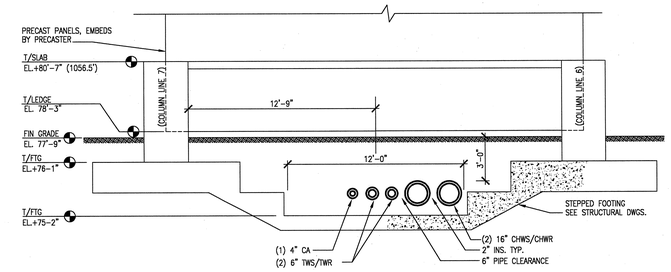
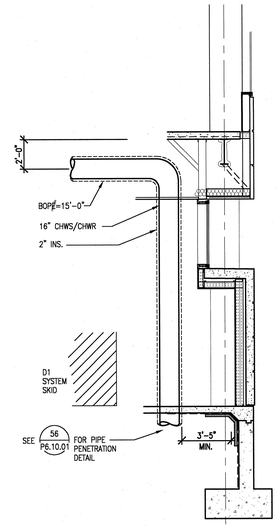
PIPE MATERIAL SCHEDULE

PIPE SERVICE DESIGNATION	PIPE SERVICE DESCRIPTION	MATERIAL	REFERENCE SPEC. SECTION
CHILLED WATER (CHWR/CHWS)	CHILLED WATER PIPE ABOVE GRADE.	<=2" SIZE: CS, SCH 40, ASTM A53,TC OR COPPER, TYPE L, ASTM B88, SWEAT JOINTS. >2" SIZE: CS, SCH 40, ASTM A53, BW/FL JOINTS.	15106
	CHILLED WATER PIPE BELOW GRADE.	ALL SIZES: CS, SCH 40, ASTM A53, SW/BW JOINTS, PREINSULATED W/ FRP CARRIER PIPE	
COMPRESSED AIR (CA)	COMPRESSED AIR PIPE ABOVE GRADE.		15112
	COMPRESSED AIR PIPE BELOW GRADE.		
COOLING TOWER WATER (TWS/TWR)	COOLING TOWER WATER PIPE ABOVE GRADE.	<=2" SIZE: CS, SCH 40, ASTM A53,TC OR COPPER, TYPE L, ASTM B88, SWEAT JOINTS. >2" SIZE: CS, SCH 40, ASTM A53, BW/FL JOINTS.	15106
	COOLING TOWER WATER PIPE BELOW GRADE.	ALL SIZES: CS, SCH 40, ASTM A53, BW/FL JOINTS, COATED	
DEIONIZED WATER (DIS/DIR)	DEIONIZED WATER PIPING ABOVE GRADE.		15104
FIRE WATER (FWD)	FIRE WATER BURIED OUTSIDE BUILDING.	<2" SIZE: CS, GALV, SCH 40, ASTM A53,TC 2"-10" SIZE: CS, GALV, SCH 40, ASTM A53, FL JOINTS. >/=12" SIZE: DUCTILE IRON, AWWA C151, MECH JOINT.	02667
NATURAL GAS (NG)	NATURAL GAS PIPE ABOVE GRADE.	<4" SIZE: CS, SCH 40, ASTM A53,TC >/=4" SIZE: CS, SCH 40, ASTM A53, BW/FL JOINTS.	15108
	NATURAL GAS PIPE BELOW GRADE.	SAME AS FOR ABOVE GRADE EXCEPTE TAPECOAT OR ENCASEMENT IN CONDUIT PIPE	
PROCESS WASTE/VENT (PO/PV	ACID RESISTANT SANITARY DRAINAGE PIPE ABOVE GRADE.	ALL SIZES: POLYPROP, SCH 40, ASTM D635, HEAT FUSION JOINTS	15111
	ACID RESISTANT SANITARY DRAINAGE PIPE BELOW GRADE.	ALL SIZES: POLYPROP, SCH 40, ASTM D2146, HEAT FUSION JOINTS CARRIER PIPE WITH PVC CASING PIPE.	
SANITARY, WASTE & VENT (SS, W, V, KW)	SANITARY, WASTE & VENT ABOVE GRADE.	<=1-1/2" SIZES: COPPER DWV TUBE, ASTM B106, SWEAT JOINTS >1-1/2" SIZES: CI, SW, ASTM B106, NO-HUB COUPLING	15109
	SANITARY, WASTE & VENT BELOW GRADE.	ALL SIZES: CI, SW, ASTM A888, HUB & SPIGGOT	
SANITARY WATER (SWC/SWH/SWR)	DOMESTIC COLD,HOT,& RETURN WATER PIPE ABOVE GRADE.	<4" SIZE: COPPER, TYPE L, ASTM B88, SWEAT JOINTS. >/=4" SIZE: CS, GALV, SCH 40, ASTM A53, FL JOINTS.	15103 & 02667
	DOMESTIC COLD,HOT,& RETURN WATER PIPE BELOW GRADE.	<4" SIZE: COPPER, TYPE L, ASTM B88, SWEAT JOINTS. >/=4" SIZE: DUCTILE IRON, AWWA C151, MECH JOINT.	
STORM DRAINAGE (SD, OFL, RWL)	STORM DRAINAGE PIPE ABOVE GRADE.	<=1-1/2" SIZES: COPPER DWV TUBE, ASTM B106, SWEAT JOINTS >1-1/2" SIZES: CI, SW, ASTM B106, NO-HUB COUPLING	15109
	STORM DRAINAGE PIPE BELOW GRADE	ALL SIZES: CI, SW, ASTM A888, HUB & SPIGGOT	



1 P1.B1.63 UTILITY PIPE SERVICE PENETRATIONS
SCALE: 1/4"=1'-0"



2 P2.B1.63 UTILITY SERVICE ENTRANCE SECTION (M6-M7/B1 LEVEL)
SCALE: 1/4"=1'-0"

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NUMBER OF SECTION OR DETAIL
DRAWING ON WHICH SECTION OR DETAIL IS SHOWN OR TAKEN
SECTION AND DETAIL KEY

THIS DOCUMENT CONTROLLED BY
CHANGE CONTROL SYSTEM 4
ENGINEERING PROCEDURE SNS-ENG-G001

REV	CHANGE TYPE	CHANGED DRAWING SYSTEM	CHANGED DRAWING NUMBER	DESCRIPTION	DSN	CHK	DEPT	DATE	PE	DATE	PJ	DATE	REQ	DATE	UTB	DATE	RPE	RPE NO	DATE	ST	CV	EC	EE	EM	IE	M	PD	SE	AR
1				CERTIFIED FOR CONSTRUCTION – MAY 15, 2001	EB	KJH											BWJ	105869	5/15/01										
0				CERTIFIED FOR CONSTRUCTION – OCTOBER 25, 2000	EB	KJH											BWJ	105869	10/25/00	SC	AW	WRS	RL	WRS	BWJ	--	WRS	--	WAS

REVISION OR ISSUE PURPOSE — REVISION APPROVALS — SQUAD CHECK

RPE: BRUCE W. JOHNSON, REGISTERED ENGINEER, CIVIL, STATE OF TENNESSEE, No. 0010056

DSN	M. WITHROW	05/15/01
DRW	T. WHITE JR.	05/15/01
CHK	B. JOHNSON	05/15/01
DEPT		
PE		
PJ		
REQ		
UTB		

1 REV. 5/17/01 DATE — DRAWING APPROVALS

108031400-P8E-8600-A012

Knight/Jacobs — Knight/Jacobs Joint Venture, 701 Scarboro Road, MS 8253, Oak Ridge, TN 37830, 865-241-9433, fax 865-241-3400

KNIGHT — Knight Advanced Technology, 549 West Randolph Street, Chicago, IL 60661

UT-BATTELLE — Oak Ridge National Laboratory managed for the DEPARTMENT OF ENERGY under U.S. GOVERNMENT contract DE-AC05-00OR22725. UT-BATTELLE, LLC, ◆ Oak Ridge, Tennessee

PROJECT NAME:
SPALLATION NEUTRON SOURCE
CENTRAL LAB AND OFFICE BUILDING
PLUMBING SECTIONS

1	48	49	50	PLANT	BLDG	FL	SH.	OF	TYPE	CLASS
3	P	X	X	8	8600		1	1	S	U
51		52		53	WBS					REV
NC		NA			1.8.3.14		P5.20.40			1

AutoCAD