

A494 NEW SOUTHERN BRIDGE - PIER INSTALLATION

SKETCH REF: R7M-522027-SKH-002

REVISION: A3

DATE: 01/05/2025

SHEET 1 OF 14

SCALE 1:1000 @ A3

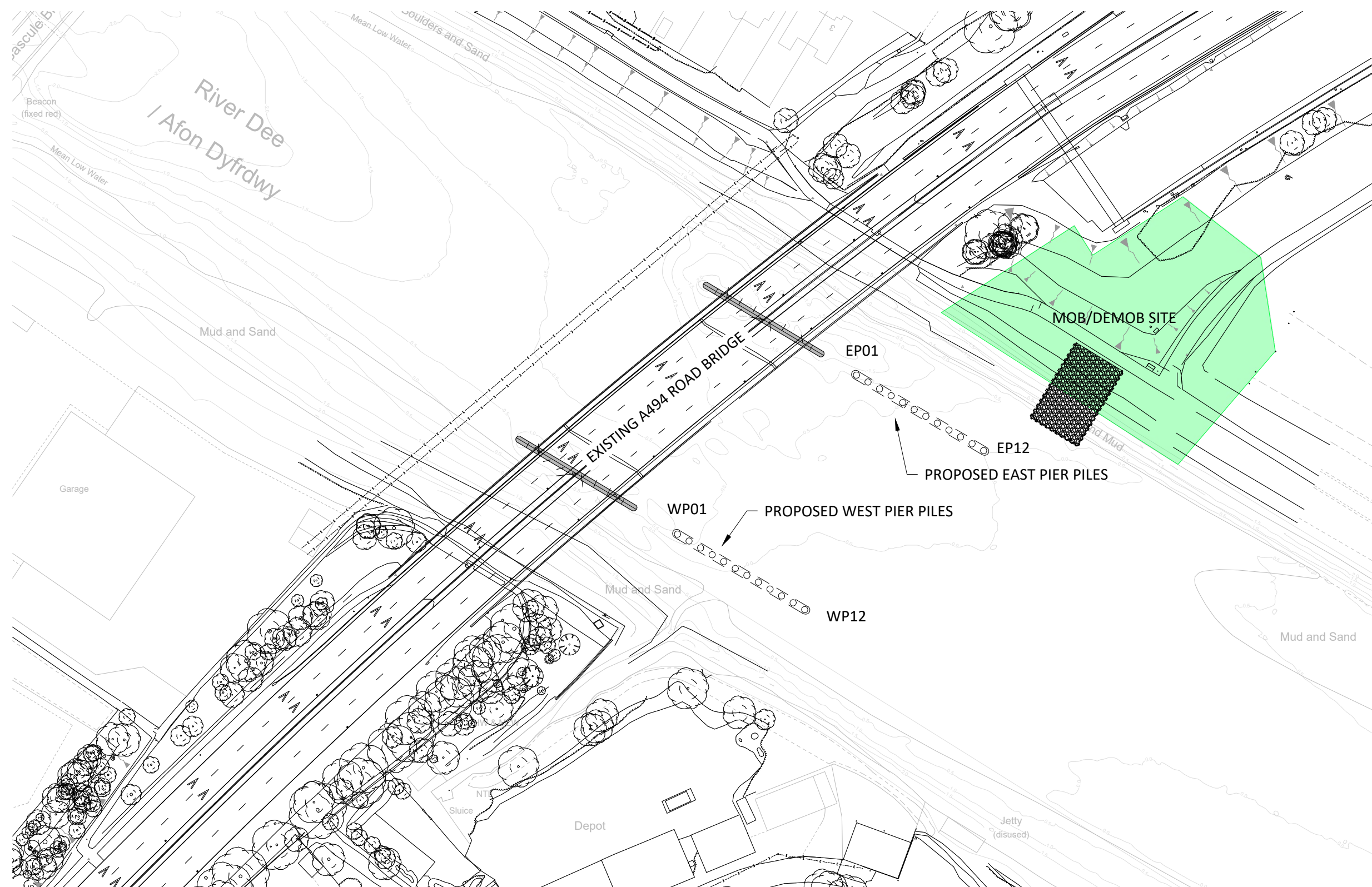
UNITS: m / °

FOR ILLUSTRATION ONLY



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SITE LOCATION



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SHEET 2 OF 14

SCALE 1:250 @ A3

UNITS: m / °

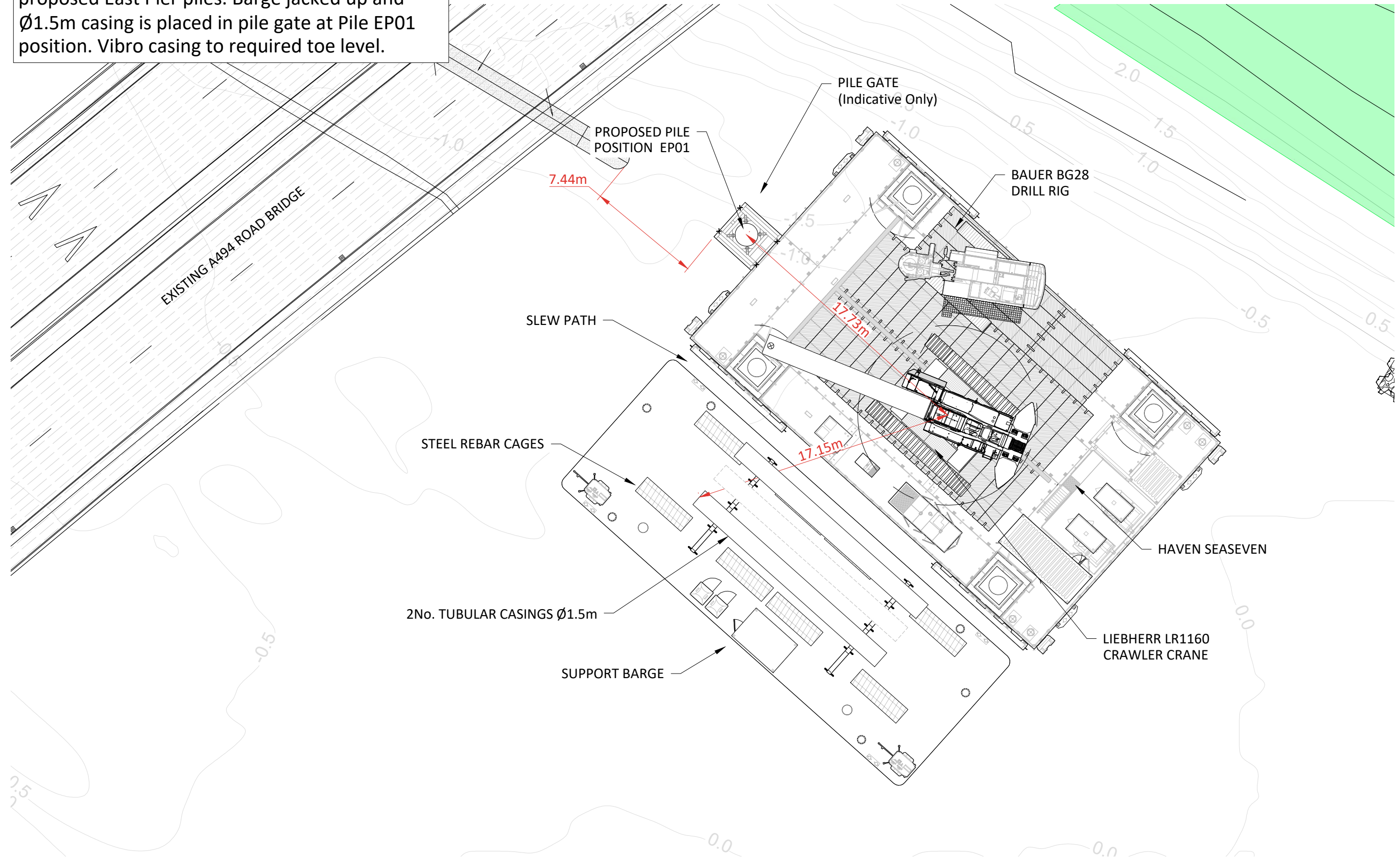
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NOTE THAT ALL DECK LAYOUTS SHOWN IN THIS SEQUENCE ARE INDICATIVE ONLY

Haven Seaseven positioned at location of proposed East Pier piles. Barge jacked up and Ø1.5m casing is placed in pile gate at Pile EP01 position. Vibro casing to required toe level.



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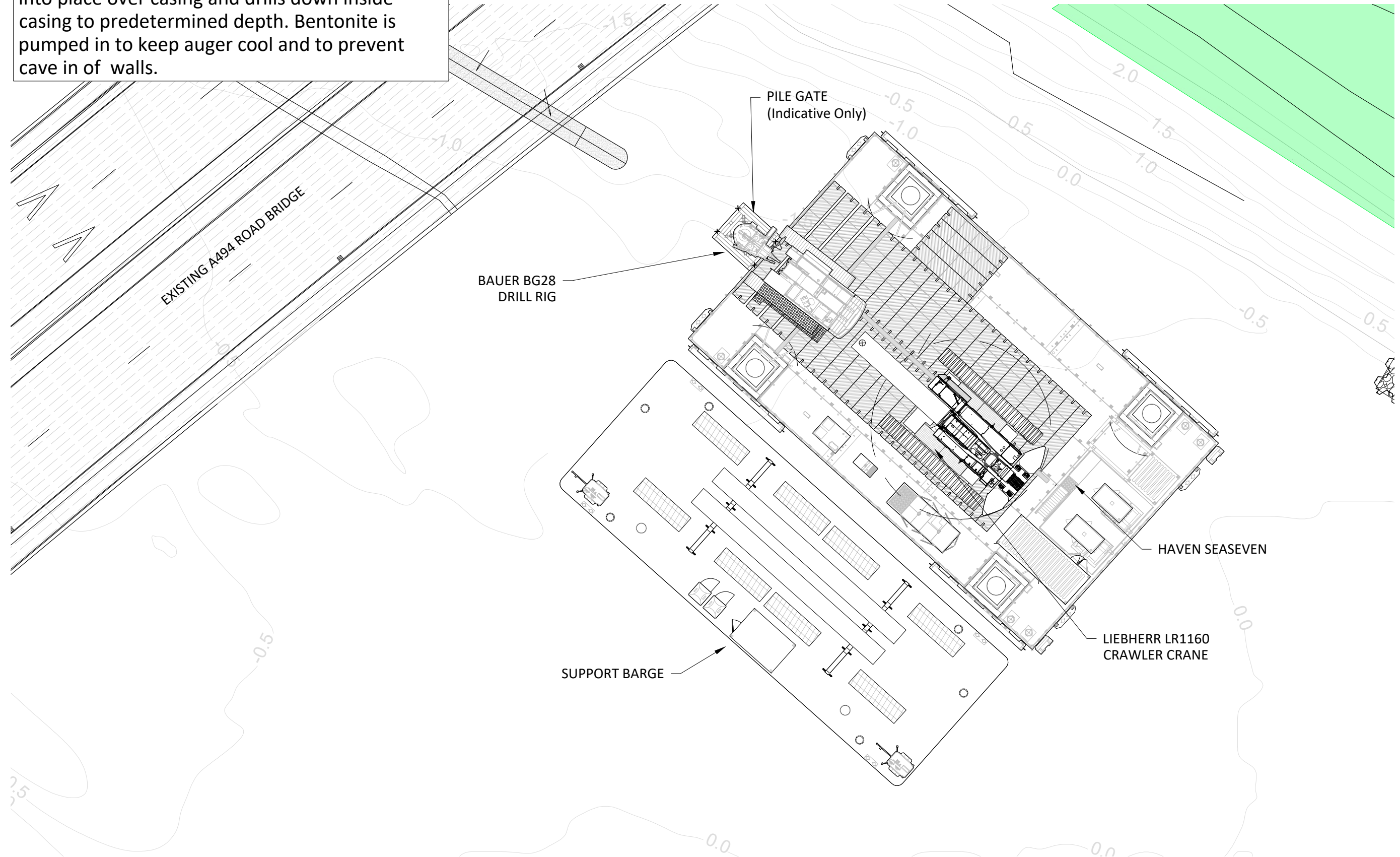
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Once casing is at required level drill rig is moved into place over casing and drills down inside casing to predetermined depth. Bentonite is pumped in to keep auger cool and to prevent cave in of walls.



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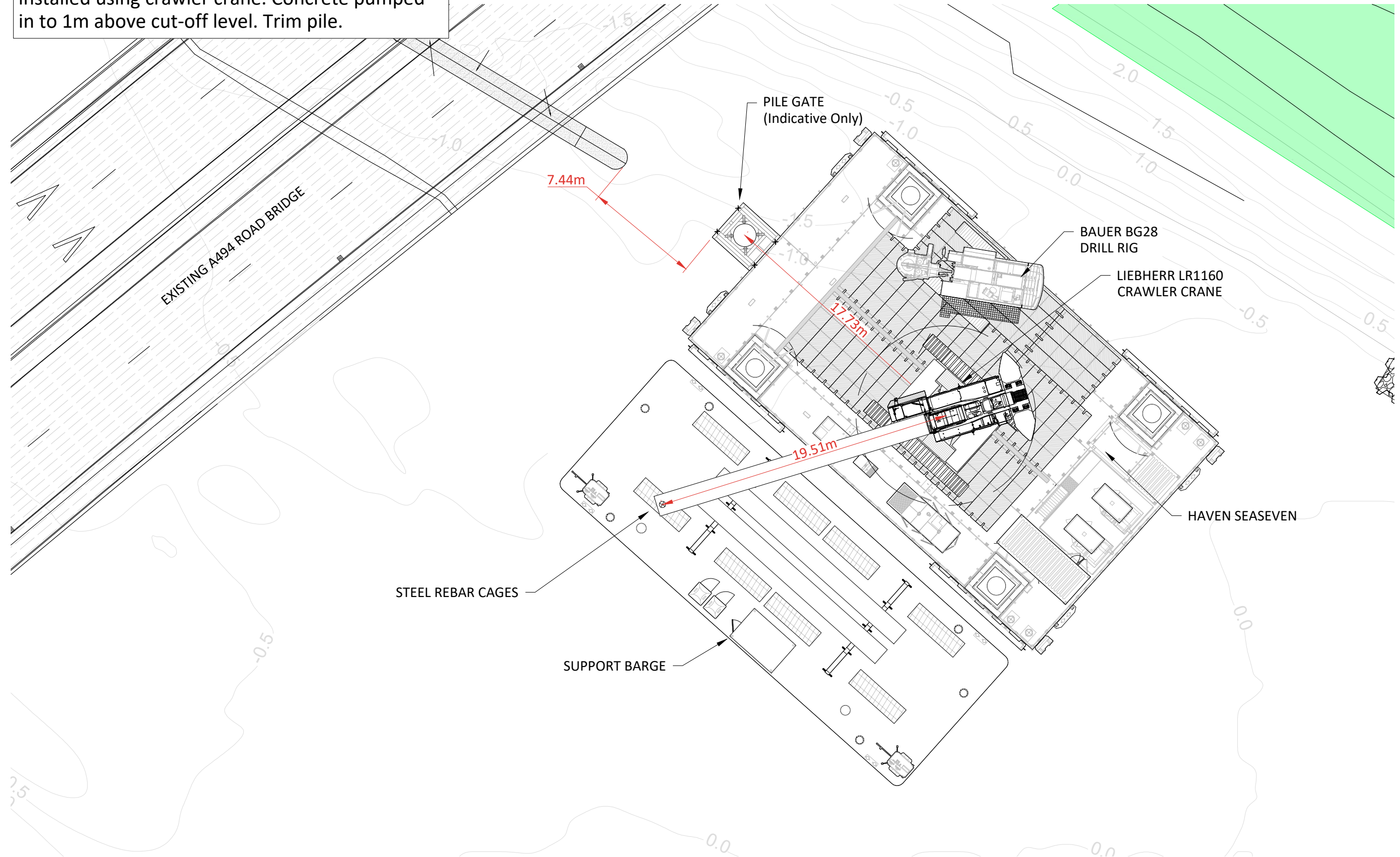
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After drilling out pile EP01 steel rebar cages
installed using crawler crane. Concrete pumped
in to 1m above cut-off level. Trim pile.



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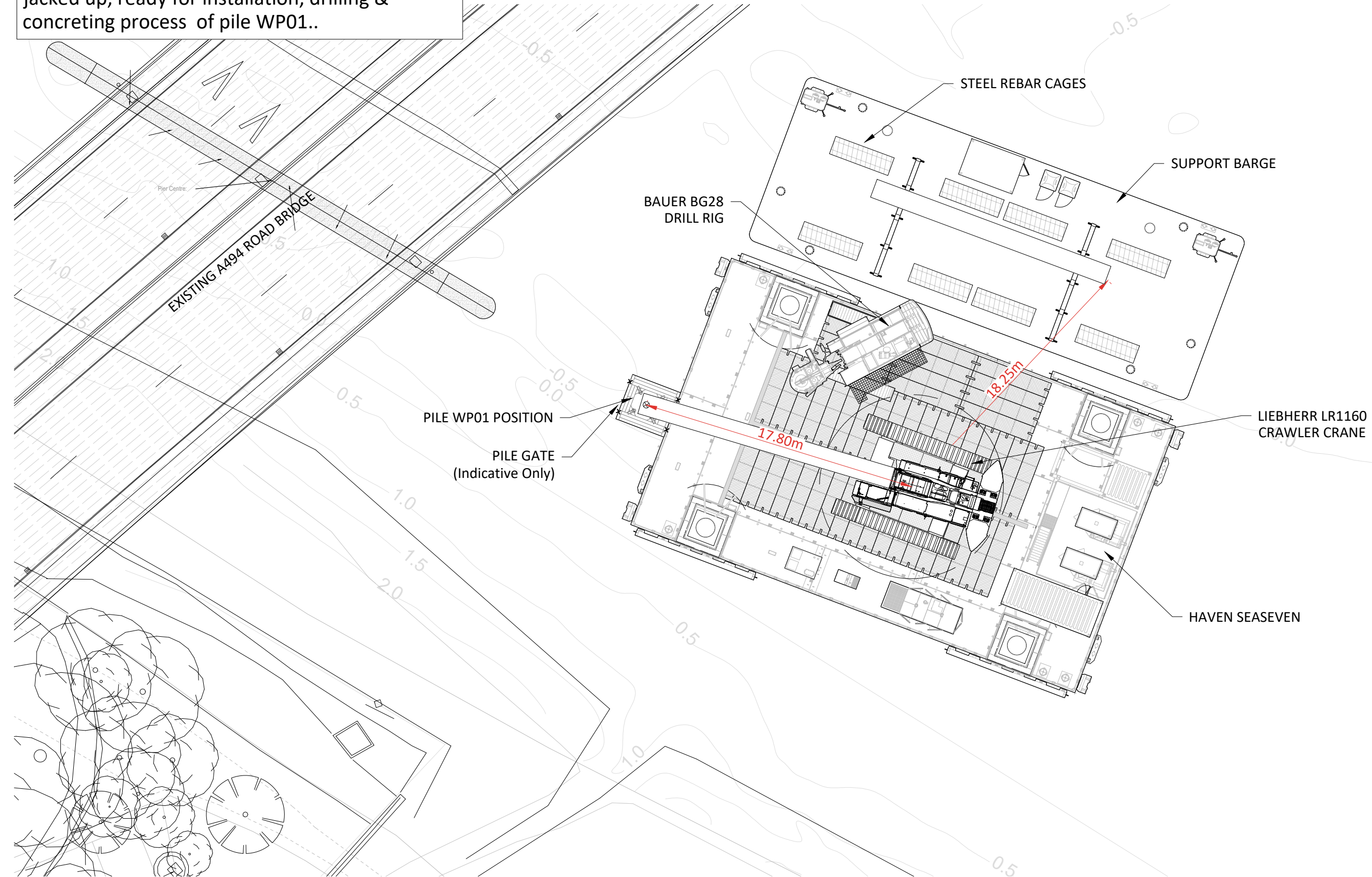
UNITS: m / °

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Haven Seaseven is repositioned to West Pier and jacked up, ready for installation, drilling & concreting process of pile WP01..



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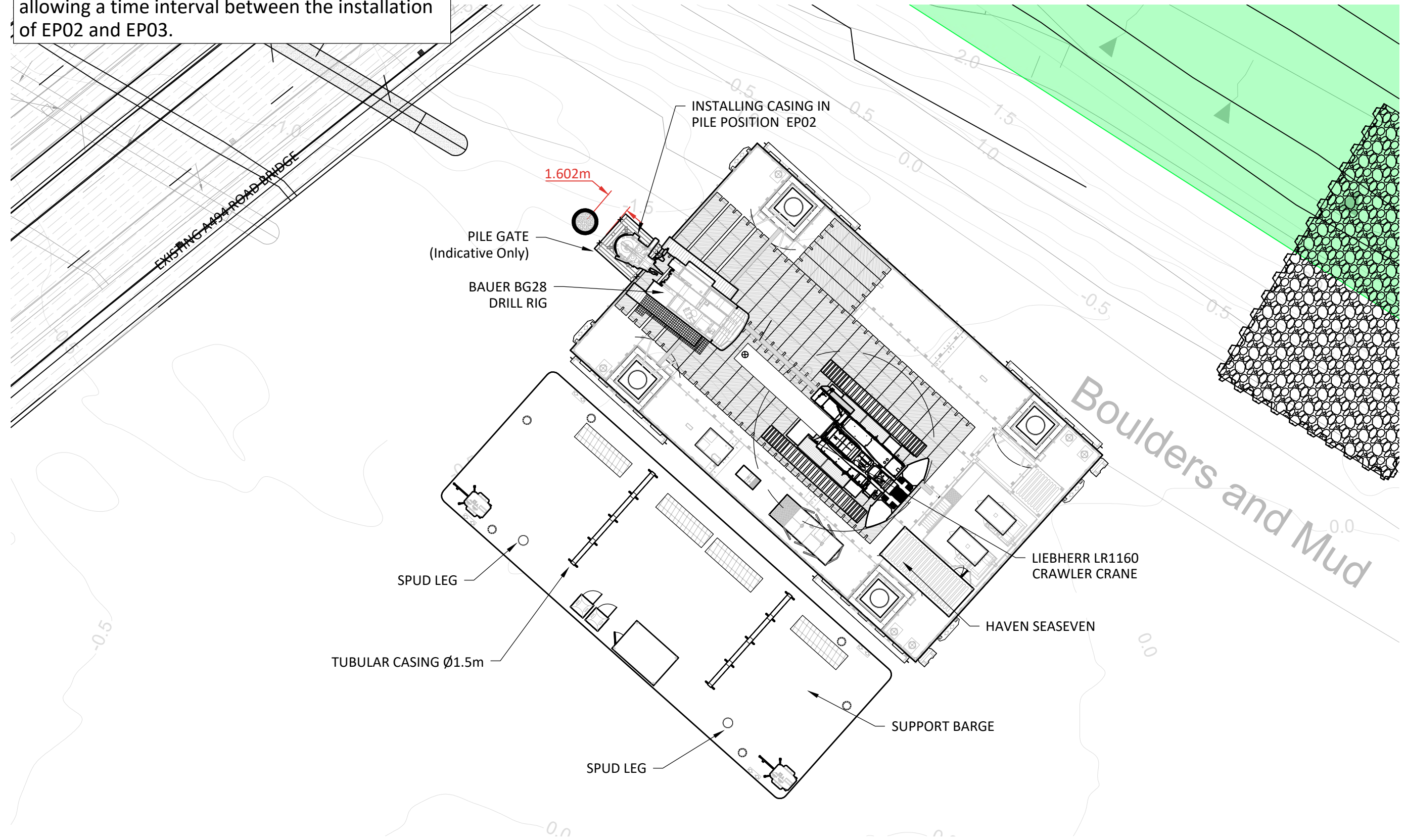
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Haven Seaseven repositioned to East Pier and gate aligned with pile EP02 along pile line. Repeat same process, then reposition and install WP02 allowing a time interval between the installation of EP02 and EP03.



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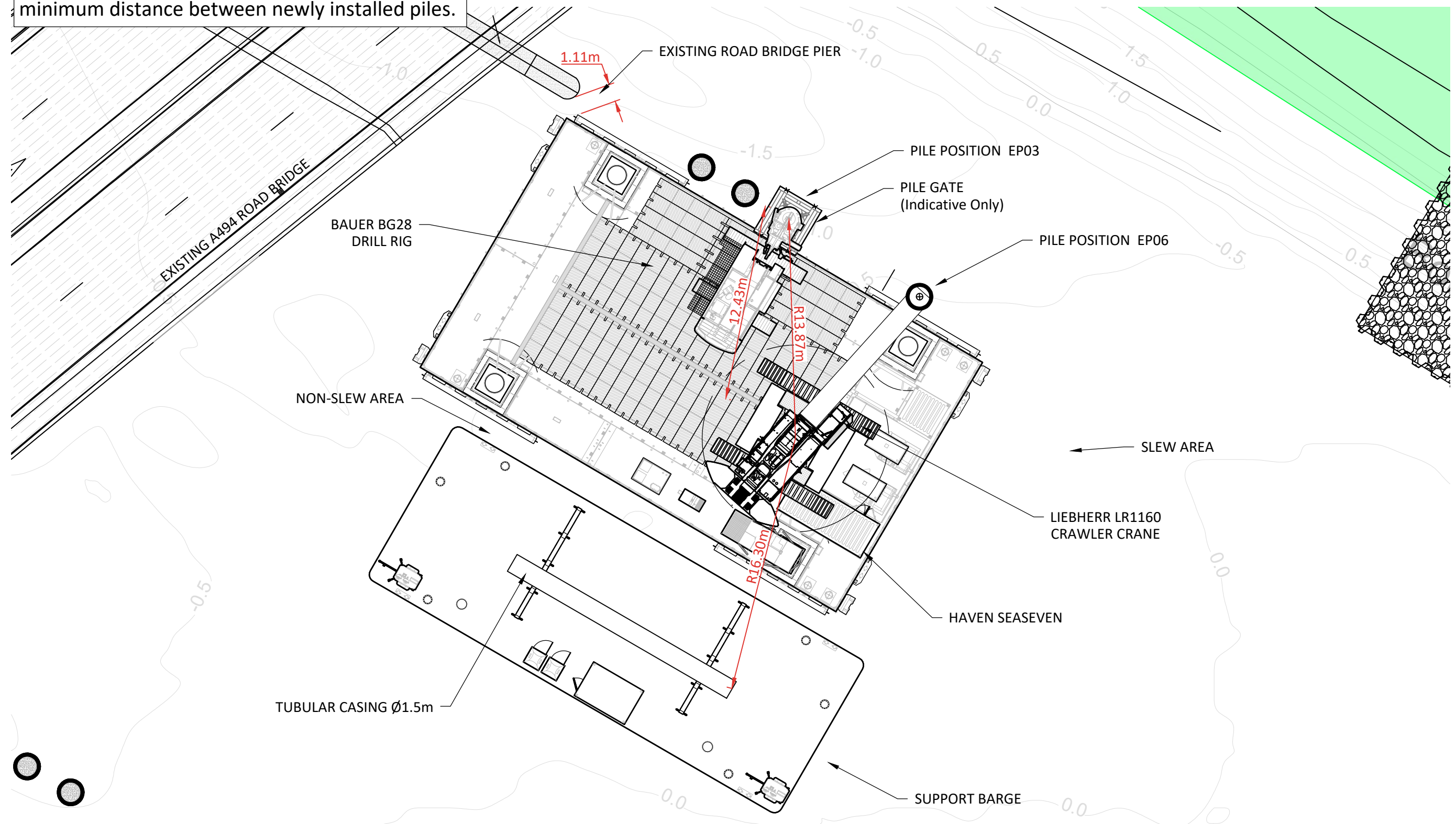
SCALE 1:250 @ A3

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Once WP02 is installed, barge repositions to East Pier for installation of EP03 and EP06. EP04 and EP05 to be installed at later stage to allow for minimum distance between newly installed piles.



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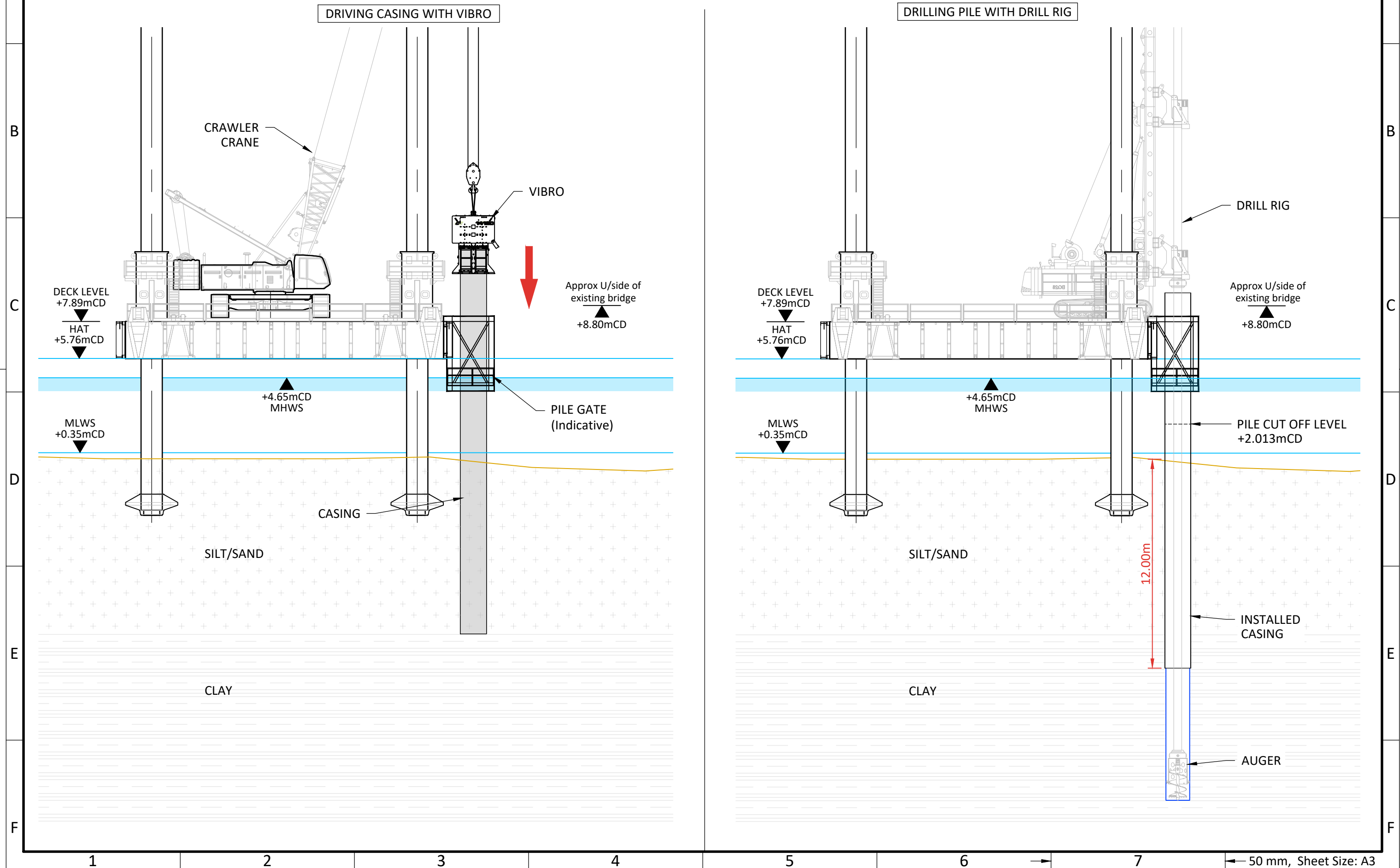
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SECTION A-A



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SCALE 1:250 @ A3

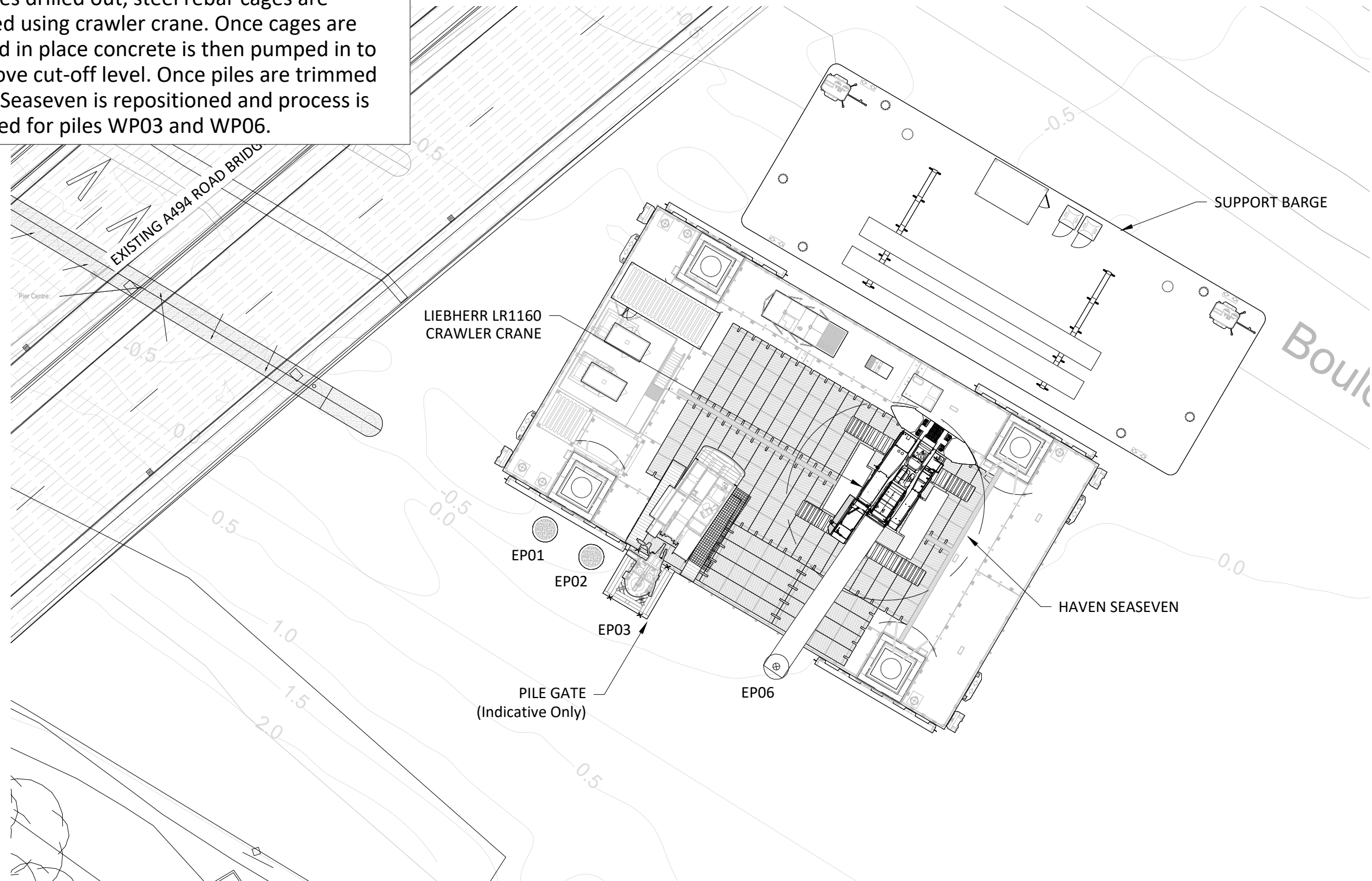
UNITS: mm / °

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Once EP03 and EP06 casings have been installed and piles drilled out, steel rebar cages are installed using crawler crane. Once cages are secured in place concrete is then pumped in to 1m above cut-off level. Once piles are trimmed Haven Seaseven is repositioned and process is repeated for piles WP03 and WP06.



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SCALE 1:250 @ A3

UNITS: mm / °

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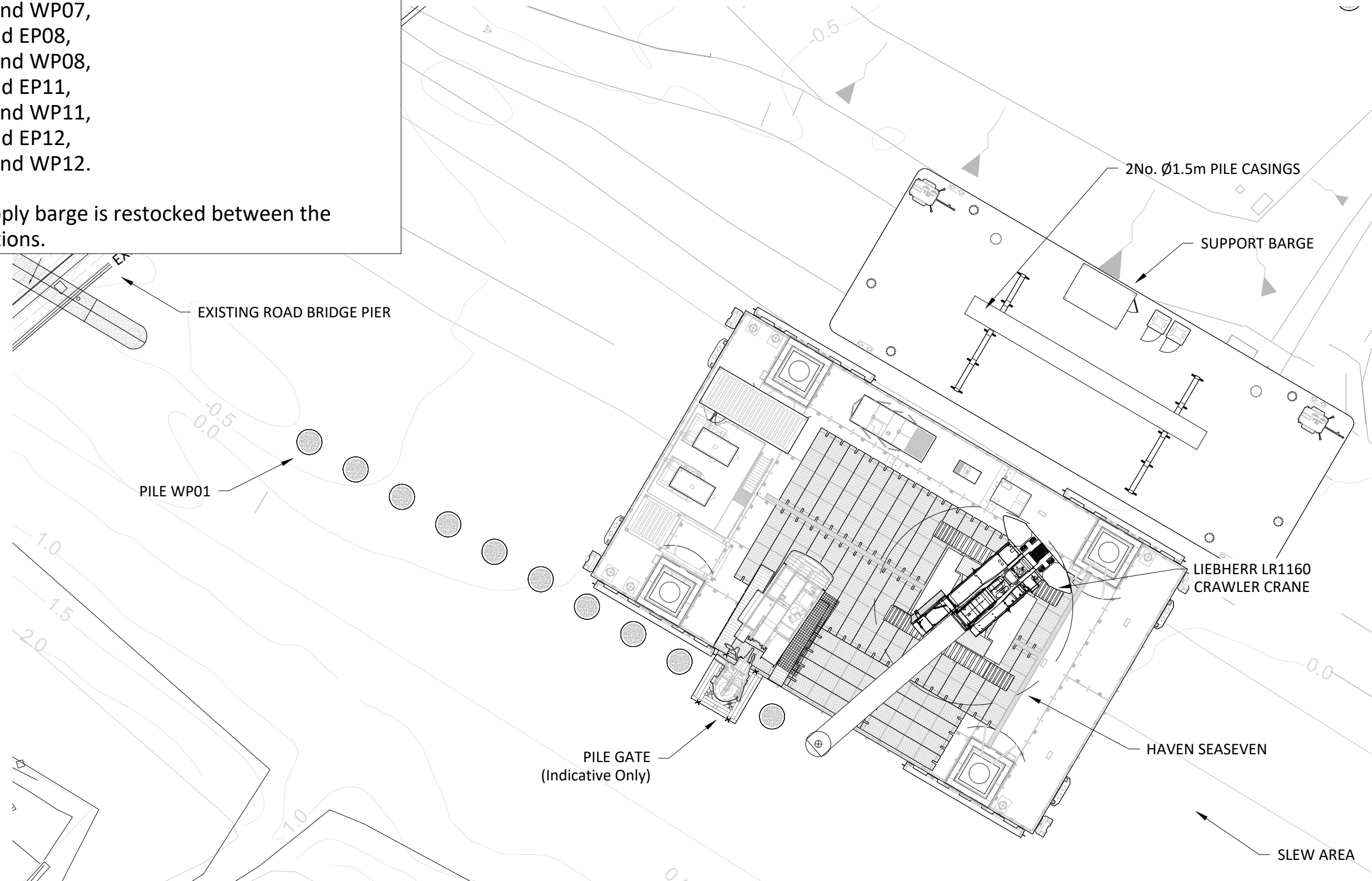


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After WP03 and WP06 are installed. Same
process is repeated in the following order:

EP04 and EP07,
WP04 and WP07,
EP05 and EP08,
WP05 and WP08,
EP09 and EP11,
WP09 and WP11,
EP10 and EP12,
WP10 and WP12.

The supply barge is restocked between the
installations.



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SCALE 1:750 @ A3

UNITS: m / °

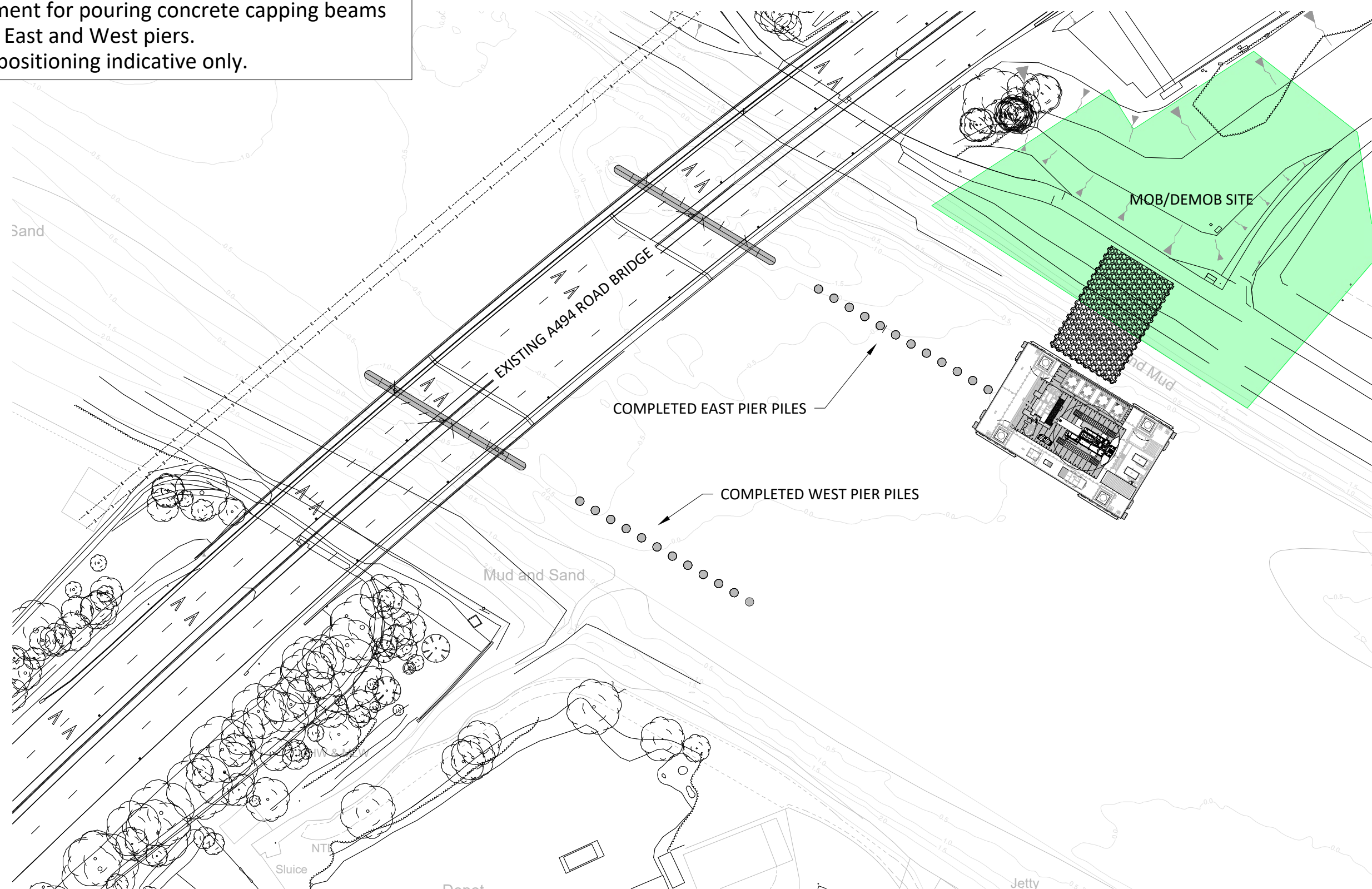
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Haven Seaseven moved back to mob/demob site to demobilise drilling equipment and mobilise equipment for pouring concrete capping beams on the East and West piers.
Barge positioning indicative only.

SHOWS HAVEN SEASEVEN READY FOR DEMOB



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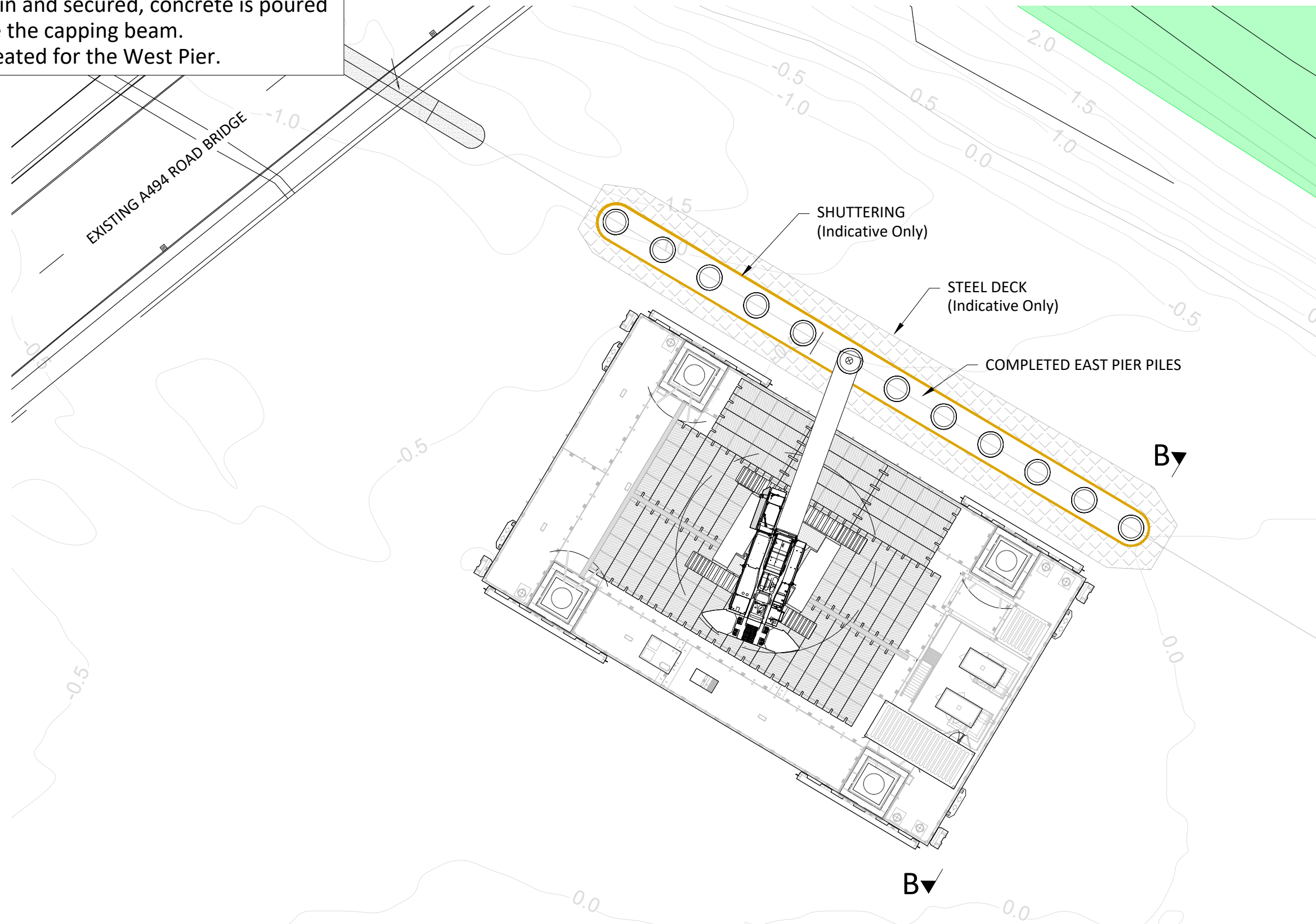
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Haven Seaseven mobilised to East Pier piles where formwork/decking/shuttering is installed. Rebar is lifted in and secured, concrete is poured in to complete the capping beam. Process is repeated for the West Pier.

CONCRETING OF EAST PIER



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SCALE 1:150 @ A3

UNITS: mm / °

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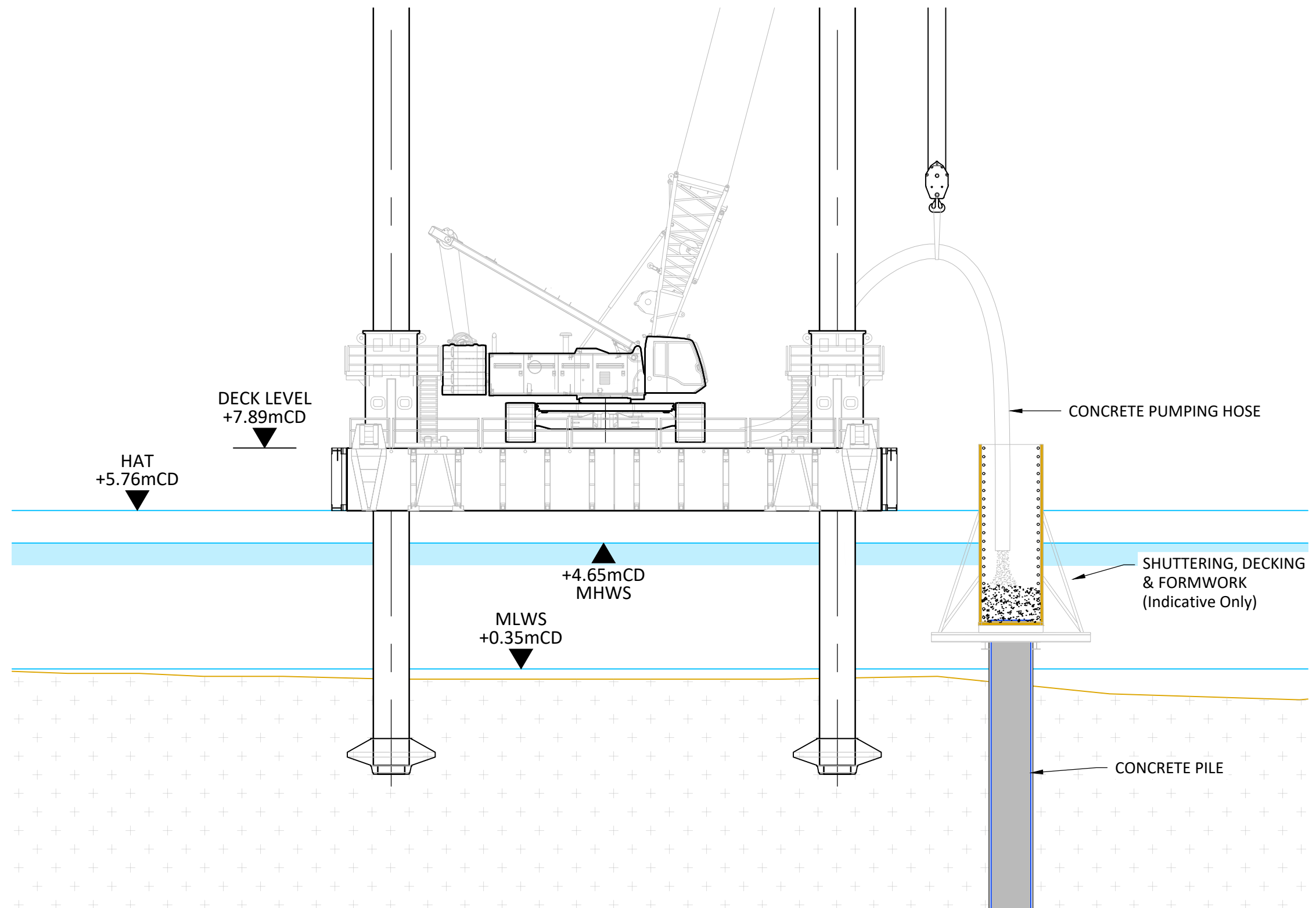


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Note that all detail shown for concreting capping
beam is indicative only.

SECTION B-B

PUMPING IN CONCRETE TO FORM CAPPING BEAM



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SCALE 1:500 @ A3

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Haven Seaseven moved back to mob/demob site
to demobilise all equipment.
Barge positioning indicative only.

SHOWS COMPLETED PIERS

