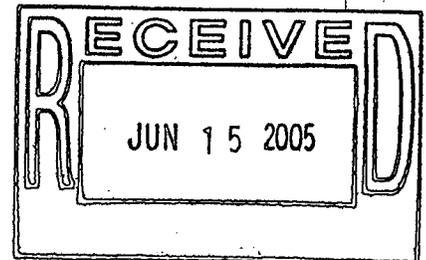


Instructions for Completion of Type 1 Facility Closeout Report

Section A. Facility Data	
Facility No.	Building 995
Facility Descriptor:	Concrete block, concrete, and structural metal buildings, 21,140 total sq. ft.
Project:	RISS - Area 5 D&D - Type I
Date of Demolition:	Dec. 12, 2004 - April 1, 2005
Additional Information:	Sanitary disposal values for 995 includes 988, 988A, 988 Pad, T974, 974, 977, aeration basins 995-AB-1, 995-AB-2, clarifier basins 995C-1, 995C-2, 995C-3, 995C-4, 995C-5, influent cells 995-IC1, 995-IC2, 995-IC3, 995-D1, 995-D2, 995-CCC-1, 995-CCC-2, 931, 990, 990A, 990 aeration tanks, 995-EC1, 995-EC2, 995-EC3. The building location is identified on the attached drawing.

Section B. Final Characterization Data	
Reconnaissance Level Characterization Report <i>(concurrence received)</i>	Reconnaissance Level Characterization Reports dated Nov. 1, 2004, Nov. 16, 2004, and Dec. 20, 2004; RLCR/PDSRs dated Dec. 9, 2004 and Jan. 25, 2005, - Concurrence, Steven H. Gunderson to Joseph A. Legare, dated Dec. 1, 2004, Dec. 7, 2004, Jan. 3, 2005, Dec. 23, 2004, and Jan. 28, 2005 respectively.
In-process Characterization	N/A
Pre-Demolition Survey Report <i>(approval received)</i>	N/A
Post-Demolition Survey Report <i>(as necessary)</i>	N/A

Section C. Waste Data (complete categories as appropriate)	
<u>Sanitary Disposal</u>	
Disposal Site:	BFI Foothills 93
Waste Volume (m ³):	8310 m ³
Waste Weight (tons):	7244 tons
Additional Information:	Shipping Dates: Dec. 12, 2004 - April 1, 2005
<u>Hazardous Disposal</u>	
Disposal Site:	Circuit boards, mercury switches, light bulbs and other managed materials Kettleman Hills, Kettleman City, CA and Bethlehem Apparatus Facility, Hellertown, PA
Waste Volume (m ³):	Less than 1 m ³
Additional Information:	
<u>TSCA Waste Disposal</u>	
Disposal Site:	N/A
Waste Volume (m ³):	
Additional Information:	
<u>Asbestos Waste Disposal</u>	
Disposal Site:	BFI Tower Road Landfill
Waste Volume (m ³):	Less than 1 m ³
Additional Information:	Shipping Date: Nov. 15, 2004
<u>Low-Level Waste Disposal</u>	
Disposal Site:	N/A
Waste Volume (m ³):	
Additional Information:	

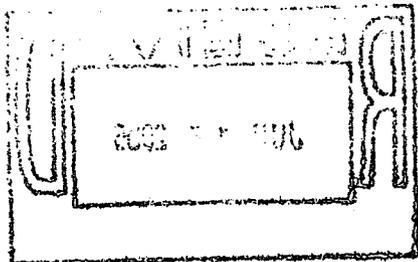


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Instructions for Completion of Type 1 Facility Closeout Report

Low-Level Mixed Waste Disposal	Solids from B990 Equalization Basins
Disposal Site:	EnviroCare of Utah
Waste Volume (m³):	5
Additional Information:	
Recycled Material	N/A
Recycle Facility:	
Waste Volume (m³):	
Additional Information:	
Property Disposition	N/A
Receiver Locations (major items only):	
Volume (m³):	
Weight (tons):	
Additional Information:	

Section D. Approvals		
Kaiser-Hill Project Manager	<i>Carroll for Fudrew</i>	06/13/05
	Name/Signature	Date



Facility Descriptions, Operation and Closure of the Sanitary Collection and Treatment Systems at RFETS

Facility Descriptions

The Rocky Flats Sanitary Collection system comprised approximately 40,000 feet of sewer line and over 200 manholes used to convey domestic wastewater to the site's wastewater treatment plant at what was collectively known as Building 995. The components of the Building 995 facility are described below in Table 1. Several lift stations operated in the lower portions of the Site and moved sanitary waste into the gravity flow portion of the system. The collection system was divided generally into two areas roughly corresponding to the north and south sides of the industrial area. The two parts of the system joined at Building 990, which housed the original equalization basins with a capacity of 120,000 gallons. Wastewater then flowed by gravity to B995, the treatment facility.

B995 (and the related structures discussed in Table 1 below) was designed to have a capacity of 0.5 million gallons per day (MGD) using activated sludge plus a tertiary clarifier and sand filtration as a final step. The activated sludge process was divided into two trains of similar size, with primary clarifiers, aeration basins and secondary clarifiers. The original installation in 1953 had one treatment train (primary clarifier, aeration basin and secondary clarifier), which was supplemented with the second train in 1970. Biosolids were anaerobically digested then air dried prior to disposal. Effluent was disinfected with chlorine and dechlorinated with sulfur dioxide. Numerous upgrades were made to the facility in the mid-1990s, including the installation of influent and effluent storage tanks (with a total capacity of over 800,000 gallons), the addition of a belt filter press for biosolids processing, and conversion from chlorine-based disinfection to ultraviolet light.

The following table describes the components of the B995 complex.

Table 1: Components of the RFETS Wastewater Treatment Facility

Building	Description
931	An access point to the sanitary collection system housing radiological detection apparatus. Removed and closed separate from the demolition of B995.
T974	A 320 square foot modified semi-truck trailer with aluminum sides and roof and a steel floor that housed the 0.7 m belt filter press used to dewater sludge prior to drying in the drying beds. Utilities: electric.
974	A 2,280 square-foot non-insulated metal building used to house 4 sludge drying beds (beds number 1, 2, 3, and 4). Anaerobically digested sludge was spread in the drying beds for dewatering and drying. Utilities: Electric.
977	A 2,280 square-foot non-insulated metal building used to house 3 sludge drying beds (beds number 5, 6, and 7). Anaerobically digested sludge was spread in the drying beds for dewatering and drying. Utilities: Electric.
988	Known as the Tertiary Pump House, it was a 1,224 square-foot building originally built in 1953 and expanded in 1990. The building was insulated concrete on a concrete floor. The building housed pumps and the three sand filters used to polish the effluent. After demolition, the building foundation was left at greater than 4 feet Below Final Grade. Utilities: electric.
988A	The Ultraviolet Disinfecting Facility was a 432 square-foot building constructed of insulated metal sections mounted on a steel frame and a concrete floor built in 1996. Ultraviolet light technology replaced the chlorination-dechlorination steps used previously. Utilities: electric.

Building	Description
990	A 222 square-foot building constructed in the early 1950s. B990 was a concrete cinder block building with a concrete foundation and a concrete roof slab and a built-up roofing system. This building was the pre-aeration building housing two air compressors used to aerate raw sewage in the equalization basins. Utilities: electric.
990A	A 200 square-foot building constructed in the 1970s. B990A was a concrete cinder block building with a concrete foundation and a concrete roof slab and a built-up roofing system. B990A housed a bar screen and radiological monitoring equipment. Utilities: electric.
995	Administration and Process Control Building. Originally built in 1953, the concrete block and metal roof building had two additions which increased the floor space to 6000 square feet. 995 was the main structure supporting the wastewater treatment plant, with office space, laboratories, and system infrastructure for the anaerobic digesters. Upon demolition the north and a portion of the west edge of the foundation was left at greater than 4 feet Below Final Grade. Utilities: electric, natural gas, plant water, plant sewer.
995-AB-1	North Aeration Basin approximately 623 square-feet built in 1953. The basins were equipped with fine bubble diffusers that aerated the activated sludge treatment process. Utilities: electric.
995-AB-2	South Aeration Basin approximately 623 square-feet built in 1970. The basins were equipped with fine bubble diffusers that aerated the activated sludge treatment process. Utilities: electric.
995-C-1	Primary Clarifier Basin approximately 200 square-feet built of concrete in 1953. The clarifiers' purpose was to separate solids from liquids. Utilities: electric.
995-C-2	Primary Clarifier Basin approximately 300 square-feet built of concrete in 1970. The clarifiers' purpose was to separate solids from liquids. Utilities: electric.
995-C-3	Secondary Clarifier Basin approximately 600 square-feet built of concrete in 1953. The clarifiers' purpose was to separate solids from liquids. Utilities: electric.
995-C-4	Clarifier Basin approximately 650 square-feet built of concrete in 1953. The clarifiers' purpose was to separate solids from liquids. Utilities: electric.
995-C-5	Tertiary Clarifier Basin approximately 600 square-feet built of concrete in 1970. The clarifiers' purpose was to separate solids from liquids. Upon demolition, the clarifier bottom and a portion of the wall was left at greater than 4 feet Below Final Grade. Utilities: electric.
995-CCC-1	Chlorine Contact Basin was a 65 square-foot concrete basin, built in 1953, formerly used for disinfecting the effluent from the wastewater treatment process. Chlorination was replaced with UV disinfection in 1996. Upon demolition, the contact chamber bottom and a portion of the walls was left at greater than 4 feet Below Final Grade.
995-CCC-2	Chlorine Contact Basin was a 200 square-foot concrete basin, built in 1953, formerly used for disinfecting the effluent from the wastewater treatment process. Chlorination was replaced with UV disinfection in 1996.
995-D-1	Anaerobic Digester approximately 500 square-feet built in 1953. The digester provided further treatment of the biosolids prior to drying in the drying beds. Upon demolition, a portion of the north wall was left at greater than 4 feet Below Final Grade. Utilities: electric.
995-D-2	Anaerobic Digester approximately 500 square-feet built in 1953. The digester provided further treatment of the biosolids prior to drying in the drying beds. Utilities: electric.
995-EC-1	Effluent Storage Cell is an 1,836 square-foot concrete basin built in 1996. The effluent cells were designed to hold several days flow of effluent in the event there was an off-normal condition in the treatment plant. Utilities: electric.
995-EC-2	Effluent Storage Cell is an 1,836 square-foot concrete basin built in 1996. The effluent cells were designed to hold several days flow of effluent in the event there

Building	Description
	was an off-normal condition in the treatment plant. Utilities: electric.
995-EC-3	Effluent Storage Cell is an 1,836 square-foot concrete basin built in 1996. The effluent cells were designed to hold several days flow of effluent in the event there was an off-normal condition in the treatment plant. Upon demolition, the effluent cell bottom was left at greater than 4 feet Below Final Grade. Utilities: electric.
995-IC-1	Influent Storage Cell was a 1,271 square-foot concrete basin built in 1996. The influent cells were designed to hold up to a days flow of influent each in the event there was a spill on-site that threatened the wastewater treatment plant. Utilities: electric.
995-IC-2	Influent Storage Cell was a 1,271 square-foot concrete basin built in 1996. The influent cells were designed to hold up to a days flow of influent each in the event there was a spill on-site that threatened the wastewater treatment plant. Upon demolition, a portion of the north and west walls was left at greater than 4 feet Below Final Grade. Utilities: electric.
995-IC-3	Influent Storage Cell was a 1,271 square-foot concrete basin built in 1996. The influent cells were designed to hold up to a days flow of influent each in the event there was a spill on-site that threatened the wastewater treatment plant. Upon demolition, a portion of the north wall was left at greater than 4 feet Below Final Grade. Utilities: electric.

Facility Disposition

Upon initial review, some portions of the sanitary system were not clearly Type I facilities, either because of the nature of the facility and the potential for contamination or because portions of the system were still in operation and inaccessible when characterization began. For those parts of the system that had the potential to be Type 2, a Pre-Demolition Survey was performed and the results reported in a Reconnaissance Level Characterization Report/Pre-Demolition Survey Report (RLCR/PDSR). Two RLCR/PDSRs were submitted for the Sewage Treatment Plant Closure Project; both presented survey results that all facilities were uncontaminated and reported them as RFCA Type 1 facilities. CDPHE concurred with both reports.

As part of the Rocky Flats security system, radiological detection apparatus was located in the sanitary collection system at Building 931. The detectors were removed separately, and access to the collection system eliminated.

Closure of the Sanitary Collection System

The closure of the collection system was conducted in accordance with the Technical Memorandum: Closure Strategy for the Rocky Flats Environmental Technology Site Sanitary Sewer System (August 31, 2004; "Closure Strategy"). This Technical Memorandum is part of the Site's Administrative Record. All site discharges to the sanitary collection system were terminated on September 30, 2004. Sewer lines were flushed with potable water to move remnant solids to the treatment plant. Biological treatment at B995 continued through most of October and the first week of November. The last discharge from Building 995 was on November 6, 2004. Demolition of the facility began in late November and was completed in December 2004.

Following the flushing of the lines, manhole removal commenced in a general west to east progression across the industrial area. Removal of manholes and lift stations began after the lines

were flushed and continued through April 2005. In accordance with the closure procedure described in the Technical Memorandum, each manhole was screened for contamination before demolition began. In certain cases, solids were collected from the manholes and in the connecting lines in areas of interest. Once the manhole screening demonstrated that there was no contamination, the manhole was grouted to at least one foot above the bench. After the concrete had cured, the top 4 feet of the manhole was removed, the void filled with soil and the closure completed. Table 2 Manholes Removed and Demolished lists the manholes that were closed as described here, including the dates that surveys were conducted, when concrete plugs were poured and the date of final demolition. In some cases, manholes were removed as part of a building demolition; those cases are identified in the table. The attached drawing "Rocky Flats Sanitary Waste Lines" shows the status of the entire sanitary collection system, including which lines were removed and which remain, and the parts of the system (manholes, lift stations and cleanouts) that were completely removed as well as those removed to 4 feet below grade. As described in the Technical Memorandum, known abandoned sanitary lines will be removed to a depth of 3 feet below grade. The Technical Memorandum also describes abandoned lines for which no reliable information is available, citing erroneous reports, maps showing existing lines in the wrong direction, and indications that some designed installations were never implemented. Some portions of the original collection system had been abandoned prior to 1990; these lines were identified in the Technical Memorandum. Some parts of the active system had been abandoned after 1990, about the time a major portion of the collection system had been sliplined. In accordance with the Technical Memorandum, known abandoned lines were removed to below 3 feet and exposed ends grouted. Sewer lines discovered in the course of building demolition were also treated in a similar manner.

Table 2: MANHOLES REMOVED AND DEMOLISHED

MH No.*	Location	Comments	Rad Survey Complete	Concrete Plugs	Demolished
MH-1	S T130I	None	8/30/04	10/4/04	11/9/04
MH-1A	W115	Abandoned brick MH	N/A	N/A	12/6/04
MH-2	E T130A	None	8/30/04	10/4/04	11/9/04
MH-3	NW T130G	None	8/30/04	10/4/04	11/9/04
MH-4	N T130G	None	8/30/04	10/4/04	11/9/04
MH-5	W T130E	None	8/30/04	10/4/04	2/11/05
MH-5A	SWB331	Abandoned System.	N/A	N/A	Previously
MH-6	SW B130	None	8/30/04	10/4/04	10/6/04
MH-7	NE B124	None	9/14/04	10/4/04	11/15/04
MH-8	E B125	None	9/14/04	10/5/04	11/15/04
MH-10	N B125	None	8/19/04	10/4/04	11/15/04
MH-13	Between B121/122	Demo w/ bldg.	8/19/04	N/A	Demolished
MH-14	NE B125	None	8/19/04	10/5/04	11/15/04
MH-15	E B111	None	10/4/04	10/4/04	10/12/04
MH-16	SE B111	None	8/19/04	7/13/04	10/11/04
MH-17	S B111	None	Contact Record Exempt**	7/13/04	10/11/04

MH No.*	Location	Comments	Rad Survey Complete	Concrete Plugs	Demolished
MH-18	S B111	None	Contact Record Exempt	7/13/04	10/11/04
MH-19	S B115	None	9/14/04	10/4/04	10/12/04
MH-20	NE B122	None	8/19/04	10/5/04	10/11/04
MH-21	N B119	None	Contact Record Exempt	7/13/04	10/11/05
MH-22	N B123	None	9/14/04	10/6/04	10/7/04
MH-25	NW B441	None	10/5/04	10/6/04	12/6/04
MH-26	N B441	Removed with 441 Demo	N/A	N/A	See Bldg Close Out Rpt
MH-29	NW B441	None	9/14/04	10/6/04	10/6/04
MH-30	W B331	None	10/5/04	10/6/04	12/7/04
MH-31	SW B331	None	9/14/04	10/6/04	10/11/04
MH-32	SE B331	None	9/21/04	10/6/04	10/11/04
MH-33	5th & Central	None	10/4/04	10/6/04	10/11/04
MH-34	W B442	None	10/4/04	10/6/04	11/15/04
MH-35A	WB442	Previously removed.	N/A	N/A	Previously
MH-35B	NW B331	MH-35 by 331, West side	9/14/04	10/4/04	10/6/04
MH-36	N B444	None	9/21/04	10/5/04	12/8/04
MH-38	W B444	None	10/4/04	10/5/04	12/8/04
MH-39	W B444	None	9/21/04	10/5/04	1/20/05
None	NE B460	None	10/4/04	10/5/04	12/8/04
MH-41	Inside B447	Demo w/ bldg.	Contact Record Exempt	N/A	See Bldg Close Out Rpt
MH-42	Inside B447	Demo w/ bldg.	Contact Record Exempt	N/A	See Bldg Close Out Rpt
MH-43	E B460	None	10/4/04	10/5/04	10/7/04
MH-44	E B460	None	9/21/04	10/5/04	10/7/04
MH-46	NW B440	None	9/21/04	10/5/04	12/10/04
MH-47	NW B440	None	10/4/04	10/5/04	12/8/04
MH-48	N B439	MH removed w/30 ft. of sewer line	10/4/04	N/A	2/4/05
MH-49	S B334	Removed with 334 Demo	N/A	N/A	See Bldg Close Out Rpt
MH-50	SE B334	None	9/21/04	10/7/04	10/11/04
MH-51	S B551	None	9/21/04	10/7/04	10/12/04
MH-52	SE B551	None	9/21/04	10/7/04	10/12/04
MH-53	S B681	None	9/21/04	10/7/04	10/12/04
MH-54	E MH-53	None	9/21/04	10/7/04	10/12/04
MH-55	8th & Cntr'l	None	8/19/04	10/8/04	10/12/04
MH-58	N B762	None	9/27/04	10/11/04	1/19/05
MH-59	SE B707	None	10/8/04	10/11/04	12/1/04
MH-60	W B762A	None	8/19/04	10/8/04	10/12/04
MH-61	N T760A	None	8/19/04	10/11/04	12/14/04
MH-62	NW B569	None	9/21/04	10/7/04	11/10/04

MH No.*	Location	Comments	Rad Survey Complete	Concrete Plugs	Demolished
MH-63	E B549	None	9/21/04	10/7/04	12/7/04
MH-64	S B552	None	9/21/04	10/7/04	10/13/04
MH-65	SE B552	None	9/21/04	10/7/04	10/13/04
MH-66	NE T760A	None	8/19/04	10/11/04	10/13/04
MH-67	N MH-66	None	10/4/04	10/11/04	10/13/04
MH-68	SE Tent 12	None	10/4/04	10/11/04	12/16/04
MH-69	SE Tent 12	None	10/4/04	10/11/04	12/16/04
MH-71	E Tent 4	None	10/12/04	12/8/04	1/3/05
MH-75	S T371C	None	Contact Record Exempt	N/A	Pipe and Manhole removed
MH-76	SE T371C	Removed entirely by Sector Closure	Contact Record Exempt	N/A	3/17/05
MH-77	NW B372A	Removed entirely by Sector Closure	8/30/04	N/A	2/22/05
MH-78	NE B372A	None	10/7/04	10/11/04	12/21/04
MH-79	NE B223	None	9/21/04	10/7/04	10/13/04
MH-80	S B374	None	9/21/04	10/11/04	12/28/04
MH-82	SE B374	Lift Station #1	9/21/04	N/A	3/15/05
MH-83	S T376A	Removed entirely by Sector Closure	4/13/05	N/A	4/13/05
MH-84	N B376	Removed entirely by Sector Closure	9/21/04	N/A	4/8/05
MH-86	W 373 CT	Demo'd with B373	12/28/04	12/29/04	See Bldg Close Out Rpt
MH-95	N B777	None	12/8/04	12/8/04	12/14/04
MH-96	NE B777	None	10/12/04	10/12/04	12/14/04
MH-97	SW B776	None	10/8/04	10/11/04	1/18/05
MH-98	S B776	None	9/27/04	10/11/04	1/18/05
MH-99	SW B776	None	9/27/04	10/11/04	12/6/04
MH-100	N B750	None	9/27/04	10/11/04	1/18/05
MH-101	NE B707	None	9/27/04	10/11/04	12/1/04
MH-103	E B707	None	9/27/04	10/11/04	12/1/04
MH-104	E B777	None	9/27/04	10/21/04	11/23/04
MH-105	SW B779	None	10/21/04	10/21/04	12/13/04
MH-106	S B779	Removed with 779 Pad remediation	N/A	N/A	See Bldg Close Out Rpt
MH-107	S B779	None	10/21/04	10/21/04	11/23/04
MH-108	NE B664	4' 3" below grade	9/14/04	10/8/04	11/22/04
MH-109	SE B664	4' 4" below grade	9/14/04	10/8/04	11/22/04
MH-110	W B850	None	10/4/04	10/8/04	11/10/04
MH-111	N B850	None	10/4/04	10/8/04	11/10/04
MH-112	N B850	Demo w/881 guard shack	N/A	N/A	See Bldg Close Out Rpt
MH-113	N B850	Demo w/881 guard shack	N/A	N/A	See Bldg Close Out Rpt
MH-115	NW 215C	None	10/5/04	10/11/04	11/11/04
MH-116	NE 215C	None	9/27/04	10/11/04	11/11/04

MH No.*	Location	Comments	Rad Survey Complete	Concrete Plugs	Demolished
MH-117	NW 215D	None	9/27/04	10/12/04	11/11/04
MH-121	NE Tent 2	None	10/8/04	10/12/04	1/12/05
MH-122	SW B928	None	9/27/04	10/12/04	11/11/04
MH-123	SE B910	None	10/7/04	10/12/04	1/24/05
MH-127	W B883	None	9/14/04	10/8/04	11/8/04
MH-128	NW B883	None	10/4/04	10/8/04	11/10/04
MH-129	W B889	None	8/30/04	10/8/04	11/8/04
MH-130	W B884	None	9/14/04	10/8/04	11/8/04
MH-131	Inside B883	Demo w/ bldg.	N/A	N/A	See Bldg Close Out Rpt
MH-133	SW T883A	None	10/21/04	10/21/04	11/8/04
MH-134	NW B889	Previously removed	N/A	N/A	Previously
MH-135	W B886	Demolished with B886.	N/A	N/A	See Bldg Close Out Rpt
MH-136	W B707	None	10/12/04	10/11/04	11/10/04
MH-138	NW B881	None	9/14/04	10/8/04	11/8/04
MH-139	S B881	Demolished with B881	N/A	N/A	881 Demo
MH-140	NE B910	None	10/8/04	10/12/04	1/11/05
MH-141	E B910	None	9/27/04	10/12/04	12/10/04
MH-147	NE 990	None	9/27/04	10/12/04	11/11/04
MH-148	E 990	None	9/27/04	10/12/04	12/29/04
MH-163	NE T117A	Demo'ed during 116 re-contour.	Contact Record Exempt	N/A	Manhole removed
MH-164	NW B116	Demo'ed during 116 re-contour.	Contact Record Exempt	N/A	Manhole removed
MH-165	N B116	Top of Sewer Line 3' 2" below grade	10/7/04	10/12/04	12/7/04
MH-166	S T371C	Removed during T371 soil removal	Contact Record Exempt	N/A	Pipe and Manhole removed
MH-167	E MH-66	None	8/30/04	9/2/04	9/7/04
MH-168	N Tent 7	None	8/19/04	8/18/04	8/23/04
MH-169	NE Tent 7	None	8/30/04	9/2/04	9/7/04
MH-170	SW Tent 7	None	8/19/04	8/18/04	8/23/04
MH-171	S Tent 7	None	8/19/04	8/18/04	8/23/04
MH-173	NW T891E	None	8/19/04	9/2/04	9/7/04
MH-174	SW T891Q	None	8/19/04	8/18/04	8/23/04
MH-175	NE T891E	None	9/1/04	9/2/04	9/7/04
MH-176	NW T891E	None	8/19/04	8/18/04	8/23/04
MH-177	NE T891A	None	8/19/04	8/18/04	8/23/04
MH-178	NE B865	None	8/19/04	8/18/04	9/10/04
MH-180	S T886B	None	8/19/04	8/18/04	9/10/04
MH-181	N T893A&B	None	8/19/04	8/18/04	9/10/04
MH-182	N B706	None	10/5/04	10/11/04	11/23/04
MH-183	S MH-55	Previously Removed	N/A	N/A	Previously
MH-184	E B443	Removed w/ fuel oil	10/5/04	N/A	See Bldg Close

MH No.*	Location	Comments	Rad Survey Complete	Concrete Plugs	Demolished
		remediation			Out Rpt
MH-188	S B130	130 line	8/30/04	10/4/04	10/6/04
MH-189	SW B131	130 line	8/30/04	10/4/04	10/6/04
MH-190	E MH-189	130 line	8/30/04	10/4/04	10/6/04
MH-191	N T124A	None	9/14/04	10/4/04	11/9/04
MH-192	NW B331	None	9/14/04	10/4/04	12/7/04
MH-193	E B460	None	10/5/04	10/5/04	10/7/04
MH-194	SE T371C	None	Contact Record Exempt	7/13/03	7/14/04
MH-195	SE T371C	Removed entirely by Sector Closure	Contact Record Exempt	N/A	3/17/05
MH-197	E B991	Demolished with B991	Contact Record Exempt	N/A	991 Demo
MH-198	E B991	Demolished with B991	Contact Record Exempt	N/A	991 Demo
MH-199	NE B771	Demolished with 771	N/A	N/A	See Bldg Close Out Rpt
MH-200	E B566	None	10/12/04	10/13/04	10/20/04
MH-201	E B777	None	10/21/04	10/21/04	3/1/05
MH-202	E B569	Surveyed clean 10/11/04	10/12/04	10/11/04	11/10/04
MH-203	E B569	Surveyed clean 10/11/04;	10/12/04	10/11/04	11/10/04
MH-204	W B883	None	9/14/04	10/8/04	11/23/04
MH-205	SW B441	None	10/4/04	10/6/04	10/7/04
MH-206	SW B440	None	3/15/05	N/A	3/31/05
MH-207	SW B440	None	3/15/05	N/A	3/31/05
MH-208	S B790	Demo'd with B790	N/A	N/A	Previously
MH-209	N MH-167	Previously removed.	N/A	N/A	Previously
MH-210	NW 372A	Removed entirely by Sector Closure	10/21/04	N/A	3/20/05
MH-211	SE B564	Surveyed clean 10/11/04	10/12/04	10/11/04	11/10/04
MH-212	N T690N	None	10/21/04	10/21/04	11/9/04
MH-213	W B702	Demolished with B702	N/A	N/A	702 Demo
MH-214	NE B559	Surveyed clean 10/11/04	10/12/04	10/11/04	1/17/05
MH-215	E B112	None	10/5/04	10/6/04	10/7/04
MH-216	S B371	Rad surveyed as "MH-132"	9/21/04	10/11/04	3/20/054

* The manhole numbers were established in the 1990s as part of a utility inventory. There are gaps in the numerical sequence because field work demonstrated that some of the numbered structures were not manholes.

**Contact Record Exempt – Manhole removals conducted prior to the Final Closure Strategy (August 31, 2004)

Lift Stations

There were 12 lift stations in the Rocky Flats sanitary collection system. All have been demolished as described in the Closure Strategy. Table 3 list the lift station number and the location.

Lift stations were either removed completely, or grouted and removed down to 4 feet below grade as described in the Technical Memorandum. All pumps, piping, controls and related equipment were removed completely.

Table 3: Rocky Flats Sanitary Collection System Lift Stations

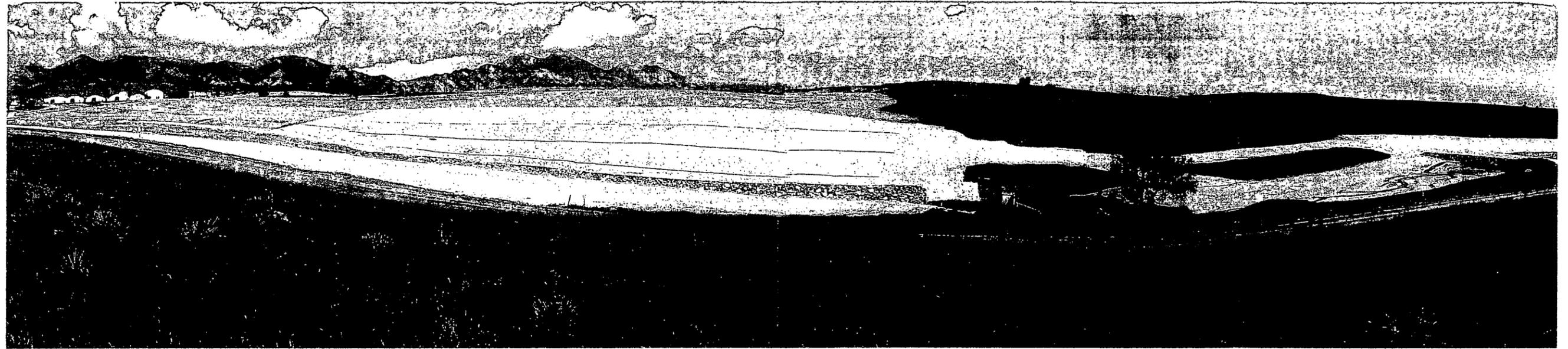
Lift Station Number	Location	Removed to Below 4 Ft. (O) or Completely Removed (X)*
LS-1	SE 374	O
LS-2	S 771F	O
LS-3	NW 771	O
LS-4	E 792A	O
LS-5	N 771	O
LS-6	S 883	O
LS-7	S 881	X
LS-8	N 886 B	O
LS-9	S 906	O
LS-10	S 792	O
LS-11	S 792	O
LS-12	NE 713	X

Groundwater and the Closed Sanitary Collection System

There was some concern that the sewer lines left in place or the bedding material of the sewer lines could serve as a conduit for underground contamination to impact surface waters. To protect against such preferential flow, the sewer lines were grouted at every manhole, as described above, and at strategic locations, the lines were excavated and both the line and the bedding material were grouted. Those locations are shown on the Close Out Report Drawing 1 (Close Out Dwg 1) as Interruption Ditches. Groundwater modeling assessing contaminant transport shows that, in general, without the disruptions to the bedding material, there is a potential for contaminants to move along this pathway. Interruptions were made at 8 locations, primarily from the B776-B881 corridor and eastward. Bed rock is known to be shallow in the corridor area, so the disruptions at the key locations along this line have effectively isolated the collection system for the western half of the industrial area. In the area east of the corridor, additional interruptions have been made in the vicinity of B910 and B990, further disrupting any preferential groundwater pathways in the sewer line bedding material.

It can be said that the closed system will not have subsequent adverse environmental impacts. Further, a Programmatic Biological Assessment (PBA) and accompanying Biological Opinion (BO) conducted to assess impacts of demolition activities was completed in April 2004. The PBA/BO concludes that the cessation of wastewater treatment plant effluent and of imported water is not considered to be a depletion of the Platte River system. As for residual waste, all screenings showed that there was no contamination in any part of the system, the lines were flushed before closure, and all manholes were grouted prior to filling. All facilities have been removed to 3 feet below grade, and the former site of B995 has been regraded as part of Functional Channel 4. There is no visible evidence that Rocky Flats had ever had a sanitary collection and treatment system. Figure 1 shows a present day view of Functional Channel 4 from the 750 Pad to the west down to Pond B-1 to the east. The north side of the drainage was the site of B995.

Figure 1 – View of Functional Channel 4 (South Walnut Creek) from 750 Pad to Pond B-1



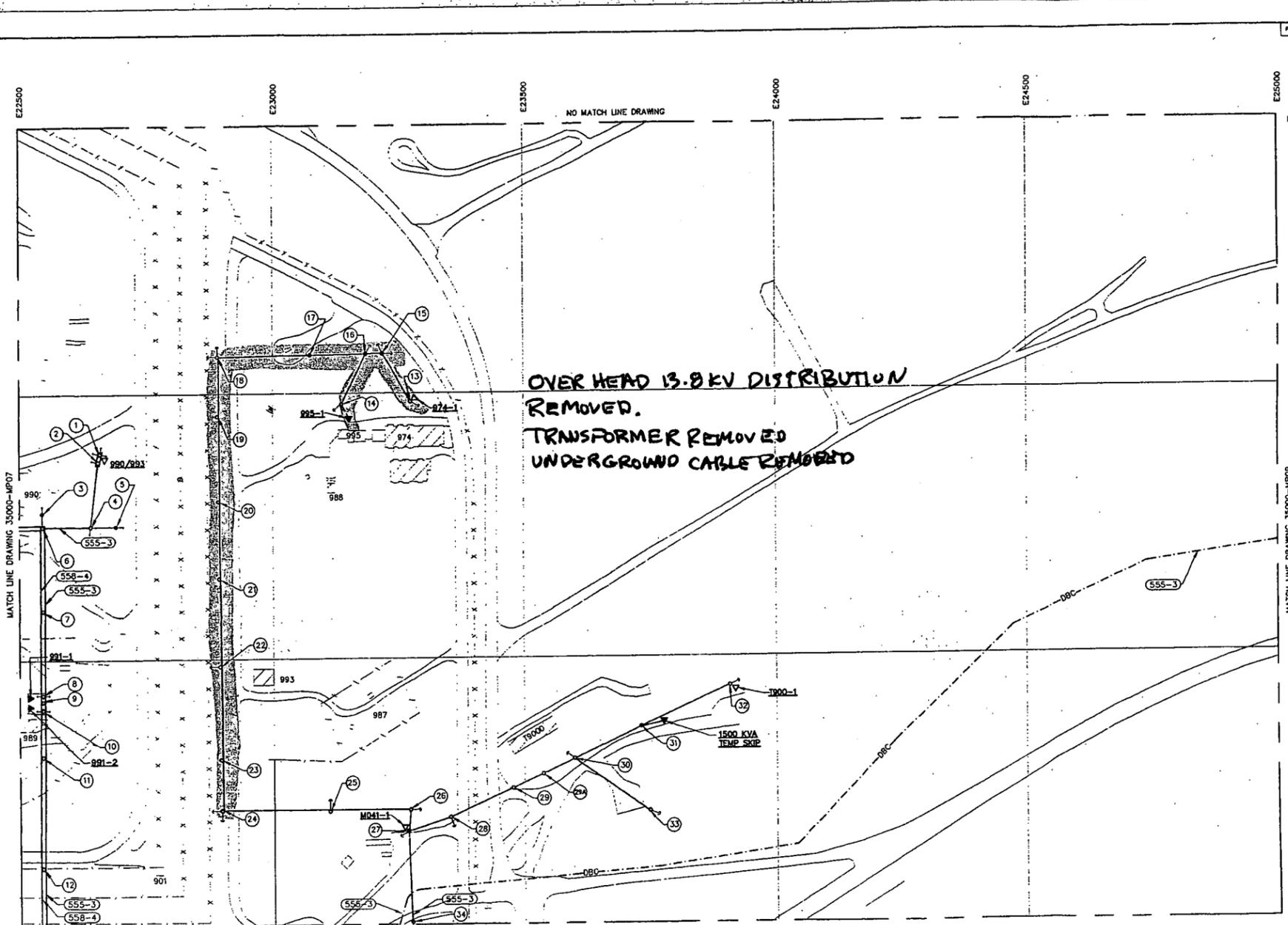
BUILDING 995

UTILITY SERVICE REMOVAL

DRAWING A – REMOVAL OF 480 V ELECTRICAL SERVICE 1995

DRAWING B – REMOVAL OF 13.8 KV ELECTRICAL SERVICE 2004

DRAWING C – REMOVAL OF ALL OTHER UTILITIES 2004



NOTES:
1. ALL CIRCUITS ARE THREE PHASE, UNLESS NOTED OTHERWISE.

POLE SCHEDULE

#	POLE TAG
1	07 859 B
2	07 859 A
3	07 859
4	07 850
5	07 857
6	07 856
7	07 850
8	07 850
9	07 851
10	07 850
11	07 850 B
12	08 745A
13	08 745B
14	08 745C
15	08 745D
16	08 745E
17	08 745F
18	08 745G
19	08 745H
20	08 745I
21	08 745J
22	08 745K
23	08 745L
24	08 745M
25	08 745N
26	08 745O
27	08 745P
28	08 745Q
29	08 745R
30	08 745S
31	08 745T
32	08 745U
33	08 745V
34	08 745W

LEGEND:

SYMBOL	DESCRIPTION
(875-3)	13.8KV CIRCUIT NUMBER
130	13.8KV CONDUIT NUMBER INDICATES CONDUIT SIZE
(54)	POWER POLE SCHEDULE NUMBER
MD40-1	POLE MOUNTED TRANSFORMER INDICATES TRANSFORMER NUMBER
443-2	PAD MOUNTED TRANSFORMER INDICATES TRANSFORMER NUMBER
S16	13.8KV OVERHEAD GANG SWITCH INDICATES SWITCH NUMBER
TS	13.8 KV PAD MOUNTED TRANSFER SWITCH
SS9	13.8KV PAD MOUNTED GANG SWITCH INDICATES SWITCH NUMBER
(Symbol)	13.8KV OVERHEAD FEEDER
(Symbol)	13.8KV DIRECT BURIED CABLE
(Symbol)	13.8KV UNDERGROUND CONDUIT
(Symbol)	13.8KV POWER POLE SINGLE CIRCUIT HORIZONTAL CONSTRUCTION
(Symbol)	13.8KV POWER POLE DOUBLE CIRCUIT HORIZONTAL CONSTRUCTION
(Symbol)	13.8KV POWER POLE SINGLE CIRCUIT VERTICAL CONSTRUCTION
(Symbol)	13.8KV POWER POLE DOUBLE CIRCUIT VERTICAL CONSTRUCTION
(Symbol)	GUY POLE
(Symbol)	GUY WITH ANCHOR
(Symbol)	MAN HOLE

ISSUE	UPDATED	DESCRIPTION	PROJECT/CHARGE NO.
A	RFCCS	3-1-99	NBE30100
DESIGN COMPANY	DATE	DESIGNER	PROJECT/CHARGE NO.
ORIGINAL ISSUE/AS-BUILT	3-1-99	TS	NBE30100
DESCRIPTION	DESIGNER	DESIGNING BY	U.S. DEPARTMENT OF ENERGY
DESIGN COMPANY: DYNACORP	DESIGNER: STRAYER	DESIGNING BY: TS	ROCKY FLATS OFFICE GOLDEN, COLORADO
U.S. DEPARTMENT OF ENERGY	PROJECT BY: CLINTANA	PROJECT BY: AEQ	Rocky Flats Environmental Technology Site
ROCKY FLATS OFFICE GOLDEN, COLORADO	DEC. DATE: HARRISON	DEC. DATE: GAH	GOLDEN, COLORADO
Rocky Flats Environmental Technology Site	APPROVED BY: LEE	APPROVED BY: JRL	13.8 KV MASTER PLAN
GOLDEN, COLORADO	APPROVED BY: LEE	APPROVED BY: JRL	SECTOR 7
13.8 KV MASTER PLAN	DATE: CLARKE	DATE: JAB	DRAWING NUMBER
SECTOR 7	DATE: JAB	DATE: JAB	D 35000-MP08
DRAWING NUMBER	SCALE: 1"=100'	SCALE: 1"=100'	ISSUE
D 35000-MP08	SCALE: 1"=100'	SCALE: 1"=100'	B
ISSUE	SCALE: 1"=100'	SCALE: 1"=100'	
B	SCALE: 1"=100'	SCALE: 1"=100'	

AUTOCAD COMPUTER GENERATED
NO MANUAL CHANGES ALLOWED

B

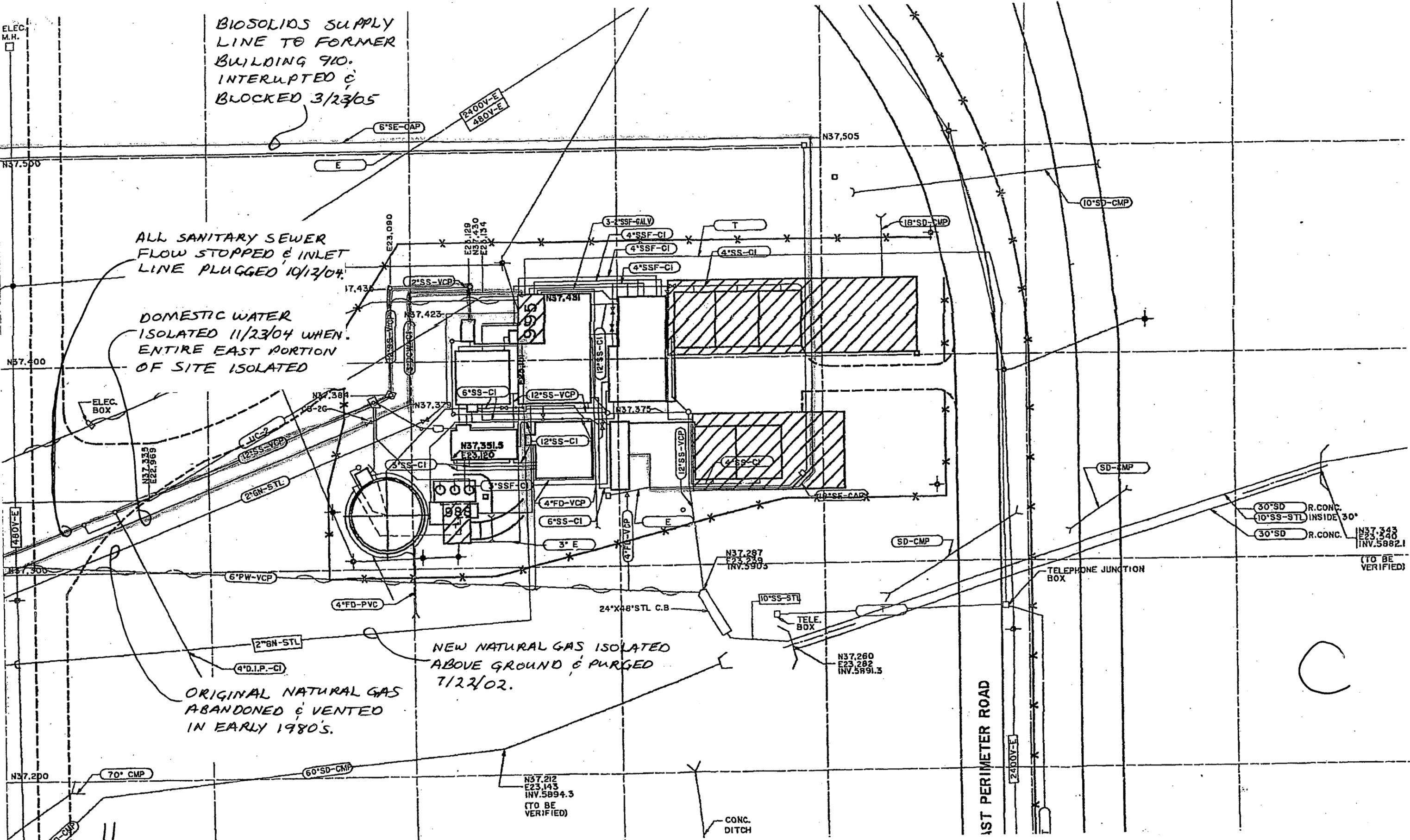
BIOSOLIDS SUPPLY
LINE TO FORMER
BUILDING 910.
INTERRUPTED &
BLOCKED 3/23/05

ALL SANITARY SEWER
FLOW STOPPED & INLET
LINE PLUGGED 10/12/04.

DOMESTIC WATER
ISOLATED 11/23/04 WHEN
ENTIRE EAST PORTION
OF SITE ISOLATED

NEW NATURAL GAS ISOLATED
ABOVE GROUND & PURGED
7/22/02.

ORIGINAL NATURAL GAS
ABANDONED & VENTED
IN EARLY 1980'S.



30\"/>
10\"/>
30\"/>
R.CONC.
INSIDE 30\"
R.CONC.
N37,243
E23,340
INV.5882.1
(TO BE VERIFIED)

C

1ST PERIMETER ROAD

N37,212
E23,143
INV.5894.3
(TO BE VERIFIED)

N37,260
E23,282
INV.5891.3

N37,287
E23,239
INV.5903

N37,351.5
E23,120

N37,481

N37,505

N37,500

N37,400

N37,300

N37,200

ELEC.
M.H.

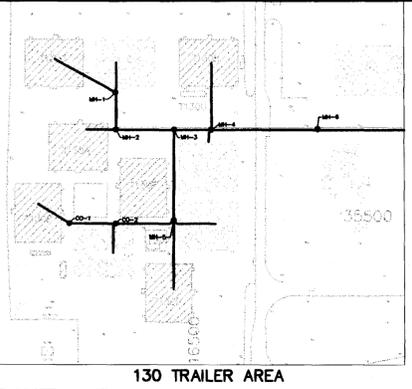
11

SANITARY COLLECTION SYSTEM

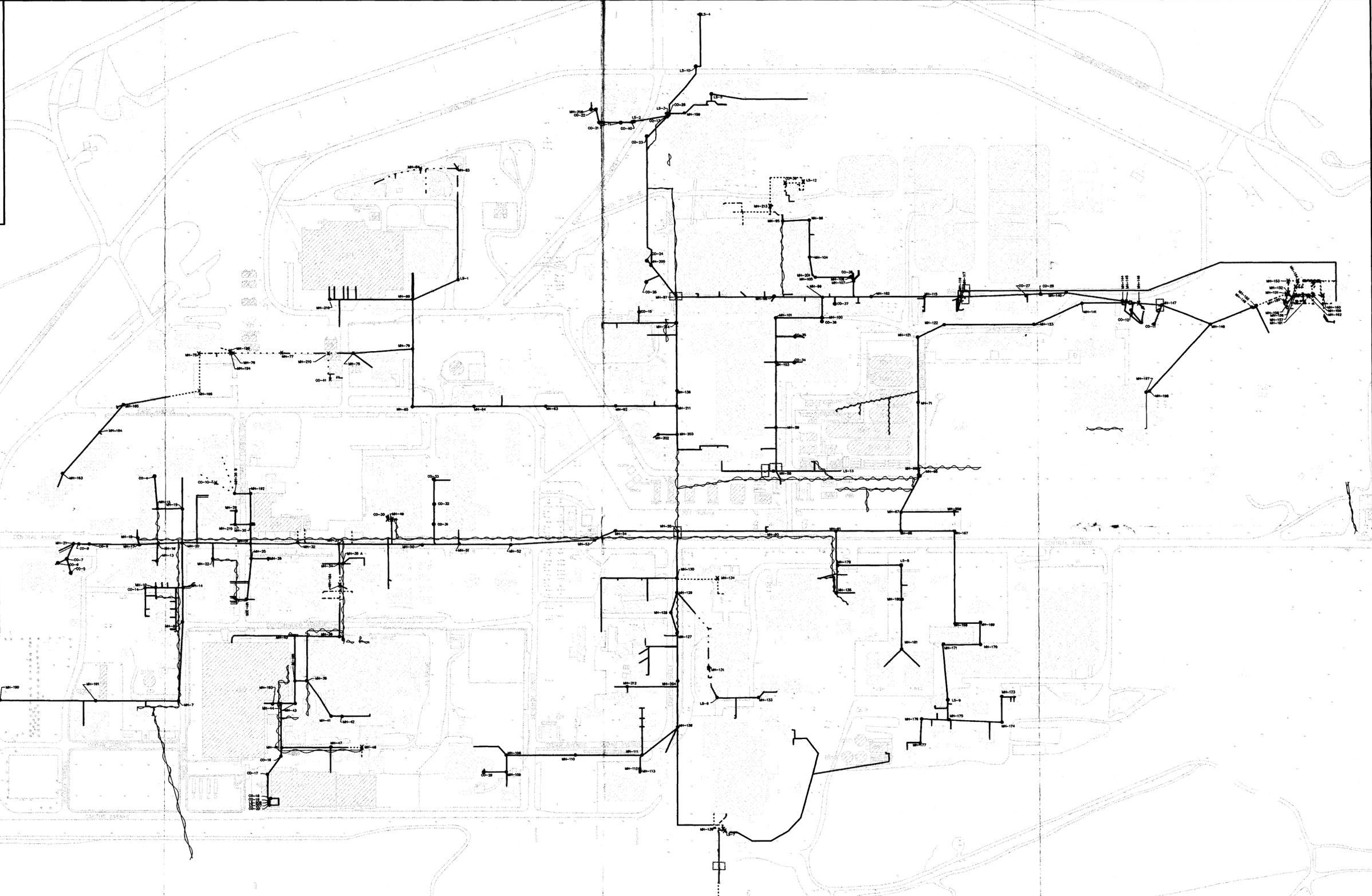
MANHOLE REMOVAL

DRAWING: ROCKY FLATS SANITARY WASTE LINES

CLOSEOUT REPORT DWG 1



130 TRAILER AREA



LEGEND

- SEWER LINE REMAINING
- SEWER - REMOVED
- ~ SEWER - ABANDONED

- ⊠ MH-174 MANHOLE(MH) COMPLETELY REMOVED
- MH-174 MANHOLE(MH) REMOVED TO 4 FT. BELOW GRADE
- ⊠ CO-17 CLEANOUT(CO) COMPLETELY REMOVED
- CO-17 CLEANOUT(CO) REMOVED TO 4 FT. BELOW GRADE
- ⊠ LS-17 LIFT STATION(LS) COMPLETELY REMOVED
- LS-17 LIFT STATION(LS) REMOVED TO 4 FT. BELOW GRADE
- INTERRUPTION DITCH



SCALE: 1"=200'-0"

ROCKY FLATS COORDINATE SYSTEM
DATUM: NAD 27

SANITARY WASTE LINES
CLOSEOUT REPORT DWG1

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS ENVIRONMENTAL
TECHNOLOGY SITE

Plot date: Jun 08, 2005 - 9:16am

13 B2-A-000855