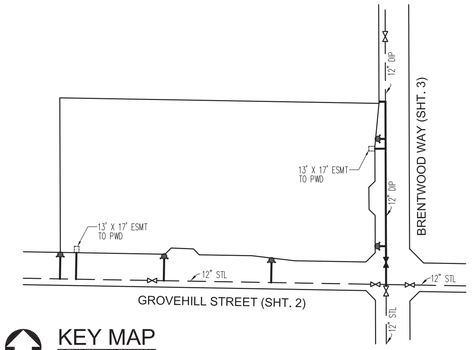
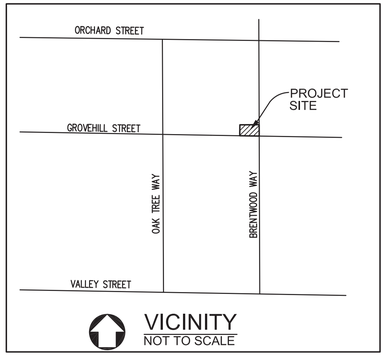
WATER SYSTEM QUANTITIES

DESCRIPTION	SHT 2	SHT 3	TOTAL	UNITS
12" D.I. PIPE, CL350, DCML.		602	602	LF
8 " STL. PIPE, 10 GA, CMLC	296	50	346	LF
1-1/2" METERED SVC PER PWD STD W-1 WITH APPROVED BACKFLOW DEVICE	6		6	EA
12" X 8" KOPPL CN-120 WELD-ON NOZZLE W/FLG'D OUTLET	4		4	EA
12" X 8" MJ X FLG TEE, D.I., CL350, DCML		1	1	EA
12" X 6" MJ X FLG TEE, D.I., CL350 DCML		2	2	EA
12" FLG'D BUTTERFLY VALVE, CL150, W/ VALVE BOX PER P.W.D. STD. W-5		1	1	EA
8" FLG'D TAPPING VALVE, CL150, W/ VALVE BOX PER P.W.D. STD. W-5	4		4	EA
8" FLG'D GATE VALVE, CL150, W/ VALVE BOX PER P.W.D. STD. W-5		1	1	EA
12" FLG INSULATION KIT		1	1	EA
8" FLG INSULATION KIT		1	1	EA
8" SLIP-ON WELD FLGS	9	4	13	EA
8" X 6" FLG'D 90° REDUCING ELBOW, STL, CMLC	3		3	EA
8" FLG'D 90° ELBOW, STL, CMLC	2	2	4	EA
12" MJ X FLG ADAPTER, D.I., CL350, DCML		5	5	EA
12" TEST PLATE		2	2	EA
6" X 4" X 2-1/2" FIRE HYDRANT COMPLETE PER PWD STD. W-2.	3		3	EA
6" X 4" X 2-1/2" FIRE HYDRANT COMPLETE PER PWD STD. W-2A.		2	2	EA
8" X 4" COMPOUND METER AND VAULT (SEE SHEET 4 FOR MATERIAL)	1		1	EA
8" USC APPROVED REDUCED-PRESSURE PRINCIPLE BACKFLOW PREVENTER.	1	1	2	EA
8" REDUCED PRESSURE DETECTOR ASSEMBLY, FEBCO MODEL 826YD O.A.E.				EA
CONCRETE THRUST BLOCK PER P.W.D. W-4	AS REQUIRED			EA



KEY MAP
SCALE: 1"=200'



VICINITY
NOT TO SCALE

GENERAL NOTES

1. WATER SYSTEM TO BE CONSTRUCTED PER PALMDALE WATER DISTRICT (PWD) STANDARD SPECIFICATIONS, LATEST REVISION. COPIES OF SAID SPECIFICATIONS ARE ON FILE AT BOTH PALMDALE WATER DISTRICT, 2029 EAST AVE Q. PALMDALE, CA 93550, AND AT THE OFFICE OF THE CITY ENGINEER AT THE CITY HALL PUBLIC SERVICE BUILDING, 38250 SIERRA HIGHWAY, PALMDALE, CA 93550.
2. THE CONTRACTOR SHALL NOTIFY PALMDALE WATER DISTRICT IN WRITING AT 2029 EAST AVENUE Q, PALMDALE, CA 93550 (661-947-4111) AND THE CITY ENGINEER (661-267-5272) AT LEAST 48 HOURS BEFORE STARTING ANY WATER SYSTEM CONSTRUCTION TO BE PERFORMED HEREUNDER.
3. THE CONTRACTOR IS REQUIRED TO OBTAIN CITY AND COUNTY PUBLIC ROAD AND CALTRANS ENCROACHMENT PERMITS FOR WATER SYSTEM FACILITES.
   ALL EXCAVATIONS FOR WATER SYSTEM CONTRUCTION SHALL BE BACKFILLED, COMPACTED AND FINISHED IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE PERMIT.
   THE MINIMUM COMPACTION REQUIREMENTS FOR ANY EXCAVATION ARE: 90% RELATIVE COMPACTION FROM SUBGRADE TO THE BOTTOM OF EXCAVATION,
   CONTRACTOR SHALL SUBMIT TO THE PALMDALE WATER DISTRICT COMPACTION REPORTS FROM A CERTIFIED SOILS LABORATORY CONFIRMING TRENCH COMPACTION. A MINIMUM OF _____ TEST(S) SHALL BE CONDUCTED.
4. THE CONTRACTOR SHALL CONTACT ALL OTHER UTILITIES INCLUDING SBC (805) 583-6585, SOUTHERN CALIFORNIA EDISON (661) 945-9317, SOUTHERN CALIFORNIA GAS (818) 353-8511, AND ADELPHIA (661)273-1890 FOR LOCATIONS OF THEIR EXISTING AND PROPOSED FACILITIES PRIOR TO EXCAVATIONS IN THIS AREA.
5. THE PLAN CHECK DEPOSIT FOR THIS PROJECT IS $_____, THIS FEE MUST BE PAID TO THE DISTRICT PRIOR TO PLAN CHECK ACTIVITY.
6. THE INSPECTION DEPOSIT FOR THIS PROJECT IS $_____, THIS AMOUNT MUST BE PAID TO THE DISTRICT BEFORE BEGINNING CONSTRUCTION ACTIVITY.
7. THE FORESTER AND THE FIRE WARDEN HAVE REQUIRED THAT THE FIRE FLOW FOR PUBLIC HYDRANTS FOR THIS PROJECT BE____GPM. THE REQUIRED FIRE FLOW FOR PRIVATE ON-SITE HYDRANTS IS____GPM. FIRE FLOW SHALL BE OVER AND ABOVE MAXIMUM DAILY DOMESTIC DEMAND FOR A DURATION OF _ HOURS AT A MINIMUM PRESSURE OF 20 PSI.
8. THE FRONT FOOTAGE FEE FOR PM 81770 IS $_____, THE ASSESSMENT PARITY CHARGES ARE $_____, THE CAPITAL IMPROVEMENT CHARGE FOR THIS PROJECT IS $_____, THESE AMOUNTS MUST BE PAID TO THE DISTRICT PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITY.
9. IF CHANGES TO THESE CONSTRUCTION PLANS ARE REQUIRED DUE TO FIELD CONDITIONS WHICH ARE NOT SHOWN ON THE PLANS, SUCH PROPOSED CHANGES SHALL BE SUBMITTED BY THE ENGINEER OF RECORD FOR REVIEW BY THE DISTRICT PRIOR TO CONSTRUCTION.
10. METERS ARE TO BE PURCHASED THROUGH PALMDALE WATER DISTRICT.
11. AS-BUILT DRAWINGS MUST BE SUBMITTED TO THE DISTRICT PRIOR TO THE ISSUANCE OF A FIRE LETTER.
12. THE DEVELOPER IS REQUIRED TO APPLY FOR WATER SERVICE FOR ALL PROPERTIES SHOWN HEREON PRIOR TO ACTIVATION OF THE PROJECT WATER SYSTEM. ALL SERVICES WILL BE BILLED IN ACCORDANCE WITH PALMDALE WATER DISTRICT POLICIES AND REGULAR RATES FROM THE SYSTEM ACTIVATION DATE.

GENERAL NOTES

1. FITTINGS REFLECT THE USE OF DUCTILE IRON PIPE. IF AN ALTERNATIVE PIPE IS USED, THE FITTINGS MUST REFLECT THE USE OF SAID PIPE.
2. ALL MJ FITTINGS REQUIRE THE USE OF RETAINING GLANDS.
3. ALL BRANCH AND RUN FITTINGS TO BE RESTRAINED BY HARNESS SYSTEM PER P.W.D. STD. W-18-23.
4. CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR, AND EQUIPMENT FOR TESTING, FLUSHING, AND DISINFECTION OF PIPELINE. BLOW-OFFS TO BE PLUGGED WITH SOLID IRON PLUG AFTER TIE-IN.
5. PROPOSED WATER MAIN SHALL MAINTAIN A MINIMUM OF 48" COVER FROM ANY PROPOSED OR FUTURE T.C. GRADE. WHERE EXISTING GRADE FALLS BELOW FUTURE T.C. GRADE, CONTRACTOR TO PROVIDE COMPACTED FILL TO MAINTAIN A MINIMUM 48" OF COVER AT FUTURE T.C. GRADE A MINIMUM OF TEN FEET (10') EITHER SIDE OF PROPOSED MAINLINE PRIOR TO INSTALLATION OF MAIN.
6. CONTRACTOR TO POT HOLE ALL UTILITY CROSSINGS AND TIE-IN POINTS PRIOR TO CONSTRUCTION TO VERIFY LOCATION, DEPTH AND CONFIGURATION OF EXISTING FACILITIES.
7. PRESSURE REGULATORS ARE REQUIRED FOR ALL SERVICES WHERE SYSTEM PRESSURE MEETS OR EXCEEDS 80 PSI. REGULATORS TO BE INSTALLED BY THE DEVELOPER AND MAINTAINED BY THE PROPERTY OWNER.
8. NEW SERVICES ARE SHOWN AT APPROXIMATE LOCATIONS. ULTIMATE LOCATIONS WILL BE FIELD DETERMINED BY DISTRICT INSPECTORS.
9. ALL AFFECTED CUSTOMERS MUST BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF DOWN TIME. DOWN TIME NOT TO EXCEED 4 HOURS.
10. ALL SALVAGEABLE FITTINGS SHALL BE RETURNED TO P.W.D. YARD.
11. ALL TIE-INS AND SHUTDOWNS INVOLVING EXISTING SYSTEM WILL BE COORDINATED WITH AND PERFORMED UNDER P.W.D. SUPERVISION.

NOTE: STATIONING SHOWN ON THESE PLANS IS RELATIVE TO STREET CENTERLINE SHOWN ON STREET IMPROVEMENT PLANS

BENCH MARK

PALMDALE QUAD

BM _____ El. _____ NAVD 88 1998 Adjustment

DESCRIPTION

UNDERGROUND UTILITIES

BEFORE STARTING EXCAVATION, THE CONTRACTOR SHOULD CONTACT:

THE GENERAL TELEPHONE COMPANY,
UNDERGROUND SERVICE ALERT
TELEPHONE: 1-800-422-4133

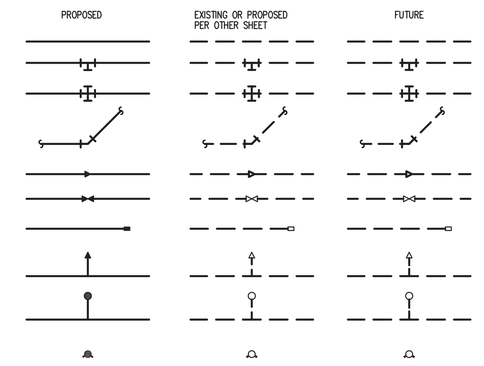
THE SOUTHERN CALIFORNIA EDISON COMPANY
MR DAVE RUPP
TELEPHONE: 1-661-945-9335

SBC
UNDERGROUND SERVICE ALERT
TELEPHONE: 510-645-2929

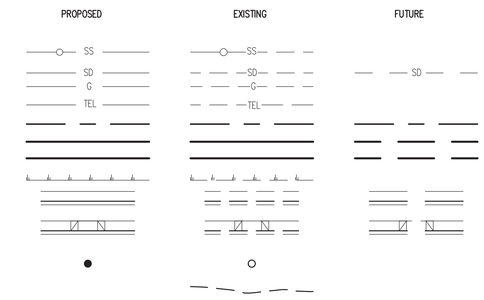
THE SOUTHERN CALIFORNIA GAS COMPANY
MR. PHIL CHURCH
TELEPHONE: 1-661-948-1526

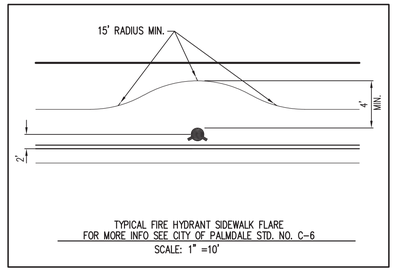
LEGEND

WATER



UTILITIES AND STREET IMPROVEMENTS





TYPICAL FIRE HYDRANT SIDEWALK FLARE
FOR MORE INFO SEE CITY OF PALMDALE STD. NO. C-6
SCALE: 1" =10'

	RECORD RCE		REVISIONS BLOCK	PWD	
NO.	BY	DATE	REVISION DESCRIPTION	APPR.	DATE
△					

DEVELOPER INFO
NAME, ADDRESS, PHONE

REGISTERED CIVIL ENGINEER STAMP

ENGINEERING FIRM INFORMATION
NAME, ADDRESS, PHONE, FAX, ETC.

NAME DATE

PALMDALE WATER DISTRICT

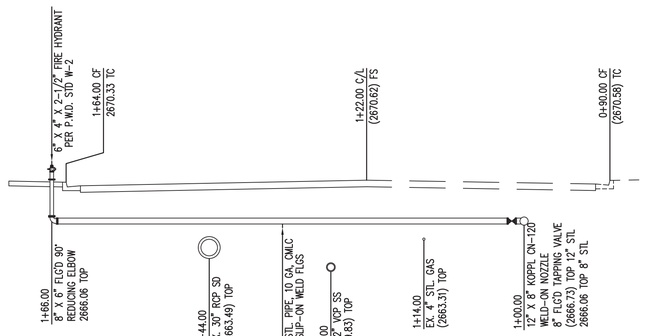
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PALMDALE WATER DISTRICT DATE

WATER SYSTEM IMPROVEMENTS

PM NO. 81770
MATERIAL LIST, GENERAL NOTES, KEY MAP, VICINITY MAP, BENCH MARK, LEGEND

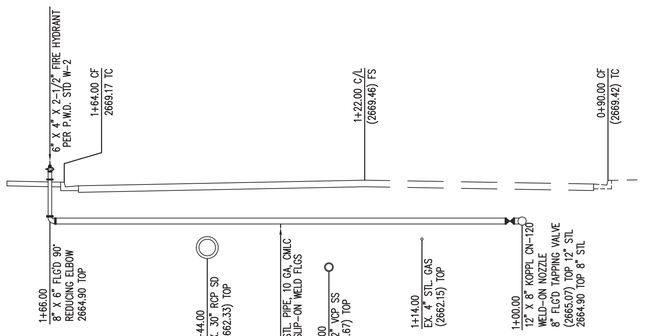
WSM NO. 46-87	PM NO. 81770	SHEET: 1 OF 5



FIRE HYDRANT CONNECTION

10+64.61 GROVEHILL STREET

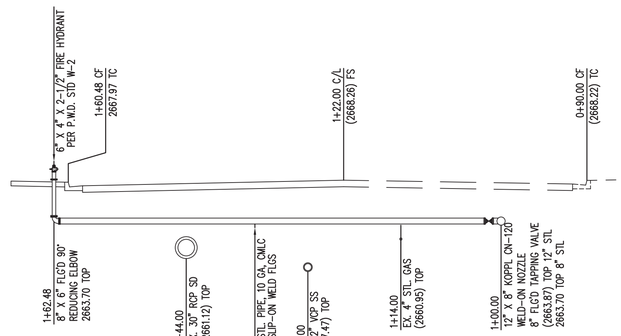
SCALE: 1" = 10'



FIRE HYDRANT CONNECTION

13+54.88 GROVEHILL STREET

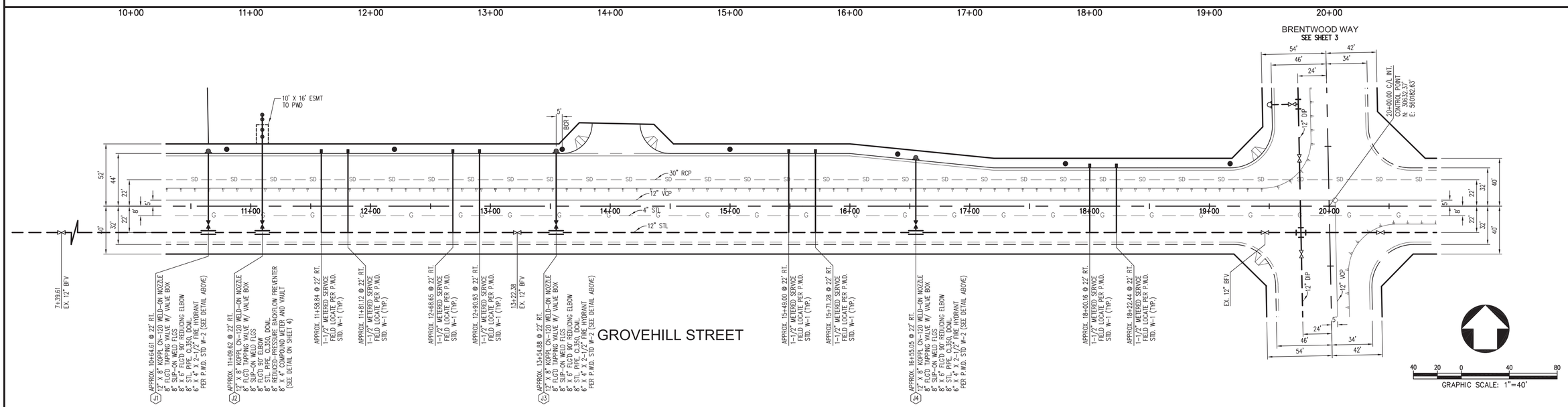
SCALE: 1" = 10'



FIRE HYDRANT CONNECTION

16+55.01 GROVEHILL STREET

SCALE: 1" = 10'



J1 - J4 UNDER DISTRICT SUPERVISION HOT TAP EX. 12" STL. AND JOIN WITH MATERIAL AS SHOWN.

NO.	RECORD RCE BY	RECORD RCE DATE	REVISIONS BLOCK REVISION DESCRIPTION	PWD APPR.	PWD DATE
△					

DEVELOPER INFO
NAME, ADDRESS, PHONE

REGISTERED CIVIL ENGINEER STAMP

ENGINEERING FIRM INFORMATION
NAME, ADDRESS, PHONE, FAX, ETC.

NAME DATE

PALMDALE WATER DISTRICT

APPROVED BY:

PALMDALE WATER DISTRICT DATE

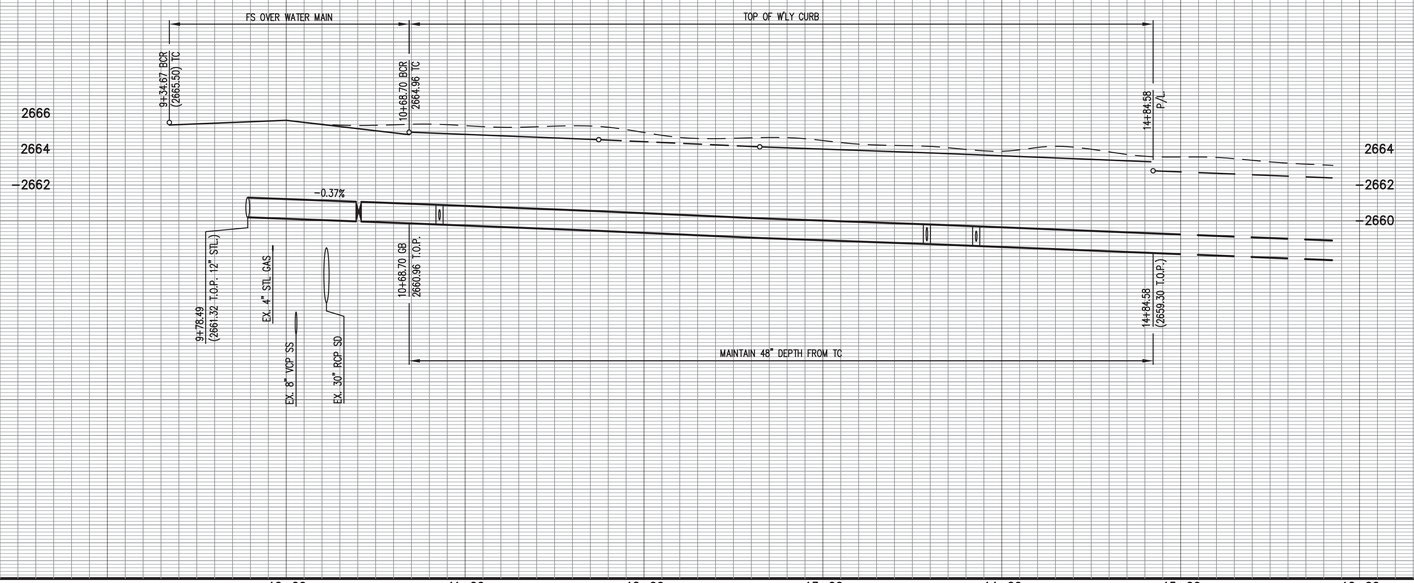
WATER SYSTEM IMPROVEMENTS

GROVEHILL STREET

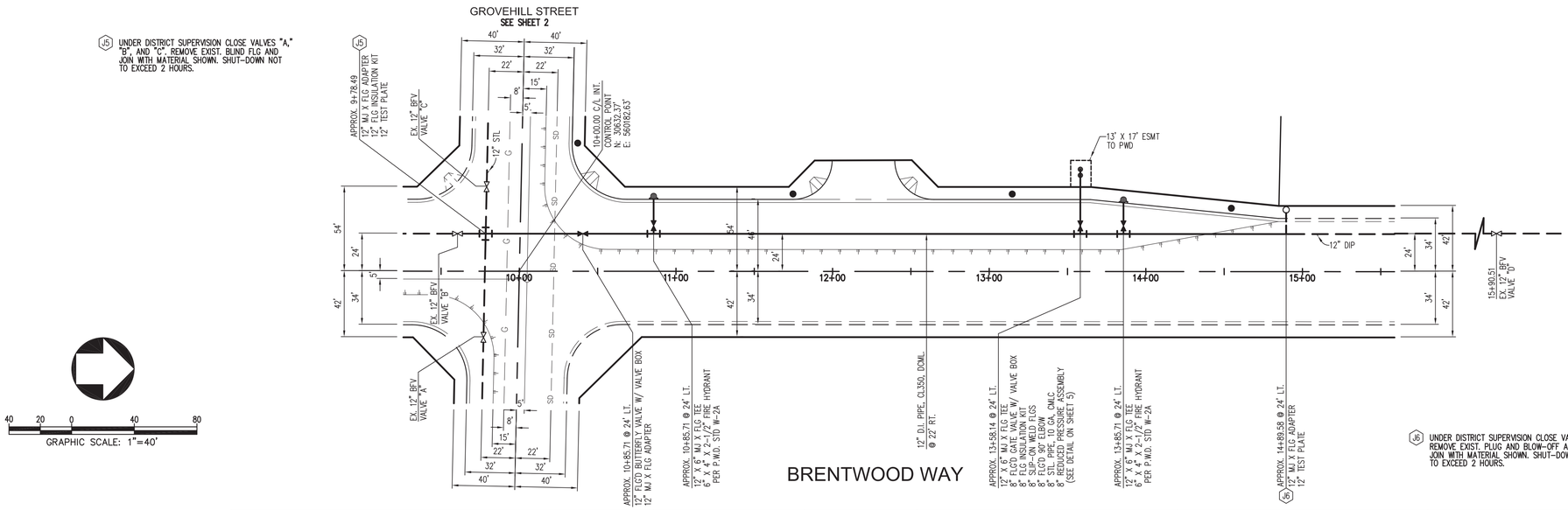
FROM 10+64.61 TO 18+22.44

WSM NO. 46-87 | PM NO. 81770 | SHEET: 2 OF 5

SCALE: HOR. 1"= 40'
VERT. 1"= 4'



J5 UNDER DISTRICT SUPERVISION CLOSE VALVES "A," "B", AND "C". REMOVE EXIST. BLIND FLG AND JOIN WITH MATERIAL SHOWN. SHUT-DOWN NOT TO EXCEED 2 HOURS.



J6 UNDER DISTRICT SUPERVISION CLOSE VALVE "D". REMOVE EXIST. PLUG AND BLOW-OFF ASSY. AND JOIN WITH MATERIAL SHOWN. SHUT-DOWN NOT TO EXCEED 2 HOURS.

	RECORD RCE		REVISIONS BLOCK	PWD	
NO.	BY	DATE	REVISION DESCRIPTION	APPR.	DATE
△					

DEVELOPER INFO
NAME, ADDRESS, PHONE

REGISTERED CIVIL ENGINEER STAMP

ENGINEERING FIRM INFORMATION
NAME, ADDRESS, PHONE, FAX, ETC.

NAME DATE

PALMDALE WATER DISTRICT

APPROVED BY:

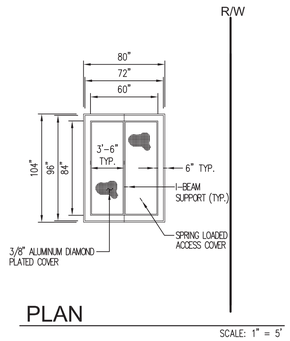
PALMDALE WATER DISTRICT DATE

WATER SYSTEM IMPROVEMENTS

BRENTWOOD WAY

FROM 9+78.49 TO 14+84.58

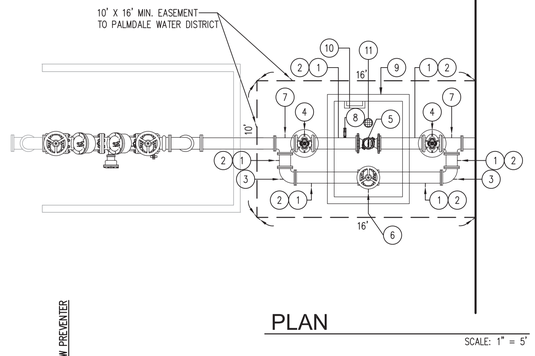
WSM NO. 46-87	PM NO. 81770	SHEET: 3 OF 5



PLAN

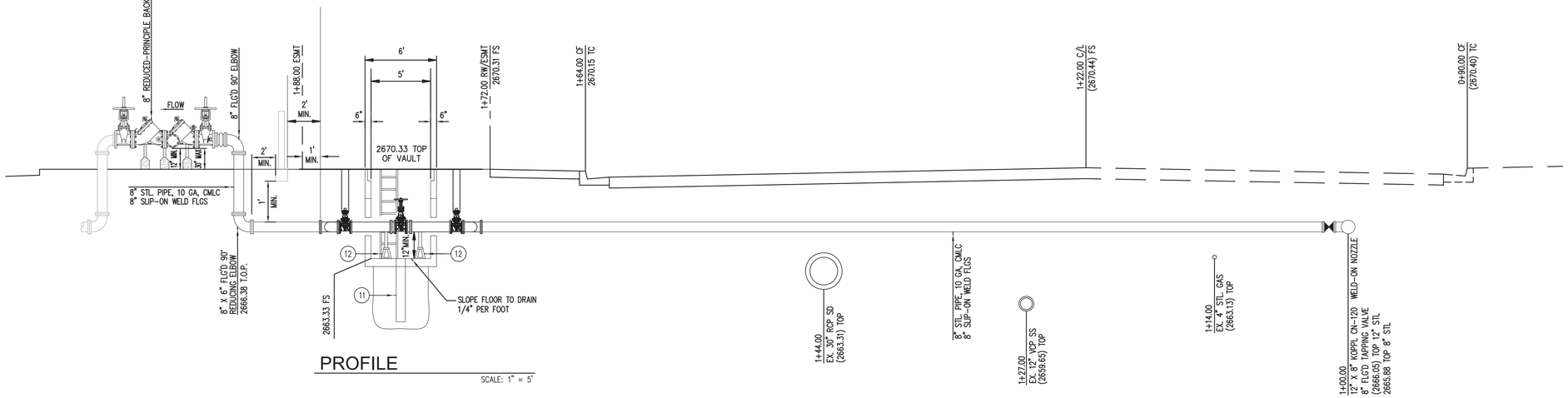
SCALE: 1" = 5'

SCALE: 1" = 5'



PLAN

SCALE: 1" = 5'



PROFILE

SCALE: 1" = 5'

NOTES:

1. FRAME AND COVER TO BE HOT DIPPED GALVANIZED AFTER FABRICATION.
2. METER MUST BE SET IN A HORIZONTAL POSITION AT LEAST EIGHT DIAMETERS OF STRAIGHT PIPE REQUIRED AT INLET END.
3. AREA WITHIN AND ADJACENT TO THE VAULT EASEMENT SHALL BE GRADED TO DIRECT FLOWS AWAY FROM THE VAULT.
4. VAULT AND LID SUBMITTAL TO BE PROVIDED BY CONTRACTOR AND APPROVED BY DISTRICT PRIOR TO INSTALLATION.
5. SCREEN WALL, IF REQUIRED, MUST BE LOCATED OUTSIDE DISTRICT EASEMENT. NO JOINTS WITHIN 2' OF FOOTING EDGE.
6. REDUCED-PRESSURE PRINCIPLE BACKFLOW PREVENTER TO BE MAINTAINED BY OWNER/DEVELOPER.

CONSTRUCTION NOTES FOR LARGE METER

1. INSTALL 8" STEEL PIPE, 10 GA., CML & C
2. INSTALL SLIP ON WELD FLANGE
3. INSTALL FLANGED 90° ELBOW, STL, CML & C
4. INSTALL 8" FLANGED GATE VALVE CL150 W/VALVE BOX
5. INSTALL LARGE METER, MODEL OCTAVE ULTRASONIC WITH ITRON "ERT" AUTOMATIC METER READING SYSTEM
6. INSTALL 8" GATE VALVE, FLANGED, 150 PSI WWP W/ WHEEL HANDLE O.S. & Y. (OUTSIDE SCREW YOKE AND HANDLE) AND LOCKING HANDLE
7. INSTALL 8" FLANGED TEE, C.I., CL150, CML & C
8. INSTALL 2" WELD-ON NOZZLE, 2" BRASS NIPPLE, AND 2" BALL VALVE
9. INSTALL CONCRETE VAULT, 8' W, 6' L, MODEL JENSEN PRECAST OR APPROVED EQUAL
10. INSTALL LADDER, HOT-DIPPED GALVANIZED IRON
11. INSTALL SUMP DRAIN PER PWD STD. W-12
12. INSTALL ADJUSTABLE STEEL SUPPORTS

	RECORD RCE		REVISIONS BLOCK	PWD	
NO.	BY	DATE	REVISION DESCRIPTION	APPR.	DATE
△					

DEVELOPER INFO
NAME, ADDRESS, PHONE

REGISTERED CIVIL ENGINEER STAMP

ENGINEERING FIRM INFORMATION
NAME, ADDRESS, PHONE, FAX, ETC.

NAME DATE

PALMDALE WATER DISTRICT

APPROVED BY:

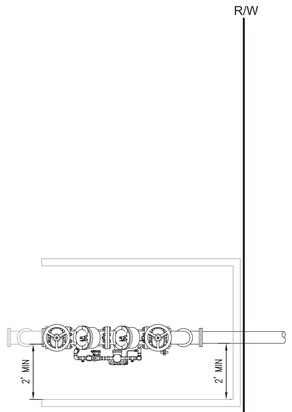
PALMDALE WATER DISTRICT DATE

WATER SYSTEM IMPROVEMENTS

LARGE METER AND VAULT DETAIL GROVEHILL STREET

@ 11+09.62

WSM NO. 46-87 | PM NO. 81770 | SHEET: 4 OF 5



PLAN

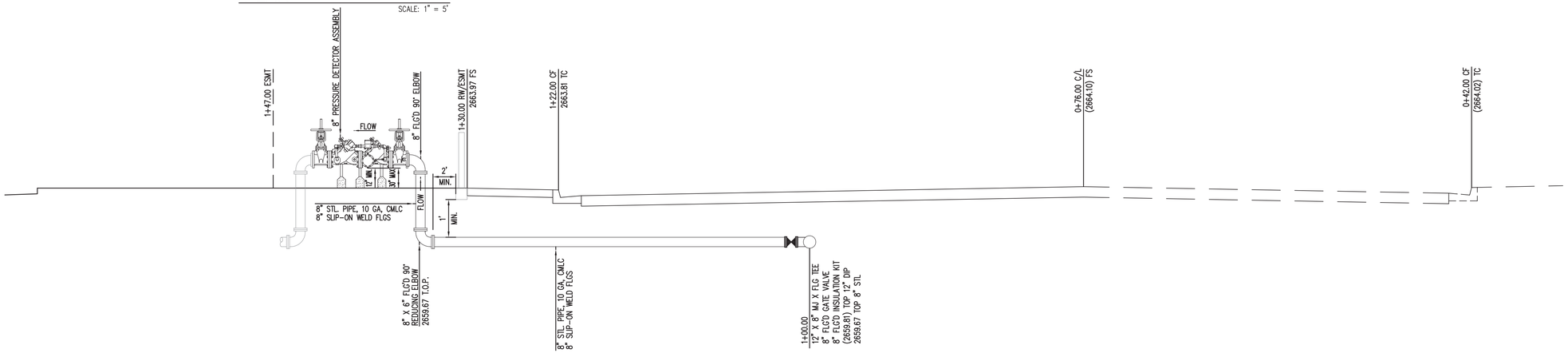
SCALE: 1" = 5'

NOTES:

1. REDUCUED-PRESSURE PRINCIPLE DETECTOR ASSEMBLY TO BE MAINTAINED BY OWNER/DEVELOPER. BYPASS METER OWNED AND MAINTAINED BY THE DISTRICT.



SCALE: 1" = 5'



PROFILE

SCALE: 1" = 5'

REDUCED PRESSURE PRINCIPLE DETECTOR ASSEMBLY

	RECORD RCE		REVISIONS BLOCK	PWD	
NO.	BY	DATE	REVISION DESCRIPTION	APPR.	DATE
△					

DEVELOPER INFO
NAME, ADDRESS, PHONE

REGISTERED CIVIL ENGINEER STAMP

ENGINEERING FIRM INFORMATION
NAME, ADDRESS, PHONE, FAX, ETC.

NAME DATE

PALMDALE WATER DISTRICT

APPROVED BY:

PALMDALE WATER DISTRICT DATE

WATER SYSTEM IMPROVEMENTS

RPDA DETAIL
BRENTWOOD WAY
@ 13+58.14

WSM NO. 46-87 | PM NO. 81770 | SHEET: 5 OF 5