

Plumbing Specifications

GENERAL PROVISIONS

- GENERAL CONDITIONS**
The general conditions, special conditions, supplementary conditions, mechanical specifications, and "General Conditions of the contract". Current edition, established in standard form by the American Institute of Architects shall apply to all work on this project except as modified below. This Contractor shall familiarize himself with these provisions and adhere to these requirements. Contractor shall coordinate and adhere to these requirements. Contractor shall coordinate his work with other trades prior to installation. This contractor shall visit the field and fully inform himself of existing conditions and limitations affecting his work. All dimensions are to be verified in the field.
- RELATED DOCUMENTS**
This contractor shall refer to the Architectural and Mechanical Plans and Specifications. Such plans and specifications are a part of the contract documents. Contractors shall visit the site and familiarize themselves with all conditions surrounding the work. If any of the conditions require a modification of the systems indicated by these plans and specifications the Contractor shall advise the engineer of the required modifications and, if approved by the Engineer, include the cost of such modifications in his bid.
- MODIFICATIONS TO PLANS AND SPECIFICATIONS**
Throughout the course of the work, minor changes and adjustments to plans and specifications may be requested by the owner. The Contractor shall make such adjustments without additional cost to the Owner, where such adjustments are necessary for the proper installation and operation and within the intent of the contract documents. It is the intent of the plans and specifications to form a guide for a complete installation. Everything necessary for the completion and successful operation of the work, whether or not herein definitely specified or indicated on the drawings, shall be furnished and installed as if so specified or indicated without additional cost to the Owner. The Contractor shall verify all dimensions and lengths prior to installation. Plumbing Contractor shall provide (3) sets of AS-BUILT drawings for all work performed under their scope to the Architect prior to their final payment.
- CODE COMPLIANCE**
All work is to be done in accordance with plumbing code and all other codes (State and Local) which have authority over this project.
- PERMITS, FEES, LICENSES**
This Contractor shall pay all fees and related charges for permits, licenses, etc. required for installation of the plumbing systems.
- SHOP DRAWINGS**
This Contractor shall provide the Architect with a minimum of three (3) certified copies of all shop and equipment drawings for his approval. Two of which shall be retained by the Architect, and the remaining being returned to the Contractor. Drawings shall be submitted before start of construction. Failure to comply with this paragraph will result in withholding of payment.
- WARRANTY**
The Contractor shall provide a written warranty that the entire installation is free from defects in materials and workmanship for a period of one year.
- BASIC MATERIAL AND METHODS**
All workmanship and materials shall be of the highest quality in every respect. All materials and equipment shall be new, of the latest design and free of defects.
- WATER PIPING**
All above ground water supply pipe shall be type L hard temper copper water pipe complying with ASTM B-88. All fittings shall be wrought copper complying with USASI B16.18 and B16.18A Dielectric couplings shall be used between steel and copper connections. All below ground water supply pipe shall be Type "K" soft temper copper water tube with 1" armaflex insulation.
- SOIL, WASTE AND VENT PIPING**
All above ground sanitary soil, waste and vent piping shall be PVC pipe sanitary system. All below ground storm & sanitary soil and waste piping shall be PVC schedule 40 sanitary system. All soil lines pitch 1/4" per foot. Sewer pipe depth shall be min. 36". Underground building drain minimum 4".
- GAS SERVICE**
The Contractor shall arrange for the gas service from the gas utility company and shall pay all charges thereby incurred. Metering and Shut-Off
The gas meter setting shall be outside as indicated on the drawings. Gas metering pressure will be 2 PSIG. This heating contractor shall provide a gas tight sleeve at entrance to building, and main gas shut-off valve immediately inside of building entrance. Gas piping to be tested as required by the Village requirements and codes.
Pressure regulation
Provide a gas pressure regulator at all gas fired equipment as required to reduce from metering pressure to required inlet pressure of equipment. Regulator valves must be vented to the outside.
Natural Gas Piping - See Layout on Sheet M-1
Natural gas piping shall be schedule 40 seamless black steel with malleable iron threaded fittings for 1/2" to 2" steel welded fittings for 2-1/2" and larger.

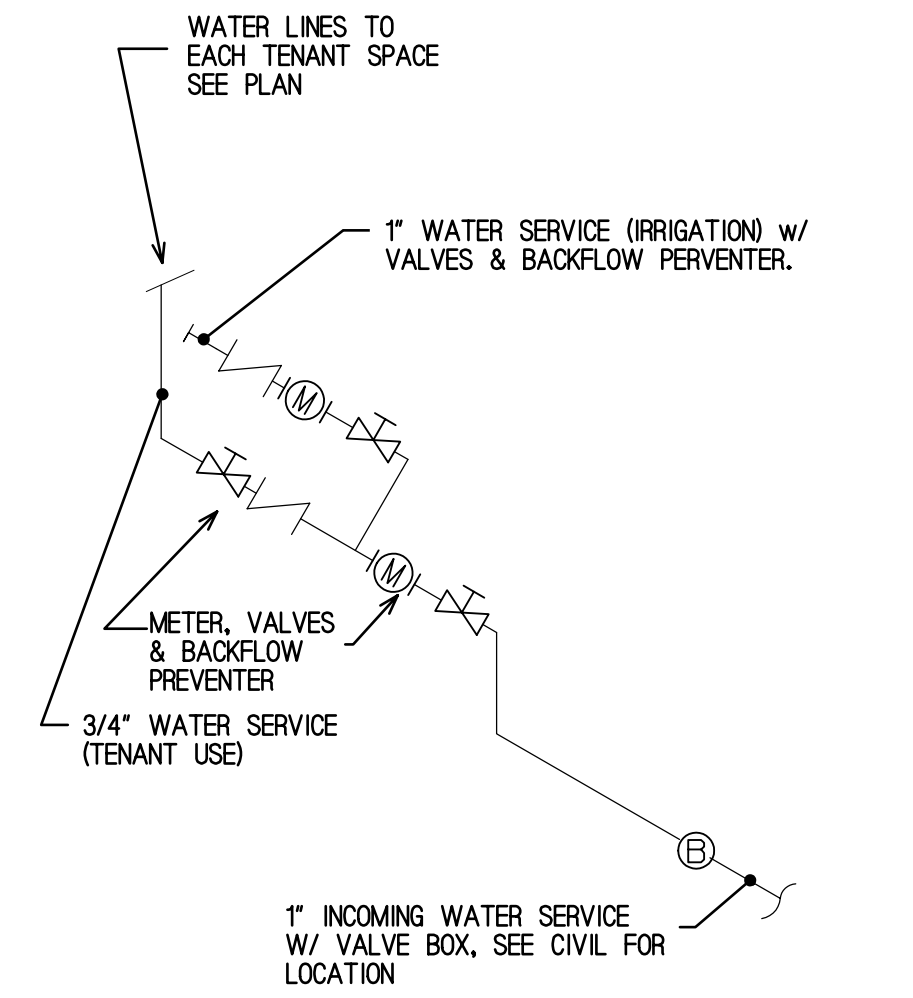
- VALVES**
The Contractor shall furnish and install valves where indicated on plan and necessary for proper system operation and component isolation. Provide valves rated for 125 PSI or greater working pressure in water piping.
Check valve up to 3" - Crane No. 37 or equal
Globe valve up to 3" - Crane No. 1240, 1241 or equal
Gate valve up to 3" - Crane No. 428, 1334 or equal
Ball valve up to 3" - Apollo 70-100, 70-200 or equal
Temp and press. relief valve - Watts 10L Mod. M4 or equal
Shock stop - Wade No. 10 (Hot), Wade No. 5 (Cold)
Back flow preventer - Watts No. 009 QT or equal
Vacuum relief valve - Watts No. 38A-3/4" or equal
Pressure reducing valve - Watts No. U5
- PIPE HANGERS AND SUPPORTS**
Support horizontal piping adequately from slabs or other structural member at intervals specified below. Use Grinnel #65 hangers, or approved equal, having adjustable wrought clevis, solid rods and sockets. Piping installed along walls shall be supported by Grinnel #69, or approved equal. Steel angle brackets, the spacing of pipe supports for steel pipe up to 2" shall be 6'-0". Hanger rods shall be 3/8" diameter for pipes up to 2" in size. Provide 18 gauge galvanized steel pipe support shields.
- PIPE SLEEVES AND OPENINGS**
The mechanical Contractor shall cut all openings in floors and walls required for penetration of piping. General Contractor shall perform all patching required by Architectural specifications. All horizontal piping which penetrates walls shall be fitted with pipe sleeves made up of standard steel pipe 1" greater in diameter the outside diameter of pipe and pipe insulation. The void between the pipe and sleeves shall be sealed with rope and filled with expando (non shrinking) cement. Sleeves shall be of such length that they end flush with wall finish on both sides of wall where uncovered exposed pipes pass thru walls. They shall be fitted with Crane #10, or equal wall plates.
- FINISHES**
All exterior exposed utility meters, gas valves, etc., are to be painted in a color which blends with the architecture and color scheme of the proposed building.
- IRRIGATION SYSTEM (ALTERNATE)**
Furnish and install irrigation system. Provide irrigation controller, electrical for controller, valves, rain sensor, piping, etc., for a full operating irrigation system. All below ground irrigation water piping shall pvc schedule 40 water pipe. Irrigation equipment manufactured by Hunter Industries or equal. Irrigation system to be designed and installed by a irrigation contractor. Contractor to provide irrigation plans for permit. System to be installed per manufactures recommendations and specifications.

GENERAL PLUMBING NOTES

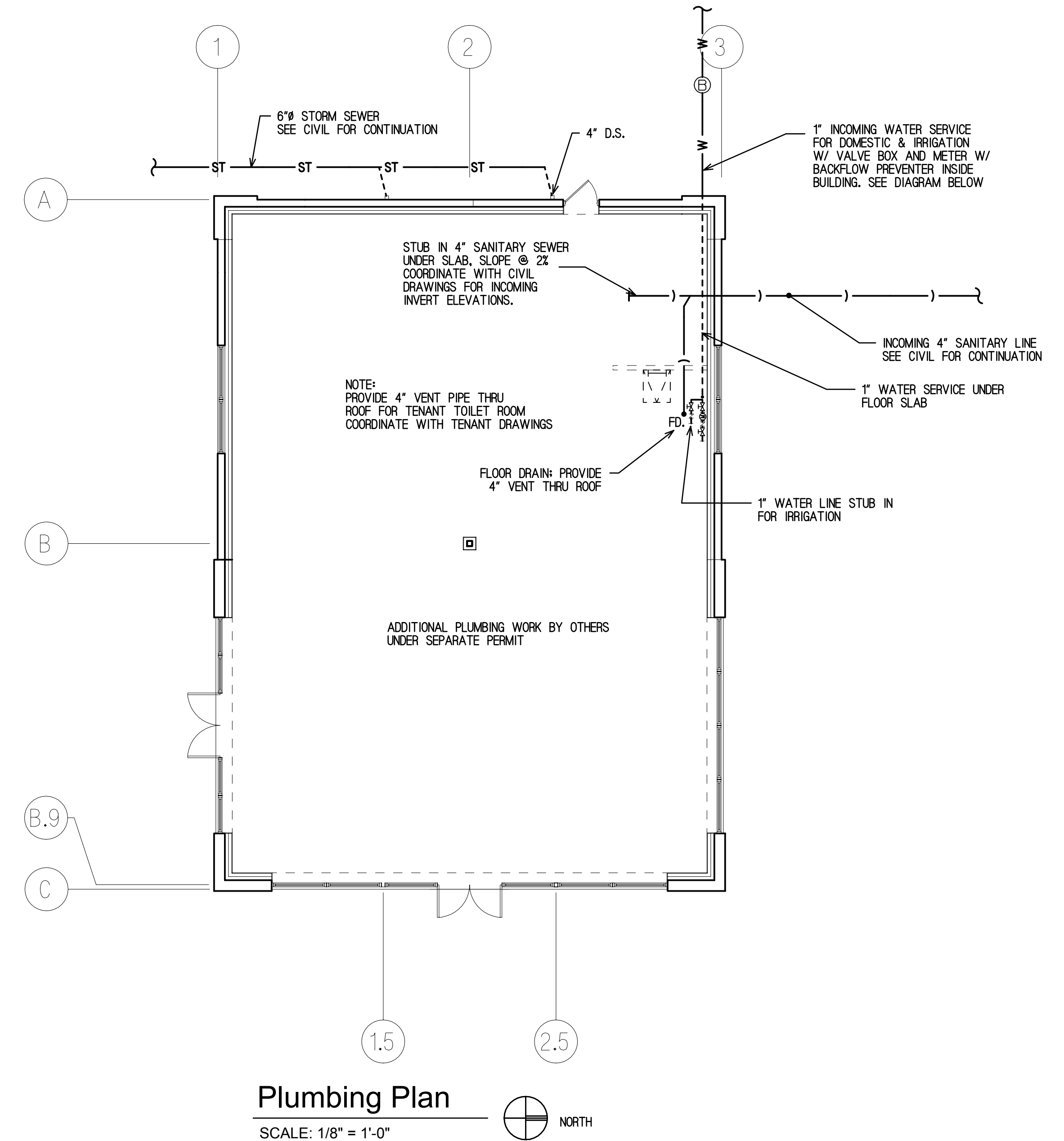
- ALL PLUMBING TO BE INSTALLED IN ACCORDANCE WITH 2004 ILLINOIS PLUMBING CODE & 2006 INTERNATIONAL PLUMBING CODE.
- PROVIDE C.O.'s IN 4" SANITARY AT 50'-0" O.C.
- CAP & VENT FUTURE WASTE PIPE PER PLUMBING CODE.
- PROVIDE STACK TEST WITH AIR OR WATER REQUIRED ON ALL ROUGH & UNDERGROUND PLUMBING.
- PROVIDE 25lb. AIR TEST REQUIRED ON GAS PIPING AT TIME OF ROUGH INSPECTION.
- PROVIDE 75lb. AIR TEST OR WATER PRESSURE REQUIRED ON WATER PIPING AT TIME OF ROUGH INSPECTION.
- WATER SERVICE FROM MAIN TO BUILDING TO BE INSTALLED BY A LICENSED PLUMBER.
- BEDDING FOR BUILDING SEWER TO BE CA-6.
- CURB STOPS TO BE MUELLER H-515H OR EQUAL.
- CURB STOP EXTENSIONS SHALL BE MUELLER H10300 OR EQUAL.
- CORPORATION STOPS SHALL BE MUELLER (cc) TREAD TYPE INLET H-1500 OR EQUAL.
- NO SWEAT JOINTS OR GALVANIZED PIPE, FITTINGS OR NIPPLES BEFORE WATER METERS.
- THE UNDERGROUND WATER MAIN TO THE BUILDING MUST BE FLUSHED AND WITNESSED BY THE FIRE DEPARTMENT.
- ALL LAVATORIES TO BE INSTALLED PER SECTION 890.6809(a) OF THE ILLINOIS STATE PLUMBING CODE.
- FIRE SUPPRESSION RPZ SHALL BE INSTALLED BY A STATE OF ILLINOIS LICENSED PLUMBER PER SECTION 2 OF THE ILLINOIS PLUMBING LICENSE LAW. RPZ'S SHALL ALSO BE INSTALLED AT THE CORRECT HEIGHT TO ACCOMMODATE THE PROPER AIR GAP FITTING AND DRAIN PIPING.
- PLUMBING CONTRACTOR TO INSTALL A MANUAL MIXING VALVE AT ALL LAVATORIES AND SET MAX DISCHARGE TEMPERATURE NOT TO EXCEED 110° F. FROM REACHING THE PLUMBING FIXTURES. MIXING VALVE TO CONFORM TO ASSE 1070.
- BRANCH PIPING TO BE MAX LENGTH PER ILLINOIS PLUMBING CODE.

Fixture Count - Anticipated

SPACE	WC.		LAV.		DF. (ADA)	MS.	OTHER
	M.	F.	M.	F.			
TENANT	1	1	1	1	1	1	
TOTAL FIXTURE UNITS BASED ON ANTICIPATED FIXTURE COUNTS IS 17.5 UNITS.							



Water Service Riser Diagram



Plumbing Plan

SCALE: 1/8" = 1'-0"

Plumbing Fixture Schedule

MARK	FITTURE	CONNECTION			MANUFAC. & MODEL	DESCRIPTION
		W	CW	HW		
FD	FLOOR DRAIN	4"	-	-	ZURN #FD-2212-ST	HEAVY DUTY ADJUSTABLE DRAIN WITH 5.3" NICKEL STRAINER w/ ROUND TOP
FCO	FLOOR CLEANOUT	4"	-	-	PLASTIC ODDITIES PCO-700R	ADJUSTABLE CLEANOUT ASSEMBLY WITH BRONZE COVER AND METAL RING

DATE
OCTOBER 7, 2014

REVISIONS
JANUARY 6, 2015 ISSUED FOR BID/CONSTRUCTION

PROPOSED DEVELOPMENT FOR:
BOLINGBROOK SEMU, LLC.
LOCATION
123 N. WEBER ROAD
BOLINGBROOK, ILLINOIS

Reitan Architects, LLC.
1325 Wiley Road - Suite 166 - Schaumburg, Illinois 60173
PH. 847-519-1227 - FAX 847-519-0347
Assumed Name No. 184-004083

THIS IS TO CERTIFY THAT THESE PLANS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF THEY COMPLY WITH ALL CITY AND VILLAGE ORDINANCES OF BOLINGBROOK, ILLINOIS.

SHEET NAME
PLUMBING
PLAN

SHEET
P1
OF 1

PROJECT NO.
1414