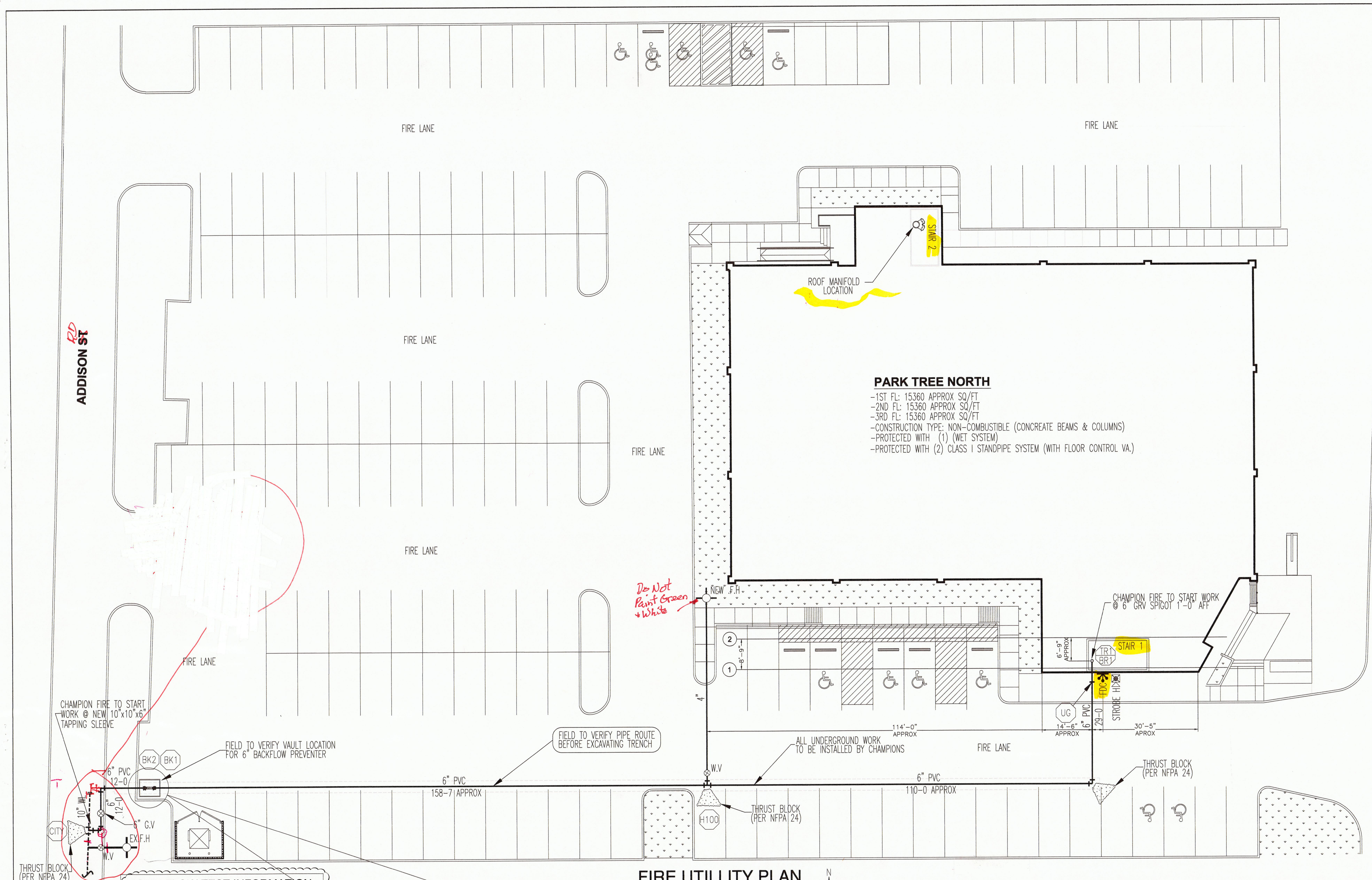
1731 DP (AFS)



FIRE UTILLITY PLAN

SCALE 1"=15'

CITY FLOW TEST INFORMATION

DATE: 05/8/16
TIME: 15:00
SIZE OF OPENING: (1) 4.0"
COEFFICIANT: 0.9
STATIC: 60 PSI
RESIDUAL: 52 PSI
PITOT: 30 PSI
FLOW: 919 GPM

UNDERGROUND PIPING GENERAL NOTES:

1. ALL MATERIALS SHALL BE U.L. LISTED & SHALL CONFORM TO NFPA 13, 24 & CITY OF ADDISON.
2. THRUST BLOCKS & RODDING SHALL CONFORM TO NFPA 24.
3. MINIMUM BURY SHALL BE 4'-0. REFER TO EMBEDMENT DETAIL (THIS SHEET).
4. ALL WATER LINES FOR FIRE SPRINKLER SYSTEMS SHALL BE TESTED AT 200 psi FOR TWO (2) HOURS MINIMUM PER NFPA 13.
5. DUCTILE IRON CLASS 52 PIPE SHALL BE USED WHEN PIPE PASSING BENEATH BUILDING FOUNDATIONS AND FOOTINGS UNLESS NOTED OTHERWISE.
6. UNDERGROUND PIPING SHALL BE FLUSHED PER NFPA 24 BEFORE BEING CONNECTED TO OVERHEAD FIRE SPRINKLER SYSTEM PIPING.
7. REFER TO ANY LOCAL REQUIREMENTS BEFORE INSTALLING OR MAKING CONNECTIONS TO THE FIRE SERVICE CONNECTION.
8. ALL UNDERGROUND PIPING SHALL BE PVC C-200 DR-14 UNLESS NOTED OTHERWISE ON THE PLAN.

DESIGN CRITERIA 2010 N.F.P.A. 13:

AREA-A (OFFICE)
SYSTEM DESIGNED TO LIGHT HAZARD - 0.1 GPM OVER 1370 SQ/FT
MAX SPRINKLER HEAD SPACING VARIES SQ.FT. PER HEAD.
MINIMUM PRESSURE PER HEAD 7 PSI AT 5.6K FACTOR
9 HEADS CALCULATED IN THE MOST DEMANDING AREA

AREA-B (LOBBY)
SYSTEM DESIGNED TO LIGHT HAZARD - 0.1 GPM OVER 903 SQ/FT
MAX SPRINKLER HEAD SPACING VARIES SQ.FT. PER HEAD.
MINIMUM PRESSURE PER HEAD 7 PSI AT 5.6K FACTOR
9 HEADS CALCULATED IN THE MOST DEMANDING AREA

AREA-C (LOBBY)
SYSTEM DESIGNED TO LIGHT HAZARD - 0.1 GPM OVER 905 SQ/FT
MAX SPRINKLER HEAD SPACING VARIES SQ.FT. PER HEAD.
MINIMUM PRESSURE PER HEAD 7 PSI AT 5.6K FACTOR
10 HEADS CALCULATED IN THE MOST DEMANDING AREA

CLASS 1 STANDPIPE (STAIRWELLS)
SYSTEM DESIGNED TO CLASS I STAND PIPE
CLASS I STP REQUIRE TO HAVE 500 GPM @ 100 PSI @ ROOF MANIFOLD
SYSTEM CALCULATED TO FDC WITH FIRE TRUCK SUPPLY
OF 174 MAX PSI RESIDUAL PRESSURE @ 1000 GPM

SCOPE OF WORK
CHAMPION FIRE & SECURITY TO START WORK AT NEW 6" SPIGOT LOCATED INSIDE BLDNG UNDER STAIRWELL. FIELD TO INSTALL NEW 6" BACKFLOW PREVENTER INSIDE VAULT & INSTALL NEW WET SYSTEM WITH NEW CLASS 1 STANDPIPE IN STAIRWELLS.

FIRE PROTECTION INSTALLATION NOTES

1. ALL DESIGN, MATERIAL, FABRICATION, AND INSTALLATION SHALL CONFORM TO THE STANDARDS SET FORTH IN NFPA 13 & ADOPTED BY THE CITY OF ADDISON.
2. ALL MATERIALS AND DEVICES SHALL BE U.L. LISTED FOR FIRE PROTECTION SERVICE AND SHALL BE INSTALLED IN ACCORDANCE WITH THEIR LISTINGS.
3. NEW SPRINKLER PIPE, SIZES 1" AND SMALLER TO BE THREADED SCHEDULE 40 SPRINKLER PIPE, ASTM A-135, USING IRON PIPE THREADS WITH STANDARD CLASS 150 CAST IRON FITTINGS.
4. NEW SPRINKLER PIPE, SIZES 1¼" AND LARGER SCHEDULE 10 BLACK STEEL SPRINKLER PIPE, CONFORMING TO ASTM A-135 USING ROLLED GROOVES WITH MECHANICAL GROOVED FITTINGS, AND LISTED WELDED OUTLETS.
5. PIPING SHALL BE SUBJECTED TO ACCEPTANCE TESTING IN ACCORDANCE WITH NFPA 13. ALL TESTING SHALL BE WITNESSED BY THE APPROVING AUTHORITIES.
6. OWNER TO PROVIDE PROPER HEAT IN AREAS PROTECTED BY WET PIPE SYSTEM TO PREVENT FREEZING OF WATER IN PIPES.
7. PIPE SIZING IS BASED ON HYDRAULIC CALCULATIONS. SEE PLAN FOR REQUIRED DENSITIES AND REMOTE AREAS.
8. ANY PAINTING OF PIPING SHALL BE PERFORMED BY OTHERS. CARE SHALL BE EXERCISED THAT NO PORTION OF ANY SPRINKLER IS PAINTED OR COATED WITH ANY SUBSTANCE.
9. ALL NEW PIPING SHALL BE HYDROSTATICALLY TESTED FOR TWO HOURS IN ACCORDANCE TO NFPA LATEST EDITION WITH AMENDMENTS AS ADOPTED BY THE CITY OF ADDISON, TEXAS REQUIREMENTS. MINIMUM HYDROSTATIC TEST PRESSURE SHALL BE 200 PSI FOR 2 HOURS OR 50 PSI IN EXCESS OF STATIC PRESSURE IF GREATER THAN 150 PSI.
10. ALL PIPE SHALL BE SUPPORTED FROM THE BUILDING STRUCTURE UTILIZING HANGERS, MATERIALS, AND METHODS PER NFPA LATEST EDITION PIPING SUPPORT SHALL BE IN ACCORDANCE WITH THE LATEST NFPA EDITION

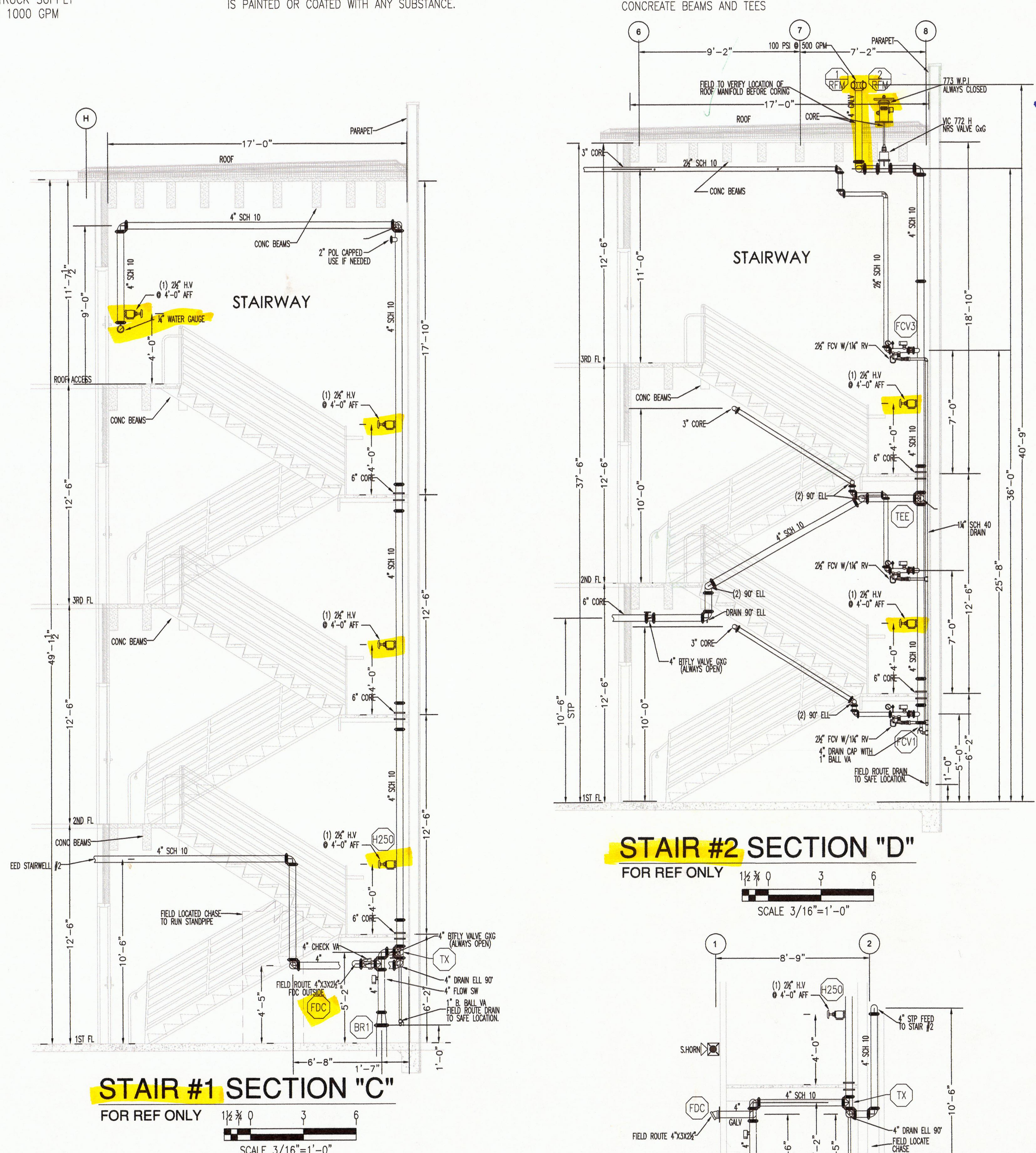
OWNER INFORMATION FOR SPARE SPRINKLERS
SPARE SPRINKLER HEADS SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 13, LATEST EDITION AT A LOCATION NEAR THE SPRINKLER RISER, OF AT LEAST 6 SPARE SPRINKLERS SHALL BE MAINTAINED ON THE PREMISES SO THAT ANY SPRINKLERS THAT HAVE OPERATED OR BEEN DAMAGED IN ANY WAY CAN BE PROMPTLY REPLACED.
A MINIMUM OF TWO SPRINKLERS OF EACH TYPE AND TEMPERATURE RATING SHOULD BE PROVIDED. A SPRINKLER HEAD WRENCH APPLICABLE FOR EACH TYPE OF SPRINKLER HEAD SHALL BE PLACED IN THE CABINET FOR THE USE OF REMOVING AND REPLACING SPRINKLER HEADS.
**** THESE SPRINKLER HEAD WRENCHES ARE ONLY TO BE USED ON THE SPRINKLER HEADS FOR WHICH THEY ARE MADE AND FOR NO OTHER USE. ****

ELECTRIC SPRINKLER-FLOW DETECTION AND SUPERVISORY DEVICES FOR THE MONITORING OF THE SPRINKLER SYSTEM SHALL BE INSTALLED BY FIRE PROTECTION CONTRACTOR. ALL WIRING OF THE DEVICES IS THE RESPONSIBILITY OF OTHERS.

SUPERVISION OF THE SPRINKLER-FLOW ALARM TO AN APPROVED CENTRAL STATION, REMOTE STATION, OR PROPRIETARY MONITORING STATION IS REQUIRED.

IN LOCATIONS SUBJECT TO FREEZING CONDITIONS, IT IS THE OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT THROUGHOUT WET SPRINKLER SYSTEM AREAS.

BUILDING CONSTRUCTION
CONCRETE BEAMS AND TEES



STAIR #1 SECTION "C"
FOR REF ONLY
SCALE 3/16"=1'-0"

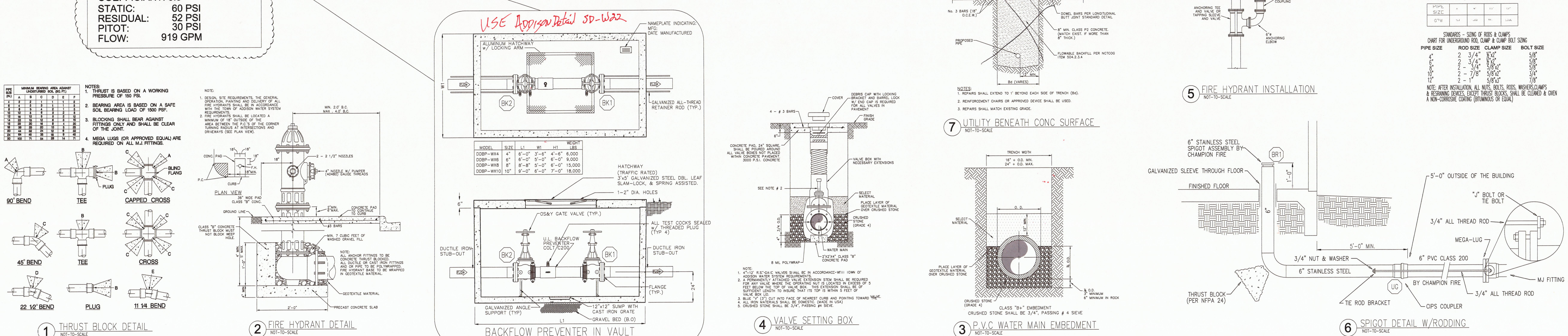
STAIR #2 SECTION "D"
FOR REF ONLY
SCALE 3/16"=1'-0"

STAIR #1 SECTION "E"
FOR REF ONLY
SCALE 3/16"=1'-0"

STANDARDS - SIZING OF RODS & CLAMPS
CHART FOR UNDERGROUND ROD, CLAMP & CLAMP BOLT SIZING

PIPE SIZE	ROD SIZE	CLAMP SIZE	BOLT SIZE
4"	2 - 3/4"	½"x2"	5/8"
6"	2 - 3/4"	½"x2"	5/8"
8"	2 - 3/4"	5/8"x2"	5/8"
10"	2 - 7/8"	5/8"x2"	3/4"
12"	2 - 1"	5/8"x3"	7/8"

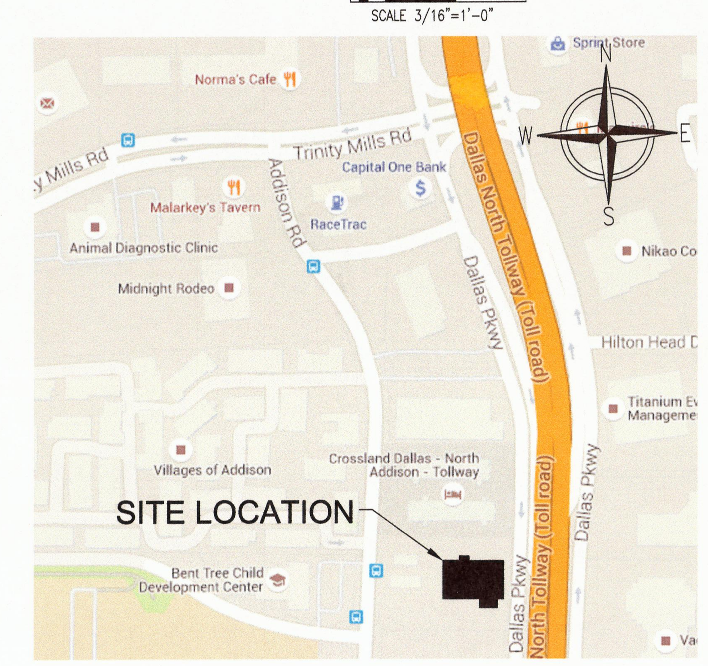
NOTE: AFTER INSTALLATION, ALL NUTS, BOLTS, RODS, WASHERS,CLAMPS & RESPANING DEVICES, EXCEPT THRUST BLOCKS, SHALL BE CLEANED & GIVEN A NON-CORROSIVE COATING (BITUMINOUS OR EQUAL)



MODEL	SIZE	L1	W1	H1	WEIGHT LBS
DDBP-WX4	4"	6'-0"	3'-6"	4'-6"	6,000
DDBP-WX6	6"	6'-0"	5'-0"	6'-0"	9,000
DDBP-WX8	8"	8'-8"	5'-0"	6'-0"	15,000
DDBP-WX10	10"	9'-0"	6'-0"	7'-0"	18,000

NOTES:
1. THRUST IS BASED ON A WORKING PRESSURE OF 150 PSI.
2. BEARING AREA IS BASED ON A SAFE SOIL BEARING LOAD OF 1500 PSF.
3. BLOCKING SHALL BEAR AGAINST FITTINGS ONLY AND SHALL BE CLEAR OF THE JOINT.
4. MEGA LUGS (OR APPROVED EQUAL) ARE REQUIRED ON ALL M.J. FITTINGS.

1 THRUST BLOCK DETAIL — NOT-TO-SCALE
2 FIRE HYDRANT DETAIL — NOT-TO-SCALE
BACKFLOW PREVENTER IN VAULT — NOT-TO-SCALE
4 VALVE SETTING BOX — NOT-TO-SCALE
7 UTILITY BENEATH CONC SURFACE — NOT-TO-SCALE
3 P.V.C WATER MAIN EMBEDMENT — NOT-TO-SCALE
5 FIRE HYDRANT INSTALLATION — NOT-TO-SCALE
6 SPIGOT DETAIL W/RODDING — NOT-TO-SCALE



VICINITY MAP

REV.	REV. DATE	DESCRIPTION	BY
1	5/12/15	CITY SUBMITTALS	ST
2	6/24/16	REVISED FLOW INFO	ST
3			
4			
5			

SPRINKLER INFORMATION

SYMBOL	MANUFACTURER NAME	SPRINKLER TYPE	MODEL NO./ SIN NO.	RES TYPE COV TYPE	ORFICE	K FACTOR	TEMP	THRD	APPROV	SPRINK FINISH	ESCUTCHEON TYPE	ESCUTCHEON FINISH	SPRKLR THIS SHT
												TOTAL ON SHEET	
												TOTAL PER BLDNG	

I have reviewed these plans and certify that they comply with the adopted NFPA standards.
Champion Fire & Security, LLC
17311 Dallas Parkway, Suite 300
Dallas, Texas 75248
(972)663-5000
SCRG-1735237
RME-Signature:
Print RME Name: BRYAN D. MOORE
RME- G-1726106
Date: 6-28-16
☐ AS-BUILT ☒ SUBMITTAL ☐ OTHER

CHAMPION
FIRE & SECURITY
17311 DALLAS PARKWAY
SUITE 300
DALLAS, TEXAS 75248
PHONE: 972/663-5000
FAX: 972/242-3539

PROJECT: PARK TREE NORTH
17311 DALLAS PRKWY
ADDISON, TX, 75248

FIRE SITE/UG PLAN

CONTRACT WITH: MYCON
208 E LOUISIANA ST SUITE 200
MCKINNEY, TEXAS, 75069

DATE: TBA | CONTRACT NO: | SHEET NO: FP 1 OF 5