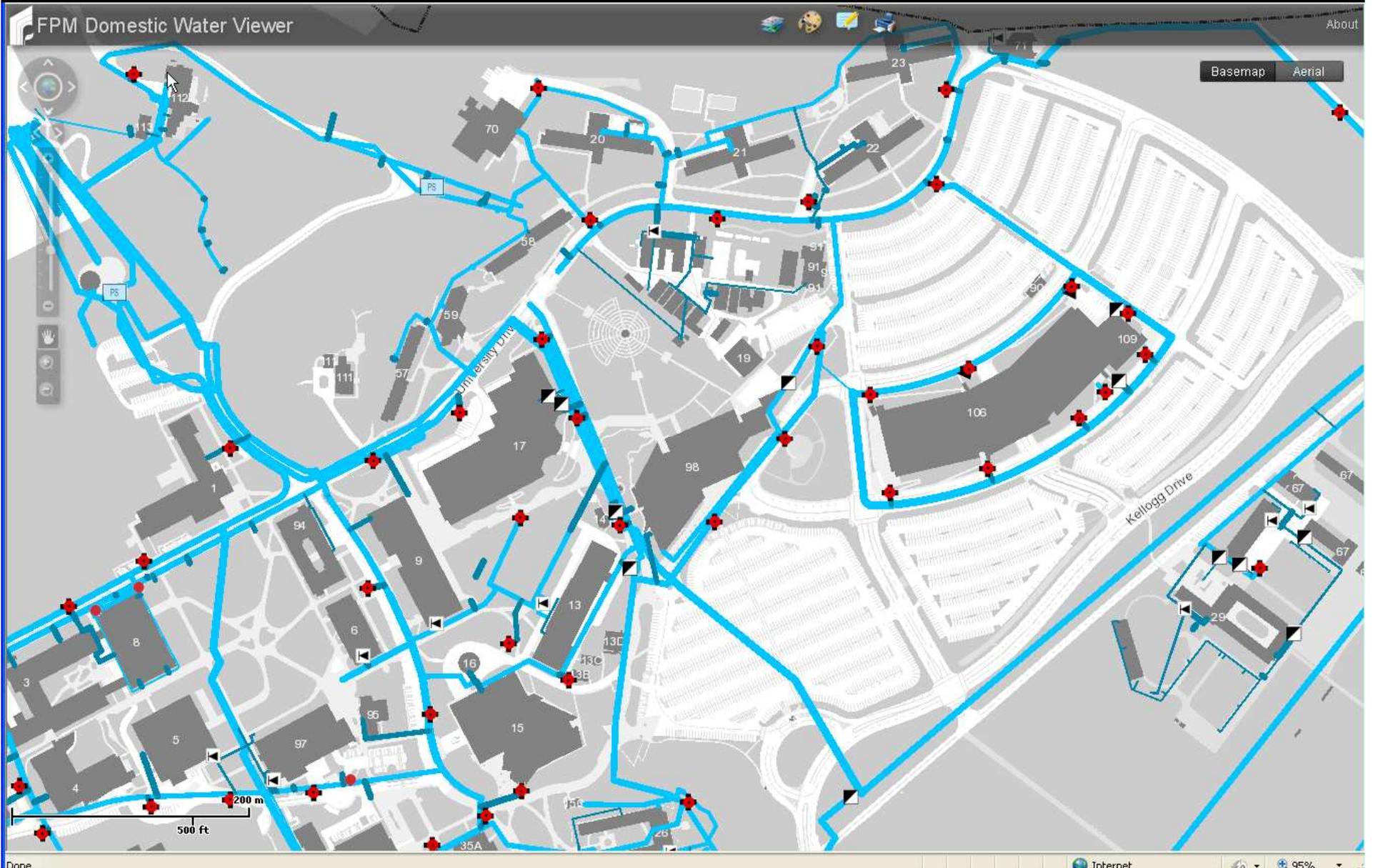


WHEN GIS WORKS

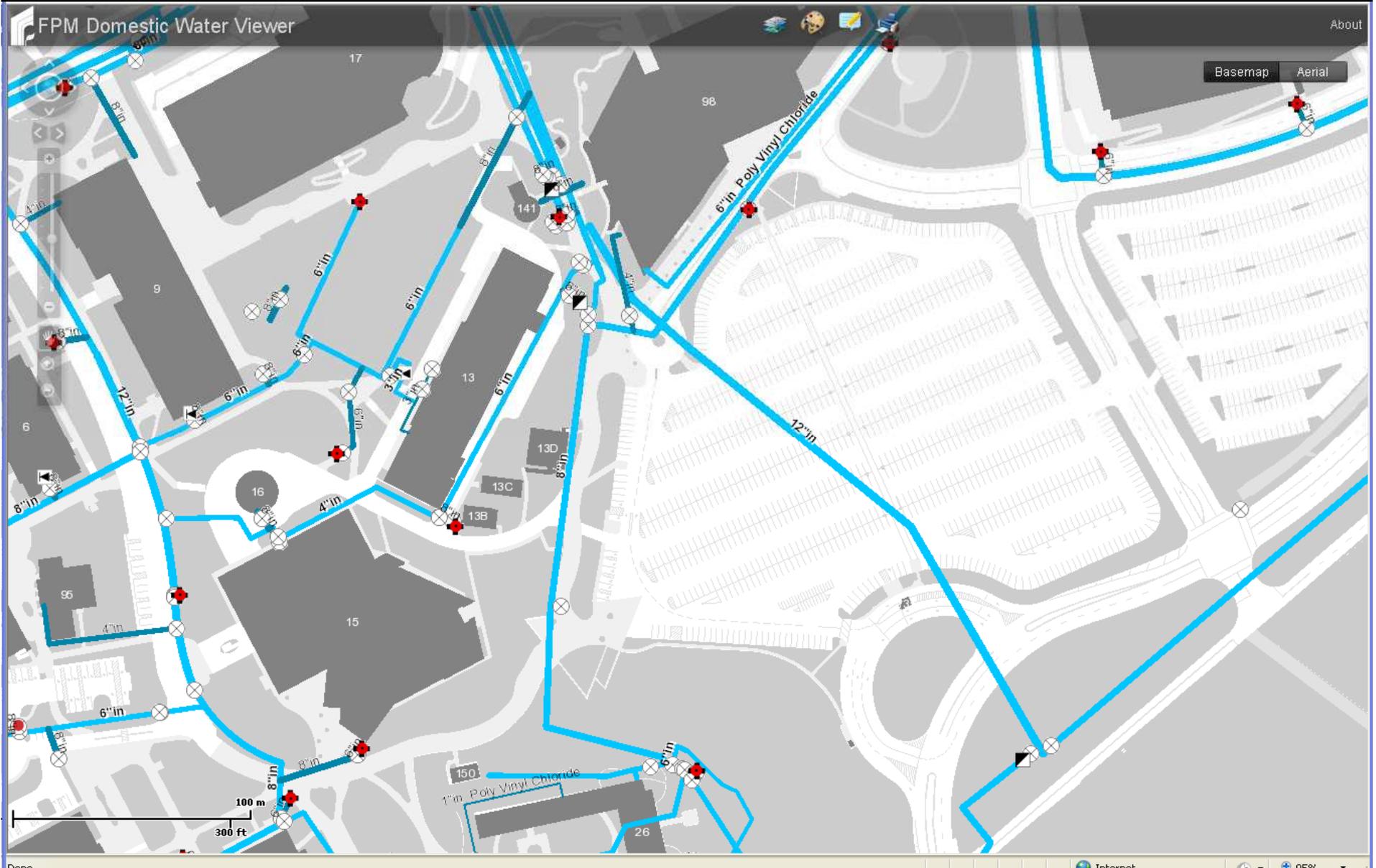
How a Campus Uses Data for Sustainability

Boykin Witherspoon III

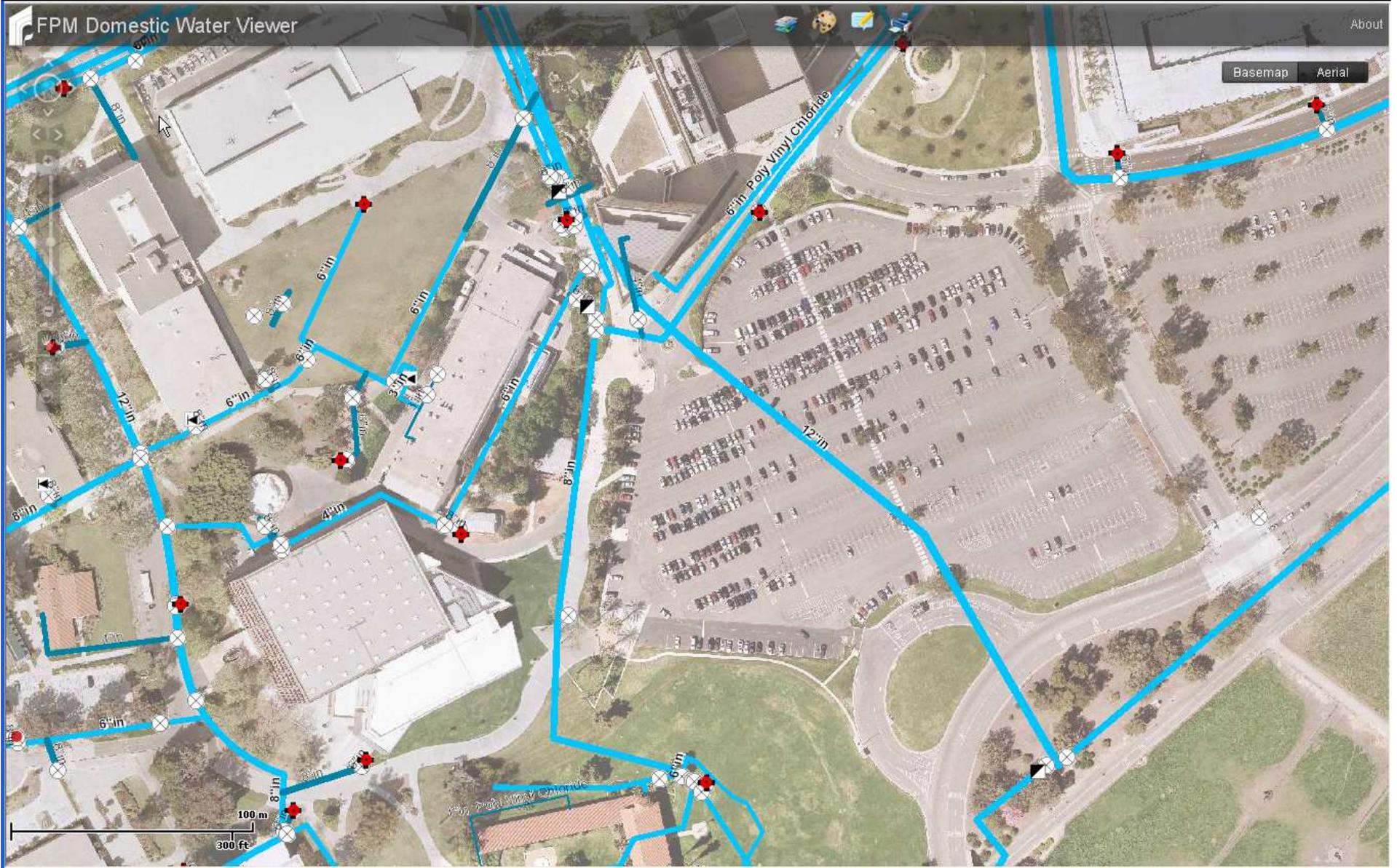
WORKS



HOW DO I KNOW IT WORKS



WATER WORKS



WHO WORKS

Utility Maps

Click any of icons below to launch a map service.



SEWER

Sewer Map

Contains gravity mains, manholes, lateral lines, fittings, cleanouts, and overall network structure. This map also links to videos, pictures, and plans.



STORM

Storm Drains

Contains gravity mains, manholes, lateral lines, fittings, culverts, outlets and overall network structure. This map also links to videos, pictures, and plans.



GAS NATURAL

Natural Gas

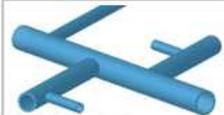
Contains mainlines, meters, pressure regulators, fittings and overall network structure. This map also links to pictures and plans.



HVAC CHILLED & HOT WATER

HVAC Water Systems

Contains mainlines, control valve, fittings and overall network structure of both Chilled and Reclaimed water systems.



WATER DOMESTIC

Domestic Water

Contains mainlines, control valve, fittings and overall network structure of the domestic water system. Reclaimed water system is also available via the layer list icon.



WATER RECLAIMED

Reclaimed Water

Contains mainlines, control valve, fittings and overall network structure of the reclaimed water system. Domestic water system is also available via the layer list icon.



ELECTRIC

Electric 4160

4160 Lines and feeders are shown on this map along. When zoomed in transformers, panels and other electrical structures are available.



ELECTRIC

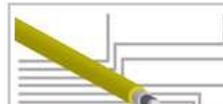
Electric 12KV

12KV Lines and feeders are shown on this map along. When zoomed in transformers, panels and other electrical structures are available.



Lighting

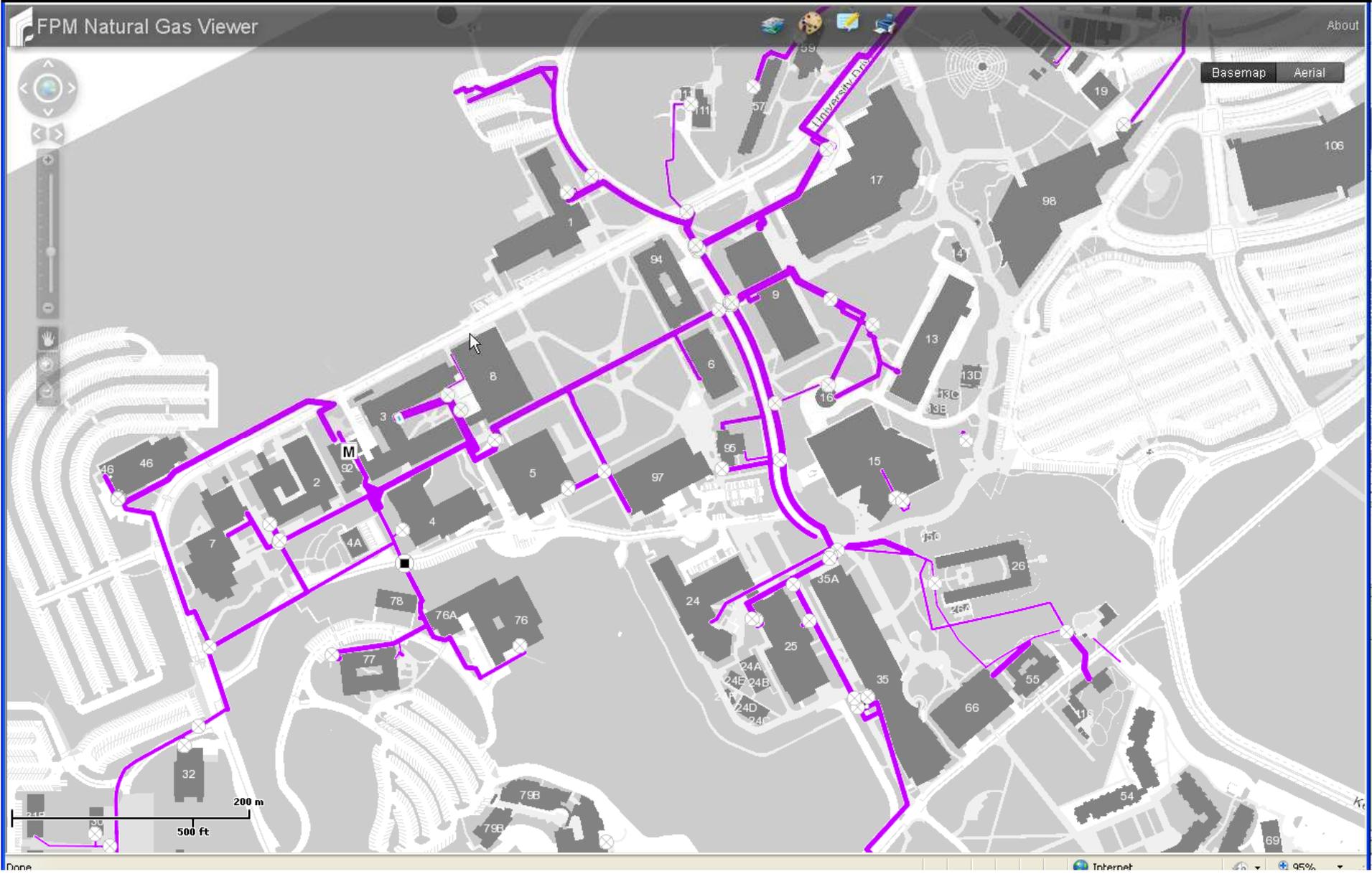
All high voltage Landscape lighting is included in this map from streetlights to bollard lighting.



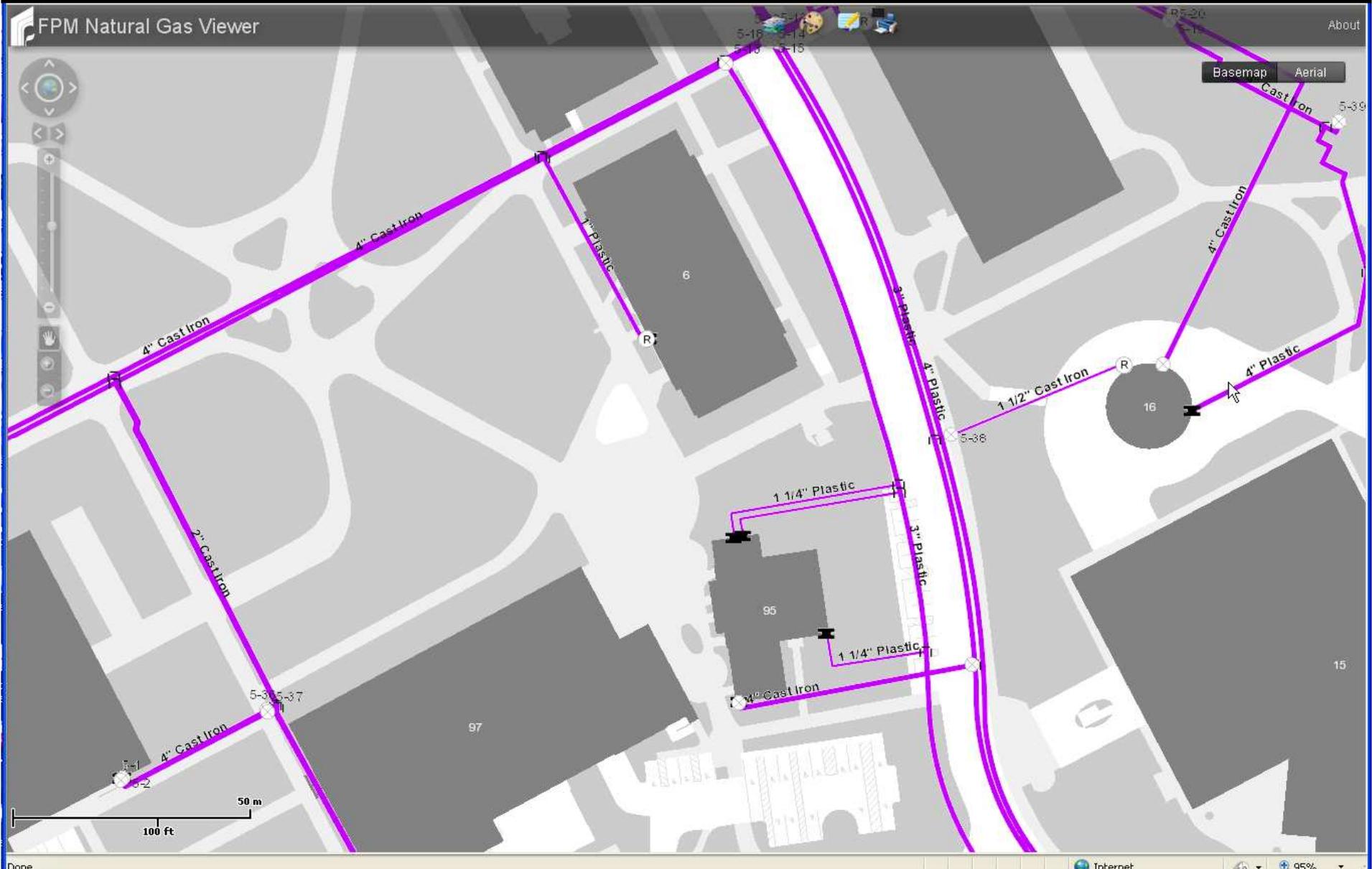
Telecom

This map contains fiber optic and copper Telecom/Datacom conduit locations.

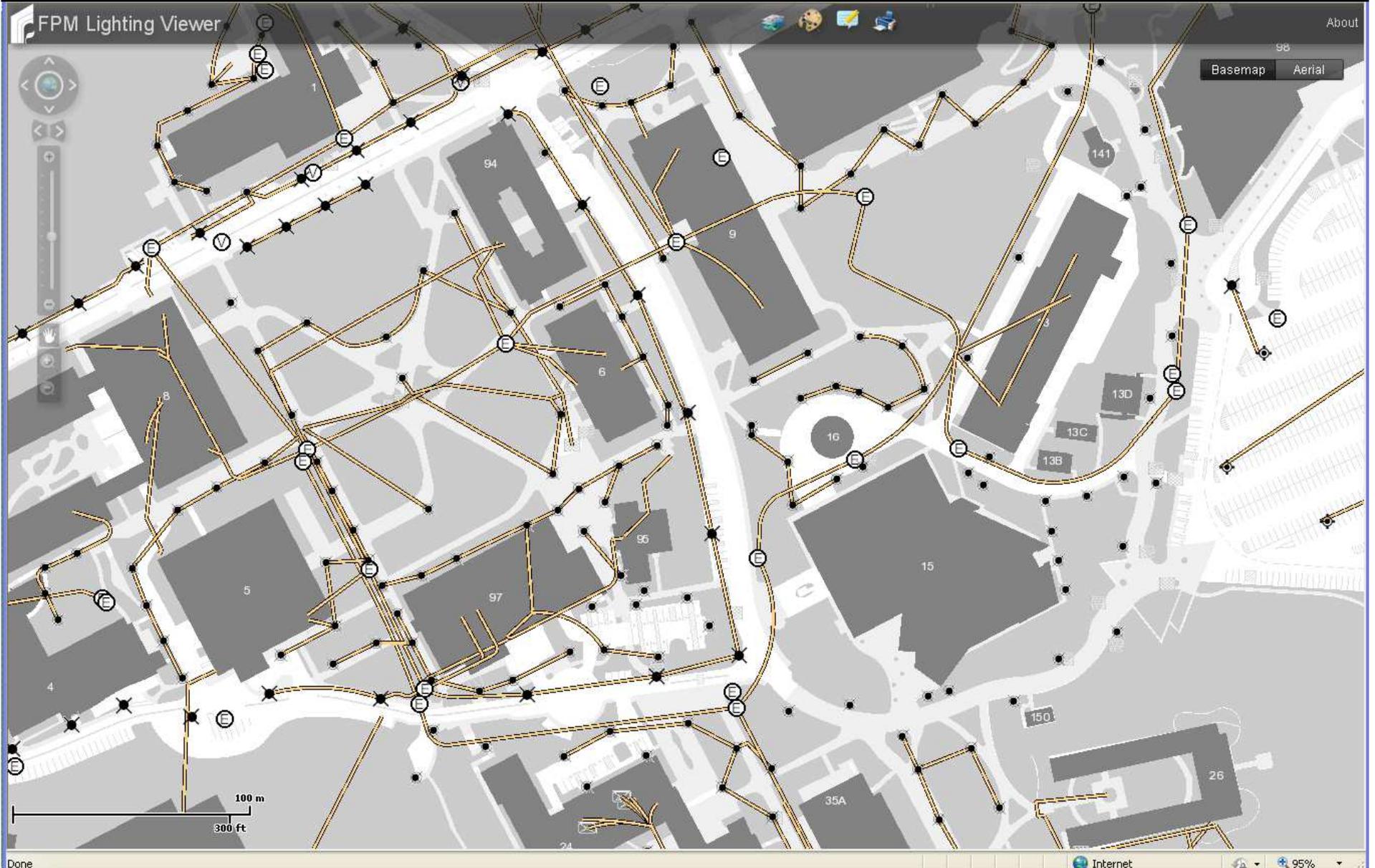
GAS WORKS



GAS WORKS



LIGHT WORK



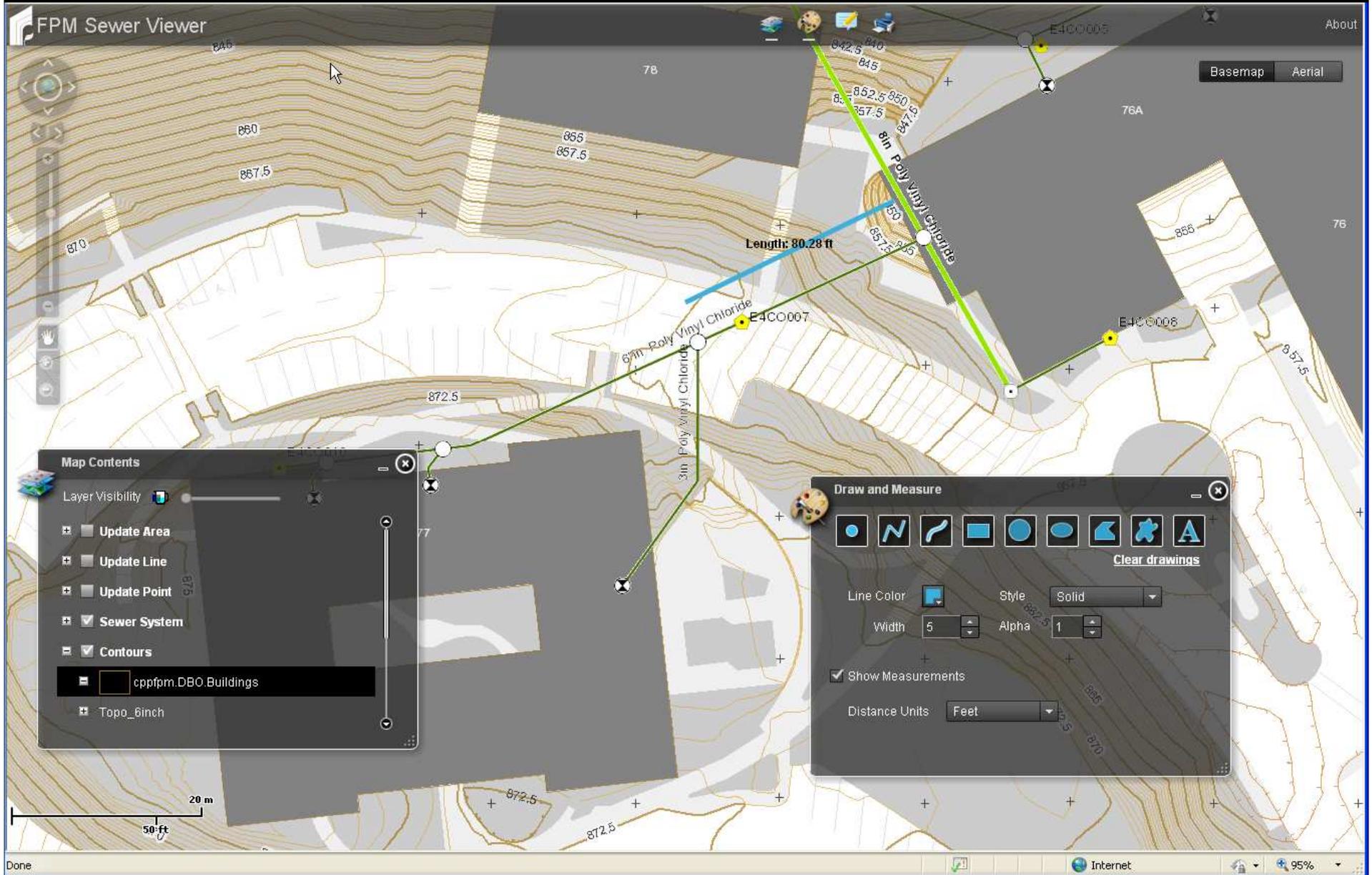
HOW DOES SEWER WORK

The screenshot displays the 'FPM Sewer Viewer' application. The main map shows a network of sewer pipes and manholes. A data popup window is open for 'Sewer Manhole E4MH002', providing the following details:

Attribute	Value
Status	Active
Confidence Level	1
Access Type	Manhole Cover
Access Diameter	36
Rim Elev.	778.56
Invert Elevation	771.24
Depth	
Location	N of Bldg 5
Plan Name	Campus Sewer Pla

The map includes various pipe types such as '6in Clay', '8in Poly Vinyl Chloride', and '10in Poly Vinyl Chloride'. Manholes are labeled with IDs like E4MH001, E4MH002, E4MH004, E5MH001, E5MH006, E5MH019, E5MH021, E5MH024, E5MH025, E5MH026, E5MH035A, E5MH003, E5MH010a, D4MH004, D4MH010, D5MH020, D5MH017, D5MH021, D5MH014, D5MH016, D5MH015, and D5MH018. An inset camera view in the bottom right shows the interior of a manhole with a date stamp of '07/20/2008'. The software interface includes navigation controls on the left and a Windows taskbar at the bottom.

HOW DOES SEWER WORK



HOW DOES SEWER WORK

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Depth	
Location	N of Bldg 5
Plan Name	Campus Sewer Pla

Two video windows on the right show live camera footage from the sewer system. The top window shows a view looking down a pipe with a manhole cover visible at the top. The bottom window shows a similar view from a different location. Both videos include a timestamp of 09/24/07 and 14:11. The interface also includes a map navigation toolbar on the left and a status bar at the bottom.

OTHER WORK

Campus Basemaps

Click any of icons below to launch a map service.



BASEMAP

General Basemap

A good map to start with! Take a minute and get acquainted with our mapviewer and campus.



BASEMAP 2

Basemap 2

This is a more graphical map for presentation.



LANDSCAPE

Landscape Map

This is a categorical map of landscape.



LANDUSE

Landuse Map

This is a categorical map of landuses across the campus.



SOILS

Soils

A map of the campus' many soils.



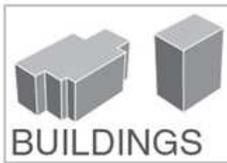
CONTOURS

Contours

Elevation data for our entire campus can be easily viewed in this map. There are one foot contours for the entire property with 6" contours for inner campus.

Maps in Progress

Click any of icons below to launch a map service.



BUILDINGS

Buildings Map

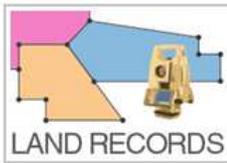
This map will launch a service to will view individual floors of most buildings on campus. Only the highlighted buildings are available at this time.



IRRIGATION

Irrigation

This map is for testing purposes; it is unstable and not recommended for use.



LAND RECORDS

Land Records Map

Campus Land Records and transactions can be searched or viewed chronologically in this map.



DEVELOPMENT

DIG Map

This map is a good reference when digging at CSU Pomona.

PRETTY WORK

FPM Basemap 2 Viewer

About

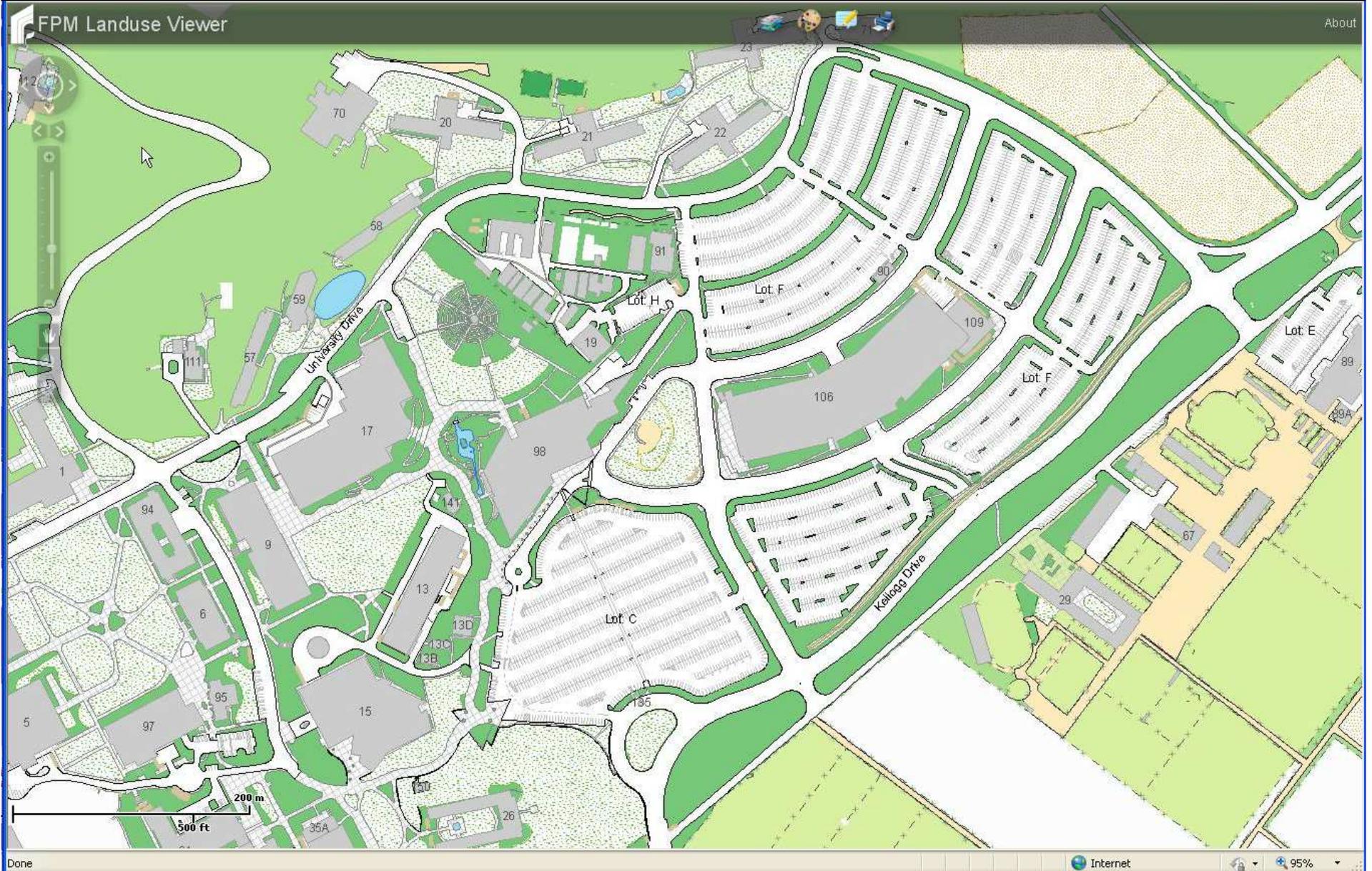


Done

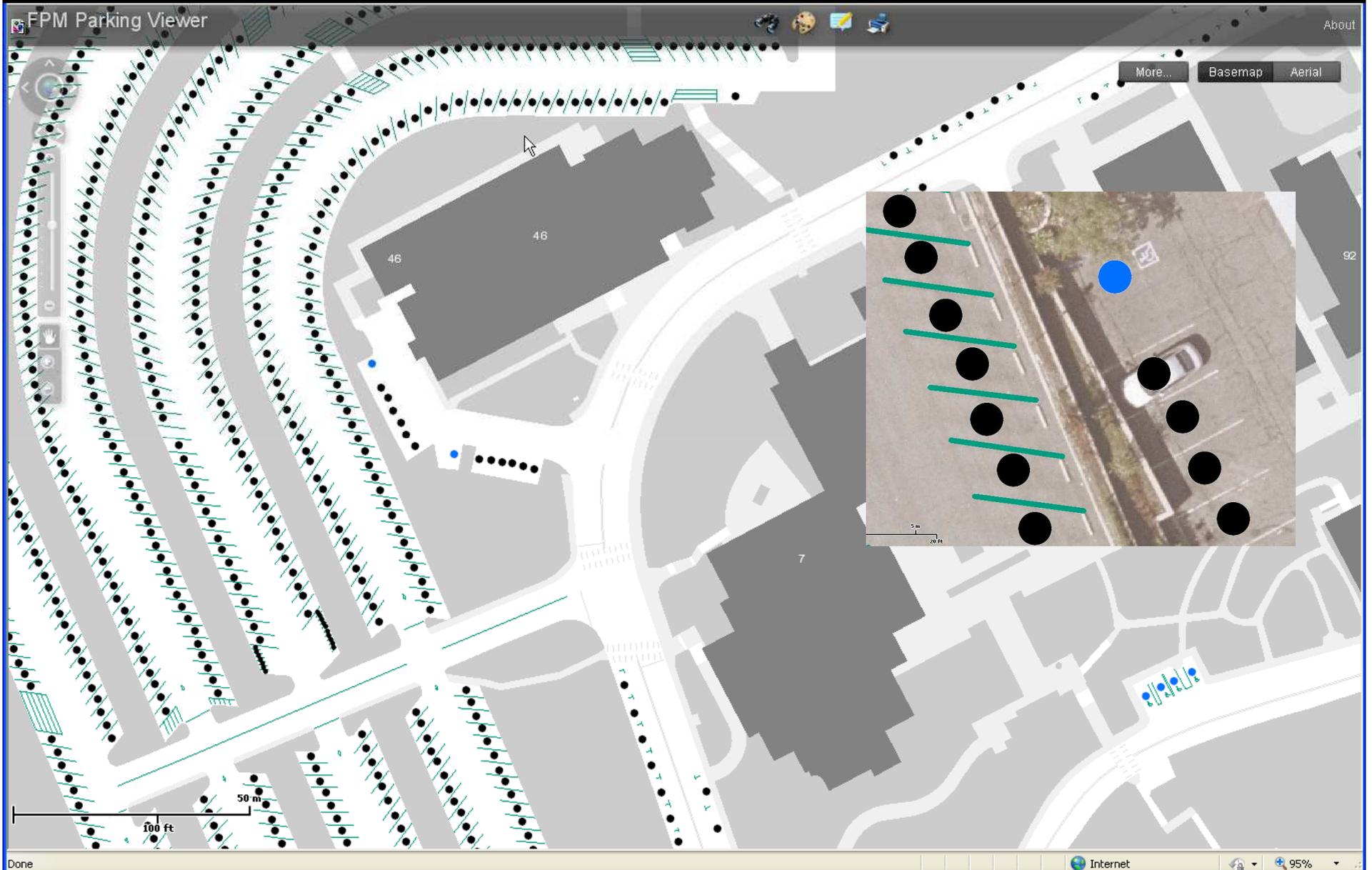
Internet

95%

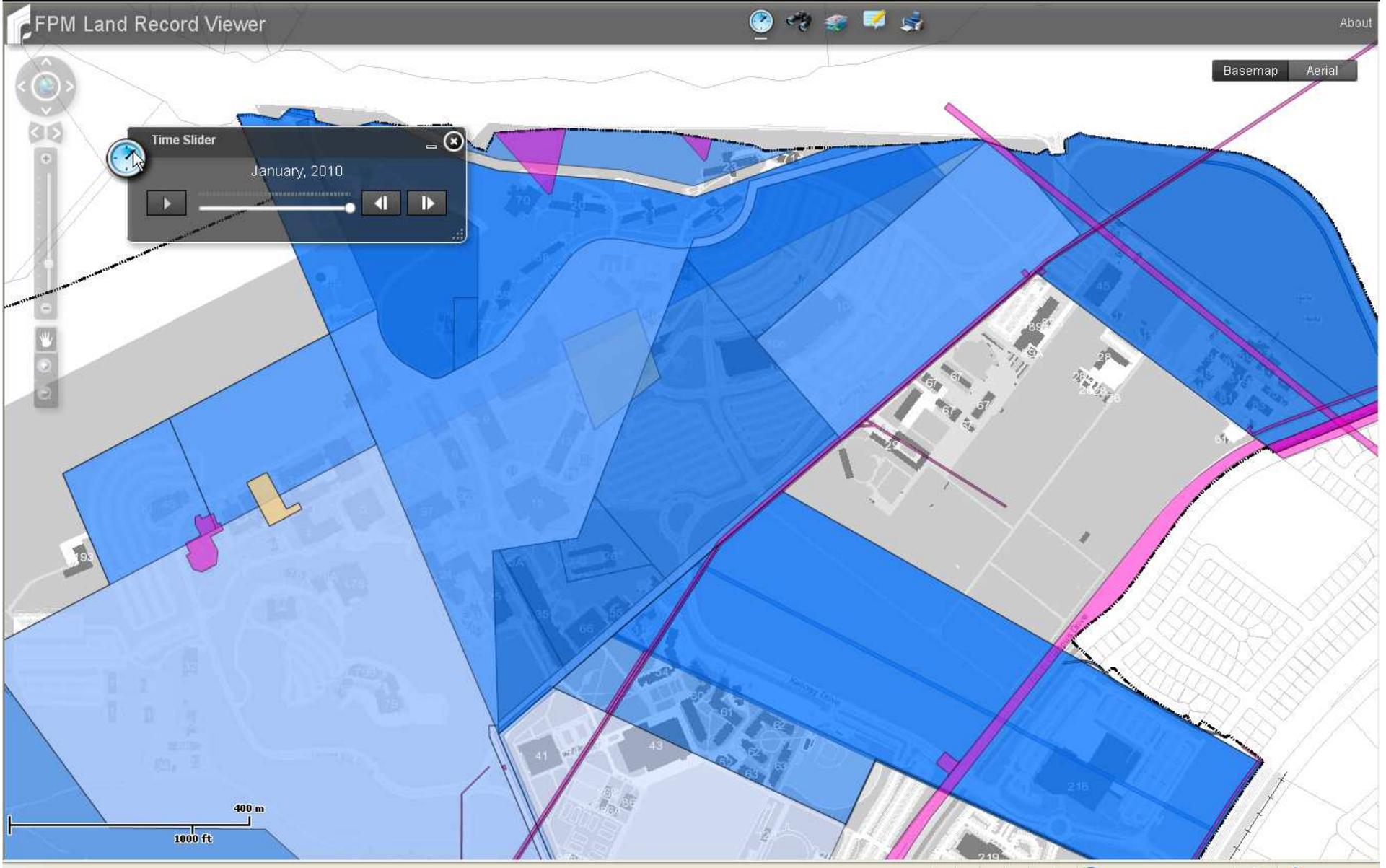
WORK WORK



PARKING WORK



LEGAL WORK



HOW DO BUILDINGS WORK



HOW DO BUILDINGS WORK

Building Navigator Info Window

Room Name: CGISR.
Room No.: 215
Space Type: Tch Lab
Description: Undefined
Work Orders: <http://gis.fpm.csupomona.edu>
SFDB Area: 1183
Hegis: Geography
Department: Anthro/GenEd

GIS TMA Interface
Space Report 005-0215

SFDB | Open Work Orders | **Work Orders History** | Equipment

Closed Work Orders

WO Number	Date	Closed	Request
01-11050	2/10/2001	3/15/2001	TOO COLD IN OFFICE HEATER UNIT NOT WORKING (PAGED PETE TMM)
01-12020	3/6/2001	4/30/2001	PM DX Units (Trimester)
01-13024	3/22/2001	4/10/2001	UNLCOCK DOOR. ELECTRONIC ACCESS NOT WORKING (CALL TO BECKY ON 3/21 ATTN PAUL TMM)
01-13751	4/11/2001	4/27/2001	82 DEGREE IN RM. PLEASE ADJUST HEAT TEMPERATURE, TOO HOT. PAGED PETE GARCIA. (M.S.)
01-14104	4/12/2001	4/27/2001	A/C UNIT WENT OFF (PAGED PETE TMM)
01-14149	4/12/2001	4/30/2001	THE A/C IS OFF AGAIN AT UNIT IN ROOM. ROOM TEMP IS 73' (NO PAGE DUE TO TIME OF DAY (TMM) 04/18 A/C UNIT NOT WORKING (PHONE PAGED PETE)
01-14412	4/19/2001	5/3/2001	COMPUTER LAB IS VERY COLD (PHONE PAGED PATE TMM)
01-14487	4/23/2001	5/7/2001	HIGH PITCHED NOISE COMING FROM A/C UNIT PAGED PETE (BOA)
01-16274	6/6/2001	6/18/2001	PM DX Units (Trimester)
01-16406	6/1/2001	6/29/2001	THE A/C UNIT IN ROOM IS LOCATED AND MOUNTED ON TOP OF ROOM, TOO HOT. PLEASE ADJUST TEMPERATURE.

1 2 3 4 5 >

HOW DO WE KEEP THIS WORKING

Step one is to identify all of the GIS change agents:

- Changed all the terms and conditions for contractor deliverables
- Changed what we ask for in civil surveys
- Integrated our campus work order management system
- Integrated the CSU SFDB (Space and Facilities Database)
- Gave the trades tools to update and correct attributes and features
- Integrated Arbor Pro and the Project Management System
- Instituted the Reliability Index (better data as you work)

ALWAYS WORKING

Boykin Witherspoon III

Thank You