

Basic Remediation Company

Restoration Advisory Committee  
Meeting

Dr. Ranajit (Ron) Sahu

Project Manager

April 9, 2009

# Topics

- Introductions and Approval of Minutes (Transcript)
- Remediation Update
- Other Work Update
- Planned Activities
- Next Meeting – July 9, 2009
- Subsequent Meetings – October 8, 2009 and January 7, 2010.



Las Vegas

Henderson

Las Vegas Wash

Lake Mead

Site

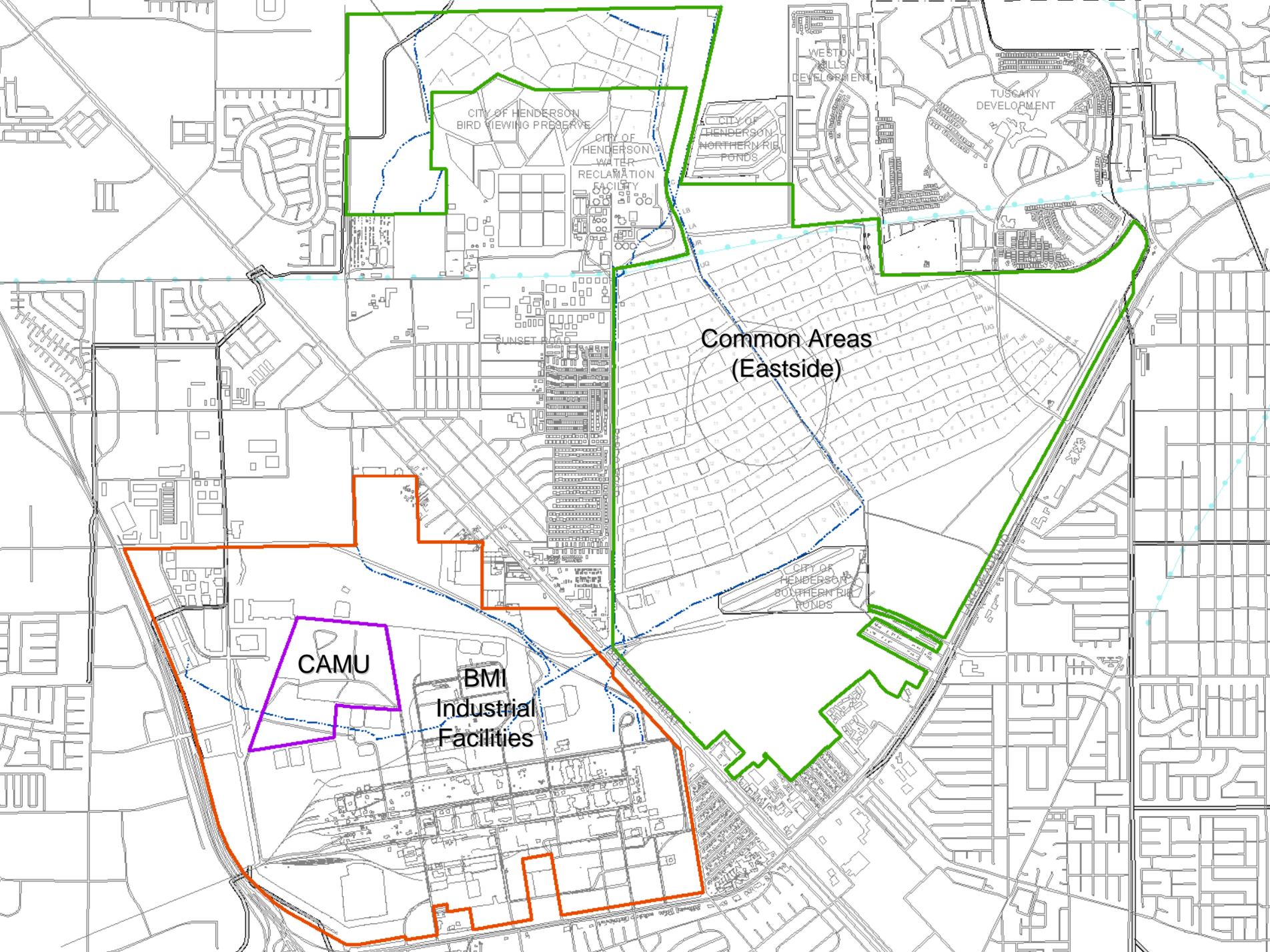


NEVADA



BMI Site  
Clark County, Nevada

Site Location



CITY OF HENDERSON  
BIRD VIEWING PRESERVE

CITY OF HENDERSON  
WATER RECLAMATION  
FACILITY

CITY OF HENDERSON  
NORTHERN RIE  
PONDS

WESTON  
HILLS  
DEVELOPMENT

TUSCANY  
DEVELOPMENT

SUNSET BLVD

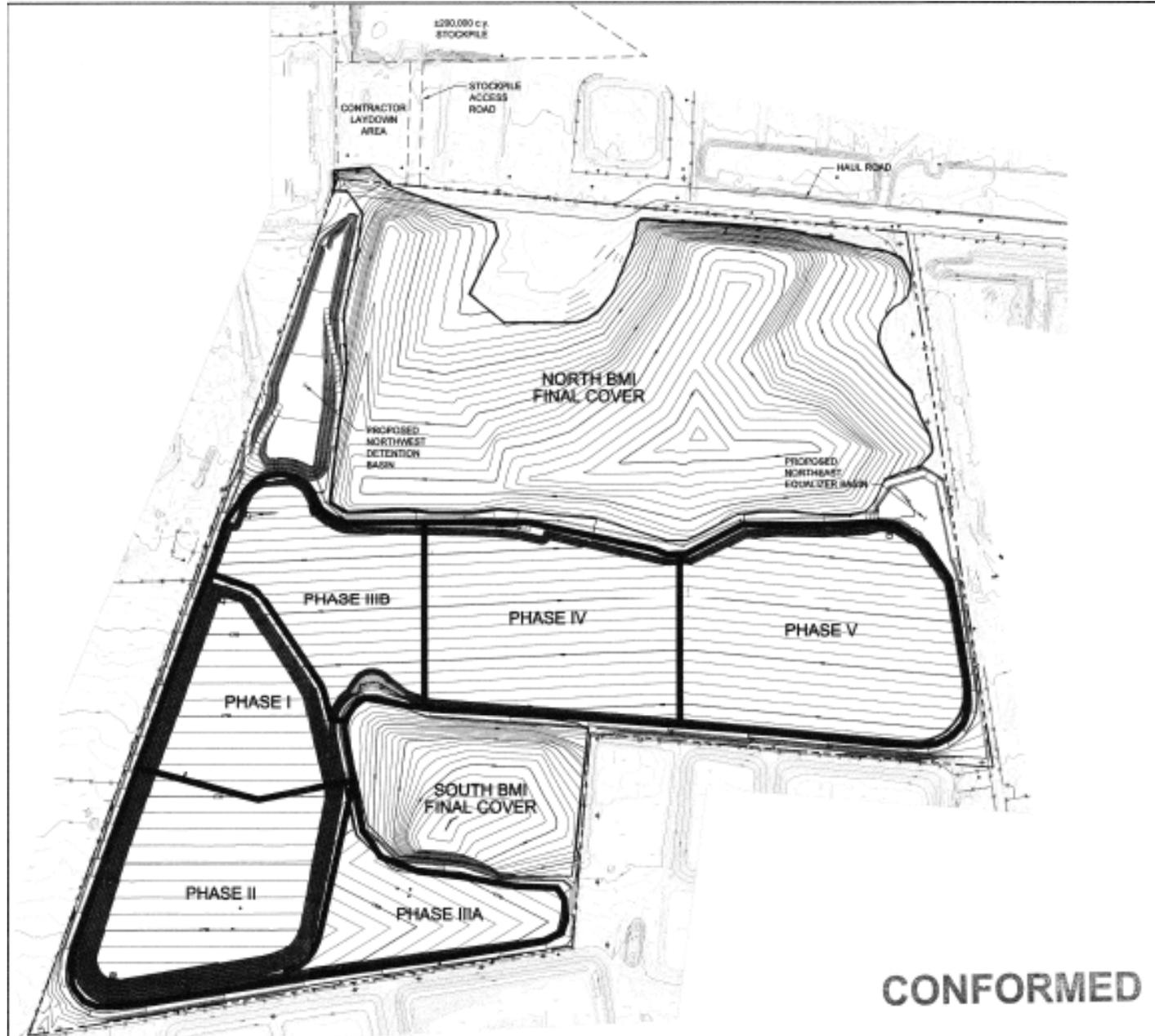
Common Areas  
(Eastside)

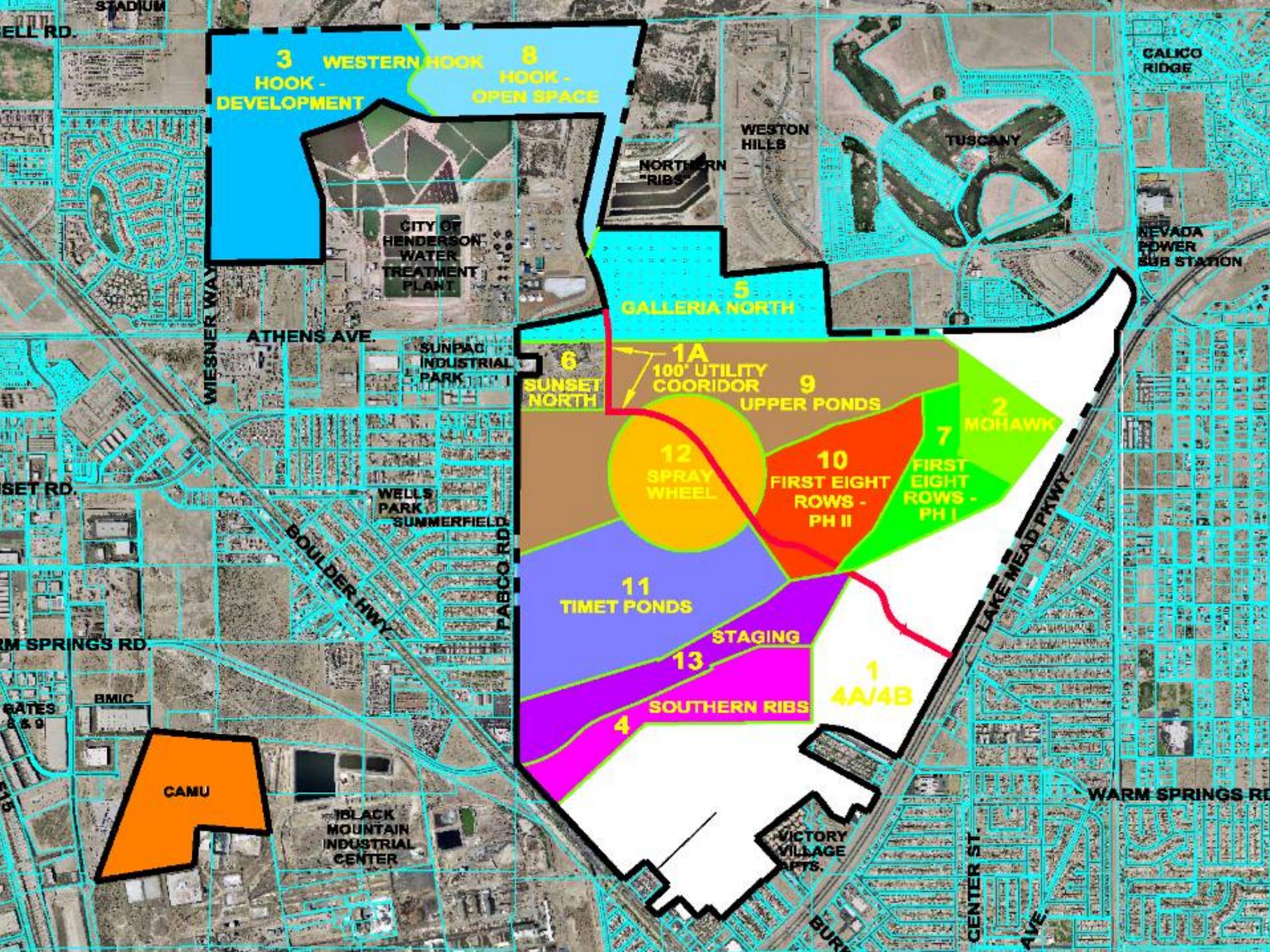
CAMU

BMI  
Industrial  
Facilities

CITY OF HENDERSON  
SOUTHERN BIRD  
PONDS

# CAMU Phases





**3 WESTERN HOOK HOOK - DEVELOPMENT**  
**8 HOOK - OPEN SPACE**

**5 GALLERIA NORTH**

**6 SUNSET NORTH**

**1A 100' UTILITY COORIDOR**

**9 UPPER PONDS**

**2 MOHAWK**

**12 SPRAY WHEEL**

**10 FIRST EIGHT ROWS - PH II**

**7 FIRST EIGHT ROWS - PH I**

**11 TIMET PONDS**

**STAGING**

**13 SOUTHERN RIBS**

**1 4A/4B**

**CAMU**

**BLACK MOUNTAIN INDUSTRIAL CENTER**

**VICTORY VILLAGE APPTS.**

**WARM SPRINGS RD**

STADIUM

CALICO RIDGE

WESTON HILLS

TUSCANY

NEVADA POWER SUB STATION

ATHENS AVE.

SUNPAC INDUSTRIAL PARK

WELLS PARK SUMMERFIELD

SET RD.

M SPRINGS RD.

BMIC

GATES & S

LAKE MEAD PKWY.

CENTER ST. AVE.

BURE



SW-12

SW-11

HP-5

SW-10

HP-3

SW-9

HP-4

SW-8

HP-2

SW-7

SW-6

SW-5

SW-4

SW-3

SW-2

SW-1

# Remediation Update

- Air Monitoring Continues
  - Phase IIA in progress (2 monitors in Eastside, 2 in CAMU)
  - Phase III (Slit Trenches) ongoing
  - Additional Baseline monitoring to be done (4 weeks)
  - Additional exhaust sampling of haul trucks and typ. Work truck
- CAMU Status
  - In Progress [Waste Placed in CAMU = over 825,000 cu. yds.]
  - CAMU Phase I – Interim level reached
  - CAMU Phase II – Waste placement in progress
  - CAMU Phase IIIA – Waste placement in progress
  - CAMU Phase IIIB – Subgrade preparation and contaminant excavation ongoing

# Remediation Update (contd.)

- CAMU Status (contd.)
  - BMI Landfill North – Cover placed
  - N-E Detention Basin completed
  - N-W Detention Basin completed
  - Slit Trenches
    - 4 out of 5 trenches cleared in Phase IIIB
- Eastside
  - TIMET Ponds - Excavation/Drying Activities in 14 out of 15 ponds
  - Dry Ponds in sub-area 7 almost completed cleared



## **CAMU IIIA - Subgrade Preparation**

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## CAMU IIIA - GCL Installation

Installation of geosynthetic clay liner (GCL) with staggered geomembrane deployment.



## **CAMU IIIA - Geomembrane Installation**

Geomembrane deployment with sandbags along edges to prevent stormwater and dust control water from hydrating underlying GCL



## **CAMU IIIA - Geomembrane Seaming**

ESI personnel sweep away dust and debris from geomembrane overlap as welding machine seams panels.



## **CAMU IIIA - Geocomposite Installation**

Spreader bar used to raise geocomposite roll.



## **CAMU IIIA - Geocomposite Installation**

Low pressure equipment is used to pull geocomposite from spreader bar above geomembrane.



## **CAMU IIIA - Anchor Trench Backfill**

Placement and compaction of anchor trench backfill to secure liner system.



## **CAMU IIIA - HDPE Welding**

Butt-fusion welding of HDPE leachate collection pipes.



## **CAMU IIIA - Operations Layer Placement**

Placement of two feet of operations layer material to protect geosynthetics during waste placement.



2009/02/11



2009/02/11











**CAMU IIIB**



SW-12

SW-11

HP-5

SW-10

HP-3

SW-9

HP-4

SW-8

HP-2

SW-7

SW-6

SW-5

SW-3

SW-4

SW-2

SC-1



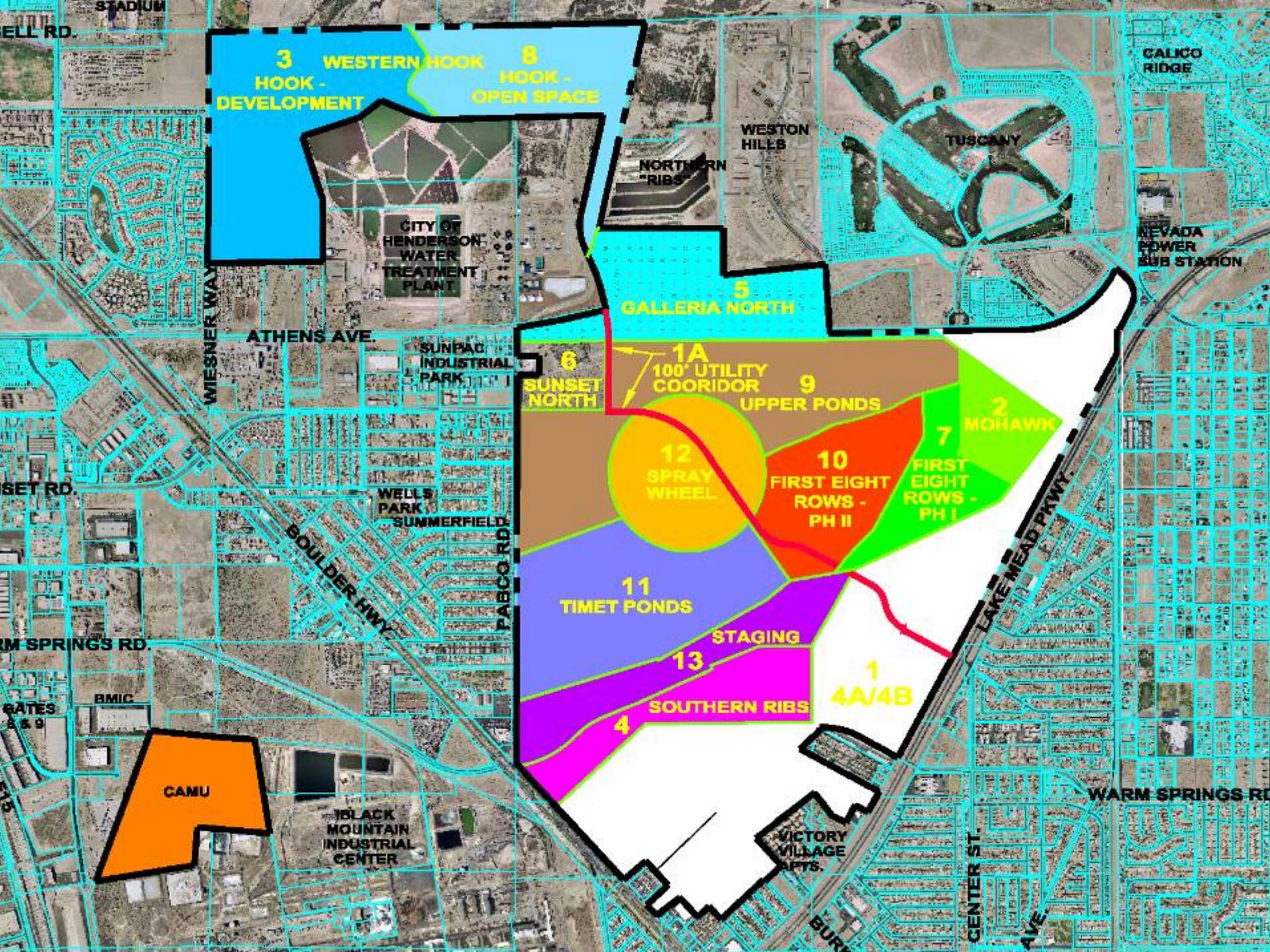












**3 WESTERN HOOK**  
**HOOK - DEVELOPMENT**

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**TUSCANY**

**NEVADA POWER SUB STATION**

**ATHENS AVE.**

**SUNPAC INDUSTRIAL PARK**

**WELLS PARK SUMMERFIELD**

**LAKE MEAD PKWY.**

**BOULDER HWY.**

**PABCO RD.**

**SET RD.**

**SPRINGS RD.**

**BMIC**

**GATES & S**

**CENTER ST. AVE.**

**BURE**

# Looking West to PUA 7 from PUA 4



# Looking West From PUB 3 to PUB 4



# Looking North at PUC 3 & 4



# Other Work Update

## Sub-Areas Status

Sub-Area Name	Acres	Samples	Locations	Conf.-SAP	C-Samp	NFA
Parcel 4A	243.7	--	--	App	R1/R2	Done
Parcel 4B	278.4	--	--	App	R1/R2/R3/R4	RA Prep
Utility Corridor	8.4	60	46	App	R1/R2/R3	Done
Mohawk	54.74	98	38	App	R1/R2/R3	TBD
Western Hook	226.95	279	129	App	R1	TBD
Southern RIBs	95.83	154	63	App	R1/R2	TBD
Galleria North	144.25	212	96	App	R1	TBD
SN Commercial	44.33	103	50	App	R1	TBD
First Eight Rows-Phase II	126.48	240	108	TBD	TBD	TBD
Open Space	151.33	336	151	In Review	Q2, 09	TBD
Upper Ponds	283.3	407	183	In Revision	Q2, 09	TBD
First Eight Rows-Phase I	77.23	140	63	Q2, 09	Q3, 09	TBD
TIMET Ponds	209.89	391	176	TBD	TBD	TBD
Spray Wheel	128.71	180	81	TBD	TBD	TBD
Staging	114.97	262	118	TBD	TBD	TBD
	2189	3147	1302			

# Other Work Update (contd.)

- Background Reports
  - Suppl. Shallow Soils – Revised Report in review
  - Deep Soils – Revised Report in review
- Groundwater
  - Eastside 5<sup>th</sup> quarter groundwater sampling
    - Complete; report submitted; RTC for comments submitted
  - Modeling – in progress
    - Calibration Report accepted
  - CAMU area baseline groundwater monitoring [4 Qtrs. in 2009]
    - Q1 Sampling completed; results awaited
    - Q2 Sampling to commence in next 2 weeks

# Planned Activities - 1

- Remediation // Related Activities – Continue
- Closure // Related Activities
  - Create Final Background Datasets Report
  - Obtain NFA – 4B, Mohawk, SRIBS
  - Complete Debris Removal – W. Hook
  - Confirmation SAPs – Obtain approval Open Space, Upper Ponds
  - Confirmation SAPs – Create for parcel 7
  - Complete Groundwater modeling
  - Initiate Eastside Groundwater RAS
  - Continue CAMU groundwater monitoring

# Planned Activities - 2

- Public Involvement Activities
  - Website at [www.landwellco.com](http://www.landwellco.com) now updated
    - All important project documents available on the website
    - Construction updates added
  - Informational Kiosk – still open