Tucson's SHARP Step Toward Total Reuse

Southeast Houghton Area Recharge Project

RWRAC

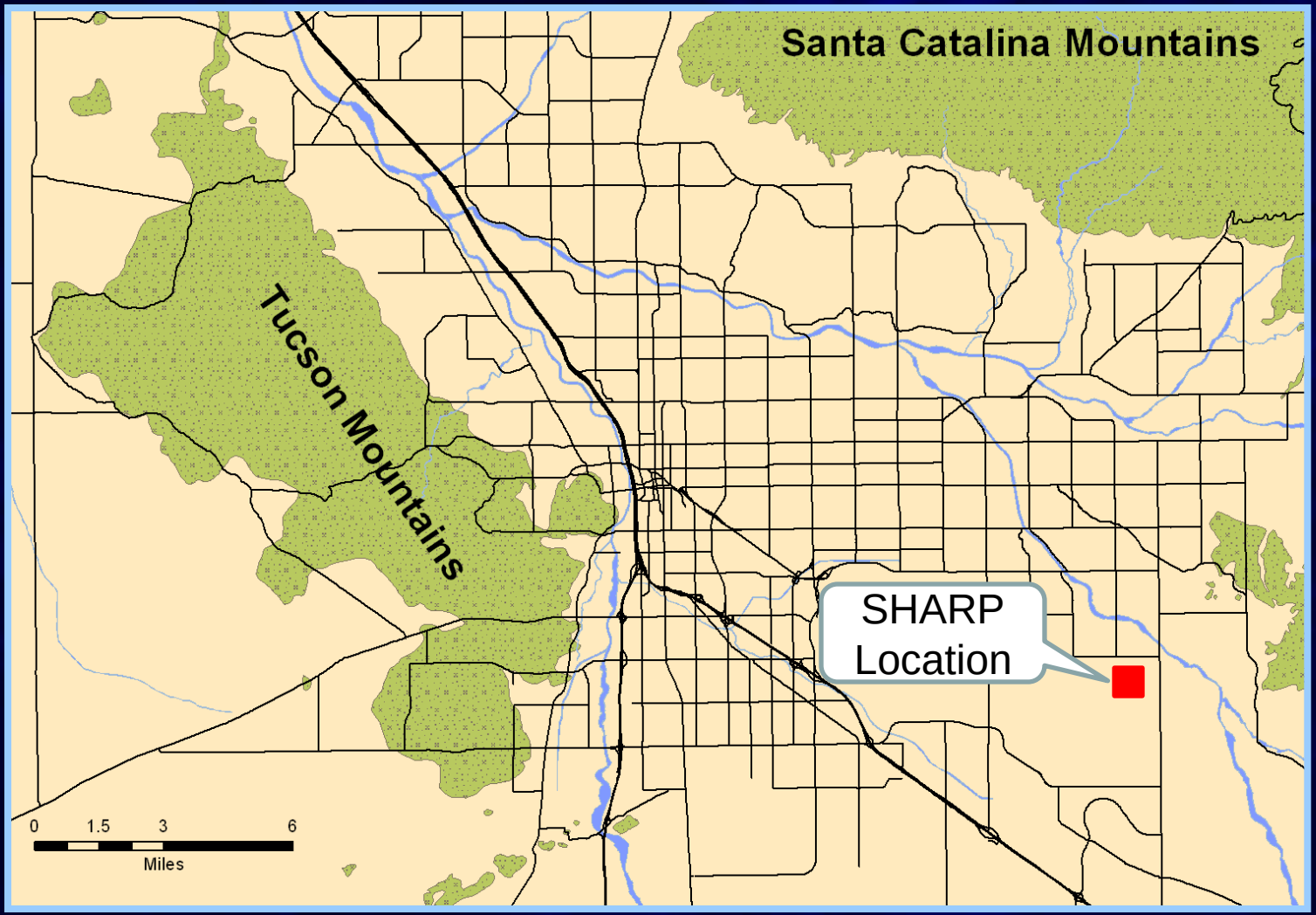
September 19, 2013

SHARP Background

IGA Completed (Feb 2011)

- Equal Cost Share for Equal Storage Share
- Target of up to 4,000 AF/f storage
- Established Joint Recharge Oversight Committee (JROC)

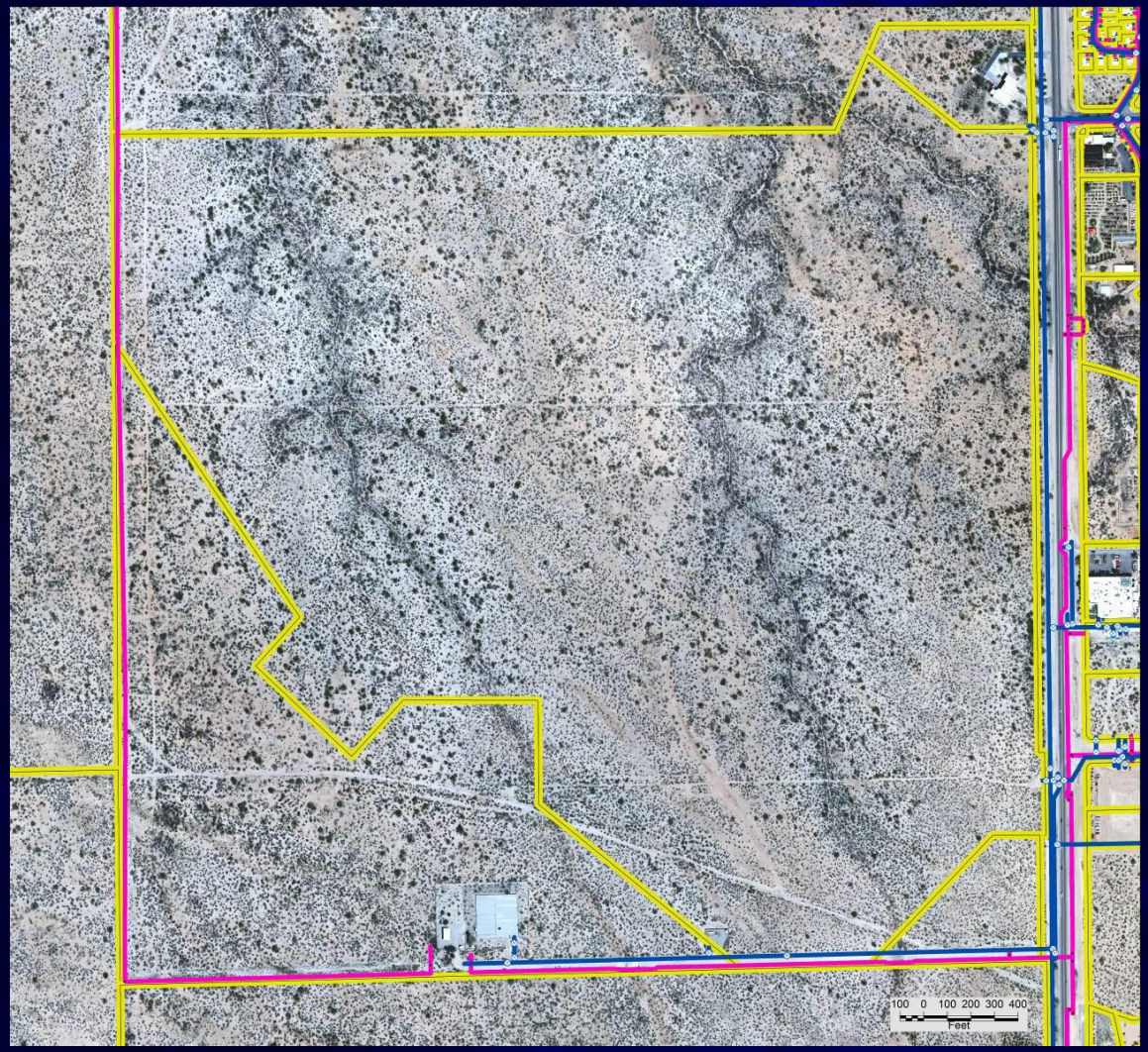
SHARP Location



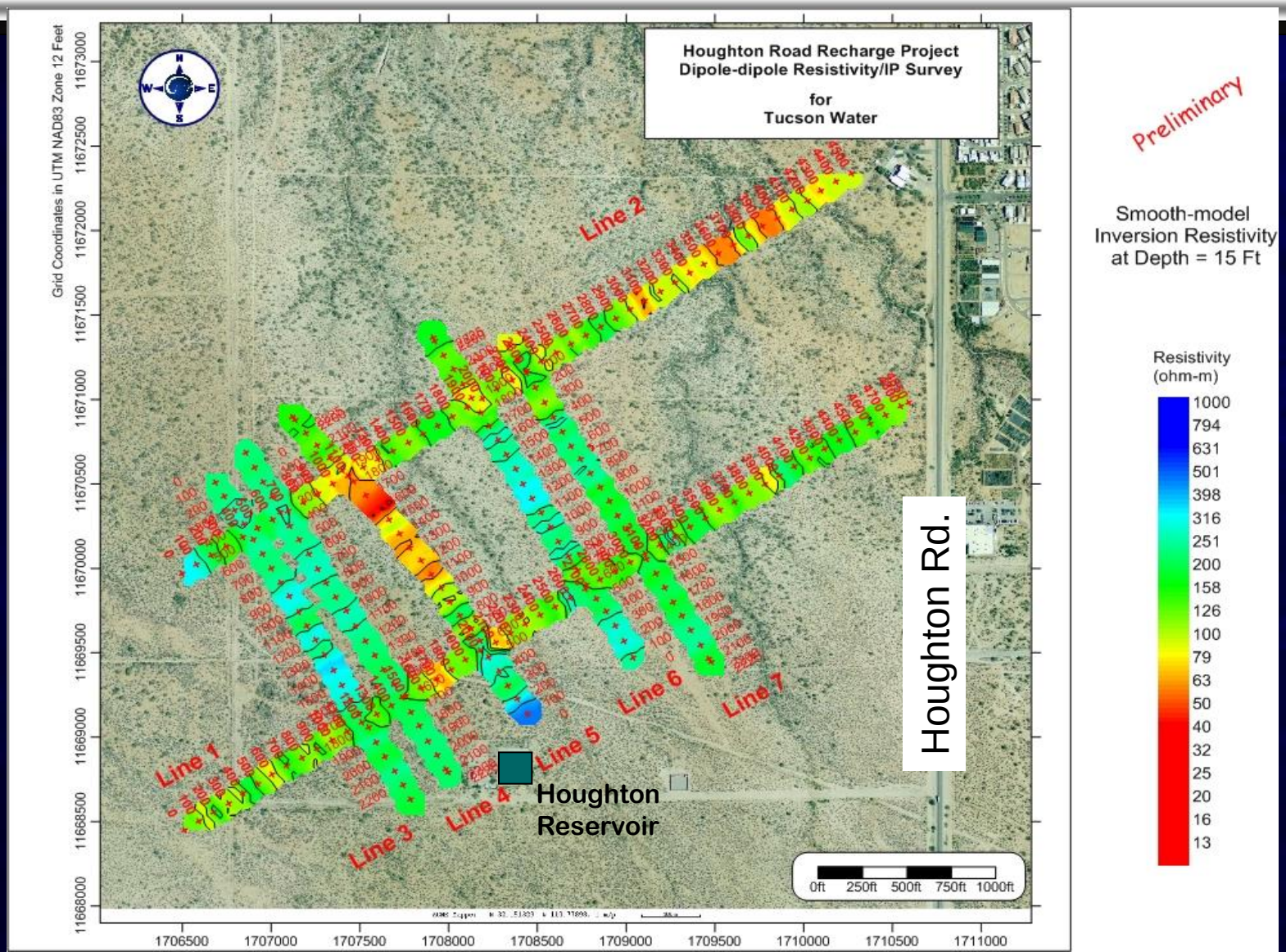
Feasibility Investigation

- Archeological Clearance (Spring 2011)
- Environmental Site Assessment (Spring 2011)
- Geophysics (Summer 2011)
- Drilling Program (Winter 2012)
- Infiltration Testing (Winter 2012 – Spring 2013)

Feasibility Investigation Limits

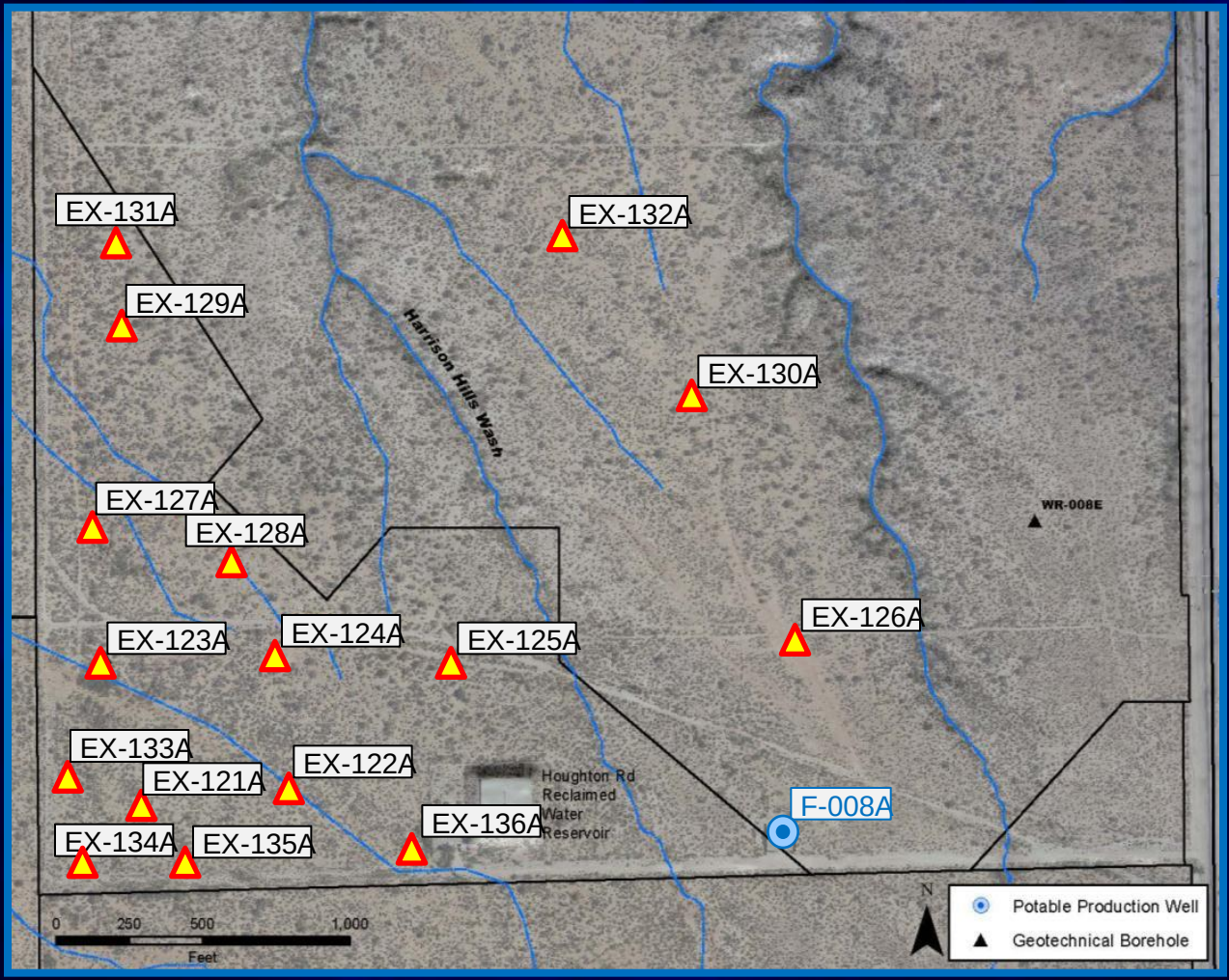


Resistivity Geophysical Results

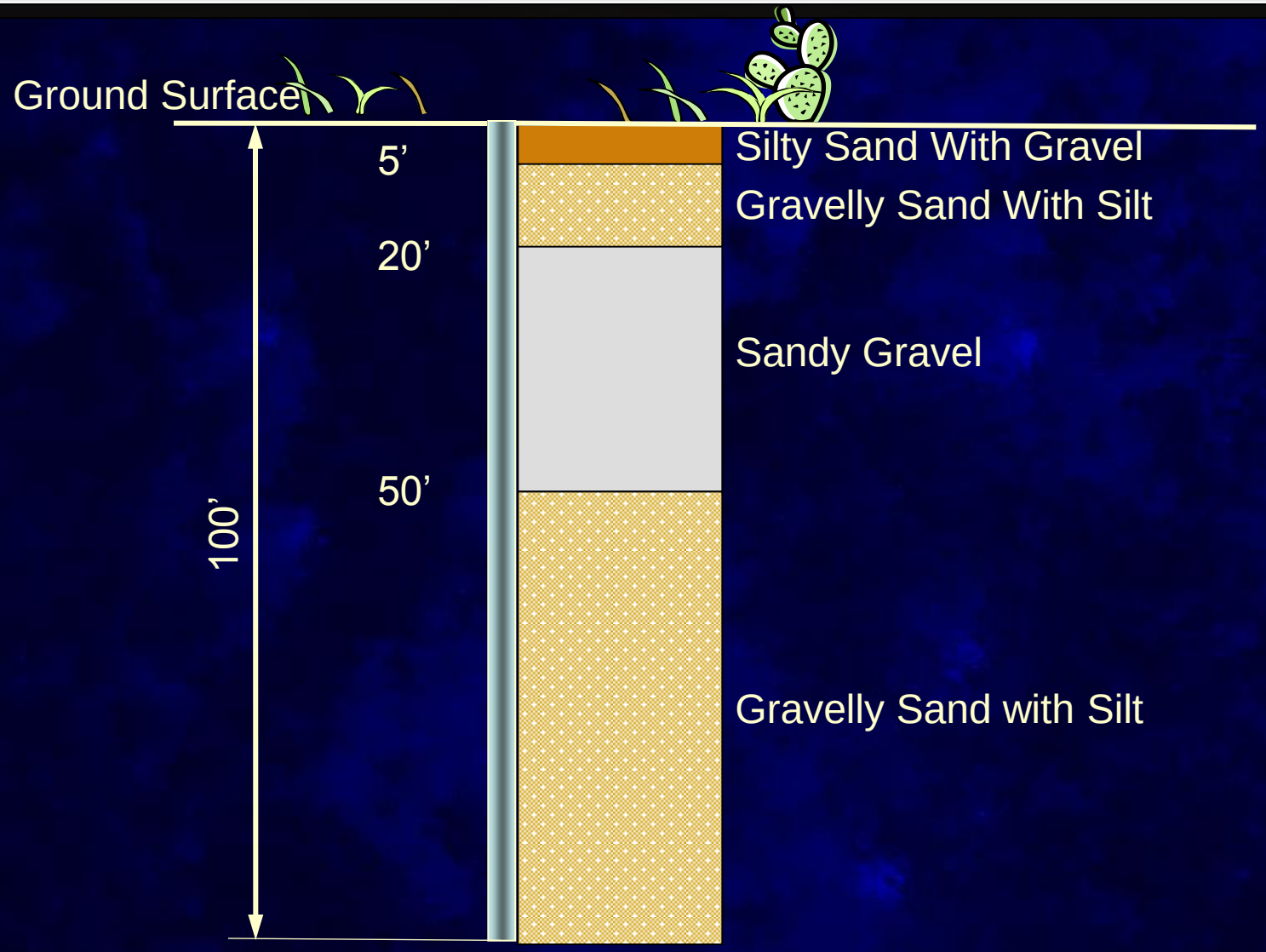


Verification Borehole Locations

- 17 Borings
- 50’-100’ Depth
- Soil Logging and Geophysical Verification

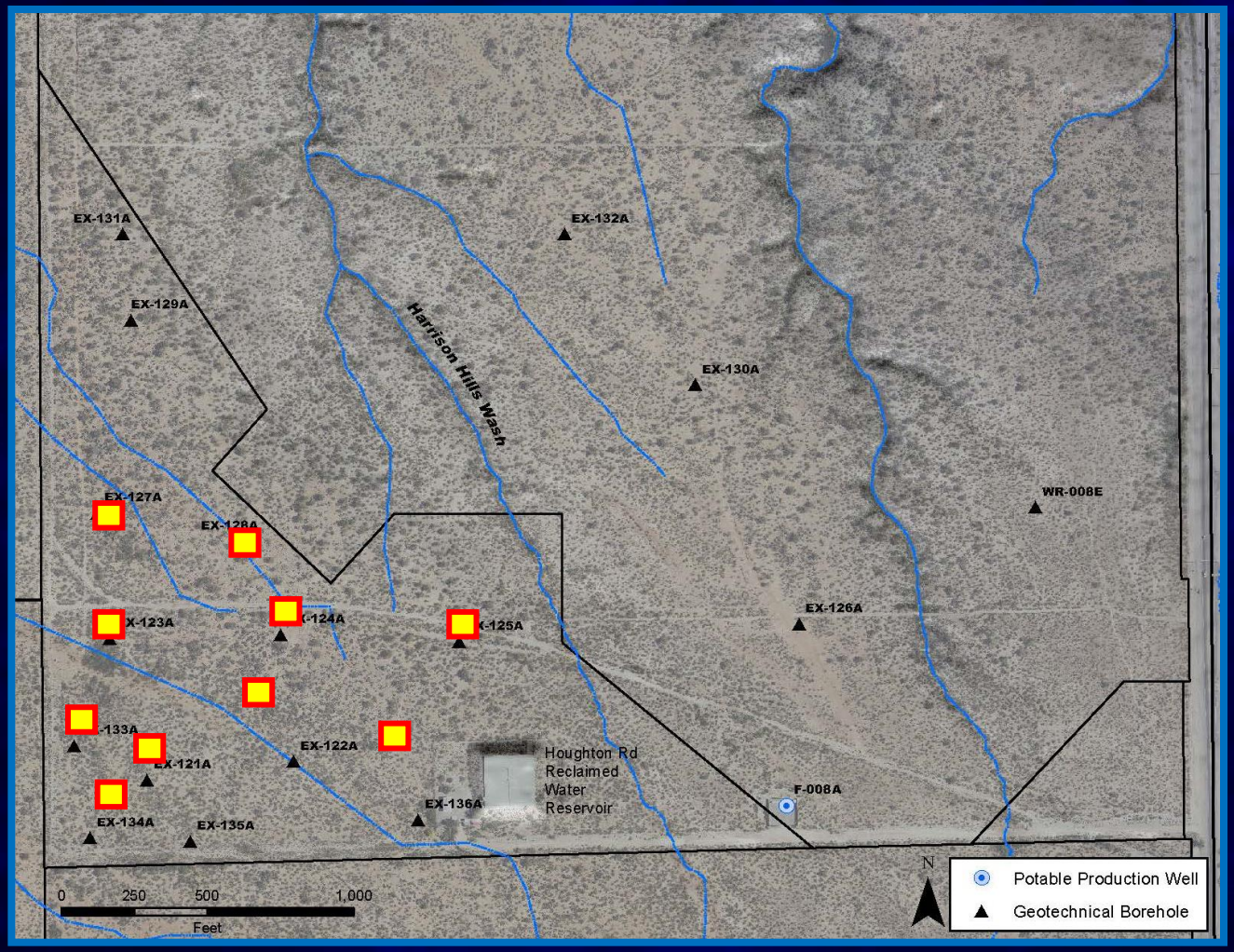


Typical Borehole Lithology



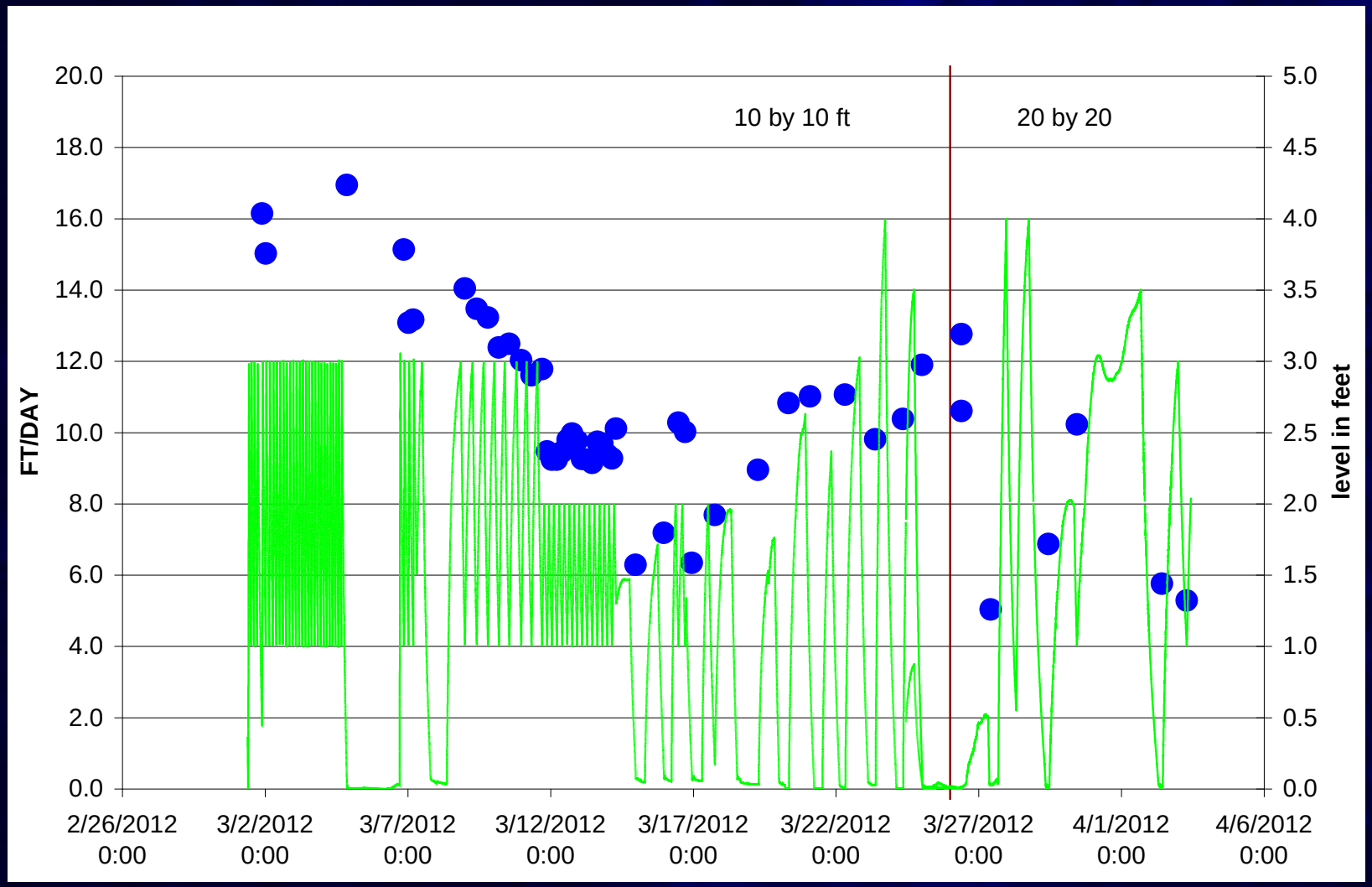
Total Basin Locations to be Tested

- 10 – Infiltration Basins
- 5’-6’ Deep
- 20’x20’ Basin Size



Infiltration Basin 1
10’X10’ Configuration

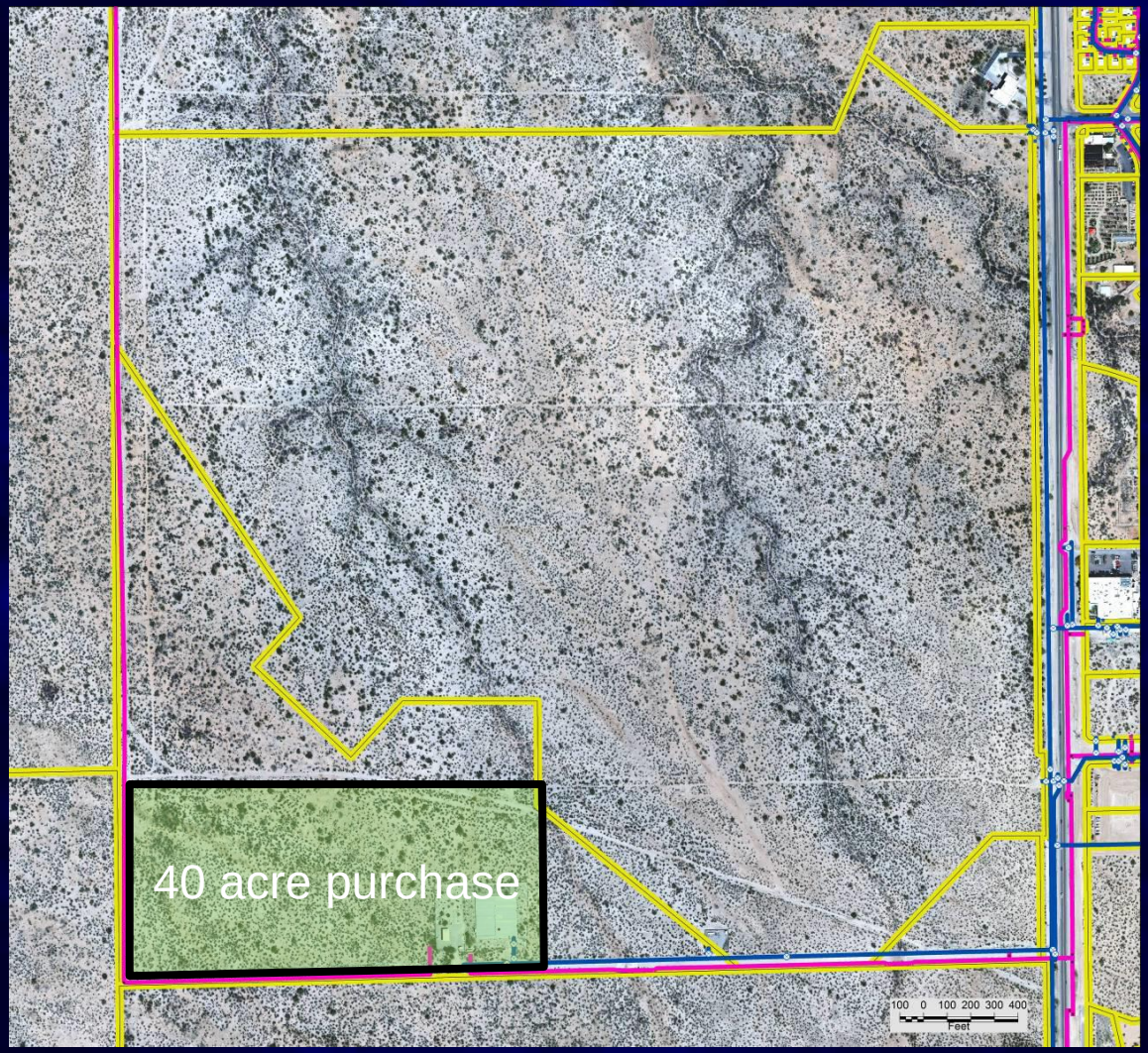
Basin 1 Infiltration Rates (Ft/d)



SHARP Land Purchase

Site Advantages

- Reclaimed Water infrastructure in place
- Level terrain
- Distant from ephemeral streams
- High infiltration rates
- No existing development
- Recovery capacity in existing well



Conceptual SHARP Facility

Many are anxiously awaiting SHARP