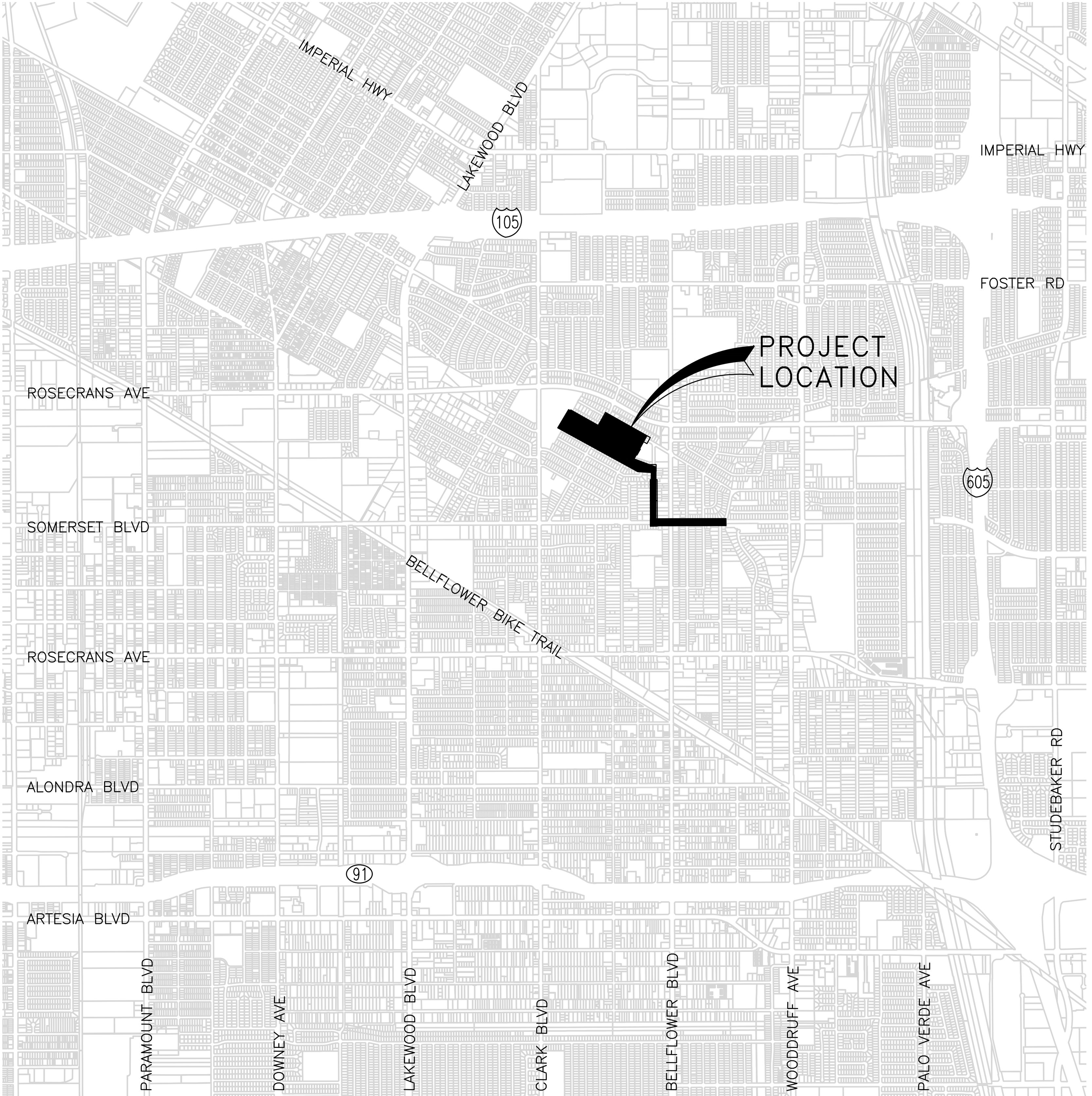
CALIFORNIA AMERICAN WATER

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
MAPLEWOOD ST, CLOVERWOOD ST, GLANDON ST, ARDIS AVE, BLAINE AVE AND 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

CAUTION

WATCH FOR OVERHEAD POWER LINES

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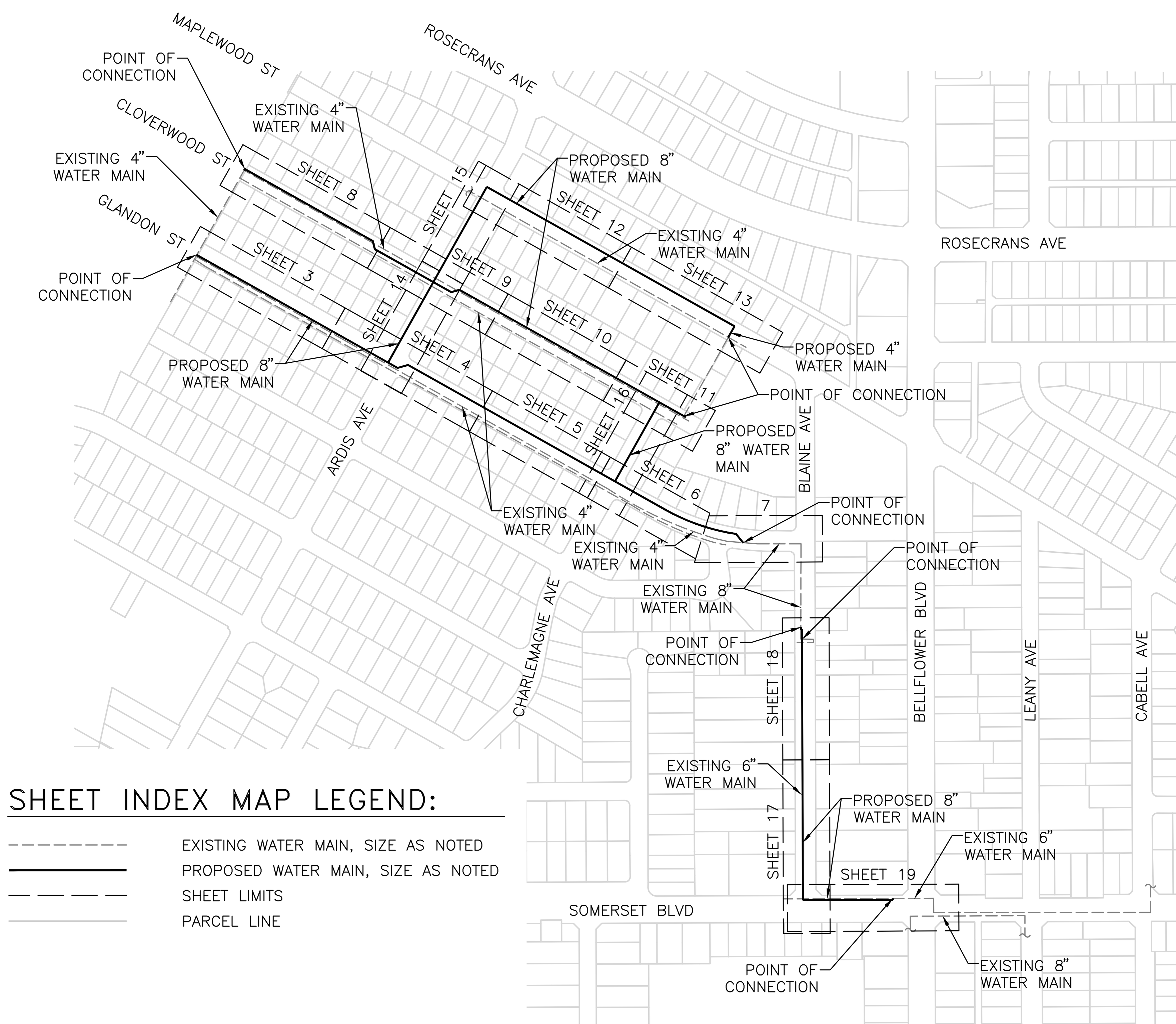

SHEET INDEX MAP

NOT TO SCALE

SHEET INDEX MAP LEGEND:

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

SHEET LIST TABLE	
SHEET NUMBER	SHEET TITLE
GENERAL	
1	COVER SHEET AND INDEX MAP
2	LEGEND AND NOTES
PLAN AND PROFILE	
3	STA 10+00 TO STA 14+50 – GLANDON ST
4	STA 14+50 TO STA 19+50 – GLANDON ST
5	STA 19+50 TO STA 23+50 – GLANDON ST
6	STA 23+50 TO STA 27+00 – GLANDON ST
7	STA 27+00 TO STA 30+50 – GLANDON ST
8	STA 40+00 TO STA 44+50 – CLOVERWOOD ST
9	STA 44+50 TO STA 48+50 – CLOVERWOOD ST
10	STA 48+50 TO STA 52+50 – CLOVERWOOD ST
11	STA 52+50 TO STA 55+50 – CLOVERWOOD ST
12	STA 60+50 TO STA 64+50 – MAPLEWOOD ST
13	STA 64+00 TO STA 69+50 – MAPLEWOOD ST
14	STA 79+50 TO STA 83+00 – ARDIS AVE
15	STA 83+00 TO STA 86+00 – ARDIS AVE
16	STA 89+50 TO STA 93+50 – CHARLEMAGNE AVE
17	STA 100+00 TO STA 104+50 – BLAINE AVE
18	STA 104+50 TO STA 108+50 – BLAINE AVE
19	STA 120+00 TO STA 124+50 – SOMERSET BLVD
DETAILS	
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23	DETAILS AND CONNECTION DETAILS
TRAFFIC CONTRTOL	
24	TRAFFIC CONTROL NOTES
25	SOMERSET BLVD

CALIFORNIA AMERICAN WATER

REVISIONS		REVISIONS	

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DRAWN BY JCA
PROJECT ENG'R JLS
DATE 2023–6–29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER

COVER SHEET AND INDEX MAP

----	----	USE DIMENSIONS ONLY SCALE AS SHOWN
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TOPO LEGEND:

Symbol	Description
	BACKFLOW ASSEMBLY
COPB	COMMUNICATION PULLBOX
CVA	COMMUNICATION VAULT
ECA	ELECTRICAL CABINET
EPB	ELECTRICAL PULL BOX
2" ELC	ELECTRICAL CONDUIT
	FIRE HYDRANT
	GAS METER
GV	GAS VALVE
GUY	GUY WIRE ANCHOR
IVA	IRRIGATION VALVE
JP	JOINT UTILITY POLE
LP	LIGHT POLE
PP	POWER POLE
	STREET LIGHT
S	SEWER MANHOLE
SP	SERVICE POLE
	SIGN
	STORM DRAIN INLET
	STORM DRAIN MANHOLE
312.55	SURVEY CONTROL POINT
T	TELEPHONE MANHOLE
TSPB	TRAFFIC SIGNAL PULLBOX
	TRAFFIC SIGNAL W/ MAST ARM
PBP	TRAFFIC PEDESTRIAN POLE
	TRAFFIC SIGNAL
UB	UNIDENTIFIED BOX
	UNIDENTIFIED MANHOLE
UVA	UNIDENTIFIED VAULT
	WATER METER
WV	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

ABBREVIATIONS AND SYMBOLS:

Abbreviation	Meaning
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 20
WV	PROPOSED WATER VALVE AND VALVE BOX PER STD DWG COR-9 A&B ON SHEET 21
	PROPOSED 1" WATER SERVICE PER STD DWG COR-1 OR COR-2 ON SHEET 20, AND COR-18 ON SHEET 21
	PROPOSED 2" BLOW-OFF ASSEMBLY PER STD DWG COR-6 ON SHEET 20
	PROPOSED WATER MAIN, SIZE AS NOTED ON PLANS, PER STD DWG COR-4A, B & C ON SHEET 20 AND COR-23 ON SHEET 21
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 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 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 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 21.
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 BE RESPONSIBLE FOR PREPARING TRAFFIC CONTROL DRAWINGS AND GAINING APPROVAL FROM CITY.
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.

WATER SERVICE NOTES:

1. CONTRACTOR SHALL CONNECT ON-SITE WATER SERVICE LINE TO NEW METER BOX, SEE STD DWGS ON SHEET 20 EXISTING WATER METER SHALL BE TRANSFERRED TO NEW METER BOX.
2. ALL RESIDENTIAL WATER SERVICES SHALL BE 1", UNLESS OTHERWISE NOTED OR OTHERWISE INDICATED IN THE SPECIFICATIONS. EXISTING WATER METERS SHALL BE REUSED.
3. CONTRACTOR SHALL VERIFY PROPOSED METER BOX LOCATIONS WITH CAW PRIOR TO CONSTRUCTION.
4. 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.

SEWER LATERAL NOTES:

1. UNLESS OTHERWISE NOTED, HORIZONTAL LOCATION OF SEWER LATERALS WAS OBTAINED FROM AS-BUILT SEWER MAIN PLANS. ALL LATERAL ELEVATIONS ARE UNKNOWN AND ARE DRAWN IN PROFILE AT A STANDARD DEPTH OF 2 FEET COVER.
2. FOR SEWER LATERALS THAT WERE NOT PROVIDED ON AS-BUILT PLANS, LATERALS WERE DRAWN DIAGRAMMATICALLY IN CENTER OF PROPERTY.
3. CONTRACTOR SHALL TAKE EXTRA CARE WHILE TRENCHING IN FRONT OF HOUSES TO AVOID DAMAGING SEWER LATERALS. COSTS TO LOCATE UNKNOWN SEWER LATERALS SHALL BE INCLUDED IN PROPOSED PIPELINE COSTS.

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.

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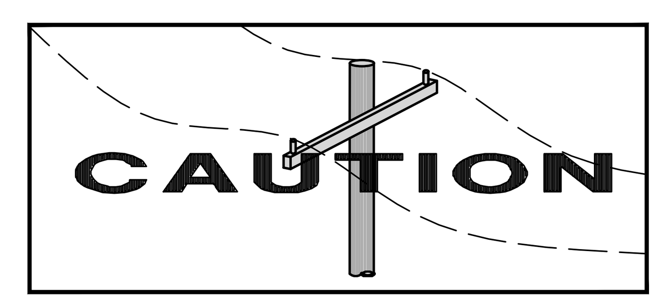

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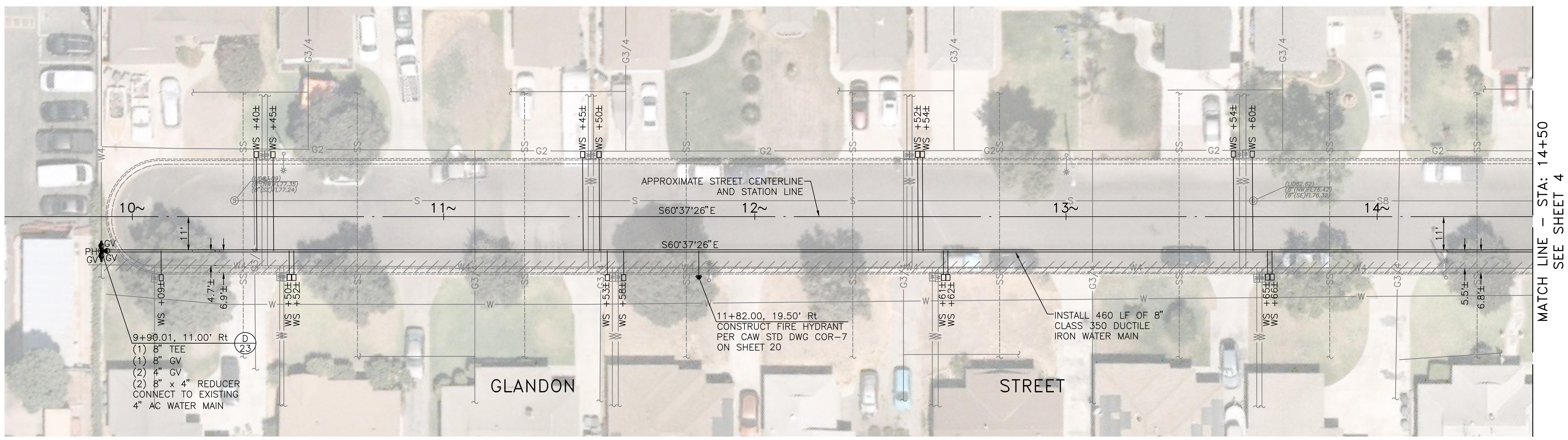

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VERT 1"=2'
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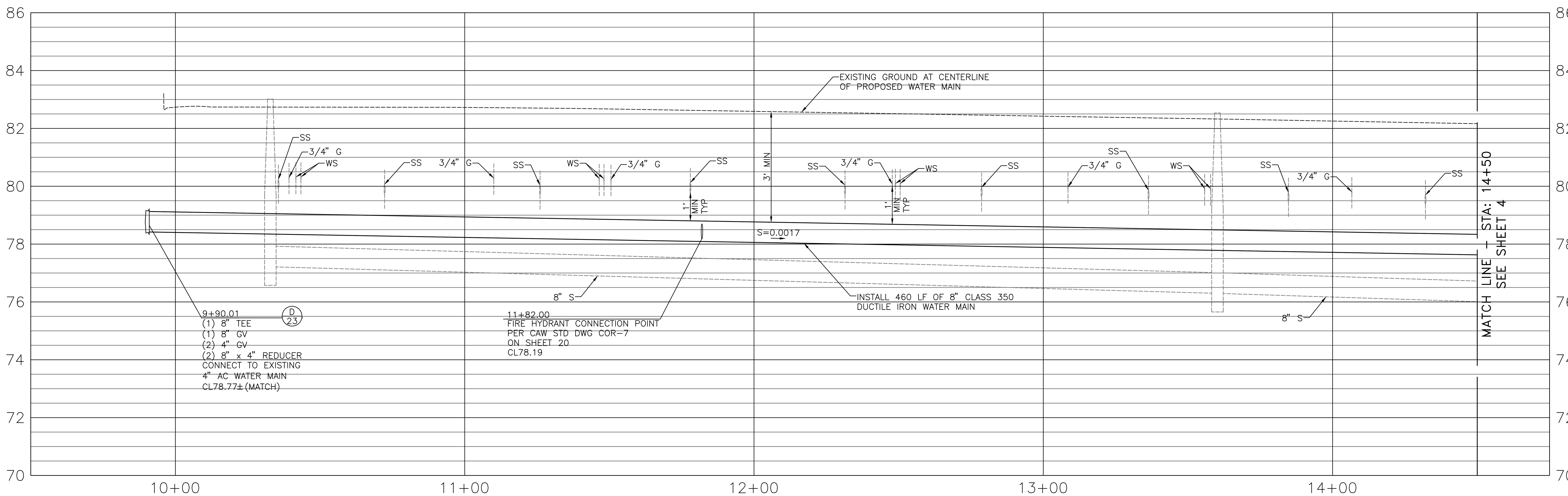
SCALE IN FEET



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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AMERICAN WATER

DRAWN BY JCA
PROJECT ENG'R JLS
DATE 2023-6-29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 10+00 TO STA 14+50 – GLANDON ST

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SCALE AS SHOWN
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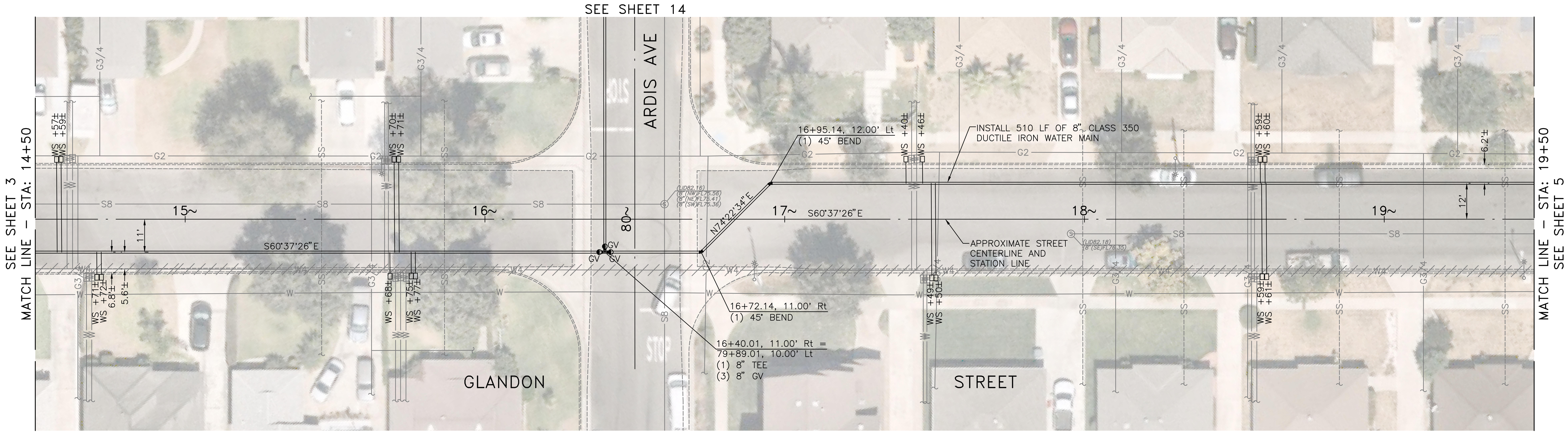

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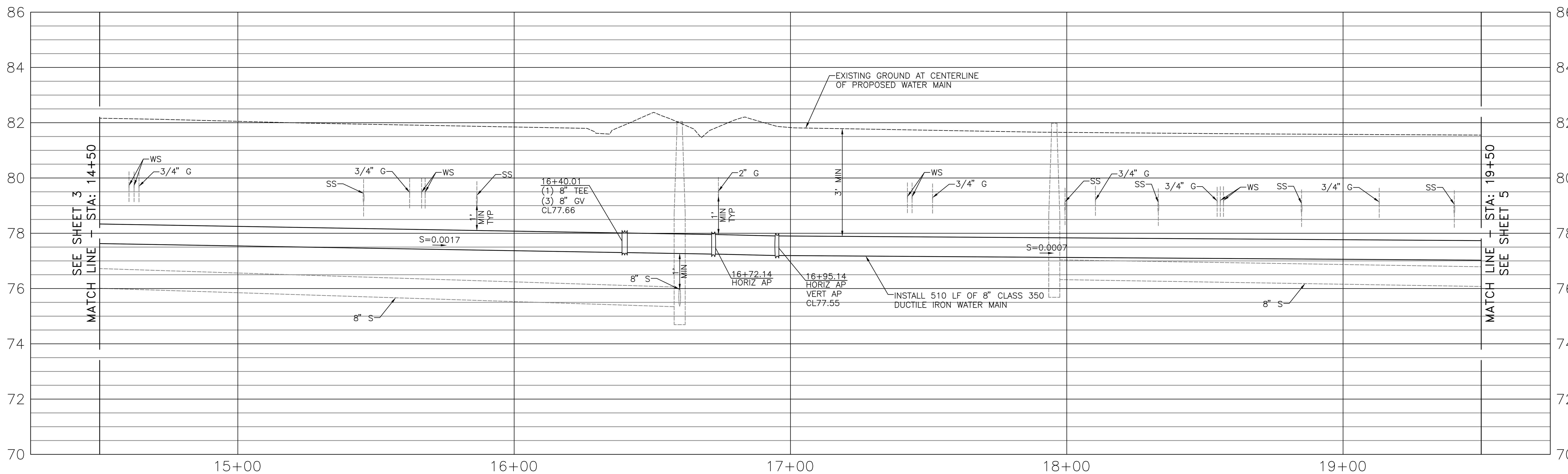

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 14+50 TO STA 19+50 – GLANDON ST

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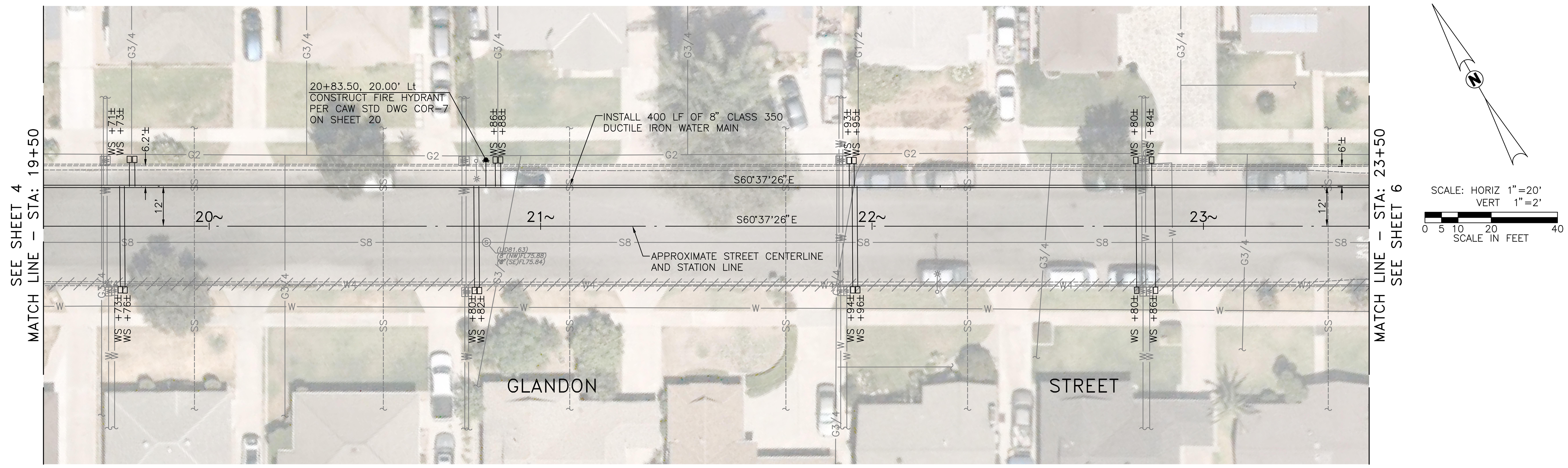

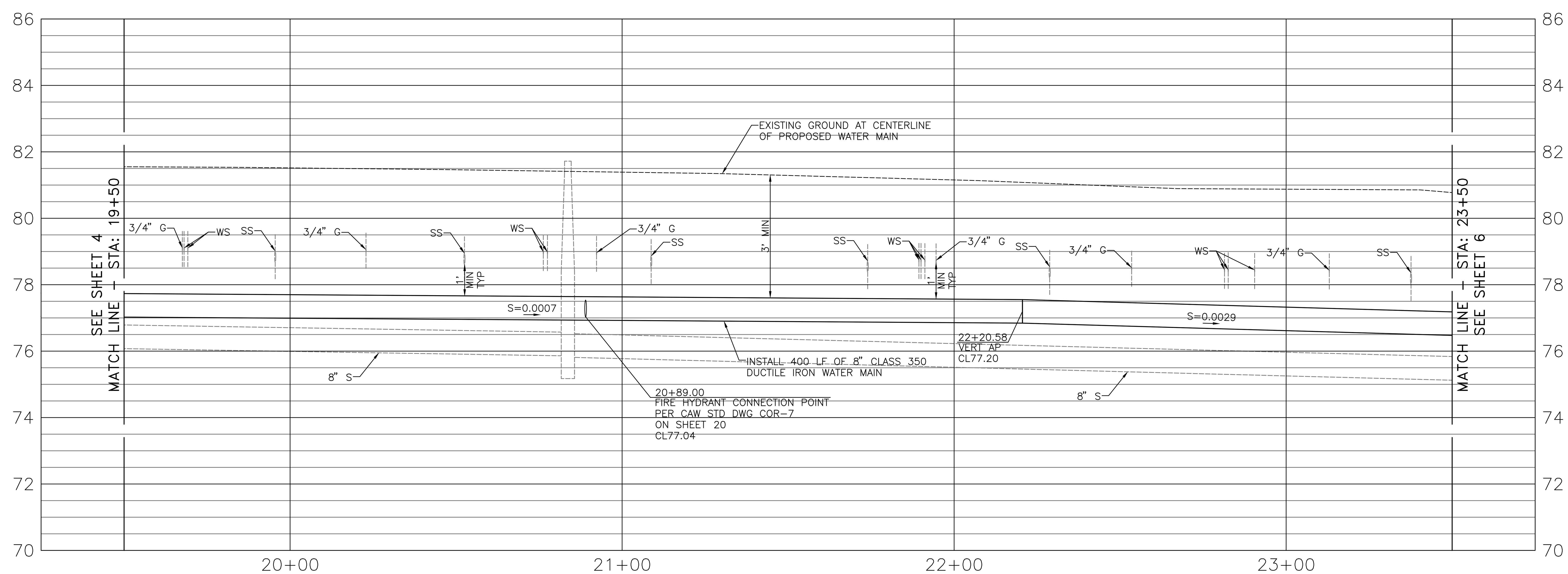

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 19+50 TO STA 23+50 – GLANDON ST

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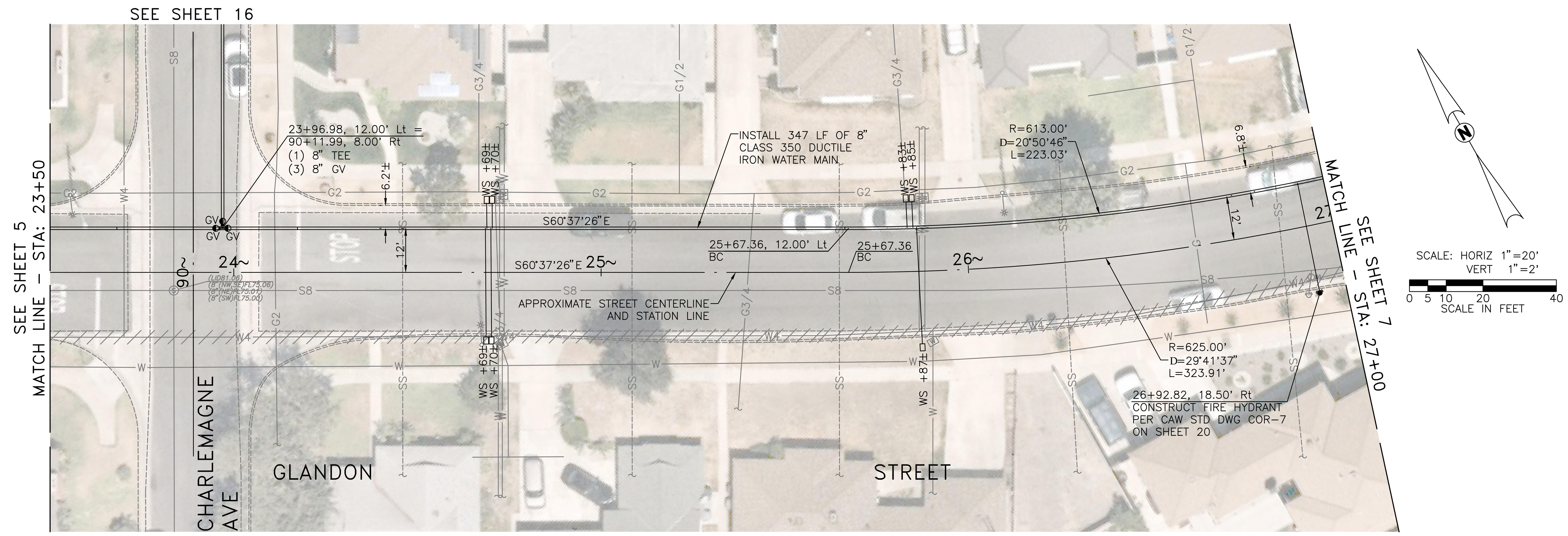

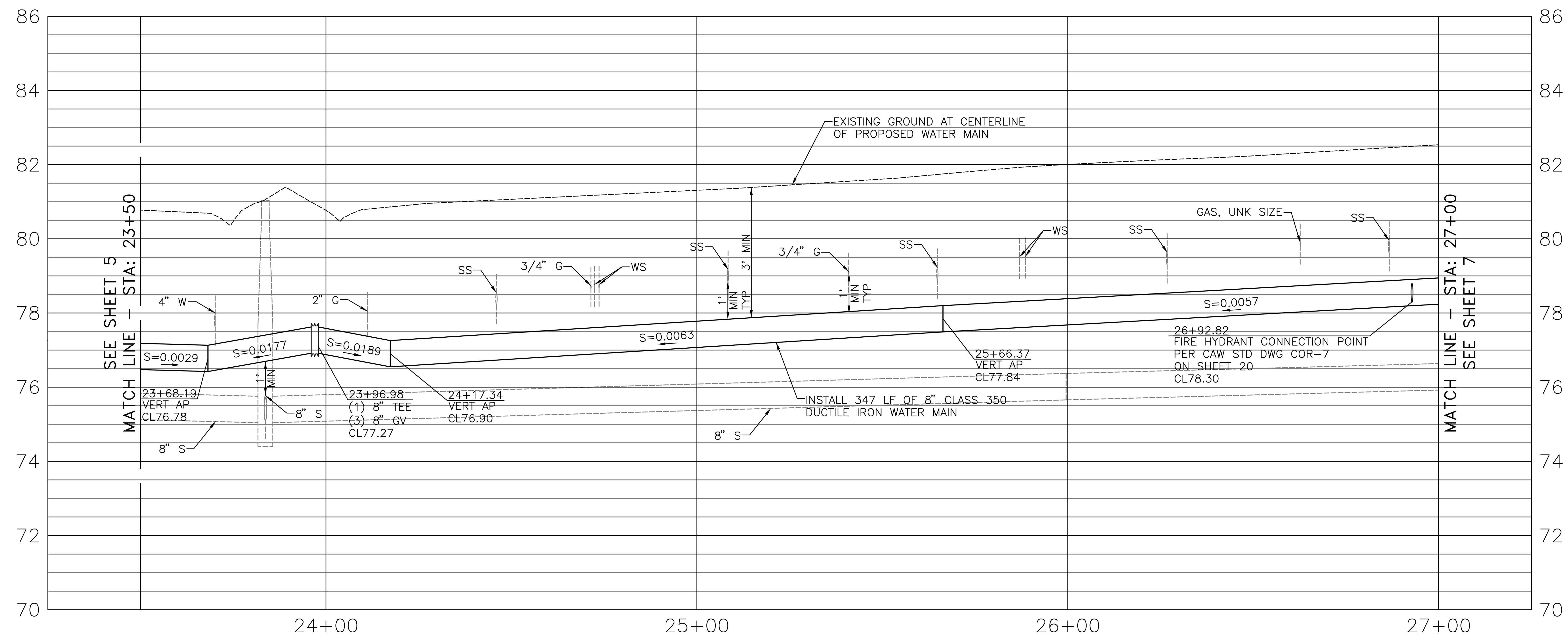

SEE WATER NOTES
AND WATER SERVICE
NOTES ON SHEET 2

POTHOLE AND LOCATION NOTES:

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PLAN AND PROFILE
STA 23+50 TO STA 27+00 - GLANDON ST

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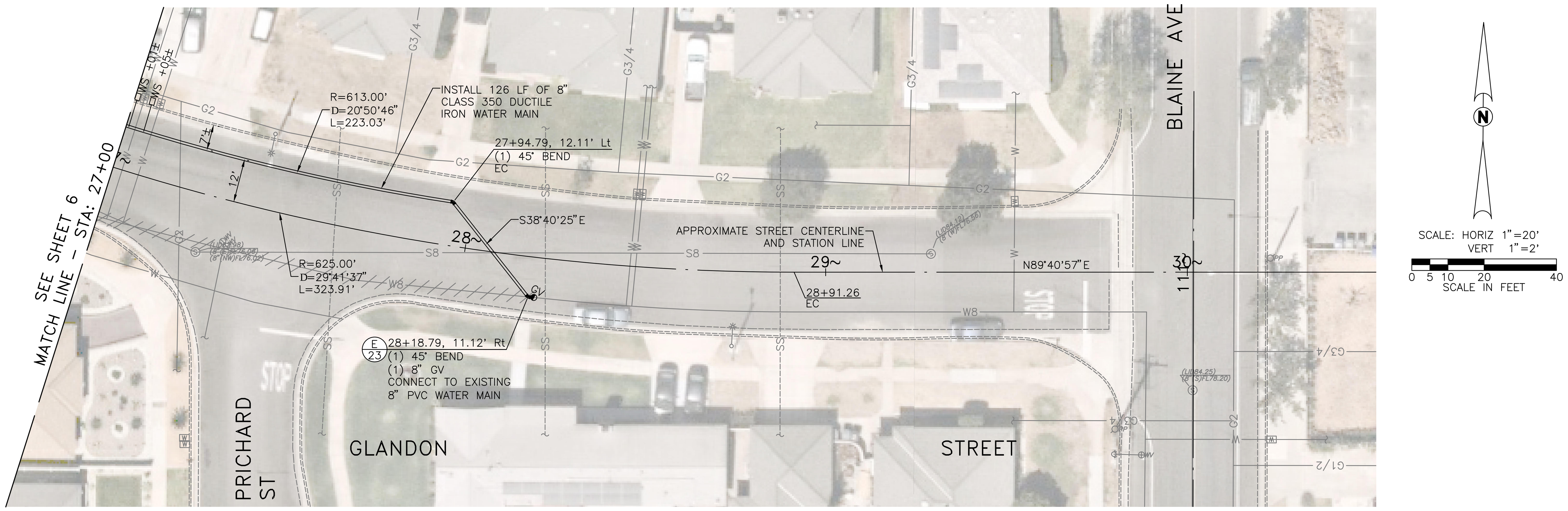

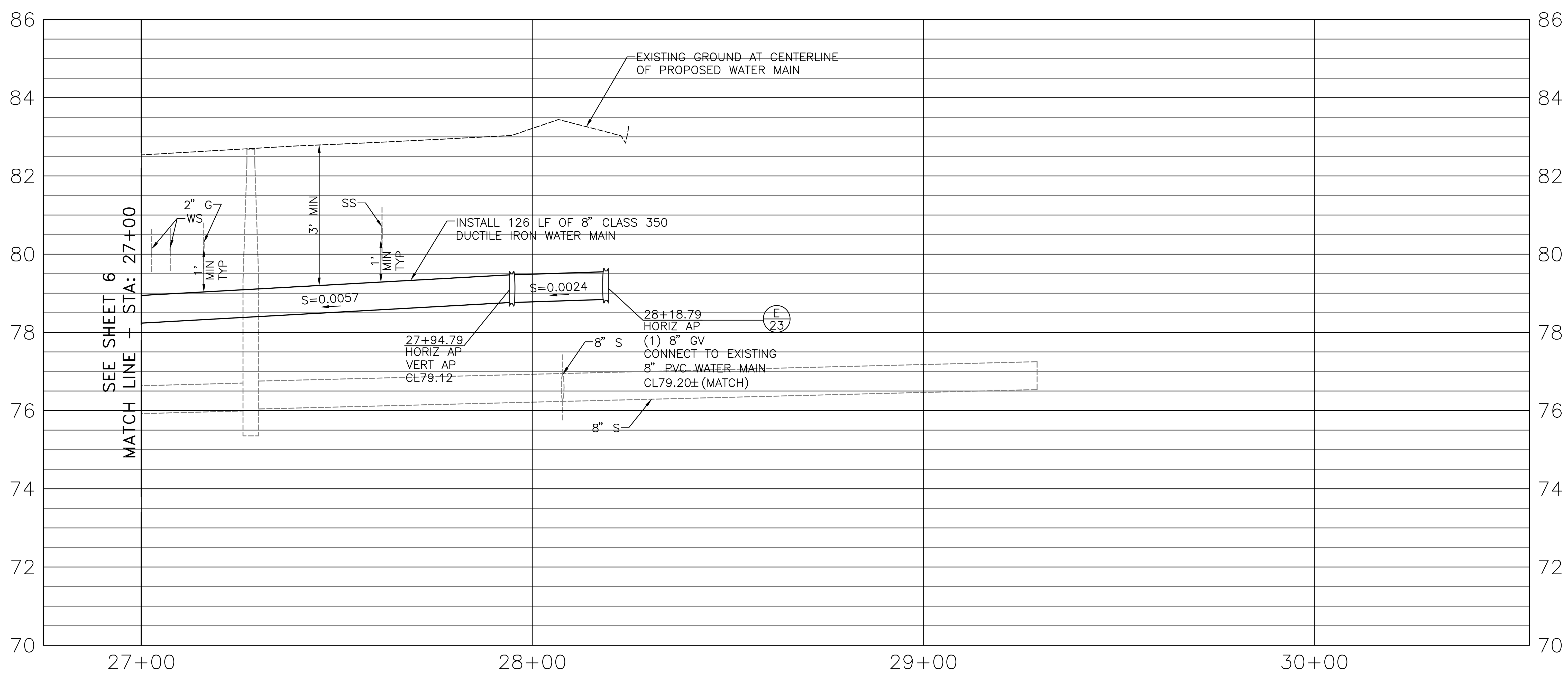

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---- | ---- | USE DIMENSIONS ONLY SCALE AS SHOWN

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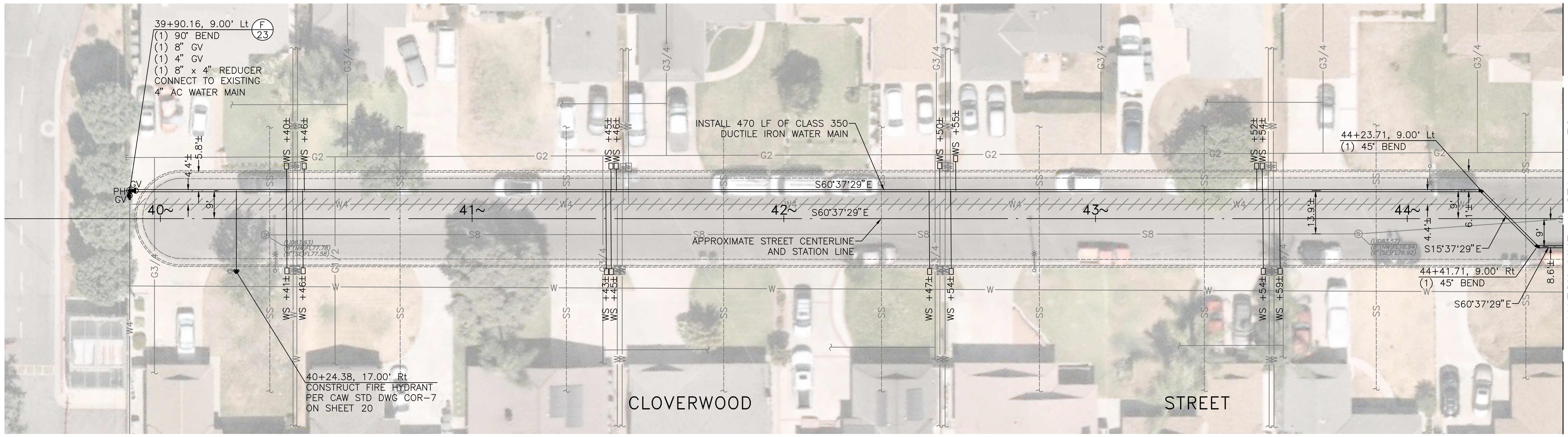

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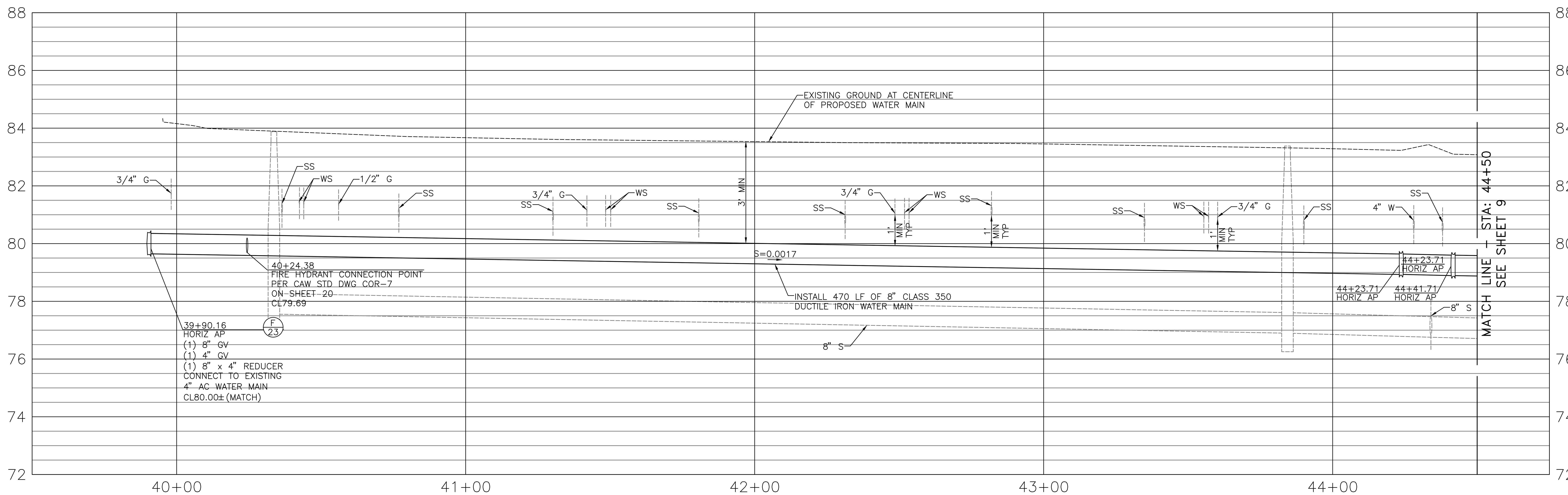

SEE WATER NOTES AND WATER SERVICE NOTES ON SHEET 2

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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Fax (559) 326-1500

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

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

AMERICAN WATER

DRAWN BY JCA
PROJECT ENG'R JLS
DATE 2023-6-29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 40+00 TO STA 44+50 - CLOVERWOOD ST

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SCALE AS SHOWN
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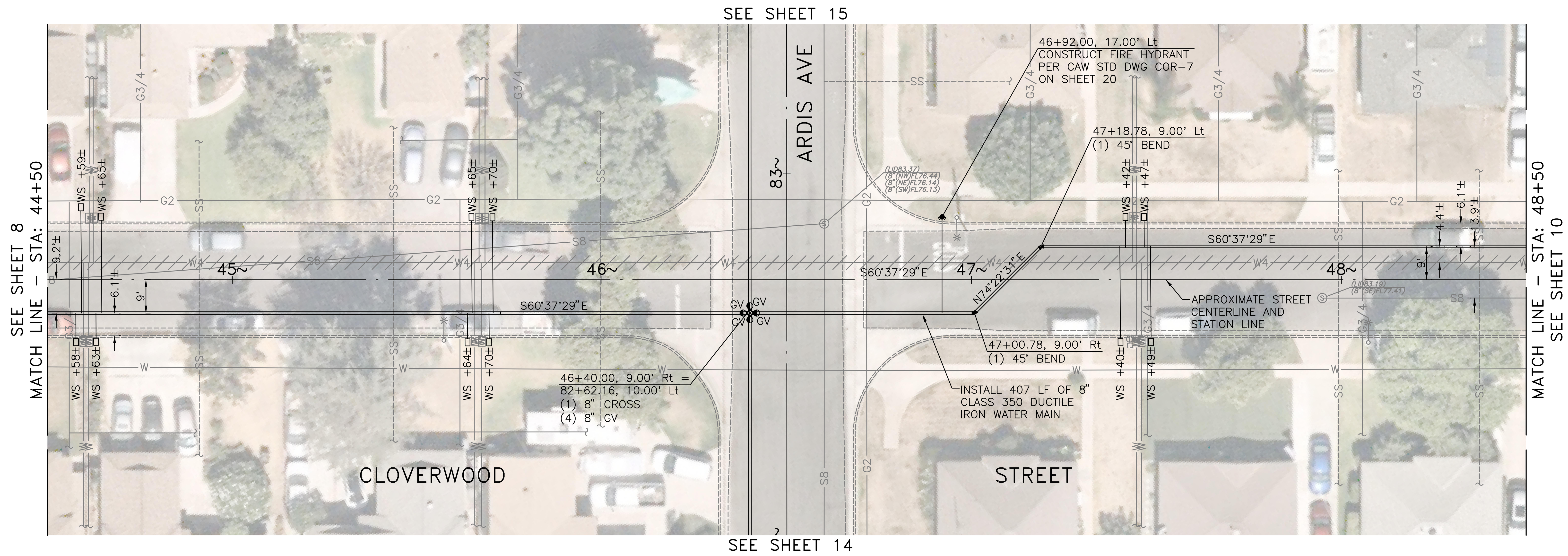

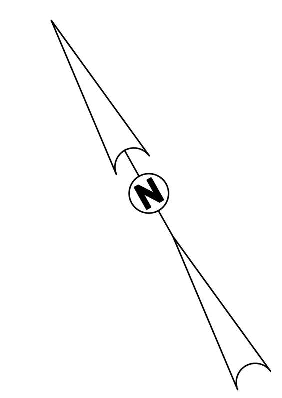

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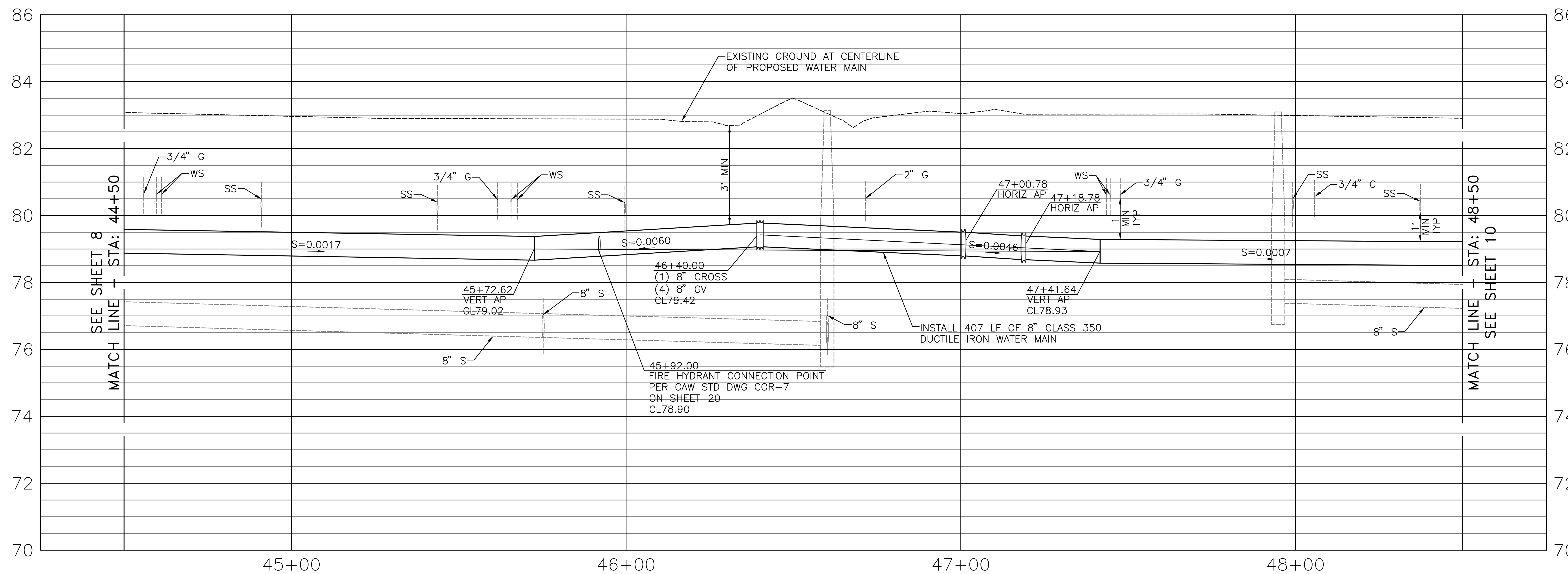
SCALE IN FEET



SEE WATER NOTES
AND WATER SERVICE
NOTES ON SHEET 2

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 44+50 TO STA 48+50 – CLOVERWOOD ST

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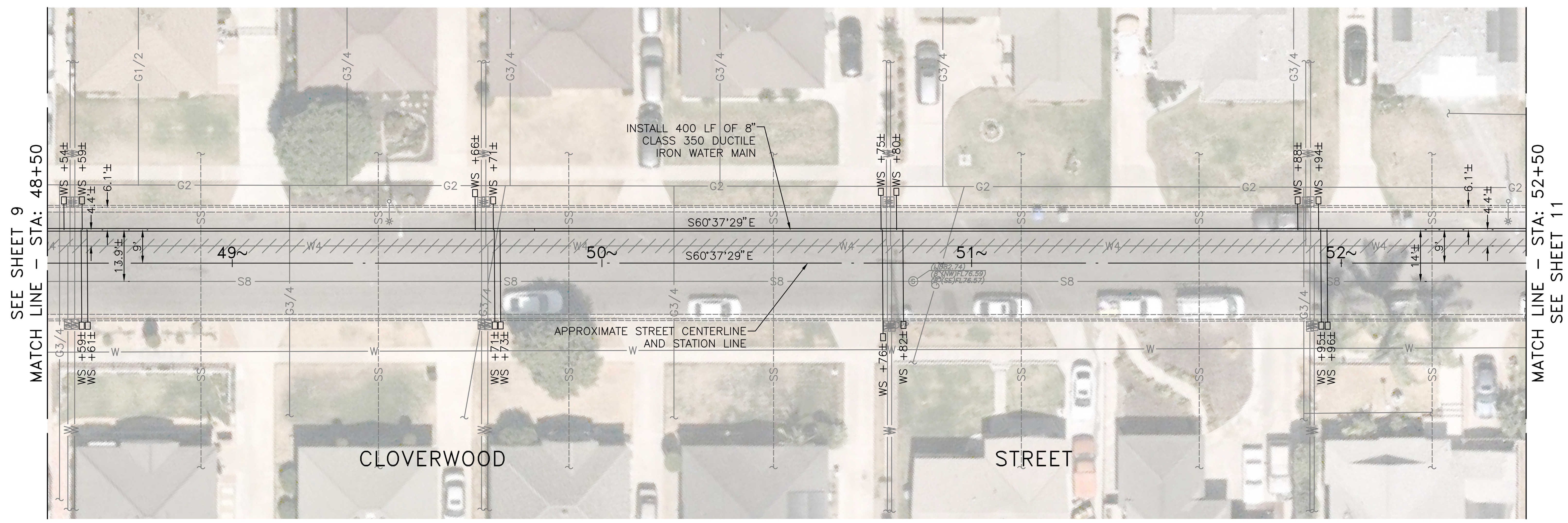
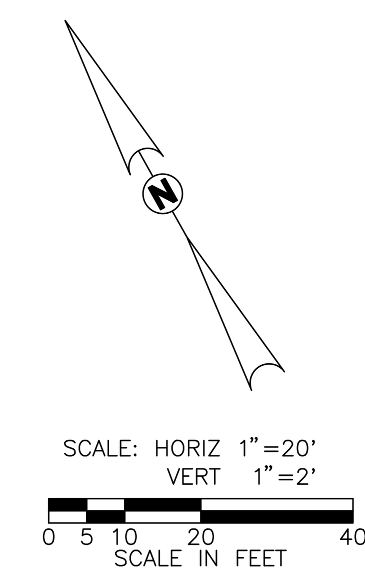
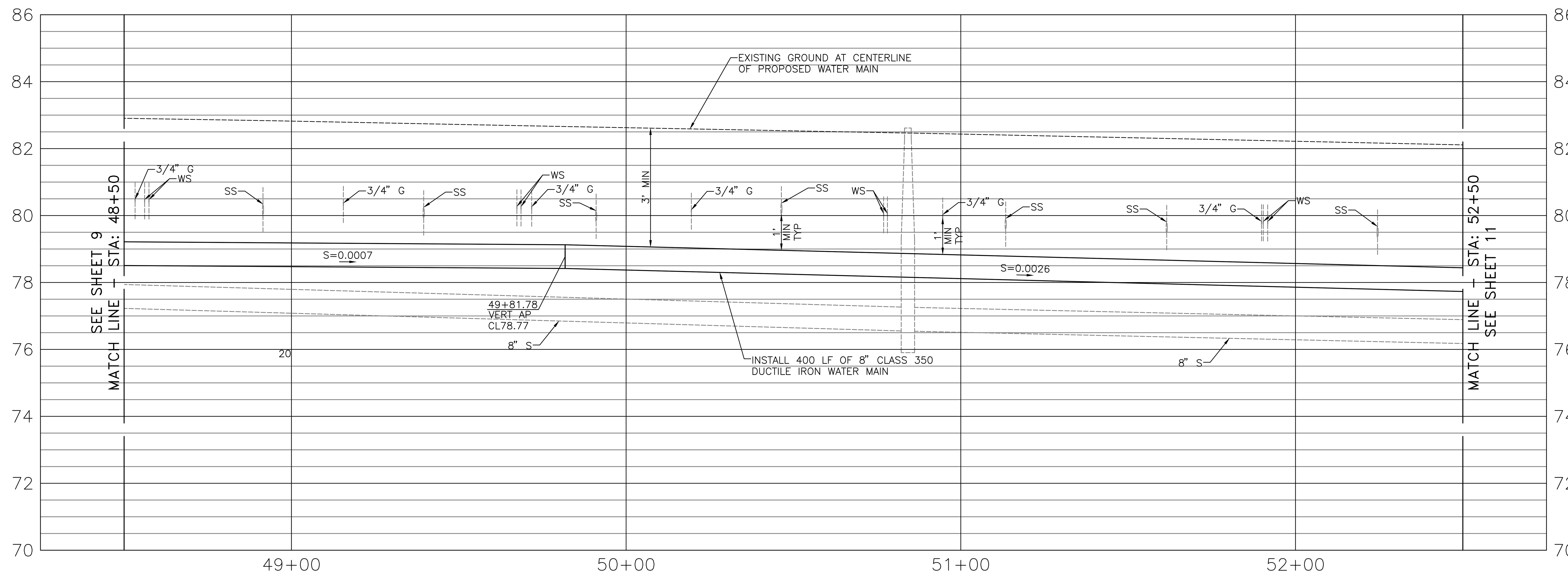
SCALE AS SHOWN







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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 48+50 TO STA 52+50 – CLOVERWOOD ST

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PROJECT

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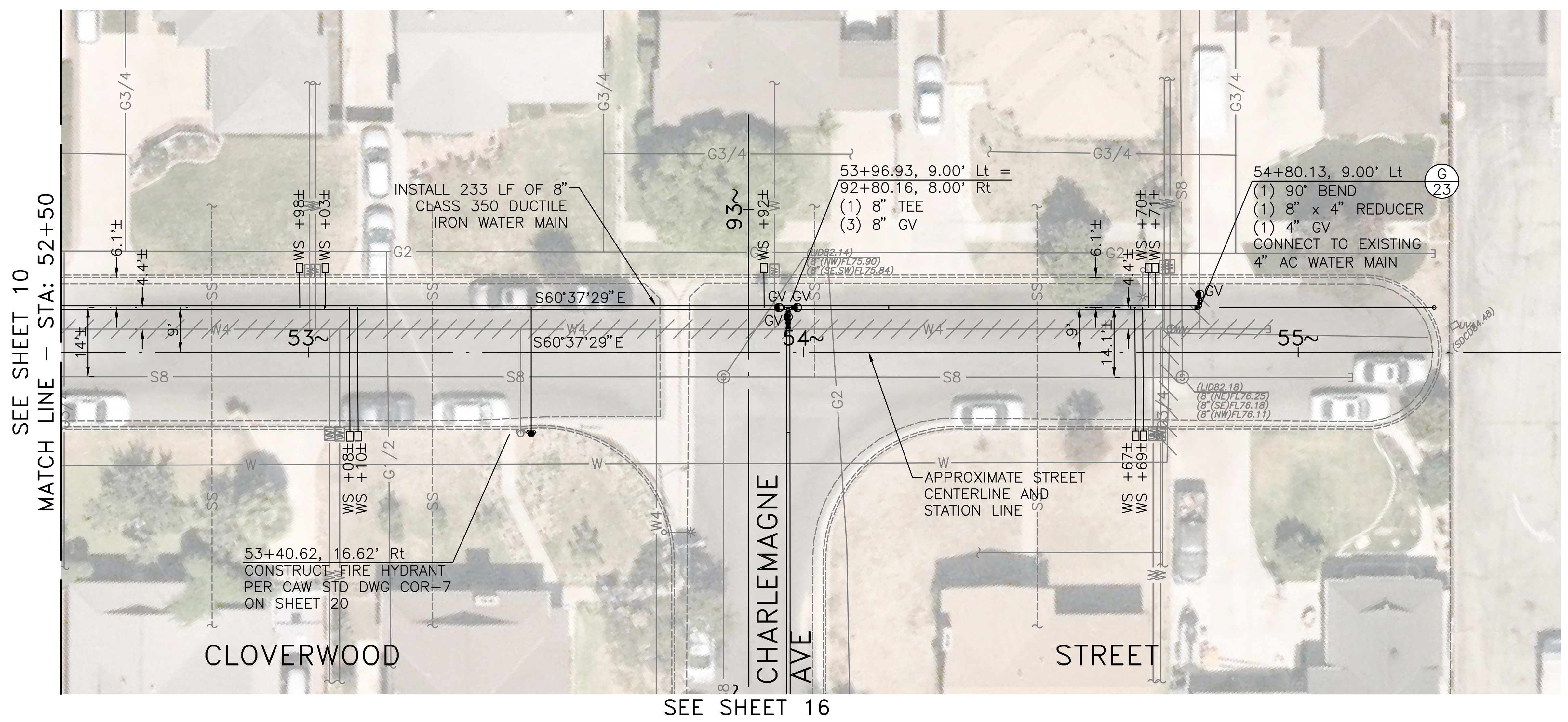

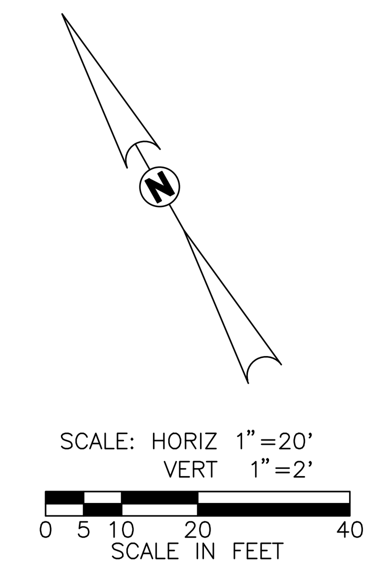

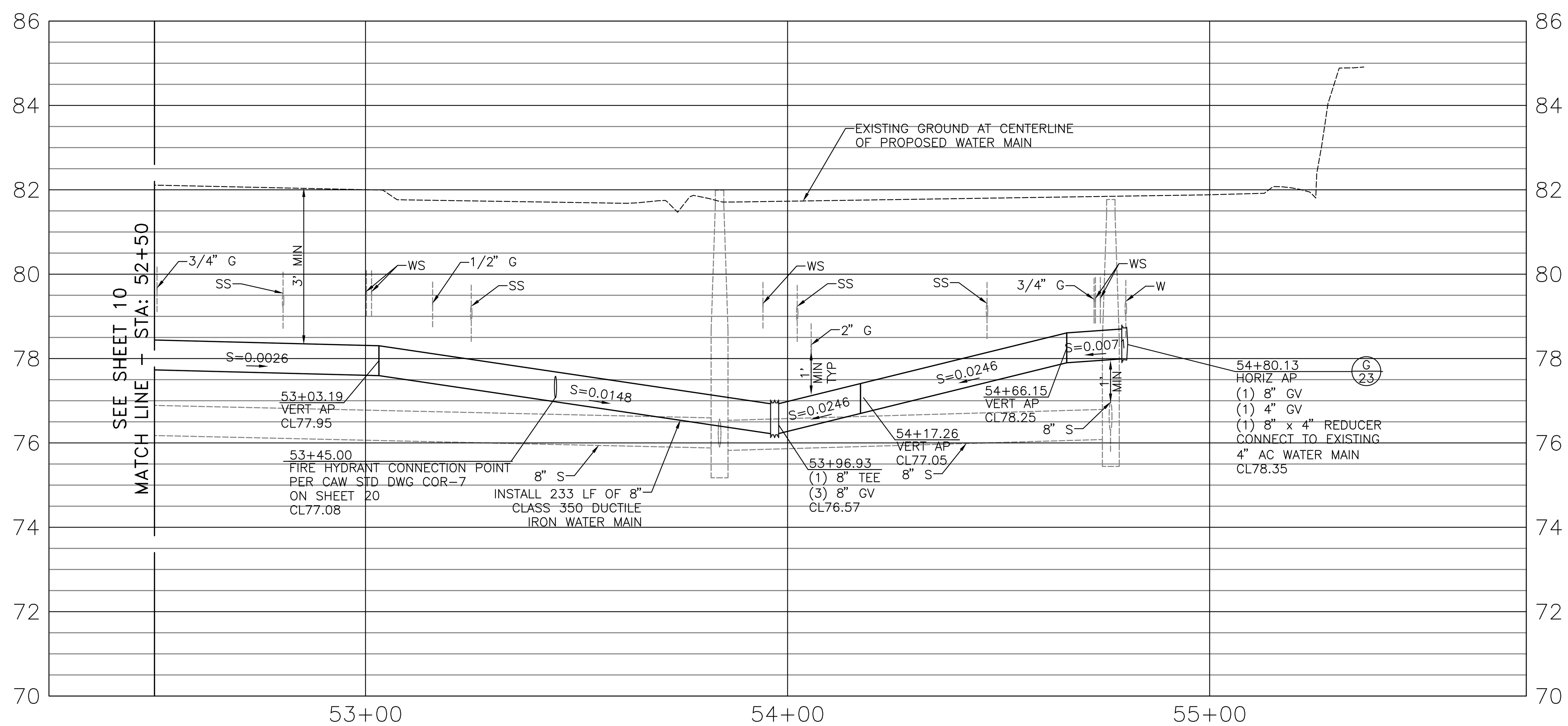

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CITY OF BELLFLOWER
PLAN AND PROFILE
STA 52+50 TO STA 55+50 - CLOVERWOOD ST

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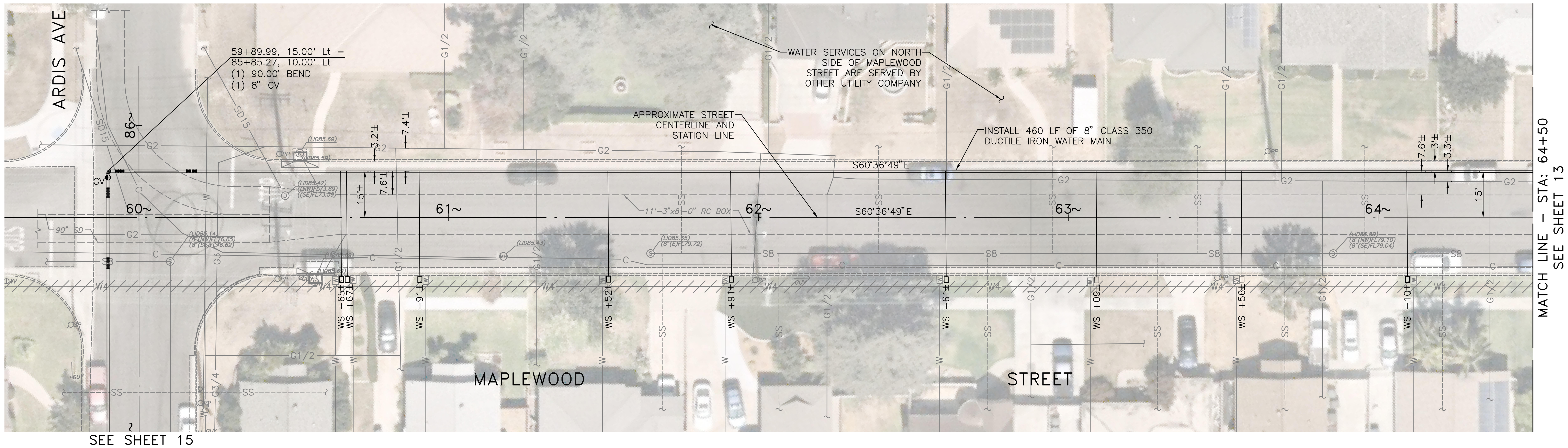

SCALE: HORIZ 1"=20'
VERT 1"=2'
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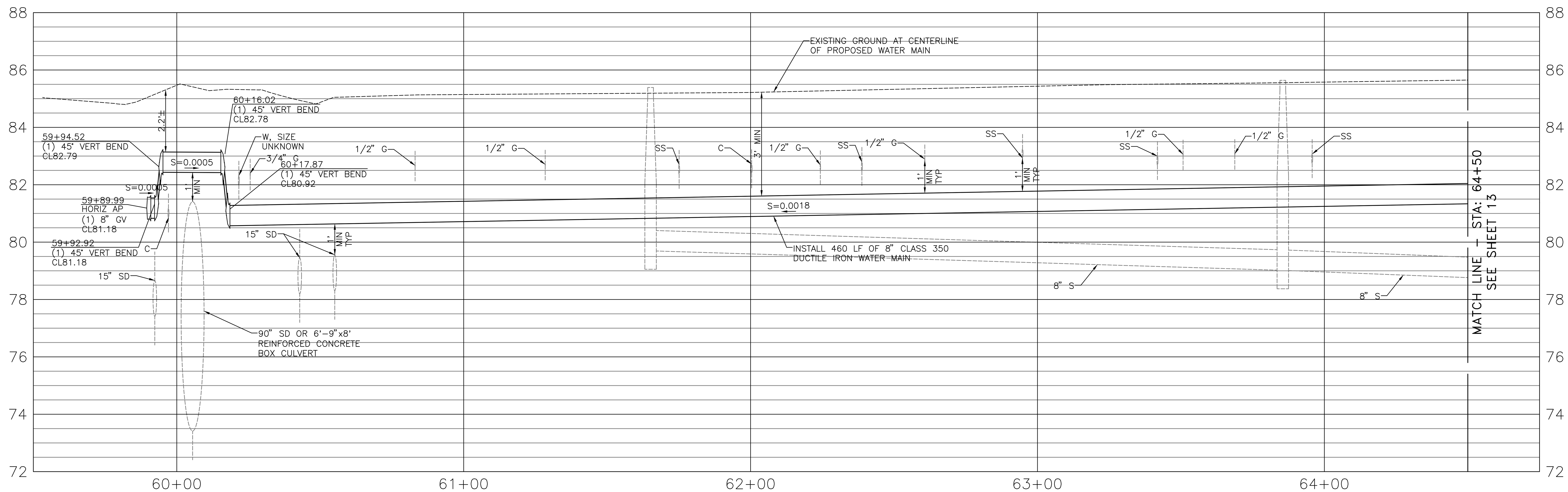
SCALE IN FEET



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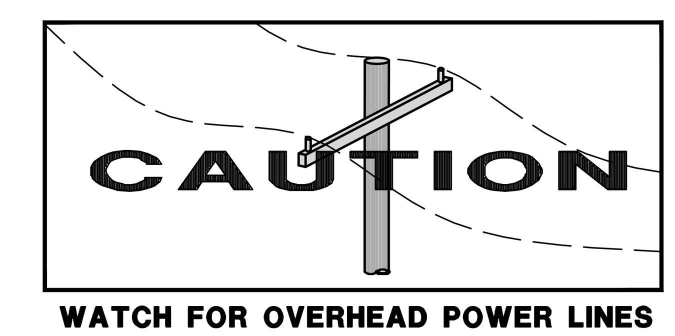

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BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 60+50 TO STA 64+50 - MAPLEWOOD ST

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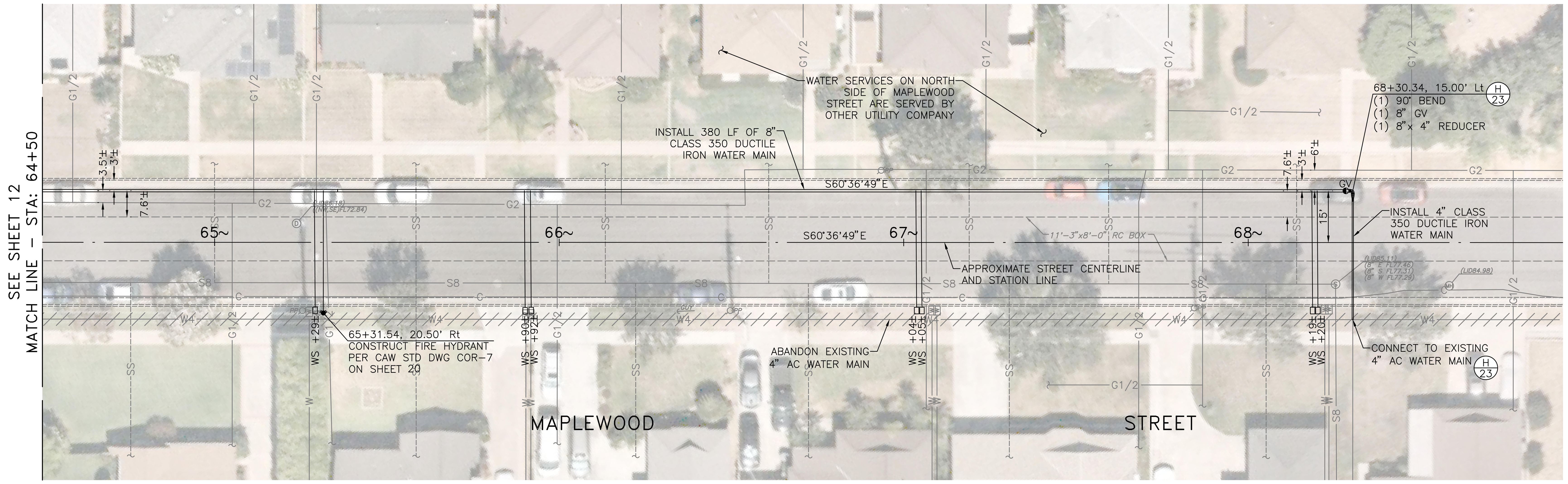
SCALE AS SHOWN



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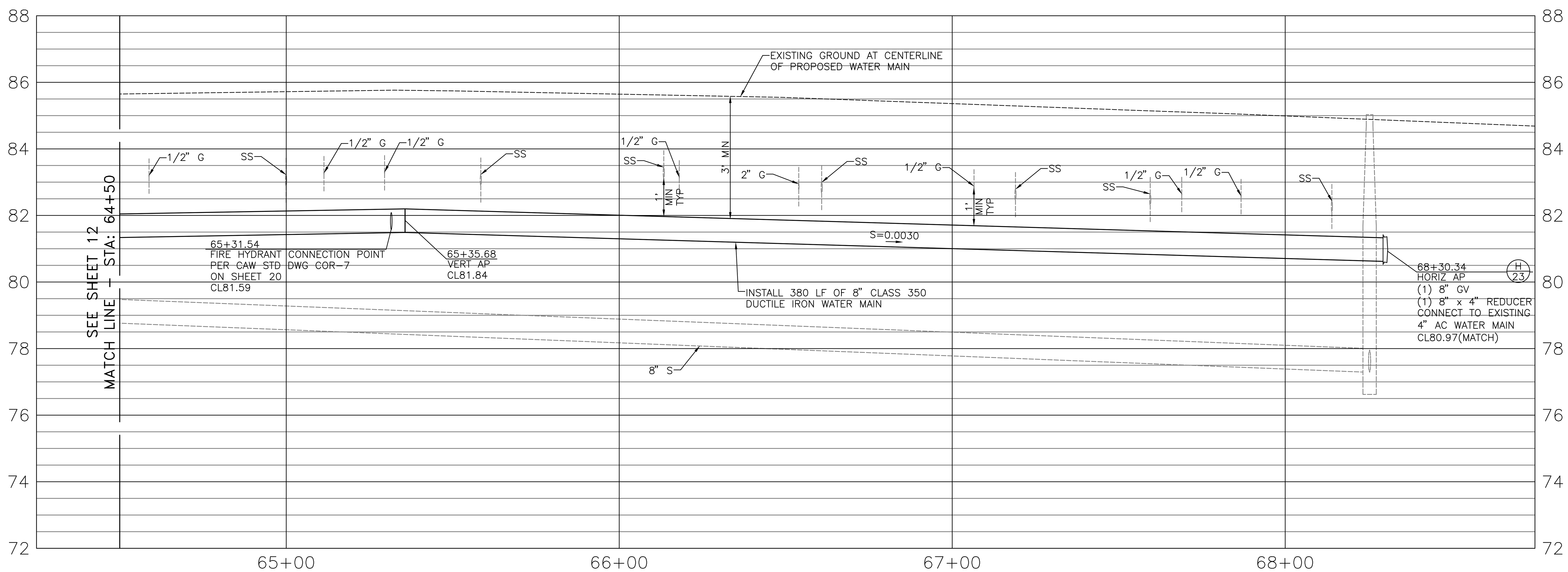

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 64+00 TO STA 69+50 – MAPLEWOOD ST

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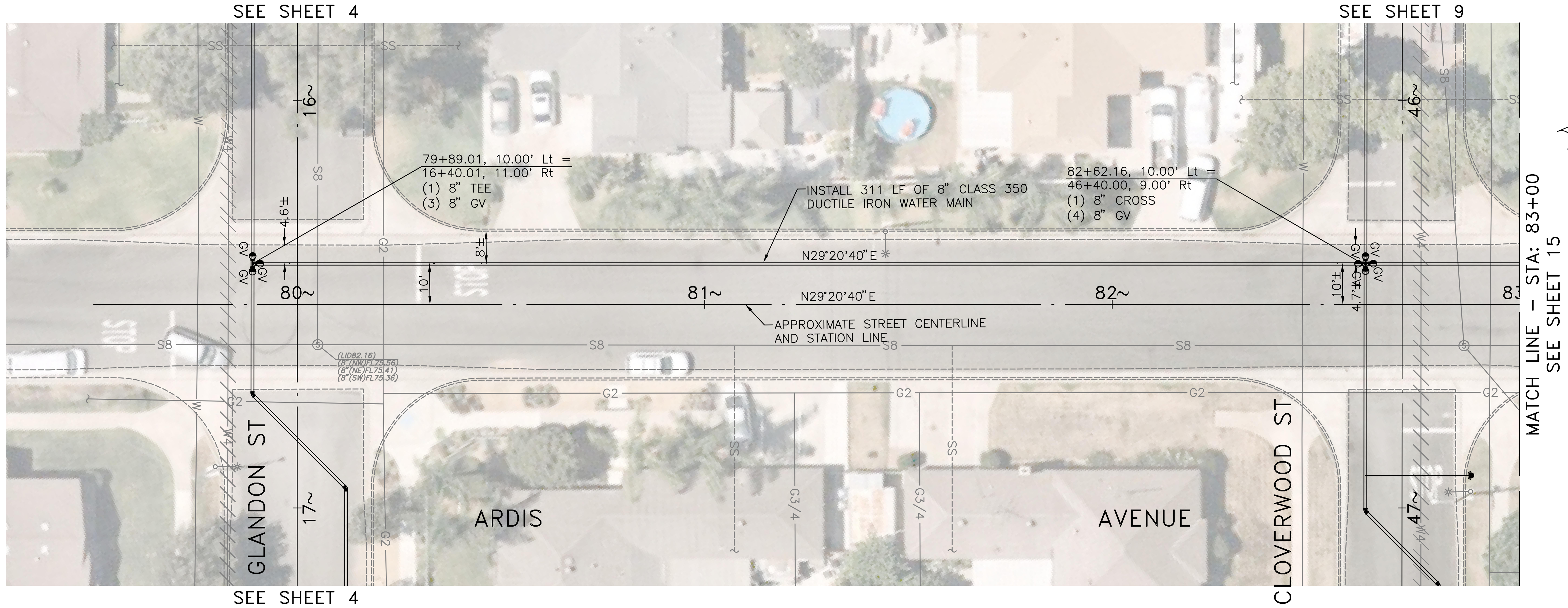

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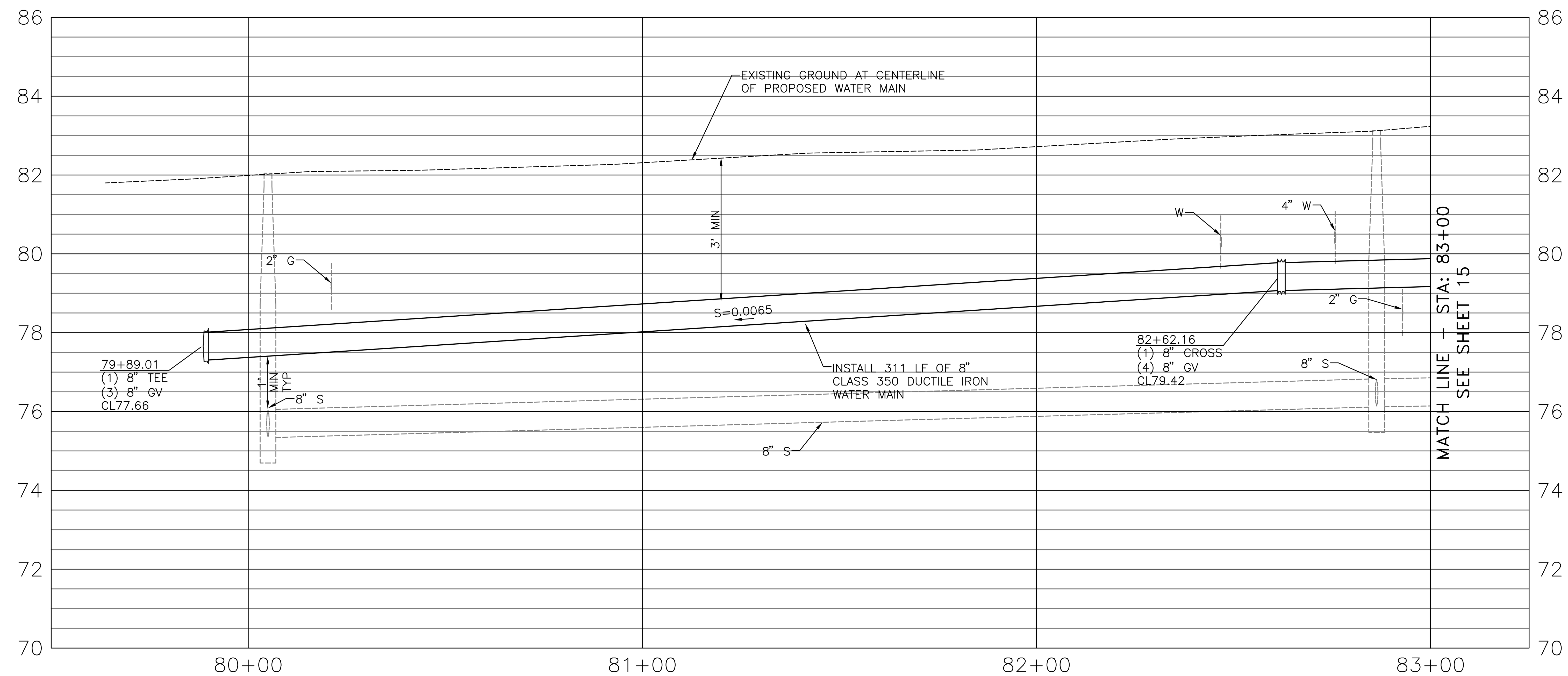

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 79+50 TO STA 83+00 – ARDIS AVE

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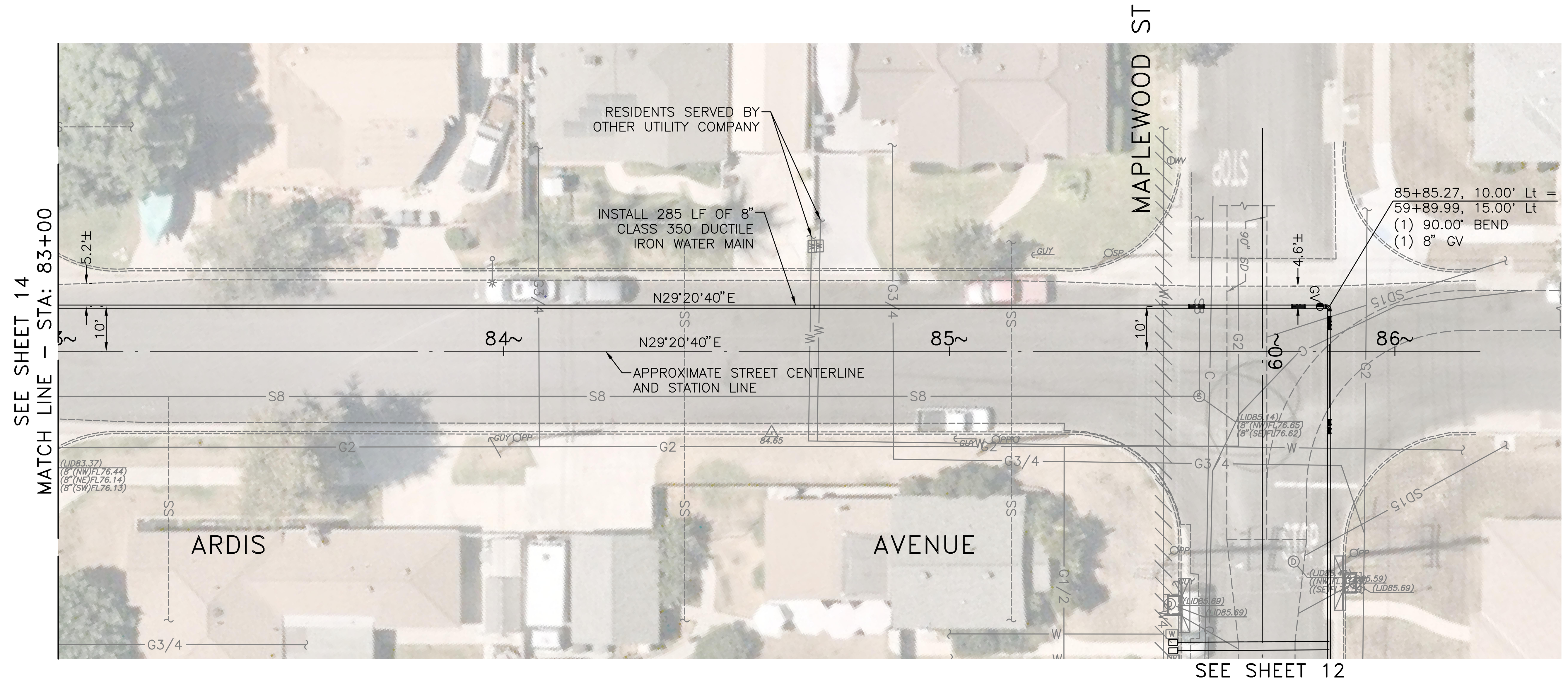

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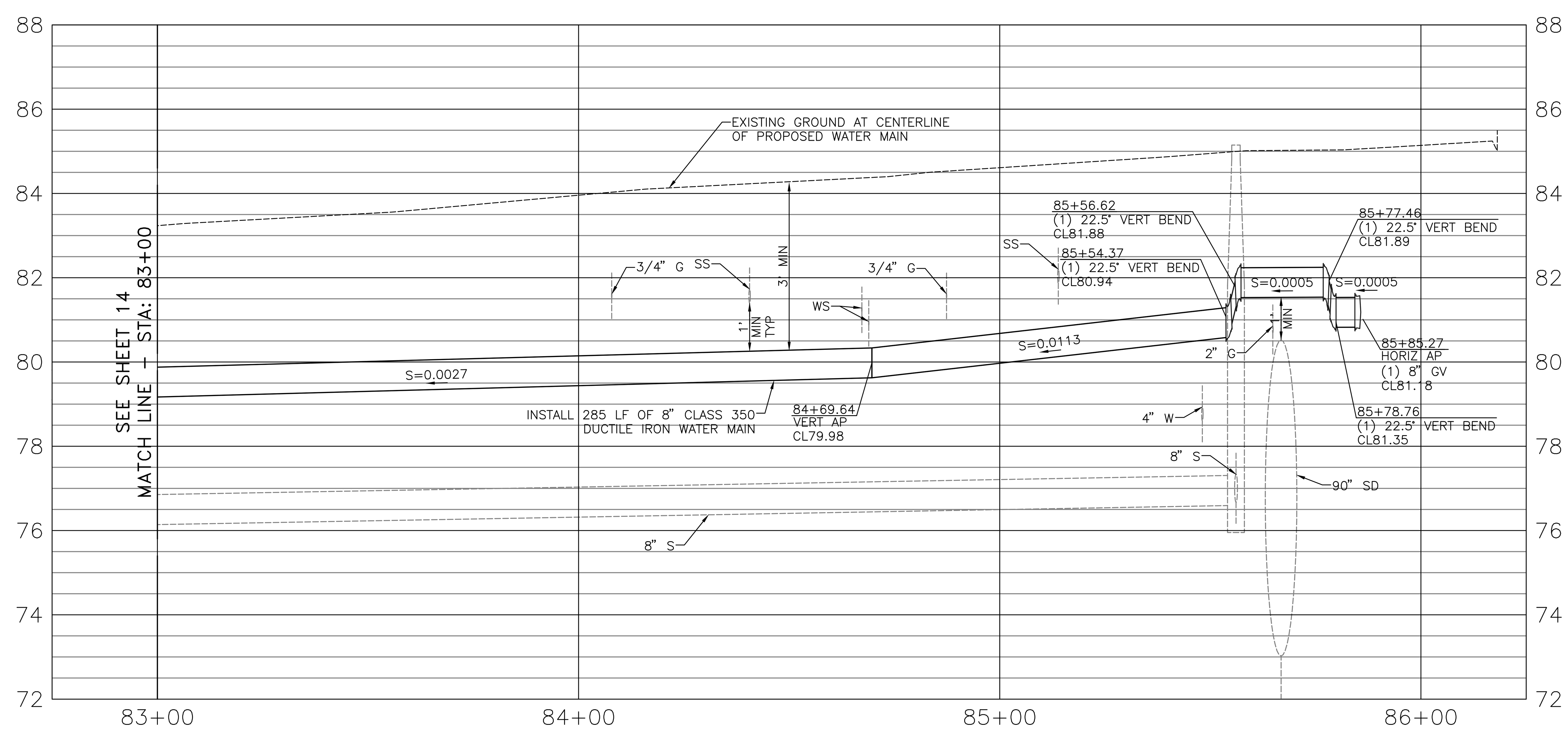

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DATE 2023-6-29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 83+00 TO STA 86+00 – ARDIS AVE

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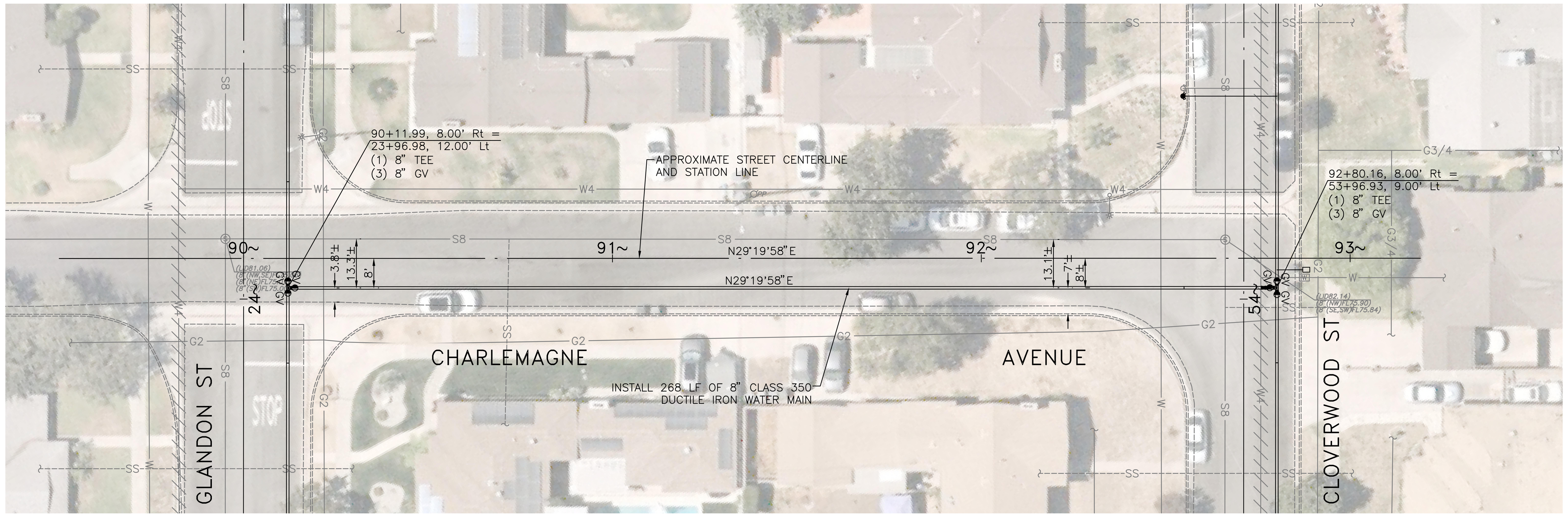
SEE SHEET 6 SEE SHEET 11



SEE SHEET 6 SEE SHEET 11

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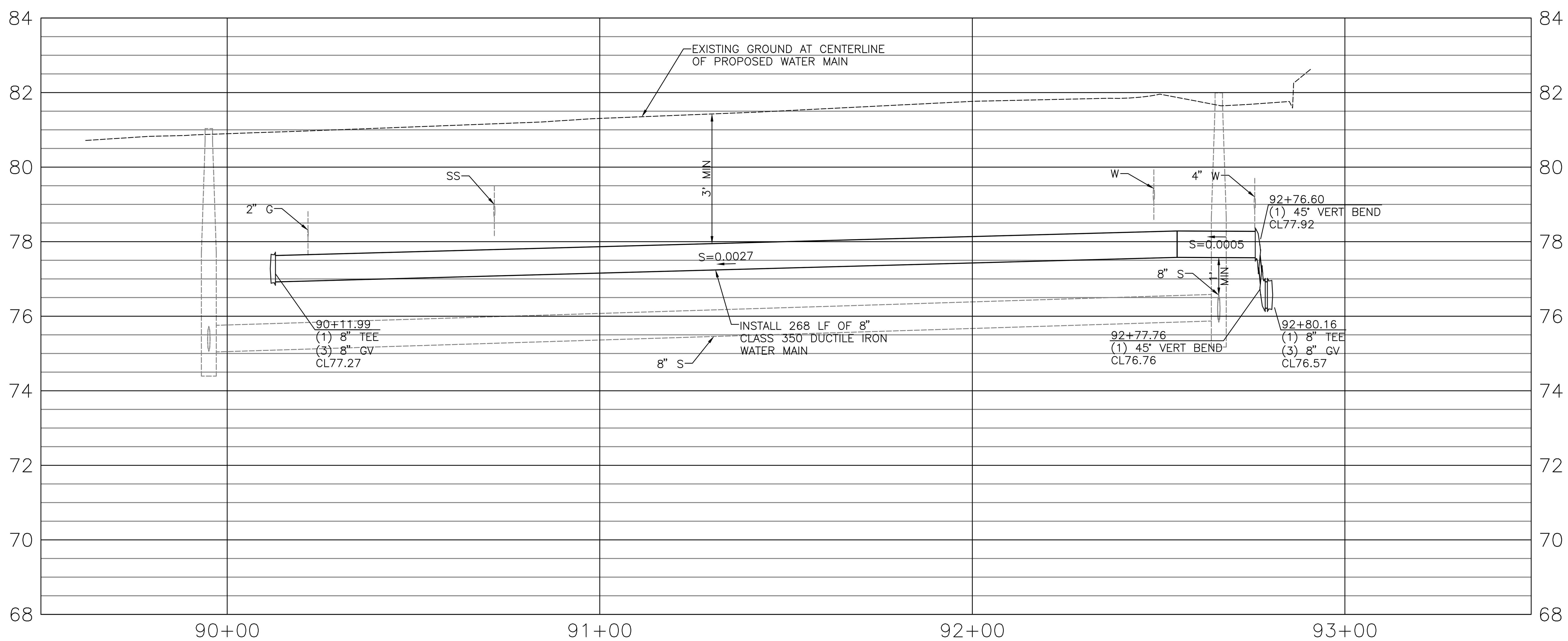

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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 89+50 TO STA 93+50 – CHARLEMAGNE AVE

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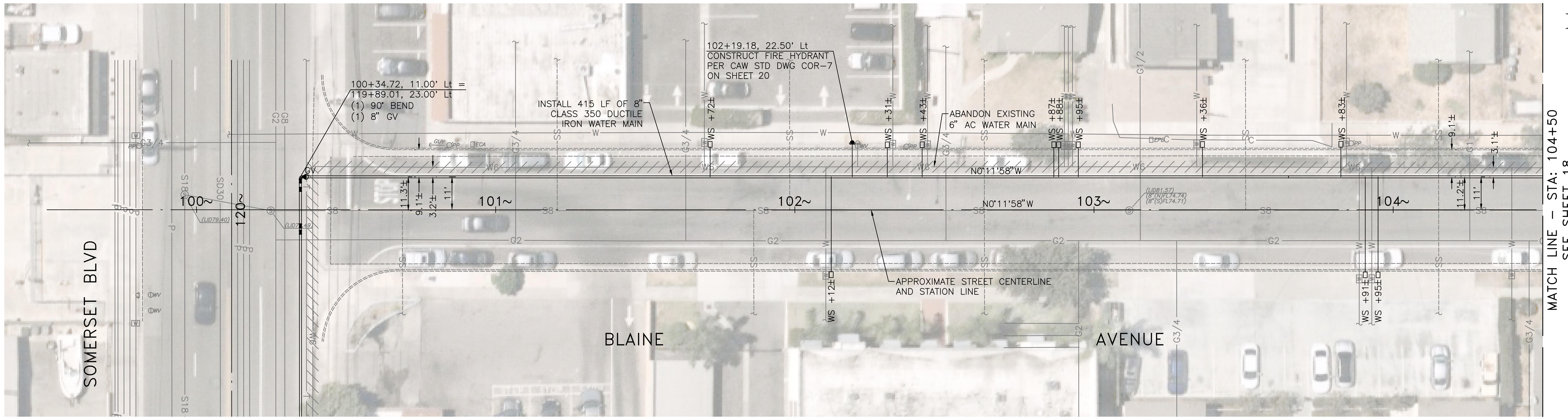

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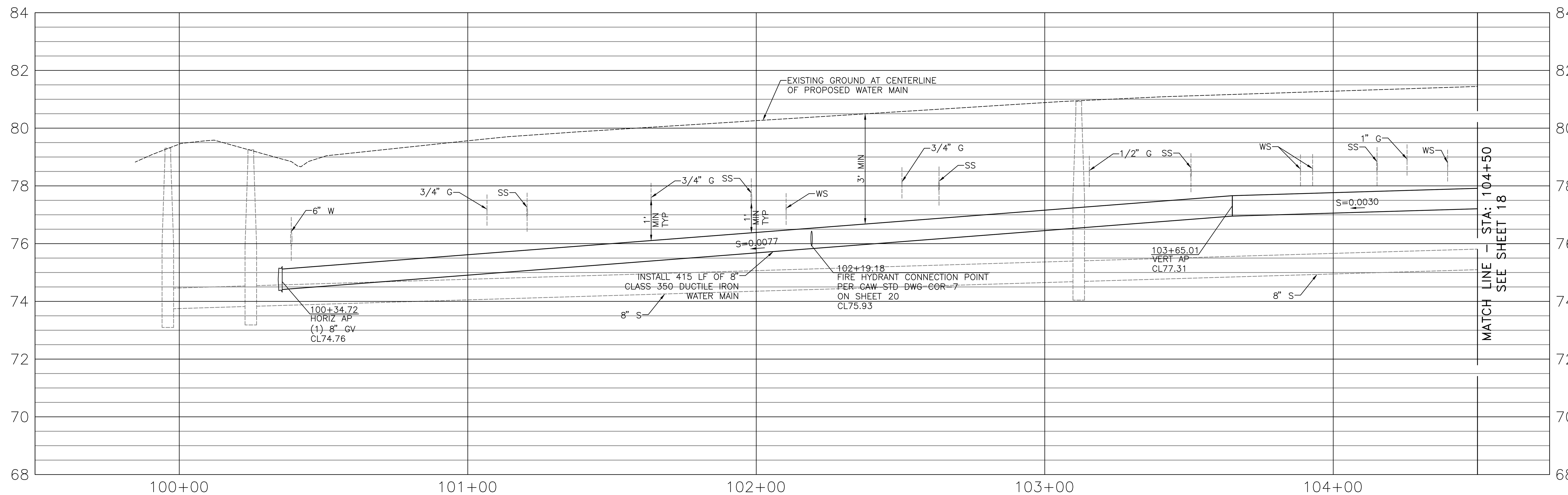

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DATE 2023-6-29
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BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 100+00 TO STA 104+50 - BLAINE AVE

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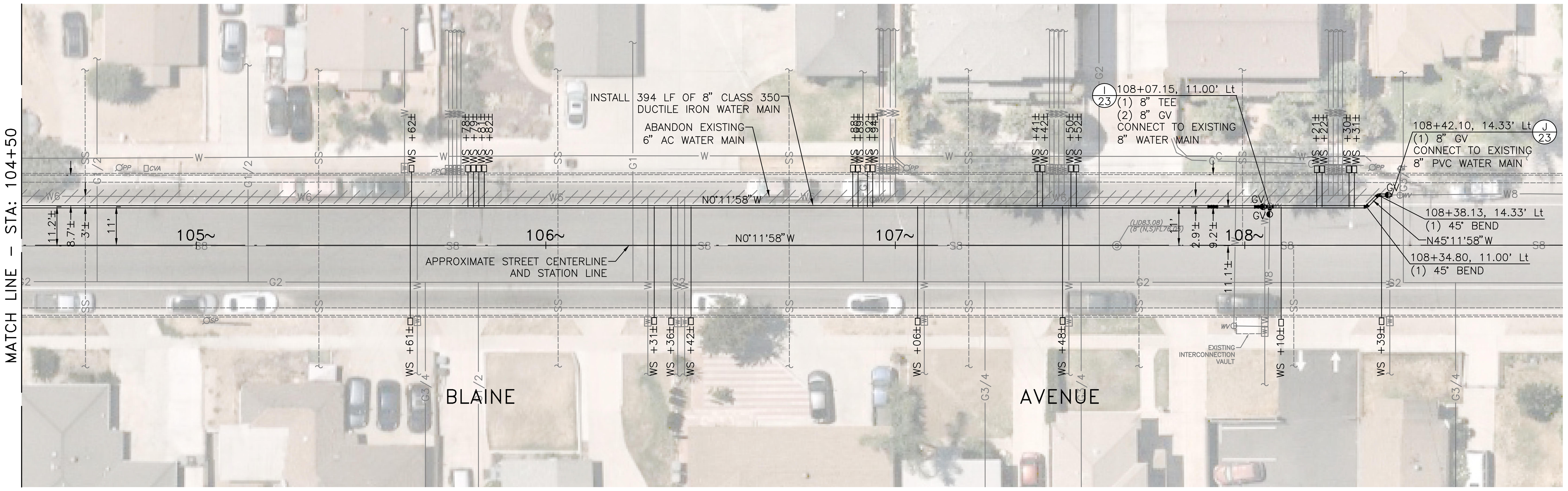
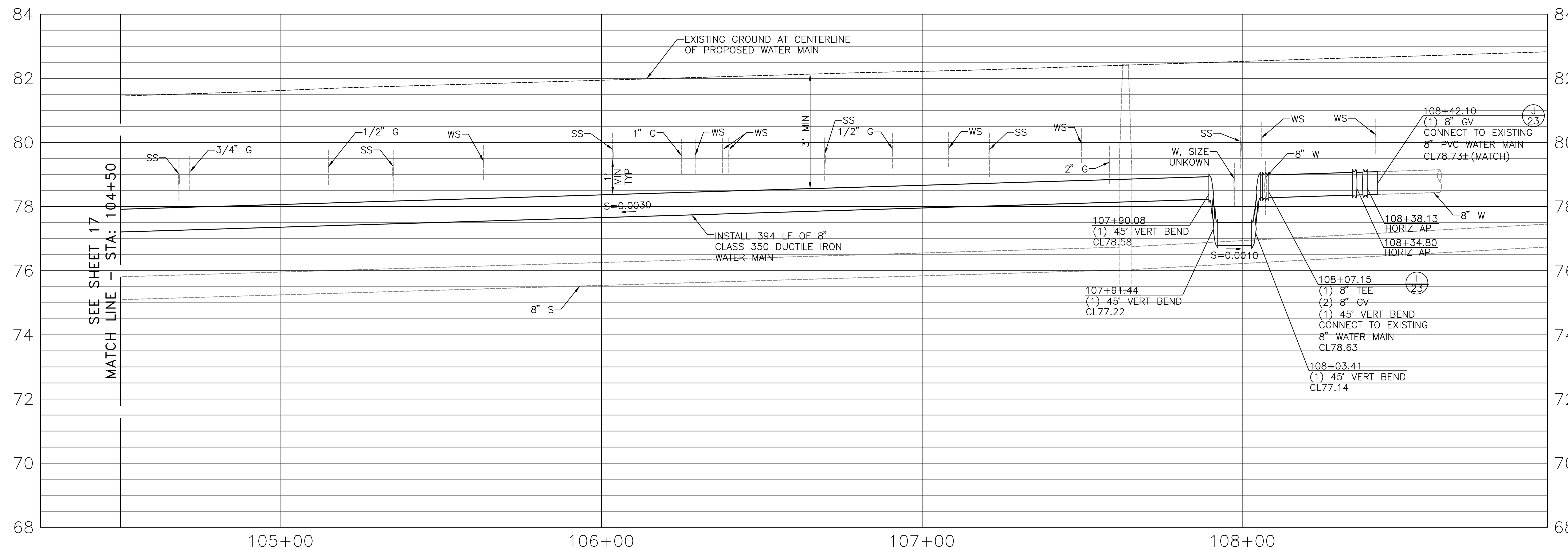
SCALE IN FEET





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DATE 2023-6-29
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BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 104+50 TO STA 108+50 – BLAINE AVE

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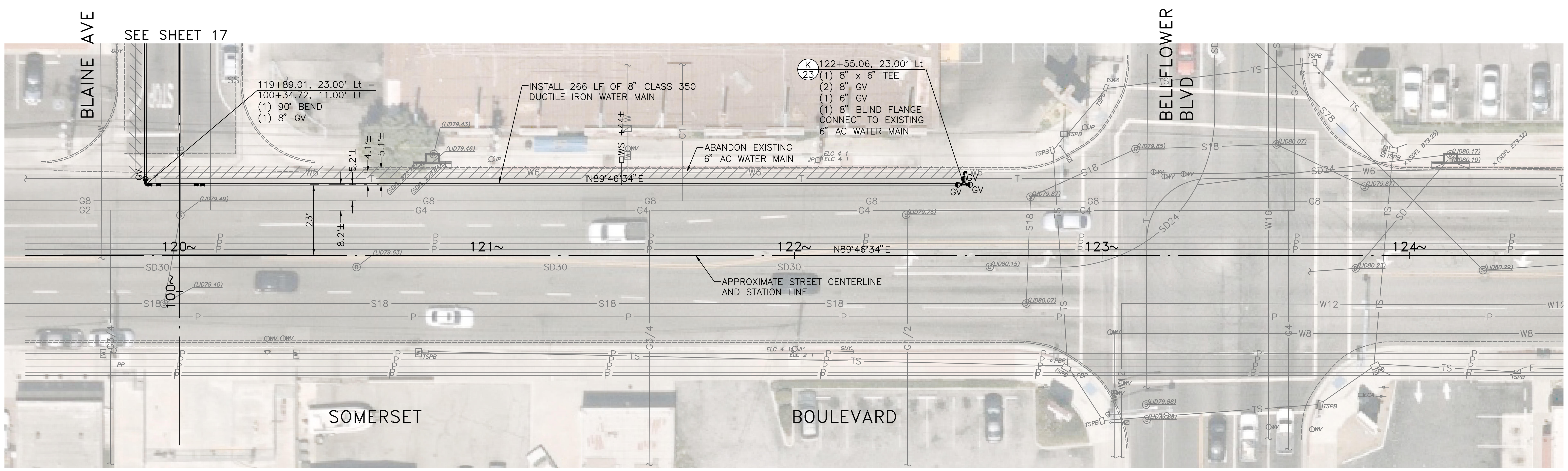
18 / 25



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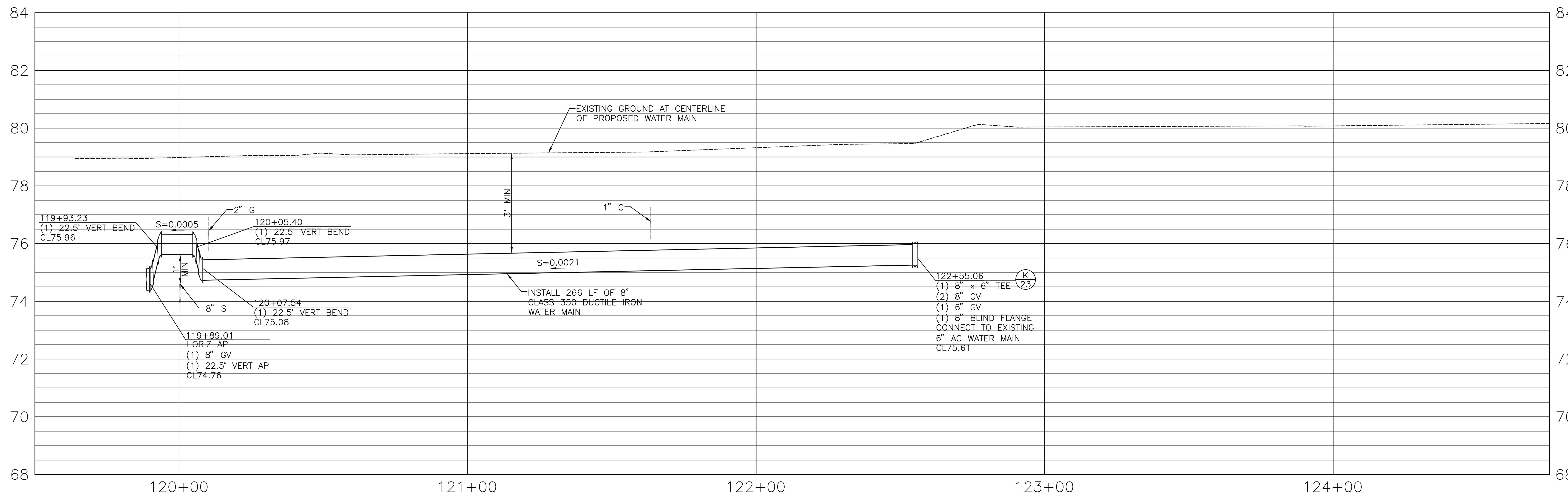

SEE WATER NOTES
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BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 4
CITY OF BELLFLOWER
PLAN AND PROFILE
STA 120+00 TO STA 124+50 - SOMERSET BLVD

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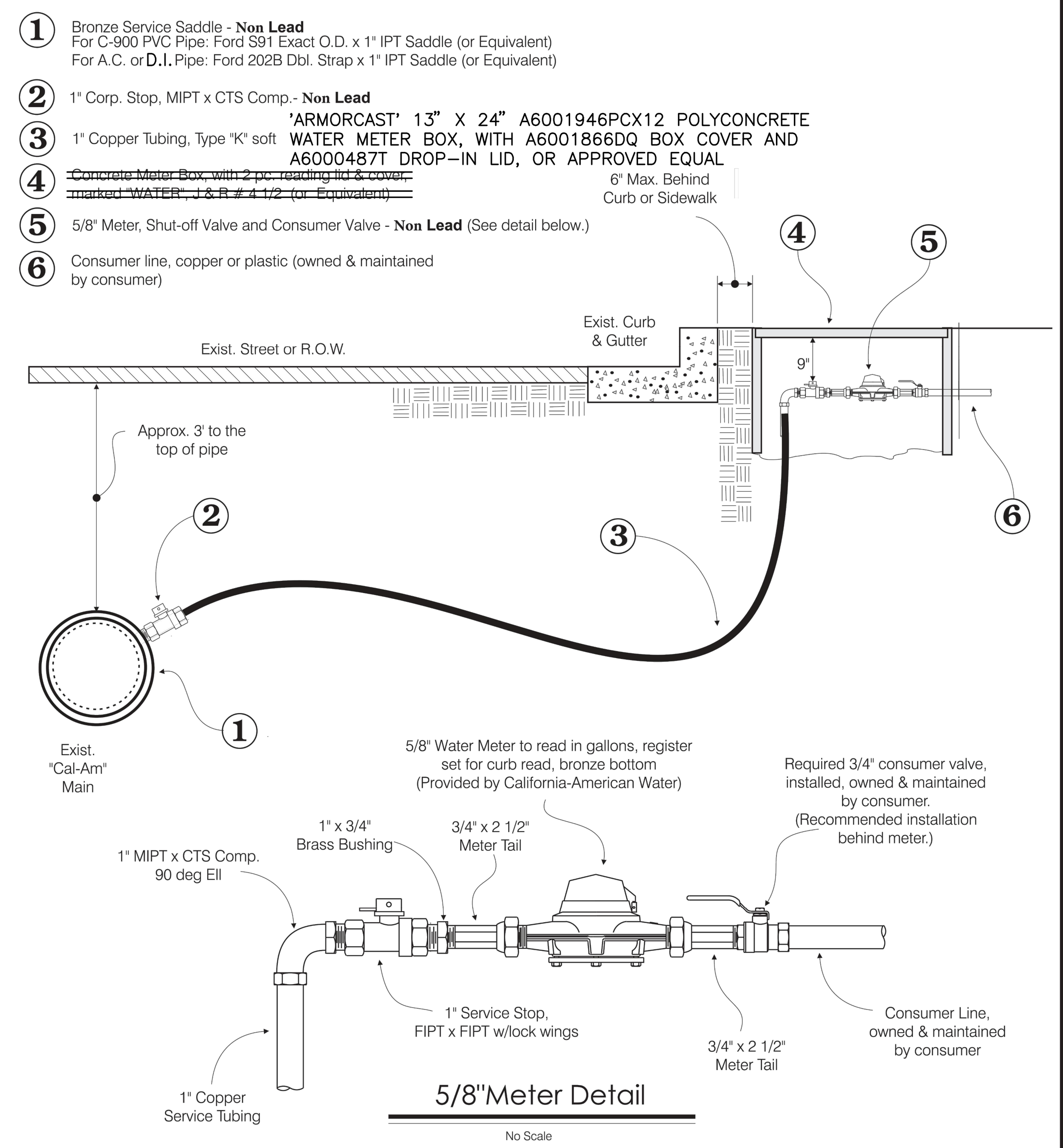
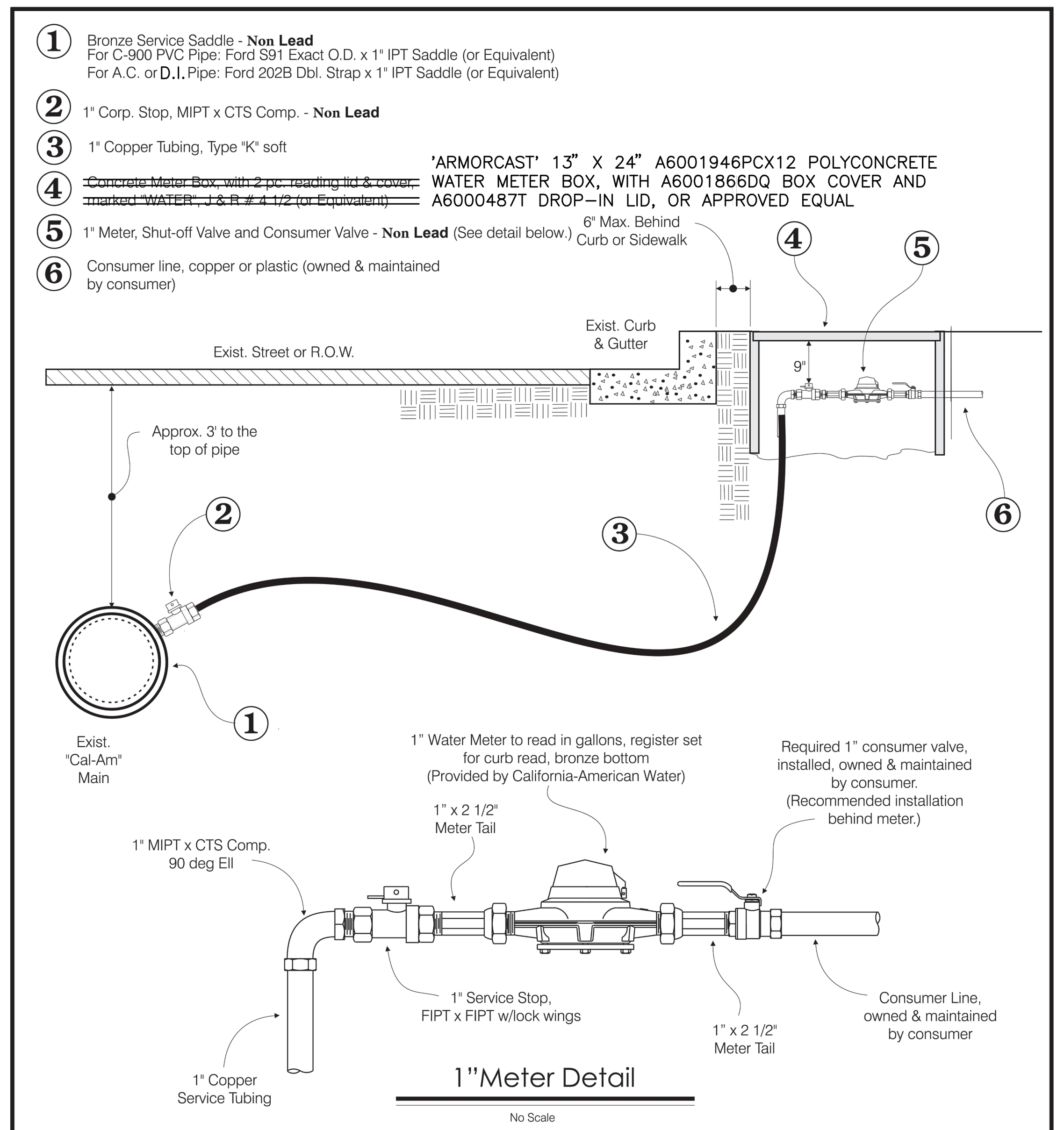
SCALE AS SHOWN



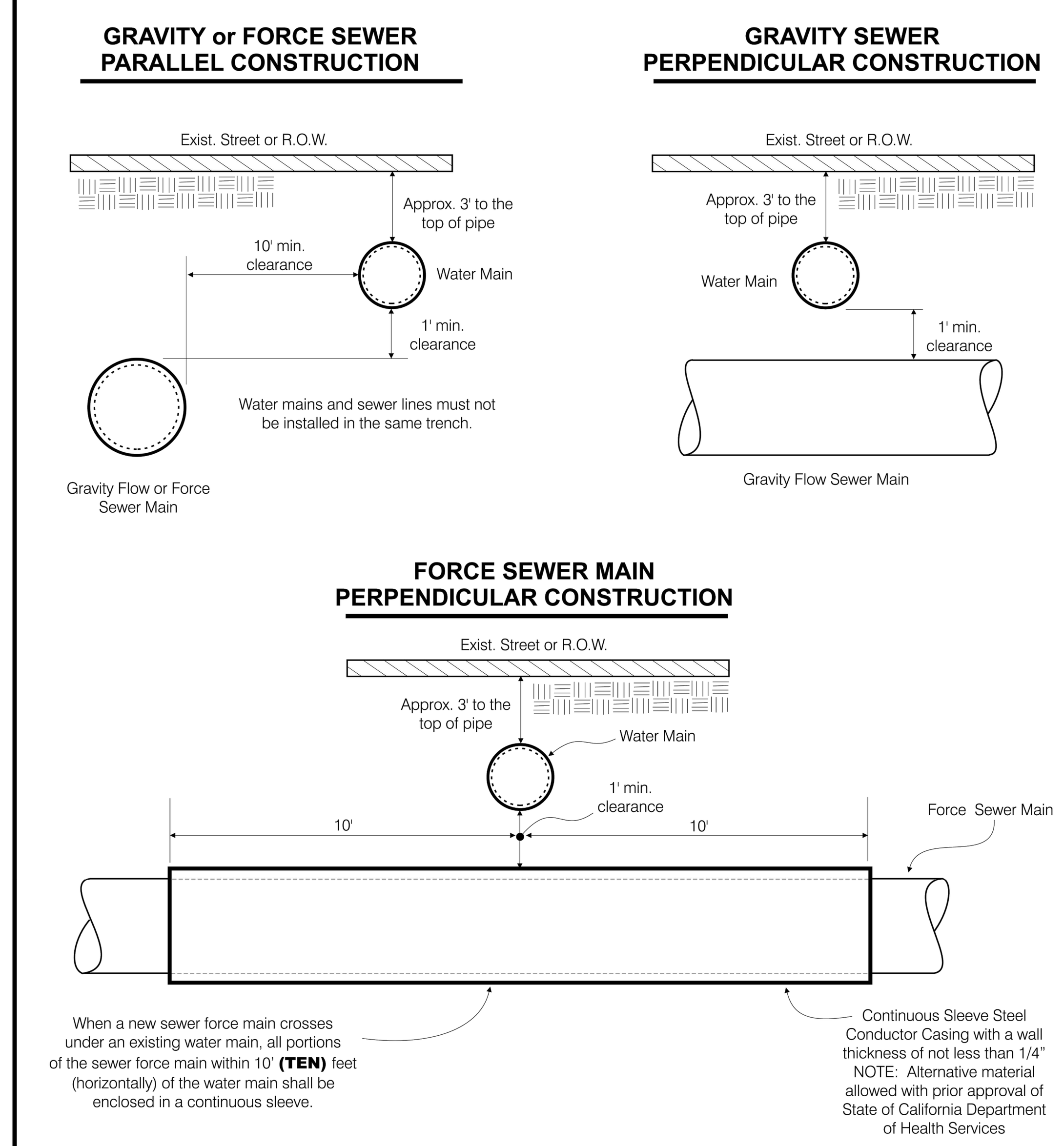
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT, ROSEMEAD OPERATIONS

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.

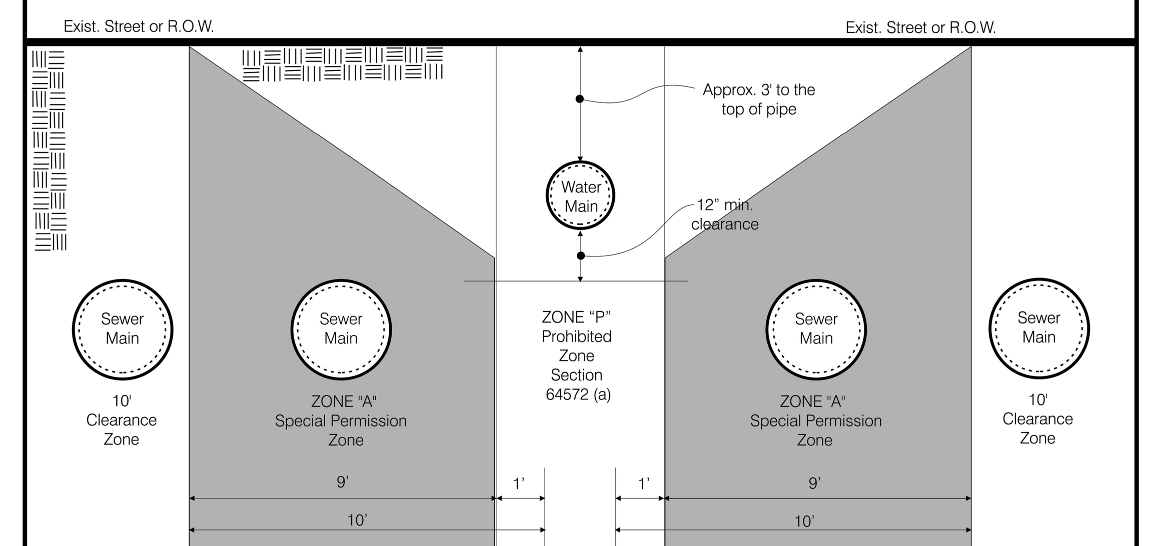
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT, ROSEMEAD OPERATIONS

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

SPECIAL CONSTRUCTION REQUIREMENTS

WHERE REQUIRED WATER MAIN SEPARATION FROM SANITARY GRAVITY SEWER CANNOT BE MAINTAINED
(Sewer force mains shall not be installed within 10' (horizontally) of the water main.)

PARALLEL CONSTRUCTION



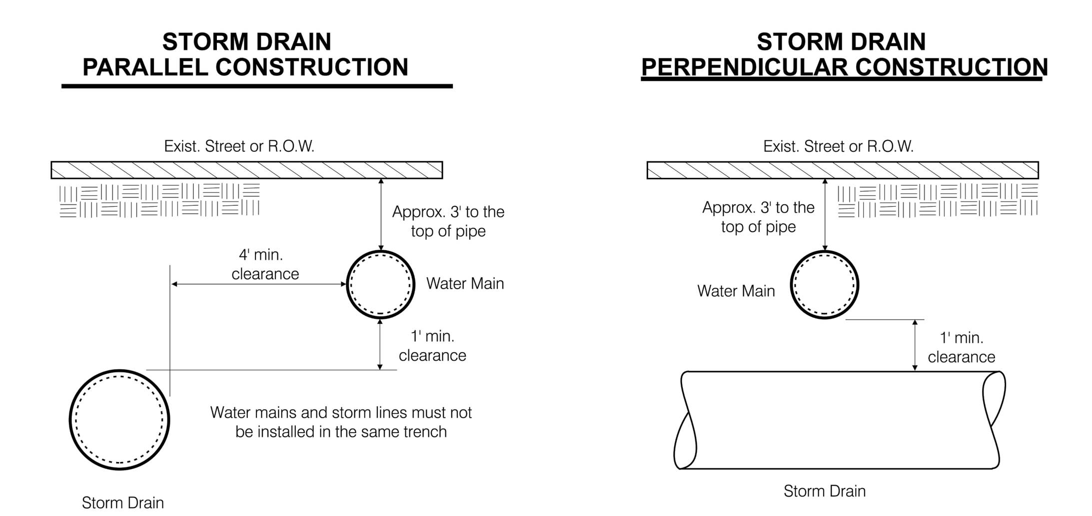
ZONE "A" Special Permission Zone — Special Construction Required for Gravity Sewer
Gravity sewer lines parallel to water mains shall not be permitted in this zone without approval from the responsible health agency and water supplier.
A gravity sewer line placed parallel to a water line shall be constructed of:
1. Extra strength vitrified clay pipe with compression joints.
2. Plastic sewer pipe with rubber ring joints (per ASTM D3034) or equivalent.
3. Ductile iron pipe with Field Lok joints.
4. Reinforced concrete pressure pipe with compression joints (per AWWA C302-87)

ZONE "P" Prohibited Zone — Prohibited Zone, per California Code of Regulations (CCR), Title 22, Division 4, Chapter 16, Section 64572 (a)

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

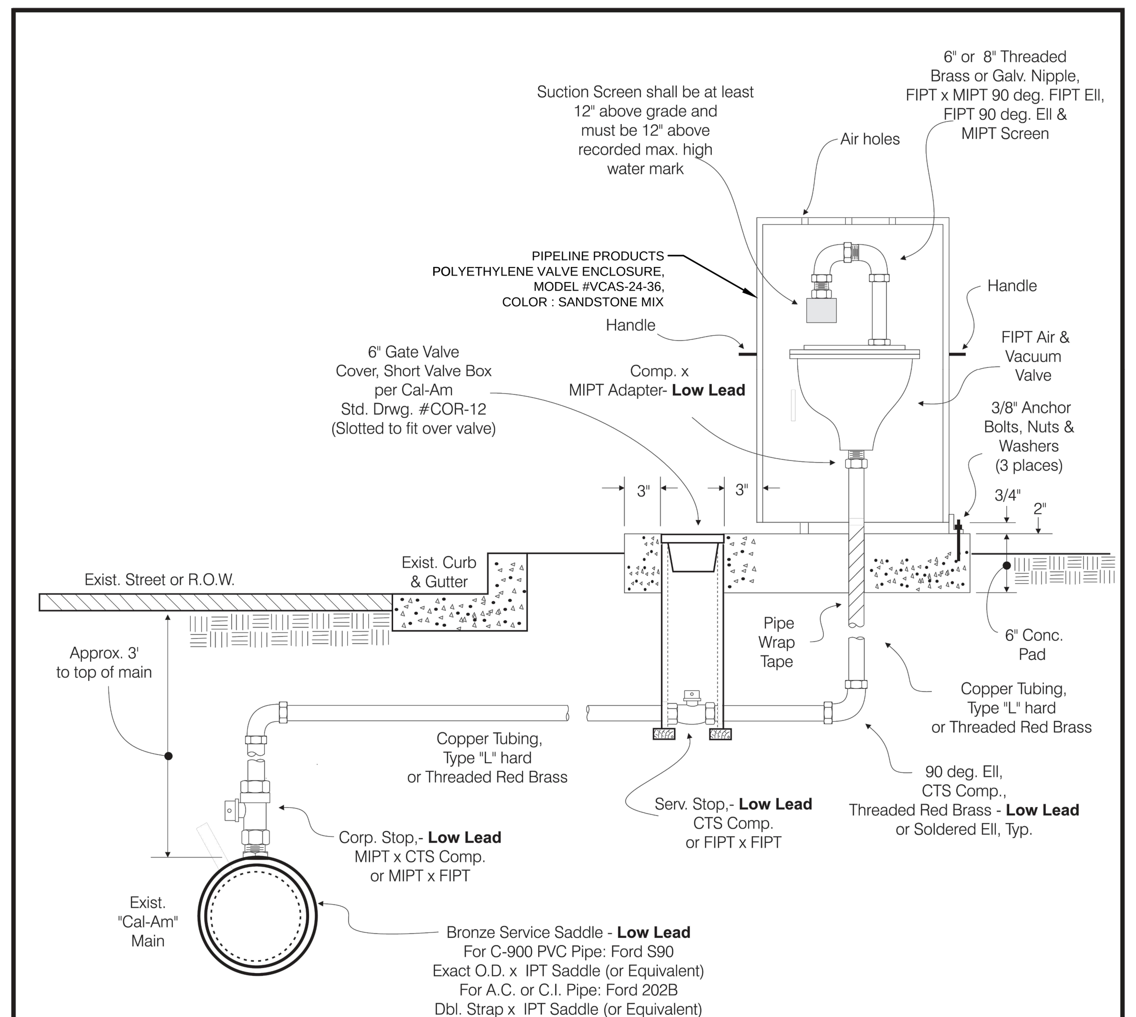
Approved By:	Scale: No Scale	Date: 7/18/97
	Drawn By: Jacob Quick	Revised: 4/12/19
Special Requirements For Separation Between A Water Main & A Sanitary Sewer Main		Drwg. No. COR-4B



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.

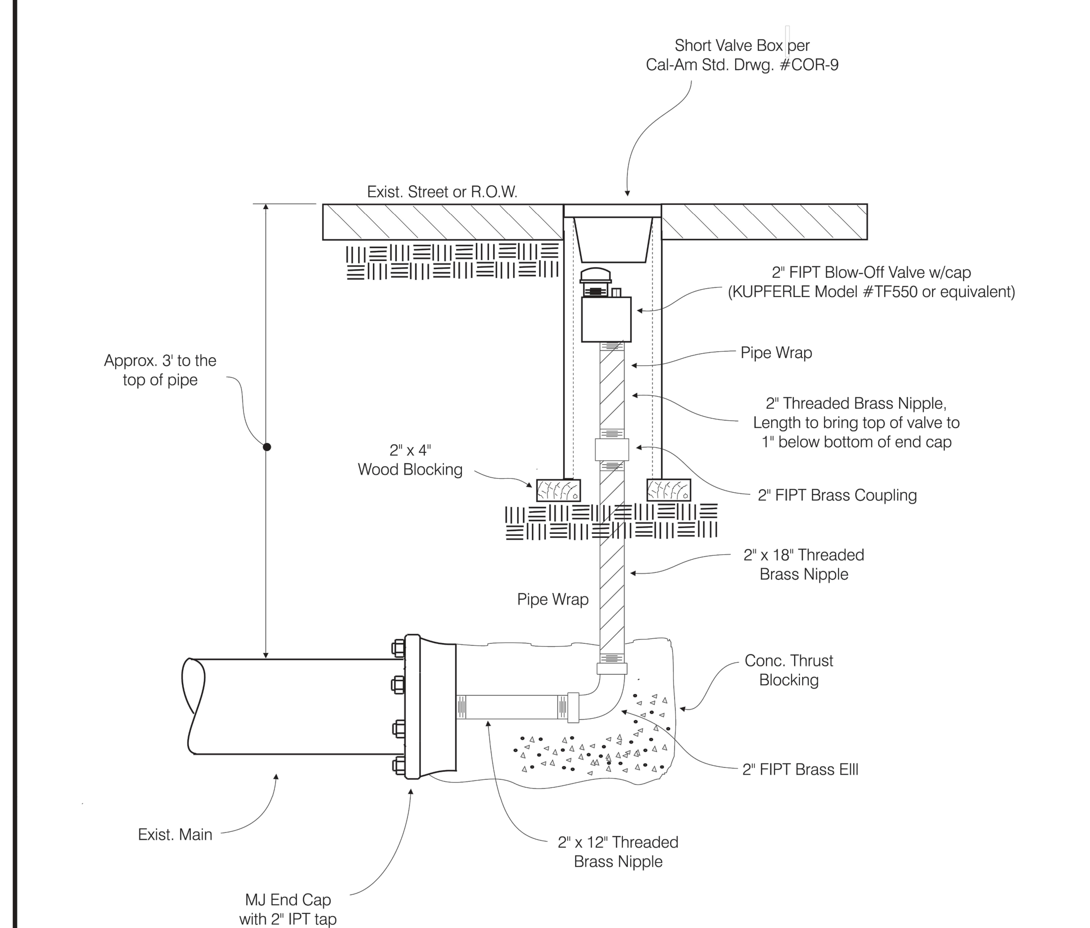
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT, ROSEMEAD OPERATIONS

Approved By:	Scale: No Scale	Date: 7/18/97
	Drawn By: Jacob Quick	Revised: 6/13/19
Required Separation Between A Water Main & A Storm Drain		Drwg. No. COR-4C



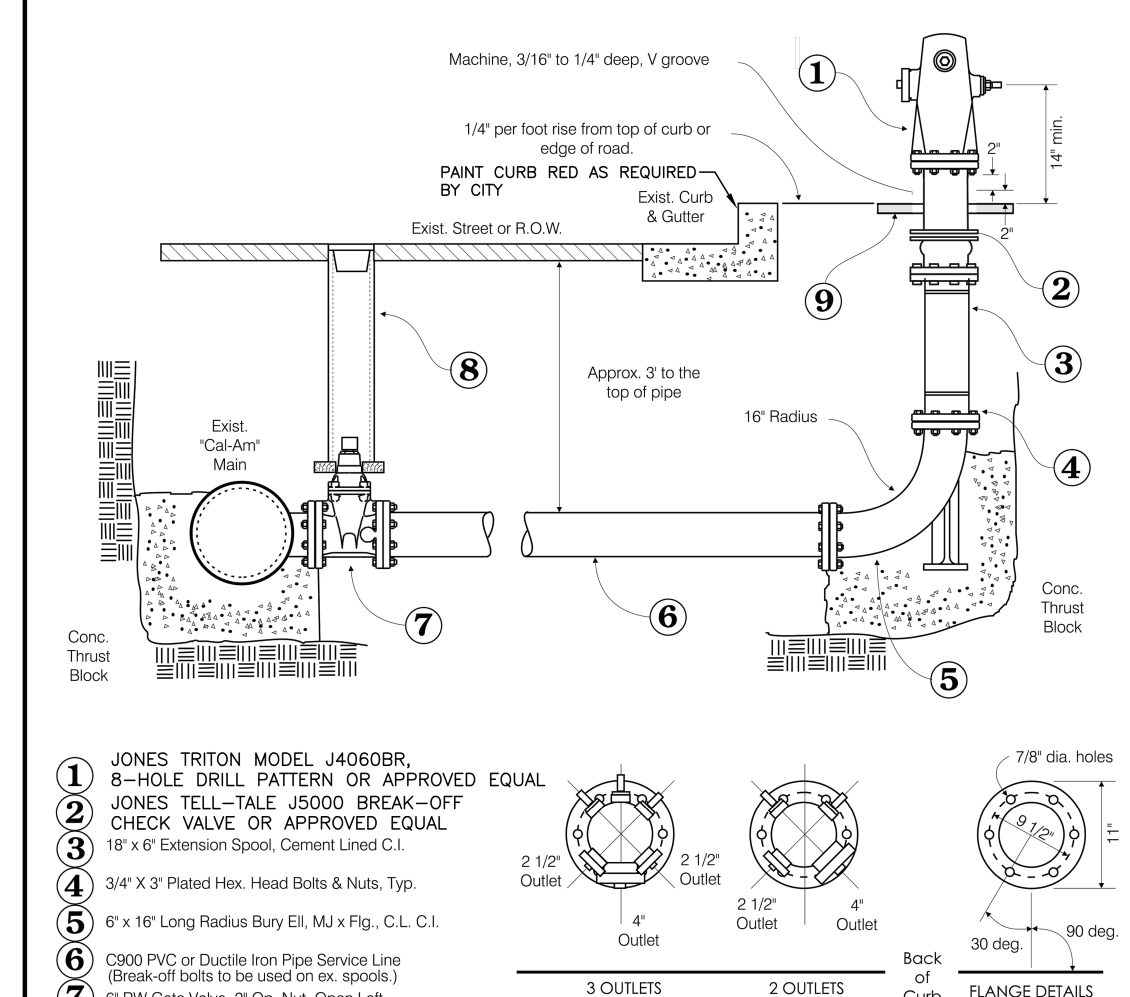
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT, ROSEMEAD OPERATIONS

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



1. JONES TRITON MODEL J4060BR, 8-HOLE DRILL PATTERN OR APPROVED EQUAL
2. JONES TELL-TALE J5000 BREAK-OFF CHECK VALVE OR APPROVED EQUAL
3. 18" x 6" Extension Spool, Cement Lined C.I.
4. 3/4" X 3" Plated Hex. Head Bolts & Nuts, Typ.
5. 6" x 16" Long Radius Bury Ell, MJ x Flg., C.L. C.I.
6. C900 PVC or Ductile Iron Pipe Service Line (Break-off bolts to be used on ex. spools.)
7. 6" RW Gate Valve, 2" Op. Nut, Open Left
8. Valve Box (See Std. Drwg. COR-12)
9. Conc. Apron (See Std. Drwg. COR-11 for fire hydrant locations)

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

CALIFORNIA AMERICAN WATER

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

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

DRAWN BY JCA
PROJECT ENG'R JLS

DATE 2023-06-29

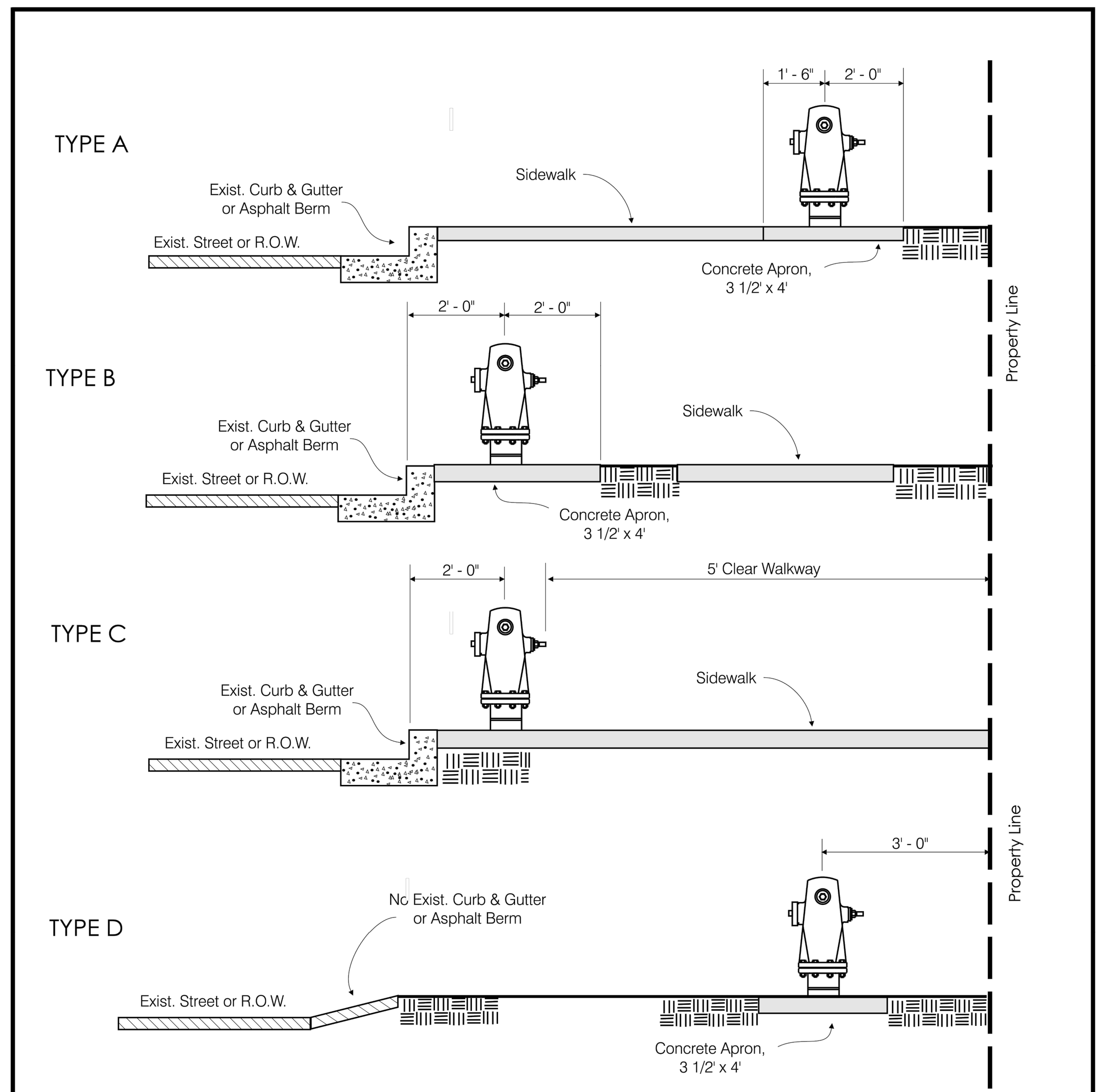
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER

DETAILS

---- | ---- | USE DIMENSIONS ONLY, SCALE AS SHOWN

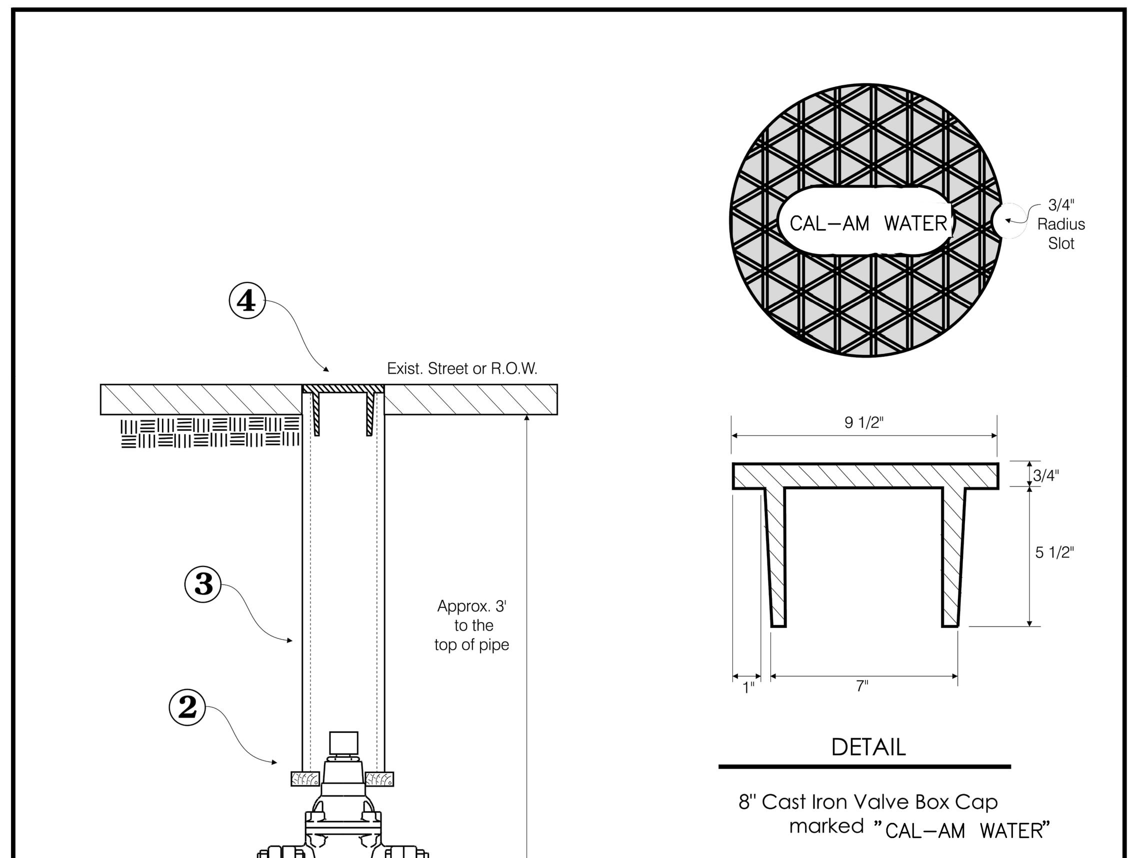
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 20 / 25



NOTES:

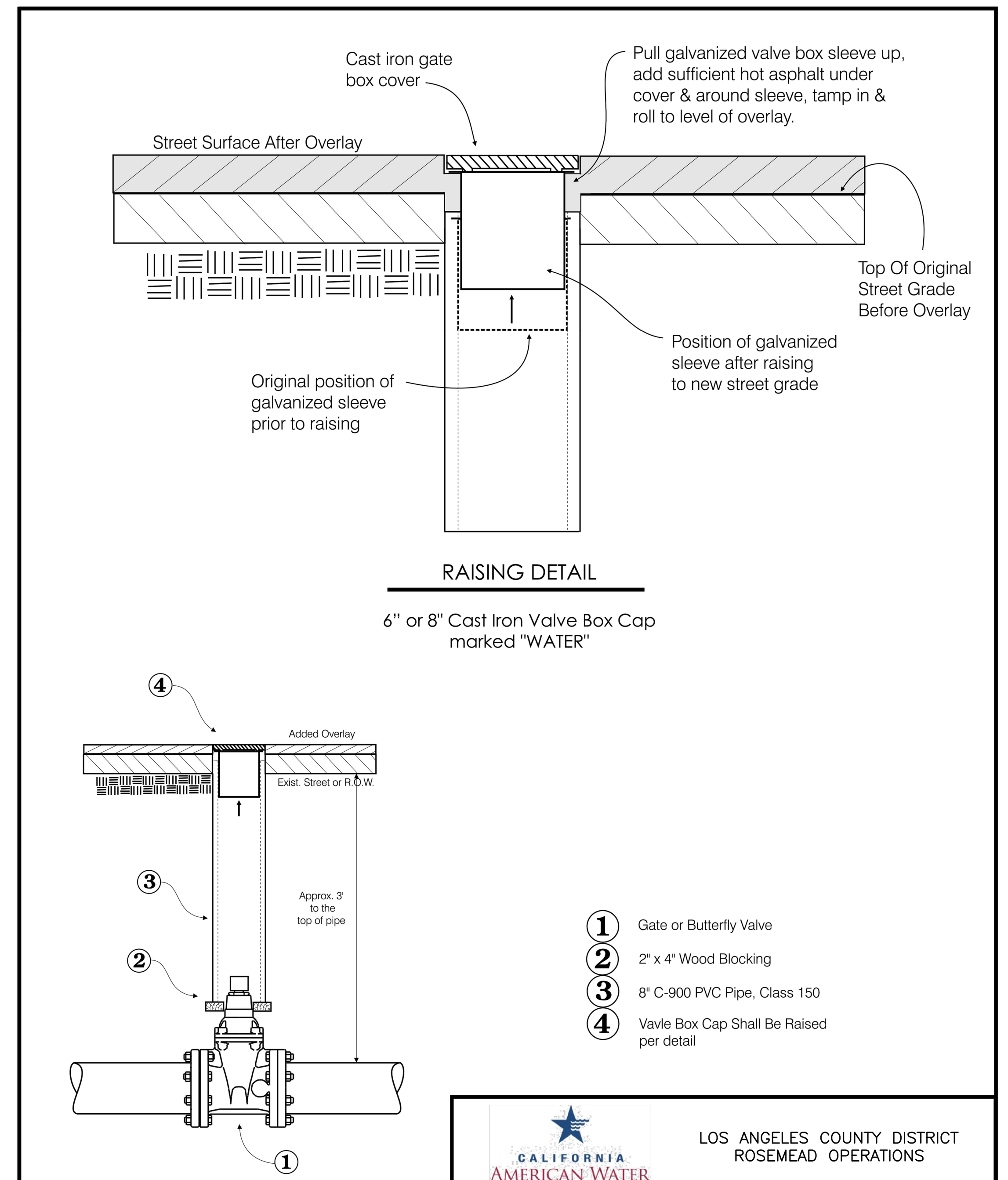
1. Apron shall be 4" thick (520-C-2500) concrete.
2. When distance from hydrant to the top or toe of the slope is less that 2' - 0", a special hydrant installation will be required by Cal-Am.
3. Where hydrant is not protected by a vertical face of curb protective posts are required. (See San Diego Reg. 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
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



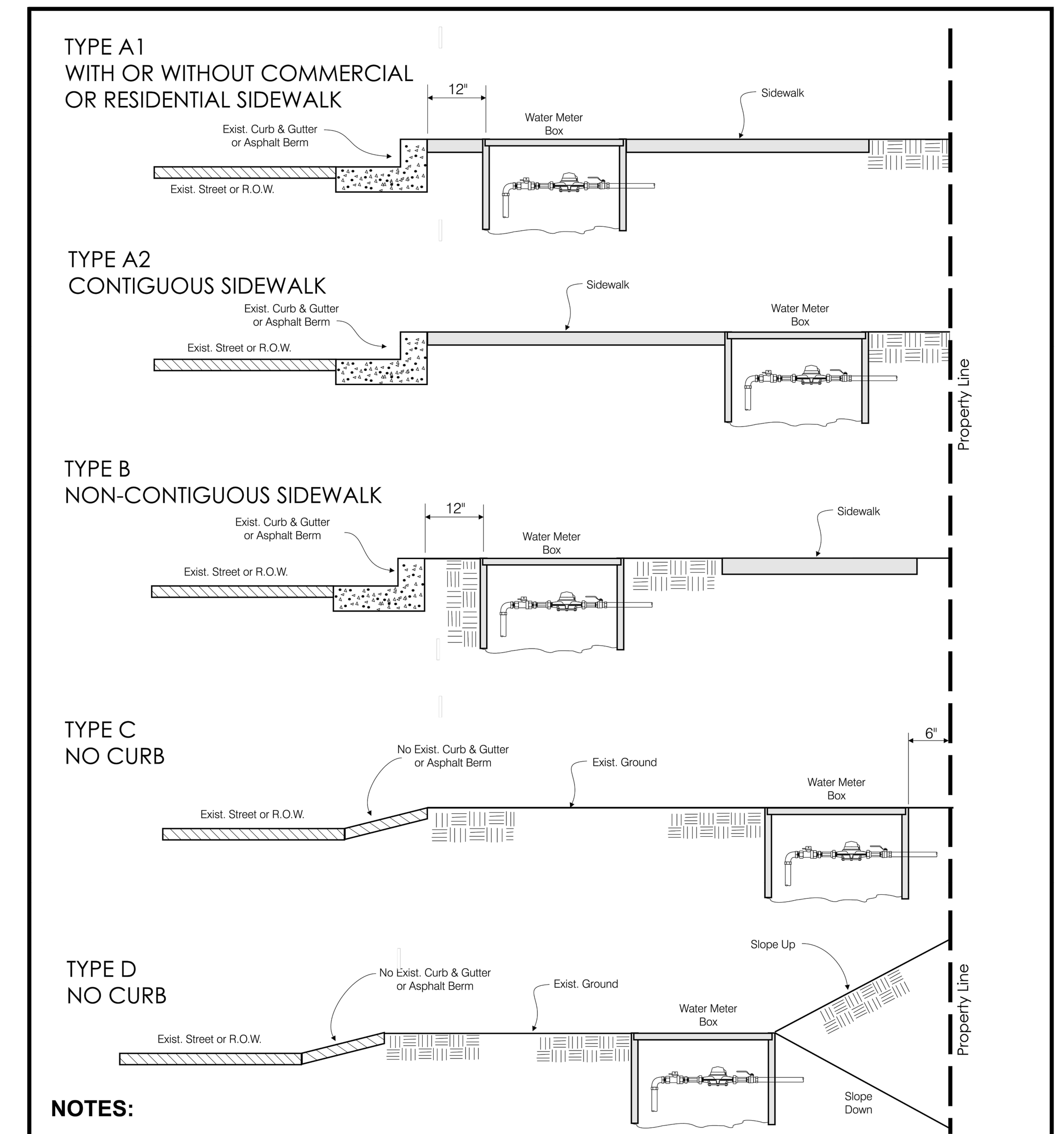
1. Gate or Butterfly Valve
2. 2" x 4" Wood Blocking
3. 8" C-900 PVC Pipe, Class 150
4. Valve Box Cap per detail

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: 4/19/06
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

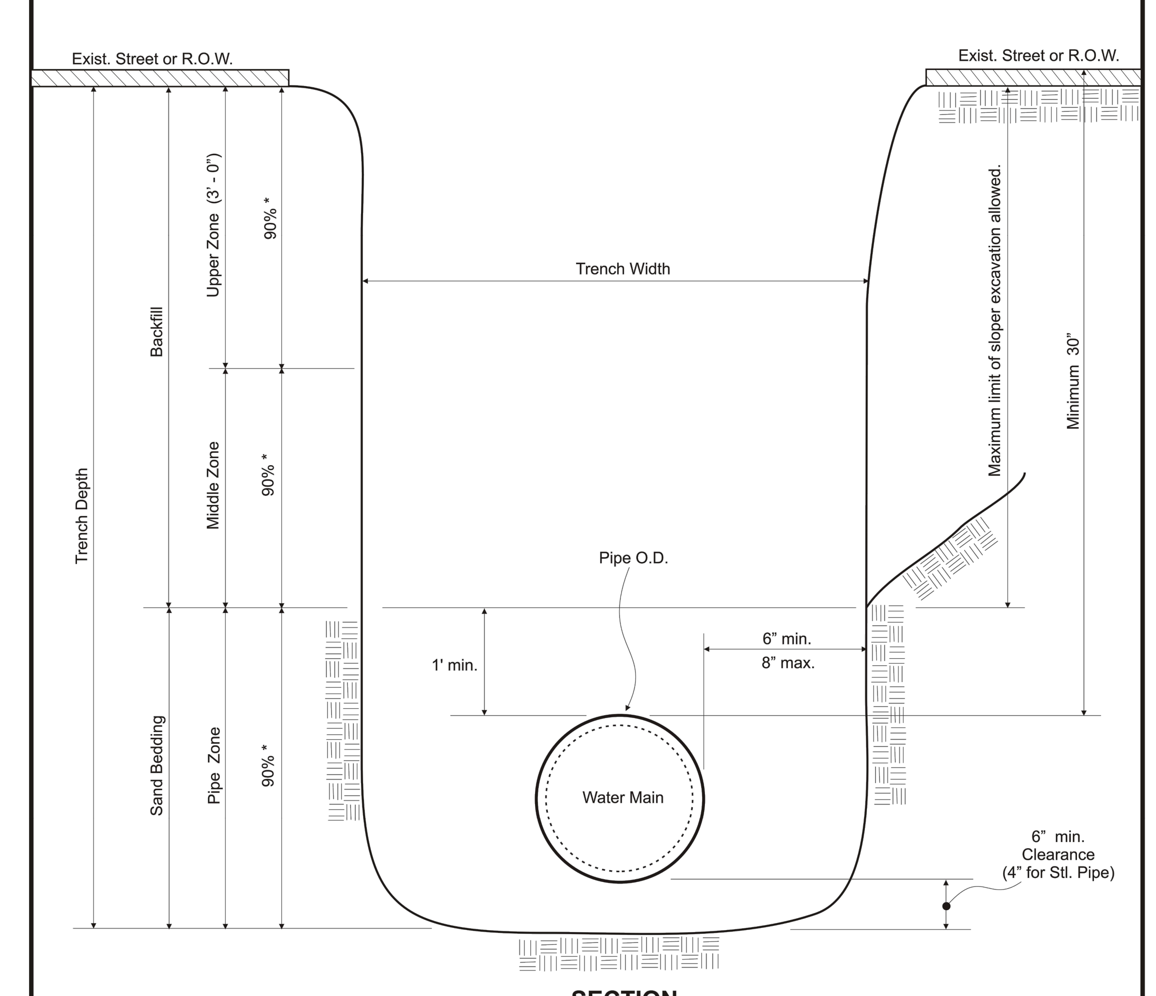
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS
Approved By: Operations Superintendent | Scale: No Scale | Date: 6/17/05 | Drawn By: Doug Krupinski | Revised: 4/26/06
STANDARD DRAWING VALVE BOX DETAIL, RAISING STD. — Drwg. No. COR-9B



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.

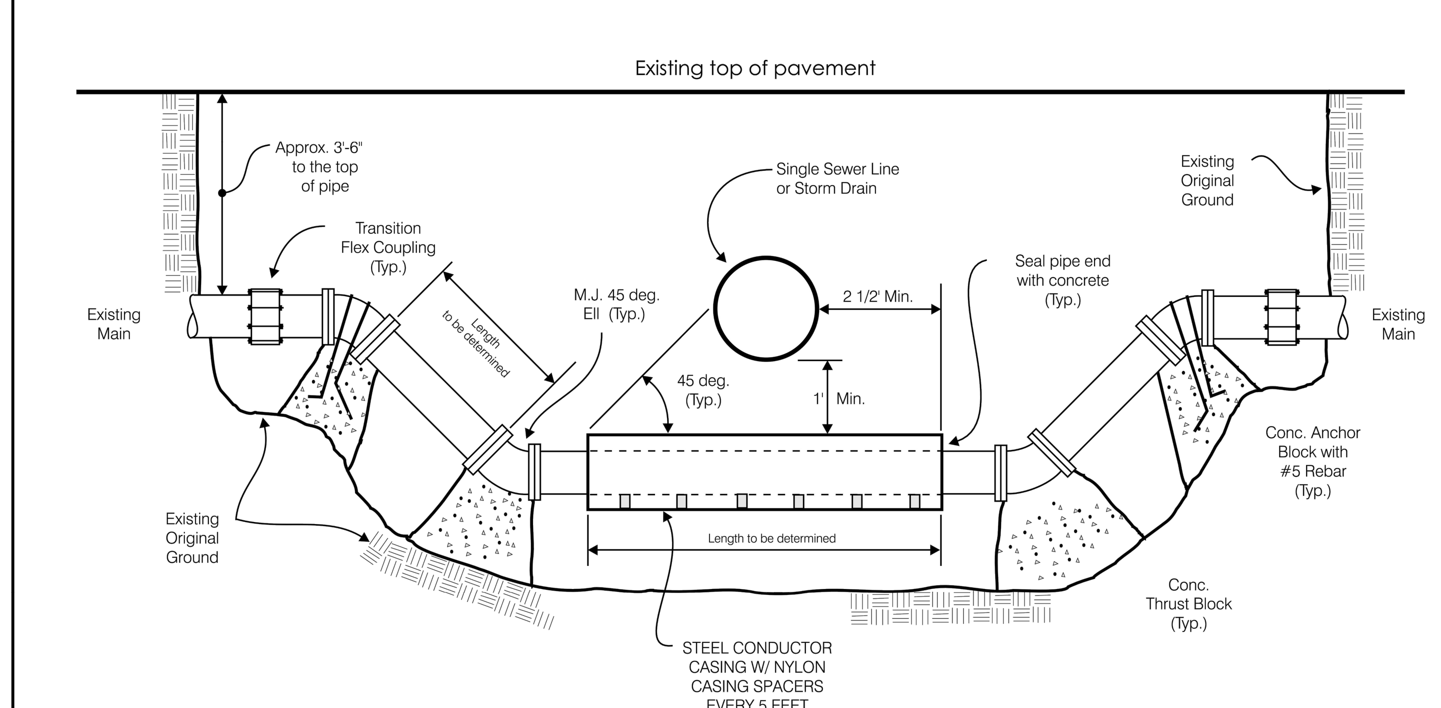
CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT ROSEMEAD OPERATIONS
Approved By: Operations Superintendent | Scale: No Scale | Date: 10/2/97 | Drawn By: Doug Krupinski | Revised: 4/24/06
STANDARD DRAWING WATER METER LOCATIONS — Drwg. No. COR-18



NOTE:

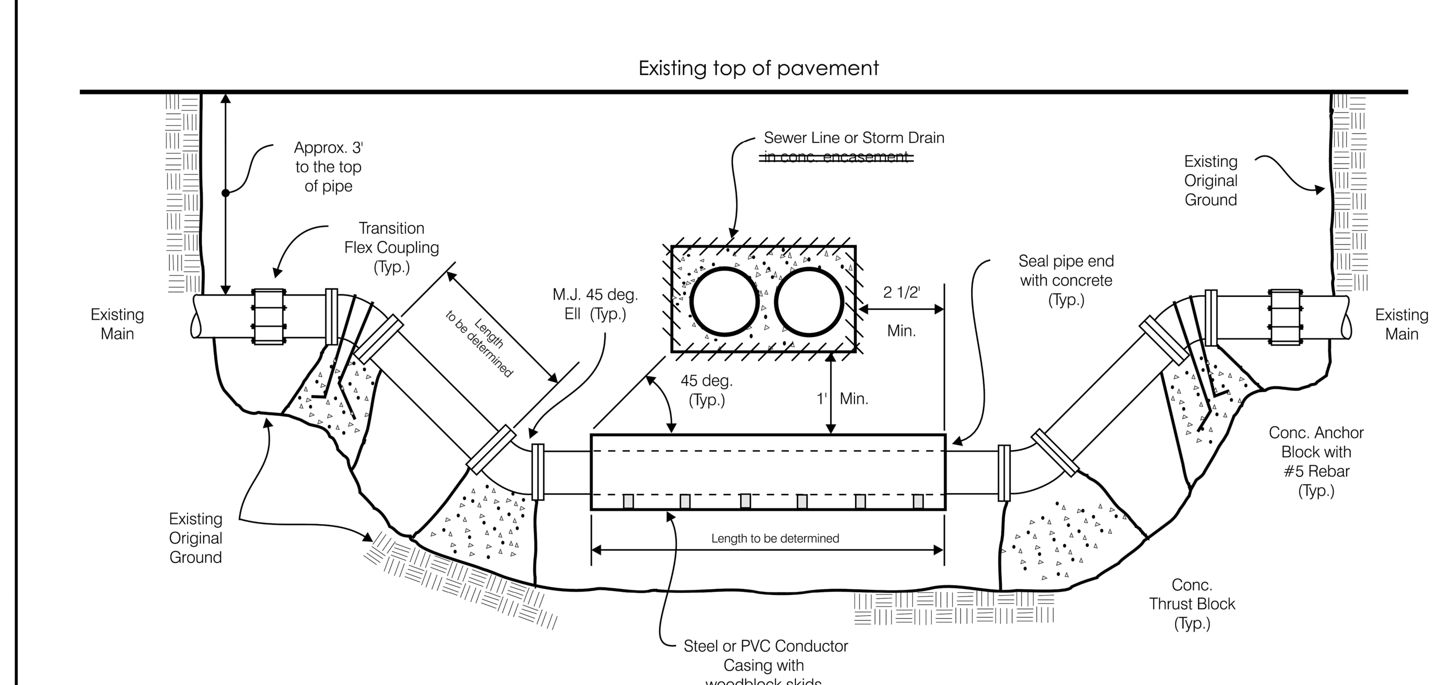
1. (*) indicates minimum relative compaction.
2. Bedding material shall be screened sand having a sand equivalent (SE) of not less than (50) and an expansion coefficient, when saturated with water, of not more than 0.5 of one percent (0.5%).
3. Water mains of nominal size 4" - 12" shall be of PVC C-900.
4. Water mains greater than 12" nominal size shall be of ductile iron.

CALIFORNIA AMERICAN WATER — LOS ANGELES COUNTY DISTRICT
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



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
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
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

CALIFORNIA AMERICAN WATER

REVISIONS		REVISIONS	
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△	2023–6–29	△	2023–6–29
△	2023–6–29	△	2023–6–29
△	2023–6–29	△	2023–6–29
△	2023–6–29	△	2023–6–29

Blair, Church & Flynn
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REGISTERED PROFESSIONAL ENGINEER — JACOB L. SEMPA — No. 93,768 — STATE OF CALIFORNIA

AMERICAN WATER COMPANY
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MT. LAUREL, NJ 08054

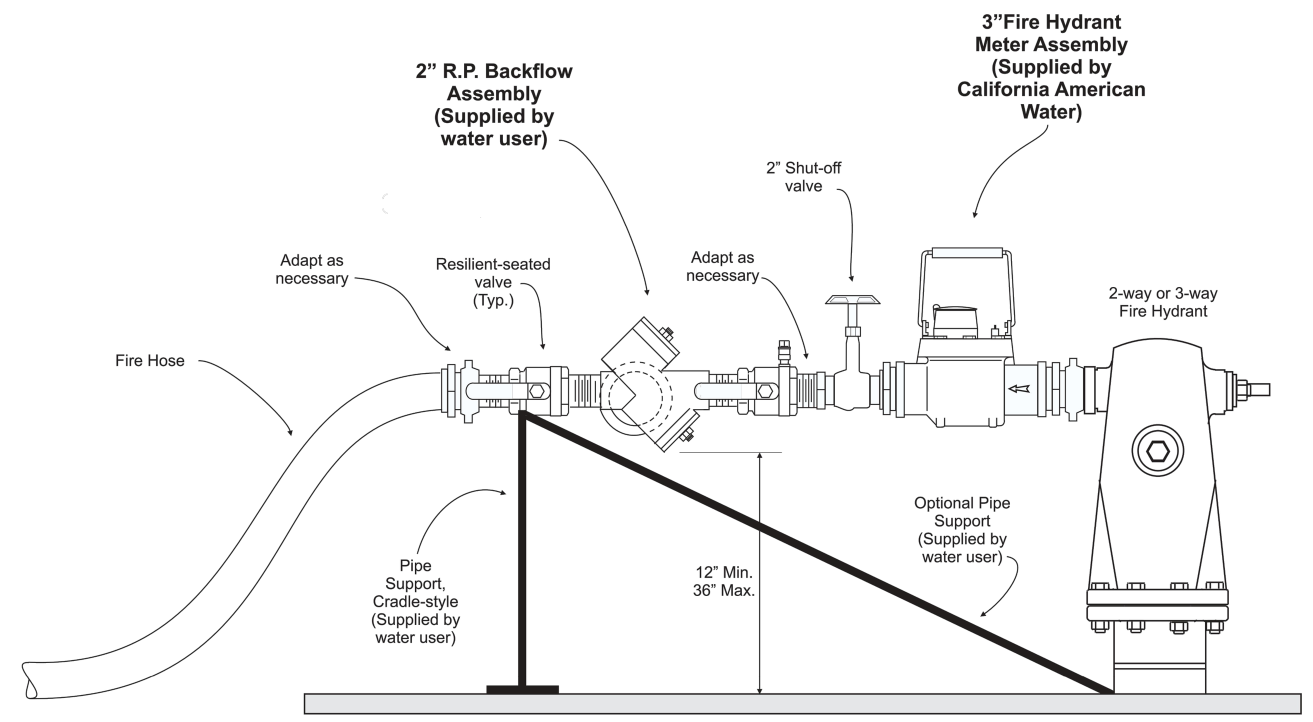
DRAWN BY JCA
PROJECT ENG'R JLS
DATE 2023–6–29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER

DETAILS

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

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 21 / 25



NOTE: The 3"Fire Hydrant Meter Assembly shall be removed from the hydrant at the end of each working day. It is the responsibility of the applicant to store the meter in a secure place.

CALIFORNIA AMERICAN WATER		LOS ANGELES COUNTY DISTRICT
Approved By: ______ Operations Superintendent	Scale: No Scale	Date: 10/2/97
	Drawn By: *Doug Krupinski*	Revised: 4/24/06
Standard Drawing Fire Hydrant Meter & R.P. Installation		Drwg. No. **COR-27A**

CALIFORNIA AMERICAN WATER

REVISIONS		REVISIONS	
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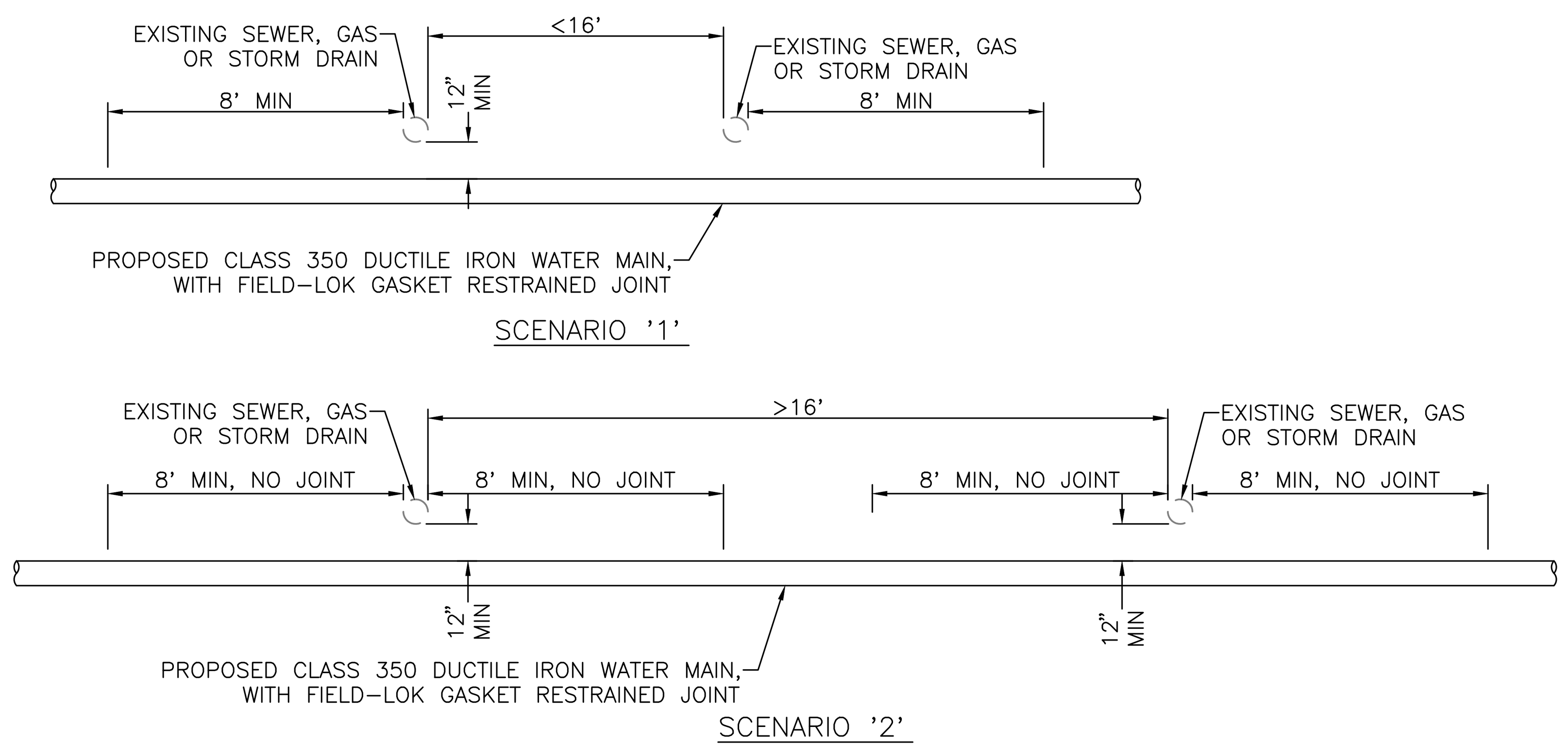
PROJECT ENG'R JLS

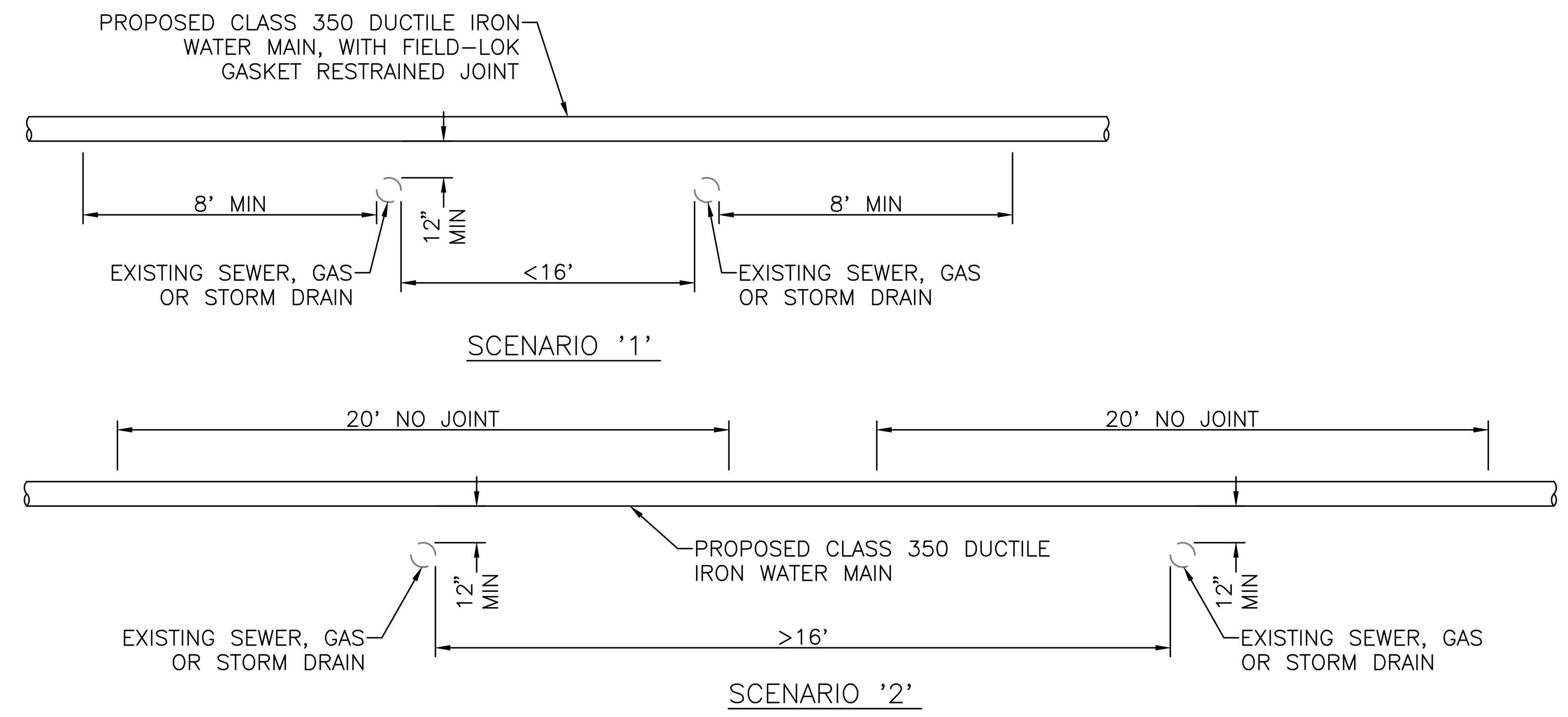
BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER

DETAILS

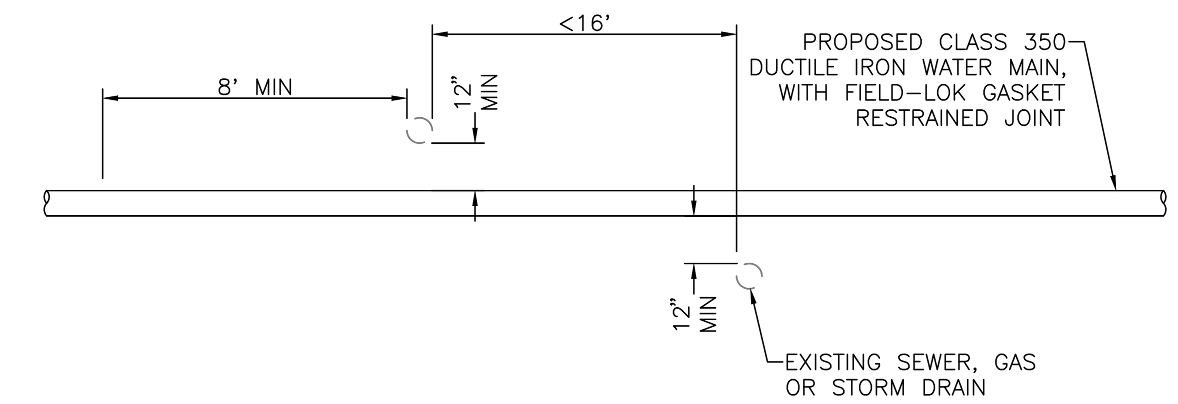
DATE 2023-6-29	----	----	USE DIMENSIONS ONLY SCALE AS SHOWN
PROJECT	USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	BID SET	22 / 25



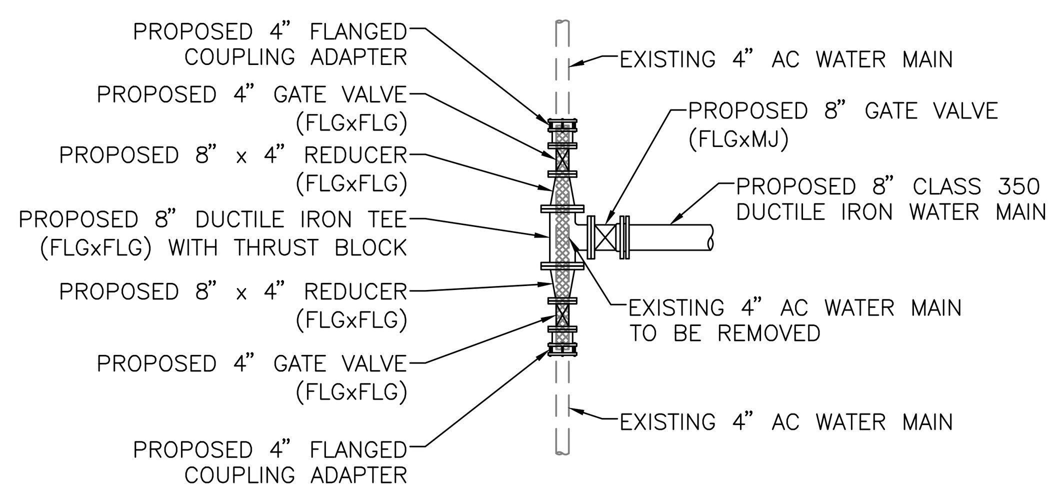
A 23 WATER MAIN CONSTRUCTION WITH EXISTING UTILITIES ABOVE
NOT TO SCALE



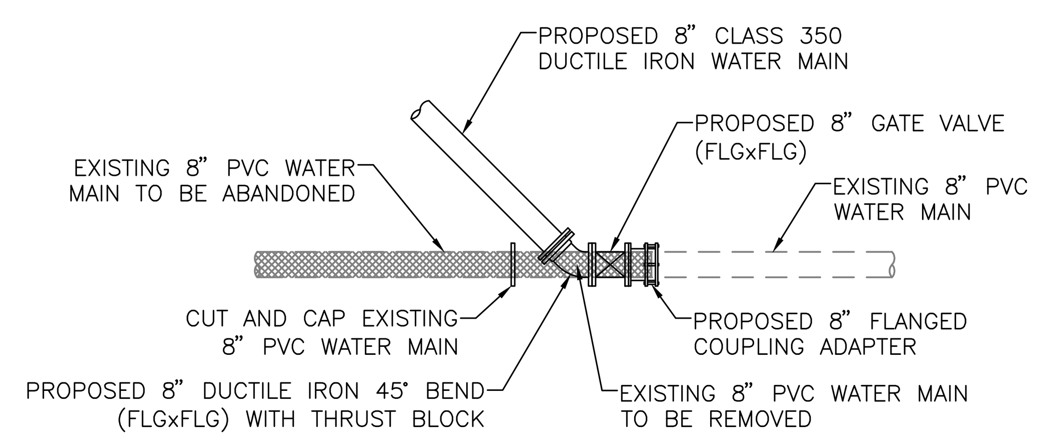
B 23 WATER MAIN CONSTRUCTION WITH EXISTING UTILITIES BELOW
NOT TO SCALE



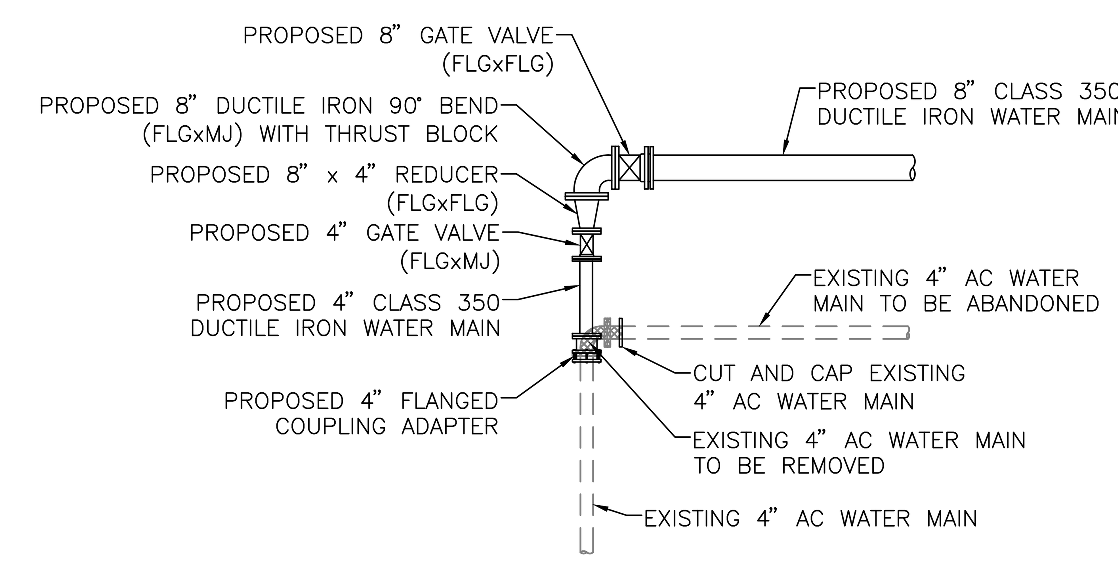
C 23 WATER MAIN CONSTRUCTION WITH EXISTING UTILITIES BELOW AND ABOVE
NOT TO SCALE



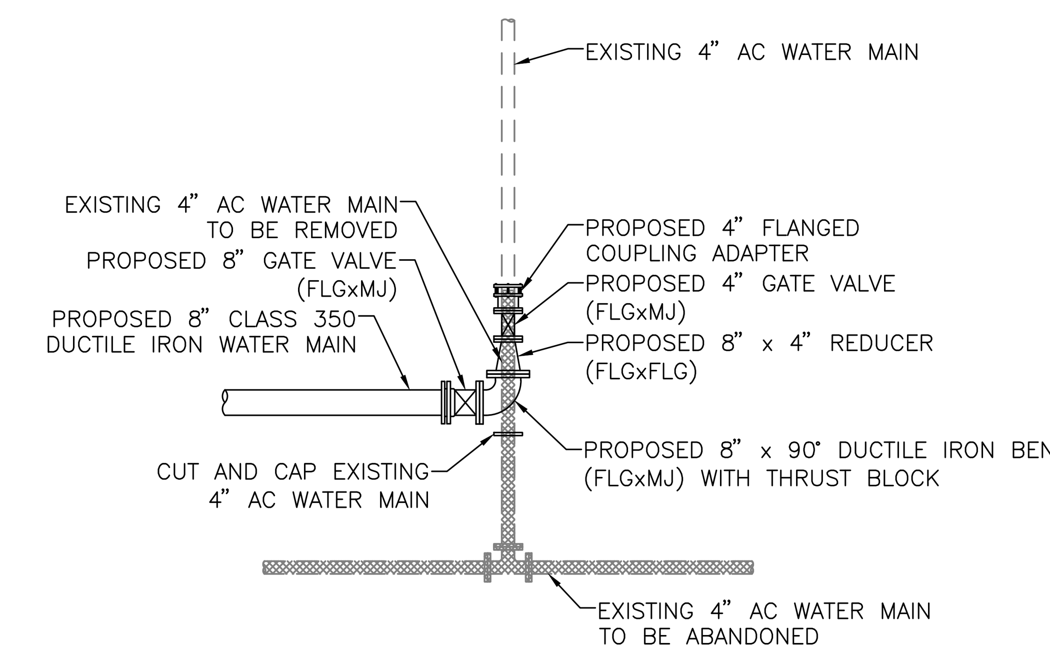
D 23 CONNECTION AT GLANDON STREET WEST END
NOT TO SCALE



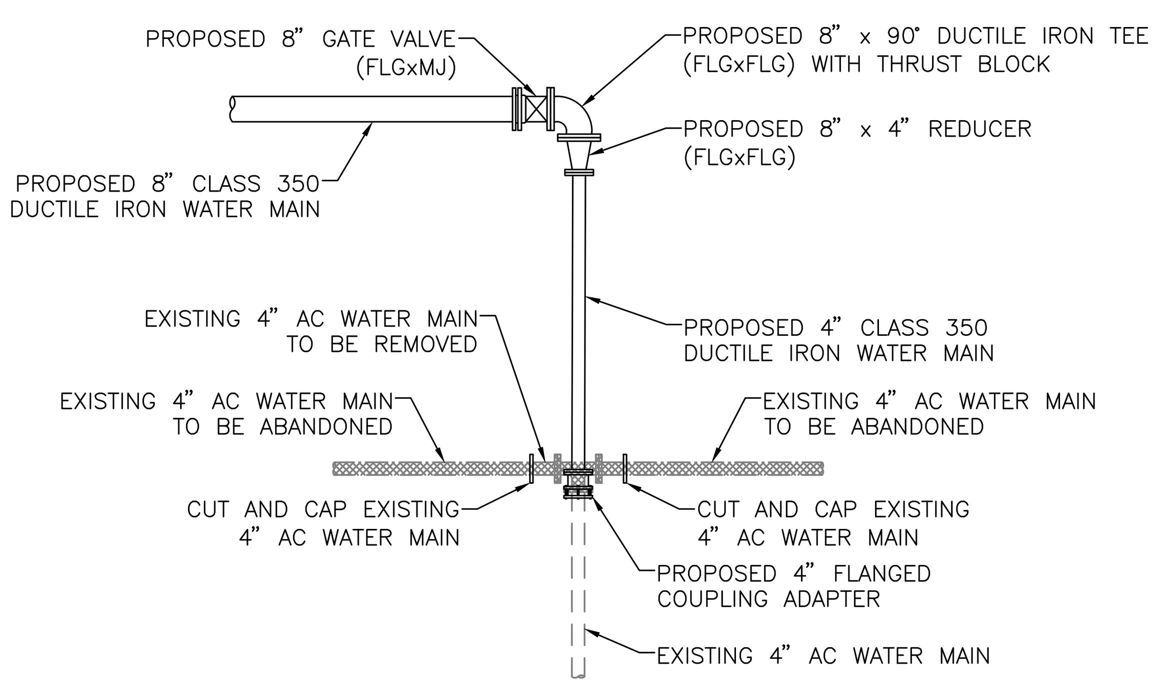
E 23 CONNECTION AT GLANDON STREET NEAR PRITCHARD STREET
NOT TO SCALE



F 23 CONNECTION AT CLOVERWOOD STREET WEST END
NOT TO SCALE



G 23 CONNECTION AT CLOVERWOOD STREET EAST END
NOT TO SCALE



H 23 CONNECTION AT MAPLEWOOD STREET EAST END
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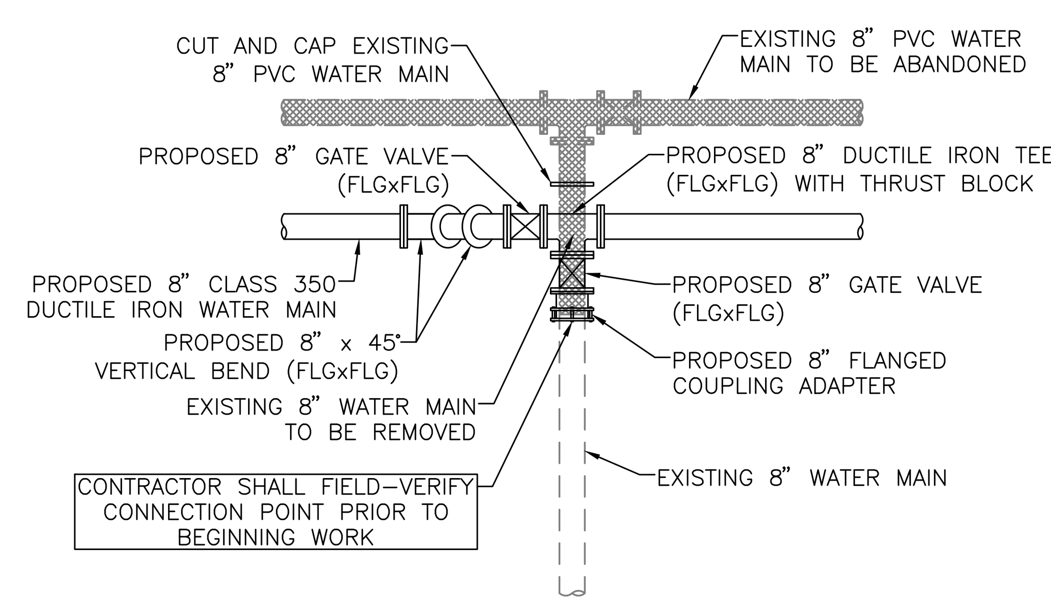
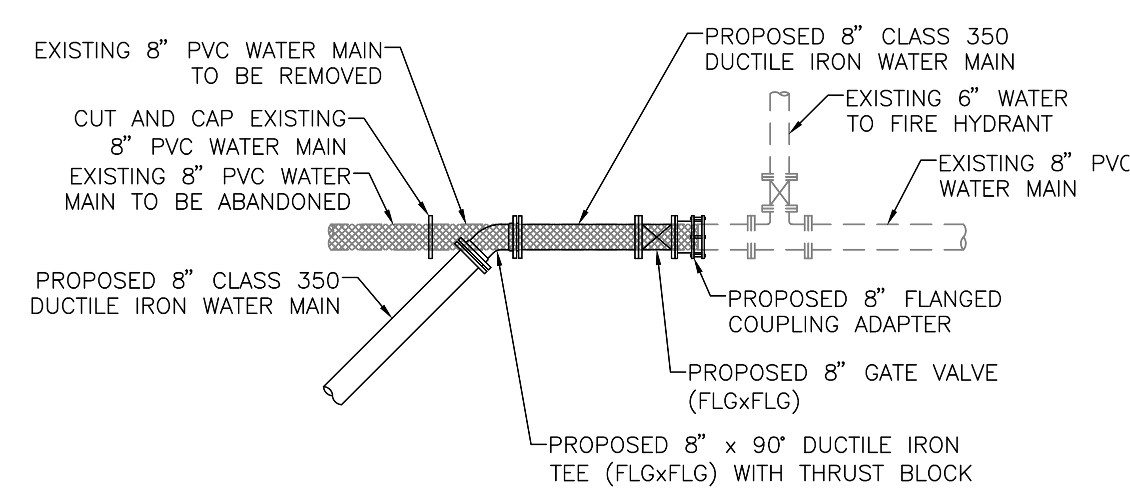
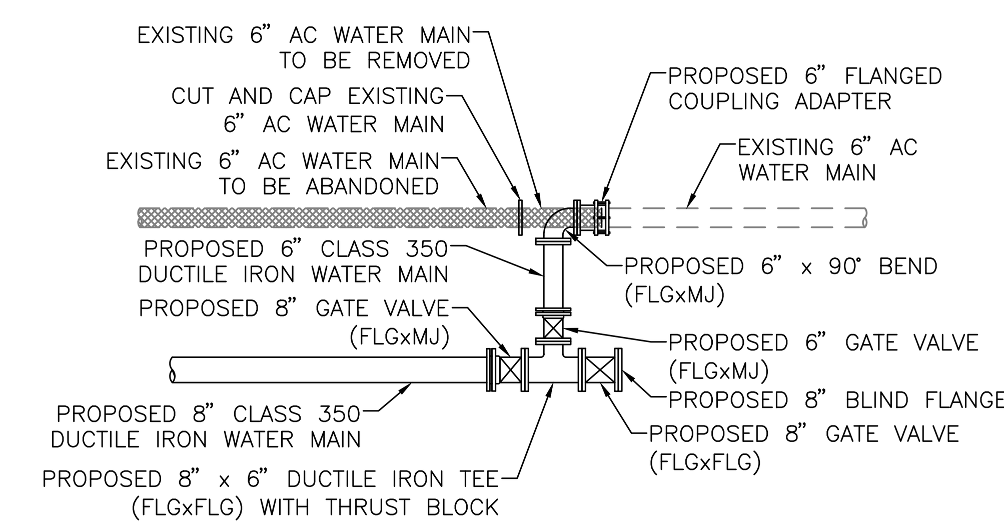


I 23 CONNECTION AT BLAINE AVENUE NEAR STA 108+00
NOT TO SCALE



J 23 CONNECTION AT BLAINE AVENUE NORTH END
NOT TO SCALE



K 23 CONNECTION AT SOMERSET BLVD NEAR BELLFLOWER BLVD
NOT TO SCALE

CALIFORNIA AMERICAN WATER

REVISIONS	REVISIONS
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3906 CHURCH ROAD
MT. LAUREL, NJ 08054

DRAWN BY JCA
PROJECT ENG'R JLS
DATE 2023-6-29
PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER

DETAILS AND CONNECTION DETAILS

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

USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES | BID SET | 23 / 25

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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AMERICAN WATER

DRAWN BY JCA
PROJECT ENG'R JLS

DATE 2023-6-29

PROJECT

BELLFLOWER WATER MAIN REPLACEMENT - SYSTEM 4
CITY OF BELLFLOWER
TRAFFIC CONTROL -
TRAFFIC CONTROL NOTES

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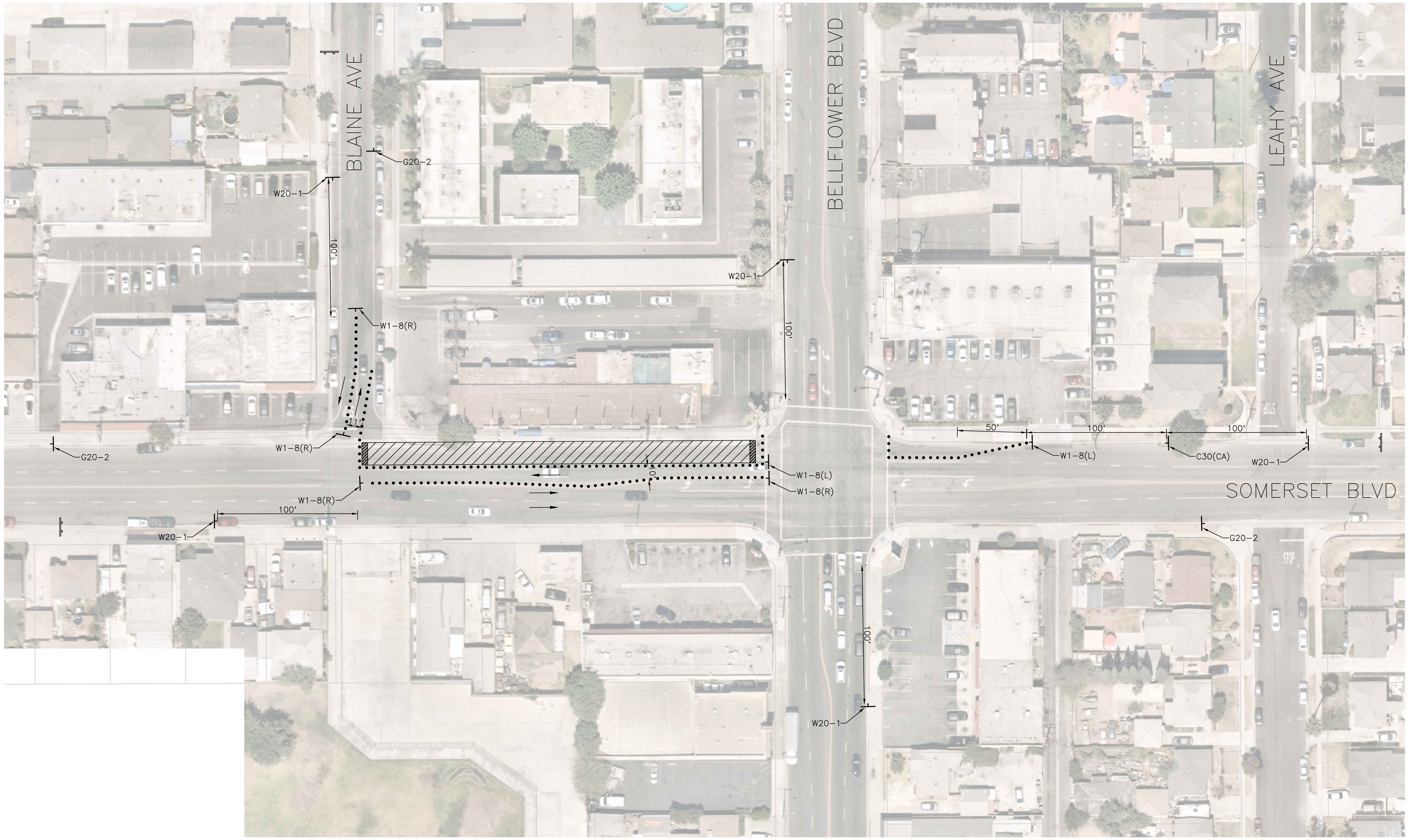
USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES	BID SET	24 / 25



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.
6. TWO-WAY TRAFFIC SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION ACTIVITIES.

CALIFORNIA AMERICAN WATER

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PROJECT

BELLFLOWER WATER MAIN REPLACEMENT – SYSTEM 4
CITY OF BELLFLOWER
TRAFFIC CONTROL – SOMERSET BLVD

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USE APPROVED DRAWINGS ONLY FOR CONSTRUCTION PURPOSES
BID SET
USE DIMENSIONS ONLY
SCALE AS SHOWN
25 / 25