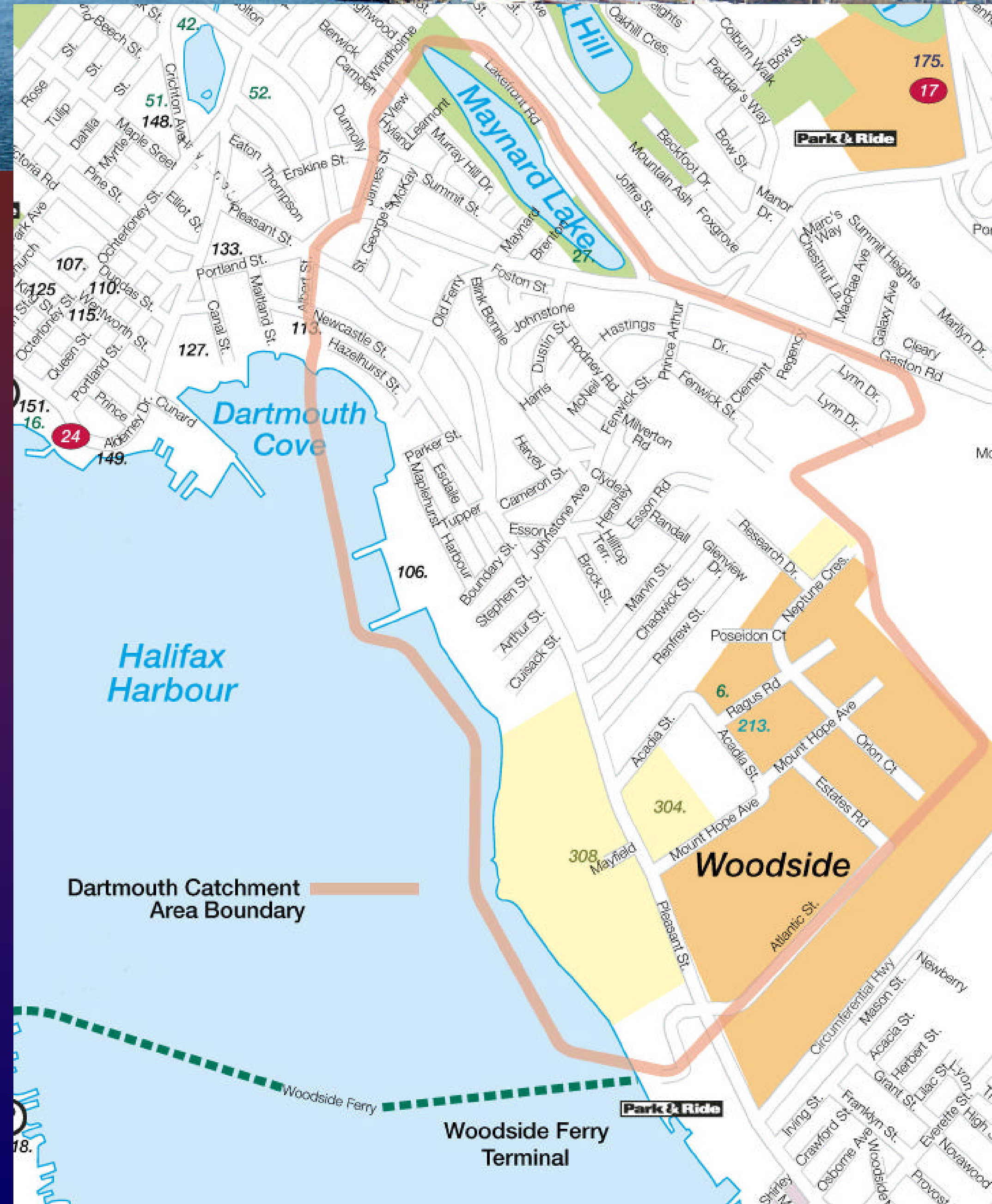
Halifax Harbour Solutions Project
Dartmouth Community Update

January 26, 2005

Agenda

- Introduction – Councillor Becky Kent
- Harbour Solutions Project – Ted Tam
- Harbourfront Trails Group – Paul Euloth
- The Harbour Plan – Roger Wells
- NSCC – Grant MacDermot
- Questions/Other Business
- Adjournment

Dartmouth Community

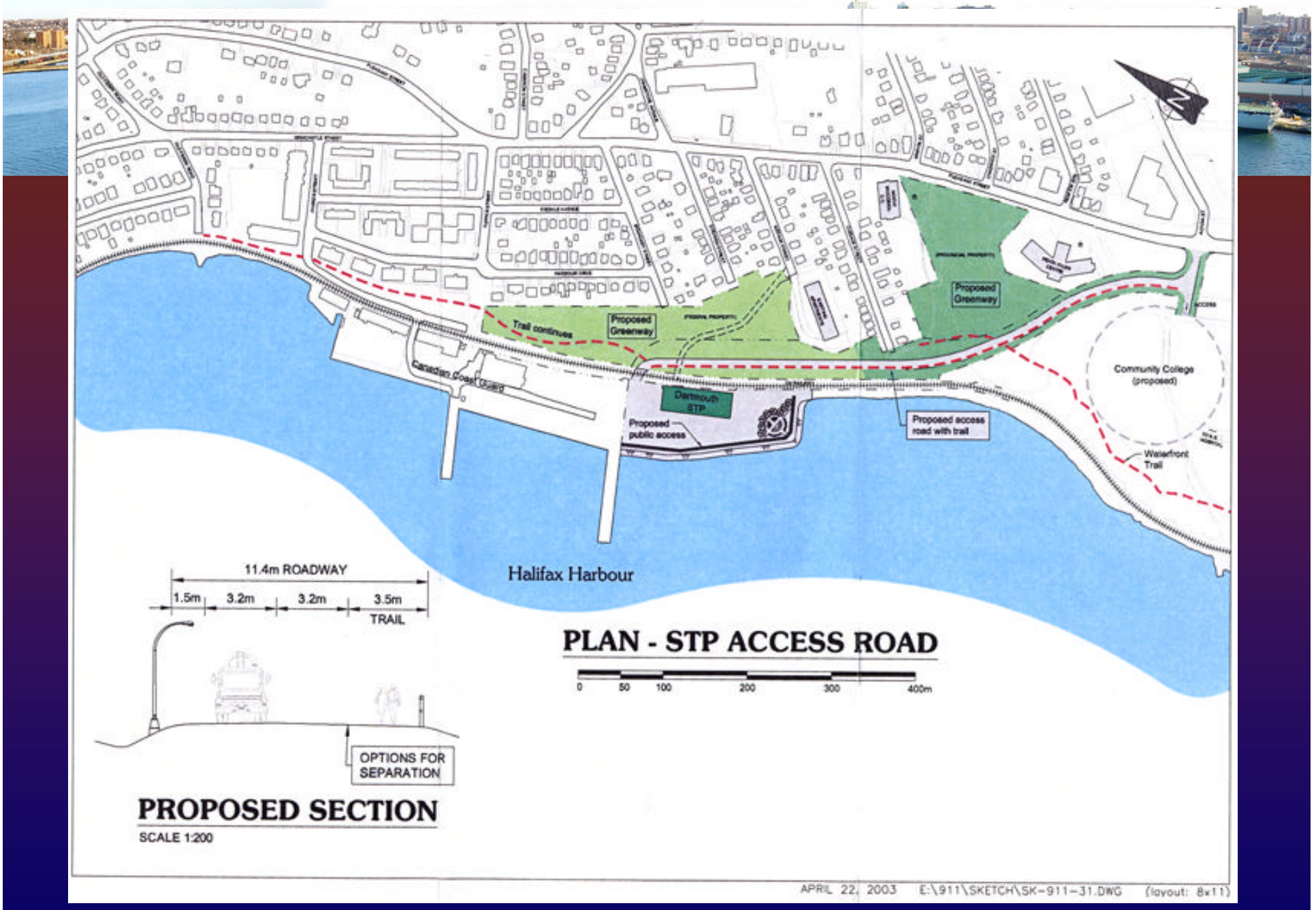


Background

- Dartmouth Wastewater Treatment Plant
  - May, 2000, Dartmouth CLC formed to involve residents in integrating the Dartmouth Wastewater Treatment Plant (WTP) into the community
    - $1million Community Integration Fund
  - December, 2001, results and recommendations of District 8 Community Recreation Needs Assessment provides foundation for Dartmouth CLC's Community Integration Plan
  - July, 2002, Dartmouth Waterfront Greenway Proposal – trail from Acadia Street to Old Ferry Road – endorsed by HRM Council

Background

- April 2003, HRM conducts survey of Woodside area residents regarding plant access road options.
- Approx. 1250 surveys sent out
  - WTP traffic use residential streets - 16.6% YES, 68.7% NO, 15.6% No response.
  - WTP traffic use proposed access road - 71.2% YES, 13.6% NO, 15% No response.
  - Total respondents = 205(16.6%)


Proposed Greenway
Trail continues
Proposed Greenway
Canadian Coast Guard
Dartmouth STP
Proposed public access
Proposed access road with trail
Community College (proposed)
Waterfront Trail
Halifax Harbour
11.4m ROADWAY
1.5m
3.2m
3.2m
3.5m
TRAIL
OPTIONS FOR SEPARATION
PROPOSED SECTION
SCALE 1:200
PLAN - STP ACCESS ROAD
0
50
100
200
300
400m
APRIL 22, 2003
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Summary: What has been decided

- Location of the Dartmouth WTP on the south end of the Coast Guard lands
- Location of access road to WTP off Pleasant at Acadia St.
- Community Integration Fund – to be spent on the Greenway Plan.

Remaining items for community input/consultation:

- Whether the access road to the plant should remain as a private road.
- The building exterior of the treatment plant and landscaping (within the existing budget)
- Communication of information from the Harbour Solutions Project to the Dartmouth Community

Moving Forward

4 Key Components of Harbour Solutions Project:

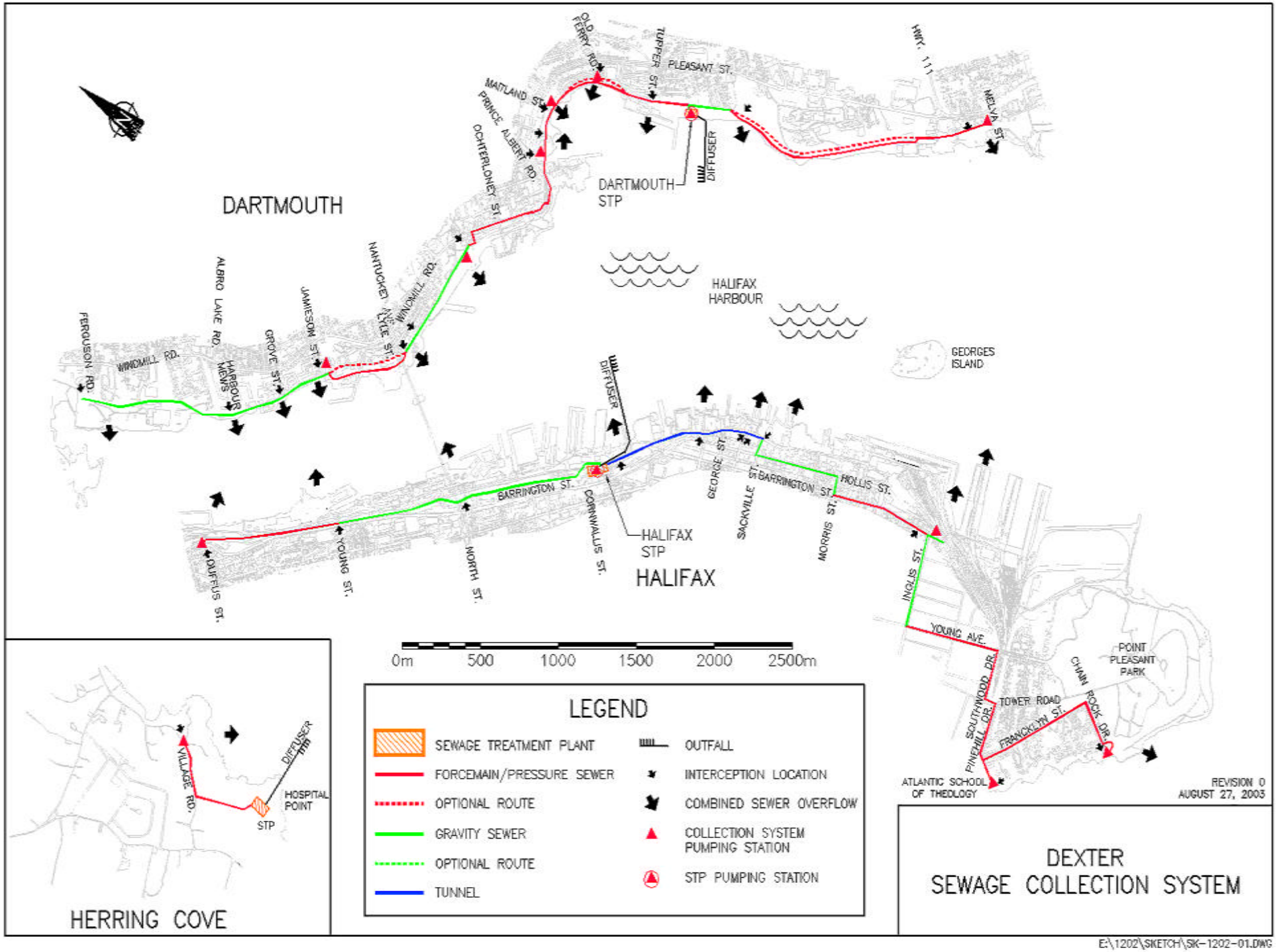
- Sewage Collection System, including outfalls, diffusers & access roads
- Wastewater Treatment Plants design and construction
- Operation of Sewage Treatment Plants
- Biosolids (sludge) management

Halifax Harbour Solutions Project

- November, 2003, sewage collection system groundbreaking begins construction
- September 2004, wastewater treatment plants groundbreaking
- November 2004, signed agreements to design, build, and operate a biosolids processing facility and design is underway

Sewage Collection Systems

- Dexter Construction to build, HRM owns & operates
- Collects sewage and carries to WTP's
- Construction underway for Halifax system and Dartmouth system to start Spring 2005
- Expected completion prior to commissioning of Wastewater Treatment plants. (Dartmouth - Sept 2007)


DARTMOUTH
DARTMOUTH STP
DIFFUSER
OLD FERRY RD.
TURPER ST.
PLEASANT ST.
HWY. 111
MELVA ST.
MAITLAND ST.
PRINCE ALBERT RD.
OCHTERLONEY ST.
NANTUCKET AVE.
WINDMILL RD.
ALBRO LAKE RD.
FERGUSON RD.
HARBOUR MEWS
GROVE ST.
JAMIESON ST.
LYLE ST.
HALIFAX HARBOUR
GEORGES ISLAND
DIFFUSER
BARRINGTON ST.
CORNWALLIS ST.
GEORGE ST.
SACKVILLE ST.
BARRINGTON ST.
ROLLIS ST.
MORRIS ST.
INGLIS ST.
DUFFUS ST.
YOUNG ST.
NORTH ST.
HALIFAX STP
HALIFAX
YOUNG AVE.
POINT PLEASANT PARK
CHAIN ROCK DR.
SOUTHWOOD DR.
TOWER ROAD
PINEHILL DR.
FRANCKLYN ST.
ATLANTIC SCHOOL OF THEOLOGY
0m
500
1000
1500
2000
2500m
LEGEND
SEWAGE TREATMENT PLANT
FORCEMAIN/PRESSURE SEWER
OPTIONAL ROUTE
GRAVITY SEWER
OPTIONAL ROUTE
TUNNEL
OUTFALL
INTERCEPTION LOCATION
COMBINED SEWER OVERFLOW
COLLECTION SYSTEM PUMPING STATION
STP PUMPING STATION
VILLAGE RD.
DIFFUSER
HOSPITAL POINT
STP
HERRING COVE
DEXTER
SEWAGE COLLECTION SYSTEM
REVISION 0
AUGUST 27, 2003
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Wastewater Treatment Plants Design & Construction

- September 2004, ground breaking of Halifax wastewater treatment plant
- HRM responsible for effluent quality
- Can accommodate partial biological treatment if required

Wastewater Treatment Plant Sites

3 Wastewater treatment plant sites

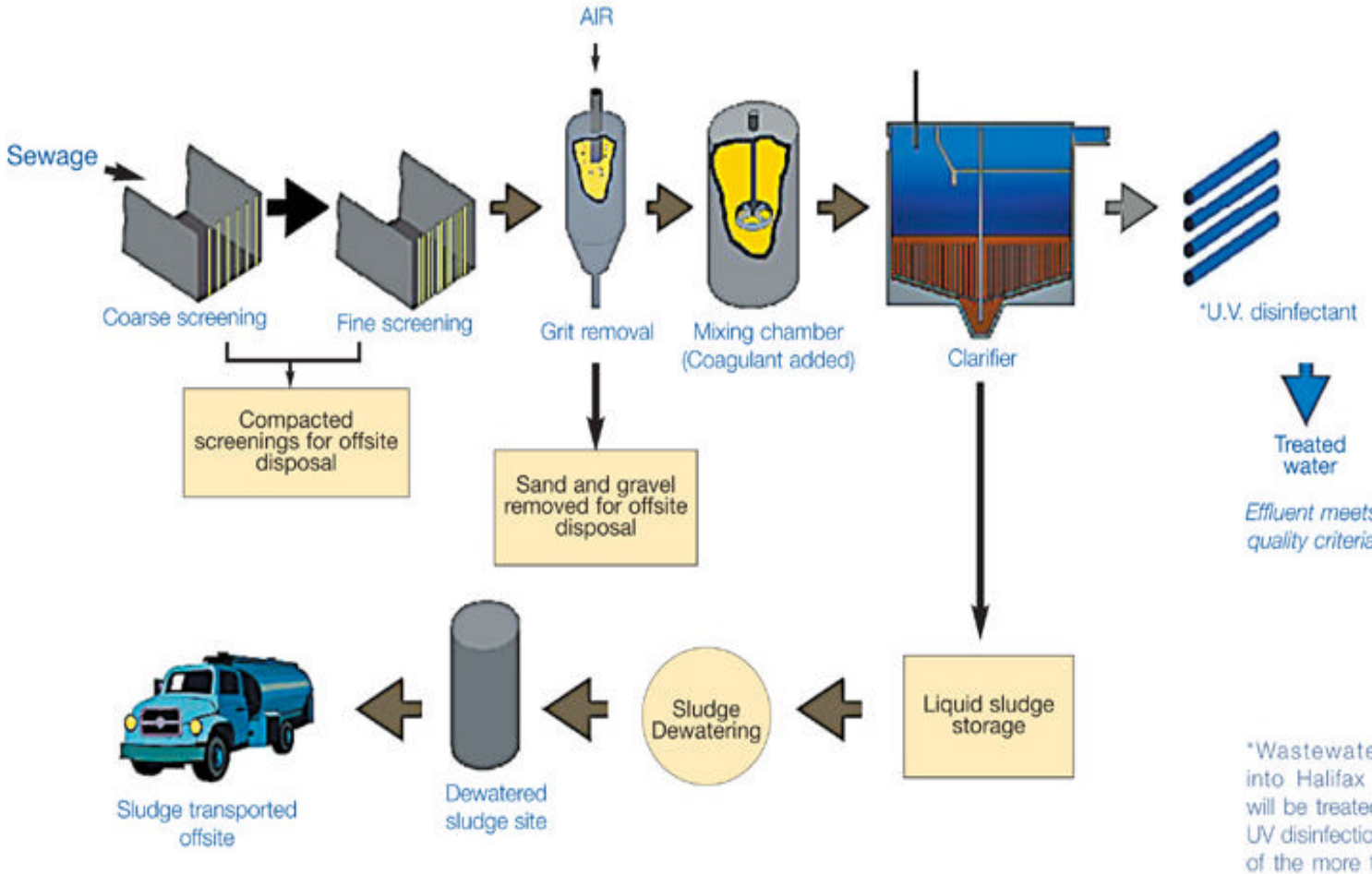
- Downtown Halifax at Cornwallis and Upper Water St.
  - Completion summer/early fall 2006
- Dartmouth on land from the Coast Guard base
  - Completion summer 2007
- Hospital Point in Herring Cove
  - Completion summer 2008


Dartmouth
- SCS spring 2005
- access road spring 2005
- WTP spring/summer 2005

Operation of WTPs

- HRM will own and operate
- Advanced primary treatment of sewage
  - Removes 70% of suspended solids in the wastewater
  - High-intensity ultra-violet lights are used to kill bacteria (UV disinfectant) meeting or exceeding all regulatory water quality targets
  - all are designed to blend in visually
  - all are designed to comply with very stringent noise or odour control requirements.

Sewage Treatment Process



*Wastewater going into Halifax Harbour will be treated using a UV disinfection instead of the more traditional chlorination process

Biosolids Management

- Biosolid - By product of the sewage treatment
- Dewatered sludge removed from settling tanks and transported to sludge processing facility
- Contracts for design, build, commissioning and operation of Biosolids management Facility were signed (Nov, 2004)

N-VIRO PLANT SCHEMATIC

ALKALINE ADMIXTURE SILOS

DEWATERED BIOSOLIDS

MIXER

DRYER

solids

air

STORAGE AREA

HEAT PULSE

STORAGE

N-VIRO SOIL

ODOUR CONTROL SYSTEM

AEROTECH STP

LIQUID EFFLUENT

BIOFILTER

AIR

BENEFICIAL USES:

- agriculture, limestone substitute
- land reclamation
- topsoil manufacture
- yard waste composting
- landfill cover

SALES AND DISTRIBUTION

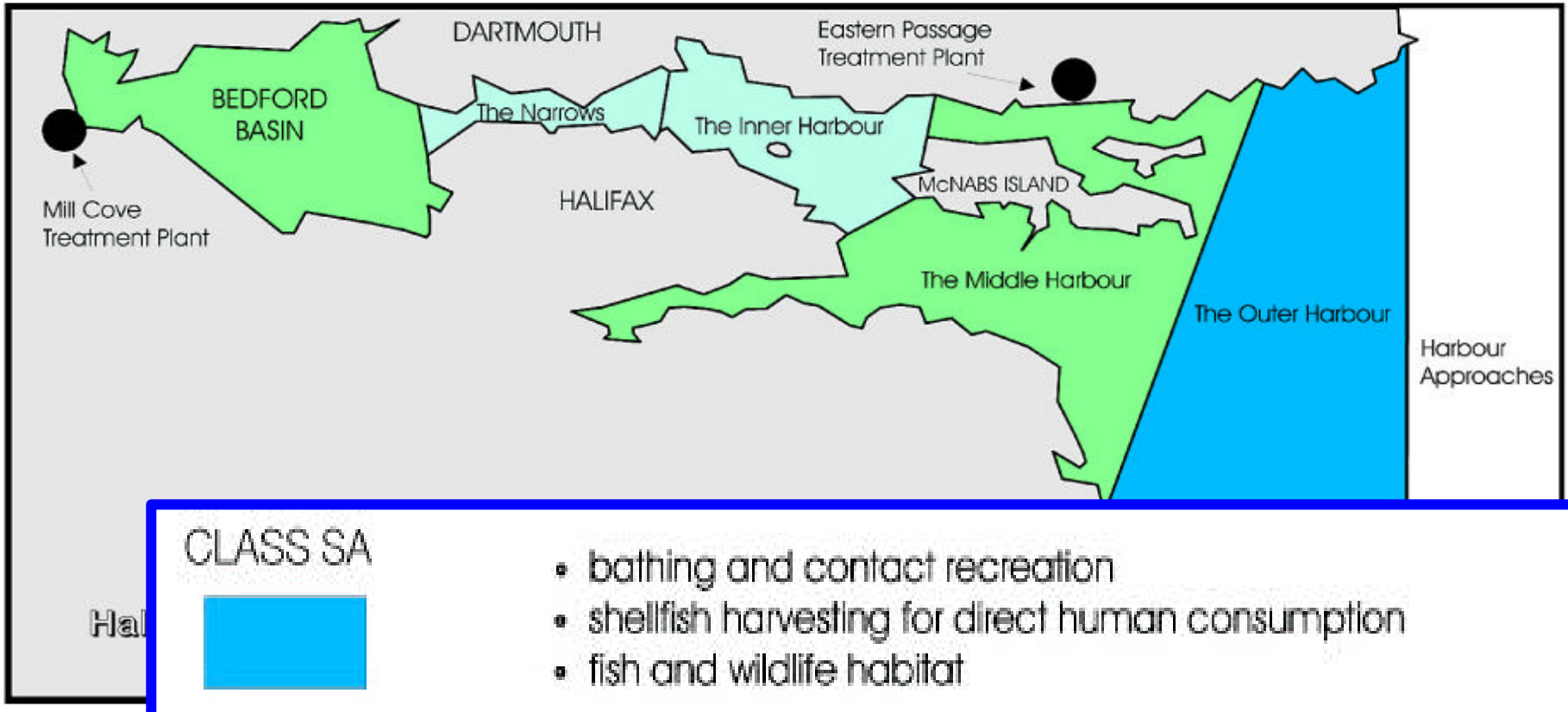
E.G. AGRICULTURAL APPLICATIONS

Funding Sources

- Provincial - $2 million/year for 15 years + $2 million in land
- Federal - $60 million
- Municipal funds raised through Pollution Control levy on HRM residents' water bills
- HSP total budget of $333 million

Long Term Goals of the HSP

- ✓ Greatly improved water quality in the Harbour
- ✓ Increased property values
- ✓ Increased tourism revenues
- ✓ Renewed shellfish harvesting
- ✓ Improved marine ecosystem health
- ✓ Avoided health costs due to water-related illnesses
- ✓ Increased recreational opportunities
- ✓ Overall enhanced quality of life for HRM



CLASS SA

- bathing and contact recreation
- shellfish harvesting for direct human consumption
- fish and wildlife habitat

CLASS SB

- shellfish harvesting for human consumption after depuration
- bathing and other primary contact recreational activities
- fish and wildlife habitat

CLASS SC

- boating and other secondary contact recreational activities
- industrial cooling
- good aesthetic value
- fish and wildlife habitat

Complementary programs to the Harbour Solutions Project

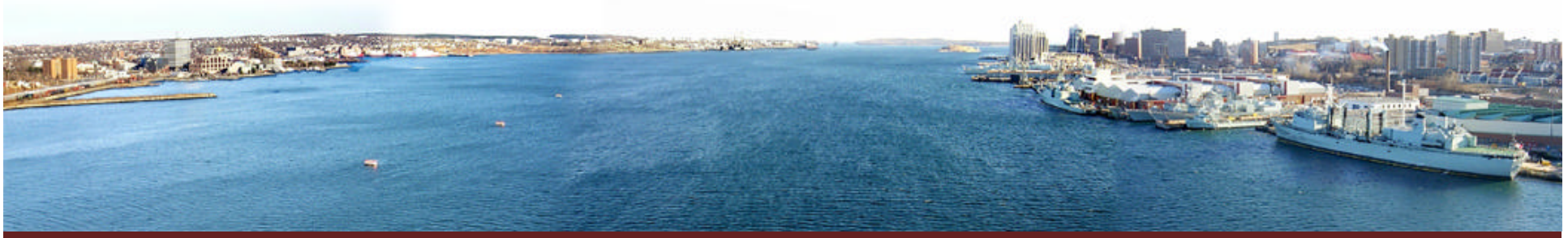
- Harbour Water Quality Monitoring
- Pollution Prevention (P2) Program
- Public Involvement and Information Program (PIIP)

How can you Help ?

- Reducing and/or eliminating the use of household hazardous products
- Not pouring leftover cleaning products, paints, solvents and pesticides down kitchen drains
- Encouraging responsible disposal practices at your place of business
- Being aware of and supporting programs and facilities HRM has undertaken to reduce pollution sources
- Conserve water

How Can You Stay Informed?

- Naturally Green Newsletter
- HRM Website (www.halifax.ca/harboursol)
- E-mail (contactHRM@halifax.ca)
- HRM Call Centre (490-4000)
- Harbour Solutions Project Office (490-4756)
- News Releases
- Public Meetings



Questionnaire

Remaining Items that Require Community Input/Consultation

- Whether the access road to the plant should remain as a private road.
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- Communication of information from the Harbour Solutions Project to the Dartmouth Community.

Who Should Assume these Responsibilities?

- ✓ Councillor Becky Kent - District 8 (Woodside - Eastern Passage) and the Harbour East Community Council.
- ✓ A newly elected Dartmouth Community Liaison Committee.