

DEMOLITION NOTES:

1. THE MAIN PURPOSE OF THIS PROJECT IS TO INSTALL A NEW 12" HIGH PRESSURE STEAM MAIN IN THE TUNNEL BEHIND BUILDINGS 1 AND 9. THE EXISTING PUMPED CONDENSATE MAINS WILL BE DEMOLISHED AND THE NEW STEAM MAIN WILL BE INSTALLED IN ITS PLACE. THE EXISTING 6" STEAM MAIN WILL REMAIN AND WILL BE REUSED AS THE NEW PUMPED CONDENSATE MAIN.
2. DEMOLISH THE EXISTING PUMPED CONDENSATE MAIN IN THE CRAWL SPACE OF BUILDING 5.
3. DEMOLISH THE EXISTING PUMPED CONDENSATE MAIN IN THE TUNNEL BEHIND BUILDINGS 1 AND 9.
4. DEMOLISH THE EXISTING ELECTRIC CONDENSATE PUMP INCLUDING ALL RELATED PIPING AND POWER WIRING.
5. DISCONNECT THE STEAM AND CONDENSATE BRANCH PIPES THAT SERVE BUILDINGS 3 AND 48.
6. DISCONNECT THE STEAM AND CONDENSATE BRANCH PIPES THAT SERVE AIR HANDLER SR-9.
7. DISCONNECT THE STEAM AND CONDENSATE BRANCH PIPES THAT SERVE BUILDING 1 AND AIR HANDLER SR-8.
8. DISCONNECT THE STEAM AND CONDENSATE BRANCH PIPES THAT SERVE BUILDINGS 11 AND 36.
9. DISCONNECT THE STEAM BRANCH PIPE THAT SERVES BUILDING 4.
10. DISCONNECT THE STEAM AND CONDENSATE BRANCH PIPES THAT SERVE BUILDING 9 AND AIR HANDLER SR-7.
11. DEMOLISH THE EXISTING PRESSURE REDUCING STATION, RELIEF VALVE, AND RELIEF VALVE VENT PIPING IN ITS ENTIRETY. THE END OF THE EXISTING 6" STEAM MAIN WILL BE CONNECTED TO THE EXISTING 5" PUMPED CONDENSATE MAINS PASSING THROUGH THIS PART OF THE TUNNEL.
12. REMOVAL OF HAZARDOUS MATERIALS THAT MAY EXIST ON THE EXISTING PIPING IS TO BE INCLUDED IN THIS WORK.

LINE TYPE LEGEND:

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| ——    | EXISTING STEAM LINE<br>(THIN CONTINUOUS LINE)  |
| -- -- | EXISTING CONDENSATE LINE<br>(THIN DASHED LINE) |

THE MAIN PURPOSE OF THIS PROJECT IS TO INSTALL A NEW 12" HIGH PRESSURE STEAM MAIN IN THE TUNNEL BEHIND BUILDINGS 1 AND 9. THE EXISTING PUMPED CONDENSATE MAINS WILL BE DEMOLISHED AND THE NEW STEAM MAIN WILL BE INSTALLED IN ITS PLACE. THE EXISTING 6" STEAM MAIN WILL REMAIN AND WILL BE REUSED AS THE NEW PUMPED CONDENSATE MAIN.




1. HEAT AND HOT WATER SERVICES SHALL NOT BE INTERRUPTED DURING CONSTRUCTION. PERIODIC BUILDING SHUTDOWNS WILL BE PERMITTED FOR CONNECTIONS OF NEW PIPE TO EXISTING PIPE. THESE SHUTDOWNS SHALL BE SCHEDULED TWO WEEKS IN ADVANCE AND REQUIRED THE APPROVAL OF THE VA STAFF.
2. INSTALL A NEW 12" STEAM MAIN STARTING IN THE BASEMENT OF BUILDING 5 AND ENDING AT THE FINAL CONNECTION POINT IN THE TUNNEL NEAR THE SOUTHWEST CORNER OF BUILDING 4. A NEW 12" BALL VALVE ALREADY EXISTS IN THE BASEMENT OF BUILDING 5. A NEW 12" BALL VALVE MUST BE ADDED TO THE FINAL CONNECTION POINT NEAR THE SOUTHWEST CORNER OF BUILDING 4 AS SHOWN.
3. THE NEW STEAM MAIN WILL OPERATE AT 125 PSI. THE PIPING MATERIAL FOR STEAM PIPING FROM 2-1/2" DIAMETER TO 12" DIAMETER SHALL BE CARBON STEEL SCHEDULE 40 PIPE, ASTM A-106 GRADE "B" SEAMLESS WITH BEVELED ENDS ANSI B36.10. ALL PIPING SHALL BE DOMESTIC. IMPORTED PIPE WILL NOT BE ACCEPTED.
4. BRANCH PIPING CONNECTIONS TO BUILDINGS AND TRAMWAY AIR HANDLERS SHALL INCLUDE NEW ISOLATION VALVES. THE ISOLATION VALVES SHALL BE KLINGER SERIES "KVSN" PISTON VALVES. SIZES 1/2" THROUGH 2" SHALL HAVE SOCKET WELD ENDS. SIZES 2-1/2" THROUGH 8" SHALL HAVE BUTT WELD ENDS.
5. ISOLATION VALVES INSTALLED IN THE 12" STEAM MAIN SHALL BE KLINGER SERIES "KHSV BALLOSTAR" BALL VALVES WITH EXTENDED BUTT WELD ENDS. A NEW 1" SOCKET WELD WARM-UP VALVE SHALL BE INCLUDED ACROSS ALL BALLOSTAR VALVES.
6. THE PIPING LAYOUT SHOWN IS APPROXIMATE. THE CONTRACTOR IS TO INCLUDE ANY AND ALL CHANGES THAT MUST BE MADE TO THE EXISTING PIPING SYSTEMS IN ORDER TO MAKE WAY FOR THE NEW STEAM MAIN.
7. THE MAIN HEATING PRESSURE REDUCING VALVE IN BUILDINGS 5, 9, 4, 36, AND 48 MUST BE CHANGED TO AN ARMSTRONG PRESSURE REDUCING VALVE WITH A HIGH "TURN-DOWN" RATIO. THE VALVE SHALL BE PROPERLY SIZED TO MATCH THE BUILDING LOAD.
8. THERE ARE 7 DRIP TRAPS SHOWN ALONG THE NEW 12" STEAM MAIN. THIS COUNT IS APPROXIMATE. THE CONTRACTOR SHALL INCLUDE ANY ADDITIONAL STEAM TRAPS THAT MAY BE REQUIRED TO ACCOMMODATE LOW POINTS. ALL DRIP TRAPS SHALL DISCHARGE TO THE NEAREST FLASH TANK. THERE ARE FOUR FLASH TANKS AVAILABLE. FLASH TANK FT1 LOCATED IN THE BUILDING 1, FT5 LOCATED IN THE BUILDING 5, FT9 LOCATED IN THE BUILDING 9, AND FT10 LOCATED IN THE TUNNEL. DISCHARGING A DRIP TRAP INTO A PUMPED CONDENSATE LINE IS NOT PERMITTED.
9. DRIP TRAP ASSEMBLIES SHALL INCLUDE PROPERLY SIZED ARMSTRONG 880 SERIES BUCKET TRAPS WITH THREADED ENDS. TWO ISOLATION VALVES SHALL BE INCLUDED WITH EACH DRIP TRAP. THE ISOLATION VALVES SHALL BE APOLLO 70-140-64 BRONZE BODY WITH THREADED ENDS. EACH ASSEMBLY SHALL INCLUDE A CHECK VALVE, NIBCO T-453-B. ALL PIPING AND FITTINGS RELATED TO THE DRIP TRAP ASSEMBLIES SHALL BE SOCKET WELD. PIPING SHALL BE CARBON STEEL SCHEDULE 80 ASTM A-53 GRADE "B" SEAMLESS. ALL PIPING SHALL BE DOMESTIC. IMPORTED PIPING WILL NOT BE ACCEPTED.
10. ALL PIPING SHALL BE SUPPORTED EVERY 10 FEET. A TYPICAL HANGER SHALL CONSIST OF AN ANVIL FIGURE 171 PIPE ROLL WITH 7/8" DIAMETER THREADED ROD. THE CONTRACTOR SHALL INCLUDE EXPANSION JOINTS, EXPANSION LOOPS, ANCHOR POINTS, GUIDES, SLIDES, PROTECTION SADDLES AS REQUIRED TO BUILD A COMPLETE SYSTEM.
11. BUILDING 5 RECEIVES ITS DOMESTIC HOT WATER FROM AN INSTANTANEOUS HOT WATER HEATER LOCATED IN THE BASEMENT OF BUILDING 5. THE HOT WATER HEATER WILL REMAIN BUT THIS CONTRACT SHALL INCLUDE A NEW PRESSURE REDUCING STATION FOR THIS HOT WATER HEATER. THE PRESSURE REDUCING VALVE SHALL BE ARMSTRONG WITH A HIGH TURN DOWN RATIO. THE PRESSURE REDUCING STATION SHALL INCLUDE 2 KLINGER ISOLATION VALVES AND ONE KLINGER BY PASS VALVE(SAME AS SPECIFIED IN NOTE 4). THE PRESSURE REDUCING STATION SHALL ALSO INCLUDE A NEW RELIEF VALVE, PRESSURE GUAGES, AND A STRAINER WITH A BLOW-DOWN VALVE.

NOTES FOR CONVERSION OF THE EXISTING STEAM MAIN TO THE NEW PUMPED CONDENSATE MAIN:

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1. HEAT AND HOT WATER SERVICES SHALL NOT BE INTERRUPTED DURING CONSTRUCTION. PERIODIC BUILDING SHUTDOWNS WILL BE PERMITTED FOR CONNECTIONS OF NEW PIPE TO EXISTING PIPE. THESE SHUTDOWNS SHALL BE SCHEDULED TWO WEEKS IN ADVANCE AND REQUIRED THE APPROVAL OF THE VA STAFF.
2. THE EXISTING CONDENSATE MAIN THAT LEAVES BUILDING 5 PASSES IN A TUNNEL TO BUILDING 33. IT ENTERS A FLASH TANK IN BUILDING THREE. THE CONTRACT SHALL INCLUDE A NEW 6" BY PASS AROUND THE EXISTING FLASH TANK INSIDE BUILDING 33. THE NEW BYPASS SHALL INCLUDE A NEW KLINGER PISTON VALVE.
3. DISCONNECT THE EXISTING 6" STEAM MAIN IN THE BASEMENT OF BUILDING 5 AND RECONNECT IT TO THE EXISTING 6" PUMPED CONDENSATE VALVE LOCATED IN THE NORTHEAST CORNER OF THE BASEMENT MECHANICAL ROOM. RECONFIGURE THE PIPING AS REQUIRED TO COMPLETE THIS CONNECTION.
4. THE PIPING MATERIAL FOR CONDENSATE PIPING SHALL BE CARBON STEEL SCHEDULE 80 PIPE, ASTM A-53 GRADE "B" SEAMLESS. ALL PIPING SHALL BE DOMESTIC. IMPORTED PIPE WILL NOT BE ACCEPTED.
5. BRANCH PIPING CONNECTIONS TO BUILDINGS SHALL INCLUDE NEW ISOLATION VALVES. THE ISOLATION VALVES SHALL BE KLINGER SERIES "KVSN" PISTON VALVES. SIZES 1/2" THROUGH 2" SHALL HAVE SOCKET WELD BENDS. SIZES 2-1/2" THROUGH 8" SHALL HAVE BUTT WELD BENDS.
6. THE PIPING LAYOUT SHOWN IS APPROXIMATE. THE CONTRACTOR IS TO INCLUDE ANY AND ALL CHANGES THAT MUST BE MADE TO THE EXISTING PIPING SYSTEMS IN ORDER TO MAKE WAY FOR THE NEW CONDENSATE PIPING.
7. THE MEDIUM PRESSURE CONDENSATE PIPING FROM TRAMWAY AIR HANDLER SR8 SHALL BE ROUTED OVER TO BUILDING 1 AND CONNECTED TO THE EXISTING FLASH TANK. FITTINGS SHALL BE EXTRA HEAVY SOCKET WELD.
8. ALL PIPING SHALL BE SUPPORTED EVERY 10 FEET. A TYPICAL HANGER SHALL CONSIST OF AN ANVIL FIGURE 171 PIPE ROLL WITH 7/8" DIAMETER THREADED ROD. THE CONTRACTOR SHALL INCLUDE EXPANSION JOINTS, EXPANSION LOOPS, ANCHOR POINTS, GUIDES, SLIDES, PROTECTION SADDLES AS REQUIRED TO BUILD A COMPLETE SYSTEM.
9. DISCONNECT THE 6" STEAM MAIN FROM THE PRESSURE REDUCING STATION LOCATED IN THE TUNNEL NEAR THE SOUTHWEST CORNER OF BUILDING 4. THIS IS SHOWN AN DRAWING MD-1, PAGE 1 OF 3. RECONNECT THE 6" PIPING TO THE EXISTING 5" PUMPED CONDENSATE MAIN THAT PASSES THROUGH THIS SECTION OF THE TUNNEL. INCLUDE A NEW 6" KLINGER PISTON VALVE IN THE NEW CONNECTION.

LINE TYPE LEGEND:

	EXISTING STEAM LINE (THIN CONTINUOUS LINE)
	EXISTING CONDENSATE LINE (THIN DASHED LINE)
	NEW CONDENSATE LINE