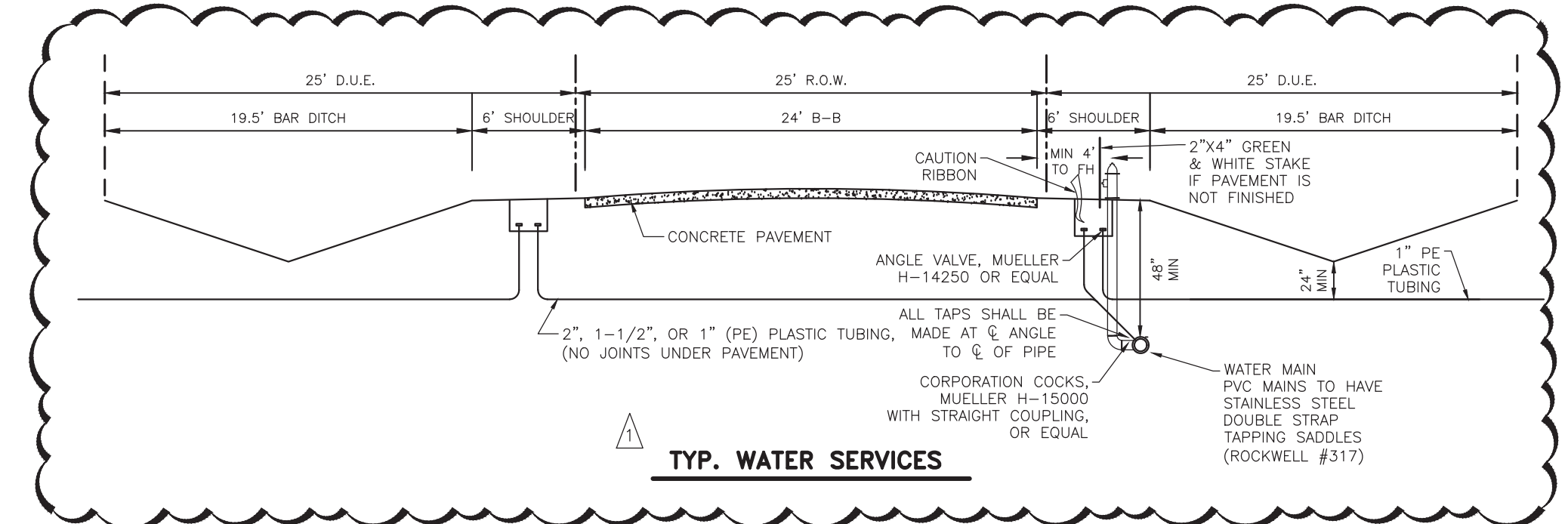


!! CAUTION !!
 UNDERGROUND UTILITIES ARE LOCATED ON THIS SITE.
 AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION, CONTACT THE
 TEXAS EXCAVATION SAFETY SYSTEM (TESS) TO LOCATE ALL
 UNDERGROUND UTILITIES IN THE AREA.
 1-800-DIG-TESS
 (1-800-344-8377)
 WWW.DIGTESS.ORG

NORTH CENTRAL TEXAS COUNCIL OF GOVERNMENTS NOTES

- All materials, construction, testing and workmanship shall conform to the North Central Texas Council of Governments Standard Specifications for Public Works Construction (Third Addition 1998)
- All water mains 12" and smaller shall have a minimum cover of 48" and shall be PVC A.W.W.A C900 DR-14, Class 200 water pipe. The pipe shall be "green" in color and the embedment with a minimum of Class "B+" Detectable metallic tape (Blue - "Caution Buried Water Line Below" or approved equal) shall be installed above all water mains to a max depth of 12" below finished grade (after compaction). All water mains shall be trace wired.
- All tapping sleeves and valves shall be full body ductile iron. Fittings shall be of the mechanical joint type or slip joint, and shall be Class D, or Class 250 on sizes 12" and smaller in accordance with A.W.W.A Specification C-110-64 and C-11-64. All fittings shall be restrained by the use of Mega-Lugs or approved equal and concrete thrust blocking. Brass fittings by Ford or approved equal.
- Concrete blocking shall be provided on water mains at all tees, wyes, bends, crosses and fire hydrants per NCTCOG Standards. All concrete for blocking shall be a minimum 2000 psi. Polyethylene wrap shall be installed around all ductile iron fittings and valves.
- All fire hydrants shall conform to A.W.W.A standard specifications for fire hydrants for ordinary water works service, C-502. Fire hydrants shall have a 5/8" minimum valve opening and a barrel with approximately 7" inside diameter. All hydrants shall be equipped with a breakaway flange. Use Waterous or approved equal.
- A blue Stimsonite fire-lite reflector shall be placed in the center of the street opposite each fire hydrant.
- Unless otherwise approved by the City, all water valves shall be Resilient Seat Valves (RSV) and valve boxes shall be American Flow Control's Trench Adapter with a cast iron lid. After the final cleanup and alignment has been completed, the contractor shall pour a reinforced concrete block around all valve boxes so that they are flush with the final grade.
- All residential water services shall be as follows: A) The location shall be near the mid-point of the front lot line unless otherwise shown on plans. The water service shall be a minimum of 1" nominal diameter continuous 200 psi rated polyethylene tubing. Sand embedment shall be used around the pipe and corporation stop. The contractor shall tie detectable blue metallic tape to the water service meter setter and shall leave a minimum of 36" of tape exposed after backfill and paving is complete. B) A 1-inch meter box, approved by the City, shall be installed inside the twenty-five foot waterline easement.
- Any plumbing installed outside the R.O.W or an easement shall be installed by a licensed plumber and inspected by Building Inspection.
- All water lines shall be sterilized and pressure tested to 200 psi for a 3-hour continuous period. All testing and sterilization shall meet or exceed NCTCOG specifications.
- The contractor shall be responsible for providing "as-built" plans to the design engineer of record showing the location of water and sanitary sewer services and valves by distances to lot lines. This information shall be placed and marked on "as-built" plans by the engineer of record. Copies of these "as-built" plans shall be furnished to the City as required.
- All lots must utilize an alternative type of On-Site Sewage Facility (OSSF). OSSF permit will be required. State-mandated set backs pertaining to OSSF's shall be adhered to. Final lot grading is required prior to installation or operation of OSSF.



RECORD DRAWING
 THIS DRAWING REPRESENTS
 THE CONSTRUCTED STATE OF THIS PROJECT
 ACCORDING TO AVAILABLE INFORMATION
 FURNISHED TO THE ENGINEER
 BY THE CONTRACTOR OR OWNER
 AFTER CONSTRUCTION
 BY: *Jason Trafton*
 DATE: 11.14.2019

BENCHMARKS
 BM #1
 Top nut of fire hydrant that is approximately 17 feet West of the centerline of Driftwood Ln, and approximately 30 feet South from the center of Chief Lane.
 EL: 555.97 ft.
 BM #2
 Top nut of fire hydrant that is approximately 18 feet South of the centerline of Royal King Road, and approximately 82 feet West of the center of Kitchens Drive.
 EL: 547.33 ft.

1	METER LOCATION PER CITY OF LUCAS	3/4/2019
NO.	REVISIONS / SUBMISSIONS	DATE

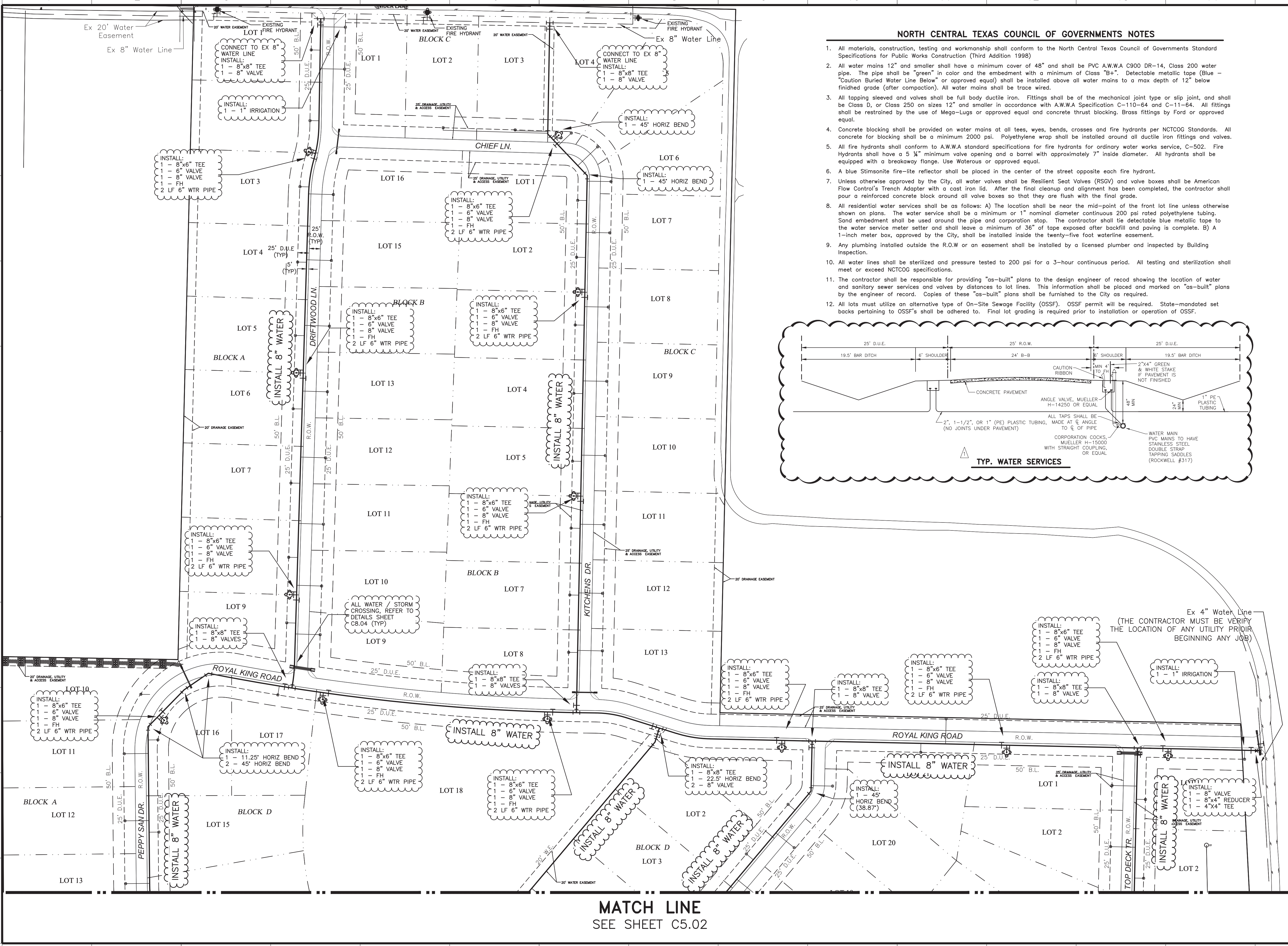
SCALE MAY NOT REPRESENT DRAWING SHOWN ON THIS SHEET.
 MEASUREMENTS FOR CONSTRUCTION SHALL BE TAKEN FROM DIGITAL FILES ONLY.

0 100 200
 Scale: 1" = 100'

Ion Design Group
 7075 Twin Hills Ave
 Suite 350
 Dallas, Texas 75231
 Firm TX F6701
 214.370.3470 Ph

**LAKEVIEW DOWNS
 EQUESTRIAN ESTATES**
 CITY OF LUCAS, COLLIN COUNTY, TEXAS

C5.01 UTILITY PLAN	
SEAL	SCALE H: 1" = 100'
DRAWN FM	FILENAME
CHECKED JT	C5.01 UTILITY PLAN
REVIEWED BK	DRAWING NO.
DATE 11.14.2019	C5.01
PROJECT NO. 2804.000	30 of 45

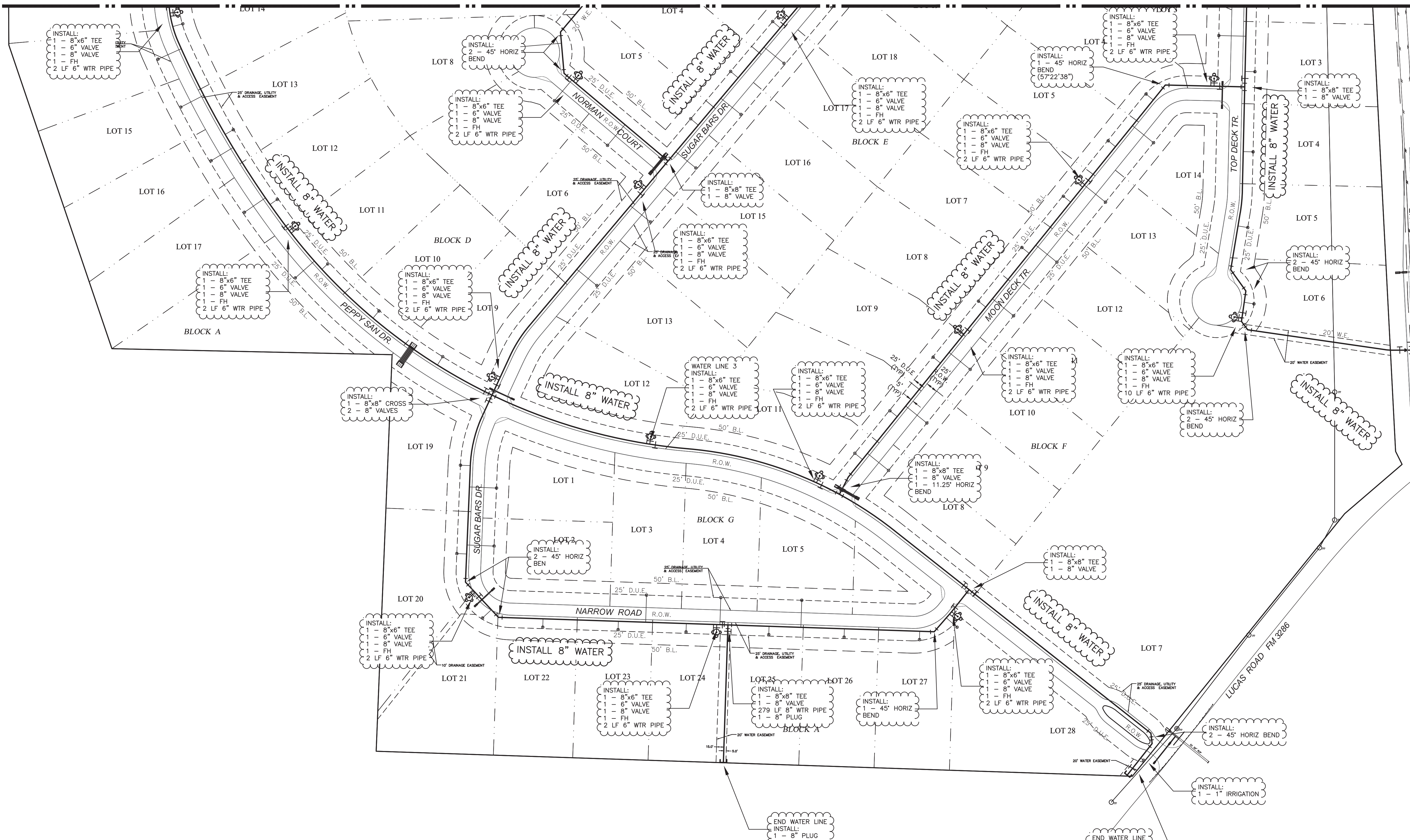


MATCH LINE
 SEE SHEET C5.02

LAYOUT: C5.01 UTILITY PLAN PLOTTED: Tuesday, December 17, 2019 10:26:27 AM BY: BRYAN-ISA PEI SCALE: 1:1 SAVED: 11/14/2019 2:14PM BY: BRYAN-ISA
 Z:\PROJECTS\2804.00 LBL LUCAS\DRAWINGS\C5.01 UTILITY PLAN.DWG

SEE SHEET C5.01
MATCH LINE

!! CAUTION !!
UNDERGROUND UTILITIES ARE LOCATED ON THIS SITE. AT LEAST 48-HOURS PRIOR TO ANY EXCAVATION, CONTACT THE TEXAS EXCAVATION SAFETY SYSTEM (TESS) TO LOCATE ALL UNDERGROUND UTILITIES IN THE AREA.
1-800-DIG-TESS
(1-800-344-8377)
WWW.DIGTESS.ORG



CONNECT TO EX 4" WATER LINE
INSTALL:
1 - 8" VALVE
1 - 8"x4" REDUCER
1 - 4"x4" TEE

Ex 4" Water Line
(THE CONTRACTOR MUST VERIFY THE LOCATION OF ANY UTILITIES PRIOR TO BEGINNING ANY JOB)

BENCHMARKS
BM #1
Top nut of fire hydrant that is approximately 17 feet West of the centerline of Driftwood Ln, and approximately 30 feet South from the center of Chief Lane.
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NO.	REVISIONS / SUBMISSIONS	DATE

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0 100 200
Scale: 1" = 100'

Ion Design Group
7075 Twin Hills Ave
Suite 350
Dallas, Texas 75231
Firm TX F6701
214.370.3470 Ph

**LAKEVIEW DOWNS
EQUSTRIAN ESTATES**
CITY OF LUCAS, COLLIN COUNTY, TEXAS

RECORD DRAWING
THIS DRAWING REPRESENTS THE CONSTRUCTED STATE OF THIS PROJECT ACCORDING TO AVAILABLE INFORMATION FURNISHED TO THE ENGINEER BY THE CONTRACTOR OR OWNER AFTER CONSTRUCTION.
BY: *Jason Trafton*
DATE: 11.14.2019

SEAL	DRAWN	SCALE
	FM	H: 1" = 100'
CHECKED	FILENAME	C5.02 UTILITY PLAN
JT	DRAWING NO.	
REVIEWED	BK	C5.02
DATE	11.14.2019	PROJECT NO.
2804.000	31 of 45	

LAYOUT: C5.02 UTILITY PLAN PLOTTED: Tuesday, December 17, 2019, 10:26:37 AM BY: BRYAN-15A.PLT SCALE: 1:1 SAVED: 11/14/2019 2:14PM BY: BRYAN-15A Z:\PROJECTS\2804.00 LBL LUCAS\DRAWINGS\C5.01 UTILITY PLAN.DWG