

## **Alton Shores Association roadway design requirements**

Requirements for upgrading or establishing a roadway on Alton Shores Association rights of way property:

- Travel road width to be 22'
- Road shoulders to be minimum of 2', where no closed drainage ditch will exist.
- Slope of embankments shall be 4:1 (horizontal to vertical ratio), to include ditches. Maximum slope allowed shall be 2:1 upon approval of Director of Roads.
- All roadway sub-surfaces shall be constructed to consist of a bank run gravel bottom layer with a minimum compacted thickness of twelve inches (12") and a processed gravel top layer with a minimum compacted thickness of six inches (6"). The minimum compaction rate shall be ninety percent (90%). The bottom layer of bank run gravel shall not consist of any organic materials, and no rocks shall be allowed with a diameter in excess of six inches (6"). The top layer (upper 6") shall not consist of any materials other than processed gravel with an aggregate size of less than one and one-half inches (1.5"). Any sub-surface running water shall be either diverted outside of the traveled way or contained to prevent undermining of the road base.
- Traveled way cross slope shall typically be two percent (2%) or 1/4" per foot from centerline to edge of traveled way.
- All surface water, whether natural flowage or a result of surface run-off, which enters upon a right-of-way shall be diverted from the traveled way to open ditches or closed drainage systems.
- Culverts shall consist of pipes made of smooth bore polyethylene or aluminum or ductile iron or reinforced concrete. All pipe connections shall be sealed in accordance with specifications as set forth by the manufacturer. The minimum diameter of any roadway crossing shall be fifteen inches (15"). The minimum amount of cover shall be three feet (3'). Backfill shall be granular material per Director of Roads.
- All driveway culvert crossings shall be a minimum of twelve inches (12") and at a depth to maintain proper flowage. Pipe inlets shall be constructed to minimize circumvention; (headwalls are required). Pipe outlets shall be constructed so as to prevent water flow and other soils from entering upon Association right of way at all times.
- Driveway entrances shall be constructed to ensure the structural integrity of the edge of pavement being maintained and to provide for drainage, which will prevent water run-off from entering upon the traveled way.
- The road right-of-way work area shall be surveyed and staked in its entirety by licensed survey personnel.
- Roadway plans shall be designed and drawn by qualified engineering personnel.
- Roadway design plans shall be submitted to the Alton Shores Board of Directors for approval, before any work is started.

## Alton Shores Association Roadways

The roadways within Alton Shores are classified under the following nomenclature:

1. Town Roads:

- 1.1 Alton Shores Road
- 1.2 Frohock Brook Drive
- 1.3 Marlene Drive
- 1.4 Sunset Shore Drive

2. Alton Shores Association owned roads:

2.1 Improved Roads –

- 2.1.1 Larry Drive (partial)
- 2.1.2 Scott Drive
- 2.1.3 Wendy Drive (partial)
- 2.1.4 Barbara Drive
- 2.1.5 Stephanie Drive (partial)
- 2.1.6 Parandes Drive
- 2.1.7 Bonnie Drive
- 2.1.8 Marsha Drive
- 2.1.9 Bly Avenue (partial)
- 2.1.10 Nutter Drive

2.2 Unimproved Roadways

- 2.2.1 Easy Street
- 2.2.2 Cynthia Road
- 2.2.3 Roadway between Stephanie and Bly??????
- 2.2.4 Unimproved sections of roads listed in section 2.1 as 'partial'.

- Roads listed under 'Improved' are maintained by the association as funds allow.
- Roads listed under 'Town Roads' are maintained by the town of Alton and not the responsibility of Alton Shores Association.
- Roadways listed under 'Unimproved' are not maintained by the association and will not be considered for maintenance if the road development regulations of the association are not satisfied.

Any improvement to Alton Shores Association owned roadways is the responsibility of the contractor and/or developer and any resultant damage to existing improved roads as a result of roadway improvement is the responsibility of the contractor and/or developer.

Alton Shores Board of Directors