FINAL

IMA

ADDENDUM #18
TO THE
WORK PLAN

FOR

3d Inf Div (Mech)

PRELIMINARY GROUNDWATER AND CORRECTIVE ACTION PLAN–PART A/PART B INVESTIGATIONS AT FORMER UNDERGROUND STORAGE TANK SITES, HUNTER ARMY AIRFIELD AND FORT STEWART, GEORGIA

Prepared for

U.S. ARMY CORPS OF ENGINEERS
SAVANNAH DISTRICT

Contract No. DACA21-02-D-0004
Delivery Order 54

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Prepared by

Science Applications International Corporation
151 Lafayette Drive
Oak Ridge, TN 37830

June 2005

APPROVALS

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AND
FORT STEWART, GEORGIA

Greg Grim, Program Manager — Date: 6/29/05

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BFF	Bulk Fuel Facility
BGS	below ground surface
BTEX	benzene, toluene, ethylbenzene, and xylenes
DAACG	Departure/Arrival Control Group
DO	dissolved oxygen
FTA	Fire Training Area
GA EPD	Georgia Environmental Protection Division
HAAF	Hunter Army Airfield
NFA	no further action
PCE	tetrachloroethene
PDO	Old Property Disposal
Redox	oxidation-reduction potential
SVOC	semivolatile organic compound
SWMU	solid waste management unit
UST	underground storage tank
VOC	volatile organic compound

1.0 INTRODUCTION

This addendum supplements the following work plans: *Work Plan for Preliminary Groundwater and Corrective Action Plan–Part A/Part B Investigations at Former Underground Storage Tank Sites, Fort Stewart, Georgia* (SAIC 1996) and *Sampling and Analysis Plan for Corrective Action Plan–Part A and B Investigations for Former Underground Storage Tanks at Hunter Army Airfield, Georgia* (SAIC 1998). It presents changes to the work plans and the specific sampling requirements for the fiscal year 2005 monitoring only program and miscellaneous investigations.

Seven sites at Fort Stewart, Georgia, were identified as requiring additional activities based on analytical results obtained during previous investigations. These sites are former underground storage tanks (USTs) 11 & 12, UST 82, UST 89, UST 94A, USTs 255 & 256, USTs 276-279, and Solid Waste Management Unit (SWMU) 13. Table 1 identifies general site-specific information and presents the proposed activities for each site.

Six sites at Hunter Army Airfield (HAAF) were identified as requiring additional activities based on analytical results obtained during previous investigations. These sites are the Fire Training Area (FTA) the Bulk Fuel Facility (BFF), Pumphouse #1, Pumphouse #2, the Old Property Disposal (PDO) Yard, and USTs 25 & 26.Table 2 identifies general site-specific information and presents the proposed activities for each site.

2.0 PROJECT ORGANIZATION

The organizational chart for the Fort Stewart and HAAF investigations is presented in Figure 1.

3.0 FIELD ACTIVITIES

3.1 FIELD ACTIVITIES GROUP 1 (BASE)

At the USTs 11 & 12 site, approximately 15 monitoring wells and 24 injection wells will be abandoned pending approval for no further action (NFA) at the site by the Georgia Environmental Protection Division (GA EPD). The wells will be abandoned in accordance with the abandonment procedures described in the *Work Plan for Preliminary Groundwater and Corrective Action Plan–Part A/Part B Investigations at Former Underground Storage Tank Sites, Fort Stewart Georgia* (SAIC 1996). The well locations for the site are presented in Appendix A, Figure A-1.

At the UST 82 site, as part of the monitoring only program, two semiannual sampling rounds of four existing wells for benzene, toluene, ethylbenzene, and xylenes (BTEX) will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-2.

At the UST 89 site, as part of the monitoring only program, two rounds of semiannual sampling of four existing wells for BTEX will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-3.

At the UST 94A site, as part of the monitoring only program, two rounds of semiannual sampling of three existing wells for BTEX will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-4.

At the USTs 255 & 256 site, as part of the monitoring only program, two rounds of annual sampling of 11 wells for BTEX will be conducted. Well 93-08 will be checked for free product on a bimonthly basis. If free product is present in the well, then approximately 40 to 50 gal of a free product/water mixture will be pumped from the well and absorbent socks will be placed in the well between bimonthly events. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-5.

At the SWMU 13 site, two annual sampling rounds will be conducted. Seven wells will be sampled for volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), total iron, nitrate, nitrite, sulfate, sulfide, carbon dioxide, total phosphorous, and methane. Also, four soil borings will be installed to determine the type of chromium in the soil. Two soil samples will be collected from each soil boring [i.e., 2 and 3 ft below ground surface (BGS)] and analyzed for hexavalent chromium. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-6.

At the FTA and Departure/Arrival Control Group (DAACG) Chlorinated Solvents Area at HAAF, two rounds of semiannual sampling of 20 wells will be conducted. At the FTA, groundwater samples from ten wells will be analyzed for VOCs, SVOCs, and lead. At the DAACG Chlorinated Solvents Area, groundwater samples from ten wells will analyzed for VOCs. The sampling locations for the site are listed in Table 1 and presented in Appendix B, Figure B-1.

At the BFF (UST 117) at HAAF, free product will be pumped from MW-E5 on a bimonthly basis for a period of 1 year. In between pumping events, an absorbent sock will be placed in the well. No groundwater samples will be collected from the site. The location for product removal for the site is presented in Appendix B, Figure B-2.

At the Former Pumphouse #1 site at HAAF, as part of the monitoring only program, two rounds of semiannual sampling of eight wells for BTEX will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix B, Figure B-3.

At the Former Pumphouse #1 site and DAACG area at HAAF, free product removal utilizing a vacuum truck will be conducted bimonthly for 1 year in 23 monitoring wells and 29 CPT wells. The locations for product removal for the site are presented in Appendix B, Figures B-4 and B-5, respectively.

At the Former Pumphouse #2 site, as part of the monitoring only program, two semiannual sampling rounds of 12 wells for BTEX and polyaromatic hydrocarbons will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix B, Figure B-6. In addition, well TMP-04R will be pumped bimonthly, using the vacuum truck, for 1 year.

At the PDO Yard site at HAAF, seven wells associated with the tetrachloroethene (PCE) plume will be sampled for PCE, and seven wells associated with the BTEX plume will be sampled for BTEX. Two semiannual sampling events will be conducted. The sampling locations for the site are presented in Appendix B, Figure B-7.

The sample numbering system for each site is provided in Table 3. A summary of analytical samples to be collected at Fort Stewart and HAAF is provided in Tables 4 and 5, respectively.

3.2 FIELD ACTIVITIES GROUP 2 (OPTIONS 1, 2, AND 3)

3.2.1 Option 1

At the USTs 25 & 26 site at HAAF, as part of the monitoring only program, two semiannual sampling rounds of four existing wells for BTEX will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix B, Figure B-8.

3.2.2 Option 2

At the USTs 276-279 Victory Shoppette site, as part of the monitoring only program, two semiannual sampling rounds of 13 wells for BTEX and methyl tert butyl ether will be conducted. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-7. In addition, bimonthly water level measurements will be collected from MW-1, MW-2, MW-3, MW-4, MW-5R, and MW-6 to check for the presence of free product.

3.2.3 Option 3

If NFA is not granted by GA EPD for the USTs 11 & 12 site, then optional field activities will consist of two semiannual sampling rounds of 11 existing wells for BTEX. The sampling locations for the site are listed in Table 1 and presented in Appendix A, Figure A-1.

4.0 SOIL BORING INSTALLATION

Four soil borings will be installed using a hand auger at the SWMU 13 site. Two soil samples will be collected from each soil boring and sent to an off-site laboratory for hexavalent chromium analysis. One soil sample will be collected from the 2-ft BGS interval and one soil sample will be collected from the 3-ft BGS interval. The procedures and methodology for hand auger sampling are presented in the *Sampling and Analysis Plan for Phase II RCRA Facility Investigations of 16 Solid Waste Management Units at Fort Stewart, Georgia* (SAIC 1997).

5.0 GROUNDWATER SAMPLING

Low-flow techniques will be used to collect groundwater samples from all 2-in. monitoring wells. Field measurements performed during the investigations will include pH, specific conductance, temperature, oxidation-reduction potential (Redox), and dissolved oxygen (DO). Procedures and equipment for measurement of pH, specific conductance, temperature, Redox, and DO were presented in the work plan (SAIC 1996).

Groundwater samples will be collected from the 3/4-in. monitoring wells and piezometers using peristaltic pumps for purging and disposable bailers for sampling. Field measurements performed during the investigations will include pH, specific conductance, temperature, Redox, and DO. Procedures and equipment for measurement of pH, specific conductance, temperature, Redox, and DO were presented in the work plan (SAIC 1996).

6.0 WATER-LEVEL MEASUREMENT

Before the sampling team leaves the sites, a complete set of water level measurements will be collected from all wells at each site. Procedures and equipment for water level measurements were presented in the work plan (SAIC 1996).

7.0 REFERENCES

SAIC (Science Applications International Corporation) 1996. *Work Plan for Preliminary Groundwater and Corrective Action Plan–Part A/Part B Investigations at Former Underground Storage Tank Sites, Fort Stewart, Georgia,* August.

SAIC 1997. *Sampling and Analysis Plan for Phase II RCRA Facility Investigations of 16 Solid Waste Management Units at Fort Stewart, Georgia*, October.

SAIC 1998. *Sampling and Analysis Plan for Corrective Action Plan–Part A and B Investigations for Former Underground Storage Tanks at Hunter Army Airfield, Georgia,* March.

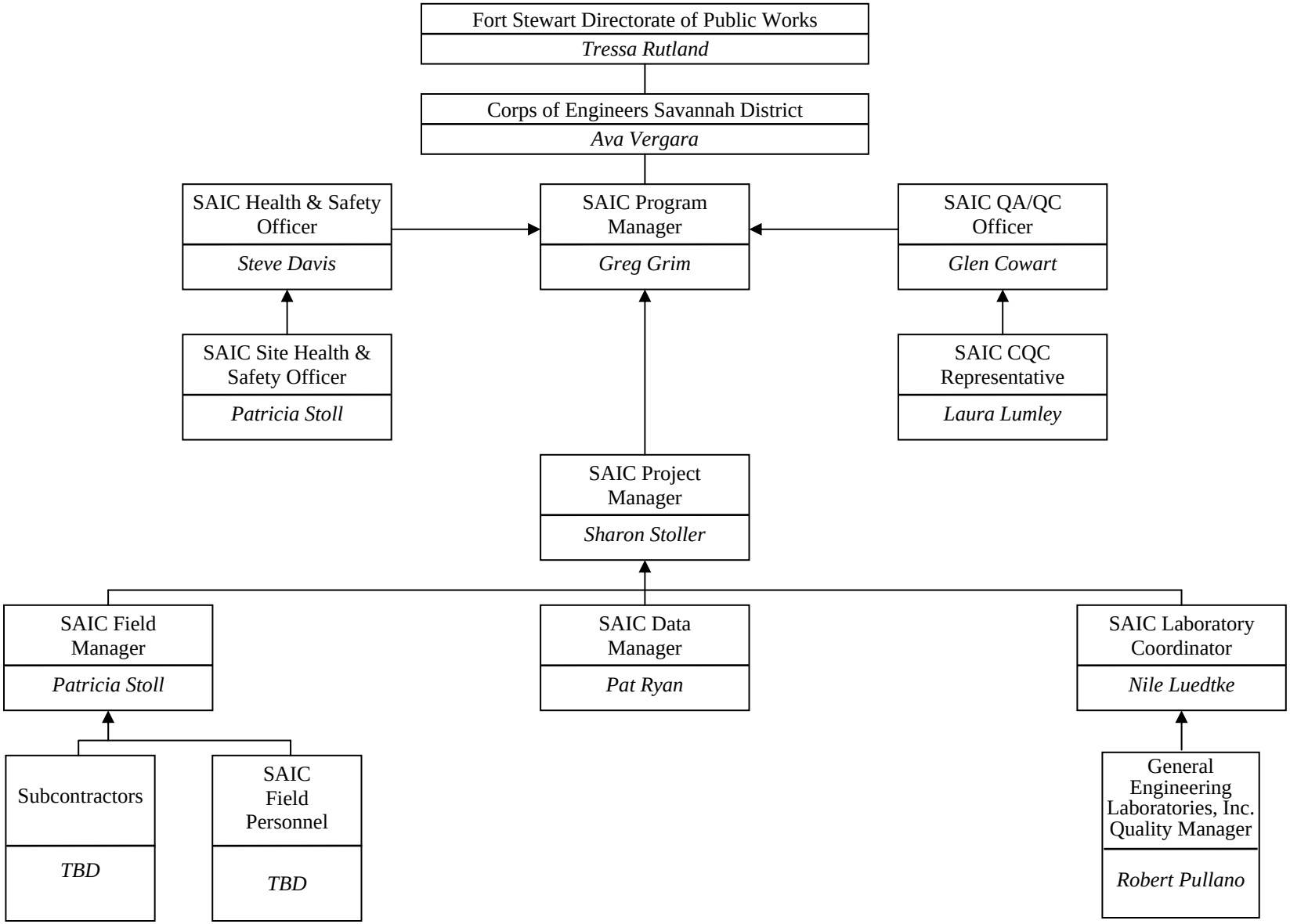

Figure 1. Revised Organizational Chart for Fort Stewart/Hunter Army Airfield Investigations

Table 1. Proposed Fort Stewart Investigations

Site Name	Facility ID #	Building	Unit	Type of Tank	Product Removal/ Soil Boring Installation	Laboratory Analysis	Wells to Be Sampled	Laboratory Analyses	Sampling Times
USTs 11 & 12	9-089068	1810	Divarty	Gas/diesel			Abandon approximately 50 wells pending NFA approval		TBD
UST 82	9-089029	1281	3d 7th Infantry	Waste oil			32-07, 32-08, 32-10, 32-11 (4)	GW: BTEX	July 2005 January 2006
UST 89	9-089074	1248	1st 41st Field Artillery	Waste oil			33-06, 33-07, 33-08R, 33-10 (4)	GW: BTEX	July 2005 January 2006
UST 94A	9-089078	1320	3d 7th Calvary	Waste oil			37-06R2, 37-07, 37-09 (3)	GW: BTEX	July 2005 January 2006
USTs 255 & 256	9-089087	16012	Taylors Creek Maintenance Area	Gas/diesel	Product Removal: 93-08		93-08, 93-14, 93-15, 93-17, 93-18, 93-19, 93-20, 93-25, 93-28, 93-30, 93-31 (11)	GW: BTEX	Product removal: Bimonthly GW sampling: July 2005 July 2006
SWMU 13					Soil Borings: 13-SB-01, 13-SB-02, 13-SB-03, 13-SB-04	Soil: Hexavalent Chromium (8)	MW-3, MW-4, MW-10, MW-15, MW-16, MW-18, MW-19 (7)	GW: VOCs, SVOCs, iron, nitrate, sulfate, carbon dioxide, phosphorous, sulfide, methane	Soil Borings: July 2005 GW Sampling: July 2005 July 2006
Option 2									
USTs 276-279	9-089156		Victory Shoppette	Gas			MW-1, MW-2, MW-3, MW-4, MW-5R, MW-6, MW-7, MW-8, MW-12, 1A-18, 1A-20, 1A-21, 1A-22 (13)	GW: BTEX, MTBE	GW Sampling: July 2005[a] January 2006[a] Water Levels: Bimonthly in wells MW-1, MW-2, MW-3, MW-4, MW-5R, and MW-6
Option 3									
USTs 11 & 12	9-089068	1810	Divarty	Gas/diesel			03-05, 03-08, 03-09, 03-10, 03-11, 03-12, 03-14, 03-16, 03-17, 03-18, 03-19 (11)	GW: BTEX	TBD

[a] Assumes that contract notice to proceed for the options is received prior to the scheduled sampling round.

BTEX = Benzene, toluene, ethylbenzene, and xylenes.
GW = Groundwater.
NFA = No further action.
SWMU = Solid waste management unit.
SVOC = Semivolatile organic compound.
TBD = To be determined.
UST = Underground storage tank.
VOC = Volatile organic compound.

Table 2. Proposed Hunter Army Airfield Investigations

Site Name	Facility ID #	Building	Unit	Type of Tank	Free Product Removal Wells	Wells to Be Sampled	Laboratory Analyses	Sampling Times
Fire Training Area						HMW-02, HMW-04, HMW-06, HMW-08, HMW-09, HMW-10, HMW-11, HMW-13, HMW-23, HMW-24 (10)	GW: VOC, SVOC, Lead	July 2005 January 2006
DAACG Chlorinated Solvents Area						COE-MW-01, COE-MW-02, COE-MW-03, COE-MW-04, COE-MW-05, COE-MW-06, COE-MW-07, COE-MW-08, HMW-14R, HMW-21 (10)	GW: VOC	July 2005 January 2006
Pumphouse #1	9-025085	8060		JP-8		D-MW-5, D-MW-6, P1-MW-1, P1-MW-2, P1-MW-18, P1-MW-19, P1-MW-22, P1-MW-23 (8)	GW: BTEX	July 2005 January 2006
Pumphouse #2	9-025086	8065				TMP-1, TMP-2, TMP-3, TMP-4R, TMP-5, TMP-6, TMP-7, TMP-8, TMP-9, TMP-10, TMP-11, TMP-12 (12)	GW: BTEX, PAH	July 2005 January 2006
PDO Yard		726				MW-2, MW-3, MW-5, MW1-24, MW-26, MW-27, MW-29 (7)	GW: PCE	April 2005 October 2005
PDO Yard		726				MW-1, MW-6, MW-7, MW-8, MW-9, MW1-23, MW1-25 (7)	GW: BTEX	April 2005 October 2005
UST 117 (BFF)	9-025113	7002	BFF	JP-4	Product Removal/Socks installed BF-MW-E5			Bimonthly beginning May 2005

Table 2. Proposed Hunter Army Airfield Investigations (continued)

Site Name	Facility ID #	Building	Unit	Type of Tank	Free Product Removal Wells	Wells to Be Sampled	Laboratory Analyses	Sampling Times
DAACG/ Pumphouse #1/ Pumphouse #2	9-025085 9-025086	8060 8065		JP-8	Product Removal (Vacuum Truck): D-MW-02, D-MW-05, D-MW-06, D-MW-08, D-MW-11, D-MW-12, D-MW-13, D-MW-17, D-MW-34, D-MW-35, D-MW-36, D-MW-37, D-MW-38, D-MW-39, D-MW-40, D-MW-41, D-MW-42, D-MW-43, P1-MW-01, P1-MW-02, P1-MW-03, P1-MW-21, P1-MW-22, D-CPT-1, D-CPT-2, D-CPT-3, D-CPT-4, D-CPT-5, D-CPT-6, D-CPT-7, D-CPT-8, D-CPT-10, D-CPT-11, D-CPT-12, D-CPT-14, D-CPT-17, D-CPT-18, D-CPT-21, D-CPT-29, D-CPT-31, D-CPT-37, D-CPT-39, D-CPT-40, D-CPT-42, P1-CPT-2, P1-CPT-3, P1-CPT-7, P1-CPT-8, P1-CPT-11, P1-CPT-17, P1-CPT-18, P2-TMP-4R (52)			Bi-monthly beginning May 2005
Option 1								
USTs 25 & 26	9-025008	1343	260th Quarter-master	Gas/ diesel		AF-02, AF-05, AF-07, AF-12 (4)	GW: BTEX	July 2005 [a] January 2006 [a]

[a] Assumes that contract notice to proceed for the options is received prior to the scheduled sampling round.

BFF = Bulk Fuel Facility.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
DAACG = Departure/Arrival Control Group.
GW = Groundwater.
PAH = Polyaromatic hydrocarbon.
PCE = Tetrachloroethene.
PDO = Old Property Disposal.
SVOC = Semivolatile organic compound.
UST = Underground storage tank.
VOC = Volatile organic compound.

Table 3. Sample Numbering System for Fort Stewart/Hunter Army Airfield Activities

Sample Identification: XX##NT	
XX = Area designator Examples: Fort Stewart 03 = INV – 03 (USTs 11 & 12) 32 = INV – 32 (UST 82) 33 = INV – 33 (UST 89) 37 = INV – 37 (UST 94A) 93 = INV – 93 (USTs 255 & 256) 1A = INV – 1A (USTs 276–279) 13 = INV – 13 (SWMU 13)	Area designators used for the project will be the data-cluster identifiers presented in Table 1-1 of the project work plan (SAIC 1998) Examples: Hunter Army Airfield AC = INV – AC (Former HAAF Fire Training Area) AF = INV – AF (USTs 25 & 26) AM = INV – AM (Pumphouse #2) AN = INV – AN (Pumphouse #1) AP = INV – AP (PDO Yard) AS = INV – AS (DAACG Chlorinated Solvents Area) BF = INV – BF (Bulk Fuel Facility, UST 117)
## = Sample location	Sample locations will be consecutive starting from the last sample location Example 05 = Monitoring well 05
N = Sample depth	Sample depth will be represented by a number for each laboratory sample Examples 1 = First interval 2 = Second interval
T = Sample type	Examples 1 = Soil sample 2 = Groundwater sample 3 = Soil duplicate 4 = Groundwater duplicate 5 = Rinsate blank (soil equipment) 6 = Rinsate blank (groundwater equipment) 7 = Soil QA split sample 8 = Groundwater QA split sample 9 = Surface water sample 0 = Sediment sample A = Vertical-profile groundwater sample X = Investigation-derived waste soil

All trip blank samples used during the project will be consecutively identified.
HAAF = Hunter Army Airfield.
PDO = Old Property Disposal.
QA = Quality assurance.
SWMU = Solid waste management unit.
UST = Underground storage tank.

Table 4. Summary of Analytical Samples to be Collected during Fort Stewart Investigations

Matrix	Analysis	Analytical Procedures	No. Field Samples	QC Dups[a]	Field Rnsts[b]	QC Trip Blanks	Total Samples	Holding Time	Preservation Requirements	Sample Containers
Groundwater	BTEX	EPA 8260B	92	9	5	10	116	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	VOC	EPA 8260B	14	2	1	4	21	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	MTBE	EPA 8260B	26	3	2	0	31	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	SVOC	EPA 8270C	14	2	1	0	17	14 days	Cool 4°C	Two 1-L AG
	Iron	EPA 6010B	14	2	1	0	17	180 days	Cool 4°C HNO_3 pH<2	One 500-mL HDPE
	Nitrate	EPA 300.0	14	2	1	0	17	48 hours	Cool 4°C	One 250-mL HDPE
	Nitrite	EPA 300.0	14	2	1	0	17	48 hours	Cool 4°C	None[d]
	Sulfate	EPA 300.0	14	2	1	0	17	48 hours	Cool 4°C	None[d]
	Sulfide	EPA 376.2	14	2	1	0	17	7 days	Cool 4°C zinc acetate plus NaOH to pH>9	One 500-mL HDPE
	Carbon Dioxide	SM 4500	14	2	1	0	17	14 days	Cool 4°C	One 250-mL HDPE
	Methane	EPA 8000	14	2	1	0	17	14 days	Cool 4°C	Two 40-mL GSV[c]
	Total Phosphourous	EPA 365.4	14	2	1	0	17	28 days	Cool 4°C H_2SO_4 pH<2	One 250-mL HDPE
Soil	Hexavalent Chromium	EPA SW846-6010B	4	0	0	0	0	180 days	none	One 4-oz. CWM
IDW Water	VOC	EPA 8260B	2	0	0	0	2	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	Oil and grease	EPA 413.2	2	0	0	0	2	28 days	Cool 4°C H_2SO_4 pH<2	Two 1-L AG
	Total phenols	EPA 420.1/420.2	2	0	0	0	2	28 days	Cool 4°C H_2S0_4 pH<2	Two 1-L AG
	pH	EPA 150.1	2	0	0	0	2	ASAP	Cool 4°C	One 250-mL HDPE

Table 4. Summary of Analytical Samples to Be Collected during Fort Stewart Investigations (continued)

Matrix	Analysis	Analytical Procedures	No. Field Samples	QC Dups[a]	Field Rnsts[b]	QC Trip Blanks	Total Samples	Holding Time	Preservation Requirements	Sample Containers
IDW Soil	TCLP BTEX	EPA 1311/8260B	1	0	0	0	1	14 d initial extraction	Cool 4°C	One 4-oz. CWM
	TCLP Lead	EPA 1311/6010B	1	0	0	0	1	14 d initial extraction	Cool 4°C	One 4-oz. CWM

[a] The number of QC duplicate samples represents a 10% distribution between the different types of investigations to be conducted; however, the actual number of duplicates collected for each investigation type might vary slightly from the distribution presented.

[b] The number of QC rinsate blank samples represents a 5% distribution between the different types of investigations to be conducted; however, the actual number of blanks collected for each investigation type might vary slightly from the distribution presented.

[c] Sample containers will be filled so that no headspace is present.

[d] Analysis will be performed on matrix in a nitrate sample container.

AG = Amber glass.
ASAP = As soon as possible.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
CWM = Clear, wide-mouth (glass jar).
EPA = U. S. Environmental Protection Agency.
GSV = Glass septa vial.
(This table is in conformance with EM-200-1-3).
HDPE = High-density polyethylene.
IDW = Investigation-derived waste.
MTBE = Methyl tert butyl ether.
QC = Quality control.
SVOC = Semivolatile organic compound.
TCLP = Toxicity characteristic leaching procedure.
VOC = Volatile organic compound.

Table 5. Summary of Analytical Samples to be Collected during Hunter Army Airfield Investigations

Matrix	Analysis	Analytical Procedures	No. Field Samples	QC Dups[a]	Field Rnsts[b]	QC Trip Blanks	Total Samples	Holding Time	Preservation Requirements	Sample Containers
Groundwater	BTEX	EPA 8260B	74	7	4	4	89	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	VOC	EPA 8260B	20	2	1	2	22	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	SVOC	EPA 8270C	20	2	1	0	23	14 days	Cool 4°C	Two 1-L AG
	PAH	EPA 8100	24	2	1	0	27	14 days	Cool 4°C	Two 1-L AG
	PCE	EPA 8260B	14	2	1	0	17	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	Lead	EPA SW846-6010B	20	2	1	0	23	180 days	Cool 4°C HNO_3 pH<2	One 500-mL HDPE
IDW water	VOC	EPA 8260B	2	0	0	0	2	14 days	Cool 4°C HCl pH <2	Two 40-mL GSV[c]
	Oil and grease	EPA 413.2	2	0	0	0	2	28 days	Cool 4°C H_2SO_4 pH<2	Two 1-L AG
	Total phenols	EPA 420.1/420.2	2	0	0	0	2	28 days	Cool 4°C H_2S0_4 pH<2	Two 1-L AG
	pH	EPA 150.1	2	0	0	0	2	ASAP	Cool 4°C	One 250-mL HDPE
IDW Soil	TCLP BTEX	EPA 1311/8260B	11	0	0	0	11	14 days initial extraction	Cool 4°C	One 4-oz. CWM
	TCLP Lead	EPA 1311/6010B	11	0	0	0	11	14 days initial extraction	Cool 4°C	One 4-oz. CWM

[a] The number of QC duplicate samples represents a 10% distribution between the different types of investigations to be conducted; however, the actual number of duplicates collected for each investigation type might vary slightly from the distribution presented.

[b] The number of QC rinsate blank samples represents a 5% distribution between the different types of investigations to be conducted; however, the actual number of blanks collected for each investigation type might vary slightly from the distribution presented.

[c] Sample containers will be filled so that no headspace is present.

AG = Amber glass.
ASAP = As soon as possible.
BTEX = Benzene, toluene, ethylbenzene, and xylenes.
CWM = Clear, wide-mouth (glass jar).
EPA = U. S. Environmental Protection Agency.
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HDPE = High-density polyethylene.
IDW = Investigation-derived waste.
PAH = Polyaromatic hydrocarbon.
PCE = Tetrachloroethene.
QC = Quality control.
SVOC = Semivolatile organic compound.
TCLP = Toxicity characteristic leaching procedure.
VOC = Volatile organic compound.

(This table is in conformance with EM-200-1-3).

APPENDIX A

PROPOSED SAMPLING LOCATIONS FOR FORT STEWART INVESTIGATIONS

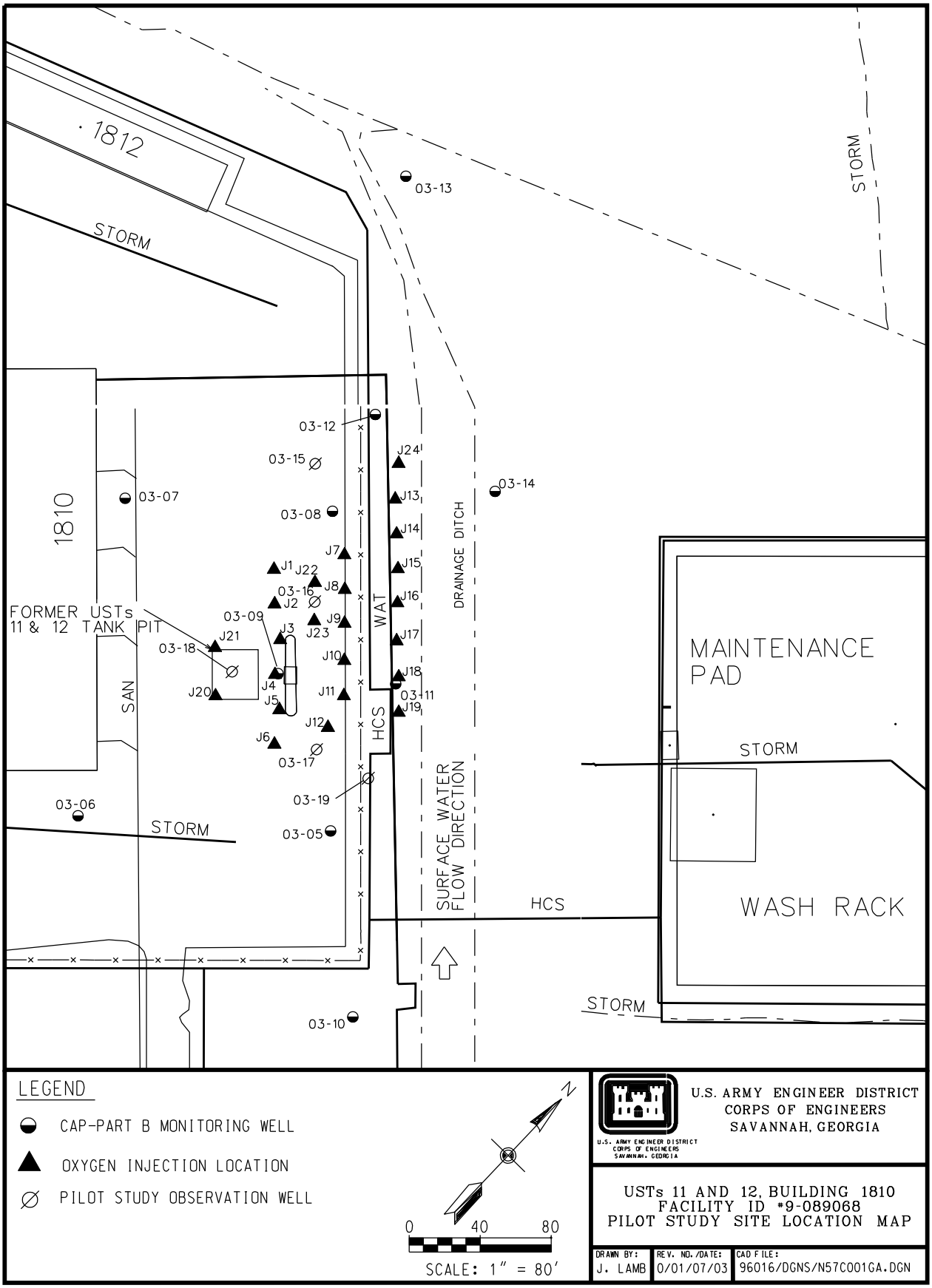


Figure A-1. Site Location Map of USTs 11 & 12

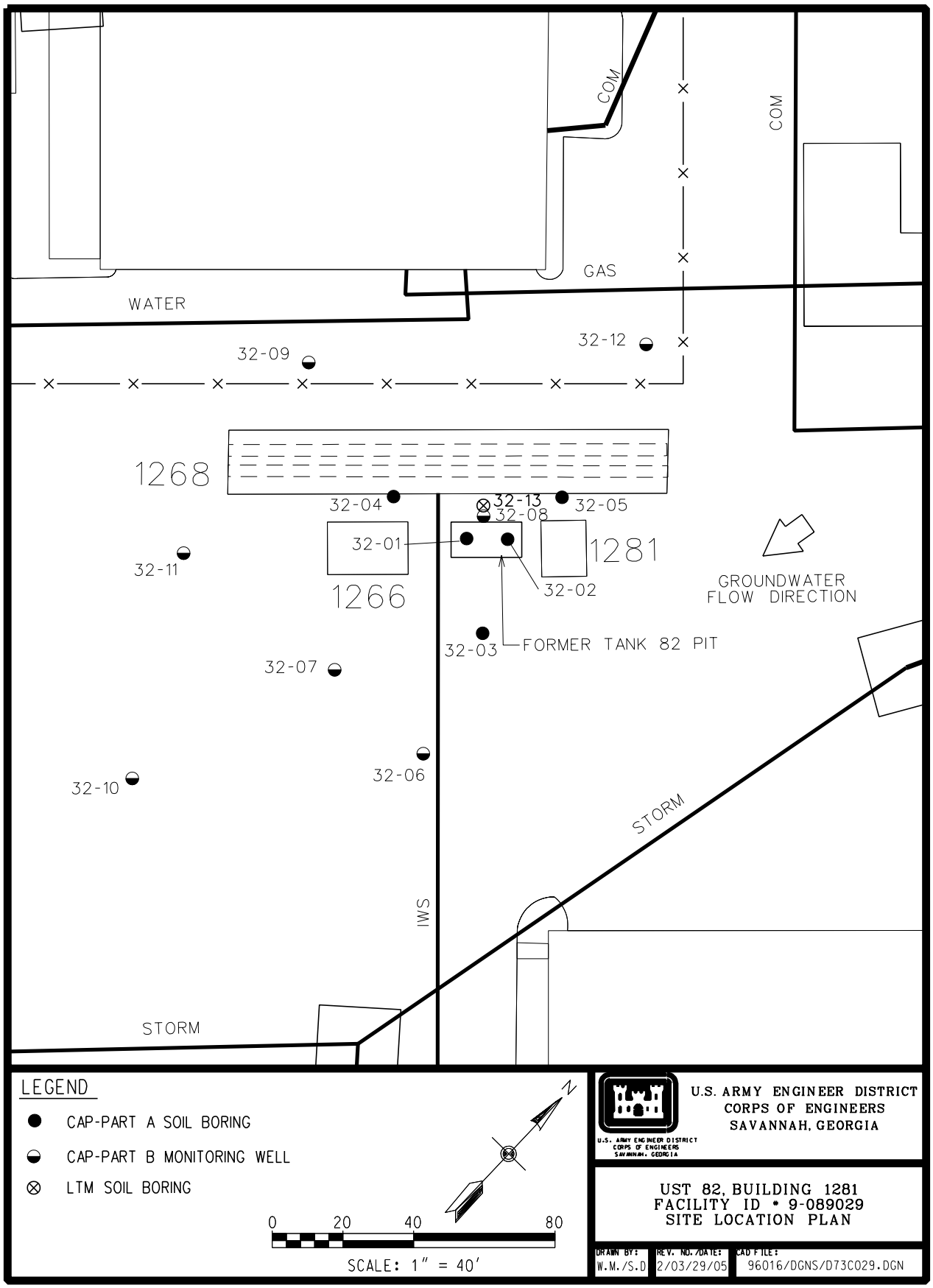


Figure A-2. Site Location Map of UST 82

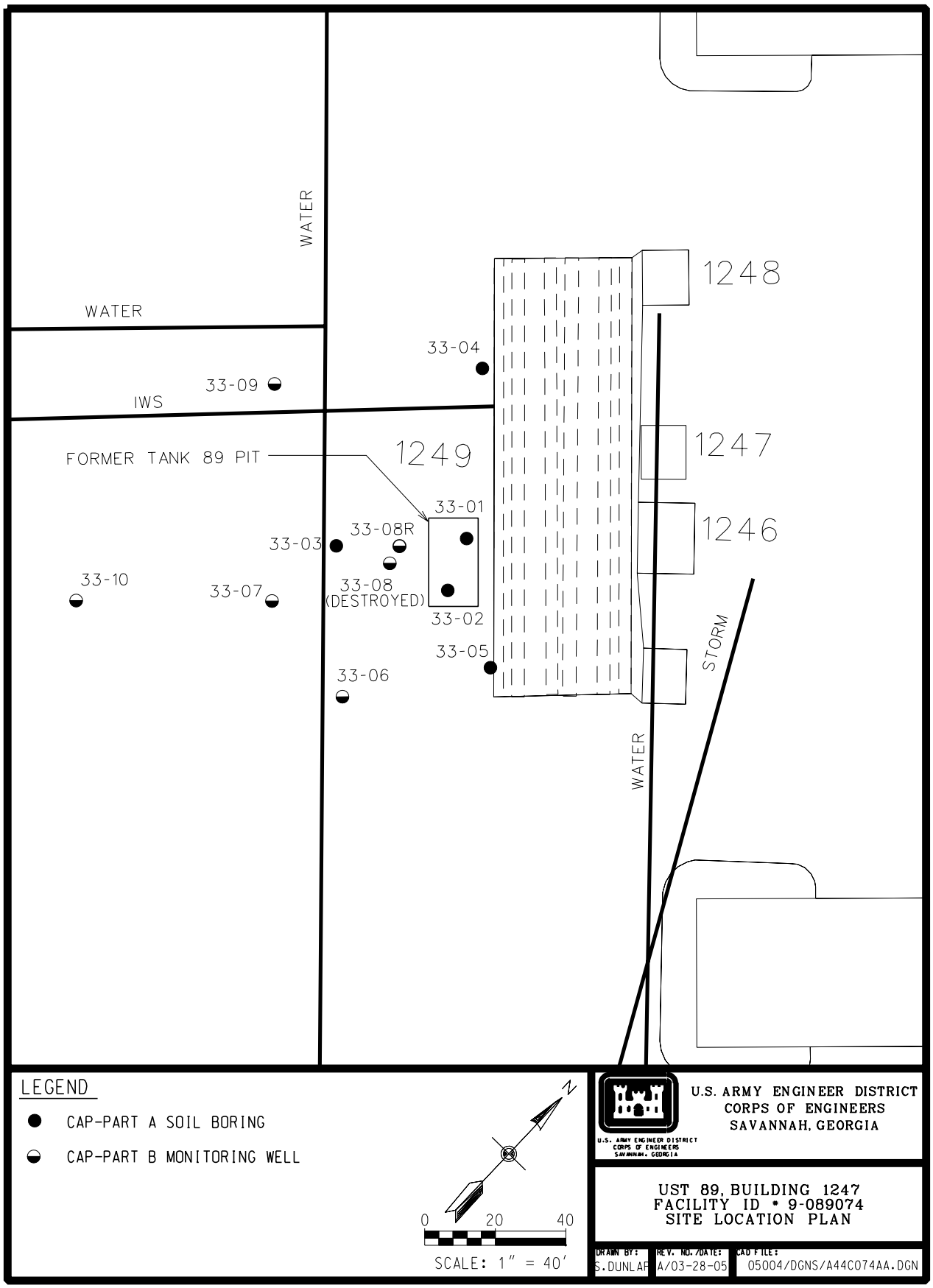


Figure A-3. Site Location Map of UST 89

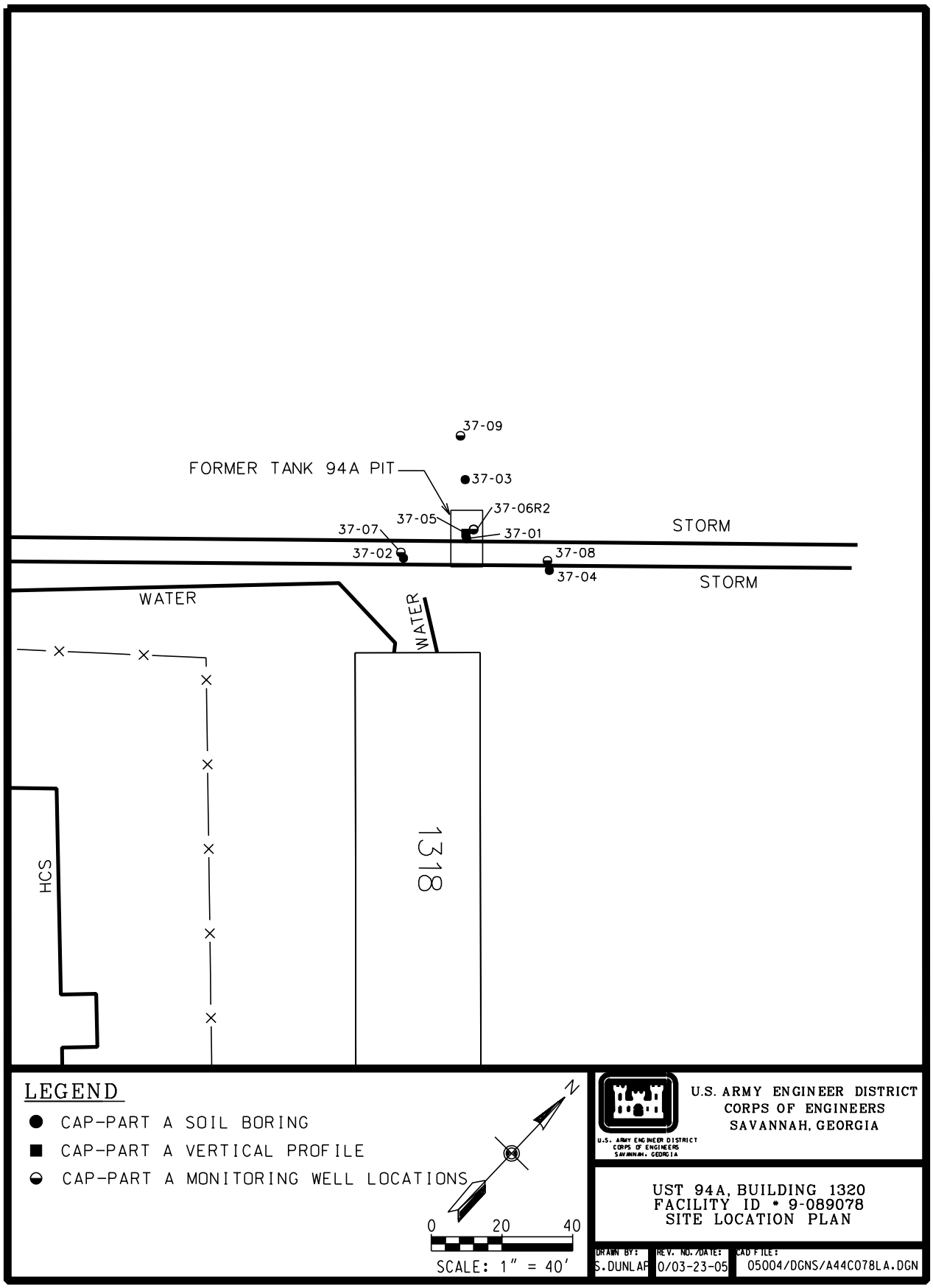


Figure A-4. Site Location Map of UST 94A

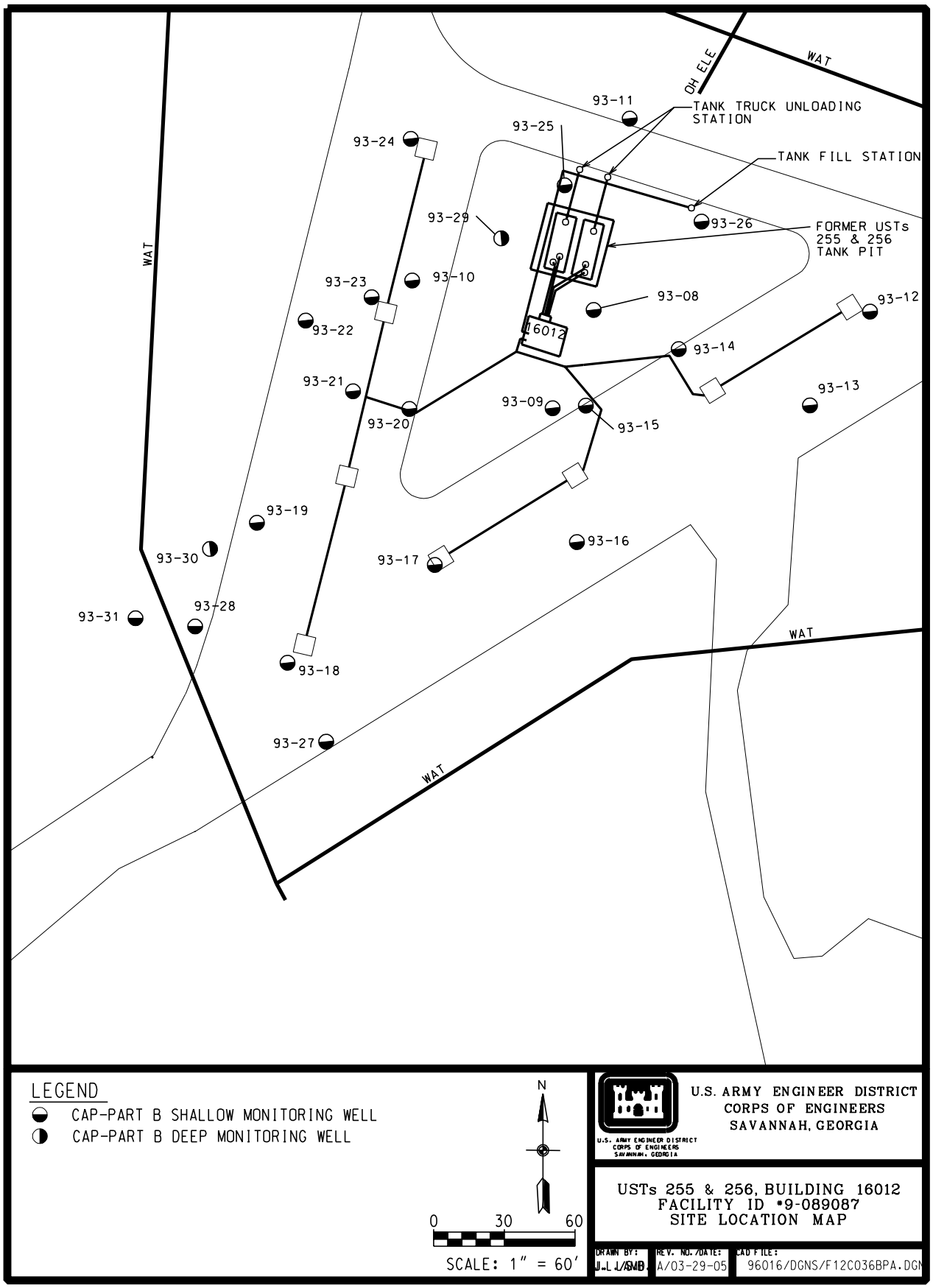
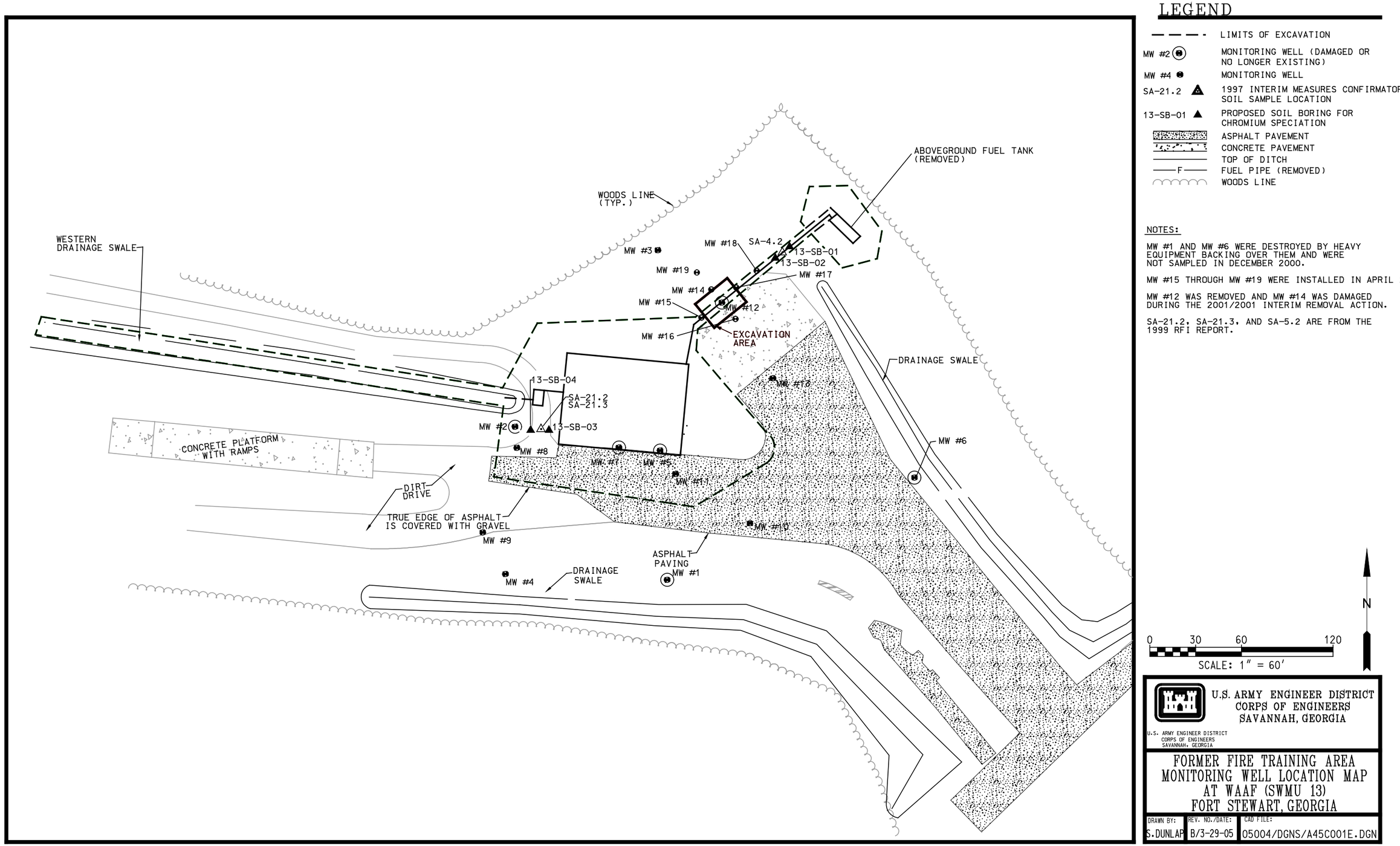


Figure A-5. Site Location Map of USTs 255 & 256



LEGEND

- LIMITS OF EXCAVATION
- MW #2 — MONITORING WELL (DAMAGED OR NO LONGER EXISTING)
- MW #4 — MONITORING WELL
- SA-21.2 — 1997 INTERIM MEASURES CONFIRMATORY SOIL SAMPLE LOCATION
- 13-SB-01 — PROPOSED SOIL BORING FOR CHROMIUM SPECIATION
- ASPHALT PAVEMENT
- CONCRETE PAVEMENT
- TOP OF DITCH
- F — FUEL PIPE (REMOVED)
- WOODS LINE

NOTES:

MW #1 AND MW #6 WERE DESTROYED BY HEAVY EQUIPMENT BACKING OVER THEM AND WERE NOT SAMPLED IN DECEMBER 2000.

MW #15 THROUGH MW #19 WERE INSTALLED IN APRIL 2001.

MW #12 WAS REMOVED AND MW #14 WAS DAMAGED DURING THE 2001/2001 INTERIM REMOVAL ACTION.

SA-21.2, SA-21.3, AND SA-5.2 ARE FROM THE 1999 RFI REPORT.

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FORMER FIRE TRAINING AREA
MONITORING WELL LOCATION MAP
AT WAAF (SWMU 13)
FORT STEWART, GEORGIA

DRAWN BY:	REV. NO./DATE:	CAD FILE:
S.DUNLAP	B/3-29-05	05004/DGNS/A45C001E.DGN

Figure A-6. Site Location Map of SWMU 13

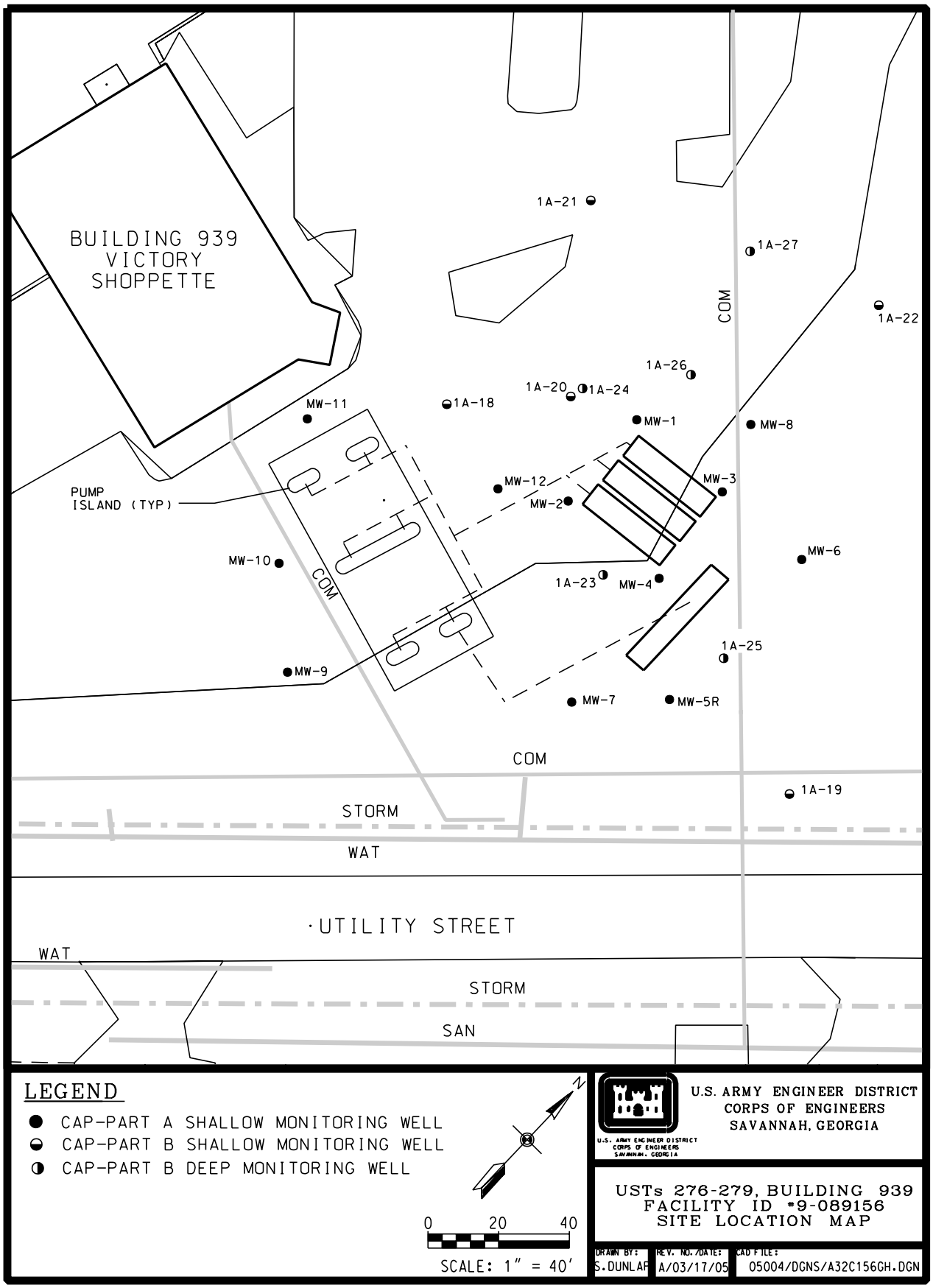
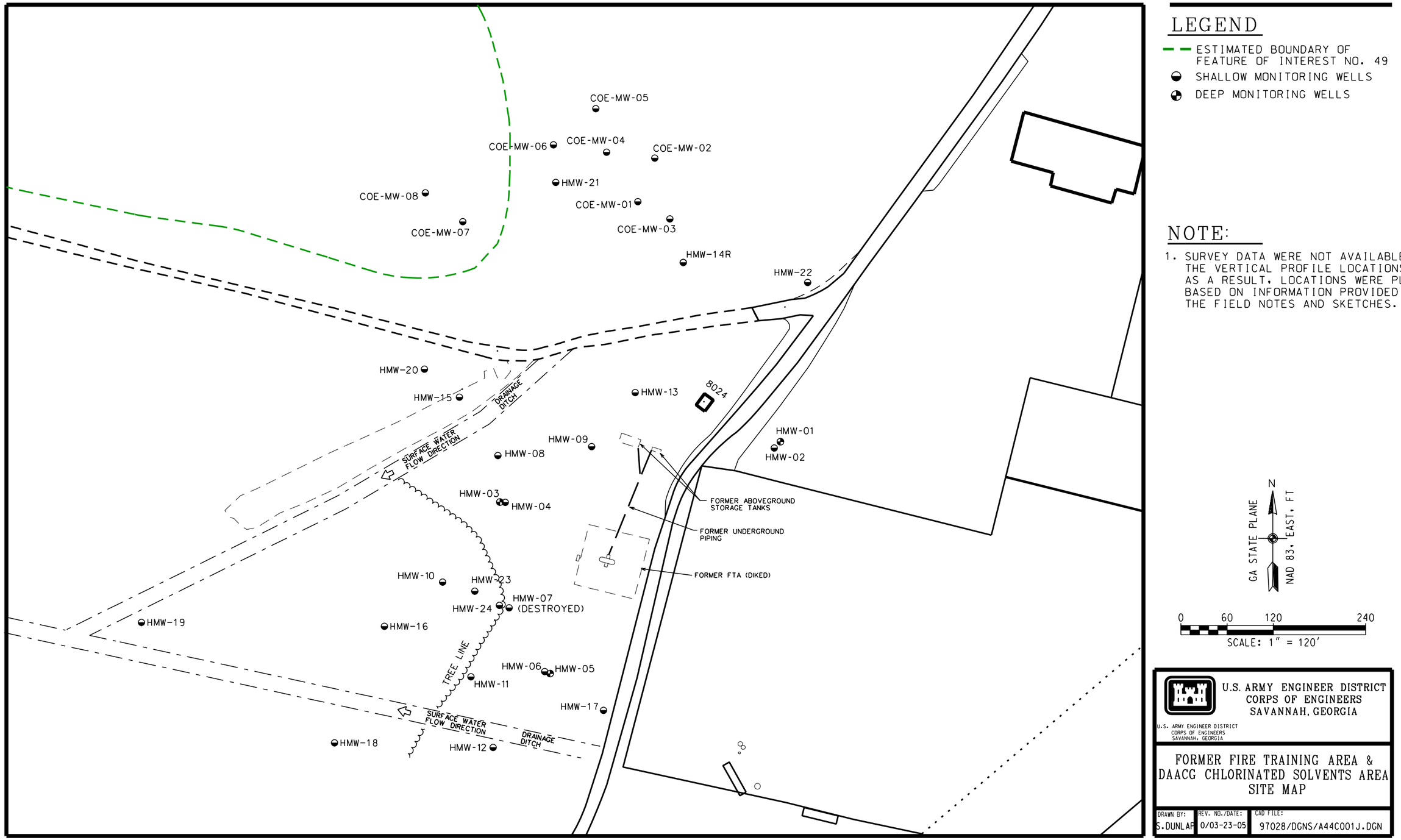


Figure A-7. Site Location Map of USTs 276-279

APPENDIX B

PROPOSED SAMPLING LOCATIONS FOR HUNTER ARMY AIRFIELD INVESTIGATIONS



LEGEND

- ESTIMATED BOUNDARY OF FEATURE OF INTEREST NO. 49
- SHALLOW MONITORING WELLS
- DEEP MONITORING WELLS

NOTE:

1. SURVEY DATA WERE NOT AVAILABLE FOR THE VERTICAL PROFILE LOCATIONS. AS A RESULT, LOCATIONS WERE PLOTTED BASED ON INFORMATION PROVIDED IN THE FIELD NOTES AND SKETCHES.

N

GA STATE PLANE

NAD 83, EAST, FT

0 60 120 240

SCALE: 1" = 120'

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FORMER FIRE TRAINING AREA & DAACG CHLORINATED SOLVENTS AREA SITE MAP

DRAWN BY:	REV. NO./DATE:	CAD FILE:
S.DUNLAP	0/03-23-05	97028/DGNS/A44C001J.DGN

Figure B-1. Site Location Map of the Former Fire Training Area and DAACG Chlorinated Solvents Area

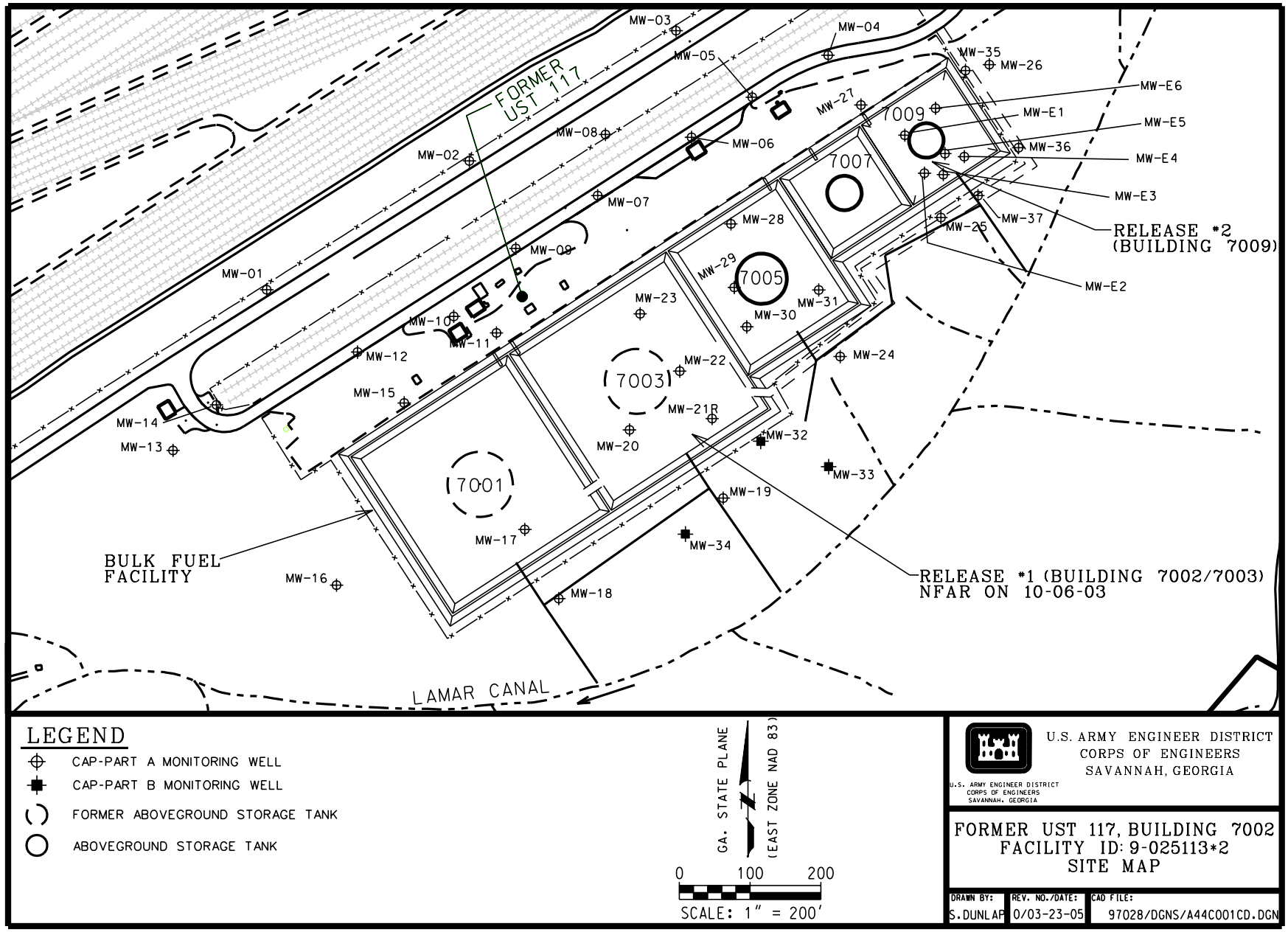


Figure B-2. Location Map of the Former UST 117 (Bulk Fuel Facility)

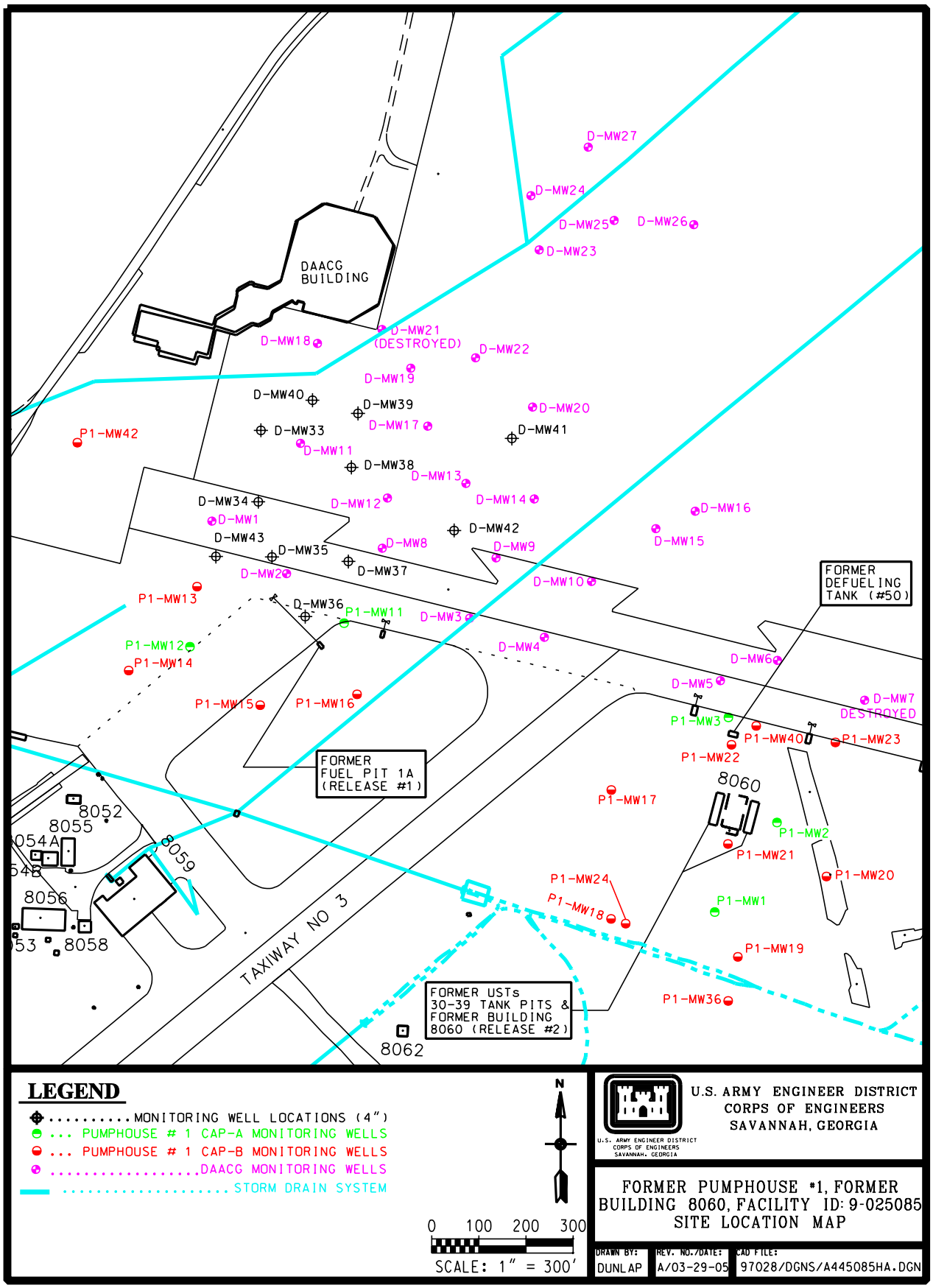


Figure B-3. Location Map of Former Pumphouse #1

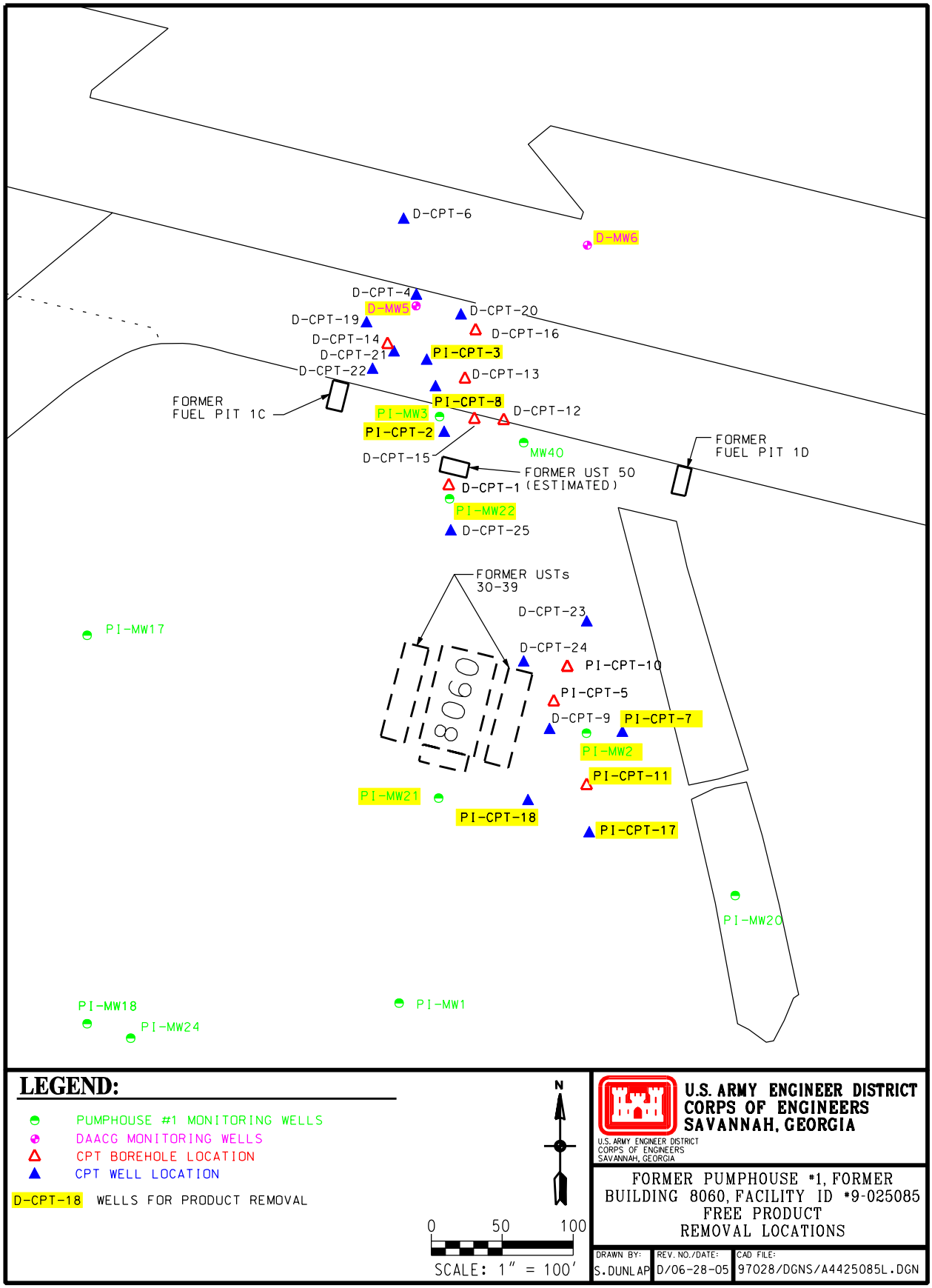
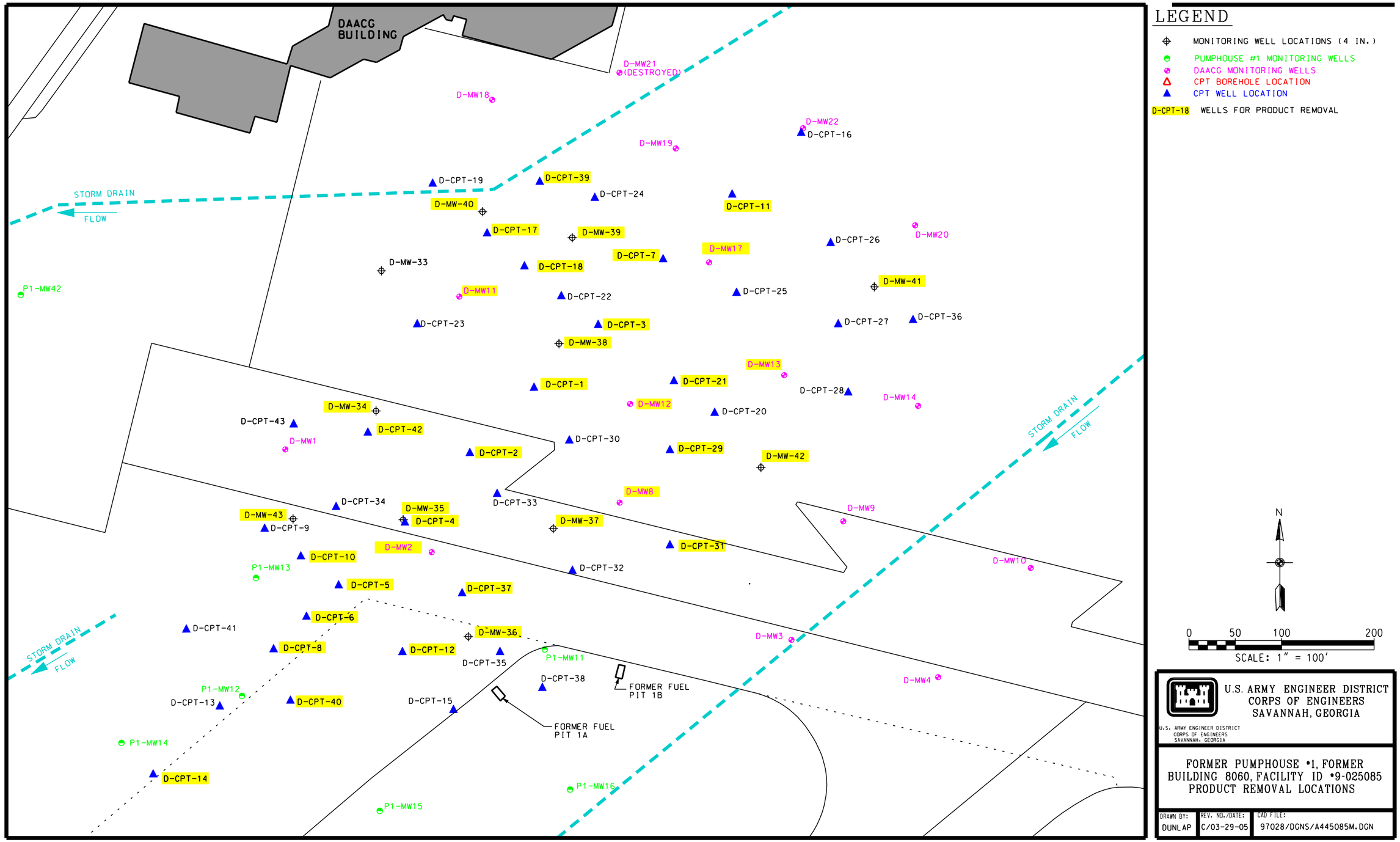


Figure B-4. Free Product Removal Locations for the Former Pumphouse #1



LEGEND

- MONITORING WELL LOCATIONS (4 IN.)
- PUMPHOUSE #1 MONITORING WELLS
- DAACG MONITORING WELLS
- CPT BOREHOLE LOCATION
- CPT WELL LOCATION
- D-CPT-18 WELLS FOR PRODUCT REMOVAL

N

0 50 100 200

SCALE: 1" = 100'

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FORMER PUMPHOUSE #1, FORMER BUILDING 8060, FACILITY ID #9-025085
PRODUCT REMOVAL LOCATIONS

DRAWN BY:	REV. NO./DATE:	CAD FILE:
DUNLAP	C/03-29-05	97028/DGNS/A445085M.DGN

Figure B-5. Free Product Removal Locations for the DAACG

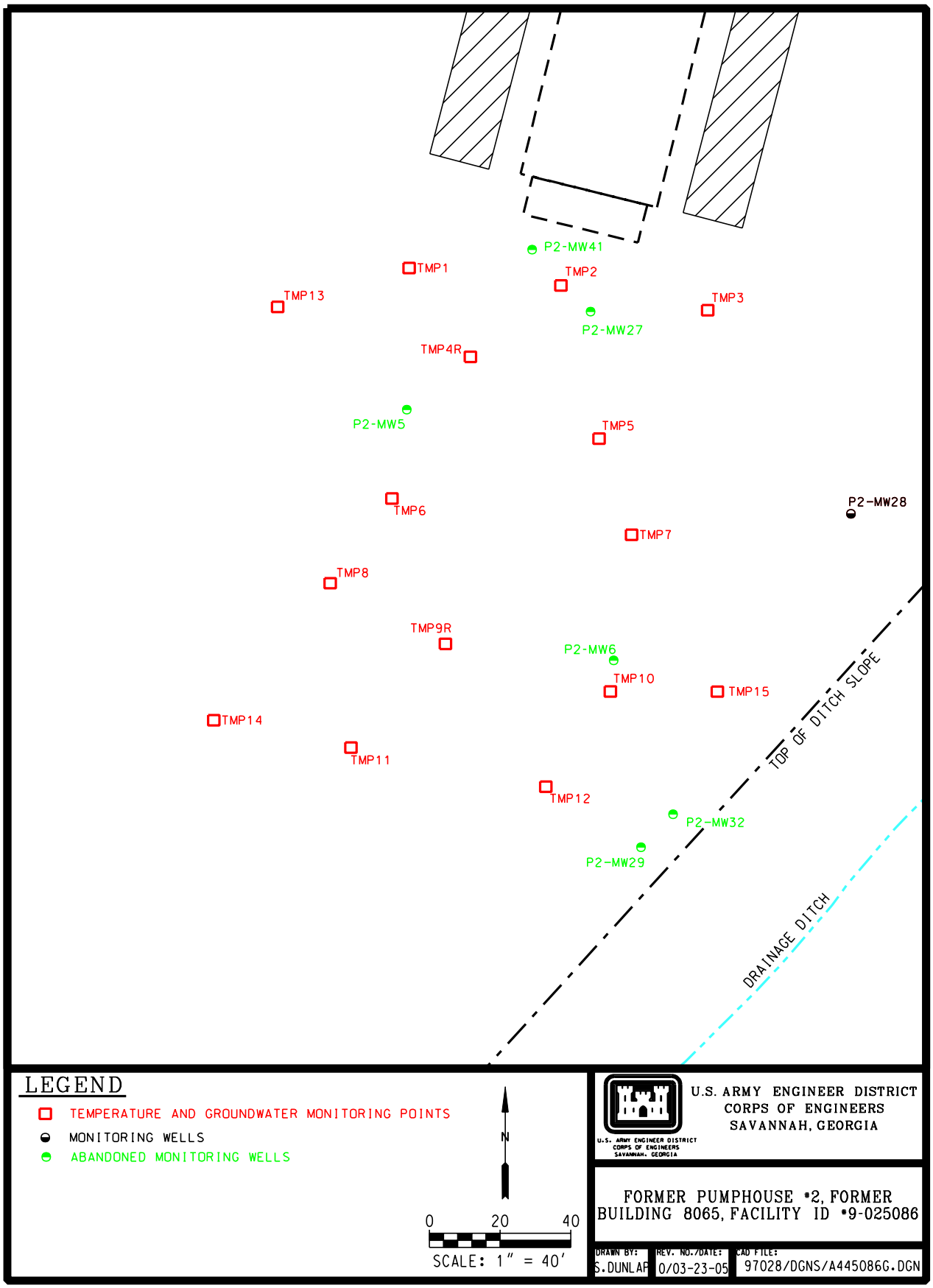

Figure B-6. Site Location Map of Former Pumphouse #2

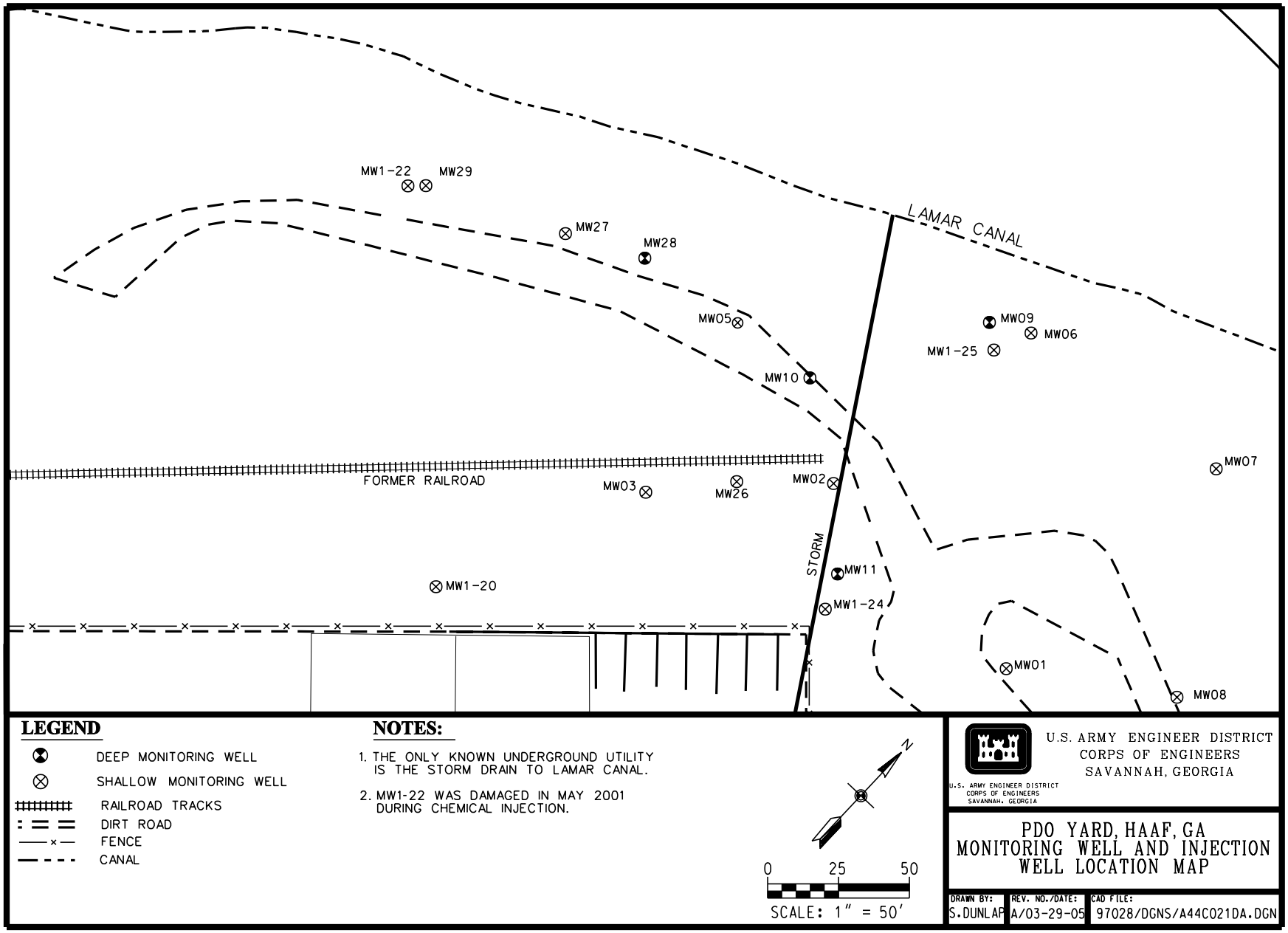

Figure B-7. Site Location Map of the PDO Yard

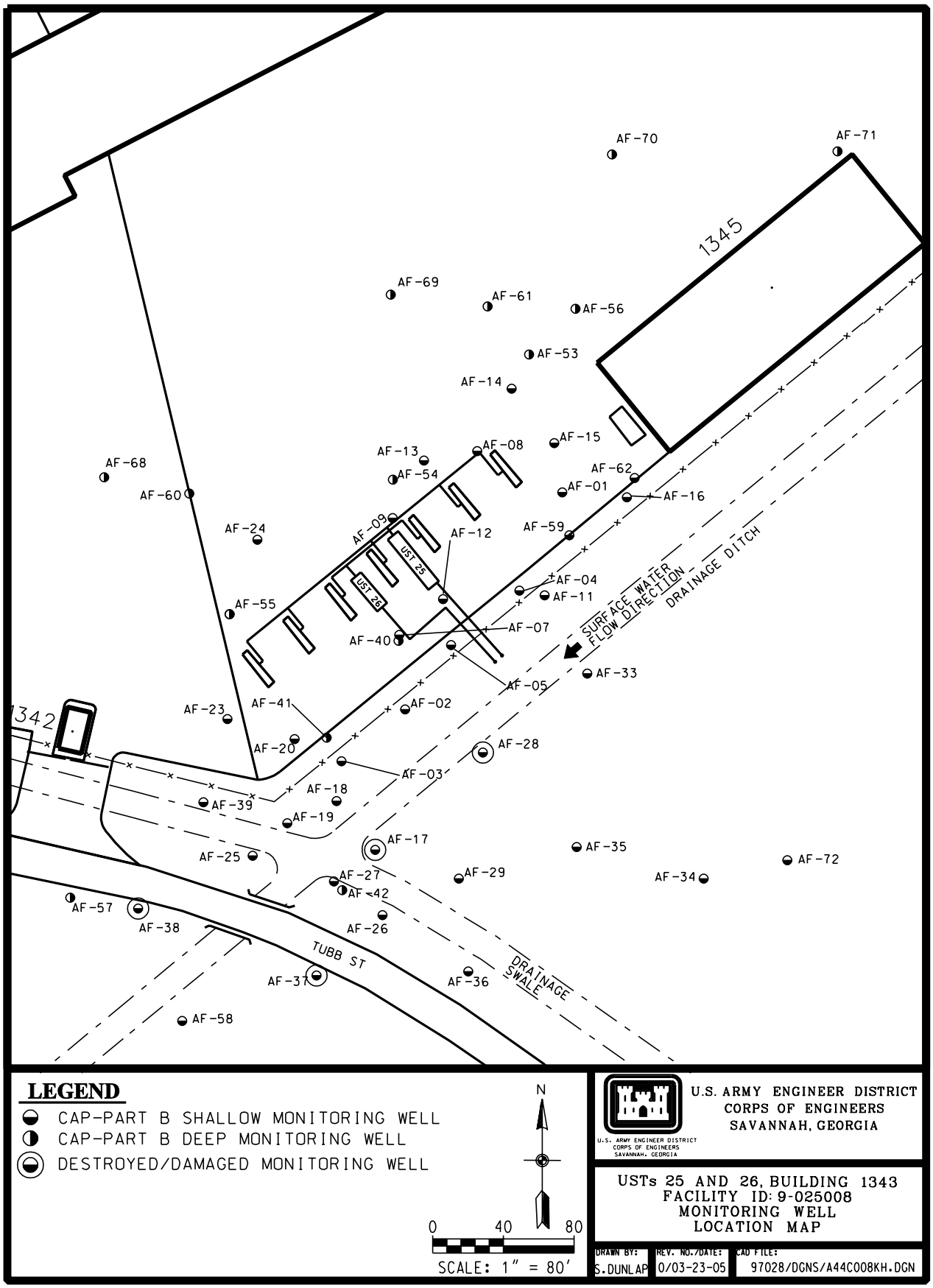

Figure B-8. Site Location Map of USTs 25 & 26