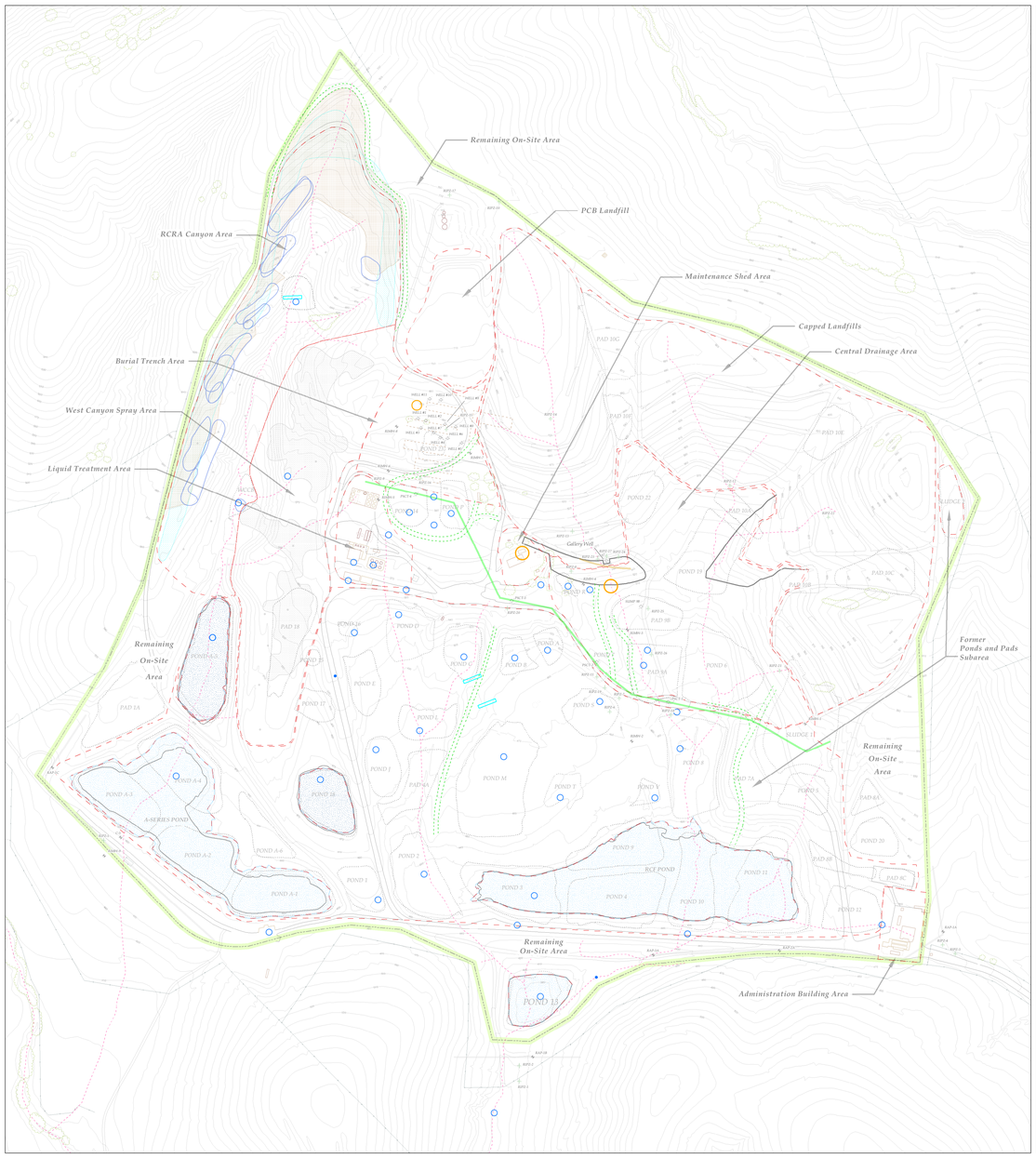
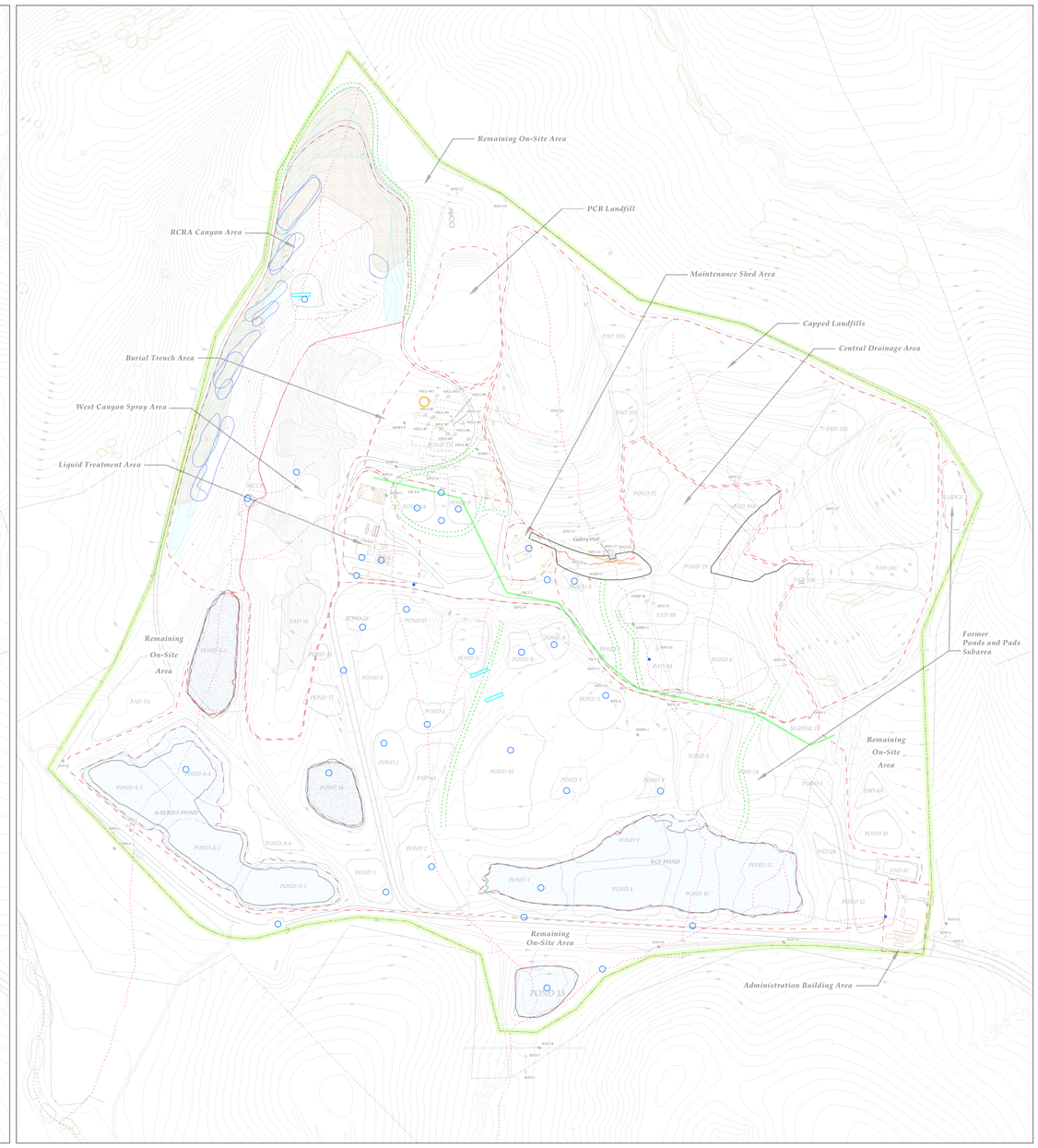
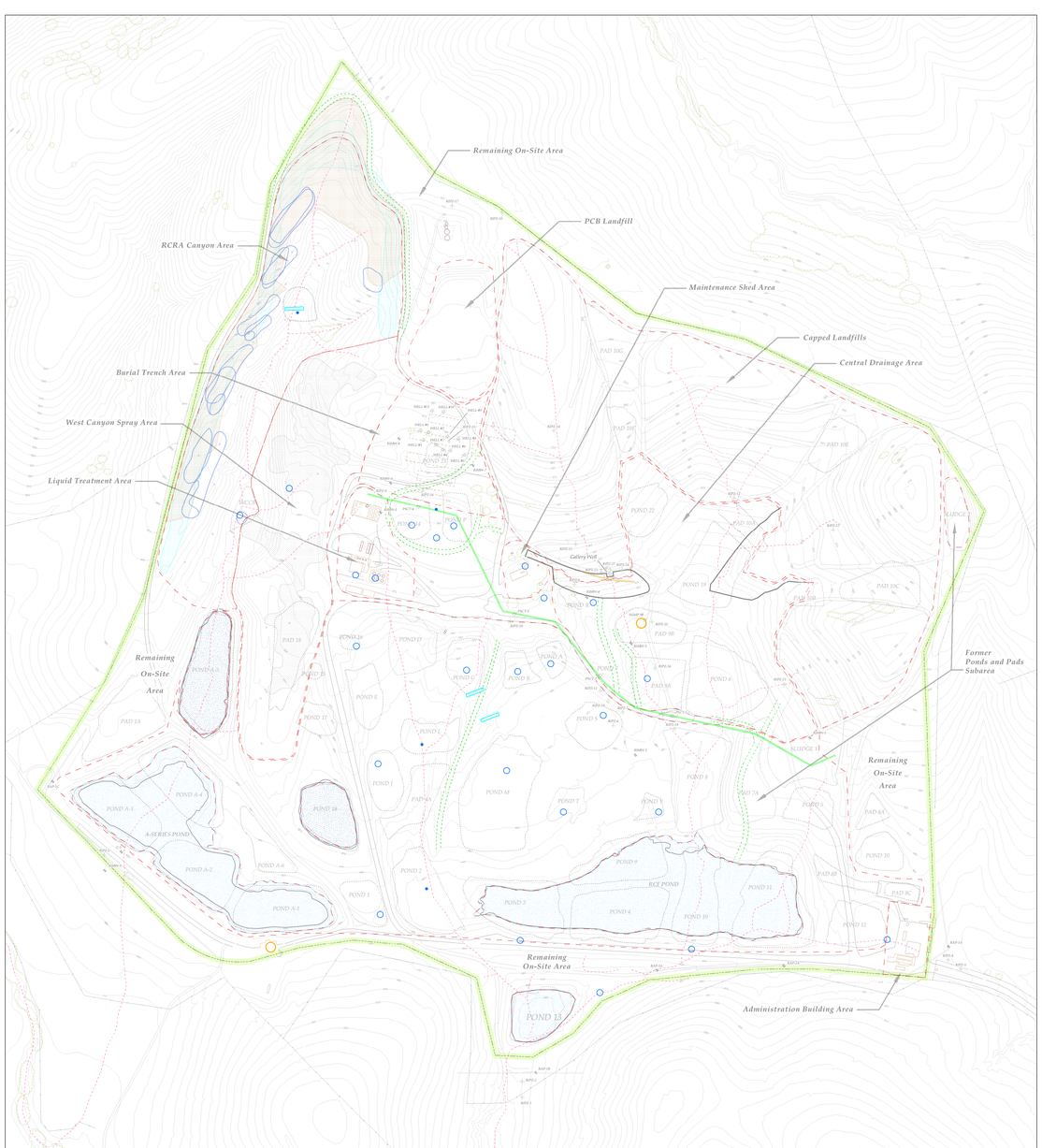


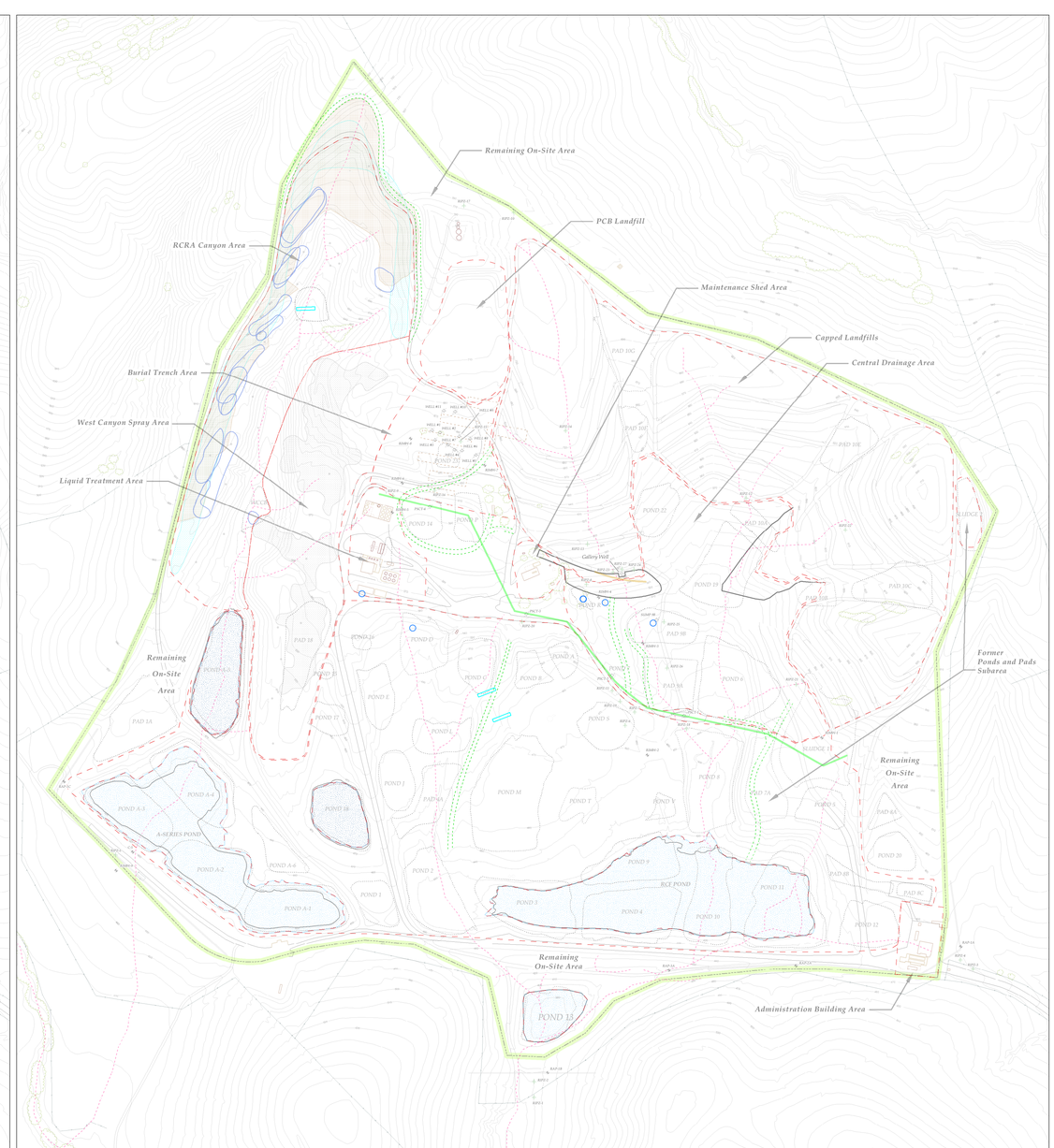
Surface (0 to 0.5 feet)



Shallow (>0.5 to 5.3 feet)



Medium (>5.3 to 10 feet)



Deep (>10 feet)

Explanation

Total Mammalian Dioxin TEQ Surface Soil Sample
(Concentration mg/kg)
- Not Detected
- Detection to < 6.00E-06 (Eco RBC)
- 6.00E-06 (Eco RBC) to < 1.80E-04 (HH RBC)
- ≥ 1.80E-04 (HH RBC)

Total Mammalian Dioxin TEQ Shallow Soil Sample
(Concentration mg/kg)
- Not Detected
- Detection to < 6.00E-06 (Eco RBC)
- 6.00E-06 (Eco RBC) to < 1.80E-04 (HH RBC)
- ≥ 1.80E-04 (HH RBC)

Total Mammalian Dioxin TEQ Medium Soil Sample
(Concentration mg/kg)
- Not Detected
- Detection to < 1.0E-06
- 1.0E-06 to < 1.0E-05
- ≥ 1.0E-05

Total Mammalian Dioxin TEQ Deep Soil Sample
(Concentration mg/kg)
- Not Detected
- Detection to < 1.0E-06
- 1.0E-06 to < 1.0E-05
- ≥ 1.0E-05

Abbreviations for Cut-Off Points

Eco RBC - Ecological Site Specific Screening Level
HH RBC - Risk-Based Concentration

Other Site Features
- Casmalia Site Boundary
- Study Area Boundary
- Piezometer
- Monitoring Well
- Former Injection Well (Surveyed March 25, 1987)
- Liquids Extraction Well
- Historical Soil Sample
- P/S Landfill Clay Barrier (1981 Photograph)
- Perimeter Source Control Trench (Brierly & Lyman, 1989)
- Perimeter Control Trench (Brierly & Lyman, 1989)
- Terrace and Surface Impoundment (Based on 10/06/83 & 07/06/84 Photos)
- Buttress
- Burial Trench Location (Figure A21-1-1 Woodward-Clyde, 1988)
- Historical Natural Drainage (Based on 1956 Photo, 1974 Topographic Maps, and Figures 21-2 and 21-3 Woodward-Clyde, 1988)
- Road Remnant
- Historical Feature
- Former Waste Burial Area
- Fence
- Oil Field Waste Spreading Area (Based on 1983, 1985/86 Photos)
- Oil Field Waste Spreading Area (Figure A21-1-1 Woodward-Clyde, 1988)
- 1983 Spray Area
- Stormwater Pond
- Treated Liquid Impoundment

Source: Topographic base map provided by Pacific Engineering, Inc. from aerial survey dated March 4, 2004.

Notes:
It should be noted that while there may be a few individual samples in a Study Area that exceed a RBC, the Study Area as a whole may not pose a significant risk due to the use of the 95UCL concentration in the ERA and HHRA.

As the Stormwater Ponds and Treated Liquid Impoundments may be drained in the future, sediment sample data for these study areas are included in this map and compared with ecological and human health screening levels for soil.

0 300 600
Scale in Feet

Figure 5-7

Concentration Ranges for Dioxin TEQ (Mammalian) in Soil All On-Site Areas

Final Remedial Investigation Report
Casmalia Resources Superfund Site
January 2011

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