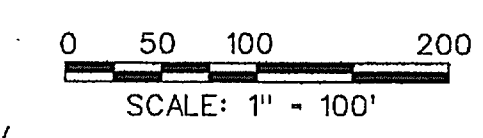
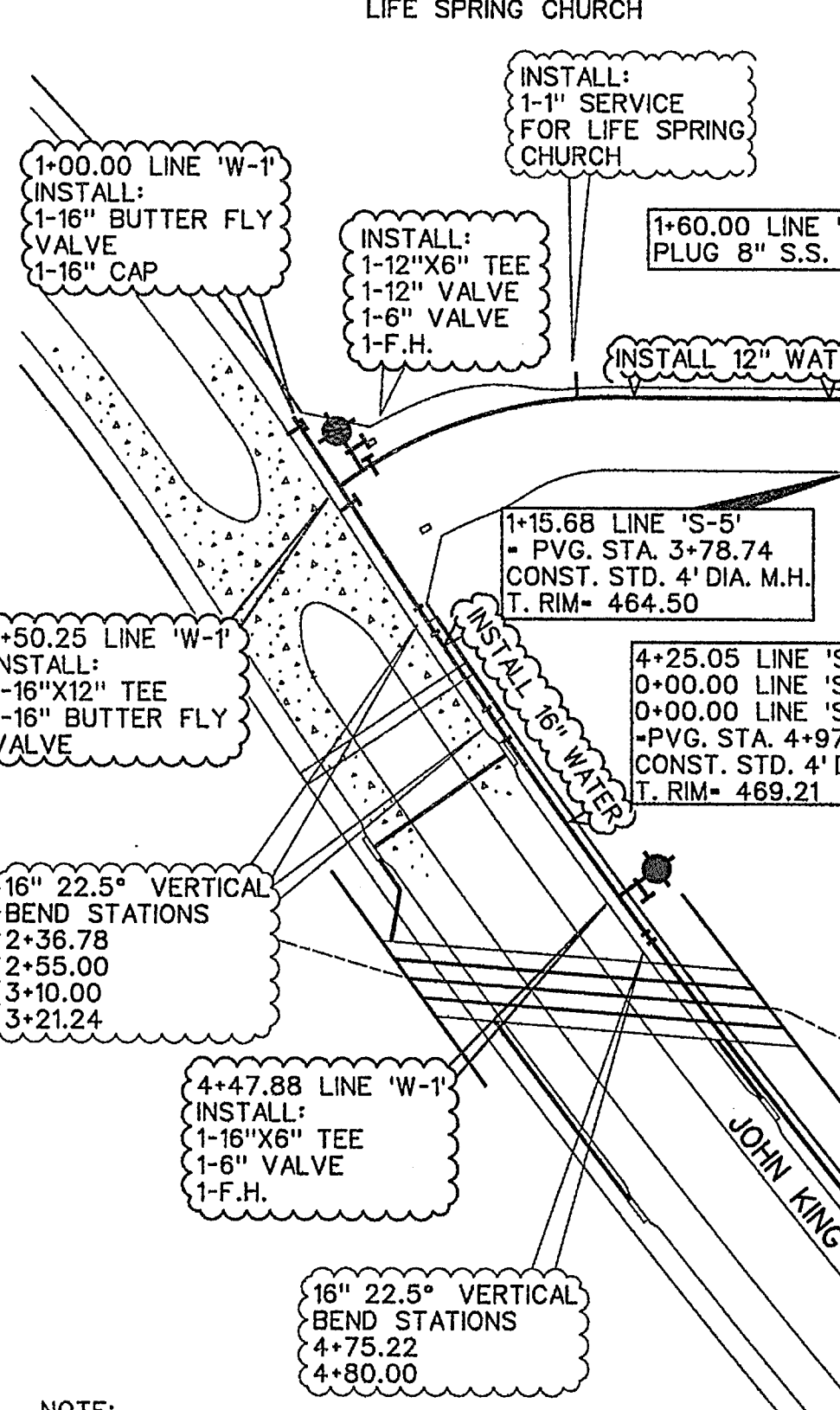
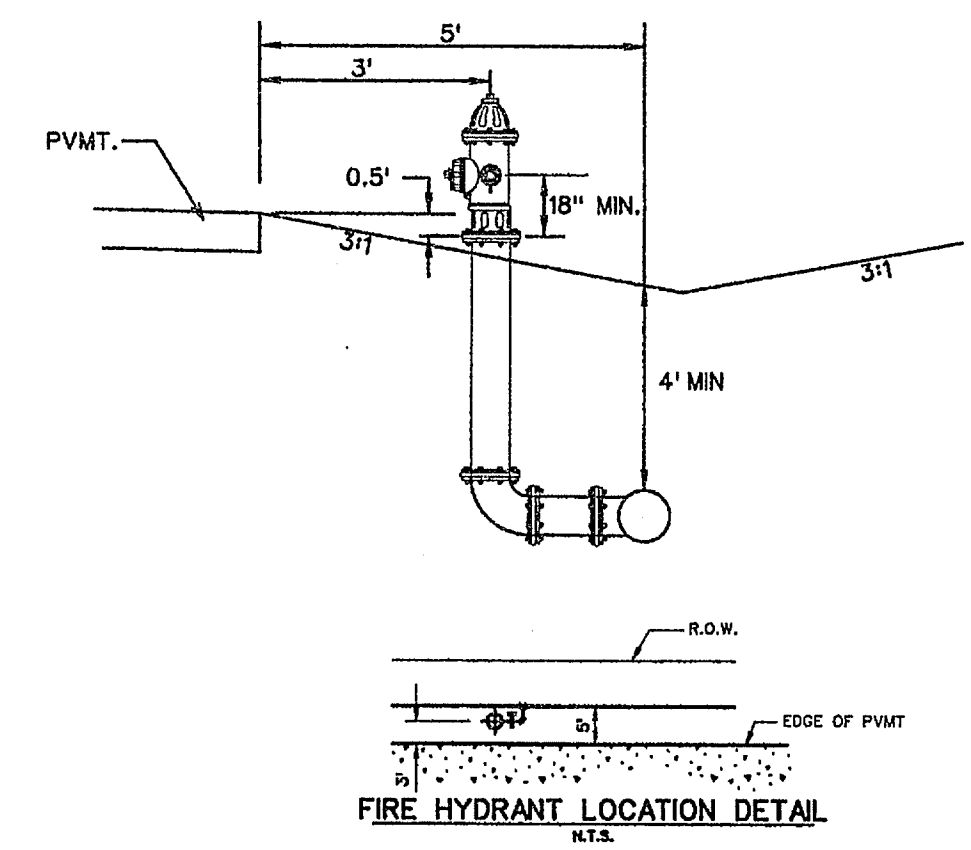


SANITARY SEWER CURVE TABLE

CURVE NO.	DELTA	RADIUS	LENGTH	TANGENT
1.	17°28'14"	805.50'	245.61'	123.77'
2.	04°27'06"	805.50'	62.58'	31.31'
3.	07°26'59"	1342.50'	174.55'	87.40'
4.	14°59'03"	1342.50'	351.09'	176.55'
5.	18°07'32"	444.50'	140.62'	70.90'
6.	19°55'37"	1007.50'	350.40'	176.99'
7.	02°43'53"	892.50'	42.55'	21.28'
8.	19°42'06"	892.50'	306.91'	154.98'
9.	26°32'23"	230.50'	106.77'	54.36'
10.	09°55'46"	305.50'	52.94'	26.50'



- NOTES FOR CONSTRUCTION WITH THE NORTH TEXAS MUNICIPAL WATER DISTRICT EASEMENT**
- North Texas Municipal Water District (NTMWD's) 30-inch water transmission pipeline is located within the limits of construction.
 - Operation of heavy earthmoving equipment, compaction equipment or heavy construction equipment, such as concrete trucks, shall be restricted to specific crossing points across NTMWD easements, as approved by the NTMWD. The crossing shall be designated and verified to provide a minimum of five-feet of cover.
 - To assure that placing of significant loads over the NTMWD pipeline does not damage the existing pipeline, no materials shall be stockpiled on the NTMWD easement, without authorization from the NTMWD. If the contractor desires to use NTMWD's easement for stockpile of materials, contact NTMWD's Engineering Department at (972) 442-5405 so your plans for use of NTMWD's easement can be reviewed.
 - A minimum of three feet separation between the bottom of the pavement and top of NTMWD pipeline is required. In addition, if separation between the bottom of the pavement and the top of the pipeline is less than 3.5 feet, a thickened pavement section is required.
 - Crossing of the NTMWD easement with other utilities, such as TV cable, phone, gas and electric, shall be coordinated with the NTMWD to avoid damage to the NTMWD facilities.
 - Outdoor lighting, landscaping, screening walls or other facilities shall not be installed in NTMWD easements without written approval of the NTMWD.
 - Unless otherwise shown or required a minimum of one-foot clearance shall be provided for all utilities crossing the NTMWD pipelines.
 - The contractor shall contact NTMWD Engineering at (972) 442-5405 at least 48 hours prior to performing any work in the vicinity of the NTMWD facilities.
 - For open cut where crossing under the NTMWD pipeline, within ten feet either side of centerline of pipeline, the trench width to be cut shall be limited to four-foot vertical walls, no sloping bank with the appropriate trench safety. The entire excavation within the limits noted above shall be backfilled with gravel to one-foot above top of NTMWD pipeline. One-foot minimum vertical clearance is required between NTMWD pipeline and proposed utilities.
 - Limits of bore shall be a minimum of the NTMWD easement width centered on NTMWD's pipeline.
 - The casing pipe shall terminate outside of NTMWD's easement.
 - All proposed sanitary sewer crossings where installed above NTMWD's pipeline shall be comprised of a minimum 150-PSI pressure rated carrier pipe and casing pipe. Installation of this carrier pipe and casing pipe shall be installed across the entire NTMWD easement.
 - Water and sewer lines crossing the NTMWD easement shall be installed in compliance with the Rules and Regulations for Public Water Systems Paragraph 290.44 (e), Location of Water Lines.

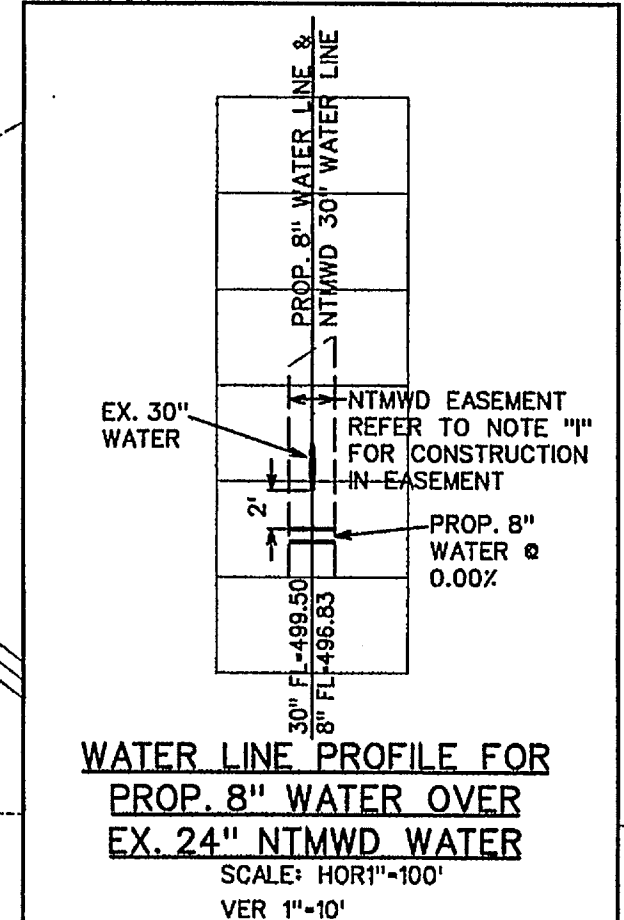
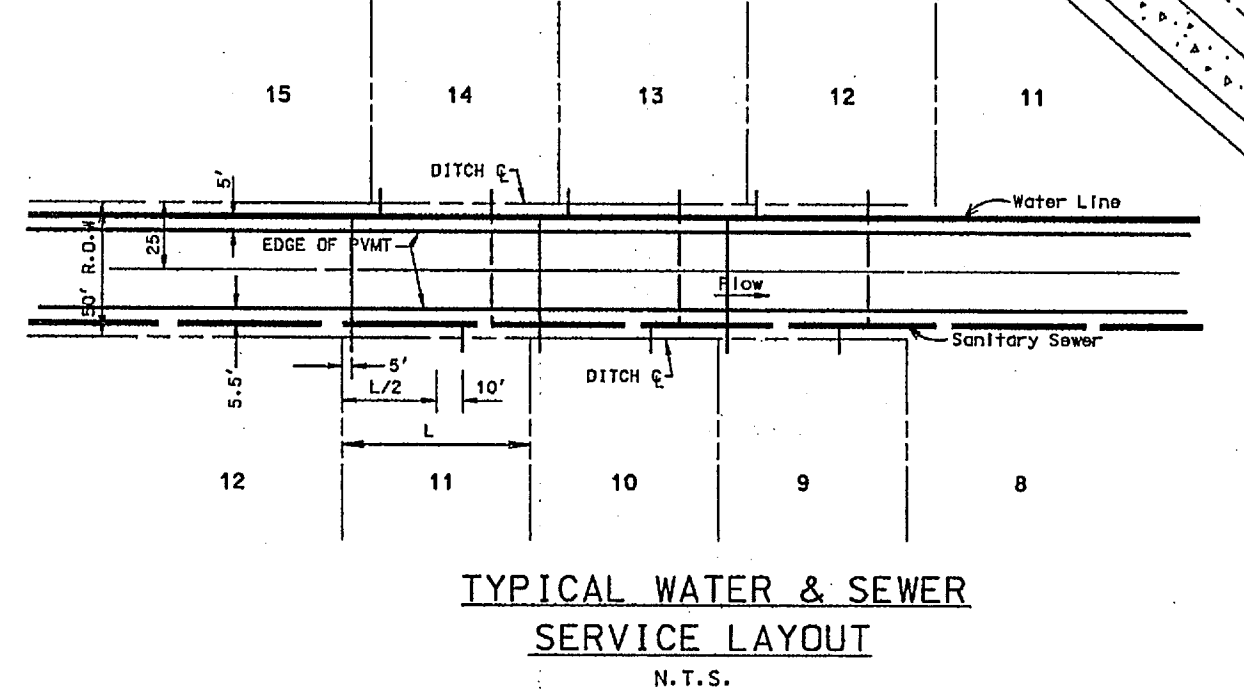


NOTE:

- ALL WATER LINES TO BE CLASS 200 PIPE SDR 14.
- ALL SANITARY SEWER PIPE TO BE SDR 35 FOR 5'-10" DEEP AND SDR 26 FOR 10" AND GREATER.
- INSTALL BLUE "EMS" DISK ON WATER LINE AT EVERY 250' AND CHANGE IN DIRECTION, VALVE, AND SERVICE.
- INSTALL GREEN "EMS" DISK ON SANITARY SEWER LINE EVERY 250' AND AT EVERY CHANGE IN DIRECTION, MANHOLE, CLEANOUT, AND SERVICE.
- ALL MANHOLES TO BE RAVEN EPOXY LINED AND SEALED.

LEGEND

- PROP. WATER LINE
- PROP. FIRE HYDRANT AND VALVE
- PROP. GATE VALVE
- PROP. FLUSH VALVE
- EXIST. WATER LINE
- EXIST. FIRE HYDRANT AND VALVE
- PROP. SANITARY SEWER
- PROP. MANHOLE
- PROP. CLEANOUT
- EXIST. SANITARY SEWER
- EXIST. MANHOLE
- PROP. STORM SEWER
- PROP. CURB INLETS
- PROP. CONC. HEADWALL



SERVICE SCHEDULE

TYPE	SIZE	NO.
SANITARY	4"	51
WATER	1"	52

STATE OF TEXAS
 WARREN L. CORWIN
 57875
 REGISTERED PROFESSIONAL ENGINEER
 8/25/2014

The seal appearing on this document was authorized by Warren L. Corwin, P.E. 57875, on August 25, 2014

AS-BUILT MARCH 2015
 INFORMATION PROVIDED BY CONTRACTORS (NOT FIELD VERIFIED)

CORWIN ENGINEERING, INC.
 200 W. BELMONT, SUITE E
 ALLEN, TEXAS 75013 (972) 396-1200
 TBPE FIRM #5951

DEVELOPMENT PLANS FOR BREEZY HILL PHASE IV
 ROCKWALL, TEXAS

WATER AND SANITARY SEWER PLAN

DRAWN BY CMF	DESIGNED BY WLC	CHECKED BY WLC	SHEET NO.
JOB NUMBER 14025	DATE APRIL 2014	SCALE 1"=100'	10 of 17