OWNER FURNISHED SPRINKLERS AND ACCESSORIES

SYMBOL	SIZE	K-FACTOR	FINISH	MFR	MAKE	S.I.N.	TEMP	STYLE	QTY	SPARE QTY	ESCH STYLE	ESCH FINISH	ESCH QTY
	1/2"	11.2	BRASS	TYCO	ELO-231	TY5831	155	UPRIGHT	1289	24	---	---	---
*	1/2"	11.2	BRASS	TYCO	ELO-231	TY5831	200	UPRIGHT	64	6	---	---	---
	3/4"	16.8	BRASS	TYCO	K17-231	TY7158	155	UPRIGHT	194	6	---	---	---
*	3/4"	16.8	BRASS	TYCO	K17-231	TY7158	200	UPRIGHT	10	6	---	---	---
**	3/4"	16.8	BRASS	TYCO	K17-231	TY7158	286	UPRIGHT	10	6	---	---	---

SUBSTITUTIONS WILL NOT BE PERMITTED. REFERENCE SPECIFICATIONS APPENDIX B FOR ADDITIONAL INFORMATION.

WHERE SPRINKLERS ARE INSTALLED BELOW OBSTRUCTIONS (REFRIGERATION PIPING, RTUs, CABLE TRAYS, ETC.) THESE SPRINKLERS SHALL BE REPLACED WITH SPRINKLERS MATCHING THE NEW SPRINKLERS BEING INSTALLED AT THE ROOF DECK LEVEL.

* INTERMEDIATE TEMPERATURE SPRINKLERS TO BE FURNISHED BY OWNER FOR INSTALLATION BELOW SKYLIGHTS AND ON AIR FLOW SIDE (INTERMEDIATE-TEMPERATURE ZONE) OF UNIT HEATERS PER NFPA 13.

**HIGH TEMPERATURE SPRINKLERS TO BE FURNISHED BY OWNER FOR INSTALLATION AROUND UNIT HEATERS.

THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY DAMAGE TO OWNER FURNISHED SPRINKLERS DURING INSTALLATION. TO REPLACE DAMAGED SPRINKLERS CONTACT HAINES, JONES, CADBURY 1-800-459-7099.

THE OWNER WILL FURNISH ADDITIONAL SPRINKLERS FOR THE SPARES CABINET. INSTALL SPARE SPRINKLER QUANTITY INDICATED ON CONTRACT DOCUMENTS PRIOR TO FIRE PROTECTION CONSULTANT SITE OBSERVATION.

SPRINKLER SYMBOL LEGEND

SYMBOL	SIZE	MFR	MAKE	S.I.N.	FINISH	STYLE	TEMP	K-FACTOR
	3/4"	TYCO	ELO 231	TY5251	BRASS	PENDENT	286	11.2
	MATCH EXISTING	TYCO	MATCH EXISTING	MATCH EXISTING	QUICK RESP.	PENDENT	MATCH EXISTING	MATCH EXISTING
	1"	TYCO	DS-C	TY3555	WHITE	CONCEAL DRY PEND	200	5.6
	3/4"	TYCO	TY-B	TY4151	BRASS	UPRIGHT	286	8.0
	1/2"	TYCO	TY-B	TY3251	WHITE	RECESSED STYLE 10	155	5.6
	MATCH EXISTING	TYCO	MATCH EXISTING	MATCH EXISTING	MATCH EXISTING	UPRIGHT	MATCH EXISTING	MATCH EXISTING
	VARIES	VARIES	VARIES	VARIES	VARIES	EXISTING PENDENT	VARIES	VARIES
	VARIES	VARIES	VARIES	VARIES	BRASS	EXISTING UPRIGHT	VARIES	VARIES
	VARIES	VARIES	VARIES	VARIES	BRASS	EXISTING HSW	VARIES	VARIES

WHERE SPRINKLERS ARE CALLED OUT TO "MATCH EXISTING," THE CONTRACTOR SHALL PROVIDE SPRINKLERS MANUFACTURED BY TYCO, WHICH ARE EQUIVALENT TO THE EXISTING TO REMAIN SPRINKLERS. SUBSTITUTIONS WILL NOT BE PERMITTED.

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	HYDRAULIC REFERENCE NODE POINT
	CAP
	PLUG
	RISER NIPPLE/DROP NIPPLE
	SPRINKLER RISER
	INSPECTOR'S TEST/AUXILIARY DRAIN
	FIRE DEPARTMENT CONNECTION
	HANGER
	TRAPEZE HANGER
	NEW CONNECTION
	NEW SPRINKLER PIPE
	EXISTING SPRINKLER PIPE
	DEMOLISHED SPRINKLER PIPE

PROVIDE ADDITIONAL SPRINKLERS AS REQUIRED PER NFPA 13 IN EXISTING SPRINKLER CABINET FOR ANY NEW SPRINKLERS INSTALLED.

PIPE TABLE (WET)

PRODUCT	NOMINAL PIPE SIZE	INSIDE DIAMETER
DYNA-FLOW	2"	2.203
DYNA-FLOW	2-1/2"	2.703
DYNA-FLOW	3"	3.314
DYNA-FLOW	4"	4.310
DYNA-THREAD	1"	1.080
DYNA-THREAD	1-1/4"	1.408
DYNA-THREAD	1-1/2"	1.639
DYNA-THREAD	2"	2.104
SCHEDULE 10	1-1/4"	1.442
SCHEDULE 10	1 1/2"	1.682
SCHEDULE 10	2"	2.157
SCHEDULE 10	2 1/2"	2.635
SCHEDULE 10	3"	3.260
SCHEDULE 10	4"	4.260
SCHEDULE 10	6"	6.357
SCHEDULE 10	8"	8.249
SCHEDULE 40	1"	1.049
SCHEDULE 40	1-1/4"	1.380
SCHEDULE 40	1-1/2"	1.610
SCHEDULE 40	2"	2.067

PIPE TABLE (UNDERGROUND)

PRODUCT	NOMINAL PIPE SIZE	INSIDE DIAMETER
DI	6"	6.28
DI	8"	8.27
DI	10"	10.40
DI	12"	12.46
DI	16"	16.53
DI	18"	18.61
DI	20"	20.69
DI	24"	24.85
PVC	6"	6.09
PVC	8"	7.98
PVC	10"	9.79
PVC	12"	11.65
PVC	16"	15.53
PVC	18"	17.20
PVC	20"	19.06
PVC	24"	22.76

PIPE SIZES SHOWN ARE FOR HYDRAULIC CALCULATIONS PURPOSES ONLY. REFER TO SPECIFICATIONS FOR ALLOWABLE SUBSTITUTIONS.

HYDROSTATIC TEST

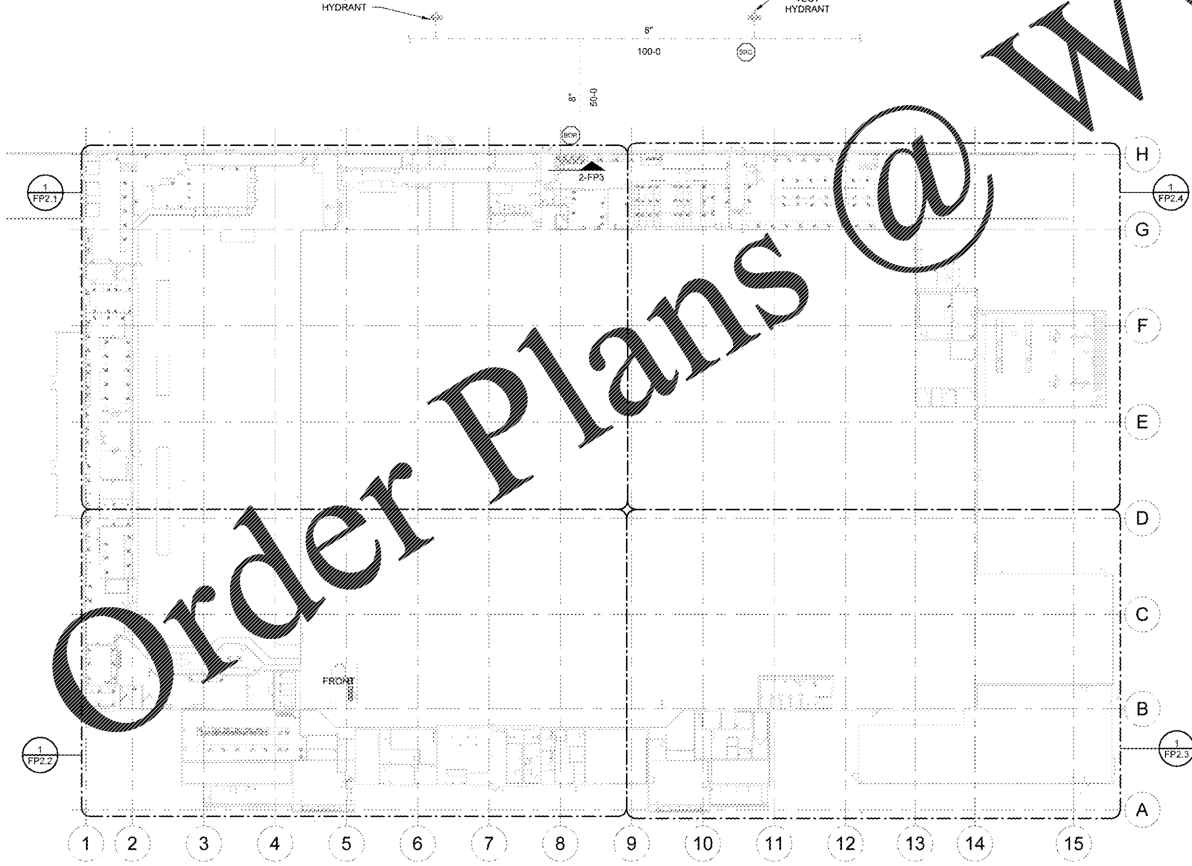
BUILDING SPRINKLER SYSTEM(S) INVOLVED IN THIS SCOPE OF WORK SHALL BE HYDROSTATICALLY TESTED IN ACCORDANCE WITH NFPA 13. MOREOVER, THE FOLLOWING TWO (2) HYDROSTATIC TESTS SHALL BE PERFORMED BY THE CONTRACTOR:

1. THE FIRST HYDROSTATIC TEST SHALL BE PERFORMED BY THE CONTRACTOR PRIOR TO START OF SPRINKLER SYSTEM SCOPE OF WORK ("PRE-SCOPE HYDRO TEST"); AND
2. THE SECOND HYDROSTATIC TEST SHALL BE PERFORMED BY THE CONTRACTOR AFTER COMPLETION OF CONTRACT SCOPE OF WORK ("POST-SCOPE HYDRO TEST").

THE HYDROSTATIC TESTS ON EXISTING SPRINKLER SYSTEM SHALL BE CONDUCTED AT A PRESSURE OF 200 PSI FOR 2 HOURS. NEW SYSTEMS SHALL BE TESTED PER PRESSURE REQUIREMENTS OF NFPA 13.

THE CONTRACTOR SHALL NOT BE RESPONSIBLE FOR DAMAGE TO CONTENTS OR BUILDING OCCURRING DURING THE "PRE-SCOPE HYDRO TEST" PROVIDED ALL COMMERCIALLY REASONABLE MEASURES NECESSARY OR PRUDENT TO PROTECT CONTENTS OR BUILDING COMPONENTS WERE FOLLOWED FOR APPROPRIATE TEST PROCESS.
CONTRACTOR SHALL COMPLETE REPAIRS AND / OR REMEDIATION TO EXISTING SYSTEMS REQUIRED AS A RESULT OF DEFICIENCIES IDENTIFIED DURING PRE-SCOPE TESTING AS AN ADDITIONAL SERVICE.
THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR DAMAGE TO CONTENTS OR BUILDING OCCURRING DURING THE "POST-SCOPE HYDRO TEST" PROCEDURE ORIGINATING IN EXISTING OR NEW SYSTEM COMPONENTS.
CONTRACTOR SHALL COMPLETE REPAIRS AND / OR REMEDIATION TO EXISTING SYSTEMS REQUIRED AS A RESULT OF DEFICIENCIES IDENTIFIED DURING POST-SCOPE TESTING AT NO ADDITIONAL COST TO WALMART.
WHEN CONDUCTING HYDROSTATIC TESTING ON EXISTING SYSTEMS AS REQUIRED BY NFPA 13, CONTRACTOR SHALL TAKE SUCH ACTIONS AS MAY BE NECESSARY TO REDUCE POTENTIAL DAMAGE TO CONTENTS AND BUILDING DURING EXECUTION OF SCOPE OF WORK, INCLUDING BUT NOT LIMITED TO THE FOLLOWING:

1. USE OF LOW CAPACITY PRESSURE PUMP TO INCREASE PRESSURE IN SYSTEM AT INCREMENTAL RATE TO LIMIT SURGES IN SYSTEM; AND
2. PROVISION OF WORK STAFF DEDICATED TO MONITORING THE IMPACTED SYSTEM AREA DURING PRESSURE APPLICATION AND DURING HYDROSTATIC TEST FOR SIGNS OF SYSTEM COMPROMISE (MINIMUM 1 PERSON / 20,000 SQ. FT. AREA) ; AND
3. MAINTAINING DEDICATED PERSON AT SYSTEM CONTROL VALVE IN CONSTANT COMMUNICATION WITH SYSTEM MONITORS TO SHUT OFF TEST PUMP AND DRAIN SYSTEM IN EVENT OF SYSTEM FAILURE OR LEAK; AND
4. PROVISION OF READY SUPPLIES PRIOR TO START OF TESTING TO FACILITATE DAMAGE MINIMIZATION IN EVENT OF SYSTEM FAILURE (TARPS / PLASTIC SHEETING, WET / DRY VACUUM ETC.); AND
5. COVERING HIGH VALUE EQUIPMENT PRIOR TO TESTING; AND
6. LIMITATION OF TESTING TO ONE SYSTEM AT A TIME, AND
7. TESTING OF SYSTEMS DURING OFF HOURS / OVERNIGHT.



1 FIRE PROTECTION PLAN
1" = 40'-0"
SCALE: 1"=40'-0"

UNDERGROUND PIPING SHOWN FOR HYDRAULIC CALCULATION PURPOSES ONLY.

SYSTEM IMPAIRMENT REQUIREMENTS

1. THE CONTRACTOR IS RESPONSIBLE FOR THE COORDINATION, VERIFICATION AND PROVISION OF A FIRE WATCH SUBJECT TO THE REQUIREMENTS OF THE LOCAL JURISDICTION. ALL FIRE WATCH COSTS INCURRED AS A RESULT OF THIS PROJECT SHALL BE INCLUDED IN THE PROJECT BID AS A SEPARATE LINE ITEM. COORDINATION AND VERIFICATION AS TO WHEN A FIRE WATCH MAY BE NEEDED SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
2. THE GENERAL CONTRACTOR SHALL REQUEST THE STORE MANAGER TO NOTIFY ALARM CENTRAL OF THE SYSTEM(S) BEING SHUT OFF FOR WORK AND THE DURATION OF THE SHUT OFF.
3. THE GENERAL CONTRACTOR SHALL CALL DIRECT TO THE FIRE DEPARTMENT AND ADVISE THAT THE FIRE ALARM SYSTEM IS IN TEST.
4. AT THE END OF EACH NIGHTS WORK, THE GENERAL CONTRACTOR SHALL CALL DIRECT TO THE FIRE DEPARTMENT AND ALARM CENTRAL TO ADVISE WORK IS COMPLETE.
5. A FIRE WATCH IN ACCORDANCE WITH SECTION 901.7 OF THE INTERNATIONAL FIRE CODE SHALL BE REQUIRED WHEN ANY FIRE PROTECTION SYSTEM IS IMPAIRED OR OTHERWISE DOWN FOR ALTERATION. ADDITIONAL SPECIFIC REQUIREMENTS MAY BE NECESSARY DEPENDING UPON THE AUTHORITY HAVING JURISDICTION. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ASSUMING THE ROLE OF IMPAIRMENT COORDINATOR TO DEVELOP AND MAINTAIN THE FIRE WATCH PLAN. THE PLAN SHALL ENSURE THAT A TRAINED INDIVIDUAL(S), WHOSE SOLE RESPONSIBILITY IS TO PERFORM CONSTANT PATROL AND WATCH FOR THE OCCURRENCE OF FIRE IS ON SITE WHILE ANY SYSTEM IS IMPAIRED. THE FIRE WATCH INDIVIDUAL SHALL HAVE AN APPROVED MEANS OF COMMUNICATION TO REPORT A FIRE TO THE FIRE DEPARTMENT AND/OR THE DESIGNATED CENTRAL STATION, AND DOCUMENT EVIDENCE OF THEIR PATROLS IN WRITING. ONLY (1) ONE SYSTEM IS PERMITTED TO BE SHUT DOWN AT ONE TIME.
6. ANY FIRE DEPARTMENT FEES FOR FAILURE TO FOLLOW PROCEDURES WILL BE AT THE GENERAL CONTRACTORS EXPENSE.
7. REQUIRED MEANS OF EGRESS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION, DEMOLITION, REMODELING OR ALTERATIONS AND ADDITIONS TO THE WALMART. ALL EXITS SHALL NOT BE BLOCKED, REDUCED OR OTHERWISE MADE INOPERABLE WHICH ALSO INCLUDES THE EXIT ACCESS, THE EXIT AND EXIT DISCHARGE TO THE PUBLIC WAY. TEMPORARY MEANS OF EGRESS ARE ALLOWED.
8. ALL SYSTEMS TO BE LEFT IN SERVICE PRIOR TO THE END OF EACH WORKDAY.

AIR RELEASE VENT

ONE AIR VENT MUST BE INSTALLED ON ALL WET TYPE FIRE PROTECTION SYSTEMS INCLUDING SYSTEMS NOT AFFECTED BY THE REMODEL SCOPE OF WORK. EACH AIR VENT IS TO BE INSTALLED AT THE HIGHEST POINT OF THE SYSTEM AND PREFERABLY ON THE MAINS. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING THE HIGHEST POINT OF EACH SYSTEM AND INSTALLING THE AIR VENT IN AN ACCESSIBLE LOCATION. IF THE AIR VENT IS TO BE INSTALLED ABOVE AN EXISTING CEILING THE CONTRACTOR MUST PROVIDE SIGNAGE PER NFPA 13. REF. 1-FP3

PLACARD INFORMATION

THE FOLLOWING INFORMATION MUST BE SHOWN ON THE PLACARDS FOR EACH UL PERFORMANCE BASE DESIGNS. REFERENCE SPECIFICATIONS FOR ADDITIONAL INFORMATION. PLACARDS THAT ARE INSTALLED WITH INFORMATION WRITTEN PERMANENT MARKER WILL NOT BE ACCEPTED.

SYSTEM #: X AREA: X
SPRINKLERS CALCULATED: X
WORK END HEAD PRESSURE: X
HOSE DEMAND: X
SYSTEM FLOW DEMAND: X
SYSTEM PRESSURE DEMAND: X
SYSTEM SAFETY FACTOR: X
INSTALLING CONTRACTOR: X
UL TEST SERIES NUMBER: X
UL PERFORMANCE BASE DESIGN
PROJECT 4788122552, NC27954

WATER SUPPLY INFORMATION

STATIC: 80.0 PSI
RESIDUAL: 75.0 PSI AT 1424 GPM

INFORMATION DERIVED FROM A FLOW TEST PERFORMED BY THE CITY OF CAMDEN VISIT ON 09/04/2019. ADDITIONAL SAFETY FACTORS ARE NOT INCLUDED.

SCOPE OF WORK

1. CONTRACTOR TO FIELD VERIFY EXTENT OF WORK.
2. UPGRADE THE EXISTING FIRE SPRINKLER SYSTEM IN THE GROCERY STOCKROOM, GENERAL MERCHANDISING STOCKROOM, SALES FLOOR AND SEASONAL SHOP TO MEET THE DISCHARGE PRESSURE, HOSE ALLOWANCE AND MAXIMUM SPRINKLER SPACING AS REFERENCED IN THE PROTECTION CRITERIA LEGEND.
3. THE EXISTING FIRE SPRINKLER SYSTEMS WILL BE MODIFIED AS INDICATED ON THE PROJECT CONTRACT DOCUMENTS. THE SCOPE OF WORK MAY INCLUDE THE MODIFICATION OF EXISTING BRANCHLINES, INSTALLATION OF NEW BRANCHLINES, MODIFICATION OF EXISTING RISER(S), THE REMOVAL AND INSTALLATION OF NEW SPRINKLERS, MODIFICATION OF EXISTING MAINS, INSTALLATION OF NEW MAINS, REPLACEMENT OF THE EXISTING BACKFLOW PREVENTOR.
4. ALL NEW PIPING SHALL HAVE HANGERS INSTALLED IN ACCORDANCE TO THE DETAILS LOCATED ON THE FIRE PROTECTION DETAILS SHEET.
5. ALL 1-INCH ARMOVERS (IF APPLICABLE) SHALL HAVE A HANGER SECURED TO THE STRUCTURAL STEEL ONLY, NOT TO THE DECK WHEN THE LENGTH EXCEEDS 2'-0" WHERE STATIC PRESSURES ARE UP TO 100 PSI AND 1'-0" WHERE STATIC PRESSURES EXCEEDS 100 PSI.
6. WHEN REQUIRED EARTHQUAKE BRACING SHALL BE INSTALLED. REFERENCE EARTHQUAKE BRACING NOTES AND DETAILS LOCATED ON THE FIRE PROTECTION DETAILS SHEET.
7. CEILING GRID SHALL NOT BE PERMITTED TO BE REMOVED IN AREAS WHERE REQUIRED IN ORDER TO COMPLETE THE WORK NEEDED SUCH AS DEMO AND INSTALLATION OF NEW MAINS OR LONG DROPS. IN THIS CASE THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING DAMAGED CEILING TILE OR GRID DURING THE INSTALLATION. ALL REMOVED CEILING TILES MUST BE REPLACED AT THE END OF BUSINESS DAY. AREAS LEFT EXPOSED SUCH AS BUT NOT LIMITED TO REMOVED CEILING GRID AND CEILING TILES SHALL NOT BE PERMITTED.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PURCHASING AND INSTALLING MATCHING CEILING TILES TO REPLACE ANY CEILING TILES THAT HAVE EMPTY HOLES DUE TO SPRINKLER REPLACEMENT.
9. USE EACH EXISTING OUTLETS FOR ONE NEW ARM OVER TO NEW SPRINKLER LOCATION UNLESS HYDRAULICALLY CALCULATED. CONTRACTOR SHALL INSTALL 1" INCH MECHANICAL TEES IF ADDITIONAL OUTLETS ARE REQUIRED. AFTER THE DEMOLITION IS COMPLETE, THE NEW SPRINKLER SYSTEM SHALL MEET ALL REQUIREMENTS OF NFPA 13.
10. CONTRACTOR SHALL PROVIDE NEW SPRINKLERS AS NECESSARY DUE TO PAINT, DAMAGE, ETC. CONTRACTOR SHALL COORDINATE.
11. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING THE FIRE LANES DURING THE SPRINKLER SYSTEM UPGRADE PROCESS. THE CONTRACTOR SHALL COORDINATE WITH THE STORE MANAGER STAGING AREA FOR MATERIALS AND TOOLS TO BE USED FOR PROJECT PRIOR TO START OF WORK.
12. THE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR PREPARING THE SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND APPROVAL (BY THE ENGINEER OF RECORD AND AHJ) AS WELL AS INSTALLATION.
13. THE SPRINKLER CONTRACTOR MUST FIRST SUBMIT DOCUMENTS, AS OUTLINED IN THE PROJECT SPECIFICATIONS. TO THE FIRE PROTECTION ENGINEER OF RECORD FOR APPROVAL. AFTER THE APPROVAL IS GIVEN, THE CONTRACTOR MUST SUBMIT TO THE AUTHORITY HAVING JURISDICTION FOR INSTALLATION PERMIT.
14. THE CONTRACTOR SHALL COORDINATE WITH THE STORE MANAGER ON THE AREA TO BE WORKED ON AT LEAST 24 HOURS IN ADVANCE.
15. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO ANY CONTENT OR BUILDING COMPONENTS DUE TO CONTRACTOR NEGLIGENCE IN EXECUTION OF THE SCOPE OF WORK SHOWN IN CONTRACT DOCUMENTS. CONTRACTOR SHALL TAKE ALL PRECAUTIONS NECESSARY TO REDUCE POTENTIAL DAMAGE TO CONTENTS AND BUILDING DURING EXECUTION OF SCOPE OF WORK. WHERE POTENTIAL FOR DAMAGE TO CONTENTS OR BUILDING COMPONENTS IS CONSIDERED LIKELY DUE TO EXISTING SYSTEM CONDITION OR CONFIGURATIONS, CONTRACTOR SHALL DOCUMENT AND REVIEW CONCERNS WITH WALMART CONSTRUCTION MANAGER PRIOR TO INITIATING AFFECTED WORK.
16. THE CONTRACTOR SHALL REPAIR ANY LEAKS OR REPLACE ANY LEAKING COMPONENTS AFFECTED BY THIS SCOPE OF WORK AT NO ADDITIONAL COST TO THE OWNER.

GENERAL UNDERGROUND NOTES

1. ALL UNDERGROUND IS SHOWN FOR HYDRAULIC REFERENCE ONLY.
2. SEE CIVIL DRAWINGS FOR EXACT LOCATIONS IF AVAILABLE.
3. NO NEW WORK UNLESS OTHERWISE NOTED.

GENERAL NOTES

1. THE DESIGN SHOWN ON THESE CONTRACT DOCUMENTS HAS BEEN PREPARED FOR APPROVAL BY THE AUTHORITY HAVING JURISDICTION AND TO PROVIDE GUIDANCE FOR BIDDING. SUBMIT COMPLETE FIRE SPRINKLER SHOP DRAWINGS AS REQUIRED BY CONTRACT DOCUMENTS TO THE OWNERS DESIGNATED REVIEWERS. BASE SPRINKLER DESIGN UPON THESE DRAWINGS AND AS REQUIRED BY THE SPECIFICATIONS. SHOP DRAWINGS MUST INCLUDE ELEVATIONS, HANGER LOCATIONS, PIPE LENGTHS, DIMENSIONS, FABRICATIONS METHODS, MATERIAL DATA, AND ADDITIONAL INFORMATION NECESSARY TO CLARIFY THE INTENT OF INSTALLATION. CONTRACTOR SHALL PROVIDE PIPE SIZE, SPRINKLER SPACING, AND SYSTEM CONFIGURATION AS SHOWN. ALTERNATE MATERIALS MUST BE SENT TO THE FIRE PROTECTION ENGINEER OF RECORD OR VIA THE RFI PROCESS AND MUST BE APPROVED IN RECORD DOCUMENTS PRIOR TO BID.
2. COORDINATE LOCATIONS OF FIRE PROTECTION COMPONENTS, INCLUDING PIPING, ALARMS, DRAINS, TEST POINTS, ETC. WITH ARCHITECTURAL, STRUCTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS. OBSTRUCTION TO SPRINKLER DISCHARGE MUST BE CONSIDERED DURING SHOP DRAWING PRODUCTION AND INSTALLATION; ADDITIONAL SPRINKLERS MAY BE REQUIRED AT NO ADDITIONAL COST TO OWNER. REFER TO SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
3. CONTRACTOR MUST VISIT THE BUILDING SITE TO DETERMINE THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS, BECOME TOTALLY FAMILIAR WITH THE DISCONNECTIONS, REMOVALS, RELOCATIONS AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE PAID FOR LACK OF SUCH DETERMINATION, FAMILIARIZATION, AND/OR ALLOWANCE.
4. SUBMIT A REQUEST FOR INFORMATION FOR QUESTIONS REGARDING THE FIRE PROTECTION DOCUMENTS PER RFI PROCESS LOCATED IN THE FIRE PROTECTION SPECIFICATIONS.
5. NEUTRALIZATION WALLS, IF PROVIDED, ARE SHOWN ON THE ARCHITECTURAL DRAWINGS. REFER TO MECHANICAL DRAWINGS FOR NEUTRALIZATION WALL PENETRATION DETAIL.
6. PENETRATIONS OF "RATED ASSEMBLIES" SHALL BE FIRESTOPPED WITH AN APPROVED MATERIAL PER METHODS REQUIRED BY PROJECT SPECIFICATIONS AND THE AUTHORITY HAVING JURISDICTION.

FIRE SPRINKLER PIPING AND DEMOLITION NOTES

1. CONTRACTOR MUST VISIT THE BUILDING SITE TO DETERMINE THE FULL EXTENT OF THE EXISTING FIRE PROTECTION WORK AND EXISTING CONDITIONS, BECOME TOTALLY FAMILIAR WITH THE DISCONNECTIONS, REMOVALS, RELOCATIONS AND/OR RECONNECTIONS OF EXISTING FIRE PROTECTION EQUIPMENT REQUIRED, AND CONDITIONS IN THE PROPOSAL FOR THIS PROJECT. NO EXTRA COMPENSATION WILL BE PAID FOR LACK OF SUCH DETERMINATION, FAMILIARIZATION, AND/OR ALLOWANCE.
2. UNLESS INDICATED OTHERWISE, DISCONNECT AND REMOVE ALL EXISTING FIRE PROTECTION COMPONENTS NOT INTENDED TO BE REUSED.
3. DISCONNECT, RELOCATE, AND RECONNECT EXISTING FIRE PROTECTION SYSTEMS AND EQUIPMENT WHERE REQUIRED.
4. NOTE CAREFULLY THAT THE FIRE PROTECTION DRAWINGS ARE INTENDED TO INDICATE, ONLY DIAGRAMMATICALLY, THE EXTENT AND THE GENERAL CHARACTER AND LOCATIONS OF THE WORK INCLUDED. PROVIDE ALL WORK OBVIOUSLY INTENDED, BUT HAVING MINOR DETAILS OMITTED OR NOT SHOWN. COMPLETE AS REQUIRED TO PERFORM THE FUNCTIONS INTENDED. FOLLOW THE CONTRACT DOCUMENTS FOR BUILDING DETAILS AND FIT THE WORK OF THE FIRE PROTECTION DRAWINGS AND SPECIFICATIONS THERETO.
5. REMOVE ALL DEMOLITION MATERIALS AND DEBRIS TO AN APPROVED DUMPING SITE AND CLEAN ALL FIRE PROTECTION WORK PRIOR THE PROJECT COMPLETION.
6. PERFORM ALL WORK ACCORDING TO THE PROJECT PHASING SCHEDULE INFORMATION FOR THIS PROJECT. PROVIDE ALL NECESSARY FIRE PROTECTION WORK, TEMPORARY AND/OR OTHERWISE, AND USE WHATEVER MEANS NECESSARY, TO CONFORM TO THE REQUIRED CONSTRUCTION PHASING OF THE PROJECT.
7. CONTRACTOR IS RESPONSIBLE FOR REPAIRING OR REPLACING ITEMS DAMAGED DURING DEMOLITION AND CONSTRUCTION.
8. CONTRACTOR SHALL PATCH ALL HOLES TO MATCH ADJACENT SURFACES LEFT UNUSED AFTER EXISTING SPRINKLER PIPING OR EQUIPMENT IS REMOVED AND VACATED FROM THESE HOLES.
9. CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING FIRE DEPARTMENT ACCESS ROADS THROUGHOUT THE PROJECT.
10. SPRINKLER SYSTEMS NOT ASSOCIATED WITH THE DEMOLITION SHALL BE LEFT IN SERVICE.
11. THE CONTRACTOR SHALL PROPERLY NOTIFY THE LANDLORD, THE LESSOR AND THE ADJACENT TENANTS A MINIMUM OF 48 HOURS IN ADVANCE BEFORE PROCEEDING WITH THIS WORK. ALL WORK SHALL BE SCHEDULED IN ADVANCE.

CONTACT INFORMATION

DOCUMENTS INCLUDE JURISDICTIONAL REQUIREMENTS PROVIDED BY THE FOLLOWING CONTACTS:

FIRE SPRINKLER REVIEWING AUTHORITY:
PHIL ELLIOTT, DEPUTY CHIEF
(803) 425-6040

SHEET INDEX

FP1	OVERALL FIRE SPRINKLER PLAN
FP2.1	ENLARGED FIRE SPRINKLER PLAN
FP2.2	ENLARGED FIRE SPRINKLER PLAN
FP2.3	ENLARGED FIRE SPRINKLER PLAN
FP2.4	ENLARGED FIRE SPRINKLER PLAN
FP3	FIRE PROTECTION DETAILS

GENERAL NOTES CONT.

7. THE FIRE PROTECTION ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S FAILURE TO CARRY OUT THE CONSTRUCTION WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS, NOR SHALL THEY BE REQUIRED TO SUPERVISE THE CONDUCT OF THE WORK, THE CONSTRUCTION PROCEDURES FOLLOWED BY THE CONTRACTOR, SUBCONTRACTORS, THEIR RESPECTIVE EMPLOYEES OR ANY OTHER PERSON AT THE JOB SITE OTHER THAN THAT OF THE ENGINEERING FIRM'S EMPLOYEES.
8. CONTRACTOR MUST REVIEW ALL CONSTRUCTION DOCUMENTS PRIOR TO BID. SHOULD MODIFICATIONS TO THESE PLANS BECOME NECESSARY TO PROPERLY COORDINATE THE SYSTEM WITH ALL OTHER TRADES, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN APPROVAL OF THE CHANGES FROM BOTH THE AUTHORITY HAVING JURISDICTION AND THE OWNER'S DESIGNATED REVIEW CONSULTANT IN ADDITION TO OBTAINING THE NECESSARY APPROVALS. THE CONTRACTOR MUST MAKE NOTE OF ANY FIELD OR COORDINATION CHANGES ON THE INSTALLATION DRAWINGS, AND THEN MUST PROVIDE A SET OF AS-BUILT DRAWINGS ONCE COMPLETE.
9. CONTRACTOR MUST VERIFY ALL DROP DOWN LOCATIONS AT EXTERIOR WALLS WITH THE PROJECT MANAGER PRIOR TO INSTALLATION.
10. ALL PIPING MUST BE COORDINATED AROUND FRAMING MEMBERS AND PROPERLY INSTALLED INSIDE THE BAR JOIST.
11. CONTRACTOR SHALL ROUTE PIPING AROUND ALL OBSTRUCTIONS AND PROVIDE SPRINKLER PROTECTION UNDER OBSTRUCTIONS. AS DETAILED IN NFPA 13 STANDARDS AS PART OF THE FIELD COORDINATION AT NO ADDITIONAL COST TO OWNER.
12. ALL SPRINKLER DEFLECTOR DISTANCE REQUIREMENTS SHALL BE IN ACCORDANCE TO THE STANDARDS OUTLINED IN NFPA 13.
13. CONTRACTOR IS RESPONSIBLE FOR PAINTING ALL NEW SPRINKLER PIPE ADDED TO EXISTING SPRINKLER SYSTEMS THAT IS VISIBLE TO THE PUBLIC. PIPE SHALL BE PAINTED THE SAME COLOR AS THE ADJACENT PIPING IN THAT SPACE. (NOT APPLICABLE IF THE EXISTING SPRINKLER PIPE IS NOT PAINTED).
14. ALL PIPING PASSING THROUGH CMU WALLS SHALL BE INSTALLED WITH ONE INCH CLEARANCE ON ALL SIDES. (CORE DIAMETER EQUAL TO PIPE +2"). ALL CORES SHALL BE COORDINATED WITH STRUCTURAL REINFORCING. CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL CORING WITH PROPER CLEARANCE AT ALL CMU WALLS. GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TWO INCH CLEARANCE AROUND ALL PIPING PASSING THROUGH CONCRETE SLABS. THE SPRINKLER CONTRACTOR SHALL FILL ALL CLEARANCES WITH APPROVED MASTIC.
15. PROVIDE FLUSHING CONNECTIONS IN ACCORDANCE WITH THE STANDARDS OUTLINED IN NFPA 13.
16. PROVIDE ALL NECESSARY OFFSETS, RISES OR DROPS IN PIPING AND AUXILIARY DRAINS REQUIRED BY BUILDING CONDITIONS.
17. EXAMINE THE JOB CONDITIONS AND VERIFY ALL MEASUREMENTS, DISTANCES, ELEVATIONS, CLEARANCES, ETC.
18. ARCHITECTURAL AND ELECTRICAL BACKGROUND INFORMATION IS SHOWN FOR COORDINATION PURPOSES ONLY. REFER TO THE CONTRACT DOCUMENTS FOR LOCATIONS, SIZES AND QUANTITIES OF OTHER TRADE WORK.
19. SPRINKLER SPACING SHALL BE PER NFPA 13 UNLESS OTHERWISE NOTED ON PLANS AND/ OR PROTECTION CRITERIA LEGEND.
20. INTERFACE SPRINKLER SYSTEM WITH FIRE PROTECTION SUPERVISORY SYSTEM.
21. ALL MATERIALS SHALL BE UL LISTED OR FM APPROVED. SPRINKLER PIPE SHALL BE MANUFACTURED TO STANDARDS RECOGNIZED BY NFPA 13. THREADED PIPE SHALL HAVE A CORROSION RESISTANCE RATING OF 1.0 OR GREATER. CRIMP-TYPE COUPLINGS SHALL NOT BE USED. THREADABLE THINWALL PIPE WITH CORROSION RESISTANCE RATING OF LESS THAN 1.0 SHALL BE USED ONLY WITH ROLL GROOVE FITTINGS.
22. IF REQUIRED, PROVIDE 24 VOLT AC, ELECTRIC BELL, MODEL NO. PBA248, ELECTRIC BELL BY POTTER ELECTRIC SIGNAL OF ST. LOUIS, MISSOURI, LOCATE AS REQUIRED BY AUTHORITIES HAVING JURISDICTION. PROVIDE NEW DOUBLE POLE VANE TYPE FLOW DETECTOR, MODEL NO. VSR-F, BY POTTER ELECTRIC SIGNAL OF ST. LOUIS, MISSOURI. SET ADJUSTABLE DELAYED SIGNAL AT 30 SECONDS. MOUNT WATER FLOW INDICATORS NO HIGHER THAN 6 FEET ABOVE FINISH FLOOR.
23. ALL SPRINKLER SYSTEMS THAT ARE TO BE MODIFIED SHALL BE HYDROSTATICALLY TESTED PER NFPA 13 PRIOR TO SPRINKLER SYSTEM MODIFICATION AND SHALL BE RE-HYDROSTATICALLY TESTED AFTER COMPLETION OF WORK. REFERENCE HYDROSTATIC BOX NOTE FOR ADDITIONAL INFORMATION.
24. DO NOT HANG OR SUPPORT ANY LOADS OR MAKE ANY ATTACHMENTS TO THE METAL ROOF DECK OR JOIST BRIDGING.
25. SAMMY SCREWS ARE NOT PERMITTED.
26. CEILING FLANGES ARE NOT PERMITTED.
27. PROVIDE RETAINING STRAPS ON HANGERS WHERE REQUIRED.
28. CONTRACTOR IS TO COORDINATE FINAL SPRINKLER HEAD LOCATIONS AND PIPE ROUTING SUCH THAT THEY DO NOT INTERFERE WITH NOR RECEIVE DAMAGE FROM THE NORMAL OPERATIONS OF THE AREA.
29. WHERE THE DESIGN IS SHOWN TO REPLACE SPRINKLERS, IT IS THE CONTRACTORS RESPONSIBLITY TO VERIFY THE SIZE OF THE EXISTING SPRINKLER FITTING PRIOR TO BID. WHEN THE DESIGN SHOWS TO REPLACE PENDENT SPRINKLERS ON THE SALES FLOOR, THE CONTRACTOR IS RESPONSIBLE FOR REPLACING THE EXISTING REDUCING COUPLING IF THE SPRINKLER OUTLET THREAD IS LARGER THAN WHAT IS CURRENTLY INSTALLED. ADDITIONAL OUTLETS WILL BE REQUIRED WHEN THE DESIGN SHOWS 3/4" UPRIGHT SPRINKLERS AND THE EXISTING INSTALLATION IS 1/2". IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY FITTING(S) WHEN THE NEW SPRINKLER DIFFERS FROM THE EXISTING SPRINKLERS CURRENTLY INSTALLED.
30. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE NECESSARY FITTING(S) WHERE NEW SPRINKLERS DO NOT FIT THE EXISTING OUTLETS. THE CONTRACTOR IS RESPONSIBLE FOR REPLACING THE EXISTING REDUCING COUPLING WITH A NEW 1 X 3/4" REDUCING COUPLING WHICH WILL EQUAL THE SAME AMOUT OF PENDENT SPRINKLERS INDICATED IN THE OWNER FURNISHED SPRINKLER LEGEND.
31. ALL WET SYSTEMS SHALL BE REQUIRED TO HAVE A LISTED RELIEF VALVE NOT LESS THAN 1/2" IN SIZE AND SET TO OPERATE PER NFPA 13.

APPLICABLE CODES

NFPA STANDARDS	EDITION
NFPA 13	2016

UL GUIDELINE:
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EXISTING CONDITIONS WERE TAKEN FROM ORIGINAL DRAWINGS AND MAY NOT REFLECT EXACT "AS-BUILT" CONDITIONS. CONTRACTOR SHALL FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO SUBMITTING FINAL BIDS. CONTRACTOR SHALL CAREFULLY COORDINATE NEW WORK AND DEMOLITION WITH ALL OTHER DISCIPLINES AND EXISTING CONDITIONS.

EACH SUBCONTRACTOR IS RESPONSIBLE FOR HAVING A THOROUGH KNOWLEDGE OF ALL DRAWINGS AND SPECIFICATIONS IN THEIR RELATED FIELD. THE FAILURE TO ACQUAINT THEMSELF WITH THIS KNOWLEDGE DOES NOT RELIEVE THE RESPONSIBILITY OF PERFORMING THE WORK PROPERLY. NO ADDITIONAL COMPENSATION SHALL BE ALLOWED BECAUSE OF CONDITIONS THAT OCCUR DUE TO FAILURE TO FAMILIARIZE WORKERS WITH THIS KNOWLEDGE.

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THIS DRAWING WAS PREPARED FOR USE ON A SPECIFIC SITE AT: CAMDEN, SC CONTEMPORANEOUSLY WITH ITS ISSUE DATE ON 12/18/19 AND IT IS NOT SUITABLE FOR USE ON A DIFFERENT PROJECT SITE OR AT A LATER TIME. USE OF THIS DRAWING FOR REFERENCE OR EXAMPLE ON ANOTHER PROJECT REQUIRES THE SERVICES OF PROPERLY LICENSED ARCHITECTS AND ENGINEERS. REPRODUCTION OF THIS DRAWING FOR REUSE ON ANOTHER PROJECT IS NOT AUTHORIZED AND MAY BE CONTRARY TO THE LAW.

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2020 GENERAL REMODEL

ISSUE BLOCK

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DOCUMENT DATE:	12/18/19

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SOUTH CAROLINA CERTIFICATE OF AUTHORIZATION
HENDERSON ENGINEERS, INC
No. C01972

OVERALL FIRE SPRINKLER PLAN

SHEET: FP1

JAMES E. COOPER

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