City of Coquitlam

Custom Web Map Applications – A New Approach

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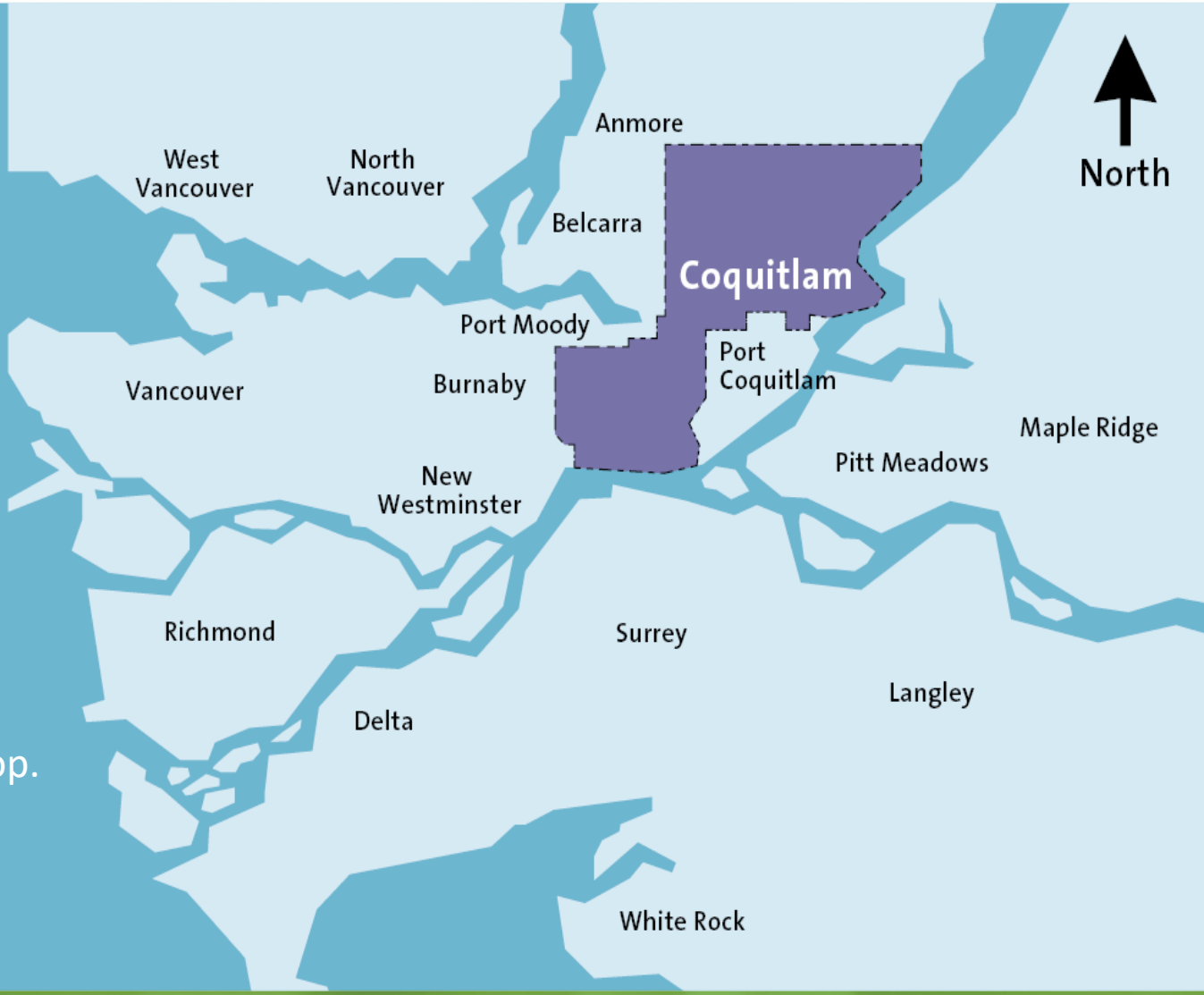
Supervisor Mapping & Drafing

Engineering & Public Works

December 6, 2016

Coquitlam

140,000 pop.



Background

Converted to Esri in 2001 (SLG ELA since 2010)

Inital reliance on paper based map products

All-in-one internal & public web applicatons since 2004 (QtheMap) - staf & public view and retrieve typical or standard municipal data

Custom maps requested to meet changing business needs

Mobile GIS (maps for field staff)

Improve processes, efciency and ease of access to up-to-date informaton

Spatal presentaton of informaton from other business applicaton systems

Enable beter decision making for long-range planning or day-to-day operatons

Inspiraton - It all changed when…

2014 Esri Internatonal User Conference

Introducton of ArcGIS Online, Web AppBuilder, Portal for ArcGIS

Opportunity to beter share informaton within the organizaton

A New Approach

One size does not ft all – customizaton of maps

Think spatally – majority of informaton is locaton based

Leverage the power of GIS to bring informaton together

Simplify complicated processes… and keep the simple things simple

Training & access for non-GIS staf to view, analyze & edit GIS data

Process and Communicaton

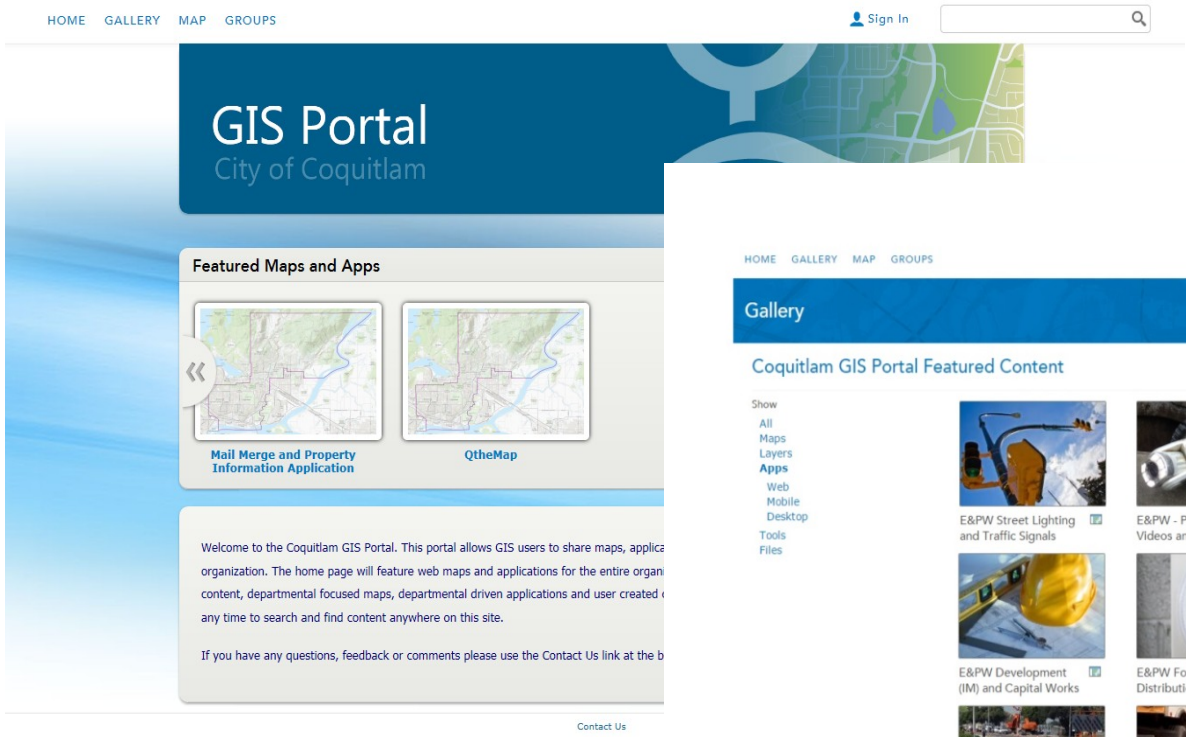
Installation and testing of the technology

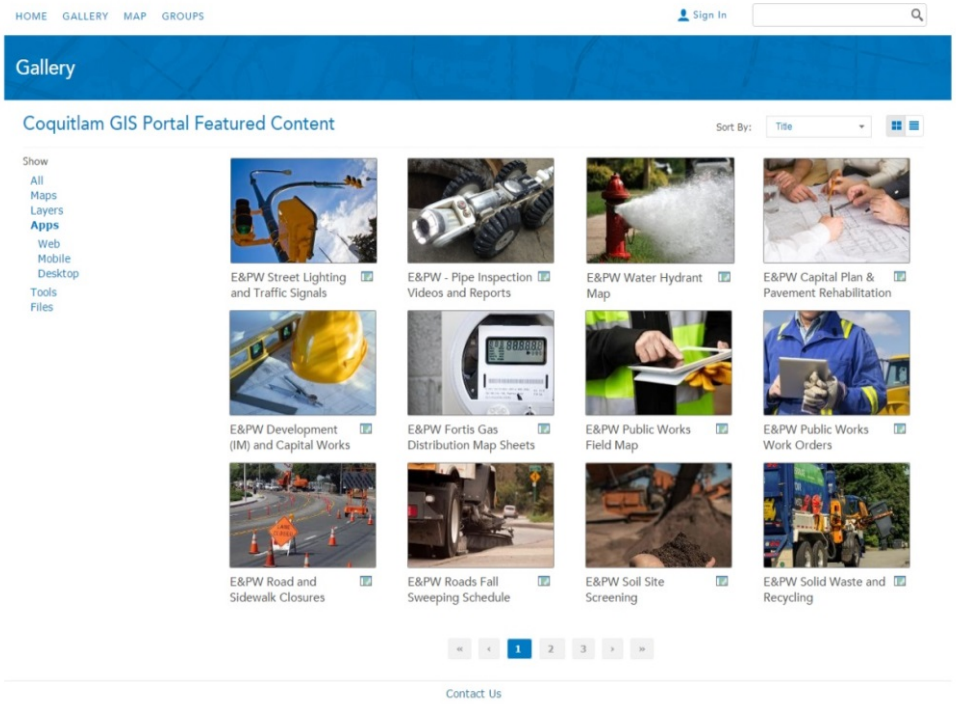
Privacy Review

Thorough needs assessment included training and communication sessions with user groups

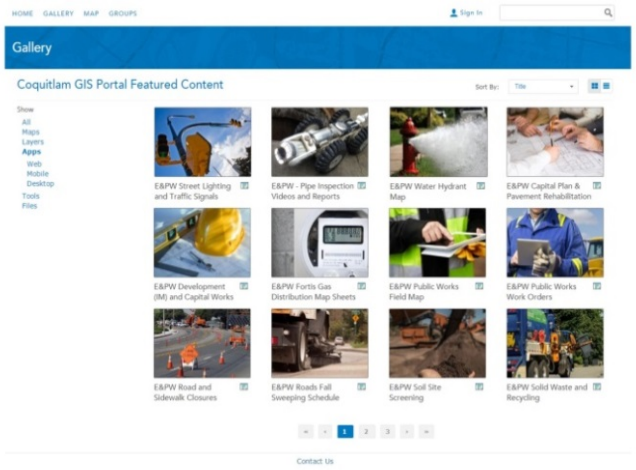
Rapid prototyping with continued communication

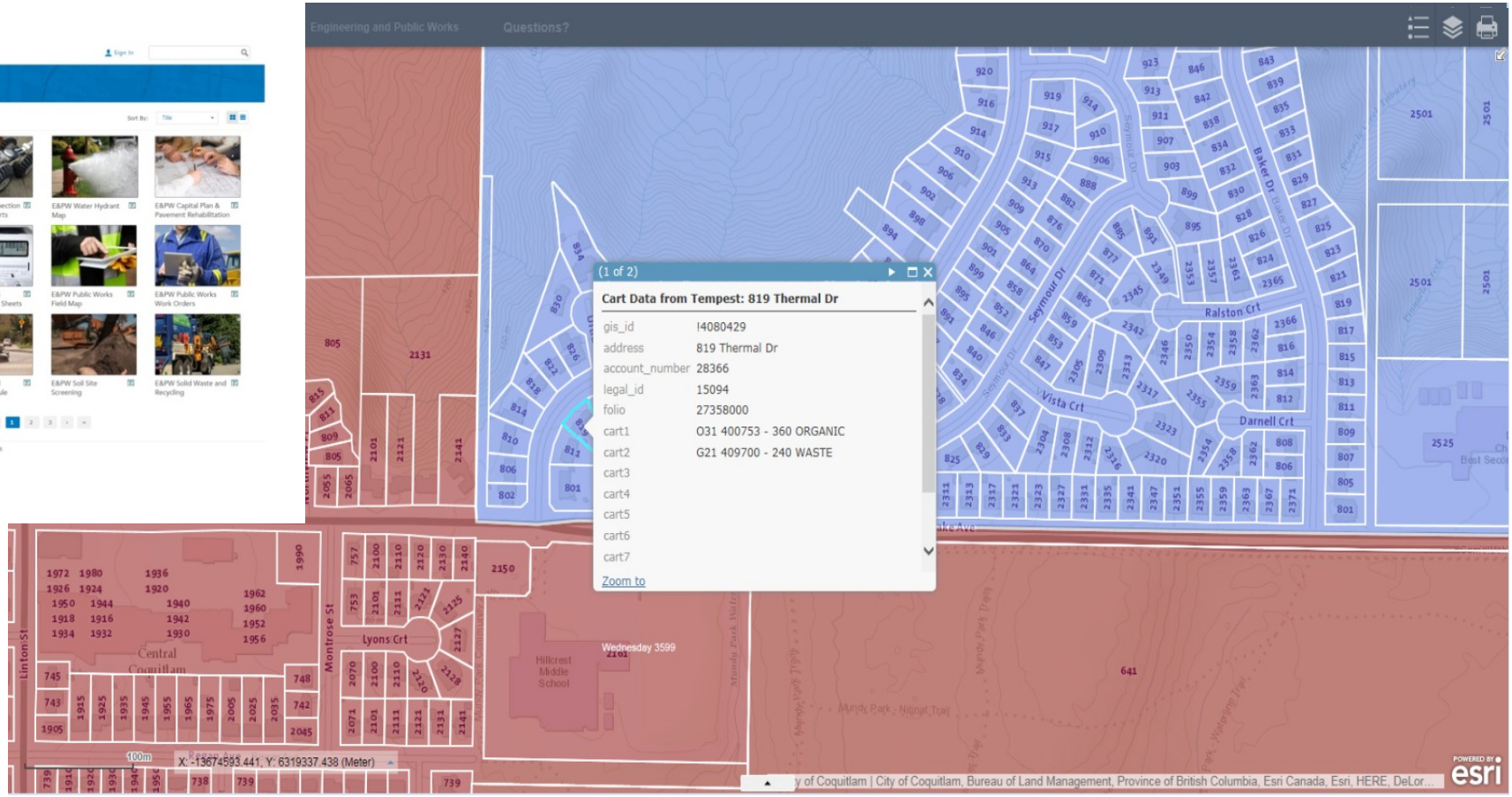
Coquitlam GIS Portal - Map Applicatons



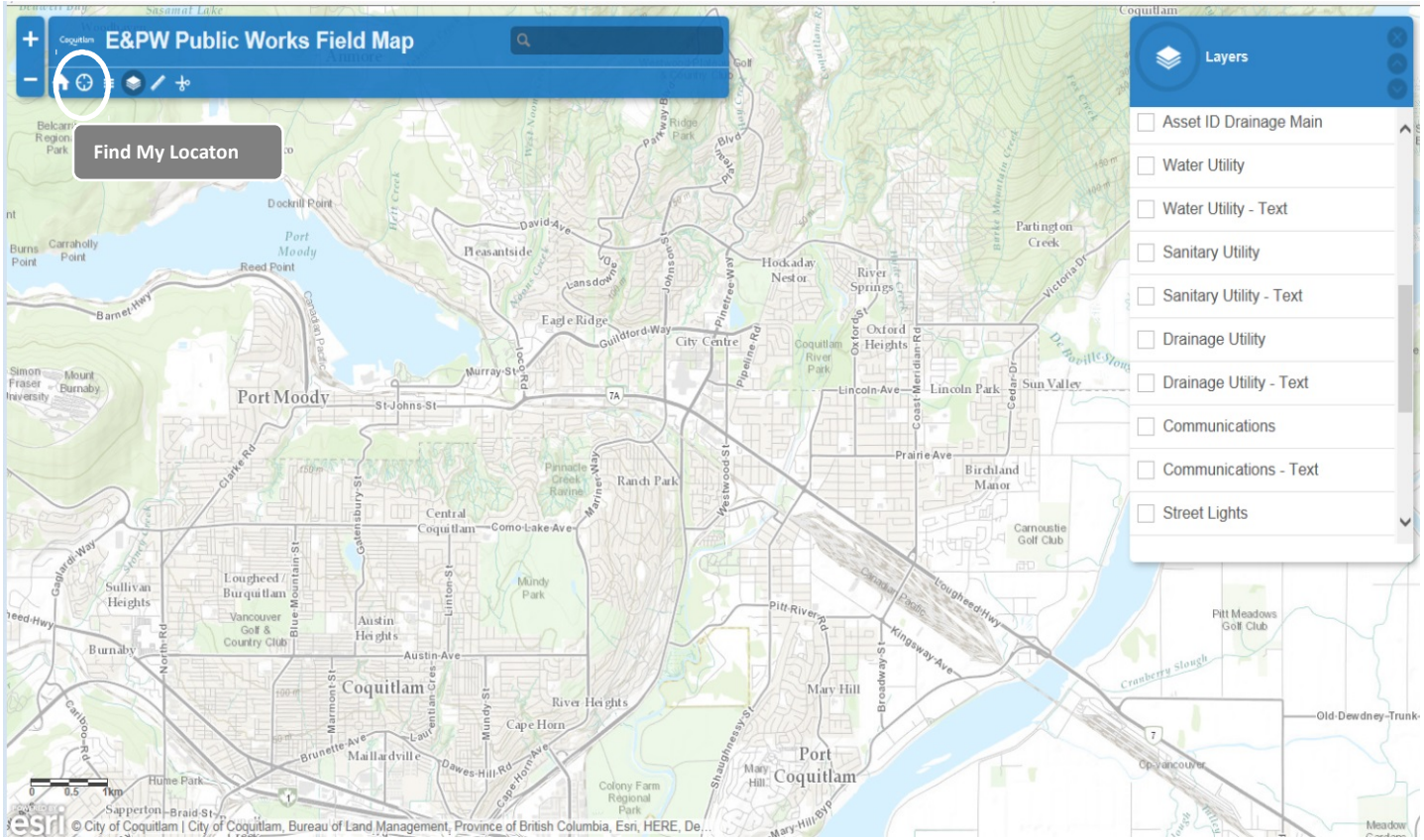


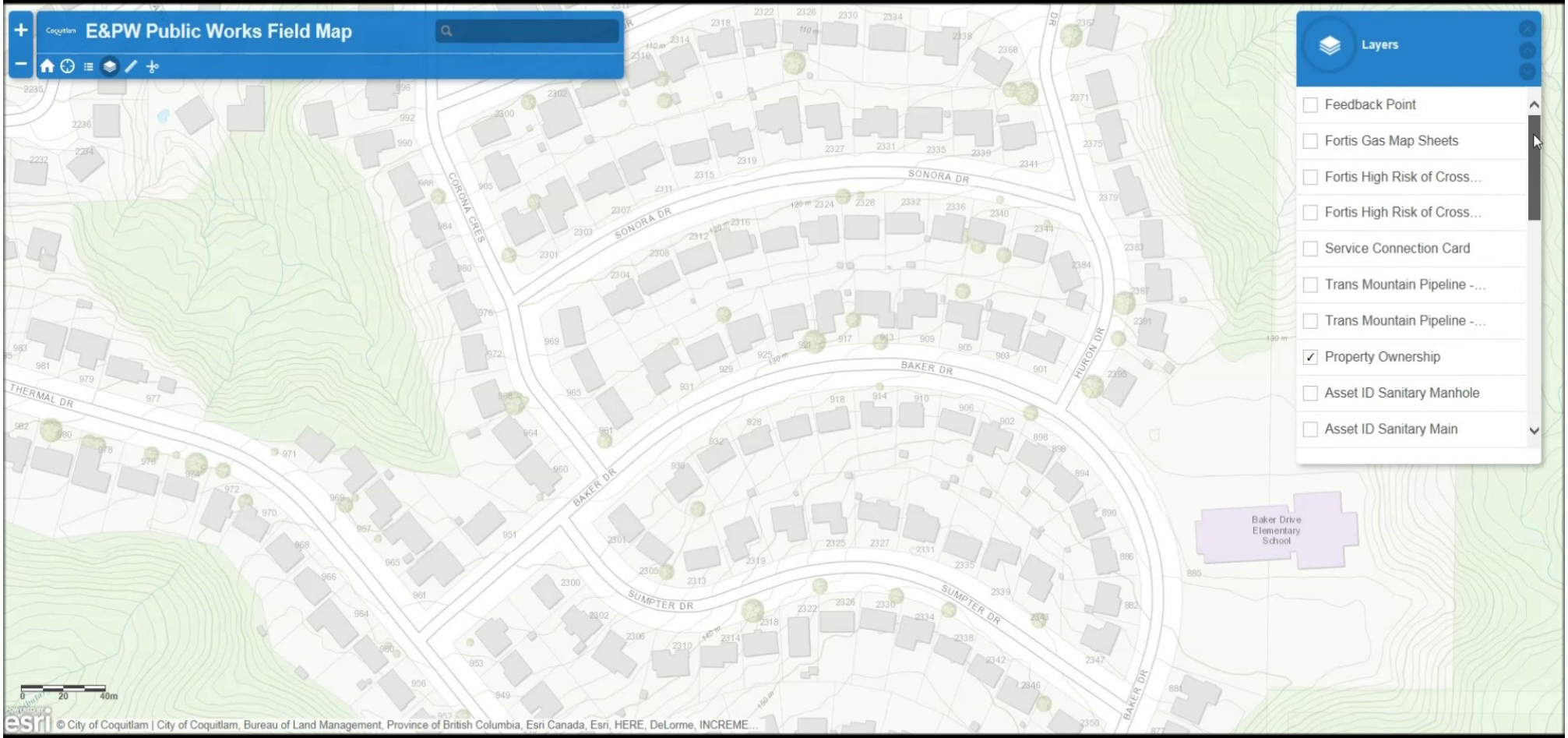
Street Sweeping - Road Closures - Solid Waste & Recycling



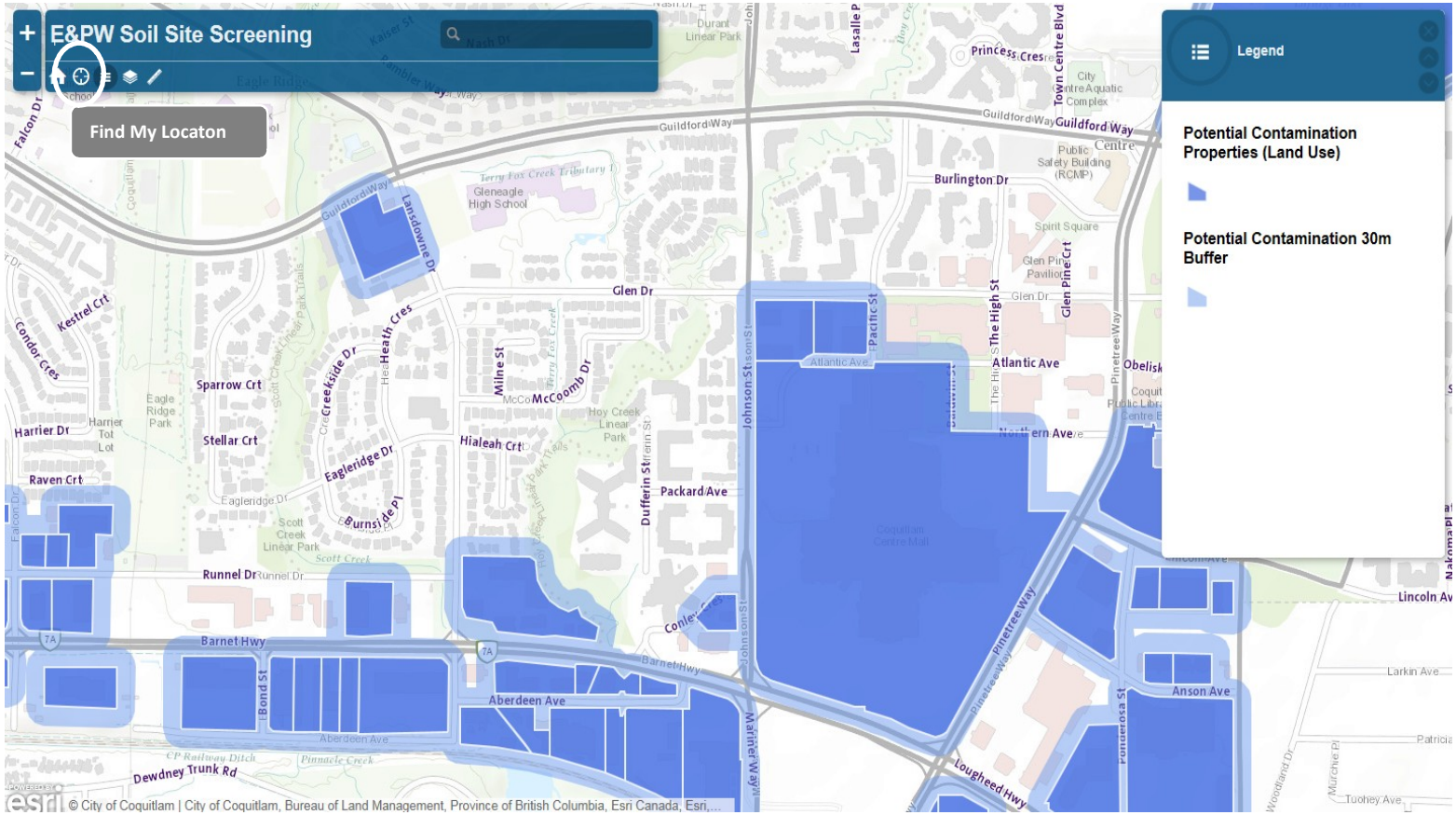


Public Works Field Map

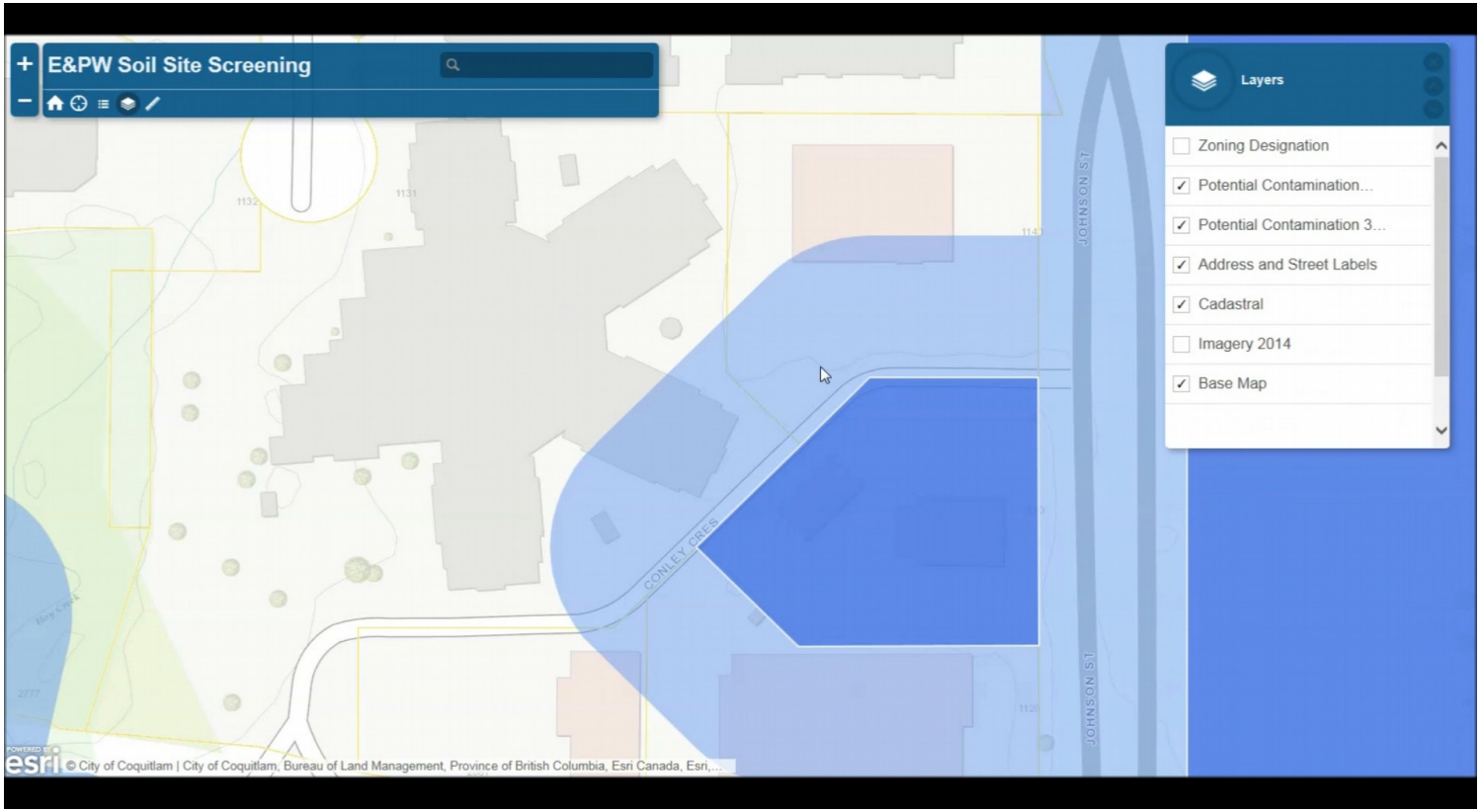



E&PW Public Works Field Map
Layers
Feedback Point
Fortis Gas Map Sheets
Fortis High Risk of Cross...
Fortis High Risk of Cross...
Service Connection Card
Trans Mountain Pipeline -...
Trans Mountain Pipeline -...
Property Ownership
Asset ID Sanitary Manhole
Asset ID Sanitary Main
SONORA DR
BAKER DR
SUMPTER DR
CORONA CRES
HURON DR
THERMAL DR
Baker Drive Elementary School
0 20 40m
© City of Coquitlam | City of Coquitlam, Bureau of Land Management, Province of British Columbia, Esri Canada, Esri, HERE, DeLorme, INCREME...

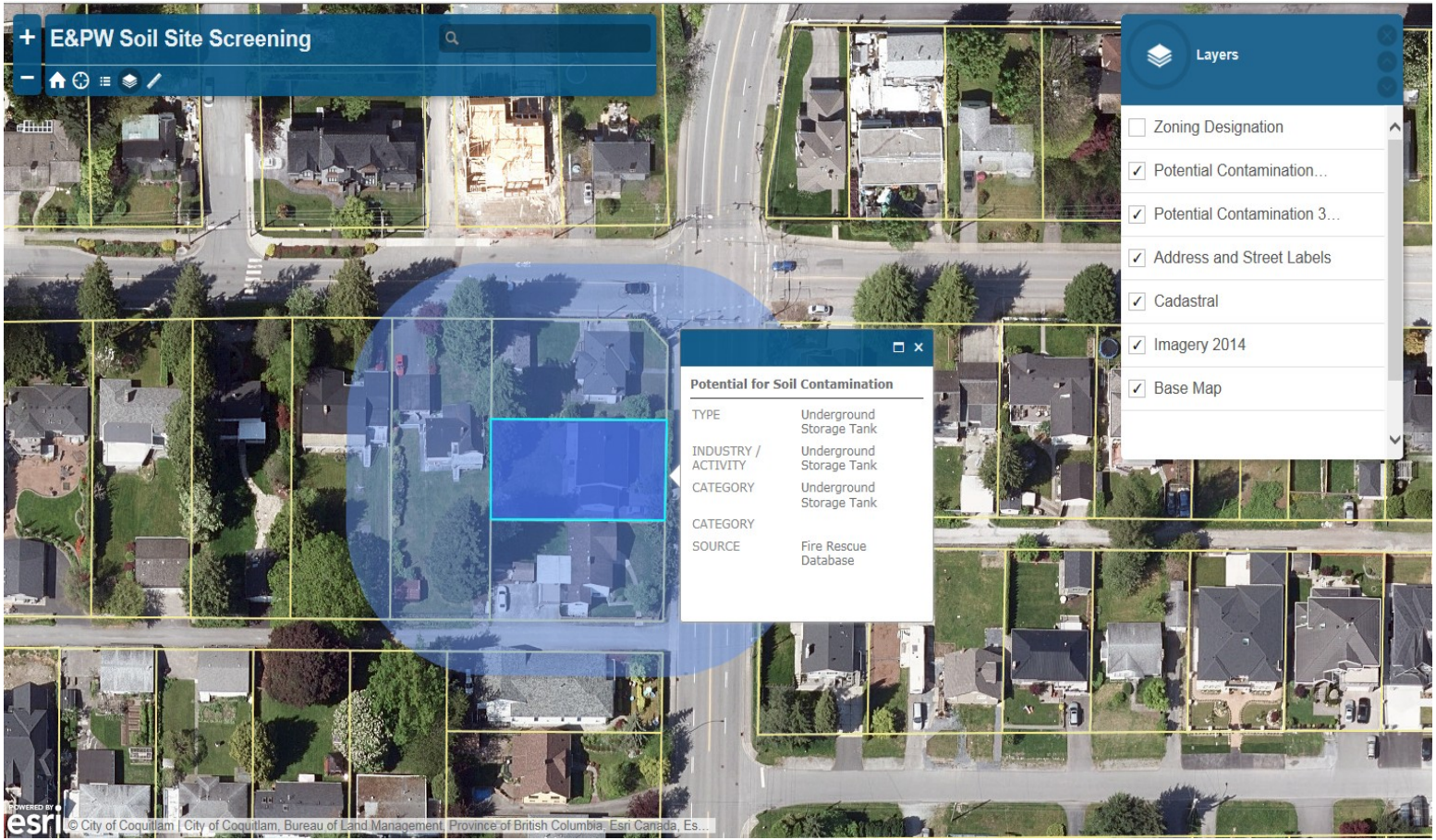
Soil Site Screening & Handling



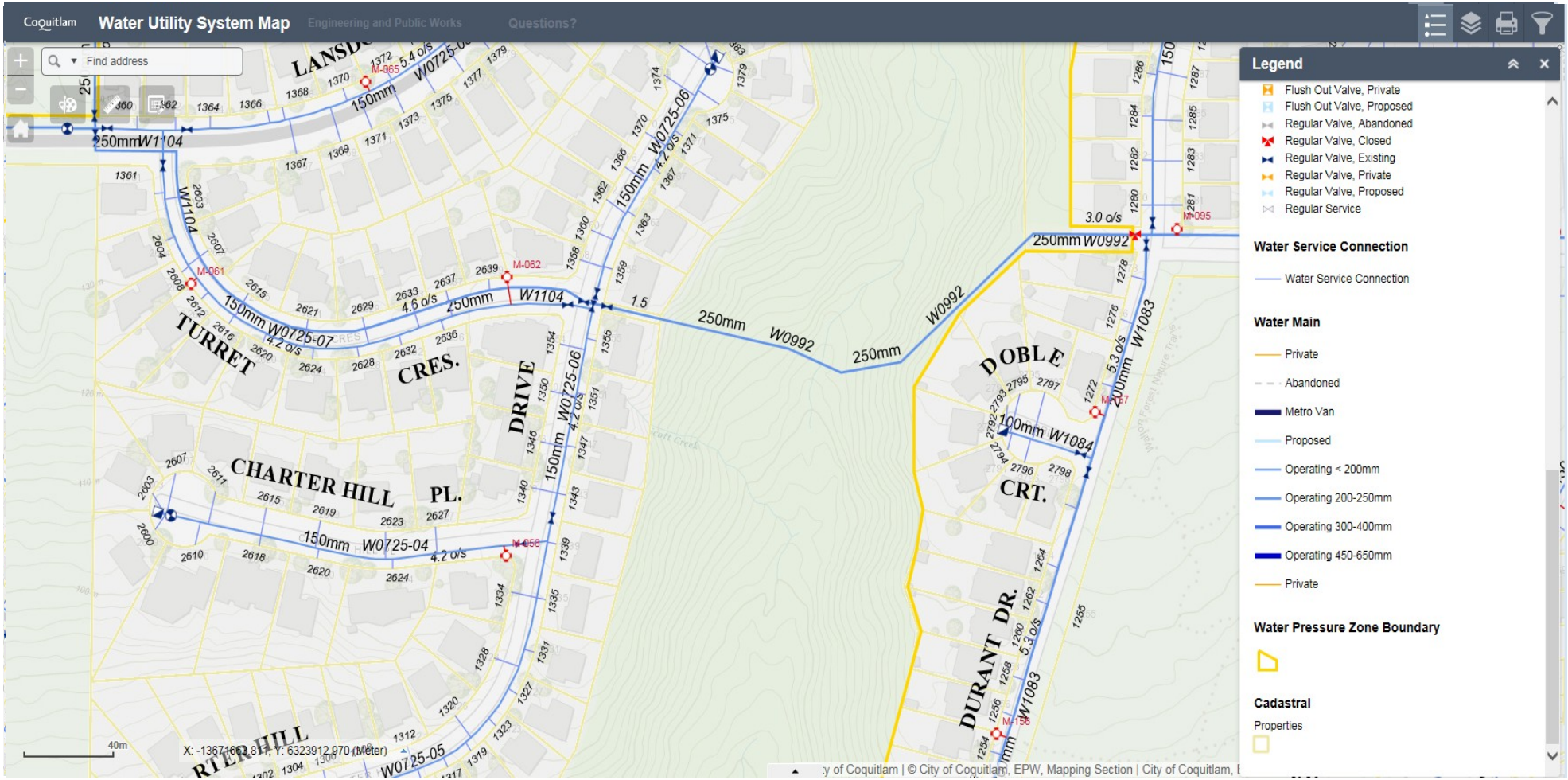
Soil Site Screening & Handling



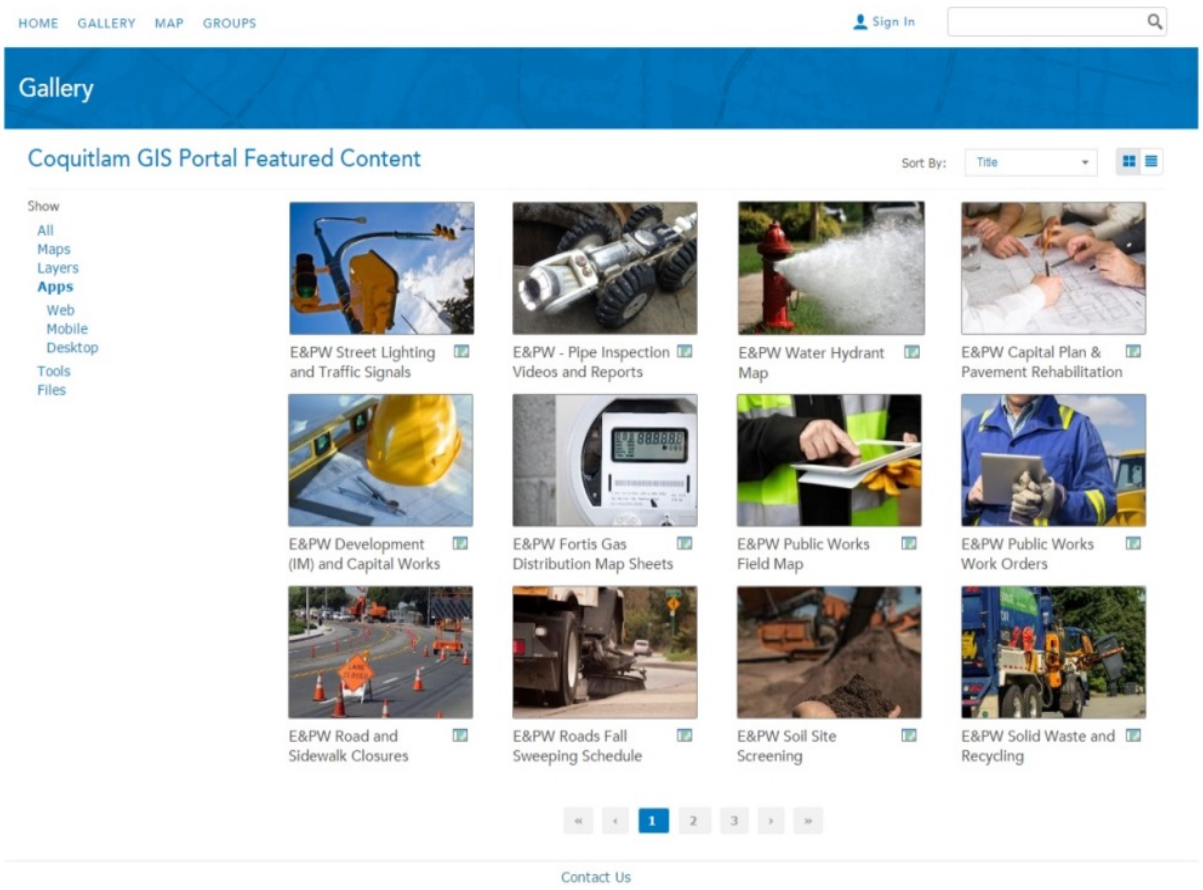
Soil Site Screening & Handling



Water Utlity System Map



Trafc Signals and Street Lightng



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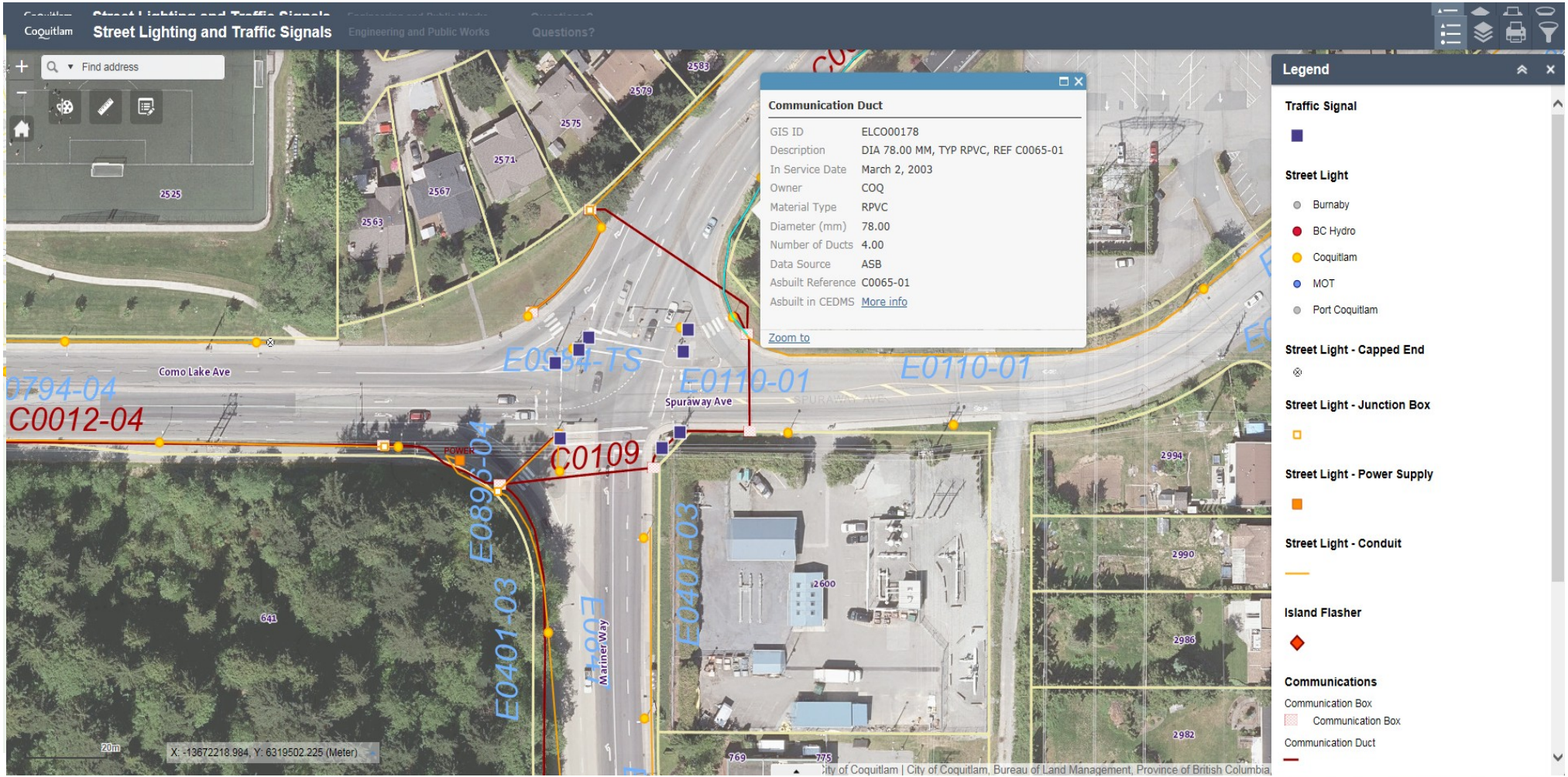
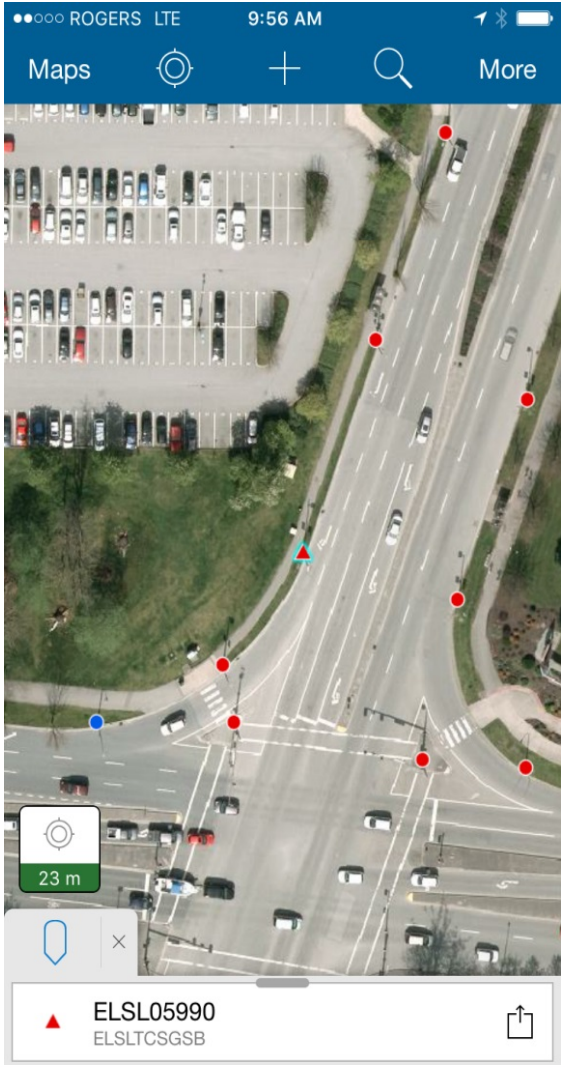
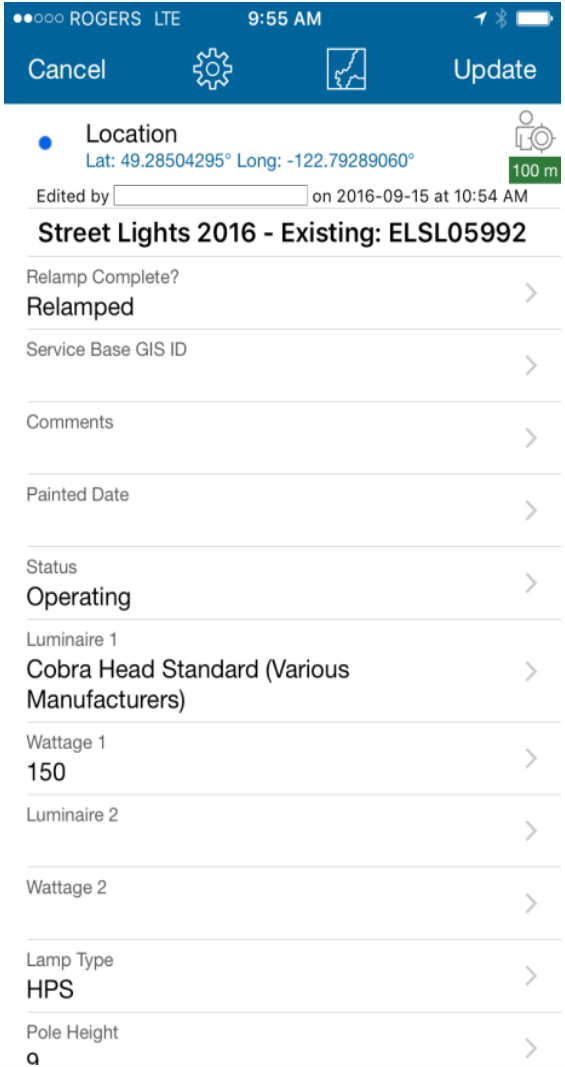
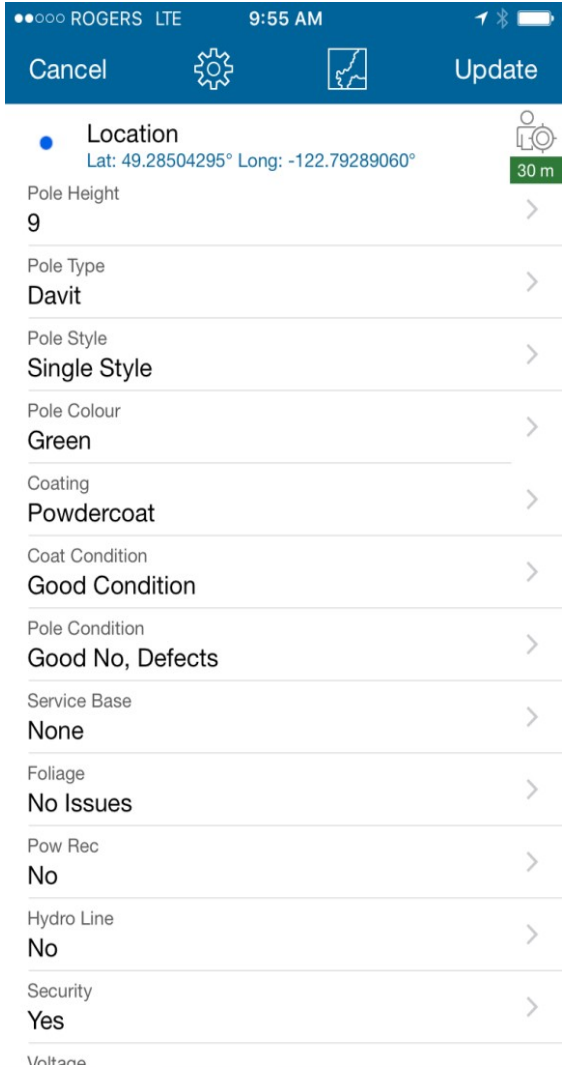
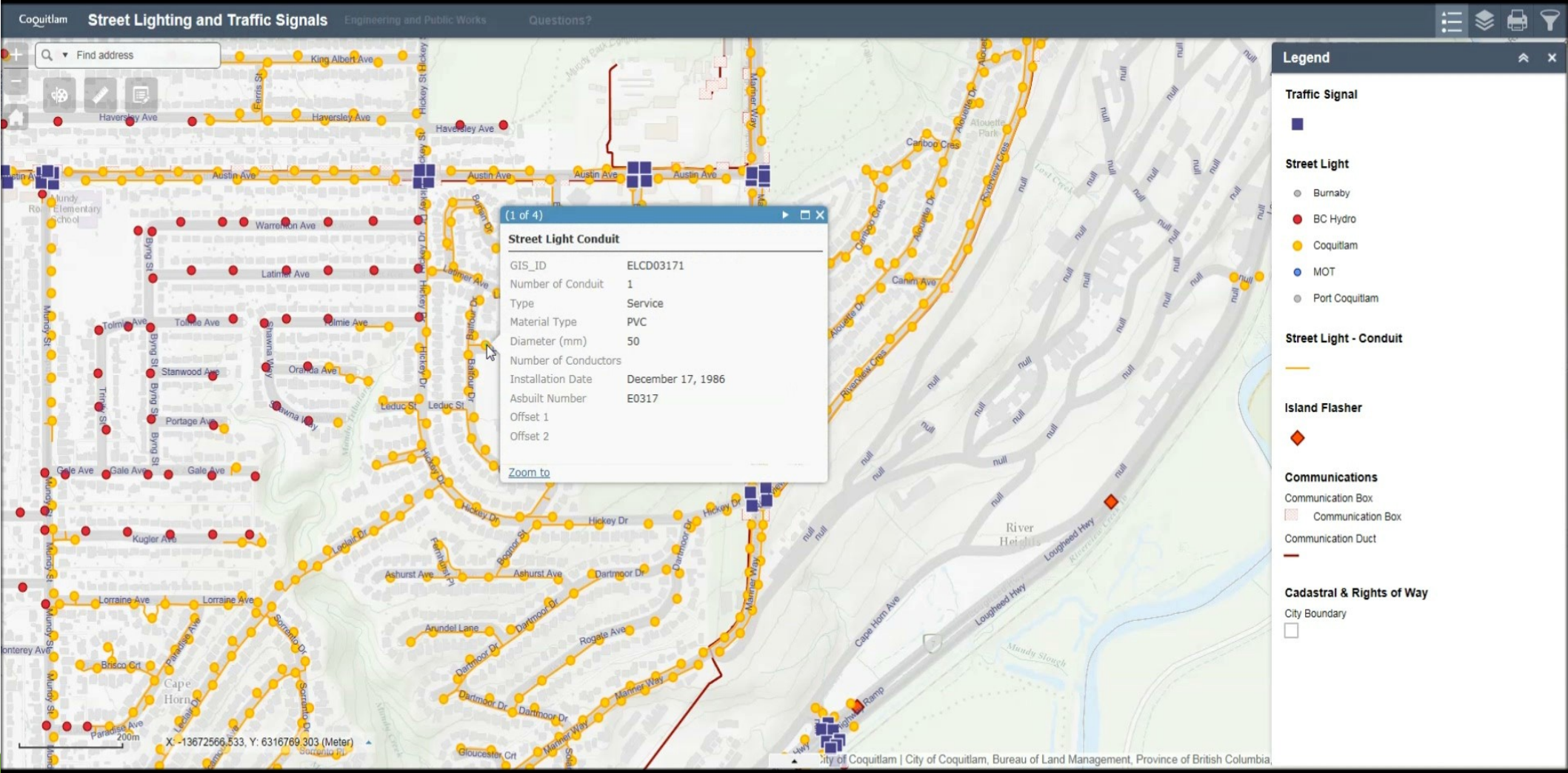
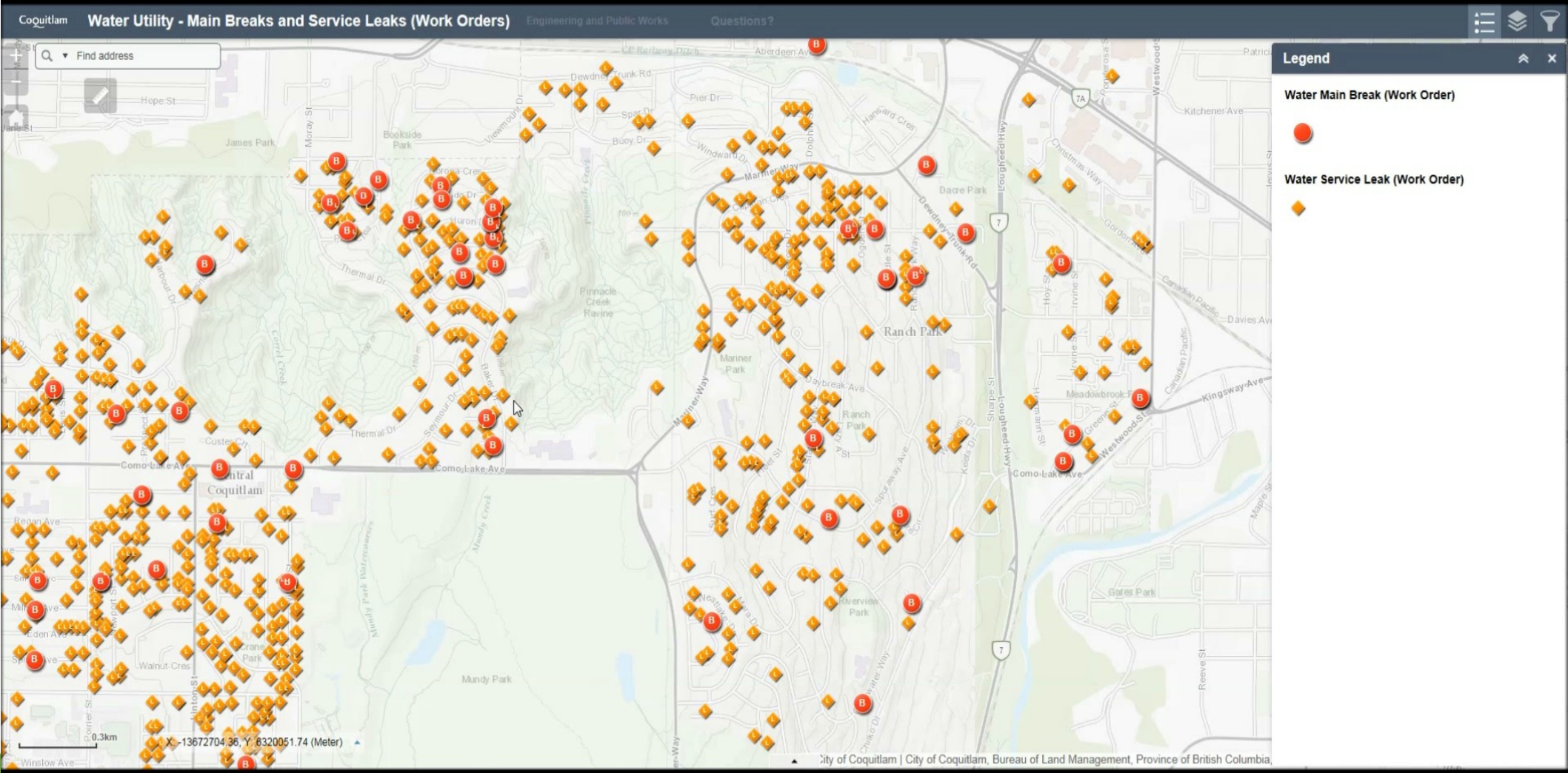



●●○○○ ROGERS LTE
9:56 AM
Maps
More
23 m
ELSL05990
ELSLTCSGSB

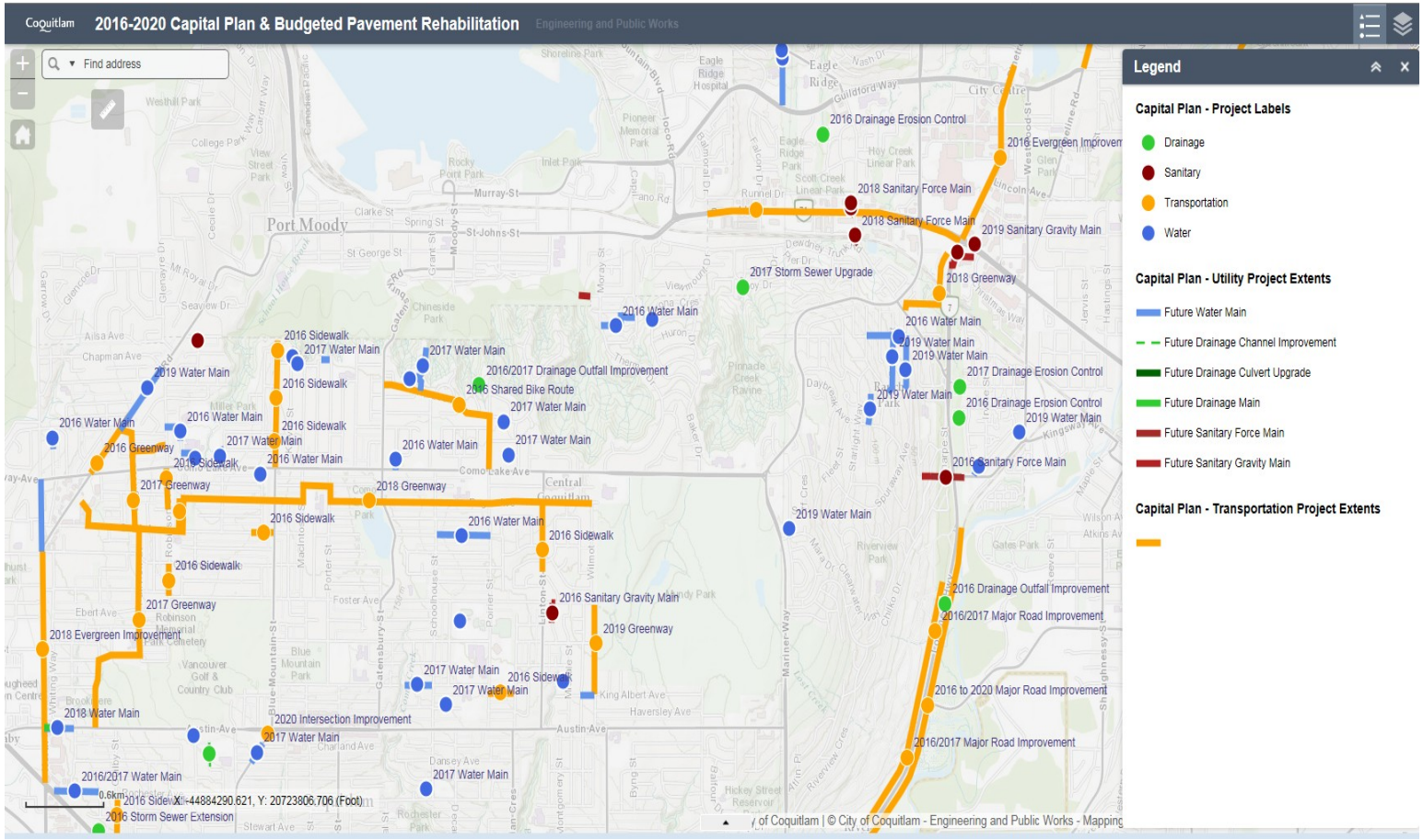

●●○○○ ROGERS LTE
9:55 AM
Cancel
Update
Location
Lat: 49.28504295° Long: -122.79289060°
100 m
Edited by
on 2016-09-15 at 10:54 AM
Street Lights 2016 - Existing: ELSL05992
Relamp Complete?
Relamped
Service Base GIS ID
Comments
Painted Date
Status
Operating
Luminaire 1
Cobra Head Standard (Various Manufacturers)
Wattage 1
150
Luminaire 2
Wattage 2
Lamp Type
HPS
Pole Height
9

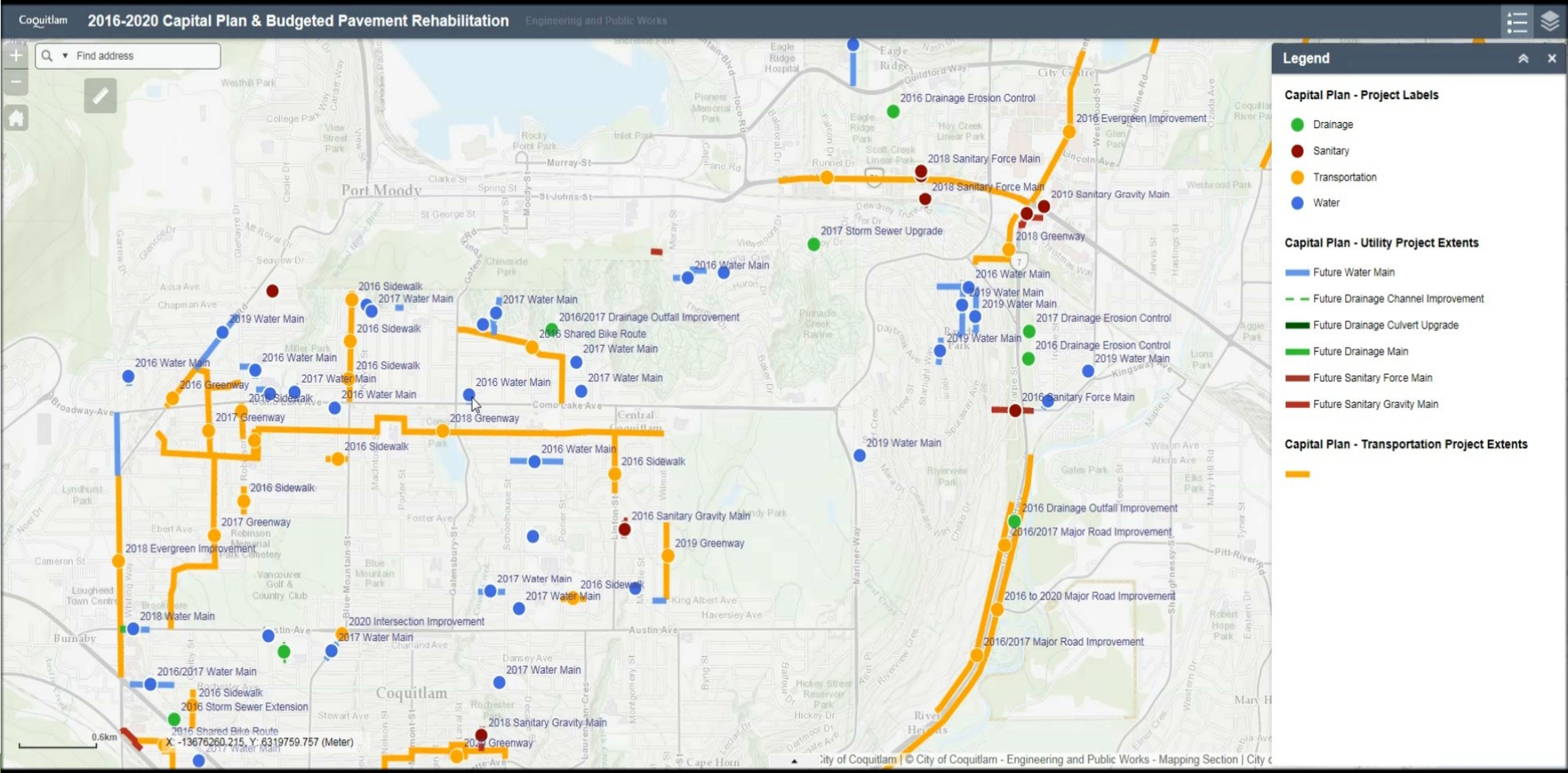

●●○○○ ROGERS LTE
9:55 AM
Cancel
Update
Location
Lat: 49.28504295° Long: -122.79289060°
30 m
Pole Height
9
Pole Type
Davit
Pole Style
Single Style
Pole Colour
Green
Coating
Powdercoat
Coat Condition
Good Condition
Pole Condition
Good No, Defects
Service Base
None
Foliage
No Issues
Pow Rec
No
Hydro Line
No
Security
Yes

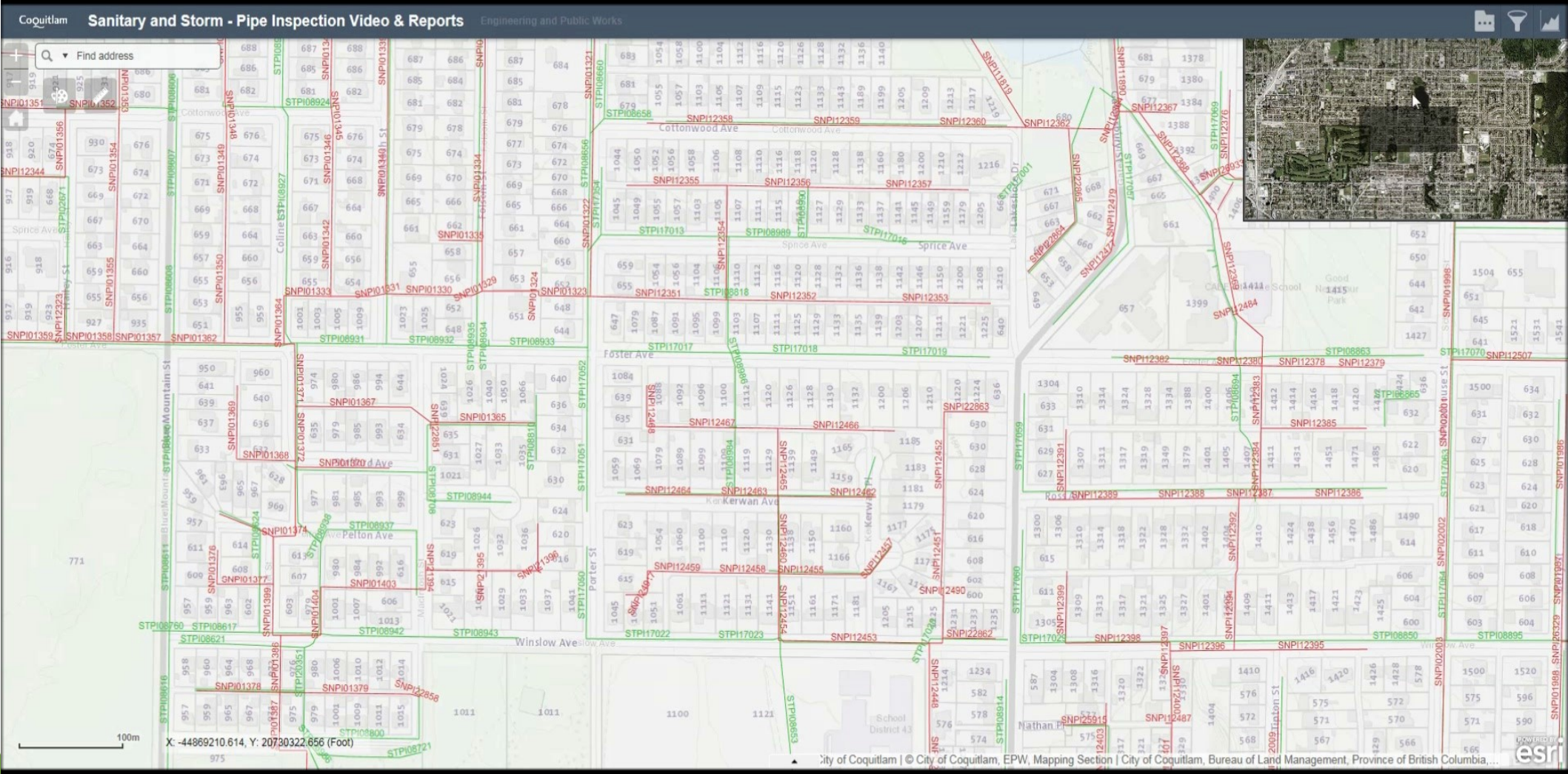

Coquitlam
Street Lighting and Traffic Signals
Engineering and Public Works
Questions?
Find address
(1 of 4)
Street Light Conduit
GIS_ID ELCD03171
Number of Conduit 1
Type Service
Material Type PVC
Diameter (mm) 50
Number of Conductors
Installation Date December 17, 1986
Asbuilt Number E0317
Offset 1
Offset 2
Zoom to
Legend
Traffic Signal
Street Light
Burnaby
BC Hydro
Coquitlam
MOT
Port Coquitlam
Street Light - Conduit
Island Flasher
Communications
Communication Box
Communication Box
Communication Duct
Cadastral & Rights of Way
City Boundary
X: -13672566.533, Y: 6316769.303 (Meter)
City of Coquitlam | City of Coquitlam, Bureau of Land Management, Province of British Columbia,


Coquitlam
Water Utility - Main Breaks and Service Leaks (Work Orders)
Engineering and Public Works
Questions?
Find address
Legend
Water Main Break (Work Order)
Water Service Leak (Work Order)
Ranch Park
Mariner Park
Pinnacle Creek Ravine
Mundy Park
Riverview Park
Dacre Park
Bookside Park
James Park
Central Coquitlam
Como Lake Ave
Dewdney Trunk Rd
Mariner Way
Lougheed Hwy
Westwood St
Kingsway Ave
Thermal Dr
Hope St
Aberdeen Ave
Kitchener Ave
Davies Ave
Meadowbrook Dr
Gates Park
Regan Ave
Walnut Cres
Winslow Ave
0.3km
X: -13672704.36, Y: 6320051.74 (Meter)
City of Coquitlam | City of Coquitlam, Bureau of Land Management, Province of British Columbia,

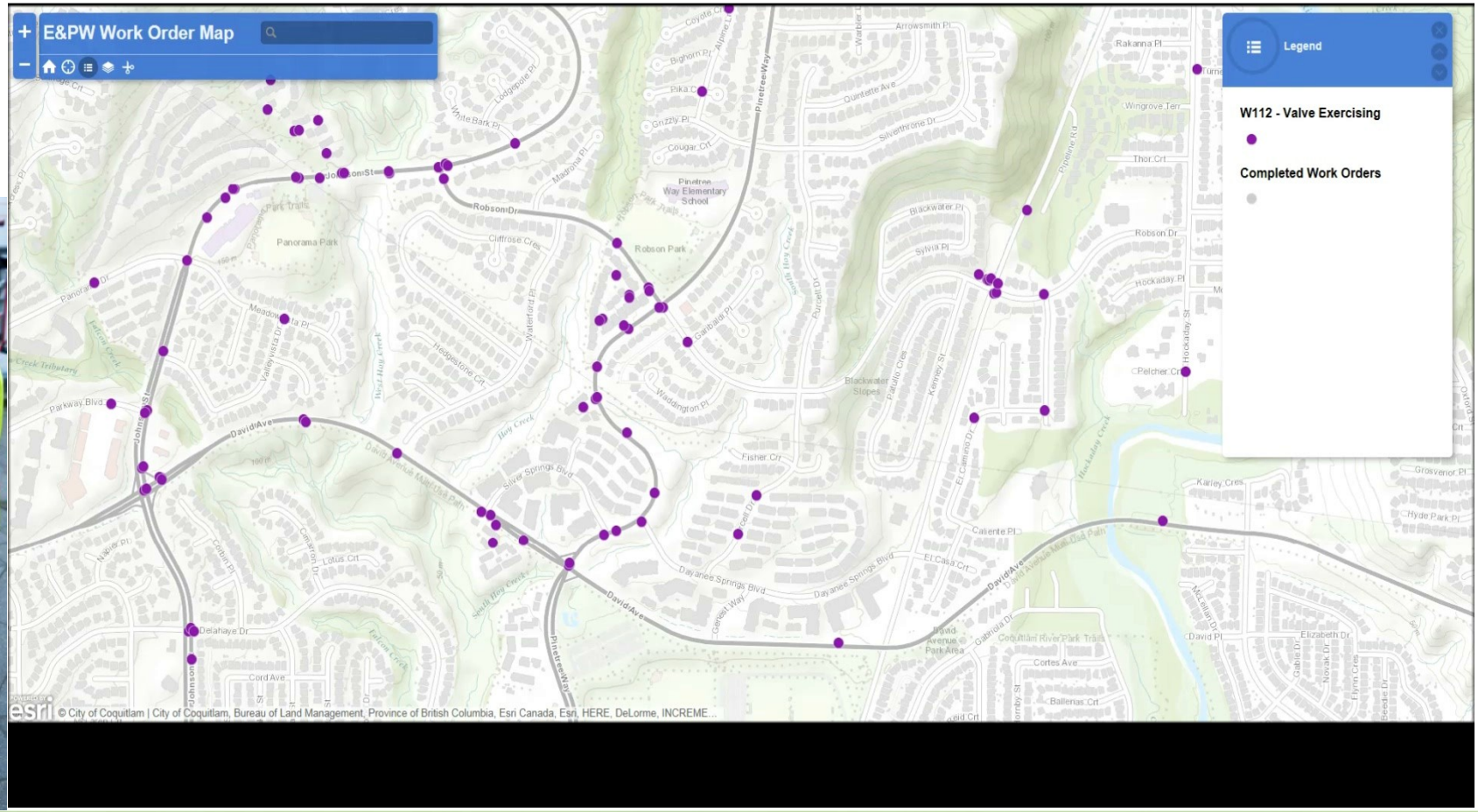
Capital Works & Pavement Rehabilitaton



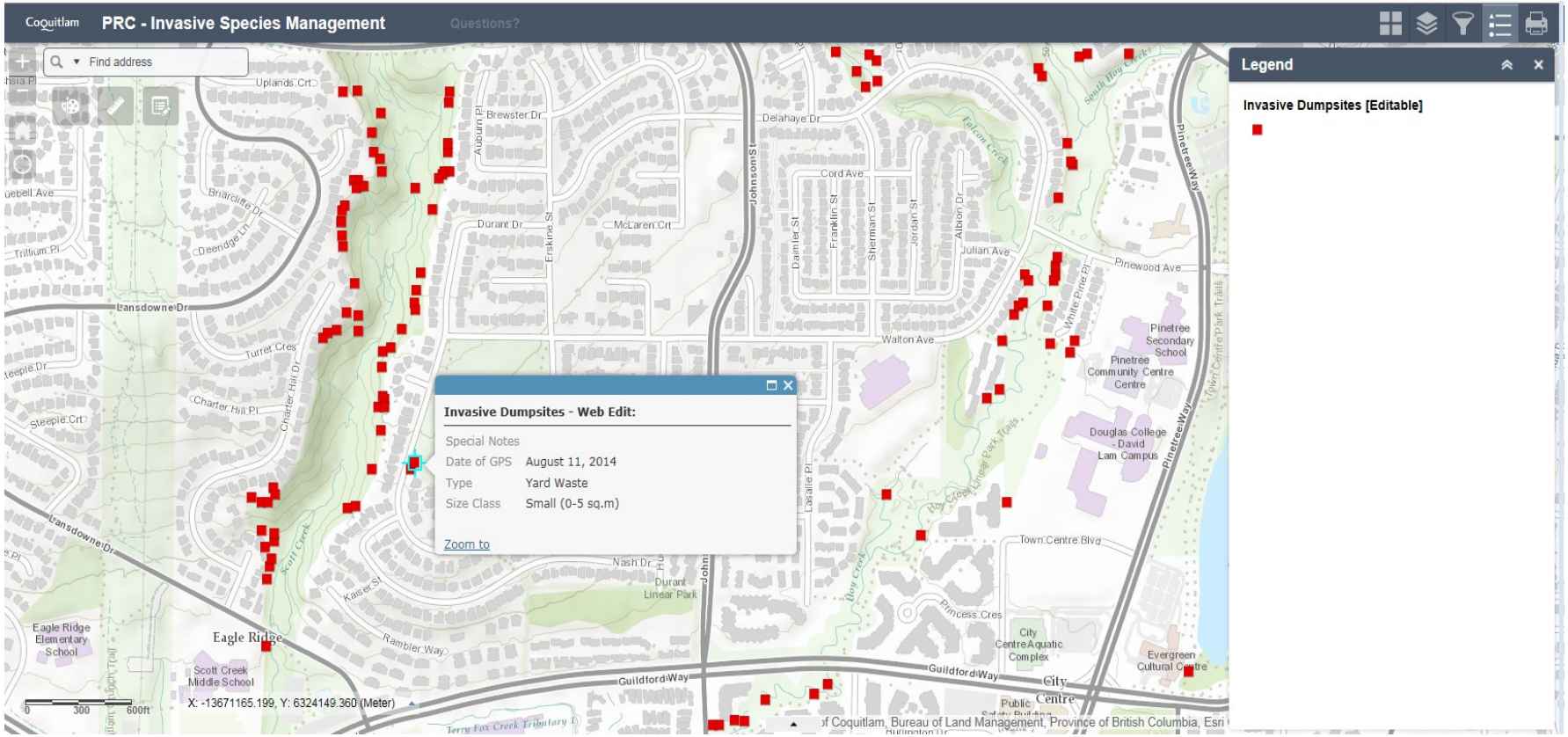

Coquitlam
2016-2020 Capital Plan & Budgeted Pavement Rehabilitation
Engineering and Public Works
Find address
Legend
Capital Plan - Project Labels
Drainage
Sanitary
Transportation
Water
Capital Plan - Utility Project Extents
Future Water Main
Future Drainage Channel Improvement
Future Drainage Culvert Upgrade
Future Drainage Main
Future Sanitary Force Main
Future Sanitary Gravity Main
Capital Plan - Transportation Project Extents
2016 Drainage Erosion Control
2016 Evergreen Improvement
2018 Sanitary Force Main
2018 Sanitary Force Main
2019 Sanitary Gravity Main
2017 Storm Sewer Upgrade
2018 Greenway
2016 Water Main
2016 Water Main
2019 Water Main
2019 Water Main
2017 Drainage Erosion Control
2016 Drainage Erosion Control
2019 Water Main
2016 Sanitary Force Main
2019 Water Main
2016 Sidewalk
2017 Water Main
2017 Water Main
2016/2017 Drainage Outfall Improvement
2016 Shared Bike Route
2017 Water Main
2019 Water Main
2016 Water Main
2016 Water Main
2016 Sidewalk
2016 Sidewalk
2016 Water Main
2016 Water Main
2017 Water Main
2016 Greenway
2019 Sidewalk
2016 Water Main
2017 Greenway
2018 Greenway
2016 Sidewalk
2016 Water Main
2016 Sidewalk
2016 Sidewalk
2017 Greenway
2016 Sanitary Gravity Main
2018 Evergreen Improvement
2019 Greenway
2017 Water Main
2016 Sidewalk
2017 Water Main
2018 Water Main
2020 Intersection Improvement
2017 Water Main
2016/2017 Water Main
2017 Water Main
2016 Sidewalk
2016 Storm Sewer Extension
2016 Shared Bike Route
2018 Sanitary Gravity Main
2020 Greenway
2016 Drainage Outfall Improvement
2016/2017 Major Road Improvement
2016 to 2020 Major Road Improvement
2016/2017 Major Road Improvement
Port Moody
Coquitlam
Burnaby
0.6km
X: -13676260.215, Y: 6319759.757 (Meter)
City of Coquitlam | © City of Coquitlam - Engineering and Public Works - Mapping Section | City


Coquitlam
Sanitary and Storm - Pipe Inspection Video & Reports
Engineering and Public Works
Find address
Cottonwood Ave
Sprice Ave
Foster Ave
Kerwan Ave
Pelton Ave
Winslow Ave
Porter St
Coline St
Mountain St
Tipton St
100m
X: -44869210.614, Y: 20730322.656 (Foot)
City of Coquitlam | © City of Coquitlam, EPW, Mapping Section | City of Coquitlam, Bureau of Land Management, Province of British Columbia,...
esri

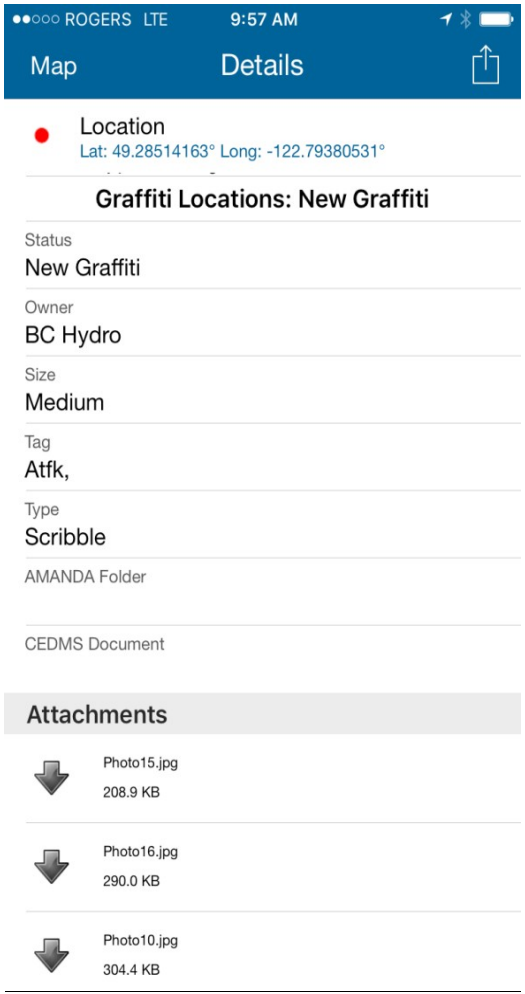
Map Based Work Management

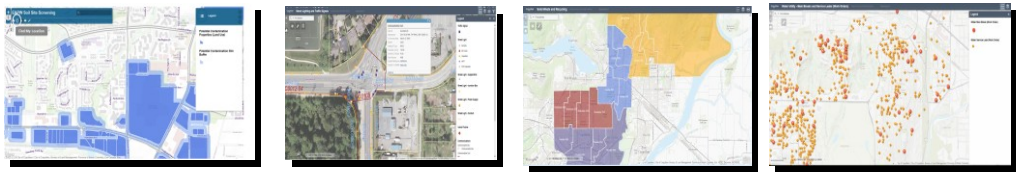


Urban Forestry – Invasive Species Management



Bylaws – Graft Applicaton





Presentaton Layer
- Web Appbuilder
- Out-of-the-Box Templates
- Web Maps

Portal for ArcGIS

Esri Basemaps

App Server Layer
- Oracle
- SDE
- Business Apps

File Geodatabases

ArcGIS Server 10.3

Web Adapter

ArcGIS Data Store

ETL Layer
- FME
- Cognos

FME Server 2016

Data Layer
- Oracle
- SDE
- Business Apps

SDE

Orthophotos & GIS Data

Asset Mgmt (Maximo)

Permits & License (AMANDA)

Property Owner, Assessment (Tempest)

… and others

Future Plans

Expand Portal for ArcGIS

Public Web Map Update

- Web AppBuilder for ArcGIS
- Potental cloud storage (or hybrid)

Open Data

- ArcGIS Open Data
- Data hosted in ArcGIS Online and AWS

Story Maps and Survey 123 for ArcGIS

Questons?

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