

SEWER NOTES:

- SEWER SYSTEM CONSTRUCTION AND MATERIALS SHALL BE MADE IN ACCORDANCE WITH EMWD'S STANDARDS AND SPECIFICATIONS.
- GRAVITY SEWER PROFILE ELEVATIONS ARE TO FLOW LINE (CONDUIT INVERT).
- CONTRACTOR HAS THE OPTION TO INSTALL PLASTIC OR VCP SEWERS EXCEPT WHERE SPECIFICALLY DESIGNATED ON PLANS PER EMWD STANDARDS AND SPECIFICATIONS.
- MANHOLES SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWINGS SB-53, SB-56, SB-58 AND SB-61, AS APPLICABLE. SEWER MAINS MAY BE LAID THROUGH THE MANHOLES AND USED AS A FORM FOR THE INVERT.
- ALL LATERALS SHALL HAVE AN ONSITE CLEANOUT IN ACCORDANCE WITH STANDARD DRAWING SB-52.
- MAINLINE CLEANOUTS, WHERE CALLED FOR ON THE PLANS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH STANDARD DRAWING SB-52.
- PRIOR TO CONSTRUCTION OF SEWER, CONTRACTOR SHALL EXPOSE EXISTING SEWER AND VERIFY ITS EXISTING ELEVATION AND LOCATION. WHERE CONNECTING TO EXISTING MANHOLES AND INLET STUB OF PROPER SIZE EXISTS, NO ALTERATIONS SHALL BE MADE TO EXISTING MANHOLE BASE OR STUB EXCEPT AS SPECIFICALLY AUTHORIZED BY EMWD.
- ALL SEWER INLETS AT THE MANHOLE SHALL BE SUCH THAT ITS CROWN SHALL BE LEVEL WITH THE CROWN OF THE OUTLET PIPE, AT THEIR PROJECTIONS TO THE MANHOLE CENTERLINE.
- RECONSTRUCTION OF EXISTING MANHOLES SHALL BE SCHEDULED AT THE CONVENIENCE OF EMWD AND SHALL BE COMPLETED WITHIN FIVE WORKING DAYS FOLLOWING ITS COMMENCEMENT.
- SEWER LATERALS SHALL BE CONSTRUCTED IN ACCORDANCE WITH SB-177. LOCATIONS OF WYES AND LATERALS, WHERE NOT SHOWN ON THE PLANS, ARE TO BE DETERMINED IN THE FIELD PRIOR TO CONSTRUCTION TO MISS DRIVEWAYS. ALL LATERALS ARE TO BE 4" IN DIAMETER UNLESS OTHERWISE SHOWN ON PLANS. CONNECTIONS OF NEW LATERALS TO EXISTING SEWER ARE TO BE PER STANDARD DRAWING SB-176.
- THE CONTRACTOR IS ADVISED THAT THE WORK ON THIS PROJECT MAY INCLUDE WORKING IN A CONFINED AIR SPACE. CONTRACTOR SHALL BE RESPONSIBLE FOR "CONFINED AIR SPACE" ARTICLE 108, TITLE 8, CALIFORNIA ADMINISTRATIVE CODE.
- WHERE GROUNDWATER IS ENCOUNTERED, ALL VCP PIPE SHALL BE TREATED FOR ABSORPTION RESISTANCE PER EMWD'S SPECIFICATIONS.
- BACKWATER VALVES SHALL BE INSTALLED PER SECTION 710.1 OF THE UNIFORM PLUMBING CODE.
- ALL PIPE ZONE BEDDING AND TRENCHING BACKFILL ARE TO BE PER STANDARD DRAWING SB-157, SB-158 AND SB-159.

GENERAL NOTES:

- ALL MATERIALS AND INSTALLATION SHALL CONFORM TO CITY OF PERRIS IMPROVEMENT ORDINANCES AND COUNTY OF RIVERSIDE SUBDIVISION IMPROVEMENT ORDINANCE 461.
- FOR SEPARATION BETWEEN WATER AND SEWER LINES SHALL CONFORM TO STATE HEALTH CODE STANDARD.
- ALL MATERIALS TESTING AND INSPECTION OF PIPE SHALL BE IN CONFORMITY WITH THE REQUIREMENTS OF CITY OF PERRIS, COUNTY OF RIVERSIDE AND THE AMERICAN WATER WORKS ASSOCIATION (A.W.W.A.) STANDARDS.
- SEWER LINE WILL BE INSTALLED BY THE SUBDIVIDER FOR E.M.W.D.
- FAILURE TO MEET ANY OF THE REQUIREMENTS OF CITY OF PERRIS, COUNTY OF RIVERSIDE, E.M.W.D. AND THE A.W.W.A. SPECIFICATIONS WILL BE CAUSE FOR REJECTION.
- AN ENCROACHMENT PERMIT SHALL BE OBTAINED FROM THE CITY OF PERRIS, AND COUNTY OF RIVERSIDE PERMIT SECTION FOR CONSTRUCTION WITHIN THE DEDICATED STREET RIGHT OF WAY.
- APPROVAL BY E.M.W.D. IMPLIES NO PERMISSION OTHER THAN THAT WITHIN THE DISTRICT'S JURISDICTION. ALL PERMITS REQUIRED BY LAW SHALL BE ACQUIRED BY THE DEVELOPER OR HIS CONTRACTOR.
- THE PROPOSED WORK SHALL BE SUBORDINATED TO ANY OPERATIONS E.M.W.D. MAY CONDUCT AND SHALL BE COORDINATED WITH SUCH OPERATIONS AS DIRECTED BY E.M.W.D.
- APPROVAL BY E.M.W.D. OF A PROPOSED CONNECTION TO AN E.M.W.D. FACILITY DOES NOT IMPLY APPROVAL OF THE CORRECTNESS OF THE ELEVATIONS SHOWN ON THE PLANS.

IN THE CITY OF PERRIS AND THE COUNTY OF RIVERSIDE CALIFORNIA
SEWER & RECYCLED WATER PLANS
SAINT JAMES CHURCH
APN: 310-230-42
PUP NO. 00924

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR:

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT THOSE SHOWN ON THE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE ALL PRECAUTIONARY MEASURES TO PROTECT THE UTILITIES SHOWN, AND ANY OTHER LINES OR STRUCTURES NOT SHOWN ON THESE PLANS AND IS RESPONSIBLE FOR THE PROTECTION OF, AND ANY DAMAGE TO THESE LINES OR STRUCTURES.

THE CONTRACTOR AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER, COUNTY AND ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER, COUNTY OR THE ENGINEER.

THE CONTRACTOR SHALL BE RESPONSIBLE TO REPORT DISCREPANCIES IN PLANS AND/OR FIELD CONDITIONS IMMEDIATELY TO THE DESIGN ENGINEER FOR RESOLUTION PRIOR TO CONSTRUCTION, AND SHALL BE RESPONSIBLE FOR DISCREPANCIES NOT SO REPORTED AND RESOLVED.

UNAUTHORIZED CHANGES & USES: THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS.

WILLIAM J. McKEEVER
 R.C.E. 22502, EXP. 12-31-15

TIME LIMITATIONS:

THE TIME LIMIT ON DRAWING(S) APPROVAL SHALL BE SIX (6) MONTHS FROM THE DATE ON THE CERTIFICATION. IF CONSTRUCTION HAS NOT COMMENCED WITHIN THE STATED TIME, EMWD REQUIRES DRAWING(S) TO BE REVIEWED BY THE DEVELOPER/DESIGN ENGINEER AND RESUBMITTED TO E.M.W.D. FOR POSSIBLE CHANGES IN MASTER PLANNED SIZING AND CHANGES IN SPECIFICATIONS AND STANDARDS.

SEWER CERTIFICATION

I CERTIFY THAT THE DESIGN OF THE SEWER SYSTEM FOR SAINT JAMES CHURCH APN 310-230-42 IS IN ACCORDANCE WITH THE EASTERN MUNICIPAL WATER DISTRICT'S SEWER SYSTEM MASTER PLAN AND THE DISTRICT HAS PROGRAMMED ADEQUATE CAPACITY TO TREAT WASTES FROM THE PROPOSED DEVELOPMENT.

EASTERN MUNICIPAL WATER DISTRICT

BY: _____
 CIVIL ENGINEER OF SUBDIVISIONS

CONSTRUCTION NOTES & ESTIMATED QUANTITIES - RECYCLED WATER MATERIALS			
ITEM NO.	DESCRIPTION	TOTAL QTY.	UNIT
1	8" PVC, C-900, CL-150 WATER LINE	726.60	L.F.
2	8" FxH RSGV	1	EA
3	6" TEMP. BLOW OFF PER EMWD STD. DWG. NO. B-568	1	EA
4	FIRE HYDRANT (6"x2-1/2"x4") WET BARREL PER E.M.W.D. STD. DWG. NO. B-362 ALL BARRELS TO BE PAINTED CHROME YELLOW WITH TOP AND NOZZLE CAPS GREEN	1	EA

CONSTRUCTION NOTES & ESTIMATED QUANTITIES - SEWER MATERIALS			
ITEM NO.	DESCRIPTION	TOTAL QTY.	UNIT
1	NEW INLET INTO EXISTING MANHOLE	1	EA
2	8" SEWER LINE	756.75	L.F.
3	48" I.D. MANHOLE	3	EA

RECYCLED WATER NOTES:

- RECYCLED WATER LINE AND APPURTENANT CONSTRUCTION SHALL BE IN ACCORDANCE WITH EMWD STANDARDS AND SPECIFICATIONS.
- PRIOR TO CONSTRUCTION OF PIPELINE, CONTRACTOR SHALL EXPOSE EXISTING RECYCLED WATER SYSTEM AND VERIFYING ITS EXISTING ELEVATION AND LOCATION.
- ALL SERVICE CONNECTIONS SHALL BE AS NOTED AND LOCATED AS SHOWN ON PLANS. SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH STD. DWGS. PA-3 AND PB-1.
- BLOW-OFFS SHALL BE INSTALLED IN ACCORDANCE WITH STD. DWG. PA-1.
- AIR VALVES SHALL BE INSTALLED IN ACCORDANCE WITH STD. DWG. PB-8 TYPE B.
- RECYCLED WATER SYSTEM PROFILE ELEVATIONS ARE TO CENTERLINE (CENTIGRADE) OF PIPE.
- JOINT RESTRAINERS, INSTEAD OF THRUST BLOCKS, SHALL BE USED ON ALL MAIN LINE PIPE JOINTS WITHIN SPECIFIED LIMITS AND ALL JOINTS OF WATER APPURTENANCE LATERALS OFF MAIN LINE, EMWD STD. DWG. B-663.
- ALL P.V.C. PIPE THROUGH 12" SHALL BE TYPE C-900, CLASS 150 EXCEPT WHERE NOTED OTHERWISE. PIPE SHALL CONFORM TO AWWA SPECIFICATIONS.
- FITTINGS FOR P.V.C. PIPE SHALL BE DUCTILE OR GRAY IRON. FITTINGS SHALL BE FLANGED, BOLTED MECHANICAL JOINTS, OR PUSH-ON JOINTS, AND SHALL BE CEMENT MORTAR LINED AND TAR (SEAL) COATED PER EMWD STANDARDS AND SPECIFICATIONS.

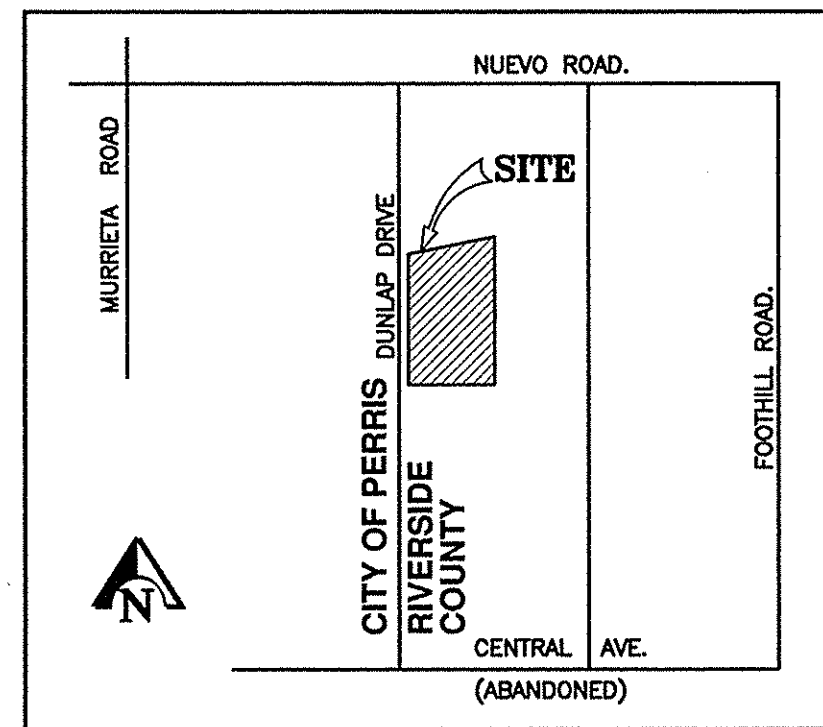
NOTIFICATIONS:

AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION, CONTRACTOR SHALL NOTIFY:

- E.M.W.D. FIELD ENGINEERING DEPARTMENT AT (951) 928-3777 EXT. 4830
- CITY OF PERRIS PUBLIC WORKS DEPARTMENT SECTION AT (951) 943-5003
- RIVERSIDE COUNTY TRANSPORTATION DEPARTMENT CONSTRUCTION SECTION AT (951) 955-6885.
- UNDERGROUND SERVICE ALERT (USA) 1-800-227-2600

BASIS OF BEARINGS:

DERIVED FROM THE CENTERLINE OF DUNLAP DRIVE AS DELINEATED ON PARCEL MAP NO. 13588, PMB 82/65, BEING N.0°34'28"E.



VICINITY MAP
N.T.S.

UNDERGROUND SERVICE ALERT
 CALL: TOLL FREE
811
 TWO DAYS BEFORE YOU DIG

CITY OF PERRIS

APPROVED BY: _____
 DATE: _____

COUNTY OF RIVERSIDE

APPROVED BY: _____
 DATE: _____



W.J. McKEEVER, INC.
 CIVIL ENGINEERING
 900 E. WASHINGTON STREET, SUITE 208
 COLTON, CALIFORNIA 92324
 PH: (909) 825-8088
 FAX: (909) 825-8639

WILLIAM J. McKEEVER, R.C.E. 22502 DATE _____

SEWER LEGEND:

- SEWER LINE
- SEWER LINE EXISTING OR PROPOSED (BY OTHERS)
- SEWER LINE WITH LATERALS
- MANHOLE
- EXISTING MANHOLE

WATER LEGEND:

- ⊥ RESILIENT SEAT GATE VALVE (FxF)
- TEMPORARY 6" BLOW-OFF (B-568)
- EXISTING OR PROPOSED WATERLINE (BY OTHERS)
- WATER LINE
- STANDARD F.H. (A.C.P./D.I.P./P.V.C. PIPE) 6" x ONE 2-1/2" x ONE 4" OUTLET B-362 ALL BARRELS TO BE PAINTED CHROME YELLOW WITH TOP AND NOZZLES CAPS GREEN
- ⊥ RESTRAINED FITTING END

BENCH MARK:
 RIVERSIDE CO. DESIGNATION
 M-16-5
 AT THE "I" INTERSECTION OF
 ORANGE AVE AND DUNLAP DR.;
 225.0 FEET WEST DUNLAP DR.;
 102.0 FEET NORTH OF ORANGE AVE.;
 9.0 FEET SOUTHWEST OF A MARKER POST;
 A BRASS DISK SET IN THE TOP OF A LARGE
 GRANITE BOULDER AND MARKED
 M-16-5 1963
 ELEV.= 1467.412

MARK	BY	DATE	REVISIONS	APPR.	DATE
	ENGINEER				

SEWER APPROVED BY:
EASTERN MUNICIPAL WATER DISTRICT

CIVIL ENGINEER OF SUBDIVISIONS	DATE	
	INITIAL	DATE
APPROVALS	PROJECT ENG. INSPECTION	
	WATER OPERATIONS	
	SEWER OPERATIONS	

COUNTY OF RIVERSIDE

ST. JAMES CHURCH
APN: 310-230-42
SEWER & RECYCLED WATER
PLAN AND PROFILE
TITLE SHEET

I.D.	—
S.A.	—
W.O.	—
C.O.	—
COORD.	—
SHT.	1 OF 3
D	—