

SC DEPT OF MENTAL HEALTH – LANCASTER SATELLITE CCMHC  
FIRE SPRINKLER MAIN REPLACEMENT

FIRE PROTECTION SYSTEMS NOTES

A. SCOPE

- THIS PROJECT CONSISTS OF DEMOLITION AND REPLACEMENT OF SPECIFIC EXISTING PIPING. SEE FP-2 FOR SCOPE DEFINITION AND BOUNDARIES.
- FIRE PROTECTION SPRINKLER PIPING SHALL MEET ALL FEDERAL, STATE, AND LOCAL CODES AND ORDINANCES, AND MUST BE APPROVED BY THE ENGINEER, OFFICE OF THE STATE ENGINEER, AND LOCAL AUTHORITIES HAVING JURISDICTION. DESIGN CRITERIA LISTED ON THE FIRE SPRINKLER SPECIFICATION SHEET IS THE MINIMUM CRITERIA ACCEPTABLE.
- REFER TO THE FIRE PROTECTION SYSTEMS SPECIFICATIONS FOR ADDITIONAL INFORMATION.
- IT IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR TO INSTALL ALL PIPING AND EQUIPMENT.
- SPRINKLER CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND INSTALLING ALL NECESSARY BRACING MEMBERS, TRAPEZE MEMBERS, AND REINFORCEMENT MEMBERS.
- SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE LOCATION OF SPRINKLER PIPING WITH ALL EQUIPMENT, APPLIANCES, DEVICES, AND STRUCTURES. CONTRACTOR IS RESPONSIBLE FOR BEING AWARE OF THE LOCATION OF HVAC DUCTS, DIFFUSERS, ELECTRICAL LIGHTING, PANELS, AND CEILING HEIGHTS. PENETRATION OR CUTTING OF STRUCTURAL MATERIALS IS NOT ALLOWED.
- CONTRACTOR SHALL IMMEDIATELY CONTACT THE ENGINEER IF DISCREPANCIES ARE FOUND IN THE FP DRAWINGS OR SPECIFICATIONS. CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY IF DISCREPANCIES ARE FOUND BETWEEN THE CONTRACT DOCUMENTS AND EXISTING CONDITIONS, OR BETWEEN THE CONTRACT DOCUMENTS AND REQUIREMENTS OF SPECIFIED CODES OR AUTHORITIES HAVING JURISDICTION. WHERE CONFLICTS OCCUR BETWEEN THE DRAWINGS, SPECIFICATIONS, OR CODES, THE CONTRACTOR SHALL BY DEFAULT FOLLOW THE MOST RESTRICTIVE REQUIREMENT. DRAWINGS AND SPECIFICATIONS ARE COMPLIMENTARY; WORK CALLED FOR IN EITHER THE DRAWINGS OR SPECIFICATIONS SHALL BE AS IF CALLED FOR BY BOTH.
- IT IS NOT THE INTENT OF THESE PLANS AND SPECIFICATIONS TO PROVIDE A COMPLETE DETAILED DESCRIPTION OF THE APPARATUS, MATERIALS, EQUIPMENT, ETC. WHICH IS REQUIRED TO MAKE A COMPLETE AND FUNCTIONAL INSTALLATION OF THIS SPECIFIC FIRE PROTECTION SYSTEM. IT SHALL BE THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR TO PROVIDE ALL REQUIRED MATERIAL AND EQUIPMENT AND PERFORM ALL WORK REQUIRED TO INSTALL A COMPLETE AND APPROVED INSTALLATION.

B. MATERIALS

- ALL REPLACEMENT PIPING SHALL BE SCHEDULE 40 BLACK STEEL.
- ALL DRAIN LINE PIPING SHALL BE GALVANIZED STEEL.
- ONLY NEW FIRE PROTECTION SYSTEM COMPONENTS WILL BE ACCEPTED.
- PIPE DIAMETERS SHOWN ON THE DRAWINGS ARE THE MINIMUM ACCEPTABLE DIAMETER..

C. HANGERS AND BRACING









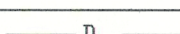

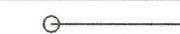








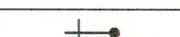


- SEE APPLICABLE SPECIFICATIONS SECTION AND DETAILS SHEETS FOR HANGERS AND SEISMIC BRACING FASTENERS, MATERIALS, AND ORIENTATINS.
- PROVIDE SEISMIC BRACING FOR NEW PIPING IN CONFORMANCE WITH NFPA 13 2007, AND THE DETAILS ON THESE SHEETS. SPACING BETWEEN LATERAL BRACES SHALL BE 20 FT MAXIMUM. SPACING BETWEEN LONGITUDINAL BRACES SHALL BE 40' MAXIMUM.

D. INSTALLATION

- ALL PENETRATIONS OF FIRE-RATED HORIZONTAL AND VERTICAL ASSEMBLIES SHALL BE FIRE STOPPED WITH AN APPROVED ASSEMBLY AS PRESCRIBED IN THE INTERNATIONAL BUILDING CODE. UNLESS THE ORIGINAL PLANS STATE OTHERWISE, THE CORRIDOR WALLS AND THE GYPSUM BOARD SHEATHING ON THE BOTTOM OF THE ATTIC TRUSSES SHALL BE CONSIDERED TO BE 1-HR FIRE RATED ASSEMBLIES. ANY OTHER WALL THAT EXTENDS TO THE BOTTOM OF THE ATTIC SHEATHING SHALL ALSO BE CONSIDERED A 1-HR FIRE RATED WALL.
- ALL INSPECTOR'S TEST CONNECTIONS AND LOW POINT DRAINS SHALL BE PER NFPA 13 (UNLESS OTHERWISE NOTED) AND SHALL BE DISPLAYED ON SHOP DRAWINGS. MAIN DRAIN AND TEST PIPING SHALL BE ROUTED TO THE EXTERIOR OF THE BUILDING.
- AT THE COMPLETION OF SYSTEM TESTING, THE SPRINKLER CONTRACTOR SHALL COMPLETE AND PROVIDE TO THE ENGINEER A CONTRACTOR'S MATERIAL AND TEST CERTIFICATE FOR ABOVEGROUND SPRINKLER PIPING SYSTEMS. ALL PIPING SHALL BE PRESSURE TESTED AT A MINIMUM 200 PSI FOR 2 HOURS, AND THERE SHALL BE NO LOSS OF PRESSURE OR VISIBLE LEAKAGE FOR THE DURATION OF THE TEST.
- AUXILIARY DRAINS SHALL BE LOCATED TIGHT AGAINST THE PERIMETER WALLS.
- PIPING SHALL BE RUN CONCEALED IN ALL FINISHED CEILING AREAS.

E. SPECIAL INSTRUCTIONS

- ALL SYSTEMS SHALL BE SLOPED TO DRAIN AS REQUIRED BY NFPA 13.
- THIS BUILDING IS OCCUPIED AND WILL REMAIN OCCUPIED DURING THE PIPING REPLACEMENT. CONTRACTOR MUST COORDINATE WORK SCHEDULE WITH SC DEPT OF MENTAL HEALTH.
- FLUSH EXISTING UNDERGROUND AND RISER PIPE THROUGH THE MAIN DRAIN UNTIL WATER FLOWS CLEAR. FLUSH PIPING THROUGH AUXILIARY DRAINS AFTER THE WORK IS COMPLETE.

FIRE PROTECTION LEGEND			
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	SPRINKLER MAIN (W/ BRANCHES)		STANDPIPE W/FIRE DEPT. VALVE
	SPRINKLER BRANCH (W/ SPRINKLER)		PUMP TEST HEADER
	UNDERGROUND FIRE MAIN		WATER MOTOR GONG
			FIRE EXTINGUISHER
			FIRE HOSE RACK
	DRAIN		FIRE HOSE CABINET
	RISER DOWN (ELBOW)		SIDEWALL SPRINKLER
	RISER UP (ELBOW)		UPRIGHT SPRINKLER
	RISE OR DROP		PENDENT SPRINKLER
			WET SYSTEM RISER
			DRY SYSTEM RISER
			DELUGE VALVE RISER
	POST INDICATOR VALVE		PREACTION VALVE RISER
	VALVE IN ROADWAY BOX		

FIRE PROTECTION ABBREVIATIONS			
ABBREVIATION/DEFINITION		ABBREVIATION/DEFINITION	
A/C	ABOVE CEILING	FS	FLOW SWITCH
AFF	ABOVE FINISHED FLOOR	FLR	FLOOR
AFG	ABOVE FINISHED GRADE	FHC	FIRE HOSE CABINET
B/F	BELOW FLOOR	FHR	FIRE HOSE RACK
BFP	BACKFLOW PREVENTER	FCA	FLOOR CONTROL ASSEMBLY
BLDG	BUILDING	IE	INVERT ELEVATION
BOP	BOTTOM OF PIPE	LOC	LOCATION
CI	CAST IRON	MIN, MAX	MINIMUM, MAXIMUM
CL	CENTER LINE	NIC	NOT IN CONTRACT
CONT	CONTINUATION	PS	LOW AIR PRESSURE SWITCH
CONTR	CONTRACTOR	RPZ-BFP	REDUCED PRESSURE ZONE BFP
DR	DRAIN	SPR	SPRINKLER
DN	DOWN	SP/FDV	STAND PIPE / FIRE DEPT. VALVE
DCV-BFP	DOUBLE CHECK VALVE BFP		
DWGS	DRAWINGS	TS	TAMPER SWITCH
DI	DUCTILE IRON	WMG	WATER MOTOR GONG
EL	ELEVATION		
NOTE: THESE ARE STANDARD ABBREVIATIONS, ALL ABBREVIATIONS SHOWN ABOVE MAY NOT APPEAR ON DRAWINGS.			

DMH

SOUTH CAROLINA  
DEPARTMENT OF  
MENTAL HEALTH

PHYSICAL PLANT SERVICES

PROJECT TITLE

LANCASTER SATELLITE – CCMHC  
FIRE SPRINKLER MAIN REPLACEMENT

PROJECT ADDRESS

1908 HWY 521 (KERSHAW CAMDEN HWY) LANCASTER SC

SHEET TITLE

COVER SHEET AND SPECIFICATIONS

SCALE : NTS

DESIGNED BY: ROA

SHEET No.:

DATE: APRIL 8 2008

CHECKED BY: JDM

PROJECT No.: J12-9661-LC

DRAWN BY: ROA

FP-1

1 OF 2

MILES ENGINEERING ASSOCIATES, LLC

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19433

4/3/08

RUSSELL O. ARMSTRONG

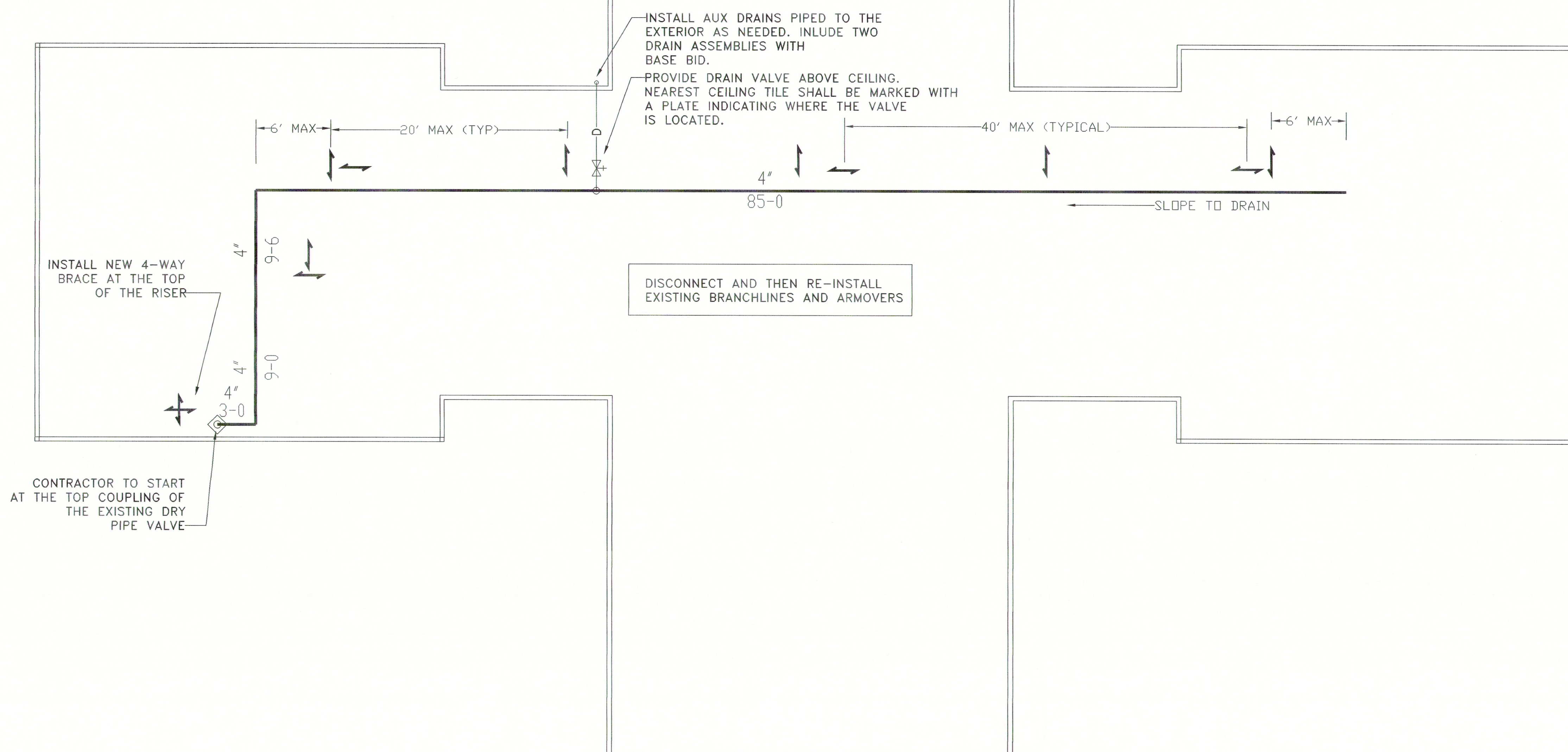


## I. DEMOLITION

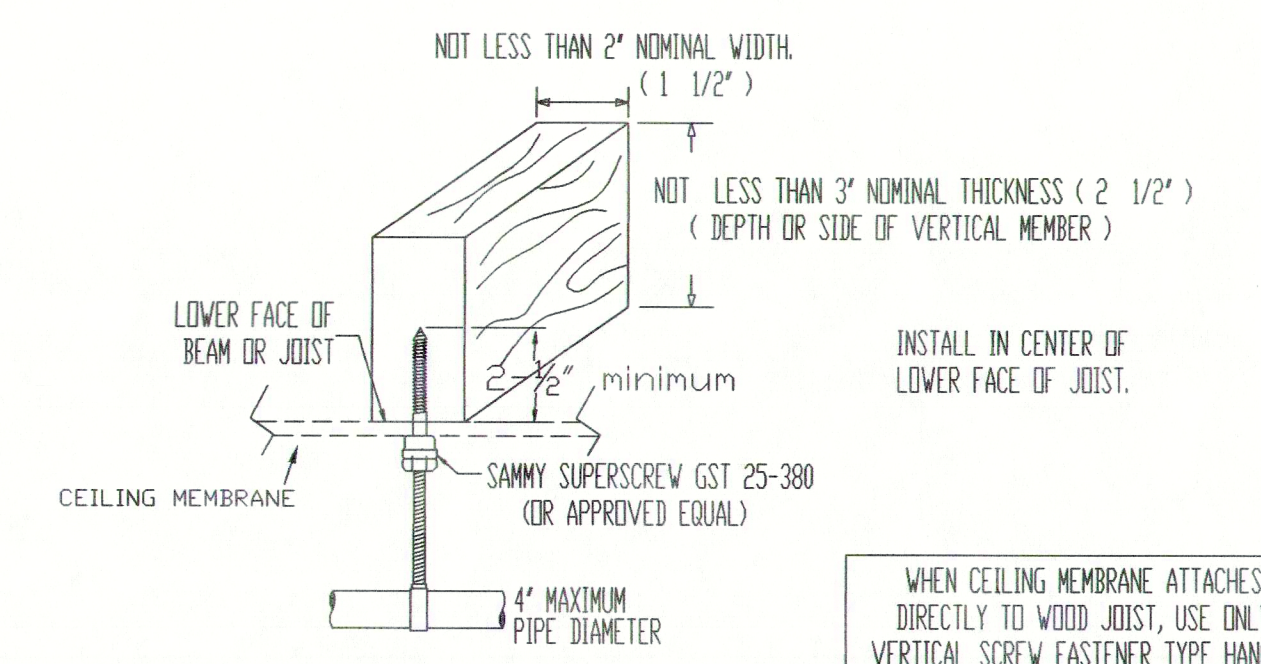
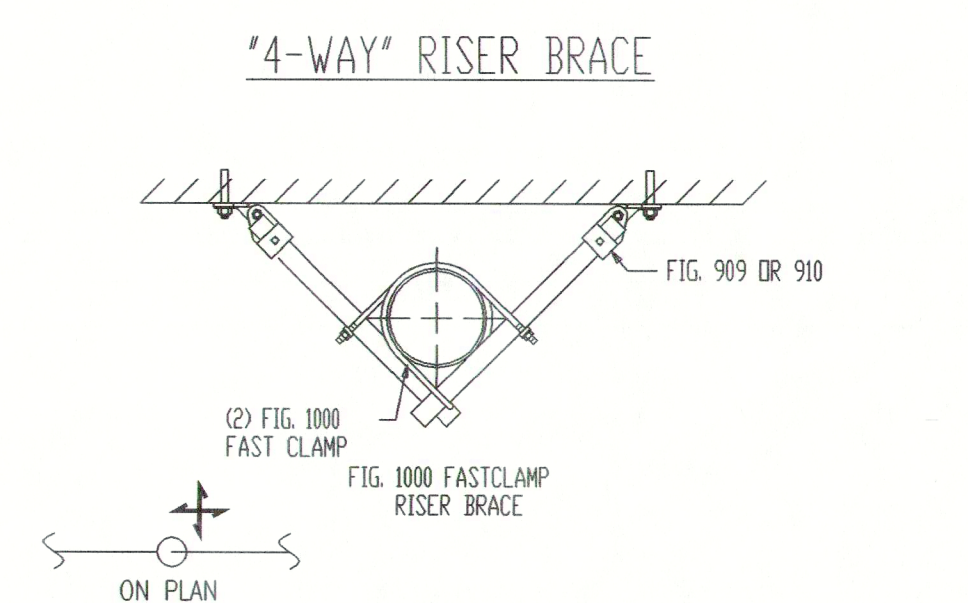
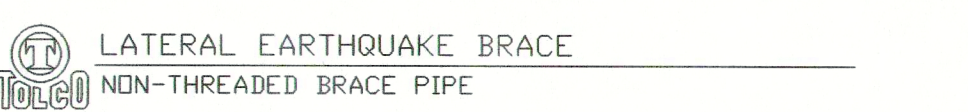
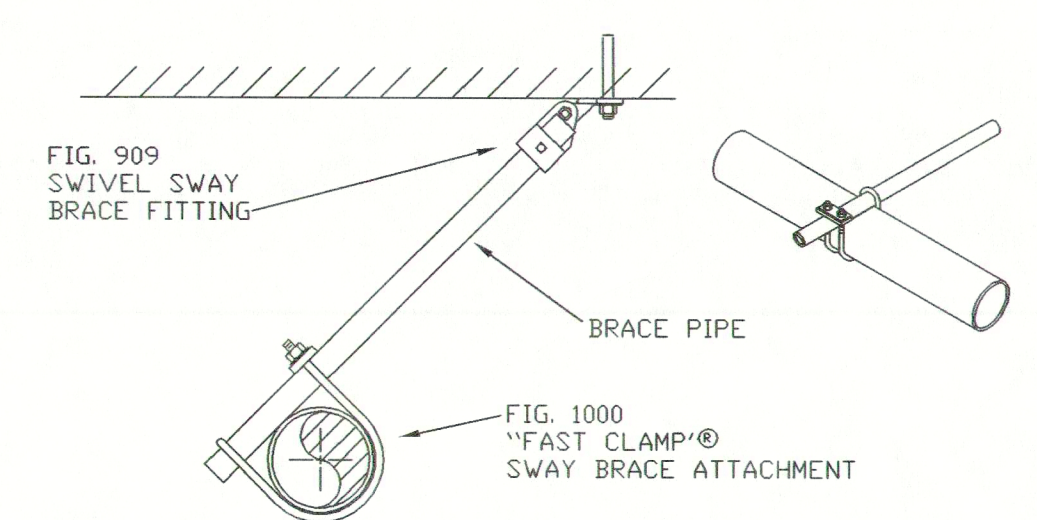
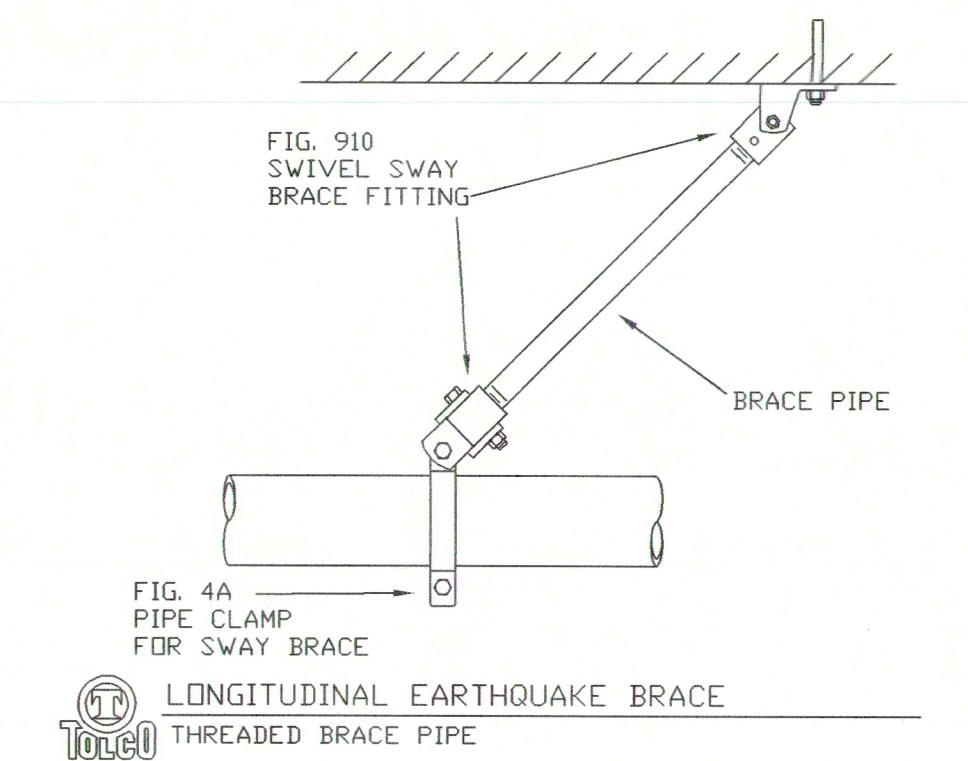
- CONTRACTOR SHALL REMOVE EXISTING 3" AND 4" MAIN PIPING AND SUPPORTING HANGERS UNLESS OTHERWISE NOTED.
- EXISTING 2" OR SMALLER CROSS MAINS, BRANCHLINES AND SPRINKLERS SHALL REMAIN IN PLACE.
- CONTRACTOR SHALL DISPOSE OF REMOVED PIPING AND HANGERS.

## II. NEW PIPING

- CONTRACTOR SHALL INSTALL NEW SCHEDULE 40 BLACK STEEL 4" PIPING AS NOTED ON THIS DRAWING.
- CONTRACTOR SHALL INSTALL NEW HANGERS AND SEISMIC BRACING.
- EXISTING SPRINKLERS AND BRANCHLINES SHALL BE RE-ATTACHED TO THE NEW MAIN.
- PIPING LENGTHS AND LOCATIONS ARE APPROXIMATE. SUCCESSFUL BIDDING CONTRACTOR WILL BE RESPONSIBLE FOR SURVEYING AND DETERMINING PROPER LENGTHS AND LOCATIONS OF NEW PIPE. PIPE DIAMETERS SHOWN ON THIS DWG WILL BE THE MINIMUM ACCEPTABLE SIZE.
- DRAINAGE - NEW PIPING SHALL BE SLOPED TO DRAIN PER NFPA 13 2007. WHERE SLOPING OF THE NEW PIPE WILL DESTROY THE SLOPE OF EXISTING SMALLER PIPING, AUXILIARY DRAINS SHALL BE INSTALLED TO INSURE DRAINAGE OF ALL PARTS OF THE NEW PIPING. CONTRACTOR SHALL INCURE THE COST OF TWO AUXILIARY DRAINS IN THE BASE BID PRICE.
- CEILINGS AND FINISHES - CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL, STORAGE, AND RE-INSTALLATION OF CEILING TILES. CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING TILES AND OR GRID THAT IS DAMAGED DURING CONSTRUCTION. CONTRACTOR WILL ALSO BE RESPONSIBLE FOR REPAIRING TO ORIGINAL CONDITION ANY FINISHED SURFACES THAT ARE DAMAGED DURING DEMOLITION OR CONSTRUCTION.



## LANCASTER CCMHC - NEW PIPING PLAN



**DMH** SOUTH CAROLINA  
DEPARTMENT OF  
MENTAL HEALTH

PHYSICAL PLANT SERVICES

PROJECT TITLE  
LANCASTER SATELLITE - CCMHC  
FIRE SPRINKLER MAIN REPLACEMENT

PROJECT ADDRESS  
1906 HWY 521 (KERSHAW CAMDEN HWY) LANCASTER SC

SHEET TITLE  
PIPING PLAN AND DETAILS

SCALE: 3/16" = 1'

DATE: APRIL 8 2008

PROJECT No. J12-9661-LC

DESIGNED BY: ROA

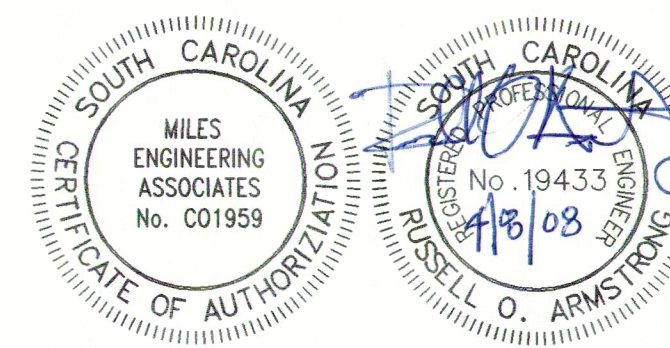
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REVISIONS

NO. #	DATE	BY