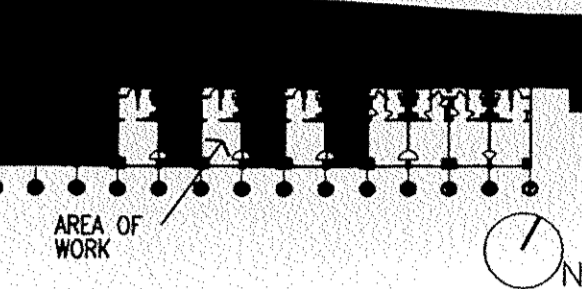




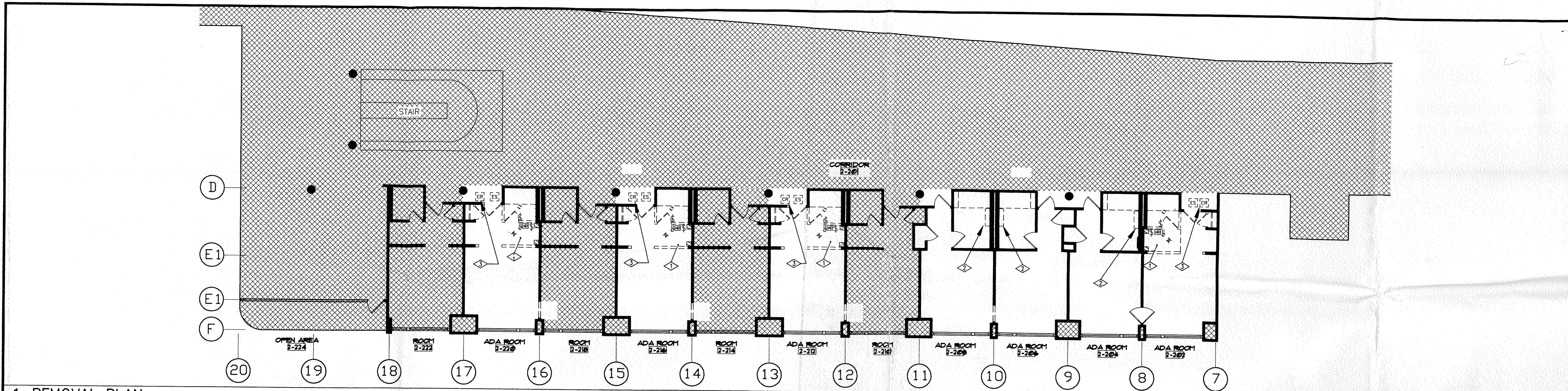
2ND FLOOR GUEST ROOMS RENOVATIONS
 PALISADES CONFERENCE CENTER
 ROUTE 9W
 PALISADES, N.Y. 10964

Key Plan



No.	Date	Issue	By
10/03/02		ISSUED TO SKANSKA	

No.	Date	Revisions	By
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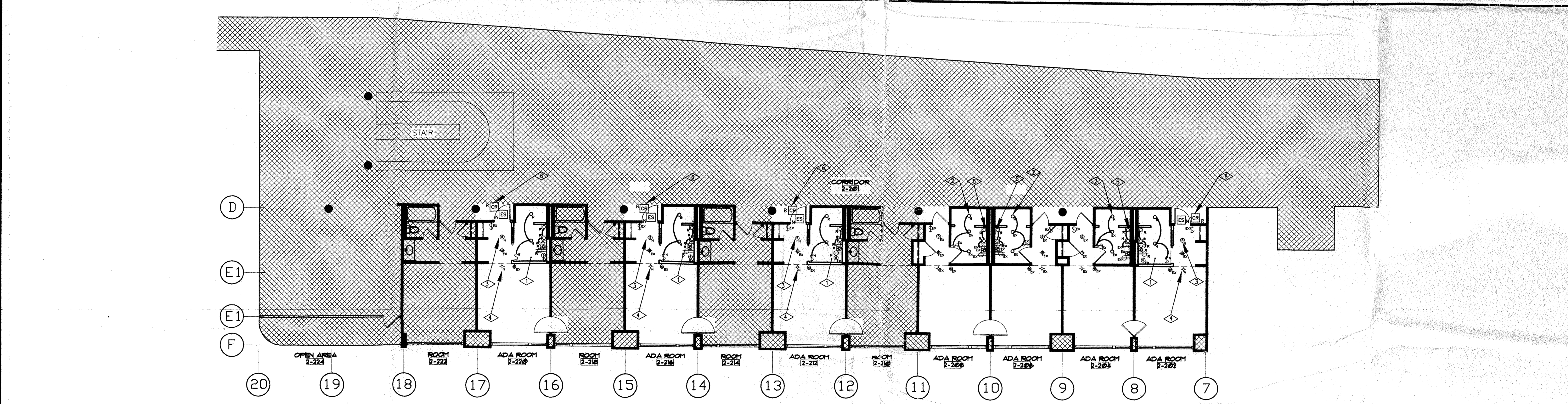
1 REMOVAL PLAN

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

- Legend**
- ◇ INDICATES REFERENCE NOTE
 - SURFACE MOUNTED LIGHT FIXTURE TO BE REMOVED FOR POSSIBLE RELOCATION
 - ⊕ RECESSED DOWNLIGHT TO BE REMOVED FOR POSSIBLE RELOCATION
 - HD HAIR DRYER TO BE REMOVED FOR RELOCATION
 - WALL MOUNTED LIGHTING FIXTURE TO BE REMOVED FOR RELOCATION (MOUNTED VERTICAL)
 - ⊕ DUPLEX RECEPTACLE TO BE REMOVED FOR POSSIBLE RELOCATION
 - ⊕ LIGHTING SWITCH TO BE REMOVED FOR POSSIBLE RELOCATION

- WALL MOUNTED LIGHTING FIXTURE TO BE REMOVED FOR RELOCATION (MOUNTED HORIZONTAL)
- CR CARD READER TO BE REMOVED FOR RELOCATION
- ES ELECTRIC STRIKE TO BE REMOVED

- Reference Notes**
- ◇ DISCONNECT & REMOVE EXISTING LIGHTING FIXTURES, SWITCHES, RECEPTACLES, & HAIR DRYER. EXISTING WIRING TO BE RE-USED - SEE ELECTRICAL CONSTRUCTION PLAN.
 - ◇ DISCONNECT & REMOVE EXISTING WALL-MOUNTED LIGHTING FIXTURE. EXISTING WIRING TO BE RE-USED - SEE ELECTRICAL CONSTRUCTION PLAN.
 - ◇ DISCONNECT & REMOVE EXISTING CARD READER. SAVE FOR RE-USE - SEE ELECTRICAL CONSTRUCTION PLAN. ELECTRIC STRIKE TO BE REMOVED.



2 CONSTRUCTION PLAN

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

- Legend**
- ◇ INDICATES REFERENCE NOTE
 - SURFACE MOUNTED LIGHT FIXTURE
 - ⊕ RECESSED DOWNLIGHT
 - HD HAIR DRYER
 - ⊕ DUPLEX RECEPTACLE
 - ⊕ LIGHTING SWITCH
 - ⊕ PA SPEAKER

- WALL MOUNTED LIGHTING FIXTURE (MOUNTED VERTICAL)
 - CR CARD READER
 - ES ELECTRIC STRIKE
 - SD SMOKE DETECTOR
 - ⊕ WALL MOUNTED FIRE STROBE
- Notes**
- ALL ELECTRICAL WORK SHALL COMPLY WITH NATIONAL ELECTRICAL CODE AND IBM PALISADES SITE STANDARDS.
 - TRACE & IDENTIFY EXISTING WIRING & BRANCH CIRCUITS IN RENOVATED ROOMS. PROVIDE NEW JUNCTION & OUTLET BOXES AND EXTEND EXISTING WIRING AS REQUIRED. ALL JUNCTION BOXES SHALL BE LEFT ACCESSIBLE.
 - ALL CONDUCTORS SHALL BE COPPER. BRANCH CIRCUIT WIRING CONCEALED ABOVE CEILING & WITHIN PARTITIONS SHALL BE TYPE AC ARMORED CABLE (BX), MINIMUM #12 AWG.
 - FA & PA WIRING SHALL MATCH EXISTING, AS RECOMMENDED BY THE SYSTEM VENDORS.
 - NEW RECEPTACLES SHALL BE NEMA 5-20R DUPLEX, GFCI TYPE, WITH MATCHING WALLPLATE.
 - NEW SWITCHES SHALL BE SINGLE-POLE, 20A, 120 VAC TO MATCH EXISTING.
 - REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS OF ALL LIGHTING FIXTURES & DEVICES.
 - REFER TO ARCHITECTURAL DRAWING A3.02 FOR LIGHTING FIXTURE SPECIFICATIONS

- Reference Notes**
- ◇ INSTALL NEW & RE-USED LIGHTING FIXTURES, SWITCHES, RECEPTACLES & HAIR DRYER WHERE SHOWN. CONNECT TO EXISTING BRANCH CIRCUIT WIRING (EXTEND & RE-ROUTE TO SUIT).
 - ◇ INSTALL NEW LIGHTING FIXTURE WHERE SHOWN. CONNECT TO ADJACENT EXISTING CIRCUIT.
 - ◇ FURNISH & INSTALL NEW PA SPEAKER TO MATCH EXISTING. CONNECT TO EXISTING SPEAKER CIRCUIT IN ROOM.
 - ◇ FURNISH & INSTALL NEW FA STROBE TO MATCH EXISTING. CONNECT TO NEAREST EXISTING STROBE CIRCUIT - VERIFY CIRCUIT LOCATION & CAPACITY. PROVIDE NEW STROBE POWER SUPPLY AS NECESSARY.
 - ◇ INSTALL NEW WALL-MOUNTED LIGHTING FIXTURE. CONNECT TO EXISTING WIRING.
 - ◇ INSTALL EXISTING CARD READER AT NEW LOCATION. CONNECT TO EXISTING WIRING & NEW ELECTRIC STRIKE.

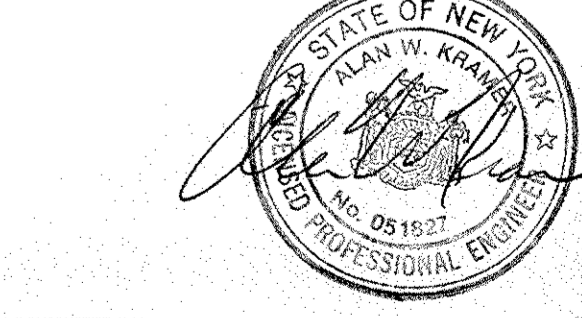
Consultant
ALAN W. KRAMER, P.E.
 CONSULTING ENGINEER
 1492 HIGH RENCE ROAD
 STAMFORD, CT 06903
 TEL 203 968-9797 FAX 203 968-9880

THE SWITZER GROUP, INC.
 555 Fifth Avenue, New York, N.Y. 10017 Tel 212-922-1213 Fax 212-922-9825

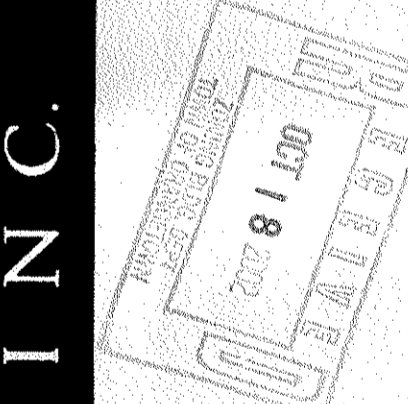
The above designs, plan and specifications are the property of The Switzer Group, Inc. Contractor is responsible for checking all dimensions and conditions at job site, as well as building rules and regulations including building elevators. Contractors and all other clearances should be checked with The Switzer Group, Inc. prior to fabrication of solid work. Contractor is responsible for correcting same at his own expense. Use of these designs for any other purpose is unauthorized.

Drawing Title
 ELECTRICAL PLANS & NOTES

Date	10/03/02	Job No.	102159
Scale	AS NOTED	Drawn By	HW
Proj. Mgr.		Checked By	MK
Seal		Seal	

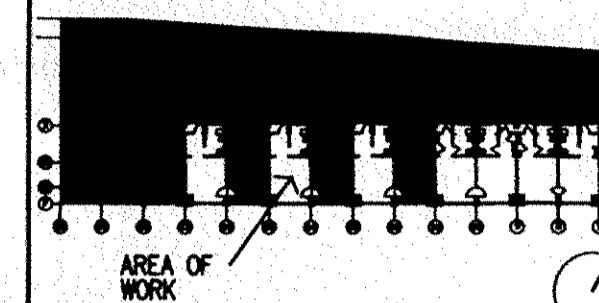


Floor No. 2ND
 Dup. No. E-1



THE SWITZER GROUP, INC.

Key Plan



No.	Date	Issue	By
10/31/02		ISSUED TO SKANSKA	

No.	Date	Revisions	By
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Consultant

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Drawing Title

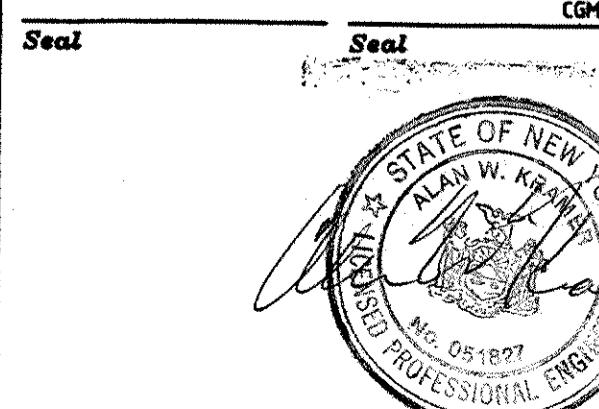
MECHANICAL FLOOR & PART PLANS

Date 05/20/02 Job No. 102519

Scale AS NOTED Drawn By SFD

Prof. Mgr. Checked By CDM

Seal



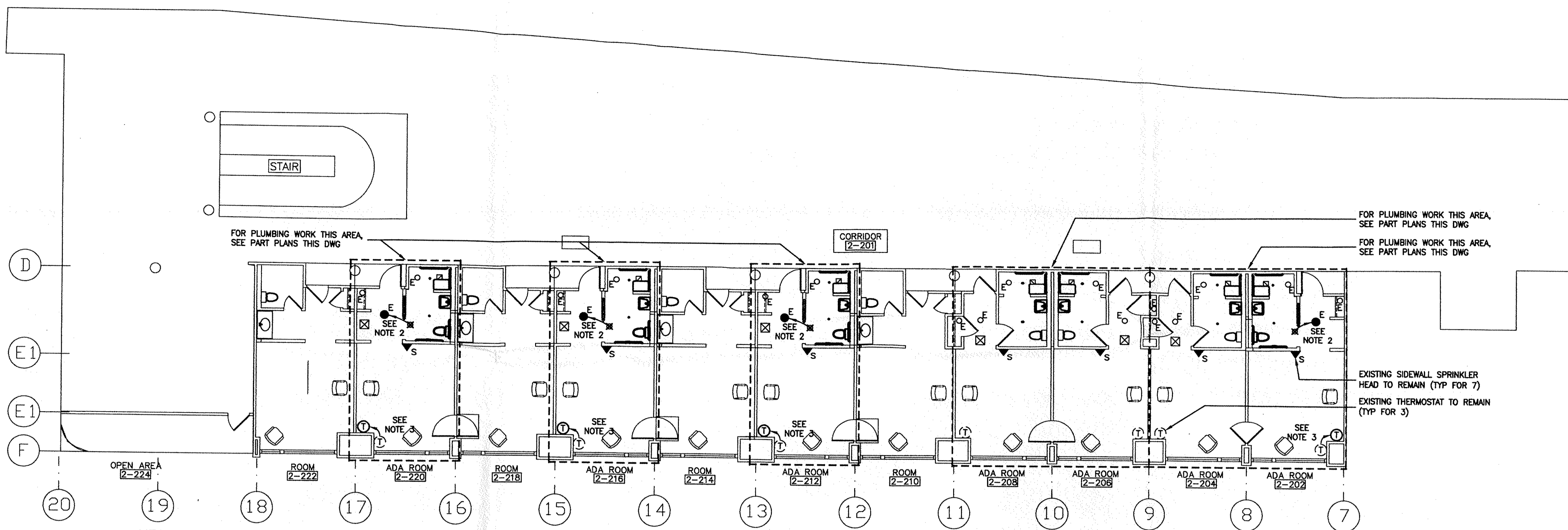
Floor No. 2ND Dwg No. M-1

PLUMBING FIXTURE SCHEDULE

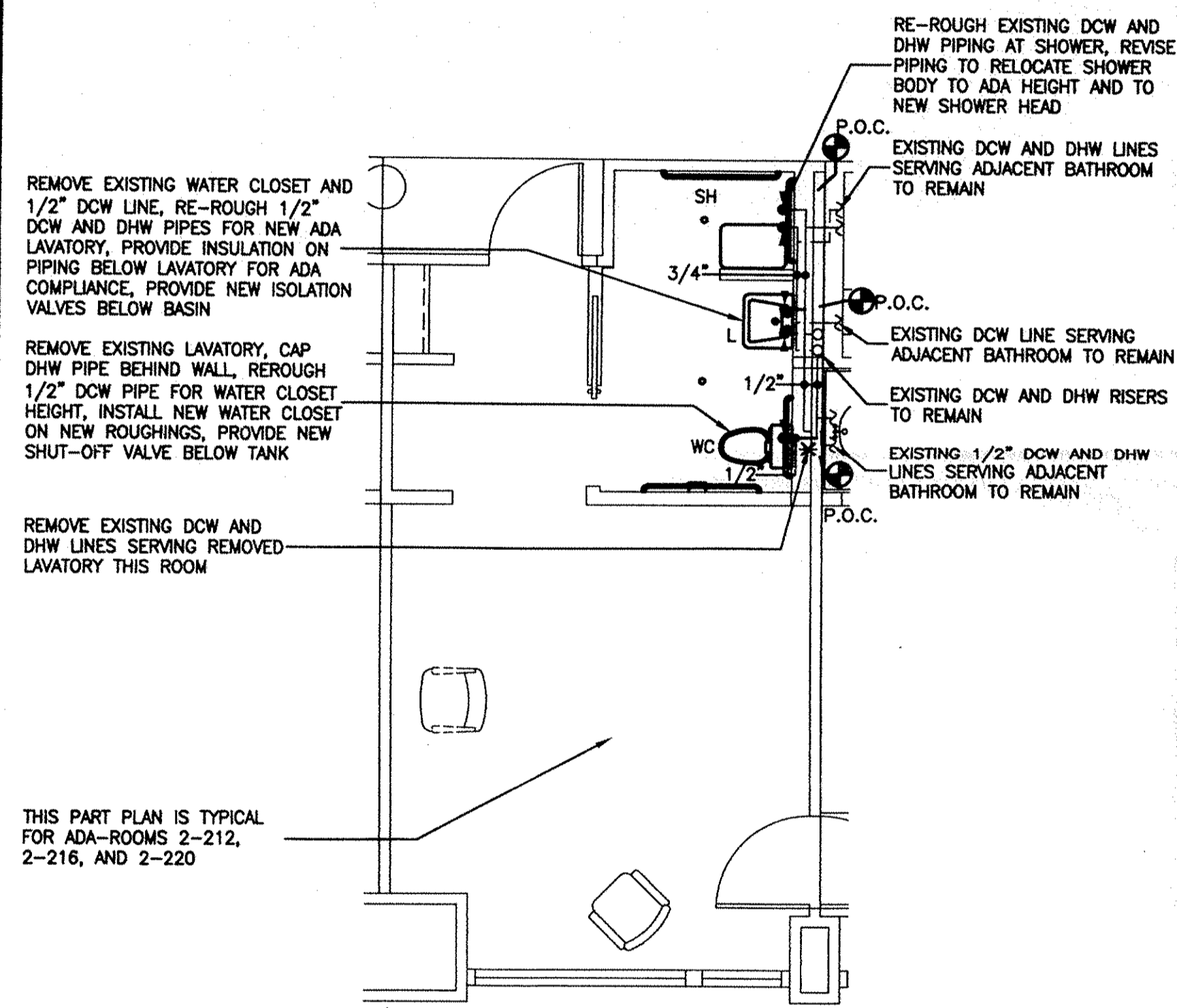
UNIT NO.	FIXTURE	WASTE	VENT	CW	HW	DESCRIPTION
L	LAVATORY	1-1/2"	2"	1/2"	1/2"	KHOLER JAMESTOWN LAVATORY MODEL # K-2053 WITH SPEAKMAN COMMANDER 8 FAUCET MODEL # S-3034-D75
WC	WATER CLOSET	4"	1-1/2"	1/2"	-	ELJER WINDSOR WATER SAVER TOILET MODEL # 081-1575; WHITE VITREOUS CHINA WITH CHROME PLATED TANK FLUSH LEVER
SH	SHOWER	1-1/2"	1-1/2"	1/2"	1/2"	SHAMONS TEMPTROL CHROME PLATED CAST BRASS SHOWER VALVE MODEL # S-86-1XL. FOR ADDITIONAL SHOWER ACCESSORIES SEE ARCHITECTURAL PLANS
FD	FLOOR DRAIN	2"	2"	-	-	JOSAM FLOOR DRAIN BODY WITH 5" SUPER-FLO STRAINER TYPE # 30002-5A

GENERAL NOTES

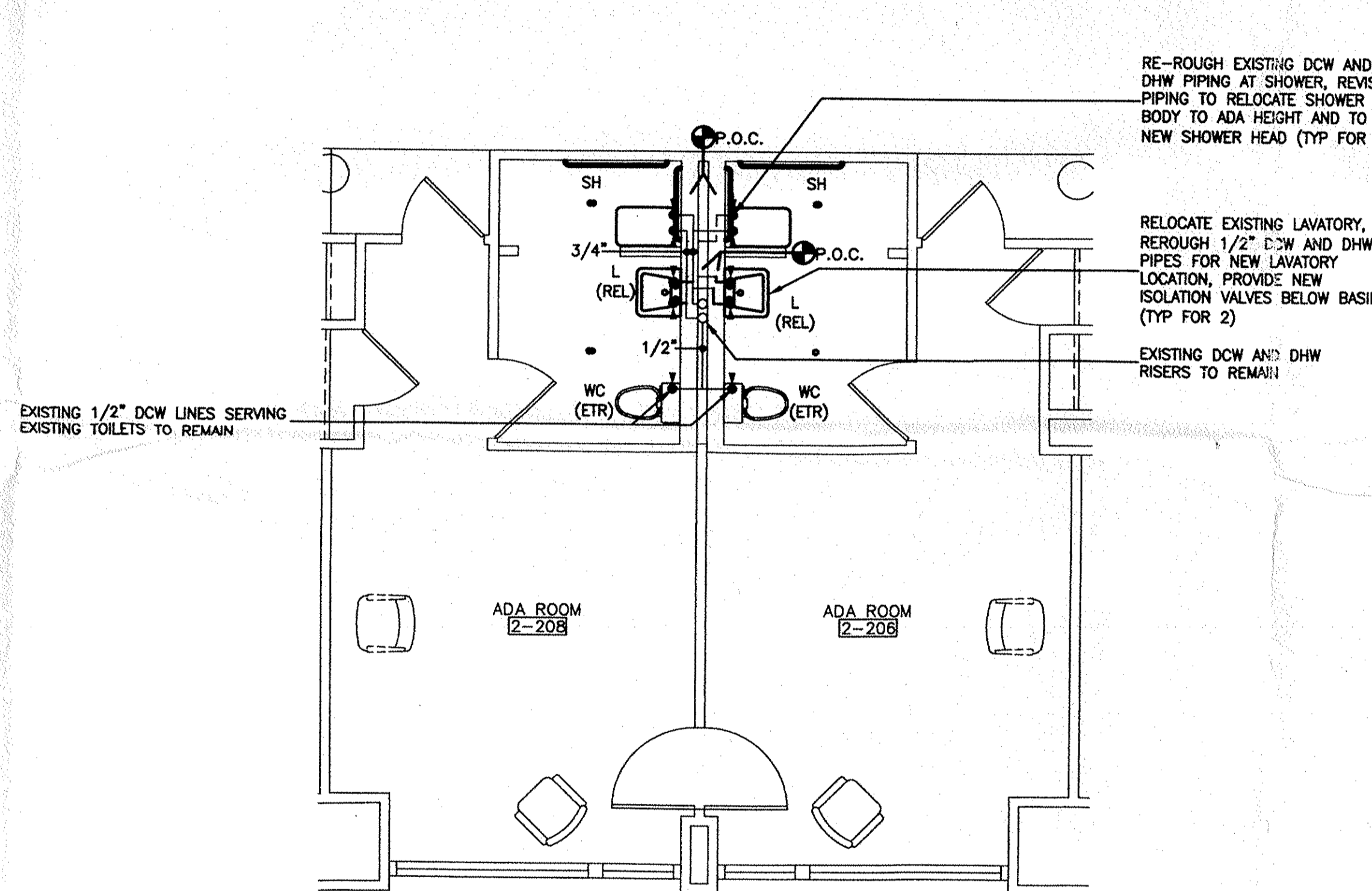
- ALL WORK SHOWN ON THIS DRAWING SHALL CONFORM WITH THE REQUIREMENTS OF THE NEW YORK STATE BUILDING CODE, IBM PALISADES SITE STANDARDS AND ALL OTHER CODES HAVING JURISDICTION.
- RELOCATE EXISTING SPRINKLER HEAD TO NEW LOCATION SHOWN; EXTEND EXISTING SPRINKLER PIPE AS REQUIRED.
- RELOCATE EXISTING THERMOSTAT FROM UNIT FACE TO WALL MOUNTING AT LOCATION SHOWN; INSTALL NEW THERMOSTAT AND UNIT CONTROLLER AT 42" ABOVE FINISHED FLOOR.



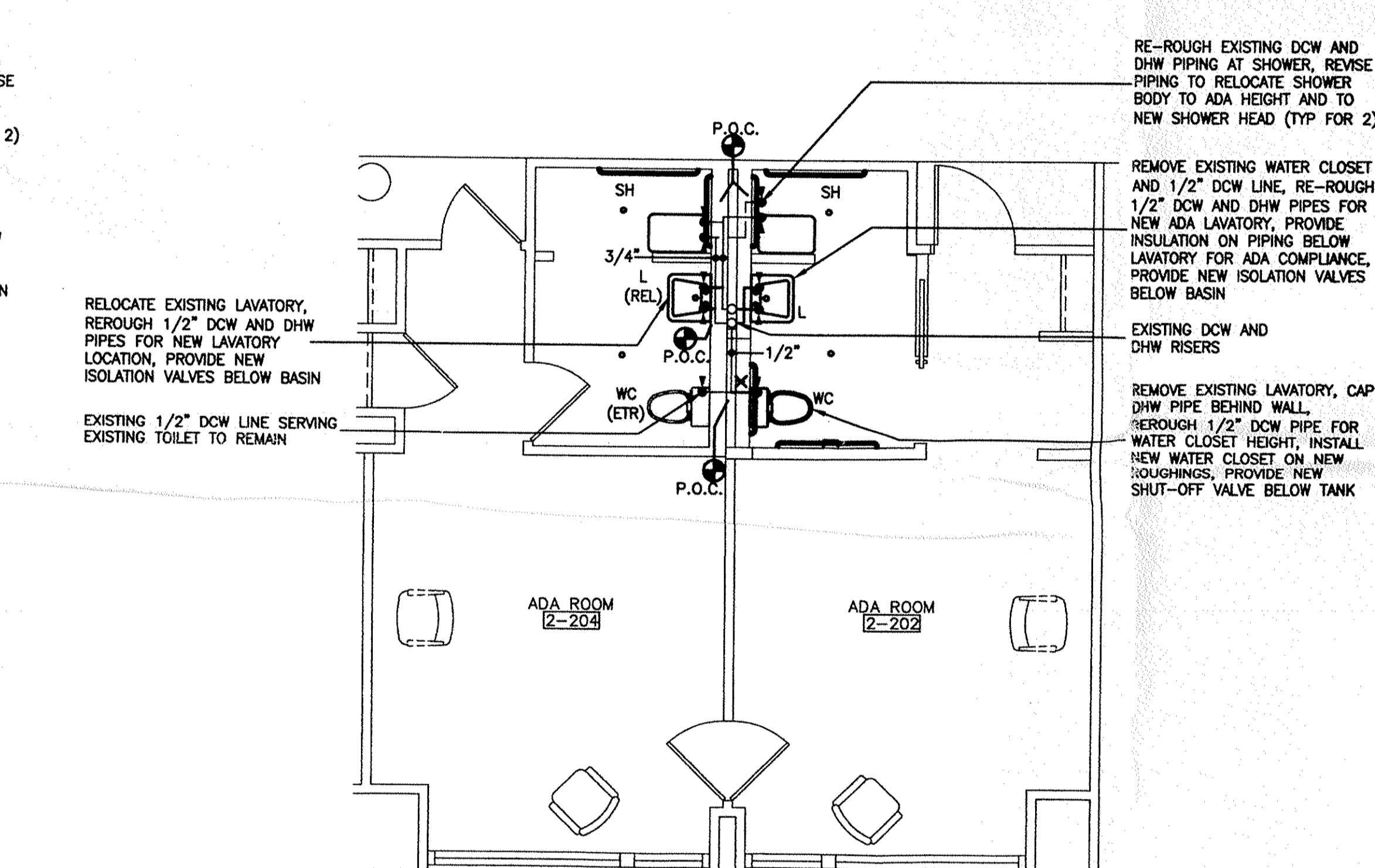
1 MECHANICAL FLOOR PLAN
SCALE: 1/8"=1'-0"



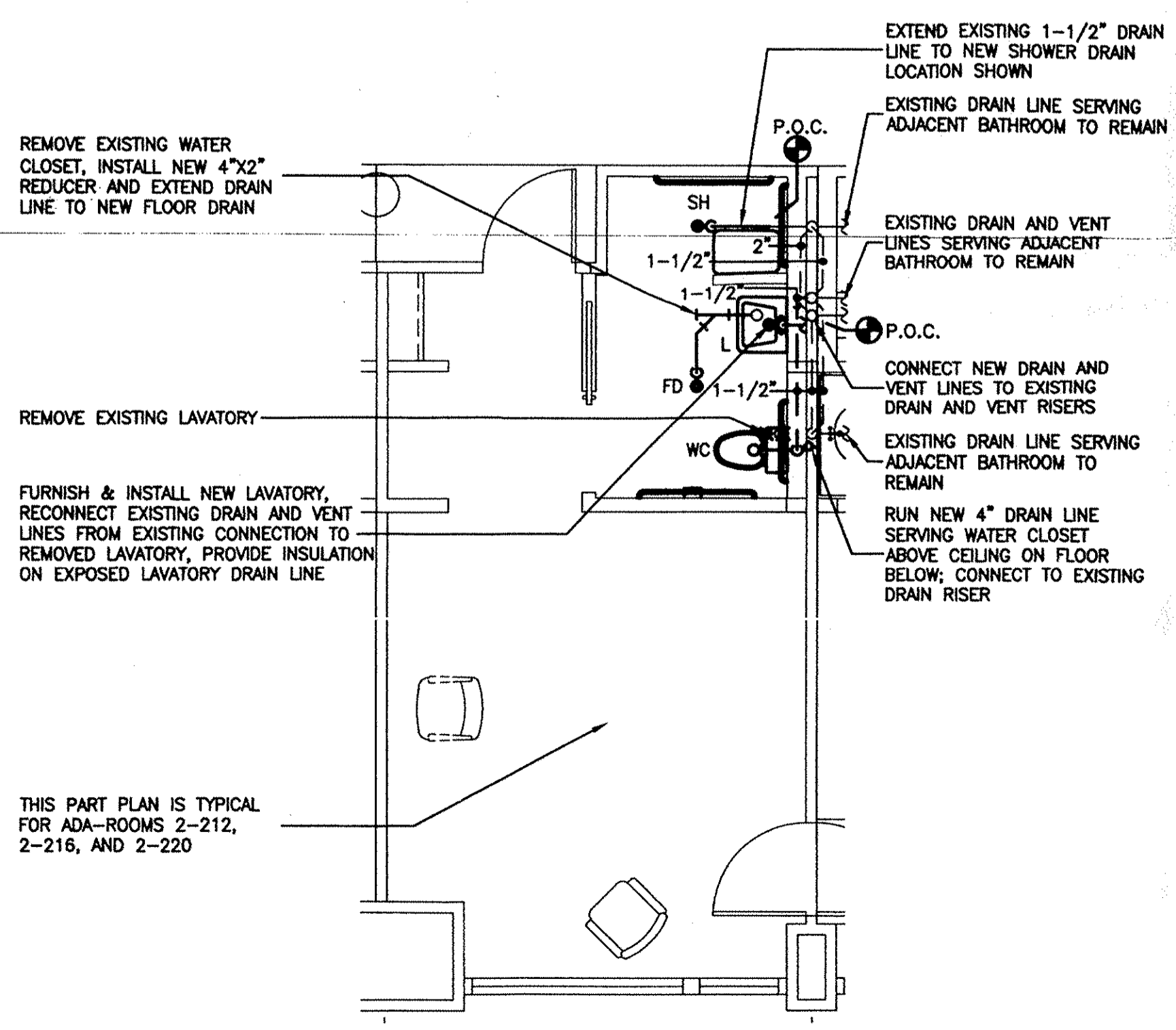
2 DOMESTIC WATER PART PLAN
SCALE: 1/4"=1'-0"



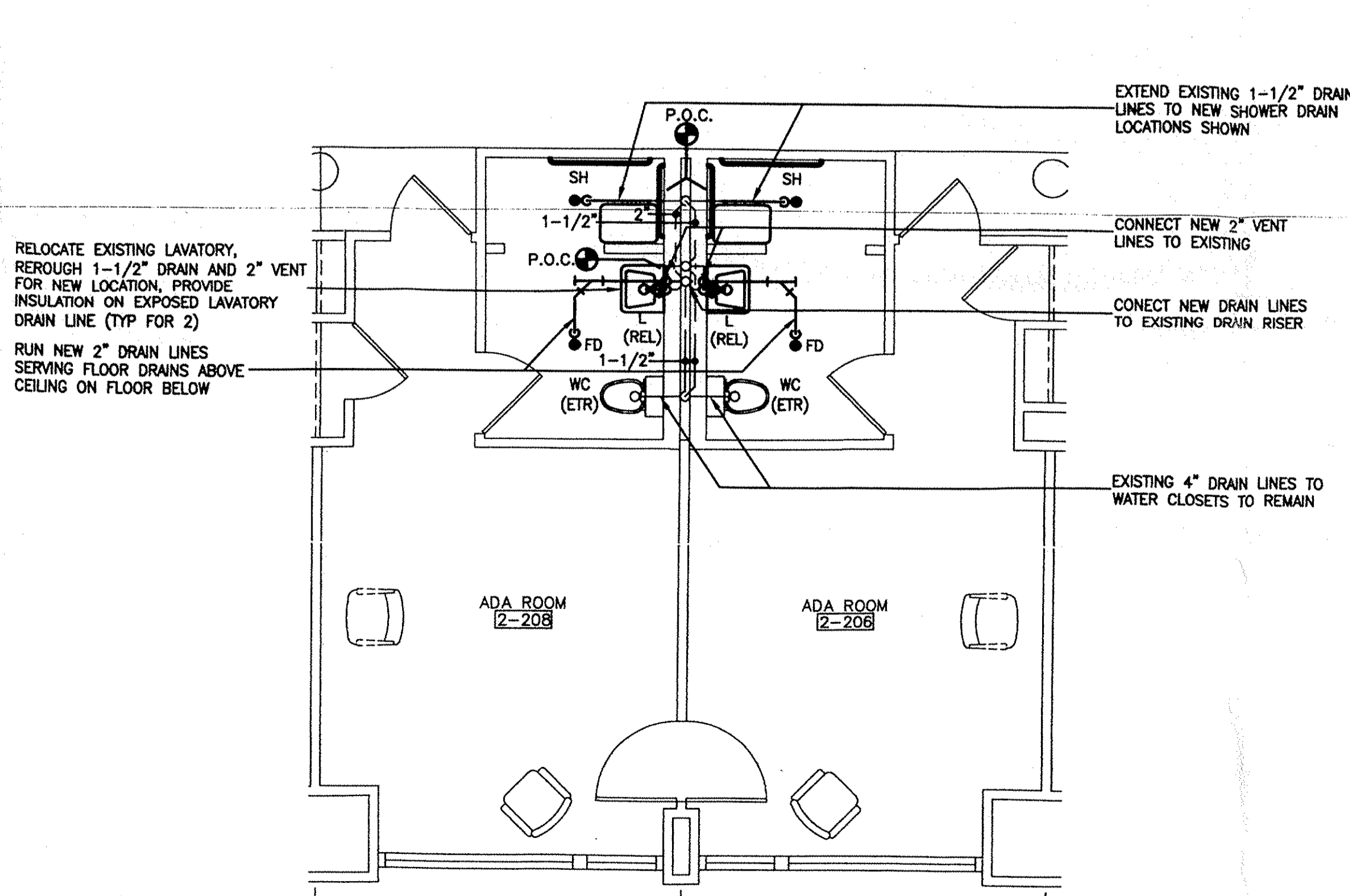
4 DOMESTIC WATER PART PLAN
SCALE: 1/4"=1'-0"



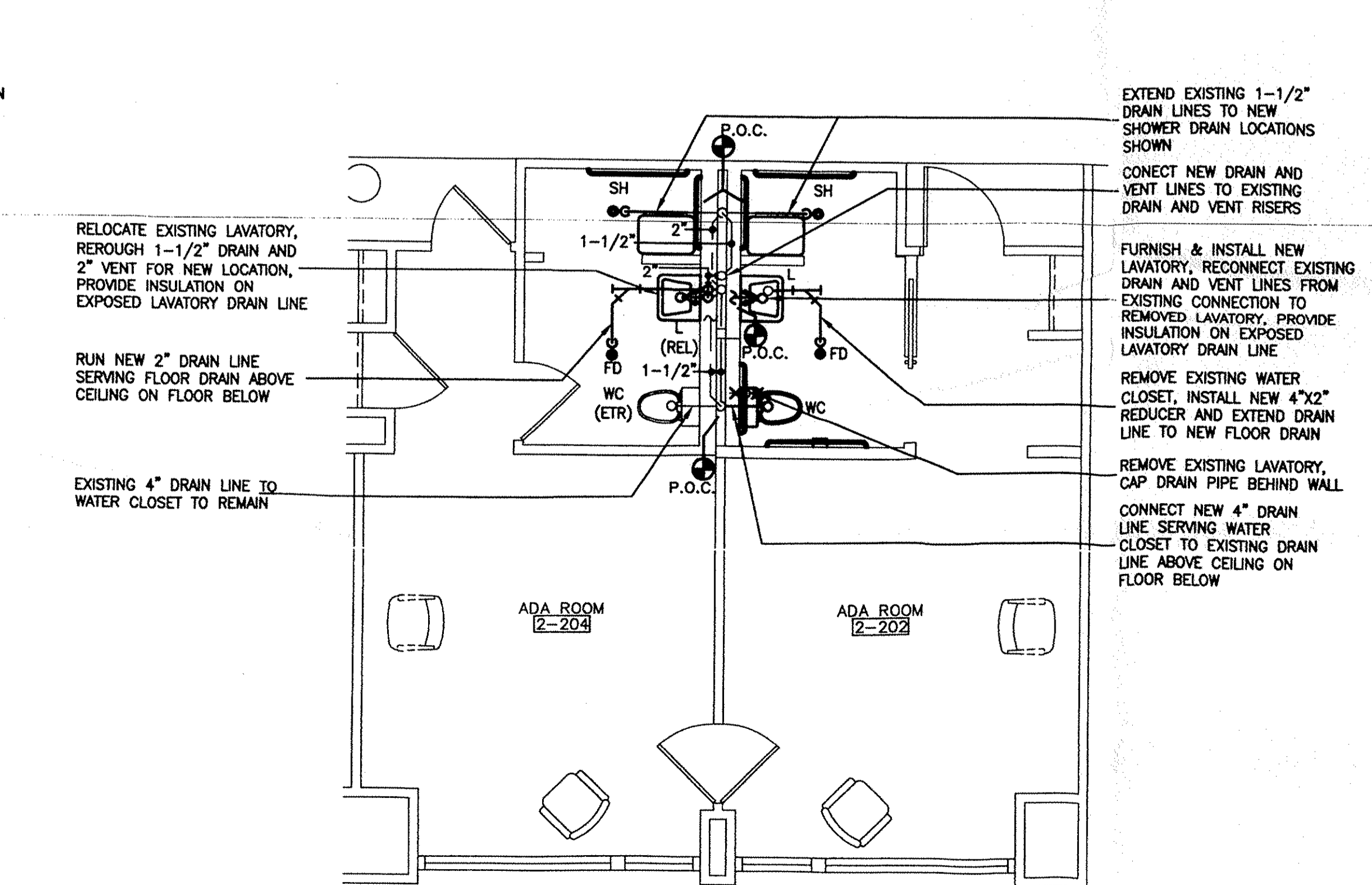
6 DOMESTIC WATER PART PLAN
SCALE: 1/4"=1'-0"



3 SANITARY DRAIN PART PLAN
SCALE: 1/4"=1'-0"



5 SANITARY DRAIN PART PLAN
SCALE: 1/4"=1'-0"



7 SANITARY DRAIN PART PLAN
SCALE: 1/4"=1'-0"

THE SWITZER GROUP, INC.

PLUMBING SPECIFICATIONS

- 1. GENERAL CONDITIONS**
- The entire installation shall conform with the rules and regulations of the New York State Building and Plumbing Code, IBM Palisades site standards and all other agencies having jurisdiction.
 - This contractor shall obtain and pay for all permits and approvals required to perform the work.
 - This contractor is responsible for initiating, maintaining and supervising all safety precautions in accordance with O.S.H.A. requirements.
- 2. WORK INCLUDED**
- This contractor shall furnish all supervision, labor, materials, equipment and appliances required for a complete plumbing and drainage installation as shown on the drawings, including but not limited to the following principal items:
 - Relocation and/or replacement of existing Plumbing fixtures.
 - Sanitary drainage and vent piping.
 - Hot and cold water piping to new fixtures.
 - Rough-in and final connections to plumbing fixtures.
 - All necessary hangers and incidentals as required to make each system complete.
 - Insulation of hot and cold water piping.
 - Tests and adjustments of each system to have the same in perfect operating condition, all to the satisfaction of the Owner.
 - All valves, check valves, stops, fittings, etc.
 - Guarantees and service for a period of one year.
- 3. WORK BY OTHERS**
- Painting.
- 4. WORK IN CONNECTION WITH OTHER TRADES**
- This Contractor shall coordinate his work in an effort to minimize conflicts with other trades.
 - This Contractor is hereby cautioned that the work shown on these plans is to be performed on an occupied facility. This work shall not interfere with the operation of the facility. Access to the facility & building by Mechanical Contractor shall be as directed by the Owner.
 - This Contractor shall be responsible for coordinating all work under this section with other contractors and trades affected by his work. All work shall be coordinated prior to installation.
- 5. REMOVAL OF DEBRIS**
- This Contractor shall periodically collect all refuse and debris resulting from his work and shall be removed from the jobsite by this Contractor.
- 6. LAWS, ORDINANCES AND PERMITS**
- All work shall comply with the NYS Plumbing Code, National Board of Fire Underwriters, IBM Palisades site standards, and any local authorities having jurisdiction.
 - Contractor shall obtain all final approvals and certificates from all authorities having jurisdiction and pay all fees required.
- 7. DISCREPANCIES**
- All peculiarities and limitations of space available for the installation of materials and equipment shall be reported to the Engineer, before commencing with any work.
 - Once work has commenced it is an indication that the Contractor has assumed full responsibility.
- 8. SITE VISIT**
- This Contractor shall visit the premises to determine the actual conditions involved in this installation. Contractor shall check the layout of the systems with the field conditions.
 - This Contractor will be responsible for inspecting the building construction shafts, plenums, equipment rooms, etc., to insure that all areas are suitable for the construction intended. When, in the opinion of the Contractor the building conditions will affect the system's performance, he will report same to the Engineer.
- 9. DRAWINGS AND SPECIFICATIONS**
- The drawings and specifications shall be considered cooperative so that anything shown on one or described in the other shall be furnished and installed as though called for in both.
- 10. TESTING**
- This Contractor shall test all materials and equipment furnished or installed under this contract to see that they operate properly, quietly, and in a satisfactory manner and are free from defects of any description.
 - All equipment shall be started-up, tested, adjusted and generally de-bugged in accordance with manufacturer's specification and recommendations.
 - This Contractor shall check all equipment for proper system operation.
 - All defective material and workmanship disclosed by the tests shall be removed and replaced with new, and the test repeated.
 - Furnish necessary equipment, material and labor for inspecting and testing plumbing and piping system as required by local authorities and to demonstrate satisfactory function and tightness.
 - All piping shall be tested prior to encasement by other trades.
- 11. SHOP DRAWINGS**
- Before fabricating any work, this Contractor shall prepare and submit for approval, equipment cuts for all plumbing equipment installed on the project.
 - The number of copies of each submittal shall be as directed by the Owner.
 - At the completion of the project, provide two (2) sets of clean "as-built" drawings to the Owner.
 - Approval of manufacturer's drawings shall not relieve this Contractor of the responsibility to adhere to the intent of the plans and specifications, or the necessity to fit the required apparatus into the space available.
 - This Contractor shall submit manufacturers shop drawings and/or catalog cuts of all equipment including fixtures, valves, piping, etc., and shall submit samples whenever requested to do so by the Owner.

- 13. SCHEDULING**
- All work to be performed by this Contractor under this contract shall be performed in accordance with the schedule to be determined by the Owner. This Contractor must adjust his schedule, and its manpower requirements to conform with the Owner's schedule.
 - All preparatory work possible shall be performed prior to the delivery or relocation of equipment. All equipment shall be connected, tested, and left ready for operation as soon as possible after installation.
- 13. GUARANTEES**
- All installations, materials, equipment and work furnished and performed under these specifications shall be guaranteed for one year from the date of the final acceptance.
 - The guarantee shall cover all workmanship, materials and equipment.
- 14. CLEANING**
- Cleaning: Clean all pipes and fittings internally before installation. Wipe tubing and fittings clean. After testing, flush all systems completely until water flows clear.
 - Disinfection of Domestic Water Systems Piping:
 - After testing all domestic water system piping shall be disinfected in one of the following manners, before piping is placed in operation:
 - The system or part thereof shall be filled with a solution containing 50 parts per million of available chlorine and allowed to stand for 24 hours before flushing.
 - The system or part thereof shall be filled with a solution containing 200 parts per million of available chlorine and allowed to stand for 1 hour.
- 15. CROSS CONNECTIONS**
- No fixture or item of shall be connected directly with the water supply system in such a manner that the cross connection between domestic water supply and drainage system can exist and permit the backflow of sewage or contaminated water to enter or pollute the water supply. This Contractor shall install suitable and approved vacuum breaking devices and/or check valves at points above the overflow of the fixtures or equipment requiring water connections below the overflow line.
- 16. PIPING SYSTEMS**
- General
 - All piping shall be run in a neat workmanlike manner, parallel to outside walls, evenly spaced, square, straight, plumb and so as to provide minimum interference with the building function.
 - All supply valves shall have removable seats.
 - Provide heavy gauge plated floor and wall escutcheons.
 - Core shall be exercised to locate all piping and suspended equipment as tight to the structure as possible.
 - Take care to prevent contact between pipes and building structure which could cause noises upon pipe movement.
 - All piping shall be anchored and supported in a manner so as to maintain the required pitch of lines, prevent vibration and allow for expansion and contraction in the desired direction. Hangers and supports shall be of adequate size and capacity to carry the piping, its contents and insulation.
 - Furnish and install sleeves where pipes pass through walls, floors, roofs or partitions. Sleeves shall be standard steel pipe to accommodate pipe and covering. Where pipes pass thru Fire Rated Construction the annular space between the pipe and sleeve shall be filled with Fire Retardant material.
 - Sanitary Drain and Vent Piping
 - Furnish and install a system of sanitary drainage piping and vent piping from all water consuming fixtures and equipment as shown on the drawings and as herein specified.
 - Furnish and install cleanouts in interior house drains at maximum intervals of 50 feet and at the base of all stacks and at all changes in direction.
 - Cleanouts shall be the same size as the pipe but need not be larger than 4 inches. Cleanouts shall be Wade W-6000 or approved equal.
 - Sanitary drain and vent piping shall be Cast Iron piping with No-Hub stainless steel couplings.
 - Where drain or vent piping is installed through masonry floors or partitions sleeves shall be provided. This Contractor shall provide a firestopping material to fill the annular space between the sleeve.
 - Hot and Cold Water Piping
 - This Contractor shall furnish and install a complete system of water distribution piping to all water consuming fixtures and equipment as shown on the plans.
 - Piping shall be type L hard drawn copper tubing, with brazed no lead fittings.
 - Valves shall be Jenkins Fig. 32A or approved equal.
 - This contractor shall coordinate piping runs with other Contractors to provide sufficient clearance around Mechanical and Electrical equipment.
 - Water piping to all submerged connections or hose valves shall be equipped with approved vacuum breakers and check valves. Included in this work are all dishwashers and clothes washing machines.
 - Separate hot and cold water piping by at least 6 inches wherever possible.

- 18. INSULATION**
- General
 - This Contractor shall furnish and install insulation as indicated on the drawings and as herein specified.
 - Apply insulation only after all tests have been completed. Use insulation and finish materials including adhesives, cements and mastics which conform to the requirements of all codes and ordinances having jurisdiction and installed in accordance with the manufacturers recommendations.
 - Fire Hazard Rating not to exceed 25 for flame spread and 50 for fuel contributed and smoke developed.
 - Exposed fittings shall be covered with molded plastic covers with self sealing edges.
 - Insulation shall be Manville or approved equal.
 - Hot and Cold Water Piping: 1/2 inch thick, heavy density fiberglass pipe insulation, with white flame retardant vapor barrier jacket of aluminum foil laminated to kraft paper. Seal all joints and seal strips with vapor barrier adhesive compound. Fittings shall be covered to an equal thickness and finished in accordance with manufacturer's recommendations.
- 19. INSERTS, HANGERS, SUPPORTS AND BRACKETS**
- This Contractor shall furnish and install all inserts, hangers, supports, brackets, etc. as indicated on the drawings and as herein specified, and as required to suit field conditions.
- Where thermal movement in the pipe line will occur, the pipe hanger assembly must be capable of supporting the line in all operating conditions.
 - Piping supports shall be attached to floors and walls with suitable hangers and attachments as manufactured by Hillt or approved equal. Installation methods shall be in accordance with the manufacturers recommendations.
 - Supplementary Steel, where required for the installation of Mechanical work herein specified, shall be furnished by this Contractor.
 - Pipe Hangers for horizontal piping, unless otherwise noted, shall be of the clevis type, similar to Fee & Mason Figure 238. Provide copper plated hangers for copper piping and steel hangers for steel and Cast Iron piping.
 - Support piping within 1 foot of each horizontal elbow and maximum spacing of the hangers shall be in accordance with the Mechanical Pipe Joint manufacturer.

SPRINKLER SPECIFICATIONS

- 1. GENERAL**
- All new connections to existing system shall be made in an approved manner.
 - Locations and sizes of existing piping and sprinkler heads shall be verified on the job by the Contractor.
 - This Contractor shall not interrupt any of the existing building services nor interfere with the operation of the building in any way without the permission of the Owner.
 - Where new work makes temporary shutdowns of service unavoidable, shutdowns shall be made at night or at such time as will cause the least interference with the established operating routine of the building, without additional cost to the Owner.
 - This Contractor shall arrange to work continuously including overtime, if required, to assure that service will be shutdown only during the time actually required to make the necessary connections to existing work.
 - All shutdowns of the existing system shall be coordinated with the Owner at least 48 hours in advance.
 - The drawings are generally diagrammatic and are intended to convey the Scope of Work and indicate general arrangement of the equipment, piping, etc. This Contractor shall prepare working drawings and Hydraulic Calculations to confirm and establish pipe sizes and location of heads, required flows and pressures.
- 2. SCOPE OF WORK**
- This Contractor shall furnish all labor, materials, equipment, Contractor services and permits necessary for the complete removal, relocation, reconnection and installation of new automatic wet pipe sprinkler heads including piping, hangers and testing as indicated on the drawings and as herein specified.
- 3. WORK BY OTHERS**
- Patching of General Construction work.
- 4. DRAWINGS AND SPECIFICATIONS**
- The drawings and specifications shall be considered cooperative so that anything shown on one or described in the other shall be furnished and installed as though called for in both.
- 5. REMOVAL OF DEBRIS**
- This Contractor shall periodically collect all refuse and debris resulting from his work, and shall store same in areas designated by the Owner.
- 6. RULES AND REGULATIONS**
- All Sprinkler work and materials shall be installed in strict conformity with all requirements of the New York State Building Code, National Fire Protection Association (NFPA), IBM Palisades Site Standards and all codes and authorities having jurisdiction.
 - This Contractor shall obtain and pay for all licenses, permits and certificates required.
- 7. SITE VISIT**
- This Contractor shall visit the premises to determine the actual conditions involved in this installation. Contractor shall check the layout of the systems with the field conditions.
 - This Contractor shall verify the actual locations where new Sprinkler work will connect to the existing system, and for clearances with structural members. All costs of any kind whatsoever which are incurred through limitations of the existing conditions shall be included in this Contractor's bid.
 - The drawings show the general arrangement of the existing Sprinkler work and indicates points of connection to existing pipes and suggests routing of new piping. However, it is not the intention of the drawings to show every offset, obstruction or structural condition, it shall be the responsibility of this Contractor to install the work in such a manner that it will conform to the structure.
- 8. DISCREPANCIES**
- All peculiarities and limitations of space available for the installation of materials and equipment shall be reported to the Engineer, before commencing with any work.
- 9. GUARANTEE, MAINTENANCE AND SERVICE**
- This contractor shall guarantee all work for a period of one year from date of acceptance of the system.
 - The guarantee shall cover all workmanship, materials and equipment.
 - The contractor shall provide all service to the owner as may be required. Service calls under this guarantee shall be made on during normal working hours and shall be performed at no charge to the owner.
- 10. COOPERATION WITH OTHER TRADES**
- This Contractor shall coordinate his work in an effort to minimize conflicts with other trades.

- 11. SPRINKLER HEADS**
- All sprinkler heads shall be UL, FM, NFPA and New York State approved and shall be ordinary temperature rating (160 degree Fahrenheit to 165 degree Fahrenheit), unless otherwise noted on the drawings and/or where higher degree ratings are required to prevent accidental discharge of the heads.
 - All new heads shall be 1/2" standard sprinkler, closed fusible link spray type, with 1/2" discharge orifice, cast brass in unfinished areas and chrome plated cast brass in finished areas.
 - All new exposed sprinkler heads shall be chrome plated pendant mounted Reliable Model G or approved equal.
 - All new concealed sprinkler heads shall be Reliable Model G1 or approved equal.
 - Sprinkler heads shall be as manufactured by Reliable Automatic Sprinkler Company, Central Sprinkler Company or approved equal.
- 12. IDENTIFICATION**
- This Contractor shall furnish and install identification signs for inspector test valves and system drain valves as required and in accordance with the requirements of the New York State Building Code and NFPA No. 13 and similar to Reliable Automatic Sprinkler Company, style A and B.
- 13. HANGERS AND BRACKETS**
- Sprinkler piping shall be supported from the structure in accordance with the requirements of the New York State Building Code and the NFPA. Hangers and supports shall be specifically approved for use in sprinkler systems.
 - Where overhead construction does not permit fastening of hanger rods, provide supplemental steel framing as required and approved.
 - No Sprinkler piping shall be supported from other trades or other piping. Hangers shall be of heavy gauge construction suitable for the size of pipe to be supported. All materials shall be wrought or malleable iron or steel.
 - All hangers and supports including rods, inserts, etc. shall be dipped in zinc chromate primer prior to installation.
 - Pipe supports shall be as manufactured by F&S, F&M, Grinnel or approved equal.
- 14. PIPING**
- This Contractor shall furnish and install piping as shown on the floor plans and as herein specified.
- All pipes, fittings and other appurtenances shall be of the material and weights as required by the New York State Building Code and the NFPA.
 - The complete Sprinkler system shall be pitched down to low points to facilitate draining. Where required, this Contractor shall furnish and install drain valves in the new and existing system.
 - Pipes passing through fire rated walls shall be provided with a metal pipe sleeve. Space between the pipe and the interior of the sleeve shall be packed with a fire rated material of equal rating to that of the wall.
 - Sprinkler piping shall be ASTM A120 schedule 40 seamless steel pipe with ASTM A234 standard weight, cast iron, threaded or flanged sprinkler fittings, black steel screwed fittings.
 - The Contractor may substitute Victaulic pipe couplings and fittings with the approval of the Engineer.
- 15. TESTING**
- Upon completion of the installation work, this Contractor shall prepare the Certificate of Materials and Tests, and shall secure the final inspection and approval by all agencies having jurisdiction including the local fire marshal.
 - This Contractor shall test all materials and equipment furnished or installed under this contract in accordance with the New York State Building Code and the NFPA.
- 16. SHOP DRAWINGS AND SUBMITTALS**
- This Contractor shall, at his own cost and expense, furnish to the Architect copies of detailed shop drawings, if required for the work to be performed. Solid detailed shop drawings are to be prepared by a competent draftsman. The Contractor shall distribute copies of the shop drawings to all other trades as required.
 - This Contractor shall submit manufacturers shop drawings and/or catalog cuts of all equipment including sprinkler heads, valves, etc. and shall submit samples whenever requested to do so by the Owner.
- 17. AS-BUILT DRAWINGS**
- This Contractor shall furnish an "As Built" package to the Owner for the piping, sprinkler heads, etc. "As Built" package shall include (6) blueprints and one mylar reproducible.
- 18. FIRE STOPPING**
- All sprinkler piping passing through walls shall have the space between wall & pipe on sleeve & pipe sealed with NYS approved fire stopping material.

SYMBOLS

- EXISTING PIPING TO REMAIN
- PIPING TO BE REMOVED
- NEW PIPING
- BALL VALVE
- GATE VALVE
- CHECK VALVE
- GLOBE VALVE
- PIPING DROP/RISE
- UNION
- CAP
- ELBOW
- TEE
- WYE
- TEE UP/DOWN
- COLD WATER PIPING
- HOT WATER PIPING
- CLEANOUT
- FLEXIBLE TUBING
- EXISTING SPRINKLER HEAD TO REMAIN, ? DENOTES HEAD TYPE
- EXISTING SPRINKLER HEAD TO BE DEMOLISHED
- NEW EXPOSED SPRINKLER HD
- NEW UPRIGHT SPRINKLER HD
- NEW PENDANT SPRINKLER HD
- NEW CONCEALED SPRINKLER HD
- EXISTING SPRINKLER PIPE

ABBREVIATIONS

- DHW DOMESTIC HOT WATER
- DN DOWN
- EXIST EXISTING
- DCW DOMESTIC COLD WATER
- V VENT
- DR DRAIN
- SPR SPRINKLER
- E EXPOSED SPRINKLER HEAD
- U UPRIGHT SPRINKLER HEAD
- P PENDANT SPRINKLER HEAD
- C CONCEALED SPRINKLER HEAD

IBM

SECOND FLOOR GUEST ROOM RENOVATION
PALISADES CONFERENCE CENTER
ROUTE 9W
PALISADES, N.Y. 10964

Key Plan

No. Date Issue By

10/3/92	ISSUED TO SKANSKA	
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No. Date Revision By

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Drawing Title
MECHANICAL DETAILS AND SPECIFICATIONS

Date 09/28/92 Job No. 922519
Scale AS NOTED Drawn By SPJ
Prof. Mgr. Checked By CGM
Seal

Floor No. 2ND Bug No. M-2

THE SWITZER GROUP, INC.

