

GENERAL NOTES

- EXISTING UTILITY LINES ARE SHOWN IN AN APPROXIMATE MANNER ONLY AND MAY BE INCOMPLETE OR OBSOLETE. SUCH LINES MAY OR MAY NOT EXIST WHERE SHOWN OR NOT SHOWN. ALL UTILITIES SHOULD BE FIELD VERIFIED AND LOCATED BY THE CONTRACTOR PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION. THE CONTRACTOR IS FULLY RESPONSIBLE FOR ANY AND ALL DAMAGE CAUSED BY ITS FAILURE TO LOCATE, IDENTIFY AND PRESERVE ANY AND ALL EXISTING UTILITIES, PIPELINES, AND UNDERGROUND UTILITY LINES.
- CONTRACTOR SHALL NOT USE VIBRATORY COMPACTION EQUIPMENT OR HEAVY VEHICLES OVER EXISTING UTILITIES.
- SITE STORM DRAIN, ELECTRIC LINES & TRANSFORMERS AND GAS LINES ARE SHOWN FOR GENERAL INFORMATION ONLY TO PROVIDE AN OVERVIEW OF SITE UTILITIES AND POTENTIAL CONFLICTS. SEE MECHANICAL PLANS FOR GAS LINE SIZING. SEE CG-101 FOR STORM DRAIN DESIGN.
- ALL WATER FITTINGS SHALL HAVE JOINT RESTRAINTS (LT). SEE RESTRAINED JOINT CRITERIA NOTES THIS SHEET. (LT) LENGTH SHOWN ON KEYED NOTES.

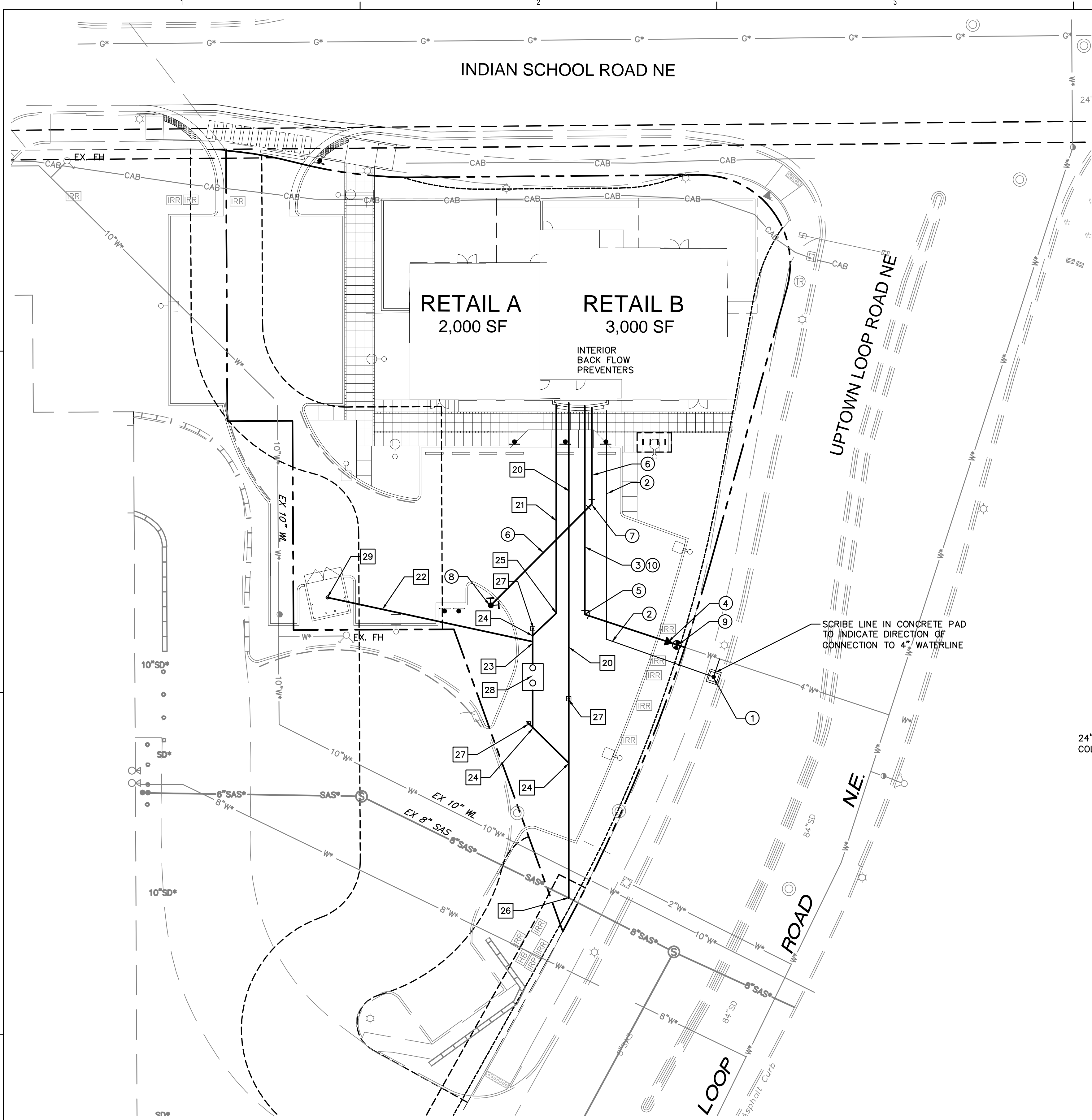
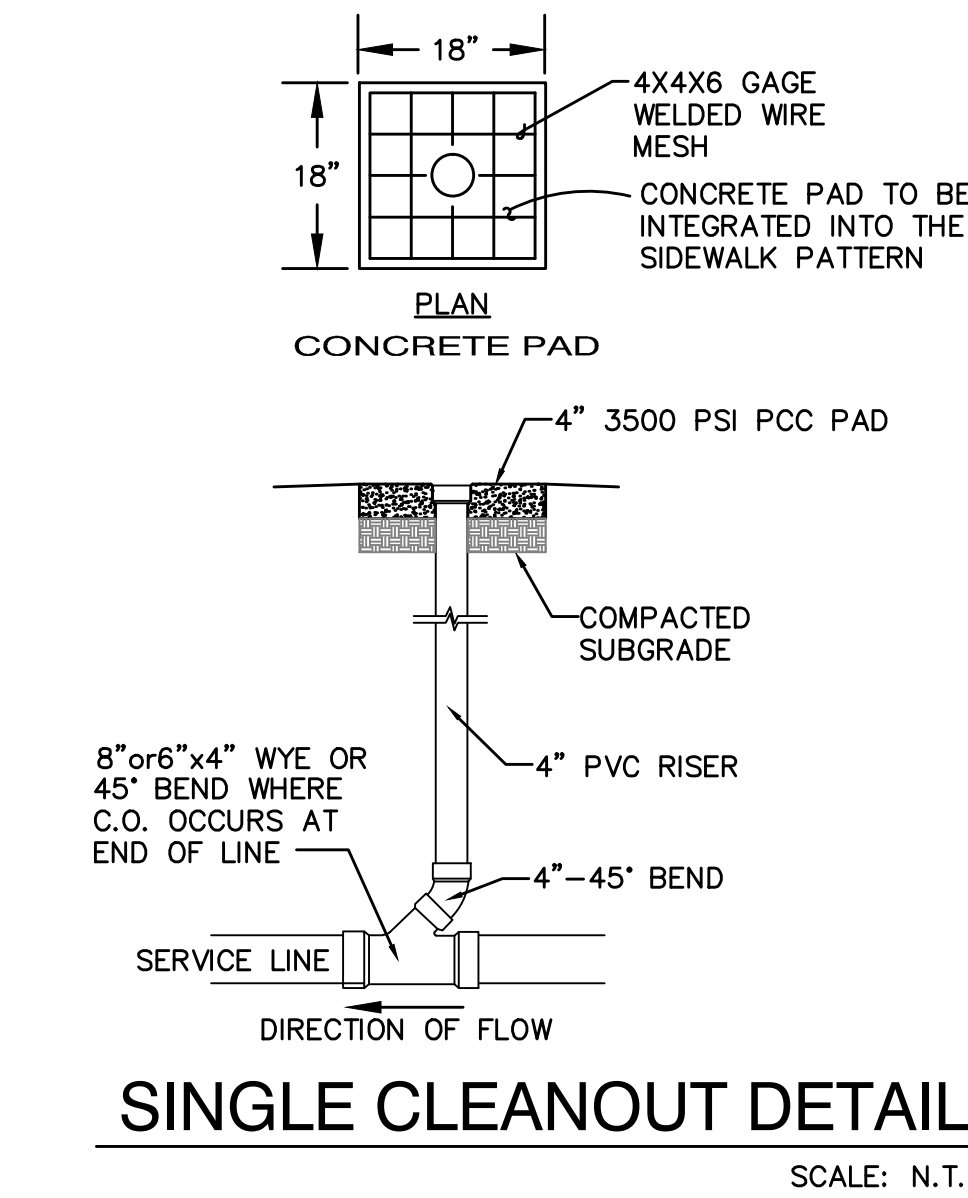
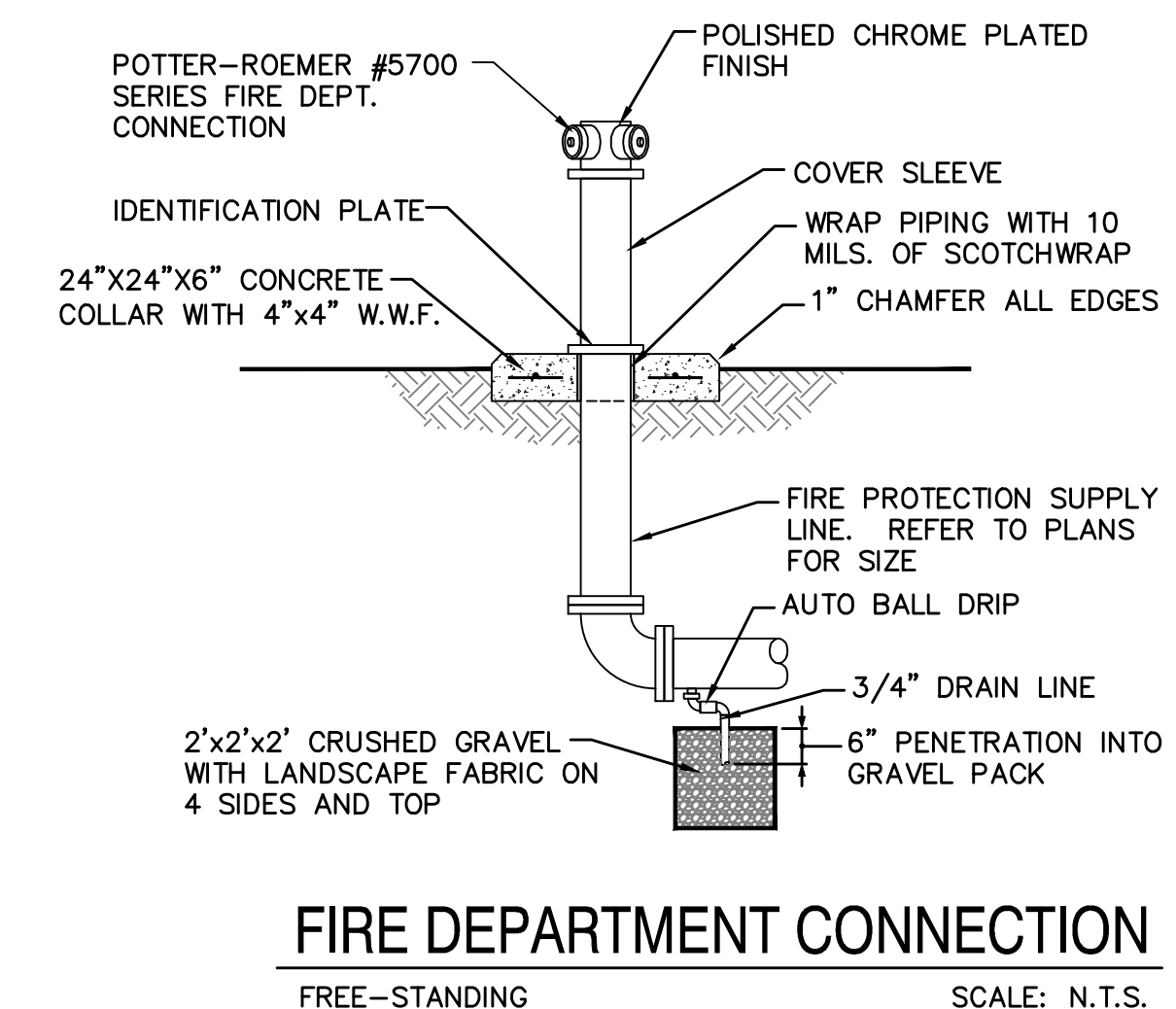
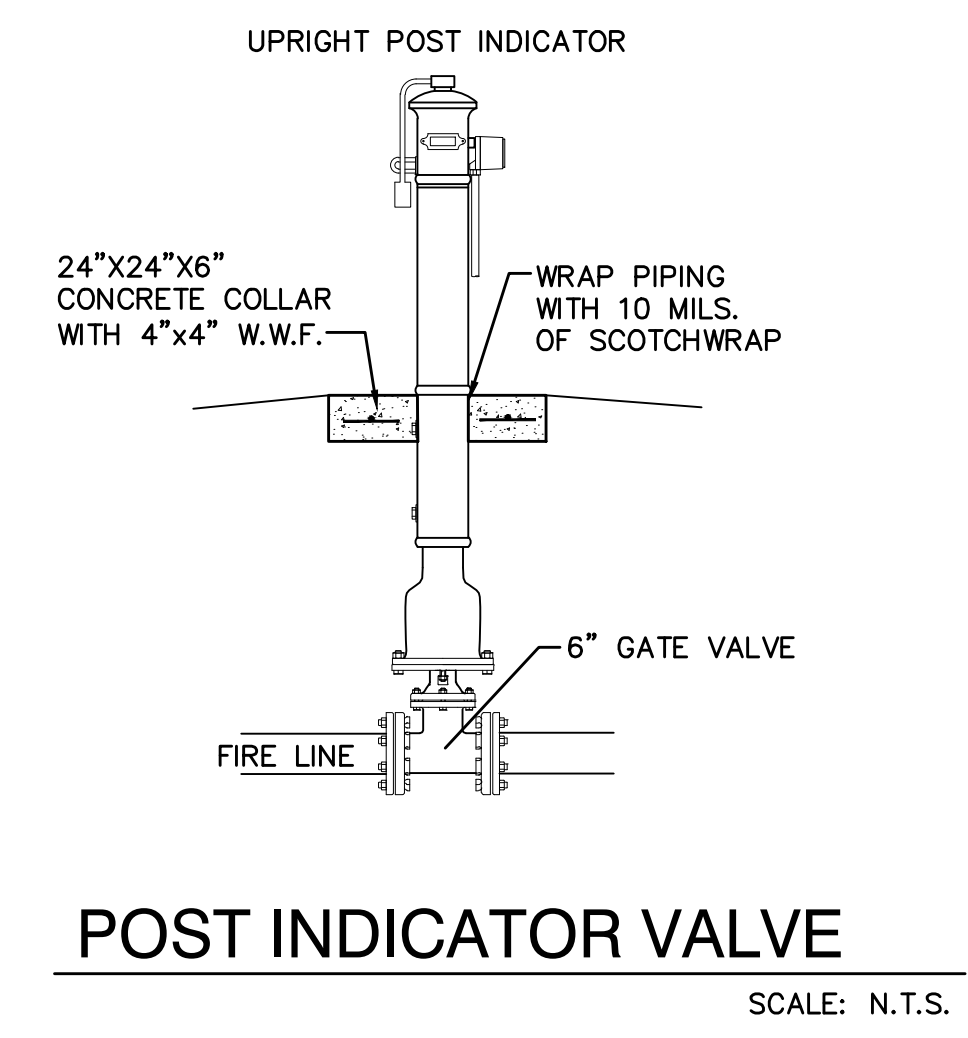
KEYED NOTES

- WATER KEYED NOTES**
- 1 1/2" METER PER COA STD DWG 2363.
 - 1 1/2" WATER SERVICE LINE.
 - 6" FIRE LINE.
 - 6"x4" REDUCER. (LT=29')
 - 6"-45° & 22 1/2° BENDS. (LT=13')
 - 4" FIRE LINE (FDC)
 - 4"-45° BEND. (LT=6')
 - FIRE DEPT. CONNECTION (FDC). (LT=46')
 - POST INDICATOR VALVE. (PIV) (LT=46')
 - 3/4" CONDUIT W/ PULL CORD FOR PIV SENSOR WIRE FROM BUILDING TO PIV PLACED IN SAME TRENCH ABOVE 6" WATERLINE.
- SEWER**
- 6" SANITARY SEWER SERVICE LINE AT 2% MIN. SLOPE.
 - 6" GREASE LINE AT 2% MIN. SLOPE.
 - 3" GREASE LINE AT 2% MIN. SLOPE.
 - 6"x3" WYE.
 - 6" WYE
 - 6" - 45° BEND.
 - 8" x 6" WYE
 - SINGLE CLEANOUT.
 - 1500 GAL. GREASE INTERCEPTOR.
 - 3" HEAVY DUTY CAST IRON FLOOR DRAIN W/ P-TRAP.

LEGEND

- SAS SINGLE CLEANOUT
- ⊠ GATE VALVE W/ BOX
- ⊙ POST INDICATOR VALVE
- ⊕ FIRE DEPARTMENT CONNECTION
- PROPOSED STORM DRAIN
- WL— EXISTING WATERLINE
- SAS— EXISTING SEWER LINE

ISAACSON & ARFMAN, P.A.
Consulting Engineering Associates
128 Monroe Street N.E.
Albuquerque, New Mexico 87108
Ph. 505-268-8828 www.iacivil.com
2136 CU-101.dwg Jan 28, 2016

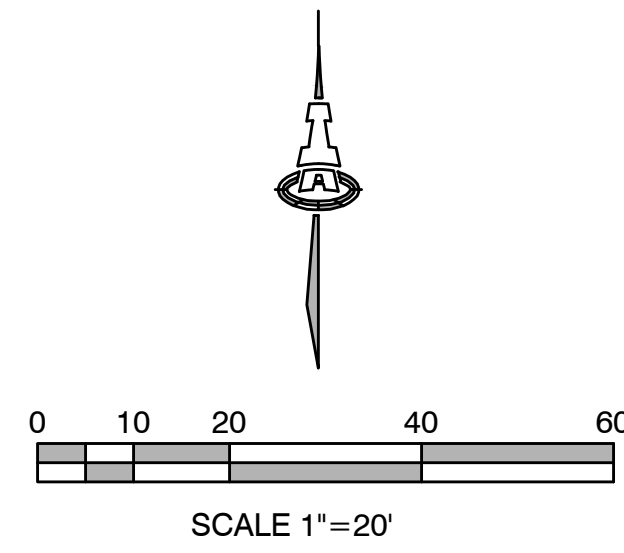


- ALL MECHANICAL JOINTS SHALL BE RESTRAINED AT THE FITTING.
- THE CONTRACTOR SHALL PROVIDE A MINIMUM PIPE LENGTH OF 20 LF FROM ALL MECHANICAL JOINTS. ALL PIPE JOINTS WITHIN 20 LF OF A MECHANICAL JOINT SHALL BE RESTRAINED AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL RESTRAIN ALL PIPE JOINTS IN THE SPECIFIED DISTANCE LISTED IN THE KEYED NOTES.
- THE CONTRACTOR SHALL RESTRAIN ALL FIRE HYDRANT JOINTS FROM THE TEE ON THE MAIN TO THE FIRE HYDRANT FLANGE.

RESTRAINED JOINT CRITERIA FOR WATERLINE FITTINGS

- DEPTH OF BURY: 3.0 FT. MINIMUM
- 1.50 FACTOR OF SAFETY:
- MATERIAL: PVC
- SOIL TYPE: GM/SM - SILTY GRAVELS AND SILTY SANDS, GRAVEL-SAND-SILT MIXTURES.
- TEST PRESSURE: 150 PSI
- TRENCH TYPE 4: PIPE BEDDED IN SAND, GRAVEL, OR CRUSHED STONE TO DEPTH OF 1/8 PIPE DIAMETER, 4 INCH MINIMUM; BACKFILL COMPACTED TO TOP OF PIPE.

DIFFERENT CRITERIA, E.G., GREATER DEPTH OF BURY, ETC., WILL REQUIRE DIFFERENT RESTRAINED LENGTHS. THESE MUST BE CALCULATED BY A QUALIFIED PROFESSIONAL ENGINEER AND APPROVED BY ABCWUA.



UTILITY PLAN