

**WASTEWATER STREAM
CHARACTERIZATION FOR
TA 3-105, 207, 252, 400, 401,
402, 403, 443, 452, 1510,
1616, 1617 and 1929**

**at
Los Alamos National Laboratory**

ENVIRONMENTAL STUDY

CHARACTERIZATION REPORT #56

Los Alamos

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TA-3-105, 207, 252, 400, 401, 402,
403, 443, 452, 1510, 1616, 1617 AND
1929

ENVIRONMENTAL STUDY

prepared for:
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EXECUTIVE SUMMARY

Buildings 105, 207, 252, 400, 401, 402, 403, 443, 452, 490, 1510, 1616, 1617 and 1929 in TA-3 were visited to document all drain piping and building outflows and to make permitting recommendations. The pipes exiting the building are as follows:

1. from building 3-105: six sanitary sewer connections, nine fire line drains, four storm drains, one water heater pressure relief valve drain and one oil line drain to storage tank,
2. from building 3-207: one sanitary sewer connection, four fire line drains, eight roof drains, seven deck drains and three heating hot water pressure relief valve drains,
3. building 3-252 has been demolished,
4. from buildings 3-400: one sanitary sewer connection, four roof drains, one water heater pressure relief valve drain and two condensed water drains,
5. from buildings 3-401: one sanitary sewer connection, four roof drains, one water heater pressure relief valve drain and two condensed water drains,
6. from building 3-402: one sanitary sewer connection, four roof drains, one water heater pressure relief valve drain and two condensed water drains,
7. from building 3-403: one sanitary sewer connection, four roof drains, one water heater pressure relief valve drain and two condensed water drains,
8. from building 3-443: one sanitary sewer connection and one storm drain,
9. from building 3-452: one sanitary sewer connection and one condensed water drain,
10. from building 3-490: one sanitary sewer connection and four roof drains,
11. building 3-1510 has been sold to the State of New Mexico and removed,
12. from building 3-1616: three roof drains, one condensed water drain and one water heater pressure relief valve drain,
13. from building 3-1617: one sanitary sewer connection, two roof drains, one condensed water drain and one water heater pressure relief valve drain and
14. from building 3-1929: four roof drains.

Recommendations for repiping are provided to allow outfall consolidation to minimize permit maintenance requirements and to bring the facility into compliance with the laboratory's NPDES Permit. Floor drain plugging is recommended where the potential of discharge of pollutants exists.

A Waste Stream Database has been prepared listing the waste water and flow rate for each outfall.

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1.0 INTRODUCTION

During December, 1992 and January, 1993, Mark E. Wendt of Santa Fe Engineering (SFE) toured buildings 105, 207, 252, 400, 401, 402, 403, 443, 452, 490, 1510, 1616, 1617 and 1929 in TA-3. The purpose of this study is to identify building drain piping, locate outfalls which discharge into the environment and to characterize the wastewater flows and sources existing at the time of the visit. This report will not reflect any subsequent changes in piping or operations. The Waste 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 building were identified and laid out in schematic form;
2. Wastewater sources were identified at each drain and the wastewater was characterized according to the flow rate and quality. The location of outfalls and their potential sources of discharges 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 1 through 16) from drawings provided by Los Alamos National Laboratory (LANL) Facilities Engineering Division. The other buildings were visited to insure that no drains exist for 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 reviewed. The National Pollutant Discharge Elimination System (NPDES) Permit, the 1990 NPDES Permit Application submitted by Los Alamos National Laboratory (LANL) in September, 1990, 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. A site visit was performed to verify the SFE drain schematics 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 and
3. SFE verified drain piping by dye checking.

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 13). 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 functions of each pipe exiting from the buildings are listed in Appendix 1, Tables 1 through 12, with non-drain recommendations in Table 13 and an abbreviations list in Table 14. Appendix 2 contains the wastestream characterization database output, listing wastewater source, flow rates and periodicity information for each outfall drain. No EPA forms were required. 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 16. A Site Plan is included in Appendix 5 as Figure 1 illustrating the locations of buildings included in this report.

3.0 RECOMMENDATIONS FOR BUILDING 3-105

Table 1 is a list of the drains to the building outfalls and Figures 2, 3 and 4 are schematics of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations. The interior of this building has been gutted and is to be remodeled sometime in the future.

3.1 Outfall 3-105-OPN-1

This outfall is from roof drains on the building. The discharge pipe runs to the storm sewer collection system in this area. No permitting is needed for this outfall and no EPA forms have been prepared.

3.2 Outfalls 3-105-OPN-2, 3-105-OPN-14, 3-105-OPN-19 and 3-105-OPN-20

These outfalls are from sink drains (6), lavatories (4), toilets (4), urinals (2), water fountains (2) and floor drains (11) and flow into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. Sink drains 1SD1, 1SD2, 1SD3, 1SD4 and 1SD5 have been removed. Sink 1SD6 should be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". Floor drain 1FD11 should be permanently plugged. No permitting is required for this outfall and no EPA forms were prepared.

3.3 Outfall 3-105-OPN-3

This outfall is from six floor drains located in bay area 160 which have been plugged and two trench drains located in the utility trench below the floor of this room. These drains discharge into the storm sewer system at the east

side of the building. Plugging of the two trench drains is recommended. No permitting is required for this outfall and no EPA forms were prepared.

3.4 Outfalls 3-105-OPN-4, 3-105-OPN-6, 3-105-OPN-9, 3-105-OPN-10, 3-105-OPN-13, 3-105-OPN-15, 3-105-OPN-16, 3-105-OPN-18 and 3-105-OPN-21

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by a Notice Of Intent (NOI) to Discharge. No piping changes are recommended. No EPA forms were completed.

3.5 Outfall 3-105-OPN-5

This outfall is from floor drains (4), a sink drain, a sump pump and a trench drain and flows into a sump pump which ~~then pumps the effluent~~ up to a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. It is recommended that all of the floor drains be permanently plugged and sink drain S2SD1 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". Access to trench drain S2TD1 located in room 101 in the lowest sub-basement level was not possible. The existence of this drain should be verified by the user and permanently plugged. It is recommended that all 55-gallon drums filled with oil and stored in this area be provided with secondary containment pallets at all times. No permitting is required for this outfall and no EPA forms were prepared.

3.6 Outfall 3-105-OPN-7

This outfall is from roof drains on the building. The downspout drains to daylight next to the building. No

permitting is needed for this outfall and no EPA forms have been prepared.

3.7 Outfall 3-105-OPN-8

This outfall is from a water heater pressure relief valve drain and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were prepared.

3.8 Outfall 3-105-OPN-11

This outfall is from a trench drain located in room 184 and drains to an oil storage pit located exterior of the building on the south side below grade. This trench drain flow could not be verified. It is recommended that the trench drain be plugged and the oil pit be decommissioned and/or removed. No permitting is required for this outfall and no EPA forms have been prepared.

3.9 Outfall 3-105-OPN-12

This outfall is from two floor drains, one of which is plugged, five trench drains and one roof drain. It flows to a storm sewer manhole located on the south side of the building. There is no active flow from the floor drains or trench drains. It is recommended that the one floor drain located in room 186 and all five trench drains below the floor be plugged. No permitting is required for this outfall and no EPA forms have been prepared.

3.10 Outfall 3-105-OPN-17

This outfall is from floor drains (2), lavatories (2), one urinal and one water fountain and flows into a sewer manhole which drains to the TA-3 sewage collection system. No

chemicals are drained into any of the drains or fixtures. Floor drain 1FD11 located in room 161 receives discharge from an air compressor blow-off line. This air compressor is located in the adjacent mechanical room 161B. Containing the liquid from the air compressor unit and plugging the floor drain is recommended. No permitting is required for this outfall and no EPA forms have been prepared.

4.0 RECOMMENDATIONS FOR BUILDING 3-207

Table 2 is a list of the drains to building outfalls and Figures 5, 6, 7 and 8 are schematics of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

4.1 Outfall 3-207-OPN-1

This outfall is from floor drains (2), floor sinks (7), lavatories (15), sink drains (7), toilets (15), urinals (4) and water fountains (4) and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. Mechanical room 30 on the lower level has an air compressor unit with a blow-off line discharging to floor sink 1FS4. Containing the liquid from the air compressor unit is recommended. It is recommended that sink drains 1SD1, 1SD2, 2SD1, 2SD2, 2SD3, 3SD1 and 3SD2 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". Floor sink 4FS1 receives seasonal blowdown from a small cooling tower located in the penthouse. Blowdown is not apparently metered but quantities appear small. It is recommended that a blowdown meter be installed.

Mechanical room 30 also has two base-mounted circulating pumps located near floor sink 1FS1 which are leaking oil. It is recommended these pump leaks be repaired and/or secondary containment be installed around the pumps. No permitting is required for this outfall and no EPA forms have been prepared.

4.2 Outfall 3-207-OPN-2, 3-207-OPN-3 and 3-207-OPN-4

These outfalls are from solar panel drains which discharge storm water to daylight next to the building. No permitting is needed for these outfalls and no EPA forms were prepared.

4.3 Outfalls 3-207-OPN-5, 3-207-OPN-6 and 3-207-OPN-7

These outfalls are drains from heating system temperature and pressure relief valves and discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

4.4 Outfall 3-207-OPN-8

This outfall is from roof drains on the building. The discharge pipe runs to the storm sewer collection system in this area. No permitting is needed for this outfall and no EPA forms have been prepared.

4.5 Outfalls 3-207-OPN-9, 3-207-OPN-10, 3-207-OPN-11, 3-207-OPN-13, 3-207-OPN-21, and 3-207-OPN-22

These outfalls are from deck drains on the building. The down spouts discharge to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

4.6 Outfalls 3-207-OPN-12, 3-207-OPN-19, 3-207-OPN-20 and 3-207-OPN-26

These outfalls are fire water system drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

4.7 Outfalls 3-207-OPN-14, 3-207-OPN-15, 3-207-OPN-16, 3-207-OPN-18, 3-207-OPN-23, 3-207-OPN-24 and 3-207-OPN-25

These outfalls are from roof drains on the building. The down spouts discharge to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared

4.8 Outfall 3-207-OPN-17

This outfall is from two area drains located in the floor of the main entry area into the library. These drains discharge to the main storm sewer system in this area. No permitting is needed for this outfall and no EPA forms have been prepared.

5.0 RECOMMENDATIONS FOR BUILDING 3-252

This structure was once a barrel storage shed and was located on the south side of building 3-105. The structure has since been demolished.

6.0 RECOMMENDATIONS FOR BUILDING 3-400

Table 3 is a list of the drains to the building outfalls and Figure 9 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The

discussion below gives the reasoning for the recommendations.

6.1 Outfall 3-400-OPN-1

This outfall is from lavatories (2), one sink drain, toilets (2), one urinal and one water fountain and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. It is recommended that sink drain 1SD1 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". No permitting is required for this outfall and no EPA forms were prepared.

6.2 Outfalls 3-400-OPN-2 and 3-400-OPN-7

These outfalls are furnace cooling coil condensed water drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

6.3 Outfalls 3-400-OPN-3, 3-400-OPN-4, 3-400-OPN-5 and 3-400-OPN-6

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

6.4 Outfall 3-400-OPN-8

This outfall is from a water heater pressure relief valve and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes or permitting are recommended. No EPA forms were completed.

7.0 RECOMMENDATIONS FOR BUILDING 3-401

Table 4 is a list of the drains to the building outfalls and Figure 10 are schematics of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

7.1 Outfall 3-401-OPN-1

This outfall is from lavatories (2), toilets (2), one urinal and one water fountain and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. No permitting is required for this outfall and no EPA forms were prepared.

7.2 Outfalls 3-401-OPN-2, 3-401-OPN-3, 3-401-OPN-7 and 3-401-OPN-8

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

7.3 Outfalls 3-401-OPN-4 and 3-401-OPN-6

These outfalls are furnace cooling coil condensed water drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

7.4 Outfall 3-401-OPN-5

This outfall is from a water heater pressure relief valve and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

8.0 RECOMMENDATIONS FOR BUILDING 3-402

Table 5 is a list of the drains to the building outfalls and Figure 11 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

8.1 Outfall 3-402-OPN-1

This outfall is from lavatories (2), toilets (2), one urinal and one water fountain and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. No permitting is required for this outfall and no EPA forms were prepared.

8.2 Outfalls 3-402-OPN-2, 3-402-OPN-3, 3-402-OPN-7 and 3-402-OPN-8

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

8.3 Outfall 3-402-OPN-4 and 3-402-OPN-6

These outfalls are furnace cooling coil condensed water drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

8.4 Outfall 3-402-OPN-5

This outfall is from a water heater pressure relief valve and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

9.0 RECOMMENDATIONS FOR BUILDING 3-403

Table 6 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 and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

9.1 Outfall 3-403-OPN-1

This outfall is from lavatories (2), toilets (2), one sink drain and one urinal and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. It is recommended that sink drain 1SD1 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". No permitting is required for this outfall and no EPA forms were prepared.

9.2 Outfalls 3-403-OPN-2, 3-403-OPN-3, 3-403-OPN-7 and 3-403-OPN-8

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

9.3 Outfalls 3-403-OPN-4 and 3-403-OPN-6

These outfalls are furnace cooling coil condensed water drains which discharge to daylight next to the building. These outfalls should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

9.4 Outfall 3-403-OPN-5

This outfall is from a water heater pressure relief valve drain and discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

10.0 RECOMMENDATIONS FOR BUILDING 3-443

Table 7 is a list of the drains to the building outfall and Figure 13 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

10.1 Outfall 3-443-OPN-1

This outfall is from one cup drain, one equipment drain lavatories (4), sink drains (2), toilets (4) and one urinal and flows into a sewage lift station located approximately

100 feet west of the building. From there it is pumped up to a gravity line where it flows to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. Cup drain 1CD1 only receives occasional discharge from a water heater pressure relief valve and equipment drain 1ED1 receives flow from a dishwasher and a backflow preventer drain. It is recommended that sink drains 1SD1 and 1SD2 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". No permitting is required for this outfall and no EPA forms have been prepared.

10.2 Outfall 3-443-OPN-2

This outfall is from roof drains on the building and one area drain and discharges to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared

11.0 RECOMMENDATIONS FOR BUILDING 3-452

Table 8 is a list of the drains to the building outfall and Figure 14 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

11.1 Outfall 3-452-OPN-1

This outfall receives flow from one lavatory, one water fountain and one toilet and discharges into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. No permitting is required for this outfall and no EPA forms were prepared.

11.2 Outfall 3-452-OPN-2

This outfall drains condensed water from a mechanical cooling unit located to the southwest of the building to daylight. This outfall should be covered by an NOI. No piping changes are recommended for this outfall. No EPA forms were prepared.

12.0 RECOMMENDATIONS FOR BUILDING 3-490

Table 9 is a list of the drains to the building outfall and Figure 15 is a schematic of the piping. The table lists the drains that connect to the outfall pipe and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

12.1 Outfall 3-490-OPN-1

This outfall is from floor drains (2) in restrooms, lavatories (3), sink drains (2), toilets (2), one urinal and one water fountain and flows into a sewer manhole which drains to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. It is recommended that sink drains 1SD1 and 1SD2 be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". No permitting is required for this outfall and no EPA forms have been prepared.

12.2 Outfalls 3-490-OPN-2, 3-490-OPN-3, 3-490-OPN-4 and 3-490-OPN-5

These outfalls are from roof drains on the building. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

13.0 RECOMMENDATIONS FOR BUILDING 1510

This structure is an office trailer which was located near the southeast corner of building 3-105. It has since been removed from the site and sold to the State of New Mexico according to James Mork of Johnson Controls, Inc.

14.0 RECOMMENDATIONS FOR BUILDING 3-1616

Table 10 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 for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

14.1 Outfalls 3-1616-OPN-1, 3-1616-OPN-2 and 3-1616-OPN-5

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

14.2 Outfall 3-1616-OPN-3

This outfall is a furnace cooling coil condensed water drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

14.3 Outfall 3-1616-OPN-4

This outfall is from a water heater pressure relief valve and discharges to daylight next to the building. This

outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

15.0 RECOMMENDATIONS FOR BUILDING 3-1617

Table 11 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 for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

15.1 Outfall 3-1617-OPN-1

This outfall is from lavatories (2), sink drains (2) and toilets (2) and flows into a sewage lift station located approximately 15 ft. northwest of the building. From there, it is pumped up to another lift station and then into a gravity line where it flows to the TA-3 sewage collection system. No chemicals are drained into any of the drains or fixtures. It is recommended that the sinks be labeled "SANITARY WASTE ONLY - NO CHEMICAL DISPOSAL". No permitting is required for this outfall and no EPA forms have been prepared.

15.2 Outfalls 3-1617-OPN-2 and 3-1617-OPN-5

These outfalls are from roof gutter drains. The down spouts drain to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

15.3 Outfall 3-1617-OPN-3

This outfall is from a water heater pressure relief valve and discharges to daylight next to the building. This

outfall should be covered by an NOI. No piping changes are recommended. No EPA forms were completed.

15.4 Outfall 3-1617-OPN-4

This outfall is a furnace cooling coil condensed water drain which discharges to daylight next to the building. This outfall should be covered by an NOI. No piping changes are recommended. No EPA forms have been prepared.

16.0 RECOMMENDATIONS FOR BUILDING 3-1929

Table 12 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 and includes recommendations for changes to the drain piping. The discussion below gives the reasoning for the recommendations.

16.1 Outfalls 3-1929-OPN-1, 3-1929-OPN-2 and 3-1929-OPN-4

These outfalls are from roof drains on the building. The down spouts discharge to daylight next to the building. No permitting is needed for these outfalls and no EPA forms have been prepared.

16.2 Outfall 3-1929-OPN-3

This outfall is from roof drains on the building. The discharge pipe runs to the storm sewer collection system in this area. No permitting is needed for this outfall and no EPA forms have been prepared.

17.0 CONCLUSION

This document provides the information to characterize buildings 105, 207, 252, 400, 401, 402, 403, 443, 452, 490, 1510, 1616, 1617 and 1929 of TA-3.

Building TA-3-252 was demolished and no longer exists.

Building TA-3-1510 is an office trailer which was sold to the State of New Mexico and moved to an unknown location.

Permitting is not recommended for the following outfalls, as itemized below.

Discharges to TA-3 Sewage Collection System:

- | | | |
|-----------------|-----------------|------------------|
| 1. 3-105-OPN-2 | 2. 3-105-OPN-5 | 3. 3-105-OPN-14 |
| 4. 3-105-OPN-17 | 5. 3-105-OPN-19 | 6. 3-105-OPN-20 |
| 7. 3-207-OPN-1 | 8. 3-400-OPN-1 | 9. 3-401-OPN-1 |
| 10. 3-402-OPN-1 | 11. 3-403-OPN-1 | 12. 3-443-OPN-1 |
| 13. 3-452-OPN-1 | 14. 3-490-OPN-1 | 15. 3-1617-OPN-1 |

Discharge from the fire system:

- | | | |
|------------------|------------------|------------------|
| 1. 3-105-OPN-4 | 2. 3-105-OPN-6 | 3. 3-105-OPN-9 |
| 4. 3-105-OPN-10 | 5. 3-105-OPN-13 | 6. 3-105-OPN-15 |
| 7. 3-105-OPN-16 | 8. 3-105-OPN-18 | 9. 3-105-OPN-21 |
| 10. 3-207-OPN-12 | 11. 3-207-OPN-19 | 12. 3-207-OPN-20 |
| 13. 3-207-OPN-26 | | |

Discharges of storm water:

- | | | |
|------------------|------------------|------------------|
| 1. 3-105-OPN-1 | 2. 3-105-OPN-3 | 3. 3-105-OPN-7 |
| 4. 3-105-OPN-12 | 5. 3-207-OPN-2 | 6. 3-207-OPN-3 |
| 7. 3-207-OPN-4 | 8. 3-207-OPN-8 | 9. 3-207-OPN-9 |
| 10. 3-207-OPN-10 | 11. 3-207-OPN-11 | 12. 3-207-OPN-13 |
| 13. 3-207-OPN-14 | 14. 3-207-OPN-15 | 15. 3-207-OPN-16 |
| 16. 3-207-OPN-17 | 17. 3-207-OPN-18 | 18. 3-207-OPN-21 |
| 19. 3-207-OPN-22 | 20. 3-207-OPN-23 | 21. 3-207-OPN-24 |
| 22. 3-207-OPN-25 | 23. 3-400-OPN-3 | 24. 3-400-OPN-4 |
| 25. 3-400-OPN-5 | 26. 3-400-OPN-6 | 27. 3-401-OPN-2 |
| 28. 3-401-OPN-3 | 29. 3-401-OPN-7 | 30. 3-401-OPN-8 |
| 31. 3-402-OPN-2 | 32. 3-402-OPN-3 | 33. 3-402-OPN-7 |
| 34. 3-402-OPN-8 | 35. 3-403-OPN-2 | 36. 3-403-OPN-3 |
| 37. 3-403-OPN-7 | 38. 3-403-OPN-8 | 39. 3-443-OPN-2 |
| 40. 3-490-OPN-2 | 41. 3-490-OPN-3 | 42. 3-490-OPN-4 |
| 43. 3-490-OPN-5 | 44. 3-1616-OPN-1 | 45. 3-1616-OPN-2 |
| 46. 3-1616-OPN-5 | 47. 3-1617-OPN-2 | 48. 3-1617-OPN-5 |
| 49. 3-1929-OPN-1 | 50. 3-1929-OPN-2 | 51. 3-1929-OPN-3 |
| 52. 3-1929-OPN-4 | | |

Discharges of condensed water:

- | | | |
|------------------|------------------|----------------|
| 1. 3-400-OPN-2 | 2. 3-400-OPN-7 | 3. 3-401-OPN-4 |
| 4. 3-401-OPN-6 | 5. 3-402-OPN-4 | 6. 3-402-OPN-6 |
| 7. 3-403-OPN-4 | 8. 3-403-OPN-6 | 9. 3-452-OPN-2 |
| 10. 3-1616-OPN-3 | 11. 3-1617-OPN-4 | |

Discharges from water heater pressure relief valves:

- | | | |
|-----------------|----------------|-----------------|
| 1. 3-105-OPN-8 | 2. 3-400-OPN-8 | 3. 3-401-OPN-5 |
| 4. 3-402-OPN-5 | 5. 3-403-OPN-5 | 6. 3-1616-OPN-4 |
| 7. 3-1617-OPN-3 | | |

Miscellaneous discharges:

- | | | |
|-----------------|----------------|----------------|
| 1. 3-105-OPN-11 | 2. 3-207-OPN-5 | 3. 3-207-OPN-6 |
| 4. 3-207-OPN-7 | | |

Recommended corrective actions are outlined in Tables 1 through 12 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: TA3-105 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-105-OPN-1 DAYLIGHT	RD6	ROOF	EXTER	NO CHANGE	NO
	RD7	ROOF	EXTER	NO CHANGE	
	RD8	ROOF	EXTER	NO CHANGE	
	RD9	ROOF	EXTER	NO CHANGE	
	RD10	ROOF	EXTER	NO CHANGE	
	RD11	ROOF	EXTER	NO CHANGE	
	RD12	ROOF	EXTER	NO CHANGE	
	RD13	ROOF	EXTER	NO CHANGE	
	RD14	ROOF	EXTER	NO CHANGE	
	RD15	ROOF	EXTER	NO CHANGE	
	RD16	ROOF	EXTER	NO CHANGE	
3-105-OPN-2 SANITARY	1SD4	OPEN BAY AREA	160	REMOVED	NO
	1SD5	OPEN BAY AREA	160	REMOVED	
3-105-OPN-3 DAYLIGHT	1FD12	OPEN BAY AREA	160	PLUGGED	NO
	1FD13	OPEN BAY AREA	160	PLUGGED	
	1FD14	OPEN BAY AREA	160	PLUGGED	
	1FD15	OPEN BAY AREA	160	PLUGGED	
	1FD16	OPEN BAY AREA	160	PLUGGED	
	1FD17	OPEN BAY AREA	160	PLUGGED	
	1TD6	BAY AREA TRENCH	160	PLUG	
	1TD7	BAY AREA TRENCH	160	PLUG	
3-105-OPN-4	N/A	FIRE LINE DRAIN	123	NOI	NO
3-105-OPN-5 SANITARY	S2FD1	SUB-BASEMENT	101	PLUG	NO
	S2FD2	SUB-BASEMENT	101	PLUG	
	S2FD3	SUB-BASEMENT	101	PLUG	
	S2FD4	SUB-BASEMENT	101	PLUG	
	S2SD1	SUB-BASEMENT	101	LABEL	
	S2SP1	SUB-BASEMENT	101	NO CHANGE	
	S2TD1	SUB-BASEMENT	101	VERIFY/PLUG	
3-105-OPN-6	N/A	FIRE LINE DRAIN	160	NOI	NO
3-105-OPN-7 DAYLIGHT	RD17	ROOF	EXTER	NO CHANGE	NO
	RD18	ROOF	EXTER	NO CHANGE	
3-105-OPN-8	1WH1	WATER HTR. DRAIN	179	NOI	NO
3-105-OPN-9	N/A	FIRE LINE DRAIN	189	NOI	NO
3-105-OPN-10	N/A	FIRE LINE DRAIN	189	NOI	NO
3-105-OPN-11	1TD8	TRENCH DRAIN & PIT	184	VERIFY/PLUG	NO
3-105-OPN-12 DAYLIGHT	1FD1	OPEN BAY AREA	186	PLUG	NO
	1FD2	OPEN BAY AREA	186	PLUGGED	
	RD1	ROOF	EXTER	NO CHANGE	
	RD2	ROOF	EXTER	NO CHANGE	
	RD3	ROOF	EXTER	NO CHANGE	

TABLE 1: TA3-105 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-105-OPN-12 CONT.	RD4	ROOF	EXTER	NO CHANGE	NO
	RD5	ROOF	EXTER	NO CHANGE	
	1TD1	ROOM TRENCH	180	PLUG	
	1TD2	ROOM TRENCH	180	PLUG	
	1TD3	ROOM TRENCH	181	PLUG	
	1TD4	ROOM TRENCH	190	PLUG	
	1TD5	ROOM TRENCH	190	PLUG	
3-105-OPN-13	N/A	FIRE LINE DRAIN	184	NOI	NO
3-105-OPN-14 SANITARY	1LV7	RESTROOM	179	NO CHANGE	NO
	1SD1	OPEN BAY AREA	160	REMOVED	
	1SD2	OPEN BAY AREA	160	REMOVED	
	1SD3	OPEN BAY AREA	160	REMOVED	
	1TL4	RESTROOM	179	NO CHANGE	
	1UR3	RESTROOM	179	NO CHANGE	
	1WF3	CORRIDOR		NO CHANGE	
	2FD2	EMPTY ROOM	200	NO CHANGE	
3-105-OPN-15	N/A	FIRE LINE DRAIN	180	NOI	NO
3-105-OPN-16	N/A	FIRE LINE DRAIN	180	NOI	NO
3-105-OPN-17 SANITARY	1FD10	RESTROOM	161A	NO CHANGE	NO
	1FD11	CORRIDOR	161	CONTAIN/PLUG	
	1LV1	RESTROOM	161A	NO CHANGE	
	1LV2	RESTROOM	161A	REMOVED	
	1UR1	RESTROOM	161A	REMOVED	
	1WF1	OPEN BAY AREA	160	REMOVED	
3-105-OPN-18	N/A	FIRE LINE DRAIN	162	NOI	NO
3-105-OPN-19 SANITARY	1FD3	MECHANICAL ROOM	161B	PLUGGED	NO
	1FD4	MECHANICAL ROOM	161B	NO CHANGE	
	1FD5	MECHANICAL ROOM	161B	PLUGGED	
	1FD6	MECHANICAL ROOM	161B	PLUG	
	1FD7	MECHANICAL ROOM	161B	PLUGGED	
	1FD8	MECHANICAL ROOM	161B	PLUGGED	
	1FD9	MECHANICAL ROOM	161B	PLUGGED	
	2FD1	MECHANICAL ROOM	MEZZ.	NO CHANGE	
3-105-OPN-20 SANITARY	1FD18	RESTROOM	155	NO CHANGE	NO
	1FD19	RESTROOM	151	NO CHANGE	
	1LV4	RESTROOM	155	NO CHANGE	
	1LV5	RESTROOM	155	NO CHANGE	
	1LV6	RESTROOM	151	NO CHANGE	
	1SD6	JANITOR'S CLOSET	153	LABEL	
	1TL1	RESTROOM	155	NO CHANGE	
	1TL2	RESTROOM	155	NO CHANGE	

TABLE 1: TA3-105 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-105-OPN-20 CONT.	1TL3	RESTROOM	151	NO CHANGE	NO
	1UR2	RESTROOM	155	NO CHANGE	
	1WF3	CORRIDOR	A100	NO CHANGE	
3-105-OPN-21	N/A	FIRE LINE DRAIN	107	NOI	NO

TABLE 2: TA3-207 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-207-OPN-1 SANITARY	1FD1	RESTROOM	17	NO CHANGE	NO
	1FD2	RESTROOM	18	NO CHANGE	
	1FS1	MECHANICAL ROOM	30	NO CHANGE	
	1FS2	MECHANICAL ROOM	30	NO CHANGE	
	1FS3	MECHANICAL ROOM	30	NO CHANGE	
	1FS4	MECHANICAL ROOM	30	CONTAIN	
	1FS5	MECHANICAL ROOM	30	NO CHANGE	
	1LV1	RESTROOM	25	NO CHANGE	
	1LV2	RESTROOM	17	NO CHANGE	
	1LV3	RESTROOM	18	NO CHANGE	
	1SD1	JANITOR'S CLOSET	16	LABEL	
	1SD2	MECHANICAL ROOM	30	LABEL	
	1TL1	RESTROOM	25	NO CHANGE	
	1TL2	RESTROOM	17	NO CHANGE	
	1TL3	RESTROOM	18	NO CHANGE	
	1WF1	LIBRARY ROOM	23	NO CHANGE	
	1WF2	MECHANICAL ROOM	30	NO CHANGE	
	2LV1	RESTROOM	105A	NO CHANGE	
	2LV2	RESTROOM	105A	NO CHANGE	
	2LV3	RESTROOM	105A	NO CHANGE	
	2LV4	RESTROOM	107A	NO CHANGE	
	2LV5	RESTROOM	107A	NO CHANGE	
	2LV6	RESTROOM	107A	NO CHANGE	
	2SD1	JANITOR'S CLOSET	104	LABEL	
	2SD2	OFFICE AREA	112	LABEL	
	2SD3	BREAK AREA	130	LABEL	
	2TL1	RESTROOM	105A	NO CHANGE	

TABLE 2: TA3-207 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-207-OPN-1 CONT. SANITARY	2TL2	RESTROOM	105A	NO CHANGE	NO
	2TL3	RESTROOM	105A	NO CHANGE	
	2TL4	RESTROOM	107A	NO CHANGE	
	2TL5	RESTROOM	107A	NO CHANGE	
	2TL6	RESTROOM	107A	NO CHANGE	
	2UR1	RESTROOM	105A	NO CHANGE	
	2UR2	RESTROOM	105A	NO CHANGE	
	2WF1	CORRIDOR	100	NO CHANGE	
	3FS1	KITCHEN	209A	NO CHANGE	
	3LV1	RESTROOM	203A	NO CHANGE	
	3LV2	RESTROOM	203A	NO CHANGE	
	3LV3	RESTROOM	203A	NO CHANGE	
	3LV4	RESTROOM	205A	NO CHANGE	
	3LV5	RESTROOM	205A	NO CHANGE	
	3LV6	RESTROOM	205A	NO CHANGE	
	3SD1	JANITOR'S CLOSET	209B	LABEL	
	3SD2	KITCHEN	209A	LABEL	
	3TL1	RESTROOM	203A	NO CHANGE	
	3TL2	RESTROOM	203A	NO CHANGE	
	3TL3	RESTROOM	203A	NO CHANGE	
	3TL4	RESTROOM	205A	NO CHANGE	
	3TL5	RESTROOM	205A	NO CHANGE	
	3TL6	RESTROOM	205A	NO CHANGE	
	3UR1	RESTROOM	203A	NO CHANGE	
	3UR2	RESTROOM	203A	NO CHANGE	
	3WF1	CORRIDOR	202	NO CHANGE	
4FS1	MECHANICAL RM.	300	METER		
3-207-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-3	N/A	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-4	N/A	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-5	N/A	HTG. HW. DRAIN	30	NOI	NO
3-207-OPN-6	N/A	HTG. HW. DRAIN	30	NOI	NO
3-207-OPN-7	N/A	HTG. HW. DRAIN	30	NOI	NO
3-207-OPN-8 DAYLIGHT	RD4	ROOF	EXTER	NO CHANGE	NO
	RD5	ROOF	EXTER	NO CHANGE	
	RD6	ROOF	EXTER	NO CHANGE	
	RD7	ROOF	EXTER	NO CHANGE	
	RD8	ROOF	EXTER	NO CHANGE	
	RD9	ROOF	EXTER	NO CHANGE	
3-207-OPN-9	2DD4	DECK	EXTER	NO CHANGE	NO

TABLE 2: TA3-207 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-207-OPN-10	2DD3	DECK	EXTER	NO CHANGE	NO
3-207-OPN-11	2DD2	DECK	EXTER	NO CHANGE	NO
3-207-OPN-12	N/A	FIRE LINE DRAIN	10	NOI	NO
3-207-OPN-13	2DD1	DECK	EXTER	NO CHANGE	NO
3-207-OPN-14 DAYLIGHT	OD1	ROOF	EXTER	NO CHANGE	NO
	OD2	ROOF	EXTER	NO CHANGE	
	OD3	ROOF	EXTER	NO CHANGE	
3-207-OPN-15	RD1	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-16	RD2	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-17 DAYLIGHT	2AD1	ENTRY	100	NO CHANGE	NO
	2AD2	ENTRY	100	NO CHANGE	
3-207-OPN-18	RD3	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-19	N/A	FIRE LINE DRAIN	30	NOI	NO
3-207-OPN-20	N/A	FIRE LINE DRAIN	30	NOI	NO
3-207-OPN-21	2DD6	DECK	EXTER	NO CHANGE	NO
3-207-OPN-22	2DD5	DECK	EXTER	NO CHANGE	NO
3-207-OPN-23	OD4	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-24	OD5	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-25	OD6	ROOF	EXTER	NO CHANGE	NO
3-207-OPN-26	N/A	FIRE LINE DRAIN	300	NOI	NO

TABLE 3: TA3-400 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-400-OPN-1 SANITARY	1LV1	RESTROOM	102	NO CHANGE	NO
	1LV2	RESTROOM	101	NO CHANGE	
	1SD1	BREAK AREA	100	LABEL	
	1TL1	RESTROOM	102	NO CHANGE	
	1TL2	RESTROOM	101	NO CHANGE	
	1UR1	RESTROOM	102	NO CHANGE	
	1WF1	CORRIDOR	100	NO CHANGE	
3-400-OPN-2	N/A	CONDENS. WATER	EXTER	NOI	NO
3-400-OPN-3	N/A	ROOF	EXTER	NO CHANGE	NO
3-400-OPN-4	N/A	ROOF	EXTER	NO CHANGE	NO
3-400-OPN-5	N/A	ROOF	EXTER	NO CHANGE	NO
3-400-OPN-6	N/A	ROOF	EXTER	NO CHANGE	NO
3-400-OPN-7	N/A	CONDENS. WATER	EXTER	NOI	NO
3-400-OPN-8	1WH1	WATER HTR. DRAIN	101	NOI	NO

TABLE 4 TA3-401 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-401-OPN-1 SANITARY	1LV1	RESTROOM	110	NO CHANGE	NO
	1LV2	RESTROOM	108	NO CHANGE	
	1TL1	RESTROOM	110	NO CHANGE	
	1TL2	RESTROOM	108	NO CHANGE	
	1UR1	RESTROOM	110	NO CHANGE	
	1WF1	CORRIDOR	100	NO CHANGE	
3-401-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-401-OPN-3	N/A	ROOF	EXTER	NO CHANGE	NO
3-401-OPN-4	N/A	CONDENS. WATER	N/A	NOI	NO
3-401-OPN-5	1WH1	WATER HTR. DRAIN	108	NOI	NO
3-401-OPN-6	N/A	CONDENS. WATER	N/A	NOI	NO
3-401-OPN-7	N/A	ROOF	EXTER	NO CHANGE	NO
3-401-OPN-8	N/A	ROOF	EXTER	NO CHANGE	NO

TABLE 5: TA3-402 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-402-OPN-1 SANITARY	1LV1	RESTROOM	110	NO CHANGE	NO
	1LV2	RESTROOM	108	NO CHANGE	
	1TL1	RESTROOM	110	NO CHANGE	
	1TL2	RESTROOM	108	NO CHANGE	
	1UR1	RESTROOM	110	NO CHANGE	
	1WF1	CORRIDOR	100	NO CHANGE	
3-402-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-402-OPN-3	N/A	ROOF	EXTER	NO CHANGE	NO
3-402-OPN-4	N/A	CONDENS. WATER	N/A	NOI	NO
3-402-OPN-5	1WH1	WATER HTR. DRAIN	108	NOI	NO
3-402-OPN-6	N/A	CONDENS. WATER	N/A	NOI	NO
3-402-OPN-7	N/A	ROOF	EXTER	NO CHANGE	NO
3-402-OPN-8	N/A	ROOF	EXTER	NO CHANGE	NO

TABLE 6: TA3-403 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-403-OPN-1 SANITARY	1LV1	RESTROOM	102	NO CHANGE	NO
	1LV2	RESTROOM	101	NO CHANGE	
	1SD1	BREAK AREA	100	LABEL	
	1TL1	RESTROOM	102	NO CHANGE	
	1TL2	RESTROOM	101	NO CHANGE	
	1UR1	RESTROOM	102	NO CHANGE	
3-403-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-403-OPN-3	N/A	ROOF	EXTER	NO CHANGE	NO
3-403-OPN-4	N/A	CONDENS. WATER	N/A	NOI	NO
3-403-OPN-5	1WH1	WATER HTR. DRAIN	101	NOI	NO
3-403-OPN-6	N/A	CONDENS. WATER	N/A	NOI	NO
3-403-OPN-7	N/A	ROOF	EXTER	NO CHANGE	NO
3-403-OPN-8	N/A	ROOF	EXTER	NO CHANGE	NO

TABLE 7: TA3-443 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-443-OPN-1 SANITARY	1CD1	UTILITY ROOM	105	NO CHANGE	NO
	1ED1	UTILITY ROOM	105	NO CHANGE	
	1LV1	RESTROOM	106A	NO CHANGE	
	1LV2	RESTROOM	106A	NO CHANGE	
	1LV3	RESTROOM	104A	NO CHANGE	
	1LV4	RESTROOM	104A	NO CHANGE	
	1SD1	UTILITY ROOM	105	LABEL	
	1SD2	KITCHEN	103	LABEL	
	1TL1	RESTROOM	106A	NO CHANGE	
	1TL2	RESTROOM	106A	NO CHANGE	
	1TL3	RESTROOM	104A	NO CHANGE	
	1TL4	RESTROOM	104A	NO CHANGE	
	1UR1	RESTROOM	104A	NO CHANGE	
3-443-OPN-2 DAYLIGHT	1AD1	DRIVEWAY	EXTER	NO CHANGE	NO
	RD1	ROOF	EXTER	NO CHANGE	
	RD2	ROOF	EXTER	NO CHANGE	
	RD3	ROOF	EXTER	NO CHANGE	
	RD4	ROOF	EXTER	NO CHANGE	

TABLE 8: TA3-452 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-452-OPN-1 SANITARY	1LV1	RESTROOM	104	NO CHANGE	NO
	1TL1	RESTROOM	104	NO CHANGE	
	1WF1	CORRIDOR	101	NO CHANGE	
3-452-OPN-1	N/A	CONDENS. WATER	EXTER	NOI	NO

TABLE 9: TA3-490 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-490-OPN-1 SANITARY	1FD1	RESTROOM	101	NO CHANGE	NO
	1FD2	RESTROOM	102	NO CHANGE	
	1LV1	RESTROOM	101	NO CHANGE	
	1LV2	RESTROOM	102	NO CHANGE	
	1LV3	RESTROOM	102	NO CHANGE	
	1SD1	BREAK ROOM	103	LABEL	
	1SD2	JANITOR'S CLOSET	114	LABEL	
	1TL1	RESTROOM	101	NO CHANGE	
	1TL2	RESTROOM	102	NO CHANGE	
	1UR1	RESTROOM	101	NO CHANGE	
	1WF1	LOBBY	100A	NO CHANGE	
3-490-OPN-2	RD2	ROOF	EXTER	NO CHANGE	NO
3-490-OPN-3	RD3	ROOF	EXTER	NO CHANGE	NO
3-490-OPN-4	RD4	ROOF	EXTER	NO CHANGE	NO
3-490-OPN-5	RD1	ROOF	EXTER	NO CHANGE	NO

TABLE 10: TA3-1616 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-1616-OPN-1	N/A	ROOF	EXTER	NO CHANGE	NO
3-1616-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-1616-OPN-3	N/A	CONDENS. WATER	107	NOI	NO
3-1616-OPN-4	1WH1	WATER HTR. DRAIN	107	NOI	NO
3-1616-OPN-5	N/A	ROOF	EXTER	NO CHANGE	NO

TABLE 11: TA3-1617 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-1617-OPN-1 SANITARY	1LV1	RESTROOM	103	NO CHANGE	NO
	1LV2	RESTROOM	104	NO CHANGE	
	1SD1	JANITOR'S CLOSET	155	LABEL	
	1SD2	BREAK AREA	150	LABEL	
	1TL1	RESTROOM	103	NO CHANGE	
	1TL2	RESTROOM	104	NO CHANGE	
3-1617-OPN-2	N/A	ROOF	EXTER	NO CHANGE	NO
3-1617-OPN-3	1WH1	WATER HTR. DRAIN	150	NOI	NO
3-1617-OPN-4	N/A	CONDENS. WATER	154	NOI	NO
3-1617-OPN-5	N/A	ROOF	EXTER	NO CHANGE	NO

TABLE 12: TA3-1929 DRAIN SUMMARY

OUTFALL NUMBER	ID NUMBER	ROOM ACTIVITY	ROOM NUMBER	STATUS OR RECOMMENDATIONS	EPA FORM PREPARED
3-1929-OPN-1	OD1	ROOF	EXTER	NO CHANGE	NO
3-1929-OPN-2	OD2	ROOF	EXTER	NO CHANGE	NO
3-1929-OPN-3 DAYLIGHT	RD1	ROOF	EXTER	NO CHANGE	NO
	RD2	ROOF	EXTER	NO CHANGE	
3-1929-OPN-4	RD3	ROOF	EXTER	NO CHANGE	NO

TABLE 13: NON-DRAIN RECOMMENDATIONS

TA #	BLDG. #	ROOM/AREA	RECOMMENDATION
3	105	101	PROVIDE SECONDARY CONTAINMENT FOR OIL DRUMS
3	105	OIL PIT	DECOMMISSION/REMOVE OIL STORAGE PIT
3	207	30	REPAIR PUMPS OR PROVIDE SECONDARY CONTAINMENT

TABLE 14
SUMMARY OF ABBREVIATIONS

ABBREVIATION	MEANING
AD	Area Storm Drain
CD	Cup Drain
DD	Deck Drain
ED	Equipment Drain
FD	Floor Drain
FS	Floor Sink
LV	Lavatory
MH	Manhole
OD	Roof Overflow Drain
RD	Roof Drain
--- SD ---	Storm Drain Pipe
SD	Sink
SH	Shower
SLS	Sewage Lift Station
--- SS ---	Sanitary Sewer Pipe
SP	Sump Pump
TD	Trench Drain
TL	Toilet
UR	Urinal
WF	Water Fountain
WH	Water Heater

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	105	3-105-OPN-01	DAYLIGHT	RD06	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD07	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD08	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD09	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD10	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD11	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD12	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD13	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD14	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD15	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-01	DAYLIGHT	RD16	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-02	01S/SWSC	1SD4	160	OPEN BAY AREA		NO FLOW	No	SINK (REMOVED)
3	105	3-105-OPN-02	01S/SWSC	1SD5	160	OPEN BAY AREA		NO FLOW	No	SINK (REMOVED)
3	105	3-105-OPN-03	DAYLIGHT	1FD12	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1FD13	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1FD14	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1FD15	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1FD16	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1FD17	160	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-03	DAYLIGHT	1TD6	160	OPEN BAY AREA TRENCH		NO FLOW	No	NONE
3	105	3-105-OPN-03	DAYLIGHT	1TD7	160	OPEN BAY AREA TRENCH		NO FLOW	No	NONE
3	105	3-105-OPN-04	DAYLIGHT	N/A	123	OFFICE		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-05	01S/SWSC	S2FD1	101	SUB-BASEMENT - LEVEL 2		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-05	01S/SWSC	S2FD2	101	SUB-BASEMENT - LEVEL 2		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-05	01S/SWSC	S2FD3	101	SUB-BASEMENT - LEVEL 2		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-05	01S/SWSC	S2FD4	101	SUB-BASEMENT - LEVEL 2		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-05	01S/SWSC	S2SD1	101	SUB-BASEMENT - LEVEL 2		5 DAYS PER WEEK	No	HAND WASH SINK
3	105	3-105-OPN-05	01S/SWSC	S2SP1	101	SUB-BASEMENT - LEVEL 2		5 DAYS PER WEEK	No	SANITARY EFFLUENT
3	105	3-105-OPN-05	01S/SWSC	S2TD1	101	SUB-BASEMENT - LEVEL 2		NO FLOW	No	TRENCH FLOOR WASHINGS
3	105	3-105-OPN-06	DAYLIGHT	N/A	160	OPEN BAY AREA		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-07	DAYLIGHT	RD17	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-07	DAYLIGHT	RD18	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-08	DAYLIGHT	1WH1	179	RESTROOM		FLOW IS NIL	No	WATER HEATER DRAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	105	3-105-OPN-09	DAYLIGHT	N/A	189	OPEN BAY AREA		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-10	DAYLIGHT	N/A	189	OPEN BAY AREA		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-11	OIL PIT	1TD8	184	WORK ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1FD01	186	OPEN BAY AREA		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1FD02	186	OPEN BAY AREA		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-12	DAYLIGHT	1TD1	180	EMPTY ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1TD2	180	EMPTY ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1TD3	181	EMPTY ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1TD4	190	EMPTY ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	1TD5	190	EMPTY ROOM		NO FLOW	No	NONE
3	105	3-105-OPN-12	DAYLIGHT	RD01	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-12	DAYLIGHT	RD02	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-12	DAYLIGHT	RD03	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-12	DAYLIGHT	RD04	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-12	DAYLIGHT	RD05	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	105	3-105-OPN-13	DAYLIGHT	N/A	184	WORK ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-14	01S/SWSC	1LV7	179	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	105	3-105-OPN-14	01S/SWSC	1SD1	160	OPEN BAY AREA		NO FLOW	No	SINK (REMOVED)
3	105	3-105-OPN-14	01S/SWSC	1SD2	160	OPEN BAY AREA		NO FLOW	No	SINK (REMOVED)
3	105	3-105-OPN-14	01S/SWSC	1SD3	160	OPEN BAY AREA		NO FLOW	No	SINK (REMOVED)
3	105	3-105-OPN-14	01S/SWSC	1TL4	179	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	105	3-105-OPN-14	01S/SWSC	1UR3	179	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	105	3-105-OPN-14	01S/SWSC	1WF3	N/A	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	105	3-105-OPN-14	01S/SWSC	2FD2	200	EMPTY ROOM		FLOW IS NIL	No	COOLING COILS CONDENSED WATER
3	105	3-105-OPN-15	DAYLIGHT	N/A	180	EMPTY ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-16	DAYLIGHT	N/A	180	EMPTY ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	105	3-105-OPN-17	01S/SWSC	1FD10	161A	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-17	01S/SWSC	1FD11	161	CORRIDOR		FLOW IS NIL	No	EMERG. SHOWER/AIR COMPR. DRAIN
3	105	3-105-OPN-17	01S/SWSC	1LV1	161A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	105	3-105-OPN-17	01S/SWSC	1LV2	161A	RESTROOM		NO FLOW	No	LAVATORY (REMOVED)
3	105	3-105-OPN-17	01S/SWSC	1UR1	161A	RESTROOM		NO FLOW	No	URINAL (REMOVED)
3	105	3-105-OPN-17	01S/SWSC	1WF1	160A	OPEN BAY AREA		NO FLOW	No	WATER FOUNTAIN (REMOVED)
3	105	3-105-OPN-18	DAYLIGHT	N/A	162	WORK ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	105	3-105-OPN-19	01S/SWSC	1FD03	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD04	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD05	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD06	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD07	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD08	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	1FD09	161B	MECHANICAL ROOM		NO FLOW	No	NONE (PLUGGED)
3	105	3-105-OPN-19	01S/SWSC	2FD1	MEZZ.	MECHANICAL ROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-20	01S/SWSC	1FD18	155	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-20	01S/SWSC	1FD19	151	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	105	3-105-OPN-20	01S/SWSC	1LV4	155	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	105	3-105-OPN-20	01S/SWSC	1LV5	155	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	105	3-105-OPN-20	01S/SWSC	1LV6	151	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	105	3-105-OPN-20	01S/SWSC	1SD6	153	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	105	3-105-OPN-20	01S/SWSC	1TL1	155	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	105	3-105-OPN-20	01S/SWSC	1TL2	155	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	105	3-105-OPN-20	01S/SWSC	1TL3	151	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	105	3-105-OPN-20	01S/SWSC	1UR2	155	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	105	3-105-OPN-20	01S/SWSC	1WF3	A100	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	105	3-105-OPN-21	DAYLIGHT	N/A	107	OFFICE		ANNUAL TESTING	No	FIRE LINE DRAIN
3	207	3-207-OPN-01	01S/SWSC	1FD1	17	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	207	3-207-OPN-01	01S/SWSC	1FD2	18	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	207	3-207-OPN-01	01S/SWSC	1FS1	30	MECHANICAL ROOM		5 DAYS PER WEEK	No	SERVICE SINK/WATER FOUNTAIN
3	207	3-207-OPN-01	01S/SWSC	1FS2	30	MECHANICAL ROOM		FLOW IS NIL	No	FIRE LINE DRAIN/BACKFLOW PREV.
3	207	3-207-OPN-01	01S/SWSC	1FS3	30	MECHANICAL ROOM		FLOW IS NIL	No	WATER HTR DRAIN/CONDENS. WATER
3	207	3-207-OPN-01	01S/SWSC	1FS4	30	MECHANICAL ROOM		FLOW IS NIL	No	AIR COMPRESSOR BLEED-OFF
3	207	3-207-OPN-01	01S/SWSC	1FS5	30	MECHANICAL ROOM		FLOW IS NIL	No	CONDENSED WATER
3	207	3-207-OPN-01	01S/SWSC	1LV1	25	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	1LV2	17	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	1LV3	18	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	1SD1	16	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	207	3-207-OPN-01	01S/SWSC	1SD2	30	MECHANICAL ROOM		5 DAYS PER WEEK	No	SERVICE SINK
3	207	3-207-OPN-01	01S/SWSC	1TL1	25	RESTROOM		5 DAYS PER WEEK	No	TOILET

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	207	3-207-OPN-01	01S/SWSC	1TL2	17	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	1TL3	18	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	1WF1	23	LIBRARY ROOM		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	207	3-207-OPN-01	01S/SWSC	1WF2	30	MECHANICAL ROOM		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	207	3-207-OPN-01	01S/SWSC	2LV1	105A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2LV2	105A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2LV3	105A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2LV4	107A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2LV5	107A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2LV6	107A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	2SD1	104	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	207	3-207-OPN-01	01S/SWSC	2SD2	112	OFFICE AREA		5 DAYS PER WEEK	No	HAND WASHING
3	207	3-207-OPN-01	01S/SWSC	2SD3	130	BREAK AREA		5 DAYS PER WEEK	No	DISH WASHING
3	207	3-207-OPN-01	01S/SWSC	2TL1	105A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2TL2	105A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2TL3	105A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2TL4	107A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2TL5	107A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2TL6	107A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	2UR1	105A	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	207	3-207-OPN-01	01S/SWSC	2UR2	105A	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	207	3-207-OPN-01	01S/SWSC	2WF1	100	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	207	3-207-OPN-01	01S/SWSC	3FS1	209A	KITCHEN		5 DAYS PER WEEK	No	DISH WASHER/WATER HTR/ICE MACH
3	207	3-207-OPN-01	01S/SWSC	3LV1	203A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3LV2	203A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3LV3	203A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3LV4	205A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3LV5	205A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3LV6	205A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	207	3-207-OPN-01	01S/SWSC	3SD1	209B	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	207	3-207-OPN-01	01S/SWSC	3SD2	209A	KITCHEN		5 DAYS PER WEEK	No	POT WASHING
3	207	3-207-OPN-01	01S/SWSC	3TL1	203A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	3TL2	203A	RESTROOM		5 DAYS PER WEEK	No	TOILET

REPORT # 56

TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	207	3-207-OPN-01	01S/SWSC	3TL3	203A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	3TL4	205A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	3TL5	205A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	3TL6	205A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	207	3-207-OPN-01	01S/SWSC	3UR1	203A	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	207	3-207-OPN-01	01S/SWSC	3UR2	203A	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	207	3-207-OPN-01	01S/SWSC	3WF1	202	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	207	3-207-OPN-01	01S/SWSC	4FS1	300	MECHANICAL ROOM		6 MONTHS PER YEA	Yes	COOLING TOWER BLOWDOWN
3	207	3-207-OPN-02	DAYLIGHT	N/A	N/A	ROOF (SOLAR PANELS)		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-03	DAYLIGHT	N/A	N/A	ROOF (SOLAR PANELS)		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-04	DAYLIGHT	N/A	N/A	ROOF (SOLAR PANELS)		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-05	DAYLIGHT	N/A	30	MECHANICAL ROOM		FLOW IS NIL	No	HTG. WATER PRESS. RELIEF VALVE
3	207	3-207-OPN-06	DAYLIGHT	N/A	30	MECHANICAL ROOM		FLOW IS NIL	No	HTG. WATER PRESS. RELIEF VALVE
3	207	3-207-OPN-07	DAYLIGHT	N/A	30	MECHANICAL ROOM		FLOW IS NIL	No	HTG. WATER PRESS. RELIEF VALVE
3	207	3-207-OPN-08	DAYLIGHT	RD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-08	DAYLIGHT	RD5	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-08	DAYLIGHT	RD6	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-08	DAYLIGHT	RD7	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-08	DAYLIGHT	RD8	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-08	DAYLIGHT	RD9	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-09	DAYLIGHT	2DD4	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-10	DAYLIGHT	2DD3	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-11	DAYLIGHT	2DD2	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-12	DAYLIGHT	N/A	10	LIBRARY ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	207	3-207-OPN-13	DAYLIGHT	2DD1	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-14	DAYLIGHT	OD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-14	DAYLIGHT	OD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-14	DAYLIGHT	OD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-15	DAYLIGHT	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-16	DAYLIGHT	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-17	DAYLIGHT	2AD1	100	ENTRY		12 MONTHS/YEAR	No	STORM WATER
3	207	3-207-OPN-17	DAYLIGHT	2AD2	100	ENTRY		12 MONTHS/YEAR	No	STORM WATER
3	207	3-207-OPN-18	DAYLIGHT	RD3	N/A	ROOF		MOSTLY SUMMER	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	207	3-207-OPN-19	DAYLIGHT	N/A	30	MECHANICAL ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	207	3-207-OPN-20	DAYLIGHT	N/A	30	MECHANICAL ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	207	3-207-OPN-21	DAYLIGHT	2DD6	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-22	DAYLIGHT	2DD5	N/A	ROOF DECK		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-23	DAYLIGHT	OD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-24	DAYLIGHT	OD5	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-25	DAYLIGHT	OD6	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	207	3-207-OPN-26	DAYLIGHT	N/A	300	MECHANICAL ROOM		ANNUAL TESTING	No	FIRE LINE DRAIN
3	400	3-400-OPN-1	01S/SWSC	1LV1	102	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	400	3-400-OPN-1	01S/SWSC	1LV2	101	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	400	3-400-OPN-1	01S/SWSC	1SD1	100	BREAK AREA		5 DAYS PER WEEK	No	DISH WASHING
3	400	3-400-OPN-1	01S/SWSC	1TL1	102	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	400	3-400-OPN-1	01S/SWSC	1TL2	101	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	400	3-400-OPN-1	01S/SWSC	1UR1	102	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	400	3-400-OPN-1	01S/SWSC	1WF1	100	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	400	3-400-OPN-2	DAYLIGHT	N/A	N/A	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	400	3-400-OPN-3	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	400	3-400-OPN-4	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	400	3-400-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	400	3-400-OPN-6	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	400	3-400-OPN-7	DAYLIGHT	N/A	N/A	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	400	3-400-OPN-8	DAYLIGHT	N/A	101	RESTROOM		FLOW IS NIL	No	WATER HEATER DRAIN
3	401	3-401-OPN-1	01S/SWSC	1LV1	110	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	401	3-401-OPN-1	01S/SWSC	1LV2	108	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	401	3-401-OPN-1	01S/SWSC	1TL1	110	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	401	3-401-OPN-1	01S/SWSC	1TL2	108	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	401	3-401-OPN-1	01S/SWSC	1UR1	110	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	401	3-401-OPN-1	01S/SWSC	1WF1	100	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	401	3-401-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	401	3-401-OPN-3	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	401	3-401-OPN-4	DAYLIGHT	N/A	N/A	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	401	3-401-OPN-5	DAYLIGHT	N/A	108	RESTROOM		FLOW IS NIL	No	WATER HEATER DRAIN
3	401	3-401-OPN-6	DAYLIGHT	N/A	N/A	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER

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TA	BLDG	OUTLET	EPA	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES	
		PIPING NO	OUTFALL #								
3	401	3-401-OPN-7	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	401	3-401-OPN-8	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	402	3-402-OPN-1	01S/SWSC	1LV1	110	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	402	3-402-OPN-1	01S/SWSC	1LV2	108	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	402	3-402-OPN-1	01S/SWSC	1TL1	110	RESTROOM			5 DAYS PER WEEK	No	TOILET
3	402	3-402-OPN-1	01S/SWSC	1TL2	108	RESTROOM			5 DAYS PER WEEK	No	TOILET
3	402	3-402-OPN-1	01S/SWSC	1UR1	110	RESTROOM			5 DAYS PER WEEK	No	URINAL
3	402	3-402-OPN-1	01S/SWSC	1WF1	100	CORRIDOR			5 DAYS PER WEEK	No	WATER FOUNTAIN
3	402	3-402-OPN-2	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	402	3-402-OPN-3	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	402	3-402-OPN-4	DAYLIGHT	N/A	N/A	MECHANICAL ROOM			6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	402	3-402-OPN-5	DAYLIGHT	N/A	N/A	RESTROOM			FLOW IS NIL	No	WATER HEATER DRAIN
3	402	3-402-OPN-6	DAYLIGHT	N/A	N/A	MECHANICAL ROOM			6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	402	3-402-OPN-7	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	402	3-402-OPN-8	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	403	3-403-OPN-1	01S/SWSC	1LV1	102	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	403	3-403-OPN-1	01S/SWSC	1LV2	101	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	403	3-403-OPN-1	01S/SWSC	1SD1	100	BREAK AREA			5 DAYS PER WEEK	No	DISH WASHING
3	403	3-403-OPN-1	01S/SWSC	1TL1	102	RESTROOM			5 DAYS PER WEEK	No	TOILET
3	403	3-403-OPN-1	01S/SWSC	1TL2	101	RESTROOM			5 DAYS PER WEEK	No	TOILET
3	403	3-403-OPN-1	01S/SWSC	1UR1	102	RESTROOM			5 DAYS PER WEEK	No	URINAL
3	403	3-403-OPN-2	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	403	3-403-OPN-3	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	403	3-403-OPN-4	DAYLIGHT	N/A	N/A	MECHANICAL ROOM			6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	403	3-403-OPN-5	DAYLIGHT	N/A	N/A	RESTROOM			FLOW IS NIL	No	WATER HEATER DRAIN
3	403	3-403-OPN-6	DAYLIGHT	N/A	N/A	MECHANICAL ROOM			6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	403	3-403-OPN-7	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	403	3-403-OPN-8	DAYLIGHT	N/A	N/A	ROOF			MOSTLY SUMMER	Yes	STORM WATER
3	443	3-443-OPN-1	01S/SWSC	1CD1	105	UTILITY ROOM			FLOW IS NIL	No	WATER HEATER DRAIN
3	443	3-443-OPN-1	01S/SWSC	1ED1	105	UTILITY ROOM			5 DAYS PER WEEK	No	DISH WASHER/BACKFLOW PREVENTER
3	443	3-443-OPN-1	01S/SWSC	1LV1	106A	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	443	3-443-OPN-1	01S/SWSC	1LV2	106A	RESTROOM			5 DAYS PER WEEK	No	LAVATORY
3	443	3-443-OPN-1	01S/SWSC	1LV3	104A	RESTROOM			5 DAYS PER WEEK	No	LAVATORY

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TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	443	3-443-OPN-1	01S/SWSC	1LV4	104A	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	443	3-443-OPN-1	01S/SWSC	1SD1	105	UTILITY ROOM		5 DAYS PER WEEK	No	SERVICE SINK
3	443	3-443-OPN-1	01S/SWSC	1SD2	103	KITCHEN		5 DAYS PER WEEK	No	DISH WASHING
3	443	3-443-OPN-1	01S/SWSC	1TL1	106A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	443	3-443-OPN-1	01S/SWSC	1TL2	106A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	443	3-443-OPN-1	01S/SWSC	1TL3	104A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	443	3-443-OPN-1	01S/SWSC	1TL4	104A	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	443	3-443-OPN-1	01S/SWSC	1UR1	104A	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	443	3-443-OPN-2	DAYLIGHT	1AD1	N/A	DRIVEWAY		MOSTLY SUMMER	Yes	STORM WATER
3	443	3-443-OPN-2	DAYLIGHT	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	443	3-443-OPN-2	DAYLIGHT	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	443	3-443-OPN-2	DAYLIGHT	RD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	443	3-443-OPN-2	DAYLIGHT	RD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	452	3-452-OPN-1	01S/SWSC	1LV1	104	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	452	3-452-OPN-1	01S/SWSC	1TL1	104	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	452	3-452-OPN-1	01S/SWSC	1WF1	101	CORRIDOR		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	452	3-452-OPN-2	DAYLIGHT	N/A	N/A	EXTERIOR		6 MONTHS/YEAR	Yes	HTG/CLG UNIT CONDENSED WATER
3	490	3-490-OPN-1	01S/SWSC	1FD1	101	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	490	3-490-OPN-1	01S/SWSC	1FD2	102	RESTROOM		FLOW IS NIL	No	FLOOR WASHINGS
3	490	3-490-OPN-1	01S/SWSC	1LV1	101	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	490	3-490-OPN-1	01S/SWSC	1LV2	102	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	490	3-490-OPN-1	01S/SWSC	1LV3	102	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	490	3-490-OPN-1	01S/SWSC	1SD1	103	BREAK ROOM		5 DAYS PER WEEK	No	DISH WASHING
3	490	3-490-OPN-1	01S/SWSC	1SD2	114	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	490	3-490-OPN-1	01S/SWSC	1TL1	101	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	490	3-490-OPN-1	01S/SWSC	1TL2	102	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	490	3-490-OPN-1	01S/SWSC	1UR1	101	RESTROOM		5 DAYS PER WEEK	No	URINAL
3	490	3-490-OPN-1	01S/SWSC	1WF1	100A	LOBBY		5 DAYS PER WEEK	No	WATER FOUNTAIN
3	490	3-490-OPN-2	DAYLIGHT	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	490	3-490-OPN-3	DAYLIGHT	RD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	490	3-490-OPN-4	DAYLIGHT	RD4	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	490	3-490-OPN-5	YLIGHTDAYLIG	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1615	3-1616-OPN-1	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER

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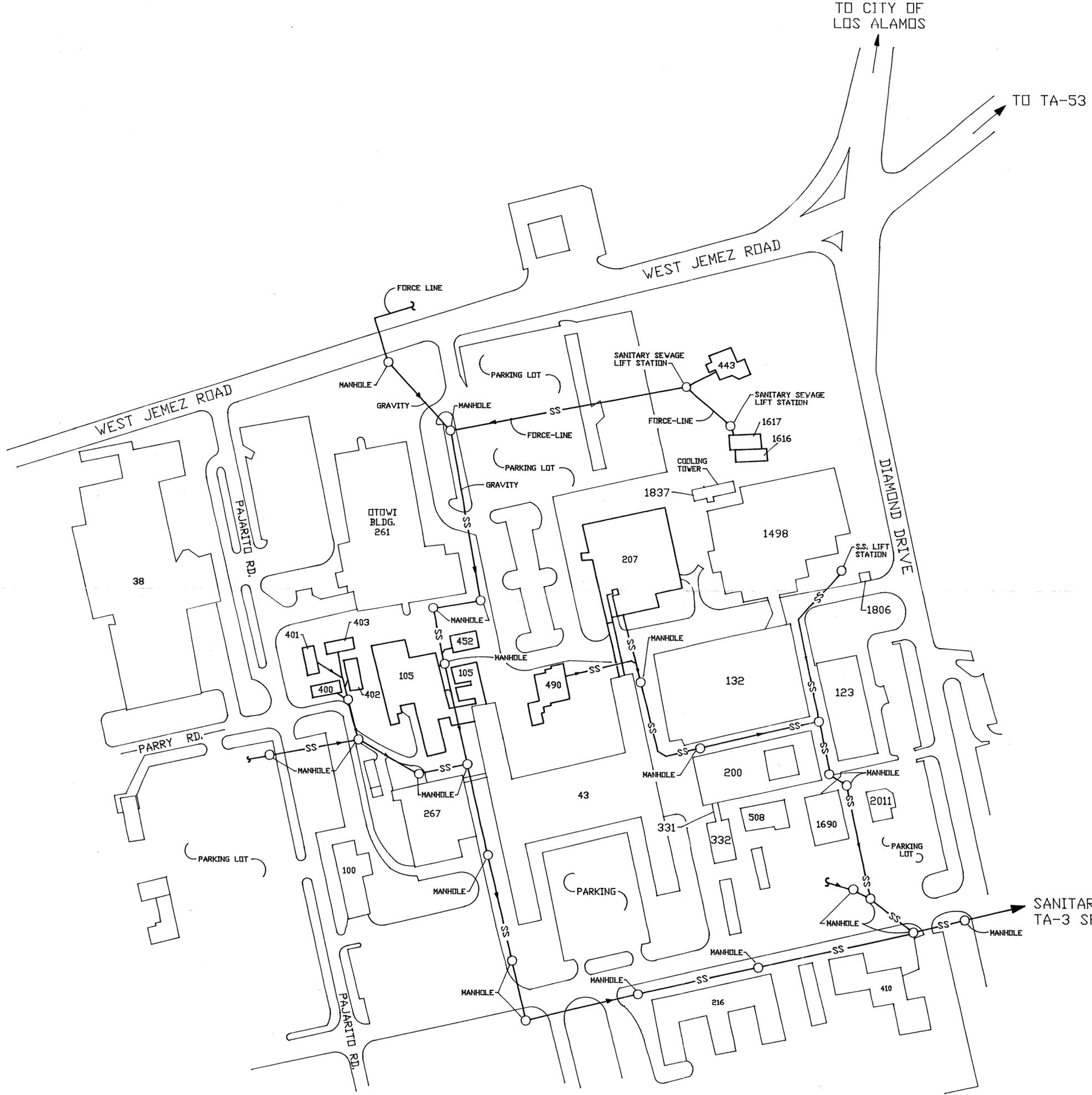
TA	BLDG	OUTLET PIPING NO	EPA OUTFALL #	DRAIN #	ROOM #	ROOM DESCRIPTION	FLOW RATE	PERIODICITY	SEASONAL	SOURCE TYPES
3	1615	3-1616-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1615	3-1616-OPN-3	DAYLIGHT	N/A	107	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	1615	3-1616-OPN-4	DAYLIGHT	1WH1	107	MECHANICAL ROOM		FLOW IS NIL	No	WATER HEATER DRAIN
3	1615	3-1616-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1616	3-1617-OPN-1	01S/SWSC	1LV1	103	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	1616	3-1617-OPN-1	01S/SWSC	1LV2	104	RESTROOM		5 DAYS PER WEEK	No	LAVATORY
3	1616	3-1617-OPN-1	01S/SWSC	1SD1	155	JANITOR'S CLOSET		5 DAYS PER WEEK	No	SERVICE SINK
3	1616	3-1617-OPN-1	01S/SWSC	1SD2	150	BREAK AREA		5 DAYS PER WEEK	No	DISH WASHING
3	1616	3-1617-OPN-1	01S/SWSC	1TL1	103	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	1616	3-1617-OPN-1	01S/SWSC	1TL2	104	RESTROOM		5 DAYS PER WEEK	No	TOILET
3	1616	3-1617-OPN-2	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1616	3-1617-OPN-3	DAYLIGHT	1WH1	150	BREAK AREA		FLOW IS NIL	No	WATER HEATER DRAIN
3	1616	3-1617-OPN-4	DAYLIGHT	N/A	154	MECHANICAL ROOM		6 MONTHS/YEAR	Yes	COOLING COIL CONDENSED WATER
3	1616	3-1617-OPN-5	DAYLIGHT	N/A	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1928	3-1929-OPN-1	DAYLIGHT	OD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1928	3-1929-OPN-2	DAYLIGHT	OD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1928	3-1929-OPN-3	DAYLIGHT	RD1	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1928	3-1929-OPN-3	DAYLIGHT	RD2	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER
3	1928	3-1929-OPN-4	DAYLIGHT	RD3	N/A	ROOF		MOSTLY SUMMER	Yes	STORM WATER

NO

EPA FORMS

DYE STUDY INFORMATION

BUILDIN NUMBER	DRAIN NUMBER	DID DYE REACH EXPECTED DESTINATION?	COMMENTS
3-105	S2FD1	YES	
3-105	S2FD2	YES	
3-105	S2FD4	YES	
3-105	S2SD1	YES	
3-105	S2SP1	YES	
3-105	1FD6	YES	
3-105	1LV1	YES	
3-105	1TL1	YES	
3-105	1TL4	YES	
3-207	1FS1	YES	
3-207	1SD2	YES	
3-207	1TL2	YES	
3-207	2TL1	YES	
3-207	3TL1	YES	
3-207	4FS1	YES	
3-400	1TL1	YES	
3-401	1TL1	YES	
3-402	1TL1	YES	
3-403	1TL1	YES	
3-443	1ED1	YES	
3-443	1LV4	YES	
3-443	1SD2	YES	
3-443	1TL3	YES	
3-452	1TL1	YES	
3-490	1TL2	YES	
3-1616	1TL1	YES	
3-1617	1SD1	YES	

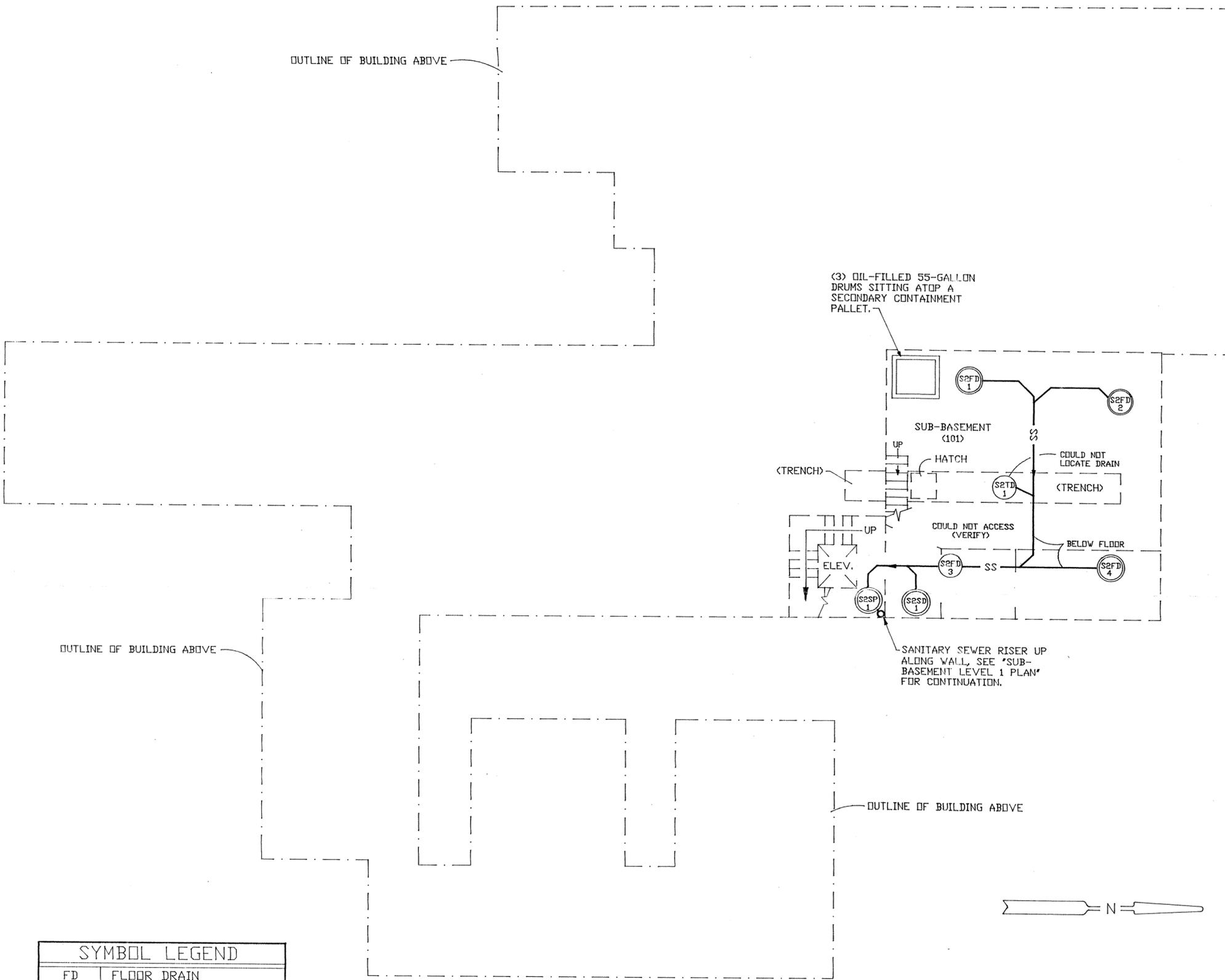


SYMBOL LEGEND	
— SS —	SANITARY SEWER

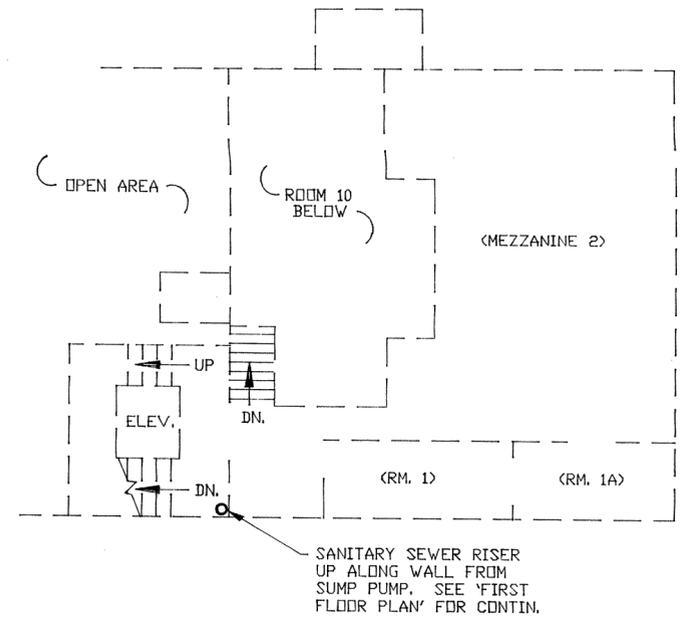
SANITARY SEWER TO TA-3 SEWAGE COLLECTOR

15295-A

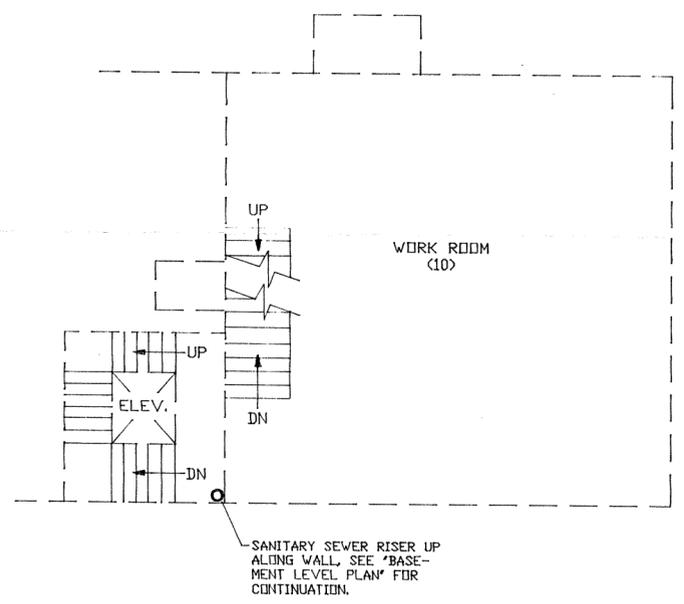
SANTA FE ENGINEERING, LTD.			
TA-3 PARTIAL SITE PLAN		DRAWN	D.A.H.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 1	



SUBBASEMENT LEVEL-2 PLAN
NOT TO SCALE



BASEMENT PLAN
NOT TO SCALE



SUBBASEMENT LEVEL-1 PLAN
NOT TO SCALE

SYMBOL LEGEND	
FD	FLOOR DRAIN
SD	SINK DRAIN
—SD—	STORM DRAIN
SP	SUMP PIT W/PUMP
S2	2ND LEVEL SUBBASEMENT (PREFIX)

⊙ DYE TESTED DRAIN



NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM L.A.N.L. DRAWINGS C-20758, R-3363, R-3364 AND SITE VISITS.

SANTA FE ENGINEERING, LTD.			
TA3-105 BASEMENT and SUB-BASEMENTS DRAIN SCHEMATIC		DRAWN	D.A.H.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 3
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-56	FIGURE 2	

15295-B

3-105-OPN-10
FIRE LINE DRAIN

OPEN BAY AREA
186

OPEN BAY AREA
189

3-105-OPN-9
FIRE SYSTEM
DRAIN

3-105-OPN-8
WATER HTR.
DRAIN

3-105-OPN-7
ROOF DRAIN

3-105-OPN-6
FIRE LINE DRAIN

3-105-OPN-5
SAN. SEWER

3-105-OPN-3
STORM SEWER

3-105-OPN-2
SAN. SEWER

3-105-OPN-4
FIRE LINE DRAIN

3-105-OPN-1
ROOF DRAIN

3-105-OPN-20
SAN. SEWER

3-105-OPN-19
SAN. SEWER

3-105-OPN-18
FIRE LINE DRAIN

1-105-OPN-14
SAN. SEWER

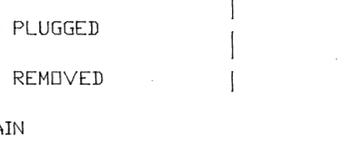
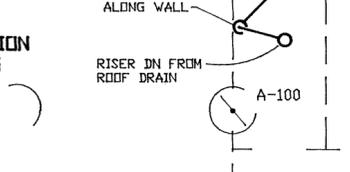
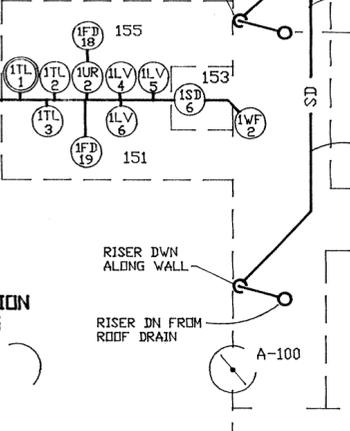
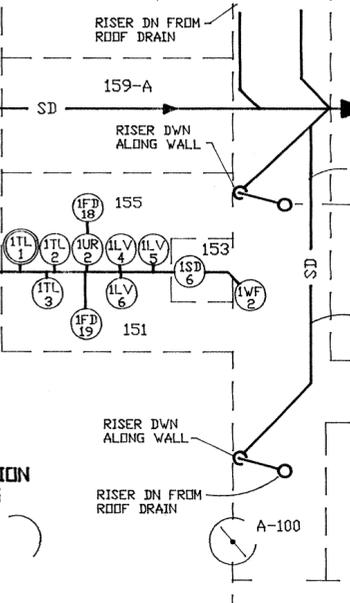
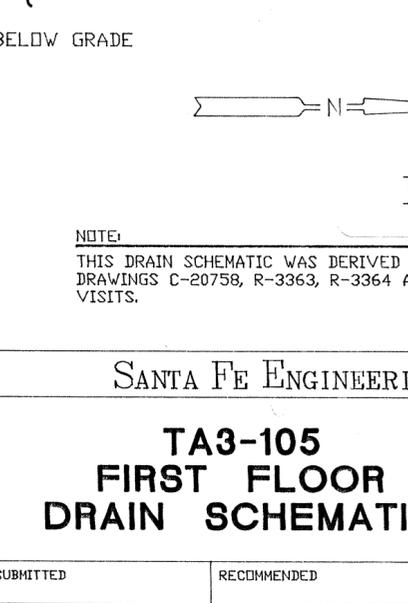
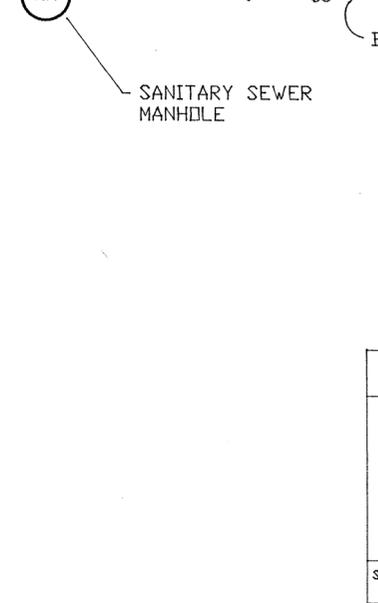
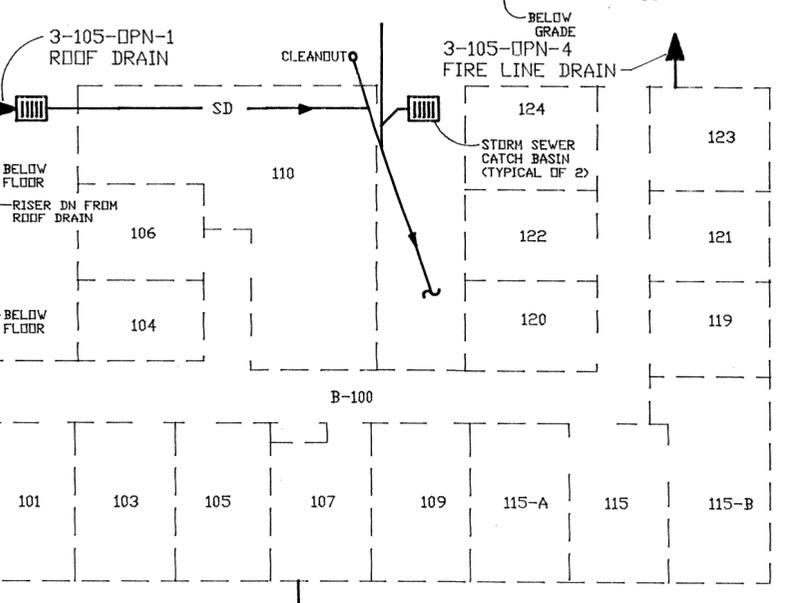
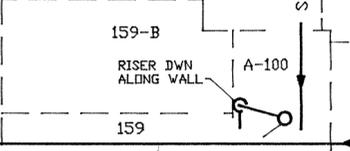
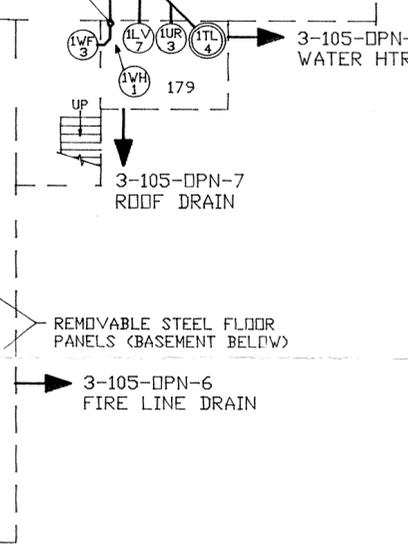
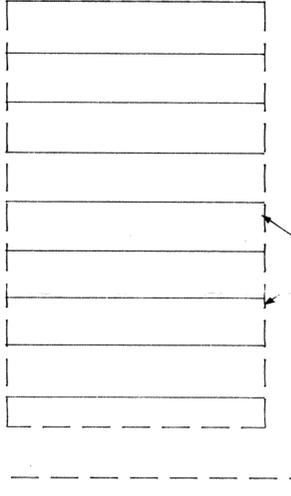
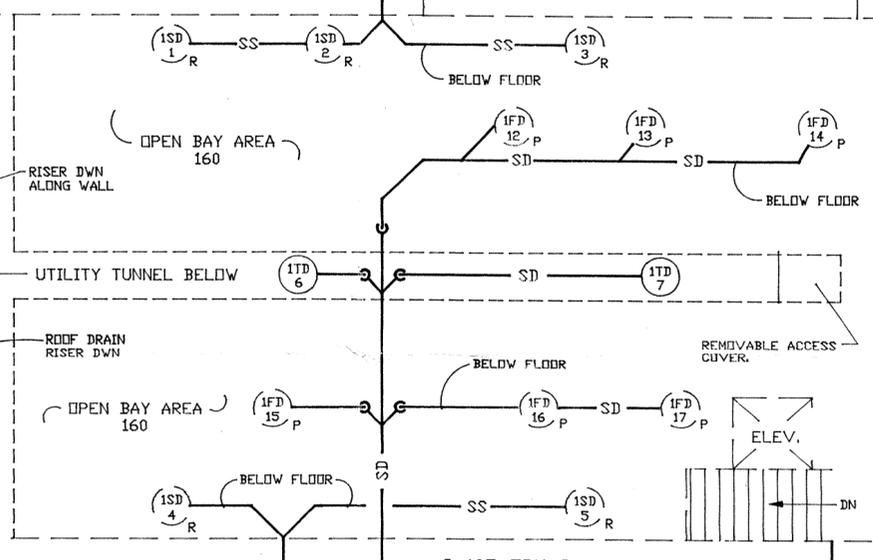
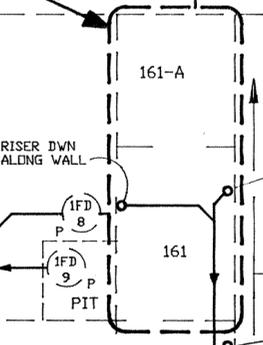
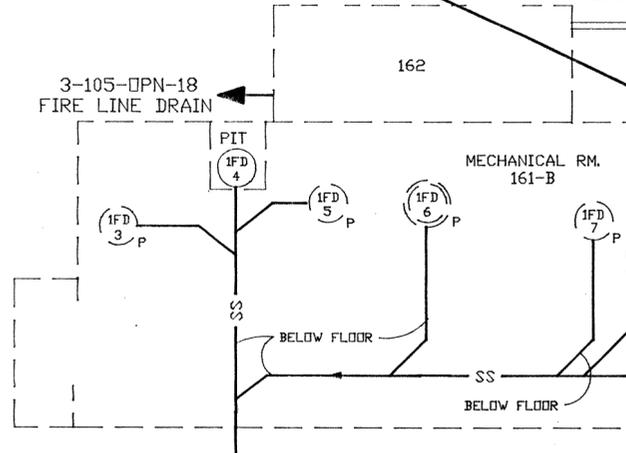
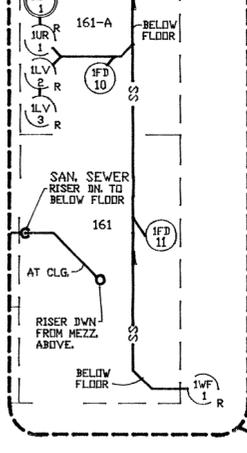
3-105-OPN-17
SAN. SEWER

3-105-OPN-15
3-105-OPN-16
FIRE LINE DRAIN

3-105-OPN-11
TO OIL PIT

3-105-OPN-13
FIRE LINE DR.

3-105-OPN-12
STORM WATER



SANITARY SEWER
BELOW GRADE, SEE
FIGURE 1.

STORM SEWER
BELOW GRADE, SEE
FIGURE 1.

AMINISTRATION
BUILDING
TA-3-43

15295-C

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM L.A.N.L.
DRAWINGS C-20758, R-3363, R-3364 AND SITE
VISITS.

SYMBOL LEGEND	
FD	FLOOR DRAIN
FS	FLOOR SINK
LV	LAVATORY
MH	MANHOLE
RD	ROOF DRAIN
SD	SINK DRAIN
SD	STORM DRAIN
SS	SANITARY SEWER
UR	URINAL
TD	TRENCH DRAIN
TL	TOILET
WF	WATER FOUNTAIN

(P) DRAIN HAS BEEN PLUGGED
(R) DRAIN HAS BEEN REMOVED
(O) DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.

**TA3-105
FIRST FLOOR
DRAIN SCHEMATIC**

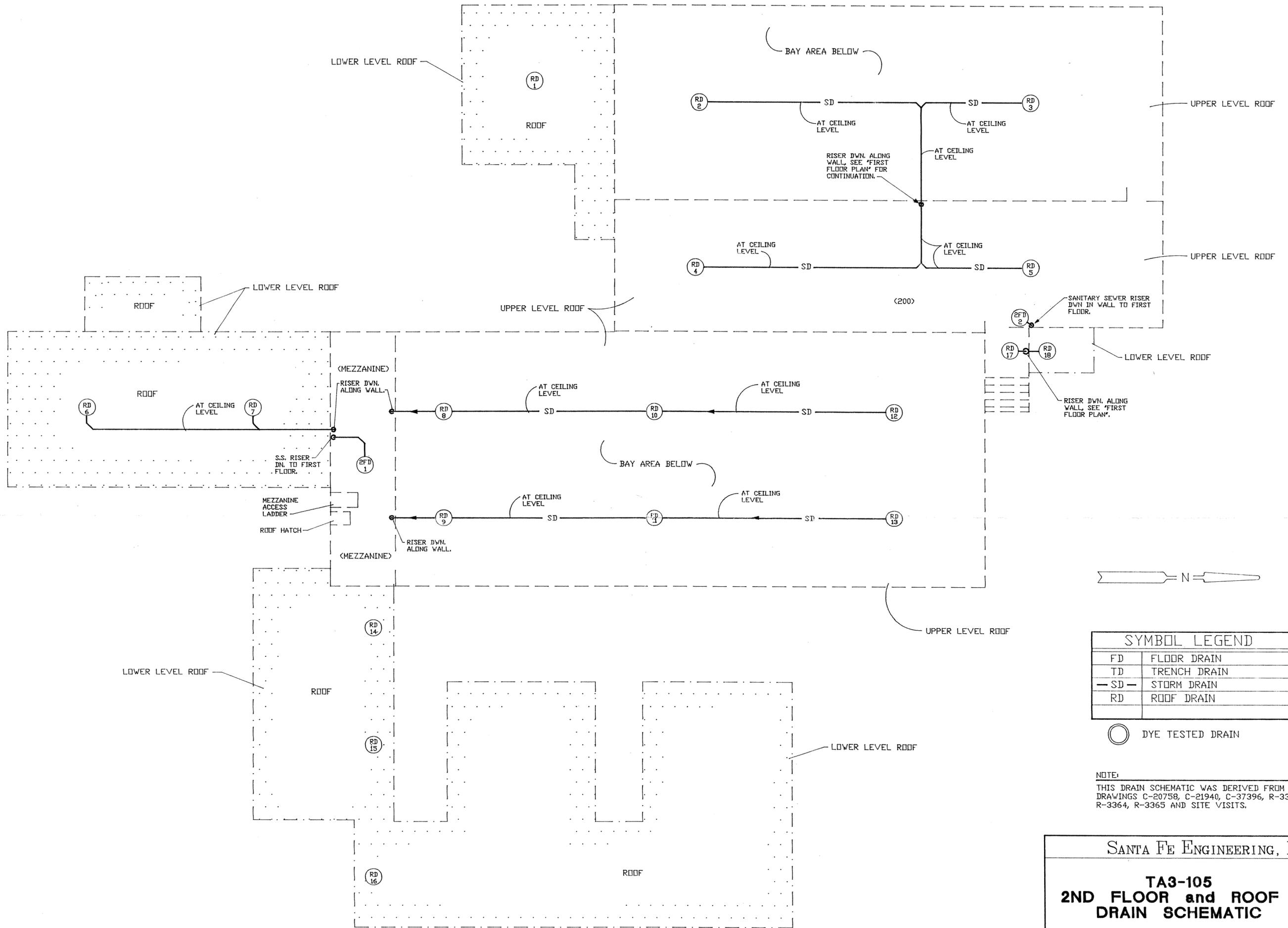
DRAWN	D.A.H.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	1-29-93

SUBMITTED: _____ RECOMMENDED: _____ APPROVED: _____

Los Alamos Los Alamos National Laboratory
Los Alamos, New Mexico 87545

CLASSIFICATION: _____ REVIEWER: _____ DATE: _____

REQUESTING DIVISION: EM-8 LAB JOB NO.: 11056-56 DRAWING NO.: FIGURE 3 SHEET 2 OF 3



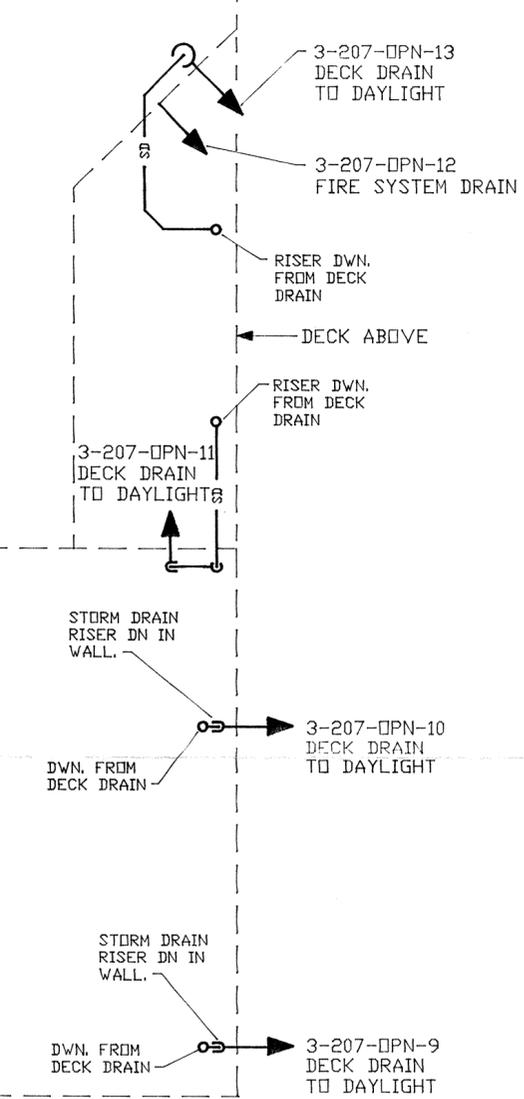
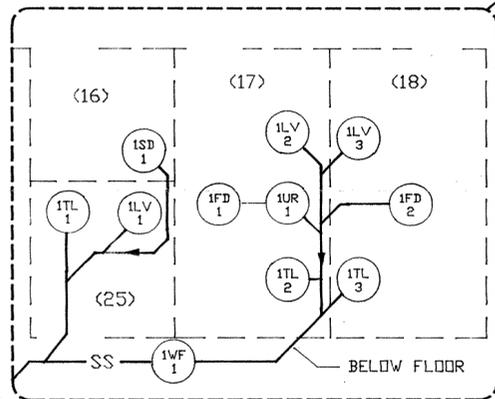
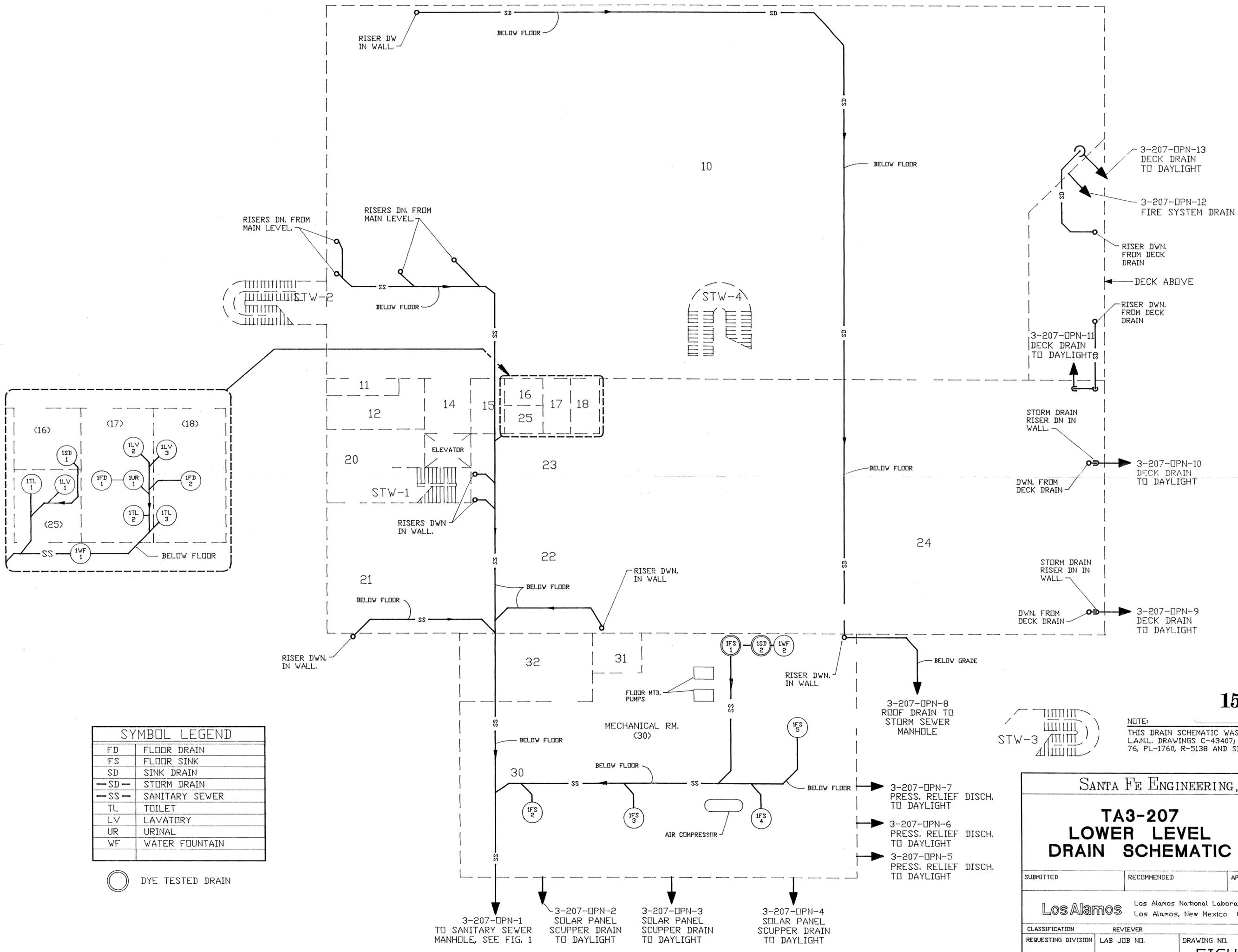
SYMBOL LEGEND	
FD	FLOOR DRAIN
TD	TRENCH DRAIN
—SD—	STORM DRAIN
RD	ROOF DRAIN

○ DYE TESTED DRAIN

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM L.A.N.L. DRAWINGS C-20758, C-21940, C-37396, R-3363, R-3364, R-3365 AND SITE VISITS.

SANTA FE ENGINEERING, LTD.			
TA3-105 2ND FLOOR and ROOF DRAIN SCHEMATIC		DRAWN	D.A.H.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 3 OF 3
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP	11056-56	FIGURE 4	

15295-D



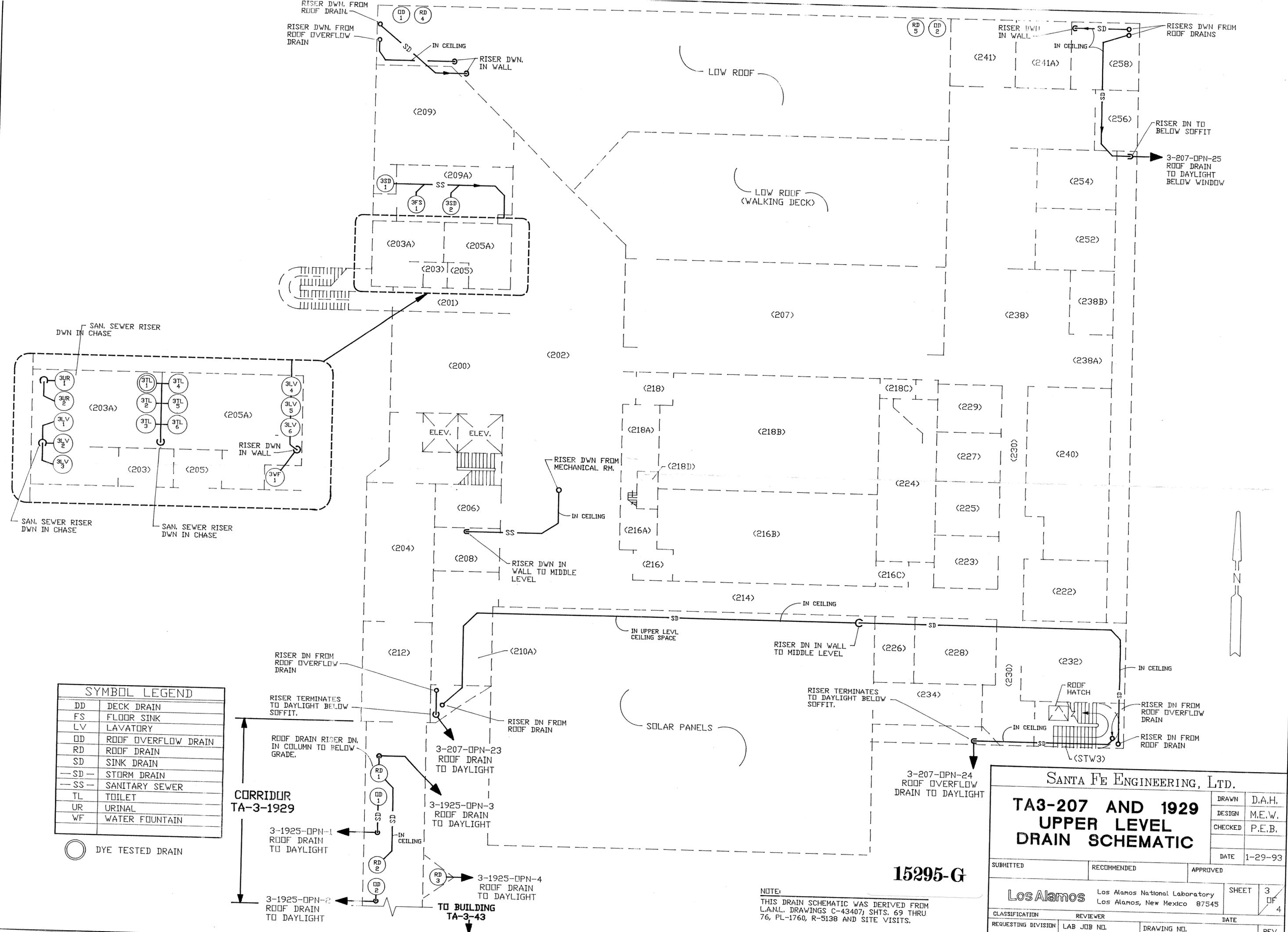
SYMBOL LEGEND	
FD	FLOOR DRAIN
FS	FLOOR SINK
SD	SINK DRAIN
—SD—	STORM DRAIN
—SS—	SANITARY SEWER
TL	TOILET
LV	LAVATORY
UR	URINAL
WF	WATER FOUNTAIN

○ DYE TESTED DRAIN

15295-E

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM
L.A.N.L. DRAWINGS C-43407; SHTS. 69 THRU
76, PL-1760, R-5138 AND SITE VISITS.

SANTA FE ENGINEERING, LTD.			
TA3-207 LOWER LEVEL DRAIN SCHEMATIC		DRAWN	D.A.H.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		RELEASED	
		DATE	01-15-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 3
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 5	



SYMBOL LEGEND	
DD	DECK DRAIN
FS	FLOOR SINK
LV	LAVATORY
OD	ROOF OVERFLOW DRAIN
RD	ROOF DRAIN
SD	SINK DRAIN
—SD—	STORM DRAIN
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

○ DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.

**TA3-207 AND 1929
UPPER LEVEL
DRAIN SCHEMATIC**

DRAWN	D.A.H.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	1-29-93

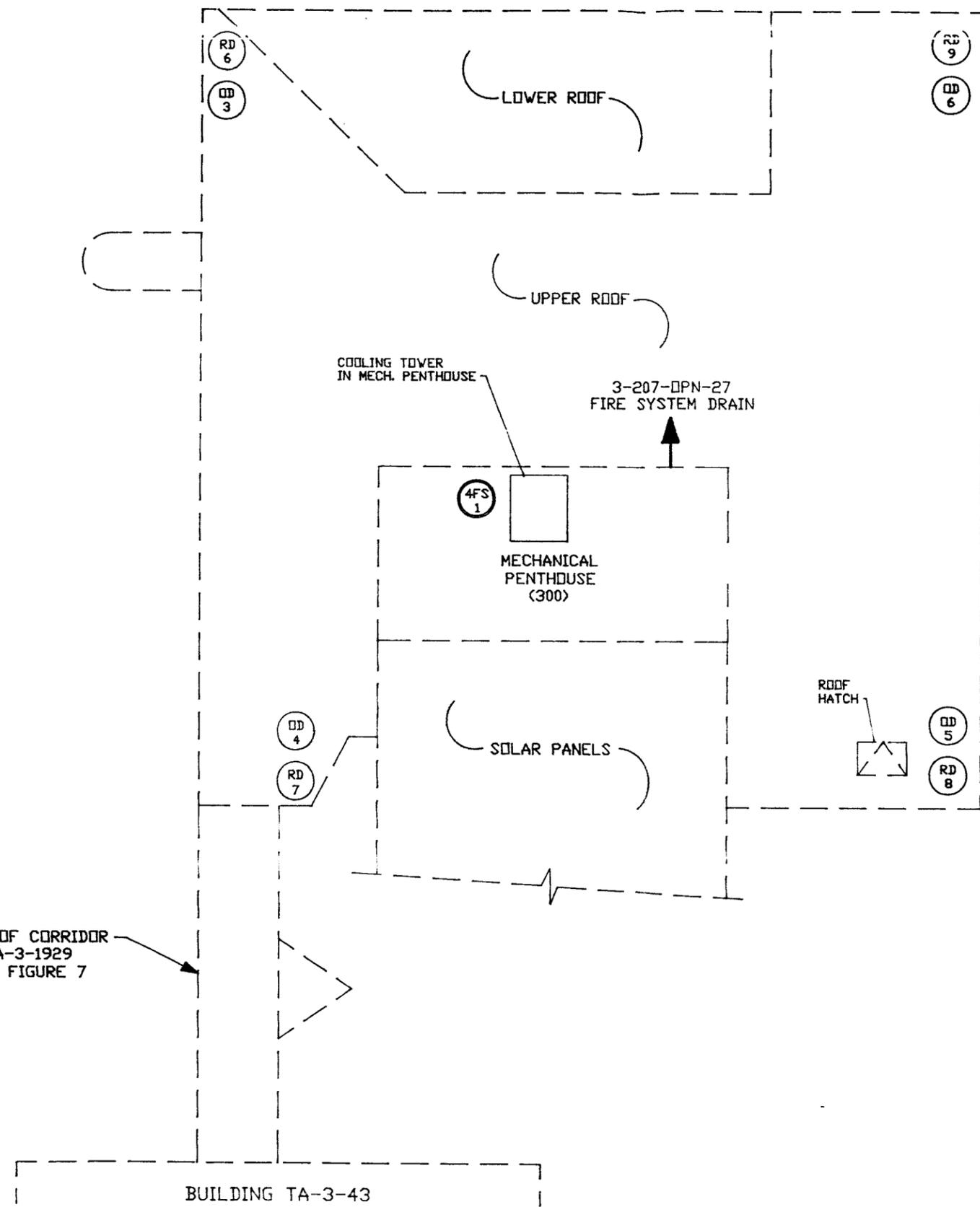
15295-G

Los Alamos Los Alamos National Laboratory
Los Alamos, New Mexico 87545

CLASSIFICATION	REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.

SHEET 3 OF 4

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM L.A.N.L. DRAWINGS C-43407, SHTS. 69 THRU 76, PL-1760, R-5138 AND SITE VISITS.



SYMBOL LEGEND	
DD	ROOF OVERFLOW DRAIN
RD	ROOF DRAIN

○ DYE TESTED DRAIN

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM
L.A.N.L. DRAWINGS C-43407, SHTS. 69 THRU
76, PL-1760, R-5138 AND SITE VISITS.

SANTA FE ENGINEERING, LTD.			
TA3-207 PENTHOUSE/ROOF DRAIN SCHEMATIC	DRAWN	M.E.W.	
	DESIGN	M.E.W.	
	CHECKED	P.E.B.	
	DATE	1-15-93	
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545			SHEET 4 OF 4
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 8	

3-400-OPN-4
ROOF DRAIN

3-400-OPN-5
ROOF DRAIN

(108)

(107)

(106)

(105)

(100)

(100)

K100A)

(102)

(101)

K100B)

MECH.

SS

MECH.

(1LV
1)

(1UR
1)

(1TL
1)

(1TL
2)

(1WF
1)

(1WH
1)

(1LV
2)

(1SD
1)

3-400-OPN-3
ROOF DRAIN

3-400-OPN-2
CONDENS. WATER

3-400-OPN-7
CONDENS. WATER

3-400-OPN-6
ROOF DRAIN

3-400-OPN-1
TO SANITARY
SEWER MANHOLE

3-400-OPN-8
WATER HTR. DRAIN



NOTE:

THIS DRAIN SCHEMATIC WAS DERIVED
FROM SITE VISITS.

SYMBOL LEGEND

LV	LAVATORY
SD	SINK DRAIN
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN
WH	WATER HEATER



DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.

**TA3-400
DRAIN SCHEMATIC**

DRAWN	M.E.W.
DESIGN	M.E.W.
CHECKED	P.E.B.
DATE	1-29-93

SUBMITTED RECOMMENDED APPROVED

Los Alamos

Los Alamos National Laboratory
Los Alamos, New Mexico 87545

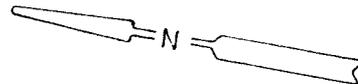
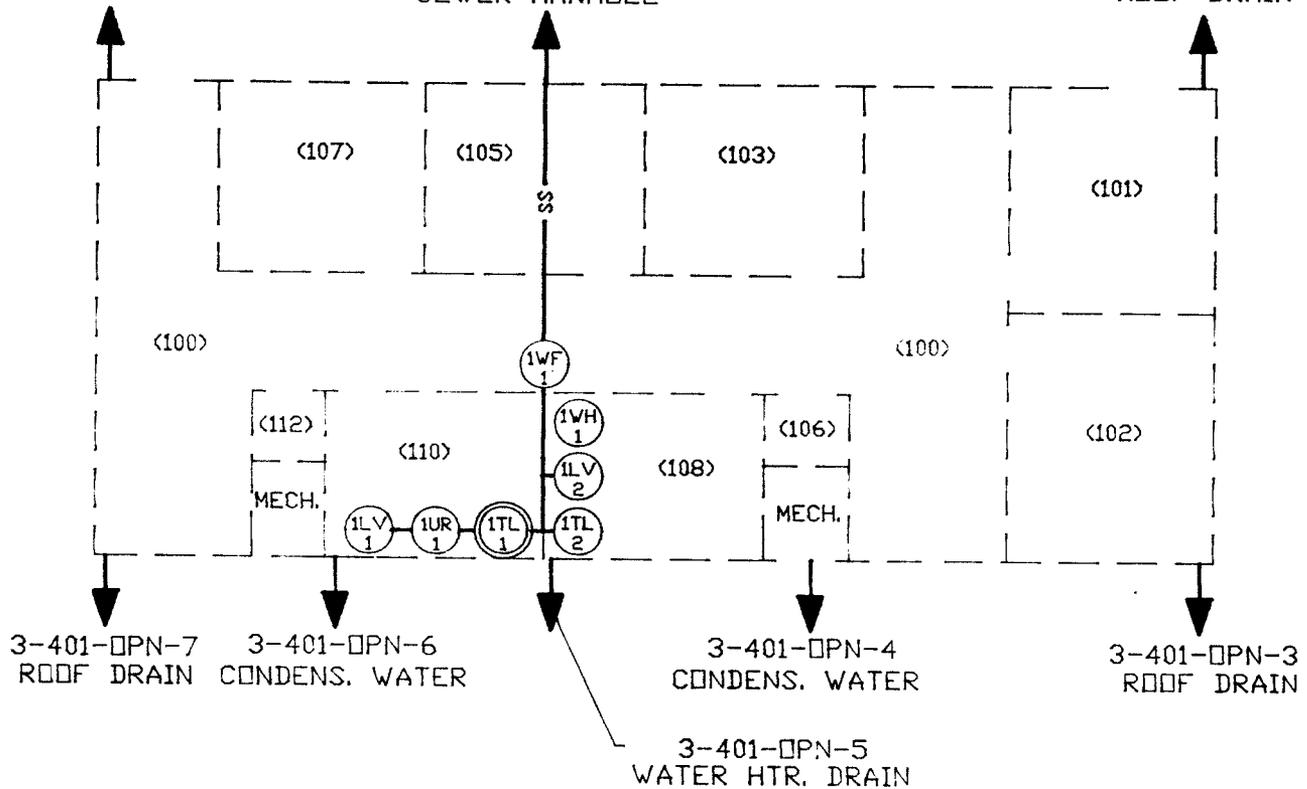
SHEET 1
OF 1

CLASSIFICATION	REVIEWER	DATE
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.
REQUESTING GROUP	11056-56	FIGURE 9
EM-8		REV.

3-401-OPN-8
ROOF DRAIN

3-401-OPN-1
TO SANITARY
SEWER MANHOLE

3-401-OPN-2
ROOF DRAIN



NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED
FROM SITE VISITS.

SYMBOL LEGEND	
LV	LAVATORY
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN
WH	WATER HEATER

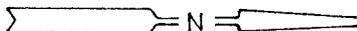
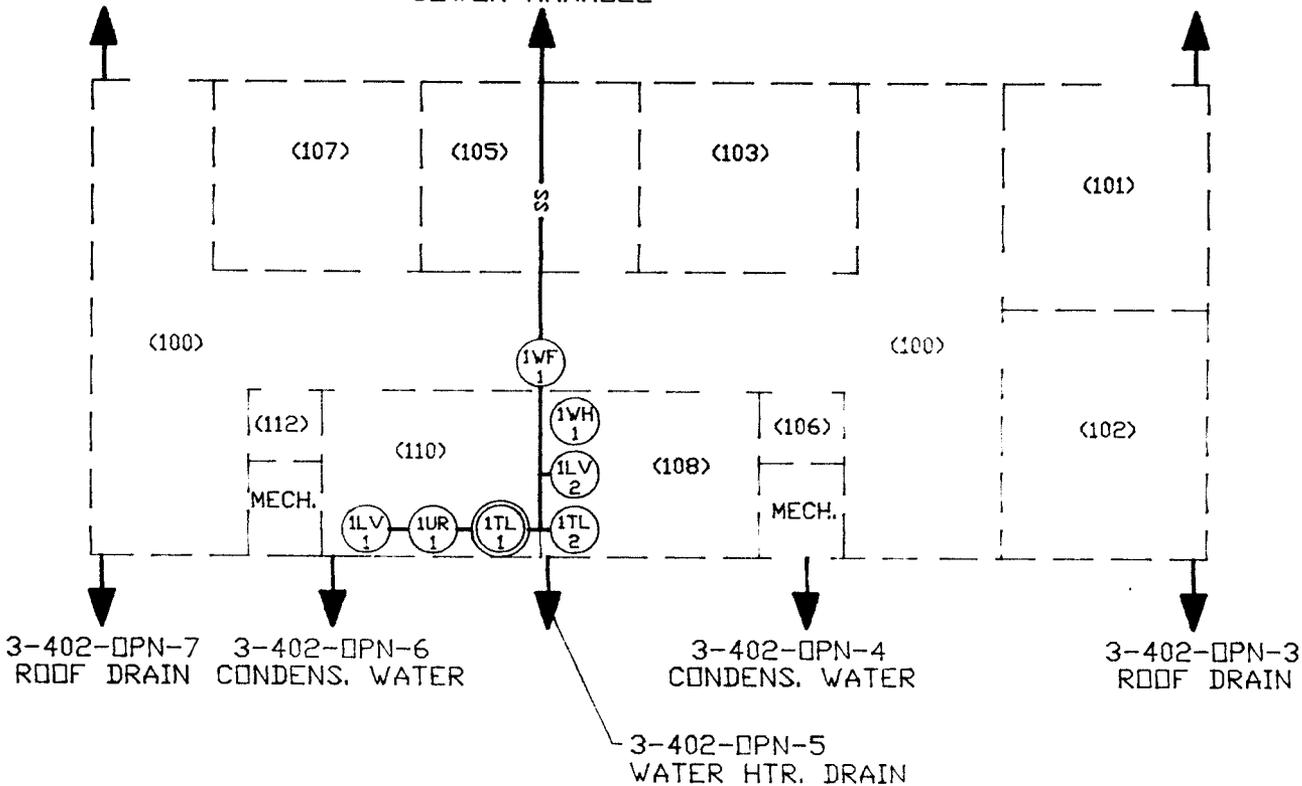
○ DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.				
TA3-401 DRAIN SCHEMATIC			DRAWN	M.E.W.
			DESIGN	M.E.W.
			CHECKED	P.E.B.
			RELEASED	
			DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED		
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE		
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.	
REQUESTING GROUP EM-8	11056-56	FIGURE 10		

3-402-OPN-8
ROOF DRAIN

3-402-OPN-1
TO SANITARY
SEWER MANHOLE

3-402-OPN-2
ROOF DRAIN



SYMBOL LEGEND	
LV	LAVATORY
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN
WH	WATER HEATER

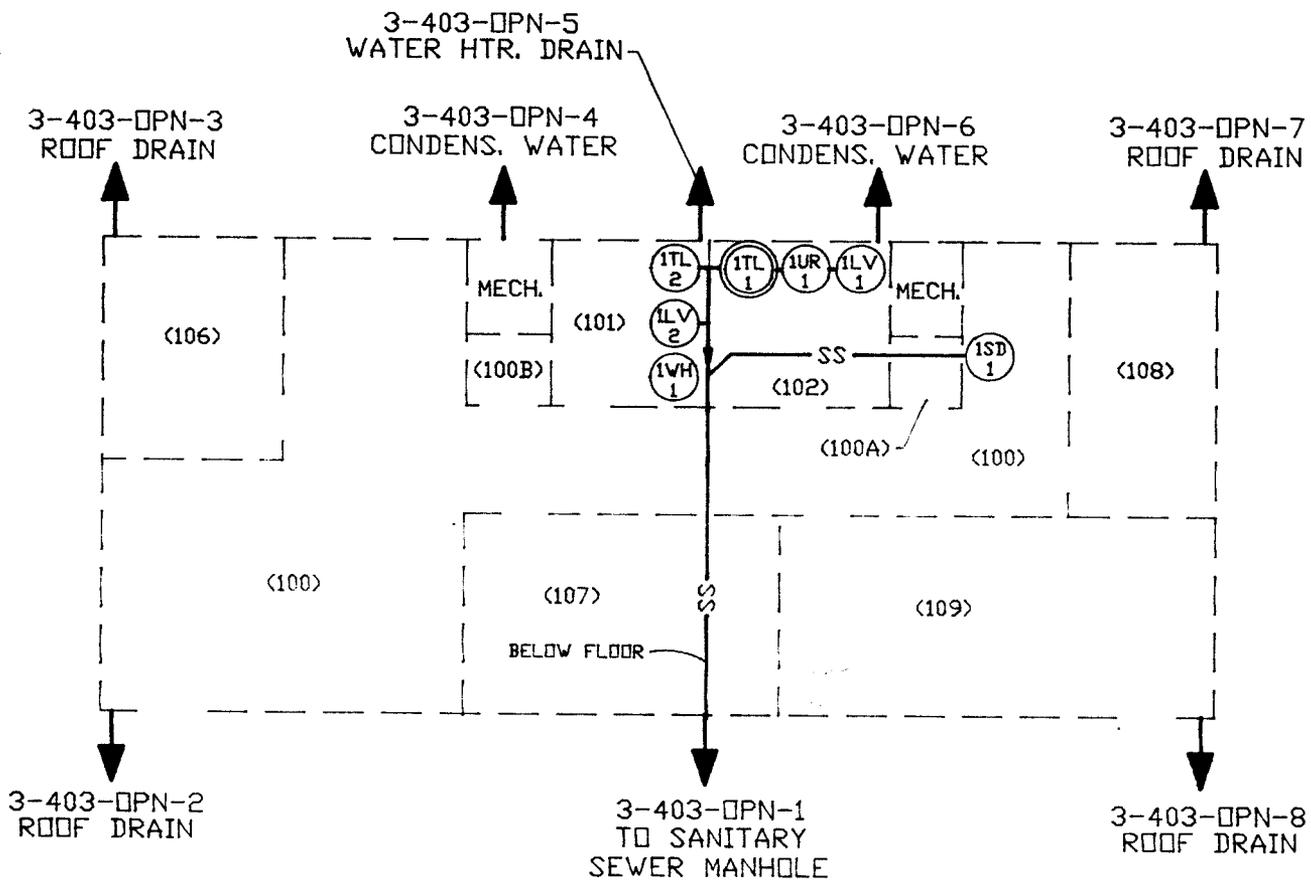


DYE TESTED DRAIN

NOTE:

THIS DRAIN SCHEMATIC WAS DERIVED FROM SITE VISITS.

SANTA FE ENGINEERING, LTD.			
TA3-402 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		RELEASED	
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 11	



NOTE:

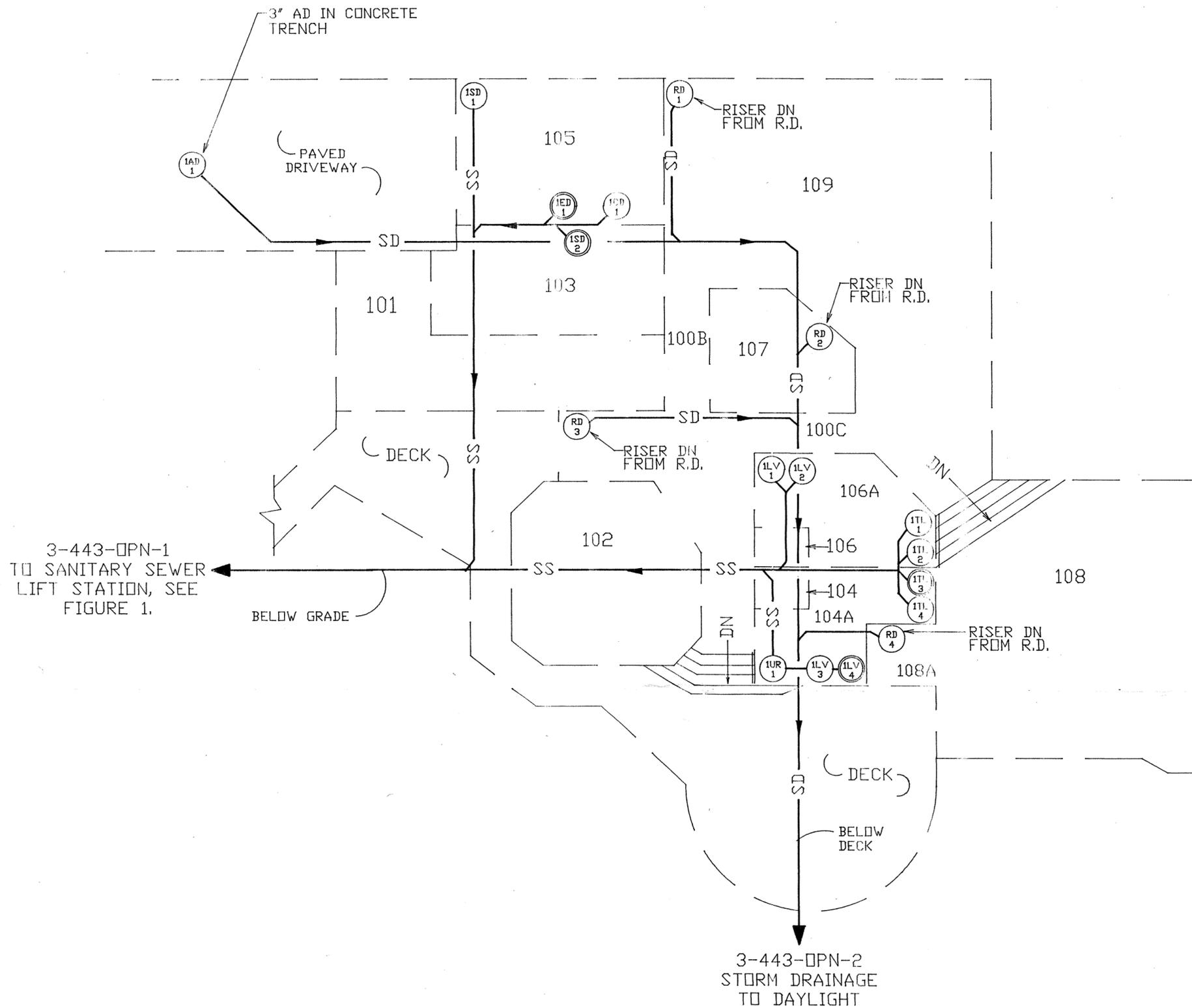
THIS DRAIN SCHEMATIC WAS DERIVED FROM SITE VISITS.

SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WH	WATER HEATER
○	DYE TESTED DRAIN



DYE TESTED DRAIN

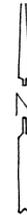
SANTA FE ENGINEERING, LTD.			
TA3-403 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		RELEASED	
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	SHEET 1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 12	



3-443-OPN-1
TO SANITARY SEWER
LIFT STATION, SEE
FIGURE 1.

BELOW GRADE

3-443-OPN-2
STORM DRAINAGE
TO DAYLIGHT



15295-H

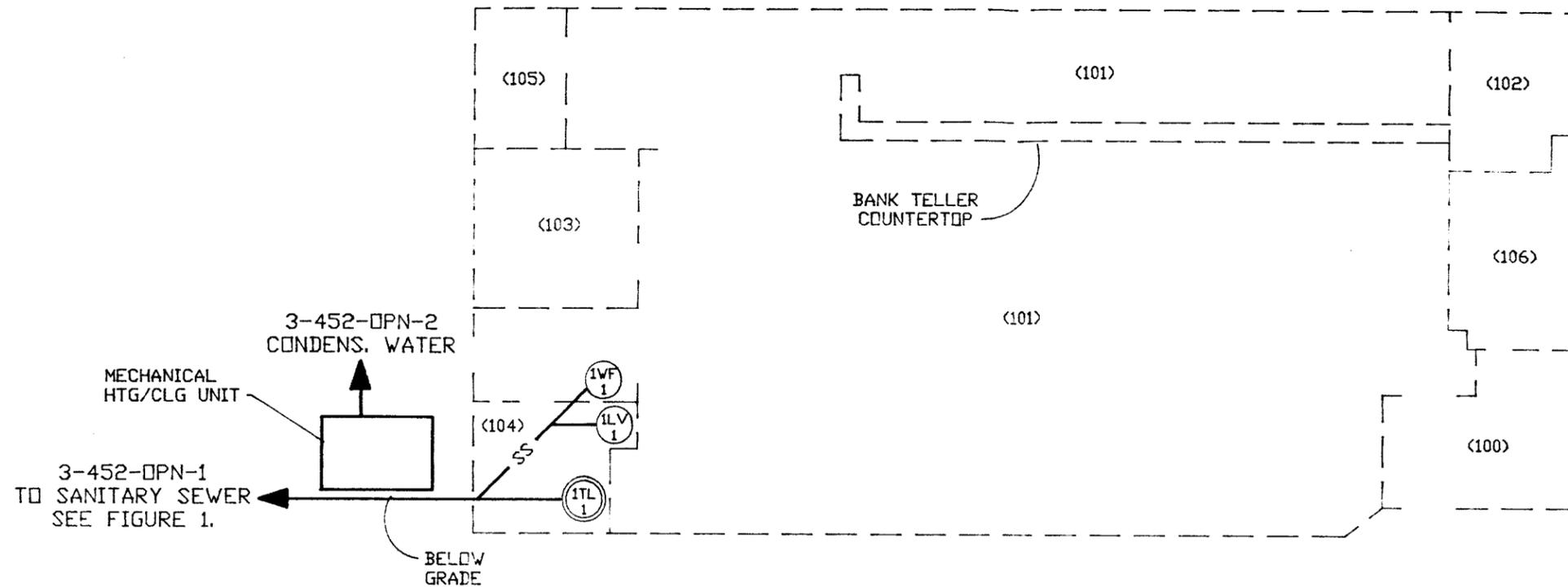
NOTES:

THIS DRAIN SCHEMATIC WAS DERIVED
SITE VISITS.

SYMBOL LEGEND	
AD	AREA DRAIN
CD	CUP DRAIN
ED	EQUIPMENT DRAIN
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
—SD—	STORM DRAIN PIPE
—SS—	SANITARY SEWER PIPE
TL	TOILET
UR	URINAL

○ DYE TEST DRAIN

SANTA FE ENGINEERING, LTD.			
TA3-443 DRAIN SCHEMATIC		DRAWN	G.S.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	
CLASSIFICATION	REVIEWER	DATE	SHEET 1 OF 1
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 13	



TRAVEL BUILDING PLAN

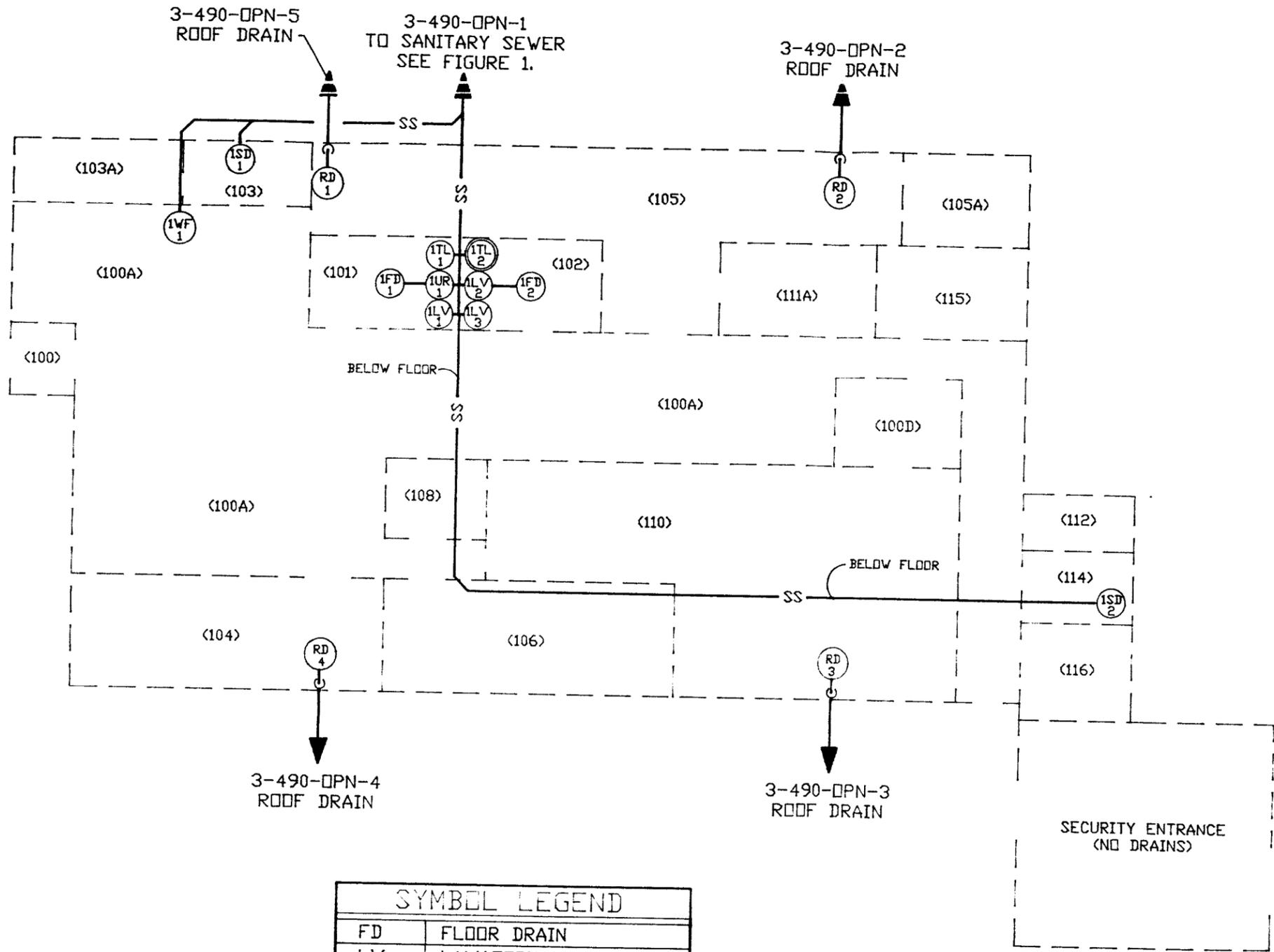
NOT TO SCALE

NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED FROM SITE VISITS.

SYMBOL LEGEND	
LV	LAVATORY
—SS—	SANITARY SEWER
TL	TOILET
WF	WATER FOUNTAIN

○ DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA3-452 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET	1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 14	

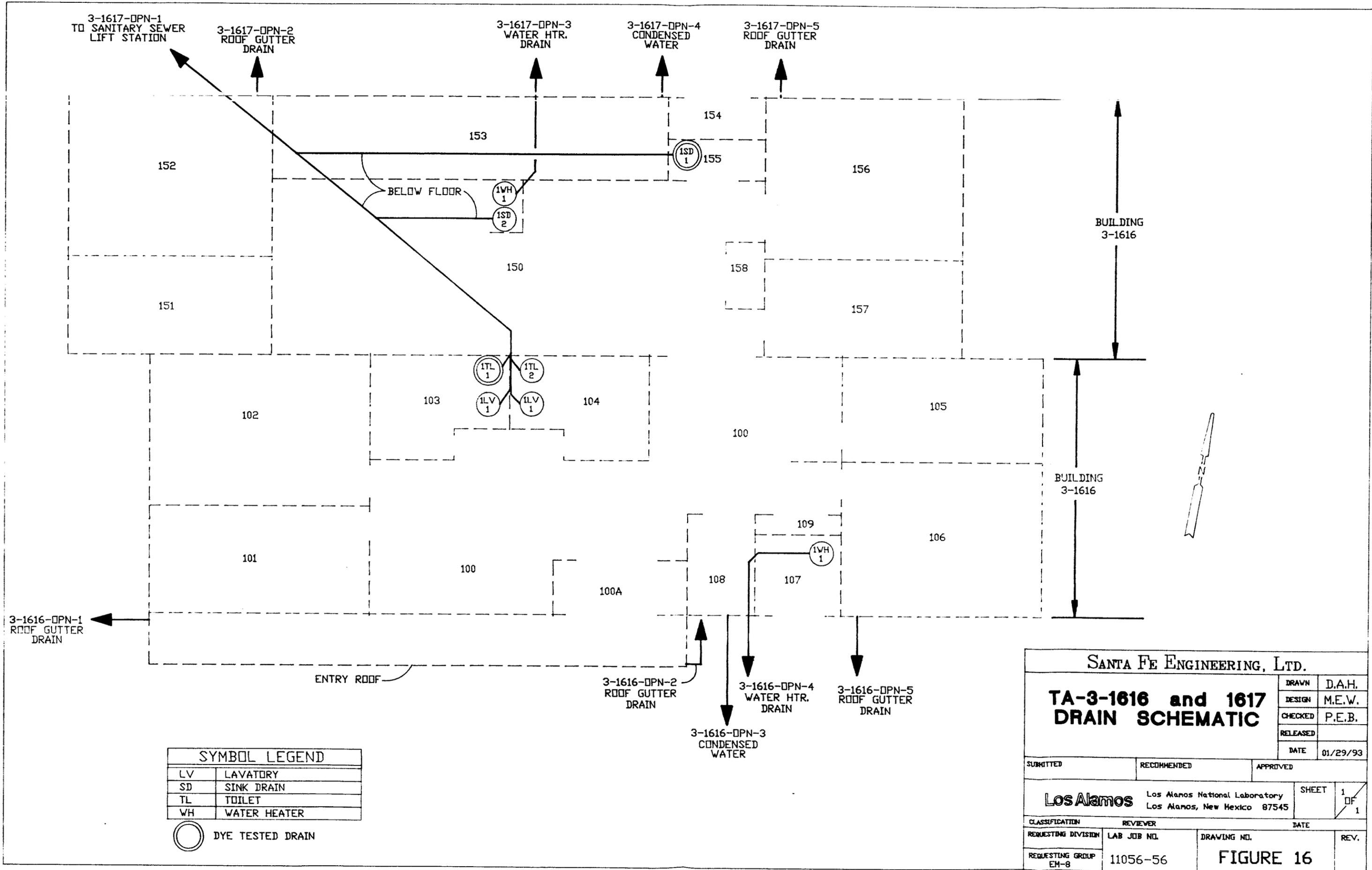


NOTE:
THIS DRAIN SCHEMATIC WAS DERIVED
FROM SITE VISITS.

SYMBOL LEGEND	
FD	FLOOR DRAIN
LV	LAVATORY
RD	ROOF DRAIN
SD	SINK DRAIN
—SS—	SANITARY SEWER
TL	TOILET
UR	URINAL
WF	WATER FOUNTAIN

○ DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.			
TA3-490 DRAIN SCHEMATIC		DRAWN	M.E.W.
		DESIGN	M.E.W.
		CHECKED	P.E.B.
		DATE	1-29-93
SUBMITTED	RECOMMENDED	APPROVED	
Los Alamos Los Alamos National Laboratory Los Alamos, New Mexico 87545		SHEET	1 OF 1
CLASSIFICATION	REVIEWER	DATE	
REQUESTING DIVISION	LAB JOB NO.	DRAWING NO.	REV.
REQUESTING GROUP EM-8	11056-56	FIGURE 15	



SYMBOL LEGEND	
LV	LAVATORY
SD	SINK DRAIN
TL	TOILET
WH	WATER HEATER


 DYE TESTED DRAIN

SANTA FE ENGINEERING, LTD.												
TA-3-1616 and 1617 DRAIN SCHEMATIC		<table border="1"> <tr> <td>DRAWN</td> <td>D.A.H.</td> </tr> <tr> <td>DESIGN</td> <td>M.E.W.</td> </tr> <tr> <td>CHECKED</td> <td>P.E.B.</td> </tr> <tr> <td>RELEASED</td> <td></td> </tr> <tr> <td>DATE</td> <td>01/29/93</td> </tr> </table>	DRAWN	D.A.H.	DESIGN	M.E.W.	CHECKED	P.E.B.	RELEASED		DATE	01/29/93
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Los Alamos		Los Alamos National Laboratory Los Alamos, New Mexico 87545	<table border="1"> <tr> <td>SHEET</td> <td>1</td> </tr> <tr> <td>OF</td> <td>1</td> </tr> </table>	SHEET	1	OF	1					
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REQUESTING GROUP EM-8	11056-56	FIGURE 16										