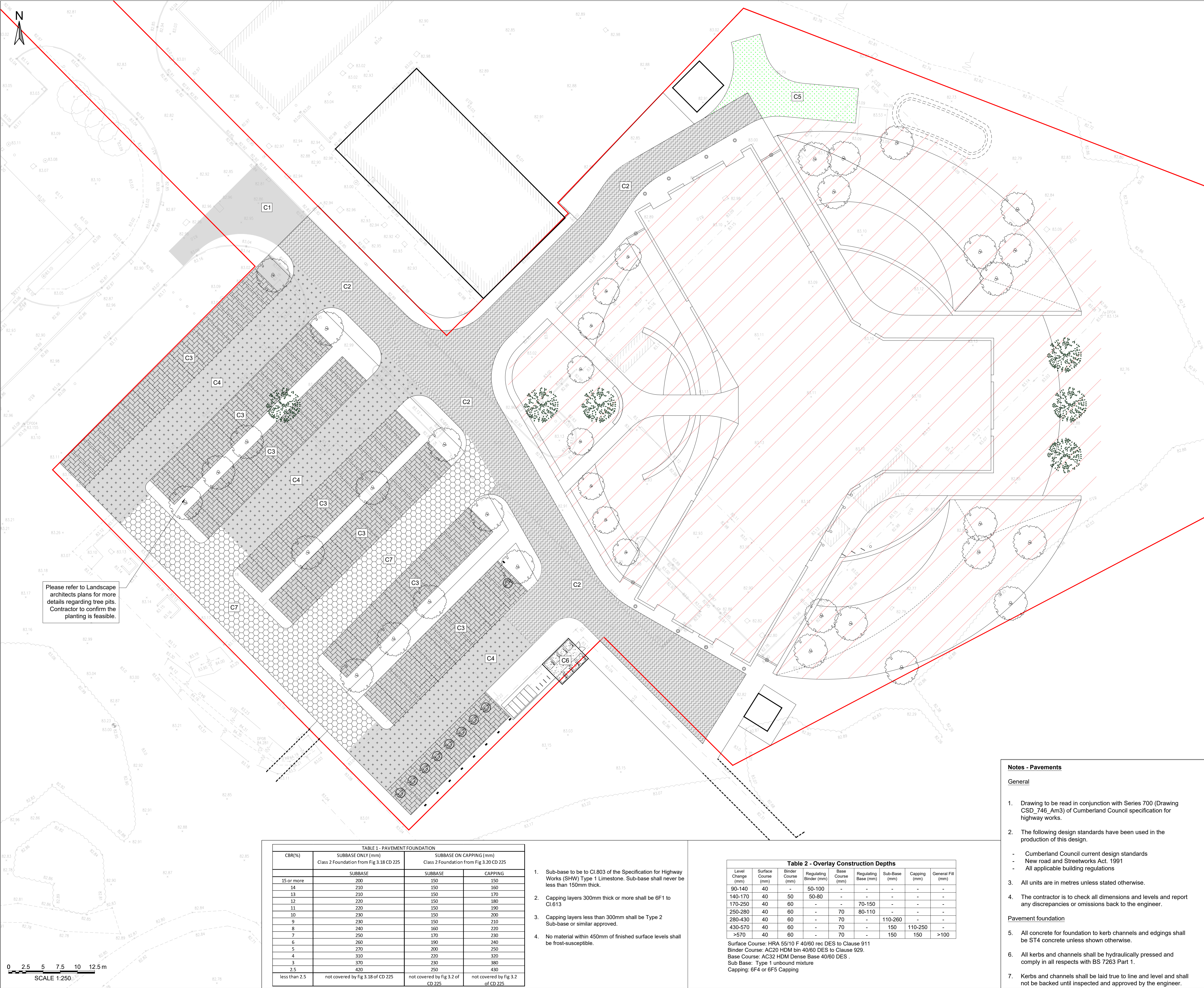




Key

C1

Access Road- Resurfacing
Plane out 90mm of existing carriageway and regulate with binder course to achieve proposed levels then re-surface with:
Surface Course: 40mm HRA 55/10F 40/60 rec DES to Clause 911
Binder Regulating 50-70mm AC20 HDM bin 40/60 DES to Clause 929.

C2

Access Roads- Full Construction
Surface Course: 40mm HRA 55/10 F 40/60 rec DES to Clause 911
Binder Course: 60mm AC20 HDM bin 40/60 DES to Clause 929.
Base Course: 120mm AC32 HDM Dense Base 40/60 DES .
Sub-base: 150mm Type 1 unbound mixture
Capping: 160mm Granular Type 6f4 or 6f5 capping based CBR levels of 14% which was minimum achieved in this area during site investigations. Contractor to confirm exact CBR levels on site.

C3

Car Park Bay Construction- Permeable Paving
Laying Course: 80mm block paving laid in Herringbone pattern. Please refer to landscape architects plan for Colour: 2-6mm grit brushed into joints.
Blocks to be laid on 50mm aggregate in accordance with BS 7533-13:2009 Table A.2
Permeable geotextile membrane separation layer is implemented as per standard detail drawings.
Sub-base: 380mm Type 3 coarse aggregate 4/20 to BS7533-13:2009 as specified in Table 5.
Impermeable Membrane sits at the bottom of Sub-base.
Capping: 150mm Granular Type 6f4 Capping
Sub-base and capping layers determined using Table 8 BS 7533-13:2009 based on 1 in 100 yr event plus 20% climate change.
Based on CBR levels of 8% which was minimum achieved in this area during site investigations. Contractor to confirm exact CBR levels on site.

C4

Car Park Road Full Construction
Surface Course: 40mm HRA 55/10 F 40/60 rec DES to Clause 911
Binder Course: 60mm AC20 HDM bin 40/60 DES to Clause 929.
Base Course: 70mm AC32 HDM Dense Base 40/60 DES
Sub-base: 160mm Type 1 unbound mixture
Capping: 220mm Granular Type 6f4 or 6f5 capping based on CBR levels of 8% which was minimum achieved in this area during site investigations. Contractor to confirm exact CBR levels on site.

C5

Marshalls Grassguard or similar approved.
Paving units: To be laid in a bonded pattern to increase resistance. The bond should be perpendicular to the main flow of vehicles.
Bedding/regulating layer: 20mm blinding sand to ensure the units are adequately bedded and evenly
Subbase: 210mm Type 1 containing 20% humus type material to support root development and maintain grass growth

C6

Concrete Slab- Bin Store
200mm Thick Pav1 Concrete slab paving
Subbase: 150mm Type 1unbound mixture separated by Geogrid or similar type membrane
Capping: 150mm Granular Type 6f2 Capping

C7

Overlay Existing Hard Surface
Clean existing hard surface.
Apply tack coat where surface is being immediatly overlaid with Bituminous materials
Overlay with construction based on change in level, Refer to Table 2.

Refer to hub design for more details

Red line boundary

FOR APPROVAL

P03	RIBA STAGE 4 - ISSUE FOR STAGE APPROVAL	20.09.2024	LJB	MB	LB
P02	MS AND RSA COMMENTS INCORPORATED	28.07.2023	LJB	MB	LB
P01	PRELIMINARY FIRST ISSUE	16.06.2023	LJB	MB	LB
Rev.	Description	Date	Drawn	Checked	App.

Notes - Pavements

General

- Drawing to be read in conjunction with Series 700 (Drawing CSD_746_Am3) of Cumberland Council specification for highway works.
- The following design standards have been used in the production of this design.
 - Cumberland Council current design standards
 - New road and Streetworks Act. 1991
 - All applicable building regulations
- All units are in metres unless stated otherwise.

Pavement foundation

- All concrete for foundation to kerb channels and edgings shall be ST4 concrete unless shown otherwise.
- All kerbs and channels shall be hydraulically pressed and comply in all respects with BS 7263 Part 1.
- Kerbs and channels shall be laid true to line and level and shall not be backed until inspected and approved by the engineer.

Issuing Office
Tetra Tech Manchester

2nd Floor,
11 York Street,
Manchester, M2 2AW
Tel: +44 (0)161 872 3223
www.tetratetecheurope.com



CUMBERLAND COUNCIL

Project Name
CLEATOR MOOR INNOVATION QUARTER (CMIQ) HUB

Sheet Title
STAGE 4 PAVEMENTS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B034942	LJB	May'23	MB	May'23	LB	May'23	1:250	S4

Client Project Number	Originator	Volume/System Level/Location	Type/Code	Role	Number	Revision
CMIQ	- TTE	- HUB	- ZZ	- DR	- H	- 0700

© Copyright Tetra Tech

TTE_MT_01

TABLE 1 - PAVEMENT FOUNDATION			
CBR(%)	SUBBASE ONLY (mm)		SUBBASE ON CAPPING (mm)
	Class 2 Foundation from Fig 3.18 CD 225		Class 2 Foundation from Fig 3.20 CD 225
	SUBBASE	SUBBASE	CAPPING
15 or more	200	150	150
14	210	150	160
13	210	150	170
12	220	150	180
11	220	150	190
10	230	150	200
9	230	150	210
8	240	160	220
7	250	170	230
6	260	190	240
5	270	200	250
4	310	220	320
3	370	230	380
2.5	420	250	430
less than 2.5	not covered by fig 3.18 of CD 225	not covered by fig 3.2 of CD 225	not covered by fig 3.2 of CD 225

- Sub-base to be to Cl.803 of the Specification for Highway Works (SHW) Type 1 Limestone. Sub-base shall never be less than 150mm thick.
- Capping layers 300mm thick or more shall be 6F1 to Cl.613
- Capping layers less than 300mm shall be Type 2 Sub-base or similar approved.
- No material within 450mm of finished surface levels shall be frost-susceptible.

Table 2 - Overlay Construction Depths								
Level Change (mm)	Surface Course (mm)	Binder Course (mm)	Regulating Binder (mm)	Base Course (mm)	Regulating Base (mm)	Sub-Base (mm)	Capping (mm)	General Fill (mm)
90-140	40	-	50-100	-	-	-	-	-
140-170	40	50	-	-	-	-	-	-
170-250	40	60	-	-	70-150	-	-	-
250-280	40	60	-	70	-	-	-	-
280-430	40	60	-	70	80-110	110-260	-	-
430-570	40	60	-	70	-	150	110-250	-
>570	40	60	-	70	-	150	150	>100

Surface Course: HRA 55/10 F 40/60 rec DES to Clause 911
Binder Course: AC20 HDM bin 40/60 DES to Clause 929.
Base Course: AC32 HDM Dense Base 40/60 DES .
Sub Base: Type 1 unbound mixture
Capping: 6F4 or 6F5 Capping