

**WASTEWATER STREAM
CHARACTERIZATION FOR
TA 3-32, 33, 34, 480, 481, 482, 483,
500, 1543, 1544, 1545, 1552, 1553,
1554, 1565, 1567, 1570, 1571, 1575,
1586, 1599, 1688, 1706, 1712, 1732,
1739, 1741, 1745, 1746, 1747, 1748,
1749, 1750, 1760, 1761, 1767, 1771,
1786, 1787, 1819, 1930, 1931, 1932,
2002 AND 2047**

**at
Los Alamos National Laboratory**

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT # 46

Los Alamos

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1786, 1787, 1819, 1930, 1931, 1932,
2002 AND 2047

ENVIRONMENTAL STUDY

prepared for:
THE LOS ALAMOS NATIONAL LABORATORY
Los Alamos, New Mexico

under subcontract 9-XG8-2874P-1

by:
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October, 1992

EXECUTIVE SUMMARY

Buildings 32, 33, 34, 480, 481, 482, 483, 500, 1543, 1544, 1545, 1552, 1553, 1554, 1565, 1567, 1570, 1571, 1575, 1586, 1599, 1688, 1706, 1712, 1732, 1739, 1741, 1745, 1746, 1748, 1749, 1750, 1760, 1761, 1767, 1771, 1786, 1787, 1819, 1930, 1931, 1932, 2002 and 2047 in TA-3 were visited to document all drain piping and to make permitting recommendations. The pipes exiting the building are as follows:

- 1) from building 3-32: one discharge to the sanitary sewer, three roof drains, two fire water drains, three vapor vents and one electrical trench drain,
- 2) from buildings 3-33, 500, 1543, 1553, 1554, 1565, 1567, 1570, 1571, 1688, 1706, 1732, 1761, 1771, 1787 and 1931: no drains,
- 3) from building 3-34: one outfall to the radioactive liquid waste system, one outfall to the sanitary sewer and two fire water drains,
- 4) from building 3-480: one outfall to the sanitary sewer,
- 5) from building 3-481: one outfall to the sanitary sewer,
- 6) from building 3-482: one outfall to the sanitary sewer,
- 7) from building 3-483: one outfall to the sanitary sewer,
- 8) from building 3-1544: one outfall to the sanitary sewer,
- 9) from building 3-1545: one outfall to the sanitary sewer,
- 10) from building 3-1552: one outfall to the sanitary sewer,
- 11) from building 3-1575: one outfall to the sanitary sewer,
- 12) from building 3-1586: one outfall to the sanitary sewer,
- 13) from buildings 3-1599, 1712 and 1739: no plumbing to the facilities,
- 14) from building 3-1741: one outfall to the sanitary sewer and three storm water discharges to daylight,
- 15) from building 3-1745: one outfall to the sanitary sewer,

- 16) from building 3-1746: one outfall to the sanitary sewer,
- 17) from building 3-1747: one outfall to the sanitary sewer,
- 18) building 3-1748 was cancelled and relocated to TA-35 and was renumbered TA-35-454,
- 19) from building 3-1749: one outfall to the sanitary sewer and four roof drains,
- 20) from building 3-1750: one outfall to the sanitary sewer and four roof drains,
- 21) from building 3-1760: four roof drains and one outfall to the sanitary sewer,
- 22) buildings 3-1767, 3-1930 and 3-1932 were sent to salvage on May 22, 1991,
- 23) from building 3-1786: one outfall to the sanitary sewer,
- 24) from building 3-1819: one outfall to the sanitary sewer and five roof drains and
- 25) from building 3-2002: one outfall to the sanitary sewer, two roof drains and one equipment vent.
- 26) building 3-2047 was cancelled and relocated to TA-46 and was renumbered TA-46-398,

No revised EPA Forms 2C are included. Recommendation for repiping are provided to permit outfall consolidation to minimize permit maintenance requirements. Floor drain plugging is recommended where potential for discharge of pollutants exists.

A waste stream database has been prepared listing wastewater type and flow rate for each outfall.

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1.0 INTRODUCTION

During September and October, 1992, Patrick E. Binkley of Santa Fe Engineering (SFE) toured buildings 32, 33, 34, 480, 481, 482, 483, 600, 1543, 1544, 1545, 1552, 1553, 1554, 1565, 1567, 1570, 1571, 1575, 1586, 1599, 1688, 1706, 1712, 1732, 1739, 1741, 1745, 1746, 1748, 1749, 1750, 1760, 1761, 1767, 1771, 1786, 1787, 1819, 1930, 1931, 1932, 2002 and 2047 in TA-3. Figure 1 is a plot plan showing the area of the buildings visited. The purpose of this study is to identify building drain piping and to characterize the wastewater flows and sources at the time of the visit. This report will not reflect any subsequent changes in piping or operation. The Wastewater Stream Characterization Policy of September 10, 1992 was followed for this study. The following tasks were performed for this purpose:

1. Building drains and all piping exiting the buildings were identified and laid out in schematic form;
2. Wastewater sources were identified at each drain and the wastewater was characterized according to flow rate and quality. The location of outfalls and their potential sources of discharge were determined. Potential pollutants were also noted;
3. Permit applications for discharges of clean water were not prepared since these discharges do not require permitting at this time and
4. Potential problems were identified and recommendations were made for repiping, floor drain plugging and spill containment where deemed appropriate.

The field investigation proceeded by verifying drain schematic drawings prepared by SFE for the appropriate buildings (Figures 2 through 9) from drawings provided by Los Alamos National

Laboratory (LANL) Facilities Engineering Division. The other buildings were visited to insure that no drains exist in the buildings. The following process was used to define drain piping and characterize the wastewater streams:

1. Laboratory engineering drawings were used to prepare the SFE drain piping schematic. The Solid Waste Stream Characterization conducted by IT Corporation was also reviewed. The National Pollutant Discharge System (NPDES) Permit, the 1990 NPDES Permit Application submitted by Los Alamos National Laboratory (LANL) in September, 1990 and the latest Federal Facilities Compliance Agreement (FFCA) between the Department of Energy (DOE) and the Environmental Protection Agency (EPA) and the Administrative Order (AO) Docket Number VI-92-1306 issued by EPA to the University of California were used for reference;
2. SFE verified drain piping by dye checking and
3. A site visit was performed to verify the SFE drain schematic and to identify potential outfall pipes exiting the building. The visit entailed a room by room inspection of wastewater sources and drains. Interviews with site personnel were conducted to assist in wastestream characterization.

2.0 FIELD INVESTIGATION

The pipes exiting the building have been assigned an Outlet Piping Number. The four part number, sequentially, identifies the Technical Area where the pipe is located, the building from which the pipe discharges, the letters OPN to indicate that it is an outlet piping number and the unique number for the pipe. The piping exiting the building will be labeled for easy identification in the future.

Each drain has a unique identification number. Each number consists of three parts. The first part is the floor the drain is on. The second part has letters that indicate the drain type (abbreviations used are summarized in Table 1). The final part is a unique number for each drain. For example, the floor drain numbering on the first floor would start with 1FD1. The roof drains do not have the number identifying the floor such as RD1 for Roof Drain 1.

The function of each pipe exiting from buildings is listed in Appendix 1 in Tables 2 through 25, with an abbreviations list in Table 1. Appendix 2 contains the waste stream characterization database output, listing wastewater sources, flow rates and periodicity information for each outfall drain. No EPA forms were included in Appendix 3. Appendix 4 provides information about the dye study of building drains. Flow schematics of the drains from each building are attached in Appendix 5 as Figures 2 through 25.

3.0 RECOMMENDATIONS FOR BUILDING 3-32

Table 2 is a list of the drains to the building outfalls and Figure 2 is a schematic of the piping. The table lists the drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

3.1 Outfall 3-32-OPN-1

This outfall to the sanitary sewer receives flow from floor drains (7), lavatories (5), sinks (7), showers (3), sump pump (1), toilets (5), urinals (2), water fountains (2) and roof drains (4). Piping the roof drains as separate outfall is recommended. Sink drains 1SD3, 1SD4, 1SD5, 1SD6 and 1SD7 are located in shops or labs and should have signs stating "Sanitary Waste Only - No Chemical Disposal". Sump pump 1SP1 in the transformer room should be covered or bermed to prevent any potential oil from entering the sanitary sewer. Plugging floor drain 1FD7 is also recommended. No permitting is recommended. No EPA forms were prepared.

3.2 Outfalls 3-32-OPN-2, 3-32-OPN-3, 3-32-OPN-6 and 3-32-OPN-7

These outfalls to daylight are from roof drains. No changes or permitting are recommended. No EPA forms were prepared.

3.3 Outfalls 3-32-OPN-4 and 3-32-OPN-5

These outfalls to daylight are fire water drains and should be included in a Notice of Intent (NOI) to Discharge. No changes are recommended. No EPA forms were prepared.

3.4 Outfalls 3-32-OPN-8, 3-32-OPN-9 and 3-32-OPN-11

These outfalls to atmosphere are vapor vents from equipment. No changes or permitting are recommended. No EPA forms were prepared.

3.5 Outfall 3-32-OPN-10

This outfall is from an electrical trench in experimental areas. No liquid is discharged into or from the trench. It is recommended that this trench drain be plugged. No permitting is recommended. No EPA forms were prepared.

4.0 **RECOMMENDATIONS FOR BUILDINGS 3-33, 500, 1543, 1553, 1554, 1565, 1567, 1570, 1571, 1688, 1706, 1732, 1761, 1771, 1787 AND 1931**

These buildings do not have any drains. No changes or permitting are recommended. No EPA forms were prepared.

5.0 **RECOMMENDATIONS FOR BUILDING 3-34**

Table 3 is a list of the drains to the building outfalls and Figure 3 is a schematic of the piping. The table lists the drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

5.1 Outfall 3-34-OPN-1

This outfall is to the radioactive liquid waste (RLW) sewer system that flows to the TA-50 treatment plant. The sources are from sinks that may be radioactively contaminated. No changes or permitting are recommended, however, it is recommended that all sinks be labeled as RLW. No EPA forms were prepared.

5.2 Outfall 3-34-OPN-2

This outfall to the sanitary sewer receives flow from floor drains (18), lavatories (3), toilets (3), urinals (1), water fountains (2), eye wash unit (1) and eight (8) roof drains. The roof drains should be piped as separate outfalls. Floor drains 2FD1, 2FD2, 2FD3, 2FD4, 2FD5 and 2FD6 receive discharge from the ventilation duct wash down system. A potential for contamination exists and these floor drains should be repiped to the RLW system or the wash down itself should be rerouted to RLW and the drains plugged. Floor drains BFD2 and BFD3 in the equipment room should be plugged. Floor drain BFD8 in lab B7 should also be plugged. Sink drains BSD2 and BSD3 should be labeled "Sanitary Waste Only - No Chemical Disposal". Sink drains BSD4 and BSD7 are located in a photo lab. The operating group should post signs and prepare an administrative procedure that prohibits the discharge of anything other than photo rinse water to these drains. No permitting is recommended. No EPA forms were prepared.

5.3 Outfalls 3-34-OPN-3 and 3-34-OPN-4

These outfalls to daylight are fire water drains and should be included in an NOI. No changes are recommended. No EPA forms were prepared.

6.0 **RECOMMENDATIONS FOR BUILDING 3-480**

Table 4 is a list of the drains to the building outfall and Figure 4 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

7.0 RECOMMENDATIONS FOR BUILDING 3-481

Table 5 is a list of the drains to the building outfall and Figure 5 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

8.0 RECOMMENDATIONS FOR BUILDING 3-482

Table 6 is a list of the drains to the building outfall and Figure 6 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

9.0 RECOMMENDATIONS FOR BUILDING 3-483

Table 7 is a list of the drains to the building outfall and Figure 7 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

10.0 RECOMMENDATIONS FOR BUILDING 3-1544

Table 8 is a list of the drains to the building outfall and Figure 8 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

11.0 RECOMMENDATIONS FOR BUILDING 3-1545

Table 9 is a list of the drains to the building outfall and Figure 9 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

12.0 RECOMMENDATIONS FOR BUILDING 3-1552

Table 10 is a list of the drains to the building outfall and Figure 10 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

13.0 RECOMMENDATIONS FOR BUILDING 3-1575

Table 11 is a list of the drains to the building outfall and Figure 11 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

14.0 RECOMMENDATIONS FOR BUILDING 3-1586

Table 12 is a list of the drains to the building outfall and Figure 12 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

15.0 RECOMMENDATIONS FOR BUILDINGS 3-1599, 1712 AND 1739

Tables 13, 14 and 15 are lists of the facilities in the buildings and Figures 13, 14 and 15 are schematics of the building. These buildings have no source of water to the facilities and no drain piping. No changes or permitting are recommended. No EPA forms were prepared.

16.0 RECOMMENDATIONS FOR BUILDING 3-1741

Table 16 is a list of the drains to the building outfall and Figure 16 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations to changes to the drain piping. The discussion below gives the reasoning for the recommendations.

16.1 Outfall 3-1741-OPN-1

This outfall to the sanitary sewer receives flow from a urinal, a sink, a water fountain, lavatories (2) and toilets (2). No permitting is recommended and no EPA forms were prepared.

16.2 Outfalls 3-1741-OPN-2, 3-1741-OPN-3 and 3-1741-OPN-4

These outfalls receive storm water flow from the roof of the building and discharge to daylight next to the building. No permitting is recommended and no EPA forms were prepared.

17.0 RECOMMENDATIONS FOR BUILDING 3-1745

Table 17 is a list of the drains to the building outfall and Figure 17 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

18.0 RECOMMENDATIONS FOR BUILDING 3-1746

Table 18 is a list of the drains to the building outfall and Figure 18 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

19.0 RECOMMENDATIONS FOR BUILDING 3-1747

Table 19 is a list of the drains to the building outfall and Figure 19 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

20.0 RECOMMENDATIONS FOR BUILDING 3-1748

This building was canceled and moved to TA-35 where it was renumbered TA-35-454. This information was obtained from Joyce Martinez of the ENG-7 As-Built Program. See Waste Stream Characterization Report #57 for more information. No permitting is recommended and no EPA forms were prepared.

21.0 RECOMMENDATIONS FOR BUILDING 3-1749

Table 20 is a list of the drains to the building outfalls and Figure 20 is a schematic of the piping. The table lists the drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

21.1 Outfall 3-1749-OPN-1

This outfall to the sanitary sewer receives flow from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

21.2 Outfalls 3-1749-OPN-2, 3-1749-OPN-3, 3-1749-OPN-4 and 3-1749-OPN-5

These outfalls to daylight are from storm water drains. No changes or permitting are recommended. No EPA forms were prepared.

22.0 RECOMMENDATIONS FOR BUILDING 3-1750

Table 21 is a list of the drains to the building outfalls and Figure 21 is a schematic of the piping. The table lists the drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

22.1 Outfall 3-1750-OPN-1

This outfall to the sanitary sewer receives flow from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

22.2 Outfalls 3-1750-OPN-2, 3-1750-OPN-3, 3-1750-OPN-4 and 3-1750-OPN-5

These outfalls to daylight are from storm water drains. No changes or permitting are recommended. No EPA forms were prepared.

23.0 RECOMMENDATIONS FOR BUILDING 3-1760

Table 22 is a list of the drains to the building outfalls and Figure 22 is a schematic of the piping. The table lists the

drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

23.1 Outfalls 3-1760-OPN-1, 3-1760-OPN-2, 3-1760-OPN-4 and 3-1760-OPN-5

These outfalls to daylight are from storm water drains. No changes or permitting are recommended. No EPA forms were prepared.

23.2 Outfall 3-1760-OPN-3

This outfall to the sanitary sewer receives flow from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

24.0 RECOMMENDATIONS FOR BUILDINGS 3-1767, 1930 AND 1932

These buildings were sent to salvage on May 22, 1991. This information was obtained from Joyce Martinez of the ENG-7 As-Built Program. No permitting is recommended and no EPA forms were prepared.

25.0 RECOMMENDATIONS FOR BUILDING 3-1786

Table 23 is a list of the drains to the building outfall and Figure 23 is a schematic of the piping. The table lists the drains that connect to the outfall pipe. The only outfall flows to the sanitary sewer. The sources are all from sanitary facilities. No changes or permitting are recommended. No EPA forms were prepared.

26.0 RECOMMENDATIONS FOR BUILDING 3-1819

Table 24 is a list of the drains to the building outfalls and Figure 24 is a schematic of the piping. The table lists the

drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

26.1 Outfall 3-1819-OPN-1

This outfall to the sanitary sewer receives flow from floor drains (2), lavatories (2), sinks (10), showers (2), toilets (2), a urinal and a water fountain. All sink drains (9 in labs and one janitor's) should be labeled "Sanitary Waste Only-No Chemical Disposal". No permitting is recommended and no EPA forms were prepared.

26.2 Outfalls 3-1819-OPN-2, 3-1819-OPN-5, 3-1819-OPN-6, 3-1819-OPN-7 and 3-1750-OPN-8

These outfalls to daylight are from storm water drains. No changes or permitting are recommended. No EPA forms were prepared.

26.3 Outfalls 3-1819-OPN-3 and 3-1819-OPN-4

These outfalls to daylight are fire water drains and should be included in an NOI. No changes are recommended. No EPA forms were prepared.

27.0 RECOMMENDATIONS FOR BUILDING 3-2002

Table 25 is a list of the drains to the building outfalls and Figure 25 is a schematic of the piping. The table lists the drains that connect to the outfall pipes and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

27.1 Outfall 3-2002-OPN-1

This outfall receives flow from a hand washing sink and floor drains and flows to the sanitary sewer. The floor drains have no source of water and should be permanently plugged. Sink drain 1SD1 should be labeled "Sanitary Waste Only-No Chemical Disposal". No permitting is recommended and no EPA forms were prepared.

27.2 Outfalls 3-2002-OPN-2 and 3-2002-OPN-3

These outfalls to daylight are from storm water drains. No changes or permitting are recommended. No EPA forms were prepared.

27.3 Outfalls 3-2002-OPN-4

This outfall to the atmosphere is an equipment vent. No permitting or changes are recommended. No EPA forms were prepared.

28.0 RECOMMENDATIONS FOR BUILDING 3-2047

This building was canceled and moved to TA-46 where it was renumbered TA-46-398. This information was obtained from Joyce Martinez of the ENG-7 As-Built Program. No permitting is recommended and no EPA forms were prepared.

29.0 CONCLUSION

This document provides the information to characterize buildings 32, 33, 34, 480, 481, 482, 483, 500, 1543, 1544, 1545, 1552, 1553, 1554, 1565, 1567, 1570, 1571, 1575, 1586, 1599, 1688, 1706, 1712, 1732, 1739, 1741, 1745, 1746, 1748, 1749, 1750, 1760, 1761, 1767, 1771, 1786, 1787, 1819, 1930, 1931, 1932, 2002 and 2047 in TA-3. No permit application forms were completed for the any of the outfalls.

Permitting is not recommended for the outfalls, as itemized below:

Areas that do not have any drains:

- | | | | |
|------------|------------|------------|------------|
| 1. 3-33 | 2. 3-500 | 3. 3-1543 | 4. 3-1553 |
| 5. 3-1554 | 6. 3-1565 | 7. 3-1567 | 8. 3-1570 |
| 9. 3-1571 | 10. 3-1688 | 11. 3-1706 | 12. 3-1732 |
| 13. 3-1761 | 14. 3-1771 | 15. 3-1787 | 16. 3-1931 |

Vapor vents:

- | | | |
|-----------------|---------------|----------------|
| 1. 3-32-OPN-8 | 2. 3-32-OPN-9 | 3. 3-32-OPN-11 |
| 4. 3-2002-OPN-4 | | |

Discharges to the sanitary sewer:

- | | | |
|------------------|------------------|------------------|
| 1. 3-32-OPN-1 | 2. 3-34-OPN-2 | 3. 3-480-OPN-1 |
| 4. 3-481-OPN-1 | 5. 3-482-OPN-1 | 6. 3-483-OPN-1 |
| 7. 3-1544-OPN-1 | 8. 3-1545-OPN-1 | 9. 3-1552-OPN-1 |
| 10. 3-1575-OPN-1 | 11. 3-1586-OPN-1 | 12. 3-1741-OPN-1 |
| 13. 3-1745-OPN-1 | 14. 3-1746-OPN-1 | 15. 3-1747-OPN-1 |
| 16. 3-1749-OPN-1 | 17. 3-1750-OPN-1 | 18. 3-1760-OPN-3 |
| 19. 3-1786-OPN-1 | 20. 3-1819-OPN-1 | 21. 3-2002-OPN-1 |

Storm water discharges:

- | | | |
|------------------|------------------|------------------|
| 1. 3-32-OPN-2 | 2. 3-32-OPN-3 | 3. 3-32-OPN-6 |
| 4. 3-32-OPN-7 | 5. 3-1749-OPN-2 | 6. 3-1749-OPN-3 |
| 7. 3-1749-OPN-4 | 8. 3-1749-OPN-5 | 9. 3-1750-OPN-2 |
| 10. 3-1750-OPN-3 | 11. 3-1750-OPN-4 | 12. 3-1750-OPN-5 |
| 13. 3-1760-OPN-1 | 14. 3-1760-OPN-2 | 15. 3-1760-OPN-4 |
| 16. 3-1760-OPN-5 | 17. 3-1819-OPN-2 | 18. 3-1819-OPN-5 |
| 19. 3-1819-OPN-6 | 20. 3-1819-OPN-7 | 21. 3-1819-OPN-8 |
| 22. 3-2002-OPN-2 | 23. 3-2002-OPN-3 | |

Discharges from the fire water system:

- | | | |
|---------------|-----------------|-----------------|
| 1. 3-32-OPN-4 | 2. 3-32-OPN-5 | 3. 3-34-OPN-3 |
| 4. 3-34-OPN-4 | 5. 3-1819-OPN-3 | 6. 3-1819-OPN-4 |

Discharges to the RLW system:

1. 3-34-OPN-1

Discharges from an electrical trench:

1. 3-32-OPN-10

Buildings with no plumbing to fixtures:

- | | | |
|-----------|-----------|-----------|
| 1. 3-1599 | 2. 3-1712 | 3. 3-1739 |
|-----------|-----------|-----------|

Buildings that were relocated to other technical areas:

- | | |
|-----------|-----------|
| 1. 3-1748 | 2. 3-2047 |
|-----------|-----------|

Buildings that were sent to salvage:

- | | | |
|-----------|-----------|-----------|
| 1. 3-1767 | 2. 3-1930 | 3. 3-1932 |
|-----------|-----------|-----------|

Recommended permitting and corrective actions are outlined in Tables 2 through 25 as well as in the above text. Corrective action should be performed as soon as practicable to minimize the chance of unpermitted discharge of pollutants.

TABLE 1:
SUMMARY OF ABBREVIATION

ABBREVIATION	MEANING
EW	Eye Wash
FD	Floor Drain
LV	Lavatory
RD	Roof Drain
SD	Sink
SH	Shower
SP	Sump
TD	Trench Drain
TL	Toilet
UR	Urinal
WF	Water Fountain

TABLE 2: TA 3-32 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-32-OPN-1 SAN SEWER	1FD1	REST ROOM	136	NO CHANGE	NO
	1FD2	REST ROOM	137	NO CHANGE	
	1FD3	REST ROOM	137	NO CHANGE	
	1FD4	REST ROOM	136	NO CHANGE	
	1FD5	REST ROOM	105	NO CHANGE	
	1FD6	EQUIP ROOM	N/A	NO CHANGE	
	1FD7	EQUIP ROOM	N/A	PLUG	
	1LV1	REST ROOM	136	NO CHANGE	
	1LV2	REST ROOM	136	NO CHANGE	
	1LV3	REST ROOM	137	NO CHANGE	
	1LV4	REST ROOM	137	NO CHANGE	
	1LV5	REST ROOM	105	NO CHANGE	
	1SD1	JAN CLOSET	139	NO CHANGE	
	1SD2	KITCHEN	N/A	NO CHANGE	
	1SD3	SHOP	104	LABEL	
	1SD4	SHOP	104	LABEL	
	1SD5	LAB	102B	LABEL	
	1SD6	LAB	102F	LABEL	
	1SD7	LAB	102F	LABEL	
	1SH1	REST ROOM	136	NO CHANGE	
	1SH2	REST ROOM	137	NO CHANGE	
	1SH3	REST ROOM	105	NO CHANGE	
	1SP1	TRANSFORMER RM	N/A	MODIFY	
	1TL1	REST ROOM	136	NO CHANGE	
	1TL2	REST ROOM	136	NO CHANGE	
	1TL3	REST ROOM	137	NO CHANGE	
	1TL4	REST ROOM	105	NO CHANGE	
	1TL5	REST ROOM	105	NO CHANGE	
	1UR1	REST ROOM	137	NO CHANGE	
	1UR2	REST ROOM	105	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	
	1WF2	CORRIDOR	N/A	NO CHANGE	

TABLE 2: TA 3-32 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-32-OPN-1 (CONT)	RD1	ROOF	EXTER	SEPARATE	NO
	RD2	ROOF	EXTER	SEPARATE	
	RD3	ROOF	EXTER	SEPARATE	
	RD4	ROOF	EXTER	SEPARATE	
3-32-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-32-OPN-3	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-32-OPN-4	N/A	FIRE WATER	N/A	NOI	NO
3-32-OPN-5	N/A	FIRE WATER	N/A	NOI	NO
3-32-OPN-6	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-32-OPN-7	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-32-OPN-8	N/A	EQUIP VENT	111A	NO CHANGE	NO
3-32-OPN-9	N/A	EQUIP VENT	111A	NO CHANGE	NO
3-32-OPN-10	1TD1	ELECT TRENCH	N/A	NO CHANGE	NO
3-32-OPN-11	N/A	EQUIP VENT	102A	NO CHANGE	NO

TABLE 3: TA 3-34 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-34-OPN-1 RLW	1SD1	LAB	111	LABEL	NO
	1SD2	LAB	129	LABEL	
	1SD3	LAB	129	LABEL	
	1SD4	LAB	123	LABEL	
	1SD5	LAB	123	LABEL	
	1SD6	LAB	107	LABEL	
	1SD7	LAB	107	LABEL	
	1SD8	LAB	103	LABEL	
	1SD9	LAB	103	LABEL	
	1SD10	LAB	119	LABEL	
	1SD11	LAB	119	LABEL	
	1SD12	SHOP	124	LABEL	
	1SD13	SHOP	124	LABEL	
	1SD14	LAB	120	LABEL	
	1SD15	LAB	120	LABEL	
	1SD16	LAB	104	LABEL	
	1SD17	LAB	108	LABEL	
	1SD18	LAB	108	LABEL	
	1SD19	LAB	122	LABEL	
	1SD20	LAB	122	LABEL	
	1SD21	LAB	126	LABEL	
	1SD22	LAB	112	LABEL	
	1SD23	LAB	116	LABEL	
	1SD24	LAB	116	LABEL	
	1SD25	LAB	118	LABEL	
	BSD1	LAB	B10	LABEL	
BSD5	LAB	B13	LABEL		
BSD6	LAB	B12	LABEL		
3-34-OPN-2 SAN SEWER	1FD1	REST ROOM	117A	NO CHANGE	NO
	1FD2	REST ROOM	117B	NO CHANGE	
	1LV1	REST ROOM	117A	NO CHANGE	
	1LV2	REST ROOM	117A	NO CHANGE	
	1LV3	REST ROOM	117B	NO CHANGE	

TABLE 3: TA 3-34 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS
3-34-OPN-2 (CONT)	1TL1	REST ROOM	117A	NO CHANGE
	1TL2	REST ROOM	117A	NO CHANGE
	1TL3	REST ROOM	117B	NO CHANGE
	1UR1	REST ROOM	117A	NO CHANGE
	1WF1	CORRIDOR	N/A	NO CHANGE
	1WF2	CORRIDOR	N/A	NO CHANGE
	2FD1	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	2FD2	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	2FD3	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	2FD4	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	2FD5	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	2FD6	BLDG VENT DUCT	N/A	PIPE TO RLW/PLUG
	BEW1	CORRIDOR	N/A	NO CHANGE
	BFD1	ENTRY	N/A	NO CHANGE
	BFD2	EQUIP ROOM	B3	PLUG
	BFD3	EQUIP ROOM	B3	PLUG
	BFD4	EQUIP ROOM	B3	NO CHANGE
	BFD5	OFFICE	N/A	NO CHANGE
	BFD6	LIBRARY	B11	NO CHANGE
	BFD7	CORRIDOR	N/A	NO CHANGE
	BFD8	LAB	B7	PLUG
	BFD9	CORRIDOR	N/A	NO CHANGE
	BFD10	ENTRY	N/A	NO CHANGE
	BSD2	EQUIP ROOM	N/A	LABEL
	BSD3	LAB	B6	LABEL
	BSD4	PHOTO LAB	B7	LABEL/SOP
BSD7	PHOTO LAB	B7	LABEL/SOP	
RD1	ROOF DRAIN	ROOF	SEPARATE	
RD2	ROOF DRAIN	ROOF	SEPARATE	

TABLE 3: TA 3-34 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-34-OPN-2 (CONT)	RD3	ROOF DRAIN	ROOF	SEPARATE	NO
	RD4	ROOF DRAIN	ROOF	SEPARATE	
	RD5	ROOF DRAIN	ROOF	SEPARATE	
	RD6	ROOF DRAIN	ROOF	SEPARATE	
	RD7	ROOF DRAIN	ROOF	SEPARATE	
	RD8	ROOF DRAIN	ROOF	SEPARATE	
3-34-OPN-3	N/A	FIRE WATER	N/A	NOI	NO
3-34-OPN-4	N/A	FIRE WATER	N/A	NOI	NO

TABLE 4: TA 3-480 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-480-OPN-1 SAN SEWER	1LV1	REST ROOM	122	NO CHANGE	NO
	1LV2	REST ROOM	116	NO CHANGE	
	1SD1	JAN CLOSET	120	NO CHANGE	
	1SD2	KITCHEN	110	NO CHANGE	
	1TL1	REST ROOM	122	NO CHANGE	
	1TL2	REST ROOM	116	NO CHANGE	
	1UR1	REST ROOM	122	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 5: TA 3-481 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-481-OPN-1 SAN SEWER	1LV1	REST ROOM	110	NO CHANGE	NO
	1LV2	REST ROOM	104	NO CHANGE	
	1SD1	JAN CLOSET	108	NO CHANGE	
	1SD2	KITCHEN	105	NO CHANGE	
	1TL1	REST ROOM	110	NO CHANGE	
	1TL2	REST ROOM	104	NO CHANGE	
	1UR1	REST ROOM	110	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 6: TA 3-482 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-482-OPN-1 SAN SEWER	1LV1	REST ROOM	116	NO CHANGE	NO
	1LV2	REST ROOM	112	NO CHANGE	
	1SD1	JAN CLOSET	108	NO CHANGE	
	1SD2	KITCHEN	118	NO CHANGE	
	1TL1	REST ROOM	116	NO CHANGE	
	1TL2	REST ROOM	112	NO CHANGE	
	1UR1	REST ROOM	116	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 7: TA 3-483 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-483-OPN-1 SAN SEWER	1LV1	REST ROOM	116	NO CHANGE	NO
	1LV2	REST ROOM	112	NO CHANGE	
	1SD1	JAN CLOSET	108	NO CHANGE	
	1SD2	KITCHEN	118	NO CHANGE	
	1TL1	REST ROOM	116	NO CHANGE	
	1TL2	REST ROOM	112	NO CHANGE	
	1UR1	REST ROOM	116	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 8: TA 3-1544 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1544-OPN-1 SAN SEWER	1LV1	REST ROOM	100A	NO CHANGE	NO
	1TL1	REST ROOM	100A	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 9: TA 3-1545 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1545-OPN-1 SAN SEWER	1LV1	REST ROOM	100A	NO CHANGE	NO
	1TL1	REST ROOM	100A	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 10: TA 3-1552 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1552-OPN-1 SAN SEWER	1LV1	REST ROOM	106	NO CHANGE	NO
	1TL1	REST ROOM	106	NO CHANGE	
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 11: TA 3-1575 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1575-OPN-1 SAN SEWER	1LV1	REST ROOM	110	NO CHANGE	NO
	1LV2	REST ROOM	108	NO CHANGE	
	1SD1	KITCHEN	100D	NO CHANGE	
	1TL1	REST ROOM	110	NO CHANGE	
	1TL2	REST ROOM	108	NO CHANGE	
	1UR1	REST ROOM	110	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 12: TA 3-1586 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1586-OPN-1 SAN SEWER	1LV1	REST ROOM	106	NO CHANGE	NO
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	106	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 13: TA 3-1599 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1599-OPN-1 NO CONN.	1LV1	REST ROOM	102A	NO PLUMBING	NO
	1TL1	REST ROOM	102A	NO PLUMBING	

TABLE 14: TA 3-1712 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1712-OPN-1 NO CONN.	1LV1	REST ROOM	101A	NO PLUMBING	NO
	1TL1	REST ROOM	101A	NO PLUMBING	

TABLE 15: TA 3-1739 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1739-OPN-1 NO CONN.	1LV1	REST ROOM	101A	NO PLUMBING	NO
	1TL1	REST ROOM	101A	NO PLUMBING	

TABLE 16: TA 3-1741 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1741-OPN-1 SAN SEWER	1LV1	REST ROOM	106	NO CHANGE	NO
	1LV2	REST ROOM	108	NO CHANGE	
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	106	NO CHANGE	
	1TL2	REST ROOM	108	NO CHANGE	
	1UR1	REST ROOM	108	NO CHANGE	
	1WF1	CORRIDOR	N/A	NO CHANGE	

TABLE 17: TA 3-1745 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1745-OPN-1 SAN SEWER	1LV1	REST ROOM	103A	NO CHANGE	NO
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	103A	NO CHANGE	

TABLE 18: TA 3-1746 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1746-OPN-1 SAN SEWER	1LV1	REST ROOM	102	NO CHANGE	NO
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1SD2	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	102	NO CHANGE	

TABLE 19: TA 3-1747 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1747-OPN-1 SAN SEWER	1LV1	REST ROOM	104	NO CHANGE	NO
	1TL1	REST ROOM	104	NO CHANGE	

TABLE 20: TA 3-1749 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1749-OPN-1 SAN SEWER	1EW1	CORRIDOR	N/A	NO CHANGE	NO
	1LV1	REST ROOM	103A	NO CHANGE	
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1SD2	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	103A	NO CHANGE	
3-1749-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1749-OPN-3	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1749-OPN-4	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1749-OPN-5	N/A	STORM WATER	ROOF	NO CHANGE	NO

TABLE 21: TA 3-1750 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1750-OPN-1 SAN SEWER	1LV1	REST ROOM	112	NO CHANGE	NO
	1LV2	REST ROOM	114	NO CHANGE	
	1SD1	CORRIDOR	100A	NO CHANGE	
	1TL1	REST ROOM	112	NO CHANGE	
	1TL2	REST ROOM	114	NO CHANGE	
	1UR1	REST ROOM	114	NO CHANGE	
	1WF1	CORRIDOR	100A	NO CHANGE	
3-1750-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1750-OPN-3	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1750-OPN-4	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1750-OPN-5	N/A	STORM WATER	ROOF	NO CHANGE	NO

TABLE 22: TA 3-1760 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1760-OPN-1	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1760-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1760-OPN-3 SAN SEWER	1LV1	REST ROOM	103A	NO CHANGE	NO
	1SD1	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	103A	NO CHANGE	
3-1760-OPN-4	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1760-OPN-5	N/A	STORM WATER	ROOF	NO CHANGE	NO

TABLE 23: TA 3-1786 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1786-OPN-1 SAN SEWER	1LV1	REST ROOM	108	NO CHANGE	NO
	1SD1	CORRIDOR	106	NO CHANGE	
	1TL1	REST ROOM	108	NO CHANGE	

TABLE 24: TA 3-1819 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-1819-OPN-1 SAN SEWER	1FD1	REST ROOM	110	NO CHANGE	NO
	1FD2	REST ROOM	106	NO CHANGE	
	1LV1	REST ROOM	110	NO CHANGE	
	1LV2	REST ROOM	106	NO CHANGE	
	1SD1	LAB	115	LABEL	
	1SD2	LAB	115	LABEL	
	1SD3	JAN CLOSET	108	LABEL	
	1SD4	LAB	104	LABEL	
	1SD5	LAB	102	LABEL	
	1SD6	LAB	103	LABEL	
	1SD7	LAB	103	LABEL	
	1SD8	LAB	105	LABEL	
	1SD9	LAB	111	LABEL	
	1SD10	LAB	113	LABEL	
	1SH1	CORRIDOR	N/A	NO CHANGE	
	1SH2	CORRIDOR	N/A	NO CHANGE	
	1TL1	REST ROOM	110	NO CHANGE	
	1TL2	REST ROOM	106	NO CHANGE	
1UR1	REST ROOM	106	NO CHANGE		
1WF1	CORRIDOR	N/A	NO CHANGE		
3-1819-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-1819-OPN-3	N/A	FIRE WATER	N/A	NOI	NO
3-1819-OPN-4	N/A	FIRE WATER	N/A	NOI	NO
3-1819-OPN-5	N/A	ROOF DRAIN	ROOF	NO CHANGE	NO
3-1819-OPN-6	N/A	ROOF DRAIN	ROOF	NO CHANGE	NO
3-1819-OPN-7	N/A	ROOF DRAIN	ROOF	NO CHANGE	NO
3-1819-OPN-8	N/A	ROOF DRAIN	ROOF	NO CHANGE	NO

TABLE 25: TA 3-2002 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	RECOMMENDATIONS	EPA FORM PREPARED
3-2002-OPN-1 SAN SEWER	1FD1	LAB	N/A	PLUG	NO
	1FD2	LAB	N/A	PLUG	
	1SD1	LAB	N/A	LABEL	
3-2002-OPN-2	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-2002-OPN-3	N/A	STORM WATER	ROOF	NO CHANGE	NO
3-2002-OPN-4	N/A	STORM WATER	N/A	NO CHANGE	NO

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TA	BLDG	OUTLET	EPA	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
		PIPING NO	OUTFALL #							
3	32	3-32-OPN-01	01S/SWSC	1FD1	136	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1FD2	137	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1FD3	137	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1FD4	136	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1FD5	105	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1FD6	N/A	EQUIPMENT ROOM		7 DAYS PER WEEK	No	CHILLER DRAIN
3	32	3-32-OPN-01	01S/SWSC	1FD7	N/A	EQUIPMENT ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1LV1	136	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1LV2	136	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1LV3	137	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1LV4	137	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1LV5	105	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	32	3-32-OPN-01	01S/SWSC	1SD1	139	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	32	3-32-OPN-01	01S/SWSC	1SD2	N/A	KITCHEN		5 DAYS PER WEEK	No	DISH WATER
3	32	3-32-OPN-01	01S/SWSC	1SD3	104	SHOP		5 DAYS PER WEEK	No	HAND WASHING
3	32	3-32-OPN-01	01S/SWSC	1SD4	104	SHOP		5 DAYS PER WEEK	No	HAND WASHING
3	32	3-32-OPN-01	01S/SWSC	1SD5	102B	LAB		5 DAYS PER WEEK	No	HAND WASHING
3	32	3-32-OPN-01	01S/SWSC	1SD6	102F	LAB		5 DAYS PER WEEK	No	HAND WASHING
3	32	3-32-OPN-01	01S/SWSC	1SD7	102F	LAB		5 DAYS PER WEEK	No	HAND WASHING
3	32	3-32-OPN-01	01S/SWSC	1SH1	136	REST ROOM		5 DAYS PER WEEK	No	SHOWER
3	32	3-32-OPN-01	01S/SWSC	1SH2	137	REST ROOM		5 DAYS PER WEEK	No	SHOWER
3	32	3-32-OPN-01	01S/SWSC	1SH3	105	REST ROOM		5 DAYS PER WEEK	No	SHOWER
3	32	3-32-OPN-01	01S/SWSC	1SP1	N/A	TRANSFORMER ROOM		MOSTLY SUMMER	Yes	STORM WATER
3	32	3-32-OPN-01	01S/SWSC	1TL1	136	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	32	3-32-OPN-01	01S/SWSC	1TL2	136	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	32	3-32-OPN-01	01S/SWSC	1TL3	137	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	32	3-32-OPN-01	01S/SWSC	1TL4	105	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	32	3-32-OPN-01	01S/SWSC	1TL5	105	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	32	3-32-OPN-01	01S/SWSC	1UR1	137	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	32	3-32-OPN-01	01S/SWSC	1UR2	105	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	32	3-32-OPN-01	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	32	3-32-OPN-01	01S/SWSC	1WF2	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	32	3-32-OPN-01	01S/SWSC	RD1	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	32	3-32-OPN-01	01S/SWSC	RD2	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-01	01S/SWSC	RD3	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-01	01S/SWSC	RD4	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-02	DAYLIGHT	N/A	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-03	DAYLIGHT	N/A	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-04	DAYLIGHT	N/A	ROOF	FIRE WATER		ANNUAL TESTING	No	FIRE WATER
3	32	3-32-OPN-05	DAYLIGHT	N/A	ROOF	FIRE WATER		ANNUAL TESTING	No	FIRE WATER
3	32	3-32-OPN-06	DAYLIGHT	N/A	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-07	DAYLIGHT	N/A	ROOF	ROOF		MOSTLY SUMMERS	Yes	STORM WATER
3	32	3-32-OPN-08	ATMOSPHERE	N/A	111A	EQUIPMENT VENT		NO LIQUID FLOW	No	VAPOR VENT
3	32	3-32-OPN-09	ATMOSPHERE	N/A	111A	EQUIPMENT VENT		NO LIQUID FLOW	No	EQUIPMENT VENT
3	32	3-32-OPN-10	N/A	1TD1	N/A	LAB		NO LIQUID FLOW	No	ELECTRICAL TRENCH
3	32	3-32-OPN-11	ATMOSPHERE	N/A	102A	LAB		NO LIQUID FLOW	No	EQUIPMENT VENT
3	33	3-33	ND	N/A	N/A	PASSAGEWAY		NO DRAINS	No	NONE
3	34	3-34-OPN-1	RLW	1SD01	111	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD02	129	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD03	129	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD04	123	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD05	123	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD06	107	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD07	107	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD08	103	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD09	103	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD10	119	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD11	119	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD12	124	SHOP		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD13	124	SHOP		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD14	120	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD15	120	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD16	104	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD17	108	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD18	108	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD19	122	LAB		5 DAYS PER WEEK	No	LAB SINK

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	34	3-34-OPN-1	RLW	1SD20	122	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD21	126	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD22	112	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD23	116	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD24	116	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	1SD25	118	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	BSD01	B10	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	BSD05	B13	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-1	RLW	BSD06	B12	LAB		5 DAYS PER WEEK	No	LAB SINK
3	34	3-34-OPN-2	01S/SWSC	1FD1	117A	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	34	3-34-OPN-2	01S/SWSC	1FD2	117B	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	34	3-34-OPN-2	01S/SWSC	1LV1	117A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	34	3-34-OPN-2	01S/SWSC	1LV2	117A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	34	3-34-OPN-2	01S/SWSC	1LV3	117B	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	34	3-34-OPN-2	01S/SWSC	1TL1	117A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	34	3-34-OPN-2	01S/SWSC	1TL2	117A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	34	3-34-OPN-2	01S/SWSC	1TL3	117B	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	34	3-34-OPN-2	01S/SWSC	1UR1	117A	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	34	3-34-OPN-2	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	34	3-34-OPN-2	01S/SWSC	1WF2	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	34	3-34-OPN-2	01S/SWSC	2FD1	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	2FD2	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	2FD3	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	2FD4	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	2FD5	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	2FD6	N/A	BUILDING VENT DUCT		WASH DOWN	No	WASH DOWN
3	34	3-34-OPN-2	01S/SWSC	BEW1	N/A	CORRIDOR		FLOW IS NIL	No	EYE WASH
3	34	3-34-OPN-2	01S/SWSC	BFD01	N/A	ENTRY		DURING SUMMER	Yes	RAIN AND EYE WASH
3	34	3-34-OPN-2	01S/SWSC	BFD02	B3	EQUIPMENT ROOM		PLUGGED	No	BSD2 & CHILLER
3	34	3-34-OPN-2	01S/SWSC	BFD03	B3	EQUIPMENT ROOM		NO FLOW	No	NONE
3	34	3-34-OPN-2	01S/SWSC	BFD04	B3	EQUIPMENT ROOM		7 DAYS PER WEEK	No	BFP, CHILLER & WATER HEATER
3	34	3-34-OPN-2	01S/SWSC	BFD05	N/A	OFFICE AREA		5 DAYS PER WEEK	No	NO SOURCES
3	34	3-34-OPN-2	01S/SWSC	BFD06	B11	LIBRARY		5 DAYS PER WEEK	No	NO SOURCES

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	34	3-34-OPN-2	01S/SWSC	BFD07	N/A	CORRIDOR		5 DAYS PER WEEK	No	NO SOURCES
3	34	3-34-OPN-2	01S/SWSC	BFD08	B7	LAB		5 DAYS PER WEEK	No	FLOOR WASHING
3	34	3-34-OPN-2	01S/SWSC	BFD09	N/A	CORRIDOR		5 DAYS PER WEEK	No	NO SOURCES
3	34	3-34-OPN-2	01S/SWSC	BFD10	N/A	ENTRY		DURING SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	BSD2	N/A	EQUIPMENT ROOM		5 DAYS PER WEEK	No	SANITARY WASTE
3	34	3-34-OPN-2	01S/SWSC	BSD3	N/A	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	34	3-34-OPN-2	01S/SWSC	BSD4	N/A	PHOTO LAB		5 DAYS PER WEEK	No	PHOTO RINSE WATER
3	34	3-34-OPN-2	01S/SWSC	BSD7	N/A	PHOTO LAB		5 DAYS PER WEEK	No	PHOTO RINSE WATER
3	34	3-34-OPN-2	01S/SWSC	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD5	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD6	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD7	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-2	01S/SWSC	RD8	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	34	3-34-OPN-3	DAYLIGHT	N/A	N/A	FIRE WATER DRAIN		ANNUAL TESTING	No	FIRE WATER
3	34	3-34-OPN-4	DAYLIGHT	N/A	N/A	FIRE WATER DRAIN		ANNUAL TESTING	No	FIRE WATER
3	480	3-480-OPN-1	01S/SWSC	1LV1	122	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	480	3-480-OPN-1	01S/SWSC	1LV2	116	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	480	3-480-OPN-1	01S/SWSC	1SD1	120	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	480	3-480-OPN-1	01S/SWSC	1SD2	105	KITCHEN		5 DAYS PER WEEK	No	DISH WASHINGS
3	480	3-480-OPN-1	01S/SWSC	1TL1	122	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	480	3-480-OPN-1	01S/SWSC	1TL2	116	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	480	3-480-OPN-1	01S/SWSC	1UR1	122	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	480	3-480-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	481	3-481-OPN-1	01S/SWSC	1LV1	110	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	481	3-481-OPN-1	01S/SWSC	1LV2	104	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	481	3-481-OPN-1	01S/SWSC	1SD1	108	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	481	3-481-OPN-1	01S/SWSC	1SD2	105	KITCHEN		5 DAYS PER WEEK	No	DISH WASHING
3	481	3-481-OPN-1	01S/SWSC	1TL1	110	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	481	3-481-OPN-1	01S/SWSC	1TL2	104	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	481	3-481-OPN-1	01S/SWSC	1UR1	110	REST ROOM		5 DAYS PER WEEK	No	URINAL

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	481	3-481-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	482	3-482-OPN-1	01S/SWSC	1LV1	116	REST ROOM		5 DAYS PER WEEK	No	HAND WASHING
3	482	3-482-OPN-1	01S/SWSC	1LV2	112	REST ROOM		5 DAYS PER WEEK	No	HAND WASHING
3	482	3-482-OPN-1	01S/SWSC	1SD1	108	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	482	3-482-OPN-1	01S/SWSC	1SD2	118	KITCHEN		5 DAYS PER WEEK	No	DISH WASHINGS
3	482	3-482-OPN-1	01S/SWSC	1TL1	116	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	482	3-482-OPN-1	01S/SWSC	1TL2	112	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	482	3-482-OPN-1	01S/SWSC	1UR2	116	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	482	3-482-OPN-1	01S/SWSC	1WF1	N/A	COIRRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	483	3-483-OPN-1	01S/SWSC	1LV1	116	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	483	3-483-OPN-1	01S/SWSC	1LV2	112	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	483	3-483-OPN-1	01S/SWSC	1SD1	108	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	483	3-483-OPN-1	01S/SWSC	1SD2	118	KITCHEN		5 DAYS PER WEEK	No	DISH WASHINGS
3	483	3-483-OPN-1	01S/SWSC	1TL1	116	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	483	3-483-OPN-1	01S/SWSC	1TL2	112	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	483	3-483-OPN-1	01S/SWSC	1UR1	116	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	483	3-483-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	500	3-500	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1543	3-1543	ND	N/A	N/A	TRAILER		NO DRAINS	No	NONE
3	1544	3-1544-OPN-1	01S/SWSC	1LV1	100A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHING
3	1544	3-1544-OPN-1	01S/SWSC	1TL1	100A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1544	3-1544-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1545	3-1545-OPN-1	01S/SWSC	1LV1	100A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHING
3	1545	3-1545-OPN-1	01S/SWSC	1TL1	100A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1545	3-1545-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1552	3-1552-OPN-1	01S/SWSC	1LV1	106	REST ROOM		5 DAYS PER WEEK	No	HAND WASHING
3	1552	3-1552-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHING
3	1552	3-1552-OPN-1	01S/SWSC	1TL1	106	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1552	3-1552-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1553	3-1553	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1554	3-1554	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1565	3-1565	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1567	3-1567	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1570	3-1570	ND	N/A	N/A	TRAILER		NO DRAINS	No	NONE
3	1571	3-1571	ND	N/A	N/A	TRAILER		NO DRAINS	No	NONE
3	1575	3-1575-OPN-1	01S/SWSC	1LV1	110	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1575	3-1575-OPN-1	01S/SWSC	1LV2	108	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1575	3-1575-OPN-1	01S/SWSC	1SD1	100D	KITCHEN		5 DAYS PER WEEK	No	DISH WASHINGS
3	1575	3-1575-OPN-1	01S/SWSC	1TL1	110	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1575	3-1575-OPN-1	01S/SWSC	1TL2	108	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1575	3-1575-OPN-1	01S/SWSC	1UR1	110	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	1575	3-1575-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1586	3-1586-OPN-1	01S/SWSC	1LV1	106	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1586	3-1586-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1586	3-1586-OPN-1	01S/SWSC	1TL1	106	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1586	3-1586-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1599	3-1599-OPN-1	NONE	1LV1	102A	REST ROOM		NO PLUMBING	No	NONE
3	1599	3-1599-OPN-1	NONE	1TL1	102A	REST ROOM		NO PLUMBING	No	NONE
3	1688	3-1688	ND	N/A	N/A	TRANSPORTAINER		NO DRAINS	No	NONE
3	1706	3-1706	ND	N/A	N/A	TRAILER		NO DRAINS	No	NONE
3	1712	3-1712-OPN-1	NONE	1LV1	101A	REST ROOM		NO PLUMBING	No	NONE
3	1712	3-1712-OPN-1	NONE	1TL1	101A	REST ROOM		NO PLUMBING	No	NONE
3	1732	3-1732	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1739	3-1739-OPN-1	NONE	1LV1	101A	REST ROOM		NO PLUMBING	No	NONE
3	1739	3-1739-OPN-1	NONE	1TL1	101A	REST ROOM		NO PLUMBING	No	NONE
3	1741	3-1741-OPN-1	01S/SWSC	1LV1	106A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1741	3-1741-OPN-1	01S/SWSC	1LV2	108	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1741	3-1741-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1741	3-1741-OPN-1	01S/SWSC	1TL1	106	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1741	3-1741-OPN-1	01S/SWSC	1TL2	108	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1741	3-1741-OPN-1	01S/SWSC	1UR1	108	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	1741	3-1741-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1745	3-1745-OPN-1	01S/SWSC	1LV1	103A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1745	3-1745-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1745	3-1745-OPN-1	01S/SWSC	1TL1	103A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1746	3-1746-OPN-1	01S/SWSC	1LV1	102	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS

REPORT # 46

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1746	3-1746-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1746	3-1746-OPN-1	01S/SWSC	1SD2	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1746	3-1746-OPN-1	01S/SWSC	1TL1	102	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1747	3-1747-OPN-1	01S/SWSC	1LV1	104	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1747	3-1747-OPN-1	01S/SWSC	1TL1	104	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1748	3-1748	N/A	N/A	N/A	OFFICE TRAILER		NONE	No	BUILDING NOT LOCATED
3	1749	3-1749-OPN-1	01S/SWSC	1EW1	N/A	CORRIDOR		FLOW IS NIL	No	EYE WASH
3	1749	3-1749-OPN-1	01S/SWSC	1LV1	103A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1749	3-1749-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHING
3	1749	3-1749-OPN-1	01S/SWSC	1SD2	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHING
3	1749	3-1749-OPN-1	01S/SWSC	1TL1	103A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1749	3-1749-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1749	3-1749-OPN-3	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1749	3-1749-OPN-4	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1749	3-1749-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1750	3-1750-OPN-1	01S/SWSC	1LV1	N/A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1750	3-1750-OPN-1	01S/SWSC	1LV2	N/A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1750	3-1750-OPN-1	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1750	3-1750-OPN-1	01S/SWSC	1TL1	N/A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1750	3-1750-OPN-1	01S/SWSC	1TL2	N/A	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1750	3-1750-OPN-1	01S/SWSC	1UR1	N/A	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	1750	3-1750-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1750	3-1750-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1750	3-1750-OPN-3	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1750	3-1750-OPN-4	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1750	3-1750-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1760	3-1760-OPN-1	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1760	3-1760-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1760	3-1760-OPN-3	01S/SWSC	1LV1	103A	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1760	3-1760-OPN-3	01S/SWSC	1SD1	N/A	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1760	3-1760-OPN-3	01S/SWSC	1TL1	103A	REST ROOM		5 DAYS PER WEEK	No	SANITARY WASTE
3	1760	3-1760-OPN-4	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	No	STORM WATER
3	1760	3-1760-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	No	STORM WATER

REPORT # 46

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1761	3-1761	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1767	3-1767	N/A	N/A	N/A	STORAGE TRAILER		NONE	No	BUILDING NOT LOCATED
3	1771	3-1771	ND	N/A	N/A	STORAGE TRAILER		NO DRAINS	No	NONE
3	1786	3-1786-OPN-1	01S/SWSC	1LV1	108	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1786	3-1786-OPN-1	01S/SWSC	1SD1	106	CORRIDOR		5 DAYS PER WEEK	No	DISH WASHINGS
3	1786	3-1786-OPN-1	01S/SWSC	1TL1	108	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1787	3-1787	ND	N/A	N/A	OFFICE TRAILER		NO DRAINS	No	NONE
3	1819	3-1819-OPN-1	01S/SWSC	1FD1	110	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1FD2	106	REST ROOM		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1LV1	110	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1LV2	106	REST ROOM		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD01	115	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD02	115	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD03	108	JANITOR'S CLOSET		5 DAYS PER WEEK	No	MOP WATER
3	1819	3-1819-OPN-1	01S/SWSC	1SD04	104	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD05	102	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD06	103	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD07	103	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD08	105	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD09	111	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SD10	113	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	1819	3-1819-OPN-1	01S/SWSC	1SH1	N/A	CORRIDOR		FLOW IS NIL	No	SAFETY SHOWER
3	1819	3-1819-OPN-1	01S/SWSC	1SH2	N/A	CORRIDOR		FLOW IS NIL	No	SAFETY SHOWER
3	1819	3-1819-OPN-1	01S/SWSC	1TL1	110	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1819	3-1819-OPN-1	01S/SWSC	1TL2	106	REST ROOM		5 DAYS PER WEEK	No	TOILET
3	1819	3-1819-OPN-1	01S/SWSC	1UR1	106	REST ROOM		5 DAYS PER WEEK	No	URINAL
3	1819	3-1819-OPN-1	01S/SWSC	1WF1	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	1819	3-1819-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1819	3-1819-OPN-3	DAYLIGHT	N/A	N/A	FIRE WATER DRAIN		ANNUAL TESTING	No	FIRE WATER
3	1819	3-1819-OPN-4	DAYLIGHT	N/A	N/A	FIRE WATER DRAIN		ANNUAL TESTING	No	FIRE WATER
3	1819	3-1819-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1819	3-1819-OPN-6	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1819	3-1819-OPN-7	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER

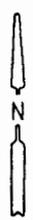
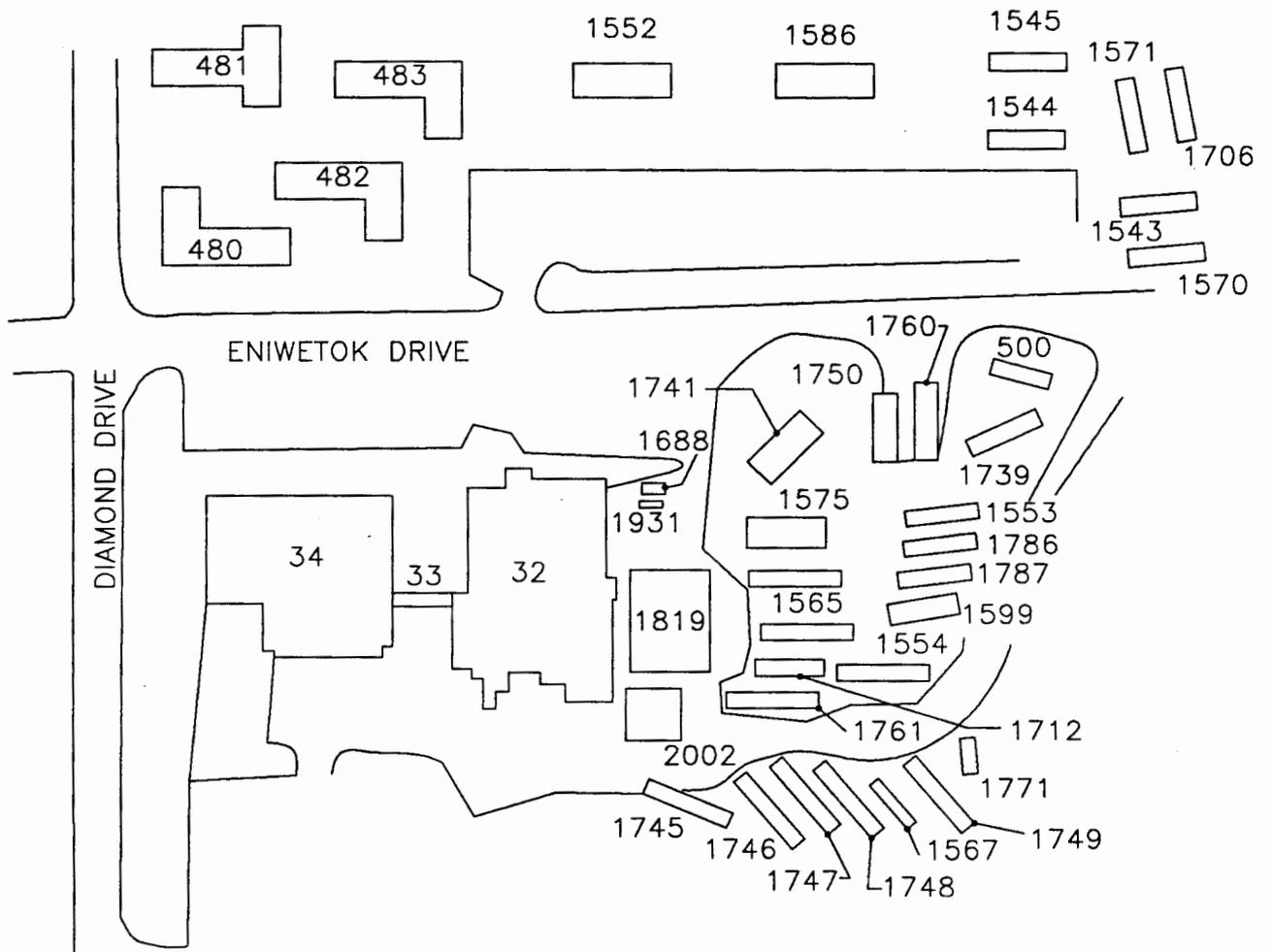
REPORT # 46

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1819	3-1819-OPN-8	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1930	3-1930	N/A	N/A	N/A	TRANSPORTAINER		NONE	No	BUILDING NOT LOCATED
3	1931	3-1931	ND	N/A	N/A	TRANSPORTAINER		NO DRAINS	No	NONE
3	1932	3-1932	N/A	N/A	N/A	TRANSPORTAINER		NONE	No	BUILDING NOT LOCATED
3	2002	3-2002-OPN-1	01S/SWSC	1FD1	N/A	LAB		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	2002	3-2002-OPN-1	01S/SWSC	1FD2	N/A	LAB		5 DAYS PER WEEK	No	FLOOR WASHINGS
3	2002	3-2002-OPN-1	01S/SWSC	1SD1	N/A	LAB		5 DAYS PER WEEK	No	HAND WASHINGS
3	2002	3-2002-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	2002	3-2002-OPN-3	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	2002	3-2002-OPN-4	ATMOSPHERE	N/A	N/A	LAB		NO LIQUIDS	No	EQUIPMENT VENT
3	2047	3-2047	N/A	N/A	N/A	TRANSPORTAINER		NONE	No	BUILDING NOT LOCATED

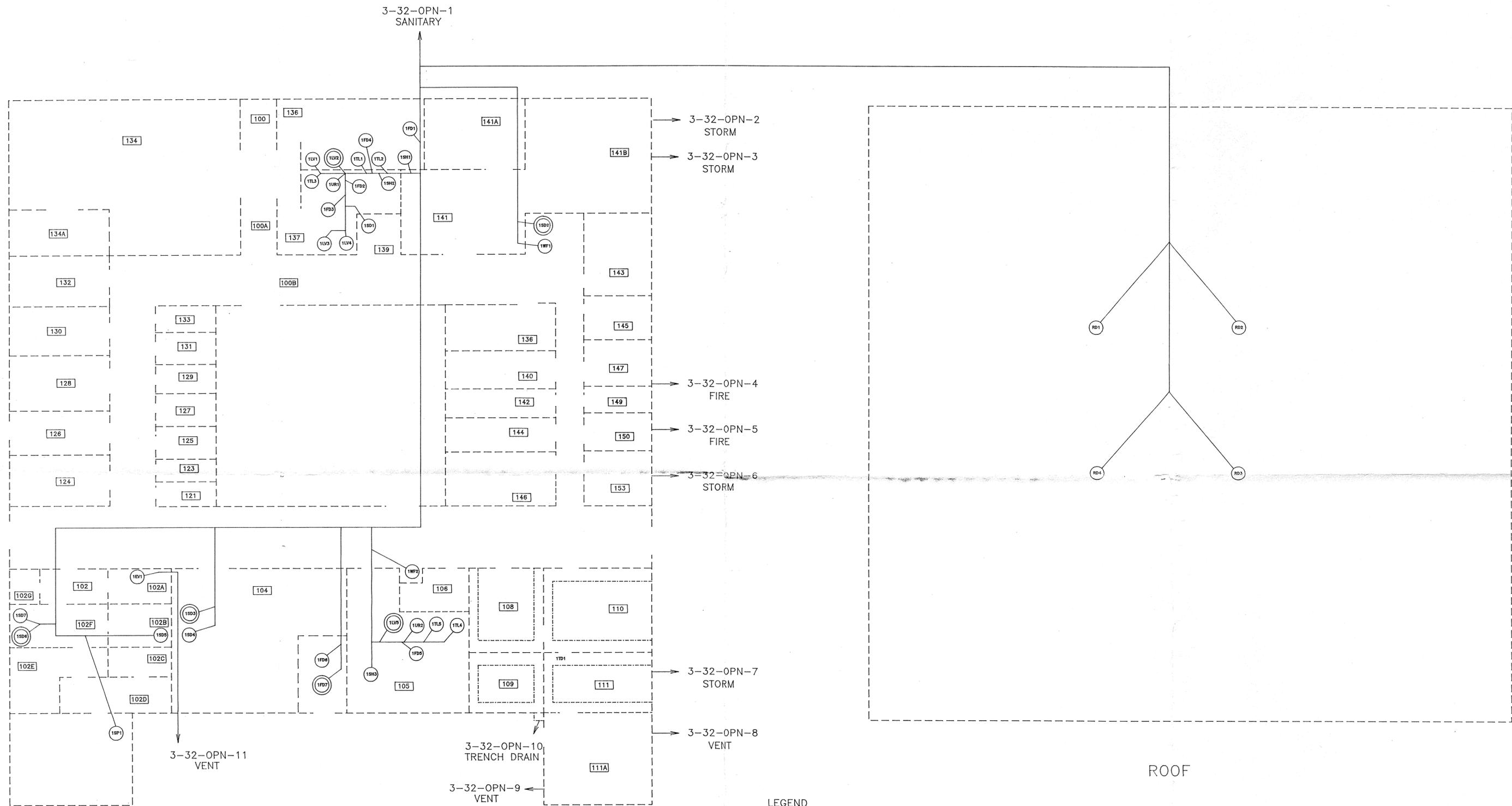
NO EPA FORMS WERE PREPARED.

DYE STUDY INFORMATION

BUILDING NUMBER	DRAIN NUMBER	DID DYE REACH EXPECT DESTINATION?	COMMENTS
3-32	1FD7	YES	NONE
	1LV2	YES	NONE
	1LV5	YES	NONE
	1SD2	YES	NONE
	1SD3	YES	NONE
	1SD6	YES	NONE
3-34	BFD1	YES	NONE
	BFD3	YES	NONE
	BSD4	YES	NONE
	1LV2	YES	NONE
3-480	1SD2	YES	NONE
3-481	1SD2	YES	NONE
3-482	1SD2	YES	NONE
3-483	1SD1	YES	NONE
3-1544	1LV1	YES	NONE
3-1545	1LV1	YES	NONE
3-1552	1SD1	YES	NONE
3-1575	1LV1	YES	NONE
3-1586	1SD1	YES	NONE
3-1741	1SD1	YES	NONE
3-1745	1SD1	YES	NONE
3-1746	1SD1	YES	NONE
3-1747	1LV1	YES	NONE
3-1749	1SD2	YES	NONE
3-1750	1SD1	YES	NONE
3-1760	1SD1	YES	NONE
3-1786	1SD1	YES	NONE
3-1819	1SD3	YES	NONE
	1SD5	YES	NONE
	1SD7	YES	NONE
	1SD8	YES	NONE
3-2002	1SD1	YES	NONE



SANTA FE ENGINEERING, LTD.			
TA 3-32 AREA PLOT PLAN		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/7/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-B	11056-46	FIGURE 1	



FIRST FLOOR

ROOF

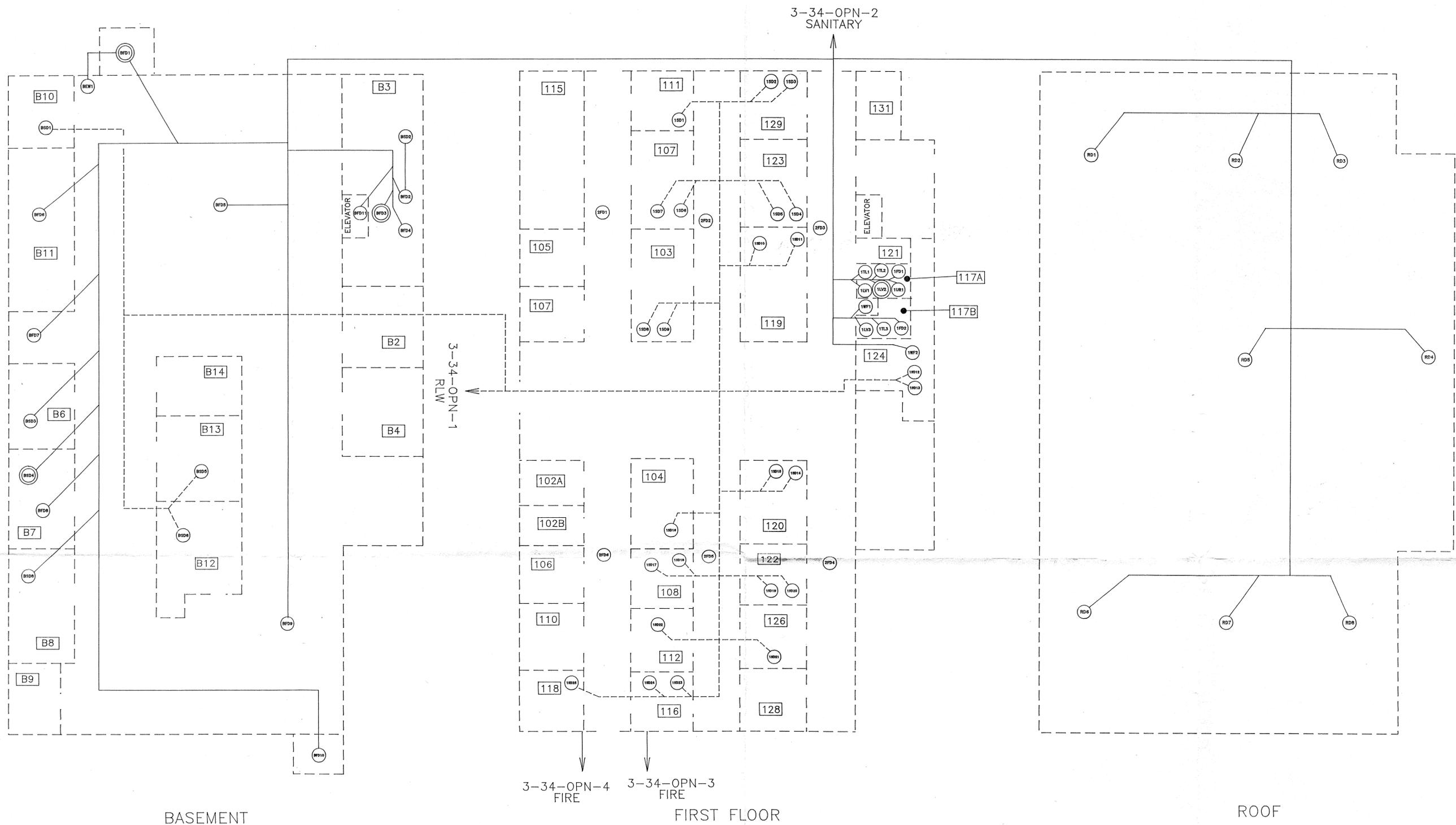
LEGEND

- EV - EQUIPMENT VENT
- FD - FLOOR DRAIN
- LV - LAVATORY
- RD - ROOF DRAIN
- SD - SINK
- SH - SHOWER
- TL - TOILET
- UR - URINAL
- WF - WATER FOUNTAIN
- ⊙ - DYE TESTED DRAIN

SCHMATIC BASED ON DRAWING
C-45120 AND SITE VISIT

15265-A

SANTA FE ENGINEERING, LTD.			
TA 3-32 BUILDING DRAIN SCHEMATIC		DRAWN PEB	DESIGN PEB
		CHECKED LBA	DATE 10/9/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	REV.
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
REQUESTING GROUP EM-8	11056-46	FIGURE 2	



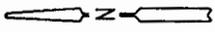
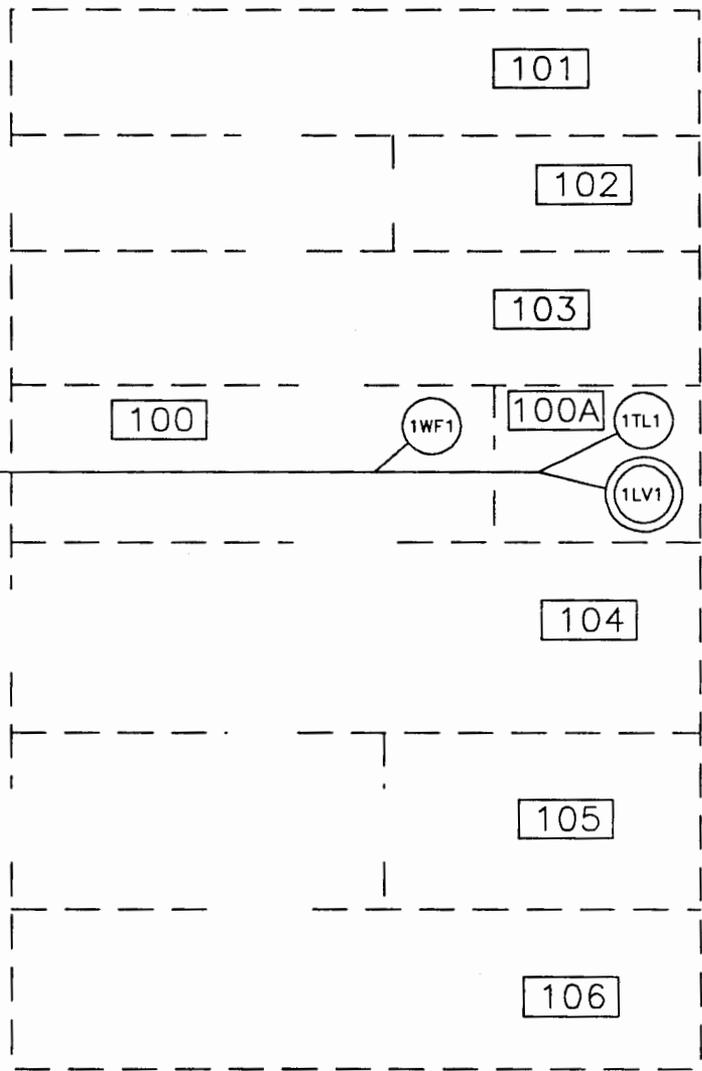
- LEGEND
- EW - EYE WASH
 - FD - FLOOR DRAIN
 - LV - LAVATORY
 - RD - ROPE DRAIN
 - SD - SINK
 - TL - TOILET
 - UR - URINAL
 - WF - WATER FOUNTAIN
 - ⊙ - DYE TESTED DRAIN

DRAWING BASED ON SITE VISIT

15265-B

SANTA FE ENGINEERING, LTD.			
TA 3-34 BUILDING DRAIN SUMMARY		DRAWN PEB	SHEET OF
		DESIGN PEB	
		CHECKED LBA	
		DATE 10/5/92	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 3	

3-1544-OPN-1
SANITARY ←

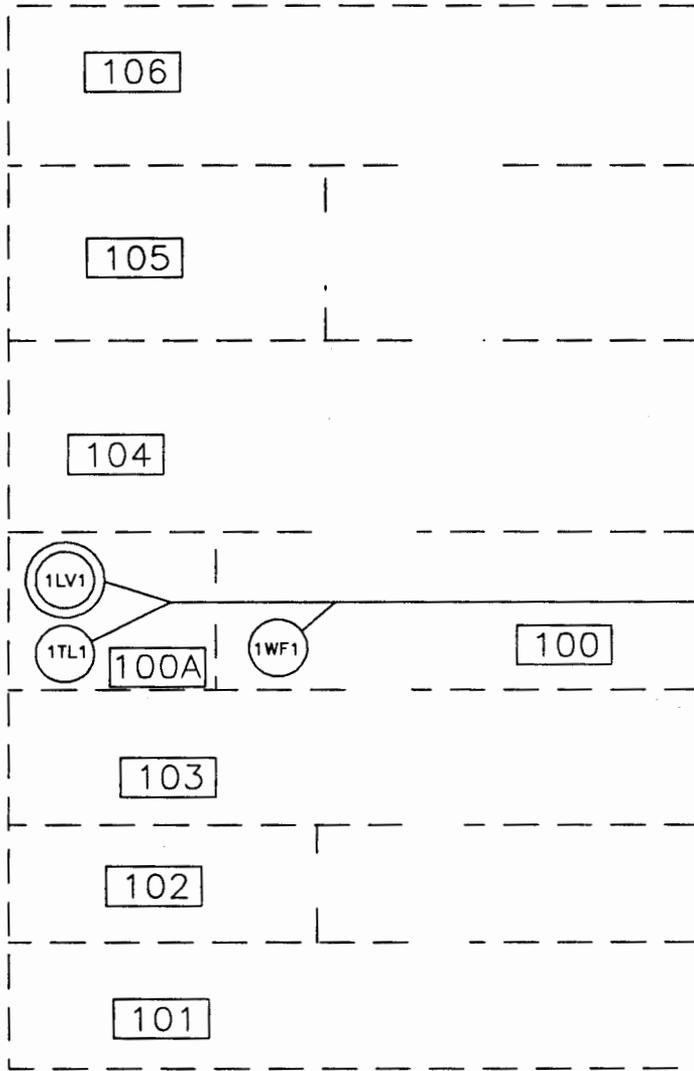


SCHEMATIC BASED ON SITE VISIT

LEGEND

- LV - LAVATORY
- TL - TOILET
- WF - WATER FOUNTAIN
-  - DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA 3-1544 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/7/92
SUBMITTED	RECOMMENDED	APPROVED	
 Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET
			OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 8	



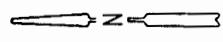
3-1545-OPN-1
SANITARY

LEGEND

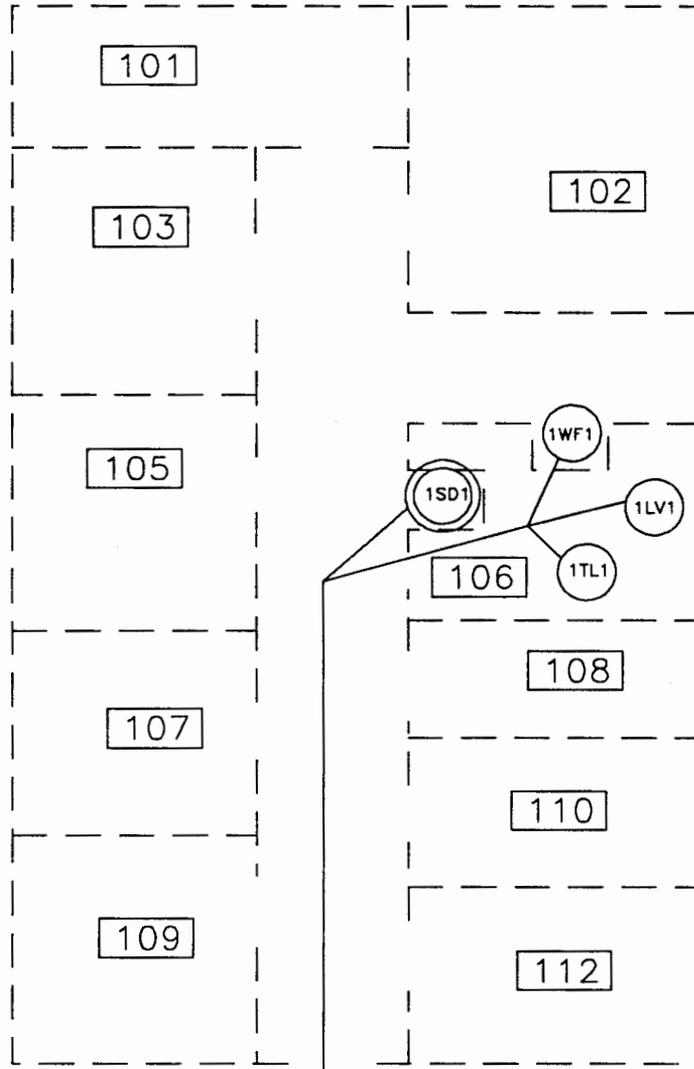
- LV - LAVATORY
- TL - TOILET
- WF - WATER FOUNTAIN

○ - DYE TESTED DRAIN

SCHEMATIC BASED ON SITE VISIT



SANTA FE ENGINEERING, LTD.			
TA 3-1545 BUILDING DRAIN SCHEMATIC			DRAWN PEB
			DESIGN PEB
			CHECKED LBA
			DATE 10/7/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 9	



3-1552-OPN-1
SANITARY

LEGEND

- LV - LAVATORY
- SD - SINK
- TL - TOILET
- WF - WATER FOUNTAIN

 - DYE TESTED DRAIN

SCHEMATIC BASED ON SITE VISIT



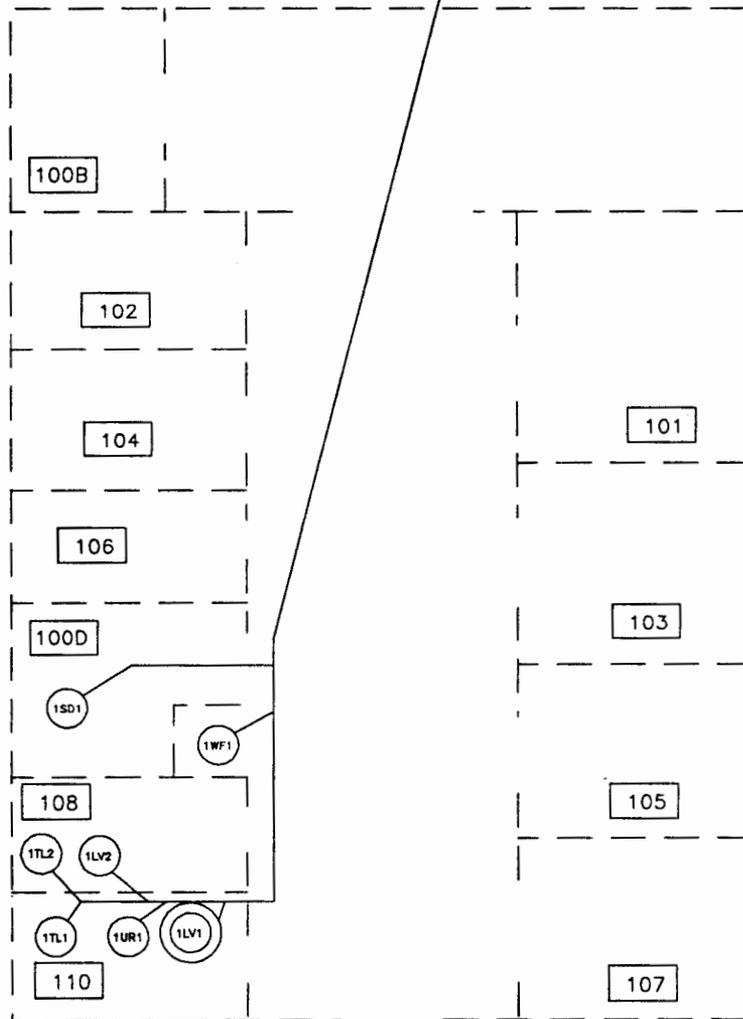
SANTA FE ENGINEERING, LTD.

TA 3-1552 BUILDING
DRAIN SCHEMATIC

DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	10/7/92

SUBMITTED		RECOMMENDED		APPROVED	
 Los Alamos National Laboratory Los Alamos, New Mexico 87545				SHEET	OF
CLASSIFICATION		REVIEWER		DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.		REV.	
REQUESTING GROUP EM-B	11056-46	FIGURE 10			

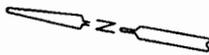
3-1575-OPN-1
SANITARY



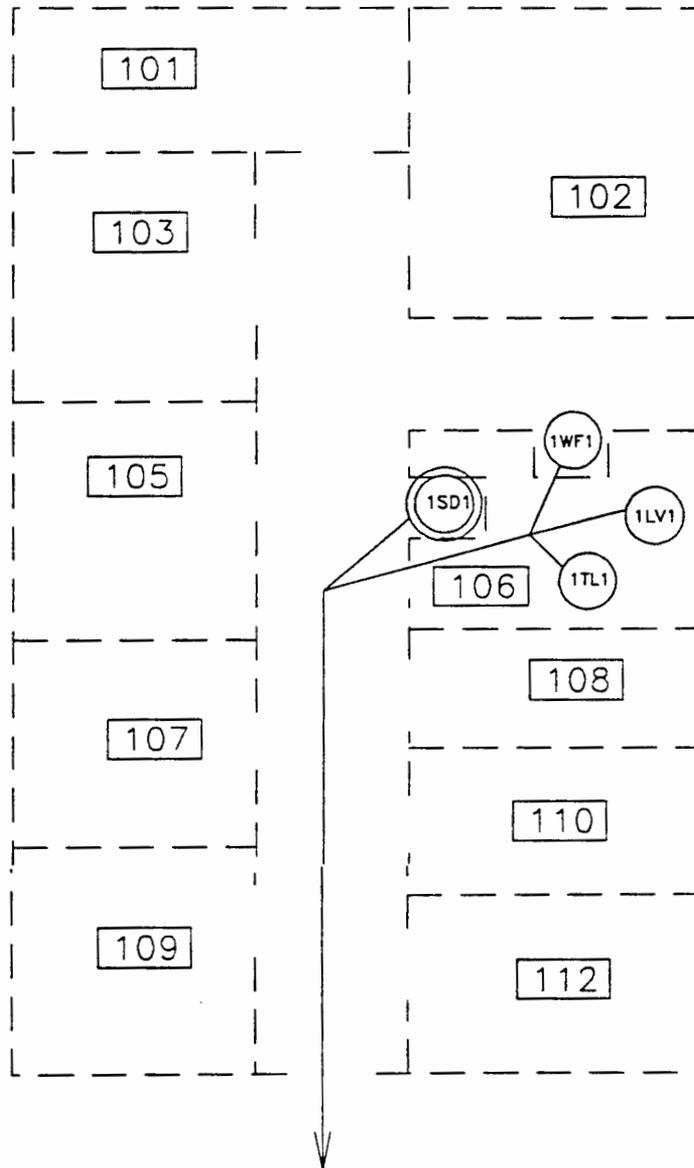
SCHEMATIC BASED ON C-44964
AND SITE VISIT

- LEGEND
 LV - LAVATORY
 SD - SINK
 TL - TOILET
 WF - WATER FOUNTAIN

 - DYE TESTED DRAIN



SANTA FE ENGINEERING, LTD.			
TA 3-1575 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/7/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 11	



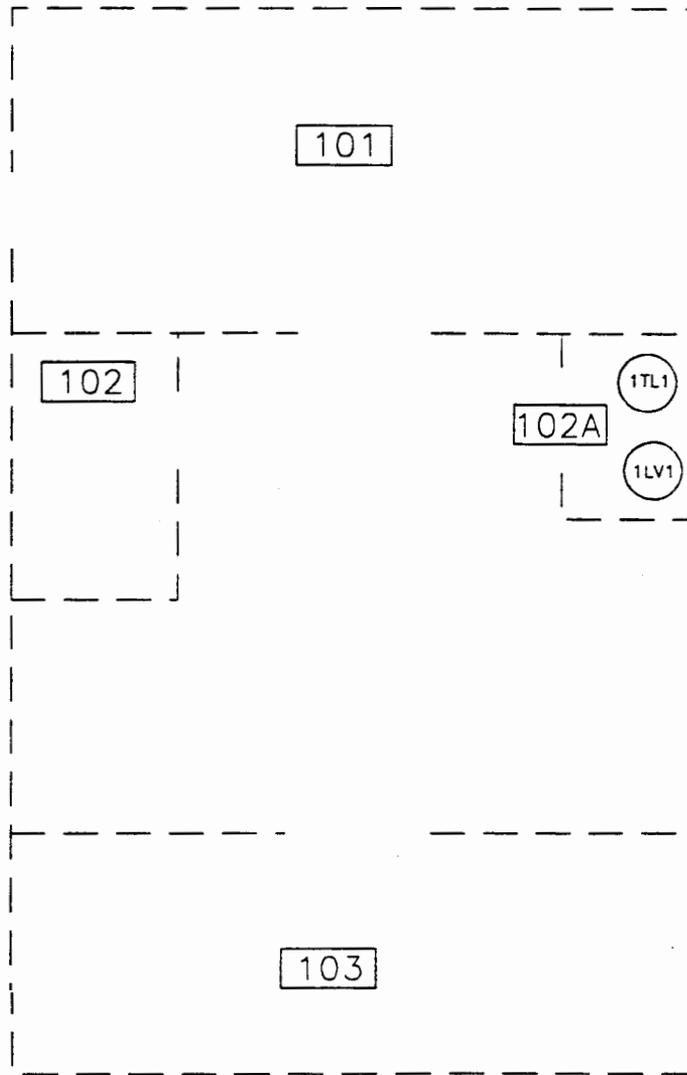
3-1586-OPN-1
SANITARY

LEGEND
 LV - LAVATORY
 SD - SINK
 TL - TOILET
 WF - WATER FOUNTAIN
 ○ - DYE TESTED DRAIN

SCHEMATIC BASED ON SITE VISIT



SANTA FE ENGINEERING, LTD.			
TA 3-1586 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED		RECOMMENDED	APPROVED
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION		REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 12	



LEGEND
 LV - LAVATORY
 TL - TOILET

NOTE:
 NO WATER SERVICE OR SEWER CONNECTION

SCHEMATIC BASED ON SITE VISIT

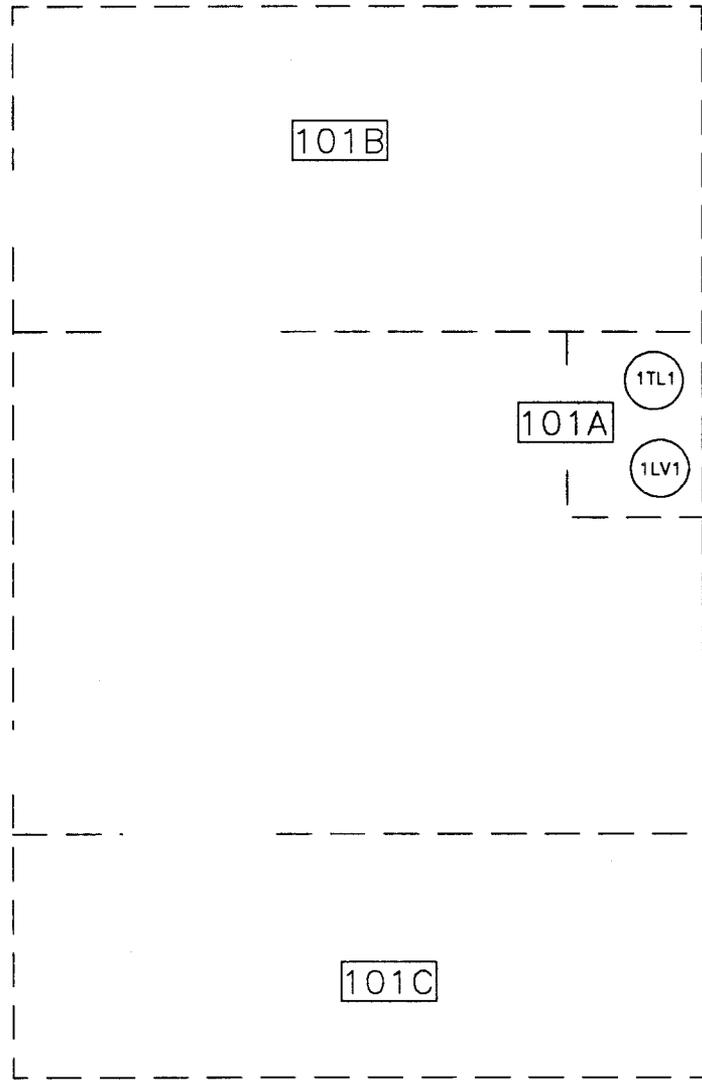


SANTA FE ENGINEERING, LTD.

TA 3-1599 BUILDING
 DRAIN SCHEMATIC

DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	10/2/92

SUBMITTED		RECOMMENDED		APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET	OF	
CLASSIFICATION	REVIEWER	DATE			
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.		REV.	
REQUESTING GROUP EM-8	11056-46	FIGURE 13			



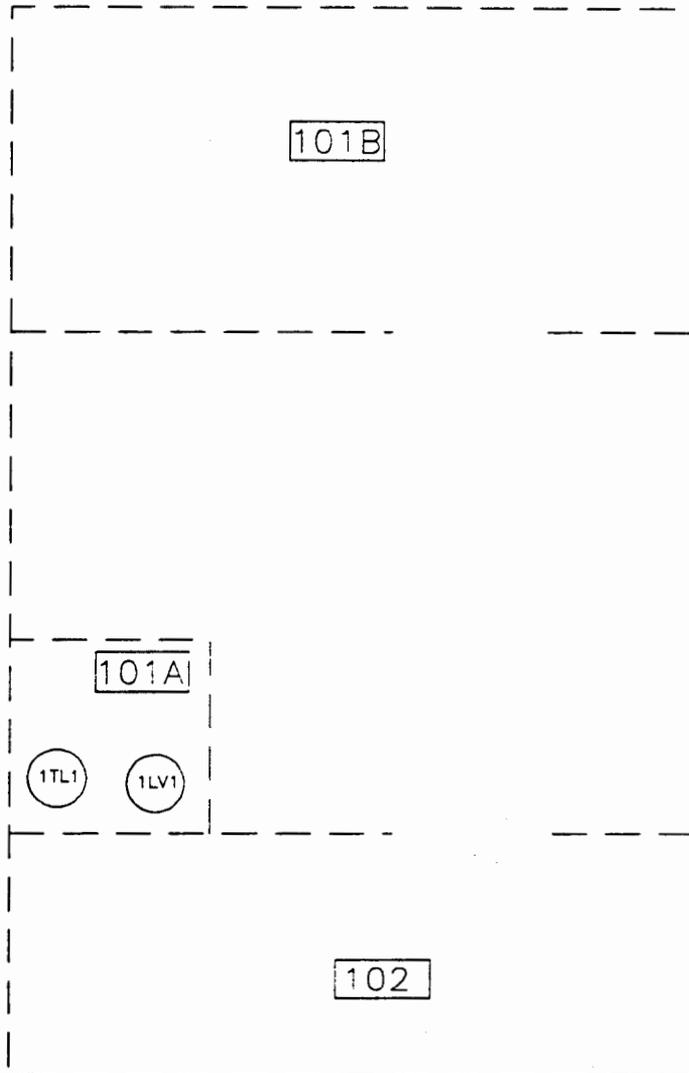
LEGEND
 LV - LAVATORY
 TL - TOILET

NOTE:
 NO WATER SERVICE OR SEWER CONNECTION

SCHEMATIC BASED ON SITE VISIT



SANTA FE ENGINEERING, LTD.			
TA 3-1712 BUILDING DRAIN SCHEMATIC	DRAWN	PEB	
	DESIGN	PEB	
	CHECKED	LBA	
	DATE	10/2/92	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 14	

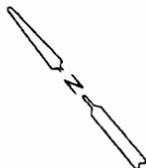


LEGEND

LV - LAVATORY

TL - TOILET

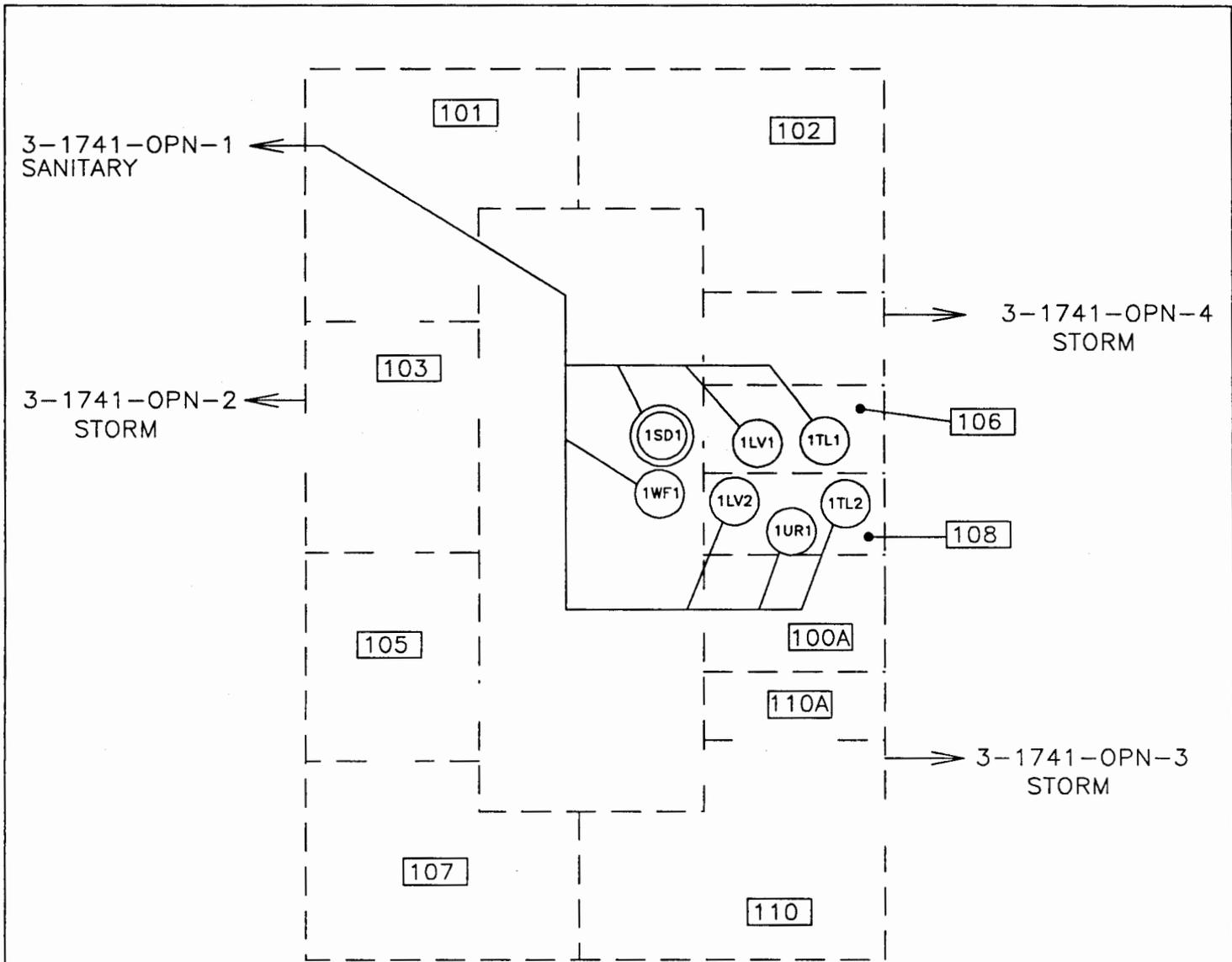
SCHEMATIC BASED ON SITE VISIT



NOTE:

NO WATER SERVICE OR SEWER CONNECTION

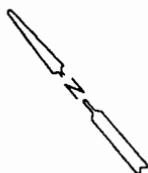
SANTA FE ENGINEERING, LTD.				
TA 3-1739 BUILDING DRAIN SCHEMATIC			DRAWN	PEB
			DESIGN	PEB
			CHECKED	LBA
			DATE	10/7/92
SUBMITTED	RECOMMENDED	APPROVED		
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET	OF
CLASSIFICATION	REVIEWER	DATE		
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.	
REQUESTING GROUP EM-8	11056-46	FIGURE 15		



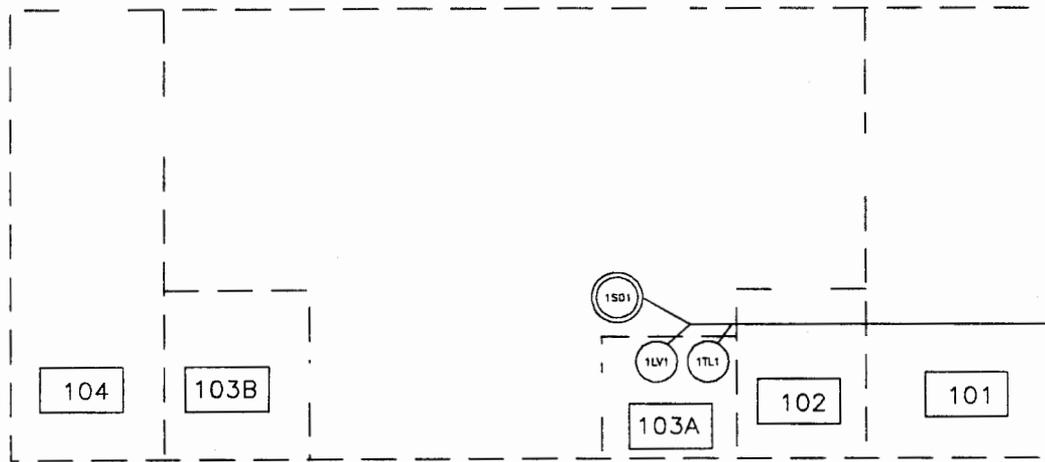
- LEGEND
- LV - LAVATORY
 - SD - SINK
 - TL - TOILET
 - UR - URINAL
 - WF - WATER FOUNTAIN



SCHEMATIC BASED ON SITE VISIT



SANTA FE ENGINEERING, LTD.			
TA 3-1741 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET	OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
REQUESTING GROUP EM-8	11056-46	FIGURE 16	
		REV.	

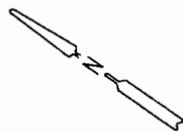


3-1745-OPN-1
SANITARY

SCHEMATIC BASED ON R-7109
AND SITE VISIT

LEGEND
LV - LAVATORY
SD - SINK
TL - TOILET

 - DYE TESTED DRAIN

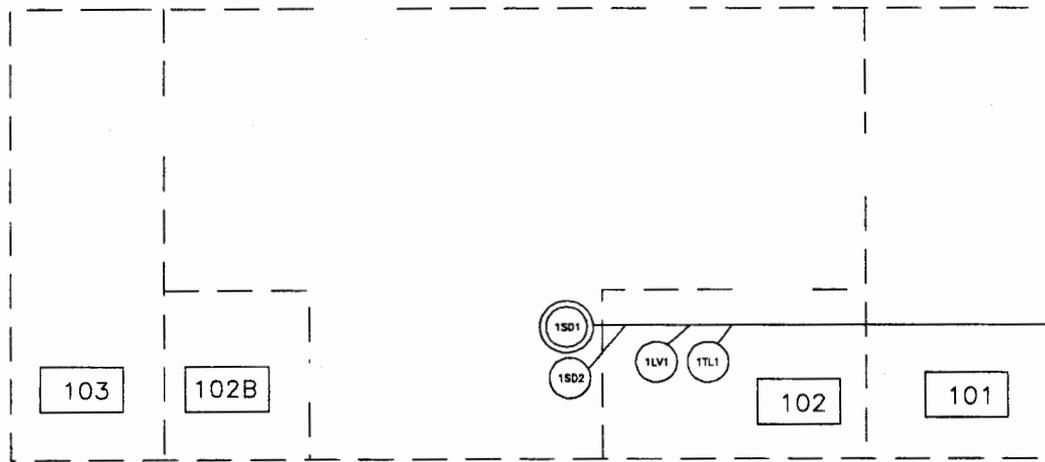


SANTA FE ENGINEERING, LTD.

TA 3-1745 BUILDING
DRAIN SCHEMATIC

DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	10/8/92

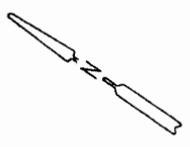
SUBMITTED		RECOMMENDED		APPROVED	
 Los Alamos National Laboratory Los Alamos, New Mexico 87545				SHEET	
				OF	
CLASSIFICATION		REVIEWER		DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.		REV.	
REQUESTING GROUP EM-B	11056-46	FIGURE 17			



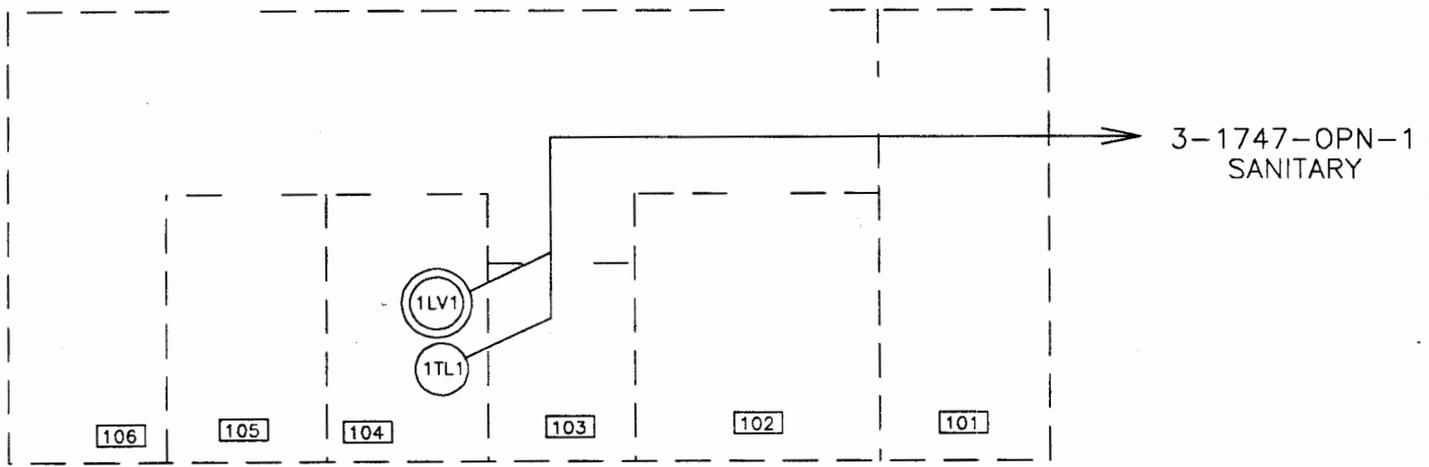
3-1746-OPN-1
SANITARY

SCHEMATIC BASED ON R-7109
AND SITE VISIT

- LEGEND
- LV - LAVATORY
 - SD - SINK
 - TL - TOILET
 - - DYE TESTED DRAIN

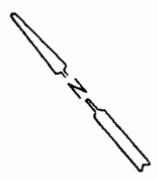


SANTA FE ENGINEERING, LTD.			
TA 3-1746 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION		REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
REQUESTING GROUP EM-8	11056-46	FIGURE 18	
			SHEET OF
			REV.



SCHEMATIC BASED ON R-7111
AND SITE VISIT

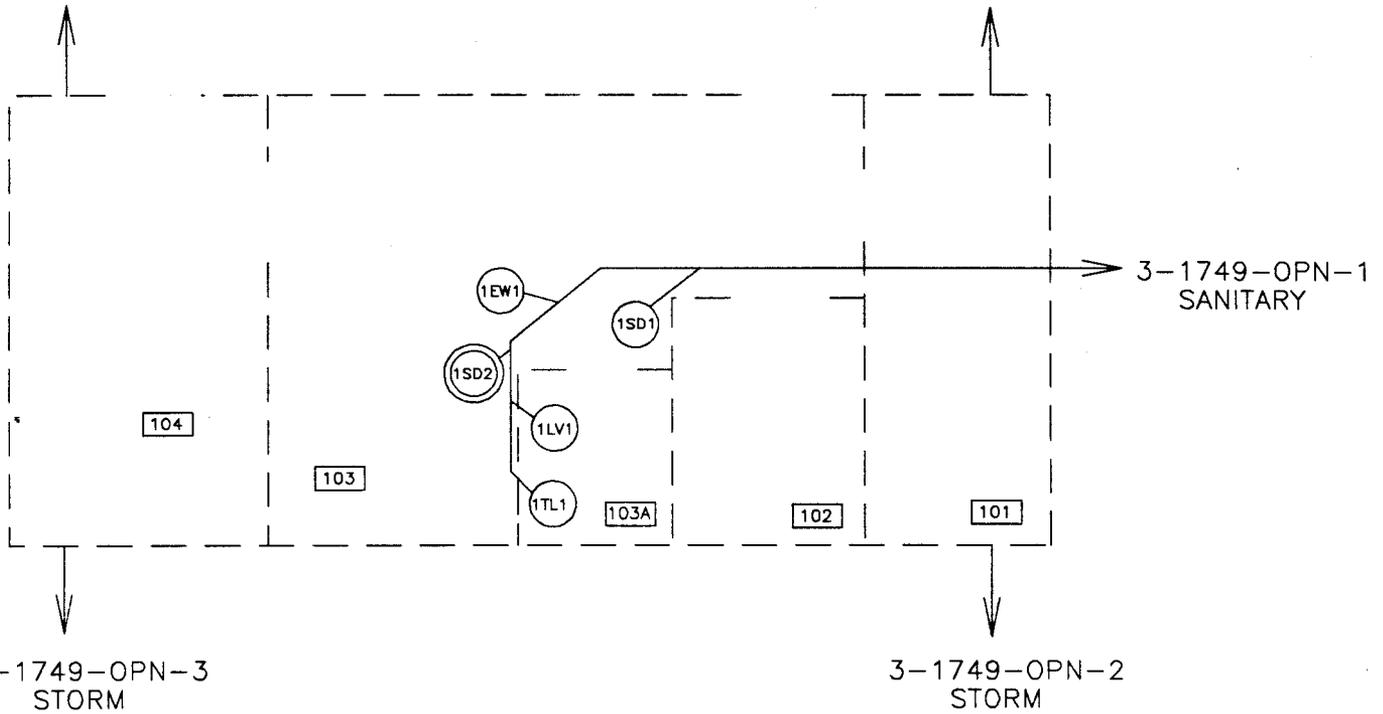
LEGEND
 LV - LAVATORY
 TL - TOILET
 ○ - DYE TESTED DRAIN



SANTA FE ENGINEERING, LTD.			
TA 3-1747 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED		RECOMMENDED	APPROVED
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	
REQUESTING GROUP EM-8	11056-46	FIGURE 19	
		REV.	

3-1749-OPN-4
STORM

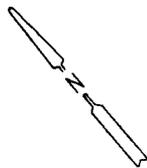
3-1749-OPN-5
STORM



SCHEMATIC BASED ON R-7113
AND SITE VISIT

LEGEND
EW - EYE WASH
LV - LAVATORY
SD - SINK
TL - TOILET

 - DYE TESTED DRAIN



SANTA FE ENGINEERING, LTD.

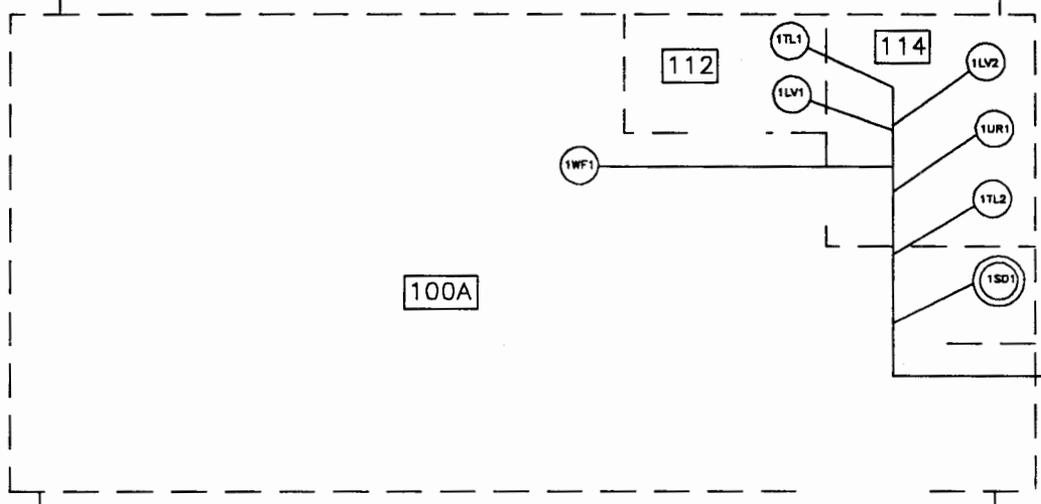
TA 3-1749 BUILDING
DRAIN SCHEMATIC

DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	10/8/92

SUBMITTED		RECOMMENDED		APPROVED	
				Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION				REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.		DRAWING NO.		REV.
REQUESTING GROUP	11056-46		FIGURE 20		
EM-8					

3-1750-OPN-4
STORM

3-1750-OPN-5
STORM



100A

112

114

1WF1

1TL1

1LV1

1LV2

1UR1

1TL2

1SD1

3-1750-OPN-1
SANITARY

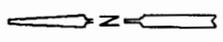
3-1750-OPN-3
STORM

3-1750-OPN-2
STORM

LEGEND

- LV - LAVATORY
- SD - SINK
- TL - TOILET
- UR - URINAL
- WF - WATER FOUNTAIN

⊙ - DYE TESTED DRAIN



SCHEMATIC BASED ON R-7114 & SITE VISIT

SANTA FE ENGINEERING, LTD.

TA 3-1750 BUILDING
DRAIN SCHEMATIC

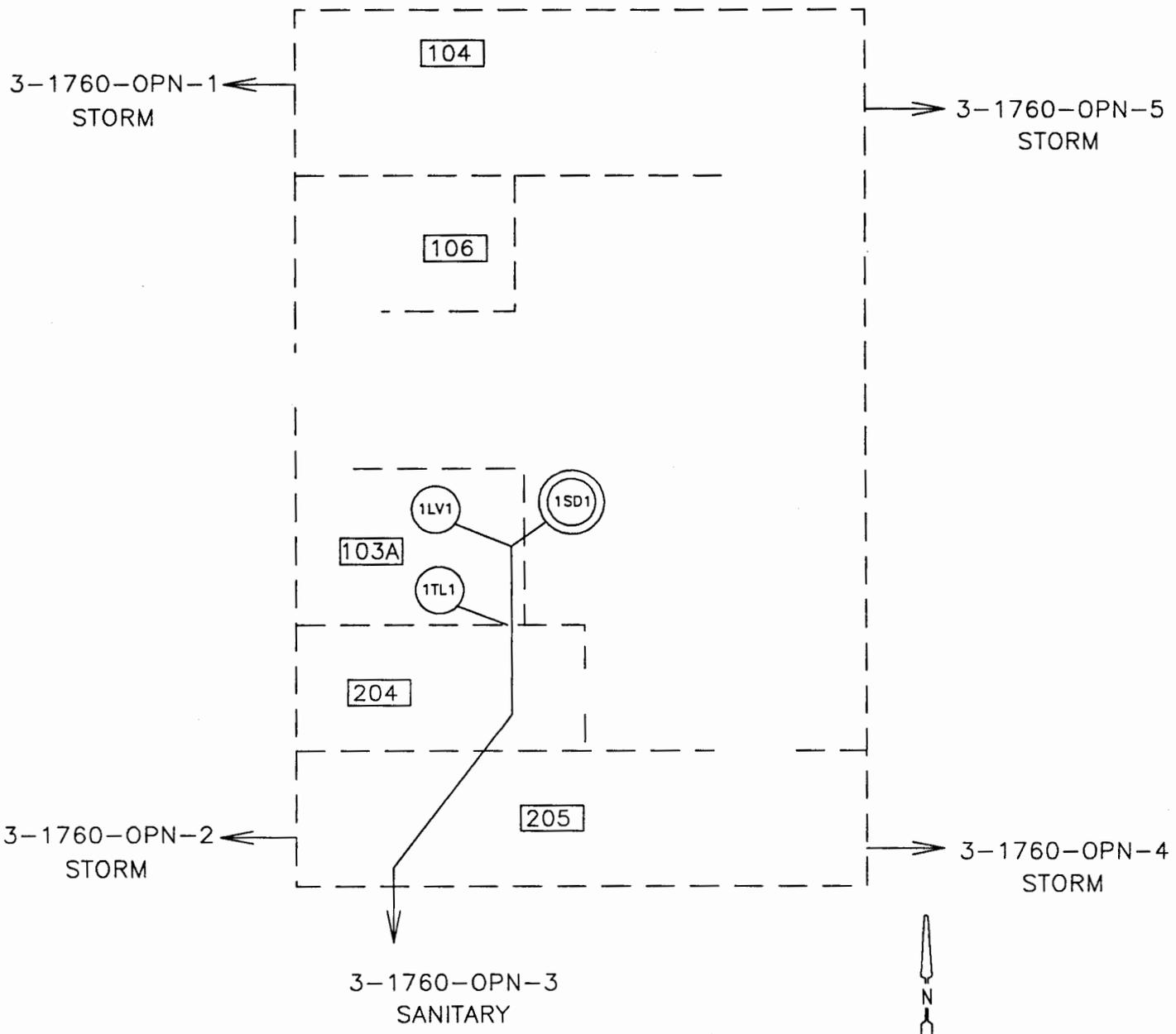
DRAWN	PEB
DESIGN	PEB
CHECKED	LBA
DATE	10/8/92

SUBMITTED	RECOMMENDED	APPROVED
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Los Alamos Los Alamos National Laboratory
Los Alamos, New Mexico 87545

SHEET OF

CLASSIFICATION	REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.
REQUESTING GROUP	11056-46	FIGURE 21
EM-8		REV.



LEGEND

LV - LAVATORY

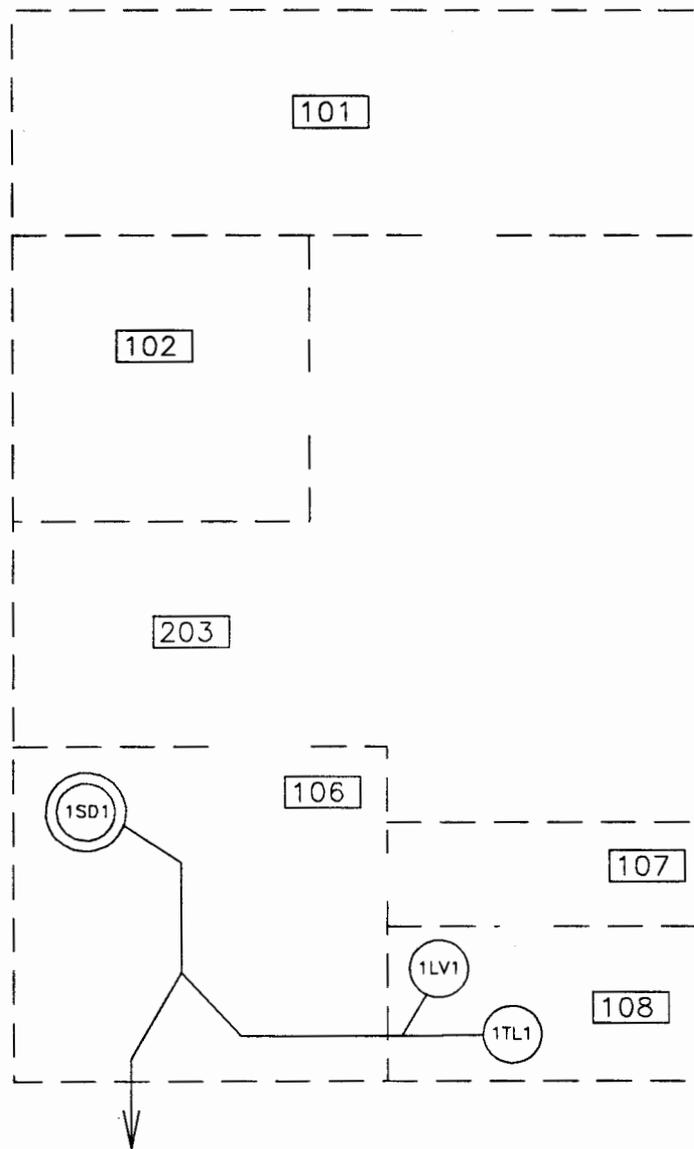
SD - SINK

TL - TOILET

 - DYE TESTED DRAIN

SCHEMATIC BASED ON SITE VISIT

SANTA FE ENGINEERING, LTD.			
TA 3-1760 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
		SHEET	OF
CLASSIFICATION		REVIEWER	
REQUESTING DIVISION	LAB JOB NO.	DATE	
REQUESTING GROUP EM-8	11056-46	DRAWING NO. FIGURE 22	
		REV.	



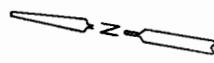
3-1786-OPN-1
SANITARY

LEGEND

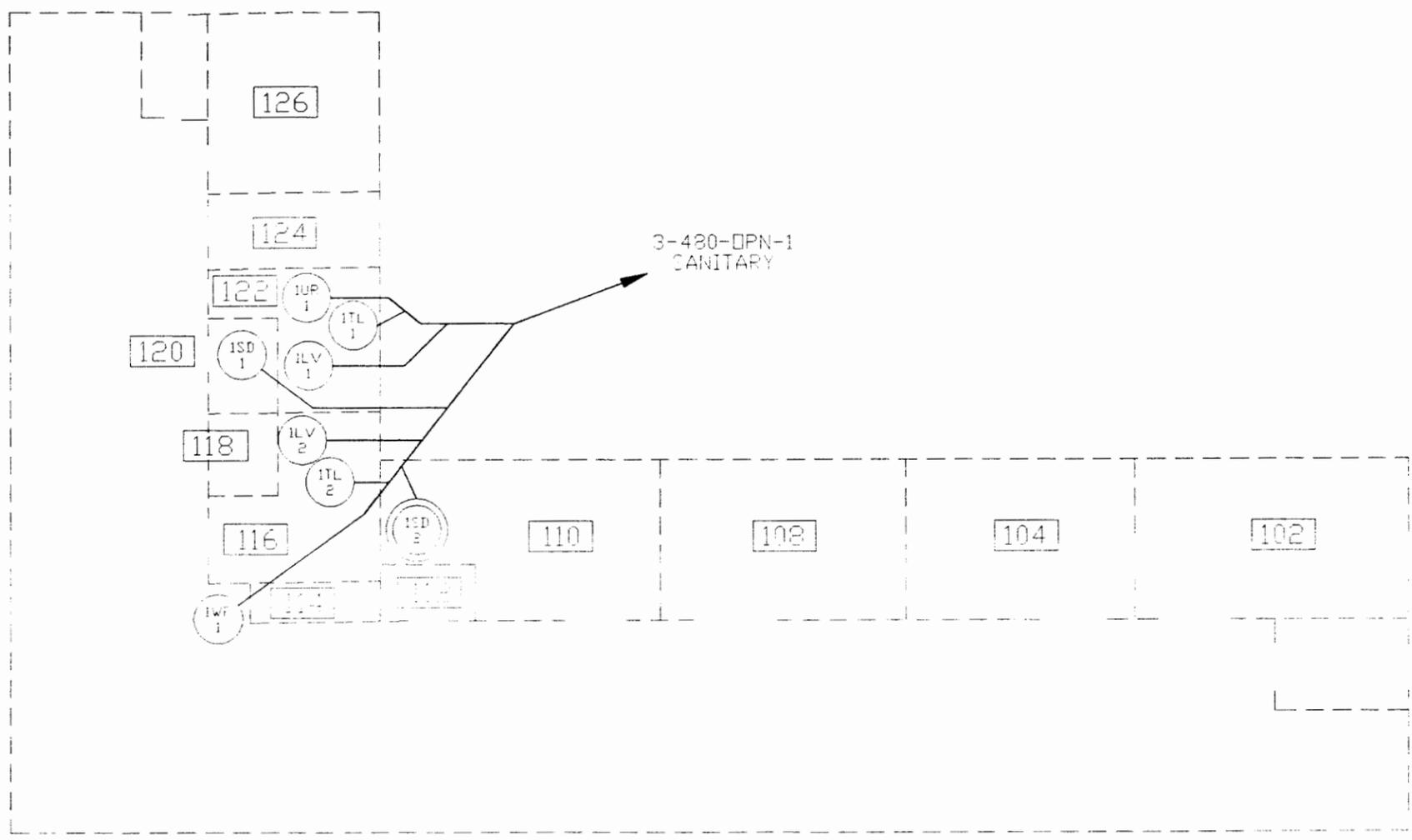
- LV - LAVATORY
- SD - SINK
- TL - TOILET



SCHEMATIC BASED ON SITE VISIT



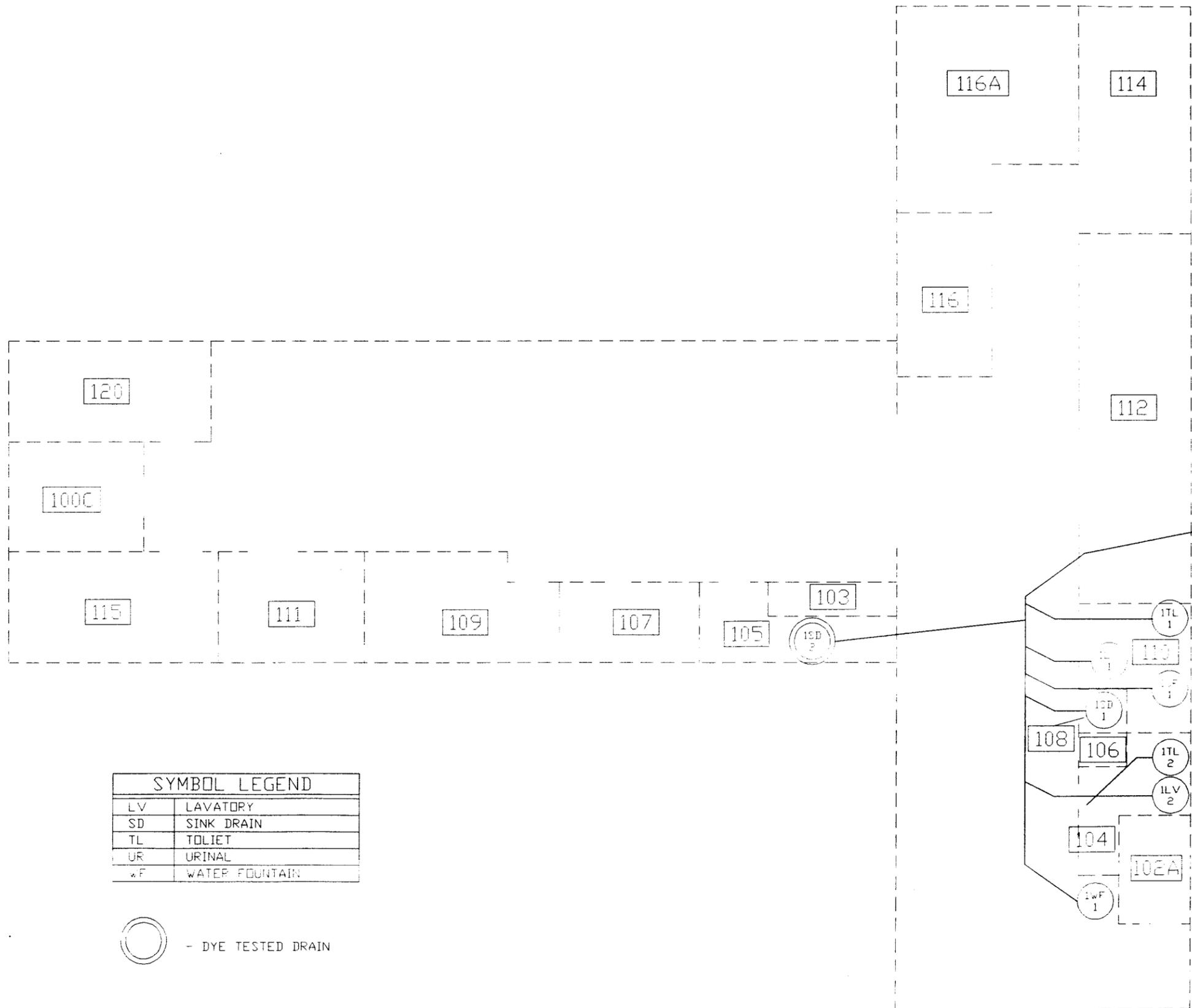
SANTA FE ENGINEERING, LTD.			
TA 3-1786 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/8/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
		SHEET	OF
CLASSIFICATION		REVIEWER	
REQUESTING DIVISION	LAB JOB NO.	DATE	
REQUESTING GROUP EM-8	11056-46	DRAWING NO. FIGURE 23	
		REV.	



SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN


 - DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA-3-480 DRAIN SCHEMATIC		DRAWN	D.A.H.
		DESIGN	P.E.B.
		CHECKED	S.C.D.
		RELEASED	
		DATE	10/28/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	CHEET OF
REQUESTING DIVISION: LAE		JOB NO:	DATE:
REQUESTING GROUP EM-8	11057-46	DRAWING NO:	REV:
		FIGURE 4	



3-421-02N-1
CANITARY

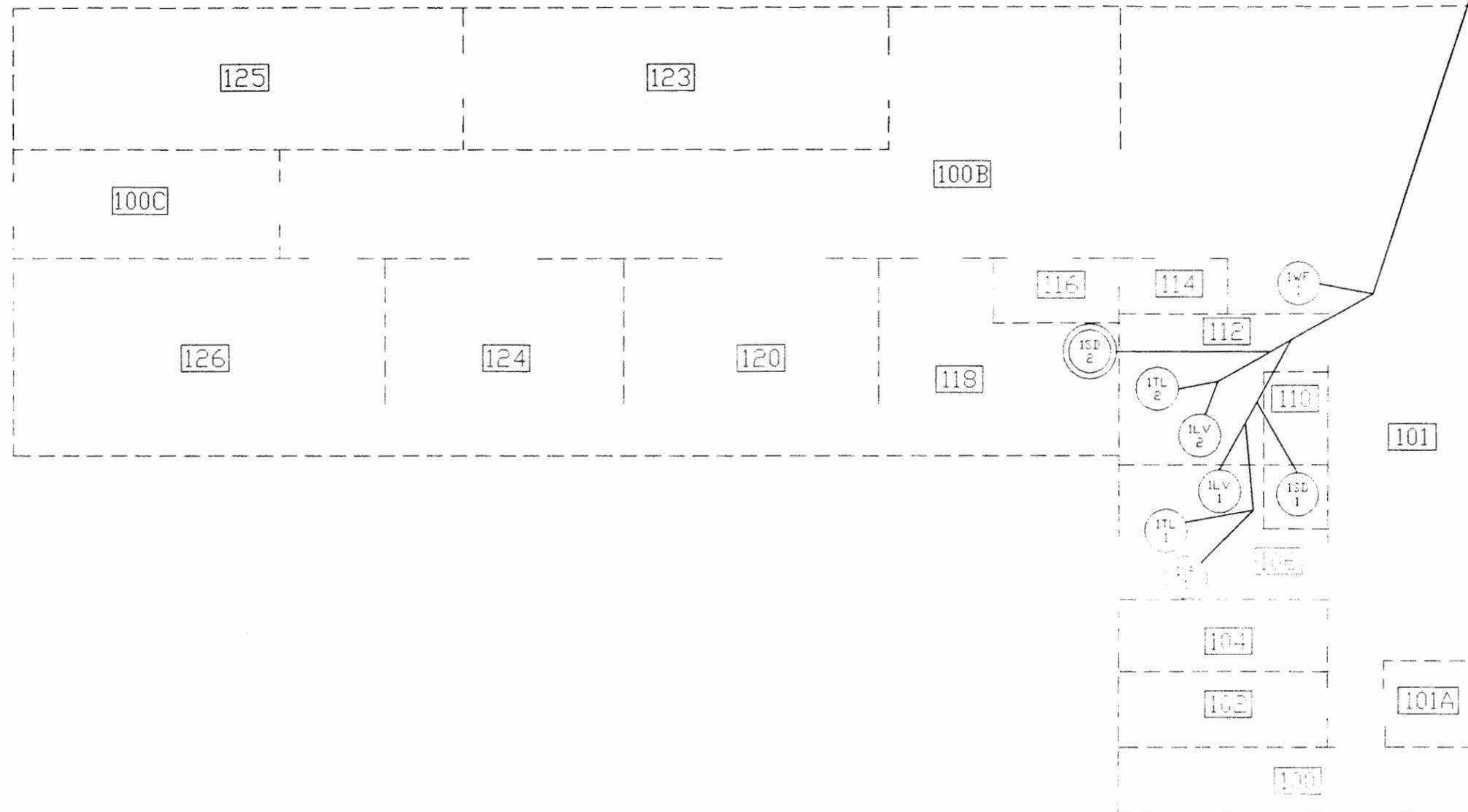


NOTE:
SCHEMATIC WAS BASED ON SITE VISIT

SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

 - DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA-3-481 DRAIN SCHEMATIC		DRAWN	D.A.H.
		DESIGN	P.E.B.
		CHECKED	S.C.B.
		RELEASED	
		DATE	10/2/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET OF
REQUESTING DIVISION	LAB JOB NO	DRAWING NO	REV.
REQUESTING GROUP	11057-46	FIGURE 5	



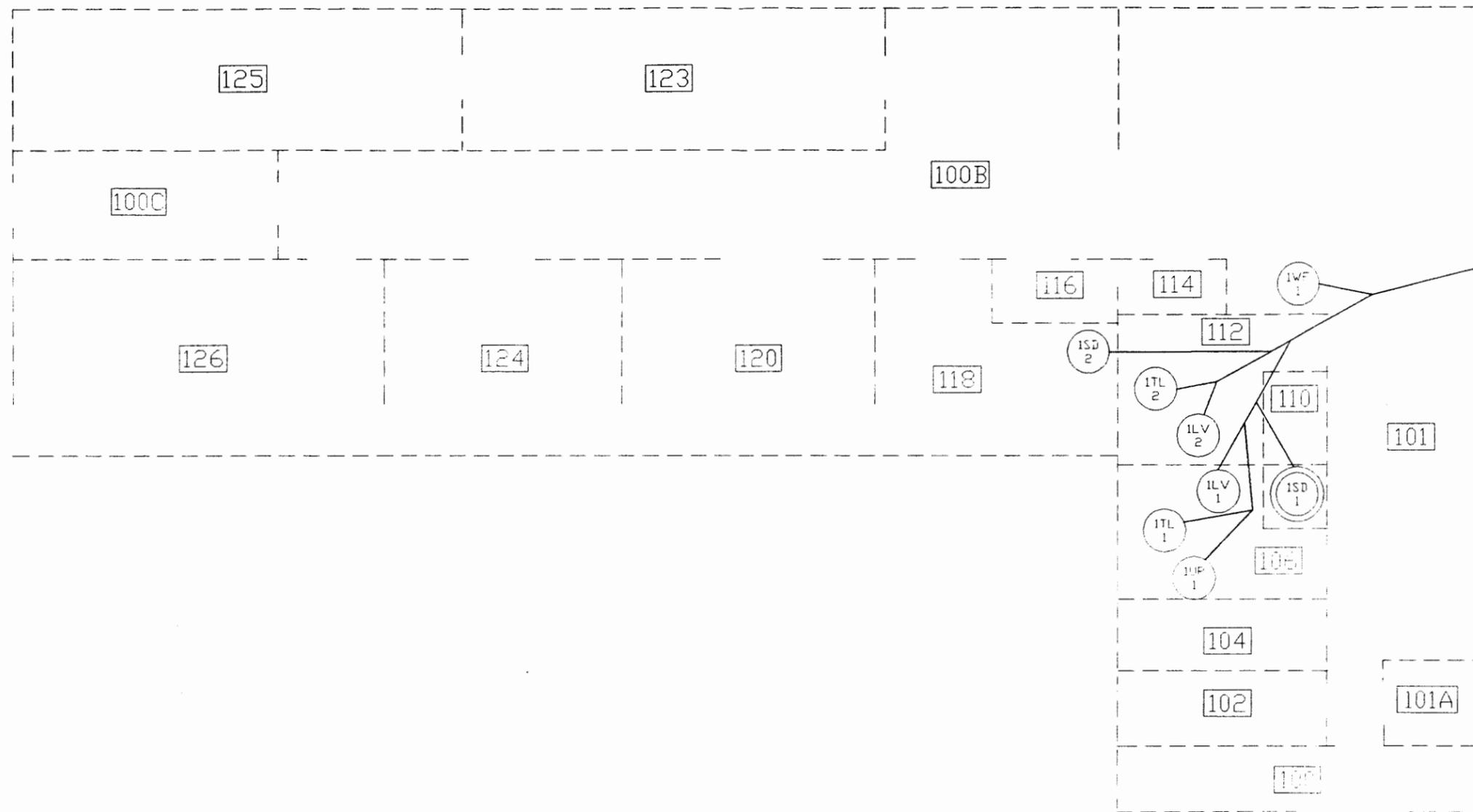
3-482-OPN-1
SANITARY

NOTE
SCHEMATIC WAS BASED ON SITE VISIT

SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

 - DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA-3-482 DRAIN SCHEMATIC	DRAWN	D.A.H.	
	DESIGN	P.E.B.	
	CHECKED	S.C.D.	
	RELEASED		
	DATE	10/2/92	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos <small>Los Alamos National Laboratory Los Alamos, New Mexico 87545</small>			SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11057-46	FIGURE 6	



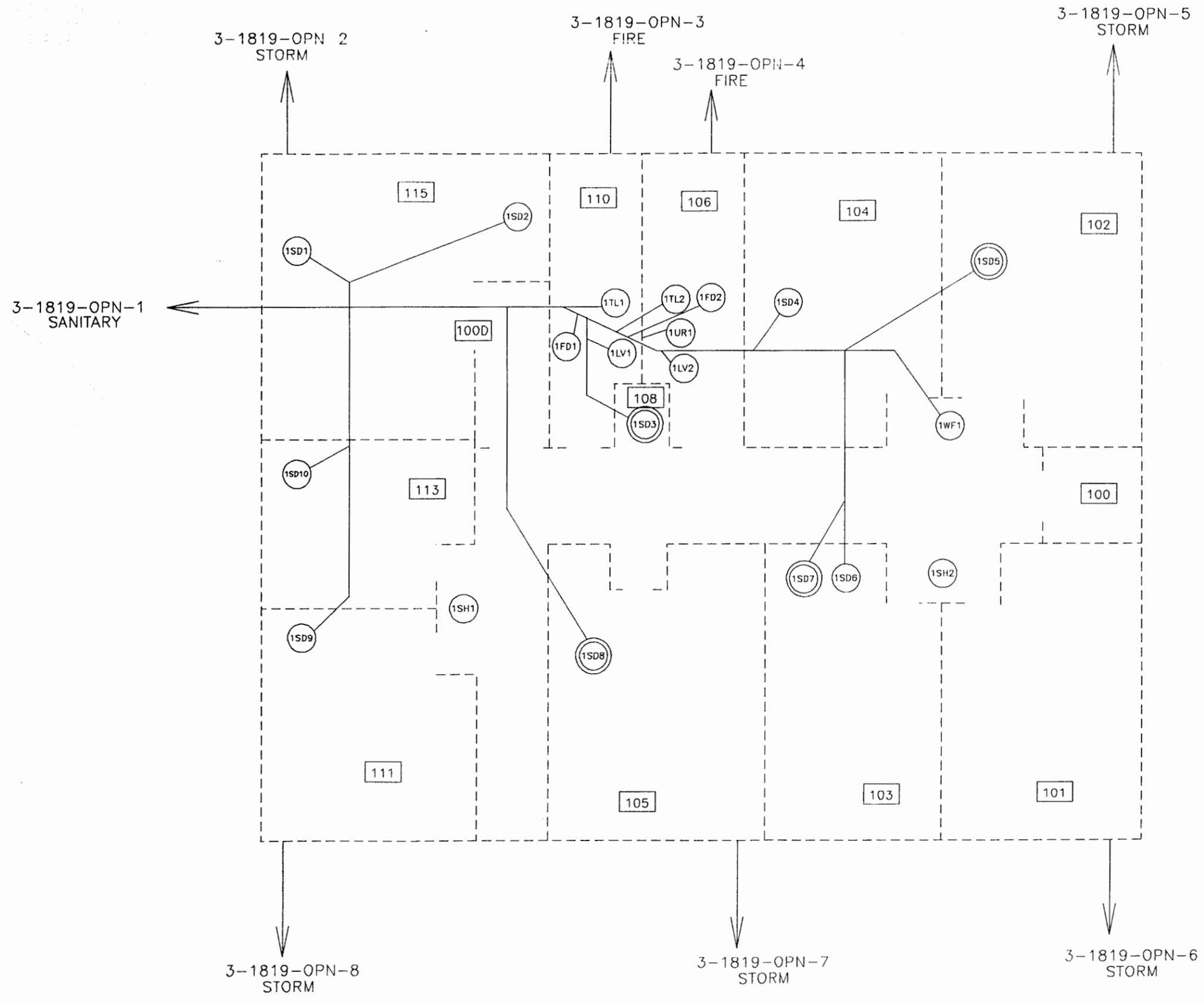
3-483-OPN-1
SANITARY

NOTE:
SCHEMATIC WAS BASED ON SITE VISIT

SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN



SANTA FE ENGINEERING, LTD.			
TA-3-483 DRAIN SCHEMATIC		DRAWN	DAH
		DESIGN	P.E.B.
		CHECKED	S.C.D.
		RELEASED	
		DATE	JUNE 42
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	CHEET OF
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11057-46	FIGURE 7	



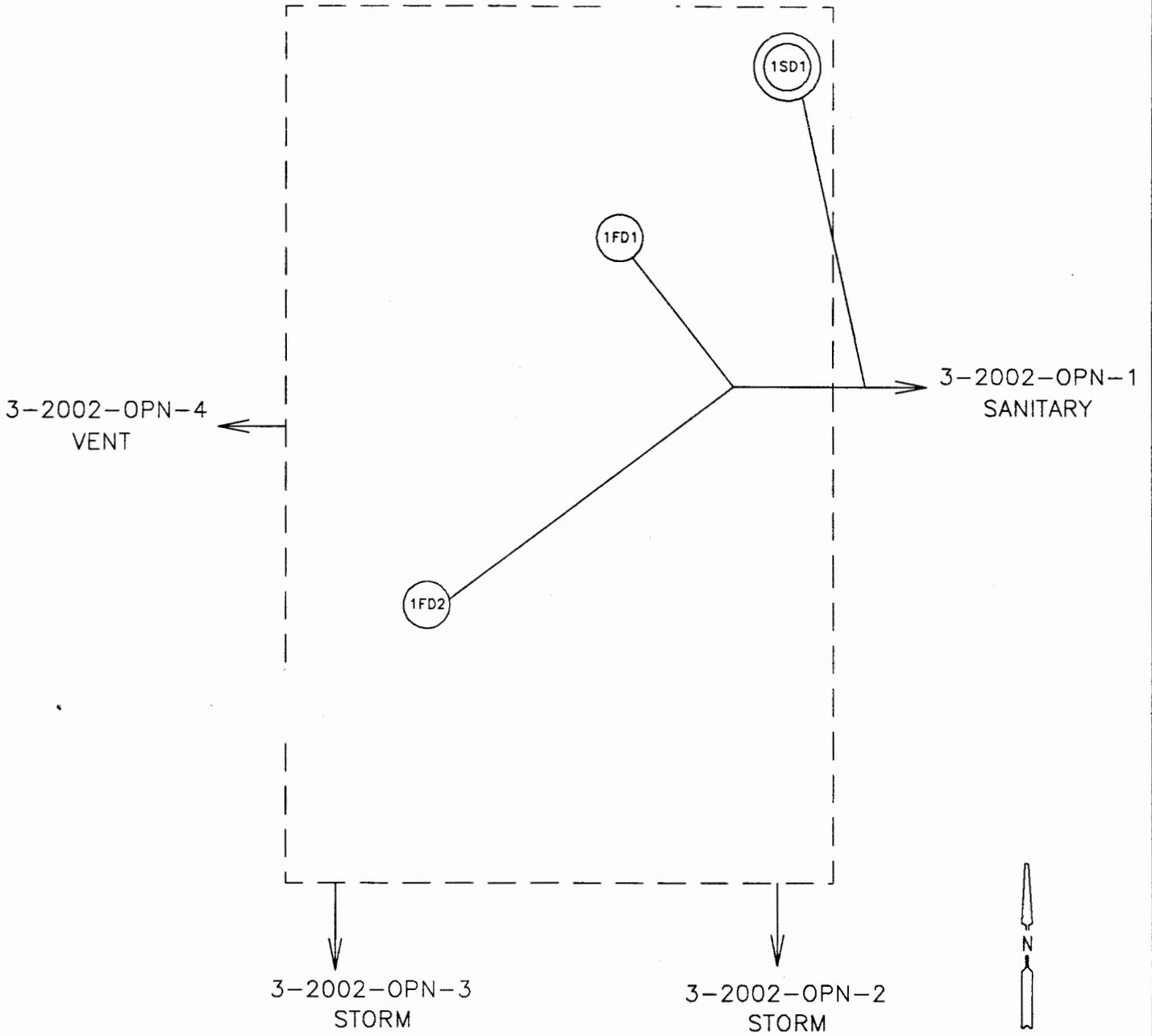
LEGEND

- FD - FLOOR DRAIN
- LV - LAVATORY
- SD - SINK
- SH - SHOWER
- TL - TOILET
- UR - URINAL
- WF - WATER FOUNTAIN
- - DYE TESTED DRAIN

SCHEMATIC BASED ON DRAWINGS
 C-44227 SHEETS 15 & 18 & R-7114
 AND SITE VISIT



SANTA FE ENGINEERING, LTD.			
TA 3-1819 BUILDING DRAIN SCHEMATIC		DRAWN	PEB
		DESIGN	PEB
		CHECKED	LBA
		DATE	10/9/92
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET	OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 24	



LEGEND

FD - FLOOR DRAIN
SD - SINK

 - DYE TESTED DRAIN

SCHEMATIC BASED ON SITE VISIT

SANTA FE ENGINEERING, LTD.			
TA 3-2002 BUILDING DRAIN SCHEMATIC		DRAWN PEB	DESIGN PEB
		CHECKED LBA	
		DATE 10/8/92	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET OF
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-46	FIGURE 25	