

DOCUMENTATION OF BURIED COASTAL PROTECTION WORKS

AT NEWPORT SLSC, NEWPORT, NSW

HORTON COASTAL ENGINEERING PTY LTD

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Sheet List Table

Sheet Number	Sheet Title
S01	GENERAL NOTES
S02	COASTAL PROTECTION WORKS PLAN
S05	EROSION AND SEDIMENT CONTROL PLAN AND WASTE MANAGEMENT PLAN
S10	SECTION 1

GENERAL NOTES

- N1. ALL LEVELS ARE IN METRES RELATIVE TO AUSTRALIAN HEIGHT DATUM (AHD), UNLESS NOTED OTHERWISE
 N2. FGL REFERS TO FINISHED GROUND LEVEL

STRUCTURAL

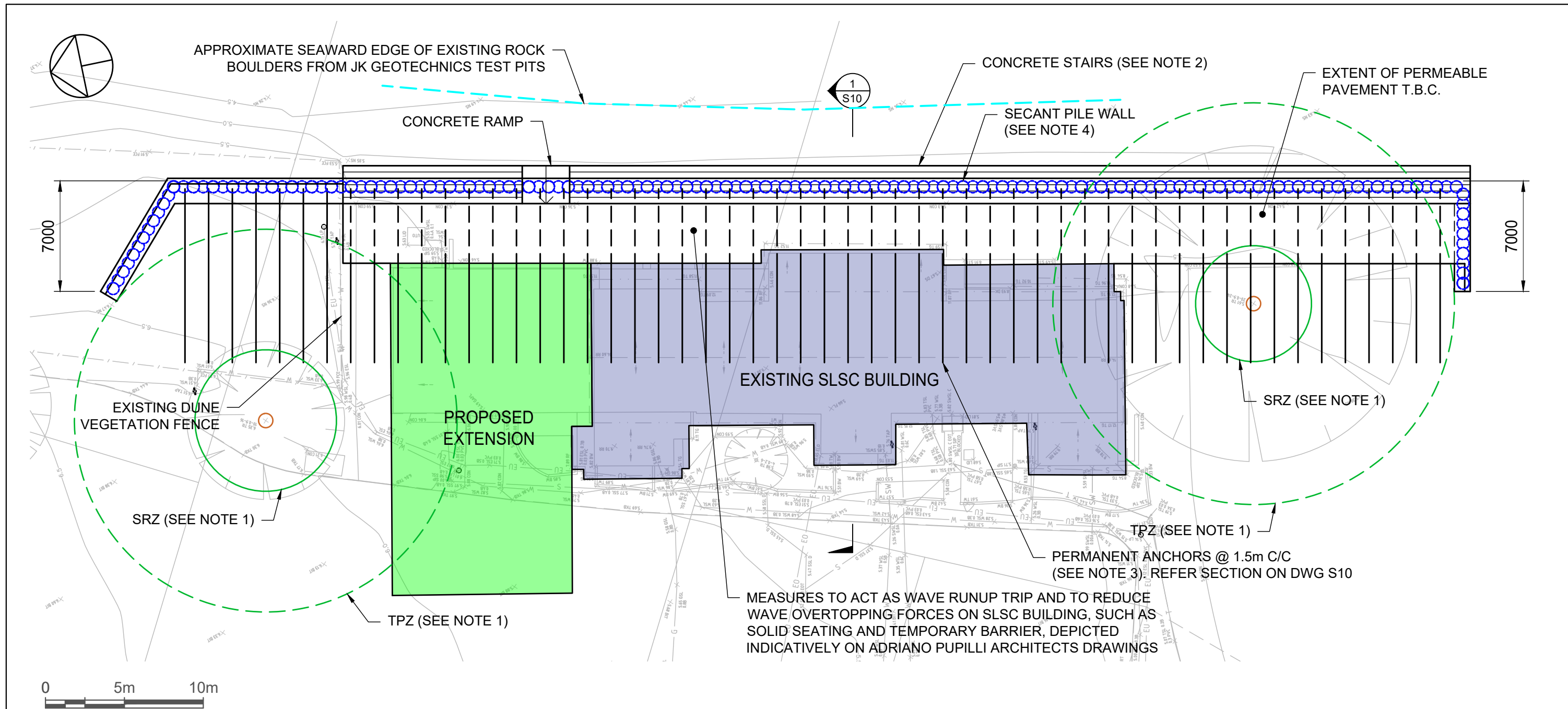
- S1. ALL STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH AS 4100
 S2. ALL TIMBER STRUCTURES SHALL BE IN ACCORDANCE WITH AS 1720, AS 1684 AS REQUIRED
 S3. ALL PILING AND CONCRETE STRUCTURES SHALL BE IN ACCORDANCE WITH RELEVANT AUSTRALIAN STANDARDS

REFERENCE DOCUMENTS

- SURVEY DRAWING PREPARED BY:
 C.M.S. SURVEYORS
 Ph. (02) 9971 4802
 REF No. 17692
 DATED: 13/04/18
- GEOTECHNICAL REPORT BY
 JK GEOTECHNICS
 Ph. (02) 9888 5000
 REF No. 32537RE
 DATED: 7-8-19

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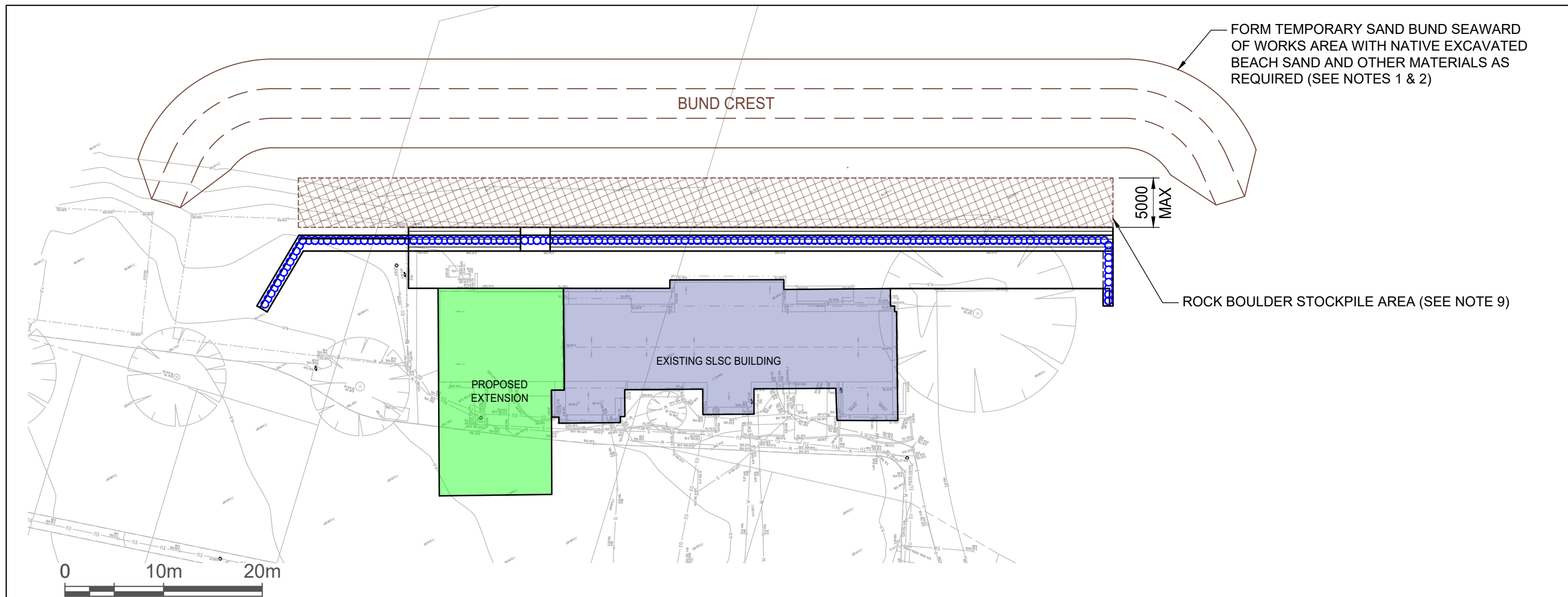
BURIED COASTAL PROTECTION WORKS AT NEWPORT SLSC, NEWPORT NSW					COASTAL ENGINEERING DESIGN: HORTON COASTAL ENGINEERING PTY LTD 18 Reynolds Cres. Beacon Hill NSW 2100 TEL: +61 (0)407 012 538 peter@hortoncoastal.com.au www.hortoncoastal.com.au			STRUCTURAL ENGINEERING DESIGN: James Taylor & Associates Civil & Structural Consulting Engineers SUITE 301, 115 MILITARY ROAD NEUTRAL BAY NSW 2090 TEL: 02 99691999 EMAIL: mail@jamestaylorassociates.com.au			DESIGN P.H.	DRAWN P.P.	PROJECT NO. 6268	
P.P.	R.Y.	REVISED AFTER CONSULTATION	24.08.21	D	GENERAL NOTES	COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM HORTON COASTAL ENGINEERING AND JAMES TAYLOR & ASSOCIATES			CHKD.	R.Y.	APPRD.	P.H.	DRAWING NO. S01	REV D
P.P.	R.Y.	REVISED FOR DA	20.11.20	C		SCALE	DATE							
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BY	CHKD	DESCRIPTION	DATE	REV										



1. STRUCTURAL ROOT ZONE (SRZ) AND TREE PROTECTION ZONE (TPZ) FOR NORFOLK ISLAND PINE TREES DERIVED FROM "ARBORICULTURAL IMPACT ASSESSMENT, NEWPORT SLSC" PREPARED BY LEIGH BRENNAN OF TREE MANAGEMENT STRATEGIES, DATED 23 MARCH 2020
2. LANDWARD EDGE OF THE NEW CONCRETE STAIRS IS COINCIDENT WITH THE SEAWARD EDGE OF THE EXISTING CONCRETE PATH
3. ALTERNATIVE ANCHOR SETOUTS AND/OR TYPES MAY BE SUBMITTED FOR APPROVAL. TO BE AGREED WITH CONTRACTOR SUBJECT TO CONFIRMATION OF STRUCTURAL & GEOTECHNICAL ENGINEER
4. ALTERNATIVE PILING TYPES MAY BE SUBMITTED FOR APPROVAL, SUCH AS CONTIGUOUS PILES COMBINED WITH PLUG PILES. TO BE AGREED WITH CONTRACTOR SUBJECT TO CONFIRMATION OF STRUCTURAL & GEOTECHNICAL ENGINEER

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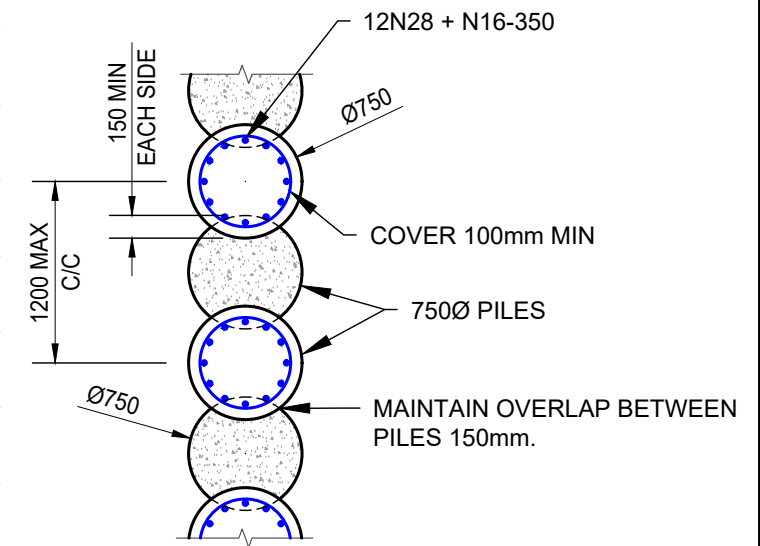
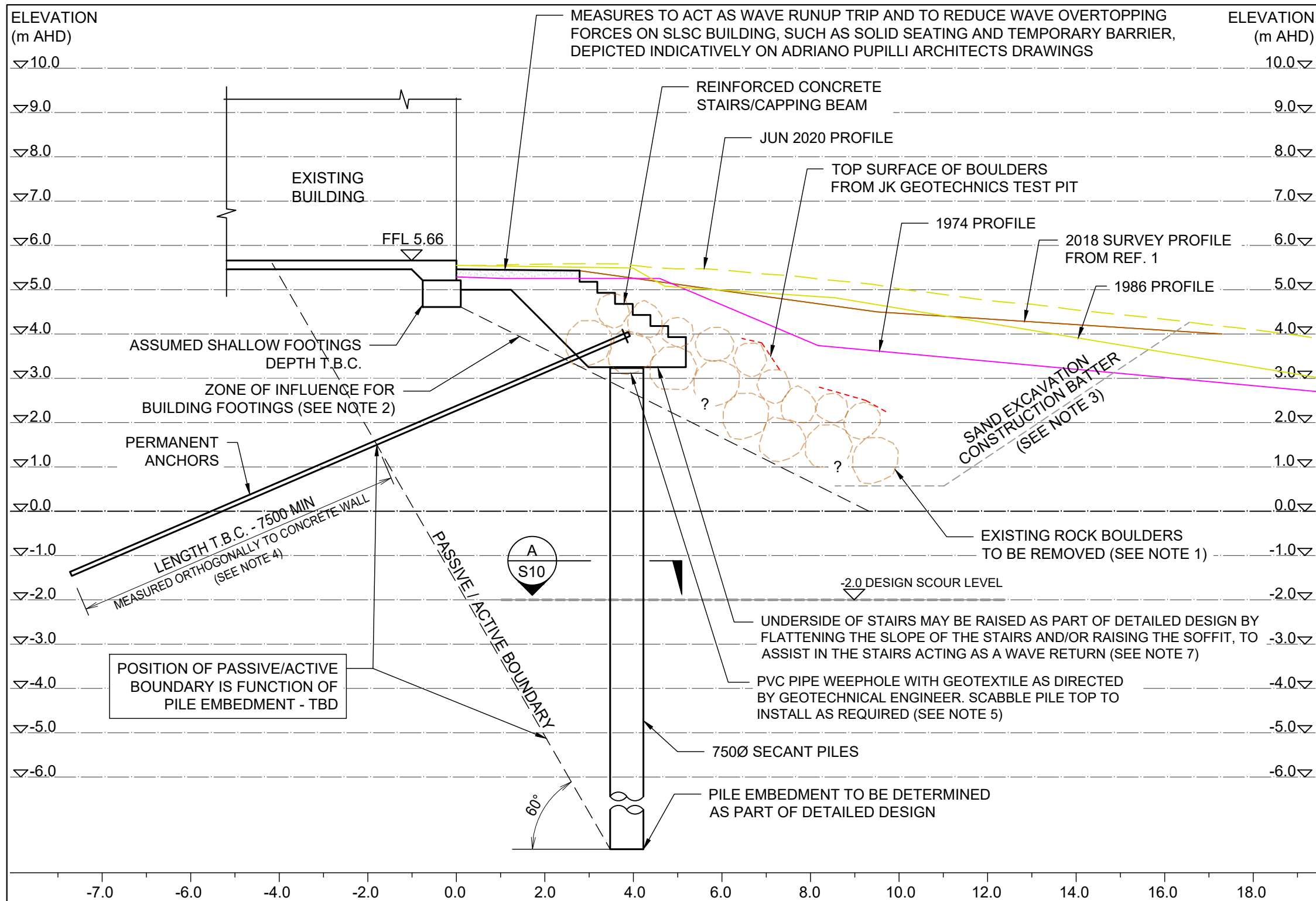
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P.P.	R.Y.	REVISED AFTER CONSULTATION	24.08.21	D	COASTAL PROTECTION WORKS PLAN			COPYRIGHT: THIS DESIGN AND PLANS ARE NOT TO BE USED OR REPRODUCED WHOLLY OR IN PART WITHOUT WRITTEN PERMISSION FROM HORTON COASTAL ENGINEERING AND JAMES TAYLOR & ASSOCIATES			CHKD. R.Y.	DRAWING NO. S02		REV D
P.P.	R.Y.	REVISED FOR DA	20.11.20	C							APPRD. P.H.			
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1. BUND MAY BE FORMED OVER A PORTION OR OVER THE ENTIRETY OF THE WORKS AREA DEPENDING ON CONSTRUCTION PROGRAM AND WAVE AND WATER LEVEL CONDITIONS, AS DIRECTED BY COASTAL ENGINEER OR CONTRACTOR. BUND IS TO BE REMOVED, WITH SAND SHAPED TO A NATURAL PROFILE, PRIOR TO COMPLETION OF THE WORKS
2. RUBBLE AND OTHER MATERIALS OR WASTE THAT WOULD BE UNSUITABLE ON A BEACH ARE TO BE SEPARATED AND STOCKPILED WHERE ENCOUNTERED DURING EXCAVATION (POTENTIALLY TO BE REUSED, SEE NOTE 7). EXCAVATED (LARGER FRACTION) ROCK BOULDERS MAY BE TEMPORARILY PLACED ON BEACH, IN BUND, AS DIRECTED BY COASTAL ENGINEER, TO PROVIDE SOME PROTECTION TO EXCAVATED WORKS AREA. IMPORTED MATERIALS THAT WOULD BE TEMPORARILY SUITABLE ON A BEACH SUCH AS CONCRETE BLOCKS AND THE LIKE MAY ALSO BE USED IN THE BUND. SHEET PILING MAY ALSO BE CONSIDERED FOR USE AS TEMPORARY PROTECTION
3. ALL DELETERIOUS MATERIALS AND EQUIPMENT THAT COULD BE DAMAGED ARE TO BE REMOVED FROM WORK AREA IF BUND CANNOT BE MAINTAINED DUE TO ELEVATED WAVES AND WATER LEVELS. WORKS IN BEACH AREA MAY NEED TO TEMPORARILY CEASE UNDER THESE CONDITIONS
4. ALL MATERIAL STOCKPILES ARE TO BE LOCATED LANDWARD OF THE EXISTING CLUBHOUSE, UNLESS AGREED BY COASTAL ENGINEER
5. WHEN RESTORING BEACH SAND LEVELS AT THE COMPLETION OF THE SEAWALL WORKS, SCREENING IS TO BE UNDERTAKEN TO REMOVE RUBBLE, ROCK FRAGMENTS AND OTHER MATERIALS THAT WOULD BE UNSUITABLE ON A BEACH
6. ANY WASTE MATERIALS SHALL BE DISPOSED OF AT AN APPROPRIATE WASTE MANAGEMENT FACILITY OFF SITE
7. WASTE AND RUBBLE MATERIALS MAY BE BURIED LANDWARD OF THE WALL AS AGREED BY GEOTECHNICAL ENGINEER, SUBJECT TO A WASTE CLASSIFICATION UNDERTAKEN BY A SUITABLY QUALIFIED ENVIRONMENTAL CONSULTANT (WHO IS A MEMBER OF THE AUSTRALIAN CONTAMINATED LAND CONSULTANTS ASSOCIATION INC)
8. WHERE DEWATERING IS UNDERTAKEN, WATER SHALL BE PUMPED INTO A SAND 'SUMP' AND NOT DISCHARGED DIRECTLY TO THE SEA
9. EXISTING ROCK BOULDERS ENCOUNTERED IN EXCAVATION (AND NOT CRUSHED TO USE AS BACKFILL, OR REMOVED FROM THE SITE) MAY BE PLACED AT A STABLE SLOPE AND IN A SAFE AND INTERLOCKED MANNER IN THIS STOCKPILE AREA UNDER THE DIRECTION OF A COASTAL ENGINEER. ANY MATERIALS ENCOUNTERED THAT WOULD BE INAPPROPRIATE TO LEAVE STOCKPILED ON THE BEACH WOULD BE PLACED AS BACKFILL LANDWARD OF THE SEAWALL (IF APPROPRIATE) OR TAKEN TO A LICENSED WASTE MANAGEMENT FACILITY. WHEN RESTORING SAND LEVELS OVER ANY REMAINING BOULDERS IN THE STOCKPILE AREA, SCREEN AS PER NOTE 5
10. SAND SIZED MATERIAL FOR BACKFILL (IF REQUIRED) SHALL NOT BE SOURCED FROM THE BEACH SEAWARD OF THE CLUBHOUSE. BACKFILL MATERIAL IMPORTED TO THE SITE SHALL BE CLASSIFIED AS VIRGIN EXCAVATED NATURAL MATERIAL (VENM), EXCAVATED NATURAL MATERIAL (ENM), OR RECYCLED MATERIALS OBTAINED FROM AN EPA LICENSED FACILITY. FOR ENM AND RECYCLED MATERIALS, SUPPORTING DOCUMENTATION SHOULD BE REVIEWED BY A SUITABLY QUALIFIED ENVIRONMENTAL CONSULTANT WHO IS A MEMBER OF THE AUSTRALIAN CONTAMINATED LAND CONSULTANTS ASSOCIATION INC. ALL BACKFILL SHALL BE TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER

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A Section A
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1. EXTENT OF ROCK BOULDERS DEPICTED IS APPROXIMATE. ALLOW TO EXCAVATE AND LOCALLY REMOVE ROCKS PRIOR TO PILING
2. CARE SHALL BE TAKEN WITH EXCAVATION OF BOULDERS, AND EXCAVATION TO FORM THE PILING WORKING PLATFORM, IN THE VICINITY OF THE ZONE OF INFLUENCE. THIS IS TO ENSURE THAT THE EXISTING CLUBHOUSE FOOTINGS ARE NOT COMPROMISED
3. SLOPE OF BATTER TO BE 1V:1.5H OR FLATTER. IT WOULD BE DIFFICULT TO MAINTAIN A TEMPORARY EXCAVATION BATTER AT 1V:1.5H IN SAND BELOW THE GROUNDWATER LEVEL. THEREFORE, TEMPORARY SUPPORT OF THE EXCAVATION (SUCH AS WITH SAND BAGS) AND/OR USE OF SUITABLE ROCK TO FORM A BATTER OF APPROXIMATELY 1V:2.5H MAY BE REQUIRED BELOW THE GROUNDWATER LEVEL (BAGS AND ROCK TO BE REMOVED OFF BEACH AT COMPLETION OF EXCAVATION WORKS)
4. ANCHOR DESIGN LIFE MIN 100 YEARS. DETAIL ANCHOR DESIGN BY ANCHORING CONTRACTOR, SUBJECT TO APPROVAL OF STRUCTURAL AND GEOTECHNICAL ENGINEERS.
5. ENSURE ADEQUATE COVER IS MAINTAINED TO REINFORCEMENT IN PILES AFTER SCABBLING, AS DIRECTED BY STRUCTURAL ENGINEER. PVC PIPE WEEPHOLES COULD ALTERNATIVELY BE TIED TO BASE OF CONCRETE STAIRS (PILE CAPPING BEAM) REINFORCEMENT IF AGREED BY CONTRACTOR AND STRUCTURAL ENGINEER
6. 1974, 1986 AND 2020 BEACH PROFILES DERIVED FROM NSW BEACH PROFILE DATABASE
7. THE SEAWARD EDGE OF THE PROMENADE AND/OR SEAWARD EDGE OF STAIRS MAY ALSO BE EXTENDED UP TO 2m SEAWARD TOTAL (COMBINED), IF REQUIRED AS PART OF DETAILED DESIGN TO REDUCE WAVE FORCES ON THE CLUBHOUSE

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