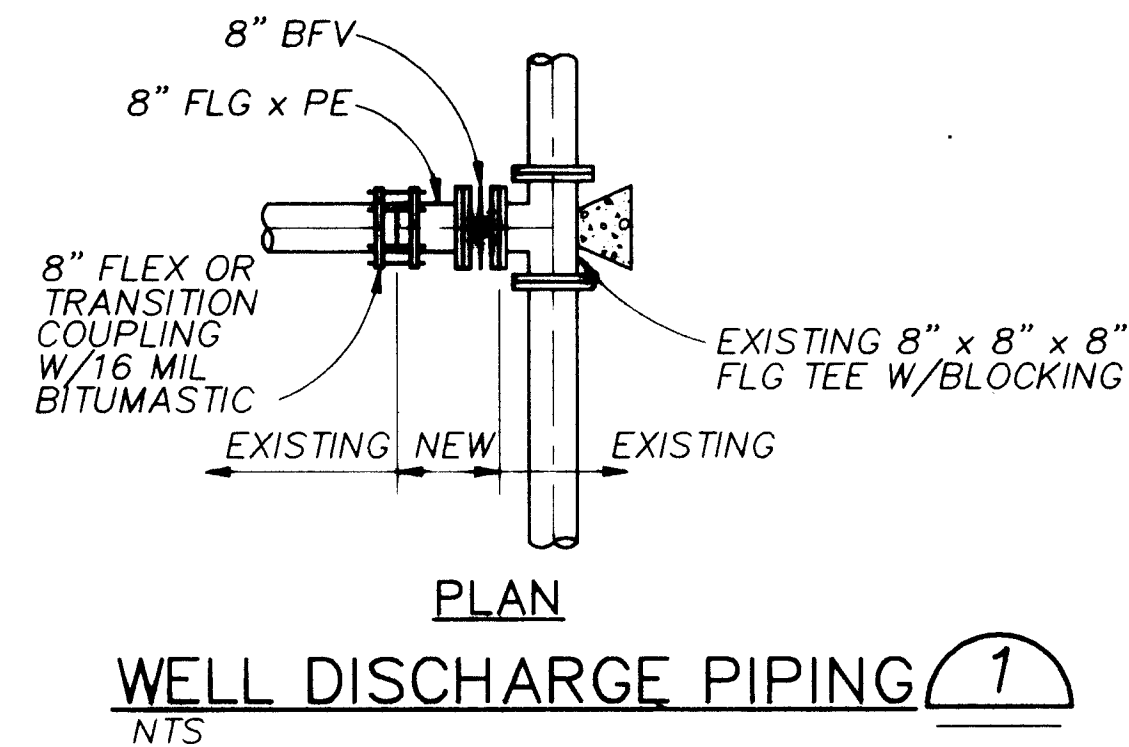
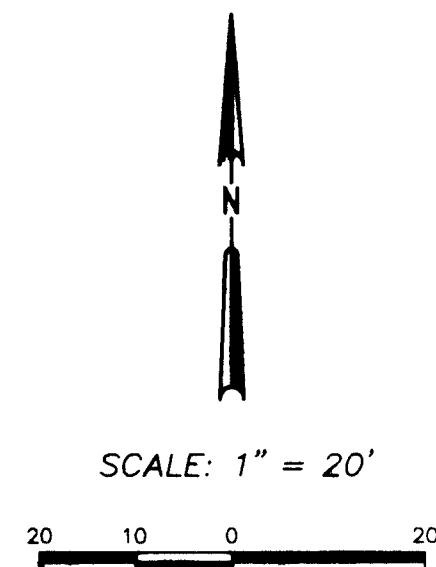


APPROVAL OF RECORD
DRAWINGS
PROJECT ENGINEER *Arthur J. Street*
DATE: 11/22/94

BY-PASS VALVE SCHEMATIC

| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
|--------------|----------|------|-------------|----------|------|
| D.R.C. Chair | | | Water | | |
| Trans. Dev. | | | Waste Water | | |
| Hydrology | | | | | |

| | | | | |
|----------------|---------|---------|-------------|----------|
| DRAWING NO. | 4366.93 | MAP NO. | SHEET 12 | OF 13 |
|----------------|---------|---------|-------------|----------|



GENERAL STRUCTURAL NOTES:

1. MINIMUM CLEARANCE FOR REINFORCEMENT BARS, SHALL BE 3" WHEN PLACED ON GROUND, FOR SURFACES EXPOSED TO WATER OR WEATHER: 1 1/2" CLEARANCE FOR #5 BAR AND SMALLER AND 2" CLEARANCE FOR LARGER BARS. INTERIOR SLABS 3/4" CLEARANCE, INTERIOR BEAMS 1 1/2" CLEARANCE.
2. ALL WALL REINFORCEMENT BARS SHALL BE CONTINUOUS AROUND CORNERS AND THOUGH COLUMNS OR PILASTERS. REINFORCEMENT BARS SHALL BE EXTENDED INTO CONNECTING WALLS. VERTICAL WALL BARS SHALL BE LAPPED WITH DOWELS FROM BASE SLABS.
3. ALL REINFORCEMENT BENDS AND LAPS, UNLESS OTHERWISE NOTED SHALL SATISFY THE FOLLOWING MINIMUM REQUIREMENT.

| REINFORCEMENT LAP DISTANCE (DIMENSIONS IN INCHES) | | | | | | | | | | |
|---|-----------|----|----|----|----|----|----|-----|-----|-----|
| | BAR SIZE | #3 | #4 | #5 | #6 | #7 | #8 | #9 | #10 | #11 |
| SPACING < 6" | TOP BAR | 21 | 29 | 36 | 46 | 62 | 82 | 104 | 132 | 163 |
| | OTHER BAR | 15 | 20 | 26 | 33 | 45 | 59 | 74 | 95 | 116 |
| SPACING > 6" | TOP BAR | 17 | 23 | 29 | 37 | 50 | 66 | 83 | 106 | 130 |
| | OTHER BAR | 12 | 16 | 20 | 26 | 36 | 47 | 60 | 76 | 93 |

HOOKS SHALL SATISFY ACI 318.83

4. PROVIDE AND INSTALL 6" THICK OF COMPACTED SUBGRADE MATERIAL (95% COMPACTION) UNDER ALL SLABS.
5. ALL EMBEDDED PIPING, TUBING, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS SHALL BE SUPPORTED TO PROVIDE A MINIMUM OF 1" CLEARANCE FROM ALL REINFORCING.
6. ALL STRUCTURAL CONCRETE SHALL HAVE A MINIMUM COMPRESSION STRENGTH OF 4000 psi.
7. REINFORCING STEEL SHALL HAVE A YIELD STRENGTH OF 60,000 psi.

RECORD DRAWINGS

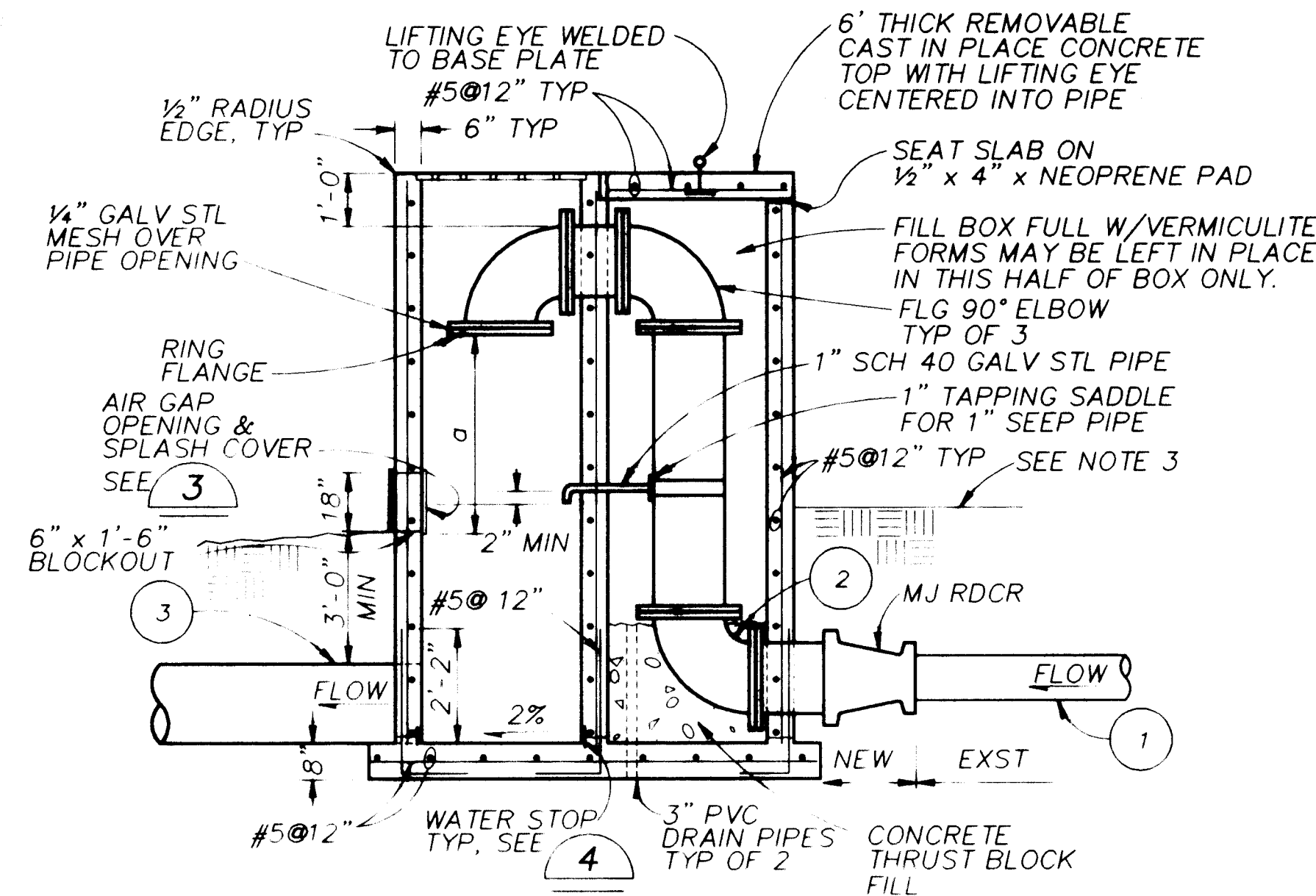
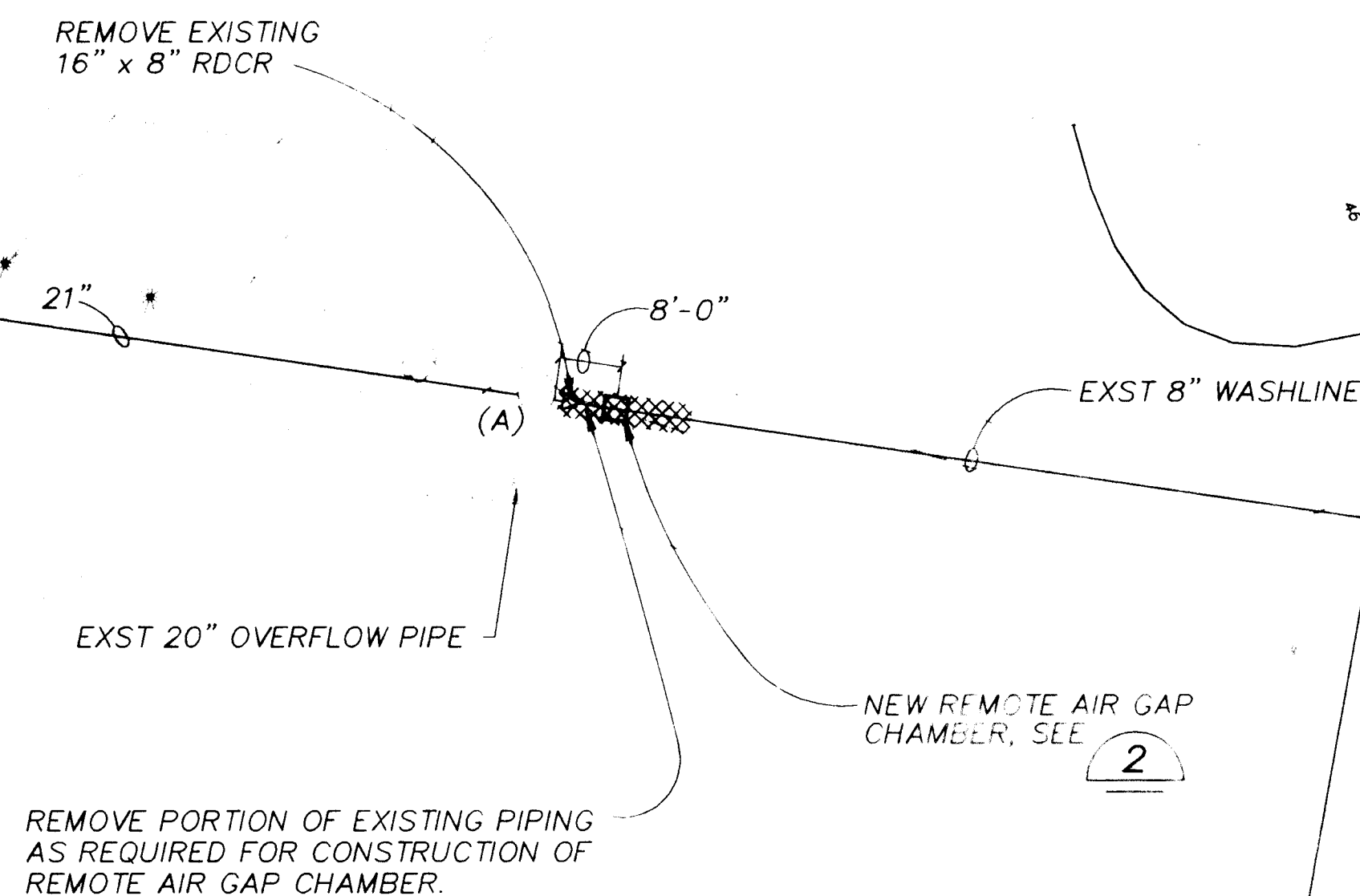
Revisions Drawn by **R. GONZALES** Date **10/12/24**

THESE RECORD DRAWINGS HAVE BEEN PREPARED, IN PART, ON THE BASIS OF INFORMATION COMPILED BY OTHERS. THEY ARE NOT INTENDED TO REPRESENT IN DETAIL THE EXACT LOCATION, TYPE OF COMPONENT NOR MANNER OF CONSTRUCTION. THE ENGINEER WILL NOT BE RESPONSIBLE FOR ANY ERRORS OR OMISSIONS WHICH HAVE BEEN INCORPORATED INTO THE RECORD DRAWINGS.

APPROVAL OF RECORD DRAWINGS
PROJECT ENGINEER
DATE: 11/24/24
SCANNED BY: LASON



| | | | | | |
|--|----------|---------|-------------|----------|----------|
| CITY OF ALBUQUERQUE PUBLIC WORKS DEPARTMENT ENGINEERING DIVISION | | | | | |
| TITLE: GRIEGOS AND THOMAS RESERVOIRS THOMAS WELL NO. 1 WASHLINE | | | | | |
| APPROVALS | ENGINEER | DATE | APPROVALS | ENGINEER | DATE |
| D.R.C. Chair | | | Water | | |
| Trans. Dev. | | | Waste Water | | |
| Hydrology | | | | | |
| DRAWING NO. | 4366.93 | MAP NO. | F-20 | SHEET | 13 OF 13 |



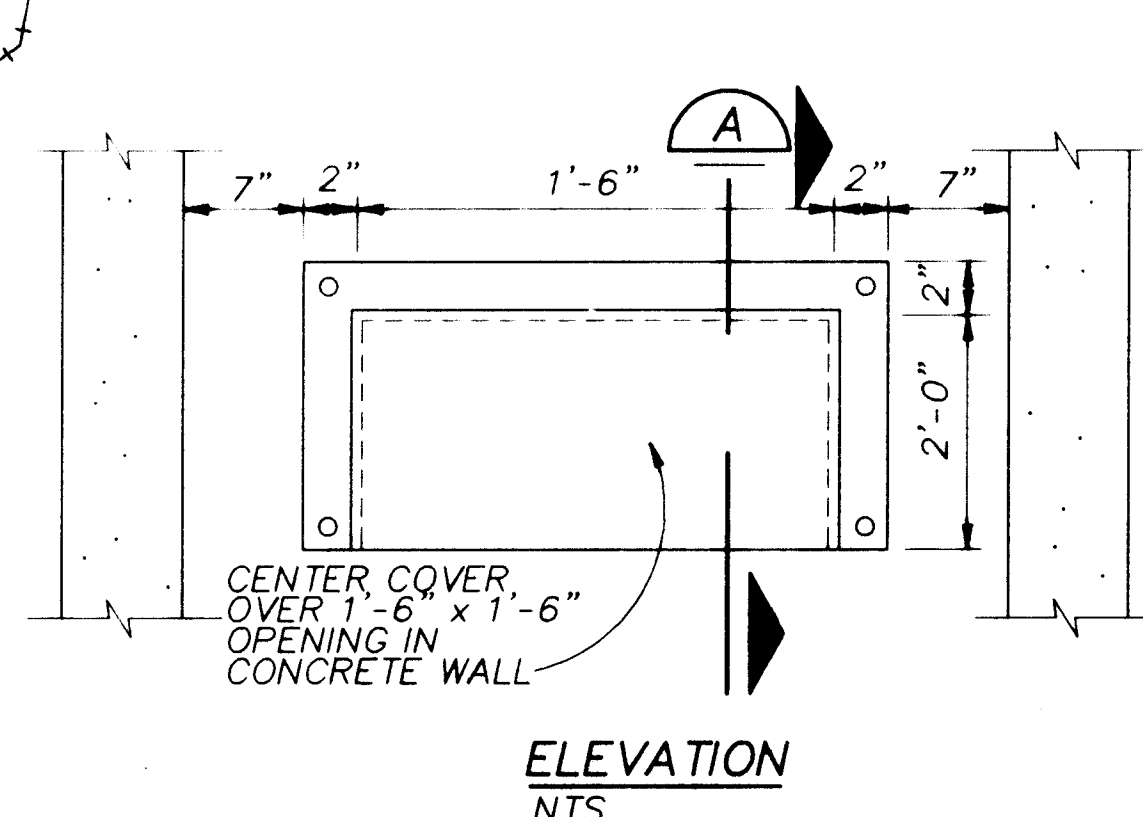
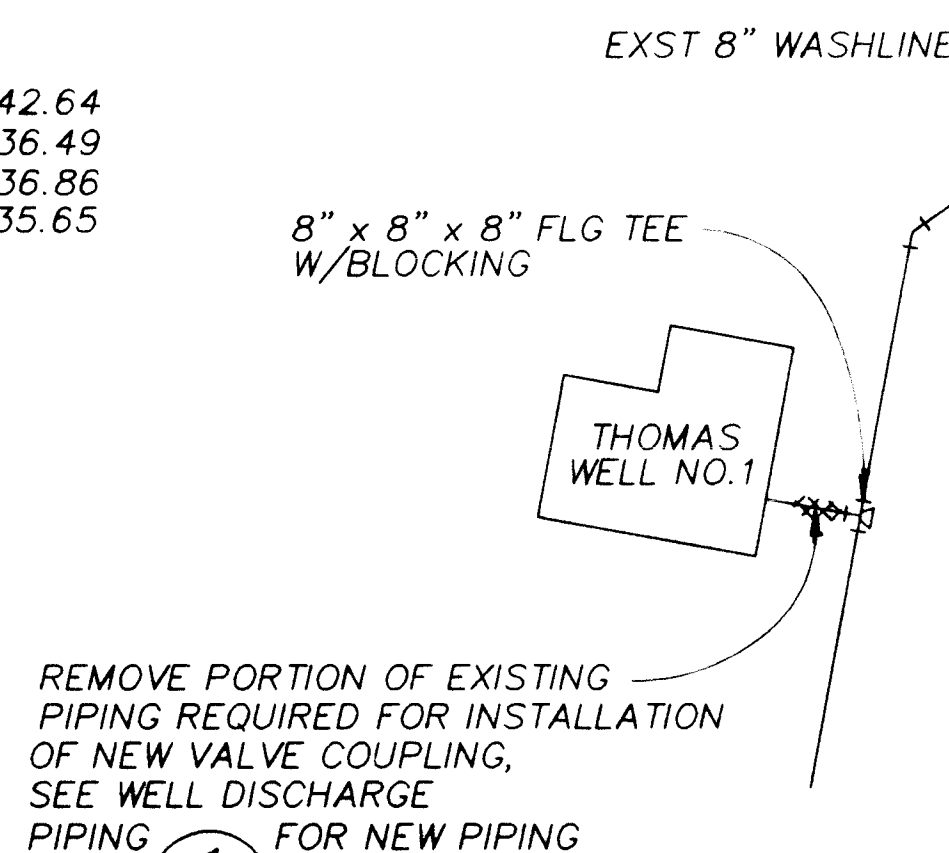
- NOTES:**
1. AT CONTRACTOR'S OPTION, AIR GAP CHAMBER PIPING MAY BE WELDED STL.
 2. 6" MIN GRAVEL BENEATH FLOOR SLAB, TYP
 3. CHAMBER HEIGHT DEPENDENT ON OUTLET PIPE INVERT AND EXST GROUND ELEV. SEE WELL SITE PLAN AND PROFILE SHEETS FOR THESE ELEVATIONS.

REMOTE AIR GAP CHAMBER (2)

NTS

| WELL SITE | a (MIN) | PIPE DIAMETER (IN) | PIPE |
|--------------|---------|--------------------|---------|
| THOMAS NO. 1 | 2'-0" | 8" | 5437.49 |

(A) MANHOLE (STORM)
NORTH RIM ELEVATION = 5442.64
EAST INVERT = 5436.49
SOUTH INVERT = 5436.86
WEST INVERT = 5435.65



SPLASH COVER (3)

NTS