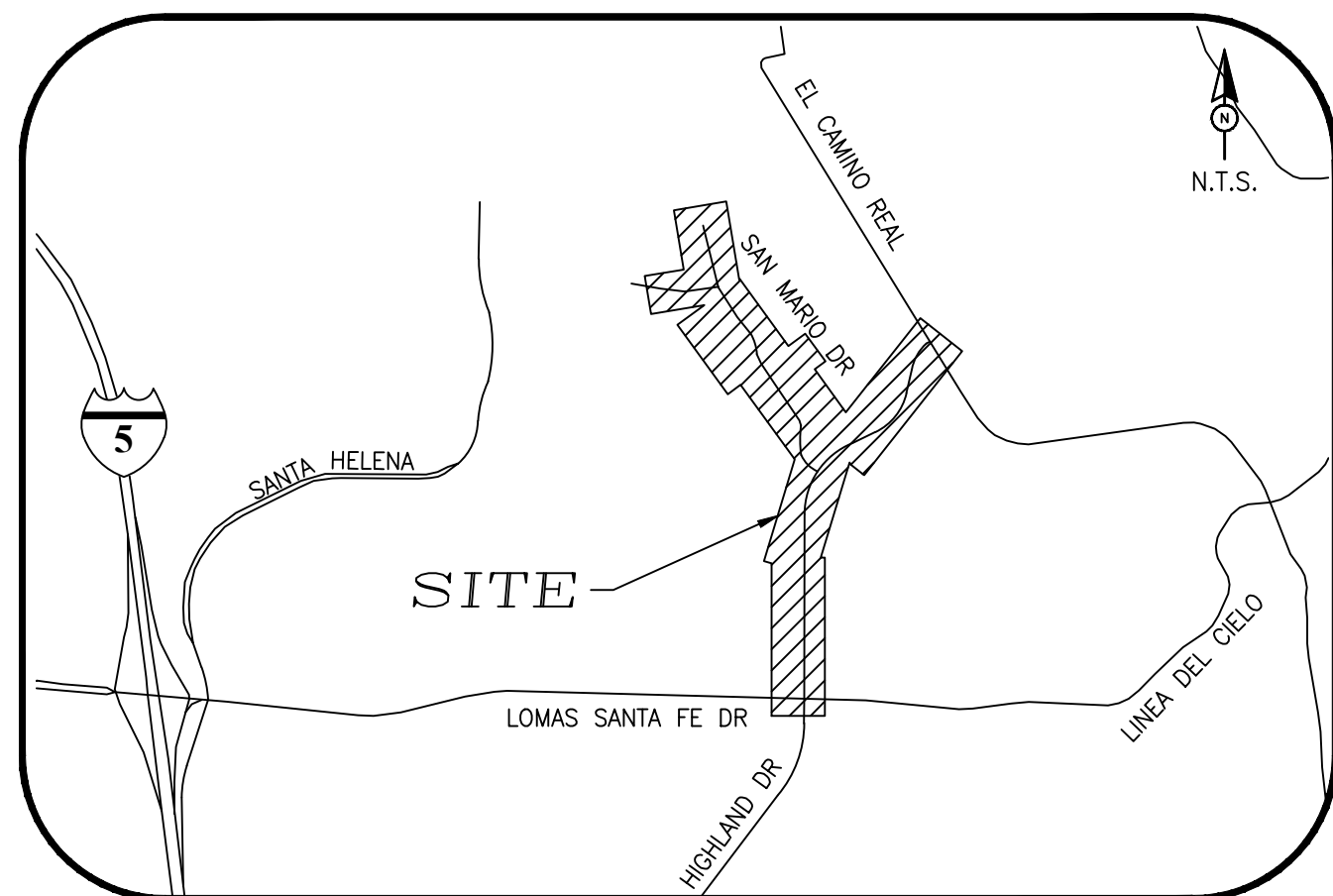


# SAN DIEGO GAS & ELECTRIC

## DIMP - GAS REPLACEMENT PROJ. ON HIGHLAND DR



**VICINITY MAP**  
 NO SCALE TB: 1167-J5, J6  
 32° 59' 57.31" N  
 117° 14' 19.77" W

### CITY SPECIAL REQUESTS:

- ALL LATERAL PIPE ARE TO BE REMOVED FROM CURB TO CURB
- ALL UTILITIES WILL BE MARKED OUT, POT-HOLED AND EXPOSED BEFORE ANY TRENCHING TAKES PLACE.
- THE EXISTING MAIN GAS LINES WILL BE ABANDONED IN PLACE.
- SDG&E WILL BE RESPONSIBLE FOR MARKING OUT OUR UTILITIES AND WILL REMOVE ABANDONED PIPE WHEN REQUESTED UPON BY THE CITY OF SOLANA BEACH.
- OPEN TRENCH METHOD WILL BE USED FOR EXCAVATION AT ALL LOCATIONS.
- ROCKWELL WILL NOT BE OPERATED FOR CONSTRUCTION IN ANY OPEN TRENCH LOCATIONS.
- REGULAR SWEEPING AND PROTECTION OF NEARBY INLETS WILL BE MAINTAINED THROUGHOUT CONSTRUCTION.

### SURVEY NOTES:

- IN THE EVENT A PROPERTY CORNER MONUMENT IS PLANNED ON BEING REMOVED AT ANY TIME DURING CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE LAND SURVEYOR LISTED ON SHEET 1 OF THIS PERMIT AT LEAST 5 DAYS AHEAD OF TIME TO ENSURE COMPLIANCE WITH CALIFORNIA BUSINESS AND PROFESSIONS CODE.
- IN THE EVENT A PROPERTY CORNER MONUMENT IS REMOVED DUE TO AN IMMEDIATE EMERGENCY, THE CONTRACTOR SHALL NOTIFY THE LAND SURVEYOR LISTED ON SHEET 1 OF THIS PERMIT WITHIN 24 HOURS, AFTER THE EMERGENCY CONSTRUCTION ACTION IS FINISHED IN ORDER TO ENSURE THE MONUMENTS IS REPLACED, IN COMPLIANCE WITH THE CALIFORNIA BUSINESS AND PROFESSIONS CODE.

### GENERAL NOTES:

- GOSL/CONTRACTOR TO CONTACT FIELD UTILITY SPECIALIST 2 WORKING DAYS PRIOR TO STARTING JOB. POSITION AND GRADE TO BE SET BY FIELD UTILITY SPECIALIST. CONTACT FIELD UTILITY SPECIALIST FOR ANY DESIGN CHANGES. FIELD UTILITY SPECIALIST - EMILIA MAKEDONSKA AT (760) 518-5167.
- GOSL OR FCA TO SCHEDULE PRE-CONSTRUCTION MEETING. ATTENDEES TO INCLUDE, FIELD UTILITY SPECIALIST, PIPELINE OPERATIONS, WELDING INSPECTION AND CATHODIC PROTECTION AS REQUIRED.
- GOSL OR FCA TO CONTACT SDG&E PIPELINE OPERATIONS SUPERVISOR, LUIS CUEVAS AT (760) 613-0158, 5 WORKING DAYS PRIOR TO STARTING JOB.
- GOSL OR FCA TO CONTACT SDG&E SYSTEM PROTECTION MIRAMAR SCHEDULING (SystemProtectionMiramarScheduling@semprautilities.com) 2 WORKING DAYS PRIOR TO STARTING JOB.
- FOR INSERTION OF SERVICES, IF DEPTH OF THE EXISTING SERVICE IS LESS THAN 12" ON PRIVATE PROPERTY, OR 18" ON PUBLIC PROPERTY, NEW SERVICE MUST BE DIRECT BURIED AT MINIMUM 24" DEPTH ON PRIVATE PROPERTY AND 30" DEPTH ON PUBLIC PROPERTY RATHER THAN INSERTED INTO OLD SERVICE. ALL INSERTED SERVICES TO BE 1/2" PE PIPE. ALL NEW SERVICES TO BE 1" PE.
- PURGE GAS SYSTEM IN ACCORDANCE WITH GAS STANDARD D7911 AND G7909.
- TEST NEW 2" PE PIPE AT 100 PSI PER GAS STANDARD D7265.
- ABANDONED NATURAL GAS PIPELINES MAY CONTAIN ASBESTOS IN THEIR INSULATING MATERIAL. PIPE COATING WRAP THAT MAY CONTAIN ASBESTOS SHALL BE TREATED AS ASBESTOS CONTAINING MATERIAL (ACM). COAL TAR PIPE WRAP THAT IS REMOVED PROPERLY USING WET METHODS AND HAND TOOLS IN NON-FRIABLE AND IS NOT CONSIDERED A REGULATED ACM. ACM COAL TAR WASTE MUST STILL BE MANAGED AND DISPOSED ON IN ACCORDANCE WITH APPLICABLE SAFETY AND ENVIRONMENTAL LAWS AND REGULATIONS. SEE COMPANY OPERATIONS STANDARD 08321.
- THIS JOB IS NOT IMPACTED BY AB-1937. AFFECTED FACILITIES MUST BE NOTIFIED 3 DAYS TO START OF CONSTRUCTION.
- SAN DIEGO GAS & ELECTRIC WILL FOLLOW THE BMP STANDARDS PER THE SDG&E BEST MANAGEMENT PRACTICES MANUAL FOR WATER QUALITY CONSTRUCTION.

### OLIVENHAIN MUNICIPAL WATER AND SANTA FE IRRIGATION DISTRICT NOTES:

- THE CONTRACTOR SHALL LOCATE ALL EXISTING UNDERGROUND UTILITIES AND POTHOLES ALL TIE-IN AND POTENTIAL CONFLICT LOCATIONS PRIOR TO PIPE INSTALLATION IN ACCORDANCE WITH WAS SPECIFICATIONS 01000 & 15000.
- CONTRACTOR TO MEET INSPECTOR BEFORE STARTING WORK & PROVIDE A MIN. OF 72 HOUR NOTICE.
- RELATIVE COMPACTION AROUND FACILITIES SHALL CONFORM TO STANDARD SPECIFICATION SECTION 02223.
- WHEREVER NEW UTILITIES CROSS UNDER OR OVER WATER, RECYCLED WATER OR SEWER FACILITIES, THE MINIMUM VERTICAL SEPARATION SHALL BE 12-INCHES UNLESS OTHERWISE APPROVED BY THE DISTRICT ENGINEER. ALL NEW UTILITIES CROSSING UNDER OR OVER WATER, RECYCLED WATER OR SEWER FACILITIES SHALL REMAIN EXPOSED UNTIL INSPECTED AND APPROVED BY THE DISTRICT ENGINEER. WHEREVER NEW FACILITIES CROSS UNDER OR OVER WATER, OR SEWER FACILITY TRENCH WIDTH SHALL BE IN STRICT CONFORMANCE WITH THE BACKFILL AND COMPACTION REQUIREMENTS SPECIFIED HEREIN.
- WHEREVER NEW FACILITIES PARALLEL WATER, RECYCLED WATER OR SEWER FACILITIES, THE MINIMUM HORIZONTAL SEPARATION SHALL BE SUCH THAT 36-INCHES OF UNDISTURBED SOIL SEPARATES ADJACENT TRENCH EDGES, UNLESS OTHERWISE APPROVED BY THE DISTRICT ENGINEER.



**KEY MAP**  
NO SCALE

**NOTE:**  
 ANY DISTURBED/DAMAGED SIDEWALK PANELS AS A RESULT OF CONSTRUCTION SHALL BE RECONSTRUCTED PER SDRSD G-2

**NOTE:**  
 WARNING MESH MUST BE INSTALLED ON ALL GAS MAINS AND SERVICES.

**NOTE:**  
 USE STEEL ENCIRCLEMENT CLAMPS FOR DUPONT SQUEEZE OPERATIONS.  
 STOCK # S228970 FOR 2" PE  
 STOCK # S228972 FOR 3" PE

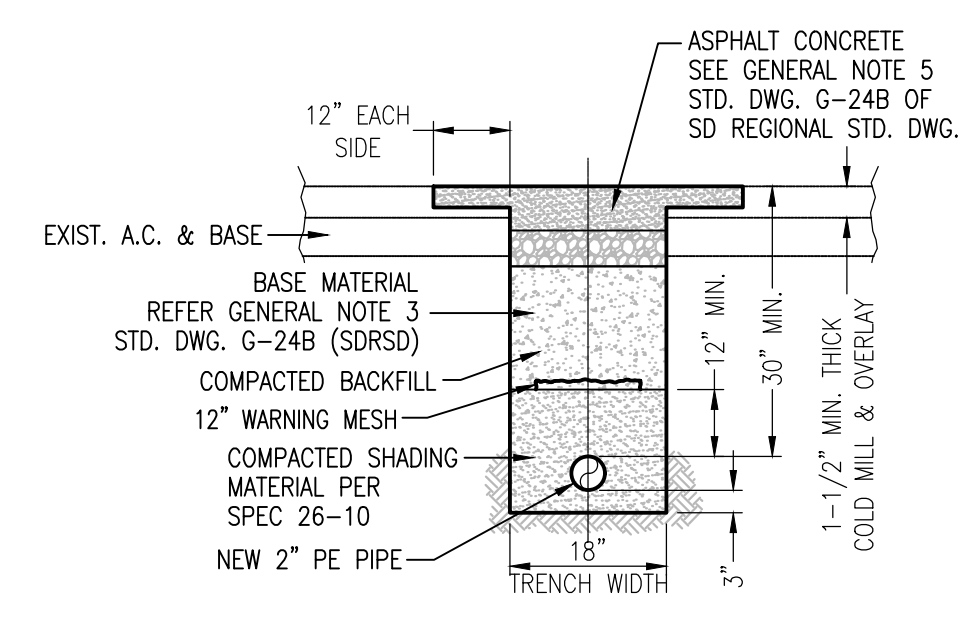
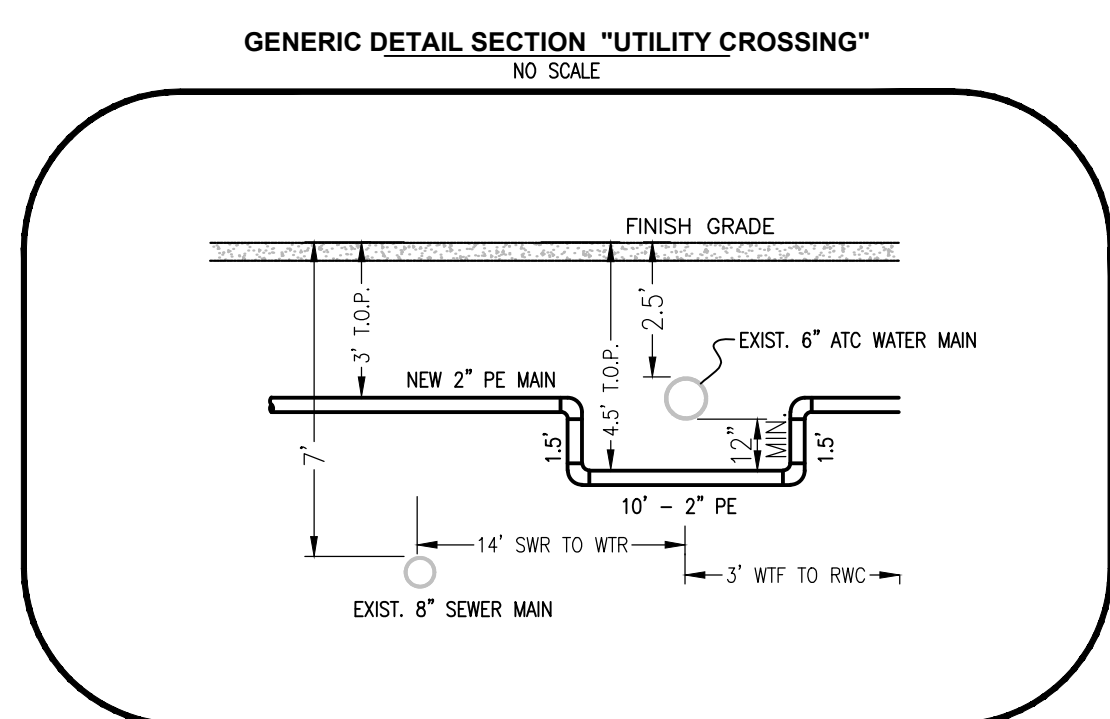
**NOTE:**  
 POT HOLE TO VERIFY POSITION AND DEPTH OF EXISTING FACILITIES.



### ESTIMATED PIPE FOOTAGE

3" PE MAIN	-----	-6,378'±
2" PE MAIN	-----	-1,843'±
1" PE SERVICE	-----	-5,664'±
RFS EX. 3" PE MAIN	-----	-6,011'±
RFS EX. 2" PE MAIN	-----	-2,085'±
RFS EX. 1-1/4" PE MAIN	-----	-2'±
RFS EX. 1/2" PE MAIN	-----	-47'±
RFS EX. 3/4" STL SERVICE	-----	-57'±
RFS EX. 1/2" PE SERVICE	-----	-4,869'±
RFS EX. 1/2" PX SERVICE	-----	-58'±

**NOTE:**  
 ALL STREET REPAIR TO BE DONE PER CITY CODE, ASPHALT OR CONCRETE TO BE REPAIRED LIKE FOR LIKE AS APPLICABLE.



**TRENCH DETAIL - PE PIPE GAS MAIN TRENCH ONLY**  
 SEE GAS STANDARDS D7403

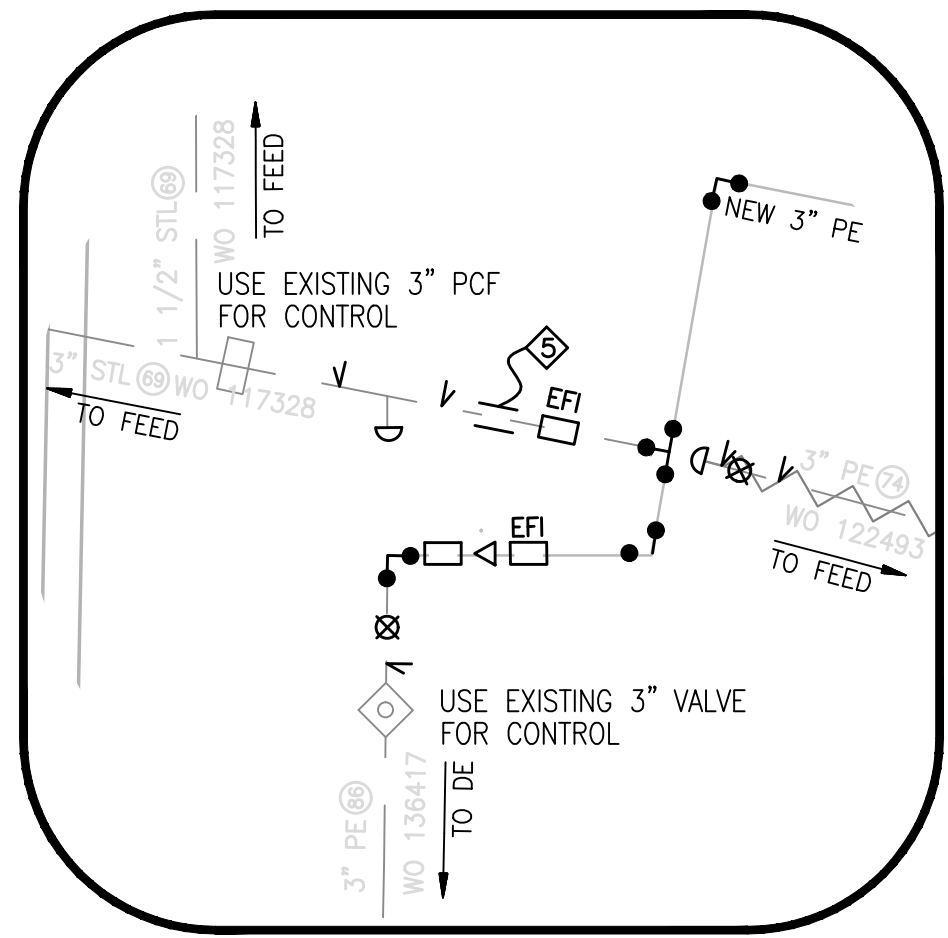
### LEGEND:

- (I) INSERT ENTIRE SERVICE WITH 1/2" PE PIPE
- (73) YEAR OF EXISTING MAIN OR SERVICE
- (R) RETIRE FROM SERVICE
- (O) MAIN OR SERVICE TO BE OPEN TRENCH
- (2) DESIGN BY LOCATION
- (BP) BARRIER POST
- (M) METER WITH PLUMB NOTE
- (GTO) GAS TRENCH ONLY
- (JT) GAS MAIN JOINT TRENCH WITH ELECTRIC
- (250) METER SIZE - STANDARD CUBIC FEET PER HOUR (SCFH)
- (EPV250) EFV 1" PE WITH A MAX. 1620 SCFH (\$783250)

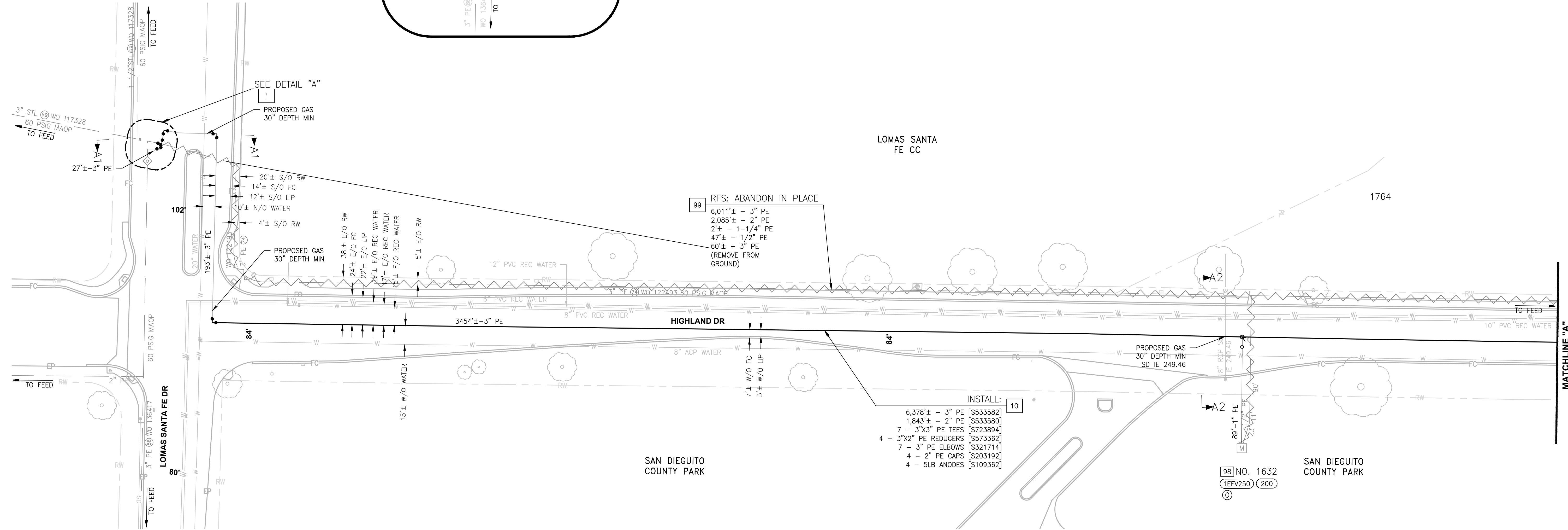
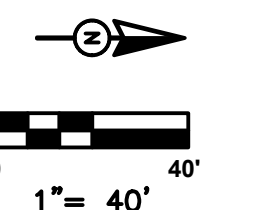
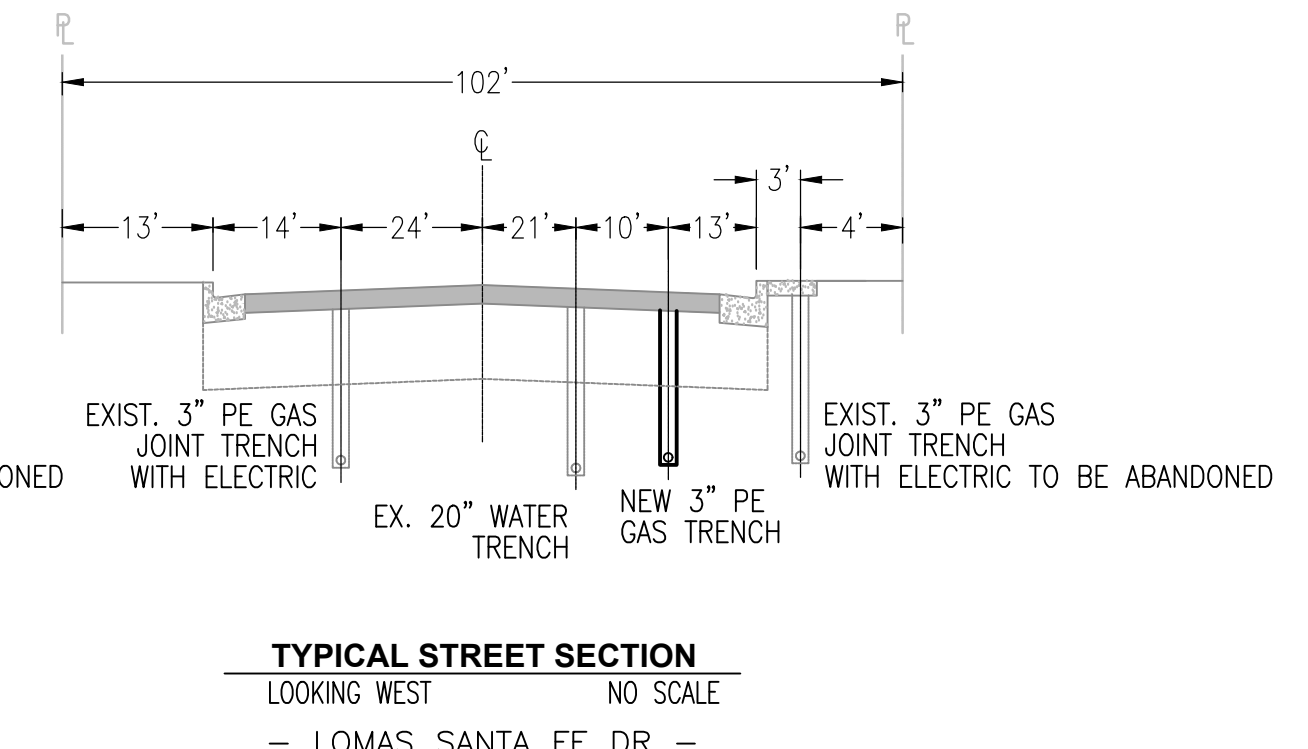
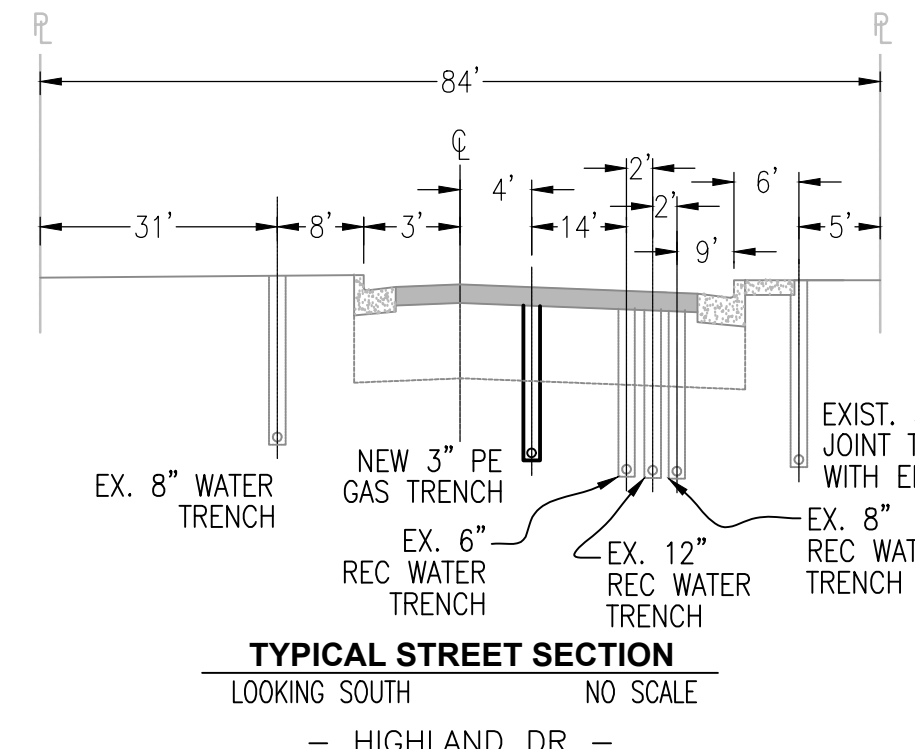
PERMIT NO.	MCU NO.			
BUDGET: 546	TB: 1167-J5, J6			
CP STATIONS:		<b>GAS TECHNICAL SERVICES - MIRAMAR                  GAS DISTRIBUTION SYSTEM</b>		
REFERENCE RER#:	DATE:			
DRAWN: RNA	09/08/17	<b>DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE                  AND 88 SERVICES ON HIGHLAND DR</b>		
DESIGNED: SPEC	09/08/17			
SYSTEM PROTECTION:		<b>CITY OF SOLANA</b>		
WELDING INSPECTOR:				
PIPELINE OPERATIONS:		Job Notification No.	Work Order No.	Rev.
REGION ENGINEERING: ZM	10/15/20	<b>30000152482</b>	<b>530000317721</b>	
FUS SUPERVISOR APPROVAL: RB	10/4/20	PLOT SCALE: N.T.S.	SHEET: COVER SHEET	<b>A</b>

100% Design - IFC - DIMP - 583481 - Highland Dr - Final.dwg Aug/03/23 ORIGINAL PAPER SIZE: 22" X 34"

**DETAIL "A"**  
N.T.S.

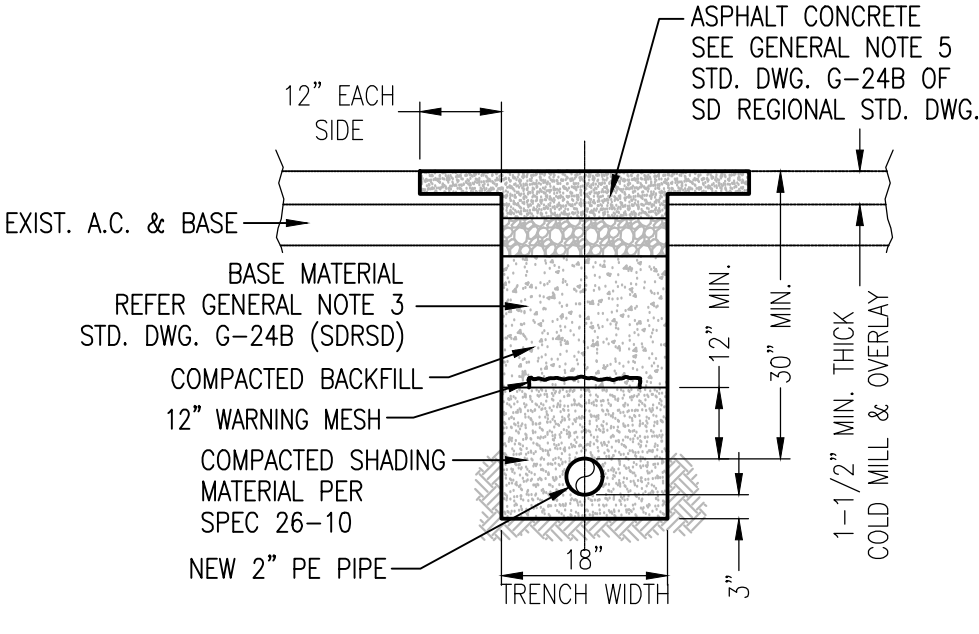


- 1** INSTALL:
- 1 - 3" TRANSITION FITTING [S350960]
  - 1 - 5LB ANODE [S109362]
  - 1 - 3" ELBOW (PE) [S321714]
  - 1 - 3" COUPLING (PE) [S281622]
  - 2 - 3" EFI COUPLINGS (PE) [S279632]
  - 2 - 3" ELBOWS (PE) [S321714]
  - 1 - 3" TEE (PE) [S723894]
  - 2 - 3" CAP (PE) [S203200]
  - 3 - 3"x1/2" TAPPING TEES (PE) [S723868]
  - 2 - 3/4" PUNCH TEES (STL) [S725732]
  - 2 - 3" FULL ENCIRCLEMENT CLAMP [S228972]
- UTILIZE EITHER A 1" PE BYPASS OR A HEADER TRUCK TO KEEP CUSTOMERS FED DURING TIE-IN



- 99** RFS: ABANDON IN PLACE
- 6,011'± - 3" PE
  - 2,085'± - 2" PE
  - 2'± - 1-1/4" PE
  - 47'± - 1/2" PE
  - 60'± - 3" PE (REMOVE FROM GROUND)

- 10** INSTALL:
- 6,378'± - 3" PE [S533582]
  - 1,843'± - 2" PE [S533580]
  - 7 - 3"x3" PE TEES [S723894]
  - 4 - 3"x2" PE REDUCERS [S573362]
  - 7 - 3" PE ELBOWS [S321714]
  - 4 - 2" PE CAPS [S203192]
  - 4 - 5LB ANODES [S109362]



**TRENCH DETAIL - PE PIPE GAS MAIN TRENCH ONLY**  
SEE GAS STANDARDS D7403

**ESTIMATED PIPE FOOTAGE**

3" PE MAIN	-----	6,378'±
2" PE MAIN	-----	1,843'±
1" PE SERVICE	-----	5,664'±
RFS EX. 3" PE MAIN	-----	6,011'±
RFS EX. 2" PE MAIN	-----	2,085'±
RFS EX. 1-1/4" PE MAIN	-----	2'±
RFS EX. 1/2" PE MAIN	-----	47'±
RFS EX. 3/4" STL SERVICE	-----	57'±
RFS EX. 1/2" PE SERVICE	-----	4,869'±
RFS EX. 1/2" PX SERVICE	-----	58'±

PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE REF#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

**GAS TECHNICAL SERVICES - MIRAMAR**  
**GAS DISTRIBUTION SYSTEM**

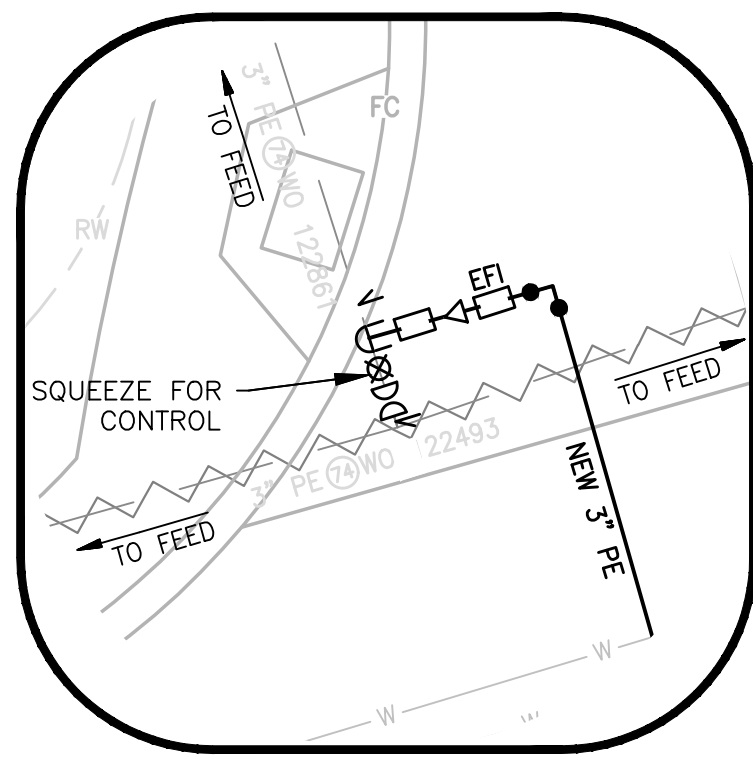
**DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE AND 88 SERVICES ON HIGHLAND DR**

**CITY OF SOLANA BEACH**

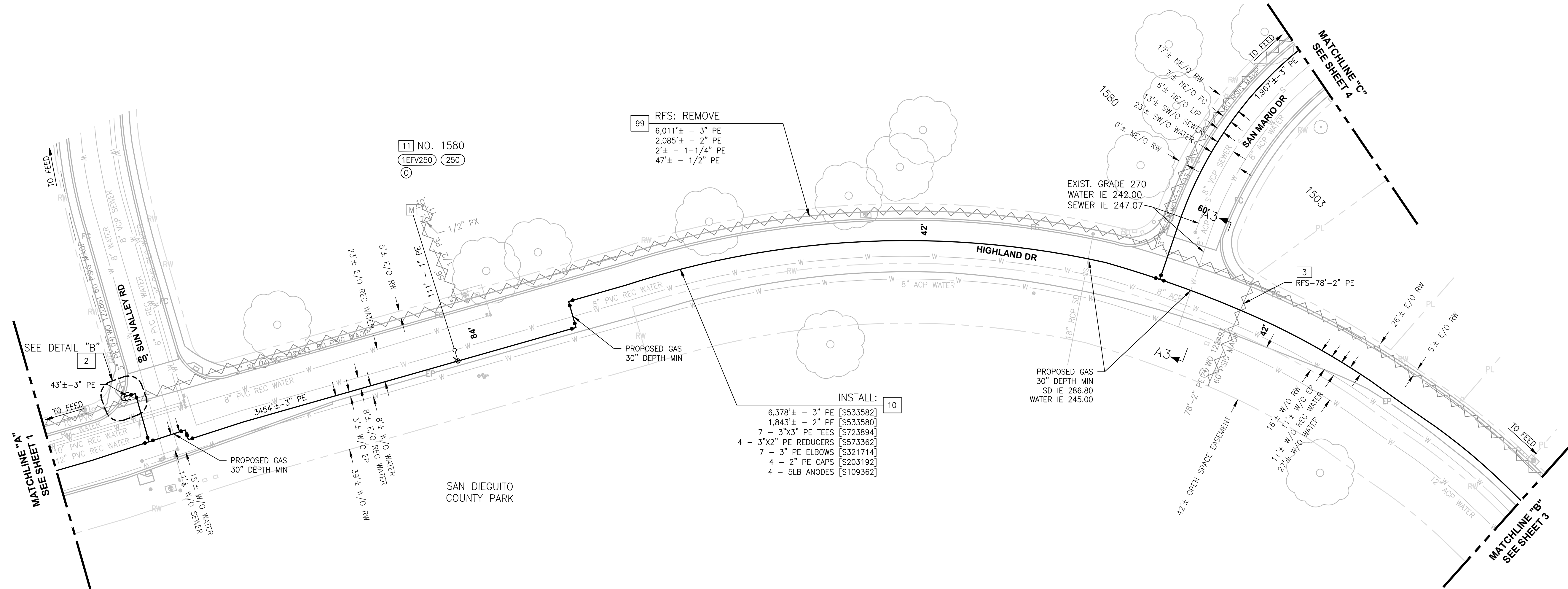
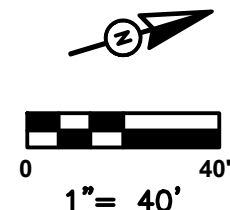
Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
Plot Scale: 1" = 40'	Sheet: 1 OF 7	

**DETAIL "B"**

N.T.S.



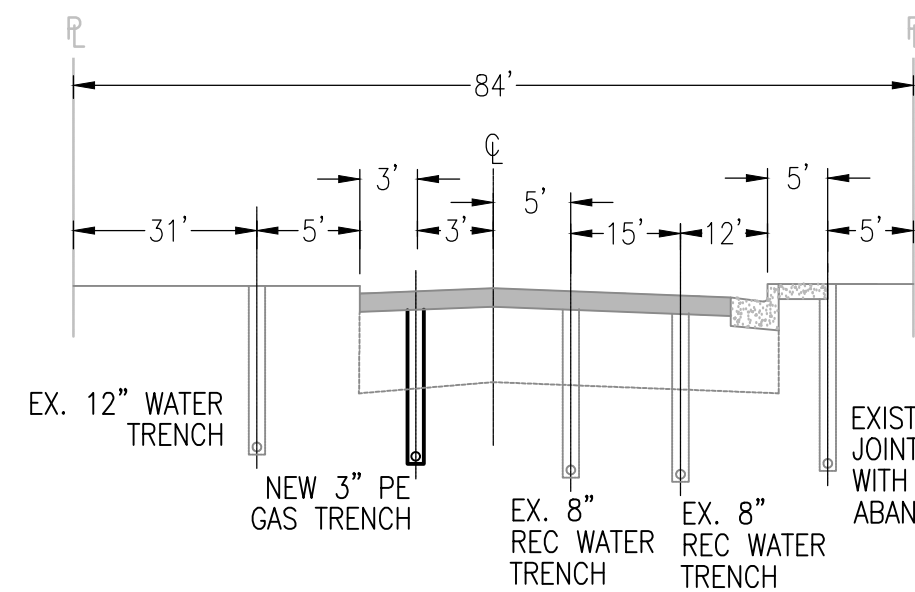
- 2** INSTALL:
- 1 - 3"x2" BRANCHING SADDLE (PE) [S609962]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 2 - 3" CAPS (PE) [S203200]
  - 2 - 3"x1/2" TAPPING TEES (PE) [S723868]
  - 1 - 3" FULL ENCIRCLEMENT CLAMP [S228972]



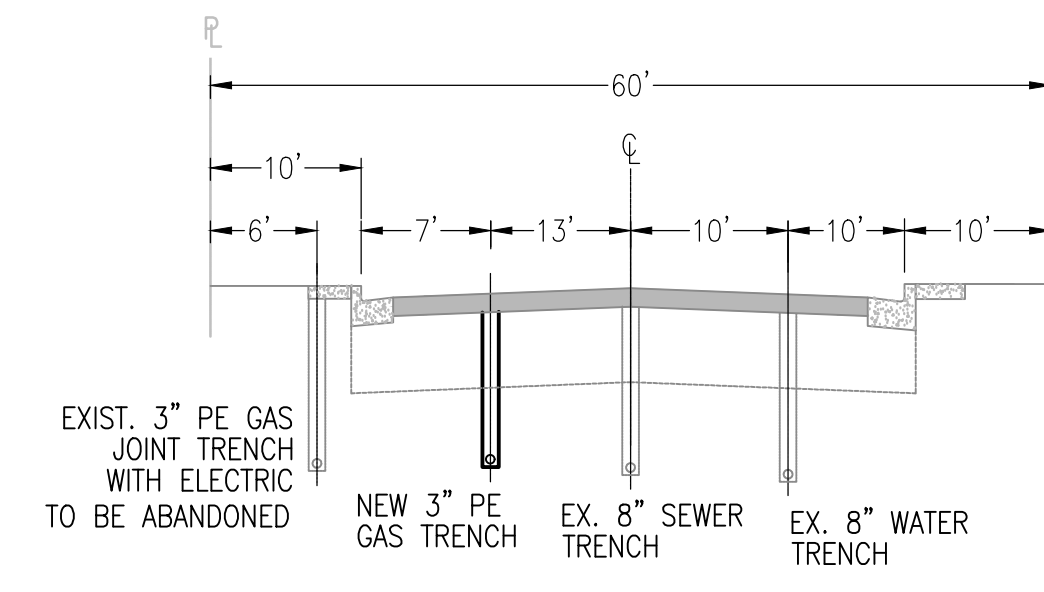
- 99** RFS: REMOVE
- 6,011'± - 3" PE
  - 2,085'± - 2" PE
  - 2'± - 1-1/4" PE
  - 47'± - 1/2" PE

**11** NO. 1580  
 1EFV250 250

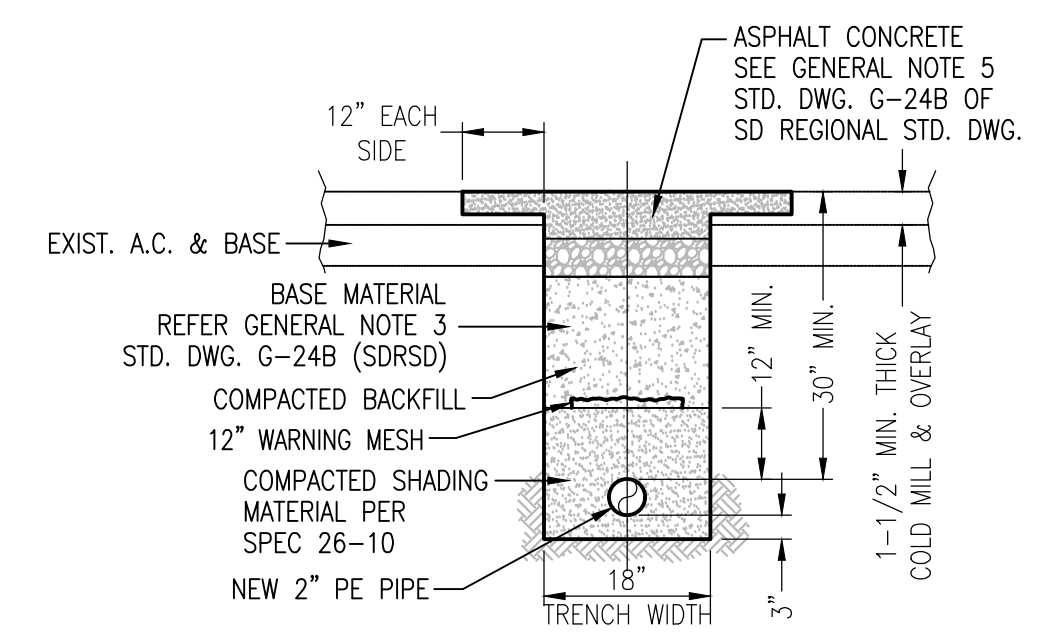
- 10** INSTALL:
- 6,378'± - 3" PE [S533582]
  - 1,843'± - 2" PE [S533580]
  - 7 - 3"x3" PE TEES [S723894]
  - 4 - 3"x2" PE REDUCERS [S573362]
  - 7 - 3" PE ELBOWS [S321714]
  - 4 - 2" PE CAPS [S203192]
  - 4 - 5LB ANODES [S109362]



**TYPICAL STREET SECTION**  
 LOOKING SOUTH  
 NO SCALE  
 - HIGHLAND DR -



**TYPICAL STREET SECTION**  
 LOOKING NORTH  
 NO SCALE  
 - SAN MARIO DR -



**TRENCH DETAIL - PE PIPE GAS MAIN TRENCH ONLY**  
 SEE GAS STANDARDS D7403

**ESTIMATED PIPE FOOTAGE**

3" PE MAIN	-----	6,378'±
2" PE MAIN	-----	1,843'±
1" PE SERVICE	-----	5,664'±
RFS EX. 3" PE MAIN	-----	6,011'±
RFS EX. 2" PE MAIN	-----	2,085'±
RFS EX. 1-1/4" PE MAIN	-----	2'±
RFS EX. 1/2" PE MAIN	-----	47'±
RFS EX. 3/4" STL SERVICE	-----	57'±
RFS EX. 1/2" PE SERVICE	-----	4,869'±
RFS EX. 1/2" PX SERVICE	-----	58'±

PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE REF#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

**SDGE** A Sempra Energy utility

**GAS TECHNICAL SERVICES - MIRAMAR**  
**GAS DISTRIBUTION SYSTEM**

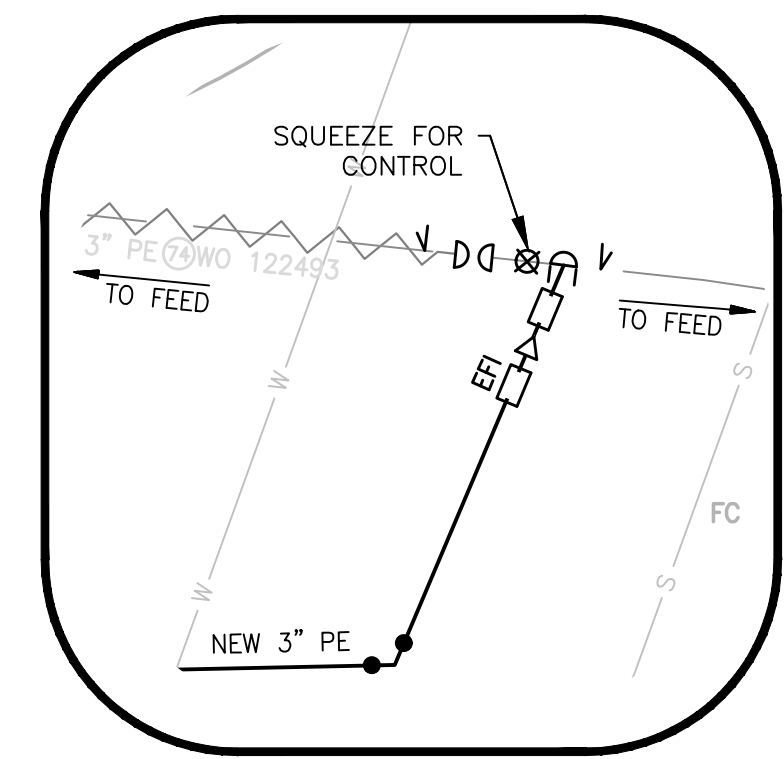
**DIMP 583481 INSTALL 6,378' 3" PE AND 1,843 2" PE AND 88 SERVICES ON HIGHLAND DR**

**CITY OF SOLANA BEACH**

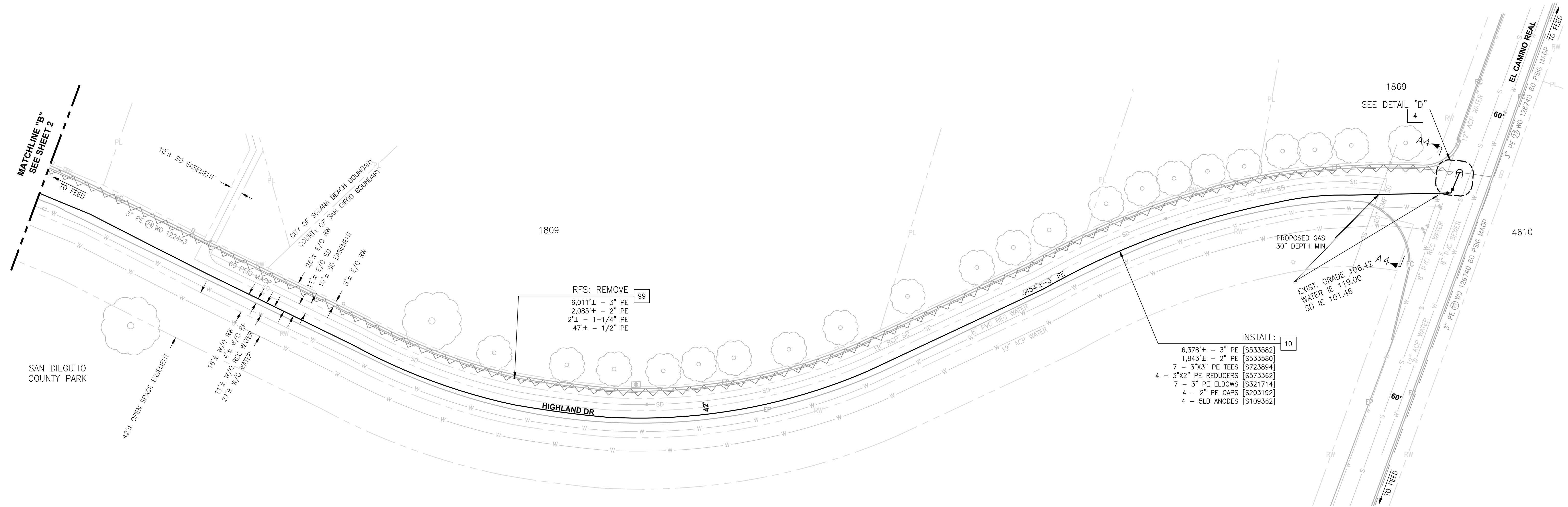
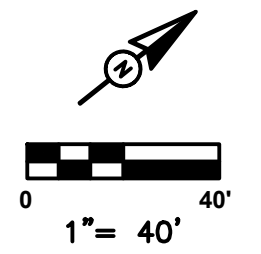
Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
PLOT SCALE: 1" = 40'	SHEET: 2 OF 7	

DETAIL "D"

N.T.S.

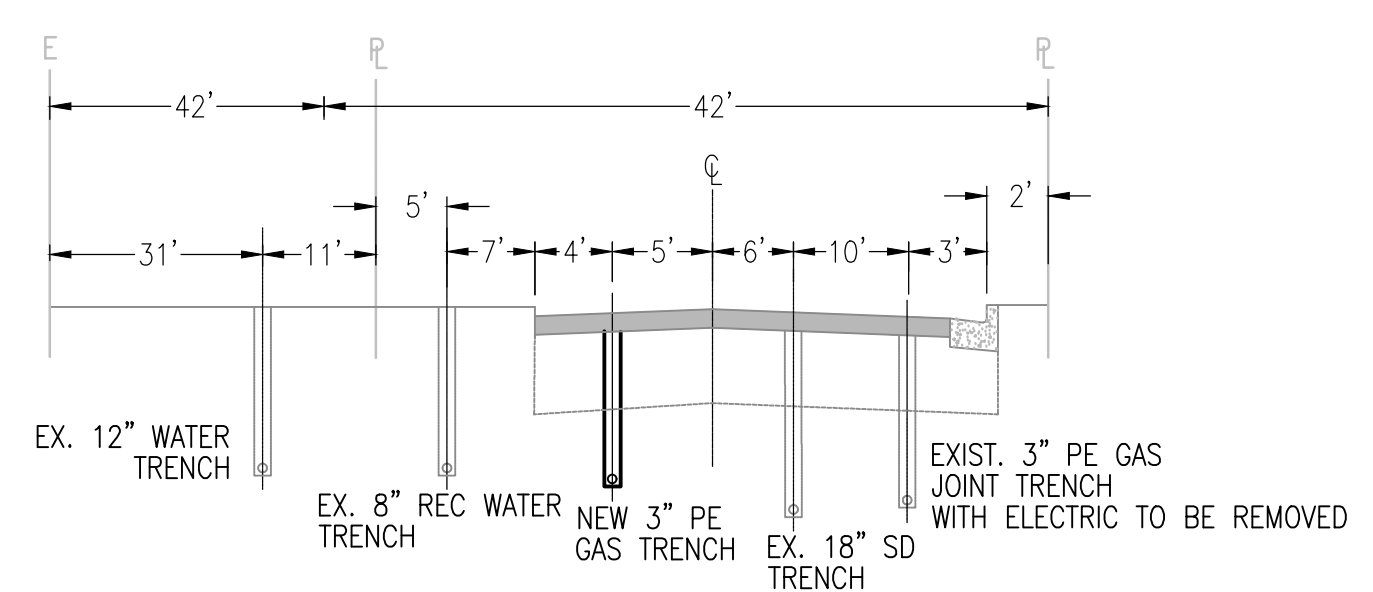


- INSTALL: 4
- 1 - 3"x2" BRANCHING SADDLE (PE) [S609962]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 2 - 3" CAPS (PE) [S203200]
  - 2 - 3"x1/2" TAPPING TEES (PE) [S723868]
  - 1 - 3" FULL ENCIRCLEMENT CLAMP [S228972]

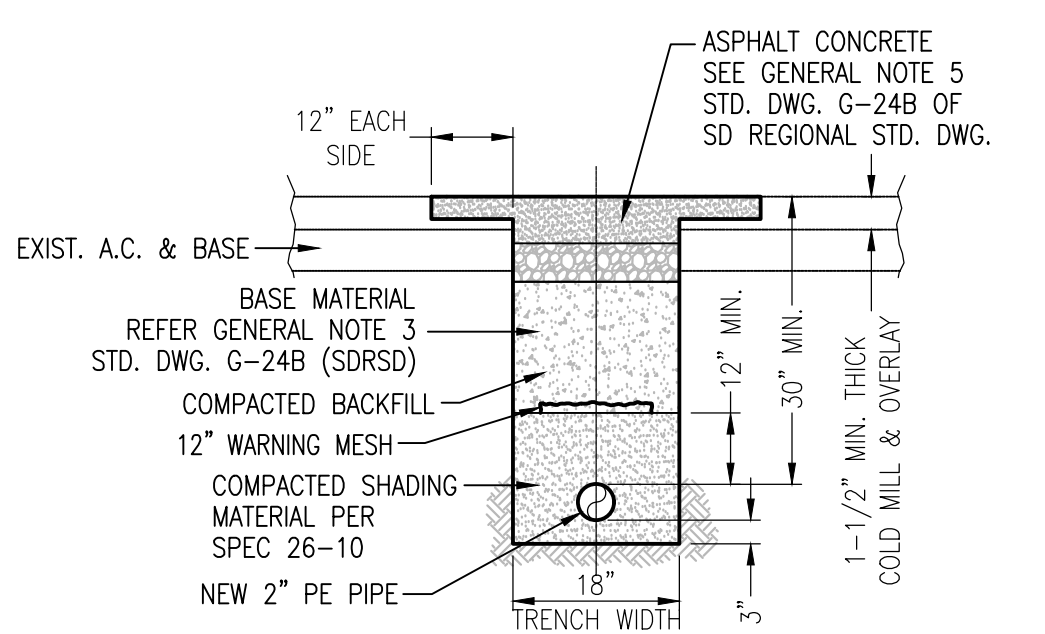


- RFS: REMOVE 99
- 6,011'± - 3" PE
  - 2,085'± - 2" PE
  - 2'± - 1-1/4" PE
  - 47'± - 1/2" PE

- INSTALL: 10
- 6,378'± - 3" PE [S533582]
  - 1,843'± - 2" PE [S533580]
  - 7 - 3"x3" PE TEES [S723894]
  - 4 - 3"x2" PE REDUCERS [S573362]
  - 7 - 3" PE ELBOWS [S321714]
  - 4 - 2" PE CAPS [S203192]
  - 4 - 5LB ANODES [S109362]



TYPICAL STREET SECTION  
LOOKING SOUTH  
NO SCALE  
- HIGHLAND DR -



TRENCH DETAIL - PE PIPE GAS MAIN TRENCH ONLY  
SEE GAS STANDARDS D7403

ESTIMATED PIPE FOOTAGE

3" PE MAIN	-----	6,378'±
2" PE MAIN	-----	1,843'±
1" PE SERVICE	-----	5,664'±
RFS EX. 3" PE MAIN	-----	6,011'±
RFS EX. 2" PE MAIN	-----	2,085'±
RFS EX. 1-1/4" PE MAIN	-----	2'±
RFS EX. 1/2" PE MAIN	-----	47'±
RFS EX. 3/4" STL SERVICE	-----	57'±
RFS EX. 1/2" PE SERVICE	-----	4,869'±
RFS EX. 1/2" PX SERVICE	-----	58'±

PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE RER#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

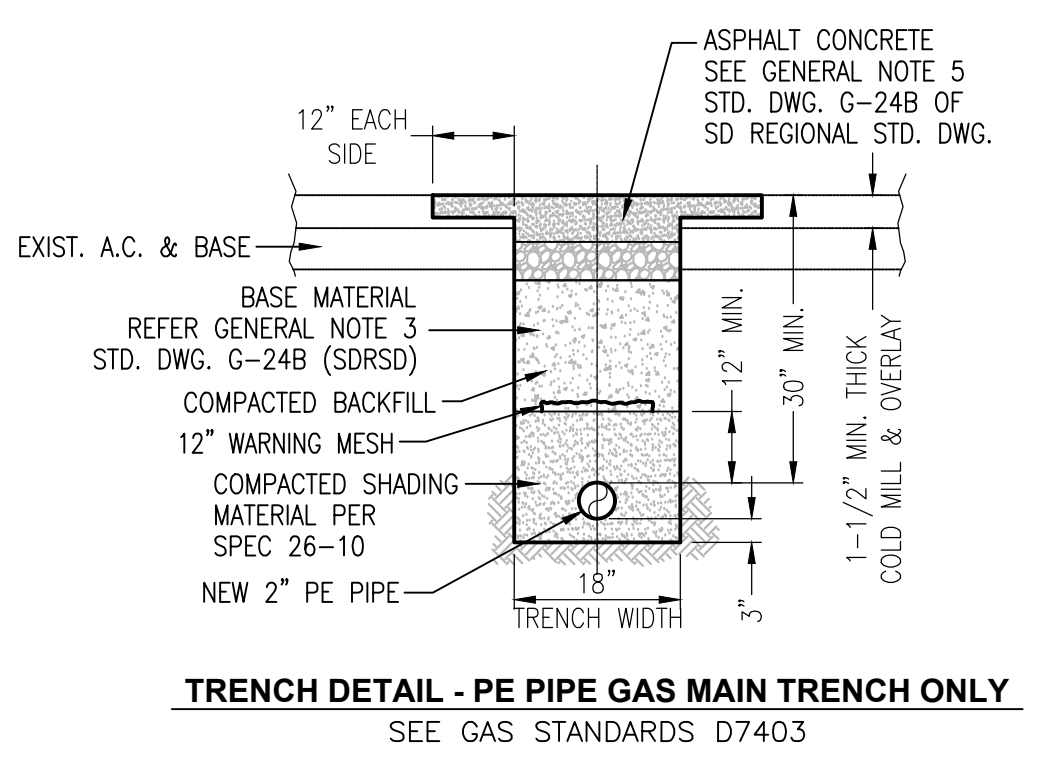
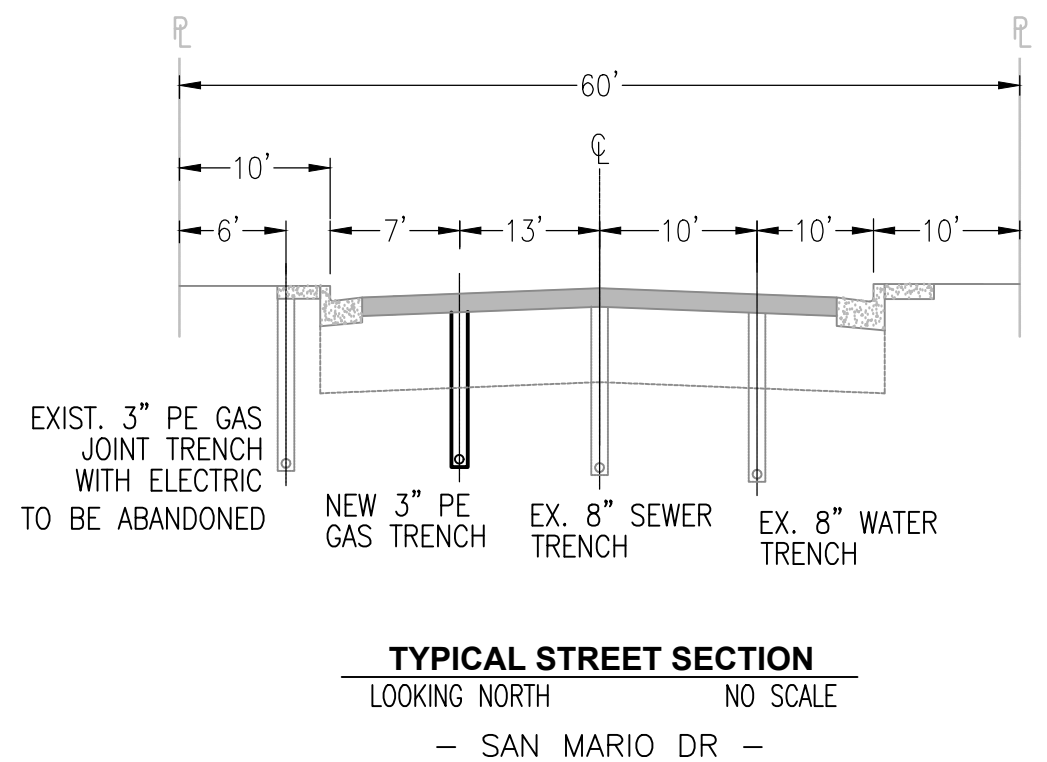
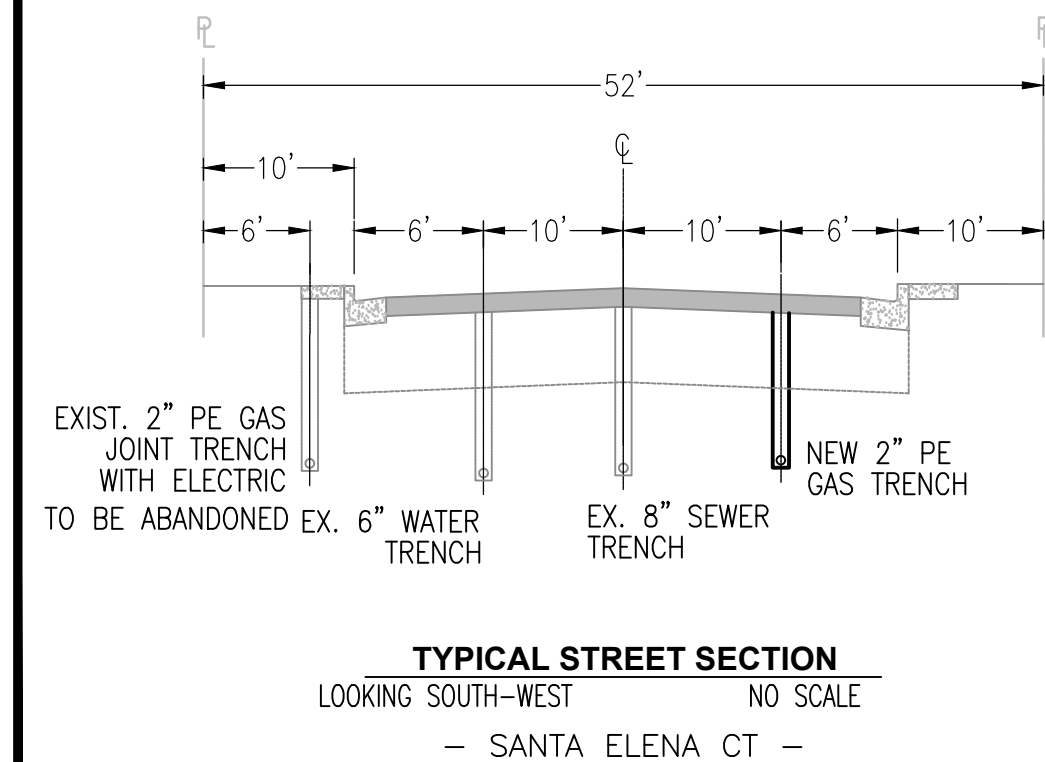
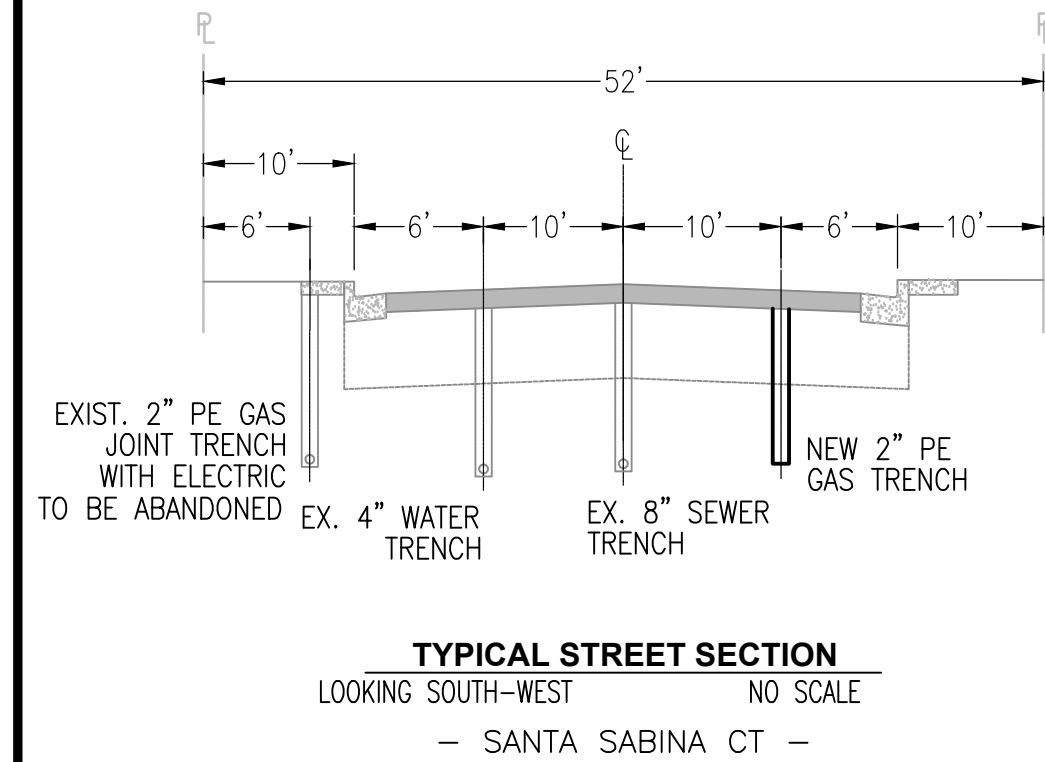
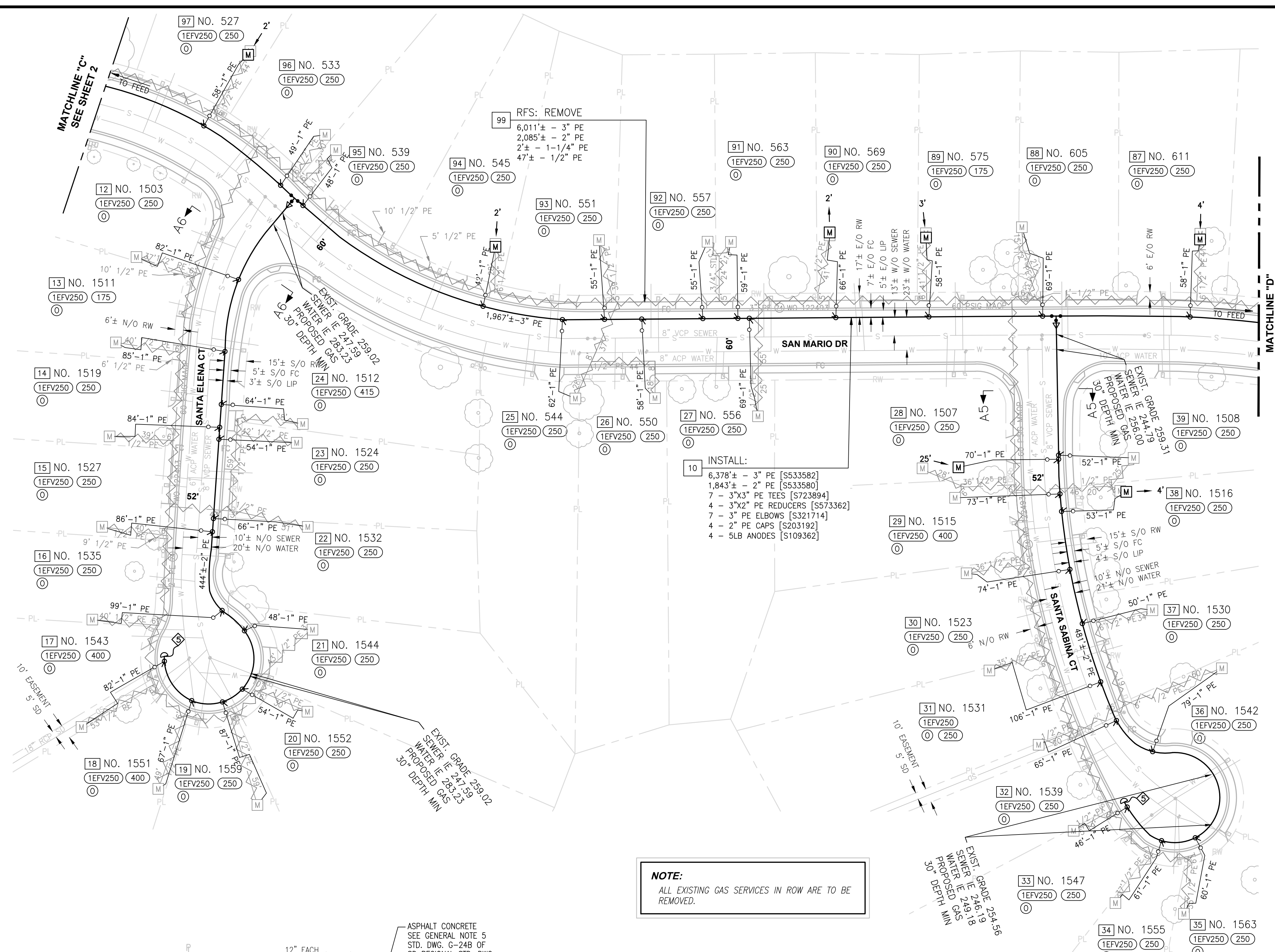
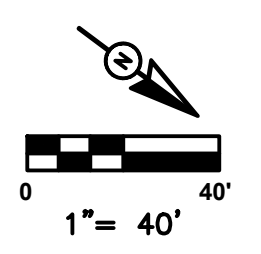
SDGE A Sempra Energy utility

**GAS TECHNICAL SERVICES - MIRAMAR  
GAS DISTRIBUTION SYSTEM**

**INSTALL ± 1050' OF 3" PE GAS MAIN  
ON HIGHLAND DR W/O EL CAMINO REAL**

**COUNTY OF SAN DIEGO**

Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
PLOT SCALE: 1" = 40'	SHEET: 3 OF 7	



**NOTE:**  
ALL EXISTING GAS SERVICES IN ROW ARE TO BE REMOVED.

**ESTIMATED PIPE FOOTAGE**

3" PE MAIN	6,378'±
2" PE MAIN	1,843'±
1" PE SERVICE	5,664'±
RFS EX. 3" PE MAIN	6,011'±
RFS EX. 2" PE MAIN	2,085'±
RFS EX. 1-1/4" PE MAIN	2'±
RFS EX. 1/2" PE MAIN	47'±
RFS EX. 3/4" STL SERVICE	57'±
RFS EX. 1/2" PE SERVICE	4,869'±
RFS EX. 1/2" PX SERVICE	58'±

PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE RER#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

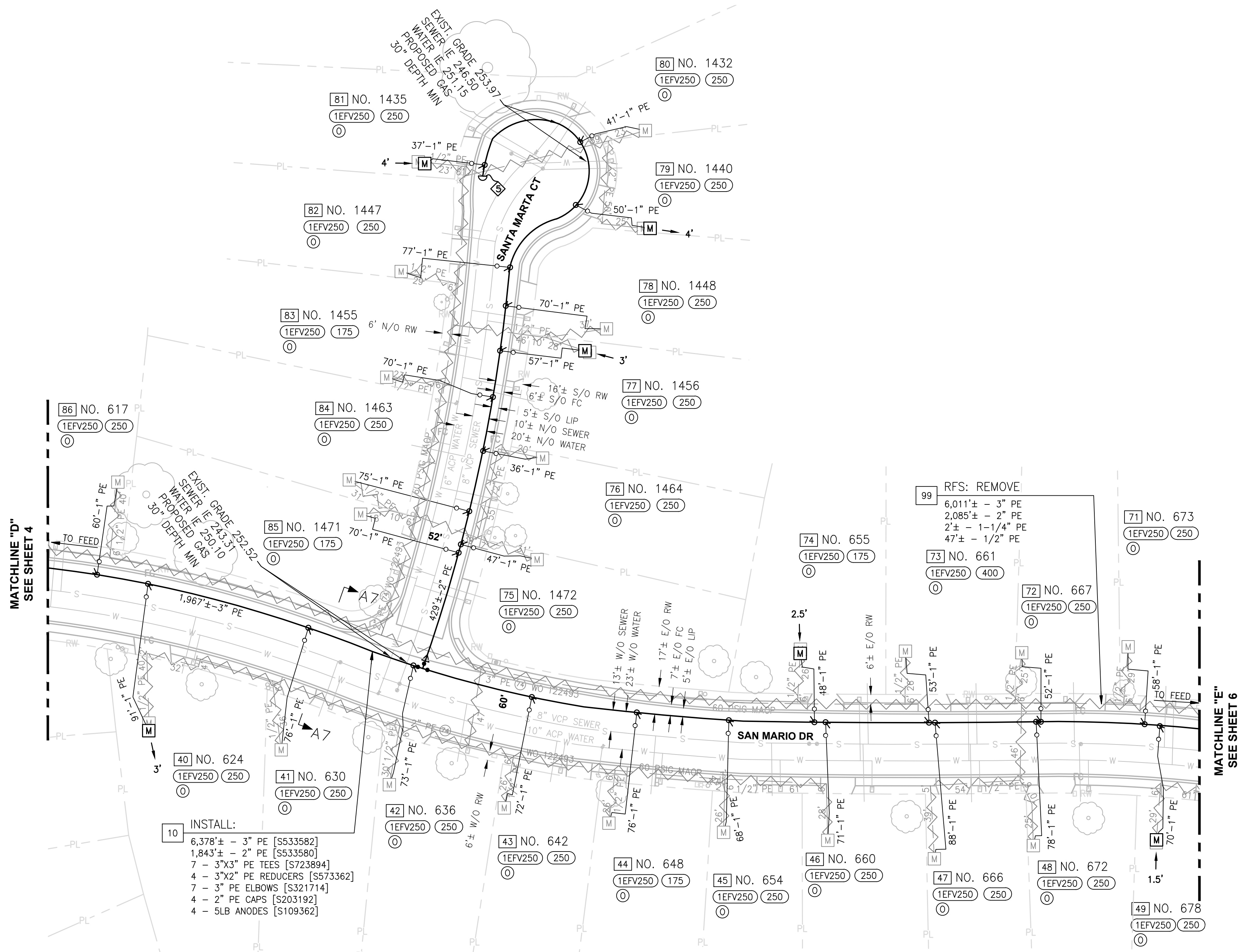
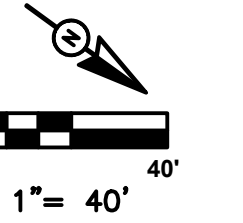
**SDGE** A Sempra Energy utility

**GAS TECHNICAL SERVICES - MIRAMAR  
GAS DISTRIBUTION SYSTEM**

**DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE  
AND 88 SERVICES ON HIGHLAND DR**

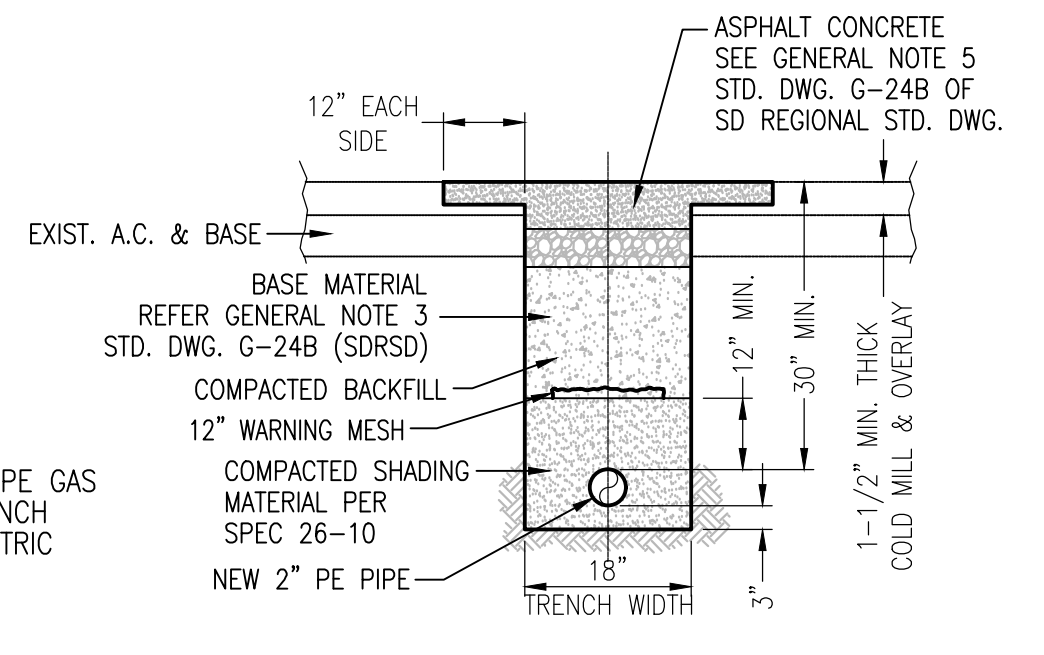
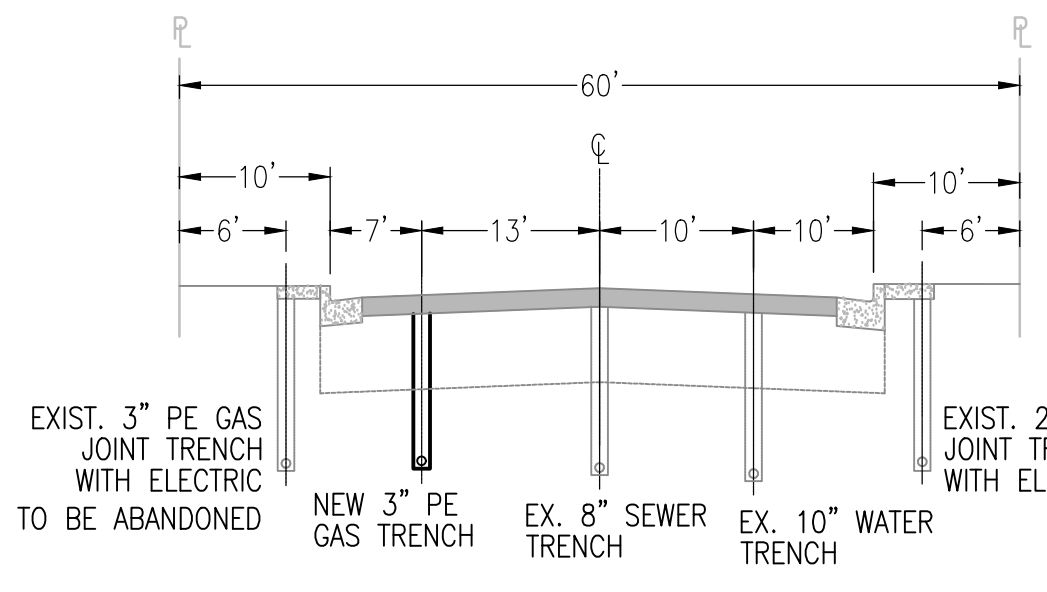
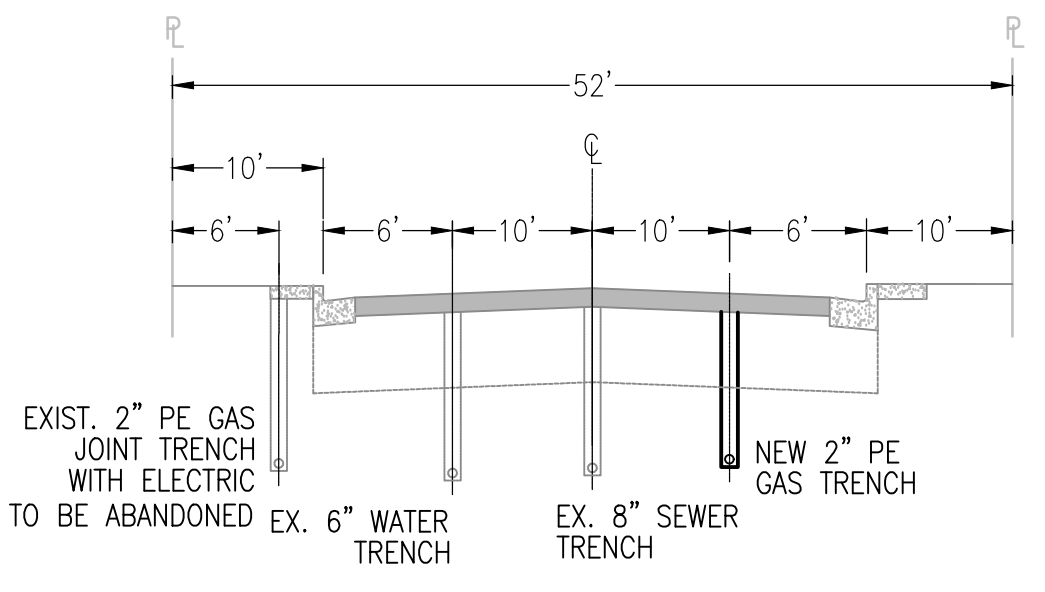
**CITY OF SOLANA BEACH**

Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
Plot Scale: 1" = 40'	Sheet: 4 OF 7	



- 10 INSTALL:**
- 6,378' ± - 3" PE [S533582]
  - 1,843' ± - 2" PE [S533580]
  - 7 - 3"x3" PE TEES [S723894]
  - 4 - 3"x2" PE REDUCERS [S573362]
  - 7 - 3" PE ELBOWS [S321714]
  - 4 - 2" PE CAPS [S203192]
  - 4 - 5LB ANODES [S109362]

**NOTE:**  
ALL EXISTING GAS SERVICES IN ROW ARE TO BE REMOVED.



**ESTIMATED PIPE FOOTAGE**

3" PE MAIN	-----	6,378' ±
2" PE MAIN	-----	1,843' ±
1" PE SERVICE	-----	5,664' ±
RFS EX. 3" PE MAIN	-----	6,011' ±
RFS EX. 2" PE MAIN	-----	2,085' ±
RFS EX. 1-1/4" PE MAIN	-----	2' ±
RFS EX. 1/2" PE MAIN	-----	47' ±
RFS EX. 3/4" STL SERVICE	-----	57' ±
RFS EX. 1/2" PE SERVICE	-----	4,869' ±
RFS EX. 1/2" PX SERVICE	-----	58' ±

PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE RER#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

**GAS TECHNICAL SERVICES - MIRAMAR  
GAS DISTRIBUTION SYSTEM**

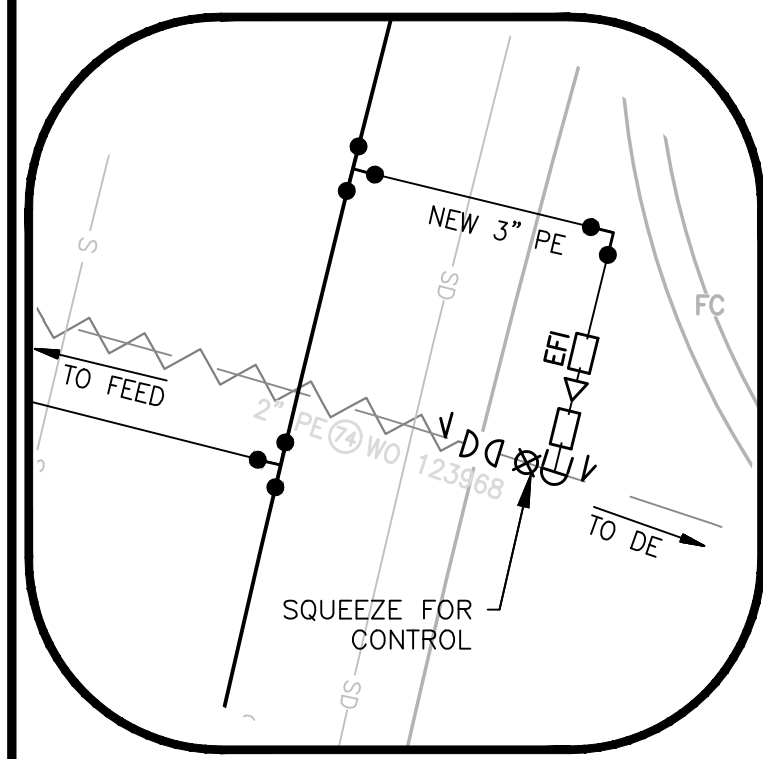
**DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE  
AND 88 SERVICES ON HIGHLAND DR**

**CITY OF SOLANA BEACH**

Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
PLOT SCALE: 1" = 40'	SHEET: 5 OF 7	

**DETAIL "E"**

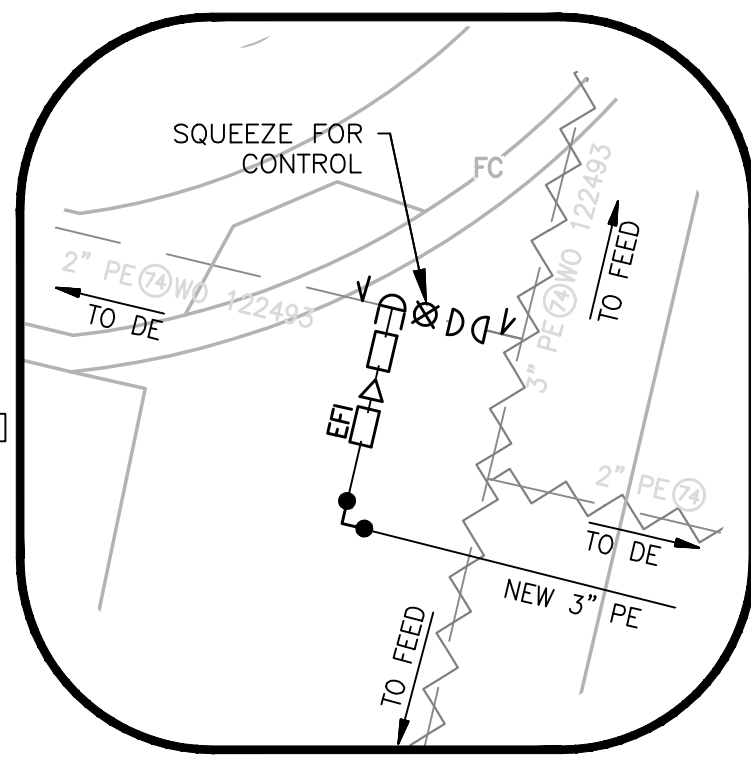
N.T.S.



- 5 INSTALL:**
- 1 - 2"x2" BRANCHING SADDLE (PE) [S609960]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 1 - 3"x3" TEE (PE) [S723894]
  - 2 - 2" CAPS (PE) [S203192]
  - 2 - 2"x1/2" TAPPING TEES (PE) [S723864]
  - 1 - 2" FULL ENCIRCLEMENT CLAMP [S228970]

**DETAIL "F"**

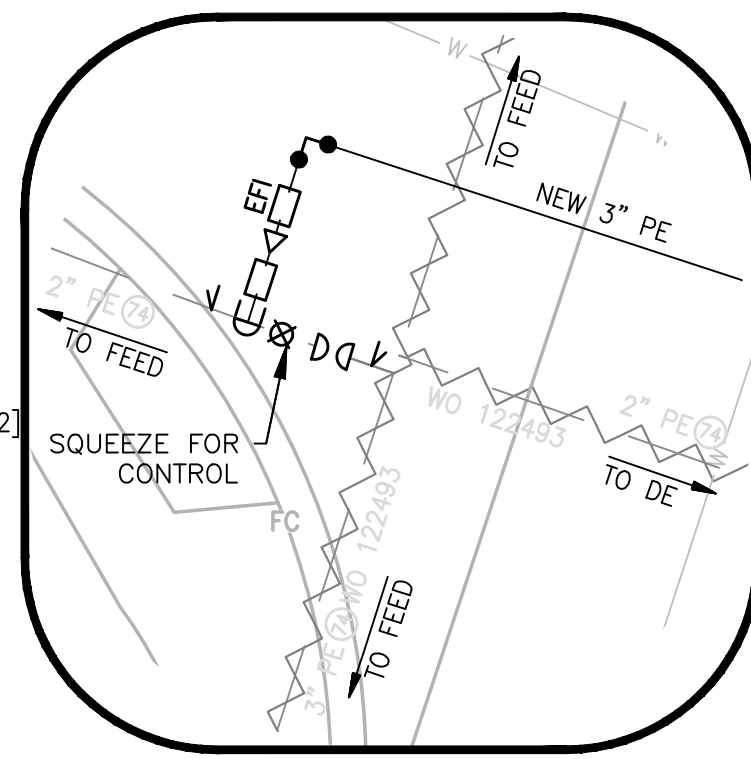
N.T.S.



- 6 INSTALL:**
- 1 - 2"x2" BRANCHING SADDLE (PE) [S609960]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 2 - 2" CAPS (PE) [S203192]
  - 2 - 2"x1/2" TAPPING TEES (PE) [S723864]
  - 1 - 2" FULL ENCIRCLEMENT CLAMP [S228970]

**DETAIL "G"**

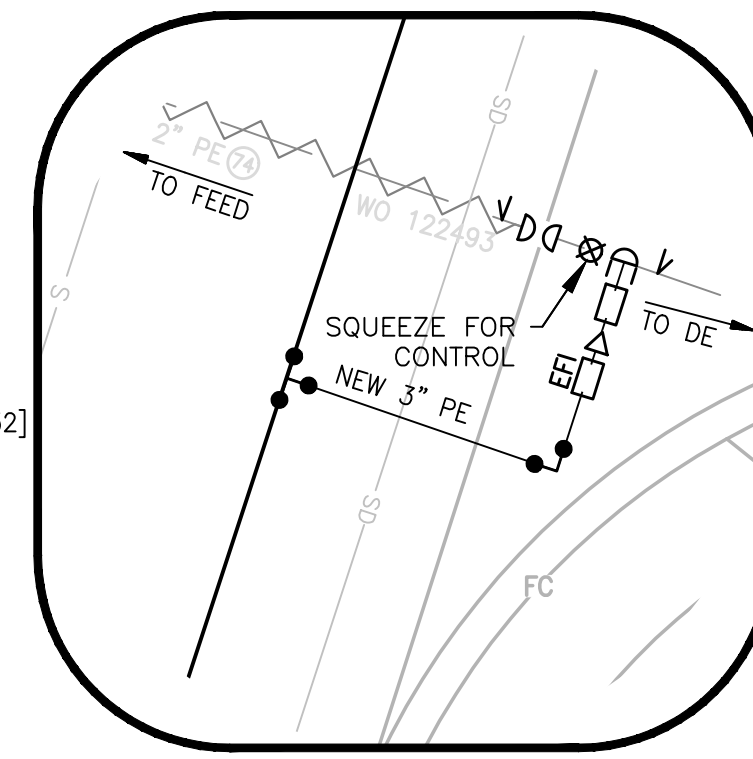
N.T.S.



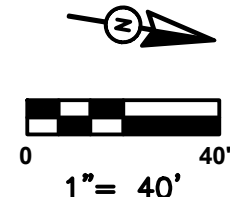
- 7 INSTALL:**
- 1 - 2"x2" BRANCHING SADDLE (PE) [S609960]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 2 - 2" CAPS (PE) [S203192]
  - 2 - 2"x1/2" TAPPING TEES (PE) [S723864]
  - 1 - 2" FULL ENCIRCLEMENT CLAMP [S228970]

**DETAIL "H"**

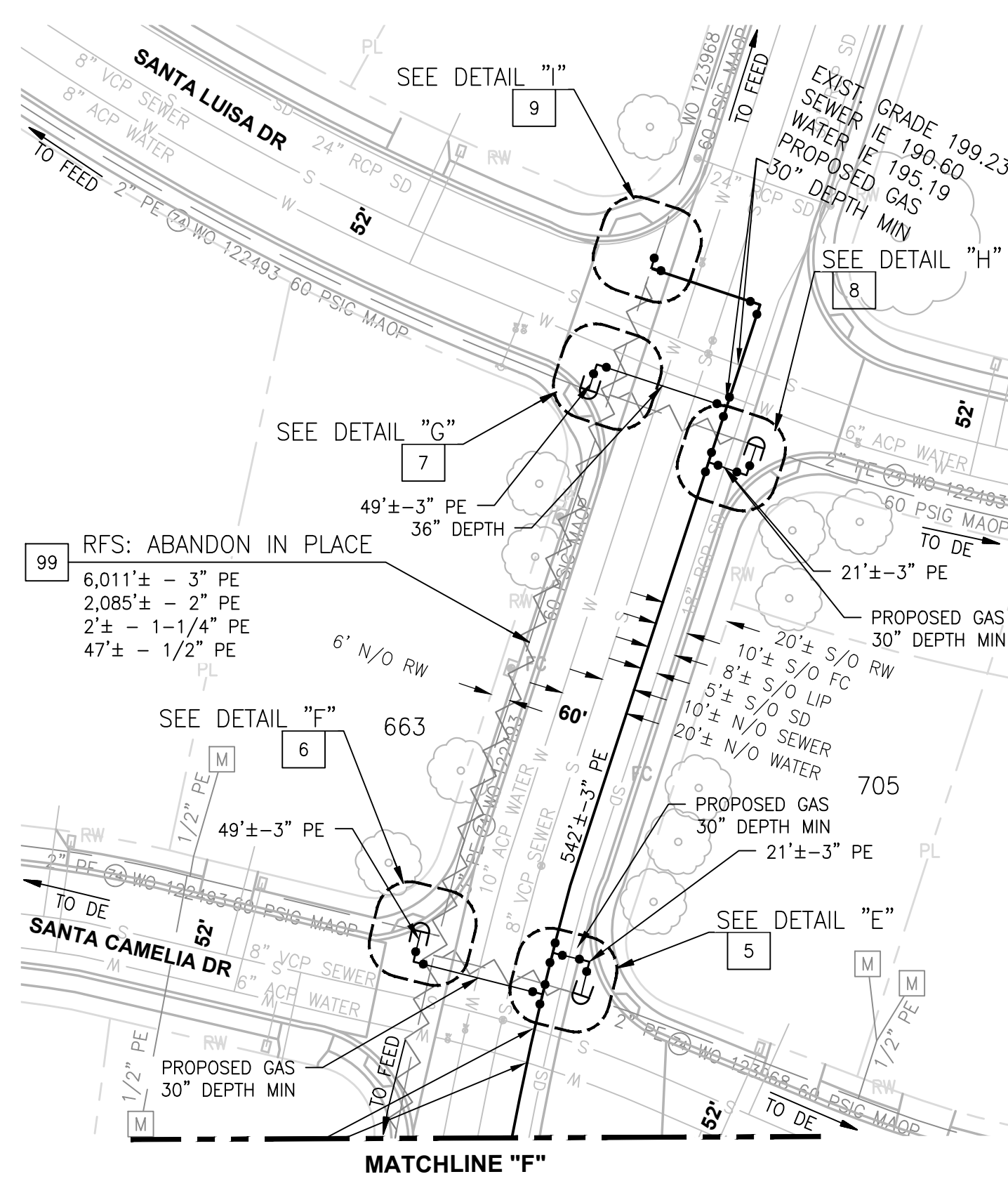
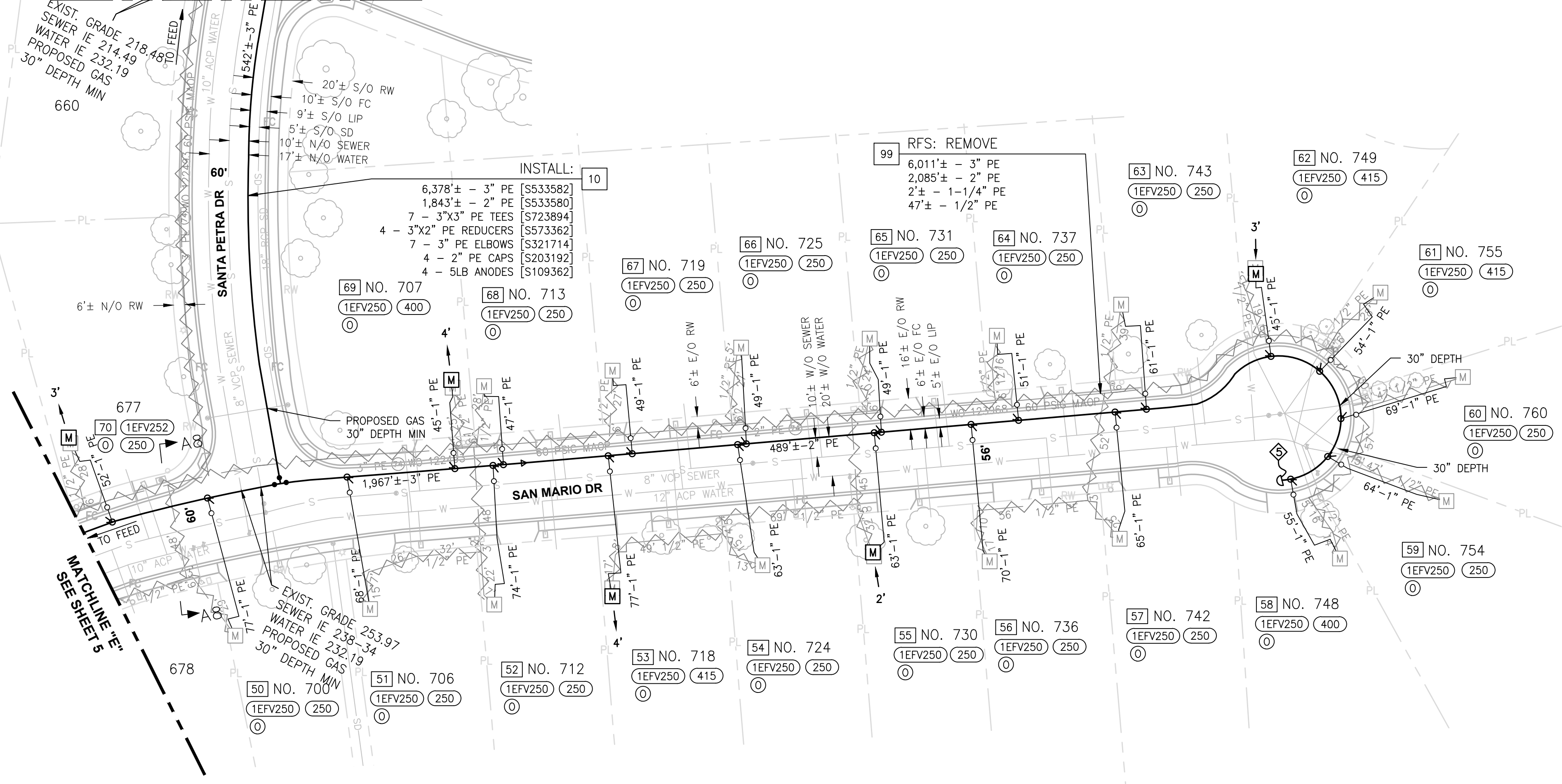
N.T.S.



- 8 INSTALL:**
- 1 - 2"x2" BRANCHING SADDLE (PE) [S609960]
  - 1 - 2" COUPLING (PE) [S281622]
  - 1 - 3"x2" REDUCER (PE) [S573362]
  - 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" ELBOWS (PE) [S321714]
  - 1 - 3"x3" TEE (PE) [S723894]
  - 2 - 2" CAPS (PE) [S203192]
  - 2 - 2"x1/2" TAPPING TEES (PE) [S723864]
  - 1 - 2" FULL ENCIRCLEMENT CLAMP [S228970]

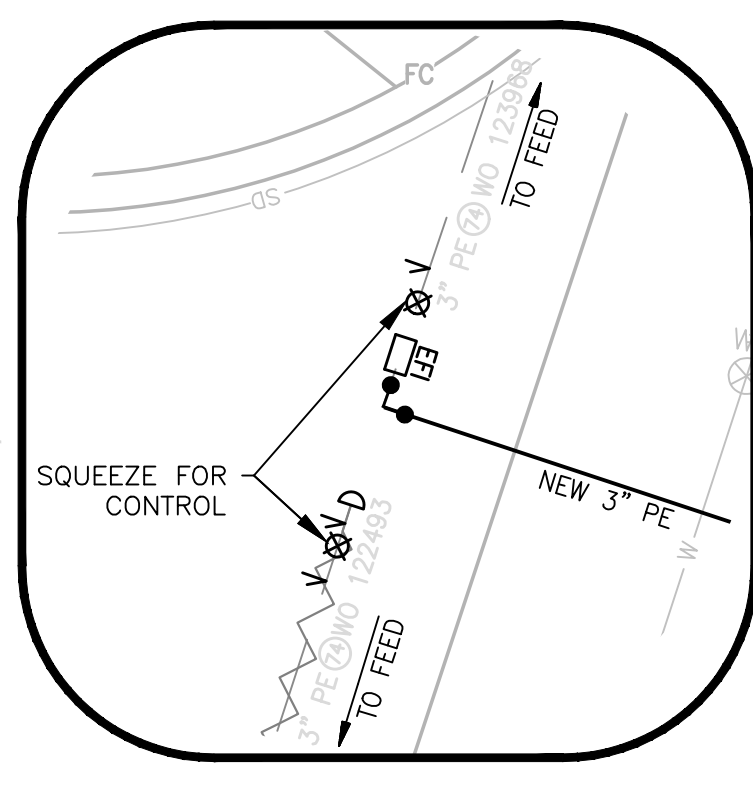


**MATCHLINE "F"**



**DETAIL "I"**

N.T.S.

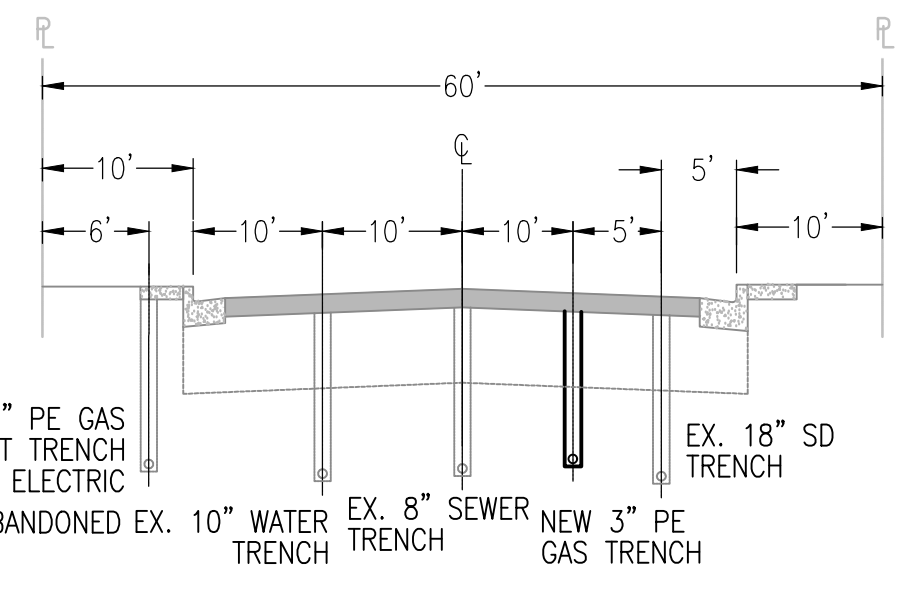


- 9 INSTALL:**
- 1 - 3" ELECTROFUSION COUPLINGS (PE) [S279632]
  - 1 - 3" CAPS (PE) [S203200]
  - 3 - 3"x1/2" TAPPING TEES (PE) [S723868]
  - 2 - 3" FULL ENCIRCLEMENT CLAMP [S228972]
  - 1 - 3" PE ELBOW [S321714]

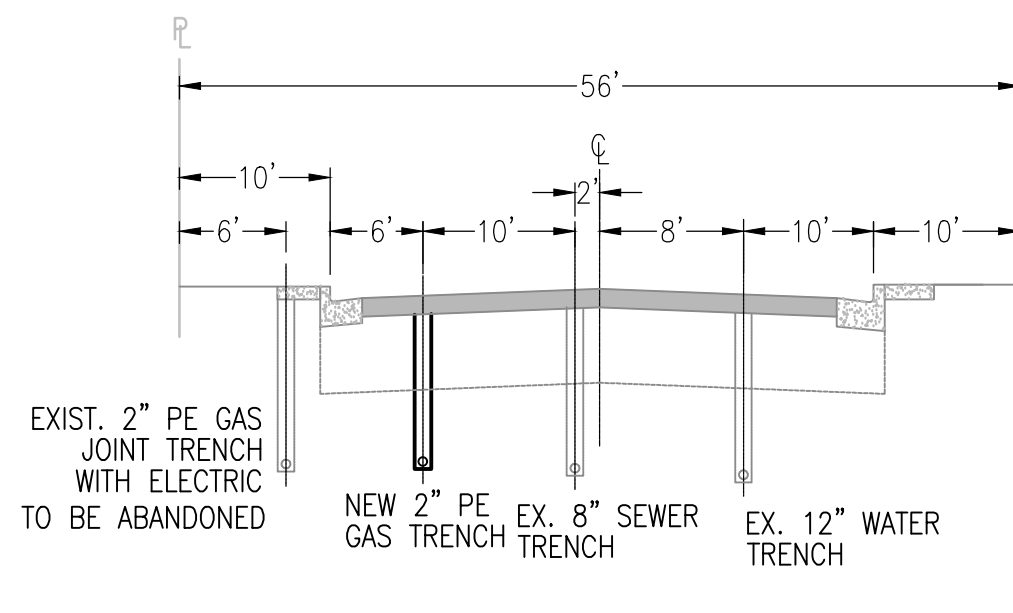
**NOTE:**  
ALL EXISTING GAS SERVICES IN ROW ARE TO BE REMOVED.

**ESTIMATED PIPE FOOTAGE**

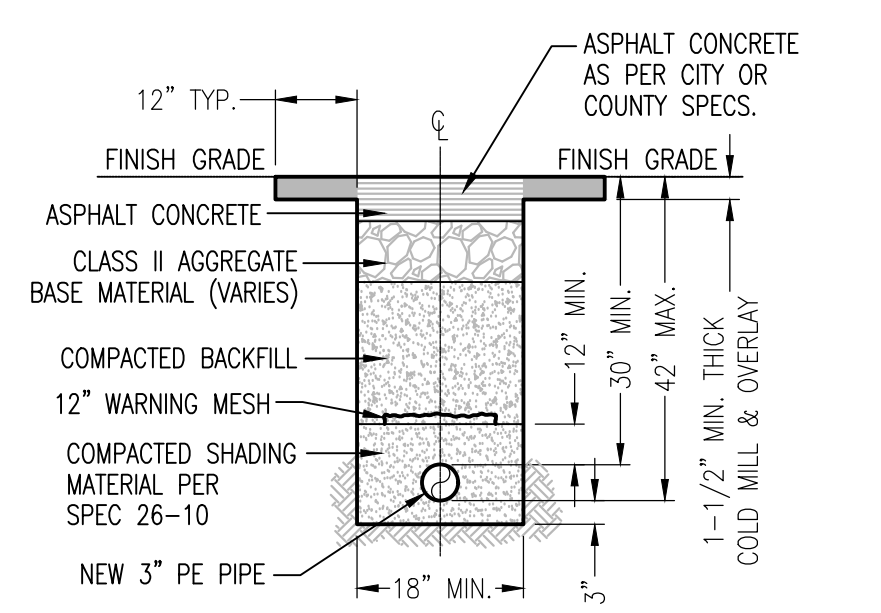
3" PE MAIN	-----	6,378'±
2" PE MAIN	-----	1,843'±
1" PE SERVICE	-----	5,664'±
RFS EX. 3" PE MAIN	-----	6,011'±
RFS EX. 2" PE MAIN	-----	2,085'±
RFS EX. 1-1/4" PE MAIN	-----	2'±
RFS EX. 1/2" PE MAIN	-----	47'±
RFS EX. 3/4" STL SERVICE	-----	57'±
RFS EX. 1/2" PE SERVICE	-----	4,869'±
RFS EX. 1/2" PX SERVICE	-----	58'±



**TYPICAL STREET SECTION**  
LOOKING WEST  
NO SCALE  
- SANTA PETRA CT -



**TYPICAL STREET SECTION**  
LOOKING NORTH  
NO SCALE  
- SAN MARIO DR -



**TRENCH DETAIL - PE PIPE GAS MAIN TRENCH ONLY**  
SEE GAS STANDARDS D7428

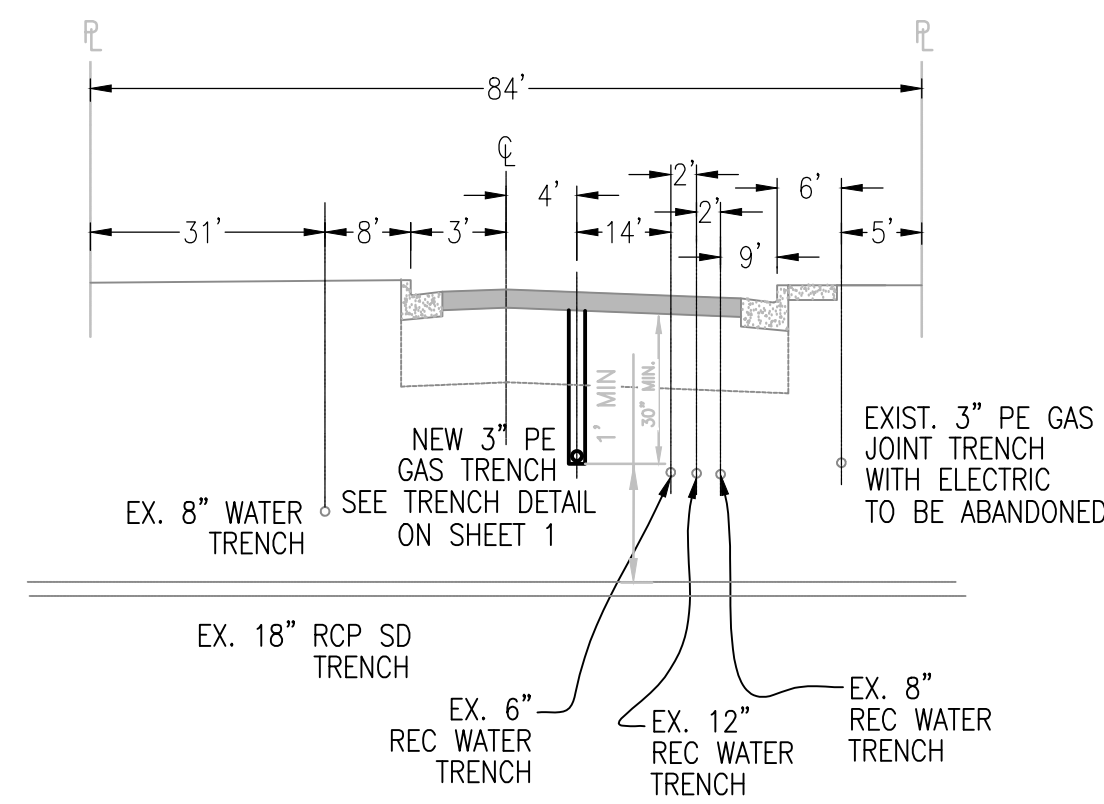
PERMIT NO.	MCU NO.
BUDGET: 546	TB: 1167-J5, J6
CP STATIONS:	
REFERENCE REF#:	DATE
DRAWN: RNA	09/08/17
DESIGNED: SPEC	09/08/17
SYSTEM PROTECTION:	
WELDING INSPECTOR:	
PIPELINE OPERATIONS:	
REGION ENGINEERING: ZM	10/15/20
FUS SUPERVISOR APPROVAL: RB	10/4/20

**GAS TECHNICAL SERVICES - MIRAMAR**  
**GAS DISTRIBUTION SYSTEM**

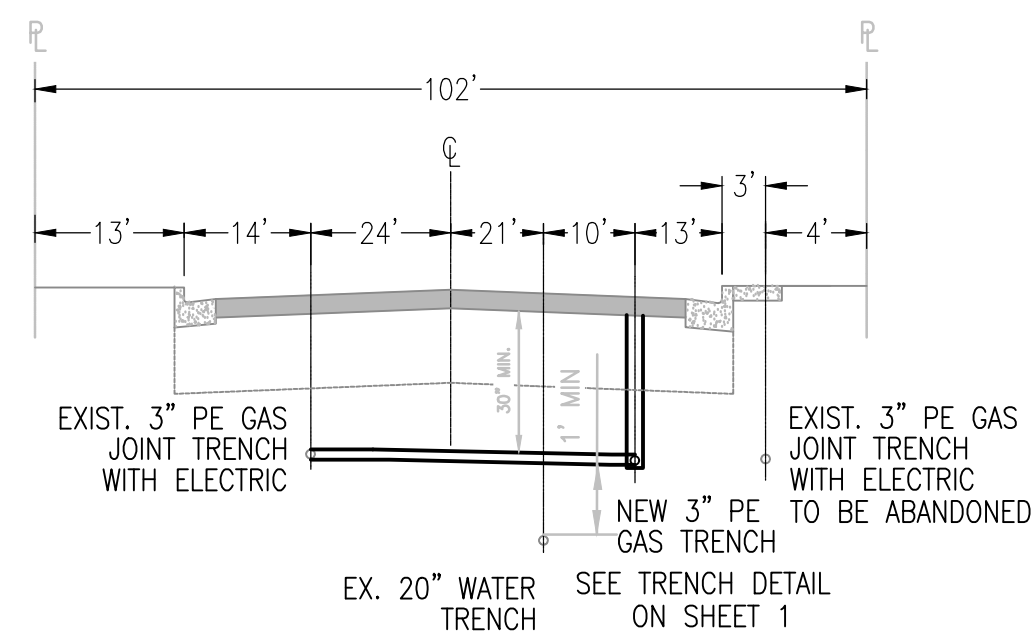
**DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE**  
**AND 88 SERVICES ON HIGHLAND DR**

**CITY ON SOLANA DR**

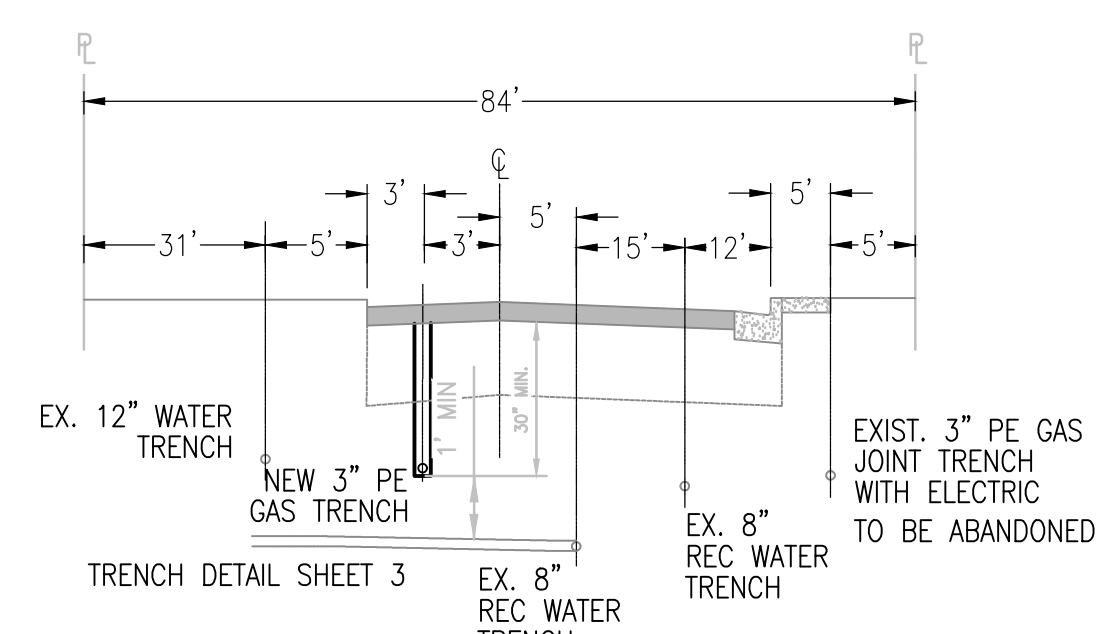
Job Notification No. <b>30000152482</b>	Work Order No. <b>53000317721</b>	Rev. <b>A</b>
PLOT SCALE: 1" = 40'	SHEET: 6 OF 7	



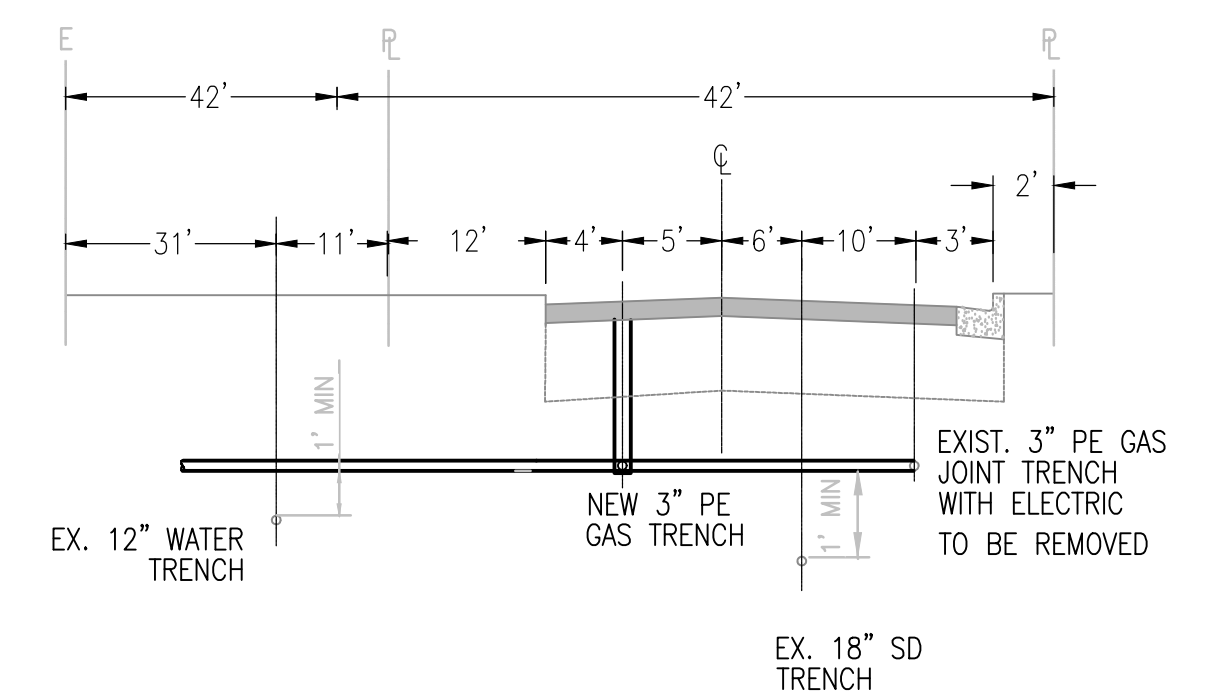
**TYPICAL STREET SECTION A2-A2**  
LOOKING SOUTH  
NO SCALE  
- HIGHLAND DR -



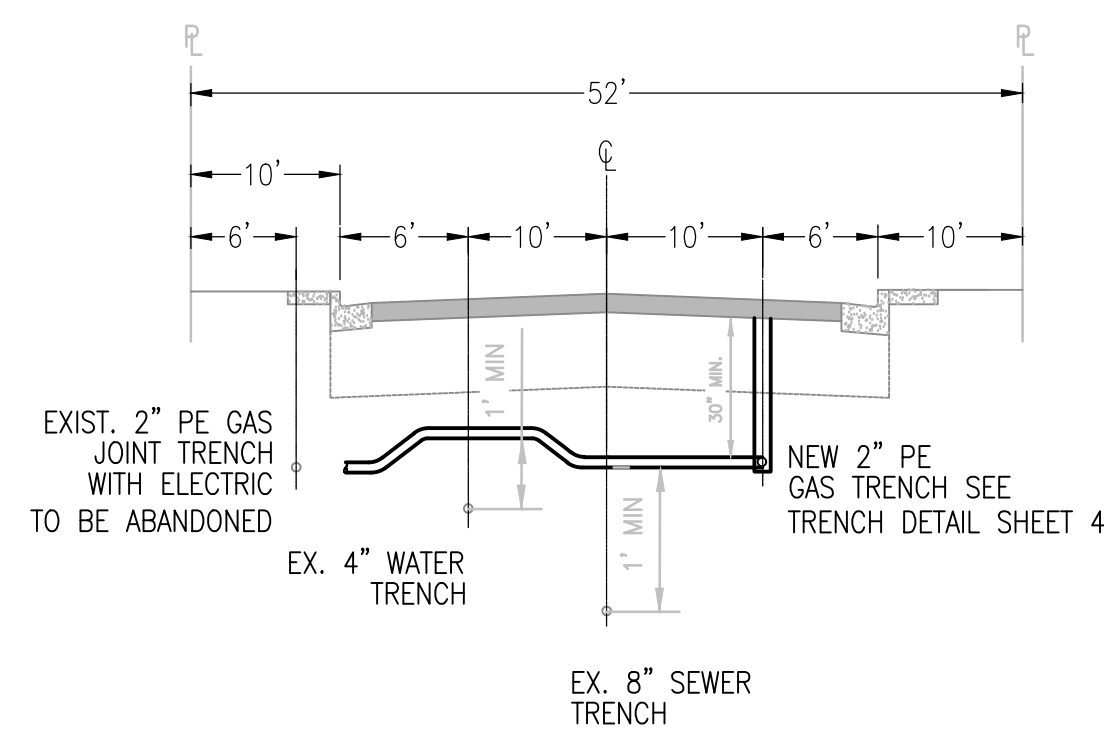
**TYPICAL STREET SECTION A1-A1**  
LOOKING WEST  
NO SCALE  
- LOMAS SANTA FE DR -



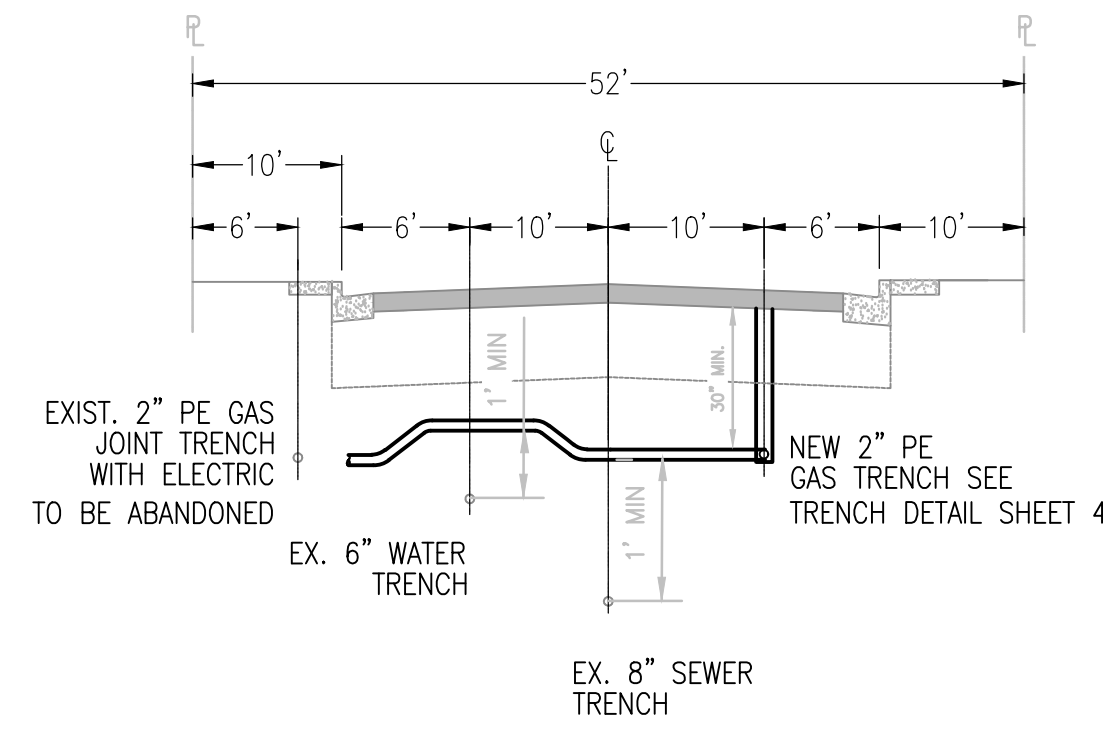
**TYPICAL STREET SECTION A3-A3**  
LOOKING SOUTH  
NO SCALE  
- HIGHLAND DR -



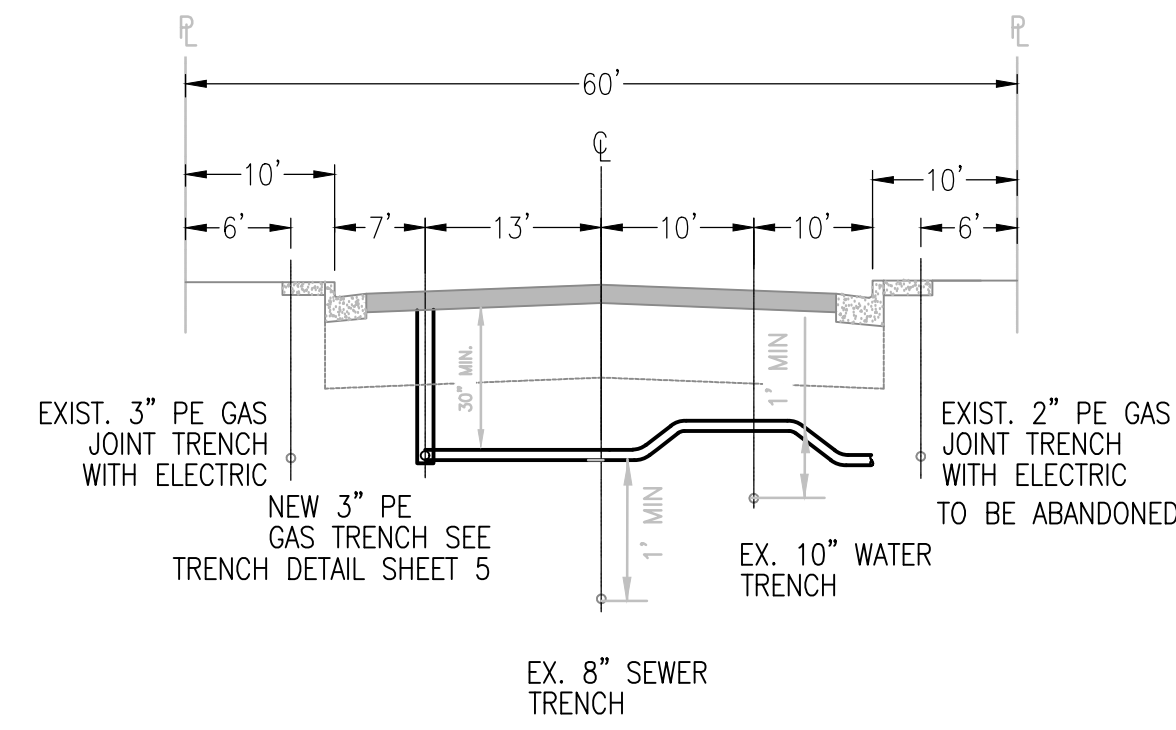
**TYPICAL STREET SECTION A4-A4**  
LOOKING SOUTH  
NO SCALE  
- HIGHLAND DR -



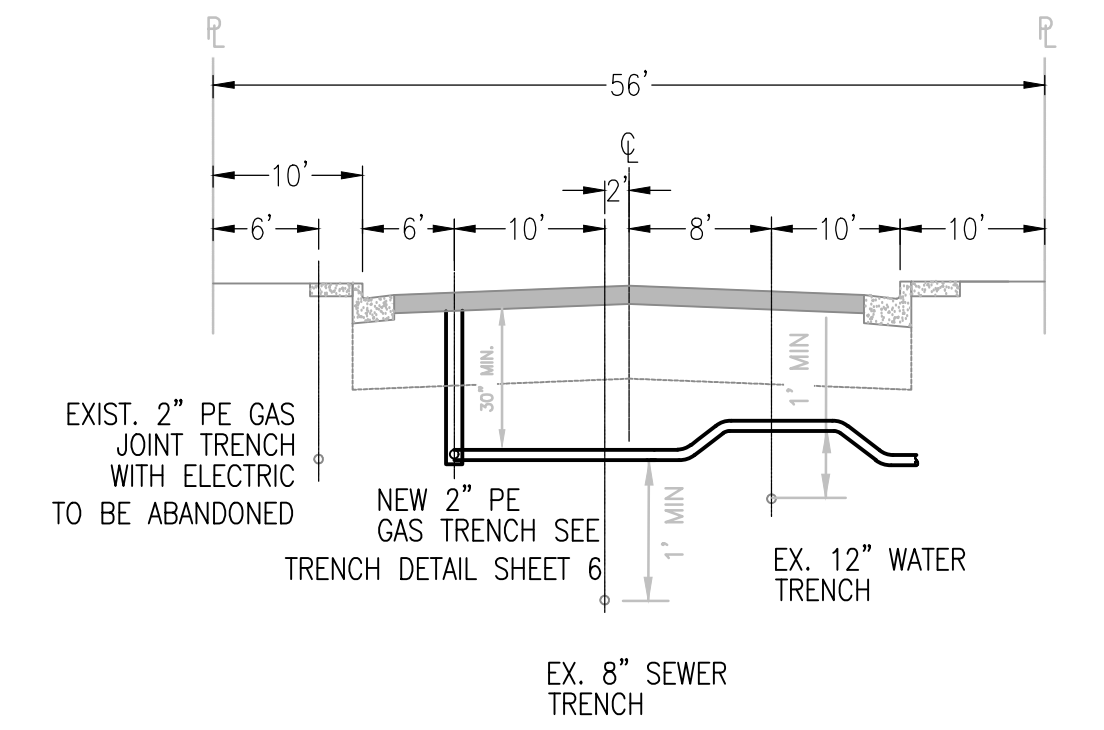
**TYPICAL STREET SECTION A5-A5**  
LOOKING SOUTH-WEST  
NO SCALE  
- SANTA SABINA CT -



**TYPICAL STREET SECTION A6-A6**  
LOOKING SOUTH-WEST  
NO SCALE  
- SANTA ELENA CT -



**TYPICAL STREET SECTION A7-A7**  
LOOKING NORTH  
NO SCALE  
- SAN MARIO DR -



**TYPICAL STREET SECTION A8-A8**  
LOOKING NORTH  
NO SCALE  
- SAN MARIO DR -

PERMIT NO.	MCU NO.	<b>SDGE</b> A Sempra Energy utility	
BUDGET: 546	TB: 1167-J5, J6	GAS TECHNICAL SERVICES - MIRAMAR GAS DISTRIBUTION SYSTEM	
REFERENCE RER#:	DATE	<b>DIMP 583481 INSTALL 6,378' 3" PE AND 1,843' 2" PE AND 88 SERVICES ON HIGHLAND DR</b>	
DRAWN: RNA	09/08/17	CITY ON SOLANA DR	
DESIGNED: SPEC	09/08/17	Job Notification No.	Work Order No.
SYSTEM PROTECTION: ##	##	<b>300000152482</b>	<b>530000317721</b>
WELDING INSPECTOR: ##	##	PLOT SCALE: 1" = 40'	SHEET: 7 OF 7
PIPELINE OPERATIONS: ##	##	Rev. <b>A</b>	
REGION ENGINEERING: ZM	10/15/20		
FUS SUPERVISOR APPROVAL: RB	10/4/20		