N60200.AR.004413
NAS CECIL FIELD, FL
5090.3a

PHASE 6 WELL ABANDONMENT WORK PLAN NAS CECIL FIELD FL
2/27/2006
TETRA TECH NUS INC

Phase VI Well Abandonment Work Plan
Naval Air Station Cecil Field
Jacksonville, Florida
February 27, 2006

During Phase VI Well Abandonment activities, a total of 83 wells, 36 monitoring wells, 26 injection wells, and 21 vapor extraction wells, are no longer required as part of environmental activities at NAS Cecil Field will be abandoned. Attachment A presents the locations of wells to be abandoned, and Table 1 lists well identification numbers, total depths, and coordinates for these wells. Photographs will be taken to document the locations of these wells, including any evidence (broken casing, etc.) that wells were present in these areas. Tasks involved in the proposed well abandonment activities include:

- Confirmation of total depth of well prior to grouting
    - Maximum well depth is 40 feet bgs (CEF-103-DMW01)
- Backfilling of wells from the bottom up to the ground surface with cement/bentonite grout using a tremie pipe (positive displacement)
- Removal and disposal of concrete pads, protective casings, and barrier posts
    - 103rd Street AS/VE vaults will be left in place
    - Building 9 Sparge System vaults will be removed
- Restoration of the well location to its original condition with similar material including grass, gravel, asphalt, or concrete
- Traffic control will be required for activities at 103rd Street AS/VE and Valve Box #2
    - Refer to HASP CTO 0374 dated January 2006
    - Comply with Sate of Florida Special Use Permit No. 06K2940003
- Completion of a TtNUS Well Abandonment Form for each well abandoned

Well abandonment activities will be conducted in accordance with TtNUS' SOP GH-2.9, Well Abandonment, and the EISOPQAM. A Well Abandonment Form must be completed for each well to serve as an internal record of the abandonment and for measurement and payment of the driller. Field personnel must confirm quantities (footages abandoned, demolition, and restoration) with the driller after each well and at the end of each day. Copies of the completed Well Abandonment Forms must be sent to the Pittsburgh office daily during abandonment activities.

If a well to be abandoned crosses a confining unit, extra care is required to ensure that the well cannot act as a conduit for contamination migration from the ground surface to the water table or between aquifers. For these wells, the well casings will be removed and the annulus will be pressure grouted with positive displacement. If the casing cannot be removed, the borehole will be pressure grouted in place.

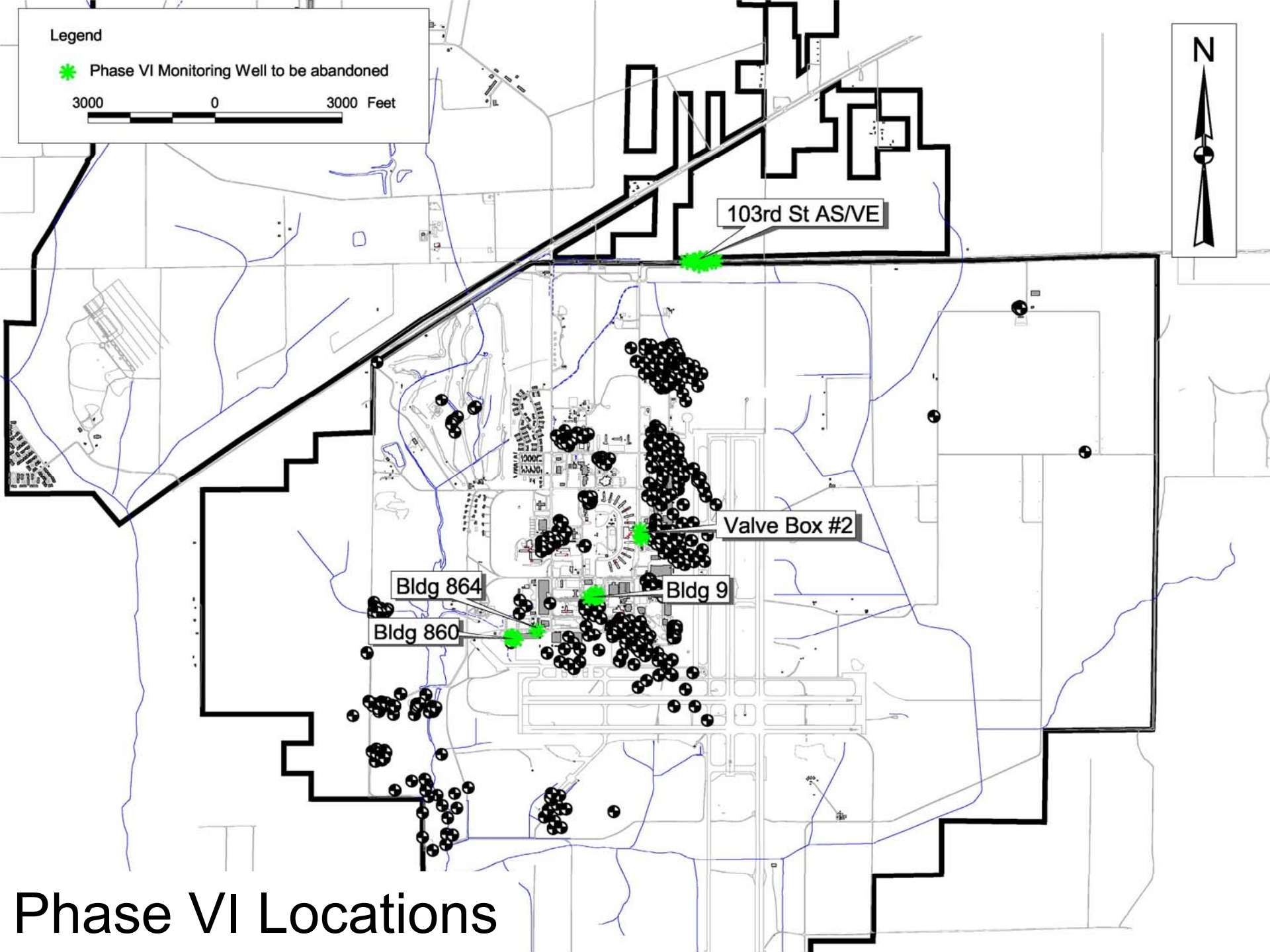
Personnel protection equipment and other waste trash will not be considered hazardous and will be disposed in a municipal landfill. Such trash will be collected in a plastic bag and disposed in a suitable trash receptacle. A suitable trash receptacle can be found at 6219 Authority Avenue formerly known as Building 1.

TABLE 1
PHASE IV - WELL ABANDONMENT WORK PLAN
JACKSONVILLE, FLORIDA
PAGE 1 OF 2

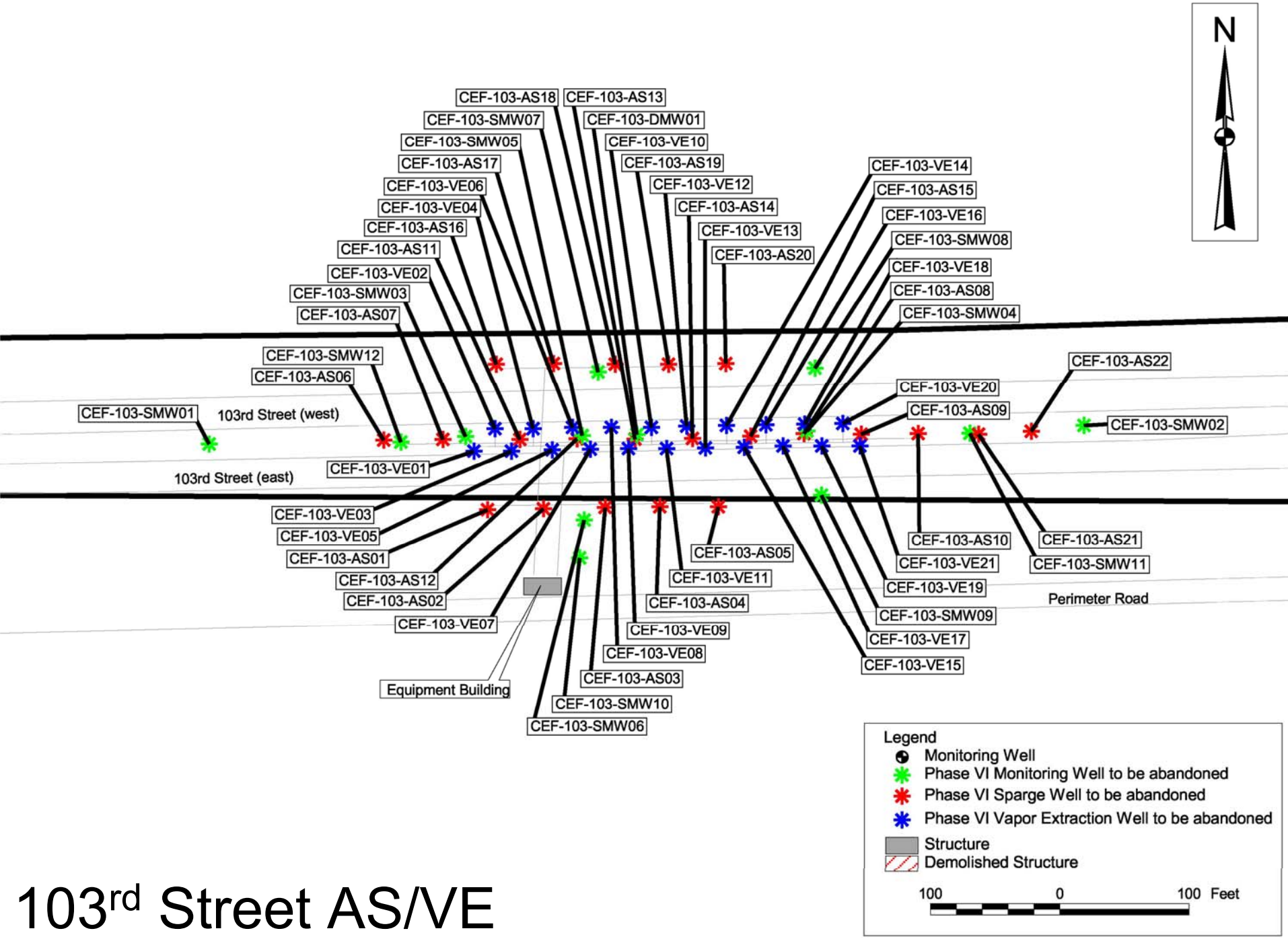
Site	Well_ID (CEF-)	Type	Depth	Florida State Plane NAD 83 (feet)		UTM NAD 83 Zone 17 (meters)		UTM NAD 27 Zone 17 (meters)	
				X	Y	X	Y	X	Y
Bldg 9	001-FACILITY-1S	MW	16.0	376101.46	2142579.03	414665.08	3343968.56	414665.08	3343968.56
	009-01Sa	MW	16.0	376240.51	2142585.14	414707.45	3343970.42	414707.45	3343970.42
	009-02S	MW	16.0	376254.35	2142676.21	414711.67	3343998.17	414711.67	3343998.17
	009-03S	MW	16.0	376265.74	2142660.16	414715.14	3343993.28	414715.14	3343993.28
	009-04S	MW	16.0	376242.83	2142658.19	414708.16	3343992.67	414708.16	3343992.67
	009-05S	MW	14.5	376299.45	2142598.10	414725.41	3343974.37	414725.41	3343974.37
	009-06S	MW	14.5	376191.50	2142616.75	414692.52	3343980.05	414692.52	3343980.05
	009-07D	MW	30.5	376244.11	2142651.02	414708.55	3343990.49	414708.55	3343990.49
	009-08S	MW	15.5	376234.79	2142582.83	414705.71	3343969.71	414705.71	3343969.71
	009-09S	MW	16.0	376266.99	2142629.87	414715.52	3343984.05	414715.52	3343984.05
	009-I1	IJ	15.99	376263.68	2142670.03	414715.52	3343984.05	414715.52	3343984.05
	009-I2	IJ	15.99	376287.20	2142646.27	414715.52	3343984.05	414715.52	3343984.05
	009-I3	IJ	15.99	376256.09	2142647.62	414715.52	3343984.05	414715.52	3343984.05
	009-I4	IJ	15.99	376275.44	2142608.87	414715.52	3343984.05	414715.52	3343984.05
103rd St	103-DMW01	MW	40.0	378738.68	2150539.33	415468.63	3346394.03	415468.63	3346394.03
	103-SMW01	MW	13.0	378407.90	2150532.12	415367.85	3346391.83	415367.85	3346391.83
	103-SMW02	MW	13.0	379084.32	2150546.17	415573.95	3346396.12	415573.95	3346396.12
	103-SMW03	MW	13.0	378606.20	2150537.76	415428.27	3346393.55	415428.27	3346393.55
	103-SMW04	MW	13.0	378870.22	2150541.92	415508.71	3346394.82	415508.71	3346394.82
	103-SMW05	MW	13.0	378696.29	2150538.53	415455.72	3346393.79	415455.72	3346393.79
	103-SMW06	MW	13.0	378697.94	2150473.11	415456.22	3346373.85	415456.22	3346373.85
	103-SMW07	MW	13.0	378708.73	2150588.09	415459.51	3346408.89	415459.51	3346408.89
	103-SMW08	MW	13.0	378876.27	2150591.04	415510.56	3346409.79	415510.56	3346409.79
	103-SMW09	MW	13.0	378881.32	2150492.39	415512.09	3346379.73	415512.09	3346379.73
	103-SMW10	MW	13.0	378694.34	2150443.53	415455.12	3346364.84	415455.12	3346364.84
	103-SMW11	MW	13.0	378996.11	2150540.26	415547.07	3346394.31	415547.07	3346394.31
	103-SMW12	MW	13.0	378556.14	2150533.54	415413.01	3346392.27	415413.01	3346392.27
	103-AS01	AS	25.00	378623.03	2150480.91	415414.72	3346168.86	415414.72	3346168.86
	103-AS02	AS	25.00	378666.31	2150481.90	415427.91	3346169.16	415427.91	3346169.16
	103-AS03	AS	25.00	378714.02	2150482.88	415442.45	3346169.46	415442.45	3346169.46
	103-AS04	AS	25.00	378756.31	2150483.37	415455.33	3346169.61	415455.33	3346169.61
	103-AS05	AS	25.00	378801.56	2150483.37	415469.12	3346169.61	415469.12	3346169.61
	103-AS06	AS	25.00	378542.86	2150535.01	415390.30	3346185.34	415390.30	3346185.34
	103-AS07	AS	25.00	378588.60	2150535.50	415404.23	3346185.49	415404.23	3346185.49
	103-AS08	AS	25.00	378867.95	2150540.08	415489.35	3346186.89	415489.35	3346186.89
	103-AS09	AS	25.00	378912.22	2150539.44	415502.84	3346186.69	415502.84	3346186.69
	103-AS10	AS	25.00	378955.99	2150539.93	415516.17	3346186.84	415516.17	3346186.84
	103-AS11	AS	25.00	378648.11	2150535.50	415422.36	3346185.49	415422.36	3346185.49
	103-AS12	AS	25.00	378692.38	2150536.00	415435.85	3346185.65	415435.85	3346185.65
	103-AS13	AS	25.00	378736.99	2150535.79	415449.45	3346185.58	415449.45	3346185.58
	103-AS14	AS	25.00	378781.52	2150536.30	415463.01	3346185.74	415463.01	3346185.74
	103-AS15	AS	25.00	378826.64	2150537.96	415476.76	3346186.24	415476.76	3346186.24
	103-AS16	AS	25.00	378629.91	2150594.03	415416.82	3346203.33	415416.82	3346203.33
	103-AS17	AS	25.00	378674.18	2150594.52	415430.31	3346203.48	415430.31	3346203.48
	103-AS18	AS	25.00	378721.88	2150594.03	415444.84	3346203.33	415444.84	3346203.33
	103-AS19	AS	25.00	378763.20	2150594.03	415457.43	3346203.33	415457.43	3346203.33
	103-AS20	AS	25.00	378807.46	2150594.52	415470.92	3346203.48	415470.92	3346203.48
	103-AS21	AS	25.00	379002.78	2150539.55	415549.10	3346394.10	415530.43	3346186.73
	103-AS22	AS	25.00	379043.59	2150541.75	415561.54	3346394.77	415542.86	3346187.40
	103-VE01	EW	7.00	378612.70	2150526.65	415411.58	3346182.80	415411.58	3346182.80
	103-VE02	EW	7.00	378628.93	2150543.87	415416.52	3346188.04	415416.52	3346188.04
	103-VE03	EW	7.00	378641.72	2150526.65	415420.42	3346182.80	415420.42	3346182.80
	103-VE04	EW	7.00	378658.44	2150543.87	415425.51	3346188.04	415425.51	3346188.04
	103-VE05	EW	7.00	378673.19	2150527.64	415430.01	3346183.10	415430.01	3346183.10
	103-VE06	EW	7.00	378688.93	2150544.85	415434.80	3346188.34	415434.80	3346188.34
	103-VE07	EW	7.00	378702.70	2150528.13	415439.00	3346183.25	415439.00	3346183.25
	103-VE08	EW	7.00	378718.93	2150544.85	415443.94	3346188.34	415443.94	3346188.34
	103-VE09	EW	7.00	378732.21	2150528.62	415447.99	3346183.40	415447.99	3346183.40
	103-VE10	EW	7.00	378749.92	2150544.85	415453.38	3346188.34	415453.38	3346188.34
	103-VE11	EW	7.00	378761.72	2150528.62	415456.98	3346183.40	415456.98	3346183.40
	103-VE12	EW	7.00	378777.18	2150545.82	415461.69	3346188.64	415461.69	3346188.64
	103-VE13	EW	7.00	378791.72	2150529.11	415466.12	3346183.55	415466.12	3346183.55

TABLE 1
PHASE IV - WELL ABANDONMENT WORK PLAN
JACKSONVILLE, FLORIDA
PAGE 2 OF 2

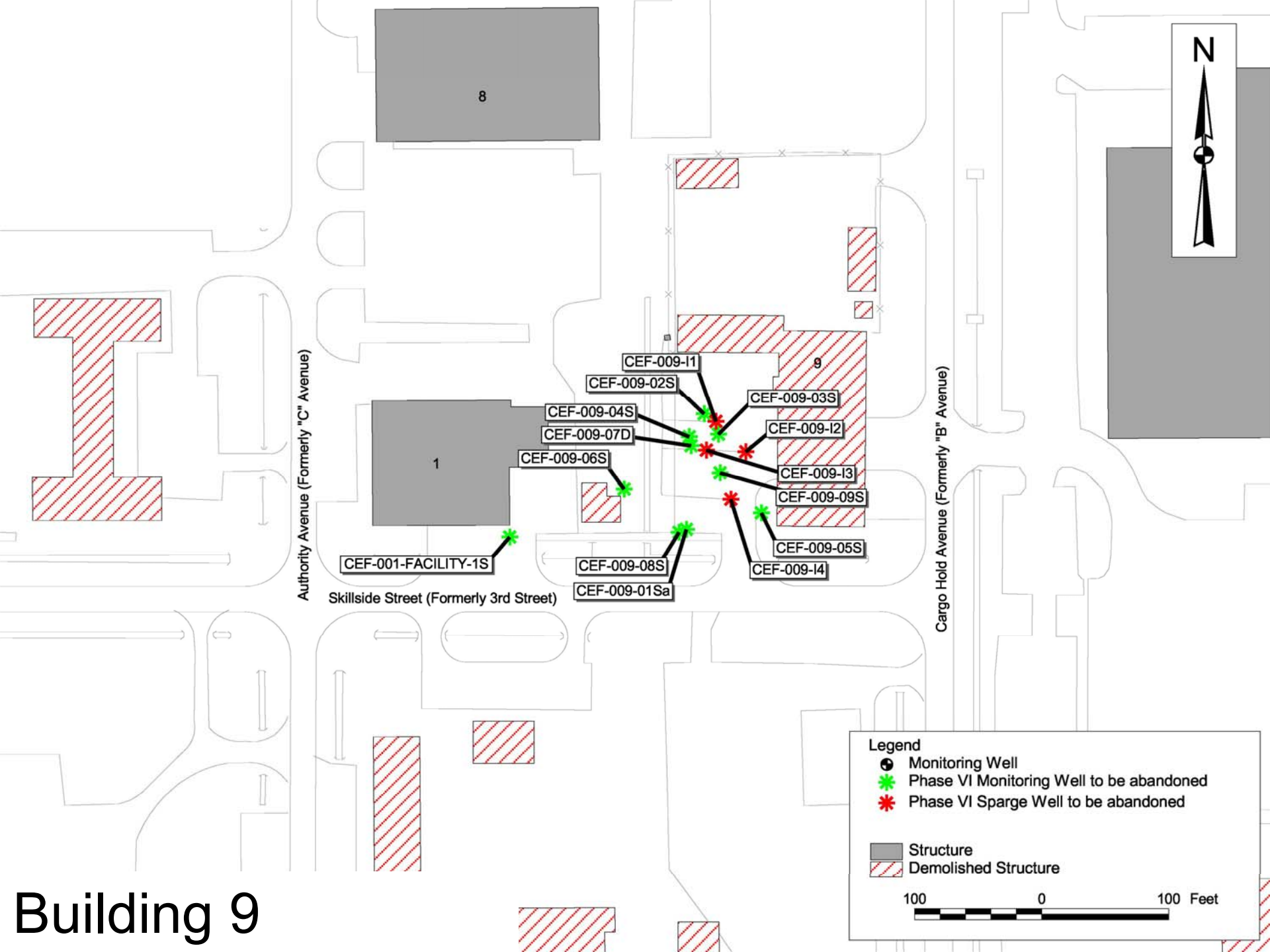
Site	Well_ID (CEF-)	Type	Depth	Florida State Plane NAD 83 (feet)		UTM NAD 83 Zone 17 (meters)		UTM NAD 27 Zone 17 (meters)	
				X	Y	X	Y	X	Y
	103-VE14	EW	7.00	378807.95	2150546.32	415471.07	3346188.79	415471.07	3346188.79
	103-VE15	EW	7.00	378821.72	2150529.60	415475.26	3346183.70	415475.26	3346183.70
	103-VE16	EW	7.00	378838.44	2150546.82	415480.36	3346188.94	415480.36	3346188.94
	103-VE17	EW	7.00	378851.72	2150530.59	415484.40	3346184.00	415484.40	3346184.00
	103-VE18	EW	7.00	378868.45	2150547.31	415489.50	3346189.09	415489.50	3346189.09
	103-VE19	EW	7.00	378881.72	2150530.59	415493.54	3346184.00	415493.54	3346184.00
	103-VE20	EW	7.00	378897.95	2150547.80	415498.49	3346189.24	415498.49	3346189.24
	103-VE21	EW	7.00	378911.23	2150530.59	415502.53	3346184.00	415502.53	3346184.00
Bldg 826	826-1S	MW	14.0	377335.55	2143981.16	415041.10	3344395.78	415041.10	3344395.78
	826-2S	MW	14.0	377339.12	2144033.51	415042.19	3344411.73	415042.19	3344411.73
Bldg 860	860-2S	MW	14.0	374292.33	2141662.66	414113.84	3343689.34	414113.84	3343689.34
	860-3S	MW	14.0	374291.88	2141648.67	414113.71	3343685.08	414113.71	3343685.08
	860-4S	MW	14.0	374308.49	2141601.23	414118.77	3343670.62	414118.77	3343670.62
	860-5S	MW	14.0	374327.57	2141596.36	414124.58	3343669.14	414124.58	3343669.14
	860-6S	MW	14.0	374362.40	2141565.45	414135.20	3343659.72	414135.20	3343659.72
	860-7S	MW	14.0	374259.45	2141601.92	414103.83	3343670.83	414103.83	3343670.83
	860-8S	MW	14.0	374258.52	2141641.53	414103.54	3343682.90	414103.54	3343682.90
Bldg 864	864-1S	MW	15.0	374860.55	2141791.17	414286.98	3343728.50	414286.98	3343728.50
	864-2S	MW	15.0	374871.39	2141782.52	414290.28	3343725.86	414290.28	3343725.86
VB2	PIPE-1S	MW	12.0	377313.34	2144007.73	415034.34	3344403.88	415034.34	3344403.88
	PIPE-SB19/3S	MW	8.0	377309.68	2144170.55	415033.22	3344453.49	415033.22	3344453.49



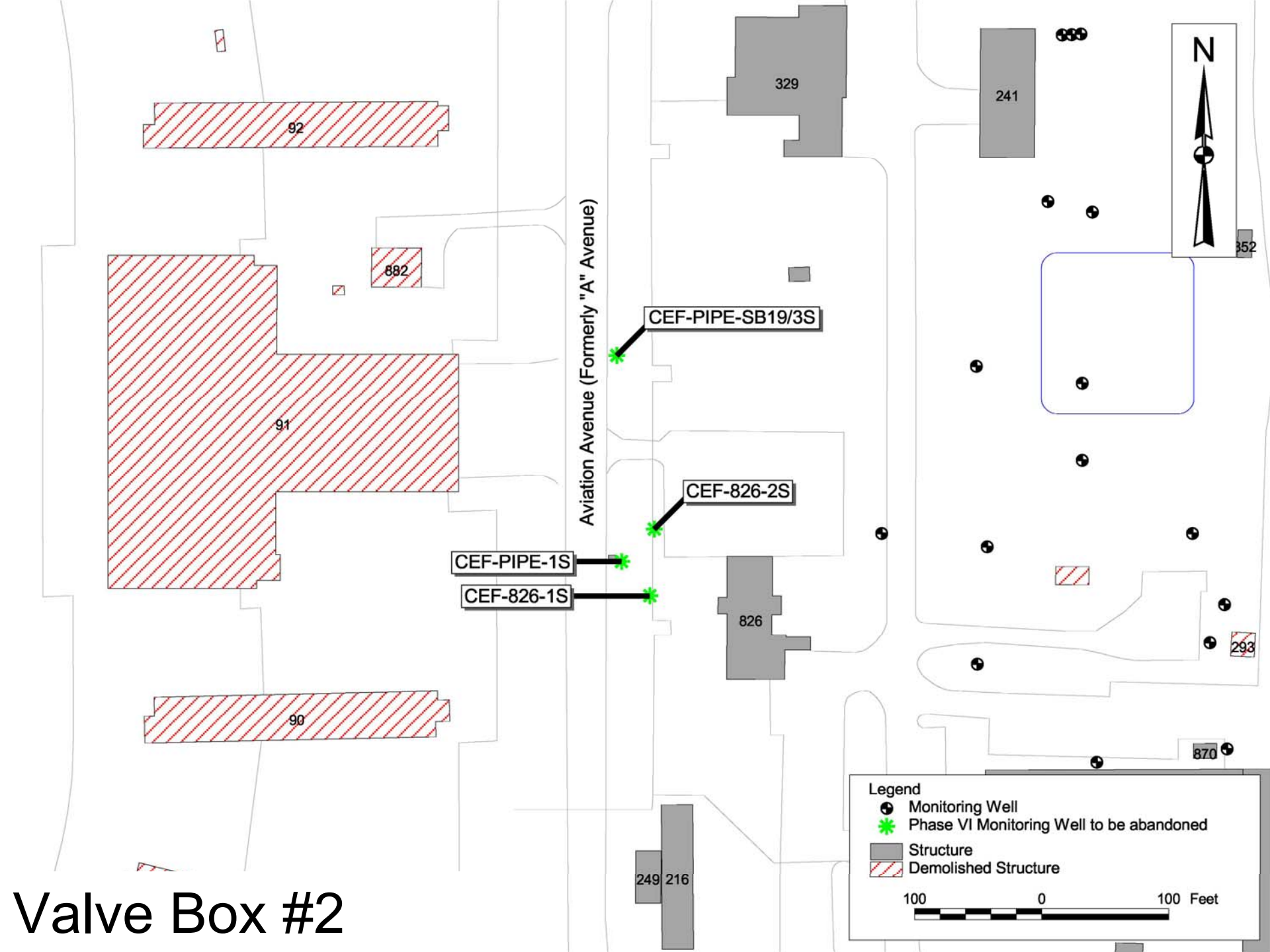
Phase VI Locations



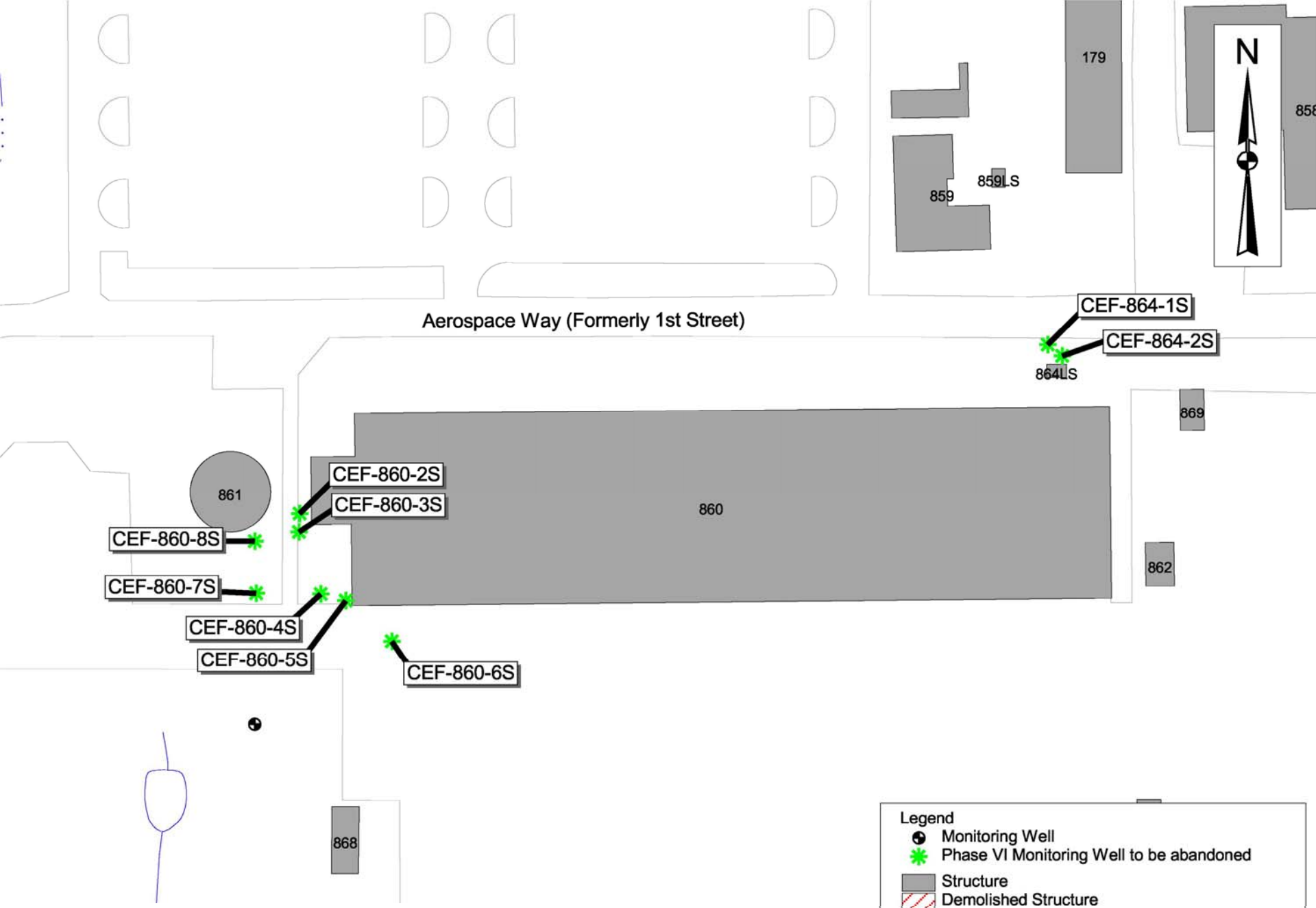
103rd Street AS/VE


N
8
9
1
CEF-009-I1
CEF-009-02S
CEF-009-03S
CEF-009-04S
CEF-009-I2
CEF-009-07D
CEF-009-06S
CEF-009-I3
CEF-009-09S
CEF-009-05S
CEF-009-I4
CEF-001-FACILITY-1S
CEF-009-08S
CEF-009-01Sa
Authority Avenue (Formerly "C" Avenue)
Skillside Street (Formerly 3rd Street)
Cargo Hold Avenue (Formerly "B" Avenue)
Legend
Monitoring Well
Phase VI Monitoring Well to be abandoned
Phase VI Sparge Well to be abandoned
Structure
Demolished Structure
100
0
100 Feet

Building 9


N
329
241
92
882
91
90
826
249
216
870
293
352
Aviation Avenue (Formerly "A" Avenue)
CEF-PIPE-SB19/3S
CEF-826-2S
CEF-PIPE-1S
CEF-826-1S
Legend
Monitoring Well
Phase VI Monitoring Well to be abandoned
Structure
Demolished Structure
100
0
100 Feet

Valve Box #2



Bldgs 860/864LS