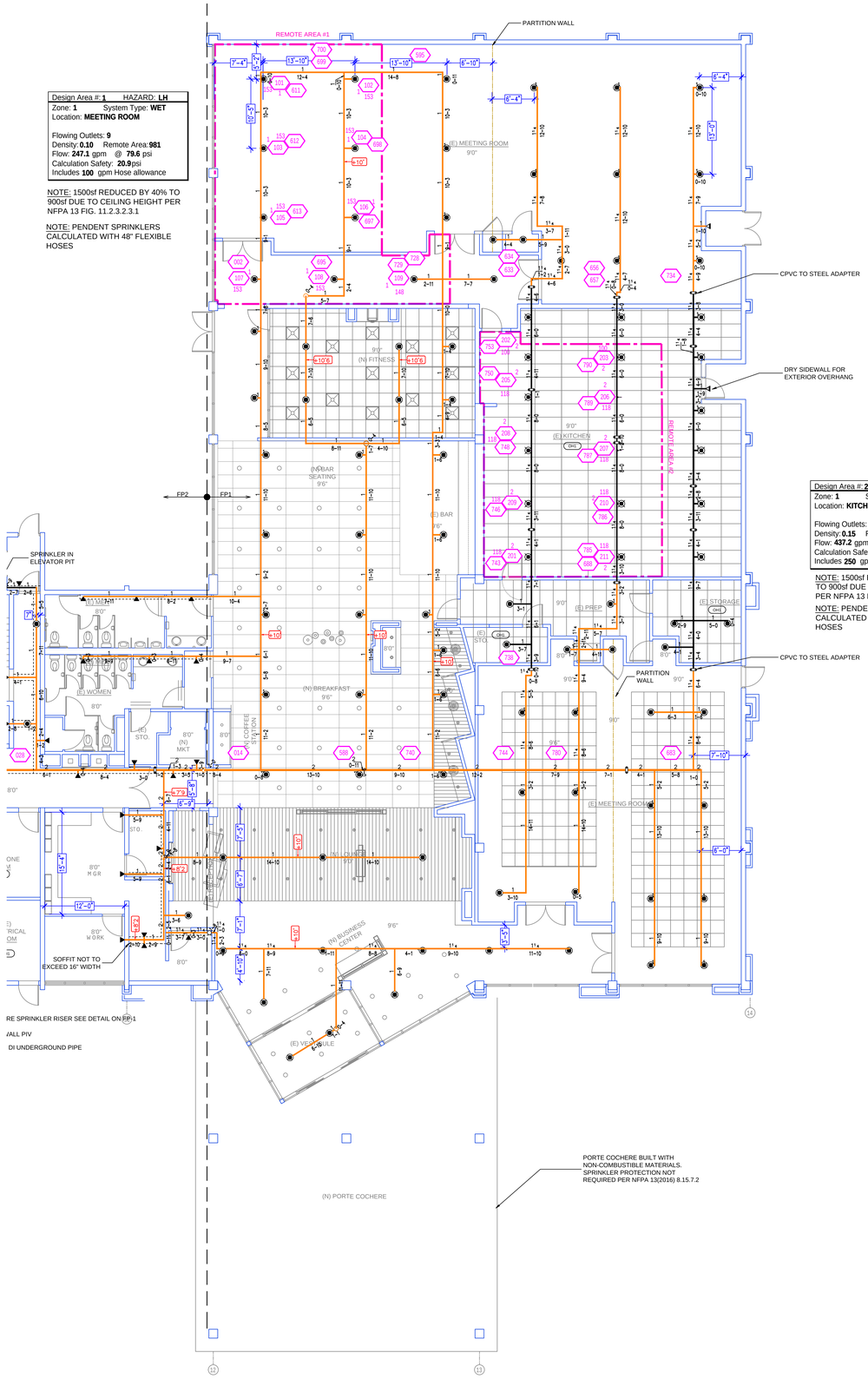


Design Area #: **1**	HAZARD: **LH**
Zone: **1**	System Type: **WET**
Location: **MEETING ROOM**	
Flowing Outlets: **9**	
Density: **0.10**	Remote Area: **981**
Flow: **247.1** gpm	@ **79.6** psi
Calculation Safety: **20.9** psi	
Includes **100** gpm Hose allowance	

NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

NOTE: PENDENT SPRINKLERS CALCULATED WITH 48" FLEXIBLE HOSES

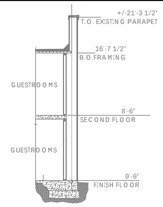
Design Area #: **2**	HAZARD: **OH1**
Zone: **1**	System Type: **WET**
Location: **KITCHEN**	
Flowing Outlets: **10**	
Density: **0.15**	Remote Area: **964**
Flow: **437.2** gpm	@ **89.9** psi
Calculation Safety: **10.4** psi	
Includes **250** gpm Hose allowance	

NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

NOTE: PENDENT SPRINKLERS CALCULATED WITH 48" FLEXIBLE HOSES

1ST FLOOR LOBBY FIRE SPRINKLER PIPING PLAN

SCALE: 1/8" = 1'-0"

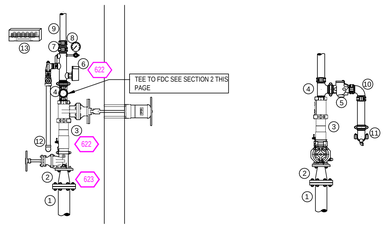


A BUILDING SECTION

SCALE: 1/8" = 1'-0"

RISER LEGEND

1. 4" UNDERGROUND WATER SERVICE (BY OTHERS)
   (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE G.C.)
2. 4X2-1/2" FLANGED CONCENTRIC REDUCER
3. 2-1/2" AMES COLT C300 DCDA BACKFLOW FXG PIV w/ TAMPERS
4. 2-1/2" GROOVED TEE
5. 2-1/2" GROOVED CHECK VALVE
6. 2-1/2" GROOVED COMMERCIAL MANIFOLD w/ FLOW SWITCH, PRESSURE GAUGE, & TEST AND DRAIN
7. 2-1/2" X 2" GROOVED CONCENTRIC REDUCER
8. STEEL TO CPVC ADAPTER
9. 2" CPVC TO SYSTEM
10. 2-1/2" GROOVED 90
11. 2-1/2" GROOVED DRAIN 90 w/ BALL DRIP
12. MAIN DRAIN PIPED TO OUTSIDE
13. HEAD BOX WITH HEADWRENCH



1 RISER DETAIL

SCALE: 1/2" = 1'-0"

* ALL WIRING/INTERFACING OF ALARMS BY OTHERS

* ALL PIPING PENETRATING THE EXTERIOR WALL TO BE GALVANIZED

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	S/N	MFG.	MODEL#	ESCUTCHEON
	107	PENDENT	WHITE	155	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	198	SIDEWALL	WHITE	165	4.20	1/2"	RA4835	RELIABLE	RFS	CONCEALED
	11	PENDENT	WHITE	165	4.90	1/2"	RA0616	RELIABLE	RFC	CONCEALED
	30	PENDENT	WHITE	212	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	31	SIDEWALL	WHITE	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	SEMI-RECESSED
	1	SIDEWALL	BRASS	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	N/A
	2	SIDEWALL	WHITE	200	5.60	1"	RS734	RELIABLE	F3QR	SEMI-RECESSED
	30	PENDENT	WHITE	165	5.60	1/2"	RA5994	RELIABLE	LT56C	CONCEALED
	6	SIDEWALL	WHITE	200	11.20	3/4"	TY5332	Tyco	ELOSW20	SEMI-RECESSED
416 TOTAL										

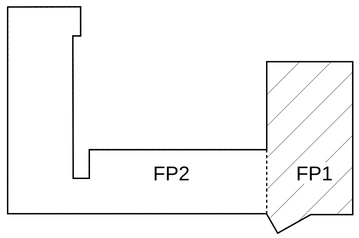
SPRINKLER HEAD LEGEND

1. INTERNATIONAL BUILDING CODE (2015)
   1.1. OCCUPANCY: **INSTITUTIONAL R-1, A2, A3,B**
   1.2. TYPE OF CONSTRUCTION: **V-B (NON-COMBUSTIBLE)**
   1.3. SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
   GROUND FLOOR = 33,628 S.F.
   SECOND FLOOR = 21,585 S.F.
   1.4. INSTALLATION STANDARDS:
   SPRINKLER SYSTEM DESIGNED AND INSTALLED PER **NFPA-13 (2016)**
2. SPRINKLER PIPE TYPES:
   -WET-
   2.1. 1" BRANCH LINES TO BE **SPEARS CPVC** PIPING WITH CEMENTED FITTINGS
   2.2. 1½" THROUGH 2-1/2" MAIN & BRANCH LINES TO BE **SPEARS CPVC** PIPING WITH CEMENTED FITTINGS
   2.3. 1-1/4" & 1-1/2" BRANCH LINES TO BE BLK SCH. 10 PIPING WITH GROOVED FITTINGS IN KITCHEN AREA
   2.4. 1" STEEL PIPING TO BE BLK SCH 40 WITH THREADED FITTINGS IN KITCHEN AREA
3. DESIGN CRITERIA
   3.1. GUEST ROOMS, MEETING ROOM, FITNESS ROOM, CORRIDORS AND BAR AREAS TO BE LIGHT HAZARD
   3.2. LAUNDRY ROOM, KITCHEN, MECHANICAL AND ELECTRICAL ROOMS TO BE ORDINARY HAZARD GROUP 1
   3.3. REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER **NFPA 13 SEC. 11.2.3.2.3**
4. NOTES:
   4.1. ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
   4.2. HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2016) - **SEE PLAN FOR HANGING REQ.**
5. SYMBOLS USED ON DRAWINGS:
   - 4-10" PIPE ELEVATION A.F.F
   - 12" PIPE ELEVATION BELOW B.O.D
   - OH1 ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
   - HYDRAULIC CALCULATION JUNCTION POINT
   - 9'0" CEILING HEIGHT
6. SCOPE OF WORK:
   6.1. EXISTING HOTEL TO BE RENOVATED AND RETROFITTED WITH FIRE SPRINKLERS THROUGHOUT THE ENTIRE BUILDING BY
   6.2. ALL AREAS OF THE B D COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2016)

NFPA 13 STEEL PIPE HANGER SPACING (EXCEPT LIGHT WALL THRID PIPING)	
NOMINAL SIZE inches	MAX SPACING feet
1"	12'-0"
1-1/4"	12'-0"
1-1/2"	15'-0"
2"	15'-0"
2-1/2"	15'-0"
3"	15'-0"
4" & LARGER	15'-0"

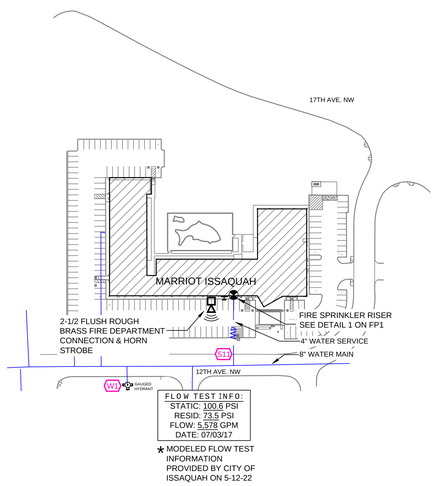
NFPA 13 CPVC PIPE HANGER SPACING	
NOMINAL SIZE inches	MAX SPACING feet
3/4"	5'-6"
1"	6'-0"
1-1/4"	6'-6"
1-1/2"	7'-0"
2"	8'-0"
2-1/2"	9'-0"
3"	10'-0"

HANGER DETAILS



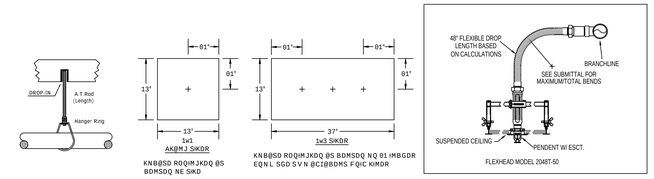
KEY PLAN

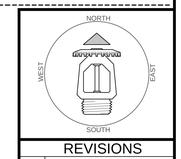
TIDYPIPE LEGEND
WET SYSTEM BLACK STEEL PIPING
CPVC BLAZEMASTER PIPING



SITE PLAN

SCALE: 1" = 100'-0"





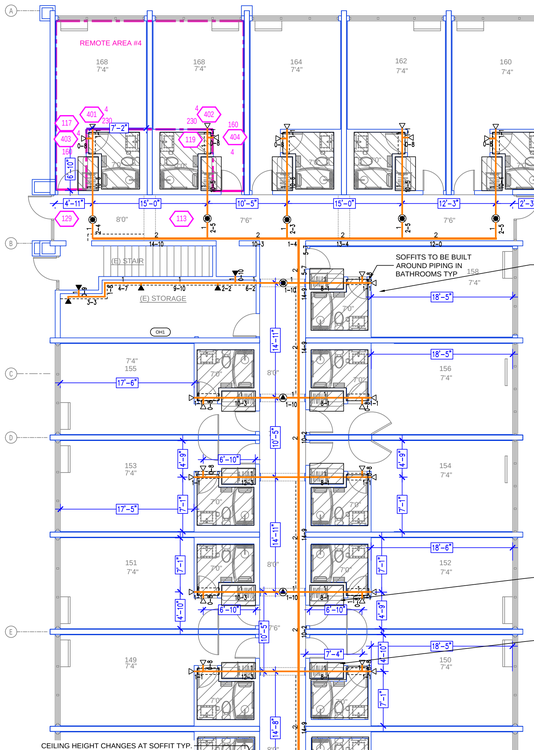
REVISIONS

Drawing Title
FIRE PROTECTION PLAN

Project No.	25135991
Drawn By	AM
Scale	1/8"=1'-0"
Date	06-29-2022
DWG Type	SUBMITTAL DWG
Parcel No.	

MARRIOT
1801 12TH AVE NW | ISSAQUAH, WA 98027

FP 1 OF 3



Design Area #: **4** HAZARD: **LH**
Zone: **1** System Type: **WET**
Location: **2ND FLOOR**
Flowing Outlets: **4**
Density: **0.10** Remote Area: **513**
Flow: **191.9** gpm @ **72.4** psi
Calculation Safety: **28.1** psi
Includes **100** gpm Hose allowance

NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

NOTE: RESIDENTIAL SIDEWALLS CALCULATED TO A MAX OF 16'X20' INSTALLED WITHIN 12" OF CEILING

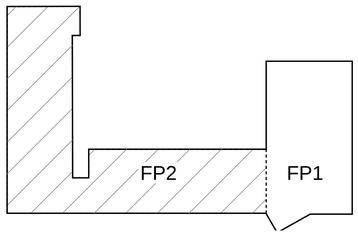
SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON
	107	PENDENT	WHITE	155	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	198	SIDEWALL	WHITE	165	4.20	1/2"	RA4835	RELIABLE	RFS	CONCEALED
	11	PENDENT	WHITE	165	4.90	1/2"	RA0616	RELIABLE	RFC	CONCEALED
	30	PENDENT	WHITE	212	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	31	SIDEWALL	WHITE	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	SEMI-RECESSED
	1	SIDEWALL	BRASS	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	N/A
	2	SIDEWALL	WHITE	200	5.60	1"	R5734	RELIABLE	F3QR	SEMI-RECESSED
	30	PENDENT	WHITE	165	5.60	1/2"	RA5994	RELIABLE	LTS6C	CONCEALED
	6	SIDEWALL	WHITE	200	11.20	3/4"	TY5332	Tyco	ELOSW20	SEMI-RECESSED
416 TOTAL										

SPRINKLER HEAD LEGEND

TIDYPIPE LEGEND

WET SYSTEM BLACK STEEL PIPING

CPVC BLAZEMASTER PIPING



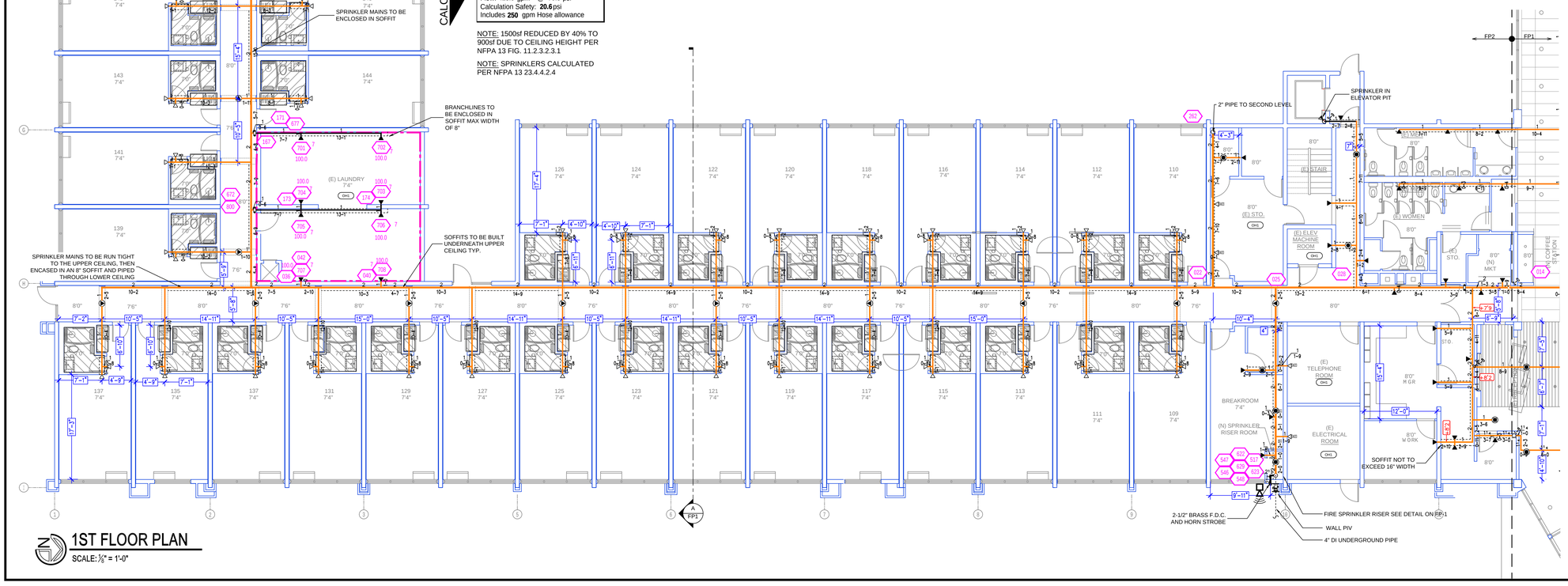
KEY PLAN

CALC PLACARD

Design Area #: **7** HAZARD: **OH1**
Zone: **1** System Type: **WET**
Location: **LAUNDRY**
Flowing Outlets: **8**
Density: **0.15** Remote Area: **920**
Flow: **418.5** gpm @ **79.8** psi
Calculation Safety: **20.6** psi
Includes **250** gpm Hose allowance

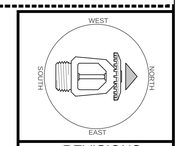
NOTE: 1500sf REDUCED BY 40% TO 900sf DUE TO CEILING HEIGHT PER NFPA 13 FIG. 11.2.3.2.3.1

NOTE: SPRINKLERS CALCULATED PER NFPA 13 23.4.4.2.4



1ST FLOOR PLAN

SCALE: 1/8" = 1'-0"



REVISIONS

Drawing Title

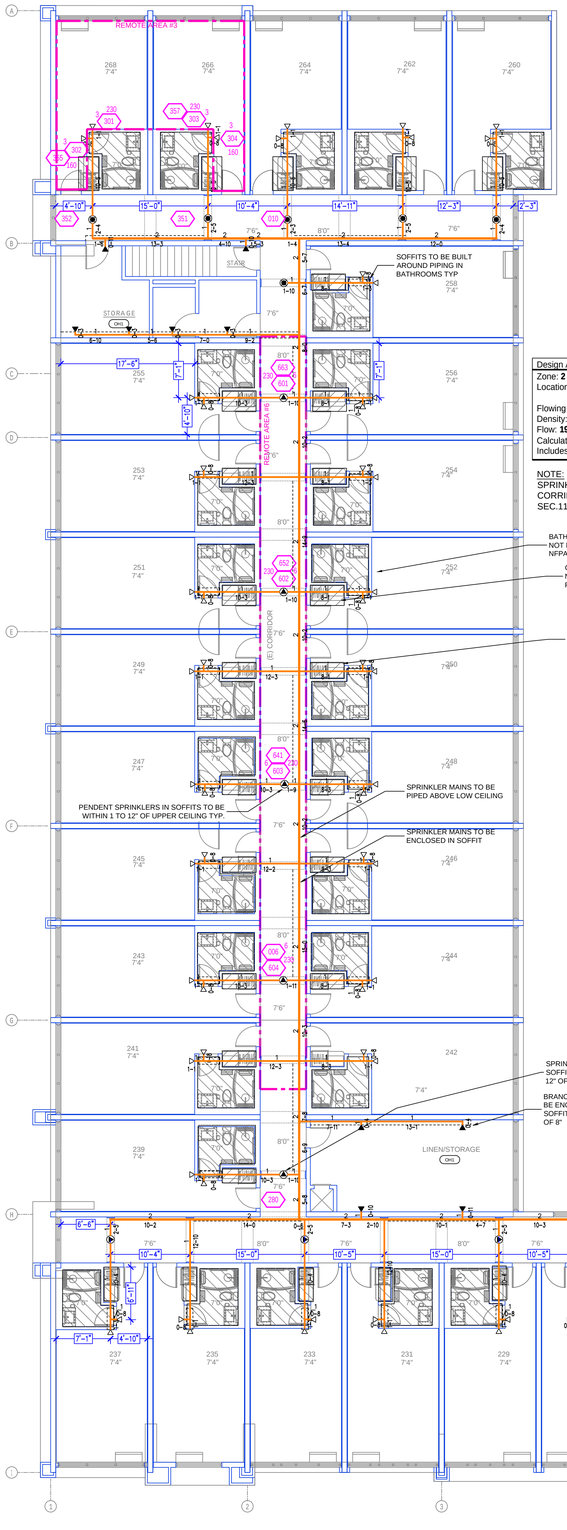
FIRE PROTECTION PLAN

Project No.	2513991
Drawn By	AM
Scale	1/8"=1'-0"
Date	06-29-2022
DWG Type	SUBMITTAL DWG
Parcel No.	

MARRIOT

1801 12TH AVE NW | ISSAQUAH, WA 98027

FP 2 OF 3



CALC PLACARD

Design Area #: **3** HAZARD: **LH**
Zone: **2** System Type: **WET**
Location: **2ND FLOOR**

Flowing Outlets: **4**
Density: **0.10** Remote Area:
Flow: **191.9** gpm @ **82.1** psi
Calculation Safety: **18.5**psi
Includes **100** gpm Hose allowance

NOTE: 4 SPRINKLER CALCULATED PER NFPA 13 SEC. 11.3.1.1

NOTE: RESIDENTIAL SIDEWALLS CALCULATED TO A MAX OF 16'X20' INSTALLED WITHIN 12" OF CEILING

Design Area #: **6** HAZARD: **LH**
Zone: **2** System Type: **WET**
Location: **2ND FLOOR CORRIDOR**
Flowing Outlets: **4**
Density: **0.10** Remote Area: **723**
Flow: **193.4** gpm @ **58.9** psi
Calculation Safety: **41.6**psi
Includes **100** gpm Hose allowance

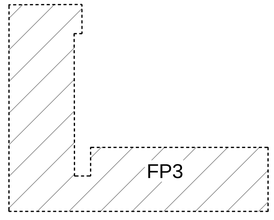
NOTE: 75 LINEAR FEET SPRINKLERS CALCULATED IN CORRIDOR PER NFPA 13 SEC.11.2.3.3.6

TIDYPIPE LEGEND

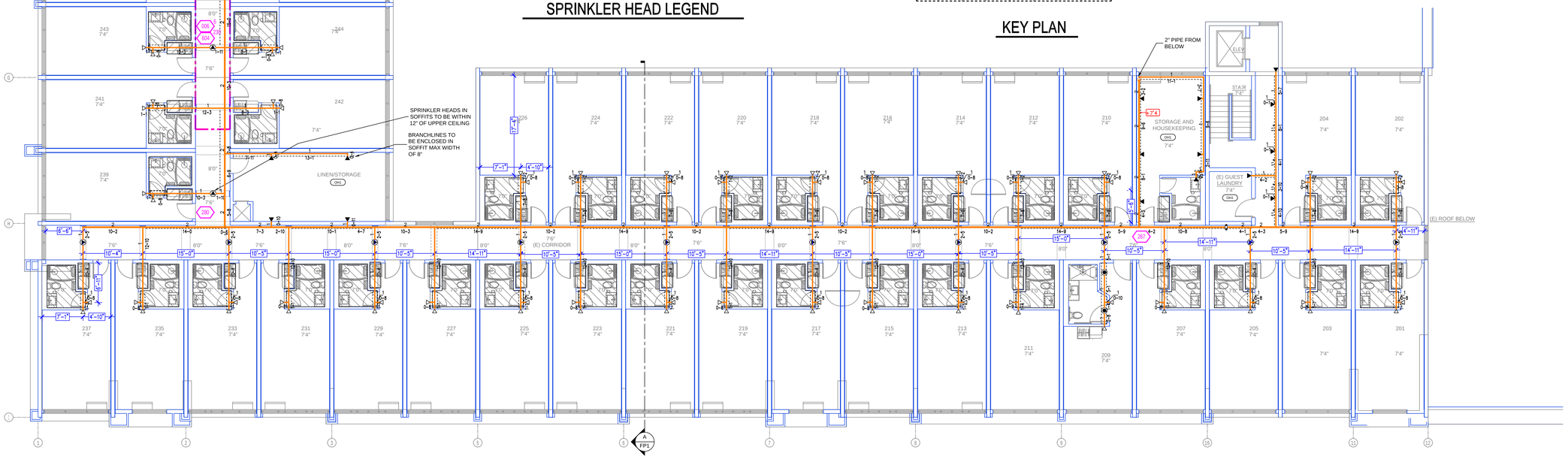
- WET SYSTEM BLACK STEEL PIPING
- CPVC BLAZEMASTER PIPING

SYM	CNT	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	ESCUTCHEON
	107	PENDENT	WHITE	155	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	198	SIDEWALL	WHITE	165	4.20	1/2"	RA4835	RELIABLE	RFS	CONCEALED
	11	PENDENT	WHITE	165	4.90	1/2"	RA0616	RELIABLE	RFC	CONCEALED
	30	PENDENT	WHITE	212	5.60	1/2"	RA1414	RELIABLE	G5	CONCEALED
	31	SIDEWALL	WHITE	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	SEMI-RECESSED
	1	SIDEWALL	BRASS	200	5.60	1/2"	RA1435	RELIABLE	F1FR56	N/A
	2	SIDEWALL	WHITE	200	5.60	1"	R5734	RELIABLE	F3QR	SEMI-RECESSED
	30	PENDENT	WHITE	165	5.60	1/2"	RA5994	RELIABLE	LT56C	CONCEALED
	6	SIDEWALL	WHITE	200	11.20	3/4"	TY5332	Tyco	ELOSW20	SEMI-RECESSED
416 TOTAL										

SPRINKLER HEAD LEGEND

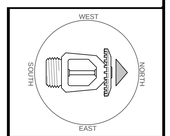


KEY PLAN



2ND FLOOR PLAN

SCALE: 1/8" = 1'-0"



REVISIONS

Drawing Title
FIRE PROTECTION PLAN

Project No.	2513991
Drawn By	AM
Scale	1/8"=1'-0"
Date	06-29-2022
DWG Type	SUBMITTAL DWG
Parcel No.	

MARRIOT
1801 12TH AVE NW | ISSAQUAH, WA 98027

FP 3 OF 3