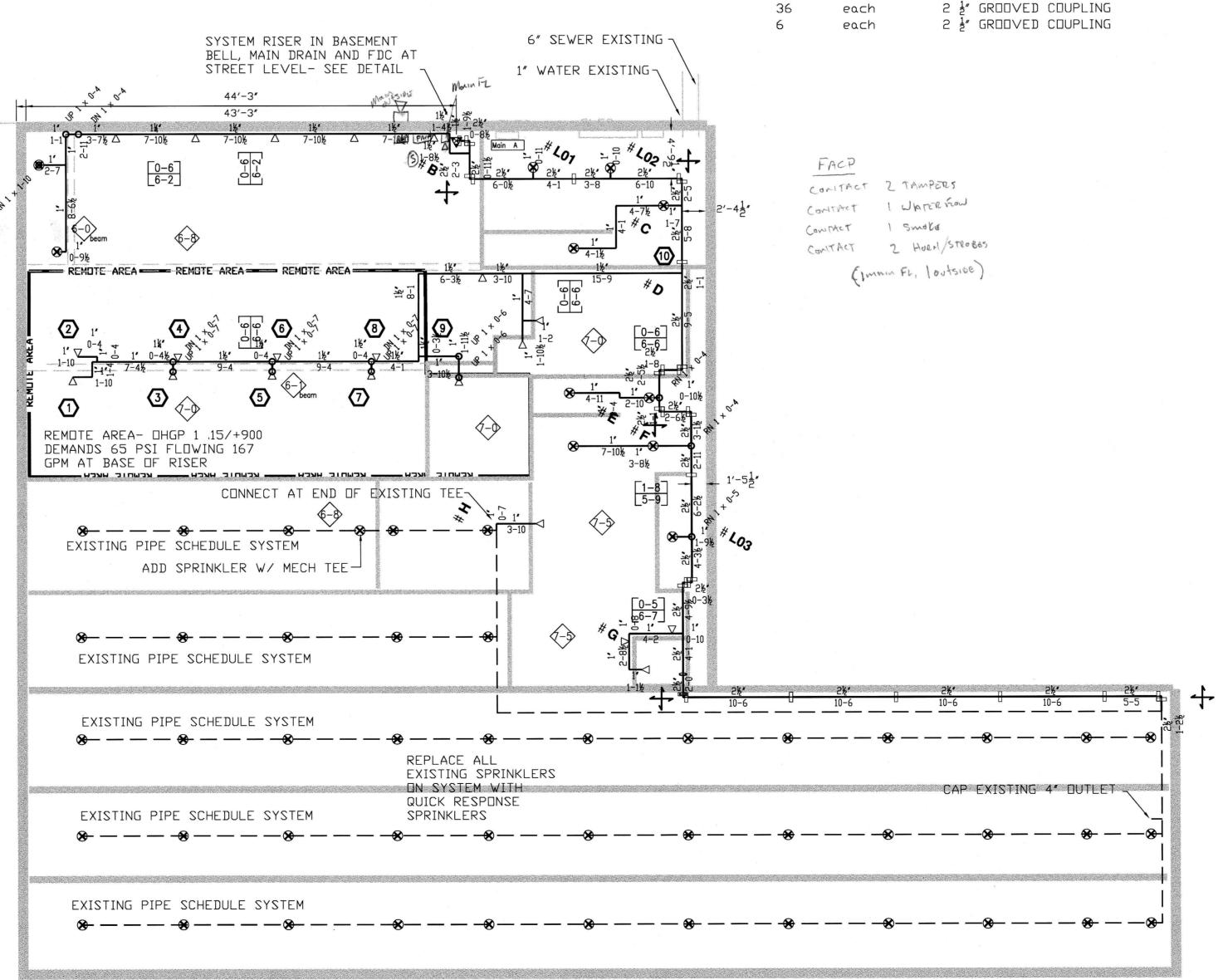


SYMBOLS LEGEND		SYMBOLS SPRINKLER LEGEND
★ WET SYSTEM RISER	3 —WELDED PIPE SIZE	TOTAL HEAD COUNT
DRY PIPE/DELUGE SYSTEM RISER — RIGID GROOVED COUPLING	21-0 —MAIN PIPE LENGTH	SYMBOL QUANTITY NPT. K-FACTOR MAKE MODEL SIN # TEMP. FINISH TYPE
FIRE HYDRANT STATE OF COLUMN COLUM	00) BRANCHLINE NUMBER	⊗ 55 (1/2′,K=5.6) TY3131 1/2 QR 155 B UP
THREADED PIPE CUUPLING		△ 21 (1/2*,K=5.6) TY3331 1/2 QR 155 B HSW
VATER MOTOR GONG ELECTRIC ALARM BELL CONTROL VALVE	(00) HYDRAULIC CALC. REFERENCE	
O PIPE 'RISE' — VALVE WITH TAMPER SWITCH	GF PIPE BELOW DECK / CEILING	76 TOTAL SPRINKLERS
O_C PIPE 'DROP' — KEY VALVE WITH ROAD BOX	0-0 OF PIPE ABOVE FINISHED FLOOR	C SPARE SPRINKLERS
— PIPE 'CAP' AUXILIARY DRAIN/PLUG	^	6 STATE STRIMETERS
SWAY BRACING CHECK VALVE	0-0 GYP. CEILING ELEVATION AND TYPE	
PIPE HANGER (SEE CHART)	1	
● POINT OF CONNECTION FLOW SWITCH	ELEV: XXX'-XX"	
EXISTING SPRINKLER PIPE BUTTERFLY VALVE WITH TAMPER SWITCH	15th 40	
SPRINKLER HEADXSECTION VIEWS S	्रिक हैं RISE/DROP CUT LENGTHS	

8 RISER & ANTIFREEZE LOOP DETAIL

F1.2 NTS

1		qui							
00 BRANCHLINE NUMBER		⊗ 55	(1/2*,K=5.6)	TY3131					
		△ 21	(1/2*,K=5.6)	TY3331	1/2 QF	₹ 155	B HZM		
(00) HYDRAULIC CALC. REFERENCE			3						
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	NG	76	TOTAL SPRINKLERS						
OF PIPE ABOVE FINISHED FLO	OR	6	SPARE SPRINKLERS						
${f O_0}_{ m GYP.}$ CEILING ELEVATION AND TYPE		_							
ELEVATION DATUM ELEV: XXX'-XX' ELEVATION DATUM									
410 010.	1 1								
FOR BUT LENGTHS									
			BASEMENT			6	S" SEW	ER EXI	STING \
	DELL MA	IN DRAIN	I AND FDC A	Γ					. \
								or rear remarks	
			SEE DETAIL	¬	. 5	1"	WATE	R EXIST	TING \
S. D. W				¬	bein FL	1"	WATE	R EXIS	TING \



LIST OF MATERIALS

DESCRIPTION

2 1/2" diameter Pipe 1 1/4" diameter Pipe 1 1/2" diameter Pipe

 $1 1/4 \times 1 \times 1$ RED. TEE

 $1 \times 1/2$ RED. ELBOW

 $1 \times 1 \times 1/2$ RED. TEE

 $1 \times 1/2$ RED, ELBOW

1 1/2" COUPLING

1 $1/4 \times 1 \times 1/2$ RED. TEE (ssf)

1 1/2 × 1 1/2 × 1 RED. TEE 1 1/2 × 1 1/4 × 1/2 RED. TEE

1 1/2 × 1 1/2 × 1/2 RED. TEE

1" diameter Pipe

1 1/2" ELBOW

1" TEE

1" ELBOW

2 ½" ELBOW

QUANTITY UNITS

feet feet

feet

each

each

each

each

each

each



GENERAL NOTES

- ALL PIPING EXPOSED PIPING SHALL BE DYNAFLOW 10, DYNATHREAD STEEL PIPING TYPICALLY.
- 9. PROVIDE CLEARANCES AND FLEXIBLE COUPLINGS AS REQUIRED FOR SEISMIC PROTECTION OF SYSTEM AND FIRE RATED GYPSUM WALLS.
 NO CLEARANCES REQUIRED FOR CPVC PIPING.

- 12. THE SPRINKLER CONTRACTOR SHALL COORDINATE WITH OTHER TRADES, EQUIPMENT, STRUCTURE AND PROVIDE ADDITIONAL OFFSETS AS REQUIRED FOR INSTALLATION. SPRINKLER PIPING SHALL BE REROUTED AS REQUIRED WHERE CONFLICTS OCCUR. SPRINKLER CONTRACTOR'S PRICING SHALL INCLUDE ANY PIPING OFFSETS, OR REVISED CUT LENGTHS.
- 13. PIPE ROUTING, ELEVATIONS, SPRINKLER LOCATIONS, & DIMENSIONS ARE SCHEMATIC, AND SHALL BE USED AS REFERENCE ONLY. INSTALLER SHALL FIELD VERIFY CONDITIONS, AND PROVIDE OFFSETS AS REQUIRED FOR INSTALLATION. DEVIATION FROM SCHEMATIC PLAN SHALL BE APPROVED IN WRITING BY THE ENGINEER, PRIOR TO INSTALLATION.
- 14. PIPE CUTS ARE NOTED AT CUT LENGTH FOR THREADED FITTINGS AND CENTER TO CENTER FOR WELDED OUTLETS AND GROOVED ENDS LENGTHS.

- 19. BUILDING IS CONSIDERED A HEATED BUILDING, IT SHALL BE THE OWNERS RESPONSIBILITY TO PROVIDE AND MAINTAIN A MINIMUM 40°F IN BUILDING AT ALL TIMES, TEMPERATURES LESS THAN THE MINIMUM NOTED MAY CAUSE SYSTEM FAILURE, ALL DOORS SHALL SEAL AND OPERATE PROPERLY TO ELIMINATE POTENTIAL FREEZING DUE TO EXCESSIVE INFILTRATION.
- 20. BUILDING DCCUPANCY CLASSIFICATION IS CONSIDERED AS FOLLOWS: ORDINARY HAZARD GROUP 1 FOR STORAGE & UTILITY. CORRIDORS AND OFFICE ARE TO BE CONSIDERED AS LIGHT HAZARD DCCUPANCY.
- 21. LATERAL BRACING OF MAINS NOT REQUIRED WHEN HANGERS ARE LESS THAN 6' IN LENGTH.
- 24. SPRINKLERS SHALL BE OFFSET FROM SURFACE MOUNTED LIGHTS AS REQUIRED PER NFPA #13 OBSTRUCTION RULES.
- 26. THIS SYSTEM SHALL TRANSMIT ALARM, TAMPER AND SUPERVISORY SIGNAL TO AN APPROVED REMOTE STATION. A SUPERVISORY SIGNAL WILL INDICATE WHEN CONTROL VALVES ARE MOVED TO A POSTITION OTHER THAN NORMAL OPERATION. SUPERVISORY SIGNAL WILL INDICATE WHEN THE ELECTRICAL CIRCUIT IS SHORTED, FAULTED, OR DISCONNNECTED.

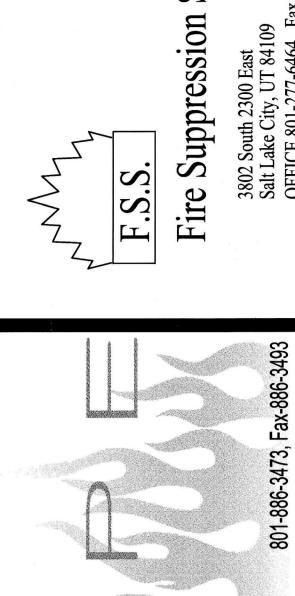
- SCOPE OF WORK: PROVIDE NEW SYSTEM RISER AND UNDERGROUND SUPPLY. REPLACE EXISTING SPRINKLERS WITH QUICK RESPONSE. PROVIDE NEW SPRINKLERS AND PIPE WHERE SHOWN. PLUG EXISTING RISER OUTLET.
- 2. INSTALL, FLUSH AND TEST UNDERGROUND AS REQUIRED PER NFPA. 3. AUTOMATIC FIRE SPRINKLER SYSTEM HAS BEEN HYDRUALICALLY CALCULATED IN ACCORDANCE WITH NFPA #13, 2007 EDITION.
- 4. AUTOMATIC FIRE SPRINKLER SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH NFPA#13, 2007 ED. INSTALLATION OF SPRINKLER
- 6. FITTINGS SHALL BE THREADED, WELDED AND GROOVED IN ACCORDANCE WITH LISTING AND NFPA #13 REQUIREMENTS. CPVC JOINTS SHALL BE PER UL LISTINGS.
- 7. SIESMIC BRACING AND FLEXIBLE COUPLINGS SHALL BE PROVIDED AS REQUIRED FOR SEISMIC PROTECTION. METHOD OF BRACING MAY DEVIATE FROM DETAILS SHOWN FOR REFERENCE.
- 8. MASONRY PENETRATIONS SHALL BE FIELD VERIFIED AND COORDINATED. CONTRACT SHALL BE RESPONSIBLE FOR ALL CORES AS NEEDED FOR SYSTEM INSTALLATION.

- 10. PROVIDE HANGERS AS REQUIRED PER NFPA #13. METHOD OF HANGING MAY DEVIATE FROM DETAILS SHOWN FOR REFERENCE.
- 11. MECHANICAL TEES SHALL NOT BE USED, UNLESS REQUIRED FOR FIELD MODIFICATION OF PIPING SYSTEM.

- 15. SUBSTITION OF SPRINKLERS AND OTHER DEVICES SHALL BE OF EQUAL. SPRINKLERS, VALVES, FITTINGS, PIPE, HANGERS AND OTHER MISC. DEVICES SHALL BE UL LISTED.
- 16. FINAL REDLINE AS-BUILT DRAWINGS SHALL BE PROVIDED BY THE SPRINKLER CONTRACTOR. ELECTRONIC AS-BUILT DRAWINGS SHALL BE MODIFIED BY THE ENGINEER.
- 17. CONTRACTOR SHALL PROVIDE AUXILLARY DRAINS AS NEEDED FOR TRAPPED PIPE. ASBUILT DRAWINGS SHALL NOTE LOCATION OF ALL DRAIN VALVES.
- 18. PROVIDE ADDITIONAL UNIONS AS NEEDED BASE ON DIRECTION OF SYSTEM INSTALLATION.

- 22. ALL STANDARD COVERAGE SPRINKLERS SHALL BE SUPPLIED WITH 1' FEEDS/DROPS TYPICALLY.
- 23. SPRINKLERS SHALL BE POSITIONED GREATER THAN 1 FT. FROM EDGE OF HVAC DIFFUSERS.

- 27. THE FIRE PREVENTION BUREAU SHALL BE NOTIFED THREE DAYS IN ADVANCE TO CONDUCT THE FOLLOWING:
 INSPECTION OF PIPE, HANGER AND SWAY BRACING. WITNESS OF THE HYDRO INSPECTION.
 FLOW AND MAIN DRAIN TEST OF THE SYSTEM. INTERCONNECTION WITH THE REMOTE STATION.



REVISIONS PROJECT #: DRAWN BY: CRB 12/7/09 ISSUE DATE:

SHEET CONTENTS **FIRE SPRINKLER PLAN-BASEMENT**

