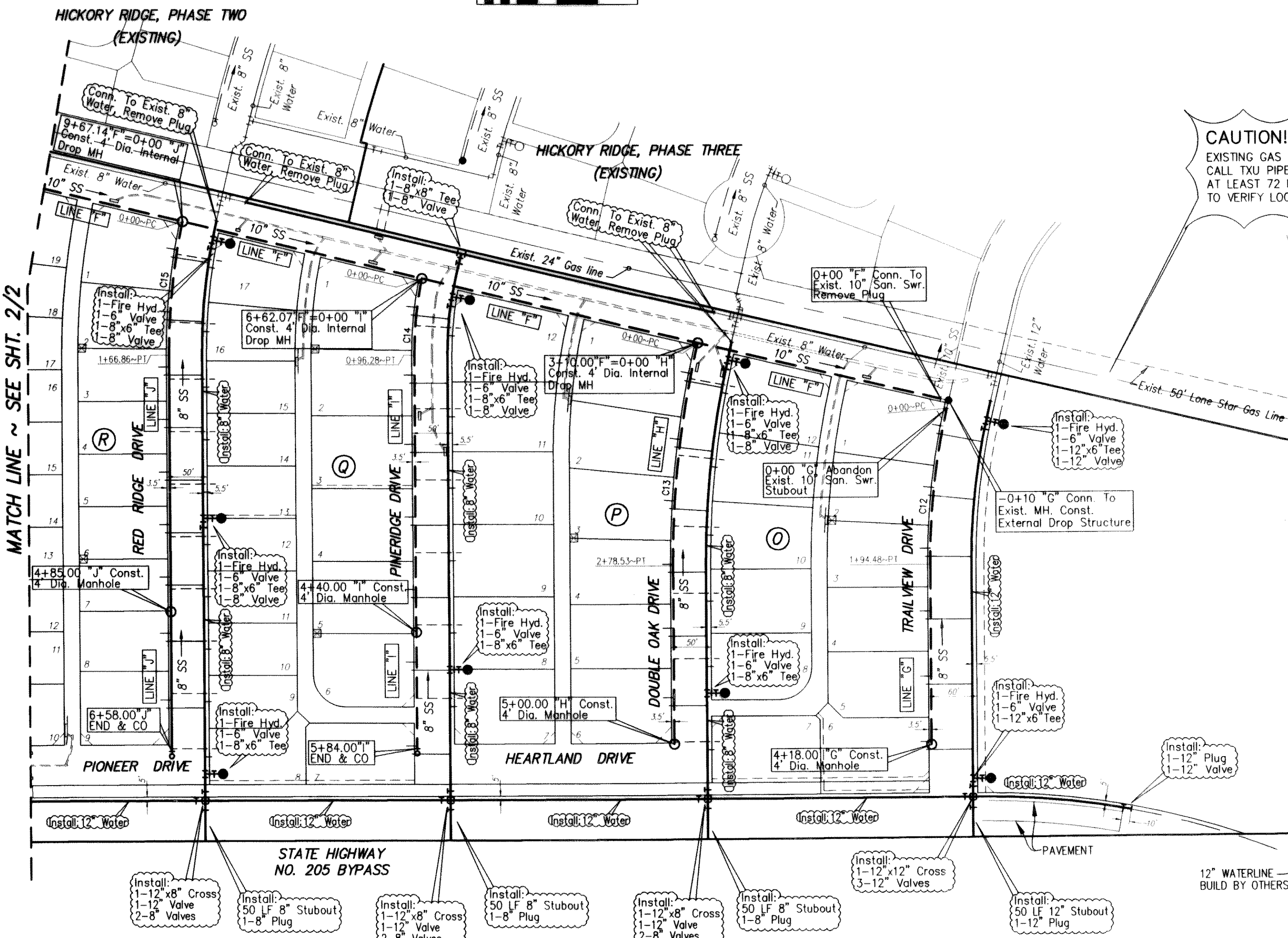


SANITARY SEWER - CURVE DATA					
CURVE	LOCATION	LENGTH	RADIUS	DELTA	TANGENT
C1	LINE "A"	45.07'	250.00'	10'19'49"	22.60'
C2	LINE "A"	195.11'	296.50'	37'42'08"	101.23'
C3	LINE "A"	314.08'	1356.50'	13'15'57"	157.74'
C4	LINE "B"	115.15'	175.00'	37'42'08"	59.75'
C5	LINE "B"	447.19'	1869.45'	13'42'20"	224.67'
C6	LINE "C"	71.17'	496.50'	8'12'47"	35.65'
C7	LINE "C"	68.59'	478.50'	8'12'47"	34.35'
C8	LINE "C"	420.88'	1558.45'	15'28'24"	211.73'
C9	LINE "D"	456.69'	1936.50'	13'30'44"	229.41'
C10	LINE "E"	385.50'	1646.50'	13'24'53"	193.63'
C11	LINE "F"	233.97'	1066.50'	12'34'11"	117.46'
C12	LINE "G"	194.48'	868.48'	12'49'49"	97.65'
C13	LINE "H"	278.53'	1188.48'	13'25'40"	139.91'
C14	LINE "I"	96.28'	471.50'	11'41'58"	48.31'
C15	LINE "J"	166.86'	776.50'	12'18'44"	83.75'
C16	LINE "K"	122.75'	366.50'	19'11'23"	61.95'
C17	LINE "K"	43.22'	366.50'	6'45'26"	21.64'



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.

NOTE:
DO NOT CONNECT TO LOFLAND FARMS WATER SYSTEM 780 PRESSURE ZONE

WATER LINE GENERAL NOTES

- UNLESS OTHERWISE NOTED, ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROCKWALL "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 230. 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.
- EMS PADS TO BE INSTALLED AT ALL HORIZONTAL BENDS AND EVERY 200 FEET.
- METER BOXES TO HAVE SPECIAL LIDS INSTALLED FOR ELECTRONIC READ. BRAND NAME - ROTEC (DFW-18-AMRL-LID) "E" SERIES LID. DFW PLASTICS, INC. - PHONE NO. (817) 439-3600

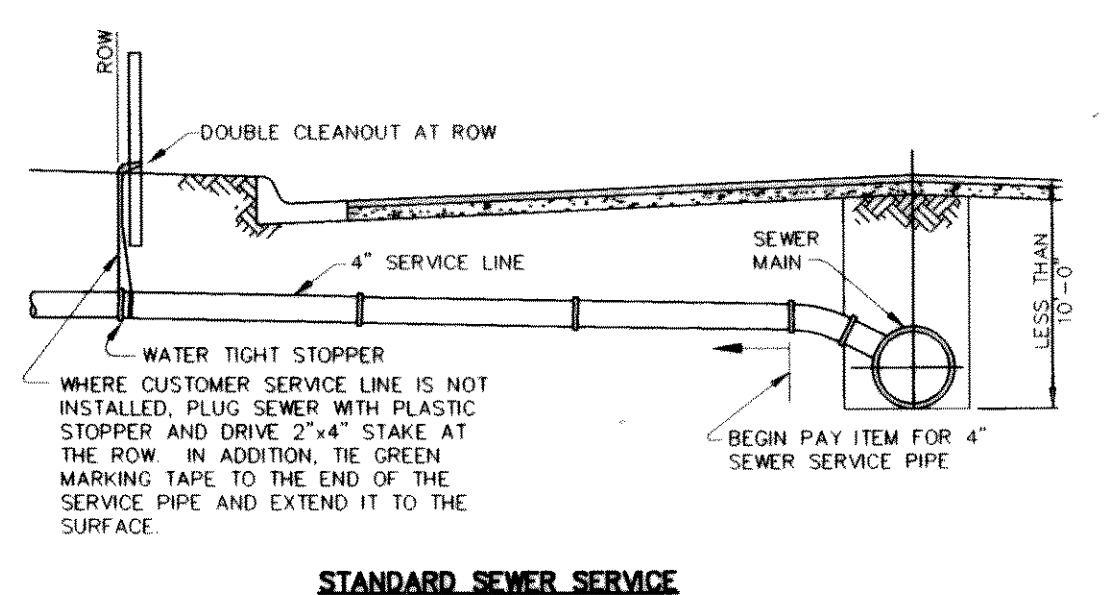
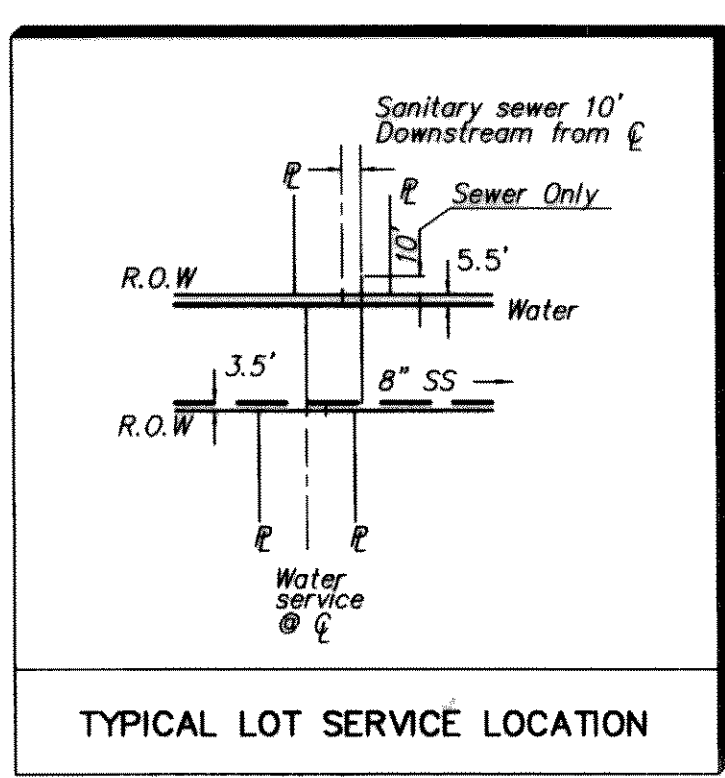
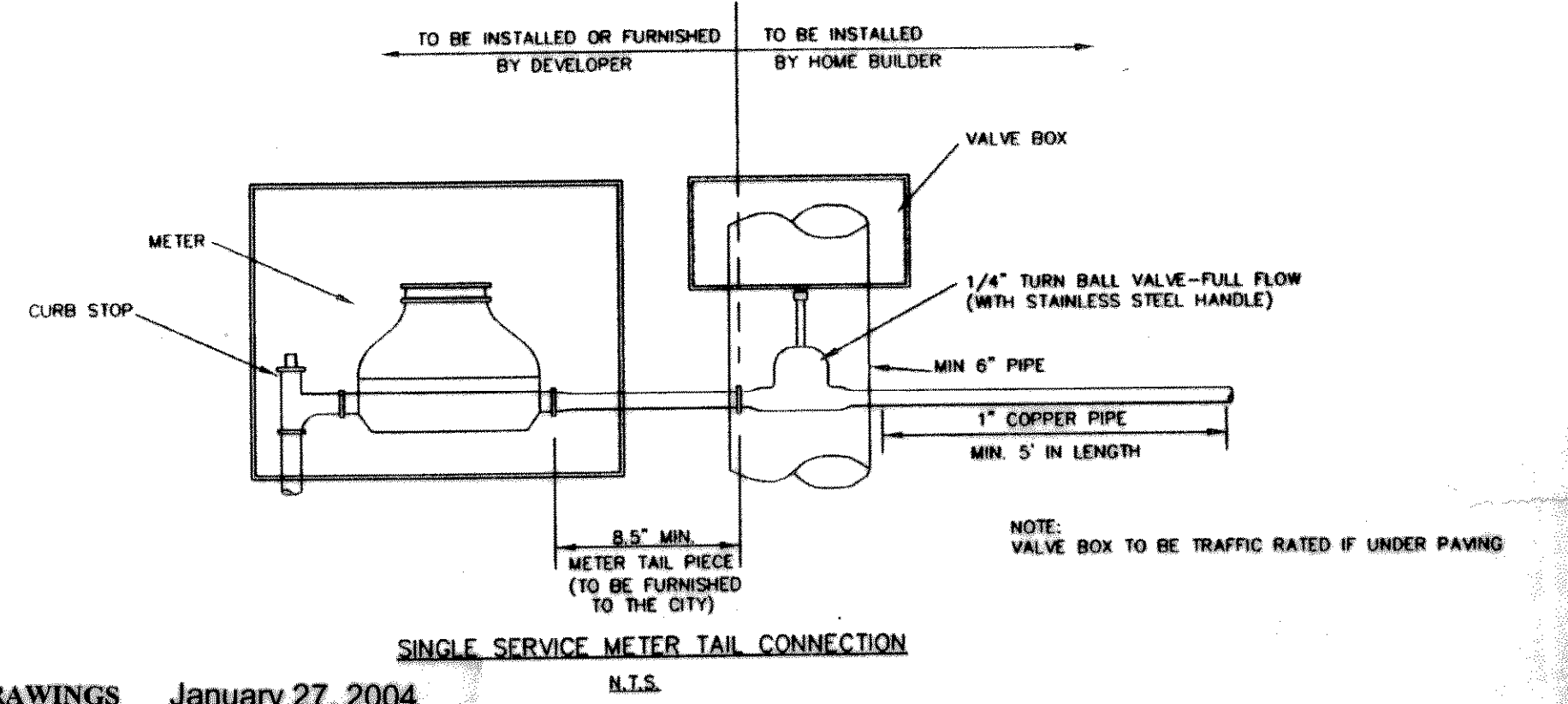
SANITARY SEWER GENERAL NOTES

- UNLESS OTHERWISE NOTED, ALL MATERIAL AND CONSTRUCTION SHALL CONFORM TO THE CURRENT CITY OF ROCKWALL "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 10' 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.

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 ENCOUNTERED, AND TO NOTIFY THE ENGINEER PROMPTLY OF ALL CONFLICTS OF THE WORK WITH EXISTING FACILITIES. 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. CONTACT ALL POSSIBLE UTILITY AND UNDERGROUND FACILITY OWNERS.

700 PRESSURE ZONE

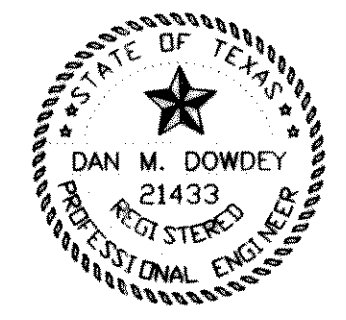
780 PRESSURE ZONE



WATER METER SCHEDULE		
TYPE	SIZE	NO.
DOM.	1"	233
IRR.	2"	3

SANITARY SEWER SERVICES		
TYPE	SIZE	NO.
PVC	4"	233

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



RECORD DRAWINGS January 27, 2004
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.

NO.	DATE	BY	REVISION
1	3-3-03	JDS	CITY MARKUPS
2	3-14-03	JDS	CITY MARKUPS
3	3-31-03	JDS	12" WATERLINE ON SH 205 BYPASS

WATER & SANITARY SEWER PLAN
HICKORY RIDGE - PHASE FOUR
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
JDS	LAC	MSD	DEC. 2002	1"=100'	99-066	2 / 2