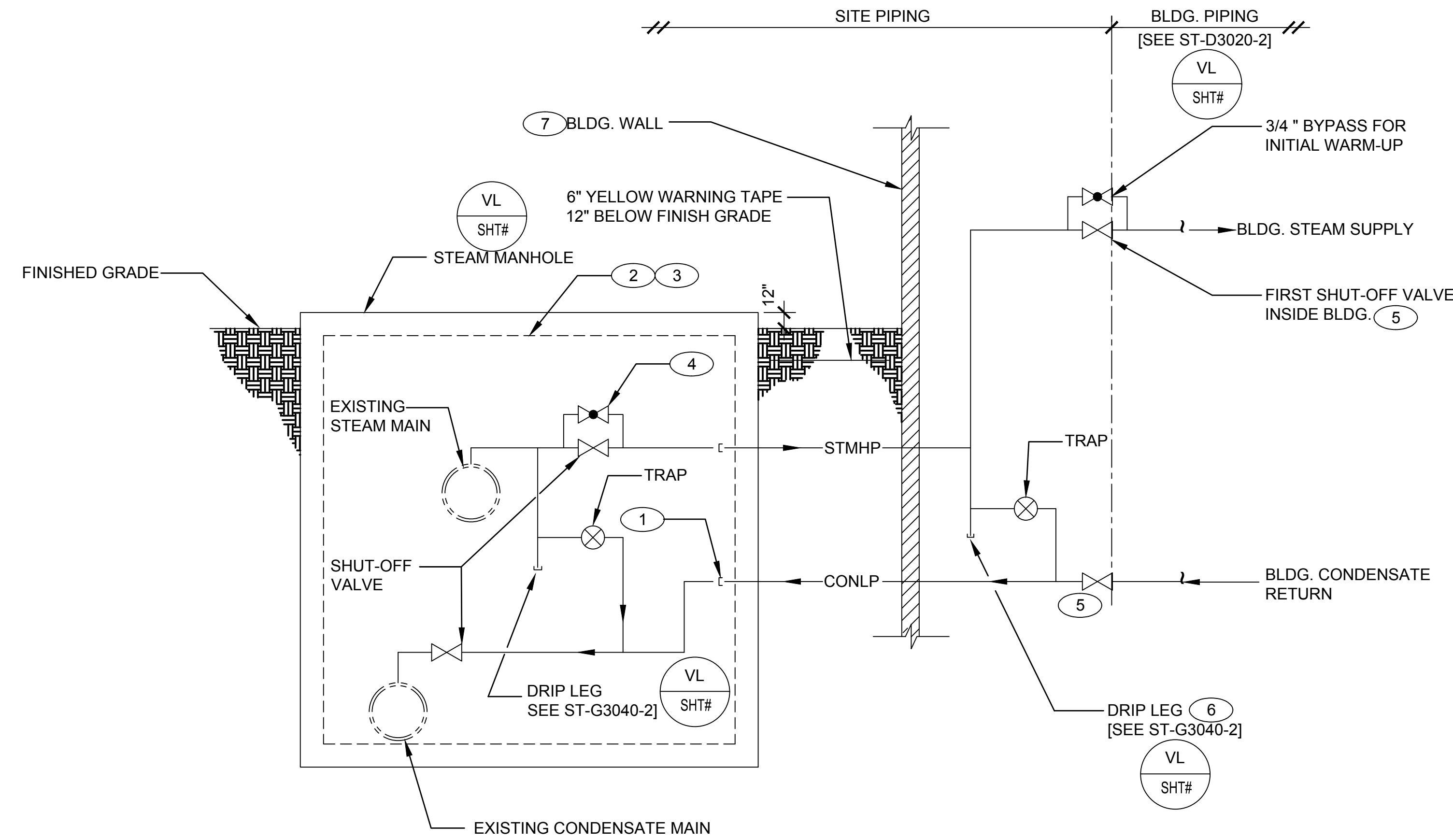


GENERAL NOTES:

- IF THIS SHEET IS NOT 24"x36" USE GRAPHIC SCALE ACCORDINGLY.

KEYED NOTES:

- SUBCONTRACTOR SHALL TERMINATE AND CAP PIPING A MINIMUM OF 12" INSIDE STEAM MANHOLE OR PER MANUFACTURERS INSTRUCTIONS.
- LANL MSS U&I WILL ASSEMBLE PIPING, VALVES, ETC IN STEAM MANHOLE AND TIE INTO EXISTING STEAM AND CONDENSATE MAINS (BY CUTTING A TEE SIZED TO MATCH NEW LINES) WITH ALL MATERIALS FURNISHED BY SUBCONTRACTOR
- LANL STR WILL NOTIFY MSS U&I 15 WORKING DAYS IN ADVANCE TO SCHEDULE TIE-IN AND INSTALLATION OF STEAM MANHOLE PIPING, VALVES, ETC. LANL STR TO ENSURE ALL MATERIAL ARE ON SITE.
- 3/4" BY PASS (PROVIDE WHEN MAIN IS 4" AND LARGER) BYPASS VALVE TO BE ON SAME PLANE WITH SHUT-OFF VALVE.
- LOCATE FIRST SHUT-OFF VALVE WITHIN 5 FEET OF BUILDING WALL PENETRATIONS.
- PROVIDE DRIP LEG AT BOTTOM OF STEAM LINE AT ALL VERTICAL RISES OR CHANGES IN DIRECTION OF STEAM PIPING.
- PIPING SHALL ENTER BUILDING IN A DESIGNATED MECHANICAL EQUIPMENT ROOM.



DRAWING DEVELOPED FOR ML-3/ML-4 PROJECTS. FOR ML-1/ML-2, ADDITIONAL REQUIREMENTS AND QA REVIEWS ARE REQUIRED. (REMOVE THIS NOTE WHEN INSERTED INTO A DRAWING PACKAGE)

SITE STEAM/CONDENSATE TIE-IN DETAIL
SCALE: NONE

NOTES FOR DESIGNER: (DO NOT INCLUDE ON CONSTRUCTION DRAWINGS)

- PIPING SHOWN IN STEAM MANHOLE IS SCHEMATIC. FINAL CONSTRUCTION DRAWINGS SHALL SHOW PIPING AND VALVES DRAWN TO SCALE TO ENSURE ADEQUATE CLEARANCES AND MANHOLE SIZE.
- DESIGN DISTRIBUTION SYSTEM UP TO AND INCLUDING FIRST PRV AND BYPASS VALVE WITHIN THE BUILDING FOR 150 PSIG WORKING STEAM PRESSURE (WSP) AND 500°F TEMPERATURE
- MINIMUM PIPE SIZE FOR STEAM AND CONDENSATE DISTRIBUTION PIPING SHALL BE 2".
- WHEN EDITING DETAIL TO SUIT PROJECT AND JOB SPECIFIC REQUIREMENTS DELETE ONLY THOSE PORTIONS THAT DO NOT APPLY. TO SEEK A VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM CIVIL POC.
- LOCATION AND DETAILS OF STEAM/CONDENSATE TIE-IN AND MANHOLE SHALL BE APPROVED BY THE LANL UTILITIES AND INSTITUTIONAL FACILITIES STEAM SYSTEM REPRESENTATIVE.
- STEAM MANHOLE:
 - PROVIDE A CONCRETE MANHOLE WITH A SOLID CONCRETE BOTTOM AND AN OPEN GRATING COVER. WITHIN THE GRATING PROVIDE A 3 FOOT BY 2 FOOT CLEAR OPENING FOR LADDER ACCESS. OPEN GRATING AND HINGED COVER TO SET ON ANGLE IRON FLUSH WITH MANHOLE TOP. AT MINIMUM, SUPPORT HINGED COVER UNDER HINGED SIDE AND SIDE OPPOSITE HINGE.
 - MANHOLE TO BE OF ADEQUATE SIZE TO ALLOW TWO PEOPLE COMFORTABLE WORK SPACE.
 - LADDER SHALL COMPLY WITH OSHA 29CFR 1910.27, FIXED LADDERS, AND/OR ANSI A14.2, SAFETY REQUIREMENTS FOR PORTABLE METAL LADDERS. LOCATE LADDER FOR CLEAR EGRESS AND EQUIPMENT ACCESS.
- REFER TO LANL CONSTRUCTION SPECIFICATION 33 6300 STEAM ENERGY DISTRIBUTION (SITE).

NO	DATE	CLASS REV	DC	DESCRIPTION	DWN	DSGN	CHKD	SUB	APP
4	09/15/2016	UNCLASS		ADMIN. CHANGES TO NEW FORMAT CAD STD REV#5. MINOR DESIGN CHANGES & INCORPORATED NOTES FROM SHEET 2 OF 2.	EJS	MS	MS	CJRR	TO
3	01/04/2006	U	DY	ADDED KEYED NOTE 7 AND SHUT-OFF VALVE INSIDE BLDG.	RP	MS	MS	EH	TO
2	08/04/2005	U	DY	ADDED KEYED NOTE 6 AND REVISED DIVISION LOGO	RP	JG	MS	EH	TO
1	08/14/2003	U		EDITORIAL CHANGES & REVISED KEYED NOTES 1 AND 3.	RP	JG	MS	EH	TO

ENGINEERING STANDARDS

CIVIL		DRAWN	R. PEARSON
STEAM/CONDENSATE TIE-IN DETAIL		DESIGN	J. GONZALES
		CHECKED	M. SMITHOUR
TA- XX		DATE	8-23-02
SUBMITTED DISCIPLINE POC: GURINDER GREWAL		APPROVED FOR RELEASE STANDARDS MANAGER: TOBIN ORUCH	
Los Alamos NATIONAL LABORATORY		P.O. Box 1663 Los Alamos, New Mexico 87545	
D.C.: U		REVIEWER: LARRY BAYS	DATE:
PROJECT ID		DRAWING NO	REV
CHAPTER 3		ST-G3040-1	4

00% REVIEW
NOT FOR CONSTRUCTION

D
C
B
A