Appendix D: Preliminary Jurisdictional Determination Table

Drainage Number	Drainage Name (if applicable)	County	Latitude	Longitude	Linear Feet	Hydrologic Regime	Likely Jurisdictional Status	Potential Non-Wetland Waters (acres)	Potential Deepwater Aquatic Non-Wetland Waters (acres)	Potential Wetlands (acres)	Total Potential Area (acres)	Cowardin Class	Section 10 Water	Approximate Distance to RPW	Flow Route to RPW	Primary Substrate	Hydrologic Indicators	Biological Characteristics
Feature 1	San Antonio Creek Channel	San Bernardino	34.0815142768901	-117.704696981025	1104	Intermittent	Jurisdictional	0.995	0.000	0.000	0.995	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel	No vegetation present
Feature 2		San Bernardino	34.0801961688258	-117.704026727549	370	Ephemeral	Jurisdictional	6.177	0.000	0.000	6.177	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Dirt	Bed and bank with water present	No vegetation present
Feature 3		San Bernardino	34.0827014341894	-117.703321335177	386	Ephemeral	Jurisdictional	1.084	0.000	0.275	1.359	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Dirt	Bed and bank with water present	Some freshwater marsh vegetation is present within the samller of the two percolation basins
Feature 4		San Bernardino	34.0836087241123	-117.694648681566	898	Ephemeral	Non-Jurisdictional	0.206	0.000	0.000	0.206	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	No vegetation present
Feature 5		San Bernardino	34.0876411607353	-117.660260637704	5052	Ephemeral	Non-Jurisdictional	1.123	0.000	0.000	1.123	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	Some freshwater marsh vegetation is present near I-10, but otherwise the channel is mostly
Feature 6		San Bernardino	34.0873023216407	-117.642966237983	4095	Ephemeral	Non-Jurisdictional	0.484	0.000	0.000	0.484	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 7	West Cucamonga Channel	San Bernardino	34.0807021682826	-117.630152615116	2031	Ephemeral	Jurisdictional	3.529	0.000	0.000	3.529	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete (channel) and Dirt (basin)	Concrete channel for channel and water marks, bed and bank for basin	No vegetation present
Feature 8		San Bernardino	34.0753381408485	-117.618839380608	709	Ephemeral	Non-Jurisdictional	0.065	0.000	0.000	0.065	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 9	Cucamonga Creek Channel	San Bernardino	34.0707815297376	-117.599929167089	1162	Intermittent	Jurisdictional	10.222	0.000	0.000	10.222	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	No vegetation present
Feature 10		San Bernardino	34.0676695781302	-117.594966165129	1126	Ephemeral	Jurisdictional	0.181	0.000	0.000	0.181	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Cobbles and sand	Bed and bank, slight erosion, some sediment deposition, riparian growth in channel	Weeds, grasses, and shrubs; coastal sage scrub community.
Feature 11		San Bernardino	34.0678082621415	-117.58754912308	962	Ephemeral	Non-Jurisdictional	0.066	0.000	0.000	0.066	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	Unvegetated channel
Feature 12	Lower Deer Creek Channel	San Bernardino	34.0673423581876	-117.584504766562	449	Ephemeral	Jurisdictional	0.153	0.000	0.000	0.153	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	Unvegetated channel
Feature 13		San Bernardino	34.0678633365895	-117.58283365946	1128	Ephemeral	Non-Jurisdictional	0.273	0.000	0.000	0.273	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone, some water staining	High vegetation on banks, many shrubs growing through cracks in the
Feature 14		San Bernardino	34.0678268933717	-117.566967101476	1907	Ephemeral	Jurisdictional	0.696	0.000	0.000	0.696	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone, sediment deposition	Sparse grasses, mostly devoid of vegetation. Some small amounts of marshy vegetation present in portions of channel
Feature 15		San Bernardino	34.0678928267633	-117.556937777059	795	Ephemeral	Non-Jurisdictional	0.121	0.000	0.000	0.121	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete, then cobbles and sand	Bed and bank, some water staining, some sediment deposition, connected to a concrete channel	Cattails and other marshy vegetation present in portions of the feature
Feature 16	Day Creek Channel	San Bernardino	34.0670500464593	-117.541583575024	1065	Intermittent	Jurisdictional	0.845	0.000	0.000	0.845	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, some water present	No vegetation present
Feature 17		San Bernardino	34.0669649361423	-117.535964339283	3194	Ephemeral	Non-Jurisdictional	0.148	0.000	0.000	0.148	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, some water present	No vegetation present
Feature 18		San Bernardino	34.0678879788359	-117.527315572248	492	Intermittent	Jurisdictional	0.159	0.000	0.000	0.159	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Rip rap	Water marks, Bed and Bank	No vegetation present
Feature 19	Lower Etiwanda Creek Channel	San Bernardino	34.0685472695999	-117.525568780079	1289	Ephemeral	Jurisdictional	1.385	0.000	0.000	1.385	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Rip rap, sand, and cobbles	Water marks, Bed and Bank	No vegetation present
Feature 20	San Sevaine Creek Channel	San Bernardino	34.0667250076338	-117.515044941877	1105	Ephemeral	Jurisdictional	6.997	0.000	0.000	6.997	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 21	I-10 Channel	San Bernardino	34.0668155833404	-117.480998674506	25936	Ephemeral	Jurisdictional	13.515	0.000	0.000	13.515	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	No vegetation present
Feature 22		San Bernardino	34.0657795902075	-117.512112265128	416	Ephemeral	Jurisdictional	0.035	0.000	0.000	0.035	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	Grasses, bushes, shrubs
Feature 23		San Bernardino	34.0666158633308	-117.506951147807	558	Ephemeral	Jurisdictional	0.229	0.000	0.000	0.229	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 24	Rialto Tributary	San Bernardino	34.0683818598528	-117.39921629367	15975	Ephemeral	Jurisdictional	5.680	0.000	0.000	5.680	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	No vegetation present
Feature 25	Rialto Creek Channel	San Bernardino	34.0675574787571	-117.371119306765	1056	Ephemeral	Jurisdictional	5.578	0.000	0.000	5.578	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present	No vegetation present

Drainage Number	Drainage Name (if applicable)	County	Latitude	Longitude	Linear Feet	Hydrologic Regime	Likely Jurisdictional Status	Potential Non-Wetland Waters (acres)	Potential Deepwater Aquatic Non-Wetland Waters (acres)	Potential Wetlands (acres)	Total Potential Area (acres)	Cowardin Class	Section 10 Water	Approximate Distance to RPW	Flow Route to RPW	Primary Substrate	Hydrologic Indicators	Biological Characteristics
Feature 26		San Bernardino	34.0683216942185	-117.370674057234	973	Ephemeral	Non-Jurisdictional	0.022	0.000	0.000	0.022	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present	No vegetation present
Feature 27		San Bernardino	34.0692085706267	-117.3683591995	908	Ephemeral	Non-Jurisdictional	0.021	0.000	0.000	0.021	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water staining	No vegetation present
Feature 28		San Bernardino	34.0690870426406	-117.365193375841	478	Ephemeral	Non-Jurisdictional	0.033	0.000	0.000	0.033	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 29		San Bernardino	34.0691728898107	-117.361205881818	582	Ephemeral	Non-Jurisdictional	0.013	0.000	0.000	0.013	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 30		San Bernardino	34.0694224699758	-117.354628090085	164	Ephemeral	Non-Jurisdictional	0.048	0.000	0.000	0.048	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present
Feature 31		San Bernardino	34.0691036407303	-117.348142215126	89	Ephemeral	Non-Jurisdictional	0.009	0.000	0.000	0.009	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Bed and bank, concrete channel with mild wrack zone	No vegetation present
Feature 32		San Bernardino	34.0685591829494	-117.338346661573	408	Ephemeral	Non-Jurisdictional	0.030	0.000	0.000	0.030	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete bed and bank with water present	Grasses and shrubs, cat tail, and other riparian vegetation
Feature 33		San Bernardino	34.0652541932016	-117.312628770323	495	Ephemeral	Non-Jurisdictional	0.091	0.000	0.000	0.091	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present	Overgrowth of ornamental and invasive vegetation on banks, but devoid of vegetation within channel
Feature 34		San Bernardino	34.0658558265414	-117.30850018471	592	Ephemeral	Jurisdictional	0.048	0.000	0.000	0.048	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Cobbles and sand	Sediment deposition, sandy, some water staining	No vegetation present in study area
Feature 35	Warm Creek Channel	San Bernardino	34.0663065474645	-117.307032123303	1077	Intermittent	Jurisdictional	17.083	0.000	0.000	17.083	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present in study area
Feature 36	Santa Ana River Channel	San Bernardino	34.0634095682425	-117.304359080474	1378	Intermittent	Jurisdictional	56.222	0.000	0.000	56.222	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with sediment deposition	No vegetation present in study area
Feature 37		San Bernardino	34.0641756311128	-117.286423664682	505	Ephemeral	Non-Jurisdictional	0.065	0.000	0.000	0.065	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone with some water staining	Highly vegetated for a concrete channel. Trees, shrubs, and grasses exist in and around the bed and bank with lots of overgrowth into the channel
Feature 38	San Timoteo Creek Chan	San Bernardino	34.06324579081	-117.26922806647	2505	Intermittent	Jurisdictional	14.346	0.000	0.000	14.346	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present	No vegetation present
Feature 39		San Bernardino	34.0649262665124	-117.256670336729	10935		Non-Jurisdictional	4.328	0.000	0.000	4.328	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present in some areas. Part of this feature has drainage culverts and is currently under construction on the west end	Sparse weeds and grasses, mostly devoid of vegetation
Feature 40	Mission Creek Channel	San Bernardino	34.0670522557958	-117.235700022226	4626	Intermittent	Jurisdictional	7.800	0.000	0.000	7.800	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Rip rap and sand	Water marks, Bed and Bank	No vegetation present in study area
Feature 41		San Bernardino	34.0660090108877	-117.221180690385	8497	Ephemeral	Non-Jurisdictional	1.687	0.000	0.000	1.687	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, sediment deposition and wrack zone	No vegetation present
Feature 42		San Bernardino	34.0670449716319	-117.217796192238	5040	Ephemeral	Non-Jurisdictional	0.572	0.000	0.000	0.572	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone	No vegetation present
Feature 43		San Bernardino	34.0641202439048	-117.199173372652		Ephemeral	Non-Jurisdictional	0.011	0.000	0.000	0.011	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone	No vegetation present
Feature 44		San Bernardino	34.0686968640978	-117.198743939228	3166	Ephemeral	Non-Jurisdictional	3.433	0.000	0.000	3.433	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone and water staining	Weeds and schrubs growing through some areas of the channel, mostly devoid of vegetation
Feature 45		San Bernardino	34.0613124228455	-117.189297991064	573	Ephemeral	Non-Jurisdictional	0.039	0.000	0.000	0.039	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with no vegetation	No vegetation present
Feature 46	Zanja Creek Channel	San Bernardino	34.0590751311309	-117.171781584616	1479	Intermittent	Jurisdictional	1.214	0.000	0.000	1.214	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Rip rap and sand	Water marks, Bed and Bank	No vegetation present
Feature 47		San Bernardino	34.0519523315446	-117.161417562563	3990	Ephemeral	Jurisdictional	0.375	0.000	0.000	0.375	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone and sediment deposition	No vegetation present
Feature 48		San Bernardino	34.0535807716939	-117.16318320726	448	Ephemeral	Non-Jurisdictional	0.041	0.000	0.000	0.041	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone and sediment deposition	No vegetation present
Feature 49		San Bernardino	34.0478467007566	-117.158593232696	350	Ephemeral	Non-Jurisdictional	0.032	0.000	0.000	0.032	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel, wrack zone	No vegetation present

Drainage Number	Drainage Name (if applicable)	County	Latitude	Longitude	Linear Feet	Hydrologic Regime	Likely Jurisdictional Status	Potential Non-Wetland Waters (acres)	Potential Deepwater Aquatic Non-Wetland Waters (acres)	Potential Wetlands (acres)	Total Potential Area (acres)	Cowardin Class	Section 10 Water	Approximate Distance to RPW	Flow Route to RPW	Primary Substrate	Hydrologic Indicators	Biological Characteristics
Feature 50		San Bernardino	34.0413079083119	-117.154826660861	256	Ephemeral	Jurisdictional	0.041	0.000	0.000	0.041	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Bed and bank	No vegetation present
Feature 51		San Bernardino	34.0425954144859	-117.160095078087	1842	Ephemeral	Jurisdictional	2.181	0.000	0.000	2.181	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Concrete channel with water present	No vegetation present
Feature 52		San Bernardino	34.0424679498626	-117.155226436514	191	Ephemeral	Jurisdictional	0.013	0.000	0.000	0.013	Riverine	No	Less than 1 mile	Natural Drainage Above Ground	Concrete	Bed and bank	No vegetation present

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Appendix E: Sample Point Data

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Montclair, San Bernardino County Sampling Date: 1/22/2013
Applicant/Owner: Caltrans State: CA Sampling Point: SP1
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 15, Township 1S, Range 8W
Landform (hillslope, terrace, etc.): Detention Basin Local relief (concave, convex, none): Concave Slope (%): 2
Subregion (LRR): LRR-C Lat: ~~435655~~ 34.082199 Long: ~~3771443~~ -117.705738 Datum: NAD83
Soil Map Unit Name: Soboba gravelly loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? N Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? Y (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	Is the Sampled Area within a Wetland? Yes ✓ No ~~X~~
Hydric Soil Present?	Yes X	No ____	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Flood control basin
Chino Water District

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 10'x 25')			
1. Rumex crispus	5	N	FAC
2. Unk. grass 1	20	Y	FACU
3.			
4.			
5.			
	25 = Total Cover		
Herb Stratum (Plot size: 10'x 25')			
1. Xanthium strumarium	10	~~N~~ Y	FAC
2. Rumex crispus	15	Y	FAC
3. Senecio sp.	5	N	FAC
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 60 % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: ~~3~~ 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species 4	x 3 = 12
FACU species 1	x 4 = 4
UPL species ____	x 5 = ____
Column Totals: 5 (A)	16 (B)

Prevalence Index = B/A = 3.2

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes X No ~~X~~

Remarks:

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SOIL I-10 Corridor 6/22/13 Sampling Point: SP1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
1-8	7.5YR 3/1						Sandy loam	30% coarse (pebbles)
8-18	7.5YR 3/2						sandy loam	30% coarse (pebbles)

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- X Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes X No ___

Remarks:
Layer division is poorly defined
Second layer has slightly more redox features.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- X Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No X Depth (inches): ___

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No X Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:
Water is pooled within part of the feature

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Montclair, San Bernardino County Sampling Date: 1/22/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP 1A
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 15, Township 1S, Range 8W
Landform (hillslope, terrace, etc.): Detention Basin Local relief (concave, convex, none): Concave Slope (%): ____
Subregion (LRR): LRR-C Lat: ~~445051~~ 34.082198 Long: ~~3771493~~ -117.703984 Datum: NAD83
Soil Map Unit Name: Soboba gravelly loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Brassica nigra	20	Y	Ø
2. Rumex crispus	15	~~N~~ Y	FAC
3.			
4.			
5.			
	35 = Total Cover		
Herb Stratum (Plot size: ____)			
1. Helminthotheca echioides	60	Y	FACU
2. Polygonum sp.	25	N	FACW
3. Rumex crispus	10	N	FAC
4. Erodium cicutarium	2	N	Ø
5. Xanthium strumarium	10	N	FAC
6.			
7.			
8.			
	107 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	0	x 1 = ____
FACW species	1	x 2 = 2
FAC species	3	x 3 = 9
FACU species	1	x 4 = 4
UPL species	____	x 5 = ____
Column Totals:	5 (A)	15 (B)

Prevalence Index = B/A = 3

Hydrophytic Vegetation Indicators:
- ____ Dominance Test is >50%
- X Prevalence Index is ≤3.0[1]
- ____ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ____ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

SOIL I-10 Corridor 1/22/13 Sampling Point: SP 1A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
1-18	7.5 YR 3/1						Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

No indicators present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- X Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Indicators present, but not sufficient to meet hydrology

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: San Bernardino County Sampling Date: 1/22/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP2
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 13 Township 1S, Range 8W
Landform (hillslope, terrace, etc.): culvert Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): LRR C Lat: ~~[illegible]~~ 34.087623 Long: ~~[illegible]~~ -117.667087 Datum: NAD83
Soil Map Unit Name: Tujunga gravelly loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ____, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ____ No X
Are Vegetation ____, Soil X, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ~~X~~	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks: within a cement-lined culvert next to a freeway

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	2	N ~~Y~~	FACW
2. Washingtonia robusta	2	N ~~Y~~	Ø
3.			
4.			
	4	= Total Cover	
Sapling/Shrub Stratum (Plot size: ____)			
1. Typha domingensis	60	Y	OBL
2. Epilobium canum	50	Y	Ø
3. Cyperus involucratus	30	~~N~~ Y	FACW
4. Syagrus romanzoffiana	1	N	Ø
5.			
	141	= Total Cover	
Herb Stratum (Plot size: ____)			
1. Epilobium canum	5	~~N~~ Y	Ø
2. Polypogon monspeliensis	5	~~N~~ Y	FACW
3. Baccharis salicifolia	2	N	FAC
4. Gnaphalium sp.	>1	N	Ø
5. Cynodon dactylon	10	~~N~~ Y	FACU
6.			
7.			
8.			
	22	= Total Cover	
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
		= Total Cover	

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 4 (A)
Total Number of Dominant Species Across All Strata: 8 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	1	x 1 = 1
FACW species	3	x 2 = 6
FAC species	1	x 3 = 3
FACU species	1	x 4 = 4
UPL species		x 5 =
Column Totals:	6 (A)	14 (B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:
__ Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ~~X~~

Remarks:

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SOIL I-10 Corridor 1/22/13 Sampling Point: SP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
~3 inches							Sandy loam, trash	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes ___ No X

Remarks:

No pit dug, concrete lined channel with soil deposits on top. No obvious indicators present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: San Bernardino County Sampling Date: 1/22/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP2A
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 13, Township 1S, Range 8W
Landform (hillslope, terrace, etc.): Road shoulder Local relief (concave, convex, none): concave Slope (%): 1
Subregion (LRR): LRR-C Lat: 34.087594 Long: -117.667088 Datum: _____
Soil Map Unit Name: Tujunga gravelly loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✓ No _____ (If no, explain in Remarks.)
Are Vegetation _____, Soil X, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes _____ No X
Are Vegetation _____, Soil X, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No X
Hydric Soil Present?	Yes _____	No X
Wetland Hydrology Present?	Yes _____	No X

Is the Sampled Area within a Wetland? Yes _____ No X

Remarks:
Fill off roadway shoulder

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: _____)			
1. Verbesina encelioides ssp. exauriculata	10	Y	FACU
2.			
3.			
4.			
5.			
	10 = Total Cover		
Herb Stratum (Plot size: _____)			
1. Erodium cicutarium	90	Y	Ø
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	90 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 10 % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: Ø (A)
Total Number of Dominant Species Across All Strata: _____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species 1	x 4 = 4
UPL species _____	x 5 = _____
Column Totals: 1 (A)	4 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:
___ Dominance Test is >50%
___ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No X

Remarks:

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SOIL I-10 Corridor 1/22/13 Sampling Point: SP2A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

No pit dug and no indicators present

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No X

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators present

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: San Bernardino County Sampling Date 1/23/2013
Applicant/Owner Caltrans State CA Sampling Point SP3
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 24, Township 1S, Range 7W
Landform (hillslope, terrace, etc.) ditch Local relief (concave, convex, none) Concave Slope (%) 2
Subregion (LRR): LRR-C Lat: 34.067831 Long: -117.566610 Datum: NAD83
Soil Map Unit Name: Delhi fine sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ____, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ✓, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✓	No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ✓	No ____	

Remarks
Concrete v-ditch

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Typha latifolia	10	Y	OBL
2. Rumex crispus	30	Y	FAC
3.			
4.			
5.			
	40 = Total Cover		
Herb Stratum (Plot size: ____)			
1. Cynodon dactylon	20	Y	ø
2. Bromus sp	10	N	ø
3.			
4.			
5.			
6.			
7.			
8.			
	60 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 66.3 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	10	x 1 = 10
FACW species	____	x 2 = ____
FAC species	30	x 3 = 90
FACU species	____	x 4 = ____
UPL species	____	x 5 = ____
Column Totals	40 (A)	100 (B)

Prevalence Index = B/A = 2.5

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks

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SOIL

Sampling Point: SP3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
<3 inches of soil							Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic

Restrictive Layer (if present):

Type: _____

Depth (inches) _____

Hydric Soil Present? Yes _____ No _____

Remarks:

No pit dug, sandy loam present but had no apparent indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ✓ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ✓ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ✓ Water Marks (B1) (**Riverine**)
- ✓ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes ✓ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers — Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: San Bernardino Cnty Sampling Date: 1/23/2013
Applicant/Owner: Caltrans State: CA Sampling Point: SP3A
Investigator(s): S. Taylor, K. Day Section, Township, Range: Section 24, Township 1S, Range 7W
Landform (hillslope, terrace, etc.): concrete ditch, shoulder Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): LRR-C Lat: 34.067802 Long: -117.568659 Datum: NAD83
Soil Map Unit Name: Delhi Fine Sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation ✓, Soil ✓, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes ✓ No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No ✓	Is the Sampled Area within a Wetland? Yes ____ No ✓
Hydric Soil Present?	Yes ____	No ✓	
Wetland Hydrology Present?	Yes ____	No ✓	

Remarks: Road shoulder

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Fraxinus (hedge)	20	Y	O
2.			
3.			
4.			
5.			
	20 = Total Cover		
Herb Stratum (Plot size: ____)			
1. Erodium cic.	10	Y	O
2. Bromus diadrum	10	Y	O
3.			
4.			
5.			
6.			
7.			
8.			
	20 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum 60 % Cover of Biotic Crust —

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals ____ (A)	____ (B)

Prevalence Index = B/A = 0

Hydrophytic Vegetation Indicators:
__ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No ✓

Remarks

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SOIL

Sampling Point SP3A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

No indicators present. Fill soil on road shoulder

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✓

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Ontario, San Bernardino County Sampling Date: 1/29/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP-4
Investigator(s): K. Day Section, Township, Range: Section 19, Township 15, Range 6W
Landform (hillslope, terrace, etc.): Channel Local relief (concave, convex, none): concave Slope (%): 1%
Subregion (LRR): LRR-C Lat: 34.067724 Long: -117.557462 Datum: _____
Soil Map Unit Name: Delhi Fine Sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No _____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No _____
Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No _____	Is the Sampled Area within a Wetland? Yes _____ No X
Hydric Soil Present?	Yes _____	No X	
Wetland Hydrology Present?	Yes X	No _____	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	_____ = Total Cover		
Sapling/Shrub Stratum (Plot size: 150 ft²)			
1. Typha domingensis	60	Y	OBL
2. Salix lasiolepis	1	N	FACW
3.			
4.			
5.			
	61 = Total Cover		
Herb Stratum (Plot size: 150 ft²)			
1. Bromus diandrus	5	Y	FACU
2. Aster sp.	1	N	NI
3. Cynodon dactylon	20	~~N~~ Y	FACU
4. Avena barbata	<1	N	NI
5.			
6.			
7.			
8.			
	8 = Total Cover		
Woody Vine Stratum (Plot size: _____)			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum _____ % Cover of Biotic Crust _____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 33% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species 1	x 1 = 1
FACW species 1	x 2 = 2
FAC species _____	x 3 = _____
FACU species 2	x 4 = 4
UPL species _____	x 5 = _____
Column Totals: 4 (A)	7 (B)

Prevalence Index = B/A = 1.75

Hydrophytic Vegetation Indicators:
__ Dominance Test is >50%
X Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No _____

Remarks:

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SOIL I-10 Corridor 1/29/13 Sampling Point: SP4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
<5 inches at deepest							Sandy loam	+ trash

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

Concrete lined channel; no pit dug. Soil indicators not apparent

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- X Water Marks (B1) (Nonriverine)
- X Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes X No ___ Depth (inches): 6"

Water Table Present? Yes ___ No X Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes X No ___ Depth (inches): 6"

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Ontario, San Bernardino County Sampling Date: 1/29/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP 4A
Investigator(s): K. Day Section, Township, Range: Section 19, Township 1S, Range 6W
Landform (hillslope, terrace, etc.): Road shoulder Local relief (concave, convex, none): convex Slope (%): <5
Subregion (LRR): LRR-C Lat: 34.067954 Long: -117.557412 Datum: NAD83
Soil Map Unit Name: Delhi fine sand NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ____ No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology ____ significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks:

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: ____)			
1. Cynodon dactylon	5		FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	5 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: ____ (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species 1	x 4 = 4
UPL species ____	x 5 = ____
Column Totals: 1 (A)	4 (B)

Prevalence Index = B/A = 4

Hydrophytic Vegetation Indicators:
__ Dominance Test is >50%
__ Prevalence Index is ≤3.0[1]
__ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
__ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:
Wood chip coverage is 100% over top soil.

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SOIL I-10 Corridor 1/29/13 Sampling Point: SP 4A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No _____

Remarks:

No pit dug; all fill material No indicators apparent.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No indicators present.

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Ontario, San Bernardino County Sampling Date: 1/29/13
Applicant/Owner: Caltrans State: CA Sampling Point: SP5
Investigator(s): K. Day Section, Township, Range: Section 19 Township 1S, Range 4W
Landform (hillslope, terrace, etc.): Channel Local relief (concave, convex, none): concave Slope (%): 0
Subregion (LRR): LRR-C Lat: 34.068570 Long: -117.338705 Datum: NAD83
Soil Map Unit Name: Tujunga loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation ____, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes X	No ____	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes X	No ____	

Remarks:
Concrete channel

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. Salix lasiolepis	10	Y	FACW
2.			
3.			
4.			
	10 = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. Eucalyptus globulus	<1	N	Ø
2. Typha domingensis	60	Y	OBL
3. Helianthus annua	5	N	Ø
4.			
5.			
	66 = Total Cover		
Herb Stratum (Plot size: ____)			
1. Cynodon dactylon	30	Y	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	30 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum Ø % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)
Total Number of Dominant Species Across All Strata: 3 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 66% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:
OBL species	1	x 1 = 1
FACW species	1	x 2 = 2
FAC species		x 3 =
FACU species	1	x 4 = 4
UPL species		x 5 =
Column Totals:	3 (A)	7 (B)

Prevalence Index = B/A = 2.3

Hydrophytic Vegetation Indicators:
✓ Dominance Test is >50%
✓ Prevalence Index is ≤3.0[1]
___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✓ No ____

Remarks:
Channel clogged with vegetative debris

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SOIL I-10 Corridor 1/29/13 Sampling Point: SP 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks
25 inches							Sandy loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: ___

Depth (inches): ___

Hydric Soil Present? Yes ___ No X

Remarks:

No pit dug, concrete lined channels with soil deposits on top
No apparent indicators

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- X Surface Water (A1)
- ___ High Water Table (A2)
- X Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- X Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ___ Depth (inches): ___

Water Table Present? Yes ___ No ___ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ___ Depth (inches): ___

Wetland Hydrology Present? Yes X No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

US Army Corps of Engineers Arid West – Version 2.0

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: I-10 Corridor City/County: Colton / Rialto / San Bernardino County Sampling Date: 1/29/2013
Applicant/Owner: Caltrans State: CA Sampling Point: SP 5A
Investigator(s): Krissy Day Section, Township, Range: Section 21, Township 1S, Range 4W
Landform (hillslope, terrace, etc.): Road Shoulder Local relief (concave, convex, none): Concave Slope (%): 0
Subregion (LRR): LRR-C Lat: 34.068546 Long: -117.338720 Datum: NAD83
Soil Map Unit Name: Tujunga loamy sand NWI classification: N/A
Are climatic / hydrologic conditions on the site typical for this time of year? Yes X No ____ (If no, explain in Remarks.)
Are Vegetation X, Soil X, or Hydrology X significantly disturbed? Are "Normal Circumstances" present? Yes X No ____
Are Vegetation X, Soil ____, or Hydrology ____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ____	No X	Is the Sampled Area within a Wetland? Yes ____ No X
Hydric Soil Present?	Yes ____	No X	
Wetland Hydrology Present?	Yes ____	No X	

Remarks: Road shoulder, highly disturbed

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: ____)	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	____ = Total Cover		
Sapling/Shrub Stratum (Plot size: ____)			
1. N/A			
2.			
3.			
4.			
5.			
	____ = Total Cover		
Herb Stratum (Plot size: 100 Ft²)			
1. Salsola tragus	40	Y	Ø
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	40 = Total Cover		
Woody Vine Stratum (Plot size: ____)			
1. N/A			
2.			
	____ = Total Cover		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust ____

Dominance Test worksheet:
Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)
Total Number of Dominant Species Across All Strata: 1 (B)
Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by: ?
OBL species ____	x 1 = ____
FACW species ____	x 2 = ____
FAC species ____	x 3 = ____
FACU species ____	x 4 = ____
UPL species ____	x 5 = ____
Column Totals: ____ (A)	____ (B)

Prevalence Index = B/A = ____

Hydrophytic Vegetation Indicators:
- ___ Dominance Test is >50%
- ___ Prevalence Index is ≤3.0[1]
- ___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)
- ___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ____ No X

Remarks:

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SOIL

Sampling Point: SP5A

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[2]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (LRR C)
- ___ 1 cm Muck (A9) (LRR D)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (LRR C)
- ___ 2 cm Muck (A10) (LRR B)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: _____

Depth (inches): _____

Hydric Soil Present? Yes _____ No X

Remarks: No pit dug – Fill next to roadway
No indicators apparent

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (Nonriverine)
- ___ Sediment Deposits (B2) (Nonriverine)
- ___ Drift Deposits (B3) (Nonriverine)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (Riverine)
- ___ Sediment Deposits (B2) (Riverine)
- ___ Drift Deposits (B3) (Riverine)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes _____ No _____ Depth (inches): _____

Water Table Present? Yes _____ No _____ Depth (inches): _____

Saturation Present? (includes capillary fringe) Yes _____ No _____ Depth (inches): _____

Wetland Hydrology Present? Yes _____ No X

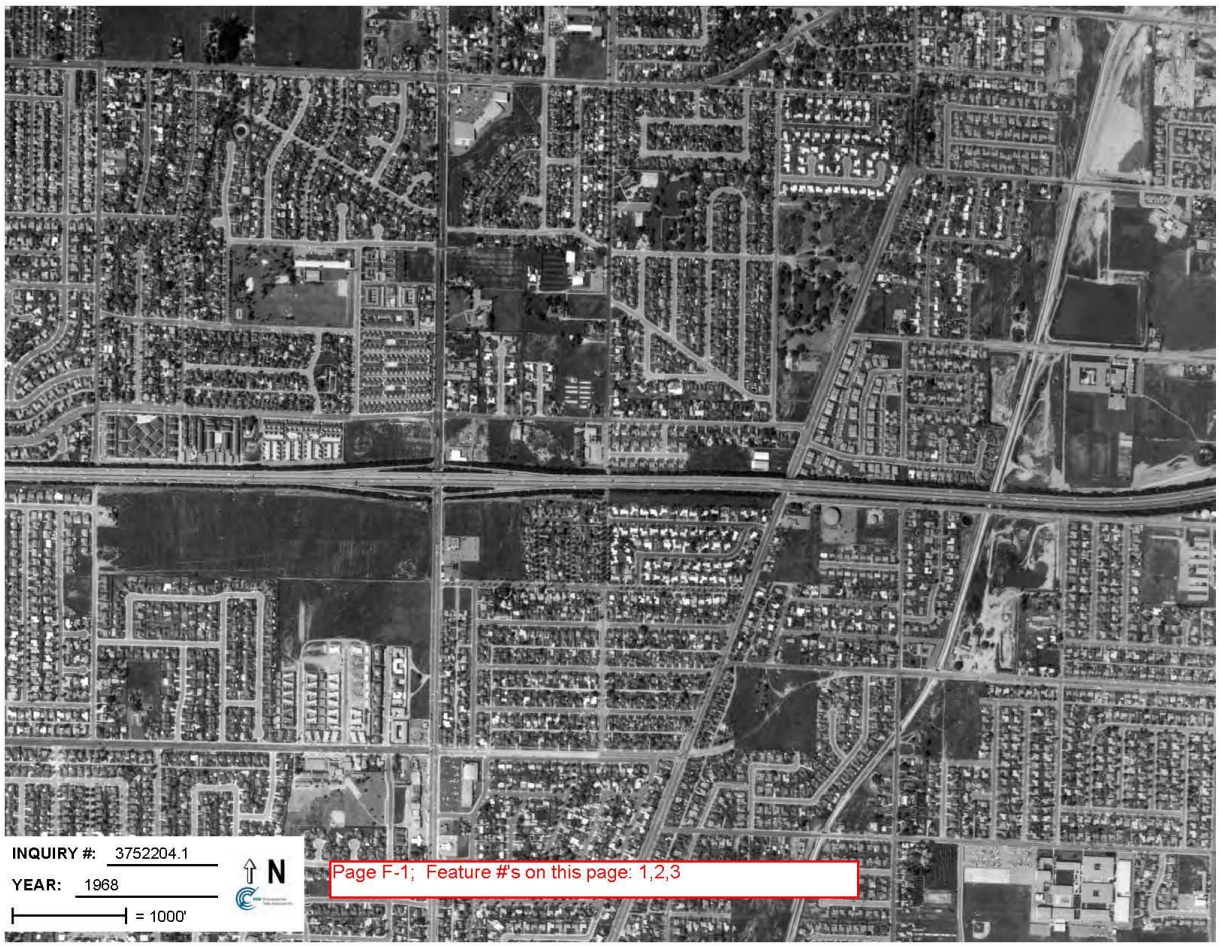
Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: No indicators present

US Army Corps of Engineers

Arid West – Version 2.0

Appendix F: Historic Photographs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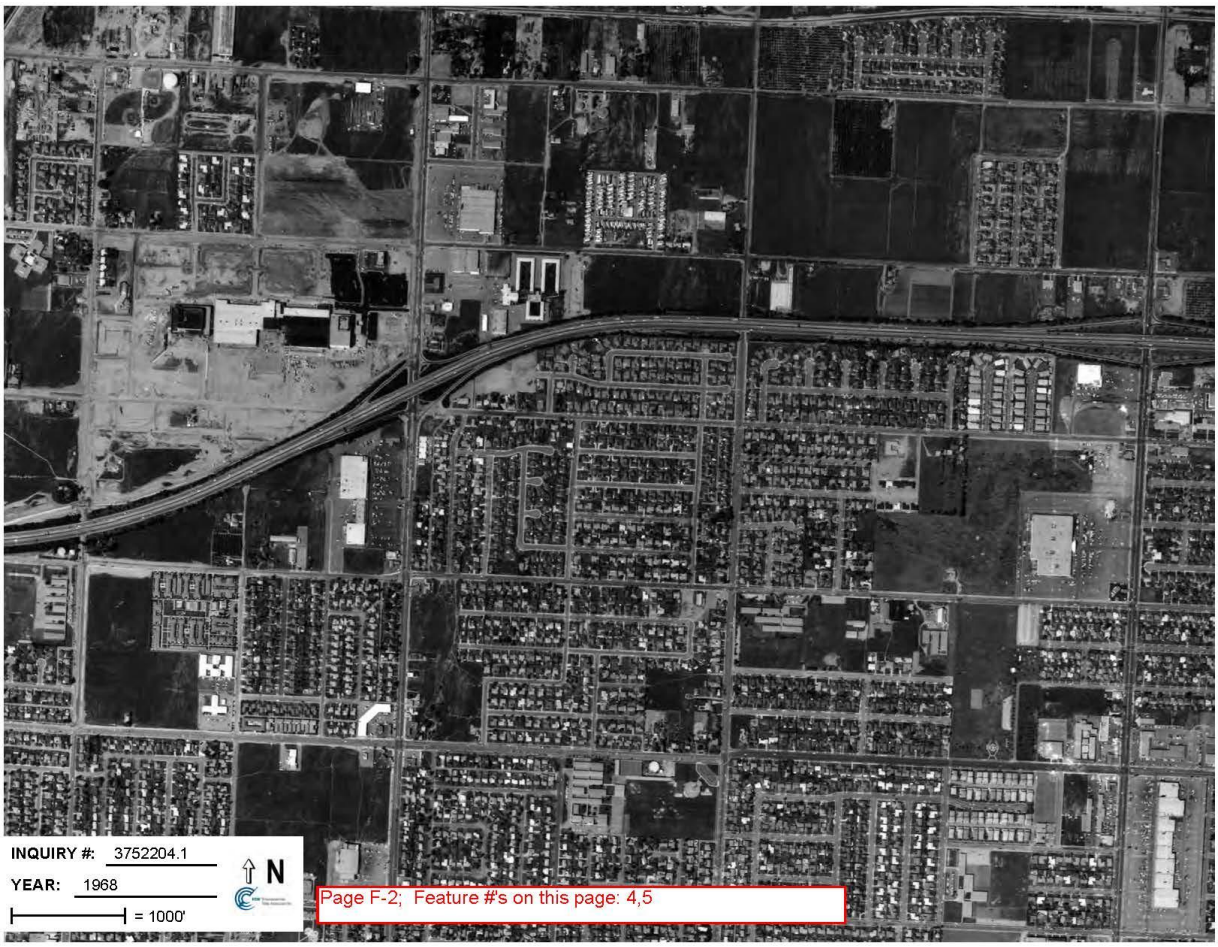
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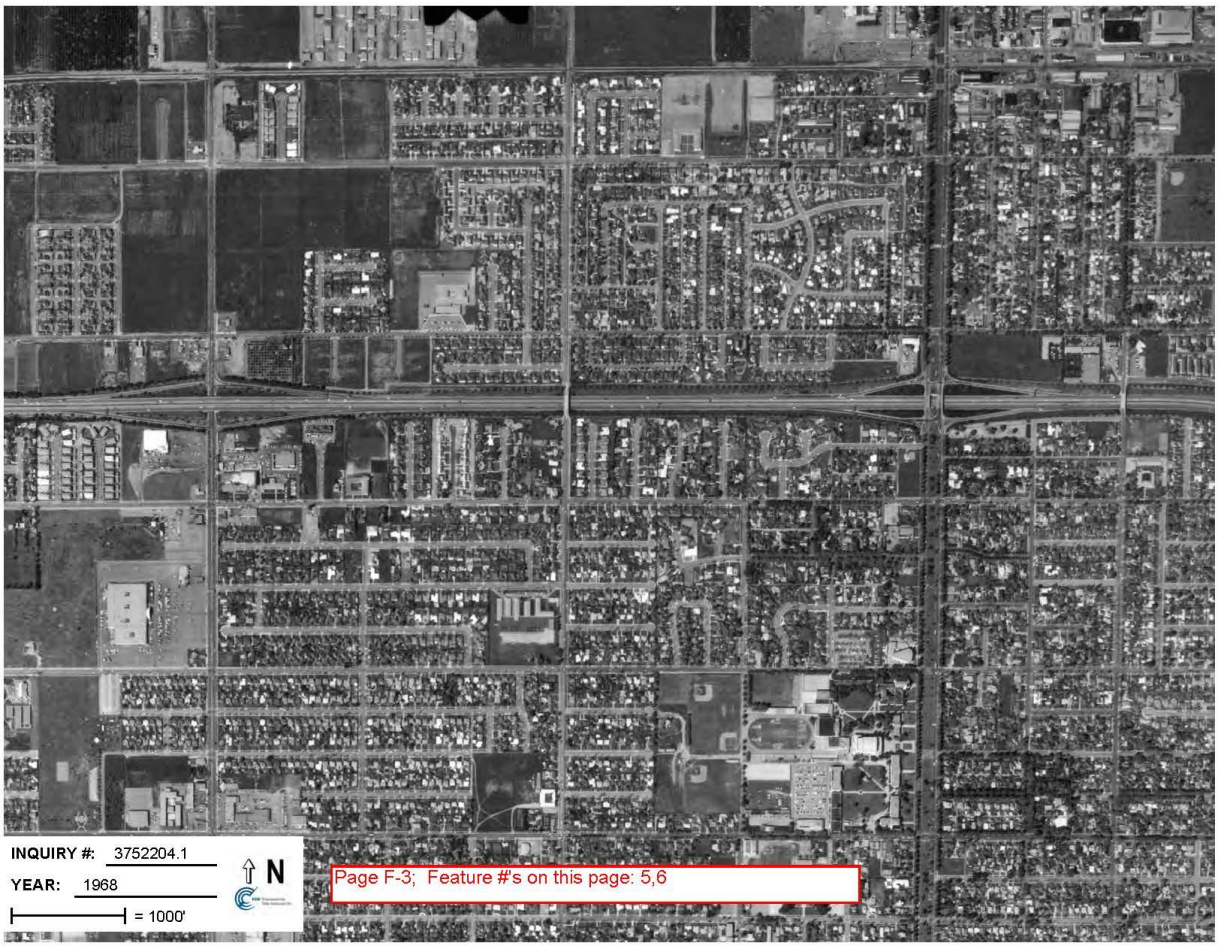
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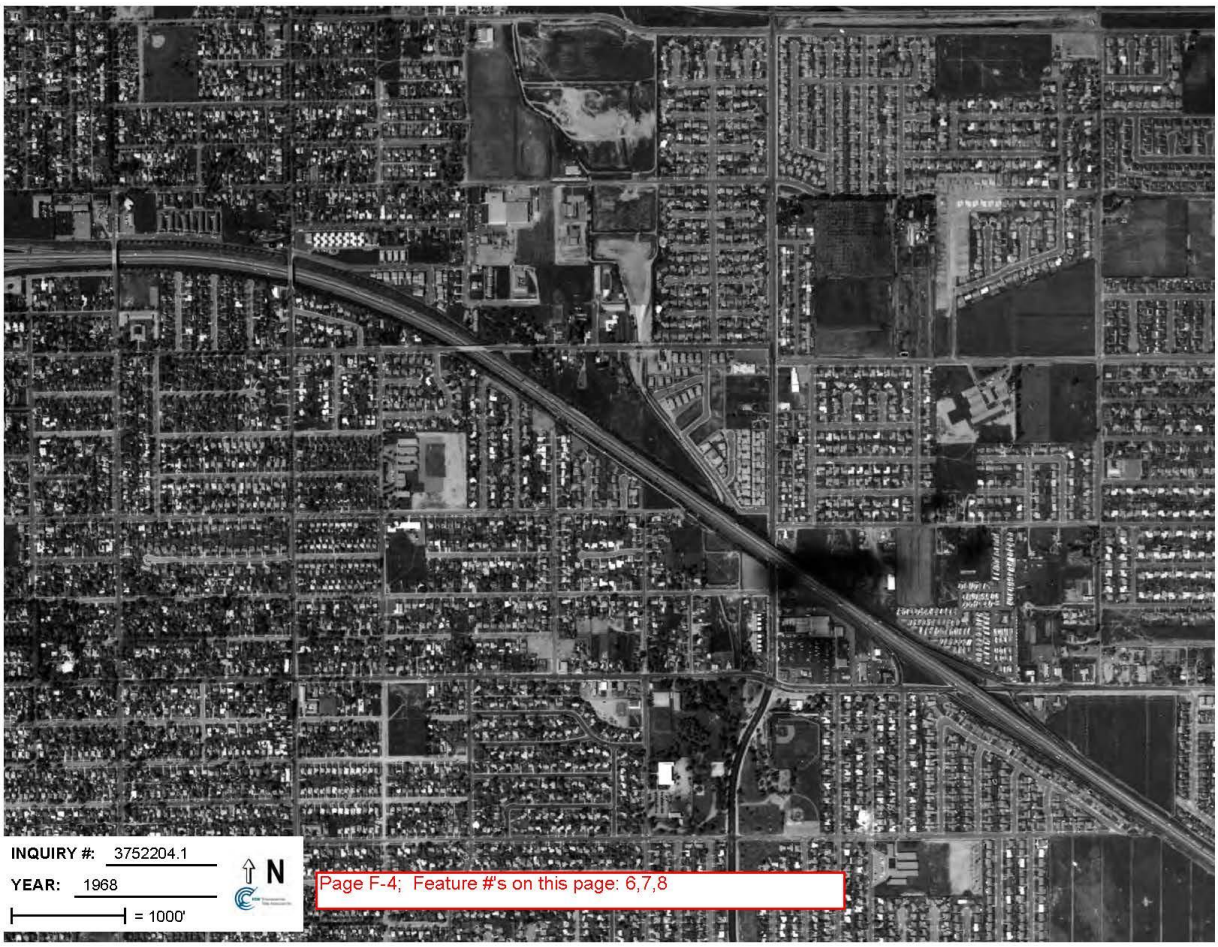
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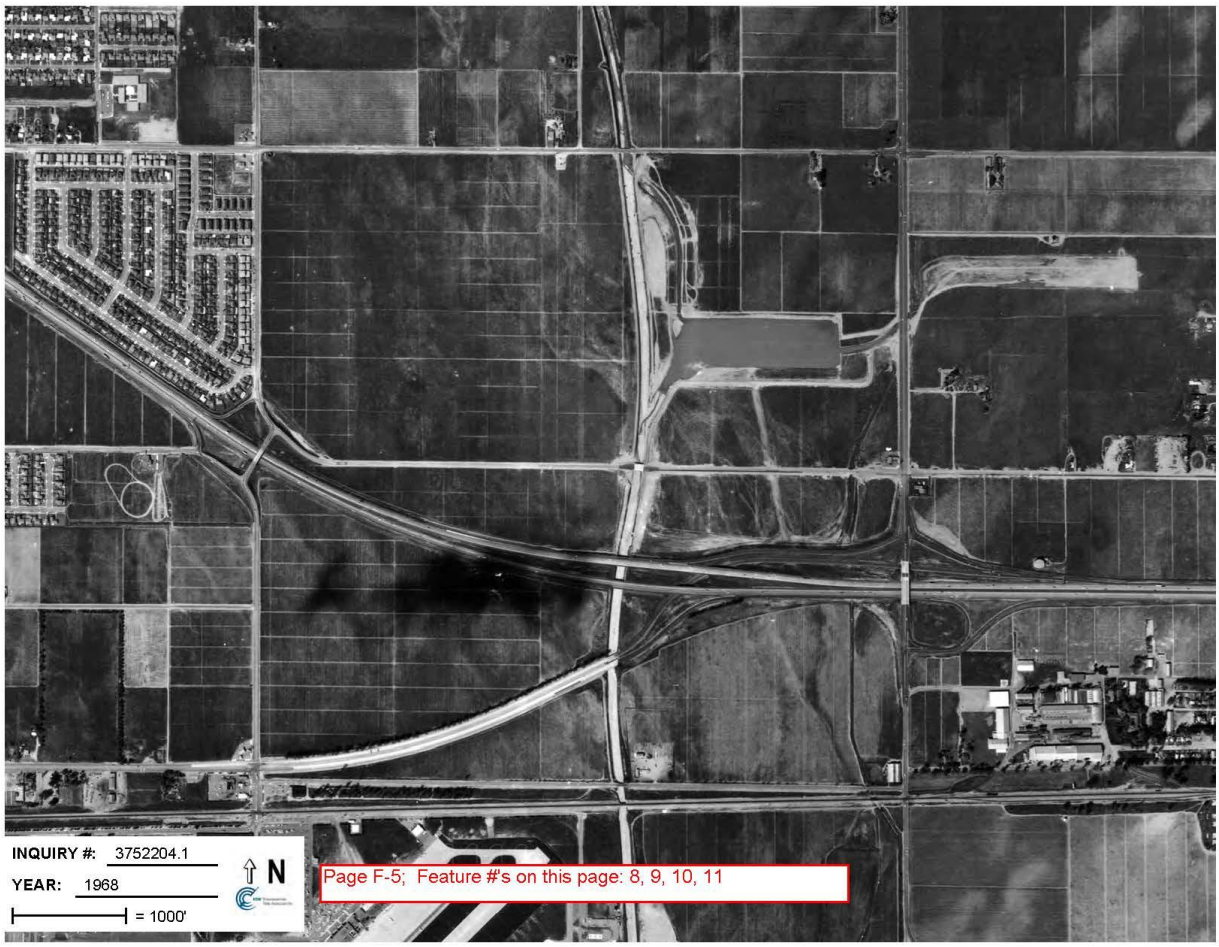
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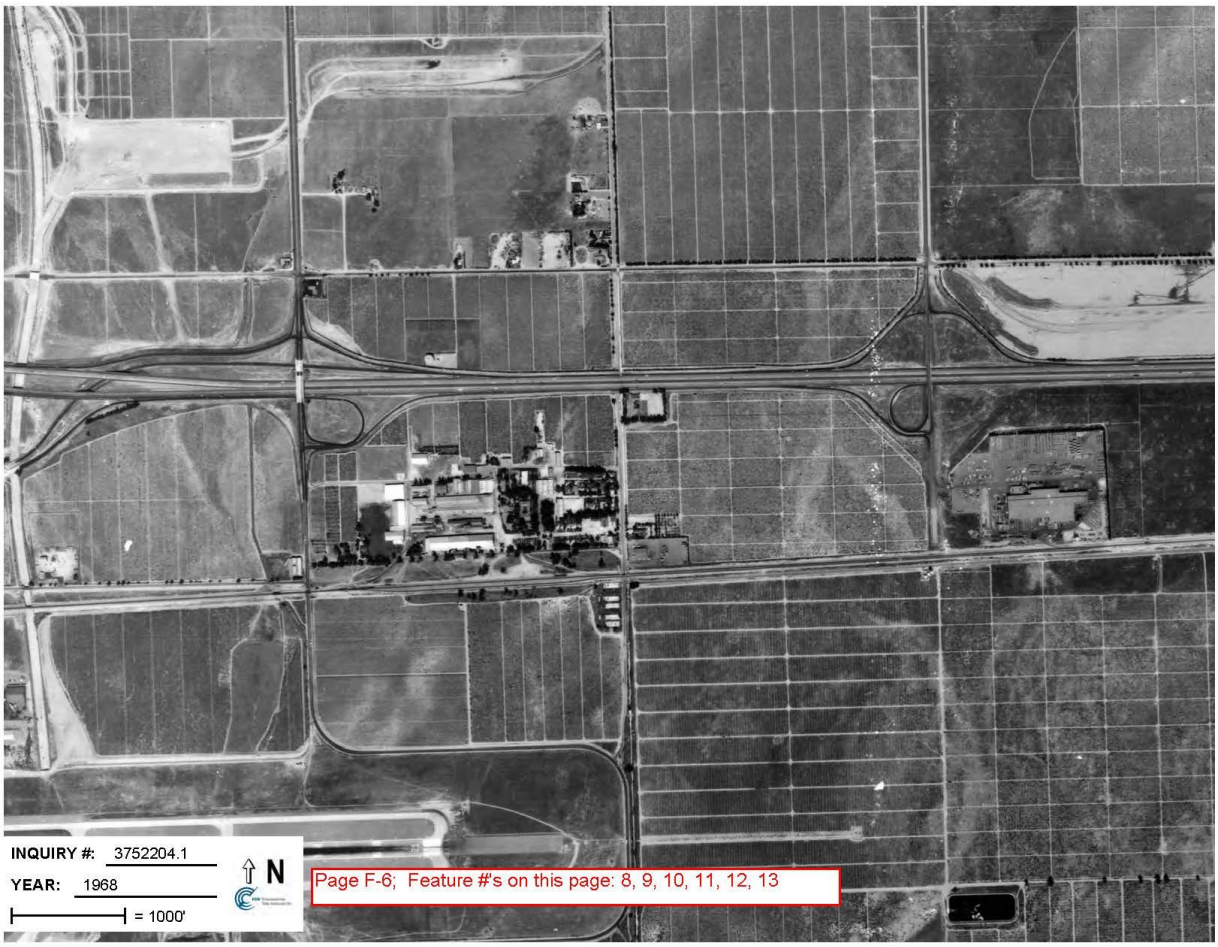
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Page F-6; Feature #'s on this page: 8, 9, 10, 11, 12, 13

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Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1966

Job Number: 646884

Original Scale of Photo: 1:24,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

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Photo Year: 1966

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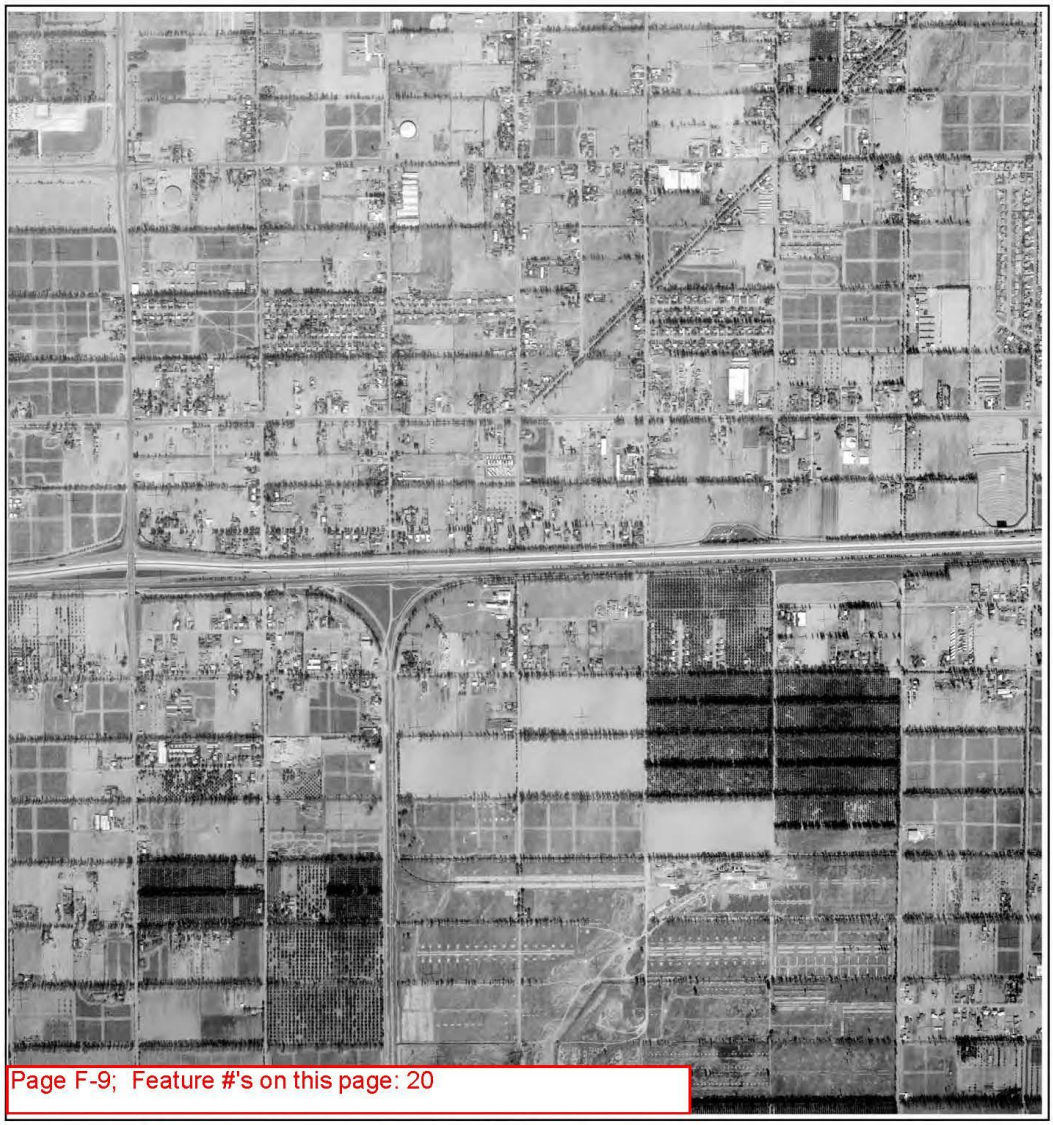
Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1966



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Coverage Area Approximately 1 Mile Radius from Subject Site

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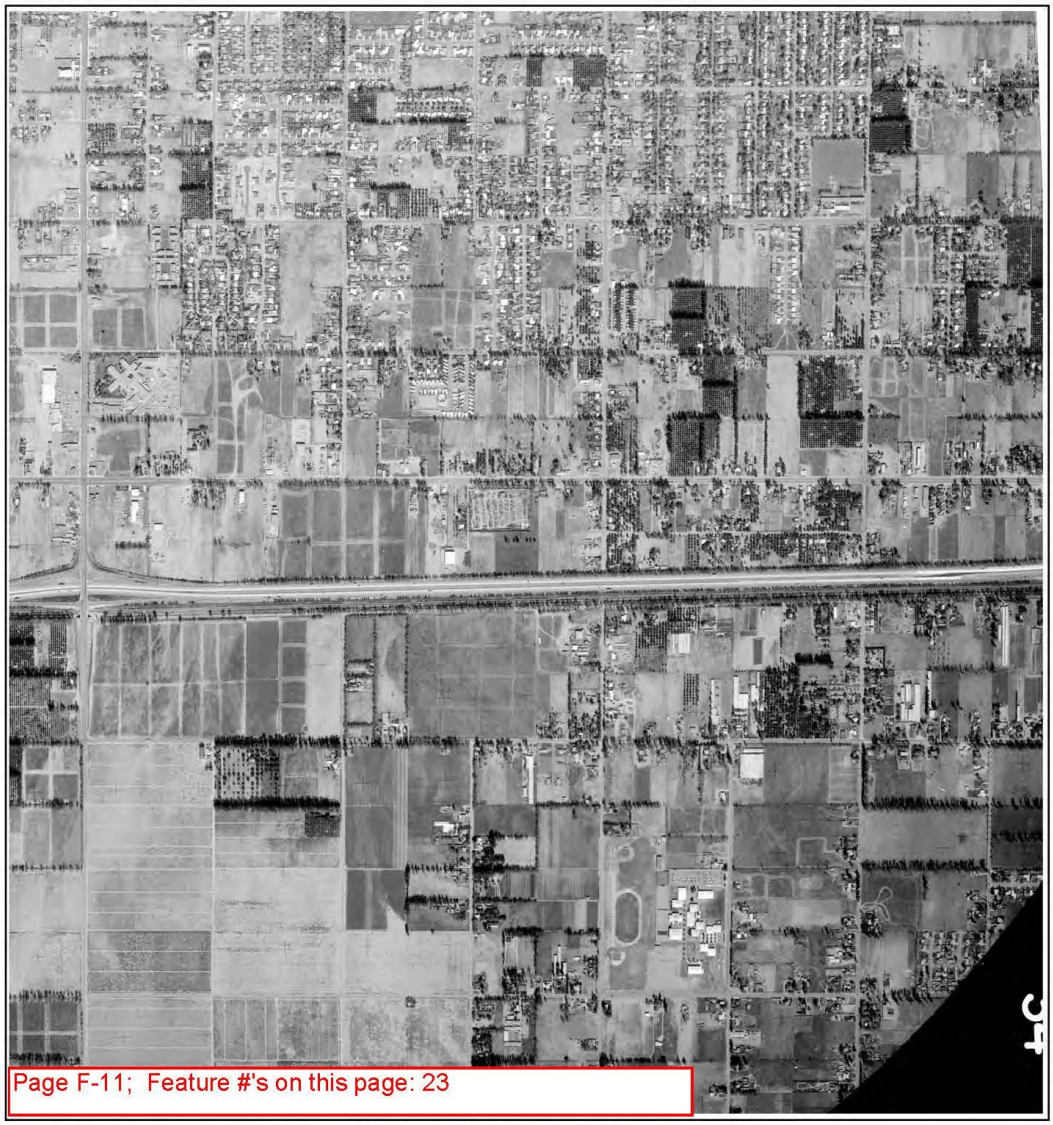

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Historical Aerial Photo

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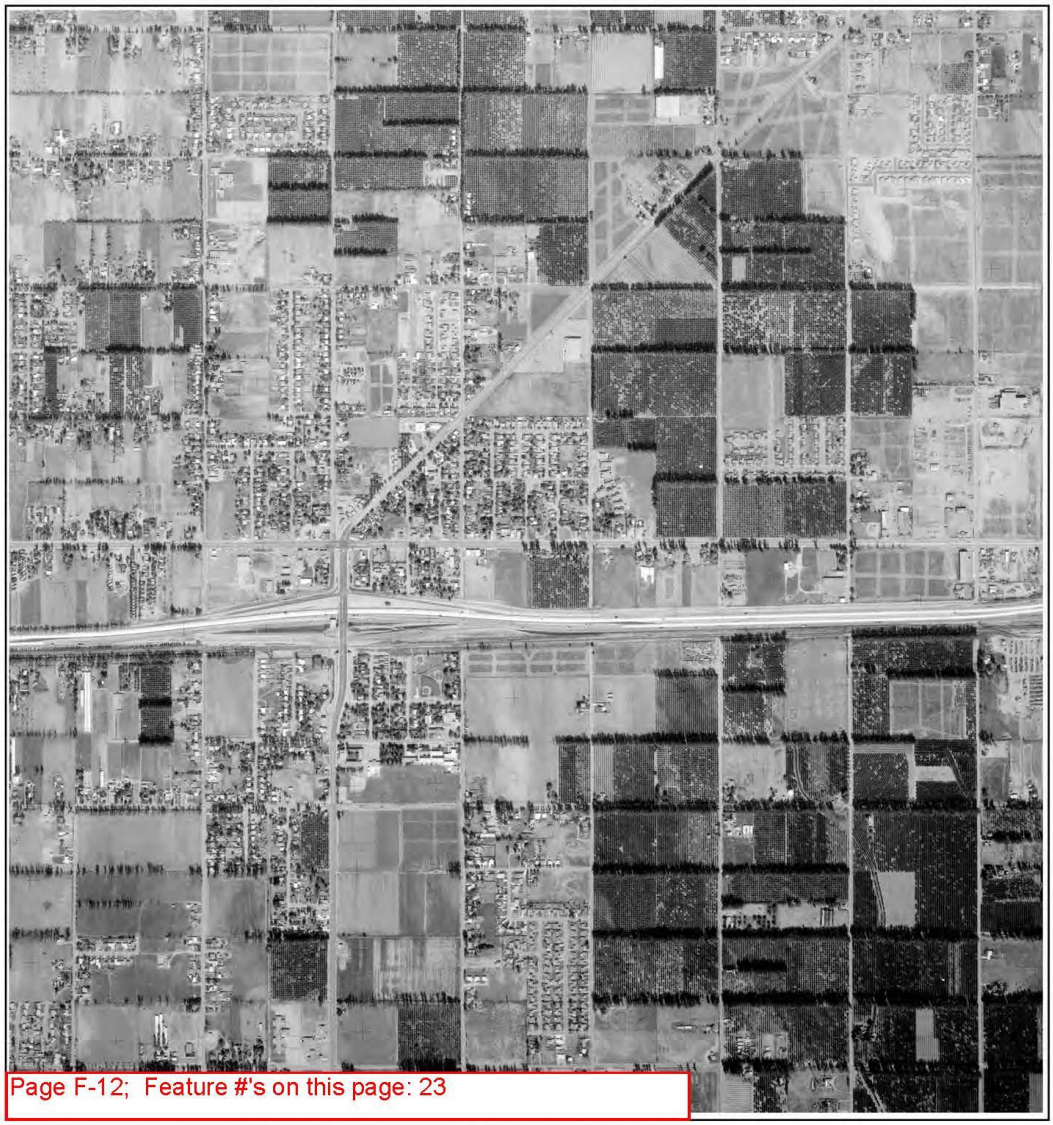
Photo Year: 1966



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Page F-13; Feature #'s on this page: 24, 25, 26, 27, 28, 29, 30, 31

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≈ 1,500 ft

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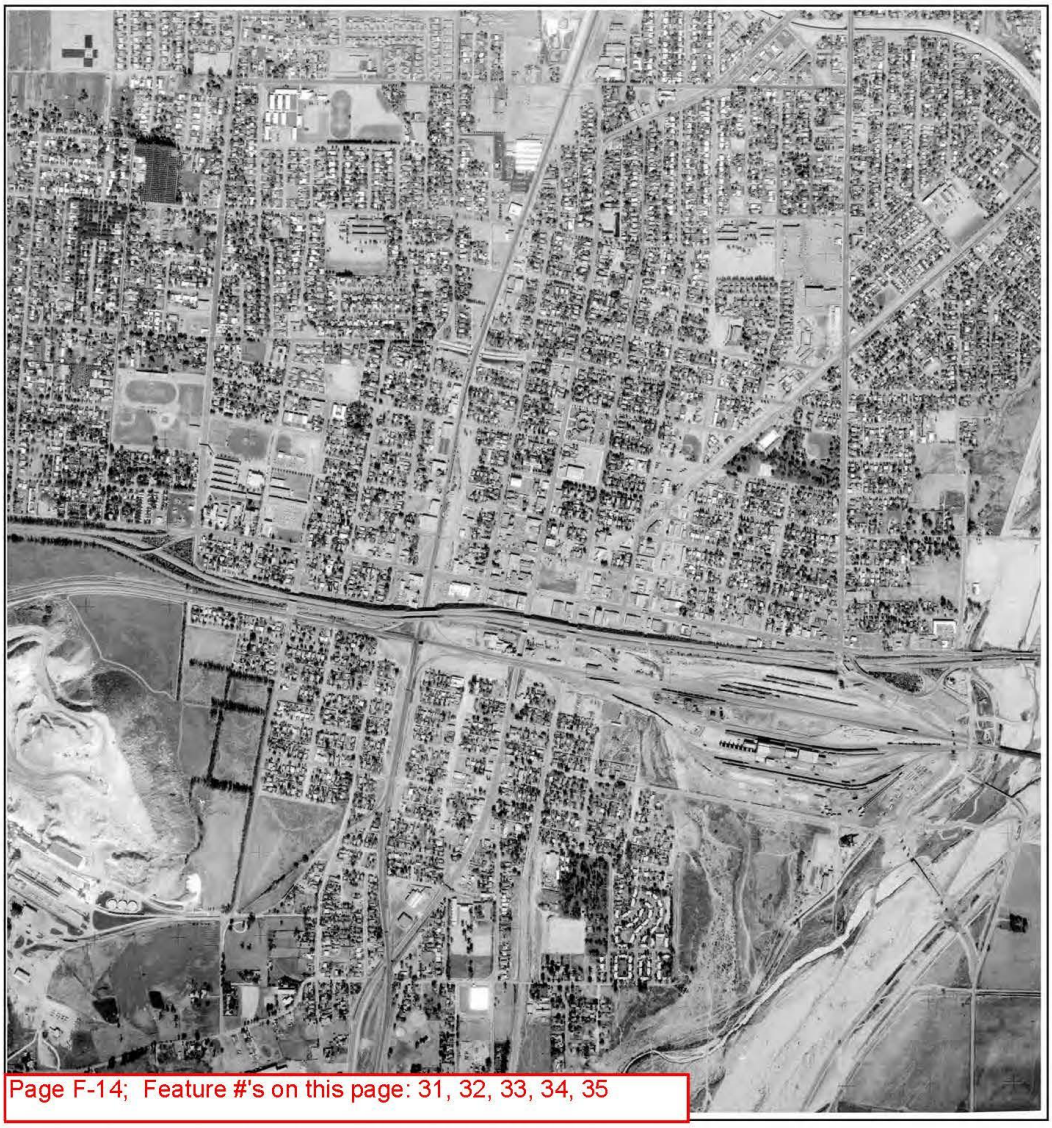
Site: Ontario to Redlands, CA 92324

Photo Year: 1966



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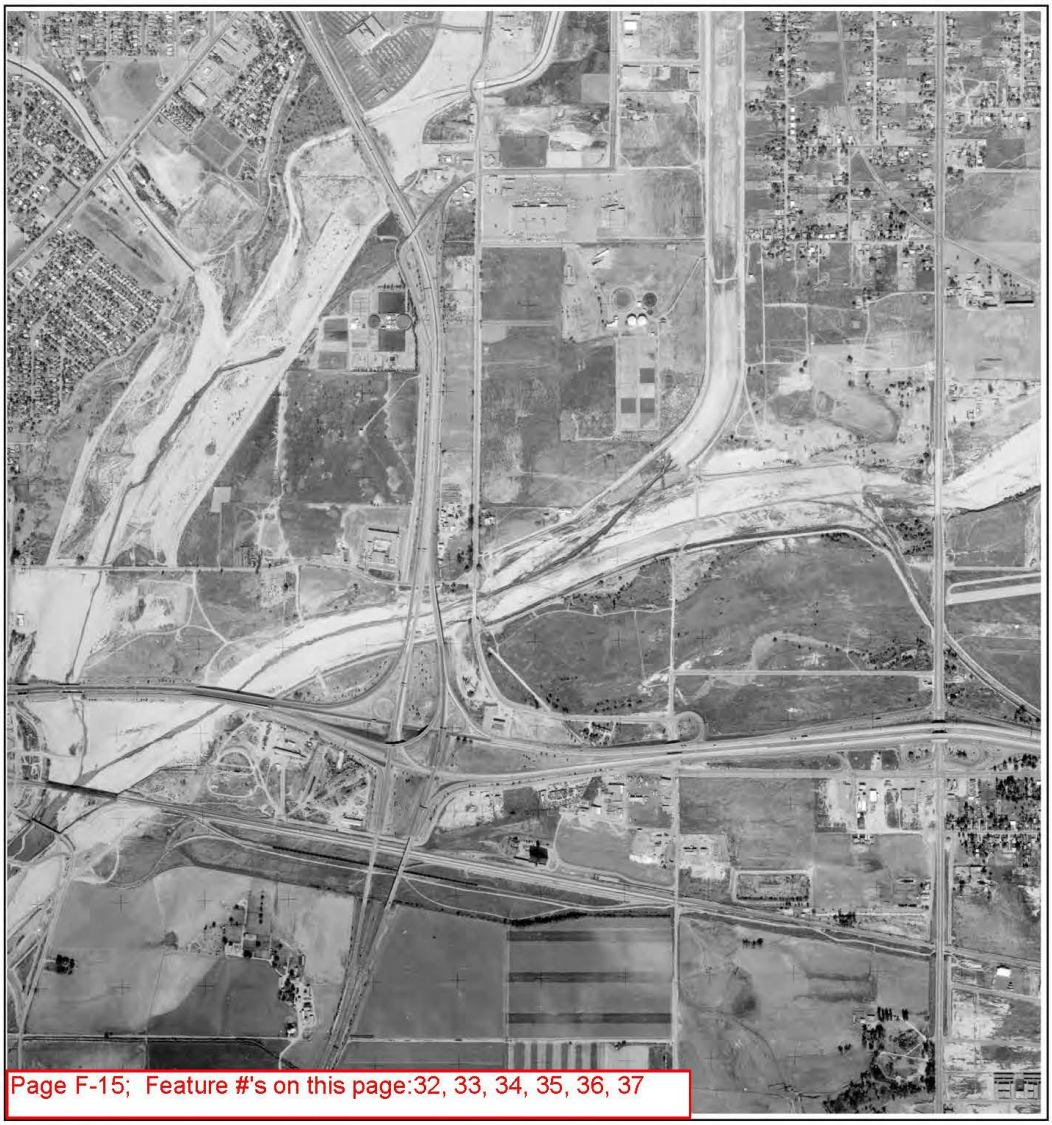

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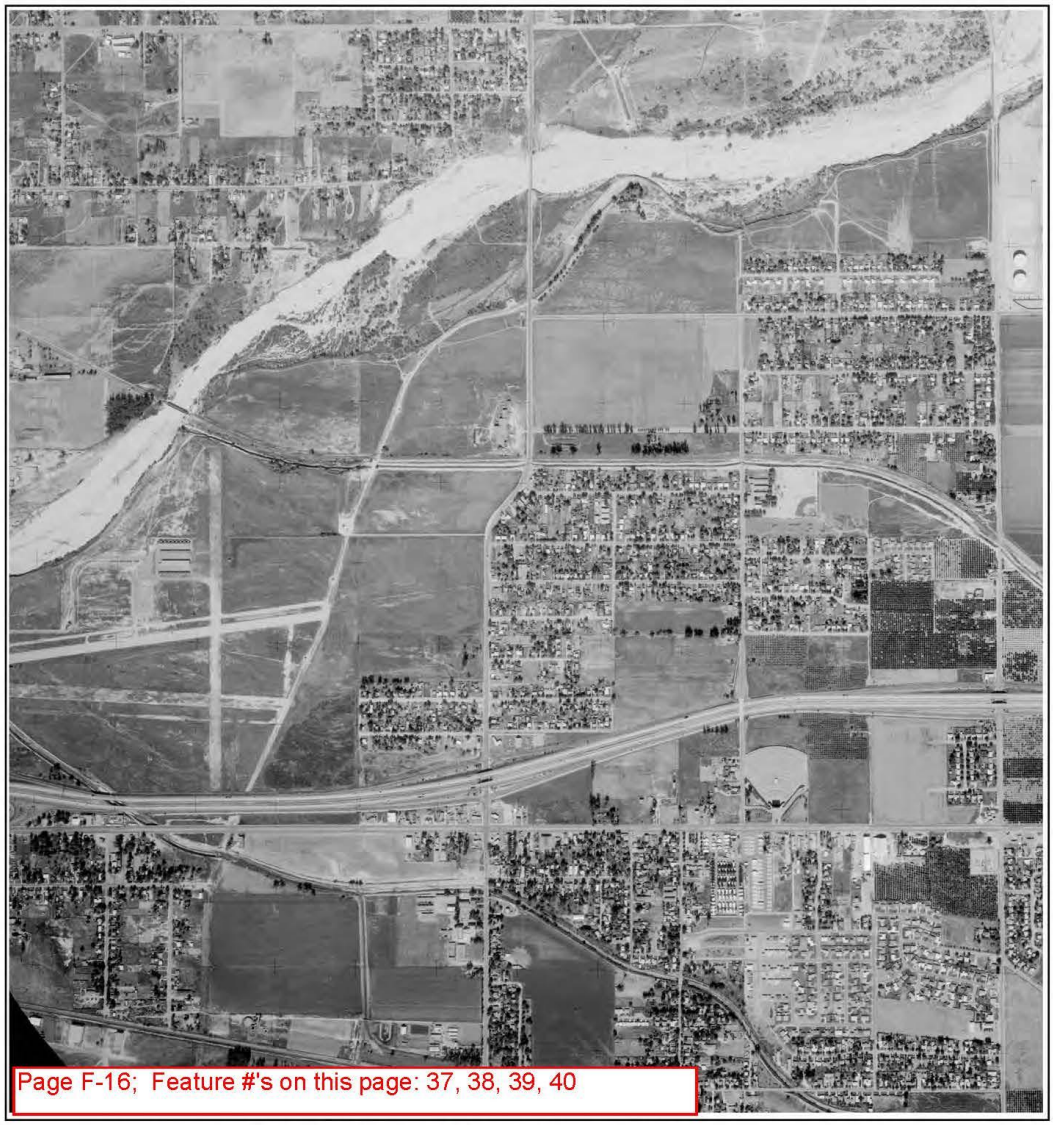
Photo Year: 1966



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Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1966

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Photo Year: 1966

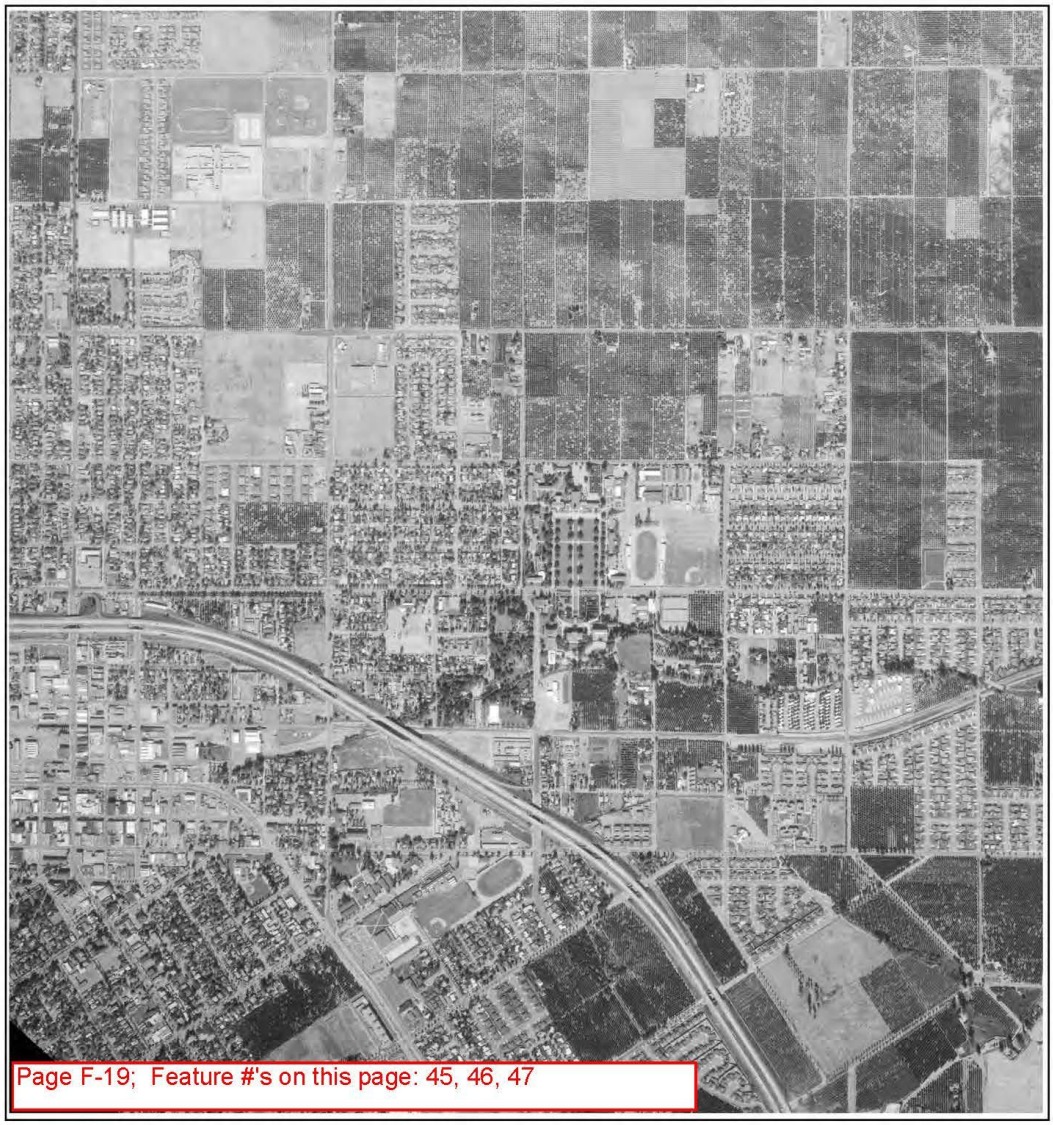

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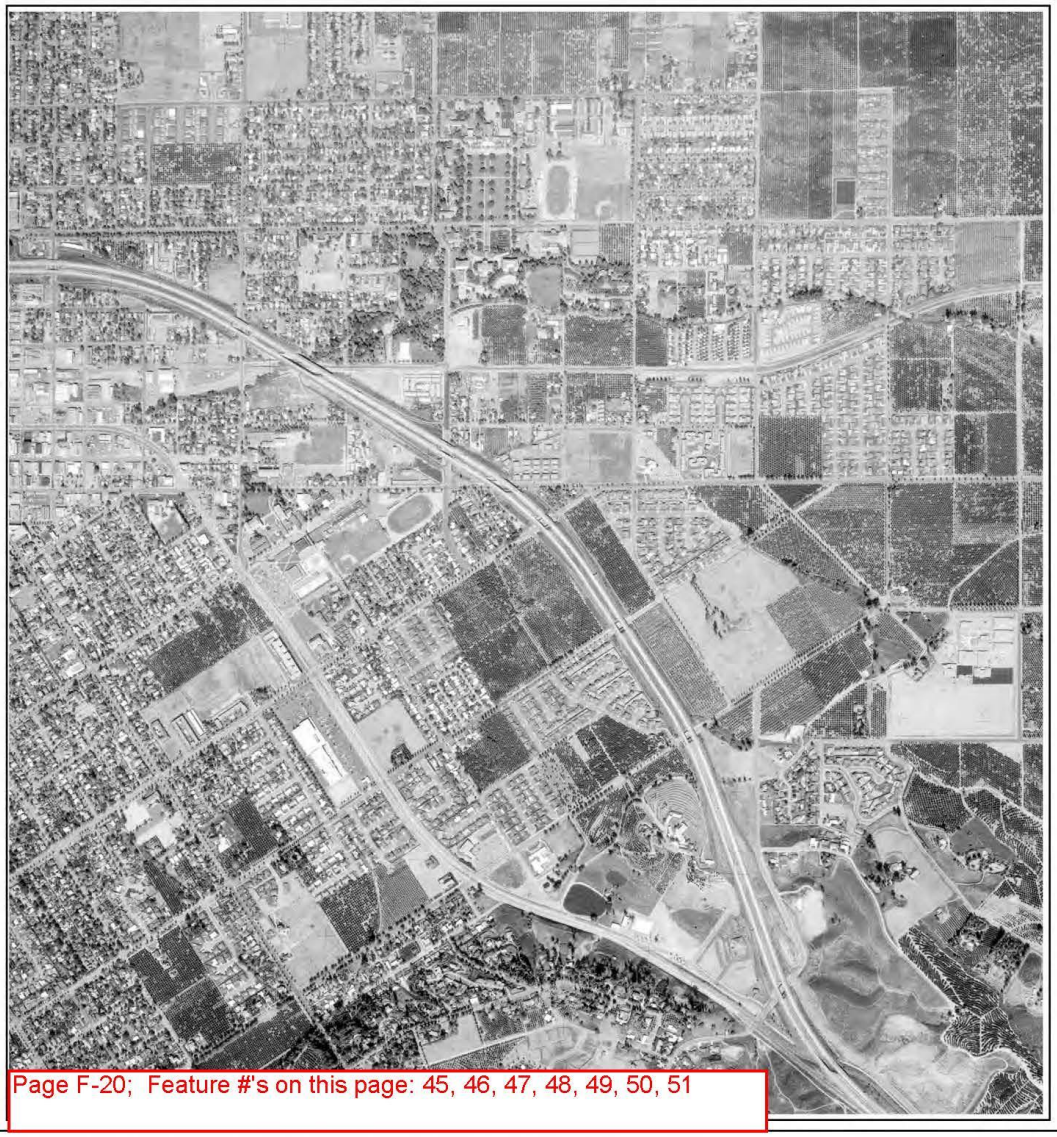
Photo Year: 1966



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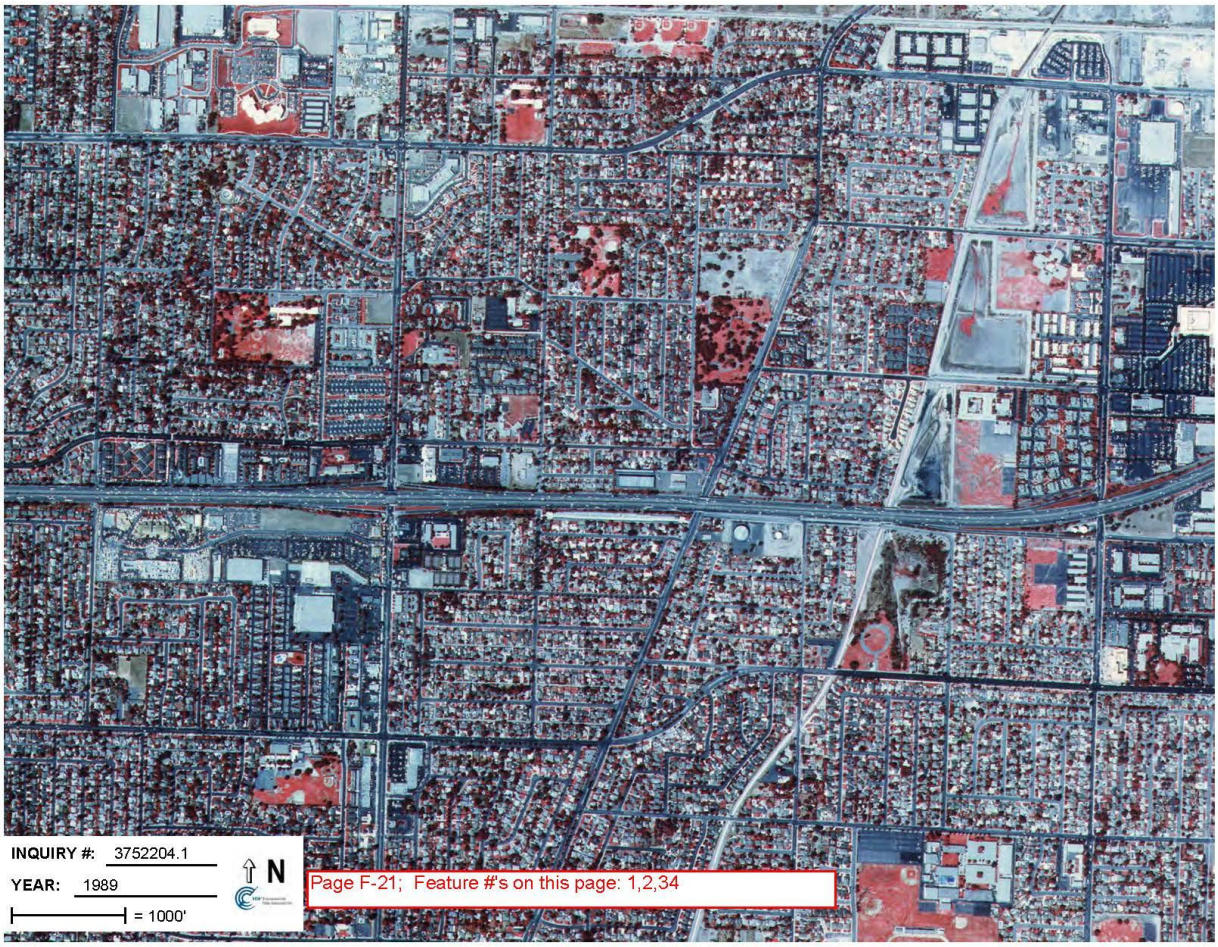
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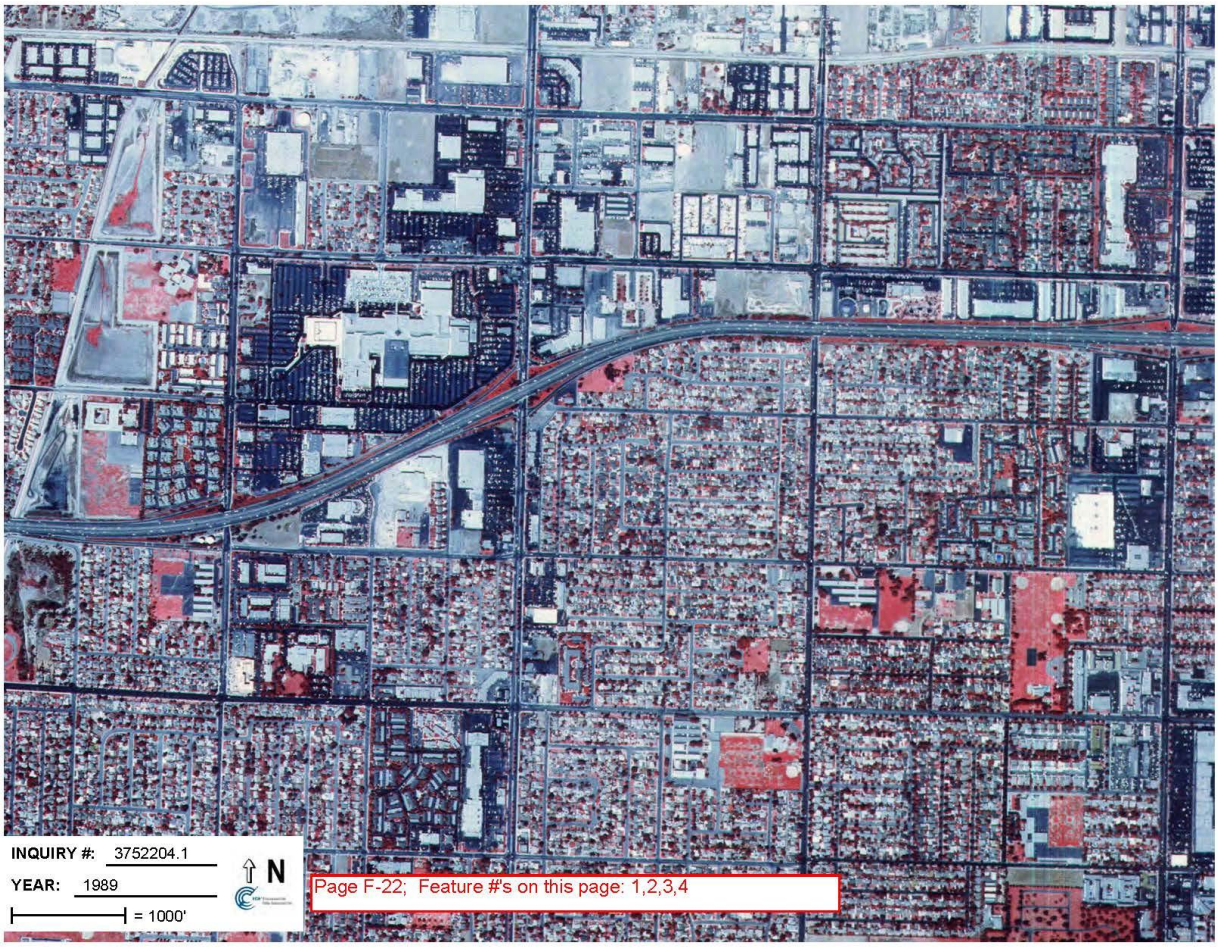
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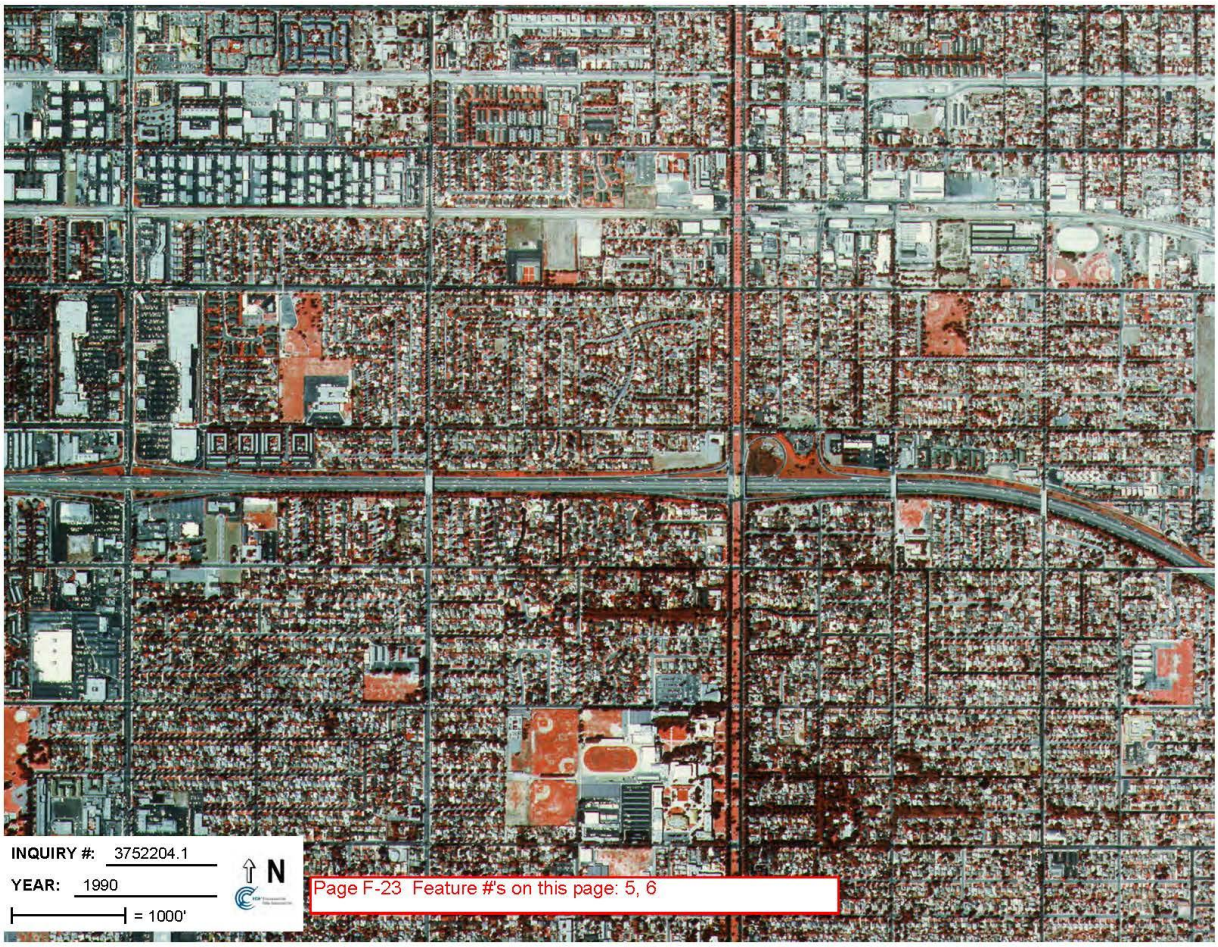
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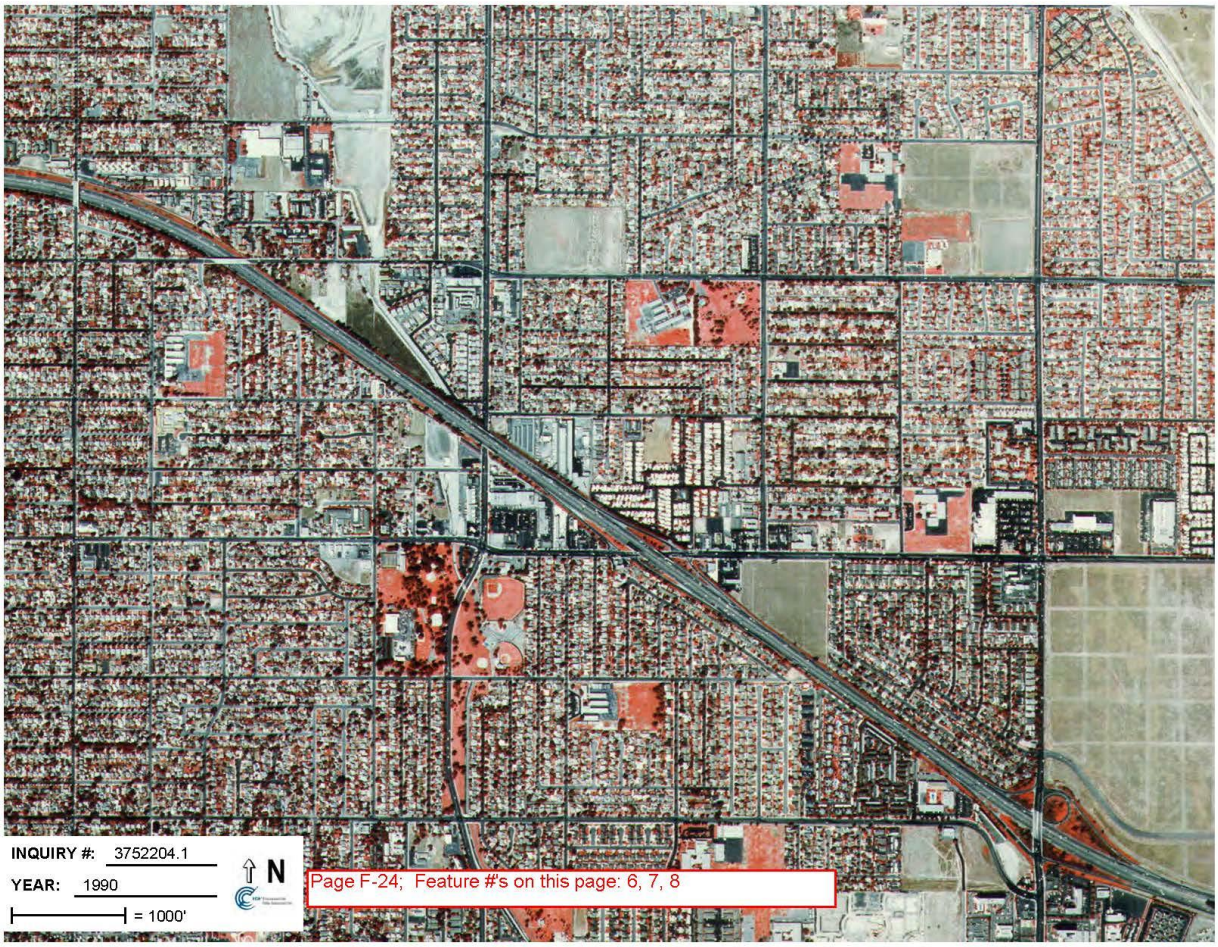
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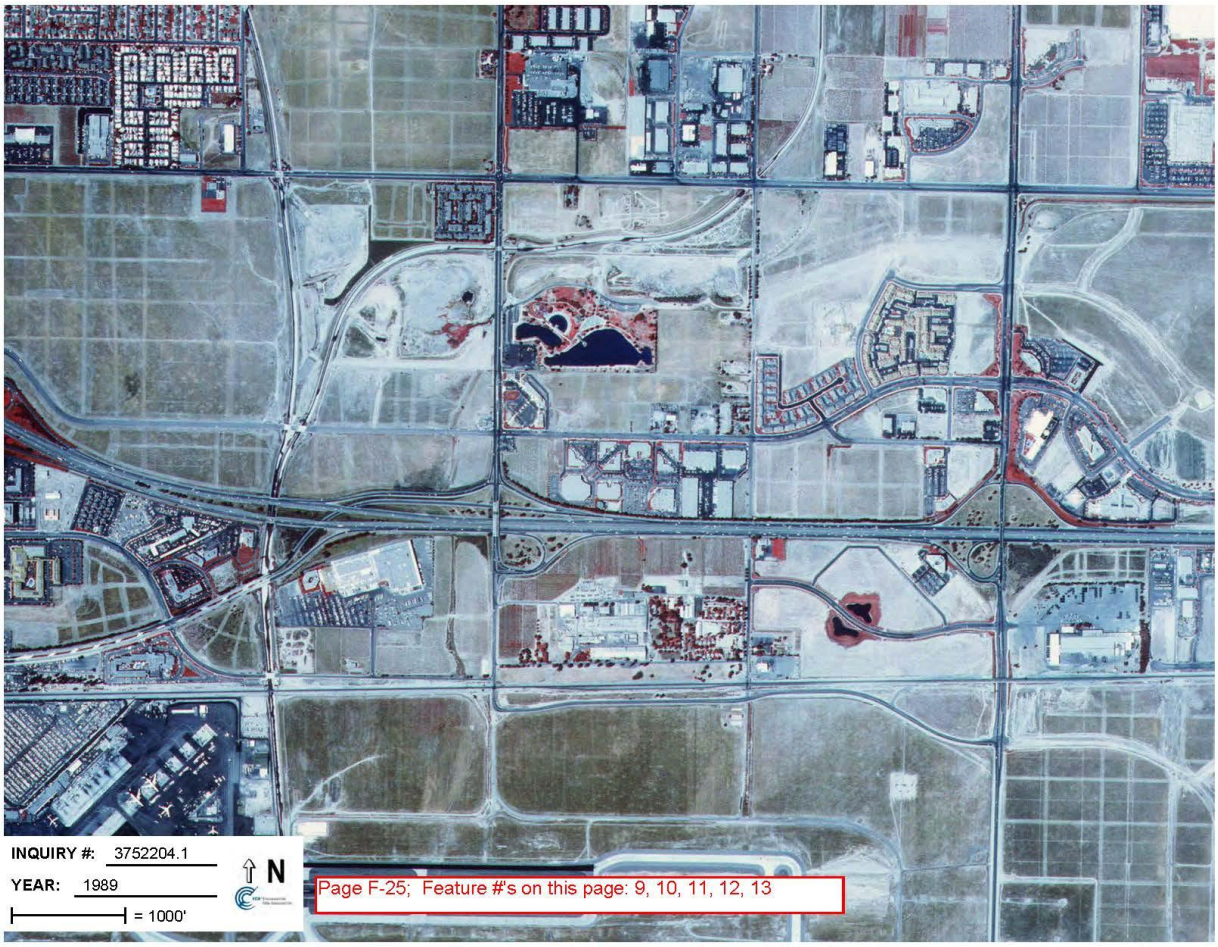
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Photo Year: 1980

Job Number: 646884

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Coverage Area Approximately 1 Mile Radius from Subject Site

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Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

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Site: Ontario to Redlands, CA 92324

Photo Year: 1980

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Historical Aerial Photo

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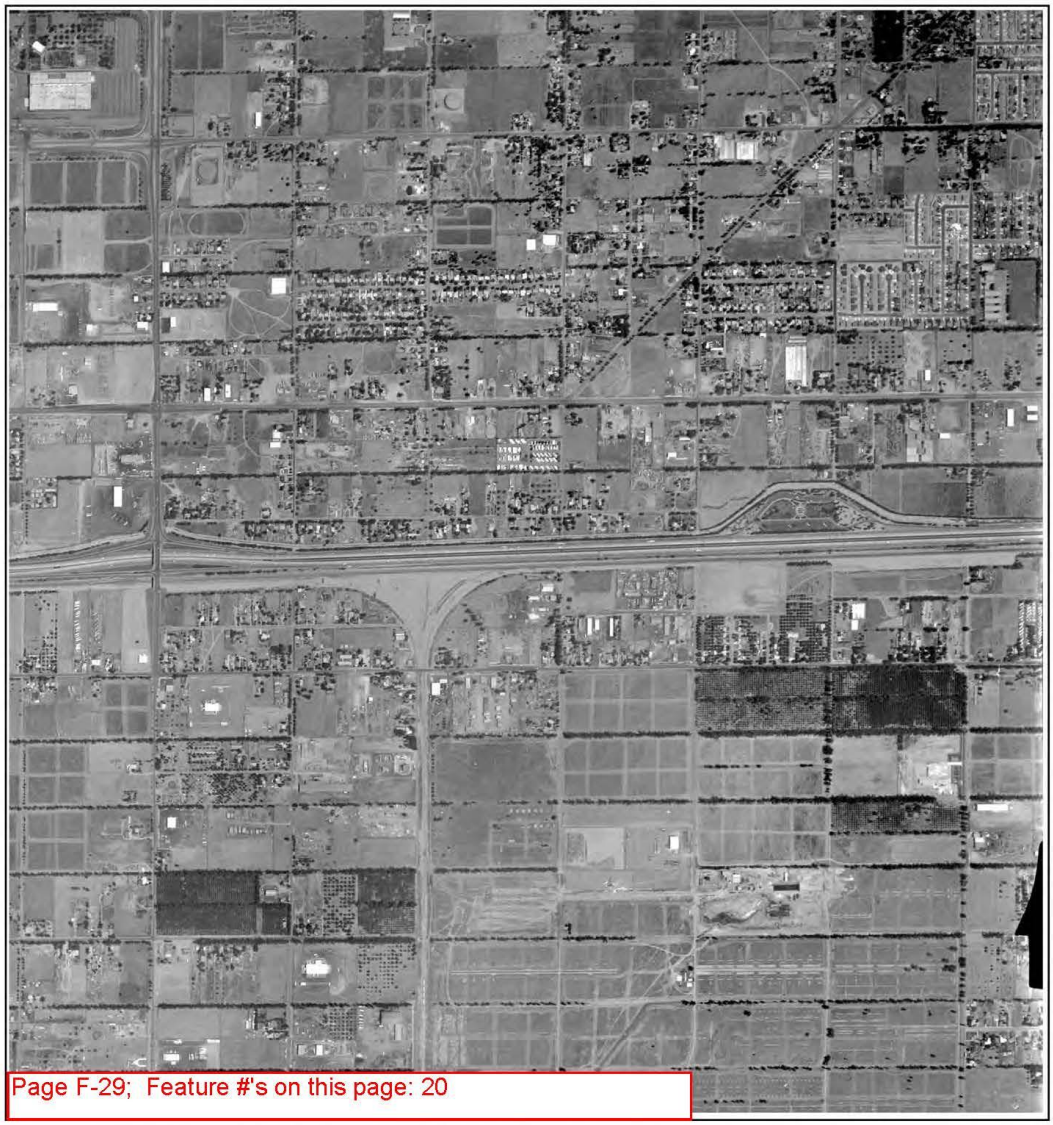
Photo Year: 1980



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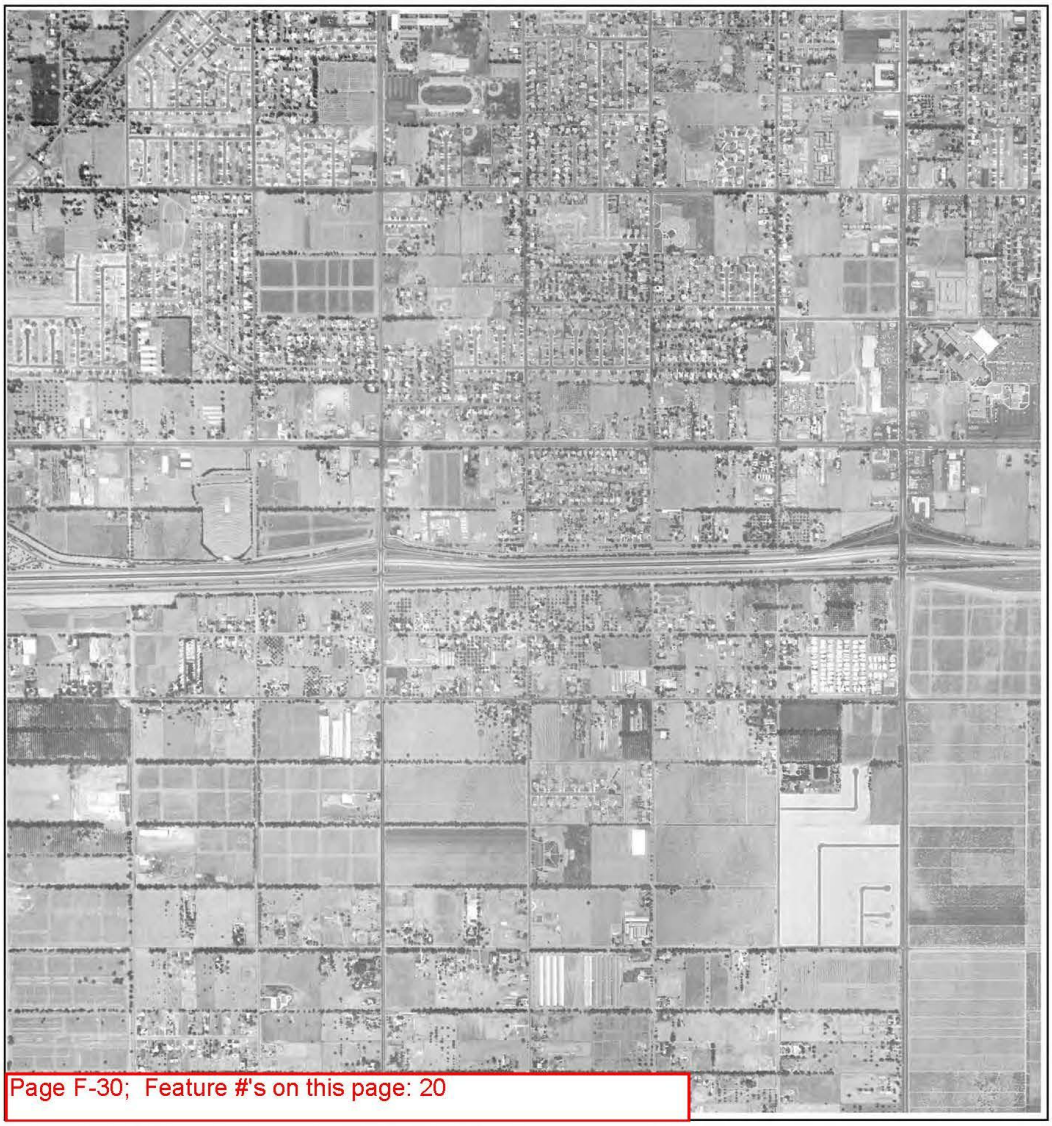
Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980



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Coverage Area Approximately 1 Mile Radius from Subject Site

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Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

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Coverage Area Approximately 1 Mile Radius from Subject Site

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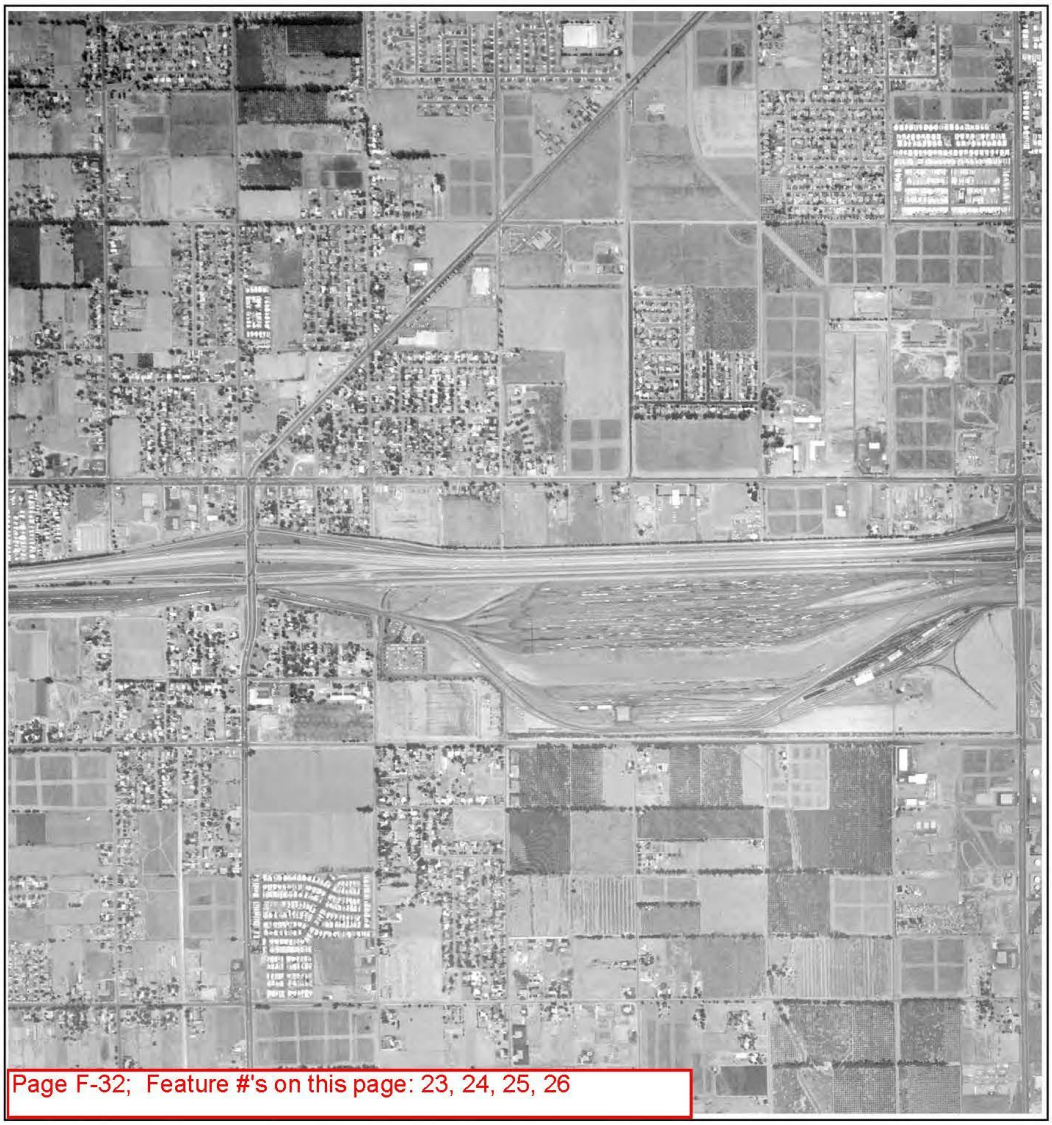
Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980



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Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

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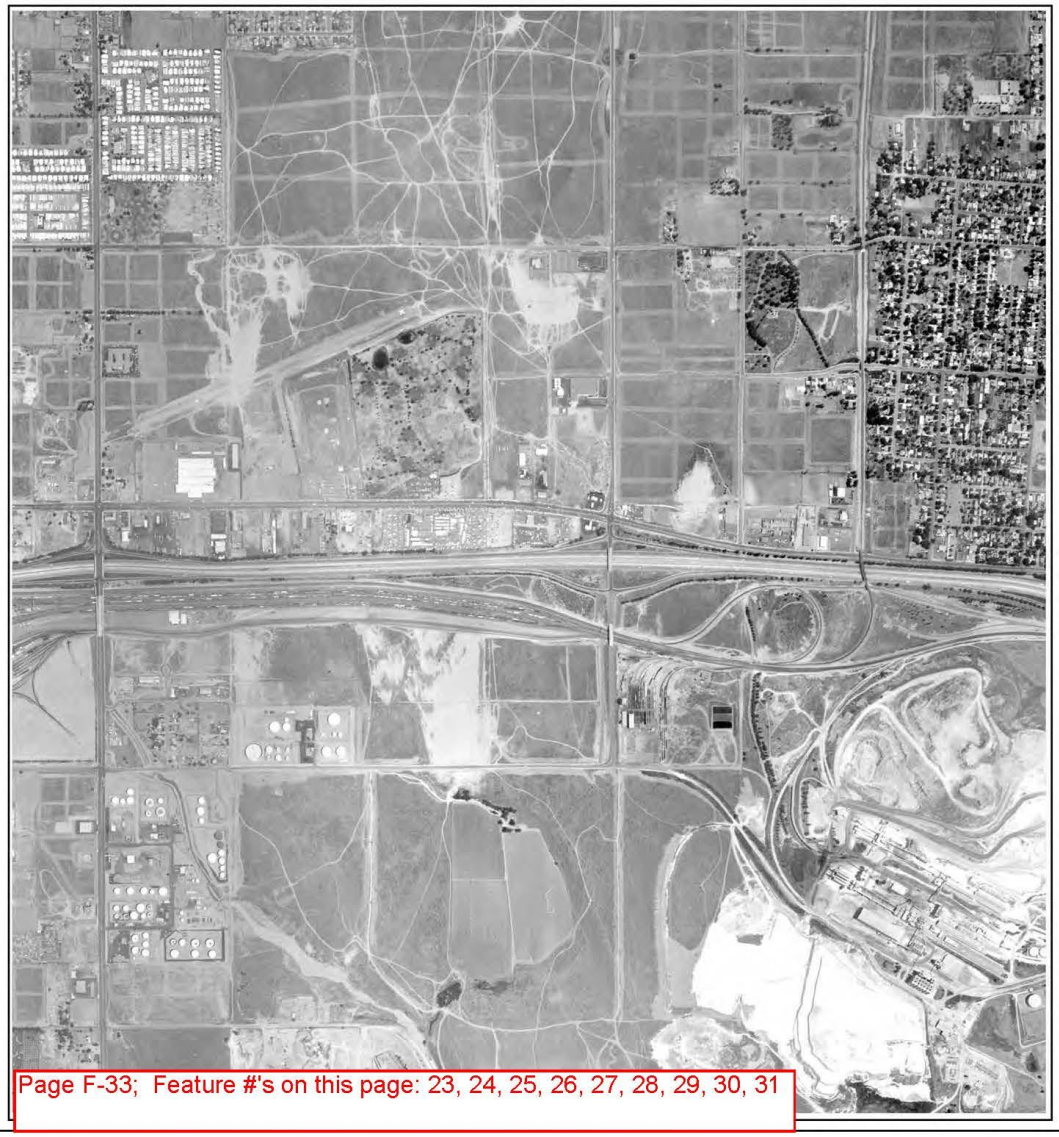
Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980



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≈ 1,500 ft

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Site: Ontario to Redlands, CA 92324

Photo Year: 1980

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

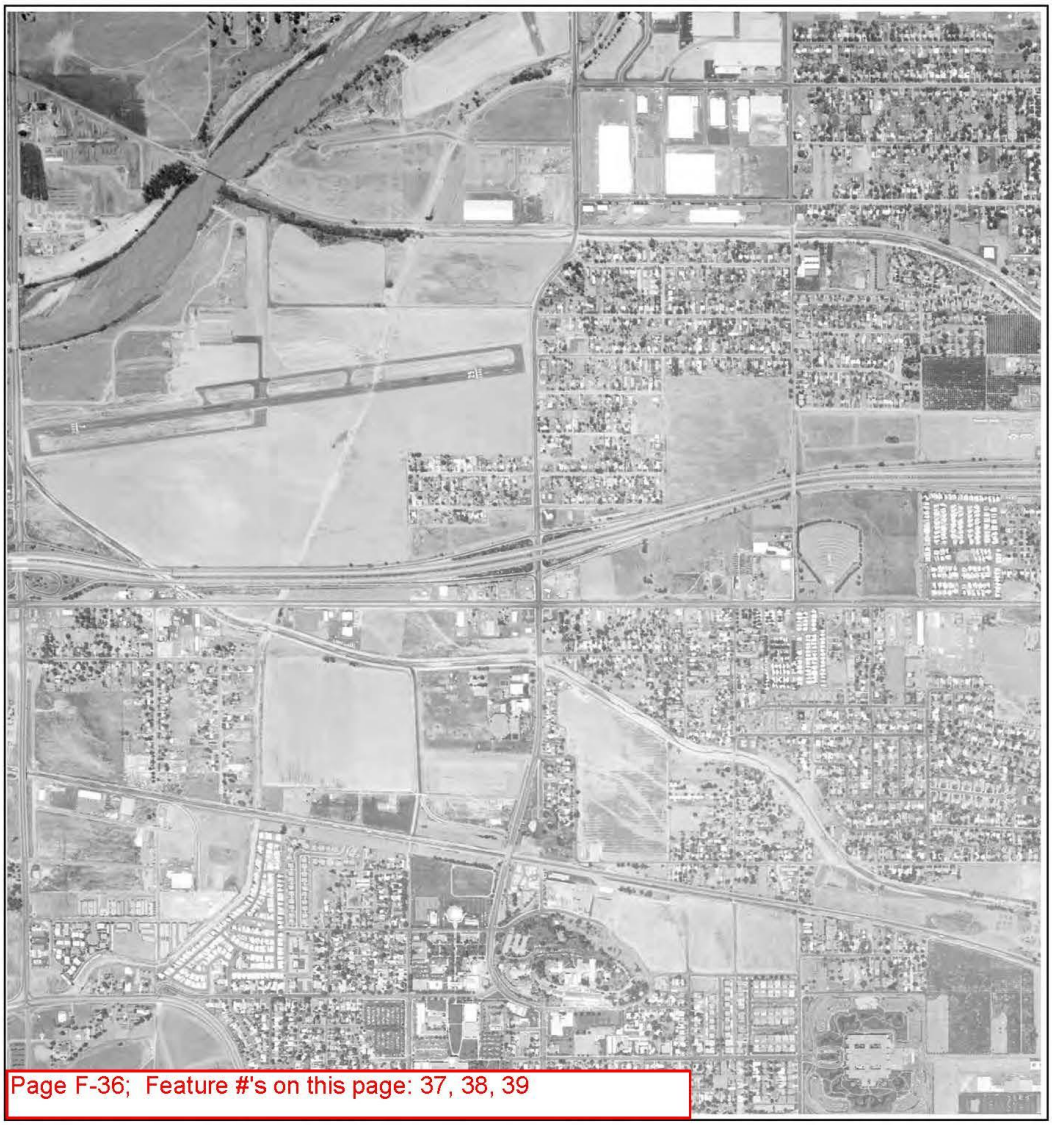
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980



Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

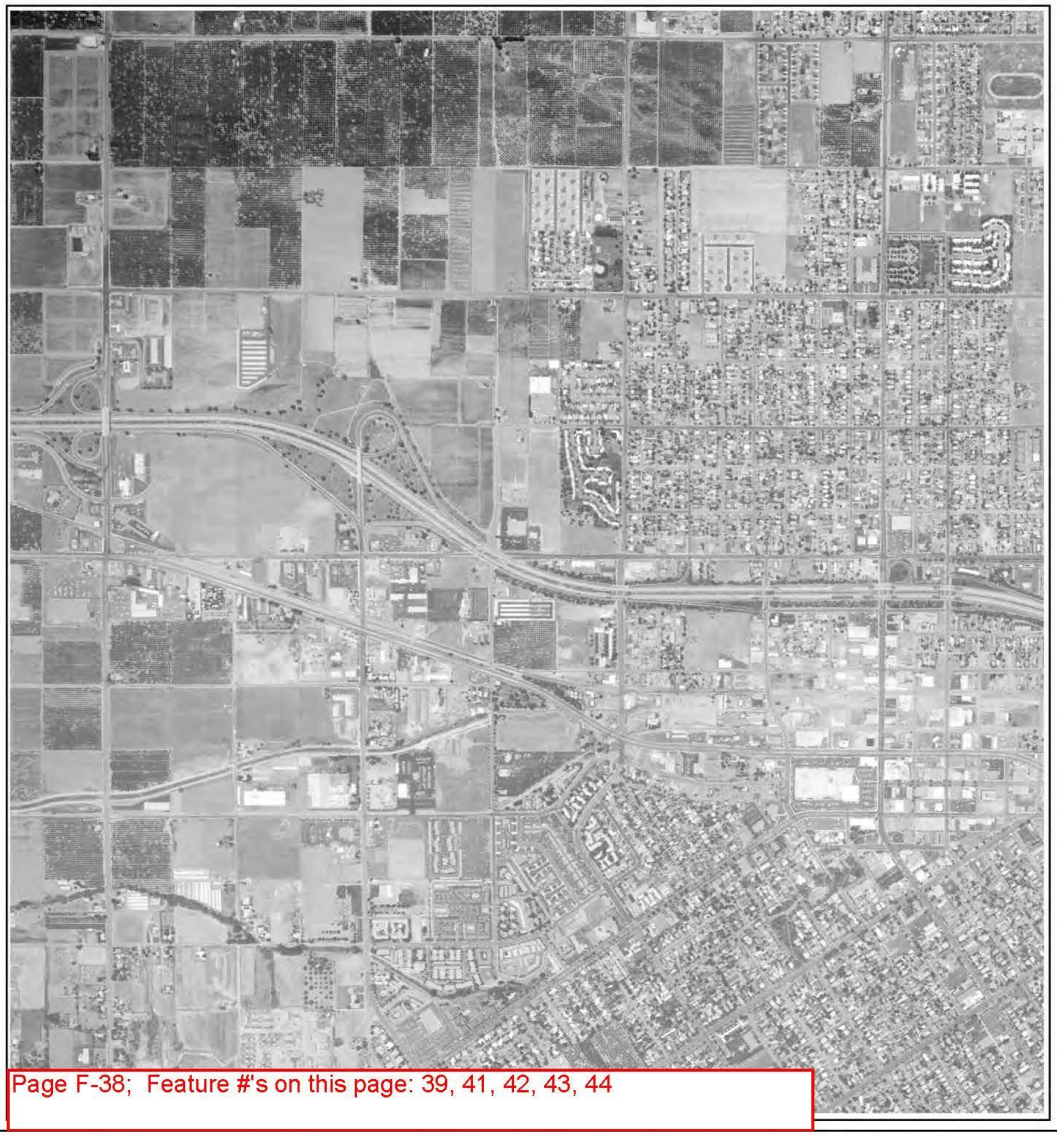
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980



Page F-38; Feature #'s on this page: 39, 41, 42, 43, 44

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Aerial Photo

Site: Ontario to Redlands, CA 92324

Photo Year: 1980

Page F-39; Feature #'s on this page: 45, 46, 47, 48, 49, 50, 51

Job Number: 646884

Original Scale of Photo: 1:36,000

Approximate Scale of This Image: 1 in equals 1,500 ft

Coverage Area Approximately 1 Mile Radius from Subject Site

≈ 1,500 ft

Copyright: Track Info Services, LLC

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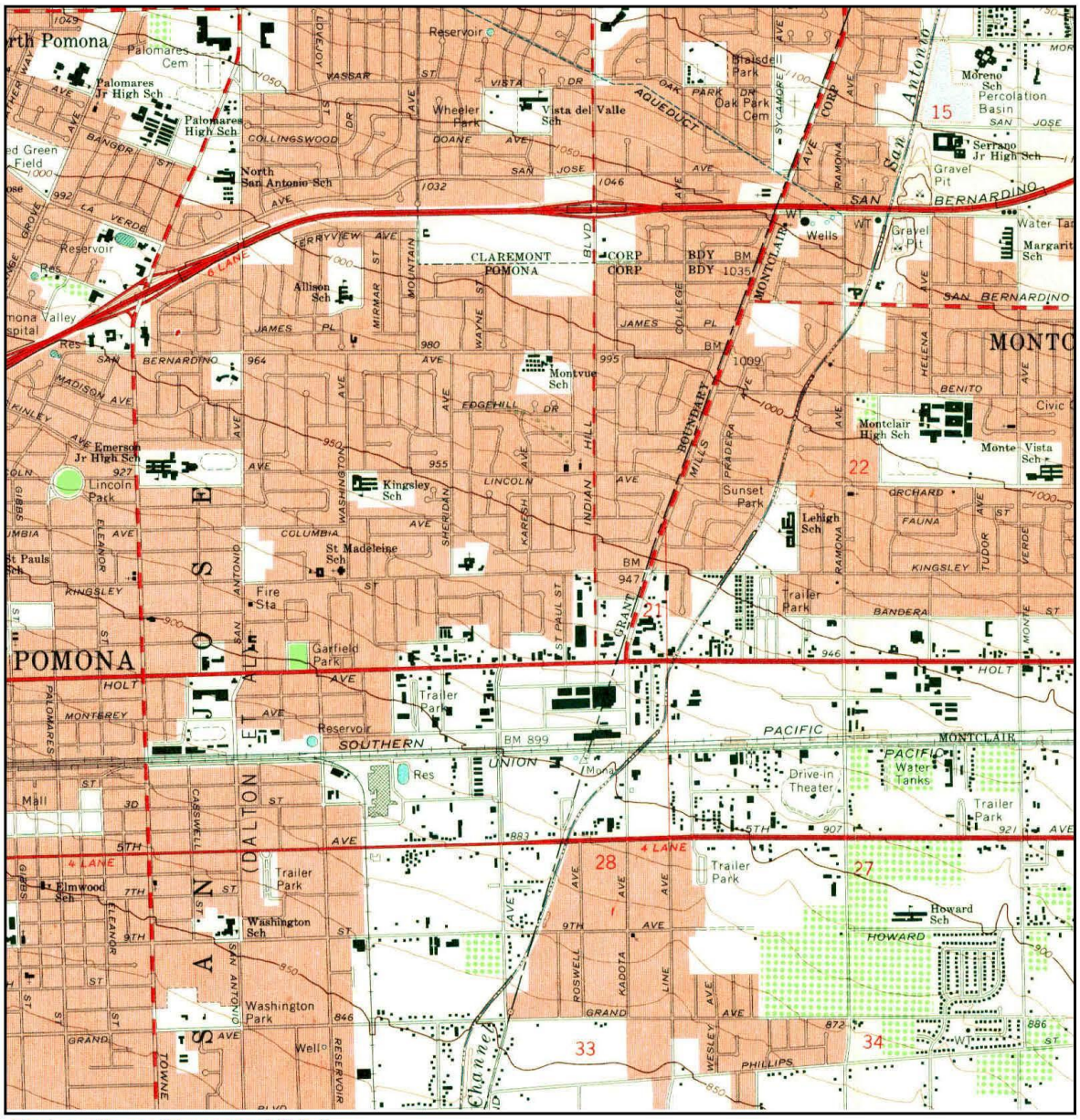
Appendix G: Historic Topographic Maps

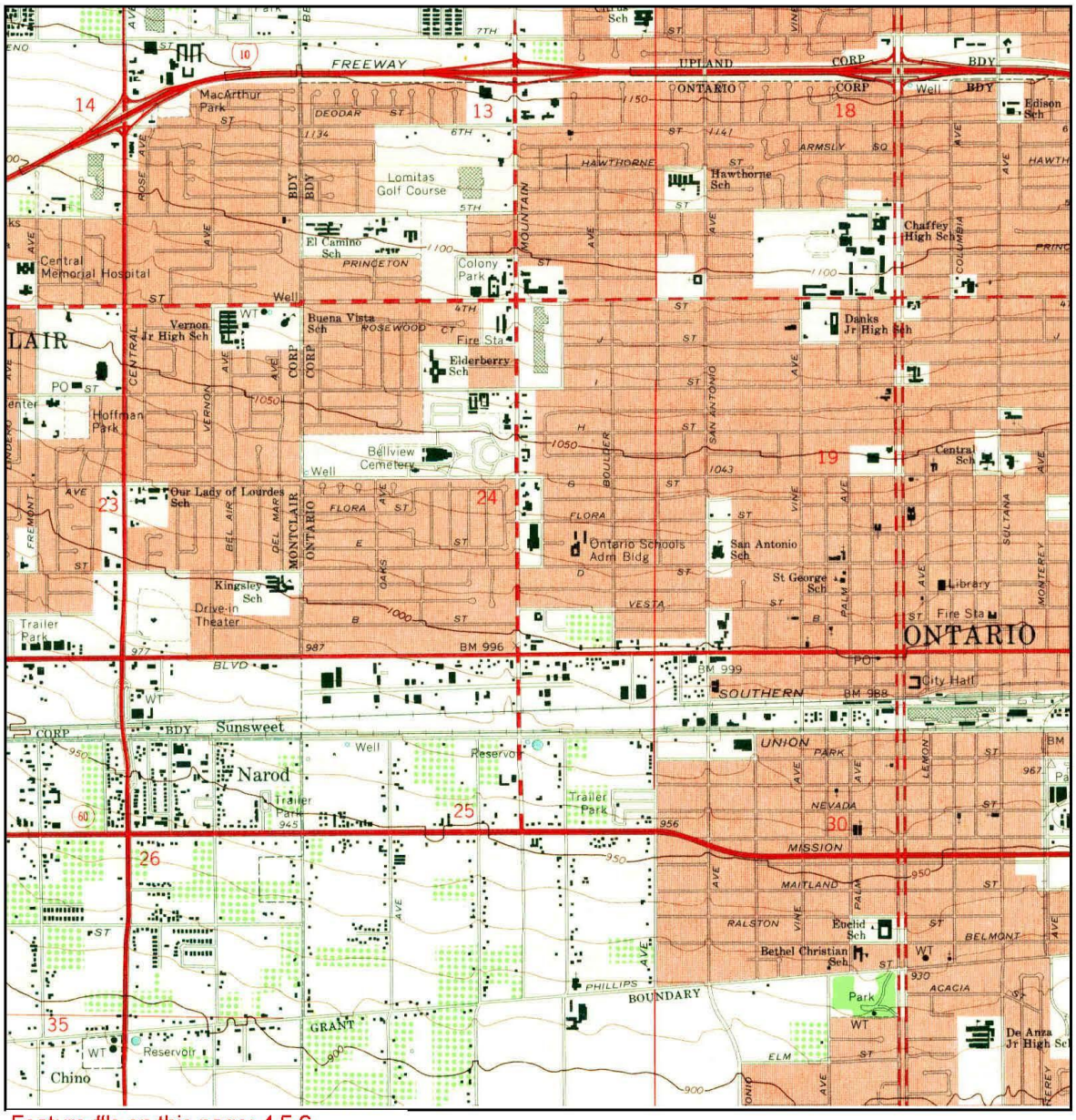
Historical Topographic Map



Feature #'s on this page: 1,2,3,4

N	TARGET QUAD NAME: ONTARIO MAP YEAR: 1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-1

Historical Topographic Map



Feature #'s on this page: 4,5,6

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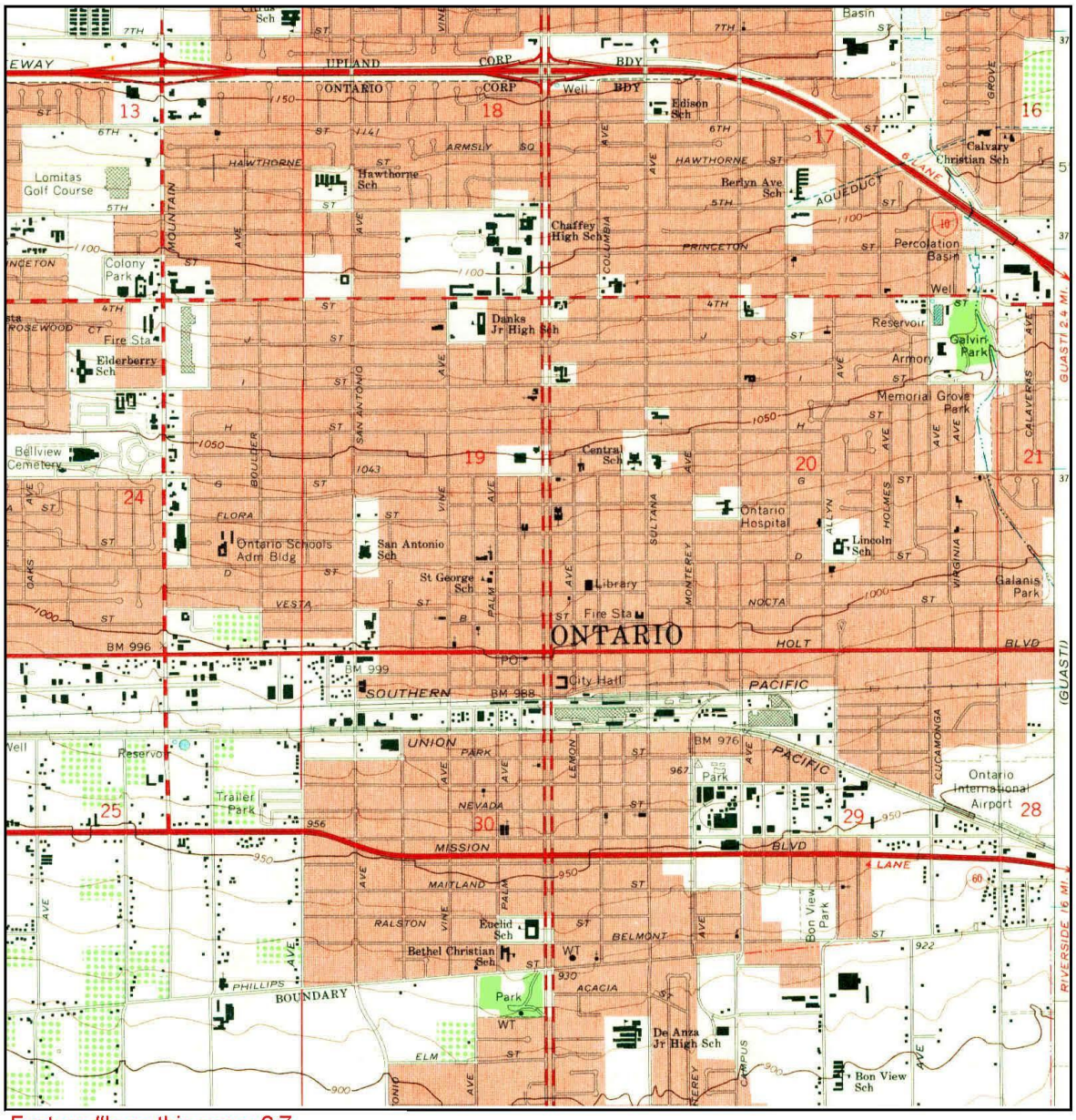
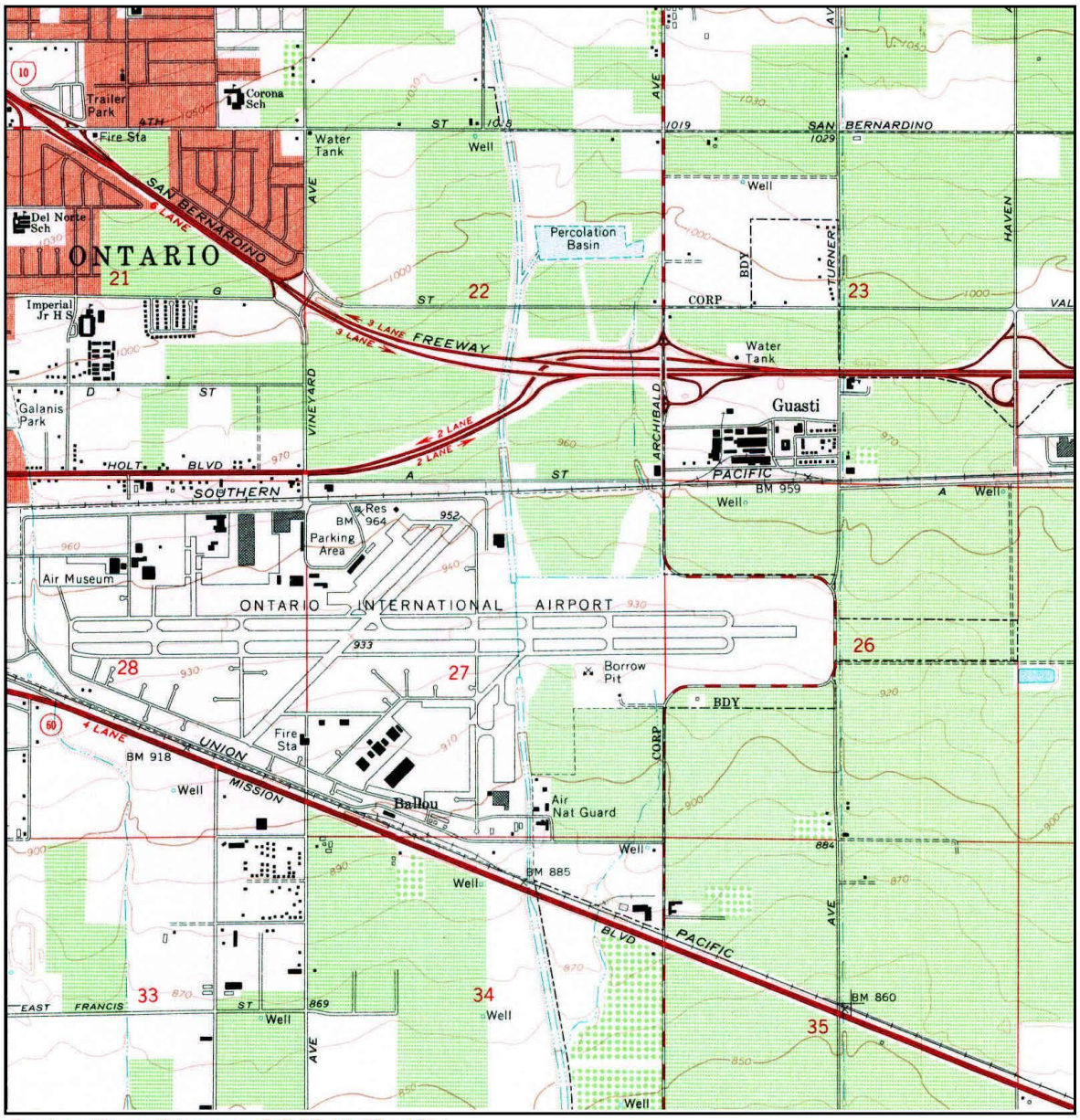
Historical Topographic Map



Feature #'s on this page: 6,7

N	TARGET QUAD NAME: ONTARIO MAP YEAR: 1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-3

Historical Topographic Map



Feature #'s on this page: 8,9,10,11,12a,12b,

N	TARGET QUAD NAME: GUASTI MAP YEAR: 1966 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-4

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1966 - Image 1

Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Guasti, Ca

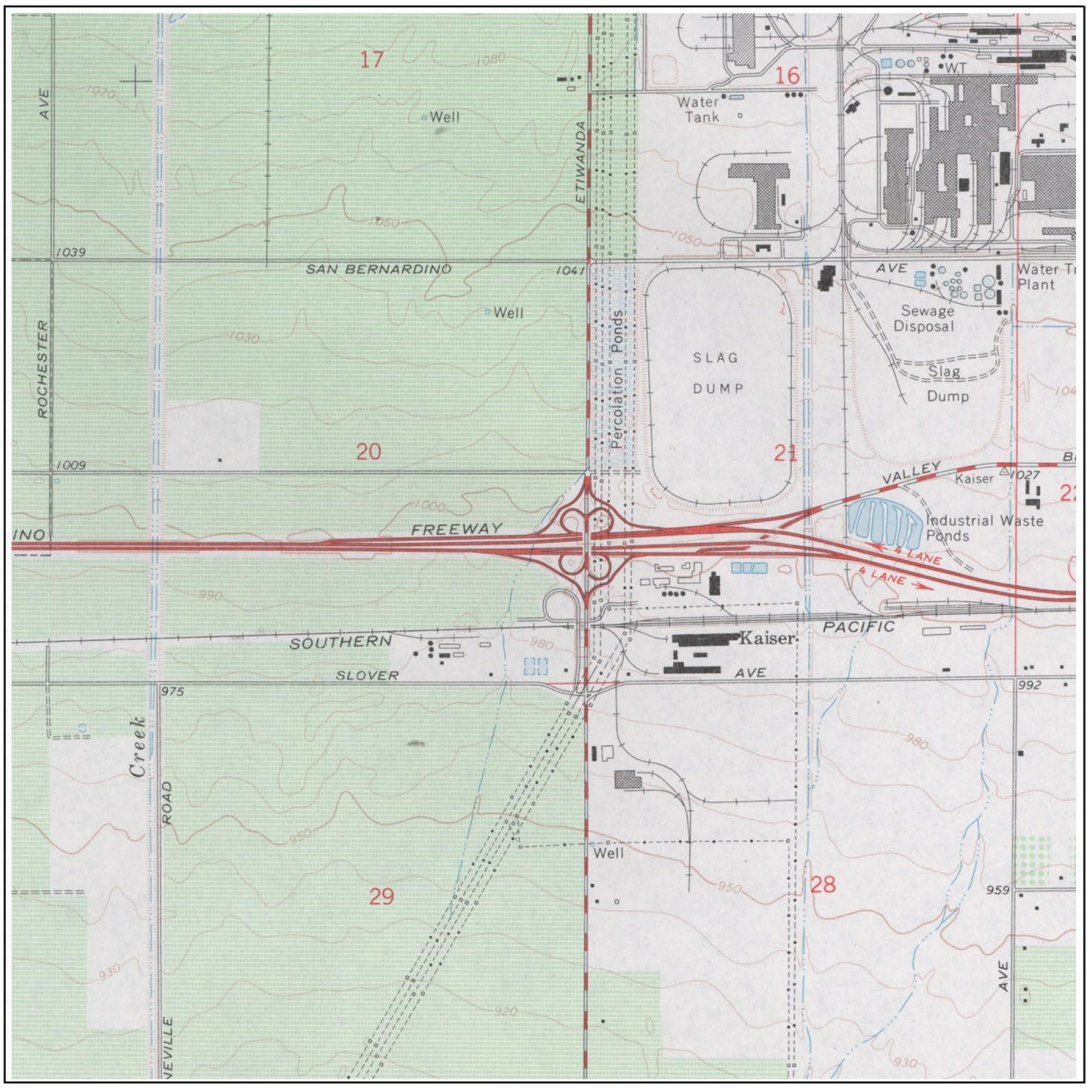
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1966 - Image 2



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Guasti, Ca

Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 3

Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Fontana, Ca
(West: Guasti, Ca 1966)

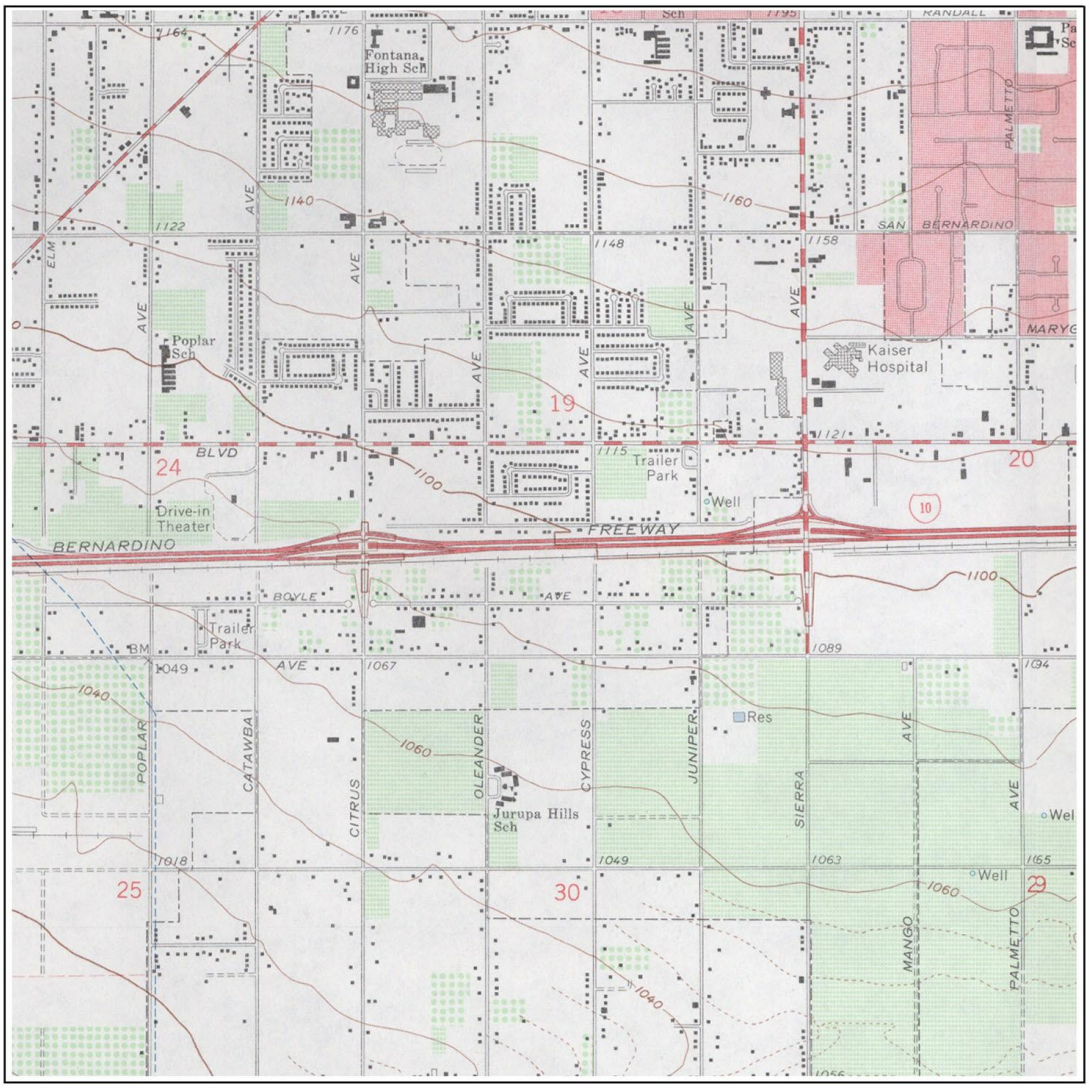
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 4



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Fontana, Ca

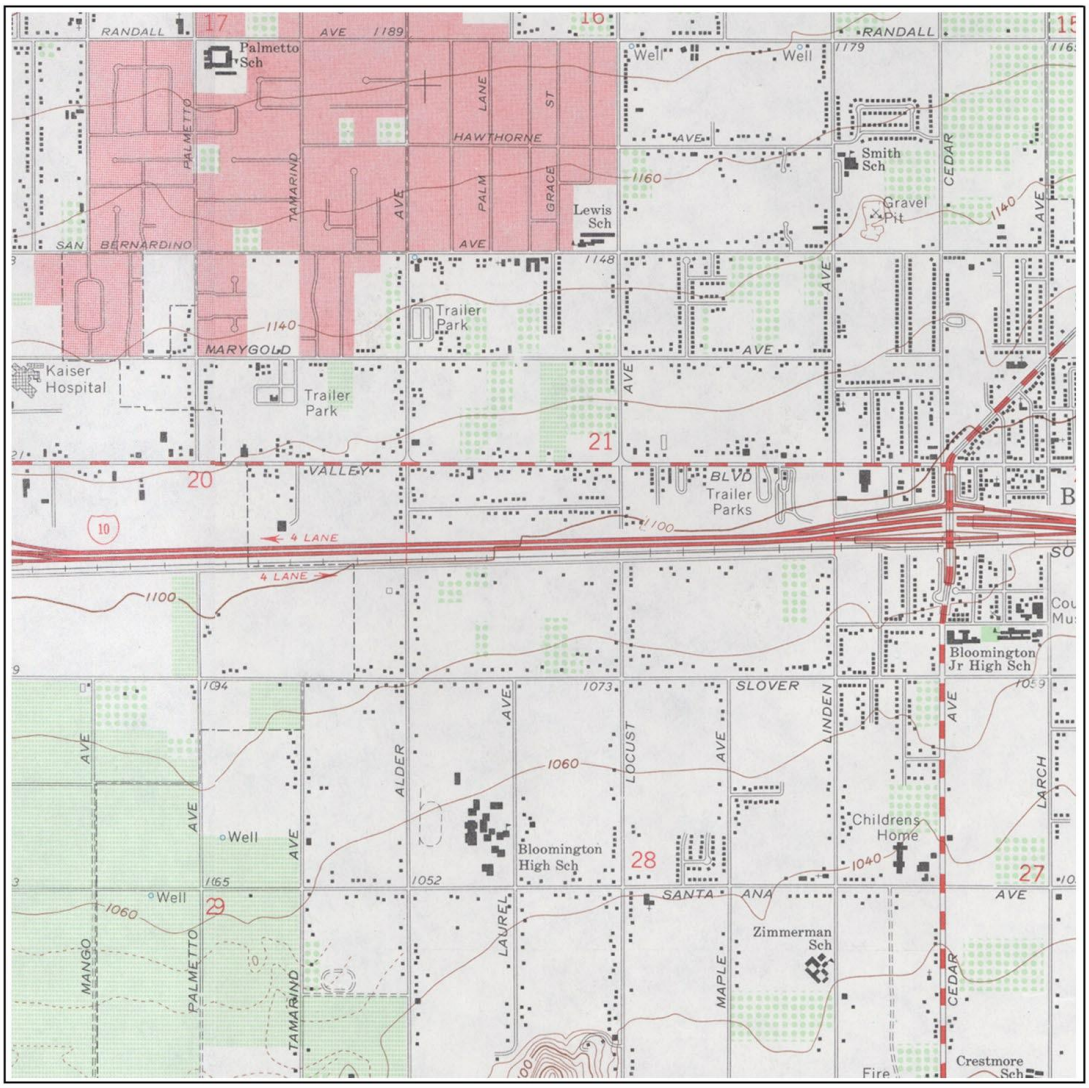
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 5



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Fontana, Ca

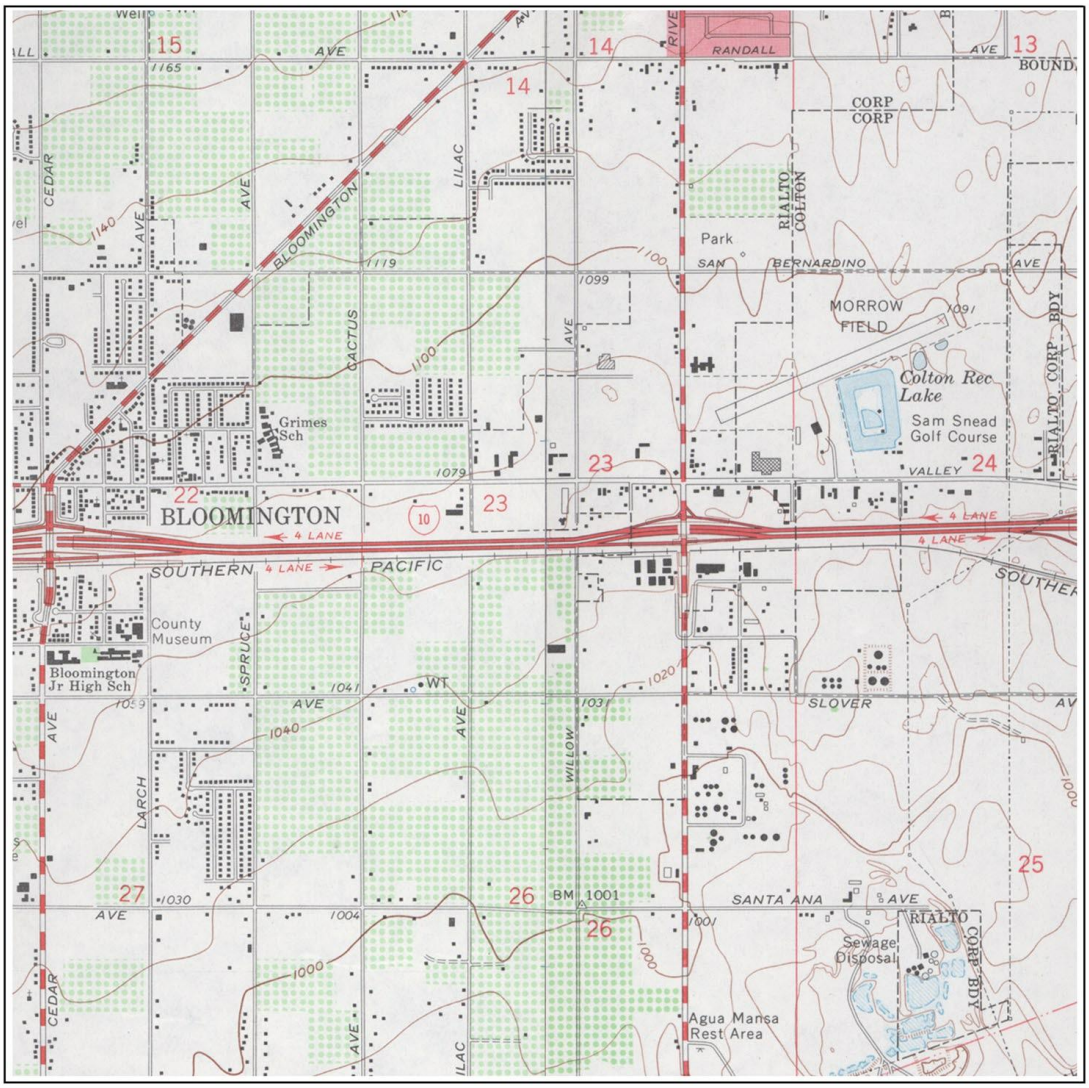
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 6



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Fontana, Ca
(East: San Bernardino South, Ca 1967)

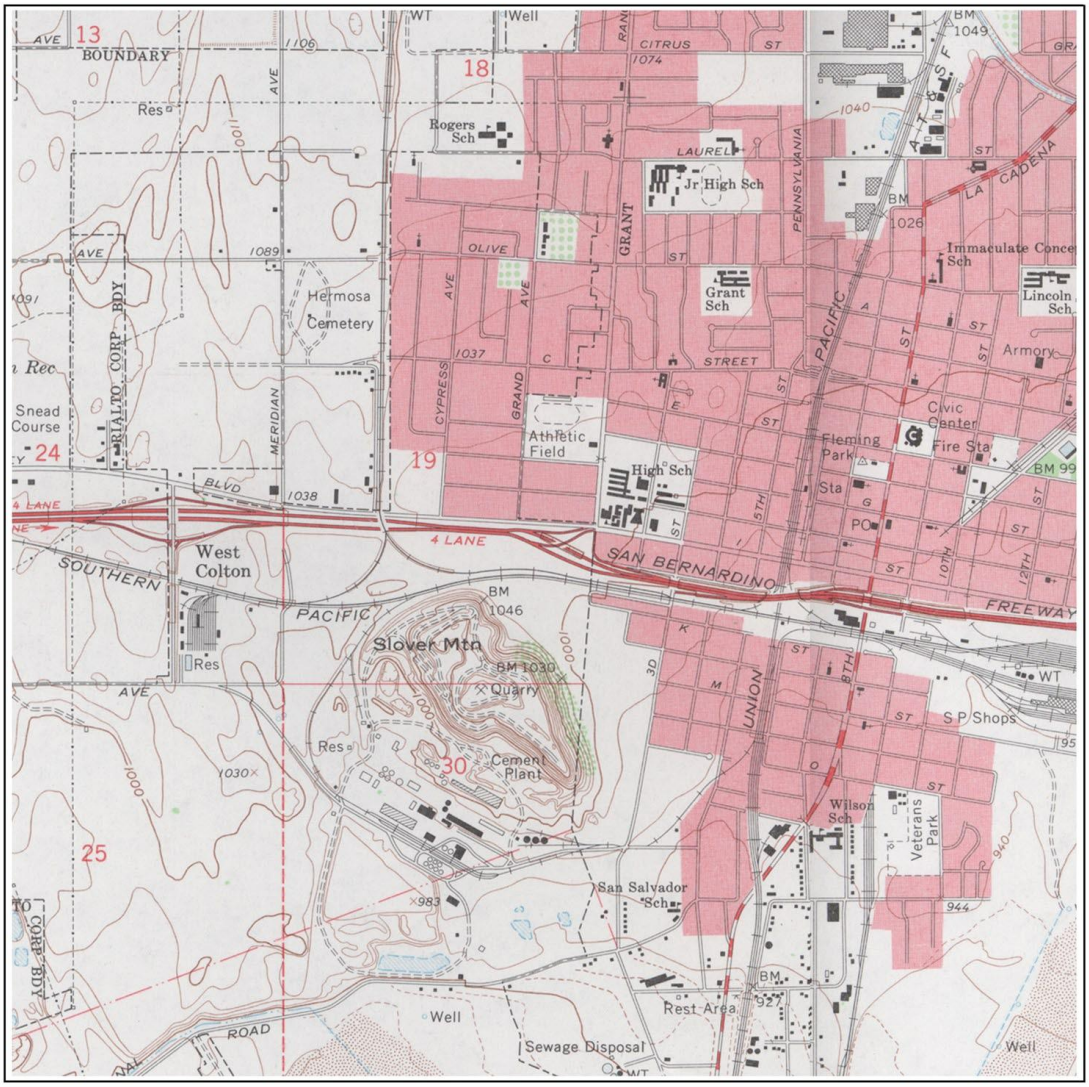
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 7



Building

Topo Contour

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: San Bernardino South, Ca

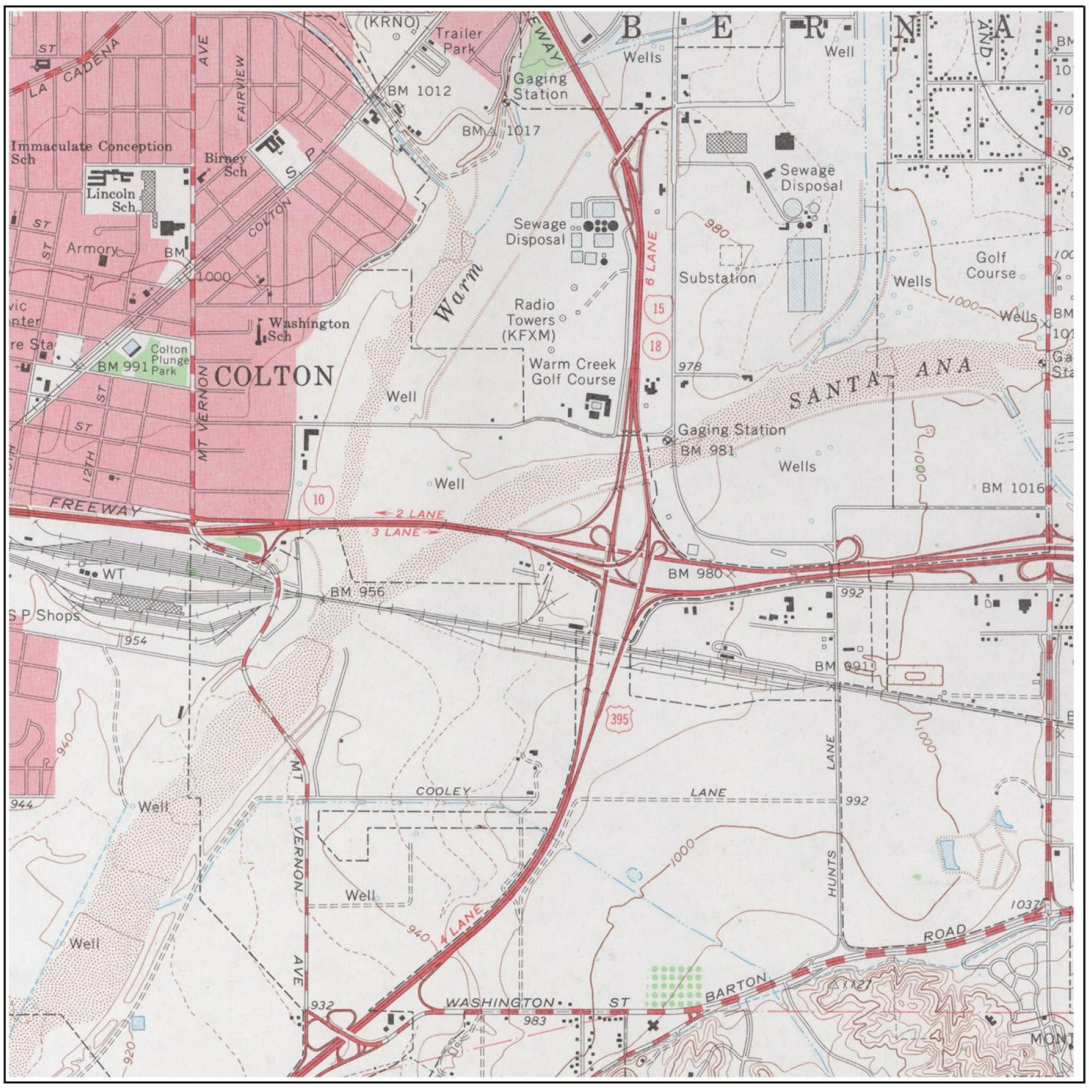
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 8



Building		Railroad	
Topo Contour	6000	Tanks	
Depression		Primary Highway	
Quarry or Open Pit Mine		Trail	

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: San Bernardino South, Ca

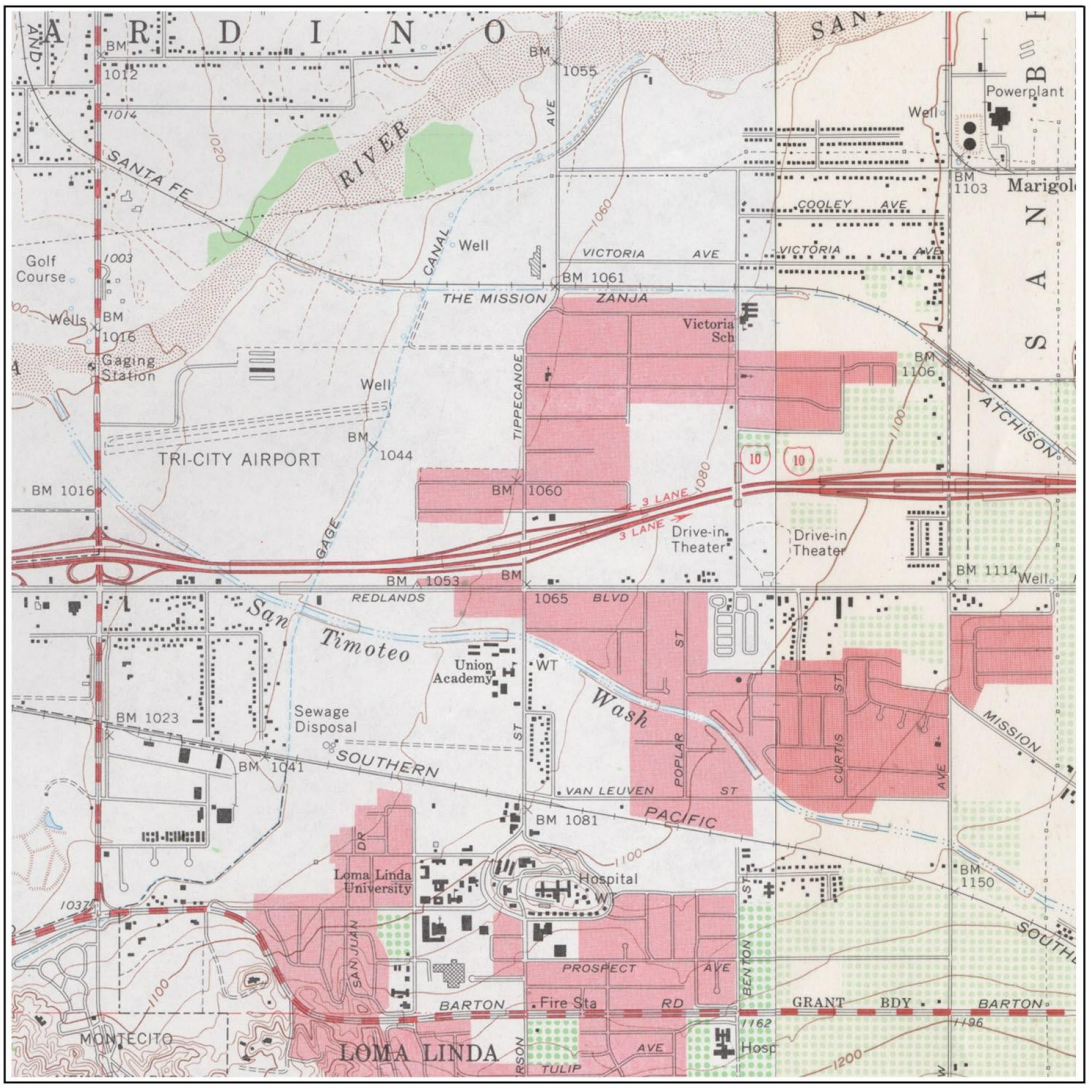
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 9



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: San Bernardino South, Ca

(East: Redlands, Ca 1967)

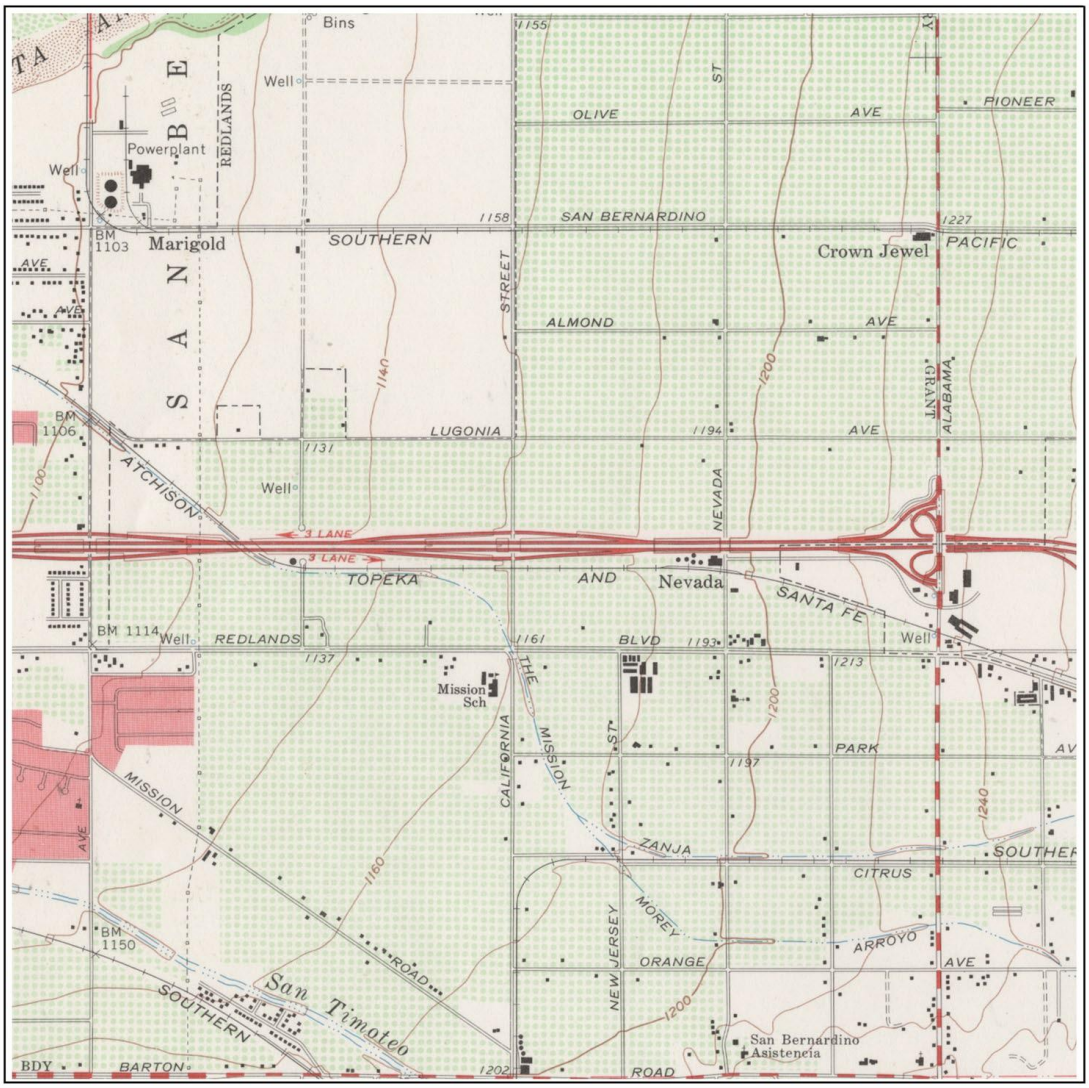
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 10



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Redlands, Ca

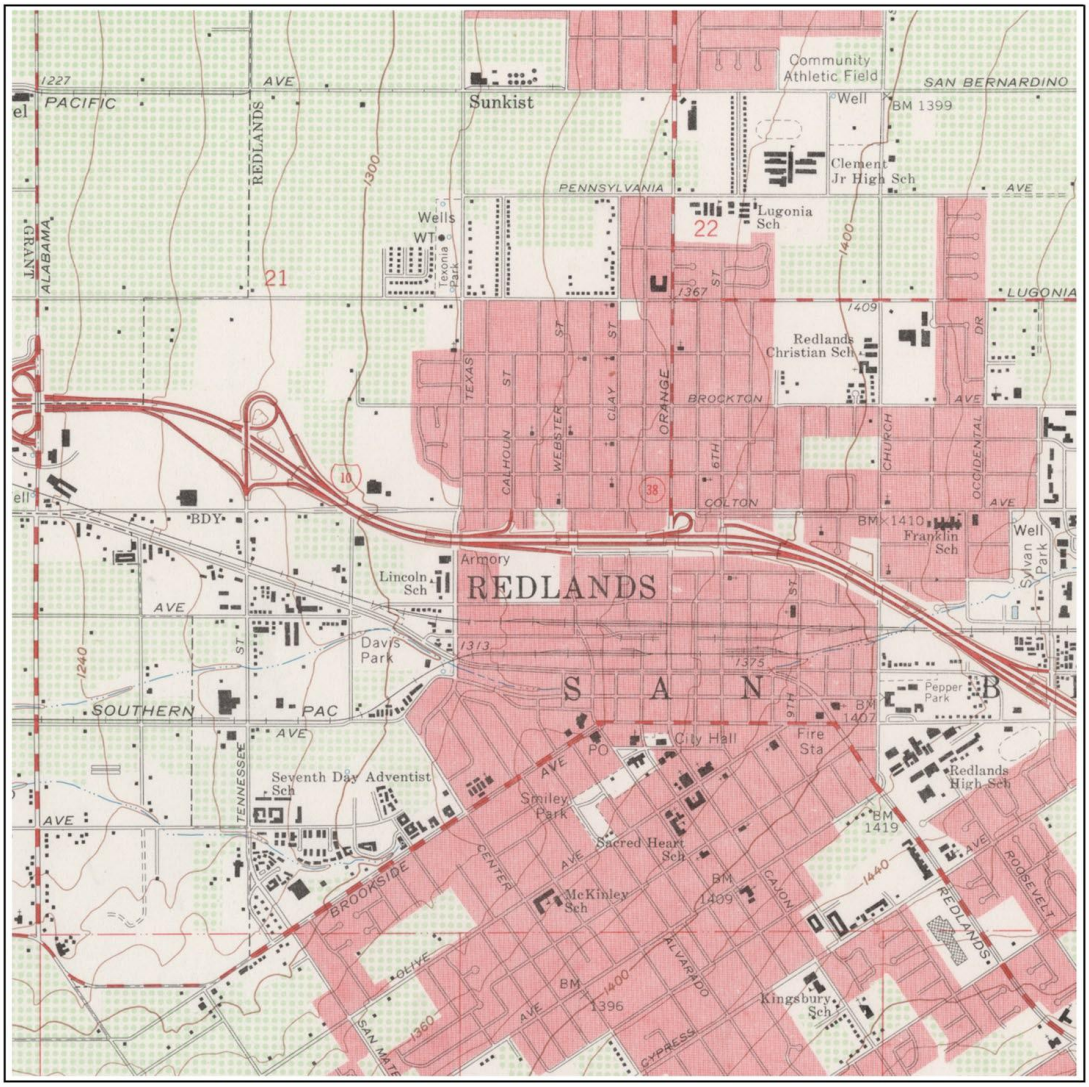
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 11



Building		Railroad	
Topo Contour	6000	Tanks	
Depression		Primary Highway	
Quarry or Open Pit Mine		Trail	

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Redlands, Ca

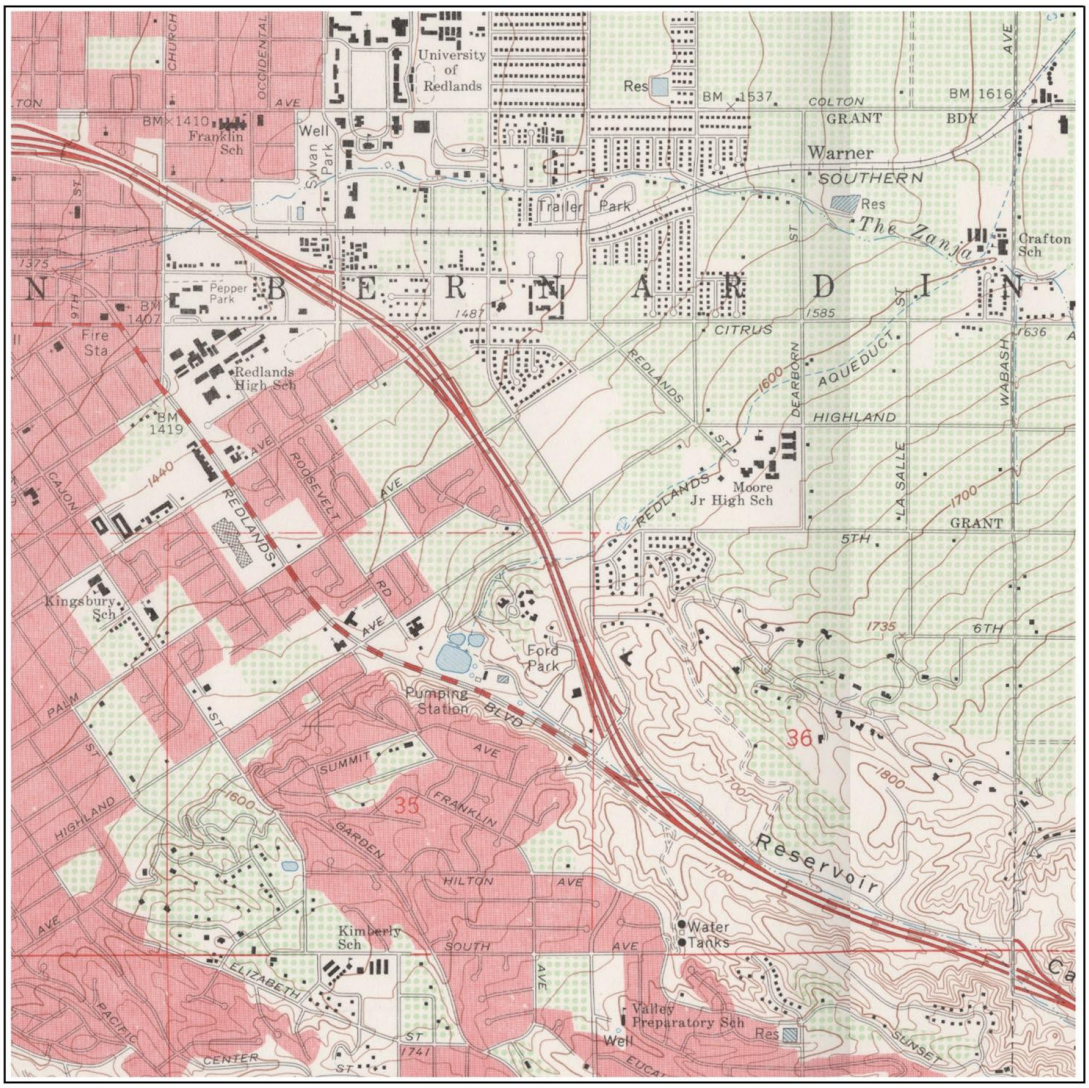
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1967 - Image 12



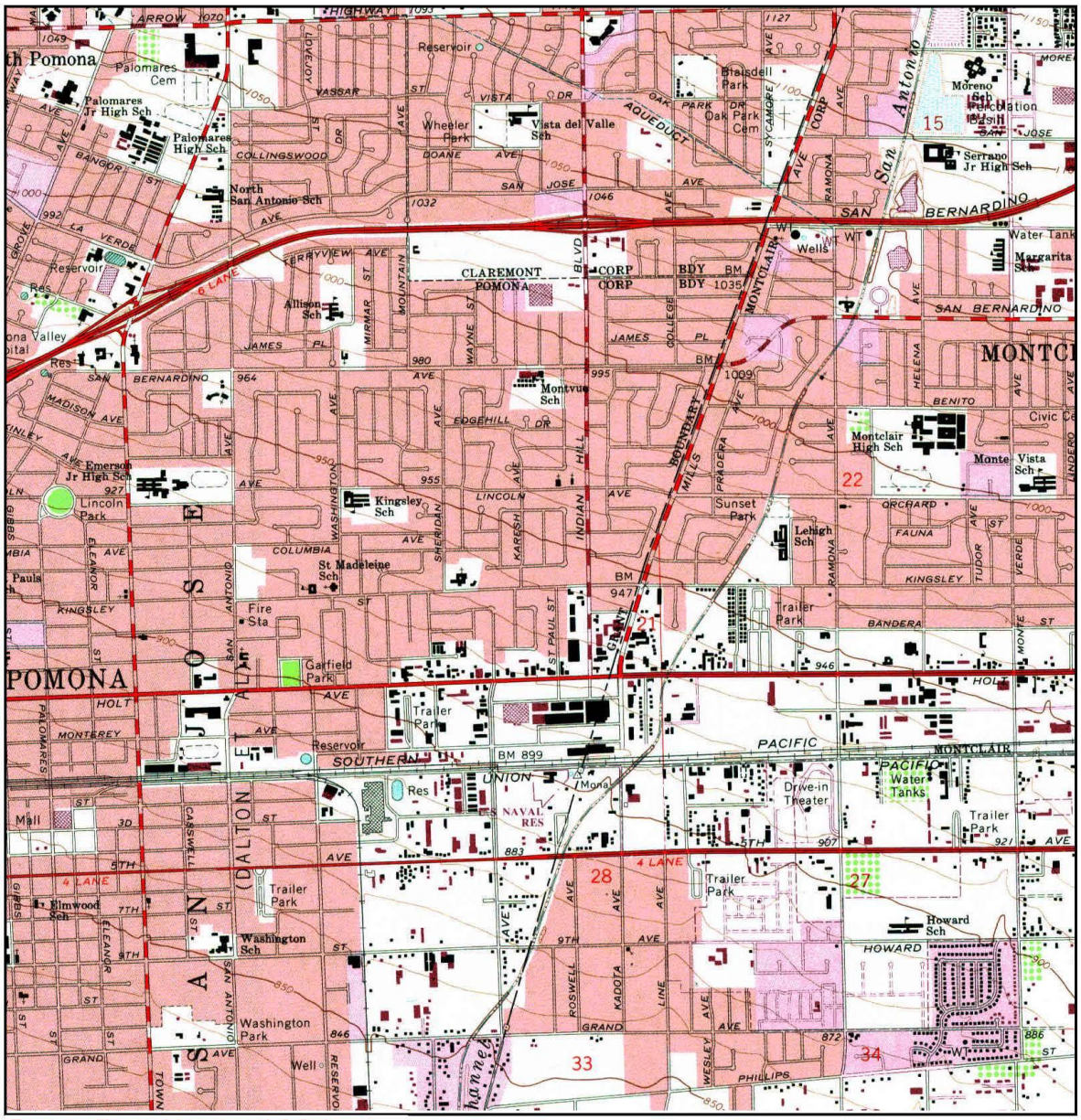
Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Redlands, Ca

Copyright: Track Info Services, LLC

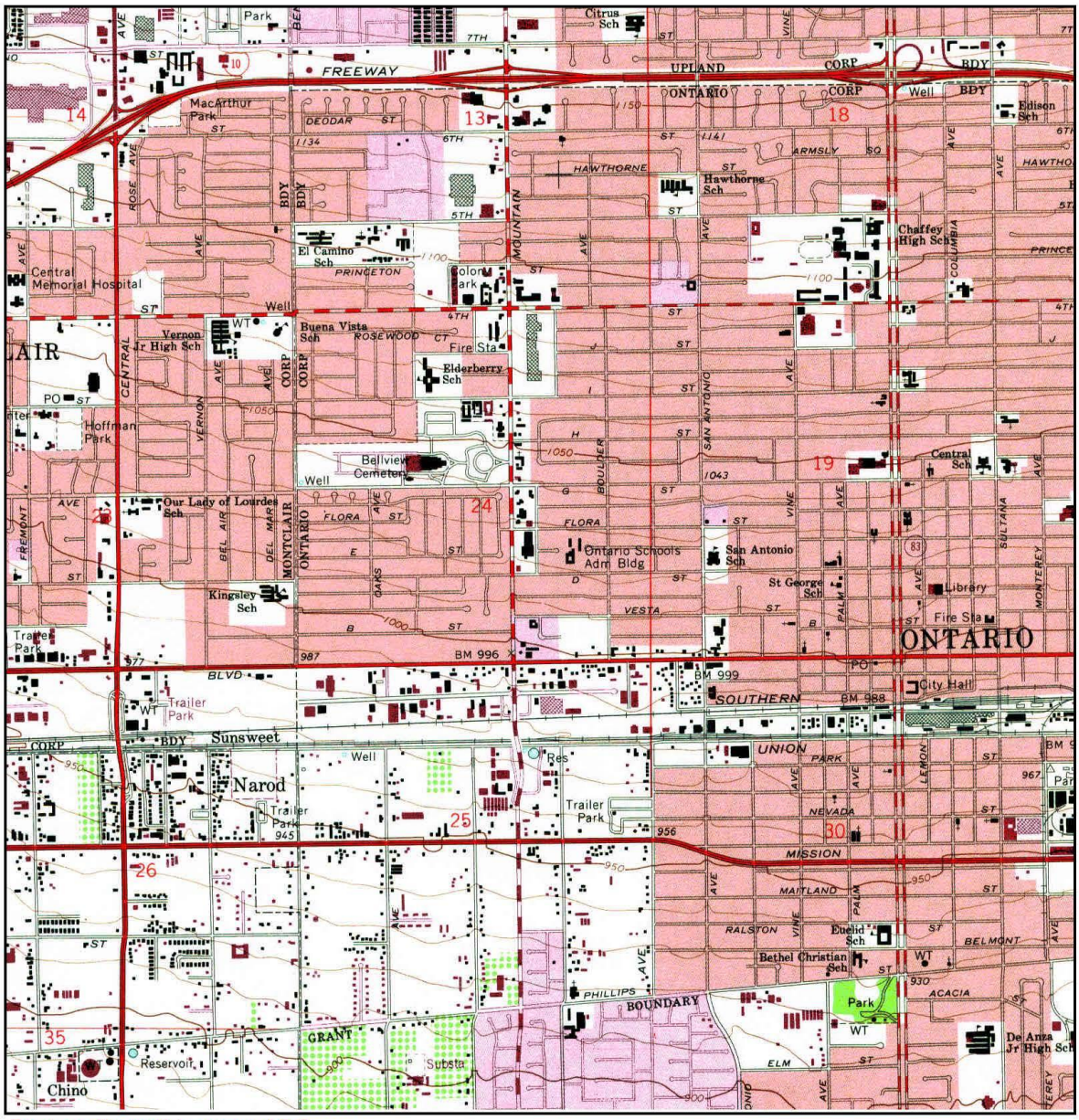
Historical Topographic Map



Feature #'s on this page: 1,2,3,4

N	TARGET QUAD NAME: ONTARIO MAP YEAR: 1981 PHOTOREVISED FROM :1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-17

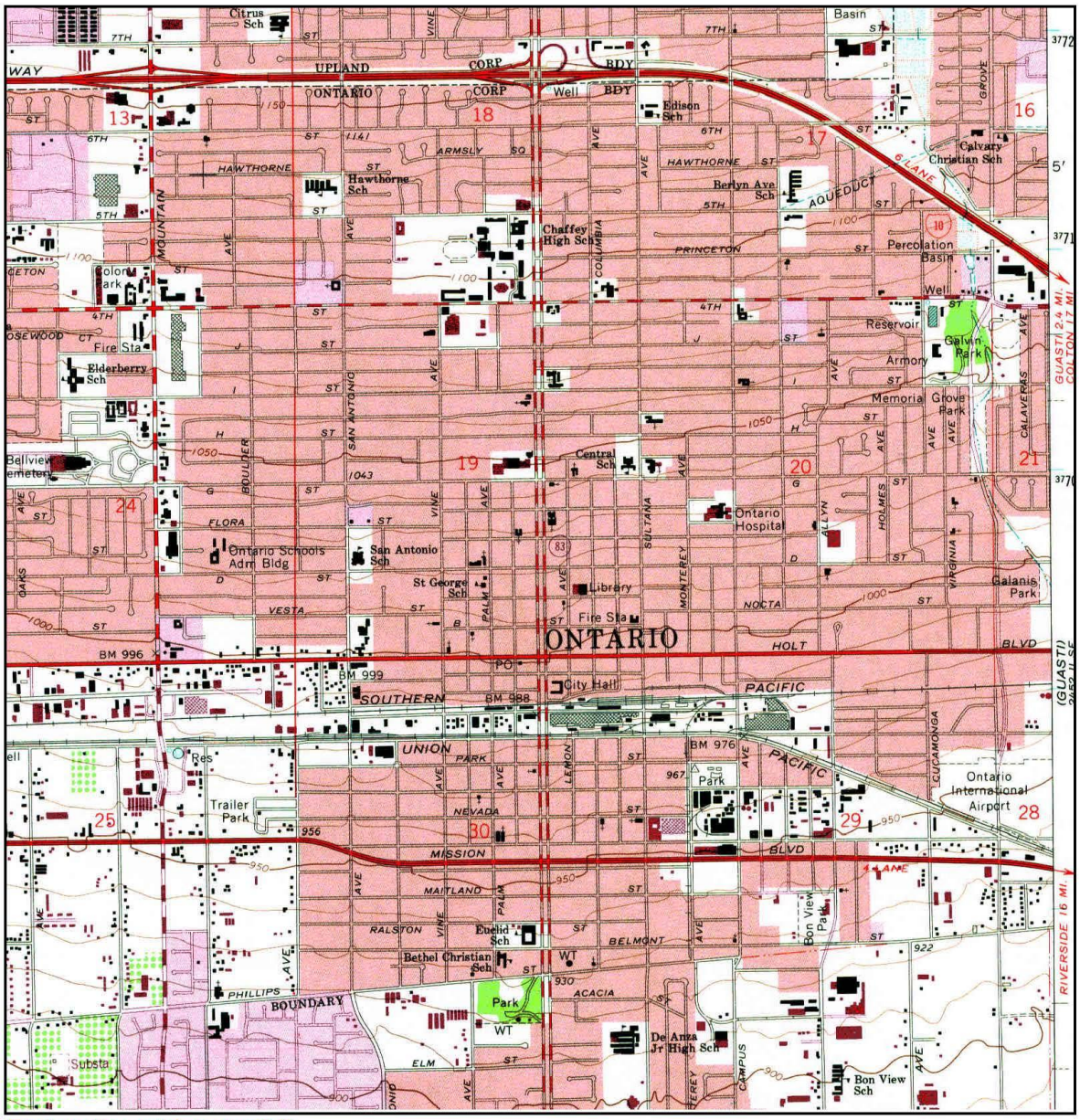
Historical Topographic Map



Feature #'s on this page: 4,5,6

N	TARGET QUAD NAME: ONTARIO MAP YEAR: 1981 PHOTOREVISED FROM :1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-18

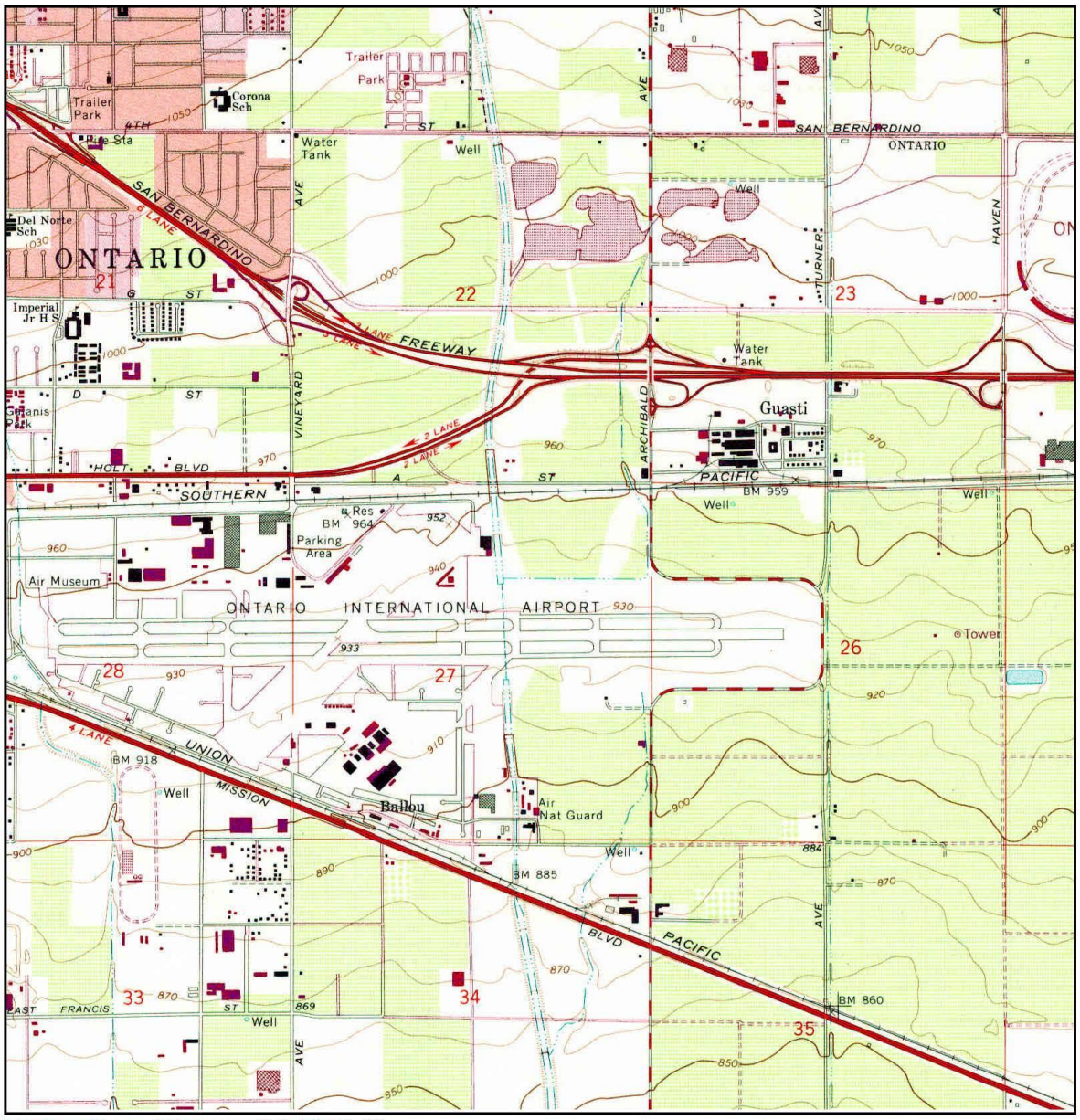
Historical Topographic Map



Feature #'s on this page: 6,7

N	TARGET QUAD NAME: ONTARIO MAP YEAR: 1981 PHOTOREVISED FROM :1967 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-19

Historical Topographic Map



Feature #'s on this page: 8,9,10,11,12

N	TARGET QUAD NAME: GUASTI MAP YEAR: 1981 PHOTOREVISED FROM :1966 SERIES: 7.5 SCALE: 1:24000	SITE NAME: I-10 Corridor Project, Pomona To Redlands ADDRESS: Interstate 10, East of Garey Ave. and Ford St. Pomona, CA 97168 LAT/LONG: 34.0878 / -117.6502	CLIENT: Parsons CONTACT: Angela Schnapp INQUIRY#: 3751726.1 RESEARCH DATE: 10/08/2013 Page G-20

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1981 - Image 1

Building
Topo Contour 6000
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Guasti, Ca

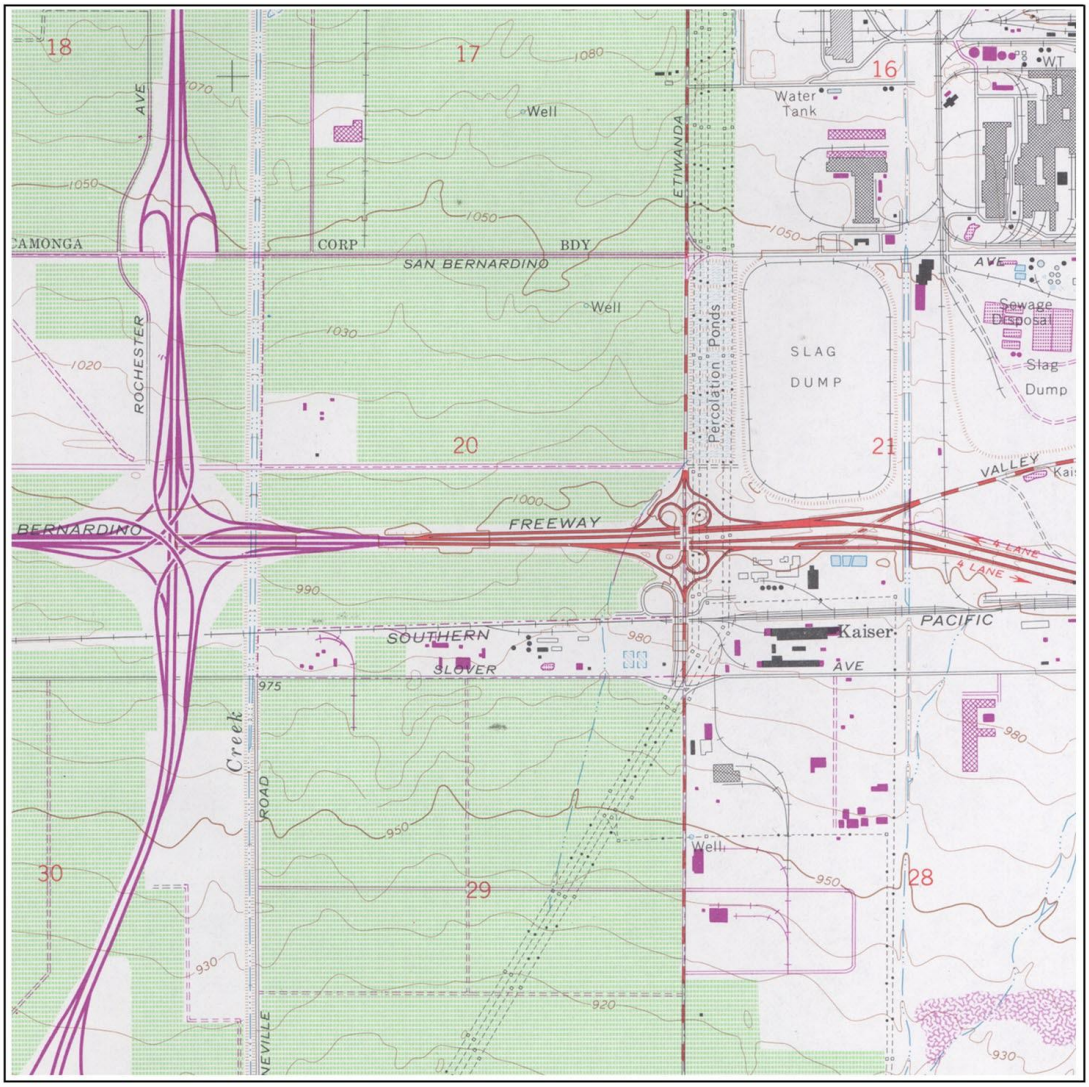
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1981 - Image 2



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Guasti, Ca

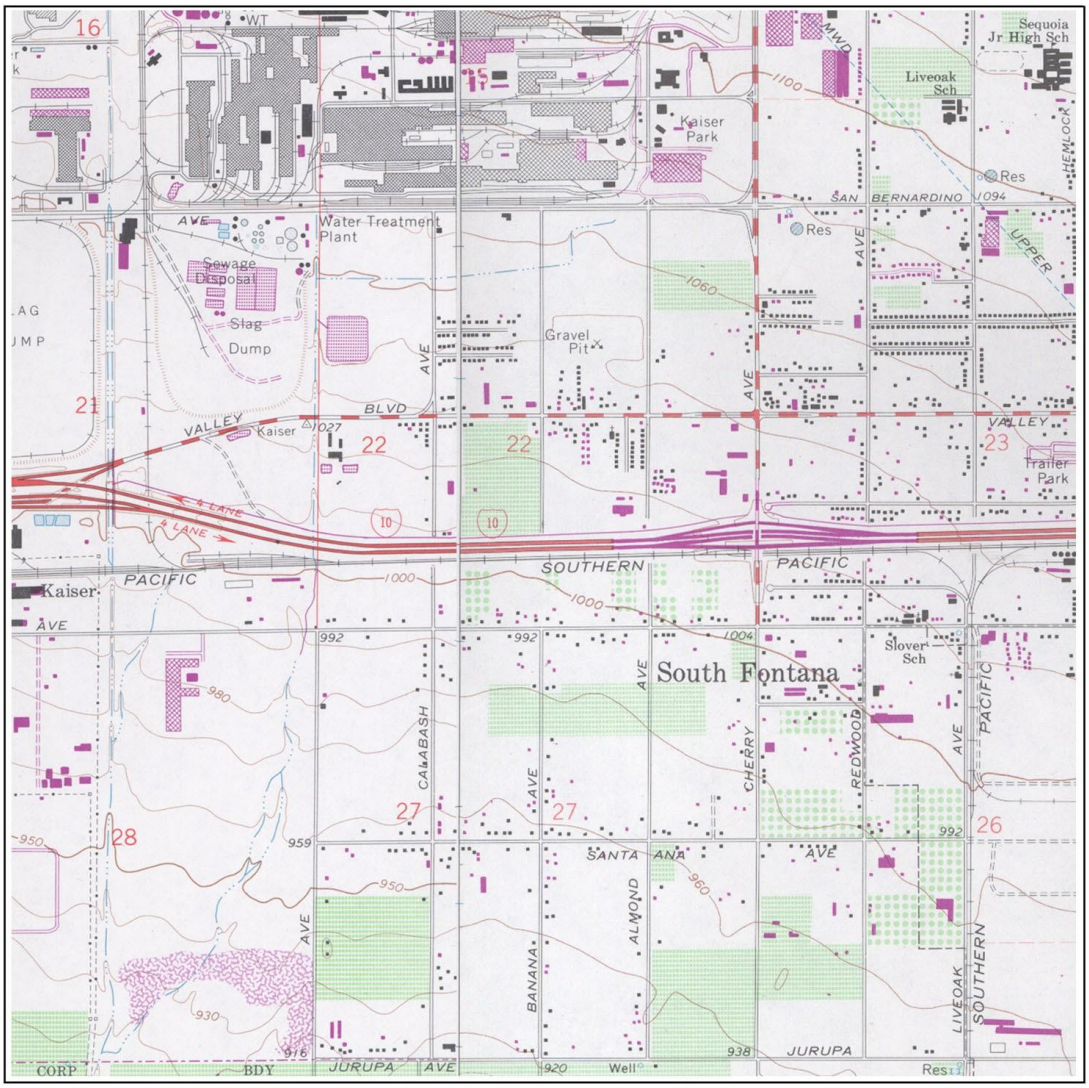
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 3



Building		Railroad	
Topo Contour	6000	Tanks	
Depression		Primary Highway	
Quarry or Open Pit Mine		Trail	

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Fontana, Ca

(West: Guasti, Ca 1981)

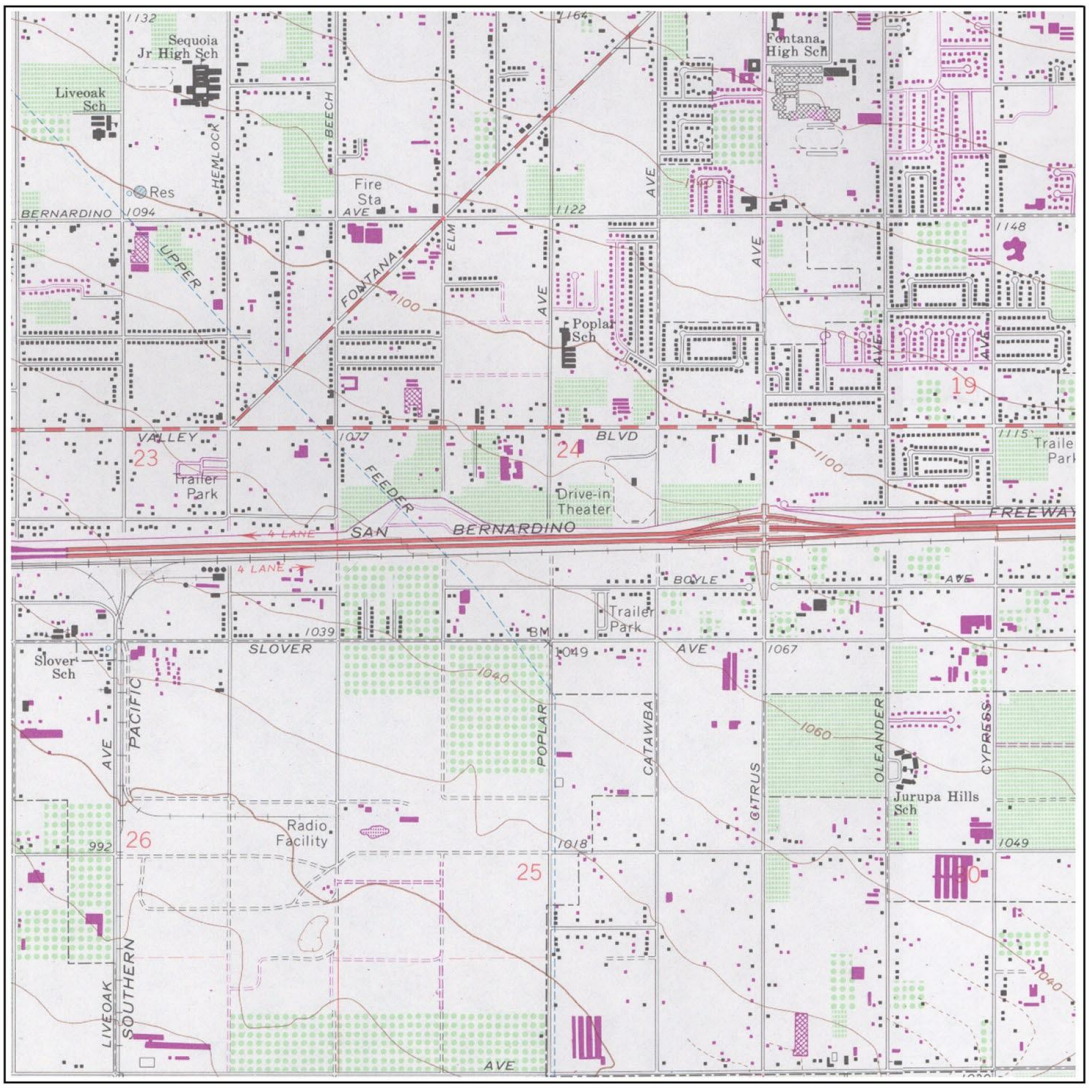
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 4



Building

Topo Contour

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Fontana, Ca

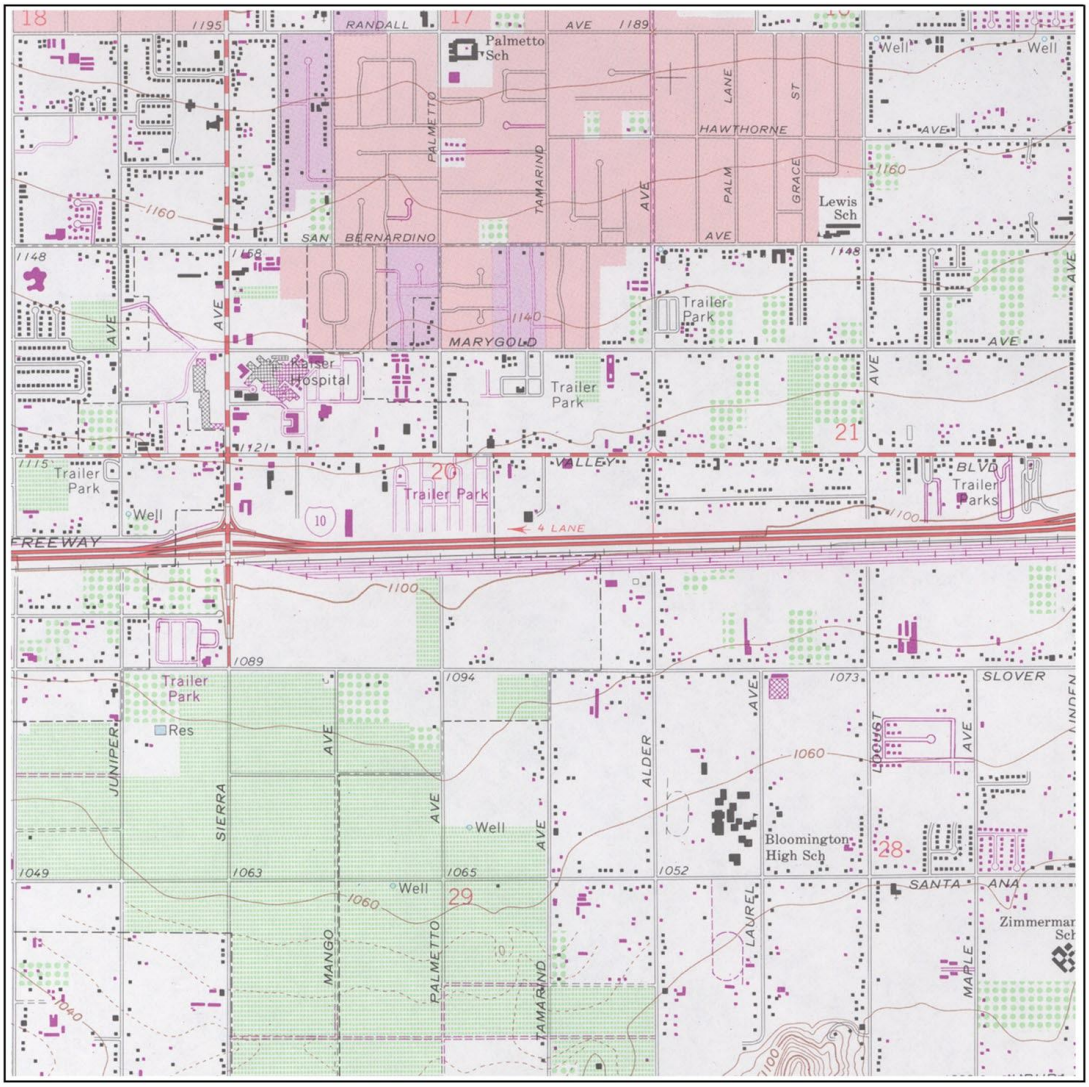
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 5



Building		Railroad	
Topo Contour	6000	Tanks	
Depression		Primary Highway	
Quarry or Open Pit Mine		Trail	

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Fontana, Ca

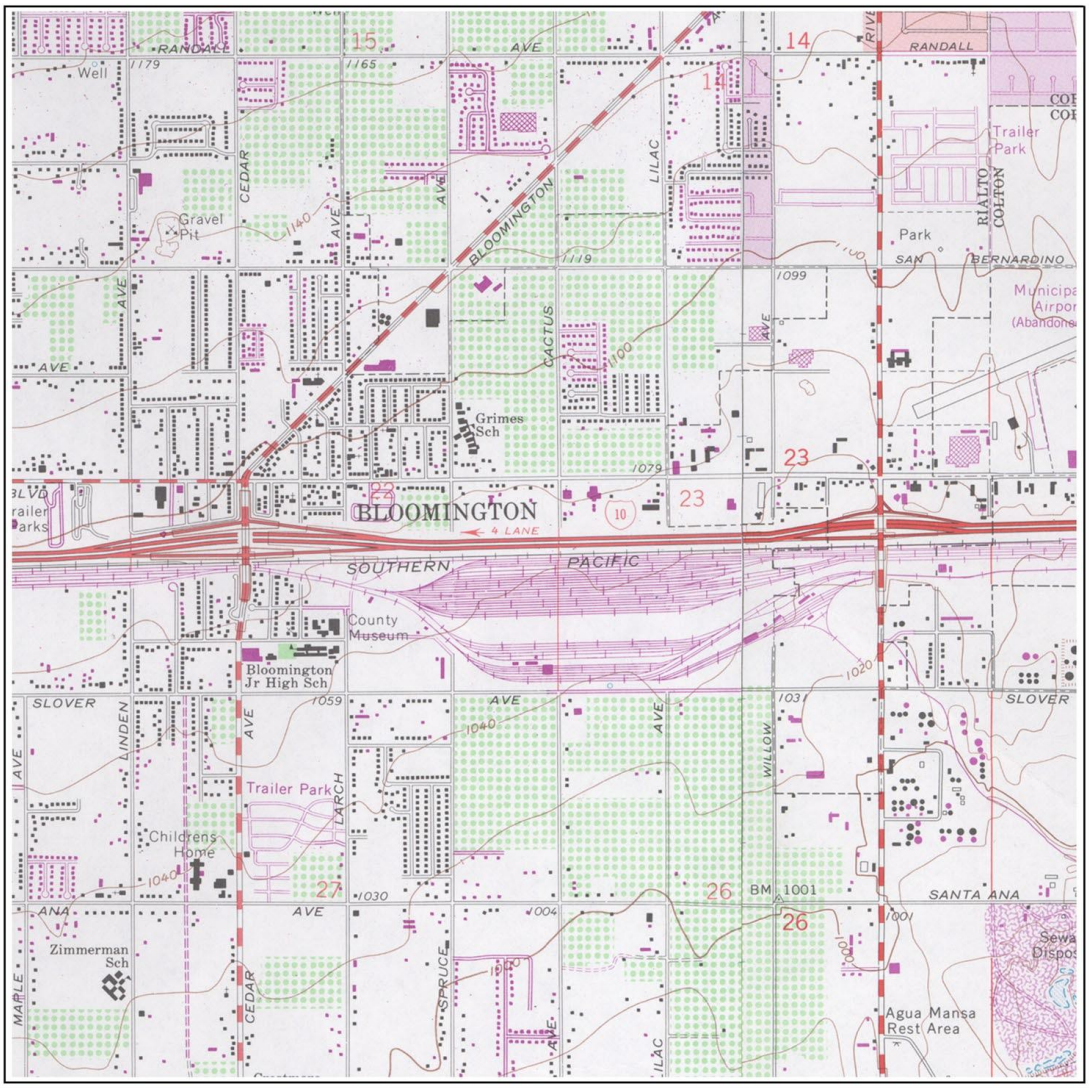
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 6



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Fontana, Ca
(East: San Bernardino South, Ca 1980)

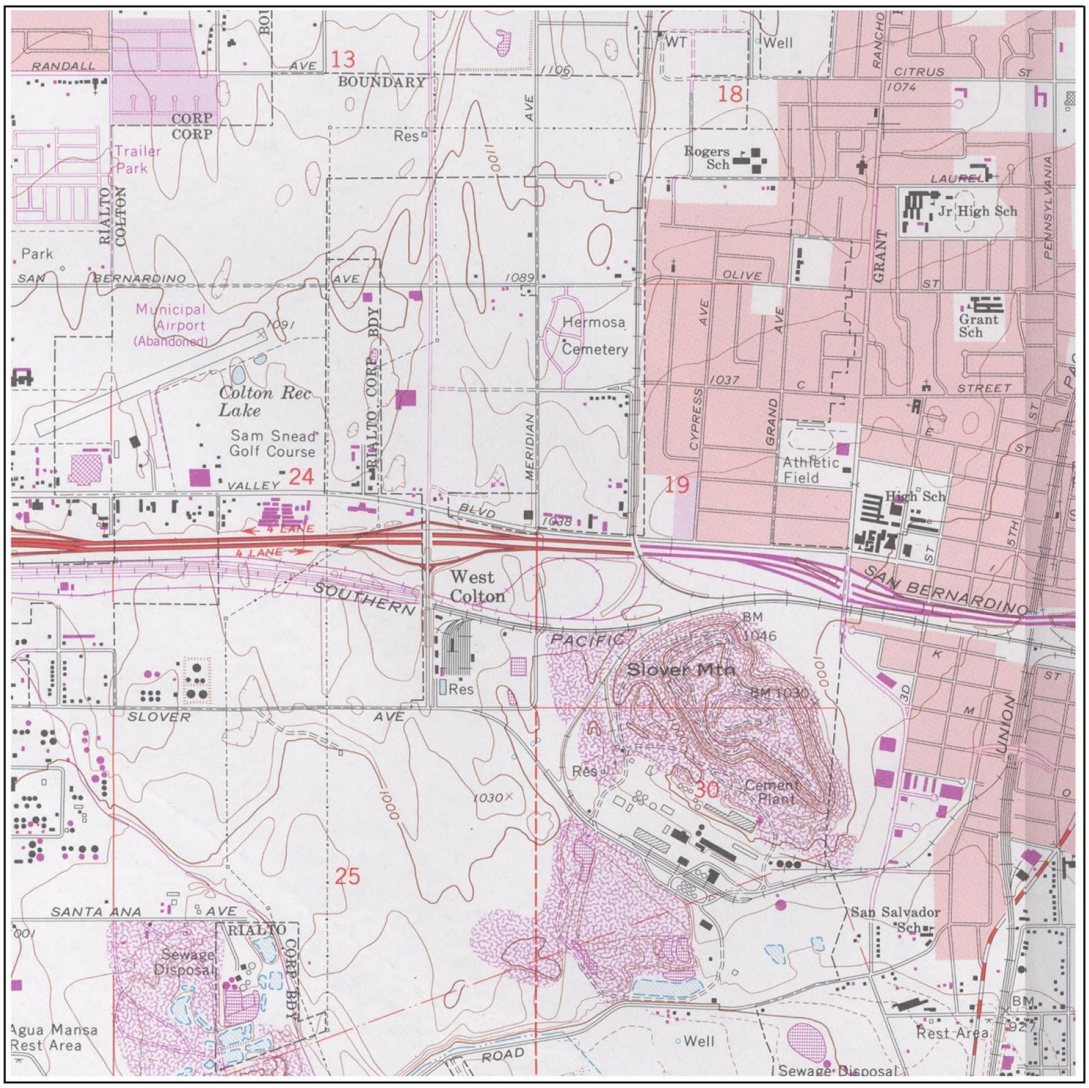
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 7



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: San Bernardino South, Ca

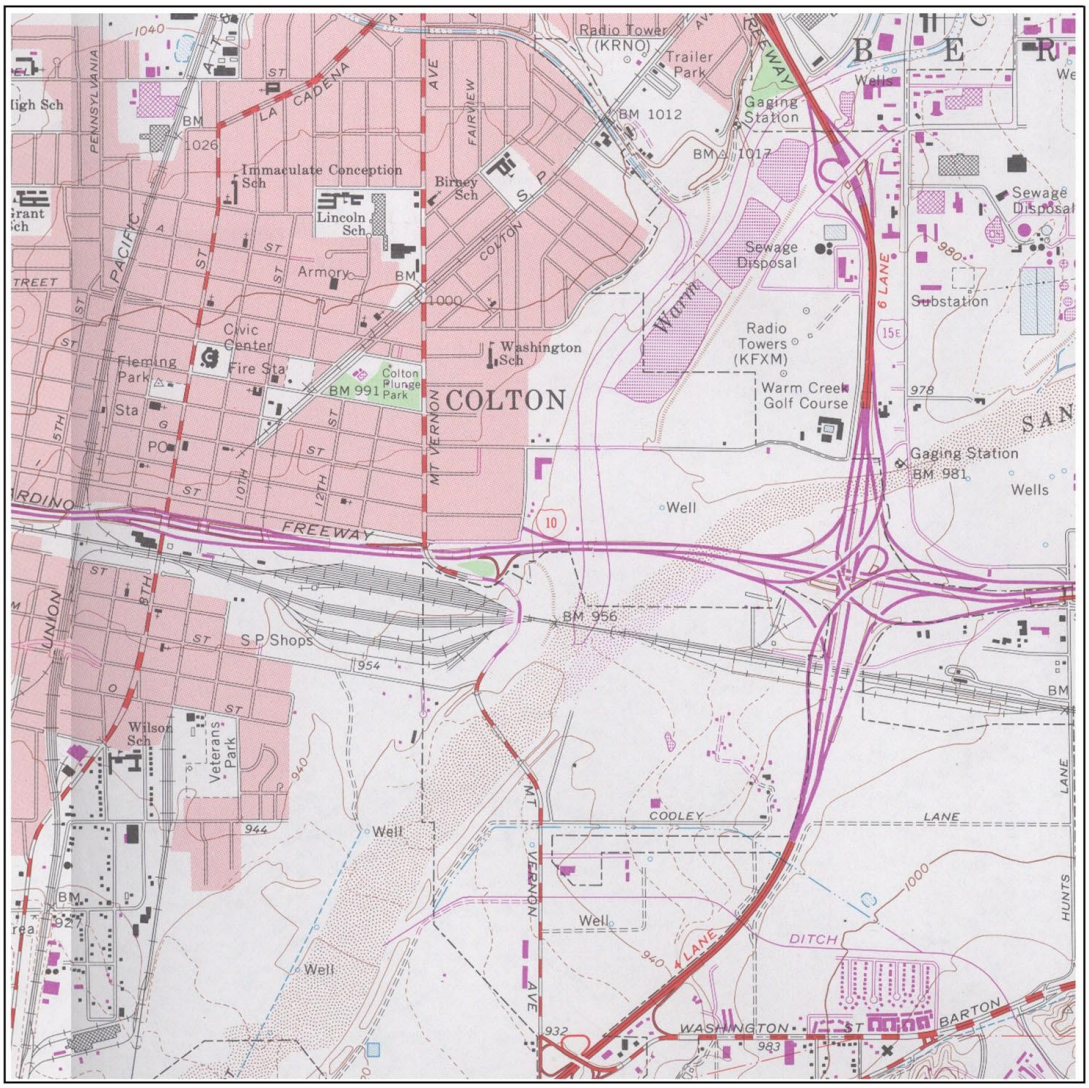
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 8



Building

Topo Contour

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: San Bernardino South, Ca

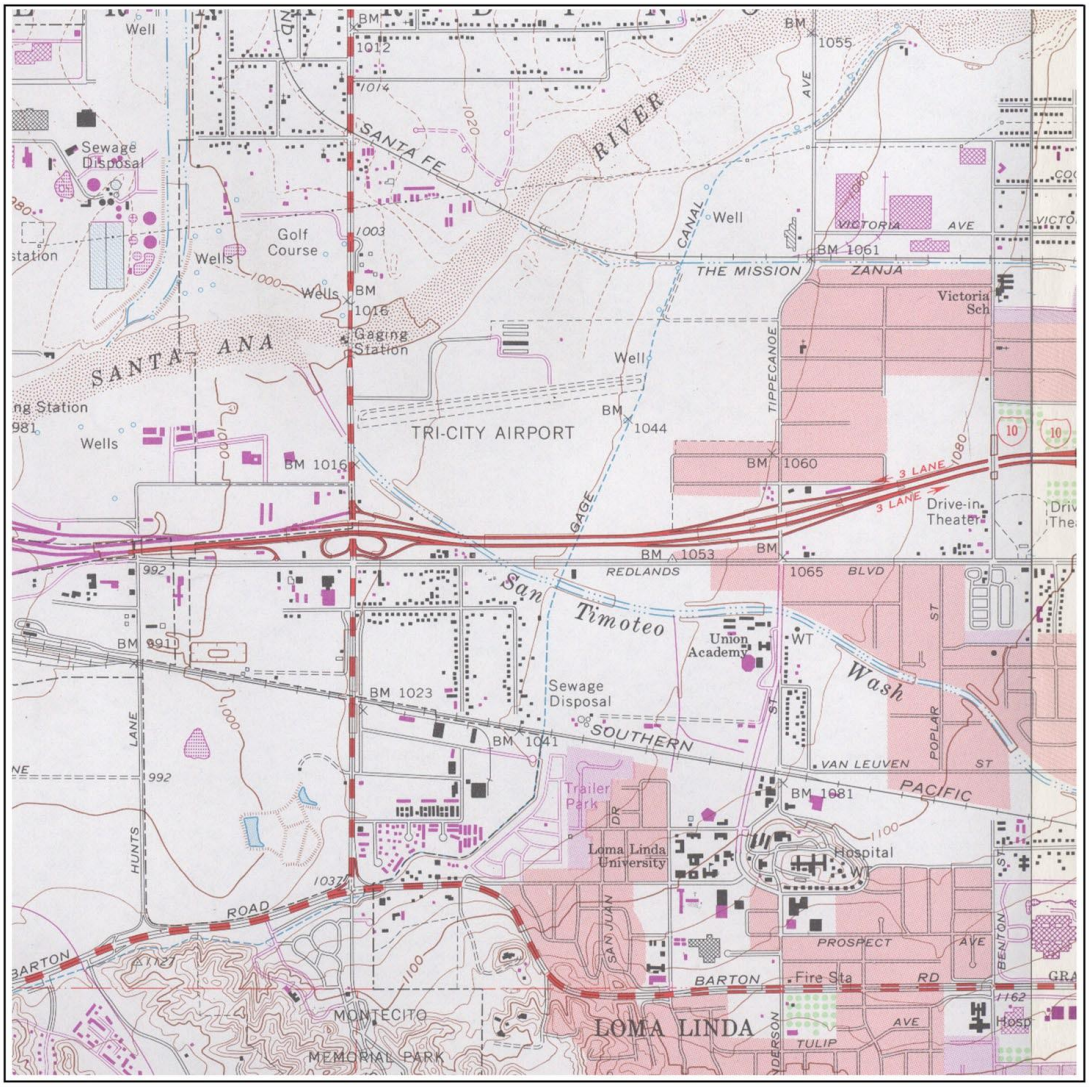
Copyright: Track Info Services, LLC

Track Info Services, LLC

Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 9



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: San Bernardino South, Ca
(East: Redlands, Ca 1980)

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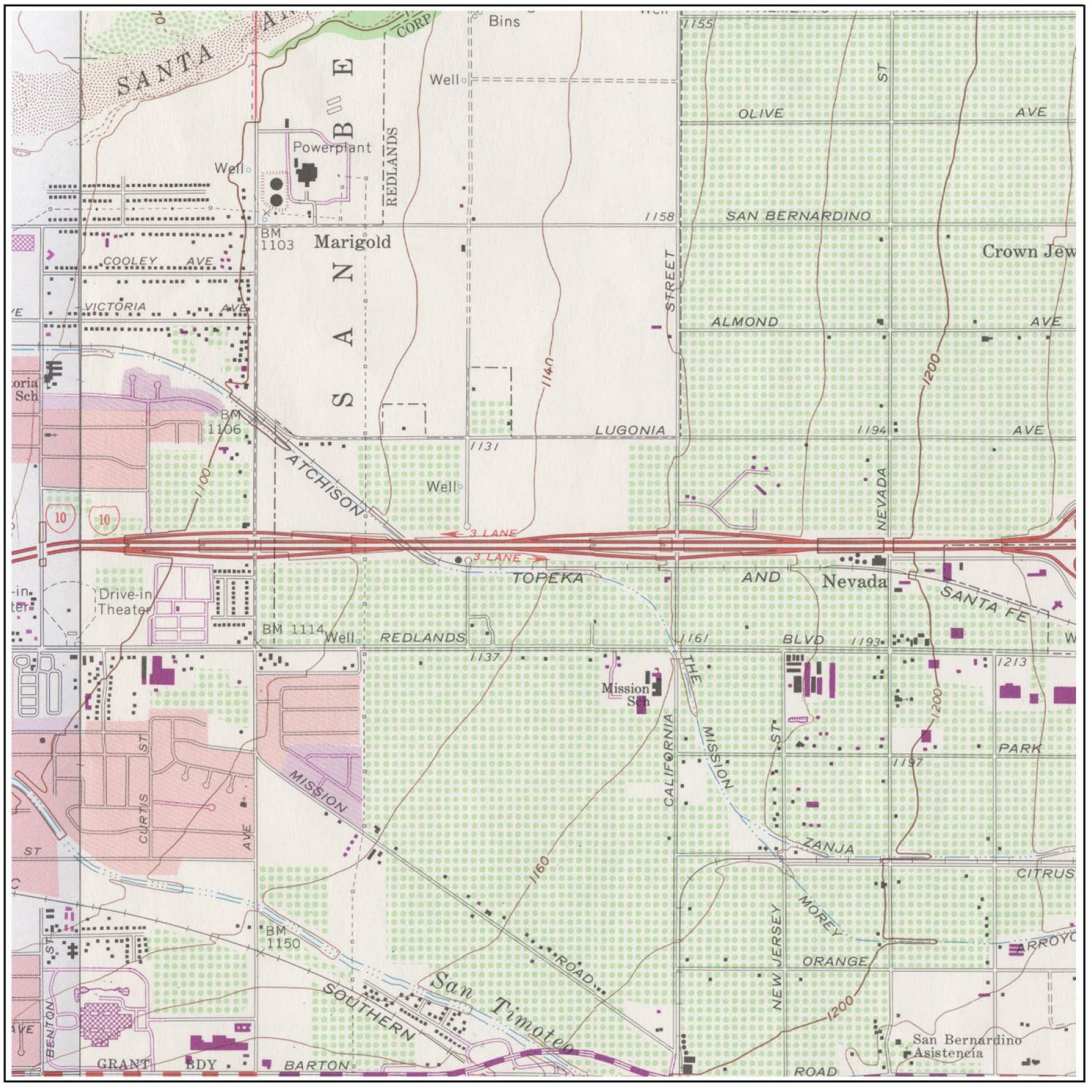
Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 10



Building
Topo Contour
Depression
Quarry or Open Pit Mine
Railroad
Tanks
Primary Highway
Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884
Original Scale of Full Topo: 1:24,000
Quadrangle Name: Redlands, Ca
(West: San Bernardino South, Ca 1980)

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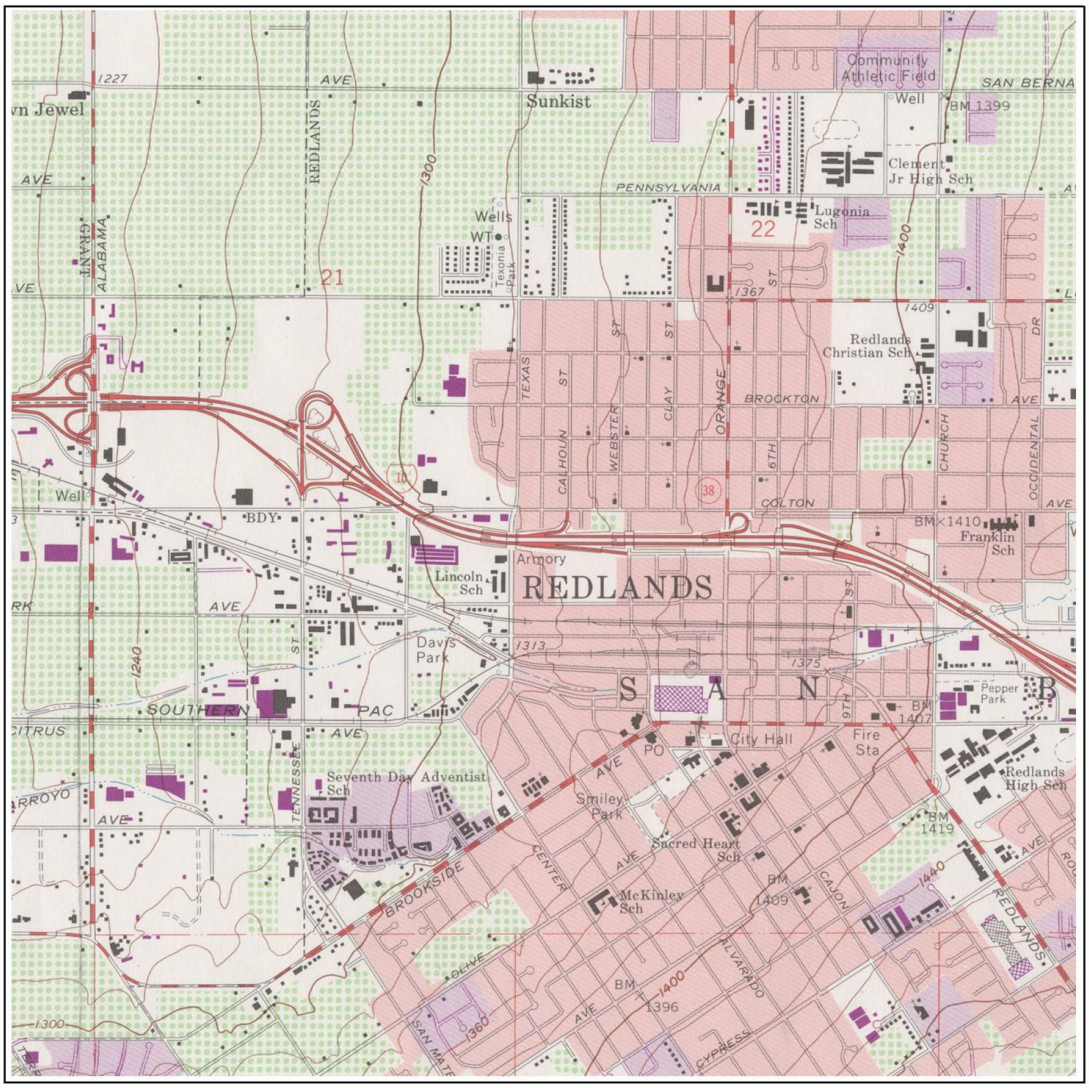
Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 11



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Redlands, Ca

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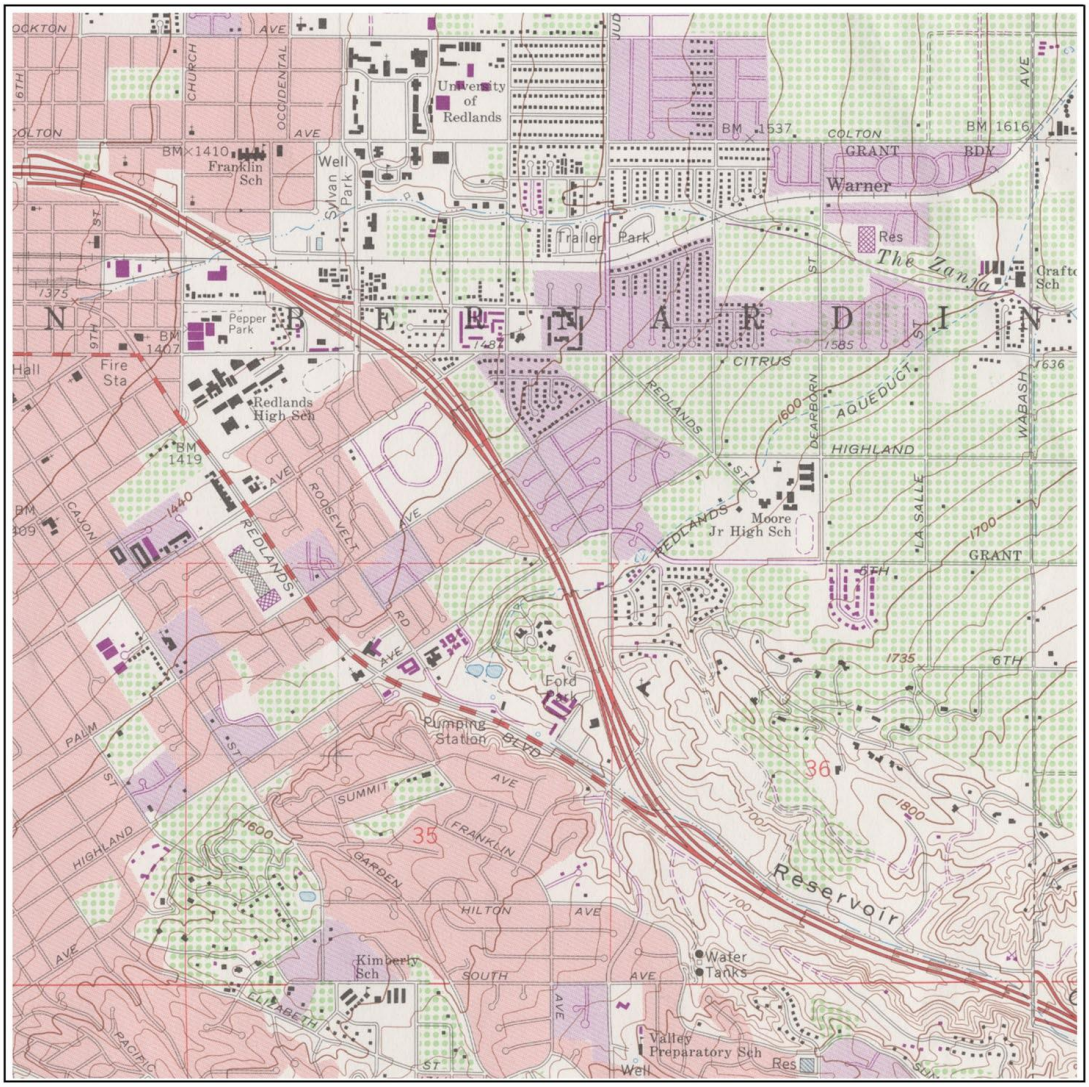
Historical Topographic Map

Site: Ontario to Redlands, Ca 92324

Quadrangle Year: 1980 - Image 12



Building

Topo Contour 6000

Depression

Quarry or Open Pit Mine

Railroad

Tanks

Primary Highway

Trail

0 1/4 1/2 3/4 1 mile

Job Number: 646884

Original Scale of Full Topo: 1:24,000

Quadrangle Name: Redlands, Ca

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