

HAZARD CLASSIFICATION			
CLASSIFICATION	AREAS	DENSITY	LOCATIONS
LIGHT HAZARD	1500 SQ.FT.	0.10 GPM/SQ FT	OFFICE AREAS, CORRIDORS, PUBLIC AND SIMILAR SPACES
ORDINARY HAZARD GROUP-1	1500 SQ.FT.	0.15 GPM/SQ FT	LABORATORIES, PENTHOUSE MECHANICAL ROOMS & STORAGE SPACES

SPRINKLER/CLASSIFICATION SUMMARY							
SYMBOL	●	○	●	△	△ _D	⊙	⊙
LOCATION	ALL AREAS WITH SUSPENDED CEILINGS (UNLESS OTHERWISE NOTED)	ALL AREAS WITH EXPOSED FL/CL/G OR ROOF/CL/G (UNLESS OTHERWISE NOTED)	AREAS WITH EXPOSED FL/CL/G, INSTALL UNDER DUCTWORK & OTHER OBSTRUCTIONS 4'-0" WIDE	AREAS WITH LOW CEILINGS, ELEVATOR RITS, VESTIBULES, ETC.	EXTERIOR OVERHANG REQUIRING FIRE PROTECTION	RECESSED PENDENT SP. HEADS LOCATED AT WOOD CEILINGS	COLD ROOM
OCCUPANCIES	LIGHT HAZARD (NOTE)	ORDINARY HAZARD	ORDINARY HAZARD	ORDINARY HAZARD	ORDINARY HAZARD	LIGHT HAZARD	ORDINARY HAZARD
MAX. COVERAGE	225 SQ.FT.	130' SQ.FT.	130' SQ.FT.	130' SQ.FT.	130' SQ.FT.	225 SQ.FT.	130' SQ.FT.
SPRINKLER STYLE	CONCEALED PENDENT	UPRIGHT	UPRIGHT	SIDEWALL	DRY SIDEWALL	PENDENT	DRY PENDENT
COVERAGE	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD	STANDARD
RESPONSE	QUICK	QUICK	QUICK	QUICK	QUICK	QUICK	QUICK
K-FACTOR	5.6	5.6	5.6	5.6	5.6	5.6	5.6
TEMPERATURE	ORDINARY	ORDINARY	ORDINARY	ORDINARY	ORDINARY	ORDINARY	ORDINARY
MANUFACTURER	RELIABLE	RELIABLE	RELIABLE	RELIABLE	RELIABLE	RELIABLE	RELIABLE
MODEL	G4A	F1FR	F1FR	F1FR56	F3QR	F1FR56	F3QR
SPRK. QUANTITIES	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS	REFER TO FLOOR PLANS
NOTE	ORDINARY HAZARD AREA HAVING 130 SQ.FT. MAX. COVERAGE	LIGHT HAZARD AREA HAVING 225 SQ.FT. MAX. COVERAGE SPRINKLERS IN AREA WITH LOW CLEARANCE SHALL BE PROTECTED WITH LISTED GUARDS	LIGHT HAZARD AREA HAVING 225 SQ.FT. MAX. COVERAGE SPRINKLERS IN AREA WITH LOW CLEARANCE SHALL BE PROTECTED WITH LISTED GUARDS	ORDINARY HAZARD AREA HAVING 130 SQ.FT. MAX. COVERAGE SPRINKLERS IN AREA WITH LOW CLEARANCE SHALL BE PROTECTED WITH LISTED GUARDS	SPRINKLERS IN AREA WITH LOW CLEARANCE SHALL BE PROTECTED WITH LISTED GUARDS	SPRINKLER HEADS AND ESCUTCHEONS SHALL BE CHROME PLATED	ORDINARY HAZARD AREA HAVING 130 SQ.FT. MAX. COVERAGE

NOTE: CONCEALED PENDENT SPRINKLER HEADS LOCATED AT WOOD CEILINGS SHALL HAVE COLORED COVER PLATE, COORDINATE COLOR WITH ARCHITECT. ALL SPRINKLER HEADS SHALL BE UL LISTED AND FM APPROVED.

PIPE SCHEDULE		
PIPING SYSTEM	LOCATION	REQUIREMENT
STANDPIPE/WET FIRE SPRINKLER	INTERIOR	BLACK STEEL, STANDARD WEIGHT (SCH. 40), WITH THREADED MALLEABLE OR FLANGED CAST STEEL FITTINGS. MECHANICAL COUPLING SIMILAR TO VICTAULIC STYLE-77 IS ACCEPTABLE IN LIEU OF THREADED AND/OR FLANGED FITTING IN SIZES 2 1/2" AND ABOVE.
SIAMESE PIPING, DRAINS, ETC.	INTERIOR & EXTERIOR	GALVANIZED STEEL, STANDARD WEIGHT (SCH. 40), WITH GALVANIZED THREADED MALLEABLE OR FLANGED CAST STEEL FITTINGS. MECHANICAL COUPLING SIMILAR TO VICTAULIC STYLE-77 IS ACCEPTABLE IN LIEU OF THREADED AND/OR FLANGED FITTING IN SIZES 2 1/2" AND ABOVE.
NOTE: ALL EXPOSED FIRE PROTECTION PIPING TO BE PAINTED RED.		

HYDRANT FLOW TEST

STATIC PRESSURE: 80 PSI
RESIDUAL PRESSURE: 75 PSI
AT 1300 GPM FLOWING
TEST TAKEN AT SEQUOIA LN.
RAMAPO COLLEGE CAMPUS,
MAHWAH, NJ

NOTE:
CONTRACTOR TO PROVIDE HYDRANT FLOW TEST
WITHIN ONE MONTH OF AWARD OF PROJECT.

SPRINKLER NOTES

- THE FIRE PROTECTION CONTRACTOR SHALL APPLY FOR AND SECURE ALL REQUIRED PERMITS AND INSPECTIONS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REVIEWING A FULL SET OF BID DOCUMENTS, FAILURE TO COMPLY SHALL NOT HOLD THE OWNER RESPONSIBLE FOR ANY ADDITIONAL COST.
- CONTRACTOR SHALL SUBMIT HYDRAULIC CALCULATIONS, SIGNED & SEALED BY A NEW JERSEY STATE LICENSED PROFESSIONAL ENGINEER, FOR THE ENGINEER'S & DCA REVIEW AND PERMIT APPLICATION.
- THE CONTRACTOR SHALL INDICATE ON HIS SHOP DRAWING THAT ALL PIPING LAYOUTS ARE COORDINATED WITH THE MEP AND STRUCTURAL CONDITIONS. INCLUDE ON EACH WORKING DRAWING LAYOUT CERTIFICATION, THAT ALL RELATED CONDITIONS HAVE BEEN CHECKED, AND THAT NO CONFLICT EXISTS. SUBMISSION WILL NOT BE APPROVED WITHOUT SUCH CERTIFICATION.
- THE CONTRACTOR MUST SUBMIT A COMPLETE SET OF COORDINATED DRAWINGS FOR APPROVAL BEFORE THE START OF THE WORK. THESE DRAWING SHALL INDICATE ALL OF THE MAINS AND BRANCH PIPING INCLUDING SIZES AND ELEVATIONS. THIS DRAWING MUST ALSO BE SUBMITTED WITH HYDRAULIC CALCULATIONS TO VERIFY THE ADEQUACY OF THE INDICATED PIPE SIZES. CONTRACTOR'S DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE SUBMITTED FOR PERMIT APPLICATION. CONTRACTOR'S SHOP DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE SIGNED AND SEALED BY A NEW JERSEY STATE PROFESSIONAL ENGINEER.
- THE PIPING SHOWN SHALL BE SIZED AND INSTALLED AS PER THE APPROVED SHOP DRAWINGS. SIZES MUST BE DETERMINED BY HYDRAULIC CALCULATIONS.
- THE MINIMUM SPRINKLER BRANCH PIPE SIZE SHALL BE 1".
- UNLESS SPECIFICALLY STATED OTHERWISE, CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS, APPURTENANCES, EQUIPMENT AND SERVICES TO COMPLETE ALL WORK AS INDICATED ON DRAWINGS, SPECIFICATIONS AND NOTES.
- UNLESS SPECIFICALLY STATED OTHERWISE, CONTRACTOR SHALL FOLLOW MANUFACTURERS' DIRECTIONS, INSTRUCTIONS AND RECOMMENDATIONS FOR ALL MATERIALS AND PROCESSES USED IN THIS CONTRACT.
- UPON COMPLETION OF THE WORK, CONTRACTOR SHALL COMPLETELY CLEAN THE CONSTRUCTION AREA SUITABLE FOR THE OWNER'S USE.
- COMPLETE AND ACCURATE CONFORMED "AS-BUILT" PLANS SHALL BE TURNED OVER TO OWNER AT THE COMPLETION OF THE JOB.
- AT THE FINAL COMPLETION OF THE JOB, CONTRACTOR SHALL SUBMIT TO THE OWNER AND TO ENGINEER A NOTARIZED AFFIDAVIT STATING COMPLIANCE WITH ALL PROVISIONS OF THIS CONTRACT, INCLUDING ALL NOTES, EXCEPT FOR THOSE CHANGES SPECIFICALLY APPROVED IN WRITING BY THE ARCHITECT.
- SPRINKLER PIPING SHALL NOT BE LOCATED DIRECTLY OVER ANY ELECTRICAL AND TELEPHONE EQUIPMENT.
- ELECTRICAL AND TELEPHONE EQUIPMENT SHALL BE PROTECTED BY A SHIELD TO DEFLECT WATER AWAY FROM SUCH EQUIPMENT. SHIELD SHALL BE GALVANIZED STEEL, ALUMINUM OR BRASS.
- PROVIDE SPRINKLERS BELOW DUCTS OVER 4'-0" IN WIDTH IN AREAS WITHOUT CEILING.
- THE CONTRACTOR SHALL INSTALL ADDITIONAL SPRINKLERS TO ENSURE ADEQUATE COVERAGE IN AREAS WHERE OBSTRUCTION MAY PREVENT ADEQUATE COVERAGE. CONTRACTOR SHALL INCLUDE AN ALLOWANCE FOR AN ADDITIONAL 25 SPRINKLER HEADS AND ASSOCIATED PIPING AS PART OF THE SCOPE OF WORK.
- COORDINATE ALL FLOW AND TAMPER SWITCHES WITH FIRE ALARM CONTRACTOR.
- ALL SPRINKLER PIPING AND COMPONENTS SHALL RECEIVE VIBRATION ISOLATION TO PREVENT TRANSMISSION OF NOISE AND VIBRATION TO THE PIPING SYSTEM AND BUILDING STRUCTURE.
- THREADS FOR STANDPIPE HOSE CONNECTIONS AND SIAMESE FIRE DEPARTMENT CONNECTIONS SHALL BE COORDINATED WITH LOCAL FIRE DEPARTMENT.
- PROVIDE FIRE WATCH DURING CONSTRUCTION AS REQUIRED. COORDINATE WITH CONSTRUCTION MANAGER.
- COORDINATE CONSTRUCTION SEQUENCING WITH OWNER AND CONSTRUCTION MANAGER.

BUILDING DEPARTMENT NOTES:

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE INTERNATIONAL BUILDING CODE NEW JERSEY EDITION. WORK SHALL BE EXECUTED IN FULL COMPLIANCE WITH THE APPLICABLE PROVISIONS OF ALL LOCAL LAWS, BY LAWS, STATUTES, ORDINANCES, CODES, RULES, REGULATIONS AND LAWFUL ORDERS OF PUBLIC AUTHORITIES BEARING ON THE PERFORMANCE AND EXECUTION OF THE WORK.

DRAWING LIST	
FP0.01G	FIRE PROTECTION TYPICAL SYMBOLS, SCHEDULES, NOTES & DRAWING LIST
FP2.01G	FIRE PROTECTION 1ST FLOOR PLAN G-WING
FP2.02G	FIRE PROTECTION 2ND FLOOR PLAN G-WING
FP2.03G	FIRE PROTECTION 3RD FLOOR PLAN G-WING
FP2.04G	FIRE PROTECTION 4TH FLOOR PLAN G-WING
FP2.05G	FIRE PROTECTION ROOF PENTHOUSE PLAN G-WING
FP4.01G	FIRE PROTECTION RISER DIAGRAM G-WING
FP5.01	FIRE PROTECTION DETAILS

FIRE PROTECTION SYMBOLS	
	STANDPIPE PIPING
	SPRINKLER PIPING
	DRAINAGE PIPING ABOVE GROUND
	DIRECTION ARROW
	PIPE-UP UNLESS OTHERWISE NOTED
	PIPE DROP UNLESS OTHERWISE NOTED
	DROP OR RISE
	TOP CONNECTION
	BOTTOM CONNECTION
	CAPPED OUTLET
	NEW CONNECTION
	POINT OF NEW CONNECTION TO EXISTING
	FIRE STANDPIPE RISER DESIGNATION
	WATER FLOW SWITCH
	WATER FLOW SWITCH
	SHUT-OFF VALVE
	NORMALLY CLOSED DRAIN VALVE
	BALL VALVE (BV)
	CHECK VALVE
	CHECK VALVE
	CHECK VALVE
	SPRINKLER ALARM CHECK VALVE
	SPRINKLER DRY PIPE VALVE
	O.S.&Y. VALVE
	O.S.&Y. VALVE WITH TAMPER SWITCH
	CURB VALVE
	BUTTERFLY VALVE
	FIRE HOSE VALVE
	SIAMESE CONNECTION
	FIRE DEPARTMENT CONNECTION
	NEW FIRE HYDRANT
	PRESSURE GAUGE (PG)
	UNION
	ORIFICE
	PIPE SLEEVE
	STRAINER
	SPRINKLER FLOOR CONTROL VALVE ASSEMBLY
	DOUBLE CHECK DETECTOR ASSEMBLY
	ALARM BELL (COMMON TROUBLE)
	ALARM BELL (WATER FLOW)
	MANUAL PULL STATION
	DENOTES CHANGE IN CEILING HEIGHT AFF (ELEVATION)
	SPRINKLER NODE FOR HYDRAULIC CALCULATIONS
	PIPE NODE FOR HYDRAULIC CALCULATIONS

NOTE: SYMBOLS LIST IS PROVIDED FOR REFERENCE ONLY. NOT ALL SYMBOLS ARE NECESSARILY USED IN THIS PROJECT.

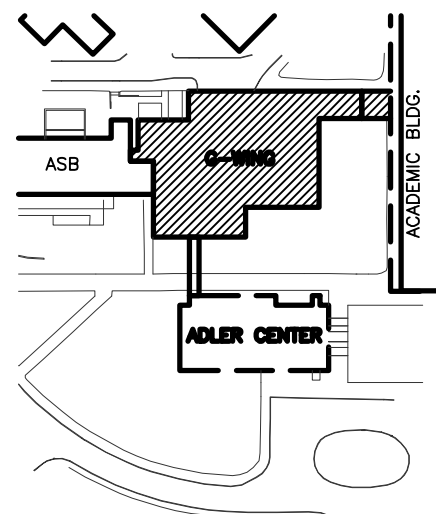


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Key Plan:



	6/8/12	DCA FILING
	7/19/12	ISSUED FOR BID
	12/10/12	BID ADDENDUM #6
	1/15/13	ISSUED FOR CONSTRUCTION
	8/12/16	AS-BUILT CONSTRUCTION DOCUMENTS

NR	DATE	COMMENTS
ISSUE/REVISION		
ALL DIMENSIONS AND EXISTING CONDITIONS SHALL BE CHECKED AND VERIFIED BY THE CONTRACTOR BEFORE PROCEEDING WITH THE WORK.		

Project:
G-WING RENOVATION &
ADLER CENTER

Submission:
CONSTRUCTION DOCUMENTS

Drawing Title:
FIRE PROTECTION
TYPICAL SYMBOLS,
SCHEDULES, NOTES
& DRAWING LIST

PROJECT NR: 102700	DATE: 6/8/12
RCNJ PROJ. NR: 08-240C	SCALE: 1/8"=1'-0"

FPO.01G