

GENERAL STRUCTURAL NOTES

GENERAL

- THE DRAWINGS ARE INTENDED TO SHOW THE GENERAL ARRANGEMENT, DESIGN AND EXTENT OF THE WORK AND ARE PARTIALLY DIAGNOMATIC. THEY ARE NOT INTENDED TO BE SCALED FOR MEASUREMENTS, OR TO BE USED AS SHOP DRAWINGS OR PORTIONS THEREOF.
- ALL DETAILS AND SECTIONS SHOWN ON THE DRAWINGS ARE INTENDED TO BE TYPICAL AND SHALL BE CONSIDERED TO APPLY TO ANY SIMILAR SITUATION ELSEWHERE ON THE PROJECT, EXCEPT WHERE A DIFFERENT DETAIL OR SECTION IS SHOWN.
- PRIOR TO START OF CONSTRUCTION, THE CONTRACTOR AND ALL THE SUBCONTRACTORS SHALL VERIFY ALL GRADES, LINES, LEVELS, DIMENSIONS AND COORDINATE EXISTING CONDITIONS AT THE JOB SITE WITH THE PLANS AND SPECIFICATIONS. THEY SHALL REPORT ANY INCONSISTENCIES OR ERRORS IN THE ABOVE TO THE ARCHITECT BEFORE COMMENCING WORK. THE CONTRACTOR AND HIS SUBCONTRACTORS SHALL LAY OUT THEIR WORK FROM ESTABLISHED REFERENCE POINTS AND BE RESPONSIBLE FOR ALL LINES, ELEVATIONS AND MEASUREMENTS IN CONNECTION WITH THEIR WORK.
- IF ANY ERRORS OR OMISSIONS APPEAR IN THE DRAWINGS, GENERAL NOTES OR OTHER DOCUMENTS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING OF SUCH OMISSION OR ERROR PRIOR TO PROCEEDING WITH ANY WORK WHICH APPEARS IN QUESTION. IN THE EVENT OF THE CONTRACTOR'S FAILING TO GIVE SUCH AN ADVANCED NOTICE, HE SHALL BE HELD RESPONSIBLE FOR THE RESULTS OF ANY SUCH ERRORS OR OMISSIONS AND THE COST OF RECTIFYING THE SAME.
- THE CONTRACTOR SHALL USE THE STRUCTURAL DRAWINGS AND SPECIFICATIONS TOGETHER WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL AND OTHER TRADE DRAWINGS AND SHOP DRAWINGS, TO LOCATE DEPRESSES, SLABS, SLOPES, DRAINS, OUTLETS, RECESSES, OPENINGS, BOLT SETTING, SLEEVES, DIMENSIONS, ETC., NOTIFY ARCHITECT/ENGINEER, IN WRITING, OF ANY POTENTIAL CONFLICTS BEFORE PROCEEDING WITH THE WORK.

SHOP DRAWINGS AND DELEGATED ENGINEERING

- ALL SHOP DRAWINGS SHALL BE SUBMITTED FOR ARCHITECT'S REVIEW ONLY AFTER THEY HAVE BEEN THOROUGHLY REVIEWED BY THE CONTRACTOR FOR CONSTRUCTION METHODS, DIMENSIONS AND OTHER TRADE REQUIREMENTS, AND STAMPED WITH THE CONTRACTOR'S APPROVAL STAMP. THE ARCHITECT ASSUMES NO RESPONSIBILITY FOR DIMENSIONS, QUANTITIES, ENGINEERING DESIGN DELEGATED ENGINEERS, ERRORS OR OMISSIONS AS A RESULT OF REVIEWING ANY SHOP DRAWINGS. ANY ERRORS OR OMISSIONS MUST BE MADE GOOD BY THE CONTRACTOR, RESPECTIVE OF RECEIPT, CHECKING OR REVIEW OF DRAWINGS BY THE ENGINEER AND EVEN THOUGH WORK IS DONE IN ACCORDANCE WITH SUCH DRAWINGS.
- BEFORE STRUCTURAL INSPECTIONS CAN BE MADE ON A PORTION OF THE STRUCTURE, ALL RELATED SHOP DRAWINGS, DELEGATED ENGINEERING, PRODUCT APPROVAL, AND OTHER TRADE DRAWINGS AND SHOP DRAWINGS INFORMATION, MUST BE REVIEWED AND ACCEPTED BY THE ARCHITECT-OF-RECORD AND APPROVED BY THE BUILDING DEPARTMENT.
- SHOP DRAWINGS SHALL CONTAIN ALL INFORMATION SHOWN ON THE STRUCTURAL PLANS (RELATED TO THE DELEGATED DESIGN) INCLUDING ALL DESIGN LOADS, IN ADDITION TO THE INFORMATION REQUIRED BY THE DELEGATED ENGINEER'S DESIGN.
- ARCHITECT WILL REVIEW ALL SUBMITTED SHOP DRAWINGS, PREPARED AND SIGNED AND SEALED BY THE CONTRACTOR'S DELEGATED ENGINEER, ONLY FOR GENERAL COMPLIANCE WITH THE DESIGN INTENT, REQUIRED LOADING AND COORDINATION WITH THE STRUCTURAL DESIGN.
- CONTRACTOR SHALL SUBMIT TO THE ARCHITECT TWO SETS OF BLUE PRINTS OF THE STRUCTURAL SHOP DRAWINGS FOR ARCHITECT REVIEW, BEFORE STARTING FABRICATION. THE ARCHITECT WILL RETURN ONE MARKED UP AND STAMPED COPY TO THE CONTRACTOR. THE MARKED-UP COPY SHALL BE USED TO MAKE THE PRINTS REQUIRED FOR SHOP DRAWING DISTRIBUTION.

CONSTRUCTION MEANS AND METHODS

- THE CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCE OR PROCEDURES, SAFETY PRECAUTIONS, SHORES, RESHORES, LATERAL BRACING AND PROGRAMS IN CONNECTION WITH THE PROJECT, ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR. OUR SERVICES DO NOT GUARANTEE NOR ASSURE LIABILITY FOR THE JOB SAFETY, TEMPORARY SHORING AND BRACING AND THE PERFORMANCE OF THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE AND SHALL COMPLY WITH THE SAFETY REQUIREMENTS OF THE 2000 FLORIDA BUILDING CODE AND APPLICABLE LOCAL, STATE AND FEDERAL LAWS.
- PROVIDE ALL SHORING, BRACING AND SHEETING AS REQUIRED FOR SAFETY, STRUCTURAL STABILITY AND FOR THE PROPER EXECUTION OF THE WORK. REMOVE WHEN WORK IS COMPLETED.
- PROVIDE AND MAINTAIN GUARD LIGHTS AT ALL BARRICADES, RAILINGS, OBSTRUCTIONS IN THE STREETS, ROADS OR SIDEWALKS AND ALL TRENCHES OR PITS ADJACENT TO PUBLIC WALKS OR ROADS.
- AT ALL TIMES, PROVIDE PROTECTION AGAINST WEATHER (RAIN, WIND, STORMS OR THE SUN), SO AS TO MAINTAIN ALL WORK, MATERIALS, APPARATUS AND FIXTURES FREE FROM INJURY OR DAMAGE.
- AT THE END OF THE DAYS WORK, COVER ALL WORK LIKELY TO BE DAMAGED. ANY WORK DAMAGED BY FAILURE TO PROVIDE PROTECTION SHALL BE REMOVED AND REPLACED WITH NEW WORK AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR SHALL PAY FOR ALL DAMAGES TO ADJACENT STRUCTURES, SIDEWALKS AND TO STREETS OR OTHER PUBLIC PROPERTY OR PUBLIC UTILITIES.

STRUCTURAL DESIGN CRITERIA

- THE DESIGN COMPLIES WITH THE REQUIREMENTS OF THE 2000 FLORIDA BUILDING CODE - SECTION 609 AND OTHER REFERENCED CODES AND SPECIFICATIONS. ALL CODES AND SPECIFICATIONS SHALL BE LATEST EDITION AT TIME OF PERMIT.
- WIND LOAD CRITERIA: RISK CATEGORY: 2, EXPOSURE 'C'
BASED ON ASHRAE 90-100 2000 FBC 609-A WIND VELOCITY: $V_{100} = 140$ MPH
 $V_{50} = 108$ MPH
- ROOF DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: 20 PSF
SUPERIMPOSED LIVE LOADS: 20 PSF
- FLOOR DESIGN LOADS:
SUPERIMPOSED DEAD LOADS: 25 PSF
SUPERIMPOSED LIVE LOADS:
COMMERCIAL: 50 PSF
BALCONIES/CORRIDORS: 60 PSF
- WIND NET UPLIFT: ARE AS INDICATED ON PLANS

NOTE!
THIS PROJECT IS TYPE 5 UNPROTECTED CONSTRUCTION PER 2010 FBC TABLE 503 AND TABLE 600

BUILDING COMPONENTS & CLADDING LOADS MEAN BUILDING HEIGHT = 30'-0", EXPOSURE 'B'				
WIND	WIND	WIND	WIND	WIND
100 MPH	120 MPH	140 MPH	160 MPH	180 MPH
1 10' 12.0 / -19.9	14.9 / -23.1	17.9 / -27.8	20.9 / -32.5	23.9 / -37.2
2 20' 11.4 / -19.4	13.6 / -23.0	16.6 / -27.6	19.6 / -32.2	22.6 / -36.8
3 30' 10.8 / -18.6	11.9 / -22.2	13.9 / -26.8	15.9 / -31.4	17.9 / -36.0
4 40' 12.5 / -34.7	14.9 / -41.3	17.9 / -48.4	20.9 / -55.5	23.9 / -62.6
5 50' 11.4 / -31.3	13.6 / -38.0	16.6 / -44.6	19.6 / -51.2	22.6 / -57.8
6 60' 10.8 / -28.2	11.9 / -35.6	13.9 / -39.4	15.9 / -46.0	17.9 / -51.2
7 70' 12.5 / -51.3	14.9 / -61.0	17.9 / -71.6	20.9 / -82.2	23.9 / -92.8
8 80' 11.4 / -47.9	13.6 / -57.1	16.6 / -67.7	19.6 / -78.3	22.6 / -88.9
9 90' 10.8 / -43.5	11.9 / -53.8	13.9 / -64.4	15.9 / -75.0	17.9 / -85.6
10 100' 21.8 / -23.6	25.9 / -34.7	30.4 / -33.0	34.9 / -31.3	39.4 / -29.6
11 110' 20.9 / -22.6	24.7 / -26.9	29.2 / -25.2	33.7 / -23.5	38.2 / -21.8
12 120' 19.9 / -21.3	23.2 / -25.4	27.7 / -23.7	32.2 / -22.0	36.7 / -20.3
13 130' 21.8 / -29.1	25.9 / -34.7	30.4 / -40.7	34.9 / -46.7	39.4 / -52.7
14 140' 20.9 / -27.2	24.7 / -32.4	29.2 / -38.4	33.7 / -44.4	38.2 / -50.4
15 150' 19.9 / -24.6	23.2 / -29.3	27.7 / -35.3	32.2 / -41.3	36.7 / -47.3

FOUNDATIONS (SPREAD FOOTINGS)

- FOUNDATIONS ARE DESIGNED TO BEAR ON WELL COMPACTED GRADE OR CLEAN FILL OF AN ALLOWABLE BEARING CAPACITY OF 1,000 PSF MINIMUM. FOR REQUIRED SOIL BEARING CAPACITIES GREATER THAN 1,000 PSF, A CERTIFIED TESTING LABORATORY SHALL BE ENGAGED BY THE OWNER. THE REQUIRED BEARING CAPACITY SHALL BE OBTAINED. SAID SOIL CAPACITY SHALL BE CERTIFIED AND TESTED BY A FLORIDA REGISTERED FOUNDATION ENGINEER, PRIOR TO CASTING OF CONCRETE IN THE FOOTINGS.
- NATURAL GRADE (OR FILL) BELOW FOOTINGS SHALL BE COMPACTED TO 95% MODIFIED PROCTOR (ASTM D-1557).
- TOP OF WALL FOOTINGS TO BE AT THE SAME ELEVATION AS TOP OF COLUMN PAD FOOTINGS. STEP WALL FOOTING FROM HIGHER COLUMN FOOTING TO THE LOWER ONE (AS DETAILED ON THE PLANS).
- BOTTOM OF ALL FOOTINGS TO BE A MINIMUM 1'-0" BELOW THE TOP OF CONCRETE SLAB ON GRADE (UNLESS OTHERWISE NOTED) OR MINIMUM 1'-0" BELOW FINISHED GRADE, WHICHEVER IS LOWER. IN THE EVENT THAT THE SLAB STEPS ON EACH SIDE OF THE FOOTING, THE FOOTING SHALL BE 1'-0" BELOW TOP OF THE LOWER SLAB.
- REINFORCING IN THE CONTINUOUS WALL FOOTINGS (MONOLITHIC AND NON-MONOLITHIC) SHALL BE SPLICED 40 BAR DIAMETERS MINIMUM AND SHALL EXTEND CONTINUOUSLY THRU ALL FOOTING PADS.
- ALL LONGITUDINAL REBARS IN THE CONTINUOUS WALL FOOTINGS SHALL BE CONTINUED AT BENTS AND CORNERS BY BENDING THE REBARS 45 BAR DIAMETERS AROUND THE CORNERS OR ADDING MATCHING CORNER BARS, EXTENDING 45 BAR-DIAMETERS INTO FOOTING EACH SIDE OF CORNER OR BENT.
- ALL FOOTINGS SHALL BE 12" MINIMUM THICKNESS.
- WHEN GEO-TECHNICAL REPORTS ARE PROVIDED, ALL RECOMMENDATIONS OF THE SOILS ENGINEER SHALL BE FOLLOWED AND THE DESIGN SOIL BEARING PRESSURE SHALL BE AS RECOMMENDED IN SUCH REPORTS, AND SUPERCEEDS PRESSURES INDICATED HEREIN.

CONCRETE SLABS ON GRADE

- ALL INTERIOR AND EXTERIOR SLABS AND WALKWAYS AS SHOWN ON THE STRUCTURAL OR ARCHITECTURAL PLANS, SHALL BE FOUR INCHES THICK MINIMUM REINFORCED WITH 6" X 6" - #4 X #4 WELDED WIRE FABRIC (UNLESS OTHERWISE NOTED).
- ALL SLABS ON GRADE TO BE CONSTRUCTED IN ACCORDANCE WITH LATEST A.C.I. - GUIDE FOR CONCRETE FLOOR AND SLAB CONSTRUCTION (A.C.I. - 302.1R).
- JOINTS SHALL BE PROVIDED IN ALL INTERIOR SLABS ON GRADE AT LOC. INDICATED ON THE PLANS DIVIDING THE SLAB INTO SQUARE PANELS NOT TO EXCEED 20 X 20 FT. IN SIZE. CAST SLAB IN LONG ALTERNATE STRIPS. PROVIDE A CONTRACTION JOINT BETWEEN EACH STRIP. SEE PLAN FOR SAW-CUT, CONTRACTION AND ISOLATION JOINT DETAILS.
- PROVIDE SAW-CUT JOINTS AT ALL SIDEWALKS AT A MAXIMUM SPACING OF FIVE FEET ON CENTERS AND ISOLATION JOINTS AT 20' FT. O.C. (U.O.N.).
- FILL MATERIAL SHALL BE PLACED IN LIFTS NOT EXCEEDING 12" AND COMPACTED TO 95% MODIFIED PROCTOR (ASTM D-1557) WITHIN A DISTANCE OF 3 FEET BEYOND ALL FOOTING EDGES. TAKE AT LEAST ONE DENSITY TEST FOR EACH 1,600 SQ. FT. OF AREA AND 12" BELOW SURFACE. SEND RESULTS OF THE TEST TO OWNER, ARCHITECT AND ENGINEER.

CONCRETE AND REINFORCING

- CONCRETE DESIGN AND REINFORCEMENT IN ACCORDANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (A.C.I. 308 - LATEST EDITION) AND WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT" (A.C.I. 315 - LATEST EDITION).
- ALL CONCRETE WORK IN ACCORDANCE WITH "SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDING" (A.C.I. 301 - LATEST EDITION), PRODUCTION OF CONCRETE, DELIVERY, PLACING AND CURING TO BE IN ACCORDANCE WITH "HOT WEATHER CONCRETING" (A.C.I. 305R - LATEST EDITION).
- ALL CONCRETE TO BE REGULAR WEIGHT WITH A DESIGN STRENGTH OF 3,000 P.S.I. AT 28 DAYS. MAXIMUM SLUMP: 5".
- ALL REINFORCING TO BE NEW BILLET STEEL CONFORMING TO THE LATEST A.S.T.M. A-618 GRADE 60, FABRICATED IN ACCORDANCE WITH C.R.S.I. MANUAL OF STANDARD PRACTICE AND PLACED IN ACCORDANCE WITH A.C.I. 308 AND C.R.S.I. MANUAL OF STANDARD PRACTICE.
- CONCRETE COVER UNLESS OTHERWISE DETAILED ON DRAWINGS:
FOOTINGS: (BOTTOM) 3"
(TOP & SIDES) 2"
SLABS ON GRADE: CENTERED 1 1/2" SLAB
- BEAM REINFORCEMENT: LAPPED 36 BAR DIAMETER OR MINIMUM 18 INCHES. BOTTOM BARS SPLICED ONLY AT SUPPORTS, TOP BARS SPLICED ONLY AT MID-SPAN. ALL TOP BARS HOOKED AT NON-CONTINUOUS EDGES (U.O.N.). ALL HOOKS TO BE STANDARD 90 DEGREE HOOKS AS REQUIRED (U.O.N.).
- ADDED REINFORCEMENT: PROVIDE ADDITIONAL CORNER BARS BENT 36 INCHES MINIMUM EACH MAY AT 1" AND 1" CORNERS IN OUTER FACES OF ALL BEAMS TO MATCH ALL HORIZONTAL BAR (TOP, BOTTOM AND INTERMEDIATE REBARS).
- SEE PLAN FOR MINIMUM SIZE CONCRETE TIE BEAM REQUIREMENTS.

NOTE!

REFER TO THE METAL BUILDING SHOP DRAWINGS PREPARED BY HESCO METAL BUILDINGS, INC. FOR EXACT LOCATION OF ALL EMBEDDED ANCHOR BOLTS.

NOTE!

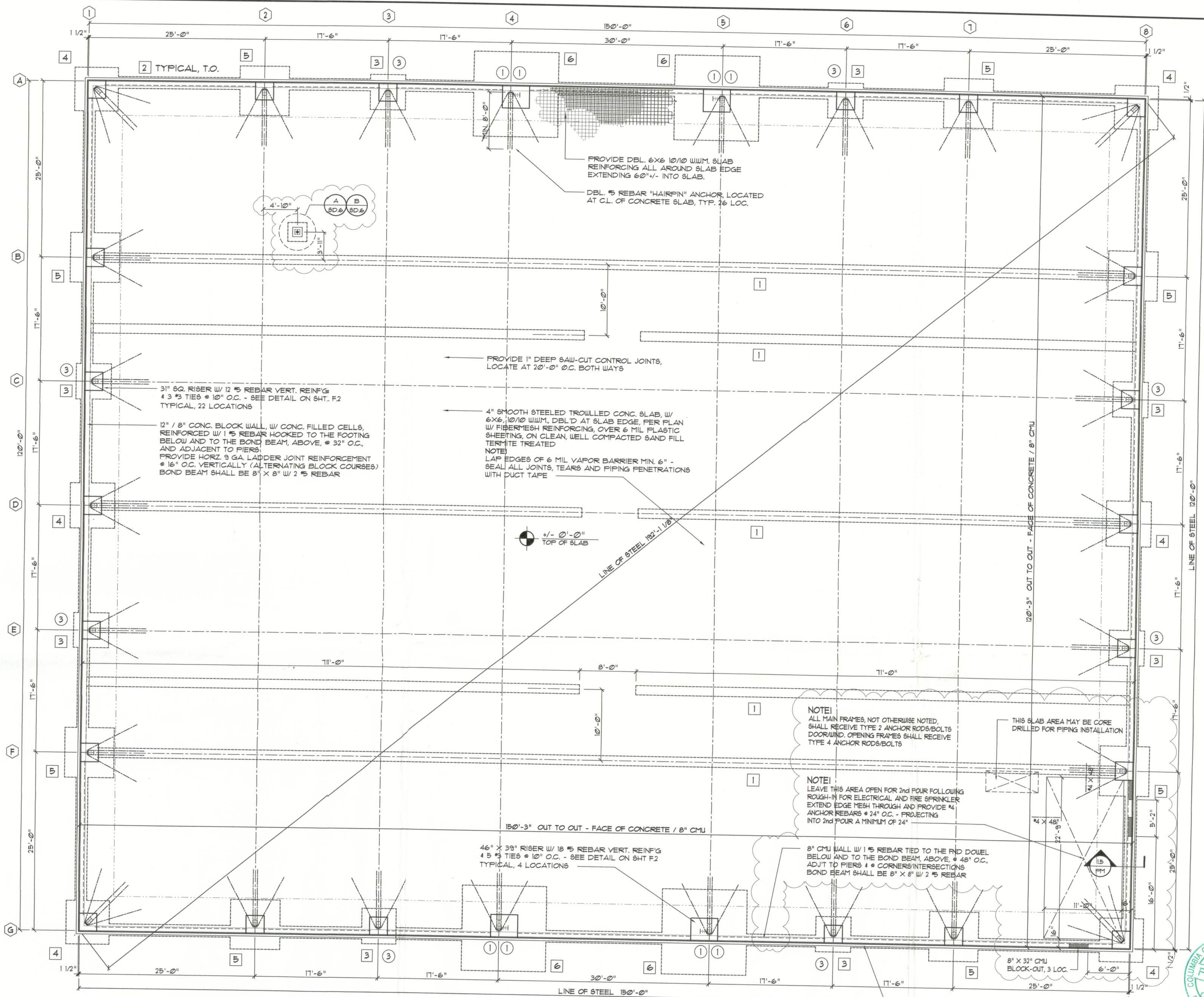
ADDED FILL SHALL BE APPLIED IN 12" LIFTS - EA. LIFT SHALL BE COMPACTED TO 95% DRY COMPACTION PER THE "MODIFIED PROCTOR" METHOD.

NOTE!

THE DESIGN WIND SPEED FOR THIS PROJECT IS 140 MPH PER 2010 FBC 1609 AND LOCAL JURISDICTION REQUIREMENTS

NOTE!

ALL ANCHOR BOLTS ARE ASTM GRADE A36 STEEL ROD, THREADED 3/4", BLACK AND FREE FROM RUST AND SCALE

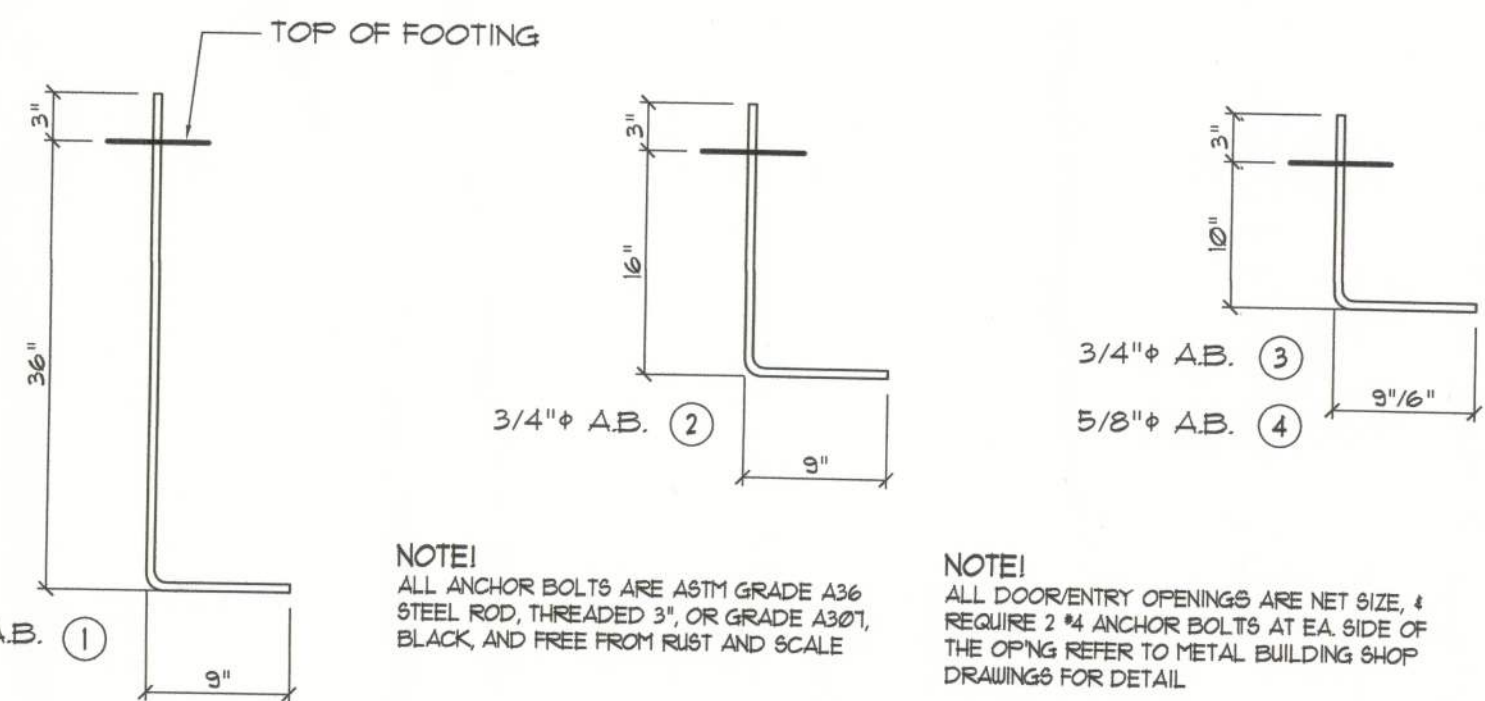
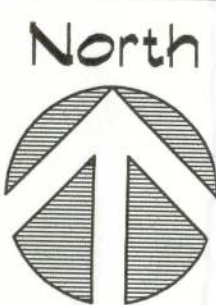


Foundation PLAN

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

FOOTING SCHEDULE

- 16" X 12" X CONT. MONO. FOOTING, W/ 2 #5 REBAR, BOT. X CONT. ALL INTERIOR STRIP FOOTINGS
- 20" X 12" X CONTINUOUS, FOOTING, W/ 2 #5 REBAR, BOT. X CONT. ALL PERIMETER STRIP MONO. FTGS
- 60" X 60" X 24" PAD FOOTING, W/ 1 #5 REBAR, TOP & BOTTOM, EA. WAY.
- 16" X 16" X 31" PAD FOOTING, W/ 9 #5 REBAR, TOP & BOTTOM, EA. WAY.
- 84" X 84" X 24" PAD FOOTING, W/ 10 #5 REBAR, TOP & BOTTOM, EA. WAY.
- 144" X 144" X 31" PAD FOOTING, W/ 17 #5 REBAR, TOP & BOTTOM, EA. WAY.



Anchor Bolt DETAILS

SCALE: 1" = 1'-0"

PROVIDE STRAP & LOOP MASONRY TIES FROM BLDG SHEATHING TO VENEER CHU# 24" O.C. EA. WAY

ANCHOR BOLT / FOUNDATION SIZING:

THE ANCHOR BOLT DIAMETERS AND DEVELOPED LENGTHS INDICATED IN THIS DRAWING WERE DETERMINED USING SHEAR FRICTION THEORY AS DESCRIBED IN AISC DESIGN GUIDE No.1, SECTION 9.3. ASSUMING AN ANCHOR BOLT MATERIAL OF ASTM A307 OR A36, THE COMBINED FORCES ACTING AT THE BASE OF THE STEEL FRAME RESULTING IN A VERTICAL REACTION ACTING UPON THE FOUNDATION WERE DEVELOPED AS FOLLOWS:

$$T = T_d + T_s f$$

WHERE

T = TOTAL TENSILE FORCE PER BOLT
T_d = TENSILE FORCE PER BOLT DUE TO DIRECTLY APPLIED LOAD = P/n
T_s = TENSILE FORCE PER BOLT DUE TO SHEAR FRICTION = V / (n x u)

WHERE

P = P = TOTAL UPLIFT TO BE RESISTED BY ANCHOR BOLT GROUP
V = V = TOTAL SHEAR FORCE TO BE RESISTED BY ANCHOR BOLT GROUP
n = n = NUMBER OF ANCHOR BOLTS
u = u = COEFFICIENT OF FRICTION (TAKEN AS 0.7 FOR UNGROUTED BASE PLATES OR 0.9 FOR GROUTED BASE PLATES)

REVISIONS	
30 AUG 2017	FIG 14.3, PAGES
11 SEP 2017	PIPE POST W/ FTG
11 SEP 2017	2nd FLOOR SLAB AREA

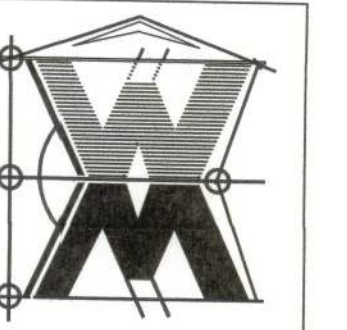
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ARCHITECTURAL DESIGN SOFTWARE

NEW LEARNING FACILITIES for:
BELMONT ACADEMY
CR. 240, COLUMBIA COUNTY, FLORIDA

AR0007005

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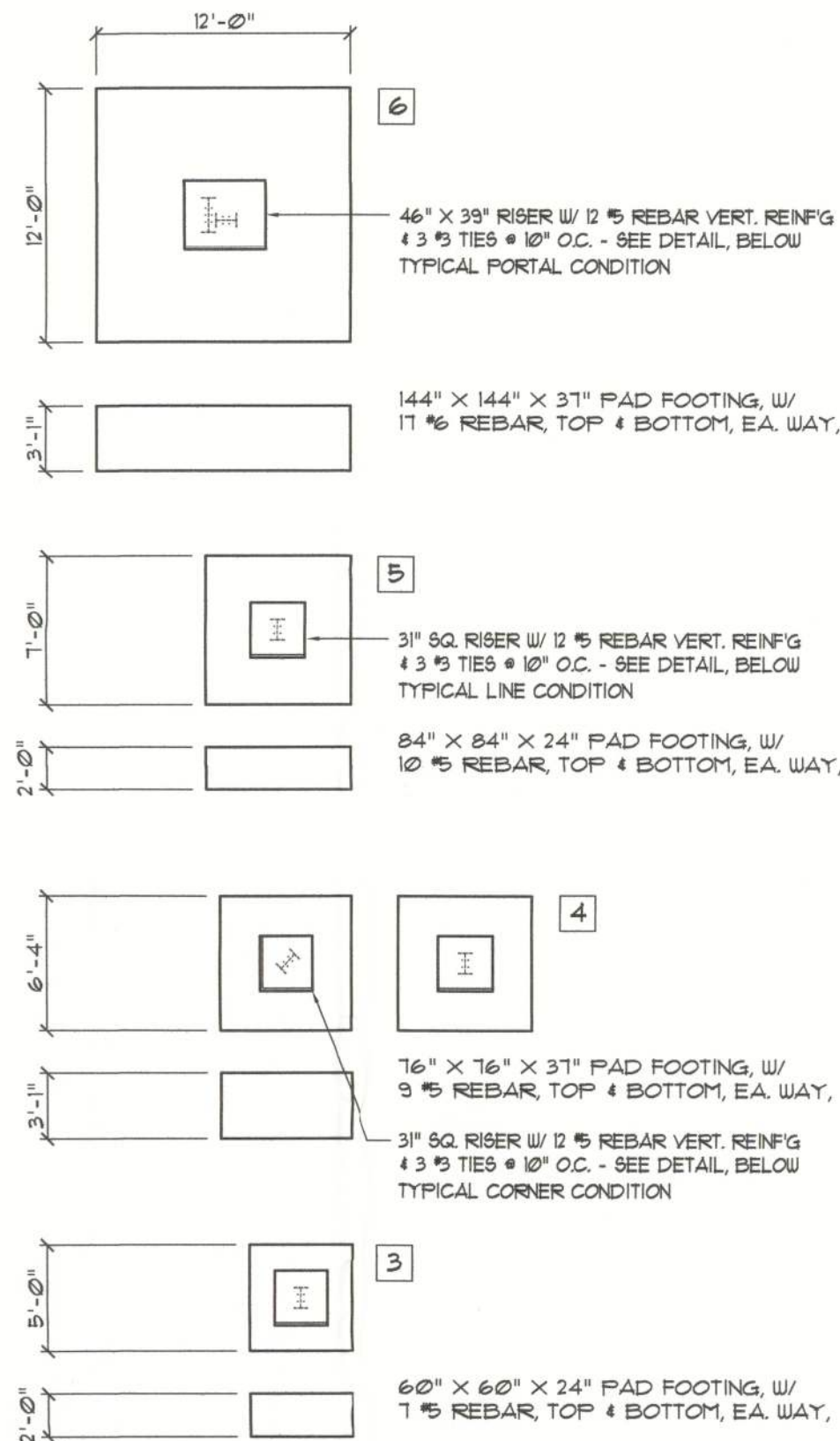
JOINT VENTURED WITH
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JOB NUMBER
2K1260
DATE
23 AUG 2012

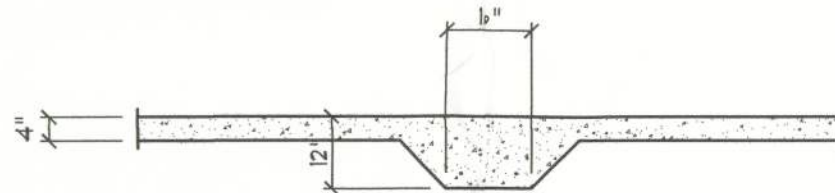
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OF 2 SHEETS

For Slab Permit



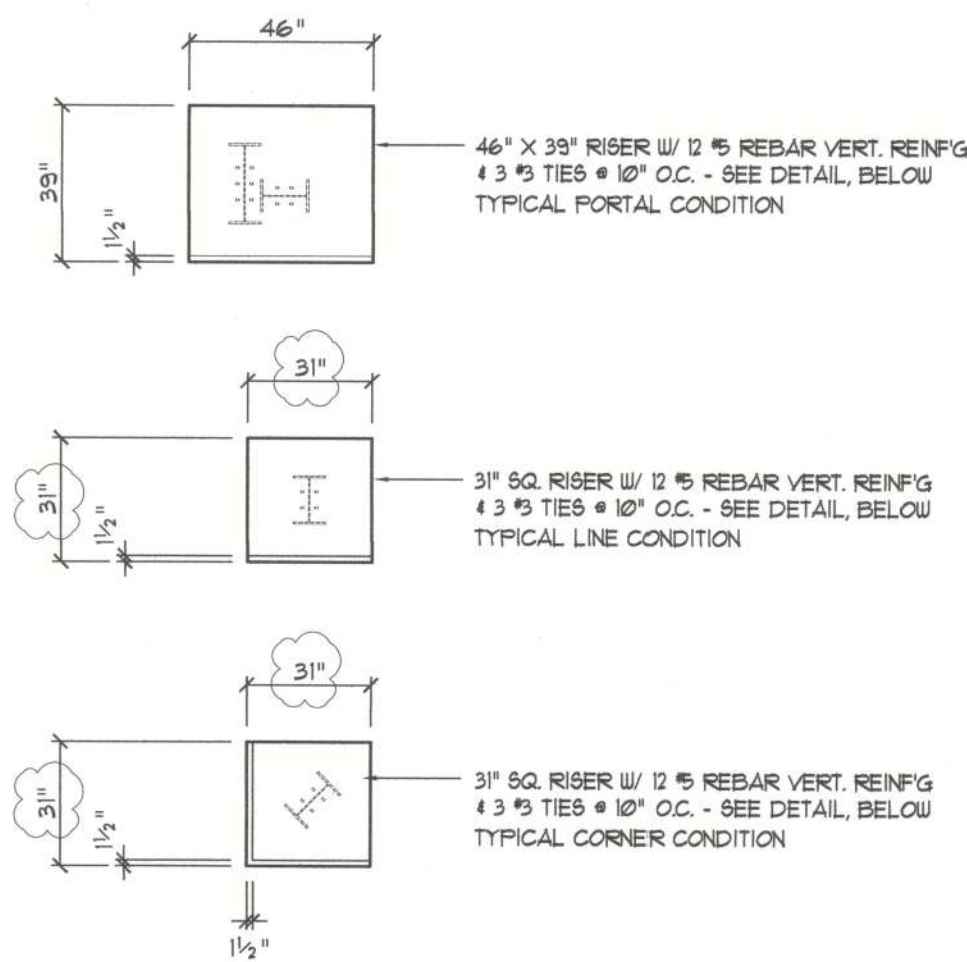
Footing DETAILS

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

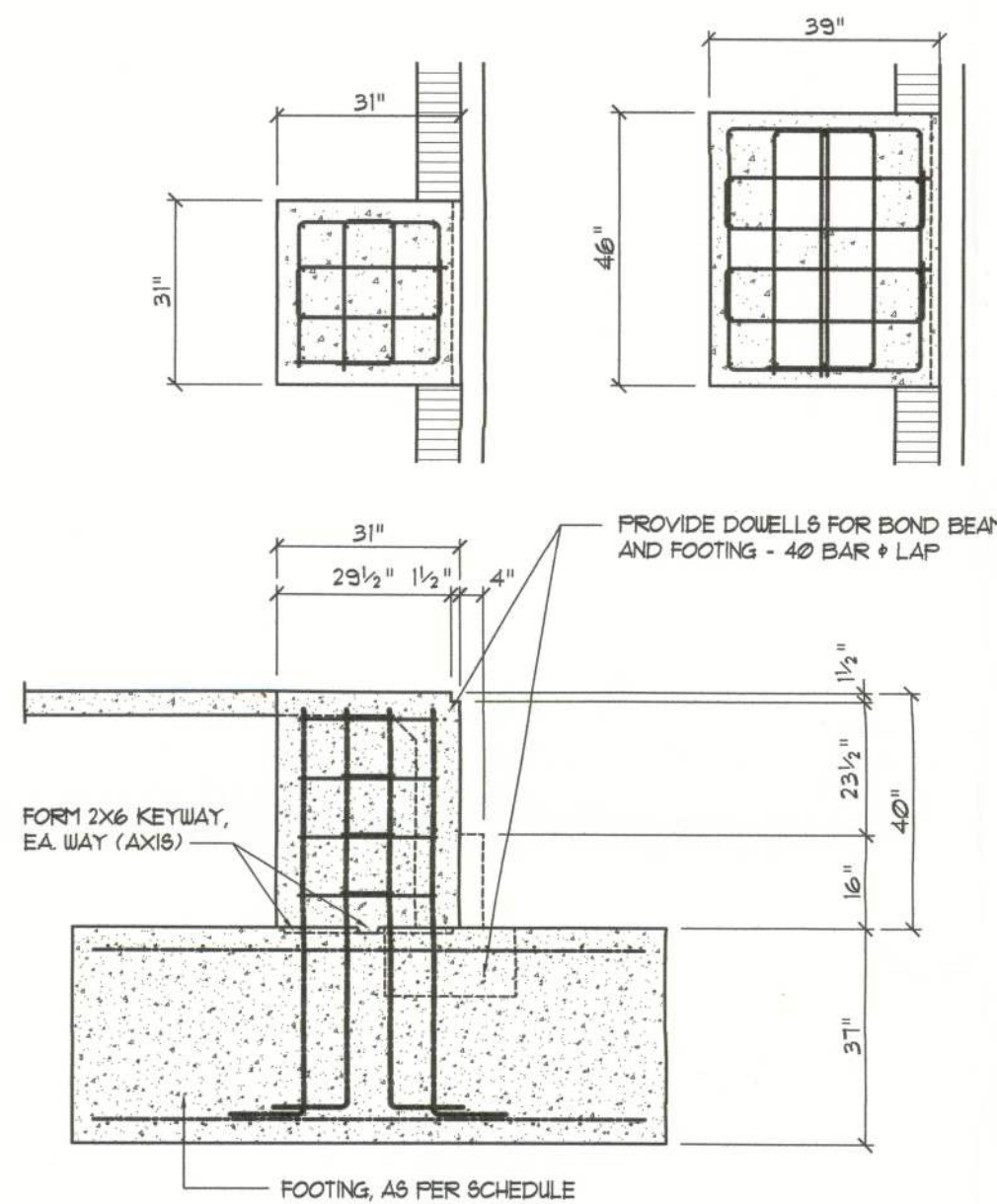


Mono. Fig. DET.

SCALE: 3/8" = 1'-0"

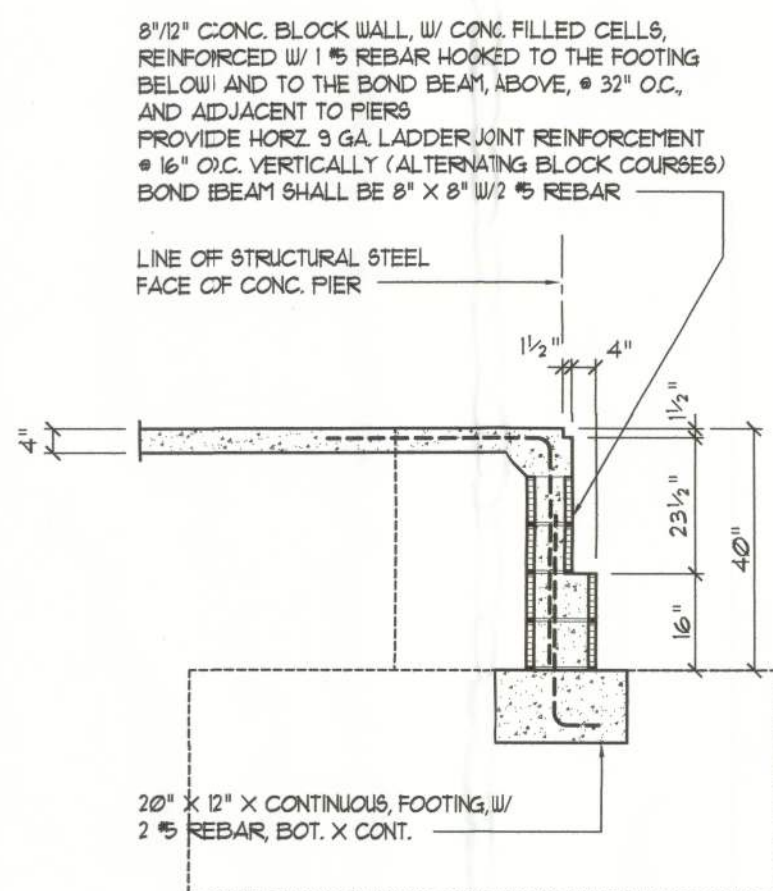


SCALE: 1/4" = 1'-0"



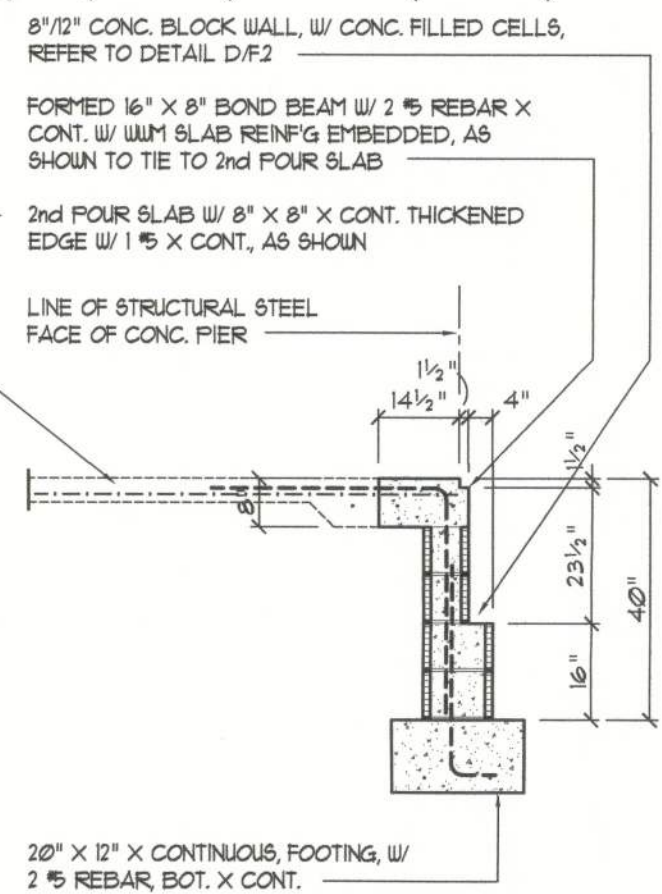
Pier DETAILS

SCALE: 3/8" = 1'-0"



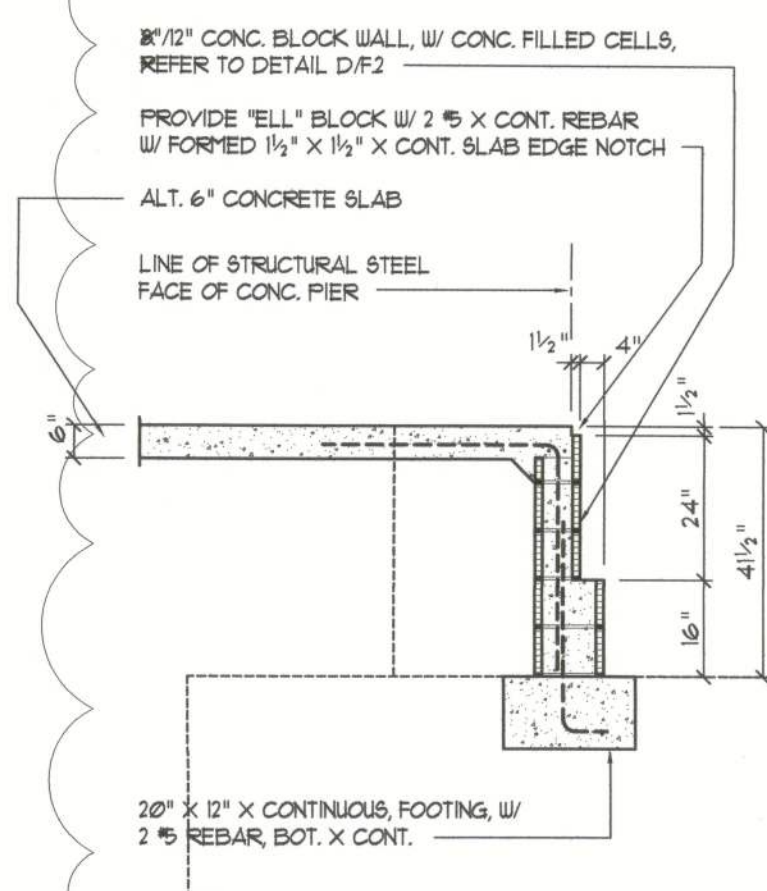
Stemwall DET.

SCALE: 3/8" = 1'-0"



2nd Pour Slab @ Stemwall DET.

SCALE: 3/8" = 1'-0"



Alternate Stemwall DET.

SCALE: 3/8" = 1'-0"

REINFORCED MASONRY WALLS:

- HOLLOW LOAD-BEARING MASONRY UNITS SHALL CONFORM TO ASTM C-90, TYPE I, GRADE N, SQUARE END, WITH A MINIMUM AVERAGE COMPRESSIVE STRENGTH ON NET AREA OF 1500 PSI. CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 530.1 SPECIFICATIONS.
- SPECIAL INSPECTOR SERVICES ARE REQUIRED FOR ALL REINFORCED MASONRY CONSTRUCTION. THE SPECIAL INSPECTOR SHALL INSPECT THE PLACING OF THE REBARS IN THE CELLS, VERIFY CLEANLINESS OF THE CELLS TO BE GROUTED, AND OBSERVE THE PLACING OF THE GROUT OR CONCRETE INTO THE CELLS.
- MORTAR SHALL CONFORM TO ASTM C-270, TYPE "M" OR "S".
- LAY ALL MASONRY WITH FULL FACE HEAD JOINTS AND WITH FACE SHELL MORTAR BEDDING.
- MASONRY ANCHORAGE TO SUPERSTRUCTURE SHALL BE PROVIDED IN ACCORDANCE WITH STRUCTURAL DRAWINGS AND DETAILS.
- THE USE OF ADMIXTURES SHALL NOT BE PERMITTED WITHOUT PRIOR REVIEW OF THE ENGINEER.
- VERTICAL REINFORCING:
 - ASTM A-615 PER REINFORCING SECTION.
 - WHEN A FOUNDATION DOHEL DOES NOT LINE UP WITH A VERTICAL CORE IT SHALL NOT BE SLOPED MORE THAN ONE HORIZONTAL INCH TO SIX INCHES VERTICAL FOR ALIGNMENT, EVEN THOUGH IT IS IN A CELL ADJACENT TO THE VERTICAL WALL REINFORCING.
 - VERTICAL REINFORCING STEEL SHALL BE PLACED CENTERED IN THE CELL. LAP 48 BAR-DIAMETERS. PROVIDE BAR SPACERS AS REQUIRED TO MAINTAIN REINFORCING SECURED IN POSITION.
 - VERTICAL REINFORCEMENT SHALL BE PROVIDED AT EACH SIDE OF OPENINGS IN WALL, AT WALL INTERSECTIONS, CORNERS AND ENDS. THIS REINFORCING SHALL BE THE SAME SIZE AS THE SCHEDULED WALL REINFORCING FOR THE PARTICULAR WALL BUT NEVER LESS THAN A #5 REBAR. SPECIAL CARE SHALL BE TAKEN TO INSURE THAT CELLS TO BE GROUTED LINE UP PROPERLY AND ARE CLEAN OF EXCESS MORTAR.
 - ALL VERTICAL REINFORCING SHALL BE HOOKED INTO THE BOND BEAMS AT THE NON-CONTINUOUS END OF THE REBARS.
 - PROVIDE INSPECTION HOLES AT THE BOTTOM OF EACH REINFORCED MASONRY CELL, AS REQUIRED FOR LIFTS HIGHER THAN 5 FT.
- HORIZONTAL REINFORCING:

PROVIDE GALVANIZED #1 GAGE, LADDER TYPE HORIZONTAL JOINT REINFORCING EVERY SECOND BLOCK COURSE (1'-4" O.C. VERTICALLY) LAPPED 7'-1/2". PROVIDE SPECIAL HORIZONTAL REINFORCING AT "T" AND "L" INTERSECTIONS. ANCHOR TO COLUMNS WITH MINIMUM 4" EXTENSION INTO AREA OF POUR.

 - PROVIDE "DOVE-TAIL" ANCHORS AT 18" O.C. VERTICALLY FOR ALL MASONRY PLACED ADJACENT TO ALREADY IN PLACE COLUMNS.
 - CELL FILLING CONCRETE SHALL BE "PFA DOCK" CONCRETE MIX (8" TO 4" SLUMP) OR GROUT WITH Fc=3,500 PSI MIN. AT 28 DAYS.
- LINTELS:
 - THE CONTRACTOR SHALL PROVIDE PRECAST CONCRETE OR CAST-IN-SITE LINTELS AT THE HEADS OF ALL OPENINGS IN MASONRY WALLS NOT EXCEEDING 50" (6) FEET IN WIDTH WHERE BEAMS HAVE NOT BEEN SPECIFIED. FOR OPENING ADJACENT TO CONCRETE COLUMNS - THE LINTEL SHALL BE CAST-IN-PLACE WITH THE COLUMN.
 - LINTEL MAY BE INTEGRAL WITH THE STRUCTURAL OR TIE BEAM WHEN HEAD OF THE OPENING IS 16 INCHES OR LESS BELOW. CONTINUE BEAMS TYPICAL BOTTOM REBARS THROUGH AND ADD 2-#5 BOTTOM TRUSS BARS AT DROPS AND 2-#5 STIRRUPS AT 6 INCHES O.C. EACH END AT DROP.
 - MINIMUM BEARING FOR ALL LINTELS 8 INCHES EACH SIDE OR PROVIDE DOHELLS AND POCKETS IN ADJACENT CONCRETE COLUMNS.
 - LINTEL TO BE MINIMUM OF 8 INCHES DEEP WITH 2-#4 TOP AND BOTTOM FOR CLEAR SPANS LESS THAN 6 FEET, 12 INCHES DEEP WITH 2-#5 TOP AND BOTTOM AND 2-#5 STIRRUPS AT 6 INCHES O.C. EACH END, FOR SPANS GREATER THAN 6 FEET (UP TO 6 FEET). CALL ENGINEER FOR SPANS LARGER THAN 6 FEET WITH NO SPECIFIED BEAMS OR LINTELS OVER.

REVISIONS
30 AUG 2010 - PIER
17 SEP 2012 - SLAB DET 1 DET. ID

SOFTPLAN
ARCHITECTURAL DESIGN SOFTWARE

WMLC 7/10

NEW LEARNING FACILITIES for:
BELMONT ACADEMY
CR. 240, COLUMBIA COUNTY, FLORIDA

AR0007005

NICHOLAS PAUL GESLER
ARCHITECT
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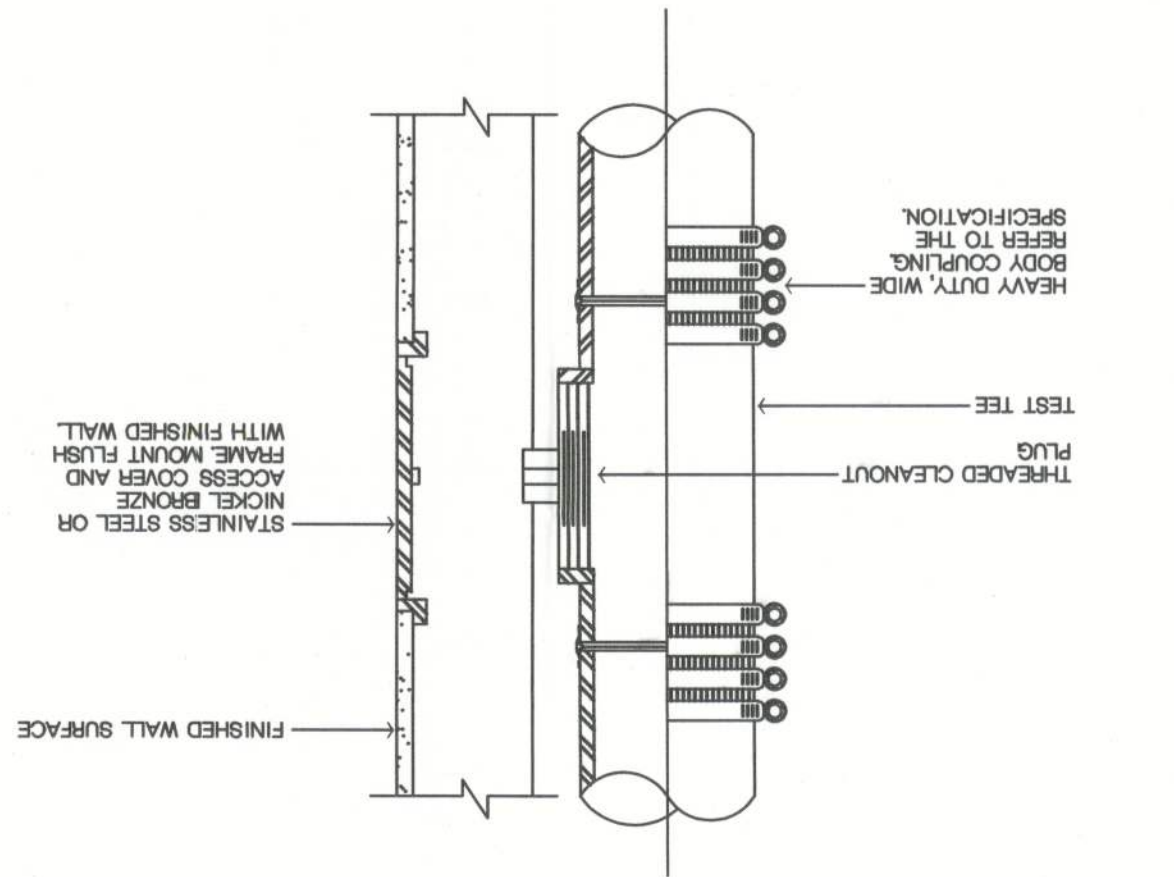
JOB NUMBER
2K1260
DATE
23 AUG 2012

SHEET NUMBER
F.2
OF 2 SHEETS

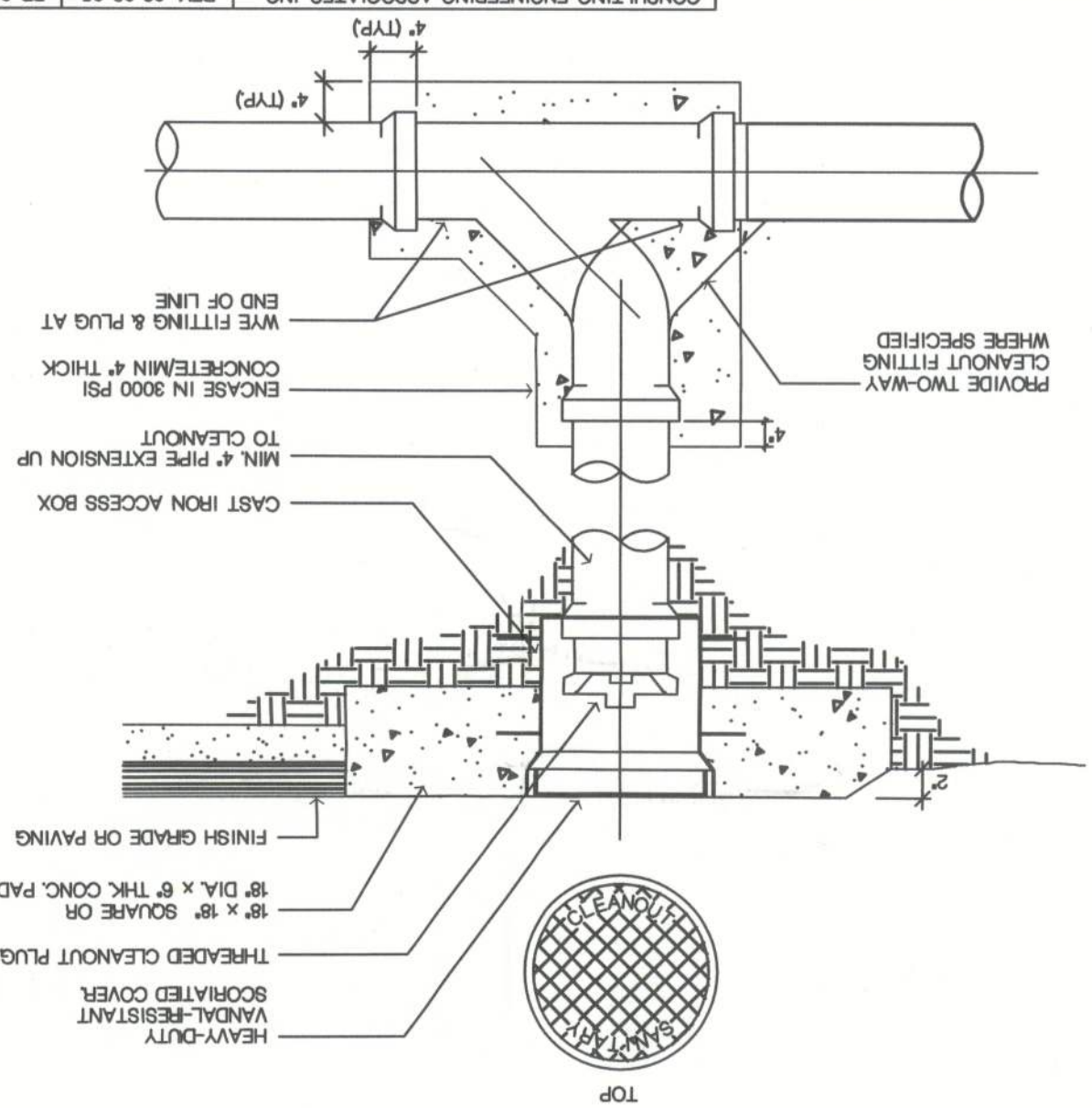
PLUMBING GENERAL NOTES

- REFERENCE.
ALL WORK UNDER THIS DIVISION SHALL COMPLY WITH THE CODES AND STANDARDS AS LISTED ON THE PROJECT DRAWINGS AND TO OTHER PERTINENT CODES MADE A PART OF SUCH CODE BY PLANS INDICATE THE SCHEMATIC LAYOUT AND LOCATION OF THE PLUMBING SYSTEM COMPONENTS. UNLESS SPECIFIC DIMENSIONS ARE NOTED, THE ACTUAL LOCATION OF THESE COMPONENTS SHALL BE DETERMINED IN THE FIELD IN COORDINATION WITH THE WORK OF OTHER TRADES. THE USE OF MANUFACTURER'S SHOP DRAWINGS AND SIMILAR CERTIFIED DATA, PLANS SHALL NOT BE SCALED. NO EXCLUSIONS FROM OR LIMITATIONS IN THE LANGUAGE USED IN THE CONTRACT DOCUMENTS SHALL BE INTERPRETED AS MEANING THAT EQUIPMENT, APPURTENANCES, AND/OR ACCESSORIES NECESSARY FOR A COMPLETE AND OPERATIONAL SYSTEM ARE NOT TO BE PROVIDED AS REQUIRED. THE SEPARATE DIVISIONAL DRAWINGS AND SPECIFICATIONS DO NOT RELIEVE THE CONTRACTOR FROM THE RESPONSIBILITY TO PROVIDE THE WORK WHICH IS INDICATED ON ANY OF THE DRAWINGS OR DIVISION OF THE SPECIFICATIONS. REVIEW AND COORDINATE THE SCOPE OF WORK WITH ALL SECTIONS TO ASSURE A COMPLETE AND FUNCTIONAL SYSTEM IS INSTALLED.
SUBMIT SHOP DRAWINGS OF ALL FIXTURES, EQUIPMENT, AND MATERIALS FOR REVIEW. INSTALL AND TEST ALL EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS. FOR ALL EQUIPMENT, WHICH HAS BEEN SCHEDULED DIRECTLY ON THE DRAWINGS, PROVIDE WITHIN THE SUBMITTAL A PERFORMANCE SCHEDULE FOR THE PROPOSED SHOP DRAWINGS/CATALOG-COPIES IN THREE RING BINDERS WITH A TITLE SHEET AND IDENTIFICATION ON FRONT AND BACK OF THE BINDER. SUBMIT DRAWINGS AND CUT SHEETS FOR ALL PRODUCTS AT ONE TIME. INDEX ALL ITEMS TO THE PRODUCT MANUAL OR DRAWINGS AS APPLICABLE. SHOP DRAWINGS THAT DEVIATE FROM THE REQUIREMENTS OF THE CONTRACT SHALL BE RETURNED TO THE ARCHITECT WITH A COVER LETTER ATTACHED TO TOP OF THE SUBMITTAL. ANY UNLIMITED DEVIATIONS FOUND DURING REVIEW WILL RESULT IN THE REJECTION OF THE ENTIRE SUBMITTAL. FOR ITEMS NOT MARKED "REVIEW" OR "REVISE AND RESUBMIT," MAKE ADDITIONAL SUBMITTALS WILL BE RETURNED TO VERIFY PRODUCT COMPLIANCE WITH THE CONTRACT DOCUMENTS. BE BLIND TO THE CONTRACTOR FOR THE DESIGN PROFESSIONAL TO VERIFY THE SUBMITTAL WITH THE REQUIREMENTS OR THE CONTRACT DOCUMENTS. THE HOURLY RATE OF \$150.00 WILL BE BILLED TO THE CONTRACTOR FOR THE PROFESSIONAL(S) TIME SPENT ON THE REVIEW.
PLUMBING AND OTHER ITEMS OF THE PLUMBING SYSTEM SHALL BE SUPPORTED DIRECTLY FROM THE BUILDING STRUCTURE AND NOT FROM THE CEILING, CEILING SUSPENSION SYSTEM, DUCTWORK, PIPING, OR ELECTRICAL SYSTEMS.
PIPING SHALL BE RUN A MINIMUM OF 6" ADJACENT TO RATED WALLS SO THAT WALLS CAN BE INSPECTED. (RELLOCATE ANY EXISTING PIPING AS REQUIRED.)
FOR SEALING OF PIPE PENETRATIONS THROUGH FIRE RATED WALLS, REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS. ALL PIPE PENETRATIONS SHALL BE SEALED USING DETAILS APPROVED BY UL.
PROVIDE ADDITIONAL PIPING SUPPORTS ON BOTH SIDES AND WITHIN 18" OF FIRE RATED WALLS. PIPING SHALL NOT BE SUPPORTED FROM ANY RATED WALL, SLEEVE AND/OR FIRESTOP. ALL PENETRATIONS THROUGH RATED WALLS, CEILINGS, AND FLOOR WITH UL LISTED FINISHES, SEE ARCHITECTURAL DRAWINGS FOR FINAL FINISHES.
HANGERS, ANCHORS AND SUPPORTS SHALL SUPPORT THE PIPING AND THE CONTENTS OF THE PIPING. HANGERS AND STRAPPING MATERIALS SHALL BE OF APPROVED MATERIALS THAT WILL NOT PROMOTE GALVANIC ACTION. PROVIDE PIPE SADDLES BELOW INSULATED PIPES.
ANCHORS AND ANCHORS SHALL BE ATTACHED TO THE BUILDING CONSTRUCTION IN AN APPROVED MANNER.
PIPE SUPPORT SWAY BRACING SHALL BE PROVIDED AT CHANGES IN DIRECTION GREATER THAN 45° FOR PIPE SIZES 4" AND LARGER.
ANCHORAGE SHALL BE PROVIDED TO RESTRAIN DRAINAGE PIPING FROM AXIAL MOVEMENT. FOR PIPE SIZES GREATER THAN 4", RESTRAINTS SHALL BE PROVIDED FOR DRAIN PIPES AT ALL CHANGES IN DIRECTION AND AT ALL CHANGES IN DIAMETER GREATER THAN TWO PIPE SIZES. BRACES, BLOCKS, RODDING AND OTHER SUITABLE METHODS AS SPECIFIED BY THE COUPLING MANUFACTURER SHALL BE UTILIZED.
BE UTILIZED.
HIGH, WITH 1 HIGH LETTERS. LENGTH OF THE SIGN SHALL BE THE SUM OF THE LETTERS/NUMBERS PLUS 3/4" EACH END.
CONCAT. PIPING ABOVE CEILING, WITHIN WALL OR CHASES EXCEPT IN MECHANICAL ROOMS OR AS SPECIFICALLY NOTED.
PROVIDE ACCESS PANELS (EQUAL TO MIFAB PRODUCTS) FOR ALL VALVES CONCEALED IN WALLS OR ABOVE NON-ACCESSIBLE CEILINGS. COORDINATE FINISH WITH THE ARCHITECT.
PROVIDE A PERMANENT 1/2" ROUND RED DOT ON THE CEILING GRID BELOW ALL VALVES.
TO CLEANOUT AS SHOWN ON THE DETAIL ON THE DRAWINGS.
COORDINATE CLEANOUTS IN ACCORDANCE WITH THE FLORIDA BUILDING CODE - PLUMBING. INSTALL CLEANOUT WITH COVER FLUSH TO FINISH SURFACE. WHEN OUTDOORS, PROVIDE CONCRETE ADJACENT
19. COORDINATE PIPING WITH ALL ELECTRICAL EQUIPMENT (PANELS, TRANSFORMERS, ETC.) PRIOR TO ANY INSTALLATION. DO NOT ROUTE ANY PIPING OVER ANY ELECTRICAL DEVICES.
20. ALL WALL MOUNTED LAVATORIES SHALL BE ATTACHED TO FLOOR MOUNTED CARRIERS DESIGNED TO WITHSTAND A VERTICAL LOAD OF 250 POUNDS ON THE FRONT OF FIXTURE.
21. REMOVE SANITARY WASTE, VENT, DOMESTIC WATER, ETC. ROUGH-IN AND MAKE FINAL CONNECTIONS (TO INCLUDE PROVIDING ALL NECESSARY RELATED STOPS, VALVES, TRAPS, ETC. AND MAKE READY TO USE) TO ALL EQUIPMENT, WHETHER FURNISHED BY THE CONTRACTOR OR FURNISHED BY OTHERS.
22. SECURE THE BASE OF ALL WATER COOLERS TO THE WALL. CAULK ALONG TOP OF WATER COOLER TO WALL.
DESIGN, CONSTRUCTION AND ALTERATION OF SUCH BUILDING AND FACILITIES TO THE EXTENT REQUIRED BY REGULATIONS ISSUED BY FEDERAL AGENCIES, INCLUDING THE DEPARTMENT OF JUSTICE, FOLLOW ADA GUIDELINES FOR ACCESSIBILITY TO PLACES OF PUBLIC ACCOMMODATION AND COMMERCIAL FACILITIES BY INDIVIDUALS WITH DISABILITIES. THESE GUIDELINES ARE TO BE APPLIED DURING UNDER THE AMERICANS WITH DISABILITIES ACT (ADA) OF 2010.
PRIOR TO ANY EXCAVATION THE CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES.
25. THE LOCATION OF ALL CLEANOUTS, VALVES, ETC. SHALL BE LOCATED FOR ACCESS AND/OR SERVICE IN REFERENCE TO THE FINISHED BUILDING. REFER TO THE DRAWINGS FOR APPLICABLE DETAILS. WALL CLEANOUT SHALL BE 18" A.F.F. AND FLOOR CLEANOUTS SHALL BE LOCATED WITHIN 12" OF AN ADJACENT E.T.C.
26. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATION AND SIZING/DIMENSIONS OF ALL PLUMBING FIXTURES, DRAINS, ETC.
27. ALL HOSE BIBBS, WALL HYDRANTS AND HOSE END CONNECTIONS SHALL BE EQUIPPED WITH AN APPROVED INTEGRAL VACUUM BREAKER AND SHUT OFF VALVE LOCATED ABOVE THE CEILING. UNLESS OTHERWISE NOTED, ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE INSTALLED 24" ABOVE FINISHED FLOOR OR GRADE.
28. DIELECTRIC UNIONS SHALL BE INSTALLED AT ALL CONNECTIONS OF DISSIMILAR METALS (SUCH AS COPPER TO GALVANIZED STEEL).
29. ALL VENT PENETRATIONS THROUGH THE ROOF SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL FRESH AIR INTAKES, DOORS, WINDOWS AND OTHER BUILDING OPENINGS. WHERE POSSIBLE, EXTEND VENT PIPE TO THE BACK SIDE OF BUILDINGS WITH SLOPED ROOFS.
30. UNDERGROUND SOIL AND WASTE PIPING SHALL BE PVC TYPE DWV AND SHALL CONFORM TO ONE OF THE FOLLOWING STANDARDS: ASTM D 2665, ASTM D 3311 OR ASTM F 1866. JOINTS SHALL BE SOLVENT CEMENTING. A PURPLE PRIMER THAT CONFORMS TO ASTM F 656 SHALL BE APPLIED TO JOINT SURFACES (CLEAN AND FREE FROM MOISTURE), SOLVENT CEMENT NOT PURELY IN COLOR AND CONFORMING TO ASTM D 2564, CSA B173.3, CSA B181.2 OR CSA B181.2 SHALL BE APPLIED TO ALL JOINT SURFACES. JOINTS SHALL BE IN ACCORDANCE WITH ASTM D 2855.
31. ABOVE GRADE SOIL, WASTE AND VENT PIPING SHALL BE SERVICE WEIGHT HEAVIER CAST IRON PIPE AND FITTINGS WITH WIDE BODY TYPE 304 STAINLESS STEEL HEAVY-DUTY COUPINGS WITH CONFORM TO ASTM C 564 OR CAN/CSA B902 AND SHALL BE PROVIDED WITH A CENTER STOP.
32. HOT AND COLD WATER PIPING SHALL BE SEAMLESS TYPE "L" HARD COPPER TUBE AND SHALL CONFORM TO NSF 61 AND ONE OF THE FOLLOWING STANDARDS: ASTM B 75, ASTM B 88, ASTM B 251 OR ASTM B 88, ASTM B 251. FITTINGS SHALL BE COPPER OR COPPER ALLOY AND SHALL CONFORM TO NSF 61 AND ONE OF THE FOLLOWING STANDARDS ASME B16.15, ASME B16.18, ASME B16.23, ASME B16.25, ASME B16.26 OR SAME B16.29.
33. THE SOLDER SHALL CONFORM TO ASTM B 32.
IN WATER PIPING.
PROVIDE VALVES WHERE INDICATED ON PLAN AND NECESSARY FOR PROPER SYSTEM OPERATION AND COMPONENT ISOLATION. PROVIDE VALVES RATED FOR 125 PSI OR GREATER WORKING PRESSURE.
BALL VALVES: NIBCO S-565-70
GATE VALVES: NIBCO S-113
CHECK VALVES: NIBCO S-413
BALANCE VALVES: NIBCO S170
34. INSULATE ALL DOMESTIC HOT WATER PIPING WITH 1" THICK FIBERGLASS WITH "AS" VAPOR BARRIER JACKET AND 25/50 FIRE/SMOKE RATING.
UNIONS AN ELECTRIC WATER HEATER AS INDICATED ON DRAWINGS. PROVIDE ASME TEMPERATURE & PRESSURE RELIEF VALVE, EXPANSION TANK, PLASTIC SAFETY DRAIN PAN, AND DIELECTRIC UTILITY PIPING AS CLOSE AS PRACTICAL TO THE STORAGE TANK.
36. NETTIC PIPE SISTERS SERVING STORAGE WATER HEATER TANKS NOT HAVING INTEGRAL HEAT TRAPS AND SERVING A NONRECIRCULATING SYSTEM SHALL HAVE HEAT TRAPS ON BOTH THE INLET AND OUTLET PIPING AS CLOSE AS PRACTICAL TO THE STORAGE TANK.
37. VERIFY SIZES, LOCATION, INVERTS AND ELEVATIONS PRIOR TO INSTALLING ANY PIPING.
38. COORDINATE ELECTRICAL CHARACTERISTICS AND REQUIREMENTS OF ALL PLUMBING EQUIPMENT WITH THE ELECTRICAL DRAWINGS AND FURNISH EQUIPMENT WIRED FOR THE VOLTAGE SHOWN HEREIN. PROVIDE STATEMENT INDICATING THIS HAS OCCURRED WITH THE SHOP DRAWING SUBMITTALS.
39. SLOPE ALL SANITARY PIPING 3" TO 6" AT A MINIMUM SLOPE OF 1/8" PER FOOT. ALL SANITARY PIPING 2"-2 1/2" AND SMALLER SHALL BE SLOPED AT A MINIMUM OF 1/4" PER FOOT.
40. ALL EXPOSED PIPING UNDER ACCESSIBLE LAVATORIES SHALL BE INSULATED WITH PROTECTIVE UNDER-SINK PIPE COVERS AND PLUMBING ENCLOSURES AS MANUFACTURED BY TRUEBRO.
41. ALL SANITARY, VENT AND WATER PIPING SHALL BE TESTED BEFORE BEING CONCEALED IN ANY WAY. ALL JOINTS SHALL BE MADE DROP TIGHT BEFORE BEING CONCEALED. DOMESTIC WATER PIPING SHALL BE TESTED AT 1-1/2 TIMES OPERATING PRESSURE OR 100 PSI, WHICHEVER IS GREATER.
DISINFECTED PORTABLE WATER SYSTEM PER THE FLORIDA BUILDING CODE.

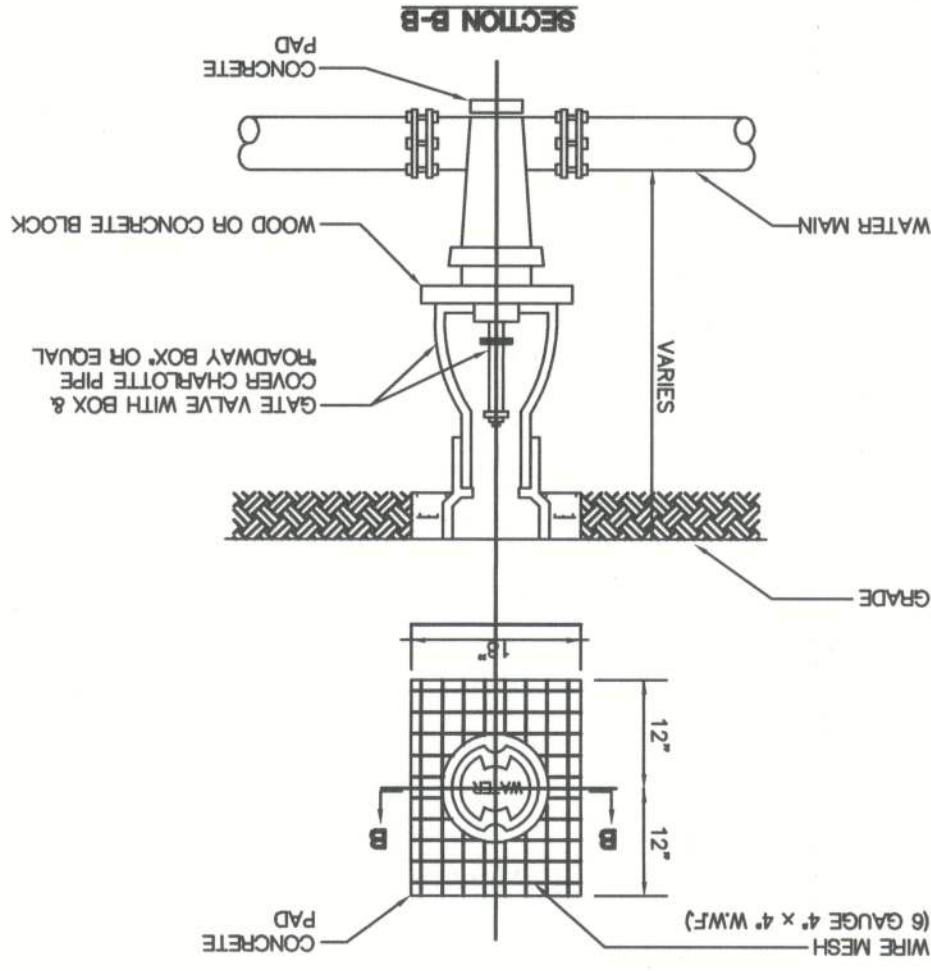
CO-1 WALL CLEANOUT
HUBLESS CAST IRON PIPE W/ACCESS COVER



CO-2 EXTERIOR CLEANOUT



GATE VALVE, VALVE BOX & PAD INSTALLATION



SECTION B-B

THE SURFACE OF THE FINISHED PAVEMENT OR AT SUCH OTHER LEVEL AS MAY BE DIRECTED.

CONSULTING ENGINEERING ASSOCIATES, INC.	REV: 02-14-05	PD-1118
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PLUMBING LEGEND & SYMBOLS		
SAN	SANITARY SOIL & WASTE	
SAN	SANITARY SOIL & WASTE (BELOW GRADE)	
V	SANITARY VENT	
CW	DOMESTIC COLD WATER	
HW	DOMESTIC HOT WATER	
HWR	DOMESTIC HOT WATER RETURN	
	PIPE DROP	
	PIPE RISE	
	PIPE CONNECTION (TOP)	
	PIPE CONNECTION (BOTTOM)	
	SHUT-OFF VALVE (VERTICAL RISER)	
	SHUT-OFF VALVE (IN CAST IRON BOX)	
	HOSE BIBB / WALL HYDRANT	
	WALL CLEANOUT	
	FLOOR DRAIN	
	SHUTOFF VALVE	
	GATE VALVE	
	CHECK VALVE (SWING)	
	UNION	
	BALANCING VALVE (CALIBRATED)	
	WATER HAMMER ARRESTOR	
	TEMP/PRESS RELIEF VALVE (ASME)	

CODE CRITERIA

NOTE:
ALL CODES SHALL COMPLY WITH THE LATEST EDITION OF
STATE FIRE MARSHAL'S RULE 4A-3.0.14 F.A.C.
THIS LIST IS NOT INCLUSIVE OF ALL CODES AND STANDARDS
THAT MAY OR MAY NOT APPLY TO THIS PROJECT.
NATIONAL FIRE PROTECTION ASSOCIATION (NFPA):
NFPA-70 (2008)
NATIONAL ELECTRICAL CODE

- *FLORIDA AMERICANS WITH DISABILITIES ACT
- *FLORIDA BUILDING CODE (FBC) 2010 - ALL
- *FLORIDA ENERGY EFFICIENCY CODE - 2010
- *FLORIDA FIRE PREVENTION CODE 2010

DRAWING INDEX

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| P.1 | PLUMBING LEGEND, NOTES, SYMBOLS, AND DETAILS |
| P.2 | PLUMBING SCHEDULES AND DETAILS |
| P.3 | PLUMBING FIRST FLOOR PLAN - SANITARY |
| P.4 | PLUMBING FIRST FLOOR PLAN - WATER |
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| P.7 | PLUMBING ISOMETRIC DIAGRAM - WATER |

SHEET NUMBER P.1

17 SEPT 2012

2K1223a

JOB NUMBER

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PROJECT NUMBER: 12057
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N3

**NICHOLAS
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GEISLER
ARCHITECT**

N.C.A.R.B. Certified

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■ (386) 755-9021

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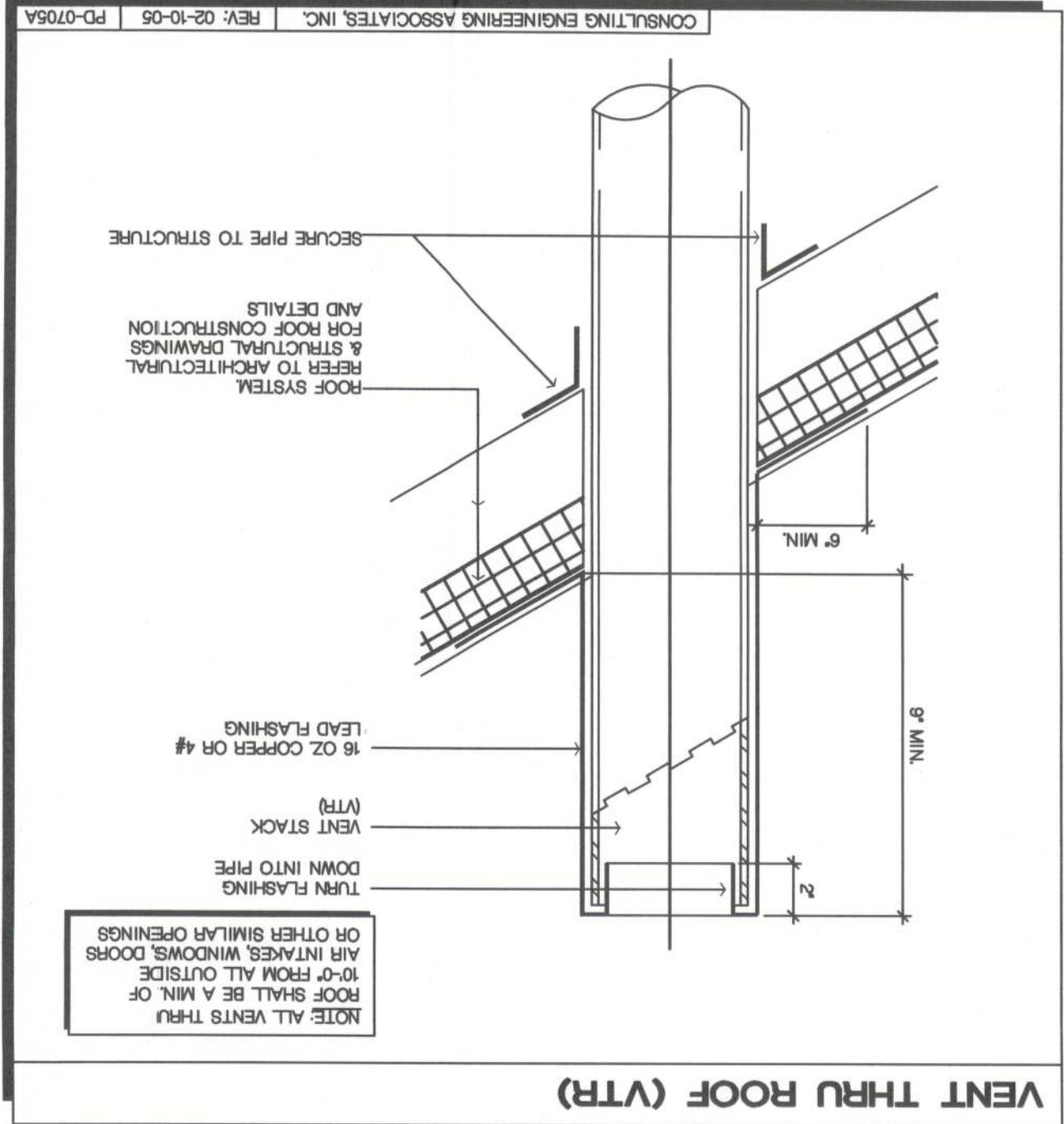
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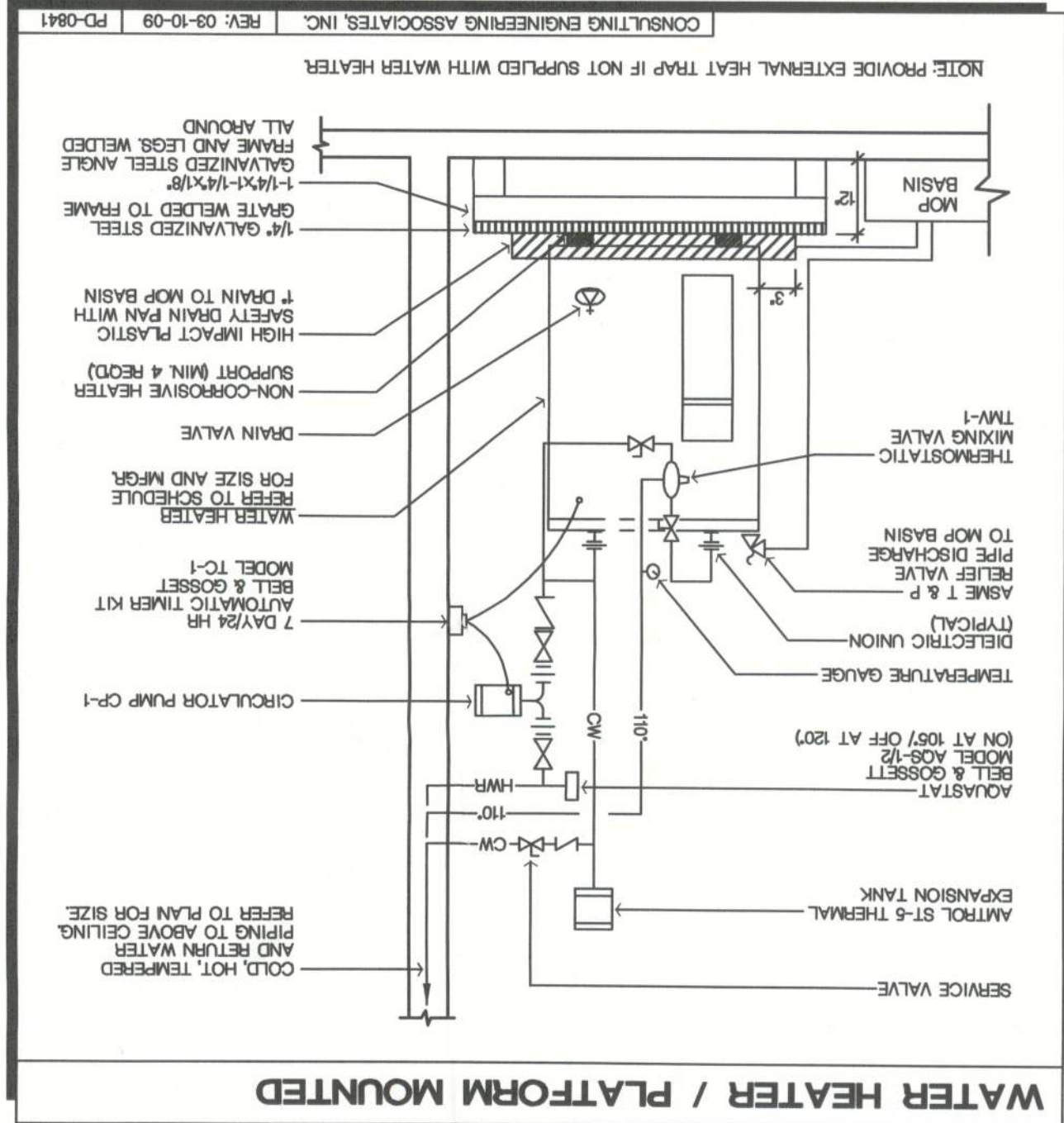
JOHN W. WELLS, III, PE
PE 0049347

BELMONT ACADEMY FOR:
MOUNTAIN TOP MINISTRIES
5037 SR 240, LAKE CITY, FLORIDA 32024

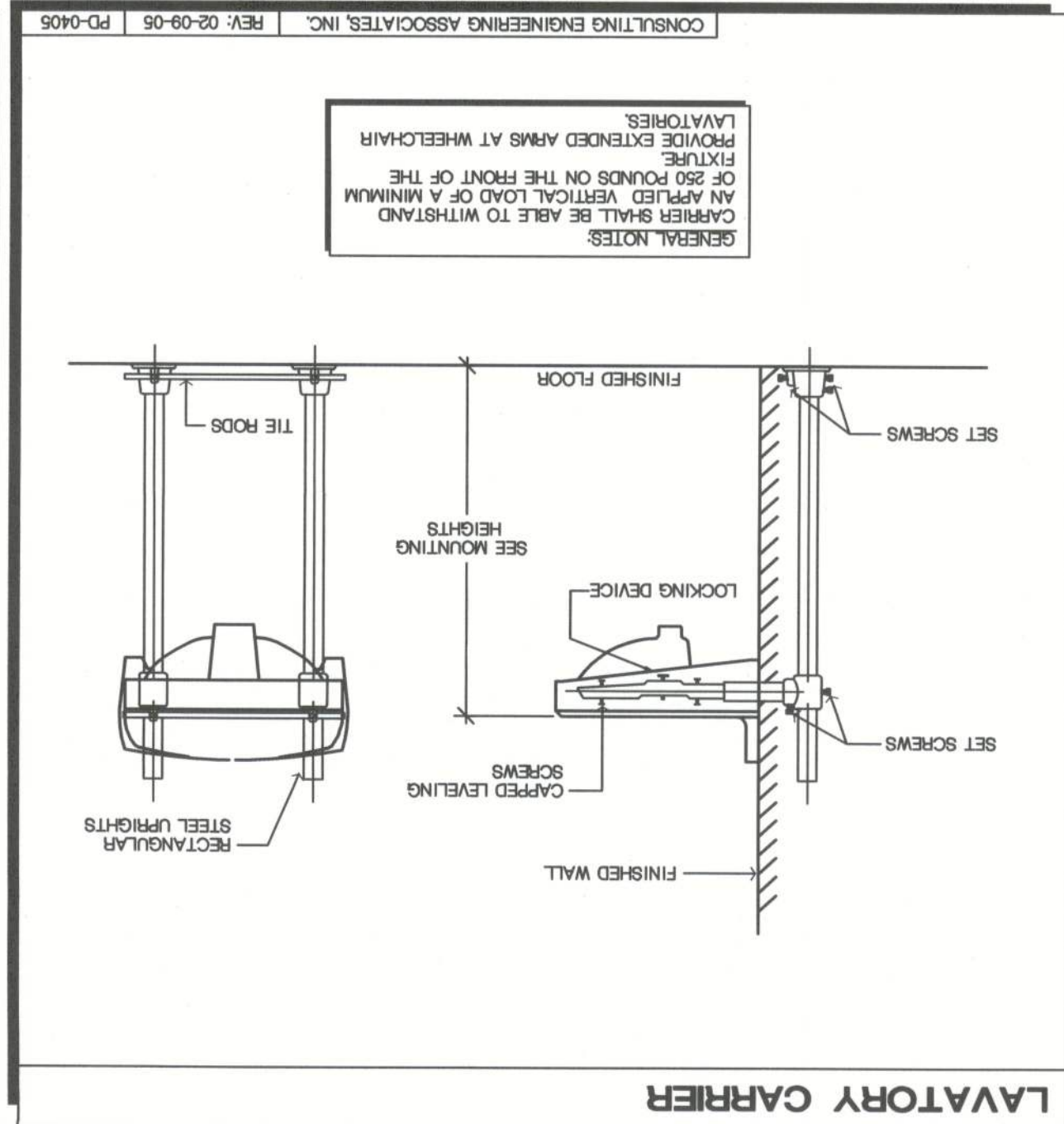
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CONSULTING ENGINEERING ASSOCIATES, INC. REV: 02-02-05 PD-07054



CONSULTING ENGINEERING ASSOCIATES, INC. REV: 08-10-09 PD-0841



CONSULTING ENGINEERING ASSOCIATES, INC. REV: 02-09-05 PD-0405

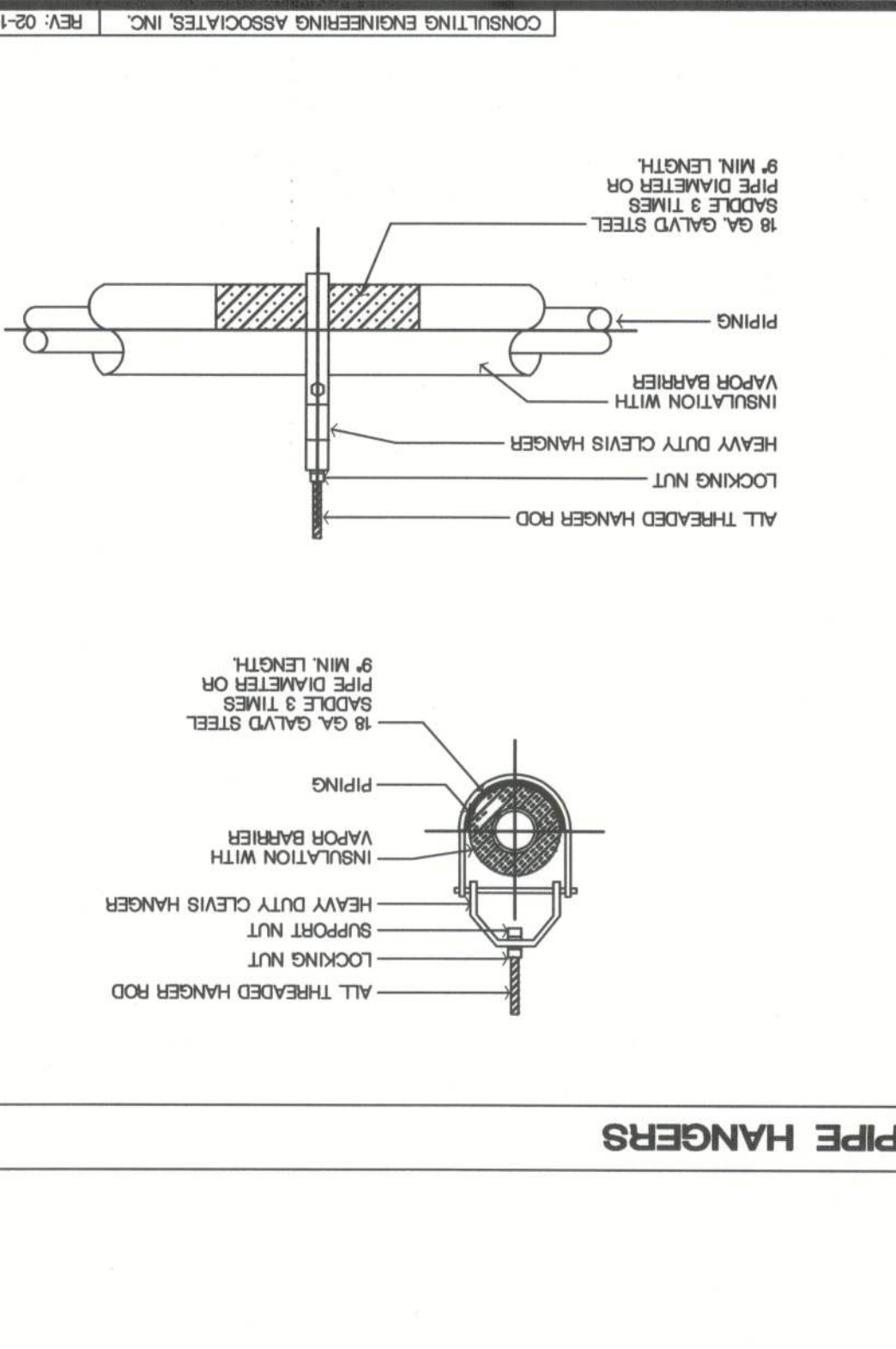
PLUMBING FIXTURE SCHEDULE

MINIMUM CONNECTIONS	WASTE	VENT	CW	HW	FIXTURE
WC-1	4"	2"	1-1/4"	-	WATER CLOSET/ADA WHITE, VITREOUS CHINA, ELONGATED BOWL, FLOOR MOUNTED, 1.4 GALLONS PER FLUSH.
L-1	1-1/2"	1-1/2"	1-1/2"	1/2"	LAVATORY/ADA WHITE, WALL HUNG, VITREOUS CHINA, 20-3/4" X 18-1/4", 4" CENTERS, WITH CARRIER. OVERFLOW, DRILLED FOR CONCEALED ARM KOHLER "GREENWICH" K-2032
EW-1	1-1/2"	1-1/2"	1-1/2"	-	ELECTRIC WATER COOLER/ADA SELF CONTAINED, WALL HUNG ELECTRIC REFRIGERATED WATER COOLER, BARRIER FREE ACCESS, STAINLESS STEEL BOWL, 8.8 GPH OF 90°F WATER WITH 90°F AMBIENT AND 80°F SUPPLY WATER TEMPERATURE. SELF CLOSING EASY TOUCH CONTROLS ON FRONT AND BOTH SIDES. ELKAY EZ58
MB-1	3"	2"	1/2"	1/2"	MOP BASIN WHITE, MOLDED STONE, 24"x24"x10" HIGH, FITTING WITH VACUUM BREAKER, 3/4" STAINLESS STEEL DRAIN BODY, COMBINATION DOME STRAINER AND STAINLESS STEEL UNIT BASINET, 3" CONNECTION. FIAT MSB-2424 FIAT MSB CC (MOP BRACKET) FIAT 1453 BB (STAINLESS STEEL STRAINER) FIAT 832 AA (HOSE AND BRACKET) FIAT MSG 2424 (STAINLESS STEEL WALL GUARDS). NOTE: INSTALL WALL GUARDS ONLY IF WALLS ARE NOT TILED.

HANGER SPACING

MAXIMUM HORIZONTAL SPACING (FEET)	MAXIMUM VERTICAL SPACING (FEET)	PIPING MATERIAL
15	5	CAST-IRON PIPE
10	6	COPPER OR COPPER-ALLOY TUBING, 1-1/4" DIAMETER AND SMALLER
10	6	COPPER OR COPPER-ALLOY TUBING, 1-1/2" DIAMETER AND LARGER
10	4	PVC PIPE

a. THE MAXIMUM HORIZONTAL SPACING OF CAST-IRON PIPE HANGERS SHALL BE INCREASED TO 10' WHERE 10' LENGTHS OF PIPE ARE INSTALLED.
b. MIDSTORY GUIDE FOR SIZES 2" AND SMALLER.



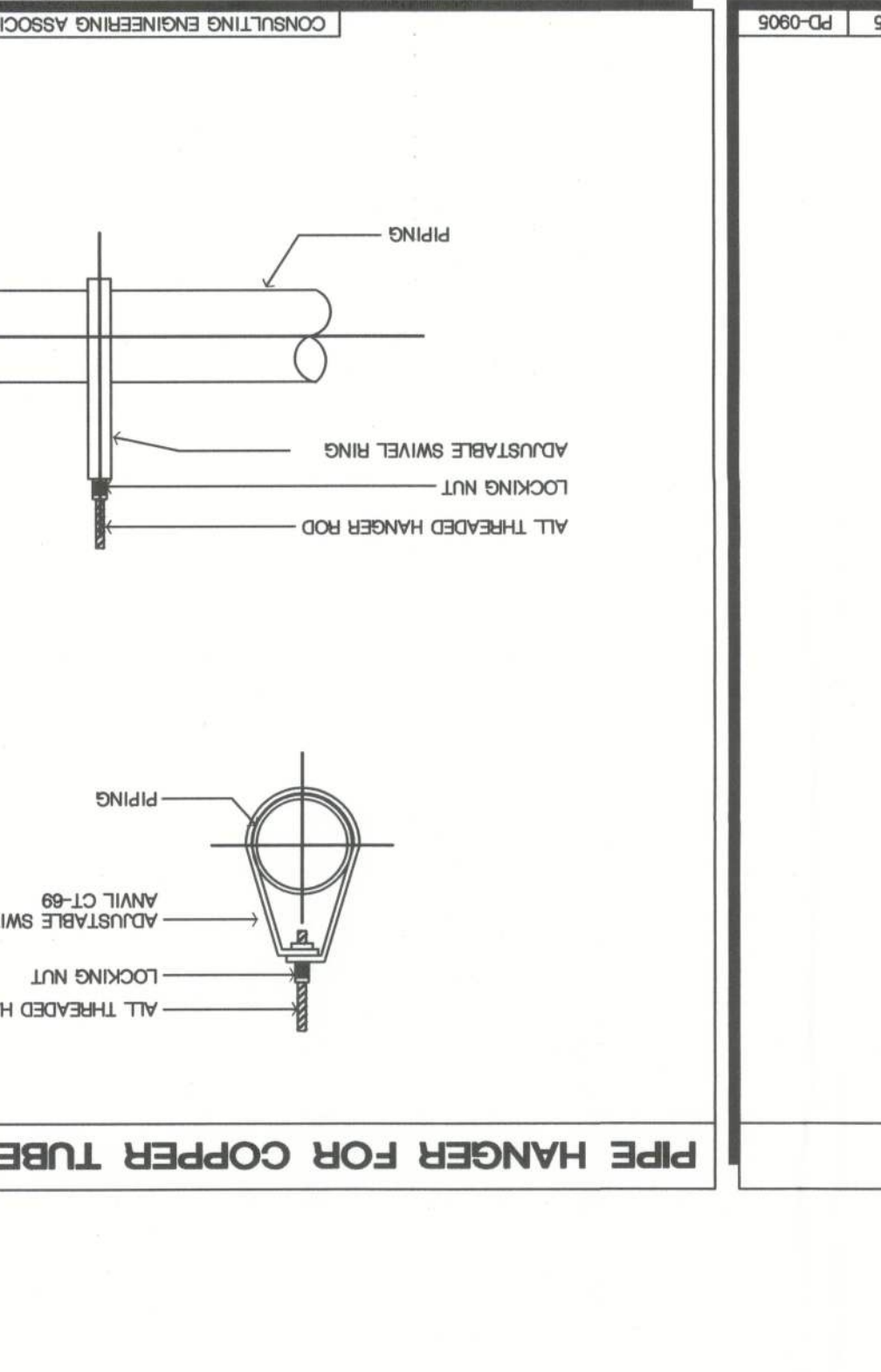
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REGRULATION PUMP SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	TYPE	VOLTS/PHASE/HERTZ	KW INPUT	LEAVING WATER TEMP.	STORAGE CAPACITY (GAL)	GAL PER HR RECOVERY @ 60°F RISE	DIMENSIONS	TERMINAL EXPANSION TANK
RP-1	BELL & GOSSETT	NBF-10S/LW	1	1/2" SWEAT	6	480/3/60	120F	50	41	AMTROL ST-5-C

WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL NUMBER	TYPE	VOLTS/PHASE/HERTZ	KW INPUT	LEAVING WATER TEMP.	STORAGE CAPACITY (GAL)	GAL PER HR RECOVERY @ 60°F RISE	DIMENSIONS	TERMINAL EXPANSION TANK
EW-1	A.O. SMITH	DEW-32	ELECTRIC	1/2" SWEAT	6	480/3/60	120F	50	41	AMTROL ST-5-C



CONSULTING ENGINEERING ASSOCIATES, INC. REV: 10-20-11 PD-0911

PLUMBING SPECIALTIES SCHEDULE

MARK	DESCRIPTION	MODEL
CO-1	WALL CLEANOUT ROUND SECURED STAINLESS STEEL FRAME, HEAVY DUTY SCREWED ACCESS COVER AND FRAME.	ZURN ZN-1446-VP
CO-2	ROUND CLEANOUT RESISTANT, CAST IRON ACCESS COVER, COATED WITH IRON CLEANOUT FERRULE WITH SPIGOT CONNECTION WITH GAS AND WATER TIGHT ABS COUNTERSINK PLUG.	ZURN ZN-1474-IN-VP
HB-1	HOSE BIBB ROUGH BRASS FINISH, BRASS BODY, LOOSE KEY, BRASS VALVE. VACUUM BREAKER AND 3/4" MALE HOSE THREAD.	WOODFORD MODEL 24P-BR
WH-1	WALL HYDRANT AUTOMATIC DRAINING FREEZELESS TAMPER RESISTANT CHROME WALL HYDRANT, HOUSED IN A PLATED BRASS BOX, LOOSE KEY OPERATED, 3/4" CONNECTION.	WOODFORD MODEL B65
FD-1	FLOOR DRAIN 9" DIAMETER TOP ADJUSTABLE CAST IRON BODY WITH BOTTOM OUTLET, SEEPAGE PAN AND ADJUSTABLE EXTENSION FRAME WITH HEAVY DUTY CAST IRON DEEP PRIMER CONNECTION, BACKWATER VALVE, SEDIMENT BUCKET.	ZURN Z520-P-V-Y
TMV-1	THERMOSTATIC MIXING VALVE LEAD FREE BRASS, SINGLE VALVE SERIES LFLM490 HI/LO, PARAFIN-BASED ADVANCED THERMAL ACTUATION TECHNOLOGY AND UNION CONNECTIONS, INTERNAL CHECKS AND INLET SCREENS, VALVE SHALL PERFORM AT A MINIMUM FLOW OF 0.5 GPM TO ASSE 1017, SET OUTLET TEMPERATURE AT 105 F, 1"	MODEL: LFLM492-2

SHOCK ARRESTOR SCHEDULE

SIZE	FIXTURE UNITS	MANUFACTURER & MODEL NO.
(A)	1-11	ANCOM JOSAM 75001 SHOK-GARD A
(B)	12-32	ANCOM JOSAM 75002 SHOK-GARD B

ALL UNITS SHALL BE P.D.I. RATED. AVAILABLE MANUFACTURERS:
JR SMITH, JONESPECK OR WADE.
ZURN
Z-1700-200
ZURN
Z-1700-100

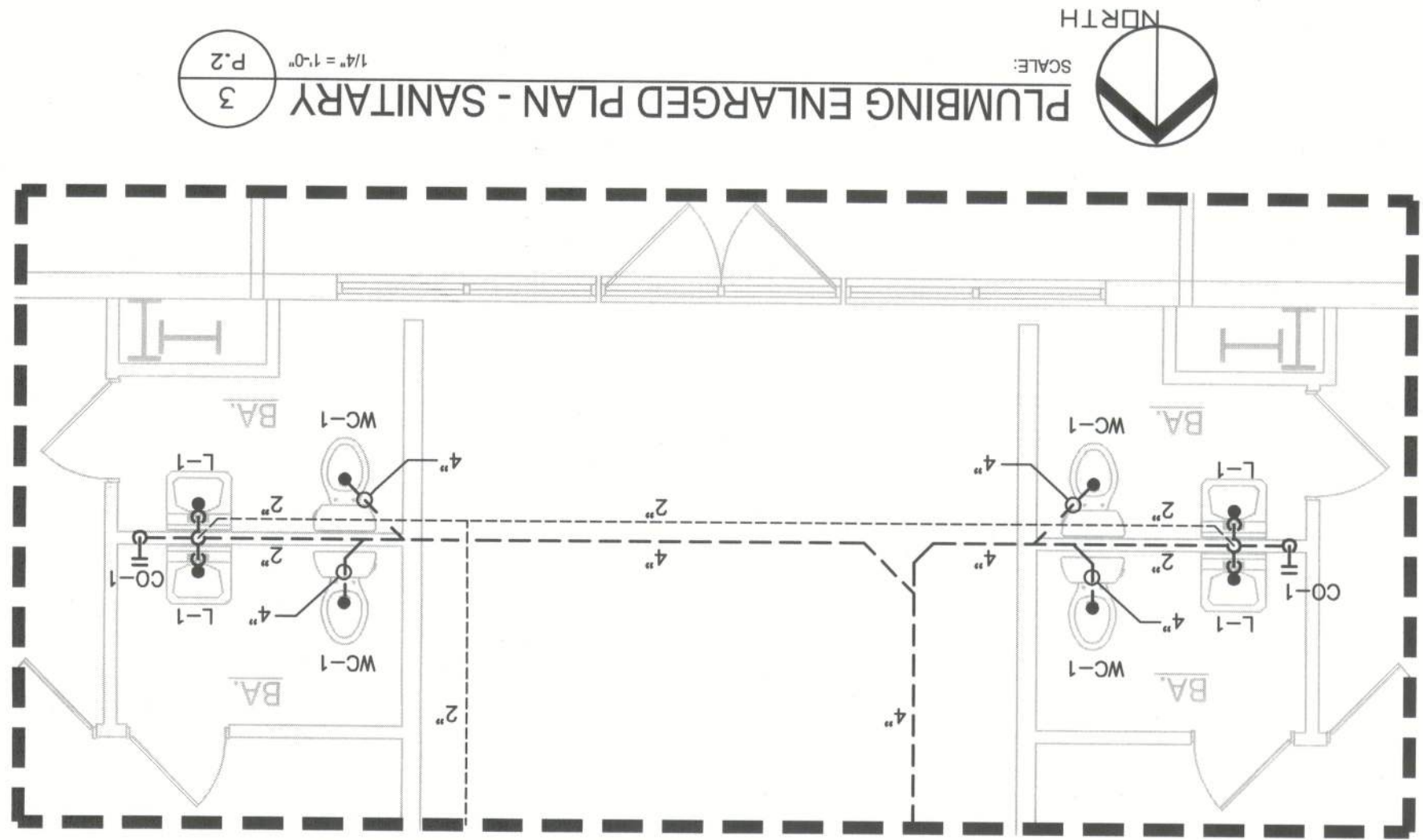
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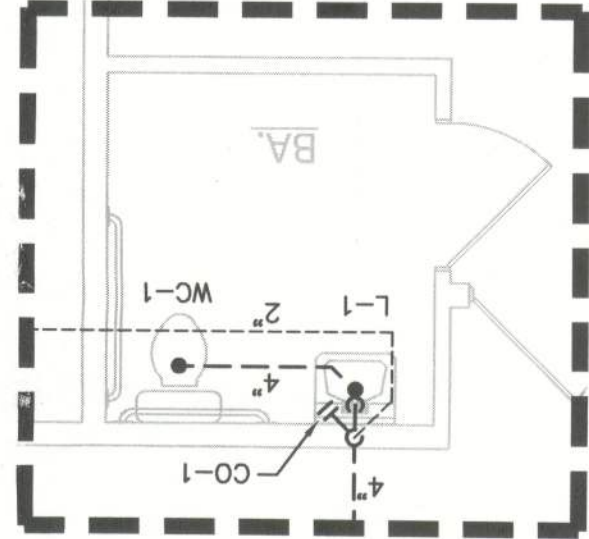
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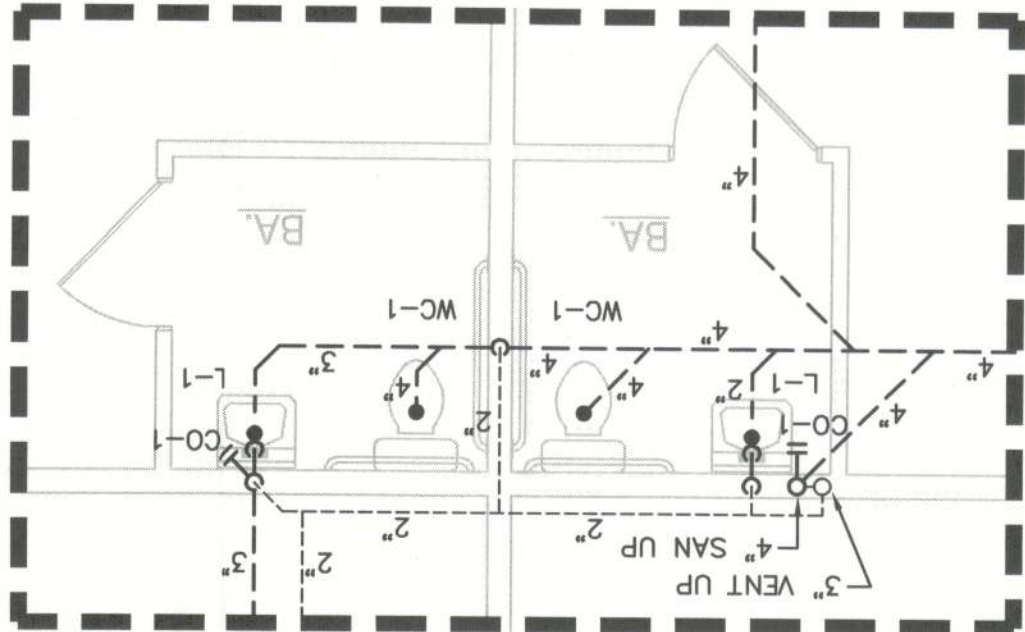
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CORPORATE OFFICE: 2012
CONSULTING ENGINEERING ASSOCIATES, INC.
SHEET NUMBER: P.2
JOB NUMBER: 2K1223a
DATE: 17 SEPT 2012



PLUMBING ENLARGED PLAN - SANITARY 2
SCALE: 1/4" = 1'-0"
P.2

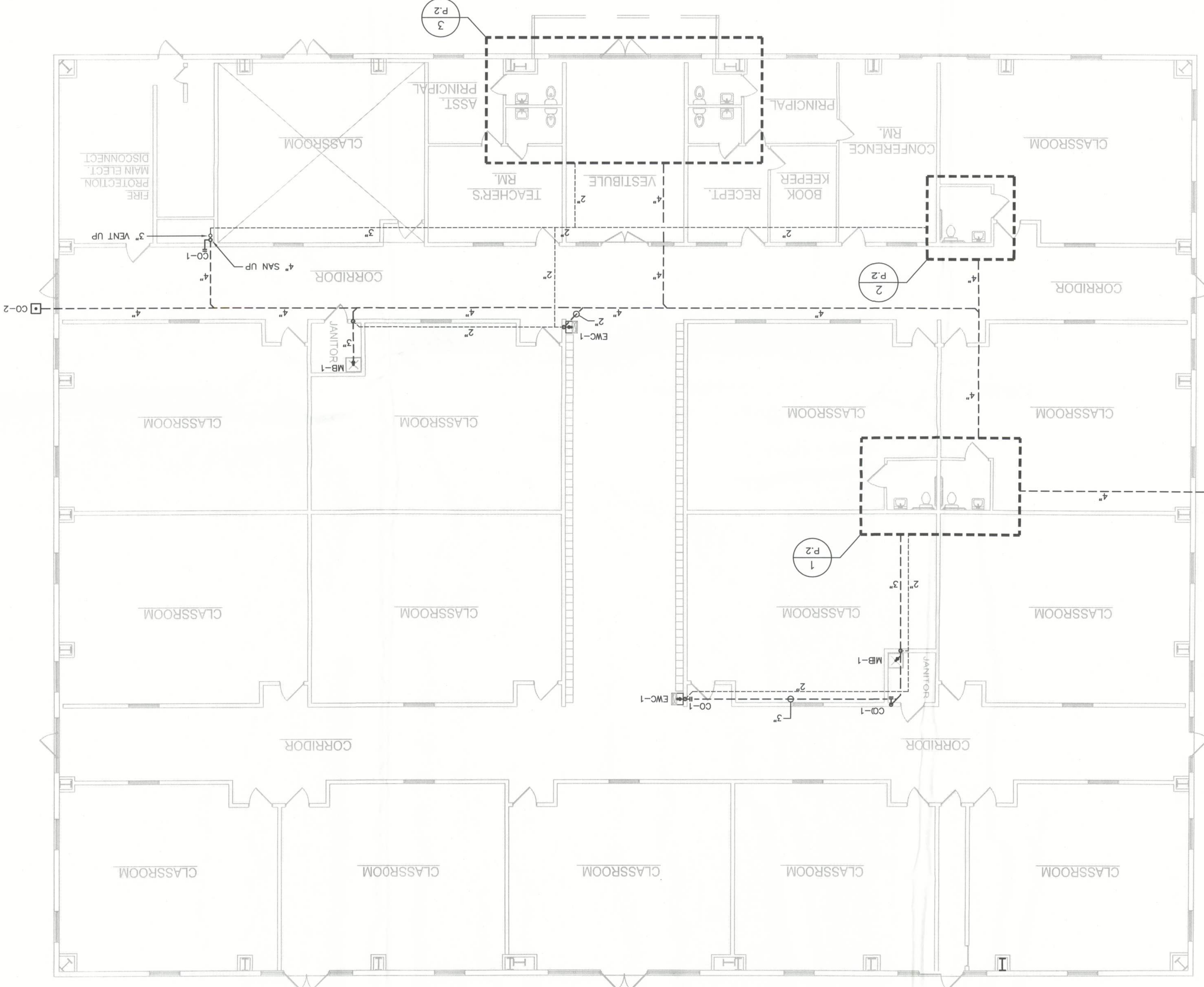


PLUMBING ENLARGED PLAN - SANITARY 1
SCALE: 1/4" = 1'-0"
P.2



4" SANITARY
FOR CONTINUATION
REFER TO CIVIL SITE PLAN
CO-2 2-WAY
IE=4' BFF (44 DFU)

PLUMBING FIRST FLOOR PLAN - SANITARY
SCALE: 1/8" = 1'-0"
P.2



P.3
SHEET NUMBER

2K1223a
DATE: 17 SEPT 2012
JOB NUMBER

CONSULTING ENGINEERING ASSOCIATES, INC.
PROJECT NUMBER: 12007
DATE: 09/03/2012
PROJECT: 12007
CONSULTING ENGINEERING ASSOCIATES, INC.
12007



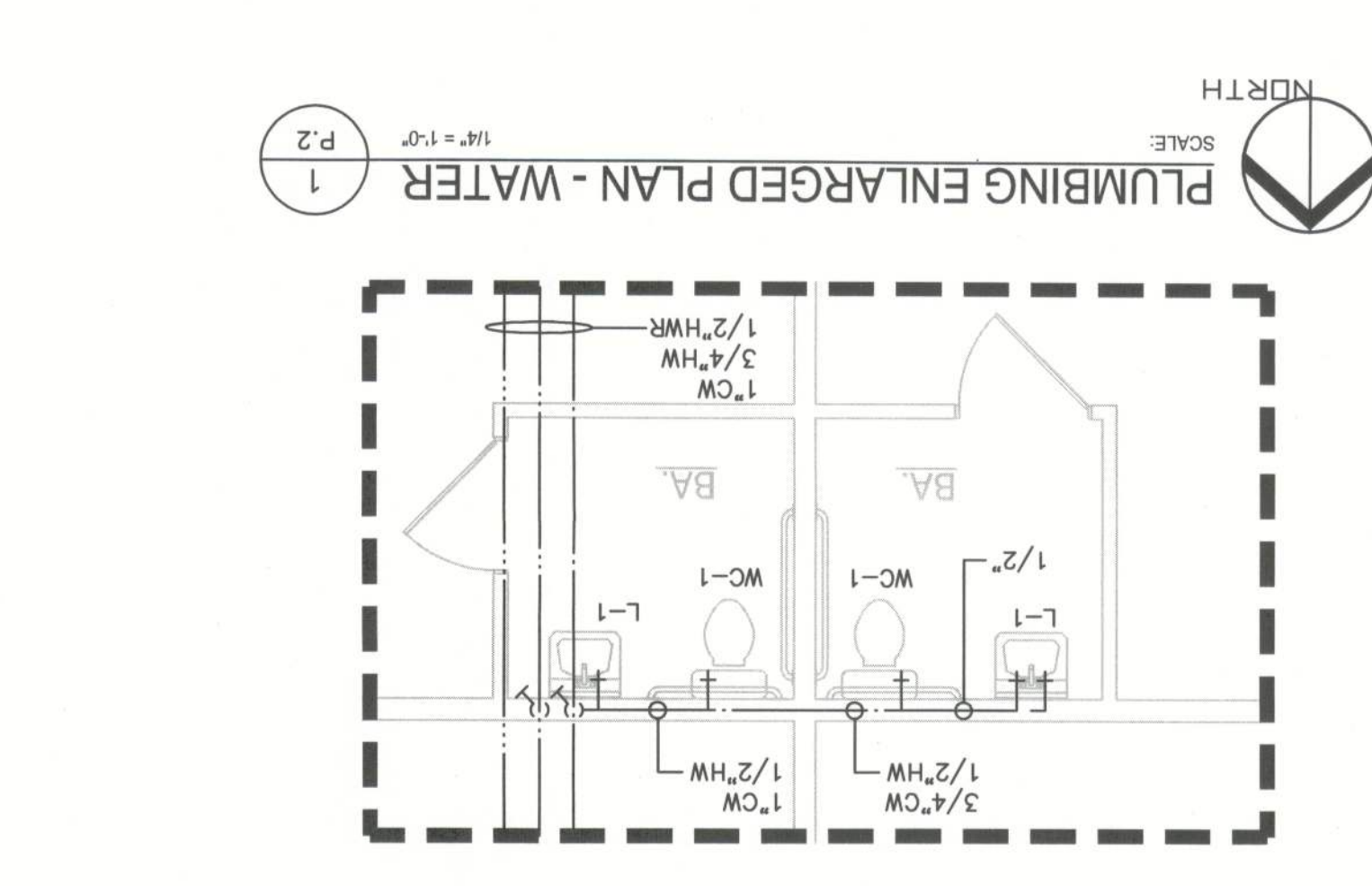
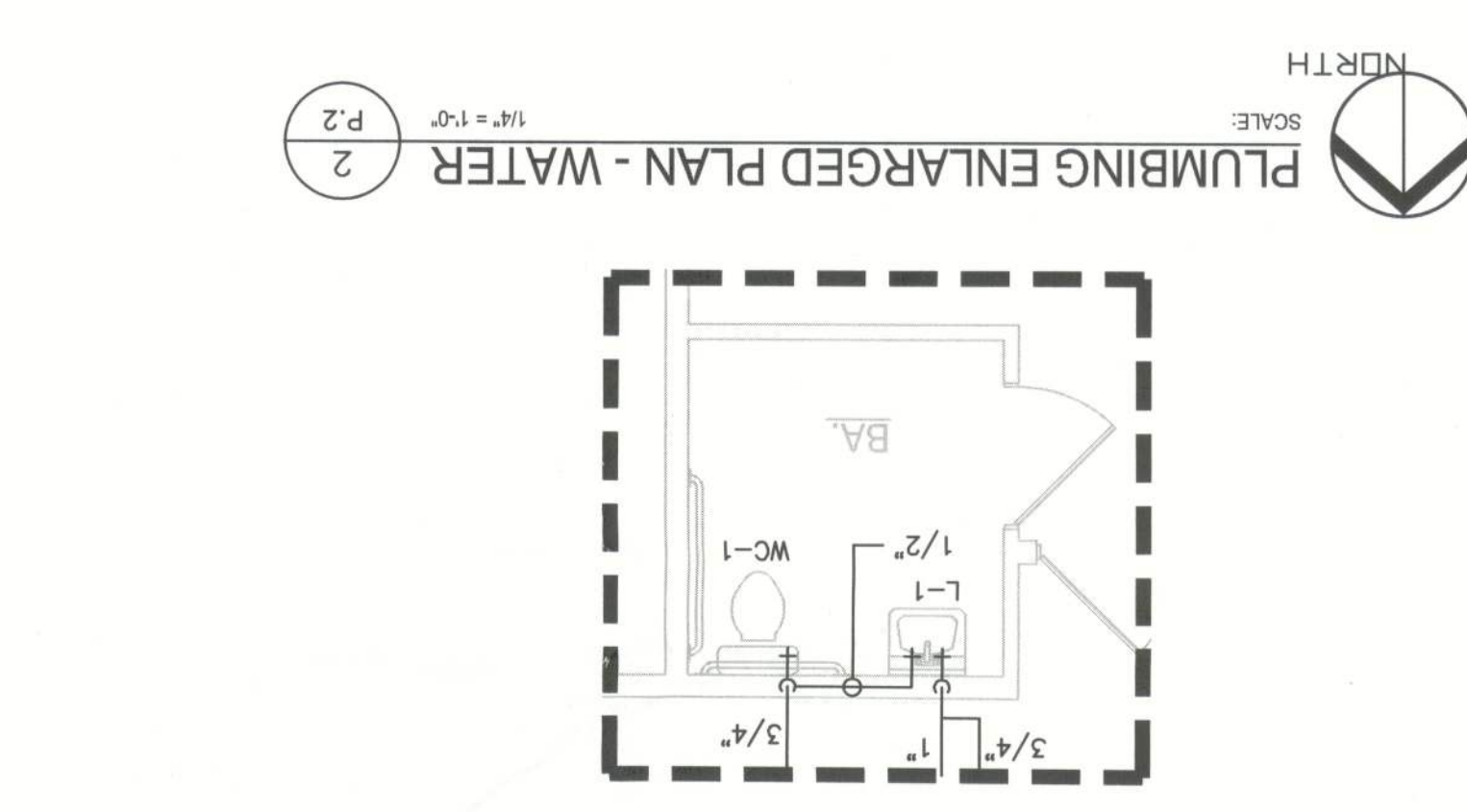
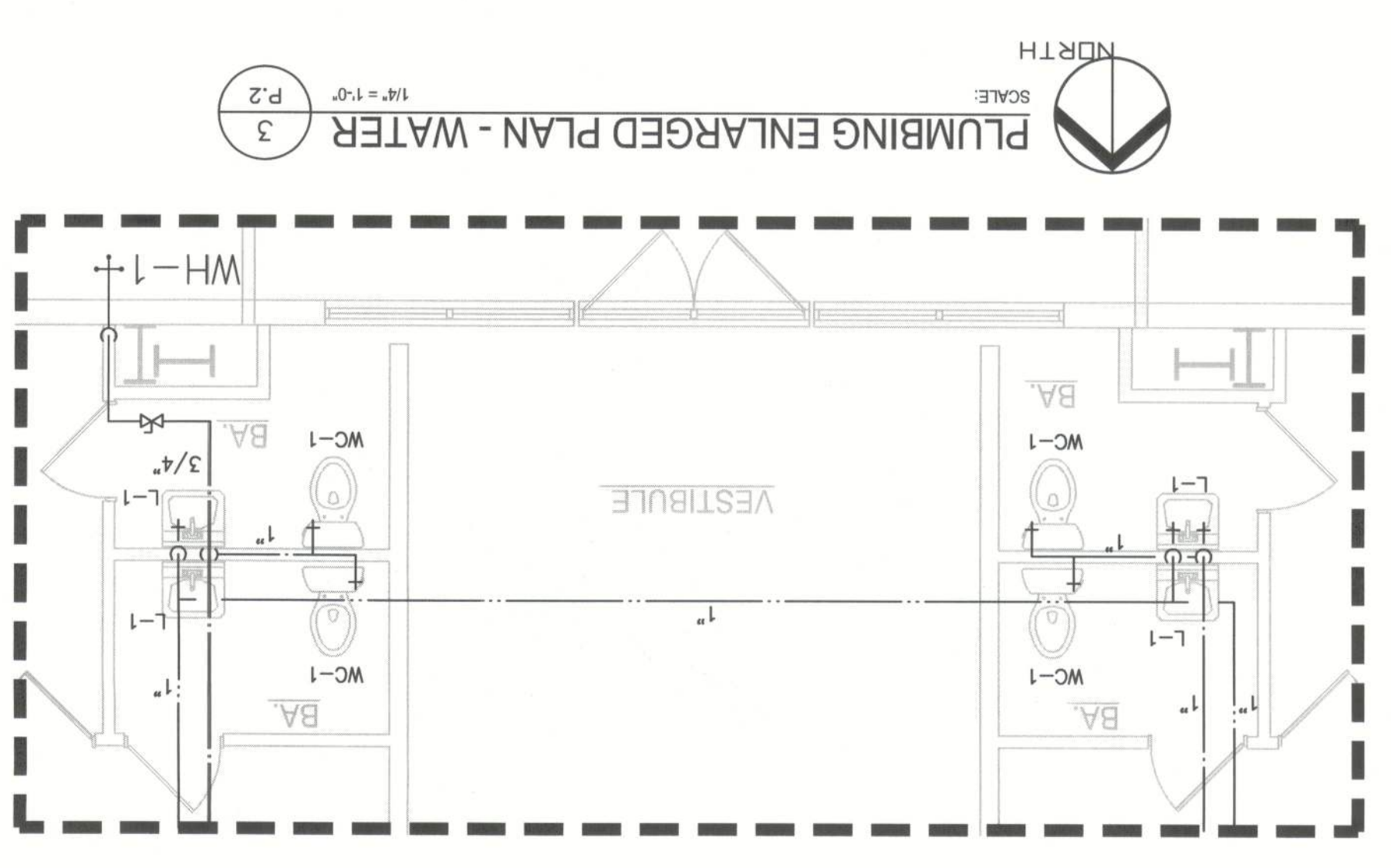
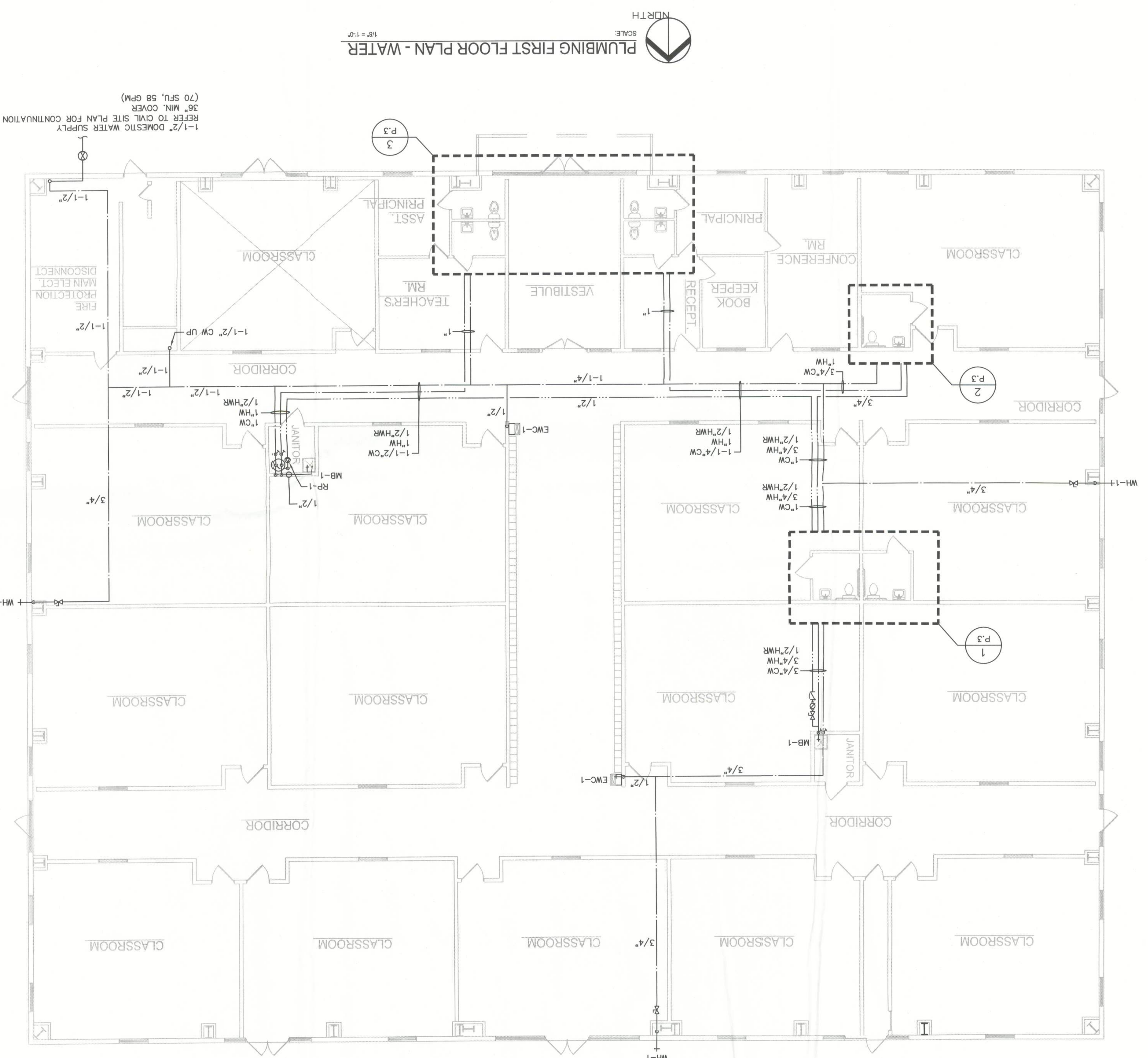
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N.P. Carter Architect
AR007005

SIGNATURE: [Signature]
DATE: 9/11/12
JOHN W. WELLS, III, PE
PE 0049347

BELMONT ACADEMY FOR:
MOUNTAIN TOP MINISTRIES
5037 SR 240, LAKE CITY, FLORIDA 32024

REVISIONS



P.4

SHEET NUMBER

17 SEPT 2012

DATE:

2K1223a

JOB NUMBER

CONSULTING ENGINEERING ASSOCIATES, INC.

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PROJECT NUMBER: 1007

PHONE: (813) 448-2234

14000 N. FLORIDA AVE., SUITE 200, TAMPA, FL 33613

ASSOCIATES, INC.

CONSULTING ENGINEERING ASSOCIATES, INC.

NICHOLAS PAUL GEISLER ARCHITECT

1758 NW Brown Rd., Lake City, FL 32055

(386) 755-9021

McA.R.A. Certified

40 Years of Service

1972 - 2012

N.E. Geisler, Architect

Architect

SIGNATURE: *John W. Wells, III*

DATE: 9/17/12

JOHN W. WELLS, III, P.E.

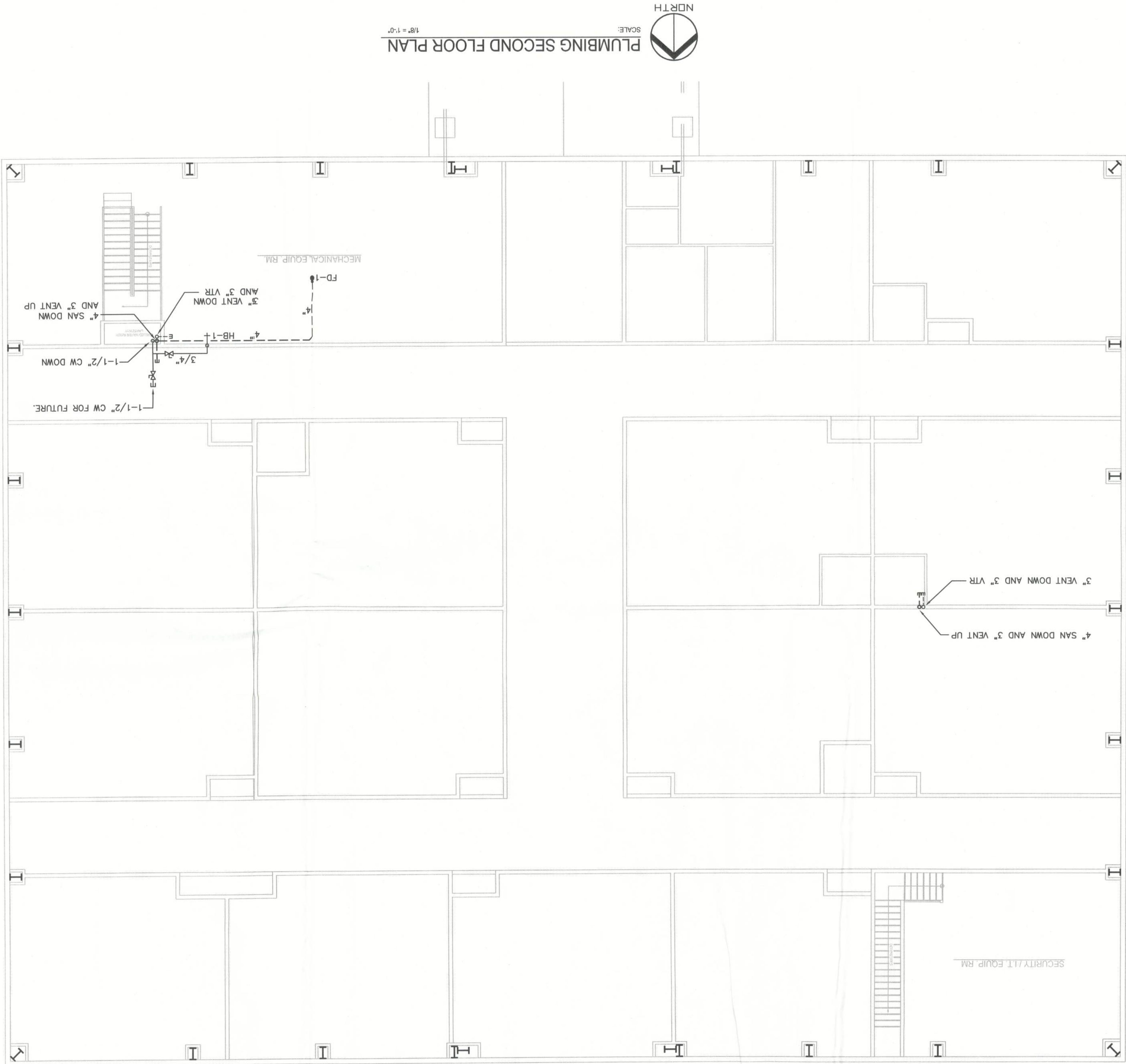
PE 0049347

BELMONT ACADEMY FOR:

MOUNTAIN TOP MINISTRIES

5037 SR 240, LAKE CITY, FLORIDA 32024

REVISIONS



SCALE: 1/8" = 1'-0"
NORTH
PLUMBING SECOND FLOOR PLAN

SHEET NUMBER
P.5

JOB NUMBER
2K1223a
DATE:
17 SEPT 2012

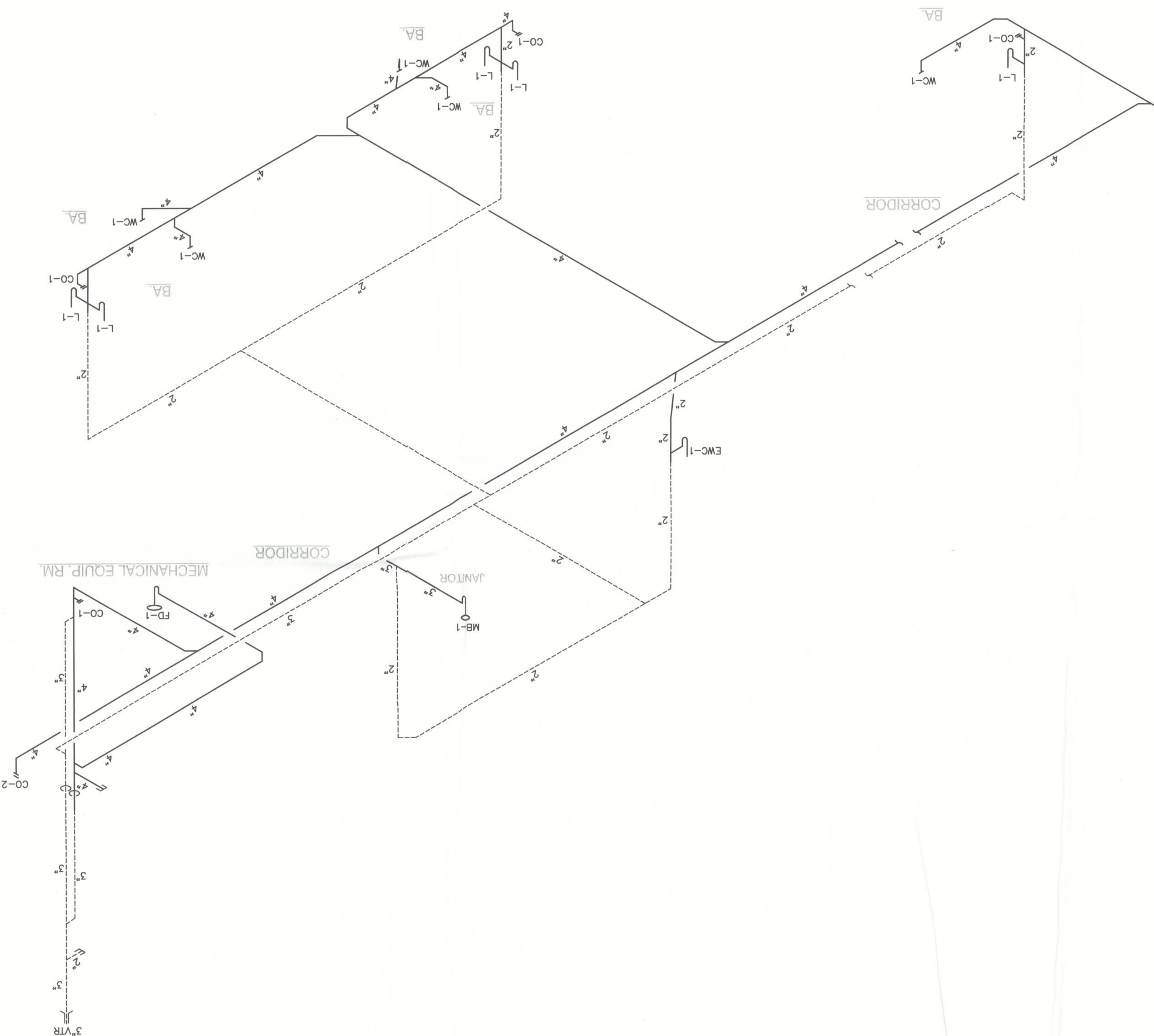
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NICHOLAS
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1758 NW Brown Rd.
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(386) 755-9021
Celebrating
40 Years of Service
1972 - 2012
N.P. Gesler, Architect
A00007005

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Signature
JOHN W. WELLS, III, P.E.
DATE
11/1/12
PE 0049347

REVISIONS

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NOT TO SCALE

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JOB NUMBER

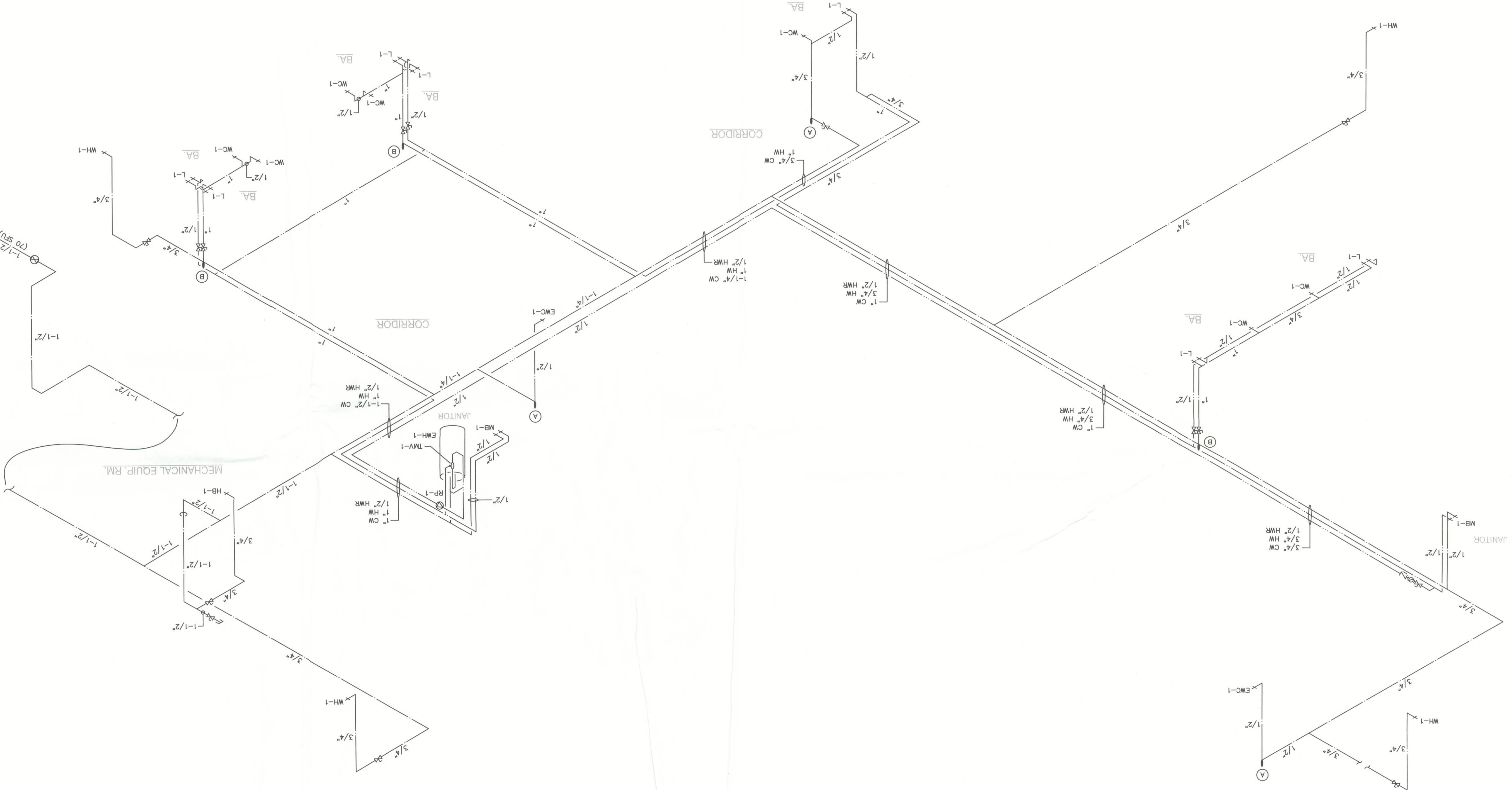
CONSULTING ENGINEERING ASSOCIATES, INC.

W

N

B
N
5

REVISIONS



PLUMBING ISOMETRIC DIAGRAM - WATER
SCALE: 1/2" = 1'-0"

P.7
SHEET NUMBER

DATE: 17 SEPT 2012
JOB NUMBER: 2K1223a

CONSULTING ENGINEERING ASSOCIATES, INC.
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40 Years of Service
1972 - 2012
N.Y. State Architect
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