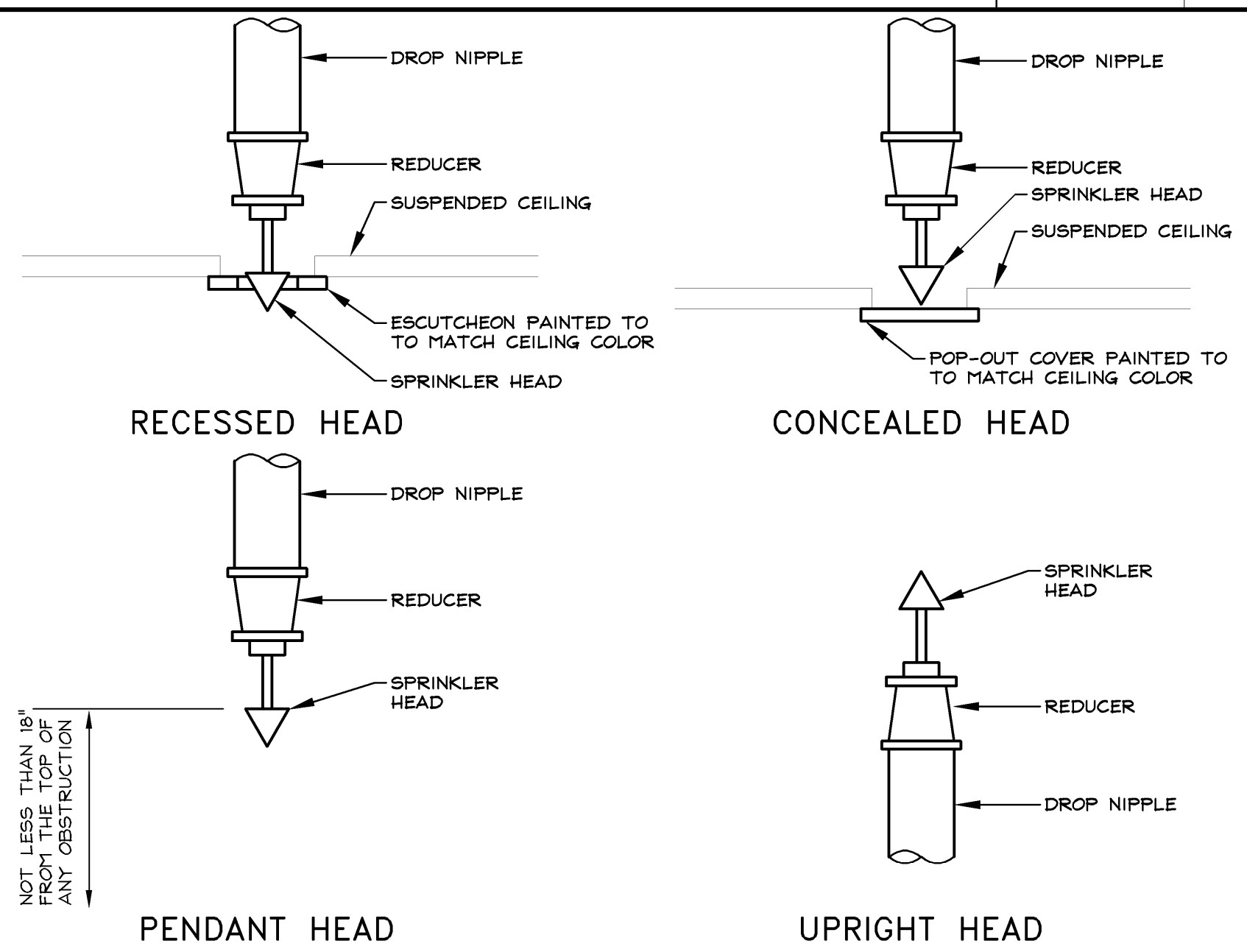


CLG TILE SPRINKLER HEAD LAYOUT

NTS G



SPRINKLER HEAD TYPE MOUNTING

NTS F

FIRE PROTECTION RESPONSIBILITY SCHEDULE						
ITEM	FURNISHED BY		INSTALLED BY		RE-USE EXISTING	N/A
SPRINKLER PIPING	ESDC VENDOR	CONTR.	LANDLORD	CONTR.	OTHER	
SPRINKLER HEADS		FPC	FPC			
FIRE EXTINGUISHERS		FPC	FPC			
AS-BUILT DRAWINGS		FPC				
PAINTING OF EXPOSED PIPE, ESCUTCHEONS, ETC.		GC	GC			COLOR TO MATCH SURROUNDING FINISH
FINISH/COLOR OF EXPOSED COVERPLATES, HEADS, ETC.		FPC				ORDER FACTORY FINISH TO MATCH SURROUNDING COLOR

FIRE PROTECTION RESPONSIBILITY SCHEDULE

- A. SCOPE OF WORK
1. PROVIDE A COMPLETE AND OPERABLE FIRE PROTECTION SYSTEM AS IT APPLIES TO THE DEMISED PREMISE.
 2. WHERE APPLICABLE, THE CONTRACTOR SHALL CONTRACT THIS WORK WITH A LANDLORD APPROVED FIRE PROTECTION CONTRACTOR, ALL MATERIALS AND EQUIPMENT UNDER THIS SECTION SHALL BE NEW AND LISTED BY UNDERWRITERS LABORATORIES, INC. FOR FIRE PROTECTION SYSTEM INSTALLATION.
 3. THE FIRE PROTECTION SYSTEM SHALL BE AS FOLLOWS:
 - a. NEW WET SPRINKLER FIRE PROTECTION SYSTEM FOR ALL AREAS OF THE RETAIL SPACE, PORTIONS THAT ARE UNHEATED OR EXPOSED TO FREEZING TEMPERATURES SHALL BE PROVIDED WITH AN AUTOMATIC DRY PIPE SYSTEM COMPATIBLE WITH NFPA 13.
 - b. COVERAGE SHALL BE IN ACCORDANCE WITH EXISTING CONDITIONS, NFPA 13, LOCAL CODES, LANDLORD'S CRITERIA, MALL, INSURANCE AND ESDC'S STANDARDS AND SHALL INCLUDE:
 - i. ALL PIPE TAPS, RISERS, LATERALS, BRANCHES, VALVES, HANGERS, ALARMS, SPRINKLER HEADS AND ALL COMPONENTS REQUIRED.
 - ii. PROVIDE PROFESSIONALLY DESIGNED AND SEALED DRAWINGS, HYDRAULIC CALCULATIONS, SUBMITTALS AND APPROVALS AS NEEDED INCLUDING ANY SEALS, PERMITS, FEES, AND CHARGES.
 - c. FIRE EXTINGUISHERS SHALL BE PROVIDED. REFER TO INSTALLATION SECTION OF THIS SPECIFICATION.
 4. EXAMINE ARCHITECTURAL, STRUCTURAL, MECHANICAL AND ELECTRICAL DOCUMENTS TO PROPERLY SEQUENCE, COORDINATE, AND INTEGRATE THE VARIOUS ELEMENTS OF THE FIRE PROTECTION SYSTEM WITH OTHER CONTRACTORS TO AVOID INTERFERENCES AND CONFLICTATIONS.
 5. CONTRACTOR SHALL USE APPROVED INDUSTRY FIRE SPRINKLER STANDARDS FOR REUSING EXISTING FIRE SPRINKLER BRANCHES AND SUBMIT CALCULATIONS TO THE ESDC'S PROJECT MANAGER UPON REQUEST OR REMARK SYSTEM TO THE ESDC PROJECT MANAGER'S SATISFACTION.
 6. RELOCATION OF EXISTING MAINS, LATERALS, BRANCHES AND RISERS TO FACILITATE STORE DESIGN CRITERIA SHALL BE INCLUDED AS PART OF THIS WORK.
- B. SHOP DRAWINGS AND DESIGN
1. IN ACCORDANCE WITH THE PREVAILING STANDARDS, BUT IN NO LESS THAN THAT REQUIRED BY NFPA 13, THIS FIRE PROTECTION CONTRACTOR SHALL PREPARE COMPLETE CALCULATIONS AND SHOP DRAWINGS. SIX (6) COPIES SHALL BE SUBMITTED TO THE GENERAL CONTRACTOR AND ADDITIONAL SETS AS REQUIRED TO THE PROPER CODE AUTHORITIES FOR APPROVAL (NO WORK SHALL BEGIN UNTIL ALL APPROVALS HAVE BEEN RECEIVED).
 2. COPY OF THE LETTER OF APPROVAL FROM THE LANDLORD'S INSURANCE RATING BUREAU SHALL BE FORWARDED TO THE LANDLORD'S AGENT AND TO THE ESDC PROJECT MANAGER.
 3. LISTED BELOW ARE MINIMUM REQUIREMENTS FOR SPRINKLER SYSTEM DESIGN AND INSTALLATION. SYSTEM SHALL BE HYDRAULICALLY DESIGNED:
 - a. ORDINARY HAZARD, GROUP 2. PROVIDE A 0.20 GPM/SF PER 1,000 SQUARE FEET DENSITY WITH 165°F RATED 1/2" ORIFICE SPRINKLER HEADS OR FOLLOW NFPA DENSITY/AREA CURVE FOR DENSITY COVERAGE. PROVIDE A MAXIMUM COVERAGE OF 130 SQUARE FEET PER HEAD.
 - b. MAXIMUM HEAD SPACING IS 15 FT.
 - c. SPRINKLERS SHALL BE TESTED FOR A MINIMUM OF 2 HOURS AT 200 PSI.
 - d. DESIGN CALCULATIONS OF INSIDE PIPE SHALL USE C=100 FOR DRY AND C=10 FOR WET SYSTEMS.
- C. SPRINKLER HEADS
1. ALL SPRINKLER HEADS SHALL BE NEW (EXISTING HEADS IN EXISTING ESDC STORES ARE NOT TO BE REPLACED UNLESS NOTED OTHERWISE), U.L. AND F.M. LISTED AND APPROVED AUTOMATIC SPRAY TYPE AS MANUFACTURED BY AUTOMATIC SPRINKLER, GRINNELL, RELIABLE, OR VIKING.
 2. ALL SPRINKLER HEADS SHALL BE RATED AS FOLLOWS OR AS REQUIRED BY LOCAL CODES:
 - a. STORAGE AREAS OR MEZZANINES: 200°F-225°F.
 - b. SALES AREA: 150°F-170°F OR 200°F-225°F AS NOTED ON PLANS.
 3. ALL SPRINKLER HEADS SHALL BE AS FOLLOWS:
 - a. MANUFACTURER:
 - i. SALES AREA: BASE BID SHALL INCLUDE HEADS MANUFACTURED BY RELIABLE WITH ALTERNATE BIDS BASED ON VIKING MICROPHATIC MODEL M OR GRINNELL MODEL P472 AND SHALL BE APPROVED BY THE ESDC PROJECT MANAGER PRIOR TO ORDERING AND INSTALLATION.
 - ii. NON-SALES AREA: ROUGH BRASS FINISH AS MANUFACTURED BY AUTOMATIC SPRINKLER, STAR, RELIABLE, GRINNELL OR VIKING SPRINKLER COMPANY ONLY.
 - b. HEAD TYPE: REFER TO LEGEND ON FIRE SPRINKLER HEAD PLAN FOR HEAD TYPE REQUIREMENTS. HEADS MOUNTED UNDER 8 FEET ABOVE FINISHED FLOOR SHALL BE CONCEALED OR BE PROVIDED WITH WIRE GUARDS.
 4. ALL SALES AREA SPRINKLER HEADS INCLUDING TRIM AND COVER SHALL HAVE FACTORY APPLIED FINISH. GENERAL CONTRACTOR SHALL FIELD PAINT COVER PLATES AND/OR ESCUTCHEONS TO MATCH SURROUNDING SURFACE COLOR. REFER TO LEGEND ON FIRE SPRINKLER HEAD PLAN AND ARCHITECTURAL SHEETS FOR FINISH REQUIREMENTS.
 5. ALL SPRINKLER HEADS ON THE MALL SIDE OF TENANT'S STOREFRONT ENCLOSURE, IF ANY, SHALL MATCH LANDLORD'S TYPE.
- D. PIPING, FITTINGS & VALVES
1. SCHEDULE 40 BLACK STEEL: ASTM A-53 WELDED AND SEAMLESS, ANSI B-36-10-70 FOR WROUGHT STEEL PIPE.
 2. CAST IRON OR MALLEABLE IRON SCREWED FITTINGS FOR PIPES 2 INCHES AND SMALLER, SCREWED OR CAST IRON FLANGED JOINTS FOR PIPES LARGER THAN 2 INCHES. FITTING SHALL BE APPROVED FOR ITS PSI WORKING PRESSURE.
 3. GALVANIZED OR BLACK MALLEABLE IRON WITH BRASS SEAT SCREWED UNIONS FOR PIPES 2 INCHES AND SMALLER.
 4. VICTAULIC TYPE COUPLINGS ARE ACCEPTABLE WHERE APPROVED BY LOCAL CODE AND THE LANDLORD.
- E. INSTALLATION
1. A FIRE PROTECTION SYSTEM TAP IS NORMALLY FURNISHED BY THE LANDLORD, VERIFY IN FIELD PRIOR TO BID.
 - a. WHENEVER AN EXISTING SPRINKLER SYSTEM IS BEING RENOVATED, THE INTEGRITY AND RELIABILITY OF THE EXISTING SYSTEM SHALL BE MAINTAINED.
 - b. ORIGINAL SPRINKLER SHOP DRAWINGS SHALL BE ACQUIRED THROUGH THE MALL MANAGER/PROJECT MANAGER; HOWEVER, THE SPRINKLER CONTRACTOR SHALL VERIFY THE EXISTING SPRINKLER SYSTEM IN THE FIELD AND SHALL COORDINATE WITH AND SHOW DISCREPANCIES BETWEEN THE ORIGINAL SHOP DRAWINGS AND FIELD CONDITIONS IN THE RENOVATED SHOP DRAWINGS.
 2. INSTALLATION SHALL INCLUDE TESTING THE BUILDING SYSTEM PRIOR TO CONNECTING TO MALL SPRINKLER SYSTEM. TESTING SHALL BE APPROVED BY THE FIRE DEPARTMENT AND LANDLORD REPRESENTATIVES. FINAL CONNECTION TO LANDLORD'S SPRINKLER MAIN WILL NOT BE MADE UNTIL THE ENTIRE SYSTEM WITHIN THE DEMISE PREMISES IS TESTED AND READY FOR SERVICE.
 3. SPRINKLER HEAD SPACING SHALL COMPLY WITH ORDINARY HAZARD, GROUP 2.
 4. SYSTEM SHALL COMPLY WITH THE MOST STRINGENT OF THESE SPECIFICATIONS, THE LANDLORD'S DESIGN CRITERIA OR LOCAL CODES WITH PIPE SIZING BEING BASED ON NFPA ORDINARY HAZARD, GROUP 2 AND COMPLY WITH NFPA 13 LATEST EDITION.
 5. ALL SPRINKLER LINES SHALL BE CONCEALED AND MOUNTED AS HIGH AS IS PRACTICAL, AVOIDING INTERFERENCE WITH LIGHTS, DUCTS, PIPES, STORAGE DECK, ETC.
 6. FIRE PROTECTION CONTRACTOR SHALL PREPARE COORDINATED SHOP DRAWINGS INDICATING THE LOCATIONS OF ALL SPRINKLER HEADS, SPRINKLER LINES, LIGHTS, DIFFUSERS, GRILLES AND REGISTERS PRIOR TO INSTALLATION.
 7. RELOCATE ALL MAINS AND BRANCHES INTERFERING WITH CEILING HEIGHTS, EQUIPMENT AND MAJOR COMPONENTS, INCLUSIVE OF ADJACENT TENANTS AND MALL COMMON AREAS, REMOVE ALL UNUSED PIPING.
 8. FASTENING AND/OR SUSPENSION DEVICES MUST BE ATTACHED TO THE BUILDING STRUCTURE ONLY. SUPPORT SHALL BE FROM THE TOP OF ANY BAR JOIST OR AS DIRECTED BY THE LANDLORD OR THE BUILDING STRUCTURAL ENGINEER.
 9. WHEN COMPLETED, THE ENTIRE FIRE PROTECTION PIPING SYSTEM SHALL BE HYDROSTATICALLY TESTED AS REQUIRED BY THE RULES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION. SYSTEM SHALL SHOW NO SIGNS OF LEAKAGE OR OTHER DEFECTS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE WORK OF THE OTHER CONTRACTORS OR TO THE BUILDING, OR TO ITS CONTENTS, PEOPLE, ETC., EXPENSE. COMPLETELY FLUSH THE SYSTEM UNTIL DISCHARGE SHOWS NO DISCOLORATION.
 10. WHEN COMPLETED, THE ENTIRE FIRE PROTECTION PIPING SYSTEM SHALL BE HYDROSTATICALLY TESTED AS REQUIRED BY THE RULES AND REGULATIONS OF THE AUTHORITIES HAVING JURISDICTION. SYSTEM SHALL SHOW NO SIGNS OF LEAKAGE OR OTHER DEFECTS. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR DAMAGE TO THE WORK OF THE OTHER CONTRACTORS OR TO THE BUILDING, OR TO ITS CONTENTS, PEOPLE, ETC., EXPENSE. COMPLETELY FLUSH THE SYSTEM UNTIL DISCHARGE SHOWS NO DISCOLORATION.
 11. PROPERLY COMPLETED AND SIGNED "SPRINKLER CONTRACTOR'S MATERIAL AND TEST CERTIFICATES SHALL BE FURNISHED TO THE LANDLORD, AUTHORITIES HAVING JURISDICTION, TENANT'S ARCHITECT, INSURANCE REPRESENTATIVE, PROJECT OFFICE AND THE ESDC PROJECT MANAGER.
 12. PROVIDE VALVED DRAIN WITH HOSE THREAD AT ALL LOW POINTS OR TRAPS IN SPRINKLER PIPING. IDENTIFY DRAIN VALVES IF ABOVE HARD CEILINGS WITH A SUITABLE CEILING MARKER AND PROVIDE ARCHITECT APPROVED METHOD FOR ACCESS AS REQUIRED.
 13. COORDINATE SPRINKLER WORK WITH FIRE/ALARM CONTRACTOR WHERE THERE ARE FLOW AND TAMPER SWITCHES AND ALARM REQUIREMENTS.
 14. SPRINKLER SYSTEM SHALL BE INTERFACED WITH BUILDING FIRE/LIFE SAFETY AND SMOKE EXHAUST SYSTEM IF REQUIRED. REFER TO LANDLORD TENANT CRITERIA AND REQUIREMENTS.
 15. FURNISH AND INSTALL 10LB. TYPE "ABC" FIRE EXTINGUISHERS WITH CABINETS IF REQUIRED, AND AT LEAST A "2A10BC" RATED EXTINGUISHER. LOCATIONS ARE TO BE ESTABLISHED IN THE FIELD BY THE ESDC PROJECT MANAGER AND THE LOCAL FIRE PROTECTION OFFICIAL. MAXIMUM TRAVEL DISTANCE BETWEEN EXTINGUISHERS SHALL BE 75 FEET OR LESS AS REQUIRED BY LOCAL CODES.

BRANSON REQUIRED CONTRACTOR
 SPRINKLER: SIMPLEX GRINNELL
 MANDATORY 2757 S. AUSTIN
 SPRINGFIELD, MO 65807
 (417) 883-0965
 \$250 WATER SHUT DOWN FEE PER OCCURRENCE
 CONTACT CENTER MANAGEMENT OFFICE TO SCHEDULE

EXPRESS

EXPRESS FASHION OPERATIONS, LLC
d/b/a STORE DESIGN & CONSTRUCTION
 1 Express Drive Columbus, Ohio 43230
 Telephone: 614.474.4001 Express.com

1753

PROJECT INFORMATION:

EXPRESS
TANGER OUTLET CENTER BRANSON
 300 TANGER BLVD.
 BRANSON, MO 65616
 SPACE NO.: 535
 SCOPE: DESIGN TYPE: ESD&C PROJECT #:

REVISIONS:

REQUIRED BY: DATE:

ELITE CONSTRUCTION GROUP
 LAKE JACKSON, TX
 PHONE: 979-285-0712
 NOTE: THESE PRINTS HAVE BEEN
 REDUCED BY 50 PERCENT SCALE
 WILL BE 50 PERCENT OF WHAT IS
 NOTED ON PLANS

* INDICATES NO DESIGN TO THIS SHEET



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DATE ISSUED: 07/18/14
 DESIGNED BY: RRD
 DRAWN BY: RRD
 CHECKED BY: JMD

FIRE PROTECTION SPECIFICATIONS AND DETAILS

DRAWING NUMBER:

F03.1

FIRE PROTECTION SPECIFICATIONS

A