

WSP on behalf of Shirestone Developments Ltd.

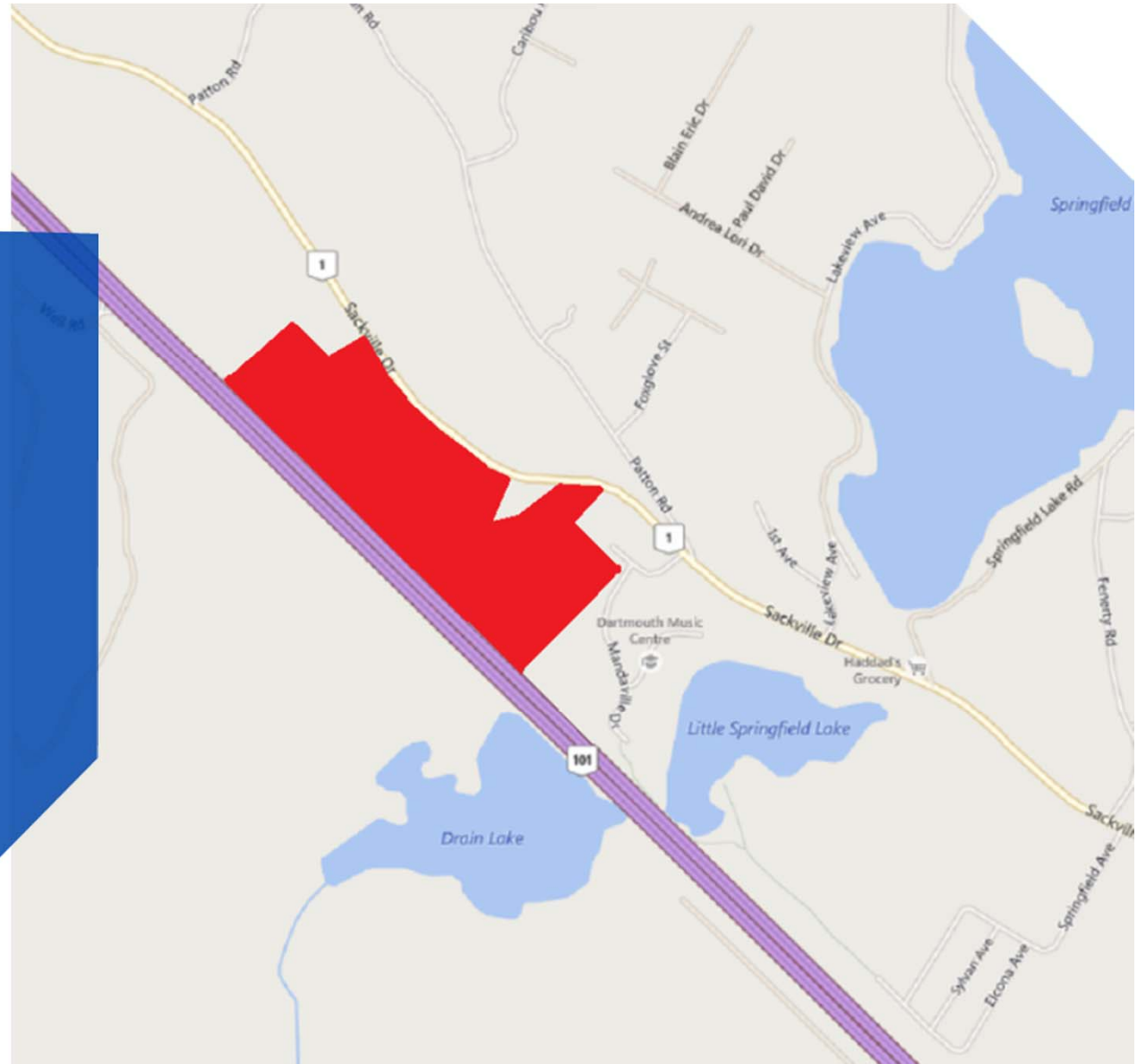
Open Space Conservation Design Development

Northwest Community Council
Public Hearing – June 15, 2015



Location

Between
2268 to 2376
Sackville Drive



OPEN SPACE DEVELOPMENT

- Protects a minimum of 60% of existing natural features under agreement.
- Respects the rural character of Upper Sackville

Process To Date

- Stage 1 Application
- Stage 2 Application
- Developer Open House:
- Public Information Meeting:
- Planning Advisory Committee
- Development Agreement Negotiations
- Public Hearing

Primary Conservation Features

- Riparian Buffers and Water Course Setbacks
- Significant Habitat and Endangered Species
- Wetlands
- 1:100 Year Flood Plains
- Rock Outcroppings
- Slopes in excess of 30%
- Agricultural Soils
- Agricultural Activity
- Potential Archaeological Sites
- Ground Water Recharge Areas

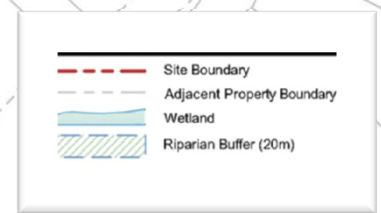


Secondary Conservation Features

- Scenic Views
- Heritage Properties
- Historic Features
- Mature Forests and other Vegetation
- Trails and Natural Networks
- Parks and Natural Corridors
- Current and Past Land Use



PID: 41164039
SHIRESTONE
DEVELOPMENTS INC
56 Ac (22.6 Ha)



Wetlands & Buffers

- Protects wetlands and waterways to assist in recharging groundwater

Conservation Features Map

- Proposed design protects a minimum of 60% open space
- No homes developed on wetlands, or buffers



Concept Plan

- Low Impact Design
- 56 Acres
- 56 Units (clustered)
- 26 Units (Phase 1)
- 30 Units (Phase 2)
- Trails
- Shared Wells
- Community Hall



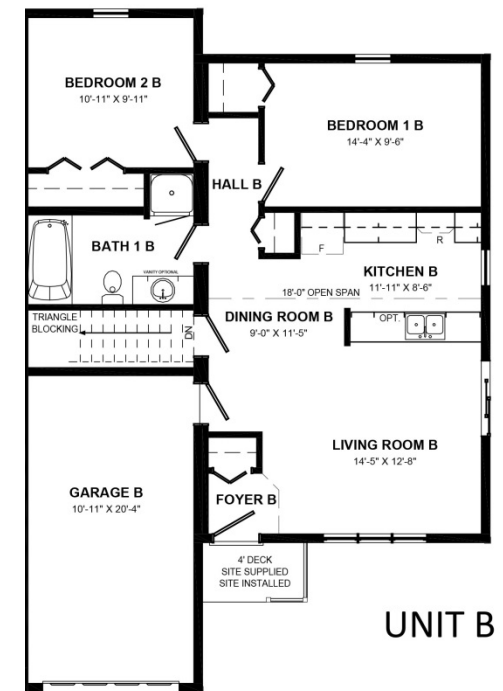
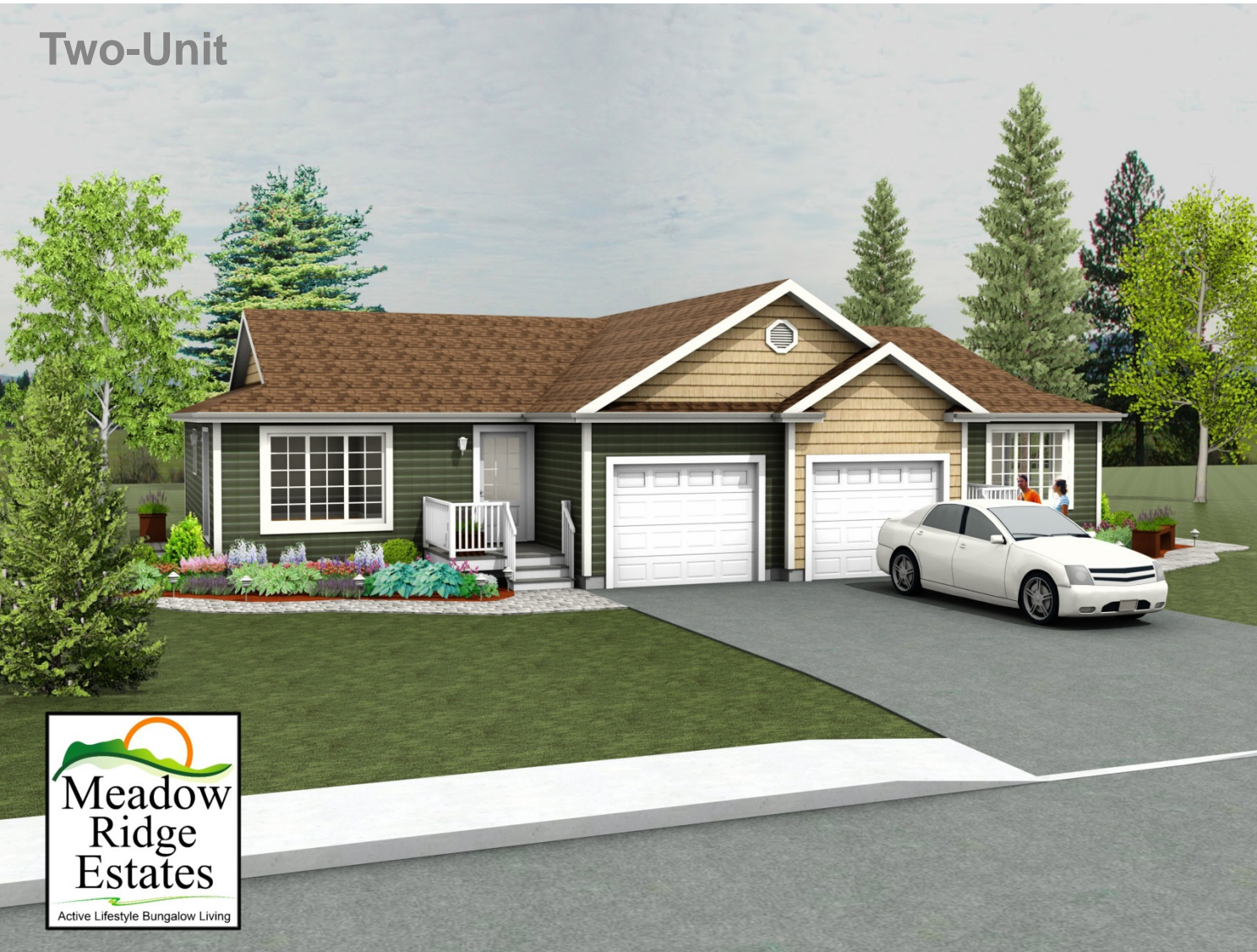
Low Impact

- Homes built in clusters with reduced footprint
- Existing roadway being re-used and reducing impact
- Offers residents variety of housing options and benefits of shared services
- Brings new neighbours into the area while minimizing impact



Proposed Typical Units

Two-Unit

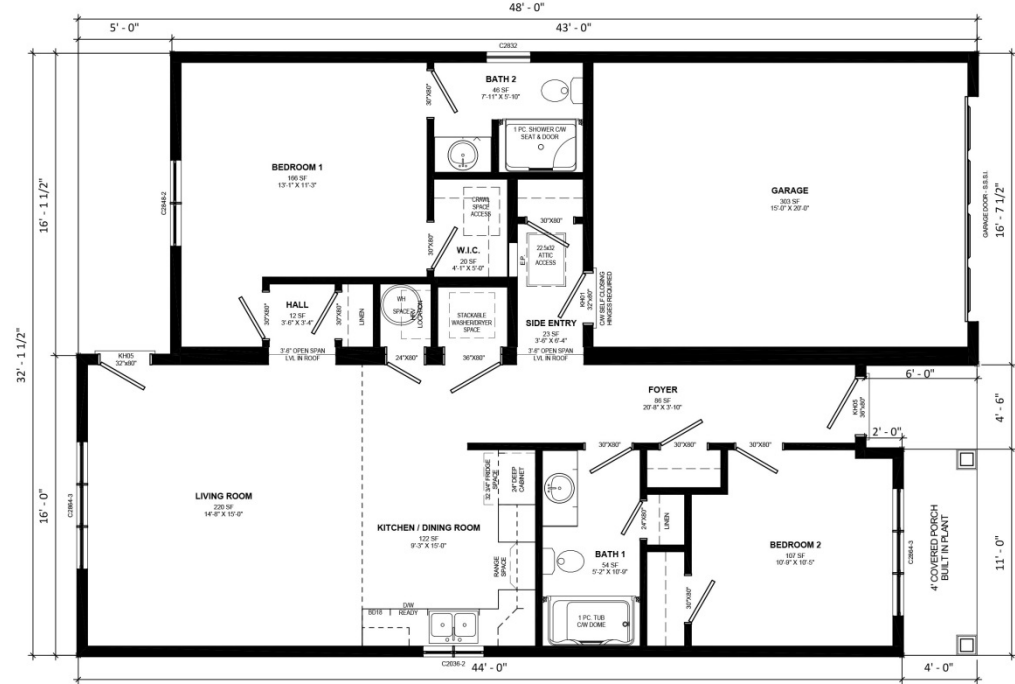


- ✓ 2-3 bedroom Units
- ✓ 50% maximum 3 bedrooms

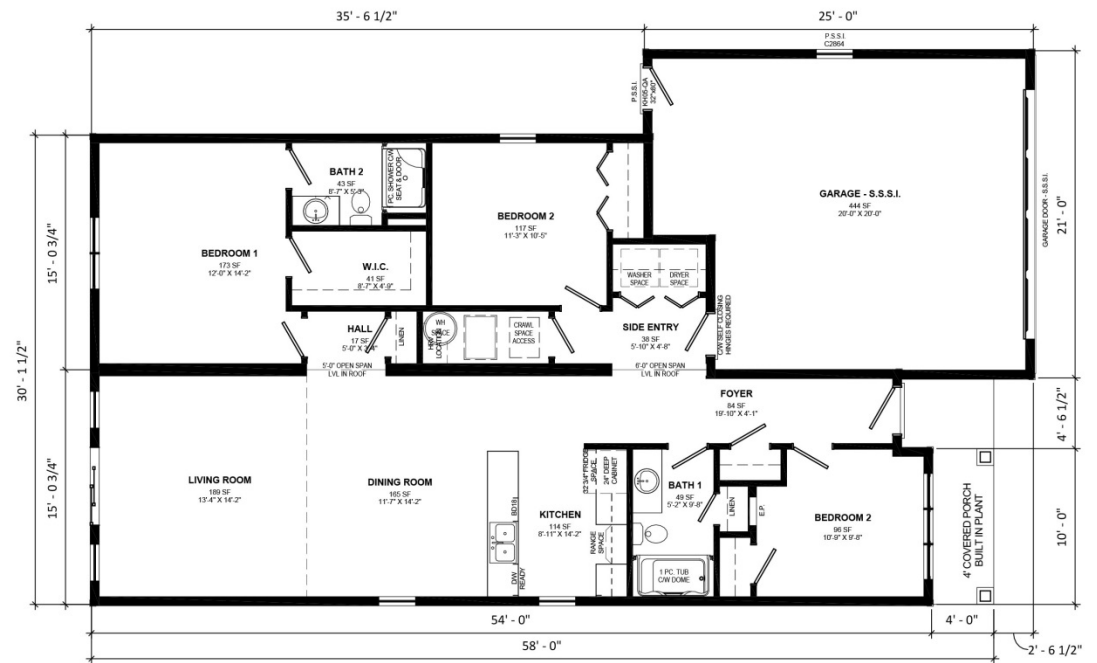


Proposed Typical Units

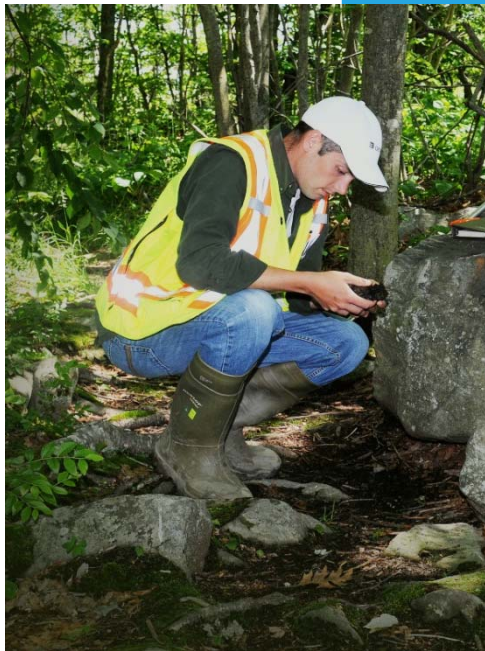
Single-Unit | Two Bedroom



Single-Unit | Three Bedroom



Technical Analysis



- **Groundwater Level I and II Completed:**
Understanding the quality and quantity of ground water available and minimize potential impacts of new community members on existing groundwater users
- 5 test wells
- Survey of off-site wells
- Step draw down tests
- 72 hour pump test
- Water samples
- Detailed water balance assessment
- Two phase development

	CURVE NUMBER (CN)	AREA (HA)
AREA	77	77
A1	77	13.14
B1	82	2.34
C1	77	8.84
D1	77	11.30
E1	77	5.74
F1	77	14.24

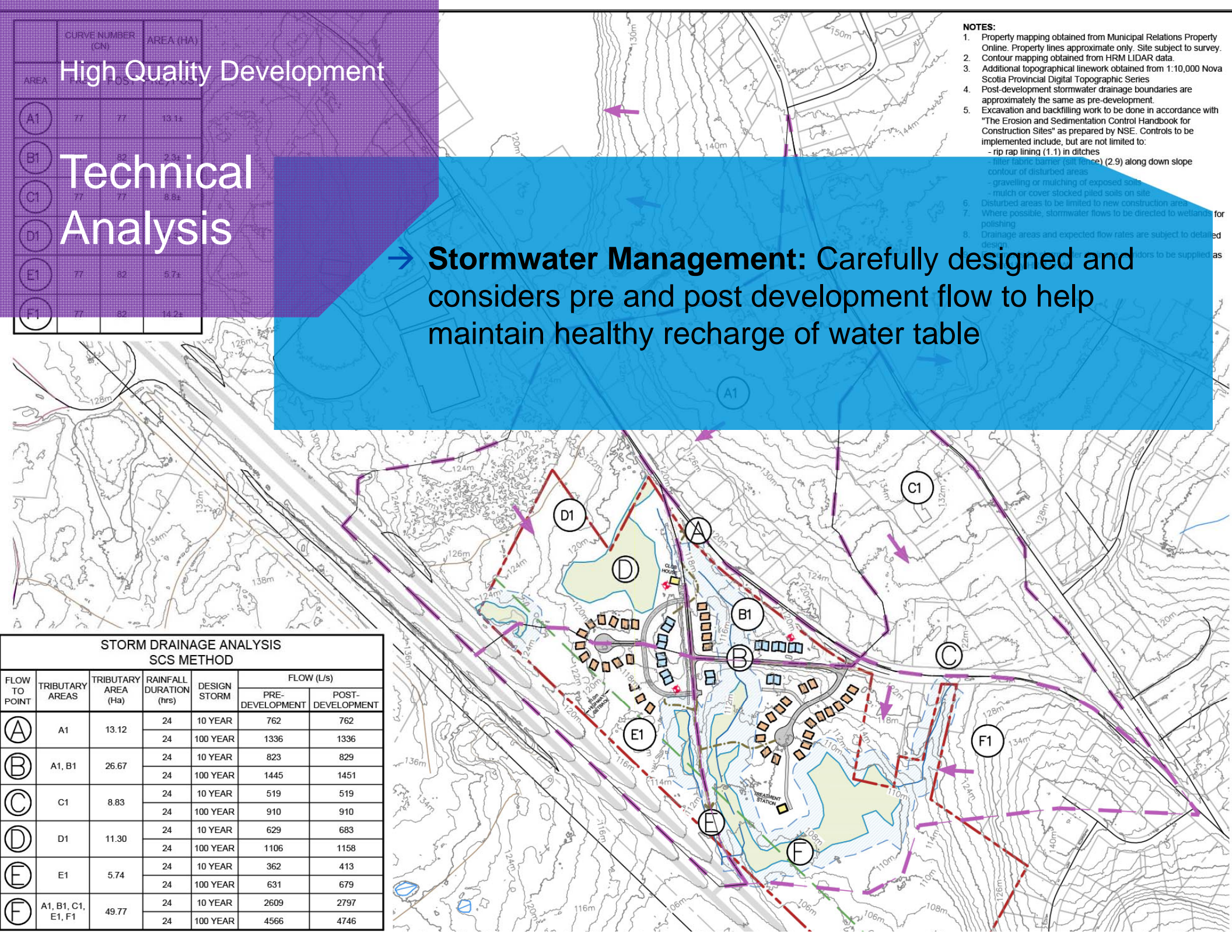
High Quality Development

Technical Analysis

➔ **Stormwater Management:** Carefully designed and considers pre and post development flow to help maintain healthy recharge of water table

- NOTES:**
1. Property mapping obtained from Municipal Relations Property Online. Property lines approximate only. Site subject to survey.
 2. Contour mapping obtained from HRM LIDAR data.
 3. Additional topographical linework obtained from 1:10,000 Nova Scotia Provincial Digital Topographic Series
 4. Post-development stormwater drainage boundaries are approximately the same as pre-development.
 5. Excavation and backfilling work to be done in accordance with "The Erosion and Sedimentation Control Handbook for Construction Sites" as prepared by NSE. Controls to be implemented include, but are not limited to:
 - rip rap lining (1.1) in ditches
 - filter fabric barrier (silt fence) (2.9) along down slope contour of disturbed areas
 - graveling or mulching of exposed soils
 - mulch or cover stocked piled soils on site
 6. Disturbed areas to be limited to new construction areas
 7. Where possible, stormwater flows to be directed to wetlands for polishing
 8. Drainage areas and expected flow rates are subject to detailed design

STORM DRAINAGE ANALYSIS SCS METHOD						
FLOW TO POINT	TRIBUTARY AREAS	TRIBUTARY AREA (Ha)	RAINFALL DURATION (hrs)	DESIGN STORM	FLOW (L/s)	
					PRE-DEVELOPMENT	POST-DEVELOPMENT
A	A1	13.12	24	10 YEAR	762	762
			24	100 YEAR	1336	1336
B	A1, B1	26.67	24	10 YEAR	823	829
			24	100 YEAR	1445	1451
C	C1	8.83	24	10 YEAR	519	519
			24	100 YEAR	910	910
D	D1	11.30	24	10 YEAR	629	683
			24	100 YEAR	1106	1158
E	E1	5.74	24	10 YEAR	362	413
			24	100 YEAR	631	679
F	A1, B1, C1, E1, F1	49.77	24	10 YEAR	2609	2797
			24	100 YEAR	4566	4746



Technical Analysis



- **Traffic Impact Study:** Analysis and statement regarding traffic implications, recommends minimal trips generated and not expected to have any significant impact to the performance of Sackville Drive
- **Sewage Treatment Facility:** Providing an advanced septic system that will be monitored and maintained regularly. Tertiary treatment

THANK YOU

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