

Uplands Combined Sewer Separation Project

Project Update

District of Oak Bay

October 26, 2015

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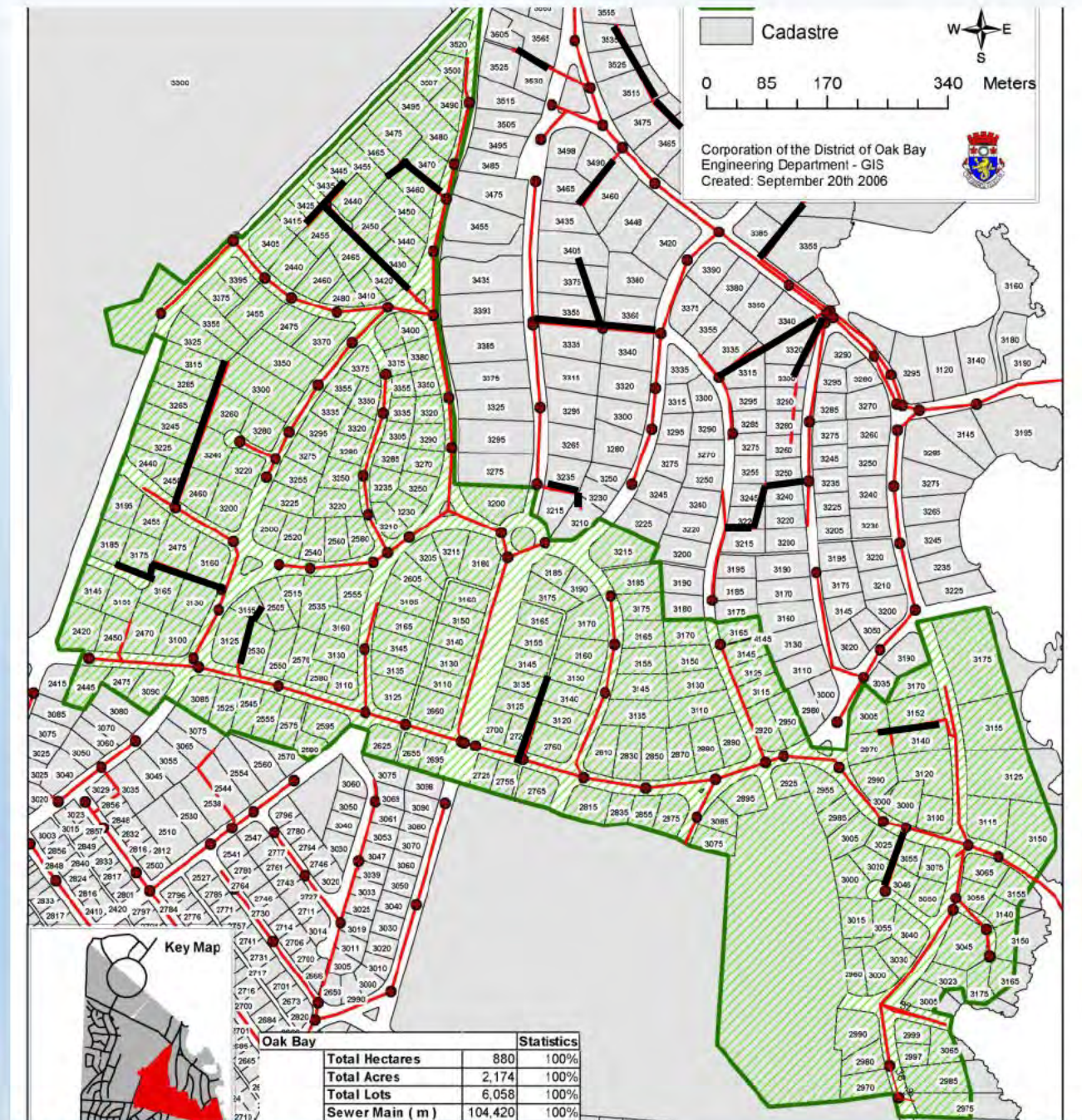
- Why?
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Why?

- Municipal Wastewater Regulation
- Combined sewer separation is included in the CALWMP approved by the Ministry of Environment
- Amendment to the CALWMP expected to be submitted early in 2016
- Amendment must include rationale for Oak Bay's plan and schedule

Humber and Rutland Catchments – Location of Existing Combined Sewers

— Existing Easements



Existing SRW at 2450/2470 Lansdowne



Existing SRW at 3490/3460 Beach Drive



The Combined Sewer Separation Options

Option 1

- New deeper, gravity sanitary sewers
- Existing pipes to convey stormwater

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 29 | 10 | 150 |
| Rutland | 39 | 7 | 236 |

- Maximum practical and economic depth – 5m

Option 2

- New deeper gravity stormwater sewer
- Existing pipes to convey sanitary sewage

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 32 | 7 | 150 |
| Rutland | 40 | 6 | 236 |

- Maximum practical and economic depth – 5m

Option 3

- Low pressure, shallow, sanitary sewer system
- Existing pipes to convey stormwater

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 140 | 10 | 150 |
| Rutland | 229 | 7 | 236 |

Option 4

- Shallow, gravity stormwater sewers, pumped where necessary
- Existing pipes to convey sanitary sewage

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 65 | 7 | 150 |
| Rutland | 101 | 6 | 236 |

- Two local District pump stations in the Rutland Catchment

Option 5

- Shallow, gravity sanitary sewers, pumped where necessary
- Existing pipes to convey stormwater

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 60 | 10 | 150 |
| Rutland | 114 | 7 | 236 |

Option 6

- Shallow, gravity sanitary sewers, community sanitary pump stations where necessary
- Existing pipes to convey stormwater

| Catchment | New Pumps | Existing Pumps | # of Properties |
|-----------|-----------|----------------|-----------------|
| Humber | 40 | 10 | 150 |
| Rutland | 96 | 7 | 236 |

- Two District pump stations in the Humber Catchment

Potential for On-site Stormwater Management



Traffic Island at Beach Drive and Midland Road



Undeveloped Midland Road ROW at Lansdowne

Sewer Separation – Present District Practice

- New builds and major renovations – sewer separation required

| Catchment | # Separated | Total Homes | % Separated |
|-----------|-------------|-------------|-------------|
| Humber | 58 | 150 | 39% |
| Rutland | 29 | 236 | 12% |

Current Responsibility for Costs

- In accordance with current municipal practice - basic infrastructure costs are a shared community cost
- Sewer separation costs on private property are the property owner's responsibility
- Cost to connect to (separated) municipal sewers within the municipal right of way – the property owner's responsibility

Responsibility for connection costs for properties with already separated sewers

- Property owners have paid to separate the sewers on their property
- Property owners have paid for a new connection to the existing combined sewer
- Proposed:
 - That properties with sewers separated prior to construction of the separated sewer system be connected to the new sanitary or storm sewer as part of the project construction cost

Bylaw No. 3891

- Current Bylaw Requirement:
 - Mandatory connection to a newly separated sewer at the homeowner's expense
- Proposed Bylaw Amendment:
 - Mandatory connection for new homes
 - Mandatory connection for renovations of \$100,000 or more
 - Optional connection for existing homes
 - Costs to be borne by property owner

Note: Bylaw amendment assumes no Federal or Provincial funding and current level of District funding

Compliance with MWR – When?

1. Assuming:

- No Federal or Provincial funding
- Current level of District funding

Timeframe for 100% compliance: several decades

2. Assuming:

- Federal and Provincial funding (2/3)
- 1/3 District funding, may include borrowing:

Timeframe for 100% compliance: 5 – 10 years

The Heritage Conservation Act

- There are known archaeological sites in the Uplands area
- Areas with archaeological potential have been identified
- Provincial Archaeological Branch recommends:
 - A Heritage Inspection 'Blanket' permit
 - Covers Oak Bay and private property owners
 - Home owners remain responsible for protection of archaeological sites on their property
 - Oak Bay responsible for protection of archaeological sites on its property
- Contact has been made with the Songhees and Esquimalt First Nations

Public Engagement

- Four public ‘open houses’ have been scheduled:
 - November 7: 2pm – 5pm at Oak Bay High
 - November 10: 5pm – 8 pm at Royal Victoria Yacht Club
 - November 20: 5pm – 8pm Uplands Campus
 - November 21: 2pm – 8pm Uplands Campus
- Details of the options, including costs, will be presented on ‘Story Boards’
- Oak Bay staff and consultants will be available to answer questions

Recommendations

- Amend Bylaw 3891
- Include the cost of connecting properties with separated sewers in the construction contracts.
- Obtain blanket Heritage Inspection Permits

Questions?