

PAVING NOTES

- This drawing is to be read in conjunction with all relevant architects and engineers drawings and specifications.
- See landscape architect design for surface finish products/materials, colour, stain dimensions, and laying patterns. Do not use this drawing for laying patterns.
- Do not scale this drawing. Any ambiguities, omissions or errors on drawings shall be brought to the engineers attention immediately.
- All works and materials to be in accordance with current British Standards (BS) and Building Regulations.
- The drawing makes references to the below sections of Standards for Highway:
 - Design Manual for Roads and Bridges (DMRB)
 - Manual of Contract Documents for Highway Works (MCHW)
 - Volume 1 Specification for Highway Works (SHW)
 - Example: SHW 807 refers to Specifications for Highway Works Clause 807
 - The construction depths given are the minimum required (compacted).
 - Subgrade California Bearing Ratio (CBR)
 - All pavement constructions are based on an assumed CBR value of 2.5%.
 - It is recommended that CBR tests are carried out to confirm and sub-base adjusted in accordance with the coping and sub-base thickness table.
 - CBR test procedure is detailed within DMRB CD 225 and BS 1377:4.
 - Measured CBR value to be a formation level and to be a 'soaked' condition.
 - Engineer to be advised of variations in ground conditions prior to construction.

Pavement Foundations

- In areas where levels are to be raised, acceptable fill material is to be used to the underside of the proposed construction make up (see Earthworks Specification).
- The construction depths given assume formation is non-frost susceptible.
- Where formation is frost susceptible contractor to provide coping material to give a minimum 450mm overall construction thickness.
- All sub-bases and capping layers to be graded and compacted to the SHW.
- No regulating or fill material has been included in construction build up. Contractor to induce for regulating/fill material in their rates.
- Areas where levels are to be lowered, existing construction is to be fully removed.

Pavement Materials

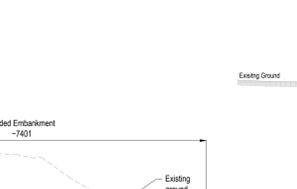
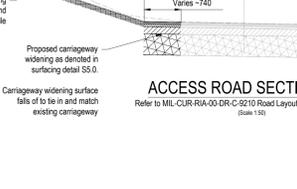
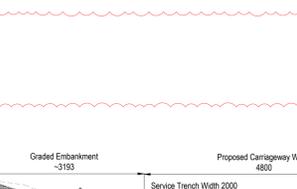
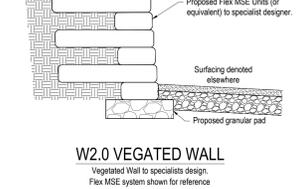
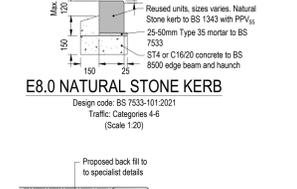
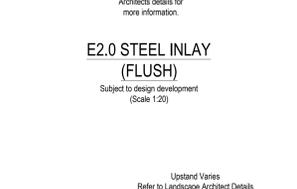
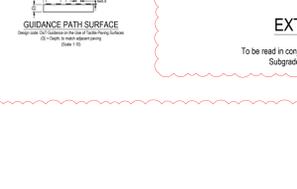
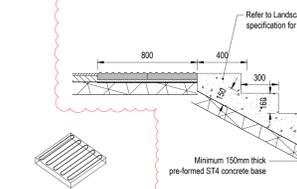
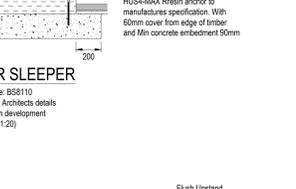
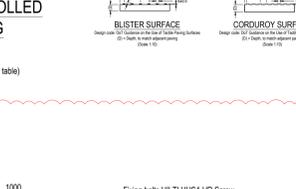
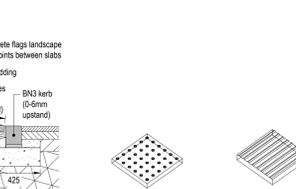
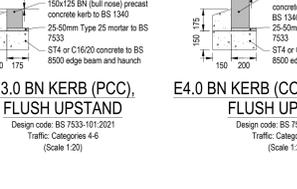
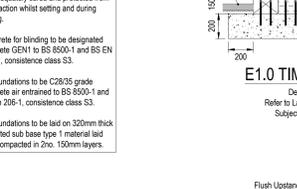
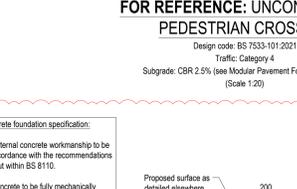
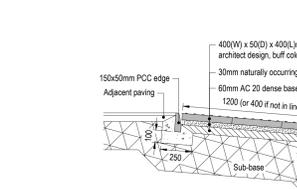
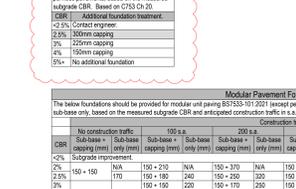
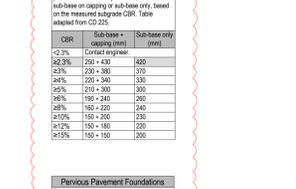
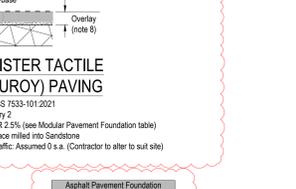
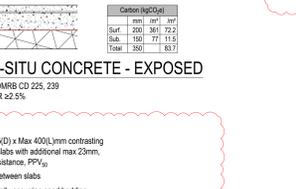
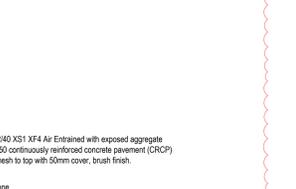
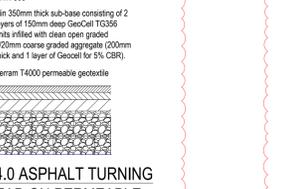
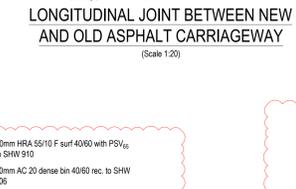
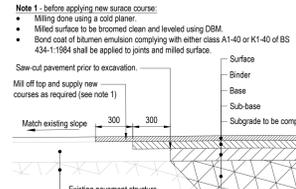
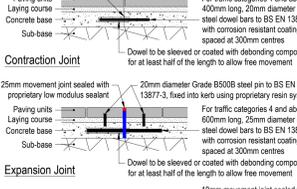
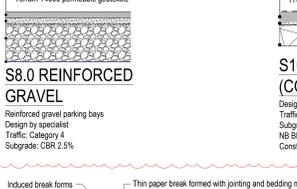
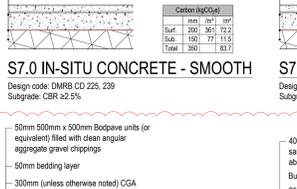
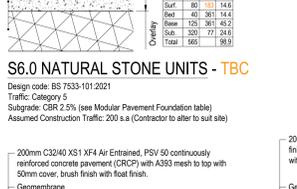
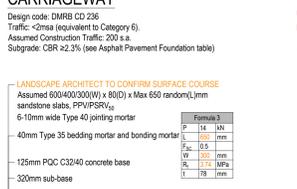
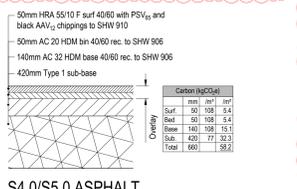
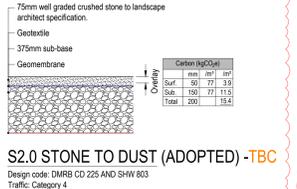
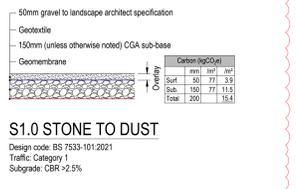
- Capping to SHW 613 Sub-formation and Capping
- Sub-base to SHW 603 (Type 1), 604 (Type 2) for traffic categories 4 and below, 606 (Category B) or 607 (Type 4) unless specified. Type 1 is most common.
- CA (Coarse Graded Aggregate) to be Coarse Aggregate 4-6mm or 4-20mm to BS 7533-13:2009, or Type 3 to SHW 605, unless specified.
- AC, HRA, PA and SMA (bituminous bound materials) to SHW 900.
- PGC (Pavement Quality Concrete) to BS EN 13877-1:2013
- Naturally occurring sand to BS 7533-10:2021 Clause 5.3.1 and 5.3.2
- Free-flowing silica aggregate to BS 7533-10:2021 Clause 5.5.1 and 5.5.2
- Concrete blocks to BS 7533-10:2021 Clause 5.7.1
- Concrete kerbs to BS 7533-10:2021 Clause 5.8.1
- 2/6.3mm aggregate bedding and jointing material for (PCBP) permeable concrete block paving to BS 7533-13:2009 Clause 6.7 and Annex A.2.
- Geotextiles for filtration and separation to be non-woven, high eversion type. See Drainage Specification.
- Membranes for lining to suit performance criteria in Drainage Specification.

Embodied Carbon

- Embodied carbon values are to the (Sintec) 'A Brief Guide to Calculating Embodied Carbon' V2.0 (2022), including upfront emissions (modules A1-5 only).
- Values are expressed in kgCO₂e/m² or kgCO₂e/m³ (kilograms of carbon dioxide equivalent emissions per square metre of surface area or per metre length).
- Values shown in orange are assumed and should be confirmed by the supplier.
- Carbon table columns are as follows:
 - surface types: Abbreviated layer name, layer thickness (mm), Carbon emissions by material volume (kgCO₂e/m³), Carbon emissions by plan area (kgCO₂e/m²).
 - linear elements: Abbreviated component name, component cross section area (m²), Carbon emissions by material volume (kgCO₂e/m³), Carbon emissions by length (kgCO₂e/m).
- The values can be multiplied by surface area or element length to calculate the total embodied carbon for that element.

This design is based on:

- MIL-CUR-00-DR-C-5201, 5202, & 5203 Drainage Strategy Layout
- MIL-LYR-XX-ZZ-DR-L-1200 - General Arrangement Series (Revised 27th Jan)
- Information required:
 - Landscape Architect to confirm surface finishes/provide product data sheets
 - Site Wide - Ground stabilisation design note.
 - Specialist 'Geogrid' ground reinforcement system (designed by others) to be incorporated below build ups in at risk areas. Refer to Mining Risk Mitigation strategy to identify extent of affected areas.



CBR	Sub-base + Sub-base only (mm)		Sub-base only (mm)	
	200	150	200	150
$C_{2.5}$	250	430	400	400
C_{3}	250	380	350	350
C_{4}	250	340	310	310
C_{5}	250	300	270	270
C_{6}	180	240	200	200
C_{7}	150	200	160	160
C_{8}	150	180	150	150
C_{9}	150	160	150	150

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C_{5}	250	300	270	270
C_{6}	180	240	200	200
C_{7}	150	200	160	160
C_{8}	150	180	150	150
C_{9}	150	160	150	150

DESIGN STAGE RIBA 4 OUTPUT
Further design coordination required pending topographical survey and the resultant landscape architect layout.

Curtins
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kenda@curtins.com
www.curtins.com

SUITABLE FOR INFORMATION **S2**

STORY **Cumberland Council**

MILLOM - IRON LINE

CONSTRUCTION DETAILS VISITOR CENTRE & ACCESS ROAD

Drawn By: CC, Designed By: GW, Checked By: GW

081617 Date: JUN 25, 2024, Scale: AS SHOWN, Project No: Originator - Function - Spatial - Form - Discipline - Number, Revision: MIL-CUR-00-XX-DR-C-9902, P03