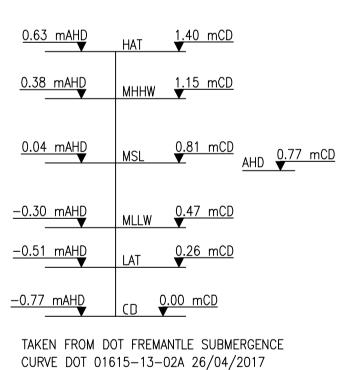


NORTH BEACH JETTY ACCESS PROTECTION

DRAWING No. TITLE DRAWING LIST & LOCALITY PLAN D1975-01-01 D1975-01-02 TECHNICAL SPECIFICATION D1975-02-01 **EXISTING CONDITIONS & ACCESS** D1975-03-01 LAYOUT D1975-04-01 TYPICAL SECTIONS



TIDAL LEVELS



CAD:D19750101[A]

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City of Stirling City of Choice								
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PROJECT	NORTH BEACI	H JETTY	AC	CESS	PROTECT	ΓΙΟΝ
TITLE	DRAWING	LIST	&	LOC	CALITY	PLAN

D1975-01-01 AS SHOWN

S1. GENERAL NOTES

- 1. UNLESS OTHERWISE STATED, DIMENSIONS AND LEVELS ARE SHOWN IN METRES.
- 2. VERTICAL DATUM IS IN METRES TO AUSTRALIAN HEIGHT DATUM (AHD). HORIZONTAL DATUM IS PERTH COASTAL GRID 1994 (PCG94).
- 3. SURVEY COMPLETED BY CITY OF STIRLING IN MARCH 2024. THE LEVELS AND CONTOURS REFLECTS THE SURFACE AT THE TIME OF SURVEY ONLY.
- 4. AERIAL PHOTOGRAPH PROVIDED BY CITY OF STIRLING TAKEN IN OCTOBER 2022.
- 5. SET OUT AND DIMENSIONS ARE TO BE CONFIRMED ON SITE PRIOR TO WORKS COMMENCING, REFER ANY DISCREPANCY TO THE SUPERINTENDENT. IF IN DOUBT ASK.
- 6. SITE ACCESS AND LAYDOWN AREAS TO BE CONFIRMED WITH SUPERINTENDENT PRIOR TO WORKS.
- 7. ON COMPLETION OF THE WORKS A SET OF MARKED UP AND SIGNED "AS CONSTRUCTED" DRAWINGS SHALL BE FORWARDED TO THE SUPERINTENDENT.

S2. DESCRIPTION OF WORK

WORK WILL INVOLVE THE PLACEMENT OF ROCK PROTECTION AT NORTH BEACH JETTY BETWEEN THE TWO BEACH ACCESS.

S3. DRAWINGS

UNLESS OTHERWISE STATED, ALL MEASUREMENTS OF ALL PARTS OF THE WORKS ARE TO BE PERFORMED IN ACCORDANCE WITH THE AUSTRALIAN STANDARD (AS) 1181 - 1982, METHOD OF MEASUREMENT OF CIVIL ENGINEERING WORKS AND ASSOCIATED BUILDING WORKS.

FIGURED DIMENSIONS ON DRAWINGS SHALL BE USED IN PREFERENCE TO MEASUREMENT BY SCALE. LARGER SCALE DRAWINGS SHALL BE READ IN PREFERENCE TO SMALLER SCALE DRAWINGS. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS ON SITE PRIOR TO COMMENCEMENT OF WORK.

S4. MANAGEMENT PLANS & APPROVALS

THE CONTRACTOR SHALL UNDERTAKE THE WORK IN ACCORDANCE WITH APPROVED TRAFFIC, CONSTRUCTION & ENVIRONMENTAL MANAGEMENT PLANS.

S5. EXISTING ASSETS, SERVICES & INFRASTRUCTURE

THE CONTRACTOR SHALL ESTABLISH THE LOCATION OF ALL EXISTING SERVICES ON SITE. IN PARTICULAR, THE CONTRACTOR SHALL CONTACT THE DIAL BEFORE YOU DIG SERVICES AND ENQUIRE ABOUT EXISTING SERVICES AND INFRASTRUCTURE ON THE SITE.

THE CONTRACTOR SHALL PLAN AND EXECUTE THE WORKS IN SUCH A MANNER THAT AVOIDS DAMAGE OR DISRUPTION TO THE EXISTING ASSETS, SERVICES AND INFRASTRUCTURES ON THE SITE. THE CONTRACTOR SHALL REPAIR ANY DAMAGE TO ANY WORKING ASSETS, SERVICES OR INFRASTRUCTURE ON THE SITE, THE COST OF SUCH REPAIR WORK IS DEEMED TO BE INCLUDED IN THE CONTRACT SUM.

S6. DEMOLITION & CLEARING REQUIREMENTS

DEMOLITION AND CLEARING OF EXISTING STRUCTURES SHALL BE COMPLETED TO THE EXTENT SUFFICIENT TO FACILITATE THE CONSTRUCTION.

ALL LOOSE BOULDERS, BUILDING WASTE AND OTHER DELETERIOUS MATERIAL SHOULD BE REMOVED TO ALLOW CONSTRUCTION.

ALL HOLES AND DEPRESSIONS RESULTING FROM DEMOLITION AND CLEARING SHALL BE BACKFILLED WITH APPROVED GRANULAR MATERIAL AND COMPACTED TO AT LEAST THE COMPACTION OF THE SURROUNDING UNDISTURBED SOIL. NO MATERIAL FROM THE DEMOLITION AND CLEARING SHALL BE PUSHED BEYOND THE LIMITS OF THE SITE. MATERIAL CLEARED SHOULD BE REMOVED FROM THE SITE AND DISPOSED OF IN AN APPROVED MANNER UPON COMPLETION OF THE WORKS.

S7. EXCAVATION AND REUSE OF MATERIAL

THE EXISTING SURFACE SHALL BE EXCAVATED TO ALLOW CONSTRUCTION OF THE WORKS. IT IS EXPECTED THAT BEDROCK EXISTS IN THE LOCATION OF THE WORKS AND THE BEDROCK IS TO BE COMPLETELY EXPOSED PRIOR TO THE WORKS. EXCAVATION OF THE BEDROCK WILL BE REQUIRED TO TRENCH IN THE TOE.

THE INTENT IS TO REUSE ALL EXCAVATED MATERIAL IN THE WORKS, OTHER THAN DEBRIS AND RUBBISH. THE LOOSE EXISTING LIMESTONE ROCKS SHOWN IN THE DRAWINGS SHALL BE REMOVED AND REUSED IN THE WORKS WHERE IT MEETS THE GRADING REQUIREMENTS LISTED BELOW.

ALL ROCK WHICH MEETS THE REQUIREMENTS, INCLUDING EXCAVATED BEDROCK, MAY BE REUSED AS CORE. THIS MAY REQUIRE THE ROCKS TO BE SORTED OR BROKEN DOWN TO ACHIEVE THE SIZE REQUIREMENTS.

THE CONTRACTOR SHALL TAKE CARE WHEN EXCAVATING THE NATURAL SURFACE TO ENSURE ONLY THE MINIMUM VOLUME OF THE DUNE IS DISTURBED.

EXCAVATED CLEAN & FREE DRAINING SAND. SHALL BE STOCKPILED AND USED AS FILL AND BACKFILL AS REQUIRED TO COMPLETE THE WORKS AND REFORM THE BEACH & DUNES. ANY SURPLUS SAND IS TO BE PLACED ON THE BEACH TO THE DIRECTION OF THE SUPERINTENDENT.

S8. QUARRIED MATERIAL

THE MATERIALS TO BE SUPPLIED, DELIVERED AND PLACED IN THE ROCK REVETMENT SHALL INCLUDE THE FOLLOWING:

- ARMOUR ROCK LIMESTONE
- CORE LIMESTONE

S8.1 DENSITY AND STRENGTH

ALL ROCK USED IN THE ROCK REVETMENT SHALL HAVE SUFFICIENT STRENGTH, HARDNESS AND DURABILITY THAT IT WILL NOT BREAK IN HANDLING. TRANSPORT AND PLACEMENT OPERATIONS AND PROVIDE A DURABLE STRUCTURE THAT WILL HAVE A SERVICE LIFE OF MORE THAN 50 YEARS IN THE MARINE ENVIRONMENT WITHOUT BREAKDOWN OR DETERIORATION OF THE STONES.

ALL LIMESTONE ROCK USED SHALL HAVE A SATURATED SURFACE DRY DENSITY (SSDD) OF 2.10 TONNES/m³ OR GREATER FOR ARMOUR OR 1.9 TONNES/m³ OR GREATER FOR CORE. THE POINT LOAD INDEX STRENGTH IS (50) FOR ARMOUR AND CORE SHALL BE 0.7MPa OR GREATER.

S8.2 ARMOUR ROCK

ARMOUR ROCK SHALL CONSIST OF INDIVIDUAL HARD, DENSE, ANGULAR QUARRY ROCKS BROKEN OUT BY EXPLOSIVES. IT SHALL BE FREE OF ANY CLEAVAGES, FRACTURES, FISSURES OR WEAK PLANES, AND BE SUCH STRENGTH THAT IT WILL NOT BREAK IN HANDLING AND PLACING.

NOT MORE THAN 10% OF ARMOUR ROCK SHALL HAVE THE GREATEST DIMENSION MORE THAN THREE TIMES THE LEAST DIMENSION.

ARMOUR ROCKS SHALL VARY IN MASS FROM 0.8 TONNES MINIMUM TO APPROXIMATELY 1.5 TONNES MAXIMUM. AT LEAST 50% OF THE ARMOUR ROCK BY NUMBER SHALL HAVE A MASS GREATER THAN 1.0 TONNES.

THE CORE SHALL BE WELL GRADED RUN OF QUARRY MATERIAL WITH INDIVIDUAL STONES BETWEEN 50mm AND 400 mm. 50% OF THE CORE SHALL BE GREATER THAN 350mm.

NOT MORE THAN 20% BY VOLUME OF THE CORE SHALL BE LESS THAN 100mm IN SIZE (BUT STILL GREATER THAN 50mm).

S9 GEOTEXTILE

THE GEOTEXTILE TO BE SUPPLIED AND PLACED IN THE WORKS SHALL INCLUDE THE FOLLOWING:

TEXCEL 1200R

EQUIVALENT GEOTEXTILE PRODUCTS MAY BE APPROVED BY THE SUPERINTENDENT. ANY PROPOSED ALTERNATIVES WILL ONLY BE ASSESSED BASED ON MINIMUM PROPERTIES AND PROVEN PERFORMANCE.

THE GEOTEXTILE SHALL BE PLACED AS SHOWN ON THE DRAWINGS. THE MINIMUM OVERLAP BETWEEN SHEETS SHALL BE 1.0m FOR THE FULL LENGTH OF THE LAP AFTER PLACEMENT OF QUARRY OR OTHER MATERIALS ON TOP OF THE

THE CONTRACTOR SHALL PLAN AND EXECUTE THE PLACEMENT OF THE GEOTEXTILE TO ENSURE THAT THERE IS NO DAMAGE TO THE GEOTEXTILE DURING PLACEMENT AND THAT IT FORMS A CONTINUOUS BARRIER TO PREVENT THE LEACHING OF FINES FROM THE MATERIAL BENEATH.

ALL DAMAGED AREAS OF GEOTEXTILE SHALL BE REPAIRED BY OVERLAYING THE AREA WITH NEW GEOTEXTILE WITH MINIMUM OVERLAP OF 1.0m FROM THE DAMAGED AREA. THE CONTRACTOR SHALL LAY THE GEOTEXTILE TO THE BEST RECOMMENDATIONS OF THE MANUFACTURER.

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Cityof**Stirling** City of Choice B GARVEY T HUNT

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APPROVED

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CAD:D19750102[A] PROJECT NORTH BEACH JETTY ACCESS PROTECTION TECHNICAL SPECIFICATION

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