

GENERAL NOTES

1. LANDSCAPE IMPROVEMENTS SHALL BE CONSTRUCTED IN COMPLIANCE WITH CITY OF TURLOCK, CA CURRENT STANDARDS AND SPECIFICATIONS AS APPROVED, INCLUDING ALL AMENDMENTS THERETO TO DATE. IMPROVEMENTS SHALL ALSO BE IN COMPLIANCE WITH CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS) STANDARD SPECIFICATIONS LATEST EDITION, WHERE APPLICABLE. IN THE EVENT THERE IS A CONFLICT WITH THE PLANS AND REFERENCES STATED ABOVE, THE GOVERNING BODY STANDARDS AND SPECIFICATIONS SHALL PREVAIL. ALL WORK SHALL BE SUBJECT TO INSPECTION.
2. DESIGN: THE DRAWINGS HEREIN REPRESENT THE DESIGN TO BE IMPLEMENTED ON THE SITE DEPICTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE LANDSCAPE ARCHITECT TO CLARIFY PLAN DETAILS RELATED TO SITE OR CONSTRUCTION DETAILS NECESSARY FOR PROJECT COMPLETION.
3. COORDINATION: CONTRACTORS SHALL COORDINATE INSTALLATION AND SCHEDULING WITH THAT OF CITY OF TURLOCK, CA AND OTHER CONTRACTORS EFFICIENTLY AND IN A TIMELY MANNER, ENSURING THE PROJECT COMPLETION IS UNIMPEDED AND INSTALLED CORRECTLY WITH MINIMAL MAINTENANCE. CITY OF TURLOCK, CA SHALL BE CONTACTED DIRECTLY AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO COVERING, COMPLETION, OR EXPOSING WORK THAT WILL BE INSTALLED.
4. SITE CONDITIONS: SEE GENERAL PROVISIONS, SPECIAL PROVISIONS, GENERAL REQUIREMENTS, AND TECHNICAL SPECIFICATIONS FOR CONTRACTOR RESPONSIBILITIES RELATED TO SITE CONDITIONS. CONTRACTOR SHALL EXAMINE EXISTING CONDITIONS OF SITE. IN THE EVENT THAT ON-SITE CONDITIONS DIFFER FROM CONDITIONS DEPICTED ON PLANS AND WILL IMPACT THE INSTALLATION PROCESS, THE CONTRACTOR SHALL SUBMIT THESE FINDINGS TO THE CITY/LANDSCAPE ARCHITECT IN WRITING PRIOR TO BEGINNING WORK. CONTRACTOR SHALL CONFIRM ALL POINTS OF CONNECTIONS PRIOR TO CONSTRUCTION. COMMENCEMENT OF WORK IMPLIES ACCEPTANCE OF THE EXISTING SITE CONDITIONS.
5. BASE INFORMATION: THE PROPOSED LANDSCAPE IMPROVEMENTS SHOWN HEREIN ARE SUPERIMPOSED OVER DATA PROVIDED TO THE LANDSCAPE ARCHITECT BY OTHER SOURCES. THE LANDSCAPE ARCHITECT SHALL NOT BE HELD LIABLE FOR THE CHANGES, INACCURACIES, OMISSIONS, OR OTHER ERRORS RELATED TO THIS DATA. THE BASE INFORMATION IS PROVIDED AS AN AID ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING ALL DOCUMENTS AND ACCOMMODATING ANY DISCREPANCIES.
- BASE INFORMATION PROVIDED BY:  
TOPOGRAPHICAL SURVEY –
- O'DELL ENGINEERING  
1165 SCENIC DRIVE, SUITE A  
MODESTO, CA 95350  
PHONE: (209)571-1765  
FILE: 37512-TP-NEW.DWG
6. BIDDING INFORMATION: SEE GENERAL PROVISIONS, SPECIAL PROVISIONS, GENERAL REQUIREMENTS, AND TECHNICAL SPECIFICATIONS FOR CONTRACTOR RESPONSIBILITIES RELATED TO BIDDING INFORMATION AND SITE VISITS PRIOR TO BID SUBMITTAL.
7. PRE-CONSTRUCTION MEETING: THE CONTRACTOR SHALL OBTAIN A GRADING PERMIT/BUILDING PERMIT, FROM THE CITY OF TURLOCK, CA BUILDING DEPARTMENT, PRIOR TO SCHEDULING A PRE-CONSTRUCTION MEETING OR OBTAINING AN ENCROACHMENT PERMIT. A PRE-CONSTRUCTION MEETING SHALL BE COORDINATED WITH THE APPROPRIATE REGULATORY BODY PRIOR TO BEGINNING WORK. APPLICABLE AGENCIES AND PARTIES SHALL BE NOTIFIED AT LEAST 3 WORKING DAYS (72 HOURS) IN ADVANCE OF THE PRE-CONSTRUCTION MEETING.
8. UTILITIES: THE CONTRACTOR AND ANY SUBCONTRACTORS SHALL CONTACT U.S.A. AT LEAST TWO WORKING DAYS (48 HOURS) PRIOR TO BEGINNING WORK.
9. POT HOLING: ONLY EXCAVATION WILL REVEAL ACTUAL TYPES, LOCATIONS, SIZES, AND DEPTHS OF UNDERGROUND UTILITIES. THE LANDSCAPE ARCHITECT ASSUMES NO RESPONSIBILITY FOR THE ACCURACY OF UNDERGROUND UTILITIES OR OF BURIED EXISTING OBJECTS AND UTILITIES NOT SHOWN ON THESE PLANS.
10. AS-BUILTS: FOR AS-BUILT PURPOSES, THE CONTRACTOR SHALL KEEP A CURRENT SET OF DRAWINGS ON SITE AT ALL TIMES WITH DEVIATIONS FROM ORIGINAL PLANS AND SPECIFICATIONS NOTED. UPON PROJECT COMPLETION THE CONTRACTOR SHALL PROVIDE THE CITY WITH A DIGITAL FORMAT, COMPLETE SET OF AS-BUILT DRAWINGS.

SURVEY CONTROL

HORIZONTAL DATUM  
1986 ADJUSTMENT OF NORTH AMERICAN DATUM OF 1993 (NAD83), EPOCH 1984.00

COORDINATE SYSTEM  
CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE III.

VERTICAL DATUM  
ELEVATIONS SHOWN HEREON ARE BASED ON THE CITY OF TURLOCK DATUM.

PROJECT BENCHMARK  
CITY OF TURLOCK BM#22-4-1, BRASS PLUG LOCATED ON TOP OF CURB, ON THE SOUTH SIDE OF HIGH STREET, APPROXIMATELY 50 FEET FROM WEST AVENUE.

ELEVATION = 95.85 FEET (CITY OF TURLOCK DATUM)


CONTROL POINT TABLE

| POINT NUMBER | NORTHING | EASTING  | DESCRIPTION |
|--------------|----------|----------|-------------|
| 16006        | -575.87  | 1643.410 | SET M/S     |
| 16007        | -513.080 | 1362.640 | SET CUT X   |
| 16008        | -810.610 | 1433.290 | SET CUT X   |

CONTACT INFORMATION

- OWNER:  
CITY OF TURLOCK  
156 S. BROADWAY, SUITE 150  
RANDALL JONES, P.E.  
ASSOCIATE CIVIL ENGINEER  
OFFICE: (209) 668-5520
- LANDSCAPE ARCHITECT & CIVIL ENGINEER:  
O'DELL ENGINEERING  
1165 SCENIC DRIVE, SUITE A & B  
MODESTO, CA 95350  
PHONE: (209)571-1765
- POOL ARCHITECT/ENGINEER:  
AQUATIC DESIGN GROUP, INC. (ADG)  
2226 FARADAY AVENUE  
CARLSBAD, CA 92008  
PHONE: (800) 938-0542
- ELECTRICAL ENGINEER:  
PEZZONI ENGINEERING, INC.  
1150 9TH STREET STE. 1415  
MODESTO, CA 95354  
PHONE: (209) 554-4602

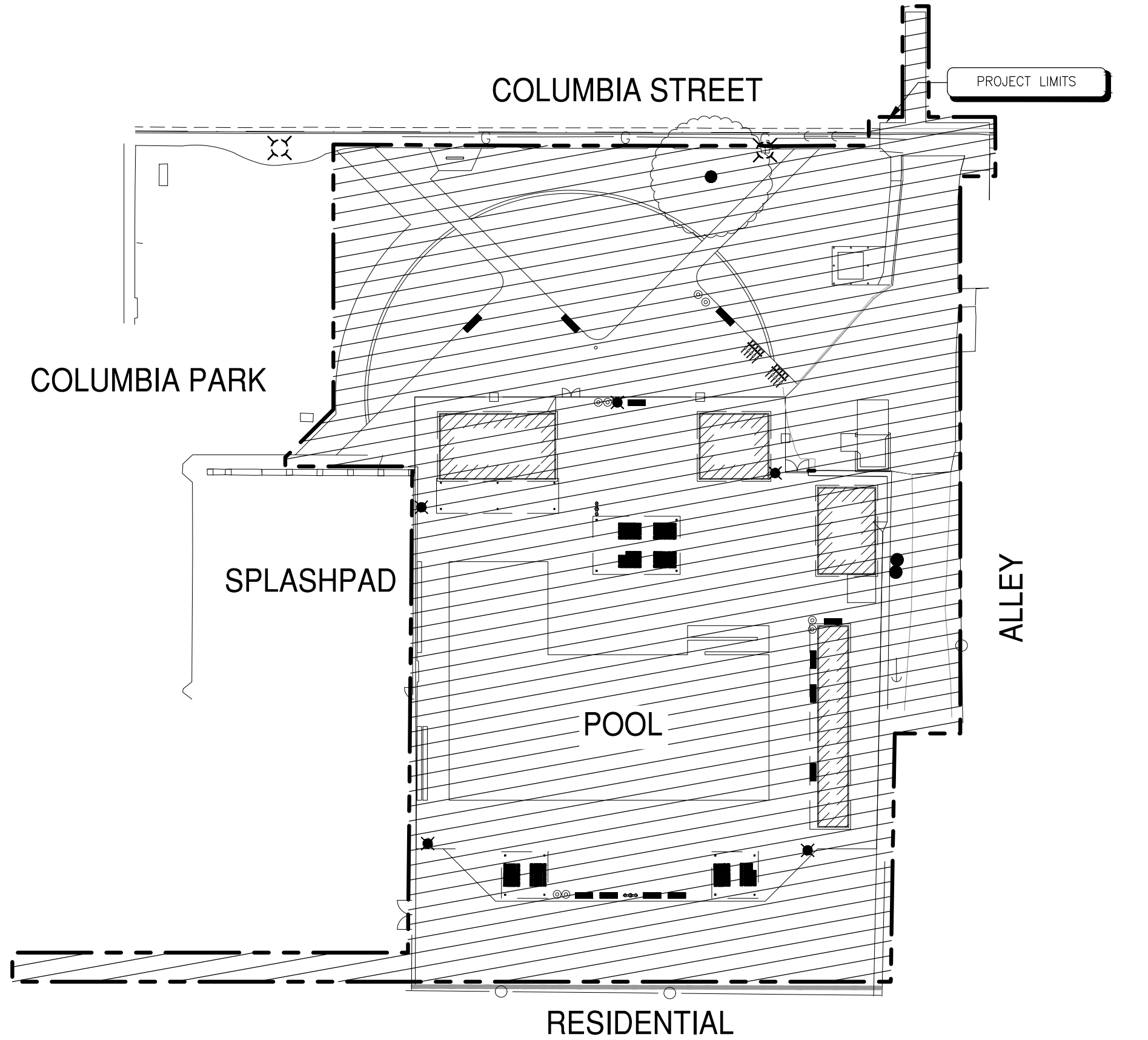
APPROVED BY THE CITY OF TURLOCK, CA

BY:  8/15/2023  
DATE:  
WILLIAM D. MORRIS, RCE 53910  
ACTING CITY ENGINEER

COLUMBIA POOL  
IMPROVEMENTS

CITY PROJECT #19-51  
IMPROVEMENT PLANS

600 COLUMBIA STREET, TURLOCK, CA



IMPROVEMENT LIMITS

PROJECT INFORMATION

|                    |  |  |  |
|--------------------|--|--|--|
| PROJECT TITLE:     | CITY PROJECT #19-51<br>"COLUMBIA POOL IMPROVEMENTS"  | PROJECT TYPE:                          | RENOVATION   |
| PARCEL NUMBER:     | 050-022-016  | GRADING & UTILITY PLANS:               | SEE GRADING & UTILITY PLANS  |
| ZONING:            | PUBLIC ACCESS  | BUILDING PLANS:                        | SEE REFERENCE DETAILS  |
| PROJECT ADDRESS:   | 600 COLUMBIA STREET<br>TURLOCK, CA, 95380  | POOL IMPROVEMENTS                      | SEE AQUATIC DESIGN PLANS   |
| APPLICANT/OWNER:   | CITY OF TURLOCK<br>156 S. BROADWAY, SUITE 150<br>RANDALL JONES, P.E.<br>ASSOCIATE CIVIL ENGINEER<br>OFFICE: 209-668-5520   | WATER SUPPLY TYPE<br>& LOCAL PURVEYOR: | POTABLE<br>CITY OF TURLOCK   |
| PLANS PREPARED BY: | O'DELL ENGINEERING<br>1165 SCENIC DRIVE, SUITE A<br>MODESTO, CA 95350<br>(209) 571-1765 OFFICE<br>(209) 571-2466 FAX<br>EMAIL:<br>JGRAFTON@ODELLENGINEERING.COM<br>CLA #6127 | ADJACENT PROPERTY<br>USES:             | NORTH - COLUMBIA PARK<br>SOUTH - RESIDENTIAL<br>EAST - RESIDENTIAL<br>WEST - COLUMBIA PARK   |
| LICENSE NUMBER:    | CLA #6127  | SOIL REPORT:                           | NOTE: SOIL AMENDMENTS IN THE<br>GENERAL PLANTING NOTES ARE FOR<br>BID PURPOSES ONLY. ACTUAL<br>AMENDMENTS SHALL REFLECT THE<br>RECOMMENDATIONS OF THE REPORT<br>ONCE FINAL MASS GRADING HAS BEEN<br>PERFORMED AND SAMPLES HAVE BEEN<br>SUBMITTED TO SOILS LAB. |
| LANDSCAPE AREA:    | 15,454 SF  |  |  |

ABBREVIATIONS

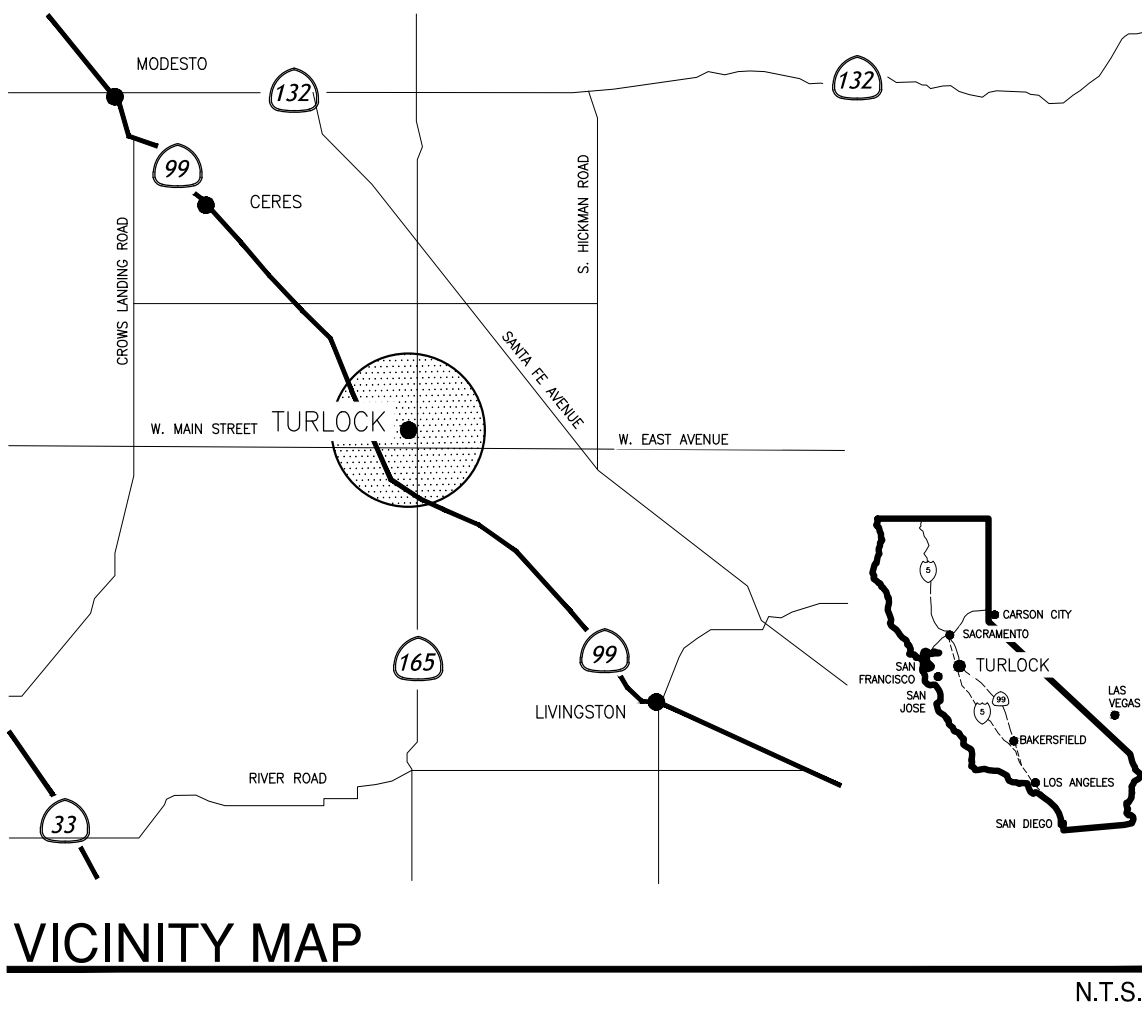
|           |                        |      |                         |
|-----------|------------------------|------|-------------------------|
| AC        | ASPHALT CONCRETE       | GB   | GRADE BREAK             |
| BC        | BOTTOM OF CURB         | HP   | HIGH POINT              |
| BFP       | BACKFLOW PREVENTER     | INV  | INVERT ELEVATION        |
| BW        | BOTTOM OF WALL         | IRR  | IRRIGATION              |
| BOW       | BACK OF WALL           | LIP  | LIP OF GUTTER           |
| CJ        | TOOLED CONTROL JOINT   | MAX  | MAXIMUM                 |
| CL        | CENTERLINE             | MIN  | MINIMUM                 |
| CLR       | CLEAR                  | N    | NORTH                   |
| CIP       | CAST IN PLACE          | (N)  | NEW                     |
| CMU       | CONCRETE MASONRY UNIT  | OC   | ON CENTER               |
| C, CONC   | CONCRETE               | OH   | OVERHEAD                |
| DWGS      | DRAWINGS               | PA   | PLANTING AREA           |
| DWY       | DRIVEWAY               | POB  | POINT OF BEGINNING      |
| E         | EAST                   | PV   | PAVEMENT                |
| (E) OR EX | EXISTING               | R    | RADIUS                  |
| ELEC      | ELECTRICAL             | RIM  | RIM ELEVATION           |
| ELEV      | ELEVATION              | RP   | RADIUS POINT            |
| EJ        | EXPANSION JOINT        | S    | SOUTH                   |
| EP        | EDGE OF PAVEMENT       | SD   | STORM DRAIN             |
| EQ        | EQUAL                  | SIM  | SIMILAR                 |
| FC        | FACE OF CURB           | SMH  | SEWER MANHOLE           |
| FCL       | FENCE CHAIN LINK       | SS   | SANITARY SEWER          |
| FDE       | FINISH DECK ELEVATIONS | SSCO | SANITARY SEWER CLEANOUT |
| FF/FFE    | FINISH FLOOR ELEVATION | SSMH | SANITARY SEWER MANHOLE  |
| FG        | FINISH GRADE           | TBD  | TO BE DETERMINED        |
| FL        | FLOW LINE              | TC   | TOP OF CURB             |
| FM        | FENCE METAL            | TP   | TOP OF PAVEMENT         |
| FOB       | FACE OF BUILDING       | TW   | TOP OF WALL             |
| FOW       | FACE OF WALL           | TYP  | TYPICAL                 |
| FS        | FINISH SURFACE         | W    | WATER                   |
| FV        | FIELD VERIFY           | W    | WEST                    |
| FW        | FENCE WOOD             | WM   | WATER METER             |
| G         | GAS                    |      |                         |

ELECTRICAL IMPROVEMENTS

- E0.1 ELECTRICAL COVER SHEET  
E1.1 OVERALL SITE PLAN - ELECTRICAL  
E1.2 SITE PLAN - PHOTOMETRICS  
E2.1 PLOT PLANS - ELECTRICAL  
E3.1 ELECTRICAL DETAILS

REFERENCE DOCUMENTS

- PROJECT 0943 COLUMBIA PARK WATER FEATURE
- CITY OF TURLOCK WATER SYSTEM MAP



VICINITY MAP

SHEET INDEX: SITE IMPROVEMENTS

- |      |   |
|------|---|
| CS   | COVER SHEET                             |
| L1.0 | DEMOLITION PLAN                         |
| L2.0 | EROSION CONTROL                         |
| C1.0 | CIVIL NOTES SHEET                       |
| C2.0 | GRADING & DRAINAGE PLAN                 |
| C3.0 | UTILITY PLAN                            |
| C4.0 | CITY STANDARD DETAILS                   |
| C4.1 | CITY STANDARD DETAILS                   |
| C4.2 | DETAILS                                 |
| L3.0 | SITE FEATURES LEGEND, NOTES & PLAN      |
| L4.0 | HORIZONTAL CONTROL PLAN - SITE WORK     |
| L4.1 | HORIZONTAL CONTROL PLAN - SITE FEATURES |
| L5.0 | IRRIGATION LEGEND & NOTES               |
| L5.1 | IRRIGATION PLAN                         |
| L6.0 | PLANTING LEGEND & NOTES                 |
| L6.1 | PLANTING PLAN                           |
| L7.0 | CONSTRUCTION DETAILS                    |
| L7.1 | CONSTRUCTION DETAILS                    |
| L7.2 | CONSTRUCTION DETAILS                    |
| L7.3 | PREFABRICATED BUILDING DETAILS          |
| L8.0 | IRRIGATION DETAILS                      |
| L9.0 | PLANTING DETAILS                        |

POOL & MECHANICAL ROOM IMPROVEMENTS

- DP-1 SWIMMING POOL DECK PLAN  
SP-1 SWIMMING POOL LAYOUT PLAN  
SP-2 SWIMMING POOL PIPING & UNDERWATER LIGHT PLAN  
SP-3 SWIMMING POOL SECTIONS  
SP-4 SWIMMING POOL DETAILS  
SP-5 SWIMMING POOL DETAILS  
SP-6 SWIMMING POOL DETAILS  
SP-7 SWIMMING POOL DETAILS  
SP-8 SWIMMING POOL DETAILS  
SP-9 SWIMMING POOL DETAILS  
SP-10 SWIMMING POOL DETAILS  
MR-1 SWIMMING POOL MECHANICAL ROOM PLAN  
MR-2 MECHANICAL ROOM DETAILS  
MR-3 MECHANICAL ROOM DETAILS  
MR-4 MECHANICAL ROOM DETAILS  
MR-5 MECHANICAL ROOM DETAILS  
MR-6 MECHANICAL ROOM DETAILS  
MR-7 MECHANICAL ROOM DETAILS  
MR-8 MECHANICAL ROOM DETAILS

BID SUBMITTAL

| PLAN REVISIONS |      |          |
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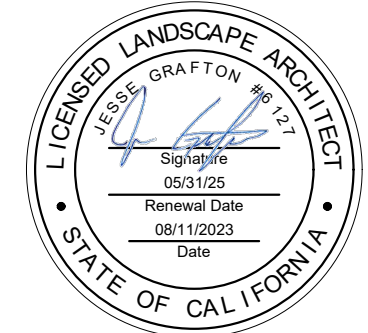


1165 Scenic Drive, Suite A  
Modesto, CA 95350

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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

COVER SHEET



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: 1"=40'

DATE: 08/11/2023

JOB NO.: 37512

FILE NO.: 37512-CS.DWG

SHEET NO.

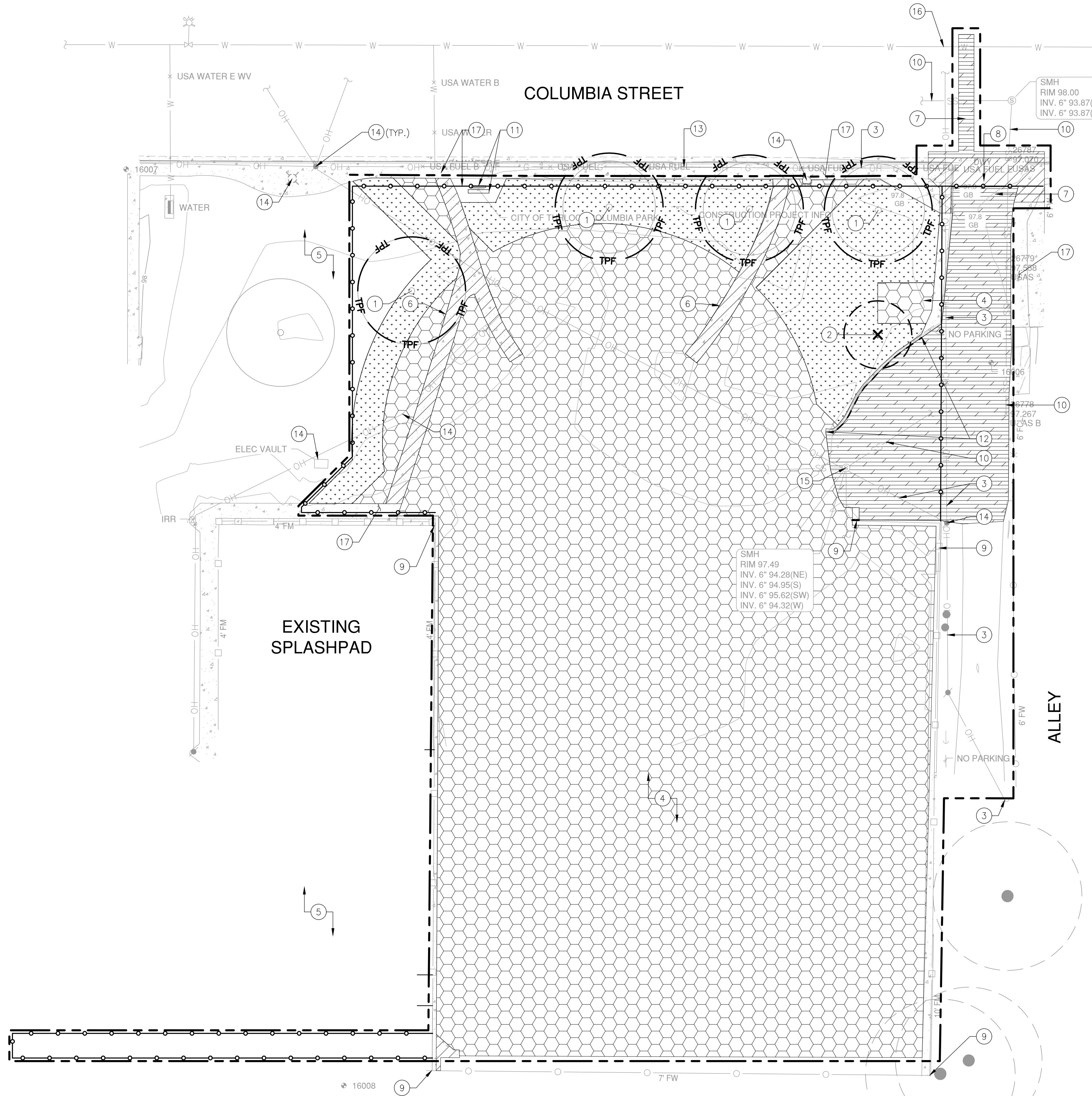
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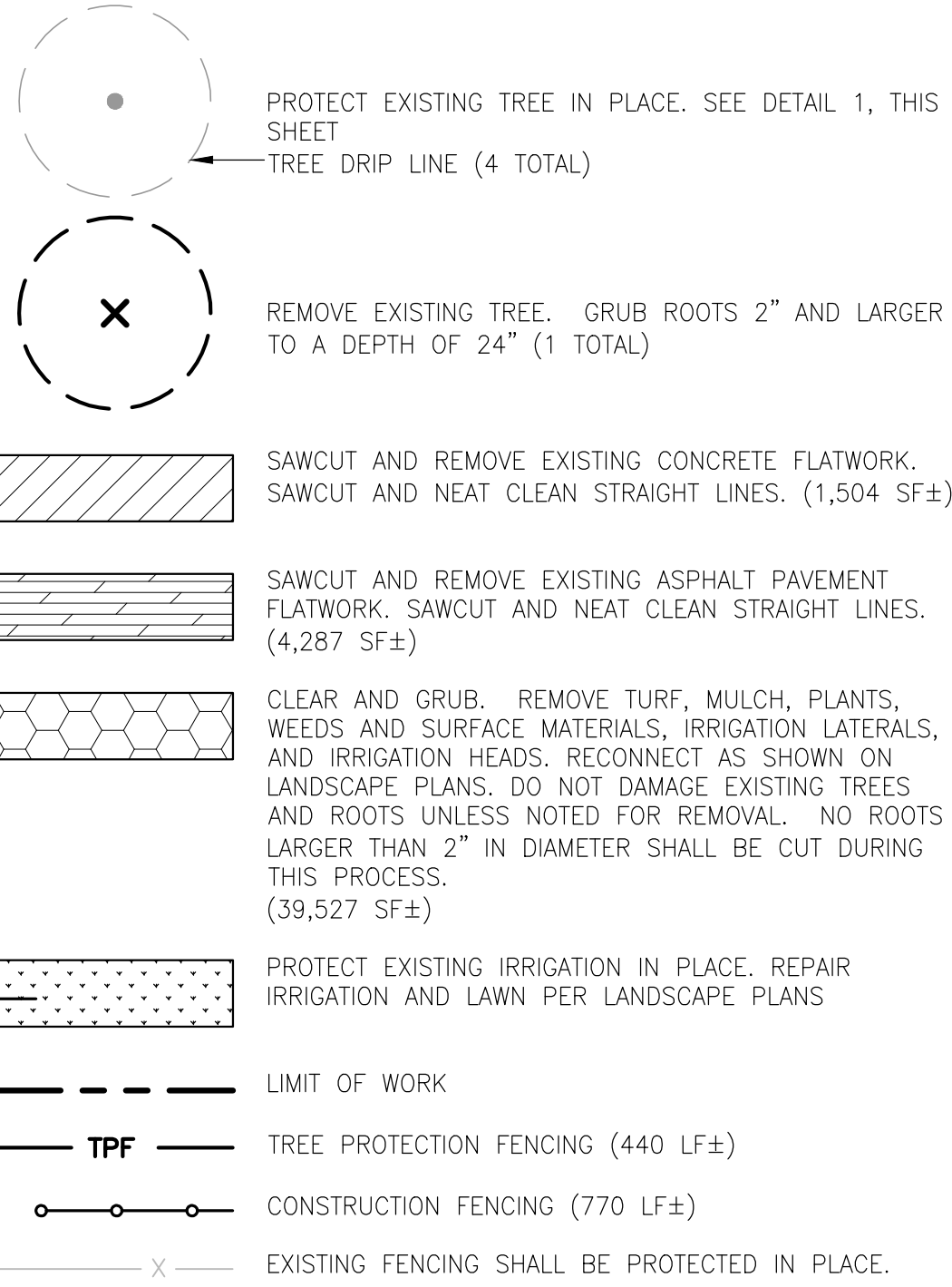
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### DEMOLITION LEGEND



### DEMOLITION NOTES

- ALL ITEMS SCHEDULED FOR REMOVAL SHALL BE PROPERLY DISPOSED OF OFF-SITE OR RETURNED TO CITY. VERIFY DIRECTION WITH CITY PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES AND PUBLIC AGENCIES TO DISCONNECT EXISTING UTILITIES TO THE PROJECT SITE PRIOR TO DEMOLITION.
- CONTRACTOR SHALL PROTECT ALL UTILITY STRUCTURES UNLESS OTHERWISE NOTED.
- CONSTRUCTION FENCE SHALL BE INSTALLED ONLY WHILE UTILITIES ARE UNDER CONSTRUCTION. CONTRACTOR SHALL LIMIT ROAD CLOSURE.
- TREE CANOPIES SHOWN ON PLAN MAY NOT REFLECT ACTUAL CANOPIES. CONTRACTOR SHALL PROVIDE TREE FENCING AT TREE DRIPLINE.
- ALLEY ACCESS MUST BE MAINTAINED AT ALL TIMES.

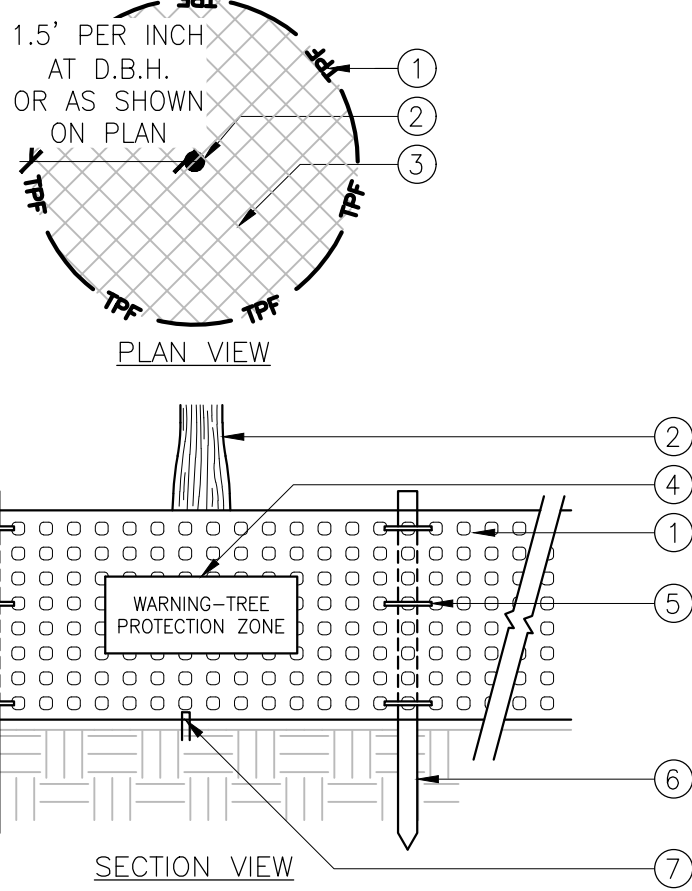
### SHEET NOTES

- ALL EXISTING TREES SHALL BE PROTECTED IN PLACE. INSTALL TREE PROTECTION FENCING PER THIS PLAN.
- REMOVE EXISTING TREE (1).
- EXISTING OVERHEAD POWER LINE. USE EXTREME CAUTION!! - SEE ELECTRICAL PLANS FOR REMOVAL & UNDERGROUNDING.
- CLEAR AND GRUB, SEE DEMOLITION LEGEND.
- CONTRACTOR SHALL PROTECT EXISTING LAWN AND KEEP IRRIGATED THROUGH DURATION OF CONSTRUCTION. REPAIR IRRIGATION AND LAWN PER LANDSCAPE PLANS.
- CONTRACTOR SHALL REMOVE EXISTING CONCRETE FLATWORK.
- CONTRACTOR SHALL REMOVE EXISTING AC PAVEMENT.
- CONTRACTOR SHALL COORDINATE WITH THE CITY PRIOR TO TEMPORARY CLOSURE(S) OF ALLEY.
- EXISTING FENCE AND GATE SHALL BE PROTECTED IN PLACE.
- EXISTING SEWER LINE SHALL BE PROTECTED IN PLACE.
- REMOVE EXISTING CITY SIGN AND LIGHT AND LEGALLY DISPOSE OF OFF SITE.
- CONTRACTOR SHALL REMOVE EXISTING CONCRETE VERTICAL CURBING. (45 LF±)
- EXISTING GAS LINE TO BE PROTECTED IN PLACE.
- EXISTING ELECTRICAL STRUCTURE TO BE PROTECTED IN PLACE.
- EXISTING SANITARY SEWER MANHOLE TO BE REMOVED AND REPLACED.
- EXISTING WATER LINE TO BE PROTECTED IN PLACE.
- EXISTING CONCRETE PAVEMENT SHALL BE PROTECTED IN PLACE.

- PROTECTIVE BARRIER FENCING MATERIAL, DEFINING THE EDGE OF THE TREE PROTECTIVE ZONE, SHALL BE:
  - 4' HEIGHT
  - UV STABILIZED
  - 2600 PSI TENSILE STRENGTH
  - BRIGHT CONTRASTING COLORPLACED AT A DISTANCE 1.5' PER INCH AT DIAMETER AT BREAST HEIGHT (D.B.H.) FROM THE TRUNK, OR AS OTHERWISE SHOWN ON PLAN.
- EXISTING TREE TO BE PROTECTED
- PROTECTION ZONE
- WARNING SIGN ON EACH FENCE AS DEPICTED, WATERPROOF 18"x24"
- UV STABILIZED 120LB BREAKING STRENGTH, NYLON TIE, MATCHING BARRIER COLOR (3 PER POST).
- FENCE POST- METAL T-POSTS OR EQUAL @ 8' O.C.
- 6" GROUND STAPLES

#### NOTES:

- EXISTING TREES WITHIN PROJECT LIMIT OF WORK SHOWN TO BE PROTECTED SHALL BE FENCED OFF WITH ORANGE CONSTRUCTION FENCING AS INDICATED ABOVE.
- WATERPROOF SIGNS (18"x24"), SHALL BE POSTED AT ENTRANCE POINTS TO SITE WITH INSTRUCTIONS TO PERSONNEL REGARDING RESTRICTIONS WITHIN THE FENCED AREAS. THE FOLLOWING ACTIVITIES MAY NOT OCCUR WITHIN THE FENCED AREAS:
  - ADDITION/REMOVAL/STORAGE OF SOIL,
  - PARKING OF VEHICLES, PLACEMENT OF EQUIPMENT, STORAGE OF MATERIALS
  - BURNING AND CEMENT WASH-OUT
- ALL UNDERGROUND WORK REQUIRED WITHIN DRIP LINE OF TREES AND BELOW ORIGINAL GRADE SHALL BE PREVIEWED BY THE CITY AND LANDSCAPE ARCHITECT TO DETERMINE POTENTIAL IMPACT ON TREES HAND TRENCHING SHALL BE REQUIRED WHERE EXISTING TREE ROOT SYSTEMS COULD BE DAMAGED BY EQUIPMENT.
- A TREE WATERING SCHEDULE SHALL BE REQUIRED WHEN CONSTRUCTION LASTS MORE THAN 1-MONTH. CONTRACTOR SHALL PROVIDE TO CITY FOR REVIEW AND APPROVAL PRIOR TO START OF CONSTRUCTION.
- ADDITIONAL PROTECTION SHALL BE REQUIRED WHEN: TREE'S CANOPY IS IN JEOPARDY, EXTREME SOIL COMPACTION OCCURS NEAR TREE, OR MAJOR GRADE CHANGE OCCURS NEAR TREE.
- IN THE EVENT THAT ROOT DAMAGE TO FIBROUS/MINOR ROOTS OCCURS DURING PROJECT CONSTRUCTION THEY SHALL BE CLEANLY SEVERED AT A 90° ANGLE TO MINIMIZE DAMAGE.
- IN THE EVENT THAT THE ARBORIST RECOMMENDS REPLACEMENT OF AN EXISTING TREE DAMAGED BY THE CONTRACTOR, THE CONTRACTOR SHALL REPLACE THE TREE WITH STOCK NO SMALLER THAN A 48" BOX AND FAIRLY COMPENSATE THE CITY FOR DAMAGES.



### 1 TREE PROTECTION FENCING

NOT TO SCALE

BID SUBMITTAL



| PLAN REVISIONS |      |          |
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**O'DELL**  
ENGINEERING

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Modesto, CA 95350

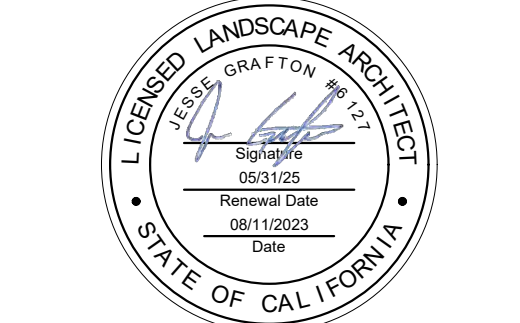
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# IMPROVEMENT PLANS

## COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

### DEMOLITION PLAN



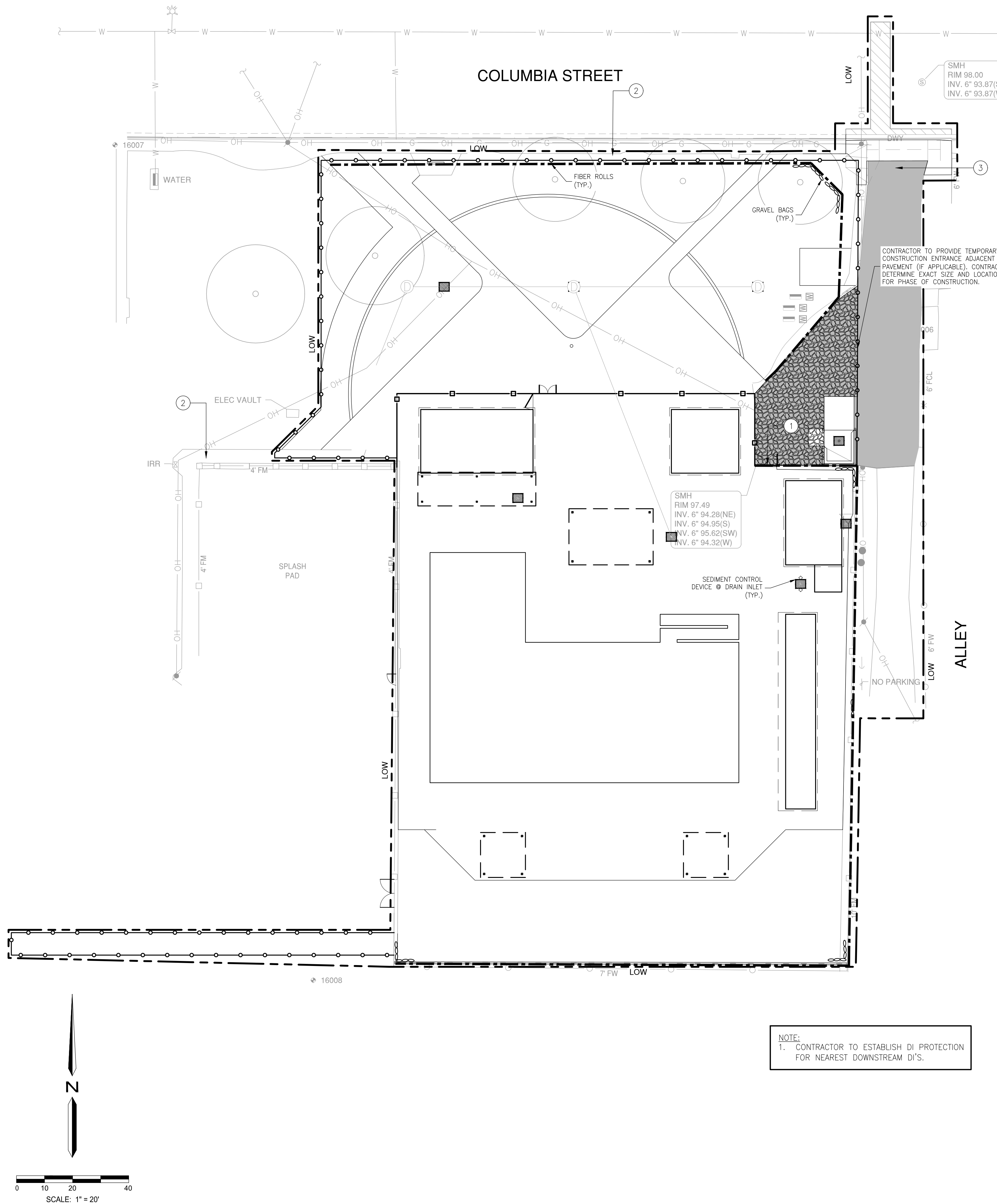
APPROVED:

DESIGNED: JG, VR, JS  
DRAWN: VR, JS  
CHECKED: JG  
SCALE: 1"=20'  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-DM.DWG

SHEET NO.  
**L1.0**  
OF  
**46**



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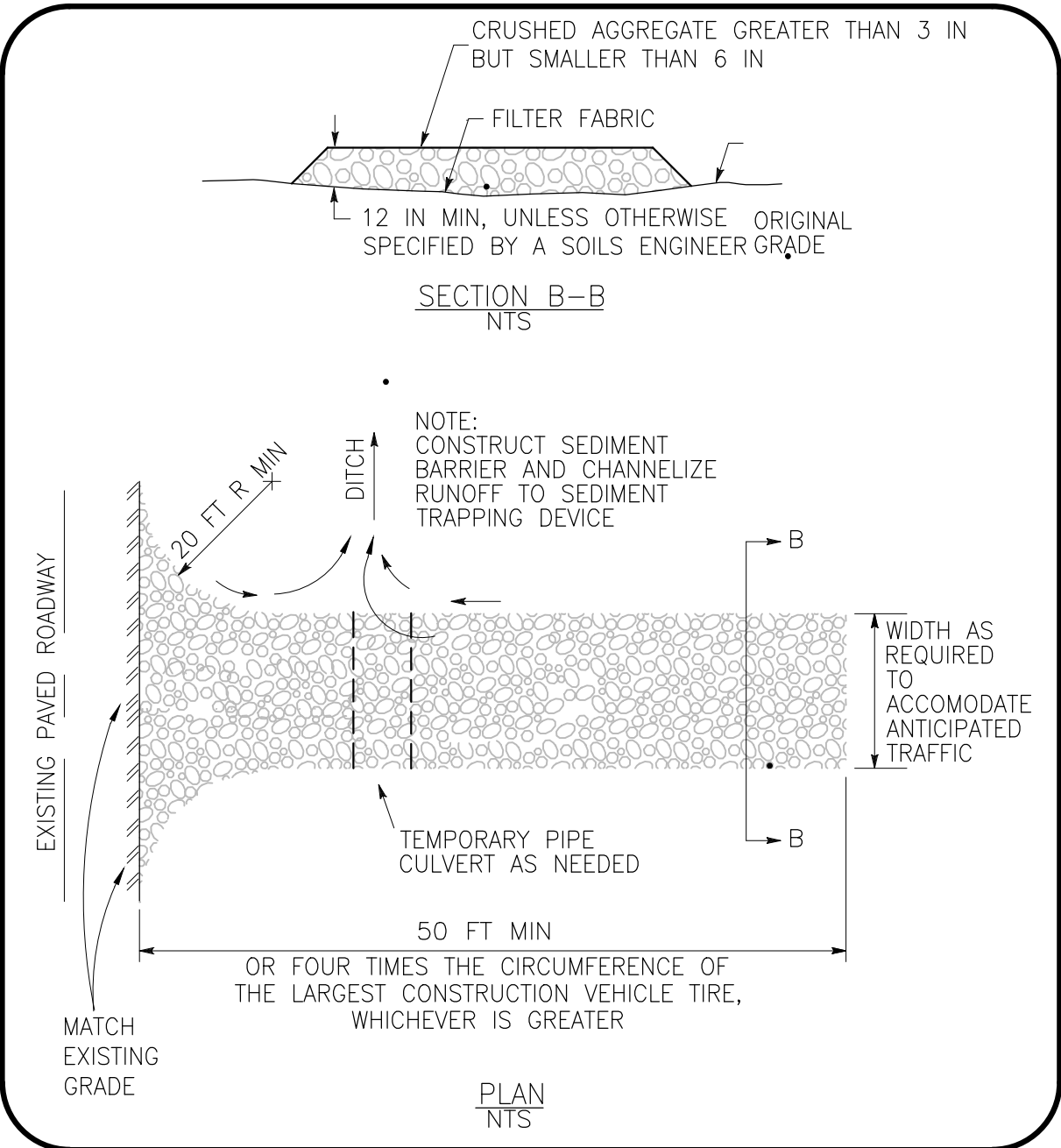


### WINTERIZATION NOTES

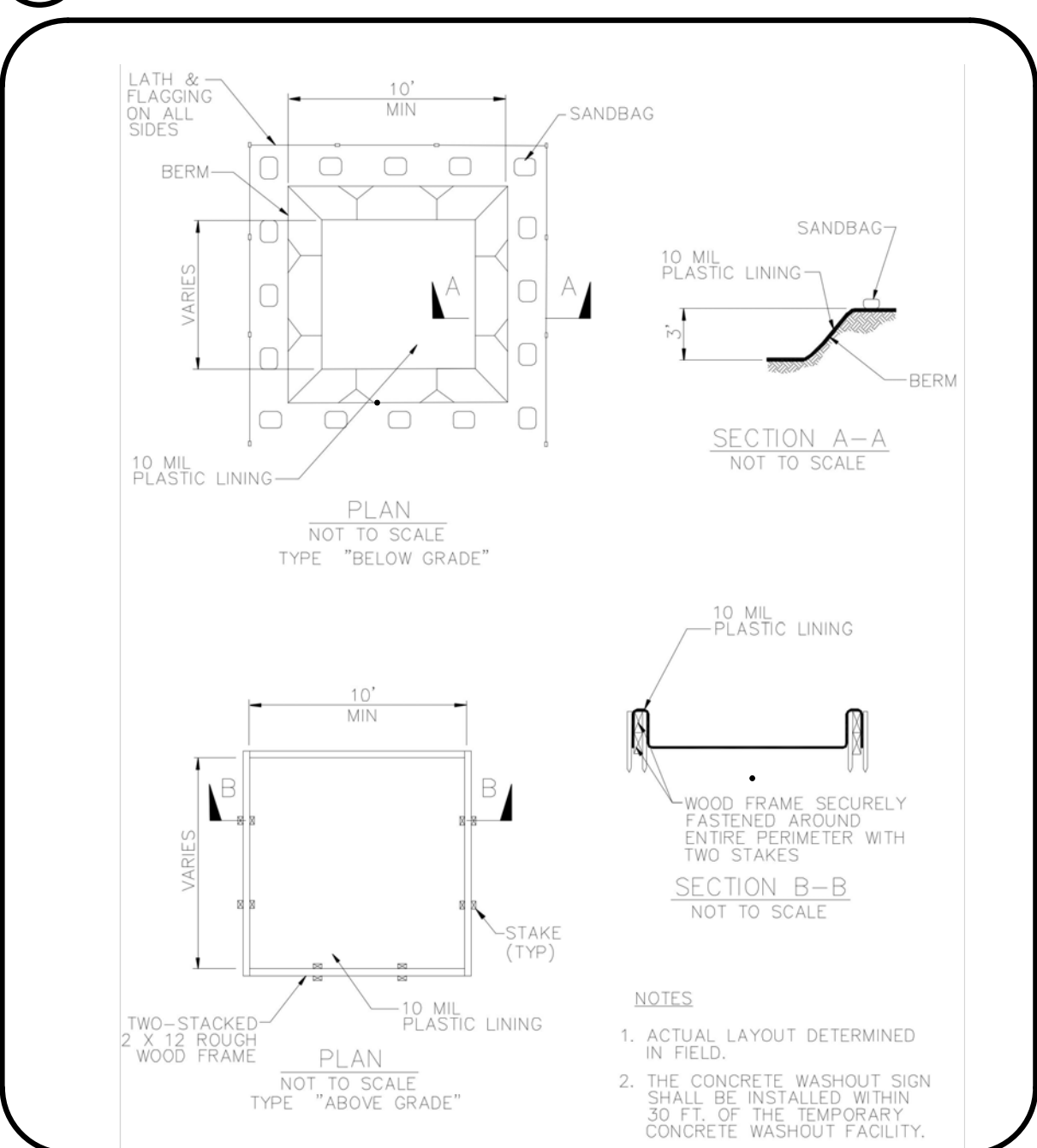
1. ALL MATERIALS NECESSARY FOR WINTERIZATION SHALL BE AVAILABLE AT THE SITE COMPLETED BY OCTOBER 15.
2. EACH FIBER ROLL SHALL BE SECURELY HELD WITH 1"x1"x18" STAKES. (WHERE APPLICABLE.)
3. IF ANY GRAVEL BAGS ARE MOVED AND/OR RELOCATED IN GAINING ACCESS TO THE SITE DURING THE WINTER MONTHS, THEY SHALL BE REPLACED IF THEY ARE NO LONGER STABLE. ONCE INSTALLED, ALL WINTERIZATION MATERIALS SHOULD BE CHECKED BEFORE EACH WEEKEND AND EACH STORM.
4. THIS PLAN IS INTENDED TO BE USED FOR EROSION CONTROL ONLY. OTHER INFORMATION SHOWN HEREIN MAY NOT BE THE MOST CURRENT.
5. AFTER THE UNDERGROUND STORM DRAIN SYSTEM IS INSTALLED, THE CATCH BASINS WILL BE INSTALLED (AS SOON AS PRACTICAL) AND THE SEDIMENT CONTROL DEVICE WILL BE PLACED AROUND THOSE CATCH BASINS AS SHOWN ON THIS PLAN AND IN THE DETAIL ON THIS SHEET UNTIL THE SITE IS PAVED.

### SHEET NOTES

1. DESIGNATED CONSTRUCTION ENTRANCE. CONTRACTOR TO MAINTAIN ENTRANCE TO REMAIN FREE OF MUD AND DEBRIS. WASH TIRES AS NEEDED TO MAINTAIN ENTRANCE AND PREVENT TRACKING OFF SITE. SEE DETAIL 3, THIS SHEET.
2. CONTRACTOR SHALL PROTECT EXISTING PAVEMENT, CURB AND GUTTER IN PLACE. IF DAMAGED, CONTRACTOR SHALL REPLACE AT NO ADDITIONAL COST TO CITY.
3. CONTRACTOR SHALL MAINTAIN ALLEY ACCESS TO RESIDENTS AT ALL TIMES.



3 STABILIZED CONSTRUCTION ENTRANCE/EXIT NOT TO SCALE



4 CONCRETE WASTE MANAGEMENT NOT TO SCALE

### EROSION CONTROL LEGEND

- FIBER ROLL, SEE DETAIL 1 ON THIS SHEET.
- TEMPORARY GRAVEL BAGS, SEE DETAIL 2 ON THIS SHEET.
- CONSTRUCTION FENCE. SEE DEMOLITION PLAN, SHEET L1.0.
- LIMIT OF WORK (L.O.W.).
- SEDIMENT CONTROL PER DETAIL 2, THIS SHEET.

### SEDIMENT CONTROL DEVICES

1. CONTRACTOR SHALL PROVIDE TEMPORARY SEDIMENT CONTROL DEVICE AT CATCH BASINS AS SHOWN IN DETAIL. CONTRACTOR MAY SUBSTITUTE OTHER SEDIMENT CONTROL DEVICES (GRAVEL BAGS, SILT TRAPS, ETC.) UNDER THE DIRECTION OF THE CITY.

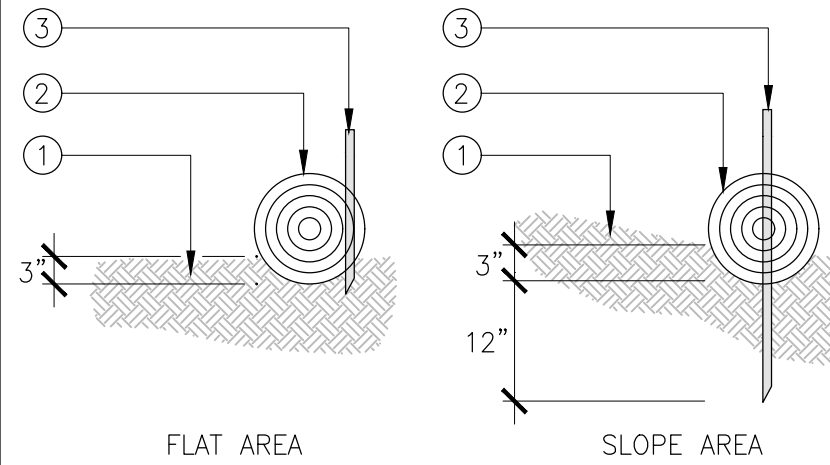
### DUST CONTROL MEASURES

1. CONTRACTOR TO PRACTICE DUST CONTROL MEASURES IN ACCORDANCE WITH THE CITY STANDARDS THROUGHOUT CONSTRUCTION.

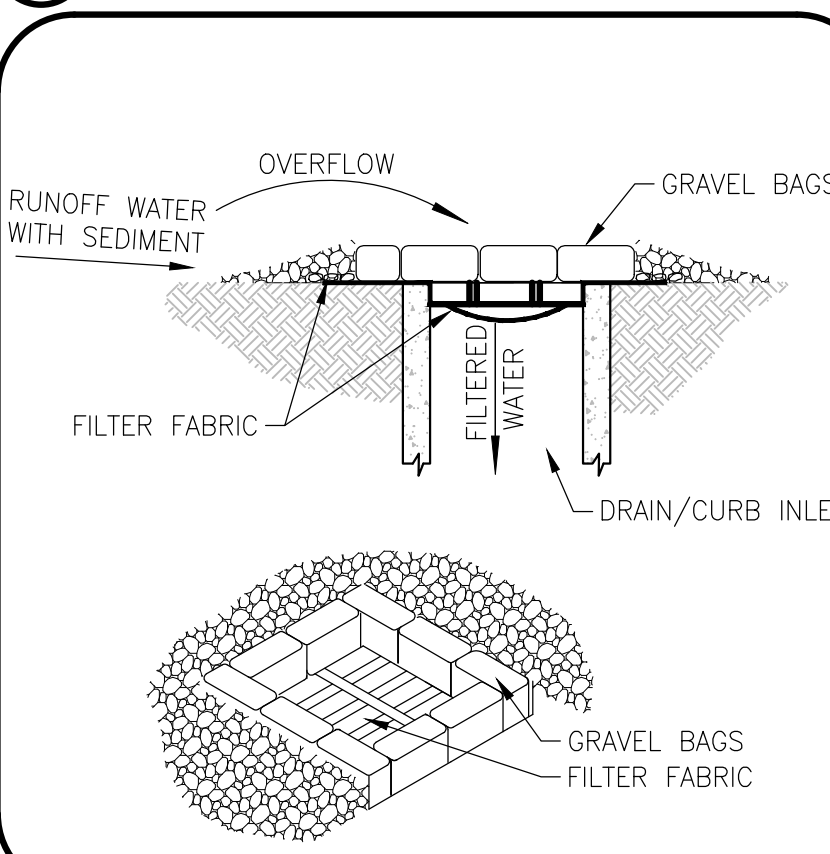
### EROSION CONTROL NOTES:

1. THIS PLAN PROVIDES EROSION CONTROL AND SEDIMENTATION INFORMATION AND DESIGN USING THE FOLLOWING ASSUMPTIONS:
  - 1a. GROUND HAS BEEN ROUGH GRADED
2. CONTRACTOR SHALL ADJUST THE SEDIMENTATION AND EROSION CONTROL METHODS AS THE PROJECT DEVELOPS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT THE INSTALLED EROSION CONTROL AND SEDIMENTATION IMPROVEMENTS ARE IN CONFORMANCE WITH BEST MANAGEMENT PRACTICES.

1. FINISH GRADE
2. FIBER ROLL
3. WOOD STAKE - 4' MAX. SPACING



1 FIBER ROLL ENTRENCHMENT DETAIL NOT TO SCALE



2 SEDIMENT CONTROL @ STORM DRAIN INLET NOT TO SCALE

| PLAN REVISIONS |      |          |
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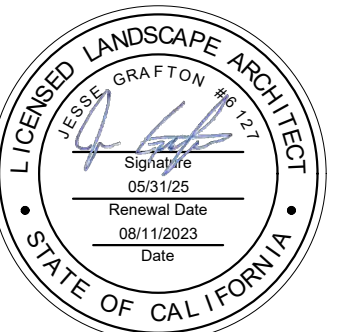
1165 Scenic Drive, Suite A  
Modesto, CA 95350

odellengineering.com

## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

### EROSION CONTROL



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: 1"=20'

DATE: 08/11/2023

JOB NO.: 37512

FILE NO.: 37512-EC.DWG

SHEET NO.

L2.0

OF

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Know what's below.  
Call before you dig.

BID SUBMITTAL



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GENERAL NOTES:

- CONTRACTOR AGREES THAT THEY SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, ENGINEER AND THE CITY HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR THE ENGINEER.
- UNLESS OTHERWISE STATED, ALL STATIONS INDICATED ON THE IMPROVEMENT PLANS ARE REFERENCED TO THE CENTER LINE OF THE STREET. ALL STATIONS ON THE CURBS ARE PERPENDICULAR TO OR RADIALLY OPPOSITE CENTER LINE STATIONS, UNLESS OTHERWISE NOTED.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING FACILITIES.
- THE CONTRACTOR SHALL PROVIDE ALL LIGHTS, SIGNS, BARRICADES, FLAGMEN OR OTHER DEVICES NECESSARY TO PROVIDE FOR PUBLIC SAFETY IN ACCORDANCE WITH THE CURRENT EDITION OF "MANUAL OF TRAFFIC CONTROLS WARNING SIGNS, LIGHTS AND DEVICES FOR USE IN PERFORMANCE OF WORK UPON HIGHWAYS" PUBLISHED BY THE STATE OF CALIFORNIA TRANSPORTATION AGENCY, DEPARTMENT OF TRANSPORTATION.
- ALL MATERIALS, WORKMANSHIP, AND CONSTRUCTION SHALL BE DONE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CURRENT CITY OF TURLOCK IMPROVEMENT STANDARDS AND SPECIFICATIONS; AND THE LATEST EDITION OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS, CITY OF CERES STANDARD PLANS ARE AVAILABLE AT THE OFFICE OF THE PUBLIC WORKS INSPECTOR.
- THE OWNER IS RESPONSIBLE FOR ARRANGEMENTS TO PAY FOR ALL MATERIAL TESTING REQUIRED BY THE PUBLIC WORKS INSPECTOR. IT IS THE CONTRACTOR'S RESPONSIBILITY TO SEE TO IT THAT ALL TESTING REQUIRED BY THE PUBLIC WORKS INSPECTOR IS PERFORMED.
- THE CONTRACTOR SHALL MEET WITH THE CITY OF TURLOCK AT LEAST 48 HOURS PRIOR TO START OF CONSTRUCTION WITH 24 HOURS NOTICE REQUIRED BEFORE ALL INSPECTIONS. ALL ARRANGEMENTS FOR SITE INSPECTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL CONSTRUCTION SHALL BE LIMITED TO BETWEEN THE HOURS OF 7:00 A.M. AND 6:00 P.M., MONDAY THROUGH FRIDAY AND INSPECTION REQUESTS SHALL BE LIMITED TO NORMAL CITY BUSINESS HOURS: 8:00 A.M. THROUGH 5:00 P.M. MONDAY THROUGH THURSDAY. ARRANGEMENTS FOR ANY OVERTIME INSPECTION SERVICES AND PAYMENT OF FEES FOR SAME SHOULD BE MADE 48 HOURS IN ADVANCE AND ARE SUBJECT TO INSPECTION AVAILABILITY AND APPROVAL BY THE CITY ENGINEER.
- THE CITY OF TURLOCK OR ASSOCIATED UTILITY COMPANY AND RESIDENCES TO BE AFFECTED SHALL BE NOTIFIED IMMEDIATELY UPON ANY UTILITY SERVICE DISRUPTION OTHER THAN SPECIFIED ON THESE IMPROVEMENT PLANS AND A 48 HOUR NOTICE SHALL BE GIVEN FOR ANY PLANNED DISRUPTION.
- DUST SHALL BE CONTROLLED BY THE CONTRACTOR AS PER SECTION 10 OF THE STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, STANDARD SPECIFICATIONS AND THE CITY OF TURLOCK SPECIFICATIONS. WATER FOR DUST CONTROL AND USE FOR COMPACTION MAY BE PURCHASED FROM THE APPROPRIATE AGENCY PRIOR TO START OF ANY WORK, AND IT IS THE RESPONSIBILITY OF THE CONTRACTOR FOR ANY FEES OR DEPOSITS. IT IS ALSO THE CONTRACTOR'S RESPONSIBILITY TO MAINTAIN CLEANLINESS OF THE EXISTING IMPROVED STREETS IN THE CONSTRUCTION AREA.
- THE CONTRACTORS SHALL SUBMIT TO THE ENGINEER, PRIOR TO FINAL ACCEPTANCE, AS BUILT DRAWINGS OF ALL IMPROVEMENTS REPRESENTED BY THE PROJECT PLANS AND SPECIFICATIONS. THE AS-BUILT DRAWINGS OF THE ELECTRICAL SYSTEM SHALL INCLUDE THE STREET LIGHT LAYOUT PLAN SHOWING LOCATION OF LIGHTS, CONDUITS, CONDUCTORS, POINTS OF CONNECTIONS TO P.G.&E. SERVICE PULL BOXES, AND WIRE SIZES.
- CONSTRUCTION EQUIPMENT SHALL UTILIZE COLUMBIA STREET FOR ACCESS.
- THE CONTRACTOR SHALL PROTECT EXISTING IMPROVEMENTS FROM DAMAGE. COST OF REPLACING EXISTING IMPROVEMENTS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR ITEMS REQUIRING REMOVAL AND REPLACEMENT OF EXISTING IMPROVEMENTS.
- THE CONTRACTOR IS TO MAKE PROVISIONS FOR TRENCH SPOILS.
- SAWCUT ALL TRENCHES IN EXISTING PAVEMENT.
- THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION OF ALL UTILITY TRENCHES INCLUDING P.G.&E. AND FOR THE SPOILS GENERATED BY THESE SAME UTILITY TRENCHES.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE DESIGN ENGINEER OF ANY ANTICIPATED SOILS IMBALANCE SO GRADES CAN BE ADJUSTED. ADJUSTMENTS REQUIRE THE APPROVAL OF THE CITY ENGINEER.
- ALL ENDS, BENDS, AND TEES ON WATER LINES MUST HAVE ADEQUATE THRUST BLOCKS CALCULATED FROM CITY STANDARDS.
- THE CITY WILL OPERATE ALL EXISTING WATER VALVES. CONTRACTOR SHALL MAKE ARRANGEMENTS IN ADVANCE WITH THE PUBLIC WORKS INSPECTOR.
- DRAWING NUMBERS SHOWN ON THE PLANS REFER TO DRAWINGS CONTAINED IN THE CITY OF TURLOCK IMPROVEMENT STANDARDS AND SPECIFICATIONS, SHOWN THUS; (I. E. STD. SD-4)
- CONTRACTOR SHALL FURNISH CERTIFICATES OF COMPLIANCE TO THE CITY FOR CRUSHED MISCELLANEOUS BASE MATERIAL AND FOR THE SPECIFIED CLASS OF P.C.C. PRIOR TO PAVING ROADWAYS.
- IN AREAS WHICH ARE TO RECEIVE A.C., P.C.C., OR AGGREGATE BASE, THE CONTRACTOR SHALL MAINTAIN SUBGRADE AT THE AS-GRADED WATER CONTENT. IF THE SUBGRADE IS ALLOWED TO DRY, THE WATER CONTENT OF SOIL SHOULD BE RAISED TO THE RECOMMENDED VALUE SPECIFIED FOR THE PROJECT.
- STREET SIGNS, TRAFFIC CONTROL SIGNS, AND PAVEMENT MARKINGS SHALL BE PROVIDED AND INSTALLED BY THE CONTRACTOR AT LOCATIONS SHOWN ON THESE PLANS.
- THE CONTRACTOR SHALL SECURE A TRENCH PERMIT FROM THE CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS, DIVISION OF OCCUPATIONAL HEALTH AND SAFETY PRIOR TO EXCAVATION OF ANY PRIOR TO THE EXCAVATION OF ANY TRENCH OVER FIVE FEET IN DEPTH.
- THE CONTRACTOR SHALL VERIFY LOCATIONS OF ALL EXISTING UNDERGROUND UTILITIES AND SHALL CONTACT THE RESPECTIVE UTILITY COMPANIES PRIOR TO COMMENCEMENT OF WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION AND PRESERVATION OF ALL SUCH FACILITIES IN THE AREA OF CONSTRUCTION AND SHALL NOTIFY UTILITIES FORTY-EIGHT (48) HOURS IN ADVANCE OF ANY CONSTRUCTION.
- CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATION OF THE REMOVAL OR RELOCATIONS OF ALL EXISTING UTILITIES WITH RESPECTIVE UTILITY COMPANIES.

GRADING NOTES

- THE GRADING AREAS SHOULD BE PREPARED FOR GRADING BY REMOVING EXISTING VEGETATION, LARGE ROOTS, DEBRIS, AND OTHER POTENTIALLY DELETERIOUS MATERIALS. THE SITE PREPARATION OPERATIONS SHOULD BE OBSERVED BY THE GEOTECHNICAL ENGINEER.
- EXISTING UTILITY LINES THAT WILL NOT REMAIN IN SERVICE SHOULD BE EITHER REMOVED OR PROPERLY ABANDONED. THE APPROPRIATE METHOD OF UTILITY ABANDONMENT WILL DEPEND UPON THE TYPE, DEPTH, AND LOCATION OF THE UTILITY. RECOMMENDATIONS FOR ABANDONMENT CAN BE MADE AS NECESSARY.

CLEARING NOTES:

- THE CONTRACTOR SHALL REVIEW SITE PRIOR TO BIDDING. ALL VEGETATION, STRUCTURES, TREES, DELETERIOUS MATERIAL, ETC. SHALL BE REMOVED FROM THE SITE AT THE EXPENSE OF THE CONTRACTOR AND SHALL BE INCLUDED IN THE LUMP SUM CLEARING COST. ALL WORK SHALL COMPLY WITH THE GEOTECHNICAL ENGINEERING INVESTIGATION COMPLETED FOR THIS PROJECT.

DUST CONTROL NOTES:

- SPRAY WATER ON ALL EXPOSED EARTH SURFACED DURING CLEARING, GRADING, EARTH MOVING AND OTHER SITE PREPARATION ACTIVITIES THROUGHOUT THE DAY TO MINIMIZE DUST. USE TARPAULINS OR OTHER EFFECTIVE COVERS ON ALL STOCKPILED EARTH MATERIAL AND ON ALL HAUL TRUCKS TO MINIMIZE DUST. SWEEP THE ADJACENT STREET FRONTAGES AT LEAST ONCE A DAY OR AS NEEDED TO REMOVE SILT AND OTHER DIRT WHICH IS EVIDENT FROM CONSTRUCTION ACTIVITIES. ENSURE THAT CONSTRUCTION VEHICLES ARE CLEANED PRIOR TO LEAVING THE SITE TO PREVENT DUST AND DIRT FROM BEING TRACKED OFF SITE.
- ALL EXPOSED SURFACES SHALL BE WATERED A MINIMUM OF TWICE DAILY UNLESS DEEMED UNNECESSARY DUE TO WEATHER. WATER SHALL BE APPLIED AS PROVIDED IN SECTION 17 OF CALTRANS STANDARD SPECIFICATIONS.
- DUST PALLIATIVES MAY BE SUBSTITUTED FOR WATERING UPON THE APPROVAL OF THE COUNTY ENGINEER. DUST PALLIATIVES SHALL BE APPLIED AS PROVIDED IN SECTION 18 OF CALTRANS STANDARD SPECIFICATIONS.
- ALL EXPOSED EARTH SURFACES SHALL BE PLANTED AT THE EARLIEST POSSIBLE TIME.

STORM DRAIN NOTES:

- THE CONTRACTOR SHALL EXPOSE ALL EXISTING STORM DRAIN PIPES WHERE A CONNECTION IS TO BE MADE SO THAT THE ENGINEER CAN VERIFY EXISTING FLOWLINES AND LOCATIONS BEFORE START OF CONSTRUCTION.
- CONTRACTOR TO BE RESPONSIBLE FOR ALL TESTING OF STORM DRAIN FACILITIES IN ACCORDANCE WITH THE CITY OF TURLOCK STANDARD SPECIFICATIONS.
- ALL MANHOLE RIMS TO BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING, UNLESS OTHERWISE NOTED. COST FOR RAISING FACILITIES TO BE INCLUDED IN UNIT PRICES FOR MANHOLES.

STORM DRAIN PIPE MATERIALS:

THE FOLLOWING STANDARD PIPE MATERIALS SHALL BE USED FOR STORM DRAIN CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF AMERICAN SOCIETY OF TESTING MATERIALS STANDARDS:

| PIPE MATERIALS  | STANDARD  |
|-----------------|-----------|
| PVC (STD. WALL) | ASTM F794 |
| CLASS III RORCP | ASTM C76  |

SANITARY SEWER NOTES:

- THE CONTRACTOR SHALL EXPOSE ALL EXISTING SANITARY SEWER PIPES WHERE A CONNECTION IS TO BE MADE SO THAT THE ENGINEER CAN VERIFY EXISTING FLOWLINES AND LOCATIONS BEFORE START OF CONSTRUCTION.
- SANITARY SEWER CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF TURLOCK STANDARD SPECIFICATIONS.
- ALL MANHOLE RIMS AND CLEANOUTS SHALL BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING, COST FOR RAISING FACILITIES TO BE INCLUDED IN UNIT PRICES FOR MANHOLES AND CLEANOUTS.
- ALL CROSSINGS SHALL BE MADE IN ACCORDANCE WITH THE STATE OF CALIFORNIA HEALTH DEPARTMENT DIVISION OF DRINKING WATER REQUIREMENTS. (INCLUDES SERVICE RUNS)
- SANITARY SEWER LATERALS SHALL BE INSTALLED IN ACCORDANCE WITH CITY OF TURLOCK STANDARD SPECIFICATIONS, EXCEPT THAT LATERAL SHALL EXTEND TO BACK OF PROPOSED SIDEWALK OR PROPERTY LINE, WHICHEVER IS GREATER.

SEWER PIPE MATERIALS:

THE FOLLOWING STANDARD PIPE MATERIALS SHALL BE USED FOR GRAVITY SEWER CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF AMERICAN SOCIETY OF TESTING MATERIALS STANDARDS:

| PIPE MATERIALS     | STANDARD         |
|--------------------|------------------|
| PVC (STD. WALL)    | ASTM D3034-SDR26 |
| PVC LARGE DIAMETER | ASTM F679, P5115 |
| VITRIFIED CLAY     | ASTM C700        |

WATER NOTES:

- CONTRACTOR SHALL EXPOSE EXISTING WATER LINES TO VERIFY EXISTING ELEVATION AND LOCATION PRIOR TO START OF CONSTRUCTION.
- WATER LINE CROSSINGS SHALL MEET STATE HEALTH STANDARDS AND THE CITY OF TURLOCK STANDARD SPECIFICATIONS.
- WATER LINE CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE CITY OF TURLOCK STANDARD SPECIFICATIONS.
- INSTALL TRACER WIRE FOR ALL WATER LINES. ALL WATER LINES SHALL BE INSTALLED WITH A NO. 12 GAGE TW SOLID COATED TRACER WIRE.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ADEQUATELY MARKING THE INSTALLED LOCATION OF SERVICES PRIOR TO CURB AND GUTTER INSTALLATION.
- ALL VALVE BOXES SHALL BE ADJUSTED TO FINISH GRADE AFTER STREET PAVING COST FOR RAISING FACILITIES TO BE INCLUDED IN UNIT PRICES FOR VALVES.
- PRIOR TO FINAL COMPLIANCE, ALL WATER LINES SHALL BE TESTED AND DISINFECTED IN COMPLIANCE WITH THE REQUIREMENTS OF THE CITY OF TURLOCK IMPROVEMENT STANDARD SPECIFICATIONS.
- ALL CONNECTIONS TO EXISTING CITY FACILITIES SHALL BE MADE IN THE PRESENCE OF THE CITY PUBLIC WORKS DEPARTMENT. HOT TAPS SHALL CONFORM TO CITY REQUIREMENTS.

WATER PIPE MATERIALS:

THE FOLLOWING PIPE MATERIALS SHALL BE USED FOR WATER MAIN CONSTRUCTION AND SHALL CONFORM TO THE LATEST EDITION OF APPROPRIATE AMERICAN WATER WORKS ASSOCIATION STANDARDS:

| PIPE MATERIALS       | STANDARD                  |
|----------------------|---------------------------|
| PVC (IRON PIPE O.D.) | AWWA C900                 |
|                      | DR 18 (CLASS 150 MINIMUM) |

IRRIGATION NOTES:

- CONTRACTOR TO REFER TO LANDSCAPE PLANS PREPARED BY O'DELL ENGINEERING FOR LANDSCAPE IRRIGATION SERVICE SIZE AND LOCATIONS.

SITE LIGHT NOTES:

- FOR ONSITE LIGHT SPECIFICATIONS, REFER TO PLANS BY PEZZONI ENGINEERING, INC. DESIGN & SPECIFICATIONS.

TRASH ENCLOSURE NOTES:

- TRASH ENCLOSURE SHALL BE PER CITY OF TURLOCK, STANDARD DETAILS R1-R4.
- CONTRACTOR TO COORDINATE WITH TRASH ENCLOSURE MANUFACTURER AND GEOTECHNICAL ENGINEER TO DETERMINE STRUCTURAL SECTION AND REINFORCEMENT.
- CONTRACTOR TO CONTACT REFUSE DEPARTMENT REGARDING MOUNTING OF TRASH COMPACTOR EQUIPMENT.

SURVEY CONTROL:

HORIZONTAL DATUM  
1986 ADJUSTMENT OF NORTH AMERICAN DATUM OF 1983 (NAD83), EPOCH 1984.00

COORDINATE SYSTEM  
CALIFORNIA COORDINATE SYSTEM OF 1983 (CCS83), ZONE III.

VERTICAL DATUM  
ELEVATIONS SHOWN HEREON ARE BASED ON THE CITY OF TURLOCK DATUM.

PROJECT BENCHMARK  
CITY OF TURLOCK BM#22-4-1, BRASS PLUG LOCATED ON TOP OF CURB, ON THE SOUTH SIDE OF HIGH STREET, APPROXIMATELY 50 FEET FROM WEST AVENUE.

ELEVATION = 95.85 FEET (CITY OF TURLOCK DATUM)

STORM WATER POLLUTION PREVENTION:

- STORM WATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE PROVIDED BY CONTRACTOR.

WDID #:

WDID NUMBER SHALL BE PROVIDED BY CONTRACTOR.

MONUMENT PRESERVATION:

CONTRACTOR MUST ENSURE THAT MONUMENT CONSERVATION HAS BEEN PROPERLY ADDRESSED. PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION ON THIS SITE, IT IS ADVISED THAT ALL INVOLVED PARTIES REVIEW SECTION 8771 AND SECTION 8725 OF THE CALIFORNIA BUSINESS AND PROFESSIONS CODE, AND SECTION 605 OF THE CALIFORNIA PENAL CODE REGARDING REFERENCING, PRESERVING, AND RECONSTRUCTING MONUMENTS, WHETHER OR NOT MONUMENTS ARE SHOWN IN PLANS.

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Modesto, CA 95350

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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

CIVIL NOTES SHEET



APPROVED:

|           |                 |
|-----------|-----------------|
| DESIGNED: | JJB             |
| DRAWN:    | DG,JH           |
| CHECKED:  | SSK             |
| SCALE:    | N/A             |
| DATE:     | 08/11/2023      |
| JOB NO.:  | 37512           |
| FILE NO.: | 37512-NI-DT.DWG |



Know what's below.  
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BID SUBMITTAL

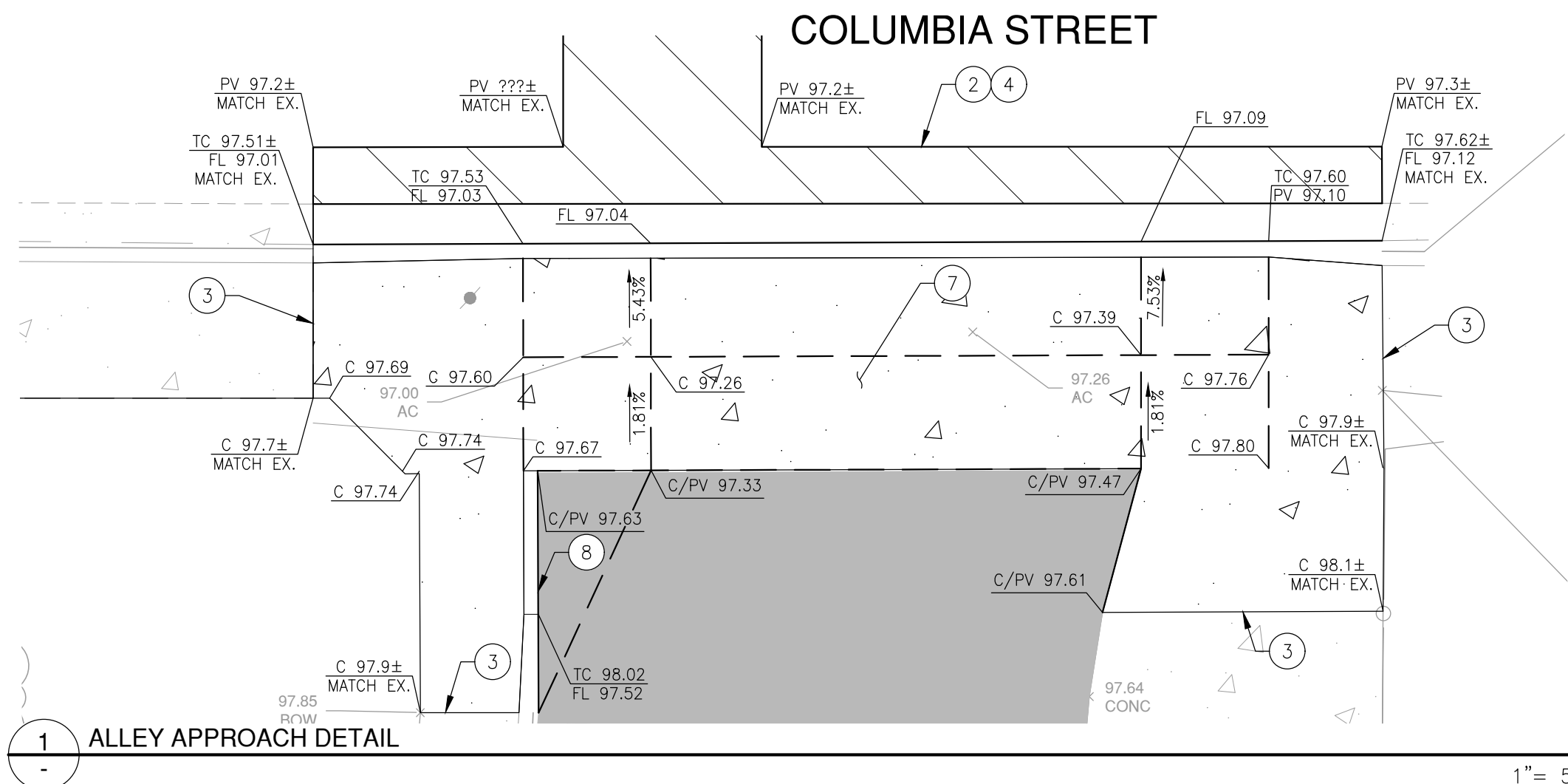
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ADA PATH OF TRAVEL NOTE

CONTRACTOR TO VERIFY THAT ALL SLOPES ALONG ADA PATH OF TRAVEL DO NOT EXCEED 2% CROSS SLOPE AND 5% RUNNING SLOPE (EXCEPT AT RAMP LOCATIONS, WHICH CANNOT EXCEED 8.33% RUNNING SLOPE). LANDINGS SHALL NOT EXCEED 2% IN ALL DIRECTIONS. ADA PATH OF TRAVEL MUST CONFORM TO STATE AND FEDERAL REGULATION.

GRADING NOTES

- SEE LANDSCAPE PLANS FOR DETAILS.
- SAWCUT AND CONFORM IN A NEAT STRAIGHT LINE.
- CONCRETE DOWEL PER DETAIL 1, SEE SHEET C4.2.
- LAP JOINT PER DETAIL 2, SEE SHEET C4.2.
- CURB CUT PER DETAIL 4, ON SHEET C4.2.
- 6" VERTICAL CURB PER CITY OF TURLOCK STANDARD DETAIL C-1, SEE SHEET C4.0.
- ALLEY APPROACH PER CITY OF TURLOCK DETAIL C-7, SEE SHEET C4.0.
- FLUSH TO VERTICAL CURB TRANSITION PER DETAIL 3, SEE SHEET C4.2.
- REFUSE AND RECYCLE BIN ENCLOSURE PER CITY OF TURLOCK STANDARD DETAIL R-1, R-3, AND R-4, SEE SHEET C4.0.
- TRENCH EXCAVATION AND BACKFILL PER CITY OF TURLOCK STANDARD DETAIL T-1, SHEET C4.1.

LEGEND

- CONCRETE  
4" PCC/COMPACTED NATIVE
- HMA PAVEMENT  
3" HMA/4" A.B. OVER 6" NATIVE SOIL 95% RELATIVE COMPACTION
- POOL DECK  
6" PCC/ COMPACTED NATIVE; GRADING BY ADG.
- TRENCH PATCH  
SEE CITY OF TURLOCK STANDARD DETAIL T-1, SHEET L4.1.
- FENCE PER LANDSCAPE PLANS.
- BLOCK WALL PER LANDSCAPE PLANS.
- GRADE BREAK
- BUILDING OVERHANG BY OTHERS.

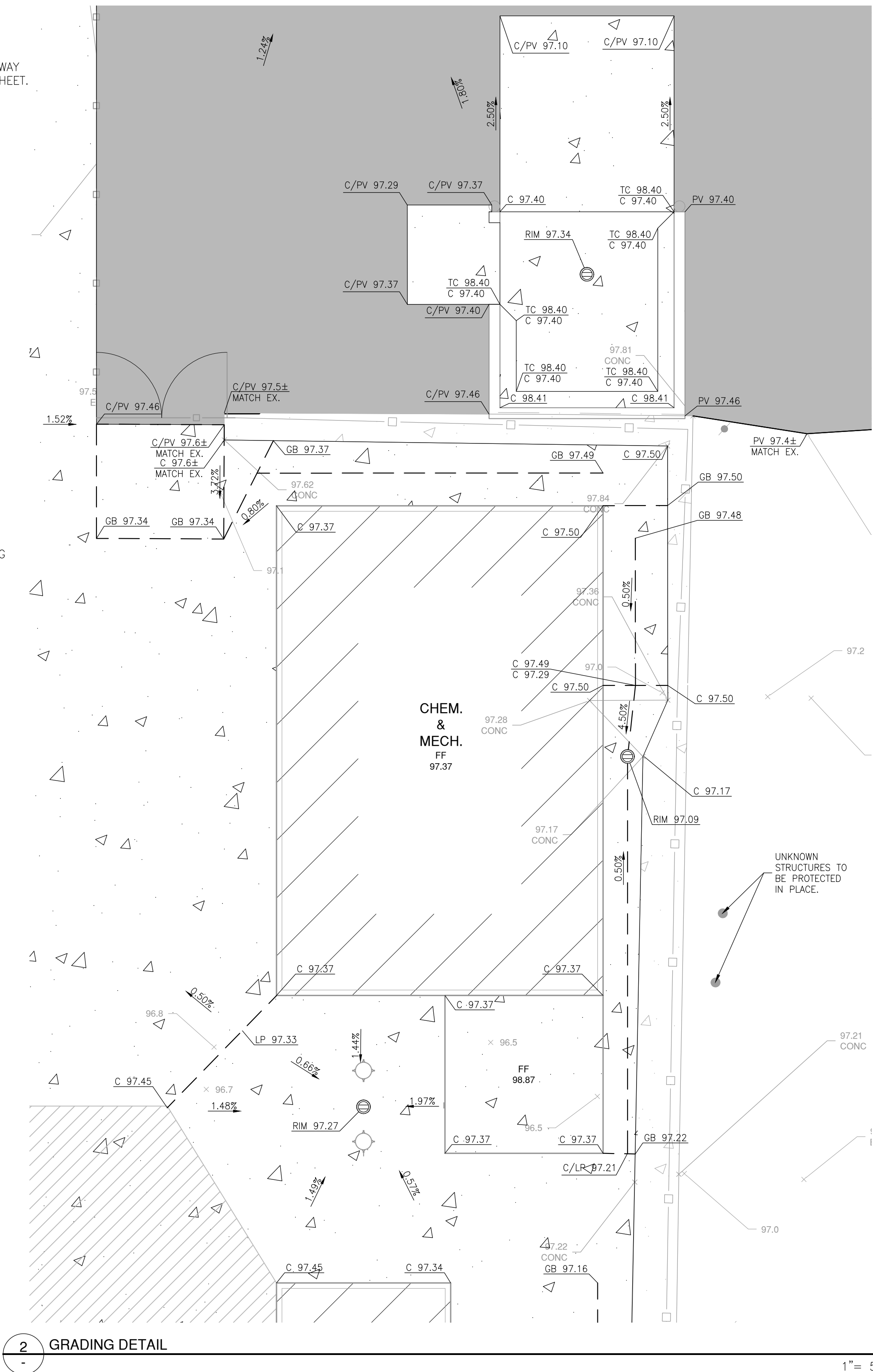
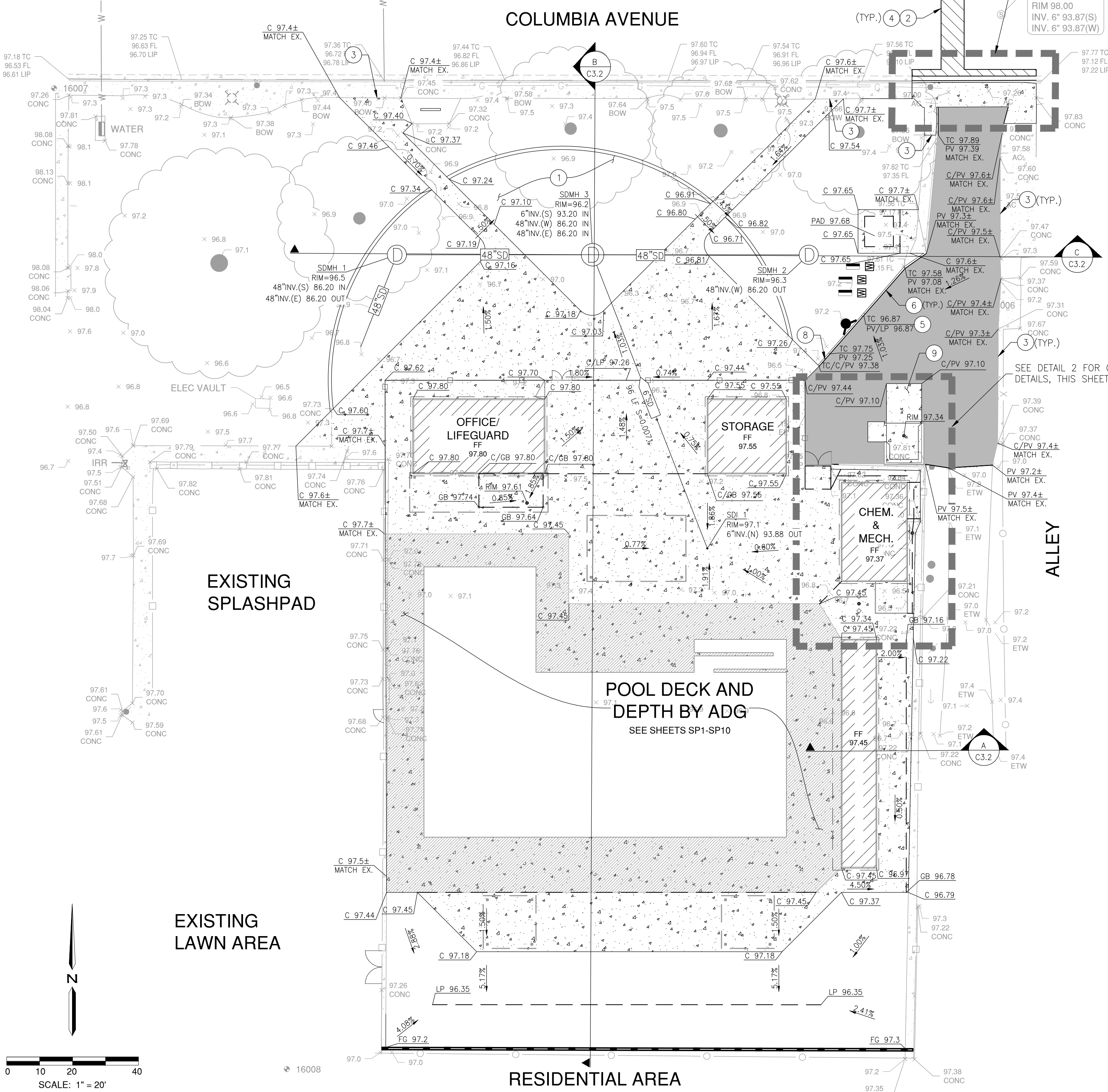
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**O'DELL**  
ENGINEERING

1165 Scenic Drive, Suite A  
Modesto, CA 95350

odellengineering.com



IMPROVEMENT PLANS

**COLUMBIA POOL IMPROVEMENTS**

TURLOCK, CA

GRADING & DRAINAGE PLAN



APPROVED:

DESIGNED: JJB  
DRAWN: DGJH  
CHECKED: SSK  
SCALE: 1" = 20'  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-GP.DWG

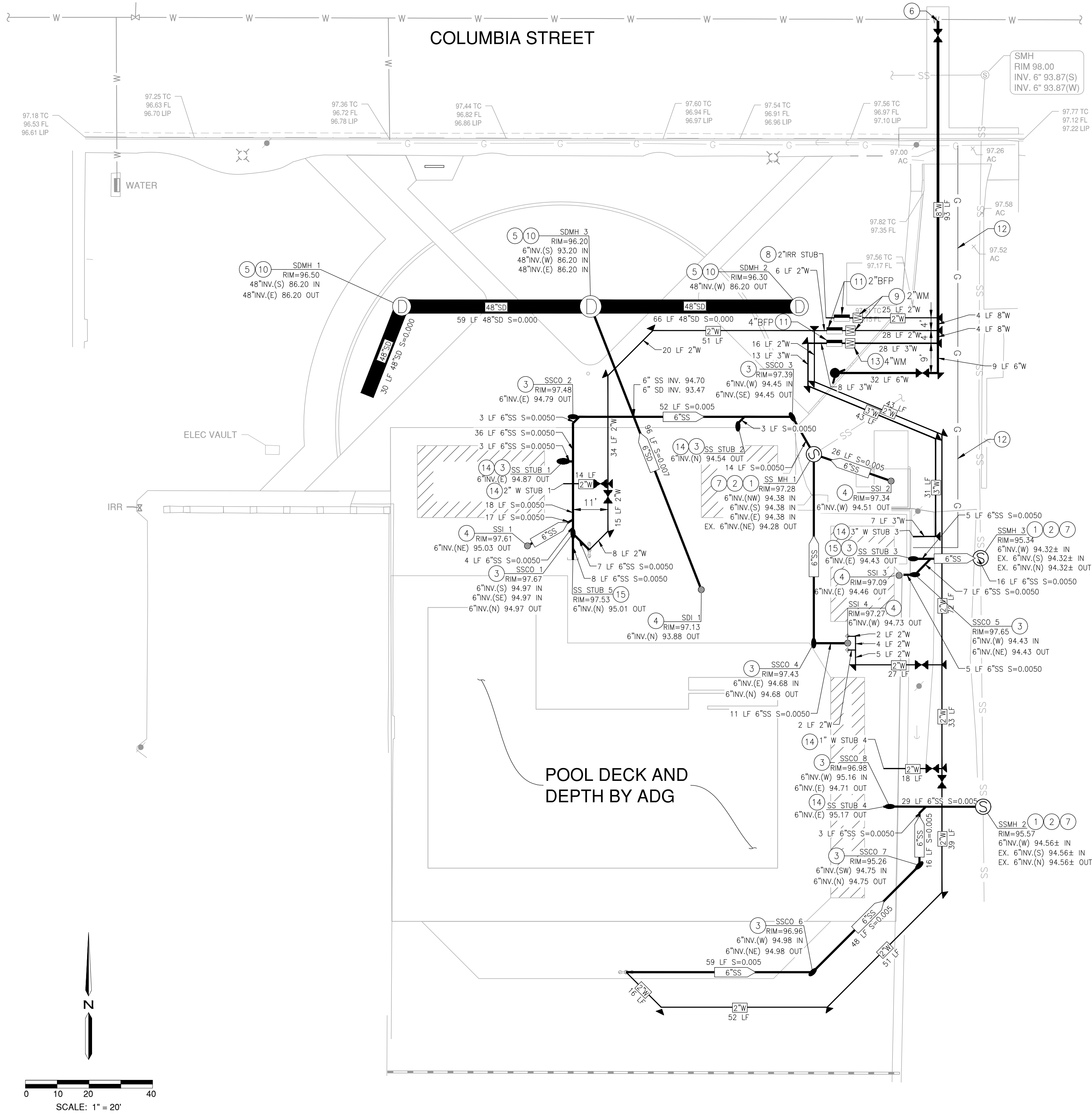


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UTILITY NOTES

- CONTRACTOR TO VERIFY EXACT LOCATION, DEPTH, AND SIZE OF EXISTING UTILITY LINE PRIOR TO CONSTRUCTION
- SANITARY SEWER MANHOLE PER CITY OF TURLOCK STANDARD DETAIL S-3 AND S-5, SEE SHEET C4.0.
- SANITARY SEWER CLEAN OUT AND COVER PER CITY OF TURLOCK STANDARD DETAIL S-7, SEE SHEET C4.1.
- HIGH DROP DOWN INLET PER CITY OF TURLOCK STANDARD DETAIL SD-11, SEE SHEET C4.1.
- 60" MANHOLE WITH 30" VRM 30 GRATE OR APPROVED EQUAL PER CITY OF TURLOCK STANDARD DETAIL S-3, SEE SHEETS C4.0.
- CONNECTION TO EXISTING WATER LINE SHALL BE PERFORMED BY CUTTING AT A TEE CITY OF TURLOCK CREWS WILL CONNECT THE TEE TO THE EXISTING MAIN. CONTRACTOR WILL PROVIDE ALL MATERIALS AND EQUIPMENT, INCLUDING EXCAVATION, TRENCH PROTECTION, TEE, PIPE, FITTINGS, TRENCH BACKFILL AND PATCH PAVING.
- CONNECT TO EXISTING SANITARY SEWER LINE.
- SEE LANDSCAPE PLANS FOR DETAILS.
- INSTALL 2" WATER METER PER CITY OF TURLOCK STANDARD DETAIL W-9, SEE SHEET C4.1.
- FRENCH DRAIN PER DETAIL 6, SEE SHEET C4.2.
- BACKFLOW PREVENTOR PER CITY OF TURLOCK STANDARD DETAIL L-16, SEE SHEET C4.0.
- CONTRACTOR TO COORDIANTE GAS LINE INSTALLATION WITH PG&E.
- INSTALL 3" WATER METER PER CITY OF TURLOCK STANDARD DETAIL W-8, SEE SHEET C4.1.
- REFER TO MEP PLANS FOR CONTINUATION TO BUILDING.
- REFER TO ADG PLANS FOR CONTINUATION TO BUILDING/POOL SYSTEM.

LEGEND

- DRAINAGE INLET PACKED ON TOP OF FRENCH DRAIN UNLESS OTHERWISE NOTED.
- SANITARY SEWER CLEANOUT
- SANITARY SEWER MANHOLE
- WATER METER
- WATER VALVE
- BACKFLOW PREVENTOR
- AREA DRAIN
- THRUST BLOCK PER CITY OF TURLOCK STANDARD DETAIL W-4, SEE SHEET C4.1.
- FIRE HYDRANT PER CITY OF TURLOCK STANDARD DETAIL W-1 AND W-3, SEE SHEET C4.1.

NOTES

- SEE ADG PLANS FOR POOL LAYOUT.
- FOR TYPICAL WATER CROSSING UNDER UTILITIES, SEE CITY OF TURLOCK STANDARD DETAIL W-14.

NOTICES

- CALL UNDERGROUND SERVICE ALERT AT LEAST TWO WORKING DAYS NOTICE PRIOR TO EXCAVATING. DELINEATE THE AREA TO BE EXCAVATED BEFORE CALLING USA. DELINEATED AREAS SHOULD BE IDENTIFIED IN WHITE MARKINGS WITH THE REQUESTER'S COMPANY NAME OR LOGO WITHIN THE PRE-MARKED ZONES.
- MAINTAIN A MINIMUM 3' SEPARATION BETWEEN JOINT TRENCH AND WET UTILITIES. SEPARATION IS MEASURED FROM THE CLOSEST EDGE OF THE JOINT TRENCH TO THE CLOSEST EDGE OF ANY WET FACILITY.
- AT THE TIME OF FINAL INSPECTION, THE PERMIT APPLICANT MUST PROVIDE THE OWNER OF THE PROPERTY WITH A CERTIFICATE OF COMPLETION, CERTIFICATE OF INSTALLATION, IRRIGATION SCHEDULE OF LANDSCAPE AND IRRIGATION MAINTENANCE.

CONTRACTOR RESPONSIBILITIES

- CONTRACTOR IS TO VERIFY ALL PROPOSED INSTALLATIONS, CONDITIONS, AND SPECIFICATIONS PRIOR TO COMMENCING WITH ANY PORTION OF WORK. ANY DISCREPANCIES, DELETIONS OR INCONSISTENCIES ARE TO BE REPORTED TO THE UTILITY COMPANY'S INSPECTOR BEFORE ORDERING MATERIAL OR COMMENCING WORK. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE SPECIFICATIONS. ANY UNAUTHORIZED VARIATION FROM PLANS OR SPECIFICATION WILL BE CORRECTED BY CONTRACTOR PRIOR TO INSTALLATION AT CONTRACTOR'S EXPENSE.
- CONTRACTOR IS RESPONSIBLE FOR PROVIDING FINAL GRADE OF ALL VAULTS, ENCLOSURES, AND PADS. DOCUMENTATION OF ABSOLUTE ELEVATION FOR STRUCTURES TO BE PROVIDED TO THE UTILITY COMPANY'S INSPECTOR BY SURVEYOR AT TIME OF STAKING. ANY VARIANCE FROM SPECIFIED FINAL GRADE SHALL BE CORRECTED BY CONTRACTOR PRIOR TO INSTALLATION.
- CONTRACTOR IS TO PROVIDE AND INSTALL ALL UNDERGROUND FACILITIES SHOWN ON THIS DRAWING IN ACCORDANCE WITH THE UTILITY COMPANY'S STANDARDS.
- CONTRACTOR IS TO PROVIDE ALL TRENCHING, SHADING, BACKFILL, COMPACTION, AND RESTORATION.
- CONTRACTOR TO OBTAIN ALL ENCROACHMENT PERMITS FROM APPROPRIATE ENTITIES WITHIN PROJECT BOUNDARY.

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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

UTILITY PLAN



APPROVED:

DESIGNED: JJB  
DRAWN: DG,JH  
CHECKED: SSK  
SCALE: 1" = 20'  
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FILE NO.: 37512-UP.DWG

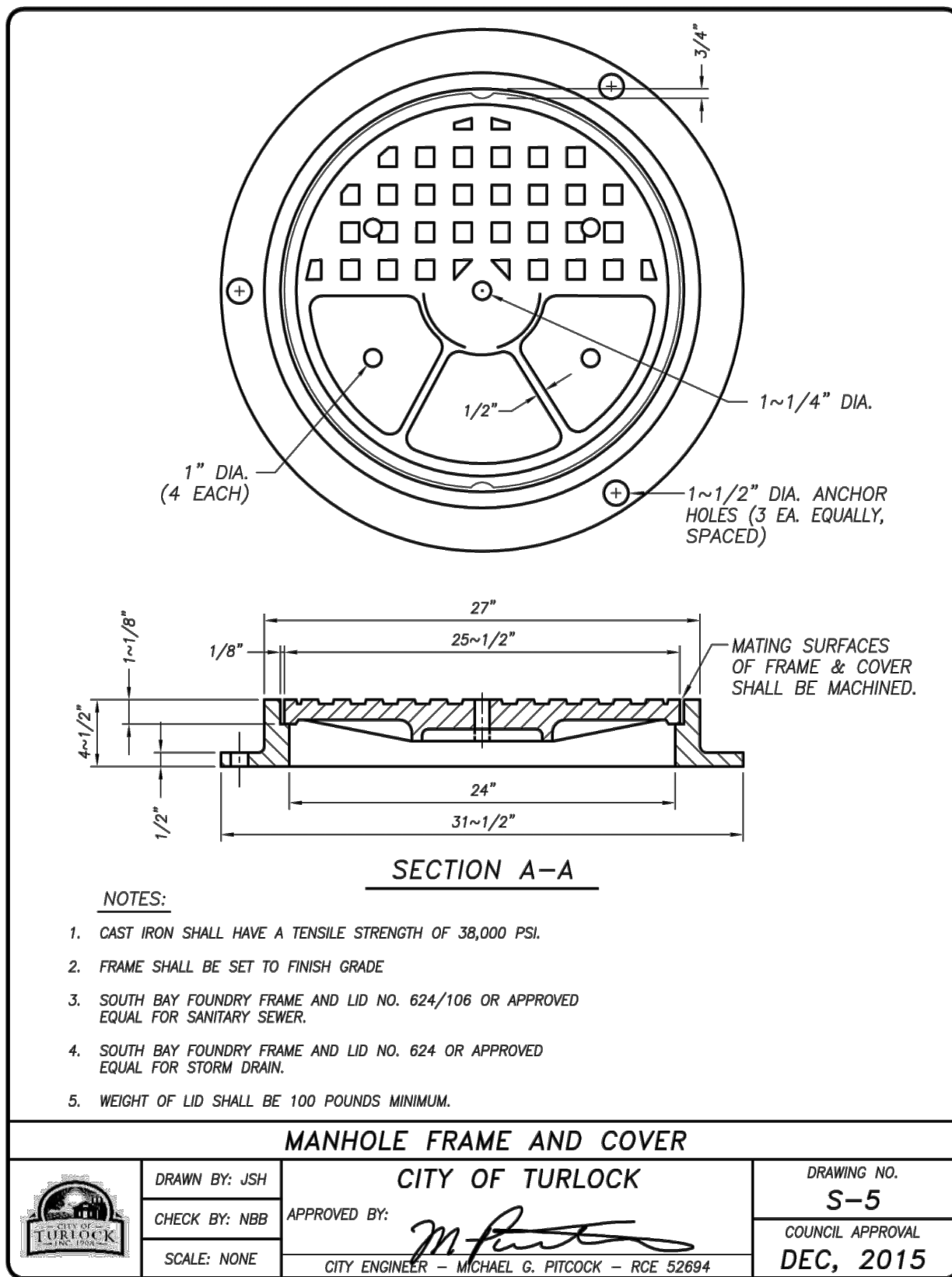
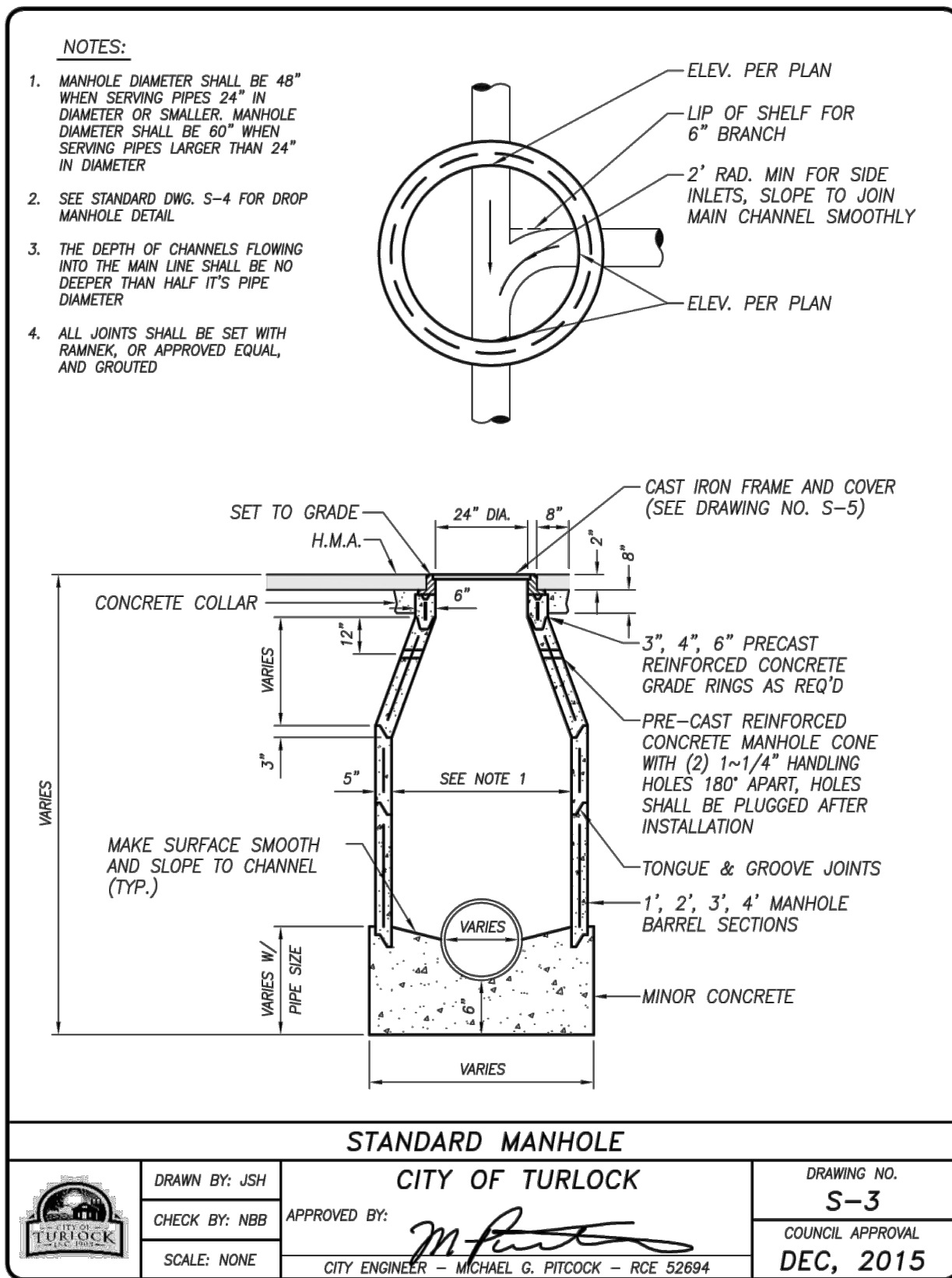
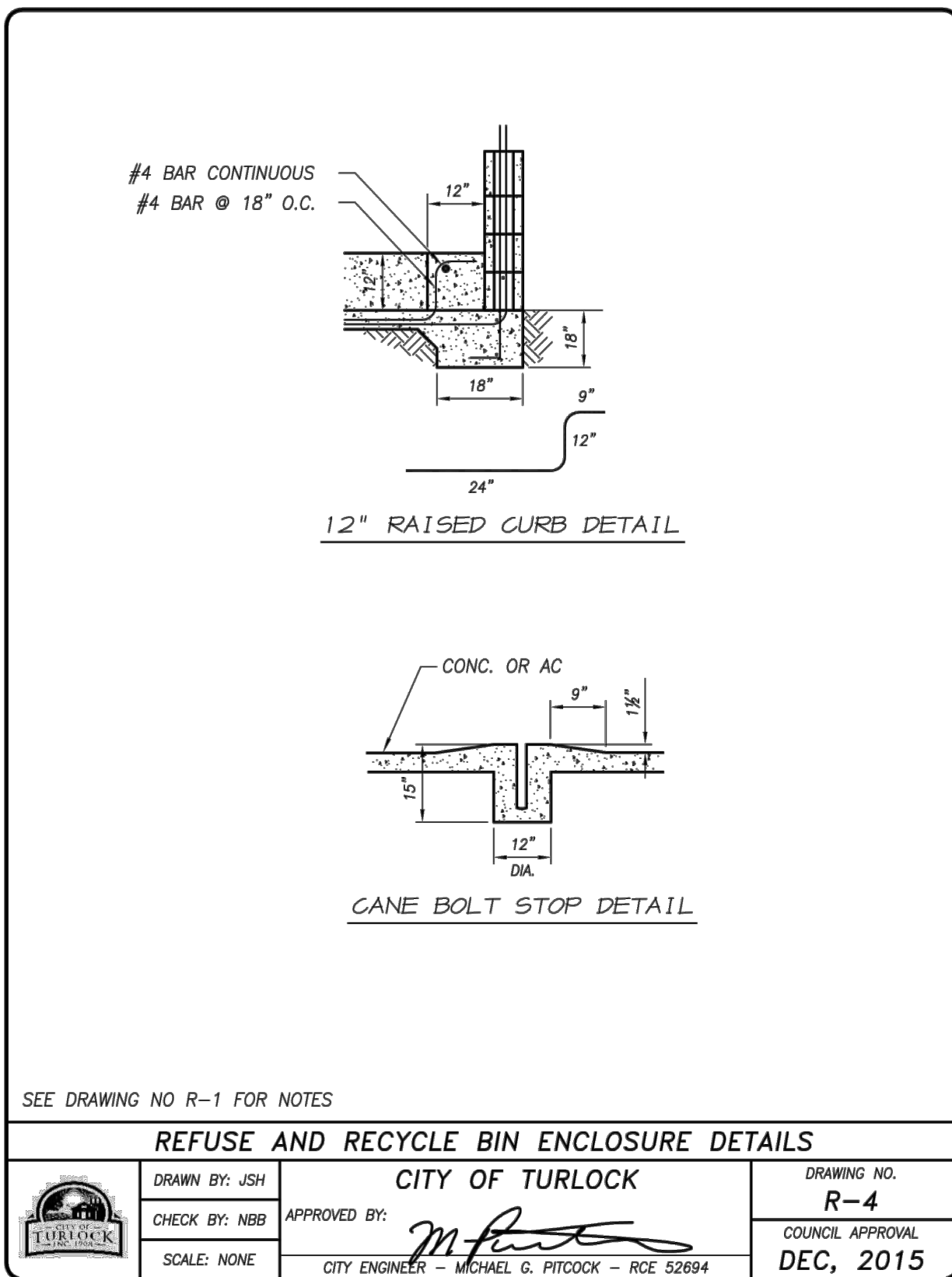
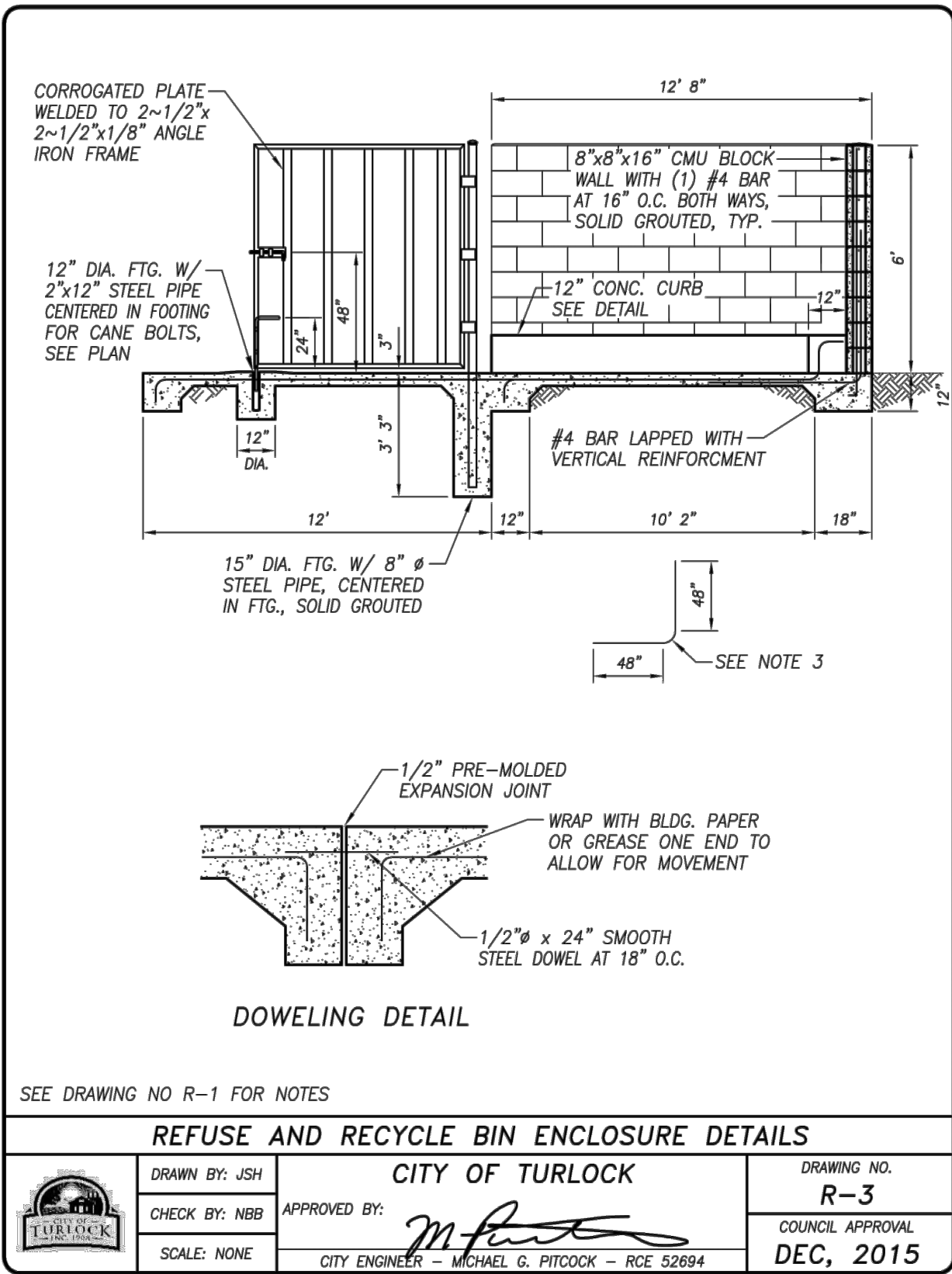
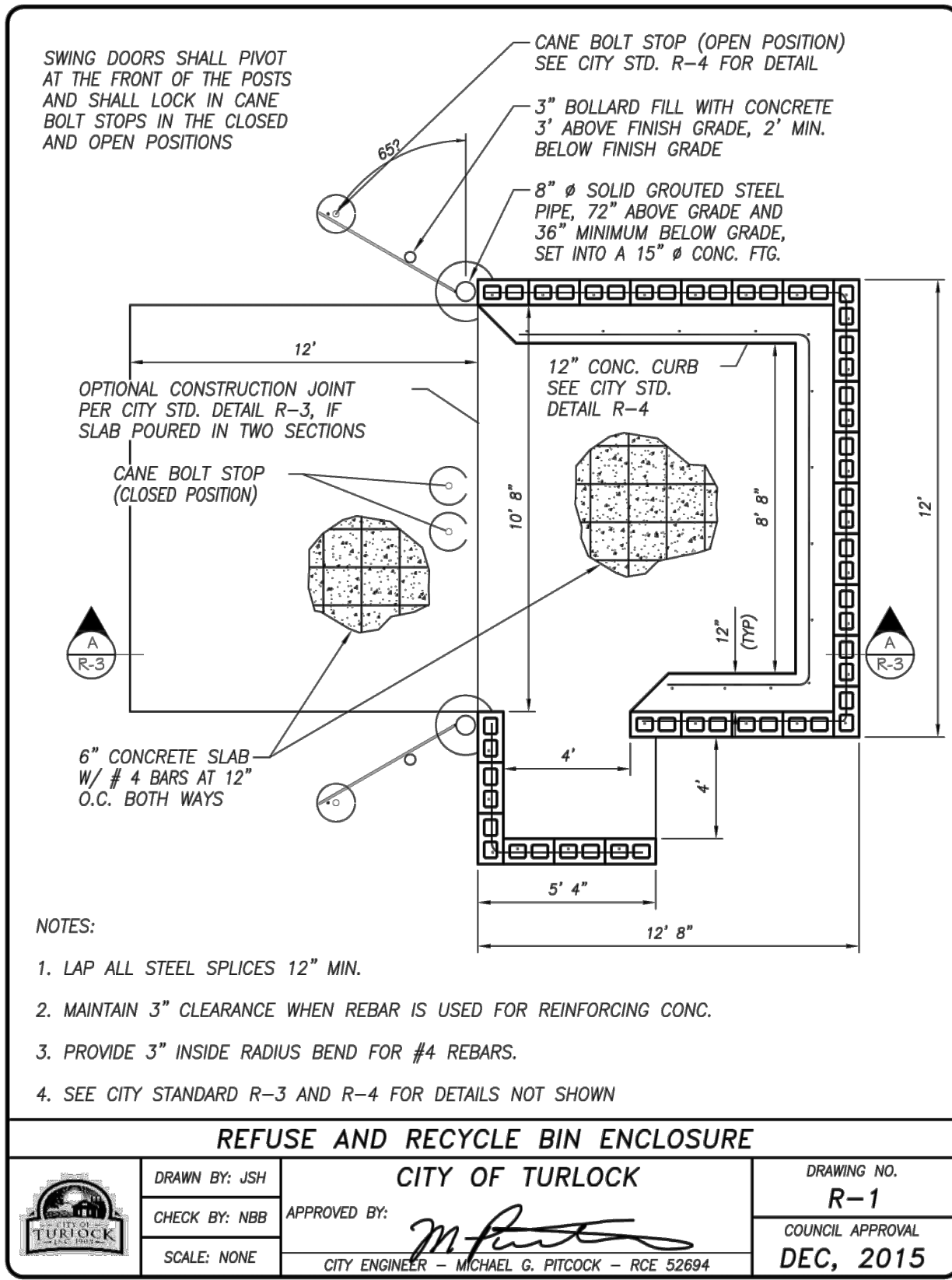
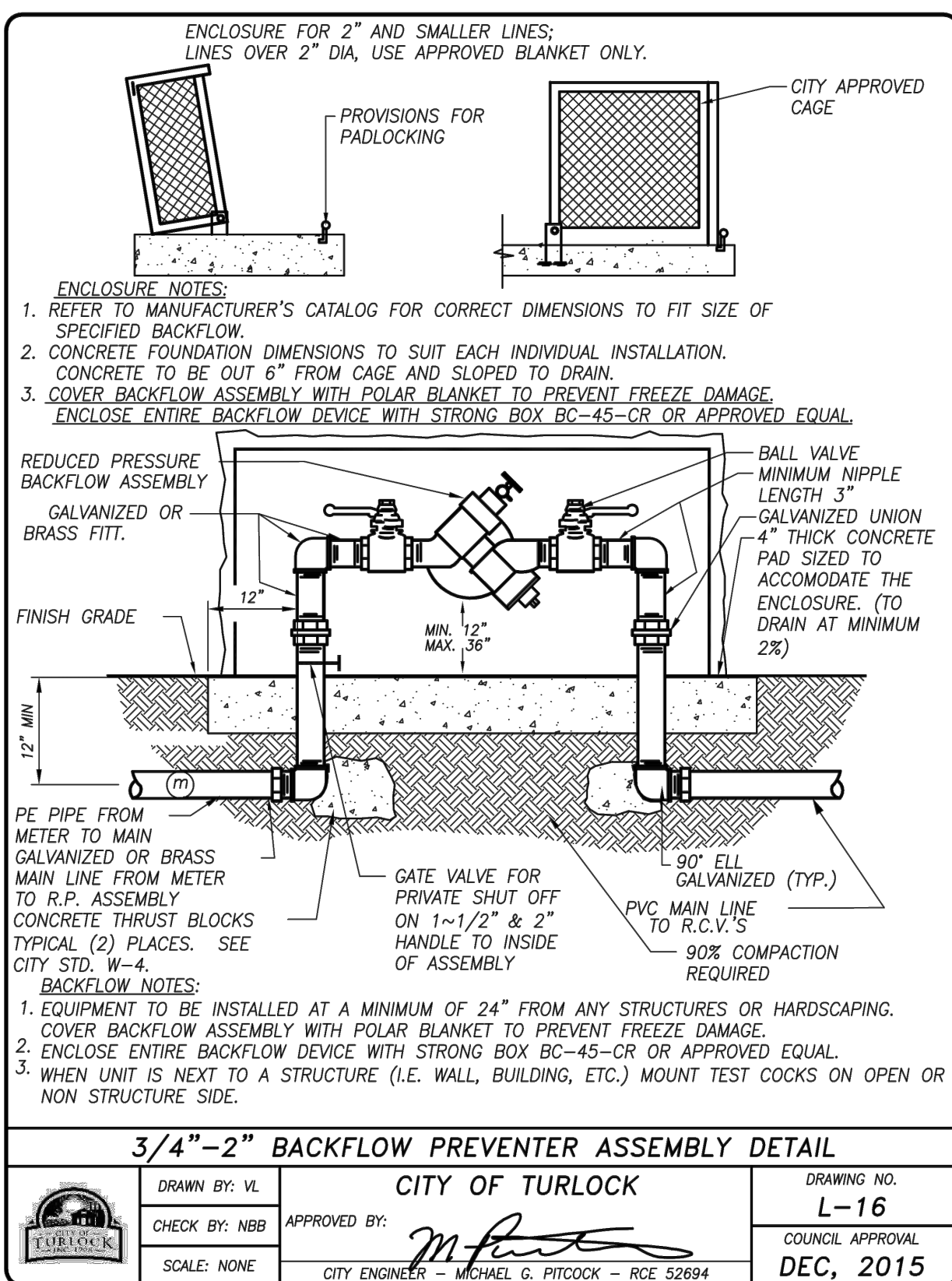
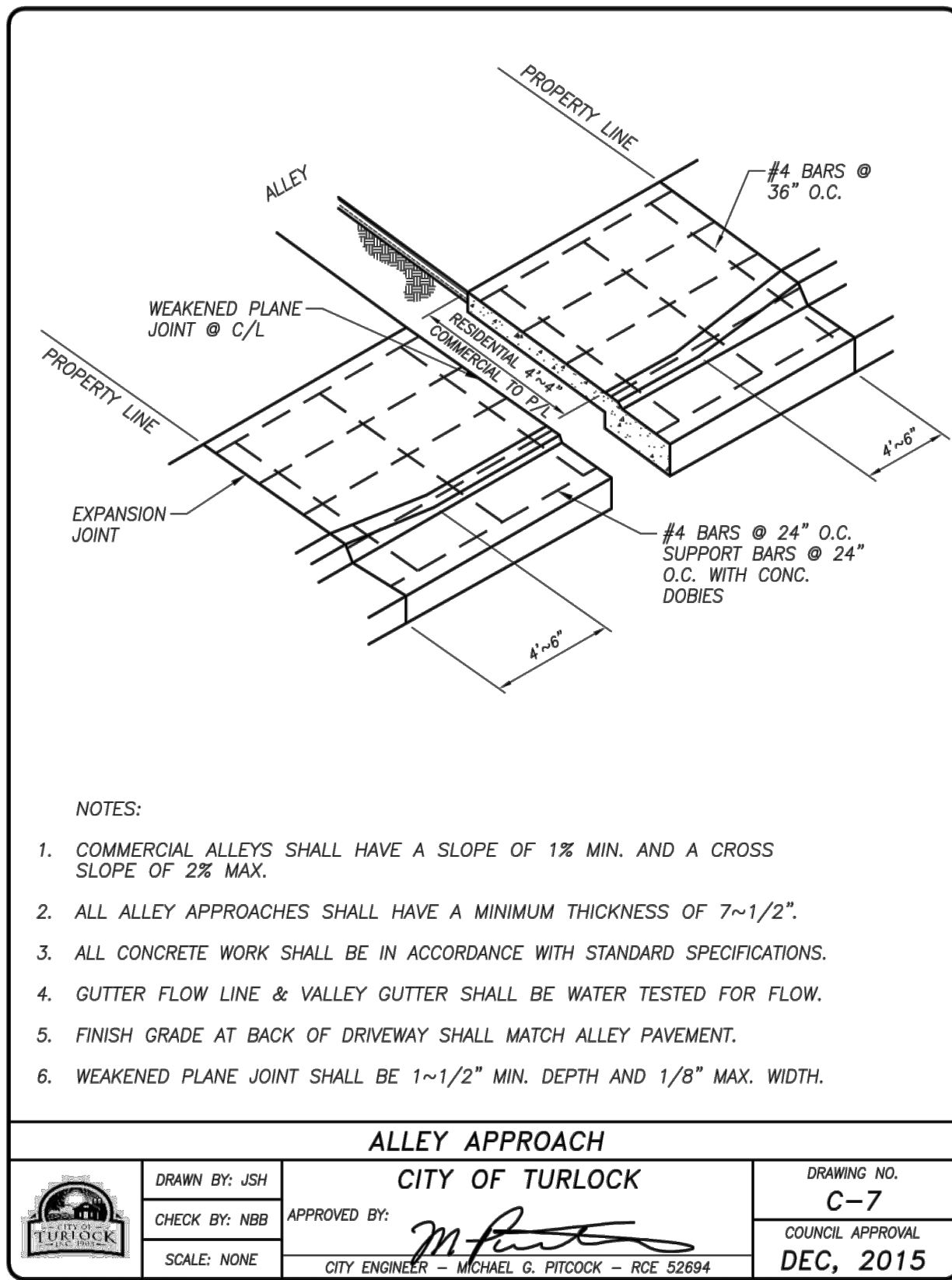
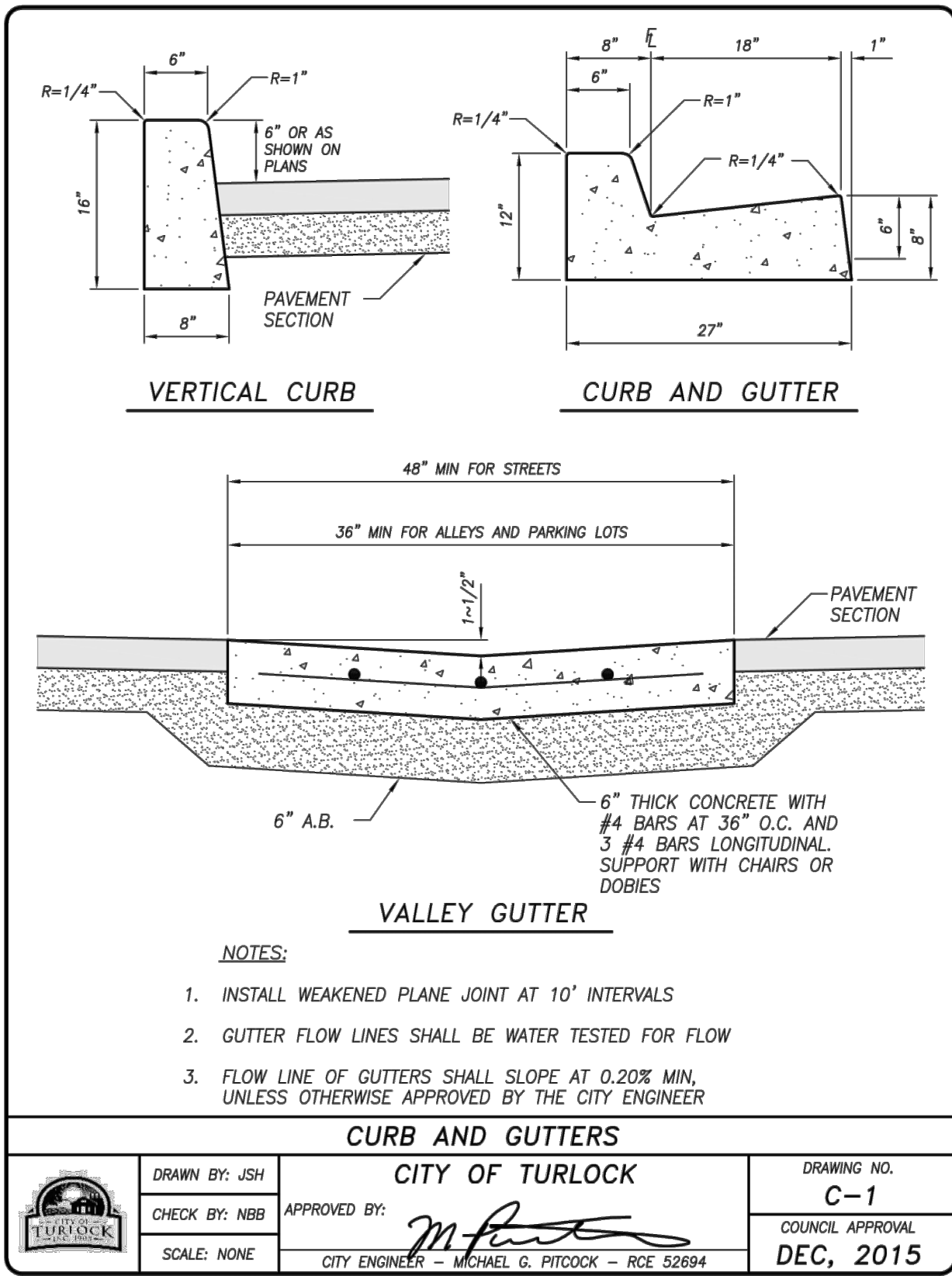


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# IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

## CITY STANDARD DETAILS



APPROVED:

DESIGNED: JJB  
DRAWN: DG,JH  
CHECKED: SSK  
SCALE: 1" = 20'  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-NT-DT.DWG

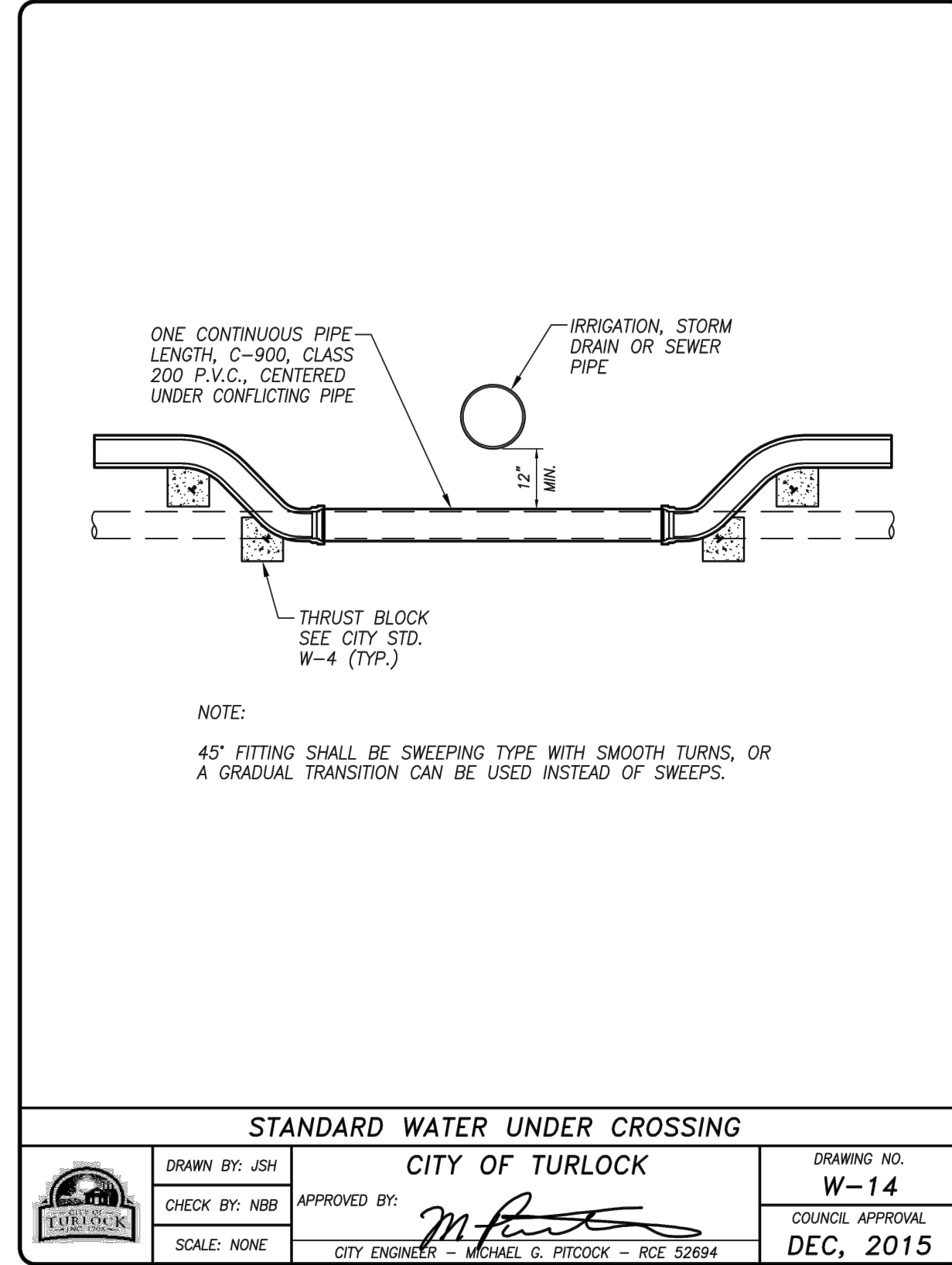
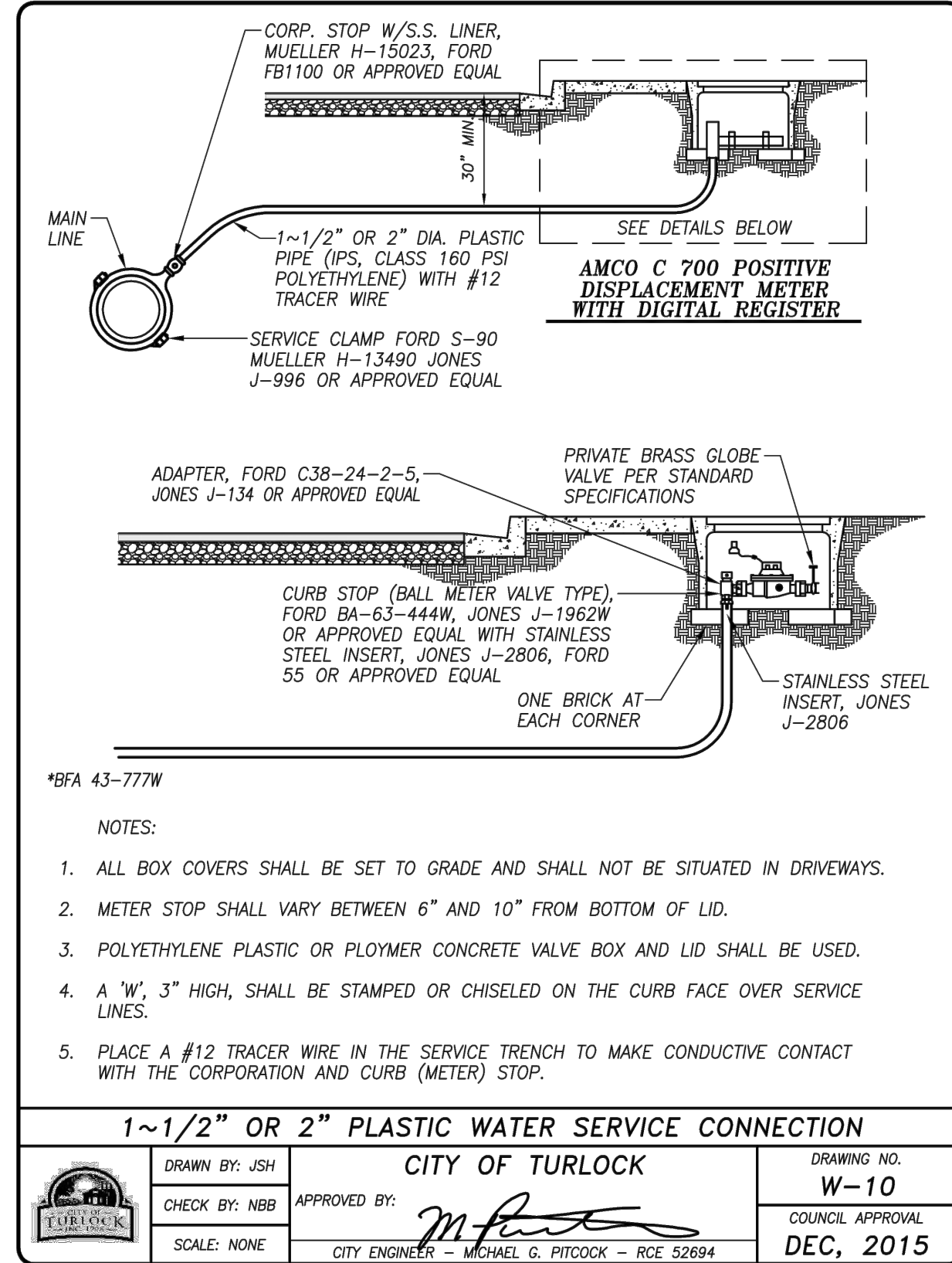
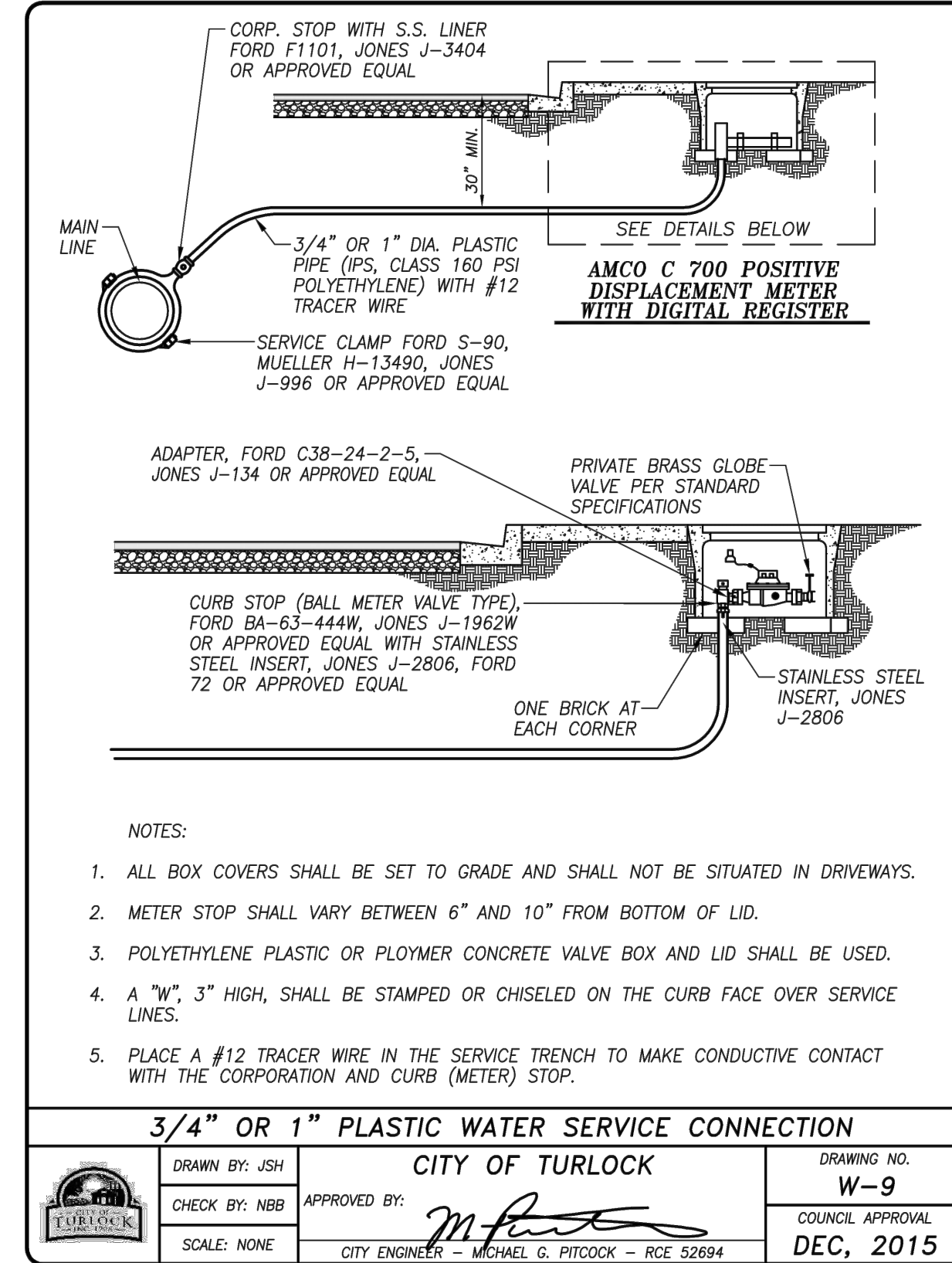
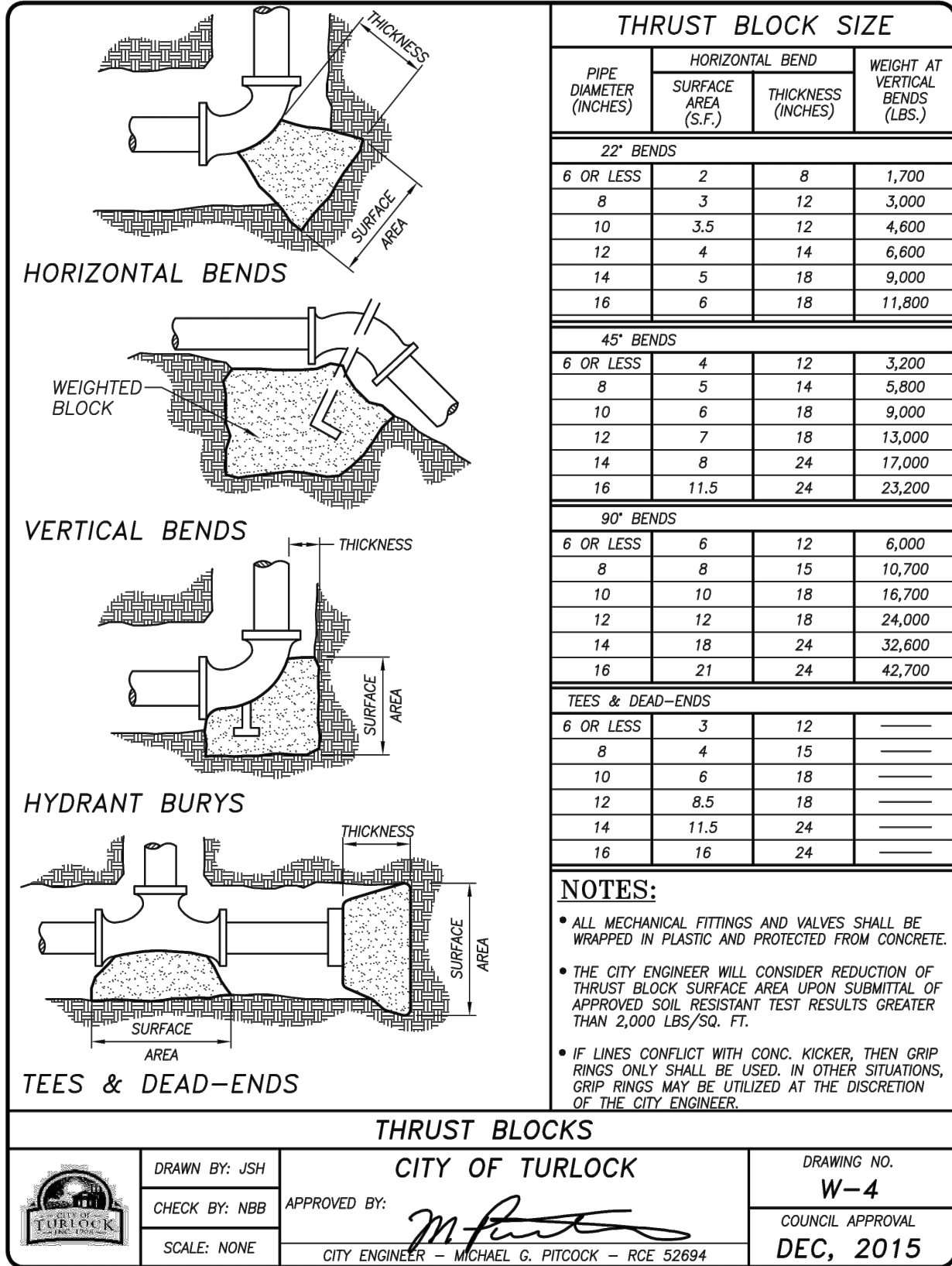
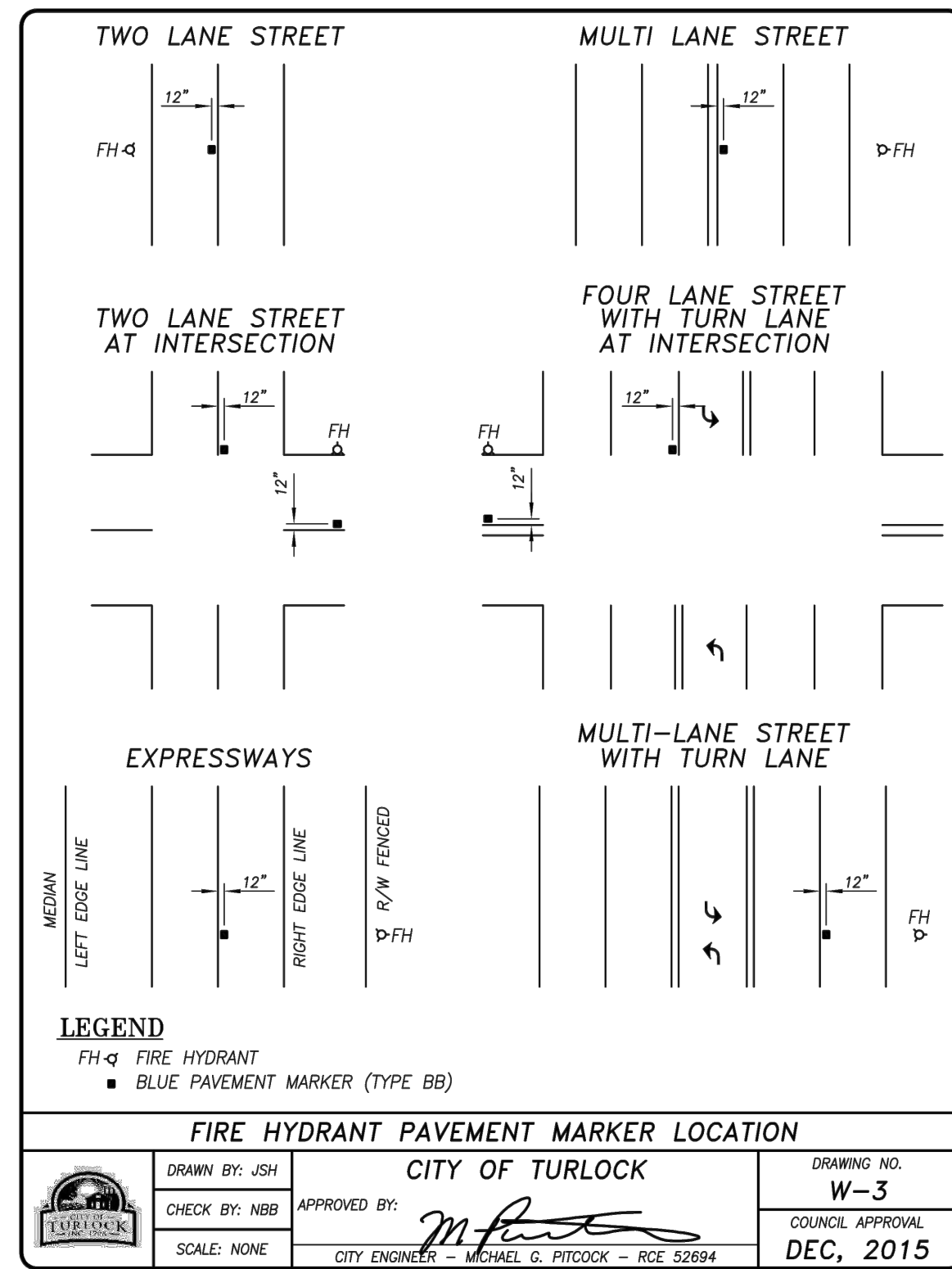
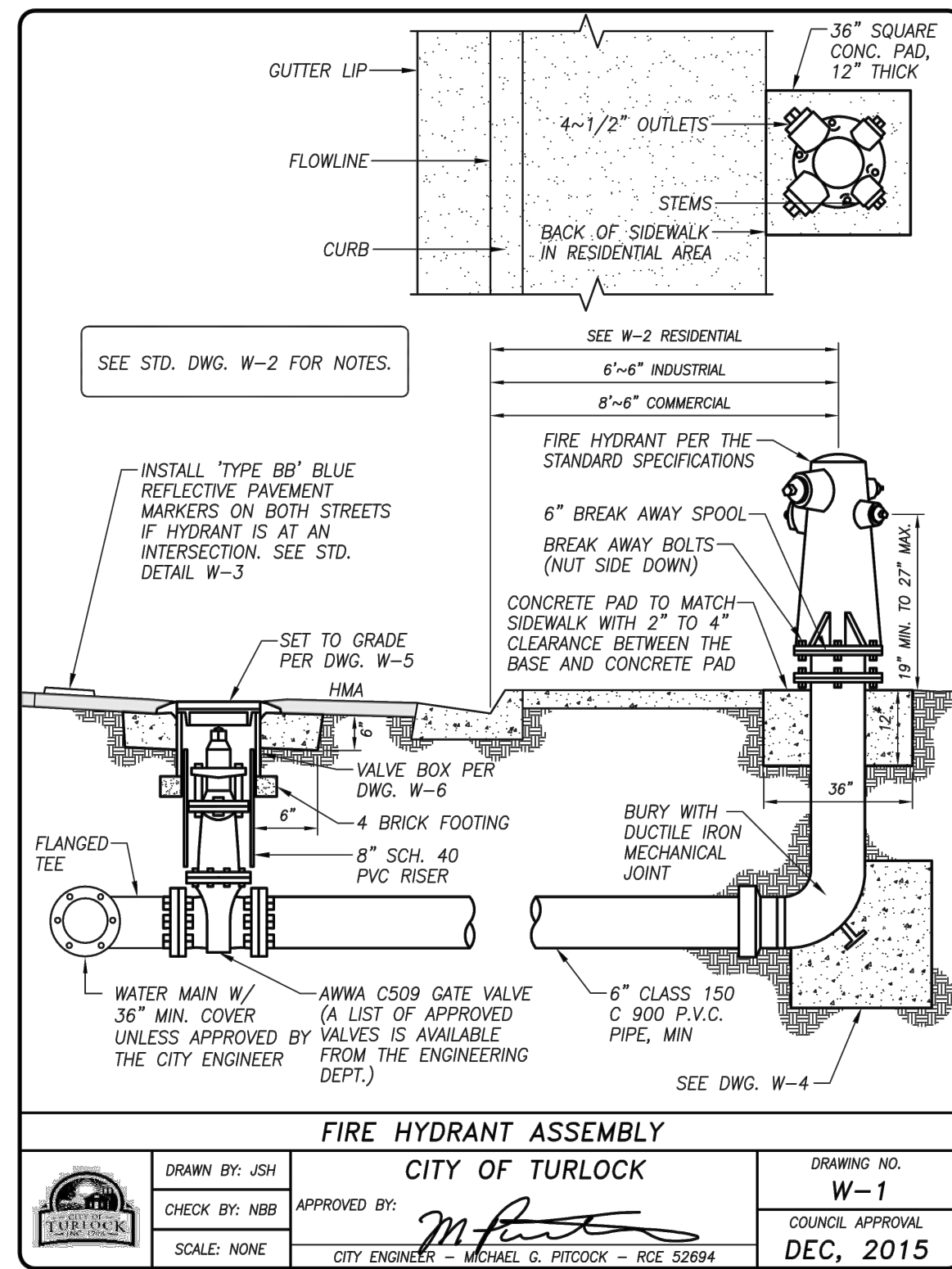
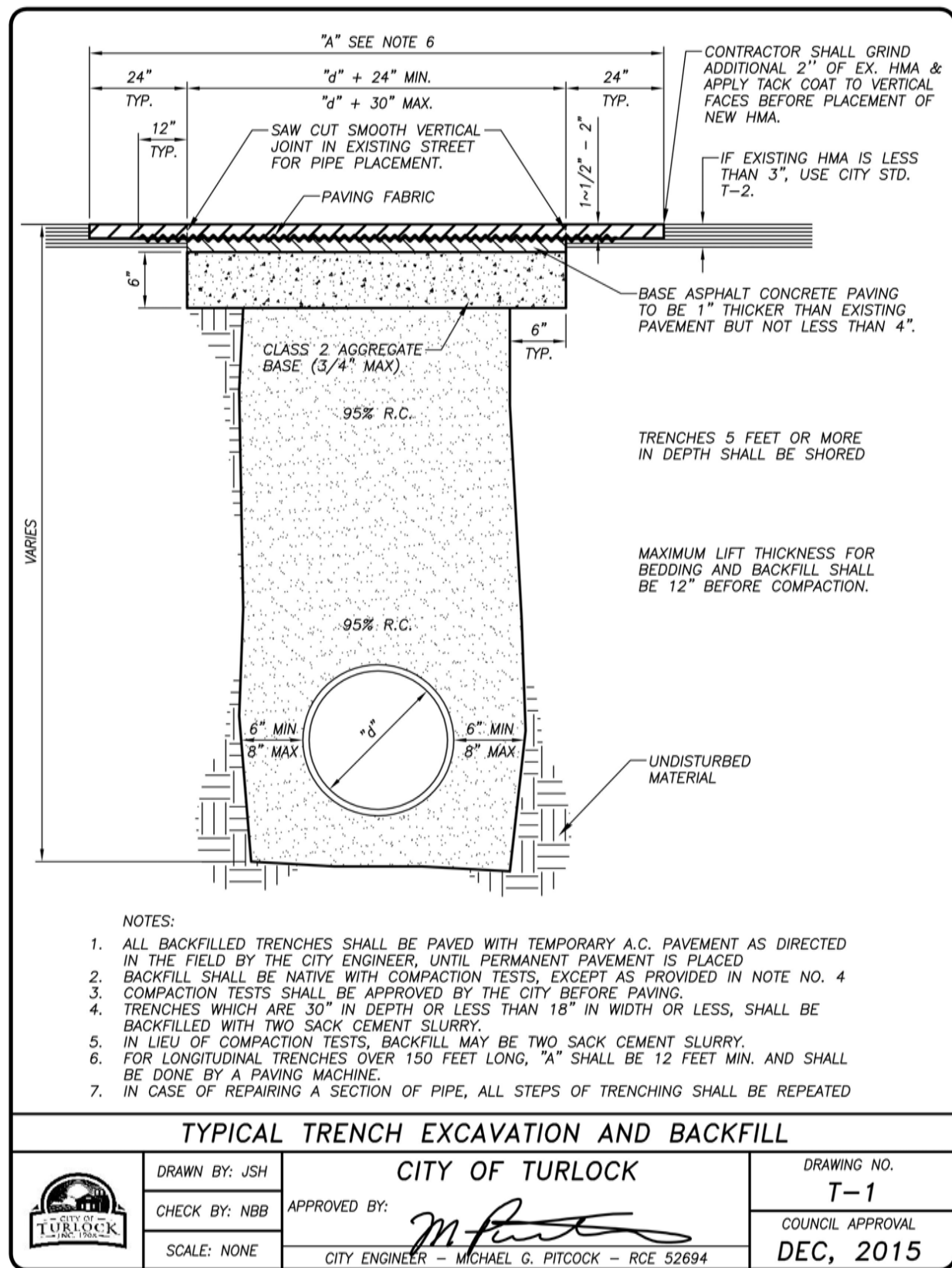
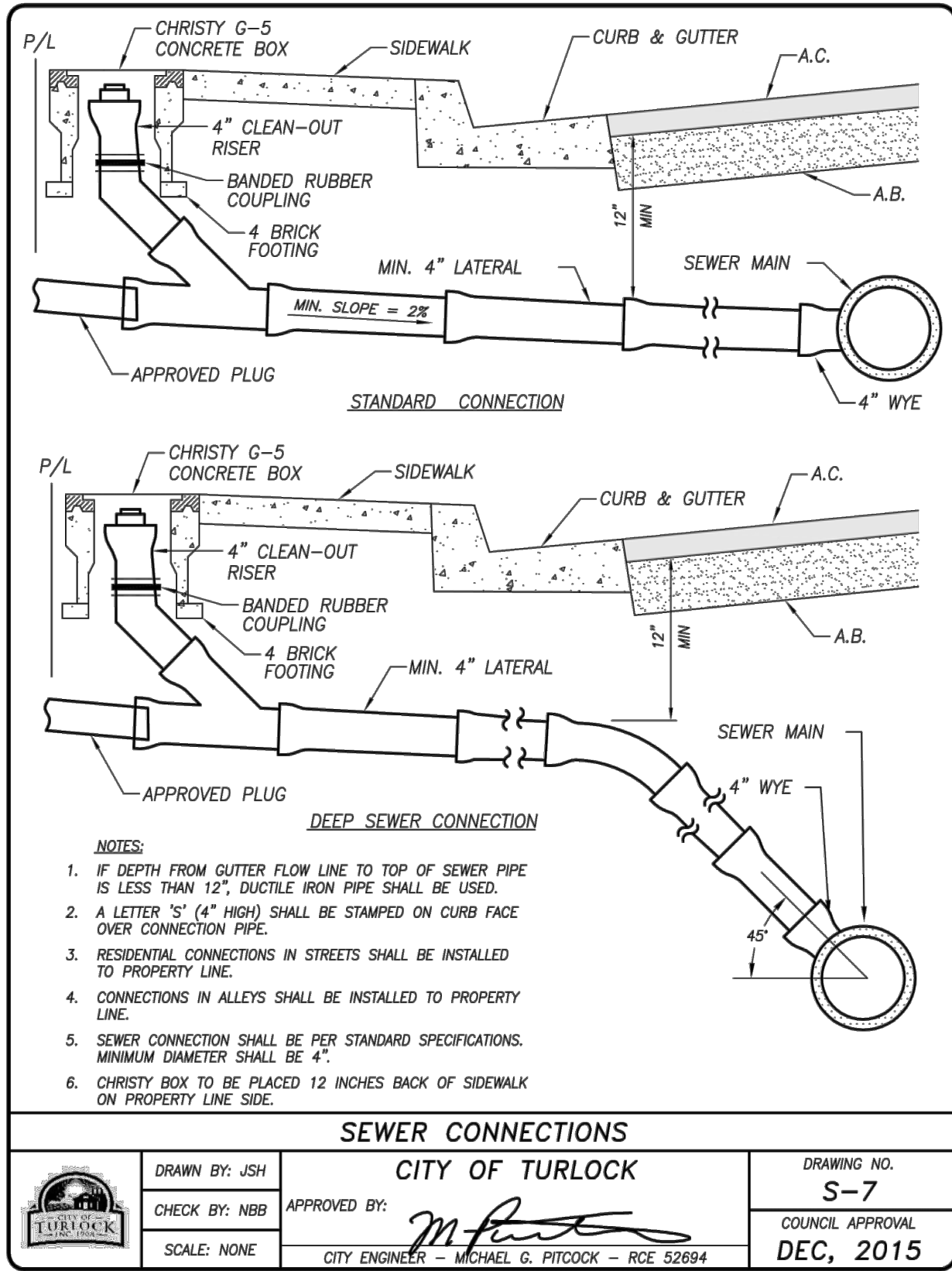


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IMPROVEMENT PLANS  
**COLUMBIA POOL IMPROVEMENTS**  
TURLOCK, CA

CITY STANDARD DETAILS



APPROVED: \_\_\_\_\_  
DESIGNED: JJB  
DRAWN: DG,JH  
CHECKED: SSK  
SCALE: 1" = 20'  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-NT-DT.DWG

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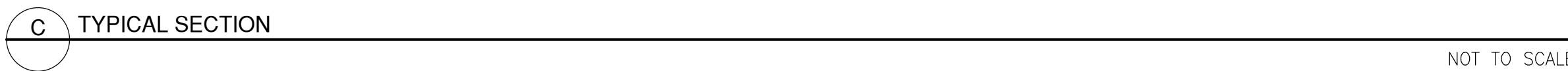
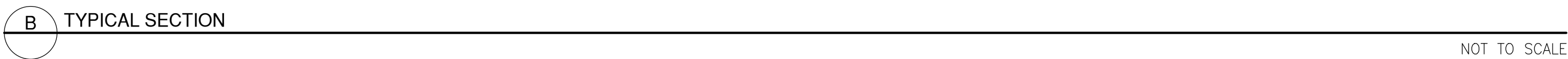
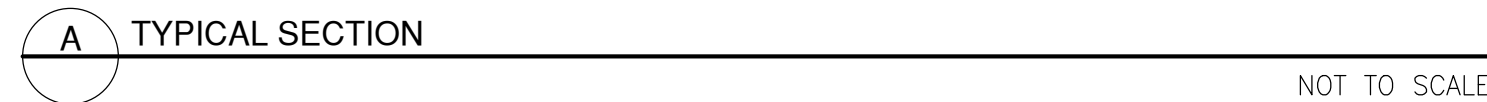
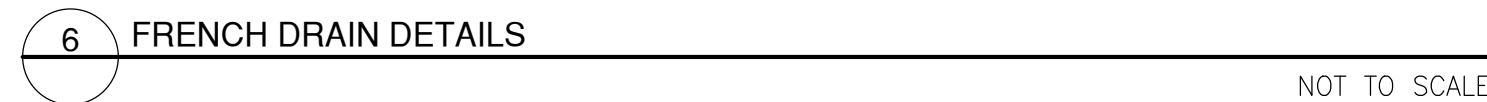
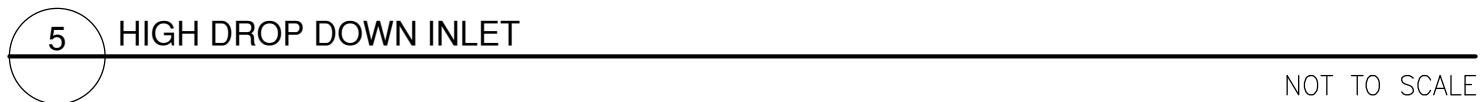
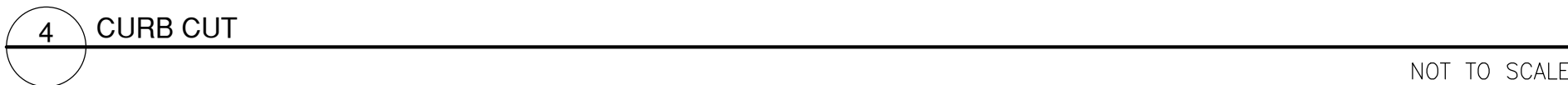
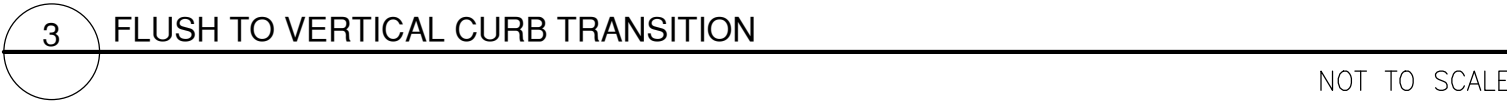
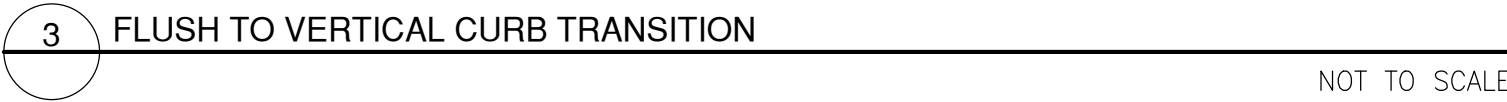
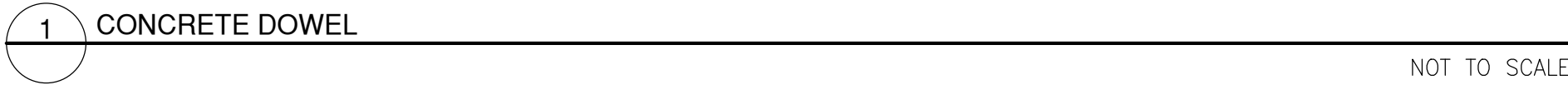


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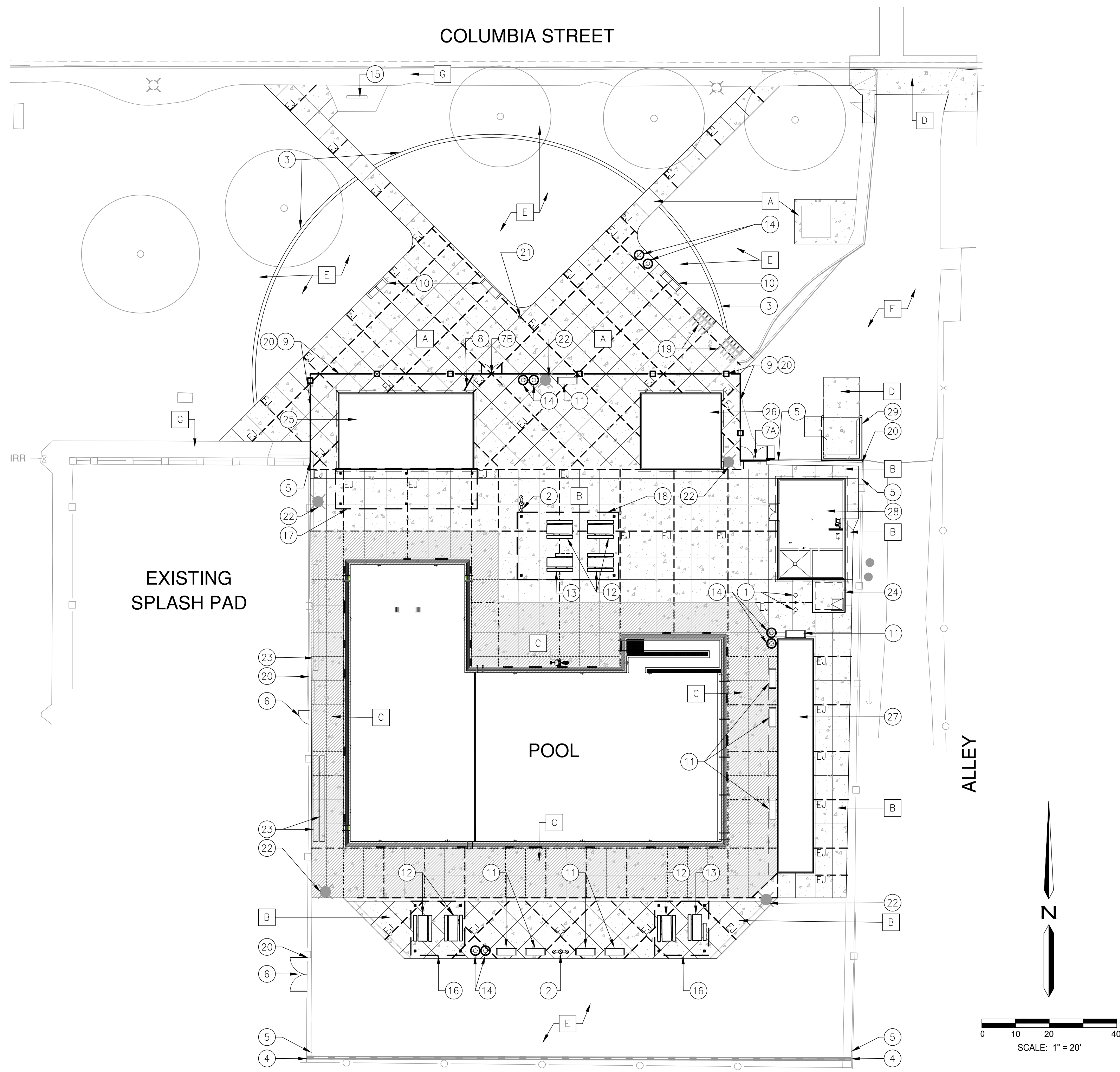
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### GENERAL NOTES

- COORDINATE INSTALLATION OF SITE FURNISHINGS, STRUCTURES, AND POOL DECKING AND EQUIPMENT WITH OTHER WORK OF GRADING, CONCRETE, AND ELECTRICAL.
- ALL SITE FURNISHINGS SHALL BE LOCATED AS SHOWN ON THE DRAWINGS, AND ASSEMBLED AND INSTALLED PER THE MANUFACTURER'S SPECIFICATIONS. SITE FURNISHING INSTALLATION SCHEDULE SHALL BE COORDINATED WITH OTHER CONTRACTORS TO AVOID CONFLICT AND POSSIBLE DAMAGE.
- MANUFACTURER NAMED ITEMS ARE FOR STANDARD OF REFERENCE AND DO NOT NECESSARILY LIMIT SUPPLY TO NAMED MANUFACTURERS.
- CONTRACTOR SHALL EXAMINE RELATED WORK AND SURFACES BEFORE STARTING WORK OF THIS SECTION AND SHOULD REPORT TO THE CITY IN WRITING ANY CONDITIONS WHICH WILL PREVENT THE PROPER PROVISION OF WORK. BEGINNING THE WORK OF THIS SECTION WITHOUT REPORTING UNSUITABLE CONDITIONS CONSTITUTES ACCEPTANCE OF CONDITIONS. ANY REQUIRED REMOVAL, REPAIR OR REPLACEMENT OF WORK CAUSED BY UNSUITABLE CONDITIONS SHALL BE DONE AT NO ADDITIONAL COST TO THE CITY.
- CONTRACTOR SHALL PROVIDE CONSTRUCTION STAKING.
- CITY SHALL PROVIDE COMPACTION TESTING. REPORTS SHALL BE DELIVERED DIRECTLY FROM THE LAB TO THE OWNER OR OWNER REPRESENTATIVE.
- ALL EARTHWORK, GRADING AND SOIL DELIVERY/REMOVAL SHALL BE PROVIDED BY THE CONTRACTOR.
- ALL CONCRETE COLORS SHALL BE REVIEWED AND APPROVED BY CITY PRIOR TO INSTALLATION.
- INTEGRAL COLOR CONCRETE SHALL BE CHROMIX ADMIXTURE BY L.M. SCOFIELD COMPANY, OR APPROVED EQUAL.
- CONCRETE COLOR SEALER SHALL BE CURE SEAL BY L.M. SCOFIELD COMPANY, OR APPROVED EQUAL.
- INSTALL INTEGRAL COLOR CONCRETE MIX AT MANUFACTURER'S RECOMMENDED RATES FOR SPECIFIED COLORS LISTED ABOVE.
- APPLY COLOR SEAL TO COLORED CONCRETE BY MEANS, RATE AND TIMING AS RECOMMENDED BY MANUFACTURER.
- CONTRACTOR SHALL PROVIDE A 6'X6' POURED SAMPLE OF COLORED CONCRETE, FINISH AND JOINTING TO OWNER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.

### REFERENCE KEY

| SCHEDULE KEY            | CONCRETE JOINT LEGEND  |
|-------------------------|--|
| <br>SITE FEATURE NUMBER | <br>EJ = EXPANSION JOINT SJ = CONTROL JOINT<br>CJ = COLD JOINT |
| <br>SITE FINISH NUMBER  |  |

### SITE FEATURE SCHEDULE

| ITEM | DESCRIPTION / MODEL   | MANUFACTURER                   | COLOR                                      | QUANTITY | SUPPLIER/INFORMATION  | DET.REF. |
|------|---|--------------------------------|--|----------|---|----------|
| 1    | 4 UNIT PEDESTAL SHOWER / MODEL # 590-SM   | MOST DEPENDABLE FOUNTAINS      | GREEN                                      | 2 EA.    | MOST DEPENDABLE FOUNTAINS / ANGELA HORNE / P: (01) 867-0039                             | 4/L7.0   |
| 2    | OUTDOOR UPPER BOTTLE FILLING STATION, TRI-LEVEL PEDESTAL, DRINKING FOUNTAIN/ #LK4420BF        | ELKAY                          | GREEN                                      | 2        | CONTACT: CHRISTOPHER ROBIN WITH GP NORTON, P: 209.723.3966.                             | 1/L7.2   |
| 3    | 12" WIDE CONCRETE MOW CURB, MEDIUM BROOM FINISH   |                                | NATURAL                                    | 208 LF   | SEE DETAILS.  | 2/L7.2   |
| 4    | 6" CMU WALL WITH 4' TALL WROUGHT IRON FENCE ABOVE   |                                | WALL-NATURAL FENCE-BLACK                   | 162 LF   | INSTALL PER DETAILS.  | 5/L7.1   |
| 5    | EXISTING 10' TALL POOL FENCING TO REMAIN AND BE PROTECTED IN PLACE                            |                                |  |          |   | -        |
| 6    | EXISTING GATES W/ NEW ACCESSIBLE CODE COMPLIANT HARDWARE                                      |                                | -  | 2        | INSTALL PER DETAILS.  | 2/L7.1   |
| 7A   | 8' CLR x 10' TALL WROUGHT IRON DOUBLE SWING GATE  |                                | BLACK                                      | 1        | INSTALL PER DETAILS.  | 4/L7.1   |
| 7B   | 6' CLR x 10' TALL WROUGHT IRON DOUBLE SWING GATE  |                                | BLACK                                      | 1        | INSTALL PER DETAILS.  | 4/L7.1   |
| 8    | 5' CLR x 6' TALL WROUGHT IRON SWING GATE  |                                | BLACK                                      | 1        | INSTALL PER DETAILS.  | 6/L7.1   |
| 9    | 10' TALL WROUGHT IRON FENCE   |                                | BLACK                                      | 174 LF   | SEE DETAILS.  | 3/L7.1   |
| 10   | CITY STD CONCRETE BACKED BENCHES, MODEL: 408 SKB W/ CITY OF TURLOCK LOGO                      | OUTDOOR CREATIONS              | CITY STD                                   | 3        | SEE DETAILS. CONTACT: CHAD SMITH, P: (530) 365-6106.                                    | -        |
| 11   | BACKLESS BENCHES, MODEL: 420  |                                | CITY STD                                   | 9        |   | 5/L7.2   |
| 12   | PICNIC TABLES, MODEL: 100SSK / CITY OF TURLOCK LOGO, OR APPROVED EQUAL                        |                                | CITY STD                                   | 6        |   | 6/L7.0   |
| 13   | ACCESSIBLE PICNIC TABLES, MODEL: 100SKRE / CITY OF TURLOCK LOGO OR APPROVED EQUAL             |                                | CITY STD                                   | 2        |   | 7/L7.0   |
| 14   | TRASH AND RECYCLE RECEPTACLES, MODEL: 500 W/ CITY OF TURLOCK LOGO                             |                                | CITY STD                                   | 4 EA     |   | 4/L7.2   |
| 15   | COLUMBIA POOL AND SPLASHPAD PRECAST CONCRETE SIGN W/ UPLIGHTING.                              |                                | AS SPECIFIED IN DETAILS                    | 1        | INSTALL PER DETAILS. SEE ELECT. DRAWINGS FOR UPLIGHT                                    | 3/L7.0   |
| 16   | SHADE STRUCTURE (16'x16')   | NORTHERN CALIFORNIA RECREATION | ROOF: ALMOND POSTS: RAL MIDDLE OLIVE GREEN | 2        | NORTHERN CALIFORNIA RECREATION / JOHN OGDEN / P: (415) 937-1697                         | 1/L7.3   |
| 17   | SHADE STRUCTURE (12'x42')   |                                |  | 1        |   | 2/L7.3   |
| 18   | SHADE STRUCTURE (20'x30')   |                                |  | 1        |   | 3/L7.3   |
| 19   | BIKE RACKS, MODEL: ORP SERIES   | PILOT ROCK                     | BLACK                                      | 10       | INSTALL PER DETAILS.  | 3/L7.2   |
| 20   | 24" HIGH METAL DEBRIS SCREEN PANELS ON FENCE  | CUSTOM. INSTALL PER DETAILS.   | BLACK                                      | 363 LF   | MOUNT TO BASE OF NORTH AND WEST FENCELINES ON INSIDE OF POOL AREA. INSTALL PER DETAILS. | 1-4/L7.1 |
| 21   | 20' TALL ALUMINUM FLAGPOLE WITH 3X5 FLAG & UPLIGHTING. FLAGPOLES ETC., MODEL: ECSA20-ESR20B41 |                                | STD  | 1        | SEE ELECT. DRAWINGS FOR UPLIGHT.  | 5/L7.0   |
| 22   | POOL AREA POLE LIGHTS   |                                | -  | 5        | SEE ELECTRICAL DRAWINGS.  | -        |
| 23   | POOL COVERS ON PORTABLE REELS   |                                |  | 3        | SEE POOL DRAWINGS.  | -        |
| 24   | POOL SURGE CHAMBER  |                                |  | 1        | SEE POOL DRAWINGS.  | -        |
| 25   | STAFF OFFICE/ LIFEGUARD/ CONCESSIONS BUILDING (DIRECT BUILDING PURCHASE BY CITY)              | PUBLIC RESTROOM COMPANY        | -  | 1        | PUBLIC RESTROOM COMPANY/ STEVE MYLER / P: (888) 888-2060 EX. 103                        | -        |
| 26   | STORAGE BUILDING (DIRECT BUILDING PURCHASE BY CITY)   |                                |  | 1        |   | -        |
| 27   | MODULAR RESTROOM BUILDING (DIRECT BUILDING PURCHASE BY CITY)                                  |                                |  | 1        |   | -        |
| 28   | POOL MECHANICAL BUILDING (DIRECT MATERIAL PURCHASE BY CITY)                                   | ROMTEC                         | -  | 1        | ROMTEC/ CODY DOOLEY/ P: (541) 496-3541  | -        |
| 29   | CITY STD TRASH ENCLOSURE WITH 4' TALL WROUGHT IRON FENCE ABOVE                                |                                | WALL: NATURAL FENCE: BLACK                 | 1        | INSTALL PER CITY STD DET R-1, R-3, R-4. FOR FENCE ON WALL, SEE DET REF AT RIGHT.        | 5/L7.1   |

### SITE FINISH SCHEDULE

| ITEM | DESCRIPTION / MODEL  | COLOR   | QUANTITY    | PATTERN / INFORMATION  | DET. REF           |
|------|--|---------|-------------|--|--------------------|
| A    | 4" CONCRETE FLATWORK - PEDESTRIAN  | NATURAL | 5,035 S.F.  | MEDIUM BROOM FINISH CONCRETE WITH HAND TOOLED SCORING AS SHOWN ON PLAN | 1-2/L7.0           |
| B    | 4" CONCRETE FLATWORK WITH NON-SLIP CONCRETE COATING INSIDE POOL FENCE ENCLOSURE. | NATURAL | 10,038 S.F. | COARSE BROOM FINISH CONCRETE AND NON-SLIP CONCRETE COATING             | 1-2/L7.0           |
| C    | 6" CONCRETE FLATWORK PER POOL DECK PLANS   | NATURAL | 6,389 S.F.  | SEE POOL DRAWINGS FOR MORE INFORMATION                                 | -                  |
| D    | 6" CONCRETE FLATWORK   | NATURAL | 643 S.F.    | MEDIUM BROOM FINISH CONCRETE WITH HAND TOOLED SCORING AS SHOWN ON PLAN | R-1, R-3, C-7/C4.0 |
| E    | NEW OR RENOVATED PLANTING AREA. SEE PLANTING PLAN, SHEET L6.0 & L6.1             |         |             |  |                    |
| F    | AC PAVEMENT. SEE CIVIL PLANS.  |         |             |  |                    |
| G    | EXISTING CONCRETE FLATWORK TO REMAIN   |         |             |  |                    |

\*ALL MANUFACTURERS ITEMS SHALL BE AS LISTED OR APPROVED EQUAL.

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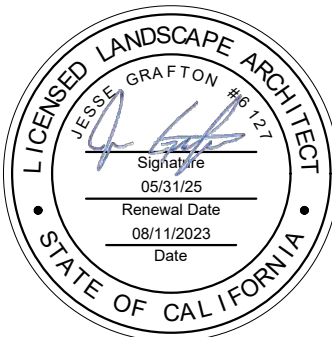
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IMPROVEMENT PLANS

COLUMBIA POOL  
IMPROVEMENTS

TURLOCK, CA

SITE FEATURES  
LEGEND, NOTES &  
PLAN



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: 1"=20'

DATE: 08/11/2023

JOB NO.: 37512

FILE NO.: 37512-SF.DWG

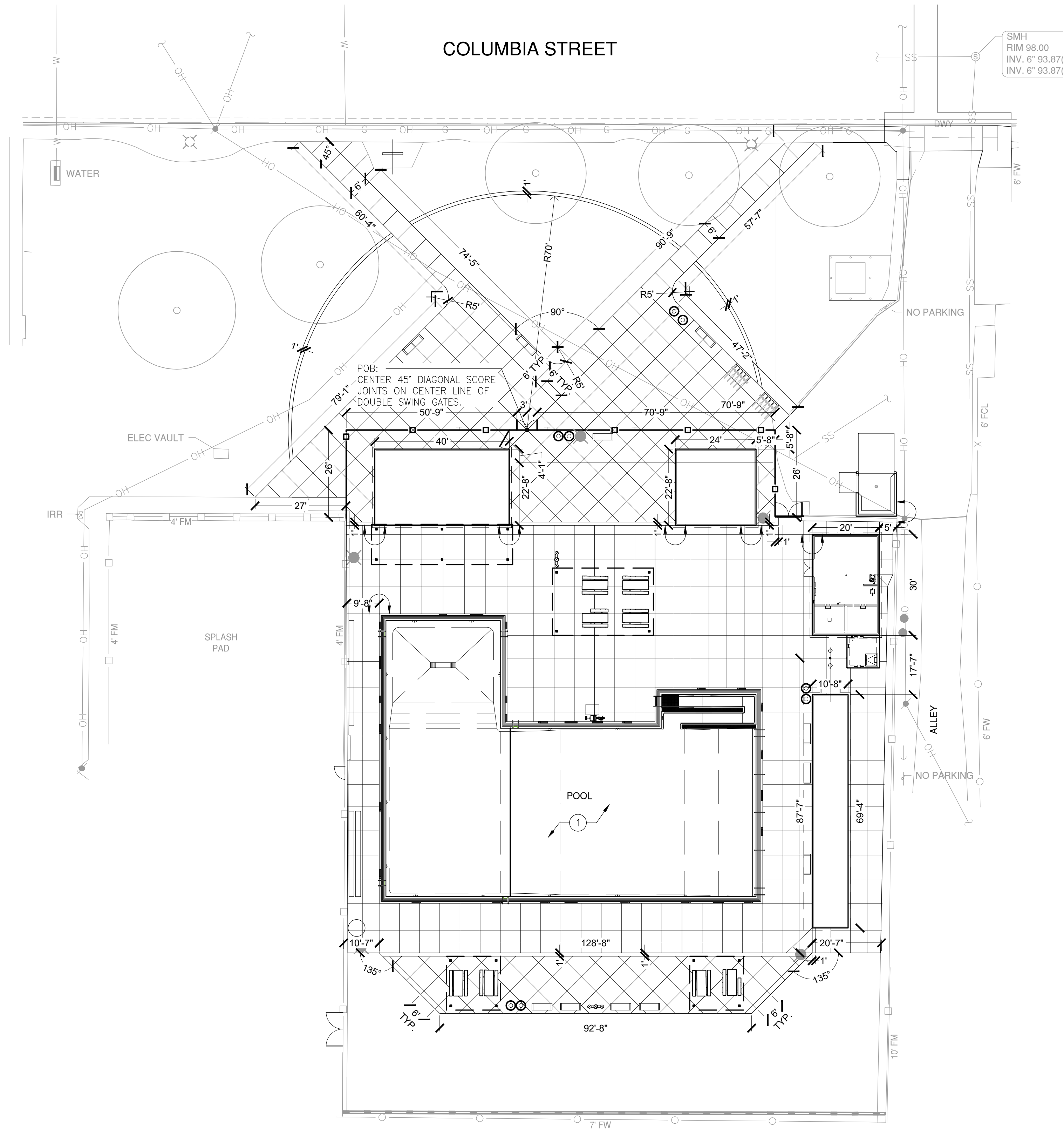
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HORIZONTAL CONTROL LEGEND

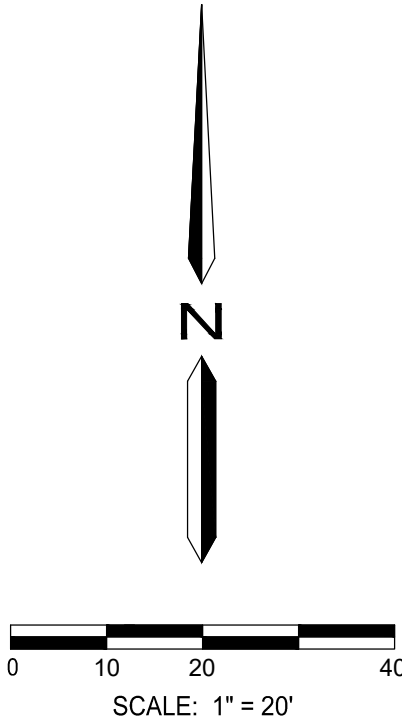
- CENTER LINE
- ARC RADIUS, TYP.
- DIMENSION, TYP.
- ALIGN, TYP.
- ORIGIN OF RADIUS

ABBREVIATIONS

- DWY DRIVEWAY
- EQ EQUAL
- FCL FENCE CHAIN LINK
- FM FENCE METAL
- FW FENCE WOOD
- G GAS
- INV INVERT
- OH OVERHEAD
- R RADIUS (CENTER)
- SMH SANITARY SEWER MANHOLE
- SS SANITARY SEWER
- TYP TYPICAL
- W WATER

SHEET NOTES

- SEE AQUATIC DESIGN GROUP'S PLANS FOR POOL AND MECHANICAL ROOM IMPROVEMENT LAYOUT DIMENSIONS.



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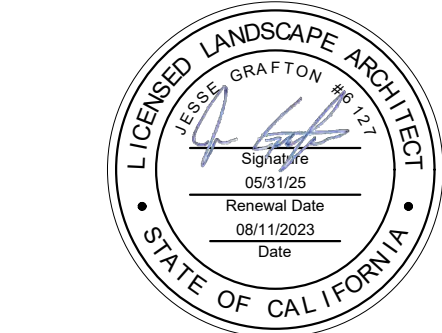
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Modesto, CA 95350

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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

HORIZONTAL CONTROL PLAN - SITE WORK

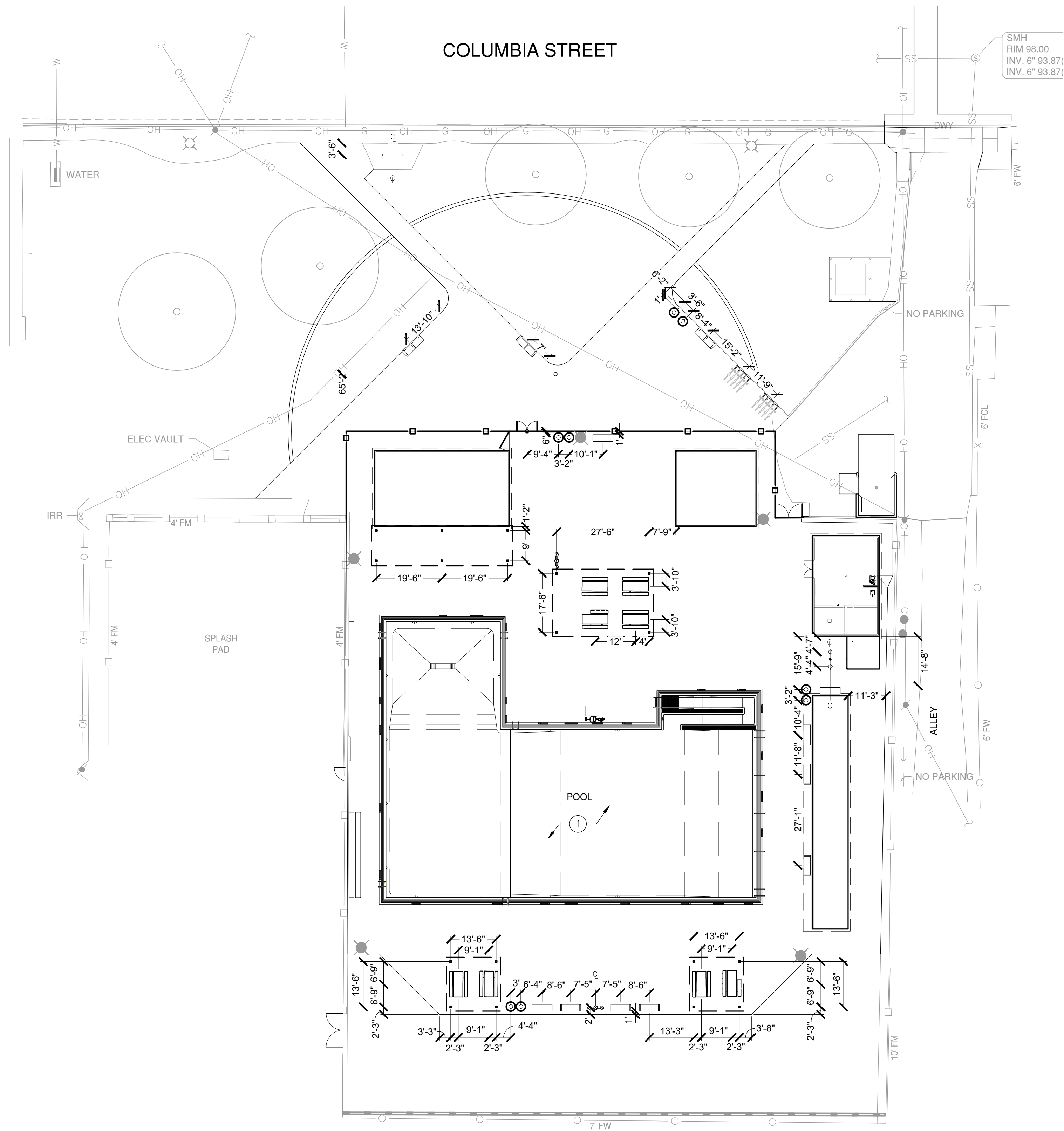


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| APPROVED: |              |
| DESIGNED: | JG, VR, JS   |
| DRAWN:    | VR, JS       |
| CHECKED:  | JG           |
| SCALE:    | 1"=20'       |
| DATE:     | 08/11/2023   |
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HORIZONTAL CONTROL LEGEND

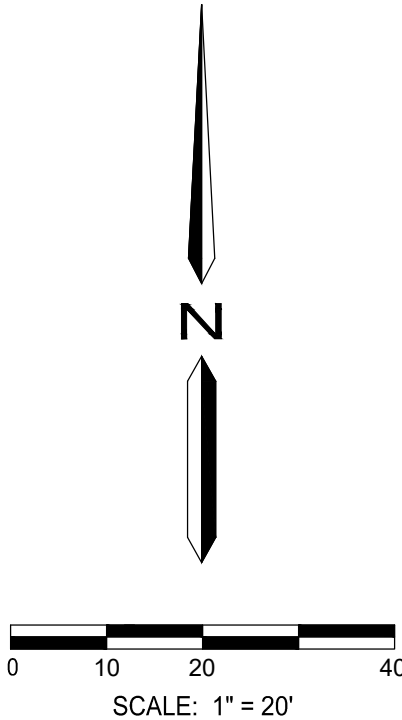
- ⊙ CENTER LINE
- ⌒ RADIUS ARC RADIUS, TYP.
- LENGTH — DIMENSION, TYP.
- ↶ ALIGN, TYP.
- + ORIGIN OF RADIUS

ABBREVIATIONS

- DWY DRIVEWAY
- EQ EQUAL
- FCL FENCE CHAIN LINK
- FM FENCE METAL
- FW FENCE WOOD
- G GAS
- INV INVERT
- OH OVERHEAD
- R RADIUS (CENTER)
- SMH SANITARY SEWER MANHOLE
- SS SANITARY SEWER
- TYP TYPICAL
- W WATER

SHEET NOTES

- 1 SEE AQUATIC DESIGN GROUP'S PLANS FOR POOL AND MECHANICAL ROOM IMPROVEMENT LAYOUT DIMENSIONS.



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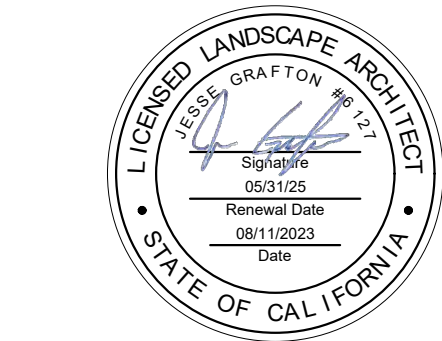
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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

HORIZONTAL  
CONTROL PLAN -  
SITE FEATURES



|           |              |
|-----------|--------------|
| APPROVED: |              |
| DESIGNED: | JG, VR, JS   |
| DRAWN:    | VR, JS       |
| CHECKED:  | JG           |
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GENERAL IRRIGATION NOTES

1. ANY AND ALL PORTIONS OF WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS AS SET FORTH BY LOCAL MUNICIPALITIES, STATE AND NATIONAL AGENCIES. IN THE EVENT THERE IS A CONFLICT WITH THESE PLANS AND THE AGENCIES STATED ABOVE, THE GOVERNING BODY'S REGULATIONS SHALL PREVAIL.
2. IRRIGATION SHALL BE INSTALLED CONSISTENT WITH CITY WATER CONSERVATION REQUIREMENTS AND THE STATE WATER EFFICIENT LANDSCAPE ORDINANCE (AB1881).
3. PRIOR TO BIDDING AND COMMENCEMENT OF SITE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH/AND EXAMINE CONDITIONS OF THE PROJECT SITE, VERIFYING LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES. LOCATIONS OF ITEMS SHOWN ON THESE PLANS ARE ONLY APPROXIMATIONS. ANY DISCREPANCIES DISCOVERED SHALL BE REPORTED TO THE CITY. FAILURE TO REPORT DISCREPANCIES TO THE CITY BEFORE COMMENCEMENT OF SITE WORK IMPLIES ACCEPTANCE OF SITE CONDITIONS AND COSTS ASSOCIATED WITH CORRECTING IRRIGATION LAYOUTS.ANY EXISTING SITE FEATURES, GRADE CHANGES, OR SITE PLAN DESIGN CHANGES NOT SPECIFICALLY ADDRESSED ON THESE PLANS, (OR UNKNOWN CONDITIONS THAT WERE NOT APPARENT DURING THE DESIGN PROCESS) THAT WILL IMPACT INSTALLATION OR OPERATING OF IRRIGATION ITEMS IN ANY WAY, SHALL BE REPORTED TO THE CITY PRIOR TO COMMENCEMENT OF SITE WORK. CONTRACTOR SHALL COORDINATE & SCHEDULE INSTALLATION EFFORTS WITH THOSE OF OTHER TRADES TO AVOID COSTLY DELAYS & ERRORS.
4. CONTRACTOR SHALL INSTALL IRRIGATION EQUIPMENT PER DETAILS AND SPECIFICATIONS. ALL IRRIGATION EQUIPMENT REQUIRED FOR PROJECT COMPLETION BUT NOT DETAILED ON THESE PLANS SHALL BE INSTALLED PER LOCAL AND STATE CODES AND MANUFACTURER'S WRITTEN INSTALLATION RECOMMENDATIONS.
5. CONTRACTOR TO OBTAIN ALL REQUIRED PERMITS FOR SUCCESSFUL COMPLETION OF PROJECT PRIOR TO COMMENCEMENT OF WORK.
6. CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN ANY AND ALL PROJECT RELATED ARCHITECTURAL OR ENGINEERING DRAWINGS PRIOR TO COMMENCEMENT OF WORK.
7. THE CONTRACTOR SHALL REPAIR, REPLACE, OR COMPENSATE OWNER FOR ALL ITEMS DAMAGED BY THEIR WORK.
8. THE CONTRACTOR SHALL COORDINATE AND SCHEDULE INSTALLATION EFFORTS WITH THOSE OF OTHER TRADES TO AVOID COSTLY DELAYS AND ERRORS.
9. CONTACT CITY OF **TURLOCK, CA** AND CITY IN ADVANCE TO SCHEDULE ALL NECESSARY IRRIGATION TESTS.
10. REQUIRED TESTING

10.1. PRESSURE TEST: MAINLINE SHALL HOLD 120 PSI MIN. FOR 8 HOURS, IF LEAKS OCCUR, REPLACE FAULTY COMPONENTS AND RE-TEST. CONTRACTOR SHALL PROVIDE MAINLINE & WIRE AS-BUILT'S TO CITY PRIOR TO BACKFILLING TRENCH AFTER PRESSURE TEST IS COMPLETE.

10.2. COVERAGE TEST: COVERAGE TEST SHALL BE PERFORMED PRIOR TO INSTALLATION OF ANY PLANT MATERIAL. IRRIGATION AUDIT SHALL BE PERFORMED AT THIS POINT, BY CERTIFIED IRRIGATION AUDITOR. CONTRACTOR SHALL PROVIDE RESULTS TO CITY AND MAKE ALL NECESSARY CORRECTIONS PRIOR TO PLANTING. FAILURE TO DO SO SHALL MAKE ALL REQUIRED COSTS ASSOCIATED WITH ADJUSTING IRRIGATION THE CONTRACTOR'S RESPONSIBILITY.

10.3. BACKFLOW PREVENTION DEVICE TEST: BACKFLOW PREVENTION TEST SHALL BE PERFORMED BY A CERTIFIED BACKFLOW PREVENTION TESTER. CONTRACTOR SHALL PROVIDE RESULTS TO LANDSCAPE ARCHITECT/ OWNER UPON COMPLETION.

1. CONTRACTOR SHALL INVESTIGATE AND DETERMINE THE POINT OF CONNECTION LOCATION, IF DIFFERENT THAN SHOWN ON THESE PLANS THIS SHALL BE REPORTED TO THE CITY.
2. THE IRRIGATION SYSTEM AS SHOWN WITHIN THESE PLANS HAS BEEN DESIGNED BASED ON OPERATING PRESSURES OF **45 PSI** AND MAXIMUM FLOW DEMANDS TO MATCH EXISTING. VERIFY AVAILABLE STATIC PRESSURE IS SUFFICIENT WITH THE CITY OF **TURLOCK, CA** OR AT EXISTING BACKFLOW PREVENTER. THE CONTRACTOR IS TO PERFORM PRESSURE TESTS AT THE POINT OF CONNECTION TO CONFIRM ACTUAL SITE PRESSURE LEVELS. ANY DISCREPANCIES BETWEEN INFORMATION ON THESE PLANS AND THAT OF EXISTING SITE CONDITIONS OR MANUFACTURER DATA SHALL BE REPORTED TO THE CITY. FAILURE TO CONFIRM POC INFORMATION RESULTING IN REQUIRED CHANGES, DUE TO LOW PRESSURE OR VOLUME, WILL RESULT IN OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.
3. CONTRACTOR SHALL CONFIRM ALL POINTS OF CONNECTIONS PRIOR TO CONSTRUCTION.

1. CONTROLLER LOCATION SHOWN ON DRAWINGS IS AN APPROXIMATE LOCATION. CONTRACTOR SHALL CONFIRM LOCATION OF CONTROLLER WITH OWNER PRIOR TO CONTROLLER INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ELECTRICAL CONNECTIONS BETWEEN THE 120 VOLT POWER SOURCE TO THE CONTROLLER, VALVES, AND ADDITIONAL IRRIGATION EQUIPMENT. SEE ELECTRICAL ENGINEERING DRAWINGS FOR ELECTRICAL CONNECTION REQUIREMENTS AND LOCATION. FAILURE TO OBTAIN APPROVAL OF CONTROLLER ASSEMBLY LOCATION PRIOR TO INSTALLATION WILL RESULT IN OWNER DIRECTED REVISIONS AT NO ADDITIONAL COST TO THE OWNER.
2. A LAMINATED, WATERPROOF, LEGIBLE, CHART OF THE IRRIGATION SYSTEM NOT EXCEEDING 11"x17", SHALL BE PROVIDED TO THE OWNER AND ONE ADHERED TO THE INSIDE COVER OF THE CONTROLLER. ALL VALVES AND THEIR RESPECTIVE COVERAGE AREAS SHALL BE IDENTIFIED WITH SEPARATE AND DISTINCT COLORS.

1. VALVE AND QUICK COUPLER LOCATIONS SHOWN ON DRAWINGS ARE APPROXIMATE LOCATIONS. CONTRACTOR SHALL STAKE THE LOCATIONS OF VALVES AND QUICK COUPLERS FOR APPROVAL BY CITY PRIOR TO INSTALLATION.
2. VALVES AND QUICK COUPLERS SHALL BE GROUPED TOGETHER AND INSTALLED IN SHRUB BEDS, UNLESS NOTED OTHERWISE.
3. INSTALL ALL VALVES AND QUICK COUPLERS PER PLAN DETAILS AND MANUFACTURER'S WRITTEN RECOMMENDATIONS.

1. ALL HEADS SHALL INCLUDE A FACTORY INSTALLED DRAIN CHECK VALVE TO PREVENT LOW HEAD DRAINAGE.
2. ALL HEADS SHALL INCLUDE A FACTORY INSTALLED PRESSURE REGULATOR. SEE LEGEND FOR SPECIFIED PRESSURE LEVELS OF INDIVIDUAL HEADS.
3. ALL HEADS AND NOZZLES SHALL BE INSTALLED PER PLANS. AFTER INSTALLATION, ADJUST ALL ARCS AND THROWS FOR EVEN COVERAGE AND TO PREVENT OVERSPRAY ONTO PAVEMENT, BUILDINGS, WALLS, OR EQUIPMENT. THIS INCLUDES BUT IS NOT LIMITED TO ADJUSTMENTS TO THE RADIUS REDUCTION SCREW, SCREEN REPLACEMENTS, AND APPROVED NOZZLE REPLACEMENTS. ANY VERTICAL OBSTRUCTIONS NOT NOTED ON THESE PLANS ARE TO BE REPORTED TO THE LANDSCAPE ARCHITECT PRIOR TO COMMENCING WORK.
4. FLOOD TRENCHES TO COMPACT SOIL PRIOR TO LEVELING HEADS. ALL HEADS SHALL BE INSTALLED FLUSH AND PERPENDICULAR TO FINISH GRADE UNLESS OTHERWISE NOTED OR DETAILED.

1. WIRING SHALL BE INSTALLED IN SAME TRENCH AS MAINLINE WITH 18" OF COVER.
2. CONTRACTOR TO SUPPLY TWO ADDITIONAL WIRES FROM CONTROLLER (STRETCHING ALONG THE ENTIRE MAINLINE) TO THE LAST VALVE OR STUB OF EACH AND EVERY LEG OF MAINLINE. EACH WIRE SHALL BE TAGGED WITH A WATERPROOF LEGIBLE LABEL SPECIFYING IT AS AN "EXTRA WIRE".
3. CONTROL WIRE TO BE U.L. LISTED, DIRECT BURIAL #14UF AWG MINIMUM. COMMON WIRE TO BE U.L. LISTED, DIRECT BURIAL #12UF AWG MINIMUM. WIRING TO BE COLOR CODED WITH CORRESPONDING STATION NUMBER TAGS AT THE CONTROLLER AND VALVES.
4. WATERPROOF DBY6 WIRE CONNECTORS SHALL BE USED AT ALL WIRE CONNECTIONS.

1. PIPING AND EQUIPMENT LAYOUT IS SHOWN SCHEMATICALLY FOR VISUAL CLARITY. PIPING AND EQUIPMENT SHOWN WITHIN PAVED AREAS SHALL BE INSTALLED WITHIN AREAS DESIGNATED FOR LANDSCAPE. MAINLINES SHALL BE LOCATED A MINIMUM OF 18" OFF ADJACENT PAVEMENT OR OTHER OBSTACLES.
2. NON-PRESSURIZED LINES SHALL BE BURIED WITH A MINIMUM OF 12" COVER. PRESSURIZED MAINLINES SHALL BE BURIED WITH A MINIMUM OF 18" COVER. UNDERGROUND WARNING TAPE READING "CAUTION, BURIED IRRIGATION LINE BELOW" SHALL BE INSTALLED 12" ABOVE PRESSURIZED LINES.
3. PIPE SIZES SHALL BE INSTALLED PER PLANS. SMALLER PIPE SIZE SUBSTITUTIONS ARE NOT ACCEPTABLE; LARGER PIPE SIZES MAY BE APPLIED.
4. SOLVENT WELD FITTINGS FOR MAINLINES 2½" AND LARGER SHALL BE SCHEDULE 40 PVC. FOR MAINLINES 3"-4" USE SCH 80 SOLVENT, WELD FITTINGS. ALL THREADED FITTINGS SHALL BE SCHEDULE 80 PVC.

1. SCHEDULE 40 PVC SLEEVES SHALL BE PROVIDED FOR ALL IRRIGATION LINES UNDER PAVING OR CONCRETE.
2. SLEEVES SHALL BE SIZED PER PLAN OR TWICE THE SIZE OF THE PIPE WHEN NOT SPECIFIED. ELECTRICAL WIRE SLEEVES SHALL BE OF SUFFICIENT SIZE FOR THE REQUIRED NUMBER OF WIRES. PIPING AND WIRING SHALL BE IN SEPARATE SLEEVES.
3. SLEEVES SHALL EXTEND A MINIMUM OF 12" BEYOND PAVED OR CONCRETE SURFACES OR AS NOTED.

1. I HAVE COMPLIED WITH THE CRITERIA OF THE CITY OF **TURLOCK, CA** WATER CONSERVATION ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE IRRIGATION DESIGN PLAN.
2. AN IRRIGATION AUDIT SHALL BE COMPLETED BY A CERTIFIED LANDSCAPE IRRIGATION AUDITOR AFTER INSTALLATION AND PER THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE. THE AUDIT SHALL BE PROVIDED TO THE CITY OF **TURLOCK, CA**. BUILDING PERMIT WILL NOT BE SIGNED OFF UNTIL AUDIT HAS BEEN PROVIDED.
3. CHANGES TO THE APPROVED PLANS OR FIELD SUBSTITUTIONS SHALL NOT BE PERMITTED WITHOUT PRIOR WRITTEN APPROVAL FROM THE LANDSCAPE ARCHITECT. IF THE OWNER/CONTRACTOR DEVIATES FROM THE APPROVED PLAN WITHOUT PRIOR WRITTEN APPROVAL THEY WILL BE REQUIRED TO MAKE ANY CORRECTIONS, AT THEIR OWN EXPENSE, TO BRING THE LANDSCAPE AND IRRIGATION INTO COMPLIANCE WITH THE APPROVED PLANS AND THE STATE MODEL WATER EFFICIENT LANDSCAPE ORDINANCE.

1. CONTRACTOR SHALL MAKE DAILY AS-BUILT PLANS OF MAINLINE & WIRE. CONTRACTOR SHALL SUBMIT AS-BUILT'S TO CITY DURING MAINLINE PRESSURE TESTING AND SHALL NOT BURY MAINLINE UNTIL AS-BUILT SET HAS BEEN APPROVED BY CITY. AS-BUILT'S SHALL INDICATE COLOR OF ELECTRICAL TAPE ON EACH RUN/LEG OF WIRE TO AID IN FUTURE WIRE TROUBLE SHOOTING.

1. AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:

A. PROJECT INFORMATION SHEET THAT CONTAINS:

1. DATE

2. PROJECT NAME

3. PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.

4. PROJECT ADDRESS

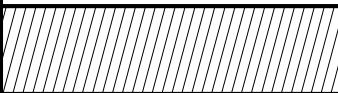



















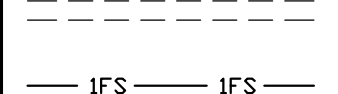

5. PROPERTY OWNER NAME, TELEPHONE NUMBER AND MAILING ADDRESS.

B. CERTIFICATION BY THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.

1. WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION.

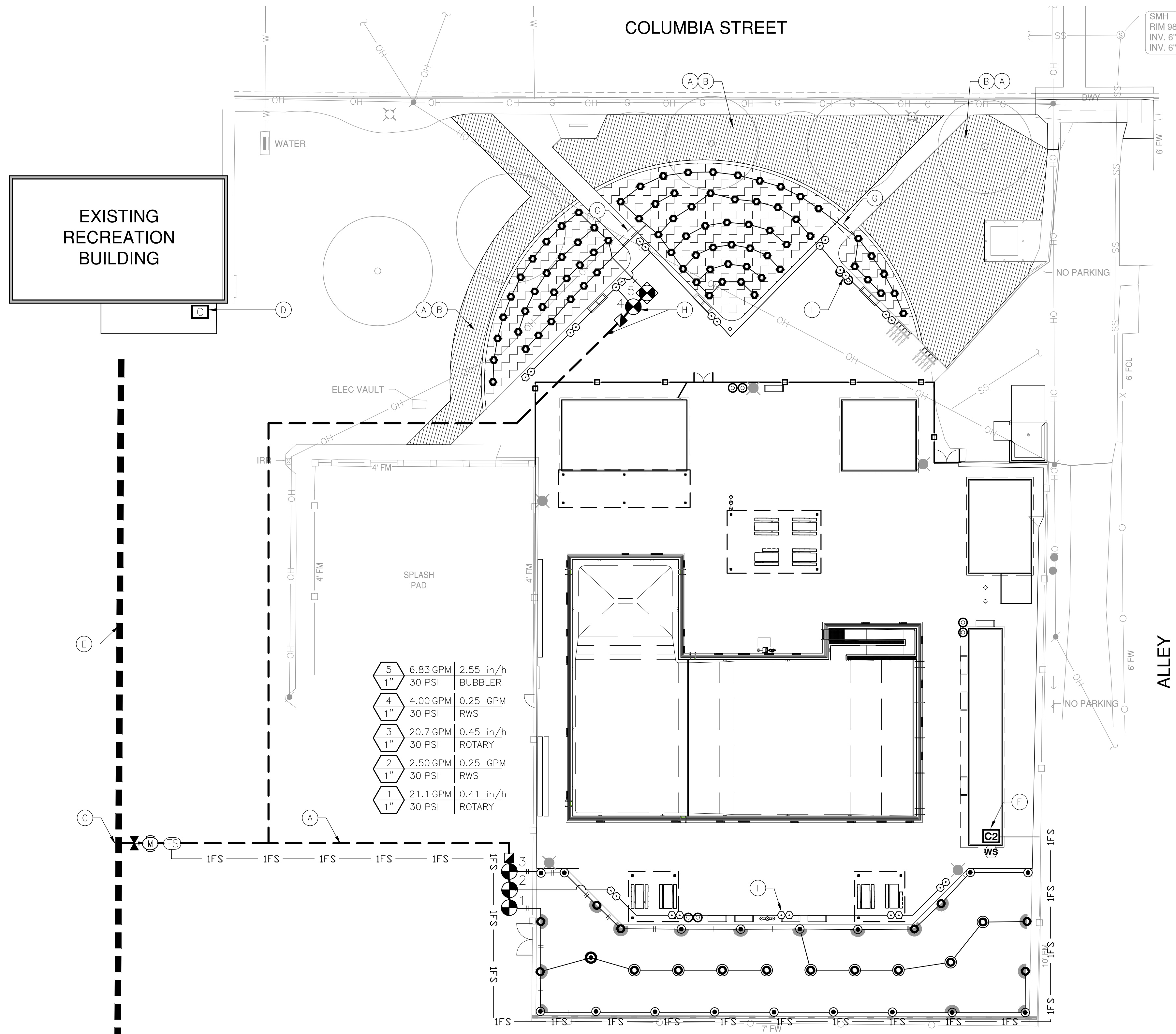
2. A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
- C. IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER.
- D. LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
- E. IRRIGATION AUDIT REPORT.
- F. SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOILS REPORT RECOMMENDATIONS.

| IRRIGATED LANDSCAPE WATER EFFICIENCY TABLE   |                   |                   |                            |              |                       |               |   | IRRIGATION SCHEDULE   |             |             |              |             |              |             |             |
|--|-------------------|-------------------|----------------------------|--------------|-----------------------|---------------|---|---|-------------|-------------|--------------|-------------|--------------|-------------|-------------|
| WATER BUDGET CALCULATIONS  |                   |                   |                            |              |                       |               |   | SCHEDULING NOTES & RUN TIMES  |             |             |              |             |              |             |             |
| MAXIMUM APPLIED WATER ALLOWANCE  |                   |                   |                            |              |                       |               |   | WATERING CYCLES AND DURATION DURING PRE-ESTABLISHMENT PERIODS SHOULD BE ADJUSTED PER PLANT PROVIDER'S RECOMMENDATIONS AND CURRENT WEATHER CONDITIONS. |             |             |              |             |              |             |             |
| MAWA=(Eto)(0.62)/((0.45xLA)+(1.0-0.45)xSLA))   |                   | LOCAL Eto=        | LA =                       | SLA =        |                       | MAWA TOTAL=   |   |   |             |             |              |             |              |             |             |
|  |                   | 50.2              | 15,454                     | 11,537       |                       | 413,938 GAL.  | POST ESTABLISHMENT IRRIGATION SCHEDULE CALCULATED USING AVERAGE CLIMATE CONDITIONS AND AVERAGE PLANT REQUIREMENTS. THIS SCHEDULE SERVES AS A BASE FOR CONTROLLER PROGRAMMING. EXTREME AND SITE SPECIFIC CONDITIONS WILL RESULT IN Eto ADJUSTMENTS AND MAY REQUIRE ADJUSTMENTS TO SCHEDULE FREQUENCY/DURATION. |   |             |             |              |             |              |             |             |
| ESTIMATED TOTAL WATER USE  |                   |                   |                            |              |                       |               |   |   |             |             |              |             |              |             |             |
| ETWU=(Eto)(0.62)/((PFxHA)/IE)+SLA)   |                   | LOCAL Eto=        | PF =                       | LA =         | SLA =                 |               | ETWU TOTAL=   | IRRIGATION CONTROLLER SHALL BE CONFIGURED TO RUN ALL ZONES ON SOAK CYCLES.  |             |             |              |             |              |             |             |
|  |                   | 50.2              | SEE BELOW                  | 15,454       | 11,537                |               | 392,537 GAL.  |   |             |             |              |             |              |             |             |
| HYDROZONE INFORMATION TABLE  |                   |                   |                            |              |                       |               |   | WINTER  |             | SPRING      |              | SUMMER      |              | FALL        |             |
| HYDROZONE TAG  | PLANT FACTOR (PF) | IRRIGATION METHOD | IRRIGATION EFFICIENCY (IE) | ETAF (PF/IE) | LANDSCAPE AREA (SF)   | ETAF X AREA   | ESTIMATED TOTAL WATER USE (ETWU)  | PRE-EST.  | POST-EST.   | PRE-EST.    | POST-EST.    | PRE-EST.    | POST-EST.    | PRE-EST.    | POST-EST.   |
| LANDSCAPE AREAS  |                   |                   |                            |              |                       |               |   |   |             |             |              |             |              |             |             |
| 2, 4<br>(TREE/RWS/LOW)   | 0.24              | RWS               | 0.81                       | 0.30         | 367 SF                | 109           | 3,384 GAL   | 19 MIN/2 DW   | 38 MIN/1 DW | 75 MIN/2 DW | 149 MIN/1 DW | 94 MIN/2 DW | 188 MIN/1 DW | 39 MIN/2 DW | 78 MIN/1 DW |
| 5<br>(SHRUB/BUBBLER/LOW)   | 0.24              | BUBBLER           | 0.81                       | 0.30         | 3,691 SF              | 1,107         | 34,464 GAL  | 2 MIN/4 DW  | 3 MIN/2 DW  | 7 MIN/4 DW  | 13 MIN/2 DW  | 8 MIN/4 DW  | 17 MIN/2 DW  | 4 MIN/4 DW  | 7 MIN/2 DW  |
|  |                   |                   |                            |              | TOTAL AREA= 4,058 SF  | TOTAL= 1,216  | TOTAL = 37,848 GAL.   |   |             |             |              |             |              |             |             |
| SPECIAL LANDSCAPE AREAS  |                   |                   |                            |              |                       |               |   |   |             |             |              |             |              |             |             |
| VALVE 1, 3, EX (LAWN/ROTARY/HIGH)  |                   |                   |                            | 1            | 11,396 SF             | 11,396        | 354,689 GAL   | 6 MIN/6 DW  | 13 MIN/3 DW | 27 MIN/6 DW | 54 MIN/3 DW  | 34 MIN/6 DW | 68 MIN/3 DW  | 14 MIN/6 DW | 28 MIN/3 DW |
|  |                   |                   |                            |              | TOTAL AREA= 11,396 SF | TOTAL= 11,396 | TOTAL = 354,689 GAL.  |   |             |             |              |             |              |             |             |
| * THIS INFORMATION DERIVED FROM PLANT FACTOR DESIGNATIONS IN THE WUCOLS IV DOCUMENT. |                   |                   |                            |              |                       |               |   |   |             |             |              |             |              |             |             |

| IRRIGATION LEGEND   |  |  |  |  |  |            |     |        |         |           |
|---|--|--|--|--|--|------------|-----|--------|---------|-----------|
| SYMBOL  |  | MANUFACTURER/MODEL/DESCRIPTION   |  |  |  | QTY        | PSI | GPM    | RADIUS  | DETAIL    |
| ROTARY  |  |  |  |  |  |            |     |        |         |           |
|    |  | TURF RENOVATION CONFORMANCE AREA. PROVIDE HEAD TO HEAD COVERAGE WITH IN-KIND REPLACEMENT.  |  |  |  | 5,966 SF   | -   | -      |         | 6/L8.0    |
|   |  | RAIN BIRD RD-06-SAM-P45-NP W/ RVAN 18 OR RVAN18-360 ROTARY NOZZLE. TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR W/ NON-POTABLE PURPLE CAP AND TURF ROTARY NOZZLE 13'-18' 45Å-270Å AND 360Å HAND ADJUSTABLE MULTI-STREAM ROTARY |  |  |  | 17         | 30  | VARIES | 13'-18' | 6/L8.0    |
|   |  | RAIN BIRD RD-06-SAM-P45-NP W/ RVAN 24 OR RVAN24-360 ROTARY NOZZLE. TURF SPRAY BODY ON 6" POP-UP, WITH CHECK VALVE AND 45 PSI IN-STEM PRESSURE REGULATOR W/ NON-POTABLE PURPLE CAP AND TURF ROTARY NOZZLE 17'-24' 45Å-270Å AND 360Å HAND ADJUSTABLE MULTI-STREAM ROTARY |  |  |  | 18         | 30  | VARIES | 17'-24' | 6/L8.0    |
| DRIP COMPONENTS   |  |  |  |  |  |            |     |        |         |           |
|    |  | RAIN BIRD RWS-M-B-C-1401 W/RWS-GRATE-P & RWS-SOCK NON-POTABLE ROOT WATERING SYSTEM WITH RWS-SOCK (2/TREE)  |  |  |  | 26         | 30  | .25/EA |         | 7/L8.0    |
|    |  | RAIN BIRD PCT-05 W/SR050 BUBBLER FILTER SCREEN   |  |  |  | 82         | 30  | .08/EA |         | L-8/L8.0  |
| IRRIGATION EQUIPMENT  |  |  |  |  |  |            |     |        |         |           |
|    |  | HUNTER ICZ-101-25. DRIP CONTROL ZONE KIT. 1" ICV GLOBE VALVE W/ 1" HY100 FILTER SYSTEM. PRESSURE REGULATION: 25PSI. FLOW RANGE: 2 GPM TO 20 GPM. 150 MESH STAINLESS STEEL SCREEN. INSTALL IN A RAIN BIRD VBUMBB & VBUMBPL VALVE BOX OR EQUAL                           |  |  |  | 1          |     |        |         | L-10/L8.0 |
|    |  | HUNTER ICV-G-FS-R. 1", 1-1/2", 2", AND 3" PLASTIC ELECTRIC REMOTE CONTROL VALVES, GLOBE CONFIGURATION, WITH FILTER SENTRY AND NON-POTABLE IDENTIFICATION. INSTALL IN A RAIN BIRD VBSTDB & VBSTDPL VALVE BOX OR EQUAL   |  |  |  | 4          |     |        |         | L-6/L8.0  |
|    |  | RAIN BIRD 33-DNP QUICK COUPLER VALVE. PLACE IN RAIN BIRD VB10RNDDB + VB10RNDPL VALVE BOX OR EQUAL.   |  |  |  | 2          |     |        |         | L-7/L8.0  |
|    |  | NIBCO F619-RWS-SON DUCTILE IRON GATE SHUT OFF VALVE WITH NUT DRIVE HANDLE, SAME SIZE AS MAINLINE PIPE DIAMETER. INSTALL IN RAIN BIRD VB10RNDDB + VB10RNDPL VALVE BOX OR EQUAL.   |  |  |  | 1          |     |        |         | 5/L8.0    |
|    |  | FSI-S30-001 FLOW SENSOR 1-1/2" 1-1/2" CREATIVE SENSOR TECHNOLOGY BRASS FLOW SENSOR. INSTALL IN A RAIN BIRD VBSTDB & VBSTDPL VALVE BOX OR EQUAL   |  |  |  | 1          |     |        |         | 4/L8.0    |
|    |  | BUCKNER SUPERIOR 3200-300-RW 1-1/2" NORMALLY CLOSED MASTER VALVE. USE TORO 2-WIRE DECODER SB-DAC-1. INSTALL IN RAIN BIRD VBSTDB, VBSDPL VALVE BOX OR EQUAL.  |  |  |  | 1          |     |        |         | 3/L8.0    |
|    |  | EXISTING 3" IRRIGATION BACKFLOW PREVENTER WITH CAGE AND WEATHER BLANKET TO REMAIN. APPROXIMATE LOCATION SHOWN. VERIFY LOCATION AND OPERATION IN FIELD.   |  |  |  | EXISTING   |     |        |         |           |
|   |  | EXISTING IRRIGATION CONTROLLER TO REMAIN. APPROXIMATE LOCATION SHOWN.  |  |  |  | EXISTING   |     |        |         |           |
|    |  | HUNTER ACC2 CONTROLLER (MODEL# A2C-1200-P-WIFI) CONVENTIONAL WIRE COMMERCIAL CONTROLLER. INSTALL IN PLASTIC WALL MOUNT WITH WIRELESS SOLAR SYNC SENSOR AND ROAM-XL RADIO REMOTE AND SURGE PROTECTOR  |  |  |  | 1          |     |        |         | 1/L8.0    |
|    |  | HUNTER SOLAR SYNC SENSOR (MODEL: SOLAR-SYNC-SEN) MOUNT SENSOR ON SOUTH OR WEST SIDE OF BUILDING EAVE TO MAXIMIZE SOLAR EXPOSURE.   |  |  |  | 1          |     |        |         | 2/L8.0    |
| PIPING  |  |  |  |  |  |            |     |        |         |           |
|    |  | IRRIGATION LATERAL LINE: PVC SCHEDULE 40 PW-PURPLE PVC SCHEDULE 40 PW-PURPLE IRRIGATION PIPE. ONLY LATERAL TRANSITION PIPE SIZES 1" AND ABOVE ARE INDICATED ON THE PLAN, WITH ALL OTHERS BEING 3/4" IN SIZE.   |  |  |  | 1,126 L.F. |     |        |         | L-12/L8.0 |
|    |  | EXISTING 3" MAINLINE TO REMAIN. APPROXIMATE LOCATION SHOWN.  |  |  |  | EXISTING   |     |        |         |           |
|    |  | IRRIGATION MAINLINE: 1-1/2" PVC SCHEDULE 40 PVC CLASS 200 PW-PURPLE IRRIGATION PIPE. ALL MAINLINE FITTINGS SHALL BE SCH 80 PVC.  |  |  |  | 380 L.F.   |     |        |         | L-12/L8.0 |
|    |  | PIPE SLEEVE: PVC SCHEDULE 40   |  |  |  | 186 L.F.   |     |        |         | L-11/L8.0 |
|    |  | 1" PVC SCHEDULE 40 ELECTRICAL CONDUIT FOR FLOW SENSORS, WITH (1) PAIGE ELECTRIC PE89 COMMUNICATION CABLE   |  |  |  | 411 L.F.   |     |        |         | 4/L8.0    |



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## SHEET NOTES

- (A) TRENCH NEW IRRIGATION MAINLINE AND IRRIGATION WIRING AND REPAIR AND REPLACE EXISTING LAWN AREA DAMAGED/ DISTURBED BY CONSTRUCTION AS NEEDED.
- (B) INSTALL NEW IRRIGATION SPRAY HEADS TO MATCH EXISTING IN-KIND. ADJUST NEW SPRAY HEADS TO PREVENT OVER SPRAY ONTO ADJACENT HARDSCAPE. ADJUST EXISTING SPRAY HEADS AS NEEDED TO PROVIDE FULL HEAD TO HEAD COVERAGE.
- (C) APPROXIMATE TIE-IN LOCATION TO EXISTING MAIN LINE FOR NEW IRRIGATION. CONTRACTOR SHALL POTHOLE TO CONFIRM EXACT LOCATION IN FIELD PRIOR TO CONSTRUCTION.
- (D) EXISTING IRRIGATION CONTROLLER SHALL REMAIN IN OPERATION AND BE PROTECTED IN PLACE.
- (E) CONTRACTOR SHALL TEST EXISTING IRRIGATION MAIN LINE TO ENSURE CAPABILITY OF USE FOR TIE-IN OF NEW IRRIGATION SYSTEM.
- (F) INSTALL NEW IRRIGATION CONTROLLER INSIDE NEW RESTROOM UTILITY CHASE. CONTRACTOR SHALL COORDINATE INSTALLATION OF CONTROLLER AND WIRING WITH NEW BUILDING INSTALLATION.
- (G) (1) 3" LATERAL LINE SLEEVE
- (H) MAINLINE AND VALVES SHOWN IN HARDSCAPE FOR GRAPHIC CLARITY. INSTALL IN ADJACENT LANDSCAPE AREA.
- (I) TREE BUBBLERS/RWS ARE SHOWN IN HARDSCAPE FOR GRAPHIC CLARITY; INSTALL IN ADJACENT LANDSCAPE AREA NEAR ROOT BALL OF TREES.

| PLAN REVISIONS |      |          |
|----------------|------|----------|
| NO.            | DATE | REVISION |
|                |      |          |
|                |      |          |
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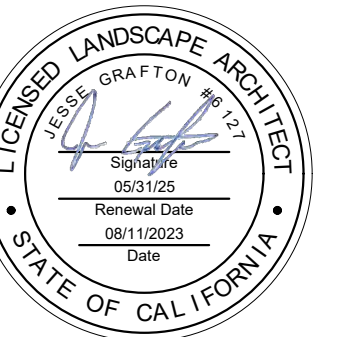


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## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

## IRRIGATION PLAN



APPROVED:

DESIGNED: JG, VR, JS  
DRAWN: VR, JS  
CHECKED: JG  
SCALE: 1"=20'  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-IR.DWG

SHEET NO.

L5.1

OF

46

BID SUBMITTAL





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GENERAL PLANTING NOTES

- ANY AND ALL PORTIONS OF THIS WORK ARE SHALL CONSTRUCTED IN COMPLIANCE WITH ALL APPLICABLE RULES AND REGULATIONS AS SET FORTH BY LOCAL MUNICIPALITIES, STATE AND NATIONAL AGENCIES. IN THE EVENT THERE IS A CONFLICT WITH THESE PLANS AND THE AGENCIES STATED ABOVE, THE GOVERNING BODY'S REGULATIONS SHALL PREVAIL.
- PRIOR TO BIDDING AND COMMENCEMENT OF SITE WORK, THE CONTRACTOR SHALL BECOME FAMILIAR WITH AND EXAMINE CONDITIONS OF THE PROJECT SITE, VERIFYING LOCATIONS OF ALL EXISTING UTILITIES, STRUCTURES AND SERVICES. LOCATIONS OF ITEMS SHOWN ON THESE PLANS ARE ONLY APPROXIMATIONS. ANY DISCREPANCIES DISCOVERED SHALL BE REPORTED TO THE CITY. FAILURE TO REPORT DISCREPANCIES TO THE CITY BEFORE COMMENCEMENT OF SITE WORK IMPLIES ACCEPTANCE OF SITE CONDITIONS AND COSTS ASSOCIATED WITH CORRECTING PLANTING RELATED INSTALLATIONS.
- CONTRACTOR TO PURCHASE AND PROVIDE ALL LABOR, MATERIALS, AND EQUIPMENT NECESSARY TO COMPLETE THE LANDSCAPE WORK (I.E. TREE PLANTING, SHRUB PLANTING, TURF GRASS, ETC.) AS SHOWN ON THE DRAWINGS AND AS SPECIFIED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF THESE ITEMS UNTIL THE PROJECT IS COMPLETED.
- ALL SCALED DIMENSIONS ARE APPROXIMATE. BEFORE PROCEEDING WITH ANY WORK, THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND QUANTITIES AND SHALL IMMEDIATELY INFORM THE CITY OF ANY DISCREPANCY BETWEEN THE INFORMATION. NUMBERS PROVIDED ON THIS PLAN ARE FOR REFERENCE ONLY. THE NUMBER OF SYMBOLS SHOWN ON THE PLANS SHALL HAVE PRIORITY OVER THE NUMBERS GIVEN.

SOIL PREPARATION

- THE LANDSCAPE CONTRACTOR SHALL INSPECT THE PLANTER AREAS FOR EXTREME COMPACTION PARTICULARLY AROUND CONSTRUCTION AREAS. PROVIDE MEANS FOR RIPPING TO A DEPTH OF TWELVE INCHES (12") ALL COMPACTED AREAS TO INSURE PROPER ROOT GROWTH OF NEW PLANTINGS.
- CULTIVATE TOP SIX INCHES (6") OF SOIL IN ALL AREAS.
- NO SOIL SHALL BE HANDLED OR WORKED WHEN IN A MUDDY CONDITION.
- FINISH GRADE SHALL BE APPROVED BY THE CITY BEFORE ANY PLANTING BEGINS.
- AN EVEN FINISHED GRADE WITH NO RIDGES OR DEPRESSIONS SHALL BE CAREFULLY MAINTAINED DURING OPERATIONS TO ENSURE PROPER SURFACE DRAINAGE.
- LAWN AREAS SHALL BE FINE GRADED TO WITHIN ONE INCH (1") BELOW ADJACENT SURFACES.
- CONTRACTOR TO PERFORM SOILS ANALYSIS AND OBTAIN AMENDMENT RECOMMENDATIONS FROM SOIL LABORATORY PRIOR TO BEGINNING WORK AND AFTER BACKFILL SOIL HAS BEEN PLACED. CONTRACTOR SHALL AMEND SOILS PER MOST RECENT RECOMMENDATIONS. THE FOLLOWING MINIMUM AMENDMENTS SHALL BE INCORPORATED INTO ALL PLANTED AREAS AND TILLED INTO THE SOIL TO A DEPTH OF SIX TO TWELVE INCHES (6"-12"):
  - 6-20-20 FERTILIZER AT 25 LBS PER 1,000 SF.
  - SOIL SULFER AT 25 LBS PER 1,000 SF.
  - ORGANIC AMENDMENT AT 4 CUBIC YARDS PER 1,000 SF.
  - BACKFILL MIX, 1/3 NATIVE SOIL, MIXED WITH 2/3 SOIL AMENDMENT.

PLANT MATERIAL

- SUBSTITUTIONS SHALL NOT BE PERMITTED UNLESS APPROVED BY THE LANDSCAPE ARCHITECT/CITY.
- PLANTS SHALL BE SOUND, HEALTHY, VIGOROUS, FREE FROM NOXIOUS WEEDS, PLANT DISEASE, INSECT PESTS, OR THEIR EGGS, AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS AND COMPLY WITH ALL STATE AND LOCAL REGULATIONS.
- PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY EXCEPT AS AUTHORIZED BY THE CITY'S REPRESENTATIVE. DO NOT "TOP" TREES.
- ALL PLANT MATERIAL IS SUBJECT TO REVIEW AND APPROVAL BY THE LANDSCAPE ARCHITECT/CITY PRIOR TO INSTALLATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY REJECTED MATERIAL.
- CONTRACTOR SHALL PROVIDE PLANT MATERIAL DELIVERY TO JOB SITE. CONTRACTOR SHALL BE RESPONSIBLE FOR STORAGE, CARE, INSTALLATION, AND GUARANTEE FROM TIME OF DELIVERY. DO NOT STORE PLANT MATERIAL ON CONCRETE OR ASPHALT SURFACES.

TURF SOD INSTALLATION PROCEDURE

- APPLY TURF SOD STARTER FERTILIZER PER MANUFACTURERS RECOMMENDATIONS IMMEDIATELY PRIOR TO LAYING DOWN SOD.
- TURF SOD SHALL BE INSTALLED ONLY DURING APPROPRIATE WEATHER CONDITIONS TO INSURE PROPER ROOTING.
- INSTALL TURF SOD PER MANUFACTURERS RECOMMENDATIONS.
- AFTER APPLICATION, THE CONTRACTOR SHALL NOT OPERATE ANY EQUIPMENT OVER THE COVERED AREA.

WEED CONTROL

- PRIOR TO TURF SOD INSTALLATION THE CONTRACTOR SHALL SPRAY A POST EMERGENT HERBICIDE TO KILL EXISTING WEEDS. ALLOW ONE (1) WEEK FOR WEEDS TO COMPLETELY DIE AND REMOVE FROM SITE.
- FOLLOWING REMOVAL OF WEEDS, IRRIGATE THE SITE KEEPING SOIL MOIST UNTIL GERMINATION OF THE NEW CROP OF WEEDS IS A MINIMUM OF ONE INCH (1") TALL. REPEAT THE HERBICIDE TREATMENT. AFTER THE SECOND TREATMENT AND AFTER THE REQUIRED WAIT PERIOD (AS SPECIFIED BY HERBICIDE MANUFACTURER) TURF SOD INSTALLATION MAY BE PERFORMED.
- THE CONTRACTOR SHALL APPLY A BROADLEAF HERBICIDE FORTY-FIVE (45) DAYS AFTER SEEDING BUT NOT BEFORE THE THIRD MOWING. THE HERBICIDE SHALL BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED DIRECTIONS.
- AFTER PLANTING SHRUB BEDS AND PRIOR TO TOPDRESSING, APPLY RONSTAR-G (OR EQUAL) PRE-EMERGENT WEED CONTROL IN THE AMOUNTS SPECIFIED BY THE MANUFACTURER.

PLANTING OPERATIONS

- ALL PLANTS SHALL BE PLANTED, STAKED, AND TIED ACCORDING TO THESE PLANS.
- STAKE TREES AT THE LOWEST POINT WHERE THE TREE CAN SUPPORT ITSELF.
- THOROUGHLY WATER TREES, SHRUBS, AND GROUNDCOVER IMMEDIATELY AFTER PLANTING.
- RELOCATION OF TREES: IN THE EVENT THAT UNDERGROUND CONSTRUCTION WORK OR OBSTRUCTIONS ARE ENCOUNTERED IN EXCAVATION OF THE TREE HOLES, ALTERNATE LOCATIONS WILL BE SELECTED BY THE LANDSCAPE ARCHITECT/CITY.
- ALL TREES SHALL BE PRUNED TO REMOVE BROKEN AND DAMAGED LIMBS AND BRANCHES. NO OTHER PRUNING IS APPROVED.
- ROOT BARRIERS SHALL BE REQUIRED FOR ALL TREES PLANTED WITHIN 10' OF A PAVED SURFACE. SEE DETAILS 4 & 5 ON SHEET L9.0 FOR MORE INFORMATION.
- 3" TOPDRESSING OF DECORATIVE MULCH (DARK BROWN) BY RECOLOGY ENVIRONMENTAL PRODUCTS (866)-764-5765 OR EQUAL (MAXIMUM 2 INCH LENGTHS) SHALL BE INSTALLED PER DETAILS. WASH EXCESS BARK OFF LEAVES AND DO NOT ENGULF STEMS OF PLANTS AND GROUNDCOVER.
- FERTILIZER TABLETS SHALL BE BEST-PAKS (20-10-5) PLANTER PACKETS PLACED IN ALL PLANTING PITS PER DETAILS.

PLANT ESTABLISHMENT AND MAINTENANCE PERIODS

- THE LANDSCAPE CONTRACTOR SHALL PROVIDE A PLANT ESTABLISHMENT PERIOD OF NINETY (90) DAYS COMMENCING AT COMPLETION OF PLANT MATERIAL INSTALLATION.
- APPROXIMATELY 30 DAYS AFTER INITIAL PLANTING, APPLY A BALANCED FERTILIZER TO TURF AND SHRUB AREAS PER MANUFACTURER'S RECOMMENDED RATES.
- FOLLOWING THE PLANT ESTABLISHMENT PERIOD, THE LANDSCAPE CONTRACTOR SHALL MAINTAIN THE INSTALLATION FOR NINETY (90) DAYS INCLUDING MOWING AND MAINTENANCE OF TURF, SHRUBS, TREES, FERTILIZATION, REMOVING CLIPPINGS FROM SITE, EDGING, AND THE CONTROL OF WEEDS. ADJUSTMENTS TO THE IRRIGATION SYSTEM FOR TIME AND DURATION OF FLOWS AND REPLACEMENT AND ADJUSTMENTS TO HEADS AND NOZZLES ARE ALSO REQUIRED.
- THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR DISEASE AND PEST CONTROL DURING THE ESTABLISHMENT AND MAINTENANCE PERIODS.

ACCEPTANCE

- COMPLETED WORK WILL BE REVIEWED AND OBSERVED BY LANDSCAPE ARCHITECT/CITY. ANY MODIFICATIONS REQUIRED TO MEET THE STANDARDS AS SET FORTH IN THESE LANDSCAPE DOCUMENTS SHALL BE SUBMITTED TO THE LANDSCAPE CONTRACTOR AND CORRECTED AT THE LANDSCAPE CONTRACTOR'S EXPENSE. CORRECTED ITEMS SHALL BE REVIEWED AND APPROVED BY CITY.
- UPON FINAL ACCEPTANCE, LANDSCAPE CONTRACTOR SHALL INSTRUCT MAINTENANCE PERSONNEL AS TO THE OPERATION AND MAINTENANCE OF ALL LANDSCAPING.

GUARANTEE

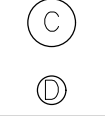



- TURF SOD CONTRACTOR SHALL GUARANTEE COMPLETE COVERAGE OF THE AREA TO BE TURF SODDED.
- ALL TREES AND SHRUBS SHALL BE GUARANTEED BY THE LANDSCAPE CONTRACTOR TO LIVE AND GROW IN A HEALTHY UPRIGHT POSITION DURING THE ESTABLISHMENT AND MAINTENANCE PERIODS. REPLACEMENT MATERIAL WILL BE AT THE LANDSCAPE CONTRACTOR'S EXPENSE EXCEPT IF VANDALIZED OR STOLEN.

WATER CONSERVATION STATEMENT

- I HAVE COMPLIED WITH THE CRITERIA OF THE (STATE/CITY WATER CONSERVATION) ORDINANCE AND APPLIED THEM FOR THE EFFICIENT USE OF WATER IN THE LANDSCAPE DESIGN PLAN.

CLOSE-OUT DOCUMENTS

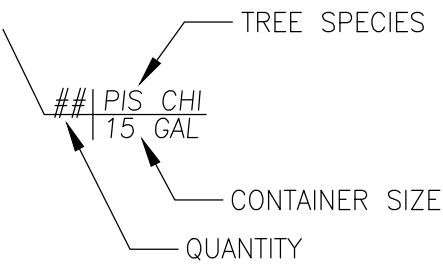
- AT THE COMPLETION OF THE PROJECT THE CONTRACTOR SHALL SUPPLY A "CERTIFICATE OF COMPLETION" DOCUMENT. THE DOCUMENT SHALL INCLUDE:
  - PROJECT INFORMATION SHEET THAT CONTAINS:
    - DATE
    - PROJECT NAME
    - PROJECT APPLICANT NAME, TELEPHONE NUMBER, AND MAILING ADDRESS.
    - PROJECT ADDRESS
    - PROPERTY CITY NAME, TELEPHONE NUMBER AND MAILING ADDRESS.
  - CERTIFICATION BY EITHER THE SIGNER OF THE LANDSCAPE DESIGN PLAN, THE DESIGNER OF THE IRRIGATION DESIGN PLAN OR THE LICENSED LANDSCAPE CONTRACTOR THAT THE LANDSCAPE PROJECT HAS BEEN INSTALLED PER THE APPROVED LANDSCAPE DOCUMENTATION PACKAGE.
    - WHERE THERE HAVE BEEN SIGNIFICANT CHANGES MADE IN THE FIELD DURING CONSTRUCTION THESE "AS-BUILT" OR RECORD DRAWINGS SHALL BE INCLUDED WITH THE CERTIFICATION.
    - A DIAGRAM OF THE IRRIGATION PLAN SHOWING HYDROZONES SHALL BE KEPT WITH THE IRRIGATION CONTROLLER FOR SUBSEQUENT MANAGEMENT PURPOSES.
  - IRRIGATION SCHEDULING PARAMETERS USED TO SET THE CONTROLLER
  - LANDSCAPE AND IRRIGATION MAINTENANCE SCHEDULE
  - IRRIGATION AUDIT REPORT.
  - SOILS ANALYSIS REPORT IF NOT SUBMITTED WITH LANDSCAPE DOCUMENTATION PACKAGE AND DOCUMENTATION VERIFYING IMPLEMENTATION OF SOILS REPORT RECOMMENDATIONS.

| PLANT LEGEND  |  |                                 |          |                 |           |             |                             |
|---|--|---------------------------------|----------|-----------------|-----------|-------------|-----------------------------|
| SYMBOL  | BOTANICAL NAME                             | COMMON NAME                     | SIZE     | APPROX. SPACING | WATER USE | QTY         | COMMENTS/NOTES              |
| TREES   |  |                                 |          |                 |           |             |                             |
| LAG IXF   | LAGERSTROEMIA INDICA X FAURIEI 'TUSCARORA' | TUSCARORA CRAPE MYRTLE          | 24" BOX  | PER PLAN        | LOW       | 5           | F&B, FGR, PINK FLW, MATCH   |
| PIS KEI   | PISTACIA CHINENSIS 'KEITH DAVEY'           | KEITH DAVEY CHINESE PISTACHE    | 24" BOX  | PER PLAN        | LOW       | 8           | F&B, FGR, MATCH             |
| SHRUBS  |  |                                 |          |                 |           |             |                             |
|  | CALLISTEMON VIMINALIS 'LITTLE JOHN'        | LITTLE JOHN WEEPING BOTTLEBRUSH | 5 GAL    | 84" O.C.        | LOW       | 51          | F&B, FGR, RED FLW, MATCH    |
|  | DIETES BICOLOR                             | FORTNIGHT LILY                  | 5 GAL    | 60" O.C.        | LOW       | 31          | F&B, FGR, WHITE FLW, MATCH  |
| MISCELLANEOUS   |  |                                 |          |                 |           |             |                             |
|  | ROOT BARRIERS (DEEP ROOT UB18-2, OR EQUAL) |                                 |          |                 |           | 112 L.F.    | SEE DETAIL 4&5, SHEET L9.0. |
| GROUNDCOVER   |  |                                 |          |                 |           |             |                             |
|  | BERMUDA (MATCH EXISTING)                   |                                 | TURF SOD |                 | HIGH      | 11,537 S.F. | REPAIR & REPLACE AS NEEDED. |

PLANT LIST ABBREVIATIONS

|       |  |        |   |
|-------|--|--------|---|
| BR GR | BRANCHED TO GROUND   | MATCH  | MATCHED SIZE, FORM, CALIPER, BRANCHING AND CULTIVAR. SELECT FROM ONE LOT, ONE GROWER, FOR GUARANTEED CONSISTENCY THROUGH LIFE OF PLANTS. IN GENERAL PLANTS WITHIN A GROUP OR AREA ARE TO BE MATCHED, UNLESS NOTED OTHERWISE |
| DV    | DWARF VARIETY  |        |   |
| F&B   | FULL DENSE, BUSHY, VIGOROUS PLANTS, WITH YOUNG GROWTH CLOSELY SPACED ON BRANCHES |        |   |
| FGR   | FREE OF GIRDLING ROOTS   | MULTI  | MULTI STEMMED   |
| FLW   | FLOWER   | SL     | SINGLE, STRAIGHT, DOMINANT LEADER   |
| GAL   | GALLON CAN   | TRI SP | TRIANGULARLY SPACED   |
| HI BR | HIGH BRANCHED  | TTW    | TRAIN TO WALL   |
| LO BR | LOW BRANCHED   | VAR    | VARIEGATED SPECIES  |

TREE CALLOUT



| PLAN REVISIONS |      |          |
|----------------|------|----------|
| NO.            | DATE | REVISION |
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|                |      |          |
|                |      |          |



1165 Scenic Drive, Suite A  
Modesto, CA 95350

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IMPROVEMENT PLANS

COLUMBIA POOL  
IMPROVEMENTS

TURLOCK, CA

PLANTING LEGEND  
& NOTES



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: N/A

DATE: 08/11/2023

JOB NO.: 37512

FILE NO.: 37512-PT.DWG

SHEET NO.

L6.0

OF

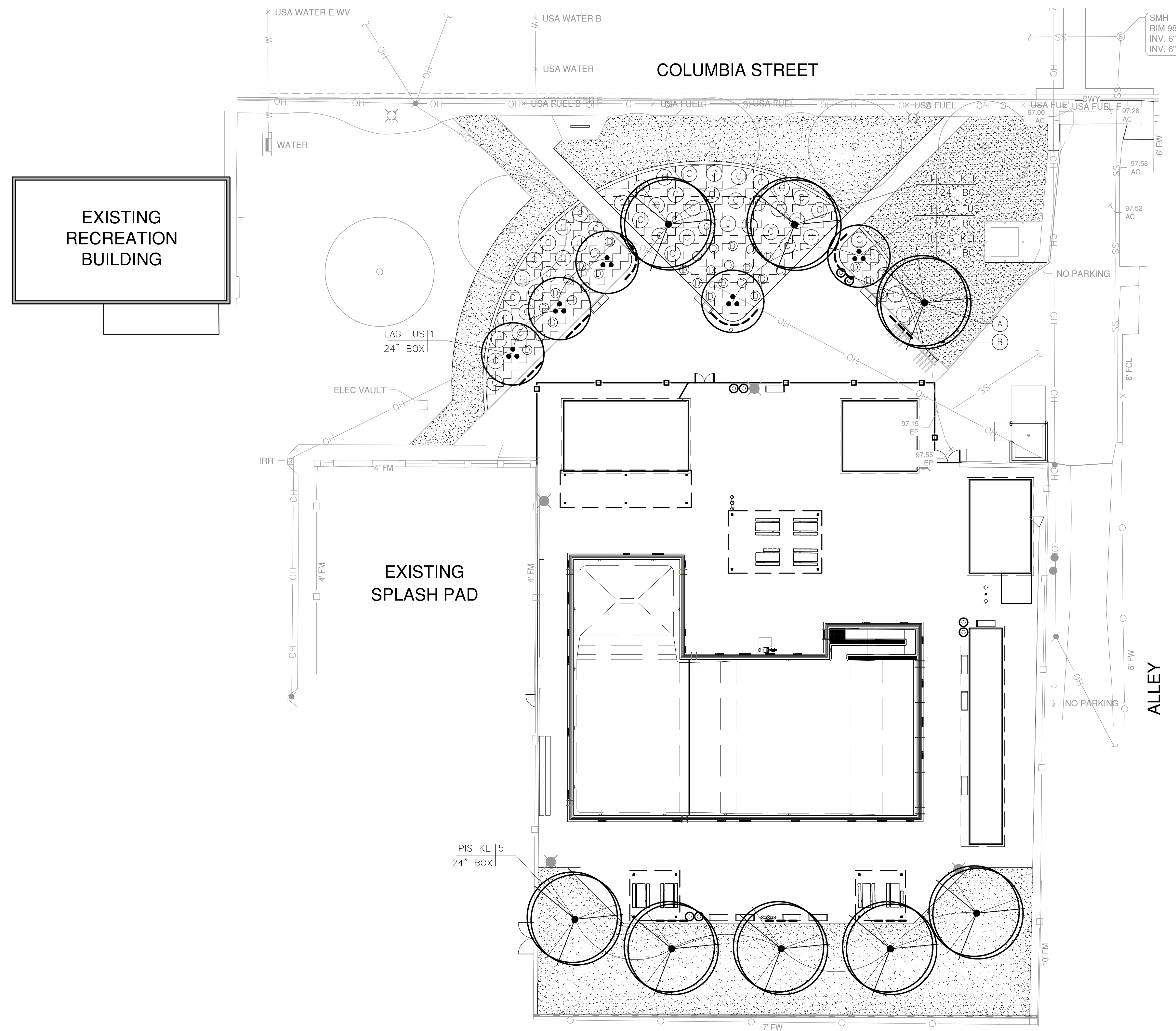
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BID SUBMITTAL



Know what's below.  
Call before you dig.





| HARDSCAPE AREA SHADE REQUIREMENTS |                  |                                      |            |  |            |                                       |            |  |            |                      |
|-----------------------------------|------------------|--------------------------------------|------------|--|------------|---------------------------------------|------------|--|------------|----------------------|
| Tree Size                         | 15 Year Diameter | S.F. @100% Coverage<br>Plan Symbol=1 |            | S.F. @ 75% Coverage<br>Plan Symbol=.75 |            | S.F. @ 50% Coverage<br>Plan Symbol=.5 |            | S.F. @ 25% Coverage<br>Plan Symbol=.25 |            | Total Shade Coverage |
|                                   |                  | Qty.                                 | Total S.F. | Qty.                                   | Total S.F. | Qty.                                  | Total S.F. | Qty.                                   | Total S.F. |                      |
| >25' Diam.                        | 20'              | 0                                    | 0          | 2                                      | 472        | 3                                     | 471        | 0                                      | 0          | 943 S.F.             |
| >35' Diam.                        | 30'              | 0                                    | 0          | 0                                      | 0          | 1                                     | 354        | 5                                      | 885        | 1,239 S.F.           |
| >40' Diam.                        | 35'              | 0                                    | 0          | 0                                      | 0          | 0                                     | 0          | 2                                      | 482        | 482 S.F.             |

|   |             |
|---|-------------|
| Total Area Shaded by Trees =  | 2,664 S.F.  |
| Total Paved Hardscape Area =  | 21,055 S.F. |
| 20% Shade Area<br>(Required By CALGreen, Sections 5.106.12.2 & 5.106.12.3 Shade Tree Standards) = | 4,211 S.F.  |
| Total Area Shaded by Trees =  | 2,664 S.F.  |
| Total Percent of Hardscape Area Shaded by Trees =   | 0.1%        |

\*Excludes areas covered by solar photovoltaic shade structures or shade structures that comply with Table A5.106.11.2.2 in Appendix A5.  
 \*\*Excludes designated playfields & play areas per CALGreen 5.106.12.2 & 5.106.12.3 Exceptions  
 \*\*\*Excludes building footprints.

| LANDSCAPE AREA SHADE REQUIREMENTS |                  |                                   |            |                                    |            |                                   |            |                                    |            |                      |
|-----------------------------------|------------------|-----------------------------------|------------|------------------------------------|------------|-----------------------------------|------------|------------------------------------|------------|----------------------|
| Tree Size                         | 15 Year Diameter | S.F. @100% Coverage Plan Symbol—1 |            | S.F. @ 75% Coverage Plan Symbol—75 |            | S.F. @ 50% Coverage Plan Symbol—5 |            | S.F. @ 25% Coverage Plan Symbol—25 |            | Total Shade Coverage |
|                                   |                  | Qty.                              | Total S.F. | Qty.                               | Total S.F. | Qty.                              | Total S.F. | Qty.                               | Total S.F. |                      |
| >25' Diam.                        | 20'              | 0                                 | 0          | 0                                  | 0          | 3                                 | 471        | 2                                  | 158        | 629 S.F.             |
| >35' Diam.                        | 30'              | 2                                 | 1,414      | 5                                  | 2,650      | 1                                 | 354        | 0                                  | 0          | 4,418 S.F.           |
| >40' Diam.                        | 35'              | 0                                 | 0          | 2                                  | 1,444      | 0                                 | 0          | 1                                  | 241        | 1,685 S.F.           |

|   |             |
|---|-------------|
| Total Area Shaded by Trees =  | 6,732 S.F.  |
| Total Landscape Area =  | 15,453 S.F. |
| 20% Shade Area<br>(Required By CALGreen, Sections 5.106.12.2 & 5.106.12.3 Shade Tree Standards) = | 3,091 S.F.  |
| Total Area Shaded by Trees =  | 6,732 S.F.  |
| Total Percent of Landscape Area Shaded by Trees =   | 0.4%        |

\*Excludes areas covered by solar photovoltaic shade structures or shade structures that comply with Table A5.106.11.2.2 in Appendix A5.  
 \*\*Excludes designated playfields & play areas per CALGreen 5.106.12.2 & 5.106.12.3 Exceptions  
 \*\*\*Excludes building footprints.

## SHEET NOTES

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1165 Scenic Drive, Suite A  
Modesto, CA 95350  
odellengineering.com

IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

## PLANTING PLAN



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: 1"=20'

DATE: 08/11/2023

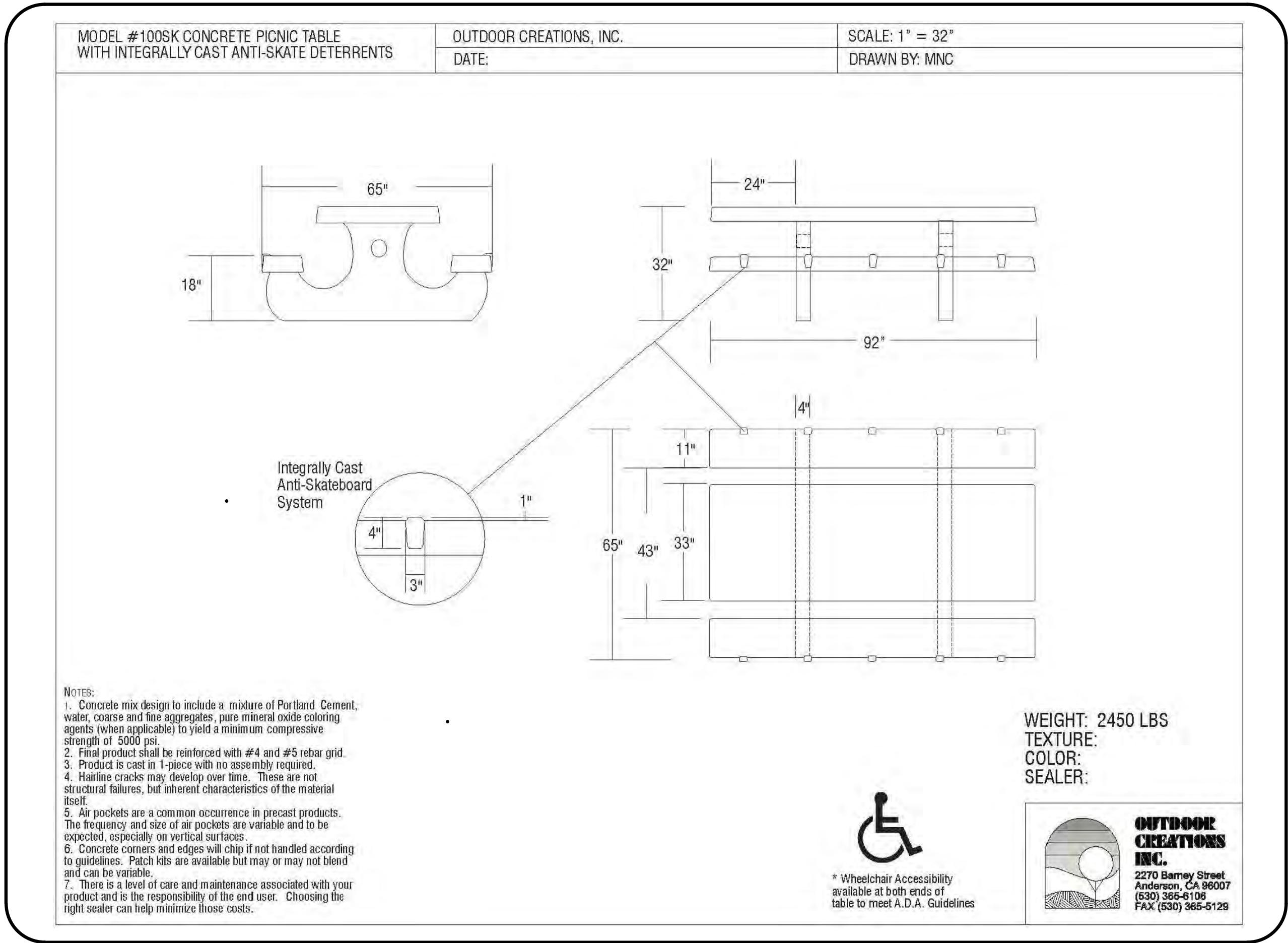
JOB NO.: 37512

FILE NO.: 37512-P.T.DWG

SHEET NO.  
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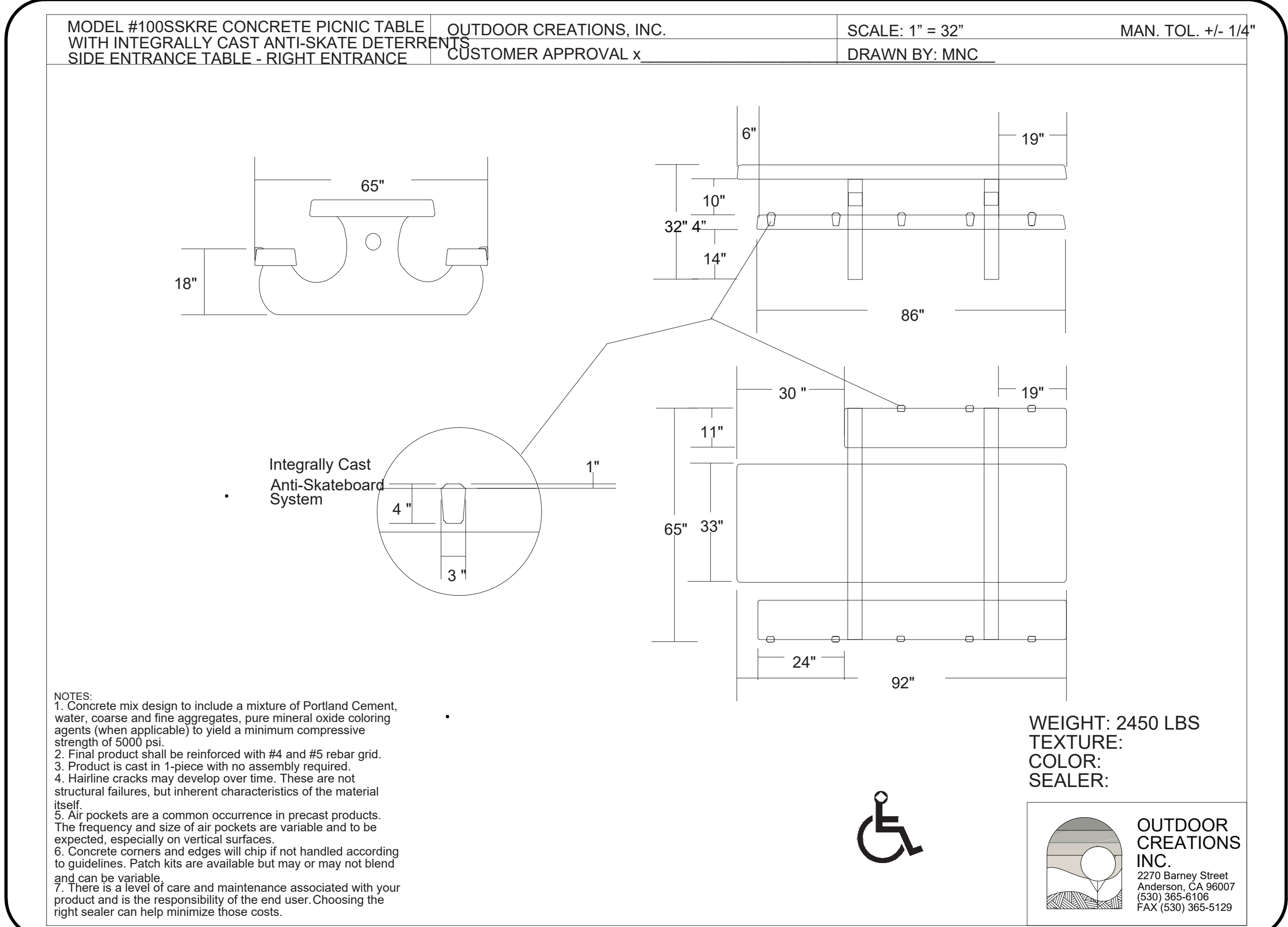


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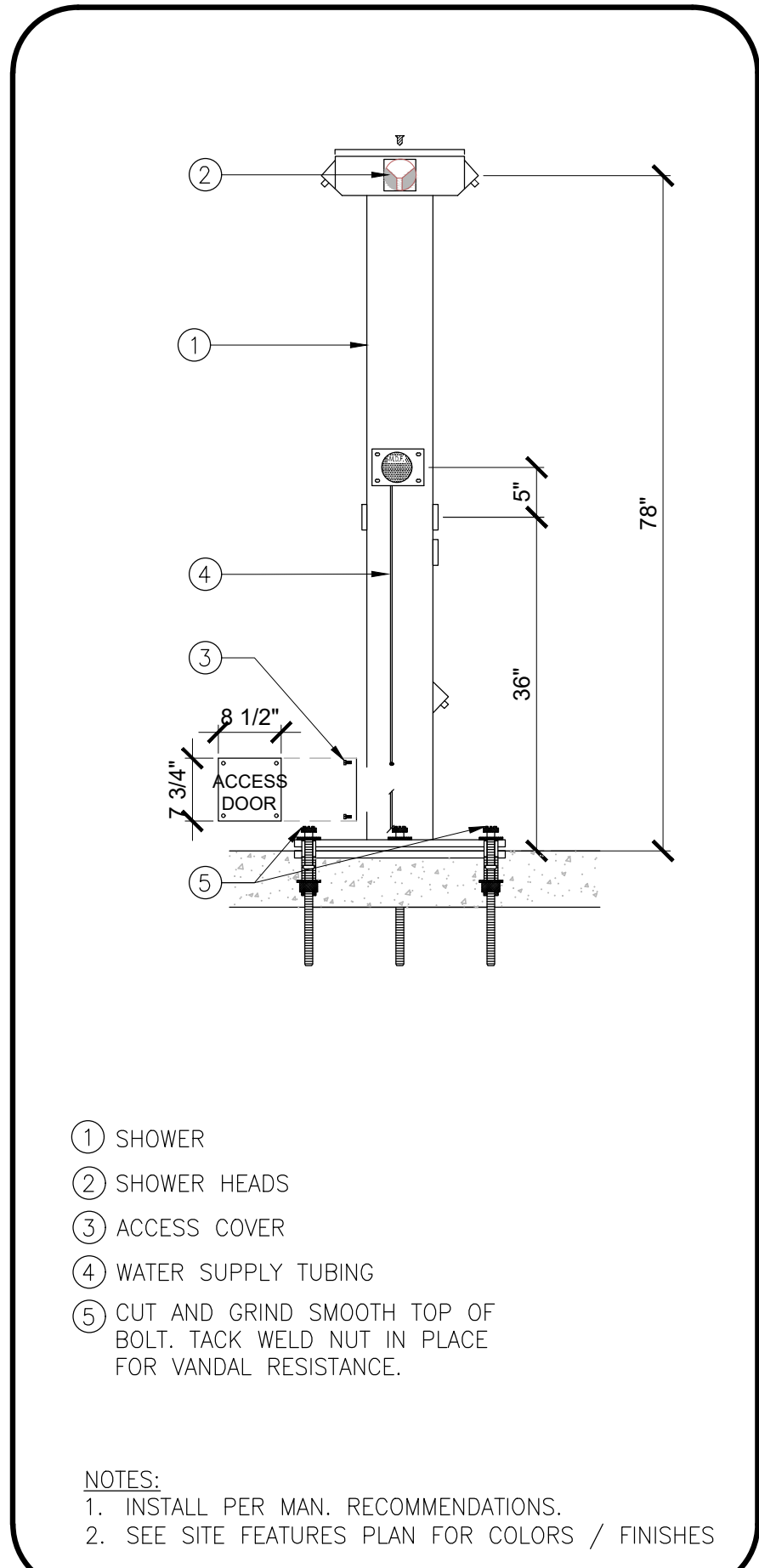
6 PICNIC TABLE

NOT TO SCALE



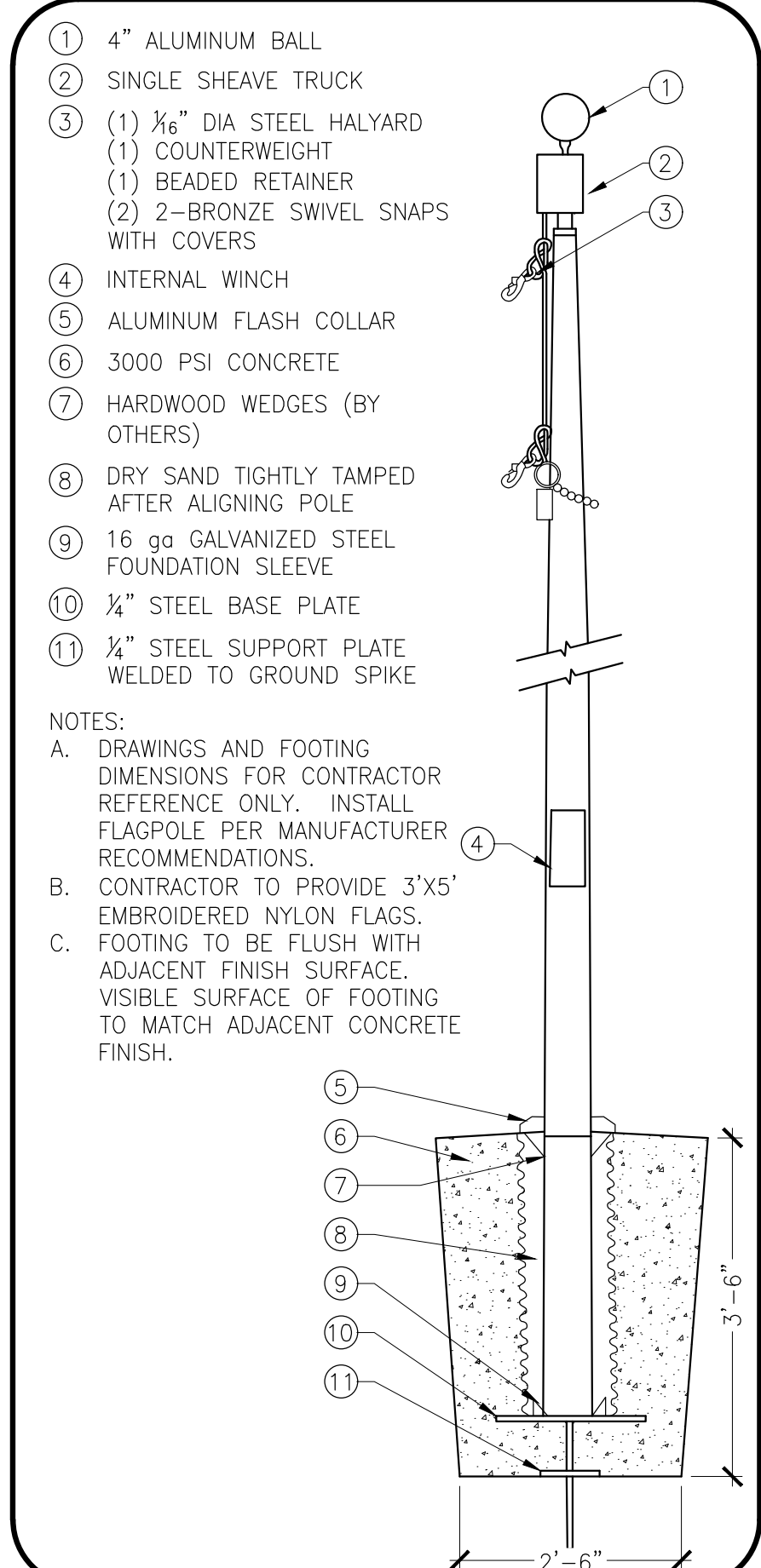
7 ACCESSIBLE PICNIC TABLE

NOT TO SCALE



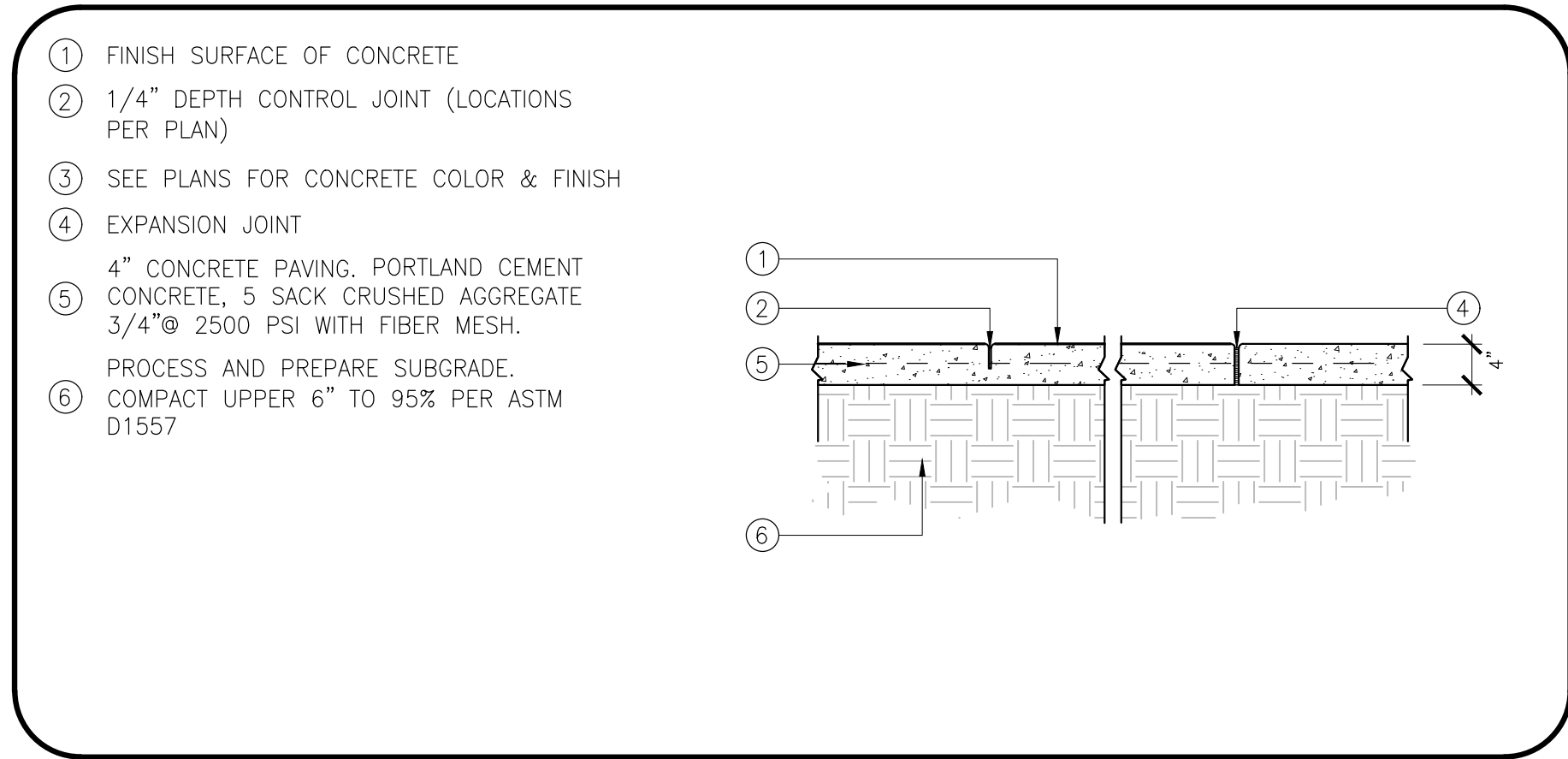
4 PEDESTAL SHOWER

NOT TO SCALE



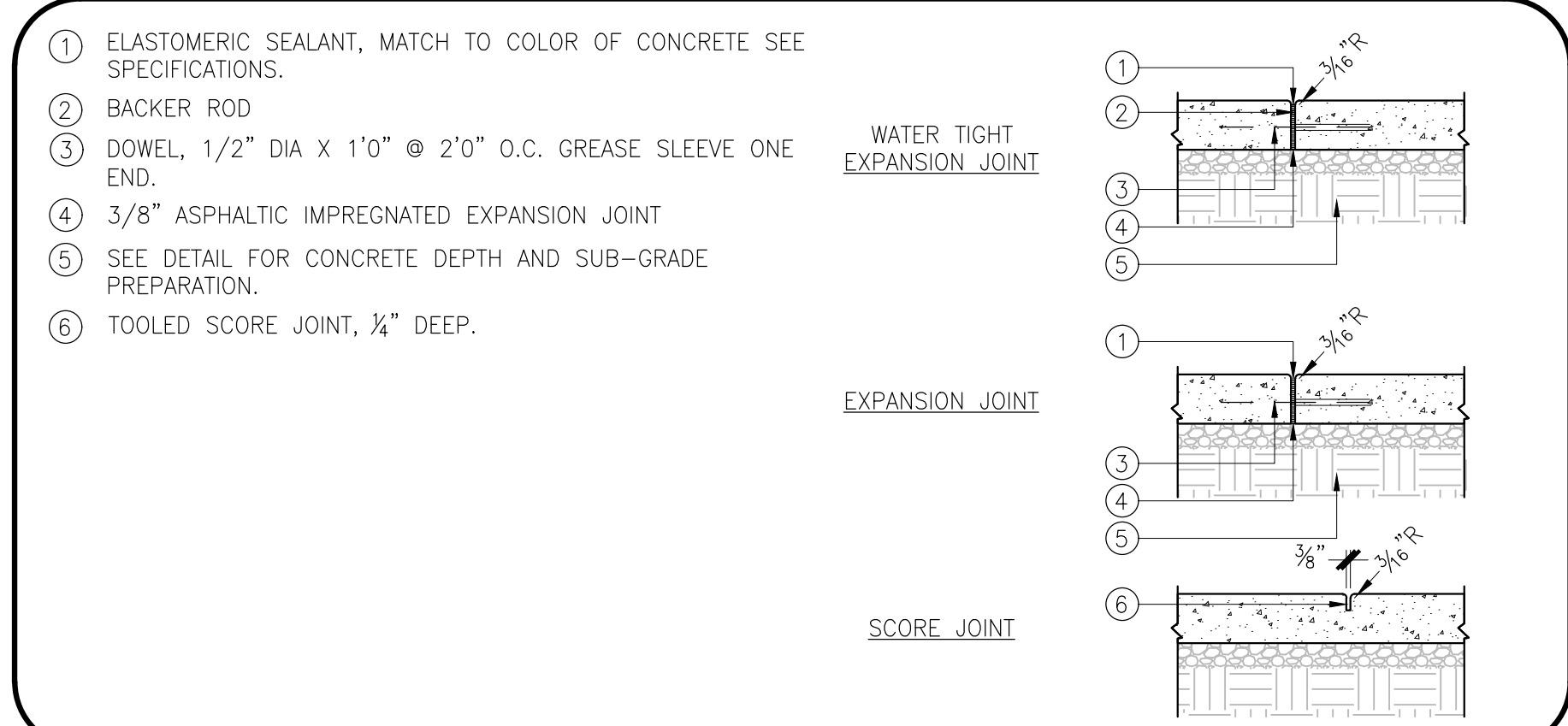
5 20' FLAGPOLE AND FOUNDATION

NOT TO SCALE



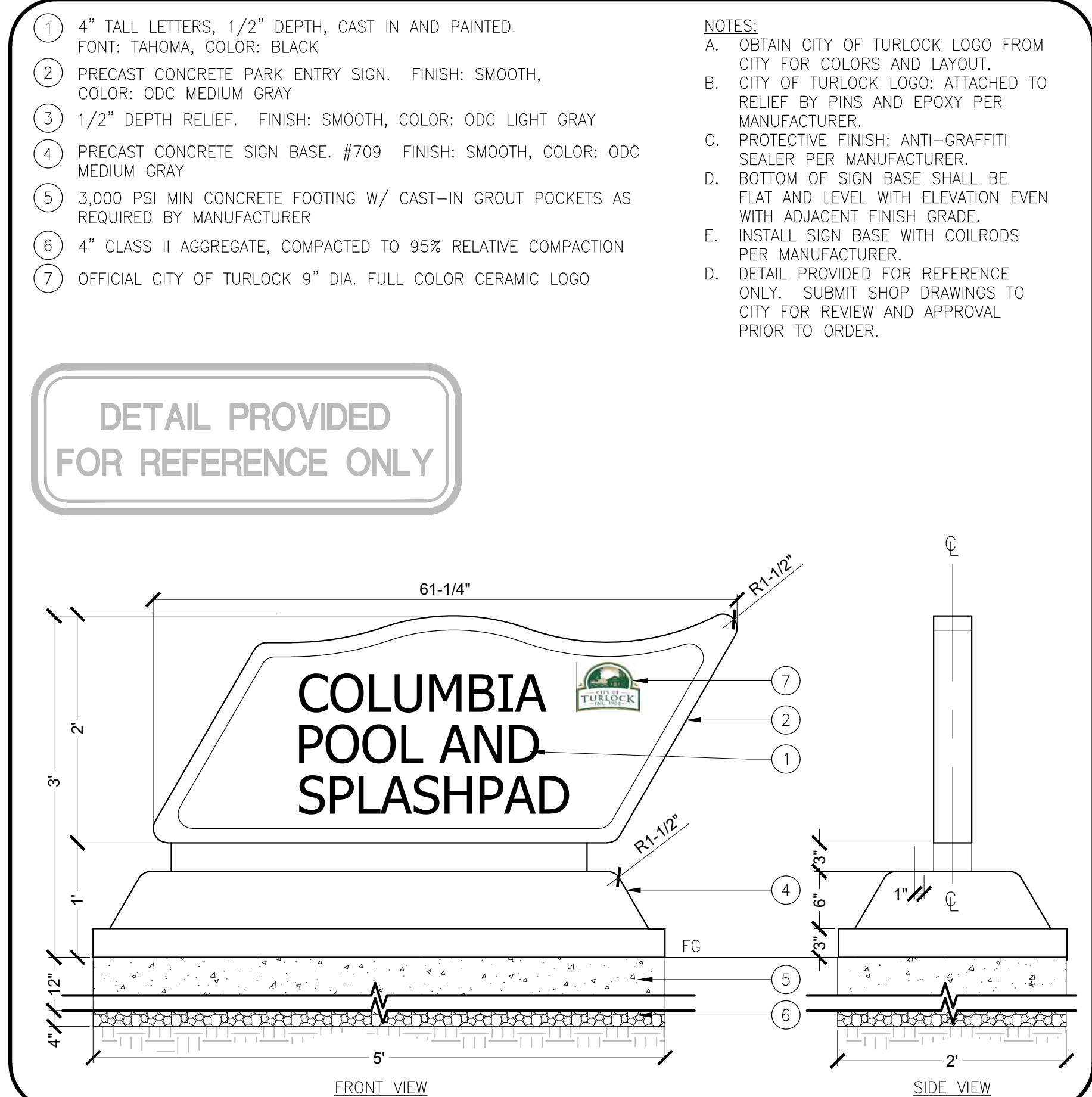
1 4" CONCRETE PAVING

NOT TO SCALE



2 EXPANSION JOINTS / SCORE JOINTS

NOT TO SCALE



3 PRECAST CONCRETE SIGN

NOT TO SCALE

BID SUBMITTAL



| PLAN REVISIONS |      |          |
|----------------|------|----------|
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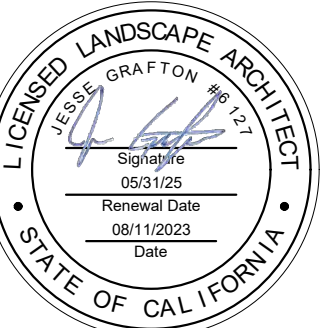


1165 Scenic Drive, Suite A  
Modesto, CA 95350

odellengineering.com

# IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS TURLOCK, CA

## CONSTRUCTION DETAILS



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: N/A

DATE: 08/11/2023

JOB NO.: 37512

FILE NO.: 37512-DT.DWG

SHEET NO.

L7.0

OF

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| PLAN REVISIONS |      |          |
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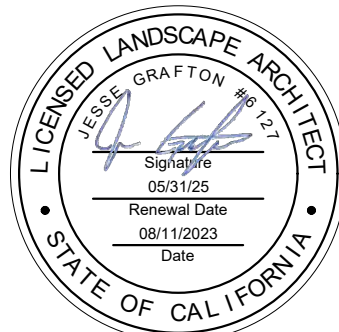


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IMPROVEMENT PLANS  
COLUMBIA POOL  
IMPROVEMENTS  
TURLOCK, CA

CONSTRUCTION  
DETAILS



APPROVED:

DESIGNED: JG, VR, JS

DRAWN: VR, JS

CHECKED: JG

SCALE: N/A

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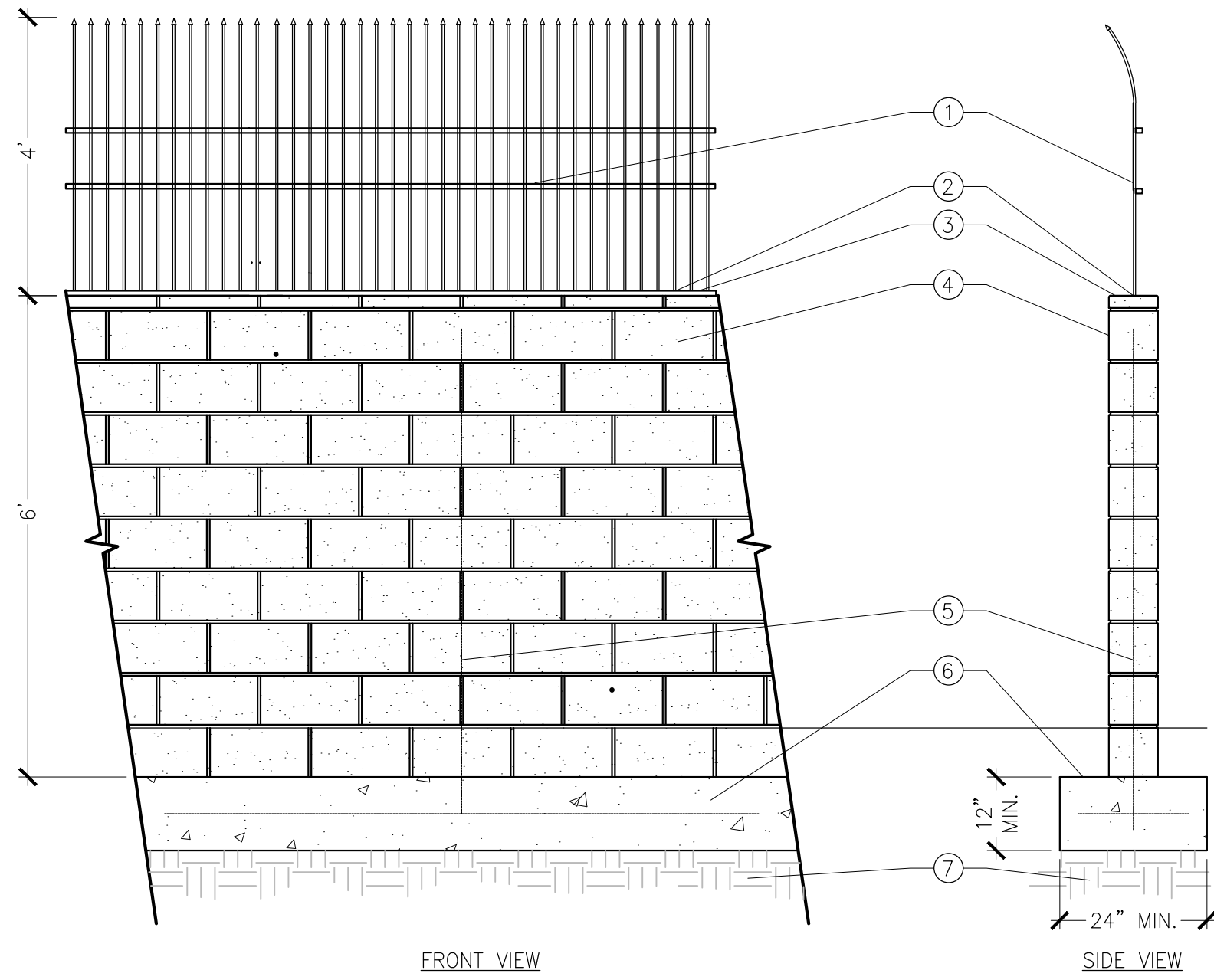
OF

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- 4' TALL WROUGH IRON FENCE. SEE DETAIL 3, THIS SHEET FOR FENCING MATERIALS
- FENCING EMBEDDED INTO WALL AND GROUTED IN PLACE, 18" MIN EMBEDMENT DEPTH
- BASALITE 2Hx8Wx16L SLUMP FACE MASONRY BLOCK CAP. (BOTH SIDES) COLOR NATURAL. VISIBLE GROUT AND MORTAR TO BE COLORED TO MATCH BLOCK. USE BASALITE TYPE S 125.
- BASALITE 8Hx8Wx16L SMOOTH FACE MASONRY BLOCK. COLOR NATURAL. VISIBLE GROUT AND MORTAR TO BE COLORED TO MATCH BLOCK. USE BASALITE TYPE S 125.
- RE-INFORCING STEEL (PER SHOP DRAWINGS)
- FOOTING FOR REFERENCE ONLY. (CONTRACTOR TO PROVIDE SHOP DRAWINGS TO CITY FOR APPROVAL). MIN. 12" DEEP BY 24" WIDE.
- COMPACT NATIVE SOIL TO 95% RELATIVE COMPACTION.

NOTES:

- THIS DETAIL IS NOT PROVIDED FOR CONSTRUCTION PURPOSES. IT IS SHOWN FOR GUIDANCE PURPOSES ONLY. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL.
- ONE COAT OF ANTI-GRAFFITI SEALANT TO BE APPLIED TO SOUTH WALL FACE ONLY, PRIOR TO PROJECT ACCEPTANCE.
- CITY SHALL COORDINATE MURAL INSTALLATION WITH COMMUNITY AT FUTURE DATE TBD.

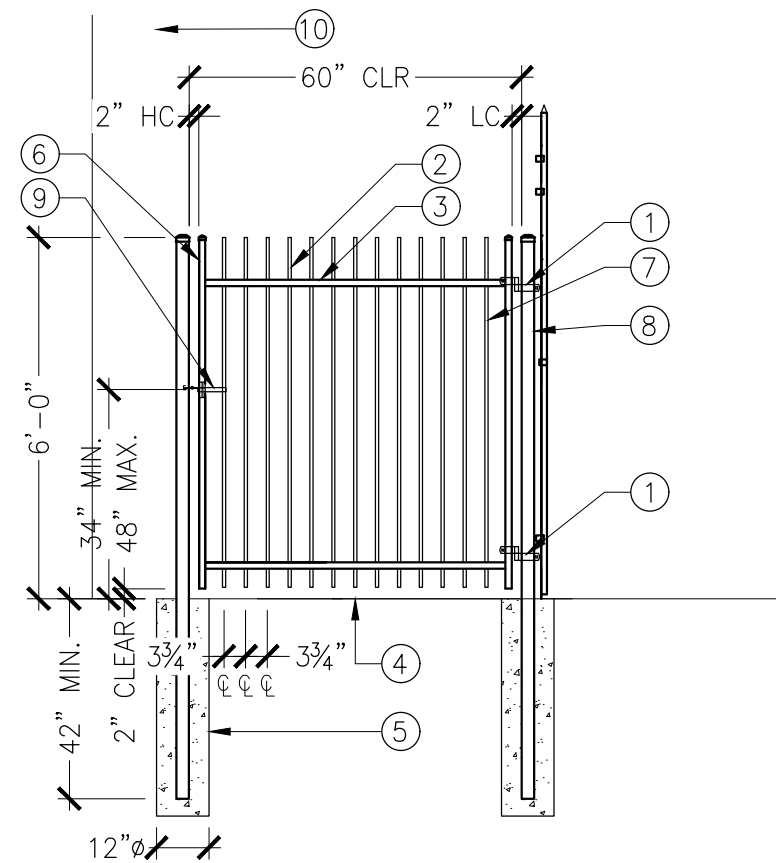


- 6' TALL CONCRETE CMU WALL WITH 4' TALL WROUGHT IRON FENCING

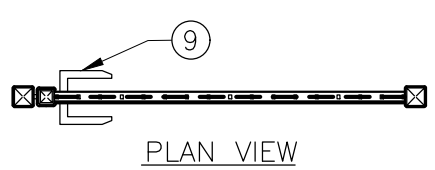
NOT TO SCALE

- BOLT-ON HINGE HARDWARE SHALL BE SELF CLOSING AND HAVE ADJUSTABLE SPEED W/ TAMPER RESISTANT FASTENERS
- 1" SQ. x 14GA. TUBULAR WROUGHT IRON TOP PICKETS
- 1-3/4" x 1-3/4" CHANNEL RAIL
- CONCRETE FINISH SURFACE
- CONCRETE FOOTING
- 2" x 11GA. SQ. GATE UPRIGHT
- 1" SQ. x 14GA. TUBULAR WROUGHT IRON PICKETS
- 3" SQ. x 12GA. GATE POST, TYP.
- GATE HANDLE - LOCKEY SYSTEMS - PB1100-LHPS (LEVER TYPE) FOR BOTH SIDES OF GATE
- BUILDING WALL

NOT FOR  
CONSTRUCTION  
FOR BIDDING  
PURPOSES ONLY



ABBREVIATIONS  
HC HINGE CLEARANCE  
LC LATCH CLEARANCE



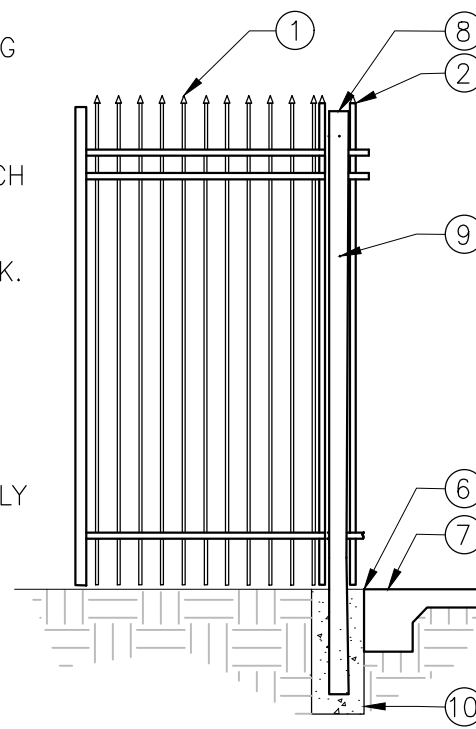
- 6' TALL WROUGHT IRON SWING GATE

NOT TO SCALE

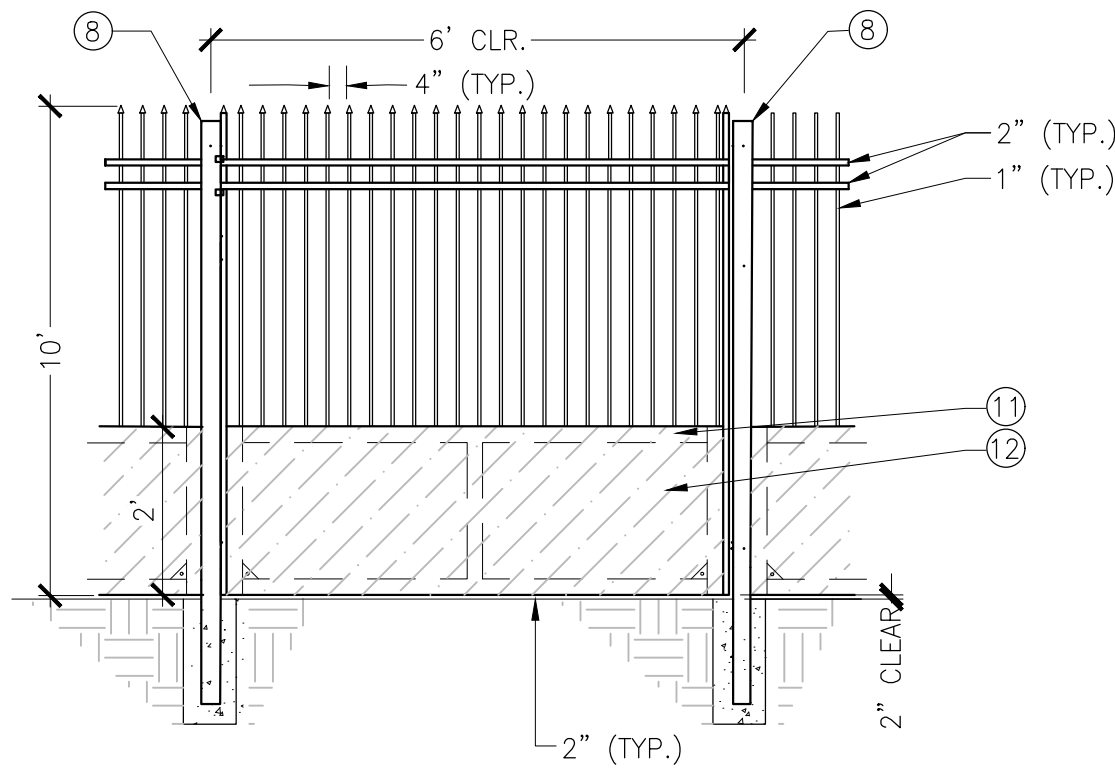
- DECORATIVE END (MATCH EXISTING)
- 2" CAP.
- 1" SQ X 11 GA PICKETS. AT 4" ON CENTER
- 2" SQ. X 11 GA. T.S. RAILS
- 2" SQ. 16 GA. T.S. VERTICAL COLUMN AT 10 FT ON CENTER.
- EXPANSION JOINT ALL ALONG, BETWEEN OLD AND NEW CONCRETE
- (E) CONCRETE SLAB. CARE SHALL BE TAKEN AS NOT TO DAMAGE ANY (E) FACILITIES. CONTRACTOR SHALL REPLACE ANY DAMAGE IN-KIND
- 8"x8"x 1/4" PLATE CAP WELDED TO POST
- 8"x8"x 3/8" T.S.
- 1.5' DIA BY 60" DEEP CONCRETE FOOTING
- 2-1/2" SQUARE, 10 GA WELDED STEEL INNER FRAME
- 3/16" THICK STEEL DEBRIS PANEL - COLOR & FINISH TO MATCH FENCING

NOTES:

- ALL FENCING MATERIAL SHALL MATCH EXISTING ADJACENT WROUGHT IRON FENCING. FENCING SHALL BE POWDER COATED BLACK.
- NEW DEBRIS PANEL MATERIALS SHALL MATCH EXISTING FENCING. PANELS SHALL BE POWDER COATED BLACK.
- THIS DETAIL IS NOT PROVIDED FOR CONSTRUCTION PURPOSES. IT IS SHOWN FOR GUIDANCE PURPOSES ONLY. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL.
- GRIND ALL WELDS SMOOTH.



SIDE VIEW



FRONT VIEW

NOT FOR  
CONSTRUCTION  
FOR BIDDING  
PURPOSES ONLY

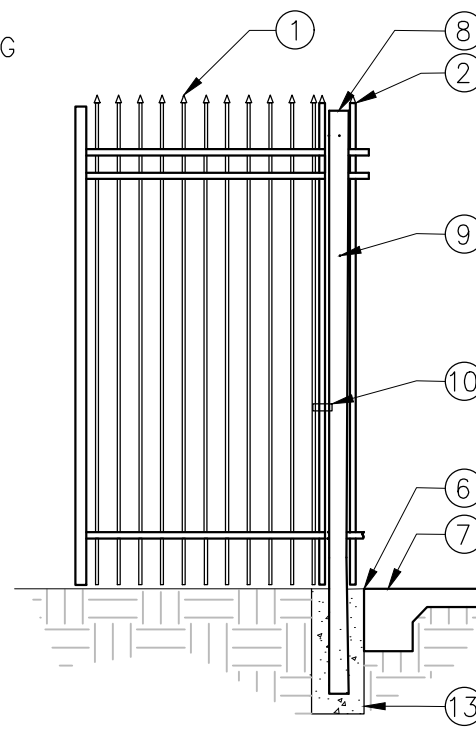
- 10' TALL WROUGHT IRON FENCING WITH DEBRIS PANELS

NOT TO SCALE

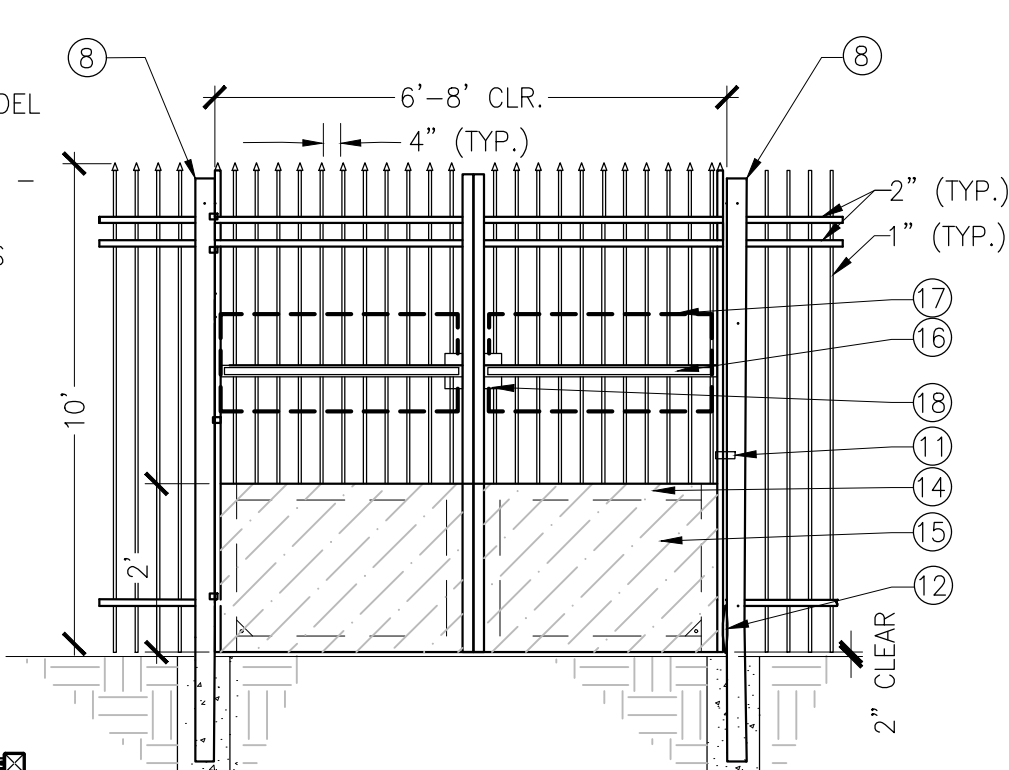
- DECORATIVE END (MATCH EXISTING)
- 2" CAP.
- 1" SQ X 11 GA PICKETS. AT 4" ON CENTER
- 2" SQ. X 11 GA. T.S. RAILS
- 2" SQ. 16 GA. T.S. VERTICAL COLUMN AT 10 FT ON CENTER.
- EXPANSION JOINT ALL ALONG, BETWEEN OLD AND NEW CONCRETE
- (E) CONCRETE SLAB. CARE SHALL BE TAKEN AS NOT TO DAMAGE ANY (E) FACILITIES. CONTRACTOR SHALL REPLACE ANY DAMAGE IN-KIND
- 8"x8"x 1/4" PLATE CAP WELDED TO POST
- 8"x8"x 3/8" T.S.
- STRIKER LATCH
- LOCK BOX ENCLOSURE. COORDINATE WITH CITY ON PREFERRED MODEL PRIOR TO CONSTRUCTION.
- PROVIDE GUIDE WHEEL AND DROP ROD WITH RECEIVER
- 1.5' DIA BY 60" DEEP CONCRETE FOOTING
- 2-1/2" SQUARE, 10 GA WELDED STEEL INNER FRAME
- 3/16" THICK STEEL DEBREE PANEL - COLOR & FINISH TO MATCH FENCING GALVANIZED
- 36" ALUMINUM TOUCH BAR PANIC EXIT DEVICE - LOCKEY SYSTEM - MODEL NO. PB1100 OR EQUAL
- 24" TALL PANIC SHIELD - LOCKEY SYSTEMS - MODEL NO. PS OR EQUAL
- PANIC SHIELD STRIKE BRACKET - LOCKEY SYSTEMS - MODEL. PS-SB OR EQUAL
- GATE HANDLE - LOCKEY SYSTEMS - PB1100-LHPS (LEVER TYPE)

NOTES:

- ALL FENCING MATERIAL SHALL MATCH EXISTING ADJACENT WROUGHT IRON FENCING. FENCING SHALL BE POWDER COATED BLACK.
- NEW DEBRIS PANEL MATERIALS SHALL MATCH EXISTING FENCING. PANELS SHALL BE POWDER COATED BLACK.
- THIS DETAIL IS NOT PROVIDED FOR CONSTRUCTION PURPOSES. IT IS SHOWN FOR GUIDANCE PURPOSES ONLY. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL.
- GRIND ALL WELDS SMOOTH.

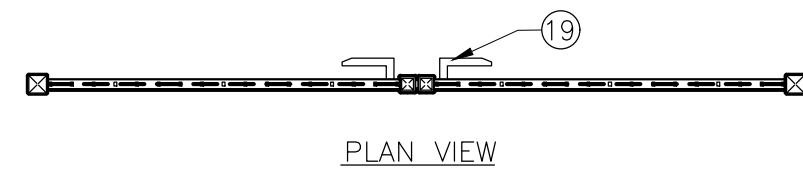


SIDE VIEW



FRONT VIEW

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CONSTRUCTION  
FOR BIDDING  
PURPOSES ONLY



PLAN VIEW

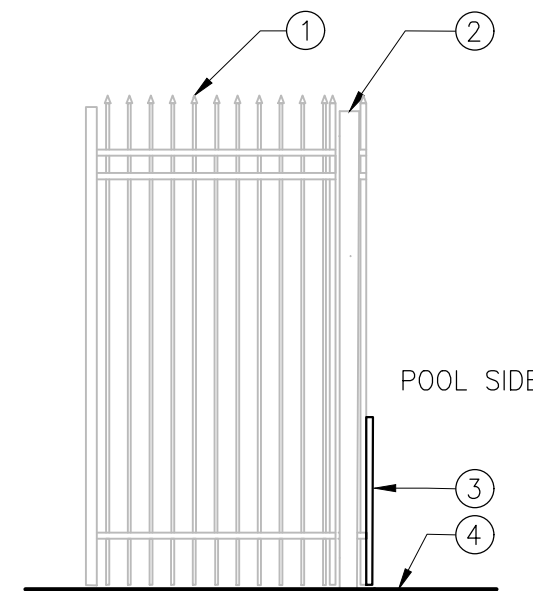
- 10' TALL WROUGHT IRON DOUBLE SWING GATE WITH DEBRIS PANELS

NOT TO SCALE

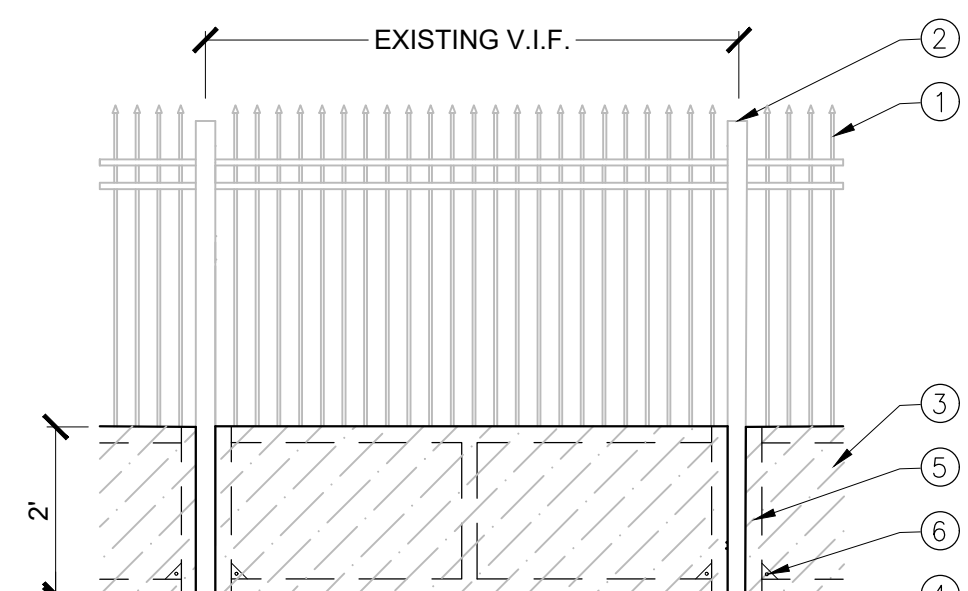
- EXISTING FENCING TO REMAIN AND BE PROTECTED
- EXISTING FENCE POST
- 3/16" THICK STEEL DEBREE PANEL
- FINISH SURFACE
- 2-1/2" SQUARE, 10 GA WELDED STEEL INNER FRAME
- CORNER SUPPORTS, TYP.

NOTES:

- NEW DEBRIS PANEL MATERIALS SHALL MATCH EXISTING FENCING. PANELS SHALL BE POWDER COATED BLACK.
- THIS DETAIL IS NOT PROVIDED FOR CONSTRUCTION PURPOSES. IT IS SHOWN FOR GUIDANCE PURPOSES ONLY. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL.
- GRIND ALL WELDS SMOOTH.



SIDE VIEW



FRONT VIEW

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CONSTRUCTION  
FOR BIDDING  
PURPOSES ONLY

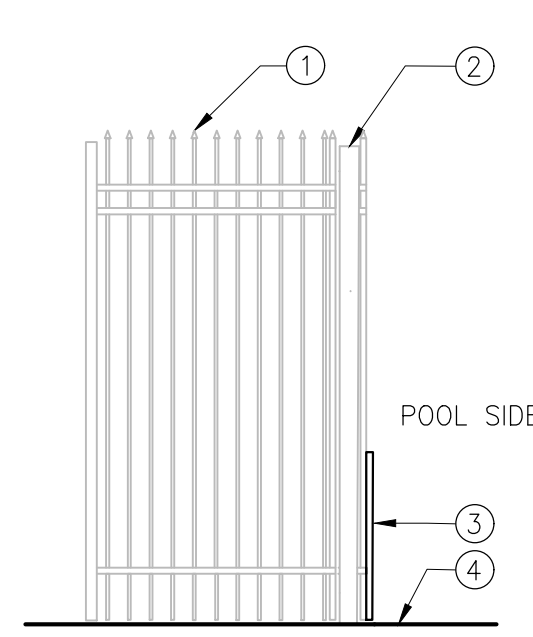
- NEW DEBRIS PANELS ON EXISTING FENCING

NOT TO SCALE

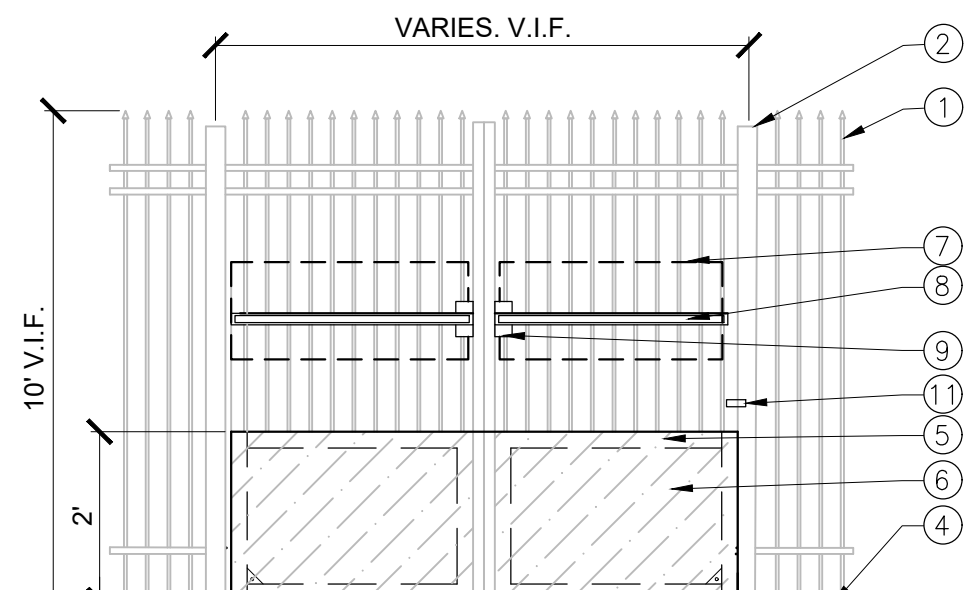
- EXISTING FENCING TO REMAIN AND BE PROTECTED
- EXISTING FENCE POST
- 3/16" THICK STEEL DEBREE PANEL
- FINISH SURFACE
- 2-1/2" SQUARE, 10 GA WELDED STEEL INNER FRAME
- CORNER SUPPORTS, TYP.
- 24" TALL PANIC SHIELD - LOCKEY SYSTEMS - MODEL NO. PS OR EQUAL
- 36" ALUMINUM TOUCH BAR PANIC EXIT DEVICE - LOCKEY SYSTEM - MODEL NO. PB1100 OR EQUAL
- PANIC SHIELD STRIKE BRACKET - LOCKEY SYSTEMS - MODEL. PS-SB OR EQUAL
- GATE HANDLE - LOCKEY SYSTEMS - PB1100-LHPS (LEVER TYPE)
- LOCK BOX ENCLOSURE. COORDINATE WITH CITY ON PREFERRED MODEL PRIOR TO CONSTRUCTION.

NOTES:

- NEW DEBRIS PANEL MATERIALS SHALL MATCH EXISTING FENCING. PANELS SHALL BE POWDER COATED BLACK.
- THIS DETAIL IS NOT PROVIDED FOR CONSTRUCTION PURPOSES. IT IS SHOWN FOR GUIDANCE PURPOSES ONLY. CONTRACTOR TO SUPPLY SHOP DRAWINGS FOR APPROVAL.
- GRIND ALL WELDS SMOOTH.

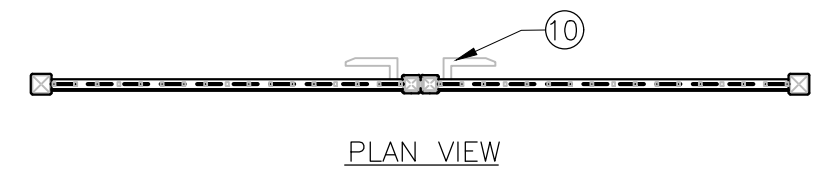


SIDE VIEW



FRONT VIEW

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CONSTRUCTION  
FOR BIDDING  
PURPOSES ONLY



PLAN VIEW

- NEW DEBRIS PANELS & PANIC HARDWARE ON EXISTING GATE

NOT TO SCALE

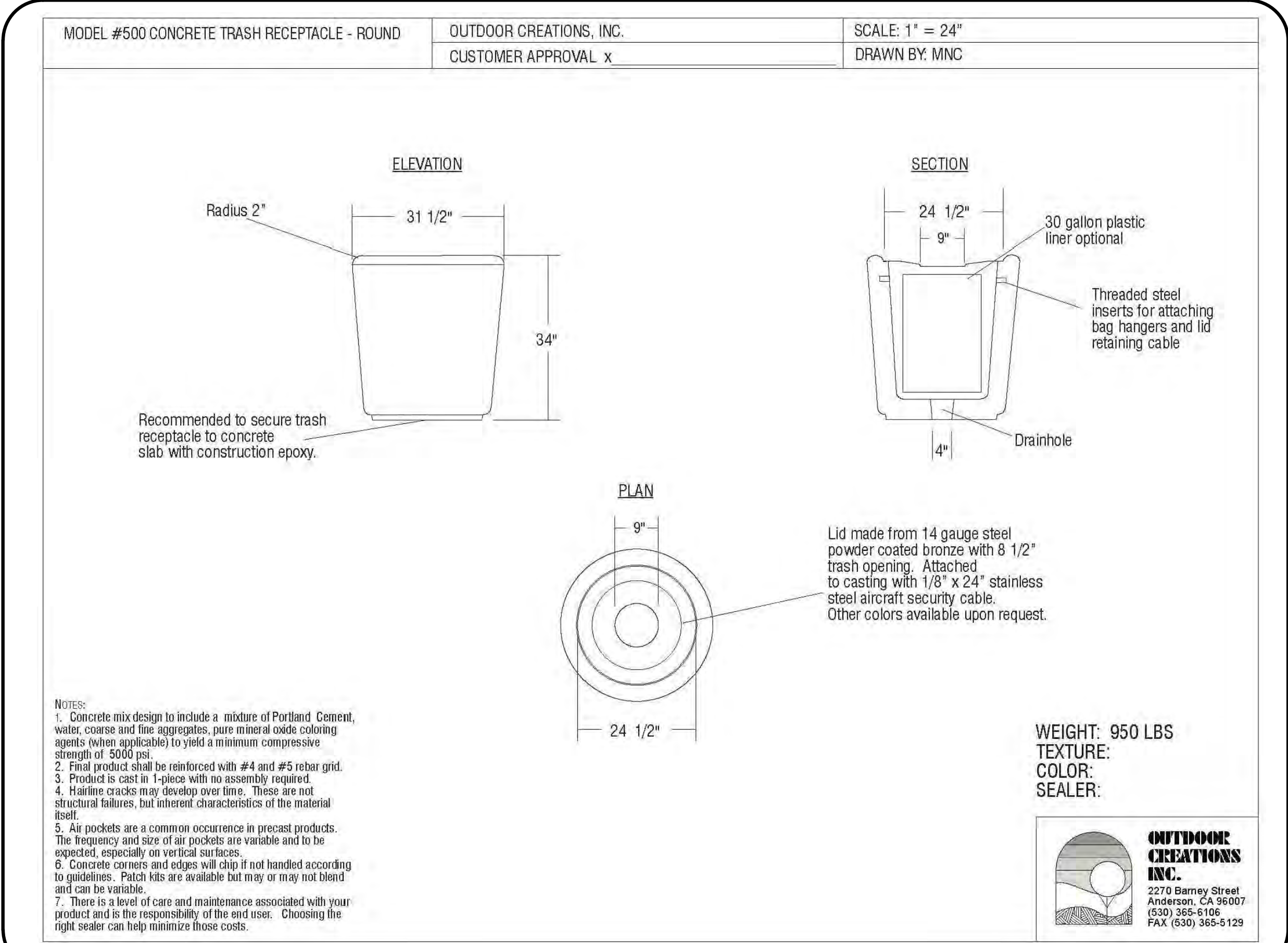
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Know what's below.  
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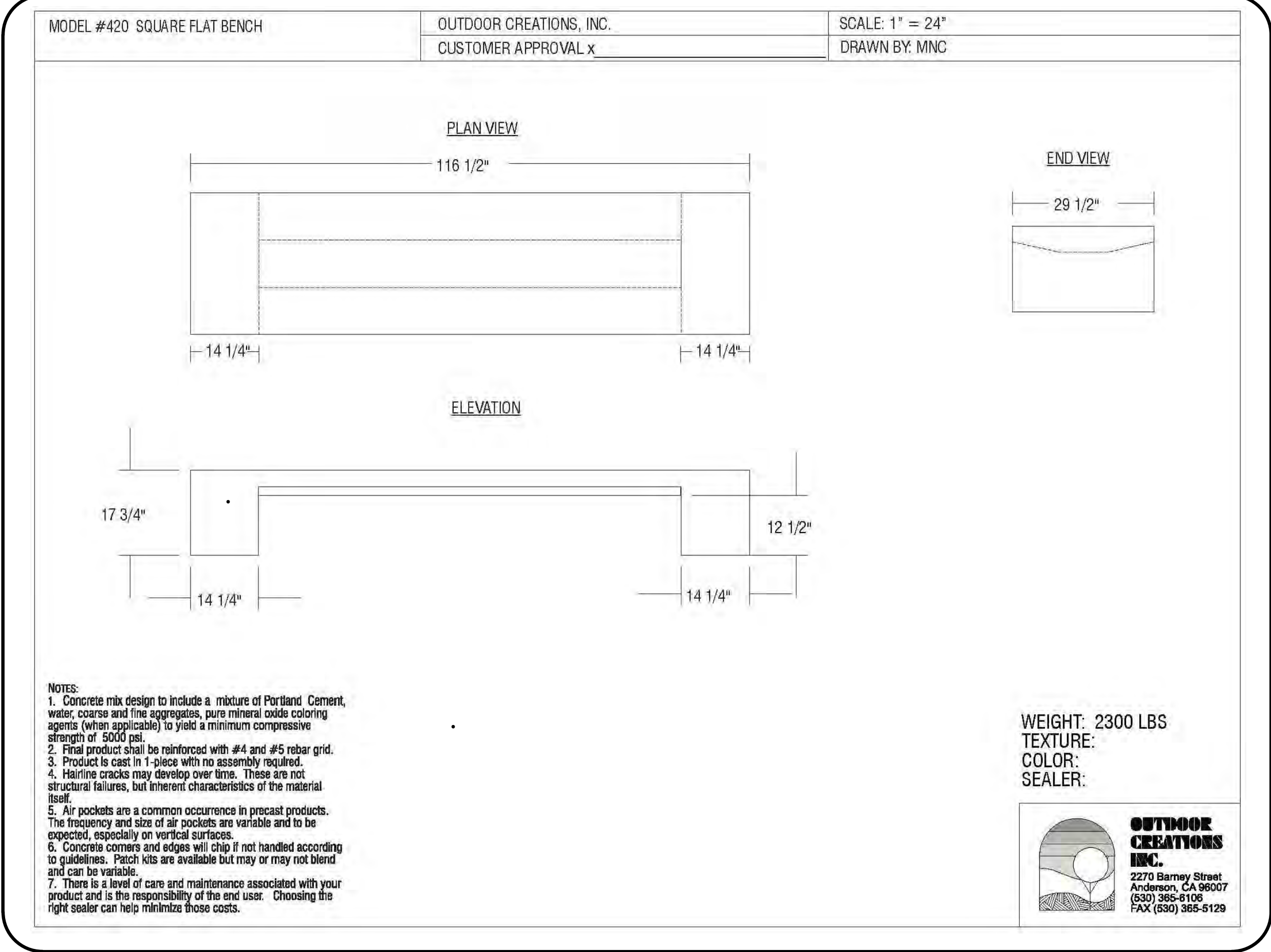


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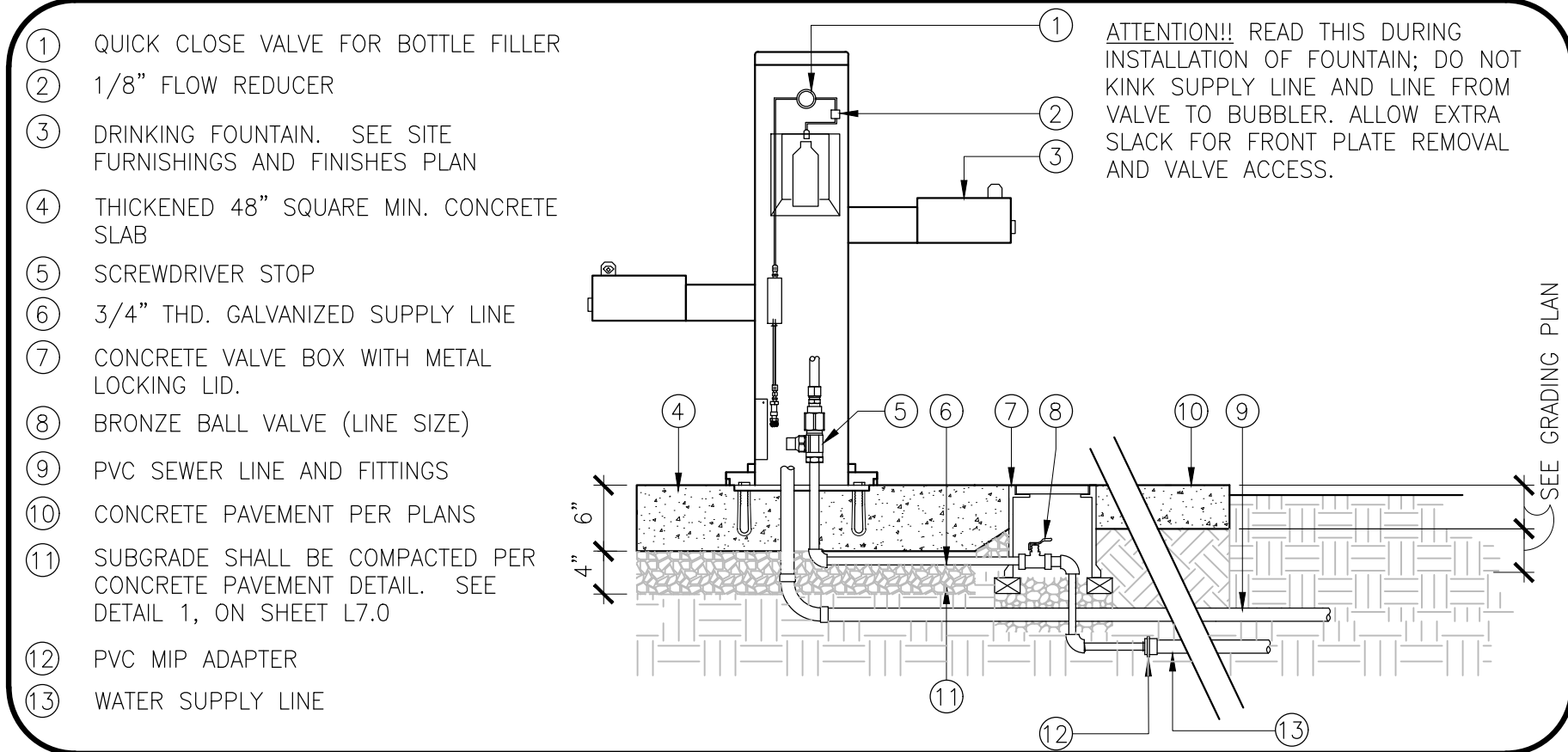
4 TRASH & RECYCLE RECEPTACLES

NOT TO SCALE



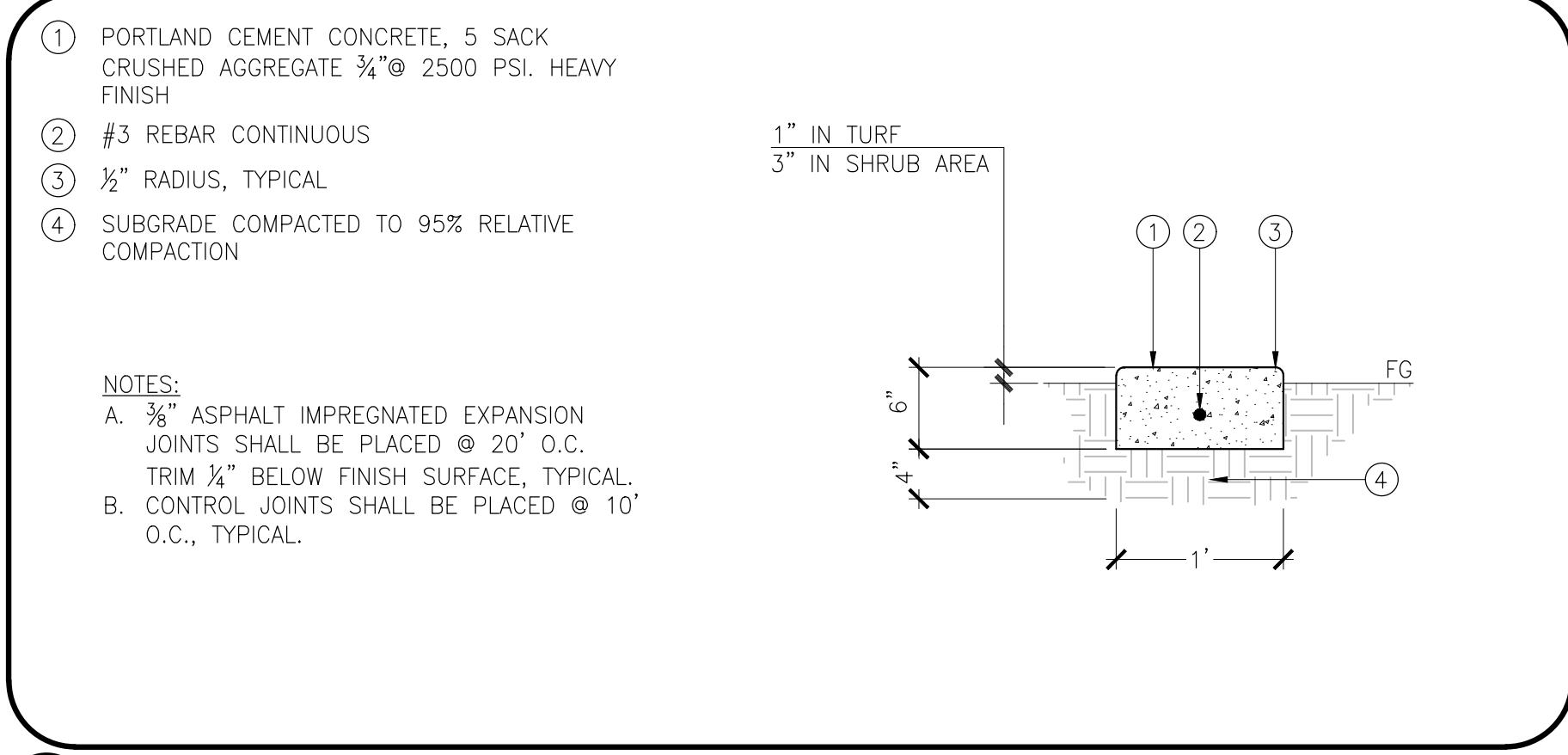
5 BACKLESS BENCHES

NOT TO SCALE



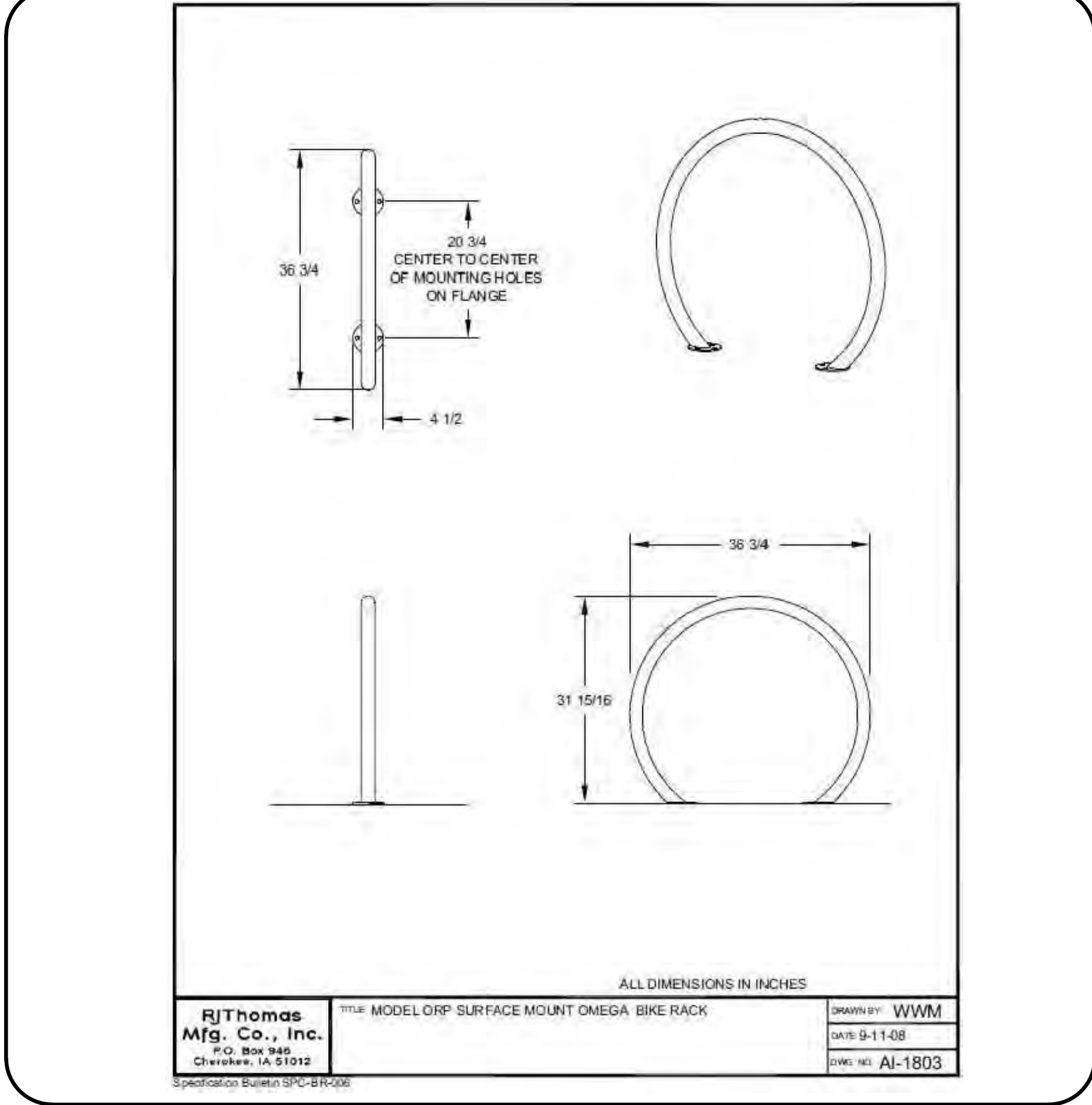
1 DRINKING FOUNTAIN W/BOTTLE FILLER

NOT TO SCALE



2 CONCRETE MOW CURB

NOT TO SCALE



3 BIKE RACKS

NOT TO SCALE

BID SUBMITTAL



| PLAN REVISIONS |      |          |
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Modesto, CA 95350

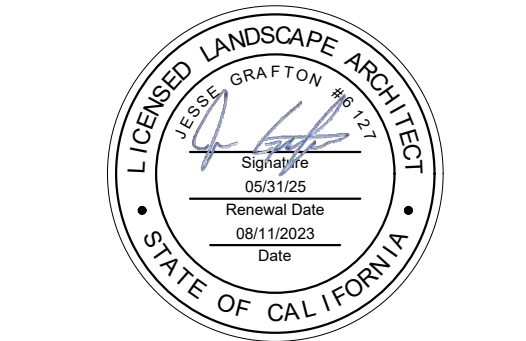
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IMPROVEMENT PLANS

COLUMBIA POOL  
IMPROVEMENTS

TURLOCK, CA

CONSTRUCTION  
DETAILS



|           |              |
|-----------|--------------|
| APPROVED: |              |
| DESIGNED: | JG, VR, JS   |
| DRAWN:    | VR, JS       |
| CHECKED:  | JG           |
| SCALE:    | N/A          |
| DATE:     | 08/11/2023   |
| JOB NO.:  | 37512        |
| FILE NO.: | 37512-DT.DWG |



TURLOCK, CA

SHEET NO.

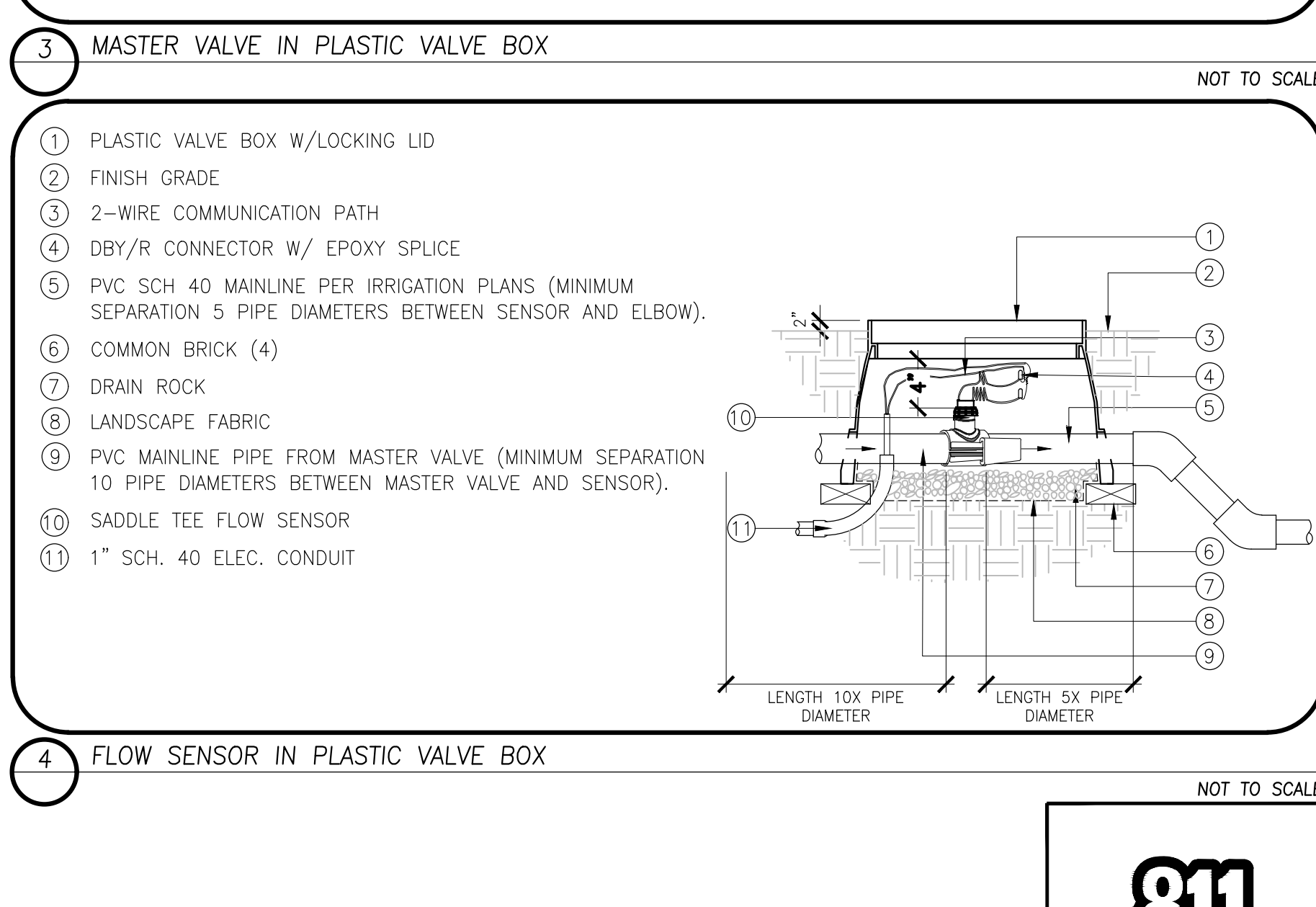
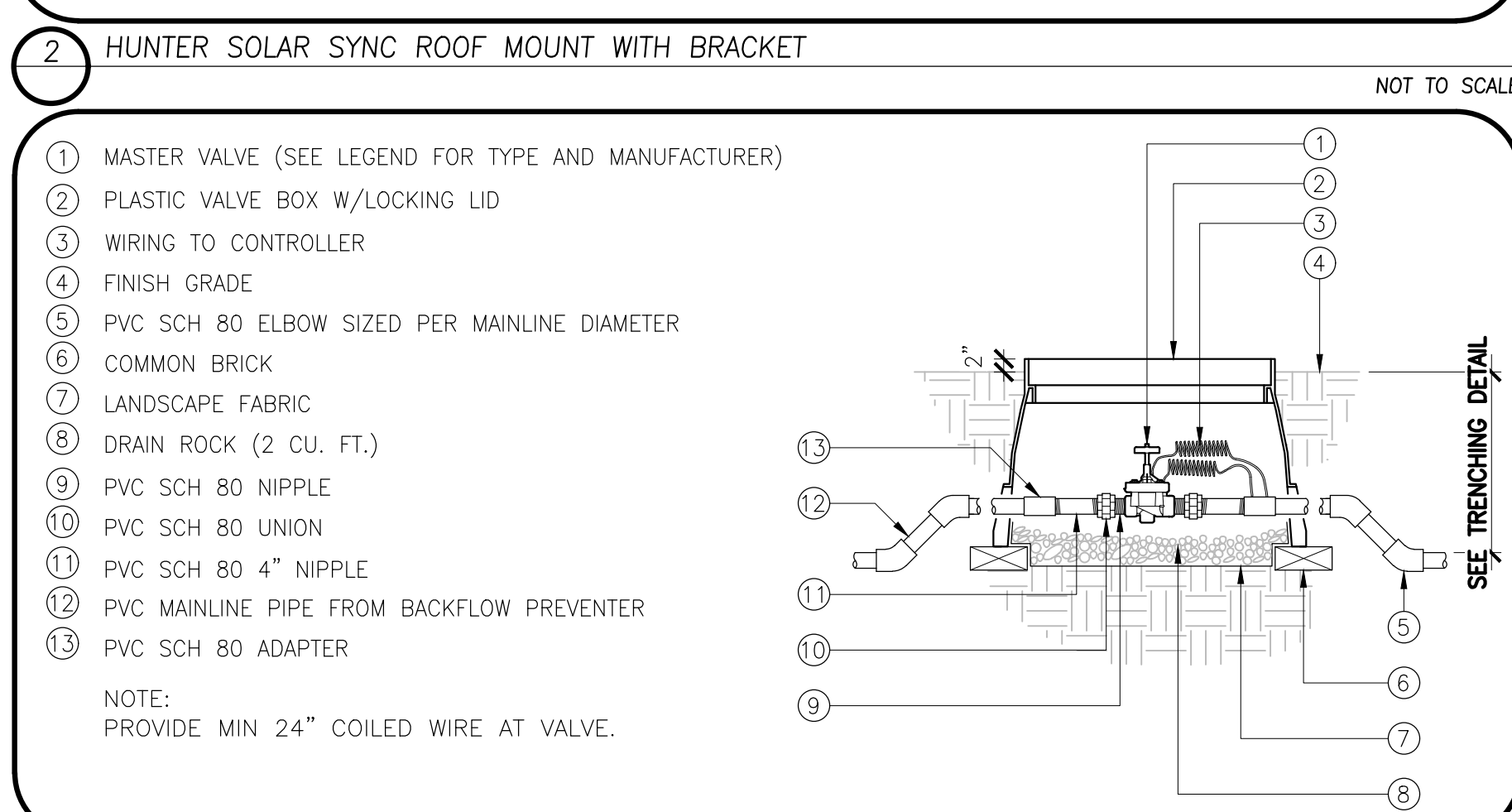
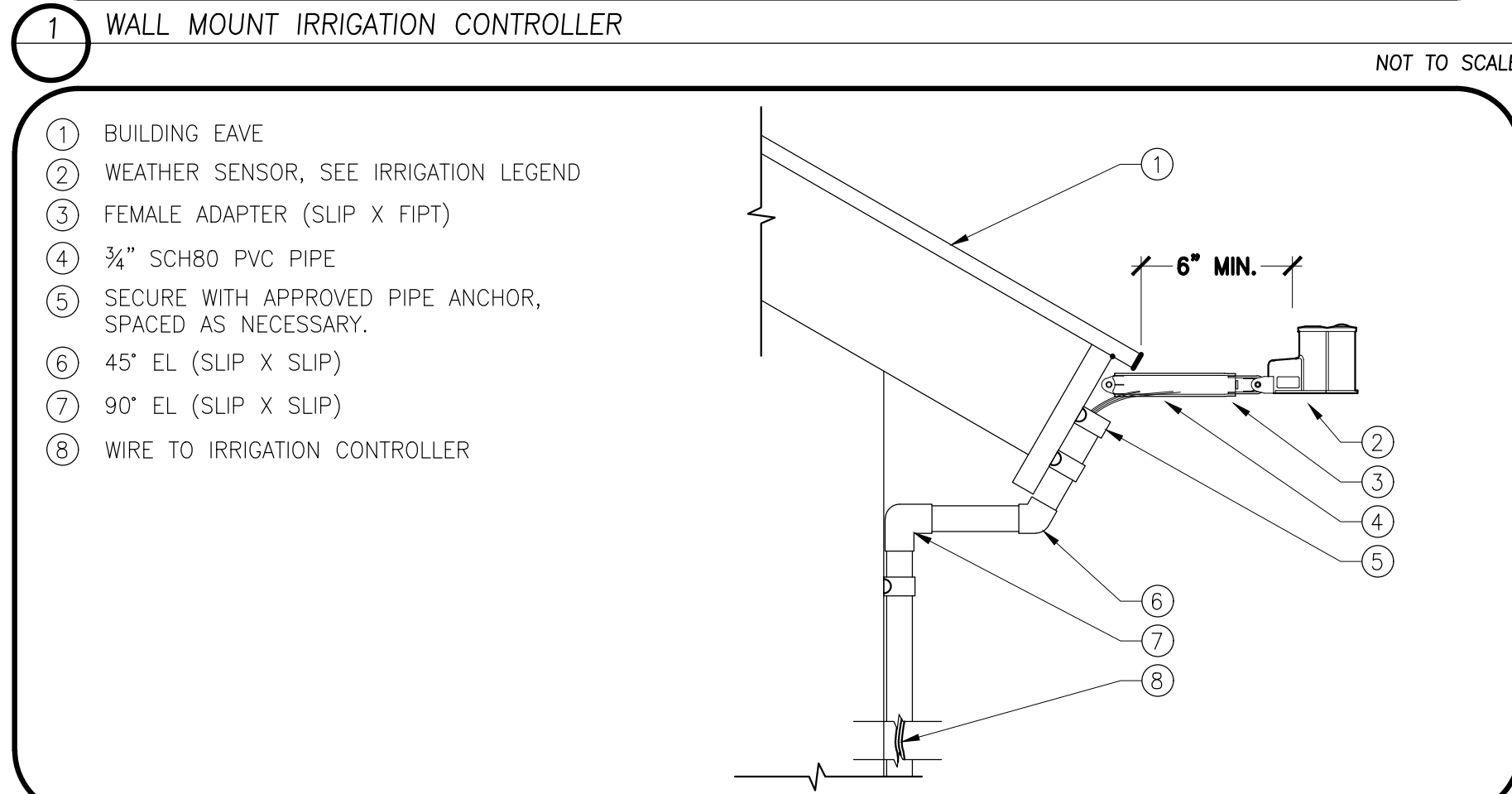
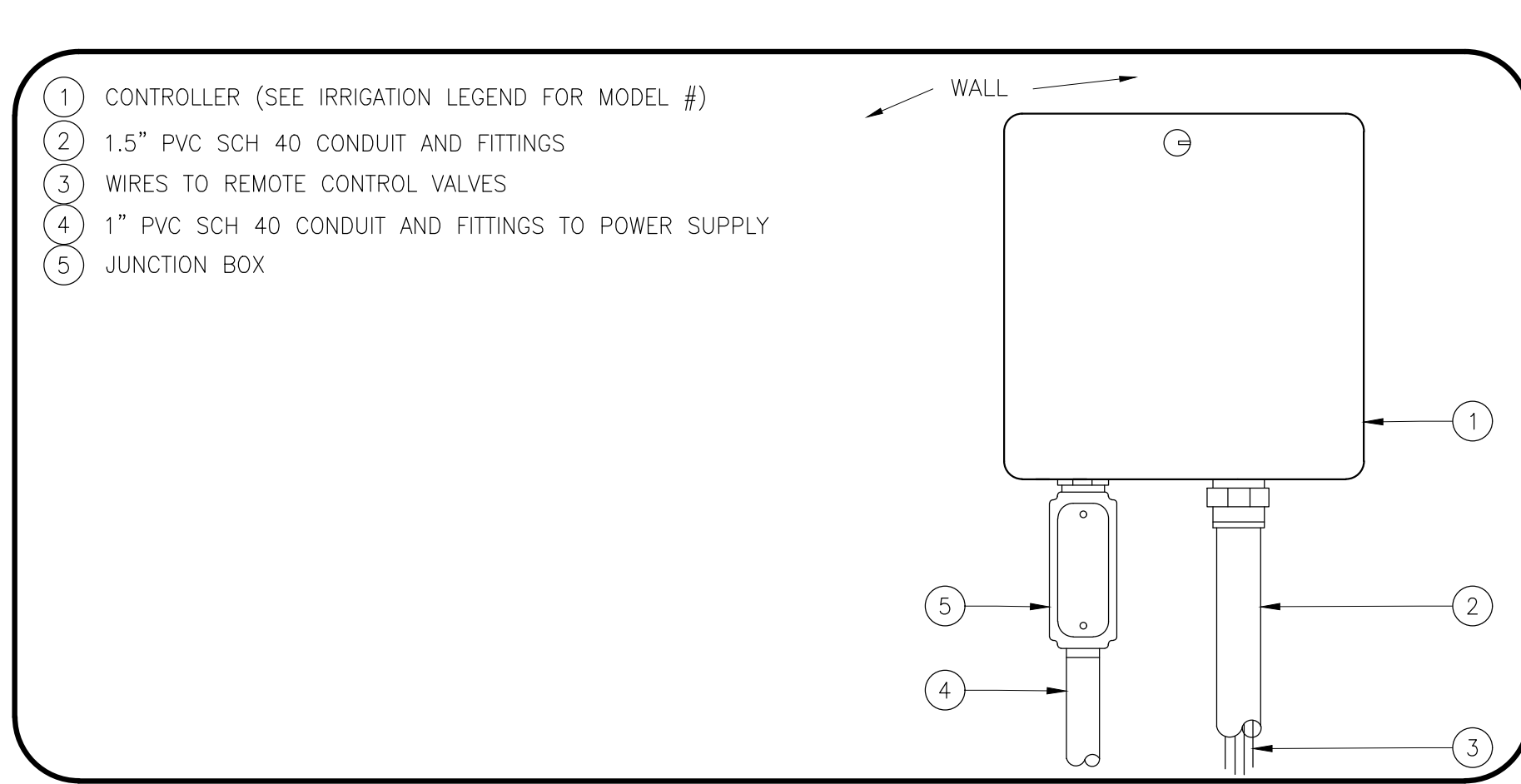
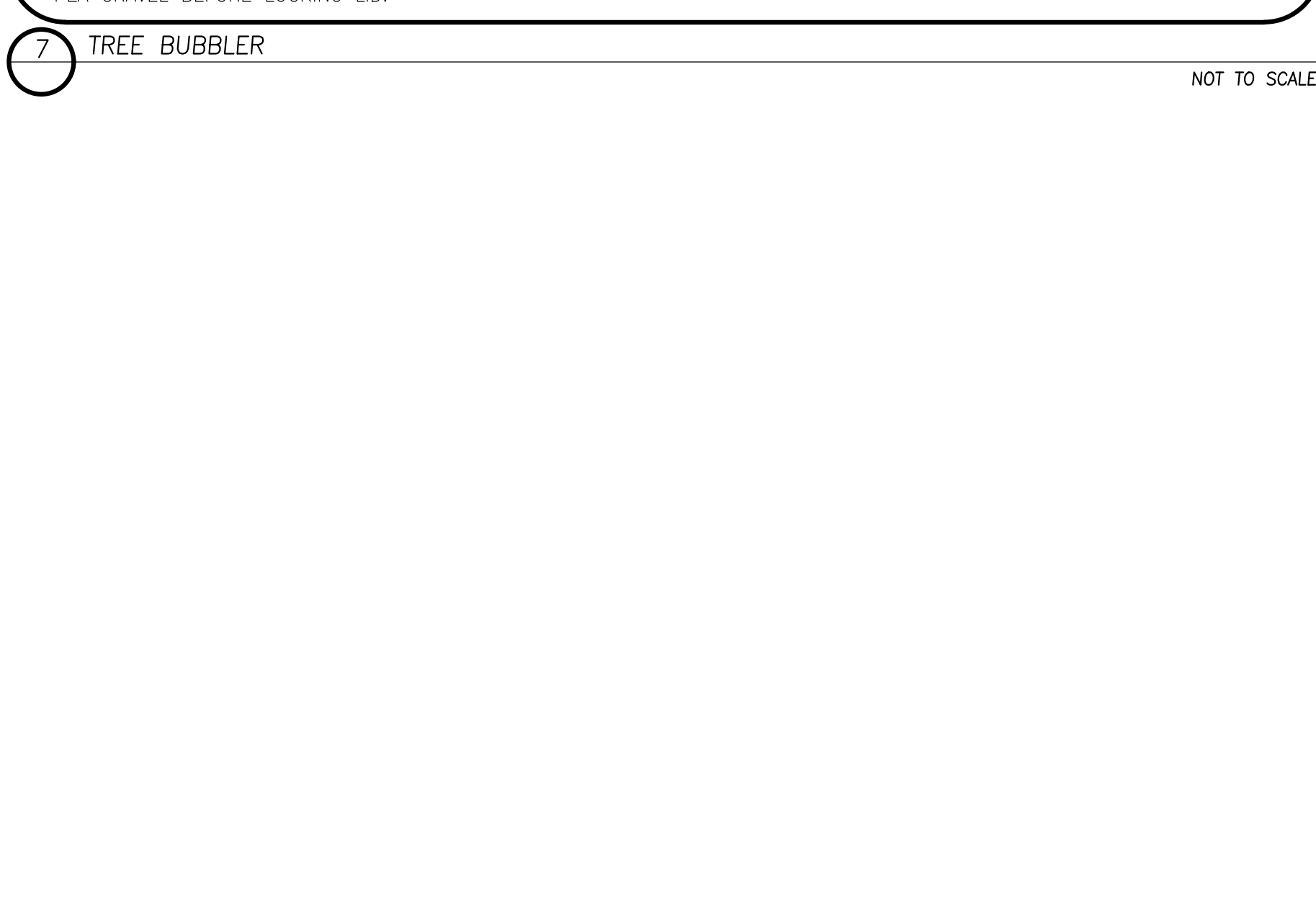
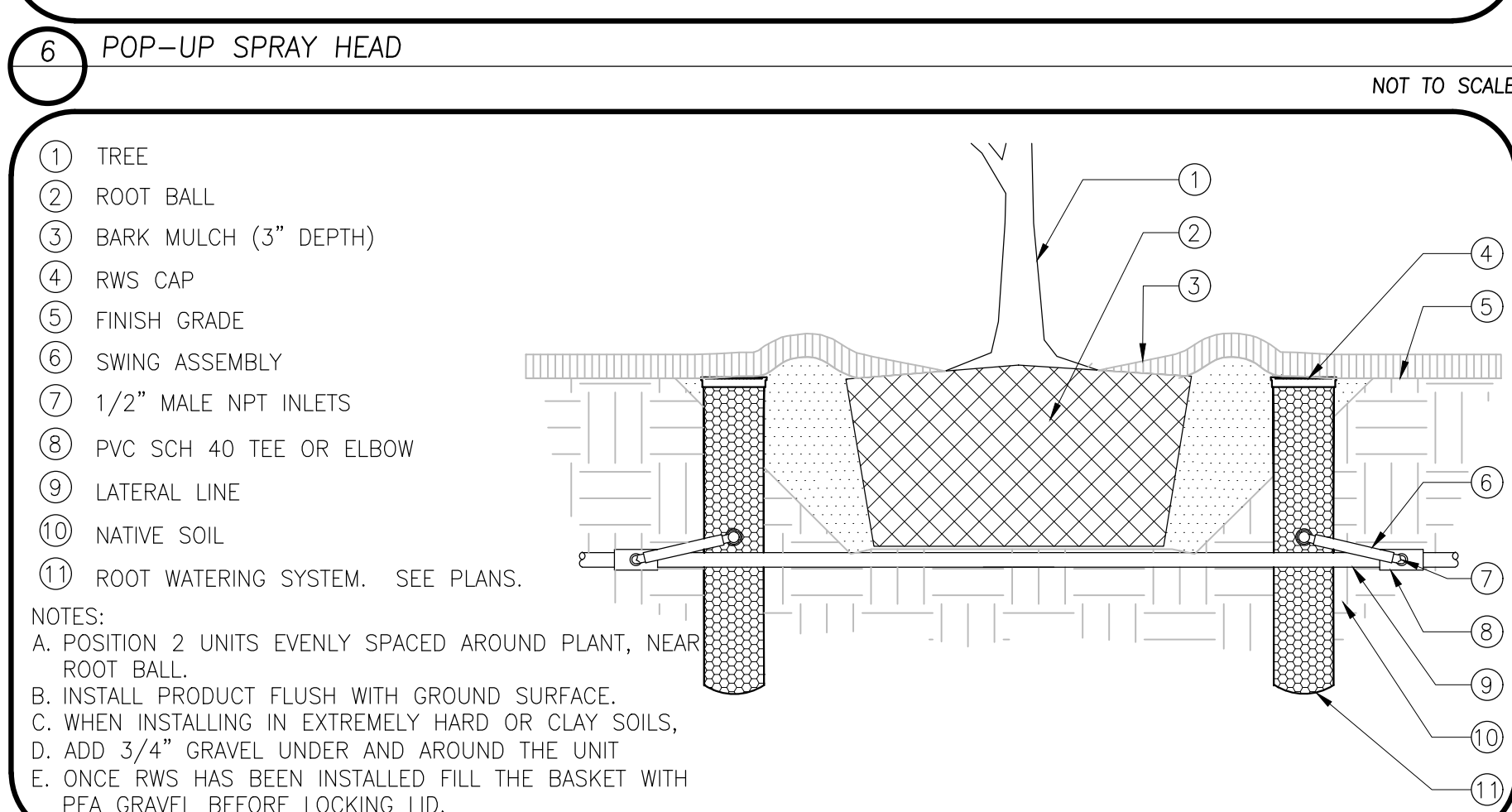
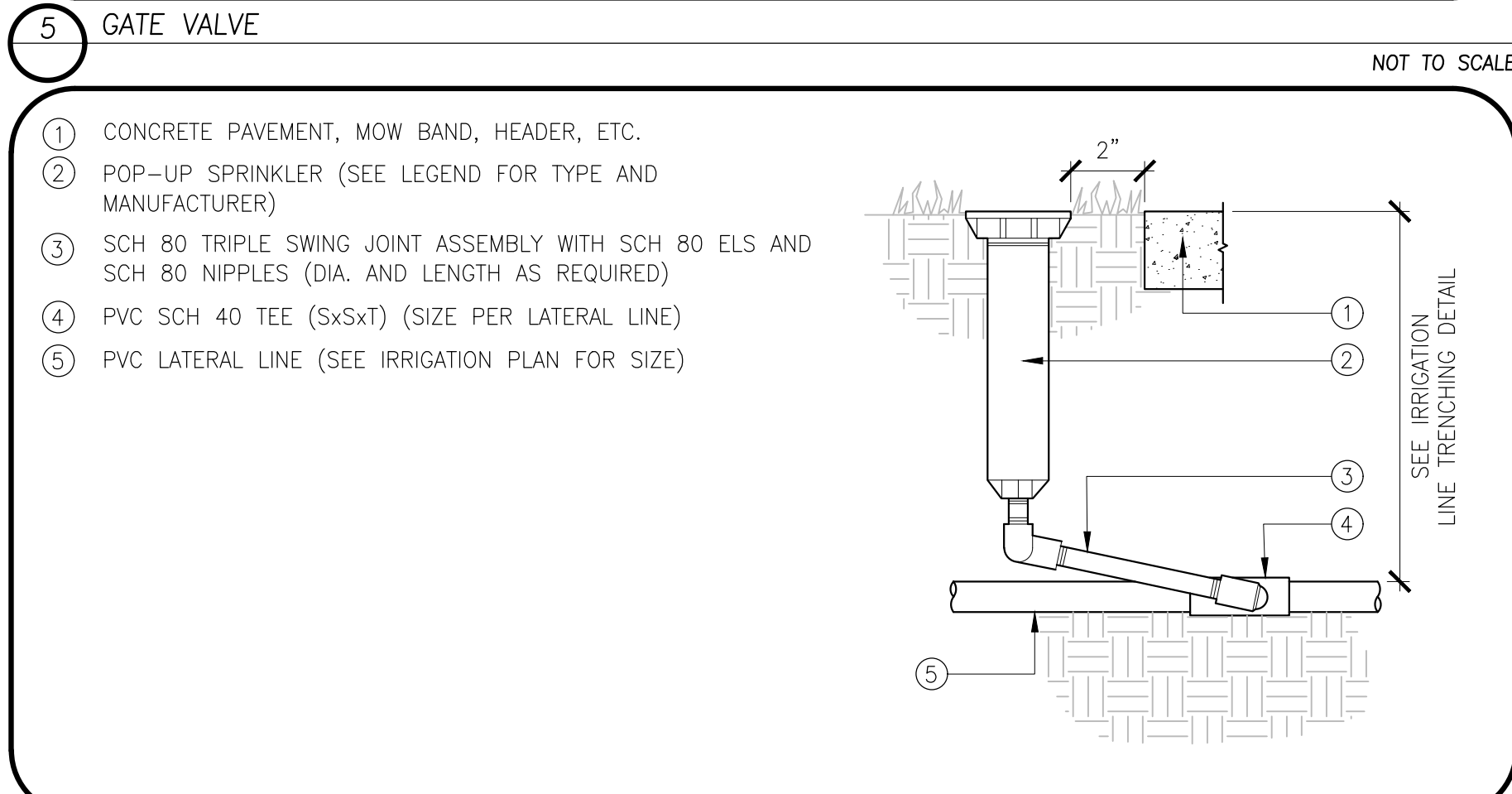
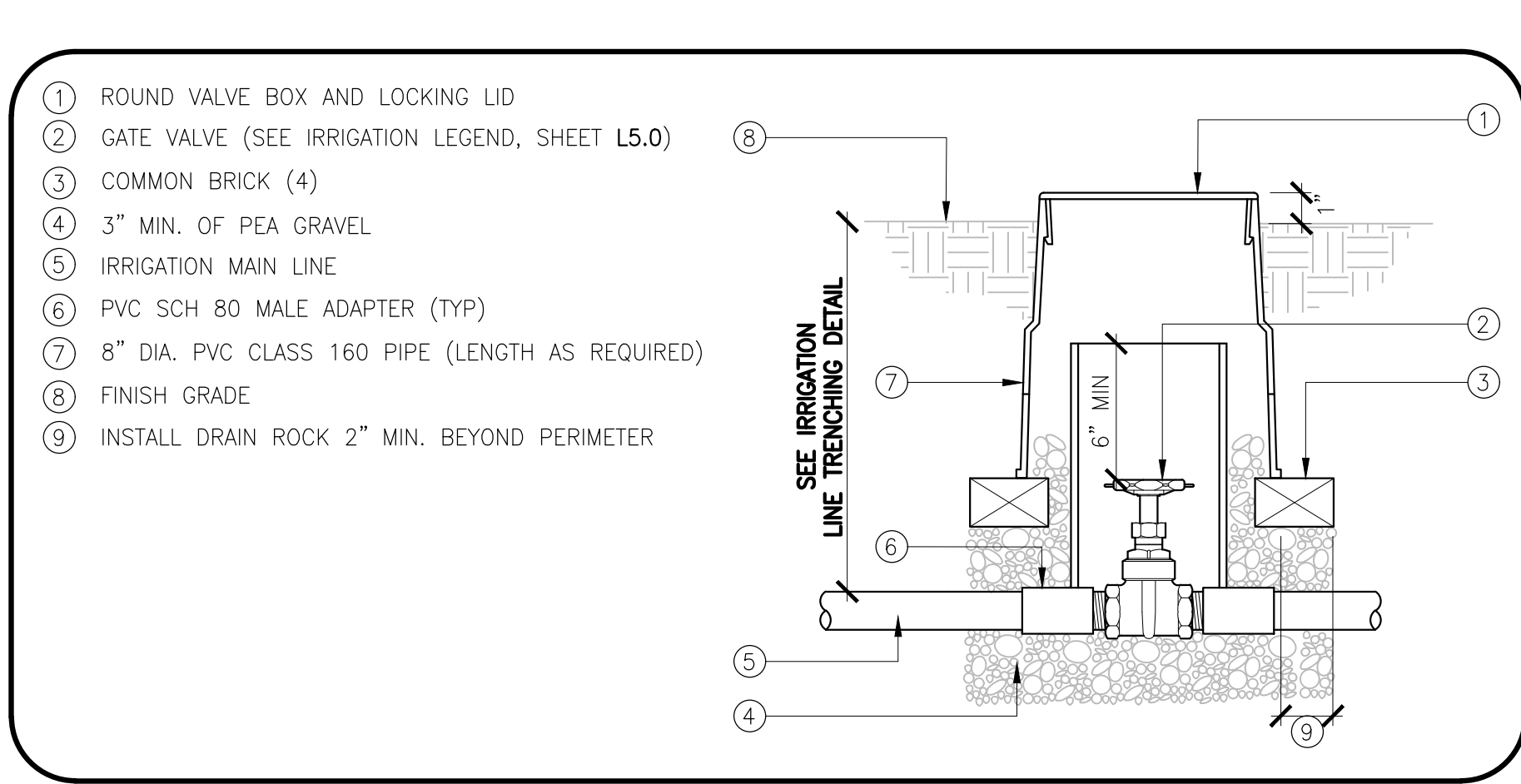
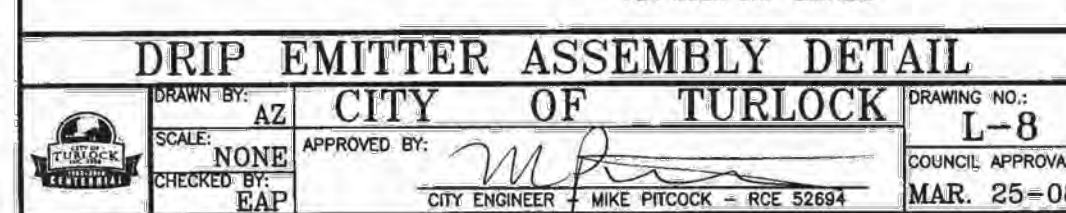
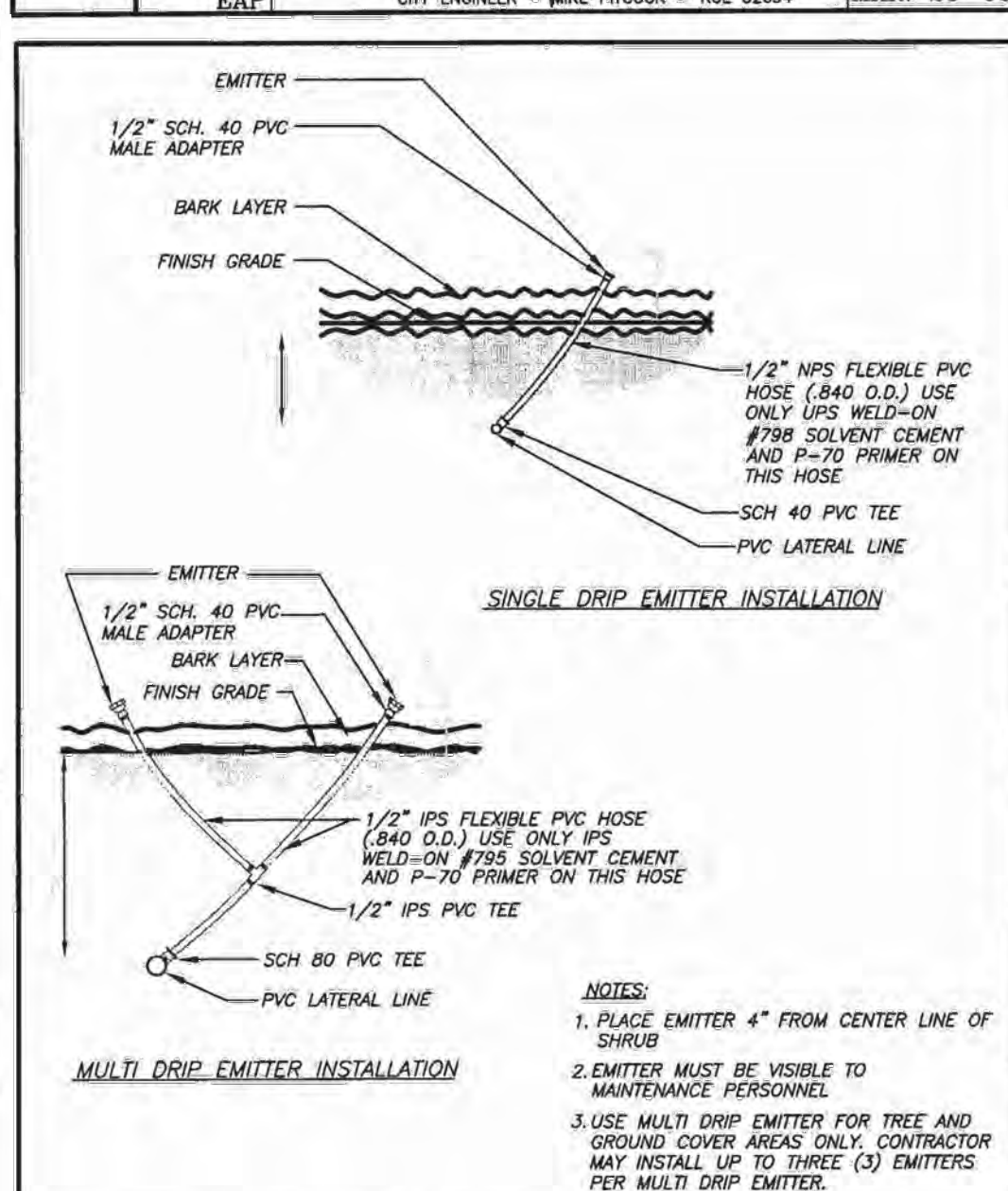
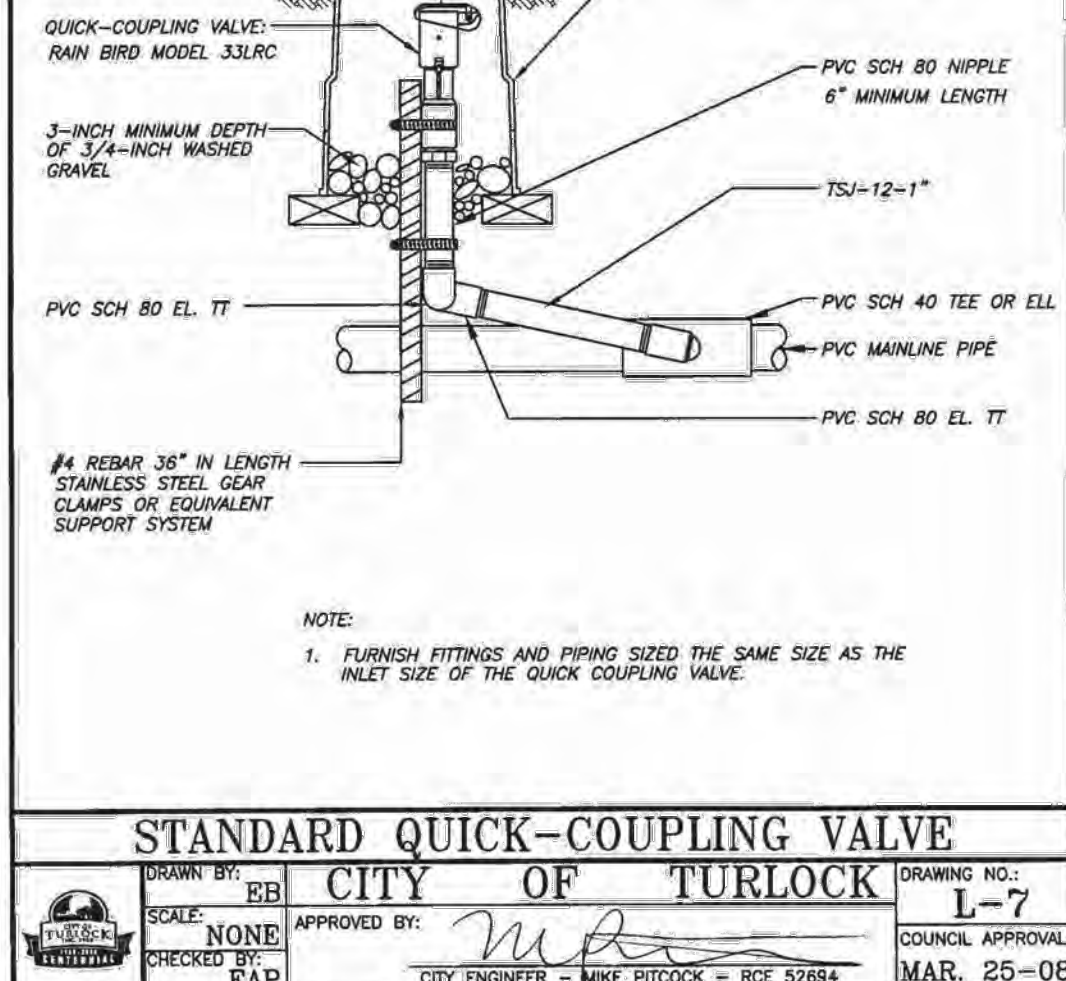
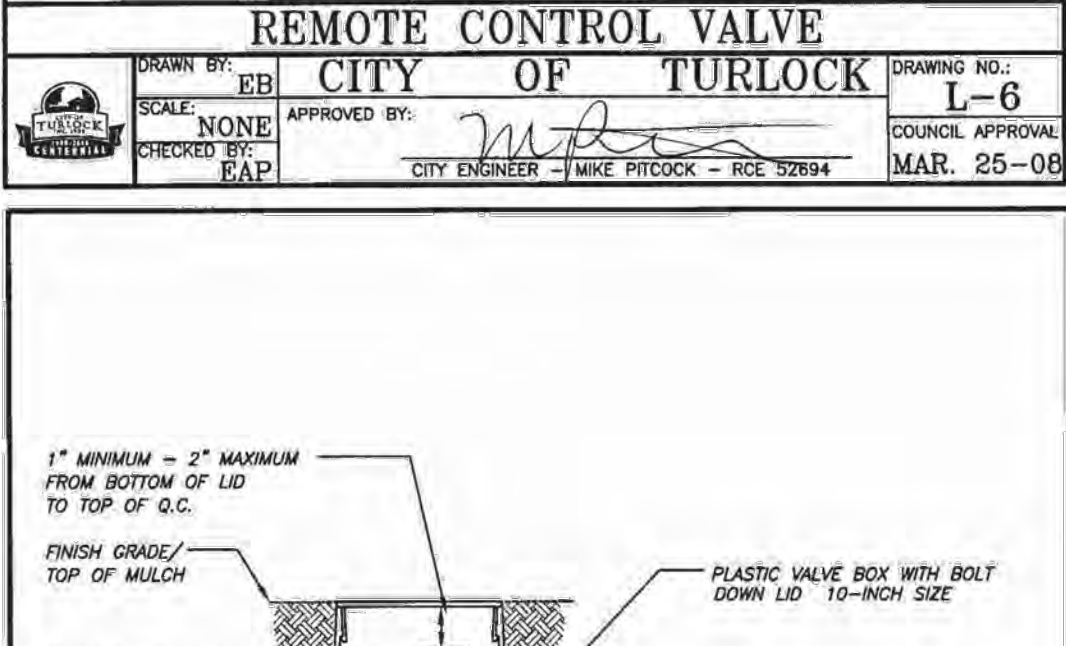
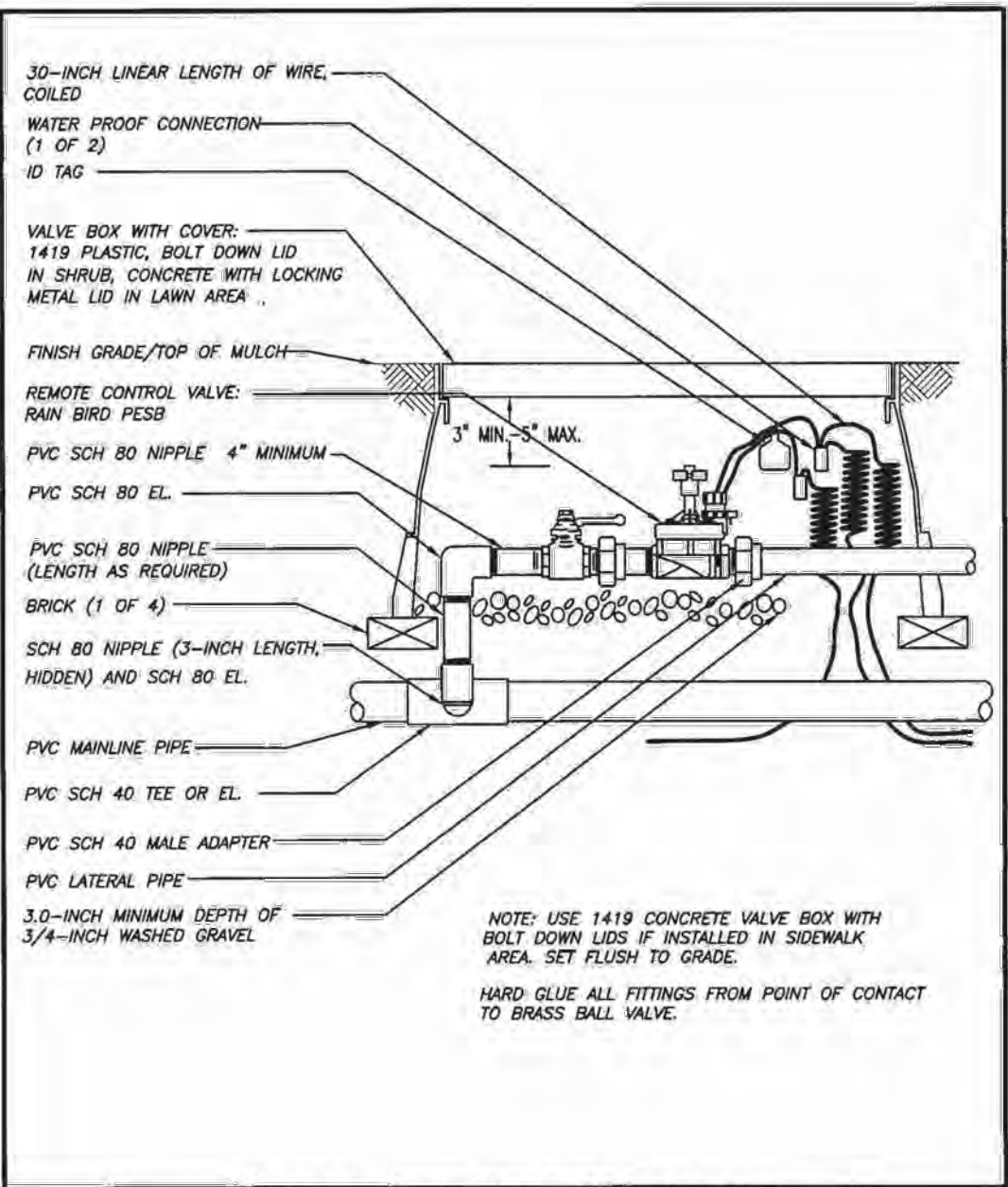
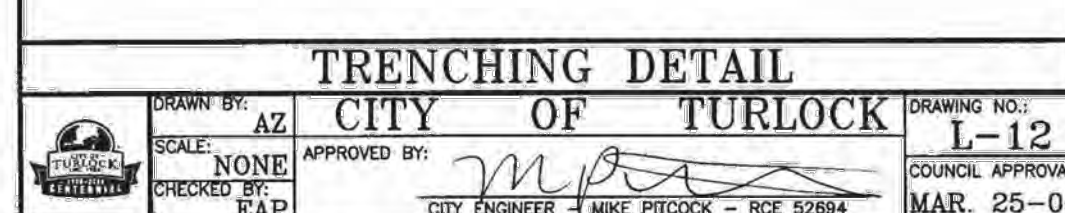
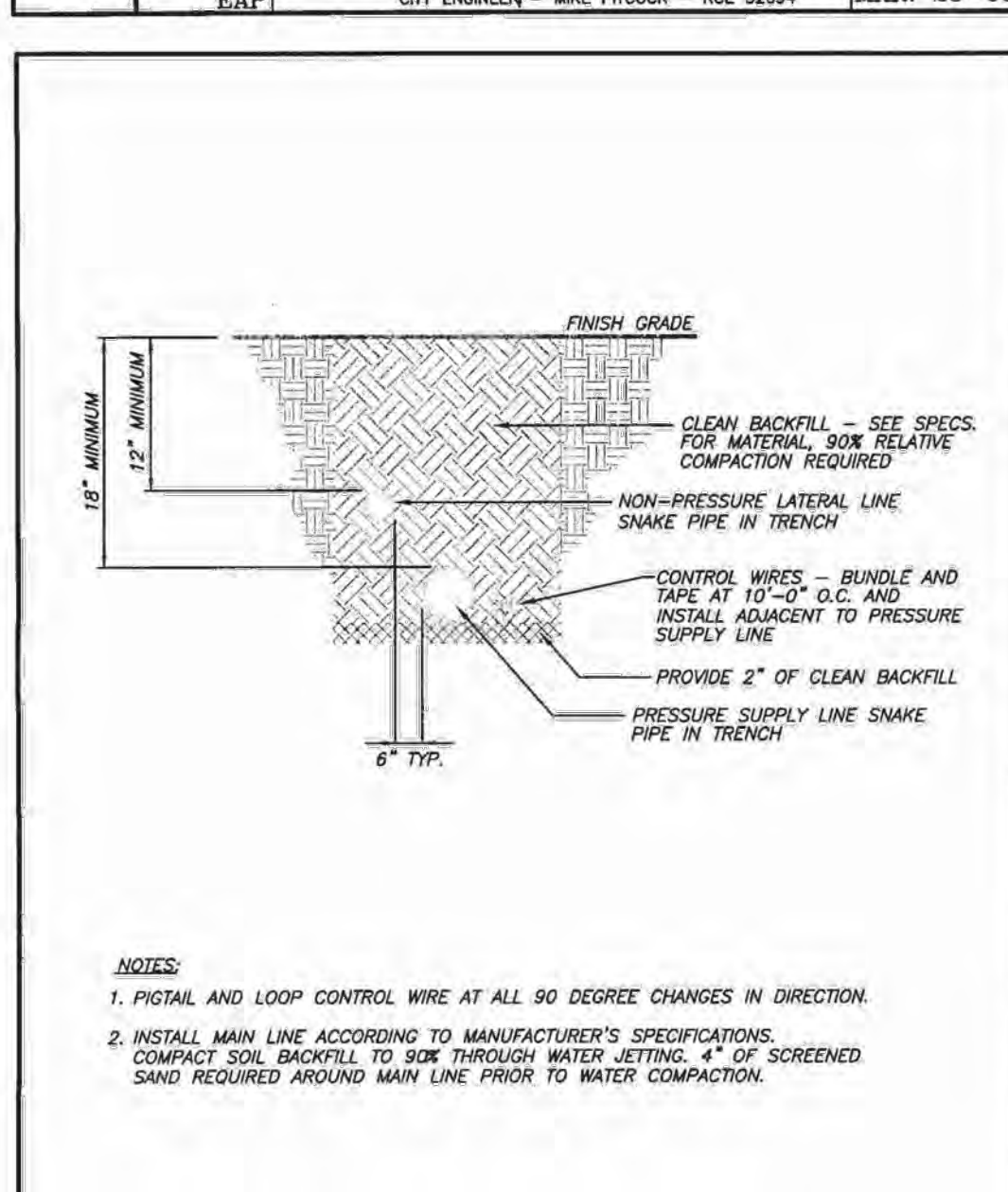
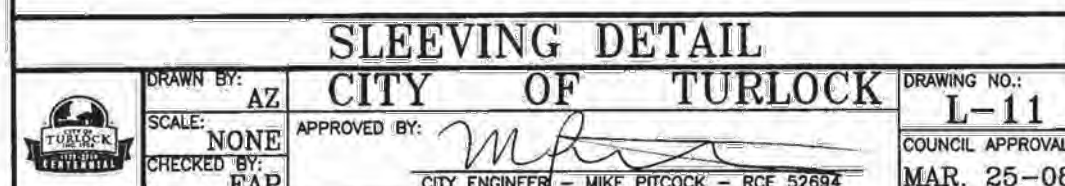
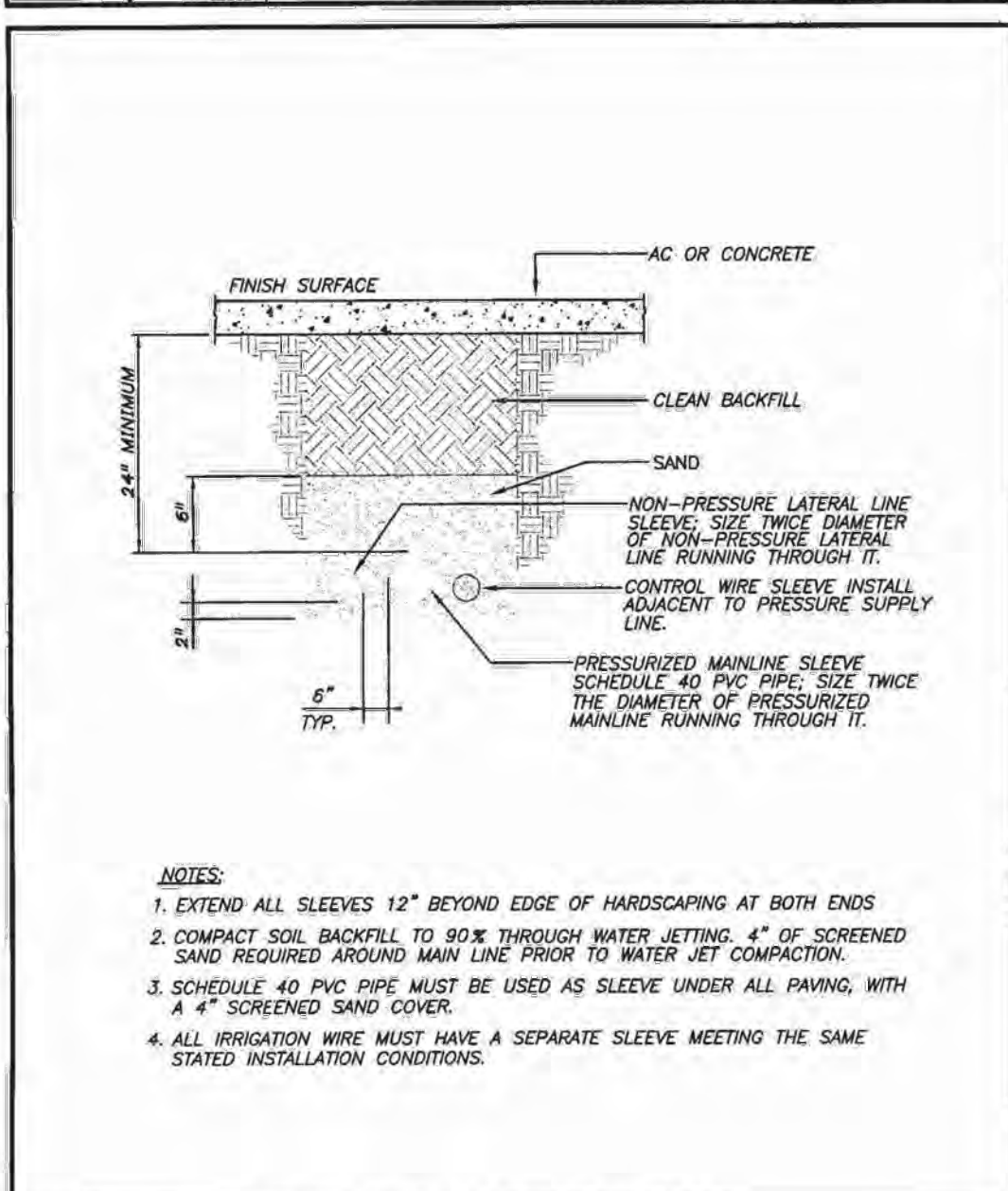
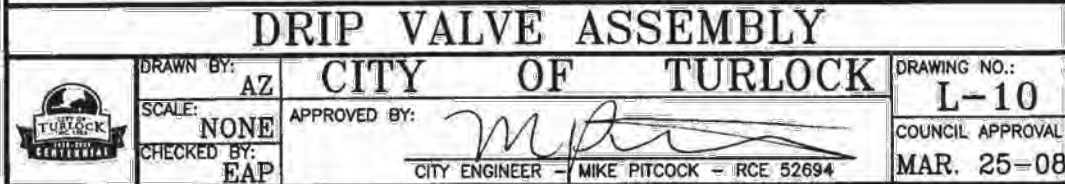
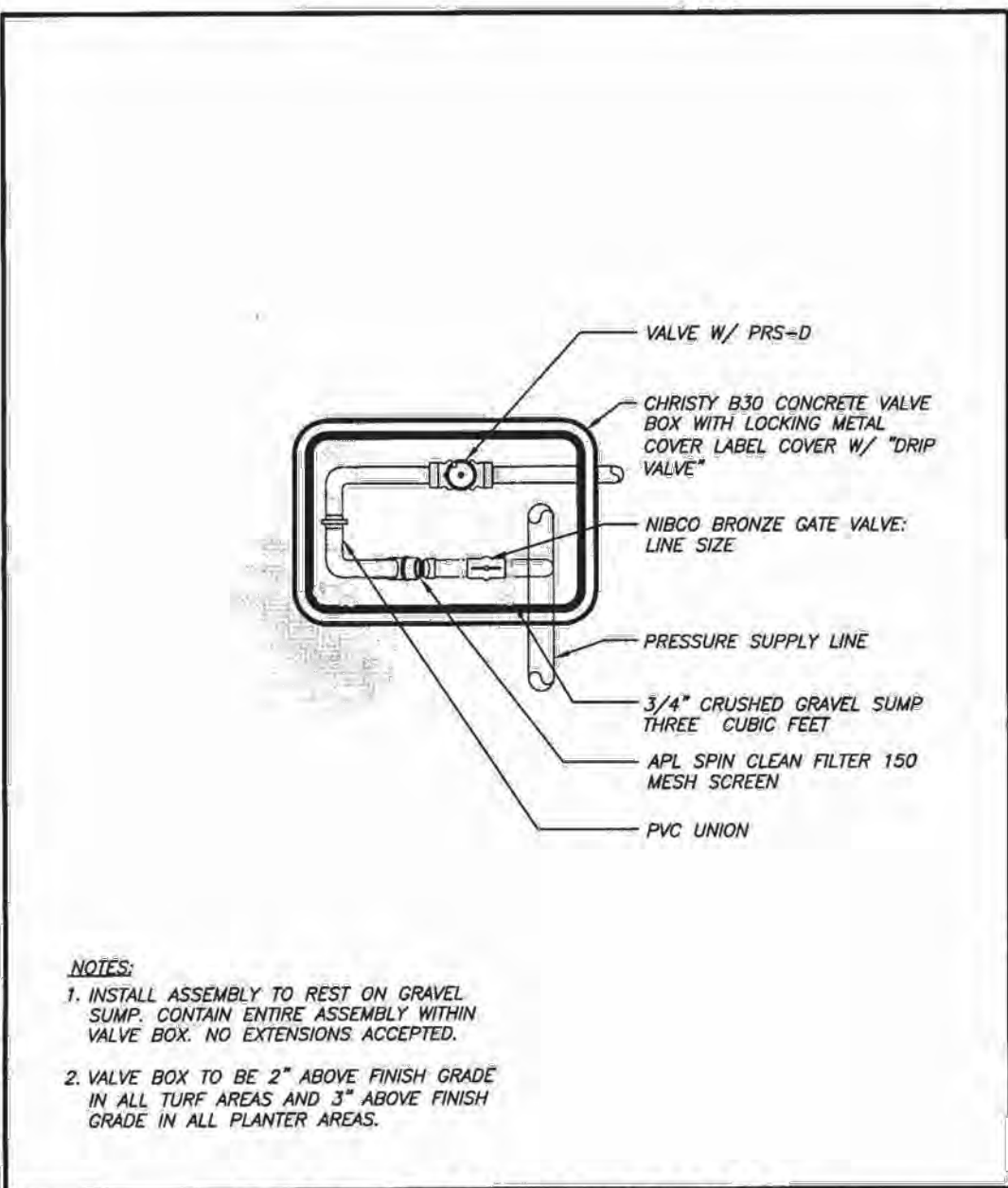
OF



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| PLAN REVISIONS |      |          |
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**O'DELL**  
ENGINEERING

1165 Scenic Drive, Suite A  
Modesto, CA 95350

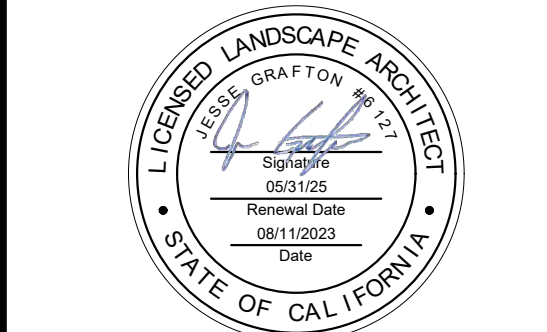
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# IMPROVEMENT PLANS

## COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

### IRRIGATION DETAILS



APPROVED: \_\_\_\_\_

DESIGNED: JG, VR, JS  
DRAWN: VR, JS  
CHECKED: JG  
SCALE: N/A  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-DT.DWG

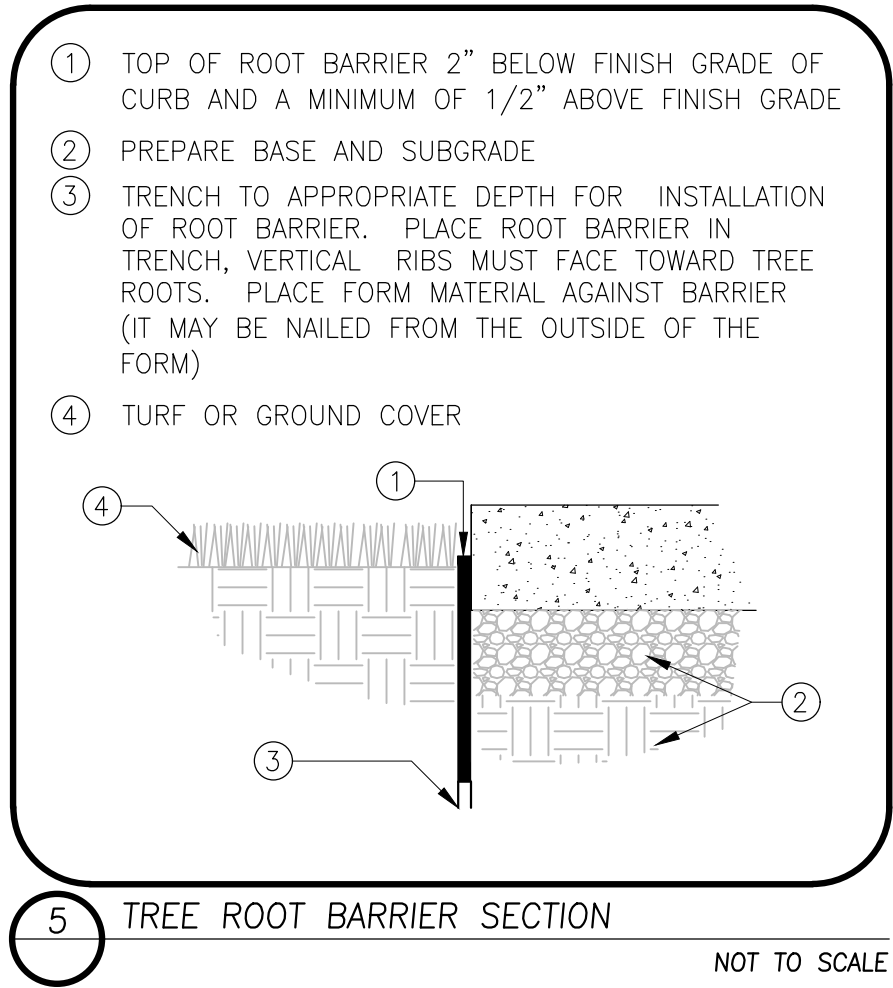
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**BID SUBMITTAL**

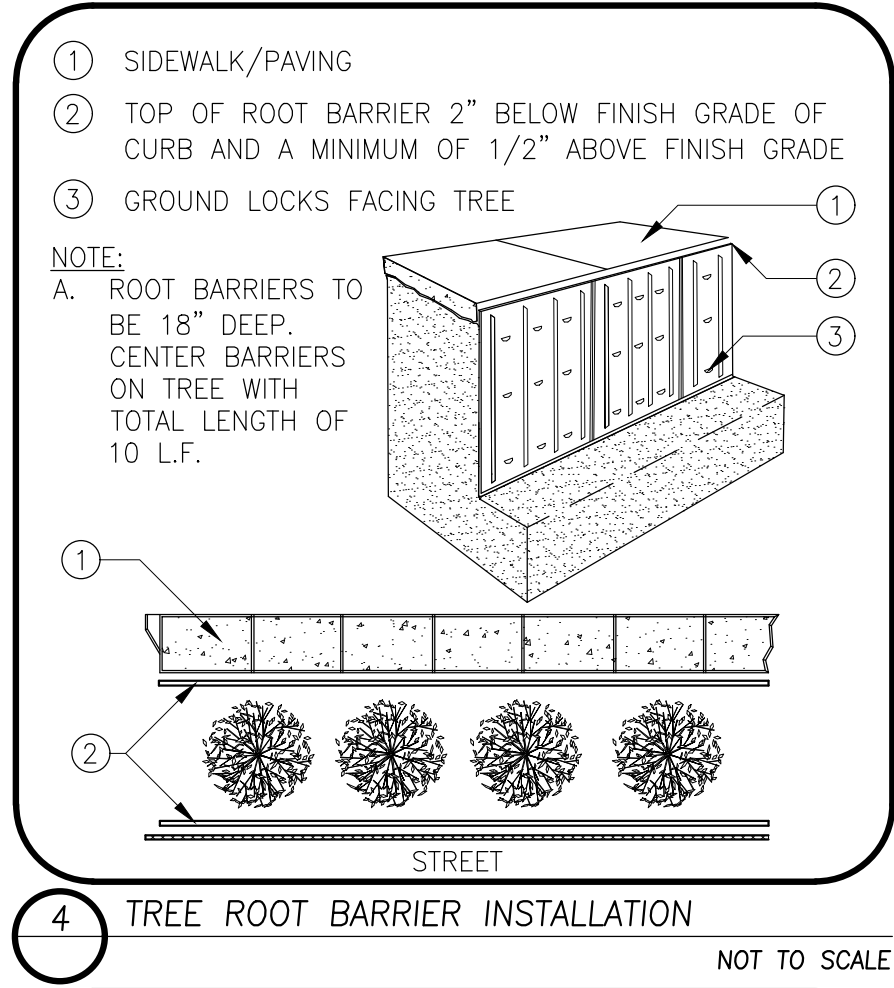




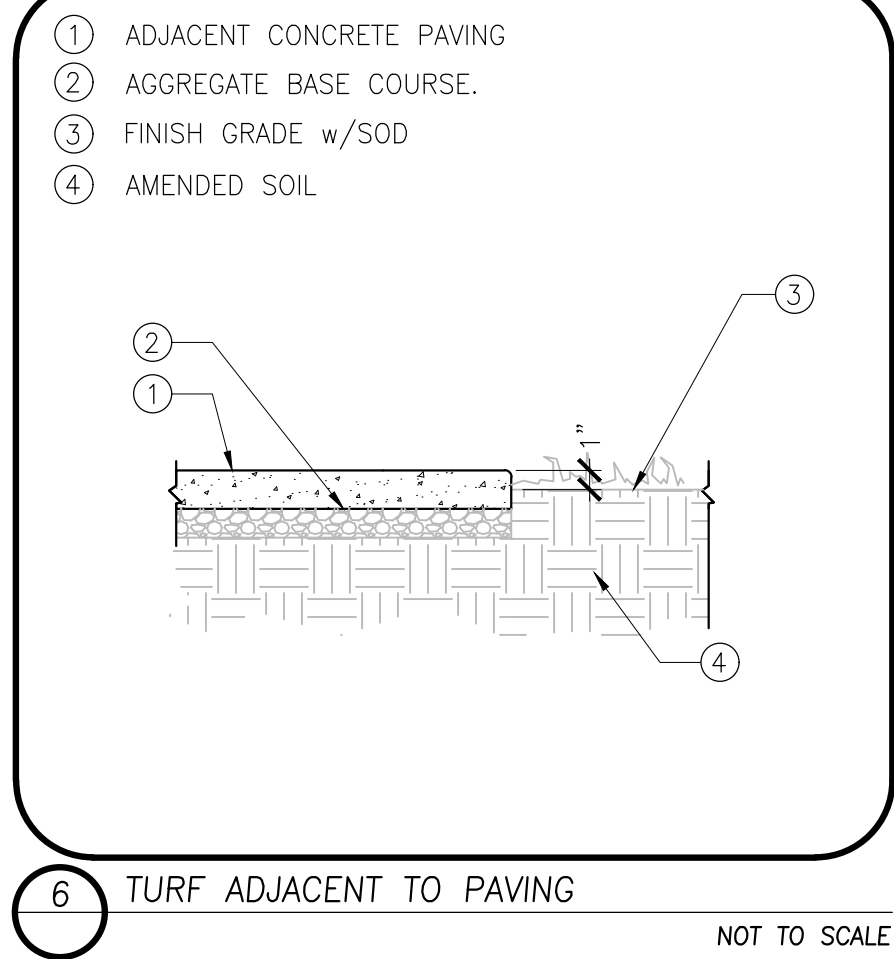
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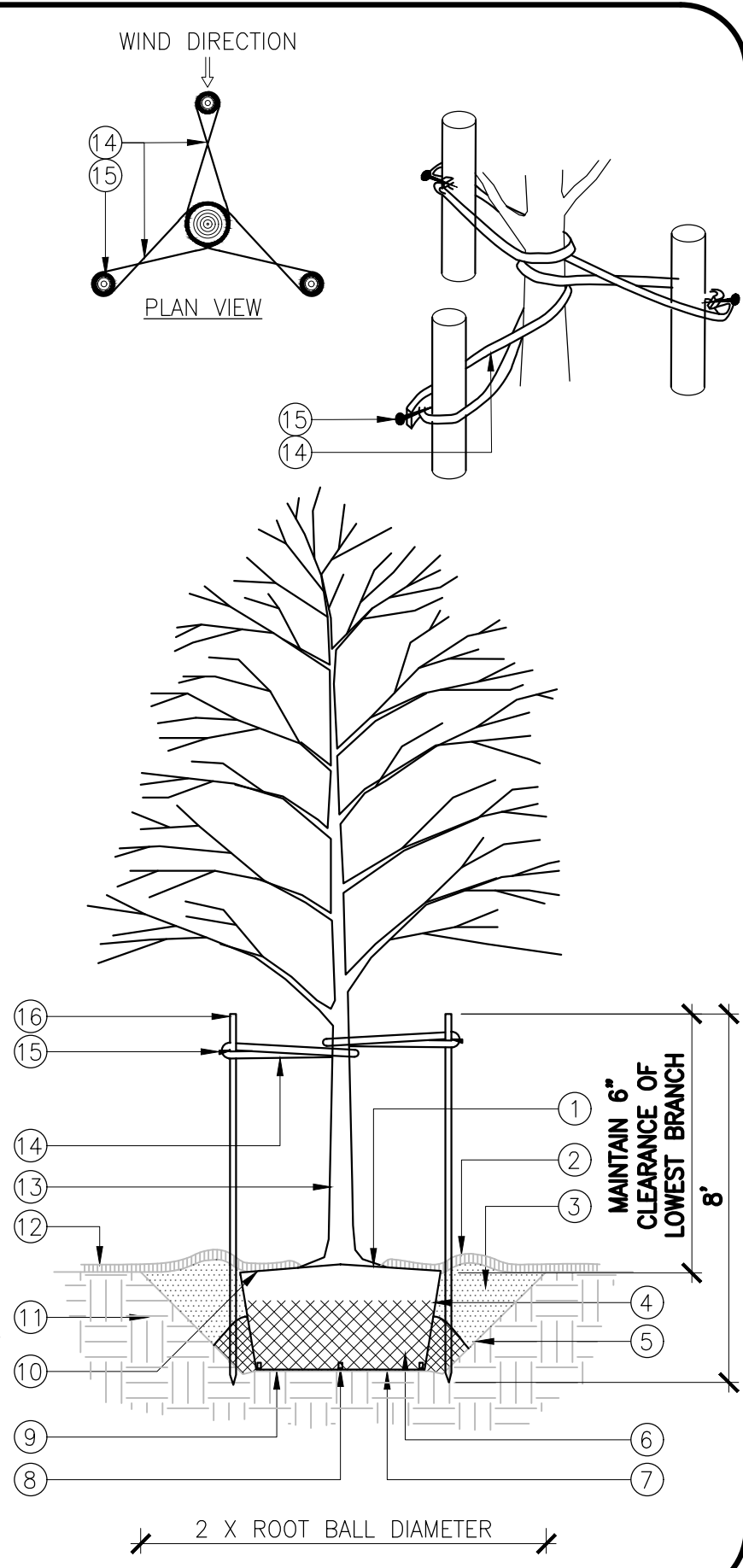
NOT TO SCALE



NOT TO SCALE

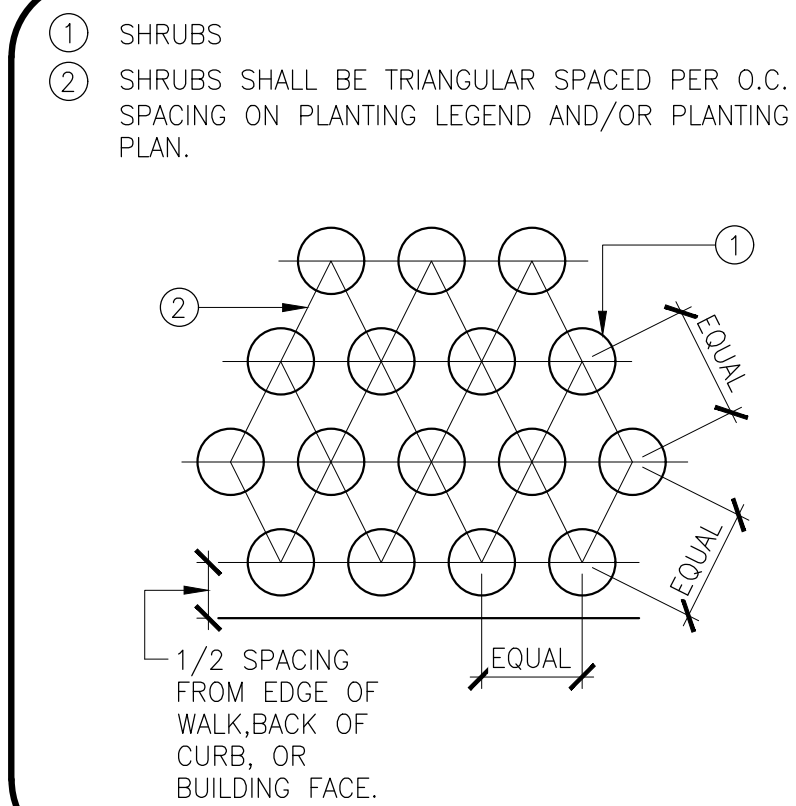
- 1 EACH TREE MUST BE PLANTED SUCH THAT THE TRUNK FLARE IS VISIBLE AT THE TOP OF THE ROOT BALL. TREES WHERE THE TRUNK FLARE IS NOT VISIBLE SHALL BE REJECTED. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.  
2 4" HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL.  
3 SEE PLANTING NOTES FOR SOIL AMENDMENT MIXTURE. AMENDED SOIL MUST NOT BE SO COMPACTED AS TO IMPEDE ROOT GROWTH OR DRAINAGE. THE SOIL STRUCTURE SHALL NOT BE PLATY OR MASSIVE.  
4 REMOVE ALL TWINE, ROPE, WIRE AND BURLAP FROM TOP HALF OF ROOT BALL.  
5 1:1 SLOPE ON SIDES OF PLANTING HOLE  
6 IF PLANT IS SHIPPED WITH A WIRE BASKET AROUND ROOT BALL, CUT THE WIRE BASKET IN FOUR PLACES AND FOLD DOWN 200MM (8") INTO PLANTING HOLE.  
7 PLACE ROOT BALL ON UNEXCAVATED OR TAMPED SOIL.  
8 FERTILIZER PLANT TABS: 5 PER 15 GAL TREE, 8 PER 24" BOX TREE, 12 PER 36" BOX TREE.  
9 TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT.  
10 SET TOP OF ROOT BALL FLUSH TO GRADE OR 1"-2" HIGHER IN SLOWLY DRAINING SOILS.  
11 NATIVE SOIL  
12 MULCH RING 3' DIAMETER MIN., 4' DIAMETER PREFERRED. DO NOT PLACE MULCH IN CONTACT WITH TREE TRUNK. MAINTAIN THE MULCH WEED-FREE DURING THE MAINTENANCE PERIOD.  
13 MARK THE NORTH SIDE OF THE TREE IN THE NURSERY, AND ROTATE TREE TO FACE NORTH AT THE SITE.  
14 GRO STRAIT 36" "Z" STRAP OR EQUAL.  
15 SECURE WITH 2" GALVANIZED NAIL OR SCREW.  
16 2" DIA. X 8' (15 GAL.-24" BOX), 3" DIA. X 10' (36"-48" BOX) HARDWOOD LODGEPOLE STAKES OR OTHER APPROVED STAKE MATERIAL. ALL STAKES SHALL BE DRIVEN OUTSIDE THE EDGE OF THE ROOTBALL.

NOTES:  
A. DO NOT HEAVILY PRUNE THE TREE AT PLANTING. PRUNE ONLY CROSSOVER LIMBS, CO-DOMINANT LEADERS, AND BROKEN OR DEAD BRANCHES. SOME INTERIOR TWIGS AND LATERAL BRANCHES MAY BE PRUNED; HOWEVER, DO NOT REMOVE THE TERMINAL BUDS OF BRANCHES THAT EXTEND TO THE EDGE OF THE CROWN.  
B. FASTEN ARBORTIE TIGHT ENOUGH TO KEEP FROM SLIPPING WHILE ALLOWING FOR SOME TRUNK MOVEMENT.  
C. REMOVE ALL STAKING AS SOON AS THE TREE HAS GROWN SUFFICIENT ROOTS.  
D. TREES WITH POOR QUALITY ROOT BALLS OR ROOT BALLS THAT HAVE BEEN CRACKED OR DAMAGED TO BE REJECTED.  
E. TREES THAT HAVE GROWN TOO CLOSE TOGETHER IN THE NURSERY, RESULTING IN WEAK TRUNKS TO BE REJECTED.



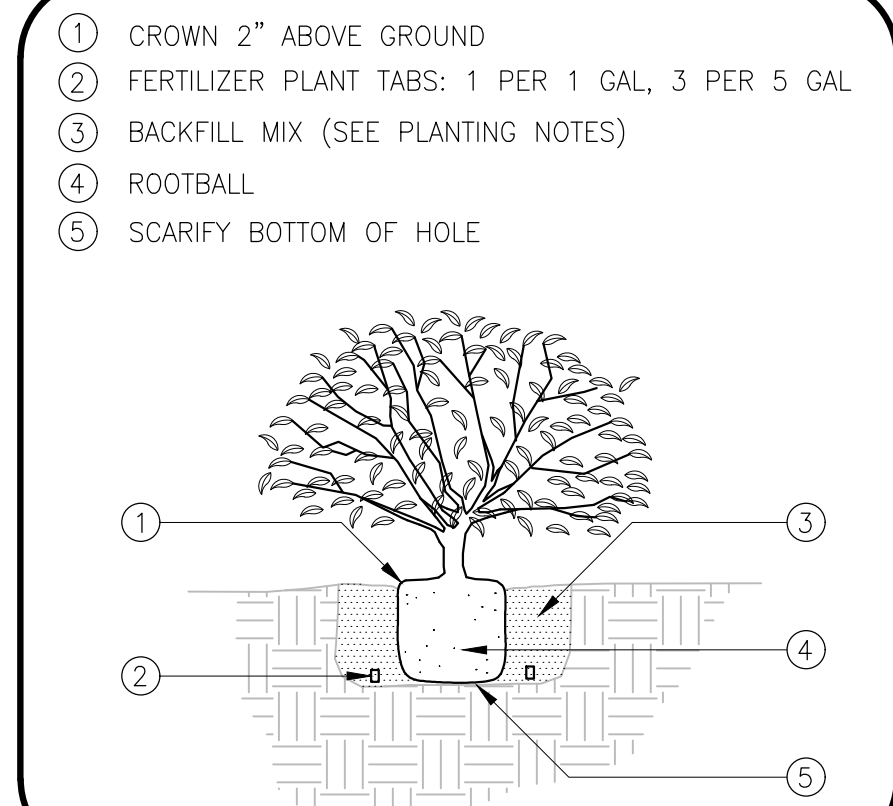
NOT TO SCALE

1 TREE PLANTING AND STAKING



3 SHRUB SPACING

NOT TO SCALE



2 SHRUB PLANTING

NOT TO SCALE

| PLAN REVISIONS |      |          |
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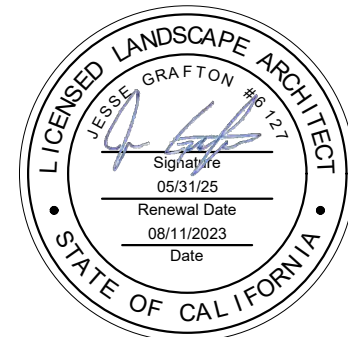
1165 Scenic Drive, Suite A  
Modesto, CA 95350  
odellengineering.com

# IMPROVEMENT PLANS

## COLUMBIA POOL IMPROVEMENTS

TURLOCK, CA

## PLANTING DETAILS



APPROVED: \_\_\_\_\_

DESIGNED: JG, VR, JS  
DRAWN: VR, JS  
CHECKED: JG  
SCALE: N/A  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: 37512-DT.DWG

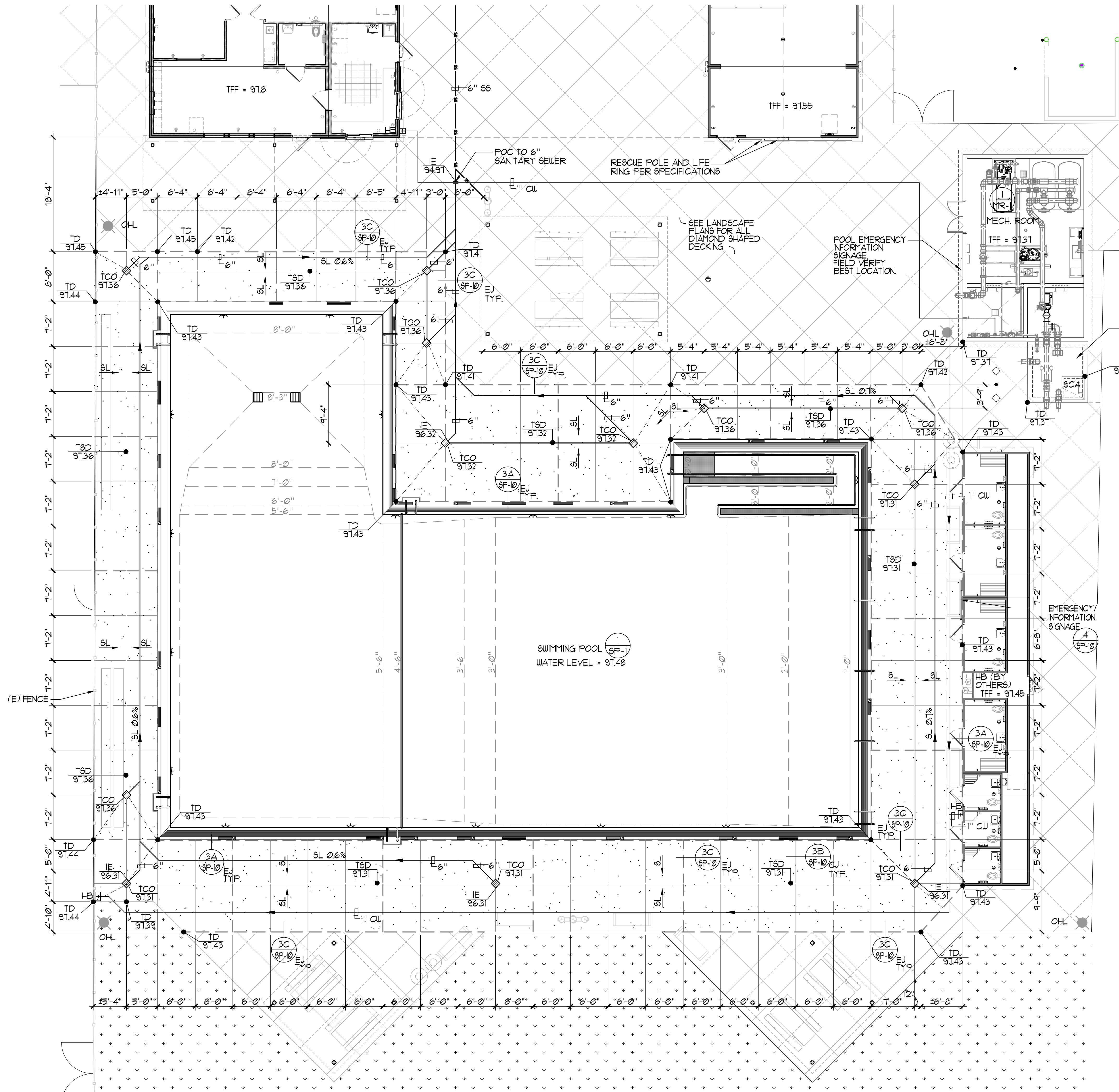
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BID SUBMITTAL





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### SWIMMING POOL DATA

|               |   |                |
|---------------|---|----------------|
| SURFACE AREA  | = | 6,822 SQ. FT.  |
| PERIMETER     | = | 404 FT.        |
| DEPTH         | = | 0'-0" TO 8'-3" |
| VOLUME        | = | 221,962 GAL.   |
| 6 HR TURNOVER | = | 617 GPM        |

### LEGEND

|         |   |                       |                      |
|---------|---|-----------------------|----------------------|
| — EJ —  | = | EXPANSION JOINT       | 3A 3C<br>5P-10 5P-10 |
| — CJ —  | = | CONTROL JOINT         | 3B<br>5P-10          |
| — T&D — | = | TOP OF SLOT DRAIN     | 1B<br>5P-10          |
| AL      | = | ACCESSIBLE LIFT       | 2<br>5P-10           |
| HB      | = | HOSE BIBB             | 2<br>5P-10           |
| TCO     | = | TOP OF CLEAN OUT      | 1A<br>5P-10          |
| TD      | = | TOP OF DECK           |                      |
| TAD     | = | TOP OF AREA DRAIN     |                      |
| TFF     | = | TOP OF FINISHED FLOOR |                      |
| IE      | = | INVERT ELEVATION      |                      |
| SCA     | = | SURGE CHAMBER ACCESS  |                      |
| OHL     | = | OVERHEAD LIGHT        |                      |
| SS      | = | SANITARY SEWER        |                      |
| CW      | = | COLD WATER            |                      |
| SL      | = | SLOPE DIRECTION       |                      |
| WL      | = | WATERLEVEL            |                      |

### NOTES:

- COORDINATE SIGNAGE PLACEMENT AND COLOR SCHEME WITH OWNER PRIOR TO INSTALLATION.
- DECKS SHALL HAVE 1% MIN. SLOPE AND 2% MAX. SLOPE TO DRAINS.
- ALL POOL DECKING SHALL BE NON-SLIP AND NON-ABRASIVE MEDIUM BROOM FINISH WITH MIN. 4 FOOT WIDTH TYP. NATURAL GRAY CONCRETE UNLESS OTHERWISE NOTED.
- REFER TO ARCHITECTURAL PLANS FOR LOCATIONS AND QUANTITY OF REQUIRED EXITS, DRINKING FOUNTAINS, AND SANITARY FIXTURES.
- THE POOL CANNOT BE WITHOUT AN APPROVED POOL ENCLOSURE AT ANY TIME, INCLUDING DURING CONSTRUCTION AND INSTALLATION OF THE NEW POOL ENCLOSURE.

| PLAN REVISIONS |      |          |
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| NO.            | DATE | REVISION |
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## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

### SWIMMING POOL DECK PLAN



APPROVED:

|           |                   |
|-----------|-------------------|
| DESIGNED: | GSF               |
| DRAWN:    | NMV               |
| CHECKED:  | GSF               |
| SCALE:    | AS NOTED          |
| DATE:     | 08/11/2023        |
| JOB NO.:  | 37512             |
| FILE NO.: | CP-DP1 - DECK.DWG |

SHEET NO.

DP-1

OF

46

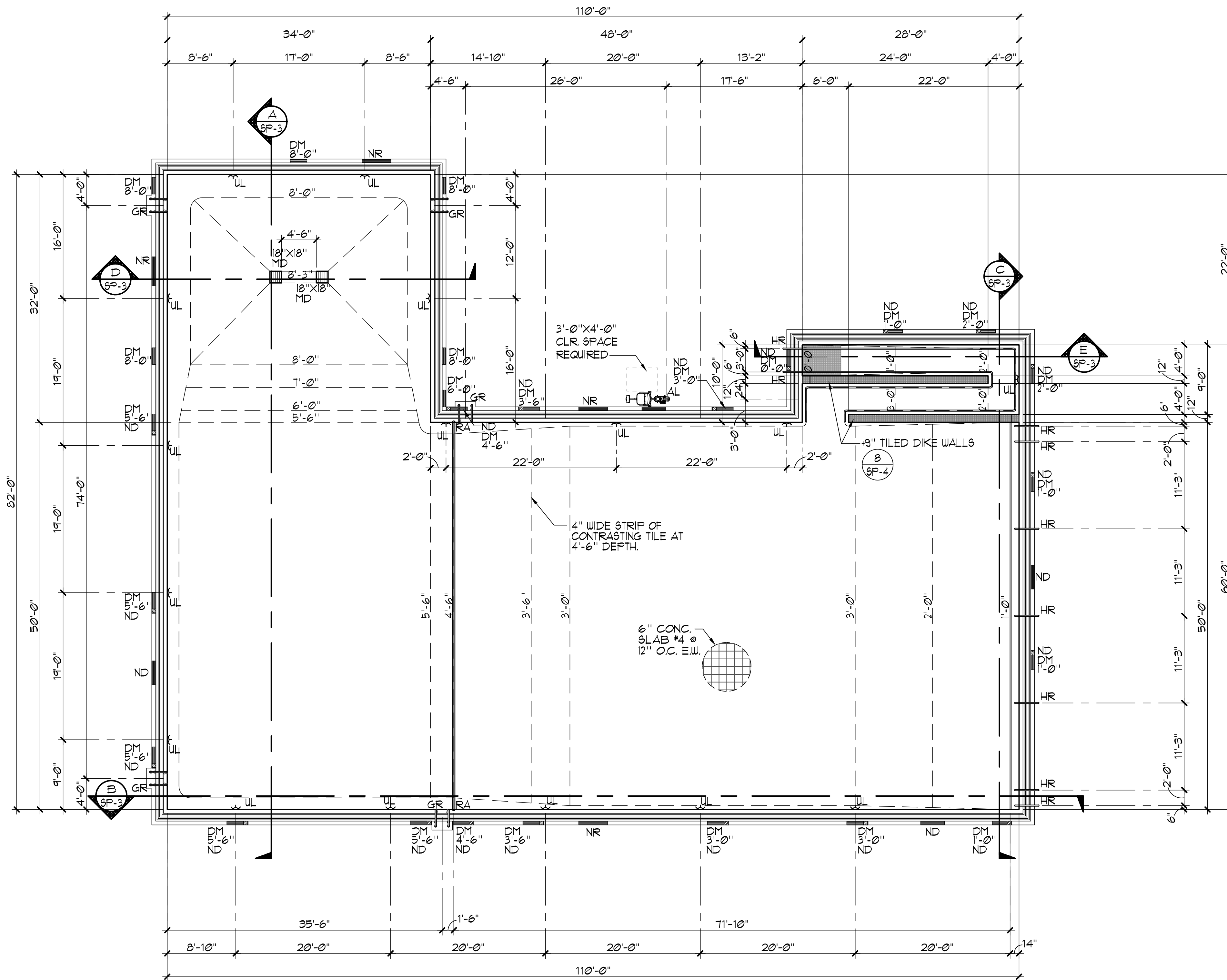
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K:\Drawings\Recreation A-M\Columbia Park - Turlock, CA\CP-SP1 - SP LAYOUT.dwg nllagas 10/5/11 08/11/2023



### SWIMMING POOL DATA

|               |   |                |
|---------------|---|----------------|
| SURFACE AREA  | = | 6,822 SQ. FT.  |
| PERIMETER     | = | 404 FT.        |
| DEPTH         | = | 0'-0" TO 8'-3" |
| VOLUME        | = | 221,962 GAL.   |
| 6 HR TURNOVER | = | 617 GPM        |

### LEGEND

|    |   |                  |     |
|----|---|------------------|-----|
| DM | = | DEPTH MARKER     | 3   |
| NR | = | 'NO RUNNING'     | 5   |
| ND | = | 'NO DIVING'      | 4.5 |
| AL | = | ACCESSIBLE LIFT  | 2   |
| GR | = | GRABRAIL         | 1   |
| HR | = | HANDRAIL         | 1   |
| MD | = | MAIN DRAIN       | 1   |
| UL | = | UNDERWATER LIGHT | 3   |

### HEALTH DEPARTMENT NOTES:

- SWIMMING POOL PLASTER COLOR SHALL BE WHITE WITH NO LETTERS, MARKINGS OR DESIGNS EXCEPT FOR SAFETY MARKINGS.
- 6" WATERLINE TILE SHALL BE GLOSSY SMOOTH AND OF A CONTRASTING COLOR TO THE POOL PLASTER, AROUND THE ENTIRE POOL PERIMETER.

| PLAN REVISIONS |      |          |
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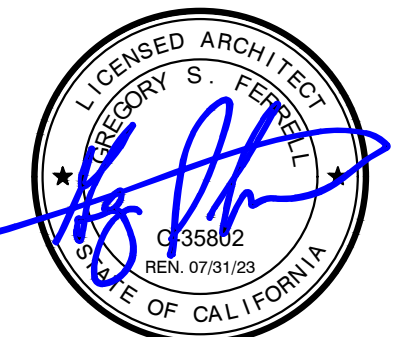
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## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

### SWIMMING POOL LAYOUT PLAN



APPROVED:

|           |                       |
|-----------|-----------------------|
| DESIGNED: | GSF                   |
| DRAWN:    | NMV                   |
| CHECKED:  | GSF                   |
| SCALE:    | AS NOTED              |
| DATE:     | 08/11/2023            |
| JOB NO.:  | 37512                 |
| FILE NO.: | CP-SP1 - SP LAYOUT.DV |

SHEET NO.

SP-1

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### SWIMMING POOL LAYOUT PLAN

1/8" = 1'-0"

1



K:\Drawings\Recreation A-M\Columbia Park - Turlock, CA\CP-SP2 - PIPING.dwg mllgso 10:55:11 08/11/2023

1

SWIMMING POOL PIPING & UNDERWATER LIGHT PLAN

1/8" = 1'-0"

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(N) SWIMMING POOL DATA

|               |   |                |
|---------------|---|----------------|
| SURFACE AREA  | = | 6,822 SQ. FT.  |
| PERIMETER     | = | 404 FT.        |
| DEPTH         | = | 0'-0" TO 8'-3" |
| VOLUME        | = | 221,962 GAL.   |
| 6 HR TURNOVER | = | 617 GPM        |

SURGE DATA

|                                  |   |            |
|----------------------------------|---|------------|
| REQUIRED SURGE CAPACITY          | = | 6,822 GAL. |
| SURGE IN PERIMETER GUTTER        | = | 3,404 GAL. |
| SURGE IN GUTTER PIPING           | = | 1,173 GAL. |
| 8' x 8' SURGE IN SURGE CHAMBER   | = | 2,394 GAL. |
| TOTAL SUPPLIED SURGE             | = | 6,971 GAL. |
| ∴ 6,971 GAL. > 6,822 GAL. +2% OK |   |            |

LEGEND

|      |   |                      |   |
|------|---|----------------------|---|
| MD   | = | MAIN DRAIN           | 1 |
| FI   | = | FLOOR INLET          | 2 |
| UL   | = | UNDERWATER LIGHT     | 3 |
| JB   | = | JUNCTION BOX         | 2 |
| AV   | = | AIR VENT             | 3 |
| GO   | = | GUTTER OUTLET        | 4 |
| BFV  | = | BUTTERFLY VALVE      | 5 |
| AFF. | = | ABOVE FINISHED FLOOR |   |

NOTES:

1. PIPING ROUTES ARE SCHEMATIC IN NATURE AND SHOWN ON PLANS FOR CLARITY. CONTRACTOR SHALL ROUTE PIPING ACCORDINGLY TO MEET NOTED INVERT ELEVATIONS. REFER TO REFERENCED DETAIL FOR PIPE SPACING REQUIREMENTS.
2. ALL BELOW GRADE POOL PIPING SHALL BE SCHEDULE 40 PVC AND ALL ABOVE GRADE POOL PIPING SHALL BE SCHEDULE 80 PVC.
3. COORDINATE ALL PIPING WITH SITE AND BUILDING UTILITIES INCLUDING PIPING, CONDUITS / STRUCTURES AND THE LIKE. COORDINATE ROUTING OF PIPING THROUGH STRUCTURAL SLAB. ALL PIPING SHALL HAVE UNIFORM SLOPE IN ONE DIRECTION.
4. SURGE CHAMBER TEE SUCTION SHALL BE SET AT +6" AFF. MAINTAIN MAXIMUM SEPARATION BETWEEN SUCTION AND INFLUENT PIPING WITHIN THE SURGE CHAMBER.
5. EACH MAIN DRAIN SHALL BE EQUIPPED WITH HYDROSTATIC RELIEF VALVE PER RECOMMENDATIONS OF GEOTECHNICAL REPORT.

| PLAN REVISIONS |      |          |
|----------------|------|----------|
| NO.            | DATE | REVISION |
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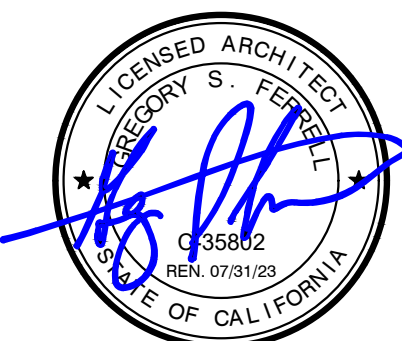


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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

SWIMMING POOL  
PIPING &  
UNDERWATER  
LIGHT PLAN



APPROVED:

|           |                     |
|-----------|---------------------|
| DESIGNED: | GSF                 |
| DRAWN:    | NMV                 |
| CHECKED:  | GSF                 |
| SCALE:    | AS NOTED            |
| DATE:     | 08/11/2023          |
| JOB NO.:  | 37512               |
| FILE NO.: | CP-SP2 - PIPING.DWG |

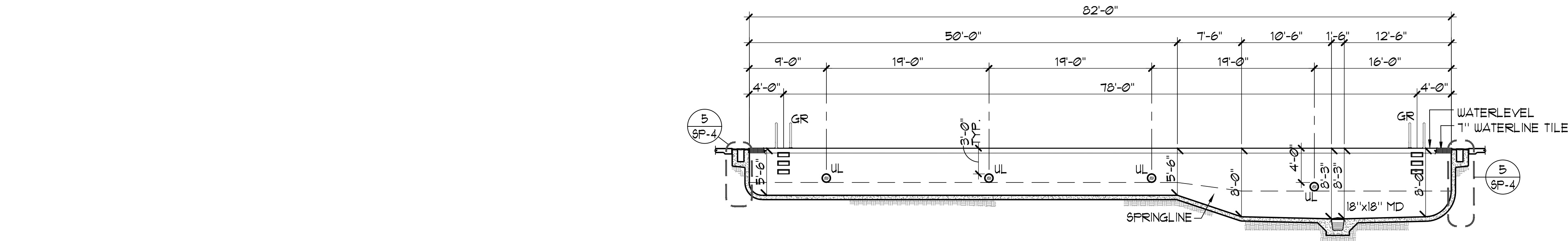
SHEET NO.  
SP-2

OF

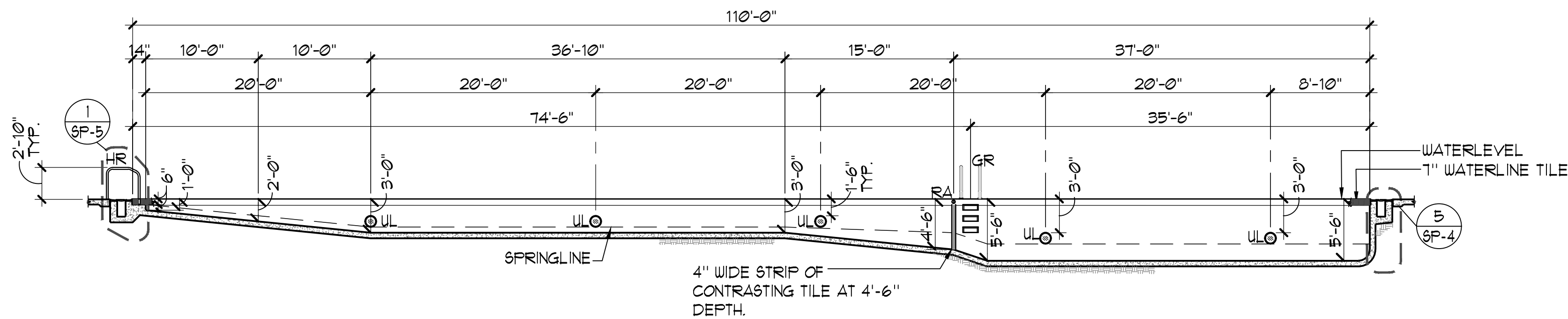
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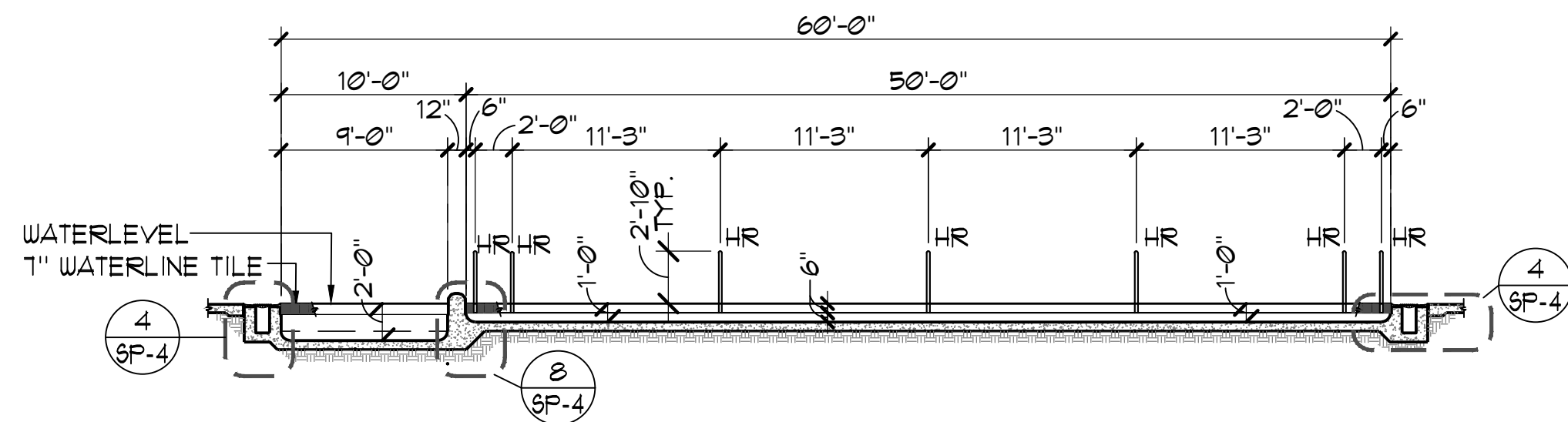
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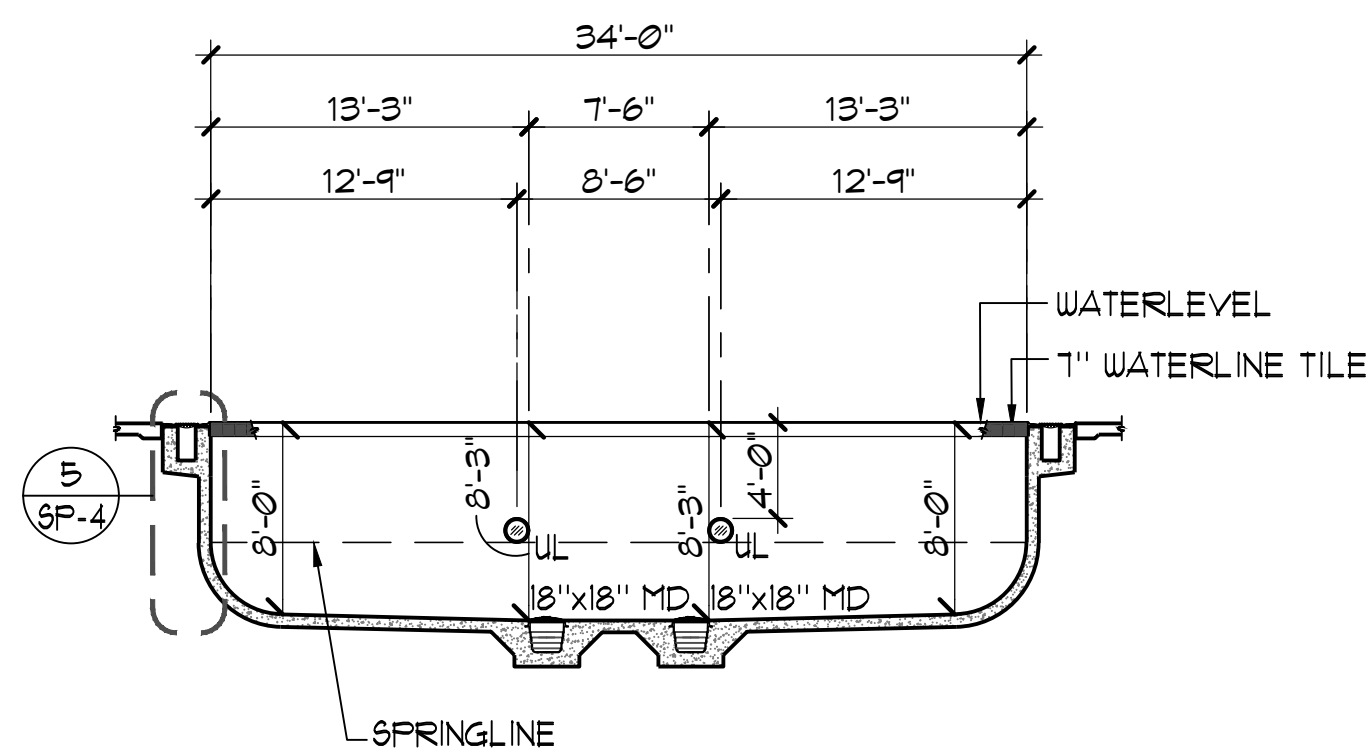
**A** SWIMMING POOL SECTION  $\frac{1}{8}'' = 1'-0''$



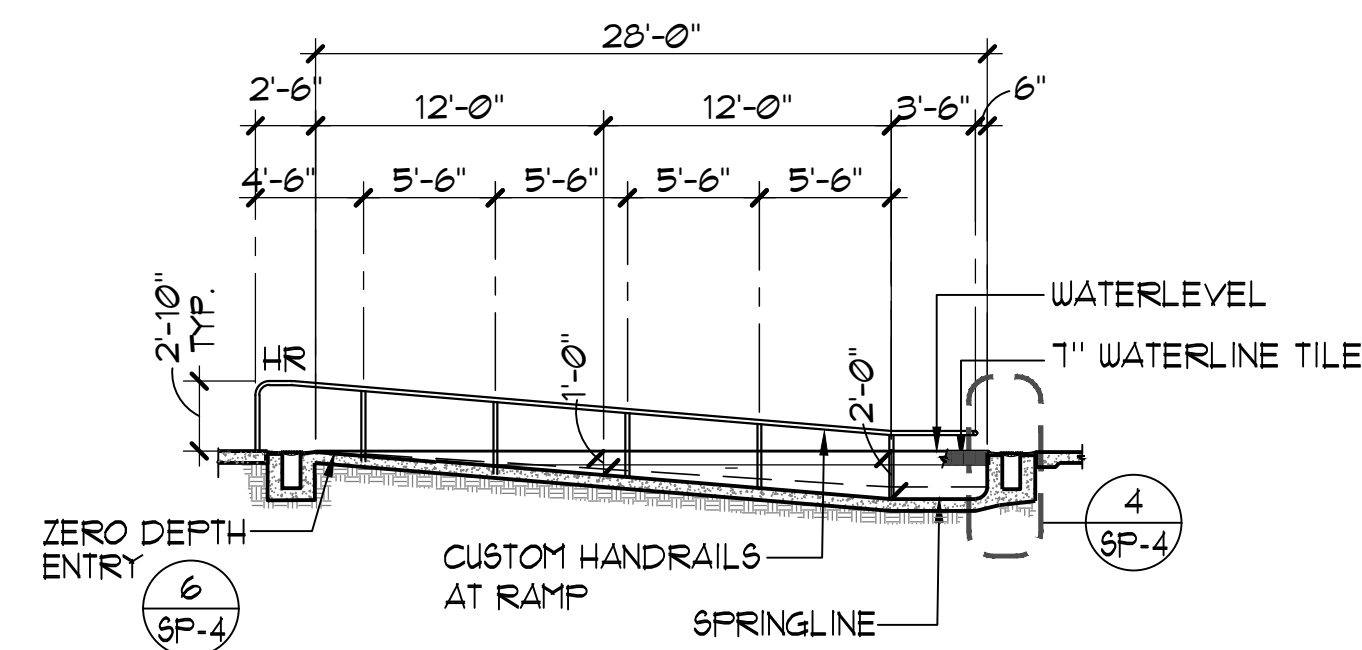
**B** SWIMMING POOL SECTION  $\frac{1}{8}'' = 1'-0''$



**C** SWIMMING POOL SECTION  $\frac{1}{8}'' = 1'-0''$

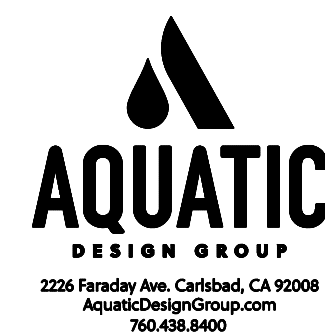


**D** SWIMMING POOL SECTION  $\frac{1}{8}'' = 1'-0''$



**E** SWIMMING POOL SECTION  $\frac{1}{8}'' = 1'-0''$

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| PLAN REVISIONS |      |          |
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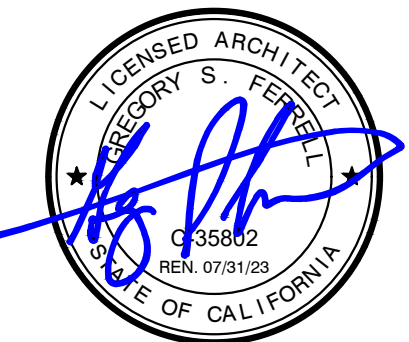


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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

SWIMMING POOL  
SECTIONS



|           |                       |
|-----------|-----------------------|
| APPROVED: |                       |
| DESIGNED: | GSF                   |
| DRAWN:    | NMV                   |
| CHECKED:  | GSF                   |
| SCALE:    | AS NOTED              |
| DATE:     | 08/11/2023            |
| JOB NO.:  | 37512                 |
| FILE NO.: | CP-SP3 - SP SECTIONS. |

SHEET NO.  
SP-3  
OF  
46

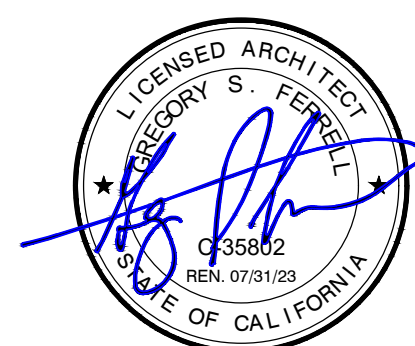


## IMPROVEMENT PLANS

### COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



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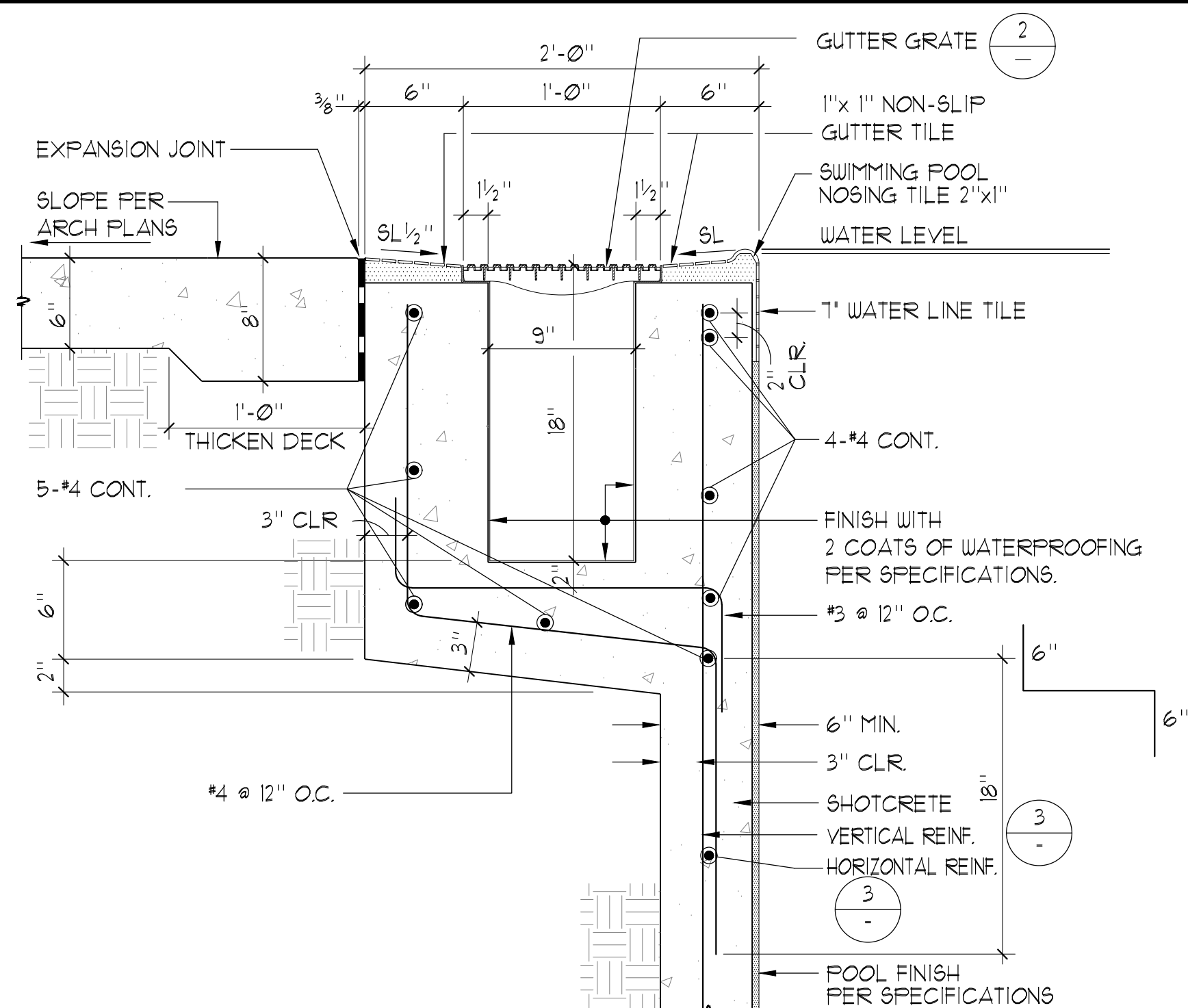
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| DRAWN:    | NMV                  |
| CHECKED:  | GSF                  |
| SCALE:    | AS NOTED             |
| DATE:     | 08/11/2023           |
| JOB NO.:  | 37512                |
| FILE NO.: | CP-SP4 - DETAILS.DWG |

SHEET NO.

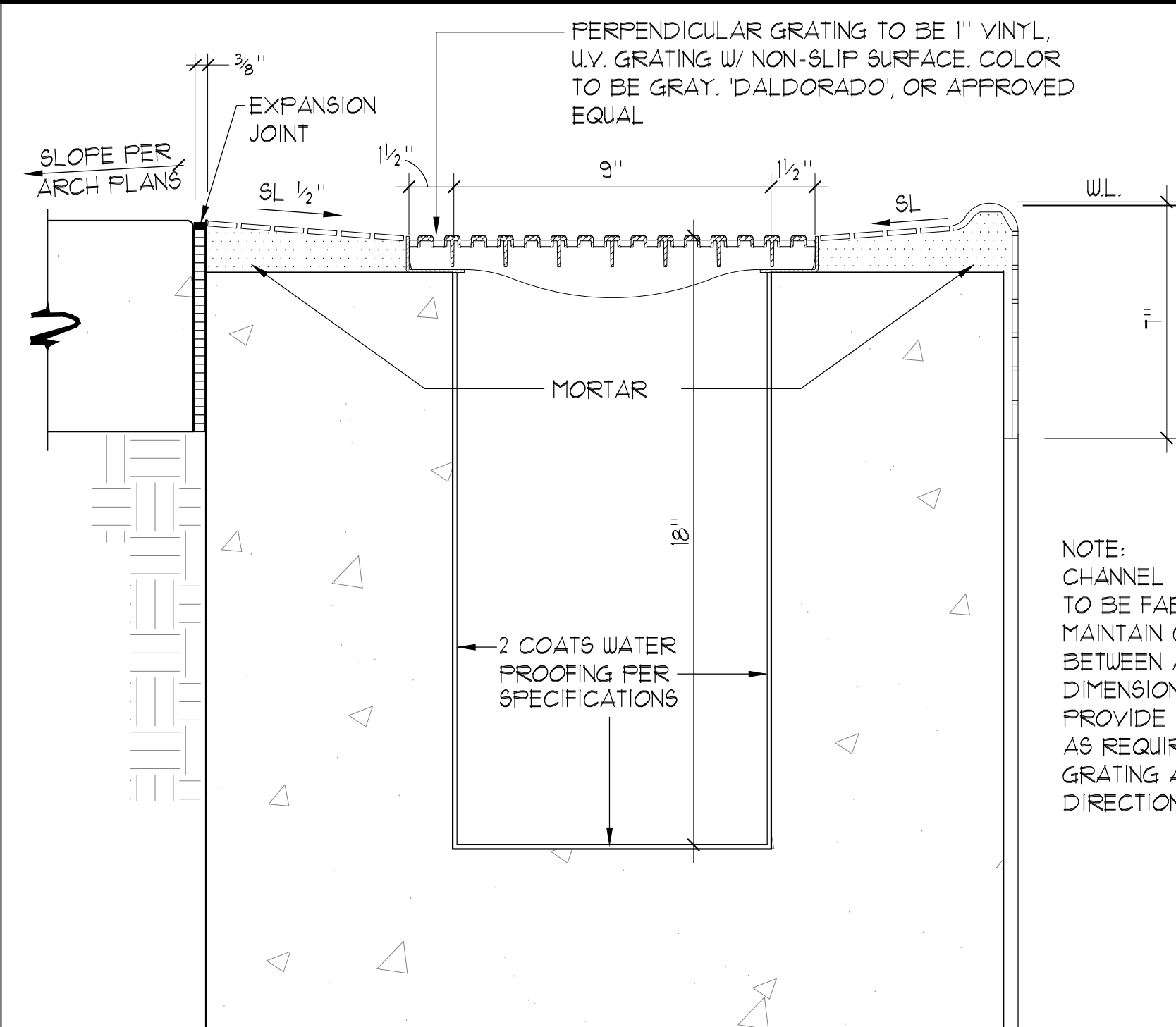
SP-4

OF

46



1 RIM FLOW GUTTER



## 2 RIM FLOW GUTTER/GRATE 3" = 1'-0"

| REINFORCEMENT TABLE |     |      |            |                 |                   |   |
|---------------------|-----|------|------------|-----------------|-------------------|---|
| WATER DEPTH         | 't' | 'ds' | RADIUS     | VERTICAL REINF. | HORIZONTAL REINF. | TRANSITION TO FLOOR REINF.<br>BEYOND END RADIUS |
| 0'-0" TO 3'-6"      | 6"  | 3"   | 0" TO 6"   | #4 @ 12" O.C.   | #4 @ 12" O.C.     | 24"   |
| 3'-7" TO 5'-6"      | 7"  | 4"   | 6" TO 18"  | #4 @ 8" O.C.    | #4 @ 12" O.C.     | 24"   |
| 5'-7" TO 8'-3"      | 10" | 7"   | 18" TO 36" | #4 @ 6" O.C.    | #4 @ 8" O.C.      | 24"   |

CONCRETE NOTES:

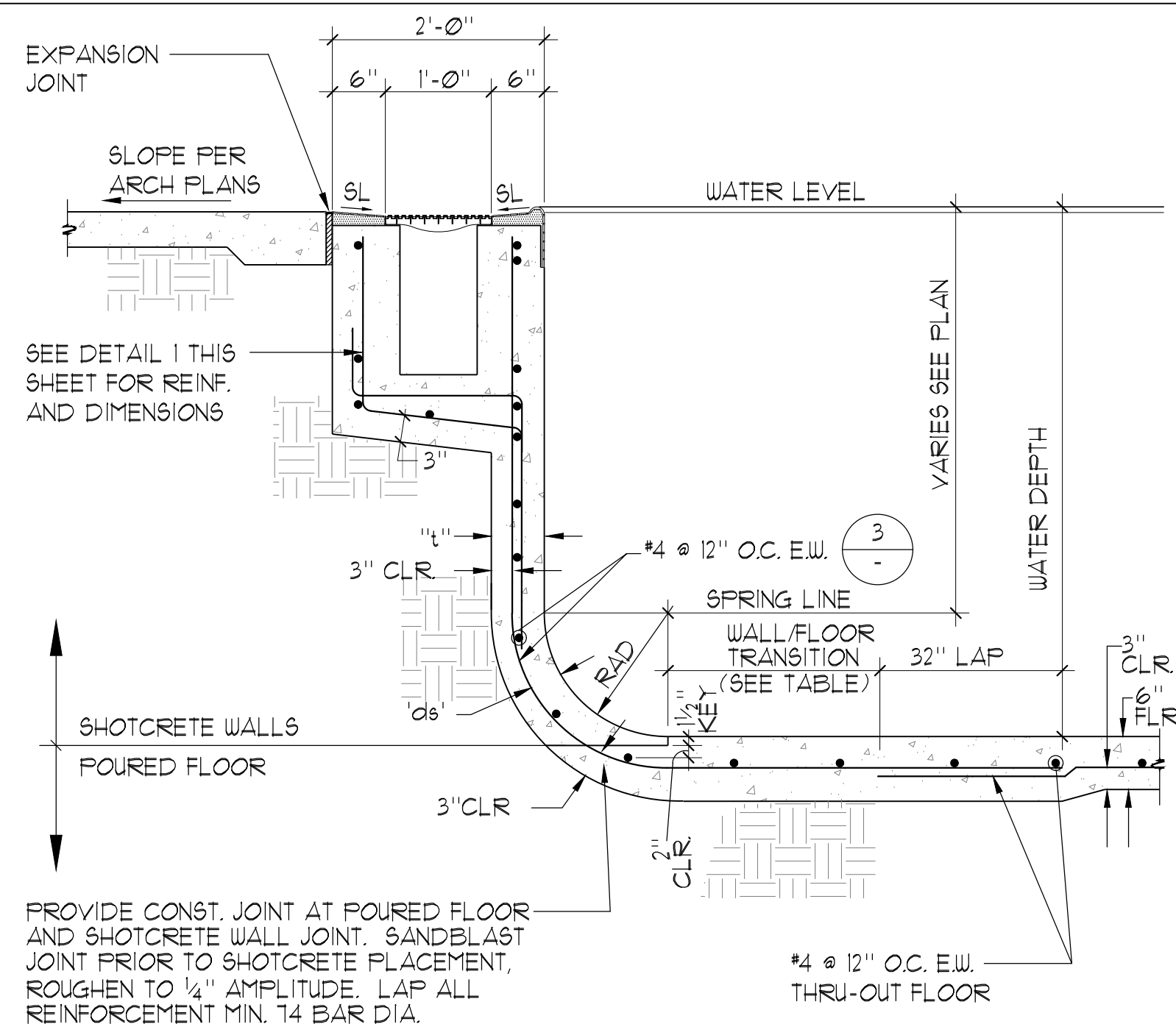
- ① THE MINIMUM ULTIMATE COMPRESSIVE STRENGTH AT 28 DAYS WITH A 0.40-0.50 WATER/CEMENT RATIO  

FOOL = 4000 PSI  
SLAB-ON-GRADE = 4000 PSI
- ② CONTINUOUS INSPECTION BY AN APPROVED INSPECTOR IS REQUIRED OF ALL CONCRETE PLACEMENT.
- ③ ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II
- ④ FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33. MAXIMUM SIZE OF AGGREGATE TO BE 1".
- ⑤ CONCRETE MIX DESIGNS SHALL BE BASED UPON ACI 318
- ⑥ CONCRETE SHALL BE TESTED AND INSPECTED PER SECTION CBC 1705.3 AND ACI 318
- ⑦ REMOVAL OF FORMS SHALL COMPLY WITH ACI 318
- ⑧ ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAPS SHALL BE 64 BAR DIA.

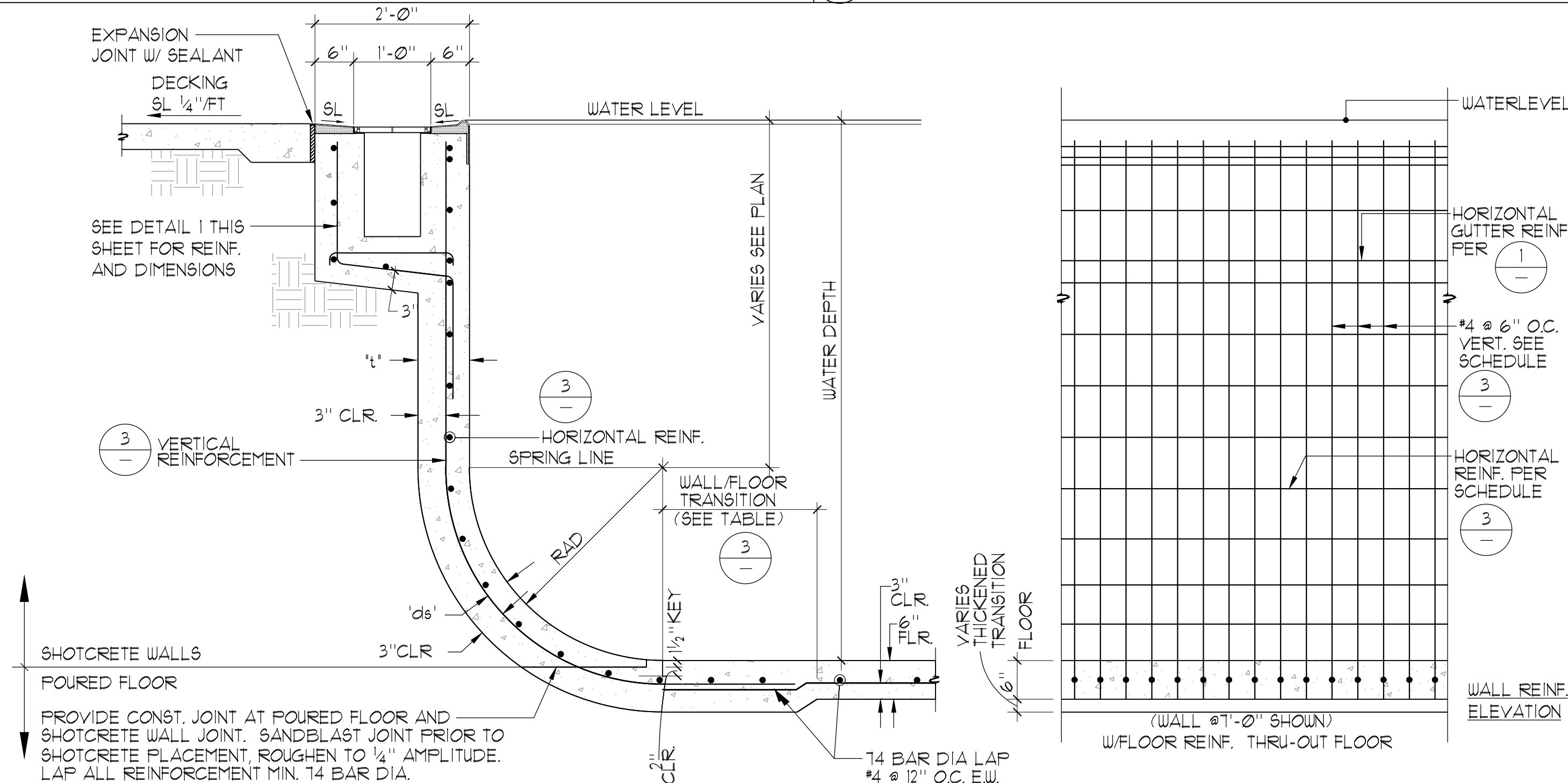
SHOTCRETE NOTES:

- ① SHOTCRETE SHALL BE WET-MIX AND HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4,000 PSI AT 28 DAYS. SHOTCRETE MATERIAL SHALL HAVE A WATER/CEMENT RATIO OF 0.40-0.50. SHOTCRETE MATERIALS MIXTURE DESIGN, PROPORTIONING, PLACEMENT, CURING, AND TESTING SHALL BE PER ACI 318.
- ② CONTINUOUS INSPECTION BY AN APPROVED INSPECTOR IS REQUIRED OF ALL SHOTCRETE PLACEMENT PER ACI-318.
- ③ ALL CEMENT USED SHALL CONFORM TO A.S.T.M. C-150 TYPE II.
- ④ FINE AND COARSE AGGREGATE SHALL CONFORM TO A.S.T.M. C-33. MAXIMUM SIZE OF AGGREGATE TO BE  $\frac{3}{8}$ ".
- ⑤ SHOTCRETE SHALL BE TESTED AND INSPECTED PER CBC 1705.3 AND ACI 318.
- ⑥ ANCHOR BOLTS, ANCHORS, DOWELS, INSERTS, ETC. SHALL BE SECURELY TIED IN PLACE PRIOR TO PLACING OF SHOTCRETE.
- ⑦ ALL REINFORCEMENT WITHIN SHOTCRETE SHALL MAINTAIN THE LEAST OF 6 BAR DIA. AND  $2\frac{1}{2}$ " CLEAR NON-CONTACT SPICES.
- ⑧ THE FILM OF LAITANCE WHICH FORMS ON THE SURFACE OF THE SHOTCRETE SHALL BE REMOVED WITHIN APPROXIMATELY TWO HOURS AFTER APPLICATION BY BRUSHING WITH A STIFF BRUSH. IF THIS IS NOT REMOVED WITHIN TWO HOURS, IT SHALL BE REMOVED BY THOROUGH WIRE BRUSHING OR SAND BLASTING. CONSTRUCTION JOINTS OVER EIGHT HOURS OLD SHALL BE THOROUGHLY CLEANED WITH AIR AND WATER PRIOR TO RECEIVING SHOTCRETE.
- ⑨ ALL REINFORCING SHALL BE ASTM A-615, GRADE 60, UNLESS OTHERWISE NOTED. LAP SPICES SHALL BE 64 BAR DIA. NON-CONTACT LAP SPICES SHALL HAVE CLEAR SPACING BETWEEN BARS THE GREATER OF 6 BAR DIA AND  $2\frac{1}{2}$ ". REINFORCING SHALL CONFORM TO ACI 318.

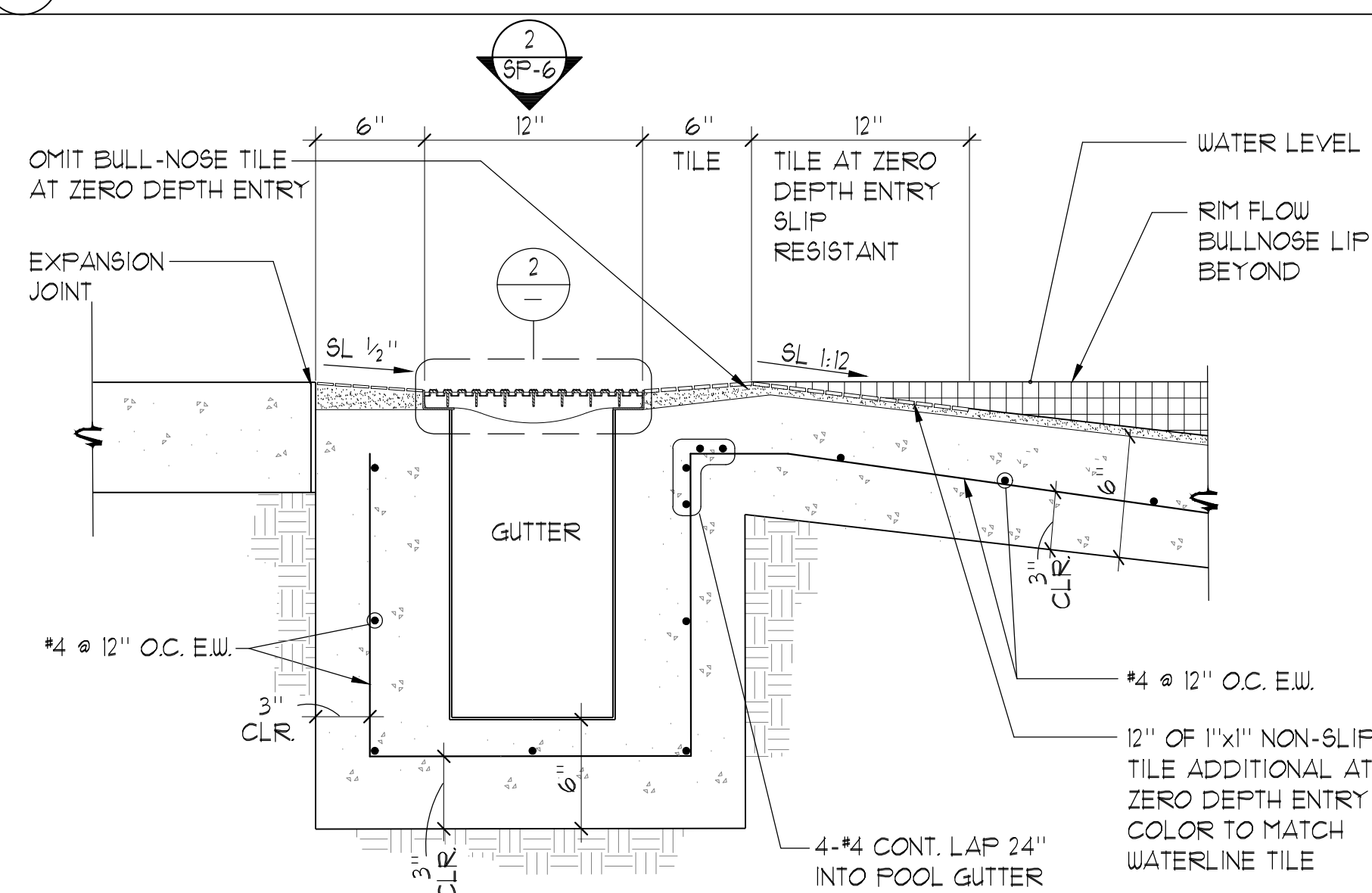
### 3 REINFORCEMENT TABLE



4 POOL WALL 0'-0" TO 5'-6"  $\frac{3}{4}" = 1' - 0"$

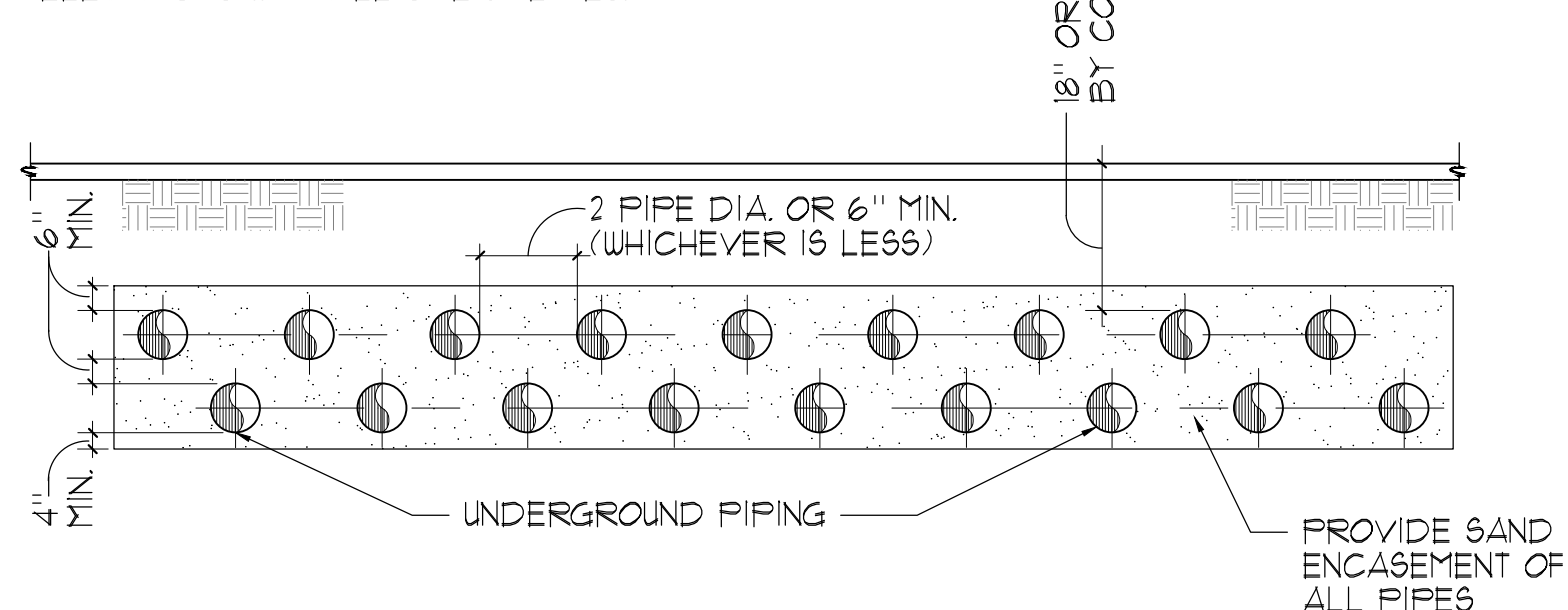


5 POOL WALL 5'-7" TO 8'-3"  $\frac{3}{4}" = 1' - 0"$

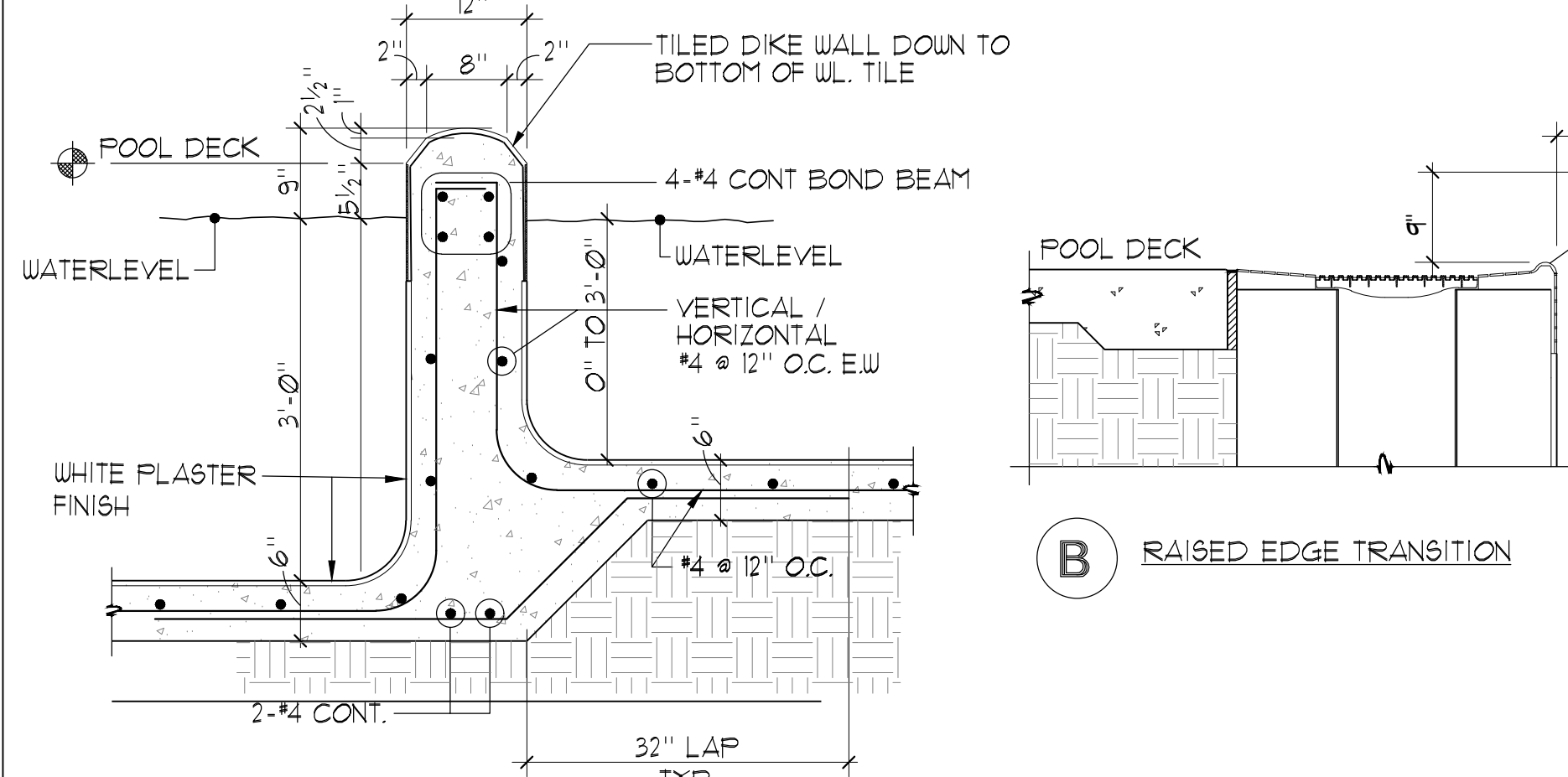


## 6 ZERO DEPTH ENTRY SECTION 1½" = 1'-0"

NOTE:  
COORDINATE ALL PIPING WITH SITE UTILITIES  
INCLUDING PIPING, CONDUITS/STRUCTURES  
AND THE LIKE. COORDINATE ALL PIPING  
ELEVATIONS WITH ALL SITE UTILITIES.



**7 STACKED UNDERGROUND PIPING** NO SCALE



8 **DIKE WALL DETAIL**  $\frac{3}{4}'' = 1' - 0''$



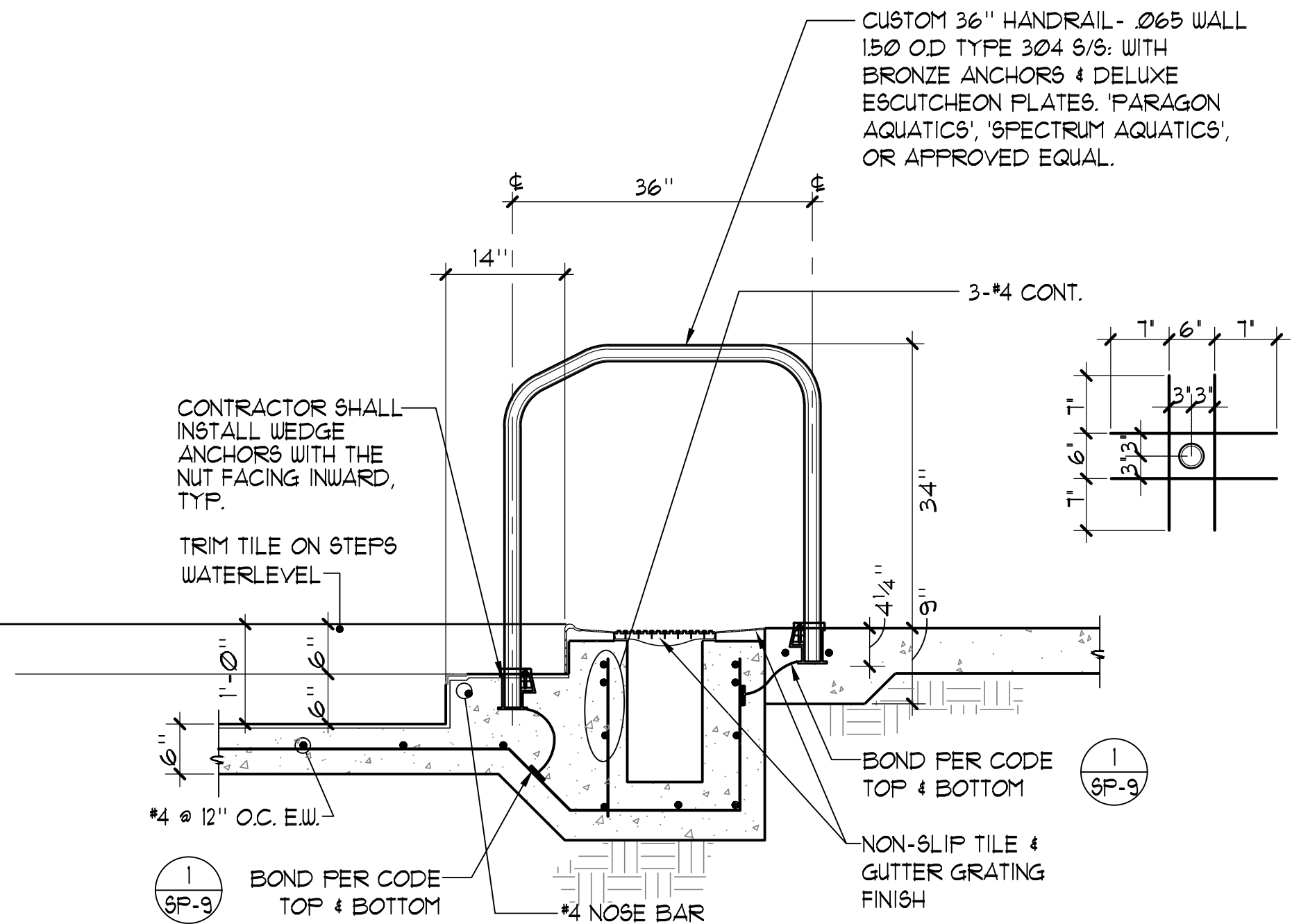
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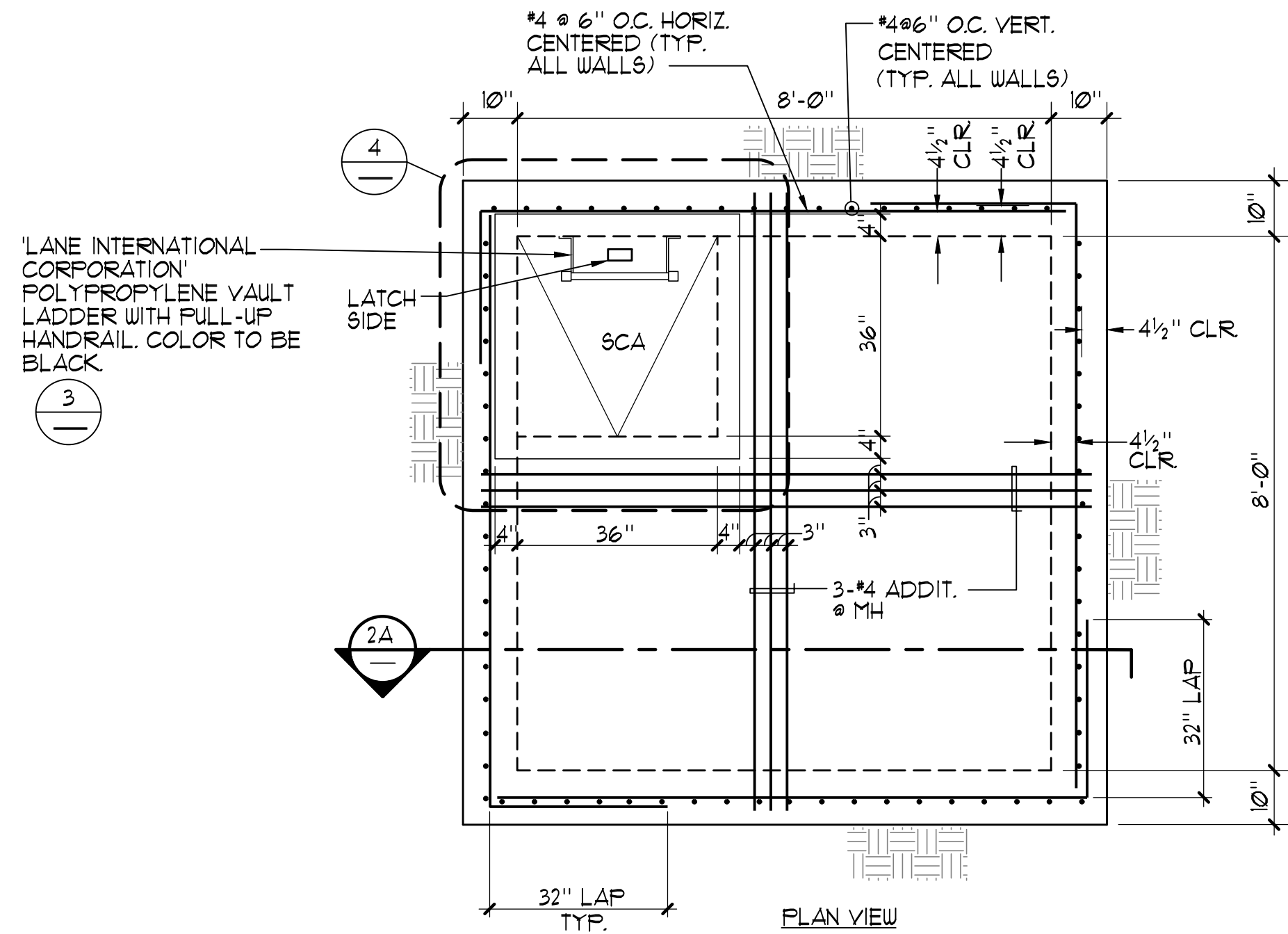


14 Drawings Recreation A-M Columbia Park - Turlock, CA CP-SP5 - DETAILS.dwg elee 10/55/11 08/11/2023

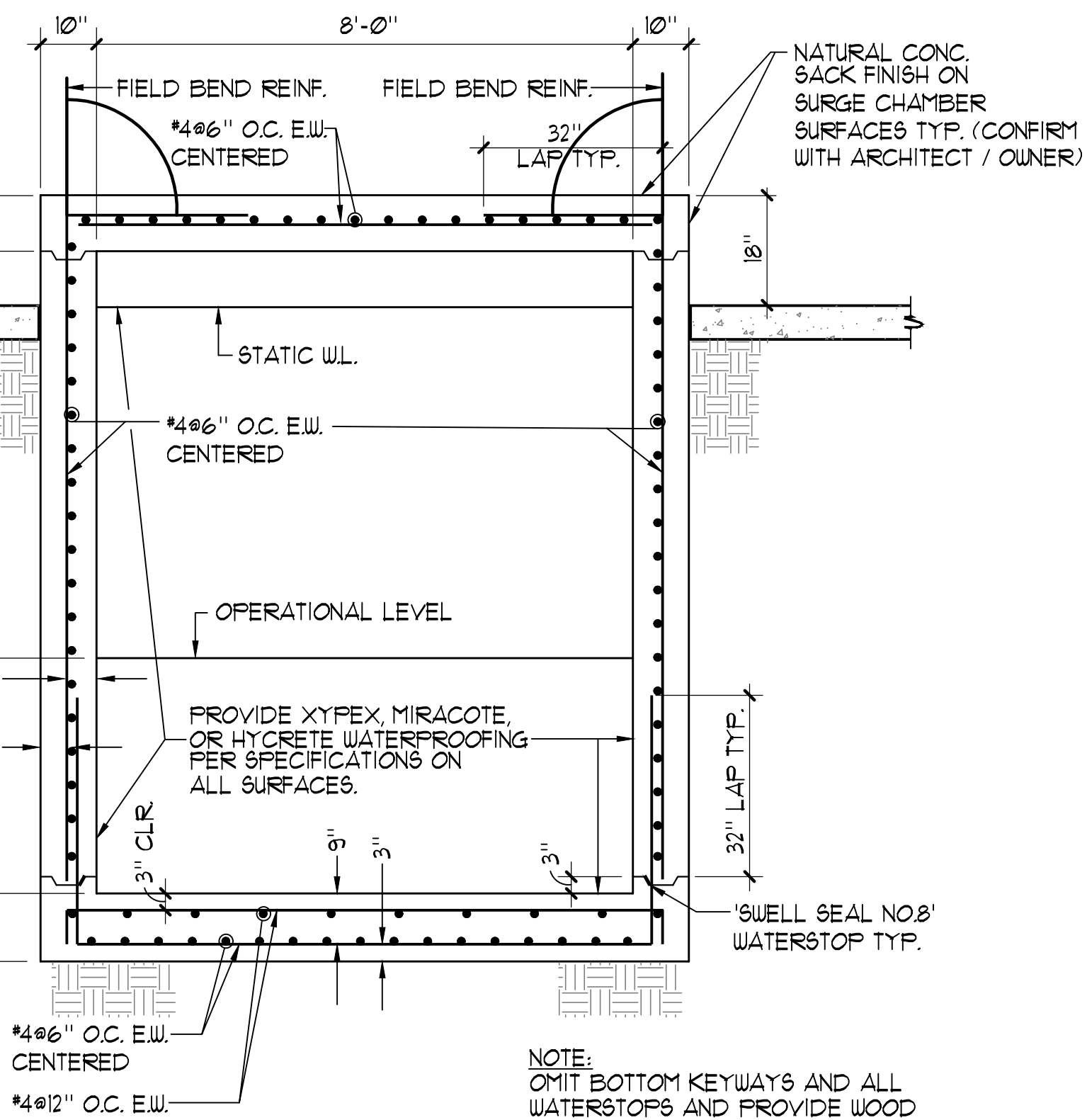


HANDRAIL DETAIL

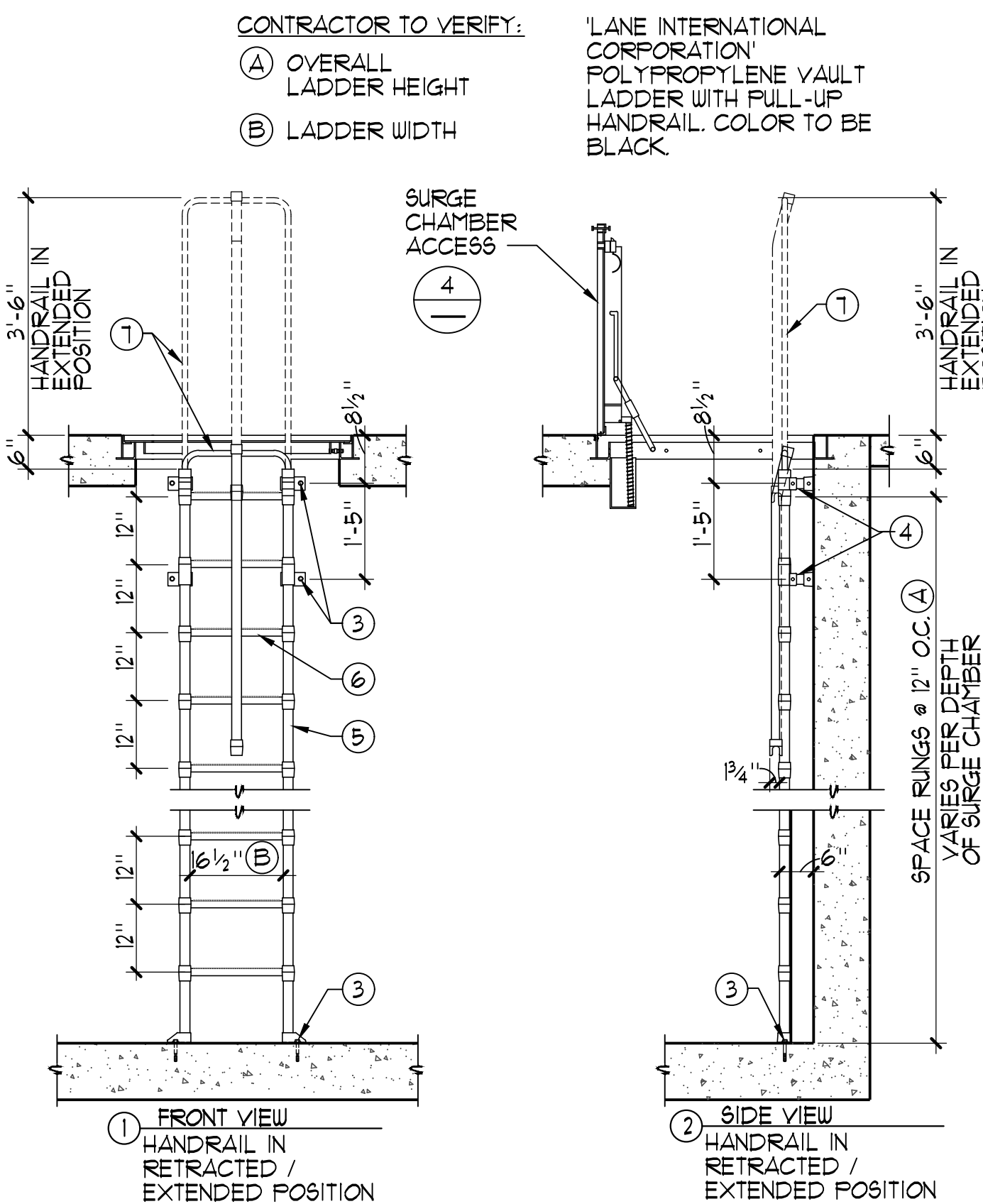
3/4" ± 1'-0"



SURGE CHAMBER

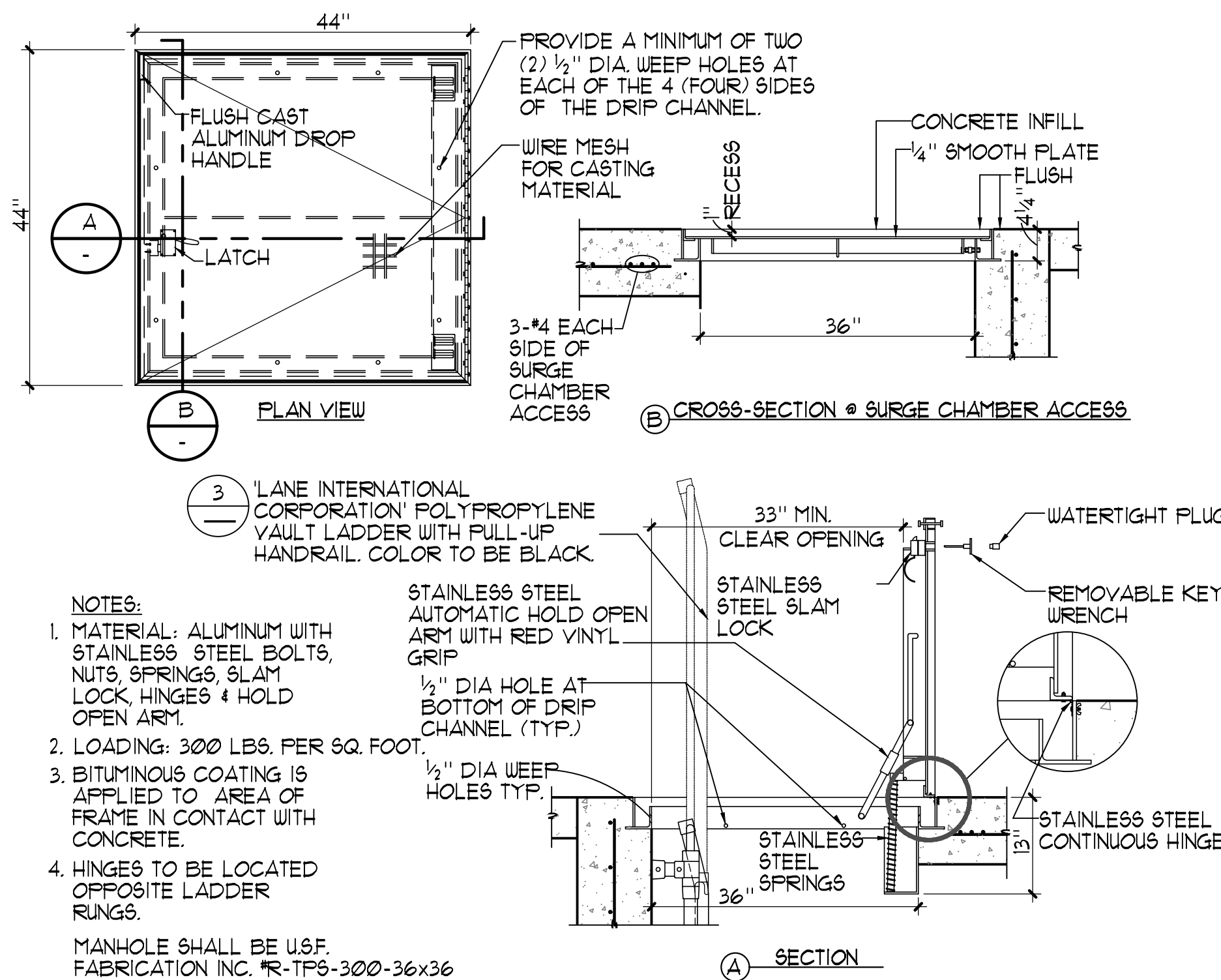


NOTE: OMIT BOTTOM KEYWAYS AND ALL WATERSTOPS AND PROVIDE WOOD FLOAT FINISH IF SHOTCRETE CONSTRUCTION IS USED



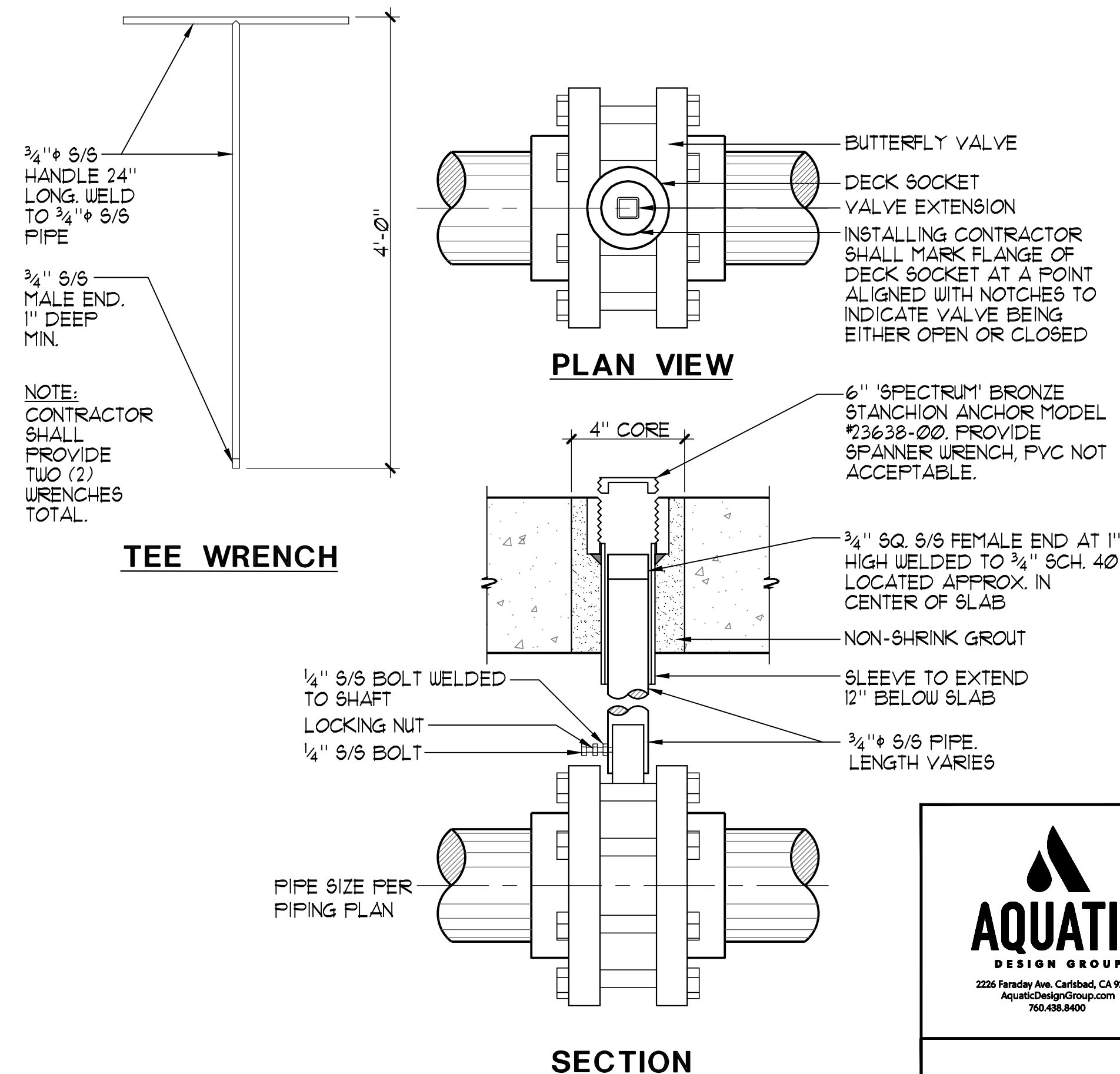
SURGE CHAMBER ACCESS LADDER

1/2" ± 1'-0"



SURGE CHAMBER ACCESS COVER

3/4" ± 1'-0"



BUTTERFLY VALVE/EXTENSION DETAIL

NO SCALE

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| PLAN REVISIONS |      |          |
|----------------|------|----------|
| NO.            | DATE | REVISION |
|                |      |          |
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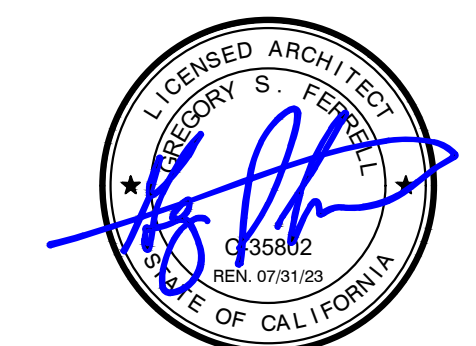
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## IMPROVEMENT PLANS

# COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



APPROVED:

|           |                      |
|-----------|----------------------|
| DESIGNED: | GSF                  |
| DRAWN:    | NMV                  |
| CHECKED:  | GSF                  |
| SCALE:    | AS NOTED             |
| DATE:     | 08/11/2023           |
| JOB NO.:  | 37512                |
| FILE NO.: | CP-SP5 - DETAILS.DWG |

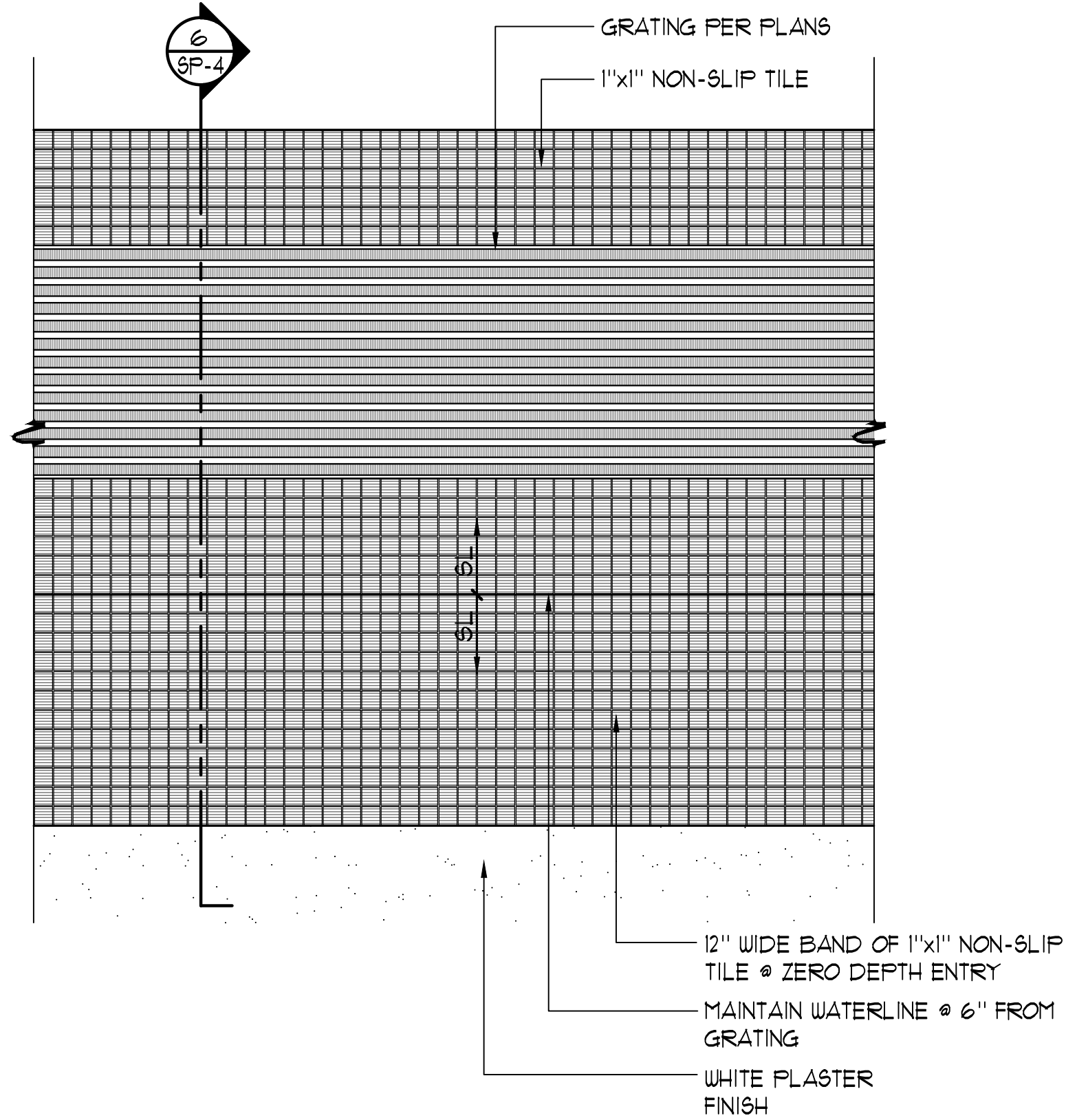
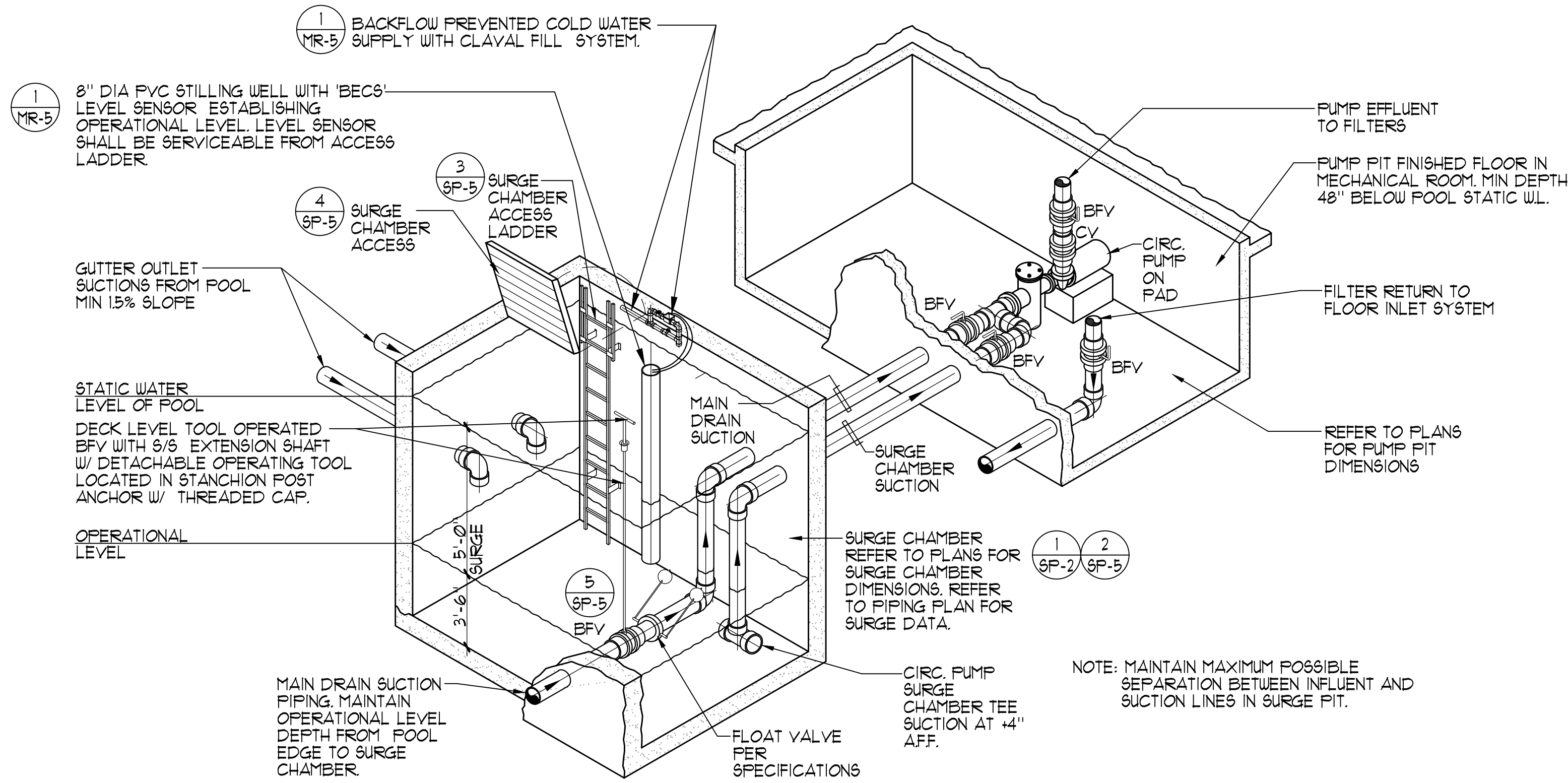
SHEET NO.

SP-5

OF

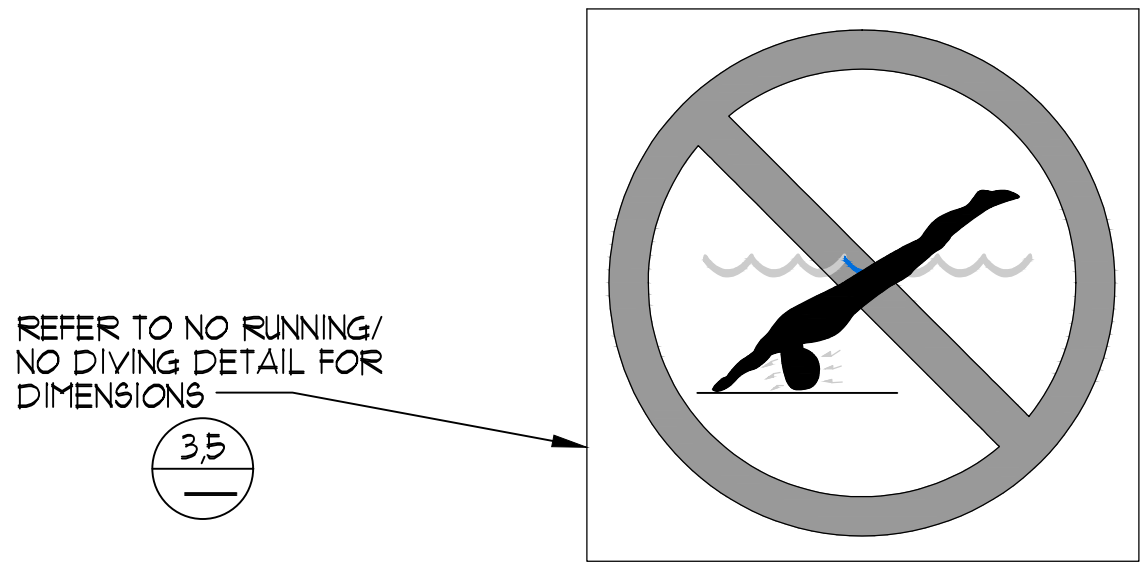
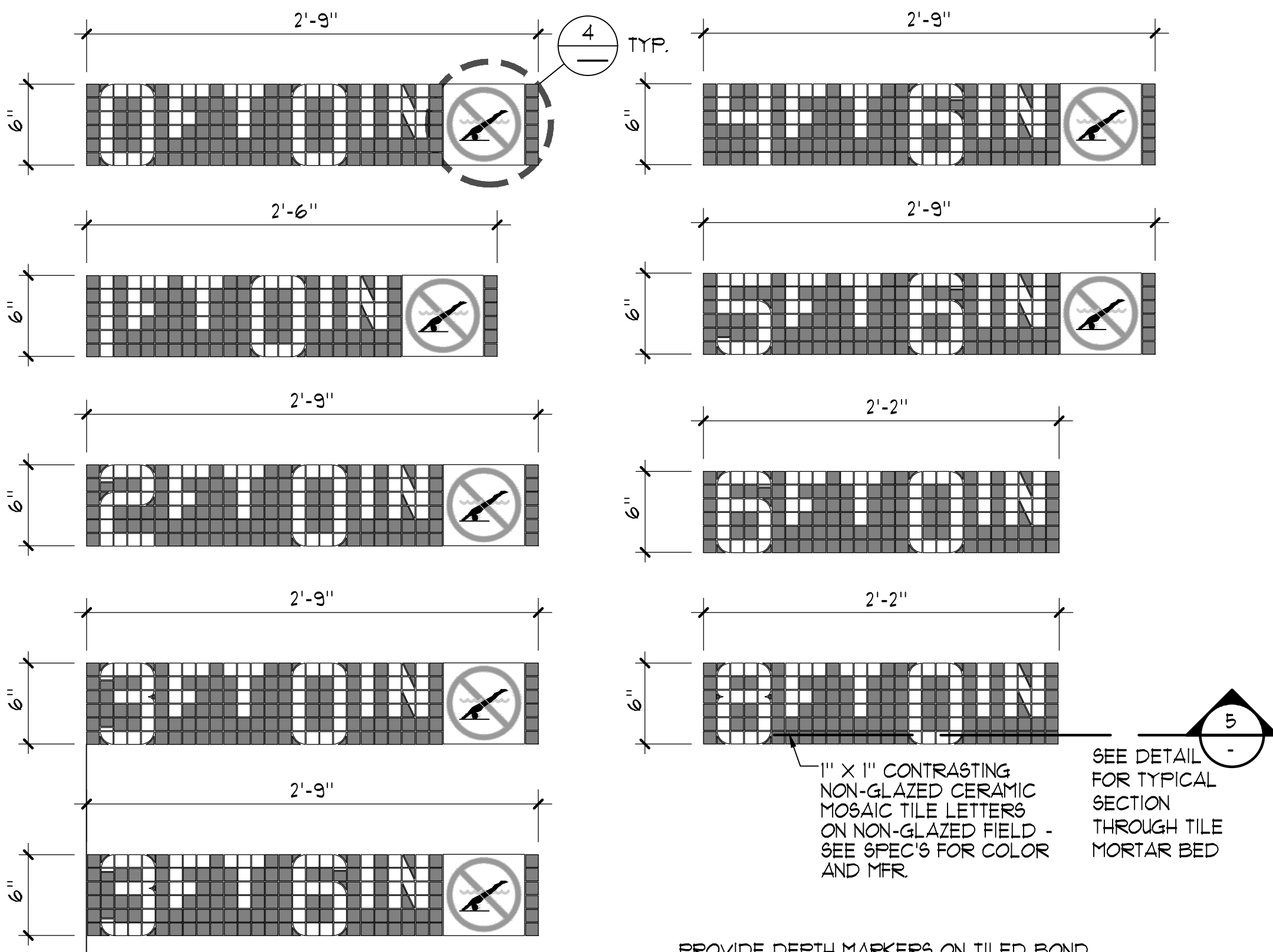
46





1 SURGE CHAMBER PIPING SCHEMATIC NO SCALE

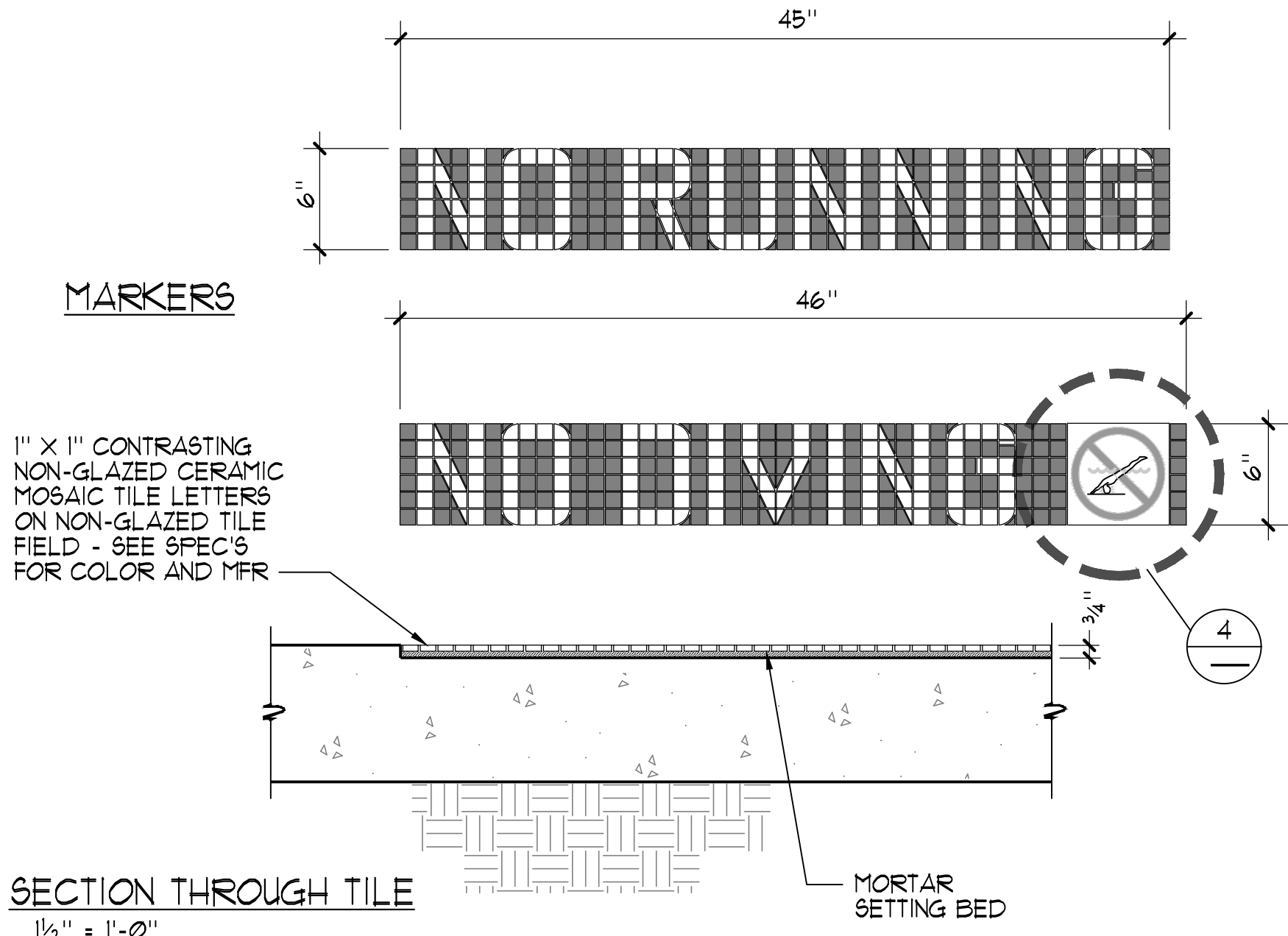
2 PLAN VIEW @ ZERO DEPTH ENTRY TRANSITION NO SCALE



- SILK SCREEN
- INLAYS DOUBLE GLAZED WHITE SLIP RESISTANT TILE TYP. OF (1) PIECE OVER 1/4" MORTAR BED WITH 1/8" GROUT JOINTS. SEE PLAN FOR LOCATION.
  - 1" WIDE RED CIRCLE WITH 1" WIDE RED DIAGONAL LINE.
  - 1/8" BLUE WATER.
  - 1/8" RED TICKS ABOUT THE HEAD.
  - TAN COLOR BODY WITH BLACK OUTLINE, HAIR AND TRUNKS.
  - 1/8" BLACK POOL FLOOR.

3 DEPTH MARKERS 1 1/2" ± 1'-0"

4 INTERNATIONAL NO DIVING MARKER 1/2" ± 1"



5 'NO RUNNING' / 'NO DIVING' MARKERS 1 1/2" ± 1'-0"

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| PLAN REVISIONS |      |          |
|----------------|------|----------|
| NO.            | DATE | REVISION |
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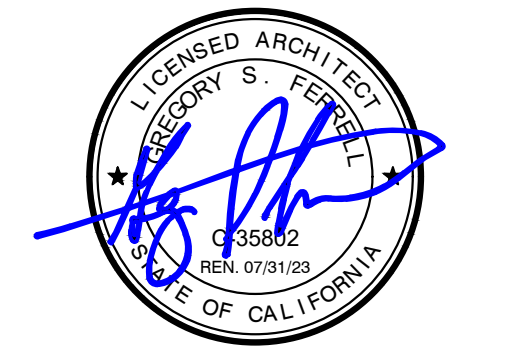
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IMPROVEMENT PLANS

COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

DETAILS



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| APPROVED: |                      |
| DESIGNED: | GSF                  |
| DRAWN:    | NMV                  |
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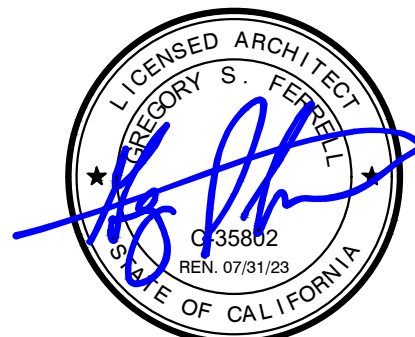
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## IMPROVEMENT PLANS

### COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



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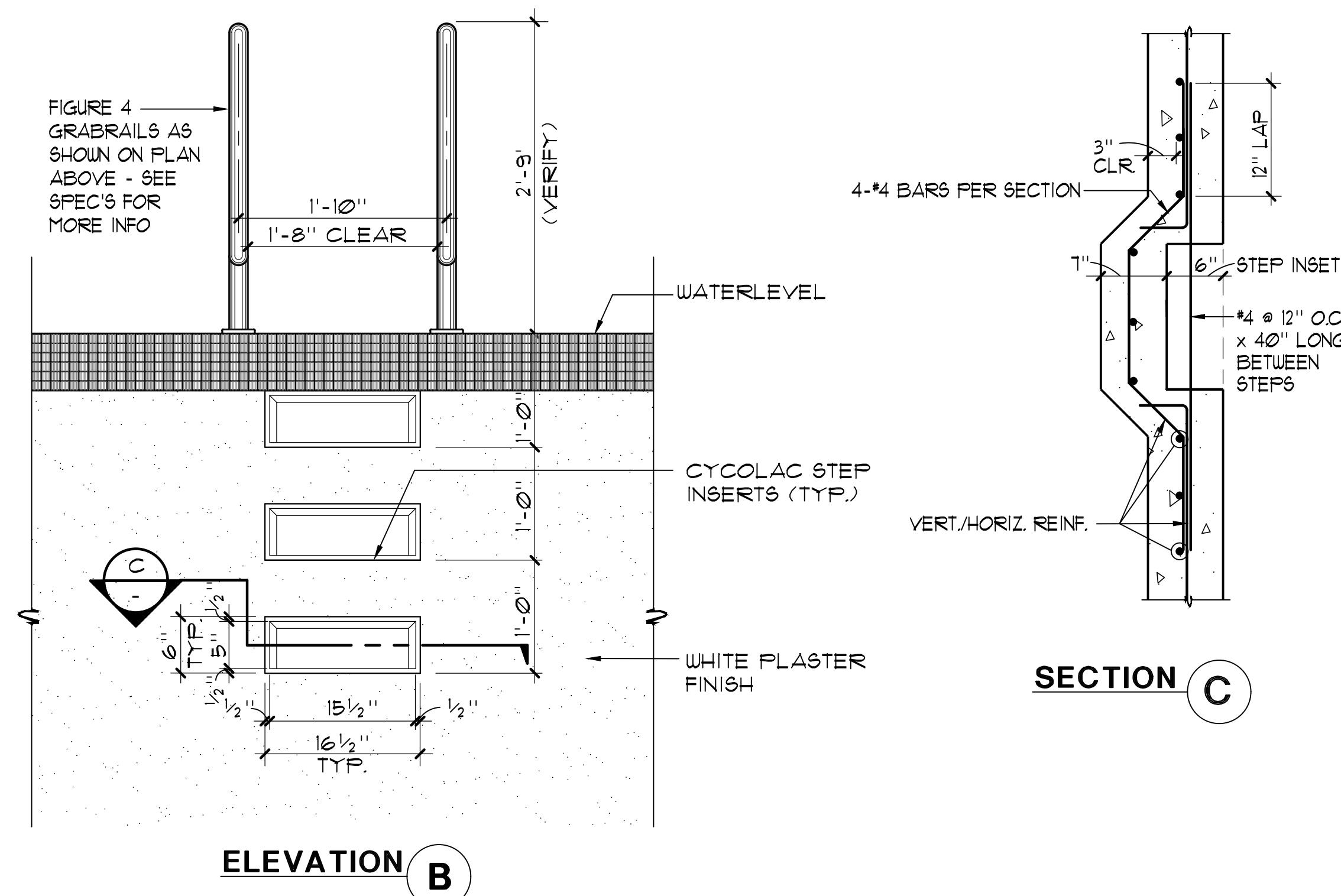
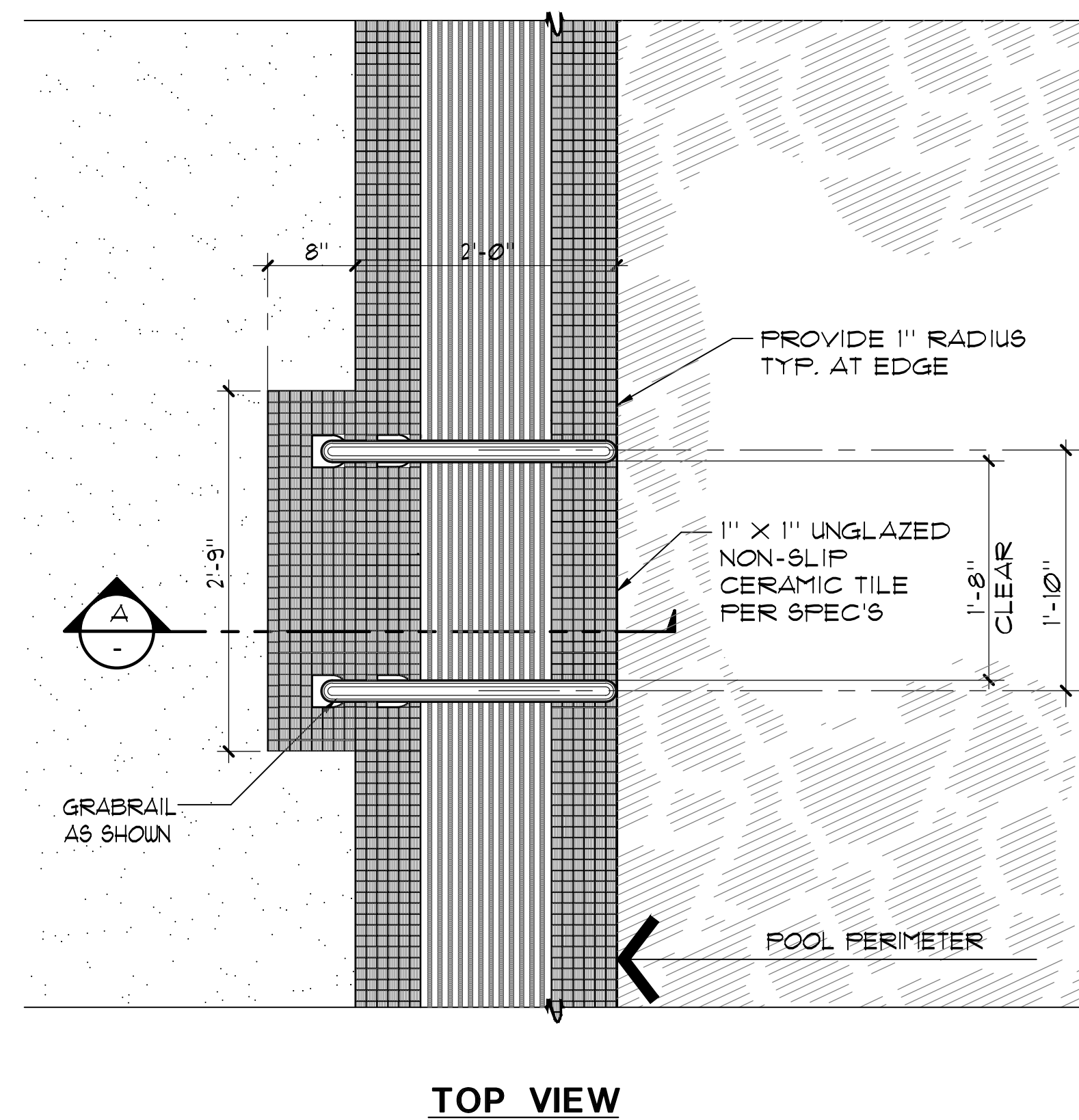
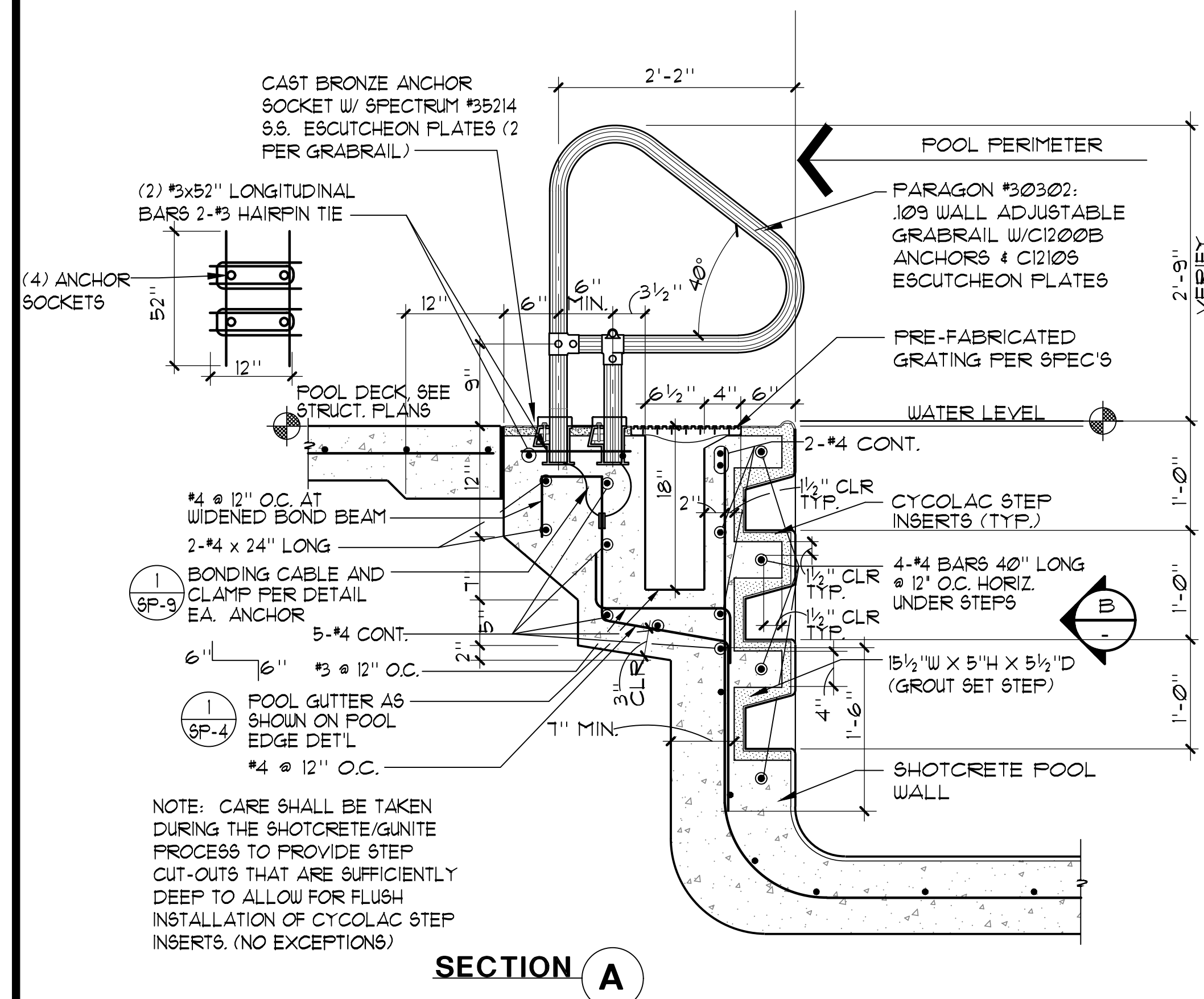
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| FILE NO.: | CP-SP7 - DETAILS.DWG |

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SP-7

OF

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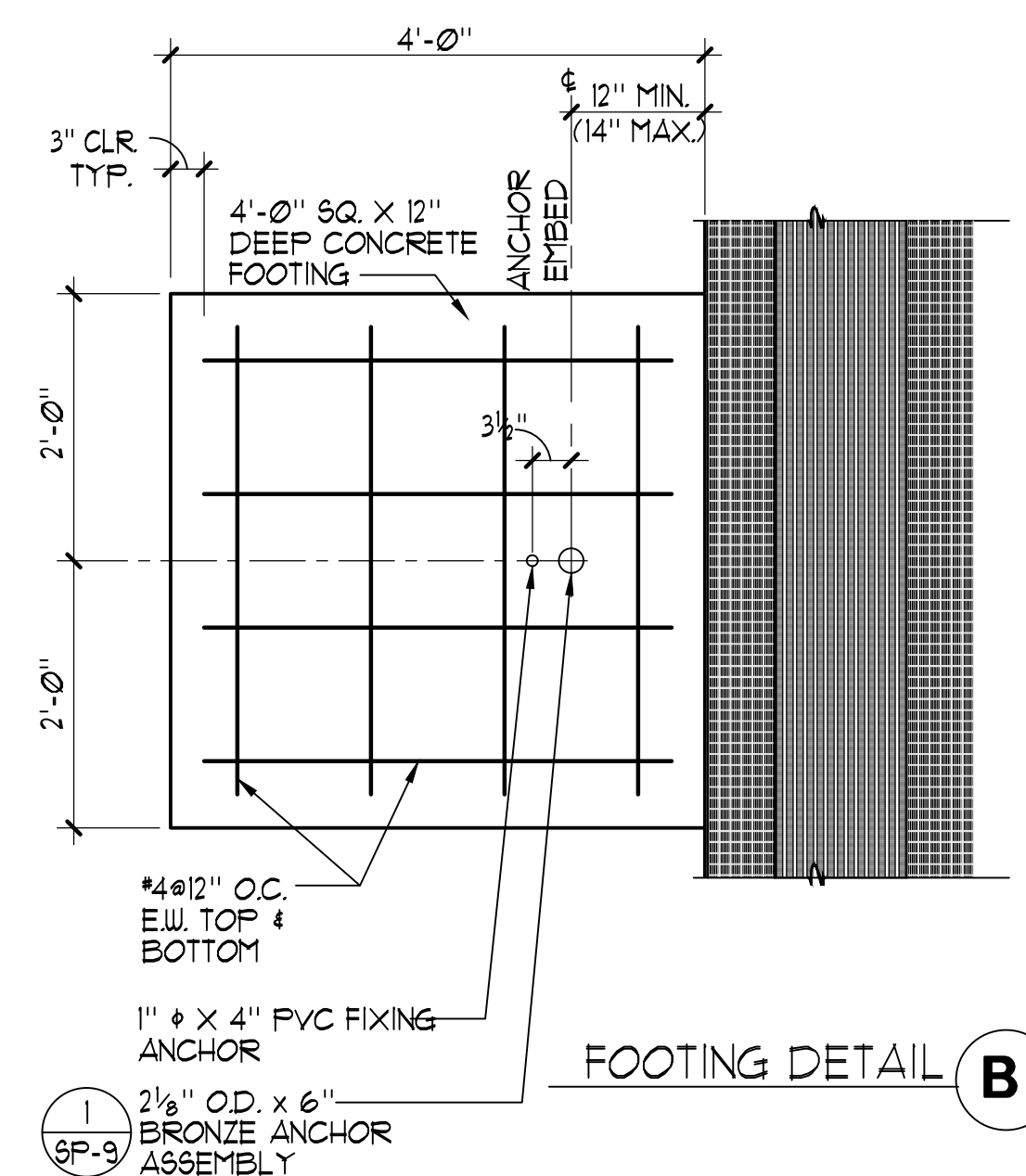
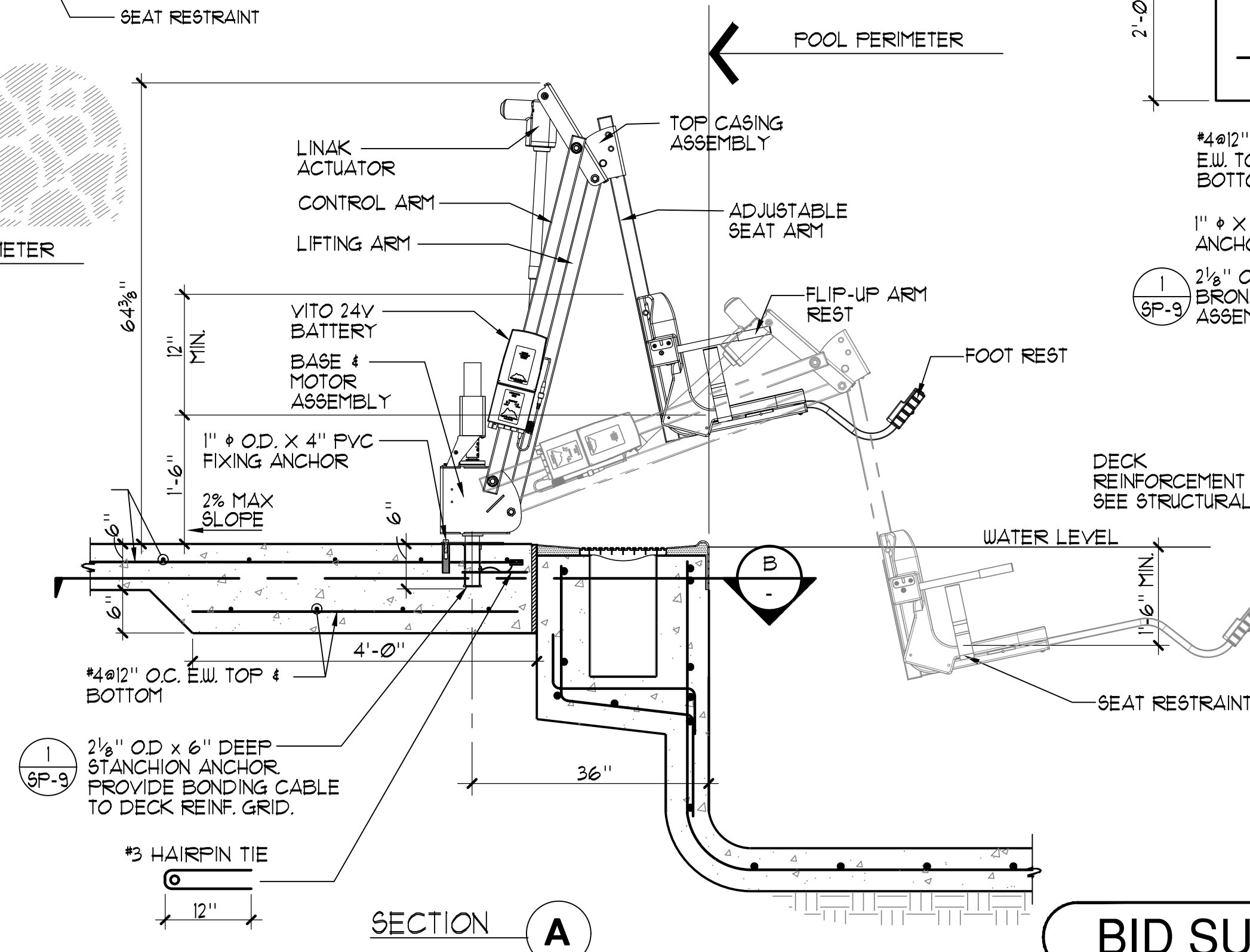
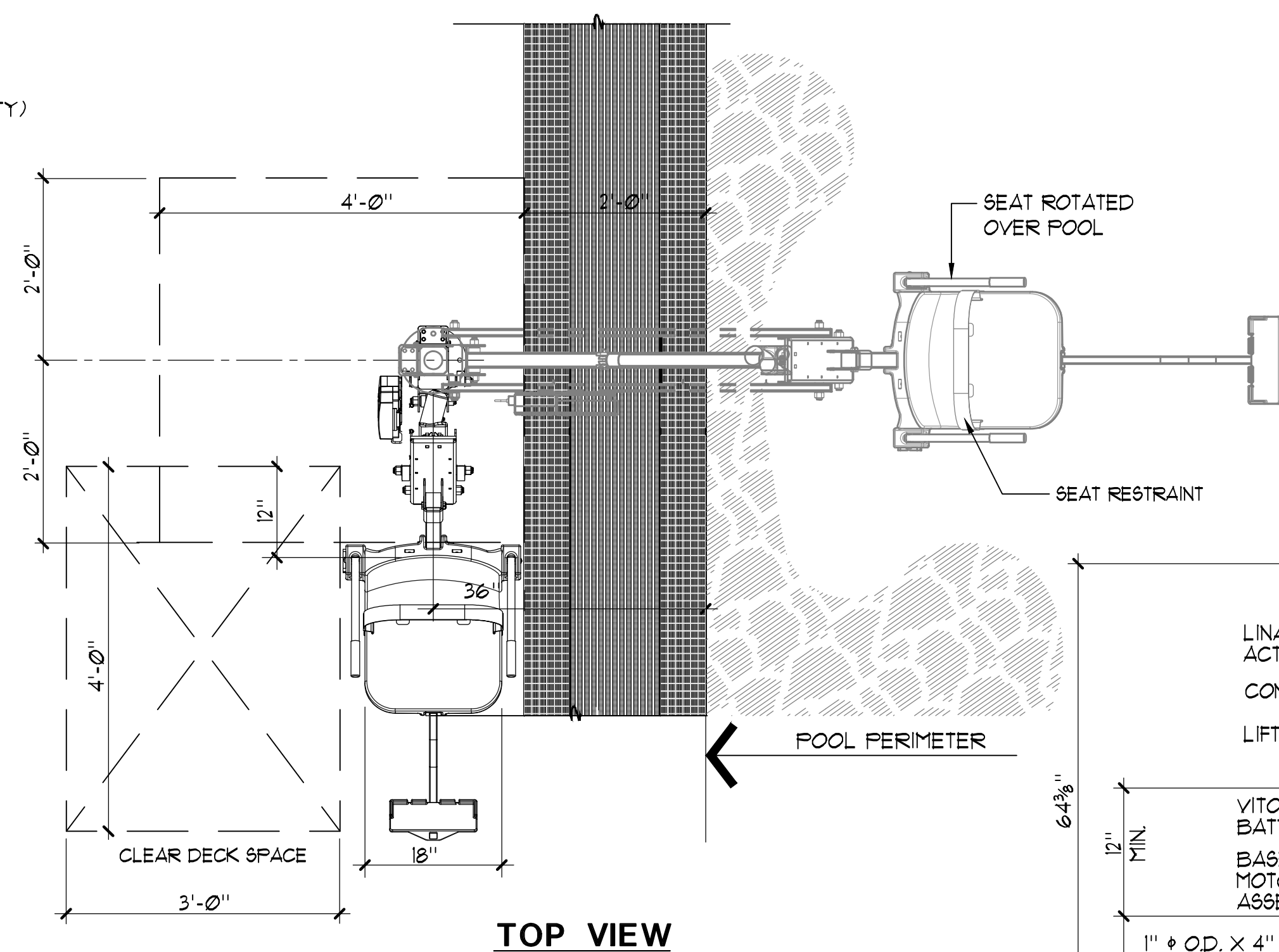


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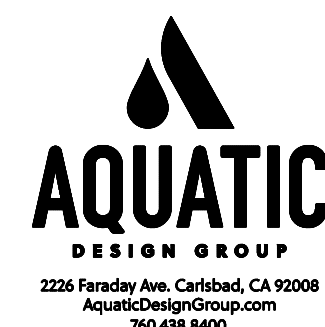
$$I'' = I' - \phi''$$

- NOTES:

1. 'AQUA CREEK' MIGHTY 400 F-MTY400 (350 lb. MIN. AND 400 lb. MAX. LIFTING CAPACITY).
2. GUSSET COVER PLATE TO BE ATTACHED REQUIRING A TOOL FOR REMOVAL.
3. CONTRACTOR SHALL PROVIDE COVER FOR LIFT 'AQUA CREEK' MIGHTY', EXTRA BATTERY PACK 'AQUA CREEK' F-004AB; TRANSPORTER CART 'AQUA CREEK' F-MTTC; AND 'AQUA CREEK' SCOUTMIGHTY STANDARD ANCHOR SOCKET F-000SA.
4. REFER TO ARCH. PLANS FOR LOCATION OF DISABLED LIFT BATTERY CHARGE STATION. PROVIDE 'AQUA CREEK' CHARGER F-044CH.
5. POOL LIFT SHALL BE LOCATED WHERE THE WATER LEVEL IS AT LEAST 36" AND DOES NOT EXCEED 48" DEEP, UNLESS ENTIRE POOL IS GREATER THAN 48" DEEP. (CBC SECTION 11B-1009.2.1)
6. ON THE RAISED POSITION, THE CENTERLINE OF THE SEAT SHALL BE LOCATED OVER THE DECK AND 16" MINIMUM FROM THE EDGE OF THE POOL. THE DECK SURFACE BETWEEN THE CENTERLINE OF THE SEAT AND THE POOL EDGE SHALL HAVE A 2% MAX. SLOPE. (CBC SECTION 11B-1009.2.2)
7. CLEAR DECK SPACE SHALL BE PROVIDED ON SIDE OF SEAT OPPOSITE THE WATER PARALLEL TO THE WATER 36" WIDE X 48" MINIMUM FROM A LINE LOCATED 12" BEHIND THE REAR EDGE OF THE SEAT. THE CLEAR SPACE SHALL HAVE A 2% MAX. SLOPE. (CBC SECTION 11B-1009.2.3)
8. THE SEAT SHALL BE RIGID AND SHALL HAVE A BACK SUPPORT THAT IS AT LEAST 12" TALL. THE HEIGHT OF THE LIFT SEAT SHALL BE DESIGNED TO ALLOW A STOP AT 17" MIN. TO 19" MAX. MEASURED FROM THE DECK TO THE TOP OF THE SEAT SURFACE WHEN IN THE RAISED POSITION. THE SEAT SHALL HAVE A RESTRAINT FOR THE USE OF THE OCCUPANT WITH OPERABLE PARTS COMPLYING WITH SECTION 11B-309. (CBC SECTION 11B-1009.2.4)
9. THE SEAT SHALL BE 16" WIDE MINIMUM. (CBC SECTION 11B-1009.2.5)
10. FOOTRESTS SHALL BE PROVIDED, EXCEPT FOR SPA LIFTS, AND SHALL MOVE WITH THE SEAT. LIFT SHALL HAVE TWO ARMRESTS. THE ARMREST POSITIONED OPPOSITE THE WATER SHALL BE REMOVABLE OR SHALL FOLD CLEAR OF THE SEAT WHEN THE SEAT IS IN THE RAISED POSITION. (CBC SECTION 11B-1009.2.6)
11. THE LIFT SHALL BE CAPABLE OF UNASSISTED OPERATION FROM BOTH THE DECK AND WATER LEVELS. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL BE UNOBSTRUCTED WHEN THE LIFT IS IN USE (CBC SECTION 11B-309.2.4) LIFT MUST BE STABLE AND NOT PERMIT UNINTENDED MOVEMENT WHEN A PERSON IS GETTING INTO OR OUT OF THE SEAT. (CBC SECTION 11B-1009.2.1)
12. THE LIFT SHALL BE DESIGNED SO THAT THE SEAT WILL SUBMERGE TO A WATER DEPTH OF 18" MIN. BELOW THE STATIONARY WATER LEVEL. (CBC SECTION 11B-1009.2.8)
13. LIFT SEAT MUST HAVE AN OCCUPANT RESTRAINT FOR USE BY THE OCCUPANT OF THE SEAT AND THE RESTRAINT MUST MEET THE STANDARDS FOR OPERABLE CONTROLS IN COMPLIANCE WITH CBC SECTION 11B-1009.2.4 AND SECTION 11B-309.

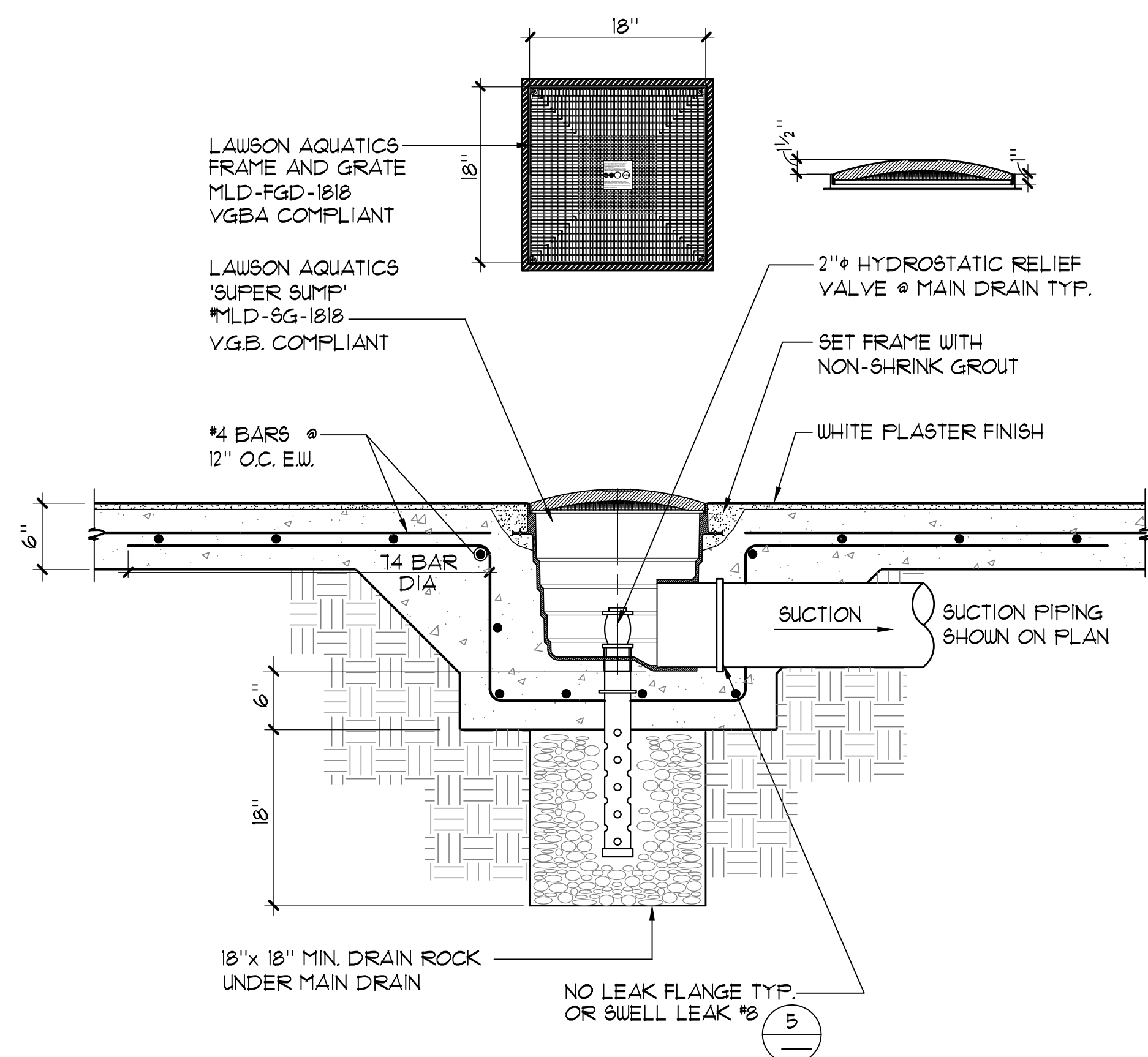


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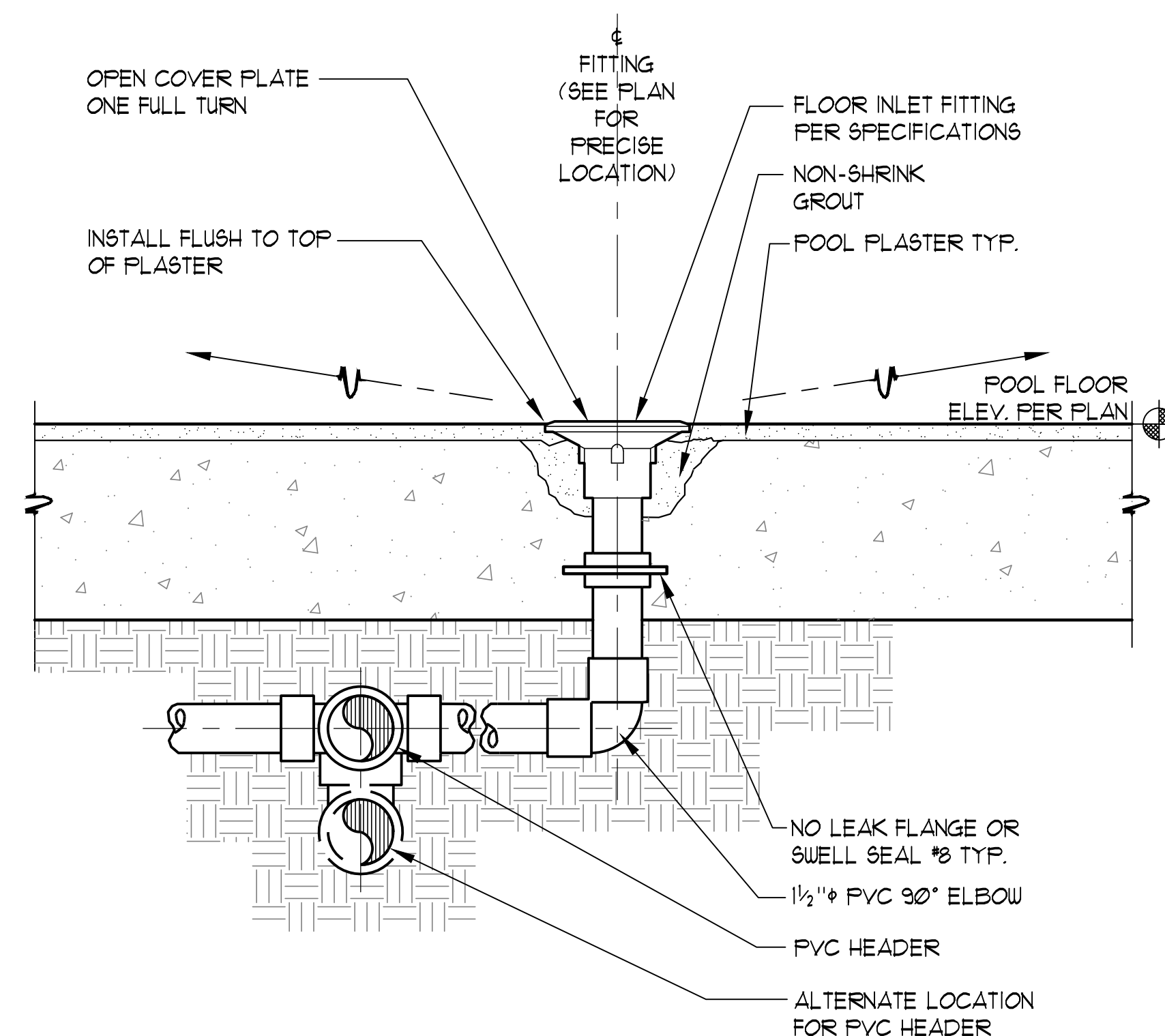


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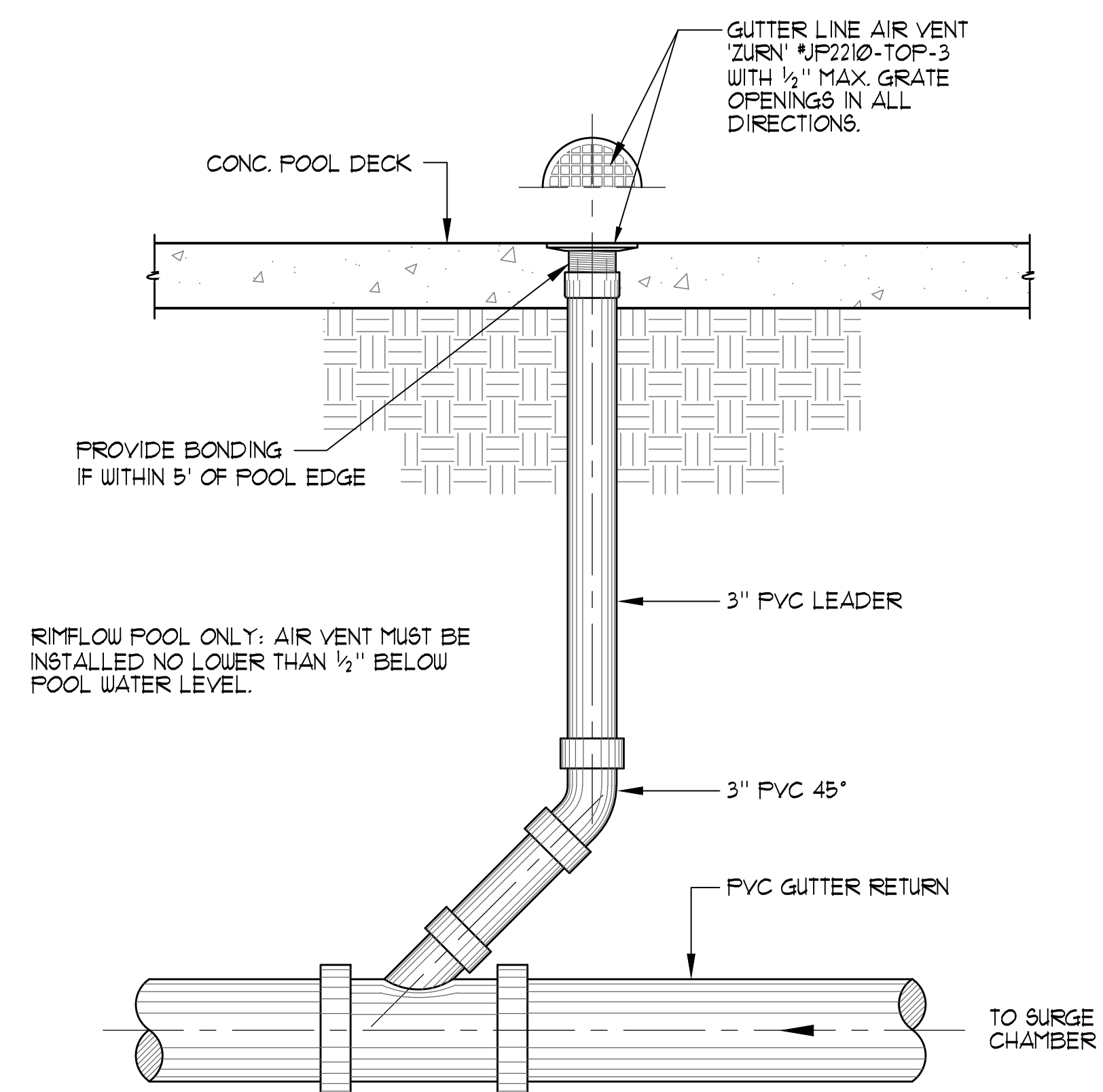




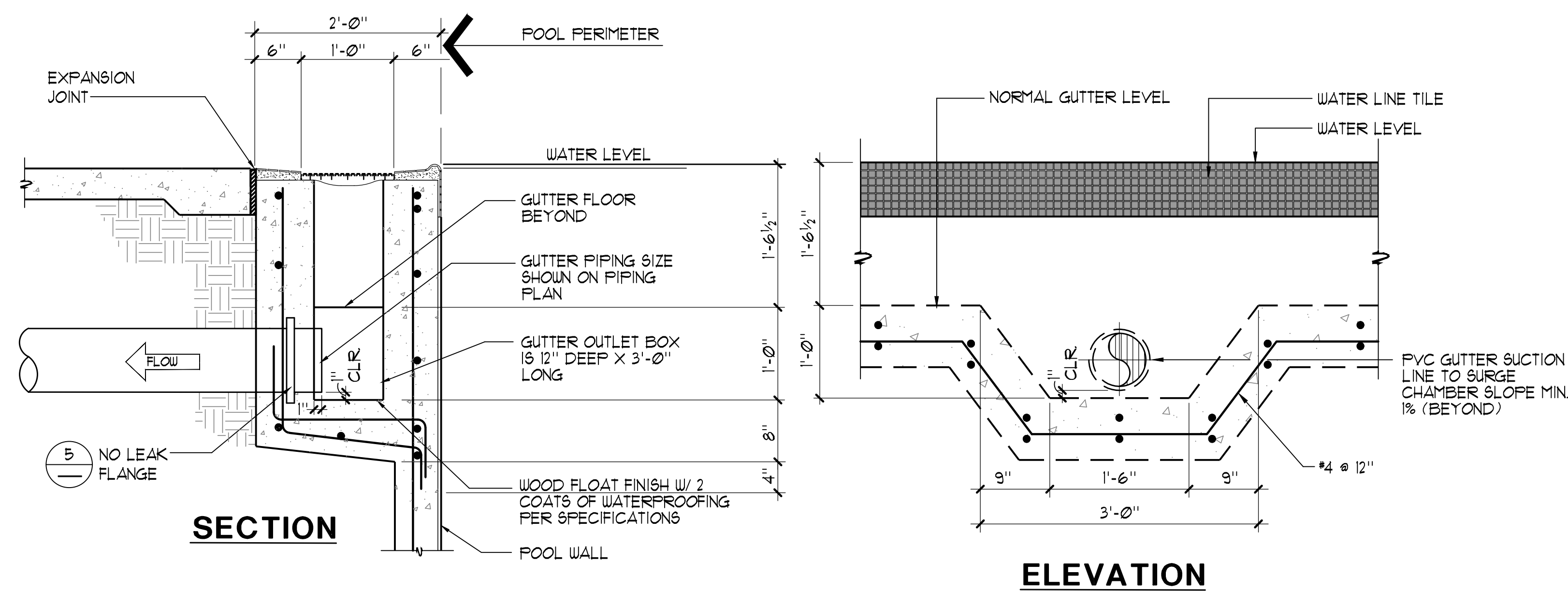
**1 MAIN DRAIN**      1" = 1'-0"



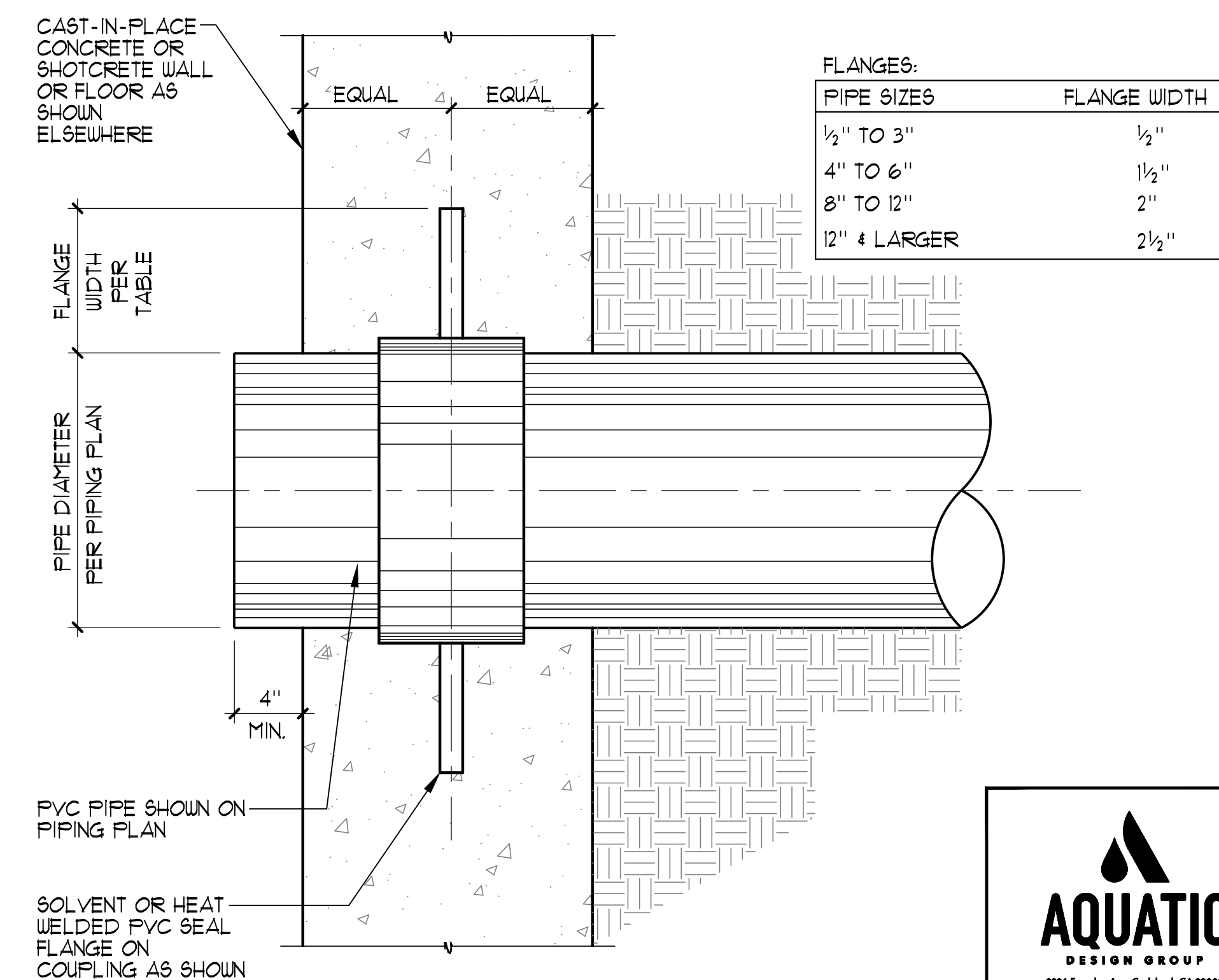
2 FLOOR INLET 3" = 1'-0"



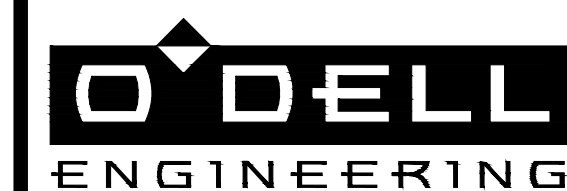
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| 3 | AIR VENT | 1"=1'-0" |
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**GUTTER OUTLET**  $1' = 1' - 0''$



## 5 WATER STOP DETAIL NO SCALE

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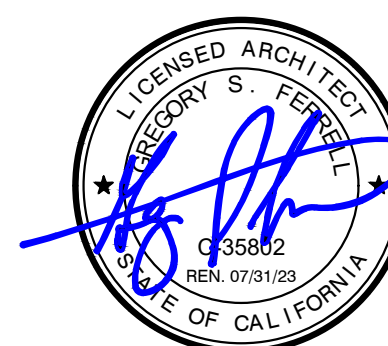
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## IMPROVEMENT PLANS

### COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



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SHEET NO.

SP-8

OF

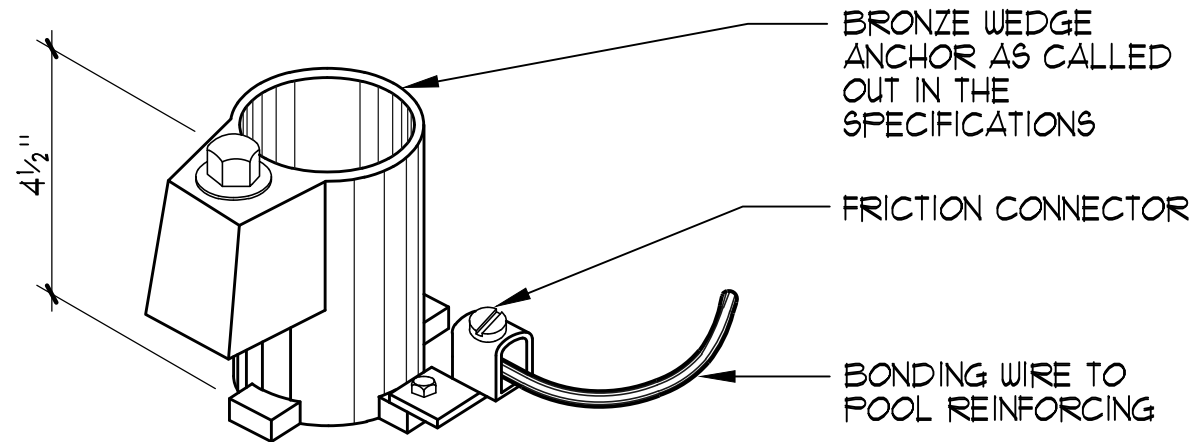
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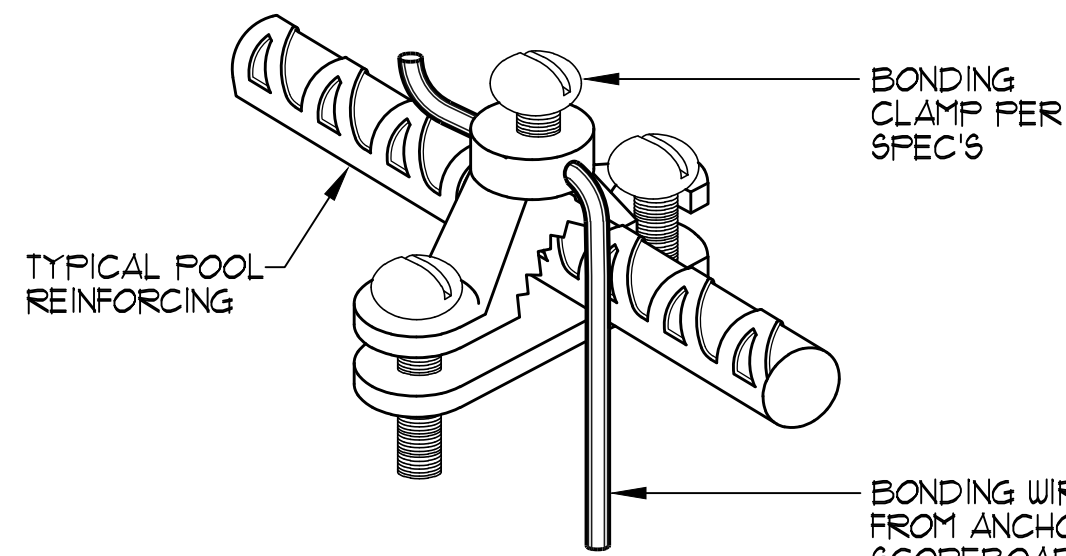
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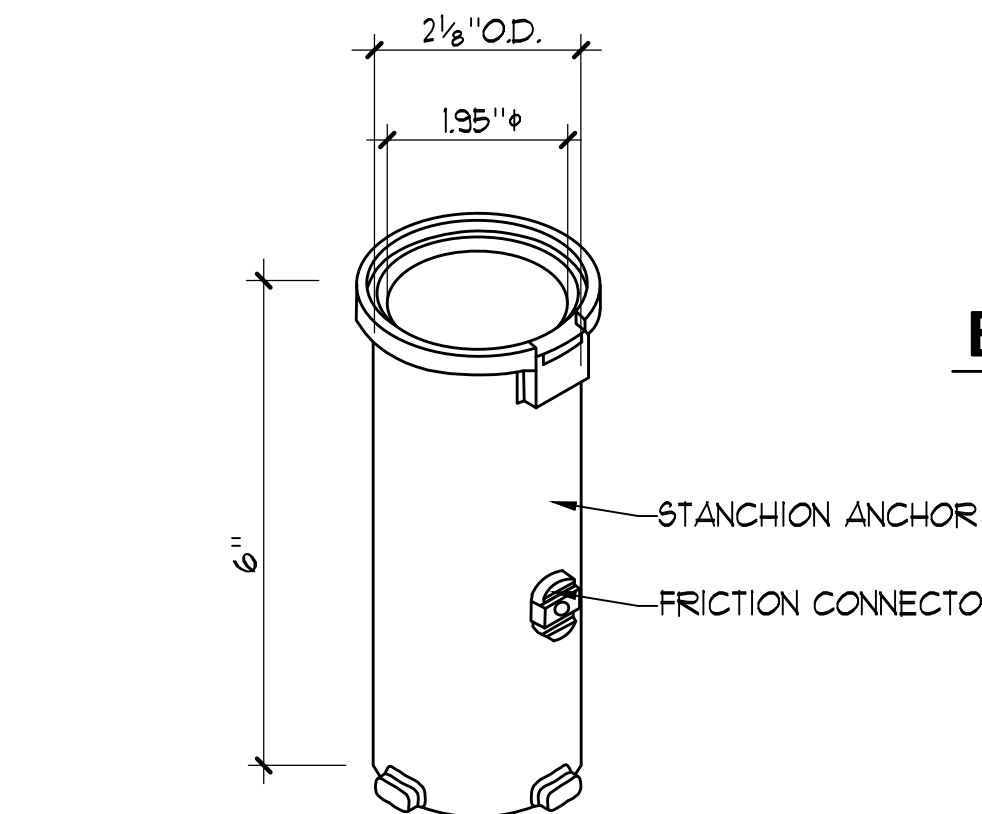




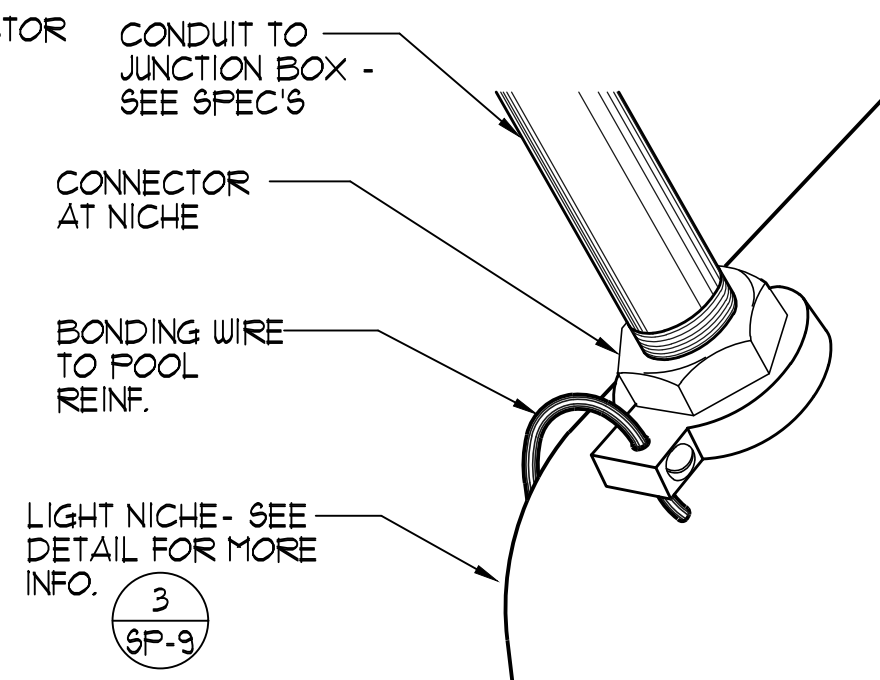
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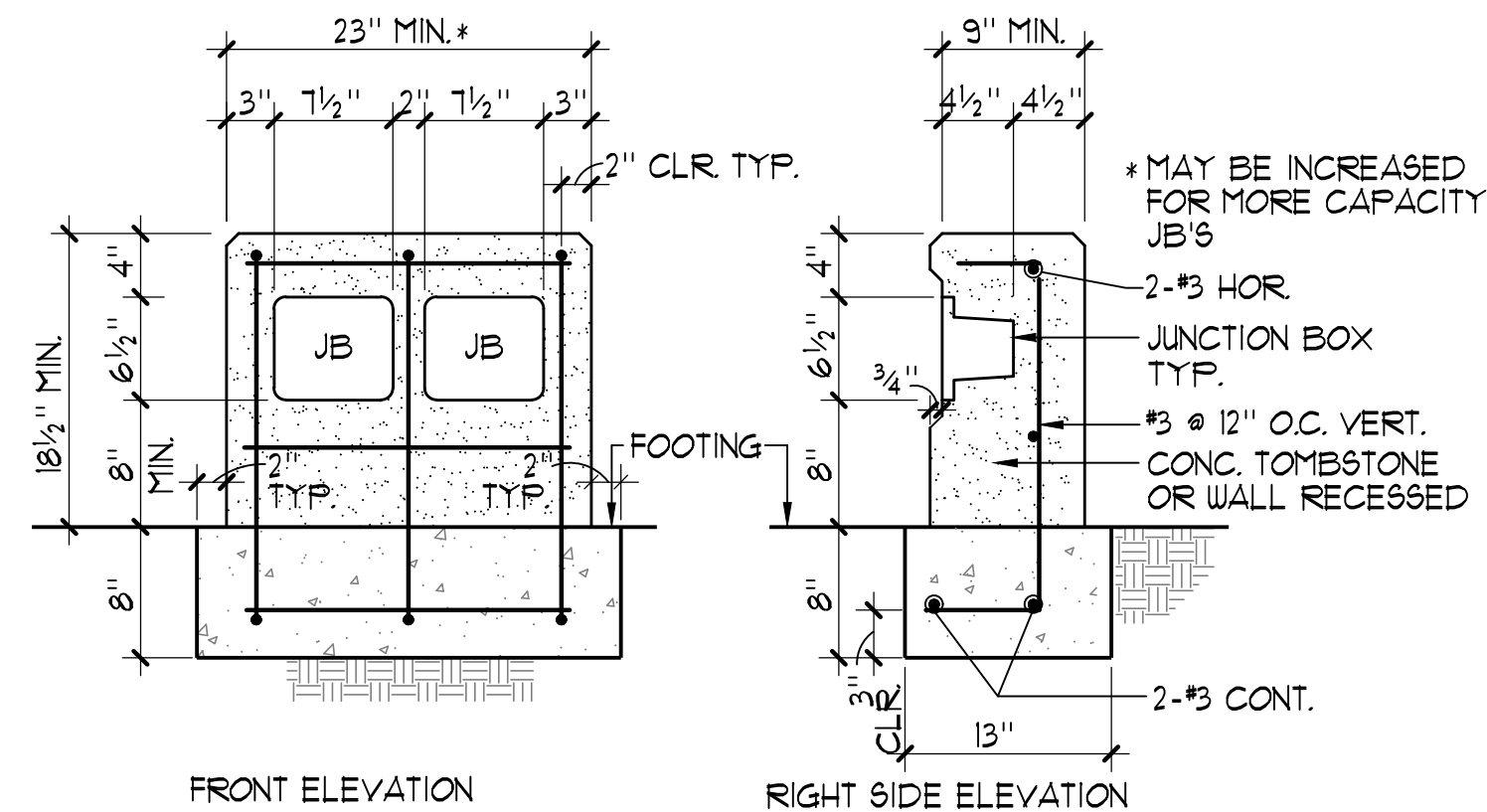
**BONDING CLAMP**  
NO SCALE



**ACCESSIBLE LIFT STANCHION ANCHOR**  
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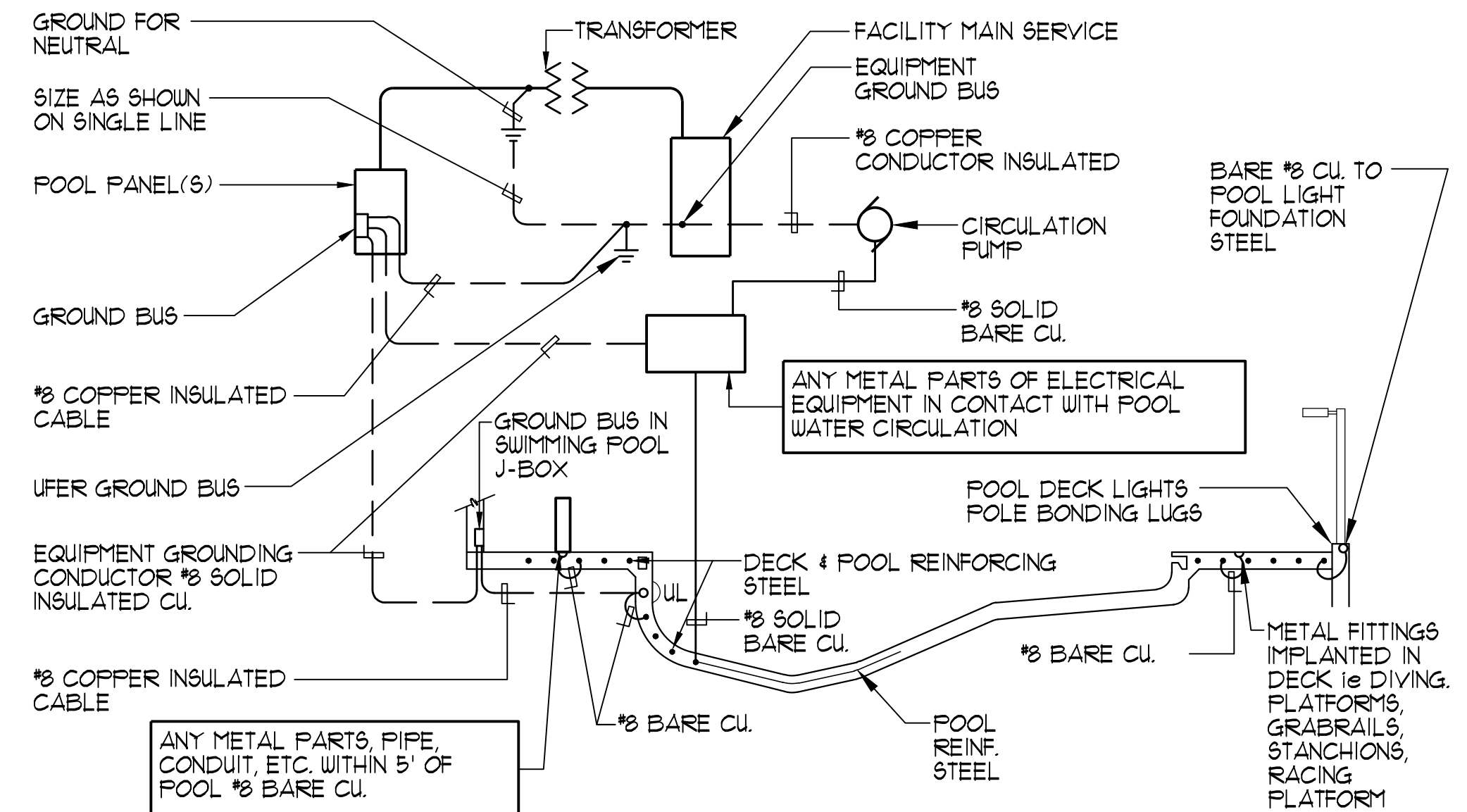


**NICHE CONNECTOR**  
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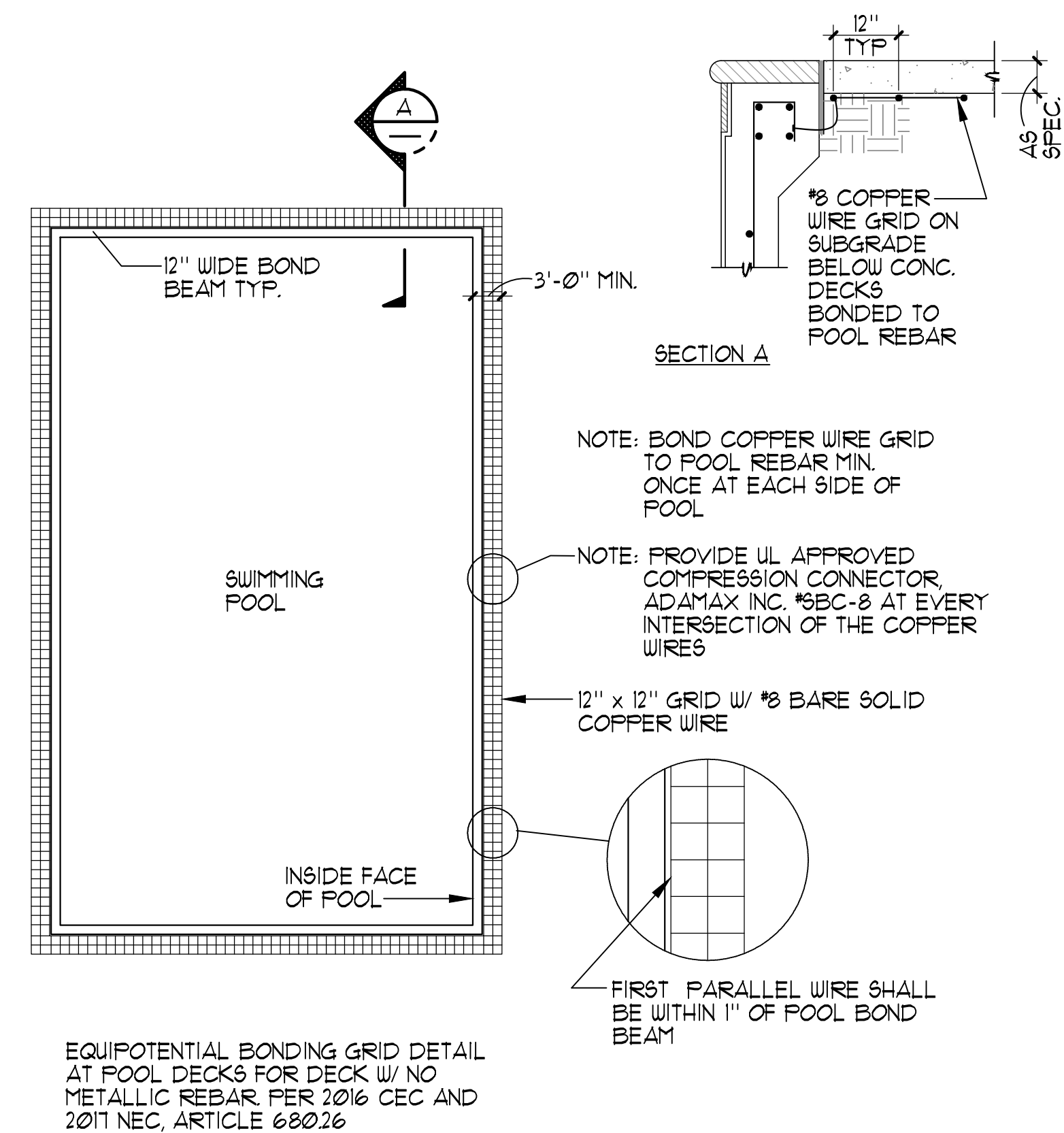
NOTE:  
PROVIDE 3/4" CHAMFER  
ON ALL CONCRETE  
CORNERS, BACK & PATCH  
ALL EXPOSED SURFACES.

1"=1'-0"



NOTE:

- STRUCTURAL STEEL IN POOL DECK AND POOL SHALL BE BONDED TOGETHER (TIGHTLY MADE STEEL TIE-WIRES ARE APPROVED FOR BONDING STRUCTURAL ELEMENTS).
- BONDING CONNECTOR TO COMMON GRID. (POOL STEEL MAY BE USED FOR THAT PURPOSE) SHALL BE MADE BY PRESSURE CONNECTORS OR CLAMPS OF BRASS, COPPER, OR COPPER ALLOY.
- ALL GROUND BUSES SHALL BE SIZED FOR CONNECTION TO AUG SIZE 8 WIRE PROVIDING ONE SPARE TERMINAL.
- GROUND AND BOND IN ACCORDANCE WITH ARTICLE 680 OF THE NATIONAL ELECTRICAL CODE. (e.g. LADDERS, FENCING, POLE LIGHTS, DIVING & STARTING STANCHIONS, HANDICAP HOIST ETC.
- PROVIDE BONDING OF AUTOMATIC POOL COVER MOTORS REGARDLESS OF PROXIMITY TO POOL.

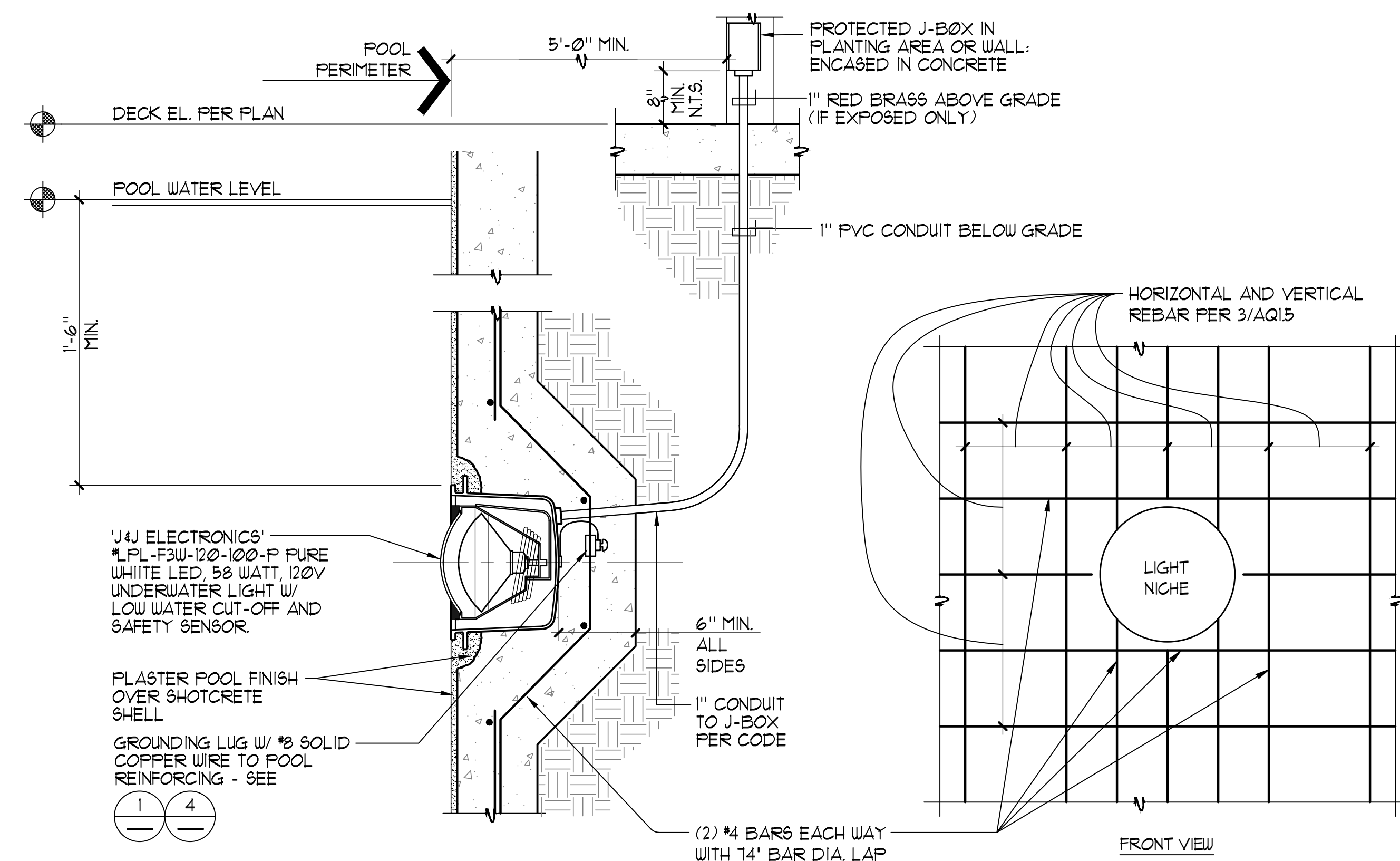


NO SCALE

**4 TYPICAL POOL BONDING & GROUND DETAIL**

**1 BONDING DETAILS** AS NOTED

**2 UNDERWATERLIGHT JUNCTION BOX SURROUND**



UNDERWATER LIGHT NOTES:

- ALL CONDUITS IN POOL LIGHTING SYSTEM TO BE A MINIMUM OF 1"Ø.
- CONDUCTORS TO POOL, J-BOXES SHALL BE MINIMUM 2-#8 & 1#8 (SEE UNDERWATER LIGHT PLAN) SOLID UNBROKEN TO MAIN PANEL ISOLATED GROUND BUSS. THIS BUSS IS TO BE CONNECTED WITH SOLID INSULATED 1/2" COPPER WIRE TO UFER & COLDWATER GROUNDING LUG ON GROUNDING BUSS. UPSIZE CONDUCTORS AS REQUIRED FOR HOMERUNS EXCEEDING 100'.
- ALL BRASS POOL J-BOXES SHALL BE FLUSH MOUNTED IN WALLS. IF FLUSH MOUNTING IS NOT POSSIBLE THEN MOUNTING SHALL BE SURFACE MOUNTED AND CONCRETE ENCASED.
- CONDUITS WHERE ALLOWED BY CODE SHALL BE P.V.C. (POLYVINYL CHLORIDE) FROM UET NICHES TO BRASS J-BOXES TO LIGHTING PANEL. ALL CONDUITS IN FREE AIR SPACE AND ALL RISERS SHALL BE RED BRASS TYPICAL. PVC CONDUITS SHALL BE SOLVENT WELDED WITH P-10 PURPLE PRIMER AND 2111 GRAY HEAVY BODIED GLUE.
- LIGHTING CONTACTORS SHALL BE 'ALLEN-BRADLEY' #500 L+ OR EQUAL MOUNTED IN A NEMA 12 HINGED COVER - LOCKABLE ENCLOSURE. CONTACTORS TO BE SWITCHED BY MOMENTARY SWITCH EQUAL TO 'HUBBELL' #551 MOUNTED IN J-BOX IN MECHANICAL EQUIPMENT ROOM. PROVIDE REMOTE UNDERWATER LIGHT SWITCH IN POOL BUILDING CONTROL ROOM.
- BRASS POOL J-BOXES SHALL BE 'HYDREL' #119 & 1/2" HUBS OR EQUAL. (NO DIE CAST BOXES).
- STRINGS SHALL BE PULLED IN ALL CONDUITS PRIOR TO PLACEMENT OF CONCRETE.
- LOCAL, COUNTY OR CITY CODES SHALL BE ADHERED TO. SPECIFICATIONS TO BE IN ACCORDANCE WITH SECTION 680 OF LATEST N.E.C. BOOK.
- PROVIDE PULL BOXES AS MAY BE REQUIRED FOR RUNS EXCEEDING 150 FT. OR DUE TO CHANGES IN GRADE OR DIRECTION.
- CONTRACTOR SHALL TEST UNDERWATER POOL LIGHT GFCI CIRCUITS AND PROVIDE LETTER TO ARCHITECT AND OWNER UPON SUCCESSFUL TEST.
- SEAL CONDUIT OPENING IN LIGHT NICHE WITH SILICON CAULKING AFTER LIGHT IS INSTALLED.
- PRIOR TO LIGHT INSTALLATION, PROVIDE MINIMUM 10 PSI PRESSURE TEST ON ALL POOL LIGHT CONDUITS FOR FOUR (4) HOURS OBSERVED BY INSPECTOR OF RECORD. MAINTAIN PRESSURE UNTIL ALL DECKS ARE POURED.

**UNDERWATER LED LIGHT**

1/2"=1'-0"

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**IMPROVEMENT PLANS**  
**COLUMBIA POOL IMPROVEMENTS**

TURLOCK, CALIFORNIA

DETAILS



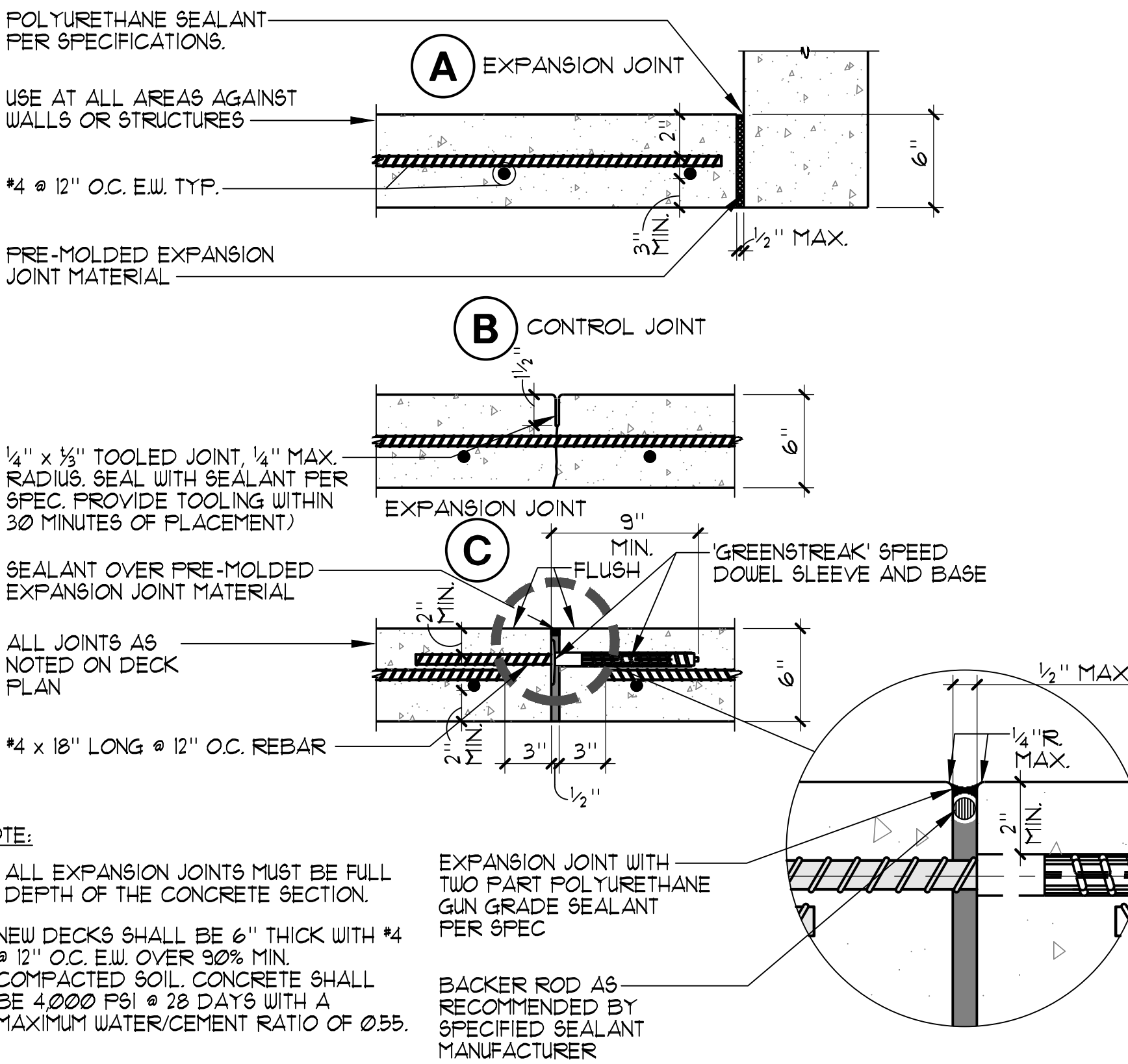
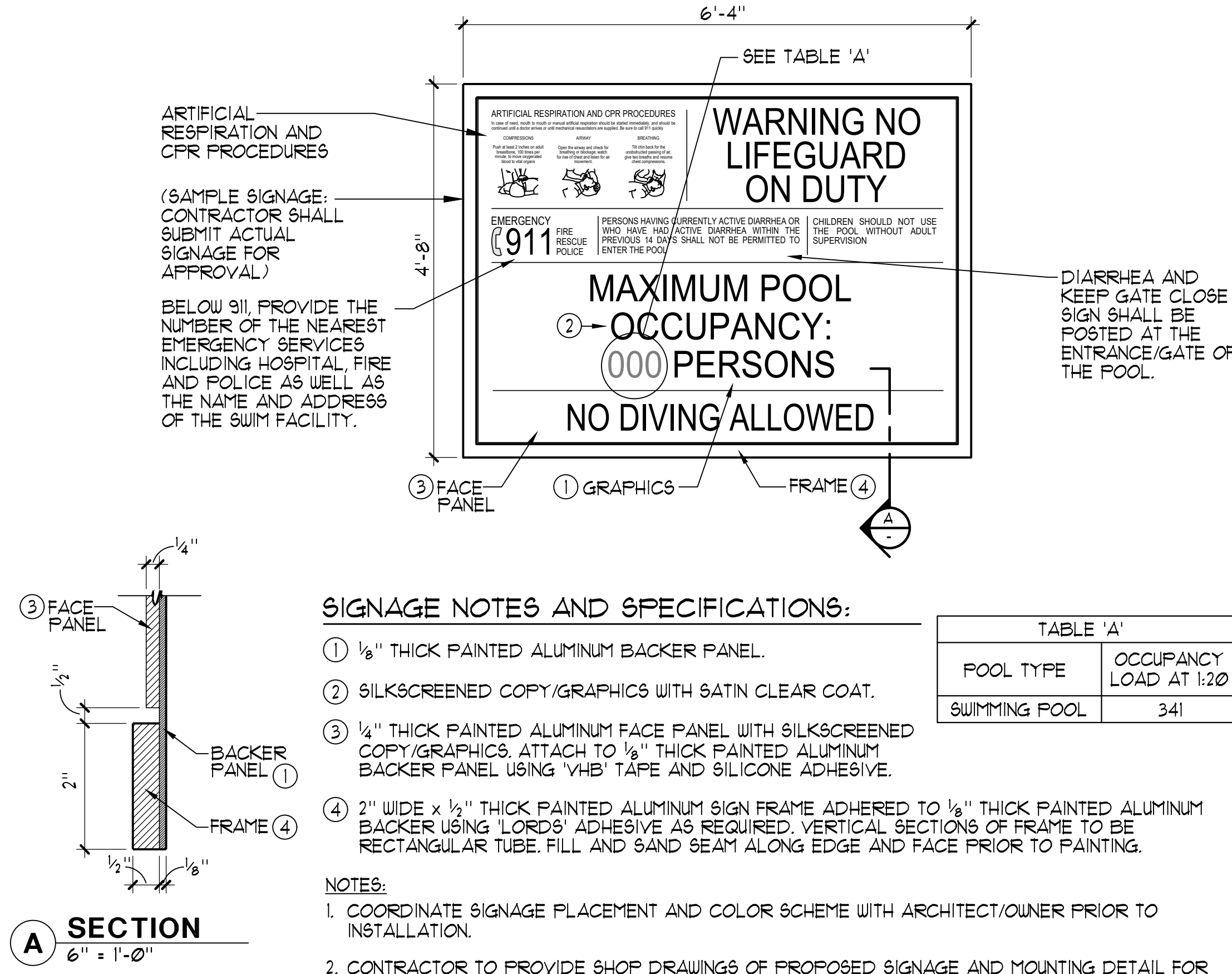
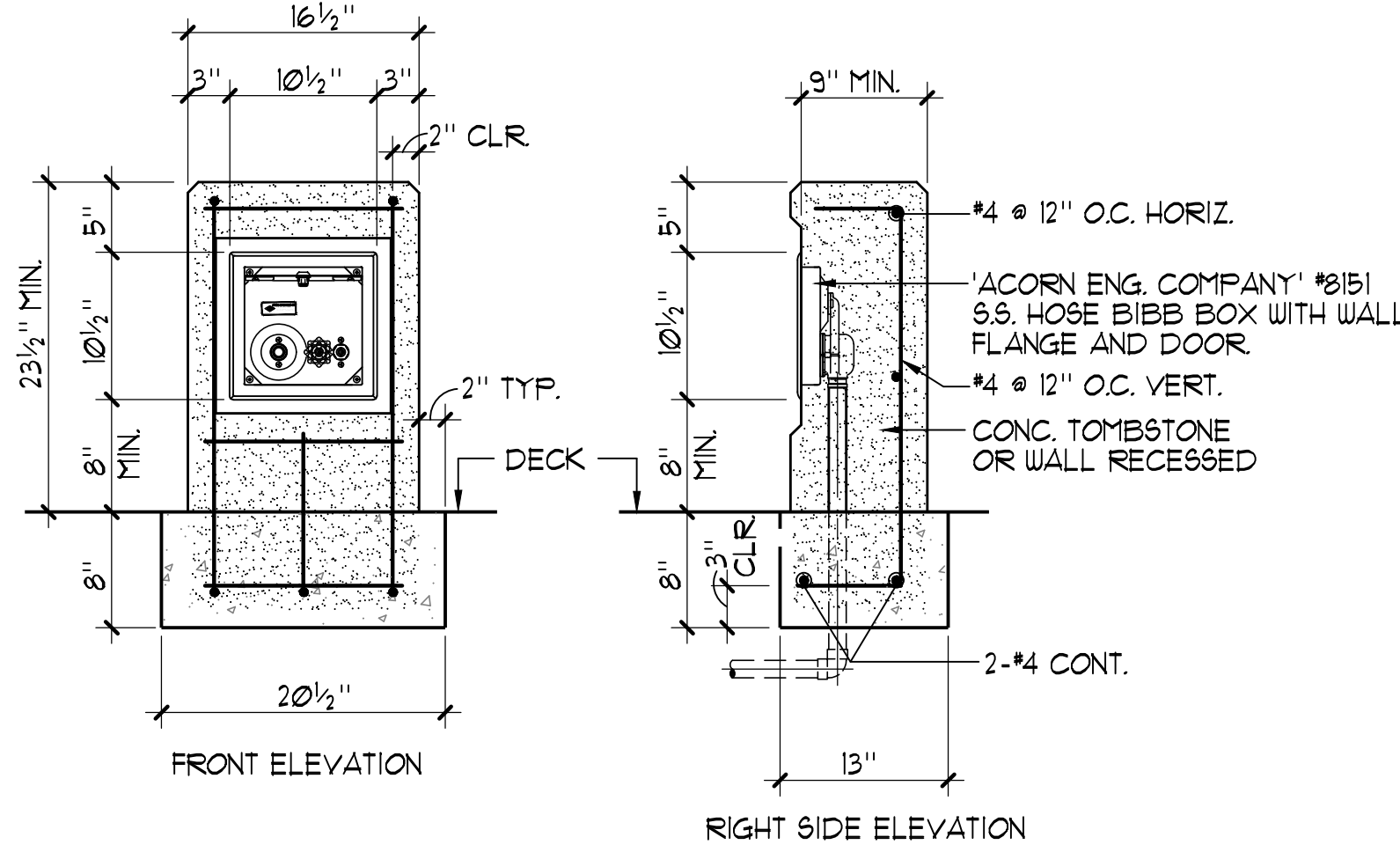
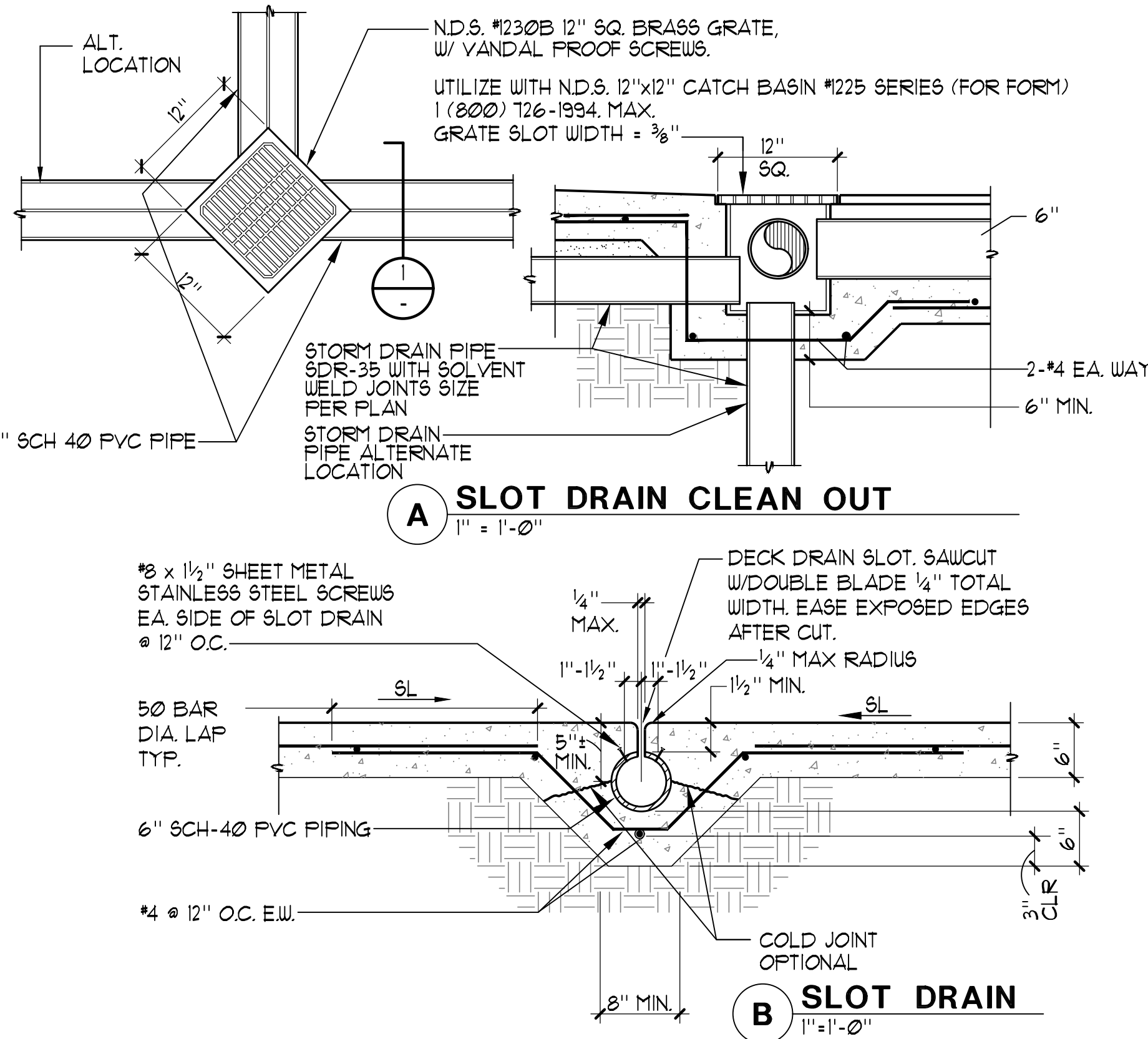
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14 Drawings Recreation A-M Columbia Park - Turlock, CA CP-SP10 - DETAILS.dwg mlllgeas 10:53:11 08/11/2023



HOSE BIBB 1" = 1'-0"

- REQUIRED SIGNAGE:**
1. ALL SIGNS SHALL HAVE CLEARLY LEGIBLE LETTERS OR NUMBERS NOT LESS THAN 4 INCHES HIGH, UNLESS OTHERWISE NOTED; AFFIXED TO A WALL, POLE, GATE, OR SIMILAR PERMANENT STRUCTURE IN A LOCATION VISIBLE TO ALL POOL USERS.
- A. POOL USER CAPACITY SIGN; A SIGN SHALL INDICATE THE MAXIMUM NUMBER OF POOL USERS PERMITTED FOR EACH POOL.
- B. NO DIVING SIGN; SIGNS SHALL BE POSTED IN CONSPICUOUS PLACES AND SHALL STATE 'NO DIVING' AT POOLS WITH A MAXIMUM WATER DEPTH OF 6 FEET OR LESS.
- C. NO LIFEGUARD SIGN; WHERE NO LIFEGUARD SERVICE IS PROVIDED, A WARNING SIGN SHALL BE POSTED STATING, 'NO LIFEGUARD ON DUTY.' THE SIGN ALSO SHALL STATE IN LETTERS AT LEAST 1 INCH HIGH, 'CHILDREN SHOULD NOT USE POOL WITHOUT ADULT SUPERVISION.'
- D. ARTIFICIAL RESPIRATION AND CPR SIGN; AN ILLUSTRATED DIAGRAM WITH TEXT AT LEAST 1/4 INCH HIGH OF ARTIFICIAL RESPIRATION AND CPR PROCEDURES SHALL BE POSTED.
- E. EMERGENCY SIGN; THE EMERGENCY TELEPHONE NUMBER 911, THE NUMBER OF THE NEAREST EMERGENCY SERVICES AND THE NAME AND STREET ADDRESS OF THE POOL FACILITY SHALL BE POSTED.
- F. NO USE AFTER DARK; WHERE POOLS WERE CONSTRUCTED FOR WHICH LIGHTING WAS NOT REQUIRED A SIGN SHALL BE POSTED AT EACH POOL ENTRANCE ON THE OUTSIDE OF THE GATE(S) STATING, 'NO USE OF POOL ALLOWED AFTER DARK.'
- G. KEEP CLOSED; A SIGN SHALL BE POSTED ON THE EXTERIOR SIDE OF GATES AND DOORS LEADING INTO THE POOL ENCLOSURE AREA STATING, 'KEEP CLOSED.'
- H. DIARRHEA; A SIGN IN LETTERS AT LEAST 1 INCH HIGH AND IN A LANGUAGE OR DIAGRAM THAT IS CLEARLY STATED SHALL BE POSTED AT THE ENTRANCE AREA OF A PUBLIC POOL WHICH STATES THAT PERSONS HAVING CURRENTLY ACTIVE DIARRHEA OR WHO HAVE HAD ACTIVE DIARRHEA WITHIN THE PREVIOUS 14 DAYS SHALL NOT BE ALLOWED TO ENTER THE POOL WATER.
2. DIRECTION OF FLOW SIGNAGE AND LABELS.
- A. THE DIRECTION OF FLOW FOR THE RECIRCULATION EQUIPMENT SHALL BE LABELED CLEARLY WITH DIRECTIONAL SYMBOLS SUCH AS ARROWS ON ALL PIPING IN THE EQUIPMENT AREA.
- B. WHERE THE RECIRCULATION EQUIPMENT FOR MORE THAN ONE POOL IS LOCATED ON SITE, THE EQUIPMENT SHALL BE MARKED AS TO WHICH POOL THE SYSTEM SERVES.
- C. VALVES AND PLUMBING LINES SHALL BE LABELED CLEARLY WITH THE SOURCE OR DESTINATION DESCRIPTIONS.

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POOL SIGNAGE DETAIL 3/4" = 1'-0"

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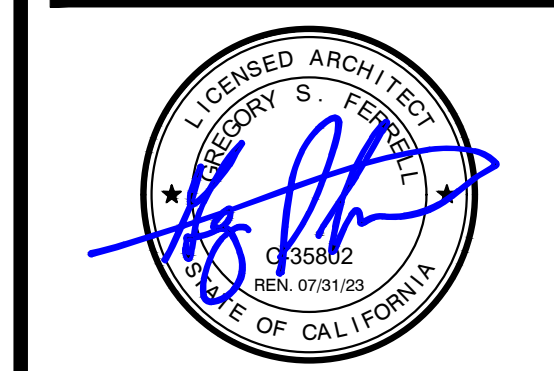
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IMPROVEMENT PLANS

COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

DETAILS



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**AQUATIC DESIGN GROUP**

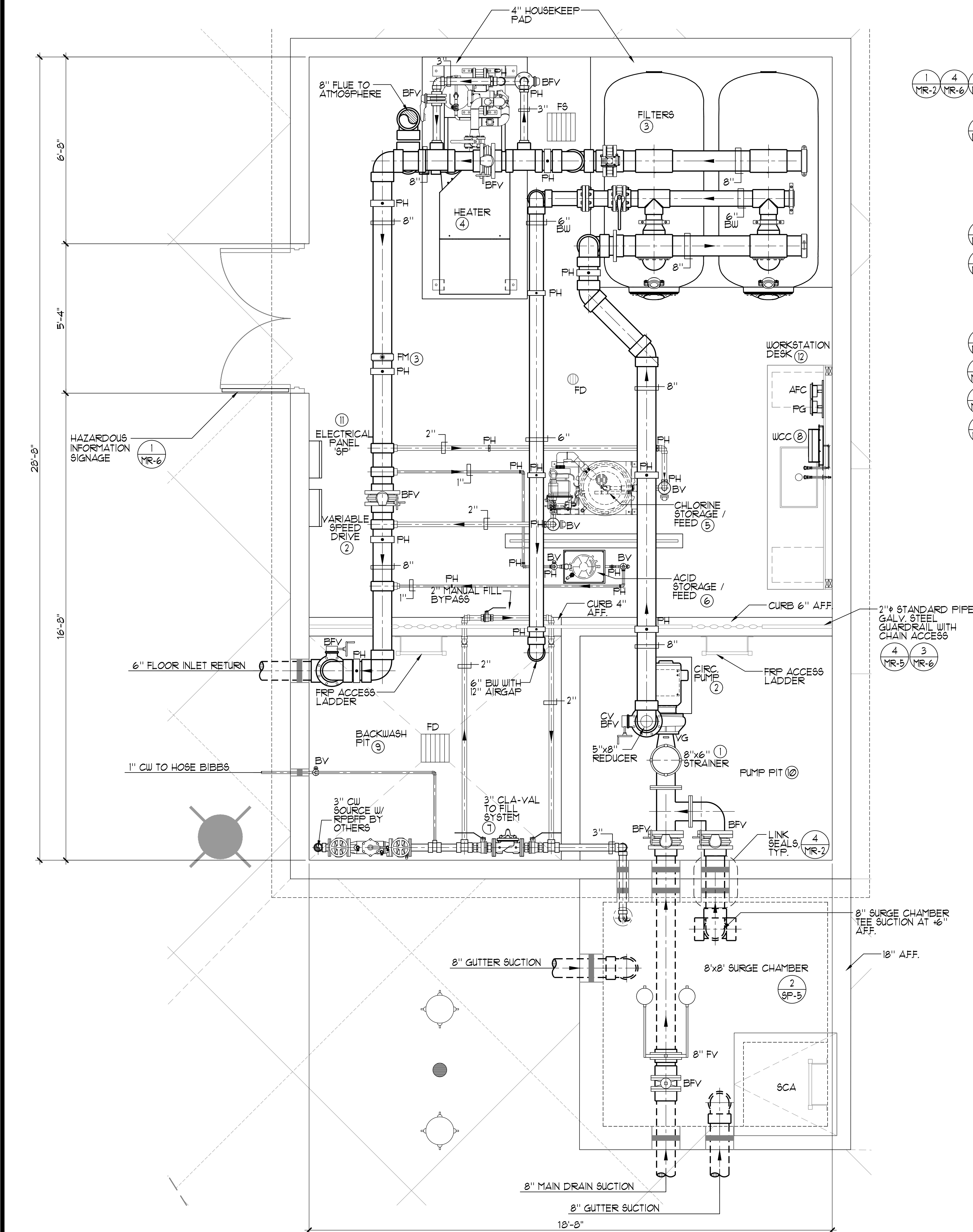
2226 Faraday Ave., Carlsbad, CA 92008  
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760.436.8400

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## SWIMMING POOL MECHANICAL ROOM PLAN

### EQUIPMENT LIST

- SWIMMING POOL STRAINER: 'MER-MADE' F.O. SERIES FRP REDUCING BASKET STRAINER: ONE (1) 8"x6" STANDARD WITH ACRYLIC LID AND TWO (2) STAINLESS STEEL STRAINERS EA. ONE (2) TOTAL. (150lbs. EA.)
- SWIMMING POOL CIRCULATION PUMP: 'PACO' #5012-3, 5"x6"x11.8" TYPE 'LC' END SUCTION CENTRIFUGAL PUMP, 1181 RPM 460V, 3PH, 15HP, RATED AT 650 GPM @ 60 FT. TDH; 83.92% EFFICIENT; PREMIUM EFFICIENCY TEFC MOTOR; EPOXY COAT ALL WET SURFACES. 'PACO', 'AURORA' OR EQUAL. (600 lbs.) PROVIDE 'SPCS' SMART PUMP CONTROL SYSTEM VARIABLE SPEED DRIVE MODEL SPC501BEF4 SYSTEM 20.5"x4"x13.9" DEEP. COORDINATE MOUNTING LOCATION TO MAINTAIN DESIRED CLEARANCES, 460V 3PH. (600 lbs.)
- SWIMMING POOL FILTERS: 'EKO' SYSTEMS' GEN 2 #42230-0806-T-2 AUTOMATIC FILTER CONTROL (AFC) FULLY AUTOMATIC HI-RATE PERMANENT MEDIA FILTER WITH 46 SQ. FT. OF FILTER AREA RATED AT 630 GPM AT 15 GPM/SQ. FT. COMPLETE WITH 8" FACE PIPING, 6" BACKWASH, SEISMIC ANCHORAGE. PROVIDE ALL UTILITIES, PIPING, VALVING, ETC. (8155 lbs EA. TANK) 'EKO', 'STARK' 99 SERIES, OR EQUAL. PROVIDE SIGNET P51530-FX FLOSENSOR WITH DIGITAL READ-OUT, ONE (1) SYSTEM TOTAL.
- ADDITIVE ALTERNATE: SWIMMING POOL HEATER: INDIRECT FIRED POOL HEATING PACKAGE SYSTEM; 'AQUAS' CREST SMARTTOUCH CONTROL CONDENSING MODULATING BOILER, TITANIUM HEAT EXCHANGER WITH CPVC CONNECTIONS, FACTORY ASSEMBLED SKID MOUNTED PACKAGE, CALIFORNIA CODE CONTROLS, 1 1/2" LIQUID PROPANE CONNECTION, 3" WATER CONNECTIONS, 8" DIAMETER AIR INLET AND 8" DIAMETER SIDEWALL VENT SIZE, PVC VENTED; 1999000 BTU PER HOUR INPUT, 91% EFFICIENT. PROVIDE 3/4" COLD WATER CONNECTION 'LOCHINVAR' AP02000N, WEIGHT = 3391 lbs. EA. ONE (1) TOTAL.
- SWIMMING POOL CHLORINE STORAGE/FEED SYSTEM(S): PROVIDE 'PPG' ACCU-TAB POWERBASE CHLORINATION UNIT MODEL 3140AT WITH 528 lbs/DAY OUTPUT, 140 lbs. TABLET CAPACITY, COMPLETE WITH 1 1/2 HP BOOSTER PUMP, PIPING, VALVING AND VENTURI INJECTION, ONE (1) SYSTEM TOTAL.
- SWIMMING POOL ACID STORAGE/FEED SYSTEM(S): PROVIDE 'ACID RITE' 450; FLOW RATE = 10 GPM FROM SODIUM BISULFATE TABLET FEED. COMPLETE SYSTEM WITH FLOWMETER PIPING, VALVING, AND 3/4 HP BOOSTER PUMP, NSF 50 CERTIFIED. TWO (2) SYSTEMS TOTAL.
- FILL SYSTEM: NICHE MOUNTED 3" 'CLA-VAL' FILL SYSTEM TO INCLUDE 3" 'CLA-VAL' SOLENOID CONTROL VALVE #136-01BY, 3" DUCT IRON, EPOXY COATED BODY WITH CAST IRON DISC RETAINER AND DIAPHRAGM WASHER, BRONZE TRIM, FLANGED GLOBE PATTERN, 120V AT 60HZ, SOLENOID WIRING SHALL BE WIRED TO WATER CHEMISTRY CONTROLLER. PROVIDE 6" AIR GAP AT FILL POINT, TWO (2) TOTAL. PROVIDE MANUAL BY-PASS VALVING PER DETAIL.
- WATER CHEMISTRY CONTROLLER: PROVIDE ETHERNET CONNECTION TO 'BECSYS' C5-BECSYS1-BP-E WATER CHEMISTRY CONTROLLER. PROVIDE COMPLETE SYSTEM CONTROL PACKAGE. 'BECSYS' SYSTEM T, 'IMPACT', 'WALLACE & TIERNAN' OR APPROVED EQUAL.
- BACKWASH PIT: 8'-0" x 3'-0" x 5'-0" DEEP WITH 6" P-TRAP OUTLET TO SEWER. PROVIDE WATERPROOFING PER SPECIFICATIONS. COORDINATE WITH STRUCTURAL AND PLUMBING PLANS.
- PUMP PIT: 8'-0" x 3'-0" x 5'-0" DEEP. PROVIDE 1 1/2" GALV. STEEL GUARDRAIL, PROVIDE FLOOR DRAIN TO WASTE. PROVIDE WATERPROOFING PER SPECIFICATIONS. ACCESS LADDER TO BE 'FIBERGLASS' DYNARAIL FRP OR EQUAL. COORDINATE WITH STRUCTURAL.
- ELECTRICAL: PROVIDE ALL ELECTRICAL WIRING, CONDUIT, PANEL(S), STARTER/DISCONNECT INTERCONNECT(S) ETC. AS REQUIRED FOR PROPER EQUIPMENT INSTALLATION PER MANUFACTURERS RECOMMENDATIONS AND SHOP DRAWINGS. COORDINATE ALL WORK WITH OTHER TRADES AS REQUIRED. REFER TO ELEC. PLANS FOR ALL ADDITIONAL INFO. ALL UNDERWATER LIGHTS TO BE CONTROLLED VIA 24HR. TIME CLOCK. SWIMMING POOL / HYDROTHERAPY SPA FILTERS TO BE CONTROLLED VIA 24HR. TIME CLOCK. TIME CLOCKS FOR POOL / HYDROTHERAPY SPA CIRCULATION AND HYDROTHERAPY SPA BOOSTER PUMP.
- POOL OPERATOR WORKSTATION DESK: 'TOTAL LAB SOLUTIONS' EPOXY COUNTERTOP WITH DROP-IN SINK AND TWO (2) END CABINETS. FURNISH WITH WALL MOUNTED TWO (2) FAUCETS 'BROEN BOSS' OR APPROVED EQUAL. SEE MEP PLANS FOR WATER SUPPLY PIPING.

### HEATER/GAS PIPING INSTALLATION NOTE

'LOCHINVAR' GAS FIRED POOL HEATER(S) INSTALLED ON A GAS SUPPLY SYSTEM UTILIZING A 2 PSI OR 5 PSI SUPPLY. GAS PRESSURE SHALL REQUIRE A REGULATOR TO REDUCE THE SUPPLY PRESSURE. A PROPERLY SIZED AND INSTALLED LOCK-UP-TYPE HIGH GAS PRESSURE REGULATOR (HGPR) SHALL BE USED TO REDUCE THE GAS PRESSURE AT THE UNIT INLET TO A MAXIMUM OF 10.5" WATER COLUMN.

'LOCHINVAR' RECOMMENDS THAT ANY REQUIRED LINE LOCK-UP-TYPE HIGH GAS PRESSURE REGULATOR BE INSTALLED WITH A MINIMUM OF 8 FEET TO 10 FEET OF PIPE FROM ITS DISCHARGE TO THE UNIT'S GAS INLET. IF A STRAIGHT DISTANCE OF GAS PIPE IS NOT AVAILABLE, THE ADDITION OF A VERTICAL 'U' IN THE GAS PIPING DOWN STREAM FROM THE 'HGPR' CAN BE USED TO ACHIEVE THE 8 FEET TO 10 FEET OF DISTANCE.

#### NOTE:

REFER TO MECHANICAL PLANS FOR HEATER VENTING, EXHAUST DUCTING, FLUE TERMINUS AND PENETRATION(S) THROUGH BUILDING STRUCTURE.

### ENERGY MANDATORY REQUIREMENTS FOR POOL HEATING SYSTEM AND EQUIPMENT

CERTIFICATION BY MANUFACTURERS. ANY POOL OR SPA HEATING SYSTEM OR EQUIPMENT MAY BE INSTALLED ONLY IF THE MANUFACTURER HAS CERTIFIED THAT THE SYSTEM OR EQUIPMENT HAS ALL OF THE FOLLOWING:

- EFFICIENCY. A THERMAL EFFICIENCY THAT COMPLIES WITH THE APPLIANCE EFFICIENCY REGULATIONS; AND
- ON-OFF SWITCH. A READILY ACCESSIBLE ON-OFF SWITCH, MOUNTED ON THE OUTSIDE OF THE HEATER THAT ALLOWS SHUTTING OFF THE HEATER WITHOUT THE THERMOSTAT SETTING; AND
- INSTRUCTIONS. A PERMANENT, EASILY READABLE, AND WEATHERPROOF PLATE OR CARD THAT GIVES INSTRUCTION FOR THE ENERGY EFFICIENT OPERATION OF THE POOL AND SPA AND FOR THE PROPER CARE OF POOL AND SPA WATER WHEN A COVER IS USED; AND
- PILOT LIGHT. NO PILOT LIGHT

INSTALLATION. ANY POOL OR SPA HEATING SYSTEM OR EQUIPMENT SHALL BE INSTALLED WITH ALL OF THE FOLLOWING:

- PIPING. AT LEAST 36 INCHES OF PIPE BETWEEN THE FILTER AND THE HEATER TO ALLOW FOR THE FUTURE ADDITION OF SOLAR HEATING EQUIPMENT; AND
- COVERS. A COVER FOR OUTDOOR POOLS AND SPAS

### LEGEND

|       |   |                                     |   |      |
|-------|---|-------------------------------------|---|------|
| PH/PS | = | PIPE HANGER / PIPE HANGER           | 2 | 3    |
| VG    | = | VACUUM GAUGE                        | 2 | MR-3 |
| PG    | = | PRESSURE GAUGE                      | 2 | MR-5 |
| BV    | = | BALL VALVE                          |   |      |
| BFV   | = | BUTTERFLY VALVE                     |   |      |
| CV    | = | CHECK VALVE                         |   |      |
| BW    | = | BACKWASH                            |   |      |
| RPBFP | = | REDUCED PRESSURE BACKFLOW PREVENTOR |   |      |
| AFC   | = | AUTO FILTER CONTROL                 |   |      |
| WLC   | = | WATER LEVEL CONTROLLER              |   |      |
| WCC   | = | WATER CHEMISTRY CONTROLLER          |   |      |
| FM    | = | FLOW METER                          |   |      |
| FD    | = | FLOOR DRAIN                         |   |      |
| FS    | = | FLOOR SINK                          |   |      |
| CW    | = | COLD WATER                          |   |      |

BID SUBMITTAL

### THREE PHASE MOTOR LOAD AT 460V

POOL CIRCULATION PUMP 15HP = 21 AMPS

#### NOTES:

- ALL PLUMBING ABOVE GRADE SHALL BE SCH. 80 PVC PIPE, UNLESS NOTED OTHERWISE.
- ALL MECHANICAL ROOM FLOORS SHALL BE SLOPED A MIN 1/4" PER FOOT TO A DRAIN. SEE ARCHITECTURAL SHEETS FOR SPOT ELEVATIONS AND SLOPES.
- MECHANICAL PLANS ARE SHOWN SCHEMATIC IN NATURE. CONTRACTOR MAY PLACE EQUIPMENT AND PIPING IN MOST EFFICIENT ROUTE AS LONG AS SYSTEMATIC FLOW AND PIPING IS MAINTAINED AND ALL MANUFACTURER REQUIREMENTS AND CODES ARE MET.



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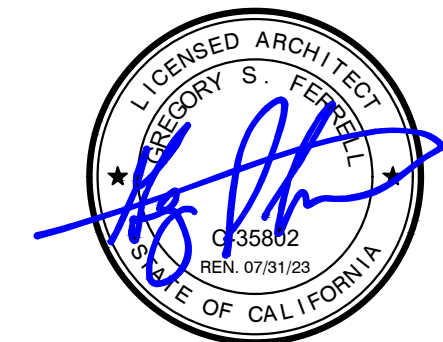
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IMPROVEMENT PLANS

COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

SWIMMING POOL  
MECHANICAL ROOM  
PLAN



APPROVED:

|           |                      |
|-----------|----------------------|
| DESIGNED: | GSF                  |
| DRAWN:    | NMV                  |
| CHECKED:  | GSF                  |
| SCALE:    | AS NOTED             |
| DATE:     | 08/11/2023           |
| JOB NO.:  | 37512                |
| FILE NO.: | CP-MR1 - MR LAYOUT.D |

SHEET NO.

MR-1

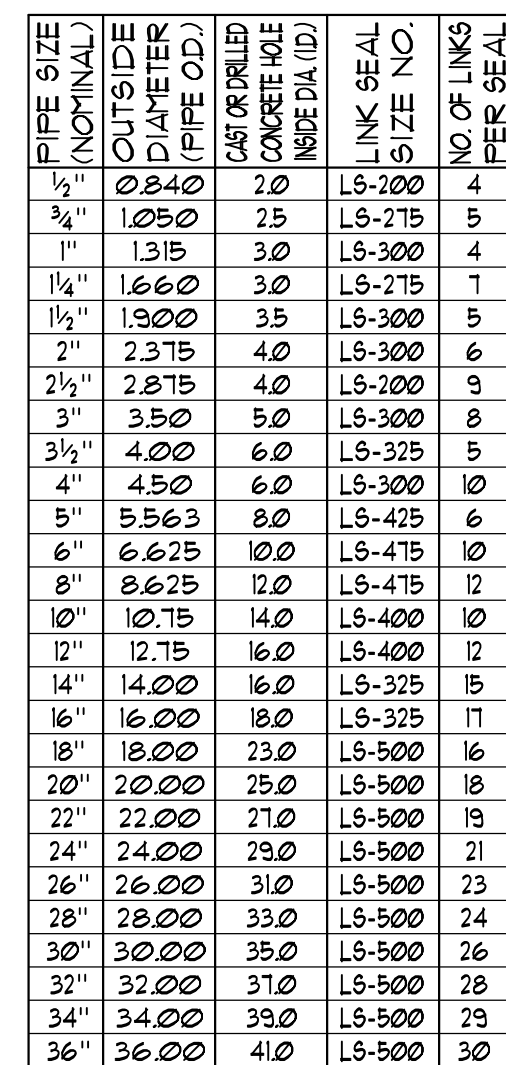
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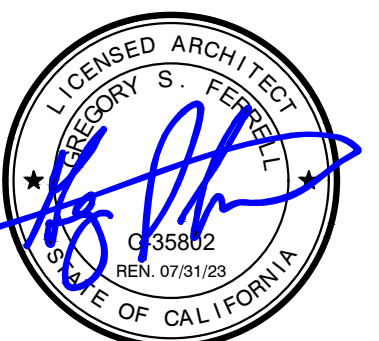


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TURLOCK, CALIFORNIA



## BID SUBMITTAL

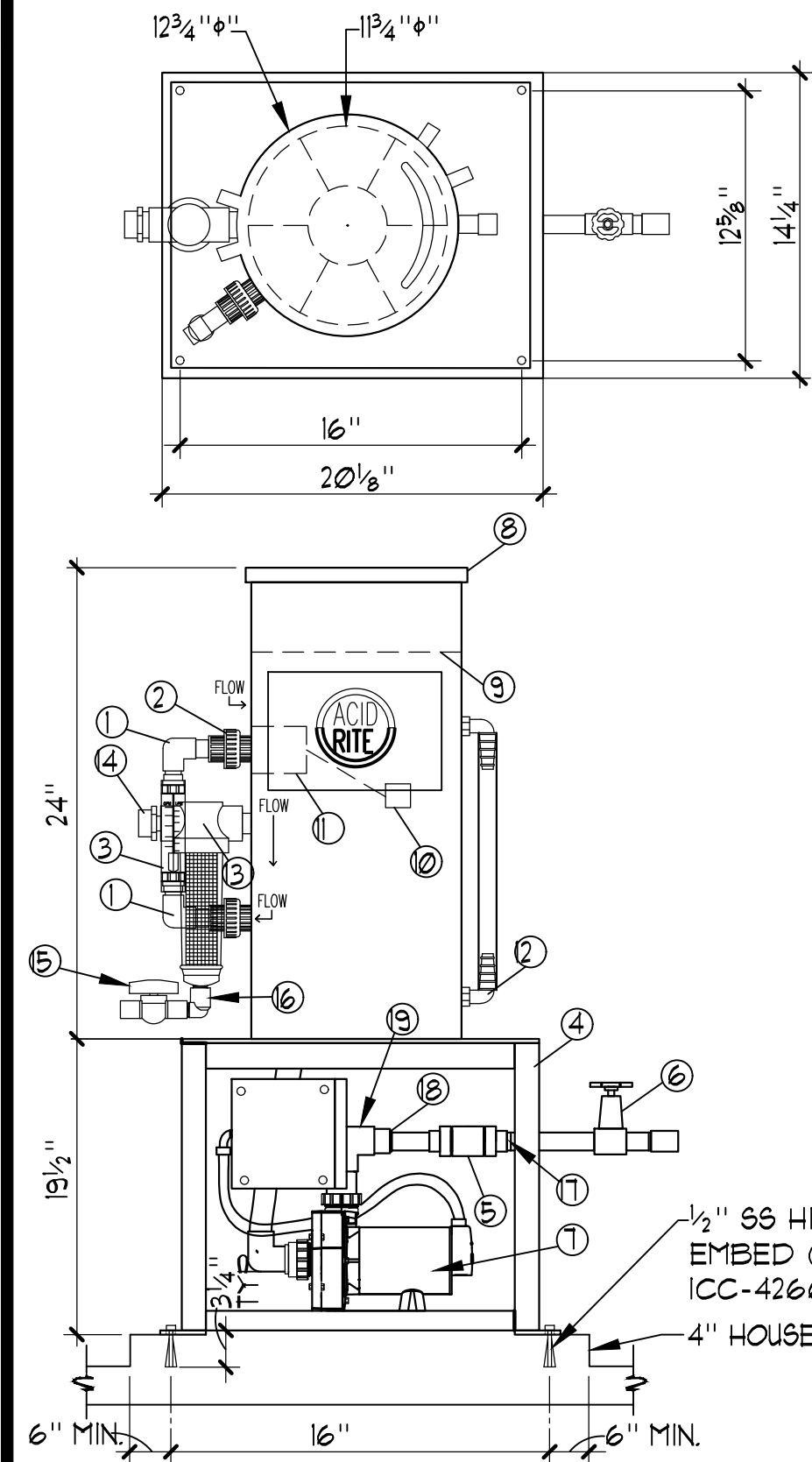


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| FILE NO.: | CP-MR2 - DETAILS.DWG |

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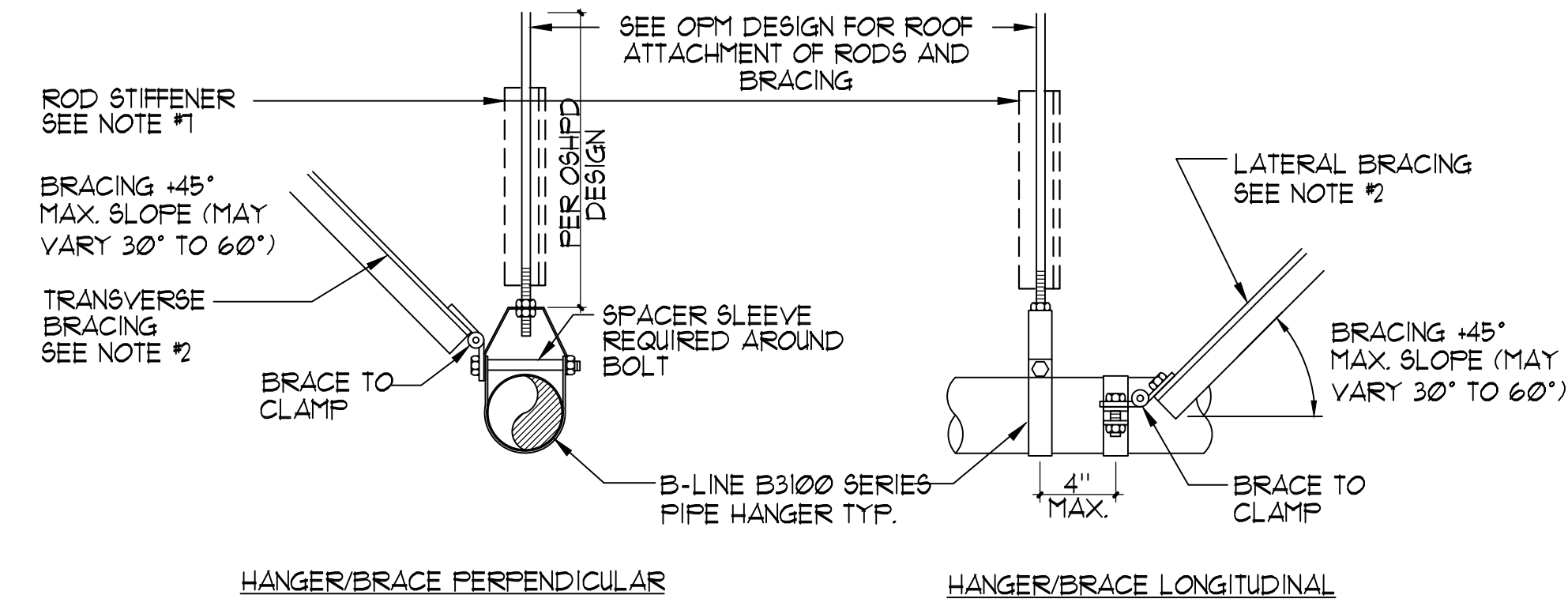


1A:\Drawings\Recreation A-M\Columbia Park - Turlock, CA\CP-MR3 - DETAILS.dwg milligan 10/54/11 08/11/2023



| BILL OF MATERIAL ACID RITE 450 |       |   |
|--------------------------------|-------|---|
| ITEM                           | QUAN. | DESCRIPTION   |
| 1                              | 1     | 1/2" 90 SCH. 40                                       |
| 2                              | 2     | 1/2" T UNION SCH. 40                                  |
| 3                              | 1     | 1/2" BLUE-WHITE F-400 FLOWMETER                       |
| 4                              | AR    | ALUMINUM 1/2" ANGLE                                   |
| 5                              | 1     | 1" SPEARS FLAP CHECK VALVE                            |
| 6                              | 1     | 1/2" GATE VALVE                                       |
| 7                              | 1     | HAYWARD PAPER PUMP                                    |
| 8                              | 1     | RED HDPE LID  |
| 9                              | 1     | 5/8" SIEVE PLATE                                      |
| 10                             | 1     | SQUARE 4x4 FLOAT                                      |
| 11                             | 1     | 3/4" MILLER VALVE                                     |
| 12                             | 2     | 1/2" MALE THREAD x BARB FITTING                       |
| 13                             | 1     | RUSCO STRAINER  |
| 14                             | 1     | 1" SOCKET x 3/4" FPT SCH. 40 REDUCING BUSHING         |
| 15                             | 1     | 1/2" DURA THRD. x THRD. BALL VALVE                    |
| 16                             | 1     | 1/2" MPT x 1/2" SOCKET STREET ELBOW                   |
| 17                             | 2     | SPEARS SCH. 40 PVC 1" x 1/2" REDUCING BUSHING         |
| 18                             | 2     | SPEARS SCH. 40 PVC 1/2" x 1" REDUCING BUSHING         |
| 19                             | 1     | SPEARS SCH. 40 PVC 1/2" SLIP x MALE SLIP STREET ELBOW |

NOTE:  
PROVIDE BONDING  
PER CODE.



#### HANGER ROD SIZES/TABLE

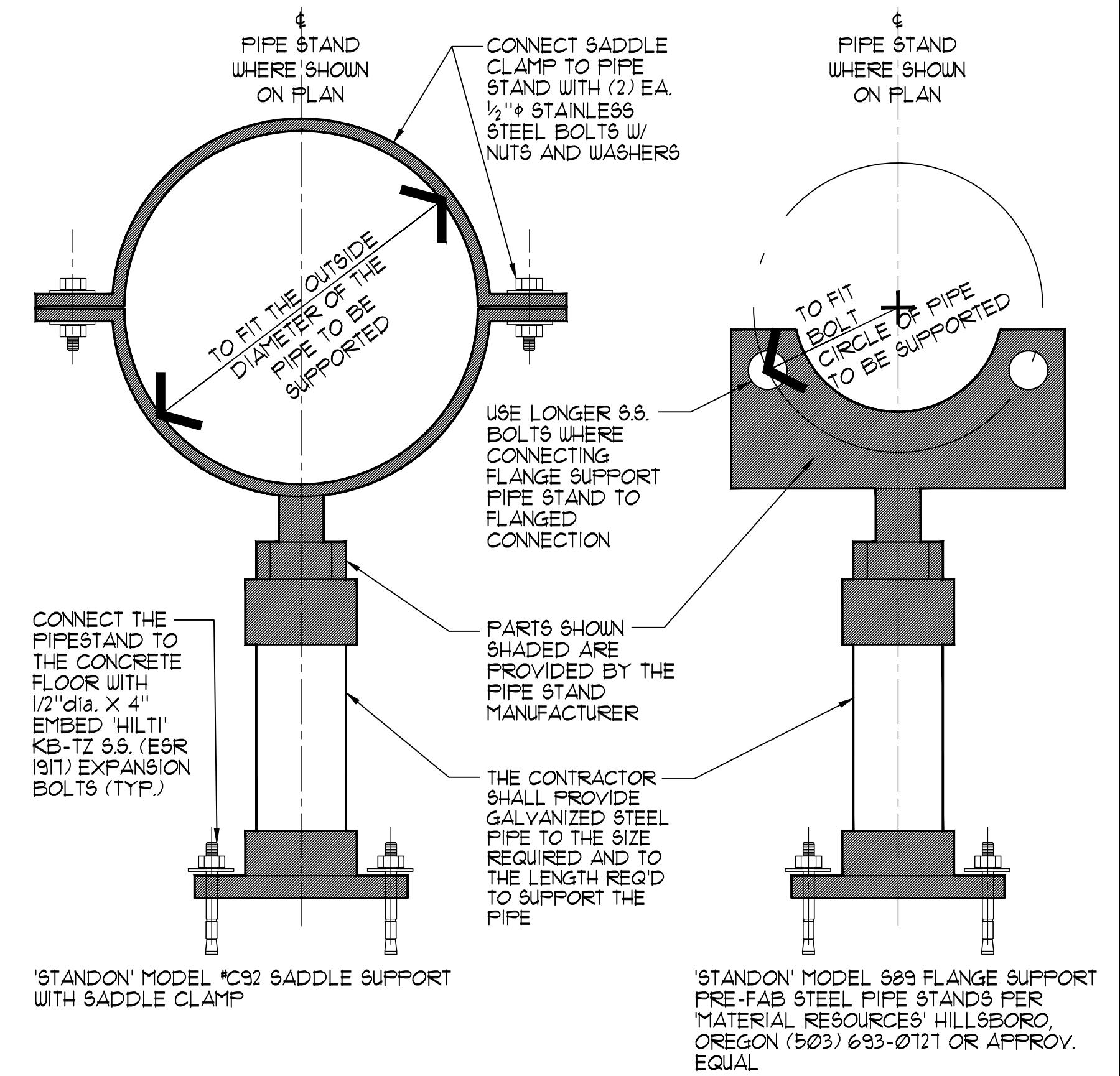
3/8" x 3" PIPING MAX. ROD LENGTH = 158" MAX PER OFM PG. C122  
3/8" x 4" PIPING MAX. ROD LENGTH = 158" MAX PER OFM PG. C134  
3/4" x 6" PIPING MAX. ROD LENGTH = 158" MAX PER OFM PG. C144  
3/4" x 8" PIPING MAX. ROD LENGTH = 158" MAX PER OFM PG. C144  
3/4" x 12" PIPING MAX. ROD LENGTH = 158" MAX PER OFM PG. C144

#### MAX. PIPE HANGER SPACING

4" PIPING OR SMALLER = 6'-0" O.C.  
6" PIPING = 6'-0" O.C.  
8" PIPING = 6'-0" O.C.  
10" PIPING = 6'-0" O.C.

#### NOTES:

- REFER TO 06HPD (OFM #0043-13) FOR PIPE HANGER HARDWARE & INSTALLATION. INSTALLATION SHALL SATISFY ANCHORAGE REQUIREMENTS OF ACI 308 CHAPTER 17.
  - PROVIDE BRACING FOR EACH PIPE HANGER IN TWO DIRECTIONS AT THE FOLLOWING CONDITIONS:
    - AT EACH CHANGE IN PIPE RUN DIRECTION
    - MID LENGTH OF PIPE RUN
    - SPACING NOT TO EXCEED 12'-0" O.C.1 5/8" x 1 5/8" x 12GA SINGLE STRUT (5'-0" LENGTH MAX)  
1 5/8" x 1 5/8" x 12GA DOUBLE STRUT (14'-6" LENGTH MAX)
  - ALL HARDWARE SHALL BE STAINLESS STEEL OR GALVANIZED SEE SPECIFICATION FOR ADDITIONAL INFORMATION.
  - REFER TO STRUCTURAL PLANS FOR TYPICAL DIAGONAL BRACE ATTACHMENT.
  - FOR COPPER TUBING USE COPPER PLATED OR PAINTED B3104CT, FELT LINED B3100F, OR PLASTIC COATED B3100C.
  - REFER TO MRI FOR PIPE HANGER LOCATIONS.
1. PROVIDE ROD STIFFENER WHEN TRANSVERSE OR LONGITUDINAL BRACING IS USED AND ROD LENGTHS EXCEEDS 31", SEE OFM DESIGN



### 1 ACID TABLET FEEDER

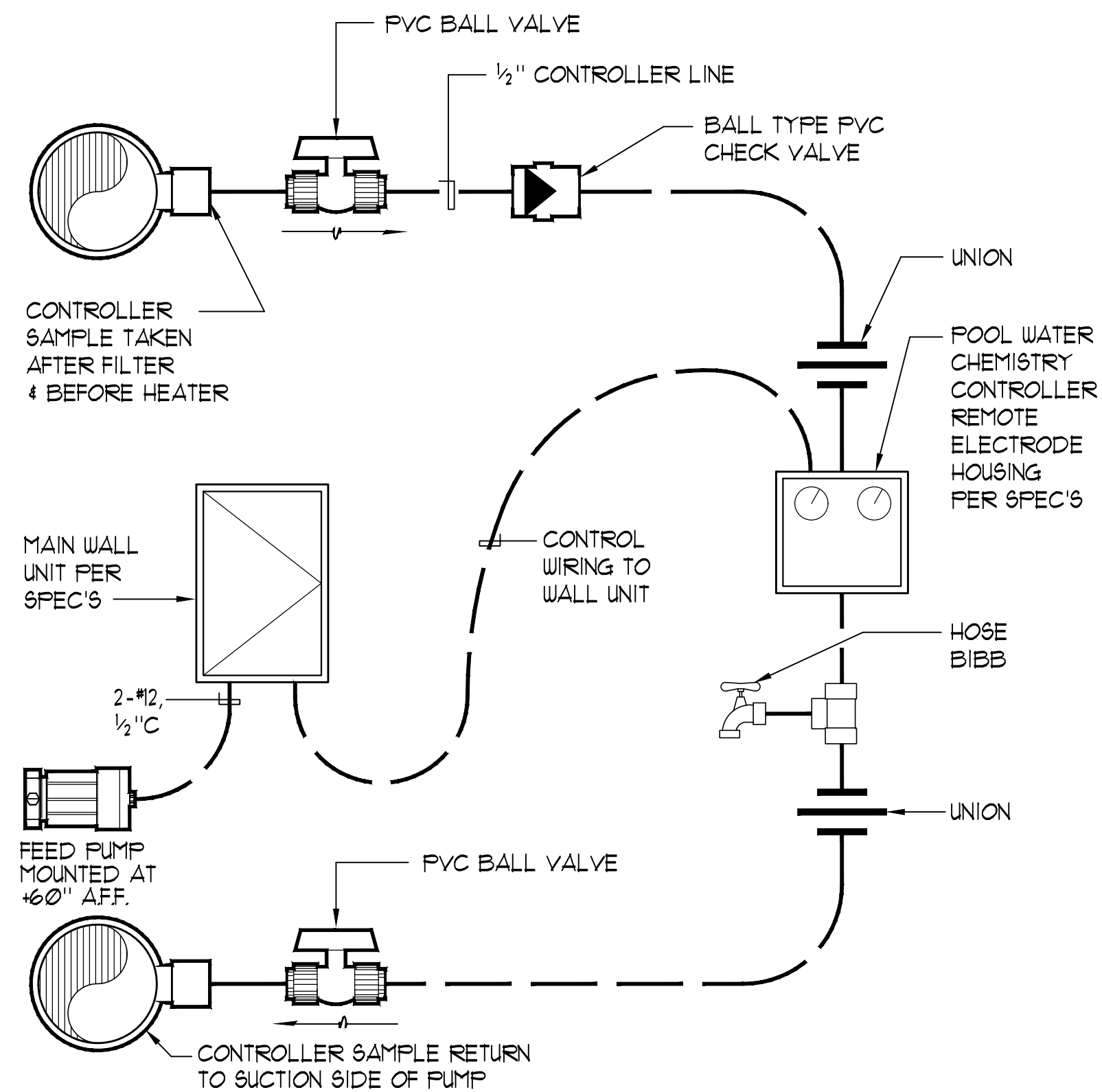
NO SCALE

### 2 'UNISTRUT' PIPING HANGER / SUPPORT DETAILS

NO SCALE

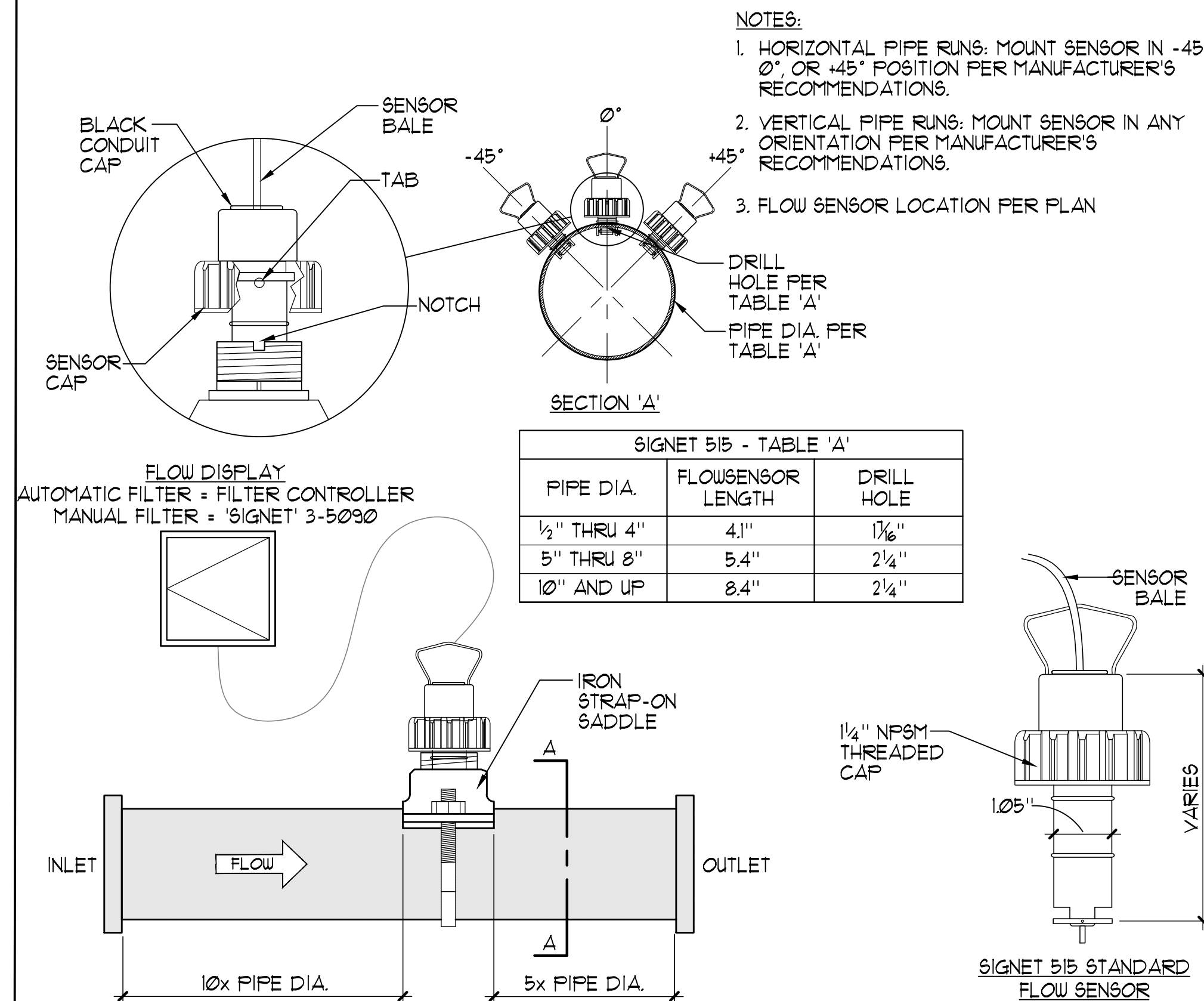
### 3 PIPE FLOOR STAND SUPPORT

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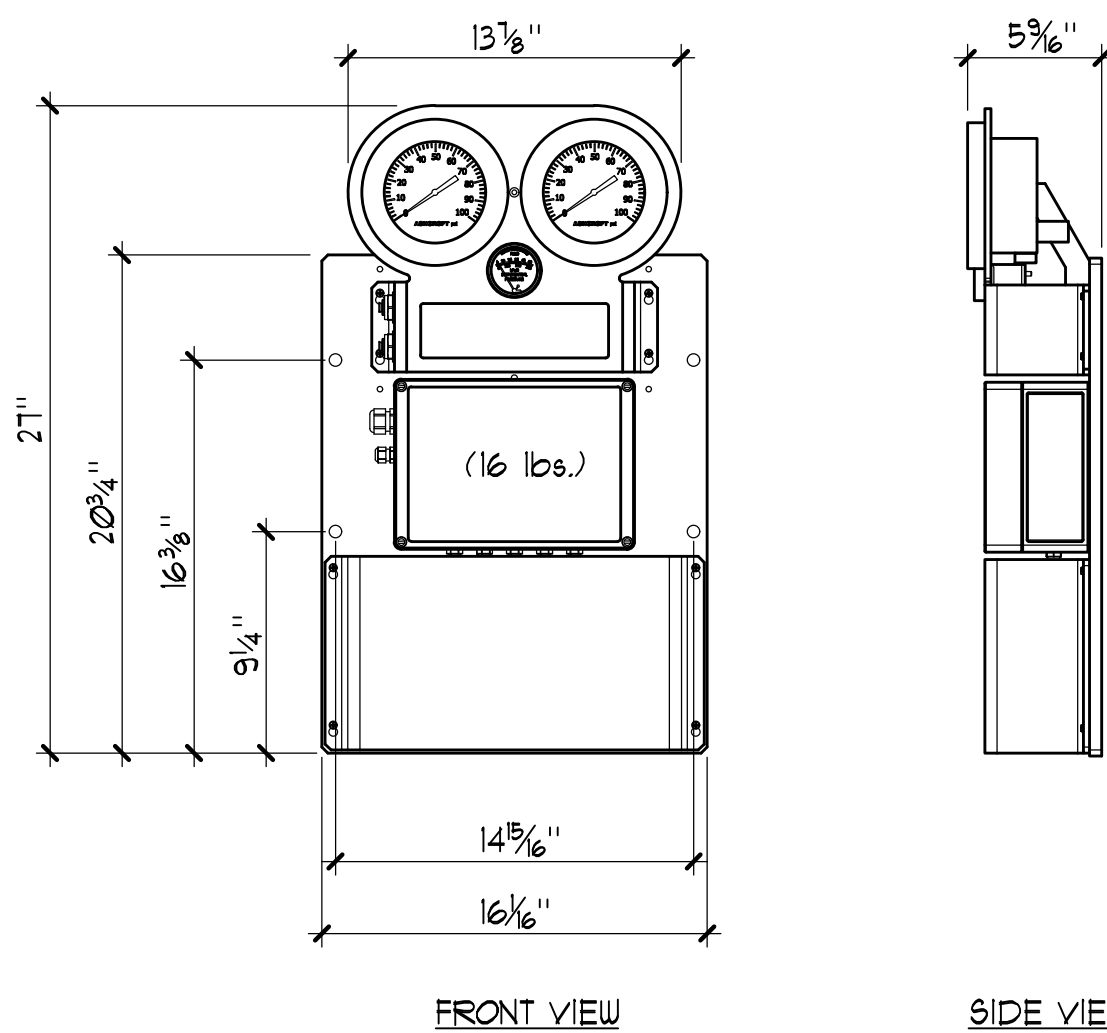
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### 4 WATER CHEMISTRY CONTROLLER SCHEMATIC



NO SCALE

### 5 SIGNET FLOWMETER



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### 6 BECSYS FILTER INTERFACE SYSTEM

1/2" = 1'-0"

| PLAN REVISIONS |      |          |
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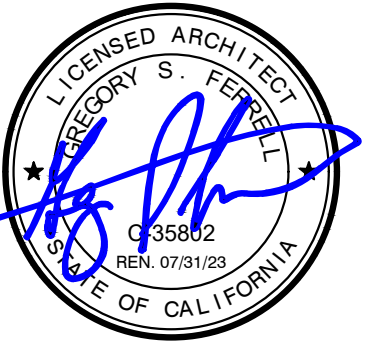
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## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

### DETAILS



APPROVED:

**AQUATIC**  
DESIGN GROUP  
2226 Faraday Ave., Carlsbad, CA 92008  
AquaticDesignGroup.com  
760.436.8400

**811**  
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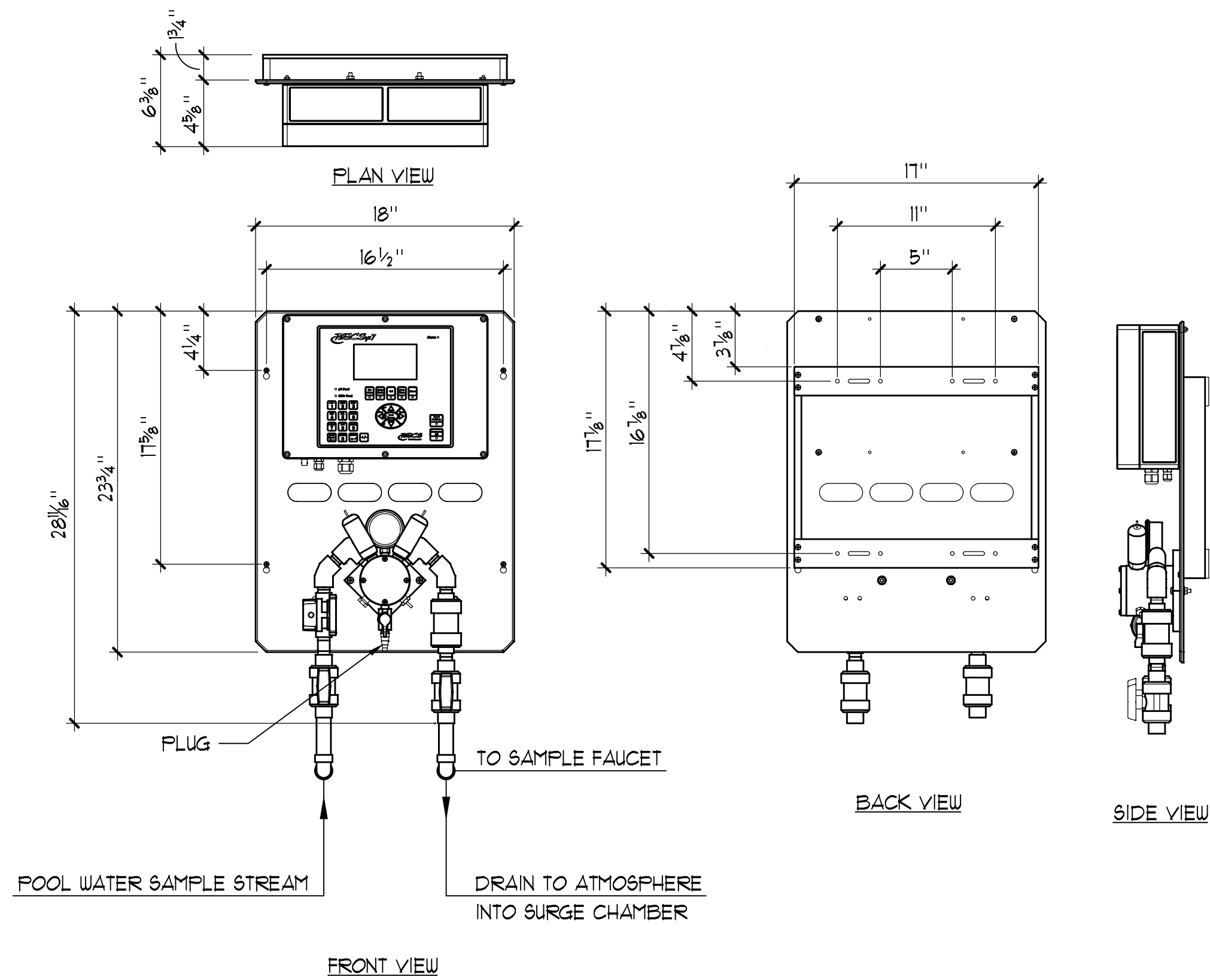
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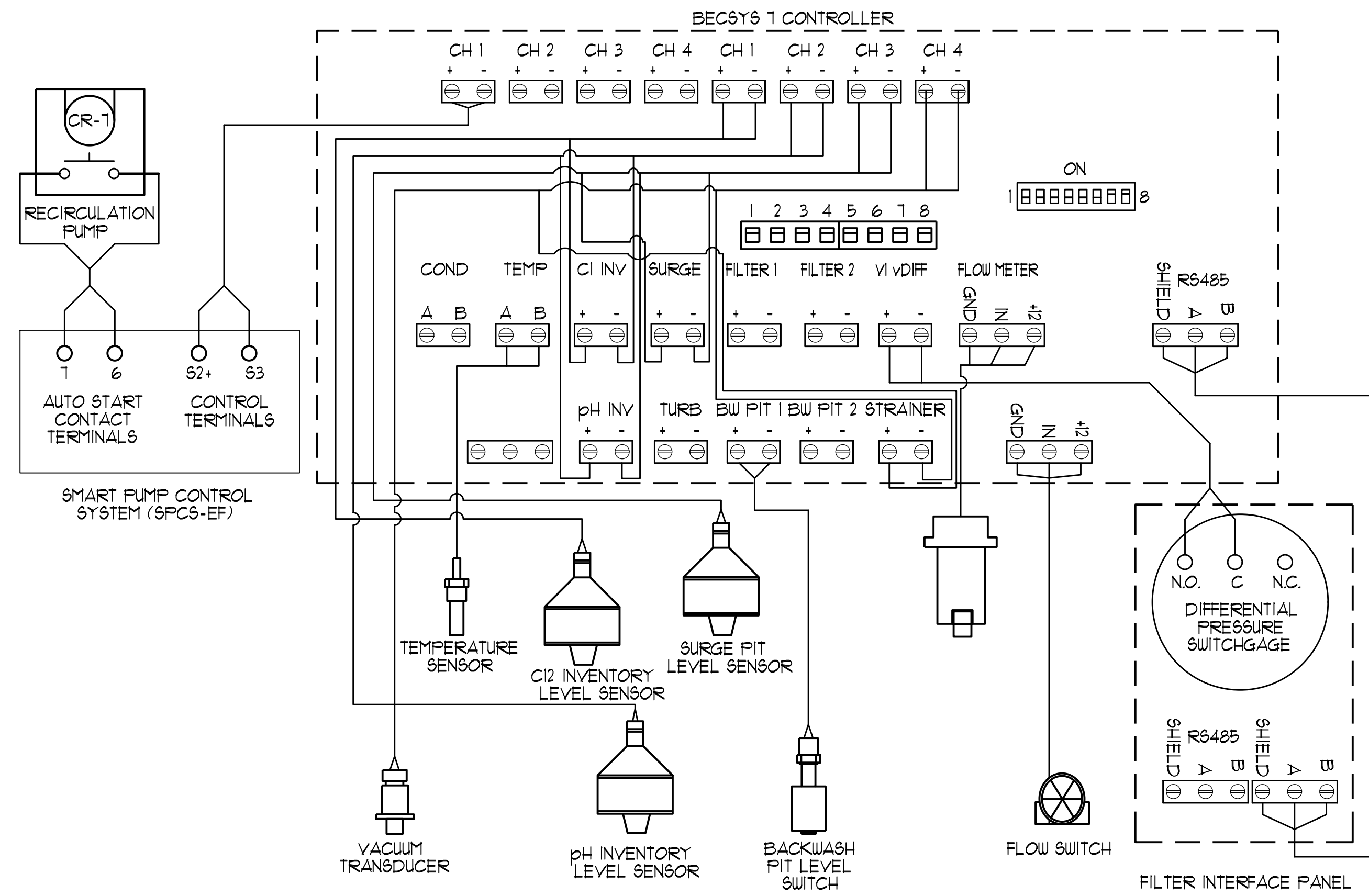
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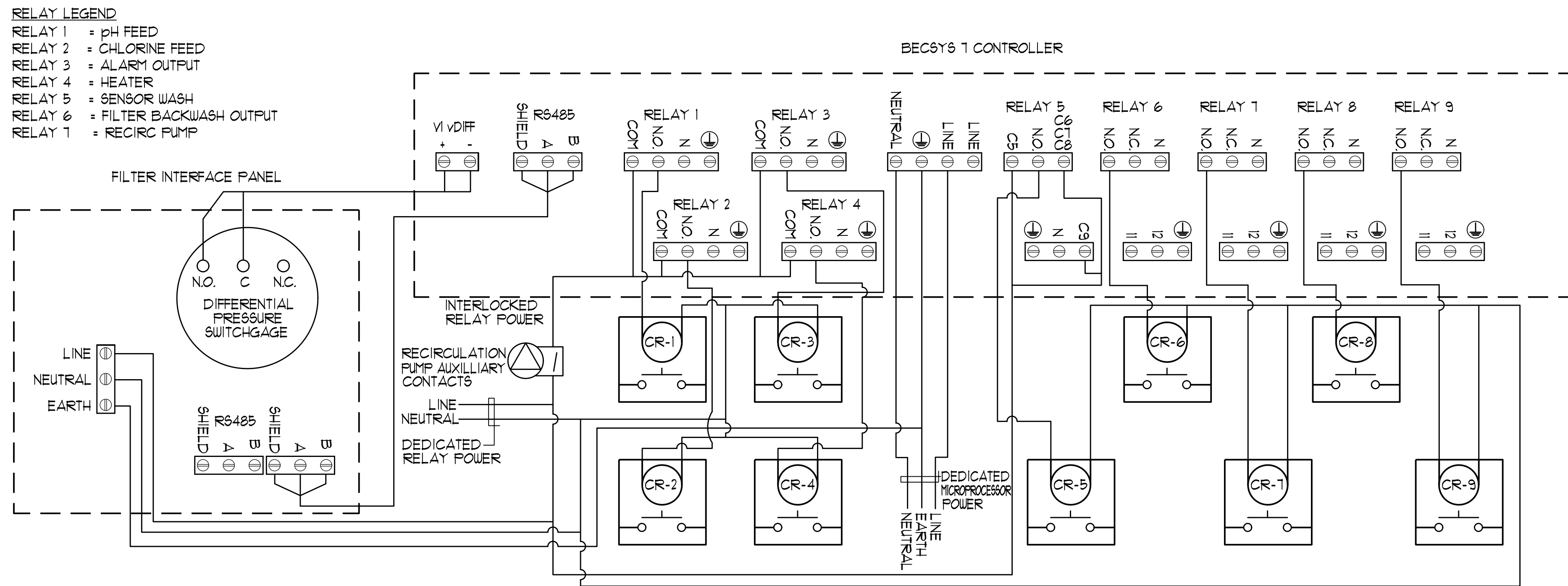




1 WATER CHEMISTRY CONTROLLER NO SCALE



2 WATER CHEMISTRY CONTROLLER RELAY INPUTS NO SCALE



3 WATER CHEMISTRY CONTROLLER RELAY OUTPUTS NO SCALE

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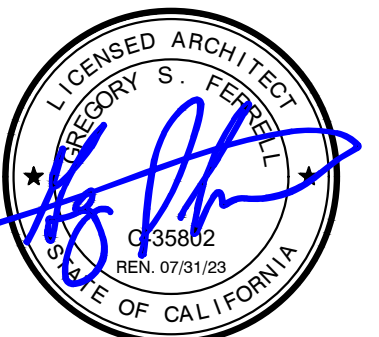
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# IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



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**AQUATIC**  
DESIGN GROUP  
2226 Faraday Ave., Carlsbad, CA 92008  
AquaticDesignGroup.com  
760.438.8400



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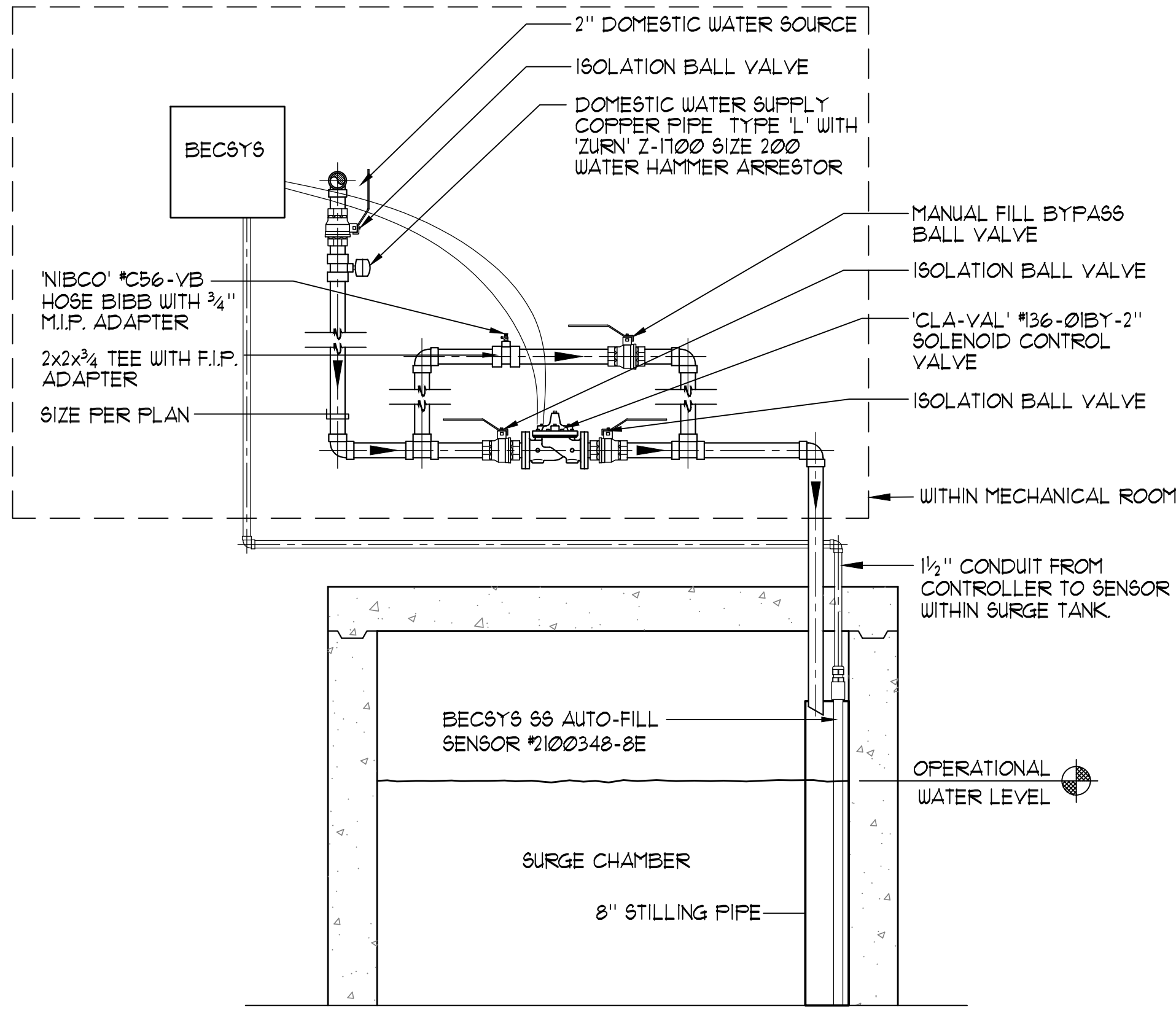
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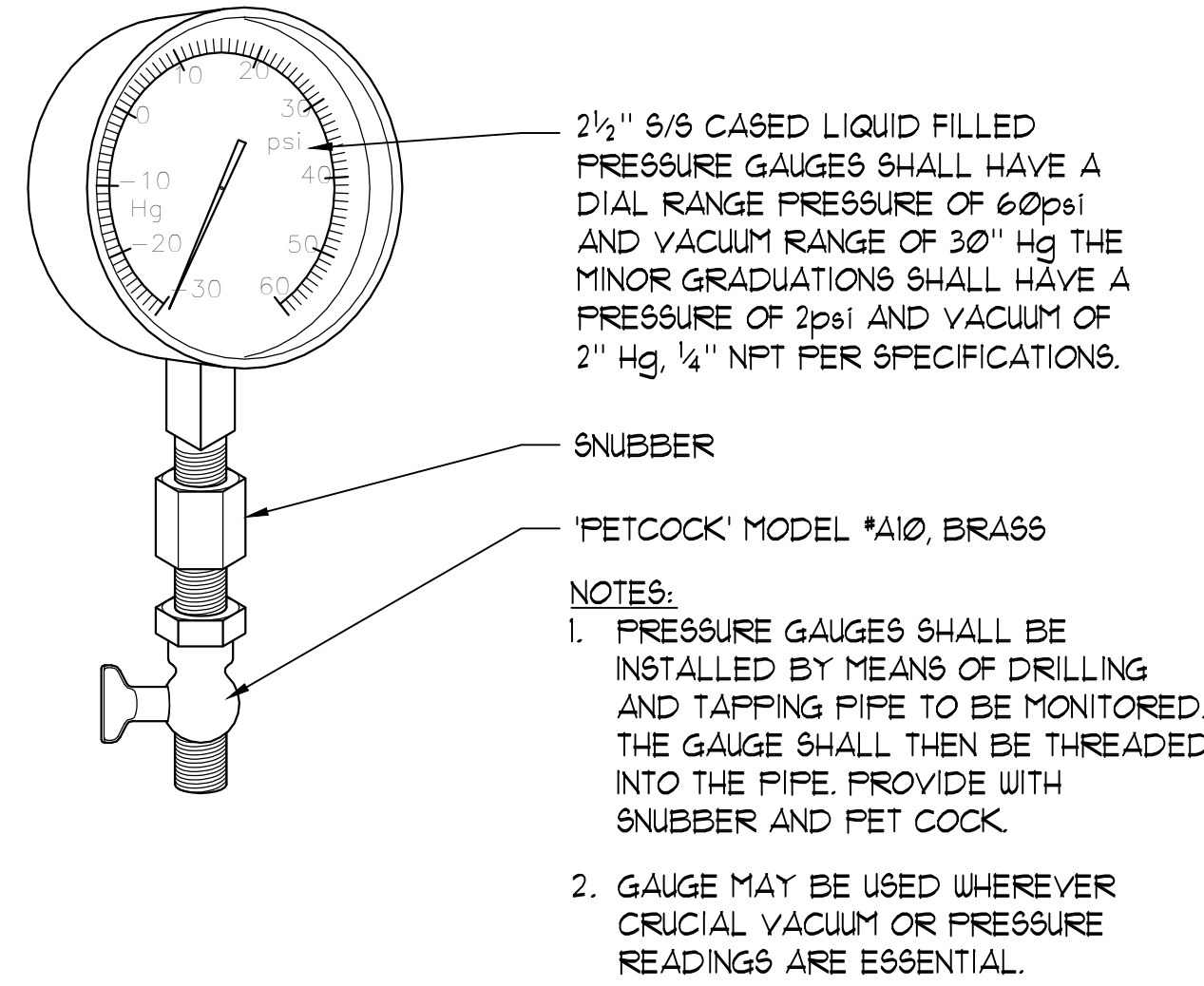
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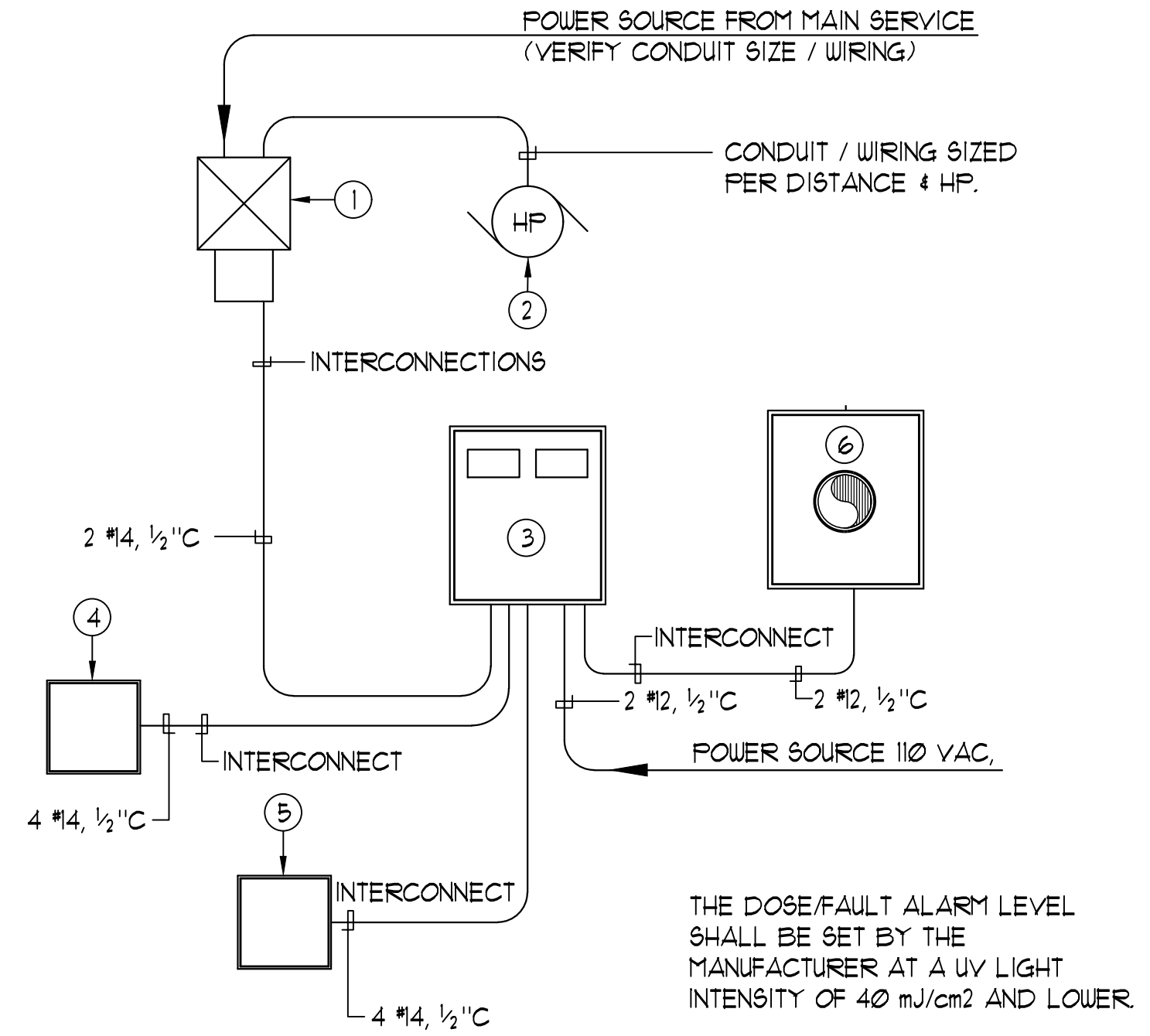


#### LEGEND

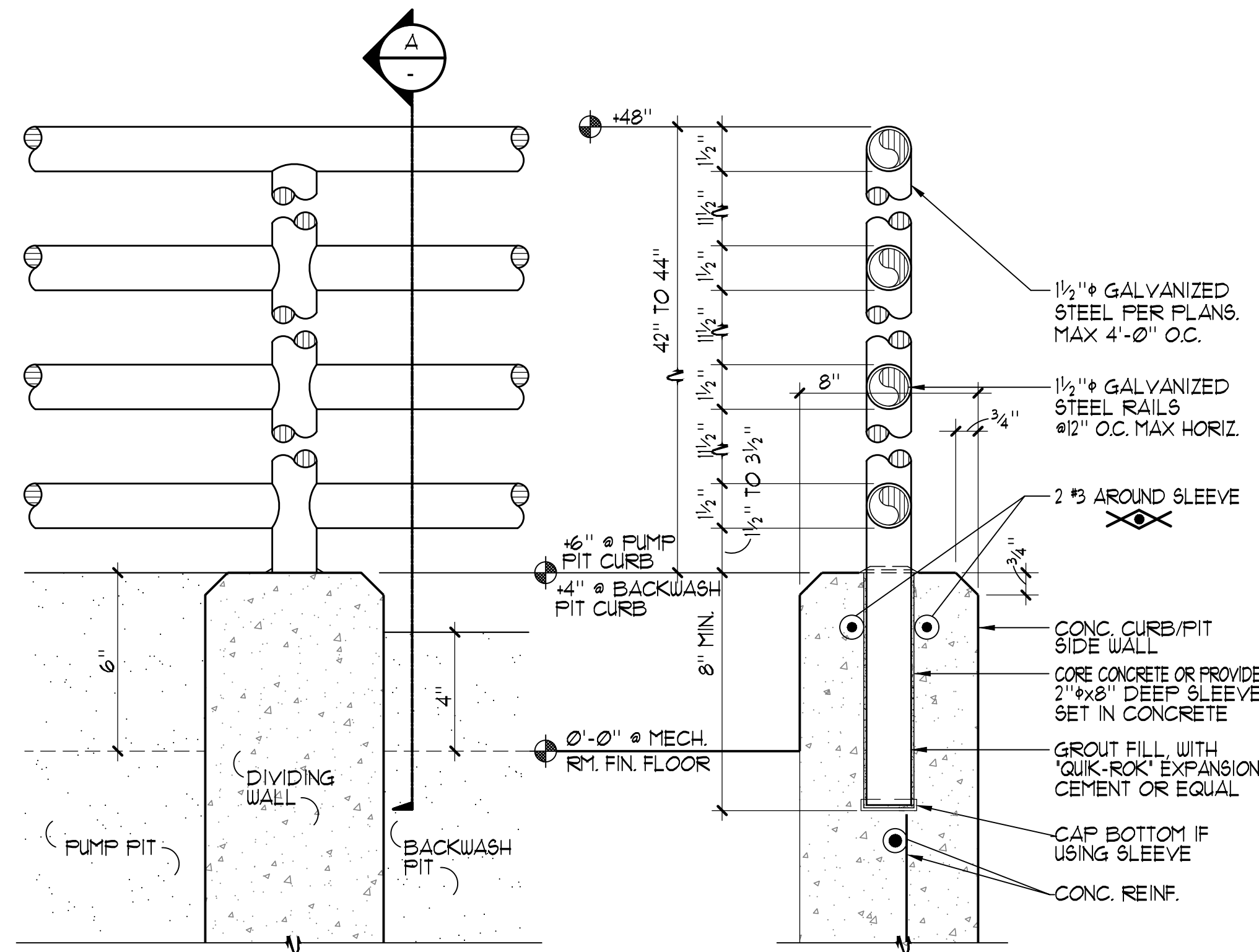
- 1 COMBINATION MAG. STARTER
- 2 CIRCULATION PUMP
- 3 WATER CHEMISTRY CONTROLLER
- 4 CHLORINE FEED SYSTEM
- 5 ACID FEED SYSTEM
- 6 HEATER "FIREMAIN SWITCH"

#### NOTES:

1. INSTALL 1 #12 GROUND CONDUCTOR IN ALL CONDUITS
2. ALL CONDUITS SHALL BE RIGID OR INTERMEDIATE GALVANIZED METAL.
3. REFER TO FILTER 'OWNER'S MANUAL' FOR INSTALLATION/ OPERATING INSTRUCTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR A FULLY OPERATIONAL SYSTEM.
4. ALL WORK SHALL BE IN ACCORDANCE WITH 2010 C.E.C. FURNISH ALL LABOR, MATERIALS AND COORDINATION OF WORK HERE ON SHOWN/IMPLIED.
5. THE UV LIGHT DISINFECTION SYSTEM MUST BE EQUIPPED WITH AN AUTOMATIC SHUTDOWN SYSTEM THAT INACTIVATES THE WATER FEATURE PUMP IF THE UV DOSAGE RATE DROPS BELOW 40 mJ/cm<sup>2</sup>.
6. AUTOMATIC DISINFECTANT FEEDERS AND FILTRATION PUMP SHALL BE INTERLOCKED SO THAT WHEN FILTRATION PUMP SHUTS OFF THE WHOLE SYSTEM SHUTS DOWN.



NO SCALE



ELEVATION AT PIT DIVIDING WALL

A GUARD RAIL SECTION

|                      |  |        |      |      |  |        |                           |  |
|----------------------|--|--------|------|------|--|--------|---------------------------|--|
| DESIGNATION:         | VOLTAGE: 120/208V 3PH 4W   |        |      |      | LOCATION: MECHANICAL EQUIP. RM.            |        |                           |  |
| 'SP'                 | 100 AMP <input checked="" type="checkbox"/> MAIN BREAKER <input type="checkbox"/> MAIN LUG |        |      |      | MINIMUM DEVICE 10,000 PANELBOARD KEY NOTES |        |                           |  |
|                      | <input type="checkbox"/> RECESSED <input checked="" type="checkbox"/> SURFACE              |        |      |      | A.I.C. RATING 14,000 ① ○ ○ ○               |        |                           |  |
| DESCRIPTION:         |  | C/B NO | φ A  | φ B  | φ C  | C/B NO | DESCRIPTION:              |  |
| SP UNDERWATER LIGHTS |  | ① 20 1 | 596  |      |  | 2 20 1 | SP FILTER AFC             |  |
| ↓                    |  | 3      | 1200 | 609  |  | 4      | SP FILTER PRESS. AMP      |  |
| SP CHLORINE FEED     |  | 20 5   |      | 1200 |  | 6      | SP WATER CHEM. CONTROLLER |  |
| ↓                    |  | 7      | 1056 |      | 1056                                       | 8      | SP WATER CHEM. RELAY      |  |
| SP ACID FEED         |  | 20 9   | 360  | 912  |  | 10     | SP CIRC. PUMP MTR. CONROL |  |
| ↓                    |  | 11     |      | 360  | 912  | 12     | SP CIRC. PUMP INTERCONN.  |  |
| SPARES               |  | ① 20 1 | 720  |      | 720  | 14     | SP HEATER                 |  |
| ↓                    |  | 13     | 2040 |      | 720  | 16     | SP HEATER                 |  |
| SPACE                |  | 15     |      | 2040 | 720  | 18     | SP FILTER PRIORITY VALVE  |  |
|                      |  | 17     |      |      | 720  | 20     | SPACE                     |  |
|                      |  | 19     |      |      |  | 22     | ↓                         |  |
|                      |  | 21     |      |      |  | 24     |                           |  |
|                      |  | 23     |      |      |  | 26     |                           |  |
|                      |  | 25     |      |      |  | 28     |                           |  |
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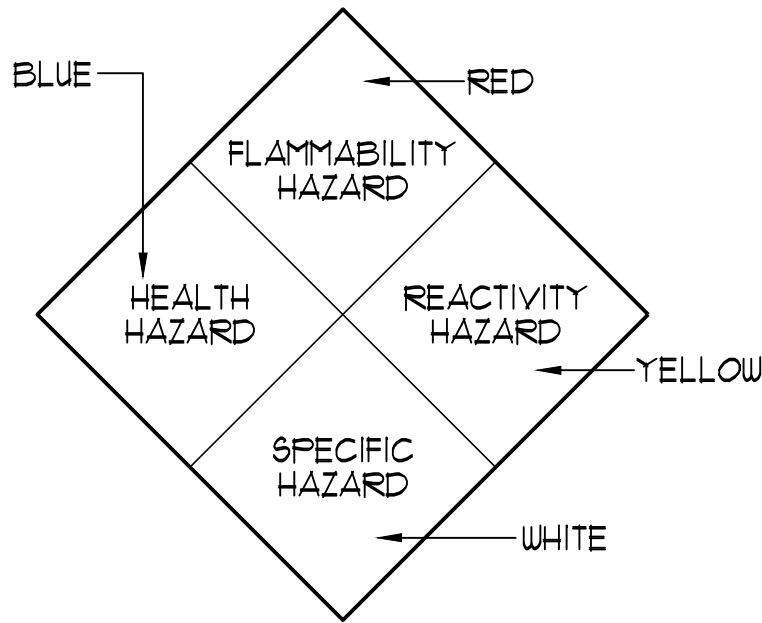


| CHEMICAL CLASSIFICATION TABLE |                      |         |           |        |                          |                            |                            |                          |                  |               |
|-------------------------------|----------------------|---------|-----------|--------|--------------------------|----------------------------|----------------------------|--------------------------|------------------|---------------|
| COMMON NAME                   | CHEMICAL NAME        | % COMP. | CAS #     | FORM   | QUANT. STORED (NOT USED) | QUANT. IN USE (USE-CLOSED) | MAXIMUM ALLOWABLE QUANTITY | LOCATION (STORAGE & USE) | HAZ CLASSES      | JUSTIFICATION |
| CALCIUM HYPOCHLORITE          | CALCIUM HYPOCHLORITE | 65%     | 7778-54-3 | TABLET | 45 lbs.                  | 70 lbs.                    | 200 lbs.                   | MECH. ROOM               | CLASS 3 OXIDIZER | MSDS          |
| SODIUM BISULFATE              | SODIUM BISULFATE     | 93%     | 7681-38-1 | TABLET | 45 lbs.                  | 45 lbs.                    | NO LIMIT                   | MECH. ROOM               | IRRITANT         | MSDS          |

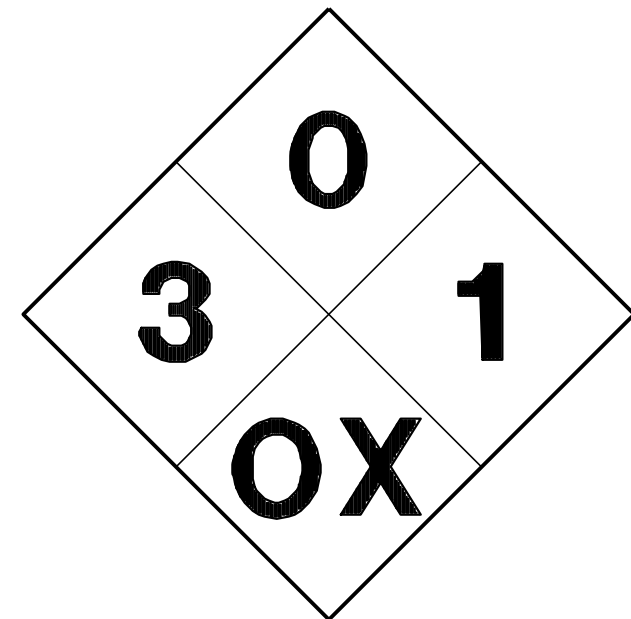
QUANTITIES OF CHEMICALS DO NOT EXCEED THE QUANTITIES LISTED IN IBC TABLES 307.1 (1) AND 307.1 (2).

| RATING EXPLANATION GUIDE |   |  |   |                    |      |
|--------------------------|---|--|---|--------------------|------|
| RATING                   | HEALTH HAZARD   | FLAMMABILITY HAZARD                          | REACTIVITY HAZARD   | SPECIFIC HAZARD    |      |
| 4                        | CAN BE LETHAL   | EXTREMELY FLAMMABLE: IGNITES AT BELOW 73° F. | MAY EXPLODE AT NORMAL TEMPERATURES AND PRESSURES          | OXIDIZER:          | OX   |
| 3                        | CAN CAUSE SERIOUS OR PERMANENT INJURY                 | IGNITES AT ABOVE 73° F. BELOW 100° F.        | MAY EXPLODE AT HIGH TEMPERATURES OR SHOCK                 | ACID:              | ACID |
| 2                        | CAN CAUSE TEMPORARY INCAPACITATION OR RESIDUAL INJURY | IGNITES AT ABOVE 100° F. BELOW 200° F.       | VIOLENT CHEMICAL CHANGE AT HIGH TEMPERATURES OR PRESSURES | CORROSIVE:         | COR  |
| 1                        | CAN CAUSE SIGNIFICANT IRRITATION                      | IGNITES AT ABOVE 200° F.                     | NORMALLY STABLE. HIGH TEMPERATURES MAKE UNSTABLE          | ALKALI:            | ALK  |
| 0                        | NO HAZARD   | WILL NOT BURN                                | STABLE  | USE NO WATER:      | W    |
|                          |   |  |   | RADIATION HAZARDS: | ☸    |
|                          |   |  |   | POLYMERIZES:       | P    |

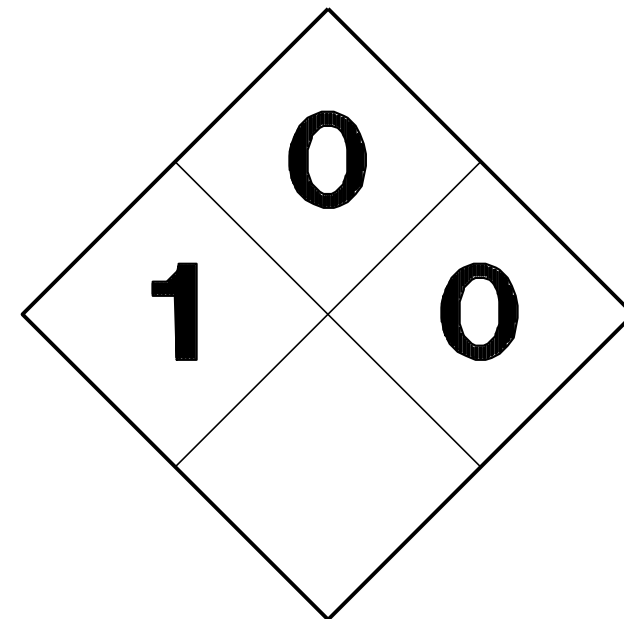
- NOTES:
- CONFIRM SIGNAGE WITH LOCAL FIRE MARSHALL AND/OR BUILDING CODES PRIOR TO INSTALLATION. SIGNS SHALL CONFORM TO NFPA 704.
  - SIGNS SHALL BE SIZES AND COLORS PER CODE MOUNTED AT 460" AFF. ON DOORS AT CHEMICAL ROOMS.



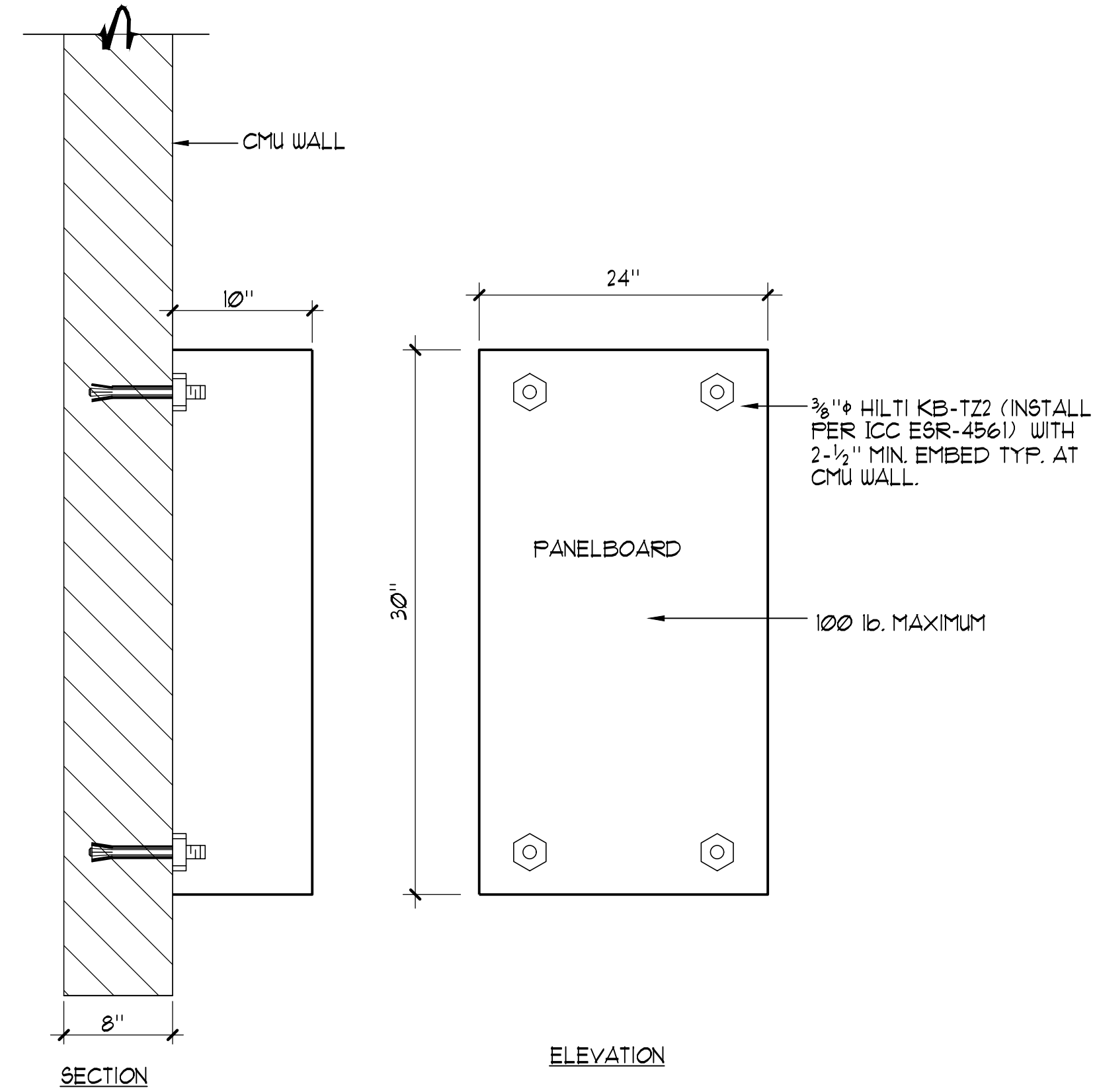
LEGEND



CALCIUM HYPOCHLORITE



SODIUM BISULFATE



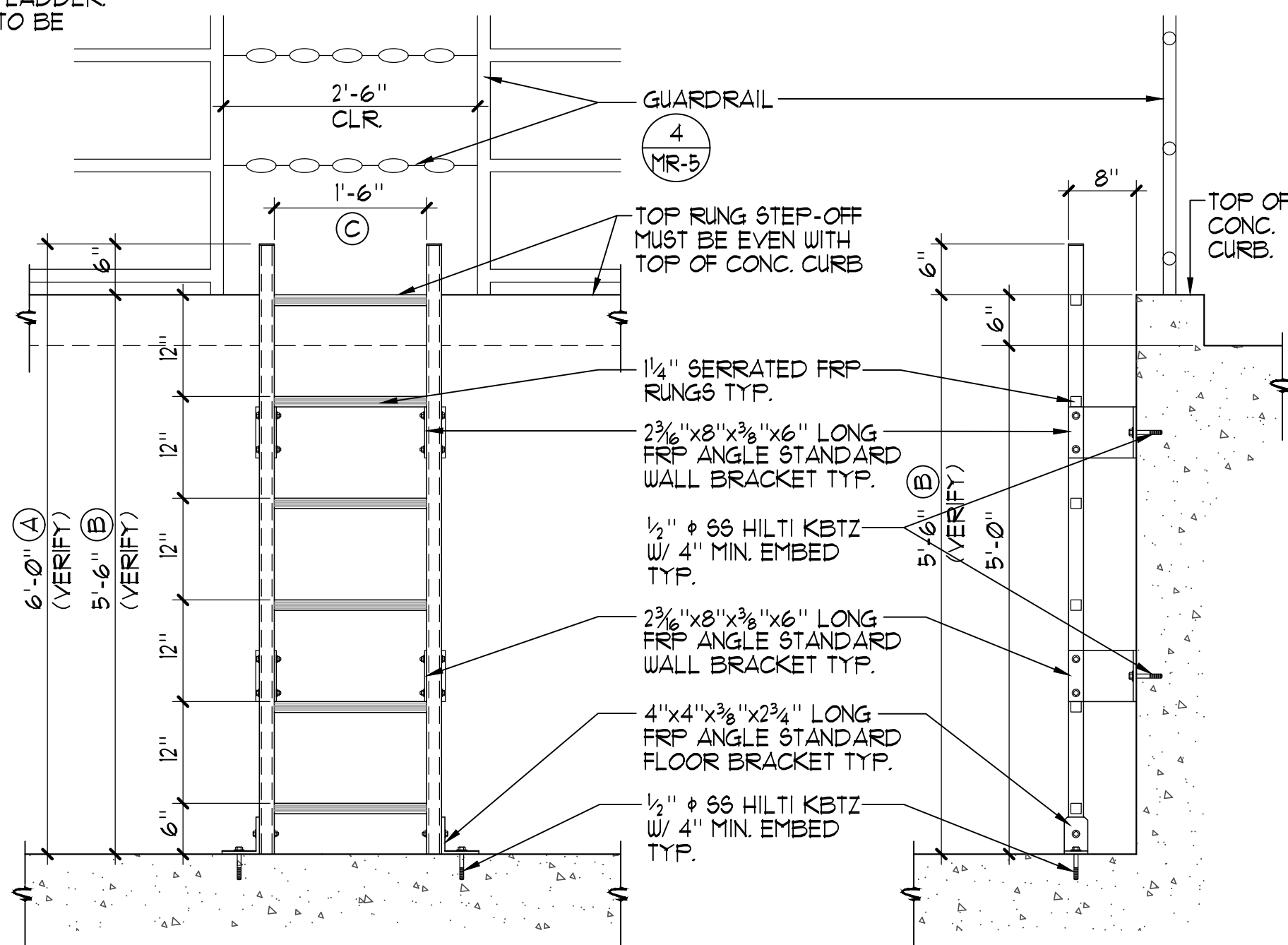
## 1 HAZARDOUS INFORMATION SIGNAGE

NO SCALE

CONTRACTOR TO VERIFY:

- (A) OVERALL LADDER HEIGHT
- (B) FF. TO TOP OF PARAPET
- (C) LADDER WIDTH

'FIBERGRATE' DYNARAIL FRP ACCESS LADDER. COLOR TO BE GRAY.



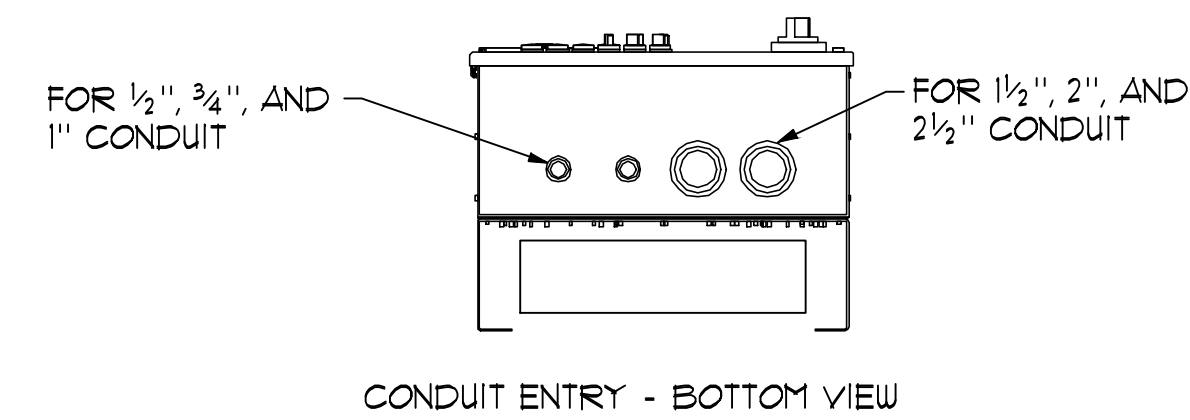
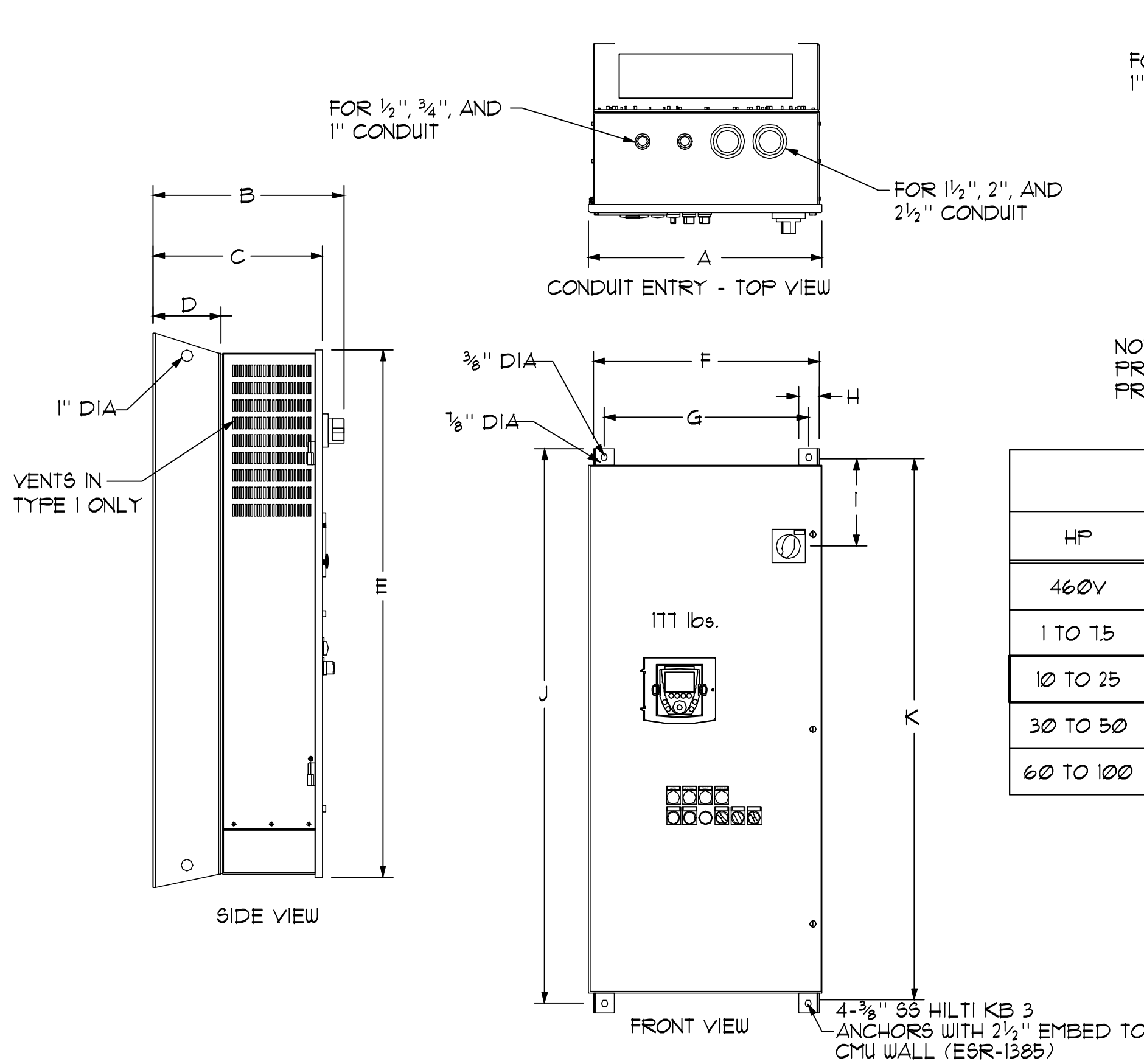
1 FRONT ELEVATION

2 SIDE ELEVATION

## 3 PUMP PIT ACCESS LADDER 3/4" = 1'-0"

## 2 PANELBOARD MOUNTING DETAIL

NO SCALE



NOTE:  
PROVIDE AT LEAST 3" OF MOUNTING CLEARANCE ON EACH SIDE OF THE DRIVE CONTROLLER.  
PROVIDE AT LEAST 6" OF MOUNTING CLEARANCE ON EACH TOP AND BOTTOM OF THE DRIVE CONTROLLER

| 'SPCS' EKO-FLEX SIZING TABLE |           |        |            |        |        |       |        |        |        |       |        |        |        |
|------------------------------|-----------|--------|------------|--------|--------|-------|--------|--------|--------|-------|--------|--------|--------|
| HP                           | HP        | WEIGHT | DIMENSIONS |        |        |       |        |        |        |       |        |        |        |
|                              |           | LBs    | A          | B      | C      | D     | E      | F      | G      | H     | I      | J      | K      |
| 460V                         | 208/230V  |        |            |        |        |       |        |        |        |       |        |        |        |
| 1 TO 7.5                     | 1 TO 5    | 83     | 14.76"     | 13.93" | 12.08" | 3.01" | 37.38" | 14.25" | 12.30" | 1.86" | 6.11"  | 35.00" | 33.75" |
| 10 TO 25                     | 7.5 TO 10 | 126    | 20.00"     | 13.93" | 12.08" | 3.01" | 38.38" | 19.49" | 17.54" | 1.86" | 7.65"  | 41.00" | 39.75" |
| 30 TO 50                     | 15 TO 25  | 171    | 20.65"     | 16.83" | 14.83" | 6.00" | 46.64" | 20.00" | 18.04" | 1.86" | 7.75"  | 49.02" | 47.83" |
| 60 TO 100                    | 30 TO 50  | 211    | 25.65"     | 16.83" | 14.98" | 6.00" | 60.38" | 25.00" | 23.04" | 1.86" | 15.52" | 63.00" | 61.81" |

## 4 'SPCS' EKO-FLEX ENCLOSURE DIMENSIONS

NO SCALE

BID SUBMITTAL



| PLAN REVISIONS |      |          |
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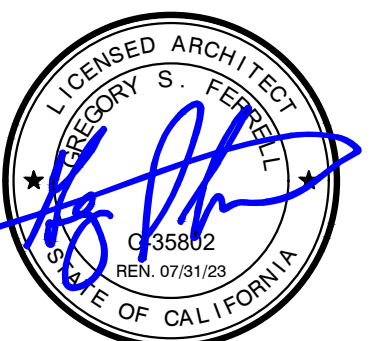
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Modesto, CA 95350

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# IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

## DETAILS



APPROVED:

DESIGNED: GSF  
DRAWN: NMV  
CHECKED: GSF  
SCALE: AS NOTED  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: CP-MR6 - DETAILS.DWG

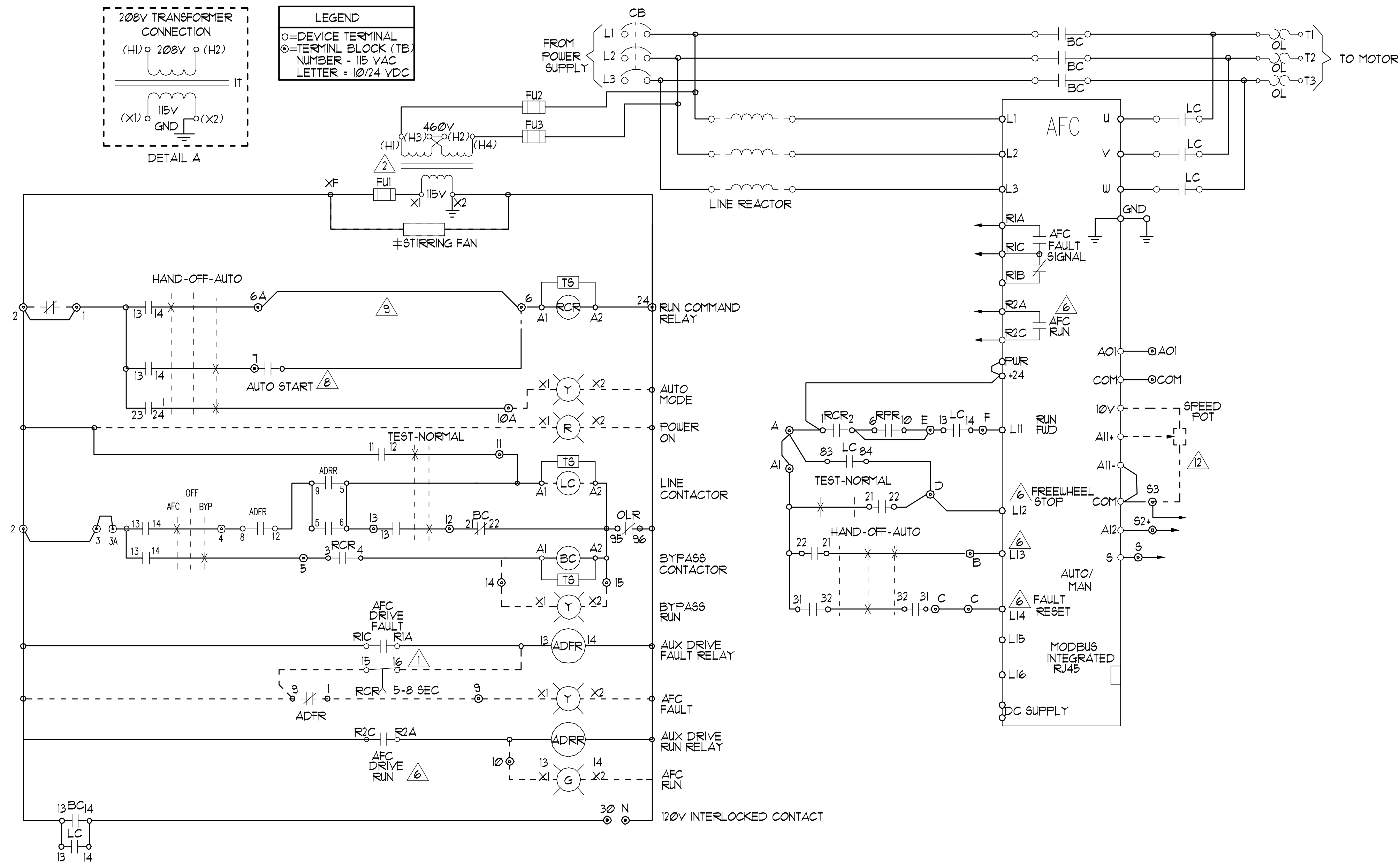
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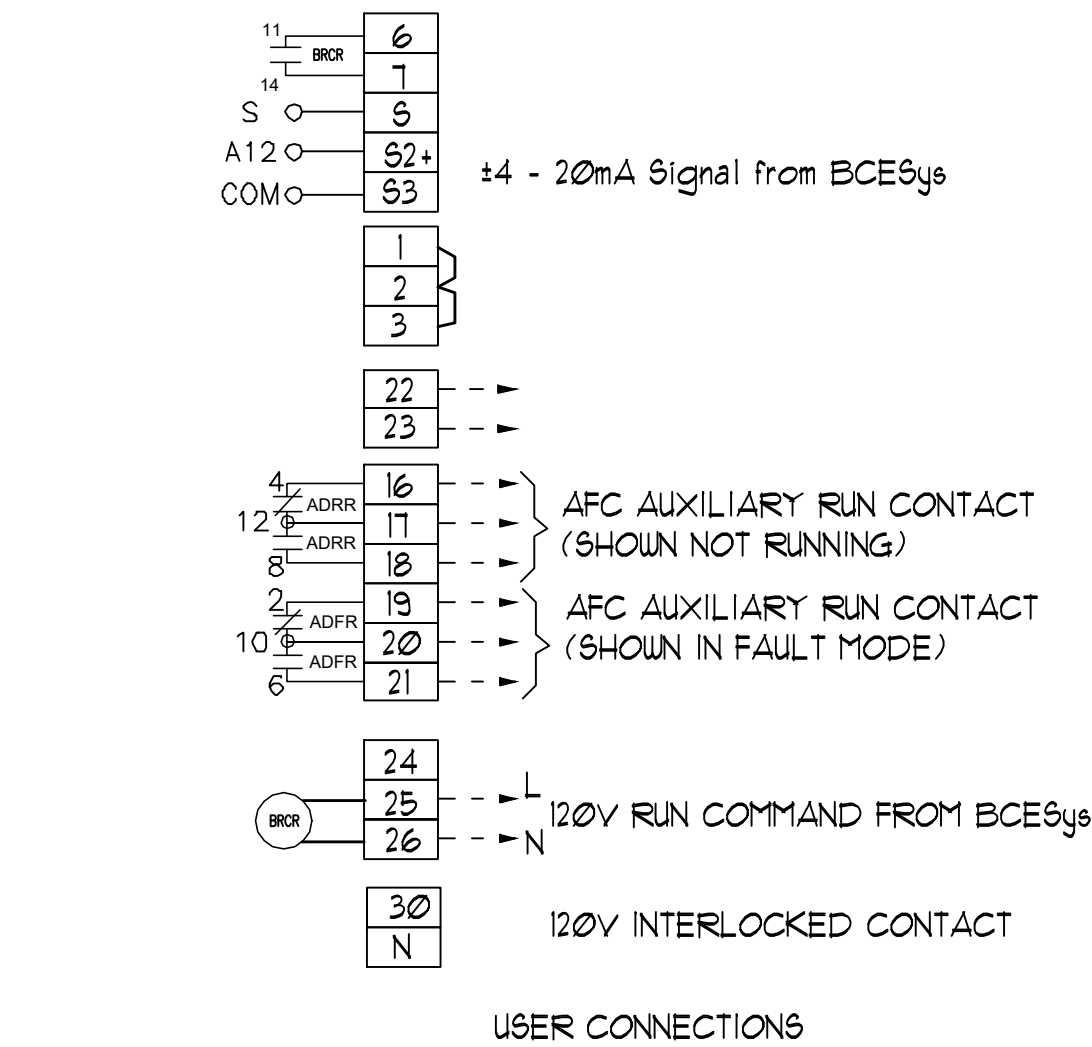


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| EKO-FLEX ATV61 FACTORY CONFIGURATION |     |                   |                           |      |      |
|--------------------------------------|-----|-------------------|---------------------------|------|------|
| MENU                                 | No  | SUB-MENU          | DESCRIPTION               | CODE | ADJ. |
| SIM                                  | 1.1 | ----              | 2/3 WIRE CONTROL          | tCC  | 2C   |
| SIM                                  | 1.1 | ----              | PUMPS FANS                | CFG  | PrF  |
| SIM                                  | 1.1 | ----              | STANDARD MOT. FREQ (HZ)   | bFr  | 60   |
| SIM                                  | 1.1 | ----              | ACCELERATION (SEC)        | ACC  | 10   |
| SIM                                  | 1.1 | ----              | DECELERATION (SEC)        | dEC  | 10   |
| SIM                                  | 1.1 | ----              | LOW SPEED (HZ)            | LSP  | 3    |
| SIM                                  | 1.3 | ----              | SWITCHING FREQ. (HZ)      | SCr  | 8    |
| I - O                                | 1.5 | ----              | 2 WIRE TYPE               | tCt  | LEL  |
| I - O                                | 1.5 | A12 CONFIG.       | A12 MIN. VALUE (mA)       | Cr12 | 4    |
| I - O                                | 1.5 | R2 CONFIG.        | R2 ASSIGN - DRIVE RUNNING | r2C  | rUn  |
| CtL                                  | 1.6 | ----              | REF. 1 CHAN               | FRI  | HM1  |
| CtL                                  | 1.6 | ----              |                           | FRI  | All  |
| CtL                                  | 1.6 | ----              | PROFILE                   | CHCF | SEP  |
| FUn                                  | 1.7 | STOP CONFIG.      | FREEWHEEL STOP ASSIGN     | nSt  | L12  |
| FUn                                  | 1.7 | REFERENCE SWITCH  | REF. 1B SWITCHING         | rCb  | L13  |
| FUn                                  | 1.7 | REFERENCE SWITCH  | REF. 1B CHAN              | Fr1b | A12  |
| FLt                                  | 1.8 | FAULT RESET       | FAULT RESET               | rSF  | L14  |
| FLt                                  | 1.8 | CATCH ON THE FLY  | CATCH ON THE FLY          | FLR  | YES  |
| FLt                                  | 1.8 | OUTPUT PHASE LOSS | OUTPHASE LOSS             | FDL  | NO   |
| COM                                  | 1.9 | FORCED LOCAL      | FORCED LOCAL ASSIGN.      | FLt  | L14  |

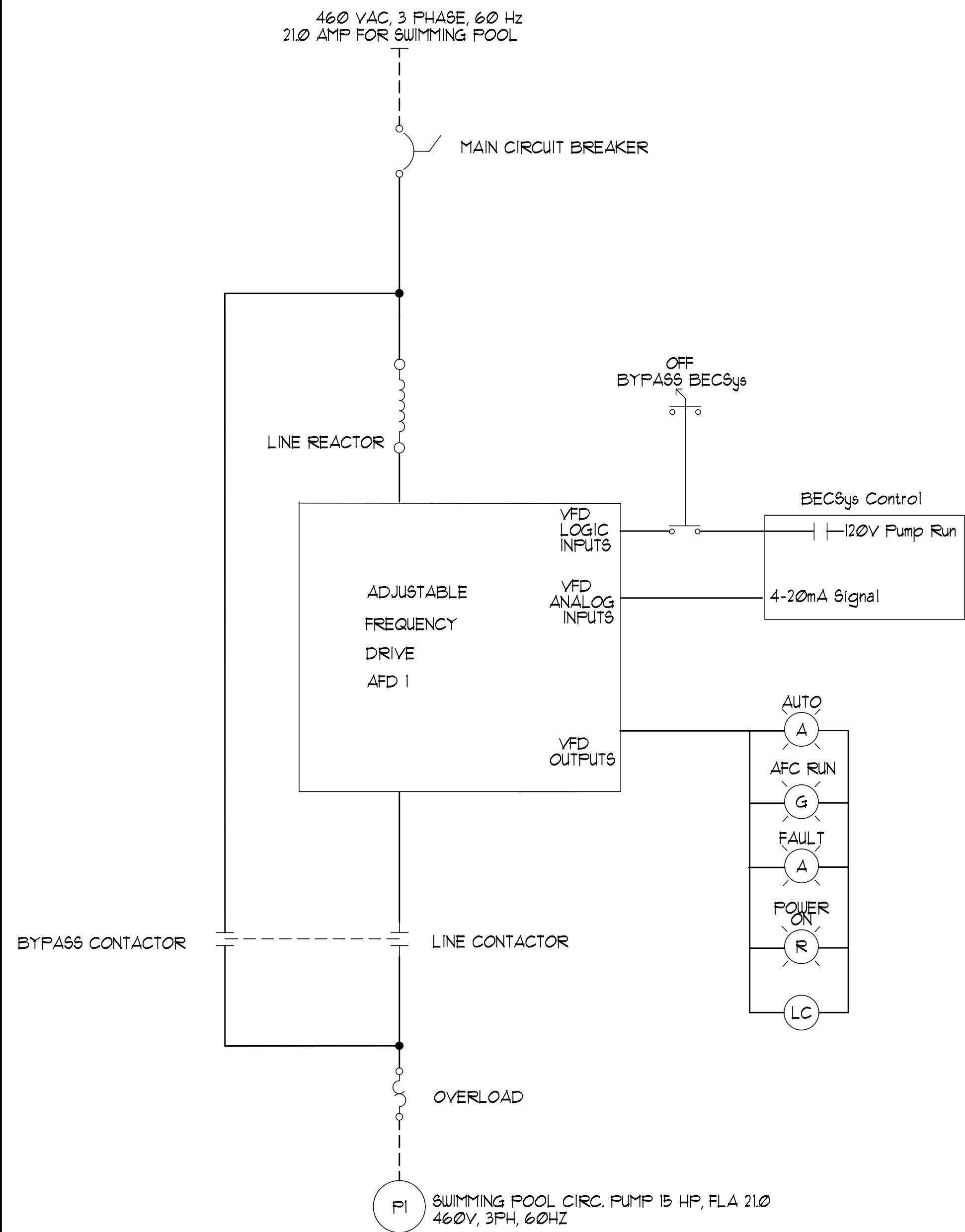
| DESCRIPTION       | TYPE 1                            | TYPE 12K                          | TYPE 3R |
|-------------------|-----------------------------------|-----------------------------------|---------|
| ± STIRRING FANS   | 10-100 HP 460V, 1.5-50HP 208/230V | 10-100 HP 460V, 1.5-50HP 208/230V | NA      |
| ± VENTILATION FAN | NA                                | NA                                | ALL HP  |
| ± SPACE HEATER    | NA                                | NA                                | ALL HP  |



- NOTES:
- RCR TIMED CONTACT USED ONLY IF LINE CONTACTOR IS SUPPLIED
  - CONTROL TRANSFORMER SHOWN FOR 460V PRIMARY. FOR 230V PRIMARY, JUMPER H2-H3 IS
  - PROGRAMMED I/O SEE CONTROLLER FUNCTION CONFIGURATION TABLE.
  - BECs RUN COMMAND RELAY (BRCR)
  - JUMPER USED WHEN START-STOP PUSH BUTTONS NOT USED.

## 2 'SPCS' EKO-FLEX SINGLE LINE DIAGRAM

NO SCALE



BID SUBMITTAL

NO SCALE

| PLAN REVISIONS |      |          |
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## IMPROVEMENT PLANS COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

### DETAILS



APPROVED:



DESIGNED: GSF  
DRAWN: NMV  
CHECKED: GSF  
SCALE: AS NOTED  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: CP-MR7 - DETAILS.DWG

SHEET NO.

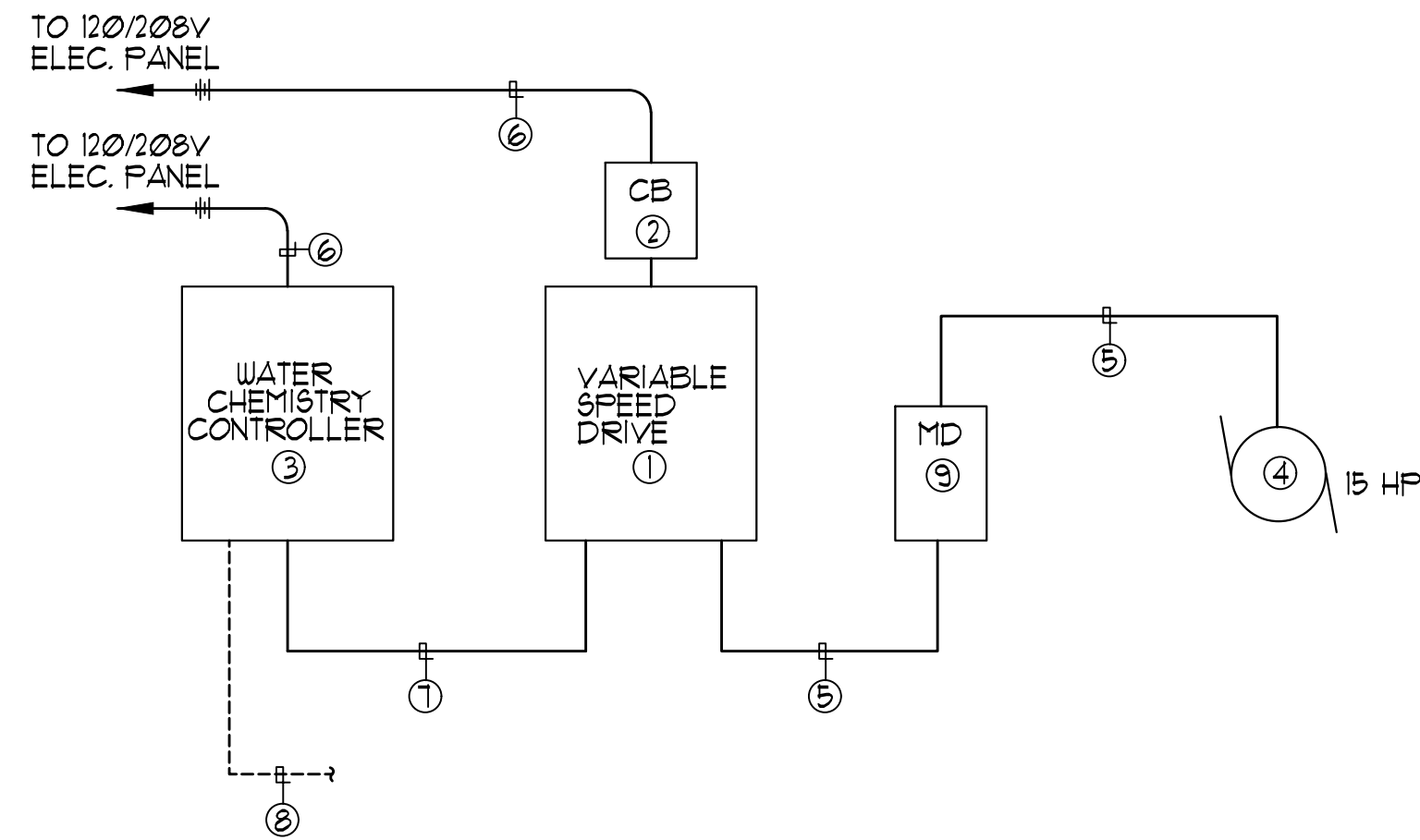
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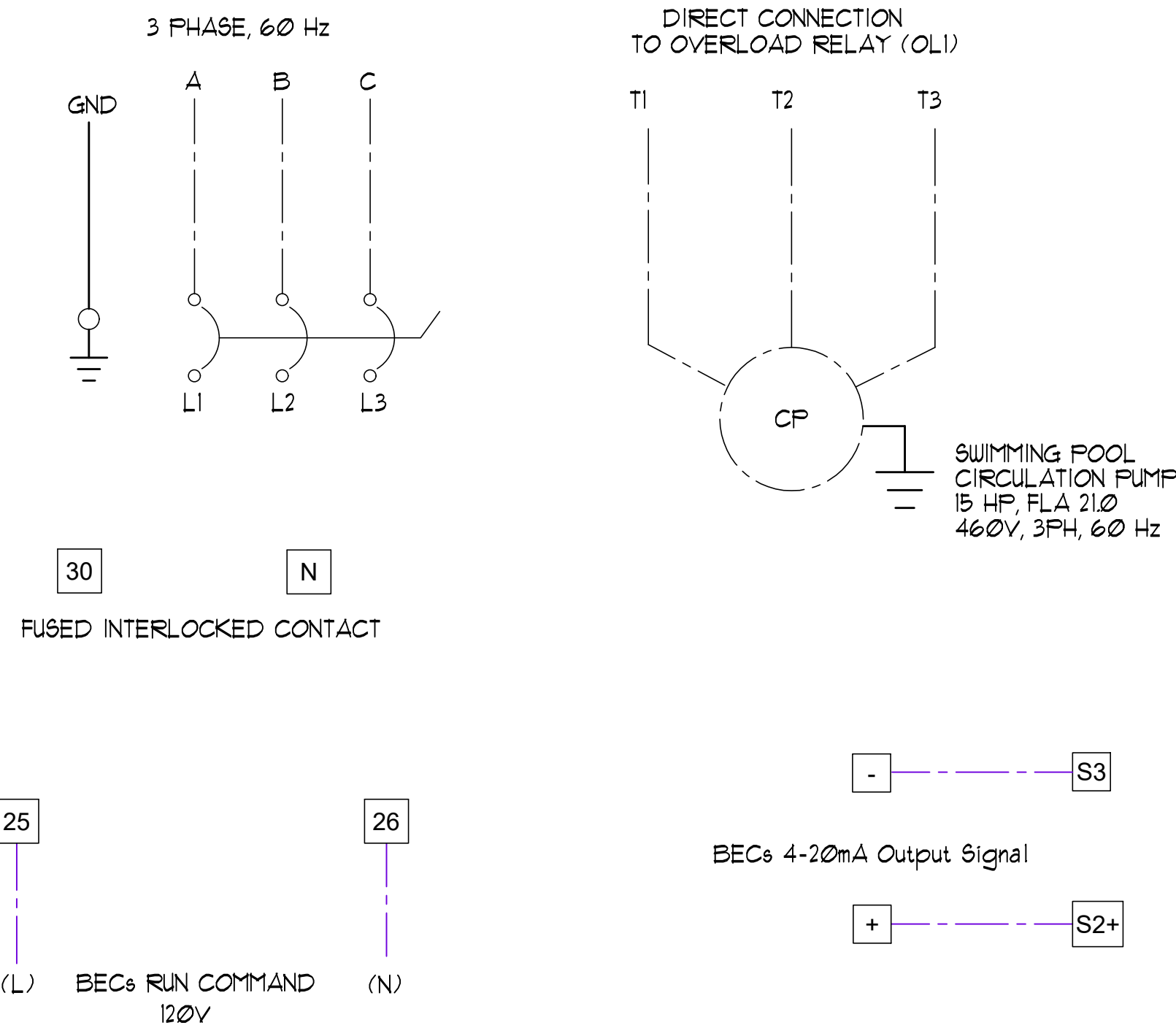
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- NOTES:
- 1) VARIABLE SPEED DRIVE MOTOR CONTROL CABINET, SEE PLANS AND SPECIFICATIONS.
  - 2) ENCLOSED CIRCUIT BREAKER, SEE SINGLE LINE DIAGRAM.
  - 3) WATER CHEMISTRY/FILTER CONTROL UNIT, SEE PLANS.
  - 4) CONNECT TO CIRCULATION PUMP MOTOR, SEE PLANS.
  - 5) MOTOR FEEDERS, SEE SINGLE LINE DIAGRAM.
  - 6) 120 VOLT BRANCH CIRCUITS, SEE PLANS.
  - 7) 3/4" C, (4) #12, (1) #12 GND. (120 VOLT CONTROL WIRING)
  - 8) 24 VOLT SIGNAL AND SENSOR CABLING, SEE SPECIFICATIONS AND INSTALLATION INSTRUCTIONS FOR ADDITIONAL REQUIREMENTS.
  - 9) MOTOR DISCONNECT, SEE PLANS.

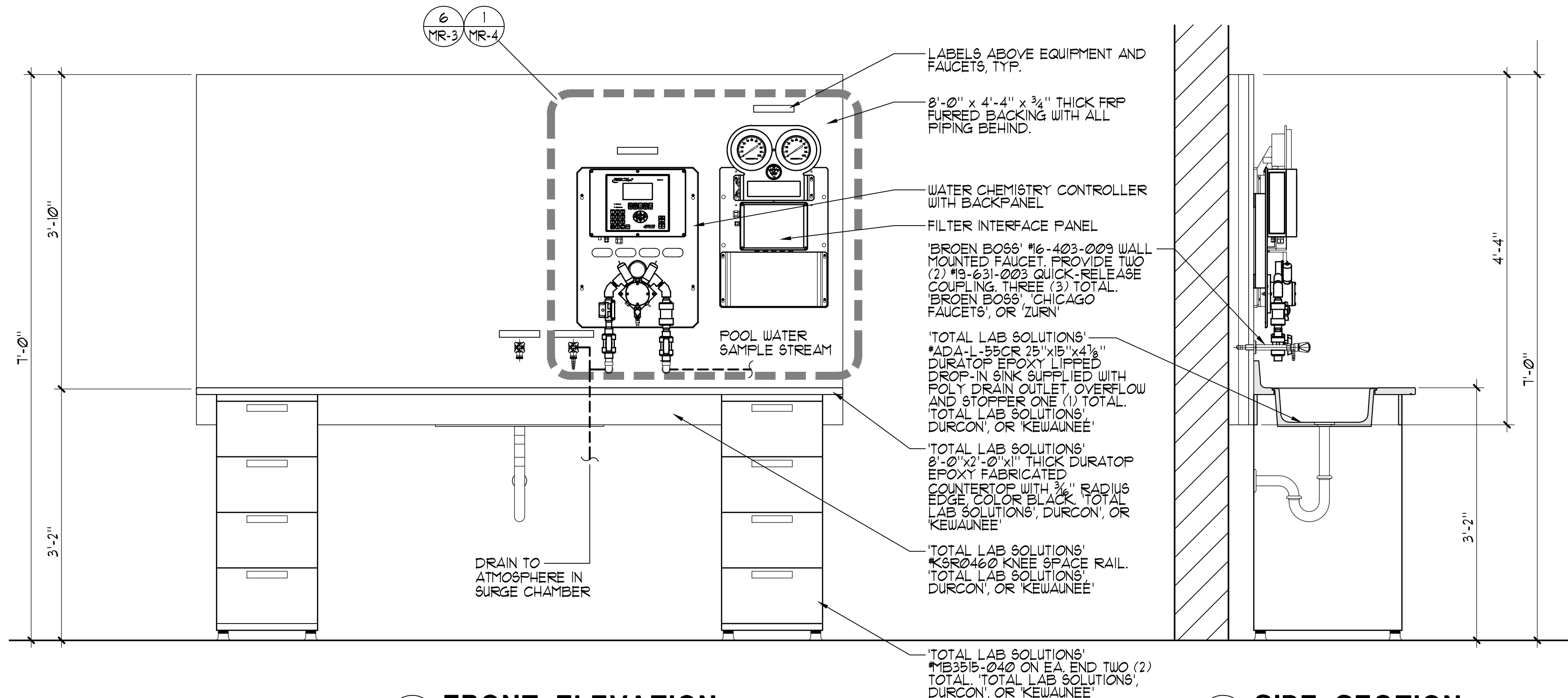


1 TYPICAL WIRING SCHEMATIC AT SPCS UNIT

NO SCALE

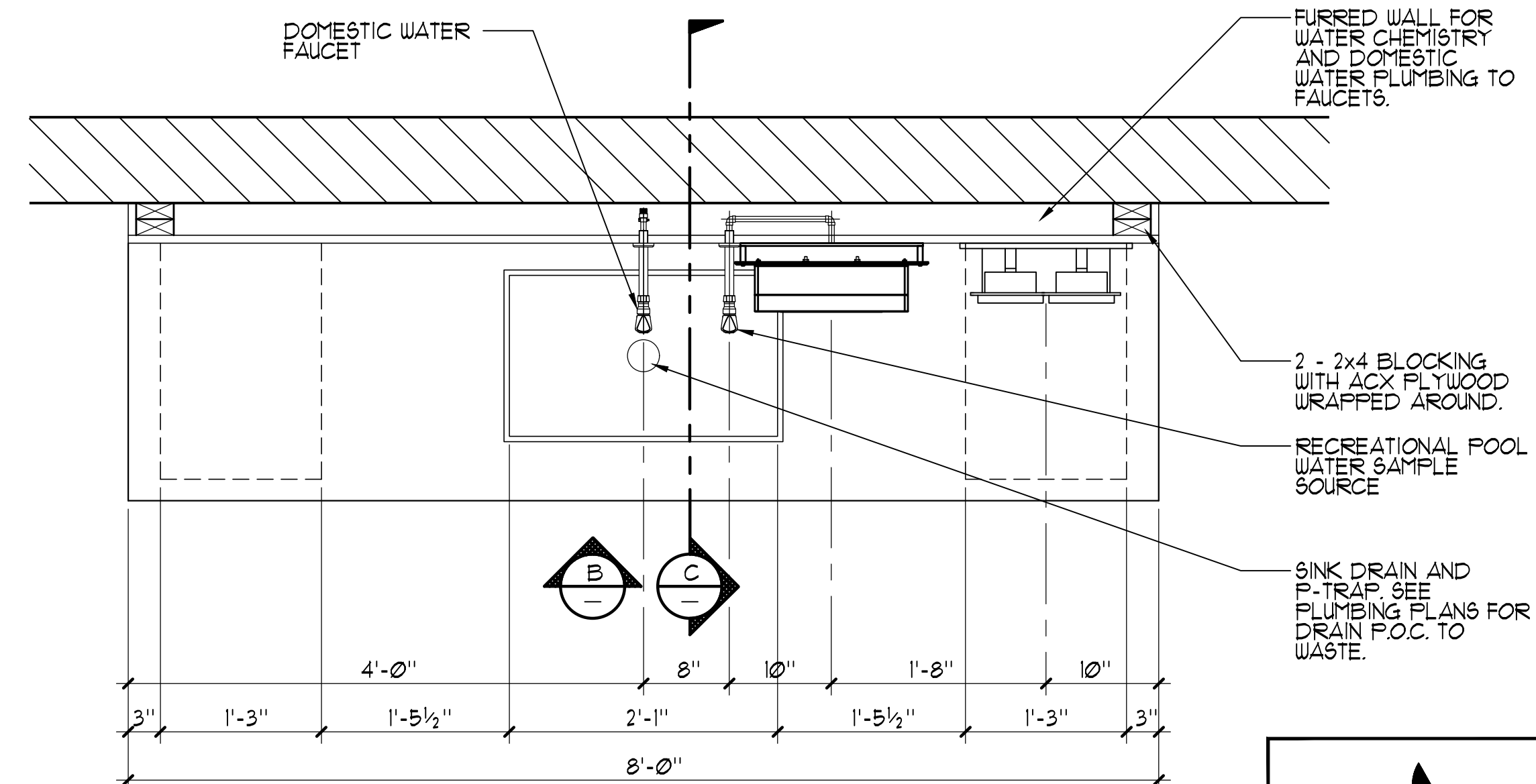
2 'SPCS' EKO-FLEX FIELD CONNECTION DIAGRAM

NO SCALE



B FRONT ELEVATION

C SIDE SECTION



A PLAN VIEW

BID SUBMITTAL

3 POOL OPERATOR WORKSTATION DESK DETAIL

1"=1'-0"

| PLAN REVISIONS |      |          |
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**ODELL**  
ENGINEERING

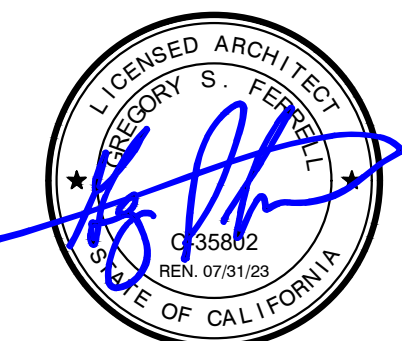
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Modesto, CA 95350

odellengineering.com

IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

DETAILS



APPROVED:

**AQUATIC**  
DESIGN GROUP  
2226 Faraday Ave., Carlsbad, CA 92008  
AquaticDesignGroup.com  
760.438.8400

**811**  
Know what's below.  
Call before you dig.

DESIGNED: GSF  
DRAWN: NMV  
CHECKED: GSF  
SCALE: AS NOTED  
DATE: 08/11/2023  
JOB NO.: 37512  
FILE NO.: CP-MR8 - DETAILS.DWG

SHEET NO.

MR-8

OF

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GENERAL POWER LEGEND

CONCRETE PULL BOX –SIZE AS NOTED – LIDS AS NOTED 'P' POWER, 'S' SIGNAL, 'F' FIRE ALARM & 'D' DATA; '–T' DENOTES TRAFFIC LID

CONDUIT –SURFACE MOUNTED OR ABOVE CEILING –EMT WITH COMPRESSION FITTING UNLESS NOTED ON PLANS

CONDUIT –CONCEALED BELOW FLOOR IN EMT OR UNDERGROUND IN PVC SCH 40 WITH IMC ELBOWS

HOMERUN TO PERSPECTIVE PANEL OR CABINET –BRANCH CIRCUIT WITH OUT FURTHER DESIGNATION IS A #12 WIRE CIRCUIT

FLEX

TERMINAL CABINET

PANEL BOARD –SEE SCHEDULE

MOTOR/EXHAUST FAN –N.I.E.S. –CONNECT AS REQUIRED

DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

HALF SWITCHED DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

HALF SWITCHED QUADPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

FLOOR POWER RECEPTACLE –WALKER OR EQUAL

30A. –4 WIRE GROUND RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

GFCI DUPLEX RECEPTACLE +15" A.F.F. FROM BOTTOM OF BOX U.O.N.

EQUIPMENT AND/OR CONTROL CONNECTION POINT. MAKE CONNECTION TO EQUIPMENT AS REQUIRED.

JUNCTION BOX – SINGLE GANG BOX

FUSED DISCONNECT SWITCH –SIZE AS NOTED –30A. SHOWN

MOTOR RATED DISCONNECT SWITCH

TELEPHONE OUTLET –SUTTLE, AT&T/LUCENT, OR EQUAL +18" ELSE WALL MOUNTED +48"

COMBINATION TELEPHONE & DATA OUTLET –AT&T/LUCENT M–SERIES OR EQUAL +18"

CARDREADER / KEYCARD – SECURITY ENTRANCE ACCESS

INTERCOM HANDSET –COMPATIBLE SPECIFIED SYSTEM +48"

FIXTURE IDENTIFICATION –LETTER INDICATES FIXTURE TYPE –NUMERAL INDICATES LAMP QUANTITY AND WATTAGE

PHOTO ELECTRIC CELL

DAYLIGHT CEILING SENSOR. WATTSTOPPER LMLS–400.

CEILING MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. WATTSTOPPER #LMDX–100.

WALL CORNER MOUNT DUAL TECHNOLOGY OCCUPANCY SENSOR. WATTSTOPPER #LMDX–100.

SINGLE POLE TOGGLE SWITCH +48"

TWO POLE TOGGLE SWITCH +48"

THREE POLE TOGGLE SWITCH +48"

FOUR POLE TOGGLE SWITCH +48"

DIMMER SWITCH SINGLE POLE +48" TO TOP OF BOX, WATTSTOPPER #LMDM–101

MANUAL PULL STATION +48" A.F.F. – TYPICAL

STROBE

COMBINATION HORN/STROBE

SMOKE DETECTOR

HEAT DETECTOR

FIRE ALARM CONTROL PANEL

REMOTE ANNUNCIATOR AT CONSTANTLY ATTENDED LOCATION +48"

DETECTOR SUBSCRIPTS:  
a ATTIC  
d DUCT  
u UNDER FLOOR/PLATFORM

SWITCHING SUBSCRIPTS  
a DEVICE CONTROLLED  
k KEY  
p PILOT  
M OCCUPANCY SENSOR

•SEE FIRE ALARM EQUIPMENT SCHEDULE FOR EXACT EQUIPMENT DESCRIPTION

GENERAL ELECTRICAL NOTES

1. PROVIDE ALL LABOR, MATERIALS, TOOLS, PLANT EQUIPMENT, TRANSPORTATION AND ALL PERFORM ALL OPERATIONS NECESSARY FOR THE PROPER EXECUTION AND COMPLETION OF ALL ELECTRICAL WORK REQUIRED FOR THE COMPLETE AND OPERATING SYSTEMS AS OUTLINED WITHIN THE SCOPE OF WORK.

2. UNDERWRITERS LABORATORIES, INC., SHALL MEET THEIR REQUIREMENTS AND SHALL BEAR THEIR LABEL WHEREVER STANDARDS HAVE BEEN ESTABLISHED AND LABEL SERVICE IS REGULARLY FURNISHED BY THAT AGENCY.

3. THE SIZE AND LOCATIONS OF EQUIPMENT ARE SHOWN TO SCALE WHEREVER POSSIBLE, CONTRACTOR SHALL MAKE USE OF ALL DATA IN ALL CONTRACT DOCUMENTS AND VERIFY THIS INFORMATION AT THE SITE.

4. CONDUCTORS SHALL BE COPPER CONDUCTORS TYPE AS NOTED ON CONSTRUCTION DOCUMENTS.

5. ALL REQUIRED CONDUITS SHALL BE PROVIDED BY E.C. LOW VOLTAGE WIRING SHALL BE BY MECHANICAL CONTRACTOR, LINE VOLTAGE (50 VOLTS OR MORE) SHALL BE BY ELECTRICAL CONTRACTOR.

6. ALL CONDUITS SHALL BE SUPPORTED AND BRACED PER OPM #OPM–0052–13, THE "B–LINE/TOLCO SEISMIC RESTRAINT COMPONENTS FOR SUSPENDED UTILITIES" FOR PIPES AND CONDUITS ONLY. LAYOUT DRAWINGS, SHOWING THE BRACING/SUPPORT LOCATIONS AND REFERENCES TO DETAILS FROM THE RELEVANT OSHPD PRE–APPROVALS FOR PIPING/DUCTS/CONDUITS EXCEPT FIRE SPRINKLERS, NEED TO BE SUBMITTED FOR USE BY THE IOR AND OSHPD STAFF. THE LAYOUT DRAWINGS NEED TO BE REVIEWED AND ACCEPTED BY THE AOR AND SEOR PRIOR TO STARTING INSTALLATION OF THE BRACING/SUPPORT. IOR SHALL ENSURE THE ABOVE REQUIREMENTS ARE SATISFIED.

7. DO NOT PENETRATE STRUCTURAL MEMBERS, INCLUDING BEAMS, COLUMNS, OR FOOTINGS, WITHOUT PRIOR WRITTEN CONSENT OF THE DISTRICT'S STRUCTURAL ENGINEER. SHOULD IT BECOME NECESSARY TO PENETRATE SUCH MEMBERS, NOTIFY THE DISTRICT IN WRITING WITHOUT DELAY, PRIOR TO PROCEEDING WITH CONSTRUCTION AROUND SUCH MEMBERS.

8. ALL ELECTRICAL WORK SHALL CONFORM WITH THE 2022 CALIF. ELECTRICAL CODE CALIFORNIA TITLE 17, 19 & 24 ALONG WITH N.F.P.A. STANDARDS AND THE STATE FIRE MARSHAL'S REQUIREMENTS.

9. ALL WORK TO BE IN ACCORDANCE WITH REQUIREMENTS OF STATE & GOVERNING LOCAL FIRE CODES AND BUILDING CODES.

10. WHERE EXISTING CONSTRUCTION IS CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, AND PERFORMANCE.

11. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.

12. CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. GUARD ALL HAZARDS IN ACCORDANCE WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.

13. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

14. CONTRACTOR TO COORDINATE WITH OWNERS VENDORS (SUCH AS, BUT NOT LIMITED TO: SECURITY, PHONES, DATA, CLOSED CIRCUIT T.V., ETC.) AND ALLOW ACCESS TO THE CONSTRUCTION SITE.

15. ALL CONDUIT SHALL BE TYPE EMT CONDUIT UNLESS OTHERWISE NOTED. TYPE MC CABLE SHALL NOT BE USED UNLESS SPECIFICALLY NOTED ON THE CONSTRUCTION DOCUMENTS.

16. OPERATED DEVICES SUCH AS, BUT NOT LIMITED TO, TELE/DATA OUTLETS, RECEPTACLE OUTLETS AND LIGHT SWITCHES INSTALLED IN AREAS NOT RESTRICTED TO AUTHORIZED MAINTENANCE PERSONAL SHALL BE MOUNTED AT A MINIMUM OF +15" AFF., AS MEASURED FROM THE BOTTOM OF THE DEVICE OUTLET BOX, AND MAXIMUM OF +48" AFF., AS MEASURED FROM THE TOP OF THE DEVICE OUTLET BOX.

17. ALL CHANGE ORDER PROPOSALS AND CHANGE ORDERS, BOTH ADDITIVE AND DEDUCTIVE, SHALL BE BASED UPON AND BE ACCOMPANIED BY A DETAILED MATERIALS AND LABOR BREAKDOWN FOR EACH SPECIFIC TASK AND/OR ITEM. THE BREAKDOWN SHALL INCLUDE ACTUAL MATERIALS COSTS PLUS OVERHEAD AND PROFIT, AS WELL AS LABOR UNITS BASE UPON THE MOST RECENT NECA MANUAL OF LABOR UNITS (NECA INDEX #4090) OR EQUIVALENT PUBLICATION FOR EACH SPECIFIC TASK AND ITEM. LABOR COSTS SHALL BE COMPUTED AS OUTLINED WITHIN THE GENERAL CONDITIONS, BASED UPON THE NECA LABOR TABLES FOR EACH TASK REQUIRED. MATERIALS COSTS SHALL INCLUDE ACTUAL CONTRACTOR INVOICE PLUS NO MORE THAN 15% MARKUP. THE OWNER AND CONTRACTOR AGREE TO THE ABOVE CHANGE ORDER COST PROCEDURE, FOR BOTH ADDITIVE AND DEDUCTIVE CHANGE ORDERS.

18. ALL PERSONNEL WORKING WITH ENERGIZED EQUIPMENT WITHIN THE RESTRICTED ZONE PER NFPA–70E SHALL COMPLY WITH ALL NFPA–70E AND OSHA REQUIREMENTS AND BE ARC FLASH SAFETY CERTIFIED.

ELECTRICAL ABBREVIATIONS

|        |                             |          |                            |       |  |        |   |        |                          |
|--------|-----------------------------|----------|----------------------------|-------|--|--------|---|--------|--------------------------|
| Δ      | DELTA CONNECTED             | CR       | CONTROL RELAY              | HI    | HIGH                                   | NAC    | NOTIFICATION APPLIANCE CIRCUIT                      | SW     | SWITCH                   |
| Y      | WYE CONNECTED               | CT       | CURRENT TRANSFORMER        | HV    | HIGH VOLTAGE                           | NC     | NORMALLY CLOSED                                     | SWD    | SWITCHED                 |
| O      | PHASE                       | CU       | COPPER                     | HVAC  | HEATING, VENTILATION, AIR CONDITIONING | NL     | NIGHT LIGHT   | SP     | SPARE                    |
| A      | AMPERES                     | DC       | DIRECT CURRENT             | IDF   | INTERMEDIATE DISTRIBUTION FRAME        | OC     | ON CENTER   | STD    | STANDARD                 |
| AC     | ALTERNATING CURRENT         | DISC     | DISCONNECT                 | INCAN | INCANDESCENT                           | OH     | OVERHEAD  | STR    | STRANDED                 |
| ACT    | ABOVE COUNTERTOP/BACKSPLASH | DIST     | DISTRIBUTION               | INST  | INSTANTANEOUS                          | OL     | THERMAL OVERLOAD RELAY                              | SWBD   | SWITCHBOARD              |
| AFF    | ABOVE FINISHED FLOOR        | (E)      | EXISTING                   | KV    | KILOVOLTS                              | OT     | OVER TEMPERATURE                                    | TEL    | TELEPHONE                |
| AL     | ALUMINUM                    | EC       | ELECTRICAL CONTRACTOR      | KVA   | KILOVOLT AMPERES                       | OSHPD  | OFFICE OF STATEWIDE HEALTH PLANNING AND DEVELOPMENT | TEMP   | TEMPERATURE              |
| APPROX | APPROXIMATE                 | EL, ELEV | ELEVATION                  | KW    | KILOWATTS                              | PA     | PUBLIC ADDRESS                                      | TH     | THERMOSTAT               |
| AUTO   | AUTOMATIC                   | ELECT    | ELECTRICAL                 |       |  | PB     | PULL BOX  | TRANSF | TRANSFORMER              |
| AUX    | AUXILIARY                   | EMT      | ELECTRICAL METALLIC TUBING | LB    | ELBOW                                  | PNL    | PANEL   | TYP    | TYPICAL                  |
| ALT    | ALTERNATE                   | EOL      | END OF LINE                | LF    | LINEAR FEET                            | PH     | PHASE   | TSP    | TWISTED SHIELDED PAIR    |
| AWG    | AMERICAN WIRE GAUGE         | ENCL     | ENCLOSURE                  | LV    | LOW VOLTAGE                            | PRI    | PRIMARY   | UG     | UNDERGROUND              |
| B      | BARE                        | EP       | EXPLOSION PROOF            | M     | MOTOR                                  | PS     | PRESSURE SWITCH                                     | UNO    | UNLESS NOTED OTHERWISE   |
| BC     | BARE COPPER GROUND          | EQUIP    | EQUIPMENT                  | MAX   | MAXIMUM                                | PWR    | POWER   | V      | VOLTS                    |
| BKBD   | BACKBOARD                   | ETC      | ET CETERA                  | MCA   | MINIMUM CIRCUIT AMPS                   | (R)    | REMOVE(D)   | VA     | VOLT AMPS                |
| BRKR   | BREAKER                     | EVAP     | EVAPORATOR                 | MCC   | MOTOR CONTROL CENTER                   | RA     | REMOTE ANNUNCIATOR                                  | VFD    | VARIABLE FREQUENCY DRIVE |
| BLDG   | BUILDING                    | (F)      | FUTURE                     | MCM   | THOUSAND CIRCULAR MILLS                | REQD   | REQUIRED  | VM     | VOLT METER               |
| C      | CONDUIT OR CONTRACTOR       | FA       | FIRE ALARM                 | MECH  | MECHANICAL                             | REQMTS | REQUIREMENTS  | W/     | WITH                     |
| CAB    | CABINET                     | FACP     | FIRE ALARM CONTROL PANEL   | MFG   | MANUFACTURER                           | RGP    | REDUNDANT GROUND PATH                               | W/O    | WITHOUT                  |
| CATV   | CABLE TELEVISION            | FLA      | FULL LOAD AMPS             | MIN   | MINIMUM                                | RM     | ROOM  | WP     | WEATHERPROOF             |
| CKT    | CIRCUIT                     | FLEX     | FLEXIBLE                   | MPOE  | MAIN POINT OF ENTRY                    | RECP   | RECEPTACLE  | WHD    | WATT HOUR DEMAND METER   |
| CLG    | CEILING                     | FLUOR    | FLUORESCENT                | MSB   | MAIN SWITCHBOARD                       | SCH    | SCHEDULE  | WM     | WATT METER               |
| COMM   | COMMUNICATION               | FS       | FLOW SWITCH                | N     | NEUTRAL                                | SEC    | SECONDS, SECONDARY                                  | WH     | WATER HEATER             |
| CONN   | CONNECT                     | GALV     | GALVANIZED                 | (N)   | NEW                                    | SIG    | SIGNAL  | XFMR   | TRANSFORMER              |
| CONT   | CONTINUATION OR CONTINUED   | GND      | GROUND                     | NA    | NON–AUTOMATIC                          | SPECS  | SPECIFICATIONS                                      | (XR)   | REMOVE AND RELOCATE(D)   |
| COORD  | COORDINATE                  | GC       | GENERAL CONTRACTOR         |       |  |        |   |        |                          |

ELECTRICAL COMPLIANCE NOTES

THE INTENT OF THE DRAWINGS AND SPECIFICATION IS TO CONSTRUCT THE PROPOSED BUILDING IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. ALL WORK PERFORMED UNDER THIS CONTRACT SHALL CONFORM TO THE FOLLOWING CODES AND REGULATIONS AS APPLICABLE:

2022 CALIFORNIA ADMINISTRATIVE CODE (CAC)  
PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)  
2022 CALIFORNIA BUILDING CODE (CBC)  
PART 2, TITLE 24, CCR  
BASED ON THE 2021 INTERNATIONAL BUILDING CODE (IBC)  
2022 CALIFORNIA ELECTRICAL CODE (CEC)  
PART 3, TITLE 24, CCR  
BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC)  
2022 CALIFORNIA MECHANICAL CODE (CMC)  
PART 4, TITLE 24, CCR  
BASED ON THE 2021 UNIFORM MECHANICAL CODE (UMC)  
2022 CALIFORNIA PLUMBING CODE (CPC)  
PART 5, TITLE 24, CCR  
BASED ON THE 2021 UNIFORM PLUMBING CODE (UPC)  
2022 CALIFORNIA FIRE CODE (CFC)  
PART 9, TITLE 24, CCR  
BASED ON THE 2021 INTERNATIONAL FIRE CODE (IFC)  
2022 NFPA 72, NATIONAL FIRE ALARM & SIGNALING CODE  
w/ CALIFORNIA AMENDMENTS.

UNLESS OTHERWISE STATED, IT IS INTENDED THAT THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN EFFECT ON THE DATE OF THE CONTRACT. NOTHING ON THE DRAWING IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE ABOVE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

PEZZONI  
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O'DELL  
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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS

ELECTRICAL  
COVER SHEET

APPROVED: \_\_\_\_\_

DESIGNED: KP

DRAWN: CCM

CHECKED: KP

SCALE: AS NOTED

DATE: 08/11/2023

JOB NO.: 37512

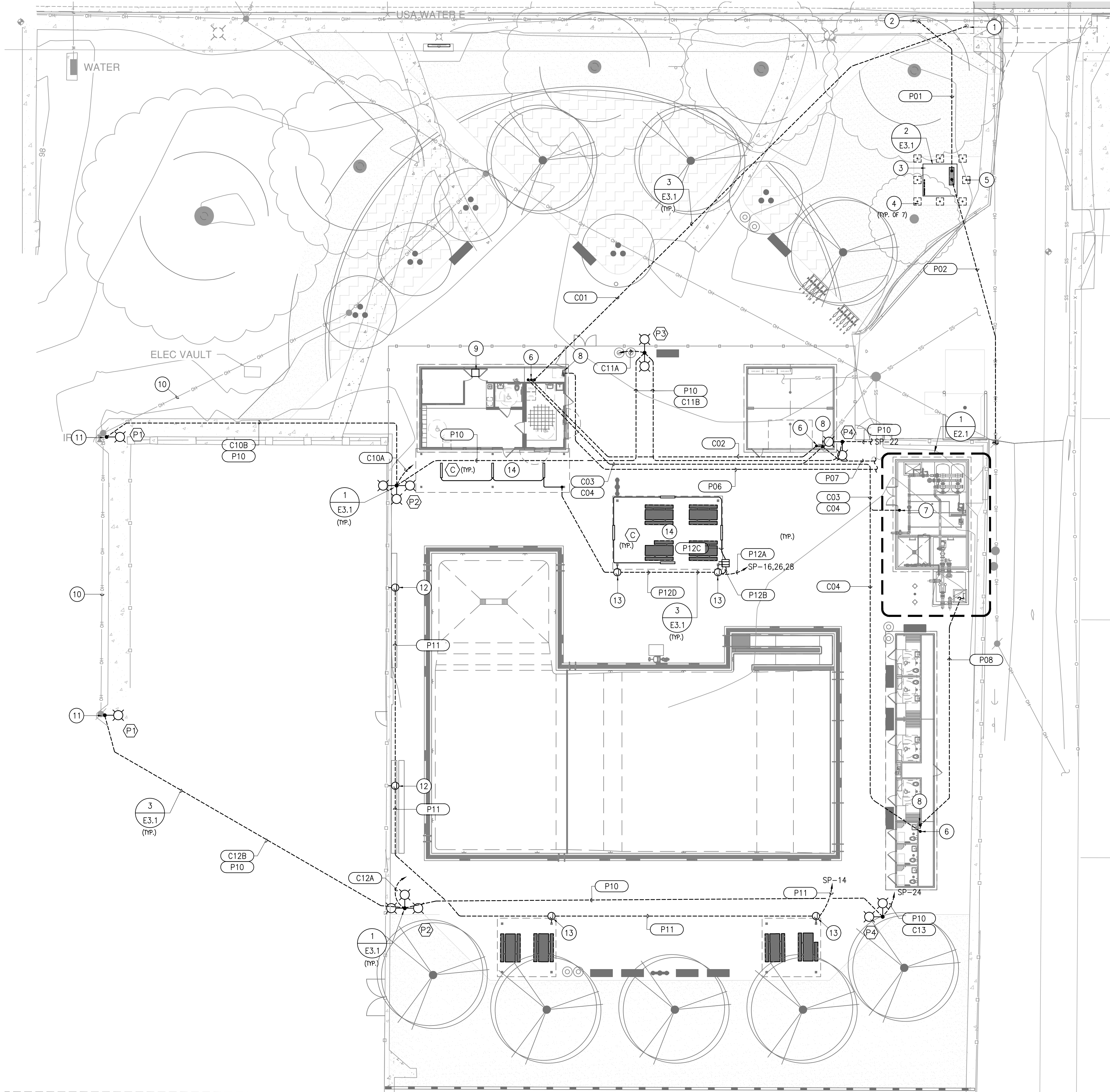
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BID SUBMITTAL



08/11/23 11:23:50 AM F:\231899 CITY OF TURLOCK COLUMBIA POOL IMPROVEMENTS\ENGR\SHEETS\899\_E1.1 SITE PLAN - ELECTRICAL.DWG kpezzoni



1 OVERALL SITE PLAN – ELECTRICAL  
SCALE: 1/16"=1'-0"

- ## PLAN NOTES:
1. STUB (N) CONDUIT AT BASE OF (E) POLE & STUB AT +4'AFG.
  2. APPROXIMATE LOCATION OF (N) TID POLE & RISER –COORDINATE FINAL LOCATION W/TID & INSTALL PER TID STANDARDS.
  3. (N) TID TRANSFORMER PAD (SMALL) PER TID STANDARDS.
  4. (N) NON-REMOVABLE BOLLARD PER TID STANDARDS.
  5. (N) REMOVABLE BOLLARD PER TID STANDARDS.
  6. CAP (N) COMM CONDUITS WITHIN UTILITY SPACE AGAINST WALL FOR (F) BACKBOARD LOCATION.
  7. STUB (N) COMM CONDUITS AT (N) J-BOX –SEE DETAIL 1/E2.1.
  8. CONNECT (N) PANEL (PROVIDED BY OTHERS) –COORDINATE ROUGH-IN LOCATION W/MFR.
  9. (N) IDF RACK PER DETAIL 5/E3.1.
  10. COORDINATE REMOVAL OF (E) TID OVERHEAD SECONDARY.
  11. COORDINATE REMOVAL OF (E) TID DUSK & DAWN POLE LT SECONDARY –INSTALL (N) POLE PER DETAIL 6/E3.0 IN EXISTING TID POLE LOCATION.
  12. (N) 6"x6"x4" NEMA-4X J-BOX @ +6'AFG FOR NICHE LT SPLICING –ALL RISERS FROM BELOW GRADE SHALL BE CRMC TYPE –LOCATE AT NEAREST FENCE POST & REFER TO POOL DRAWINGS FOR LIGHT FIXTURE INSTALLATION.
  13. (N) 6"x6"x4" NEMA-4X J-BOX @ +6'AFG FOR NICHE LT SPLICING –ALL RISERS FROM BELOW GRADE SHALL BE CRMC TYPE –LOCATE AT SHELTER COLUMN & REFER TO POOL DRAWINGS FOR LIGHT FIXTURE INSTALLATION.
  14. ROUTE (N) CONDUITS CONCEALED WITHIN SHELTER OR ROUTE NEAT IN SEMI-CONCEALED FASHION ON STRUCTURE –PAINT TO MATCH (N) SHELTER.

| FIXTURE SCHEDULE |                           |  |   |       |                             |                  |
|------------------|---------------------------|--|---|-------|-----------------------------|------------------|
| TAG              | DESCRIPTION               | MANUFACTURER / CATALOG NUMBER  | LAMPS WATTS   | VOLT. | MOUNTING                    | COMMENTS         |
| A                | GASKETED WRAP             | LITHONIA<br>#FEM-1200LM-IMAFL-WD-MVOLT-GZ10<br>-40K-80CRI-STSL-WLFEND<br>-SBOR10-MHHK120   | LED<br>75.5W<br>12,125LM  | MVOLT | SUSPENDED                   | INTEGRAL PIR     |
| B                | 24" WALL FIXTURE          | LUMINAIRE<br>#AEL-24IN-MIN10-20W-40K-MVOLT-DP<br>-BKH-PC   | LED<br>17.6W<br>1,630LM   | MVOLT | SURFACE<br>ABOVE<br>DOORWAY | INTEGRAL PC      |
| C                | 48" WALL FIXTURE          | LUMINAIRE<br>#AEL-48IN-MIN10-35W-40K-MVOLT-DP<br>-BKH-PC   | LED<br>35.2W<br>3,790LM   | MVOLT | SURFACE<br>AT CANOPY        | INTEGRAL PC      |
| P 1              | POLE LIGHT<br>SINGLE HEAD | LITHONIA<br>FIXTURE:<br>#DSX1-LED-P6-40K-80CRI-T5W-MVOLT<br>-SPA-PIR-DBLXD<br><br>POLE:<br>#SSA-30-6J-DM19AS-VD-TP-CPL1/20-0A<br>-UL-FBC-DBLXD   | LED<br>165W<br>21,800LM   | MVOLT | POLE<br>@+30'-0"            | INTEGRAL SENSORS |
| P 2              | POLE LIGHT<br>TRIPLE HEAD | LITHONIA<br>FIXTURES:<br>#DSX1-LED-P3-40K-80CRI-T3M-MVOLT<br>-SPA-PIR-HS-DBLXD (CENTER)<br><br>#DSX1-LED-P7-40K-80CRI-RCCO-MVOLT<br>-SPA-PIR-HS-DBLXD (LEFT)<br><br>#DSX1-LED-P7-40K-80CRI-LCCO-MVOLT<br>-SPA-PIR-HS-DBLXD (RIGHT)<br><br>POLE:<br>#SSA-30-6J-DM39AS-VD-TP-CPL1/20-0A<br>-UL-FBC-DBLXD | LED<br>102W<br>13,800LM<br><br>184W<br>16,300LM<br><br>184W<br>16,300LM | MVOLT | POLE<br>@+30'-0"            | INTEGRAL SENSORS |
| P 3              | POLE LIGHT<br>DOUBLE HEAD | LITHONIA<br>FIXTURE:<br>#DSX1-LED-P6-40K-80CRI-T5W-MVOLT<br>-SPA-PIR-DBLXD (x2)<br><br>POLE:<br>#SSA-30-6J-DM28AS-VD-TP-CPL1/20-0A<br>-UL-FBC-DBLXD  | LED<br>165W<br>21,800LM   | MVOLT | POLE<br>@+30'-0"            | INTEGRAL SENSORS |
| P 4              | POLE LIGHT<br>TRIPLE HEAD | LITHONIA<br>FIXTURES:<br>#DSX1-LED-P7-40K-80CRI-RCCO-MVOLT<br>-SPA-PIR-HS-DBLXD (LEFT)<br><br>#DSX1-LED-P7-40K-80CRI-LCCO-MVOLT<br>-SPA-PIR-HS-DBLXD (RIGHT)<br><br>POLE:<br>#SSA-30-6J-DM29AS-VD-TP-CPL1/20-0A<br>-UL-FBC-DBLXD   | LED<br>184W<br>16,300LM<br><br>184W<br>16,300LM                         | MVOLT | POLE<br>@+30'-0"            | INTEGRAL SENSORS |

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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS  
TURLOCK, CALIFORNIA

OVERALL SITE  
PLAN –  
ELECTRICAL



APPROVED:

DESIGNED: KP  
DRAWN: CCM  
CHECKED: KP  
SCALE: AS NOTED  
DATE: 08/11/2023  
JOB NO.: 37512  
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08/11/23 11:24:07 AM F:\231899 CITY OF TURLOCK COLUMBIA POOL IMPROVEMENTS\ENGR SHEETS\899\_E1.2 SITE PLAN - PHOTOMETRICS.DWG kpezoni

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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS

TURLOCK, CALIFORNIA

SITE PLAN -  
PHOTOMETRICS



APPROVED:

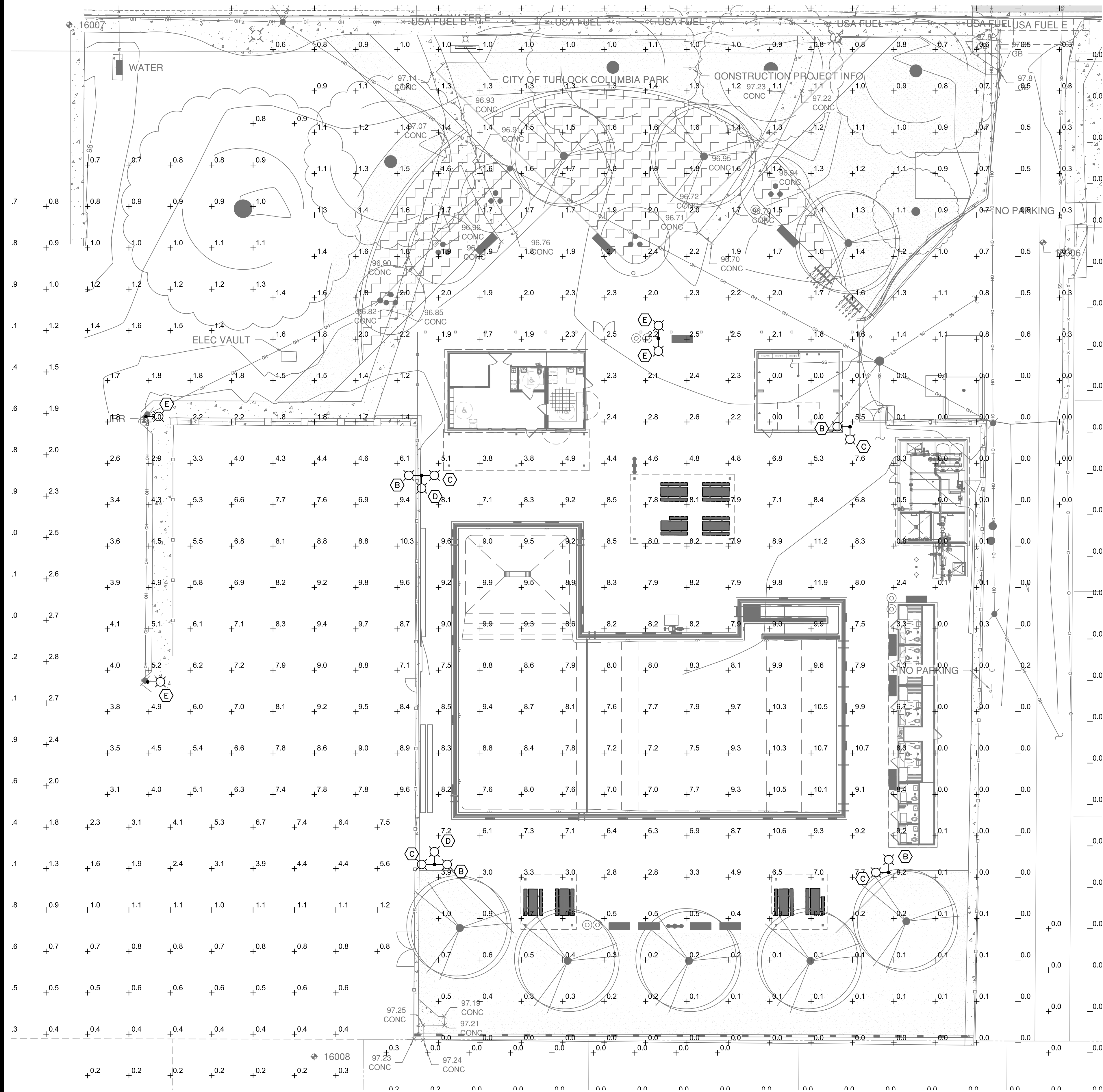
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| SCHEDULE |       |          |                   |                                 |   |              |          |
|----------|-------|----------|-------------------|---------------------------------|---|--------------|----------|
| SYMBOL   | LABEL | QUANTITY | MANUFACTURER      | CATALOG NUMBER                  | DESCRIPTION   | NUMBER LAMPS | WATTAGE  |
|          | B     | 4        | LITHONIA LIGHTING | DSX1 LED P7 40K 70CRI<br>RCCO   | D-SERIES SIZE 1 AREA LUMINAIRE P7<br>PERFORMANCE PACKAGE 4000K CCT 70 CRI<br>RIGHT CORNER CUTOFF EXTREME BACKLIGHT<br>CONTROL | 1            | 184.43   |
|          | C     | 4        | LITHONIA LIGHTING | DSX1 LED P7 40K 70CRI<br>LCCO   | D-SERIES SIZE 1 AREA LUMINAIRE P7<br>PERFORMANCE PACKAGE 4000K CCT 70 CRI<br>LEFT CORNER CUTOFF EXTREME BACKLIGHT<br>CONTROL  | 1            | 184.43   |
|          | D     | 2        | LITHONIA LIGHTING | DSX1 LED P3 40K 70CRI<br>T3M HS | D-SERIES SIZE 1 AREA LUMINAIRE P3<br>PERFORMANCE PACKAGE 4000K CCT 70 CRI<br>TYPE 3 MEDIUM HOUSESIDE SHIELD                   | 1            | 102.1727 |
|          | E     | 2        | LITHONIA LIGHTING | DSX1 LED P6 40K 70CRI<br>TSW    | D-SERIES SIZE 1 AREA LUMINAIRE P6<br>PERFORMANCE PACKAGE 4000K CCT 70 CRI<br>TYPE 5 WIDE                                      | 1            | 165.25   |



**1 SITE PLAN - PHOTOMETRICS**  
SCALE: 1/16"=1'-0"



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692-CONDUIT & CABLE SCHEDULE

| CONDUIT ID# | FROM                           | TO                             | CONDUIT QNTY | SIZE   | TYPE   | CONDUCTOR QNTY | SIZE   | GND | CABLE QNTY | TYPE        | NOTES                         |
|-------------|--------------------------------|--------------------------------|--------------|--------|--------|----------------|--------|-----|------------|-------------|-------------------------------|
| P 01        | (N) T.I.D. UTILITY POLE        | (N) T.I.D. XFMR PAD            | 1            | 4"     | PVC 40 |                |        |     | 1          | PULL ROPE   | PER T.I.D. STD'S & REQMTS     |
| P 02        | (N) T.I.D. XFMR PAD            | (N) METERING CABINET "MC"      | 1            | 4"     | RMC    |                |        |     | 1          | 500MCM QUAD | [1] PER T.I.D. STD'S & REQMTS |
| P 03        | (N) METERING CABINET "MC"      | (N) MAIN BREAKER CABINET "MDS" | 1            | 4"     | RMC    | 4              | 500MCM | #3  |            |             |                               |
| P 04        | (N) MAIN BREAKER CABINET "MDS" | (N) DIST PANEL "MDP"           | 1            | 4      | RMC    | 4              | 500MCM | #3  |            |             |                               |
| P 05        | (N) DIST PANEL "MDP"           | (N) PANEL "SP"                 | 1            | 2 1/2" | CRMC   | 4              | #3/0   | #6  |            |             | [1][2]                        |
| P 06        | (N) DIST PANEL "MDP"           | (N) PANEL "CS"                 | 1            | 2 1/2" | CRMC   | 4              | #3/0   | #6  |            |             | [1]                           |
| P 07        | (N) DIST PANEL "MDP"           | (N) PANEL "PS"                 | 1            | 1 1/2" | RMC    | 3              | #1     | #6  |            |             | [1]                           |
| P 08        | (N) DIST PANEL "MDP"           | (N) PANEL "RR"                 | 1            | 1 1/2" | RMC    | 3              | #1     | #6  |            |             | [1]                           |
| P 10        | (N) PANEL "SP"                 | (N) POLE LTS                   | 1            | 1"     | PVC 40 | 2              | #8     | #8  |            |             |                               |
| P 11        | (N) PANEL "SP"                 | (N) POOL NICHE LT J-BOXES      | 1            | 1"     | CRMC   | 2              | #8     | #8  | 1          | PULL ROPE   | [1][2]                        |
| P 12 A      | (N) PANEL "SP"                 | (N) POOL NICHE LT J-BOX        | 1            | 1"     | CRMC   | 2              | #8     | #8  |            |             | [1] NICHE LTG                 |
| P 12 B      | (N) POOL NICHE LT J-BOX        | (N) RECP @ COLUMN              | 1            | 3/4"   | RMC    | 4              | #10    | #10 |            |             | SHELTER RECP & LTG            |
| P 12 C      | (N) RECP @ COLUMN              | (N) SHELTER LTG                | 1            | 3/4"   | RMC    | 2              | #10    | #10 |            |             | SHELTER LTG                   |
| P 12 D      | (N) POOL NICHE LT J-BOX        | (N) POOL NICHE LT J-BOX        | 1            | 3/4"   | CRMC   | 2              | #8     | #8  |            |             | [1]                           |
| P 12 E      | (N) POOL NICHE LT J-BOX        | (N) SHELTER LTG                | 1            | 3/4"   | RMC    | 2              | #10    | #10 |            |             | [1]                           |
| P 20        | (N) PANEL "SP"                 | ACID FEED PUMP                 | 1            | 3/4"   | CRMC   | 2              | #12    | #12 |            |             | [1][3]                        |
| P 21        | (N) PANEL "SP"                 | CL2 FEED PUMP                  | 1            | 3/4"   | CRMC   | 2              | #12    | #12 |            |             | [1][3]                        |
| P 22 A      | (N) PANEL "SP"                 | RECIRC PUMP VFD                | 1            | 1"     | CRMC   | 3              | #6     | #8  |            |             | [1][3]                        |
| P 22 B      | RECIRC PUMP VFD                | RECIRC PUMP                    | 1            | 1"     | CRMC   | 3              | #6     | #8  |            |             | [1][3]                        |
| C 01        | (E) UTILITY POLE               | CONCESSION UTILITY SPACE       | 1            | 2 1/2" | PVC 40 |                |        |     | 1          | PULL ROPE   |                               |
| C 02        | CONCESSION UTILITY SPACE       | STORAGE BLDG                   | 2            | 2 1/2" | PVC 40 |                |        |     | 1          | PULL ROPE   | STUB AT +6" AFF AGAINST WALL  |
| C 03        | CONCESSION UTILITY SPACE       | POOL EQUIPMENT BLDG            | 2            | 2 1/2" | PVC 40 |                |        |     | 2          | STP-40P     | STUB AT +6" AFF AGAINST WALL  |
| C 04        | CONCESSION UTILITY SPACE       | RESTROOM BLDG                  | 2            | 2 1/2" | PVC 40 |                |        |     | 1          | PULL ROPE   | STUB AT +6" AFF AGAINST WALL  |
| C 10 A      | CONCESSION UTILITY SPACE       | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 2          | STP-40P     | [4]                           |
| C 10 B      | (N) LT POLE                    | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 1          | STP-40P     | [4]                           |
| C 11 A      | CONCESSION UTILITY SPACE       | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 2          | STP-40P     | [4]                           |
| C 11 B      | (N) LT POLE                    | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 1          | STP-40P     | [4]                           |
| C 12 A      | CONCESSION UTILITY SPACE       | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 2          | STP-40P     | [4]                           |
| C 12 B      | (N) LT POLE                    | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 1          | STP-40P     | [4]                           |
| C 13        | CONCESSION UTILITY SPACE       | (N) LT POLE                    | 1            | 1 1/4" | PVC 40 |                |        |     | 1          | STP-40P     | [4]                           |

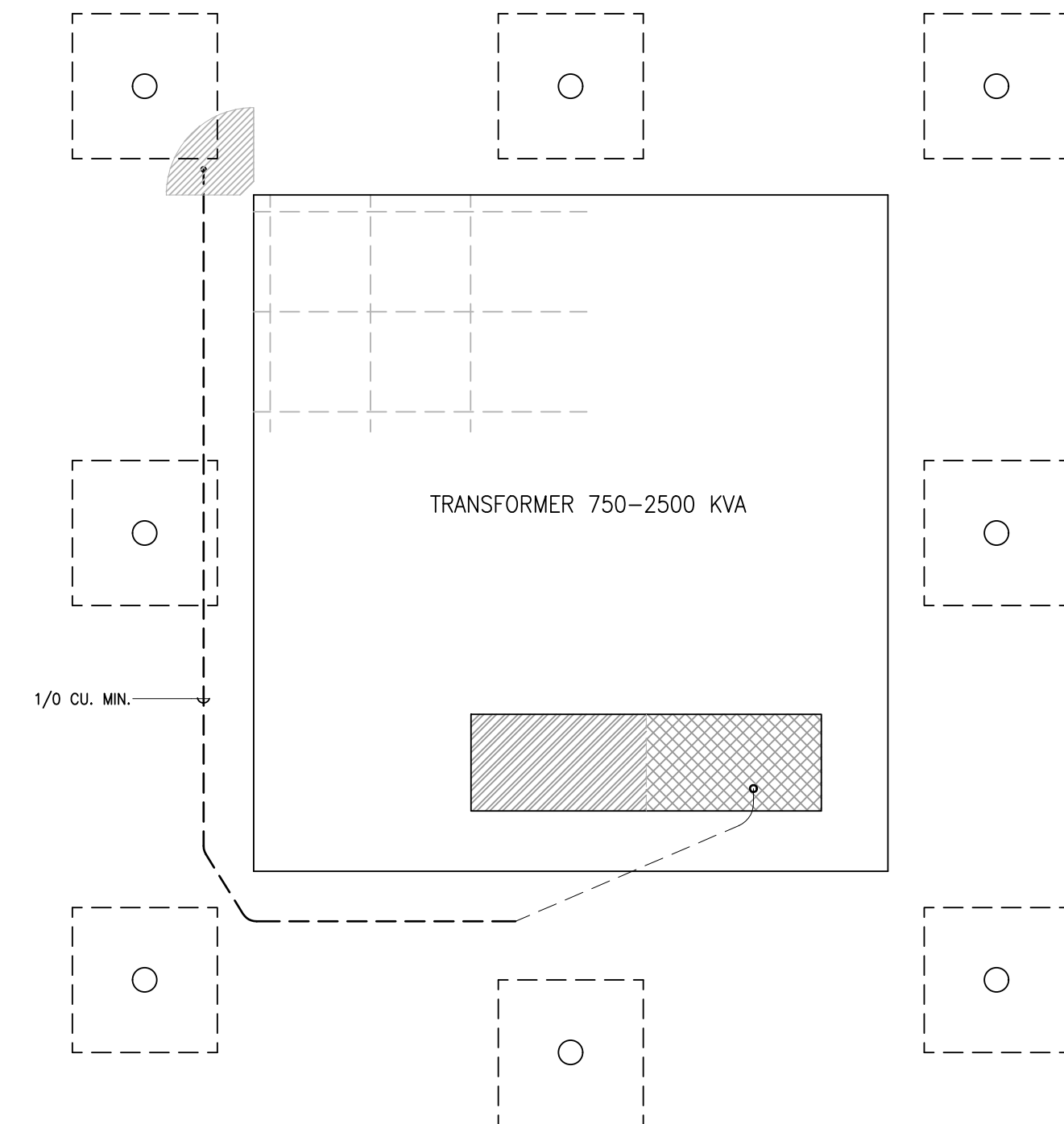
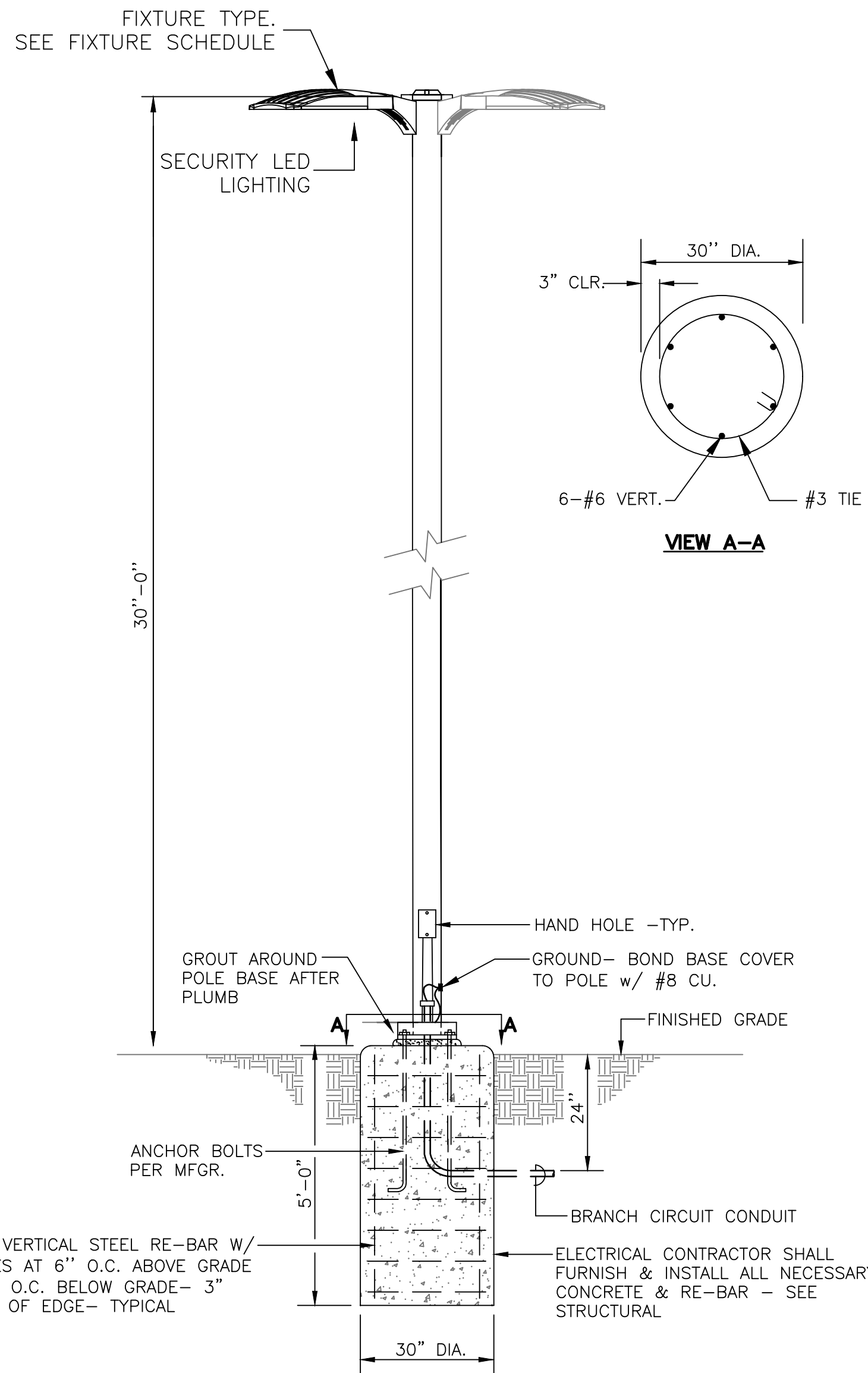
- [1] = CONDUIT BELOW GRADE MAYBE PVC SCH 40  
[2] = CONDUIT WITHIN POOL EQUIP BLDG SHALL BE CRMC WHERE EXPOSED  
[3] = PROVIDE LFMC CONNECTION TO EQUIPMENT  
[4] = PROVIDE 25' SERVICE LOOP FROM POLE BASE TO COUPLING FOR (F) CCTV CAMERA

PANELBOARD SCHEDULE

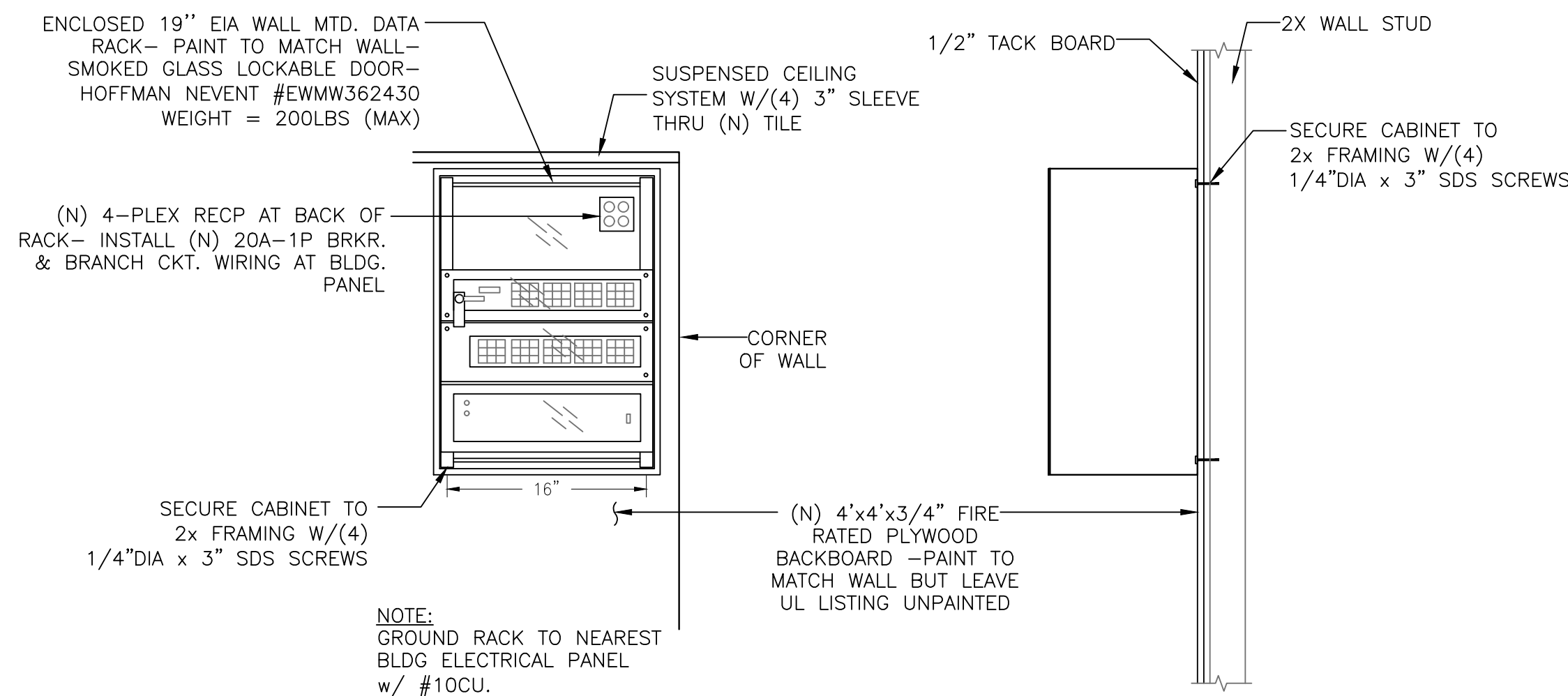
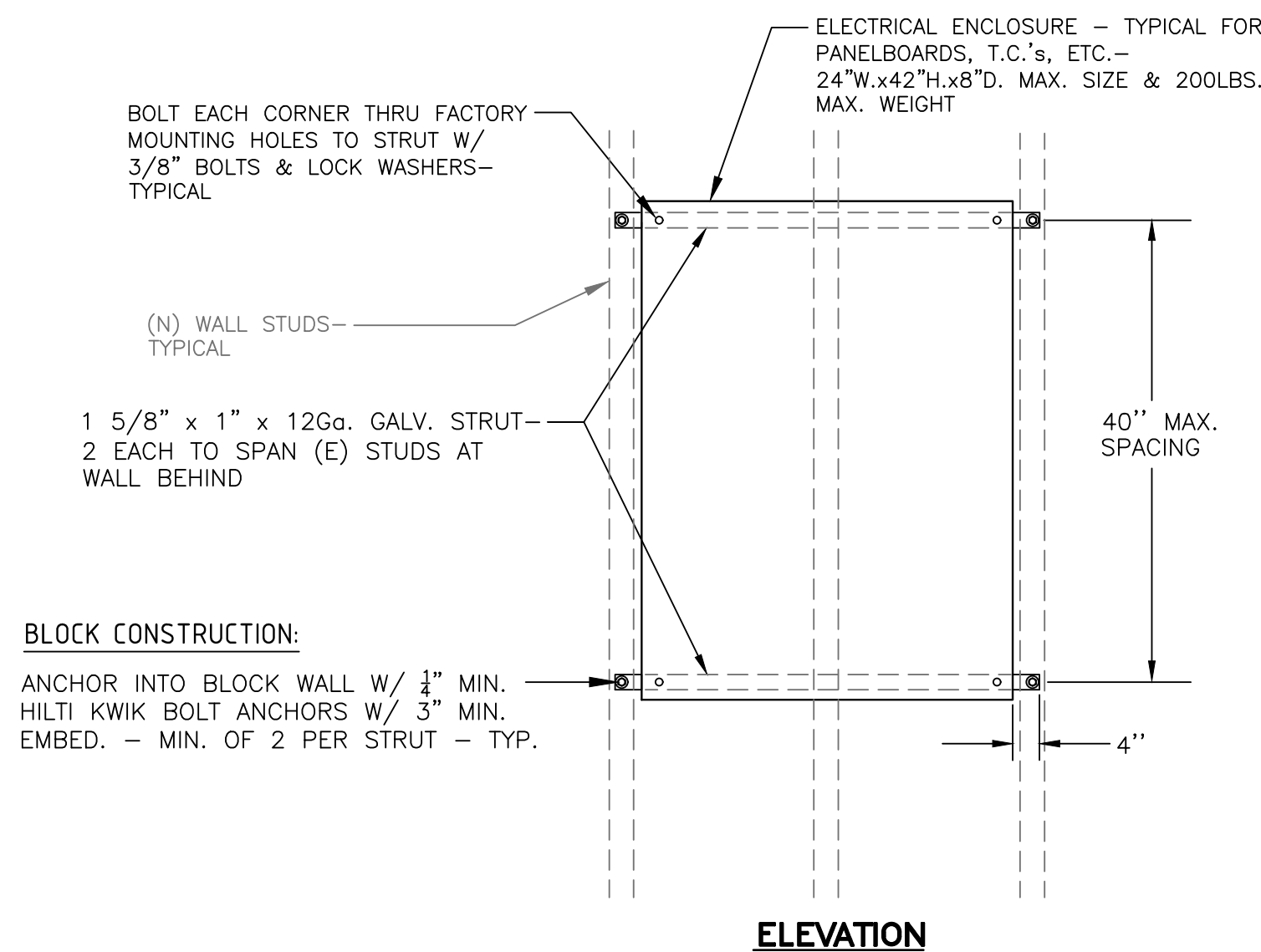
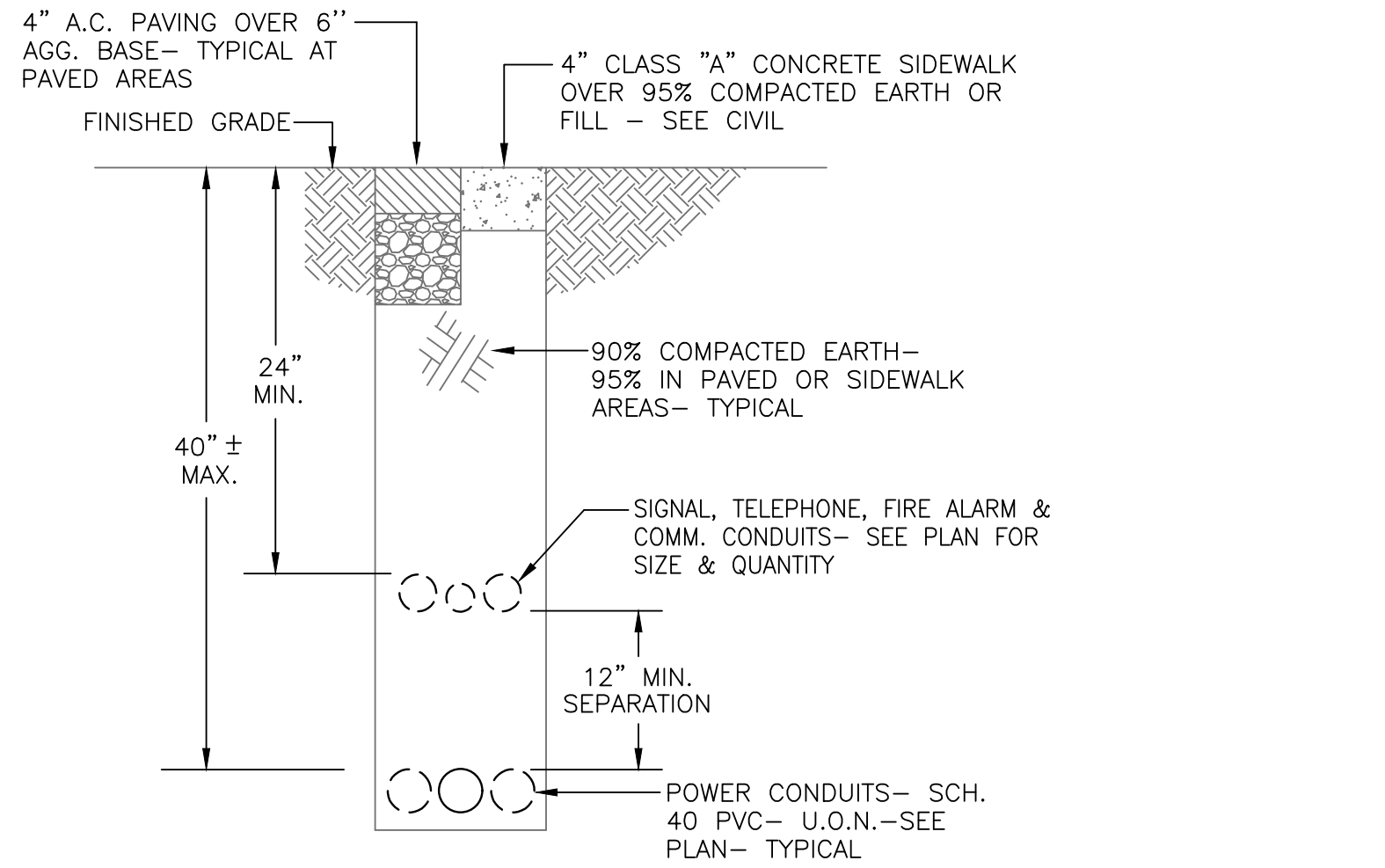
| PANEL: SP                |              |       |      |      |          |          |        |      |      |       |                             | LOCATION: NEMA TYPE: 3R |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------|--------------|-------|------|------|----------|----------|--------|------|------|-------|-----------------------------|-------------------------|--|--|--|--|--|--|--|--|--|--|--|
| BUS RATING: 200 A.       |              |       |      |      |          |          |        |      |      |       |                             | WIRE: 4                 |  |  |  |  |  |  |  |  |  |  |  |
| VOLTAGE: 120/208 V.      |              |       |      |      |          |          |        |      |      |       |                             | SCCR: 22kA              |  |  |  |  |  |  |  |  |  |  |  |
|                          |              |       |      |      |          |          |        |      |      |       |                             | BUSSING: Cu             |  |  |  |  |  |  |  |  |  |  |  |
| CKT                      | DESCRIPTION  | BRKR  | TYPE | LOAD | A (va)   | B (va)   | C (va) | LOAD | TYPE | BRKR  | DESCRIPTION                 | CKT                     |  |  |  |  |  |  |  |  |  |  |  |
| 1                        | CIRC PUMP    | 60/3  | M1   | 5550 | 6050     |          |        | 500  | N    | 20/1  | SP POOL HEATER              | 2                       |  |  |  |  |  |  |  |  |  |  |  |
| 3                        | 15HP         | /     | M1   | 5550 |          | 6550     |        | 1000 | N    | 20/1  | SP H2O CHEM CNTRLR          | 4                       |  |  |  |  |  |  |  |  |  |  |  |
| 5                        |              | /     | M1   | 5550 |          |          | 5730   | 180  | R    | 20/1  | RECP -EXTERIOR              | 6                       |  |  |  |  |  |  |  |  |  |  |  |
| 7                        | SP CL2 FEED  | 20/2  | M    | 1000 | 1360     |          |        | 360  | R    | 20/1  | RECP -INT. PANEL            | 8                       |  |  |  |  |  |  |  |  |  |  |  |
| 9                        |              | /     | M    | 1000 |          | 1350     |        | 350  | L    | 20/1  | LTG -INT/EXT                | 10                      |  |  |  |  |  |  |  |  |  |  |  |
| 11                       | SP ACID FEED | 20/2  | M    | 800  |          |          | 980    | 180  | R    | 20/1  | RECP -INT LT SW             | 12                      |  |  |  |  |  |  |  |  |  |  |  |
| 13                       |              | /     | M    | 800  | 1460     |          |        | 660  | L    | 20/1G | POOL NICHE LTS              | 14                      |  |  |  |  |  |  |  |  |  |  |  |
| 15                       | SPARE        | 20/3  |      |      |          | 300      |        | 300  | L    | 20/1G | POOL NICHE LTS              | 16                      |  |  |  |  |  |  |  |  |  |  |  |
| 17                       |              | /     |      |      |          |          | 360    | 360  | C    | 20/1  | SP H2O CHEM RELAY           | 18                      |  |  |  |  |  |  |  |  |  |  |  |
| 19                       |              | /     |      |      | 720      |          |        | 720  | C    | 20/1  | SP FILTER PR VALVE          | 20                      |  |  |  |  |  |  |  |  |  |  |  |
| 21                       | SPARE        | 20/3  |      |      |          | 1350     |        | 1350 | L    | 20/1G | LTG- POLES NORTH            | 22                      |  |  |  |  |  |  |  |  |  |  |  |
| 23                       |              | /     |      |      |          |          | 1010   | 1010 | L    | 20/1G | LTG- POLES SOUTH            | 24                      |  |  |  |  |  |  |  |  |  |  |  |
| 25                       |              | /     |      |      | 180      |          |        | 180  | R    | 20/1  | RECP -SHELTER               | 26                      |  |  |  |  |  |  |  |  |  |  |  |
| 27                       | SPARE        | 20/1G |      |      |          | 700      |        | 700  | L    | 20/1G | LTG -SHELTER                | 28                      |  |  |  |  |  |  |  |  |  |  |  |
| 29                       | SPARE        | 20/1G |      |      |          |          | 800    | 800  | N    | 20/1  | SP POOL HEATER              | 30                      |  |  |  |  |  |  |  |  |  |  |  |
| 31                       |              |       |      |      | 1200     |          |        | 1200 | C    | 20/1  | SP FILTER AFC               | 32                      |  |  |  |  |  |  |  |  |  |  |  |
| 33                       |              |       |      |      |          | 1200     |        | 1200 | C    | 20/1  | SP FILTER PRESS AMP         | 34                      |  |  |  |  |  |  |  |  |  |  |  |
| 35                       |              |       |      |      |          |          | 360    | 360  | C    | 20/1  | SP CP MTR CNTRL             | 36                      |  |  |  |  |  |  |  |  |  |  |  |
| 37                       |              |       |      |      | 360      |          |        | 360  | C    | 20/1  | SP CP PUMP CONTROL          | 38                      |  |  |  |  |  |  |  |  |  |  |  |
| 39                       |              |       |      |      |          | 0        |        |      |      | 20/1  | SPARE                       | 40                      |  |  |  |  |  |  |  |  |  |  |  |
| 41                       |              |       |      |      |          |          | 0      |      |      | 20/1  | SPARE                       | 42                      |  |  |  |  |  |  |  |  |  |  |  |
|                          |              |       |      |      | 11330    | 11450    | 9240   |      |      |       |                             |                         |  |  |  |  |  |  |  |  |  |  |  |
| CONTINUOUS (C):          |              |       |      |      | 5250 VA  | MCB: NO  |        |      |      |       |                             |                         |  |  |  |  |  |  |  |  |  |  |  |
| NON-CONTINUOUS (N):      |              |       |      |      | 2300 VA  | MLO: YES |        |      |      |       |                             |                         |  |  |  |  |  |  |  |  |  |  |  |
| RECEP. (R):              |              |       |      |      | 900 VA   |          |        |      |      |       | MAX. PHASE @125% = 119.3 A. |                         |  |  |  |  |  |  |  |  |  |  |  |
| MOTOR (M) OR (M1):       |              |       |      |      | 24413 VA |          |        |      |      |       | DEMAND TOTAL = 37.2 kVA     |                         |  |  |  |  |  |  |  |  |  |  |  |
| LIGHTING (L):            |              |       |      |      | 4370 VA  |          |        |      |      |       | = 103.3 A.                  |                         |  |  |  |  |  |  |  |  |  |  |  |
| KITCHEN >1750W (K):      |              |       |      |      | 0 VA     |          |        |      |      |       |                             |                         |  |  |  |  |  |  |  |  |  |  |  |
| DEMAND CALC. PER ART 220 |              |       |      |      |          |          |        |      |      |       |                             |                         |  |  |  |  |  |  |  |  |  |  |  |



08/11/23 11:24:22 AM F:\23\899 CITY OF TURLOCK COLUMBIA POOL IMPROVEMENTS\ENGR\SHEETS\899\_E3.1 DETAILS.DWG kpezzoni



3 ELECTRICAL TRENCH SECTION (TYP.)  
SCALE: NTS



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IMPROVEMENT PLANS  
COLUMBIA POOL IMPROVEMENTS  
TURLOCK, CALIFORNIA

ELECTRICAL  
DETAILS



|           |            |
|-----------|------------|
| DESIGNED: | KP         |
| DRAWN:    | CCM        |
| CHECKED:  | KP         |
| SCALE:    | AS NOTED   |
| DATE:     | 08/11/2023 |
| JOB NO.:  | 37512      |
| FILE NO.: |            |

BID SUBMITTAL

