Compacted fill placed within the building limits should consist of inorganic mineral soil that can be readily placed in layers not exceeding 8 in. in loose measure and compacted to a minimum of 95 percent of ASTM D1557. Compacted fill placed outside the building limits should be placed in layers not exceeding 10 in. in loose measure and compacted to a minimum of 92 percent of ASTM D1557.

We anticipate that portions of the onsite fill may meet the requirements for the above noted compacted fill. In addition, glacial stream sands and gravels in the low-lying area on the eastern end of the site will be suitable for use as compacted fill. Appendix C contains typical gradation data for the glacial stream deposits. The material typically contains less than 10 percent fines (silt and clay size particles).

As previously noted most of the fill material that is present on the site consists of silt and clay soils. If properly moisture conditioned, placed and compacted, these materials would be suitable for use as compacted fill. However, if the soils are wet of optimum (ASTM D1557) in their present condition or they become wet during construction, they will be very difficult to properly place and compact. It will be very important to make sure the contractor is aware of the project expectations if the silt and clay soils are reused on the project.

Common Fill outside the limits of the proposed retail store and paved roadways and parking areas should consist of inorganic mineral soil that can be readily placed in layers not exceeding 10 in. in loose measure and compacted to 90 percent of ASTM D1557. We anticipate that the marine sand, silt and clay deposits may be suitable for reuse as common fill. However, prospective contractors should be aware that the these deposits may be difficult to place and compact when wet, and that the material may have to be spread out and dried prior to placement.

SITE DEVELOPMENT CONSIDERATIONS

Pavement Section

The following pavement sections are recommended:

Parking Areas In Front of the Retail Stores

3-in. bituminous concrete, placed in two 1-1/2 in. thick layers
5-in. screened or crushed gravel
12-in. sand or gravel subbase course

Roads and Loading Dock Areas