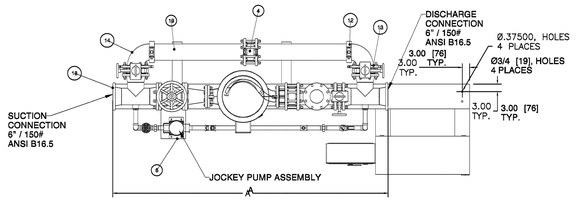
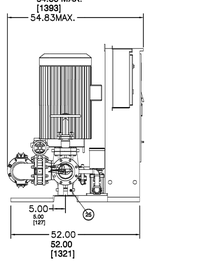
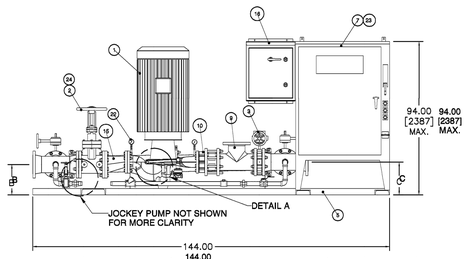
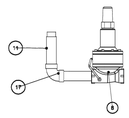
COMPONENTS INCLUDED:
- UL/FM,ULC PUMP: FACTORY ASSEMBLED, WIRED AND TESTED
- SUCTION AND DISCHARGE GAUGES
- MAIN CONTROLLER
- FABRICATED STEEL FRAME
- CHECK VALVE(S)
- LINE SIZE TEST TEE
- CASING RELIEF VALVE
- SENSING LINE(S)
- BYPASS LINE

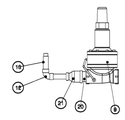








DETAIL A
FOR 4x4x7F /4x4x9.5F
SCALE 0.150



DETAIL A
FOR 6x6x11F-L
SCALE 0.150

CONTRACTOR TO PROVIDE A VFV DRIVE FOR THIS PUMP.

THIS PUMP AND INFORMATION IS TYPICAL AND PRELIMINARY. CONTRACTOR TO USE FINAL SUBMITTAL FOR INSTILLATION.

NOTES:
1. JOCKEY PUMP
2. DIMENSIONS ARE IN INCHES [MM]
3. FOR PUMP,CONTROLLER AND OPTIONS SEE DATA SHEET
4. DIMENSIONS & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE
5. CONTROLLER OPTIONS:
   - Y-DELTA CLOSED
   - WITH TRANSFER SWITCH

SHOP PRODUCTION NOTES	
1	PAINT PACKAGE ACFIRE RED
2	ADD SUPPORT TAB TO PIPING & BYPASS LOOP

REV	BY	DATE	DESCRIPTION
1	TQ	05/18/12	UPDATED DRAWING AND BOM

TITLE: STD FIRE = BYPASS 500G, 3600RPM

DWG. NO. 620-500-110 & 620-500-120

DWN.	DATE.	CKD.	DATE.	SCALE
MDS	05/04/12			

TOLERANCES UNLESS OTHERWISE SPECIFIED:

X.X ±	X.XX ±	X.XXX ±	X.XXXX ±	ANGLE ±	FRAC ±
	.25				1/4

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xylem Residential & Commercial Water
Dallas, Texas

SHEET 1 OF 2

FIRE PROTECTION NOTES

GENERAL REQUIREMENTS:

1. PROVIDE A COMPLETE HYDRAULICALLY CALCULATED AUTOMATIC SPRINKLER SYSTEM. INCLUDING ALL LABOR, MATERIALS, EQUIPMENT AND SERVICES REQUIRED TO DELIVER ALL SYSTEMS COMPLETE, IN PERFECT WORKING ORDER AND IN FULL ACCORDANCE WITH THE REQUIREMENTS OF NFPA 13, 24, THE OWNER'S INSURANCE UNDERWRITER AND LOCAL AUTHORITIES.
2. OBTAIN CURRENT WATER FLOW TEST INFORMATION FROM THE LOCAL WATER UTILITY BEFORE STARTING ANY SPRINKLER SHOP DRAWINGS.
3. OBTAIN A COMPLETE AND CURRENT SET OF THE PROJECT CONSTRUCTION DOCUMENTS INCLUDING ARCHITECTURAL, STRUCTURAL MECHANICAL, ELECTRICAL, PLUMBING DRAWINGS AND COORDINATE SPRINKLER SHOP DRAWINGS WITH ALL TRADES PRIOR TO CONSTRUCTION.
4. PROVIDE SHOP DRAWINGS INCLUDING BUT NOT LIMITED TO ALL ITEMS WHICH APPLY AS OUTLINED IN NFPA-13 SECTION 6-1; "WORKING PLANS" AND IN NFPA 13 SECTION 6-2; "HYDRAULIC CALCULATIONS".
5. THE SPRINKLER CONTRACTOR SHALL DETERMINE AND NOTE ON THE DRAWINGS; THE HAZARD CLASSIFICATION USED TO DETERMINE SPRINKLER SPACING AND DESIGN DENSITIES.
6. PRIOR TO THE START OF CONSTRUCTION, THE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND SUBMITTING TO ALL AUTHORITIES HAVING JURISDICTION AND THE DESIGN ENGINEER/ARCHITECT COMPLETE DESIGN/SHOP DRAWINGS AND HYDRAULIC CALCULATIONS BEARING A CURRENT NICET LEVEL 3 OR 4 SIGNATURE.
7. OBTAIN A PERMIT FROM THE LOCAL AUTHORITIES PRIOR TO THE INSTALLATION OF THE FIRE SUPPRESSION SYSTEM.
8. PROVIDE ALL NECESSARY OFFSETS, RISES OR DROPS IN THE PIPING AND AUXILIARY DRAINS AS REQUIRED BY ALL APPLICABLE CODES WHETHER OR NOT SHOWN ON THE PLANS.
9. THE DESIGN, MATERIALS, AND INSTALLATION SHALL MEET OR EXCEED ALL REQUIREMENTS OF THEN.F.P.A. CODES, STATE FIRE MARSHAL, LOCAL FIRE MARSHAL HAVING JURISDICTION, OWNERS INSURANCE CARRIER, AND GOVERNING CITY AND COUNTY CODES.
10. WARRANTY THE SYSTEM, LABOR, MATERIALS AND EQUIPMENT FOR ONE YEAR AFTER OWNERS ACCEPTANCE. REPLACE OR REPAIR DEFECTIVE WORKMANSHIP, EQUIPMENT AND MATERIALS AT NO ADDITIONAL TO THE OWNER.
11. THE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR DETERMINING THE SEISMIC PROTECTION REQUIREMENTS FOR THE PROJECT AND THE SEISMIC DESIGN CONFORMING TO ALL APPLICABLE CODES.
12. PROPERLY SUPPORT AND BRACE VERTICALLY AND HORIZONTALLY ALL PIPING APPARATUS EQUIPMENT, ETC. IN ACCORDANCE WITH ALL APPLICABLE CODES TO PREVENT EXCESSIVE MOVEMENT DURING SEISMIC CONDITIONS.
13. ALL SPRINKLE ALARM, TAMPER AND DETECTION SYSTEMS ARE TO BE CONNECTED TO THE BUILDINGS CENTRAL FIRE ALARM SYSTEM.
14. VALVES, HEADS, FLOW SWITCHES, ETC., SHALL CARRY EITHER THE F.M. OR U.L. APPROVAL AND CONFORM TO ALL REQUIREMENTS AS LISTED IN THE LATEST EDITION OF THE NFPA CODES.
15. ABOVE GRADE AND FITTINGS: BLACK STEEL CONFORMING TO ASTM SPECIFICATIONS FOR BLACK AND HOT DIPPED ZINC COATED (GALVANIZED) WELDED AND SEAMLESS STEEL PIPE FOR ORDINARY USES, ANSI/ASTM A53, FITTINGS SHALL BE WELDED, SCREWED, OR GROOVED MECHANICAL JOINT.
16. PIPE HANGER: SHALL CONFORM TO N.F.P.A. AND U.L. STANDARDS FOR SPACING, NUMBER, SIZE, AND TYPE. PIPE TO BE GENERALLY SUPPORTED BY CLAMPS AND RODS SECURED TO OVERHEAD CONSTRUCTION.
17. ESCUTCHEON PLATES: PROVIDE CHROME PLATED ESCUTCHEON PLATES WHERE PIPES PASS THROUGH FINISHED WALLS, FLOORS, OR CEILING. PROVIDE PRIME COAT PAINTED ESCUTCHEON PLATES WHEREVER PIPES PASS THROUGH THE WALLS, FLOOR, OR CEILINGS IN UNFURNISHED EXPOSED AREAS.
18. TESTING AND FLUSHING: OVERHEAD SPRINKLER PIPING: TESTED FOR A PERIOD OF TWO HOURS AT A HYDROSTATIC PRESSURE OF 200 LBS. AND ALL PIPING, VALVES, HEADS, ECT. SHALL BE WATERTIGHT FOR ALL SYSTEMS BELOW LOWER LEVEL ROOF OR SECOND LEVEL SILO. SYSTEM SHALL BE TESTED AT 300 LBS FOR SILO HIGH PRESSURE SYSTEM.
19. CUTTING AND PATCHING OF ANY EXISTING CONDITIONS INCLUDING FLOORS, WALLS AND CEILINGS DUE TO THE INSTALLATION OF THE FIRE PROTECTION SYSTEM IS THE RESPONSIBILITY OF THE CONTRACTOR. THE WORK SHALL BE COORDINATED WITH ALL OTHER TRADES.
20. PAINT ALL EXPOSED PIPING IN CLOSETS, STAIRWELLS, MECHANICAL ROOM, ETC. COLOR TO BE RED. ALL HIGH PRESSURE PIPING FROM PUMP TO TOP OF TOWER SHALL BE RED WITH WHITE STRIPS WHICH CAN BE EITHER PAINTED ON OR WITH HIGH QUALITY TAPE.
21. HEAD LOCATIONS ARE TO BE IN CENTER OF THE CEILING TILE USING THE REFLECTIVE CEILING PLANS IN THE CONTRACT DOCUMENTS, AND AS COORDINATED WITH THE CEILING CONTRACTOR.
22. PROVIDE RECORD DRAWINGS WHICH CLEARLY SHOW ALL UNDERGROUND PIPING DIMENSIONED FROM ANY PERMANENT STRUCTURE, AND ALL WORK ADDED TO THE CONTRACT DOCUMENTS.

DESIGNCRITERIA

1. SPRINKLER HEADS SHALL BE SPACED IN ACCORDANCE WITH NFPA-13 AND THE MANUFACTURER'S APPROVAL LISTING.
2. SPRINKLER HEADS SPACING SHALL NOT EXCEED 130 SQ. FT. PER HEAD FOR LIGHT HAZARD AREAS AND ORIDINARY HAZARD AREAS. THE SPRINKLER SPACING SHALL NOT EXCEED 15 FT. DESIGN DENSITY FOR AREA 1 LIGHT HAZARD .10/1500 + 100 HOSE MINIMUM. DESIGN DENSITY FOR AREA 3 ORDINARY HAZARD 1 .15/1500 + 250 HOSE MINIMUM. DESIGN DENSITY FOR AREA 2 COMMODITY HAZARD I .29/2000 + 400 HOSE MINIMUM. DESIGN DENSITY FOR AREA 4 ORDINARY HAZARD II .20/1500 + 250 HOSE MINIMUM.
3. DESIGN AND HYDRAULICALLY CALCULATE THE SPRINKLER SYSTEM UTILIZING THE INFORMATION INCLUDED HEREIN AND MEET ALL NFPA-13 & 24 STANDARDS. THE CONTRACTOR SHALL TERMINATE THE HYDRAULIC CALCULATIONS AT THE CITY CONNECTION MINIMUM.

Fire Sprinkler System Specification Sheet
(Per §40-10-250)

Project Data

Project name: Home 2 Suites

Location in South Carolina:	Address (street # & name): 475 Hospitality Blvd.		State Project: ☐ Yes ■No
	City: Greenwood, 29649	County: Greenwood	State Project #:

Water Supply Information (Flow test data must be less than 1 year old per §40-10-250(A)(1))

Date test conducted: 3/19/24	Static pressure (psi): 50	Residual pressure (psi): 48	Flow (gpm): 1035
Distances of test gauges relative to the base of the riser:	Horizontal (ft): 350	Vertical (elevation difference in ft): 0	
Source of water supply:	☐Municipal dead-end ■Municipal circulation ☐existing fire pump ☐ Other:		Pipe Size (in.): 12
Test data by/from:	Name: Russell Holley	Title: Eng. Dept.	
	Organization: Greenwood CPW		Phone: 864-942-8199
Fire pump:	☐New ☐Existing ■No Pump	Rated Capacity (gpm): / Rated Pressure (psi):	Churn Pressure (psi): / Pressure @ 150% flow (psi):
On-site water storage:	☐ Yes ■No	☐ New ☐ Existing ☐ Tank ☐ Other:	Capacity (gal):

NFPA Hazard Classification (Attach continuation page when necessary)

Area #	Hazard Class or Code Reference	Description of Hazard Protected (including occupancy use group, and details of storage arrangement as applicable (including commodity class, rack arrangement/type, ceiling and storage height.))
1	Light	Lobby, office, restrooms, corridors, etc.
2	Light	Guest rooms. bathrooms
3	CL 1 Standpipe	Stairwells
4	OH1	Laundry, Storage, mechanical, Electrical, fire pump room, etc.

Design Parameters (Attach continuation page when necessary)

Area #	System Type	Density(gpm/ft²)/Area(ft²), or Other (Reference code sections)	Inside Hose (gpm)	Outside Hose (gpm)
1	Wet	0.10 / 1500	0	100
2	Wet	0.10 / 1500	0	100
3	Wet	750 GPM	NA	NA
4	Wet	0.15 / 1500	0	250

Seismic Design Data: Sₛ= 0.297 | **Site Classification= D** | **Seismic Design Category= C**

Codes and Standards (Attach continuation page when necessary)

Applicable Codes, Standards, & Editions (i.e. 2018 IBC, 2016 NFPA 13, etc.) **for the Scope of Work on the Fire Sprinkler System**

NFPA 13 – 2019, NFPA 14 – 2019, IBC – 2021, IFC - 2021

Scope of work (i.e. sprinkler system A.G. from 1'-0" A.F.F., U.G. from tap to 5'-0" outside, etc.) and **notes** (attach continuation page when necessary):
Contractor shall install new wet pipe sprinkler system for the new building including the fire pump in the pool house building.
All piping shall begin at 1' AFF.

Specifier's Information

Name: Warren E. Maddox P.E.
Engineering services provided through a firm: ■Yes ☐ No
Firm name: Maddox Engineering, Inc.
Address: PO Box 26266
City: Greenville
State: SC Zip: 29616
Phone: 864-334-1875 Fax: NA
E-mail: warren@maddoxeng.pro

SOUTH CAROLINA — MADDOX ENGINEERING, INC — No. C 02747 — CERTIFICATE OF AUTHORIZATION
Certificate of Authorization

SOUTH CAROLINA — REGISTERED PROFESSIONAL ENGINEER — No. 9124 — WARREN EUGENE MADDOX
Professional Engineer's Seal

Revision No.: 0 Page 1 of 1 Signature: Warren E Maddox
Date: 10/9/24

Form Version: July 1, 2021

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Project Title :
HOME 2 SUITES
GREENWOOD SC
475 HOSPITALITY BLVD,
GREENWOOD, SC 29649

Client Logo:
HOME 2 SUITES BY HILTON

Seals :
STATE OF SOUTH CAROLINA — COR 3 DESIGN LLC — GREENVILLE, SC — 100698 — REGISTERED ARCHITECT
STATE OF SOUTH CAROLINA — RALPH M. COLEMAN — GREENVILLE, SC — 03542 — REGISTERED ARCHITECT

Revisions :
A 10.16.2024 Issue For Permit
03.20.2025 100% Issue For Hilton

Project Number : 23112
Phase : CD
Date : 04.22.2024
Drawn By : -
Checked By : -

Sheet Number:
FP-100

Sheet Title :
FIRE PROTECTION NOTES AND DETAILS