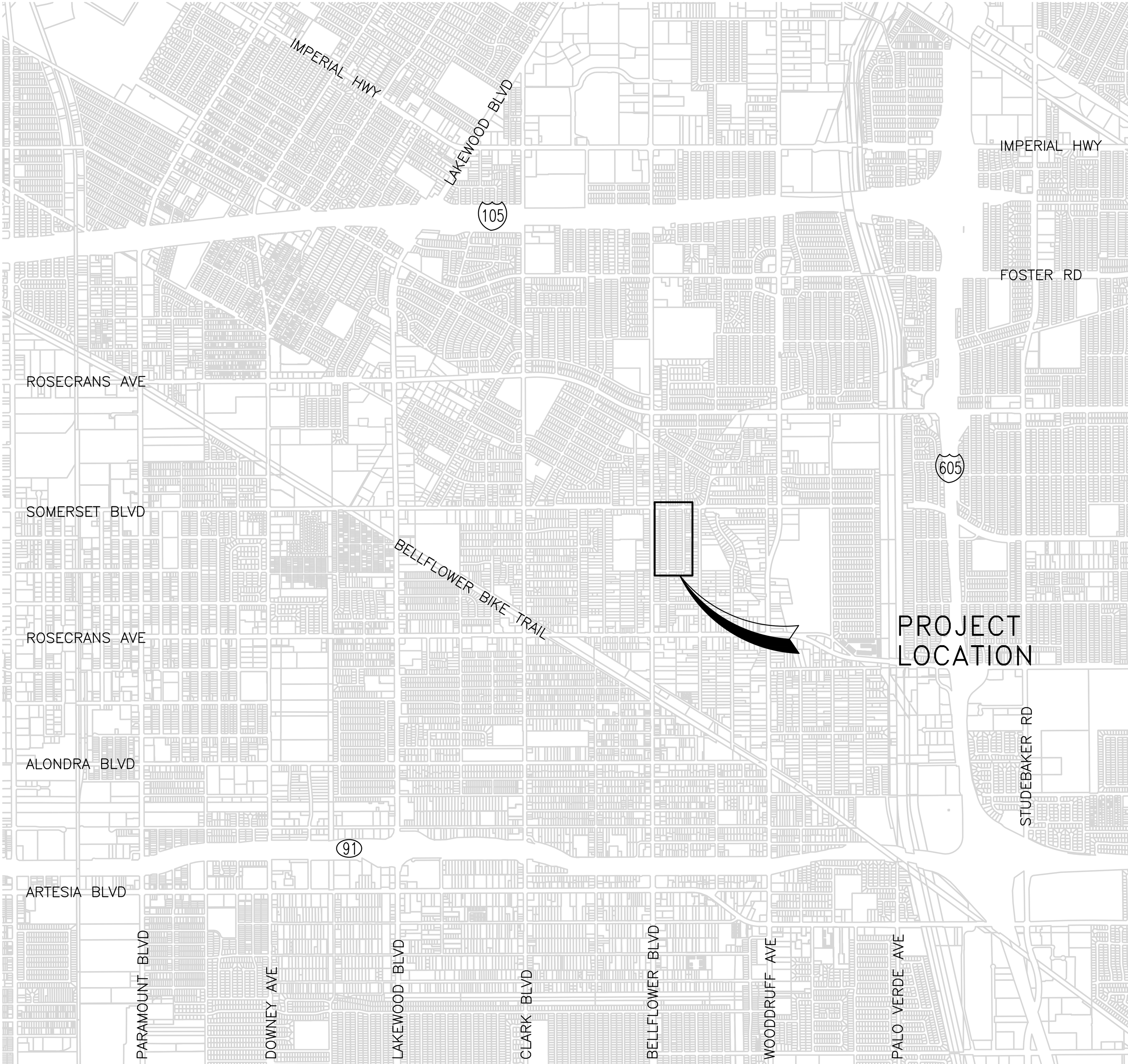
# CALIFORNIA AMERICAN WATER

# BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
## CITY OF BELLFLOWER
## JEFFERSON ST, LEAHY AVE, CABELL AVE, SOMERSET BLVD
## WATER MAIN REPLACEMENT PROJECT




VICINITY AND LOCATION MAPS
NOT TO SCALE

## SURFACE NOTE:

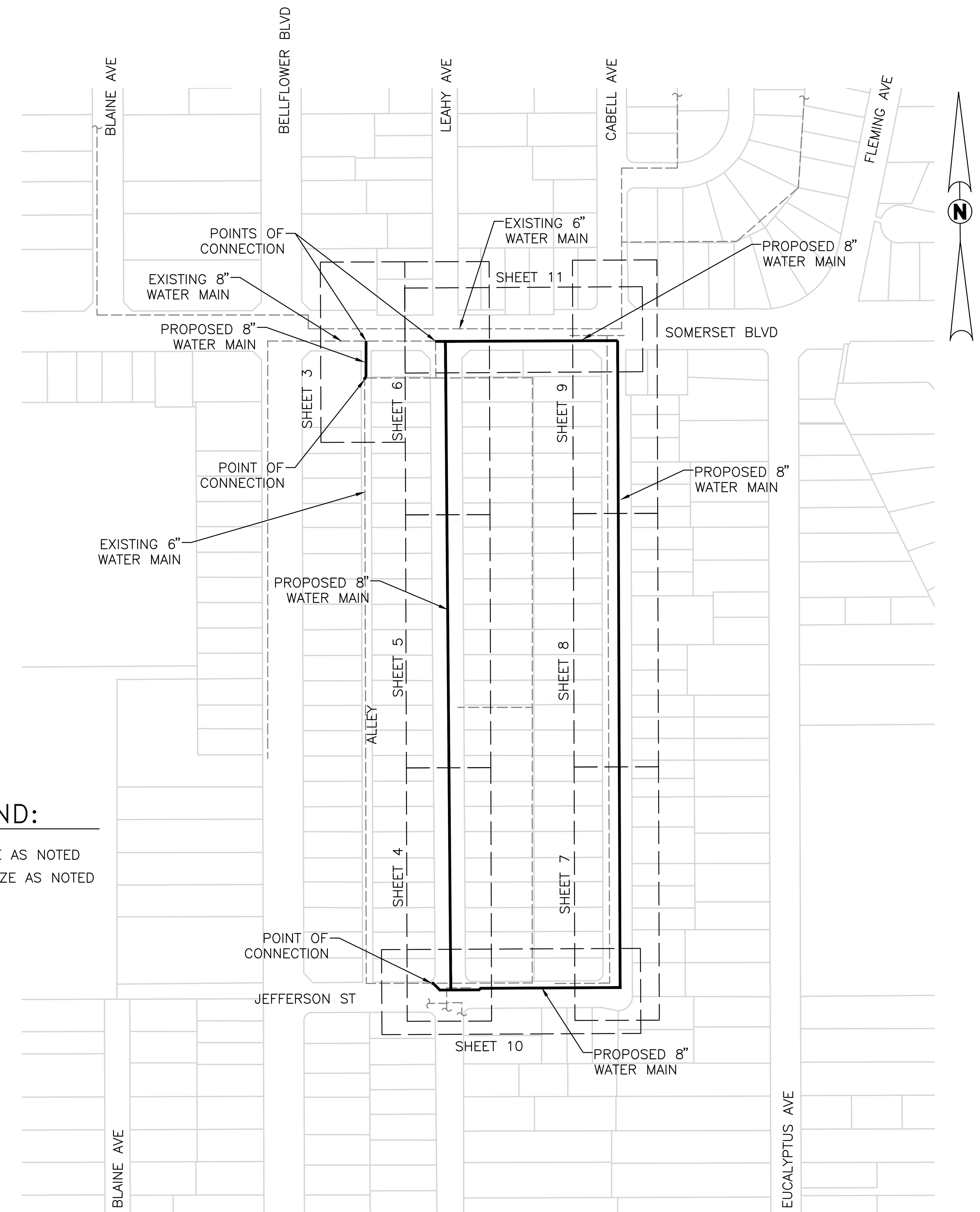
SURFACE DATA OBTAINED FROM NEARMAP LIDAR POINT CLOUD, CAPTURE DATE 9/22/20. VERTICAL SPATIAL REFERENCE: NAVD88

## UTILITIES:

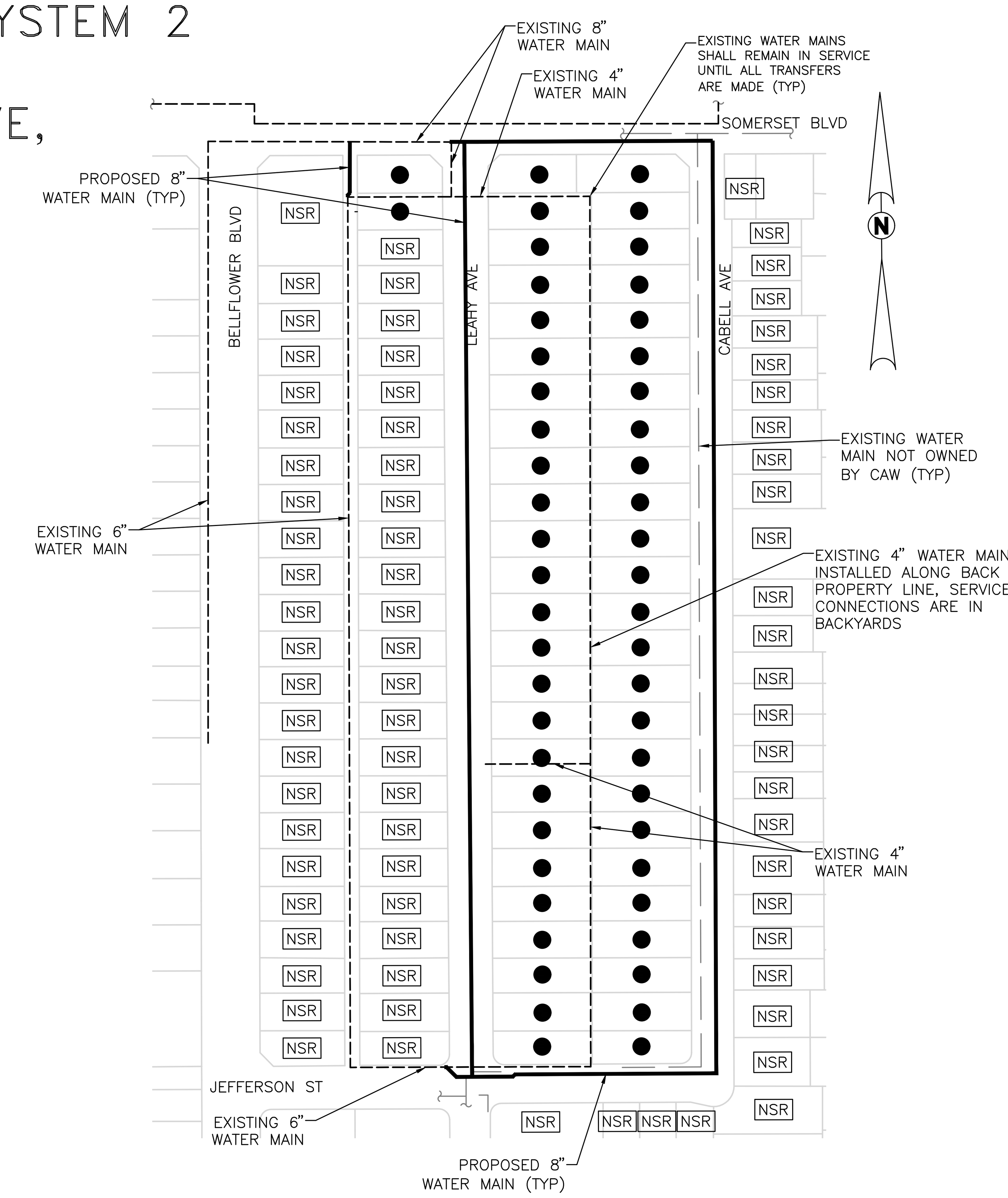
| | |
|---|---|
| SOUTHERN CALIFORNIA EDISON | (800) 655–4555 |
| CITY OF BELLFLOWER | (562) 804–1424 |
| SOUTHERN CALIFORNIA GAS COMPANY | (877) 238–0092 |
| CALIFORNIA AMERICAN WATER COMPANY | (626) 614–2533 |
| CRIMSON PIPELINE LP | (866) 351–7473 |
| LOS ANGELES COUNTY SANITATION DISTRICT | (562) 908–4288 |

## SHEET INDEX MAP LEGEND:

EXISTING WATER MAIN, SIZE AS NOTED
PROPOSED WATER MAIN, SIZE AS NOTED
SHEET LIMITS
PARCEL LINE




A/1 SHEET INDEX MAP
NOT TO SCALE

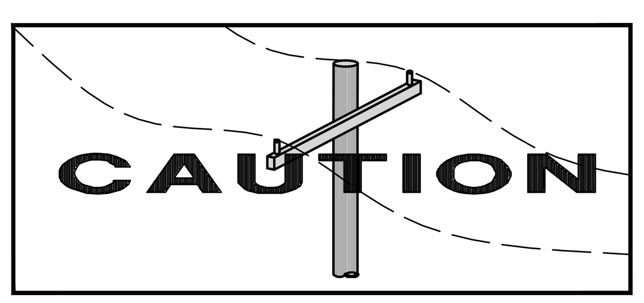



NSR NO NEW SERVICE CONNECTION REQUIRED

● NEW WATER SERVICES REQUIRED, TRANSFER FROM BACK TO FRONT

B/1 PROPOSED/EXISTING WATER MAIN MAP
NOT TO SCALE

| SHEET LIST TABLE | |
|---|---|
| SHEET | SHEET TITLE |
| GENERAL | |
| 1 | COVER SHEET AND SHEET INDEX MAP |
| 2 | LEGEND AND NOTES |
| PLAN AND PROFILES | |
| 3 | STA 19+50 TO STA 23+00 |
| 4 | STA 29+50 TO STA 34+50 |
| 5 | STA 34+50 TO STA 39+50 |
| 6 | STA 39+50 TO STA 43+00 |
| 7 | STA 49+50 TO STA 54+50 |
| 8 | STA 54+50 TO STA 59+50 |
| 9 | STA 59+50 TO STA 63+00 |
| 10 | STA 72+50 TO STA 77+00 |
| 11 | STA 126+00 TO STA 130+50 |
| DETAILS | |
| 12 | STANDARD DETAILS |
| 13 | STANDARD DETAILS |
| 14 | STANDARD DRAWING AND CONNECTION DETAILS |
| TRAFFIC CONTROL | |
| 15 | TRAFFIC CONTROL NOTES |
| 16 | SOMERSET BLVD |
| 17 | SOMERSET BLVD |
| 18 | SOMERSET BLVD |




WATCH FOR OVERHEAD POWER LINES

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CALIFORNIA AMERICAN WATER

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AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023–7–25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER

COVER SHEET AND SHEET INDEX MAP

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USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
BID SET
USE DIMENSIONS ONLY
SCALE AS SHOWN
1 / 18

## TOPO LEGEND:

BACKFLOW ASSEMBLY
COMMUNICATION PULLBOX
COMMUNICATION VAULT
ELECTRICAL CABINET
ELECTRICAL PULL BOX
ELECTRICAL CONDUIT
FIRE HYDRANT
GAS METER
GAS VALVE
GUY WIRE ANCHOR
IRRIGATION VALVE
JOINT UTILITY POLE
LIGHT POLE
POWER POLE
STREET LIGHT
SEWER MANHOLE
SERVICE POLE
SIGN
STORM DRAIN INLET
STORM DRAIN MANHOLE
SURVEY CONTROL POINT
TELEPHONE MANHOLE
TRAFFIC SIGNAL PULLBOX
TRAFFIC SIGNAL W/ MAST ARM
TRAFFIC PEDESTRIAN POLE
TRAFFIC SIGNAL
UNIDENTIFIED BOX
UNIDENTIFIED MANHOLE
UNIDENTIFIED VAULT
WATER METER
WATER VALVE

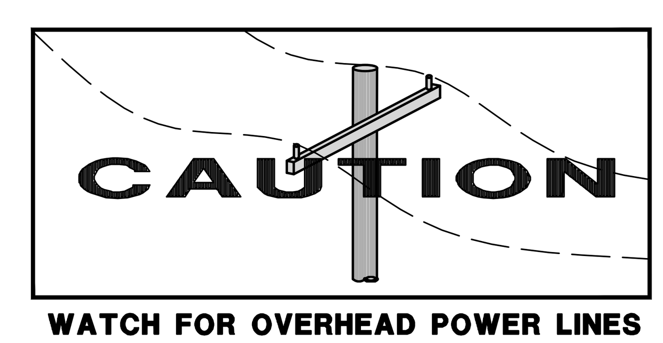
| | |
|---|---|
| C | COMMUNICATION LINE |
| E | ELECTRICAL LINE |
| G3/4 | GAS LINE; SIZE AS NOTED |
| S8 | SEWER LINE; SIZE AS NOTED |
| SS | SEWER HOUSE BRANCHES, LOCATION AND DEPTH UNKNOWN |
| SD30 | STORM DRAIN LINE; SIZE AS NOTED |
| TS | TRAFFIC SIGNAL LINE |
| W4 | WATER LINE; SIZE AS NOTED |
| W4 | WATER LINE TO BE ABANDONED; SIZE AS NOTED |
| | CENTERLINE |
| | PROPERTY LINE, PER GIS DATA |

## ABBREVIATIONS AND SYMBOLS:

| | |
|---|---|
| AC | ASBESTOS CEMENT |
| ACP, CA | ASBESTOS CEMENT PIPE |
| BMPS | BEST MANAGEMENT PRACTICES |
| AP | ANGLE POINT |
| BC | BEGIN CURVE |
| BVC | BEGIN VERTICAL CURVE |
| C | COMMUNICATION |
| CAW | CALIFORNIA AMERICAN WATER COMPANY |
| CI | CAST IRON |
| CL | CENTERLINE |
| DIP | DUCTILE IRON PIPE |
| E | EAST OR ELECTRICAL |
| EC | END CURVE |
| EVC | END VERTICAL CURVE |
| FL | FLOWLINE |
| FLG | FLANGE |
| G | GAS |
| GV | GATE VALVE |
| HORIZ | HORIZONTAL |
| L | LEFT OR LENGTH |
| LF | LINEAR FEET |
| MJ | MECHANICAL JOINT |
| MIN | MINIMUM |
| MISC | MISCELLANEOUS |
| MUTCD | MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES |
| N | NORTH |
| PCMS | PORTABLE CHANGEABLE MESSAGE SIGNS |
| R | RIGHT OR RADIUS |
| RVC | REVERSE VERTICAL CURVE |
| S | SOUTH OR SEWER |
| SD | STORM DRAIN |
| SDCD | STORM DRAIN CROSS DRAIN |
| SDFL | STORM DRAIN FLOWLINE |
| SS | SANITARY SEWER HOUSE BRANCH |
| SSFL | SANITARY SEWER FLOWLINE |
| STD | STANDARD |
| STD DWG | STANDARD DRAWING |
| TTC | TEMPORARY TRAFFIC CONTROL |
| TYP | TYPICAL |
| UNK | UNKOWN |
| VERT | VERTICAL |
| W | WEST OR WATER |
| WS | WATER SERVICE |
| | PROPOSED FIRE HYDRANT PER STD DWG COR-7 ON SHEET 12 |
| WV | PROPOSED WATER VALVE AND VALVE BOX PER STD DWG COR-9 A&B ON SHEET 13 |
| | PROPOSED 1" WATER SERVICE PER STD DWG COR-1 OR COR-2 ON SHEET 12, AND COR-18 ON SHEET 13 |
| | PROPOSED 2" BLOW-OFF ASSEMBLY PER STD DWG COR-6 ON SHEET 12 |
| | PROPOSED WATER MAIN, SIZE AS NOTED ON PLANS, PER STD DWG COR-4A, B & C ON SHEET 12 AND COR-23 ON SHEET 13 |
| PH | PROPOSED POTHOLE LOCATION |
| A / 16 | DETAIL DESIGNATION / SHEET NUMBER |

## WATER NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE CALIFORNIA AMERICAN WATER COMPANY STANDARD DRAWINGS AND SPECIFICATIONS AND THE LOS ANGELES COUNTY PUBLIC WORKS STANDARDS. WHERE CONFLICTS EXIST BETWEEN THESE TWO STANDARDS THE MORE STRINGENT OF THE TWO, IN THE OPINION OF THE ENGINEER, SHALL GOVERN.
2. CONTRACTOR SHALL COMPLY WITH ALL REQUIREMENTS SET FORTH BY THE CITY OF BELLFLOWER SHALL SECURE ALL PERMITS REQUIRED FOR THIS WORK. PROVIDE CONSTRUCTION SCHEDULE TO THE CITY OF BELLFLOWER AT LEAST 2 WEEKS AHEAD OF CONSTRUCTION START DATE. INVITE CITY STAFF TO ATTEND PRE-CONSTRUCTION MEETING.
3. CONTRACTOR SHALL SCHEDULE THE WORK IN A MANNER TO MINIMIZE WATER SERVICE OUTAGES TO EXISTING WATER CUSTOMERS AND SHALL NOTIFY THE CALIFORNIA AMERICAN WATER COMPANY AND USERS A MINIMUM OF 5 WORKING DAYS PRIOR TO ANY PLANNED WATER SERVICE DISRUPTIONS.
4. CONTRACTOR SHALL RESTORE AREAS DAMAGED DURING CONSTRUCTION TO THEIR PRE-CONSTRUCTION CONDITION, OR BETTER.
5. CONTRACTOR SHALL BACKFILL ALL PIPELINE TRENCHES OR COVER TRENCHES WITH STEEL PLATES AT THE END OF EACH WORKDAY. STEEL PLATES SHALL ALSO BE INSTALLED OVER OPEN TRENCHES TO ALLOW DRIVEWAY ACCESS.
6. OPEN TRENCHES LEFT OVERNIGHT MUST HAVE TWO SHORING WALLS IN PLACE.
7. CONTRACTOR SHALL REMOVE AND REPLACE DAMAGED CONCRETE IMPROVEMENTS TO NEAREST JOINT.
8. EXISTING IN-LINE MAIN VALVES SHALL BE ABANDONED IN PLACE, AND EXISTING VALVES AT TEE CONNECTIONS SHALL BE REMOVED. VALVE CANS SHALL BE FILLED WITH CEMENT-SAND SLURRY.
9. WHERE WATER MAIN CROSSES BELOW SEWER MAIN OR SEWER SERVICE LATERAL, NO WATER MAIN JOINTS ARE ALLOWED WITHIN 10' OF CROSSING. SEE SPECIFICATIONS.
10. WHERE WATER MAIN CROSSES ABOVE SEWER MAIN OR SEWER LATERAL WITH LESS THAN 1' CLEARANCE, NO WATER MAIN JOINTS ARE ALLOWED WITHIN 4' OF CROSSING. SEE SPECIFICATIONS.
11. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE UTILITIES AS SHOWN ON PLANS TO VERIFY THEIR VERTICAL AND HORIZONTAL LOCATIONS.
12. WET TIE AND TIE-IN LOCATION MUST BE POTHOLED BY CONTRACTOR AND NEW MAIN MUST BE ADJUSTED TO MEET ELEVATION OF EXISTING MAIN LINES. CONTACT CALIFORNIA AMERICAN WATER PRIOR TO POTHOLE WORK.
13. CONTRACTOR SHALL PREPARE AND MAINTAIN AS-BUILT DRAWINGS AND UPDATE SAID DRAWINGS ON A WEEKLY BASIS. A COPY OF THE FINAL AS-BUILT PLAN SET SHALL BE SUBMITTED TO THE CITY OF BELLFLOWER.
14. CONSTRUCTION STAKING SHALL BE PROVIDED BY THE CONTRACTOR.
15. BMPS SHALL BE INSTALLED AND MAINTAINED AT ALL NEARBY DRAIN INLETS, IN ACCORDANCE WITH THE CITY OF BELLFLOWER REQUIREMENTS.
16. DISCHARGE OF WATER INTO SEWER IS NOT ALLOWED. CONTRACTOR SHALL DISPOSE OF WATER USED FOR FLUSHING, TESTING & ANCILLARY ACTIVITIES OFF-SITE. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE WITH AND OBTAIN ALL NECESSARY PERMITS FROM CITY.
17. PRIOR TO SITE MOBILIZATION, CONTRACTOR SHALL RECORD A PRE-CONSTRUCTION VIDEO OF THE SITE TO DOCUMENT EXISTING CONDITIONS, AND PROVIDE A COPY OF THE VIDEO TO CALIFORNIA AMERICAN WATER COMPANY, IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
18. CONTRACTOR SHALL COORDINATE WITH CITY OF BELLFLOWER ENGINEERING DIVISION TO DESIGNATE DIMENSIONS FOR MATERIALS AND EQUIPMENT STORAGE IN THE PUBLIC RIGHT-OF-WAY.
19. CONTRACTOR SHALL BACKFILL TRENCH PER CITY OF BELLFLOWER STANDARDS AND CAW STD DWG COR-23 ON SHEET 13.
20. CONTRACTOR SHALL PROVIDE THRUST BLOCKS AT ALL FITTINGS AND VALVES, AND SHALL RESTRAIN DIP MECHANICAL JOINTS WITH SERIES 1100 MEGALUG, OR APPROVED EQUAL.
21. CONTRACTOR SHALL INSTALL NO. 10 COPPER TRACING WIRE AND METALLIC DETECTOR TAPE IN ACCORDANCE WITH STD SPECIFICATIONS.
22. REMOVE AND REPLACE ALL DAMAGED PAVEMENT STRIPING, CURB, GUTTER, SIDEWALK, DRIVEWAY APPROACH, CONCRETE SPANDREL IN KIND, PER CITY STANDARDS, TO THE NEAREST JOINT.
23. EXISTING PIPE TO BE ABANDONED SHALL BE CUT, CAPPED, GROUTED, AND ABANDONED IN PLACE.
24. NO SOIL STOCKPILES ARE ALLOWED WITHIN RIGHT-OF-WAY OUTSIDE OF WORKING HOURS, UNLESS GIVEN SPECIFIC PERMISSION BY CITY. STOCKPILES THAT ALLOWED TO REMAIN WITHIN RIGHT-OF-WAY SHALL BE COVERED IN ACCORDANCE WITH LOS ANGELES COUNTY STANDARDS.
25. CONTRACTOR SHALL MAINTAIN CLEAN RESTROOM ON-SITE DURING WORKING HOURS, AND REMOVE RESTROOM AT END OF WORKDAY.
26. CUT-OFF SAWS ARE NOT ALLOWED.
27. AT END OF EVERY WORKDAY, NEW PIPE MUST BE PLUGGED WITH WATER TIGHT SEAL.
28. WHEN USING WATER, CONTRACTOR MUST USE CERTIFIED BACKFLOW PREVENTER WITH CALIFORNIA AMERICAN WATER METER.
29. CONTRACTOR SHALL CLEAN AND SWEEP STREETS DAILY.
30. CONTRACTOR SHALL ADJUST AND REALIGN EXISTING IRRIGATION SYSTEM AS NECESSARY TO INSTALL WATER FACILITIES.
31. CONTRACTOR SHALL RESURFACE WATER MAIN AND WATER SERVICE TRENCH PER THE REQUIREMENTS OF THE ENCROACHMENT PERMIT, BUT NOT LESS THAN THE REQUIREMENTS OF THE CITY OF BELLFLOWER PUBLIC WORKS STANDARDS.
32. CONTRACTOR SHALL FURNISH AND INSTALL TEMPORARY AIR RELEASE VALVES AS NECESSARY DURING PRESSURE TESTING.
33. CONTRACTOR SHALL INSTALL TEMPORARY SAMPLE PORTS AS NECESSARY FOR BACTI TESTING.

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## WATER SERVICE NOTES:

1. CONTRACTOR SHALL CONNECT ON-SITE WATER SERVICE LINE TO NEW METER BOX, SEE STD DWGS ON SHEET 12. EXISTING WATER METER SHALL BE TRANSFERRED TO NEW METER BOX.
2. CONTRACTOR SHALL RESURFACE WATER MAIN AND WATER SERVICE TRENCH PER CITY STANDARD DRAWINGS ON SHEET 14.
3. ALL RESIDENTIAL WATER SERVICES SHALL BE 1", UNLESS OTHERWISE NOTED OR OTHERWISE INDICATED IN THE SPECIFICATIONS. EXISTING WATER METERS SHALL BE REUSED.
4. CONTRACTOR SHALL EVALUATE EXISTING CONDITIONS AT PROPOSED METER BOX AND WATER SERVICE AREA, AND WORK WITH CALIFORNIA AMERICAN WATER TO DETERMINE APPROPRIATE LOCATION FOR NEW SERVICE.
5. CONTRACTOR SHALL REMOVE AND LAWFULLY DISPOSE OF EXISTING METER BOXES, UNLESS OTHERWISE NOTED.

## STAGING NOTES:

1. CONTRACTOR SHALL BE RESPONSIBLE FOR SECURING STAGING AREA.
2. IF CONTRACTOR CHOOSES A PRIVATE PROPERTY FOR STAGING, CONTRACTOR SHALL OBTAIN AN AGREEMENT WITH THE PROPERTY OWNER AND PROVIDE A COPY TO CALIFORNIA AMERICAN WATER COMPANY.

## BACKYARD SERVICE NOTES:

1. THE EXISTING CALIFORNIA AMERICAN WATER MAIN BETWEEN LEAHY AVE AND CABELL AVE SERVES THE ADJACENT RESIDENCES FROM THE BACKYARD. SEE DETAIL B/1. THE PROPOSED WATER MAINS ON LEAHY AND CABELL WILL REPLACE THIS WATER MAIN, AND WATER SERVICE WILL BE TRANSFERRED TO THE STREET-SIDE OF THE HOMES.
2. EXISTING METERS WILL BE TRANSFERRED FROM EXISTING METER BOXES IN BACK TO NEW METER BOXES IN FRONT. SERVICE PIPE SIZE SHALL BE 1" UNLESS OTHERWISE NOTED.
3. EXISTING WATER MAINS SHALL REMAIN IN SERVICE UNTIL ALL SERVICE TRANSFERS HAVE BEEN MADE.
4. NEW WATER SERVICES CONNECTING TO HOUSE MUST MAINTAIN MINIMUM 10' HORIZONTAL SEPARATION FROM EXISTING SEWER LATERAL.
5. ALL EXISTING LANDSCAPING, CONCRETE, OR OTHER IMPROVEMENTS THAT ARE DISTURBED BY THE INSTALLATION OF THE NEW WATER SERVICE SHALL BE REPLACED IN-KIND BY THE CONTRACTOR.
6. CONTRACTOR SHALL COORDINATE WITH CAW PRIOR TO ANY SHUTDOWN OF WATER MAIN. WATER SERVICE SHALL BE SHUT OFF FOR NO MORE THAN 8 HOURS AND SHALL BE RESTORED AT THE END OF EVERY WORKDAY.
7. CONTRACTOR SHALL DISCONNECT EXISTING SERVICES IN A MANNER THAT FACILITATES RECONNECTION IN THE EVENT THAT THERE ARE INITIAL ISSUES WITH NEW WATER SERVICE CONNECTIONS.
8. PRIOR TO BEGINNING WORK ON PRIVATE PROPERTY, CONTRACTOR SHALL PHOTOGRAPH WORK AREA AND PROVIDE TO CAW. ANY DAMAGE TO EXISTING CONCRETE, LANDSCAPING, OR OTHER SURFACING SHALL BE REMOVED AND REPLACED IN KIND. CONTRACTOR SHALL COORDINATE WITH HOMEOWNERS DIRECTLY PRIOR TO BEGINNING WORK.
9. CONTRACTOR SHALL NOTIFY RESIDENTS AND CAW AT LEAST 7 DAYS IN ADVANCE OF ANY WORK TO BE PERFORMED ON-SITE.
10. SEE DETAILS ON SHEET 14.

## STREET RESURFACING NOTES:

1. CONTRACTOR SHALL RESURFACE WATER MAIN AND WATER SERVICE TRENCH PER CITY STANDARDS, LISTED BELOW.
2. TRENCH RESURFACING SHALL MATCH EXISTING STRUCTURAL SECTION, PLUS 1" THICKNESS FOR BASE AND ASPHALT CONCRETE. EXPECTED AC PAVEMENT THICKNESS IS 4"
3. AFTER RESURFACING, FINAL RESTORATION SHALL INCLUDE A 2" GRIND & CAP. WIDTH OF GRIND & CAP LIMITS SHALL EXTEND AT LEAST 6" PAST WIDTH OF TRENCH ON EACH SIDE.
4. FOR ANY TRENCH REPAIRS OR POTHOLES WITHIN 10' OF ANOTHER, FINAL RESTORATION PATCHES SHALL BE JOINED TOGETHER.

CALIFORNIA AMERICAN WATER

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AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS
DATE
PROJECT

# BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER

LEGEND AND NOTES

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

BID SET

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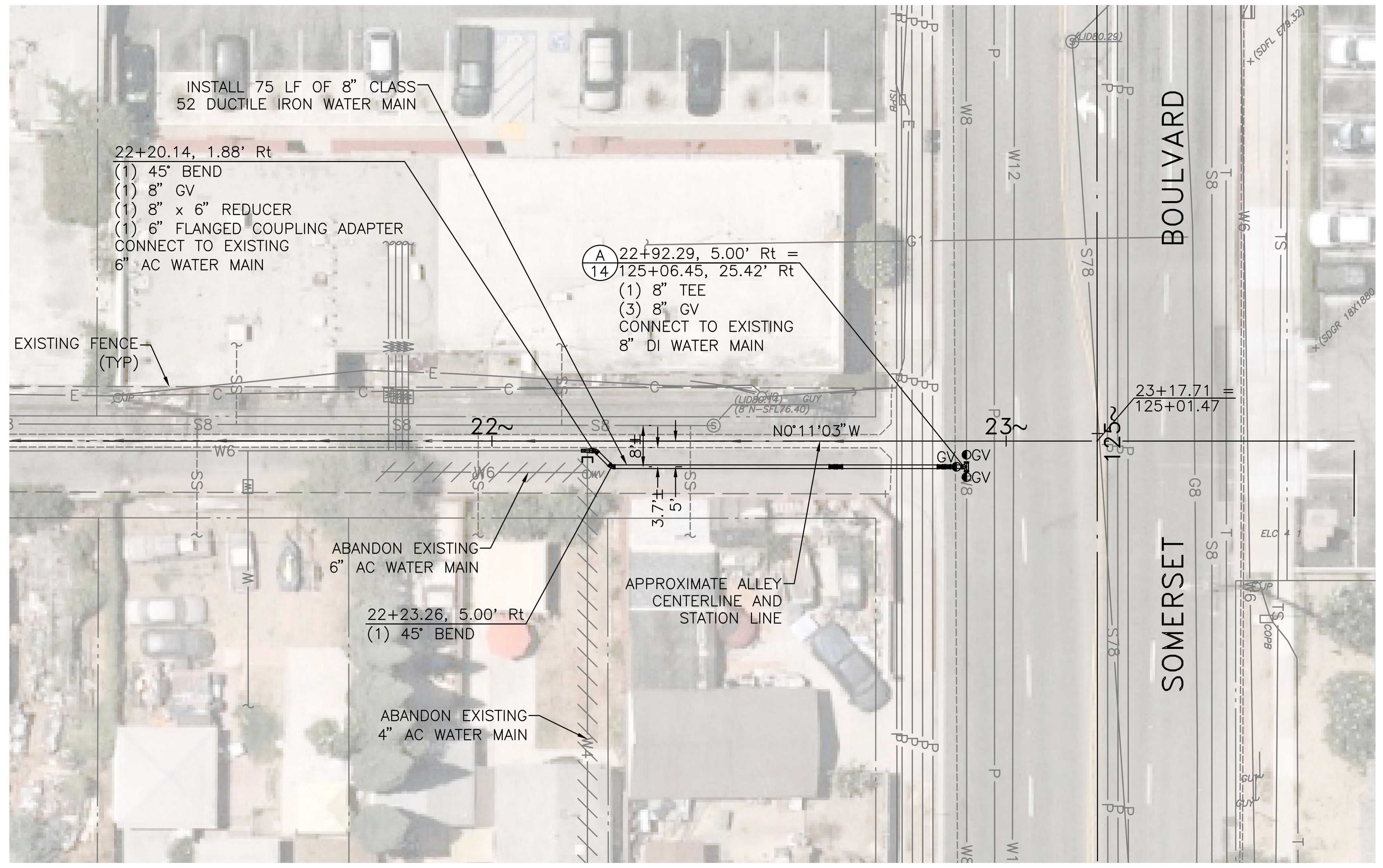
SCALE AS SHOWN

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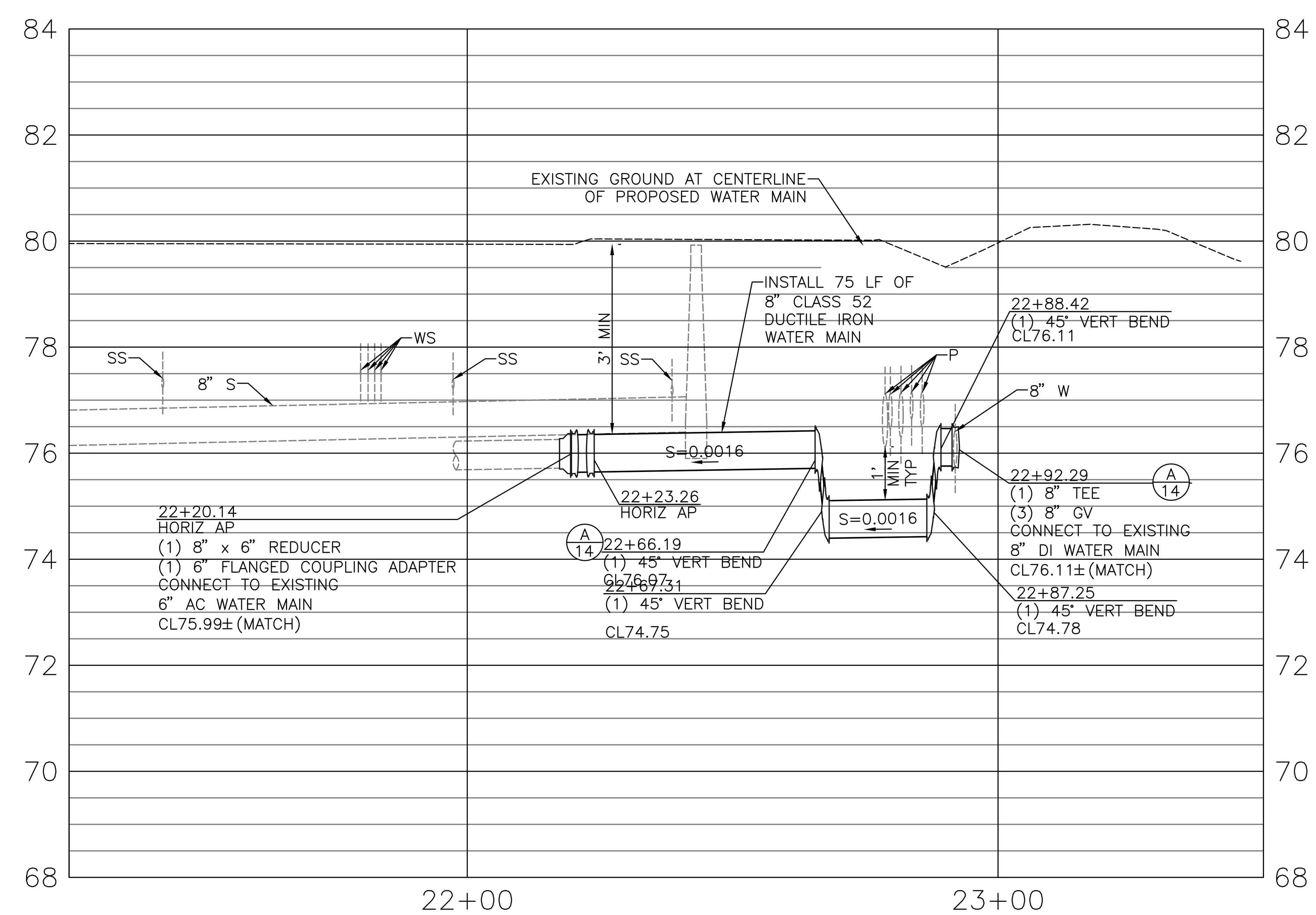
SCALE IN FEET
SCALE: HORIZ 1"=20'
VERT 1"=2'




SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

POTHOLE AND LOCATION NOTES:

1. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE UTILITIES AT LOCATIONS INDICATED ON PLAN TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER VALVE DEPTHS VIA MEASUREMENTS FROM FINISHED GRADE TO VALVE NUT.

CAUTION
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BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 19+50 TO STA 23+00

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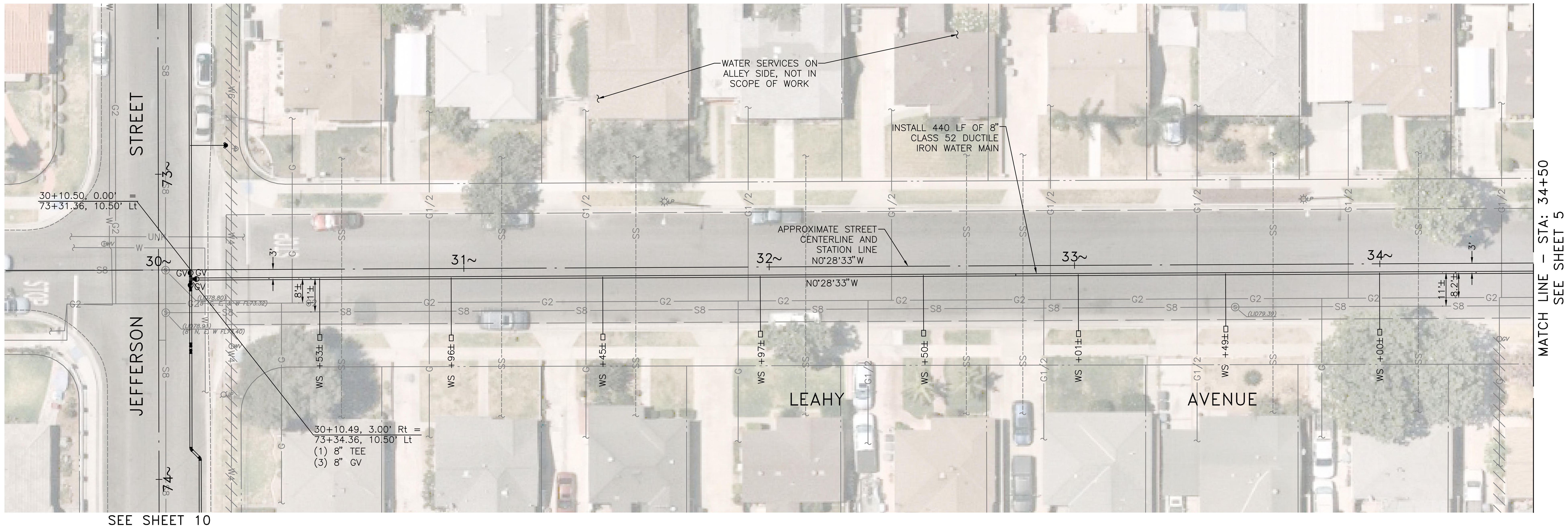


SEE SHEET 10

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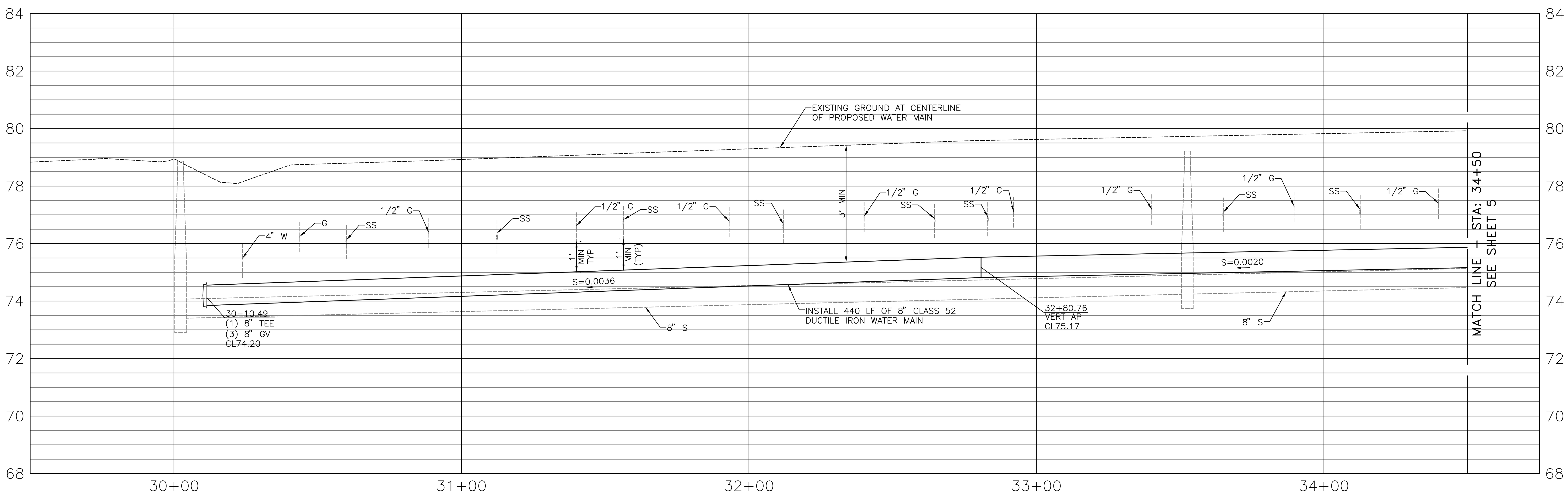


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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
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STA 29+50 TO STA 34+50

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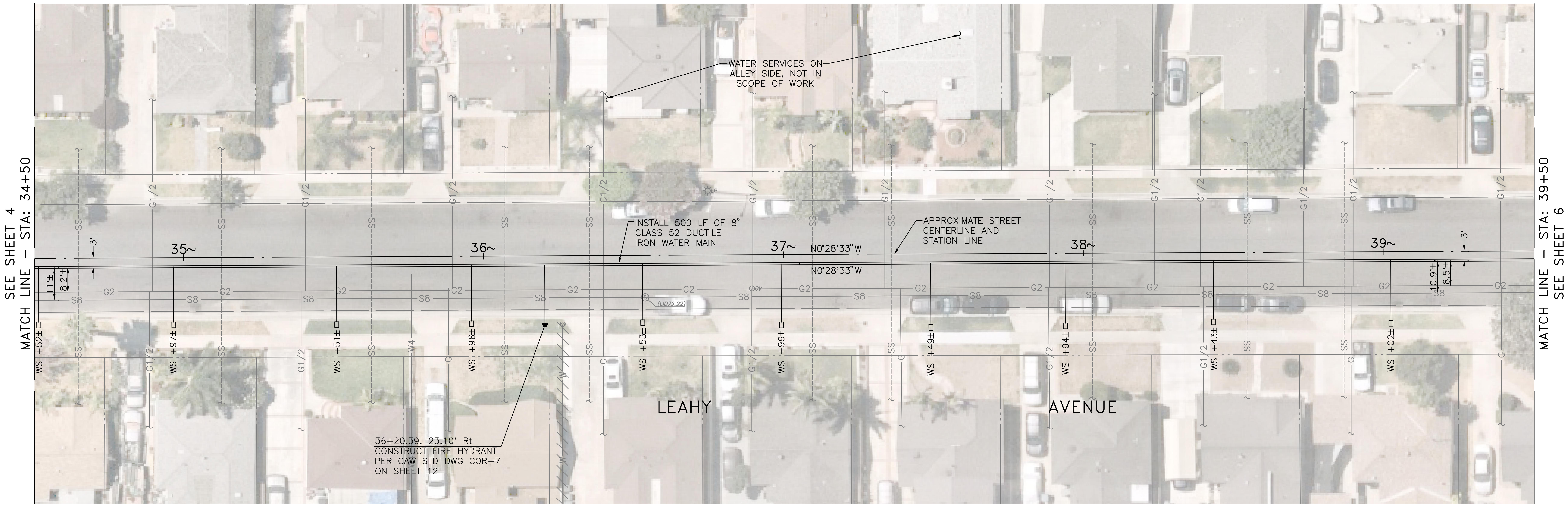


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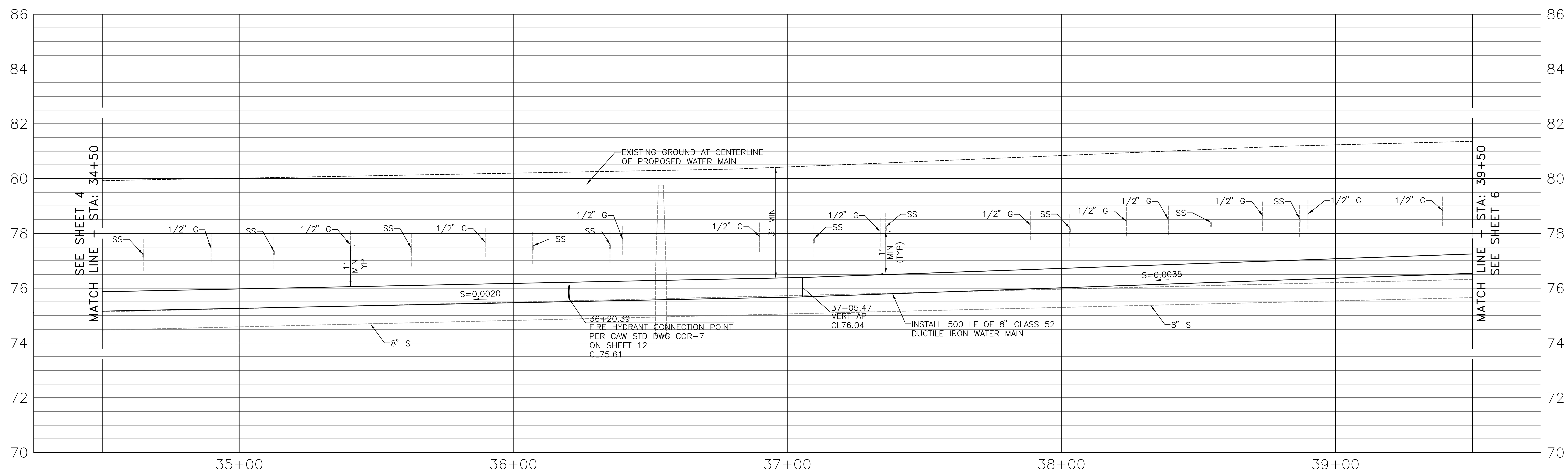


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BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 34+50 TO STA 39+50

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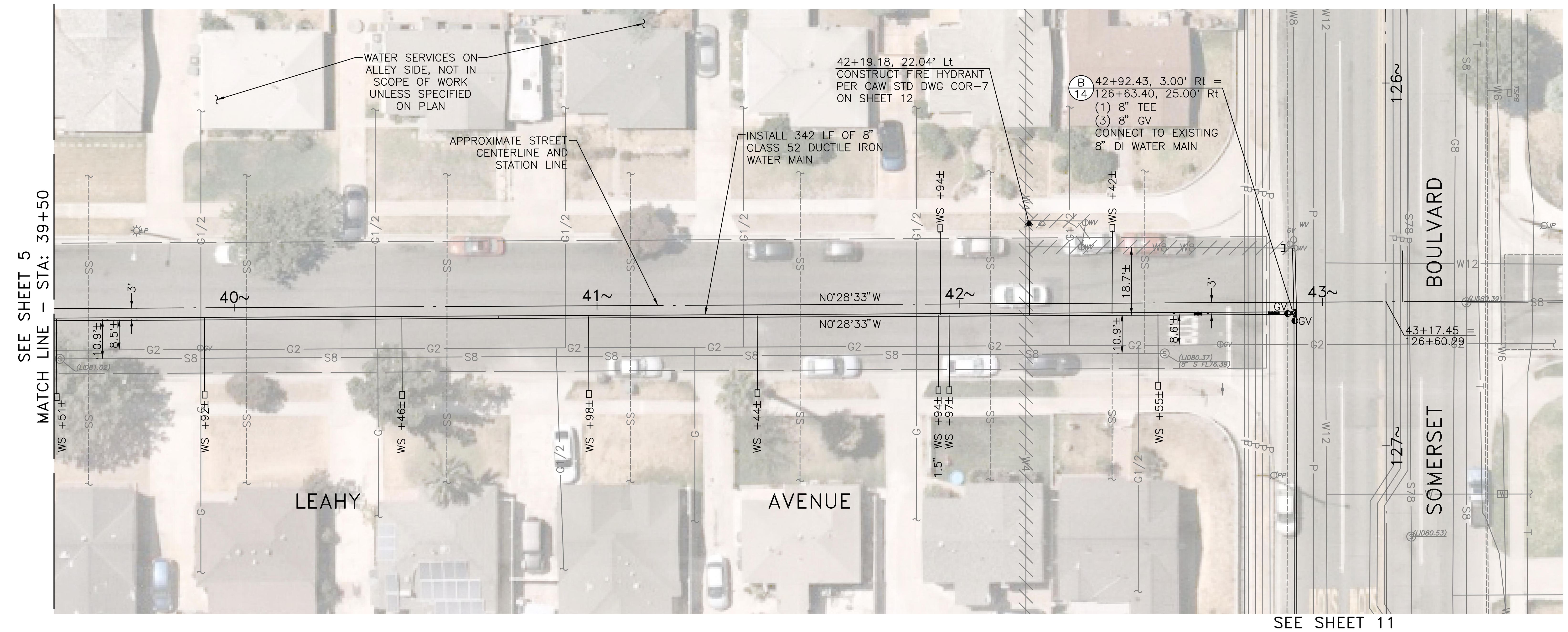


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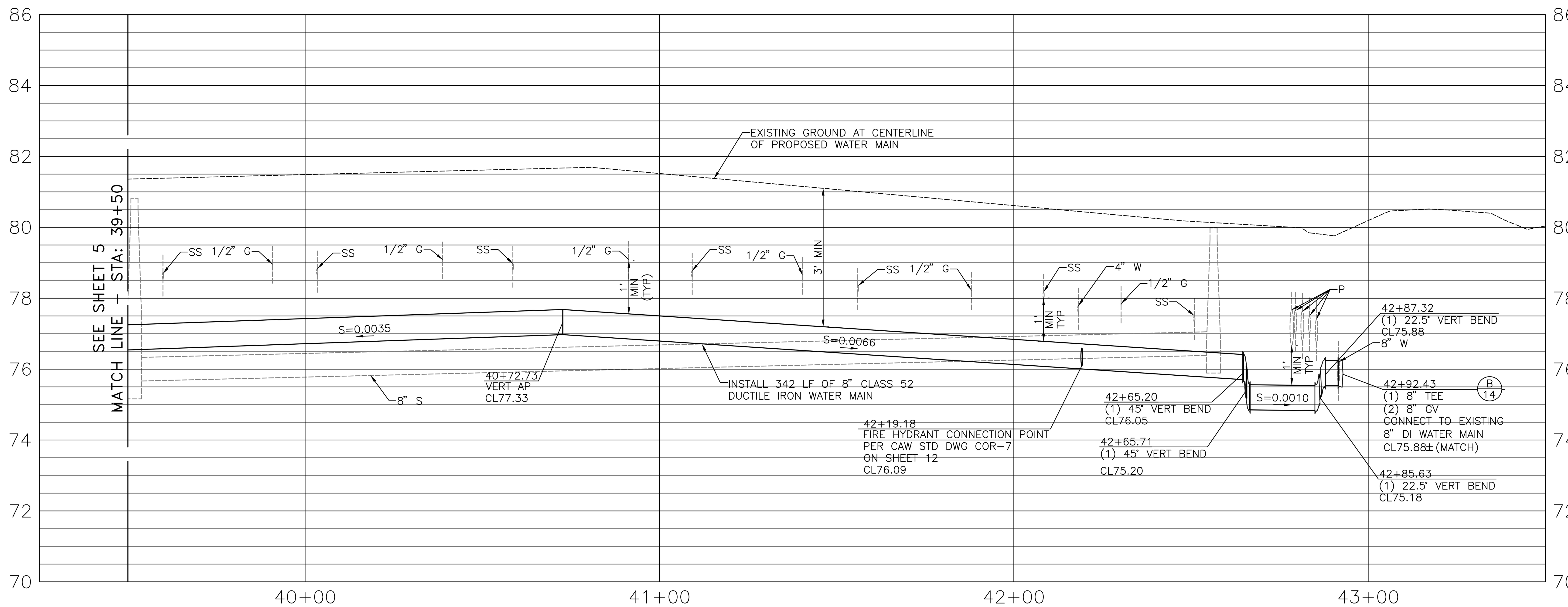
VERT 1"=2'




SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

POTHOLE AND LOCATION NOTES:

1. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE UTILITIES AT LOCATIONS INDICATED ON PLAN TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER VALVE DEPTHS VIA MEASUREMENTS FROM FINISHED GRADE TO VALVE NUT.

CAUTION
WATER FOR OVERHEAD POWER LINES

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AMERICAN WATER COMPANY
3906 CHURCH ROAD
MT. LAUREL, NJ 08054

AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 39+50 TO STA 43+00

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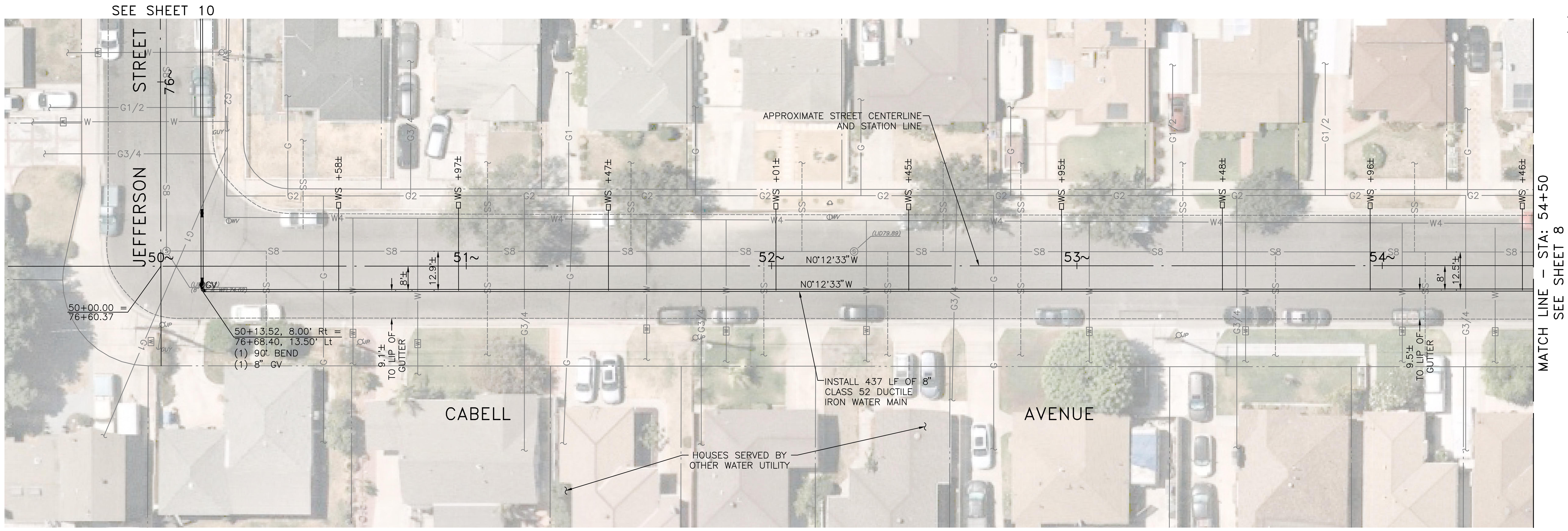
USE DIMENSIONS ONLY
SCALE AS SHOWN

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

BID SET




0 5 10 20 40
SCALE IN FEET
SCALE: HORIZ 1"=20'
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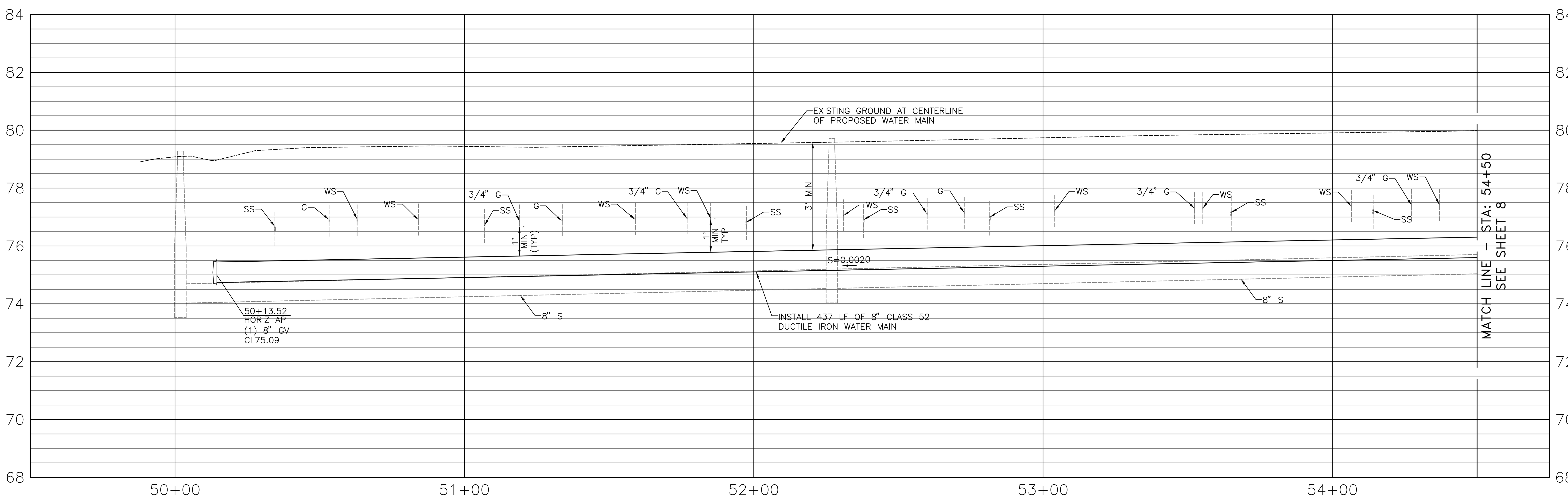


SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

POTHOLE AND LOCATION NOTES:

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AMERICAN WATER

DRAWN BY AP
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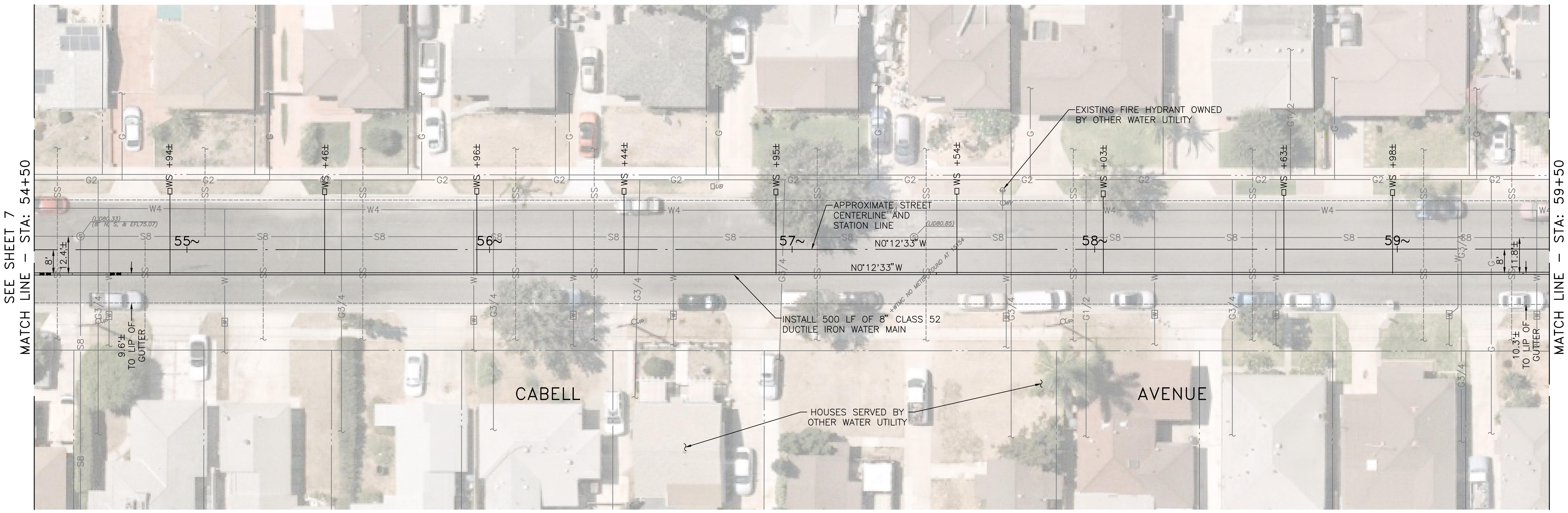
BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 49+50 TO STA 54+50

---- | ---- | USE DIMENSIONS ONLY SCALE AS SHOWN
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 7 / 18

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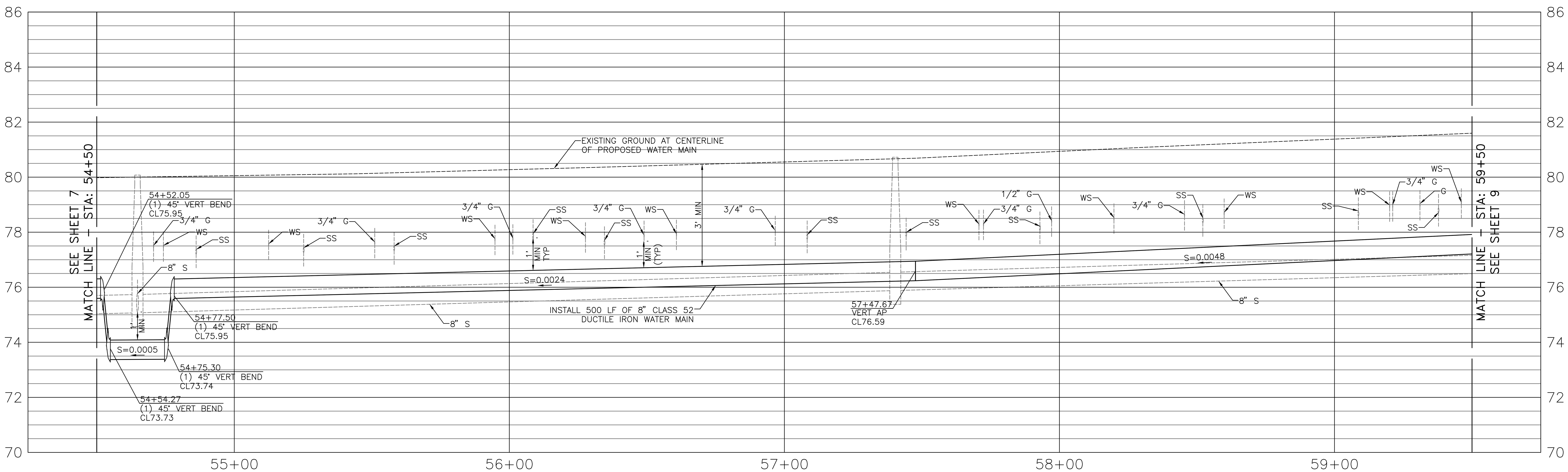


SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

## POTHOLE AND LOCATION NOTES:

1. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE UTILITIES AT LOCATIONS INDICATED ON PLAN TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER VALVE DEPTHS VIA MEASUREMENTS FROM FINISHED GRADE TO VALVE NUT.

CAUTION
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DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 54+50 TO STA 59+50

---- ----
USE DIMENSIONS ONLY
SCALE AS SHOWN
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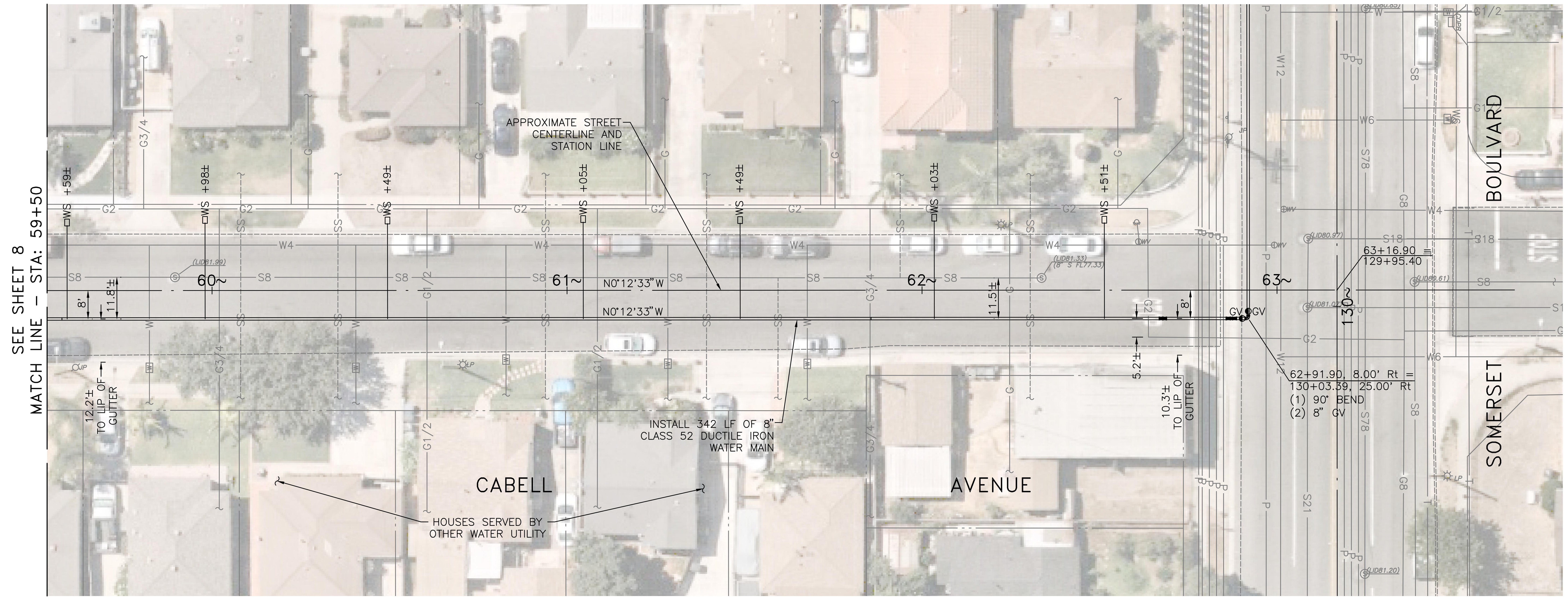


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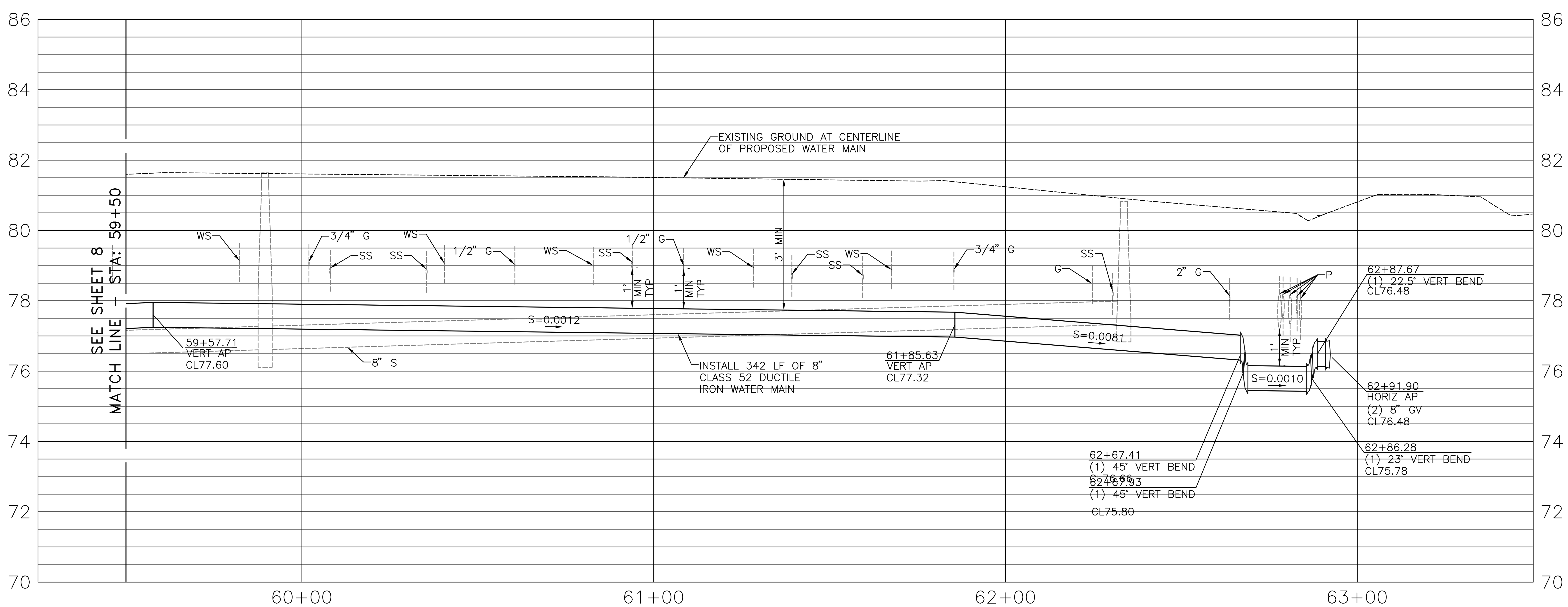
SCALE: HORIZ 1"=20'
VERT 1"=2'




SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

## POTHOLE AND LOCATION NOTES:

1. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE UTILITIES AT LOCATIONS INDICATED ON PLAN TO VERIFY HORIZONTAL AND VERTICAL LOCATIONS.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING WATER VALVE DEPTHS VIA MEASUREMENTS FROM FINISHED GRADE TO VALVE NUT.

CAUTION
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DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 59+50 TO STA 63+00

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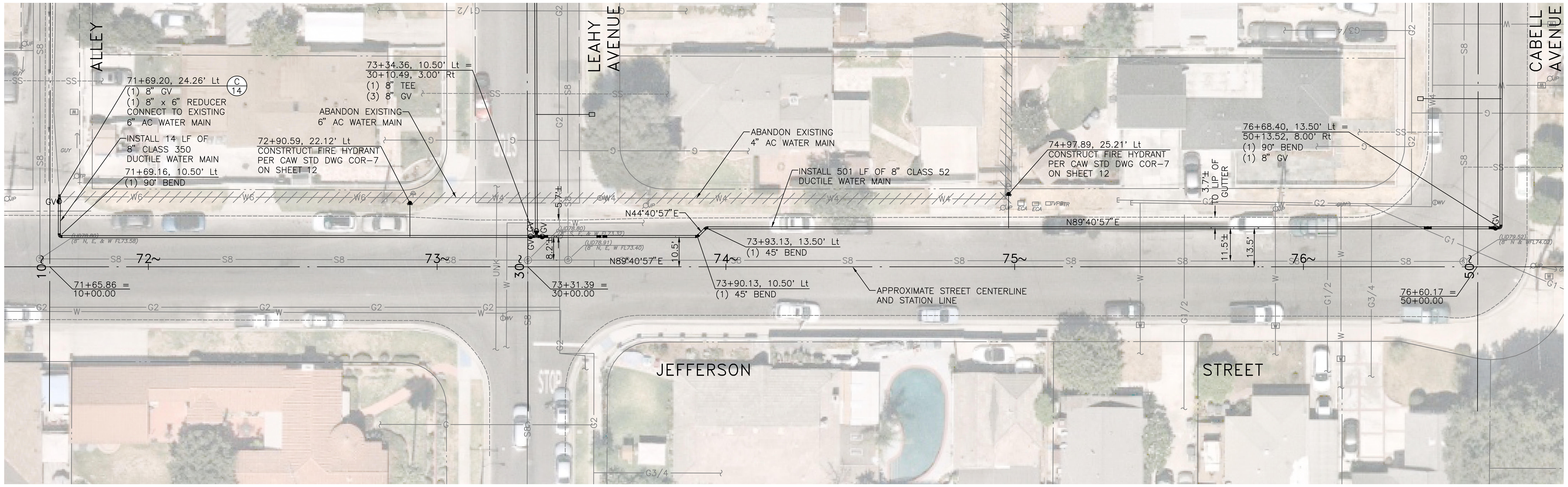


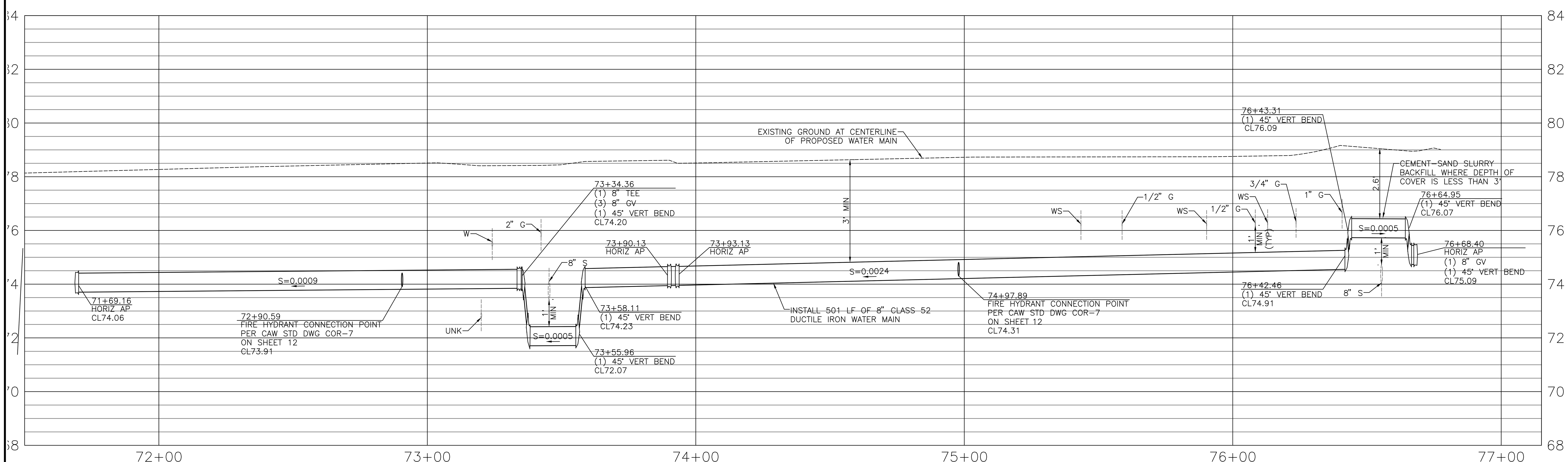


SEE WATER NOTES
AND WATER SERVICE
NOTES ON SHEET 2

POTHOLE AND LOCATION NOTES:

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DRAWN BY AP
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DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 72+50 TO STA 77+00

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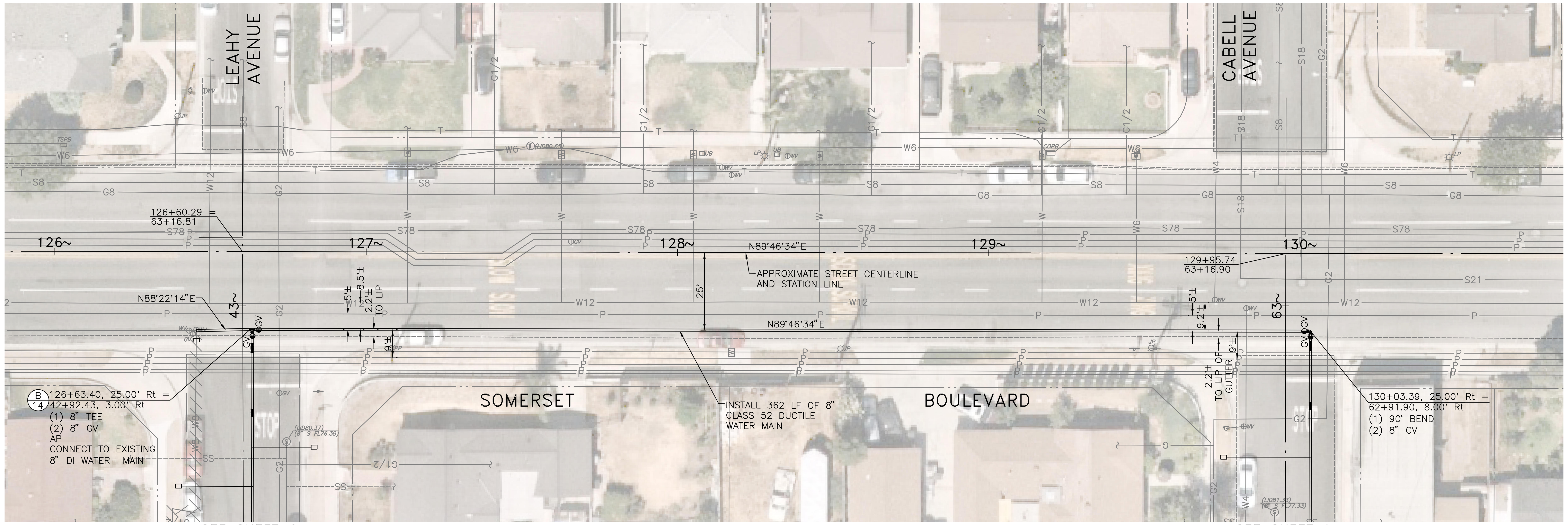
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 10 / 18 |

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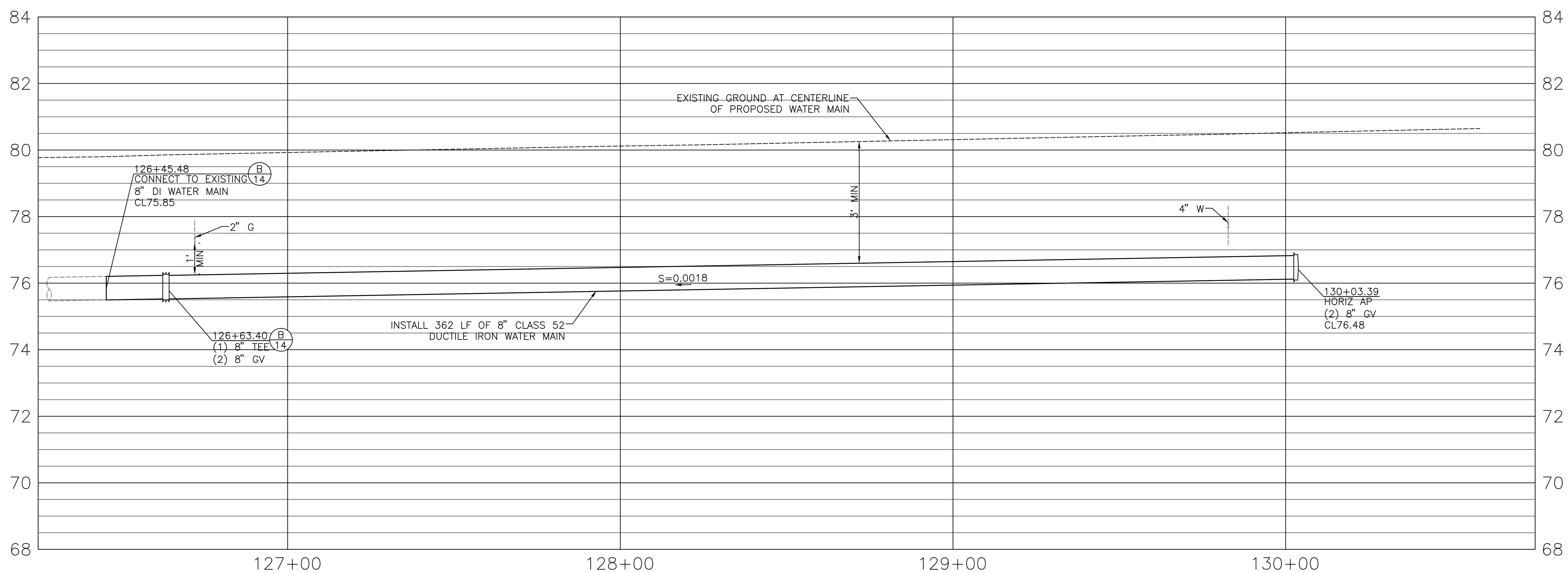
SCALE: HORIZ 1"=20'
VERT 1"=2'




SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

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DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 126+00 TO STA 130+50

| ---- | ---- | USE DIMENSIONS ONLY SCALE AS SHOWN |
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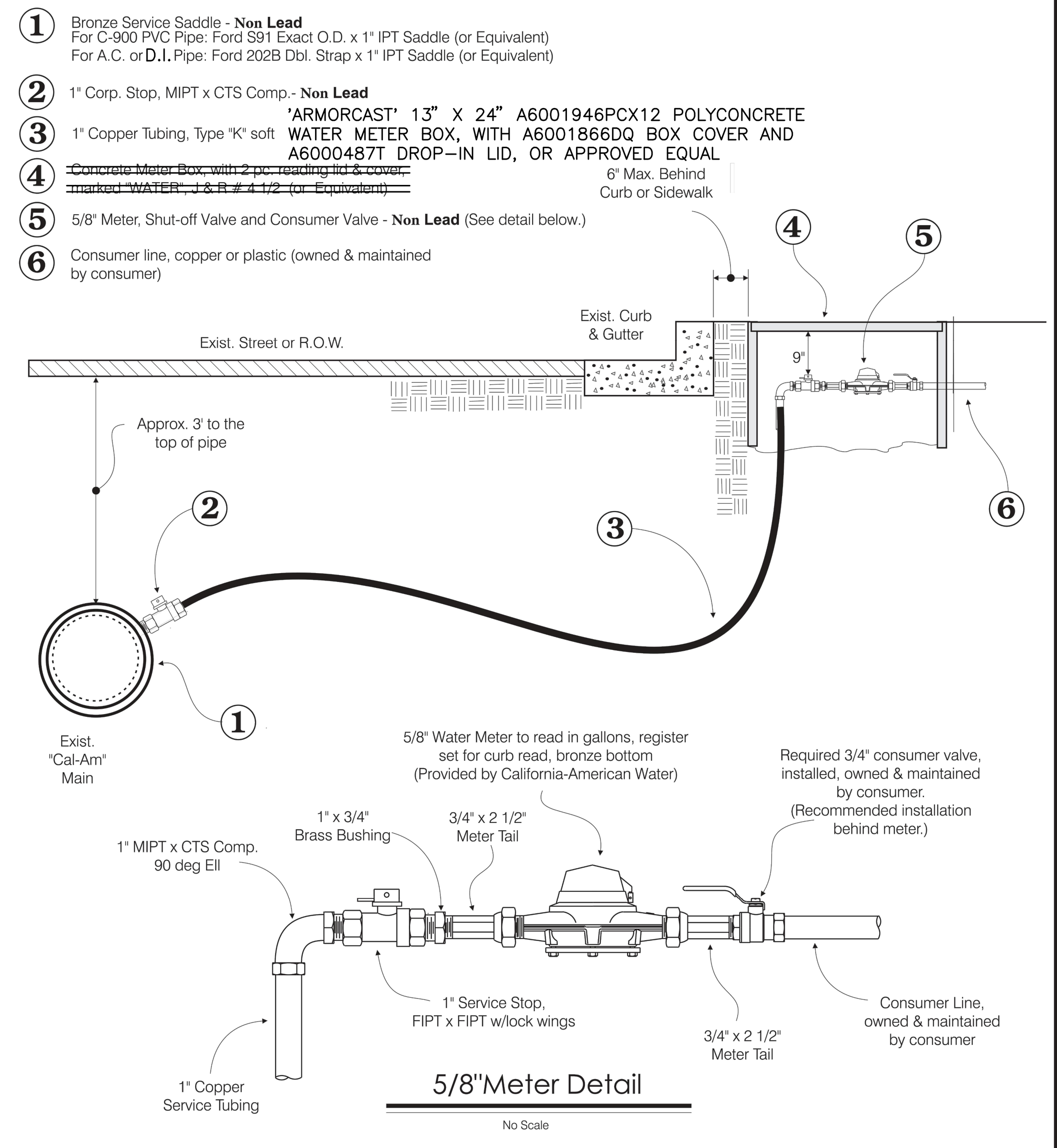
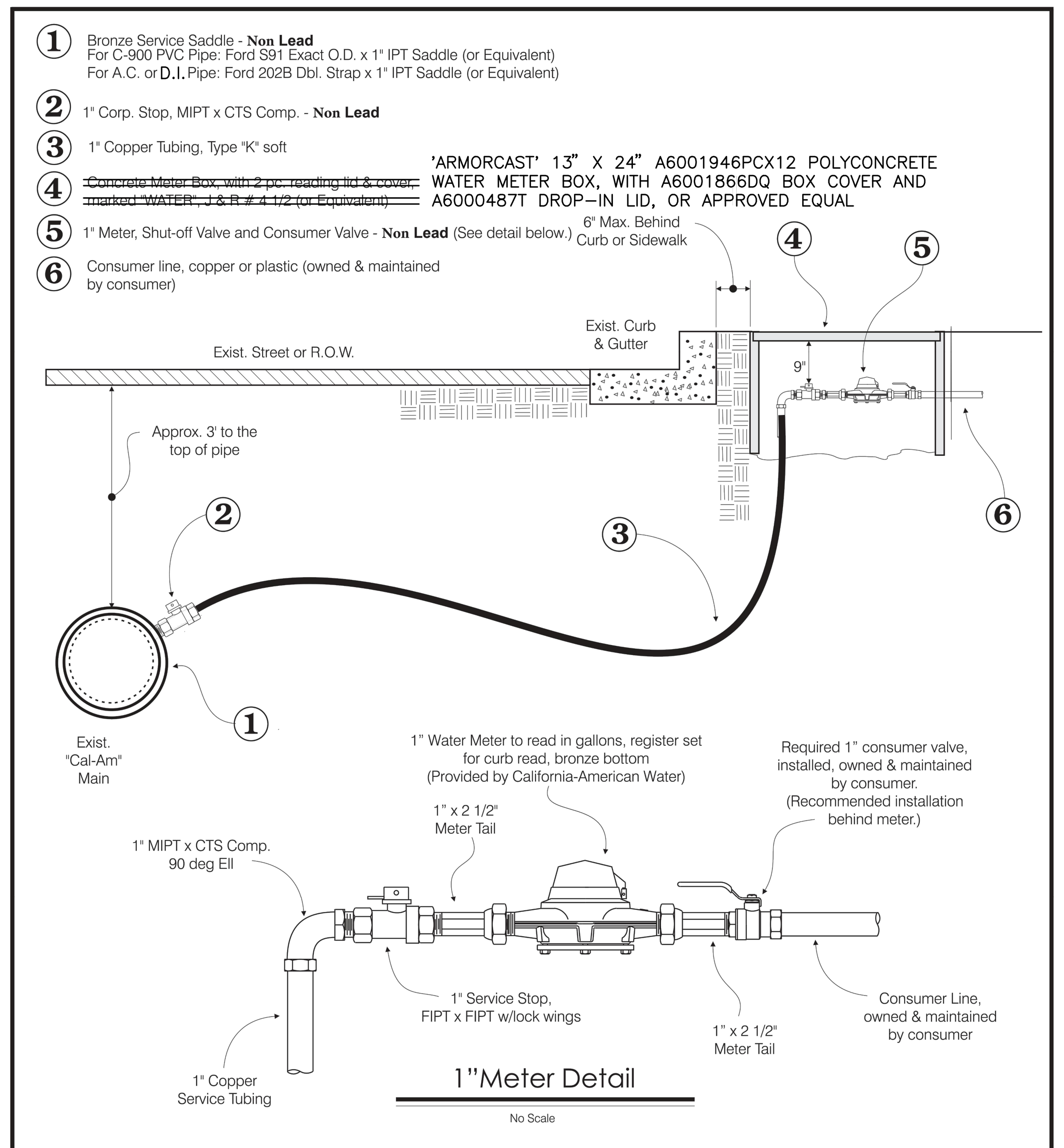
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 11 / 18 |




CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 5/20/19

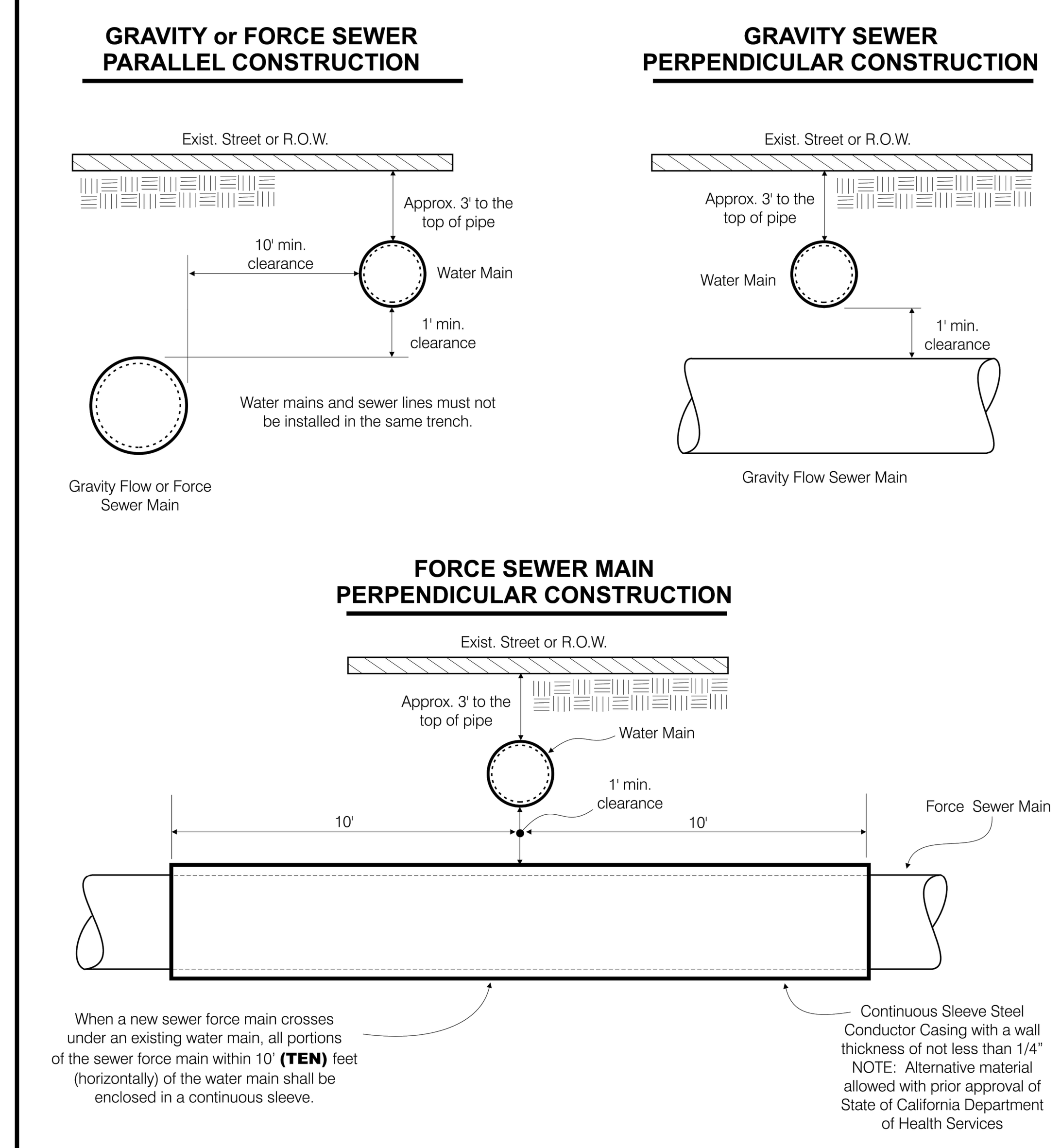
STANDARD SPECIFICATIONS FOR THE INSTALLATION OF A 1" SERVICE INSTALLATION WITH 5/8" METER — Drwg. No. COR-1




CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 5/20/19

STANDARD SPECIFICATIONS FOR THE INSTALLATION OF A 1" SERVICE INSTALLATION WITH 1" METER — Drwg. No. COR-2

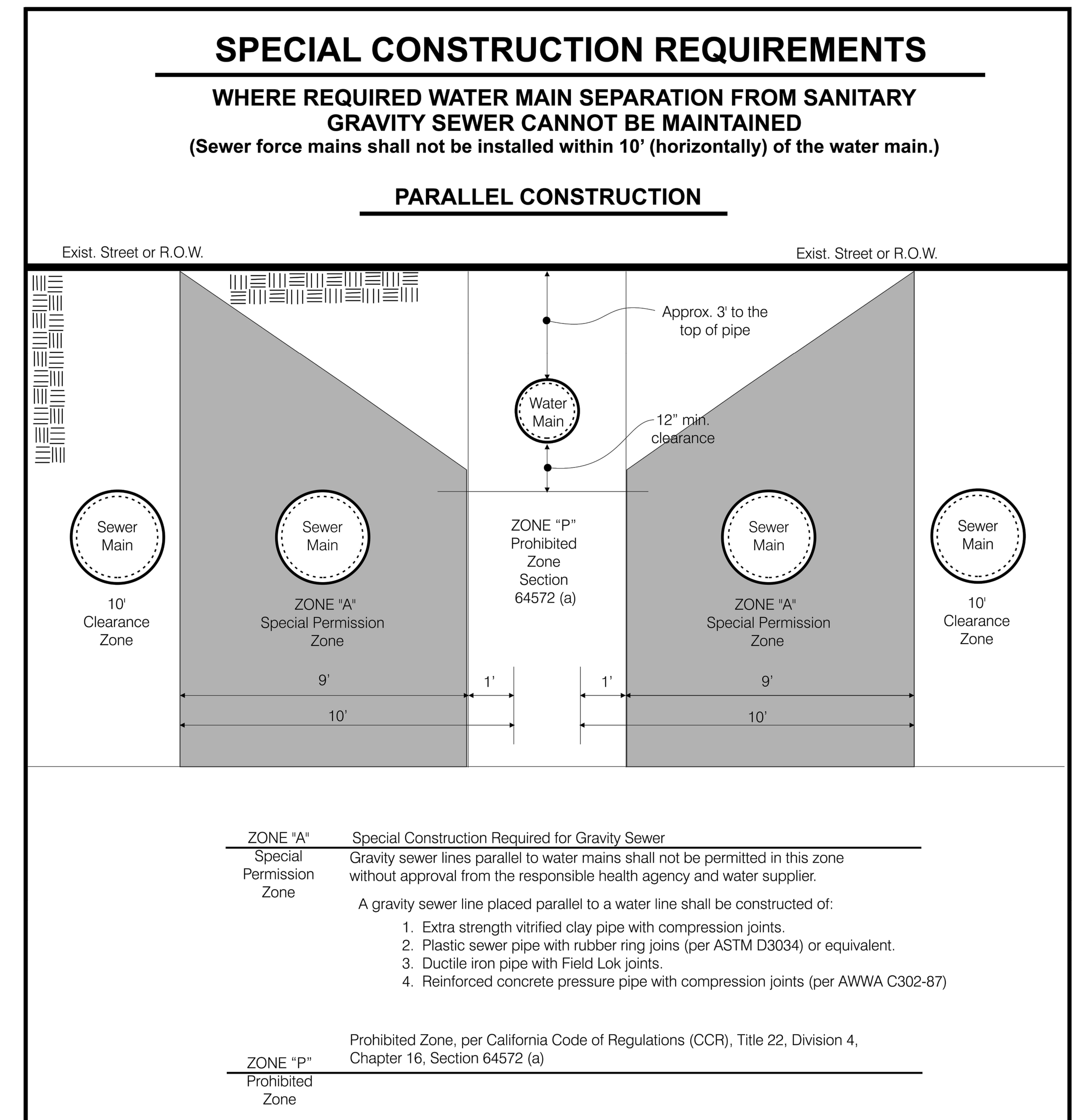



NOTE:
The "California Waterworks Standards" sets forth the minimum separation requirements for water mains, sewer lines and storm lines. These standards are contained in the California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572.

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 10/4/18

Required Separation Between A Water Main & A Sanitary Sewer Main — Drwg. No. COR-4A




NOTE:
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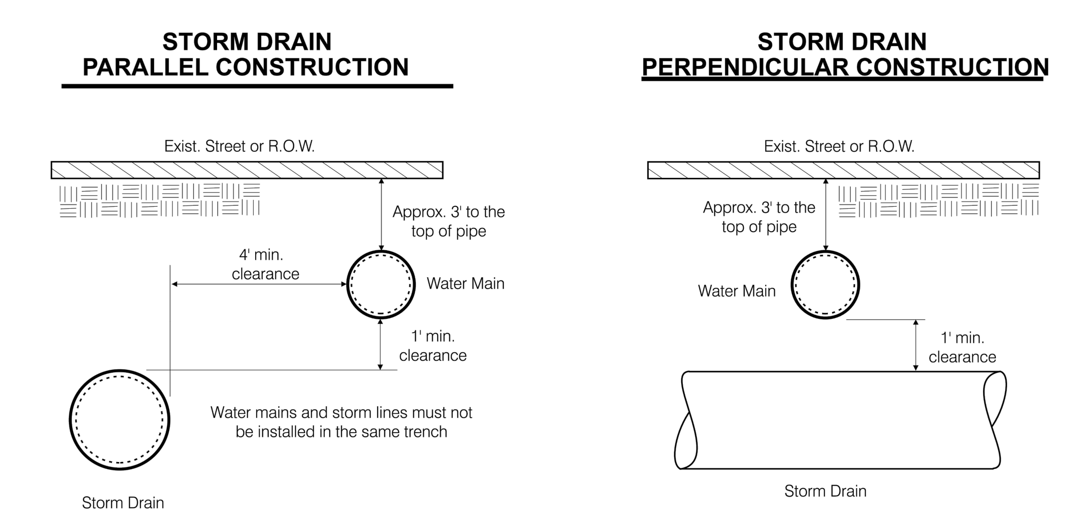
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 4/12/19

Special Requirements For Separation Between A Water Main & A Sanitary Sewer Main — Drwg. No. COR-4B

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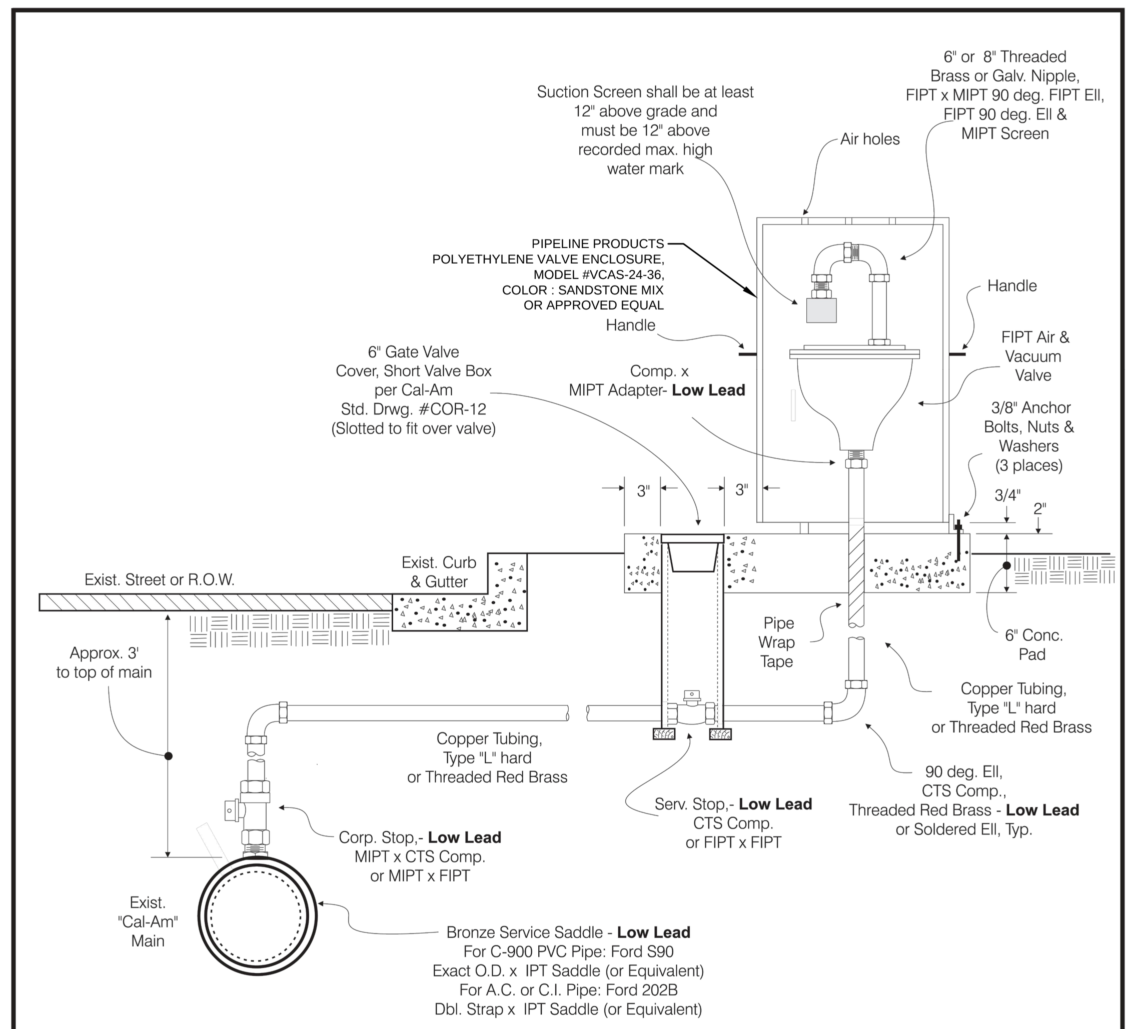
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 6/13/19

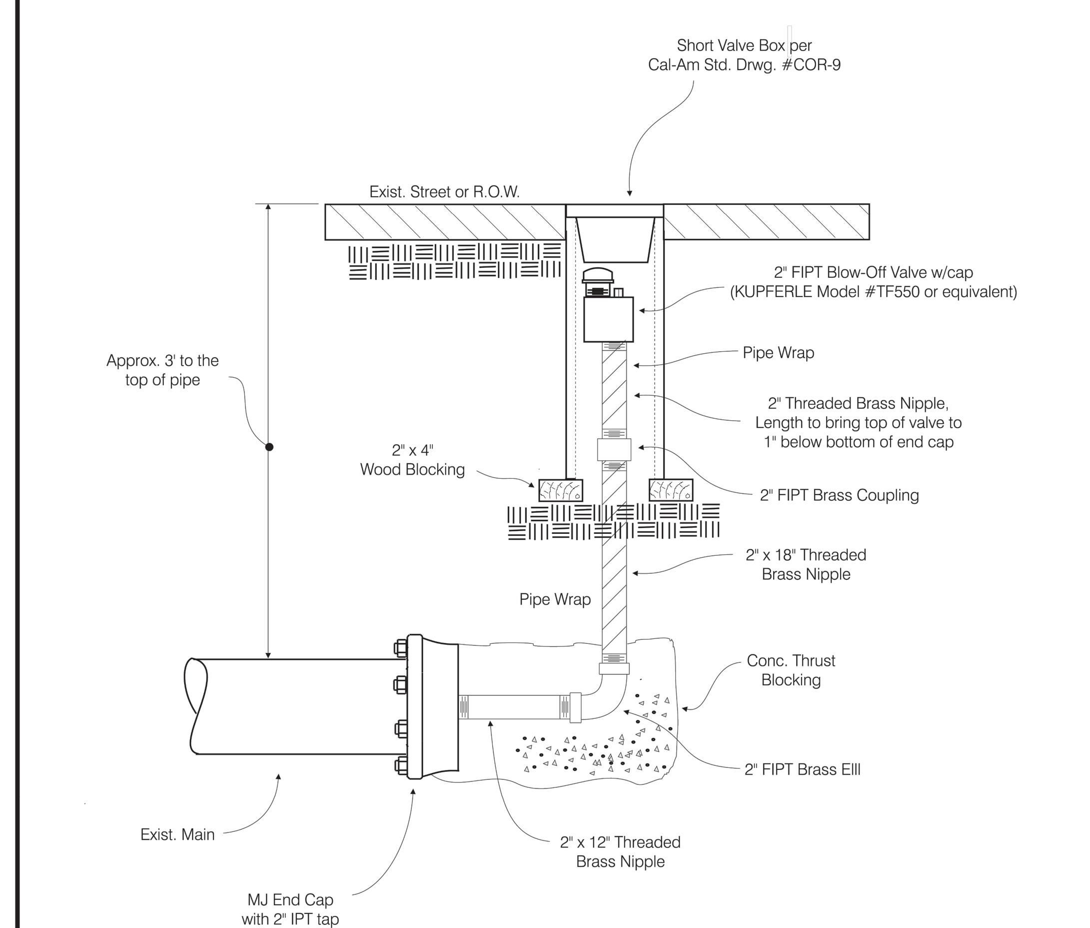
Required Separation Between A Water Main & A Storm Drain — Drwg. No. COR-4C




CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Doug Krupinski | Revised: 5/10/10

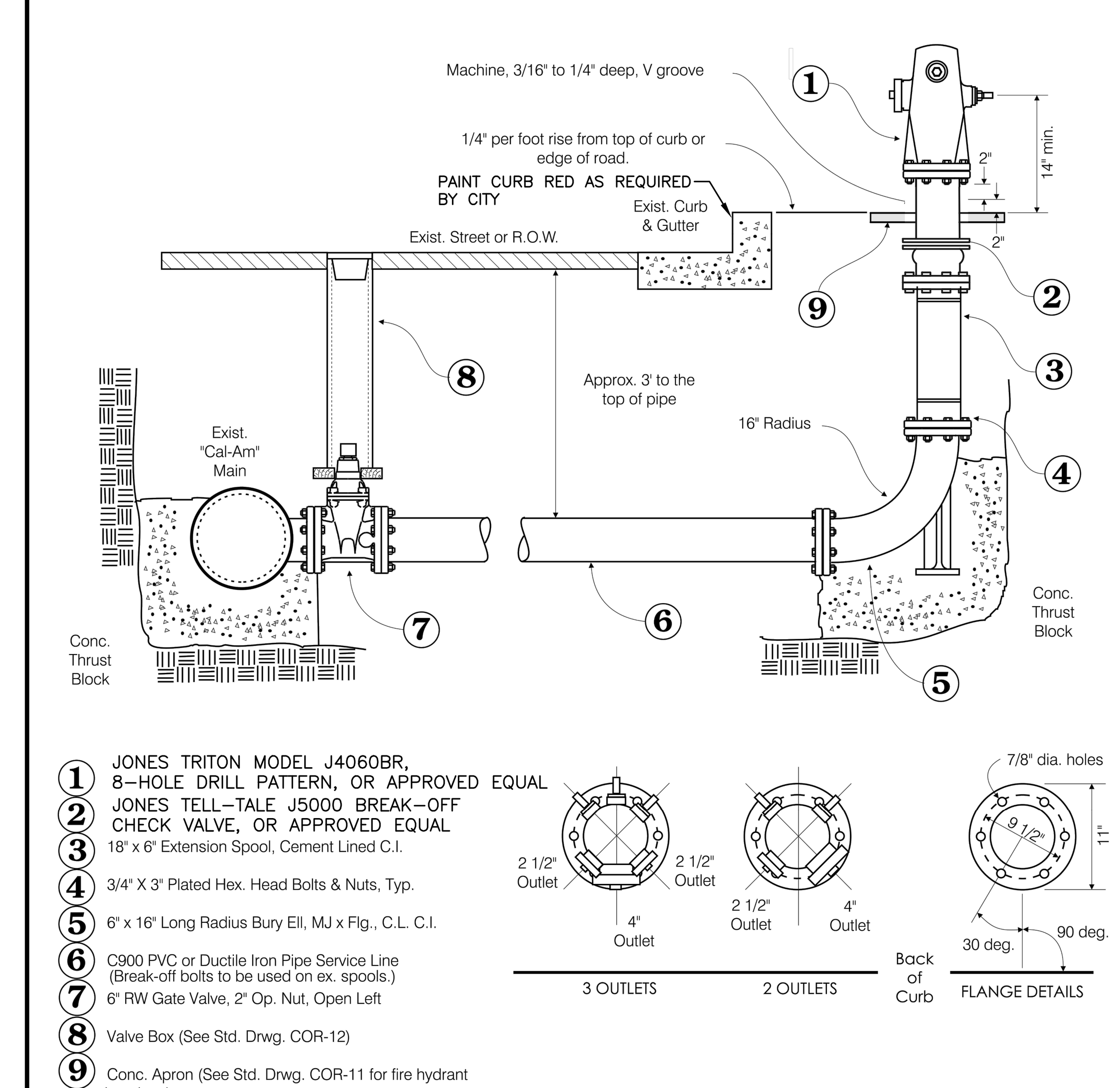
STANDARD SPECIFICATIONS FOR THE INSTALLATION OF AN AIR & VACUUM VALVE — Drwg. No. COR-5




CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Doug Krupinski | Revised: 5/10/10

STANDARD SPECIFICATIONS FOR THE INSTALLATION OF A 2" BLOW-OFF ASSEMBLY — Drwg. No. COR-6




CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

Approved By: | Scale: No Scale | Date: 7/18/97 | Drawn By: Jacob Quick | Revised: 10/4/18

STANDARD SPECIFICATIONS FOR THE INSTALLATION OF A 6" FIRE HYDRANT — Drwg. No. COR-7

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REGISTERED PROFESSIONAL ENGINEER — JACOB L. SENPA — No. 93,768 — STATE OF CALIFORNIA

AMERICAN WATER COMPANY
3906 CHURCH ROAD
MT. LAUREL, NJ 08054
AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER

STANDARD DETAILS

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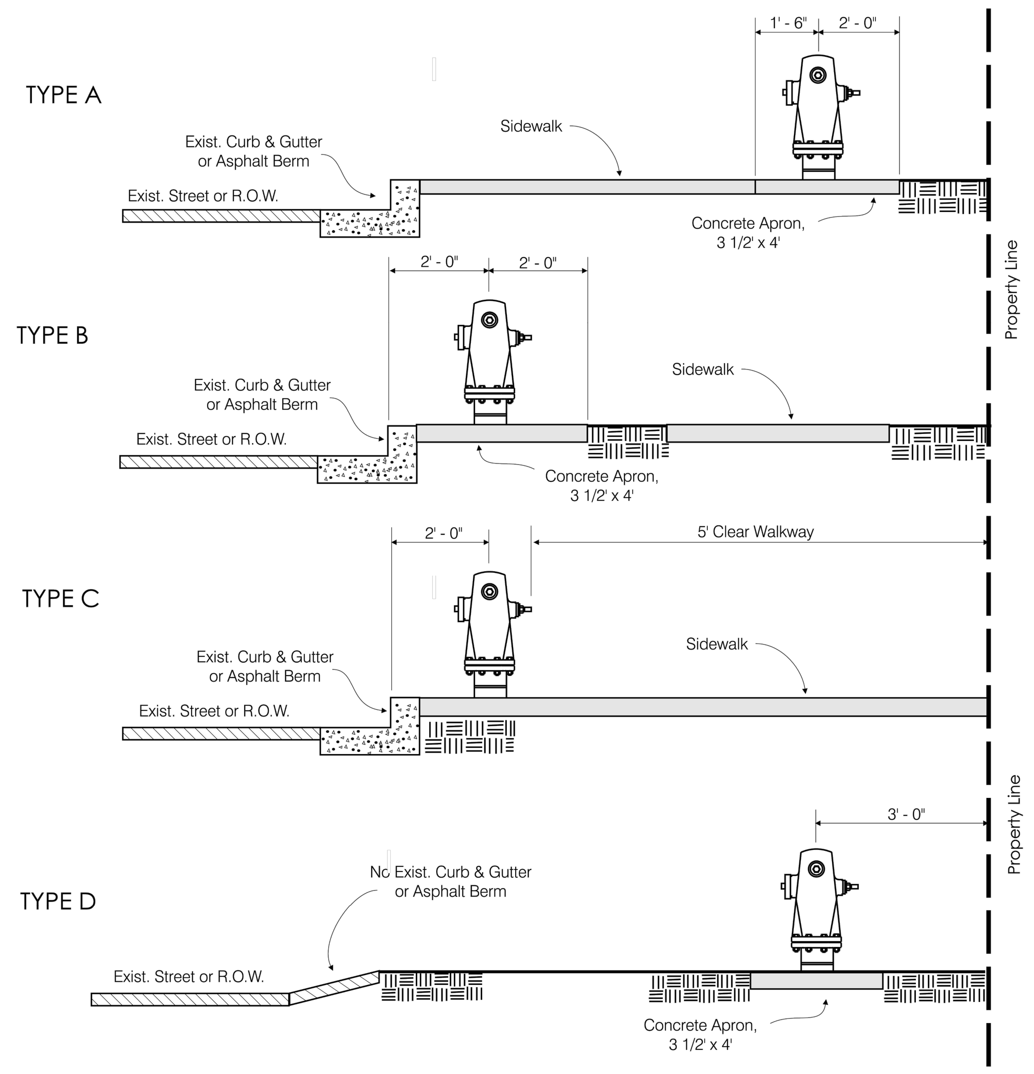
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 12 / 18




NOTES:

1. Apron shall be 4" thick (520-C-2500) concrete.
2. When distance from hydrant to the top or toe of the slope is less that 2' - 0", a special hydrant installation will be required by Cal-Am.
3. Where hydrant is not protected by a vertical face of curb protective posts are required. (See San Diego Reg. Std. Drwg. W-16 for details)
4. The centerline of the hydrant shall be located 5' minimum from curb return and minimum 3' -6" from driveway or any fixed obstruction.

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

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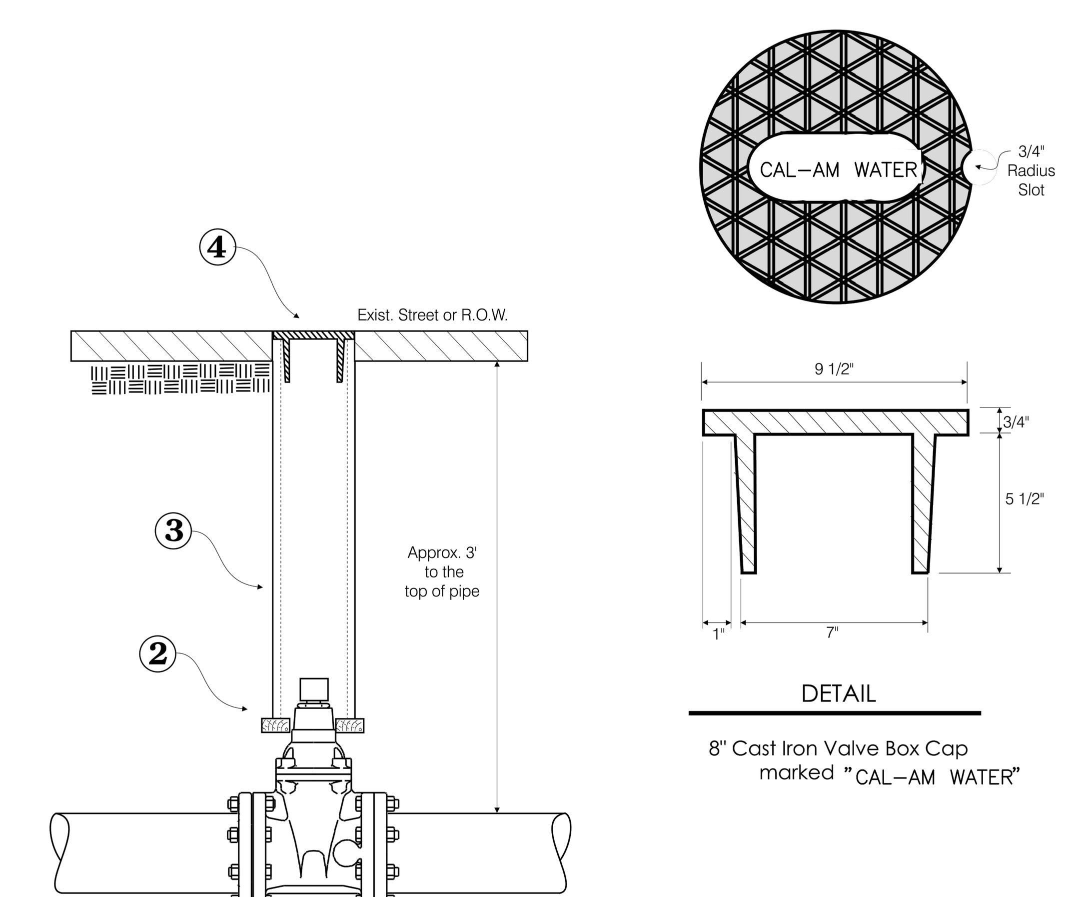
| Approved By: | Scale: No Scale | Date: 7/18/97 |
| | Drawn By: Doug Krupinski | Revised: 9/24/08 |
| STANDARD SPECIFICATIONS FOR THE INSTALLATION LOCATION OF A 6" FIRE HYDRANT | | Drwg. No. COR-8 |




1. Gate or Butterfly Valve
2. 2" x 4" Wood Blocking
3. 8" C-900 PVC Pipe, Class 150
4. Vavle Box Cap per detail

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

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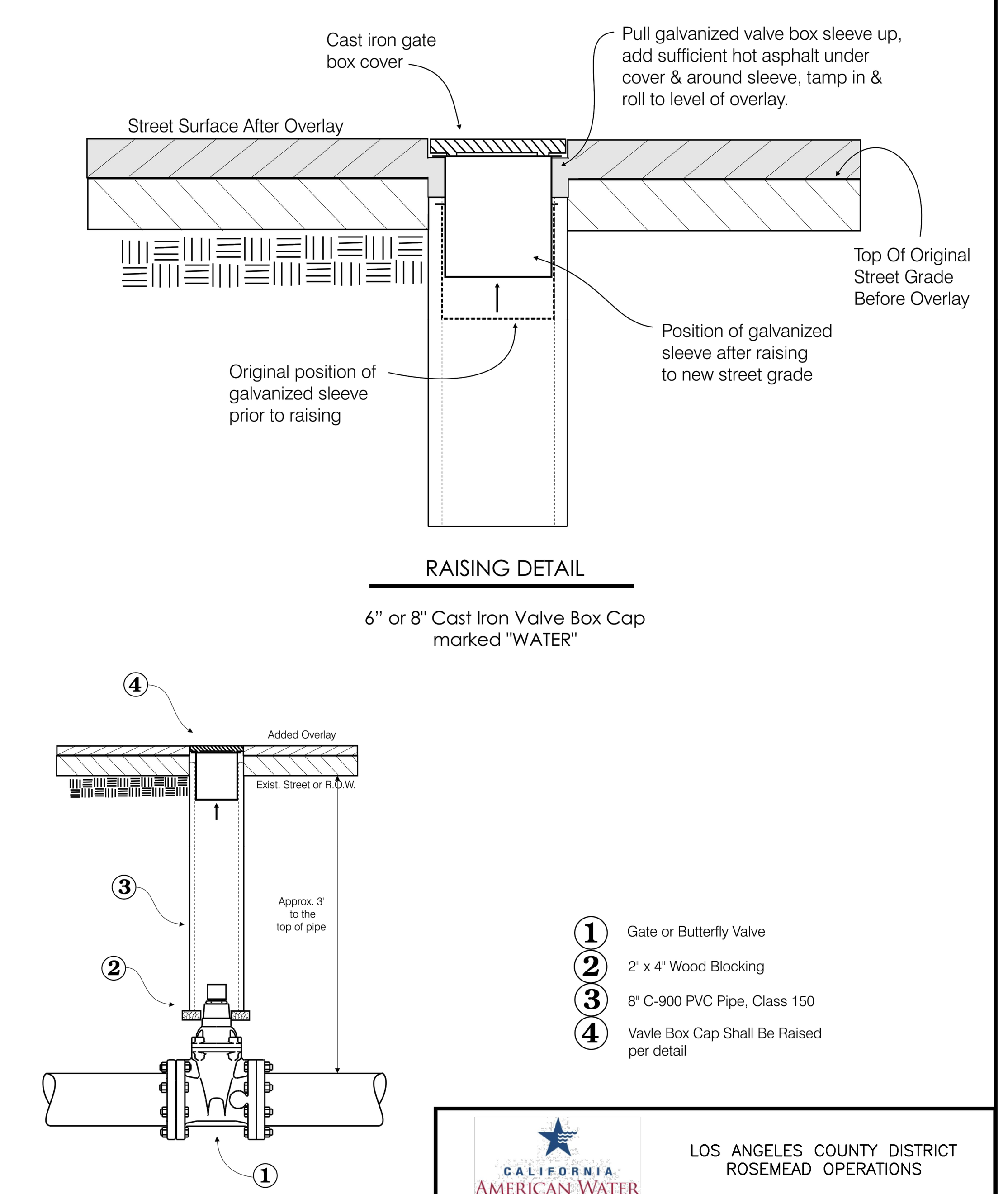
| Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 |
| | Drawn By: Doug Krupinski | Revised: 4/19/06 |
| STANDARD DRAWING VALVE BOX INSTALLATION | | Drwg. No. COR-9A |




1. Gate or Butterfly Valve
2. 2" x 4" Wood Blocking
3. 8" C-900 PVC Pipe, Class 150
4. Valve Box Cap Shall Be Raised per detail

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

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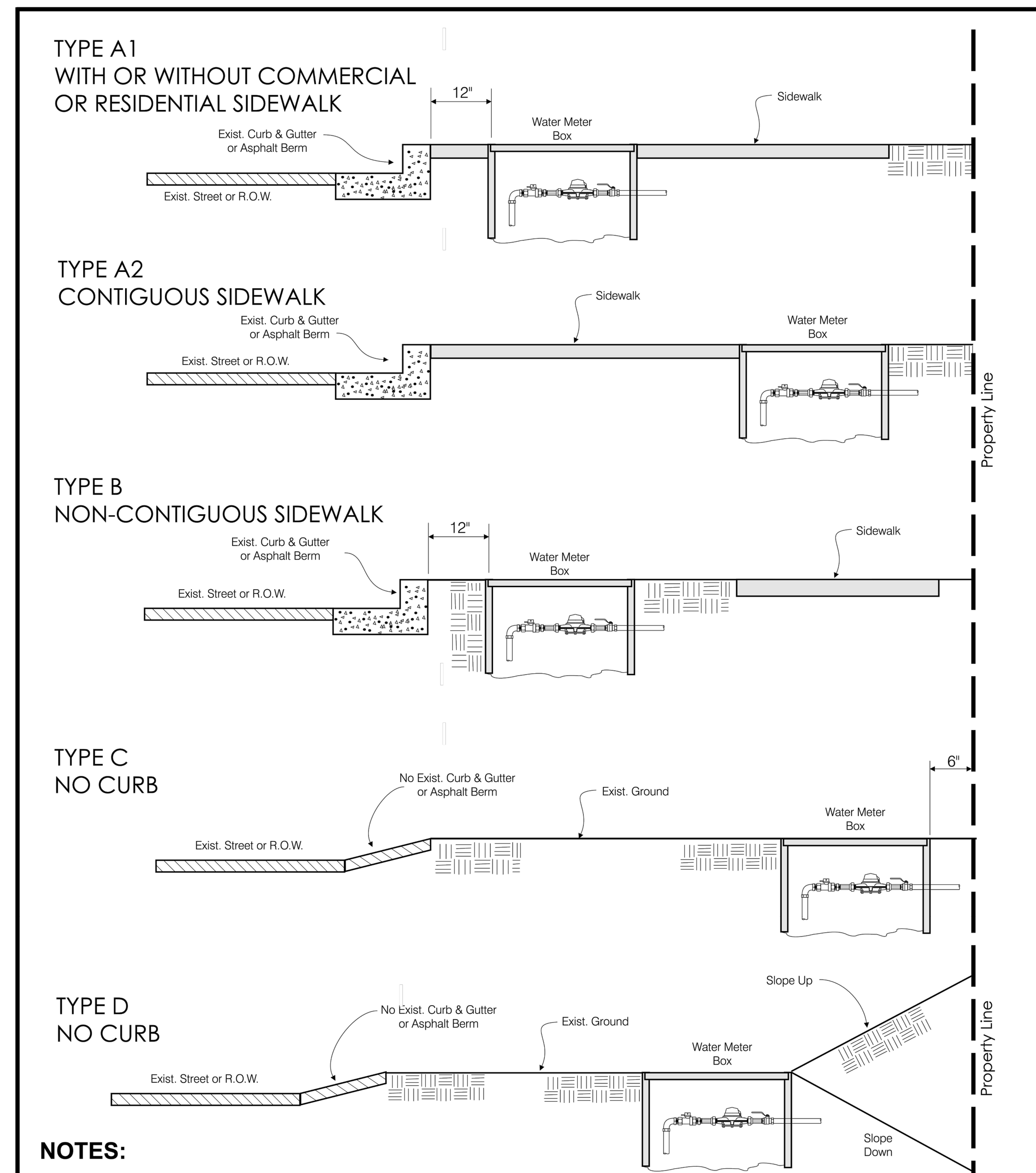
| Approved By: Operations Superintendent | Scale: No Scale | Date: 6/17/05 |
| | Drawn By: Doug Krupinski | Revised: 4/26/06 |
| STANDARD DRAWING VALVE BOX DETAIL, RAISING STD. | | Drwg. No. COR-9B |

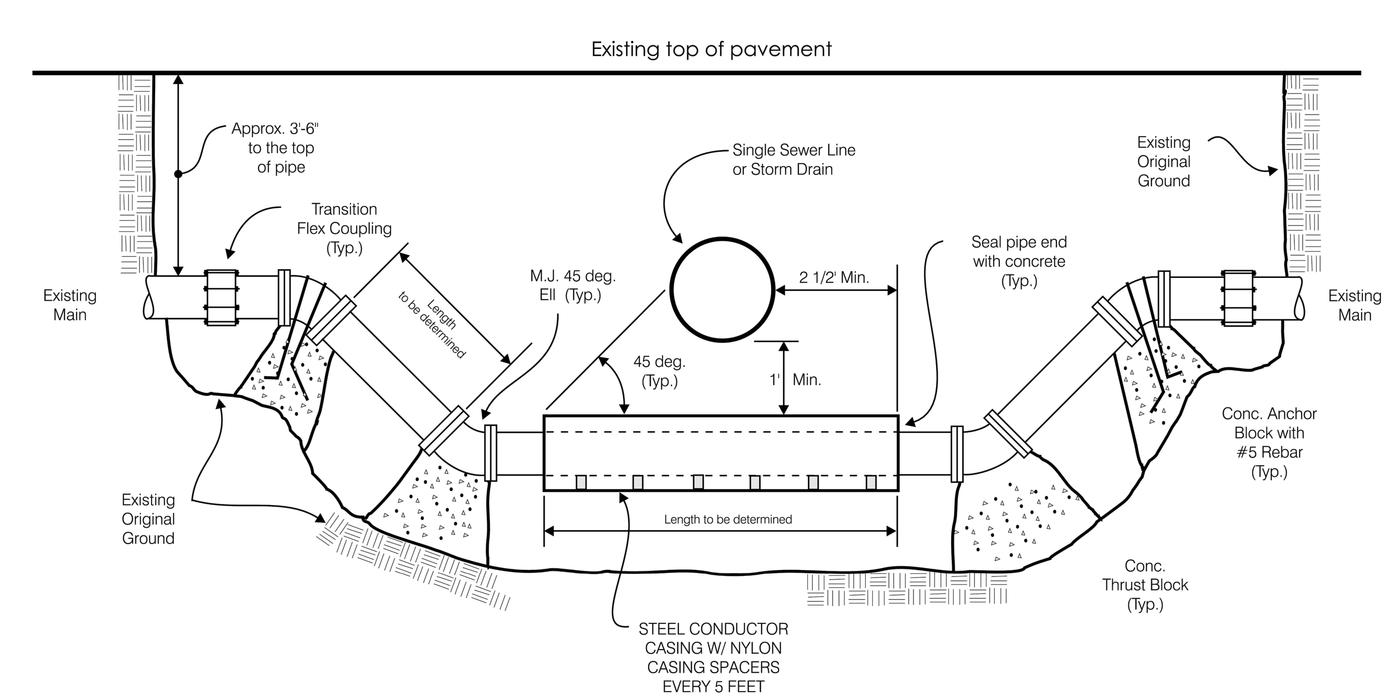



**NOTES:**

1. **Meter boxes shall not be located within driveways per S.D. Regional Std. Drwg. W-15**
2. **Meter boxes will be located in the following order of preference:**
   - **a) In the parkway between curb and sidewalk.**
   - **b) Where no parkway exists, within the public right-of-way immediately behind the sidewalk.**
   - **c) At locations where extra wide sidewalks occupy the entire right-of-way, within the sidewalk at a point close to the curb.**
   - **d) In unimproved areas, at a point convenient to the water company which is best protected from traffic.**
   - **e) Where necessary, within the customer's property.**

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

| | | |
|---|---|---|
| Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 |
| | Drawn By: Doug Krupinski | Revised: 4/24/06 |
| STANDARD DRAWING WATER METER LOCATIONS | | Drwg. No. COR-18 |




Note: This is a generic offset design. The dimensions will be calculated once the actual depth of the water main and other utilities are determined.

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

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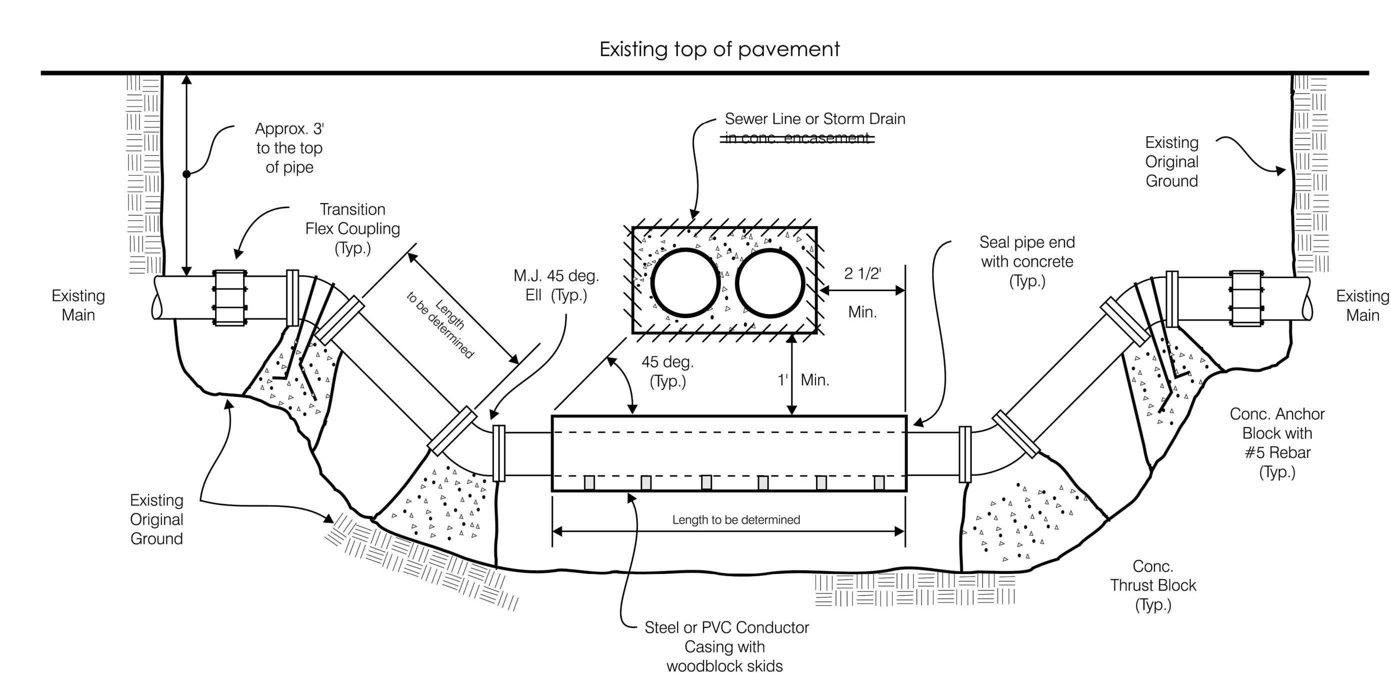
| Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 |
| | Drawn By: Jacob Quick | Revised: 5/20/19 |
| Standard Drawing Offset Fitting, Single Crossing | | Drwg. No. COR-10 |




Note: This is a generic offset design. The dimensions will be calculated once the actual depth of the water main and other utilities are determined.

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS

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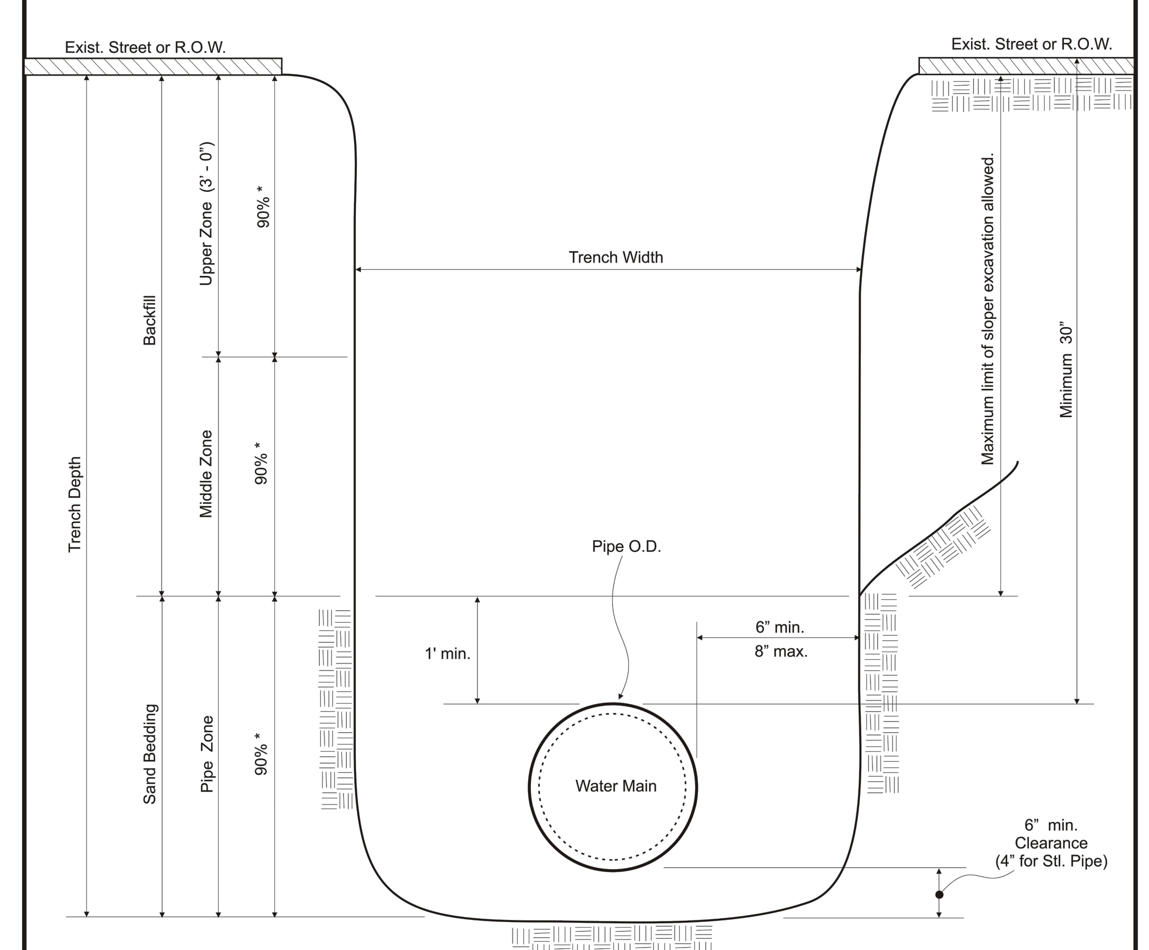
| Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 |
| | Drawn By: Doug Krupinski | Revised: 4/24/06 |
| Standard Drawing OFFSET FITTING, Multiple Pipe Crossing | | Drwg. No. COR-11 |




**SECTION**

**NOTE:**

1. (*) indicates minimum relative compaction.
2. Bedding material shall be screened sand having a sand equivalent (SE) of not less than (50) and an expansion coefficient, when saturated with water, of not more than 0.5 of one percent (0.5%).

~~3. Water mains of nominal size 4" - 12" shall be of PVC C-900.~~

~~4. Water mains greater than 12" nominal size shall be of ductile iron.~~

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT

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|---|---|---|
| Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 |
| | Drawn By: Doug Krupinski | Revised: 4/24/06 |
| STANDARD DRAWING Pipe Bedding and Trench Backfill for Water Mains | | Drwg. No. COR-23 |

CALIFORNIA AMERICAN WATER

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3906 CHURCH ROAD
MT. LAUREL, NJ 08054
AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS

DATE 2023-7-25

PROJECT

# BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
# CITY OF BELLFLOWER

## STANDARD DETAILS

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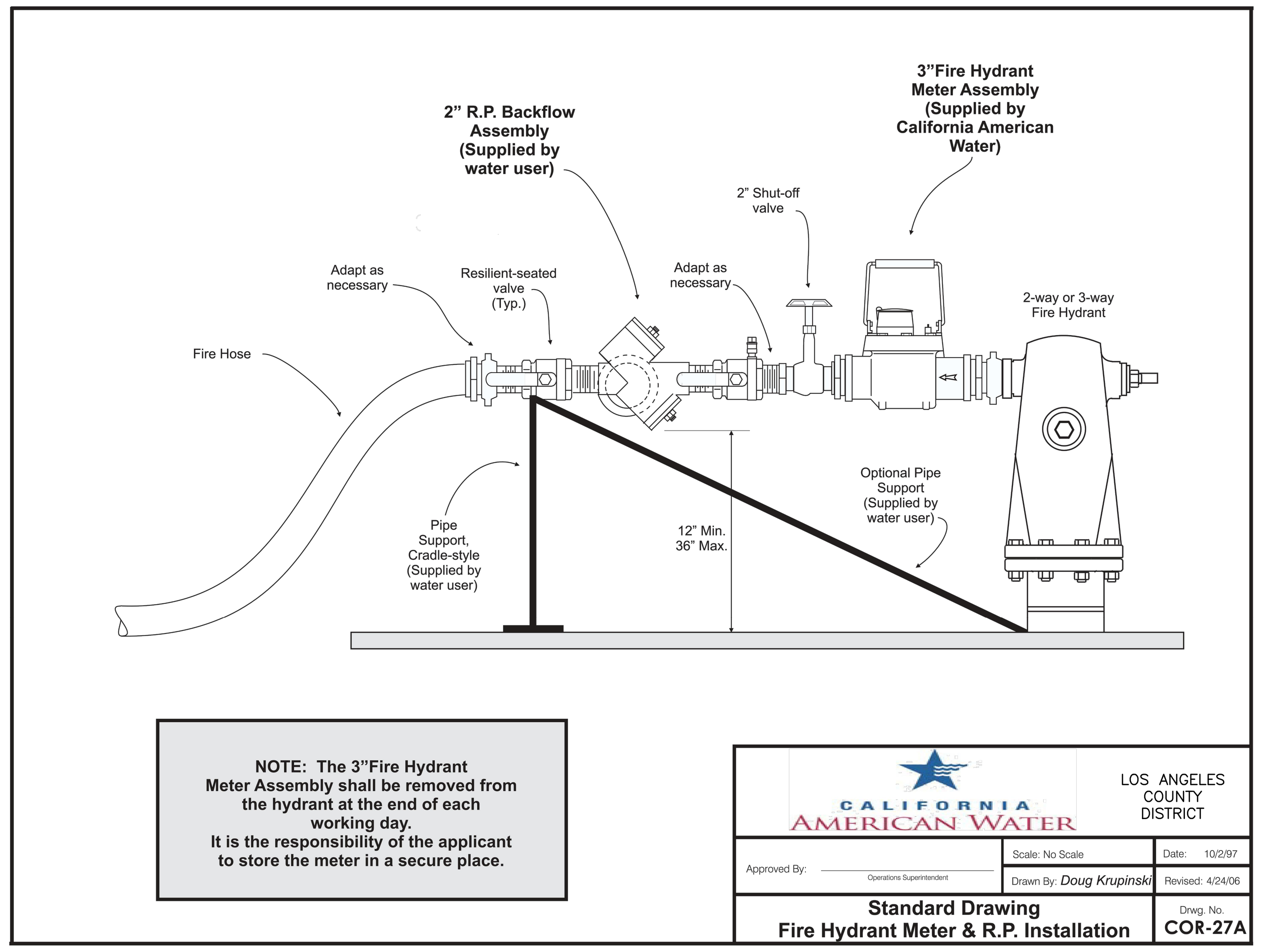
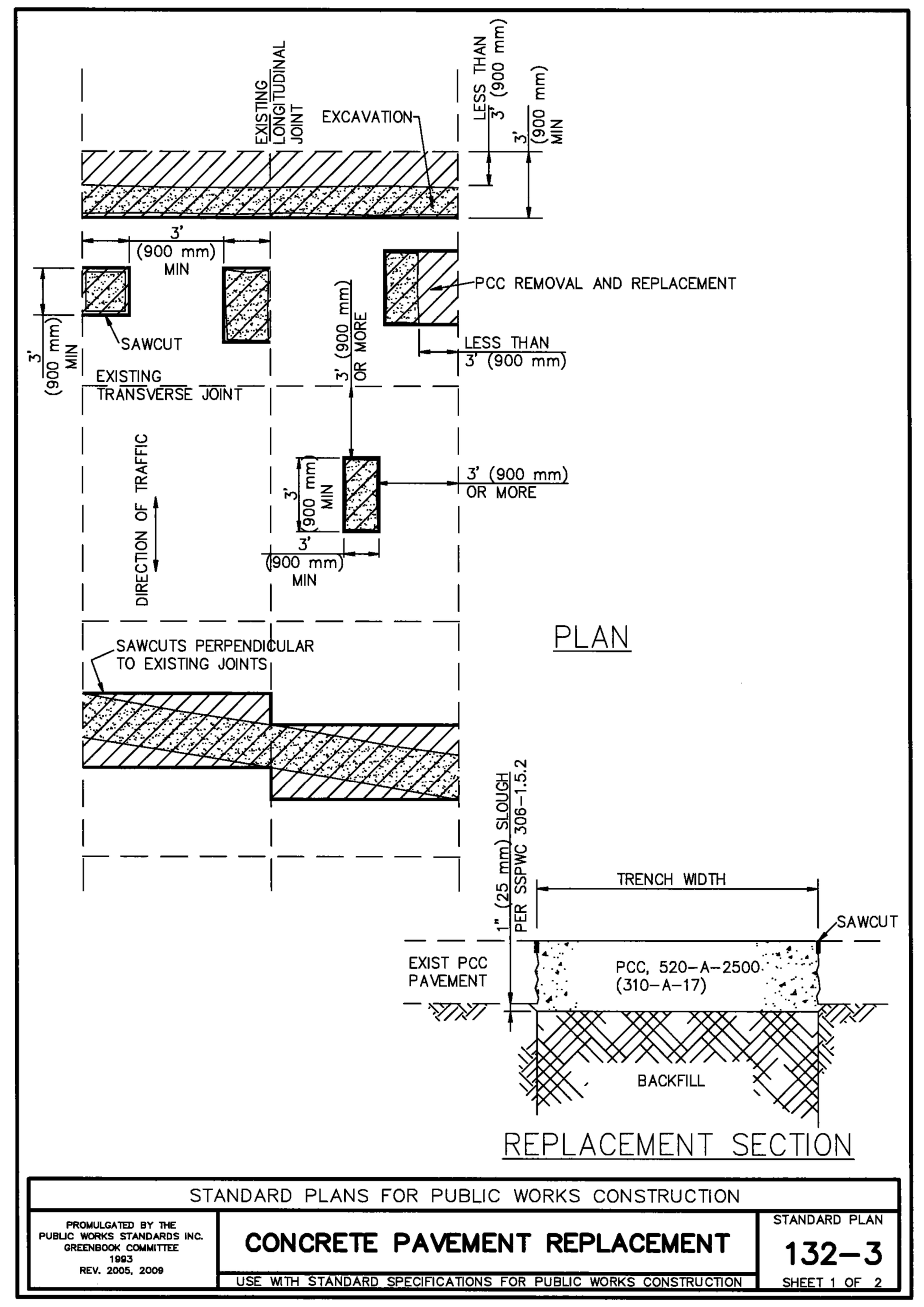
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

BID SET

USE DIMENSIONS ONLY
SCALE AS SHOWN

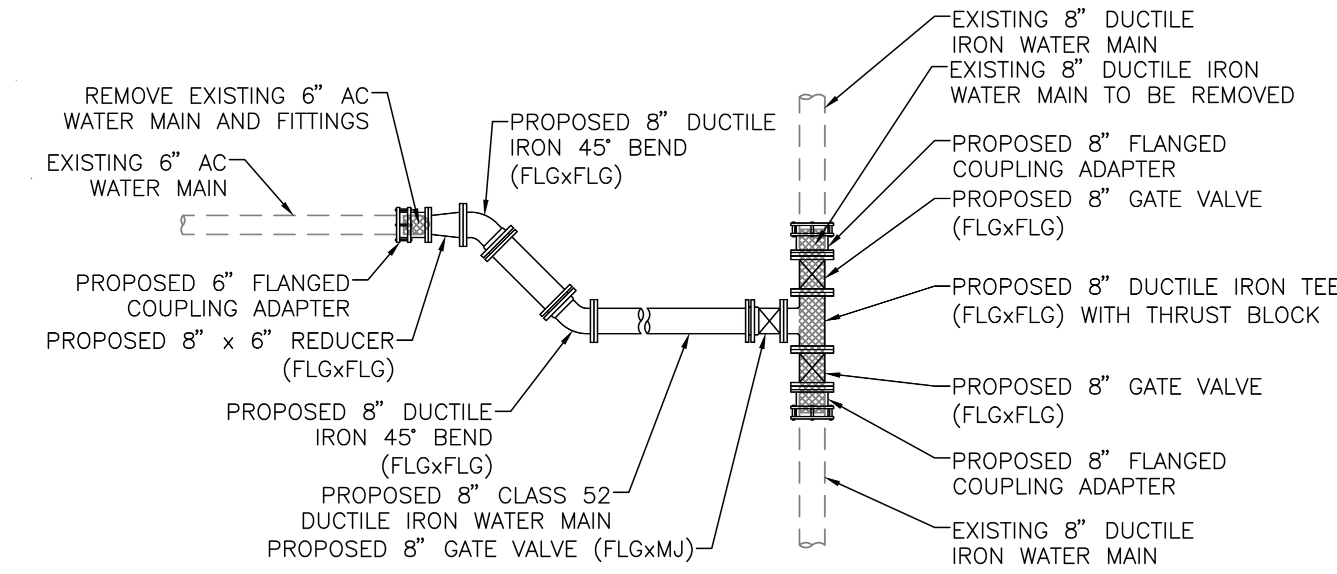



NOTES:

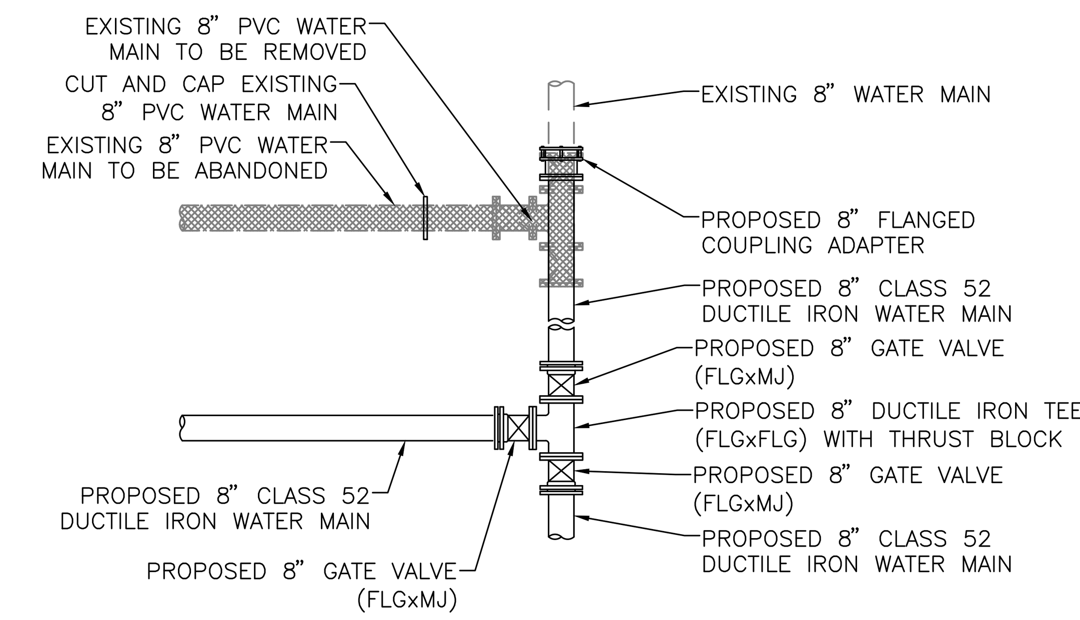
1. THE EXTENT OF REPAIRS FOR CONCRETE CUTS NOT SHOWN ON THIS STANDARD OR CUTS MADE WITHIN 3' (900 mm) OF EXISTING PATCHES, CRACKS, OR DETERIORATED SLABS SHALL BE DETERMINED BY THE ENGINEER.
2. CONCRETE PAVEMENT SHALL BE REMOVED PER SSPWC 300-1.3.
3. BACKFILL AND DENSIFICATION SHALL CONFORM TO SSPWC 306-1.3.
4. TEMPORARY RESURFACING SHALL BE PLACED PER SSPWC 306-1.5.1.

STANDARD PLANS FOR PUBLIC WORKS CONSTRUCTION — CONCRETE PAVEMENT REPLACEMENT — STANDARD PLAN 132-3 — SHEET 2 OF 2




A/14 CONNECTION AT ALLEY AND SOMERSET BLVD

NOT TO SCALE

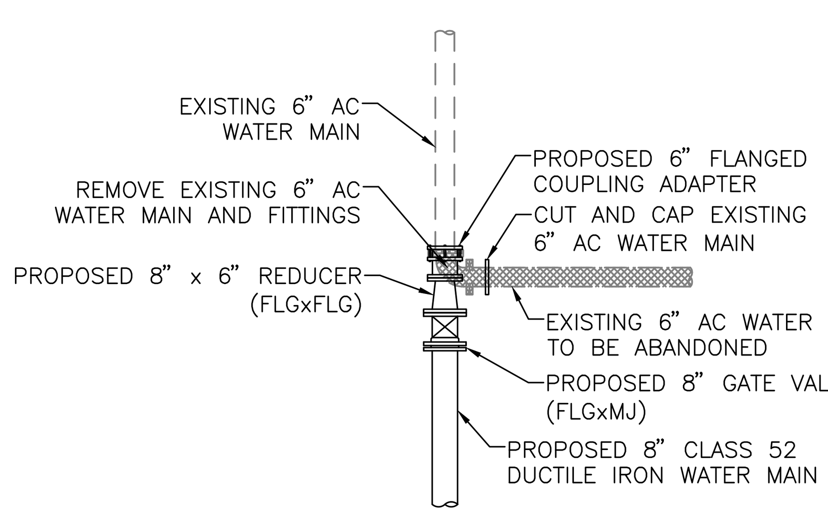



B/14 CONNECTION AT LEAHY AVENUE AND SOMERSET BLVD

NOT TO SCALE

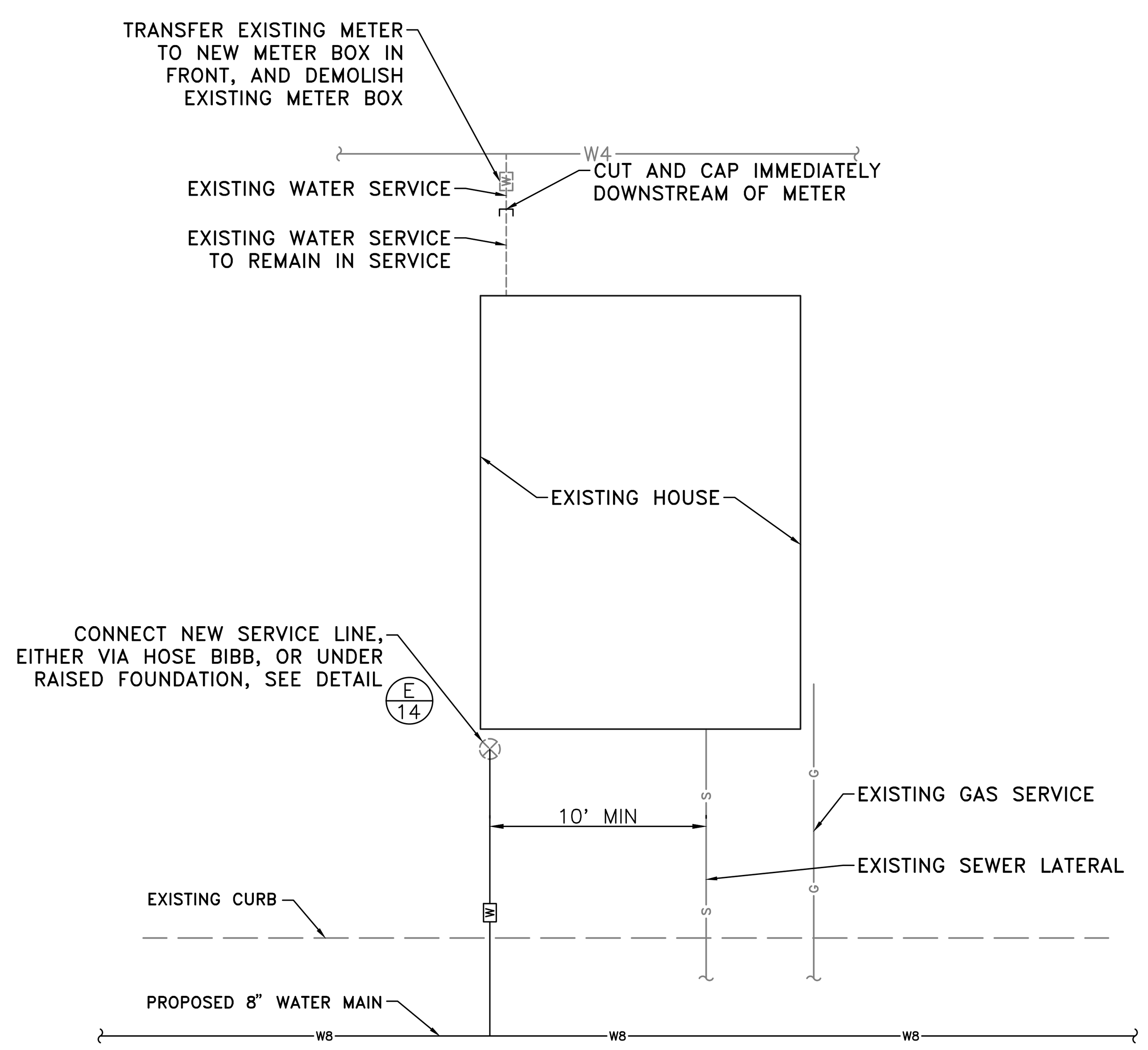
SERVICE CONNECTION NOTES:

1. PROPOSED METER BOXES SHALL BE LOCATED IN LANDSCAPED PARKWAY. CONTRACTOR SHALL BORE UNDER 4' WIDE SIDEWALK TO RUN SERVICE CONNECTION TO HOUSE.
2. ANY DAMAGED SIDEWALK SHALL BE REPLACED IN-KIND, JOINT-TO-JOINT IN ACCORDANCE WITH CITY OF BELLFLOWER REQUIREMENTS.
3. ALL DAMAGED ON-SITE SURFACING SHALL BE REPLACED IN-KIND.
4. CONTRACTOR SHALL ASSUME THE FOLLOWING PARAMETERS FOR ON-SITE TRENCHING AND RESURFACING IN FRONT YARD, FOR BIDDING PURPOSES:
   - HOSE BIBB AND/OR CRAWL SPACE OPENING ARE LOCATED BEHIND 2' WIDE GARDEN PLANTER.
   - YARD DEPTH FROM PLANTER TO SIDEWALK IS 16', SURFACE IS GRASS LANDSCAPING WITH SPRINKLER IRRIGATION
5. IN BACKYARD, CONTRACTOR SHALL REMOVE EXISTING METER BOX AND RESURFACE AREA TO MATCH SURROUNDING BACKYARD SURFACING.
6. CONTRACTOR SHALL ASSUME THAT BACKYARD SURFACING SURROUNDING METER BOX IS GRASS LANDSCAPING, FOR BIDDING PURPOSES.



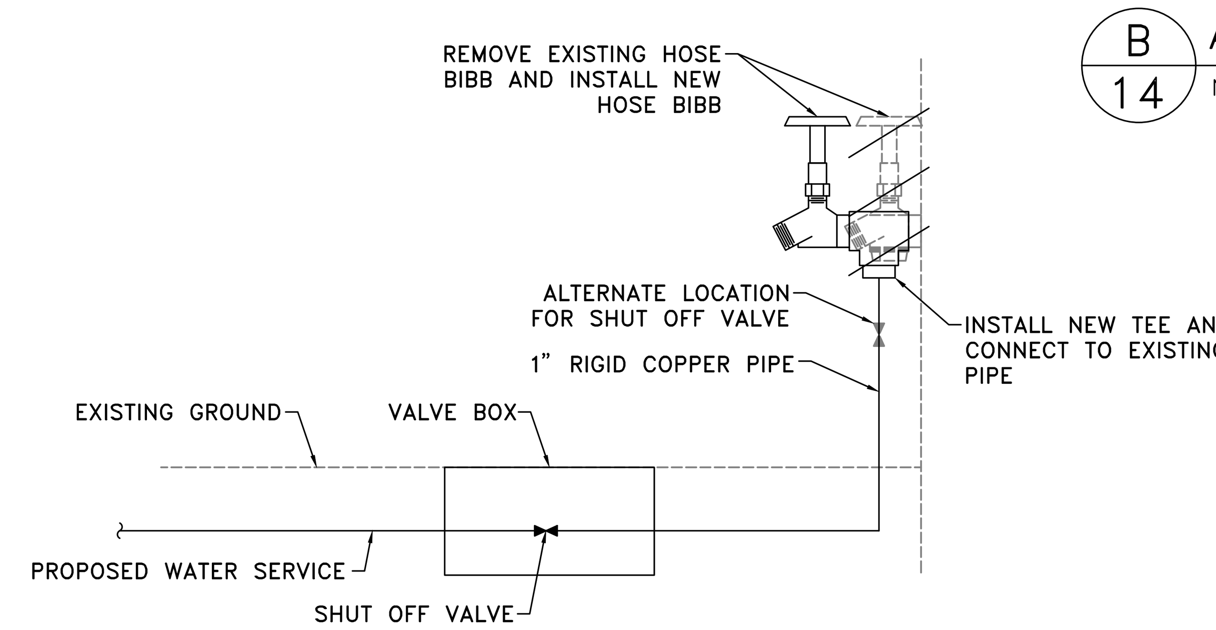

C/14 CONNECTION AT LEAHY AVENUE AND JEFFERSON STREET

NOT TO SCALE

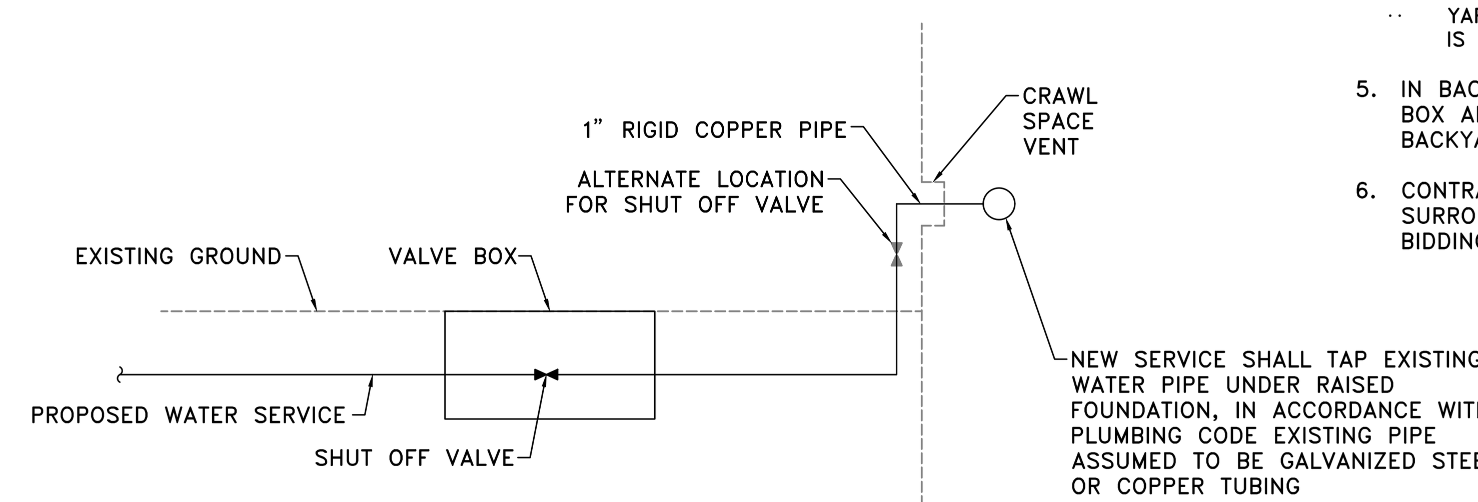



D/14 WATER SERVICE TRANSFER DETAIL

NOT TO SCALE




OPTION A – WITH HOSE BIBB




OPTION B – WITH RAISED FOUNDATION

E/14 SCHEMATIC TIE-IN

NOT TO SCALE

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PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER

STANDARD DRAWING AND CONNECTION DETAILS

----

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES

BID SET

USE DIMENSIONS ONLY
SCALE AS SHOWN

## TRAFFIC CONTROL NOTES:

1. ALL WORK AND MATERIALS SHALL COMPLY WITH THE CALTRANS MANUAL OF TRAFFIC CONTROLS IN CONSTRUCTION AND MAINTENANCE ZONES, AND THE WORK AREA TRAFFIC CONTROL HANDBOOK (W.A.T.C.H.), BOTH LATEST EDITION.
2. ALL STRIPING AND MARKING SHALL CONFORM TO THE STATE OF CALIFORNIA, STANDARD PLANS AND SPECIFICATIONS, LATEST EDITION.
3. FLASHING YELLOW LIGHTS SHALL BE USED ON ALL ADVANCE WARNING SIGNS AND ON ALL TYPE II AND TYPE III BARRICADES. PERSUANT TO SECTION 6F.83 OF THE CA MUTCD.
4. THE CONTRACTOR SHALL HAVE ALL TRAFFIC CONTROL DEVICES AS SHOWN ON THESE PLANS PROPERLY INSTALLED PRIOR TO COMMENCING CONSTRUCTION, AND SHALL MAINTAIN ON A 24-HOUR BASIS ALL THESE DEVICES TO ENSURE PROPER FLOW AND SAFETY OF TRAFFIC.
5. ALL CONFLICTING STRIPING SHALL BE REMOVED.
6. CONSTRUCTION OPERATIONS SHALL BE CONDUCTED IN SUCH A MANNER AS TO CAUSE AS LITTLE INCONVENIENCE AS POSSIBLE TO ABUTTING PROPERTY OWNERS. THE CONTRACTOR SHALL PROVIDE FOR ACCESS TO ALL ADJACENT PROPERTIES.
7. THESE PLANS INDICATE VEHICULAR TRAFFIC CONTROL THROUGH THE WORK AREA DURING CONSTRUCTION ACTIVITY, ADDITIONAL TRAFFIC CONTROLS, TRAFFIC SIGNS, OR BARRICADING WILL BE REQUIRED IN THE FIELD. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL DEVICES NECESSARY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIMES DURING CONSTRUCTION.
8. EXACT LOCATION AND TYPE OF CONSTRUCTION SIGN(S) SHALL BE AS DIRECTED BY THE ENGINEER BASED UPON CONSTRUCTION CONDITIONS.
9. ALL TEMPORARY TRAFFIC CONTROL SIGNS ON THE SIDE OF THE ROAD SHALL BE EITHER POST MOUNTED OR WHEN AVAILABLE MOUNTED ON A STREET LIGHT POLE. MOUNTING HEIGHT AND HORIZONTAL DISTANCE FROM EDGE OF ROADWAY SHALL BE IN CONFORMANCE TO THE CURRENT VERSION OF CA MUTCD.
10. TEMPORARY FACILITIES, INCLUDING PEDESTRIAN ROUTES AROUND WORKSITES, ARE ALSO COVERED BY THE ACCESSIBILITY REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT OF 1990 (ADA).
11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR PERFORMING WORK ON, OR ADJACENT TO, A HIGHWAY TO INSTALL AND MAINTAIN ON A 24-HOUR BASIS SUCH DEVICES WHICH ARE NECESSARY TO PROVIDE PASSAGE FOR THE TRAVELING PUBLIC (INCLUDING PEDESTRIANS AND BICYCLISTS) THROUGH THE WORK, AS WELL AS FOR THE SAFEGUARD OF WORKERS.
12. ANY CHANGES IN THE TEMPORARY TRAFFIC CONTROL (TTC) PLAN SHALL BE APPROVED BY THE ENGINEER OR THE ENGINEER'S DESIGNEE OF THE PUBLIC AGENCY OR AUTHORITY HAVING JURISDICTION OVER THE HIGHWAY.
13. BEFORE ANY NEW DETOUR OR TEMPORARY ROUTE IS OPENED TO TRAFFIC, ALL NECESSARY SIGNS SHALL BE IN PLACE. ALL TTC DEVICES SHALL BE REMOVED AS SOON AS PRACTICAL WHEN THEY ARE NO LONGER NEEDED. WHEN WORK IS SUSPENDED FOR SHORT PERIODS OF TIME, TTC DEVICES THAT ARE NO LONGER APPROPRIATE SHALL BE REMOVED OR COVERED.
14. COORDINATION SHOULD BE MADE BETWEEN ADJACENT OR OVERLAPPING PROJECTS TO CHECK THAT DUPLICATE SIGNING IS NOT USED AND TO CHECK COMPATIBILITY OF TRAFFIC CONTROL BETWEEN ADJACENT OR OVERLAPPING PROJECTS.
15. IF USED, A DOWNSTREAM TAPER SHOULD HAVE A MINIMUM LENGTH OF 50 FEET AND A MAXIMUM LENGTH OF 100 FEET WITH DEVICES PLACED AT A SPACING OF APPROXIMATELY 20 FEET.
16. IF THE TTC ZONE AFFECTS THE MOVEMENT OF PEDESTRIANS, ADEQUATE PEDESTRIAN ACCESS AND WALKWAYS SHALL BE PROVIDED. IF THE TTC ZONE AFFECTS AN ACCESSIBLE AND DETECTABLE PEDESTRIAN FACILITY, THE ACCESSIBILITY AND DETECTABILITY SHALL BE MAINTAINED ALONG THE ALTERNATE PEDESTRIAN ROUTE.
17. WHEN EXISTING PEDESTRIAN FACILITIES ARE DISRUPTED, CLOSED, OR RELOCATED IN A TTC ZONE, THE TEMPORARY FACILITIES SHALL BE DETECTABLE AND INCLUDE ACCESSIBILITY FEATURES CONSISTENT WITH THE FEATURES PRESENT IN THE EXISTING PEDESTRIAN FACILITY. WHERE PEDESTRIANS WITH VISUAL DISABILITIES NORMALLY USE THE CLOSED SIDEWALK, A BARRIER THAT IS DETECTABLE BY A PERSON WITH A VISUAL DISABILITY TRAVELING WITH THE AID OF A LONG CANE SHALL BE PLACED ACROSS THE FULL WIDTH OF THE CLOSED SIDEWALK.
18. EXCEPT AS PROVIDED IN SECTION 2A.11 OF THE CA MUTCD, THE SIZES FOR TTC SIGNS AND PLAQUES SHALL BE AS SHOWN IN TABLE 6F- 1 AND 6F-1(CA). THE SIZES IN THE MINIMUM COLUMN SHALL ONLY BE USED ON LOCAL STREETS OR ROADWAYS WHERE THE 85TH-PERCENTILE SPEED OR POSTED SPEED LIMIT IS LESS THAN 35 MPH.
19. ALL SIGNS USED SHALL BE RETRO-REFLECTORIZED AND STANDARD SIZE TO MEET MINIMUM CA MUTCD STANDARDS.
20. PORTABLE CHANGEABLE MESSAGE SIGNS (PCMS) SHOULD BE PLACED OFF THE SHOULDER OF THE ROADWAY AND BEHIND A TRAFFIC BARRIER, IF PRACTICAL. WHERE A TRAFFIC BARRIER IS NOT AVAILABLE TO SHIELD THE PORTABLE CHANGEABLE MESSAGE SIGN, IT SHOULD BE PLACED OFF THE SHOULDER AND OUTSIDE OF THE CLEAR ZONE. PCMS SIGNS SHALL BE INSTALLED PER SECTION 6F.60 OF THE CA MUTCD.
21. WHEN ARROW BOARDS ARE USED TO CLOSE MULTIPLE LANES, IF THE FIRST ARROW BOARD IS PLACED ON THE SHOULDER, THE SECOND ARROW BOARD SHOULD BE PLACED IN THE FIRST CLOSED LANE AT THE UPSTREAM END OF THE SECOND MERGING TAPER (SEE FIGURE 6H-37). WHEN THE FIRST ARROW BOARD IS PLACED IN THE FIRST CLOSED LANE, THE SECOND ARROW BOARD SHOULD BE PLACED IN THE SECOND CLOSED LANE AT THE DOWNSTREAM END OF THE SECOND MERGING TAPER.
22. THE SPACING BETWEEN CONES, TUBULAR MARKERS, VERTICAL PANELS, DRUMS, AND BARRICADES SHOULD NOT EXCEED A DISTANCE IN FEET EQUAL TO 1.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TAPER CHANNELIZATION, AND A DISTANCE IN FEET EQUAL TO 2.0 TIMES THE SPEED LIMIT IN MPH WHEN USED FOR TANGENT CHANNELIZATION.
23. CONES SHALL BE RETRO-REFLECTORIZED OR EQUIPPED WITH LIGHTING DEVICES FOR MAXIMUM VISIBILITY. RETROREFLECTORIZATION OF CONES THAT ARE 28 TO 36 INCHES IN HEIGHT SHALL BE PROVIDED BY A 6-INCH WIDE WHITE BAND LOCATED 3 TO 4 INCHES FROM THE TOP OF THE CONE AND AN ADDITIONAL 4-INCH WIDE WHITE BAND LOCATED APPROXIMATELY 2 INCHES BELOW THE 6-INCH BAND.
24. DEVICES THAT ARE DAMAGED OR HAVE LOST A SIGNIFICANT AMOUNT OF THEIR RETRO-REFLECTIVITY AND EFFECTIVENESS SHALL BE REPLACED AT NO COST TO THE CITY.
25. TUBULAR MARKERS SHALL BE PREDOMINANTLY ORANGE AND SHALL BE NOT LESS THAN 18 INCHES HIGH AND 2 INCHES WIDE FACING ROAD USERS. TUBULAR MARKERS SHALL BE A MINIMUM OF 28 INCHES IN HEIGHT WHEN THEY ARE USED ON FREEWAYS AND OTHER HIGH-SPEED HIGHWAYS, ON ALL HIGHWAYS DURING NIGHTTIME, OR WHENEVER MORE CONSPICUOUS GUIDANCE IS NEEDED.
26. THE NARROW LANE(S) (C12(CA)) SIGN MAY BE USED, WHEN APPROPRIATE, TO WARN THE APPROACHING MOTORIST OF A NARROW LANE CONDITION. WHEN USED, THE C12(CA) SIGN SHOULD BE USED IN CONJUNCTION WITH AN ADVISORY SPEED (W13-1P) PLAQUE. SEE SECTION 6C.01.
27. WHERE TRANSIT STOPS ARE AFFECTED OR RELOCATED BECAUSE OF WORK ACTIVITY, BOTH PEDESTRIAN AND VEHICULAR ACCESS TO THE AFFECTED OR RELOCATED TRANSIT STOPS SHALL BE PROVIDED.
28. ALL SIGNS WITHIN THE ROADWAY AREA SHALL BE MOUNTED ON A TYPE II BARRICADE UNLESS OTHERWISE NOTED.
29. INSTALL R4-7a OR R4-8a AS APPROPRIATE AT A MAXIMUM SPACING OF 300 FEET.
30. PRE NOTIFICATION PCMS TO BE PLACED SEVEN DAYS IN ADVANCE. PCMS TO INCLUDE THREE MESSAGE PANELS: 1.) "ROAD CLOSED", 2.) "DATE TO DATE", 3.) "USE ALT ROUTE".
31. CITY APPROVED "NO PARKING, TOW AWAY ZONE" SIGNS SHALL BE POSTED ALONG THE WORK ZONE AREA 72 HOURS IN ADVANCE OF START OF WORK. CONTRACTOR SHALL ALSO INSTALL "NO PARKING, TOW AWAY ZONE" ALONG ANY OUTSIDE TRAVEL LANE WHICH IS LESS THAN EIGHTEEN (18) FEET WIDE.
32. THE DURATION OF THE TEMPORARY PARKING RESTRICTION AND HOURS OF OPERATION SHALL BE INDICATED ON THE "NO PARKING, TOW AWAY ZONE" SIGNS. THE DURATION SHOULD REPRESENT THE ACTUAL TIME SPAN OF THE CONSTRUCTION.
33. ACCESS TO ALL PRIVATE PROPERTIES SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION. CONTRACTOR SHALL NOTIFY RESIDENTS / TENANTS AT LEAST TWENTY-FOUR HOURS BEFORE COMMENCEMENT OF ANY WORK IN THE AREA.
34. WORK SHALL BE SCHEDULED AROUND TRASH PICKUP DAY.
35. PRESSURE SENSITIVE TRAFFIC MARKING TAPE AND/OR STRIPING PAINT MAY BE USED TO SUPPLEMENT THE CHANNELIZING DEVICES, DELINEATORS, RETRO-REFLECTORIZED SIGNS, AND BARRICADES.
36. ALL CONFLICTING STRIPING, PAVEMENT MARKINGS, AND LEGENDS SHALL BE COMPLETELY REMOVED BY WET SANDBLASTING, OR OTHER METHODS BY THE CITY PRIOR TO ANY CHANGE IN THE TRAFFIC PATTERN.
37. ADDITIONAL TRAFFIC CONTROLS, TRAFFIC SIGNS, OR BARRICADES MAY BE REQUIRED IN THE FIELD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PLACEMENT OF ANY ADDITIONAL DEVICES NECESSARY TO ASSURE SAFETY TO THE PUBLIC AT ALL TIMES DURING CONSTRUCTION.
38. THE CONTRACTOR SHALL NOTIFY ALL LOCAL BUSINESSES AFFECTED BY CONSTRUCTION 7 DAYS PRIOR TO CONSTRUCTION AND SHALL PROVIDE SPECIAL SIGNS AND/OR CHANGEABLE MESSAGE SIGNS TO INDICATE THE BUSINESS IS OPEN AND EACH END OF THE CONSTRUCTION WORK ZONE AT THE MAJOR INTERSECTION(S).
39. ALL TRAFFIC LANES SHALL HAVE A MINIMUM OF 6 FEET CLEARANCE FROM OPEN EXCAVATIONS AND A MINIMUM OF 2 FEET FROM VERTICAL OBSTRUCTIONS.
40. CONTRACTOR SHALL PROVIDE FLAGGERS AS SHOWN ON THE PLANS OR DEEMED NECESSARY BY THE CITY OF BELLFLOWER.
41. ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE REMOVED FOLLOWING COMPLETION OF EACH CONSTRUCTION STAGE AND THE PERMANENT TRAFFIC CONTROL DEVICES SHALL BE RESTORED BY THE CONTRACTOR UPON THE COMPLETION OF CONSTRUCTION OR WHEN CONSTRUCTION ACTIVITY IS NOT ACTIVE.
42. CONTRACTOR SHALL INSTALL SIGNS FOR "UNEVEN LANES", "STEEL PLATES AHEAD", OR "BUMP" FOR PAVEMENT DISRUPTIONS OF 1/2" AND GREATER. PAVEMENT DISRUPTIONS OF 1" AND GREATER SHALL HAVE BEVELED EDGE FOR 4 (HORIZONTAL) TO 1 (VERTICAL). STEEL PLATES SUBJECT TO TRAFFIC SHALL BE SET FLUSH WITH THE PAVEMENT IN A PAVEMENT GRIND EQUAL TO THE THICKNESS OF THE STEEL PLATE.
43. CONTRACTOR SHALL INSTALL "CAUTION STEEL PLATES AHEAD" AND/OR "ROUGH ROAD" SIGNS IN ADVANCE OR STEEL PLATE BRIDGING.
44. ALL DRIVEWAYS AND ADJACENT STREETS SHALL BE KEPT OPEN AT ALL TIMES EXCEPT WHEN CONSTRUCTION TAKES PLACE DIRECTLY IN FRONT OF THE DRIVEWAY/ADJACENT STREET. ACCESS TO BUSINESS SHALL BE MAINTAINED AT ALL TIMES. MAXIMUM DELAYS TO ENTER OR EXIT BUSINESS SHALL NOT EXCEED 10 MINUTES. ACCESS TO RESIDENCE SHALL BE MAINTAINED. CONTRACTOR SHALL COORDINATE CROSSING WITH OWNERS/RESIDENTS TO LIMIT CLOSURES TO LESS THAN 8 HOURS. DRIVEWAYS, ROADS, AND INGRESS/EGRESS POINTS SHALL BE OPEN AND ACCESSIBLE DURING NON-WORKING HOURS.
45. CONTRACTOR TO FURNISH AND SUPPLY SPECIAL SIGNS FOR BUSINESS OR SCHOOLS AFFECTED BY CONSTRUCTION ACTIVITY/ROAD CLOSURES. SIGNS SHALL BE PLACED AT EACH END OF WORK ZONE AT MAJOR INTERSECTIONS.
46. FENCING SHALL BE USED AROUND OPEN TRENCHES NON-WORK HOURS.
47. WORK IN AREAS WITH TIME/DATE RESTRICTIONS SHALL BE IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, SECTION 01410 WORK RESTRICTIONS.
48. TRAFFIC CONTROL PLANS MAY REQUIRE MODIFICATIONS AND/OR ALTERATIONS DUE TO FIELD CONDITIONS WITH PRIOR APPROVAL FROM THE CITY OF BELLFLOWER FOR CHANGES IN LANE CLOSURE DAYS, TIMES, ETC. IN ALL CASES THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE TRAFFIC CONTROL MEETS CALIFORNIA MUTCD AND LOCAL AGENCY REQUIREMENTS.
49. IF A TTC ZONE AFFECTS THE MOVEMENT OF A CLASS II BIKEWAY, ADEQUATE SIGNAGE SHALL BE INSTALLED TO TEMPORARILY CONVERT THE BIKEWAY TO A CLASS III BIKE ROUTE AND INSTALL W16-1P SIGNS.
50. ANY ROAD CLOSURE REQUIRES A 7 DAY PRENOTIFICATION AT THE LOCATION OF THE CLOSURE.
51. ANY CLOSURE OF A STRIPED ROAD REQUIRES A DETOUR ROUTE USING STRIPED ROADS CAPABLE OF HANDLING THE INCREASED TRAFFIC VOLUME.
52. LANE CLOSURES PUT IN PLACE DURING PERIODS OF ACTIVE CONSTRUCTION SHALL BE OPENED TO 2-WAY TRAFFIC BY THE END OF THE WORK DAY.
53. ANY 2-WAY TEMPORARY TRAFFIC PATTERN PROVIDED DURING THE CONSTRUCTION PERIOD SHALL BE PROVIDED WITH TWO 11' LANES (MINIMUM) ON A PAVED SURFACE.
54. TEMPORARY PAVEMENT SHALL BE A MINIMUM OF 4" COLD MIX ASPHALT CONCRETE OVER COMPACTED NATIVE MATERIAL.
55. THESE TRAFFIC CONTROL PLANS SHALL SERVE AS THE MINIMUM SIGNAGE REQUIREMENTS. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH CA MUTCD, CITY OF BELLFLOWER STANDARDS, AND THE SAN DIEGO REGIONAL STANDARD DRAWINGS. IF CONFLICTS EXIST BETWEEN THESE STANDARDS, CONTRACTOR SHALL FOLLOW WHICHEVER STANDARD IS MORE STRINGENT.

CALIFORNIA AMERICAN WATER

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DRAWN BY AP
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DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
CITY OF BELLFLOWER
TRAFFIC CONTROL -
TRAFFIC CONTROL NOTES

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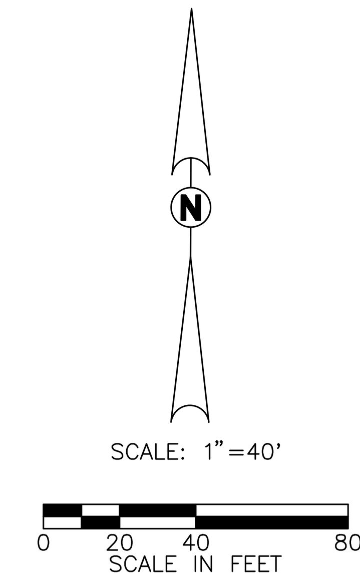
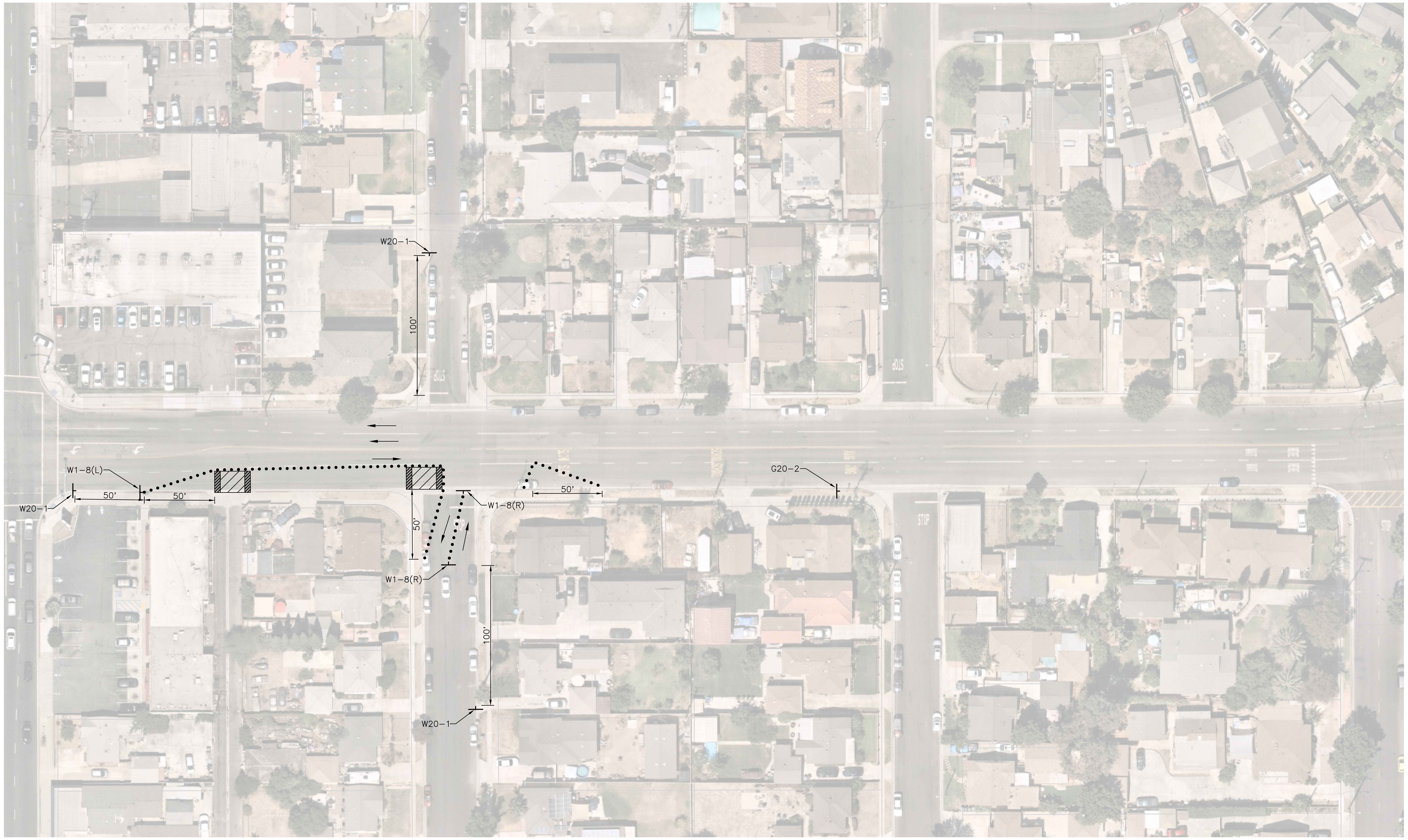
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 15 / 18 |




LEGEND:

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| ← | EXISTING LANES OF TRAFFIC, TO REMAIN OPEN DURING CONSTRUCTION |
| | TYPE III BARRICADE, SEE NOTE 3 |
| | FLAGGER, SEE NOTE 4 |
| | TEMPORARY TRAFFIC CONTROL SIGN |
| | WORK ZONE AREA |
| • | CHANNELIZING DEVICE |
| | DIAGRAMMATIC WORK AREA IN INTERSECTION, SEE NOTE 5 |
| | VARIABLE MESSAGE SIGN (VMS), COMMUNICATING CONSTRUCTION ACTIVITY DATES IN ADVANCE OF WORK START |

CONSTRUCTION NOTES:

1. WORK ASSOCIATED WITH THIS TRAFFIC HANDLING PLAN SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, SECTION 01410 WORK RESTRICTIONS.
2. CONTRACTOR SHALL COORDINATE WITH THE RESIDENTS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS TO PROVIDE ACCESS DURING CONSTRUCTION.
3. INSTALL TYPE 3 BARRICADES WITH WARNING LIGHT TO CLOSE THE LANE(S) AS SHOWN ON PLAN.
4. CONTRACTOR SHALL UTILIZE FLAGGERS FOR INTERSECTION CONTROL, AND TO ALLOW LOCALS TO ACCESS THEIR PROPERTIES.
5. CONTRACTOR SHALL HANDLE INTERSECTION WORK IN TWO PHASES, WITH HALF OF WORK IN EACH PHASE. WHILE WORK IS BEING PERFORMED IN WEST HALF OF INTERSECTION, TWO-WAY TRAFFIC FLOW SHALL BE ROUTED THROUGH THE EAST HALF. WHEN WORKING IN EAST HALF, TRAFFIC SHALL BE ROUTED THROUGH WEST HALF.
6. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), WITH MINIMUM SPACING LENGTHS PER MUTCD SECTION 6C.04


CALIFORNIA AMERICAN WATER

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER
TRAFFIC CONTROL –
SOMERSET BLVD

| ---- | ---- | USE DIMENSIONS ONLY SCALE AS SHOWN |
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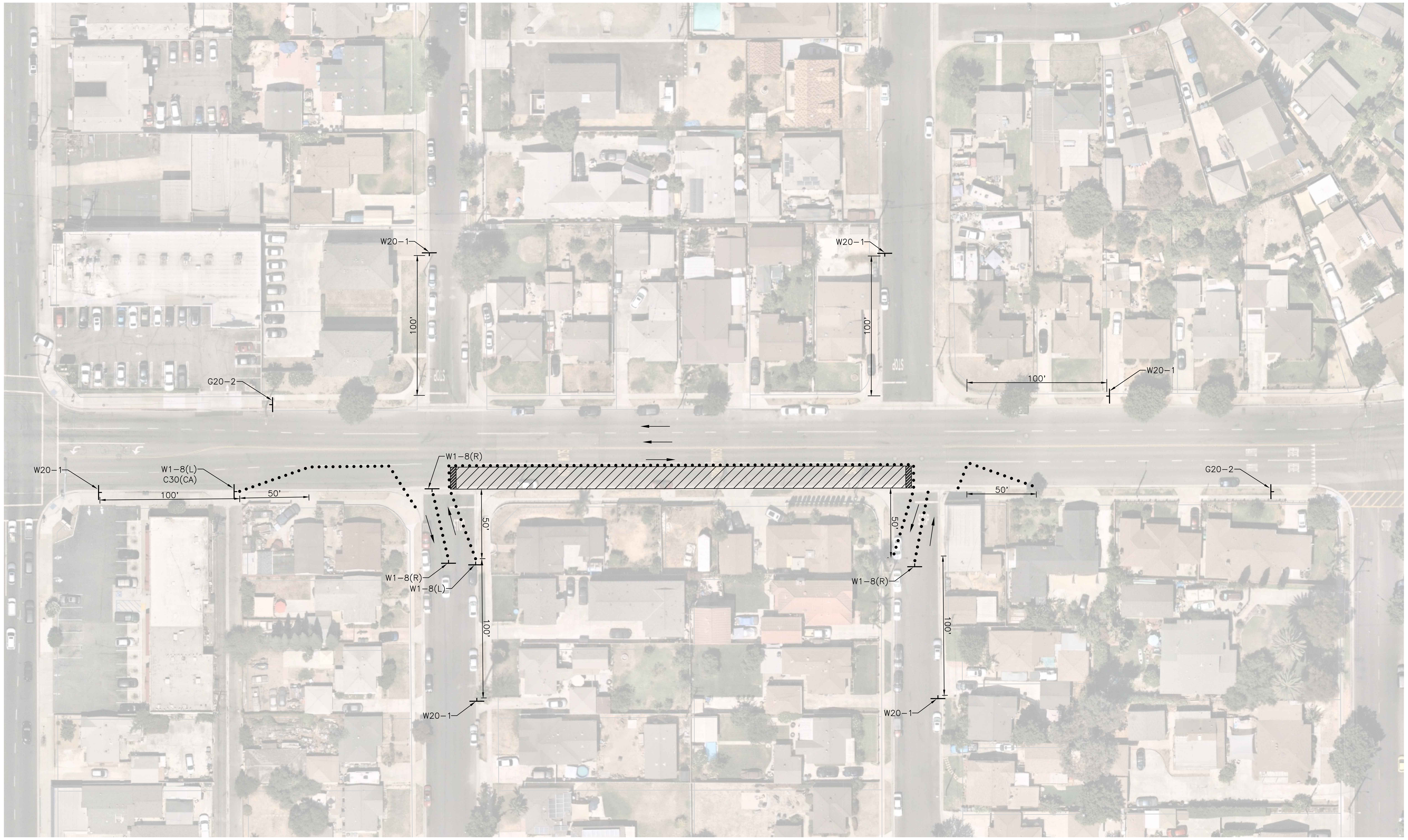
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 16 / 18 |

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LEGEND:

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| ← | EXISTING LANES OF TRAFFIC, TO REMAIN OPEN DURING CONSTRUCTION |
| | TYPE III BARRICADE, SEE NOTE 3 |
| | FLAGGER, SEE NOTE 4 |
| | TEMPORARY TRAFFIC CONTROL SIGN |
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| • | CHANNELIZING DEVICE |
| | DIAGRAMMATIC WORK AREA IN INTERSECTION, SEE NOTE 5 |
| | VARIABLE MESSAGE SIGN (VMS), COMMUNICATING CONSTRUCTION ACTIVITY DATES IN ADVANCE OF WORK START |

CONSTRUCTION NOTES:

1. WORK ASSOCIATED WITH THIS TRAFFIC HANDLING PLAN SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, SECTION 01410 WORK RESTRICTIONS.
2. CONTRACTOR SHALL COORDINATE WITH THE RESIDENTS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS TO PROVIDE ACCESS DURING CONSTRUCTION.
3. INSTALL TYPE 3 BARRICADES WITH WARNING LIGHT TO CLOSE THE LANE(S) AS SHOWN ON PLAN.
4. CONTRACTOR SHALL UTILIZE FLAGGERS FOR INTERSECTION CONTROL, AND TO ALLOW LOCALS TO ACCESS THEIR PROPERTIES.
5. CONTRACTOR SHALL HANDLE INTERSECTION WORK IN TWO PHASES, WITH HALF OF WORK IN EACH PHASE. WHILE WORK IS BEING PERFORMED IN WEST HALF OF INTERSECTION, TWO-WAY TRAFFIC FLOW SHALL BE ROUTED THROUGH THE EAST HALF. WHEN WORKING IN EAST HALF, TRAFFIC SHALL BE ROUTED THROUGH WEST HALF.
6. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.
7. ALL TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), WITH MINIMUM SPACING LENGTHS PER MUTCD SECTION 6C.04


CALIFORNIA AMERICAN WATER

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REGISTERED PROFESSIONAL ENGINEER
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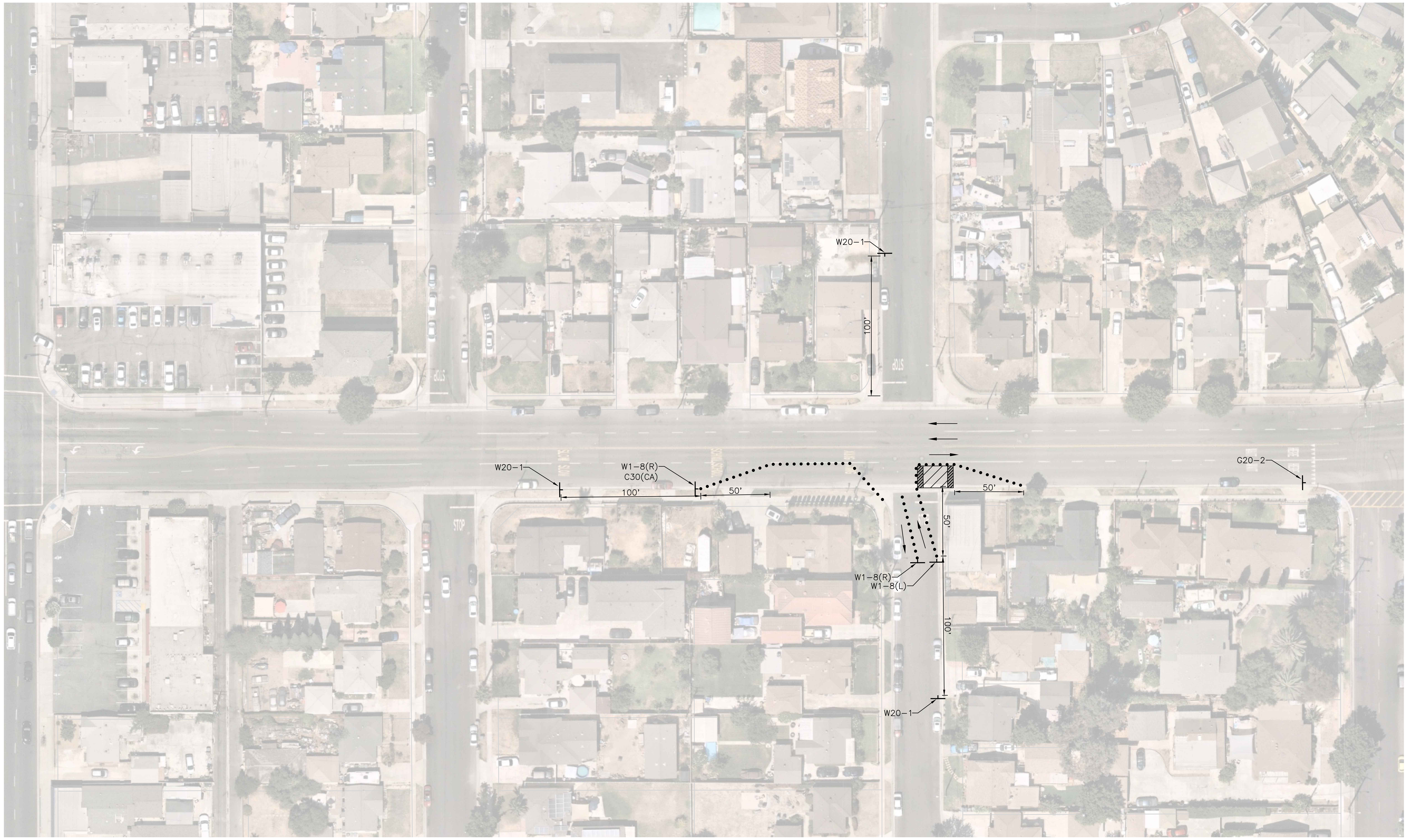
STATE OF CALIFORNIA

AMERICAN WATER COMPANY
3906 CHURCH ROAD
MT. LAUREL, NJ 08054
AMERICAN WATER

DRAWN BY AP
PROJECT ENG'R JLS
DATE 2023-7-25
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 2
CITY OF BELLFLOWER
TRAFFIC CONTROL –
SOMERSET BLVD

| ---- | ---- | USE DIMENSIONS ONLY<br>SCALE AS SHOWN |
|---|---|---|
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 17 / 18 |




SCALE: 1"=40'

0 20 40 80
SCALE IN FEET

LEGEND:

| | |
|---|---|
| ← | EXISTING LANES OF TRAFFIC, TO REMAIN OPEN DURING CONSTRUCTION |
| | TYPE III BARRICADE, SEE NOTE 3 |
| | FLAGGER, SEE NOTE 4 |
| | TEMPORARY TRAFFIC CONTROL SIGN |
| | WORK ZONE AREA |
| • | CHANNELIZING DEVICE |
| | DIAGRAMMATIC WORK AREA IN INTERSECTION, SEE NOTE 5 |
| | VARIABLE MESSAGE SIGN (VMS), COMMUNICATING CONSTRUCTION ACTIVITY DATES IN ADVANCE OF WORK START |

CONSTRUCTION NOTES:

1. WORK ASSOCIATED WITH THIS TRAFFIC HANDLING PLAN SHALL BE PERFORMED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS, SECTION 01410 WORK RESTRICTIONS.
2. CONTRACTOR SHALL COORDINATE WITH THE RESIDENTS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS TO PROVIDE ACCESS DURING CONSTRUCTION.
3. INSTALL TYPE 3 BARRICADES WITH WARNING LIGHT TO CLOSE THE LANE(S) AS SHOWN ON PLAN.
4. CONTRACTOR SHALL UTILIZE FLAGGERS FOR INTERSECTION CONTROL, AND TO ALLOW LOCALS TO ACCESS THEIR PROPERTIES.
5. CONTRACTOR SHALL HANDLE INTERSECTION WORK IN TWO PHASES, WITH HALF OF WORK IN EACH PHASE. WHILE WORK IS BEING PERFORMED IN WEST HALF OF INTERSECTION, TWO-WAY TRAFFIC FLOW SHALL BE ROUTED THROUGH THE EAST HALF. WHEN WORKING IN EAST HALF, TRAFFIC SHALL BE ROUTED THROUGH WEST HALF.
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C12 (CA)

C30 (CA)

G20-2


W1-8

W20-1

CALIFORNIA AMERICAN WATER

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DRAWN BY AP
PROJECT ENG'R JLS

DATE 2023-7-25

PROJECT

# BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 2
## CITY OF BELLFLOWER
## TRAFFIC CONTROL - SOMERSET BLVD

| ---- | ---- | USE DIMENSIONS ONLY<br>SCALE AS SHOWN |
|---|---|---|
| USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 18 / 18 |