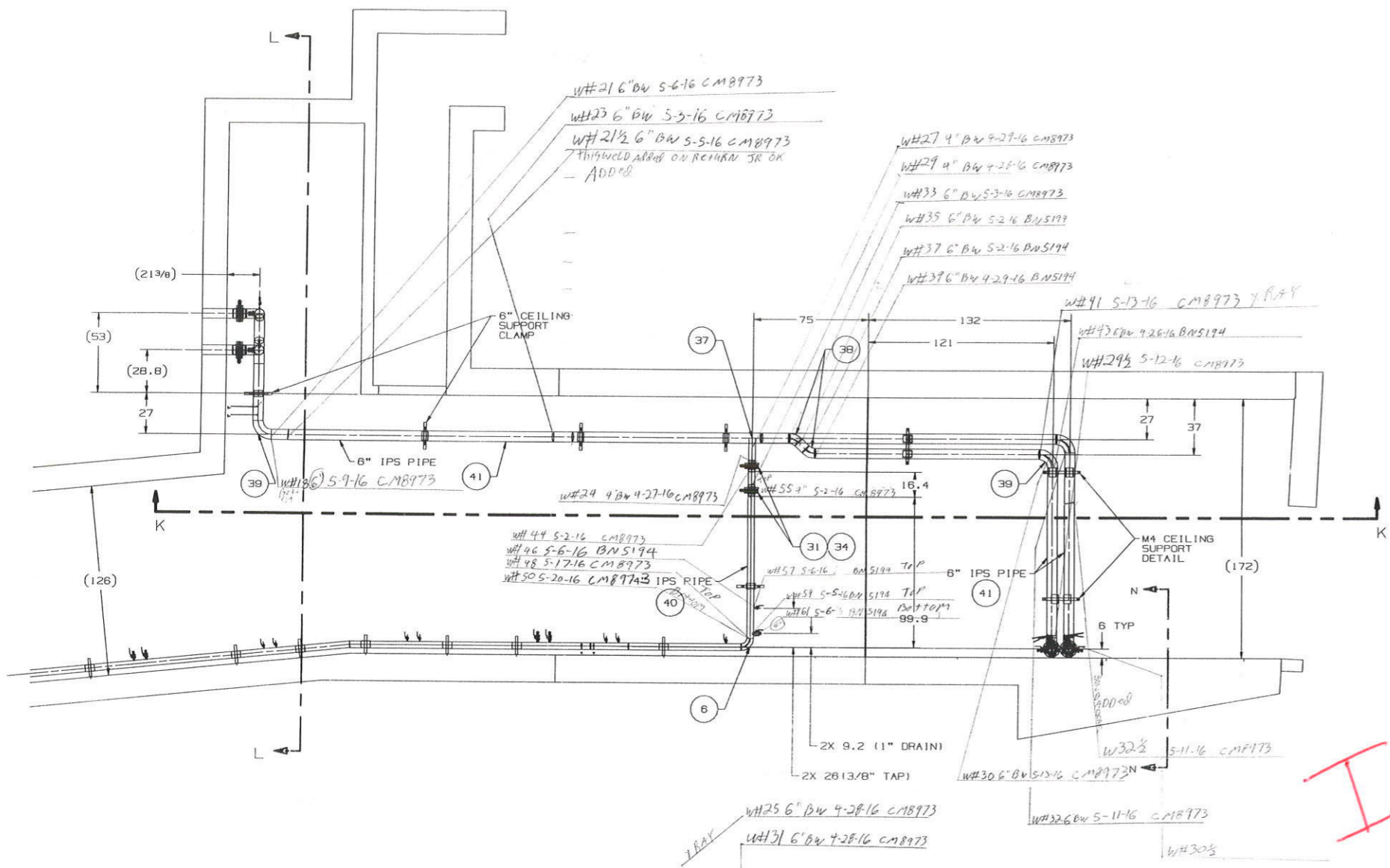
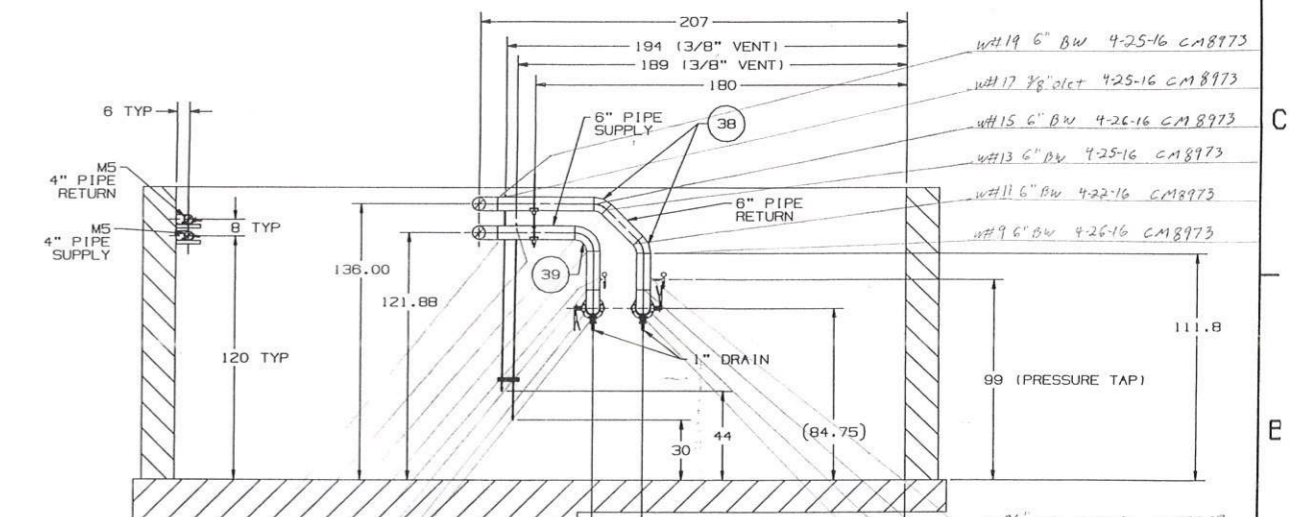
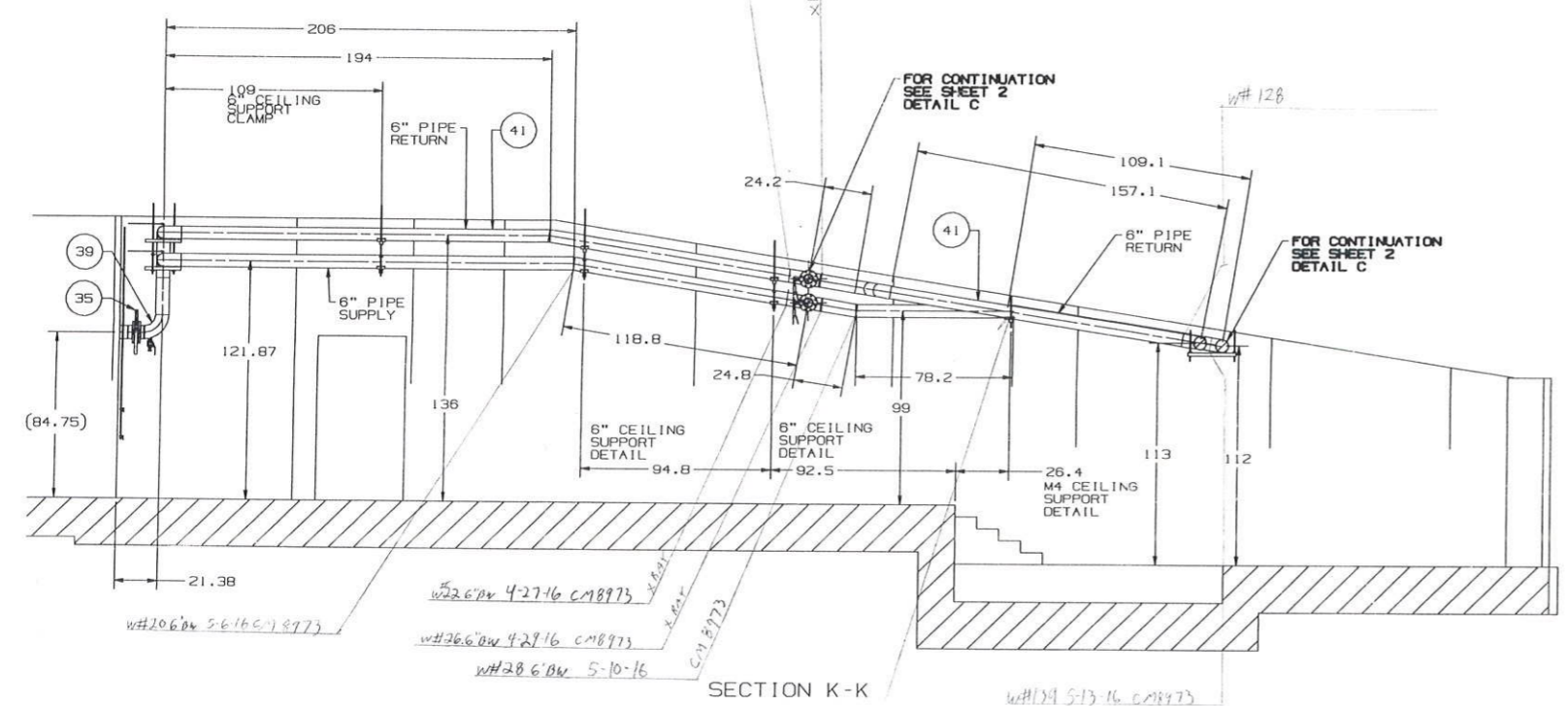


REV	REVISION CONTROL DOCUMENT	DATES	SIGNATURES
-	F10053893---RCD		E. PIRTLE



IN PROGRESS





IN PROGRESS

- NOTES:
- SEE MUON CAMPUS LOW CONDUCTIVITY WATER PIPING SPECIFICATION ED004436 FOR INSTALLATION SPECIFICATIONS.
 - BEFORE THE COMMENCEMENT OF WORK, THERE WILL BE A WALK-THROUGH CONDUCTED WITH THE CONTRACTOR.
 - ALL THE REQUIRED PIPE, FITTINGS, AND OTHER HYDRAULIC COMPONENTS WILL BE PURCHASED BY THE FERMILAB RESPONSIBLE ENGINEER. THERE SHALL BE NO SUBSTITUTIONS.
 - THIS IS AN ASME B31.3 NORMAL FLUID SERVICE SYSTEM AND ALL WELDING SHALL BE PER ASME B31.3.
 - ALL THE WELDS SHALL BE FULL-PENETRATION WELDS, AND LEAST NUMBER OF PASSES SHALL BE USED TO OBTAIN THE FULL-PENETRATION WELDS. THE WELDING SHALL BE PER AWS B2.1-B-212:2001 STANDARD WELDING PROCEDURE FOR GAS TUNGSTEN ARC WELDING OF AUSTENITIC STAINLESS STEEL.
 - ALL WELDERS SHALL BE ASME SECTION IX QUALIFIED WELDERS.
 - WELD INSPECTIONS WILL INCLUDE A MINIMUM OF 20% IN-PROCESS INSPECTION, AND 20% RADIOGRAPHY BY AN INDEPENDENT CONTRACTOR.
 - NEW FLAP DISCS (WEILER 80 GRIT MODEL NUMBER: 50107) SHALL BE USED FOR GRINDING PURPOSES.
 - NEW STAINLESS STEEL WIRE BRUSHES SHALL BE USED.
 - ONLY TOOLS THAT WERE PREVIOUSLY USED ON STAINLESS STEEL PIPES SHALL BE USED.
 - A HYDROSTATIC PRESSURE TEST WILL BE CONDUCTED BY FERMILAB USING EITHER LOW OR DISTILLED WATER.
 - UNISTRUT BRACKET LOCATIONS CALLING OUT "CLAMP" WILL USE BLIND PIPE CLAMP INSTEAD OR QUARTERED PIPE CLAMP.
 - WELD JOINTS SHOULD NOT BE LOCATED WITHIN 6" OF A HANGER BRACKET.

UNLESS OTHERWISE SPECIFIED		DATE	14-MAR-2018
±.X	±.XX	±.XXX	±X/X
.1	.02	.005	1/16
BREAK ALL SHARP EDGES .015 MAX. DO NOT SCALE DRAWING DIMENSIONS BASED ON ASME Y14.5-2009 MAX. ALL MACH SURFACES 125 DRAWING UNITS=1 INCHES		DATE	14-MAR-2018
DRAWN		DATE	14-MAR-2018
CHECKED		DATE	14-MAR-2018
APPROVED		DATE	14-MAR-2018
USED ON		DATE	14-MAR-2018
F10053902, F10021605		DATE	14-MAR-2018
MATERIAL		DATE	14-MAR-2018
GROUP: Accelerator Mechanical Support		DATE	14-MAR-2018

FERMI NATIONAL ACCELERATOR LABORATORY UNITED STATES DEPARTMENT OF ENERGY	
WELD MAP	
MS LOW PIPING INSTALLATION LAYOUT	
SCALE	SIZE
E	F10053893
DRAWING NUMBER	2

FOR CONTINUATION
SEE F10050032
SECTION B-B

DETAIL E

DETAIL D

DETAIL

FOR M4 CONTINUATION
SEE SHEET 3
DETAIL 6

FOR CONTINUATION
SEE SHEET 4

SEE DETAIL D
MATCH LINE A

MATCH LINE B

A

B

C

D