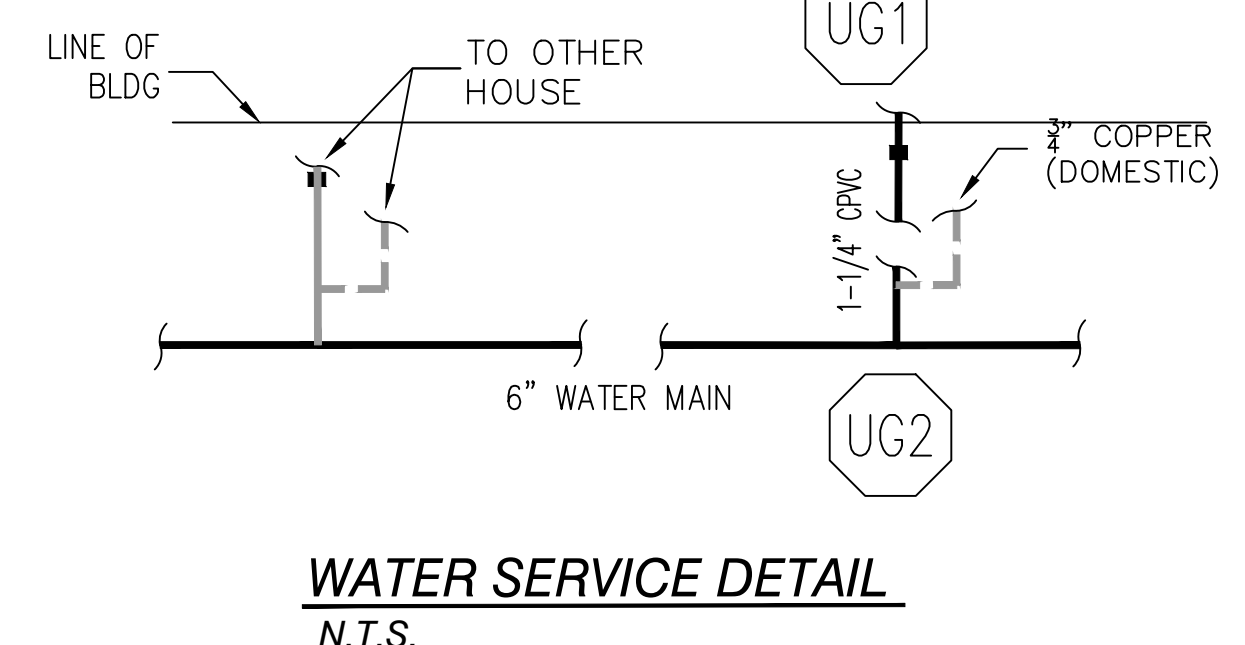
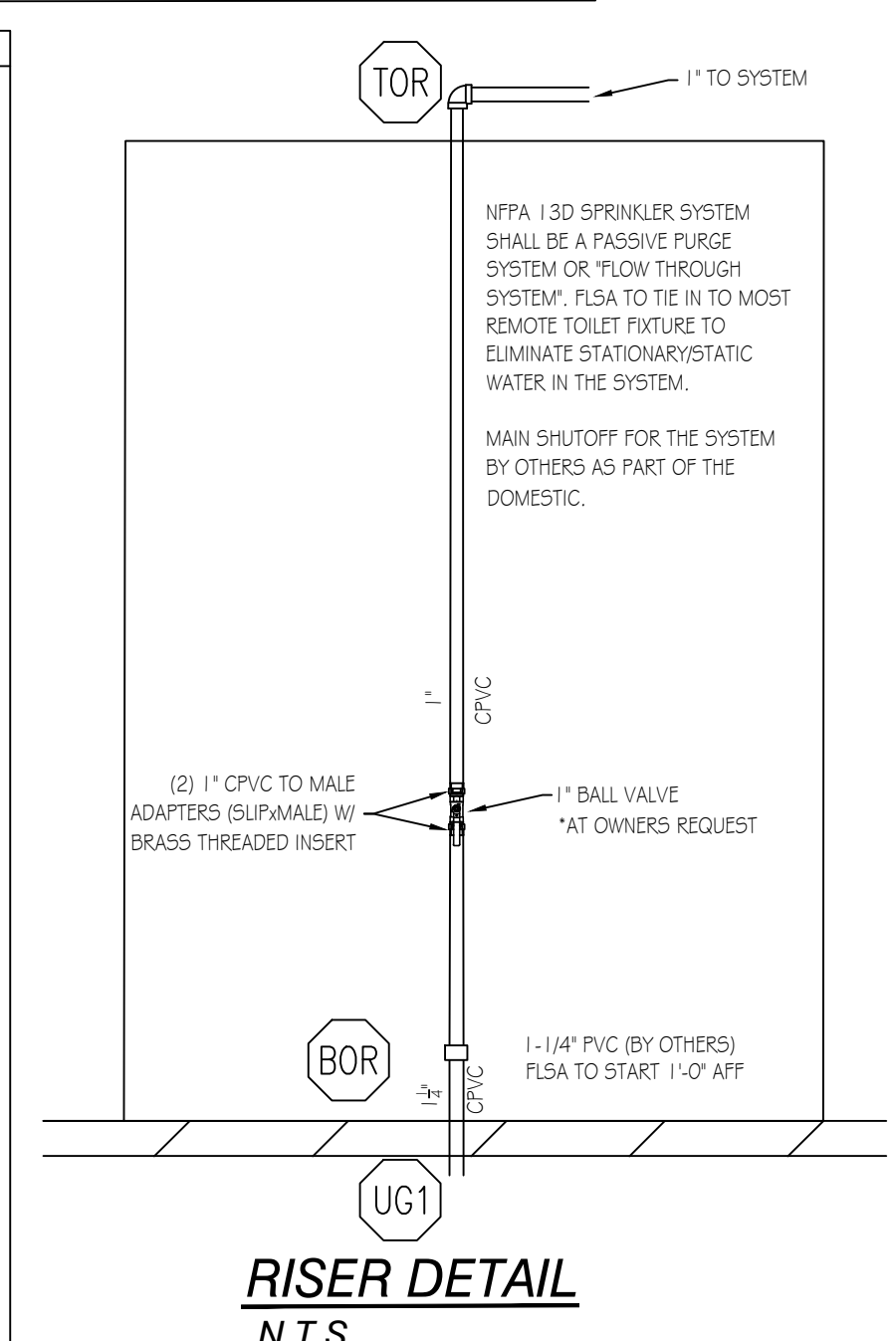
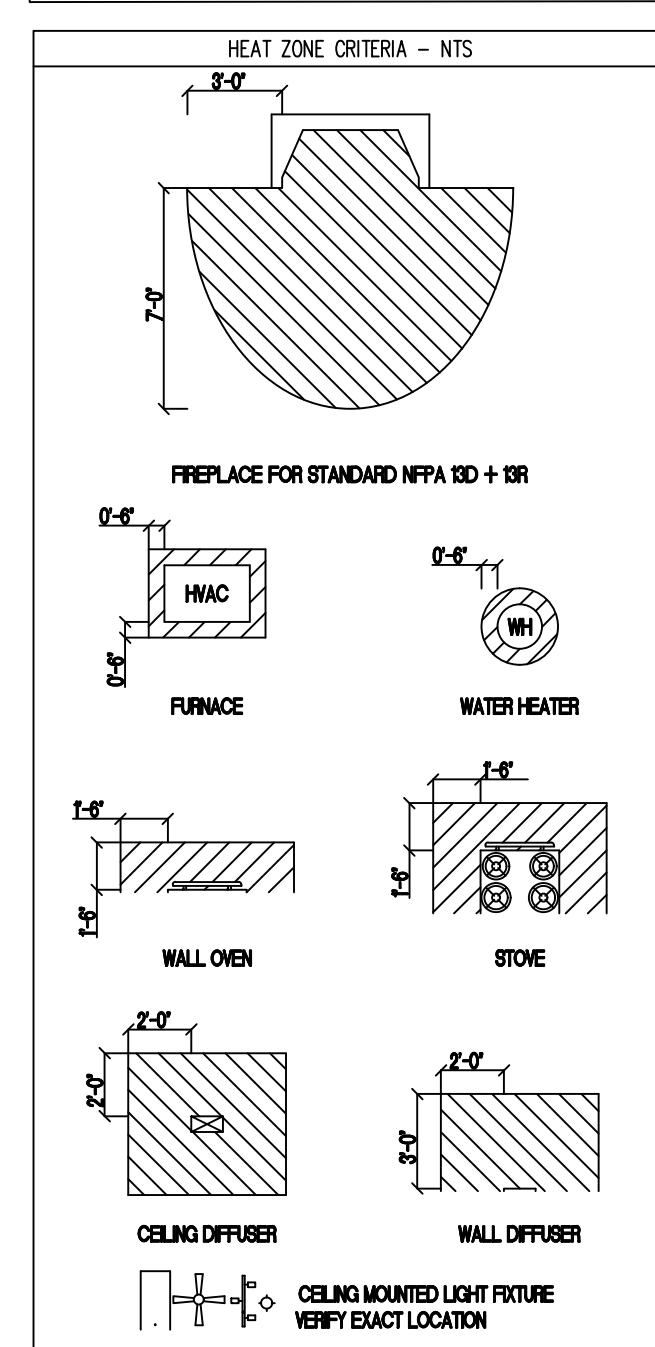
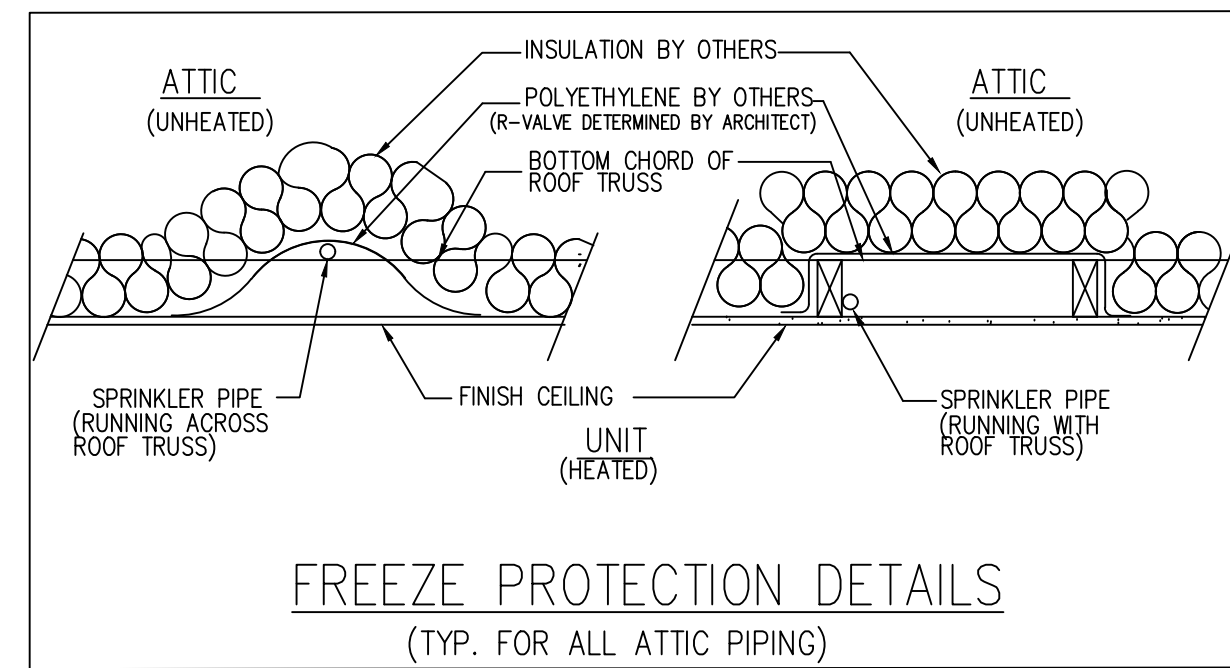
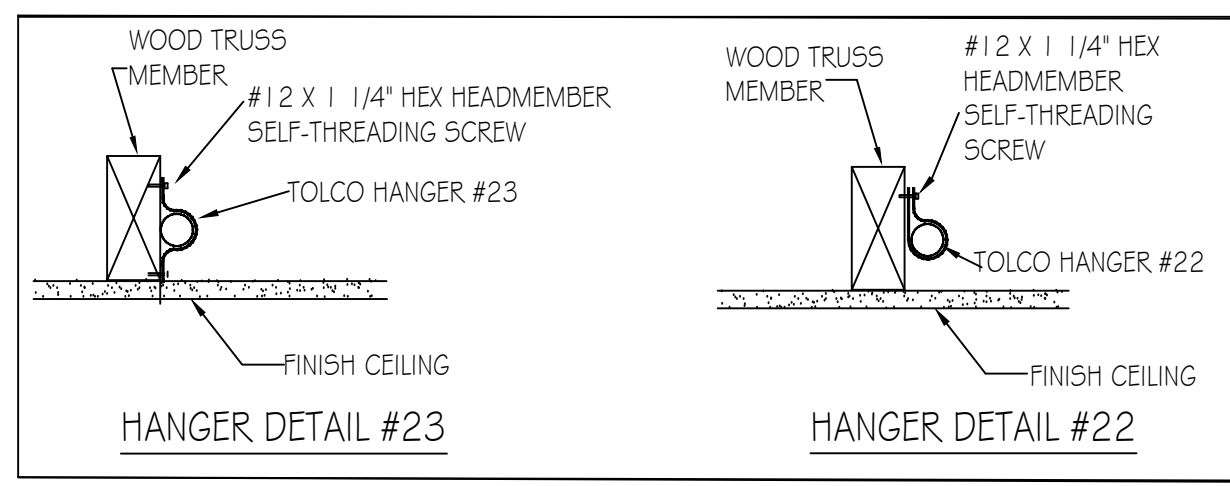


GENERAL NOTES

- THIS WET PIPE FIRE SPRINKLER SYSTEM IS DESIGNED AS LIGHT HAZARD/RESIDENTIAL OCCUPANCY WITH A DESIGN DENSITY OF .05 GPM/2 SPRINKLERS MAX IN ACCORDANCE WITH 13D (2013 EDITION) AND NFPA 13-11.3.1.1.
- HYDRAULIC CALCULATIONS ARE BASED UPON FLOW DATA PERFORMED BY FLSA ON 04/21/2021 AT 4:00PM. HYDRAULIC CALCULATIONS TO BE BASED ON NFPA 13D (2013 EDITION).
- FIRE SPRINKLER OVERHEAD PIPE AND FITTINGS ARE TO BE CPVC PIPE LISTED FOR FIRE PROTECTION USED UNLESS NOTED OTHERWISE.
- ALL HANGERS TO BE U.L. LISTED FOR FIRE PROTECTION SERVICES. HANGERS SHALL BE INSTALLED IN ACCORDANCE WITH THEIR LISTING. SPACING AND LOCATION TO COMPLY WITH NFPA 13.
- ALL EQUIPMENT TO BE U.L. LISTED FOR FIRE PROTECTION SERVICES AND LISTED IN ACCORDANCE WITH ITS LISTING.
- PENDENT SPRINKLERS ARE TO BE SPACED A MAXIMUM OF 18 FT. X 18 FT. AND A MINIMUM OF 8 FT. APART. PENDANTS MAY BE A MAXIMUM OF 9'-0" OFF OF ANY WALL.
- IN AREAS WHERE WET-TYPE SPRINKLER SYSTEM PIPING HAS BEEN INSTALLED, IT IS THE OWNERS' RESPONSIBILITY TO PROVIDE ADEQUATE HEAT. (AMBIENT TEMPERATURE OF A MINIMUM 40°F)
- ALL DRAINAGE TO COMPLY WITH NFPA 13D AND CONTRACT DOCUMENTS.
- [X'-X'] DENOTES CENTERLINE OF PIPE AFF.
- ALL SPRINKLER HEADS SHALL BE LISTED RESIDENTIAL SPRINKLER HEADS IN ACCORDANCE WITH 7.5.1 OF NFPA 13D.
- FLSA POINT OF CONNECTION IS AT 1'-0" AFF.
- UNDERGROUND PIPING TO BE FLUSHED PRIOR TO SPRINKLER PIPE CONNECTION. FLUSHING IS TO BE COMPLETED BY OTHERS.
- PIPING TO SPRINKLER HEADS 1" CPVC UNLESS OTHERWISE NOTED.

NOTE:
SITE HYDRAULIC REFERENCE PLAN HAS BEEN SHOWN FOR REFERENCE ONLY.
ALL UNDERGROUND WORK SHALL BE INSTALLED BY UTILITY CONTRACTOR AND INSTALLED IN ACCORDANCE WITH THE CIVIL SITE UTILITY PLAN. FLSA SHALL BEGIN WORK AT 1'-0" ABOVE FINISHED FLOOR.



Sprinkler Design Data

Project Name: OAKHAVEN LOT 17	System: WET
Project Street Address: 283 OAKHAVEN DRIVE	Sys. Sq. Ft.: VARIES
Floor #: 2	Ceiling Height: VARIES
Designed By: HALEY WEYANT	Phone: (919) 872-3250
Occupancy: RESIDENTIAL	Hazard: LIGHT/RESIDENTIAL

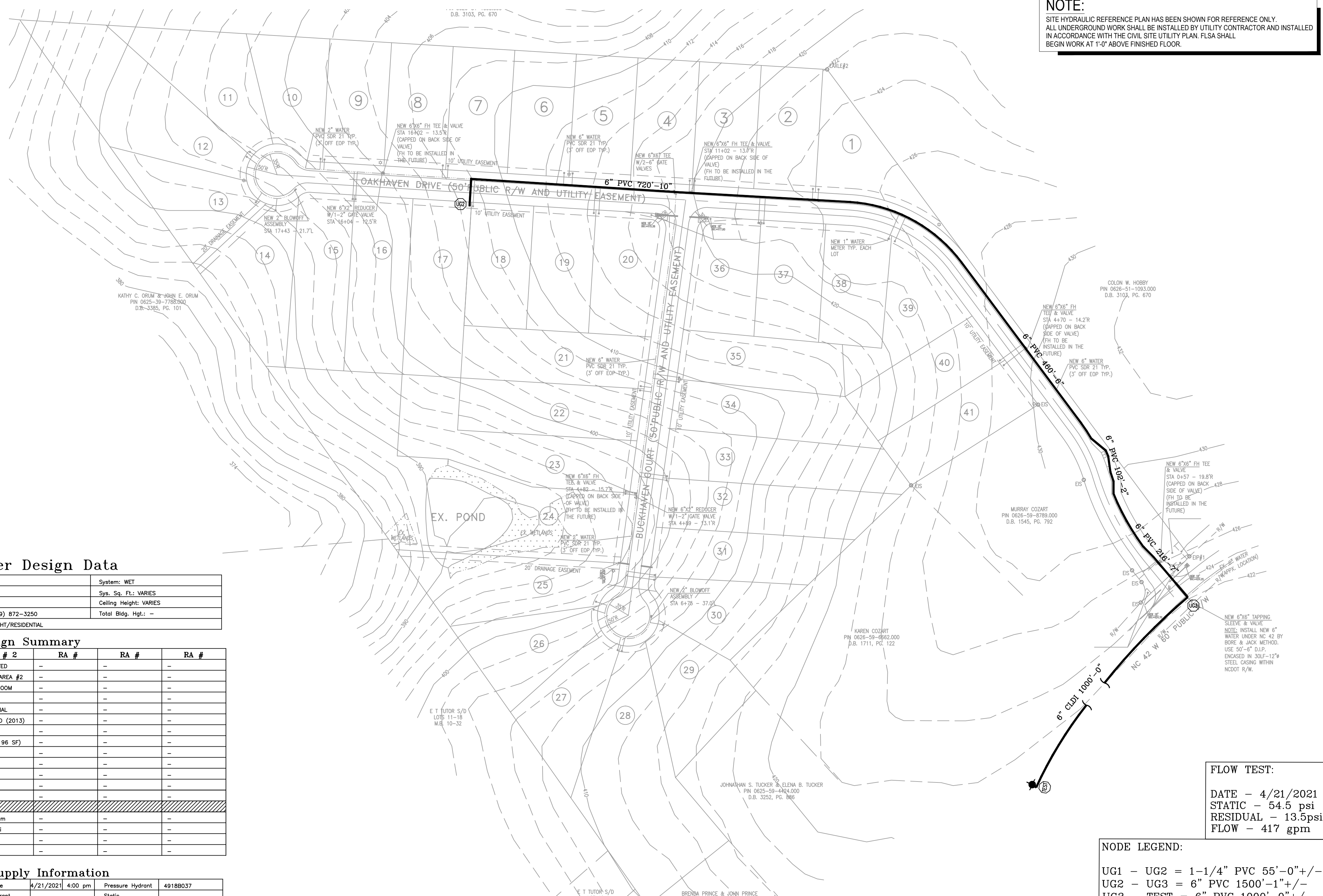
Design Summary

Design Method	RA # 1	RA # 2	RA #	RA #
Design Area #	REMOTE AREA #1	REMOTE AREA #2	-	-
Location	MASTER BEDROOM	BONUS ROOM	-	-
Type of System	WET	WET	-	-
Hazard Class	RESIDENTIAL	RESIDENTIAL	-	-
Criteria Form	NFPA 13D (2013)	NFPA 13D (2013)	-	-
Design Area	1 HEAD	2 HEADS	-	-
Sprinkler Spacing	20X20 (400 SF)	14X14 (196 SF)	-	-
Density	.05	.05	-	-
K-Factor	4.9	4.9	-	-
Domestic Flow	3 GPM	3 GPM	-	-
# Design Sprinklers	1	2	-	-
Special Application Spk.	-	-	-	-
Requirement @ TEST	-	-	-	-
G.P.M. Req'd	23.03 gpm	29.34 gpm	-	-
P.S.I. Req'd	29.48 psi	31.88 psi	-	-
Safety Factor @ TEST	24.83	22.31	-	-
Volume of Dry System	-	-	-	-

Water Supply Information

Tested by	-	Date/Time	4/21/2021 4:00 pm	Pressure Hydrant	49188037
Hydrant Elevation	-	Flow Hydrant (GPM)	13.5	Flow (GPM)	417
Static (PSI)	54.5	Residual (PSI)	13.5	Flow (GPM)	417

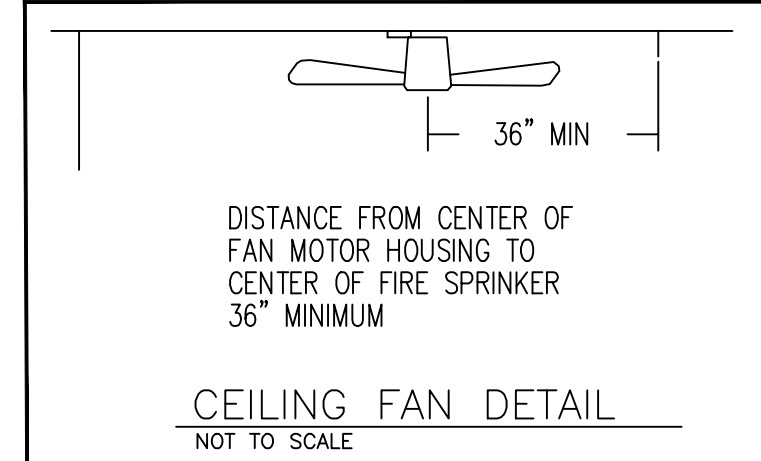
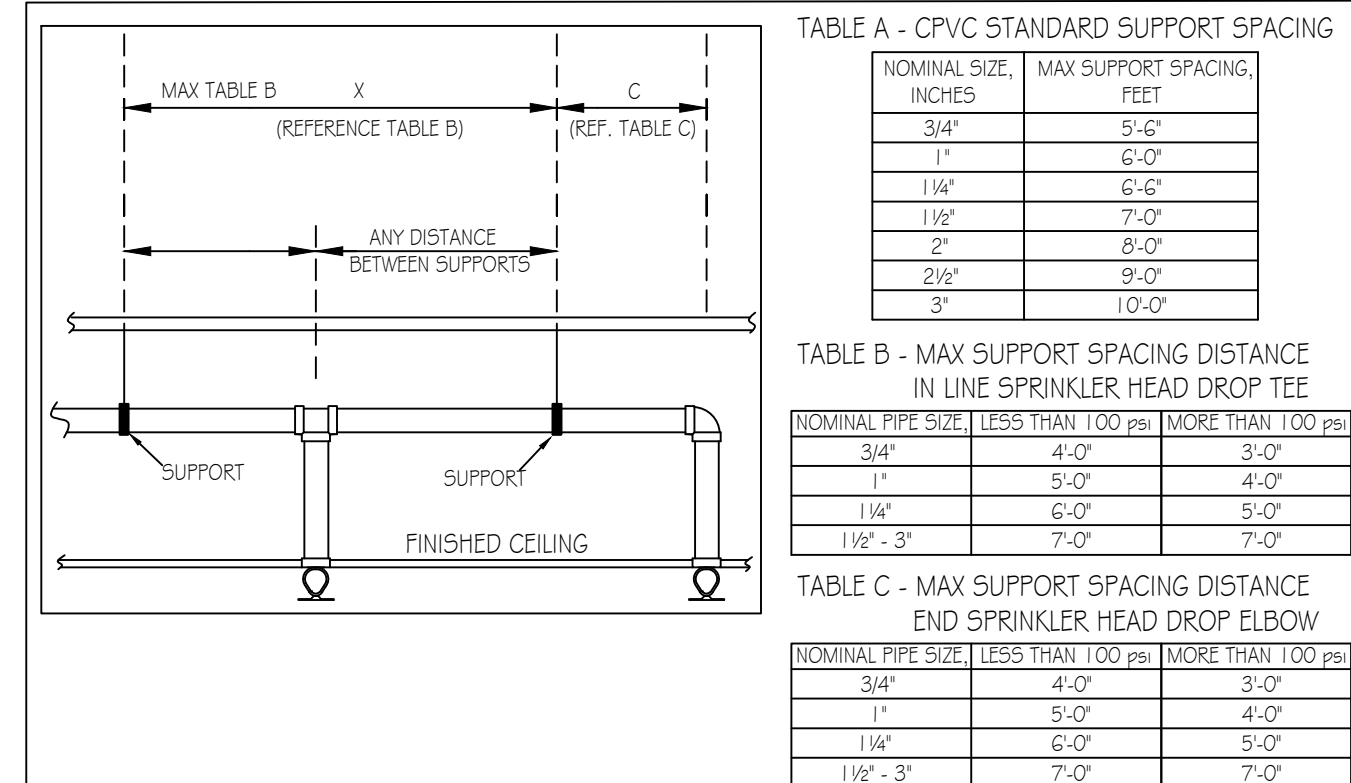
Copy of Water Test Data Included with Calculation is required



FLOW TEST:
DATE - 4/21/2021
STATIC - 54.5 psi
RESIDUAL - 13.5psi
FLOW - 417 gpm

NODE LEGEND:
UG1 - UG2 = 1-1/4" PVC 55'-0"+/-
UG2 - UG3 = 6" PVC 1500'-1"+/-
UG3 - TEST = 6" PVC 1000'-0"+/-

SITE PLAN - FOR HYDRAULIC REFERENCE ONLY



SCOPE OF WORK

- FLSA TO BEGIN WORK AT 1'-0" AFF
 - FLSA TO INSTALL AUTOMATIC SPRINKLER SYSTEM UNDER NFPA 13D (2013) TO PROTECT NEW RESIDENTIAL HOME
 - FLSA TO TIE THE NEW SPRINKLER SYSTEM INTO PLUMBING FOR A PASSIVE PURGE SYSTEM.
 - ALL PIPING TO BE CPVC.
 - ALL UNDERGROUND AND RUN-IN BY OTHERS
- THIS FIRE SPRINKLER PLANNING AND DESIGN DRAWING HAS BEEN PREPARED BY FIRE & LIFE SAFETY AMERICA, INC. AS A LICENSED FIRE SPRINKLER CONTRACTOR UNDER ARTICLE 2 OF CHAPTER 87 OR THE GENERAL STATUTES FOR THE STATE OF NORTH CAROLINA.
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HOUSTON, TX SAN ANTONIO, TX DALLAS, TX AUSTIN, TX
CHARLOTTE, NC RALEIGH, NC BALTIMORE, MD ATLANTA, GA
- 1731 Round Rock Drive
Raleigh, NC 27615
PHONE (919) 872-3250
FAX (919) 877-5775
- JONATHAN STEUBA
LEVEL III AUTOMATIC SPRINKLER SYSTEMS
#11897
- NORTH CAROLINA STATE LICENSE #29733
BUILDING PERMIT # : SFD2108-0077

SYSTEM DESIGN CRITERIA	APPROVING AGENCIES	GENERAL NOTES	LEGEND	SPRINKLER SUMMARY	GRAPHIC SCALE: 1/8" = 1'-0"	REVISIONS	DATE	DESCRIPTION	BY
TYPE SYSTEM: <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY <input type="checkbox"/> DELUGE <input type="checkbox"/> NFPA STANDARD: <input type="checkbox"/> #13 <input type="checkbox"/> #13R <input type="checkbox"/> #14 <input type="checkbox"/> #20 <input type="checkbox"/> #22 <input type="checkbox"/> PREACTION <input type="checkbox"/> ANTI-FREEZE <input type="checkbox"/> #24 <input type="checkbox"/> #231 <input type="checkbox"/> #231C <input type="checkbox"/> #415 <input type="checkbox"/> #416 <input type="checkbox"/> #449	APPROVING AUTHORITY: HARNETT COUNTY	1. Freeze Protection: The owner is responsible for maintaining a min. of 40°F temperature for all wet systems and portions of other systems containing water. 2. M.I.C. Protection: The owner is responsible for all detection testing prevention. 3. Design is subject to minor deviations arising from field conditions and/or trade coordination. Such deviations shall not affect code compliance or scope of work and shall not require resubmittal except in "as-built" if required by contract documents. 4. Underground provider to ensure lead-in is plumbed, 2-holed, redded, flashed, thrust blocked and a fully executed underground test certificate required per NFPA to be provided to FLSA prior to connection. FLSA is not responsible for damage to its system or components due to debris entering the system from underground water lines provided "by others". 5. This drawing is property of Fire and Life Safety America and is not to be duplicated and/or distributed without written authorization from FLSA. 6. Hydrostatic testing will only be performed with water or air depending on adequate temperature. Any other form of testing is excluded.	Symbol Description Hydraulic Reference Point 18" BTS 12'-0" AFF TOS 12'-0" Calling Height Denotes Hanger Location Denotes Setback Support Room name or use Sleeve Location FLSA Start Point	TYPE FINISH TEMP ORIF "K" NPT MANUF SIN# ESCUTCHEON QTY. RES. PENDENT WHITE 200" 1/2" 4.9 1/2" VIKING VK494 CONCEALED 0 Elev. Below Top of Steel 0 Elev. Above Finished Floor 0 Elev. of Top of Steel 0 Calling Height 0 Denotes Hanger Location 0 Denotes Setback Support 0 Room name or use 0 Sleeve Location 0 FLSA Start Point 0	0 4 8 16 32 GRAPHIC SCALE: 1/8" = 1'-0"	DATE DESCRIPTION BY 9/7/2021 SUBMITTAL TO AHJ HCW	1731 Round Rock Drive Raleigh, NC 27615 PHONE (919) 872-3250 FAX (919) 877-5775	1731 Round Rock Drive Raleigh, NC 27615 PHONE (919) 872-3250 FAX (919) 877-5775	DATE DESCRIPTION BY 8/30/2021 H. WEYANT
OCCUPANCY: RESIDENTIAL HAZARD: LIGHT PIPE REQUIRED: NO SLEEVES REQUIRED: NO	UNDERWRITER: N/A			TOTAL SPRINKLERS THIS PROJECT 15 TOTAL SPRINKLERS THIS DRAWING 0					
MAXIMUM SPACING: VARIES LOCAL HOSE THREADS: N.S.T. SPRINKLERS ARE REQUIRED TO BE LOCATED IN THE CENTER OF THE CEILING TILES.	GENERAL CONTRACTOR: WATERMARK HOMES								
PIPE TYPES AND FITTING TYPES LINE PIPING: CPVC LINE FITTINGS: CPVC MAIN PIPING: CPVC MAIN FITTINGS: CPVC	ADDRESS: 1303 FT BRAGG ROAD SUITE 201 CITY & STATE: FAYETTEVILLE, NC 28305 PHONE NO.: (910) 483-2229 FAX NO.:								

FLSA
FIRE & LIFE SAFETY AMERICA
PROTECTING AMERICA

OAKHAVEN LOT 17 FP 1
283 OAKHAVEN DR.
HOLLY SPRINGS, NC 27540

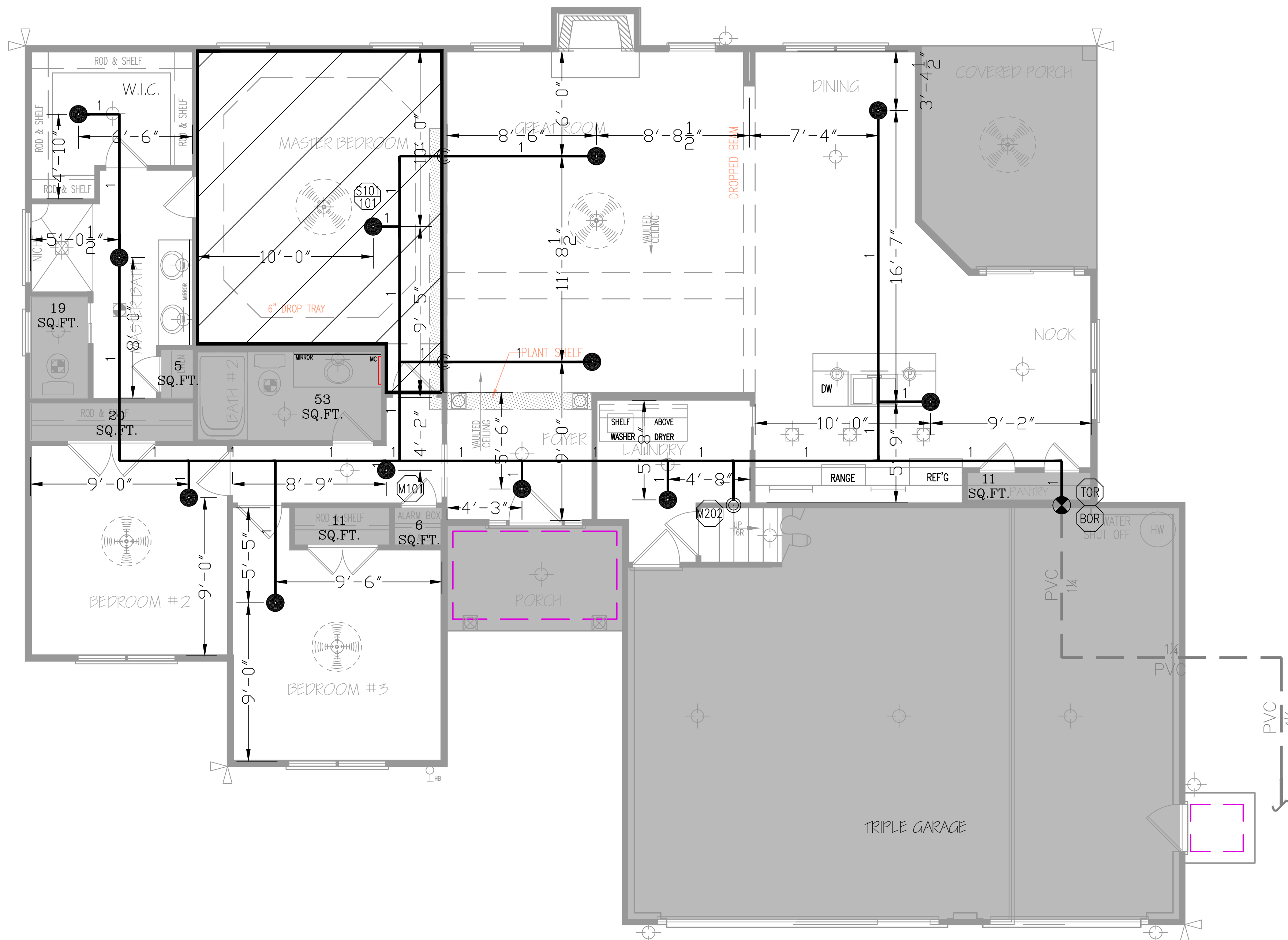
OF 2

NOTES:
 - PORCHES AND GARAGES ARE OMITTED PER NFPA 13D (2013) 8.3.4
 - CLOSETS 24 SQ. FT. OR LESS IN AREA ARE UNSPRINKLERED PER NFPA 13D (2013) 8.3.3; WALLS AND CEILING TO BE SURFACED WITH NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE MATERIAL AS DEFINED BY NFPA 220
 - BATHROOMS 55 SQ. FT. OR LESS IN AREA ARE UNSPRINKLERED PER NFPA 13D (2013) 8.3.2

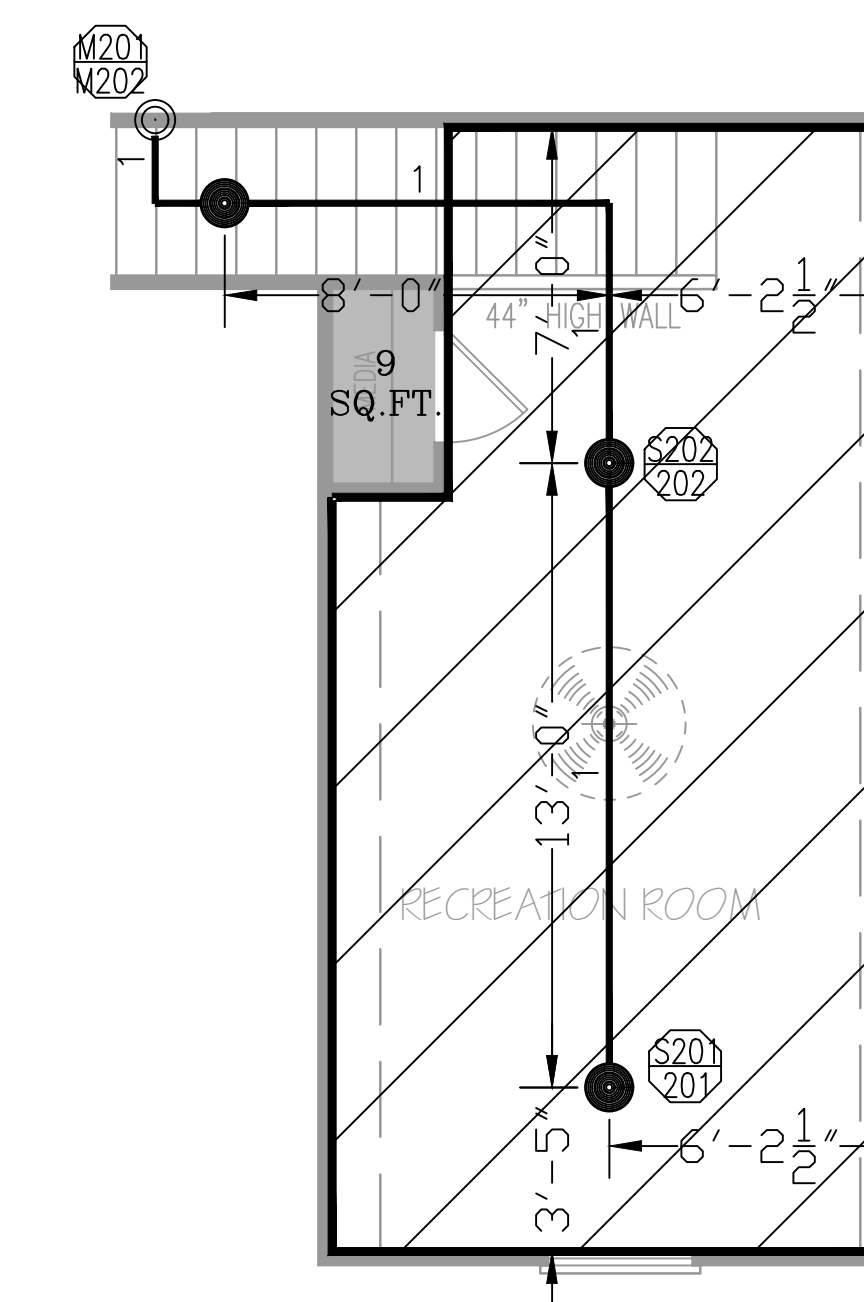
SPRINKLER LEGEND

NO HEADS REQUIRED
 REMOTE AREA

RA1 - MASTER BEDROOM
 Design Area No. 1 - RESIDENTIAL
 Density .05 Area 1 HEADS
 Flow 23.03 gpm @ 29.48 psi
 Includes N/A gpm Hose allowance
 SAFETY: 24.83



RA2 - BONUS ROOM
 Design Area No. 2 - RESIDENTIAL
 Density .05 Area 2 HEADS
 Flow 29.34 gpm @ 31.88 psi
 Includes N/A gpm Hose allowance
 SAFETY: 22.31



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LEVEL 1 - SPRINKLER PLAN

1/4" = 1' - 0"

LEVEL 2 - SPRINKLER PLAN

1/4" = 1' - 0"

SYSTEM DESIGN CRITERIA		APPROVING AGENCIES		GENERAL NOTES		LEGEND		SPRINKLER SUMMARY		REVISIONS		CONTACT INFORMATION					
TYPE SYSTEM: <input checked="" type="checkbox"/> WET <input type="checkbox"/> DRY <input type="checkbox"/> DELUGE	NFPA STANDARD: <input type="checkbox"/> #13 <input checked="" type="checkbox"/> #13R <input type="checkbox"/> #14 <input type="checkbox"/> #20 <input type="checkbox"/> #22	APPROVING AUTHORITY: HARNETT COUNTY		1. Freeze Protection: The owner is responsible for maintaining a min. of 40° F temperature for all wet systems and portions of other systems containing water.	Symbol	DESCRIPTION	SYMBOL	TYPE	FINISH	TEMP	ORIF	"K"	NPT	MANUF.	SIN#	ESCUTCHEON	QTY.
<input type="checkbox"/> PREACTION <input type="checkbox"/> ANTI-FREEZE	<input type="checkbox"/> #24 <input type="checkbox"/> #231 <input type="checkbox"/> #231C <input type="checkbox"/> #15 <input type="checkbox"/> #16 <input type="checkbox"/> #499	UNDERWRITER: N/A		2. M.I.C. Protection: The owner is responsible for all detection/testing prevention.	○	Hydraulic Reference Point	●	RES. PENDENT	WHITE	200°	1/2"	4.9	1/2"	VIKING	VK494	CONCEALED	15
OCCUPANCY: RESIDENTIAL	HAZARD: LIGHT	GENERAL CONTRACTOR: WATERMARK HOMES		3. Design is subject to minor deviations arising from field conditions and/or trade coordination. Such deviations shall not affect code compliance or scope of work and shall not require resubmittal except in "as-built" if required by contract documents.	○	18" BTS	Elev. Below Top of Steel										
MAXIMUM SPACING: VARIES	LOCAL HOSE THREADS: N.S.T.	ADDRESS: 1303 FT BRAGG ROAD SUITE 201		4. Underground provider to ensure lead-in is plumbed, 2-bolt, rodless, flanged, thrust blocked and a fully executed underground test certificate required per NFPA to be provided to FLSA prior to connection. FLSA is not responsible for damage to its system or components due to debris entering the system from underground water lines provided "by others".	○	12"-0 AFF	Elev. Above Finished Floor										
PIPE TYPES AND FITTING TYPES	PIPE ID REQUIRED: NO	CITY & STATE: FAYETTEVILLE, NC 28305		5. This drawing is property of Fire and Life Safety America and is not to be duplicated and/or distributed without written authorization from FLSA.	○	+ TOS 12'-0	Elev. of Top of Steel										
LINE PIPING: CPVC	LINE FITTINGS: CPVC	PHONE NO.: (910) 483-2229		6. Hydrostatic testing will only be performed with water or air depending on adequate temperature. Any other form of testing is excluded.	○	10'-0	Calling Height										
MAIN PIPING: CPVC	MAIN FITTINGS: CPVC	FAX NO.:			○	Denotes Hanger Location											
												RICHMOND, VA CHESAPEAKE, VA ROANOKE, VA SPRINGFIELD, VA ORLANDO, FL HOUSTON, TX SAN ANTONIO, TX DALLAS, TX AUSTIN, FL CHARLOTTE, NC RALEIGH, NC BALTIMORE, MD ATLANTA, GA					
												1731 Round Rock Drive Raleigh, NC 27615 PHONE (919) 872-3250 FAX (919) 877-5775					
												JOB #: 21NC1535 DATE: 8/30/2021 DRAWN BY: H. WEYANT SCALE: AS NOTED					
												LEVEL 1 & 2 - SPRINKLER PLAN OAKHAVEN LOT 17 283 OAKHAVEN DR. HOLLY SPRINGS, NC 27540					
												DRAWING #: FP 2 OF 2					
												NORTH CAROLINA STATE LICENSE #29733 BUILDING PERMIT #: SFD2108-0077					

