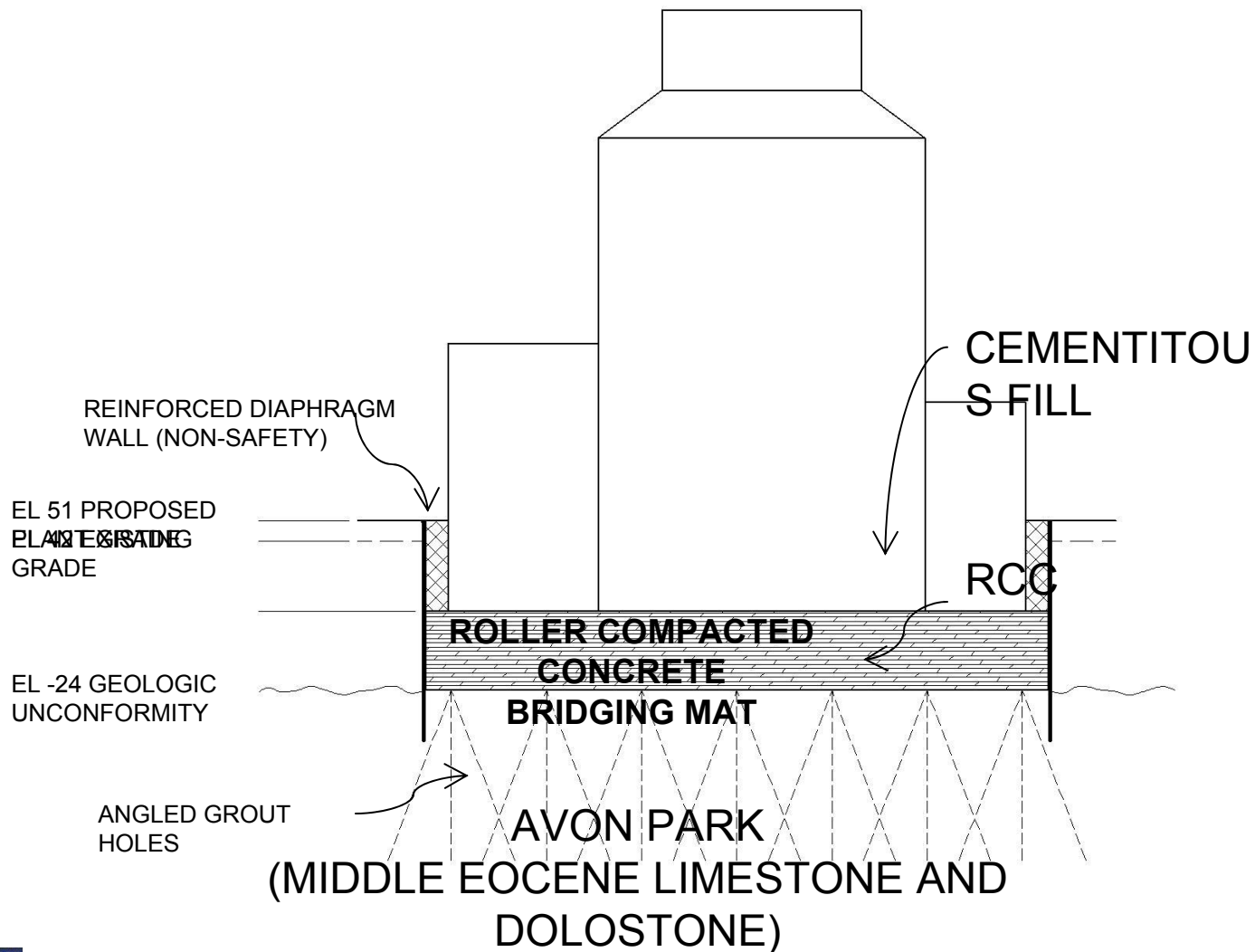

Levy Nuclear Plant

LIMITED WORK AUTHORIZATION SCOPE



LNP Foundation Concept



LNP Foundation Concept

RCC Bridging Mat

- | 35-ft thick RCC Mat

- | Basic Function
 - w Bridge over postulated solution-induced irregularities in the Avon Park that may develop in the future
 - w Provide a “bedrock” foundation for the AP1000 Basemat
 - w A Safety Related feature

LNP Foundation Concept

Approximately 75-foot thick Grouted Zone (upper Avon Park)

w Primary Functions

- u Provide a “bottom for the bathtub” as part of excavation
- u Not a Safety Related feature

w Secondary Benefits

- u Prevents future solution activity by inhibiting the flow of water through porous zones and fractures
- u Fills potential voids located within the zone
- u While credit was not taken for improving the foundation, the grouted zone adds conservatism to the design in terms of strength, stiffness, and potential settlement.

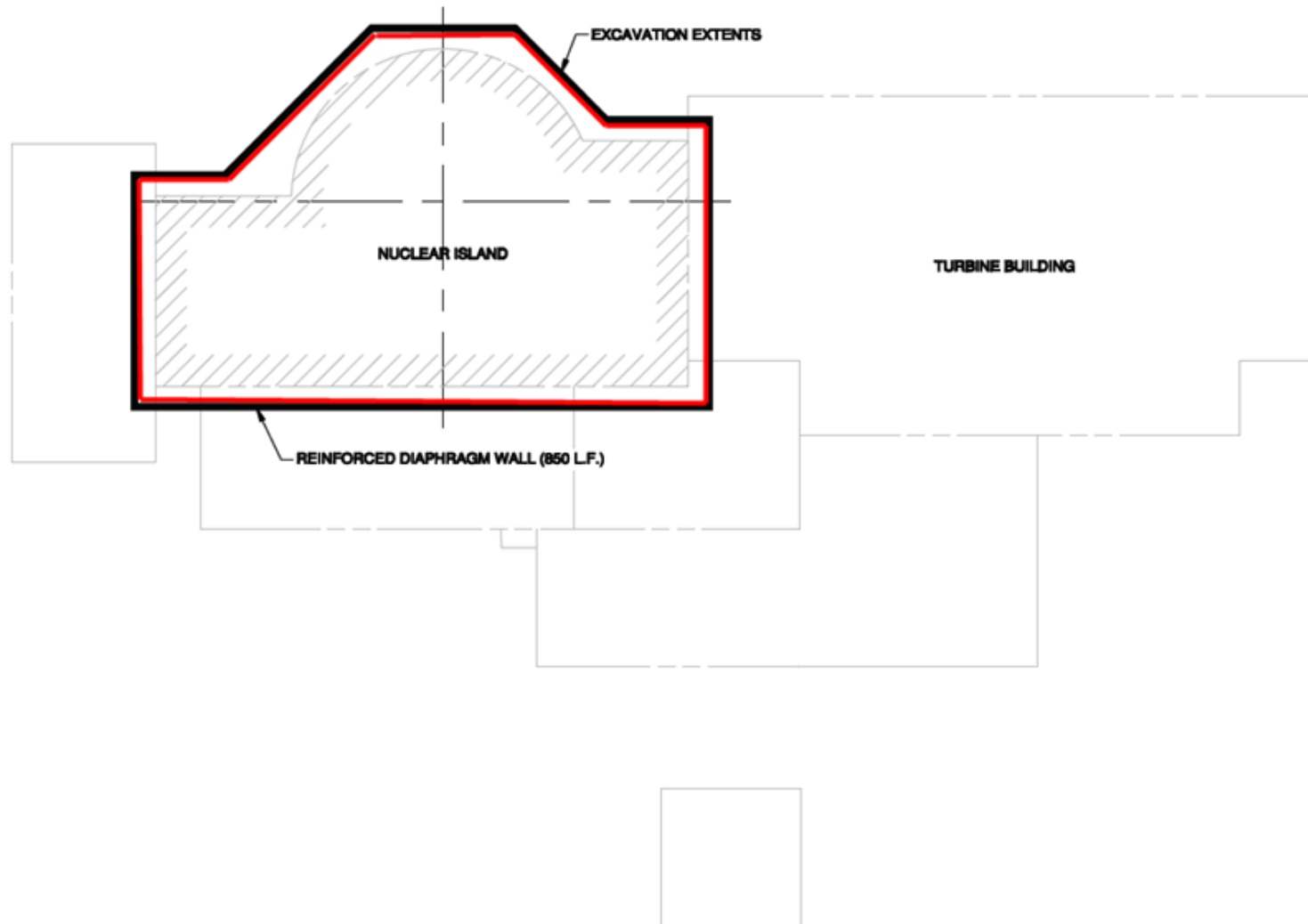
LNP Foundation Excavation Sequence

- ❑ Construct groundwater cutoff for the “walls of the bathtub”
- ❑ Conduct Grouting Program to form the “bottom of the bathtub”
- ❑ Install the shallow wells to “drain the bathtub”
- ❑ Excavate the soil in the “bathtub” down to the Avon Park

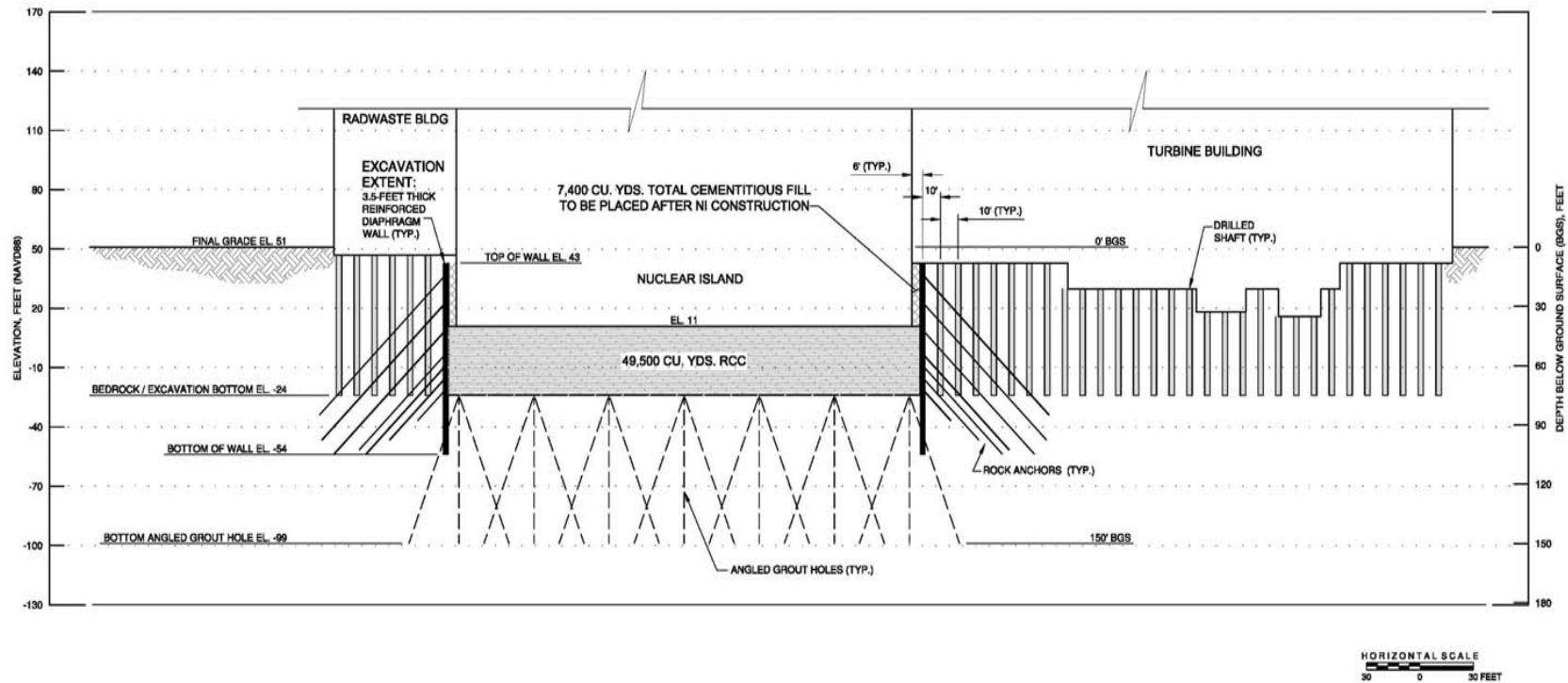
LNP Foundation Construction Sequence

- ❑ Prepare the top of the Avon Park
 - ❑ Use dental concrete (and possibly grout) to prepare surface to receive RCC
- ❑ Construct the RCC Bridging Mat
- ❑ Install the waterproofing on the RCC Bridging Mat
- ❑ Place the mud mat to protect the membrane
- ❑ Construct the AP1000 Basemat
- ❑ Place Cementitious Fill

Foundation Concept – Plan View



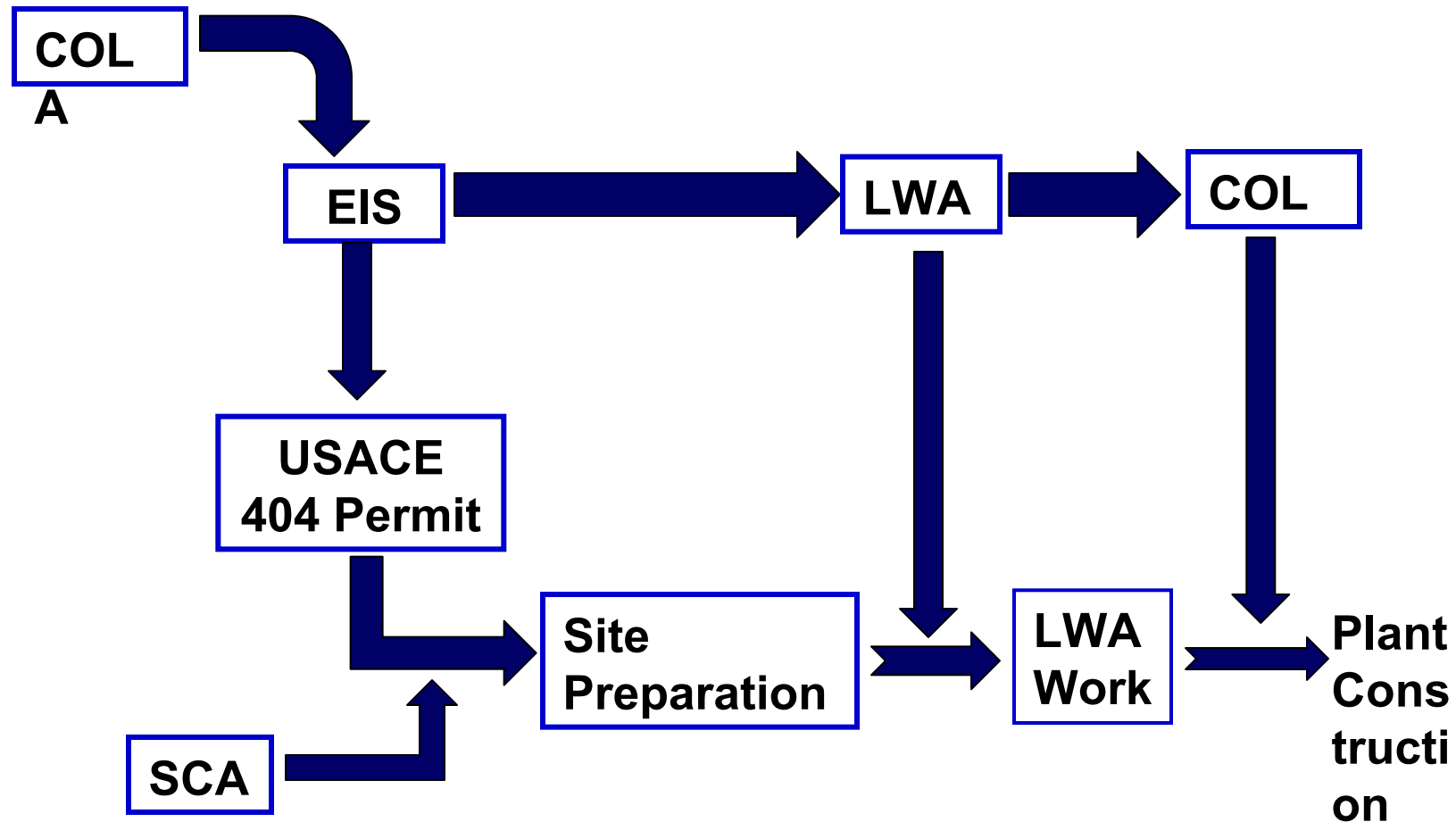
Foundation Concept – Section



LWA Scope

- ❑ Install diaphragm wall
- ❑ Install grouting in the Avon Park Formation
- ❑ Prepare nuclear island foundation surface
- ❑ Place roller compacted concrete
- ❑ Install waterproofing membrane
- ❑ Install mud mat
- ❑ Install forms & rebar in the nuclear island foundation
- ❑ Install drilled shafts
 - ❑ Turbine, Annex and Radwaste Building foundation

Levy Nuclear Project Regulatory Interface



Summary of Impacts Associated with LWA

- Impacts due to Construction (including LWA) described throughout Chapter 4 of ER
- Section 4.8: Activities Undertaken Under a Limited Work Authorization
- Table 4.8-1 provides a summary of the impacts associated with the proposed LWA activities
- This table conservatively estimates the percent of total SSC construction activities that each LWA activity represents

Excerpt of Table 4.8-1 for example

Table 4.8-1
Summary of Impacts Associated with Limited Work Authorization (LWA) Activities

LWA Activity ^(a)	COLA Reference/Description	Percent of Construction ^(b)	Potential Environmental Impact ^(c)	Basis of Estimates
Install Perimeter Diaphragm Wall	Part 2, Chapter 2, Subsection 2.5.4.5.1;	4	S	<p>Estimates are based on the percent of SSC-related construction labor hours that will be dedicated to the identified LWA activity (3.6%, restated to be 4%).</p> <p>Since the maximum impact for any SSC-related Construction activity (Table 4.6-2) is (S)mall, the potential environmental impact of this LWA activity is therefore less than 4 of (S)mall.</p>

Proposed Revision 1 to ER Sections 4.6 and 4.8

- Copies of Proposed Revision 1 to ER Section 4.8 available for review.
- Copies of Proposed Revision 1 to ER Section 4.6, including Table 4.6-2; Summary of Construction- and Preconstruction-Related Impacts for Safety-Related Structures, Systems, or Components; are also available for review.