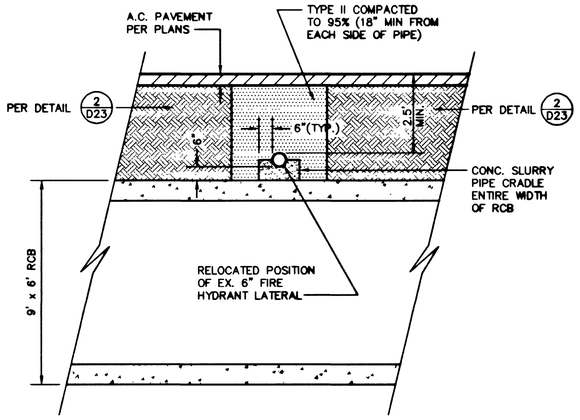
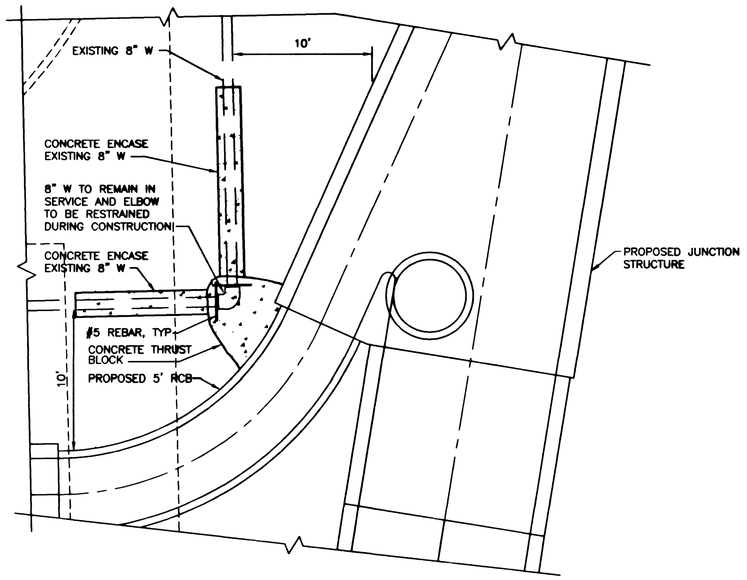
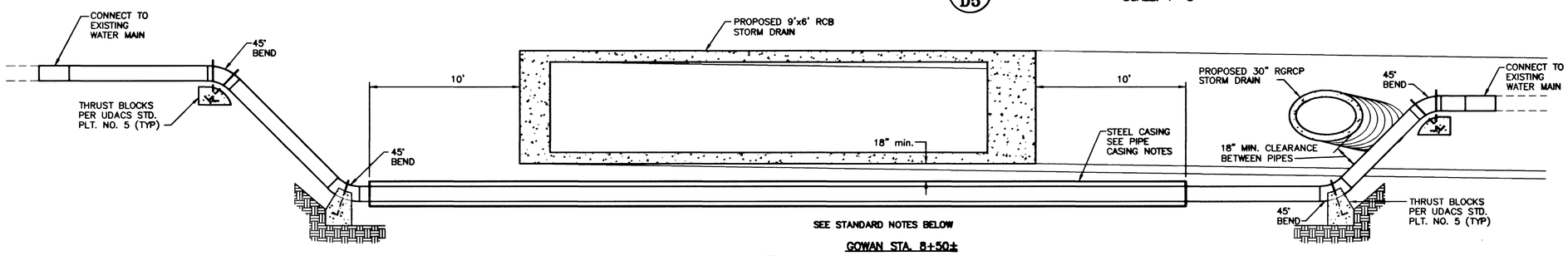


GOWAN STA. 4+50±
GOWAN STA. 6+00±

1/D5 FIRE HYDRANT LATERAL RELOCATION
NO SCALE



3/D5 THRUST BLOCK AND CONCRETE ENCASEMENT DETAIL
SCALE: 1"=5'



SEE STANDARD NOTES BELOW

GOWAN STA. 8+50±

2/D5 WATER MAIN RELOCATION
NO SCALE

WATER STANDARD NOTES

1. NO WORK SHALL BEGIN UNTIL THE WATER PLANS HAVE BEEN RELEASED FOR CONSTRUCTION BY THE LVVWD. FOLLOWING WATER PLAN APPROVAL, 48 HOUR NOTICE SHALL BE GIVEN TO THE LVVWD COMMUNICATION SUPPORT CENTER (258-7171) PRIOR TO THE START OF CONSTRUCTION. NOTICE MUST BE GIVEN BY 2:00 P.M. THE BUSINESS DAY PRIOR TO A LVVWD INSPECTION.
2. ALL WORK SHALL CONFORM TO LVVWD STANDARD PLATES, DRAWINGS, AND SPECIFICATIONS, AND THE UNIFORM DESIGN AND CONSTRUCTION STANDARDS FOR WATER DISTRIBUTION SYSTEMS, LATEST EDITION.
3. ALL WORK, EXCEPT AS MODIFIED BY THESE PLANS OR BY NOTE 2, SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT DRAFT OR EDITION OF THE UNIFORM STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION OFFSITE IMPROVEMENT, CLARK COUNTY AREA.
4. A SINGLE PIPE MATERIAL SHALL BE USED THROUGHOUT THE PROJECT UNLESS OTHERWISE APPROVED BY THE LVVWD.
5. ALL SERVICE LATERALS TWO (2) INCHES IN DIAMETER AND SMALLER SHALL BE COPPER TUBING WITH LVVWD APPROVED SERVICE SADDLES.
6. ALL WATER METER BOXES SHALL BE LOCATED OUTSIDE OF DRIVEWAY AREAS.
7. ALL VALVES SHALL BE LOCATED OUTSIDE OF DRIVEWAYS, VALLEY AND CURB GUTTERS.
8. THE FOLLOWING REQUIREMENTS MUST BE MET IN THE EVENT A WATER LINE AND SANITARY OR STORM SEWER LINE CROSS:

   A MINIMUM OF EIGHTEEN (18) INCH VERTICAL SEPARATION (OUTSIDE TO OUTSIDE) MUST BE MAINTAINED WHEN THE WATER LINE IS INSTALLED OVER THE SANITARY OR STORM SEWER LINE. IF THE VERTICAL SEPARATION CANNOT BE MAINTAINED OR THE WATER LINE MUST BE PLACED UNDER THE SANITARY OR STORM SEWER LINE, THE SANITARY OR STORM SEWER LINE MUST BE CONSTRUCTED WITH ONE OF THE FOLLOWING OR, AS SHOWN ON THESE PLANS:

   A. POTABLE WATER SUPPLY QUALITY MATERIAL,
   B. ENCASEMENT, WITH FOUR (4) INCH CONCRETE (MINIMUM)
   C. SLEEVING WITH POTABLE WATER SUPPLY QUALITY PIPE.

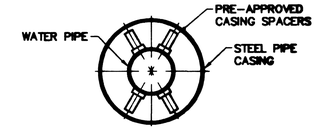
   EACH PROVISION MUST EXTEND ALONG THE SANITARY OR STORM SEWER, ON EITHER SIDE OF THE MAIN, A MINIMUM 10 FOOT DISTANCE PERPENDICULAR TO THE WATER MAIN EXTERIOR.
9. WARNING TAPE SHALL BE REQUIRED OVER ALL MAINS, ALL SIX (6) INCH DIAMETER AND LARGER SERVICE LATERALS, AND ANY SERVICE LATERAL NOT INSTALLED PERPENDICULAR TO THE MAIN IN ACCORDANCE WITH STANDARD PLATE NO. 27.
10. ALL WATER FACILITIES SHALL BE FILLED, DISINFECTED, PRESSURE TESTED, FLUSHED, FILLED AND AN ACCEPTABLE WATER SAMPLE OBTAINED, PRIOR TO CONNECTION TO THE LVVWD'S DISTRUBUTION SYSTEM.
11. THE CONTRACTOR MUST OBTAIN ALL METERS TWO (2) INCHES AND SMALLER FROM LVVWD CENTRAL STORES. TELEPHONE 258-3152 FORTY-EIGHT (48) HOURS PRIOR TO PICKUP.
12. CONSTRUCTION MAY INTERRUPT SERVICE, WITH LVVWD APPROVAL AND PROPER NOTIFICATION, BETWEEN THE HOURS OF 10 PM AND 6 AM, SUNDAY THROUGH THURSDAY. CIRCUMSTANCES MAY REQUIRE TEMPORARY SERVICE FEEDS BE INSTALLED, WITHOUT LVVWD REIMBURSEMENT. ANY TEMPORARY SERVICE FEED MUST HAVE PRIOR LVVWD APPROVAL.
13. ALL WATER FACILITY CONSTRUCTION MATERIALS USED MUST BE AS LISTED ON THE LVVWD'S PRE-APPROVED MATERIALS AND MANUFACTURES LISTING FOR NEW FACILITIES, LATEST REVISION, OR SPECIFICALLY APPROVED ON THESE PLANS.

RECONNECTION OF WATER SERVICE LATERALS 2" AND SMALLER

ALL SERVICE LATERALS 2" AND SMALLER THAT ARE CUT OR DAMAGED MAY BE RECONNECTED, PROVIDED THE FOLLOWING CRITERIA IS MET:

1. IF THE LATERAL IS COPPER, THE LATERAL MAY BE CUT AND SPLICED NOT MORE THAN ONCE IN A MANNER APPROVED BY THE DISTRICT.
2. IF THE LATERAL IS NOT COPPER, THE LATERAL MUST BE ABANDONED FROM THE EXISTING WATER MAIN, HAVE THE CORPORATION STOP TURNED OFF AT THE MAIN, AND THE LATERAL CUT 6" DOWNSTREAM FROM THE CORPORATION STOP AND CUT AGAIN 6" DOWNSTREAM FROM THE FIRST CUT SUCH THAT A 6" PIECE OF THE EXISTING SERVICE LATERAL IS REMOVED. 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 THE LVVWD. IF THE CORPORATION STOP IS NOT WATER TIGHT, THE CONTRACTOR SHALL NOTIFY LVVWD COMMUNICATION SUPPORT CENTER (702-258-7171) FOR FURTHER DIRECTION.

PIPE CASING NOTES



1. STEEL PIPE CASING SHALL BE FABRICATED FROM A MINIMUM OF 1/4" THICK STEEL PLATES CONFORMING TO THE REQUIREMENTS ASTM, A283, GRADE B,C, OR D. ALL JOINTS SHALL BE WELDED. INTERIOR JOINTS SHALL BE GROUND TO A SMOOTH FINISH. ALL WELDING SHALL BE PERFORMED IN ACCORDANCE WITH AWWA C201, "AWWA STANDARD FOR FABRICATED ELECTRICALLY WELDED STEEL WATER PIPE." COATINGS FOR STEEL CASING ARE NOT REQUIRED.
2. PIPE CASING SHALL BE LAID TRUE TO LINE AND GRADE WITH NO BENDS OR CHANGES IN GRADE FOR THE FULL LENGTH OF THE CASING.
3. THE PIPE SHALL BE SUPPORTED AT EACH END OF EACH JOINT WITH SPACERS APPROVED BY THE LVVWD. DO NOT BACKFILL WITH SAND. AFTER PIPE INSTALLATION, THE CASING SHALL BE SEALED AT BOTH ENDS WITH CASING END SEALS APPROVED BY THE LVVWD. DUCTILE IRON PIPE JOINTS INSIDE CASING ARE TO BE RESTRAINED.
4. STEEL PIPE CASING SYMMETRICAL ABOUT WATER MAIN CENTERLINE.
5. PRE-APPROVED CASING SPACERS AND PRE-APPROVED END SEALS INSTALL PER MANUFACTURER'S SPECIFICATIONS. (REDWOOD SKIDS NOT ALLOWED. UDACS SECTION 3.26 NOT APPLICABLE). USE A "CENTERED" CONFIGURATION AND PROVIDE THE MANUFACTURER WITH THE FOLLOWING:
   - PIPE OD
   - CASING ID
   - CASING LENGTH

APPROVED

LAS VEGAS VALLEY WATER DISTRICT — DATE 12/22/98

MS = "PLT"
I:\SHALL\PUBWRK\5249\DETAILS\WTR-RELO.DWG

27414

CONSULTING ENGINEERS ● PLANNERS ● LAND SURVEYORS
2727 SOUTH RAINBOW BOULEVARD
LAS VEGAS, NEVADA 89102-5148 PHONE (702) 873-7550 FAX (702) 362-2597

REV	DATE	BY	REVISION

DEPARTMENT OF PUBLIC WORKS
CITY OF LAS VEGAS

TITLE: WATER LINE RELOCATION DETAILS

PROJECT: DURANGO DRIVE IMPROVEMENTS
CHEYENNE AVENUE TO LONE MOUNTAIN ROAD

SEAL: PROFESSIONAL ENGINEER-STATE OF NEVADA — JOINER S. LAGPACAN — CIVIL — No. 12537

WO. NO.	5249
BY	JL,LMW
DATE	07/17/98
SCALE	HORIZ. NONE VERT. NONE
DRAWING	D5
SHEET	11 OF 106 SHEETS