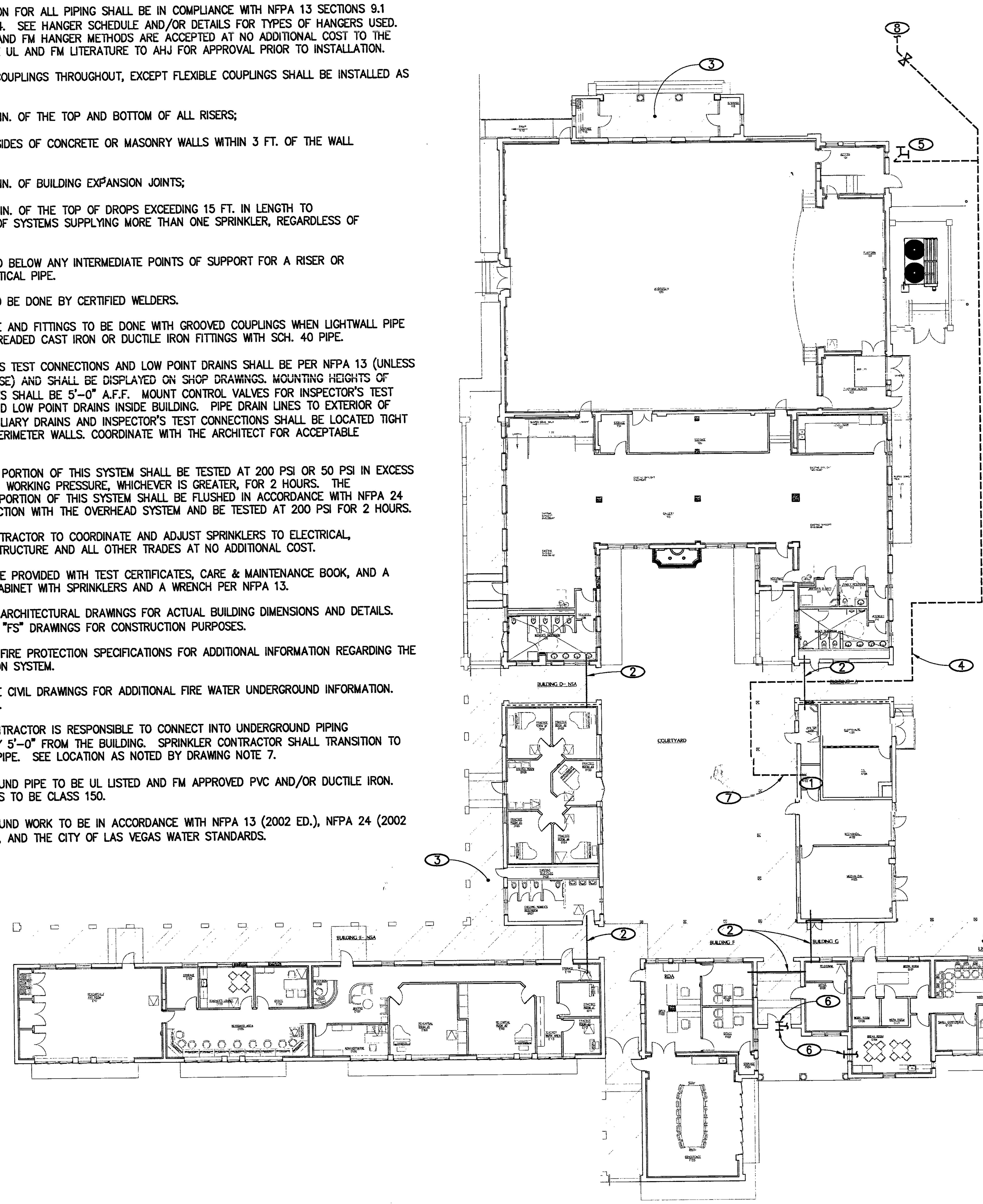
GENERAL NOTES

1. THE BUILDINGS SHALL BE FULLY SPRINKLERED WITH A WET PIPE SPRINKLER SYSTEM. THE ENTIRE FIRE PROTECTION SYSTEM SHALL MEET APPLICABLE FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES, AND MUST BE APPROVED BY LAS VEGAS FIRE AND RESCUE.
2. FIRE PROTECTION CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS AND COORDINATE WITH OTHER TRADES PRIOR TO INSTALLATION.
3. DESIGN AND INSTALLATION TO BE PER THE FOLLOWING CODES:
   2002 NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
   2003 INTERNATIONAL BUILDING CODE (IBC)
   2003 INTERNATIONAL FIRE CODE (IFC)
4. THE SPRINKLER SYSTEM IN THIS BUILDING WILL BE MONITORED BY A FIRE ALARM SIGNALING SYSTEM FURNISHED AND INSTALLED BY THE ALARM CONTRACTOR. ALL TAMPER SWITCHES AND WATERFLOW INDICATORS SHALL BE INSTALLED BY THE SPRINKLER CONTRACTOR AND WIRED TO THE FIRE ALARM SYSTEM BY THE ALARM CONTRACTOR.
5. THE SPRINKLER SUBCONTRACTOR IS RESPONSIBLE FOR ALL CUTTING, SEALING, PATCHING, AND PAINTING REQUIRED FOR INSTALLATION OF THE SPRINKLER SYSTEM. ALL PENETRATIONS OF RATED ASSEMBLIES SHALL BE FIRESTOPPED WITH AN APPROVED MATERIAL AS PRESCRIBED IN THE 2003 IBC. REFER TO THE ARCHITECTURAL SHEETS FOR LOCATIONS OF RATED ASSEMBLIES.
6. THE SPRINKLER SUBCONTRACTOR SHALL BE LICENSED BY THE STATE OF NEVADA FOR DESIGN AND INSTALLATION OF AUTOMATIC SPRINKLER SYSTEMS.
7. SYSTEM DESIGN AND INSTALLATION SHALL BE PER NFPA 13 2002 & CITY OF LAS VEGAS. MATERIALS TO BE UL-LISTED OR FM-APPROVED.
8. ALL PIPE 2" OR SMALLER TO BE BLACK STEEL, SCHEDULE 40 OR APPROVED EQUAL. ALL PIPE 2½" AND LARGER TO BE ASTM 795 OR 53, SCHEDULE 10. PIPING AND EQUIPMENT EXPOSED TO ATMOSPHERE SHALL BE CORROSION RESISTANT.
9. PROVIDE SEISMIC BRACING AS REQUIRED BY LAS VEGAS FIRE AND RESCUE. ALL SEISMIC BRACING SHALL BE IN CONFORMANCE WITH THE 2002 EDITION OF NFPA 13 AND LOCAL REQUIREMENTS.
10. HANGER LOCATION FOR ALL PIPING SHALL BE IN COMPLIANCE WITH NFPA 13 SECTIONS 9.1 THROUGH 9.2.5.4. SEE HANGER SCHEDULE AND/OR DETAILS FOR TYPES OF HANGERS USED. ALTERNATE UL AND FM HANGER METHODS ARE ACCEPTED AT NO ADDITIONAL COST TO THE OWNER. PROVIDE UL AND FM LITERATURE TO AHJ FOR APPROVAL PRIOR TO INSTALLATION.
11. PROVIDE RIGID COUPLINGS THROUGHOUT, EXCEPT FLEXIBLE COUPLINGS SHALL BE INSTALLED AS FOLLOWS:
    (a) WITHIN 24 IN. OF THE TOP AND BOTTOM OF ALL RISERS;
    (b) ON BOTH SIDES OF CONCRETE OR MASONRY WALLS WITHIN 3 FT. OF THE WALL SURFACE;
    (c) WITHIN 24 IN. OF BUILDING EXPANSION JOINTS;
    (d) WITHIN 24 IN. OF THE TOP OF DROPS EXCEEDING 15 FT. IN LENGTH TO PORTIONS OF SYSTEMS SUPPLYING MORE THAN ONE SPRINKLER, REGARDLESS OF PIPE SIZE;
    (e) ABOVE AND BELOW ANY INTERMEDIATE POINTS OF SUPPORT FOR A RISER OR OTHER VERTICAL PIPE.
12. ALL WELDING TO BE DONE BY CERTIFIED WELDERS.
13. JOINING OF PIPE AND FITTINGS TO BE DONE WITH GROOVED COUPLINGS WHEN LIGHTWALL PIPE IS USED OR THREADED CAST IRON OR DUCTILE IRON FITTINGS WITH SCH. 40 PIPE.
14. ALL INSPECTOR'S TEST CONNECTIONS AND LOW POINT DRAINS SHALL BE PER NFPA 13 (UNLESS NOTED OTHERWISE) AND SHALL BE DISPLAYED ON SHOP DRAWINGS. MOUNTING HEIGHTS OF CONTROL VALVES SHALL BE 5'-0" A.F.F. MOUNT CONTROL VALVES FOR INSPECTOR'S TEST CONNECTION AND LOW POINT DRAINS INSIDE BUILDING. PIPE DRAIN LINES TO EXTERIOR OF BUILDING. AUXILIARY DRAINS AND INSPECTOR'S TEST CONNECTIONS SHALL BE LOCATED TIGHT AGAINST THE PERIMETER WALLS. COORDINATE WITH THE ARCHITECT FOR ACCEPTABLE LOCATIONS.
15. THE OVERHEAD PORTION OF THIS SYSTEM SHALL BE TESTED AT 200 PSI OR 50 PSI IN EXCESS OF THE SYSTEM WORKING PRESSURE, WHICHEVER IS GREATER, FOR 2 HOURS. THE UNDERGROUND PORTION OF THIS SYSTEM SHALL BE FLUSHED IN ACCORDANCE WITH NFPA 24 BEFORE CONNECTION WITH THE OVERHEAD SYSTEM AND BE TESTED AT 200 PSI FOR 2 HOURS.
16. SPRINKLER CONTRACTOR TO COORDINATE AND ADJUST SPRINKLERS TO ELECTRICAL, MECHANICAL, STRUCTURE AND ALL OTHER TRADES AT NO ADDITIONAL COST.
17. OWNER IS TO BE PROVIDED WITH TEST CERTIFICATES, CARE & MAINTENANCE BOOK, AND A SPARE HEAD CABINET WITH SPRINKLERS AND A WRENCH PER NFPA 13.
18. REFER TO THE ARCHITECTURAL DRAWINGS FOR ACTUAL BUILDING DIMENSIONS AND DETAILS. DO NOT SCALE "FS" DRAWINGS FOR CONSTRUCTION PURPOSES.
19. REFER TO THE FIRE PROTECTION SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING THE FIRE PROTECTION SYSTEM.
20. REFERENCE THE CIVIL DRAWINGS FOR ADDITIONAL FIRE WATER UNDERGROUND INFORMATION. SEE SHT. UT-1.
21. SPRINKLER CONTRACTOR IS RESPONSIBLE TO CONNECT INTO UNDERGROUND PIPING APPROXIMATELY 5'-0" FROM THE BUILDING. SPRINKLER CONTRACTOR SHALL TRANSITION TO DUCTILE IRON PIPE. SEE LOCATION AS NOTED BY DRAWING NOTE 7.
22. ALL UNDERGROUND PIPE TO BE UL LISTED AND FM APPROVED PVC AND/OR DUCTILE IRON. PIPE & FITTINGS TO BE CLASS 150.
23. ALL UNDERGROUND WORK TO BE IN ACCORDANCE WITH NFPA 13 (2002 ED.), NFPA 24 (2002 ED.), 2003 IBC, AND THE CITY OF LAS VEGAS WATER STANDARDS.

GENERAL NOTES (CONT.)

24. ALL UNDERGROUND PIPE TO HAVE A MINIMUM DEPTH OF BURY PER THE CITY OF LAS VEGAS WATER STANDARDS AND BE RODDED OR THRUST BLOCKED PER NFPA 13 (2002 ED.) AND NFPA 24 (2002 ED.).
25. ALL UNDERGROUND MAINS AND LEAD-IN CONNECTIONS SHALL BE FLUSHED PER NFPA 13 (2002 ED.) AND NFPA 24 (2002 ED.) UNTIL WATER IS CLEAR OF FOREIGN MATERIAL. FLUSH IMMEDIATELY PRIOR TO CONNECTION TO OVERHEAD PIPING. USE THE FOLLOWING FLOW RATES OR MAXIMUM AVAILABLE:
    4" PIPE – 440 GPM
    6" PIPE – 750 GPM
    8" PIPE – 1,000 GPM
    10" PIPE – 1,500 GPM
26. ALL UNDERGROUND PIPE IS TO BE SUBJECTED TO A HYDROSTATIC TEST OF 200 PSI FOR 2 HOURS OR 50 PSI ABOVE STATIC PRESSURE IN EXCESS OF 150 PSI FOR 2 HOURS. NO LEAKAGE IS ALLOWED AT RUBBER GASKET JOINTS.
27. FLUSHING OF UNDERGROUND AND HYDROSTATIC TEST MUST BE WITNESSED AND SIGNED BY CITY OF LAS VEGAS.
28. DO NOT CONNECT UNTIL A HYDROSTATIC AND FLUSH TEST HAS BEEN COMPLETED. CENTER LOADING IS PERMISSIBLE.
29. A FINAL INSPECTION SHALL BE REQUIRED AND CONDUCTED ON ALL SYSTEMS.
30. DUCTILE IRON OR CAST IRON PIPE AND FITTINGS SHALL BE PROVIDED WITH POLYETHYLENE ENCASEMENT IN ACCORDANCE WITH AWWA STANDARDS.
31. UNDERGROUND PIPE SHALL BE WRAPPED WITH A METAL TRACER WIRE ALONG THE ENTIRE LENGTH OF PIPE.
32. COORDINATE WITH CIVIL DRAWINGS FOR ACCEPTABLE BACKFILL AND LAYING CONDITIONS. SEE SHT. UT-1.



FIRE SPRINKLER PLAN
SCALE : 1/16" = 1'-0"

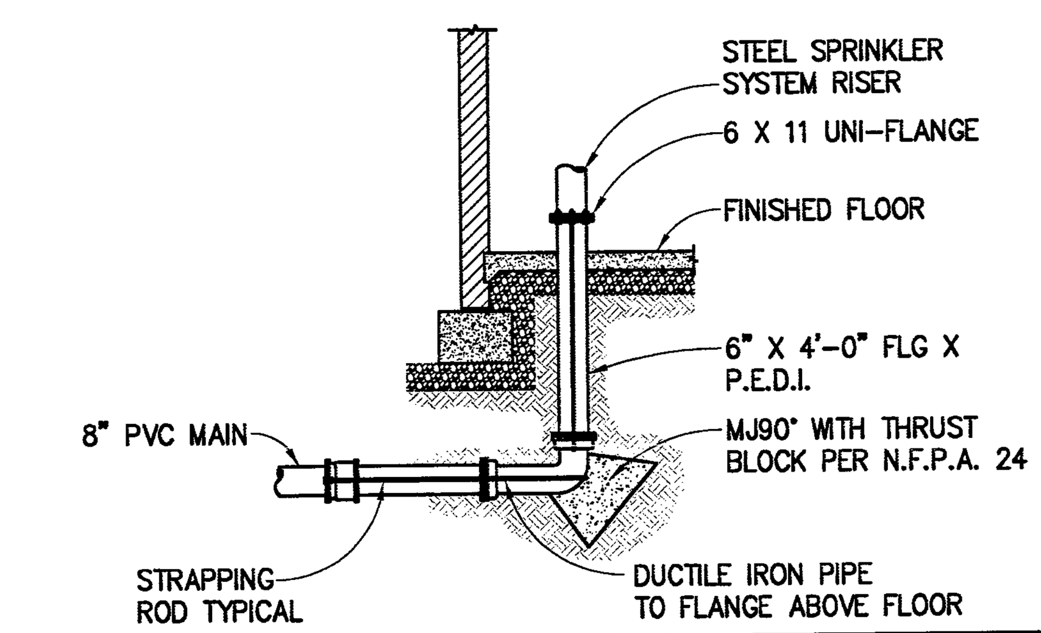
HYDRAULIC DESIGN CRITERIA

OCCUPANCY	NFPA-13 HAZARD OCCUPANCY	DENSITY (GPM/ FT²)	DESIGN AREA (FT²)	MAX. AREA/ SPRINK.	SYSTEM TYPE	GPM HOSE ALLOW.	REMARKS
AUDITORIUM/ OFFICES/ GALLERY/ STUDIO/ REHEARSAL/ EXTERIOR	LIGHT	0.1	900	225	WET	100	(1)
MECHANICAL	OH2	0.2	1500	130	WET	250	
BOOKSTORE	OH1	0.15	1500	130	WET	250	(1)
EXTERIOR	LIGHT	0.1	900	225	WET	100	(2)

HYDRAULIC DESIGN CRITERIA NOTES:

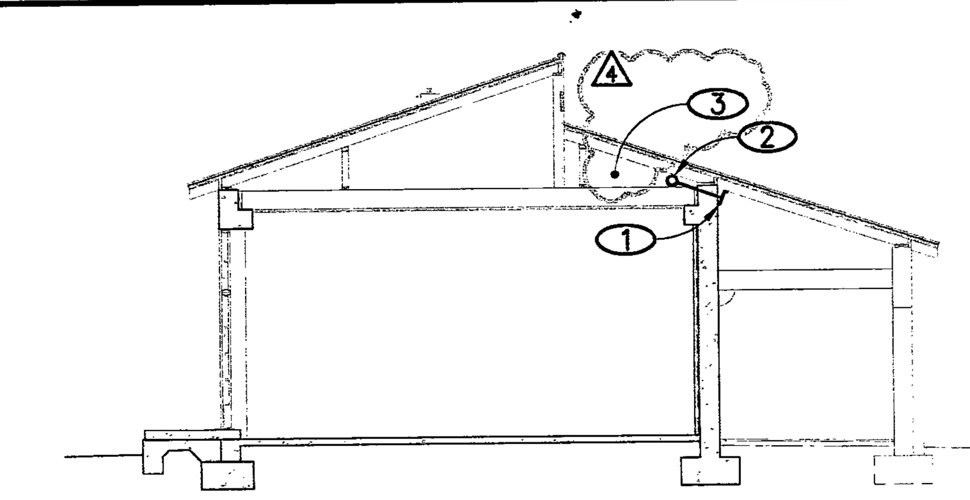
(1) USE QUICK RESPONSE 155°F – 165°F SPRINKLERS.

(2) DRY SIDEWALL HEADS TO BE USED IN THESE LOCATIONS.



UNDERGROUND PIPING DETAIL (1 / FS1.01)

NO SCALE



BREEZEWAY SECTION NOTES

(1) DRY-SIDEWALL SPRINKLER SPACED IN ACCORDANCE WITH LISTING AND BETWEEN BEAMS.

(2) LINE INSIDE HEATED AREA.

(3) ATTIC TO BE SPRINKLERED. (4)

BREEZEWAY SECTION (2 / FS1.01)

NO SCALE

DRAWING NOTES

(1) RISER ROOM LOCATION.

(2) FIELD VERIFY LOCATIONS OF MAINS EXTENDING ACROSS NON-CLIMATE CONTROLLED AREAS RELATIVE TO STRUCTURAL MEMBERS. PROVIDE PROTECTION IN ACCORDANCE WITH NFPA 13 SECTION 8.15.3.1.3 AND SPECIFICATION. RUN MAINS AS CLOSE TO STRUCTURAL MEMBERS AND ROOF AS POSSIBLE. PAINT TO MATCH BREEZEWAY.

(3) PROTECT ALL ATTACHED, COVERED EXTERIOR AREAS WITH DRY SIDEWALLS AS NECESSARY.

(4) PROPOSED UNDERGROUND ROUTING OF 8" PVC MAIN TO NEW RISER.

(5) NEW FDC AND PIV LOCATION. FDC TO BE WITHIN 100'-0" OF HYDRANT ON 4TH STREET. LOCATE FDC AND PIV RELATIVE TO DRIVEWAY TO ELIMINATE CONFLICT.

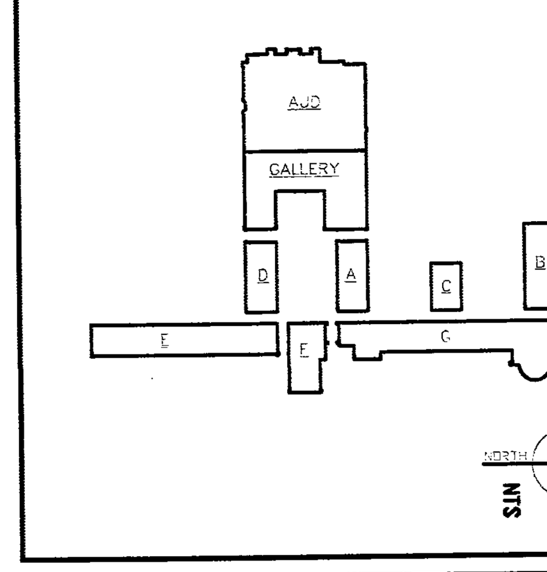
(6) DRY-SIDEWALL SPRINKLER.

(7) POINT WHERE SPRINKLER CONTRACTOR TIES TO UNDERGROUND MAIN.

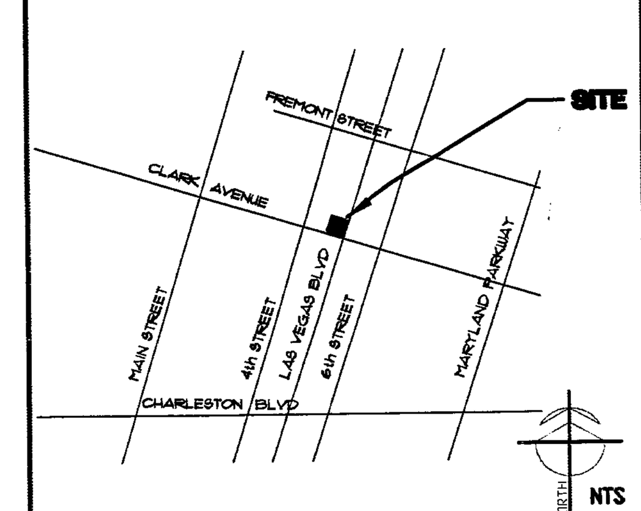
(8) FOR CONTINUATION SEE SHT. UT-1.

RECEIVED
FEB 06 2007
CITY OF LAS VEGAS
BUILDING DEPT.

BUILDING MAP



VICINITY MAP



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REVISIONS
(4) OWNER COMMENTS
FEBRUARY 2, 2007

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FIFTH STREET SCHOOL
REHABILITATION
BUILDING DEPARTMENT SUBMITTAL

REVISED

CITY OF LAS VEGAS
REDEVELOPMENT AGENCY

STAMP

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DRAWN

FILE: FIRE SPRINKLER PLAN

DATE: 12/12/2006

SCALE: 1/16" = 1'-0"

BID NO

CLV DWG NO: 513-65E

SHT NO: FS1.01

REVISED 8/27/03

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