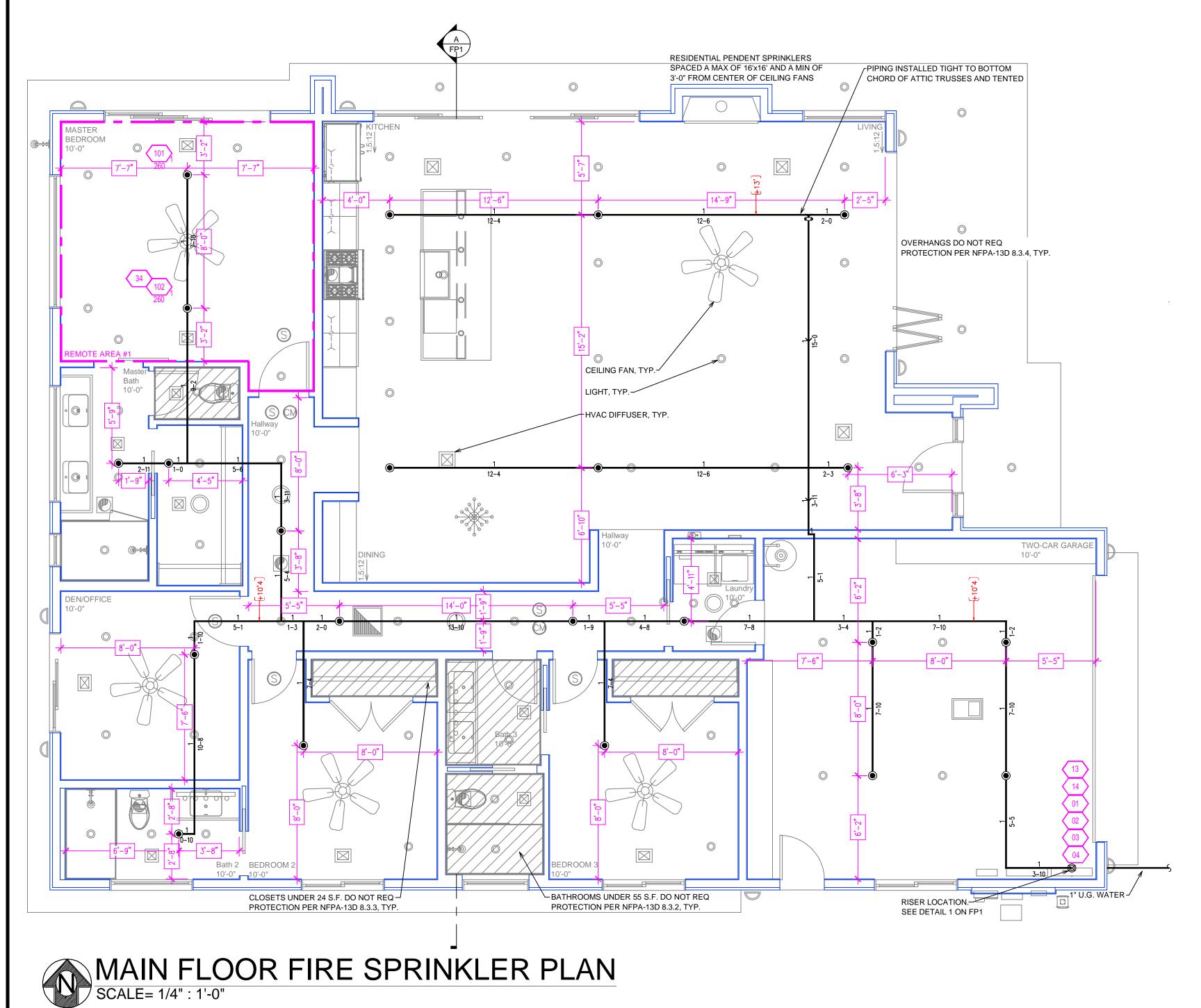
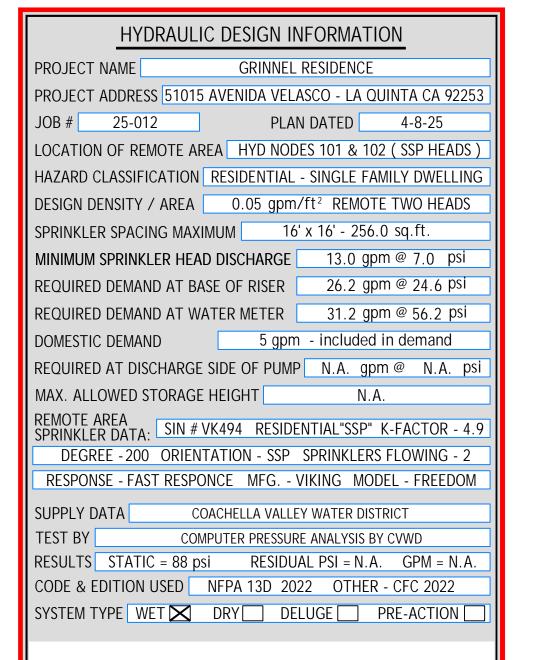
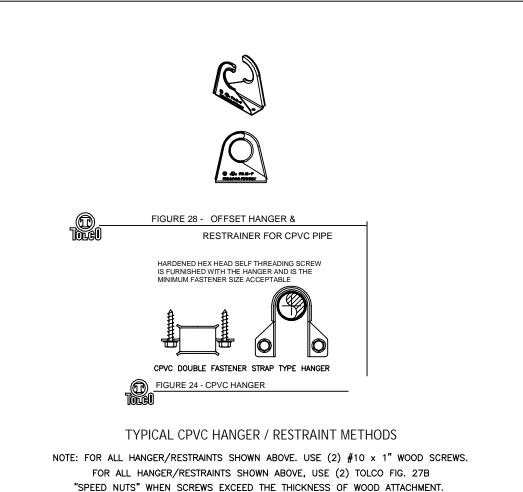
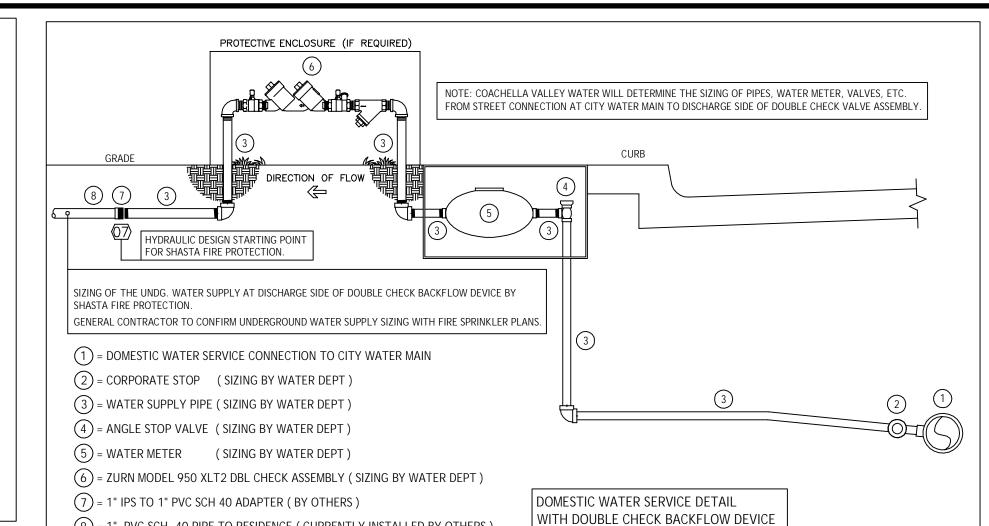


A BUILDING SECTION SCALE= 1/4": 1'-0"









VIKING FREEDOM CONCEALED RESIDENTIAL PENDENT FINISHED CEILING HEAD DESIGN REQUIREMENT: SIN # VK 494 (4.9 K-FACTOR) 200 DEGREE

MAXIMUM AREA OF COVERAGE:

16' x 16' (8' TO ANY WALL)

(8' MINIMUM DISTANCE BETWEEN HEADS)

HEAT SOURCE

KITCHEN RANGE

HOT AIR FLUES

HOT AIR DIFFUSERS

HOT AIR DIFFUSERS

WALL OVEN

SIDE OF OPEN OR RECESSED FIREPLACE

FRONT OF RECESSED FIREPLACE

UNINSULATED HEAT DUCTS

FRONT OF WALL MOUNTED

UNINSULATED HOT WATER PIPES

HOT WATER HEATER OR FURNACE

IDE OF CEILING OR WALL MOUNTED

COAL OR WOOD - BURNING STOVE

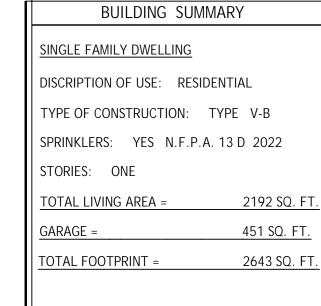
MIN. WATER SUPPLY REQUIREMENT: EACH HEAD (TWO HEAD CALC.)

(8) = 1" PVC SCH. 40 PIPE TO RESIDENCE (CURRENTLY INSTALLED BY OTHERS)

13 G.P.M. (MIN.) @ 7.0 P.S.I. (MIN.)

RESIDENTIAL HEADS IN RELATION TO HEAT SOURCE

MINIMUM DISTANCES FOR ORDINARY TEMPERATURE RESIDENTIAL FIRE SPRINKLERS



Caution: For areas having temperatures

of 0°F (-18°C) or lower, an additional

batt of insulation covering the joist and

the fire sprinkler piping should be used.

in the sprinkler piping.

If this is not done, freeze-ups can occur

RESIDENTIAL DESIGN MATERIAL NOTES PIPE AND FITTINGS WILL BE "BLAZEMASTER" CPVC; WITH PRIMER / GLUE JOINTS. INSTALL CPVC PIPE/FITTINGS PER. MFG. RECOMMENDATIONS SECURE CPVC PIPE TO STRUCTURE PER. MFG. RECOMMENDATIONS. MAXIMUM CPVC HANGER DISTANCES ARE AS FOLLOWS... 1" CPVC PIPE (HANGER @ MAXIMUM DISTANCE OF) 6'-0" 1 1/4" CPVC PIPE (HANGER @ MAXIMUM DISTANCE OF) 6'-6" NOTE: CPVC PIPE / FITTINGS WILL BE INSTALLED ABOVE A MIN. OF

LIGHT FIXTURE UP TO 250 WATT LIGHT FIXTURE 250 TO 499 WATT RESIDENTIAL "SSP" HEADS IN RELATION TO CEILING FANS 3/8" GYP. BOARD, SUSPENDED LAY IN PANELS, (WITH "T-BAR"); OR 1/2" PLYWOOD. 36" (MINIMUM) CPVC PIPE / FITTINGS FOR THIS INSTALLATION, WILL BE CONCEALED ABOVE MINIMUM CONSTRUCTED BARRIER NOTED ABOVE...

> NOTE TO GENERAL CONTRACTOR! ANY PRESSURE REDUCING DEVICE FOR DOMESTIC WATER SERVICE MUST BE INSTALLED DOWNSTREAM TO THE WATER SUPPLY WHERE THE DOMESTIC AND FIRE SERVICE INTERSECT. THE FIRE SPRINKLER

PRESSURE THAT IS AVAILABLE AT THE SUPPLY SOURCE.

31.2 GPM @ 42.3 PSI IS REQUIRED AT OUTLET OF DOUBLE CHECK VALVE. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO INSTALL THE DOMESTIC WATER / FIRE SPRINKLER SUPPLY FROM DOUBLE CHECK VALVE TO RESIDENCE WITH PIPE, DEVICES & SIZING PER THIS DRAWING.

SYSTEM HAS BEEN HYDRAULICALLY CALCULATED WITH THE FULL

IT IS THE RESPONSIBILITY OF THE WATER DISTRICT TO PROVIDE THE CORRECT SIZE WATER LATERAL & METER & DOUBLE CHECK VALVE TO MEET THE GPM & PSI REQUIREMENTS STATED ABOVE.

LOCATION OF RESIDENTIAL SPRINKLERS PER. NFPA 13D 2022 SECTION 8.3.1 SPRINKLERS SHALL BE INSTALLED IN ALL AREAS EXCEPT WHERE OMISSION IS PERMITTED BY

SECTION 8.3.2 SPRINKLERS SHALL NOT BE REQUIRED IN BATHROOMS OF 55 SQ.FT. AND LESS. SECTION 8.3.3 SPRINKLERS SHALL NOT BE REQUIRED IN CLOTHES CLOSETS, LINEN CLOSETS, AND PANTRIES THAT MEET

ALL OF THE FOLLOWING CONDITIONS: (1) THE AREA OF THE SPACE DOES NOT EXCEED 24 SQ.FT.

(2) THE WALLS AND CEILINGS ARE SURFACED WITH NONCOMBUSTIBLE OR LIMITED COMBUSTIBLE MATERIALS AS DEFINED IN NFPA 220.

SECTION 8.3.4 SPRINKLERS SHALL NOT BE REQUIRED IN GARAGES, OPEN ATTACHED PORCHES AND BALCONIES, CARPORTS, AND SIMILAR STRUCTURES.

NOTE: THE LOCAL AUTHORITY HAVING JURISDICTION REQUIRES FIRE SPRINKLER PROTECTION WITHIN THE GARAGE AREA. USE 4.9 K-FACTOR 200 DEGREE "SSP" HEADS IN THE GARAGE @ THE FINISHED CEILING LEVEL.

SECTION 8.3.5 SPRINKLERS SHALL NOT BE REQUIRED IN ATTICS WITH OR WITHOUT STORAGE, PENTHOUSE EQUIPMENT ROOMS, ELEVATOR MACHINE ROOMS, CONCEALED SPACES DEDICATED EXCLUSIVELY TO AND CONTAINING ONLY DWELLING UNIT VENTILATION EQUIPMENT, FLOOR / CEILING SPACES, VERTICAL CHASES, ELEVATOR SHAFTS, CRAWL SPACES, AND OTHER CONCEALED SPACES THAT ARE NOT USED OR INTENDED FOR LIVING

SECTION 8.3.5.1.1 WHERE FUEL-FIRED EQUIPMENT IS LOCATED OTHER THAN BENEATH AN OCCUPIED AREA OF THE DWELLING UNIT, SPRINKLER PROTECTION SHALL NOT BE REQUIRED BASED ON THE PRESENCE OF THE FUEL-FIRED

SECTION 8.3.5.1 SUCH SPACES THAT CONTAIN FUEL-FIRED EQUIPMENT SHALL ALSO COMPLY WITH 8.3.5.1.1 OR 8.3.5.1.2

SECTION 8.3.5.1.2 WHERE FUEL-FIRED EQUIPMENT IS LOCATED BENEATH AN OCCUPIED AREA OF THE DWELLING UNIT, AT LEAST ONE QUICK-RESPONSE INTERMEDIATE TEMPERATURE SPRINKLER SHALL BE INSTALLED ABOVE THE

SECTION 8.3.6 SPRINKLERS SHALL NOT BE REQUIRED IN UNHEATED ENCLOSURES AT THE BUILDING AT ENTRANCES / EXITS AS LONG AS DWELLING UNIT HAS ANOTHER ENTRANCE / EXIT.

SECTION 8.3.7 SPRINKLERS SHALL NOT BE REQUIRED FOR CEILING POCKETS THAT MEET THE FOLLOWING CONDITIONS. (1) THE TOTAL VOLUME OF ALL UNPROTECTED CEILING POCKETS IN A COMPARTMENT DOES NOT EXCEED

(2) THE ENTIRE FLOOR UNDER THE UNPROTECTED CEILING POCKET IS PROTECTED BY SIDEWALL OR PENDENT SPRINKLERS AT THE LOWER CEILING ELEVATION.

(3) THE INTERIOR FINISH OF THE UNPROTECTED CEILING POCKET EXCLUDING DECORATIVE TREATMENTS IS NONCOMBUSTIBLE OR LIMITED-COMBUSTIBLE MATERIAL. (CROWN MOLDING IS ACCEPTABLE) (4) SKYLIGHTS NOT EXCEEDING 32 SQ.FT. SHALL BE PERMITTED TO HAVE A PLASTIC COVER.

SECTION 8.3.8 SPRINKLERS SHALL NOT BE REQUIRED IN CLOSETS IN GARAGES AND EXTERIOR CLOSETS (REGARDLESS OF SIZE) LOCATED ON EXTERIOR BALCONIES, EXTERIOR BREEZEWAYS / CORRIDORS, OR ACCESSED FROM OUTDOORS WHERE THE CLOSET DOES NOT HAVE DOORS OR UNPROTECTED PENETRATIONS DIRECTLY

SECTION 8.3.9 SPRINKLERS SHALL BE INSTALLED IN ANY CLOSET USED FOR HEATING AND / OR AIR CONDITIONING EQUIPMENT, WASHERS AND / OR DRYERS, OR WATER HEATERS EXCEPT AS ALLOWED BY 8.3.8

GENERAL NOTES

BASIS OF DESIGN FOR THIS PROJECT WILL BE NFPA 13D 2022 AND LOCAL FIRE DEPARTMENT REQUIREMENTS. ALL MATERIALS AND DEVICES SHALL CONFORM TO NFPA 13D 2022 EDITION SHASTA FIRE PROTECTION'S "SCOPE OF WORK" FOR THIS CONTRACT WILL BE:

DESIGN & INSTALL A NEW RESIDENTIAL FIRE SPRINKLER SYSTEM STARTING AT 0'-6" ABOVE INTERIOR FINISHED FLOOR LEVEL WITHIN MAIN RESIDENCE, ADU UNIT & GARAGE. PIPING: A CPVC GLUE JOINT "RISER" SHALL BE LOCATED WITHIN AN EXTERIOR WALL. CPVC GLUE JOINT PIPE & FITTINGS WITHIN CONCEALED ATTIC AREA ABOVE FINISHED

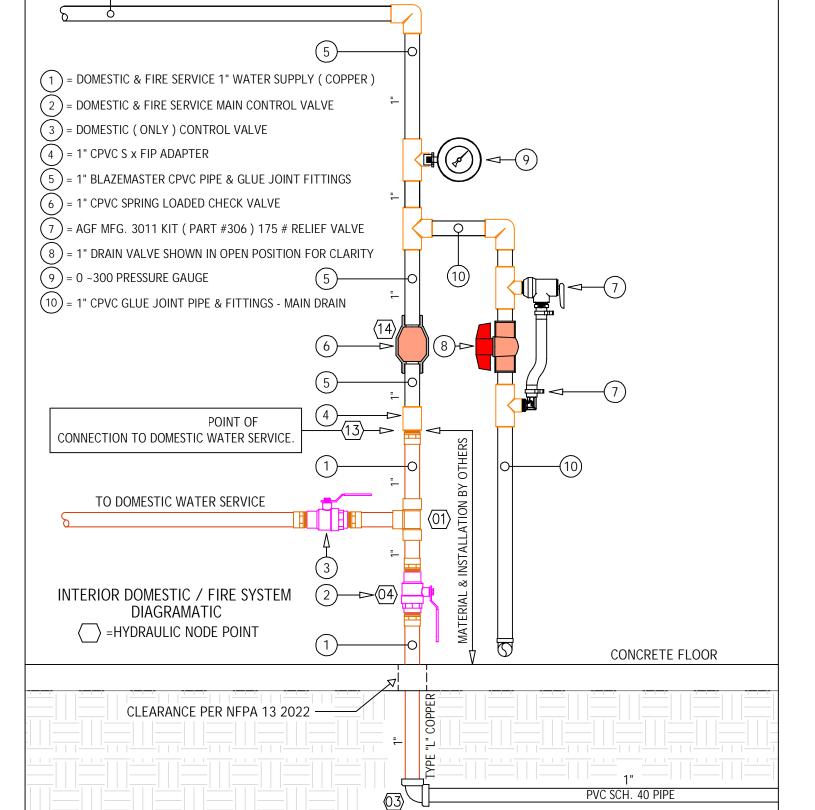
CEILING. ALL MATERIALS USED WILL BE U.L. LISTED FOR AUTOMATIC FIRE SPRINKLER RESIDENTIAL SYSTEMS AND INSTALLED PER MFG. & LOCAL FIRE DEPT. REQUIREMENTS. SPACING AND PIPING SUPPORTS. SEE MFG. DESIGN REQUIREMENT CHART ON DRWG. 3 OF 3 FOR FINISHED CEILING HEAD PERFORMANCE & SPACING REQUIREMENTS.

SEE MAX DISTANCE SUPPORT CHART ON DRWG. 2 OF 3 FOR CPVC PIPING. NOTE: EACH PIPING SECTION THAT SUPPLIES A DROP TO A FINISHED CEILING SPRINKLER HEAD, SHALL BE SECURED NO MORE THAN 12" FROM THE DROP TO PREVENT BOTH VERTICAL AND LATERAL MOVEMENT. . PIPE LENGTHS SHOWN ON THIS DRAWING WILL BE CENTER TO CENTER FOR

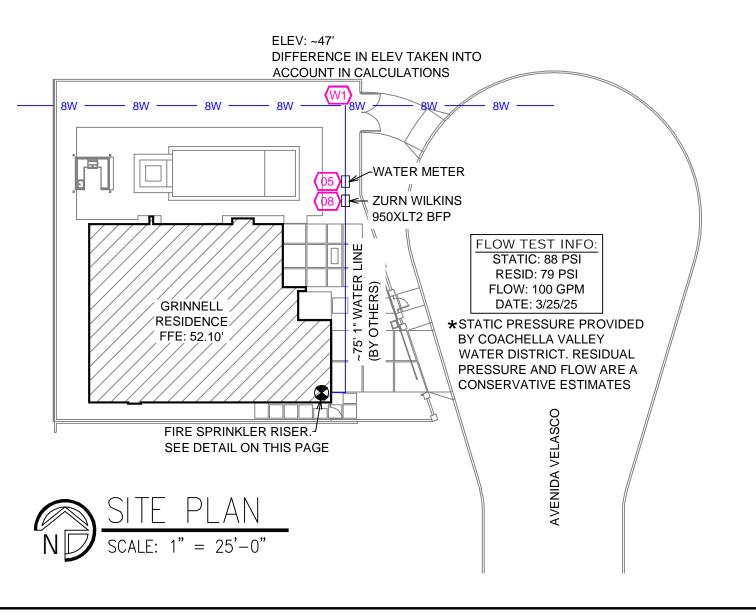
HYDRAULIC CALCULATION AND PLAN REVIEW PURPOSES ONLY. THE OWNER SHALL FURNISH SUFFICIENT HEAT OR FREEZE PROTECTION IN ALL AREAS WHERE FIRE SPRINKLER PIPE AND FITTINGS HAVE BEEN INSTALLED FOR THIS

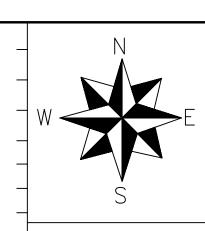
PROJECT. THIS INCLUDES CONCEALED SPACES SUCH AS WALLS & ATTIC AREAS. THERE SHALL BE NO PRESSURE REDUCING DEVICES INSTALLED THAT WOULD AFFECT THE WATER PRESSURE FROM THE CITY WATER SUPPLY TO THE FIRE

SPRINKLER SYSTEM.



1" CPVC TO FIRE SPRINKLER SYSTEM





PROJECT:

