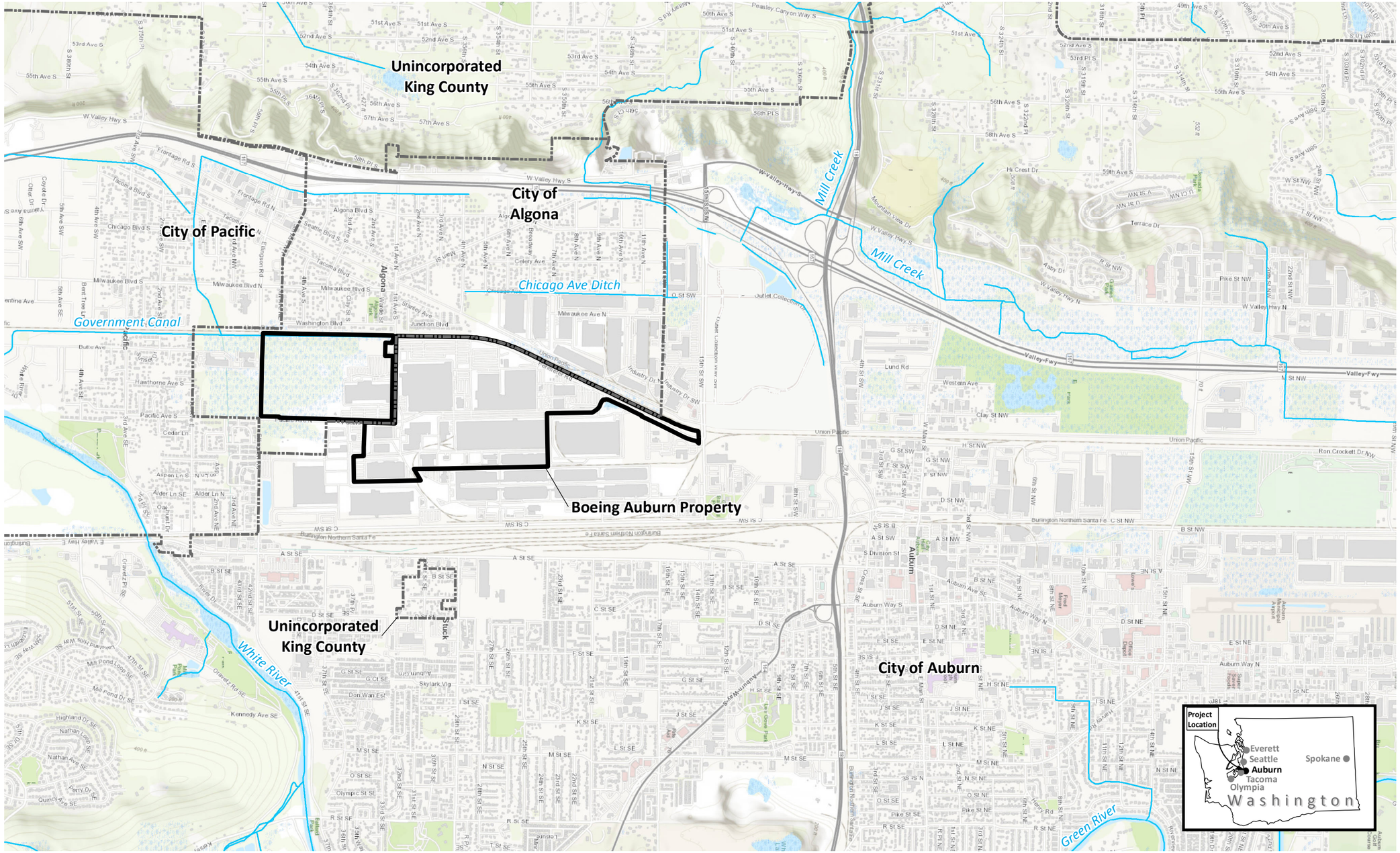


Legend

- Boeing Property
- City Limits
- Waterways
- Water Bodies
- Wetland Areas

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 2,000 4,000

Scale in Feet

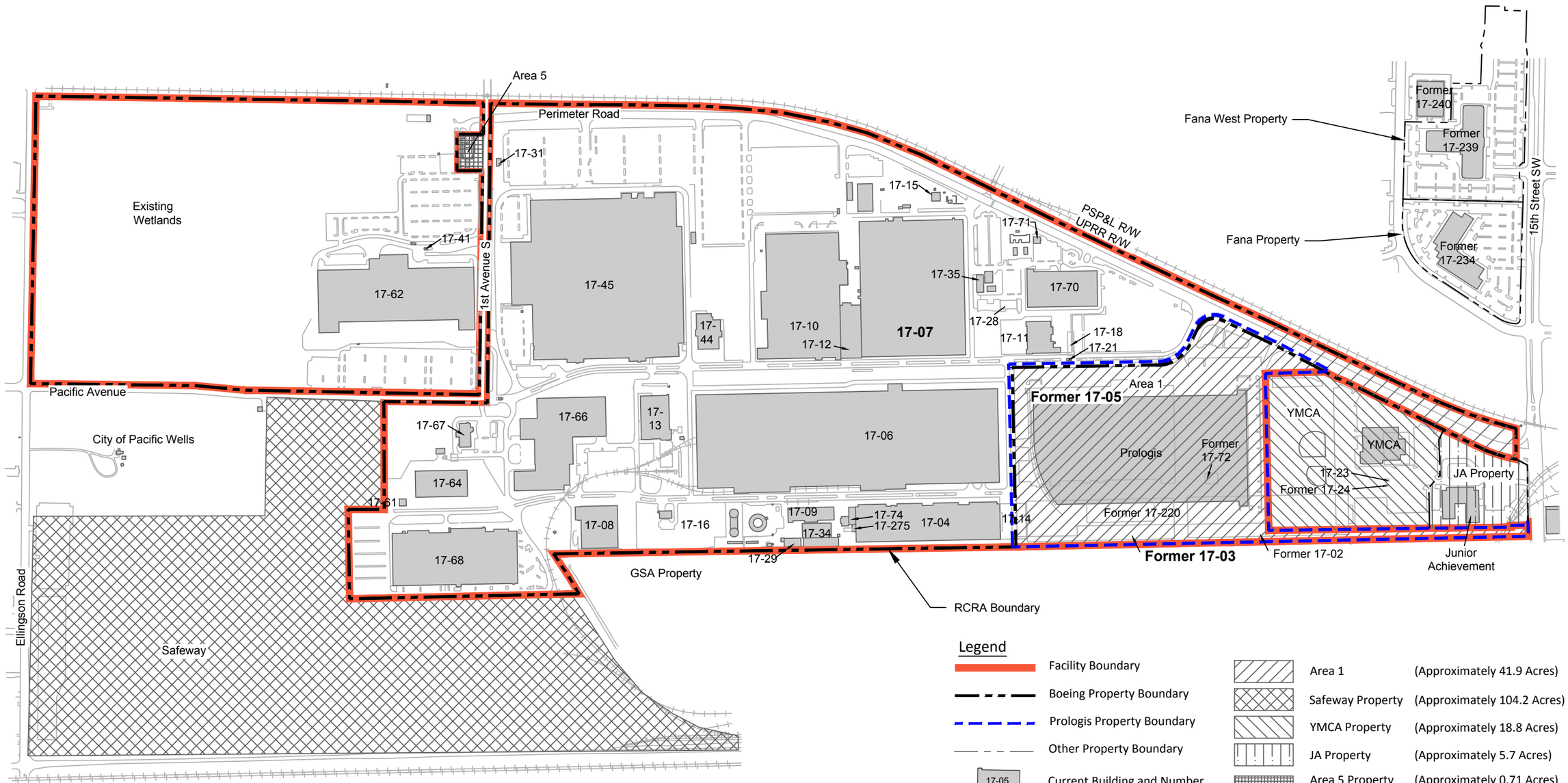
N

Data Source:Esri World Topo Map

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Vicinity Map**	Figure 1-1

LANDAU ASSOCIATES

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01 01VicMapLandscape.mxd 8/10/2020



Legend

- Facility Boundary
- Boeing Property Boundary
- Prologis Property Boundary
- Other Property Boundary
- 17-05 — Current Building and Number

Area 1	(Approximately 41.9 Acres)
Safeway Property	(Approximately 104.2 Acres)
YMCA Property	(Approximately 18.8 Acres)
JA Property	(Approximately 5.7 Acres)
Area 5 Property (PSE Property)	(Approximately 0.71 Acres)

Notes

1. Former Building Numbers 17-234, 17-239 and 17-240 are currently owned by Fana.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 600 1200

Scale in Feet

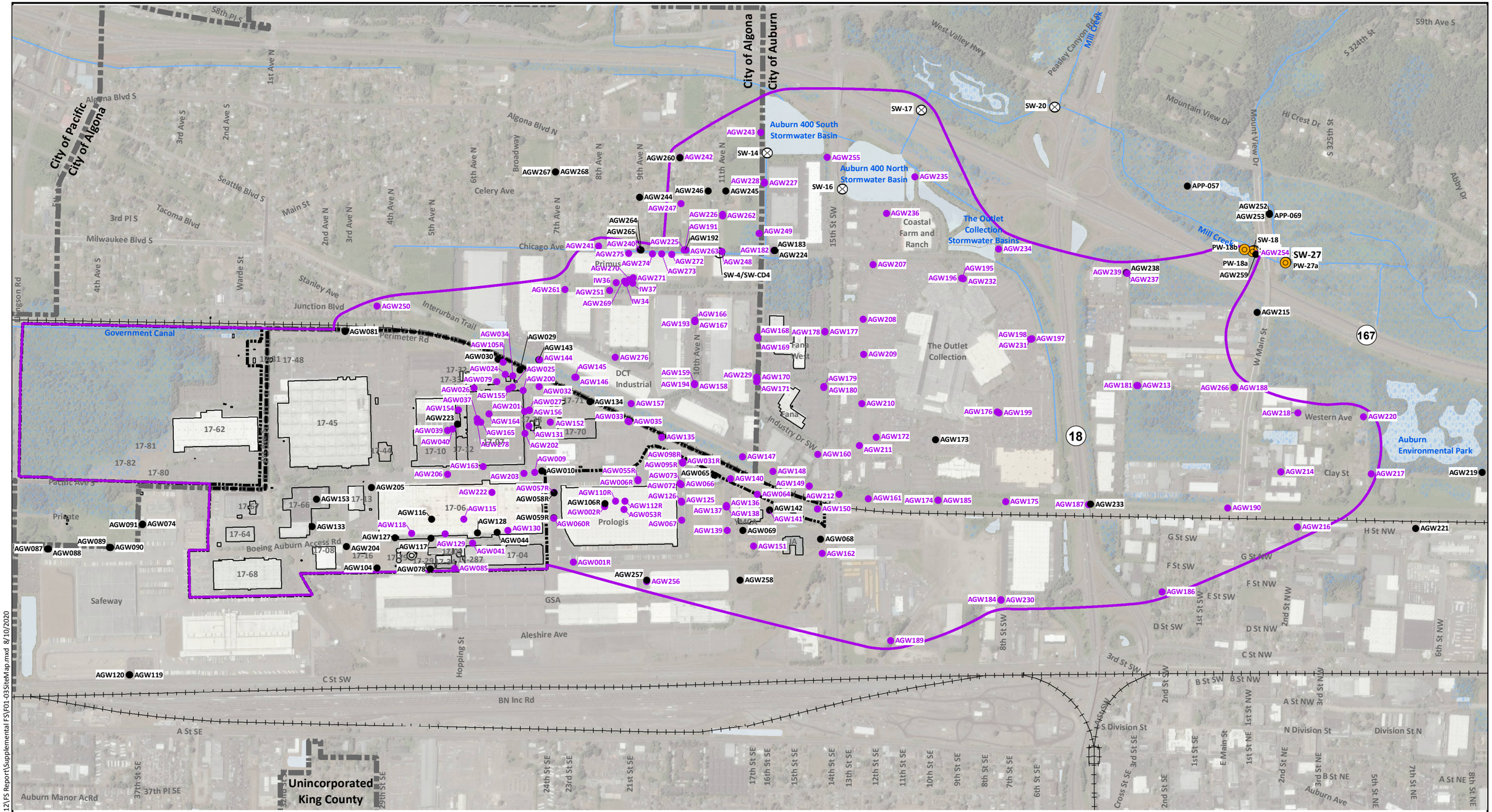
Base map source: Geomatrix 2003

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

Facility Map

Figure
1-2



Notes

1. Detections of chlorinated volatile organic compounds (CVOCs), trichloroethene (TCE), cis-1,2-Dichloroethene (cDCE), and vinyl chloride (VC) determined based on most recent data as of December 2018.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

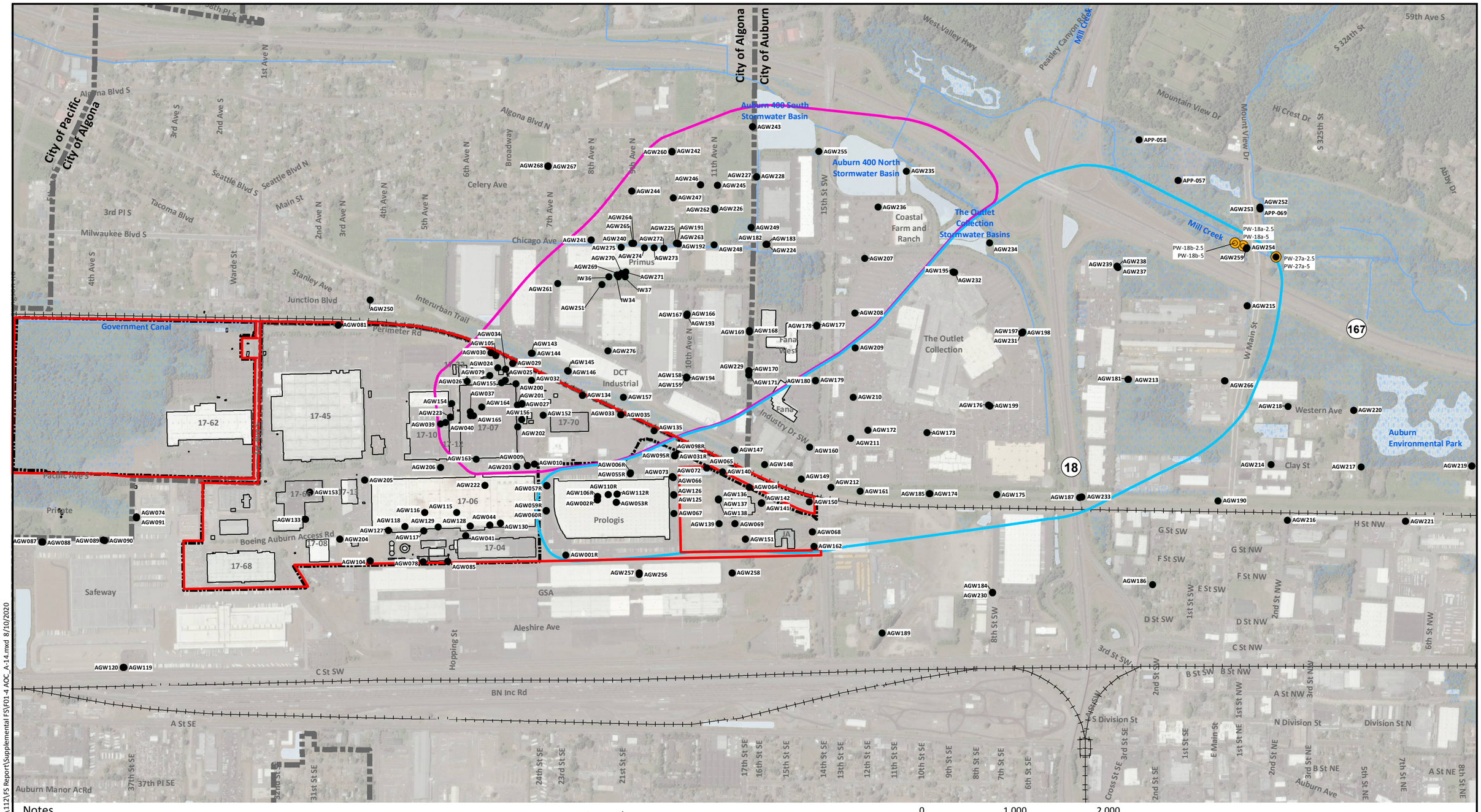
Legend

- Well with no Detections of TCE, cDCE, or VC
- Well with Detections of TCE, cDCE, or VC
- Current Surface Water Sample Location
- Pore Water Sample Location
- City Limits
- Boeing Property
- Approximate Extent of Site (Including Facility and Monitoring Wells with Detections of CVOCs)
- Wetland Areas
- Water Bodies
- Waterways

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Site Map**	Figure 1-3

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-03SiteMap.mxd 8/10/2020



Notes

1. The current monitoring well network is shown.
2. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well
- Pore Water Sample Location
- Area 1 Plume
- Western Plume
- City Limits
- Facility Boundary
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

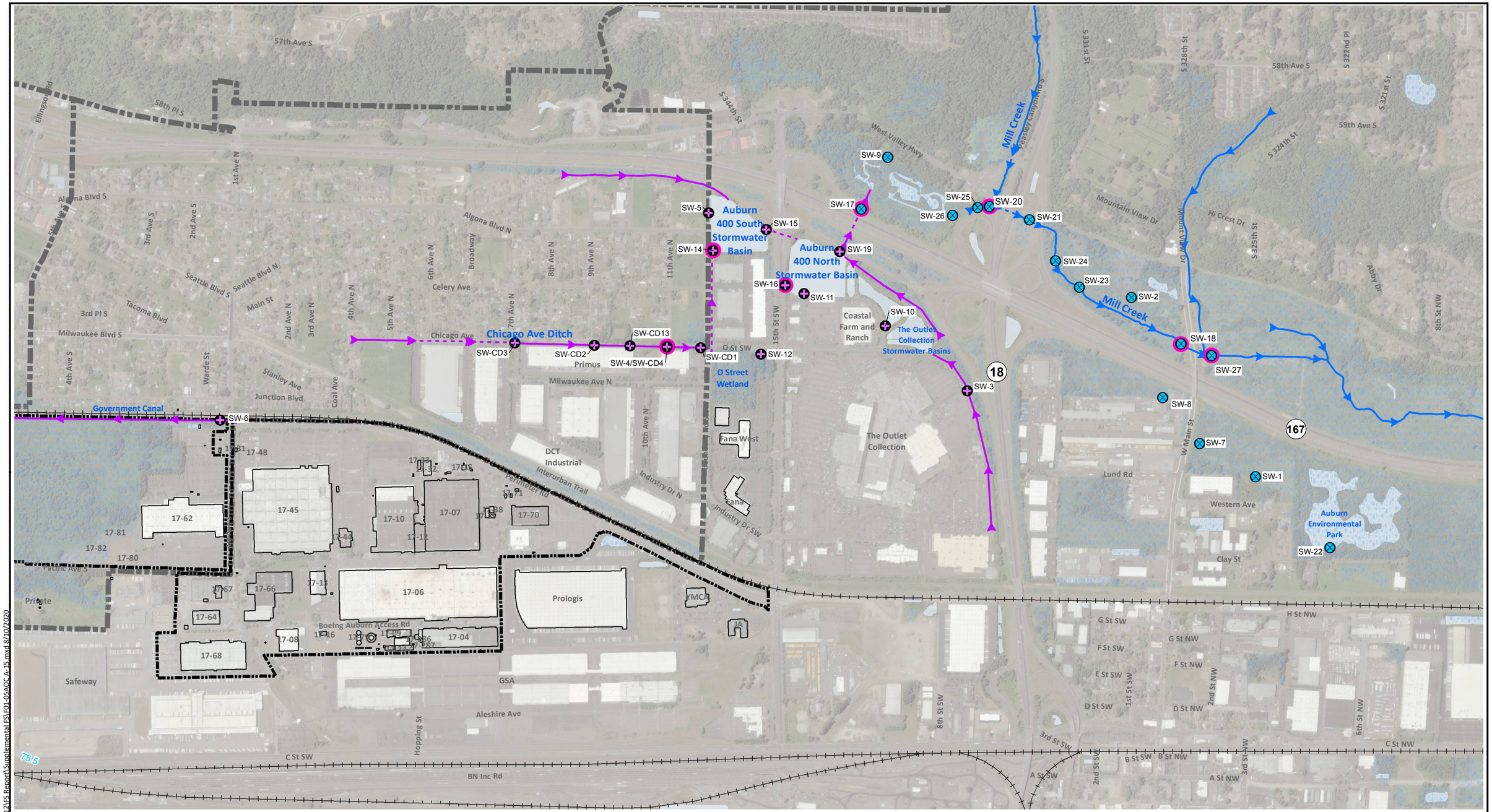
N

Base map source: Geometrix 2003; Aerial Photo Source: Esri World Imagery; Parcel Data Source: King County GIS 2012

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Monitoring Well Network and Approximate Extent of Area 1 and Western Plumes**	Figure 1-4

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-4 AOC_A-14.mxd 8/10/2020



Legend

- Stormwater Sample Location
- Surface Water Sample Location
- Ongoing Sample Location
- Open Surface Water Channel
- Open Stormwater Ditch
- Piped Surface Water Conveyance
- Piped Stormwater Conveyance
- Wetland Areas
- Boeing Property
- City Limits

Notes

1. Surface water sampling locations are designated by SW.
2. The locations of stormwater/surface water features are approximate.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 1,000 2,000

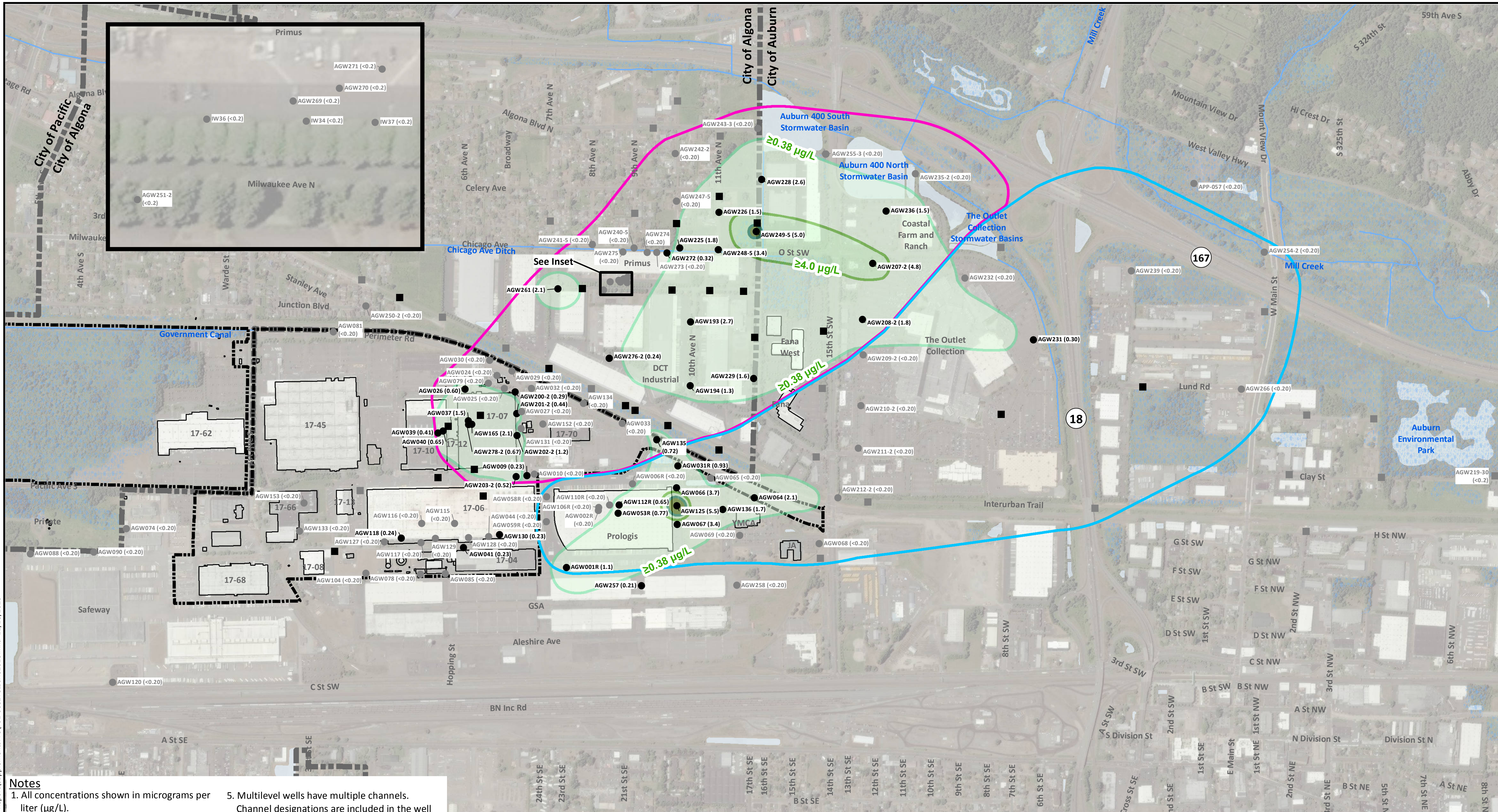
Scale in Feet

Base Map Source: Geometrix 2003; Parcel Data Source: King County 2015; Aerial Photo Source: Esri World Imagery.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-05AOC A-15.mxd 8/10/2020

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Stormwater and Surface Water Features**	Figure 1-5


Primus
AGW271 (<0.2)
AGW270 (<0.2)
AGW269 (<0.2)
IW36 (<0.2)
IW34 (<0.2)
IW37 (<0.2)
Milwaukee Ave N
AGW251-2 (<0.2)
City of Pacific
City of Algona
City of Algona
City of Auburn
Auburn 400 South Stormwater Basin
Auburn 400 North Stormwater Basin
The Outlet Collection Stormwater Basins
Coastal Farm and Ranch
The Outlet Collection
DCT Industrial
Prologis
Government Canal
Chicago Ave Ditch
Mill Creek
Auburn Environmental Park
See Inset
≥0.38 µg/L
≥4.0 µg/L
AGW228 (2.6)
AGW226 (1.5)
AGW249-5 (5.0)
AGW225 (1.8)
AGW248-5 (3.4)
AGW272 (0.32)
AGW207-2 (4.8)
AGW236 (1.5)
AGW261 (2.1)
AGW193 (2.7)
AGW208-2 (1.8)
AGW231 (0.30)
AGW276-2 (0.24)
AGW229 (1.6)
AGW194 (1.3)
AGW026 (0.60)
AGW200-2 (0.29)
AGW201-2 (0.44)
AGW037 (1.5)
AGW039 (0.41)
AGW040 (0.65)
AGW165 (2.1)
AGW278-2 (0.67)
AGW202-2 (1.2)
AGW009 (0.23)
AGW203-2 (0.52)
AGW135 (0.72)
AGW031R (0.93)
AGW066 (3.7)
AGW112R (0.65)
AGW053R (0.77)
AGW125 (5.5)
AGW136 (1.7)
AGW064 (2.1)
AGW067 (3.4)
AGW118 (0.24)
AGW130 (0.23)
AGW041 (0.23)
AGW001R (1.1)
AGW257 (0.21)
17-62
17-45
17-07
17-10
17-12
17-70
17-66
17-13
17-06
17-04
17-08
17-68
Safeway
GSA
Aleshire Ave
C St SW
BN Inc Rd
A St SE
Interurban Trail
Lund Rd
Clay St
167
18
Mountain View Dr
West Valley Hwy
Junction Blvd
Perimeter Rd
Algona Blvd N
Celery Ave
Stanley Ave
O St SW
Mill Creek
59th Ave S

Notes

1. All concentrations shown in micrograms per liter (µg/L).
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000
Scale in Feet

N

Data Sources: King County; Esri World Imagery.

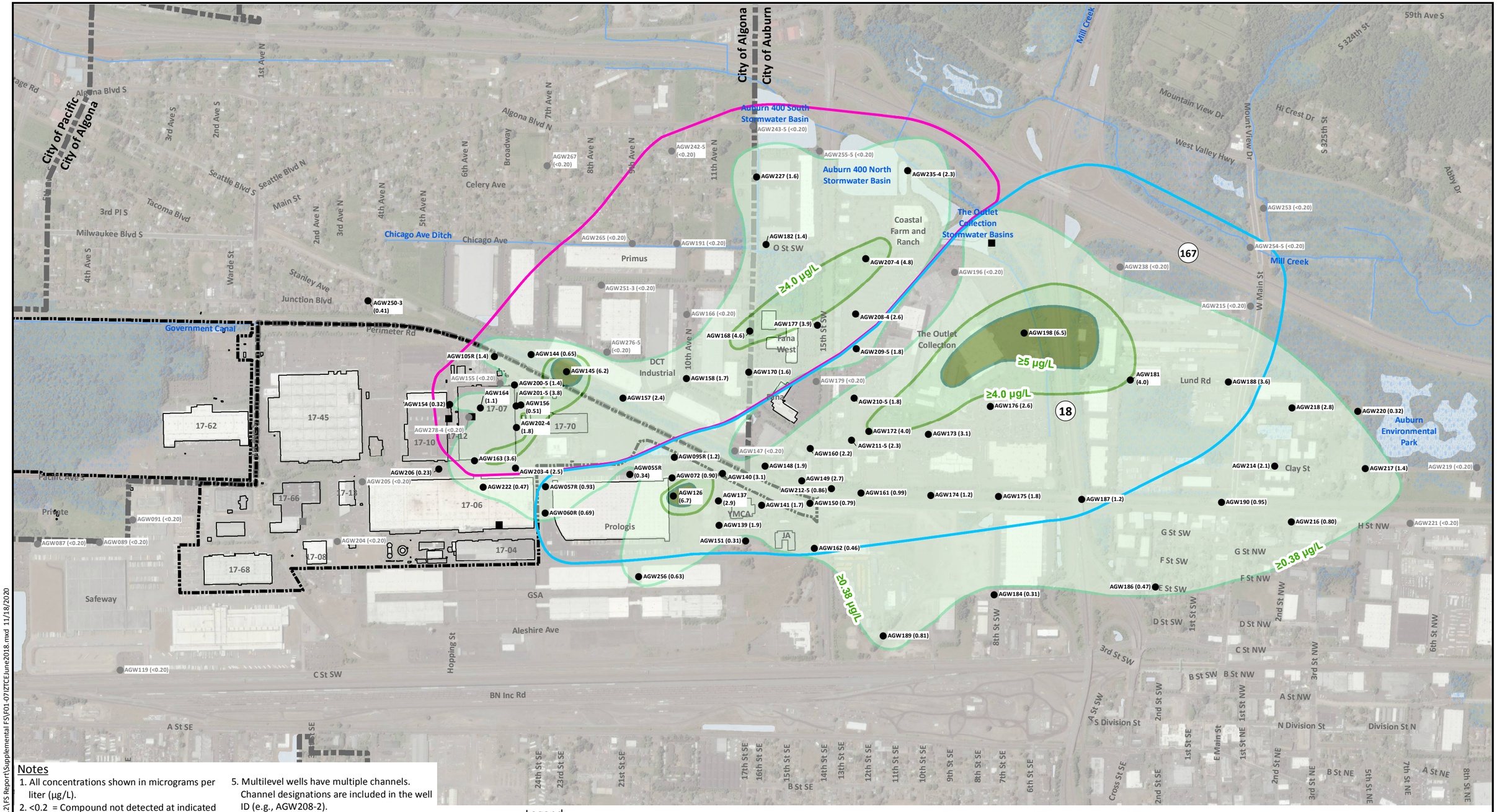
G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-06SZTCEJune2018.mxd 11/18/2020

Landau Associates

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Shallow Zone Trichloroethene Concentrations June 2018

Figure
1-6



Notes

1. All concentrations shown in micrograms per liter (µg/L).
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

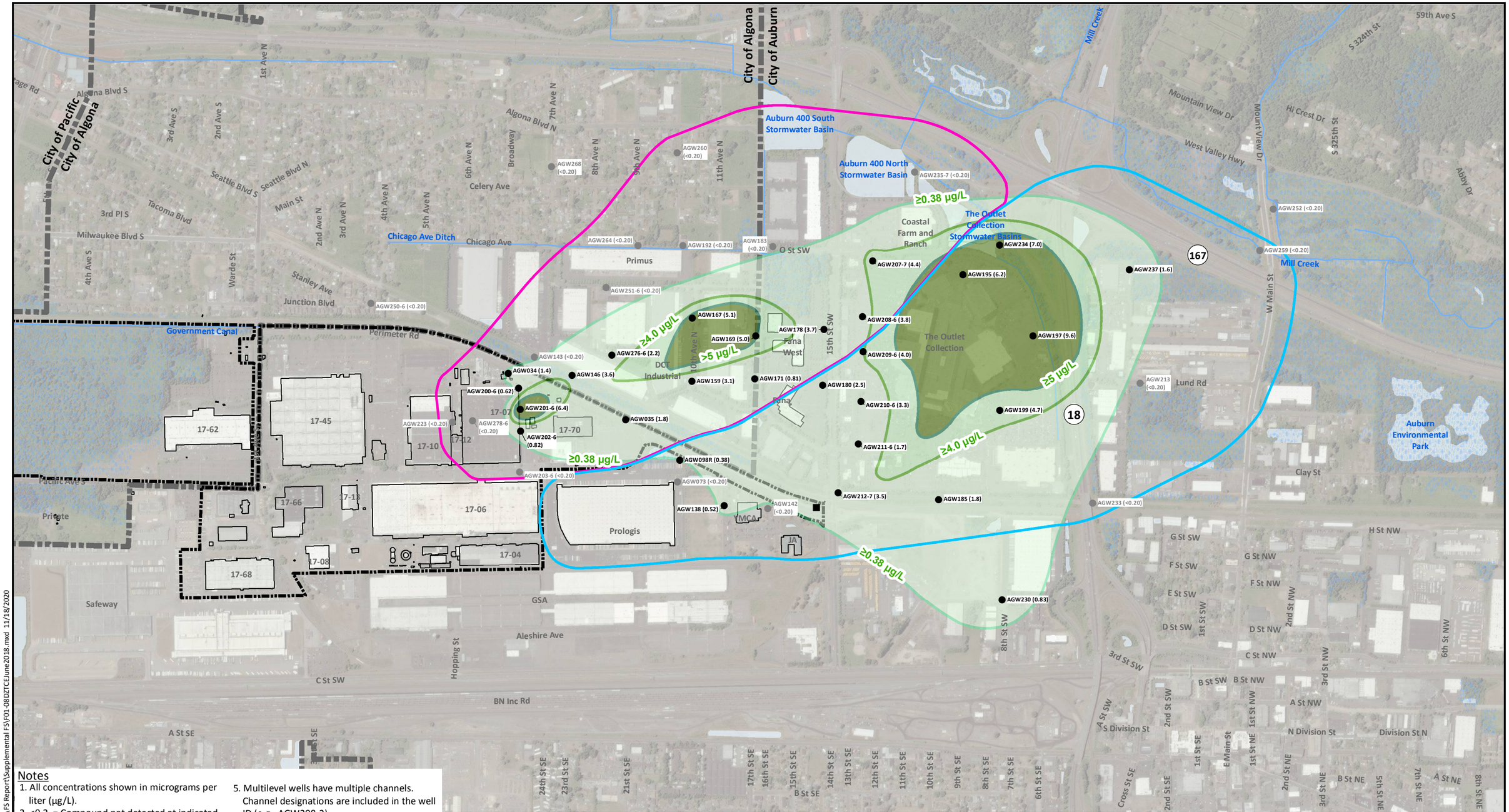
N

Data Sources: King County GIS; Esri World Imagery.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-07IZTCEJune2018.mxd 11/18/2020

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Intermediate Zone Trichloroethene Concentrations June 2018**	Figure 1-7



Notes

1. All concentrations shown in micrograms per liter (µg/L).
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- TCE Contour (≥5.0 µg/L)
- TCE Contour (≥4.0 µg/L)
- TCE Contour (≥0.38 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

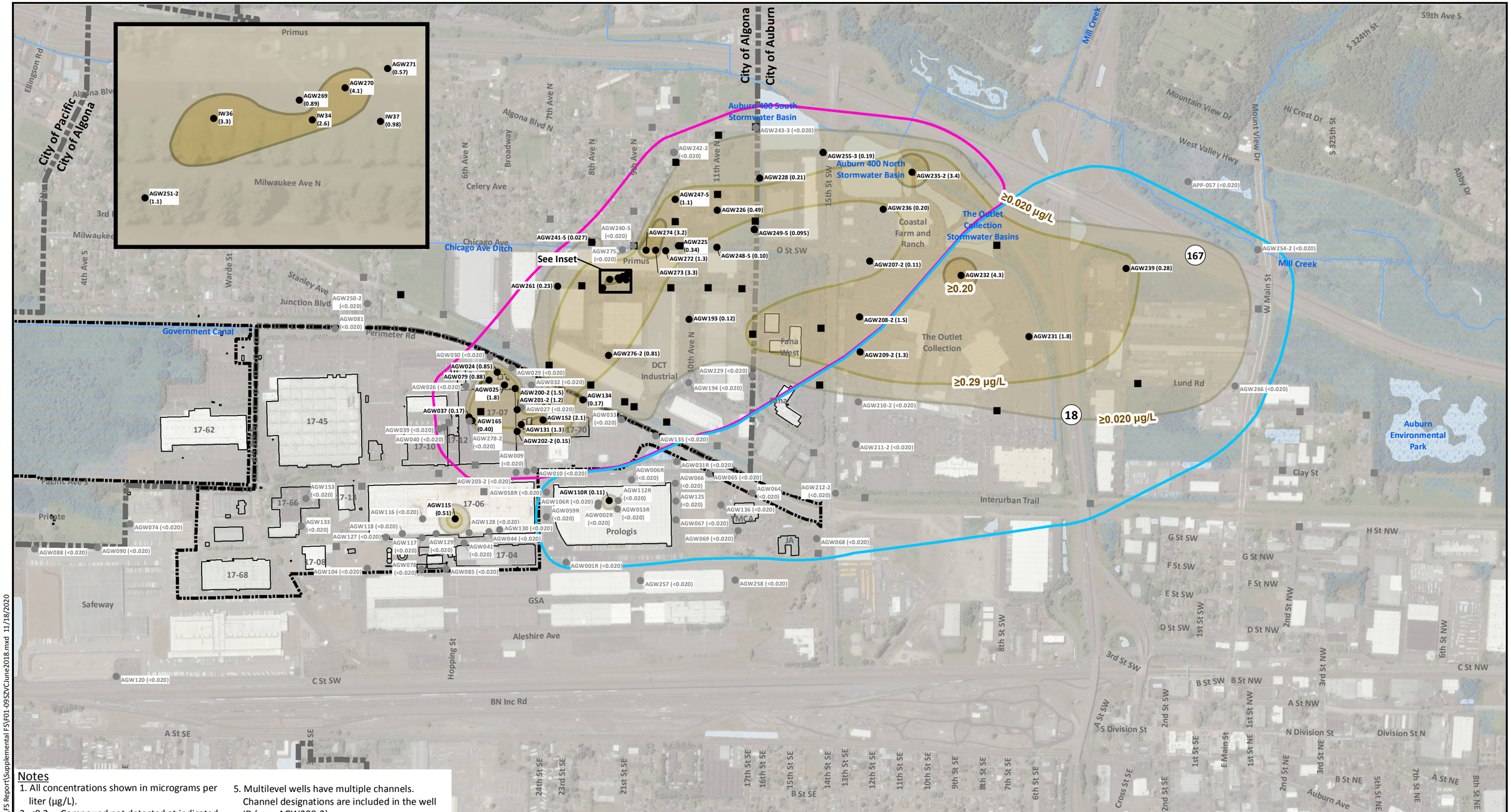
Scale in Feet

Data Sources: King County GIS; Esri World Imagery.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Deep Zone Trichloroethene Concentrations June 2018**	Figure 1-8

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-08DZTCEJune2018.mxd 11/18/2020



Notes

1. All concentrations shown in micrograms per liter (µg/L).
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

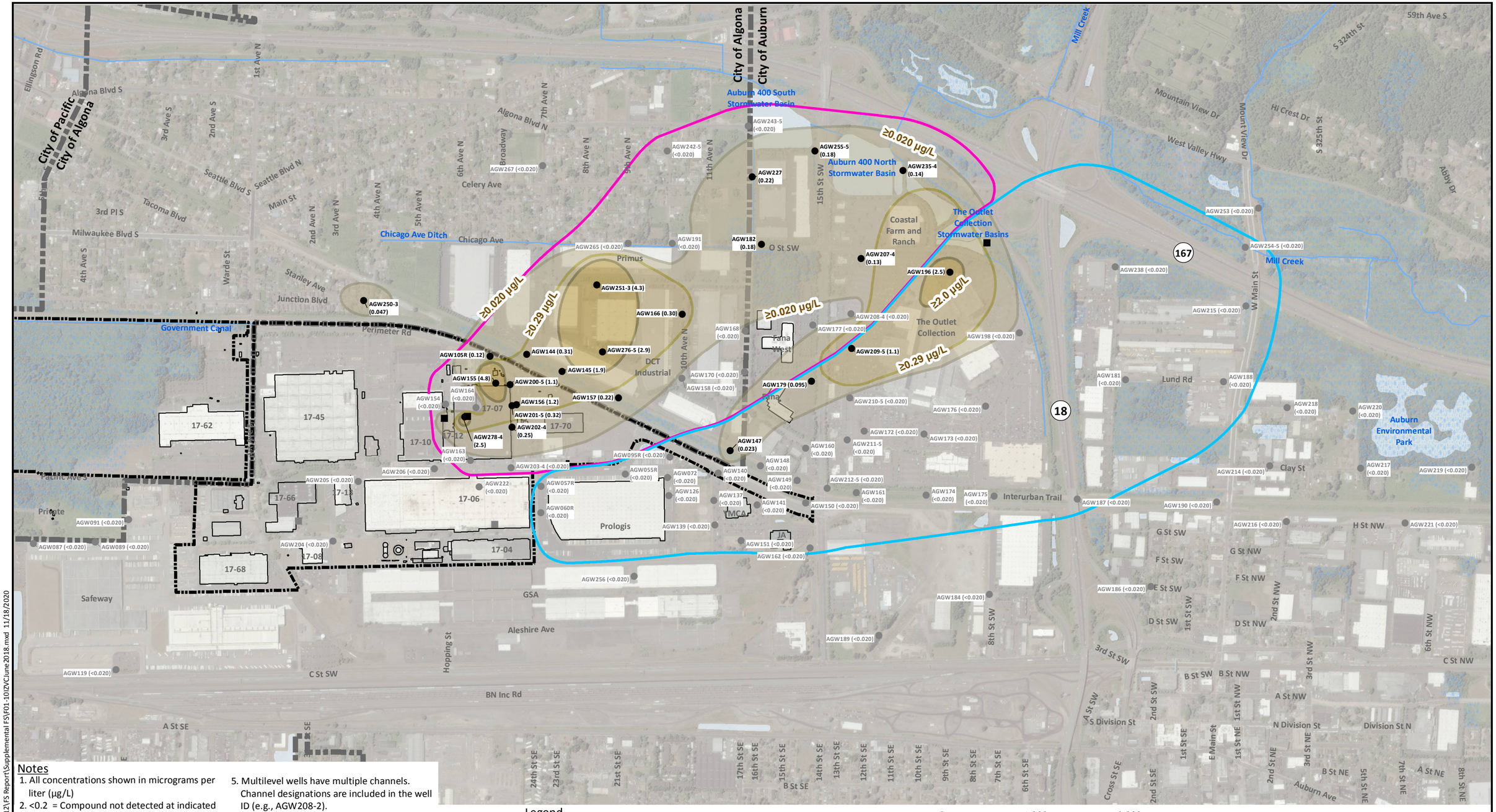
Scale in Feet

Data Sources: King County GIS; Esri World Imagery.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Shallow Zone Vinyl Chloride Concentrations June 2018**	Figure 1-9

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-09SZVClune2018.mxd 11/18/2020



Notes

1. All concentrations shown in micrograms per liter (µg/L)
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

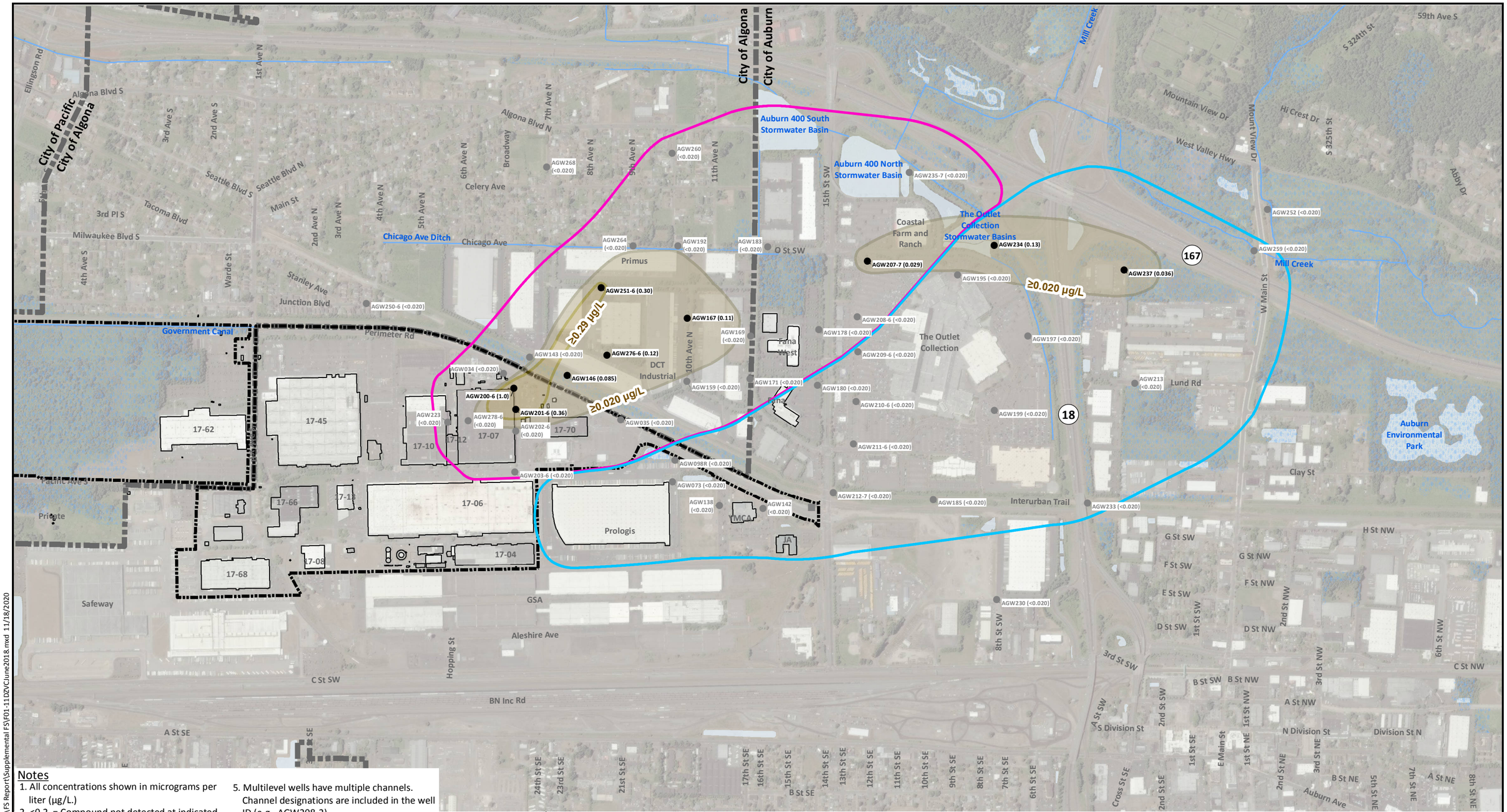
N

Data Sources: King County GIS; Esri World Imagery.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-10I2VCJune2018.mxd 11/18/2020

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Intermediate Zone Vinyl Chloride Concentrations June 2018**	Figure 1-10



Notes

1. All concentrations shown in micrograms per liter (µg/L.)
2. <0.2 = Compound not detected at indicated reporting limit.
3. Monitoring well results are the most recent.
4. Black well and boring symbols indicate locations where the compound was detected. Gray well and boring symbols indicate locations where the compound was not detected.
5. Multilevel wells have multiple channels. Channel designations are included in the well ID (e.g., AGW208-2).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well Location
- Historical Borehole Grab Sample Location
- Non-Detect
- Vinyl Chloride Contour (≥2.0 µg/L)
- Vinyl Chloride Contour (≥0.29 µg/L)
- Vinyl Chloride Contour (≥0.020 µg/L)
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

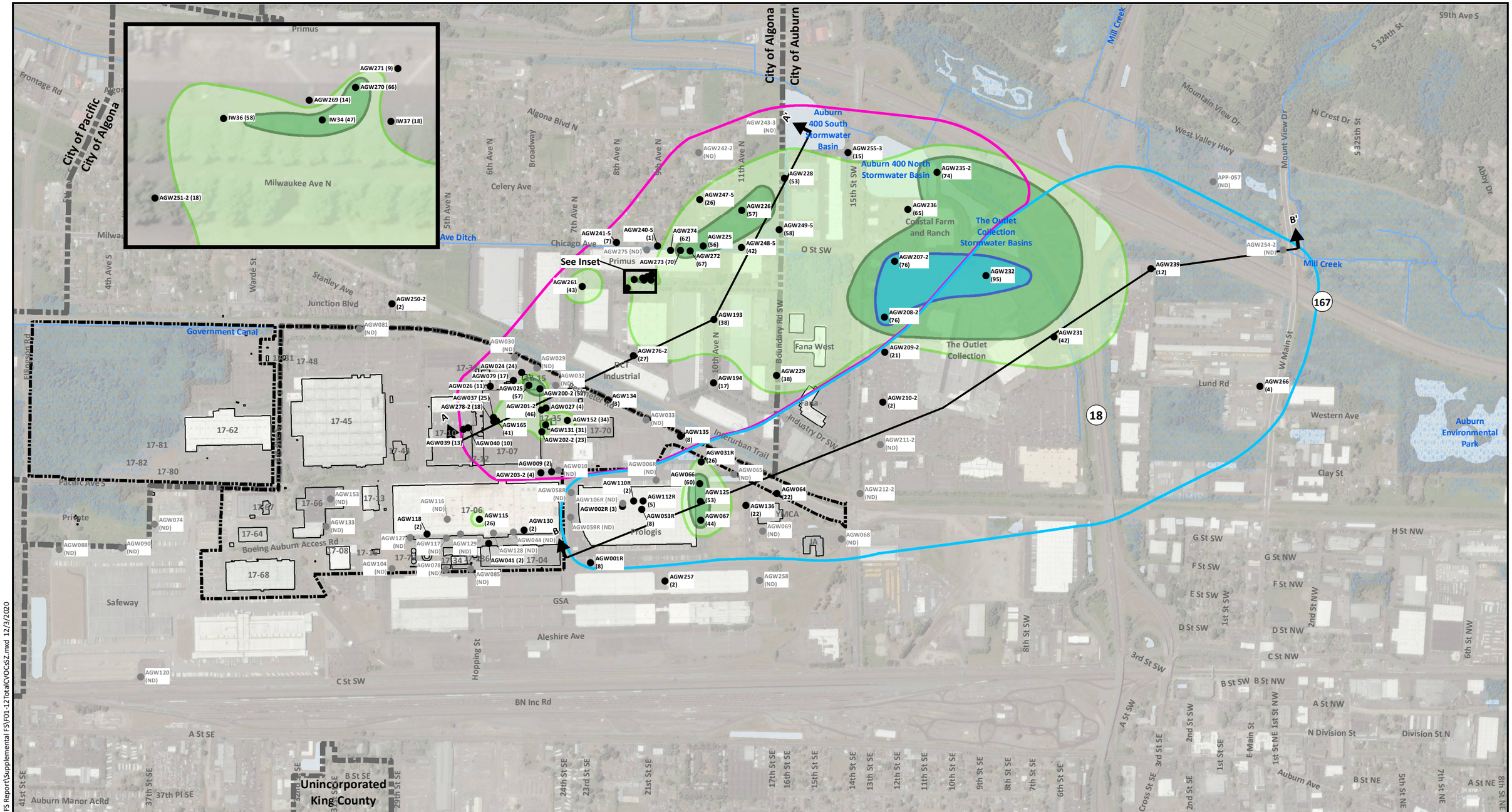
N

Data Sources: King County GIS; Esri World Imagery.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Deep Zone Vinyl Chloride Concentrations June 2018**	Figure 1-11

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-11DZVCJune2018.mxd 11/18/2020



Notes

1. All concentrations shown in nanomoles per liter (nmol/L).
2. Multilevel wells have seven well channels. Channel designations are included in the well ID (ex: AGW208-1).
3. Total chloroethenes include TCE, DCE, and VC.
4. ND = TCE, DCE, and VC were not detected at the laboratory reporting limits.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

Legend

- Monitoring Well Location
- Monitoring Well Location (Non-Detect)
- Nanomole Contour ≥ 100 nmol/L
- Nanomole Contour ≥ 75 nmol/L
- Nanomole Contour ≥ 50 nmol/L
- Nanomole Contour ≥ 25 nmol/L
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Cross Section Location

0 1,000 2,000

Scale in Feet

Data Sources: King County GIS; Esri World Imagery.

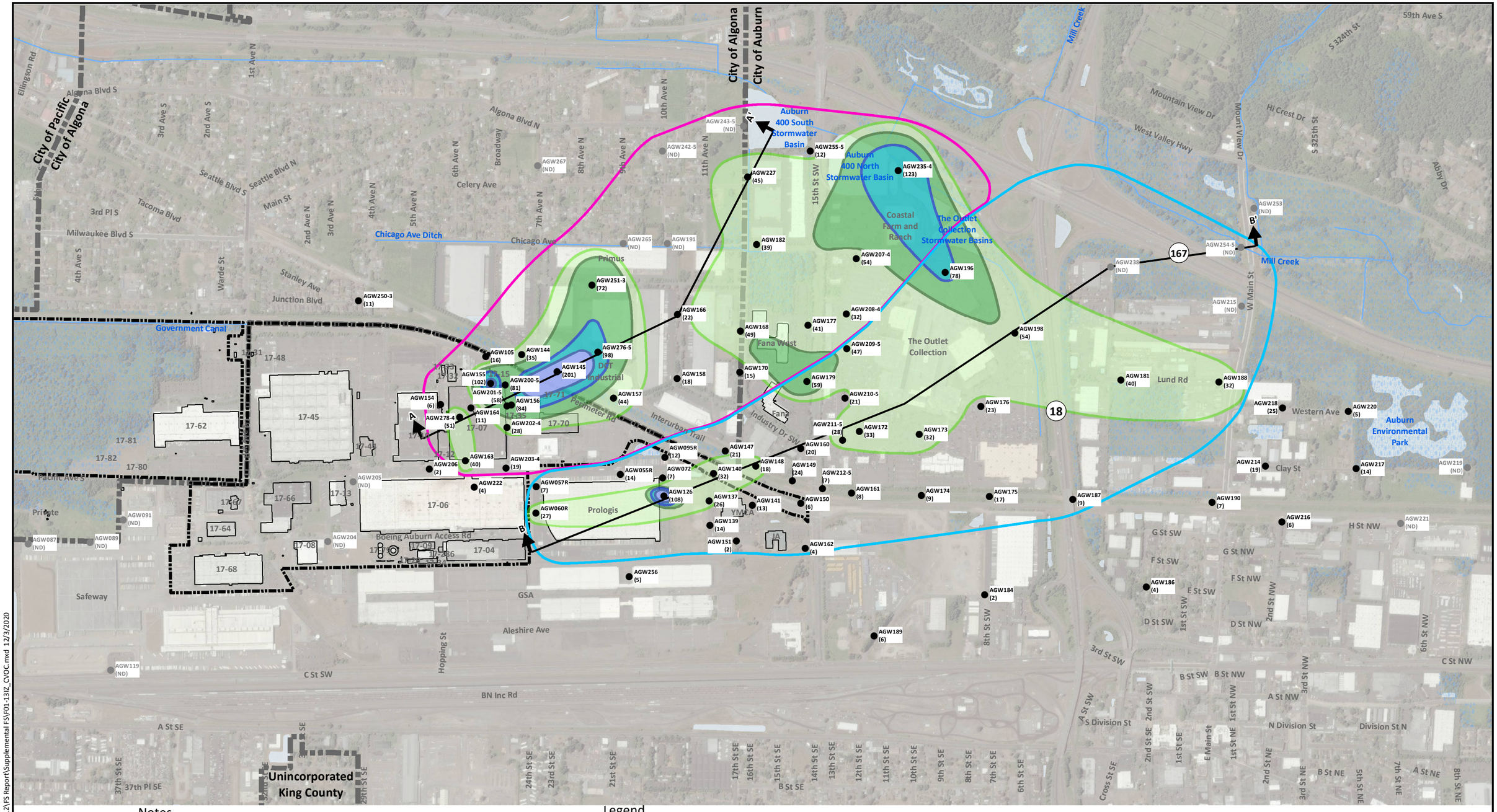
LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Shallow Zone
Total Chlorinated Volatile Organic Compound Concentrations - June 2018

Figure 1-12

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-12TotalCVOCsSZ.mxd 12/3/2020



Notes

1. All concentrations shown in nanomoles per liter (nmol/L).
2. Multilevel wells have seven well channels. Channel designations are included in the well ID (ex: AGW208-1).
3. Total chloroethenes include TCE, DCE, and VC.
4. ND = TCE, DCE, and VC were not detected at the laboratory reporting limits.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

Legend

- Monitoring Well Location
- Monitoring Well Location (Non-Detect)
- Nanomole Contour ≥ 100 nmol/L
- Nanomole Contour ≥ 75 nmol/L
- Nanomole Contour ≥ 50 nmol/L
- Nanomole Contour ≥ 25 nmol/L
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Cross Section Location

Data Sources: King County GIS; Esri World Imagery.

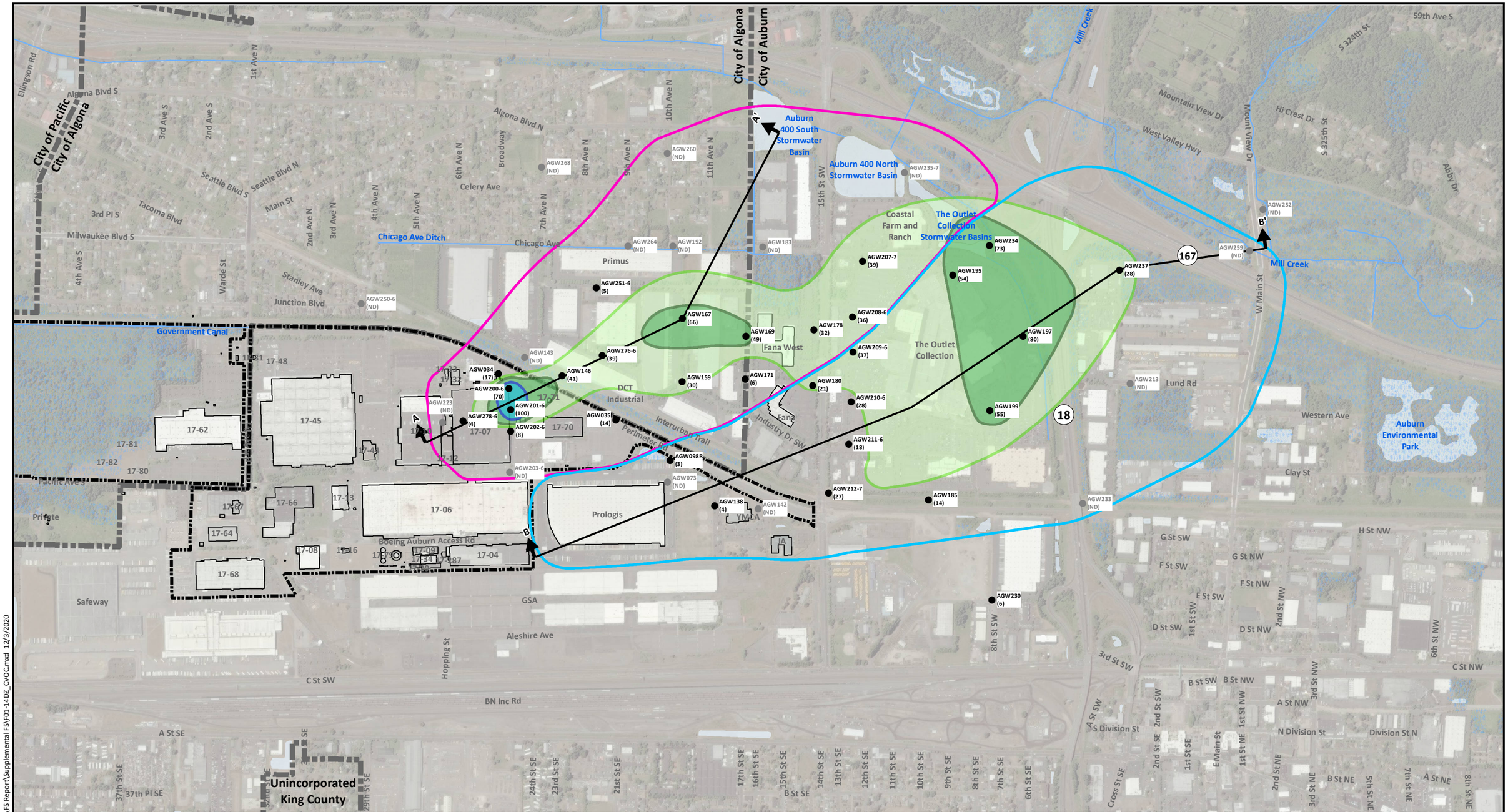
0 1,000 2,000

Scale in Feet

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Intermediate Zone Total Chlorinated Volatile Organic Compound Concentrations - June 2018**	Figure 1-13

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-13IZ_CVOC.mxd 12/3/2020



Notes

1. All concentrations shown in nanomoles per liter (nmol/L).
2. Multilevel wells have seven well channels. Channel designations are included in the well ID (ex: AGW208-1).
3. Total chloroethenes include TCE, DCE, and VC.
4. ND = TCE, DCE, and VC were not detected at the laboratory reporting limits.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

Legend

- Monitoring Well Location
- Monitoring Well Location (Non-Detect)
- Nanomole Contour ≥ 100 nmol/L
- Nanomole Contour ≥ 75 nmol/L
- Nanomole Contour ≥ 50 nmol/L
- Nanomole Contour ≥ 25 nmol/L
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Cross Section Location

Data Sources: King County GIS; Esri World Imagery.

0 1,000 2,000

Scale in Feet

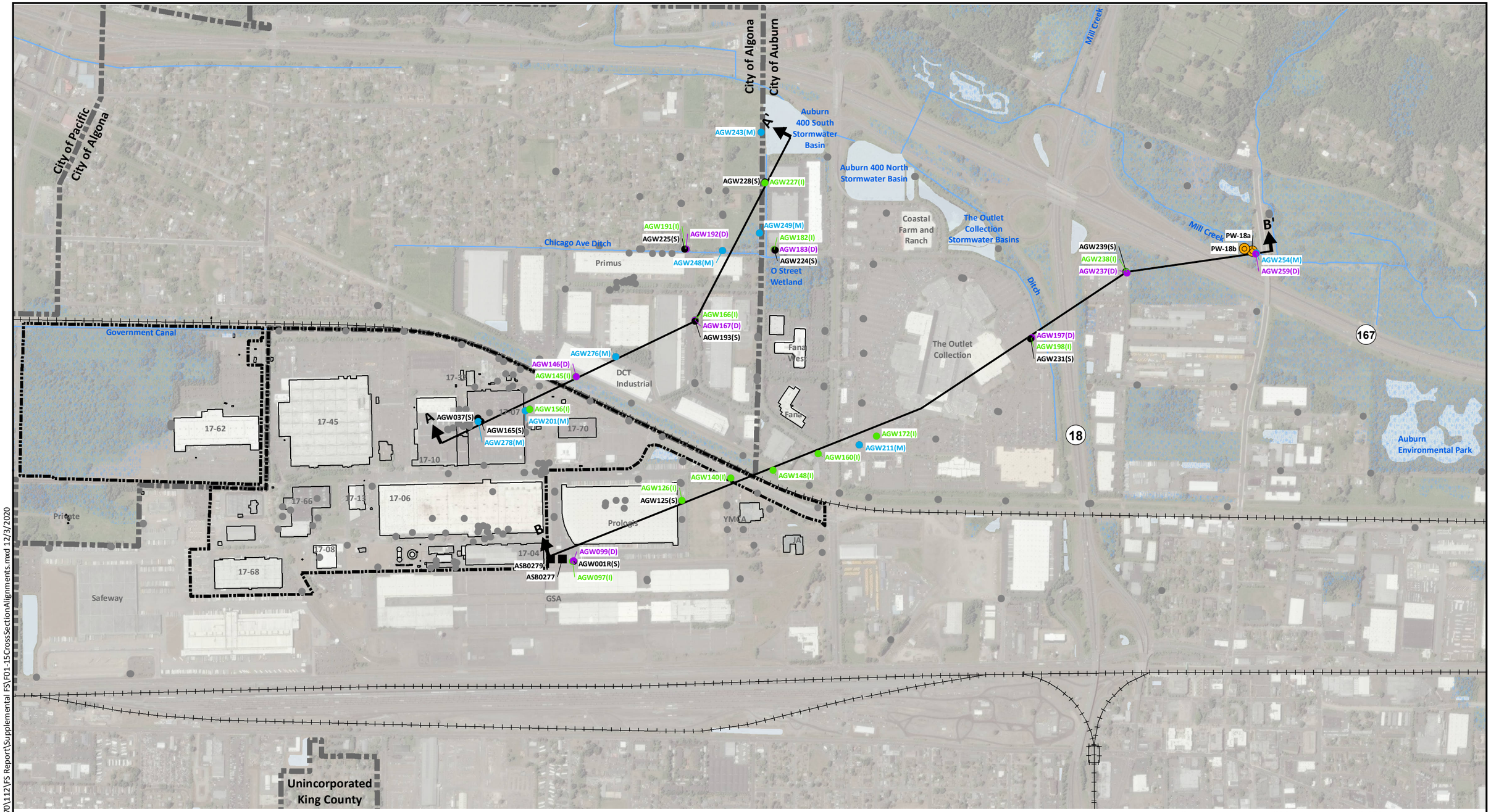
LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Deep Zone
Total Chlorinated Volatile Organic Compound Concentrations - June 2018

Figure 1-14

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-14DZ_CVOC.mxd 12/3/2020



Notes

1. Groundwater wells are identified by the AGW prefix. The designations behind the identifications indicate the zone. If there is no designation, the well is screened in the shallow zone. (I) = intermediate zone, (D) = deep zone, (M) = multi-level well; screens in multiple groundwater zones.
2. Well designations beginning with APP are installed and owned by WSDOT.
3. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- AGW165(S) ● Shallow Monitoring Well (2 to 30 ft bgs)
- AGW145(I) ● Intermediate Monitoring Well (40 to 60 ft bgs)
- AGW146(D) ● Deep Monitoring Well (80 to 100 ft bgs)
- AGW276(M) ● Multi-Level Well
- ● Wells Not Associated with Cross-Sections
- ASB0277 ■ FS Boring Location
- Pore Water Sample Location
- Wetland Areas
- Water Bodies
- Waterways
- Cross-Section Location

0 1,000 2,000

Scale in Feet

Base Map Source: Geometrix 2003; Parcel Data Source: King County 2015; Aerial Photo Source: Esri World Imagery.

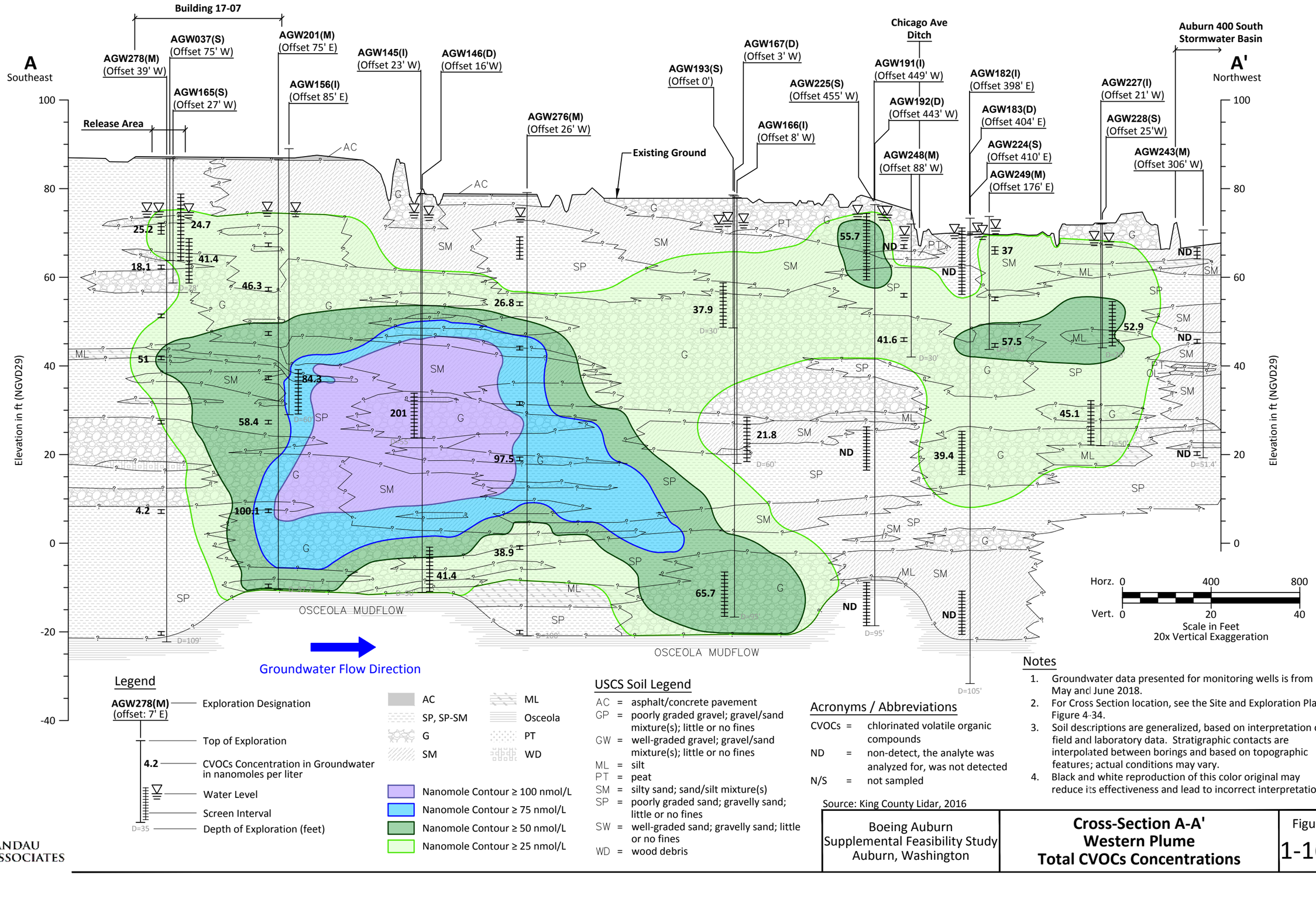
G:\Projects\025\164\170\112\FS Report\Supplemental FS\F01-15CrossSectionAlignments.mxd 12/3/2020

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

Western Plume and Area 1 Plume Cross-Section Alignments

Figure 1-15



Legend

AGW278(M) (offset: 7' E) — Exploration Designation

Top of Exploration

4.2 — CVOCs Concentration in Groundwater in nanomoles per liter

Water Level

Screen Interval

D=35 — Depth of Exploration (feet)

- AC
- SP, SP-SM
- G
- SM
- ML
- Osceola
- PT
- WD

- Nanomole Contour ≥ 100 nmol/L
- Nanomole Contour ≥ 75 nmol/L
- Nanomole Contour ≥ 50 nmol/L
- Nanomole Contour ≥ 25 nmol/L

USCS Soil Legend

AC = asphalt/concrete pavement
GP = poorly graded gravel; gravel/sand mixture(s); little or no fines
GW = well-graded gravel; gravel/sand mixture(s); little or no fines
ML = silt
PT = peat
SM = silty sand; sand/silt mixture(s)
SP = poorly graded sand; gravelly sand; little or no fines
SW = well-graded sand; gravelly sand; little or no fines
WD = wood debris

Acronyms / Abbreviations

CVOCs = chlorinated volatile organic compounds
ND = non-detect, the analyte was analyzed for, was not detected
N/S = not sampled

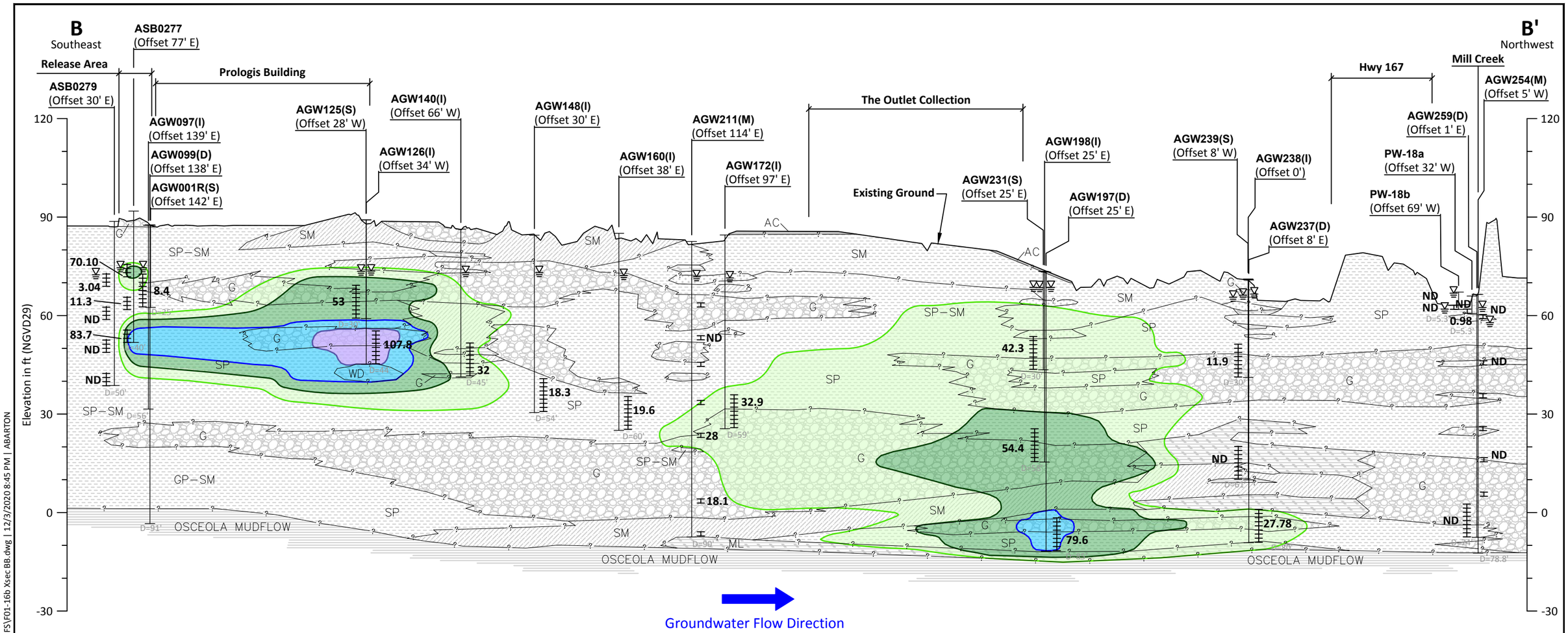
Notes

1. Groundwater data presented for monitoring wells is from May and June 2018.
2. For Cross Section location, see the Site and Exploration Plan, Figure 4-34.
3. Soil descriptions are generalized, based on interpretation of field and laboratory data. Stratigraphic contacts are interpolated between borings and based on topographic features; actual conditions may vary.
4. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Source: King County Lidar, 2016

Landau Associates

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Cross-Section A-A' Western Plume Total CVOCs Concentrations**	Figure 1-16a



Legend

- **ASB0281** (offset: 7' E) — Exploration Designation
- Top of Exploration
- **18.1** — CVOCs Concentration in Groundwater in nanomoles per liter
- Water Level
- Screen Interval
- D=35 — Depth of Exploration (feet)

Horz. 0 600 1200
Vert. 0 30 60
Scale in Feet
20x Vertical Exaggeration

Acronyms / Abbreviations

CVOCs = chlorinated volatile organic compounds
ND = non-detect, the analyte was analyzed for, was not detected

AC
SP, SP-SM, GP/SP
G
SM
ML
Osceola
PT

Nanomole Contour ≥ 100 nmol/L
Nanomole Contour ≥ 75 nmol/L
Nanomole Contour ≥ 50 nmol/L
Nanomole Contour ≥ 25 nmol/L

USCS Soil Legend

AC = asphalt/concrete pavement
GP = poorly graded gravel; gravel/sand mixture(s); little or no fines
GW = well-graded gravel; gravel/sand mixture(s); little or no fines
ML = silt
PT = peat
SM = silty sand; sand/silt mixture(s)
SP = poorly graded sand; gravelly sand; little or no fines
SW = well-graded sand; gravelly sand; little or no fines
WD = wood debris

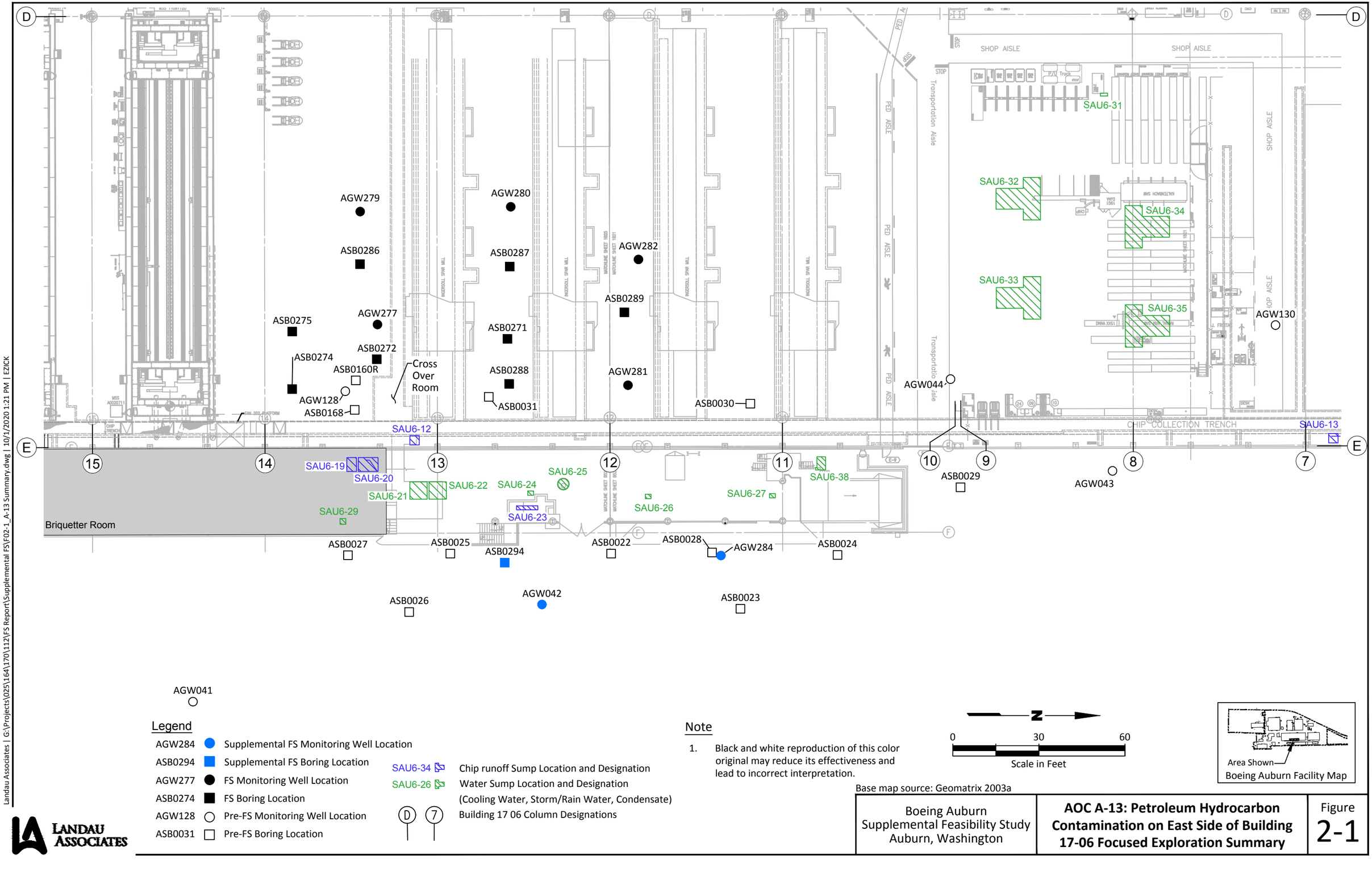
Notes

1. Groundwater data presented for monitoring wells is from May and June 2018. Groundwater data for borings are from August 2017. Pore water data is from October 2018.
2. For Cross Section location, see the Site and Exploration Plan, Figures 4-34.
3. Soil descriptions are generalized, based on interpretation of field and laboratory data. Stratigraphic contacts are interpolated between borings and based on topographic features; actual conditions may vary.
4. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Source: King County Lidar, 2016

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Cross-Section B-B' Area 1 Plume Total CVOCs Concentrations**	Figure 1-16b



Legend

AGW284	●	Supplemental FS Monitoring Well Location
ASB0294	■	Supplemental FS Boring Location
AGW277	●	FS Monitoring Well Location
ASB0274	■	FS Boring Location
AGW128	○	Pre-FS Monitoring Well Location
ASB0031	□	Pre-FS Boring Location

SAU6-34 Chip runoff Sump Location and Designation

SAU6-26 Water Sump Location and Designation (Cooling Water, Storm/Rain Water, Condensate)

(D) (7) Building 17 06 Column Designations

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

N

0 30 60

Scale in Feet

Area Shown

Boeing Auburn Facility Map

Base map source: Geomatrix 2003a

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-13: Petroleum Hydrocarbon Contamination on East Side of Building 17-06 Focused Exploration Summary**	Figure **2-1**

AGW279 (12/2017)	12.5'	22'
TPH	ND	ND

ASB0286 (12/2017)	11'	16'	18'	22'
TPH	ND	**326**	**13,600**	ND

ASB0272 (8/2017)	11'	17'	19'
TPH	ND	**13,300**	**18,500**

ASB0160R (9/2004)	17.5'
TPH	**36,800**

ASB0275 (8/2017)	8'	10'	20'	23'
TPH	ND	**62**	ND	ND

AGW128 (9/2008)	17-18.5'
TPH	**5,280**

ASB0274 (8/2017)	10'	16'	19'
TPH	**92**	ND	ND

ASB0168 (9/2004)	15'	17.5'
TPH	**1,570**	**268**

AGW277 (8/2017)	8'	17'	21'	24.5'	26'	29.5'
TPH	ND	**15,200**	**1,500**	ND	**110**	ND

AGW280 (12/2017)	13'	23.5'
TPH	ND	ND

ASB0294 (6/2020)	12'	16'	23'
TPH	ND	**194.7**	ND

ASB0287 (12/2017)	12'	22'
TPH	ND	ND

ASB0271 (8/2017)	11'	18'	24'
TPH	ND	**9,100**	**1,290**

ASB0288 (12/2017)	10.5'	12'	13.5'	18'	22.5'	25'	29'
TPH	**120**	**5,630**	**3,960**	**19,500**	**2,090**	ND	ND

AGW282 (12/2017)	11.5'	16'	17'	21'	22.5
TPH	**95**	ND	ND	ND	ND

ASB0289 (12/2017)	12'	17'	20.5'	22'	25'	27'
TPH	ND	**120**	**423**	**100**	ND	ND

AGW281 (12/2017)	13'	16'	18.5'	21'	25.5'	26.5'	27.5'
TPH	ND	**170**	**18,100**	**770**	**496**	**170**	ND

AGW284 (6/2020)	11'	17.5'	22.5
TPH	ND	ND	ND

AGW130 (9/2008)	12.5 - 14'
TPH	**5.6**

SHOP AISLE
SHOP AISLE
SHOP AISLE
Transportation Aisle
PED AISLE
CHIP COLLECTION TRENCH
Briquetter Room
Cross Over Room
SAU6-12
SAU6-13
SAU6-19
SAU6-20
SAU6-21
SAU6-22
SAU6-23
SAU6-24
SAU6-25
SAU6-26
SAU6-27
SAU6-29
SAU6-31
SAU6-32
SAU6-33
SAU6-34
SAU6-35
SAU6-38
AGW041
AGW042
AGW043
AGW044
ASB0022
ASB0023
ASB0024
ASB0025
ASB0026
ASB0027
ASB0028
ASB0029
ASB0030
ASB0031

Legend

- AGW284 — Supplemental FS Monitoring Well Location
- ASB0294 — Supplemental FS Boring Location
- AGW277 — FS Monitoring Well Location
- ASB0274 — FS Boring Location
- AGW128 — Pre-FS Monitoring Well Location
- ASB0031 — Pre-FS Boring Location

SAU6-34 — Chip runoff Sump Location and Designation
SAU6-26 — Water Sump Location and Designation (Cooling Water, Storm/Rain Water, Condensate)

(D) (7) — Building 17-06 Column Designations

Black = No detection
Orange = Detection below pCUL
Green = Exceedance of pCUL

Notes

1. All analytes are shown in milligrams per kilogram (mg/kg).
2. Total petroleum hydrocarbons (TPH) are the sum of diesel-range and oil-range petroleum hydrocarbon detections.
3. In the databoxes: **Bold** text indicates detected analyte. Green shading indicates exceedance of proposed cleanup level (pCUL).
4. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

ND = non-detect, the analyte was analyzed for, but was not detected

AOC A-13	Soil pCUL (mg/kg)
TPH	71,000

0 30 60
Scale in Feet

Area Shown
Boeing Auburn Facility Map

Base map source: Geomatrix 2003a

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-13: Petroleum Hydrocarbon Contamination on East Side of Building 17-06 Soil Results

Figure
2-2

AGW277	Most Recent	Date
TPH	ND	12/2018

AGW279	Most Recent	Date
TPH	ND	12/2018

AGW280	Most Recent	Date
TPH	ND	12/2018

AGW282	Most Recent	Date
TPH	ND	12/2018

AGW281	Most Recent	Date
TPH	**250**	12/2018

AGW128	Most Recent	Date
TPH	**2,885**	12/2018

AGW130	Most Recent	Date
TPH	ND	12/2018

AGW044	Most Recent	Date
TPH	**1,300**	6/2018

AGW043	Most Recent	Date
TPH	ND	1/2009

AGW284	Most Recent	Date
TPH	ND	7/2020

AGW042	Most Recent	Date
TPH	ND	7/2020

AGW041	Most Recent	Date
TPH	ND	6/2013

ASB0286 ASB0287 ASB0289 ASB0275 ASB0271 ASB0272 ASB0274 ASB0160R Cross Over Room ASB0288 ASB0168 ASB0031 ASB0030 ASB0029 ASB0027 ASB0025 ASB0294 ASB0022 ASB0028 ASB0024 ASB0026 ASB0023

SAU6-12 SAU6-13 SAU6-19 SAU6-20 SAU6-21 SAU6-22 SAU6-24 SAU6-25 SAU6-26 SAU6-27 SAU6-38 SAU6-29 SAU6-23 SAU6-31 SAU6-32 SAU6-34 SAU6-33 SAU6-35

SHOP AISLE Transportation Aisle PED AISLE CHIP COLLECTION TRENCH Briquetter Room

Legend

- AGW284 — Supplemental FS Monitoring Well Location
- ASB0294 — Supplemental FS Boring Location
- AGW277 — FS Monitoring Well Location
- ASB0274 — FS Boring Location
- AGW128 — Pre-FS Monitoring Well Location
- ASB0031 — Pre-FS Boring Location

SAU6-34 Chip runoff Sump Location and Designation

SAU6-26 Water Sump Location and Designation (Cooling Water, Storm/Rain Water, Condensate)

(D) (7) Building 17-06 Column Designations

Black = No detection

Orange = Detection below pCUL

Notes

1. All analytes are shown in micrograms per liter (µg/L).
2. For monitoring wells, the most recent data is shown.
3. All monitoring wells on this figure are screened across the water table.
4. Total petroleum hydrocarbons (TPH) are the sum of diesel-range and oil-range petroleum hydrocarbon detections.
5. In the databoxes: Bold text indicates detected analyte. Green shading indicates exceedance of proposed cleanup level (pCUL).
6. Existing monitoring well AGW042 was sampled, rather than collecting any groundwater samples from ASB0294.
7. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

ND = non-detect, the analyte was analyzed for, but was not detected

Base map source: Geomatrix 2003a

AOC A-13	Groundwater pCUL (µg/L)
TPH	20,000

N

0 30 60

Scale in Feet

Area Shown

Boeing Auburn Facility Map

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-13: Petroleum Hydrocarbon Contamination on East Side of Building 17-06 Groundwater Results

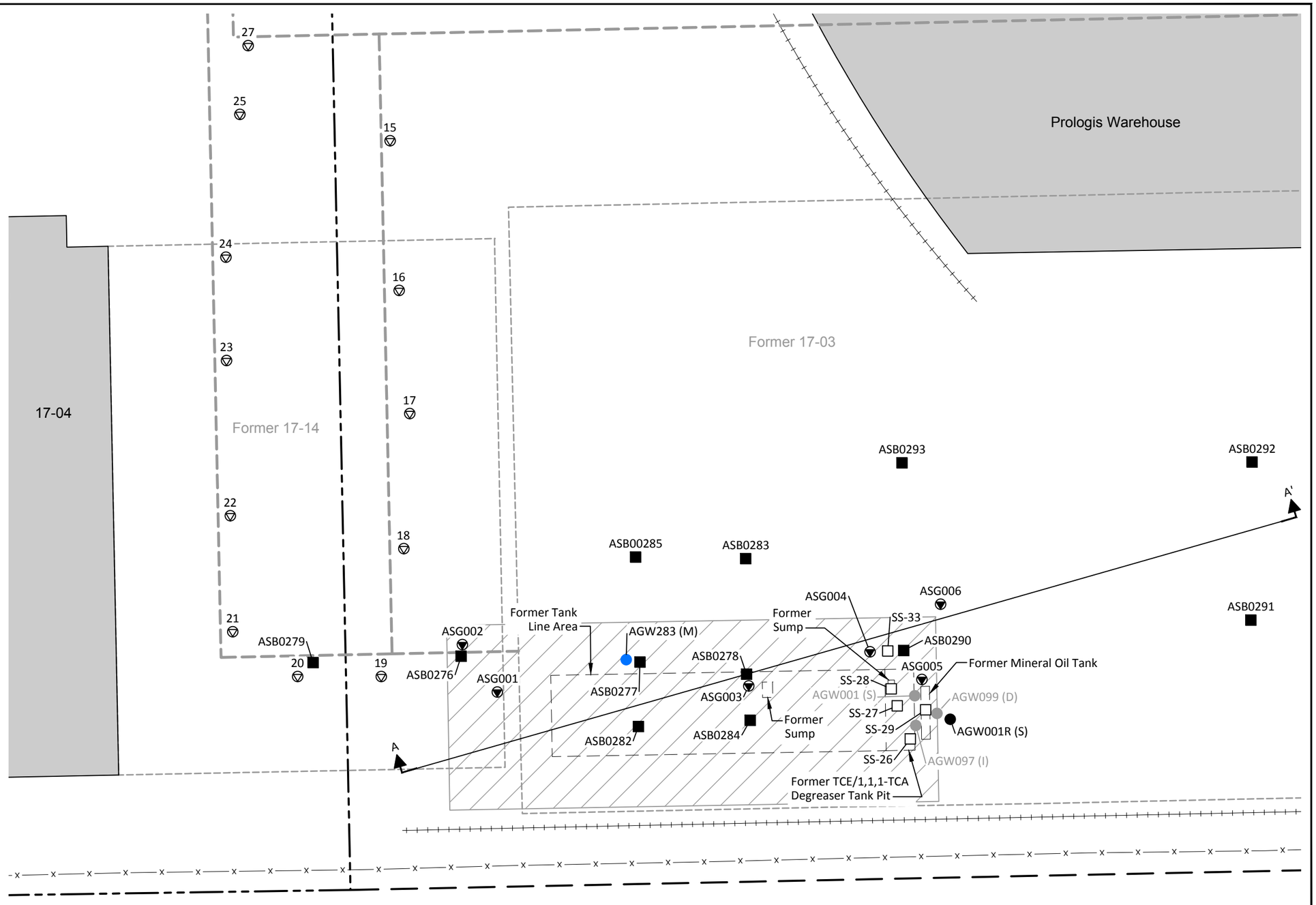
Figure 2-3

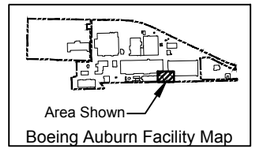
Legend

- ASB0280 — FS Boring Location
- SS-33 — Pre-FS Boring Location
- ASG001 — FS Soil Gas Sampling Location
- 18 — Pre-FS Soil Gas Location
- AGW001R (S) — Monitoring Well Location
- AGW283 (M) — Supplemental FS Monitoring Well Location
- AGW001 (S) — Decommissioned Well Location
- 17-07 — Current Building and Number
- 17-14 — Former Building and Number
- Former Building 17-03 Release Area
- Boeing Property Line
- Adjacent Property Line
- Existing Fence Line
- Existing Railroad Track
- Chrome Waste Line
- A — A' — Cross Section Location

Note

1. Groundwater wells are identified by the AGW prefix. The designations behind the identifications indicate the zone. (S) = shallow zone, (I) = intermediate zone, (D) = deep zone, (M) = multi-level well; screens in multiple groundwater zones.





N

0 40 80

Scale in Feet

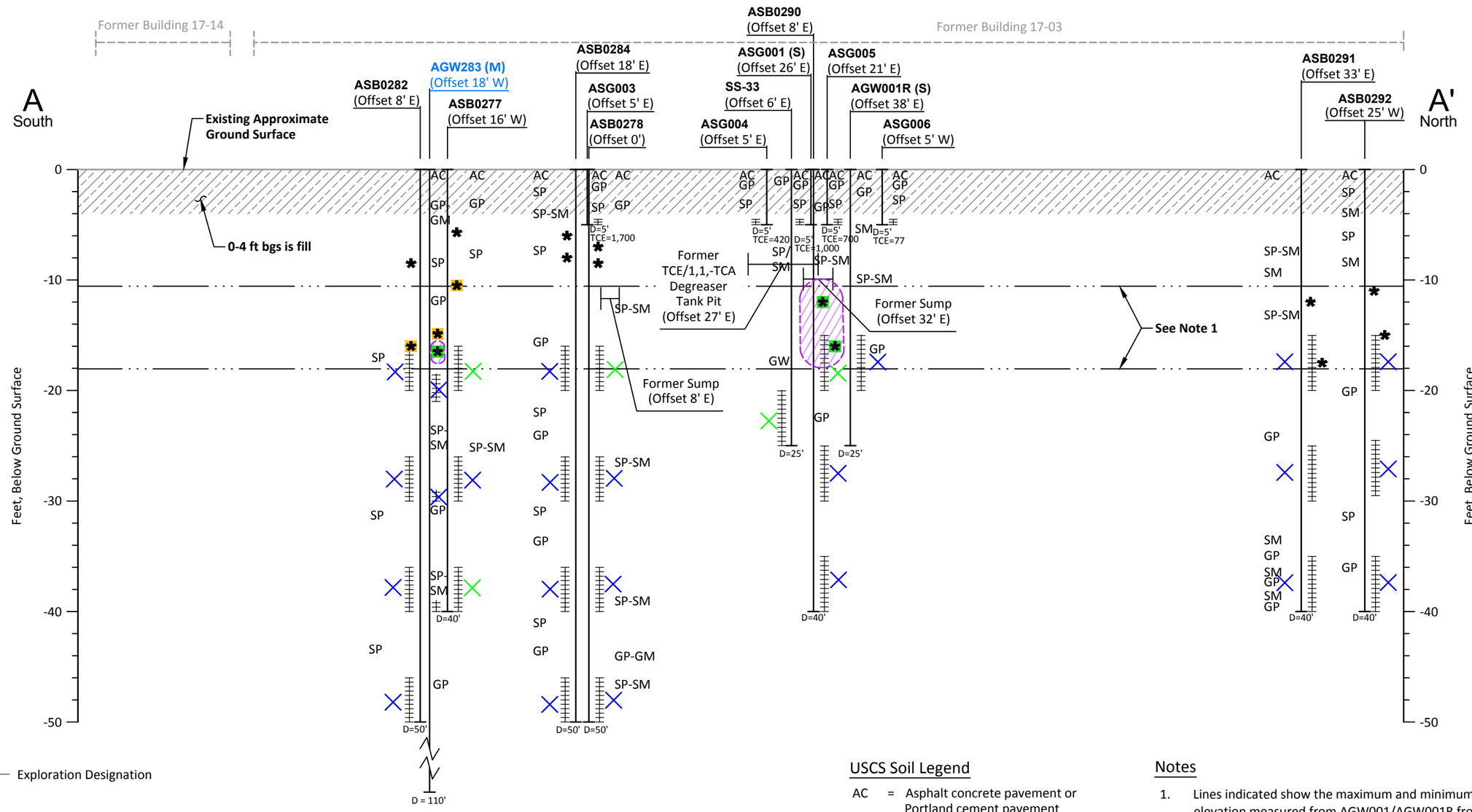
Base map source: Geomatrix 2003; Kennedy Jenks

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Former Building 17-03 Release Area Exploration Summary

Figure 2-4

LANDAU ASSOCIATES



Legend

- **ASB0282** (Offset: 8' E) — Exploration Designation
- Top of Exploration
- ✱ = Soil sample (Analytes = Not detected)
- ✱ = Soil sample (Analytes = Detected, below pCULs)
- ✱ = Soil sample (Analytes = Detected, above pCULs)
- SM — Unified Soil Classification Symbol (USCS)
- Screen Interval
- D=20.5' — Depth of Exploration (feet)
- TCE=77 — TCE Concentration in Soil Gas (µg/m³)

- X = Analytes detected above SWQS in groundwater
- X = Analytes detected above GW pCUL (protective of drinking water)
- ▨ = Analytes detected above pCULs in soil

AOC A-14	Groundwater pCUL	SWQS in Groundwater	Soil pCUL (mg/kg)
TCE	4	0.38	0.025
VC	0.29	0.02	N/A

USCS Soil Legend

AC	=	Asphalt concrete pavement or Portland cement pavement
GM	=	Silty gravel; gravel/sand/silt mixture(s)
GP	=	Poorly graded gravel; gravel/sand mixture(s); little or no fines
GW	=	Well-graded gravel; gravel/sand mixture(s); little or no fines
ML	=	Silt
SM	=	Silty sand; sand/silt mixture(s)
SP	=	Poorly graded sand; gravelly sand; little or no fines
SW	=	Well-graded sand; gravelly sand; little or no fines

Notes

1. Lines indicated show the maximum and minimum water level elevation measured from AGW001/AGW001R from December 2003 to December 2018.
2. ASG001 through ASG006 were installed in June 2017. Borings ASB0277, ASB0278, ASB0282, and ASB0284 were completed in August and September 2017. Borings ASB0290 through ASB0292 were installed in December 2018. AGW283 was installed in June 2020.
3. Symbols at well screens reflect the most recent data.
4. **AGW283 (M)** is a Supplemental FS monitoring well location.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 30 60
Scale in Feet
3x Vertical Exaggeration

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Former Building 17-03 Release Area Cross-Section

Figure 2-5

Legend

- ASB0280 ■ FS Boring Location
- SS-33 □ Pre-FS Boring Location
- ASG001 ▽ FS Soil Gas Sampling Location
- 18 ▽ Pre-FS Soil Gas Location
- AGW283 (M) ● Supplemental FS Monitoring Well Location
- AGW001R (S) ● Monitoring Well Location
- AGW001 (S) ● Decommissioned Well Location

No highlighting = No detection
Orange = Detection below pCUL
Green = Exceedance of pCUL

- 17-07 Current Building and Number
- 17-14 Former Building and Number
- Boeing Property Line
- Adjacent Property Line
- Existing Fence Line
- Existing Railroad Track
- Chrome Waste Line

AOC A-14	Soil pCUL (mg/kg)
TCE	0.025
VC	N/A

Notes

1. Soil gas results are identified with black data boxes. Soil gas data is shown in micrograms per cubic meter (µg/m^3).
2. Soil results are identified with purple or blue data boxes. Soil data is shown in milligrams per kilgram (mg/kg).
3. For soil and soil gas results, TCE was the only constituent of concern detected above preliminary cleanup levels or screening levels, and only TCE results are shown.
4. Groundwater monitoring wells are identified by the AGW prefix. The designations beside the identifications indicate the zone (S) = Shallow zone, (I) = Intermediate zone, (D) = deep zone, (M) = multi-level well.
5. In the databoxes: **Bold** text indicates detected analyte. Green shading indicates exceedance of proposed cleanup level (pCUL).
6. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

ND = non-detect, the analyte was analyzed for, but was not detected
NE = no exceedance, one or more analytes were detected, but do not exceed pCULs

B-27 (12/1996)	
TCE	**200**

B-15 (12/1996)	
TCE	**50**

B-22 (12/1996)	
TCE	**100**

B-18 (12/1996)	
TCE	**200**

ASB0279 (8/2017)	6'	12'	18'
TCE	ND	**NE**	ND

B-21 (12/1996)	
TCE	**540**

B-20 (12/1996)	
TCE	**4,500**

B-19 (12/1996)	
TCE	**6,070**

ASB0276 (8/2017)	7'	9'	17.4'
TCE	ND	ND	ND

ASB0277 (8/2017)	5.7'	10.5'
TCE	ND	**NE**

AGW283 (M) (6/2020)	14'	16'
TCE	NE	**0.0560**

ASG002 (6/2017)	
TCE	**1,400**

ASG001 (6/2017)	
TCE	**1,000**

ASB0282 (9/2017)	8.5'	16'
TCE	ND	**NE**

ASB0285 (9/2017)	2'	9.2'
TCE	ND	ND

ASB0278 (8/2017)	7'	8.5'
TCE	ND	ND

ASB0284 (9/2017)	6'	8'
TCE	ND	ND

ASB0293 (12/2018)	11'	15'
TCE	ND	ND

ASB0283 (9/2017)	16'
TCE	ND

ASG004 (6/2017)	
TCE	**420**

ASG006 (6/2017)	
TCE	**77**

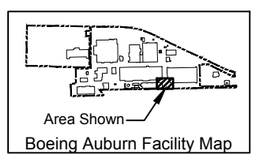
ASB0290 (12/2018)	12'	16'
TCE	**0.0445**	**0.0653**

ASG005 (6/2017)	
TCE	**700**

ASB0291 (12/2018)	12'	17.5'
TCE	ND	ND

ASG003 (6/2017)	
TCE	**1,700**

Prologis Warehouse
17-04
Former 17-14
Former 17-03
Former Tank Line Area
Former Sump
Former Sump
Former Mineral Oil Tank
Former TCE/1,1,1-TCA Degreaser Tank Pit
ASB0292
SS-33
SS-28
SS-27
SS-29
SS-26
AGW001 (S)
AGW099 (D)
AGW001R (S)
AGW097 (I)
25
24
23
17
16



N
0 40 80
Scale in Feet

Base map source: Geomatrix 2003; Kennedy Jenks

Landau Associates | G:\Projects\025\164\170\112\FS Report\Supplemental FS\F02-6_A-14 17-03 Soil.dwg | 10/1/2020 2:58 PM | EZICK

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Former Building 17-03 Release Area Soil and Soil Gas Results

Figure 2-6

Legend

ASB0280 ■	FS Boring Location
SS-33 □	Pre-FS Boring Location
ASG001 ▽	FS Soil Gas Sampling Location
18 ▽	Pre-FS Soil Gas Location
AGW283 (M) ●	Supplemental FS Monitoring Well Location
AGW001R (S) ●	Monitoring Well Location
AGW001 (S) ●	Decommissioned Well Location

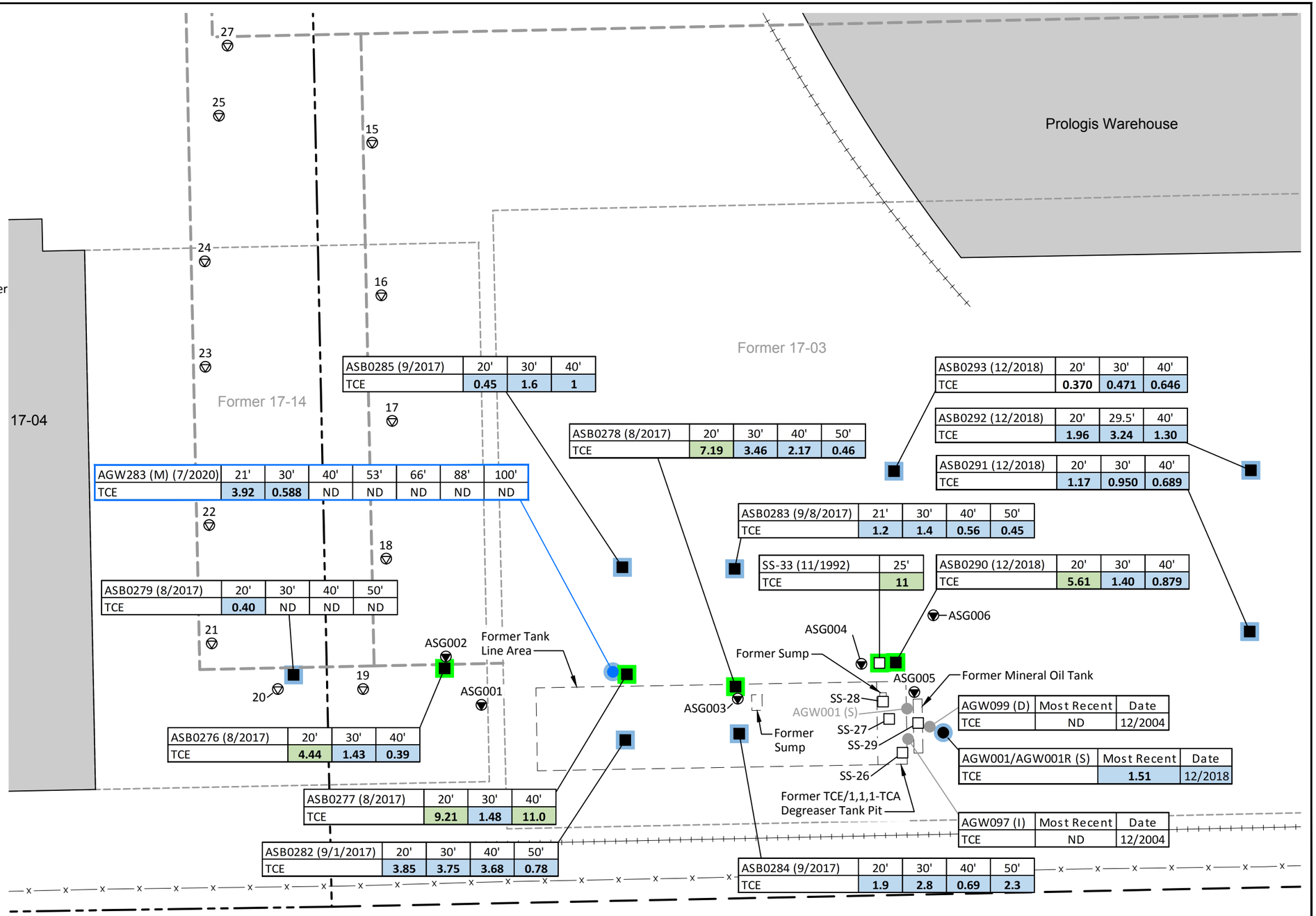
No highlighting = No detection
Green = Exceedance of Groundwater pCUL (protective of drinking water) (TCE>4 µg/L and/or VC>0.29 µg/L)
Blue = Concentration above SWQS in Groundwater (TCE>0.38 µg/L and/or VC>0.2 µg/L)

17-07	Current Building and Number
17-14	Former Building and Number
— — —	Boeing Property Line
— ——— —	Adjacent Property Line
—x—x—	Existing Fence Line
++++++++	Existing Railroad Track
— — — —	Chrome Waste Line

Notes

1. All TCE results are shown in micrograms per liter (µg/L).
2. For groundwater results, TCE was the only constituent of concern detected above cleanup levels, and only TCE results are shown.
3. Groundwater monitoring wells are identified by the AGW prefix. The designations beside the identifications indicate the zone (S) = Shallow zone, (I) = Intermediate zone, (D) = deep zone, (M) = multi-level well.
4. In the databoxes: **Bold** text indicates detected analyte. Green shading indicates exceedance of proposed cleanup level (pCUL) and concentrations above groundwater pCULs. Blue shading indicates concentrations above surface water quality standards (SWQS) in groundwater.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

ND = non-detect, the analyte was analyzed for, but was not detected



ASB0285 (9/2017)	20'	30'	40'
TCE	**0.45**	**1.6**	**1**

ASB0278 (8/2017)	20'	30'	40'	50'
TCE	**7.19**	**3.46**	**2.17**	**0.46**

ASB0293 (12/2018)	20'	30'	40'
TCE	**0.370**	**0.471**	**0.646**

ASB0292 (12/2018)	20'	29.5'	40'
TCE	**1.96**	**3.24**	**1.30**

ASB0291 (12/2018)	20'	30'	40'
TCE	**1.17**	**0.950**	**0.689**

AGW283 (M) (7/2020)	21'	30'	40'	53'	66'	88'	100'
TCE	**3.92**	**0.588**	ND	ND	ND	ND	ND

ASB0283 (9/8/2017)	21'	30'	40'	50'
TCE	**1.2**	**1.4**	**0.56**	**0.45**

SS-33 (11/1992)	25'
TCE	**11**

ASB0290 (12/2018)	20'	30'	40'
TCE	**5.61**	**1.40**	**0.879**

ASB0279 (8/2017)	20'	30'	40'	50'
TCE	**0.40**	ND	ND	ND

ASB0276 (8/2017)	20'	30'	40'
TCE	**4.44**	**1.43**	**0.39**

AGW099 (D)	Most Recent	Date
TCE	ND	12/2004

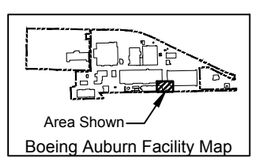
AGW001/AGW001R (S)	Most Recent	Date
TCE	**1.51**	12/2018

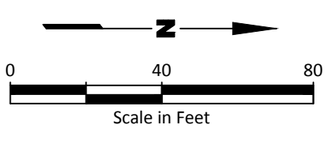
ASB0277 (8/2017)	20'	30'	40'
TCE	**9.21**	**1.48**	**11.0**

AGW097 (I)	Most Recent	Date
TCE	ND	12/2004

ASB0282 (9/1/2017)	20'	30'	40'	50'
TCE	**3.85**	**3.75**	**3.68**	**0.78**

ASB0284 (9/2017)	20'	30'	40'	50'
TCE	**1.9**	**2.8**	**0.69**	**2.3**





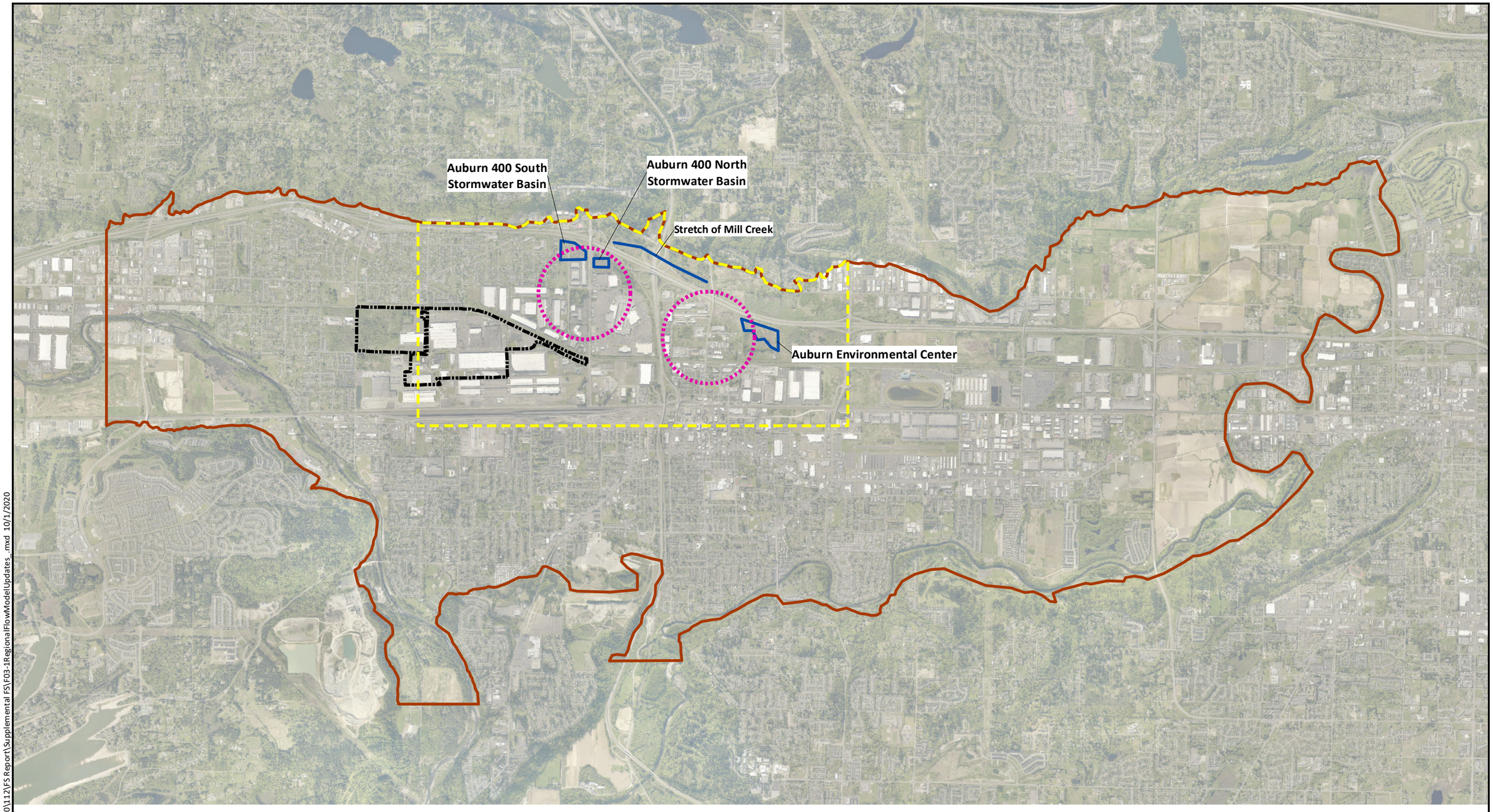
Base map source: Geomatrix 2003; Kennedy Jenks

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Former Building 17-03 Release Area Groundwater Results

Figure
2-7

LANDAU ASSOCIATES



G:\Projects\025\164\170\112\FS Report\Supplemental FS\F03-1RegionalFlowModelUpdates_.mxd 10/1/2020

Legend

- Local Model Boundary
- Regional Model Boundary
- Modified Drainage Features
- Modified Hydraulic Conductivity Area
- Boeing Property

Note

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

0 3,500 7,000

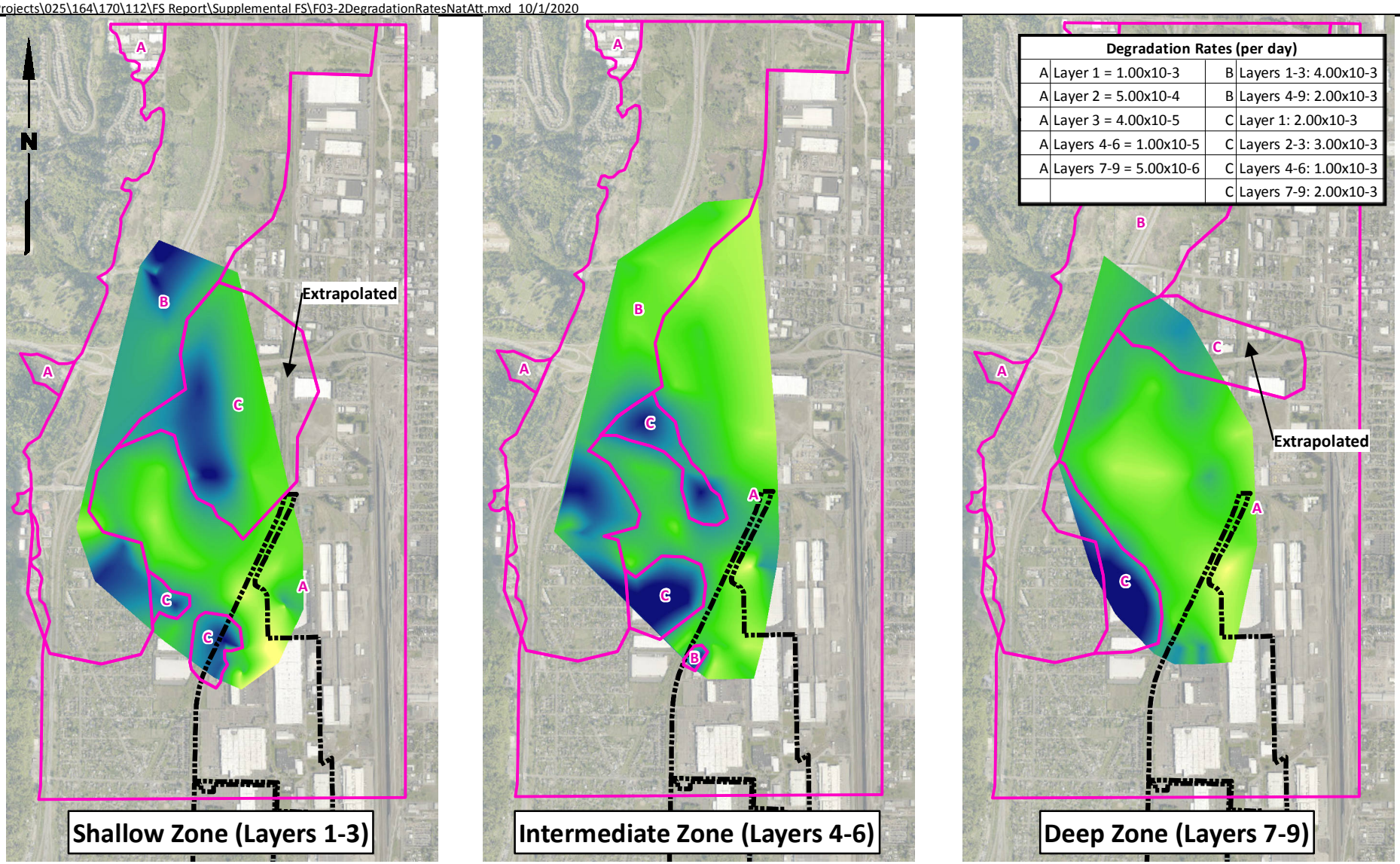
Scale in Feet

Data Source: King County GIS.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Regional Groundwater Flow Model Updates**	Figure 3-1

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F03-2DegradationRatesNatAtt.mxd 10/1/2020



Degradation Rates (per day)			
A	Layer 1 = 1.00x10-3	B	Layers 1-3: 4.00x10-3
A	Layer 2 = 5.00x10-4	B	Layers 4-9: 2.00x10-3
A	Layer 3 = 4.00x10-5	C	Layer 1: 2.00x10-3
A	Layers 4-6 = 1.00x10-5	C	Layers 2-3: 3.00x10-3
A	Layers 7-9 = 5.00x10-6	C	Layers 4-6: 1.00x10-3
		C	Layers 7-9: 2.00x10-3

Legend

Degredation Rate Zone

Boeing Property

Potential for Reductive Dechlorination

Less

More

0 3,000 6,000

Scale in Feet

Data Source: King County GIS.

Note

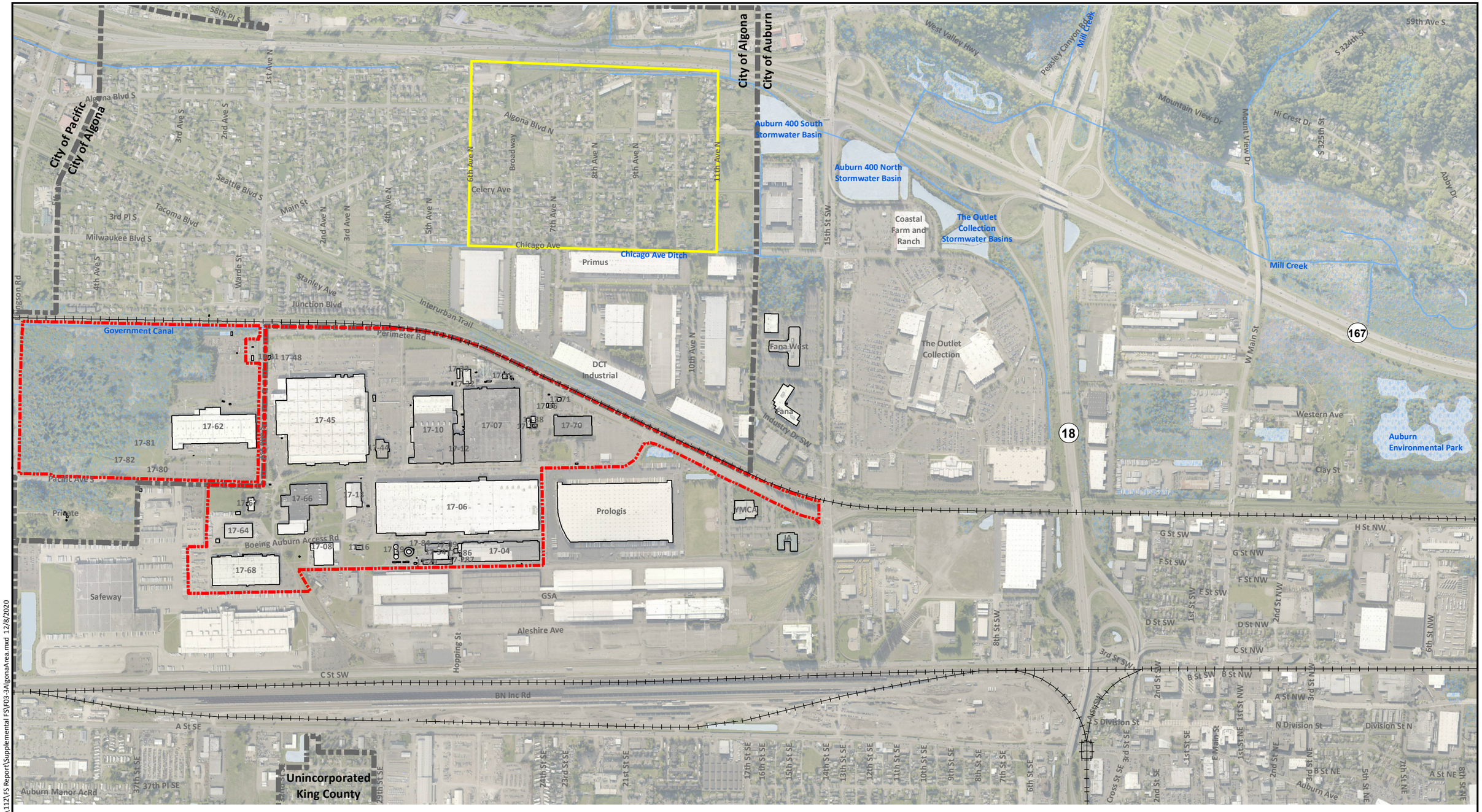
1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

Site-Wide Natural Attenuation Areas and Groundwater Contaminant Transport Model Degradation Rate Revisions

Figure
3-2



Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Northern Algona Residential Area
- Boeing Property
- City Limits
- Wetland Areas
- Water Bodies
- Waterways

N

0 1,000 2,000

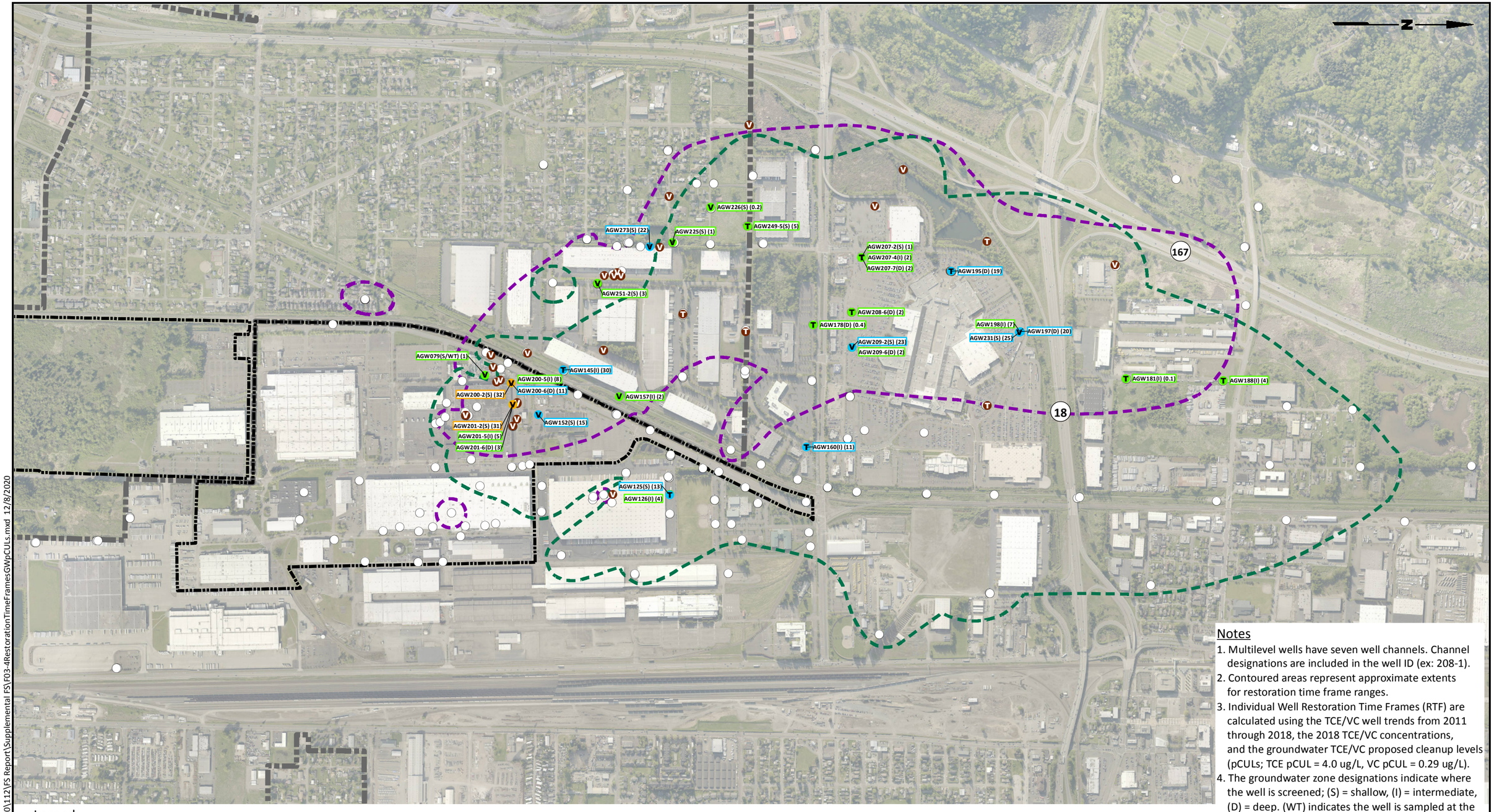
Scale in Feet

Data Source: King County GIS.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F03-3AlgonaArea.mxd 12/8/2020

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**Northern Algona Residential Area**	Figure 3-3



Legend

- pCUL Met for TCE and VC
- TCE Driving Constituent
- VC Driving Constituent
- Increasing/No Trend/Stable
- ≤10 Years
- >10-30 Years
- >30 Years
- Boeing Property
- City Limits
- TCE Plume Extents - June 2018
- VC Plume Extents - June 2018

AGW125(S) (13) - Well ID (Groundwater Zone (Shallow, Intermediate, or Deep)
(Estimated Restoration Time Frame in Years)

0 1,000 2,000

Scale in Feet

Data Source: King County GIS.

Notes

1. Multilevel wells have seven well channels. Channel designations are included in the well ID (ex: 208-1).
2. Contoured areas represent approximate extents for restoration time frame ranges.
3. Individual Well Restoration Time Frames (RTF) are calculated using the TCE/VC well trends from 2011 through 2018, the 2018 TCE/VC concentrations, and the groundwater TCE/VC proposed cleanup levels (pCULs; TCE pCUL = 4.0 ug/L, VC pCUL = 0.29 ug/L).
4. The groundwater zone designations indicate where the well is screened; (S) = shallow, (I) = intermediate, (D) = deep. (WT) indicates the well is sampled at the water table.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

Estimated Restoration Time Frames to Meet Groundwater pCULs

Figure 3-4

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F03-4RestorationTimeFramesGWpCULs.mxd 12/8/2020

N

AGW240-1(S/WT) (1)
AGW240-5(S) (0.1)
AGW275(S) (0.2)
AGW273(S) (46)
AGW274(S) (2)
AGW271(S) (3)
AGW269(S) (2)
AGW225(S) (33)
AGW226(S) (29)
AGW228(S) (24)
AGW227(I) (34)
AGW249-5(S) (37)
AGW182(I) (20)
AGW248-5(S) (10)
AGW255-1(S/WT) (23)
AGW255-3(S) (25)
AGW235-4(I) (6)
AGW236(S) (5)
AGW207-2(S) (66)
AGW207-4(I) (35)
AGW207-7(D) (36)
AGW195(D) (96)
AGW237(D) (6)
AGW250-2(S) (3)
AGW251-1(S/WT) (2)
AGW251-2(S) (14)
AGW167(D) (13)
AGW193(S) (99)
AGW168(I) (2)
AGW169(D) (2)
AGW177(I) (53)
AGW178(D) (56)
AGW208-2(S) (7)
AGW208-6(D) (31)
AGW209-2(S) (58)
AGW209-6(D) (33)
AGW231(S) (57)
AGW198(I) (49)
AGW197(D) (80)
AGW034(D) (7)
AGW145(I) (100)
AGW079(S/WT) (24)
AGW200-2(S) (84)
AGW146(D) (11)
AGW026(S) (17)
AGW032(S/WT) (3)
AGW200-5(I) (21)
AGW200-6(D) (42)
AGW157(I) (16)
AGW159(D) (39)
AGW194(S) (18)
AGW158(I) (18)
AGW170(I) (24)
AGW171(D) (15)
AGW179(I) (48)
AGW180(D) (24)
AGW181(I) (69)
AGW213(D) (1)
AGW188(I) (72)
AGW040(S/WT) (4)
AGW039(S/WT) (1)
AGW152(S) (34)
AGW202-2(S) (9)
AGW202-4(I) (10)
AGW202-6(D) (15)
AGW201-2(S) (76)
AGW201-5(I) (25)
AGW201-6(D) (27)
AGW135(S) (17)
AGW098R(D) (0.2)
AGW095R(I) (8)
AGW031R(S) (6)
AGW210-5(I) (7)
AGW210-6(D) (29)
AGW176(I) (32)
AGW199(D) (3)
AGW218(I) (40)
AGW172(I) (359)
AGW211-5(I) (13)
AGW211-6(D) (6)
AGW160(I) (59)
AGW148(I) (30)
AGW149(I) (31)
AGW212-5(I) (11)
AGW212-7(D) (56)
AGW214(I) (26)
AGW217(I) (37)
AGW163(I) (102)
AGW203-2(S) (4)
AGW203-4(I) (19)
AGW055R(I) (4)
AGW072(I) (11)
AGW140(I) (29)
AGW112R(S) (14)
AGW126(I) (24)
AGW137(I) (31)
AGW161(I) (11)
AGW174(I) (11)
AGW185(D) (26)
AGW175(I) (15)
AGW190(I) (15)
AGW222(I) (2)
AGW057R(I) (7)
AGW002R(S) (4)
AGW125(S) (68)
AGW150(I) (10)
AGW187(I) (20)
AGW216(I) (7)
AGW115(S/WT) (20)
AGW060R(I) (18)
AGW053R(S/WT) (15)
AGW138(D) (3)
AGW141(I) (19)
AGW067(S/WT) (46)
AGW139(I) (12)
AGW129(S/WT) (1)
AGW001R(S) (16)
AGW151(I) (4)
AGW162(I) (5)
AGW184(I) (0.2)
AGW230(D) (16)
AGW186(I) (3)
AGW189(I) (4)

167
18

Notes

1. Multilevel wells have seven well channels. Channel designations are included in the well ID (ex: 208-1).
2. Contoured areas represent approximate extents for restoration time frame ranges.
3. Individual Well Restoration Time Frames (RTF) are calculated using the TCE/VC well trends from 2011 through 2018, the 2018 TCE/VC concentrations, and surface water quality standards (SWQS) in groundwater for TCE/VC as requested by Ecology (TCE SWQS = 0.38 ug/L, VC SWQS = 0.02 ug/L).
4. The groundwater zone designations indicate where the well is screened; (S) = shallow, (I) = intermediate, (D) = deep. (WT) indicates the well is sampled at the water table.
5. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- SWQS Met for TCE and VC
- TCE Driving Constituent
- VC Driving Constituent
- TCE/VC Driving Constituent

- Increasing/No Trend/Stable
- ≤10 Years
- >10-30 Years
- >30-50 Years
- >50-100 Years
- >100 Years

- Boeing Property
- City Limits
- TCE Plume Extents - June 2018
- VC Plume Extents - June 2018

AGW125(S) (68) - Well ID (Groundwater Zone (Shallow, Intermediate, or Deep) (Estimated Restoration Time Frame in Years)

0 1,000 2,000
Scale in Feet

Data Source: King County GIS.

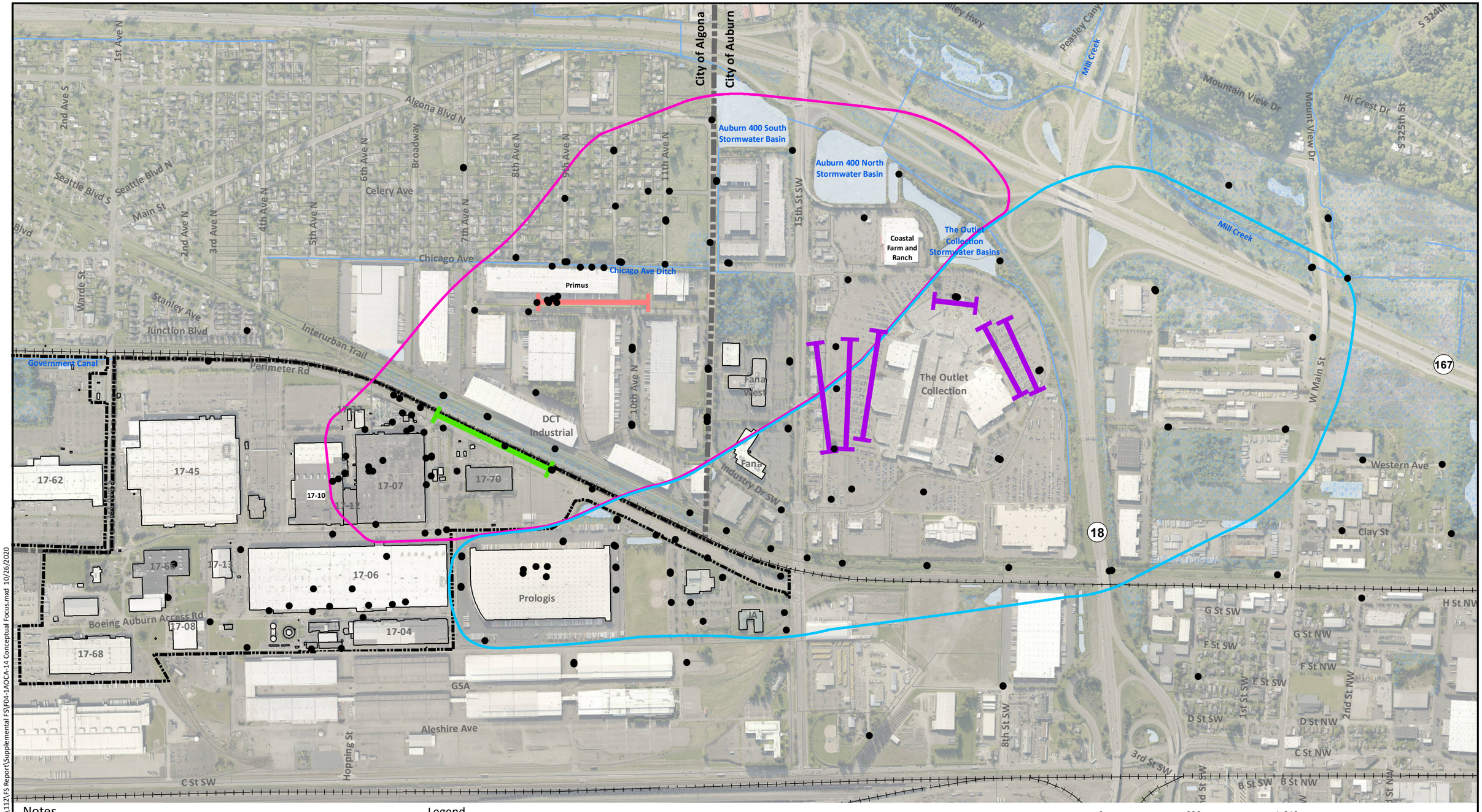
LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

Estimated Restoration Time Frames to Meet Groundwater SWQS

Figure 3-5

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F03-5RestorationTimeFramesSWQS.mxd 12/8/2020



Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- Monitoring Well
- Area 1 Plume
- Western Plume
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Property Boundary Injection Row
- Algona Injection Row
- The Outlet Collection Injection Row

0 820 1,640

Scale in Feet

N

Data Source: King County GIS.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-1AOCA-14 Conceptual Focus.mxd 10/26/2020

LANDAU ASSOCIATES

Boeing Auburn
Supplemental Feasibility Study
Auburn, Washington

AOC A-14: Conceptual EISB Focus Areas

Figure
4-1

Notes

1. For monitoring wells and pore water sampling locations, the most recent data as of December 2018 are used.
2. Green shading exceeds both proposed cleanup levels (pCUL) protective of drinking water and SWQS (surface water quality standards) in groundwater.
3. Exceedances shown at multilevel wells reflect an exceedance in any channel.
4. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- AGW192 (D) — Boundary Well
- AGW234 (D) — Exceedance of Groundwater pCUL (Protective of Drinking Water) (TCE>4 µg/L and/or VC>0.29 µg/L)
- AGW260 (D) — No Exceedance
- SW-17 — Ongoing Stormwater Sample Location
- SW-20 — Ongoing Surface Water Sample Location

- Facility Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

Data Source: King County GIS.

LANDAU ASSOCIATES

Boeing Auburn Feasibility Study Auburn, Washington	**AOC A-14: Conceptual Monitored Natural Attenuation pCULs Protective of Drinking Water (Alternative D1)**	Figure 4-2a

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-2aConceptualMNAAlt.mxd 12/11/2020

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.

Legend

- AGW191 (I) — Boundary Well
- AGW234 (D) — Monitoring Well (Exceedance of SWQS in Groundwater)
- AGW260 (D) — Well Removed from Monitoring Well Network
- SW-17 — Ongoing Stormwater Sample Location
- SW-20 — Ongoing Surface Water Sample Location
- Facility Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways

0 1,000 2,000

Scale in Feet

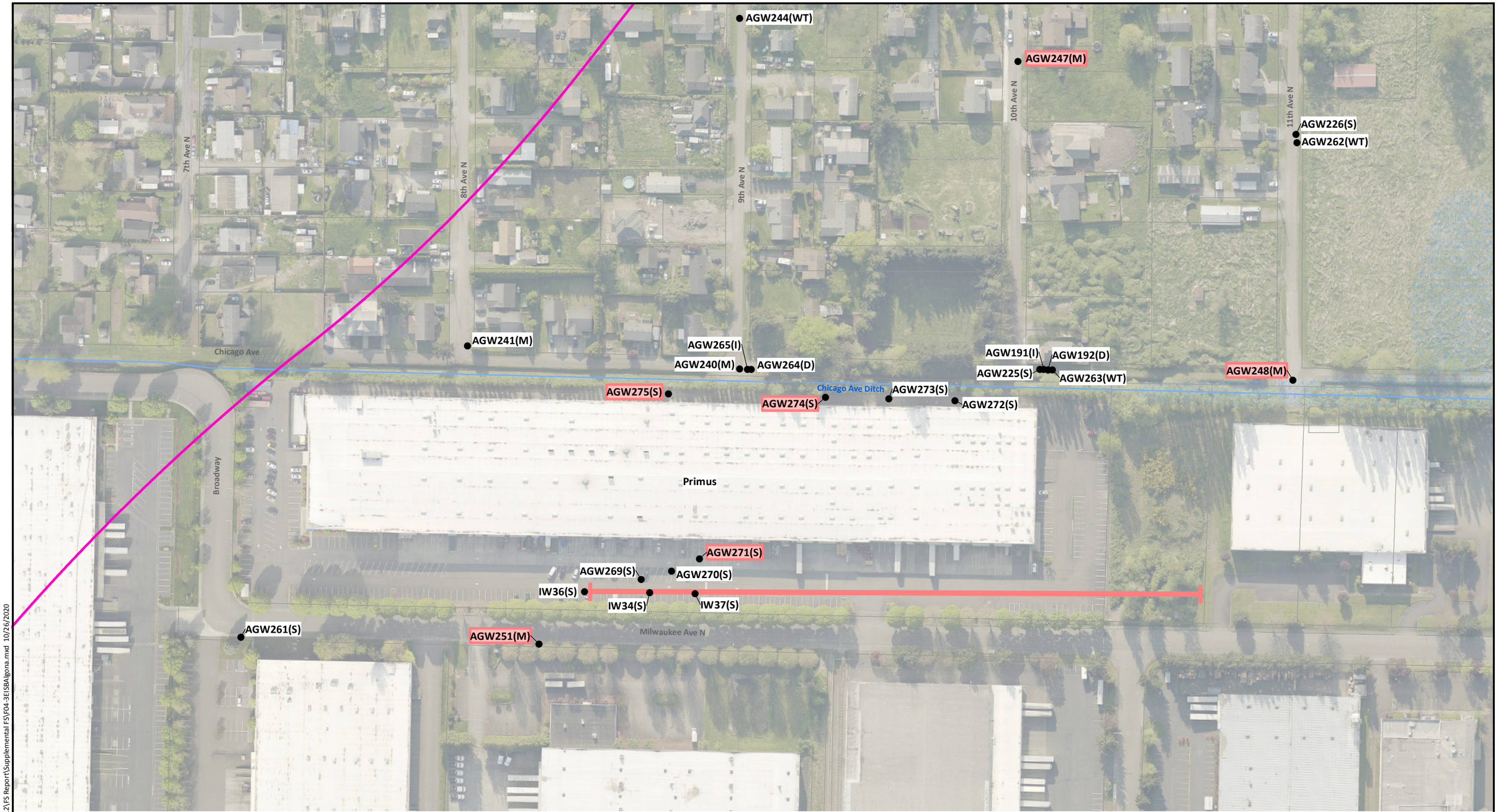
N

Data Source: King County GIS.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Conceptual Monitored Natural Attenuation - SWQS in Groundwater (Alternative D1)**	Figure 4-2b

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-2bConceptualMNAAltSWQS.mxd 10/1/2020



G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-3EISBAlgona.mxd 10/26/2020

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. The designations behind the well identifications indicate the zone.
   (WT) = water table
   (S) = shallow zone (water table to 35 ft bgs)
   (I) = intermediate zone (35 to 75 ft bgs)
   (D) = deep zone (75 to 100 ft bgs).

Legend

- Monitoring Well
- Western Plume Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Algona Injection Row
- AGW251 Algona Monitoring Location

0 150 300

Scale in Feet

N

Data Source: King County GIS.

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Conceptual EISB Algona Focus Area (Alternative D6)**	Figure 4-3

AGW269(S)
AGW270(S)
IW36(S)
IW34(S)
IW37(S)
AGW261(S)
AGW251(M)
AGW166(I)
AGW167(D)
AGW193(S)
AGW276(M)
AGW030(S)
AGW105R(I)
AGW143(D)
AGW144(I)
AGW029(S)
DCT Industrial
AGW024(S)
AGW034(D)
AGW145(I)
AGW146(D)
AGW079(S)
AGW159(D)
AGW158(I)
AGW194(S)
AGW026(S)
AGW025(S)
AGW032(S)
AGW155(I)
AGW200(M)
AGW134(S)
AGW157(I)
AGW154(I)
AGW027(S)
AGW201(M)
AGW156(I)
AGW164(I)
AGW037(S)
AGW033(WT)
AGW152(S)
AGW223(D)
AGW278(M)
AGW165(S)
AGW035(D)
AGW131(S)
AGW040(S)
AGW039(S)
AGW202(M)
AGW135(S)
17-32
17-70

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. The designations behind the well identifications indicate the zone.
   (WT) = water table
   (S) = shallow zone (water table to 35 ft bgs)
   (I) = intermediate zone (35 to 75 ft bgs)
   (D) = deep zone (75 to 100 ft bgs).

Legend

- Monitoring Well
- Area 1 Plume Boundary
- Western Plume Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- Property Boundary Injection Row
- AGW134 Property Boundary Monitoring Location

0 200 400

Scale in Feet

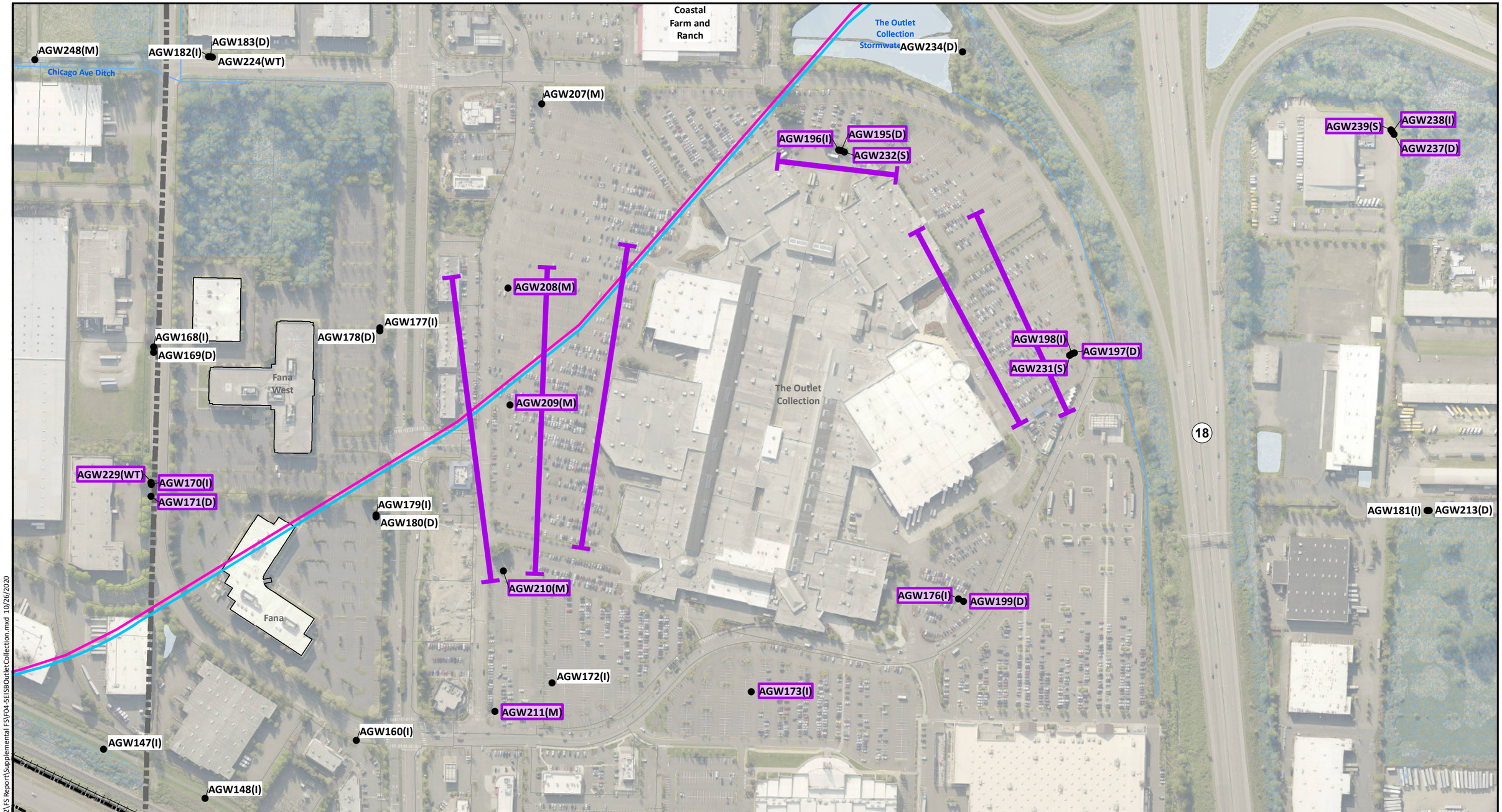
N

Data Source: King County GIS.

G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-4ElSBPropertyBoundary.mxd 10/26/2020

LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Conceptual EISB 17-07 Property Boundary Focus Area (Alternative D7)**	Figure 4-4



G:\Projects\025\164\170\112\FS Report\Supplemental FS\F04-5EISBOutletCollection.mxd 10/26/2020

Notes

1. Black and white reproduction of this color original may reduce its effectiveness and lead to incorrect interpretation.
2. The designations behind the well identifications indicate the zone.
   (WT) = water table
   (S) = shallow zone (water table to 35 ft bgs)
   (I) = intermediate zone (35 to 75 ft bgs)
   (D) = deep zone (75 to 100 ft bgs).

Legend

- Monitoring Well
- Area 1 Plume Boundary
- Western Plume Boundary
- City Limits
- Boeing Property
- Wetland Areas
- Water Bodies
- Waterways
- The Outlet Collection Injection Row
- AGW229 The Outlet Collection Monitoring Location

0 300 600

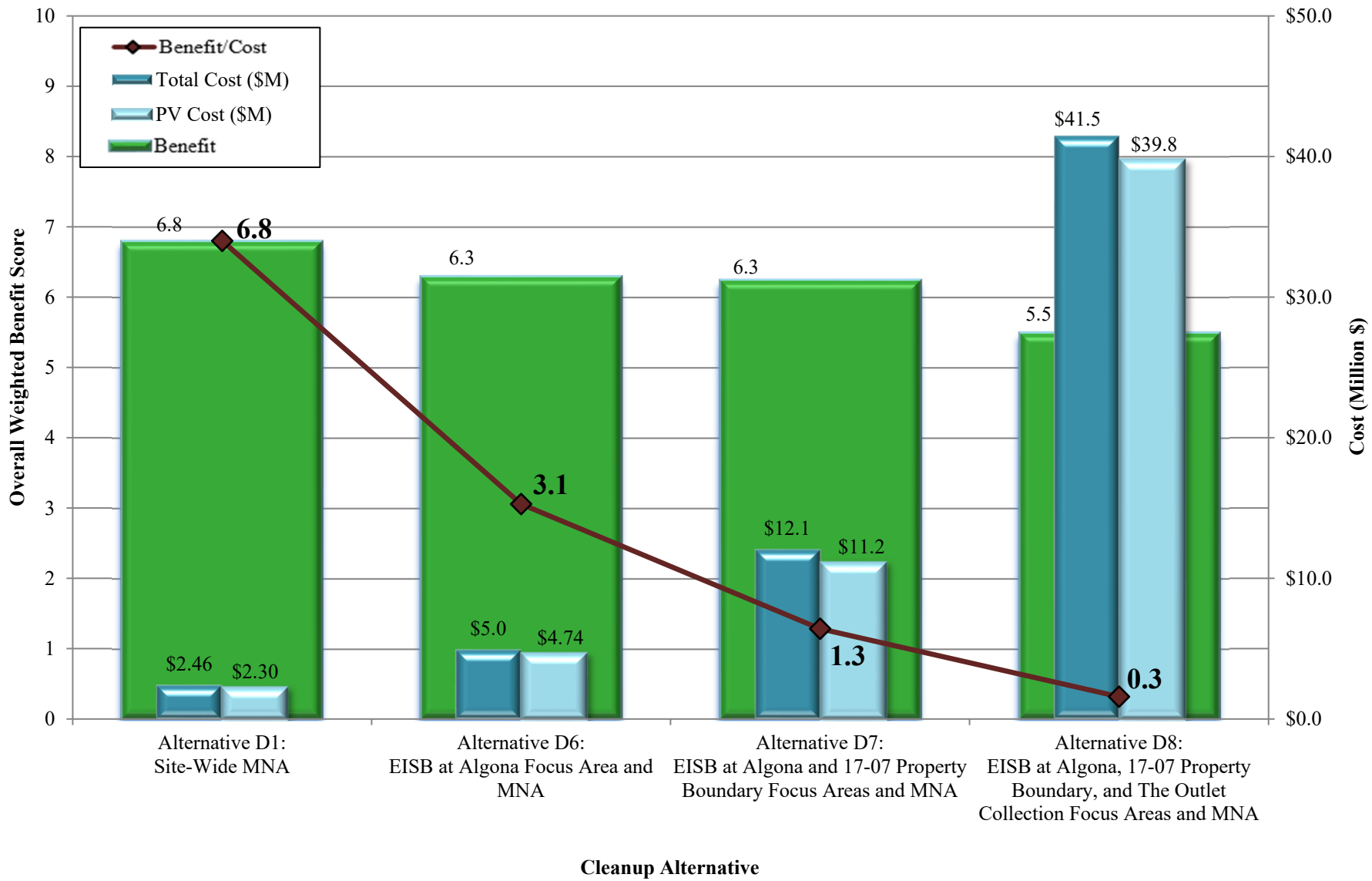
Scale in Feet

N

Data Source: King County GIS.

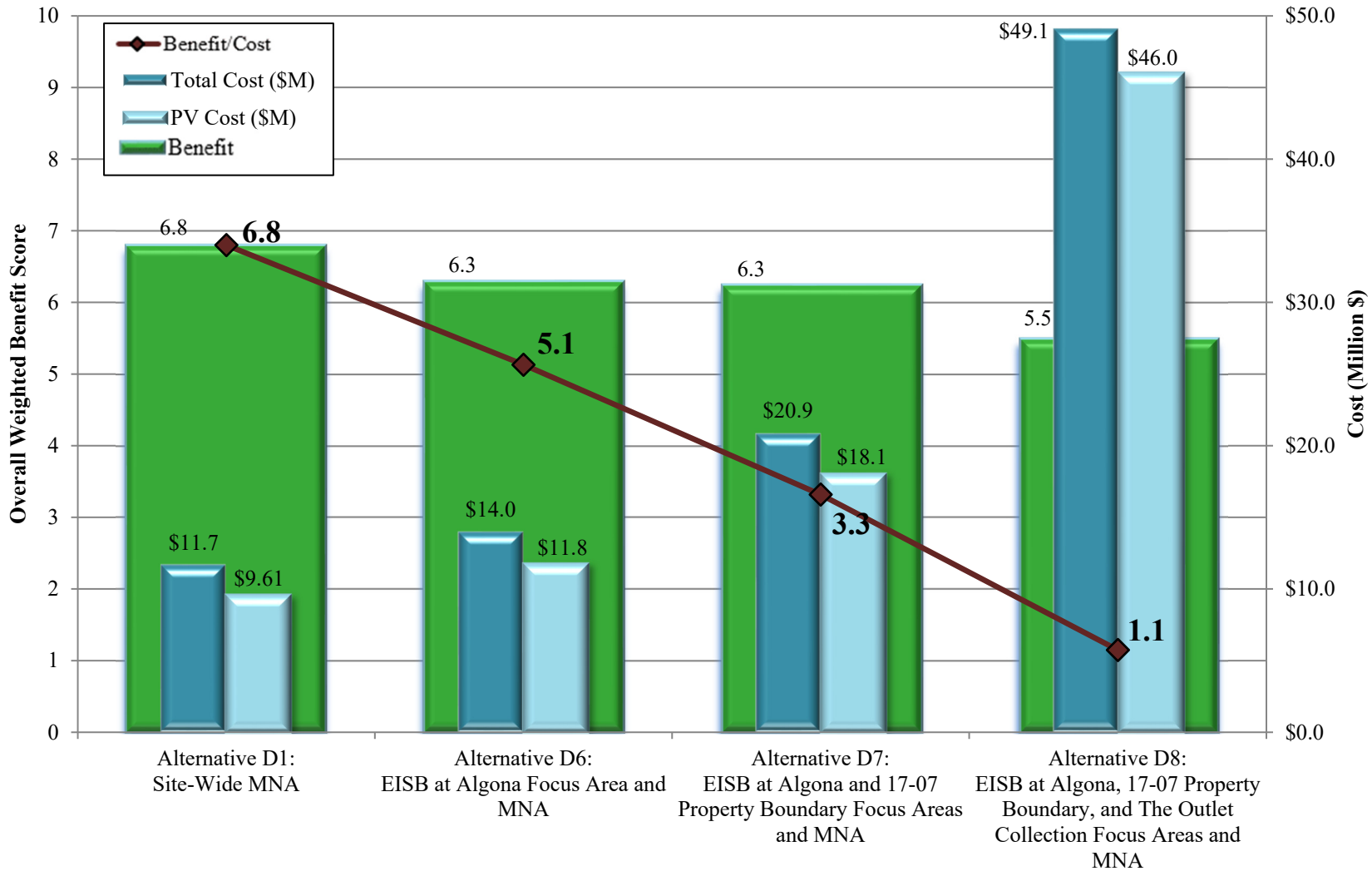
LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Conceptual EISB The Outlet Collection Focus Area (Alternative D8)**	Figure 4-5



LANDAU ASSOCIATES

Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Summary of MTCA Supplemental Feasibility Study Alternatives Relative Benefits Ranking (Groundwater pCULs)**	Figure 5-1



LANDAU ASSOCIATES	Boeing Auburn Supplemental Feasibility Study Auburn, Washington	**AOC A-14: Summary of MTCA Supplemental Feasibility Study Alternatives Relative Benefits Ranking (SWQS in Groundwater)**

Figure
5-2