

CAUTION!!!

UNDERGROUND UTILITIES

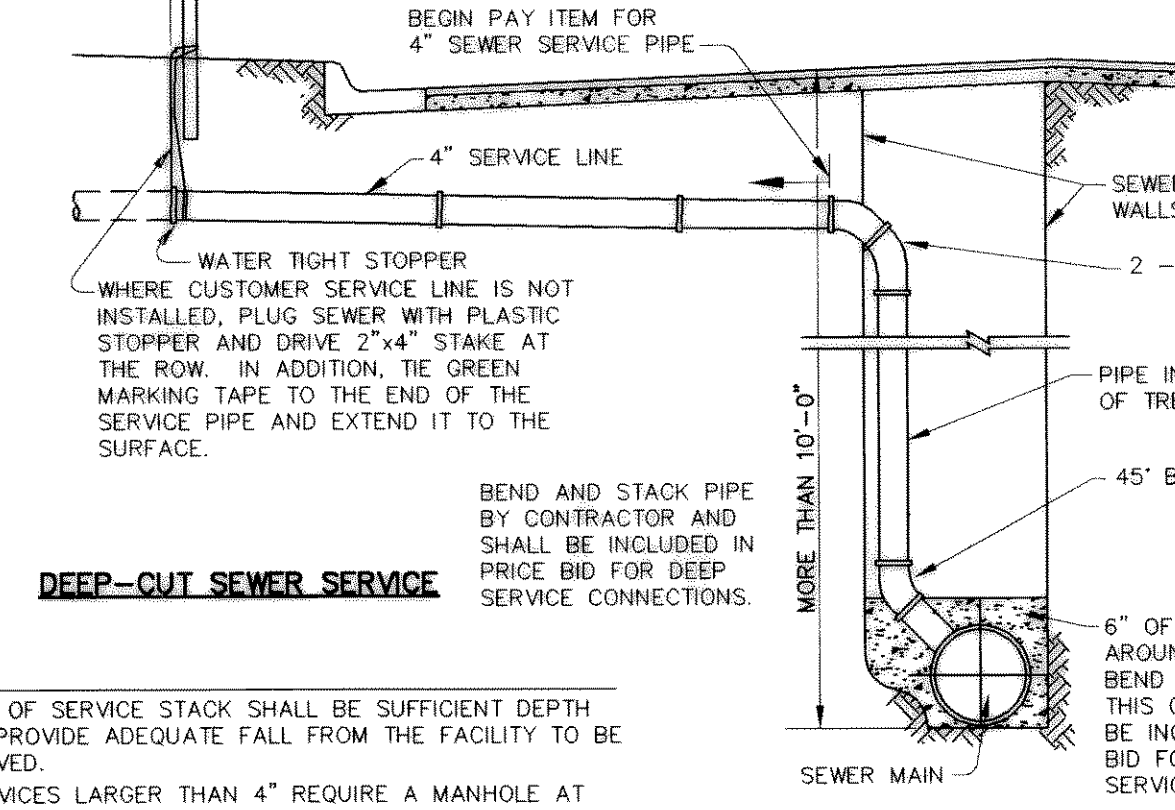
EXISTING UTILITIES AND UNDERGROUND FACILITIES INDICATED ON THESE PLANS HAVE BEEN LOCATED FROM REFERENCE INFORMATION SUPPLIED BY VARIOUS OWNERS OF THE FACILITIES. THE ENGINEER DOES NOT ACCEPT THE RESPONSIBILITY FOR THE UTILITY LOCATIONS SHOWN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY BOTH HORIZONTALLY AND VERTICALLY THE LOCATION OF ALL EXISTING UTILITIES AND UNDERGROUND FACILITIES PRIOR TO CONSTRUCTION, TO TAKE NECESSARY PRECAUTIONS IN ORDER TO PROTECT ALL FACILITIES ENGINEERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING UTILITIES. THE CONTRACTOR SHALL PRESERVE AND PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION. ANY DAMAGE BY THE CONTRACTOR TO EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR AT HIS EXPENSE. THE CONTRACTOR SHALL CONTACT ALL POSSIBLE UTILITY AND UNDERGROUND FACILITY OWNERS.

WATER LINE GENERAL NOTES

- UNLESS OTHERWISE NOTED, ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROCKWALL "STANDARDS OF DESIGN, STANDARD SPECIFICATIONS FOR CONSTRUCTION, STANDARD DETAILS FOR THE CITY OF ROCKWALL" MANUAL.
- ALL DUCTILE IRON FITTINGS SHALL BE OF THE MECHANICAL JOINT TYPE OR SLIP JOINT, EXCEPT AS NOTED, AND SHALL BE CLASS "D" OR CLASS "250 ON SIZES 12" AND SMALLER IN ACCORDANCE WITH AWWA SPECIFICATION C-111-64.
- WATER MAINS SHALL HAVE A MINIMUM COVER OF 42". WATER PIPE SHALL BE C-900 CLASS 200, 16" SHALL BE C-905 CLASS 200. ALL CORPORATION STOPS MARKED WITH E.M.S. LOCATOR DISK (BLUE).
- FIRE HYDRANTS SHALL BE EITHER MUELLER, AMERICAN DARLING OR AN APPROVED EQUIVALENT CONFORMING TO THE REQUIREMENTS SET FORTH IN THE CITY OF ROCKWALL "STANDARD SPECIFICATIONS FOR CONSTRUCTION". ALL FIRE HYDRANTS SHALL BE INSTALLED WITH A 6-INCH GATE VALVE ON THE HYDRANT LEAD AND WILL BE PLACED 2 FEET - 4 FEET FROM BACK OF CURB UNLESS OTHERWISE INDICATED ON THE PLANS OR AS REQUIRED TO CLEAR SIDEWALK. DO NOT PLACE FIRE HYDRANTS IN STREET CURB RETURNS.
- FIRE HYDRANT BONNETS AND CAPS WILL BE PAINTED TO CONFORM WITH CITY SPECIFICATIONS FOR COLOR CODE AS SET FORTH IN THE "STANDARD SPECIFICATIONS FOR CONSTRUCTION".
- GATE VALVES SHALL BE MANUFACTURED BY MUELLER OR KENNEDY, OR AN APPROVED EQUIVALENT AND SHALL CONFORM TO AND SHALL BE INSTALLED ACCORDING TO THE CITY OF ROCKWALL "STANDARD SPECIFICATIONS FOR CONSTRUCTION".
- FLUSH VALVES OR AN APPROVED EQUIVALENT SHALL BE INSTALLED ON ALL DEAD-END WATER LINES AND SHALL COMPLY WITH THE CITY OF ROCKWALL STANDARD DETAILS.
- WHENEVER WATER MAINS ARE LOCATED INSIDE THE STREET R.O.W., THEY SHALL BE PLACED 5.5 FEET FROM R.O.W., UNLESS OTHERWISE SHOWN ON PLANS. ALL WATER AND SANITARY SEWER MAINS SHALL HAVE A 10.0 FEET MINIMUM LATERAL SEPARATION.
- IN THE EVENT AN ITEM IS NOT COVERED IN THE CITY OF ROCKWALL "STANDARD SPECIFICATIONS FOR CONSTRUCTION", THE CITY ENGINEER'S DECISION SHALL APPLY.
- ALL STUBOUT WILL BE A MINIMUM OF 1 JOINT OF PIPE (20') PAST THE VALVE.
- ALL WATER SERVICES SHALL BE POLYETHYLENE PLASTIC.

SANITARY SEWER GENERAL NOTES

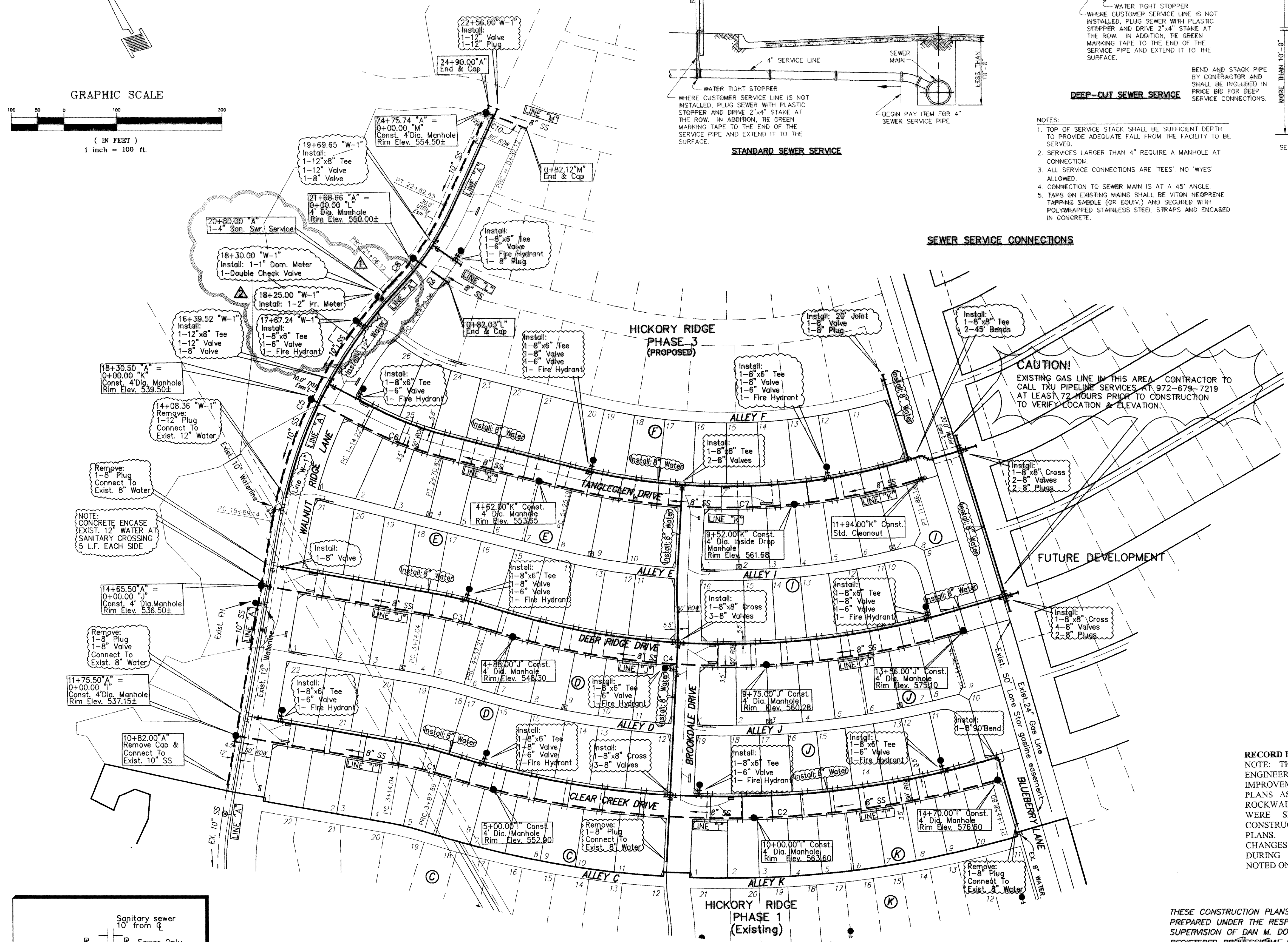
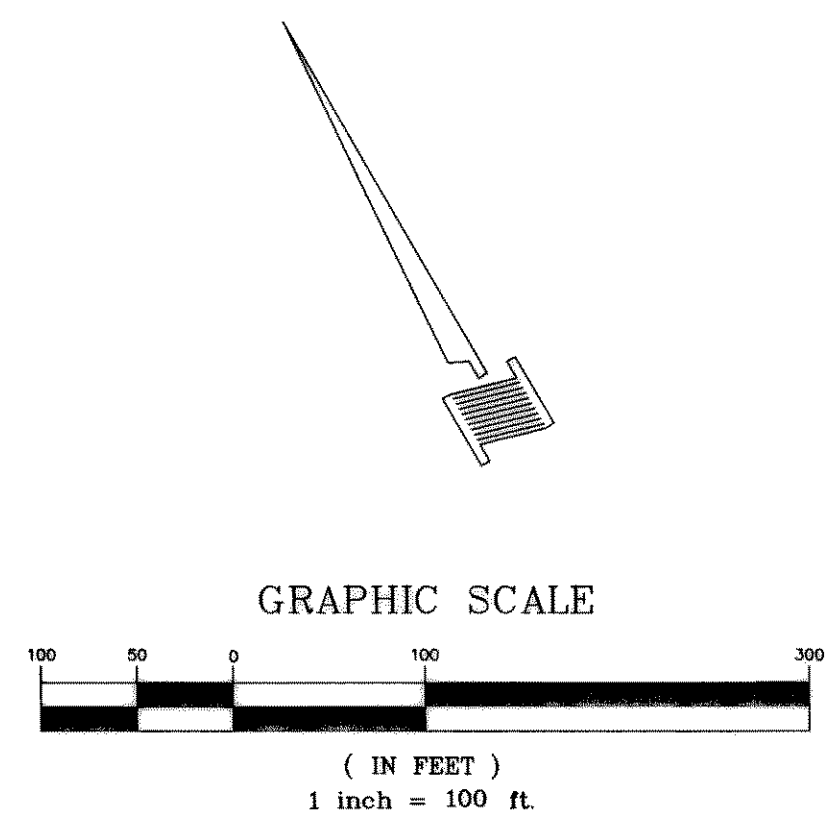
- UNLESS OTHERWISE NOTED, ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROCKWALL "STANDARD OF DESIGN, STANDARD SPECIFICATIONS FOR CONSTRUCTION, STANDARD DETAILS FOR THE CITY OF ROCKWALL" MANUAL.
- WHENEVER SANITARY SEWER MAINS ARE LOCATED INSIDE THE STREET R.O.W., THEY SHALL BE PLACED 3.5 FEET FROM R.O.W., UNLESS OTHERWISE SHOWN ON PLANS. ALL WATER AND SANITARY SEWER MAINS SHALL HAVE A 10.0 FEET MINIMUM LATERAL SEPARATION.
- SEWER PIPE AND SERVICES SHALL BE SDR35 P.V.C. GRAVITY PIPE OR SDR26 P.V.C. PIPE FOR MAINS DEEPER THAN 12' UNLESS SHOWN OTHERWISE ON THESE PLANS.
- IN THE EVENT AN ITEM IS NOT COVERED IN THE CITY OF ROCKWALL "STANDARD SPECIFICATIONS FOR CONSTRUCTION", THE CITY ENGINEER'S DECISION SHALL APPLY.
- AT WATER AND SEWER MAIN CROSSINGS, SEWER PIPE JOINTS SHALL NOT BE LOCATED CLOSER THAN TEN HORIZONTAL FEET FROM THE WATER MAIN. IF THIS CONDITION CANNOT BE ADHERED TO, THE SEWER PIPE JOINTS SHALL BE PRESSURE TYPE. (150 P.S.I. MINIMUM)
- THE GENERAL CROSSING LOCATIONS FOR STORM DRAIN PIPES ARE SHOWN AND DENOTED HEREON. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING THE STORM DRAIN CROSSING FROM THE PLAN INFORMATION PROVIDED HEREON AND ELSEWHERE IN THESE PLANS. THE VERTICAL CLEARANCES BETWEEN WATER, SANITARY SEWER, AND STORM DRAIN PIPE LINES SHOWN ON THESE PLANS SHALL BE ADHERED TO.
- ALL SANITARY SEWER SERVICE LATERALS SHALL INCLUDE 4" TEE, BEND, PIPE, AND STOPPER INSTALLED 10.0 FEET DOWNSTREAM OF THE CENTERLINE OF LOTS, UNLESS OTHERWISE SHOWN ON PLANS. END OF PIPE MARKED WITH E.M.S. LOCATOR DISK (GREEN).
- TRENCH WALLS SHALL BE CONSTRUCTED IN STRICT ACCORDANCE WITH THE LATEST OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION STANDARDS AND MAY BE SLOPED OR VERTICAL ABOVE THE PIPE EMBEDMENT AT THE CONTRACTOR'S OPTION. IN SOME LOCATIONS, THE AVAILABLE WORKING AREA MAY BE INADEQUATE TO ALLOW FOR FULLY SLOPED TRENCH WALLS. IN THESE AREAS, THE CONTRACTOR SHALL PROVIDE TEMPORARY SHEETING, SHORING OR BRACING OF TRENCH WALLS AS NECESSARY, IN STRICT ACCORDANCE WITH O.S.H.A. STANDARDS, TO PREVENT SLIDES, CAVE-INS, SETTLEMENT OR MOVEMENT OF THE BANKS AND TO PROVIDE SAFE WORKING CONDITIONS FOR WORKMEN. PAYMENT FOR SLOPED OR SHEETED, SHORED OR BRACED TRENCH WALLS CONSTRUCTED IN ACCORDANCE WITH O.S.H.A. STANDARDS SHALL BE LIMITED TO THE BID ITEMS IN THE PROPOSAL FOR TRENCH SAFETY SYSTEMS. TRENCH CONSTRUCTION SHALL BE LIMITED TO THE STREET RIGHT-OF-WAY. PERMANENT EASEMENTS AND AREAS DELINEATED AS LIMITS OF CONSTRUCTION AS SHOWN ON THE PLANS.



- NOTES:**
- TOP OF SERVICE STACK SHALL BE SUFFICIENT DEPTH TO PROVIDE ADEQUATE FALL FROM THE FACILITY TO BE SERVED.
 - SERVICES LARGER THAN 4" REQUIRE A MANHOLE AT CONNECTION.
 - ALL SERVICE CONNECTIONS ARE 'TEES', NO 'WYES' ALLOWED.
 - CONNECTION TO SEWER MAIN IS AT A 45° ANGLE.
 - TAPS ON EXISTING MAINS SHALL BE WITH NEOPRENE TAPPING SADDLE (OR EQUIV.) AND SECURED WITH POLYWRAPPED STAINLESS STEEL STRAPS AND ENCASED IN CONCRETE.

SEWER SERVICE CONNECTIONS

CAUTION!
EXISTING GAS LINE IN THIS AREA. CONTRACTOR TO CALL TXU PIPELINE SERVICES AT 972-679-7219 AT LEAST 72 HOURS PRIOR TO CONSTRUCTION TO VERIFY LOCATION & ELEVATION.



RECORD DRAWINGS AUGUST 19, 2002
NOTE: THE INTENT OF THE OWNER AND ENGINEER WAS TO CONSTRUCT THE IMPROVEMENTS ACCORDING TO THESE PLANS AS APPROVED BY THE CITY OF ROCKWALL. THE LINES AND GRADES WERE SET ON THE GROUND FOR CONSTRUCTION ACCORDING TO SAID PLANS. WE ARE NOT AWARE OF ANY CHANGES OR REVISIONS TO THESE PLANS DURING CONSTRUCTION EXCEPT AS NOTED ON THE PLANS.

THESE CONSTRUCTION PLANS WERE PREPARED UNDER THE RESPONSIBLE SUPERVISION OF DAN M. DOWDEY REGISTERED PROFESSIONAL ENGINEER No. 21433



THE SEAL APPEARING ON THIS DOCUMENT WAS AUTHORIZED BY DAN M. DOWDEY P.E. # 21433

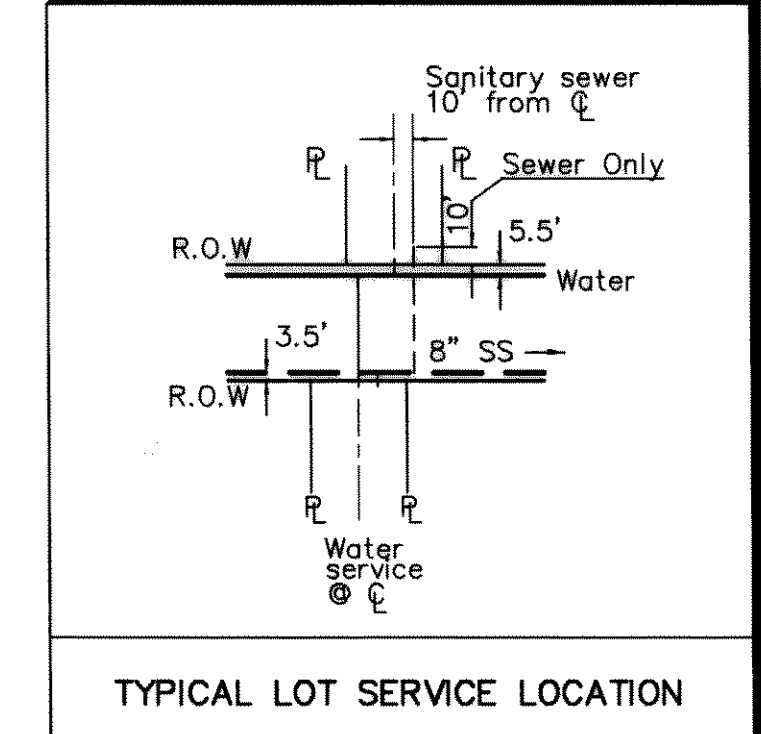
SANITARY SEWER CURVE TABLE					
LOCATION	CURVE	LENGTH	RADIUS	TANGENT	DELTA
LINE "I"	C1	83.85	618.50	41.99	7'46"04"
LINE "I"	C2	1060.91	1816.50	546.07	33'27"48"
LINE "J"	C3	123.17	908.50	61.88	7'46"04"
LINE "J"	C4	891.54	1526.50	458.89	33'27"48"
LINE "A"	C5	516.98	862.00	266.53	34'21"46"
LINE "K"	C6	156.59	672.16	78.65	13'20"54"
LINE "K"	C7	660.93	1226.50	338.70	30'52"31"
LINE "A"	C8	176.33	513.00	89.04	19'41"38"
LINE "I"	C9	9.97	271.50	4.99	02'06"15"
LINE "M"	C10	82.12	1500.00	41.07	03'08"13"

WATER METER SCHEDULE		
TYPE	SIZE	NO.
DOM.	1"	116
IRR.	2"	1

NO.	DATE	BY	REVISION
1	11-21-02	JDS	ADDED 1-1" DOM. METER, 1-2" IRR. METER & 4" SAN. SERVICE FOR AMENITY CENTER
2	3-05-02	JDS	ADDED FIRE HYDRANT & DOUBLE CHECK VALVE

WATER & SANITARY SEWER PLAN
HICKORY RIDGE, PHASE TWO
CITY OF ROCKWALL
ROCKWALL COUNTY, TEXAS
DOWDEY, ANDERSON & ASSOCIATES, INC.
5225 VILLAGE CREEK DR., STE. 200 (972) 931-0694 PLANO, TEXAS

DESIGN	DRAWN	CHECKED	DATE	SCALE	JOB	SHEET
RR	RR	DMD	MAR, 2001	1"=100'	99-066	1



BENCHMARKS: CITY OF ROCKWALL, TEXAS, CONTROL MONUMENT #929, TOP OF HEADWALL IN NORTHWEST CORNER OF BRIDGE OVER SQUABBLE CREEK, SOUTHWESTERLY SIDE OF FM 205. ELEV = 524.55
SQUARE CUT ON TOP OF HEADWALL AT THE MOST NORTHERLY CORNER OF BRIDGE, NORTHEASTERLY SIDE OF FM 205, 1680± NORTHWEST OF CL OF MIMS ROAD. ELEV = 529.11