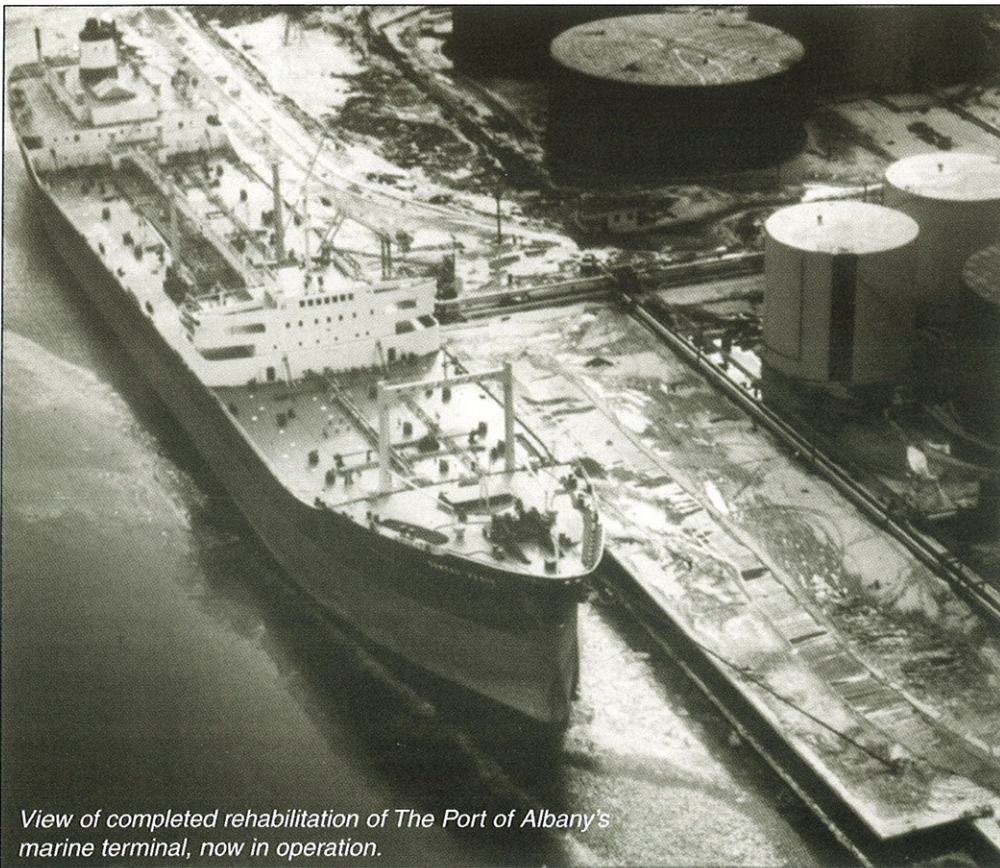
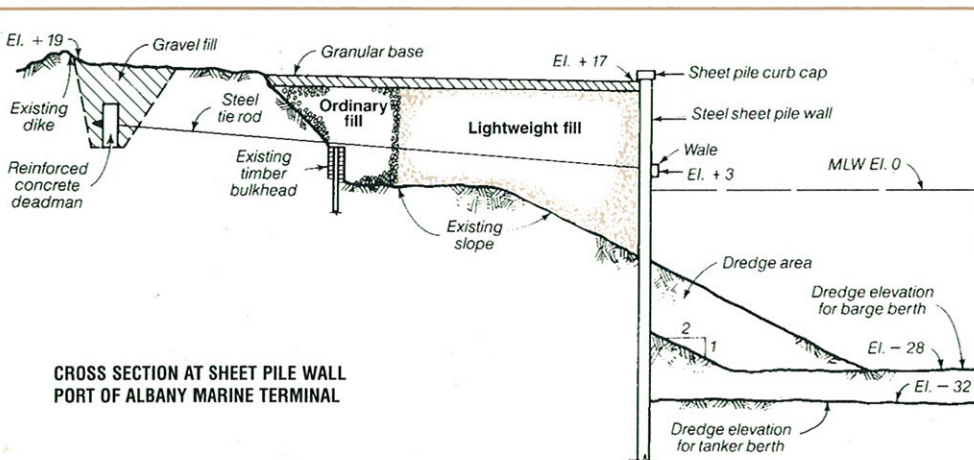


SOLITE LIGHTWEIGHT AGGREGATE SOIL FILL

The controlled lightweight aggregate for use in special soil mechanics engineering applications.



View of completed rehabilitation of The Port of Albany's marine terminal, now in operation.



SOLITE lightweight aggregate is similar to natural aggregates in particle shape and gradation. The reason for its lightness is the multitude of fine pores generated within each particle during the expansion phase of the manufacturing process.

As a replacement for natural aggregates, SOLITE has over the past 42 years been used in millions of cubic yards of structural concrete—including 60-story concrete frames, high strength prestressed concrete, and miles of exposed concrete bridge decks. Due to the reduction of dead load, the projects are more economical to the owner because of smaller foundations, lower tonnages of reinforcing steel and less bulky columns.

In a number of schematically shown actual situations, engineers familiar with its long term excellent structural performance have called for SOLITE to replace stone, gravel or natural soil when reduction in ground loading dead weight has become a critical necessity.

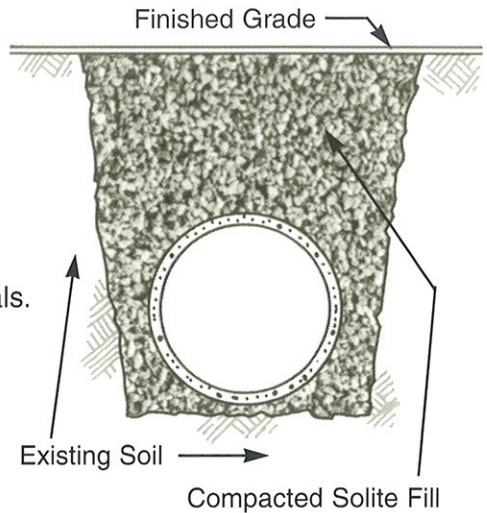
SOLITE structural grade lightweight aggregate can provide the solution to difficult soil mechanics situations because of its optimum combination of low compacted density (less than 62.4 pcf) and high inherent stability (angle of internal friction greater than 40°).



Illustrations of completed

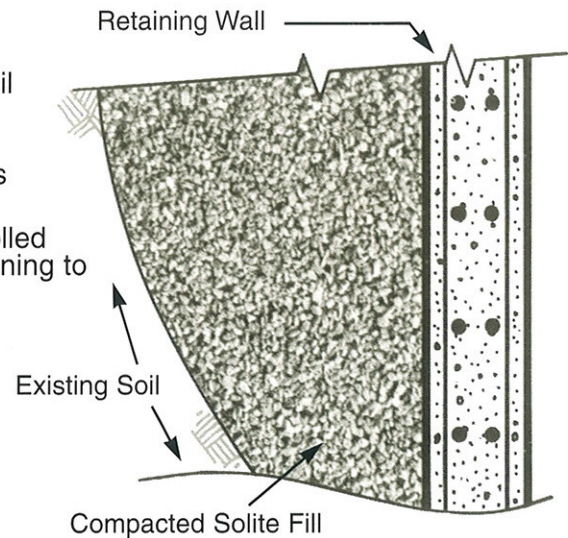
Controlled Solite Soil Fill over Buried Pipe Structures

- Lighter—approximately half the in-place density of usual soils.
- Controlled—manufactured aggregate for consistent weight and gradation
- Durable—resists freeze-thaw cycles.
- Inert—no corrosive chemicals.
- Insulating—low coefficient of thermal conductivity; counteracts frost heaving; protects buried pipes from freezing.
- Free-draining—minimizes hydrostatic potential.



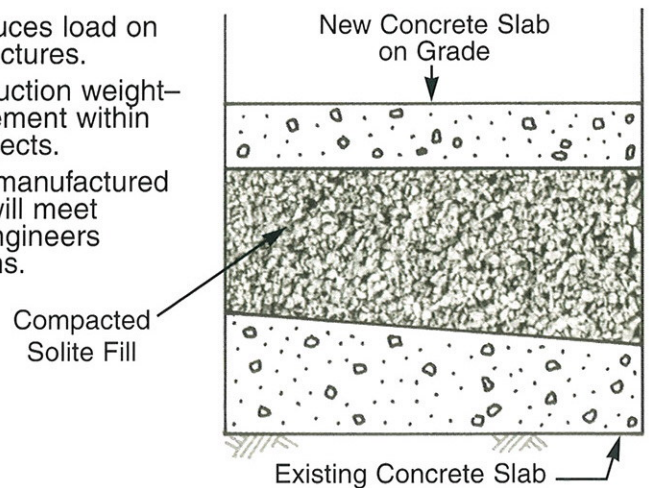
Controlled Solite Soil Fill behind Retaining Walls

- Lighter—to reduce soil thrust and bending moments.
- Less weight—reduces cantilever steel.
- Free-draining—controlled gradation allows draining to minimize hydrostatic potential.

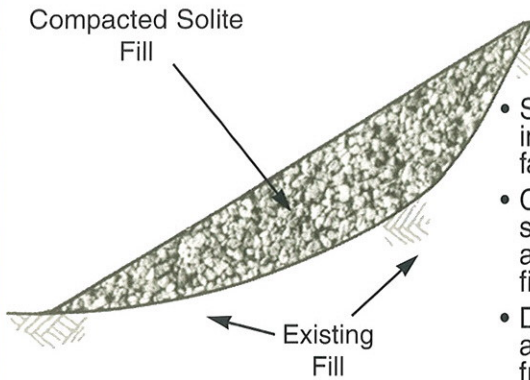


Controlled Solite Soil Fill on Rehabilitation Projects

- Lighter—reduces load on existing structures.
- Less construction weight—easier movement within existing projects.
- Controlled—manufactured aggregate will meet structural engineers specifications.



soil fill applications

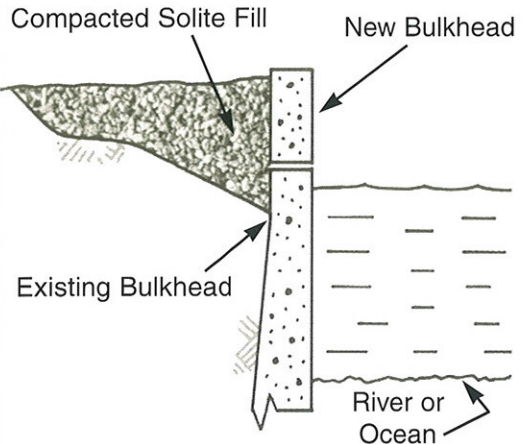


Compacted Solite Fill

Existing Fill

- Safety—lower self weight increases stability and safety factors on slope.
- Control—designer can specify in-place density with assurance using Solite soil fill.
- Drainage—manufactured aggregate is predictably free-draining.
- Surface to surface friction resists movement after compaction.

Controlled Solite Soil Fill Improves Embankment Stability



Compacted Solite Fill

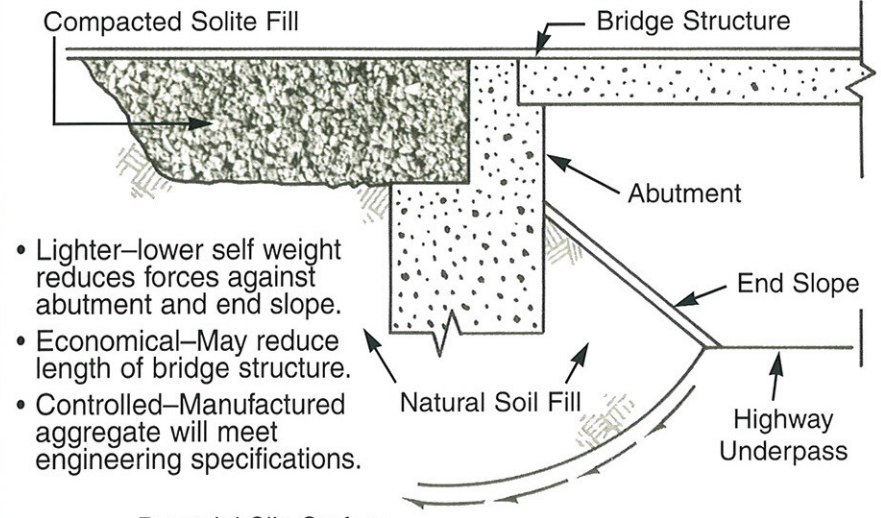
New Bulkhead

Existing Bulkhead

River or Ocean

- Safety—lower weight reduces thrust and bending moments on bulkhead.
- Control—designer can specify in-place density with assurance using manufactured Solite soil fill.
- Drainage—manufactured free-draining lightweight aggregate provides controlled permeability.

Controlled Solite Soil Fill Improves Safety of Waterfront Structures



Compacted Solite Fill

Bridge Structure

Abutment

End Slope

Natural Soil Fill

Highway Underpass

Potential Slip Surface

- Lighter—lower self weight reduces forces against abutment and end slope.
- Economical—May reduce length of bridge structure.
- Controlled—Manufactured aggregate will meet engineering specifications.

Controlled Solite Soil Fill Improves End Embankment Stability