GENERAL WATER NOTES:

CONSTRUCTION.

- 1. THESE PLANS HAVE BEEN PREPARED FOR THE SAN BERNARDINO MUNICIPAL WATER DEPARTMENT (SBMWD)
- THESE PLANS ARE INTENDED TO SUPPLEMENT THE DEPARTMENT'S TECHNICAL SPECIFICATIONS AND DETAILS 2. ALL UTILITY LOCATIONS SHOWN ARE FROM RECORD INFORMATION ONLY AND ARE NOT A RESULT OF A FIELD SURVEY. CALL UNDERGROUND SERVICE ALERT AT 1-800-227-2600 -- 48 HOURS IN ADVANCE OF
- 3. ALL WATER LINE CONNECTION POINTS AND CRITICAL UTILITY CROSSING POINTS SHALL BE EXPOSED AND ACCURATELY LOCATED AT THE START OF CONSTRUCTION, AND THE SBMWD SHALL BE NOTIFIED OF ANY DISCREPANCIES PRIOR TO THE CONTINUATION OF WORK.
- 4. ALL ELEVATIONS SHOWN ON PLANS SHALL BE BASED ON A U.S.G.S. DATUM, AND SHALL SHOW ELEVATION
- FROM MEAN SEA LEVEL. 5. ALL HORIZONTAL OR VERTICAL CHANGES IN PIPE ALIGNMENT DELINEATED ON THE PLANS AS "DEFLECTION BY JOINT" OR SHOWN WITHOUT BENDS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. TOTAL ANGULAR DISPLACEMENT SHALL BE DISTRIBUTED THROUGH AS MANY JOINTS AS
- 6. ALL WORK SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (GREEN BOOK) -- SBMWD STANDARD SPECIFICATIONS, A.W.W.A. STANDARDS, AND
- 7. APPROVAL OF THIS PLAN BY THE SBMWD DOES NOT CONSTITUTE A REPRESENTATION AS TO THE ACCURACY OF THE LOCATION OR OF THE EXISTENCE OR NONEXISTENCE OF ANY UNDERGROUND UTILITY PIPE OR STRUCTURE WITHIN THE LIMITS OF THIS PROJECT. THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR THE PROTECTION OF ALL UTILITIES WITHIN THE LIMITS OF THE PROJECT.
- 8. DURING THE PERIOD OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH, ERECT, AND MAINTAIN SUCH WARNINGS, SIGNS, STOP SIGNS, SIGNALS, BARRICADES AND OTHER SAFETY MEASURES AS DIRECTED BY THE CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS WITH REFERENCE TO THE W.A.T.C.H. MANUAL
- 9. THE CONTRACTOR SHALL NOT OPEN MORE TRENCH THAN CAN BE PROPERLY PROSECUTED IN A DAYS OPERATION. ANY TRENCH UNAVOIDABLY LEFT OPEN DURING THE HOURS OF DARKNESS OR OVER A WEEKEND SHALL BE FENCED WITH 6-FOOT CHAIN LINK AND PROPERLY LIGHTED, OR BRIDGED BY A WATER DEPARTMENT APPROVED TRAFFIC PLATE WITH REFERENCE TO THE W.A.T.C.H. MANUAL.
- 10. THE CONTRACTOR SHALL REINSTALL PAVEMENT MARKINGS AND STRIPPING DISTURBED BY HIS OPERATIONS. 11. A CAL/OSHA PERMIT IS REQUIRED FOR TRENCHES OVER 5' IN DEPTH.
- 12. THE CONTRACTOR SHALL PROVIDE SAFE AND CONTINUOUS PASSAGE FOR LOCAL PEDESTRIAN AND VEHICULAR TRAFFIC AT ALL TIMES WITH REFERENCE TO THE W.A.T.C.H. MANUAL.
- 13. TRAFFIC SIGNAL FUNCTIONS SHALL BE APPROVED BY THE CITY OF SAN BERNARDINO DEPARTMENT OF PUBLIC WORKS. HOWEVER, THE CONTRACTOR IS REQUIRED TO GIVE 48 HOUR NOTICE PRIOR TO ANY CONSTRUCTION THAT WILL DAMAGE OR AFFECT ANY BURIED TRAFFIC DETECTORS.
- 14. THE CONTRACTOR SHALL SO CONDUCT HIS OPERATIONS AS TO OFFER THE LEAST POSSIBLE OBSTRUCTION AND INCONVENIENCE TO THE PUBLIC, AND HE SHALL HAVE UNDER CONSTRUCTION NO GREATER LENGTH OR AMOUNT OF WORK THAN HE CAN PROSECUTE PROPERLY WITH DUE REGARD TO THE RIGHTS OF THE PUBLIC. CONVENIENT ACCESS TO DRIVEWAYS, HOUSES, AND BUILDINGS ALONG THE LINE OF WORK SHALL BE MAINTAINED. TEMPORARY CROSSINGS SHALL BE PROVIDED AND MAINTAINED IN GOOD CONDITION. NOT MORE THAN ONE CROSSING OR INTERSECTING STREET OR ROAD SHALL BE CLOSED AT ANY ONE TIME WITHOUT THE APPROVAL OF THE TRAFFIC/WATER DEPARTMENT ENGINEER. THE CONTRACTOR SHALL PROVIDE AND MAINTAIN SUCH FENCES, BARRIERS, DIRECTIONAL SIGNS, LIGHTS, AND FLAGMEN AS ARE NECESSARY TO GIVE ADEQUATE WARNING TO THE PUBLIC AT ALL TIMES OF ANY DANGEROUS CONDITIONS TO BE ENCOUNTERED AS A RESULT OF THE CONSTRUCTION WORK AND TO GIVE DIRECTIONS TO THE PUBLIC.
- 15. STREET CUT PERMITS MUST BE OBTAINED FROM THE CITY OF SAN BERNARDINO PUBLIC WORKS DEPARTMENT 16. ALL REMOVALS IN PAVED AREAS SHALL BE SAW CUT ON A NEAT, STRAIGHT LINE PARALLEL TO THE PIPE LINE. THE EDGE SHALL BE PROTECTED FROM CRUSHING AND ALL BROKEN EDGES SHALL BE RE-CUT PRIOR TO PAVING
- 17. DUST SHALL BE CONTROLLED AT ALL TIMES BY APPROVED METHODS.
- 18. PUBLIC STREETS SHALL BE KEPT CLEAN AND FREE FROM DIRT AND/OR DEBRIS ON A DAILY BASIS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IN STREET CLEANING NECESSITATED BY HIS OPERATION:
- 19. ALL TRENCH BACKFILLS SHALL BE TESTED AND CERTIFIED BY A SOILS ENGINEER PRIOR TO ACCEPTANCE. 20. 24 HOURS ADVANCE NOTICE IS REQUIRED FOR INSPECTION AND FIELD TIES. ARRANGEMENTS CAN BE MADE BY
- CALLING (909) 453-6175 BETWEEN 8:00 A.M. AND 5:00 P.M. MONDAY THROUGH THURSDAY AND BETWEEN 8:00 A.M. AND 4:30 P.M. ON FRIDAYS, EXCEPT LEGAL HOLIDAYS. 21. NORMAL INSPECTION HOURS ARE 8:00 A.M. TO 4:00 P.M. MONDAY THROUGH FRIDAY, EXCEPT LEGAL HOLIDAYS. REQUESTS FOR INSPECTION AT OTHER TIMES OR ON OTHER DAYS MUST BE SUBMITTED TO THE
- SBMWD ENGINEERING SECTION A MINIMUM OF 5 WORKING DAYS BEFORE THE INSPECTION IS REQUIRED. THE CONTRACTOR MUST BEAR THE COST OF SUCH OVERTIME INSPECTIONS AND WILL BE BILLED ACCORDINGLY. NORMAL OVERTIME RATES ARE 1.5 TIMES THE BASE RATE PLUS OVERHEAD. OVERTIME INSPECTIONS WILL BE MADE SOLELY AT THE DISCRETION OF THE SBMWD AND BASED ON STAFF AVAILABILITY.
- 22. THE CONTRACTOR WILL BE REQUIRED TO OBTAIN CITY BUSINESS LICENSES, INSURANCE, AND PROVIDE EVIDENCE OF SAME TO INSPECTION STAFF UPON REQUEST
- 23. THE CONTRACTOR SHALL NOT PLACE CONCRETE OR ASPHALT ON THE PROJECT PRIOR TO SBMWD/PUBLIC WORKS REVIEW APPROVAL OF CONTRACTOR-SUPPLIED COMPACTION TESTS.
- 24. NO DEVIATIONS SHALL BE MADE FROM THIS PLAN WITHOUT THE REVIEW AND APPROVAL OF THE SBMWD
- ENGINEER.
- 25. THE CONTRACTOR SHALL NOT MAKE ANY CONNECTION TO THE EXISTING SBMWD DISTRIBUTION SYSTEM WITHOUT FIRST GAINING WRITTEN PERMISSION TO DO SO FROM THE SBMWD ENGINEER. IN THE EVENT THAT PERMISSION IS GRANTED, A SBMWD INSPECTOR MUST BE PRESENT ON SITE TO WITNESS SAID CONNECTION(S). TEST PLATES SHALL BE INSTALLED ON THE NEW CONSTRUCTED SIDE OF ALL MAIN CONNECTION POINTS. CONNECTIONS REQUIRING SHUTDOWNS REQUIRE SEVEN (7) WORKING DAYS MINIMUM ADVANCE NOTIFICATION FROM THE CONTRACTOR. ALL FLUSHING, CHLORINATION, AND TESTING SHALL BE PERFORMED EITHER BY (A) WATER TRUCK, OR (B) HYDRANT-TO-HYDRANT CONNECTION THROUGH AN APPROVED BACKFLOW PREVENTION ASSEMBLY. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND COMPLYING WITH THE NPDES PERMIT.
- 26. ALL WATER MAINS AND APPURTENANCES SHALL BE PRESSURE TESTED AND DISINFECTED PRIOR TO
- ACCEPTANCE BY THE SBMWD. 27. TESTING AND DISINFECTION OF WATER MAINS AND APPURTENANCES SHALL BE IN ACCORDANCE WITH THE APPLICABLE A.W.W.A. STANDARDS AND THE CONTRACTOR OBTAINED NPDES PERMIT, EXCEPT AS HEREIN MODIFIED (SEE ATTACHED SBMWD STANDARD).
- 28. ALL TESTING AND DISINFECTION SHALL BE MADE IN THE PRESENCE OF THE SBMWD INSPECTOR AND SHALL COMPLY WITH THE NPDES PERMIT REQUIREMENTS. THE CONTRACTOR SHALL NOTIFY THE SBMWD ENGINEER NOT LESS THAN TWENTY-FOUR (24) HOURS IN ADVANCE OF THE ACTUAL TIME OF TESTING AND/OR DISINFECTION SO THAT THE SBMWD ENGINEER OR DESIGNEE MAY OBSERVE THE PROCEDURE.
- 29. IF THE PRESSURE TEST, CHLORINATION OR BACTERIOLOGICAL TEST FAIL TO MEET THE REQUIREMENT OF THE SPECIFICATIONS, THE CONTRACTOR SHALL MAKE NECESSARY REPAIRS, REPLACEMENTS OR REPETITION OF PROCEDURES AT HIS OWN EXPENSE.
- 30. AT DEAD END LOCATIONS, WATER SERVICE SHALL BE TAPPED TO THE END OF WATER MAIN.
- 31. THE SBMWD HAS POTHOLED AND LOCATED CERTAIN EXISTING UTILITIES IN THE PLANS. THE CONTRACTOR SHALL POTHOLE & LOCATE ALL EXISTING UTILITIES TO VERIFY DEPTH AND LOCATION IN ADVANCE OF CONSTRUCTION. CONTRACTOR IS RESPONSIBLE FOR ALL PERMITS REQUIRED FOR POTHOLING. CONTRACTOR SHALL PROVIDE A DESIGN DRAWING (PLAN & PROFILE) SHOWING HOW THE PROPOSED PIPE ALIGNMENT
- SHOULD BE CHANGED TO AVOID EXISTING UTILITIES. 32. ALL SERVICES ARE TO REMAIN ACTIVE DURING NON-WORKING HOURS.
- 33. ANY UNDERCUT SEWERS WILL REQUIRE A 1-SACK SAND SLURRY BACKFILL UP TO THE SPRING LINE OF THE SFWFR PIPF
- 34. PROPERTY RIGHT OF WAY LINES ARE APPROXIMATE AND ARE INTENDED AS GENERAL REFERENCE ONLY FOR THIS PROJECT. NO RECORD OF SURVEY CONDUCTED OR IMPLIED.

DESIGN STANDARD NOTES:

CONDITIONAL APPROVAL OF VALVED OUTLET (6" AND LARGER)

THE WATER PLANS SHOW ONE OR MORE VALVED OUTLETS EXTENDING OUT OF PAVED AREAS. INSTALLATION OF THESE OUTLETS IS ACCEPTABLE. HOWEVER, IF THE OUTLETS ARE INCORRECTLY LOCATED OR NOT USED FOR ANY REASON WHEN THE PROPERTY IS ACTUALLY DEVELOPED, THE DEVELOPER SHALL ABANDON THE OUTLETS AT THE CONNECTION TO THE ACTIVE MAIN IN ACCORDANCE WITH SBMWD'S STANDARDS AND AT THE DEVELOPER'S EXPENSE. APPROVAL OF THE VALVED OUTLET DOES NOT PROVIDE OR IMPLY A WATER COMMITMENT.

ABANDON VALVES

ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI. THE LATERAL MUST BE COMPLETELY REMOVED FROM THE ABANDONED VALVE AND CAPPED WITH A BLIND FLANGE OR

ABANDONMENT OF EXISTING SERVICE LATERALS (2" AND SMALLER)

THE CONTRACTOR SHALL NOTIFY SBMWD TWO (2) FULL BUSINESS DAYS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW SBMWD TO TAKE THE FINAL SERVICE READING. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

EXISTING SERVICE LATERALS TO BE ABANDONED FROM EXISTING WATER MAINS SHALL HAVE THE CORPORATION STOPS TURNED OFF AT THE MAIN, A MINIMUM OF TWELVE (12) INCHES OF THE LATERAL CUT OUT NEAR THE CORPORATION STOPS, AND A BRASS CAP OR PLUG INSTALLED ON THE CORPORATION STOP. IF THE CORPORATION STOP IS DAMAGED BEYOND REPAIR OR PULLED FROM THE EXISTING WATER MAIN, THE MAIN SHALL BE REPAIRED AT THE CONTRACTOR'S EXPENSE IN A MANNER APPROVED BY SBMWD. IF IT IS DISCOVERED THE CORPORATION STOP IS NOT WATER TIGHT, THROUGH NO FAULT OF THE CONTRACTOR, THE CONTRACTOR SHALL NOTIFY SBMWD FOR FURTHER DIRECTION. THE EXISTING SERVICE(S) SHALL BE REMOVED AND RECYCLED. THE SBMWD MAY REQUIRE REUSABLE COMPONENTS (METERS) ETC. TO BE DELIVERED TO SBMWD.

ABANDONMENT OF EXISTING SERVICE LATERALS (3" AND LARGER)

THE CONTRACTOR SHALL NOTIFY SBMWD TWO (2) FULL BUSINESS DAYS PRIOR TO THE REQUESTED REMOVAL TIME TO ALLOW SBMWD TO TAKE THE FINAL SERVICE READING AND TO NOTIFY SBMWD'S INSPECTOR OF THE IMPENDING WORK. THE CONTRACTOR MAY THEN BEGIN REMOVAL PROCEDURES FOR THE AFFECTED SERVICE AS FOLLOWS:

ALL VALVES TO BE ABANDONED SHALL BE ABANDONED IN THE CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO THOUSAND (2,000) PSI.

IF THE VALVE IS TO BE ABANDONED IN THE CLOSED POSITION, THE LATERAL MUST BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATIONS, THE INSTALLATION OF A RESTRAINED PLUG MAY BE PERMITTED WITH SBMWD APPROVAL. THE CONTRACTOR SHALL INSTALL A CONCRETE THRUST BLOCK IN ACCORDANCE WITH THE PROVISIONS OF THE SBMWD STANDARD DRAWING No. W6.4A AT ALL CAP OR PLUG LOCATIONS.

THE EXISTING SERVICE(S) SHALL BE REMOVED AND RECYCLED. THE CONTRACTOR SHALL THEN REMOVE AND/OR BACKFILL THE ABANDONED VAULT WITH SELECT MATERIAL AND RESTORE ALL DAMAGED SURFACE FEATURES AS DIRECTED BY SBMWD. THE SBMWD MAY REQUIRE REUSABLE COMPONENTS (METERS) ETC. TO BE DELIVERED TO

INSTALLATION OF METER AND VAULT

THE METER(S) AND VAULT(S) WITH TRAFFIC/NON-TRAFFIC BEARING COVERS(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS AND SPECIFICATIONS. PRE-CAST VAULTS APPROVED BY SBMWD MAY BE USED IN LIEU OF THE FIBERGLASS VAULTS. THE DESIGNATION OF PRE-CAST OR CAST-IN PLACE MUST BE MADE PRIOR TO PLAN APPROVAL.

ANY BLOCK WALL OR OTHER FENCE MATERIAL SHALL BE DESIGNED AND CONSTRUCTED AROUND THE OUTSIDE OF THE EASEMENT(S), TO ALLOW SBMWD DIRECT ACCESS TO THE VAULT(S) AND INLET PIPING FROM THE ADJACENT RIGHT-OF-WAY.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

INSTALLATION DOUBLE CHECK DETECTOR CHECK ASSEMBLY

THE DETECTOR CHECK(S) SHALL BE INSTALLED IN ACCORDANCE WITH THE STANDARD DRAWINGS.

EASEMENTS SHALL BE CLEARLY MARKED OR STAKED PRIOR TO THE START OF CONSTRUCTION.

EXISTING PRIVATE WELLS TO REMAIN IN SERVICE

IF THE EXISTING PRIVATE WELL IS TO REMAIN IN SERVICE. SBMWD APPROVED BACKFLOW PREVENTION ASSEMBLY SHALL BE INSTALLED IMMEDIATELY DOWNSTREAM OF SBMWD'S WATER METER IN ACCORDANCE WITH STANDARD DRAWING W4.2. THE NEW SERVICE SHALL NOT BE ACTIVATED UNTIL THE BACKFLOW PREVENTION ASSEMBLY HAS BEEN SUCCESSFULLY TESTED BY SBMWD.

PRIVATE WELLS TO BE REMOVED FROM SERVICE

IF THE EXISTING PRIVATE WELL IS TO BE ABANDONED. THE INSTALLATION OF A BACKELOW PREVENTION ASSEMBLY WILL NOT BE REQUIRED. HOWEVER. SBMWD WATER SERVICE WILL REMAIN IN THE OFF POSITION AND LOCKED OUT UNTIL THE WELL HAS BEEN ABANDONED. AN INSPECTION OF THE ON-SITE SYSTEM WILL BE MADE BY SBMWD'S INSPECTOR TO VERIFY THE WELL HAS BEEN DISCONNECTED FROM THE ON-SITE SYSTEM AND THE WELL IS NO LONGER FUNCTIONAL.

RELOCATION OF FIRE HYDRANTS (EXTENSION OF EXISTING LATERALS)

THE CONTRACTOR SHALL REMOVE AND RELOCATE BOTH THE UPPER AND LOWER BARRELS OF THE EXISTING FIRE HYDRANT(S) WHERE SHOWN. EXTEND THE EXISTING LATERAL AS REQUIRED. AND REINSTALL SUCH HYDRANT(S) AT THE NEW LOCATION(S) INDICATED. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION UNDER THE DIRECTION OF SBMWD TO ENSURE QUALITY. INSTALLATION SHALL BE IN ACCORDANCE WITH STANDARD DRAWING W2.2. LATERALS MADE OF UNAPPROVED MATERIALS SHALL BE REPLACED FROM THE MAIN TO THE FIRE HYDRANT.

FIRE HYDRANT RELOCATION AND LATERAL ABANDONMENT (EXISTING

LATERAL TO BE ABANDONED)

WHERE SHOWN ON THE DRAWING(S), THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER BARRELS AND LATERAL OF THE FIRE HYDRANT TO THE FIRE HYDRANT VALVE ADJACENT TO THE MAIN. FIRE HYDRANTS SHALL BE TESTED PRIOR TO AND AFTER RELOCATION UNDER THE DIRECTION OF SBMWD TO ENSURE QUALITY OF THE FIRE HYDRANT(S). THE EXISTING HYDRANT SHALL BE INSTALLED AT THE NEW LOCATION AS INDICATED ON THE DRAWING, IN ACCORDANCE WITH STANDARD DRAWING NOS. W2.1 AND W2.2. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX, AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR APPROVED AGGREGATE BASE. THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO-THOUSAND (2,000) PSI. THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. WHERE A JOINT OR COUPLING IN THE EXISTING PIPE IS UNCOVERED AT THE CUT AND CAP LOCATION, THE INSTALLATION OF A PLUG MAY BE PERMITTED, WITH SBMWD APPROVAL. A CONCRETE THRUST BLOCK SHALL BE INSTALLED AT ALL CUT AND CAP LOCATIONS IN ACCORDANCE WITH THE PROVISIONS OF STANDARD DRAWING.

SIGNED BY: XX DRAWN BY: XX CHECKED BY: XX DESIGN ENGINEER

DESIGN STANDARD NOTES (CONT.):

FIRE HYDRANT AND LATERAL ABANDONMENT

WHERE SHOWN ON THE DRAWING(S), THE CONTRACTOR SHALL ABANDON THE EXISTING FIRE HYDRANT(S) BY REMOVING BOTH THE UPPER AND LOWER FIRE HYDRANT BARRELS AND LATERAL OF THE FIRE HYDRANT TO THE FIRE HYDRANT VALVE ADJACENT TO THE MAIN. THE EXISTING HYDRANT MAY BE DELIVERED TO SBMWD AT SBMWD'S OWN DISCRETION. THE EXISTING VALVE SHALL BE ABANDONED IN A CLOSED POSITION, UNLESS SHOWN OTHERWISE, BY REMOVING A MINIMUM OF THE TOP TWENTY-FOUR (24) INCHES OF THE VALVE BOX, AND THEN FILLING THE BOTTOM OF THE BOX WITH A MINIMUM OF EIGHT (8) INCHES OF SAND OR APPROVED AGGREGATE BASE, THE REMAINING PORTION OF THE VALVE BOX SHALL BE FILLED WITH CONCRETE HAVING A COMPRESSIVE STRENGTH OF AT LEAST TWO-THOUSAND (2,000) PSI. THE REMAINING PORTION OF THE LATERAL SHALL BE CUT WITHIN THREE (3) FEET OF THE ABANDONED VALVE, OR AS SHOWN ON PLANS, AND CAPPED. THE EXISTING CONCRETE HYDRANT PAD SHALL BE REMOVED.

STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION (CALTRANS)

PERMIT REQUIRED

AN APPROVED CALTRANS ACCEPTANCE PERMIT SHALL BE OBTAINED THROUGH SBMWD PRIOR TO ANY CONSTRUCTION WITHIN CALTRANS RIGHT-OF-WAY. PLANS SHOWING WORK IN CALTRANS RIGHT-OF-WAY MUST SHOWN CALTRANS STATIONING. THE DEVELOPER ASSUMES ALL LIABILITY FOR WORK CONDUCTED UNDER SBMWD OBTAINED PERMIT THROUGH WARRANTY EXPIRATION.

SURVEY MONUMENTATION NOTES:

1. CONTRACTOR SHALL ESTABLISH SUFFICIENT MONUMENTS SO THAT A MINIMUM OF THREE HORIZONTAL AND VERTICAL CONTROL MONUMENTS EXIST FOR EACH PROJECT. ALL MONUMENTS SHALL BE DURABLE, PERMANENT MONUMENTS WITH SBMWD MARKINGS. MONUMENT SHALL BE CONCRETE MONUMENT WITH BRASS DISK AS SHOWN ON STANDARD DRAWING NO. W6.2. WHEN BRASS DISK MONUMENT IS NOT APPLICABLE, OTHER ACCEPTABLE MONUMENTS WOULD INCLUDE:

2-INCH GALVANIZED STEEL PIPE 30-INCHES LONG, WITH BRASS DISK OR PLASTIC PLUG

5/8" DIAMETER REBAR, 30-INCHES LONG WITH CAP

BRASS DISK EPOXIED IN ROCK MASS OR BRIDGE ABUTMENT

- ANY EXISTING STABLE MONUMENTS 2. CONTRACTOR SHALL SET HORIZONTAL CONTROL MONUMENTS AS REQUIRED BY PROJECT CONDITIONS, NO MORE THAN ½ MILE APART. IF LONGER SPACING IS USED, ESTABLISH MONUMENTS IN PAIRS FOR
- INTERVISIBILITY. MINIMUM SPACING FOR MONUMENTS IS 500 FEET (1,000 FEET WHEN USING GPS). MONUMENTS SHALL BE ACCESSIBLY LOCATED, WITHIN PUBLIC RIGHT-OF-WAY OR EASEMENT, TO MINIMIZE
- DISTURBANCE BY CONSTRUCTION AND BE CLEAR OF TRAFFIC.
- 4. HORIZONTAL CONTROL MONUMENTS SHALL BE SET SO THEY ARE INTER VISIBLE WITH A MINIMUM OF TWO OTHER MONUMENTS.
- CONTRACTOR SHALL SET VERTICAL CONTROL MONUMENTS AS REQUIRED BY PROJECT CONDITIONS, NO MORE THAN ½ MILE APART. CONTRACTOR SHALL UTILIZE HORIZONTAL CONTROL MONUMENTS AS VERTICAL
- CONTROL MONUMENTS, WHENEVER POSSIBLE. 5. CONTRACTOR SHALL SET VERTICAL CONTROL MONUMENT AT EACH MAJOR STRUCTURE, WHENEVER POSSIBLE.

SBMWD STANDARD DRAWINGS REFERENCED:

SBMWD STANDARD DRAWINGS ARE AVAILABLE ON THE DEPARTMENT WEBSITE, AT WWW.SBMWD.ORG. ALL CONSTUCTION MUST BE MADE IN CONFORMANCE WITH ALL APPLICABLE SBMWD STANDARD DRAWINGS. THE FOLLOWING LIST OF SBMWD STANDARD DRAWINGS HAVE BEEN INCORPORATED BY REFERENCE WITHIN THE CONSTRUCTION NOTES OF THIS PLAN SET.



FOR EXAMPLE ONLY

- 1. THE CONTENTS OF THIS SET OF DRAWINGS WAS CREATED TO PROVIDE A GRAPHIC REPRESENTATION OF SBMWD AUTOCAD STANDARD REQUIREMENTS AND EXPECTATIONS.
- 2. ALL TYPES OF INFORMATION ON THIS SET OF DRAWINGS IS REQUIRED TO BE PROVIDED AS SHOWN FOR THE PROJECT SUBMITTAL TO BE ACCEPTED AND APPROVED (TYP).

DRAWING SCALES: CITY OF SAN BERNARDINO UNDERGROUND SERVICE ALERT BENCHMARK: ROBERT LINDBERG **PROJECT** ENGINEERING ASSOCIATE MANAGER: HORIZ: N/A VERT: N/A MUNICIPAL WATER DEPARTMENT CALL: TOLL FREE ENGINEERING WARREN HUANG, P.E. XXXXX PROJECT TITLE 1-800-227-2600 CA. R.C.E. 49208 MANAGER: **GENERAL NOTES** APPROVED BY **GENERAL** MIGUEL GUERRERO, P.E. TWO WORKING DAYS REGISTERED CIVIL ENGINEER No. XXXXX CA. R.C.E. 73239 MANAGER: ELEV.= XXXX.XX FT. SHEET 2 OF XX BEFORE YOU DIG