

LEGEND

301	Preliminary Buildings of Interest Retained for Step 2 (58 total)
303	Buildings Excluded from Further Evaluation (48 total)
	BSVE Target Treatment Area (TTA)
	Honeywell 34th Street Facility
	FHHRA Study Area
	Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.

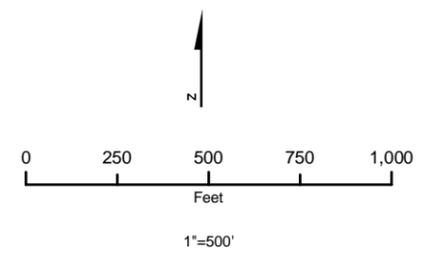


FIGURE 19
STEP 1 - PRELIMINARY BUILDINGS OF INTEREST RETAINED FOR STEP 2
Honeywell 34th Street Facility
Phoenix, Arizona

Total No. of Buildings as Identified by Honeywell	106
Total No. of Buildings Identified as Preliminary Building of Interest and Retained for Step 2	58
Total No. of Buildings Excluded from Further evaluation	48
Reference Table 5.	

LEGEND

- Baseline (Pre-BSVE) Risk Results for Locations with TO-15 Analysis
- ELCR ≤ 1E-06
 - ELCR > 1E-06 to ≤ 1E-05
 - ELCR > 1E-05 to ≤ 1E-04
- Baseline (Pre-BSVE) Risk Results for Locations without TO-15 Analysis
- ▲ ELCR ≤ 1E-06
 - ▲ ELCR > 1E-06 to ≤ 1E-05
 - ▲ ELCR > 1E-05 to ≤ 1E-04
 - ▲ ELCR > 1E-04
- ▭ BSVE Target Treatment Area (TTA)
 - ▭ 100' Exceedance Buffer
 - ▭ Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Detected Chemicals (33 total)
 - ▭ Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Non-Detected Reporting Limits (21 total)
 - ▭ Preliminary Buildings of Interest Located Outside 100' of Exceedance Buffer (4 Total)
 - ▭ Buildings Excluded from Further Evaluation (49 Total)
 - ▭ Honeywell 34th Street Facility
 - ▭ FHHRA Study Area
 - ▭ Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

- Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.
 2. The baseline (Pre-BSVE) risks presented on this figure were taken from Figures 5-1 and 6-1A in the *Focused Human Health Risk Assessment, Honeywell 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2011).
 3. No location had a non-cancer hazard index greater than one; therefore a hazard index map was not prepared.

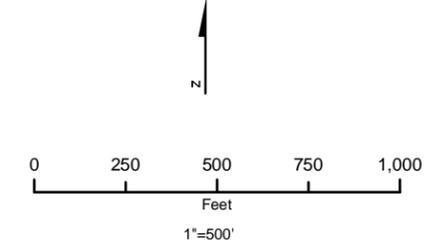
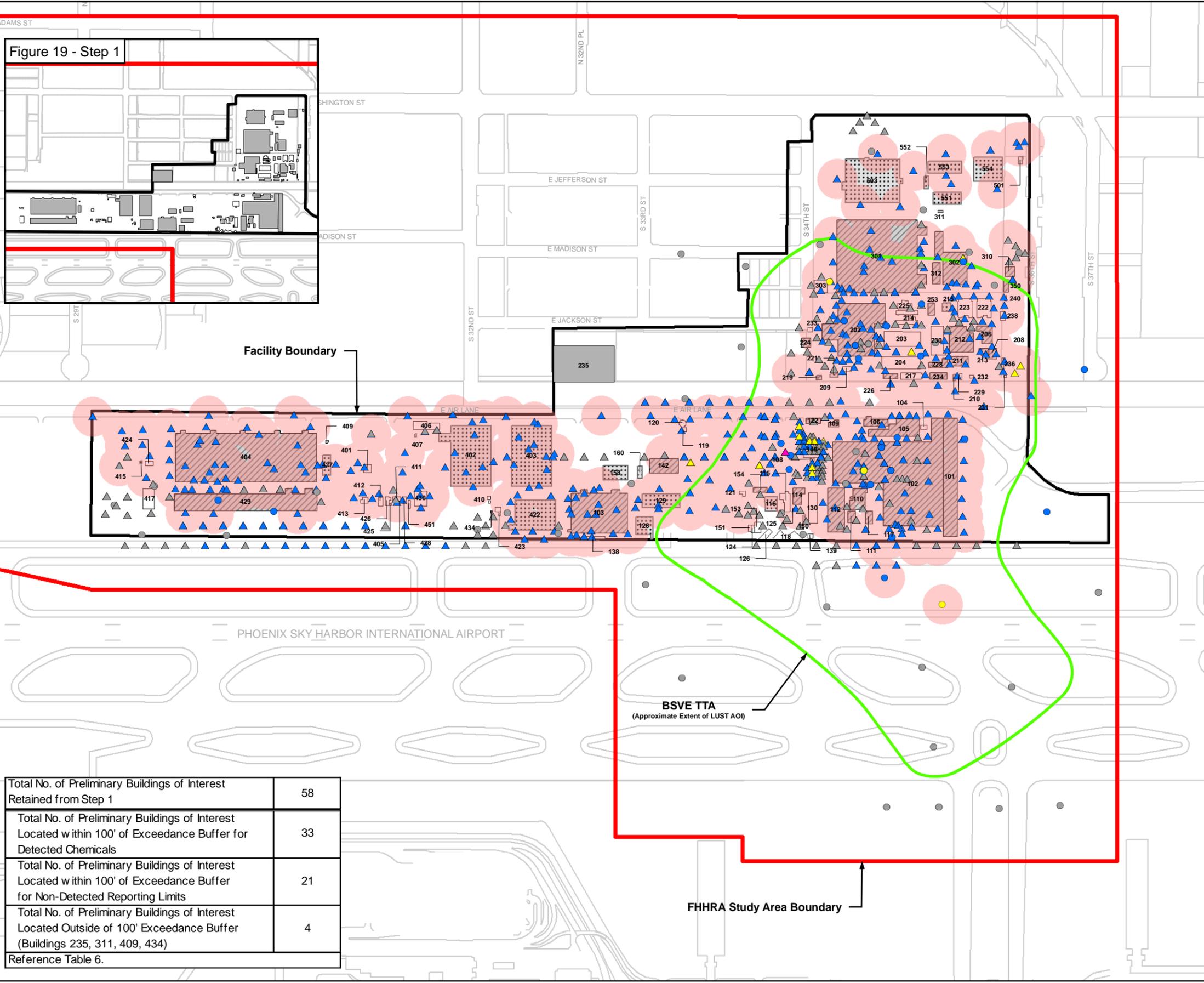


FIGURE 20
STEP 2 - BASELINE (PRE-BSVE) RISK RESULTS: EVALUATION OF PRELIMINARY BUILDINGS OF INTEREST BASED ON 100' BUFFER OF EXCEEDANCE FOR DETECTED CHEMICALS AND NON-DETECTED REPORTING LIMITS
 Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Preliminary Buildings of Interest Retained from Step 1	58
Total No. of Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Detected Chemicals	33
Total No. of Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Non-Detected Reporting Limits	21
Total No. of Preliminary Buildings of Interest Located Outside of 100' Exceedance Buffer (Buildings 235, 311, 409, 434)	4
Reference Table 6.	

LEGEND

- BSVE Target Treatment Area (TTA)
- Retained as Primary Buildings of Interest for Step 3 (33 total)
- Retained as Secondary Buildings of Interest for Step 3 (21 total)
- Samples Not Collected within 100', Retained as Secondary Buildings of Interest for Step 3 (3 total)
- Buildings Excluded from Further Evaluation (49 total)
- Honeywell 34th Street Facility
- FHHRA Study Area
- Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
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Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.

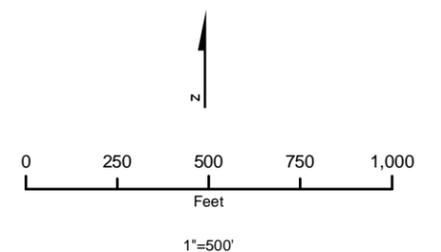


FIGURE 21
STEP 2 - RESULTS OF STEP 2
EVULATION FOR IDENTIFYING
PRIMARY AND SECONDARY
BUILDINGS OF INTEREST
Honeywell 34th Street Facility
Phoenix, Arizona

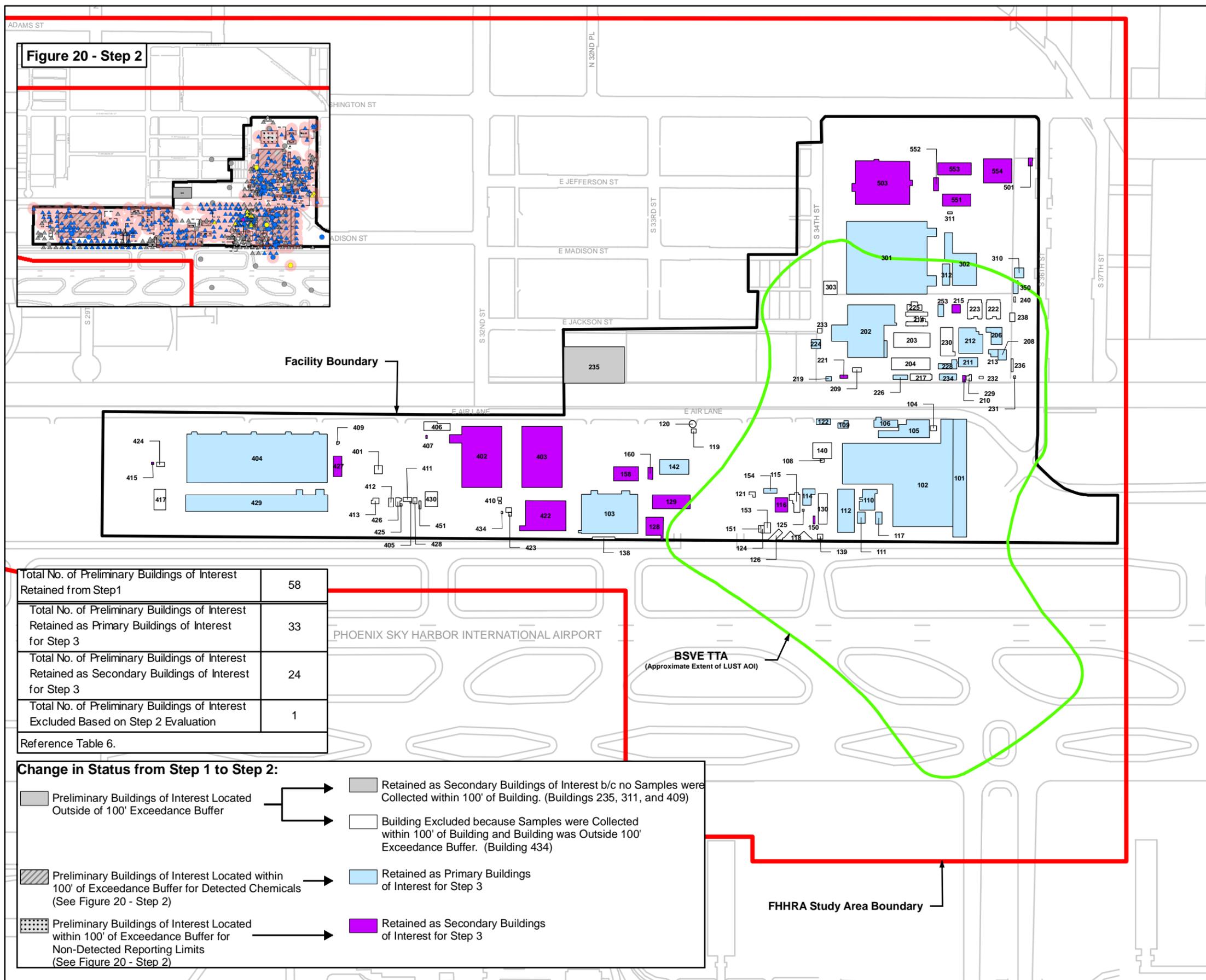


Figure 20 - Step 2

Total No. of Preliminary Buildings of Interest Retained from Step 1	58
Total No. of Preliminary Buildings of Interest Retained as Primary Buildings of Interest for Step 3	33
Total No. of Preliminary Buildings of Interest Retained as Secondary Buildings of Interest for Step 3	24
Total No. of Preliminary Buildings of Interest Excluded Based on Step 2 Evaluation	1

Reference Table 6.

Change in Status from Step 1 to Step 2:

<ul style="list-style-type: none"> Preliminary Buildings of Interest Located Outside of 100' Exceedance Buffer Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Detected Chemicals (See Figure 20 - Step 2) Preliminary Buildings of Interest Located within 100' of Exceedance Buffer for Non-Detected Reporting Limits (See Figure 20 - Step 2) 	<ul style="list-style-type: none"> → → → 	<ul style="list-style-type: none"> Retained as Secondary Buildings of Interest b/c no Samples were Collected within 100' of Building. (Buildings 235, 311, and 409) Building Excluded because Samples were Collected within 100' of Building and Building was Outside 100' Exceedance Buffer. (Building 434) Retained as Primary Buildings of Interest for Step 3 Retained as Secondary Buildings of Interest for Step 3
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LEGEND

Baseline (Pre-BSVE) Risk Results for Locations with TO-15 Analysis

- ELCR ≤ 1E-06
- ELCR > 1E-06 to ≤ 1E-05
- ELCR > 1E-05 to ≤ 1E-04

Baseline (Pre-BSVE) Risk Results for Locations without TO-15 Analysis

- ▲ ELCR ≤ 1E-06
- ▲ ELCR > 1E-06 to ≤ 1E-05
- ▲ ELCR > 1E-05 to ≤ 1E-04
- ▲ ELCR > 1E-04

Building with Sub-Slab Exceedance Based on Detected Chemicals and Retained as Buildings of Interest for Step 4 (4 total)

Building Identified as Key Potential Source Area and Retained as Primary Buildings of Interest for Step 4 (6 total)

Retained as Primary Buildings of Interest for Step 4 (26 total)

Retained as Secondary Buildings of Interest for Step 4 (25 total)

Buildings Excluded from Further Evaluation (55 total)

BSVE Target Treatment Area (TTA)

Honeywell 34th Street Facility

FHHRA Study Area

Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

- Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.
 2. The Baseline (Pre-BSVE) risk results presented on this figure were taken from Figures 5-1 and 6-1A in the *Focused Human Health Risk Assessment, Honeywell 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2011a).
 3. No location had a non-cancer hazard index greater than one; therefore a hazard index map was not prepared.

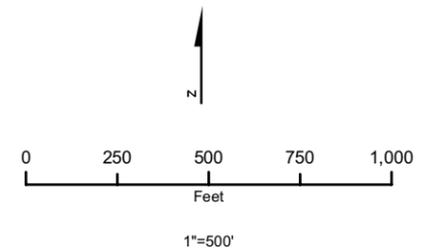
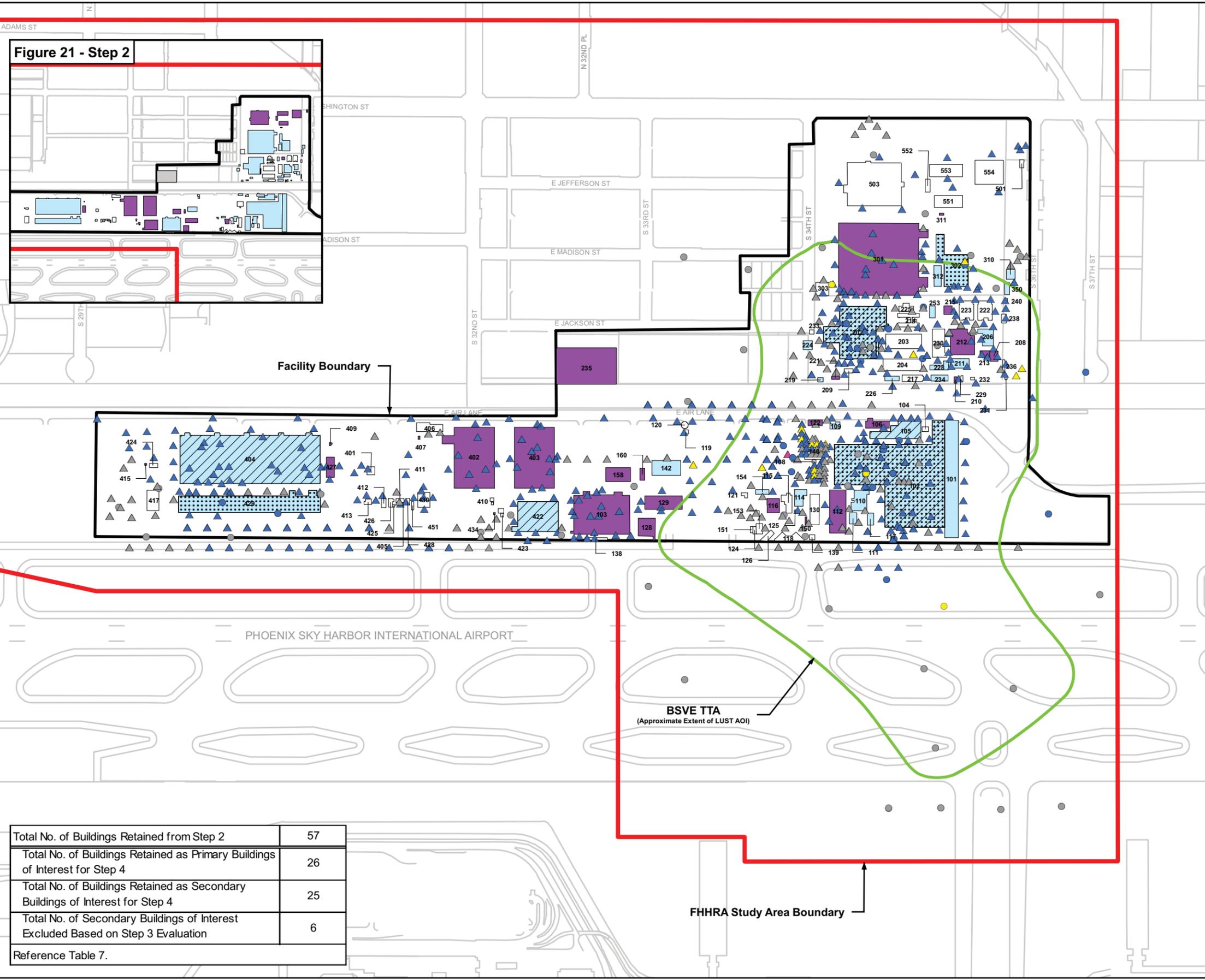


FIGURE 22
STEP 3 - REFINED BUILDING
PRIORITIZATION BASED ON
SUB-SLAB DATA AND KEY POTENTIAL
SOURCE AREAS
 Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Buildings Retained from Step 2	57
Total No. of Buildings Retained as Primary Buildings of Interest for Step 4	26
Total No. of Buildings Retained as Secondary Buildings of Interest for Step 4	25
Total No. of Secondary Buildings of Interest Excluded Based on Step 3 Evaluation	6
Reference Table 7.	

- LEGEND**
- Retained as Primary Buildings of Interest for Step 4 (26 Total)
 - Retained as Secondary Buildings of Interest for Step 4 (25 Total)
 - Buildings Excluded from Further Evaluation (55 Total)
 - BSVE Target Treatment Area (TTA)
 - Honeywell 34th Street Facility
 - FHHRA Study Area
 - Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.

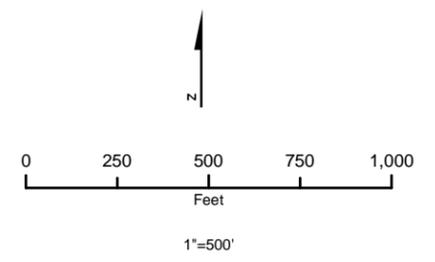
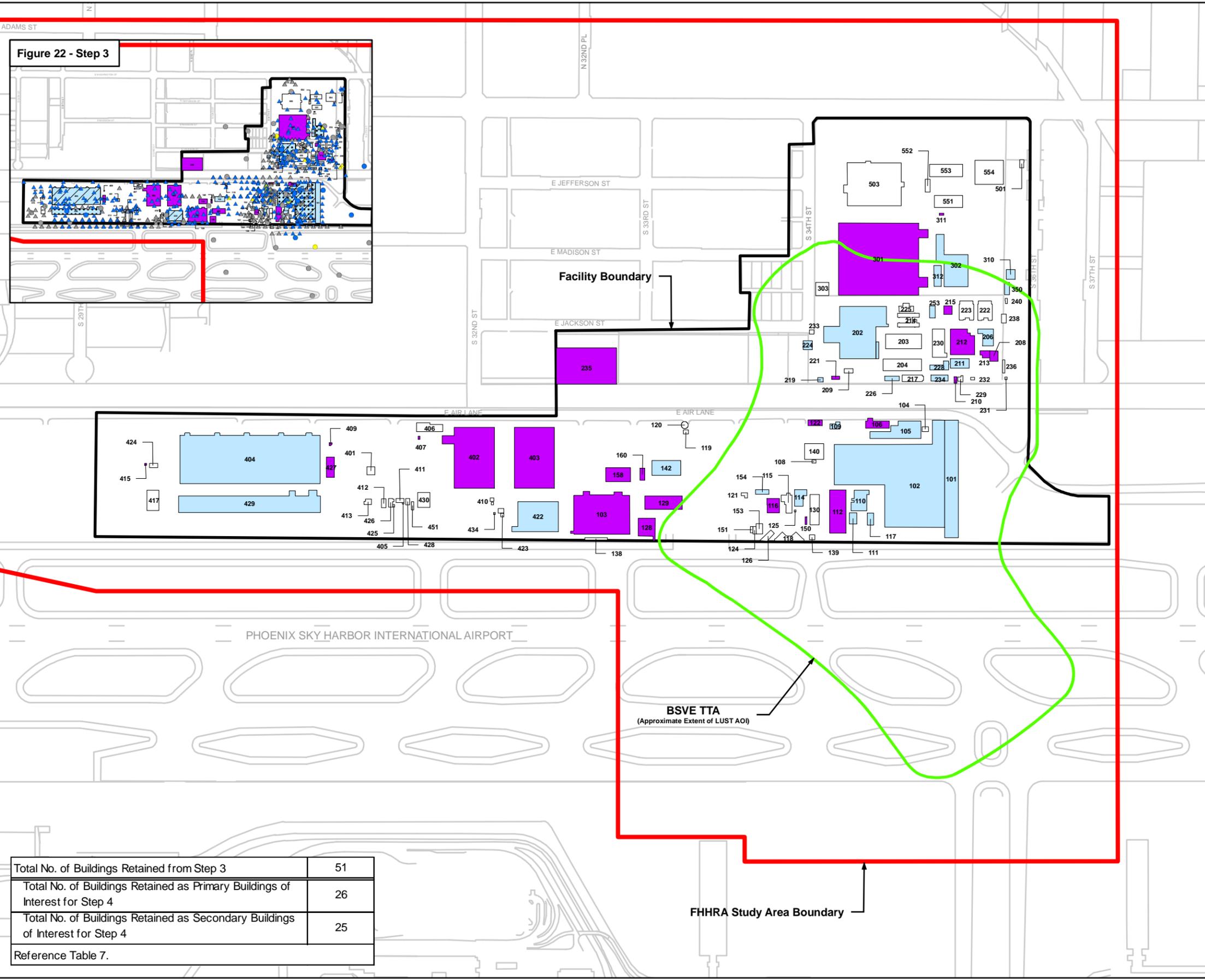


FIGURE 23
STEP 3 - RESULTS OF STEP 3
EVALUATION FOR IDENTIFYING
PRIMARY AND SECONDARY
BUILDINGS OF INTEREST
 Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Buildings Retained from Step 3	51
Total No. of Buildings Retained as Primary Buildings of Interest for Step 4	26
Total No. of Buildings Retained as Secondary Buildings of Interest for Step 4	25
Reference Table 7.	

LEGEND

Risk Results for Locations with 8260 Analysis (Collected as part of the Additional Field Work and FFS Work Plan)

◆ ELCR ≤ 1E-06

Risk Results for Locations with TO-15 Analysis

● ELCR ≤ 1E-06

● ELCR > 1E-06 to ≤ 1E-05

302 Retained as Primary Buildings of Interest from Step 3 (26 total)

212 Retained as Secondary Buildings of Interest from Step 3 (25 total)

202 Buildings Excluded from Further Evaluation (55 total)

BSVE Target Treatment Area (TTA)

Honeywell 34th Street Facility

FHHRA Study Area

Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

Notes:

- Refer to Figure Index for abbreviation/acronym definitions.
- The screening level risk results presented on this figure were based on:
 - Chemicals detected in soil gas samples collected from all sampling depths as part of the ongoing operation of the BSVE system from 11/1/2009 – 12/31/2010, and as part of the FFS additional data collection field work from 6/2/2009 – 6/6/2009. Samples from soil vapor wells with screens intersecting the water table were excluded.
 - The soil gas to indoor air risk-based screening levels for an industrial exposure scenario are presented in Appendix G-5 of the *Focused Human Health Risk Assessment, Honeywell 34th Street Facility, Phoenix, Arizona* (CH2M HILL, 2011).

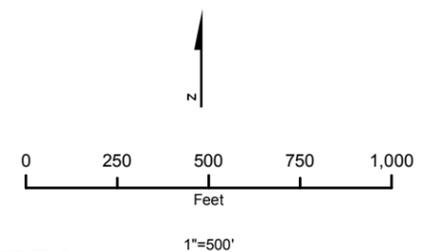
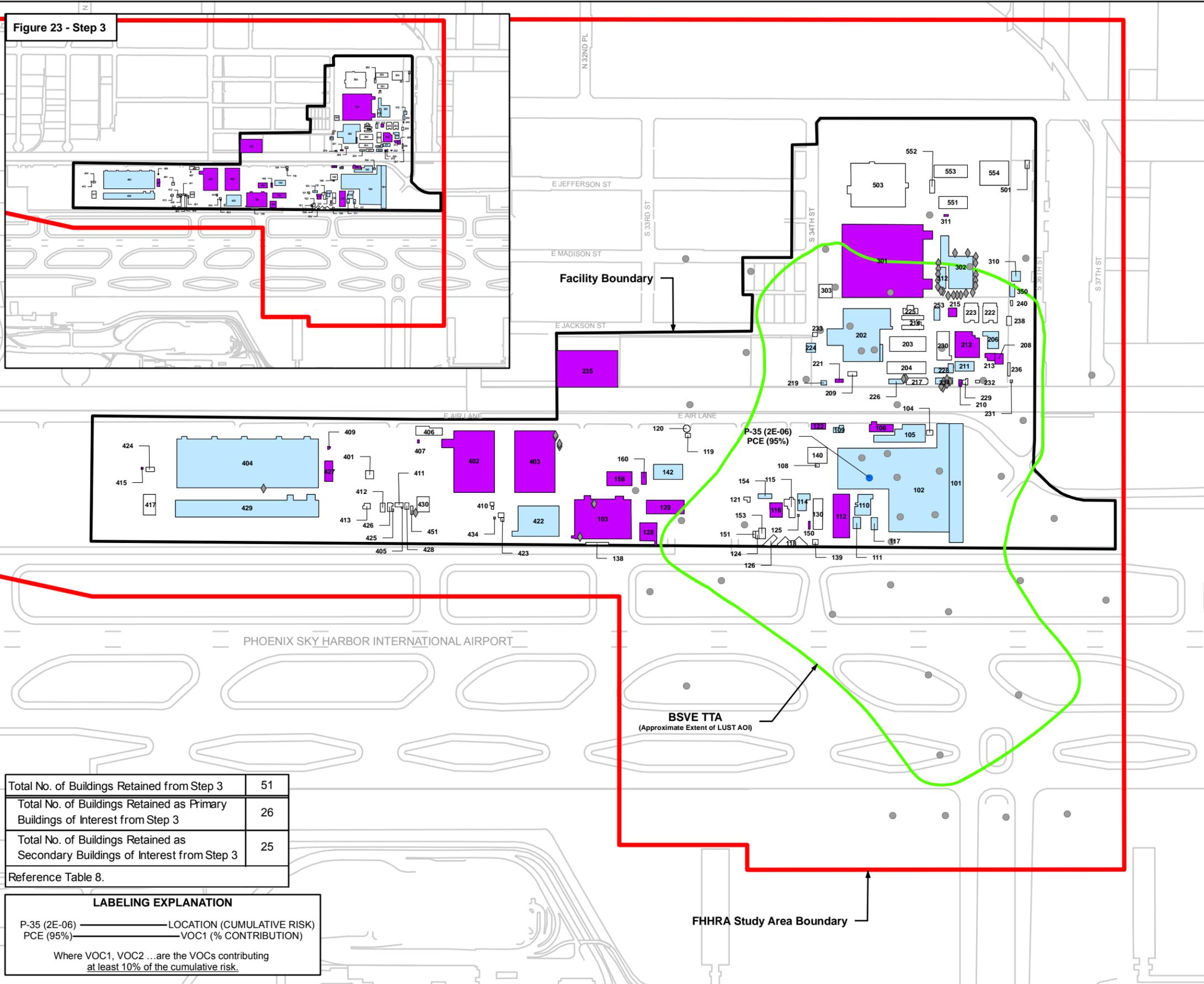


FIGURE 24
STEP 4 - POST-BASELINE
(I.E., OPERATION OF BSVE SYSTEM)
EVALUATION: SCREENING LEVEL
CUMULATIVE CANCER RISKS FOR
SOIL GAS TO INDUSTRIAL AIR BASED
ON DETECTED CHEMICALS
(ALL SAMPLING DEPTHS)

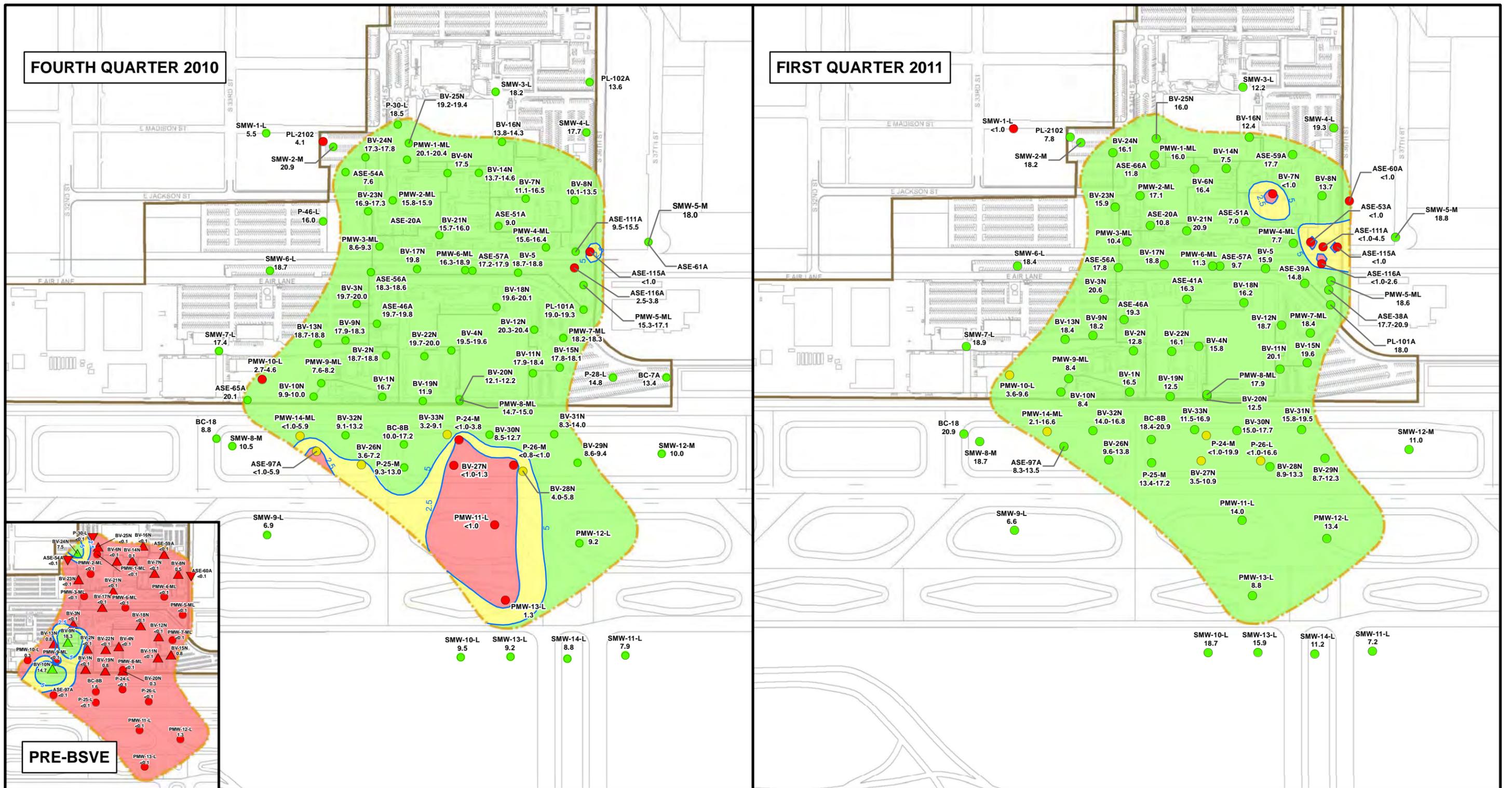
Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Buildings Retained from Step 3	51
Total No. of Buildings Retained as Primary Buildings of Interest from Step 3	26
Total No. of Buildings Retained as Secondary Buildings of Interest from Step 3	25

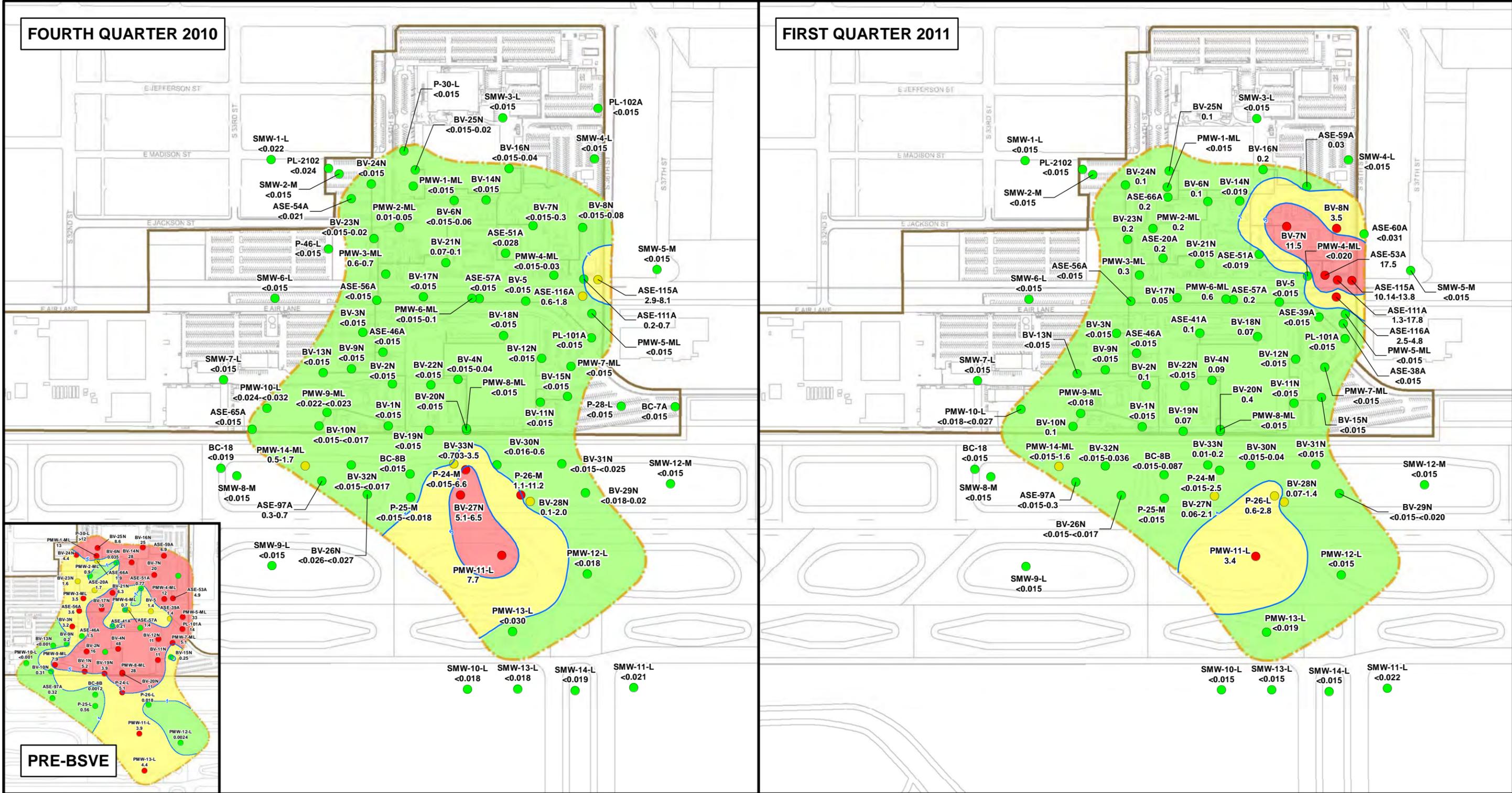
Reference Table 8.

LABELING EXPLANATION	
P-35 (2E-06)	LOCATION (CUMULATIVE RISK)
PCE (95%)	VOC1 (% CONTRIBUTION)
Where VOC1, VOC2 ... are the VOCs contributing at least 10% of the cumulative risk.	



FOURTH QUARTER 2010

FIRST QUARTER 2011



Legend

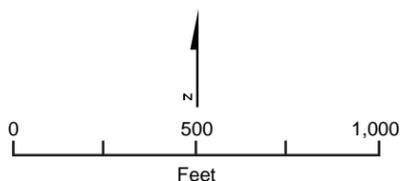
Honeywell Monitoring Wells

- All Methane < 1%
- Methane above and below 5%
- All Methane > 5%

- Methane Isocontour (%)
- BSVE Pipeline System
- Target Treatment Area
- Honeywell Facility

Notes:

1. Contours for Fourth Quarter 2010 and First Quarter 2011 are based on quarterly soil vapor monitoring event data only; data posted includes all data measurements observed during the quarter, excluding periods when BSVE System was shut down for 72 hours or more (including Respiration Testing).
2. BSVE = Biologically Enhanced Soil Vapor Extraction
3. Pre-BSVE measurements were collected between July 8, 2005 and May 22, 2009.
4. The Fourth Quarter 2010 and First Quarter 2011 methane data were collected with an RKI Eagle (detection limit of 0.001%). The Pre-BSVE methane data were collected using a flame ionization detector (FID). For the purpose of this figure, FID detections below 0.001% are presented as <0.001%.



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Approved by STC or PM:	Tasha Lewis	<i>Tasha Lewis</i> (Signature)

FIGURE 26
DEEP SUBSURFACE
METHANE DISTRIBUTION
SOIL VAPOR FIELD PARAMETERS
 Honeywell 34th Street Facility
 Phoenix Arizona

- LEGEND**
- Retained as Primary Buildings of Interest for Step 5 (8 Total)
 - Retained as Secondary Buildings of Interest for Step 5 (43 Total)
 - BSVE Target Treatment Area (TTA)
 - Honeywell 34th Street Facility
 - FHHRA Study Area
 - Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Eric Davis	<i>Eric Davis</i> (Signature)
Approved by STC or PM: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.

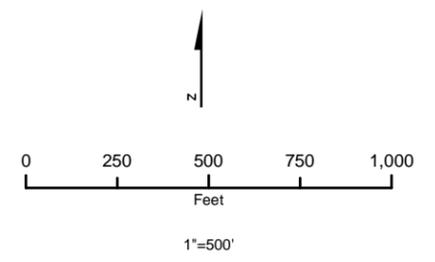
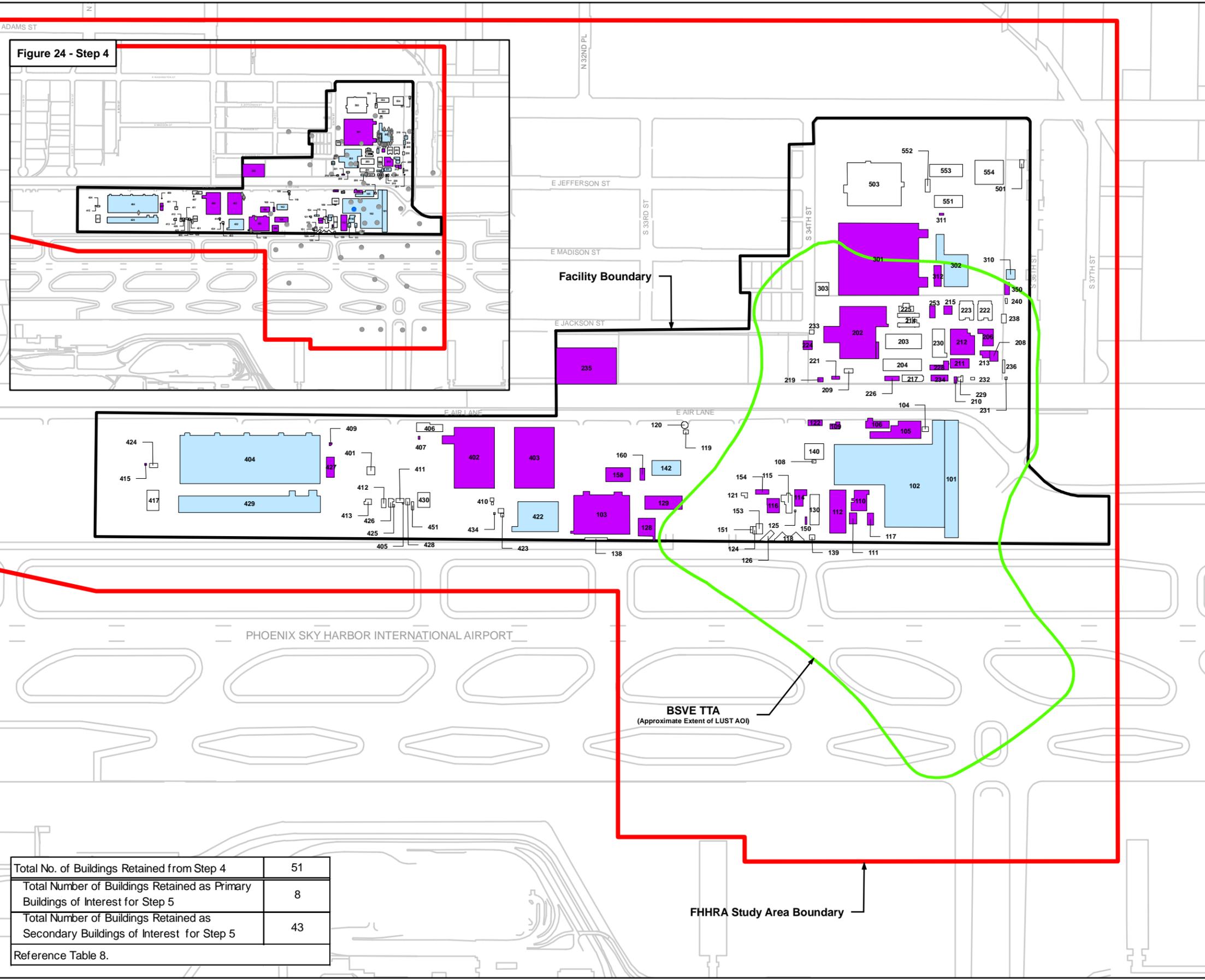
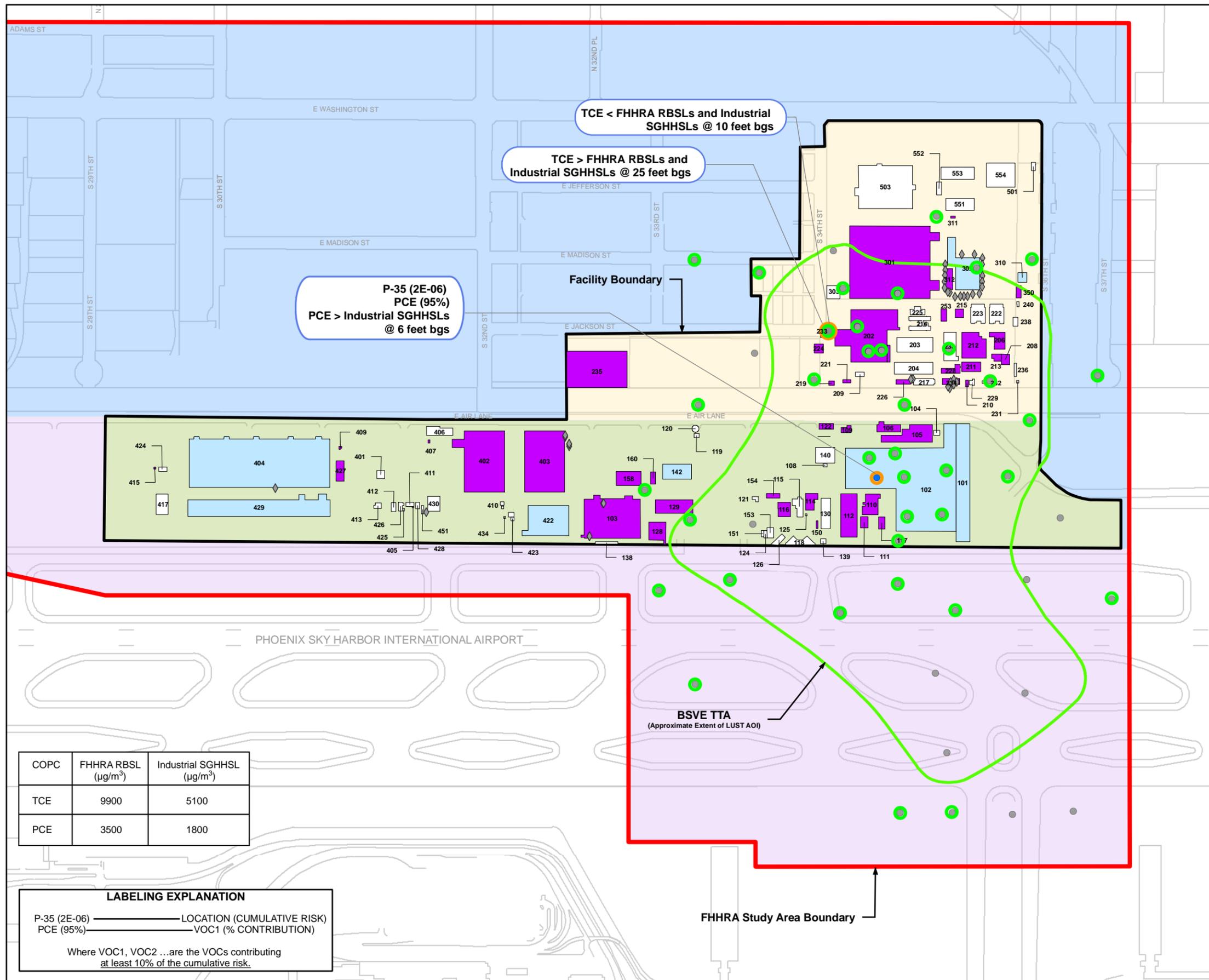


FIGURE 27
STEP 4 - RESULTS OF STEP 4
EVALUATION FOR IDENTIFYING
PRIMARY AND SECONDARY
BUILDINGS OF INTEREST
 Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Buildings Retained from Step 4	51
Total Number of Buildings Retained as Primary Buildings of Interest for Step 5	8
Total Number of Buildings Retained as Secondary Buildings of Interest for Step 5	43
Reference Table 8.	



LEGEND

Risk Results for Locations with 8260 Analysis (Collected as part of the Additional Field Work and FFS Work Plan)

- ◇ ELCR ≤ 1E-06

Risk Results for Locations with TO-15 Analysis

- ELCR ≤ 1E-06
- ELCR > 1E-06 to ≤ 1E-05

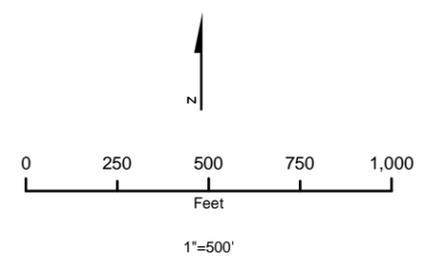
102 Retained as Primary Buildings of Interest for Step 5 (8 Total)

301 Retained as Secondary Buildings of Interest for Step 5 (43 Total)

- Honeywell Facility North Exposure Area
- Honeywell Facility South Exposure Area
- PSHA Exposure Area
- Offsite Exposure Area
- BSVE Target Treatment Area (TTA)
- Honeywell 34th Street Facility
- FHHRA Study Area
- Street and Airport Features
- Soil gas concentrations < FHHRA RBSLs and Industrial SGHSLs
- Soil gas concentrations > FHHRA RBSLs and Industrial SGHSLs

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Anja Schoenberger	<i>Anja Schoenberger</i> (Signature)
Approved by: Tasha Lewis	<i>Tasha Lewis</i> (Signature)

- Notes:
- Refer to Figure Index for abbreviation/acronym definitions.
 - Data set used for the comparison evaluation includes:
 Second Quarter 2010 subslab soil-gas data (May 19-20, 2010)
 Fourth Quarter 2010 BSVE soil-gas data (November 2-14, 2010)
 First Quarter 2011 BSVE soil-gas data (February 1-16, 2011)
 - FHHRA RBSLs = Focused Human Health Risk Assessment Risk Based Screening Levels.
 - SGHSLs = Soil Gas Human Health Screening Levels.



COPC	FHHRA RBSL (µg/m³)	Industrial SGHSL (µg/m³)
TCE	9900	5100
PCE	3500	1800

LABELING EXPLANATION

P-35 (2E-06) LOCATION (CUMULATIVE RISK)
 PCE (95%) VOC1 (% CONTRIBUTION)

Where VOC1, VOC2 ...are the VOCs contributing at least 10% of the cumulative risk.

FIGURE 28
STEP 5 - COMPARISON OF BSVE SOIL GAS DATA TO THE MOTOROLA 52ND STREET INDUSTRIAL SGHSLs
 Honeywell 34th Street Facility
 Phoenix, Arizona

- LEGEND**
- Retained as Primary Buildings of Interest and Selected for Concurrent Indoor Air, Outdoor Air, and Subslab Soil-Gas Sampling (7 Total)
 - Retained as Secondary Buildings of Interest (44 Total)
 - BSVE Target Treatment Area (TTA)
 - Honeywell 34th Street Facility
 - FHHRA Study Area
 - Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Tasha Lewis	<i>Tasha Lewis</i> (Signature)
Approved by STC or PM: Loren Lund	<i>Loren Lund</i> (Signature)

Notes:
 1. Refer to Figure Index for abbreviation/acronym definitions.
 2. ADEQ and USEPA site walk and building inspection was performed on July 19 and 20, 2011.

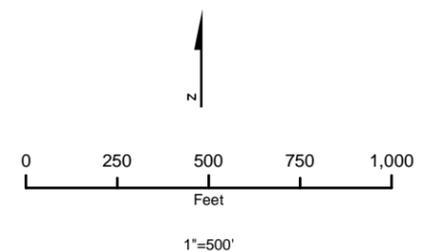
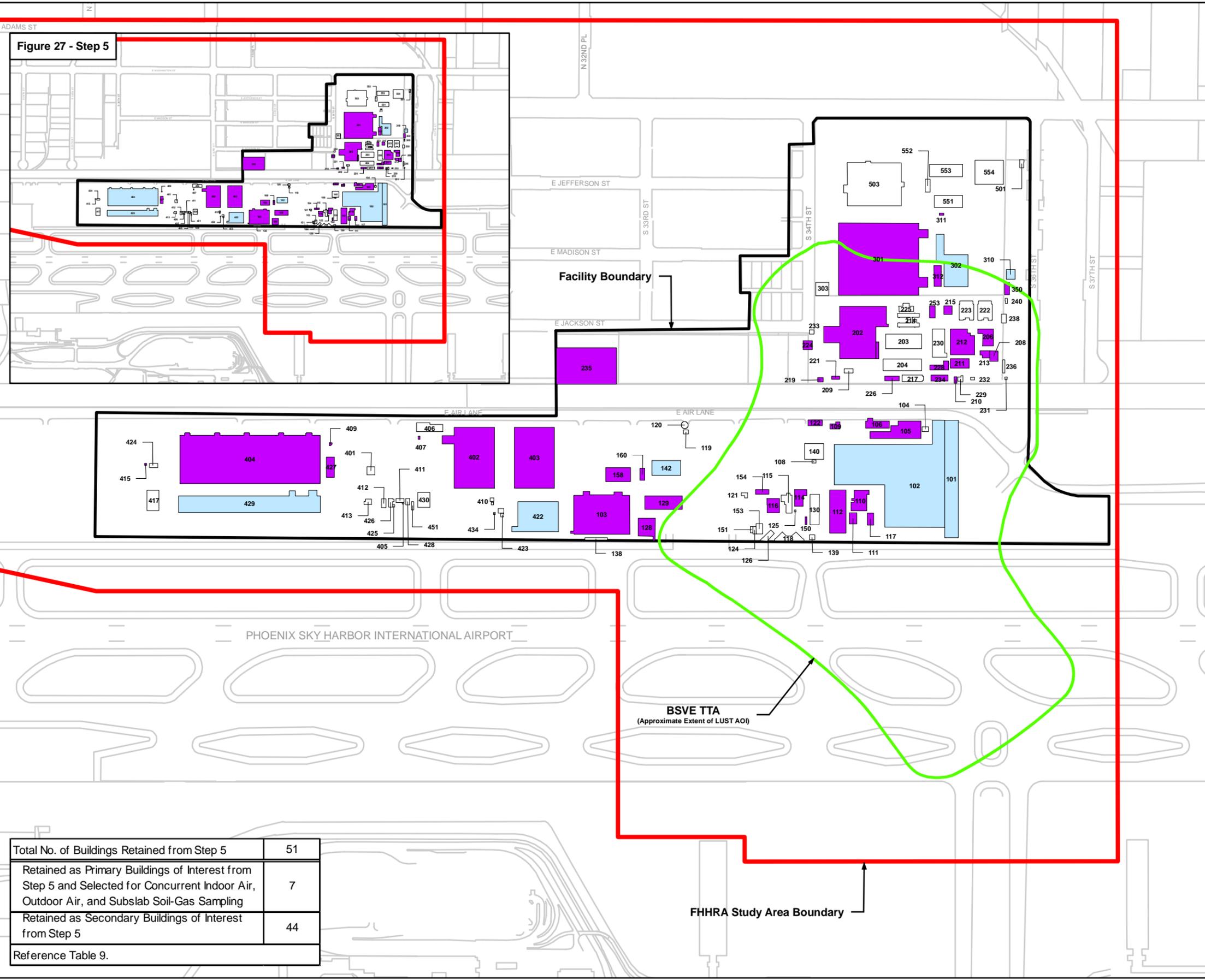
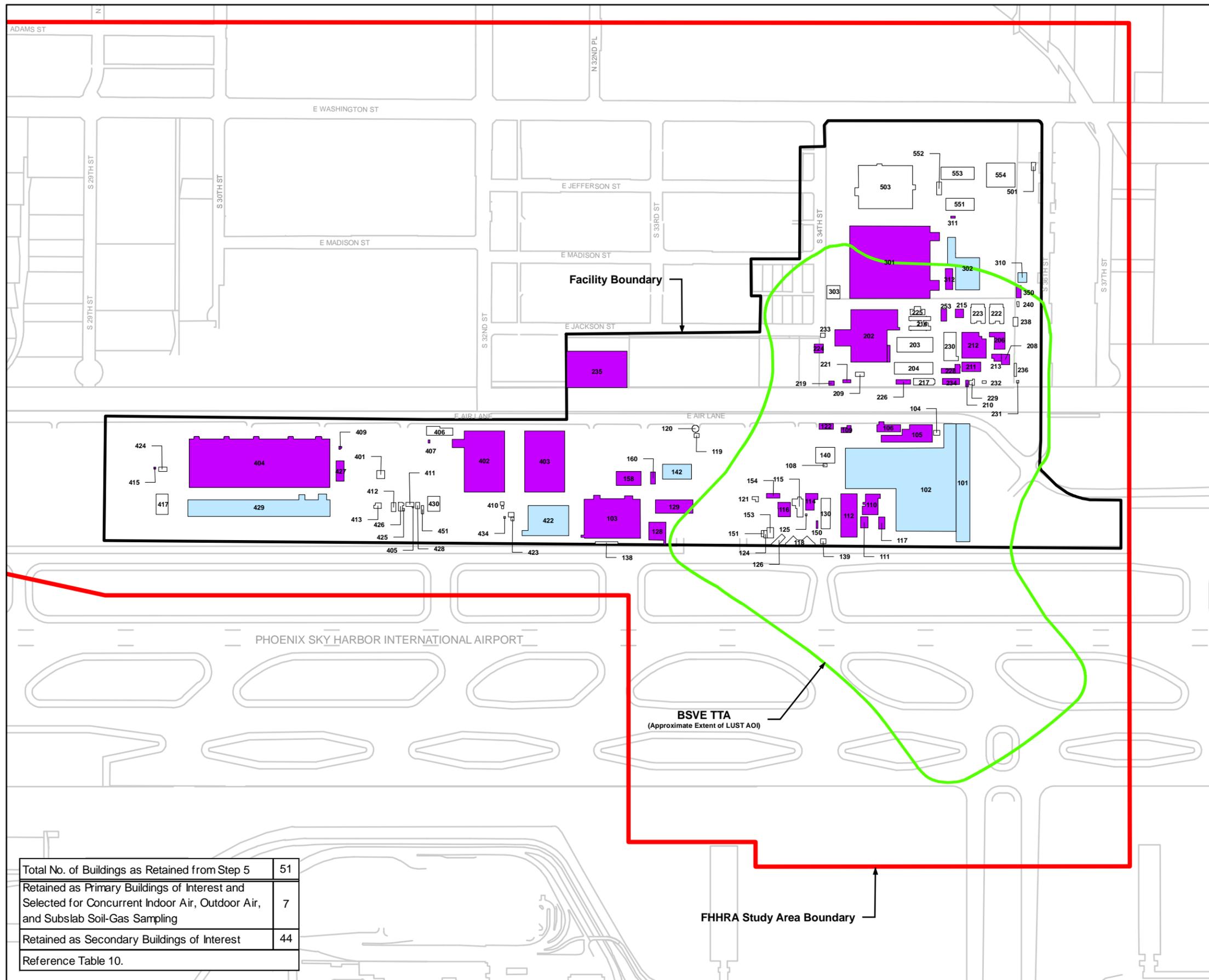


FIGURE 29
STEP 5 - RESULTS OF STEP 5
EVALUATION FOR IDENTIFYING PRIMARY
AND SECONDARY BUILDINGS OF
INTEREST
 Honeywell 34th Street Facility
 Phoenix, Arizona



Total No. of Buildings Retained from Step 5	51
Retained as Primary Buildings of Interest from Step 5 and Selected for Concurrent Indoor Air, Outdoor Air, and Subslab Soil-Gas Sampling	7
Retained as Secondary Buildings of Interest from Step 5	44
Reference Table 9.	



- LEGEND**
- Retained as Primary Buildings of Interest and Selected for Concurrent Indoor Air, Outdoor Air, and Subslab Soil-Gas Sampling (7 Total)
 - Retained as Secondary Buildings of Interest (44 Total)
 - Building was Excluded from Further Evaluation (i.e., not Selected for Concurrent Indoor Air, Outdoor Air, and Subslab Soil-Gas Sampling Based on Prioritization Rationale (55 total))
 - BSVE Target Treatment Area (TTA)
 - Honeywell 34th Street Facility
 - FHHRA Study Area
 - Street and Airport Features

Originator: Andrew O'Malley	<i>Andrew O'Malley</i> (Signature)
Checked by: Tasha Lewis	<i>Tasha Lewis</i> (Signature)
Approved by STC or PM: Loren Lund	<i>Loren Lund</i> (Signature)

Notes:
1. Refer to Figure Index for abbreviation/acronym definitions.

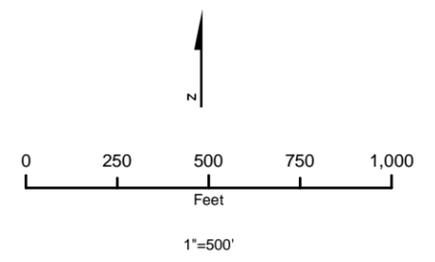


FIGURE 30
FINAL PRIMARY AND SECONDARY
BUILDINGS OF INTEREST RETAINED
FOR PHASE 2 VAPOR INTRUSION
ASSESSMENT
 Honeywell 34th Street Facility
 Phoenix, Arizona

Total No. of Buildings as Retained from Step 5	51
Retained as Primary Buildings of Interest and Selected for Concurrent Indoor Air, Outdoor Air, and Subslab Soil-Gas Sampling	7
Retained as Secondary Buildings of Interest	44
Reference Table 10.	