

The City of Vancouver is Not Looking Down on Orthophotography Anymore

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City of Vancouver - January 22, 2009



Presentation Objectives

- Describe what Pictometry imagery is
- Describe how the City has deployed Pictometry
- Describe Engineering-oriented uses of Pictometry
- Describe Planning uses of Pictometry

Vancouver's History with Orthophotos

- 1994 purchased off the shelf
- RFQ for orthos in 1999
- RFP for orthos in 2002, 2006, 2006
- 2008 obtained without RFP, used 2006 vendor
- 2009 from Consortium and Pictometry
- All included in VanMap

Why Are Orthos So Important?

- They add perspective & reality to all those lines on the map
- They facilitate comparisons between years
- They facilitate detection of patterns not otherwise easily seen
- Orthos are likely the most popular option layer in VanMap

Looking Sideways is Moving Forward

- COV obtained oblique imagery from MDA/Pictometry at end of 2007
- “Took a flyer” with end of year money
- Implemented the imagery and EFS (Electronic Field Study) in April 2008
- They were a big hit!

Looking Sideways is Moving Forward

- Implemented an ActiveX control version for viewing with VanMap in August 2008
- They were an enormous hit!!
- Application accessed 11,500+ times in first 5 months

Why?

- What's the big deal about looking sideways?
- The Planning & CSG perspective (Dan)
- The Engineering perspective (Martin)

CSG & Pictometry

- Why it is important
 - crowns VS faces
- How we are using it
 - Virtual site visits
 - Public consultation
 - 3D model
- Future enhancements

Why The Enthusiasm Form CSG Staff?

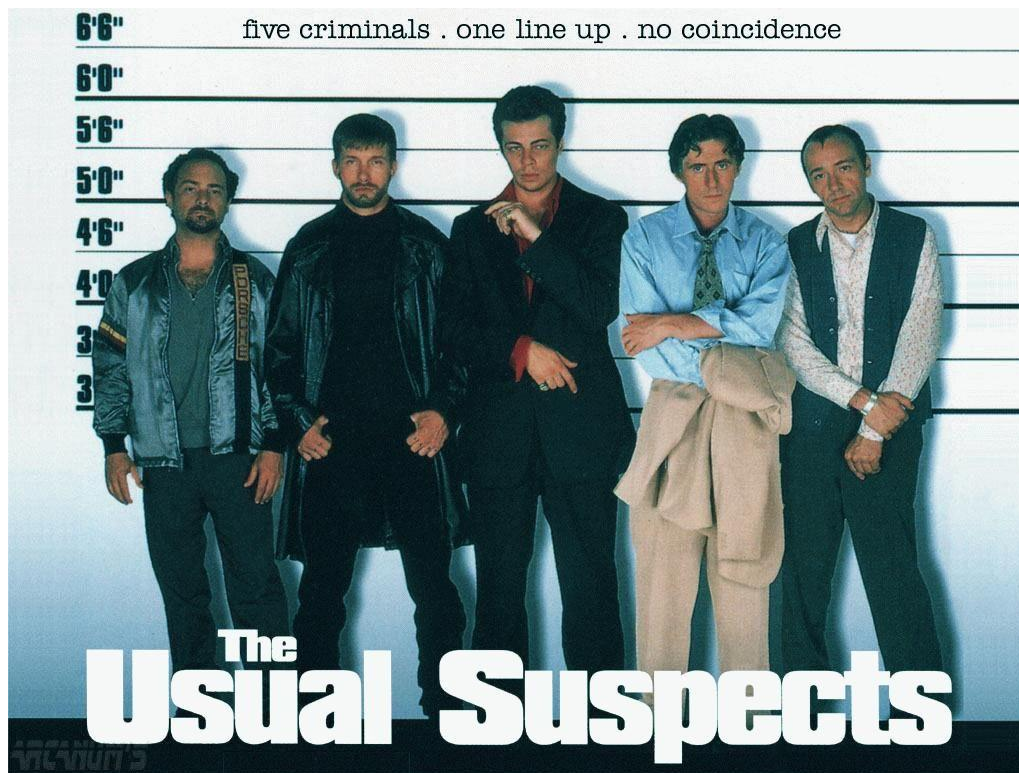
- The simple benefits shouldn't be overlooked
 - Easy to get at (VanMap & EFS)
 - Lots of information
 - Currency of the photography
 - ... **it is how we actually perceive the world**

Obliques Are Anything But

- o·blique [uh-bleek, oh-bleek; Mil. uh-blahyk, oh-blahyk]
 - Oblique indirectly stated or expressed; not straightforward

It Is All About Faces!

- Consider, if you will, a police lineup



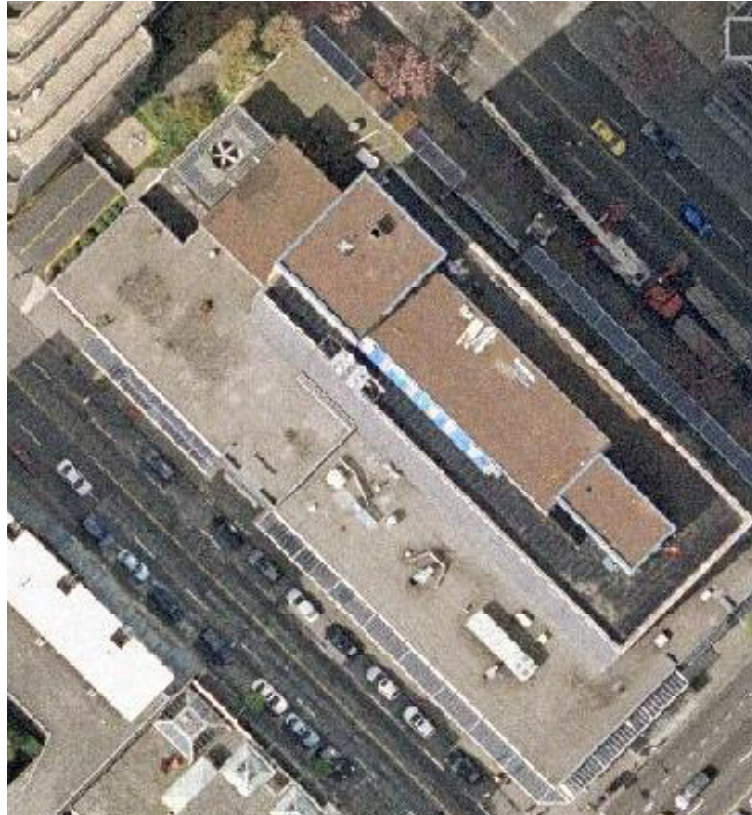
Limited View = Limited Data

- What if we could only see the Usual Suspects from above?



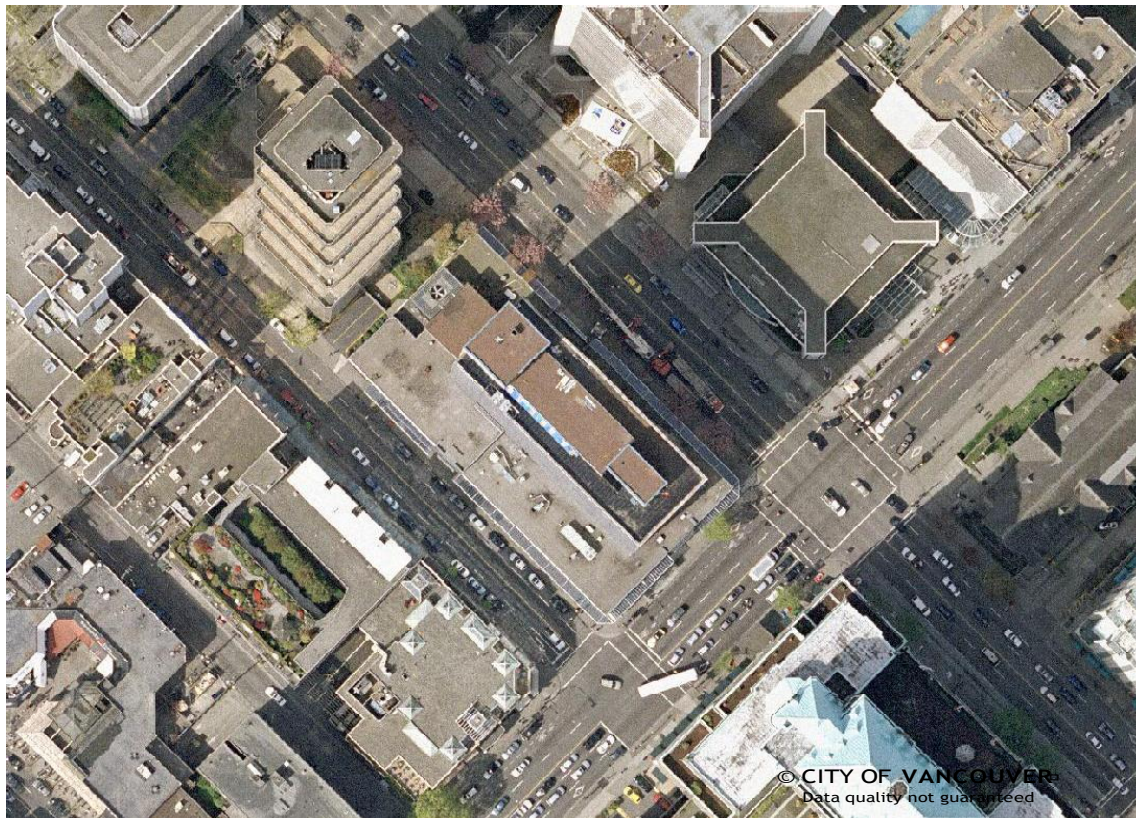
I'd Know That Roof Anywhere

- Conventional way of seeing our city



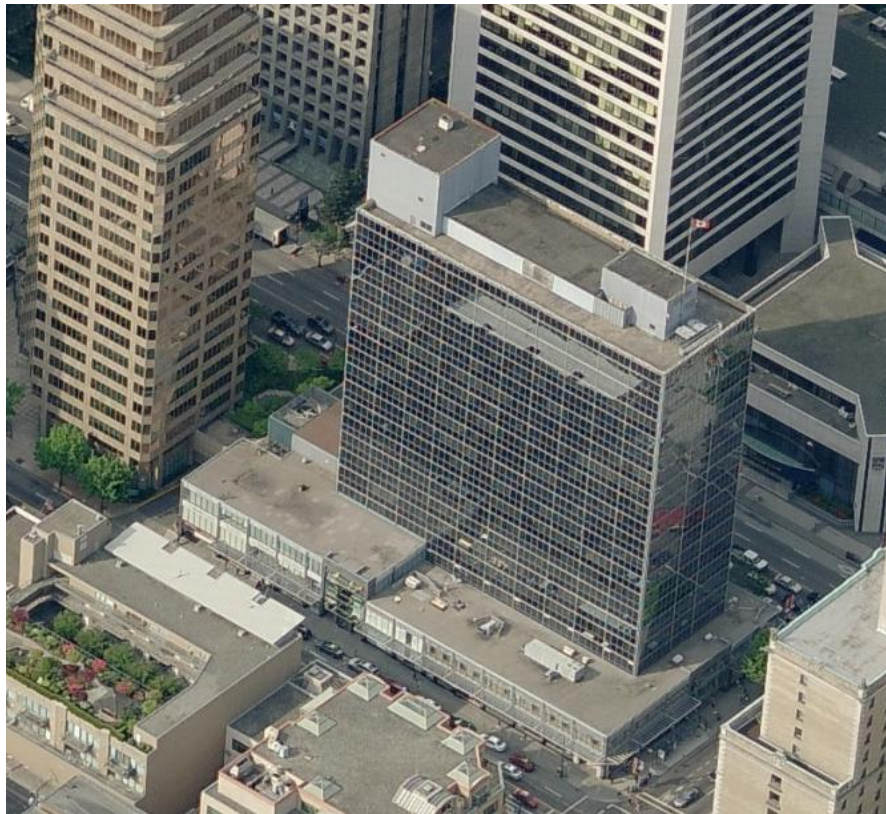
Bird's Eye View For The Birds?

- Why limit ourselves?



Now I Know Where I Am

- When we can look at faces?



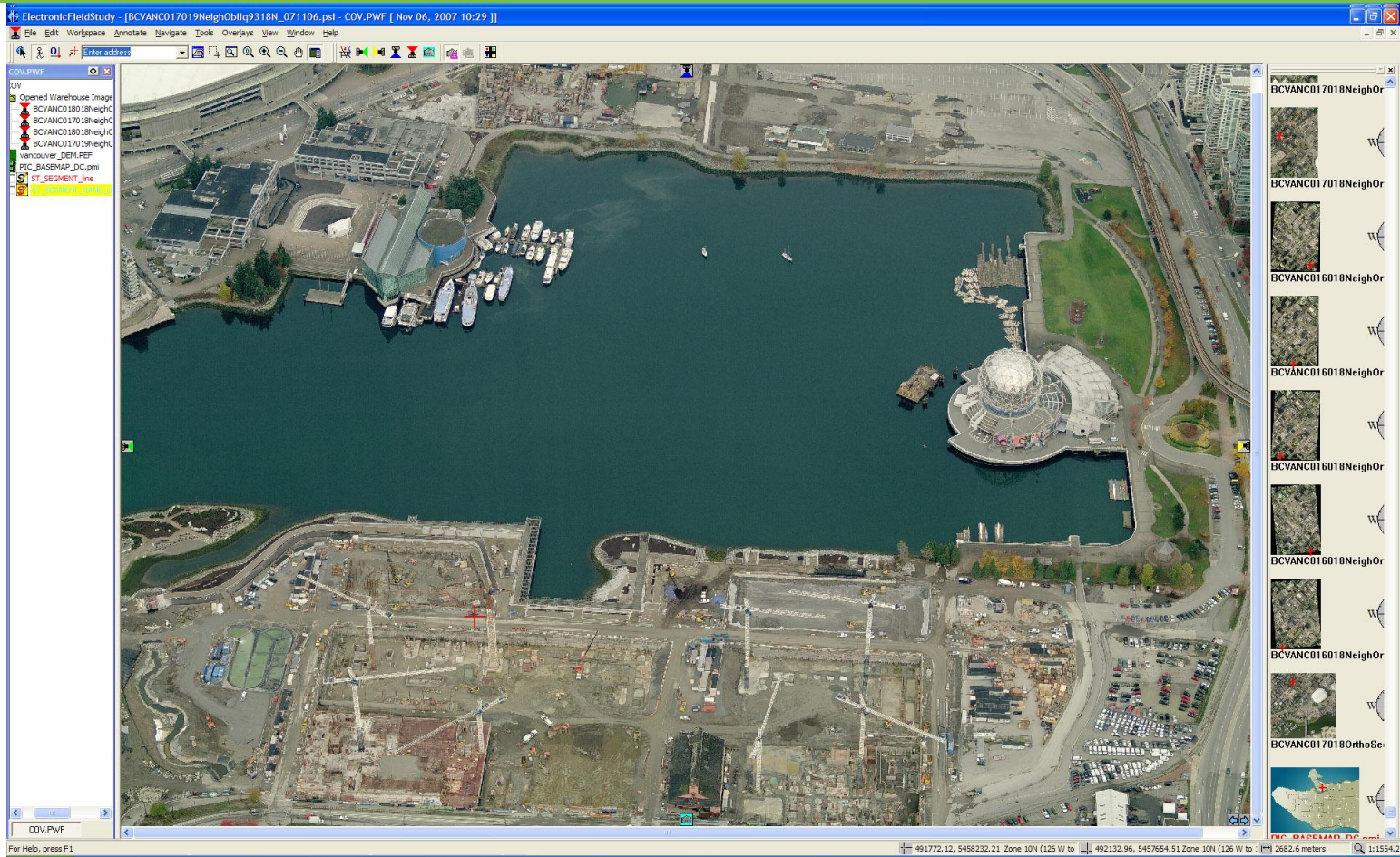
CSG - Virtual Site Visits

- For quick checks can reduce the number of physical site visits
- Potential for tracking change, (and noting changes where changes weren't approved)

CSG - Testimonials

- The oblique images graphically convey information in one image that would otherwise take an orthophoto and many, many elevation photos to convey.
- Obtaining the elevation photos is time consuming and requires several site visits and does not give as complete an image as the oblique photos

CSG Virtual Site Visits



CSG - Testimonials

- I've used the images on multiple open house presentation boards (for multiple projects) and they have been a huge improvement on the use of aerial photos when trying to engage the community in any kind of conversation about redevelopment
- (a significant portion of people cannot easily understand plans and ortho views, but the oblique images are easily understood and allow people to immediately begin discussions).

CSG Cost Savings

- Reduced need for custom photography



Lots Of Data To Work With



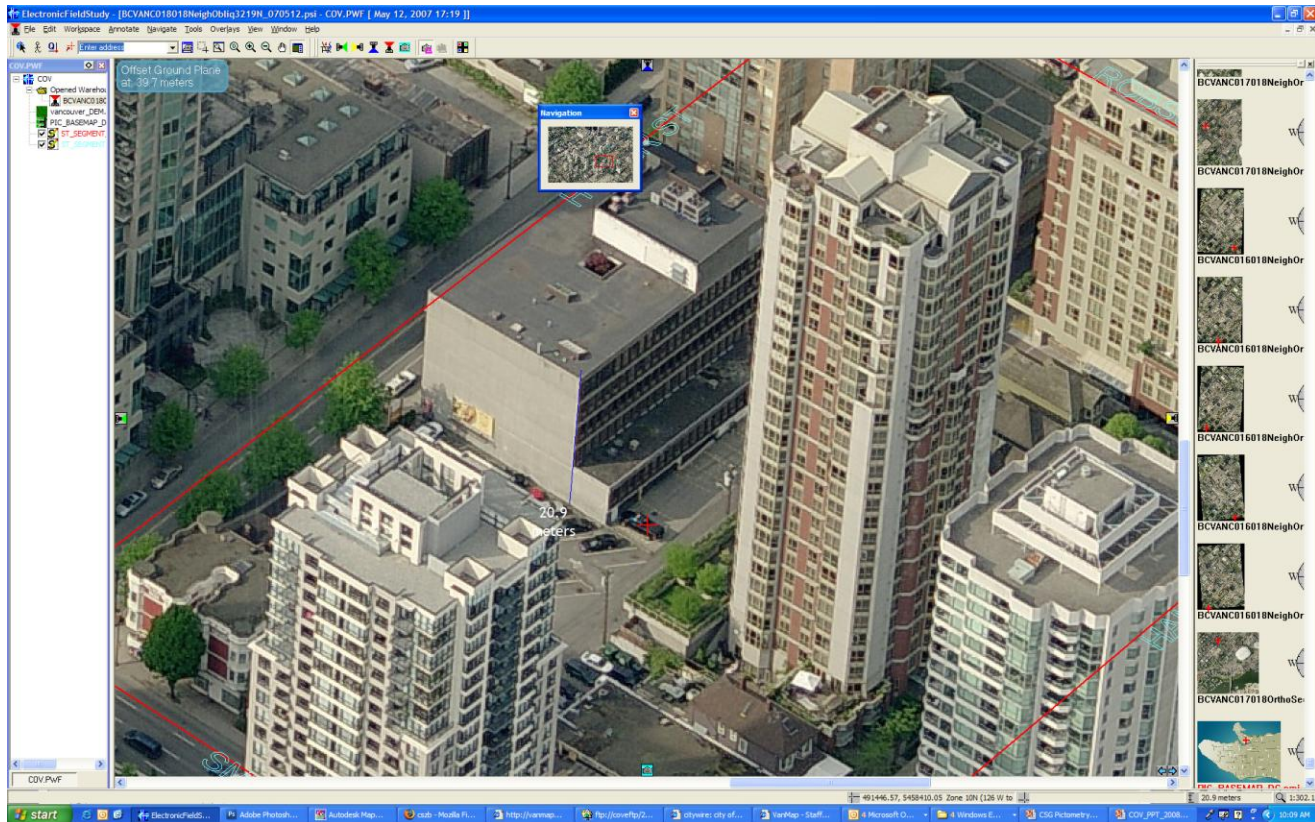
CSG - 3D Model



CSG - 3D Model

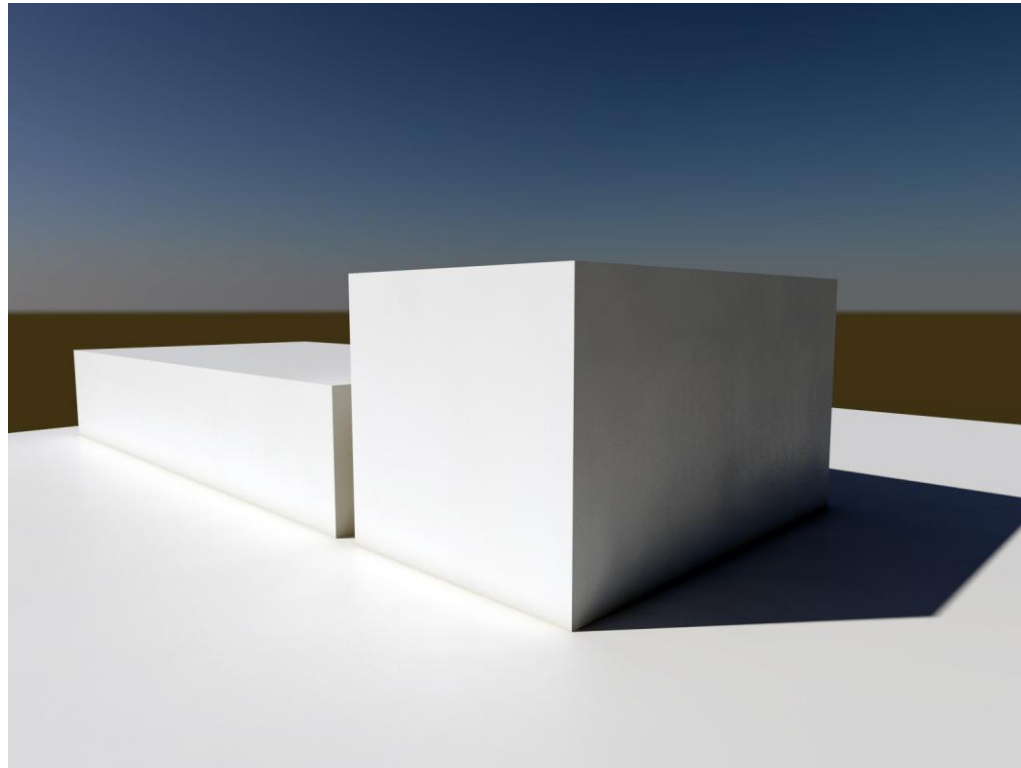
- Multiple views and measurement tools have helped with our 3D model
 - Create new buildings from scratch
 - Add character and details to existing buildings
 - Check accuracy of model

3D Model Data Resource

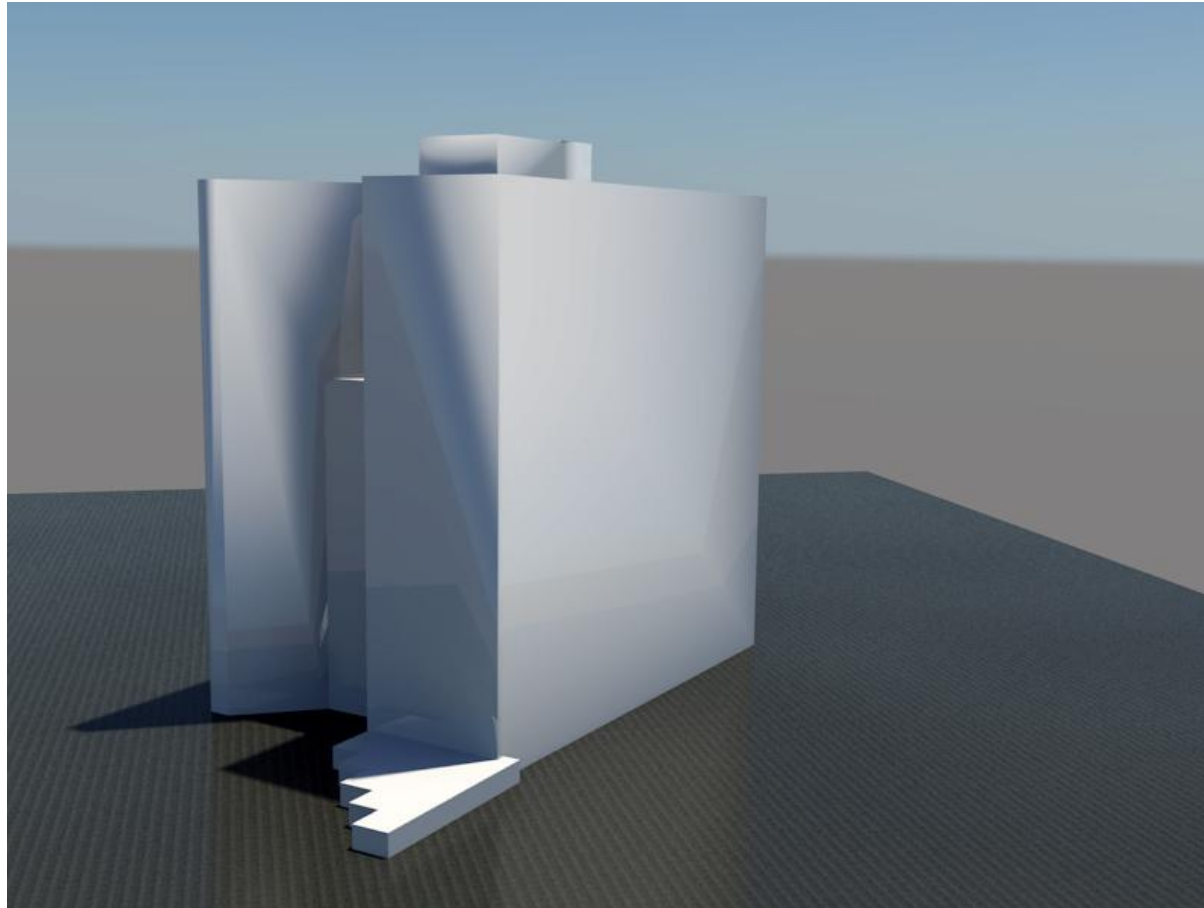


3D Model Data Resource

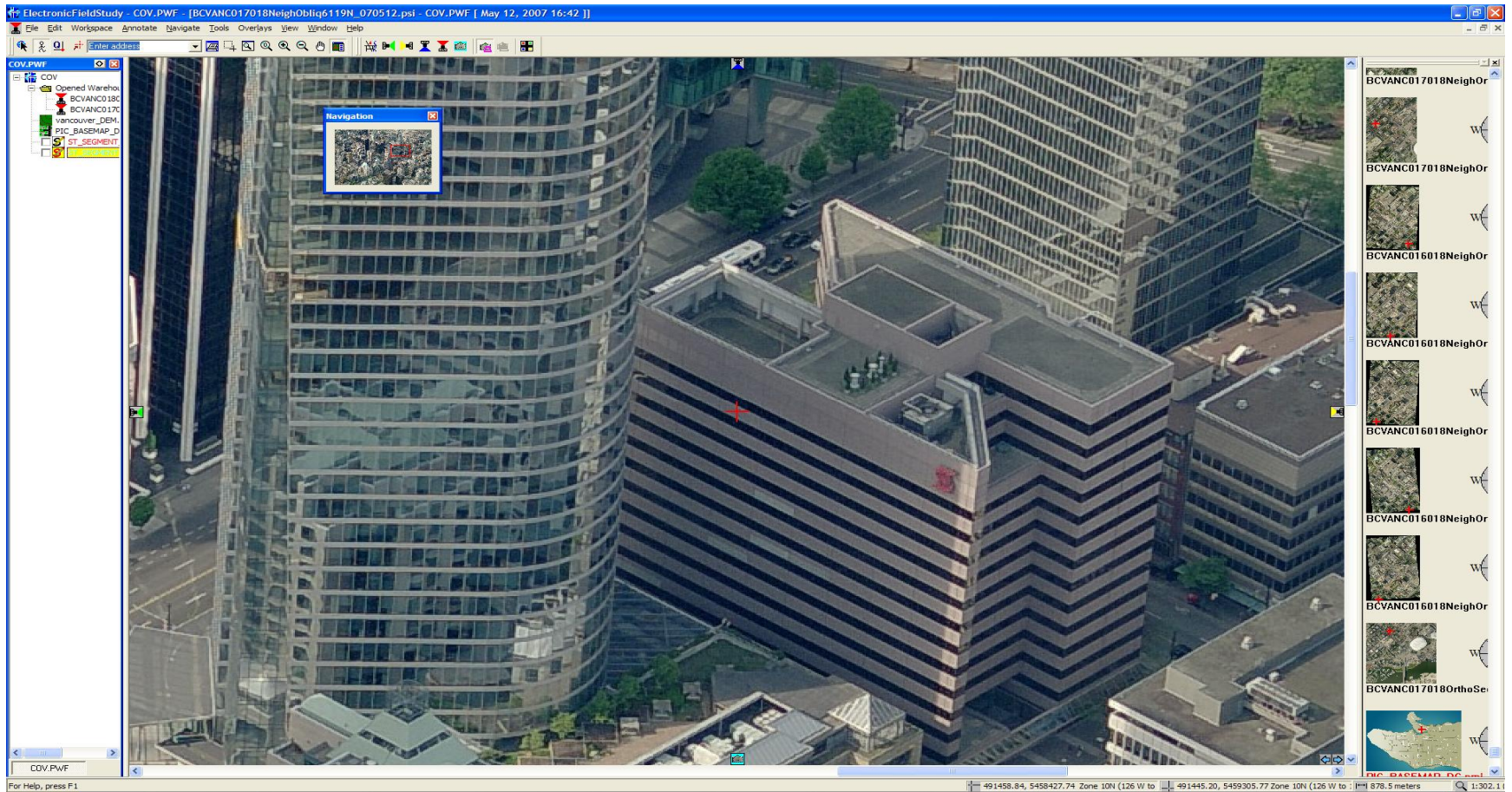
- 3D Model Data Resource



3D Model Skin Resource



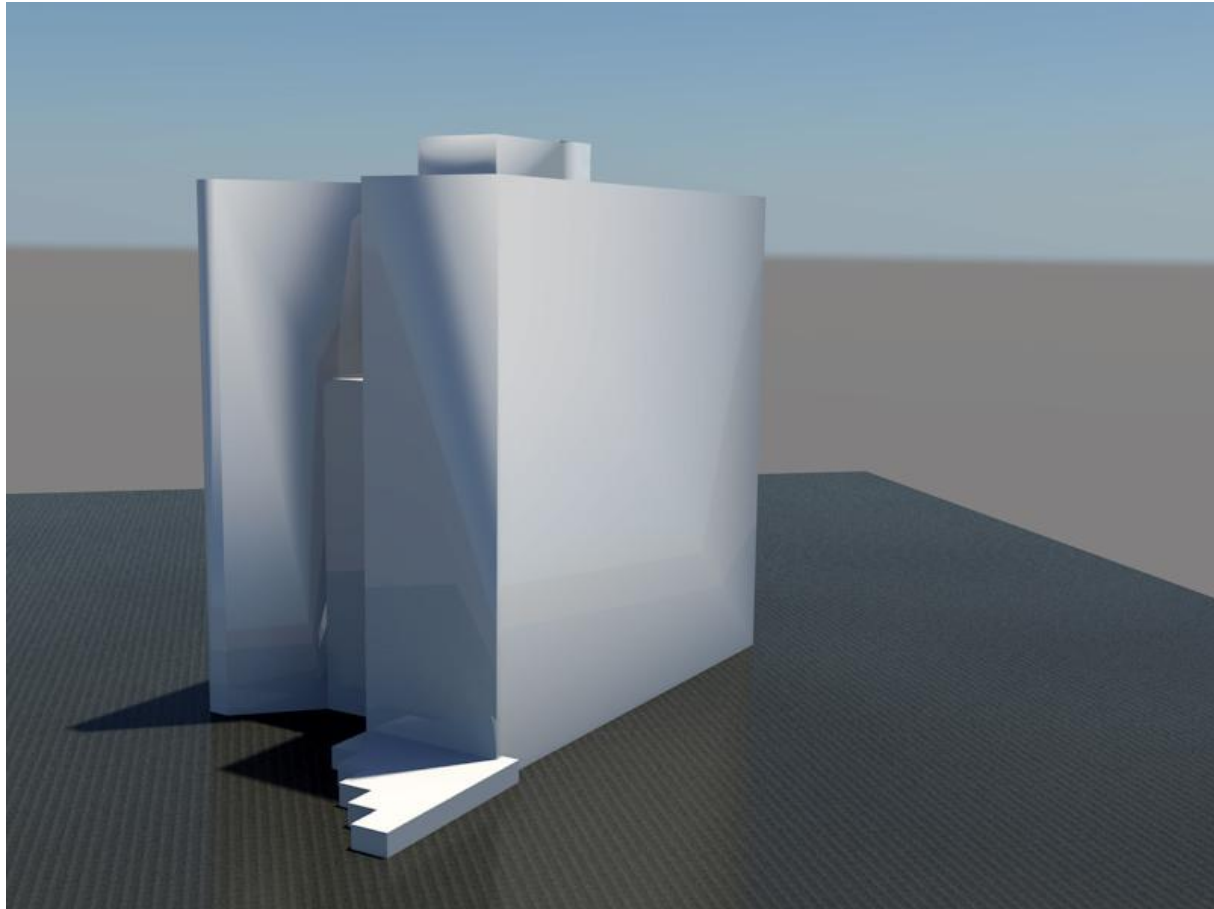
3D Model Skin Resource



3D Model Skin Resource



3D Model Skin Resource



CSG Pictometry - Future Directions

- Looking forward to:
 - New photography (compare change)
 - Possible integration into notification process
 - Do it yourself for staff access to high resolution images (VanMap)
 - Easier access to alternate images (VanMap)

CSG Pictometry

- In Summary
 - Provides substantially richer information
 - More readily understood by the public
 - Adds a new set of tools
 - Reduces need for site visits
 - Reduces need for custom aerial photography
 - Enhances 3D model



(c) Copyright 2007, Pictometry International C

How does Engineering use Pictometry





Transportation Planning

- Replaces site visit
- Reduced travel
- Better overview of the area
- See the spaces that are under bridges
- Recognize buildings and locations easier than orthophoto
- Save expense and staff time required for a special photo-fly of our major projects.
- High quality
- Improves the quality of the work we do.

Lon Laclaire PEng Strategic Transportation Planning Engineer





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Orthophoto View





Pictometry View



Local Improvements

- Helps visualize the location
- Able to respond to the public faster
- Saves on travel time
- Provides details not visible on the orthophotos
- Multiple views
- Used the images in PowerPoint presentation



Neighbourhood & Greenways

- Planning
- Saved site visit.
- Better suited to see the actual locations of lamp standards
- Multiple directional views
- Communication tool for large displays
- Describes reality better than the orthophotos



Lamp Standards



Films and Special Events

- Level of detail (Almost able read the parking regulation signs)
- Visualize and measure locations
- Reduce site visits
- Communication
- Assists event planning

Sara Spearman Films & Events Liaison

In Summary

PICTOMETRY...

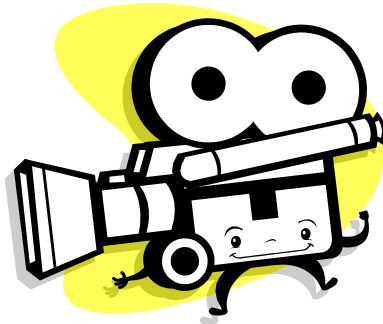
- Reduces site visits
- Provides accurate, detailed views of location-based information
- Assists communication between staff and public
- Uses multi-views to unlock data not visible in orthophotos
- Is very popular with staff!

Thanks for attending!

Looking Forward (from sideways)

- We will make Pictometry imagery available to the public with reduced functionality
- We will acquire 2009 imagery to complement our 2007 imagery

Demonstration



Public VanMap Can Be Found At

- vancouver.ca/vanmap

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