

BARTON SPRINGS BYPASS

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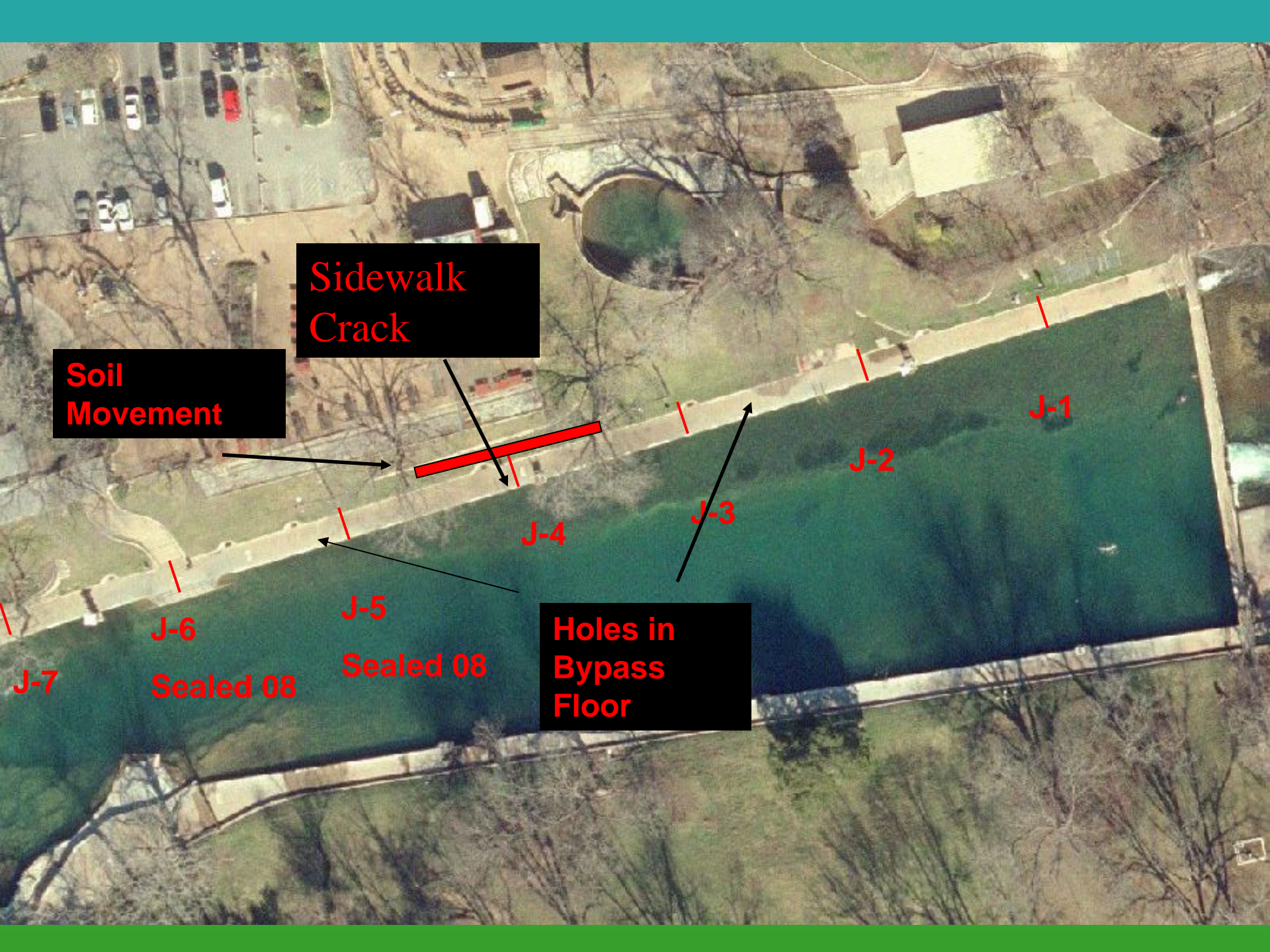


Barton Spring Bypass

- Constructed in 1975
- Divert minor flood waters
- Prevent muddy water and flood debris from entering pool
- Save PARD cleaning and maintenance time and costs
- Time of increasing development in Barton Creek watershed







Sidewalk
Crack

Soil
Movement

J-1

J-2

J-3

J-4

J-5

J-6

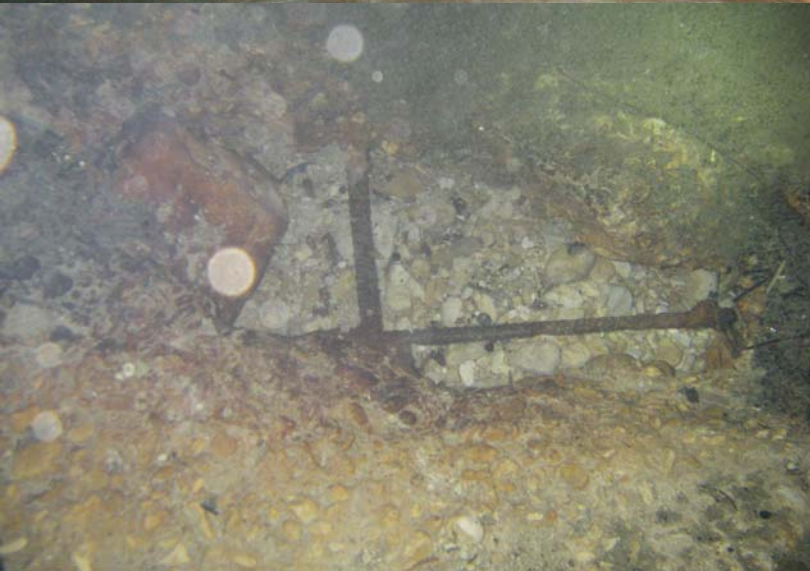
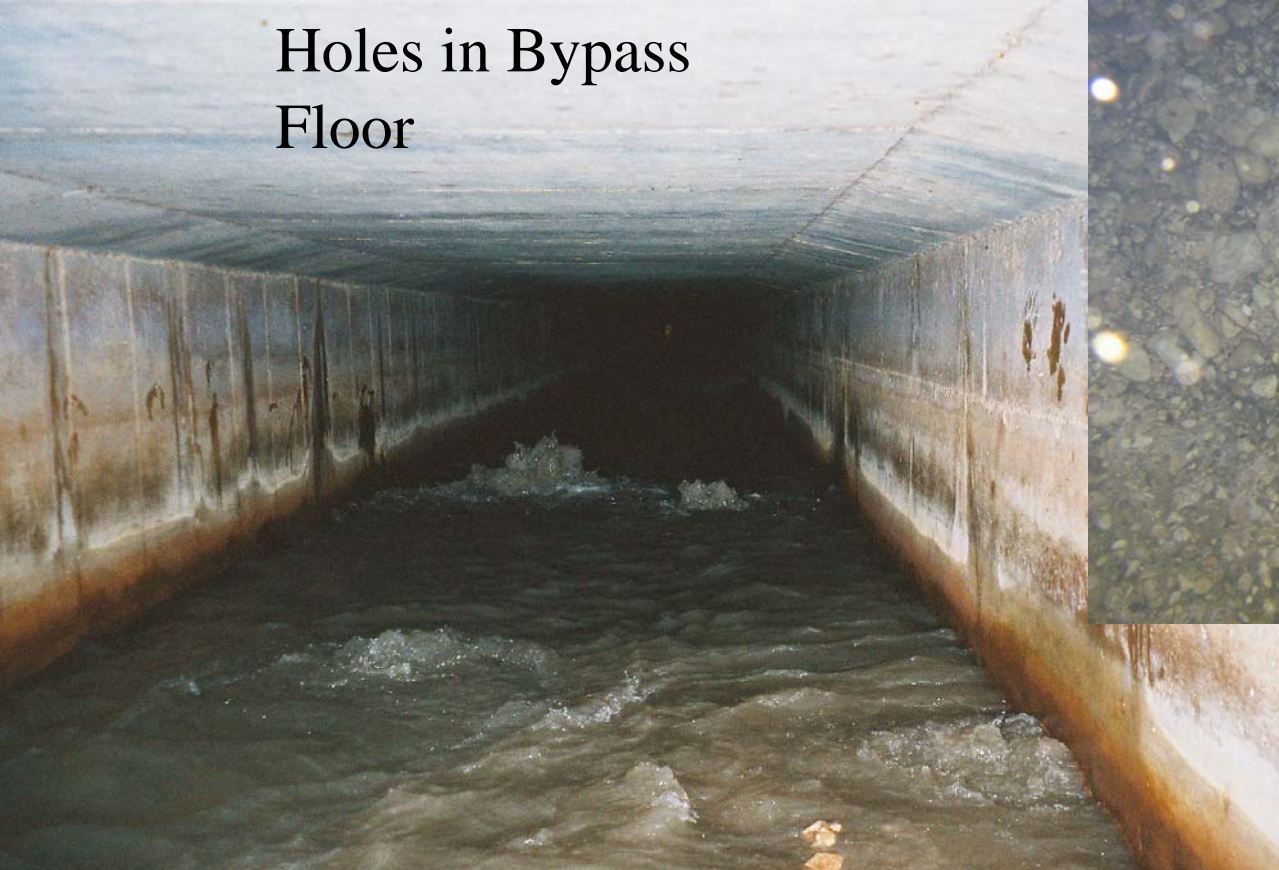
J-7

Sealed 08

Sealed 08

Holes in
Bypass
Floor

Holes in Bypass Floor



Bypass Problems

- Holes in floor
 - Structural concern
 - Drains pool water
- Erosion of soil and backfill
- Deck drain pipe collapsed
- Failing joints
- Abrasion of concrete
- Insufficient safety margin
 - Sliding
 - Overturning
 - Buoyancy

water

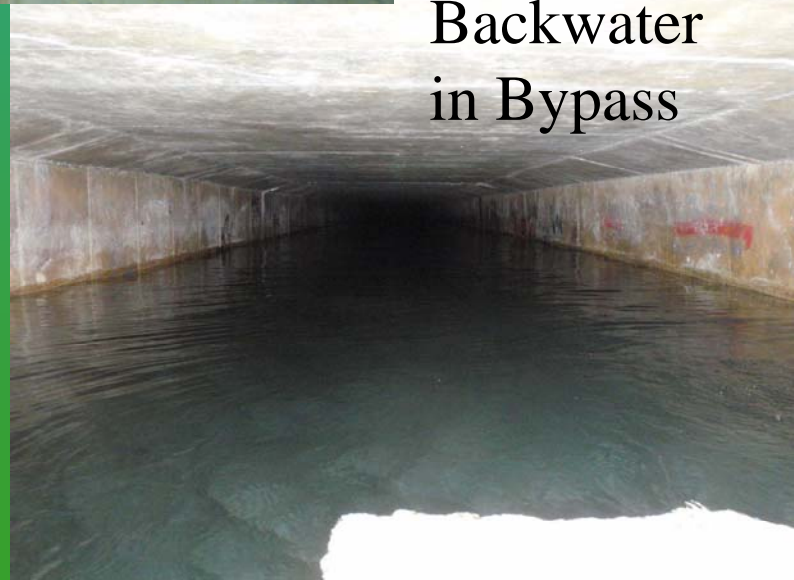
Plastic on
Pool Bottom



Temporarily
Block Bypass



Backwater
in Bypass



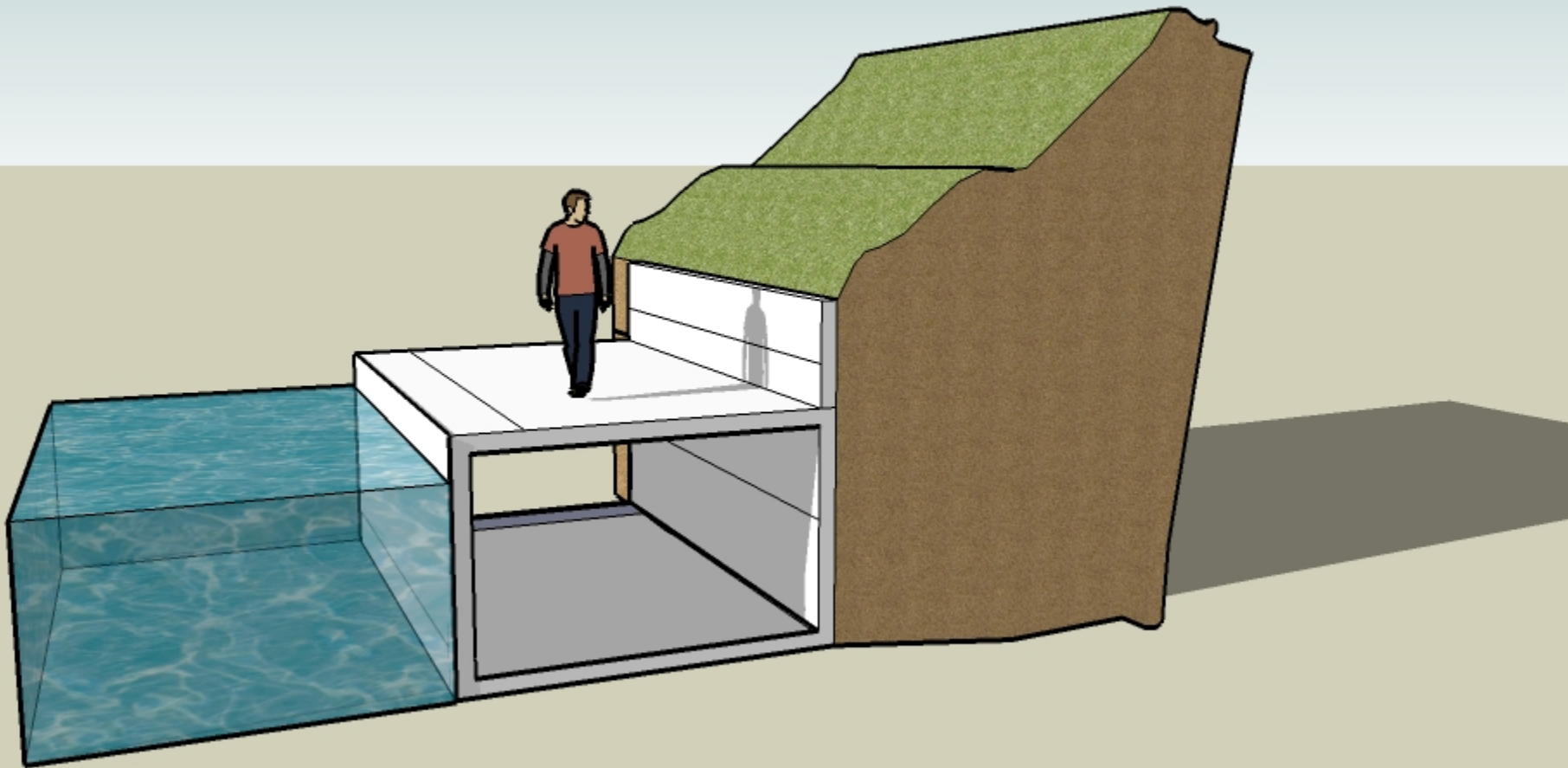
Issues With Existing Bypass Condition

- Operational constraints
 - No drawdowns
 - Flooding
 - Cleaning
- Bypass failure
 - Engineering reality
 - Safety, pool and downstream
 - Pool closing
 - Longer recreational impact
 - Lost revenue
 - Loss of significant salamander population and habitat (mainly in Eliza)

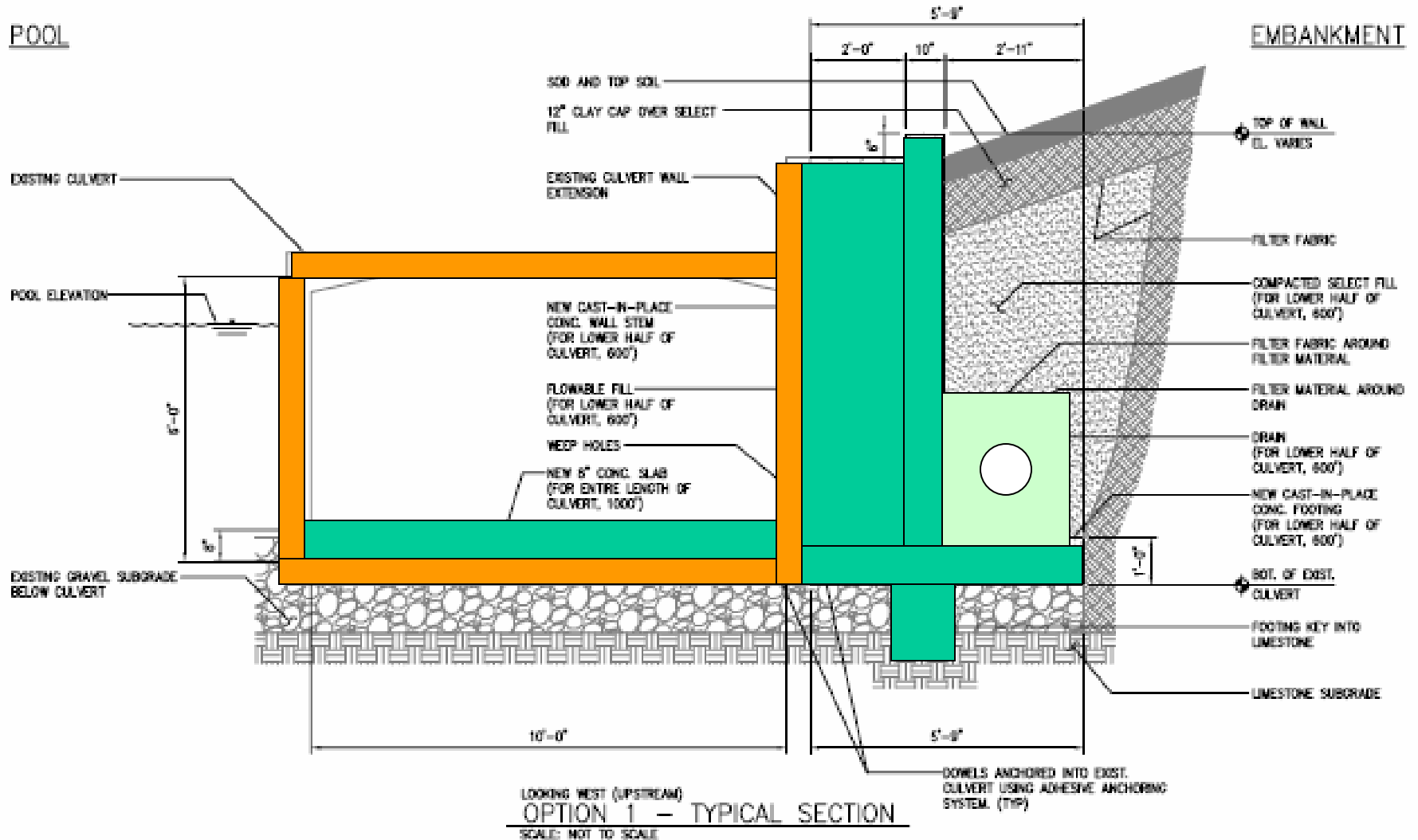
Repair Options Evaluation

- Site disturbance
- Pool closure
- Endangered species
- Cost
- Longevity
- Flow capacity
- Constructability

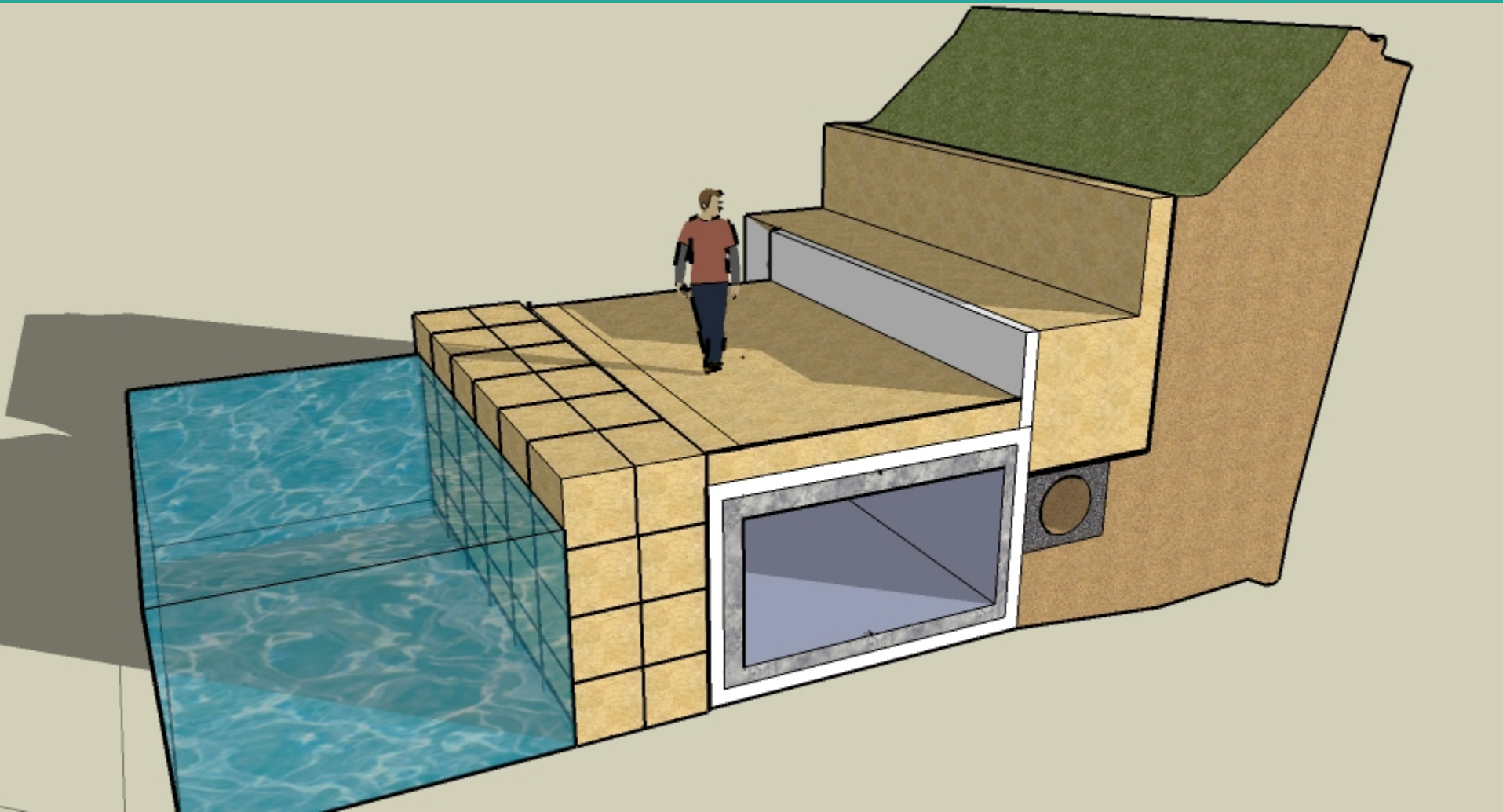
Existing Bypass Structure



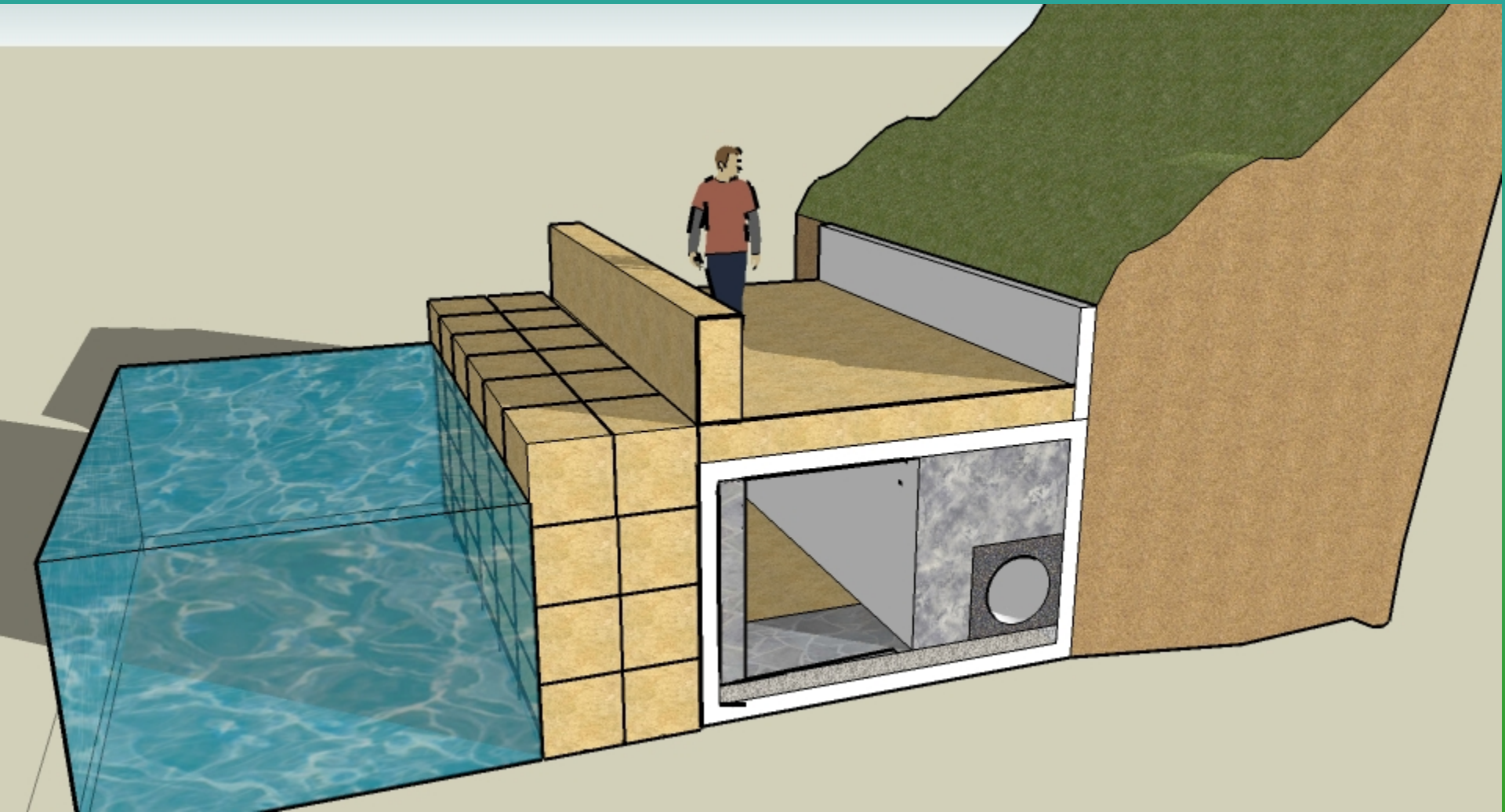
Option 1: Stabilization



Option 1a



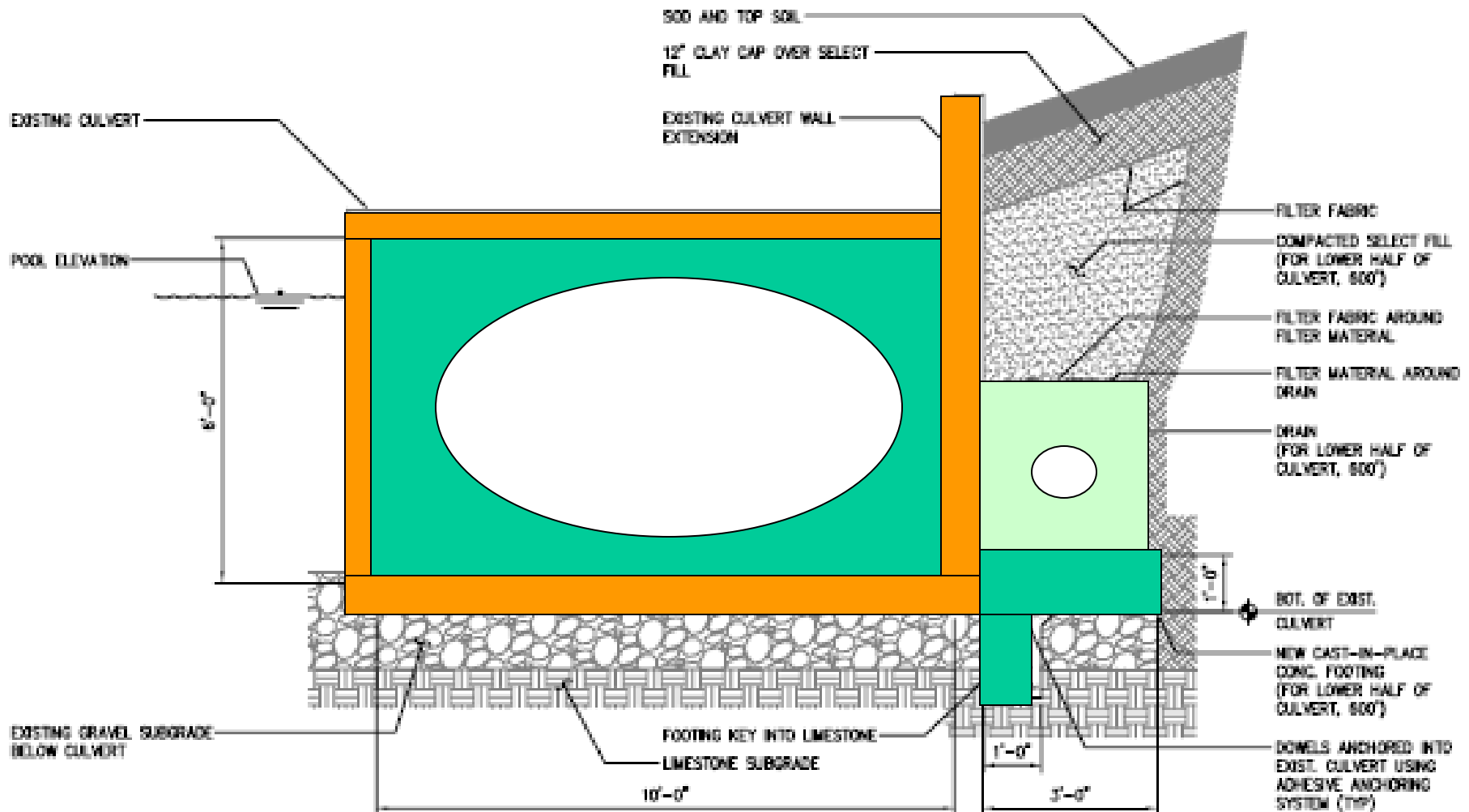
Option 1b



Option 2: Pipe-in-a-Pipe

POOL

EMBANKMENT

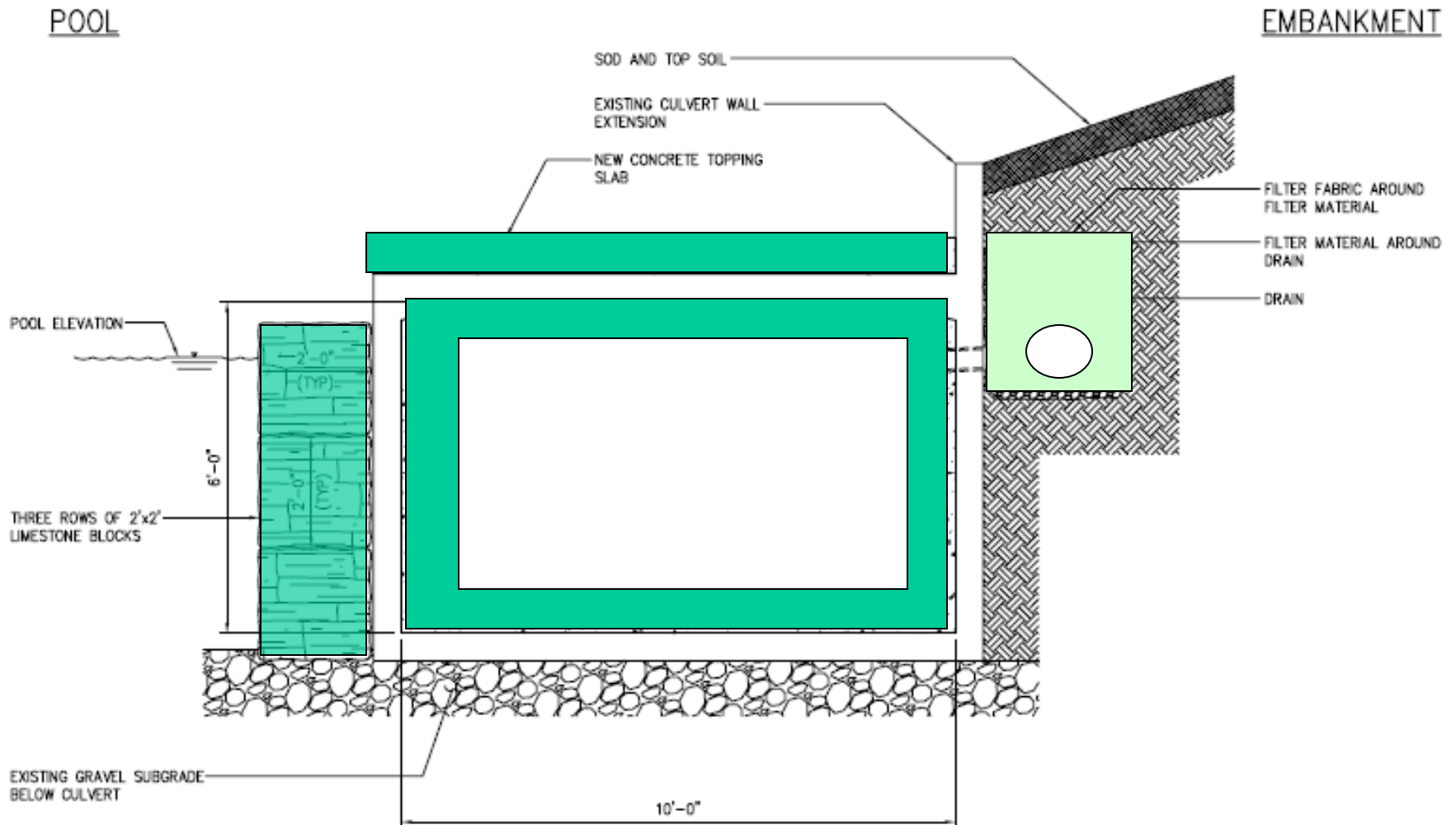


LOOKING WEST (UPSTREAM)

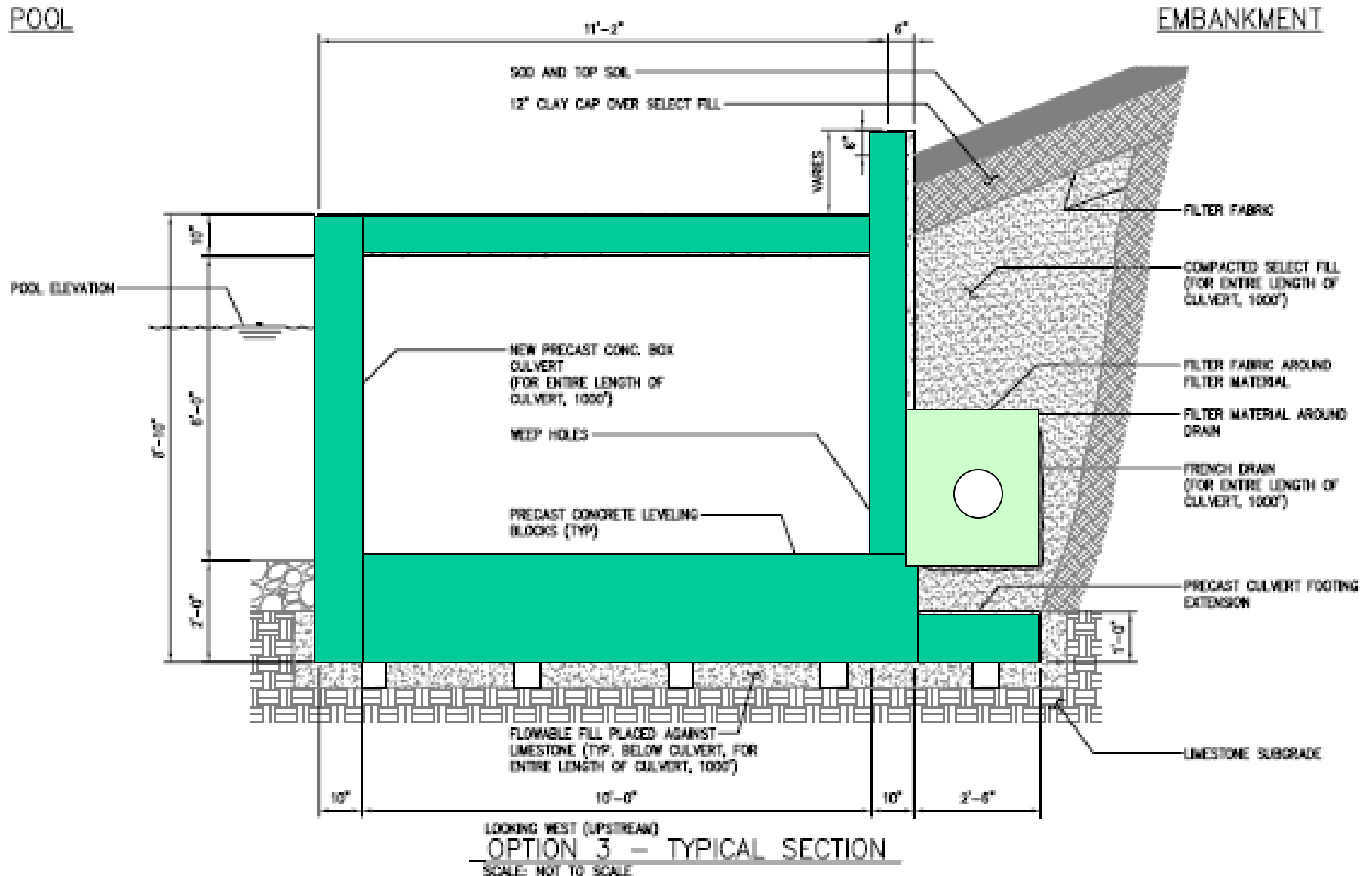
OPTION 2 - TYPICAL SECTION

SCALE: NOT TO SCALE

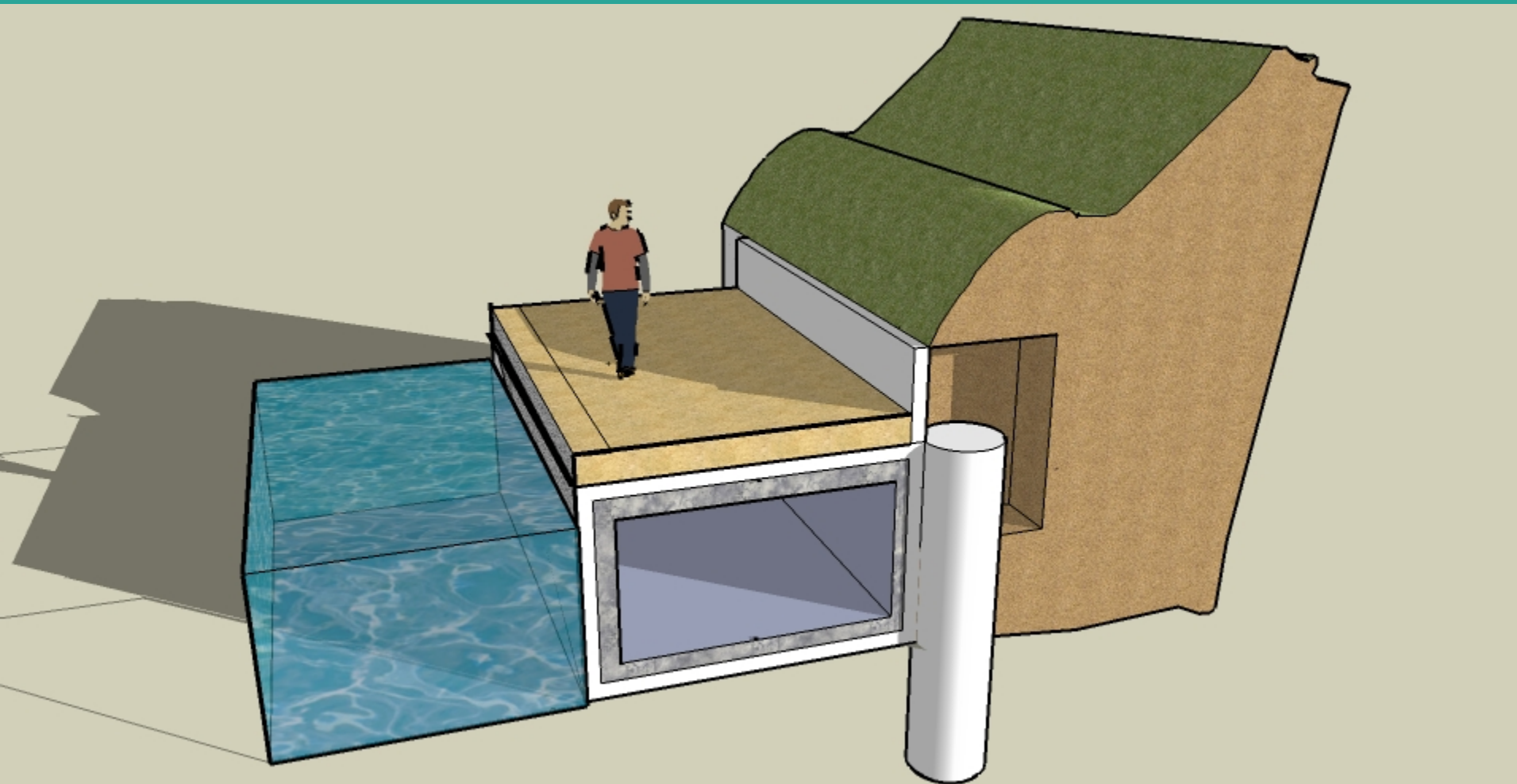
Option 2a



Option 3: Replacement



Option 5: Piers



Other Ideas

- Divert water around pool via trench
- Divert water via tunnel
- Store stormwater in off channel pond

Proposed Schedule

- Aug/Sept – Public input
- October – Staff recommendation
- October - Council RCA/USFWS
- Nov/Dec – Recommendations to public
- Nov/Jan - Final design and bid documents
- Spring 2010 – Permits
- Summer 2010 - Project out for bids
- Fall 2010/Spring 2011 – Construction