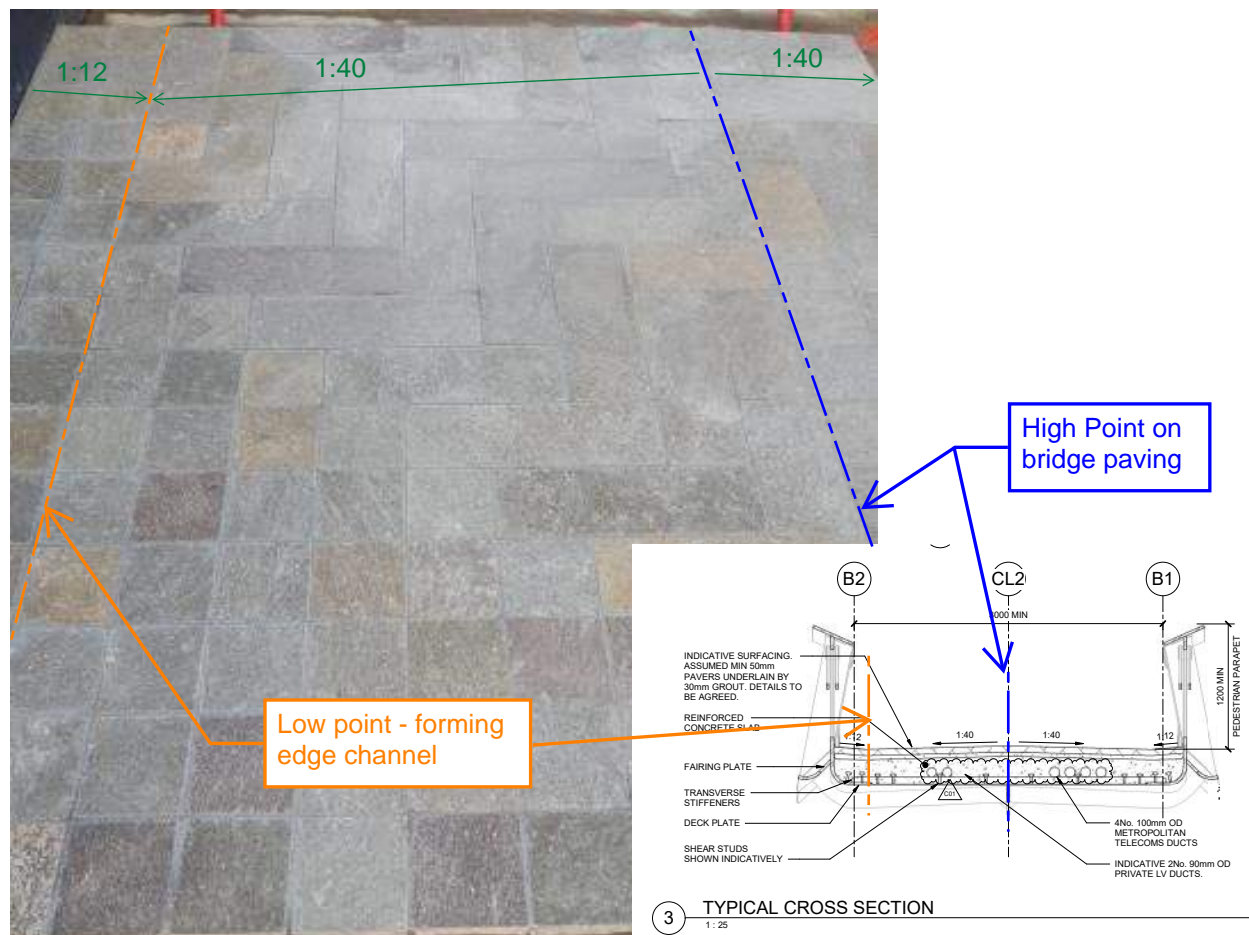


Kings Cross Bridge 2 – GDR 594		
Document Ref. & Rev.	Package Description	Company Name
KXC-GDR-BR2-XX-SA-W-0007	Hard Landscaping	Maylim
Sample / Benchmark / Mock Up: <i>Delete as appropriate</i>		Paving to bridge
Date of Issue:	19 th March 2021	

Date of Request:	NA	Date/Time of Inspection to be undertaken:	TBC
Specification Section & Clause:	As ALD drawing - KXC-ALD-BR2-XX-DR-LA-90203-revP02-Bridge-detail plan		
Area / Location:	Galldris site office		
Detailed description of area / item / equipment:	Proposed paving finishes – Porphyry Granite		

Actual date of Inspection: TBC

Photographs:







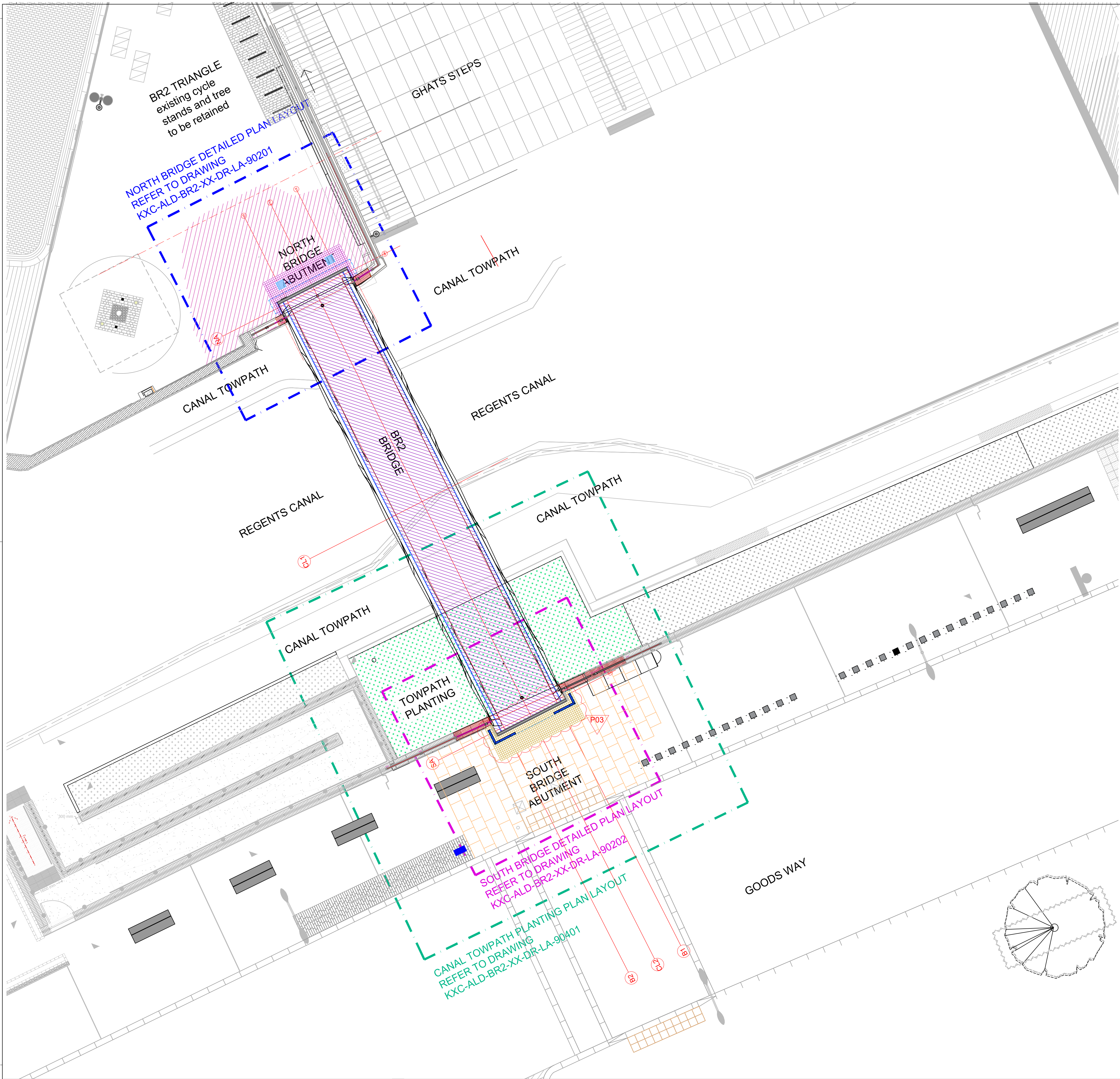
Comments:

Further action required: Yes / No

If yes, by what date?

QUALITY CONTROL			
Consultant / Contractor Acceptance			
Galldris	Signature: <i>Ross Thompson</i>	Moxon/Argent	Signature:
	Print Name: Ross Thompson		Print Name:
	Position: Pre Construction Manager		Position:
	Date: 19 March 2021		Date:
ALD	Signature:	LBC	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:

Alternatively record of approval can be through Asite.



KEY

-
- BRIDGE DECK: PORPHYRY PAVING
Various sizes, refer to drawing
KXC-ALD-BR2-XX-DR-LA-90203 for paving
pattern
-
- NORTH ABUTMENT: REPLACED AREA OF
RIVEN PORPHYRY PAVING
200mm wide x 400-600mm lengths x 70mm
thick to tie in with existing
-
- NORTH ABUTMENT: PORPHYRY SETTS
94mm wide x 94mm lengths x 50mm setts
thick, colour to match existing Porphyry
paving
-
- SOUTH ABUTMENT: REPLACED AREA OF
SCOUTMOOR SANDSTONE
600mm - 900mm length x 600mm width x 50mm
depth Scoutmoor Sandstone paving, Diamond
Wire Cut
-
- SOUTH ABUTMENT: SANDSTONE SETTS
94mm wide x 94mm lengths x 50mm setts
thick, colour to match existing sandstone
paving
-
- SOUTH ABUTMENT: TACTILE PAVING
400mm W x 400mm L x 50mm D, 6mm mortar
joints. Tactile blister paving with milled blisters.
Crossland Hill Sandstone by Marshalls or equal
and approved. To both sides of Goods Way
-
- CENTRAL BOLLARD
101mm diameter demountable sloped top
bollard by
-
- CANAL TOWPATH PLANTING
to be replaced due to ARUP drainage works,
refer to drawing
KXC-ALD-BR2-XX-DR-LA-90401
-
- BR2 BRIDGE STRUCTURE
as per ARUP drawings
-
- EXISTING FEATURES TO BE RETAINED
shown in grey

NOTE:

- DRAWING PRODUCED TO SHOW CONTENT, PAVING MATERIALS AND EXTENT OF WORKS ONLY;
- PROPOSED LEVELS, DRAINAGE, DETAILS AND DETAILS AT BRIDGE LANDING POINTS NOT SHOWN ON THIS DRAWING, REFER TO DETAILED PLAN LAYOUTS OF EACH BRIDGE ABUTMENT, DRAWINGS: KXC-ALD-BR2-XX-DR-LA-90201 - Northern end KXC-ALD-BR2-XX-DR-LA-90202 - Southern end KXC-ALD-BR2-XX-DR-LA-90203 - Bridge deck

All dimensions to be verified on site. Figured dimensions to take precedent to those scaled. Any areas indicated on this drawing are for guidance only, no responsibility is taken for their accuracy.

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CDM/H&S:

The works illustrated on this drawing have been reviewed against the Design CDM Risk Register and significant risks are noted as:

Construction:

- Handling heavy materials
- Working at height / risk of falls
- Working adjacent to canal

Maintenance:

- Working adjacent to canal

Demolition:

NOTES / KEY:

REFERENCE DRAWINGS / DOCUMENTS

NO.	DESCRIPTION	DATE
KXC-ALD-BR2-XX-L-DR-90202	HARD LANDSCAPE BRIDGE DECK PAVING DETAILED PLAN LAYOUT	
KXC-ALD-BR2-XX-L-DR-90202	HARD LANDSCAPE SOUTHERN BRIDGE END DETAILED PLAN LAYOUT	
KXC-ALD-BR2-XX-L-DR-90201	HARD LANDSCAPE NORTHERN BRIDGE END DETAILED PLAN LAYOUT	

REVISIONS

NO.	REASON FOR ISSUE	DRN	CHKD	DATE
P03	Southern abutment drainage amended	CW	KmJ	03/03/21
P02	Issue for review / comment	CW	KmJ	13/01/21
P01	First issue for review / comment	MCY	KmJ	24/06/20

CLIENTS:

Galldris Service Limited
Galldris House, Pavilion Business Centre, Kinetic Crescent
Innova Science Park
Enfield EN3 7FJ
www.galldris.co.uk

LANDSCAPE ARCHITECT:

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Barns, Chesterton, Nr. Bicester,
Oxfordshire OX26 1TD
Tel: 01869 249776
Fax: 01869 327513
Email: mail@appliedlandscape.co.uk

PROJECT TITLE:

BRIDGE BR2
KINGS CROSS

DRAWING TITLE:

GENERAL ARRANGEMENT

drawn:	checked:	scale:	date:
CW	KmJ	1:100 @ A1	24/06/2020

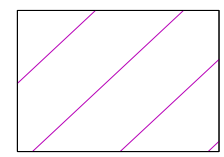
xref file ref:
ALD861_MPbase

status:	revision:
Review / Comment	P03

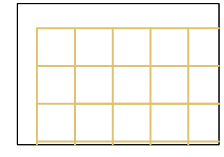
DRAWING NUMBER:
KXC-ALD-BR2-XX-DR-LA-90001

ORIGINAL A1 SIZE SHEET

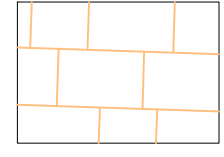
KEY



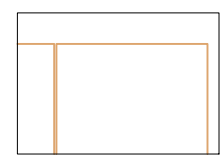
BRIDGE PAVING: PORPHYRY UNITS
Various sizes, refer to drawing
KXC-ALD-BR2-XX-DR-LA-90203 for pattern
& KXC-ALD-BR2-XX-DR-LA-90723 for detail



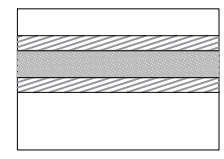
BRIDGE LANDING ZONE: SANDSTONE SETTS
94mm x 94mm x 50mm thick sandstone setts with
8mm joint to match existing. Refer to drawing
KXC-ALD-BR2-XX-DR-LA-90722



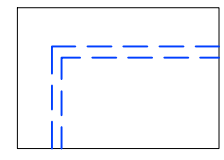
REPLACED AREA OF SANDSTONE
600mm - 900mm length x 600mm width x 50mm
depth Scoutmoor Sandstone paving. Diamond
Wire Cut by Marshalls or equal and approved.
6mm mortar joints. Refer to drawing
KXC-ALD-BR2-XX-DR-LA-90722



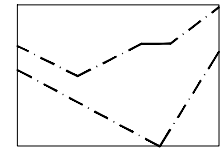
TACTILE PAVING: *To uncontrolled crossings*
400mm W x 400mm L x 50mm D, 6mm mortar
joints. Tactile blister paving with milled blisters.
Crossland Hill Sandstone by Marshalls or equal
and approved. To both sides of Goods Way
Refer to KXC-ALD-BR2-XX-DR-LA-90224 for
details



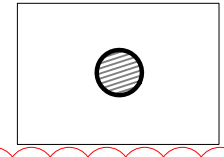
MOVEMENT JOINT
Drawing Shows 150mm wide movement
joint to ARUP details and specifications



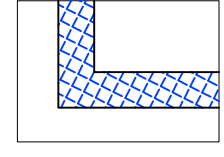
BRIDGE STRUCTURE
30 / 35mm wide bridge bath tub metal edge,
indicative only to ARUP details and specification



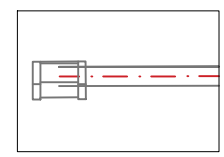
PROPOSED CONTOUR LINES



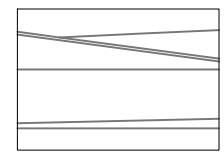
CENTRAL BOLLARD
Kent stainless sloped bollard 101mm
diameter, 900mm above ground
Refer to KXC-ALD-BR2-XX-DR-LA-90741



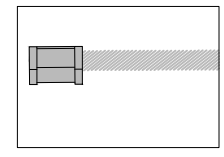
DRAINAGE GULLY
Bespoke 94mm wide drainage channel with
stainless steel heelsafe grating by Kent
Stainless or equal and approved.



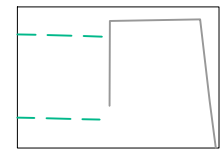
EXISTING BALUSTRADE
Mild steel balustrade mid-post and panels to
be retained.



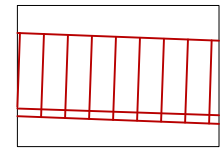
BR2 BRIDGE & BALUSTRADE STRUCTURE
To architects / engineers details and
specification



NEW BALUSTRADE TO MATCH EXISTING
Mild steel balustrade mid-post and panels.



EXISTING UPSTAND BRICKWORK
Brick-on-edge coping, upstand 130mm min.
brick colour.
And the Brickwork to be removed for bridge
connection.



NEW UPSTAND BRICKWORK COPING
Brick-on-edge coping coping to match the
existing.

NOTE:
EXTENT OF SANDSTONE PAVING CONTINUES
FOR 2 FULL ROWS - REFER TO
KXC-ALD-BR2-XX-DR-LA-90001 FOR EXTENT

EXISTING WALL
at paving level to be demolished and
rebuilt to proposed levels

SANDSTONE SETTS (OVERSIZED)
Oversized sanstone setts cut on site to suit
movement joint and avoid paving slithers.
94mm width x 200mm length x 50mm. False
joints to surface continue paving pattern

BRIDGE STRUCTURE:
to ARUP drawings

METAL EDGE TO BRIDGE (HIDDEN)
To engineers details and specification

MOVEMENT JOINT:
Shown indicatively only - 150mm wide in total to
engineers details and specifications
NOTE: Movement joint to follow falls of bridge

BOLLARD
by Kent stainless, sloped top 101mm diameter
demountable bollard, 900mm height above ground.
Refer to drawing KXC-ALD-BR2-XX-DR-LA-90741
for details

**CONCRETE ABUTMENT SHOWN BELOW
TO ARUP DETAILS AND SPECIFICATION**
NOTE:
PAVING ON BRIDGE NOT SHOWN FOR
CLARITY. FOR PAVING LAYOUT REFER TO
DRAWING KXC-ALD-BR2-XX-DR-LA-90203

DRAINAGE CHANNEL
BESPOKE 94mm wide DRAINAGE CHANNEL WITH
STAINLESS STEEL HEELSFAE GRATING BY KENT
STAINLESS. CHANNEL GRILLE LAID TO FALLS TO
SUIT BRIDGE FALLS

SANDSTONE SETTS
94mm x 94mm x 50mm sandstone setts to allow
for changes in level with 6mm joint. Refer to
KXC-ALD-BR2-XX-DR-LA-90722 for details

NOTE:

- LEVELS TO TIE IN TO EXISTING
- AREA OF PAVING TO BE LIFTED TO BE REVIEWED ON SITE -
PAVING JOINT LINES SHOWN FOR EXISTING PAVING UNITS ARE
INDICATIVE ONLY AND NOT ASBUILT
- FOR PROPOSED ACCESS COVER LAYOUTS, REFER TO
DRAWING KXC-ALD-BR2-XX-DR-LA-90251
- ALL EXISTING SURFACE FINISHES TO BE RETAINED ARE
SHOWN IN GREY

FOR CANAL TOWPATH PLANTING, REFER TO
DRAWING KXC-ALD-BR2-XX-DR-LA-90401

APPROX. EXTENT OF PAVING TO BE
LIFTED AND RELAID TO PROPOSED
LEVELS

EXISTING BIKES
To be retained

PROPOSED TACTILE PAVING
400mm x 400mm to be installed to both
sides of Goods Way

EXISTING COVER
RETAINED

EXISTING SURFACE FINISHES AND
CYCLE STANDS TO BE RETAINED

All dimensions to be verified on site. Figured dimensions to take precedent to those scaled. Any areas
indicated on this drawing are for guidance only, no responsibility is taken for their accuracy.

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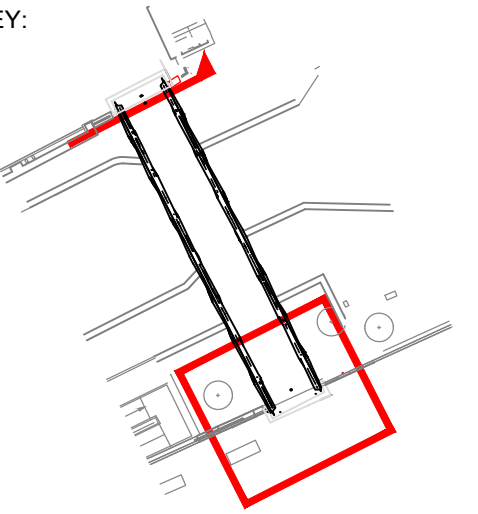
CDMH&S:

The works illustrated on this drawing have been reviewed against the Design CDM Risk Register and
significant risks are noted as:

Construction:
• Handling heavy materials
• Working at height / risks of falls
• Working adjacent to canal

Maintenance:
• Working adjacent to canal
Demolition:

NOTES / KEY:



REFERENCE DRAWINGS / DOCUMENTS

KXC-ALD-BR2-XX-DR-LA-90203	HARD LANDSCAPE BRIDGE DECK DETAILED PLAN LAYOUT
KXC-ALD-BR2-XX-DR-LA-90201	HARD LANDSCAPE NORTHERN BRIDGE END DETAILED PLAN LAYOUT
KXC-ALD-BR2-XX-DR-LA-90001	GENERAL ARRANGEMENT

REVISIONS

no.	reason for issue	dm	chkd	date
P06	Drainage gully's replaced with bespoke channel, for approval	CW	KmJ	03/03/21
P05	Amends to levels to suit movement joint, issue for review	CW	KmJ	27/01/21
P04	Bridge updated and movement joint revised	CW	KmJ	13/01/21
P03	Updated bridge layout following revised ARUP drawings	CW	KmJ	28/10/20
P02	For information / design team review / comment	MCY	KmJ	16/09/20
P01	For project workshop	MCY	KmJ	24/06/20

CLIENTS:

Galldris Service Limited
Galldris House, Pavilion Business
Centre, Kinetic Crescent
Innova Science Park
Enfield EN3 7FJ
www.galldris.co.uk

LANDSCAPE ARCHITECT:

ALD
applied landscape design
The Threshing Barn, Bignell Park
Barns, Chesterton, Nr. Bicester,
Oxfordshire OX26 1TD
Tel: 01869 249776
Fax: 01869 327513
Email: mail@appliedlandscape.co.uk

PROJECT TITLE:

**BRIDGE BR2
KINGS CROSS**

DRAWING TITLE:

**HARD LANDSCAPE
SOUTHERN BRIDGE END
DETAILED PLAN LAYOUT**


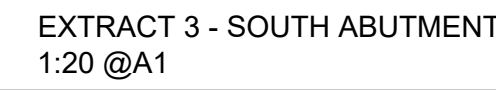
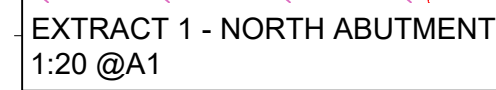
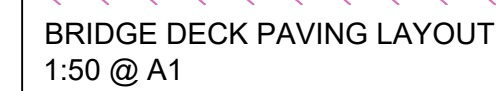
drawn: MCY	checked: KmJ	scale: 1:20 @ A1	date: 24/06/2020
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xref file ref:
ALD861-HLbase.dwg

status: Review / Comment	revision: P06
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DRAWING NUMBER:
KXC-ALD-BR2-XX-DR-LA-90202

ORIGINAL A1 SIZE SHEET



462mm x 150mm x 50mm

REDUCED WIDTH UNITS
Units widths / lengths cut on site to suit bridge

CDM/H&S:

NOTES / KEY:

DRAWING PRODUCED TO SHOW BRIDGE DECK
PAVING ONLY, REFER TO DRAWINGS
KXC-ALD-BR2-XX-DR-LA-90201 & 90202 FOR
NORTH AND SOUTH ABUTMENT DETAILED
PLAN LAYOUTS

REFERENCE DRAWINGS / DOCUMENTS

REVISIONS

P02	South abutment drainage revised	CW	KmJ	03/03/21
P01	For review / comment	CW	KmJ	13/01/21

no.	reason for issue	drn	chkd	date
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CLIENTS:

GALLDRIS

Galldris Service Limited
Galldris House, Pavilion Business
Centre, Kinetix Crescent
Innova Science Park
Enfield EN3 7FJ
www.galldris.co.uk

BRENT CROSS SOUTH LIMITED PARTNERSHIP

LANDSCAPE ARCHITECT:

ALD
applied landscape design

The Threshing Barn, Bignell Park
Barns, Chesterton, Nr. Bicester,
Oxfordshire OX26 1TD

Tel: 01869 249776
Fax: 01869 327513
Email: mail@appliedlandscape.co.uk

PROJECT TITLE:

BRIDGE BR2
KINGS CROSS

DRAWING TITLE:

HARD LANDSCAPE
BRIDGE DECK PAVING
DETAILED PLAN LAYOUT

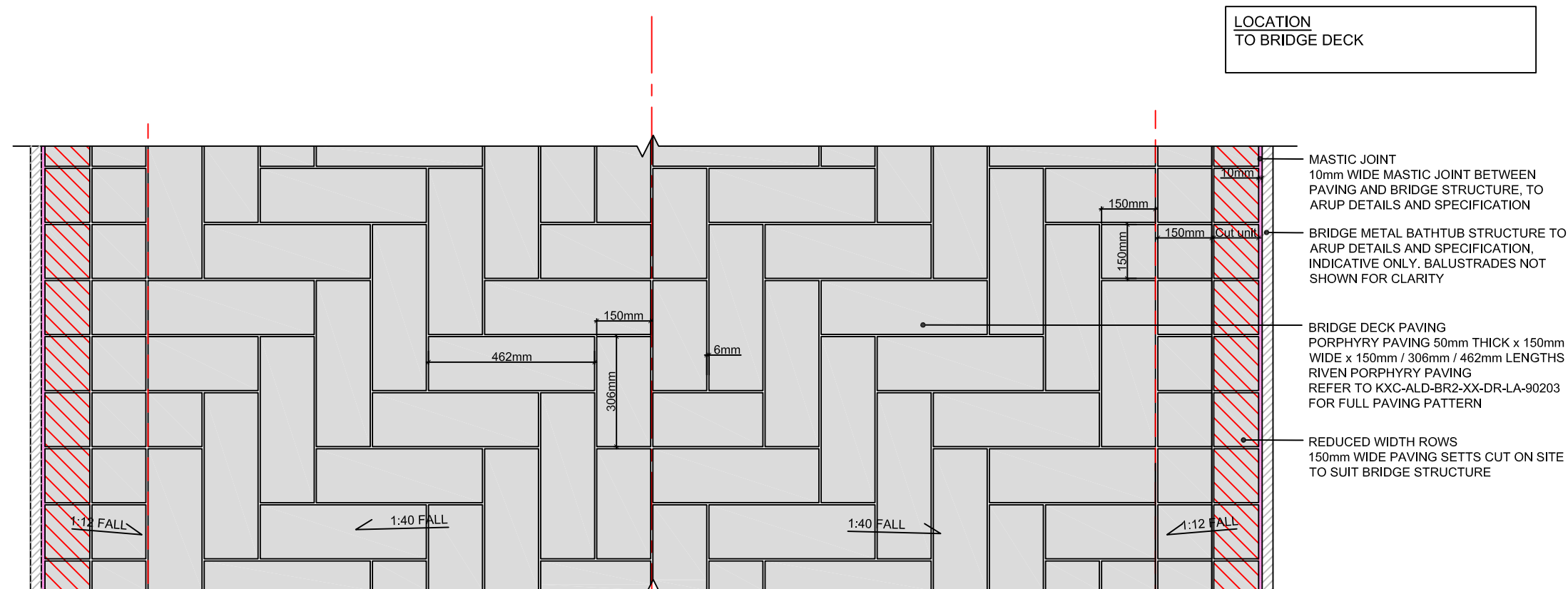
drawn: CW	checked: KmJ	scale: AS @ A1	date: 24/06/2020
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xref file ref:
ALD861-HLbase.dwg

status:	revision:
Review / Comment	P02

DRAWING NUMBER:
KXC-ALD-BR2-XX-DR-LA-90203

ORIGINAL A1 SIZE SHEET



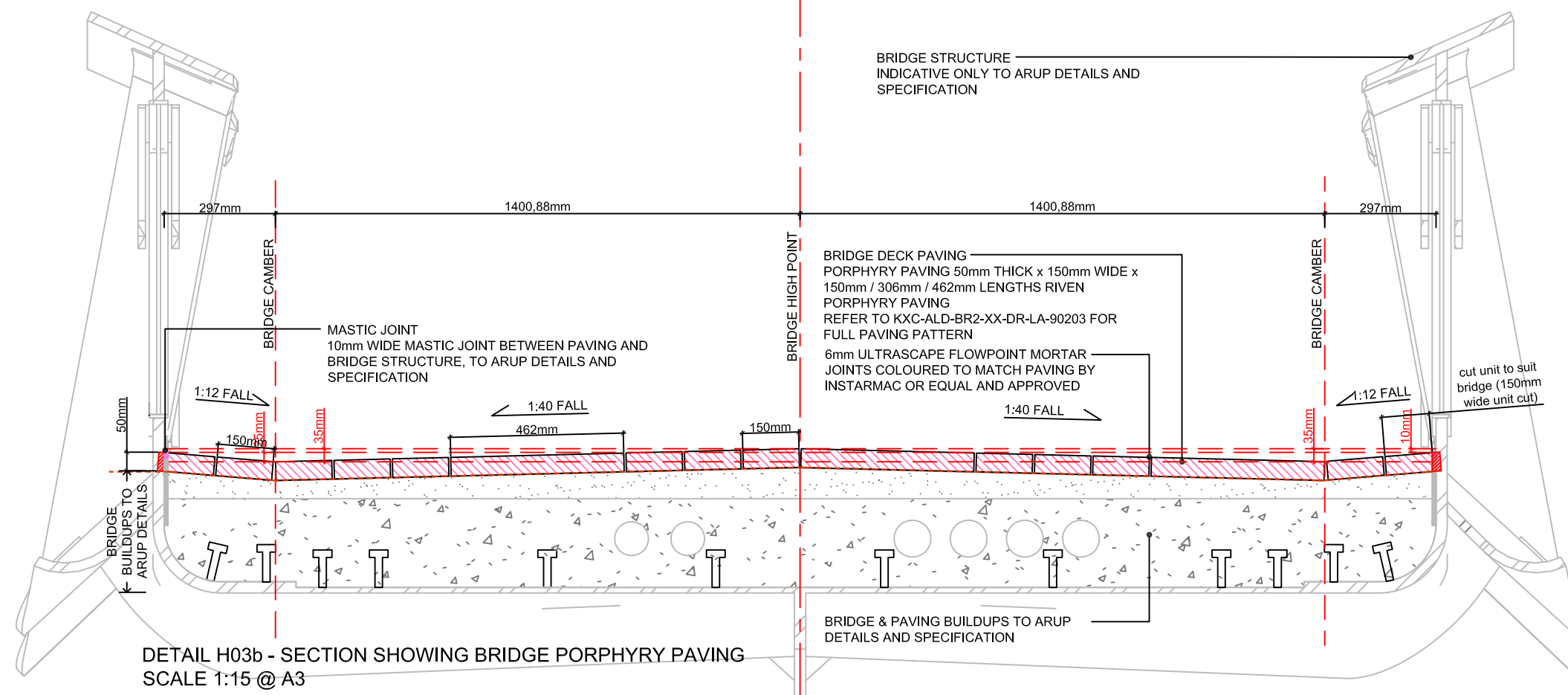
LOCATION
TO BRIDGE DECK

- MASTIC JOINT
10mm WIDE MASTIC JOINT BETWEEN
PAVING AND BRIDGE STRUCTURE, TO
ARUP DETAILS AND SPECIFICATION
- BRIDGE METAL BATHTUB STRUCTURE TO
ARUP DETAILS AND SPECIFICATION,
INDICATIVE ONLY. BALUSTRADES NOT
SHOWN FOR CLARITY

BRIDGE DECK PAVING
PORPHYRY PAVING 50mm THICK x 150mm
WIDE x 150mm / 306mm / 462mm LENGTHS
RIVEN PORPHYRY PAVING
REFER TO KXC-ALD-BR2-XX-DR-LA-90203
FOR FULL PAVING PATTERN

— REDUCED WIDTH ROWS
150mm WIDE PAVING SETTS CUT ON SITE
TO SUIT BRIDGE STRUCTURE

NOTE: PLAN LAYOUT SHOWS TYPICAL PAVING PATTERN
EXTRACT ONLY FOR FULL BRIDGE PAVING PATTERN, REFER TO
DRAWING KXC-ALD-BR2-XX-DR-LA-90203



BRIDGE STRUCTURE —————
INDICATIVE ONLY TO ARUP DETAILS AND
SPECIFICATION

BRIDGE DECK PAVING —————
PORPHYRY PAVING 50mm THICK x 150mm WIDE x
150mm / 306mm / 462mm LENGTHS RIVEN
PORPHYRY PAVING
REFER TO KXC-ALD-BR2-XX-DR-LA-90203 FOR
FULL PAVING PATTERN

6mm ULTRASCAPE FLOWPOINT MORTAR —————
JOINTS COLOURED TO MATCH PAVING BY
INSTARMAC OR EQUAL AND APPROVED

BRIDGE & PAVING BUILDUPS TO ARUP
DETAILS AND SPECIFICATION

cut unit to suit
bridge (150mm
wide unit cut)

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CDM/H&S:

The works illustrated on this drawing have been reviewed against the Design CDM Risk Register and significant risks are noted as:

- Handling heavy materials
- Working at height
- Working adjacent to existing structures and buildings

- Light bulb changing

NOTES / KEY:

REFERENCE DRAWINGS/DOCUMENTS

REVISIONS

P01	First issue for Review / comment 27.01.2021
-----	---

no.	Issued	date
-----	--------	------

CLIENT:



GALLDRIS

LANDSCAPE ARCHITECT:

The Threshing Barn
Bignell Park Barns
Chesterton, Nr. Bicester
Oxfordshire, OX26 1TD

Tel: 01869 249776



PROJECT:

BR2 BRIDGE
KINGS CROSS CENTRAL

DRAWING TITLE:

PAVING DETAILS

BRIDGE DECK PORPHYRY

DETAILED PLAN & SECTION

drawn: CW	scale: 1:15 @ A3
--------------	---------------------

checked: KmJ	status: REVIEW
-----------------	-------------------

date:	xref file ref:
28.04.2019	ALD861 LDbase

DRAWING NUMBER:	REVISION:
KXC-ALD-BR2-XX-DR-LA-90723	P01

ORIGINAL A3 SIZE SHEET

A1

A

B

C

D

E

F

G

H

I

J

K

L

M

N

1

Joints: 6mm ±2mm wide Ultrascapc Flowpoint mortar or similar approved in accordance with BS7533 part 7 annex C para 2.2. Joints to have a maximum 3mm depression on pointing. Joint colour as specified by Landscape Architect.

Surfacing: 50mm block porphyry paving, Class 1. Sizing various lengths (462mm/306mm/150mm) x 150mm wide Installed in accordance with BS 7533 and specialist manufacturers requirements. Pavers are bedded into the Ecobed after applying a liberal coat of pro-primer Slurry Primer to the back of the paver.

Laying course: 50mm Ultrascapc Eco-bed bedding concrete by Instarmac.

Concrete base: Concrete base thickness as per Structural bridge design. Note that utilities are located within the concrete base.

Typical Pavement Type 1 - Bridge
BS 7533-12 Category IV (Pedestrian only)

Not to scale

2

3

4

Joints:8mm ±2mm wide Ultrascapc Flowpoint mortar or similar approved in accordance with BS7533 part 7 annex C para 2.2. Joints to have a maximum 3mm depression on pointing. Joint colour as specified by Landscape Architect.

Surfacing: 50mm deep Porphyry setts, Class 1. Sizing 94mm wide x 94mm long. 8mm joints to match existing. Installed in accordance with BS 7533 and specialist manufacturers requirements. Setts are bedded into the Ecobed after applying a liberal coat of pro-primer Slurry Primer to the back of the paver.

Laying course: 40mm thick Ultrascapc Eco-bed bedding concrete by Instarmac (or equal and approved) to be in accordance with Table 4 of BS 7533-4.

Road base layer: 180mm C32/40 unreinforced concrete base to cl. 1001-1005.

Slip/separation membrane to cl. 1007

Sub-base layer: Refer to Table 2 for compacted depth of imported Type 1 (cl. 803) material or to match the existing pavement build up (whichever is greatest).

Geotextile: GeoTrax TS1000 geotextile fabric beneath the sub-base in accordance with specialist manufacturer specifications. Ensure minimum 500mm overlap.

Subgrade: If CBR is less than 2%, consult the engineer. Formation prepared to cl. 616 and materials to be class 6N/6P To Table 6/1 of SHW.

Typical Pavement Type 3 - Northern section Setts

BS 7533-10 Category II (<60 SA/day)

Not to scale

5

6

8

Joints:6mm Tufftop joint coloured to match paving by Steintec (or equal and approved) to be in accordance with Table C5 of BS 7533-7:2010.Joint colour as specified by Landscape Architect.

Surfacing: 50mm deep York Stone Flags Class 1. Sizing to match existing. 600mm wide x 600-900 long. 6mm joints to match existing. Installed in accordance with BS 7533 and specialist manufacturers requirements.

Laying course: 40mm thick Tuffbed bedding mortar by Steintec (or equal and approved) to be in accordance with Table 4 of BS 7533-4. Setts are bedded into the Tuffbed after applying a liberal coat of Steintec Tuffbond to the back of the paver.

Road base layer: 150mm thick C32/40 concrete base with A393 steel mesh reinforcement located centrally. Top of base slab to be primed with Steintec Tuffbond prior to laying course being applied

Slip/separation membrane to cl. 1007

Sub-base layer: Refer to Table 1 for compacted depth of imported Type 1 (cl. 803) material or to match the existing pavement build up (whichever is greatest).

Geotextile: GeoTrax TS1000 geotextile fabric beneath the sub-base in accordance with specialist manufacturer specifications. Ensure minimum 500mm overlap.

Subgrade: If CBR is less than 2%, consult the engineer. Formation prepared to cl. 616

Typical Pavement Type 5 - Tie in to existing pavement on south side of BR2

BS 7533-12 Category II (<60 SA/day)

Not to scale

9

10

11

Joints: 6mm ±2mm wide Ultrascapc Flowpoint mortar or similar approved in accordance with BS7533 part 7 annex C para 2.2. Joints to have a maximum 3mm depression on pointing. Joint colour as specified by Landscape Architect.

Surfacing: 70mm deep Porphyry paving slabs, Class 1. Sizing to match existing. 200mm wide x 400-600mm long. Installed in accordance with BS 7533 and specialist manufacturers requirements. Pavers are bedded into the Ecobed after applying a liberal coat of pro-primer Slurry Primer to the back of the paver

Laying course: 40mm thick Ultrascapc Eco-bed bedding concrete by Instarmac (or equal and approved) to be in accordance with Table 4 of BS 7533-4

Road base layer: 180mm thick C32/40 concrete base with A393 steel mesh reinforcement located centrally. Top of base slab to be primed with Ultrascapc pro-primer slurry primer by Instarmac priming mortar prior to laying course being applied

Slip/separation membrane to cl. 1007

Sub-base layer: Refer to Table 1 for compacted depth of imported Type 1 (cl. 803) material or to match the existing pavement build up (whichever is greatest).

Geotextile: GeoTrax TS1000 geotextile fabric beneath the sub-base in accordance with specialist manufacturer specifications. Ensure minimum 500mm overlap.

Subgrade: If CBR is less than 2%, consult the engineer. Formation prepared to cl. 616

Typical Pavement Type 2 - Tie in to existing pavement on north side of BR2

BS 7533 -12 Category II (<60 SA/day)

Not to scale

Joints:8mm ±2mm Tufftop joint coloured to match paving by Steintec (or equal and approved) to be in accordance with Table C5 of BS 7533-7:2010. Joints to have a maximum 3mm depression on pointing. Joint colour as specified by Landscape Architect.

Surfacing: 50mm deep Sandstone setts, Class 1. Sizing 94mm wide x 94mm long. 8mm joints to match existing. Installed in accordance with BS 7533 and specialist manufacturers requirements. Setts are bedded into the Tuffbed after applying a liberal coat of Steintec Tuffbond to the back of the paver.

Laying course: 40mm thick Tuffbed bedding mortar by Steintec (or equal and approved) to be in accordance with Table 4 of BS 7533-4

Road base layer: 150mm thick C32/40 concrete base with A393 steel mesh reinforcement located centrally. Top of base slab to be primed with Steintec Tuffbond prior to laying course being applied

Slip/separation membrane to cl. 1007

Sub-base layer: Refer to Table 2 for compacted depth of imported Type 1 (cl. 803) material or to match the existing pavement build up (whichever is greatest).

Geotextile: GeoTrax TS1000 geotextile fabric beneath the sub-base in accordance with specialist manufacturer specifications. Ensure minimum 500mm overlap.

Subgrade: If CBR is less than 2%, consult the engineer. Formation prepared to cl. 616

Typical Pavement Type 4 - Southern section setts

BS 7533-10 Category II (<60 SA/day)

Not to scale

Joints:6mm Tufftop joint coloured to match paving by Steintec (or equal and approved) to be in accordance with Table C5 of BS 7533-7:2010. Joint colour as specified by Landscape Architect.

Surfacing: 400x400x50mm thick Marhall sandstone blister tactile paving to BS EN 1341:2000. Installed in accordance with BS 7533 and specialist manufacturers requirements.

Laying course: 40mm thick Tuffbed bedding mortar by Steintec (or equal and approved) to be in accordance with Table 4 of BS 7533-4. Setts are bedded into the Tuffbed after applying a liberal coat of Steintec Tuffbond to the back of the paver.

Road base layer: 150mm thick C32/40 concrete base with A393 steel mesh reinforcement located centrally. Top of base slab to be primed with Steintec Tuffbond prior to laying course being applied

Slip/separation membrane to cl. 1007

Sub-base layer: Refer to Table 1 for compacted depth of imported Type 1 (cl. 803) material or to match the existing pavement build up (whichever is greatest).

Geotextile: GeoTrax TS1000 geotextile fabric beneath the sub-base in accordance with specialist manufacturer specifications. Ensure minimum 500mm overlap.

Subgrade: If CBR is less than 2%, consult the engineer. Formation prepared to cl. 616

Typical Pavement Type 6 - Tactile pavement (blister) Goodways crossing

BS 7533-12 Category II (<60 SA/day)

Table 1: Sub-base & Capping Depths			
CBR	Combined capping / sub-base		Sub-base only
	Sub-base	Capping	
2.5%*	150mm	450mm	400mm
>2.0-5.0%	150mm	400mm	350mm
>5.0-10.0%	150mm	250mm	220mm
>10.0-15.0%	150mm	180mm	175mm
>15.0%	150mm	-	150mm

Design assumes CBR =>5%
*If CBR is less than 2.5% refer to Engineer
Table B.1 - BS 7533-12:2006

Table 2: Minimum Compacted Sub-base					
Site Category	Design CBR %				
	2%	3%	4%	5%	6%
II	450mm	350mm	250mm	150mm	150mm

Design assumes CBR =>5%
*If CBR is less than 2% refer to Engineer
Table 7 - BS 7533-10:2010

Notes

- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
- All pavement affected by the works is to be re-instated to match existing.
- All works shall be in accordance with the Specification for Highway Works
- Pavement to be coordinated with Landscape Architect's surfacing requirements.
- Paving design in accordance with BS 7533-10 & 7533-12
- Chamber and cover alignment to paving to be coordinated with the Landscape Architect (ALD)
- No frost susceptible material shall be placed within 450mm of the finished surface level.
- The build ups are not suitable for site traffic.
- The dowel bars J02 shall be placed at 300 centres. this spacing shall be varied where necessary so that no dowel bar is within 150 of a slab edge or a joint parallel to the bars.
- Dimension D 150mm to 239mm
- Dimension B = 25mm
- Spacing C = 550mm
- Existing joints to be reinstated, edge of concrete to be sealed to allow cold joint and existing dowels to be cleaned and inspected for re use.

GALLDRIS								
DOCUMENT REVIEW								
Status:								
A	For Client Review							
B	Comments to be incorporated							
B	Minor Comments - For Client Review							
C	Rejected - correct and resubmit within 5 working days							
Checked By:								
Date:								
This review does not change the duties and scope of each company as set out in their respective contracts								

C01	17/03/21	PS	GT	GT
For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

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Client

GALLDRIS

Project Title
Kings Cross Bridge 2
(BR2)

Drawing Title
Proposed Pavement
Typical Details
Sheet 1 of 3

Scale at A1

1:10

Role

Civil

Suitability

A1 - For Construction

Arup Job No

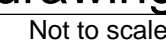
268962-00

Rev

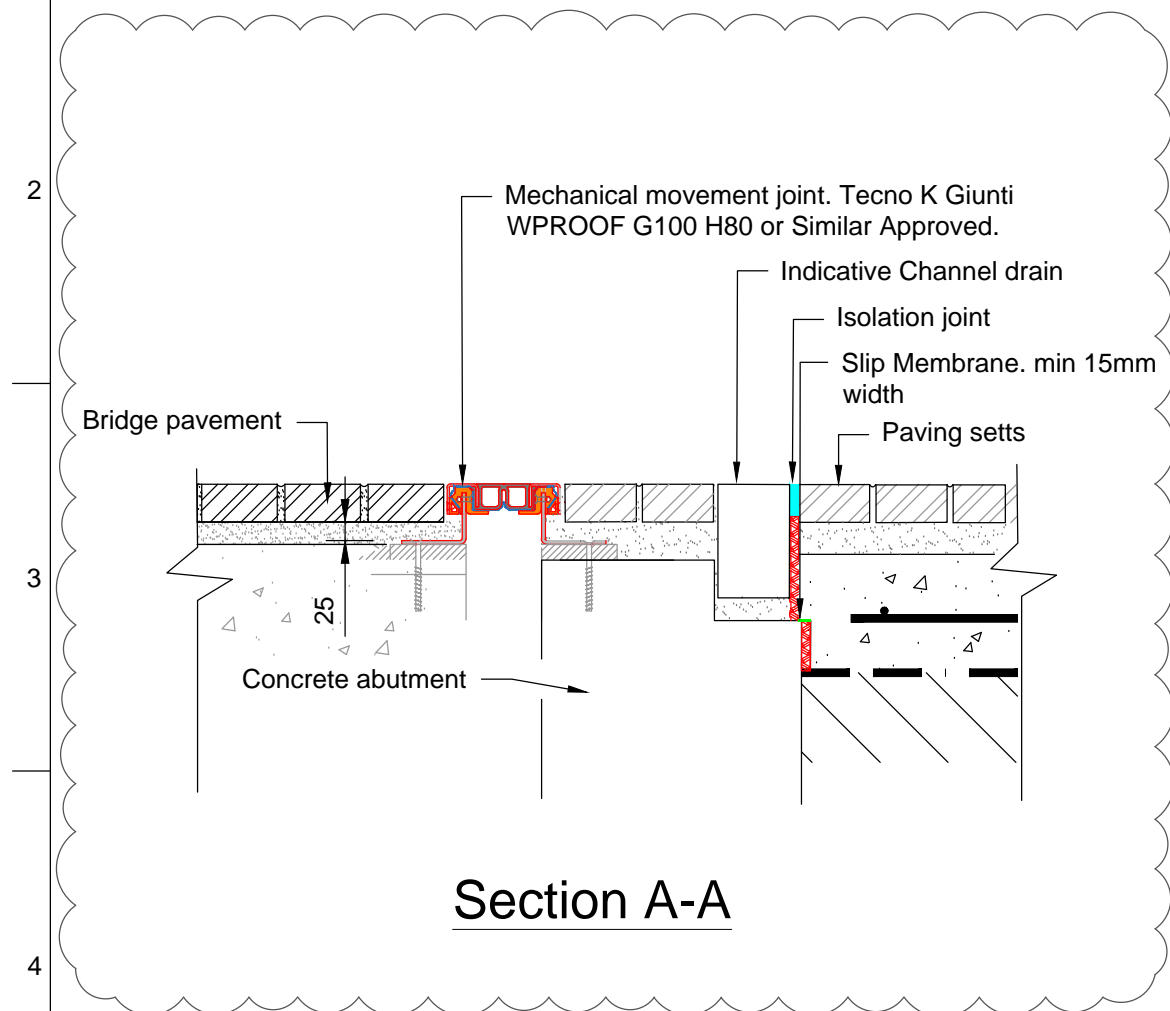
C01

Name

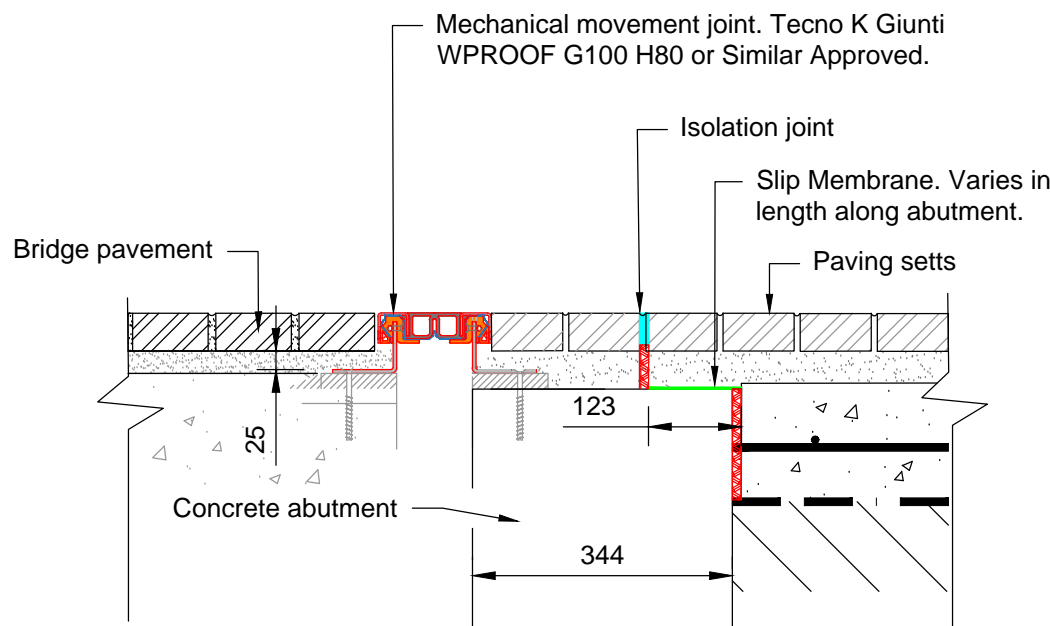
KXC-ARP-BR2-XX-DR-CX-30011



-
- Arup



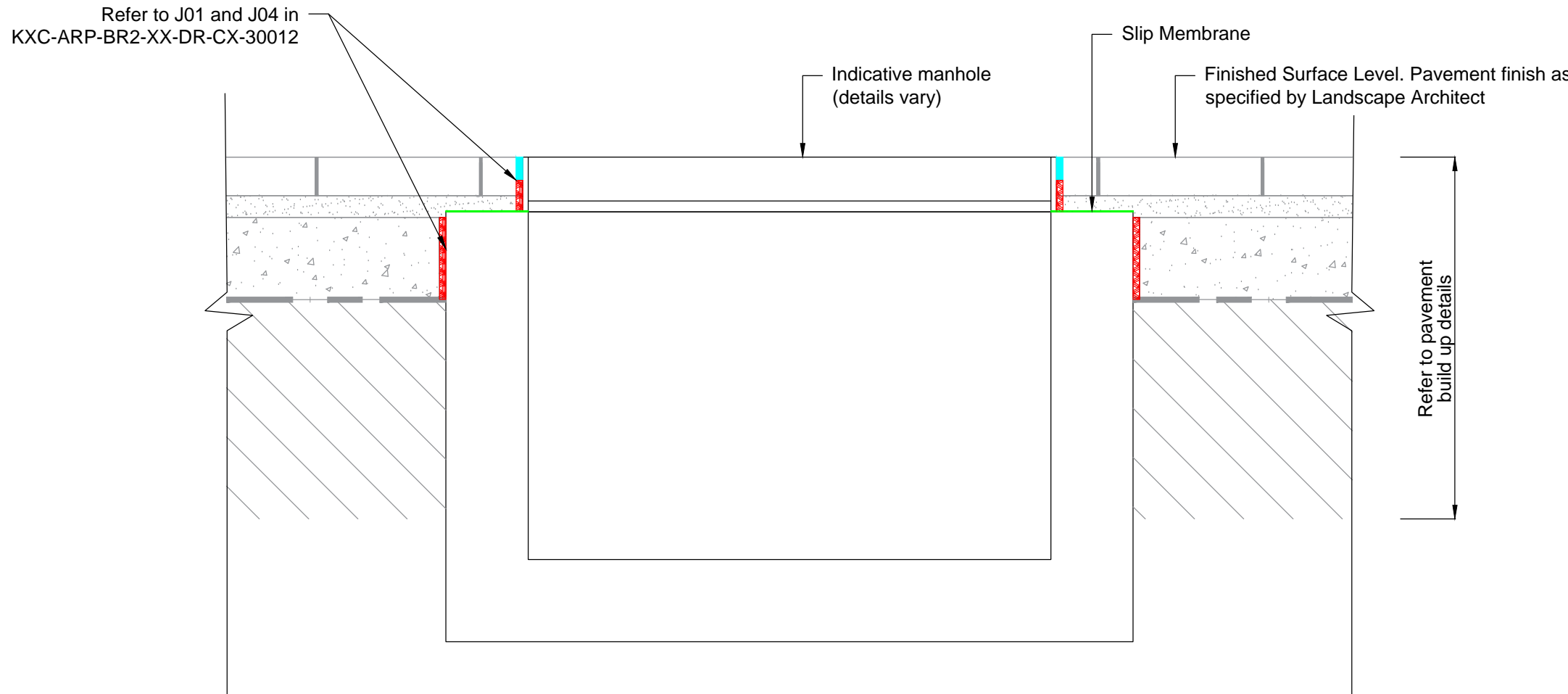
Section A-A



Section B-B

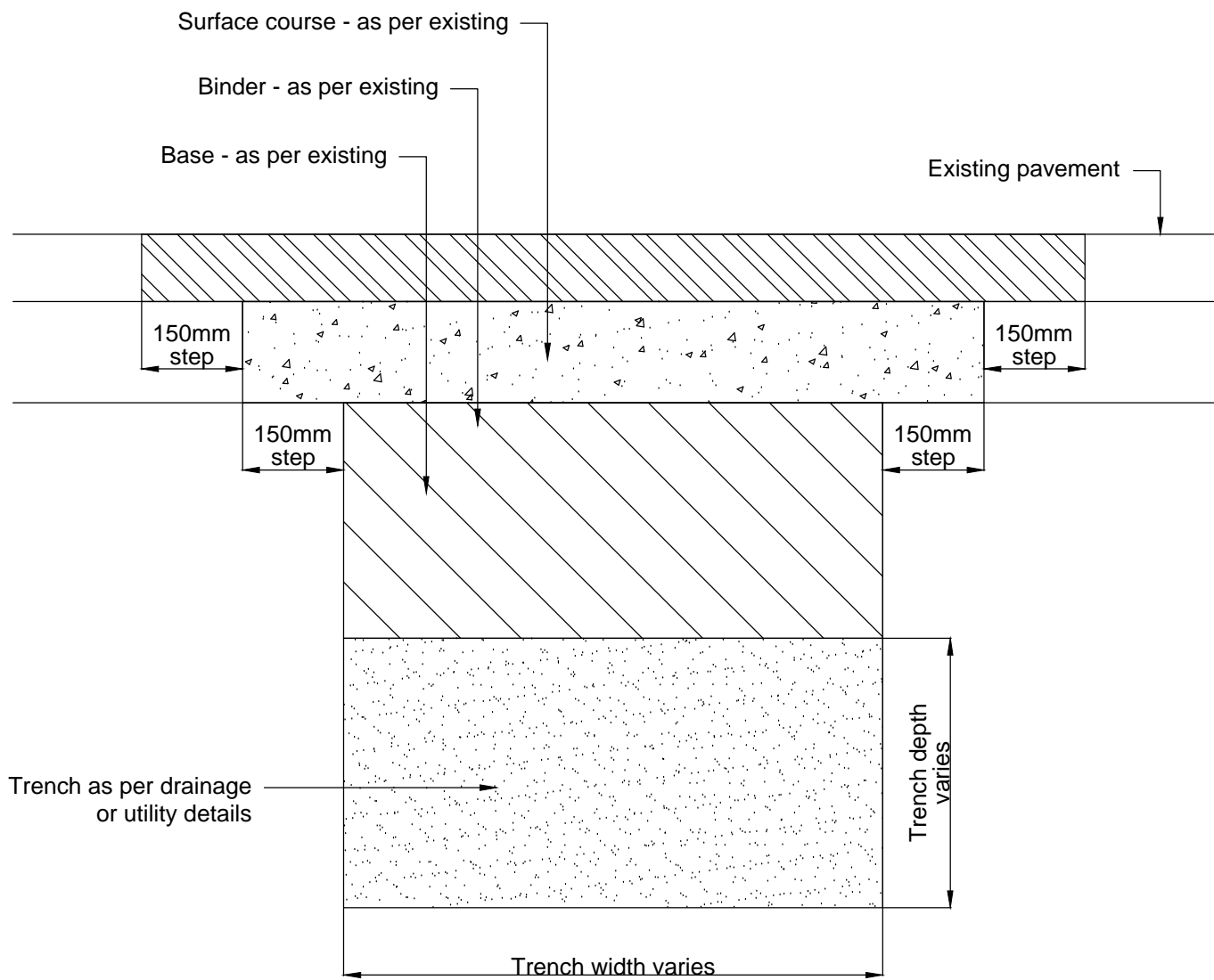
J07 - Pavement and Mechanical Movement Joint Interface

KXC-ARP-BR2-XX-DR-CX-30001
Not to scale



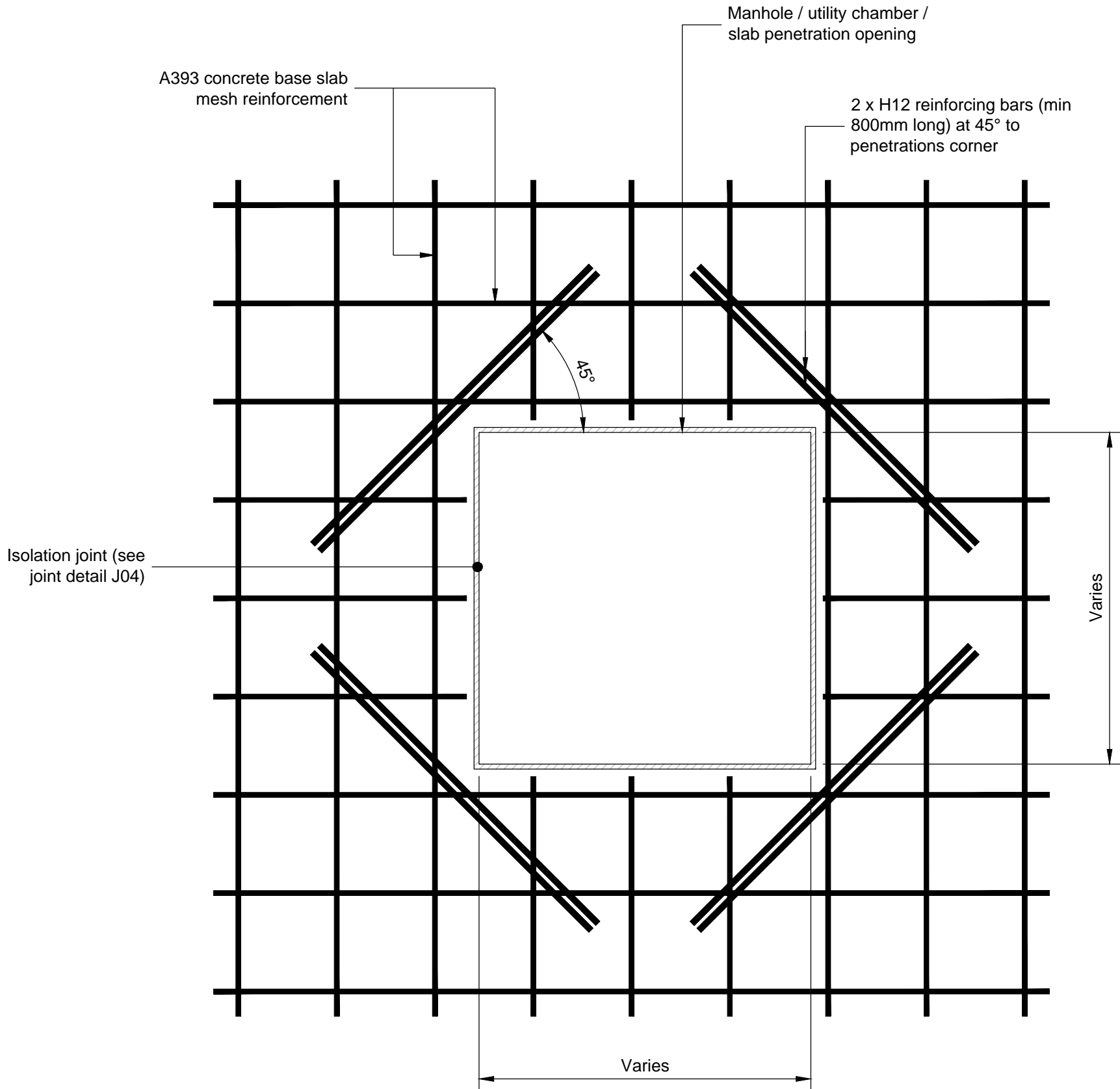
Typical Manhole Penetration Through Concrete Slab

Not to scale



Permanent Carriageway Repair Following Installation of Trench

Not to scale



Plan View

Notes:

- All penetrations / manholes / chambers to align with paving bond / joint orientation wherever practically possible.
- Any chamber covers to be co-ordinated with paving joint locations. Chambers within 150mm of a pavement movement joint to be moved so that edge of the chamber penetration runs along the alignment of the joint.

Notes

- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
- All pavement affected by the works is to be re-instated to match existing.
- All works shall be in accordance with the Specification for Highway Works
- Pavement to be coordinated with Landscape Architect's surfacing requirements.
- Paving design in accordance with BS 7533-10 & 7533-12
- Chamber and cover alignment to paving to be coordinated with the Landscape Architect (ALD)
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- The build ups are not suitable for site traffic.
- The dowel bars J02 shall be placed at 300 centres, this spacing shall be varied where necessary so that no dowel bar is within 150 of a slab edge or a joint parallel to the bars.
- Dimension D 150mm to 239mm
- Dimension B = 25mm
- Spacing C = 550mm
- Existing joints to be reinstated, edge of concrete to be scaled to allow cold joint and existing dowels to be cleaned and inspected for re use.

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For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

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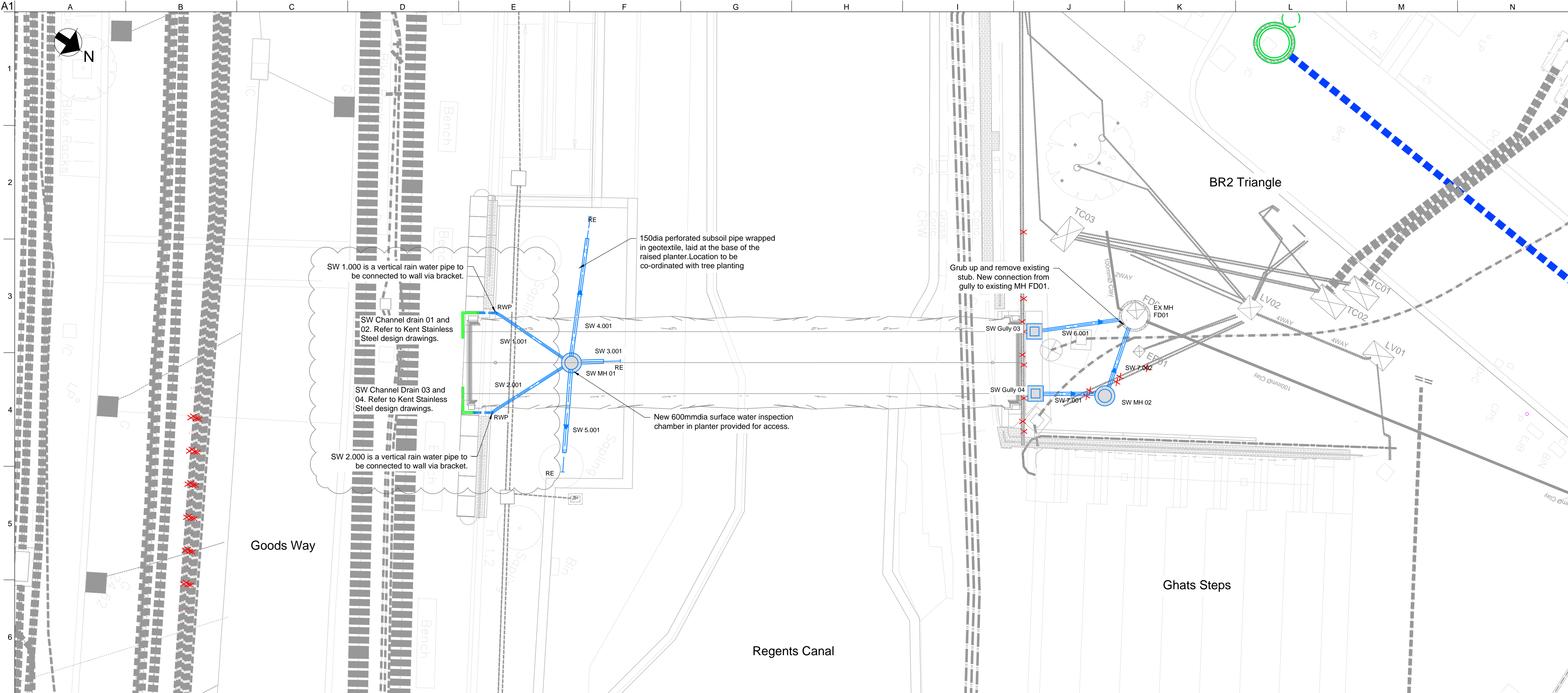
Client

GALLDRIS

Project Title
Kings Cross Bridge 2
(BR2)

Drawing Title
Proposed Pavement
Typical Details
Sheet 3 of 3

Scale at A1	1:10
Role	Civil
Suitability	A1 - For Construction
Arup Job No	268962-00
Rev	C01
Name	KXC-ARP-BR2-XX-DR-CX-30013



- Notes
- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
 - All dimensions are in millimeters unless otherwise stated.
 - The existing utility alignments are sourced from asbuilt, construction and design issue drawings and is assumed to be accurate. Contractor to carry out underground utilities survey to confirm vertical and horizontal alignments.
 - This drawing contains extensive use of colour line work and must be plotted in colour.
 - Drainage infrastructure on Good Ways subject to S278 approval from London Borough of Camden.

Legend

Existing Utilities to be Abandoned

- LV
- Telecoms

Existing Utilities

- CCTV
- District Cooling
- District Heating
- Foul Sewer
- Gas - LP
- Gas - MP
- HV Electricity
- LV Electricity
- Telecoms
- Potable Water

LV Chamber

Telecoms Chamber

Manhole

Proposed Utilities

- Private Drainage
- Private Land Drainage
- Private Channel Drain

Drainage Manhole/Inspection chamber

Drainage Gully

Drainage Downpipe

Rodding eye

Pipe Table							
Pipe Name	Size (mm)	Plan Length (m)	Slope	Start Invert Level (mAOD)	End Invert Level (mAOD)	Pipe Material	Minimum Cover (m)
SW 1.000	75	2.235	Vertical	23.375	21.140	Cast Iron	Exposed
SW 1.001	100	4.011	1:41	21.140	21.043	PVC-U	0.650
SW 2.000	75	2.263	Vertical	23.375	21.112	Cast Iron	Exposed
SW 2.001	100	4.264	1:62	21.112	20.043	PVC-U	0.650
SW 3.001	150	1.319	Horizontal	20.762	20.762	Perforated PVC-U	0.925
SW 4.001	150	6.341	Horizontal	20.762	20.762	Perforated PVC-U	0.936
SW 5.001	150	4.736	Horizontal	20.762	20.762	Perforated PVC-U	0.947
SW 6.001	100	4.420	1:13.0	23.545	23.206	PVC-U	0.937
SW 7.001	100	3.156	1:16.5	23.544	23.353	PVC-U	0.938
SW 7.002	100	3.735	1:25.4	23.353	23.206	PVC-U	1.129
SW Channel Drain 01	95	1.144	Horizontal	Kent Stainless Steel Bespoke design		Kent Stainless Steel	0.000
SW Channel Drain 02	95	0.745	Horizontal			Kent Stainless Steel	0.000
SW Channel Drain 03	95	1.145	Horizontal			Kent Stainless Steel	0.000
SW Channel Drain 04	95	0.544	Horizontal			Kent Stainless Steel	0.000

Structure Table								
Structure Name	Easting (m)	Northing (m)	Cover Level (mAOD)	Chamber Invert (mAOD)	Depth (m)	Connected Pipes	Structure size (m)	Structure Type
Existing manhole ref FD01	530109.995	183441.185	24.550	23.122	1.428	SW 7.002 Inv. 23.206 SW 6.001 Inv. 23.206	1.050 dia.	As existing
SW Gully 3	530112.539	183437.570	24.593	23.543	1.050	SW 6.001 Inv. 23.545	0.400 x 0.400	ACO 357 Gully with vertical outlet
SW Gully 4	530115.038	183438.845	24.593	23.543	1.050	SW 7.001 Inv. 23.544	0.400 x 0.400	ACO 357 Gully with vertical outlet
SW MH 1	530123.301	183419.504	21.873	20.462	1.411	SW 1.001 Inv. 21.043 SW 4.001 Inv. 20.762 SW 5.001 Inv. 20.762 SW 3.001 Inv. 20.762 SW 2.001 Inv. 21.043	0.600 dia.	Typical catchpit - Inspection chamber with 300mm sump
SW MH 2	530113.694	183441.701	24.593	23.353	1.240	SW 7.001 Inv. 23.353 SW 7.002 Inv. 23.353	0.600 dia.	Type 2 manhole

GALLDRIS

DOCUMENT REVIEW

Status:

A

For Client Review

B

Comments to be incorporated

B

Minor Comments - For Client Review

C

Rejected - correct and resubmit within 5 working days

Checked By:

Date:

This review does not change the duties and scope of each company as set out in their respective contracts

C01	17/03/21	PS	GT	GT
For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MA/MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

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Client

GALLDRIS

Project Title
Kings Cross Bridge 2 (BR2)

Drawing Title
Proposed Surface Water Drainage General Arrangement & Pipe and Manhole Schedule

Scale at A1
1:100

Role
Civil

Suitability
A1 - For Construction

Arup Job No
268962-00

Rev
C01

Name
KXC-ARP-BR2-XX-DR-CD-20001

A1

A

B

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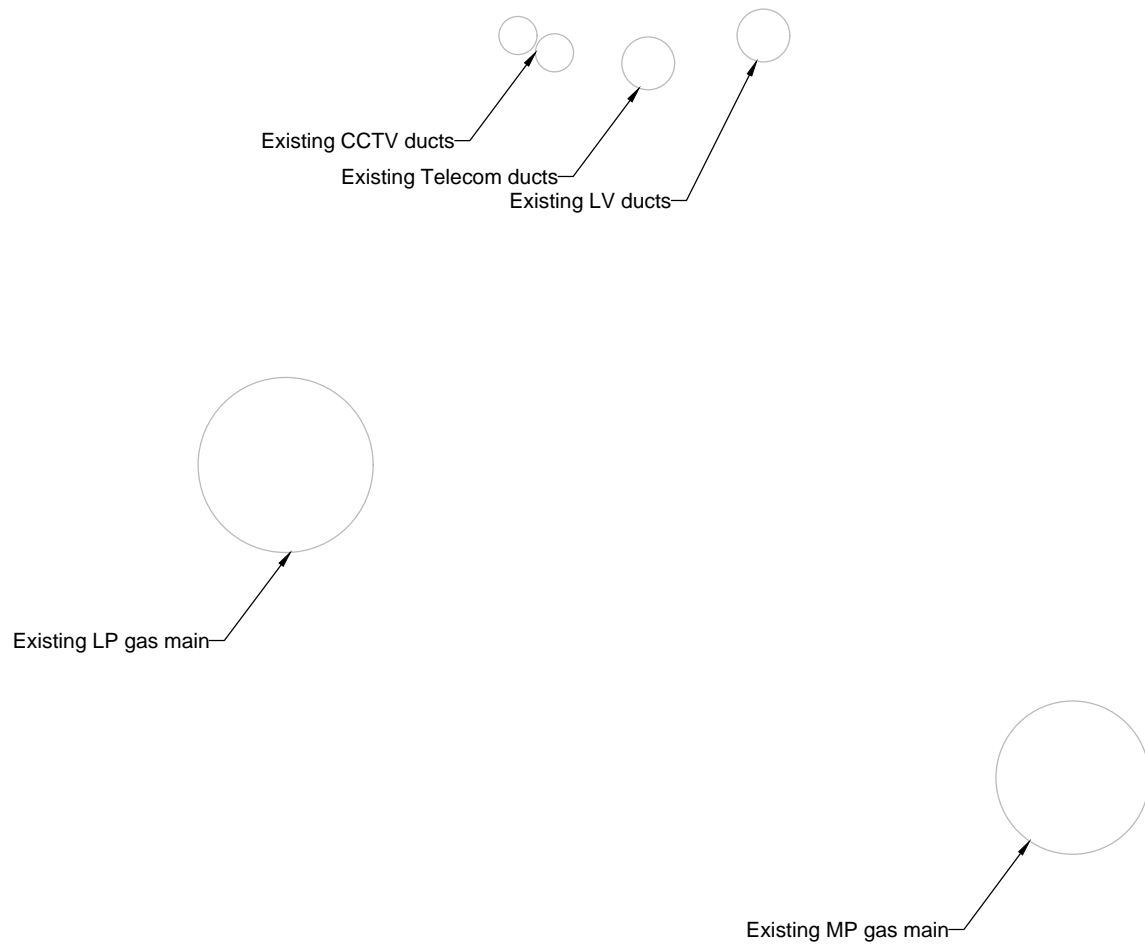
7

8

9

10

11



Refer to landscape Architects plans for surface finish and paving pattern. Refer pavement build up detail drawing KXC-ARP-BR2-XX-DR-CX-30011

Kent Stainless Steel Channel-
Drain or similar approved

Pipework to be cast in concrete

Rodding point

SW 2.000

Rodding access point located 1m above
ground level

Rain water down pipe connection to
Architects specification

Indicative
existing wall

Indicative LV, comms and
Potable water (1000s) -
Assumed 600mm cover

Easy/rest bend with min
150mm cohcrate bed and
surround grade ST4 to BS
5328 : Part 2

185

170

SW 2.001

600mm Catchpit chamber with 300mm
sump, Polystorm catchpit or similar
approved.
Cover level 21.872m
Invert level 20.765m
Sump level 20.462m

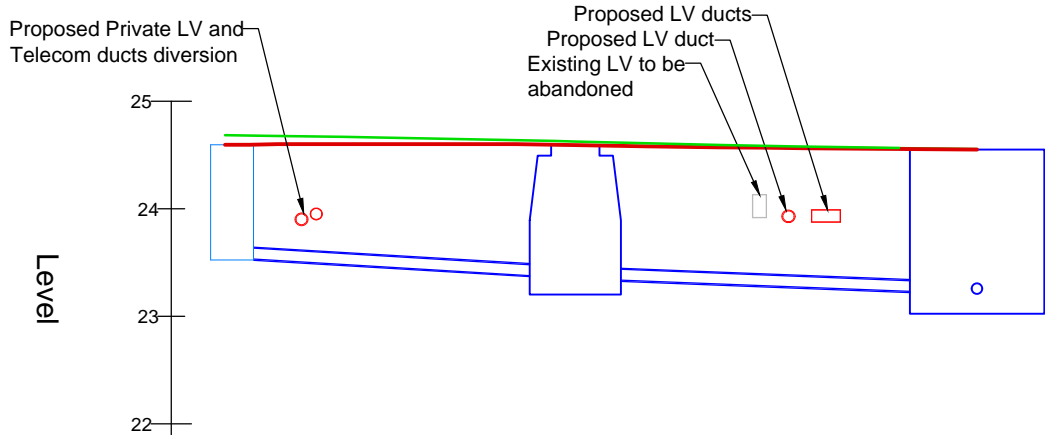
Approximate planter
level 21.900m

Indicative wall

SW 3.001 and other outgoing pipes
to be 150mm diameter perforated
pipes wrapped in geotextile.

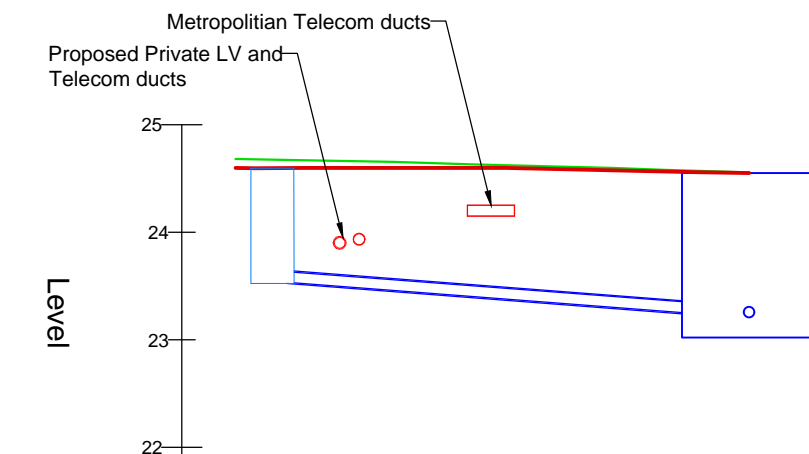
Min.
300mm

ALIGNMENT - SW SOUTHSIDE - LONGSECTION
NTS



Structure Name	SW Gully 4	SW MH 3	Existing MH FD01
Pipe Dia.		100mm	100mm
Network -SW	00.064 24.594	5.978% L= 3.198 100mm	03.256 24.553
Existing Levels	24.683		06.892 24.550
Cover and Invert	24.594	Start Invert 23.54 End Invert 23.353	Start Invert 23.35 End Invert 23.206
Chainage	00.000		08.000
Pipe Length		2D = 3.192 3D = 3.198	2D = 3.735 3D = 3.738

ALIGNMENT - SW NORTHSIDE - CL - LONGSECTION
Scale: H 1:50, V 1:50. Datum: 22.000



Structure Name	SW Gully 3	Existing MH FD01
Pipe Dia.		100mm
Network -SW	00.344 24.595	7.644% L= 4.448 100mm
Existing Levels	24.683	24.550
Cover and Invert	24.595	Start Invert 23.54 End Invert 23.206
Chainage	00.000	06.000
Pipe Length		2D = 4.435 3D = 4.448

ALIGNMENT - SW NORTHSIDE 2 - CL - LONGSECTION
Scale: H 1:50, V 1:50. Datum: 22.000

Notes

- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
- Cover levels are approximate and covers shall be set flush with the finished surface unless otherwise directed on site.
- Gully grate levels are approximate and grate levels shall be set 5mm below the proposed finished level.

Legend

- Existing Surface
- Proposed surface

GALLDRIS

DOCUMENT REVIEW

Status:

A	For Client Review
B	Comments to be incorporated
B	Minor Comments - For Client Review
C	Rejected - correct and resubmit within 5 working days

Checked By:

Date:

This review does not change the duties and scope of each company as set out in their respective contracts

C01	3/17/2021	PS	GT	GT
For Construction				
P01	22/12/20	PS	AS	GT
For Review and Comment				
Rev	Date	By	Chkd	Appd

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Client

GALLDRIS

Project Title

Kings Cross Bridge 2
(BR2)

Drawing Title

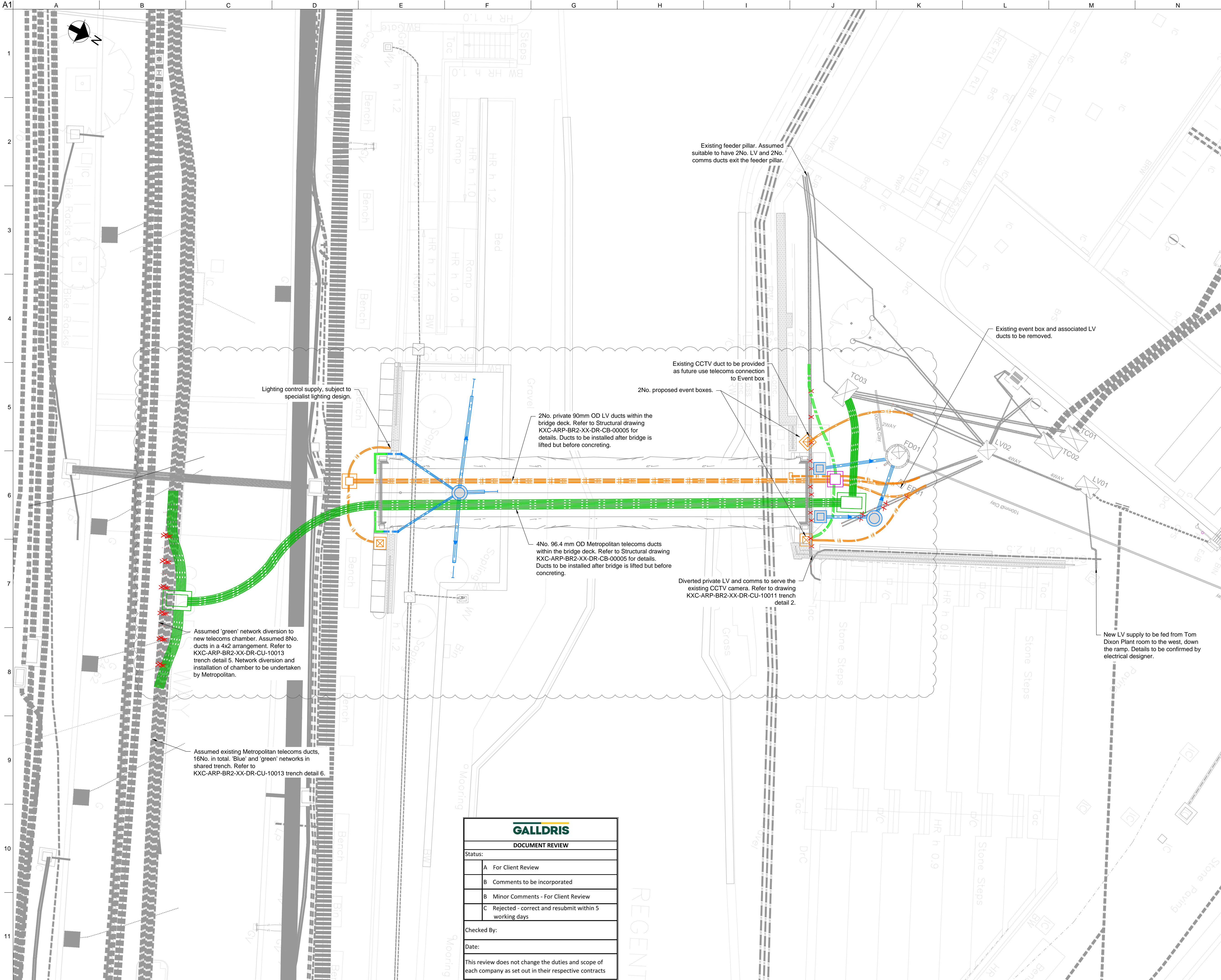
Proposed Surface Water Drainage
Longsections

Scale at A1
As Shown

Role
Civil

Suitability
A1 - For Construction

Arup Job No 268962-00	Rev C01
Name KXC-ARP-BR2-XX-DR-CD-20014	



- Notes**
- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
 - All dimensions are in millimeters unless otherwise stated.
 - The existing utility alignments are sourced from asbuilt, construction and design issue drawings and is assumed to be accurate. Contractor to carry out underground utilities survey to confirm vertical and horizontal alignments.
 - This drawing contains extensive use of colour line work and must be plotted in colour.
 - Contractor to confirm LV connection point with electrical designer.

Legend

Existing Utilities to be Abandoned

- LV
- Telecoms

Existing Utilities

- CCTV
- District Cooling
- District Heating
- Foul Sewer
- Gas - LP
- Gas - MP
- HV Electricity
- LV Electricity
- Telecoms
- Potable Water

Proposed Utilities

- Private LV Electricity
- Metropolitan Telecoms
- Private Telecoms
- Private Drainage
- Private Channel Drain

Chambers and Boxes

- Combined LV and Telecoms Chamber
- Event box
- LV Chamber
- Telecoms Chamber
- Drainage Manhole/Inspection chamber
- Drainage Gully

C01	17/03/21	PS	GT	GT
For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MA/MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

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Client

GALLDRIS

Project Title

Kings Cross Bridge 2 (BR2)

Drawing Title

Combined Proposed Utilities General Arrangement

Scale at A1 1:100

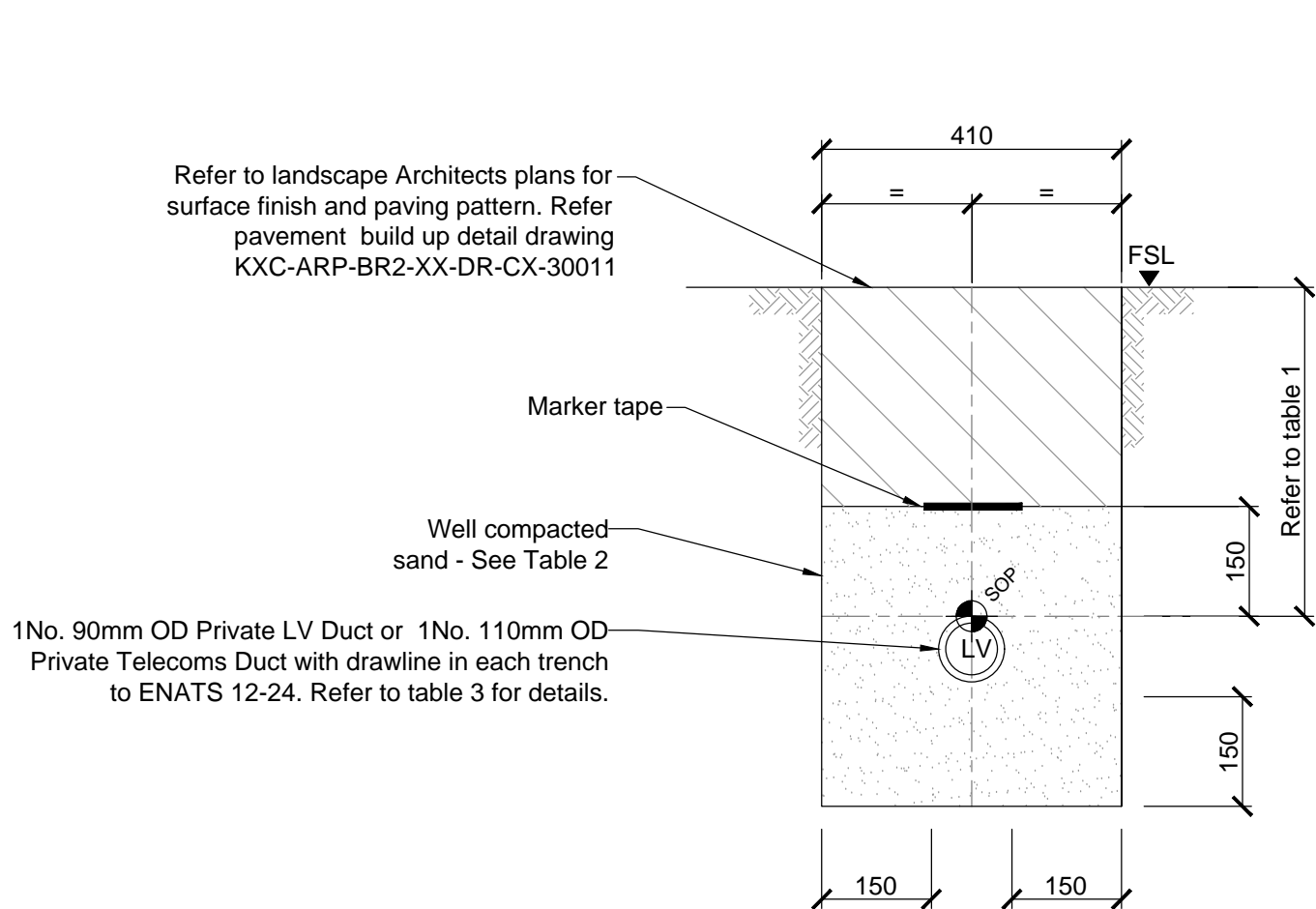
Role Civil

Suitability A1 - For Construction

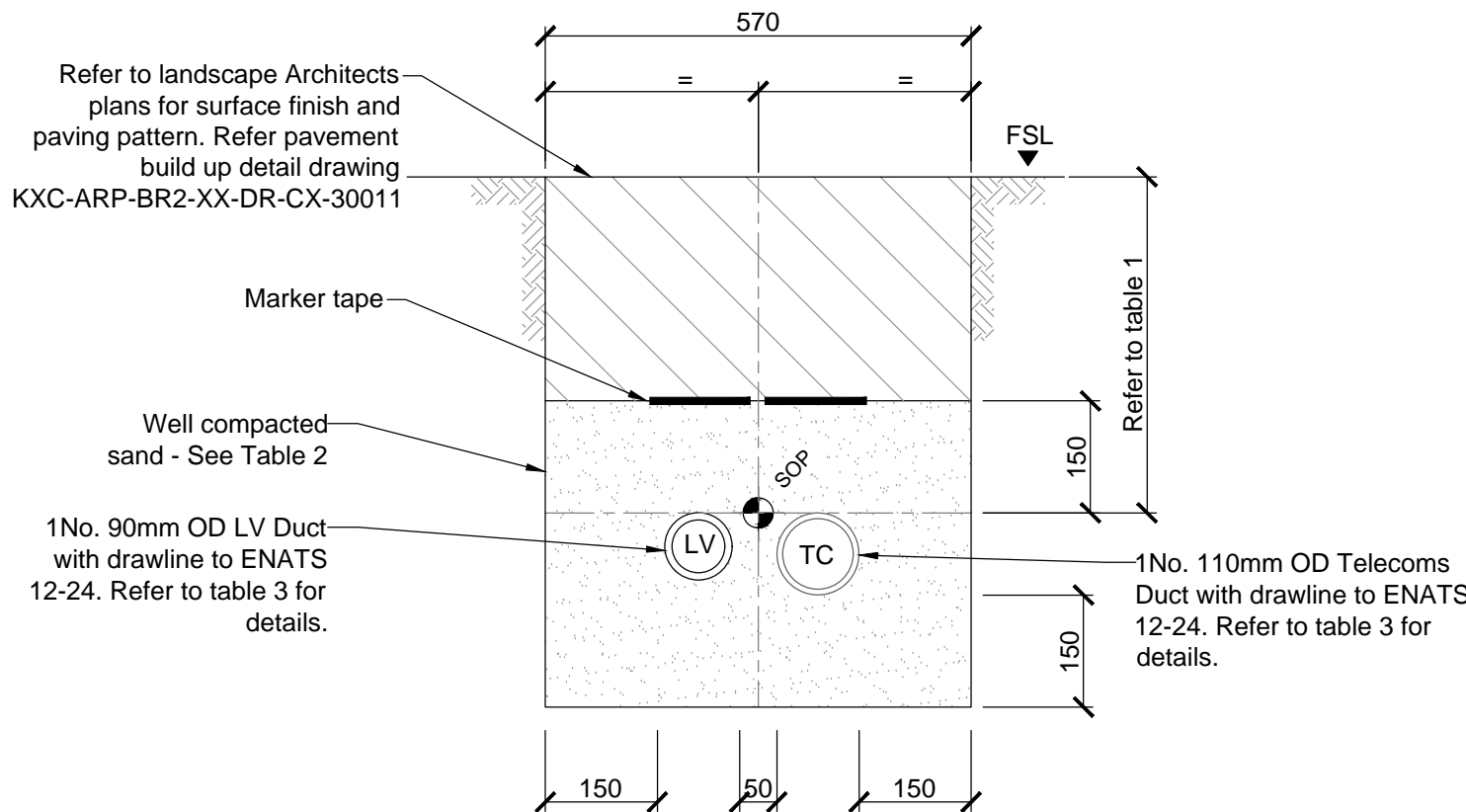
Arup Job No **268962-00** Rev **C01**

Name **KXC-ARP-BR2-XX-DR-CU-10002**

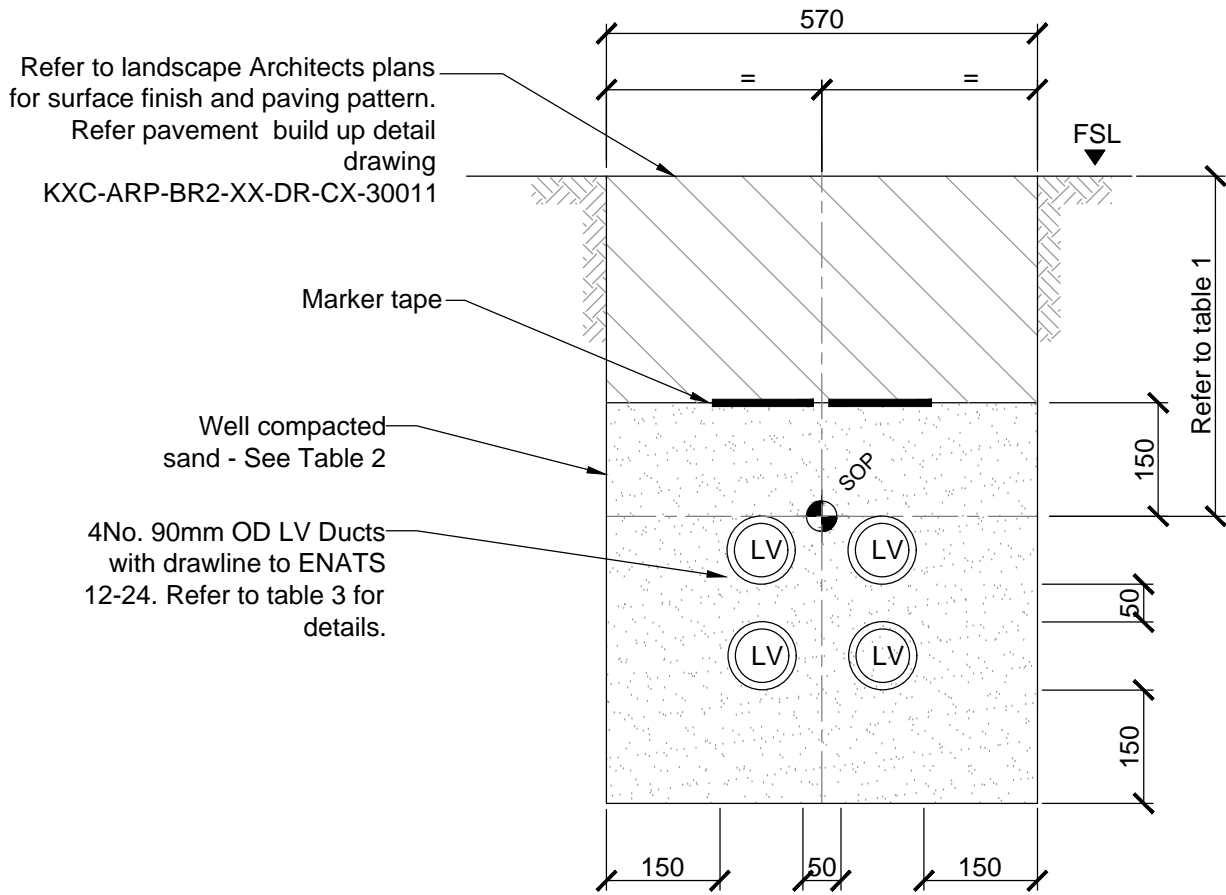
GALLDRIS	
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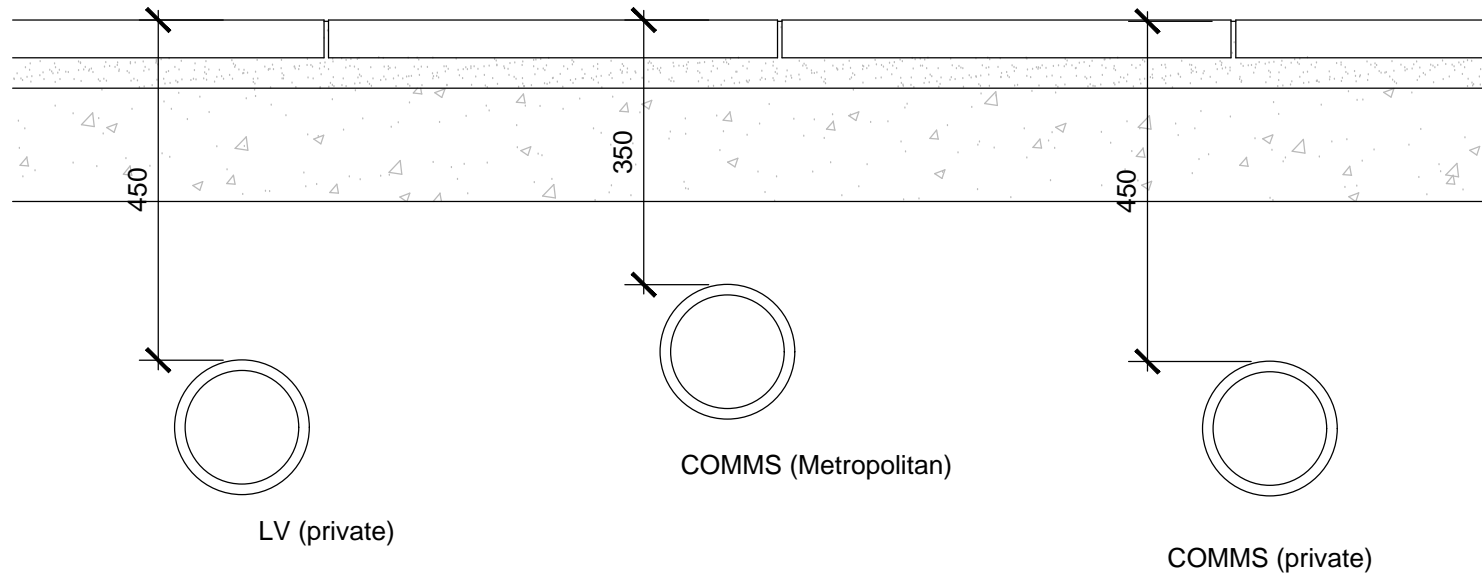
Typical Trench Detail 1 - Private Comms or LV Duct Trench (1-way) (assumed private)



Typical Trench Detail 2 - Combination of Private Comms and LV shared trench (2-way) (assumed private)



Typical Trench Detail 3 - Combination of Private LV shared trench (4-way) (assumed private)



Typical Minimum Utility Depths (Footway)

Table 1: Typical Minimum Depths of Cover to Private Utilities (mm)		
Service	Cover in Road	Cover in Footway
LV	600	450
Telecoms	600	Typically 450 (min 350mm for Metropolitan ducts)

Table 2: Typical bedding and Surround Materials	
Service	Material
LV	Sand (Fine aggregate complying with BS EN13242 Table 2)
Telecoms	

Table 3: Duct Details			
Service	Colour	Duct Ø (OD)	Product
Telecoms (Private)	Green	110mm	Generally Rigidcoil Utilities *
Telecoms (Metropolitan)	Purple	96.5mm	Emtelle uPVC Duct
LV (Private)	Black	90mm	Generally Rigidcoil Power *

*Rigiduct to be used in parts of the network where pre-formed bends are required

Notes

- For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
- All chamber details are to be confirmed with chamber specialist manufacturer.
- Contractor to liaise with electrical designer for LV cable design.
- Contractor to liaise with telecoms provider to confirm telecoms network details.
- Where private LV and comms share a chamber, suitable cable separation/identification is required.
- LV connection points are assumed and to be confirmed with the electrical designer.

GALLDRIS	
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For Review and Comment				
P01	27/03/20	MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

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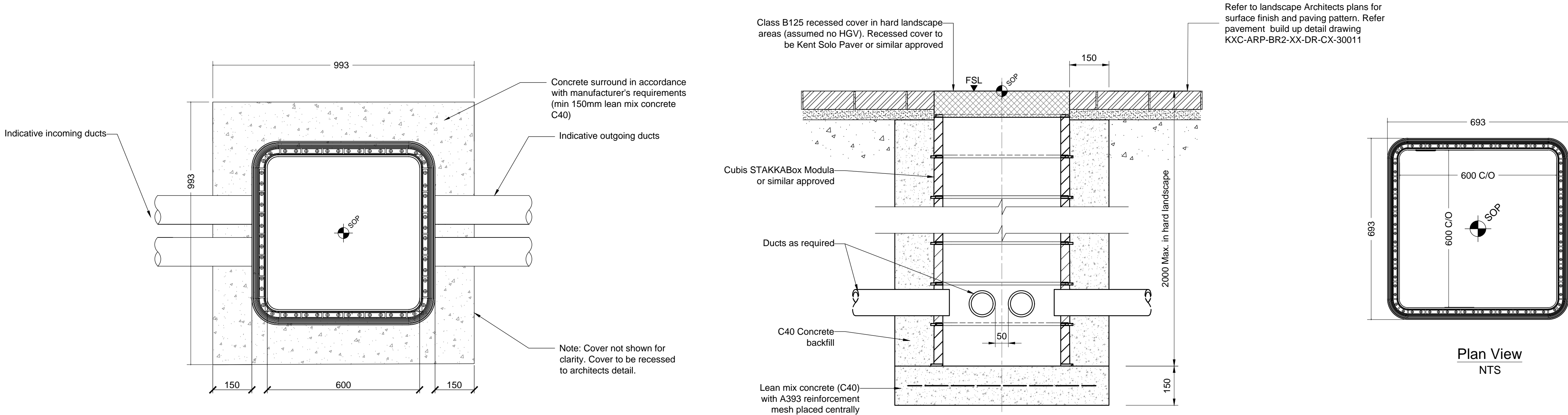
Client

GALLDRIS

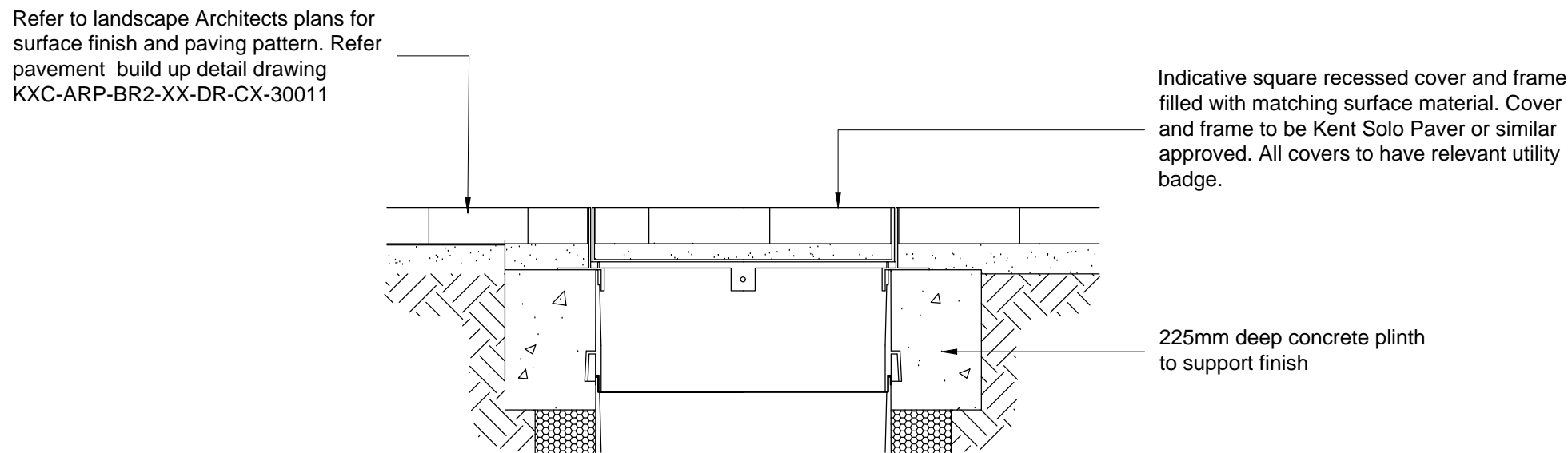
Project Title
Kings Cross Bridge 2 (BR2)

Drawing Title
Proposed Utilities
Typical Details
Sheet 1 of 5

Scale at A1	1:10
Role	Civil
Suitability	A1 - For Construction
Arup Job No	268962-00
Name	KXC-ARP-BR2-XX-DR-CU-10011
Rev	C01




Typical 600 x 600mm Private LV/Comms Chamber Detail
By CUBIS Stakkabox Modula (or similar approved)



Typical Recessed Cover Detail - sited in hard landscaped areas
Dimensions to suit chamber size
(Details T.B.C by specialist Manufacturer)

Notes

1. For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
2. All chamber details are to be confirmed with chamber specialist manufacturer.
3. Contractor to liaise with electrical designer for LV cable design.
4. Contractor to liaise with telecoms provider to confirm telecoms network details.
5. **Where private LV and comms share a chamber, suitable cable separation/identification is required.**
6. LV connection points are assumed and to be confirmed with the electrical designer.



DOCUMENT REVIEW	
Status:	
A	For Client Review
B	Comments to be incorporated
B	Minor Comments - For Client Review
C	Rejected - correct and resubmit within 5 working days
Checked By:	
Date:	
This review does not change the duties and scope of each company as set out in their respective contracts	

C01	17/03/21	PS	GT	GT
For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

ARUP

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www.arup.com

Client

GALLDRIS

Project Title
Kings Cross Bridge 2
(BR2)

Drawing Title
Proposed Utilities
Typical Details
Sheet 2 of 5

Scale at A1	1:10
Role	Civil
Suitability	A1 - For Construction
Arup Job No	268962-00
Name	KXC-ARP-BR2-XX-DR-CU-10012
Rev	C01

A1

A

B

C

D

E

F

G

H

I

J

K

L

M

N

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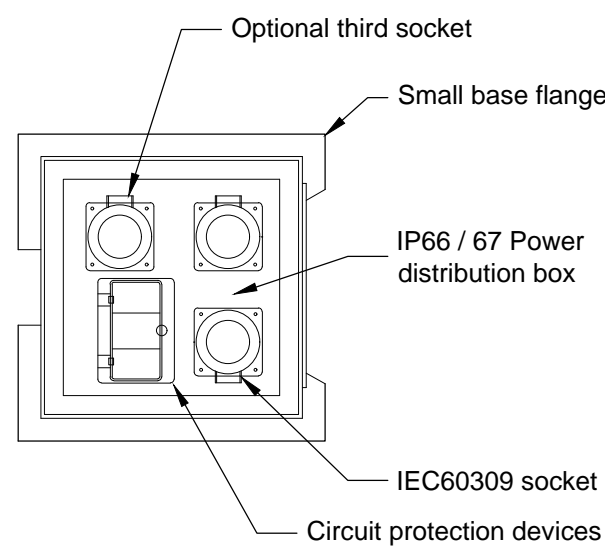
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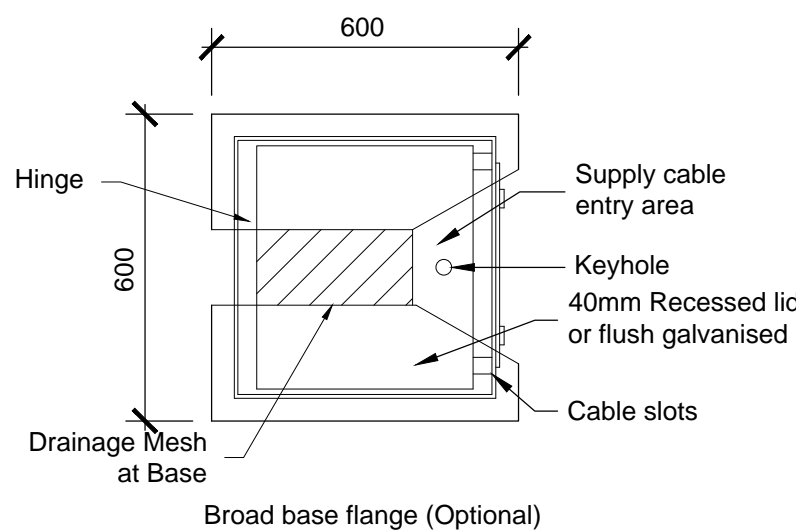
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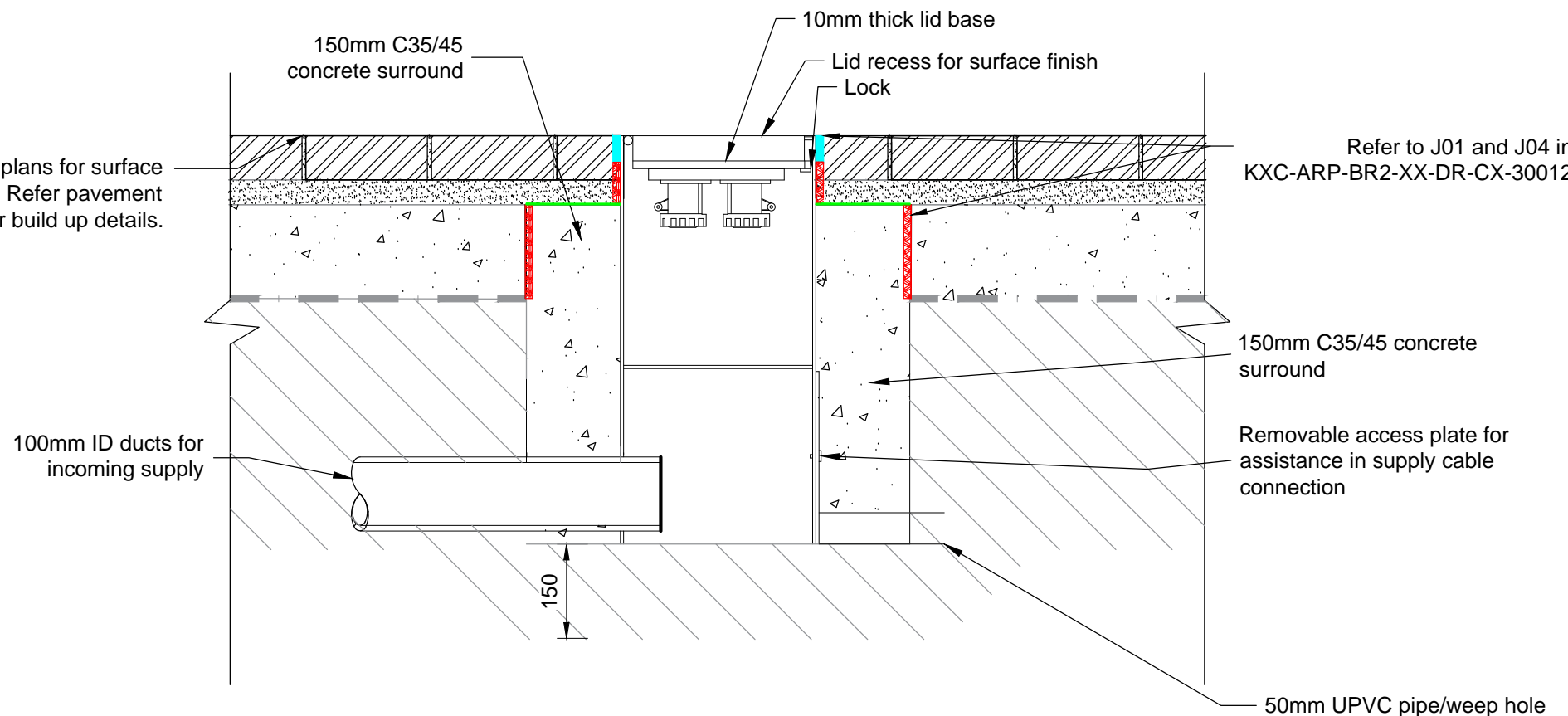
11



COVER INTERNAL VIEW



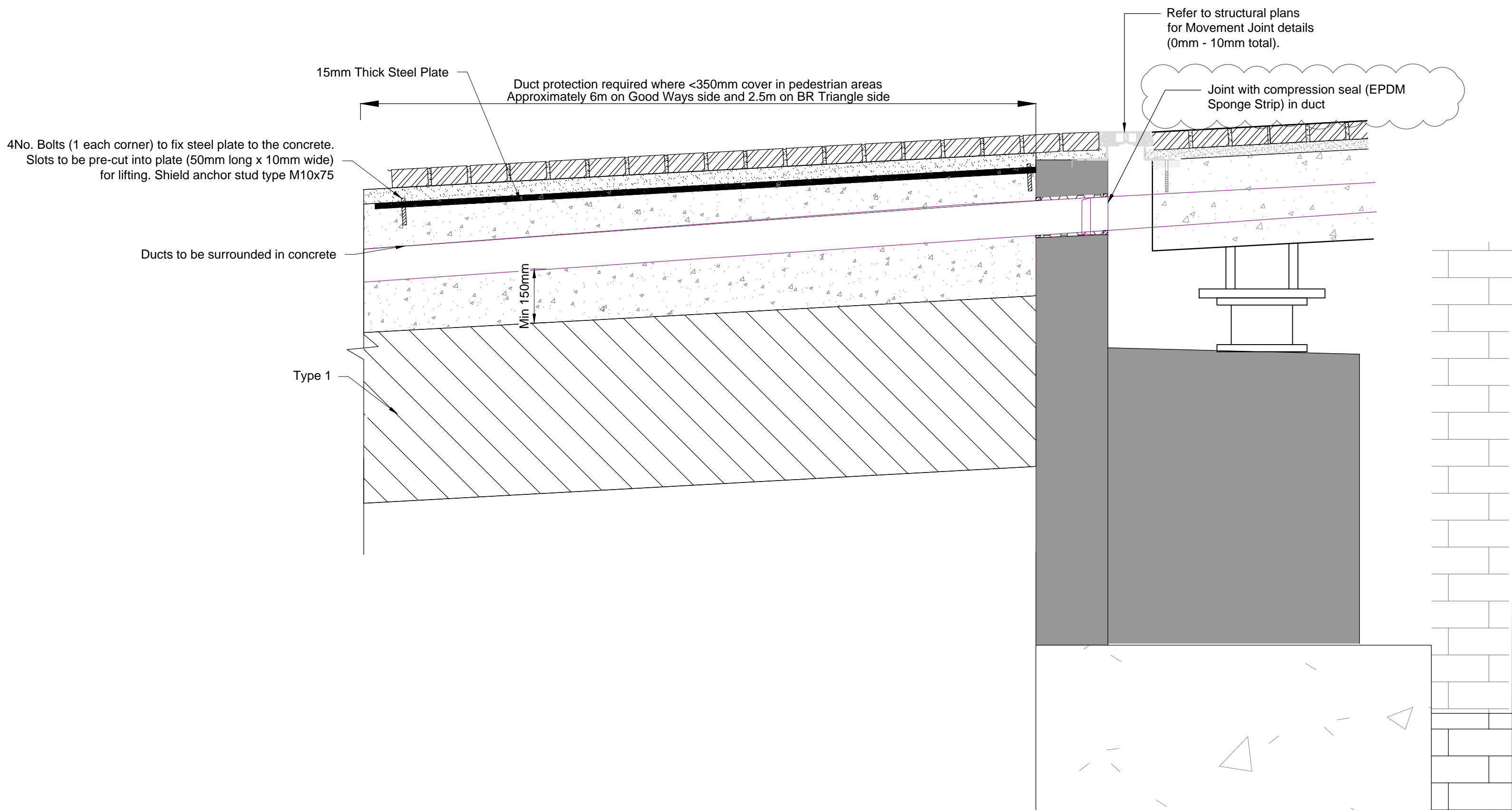
PLAN VIEW



CROSS SECTION

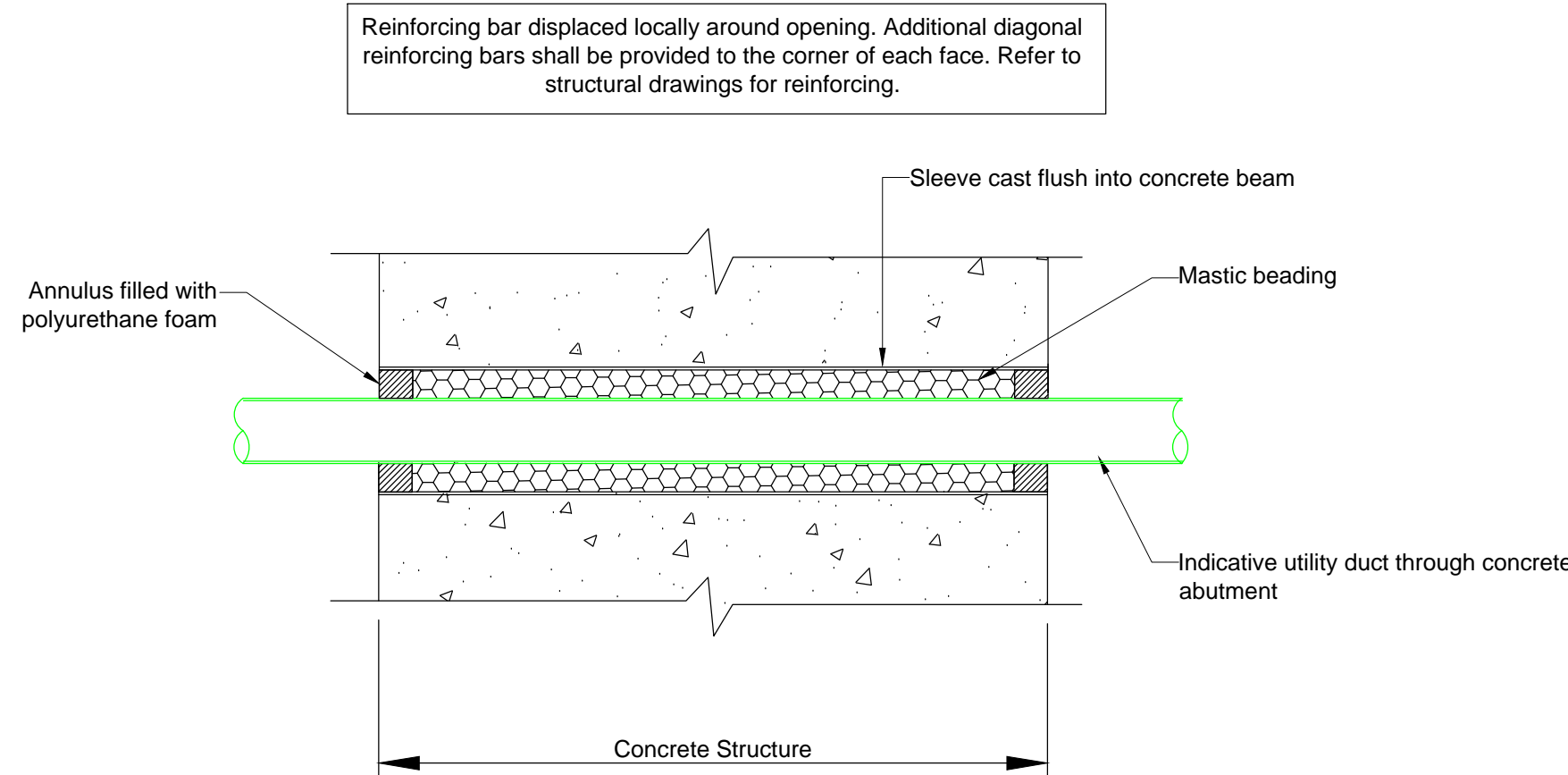
In Ground Power / Comms Event Box Details

NTS



Shallow Duct and Mechanical Expansion Joint Section

NTS



Sleeved Duct through Structure

NTS

Notes

1. For general notes refer to drawing KXC-ARP-BR2-XX-DR-CX-00001.
2. All chamber details are to be confirmed with chamber specialist manufacturer.
3. Contractor to liaise with electrical designer for LV cable design.
4. Contractor to liaise with telecoms provider to confirm telecoms network details.
5. Where private LV and comms share a chamber, suitable cable separation/identification is required.
6. LV connection points are assumed and to be confirmed with the electrical designer.

GALLDRIS

DOCUMENT REVIEW

Status:

A	For Client Review
B	Comments to be incorporated
B	Minor Comments - For Client Review
C	Rejected - correct and resubmit within 5 working days

Checked By:

Date:

This review does not change the duties and scope of each company as set out in their respective contracts

C01	17/03/21	PS	GT	GT
For Construction				
P02	22/12/20	PS	AS	GT
For Review and Comment				
P01	27/03/20	MW	AS	GT
Issued for Scheme Design				
Rev	Date	By	Chkd	Appd

ARUP

13 Fitzroy Street
London W1T 4BQ
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www.arup.com

Client

GALLDRIS

Project Title

Kings Cross Bridge 2
(BR2)

Drawing Title

Proposed Utilities
Typical Details
Sheet 5 of 5

Scale at A1

1:10

Role

Civil

Suitability

A1 - For Construction

Arup Job No	Rev
268962-00	C01
Name	
KXC-ARP-BR2-XX-DR-CU-10015	

<i>Kings Cross Bridge 2</i>		
Document Ref. & Rev.	Package Description	Company Name
KXC-GDR-BR2-XX-TS-W-0002 Rev 00	Movement Joint	Galldris
Date of Issue:	19-01-2021	

Specification Section & Clause:	KXC-ARP-BR2-XX-DR-CB-30002-C01_C01
Area / Location:	Bridge Movement Joints
Detailed description of area / item / equipment:	North & South end of bridge at pavement level

Photographs:



Example of completed movement joint in pavement finishes



Proposed movement joint adjacent to BR3 finishes

Comments:

QUALITY CONTROL			
Consultant / Contractor Acceptance			
ALD	Signature:	Moxon	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:
ARUP	Signature:	Argent	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:

Alternatively record of approval can be through Asite.



Pavimenti carrabili impermeabili
Watertight profiles

K W PROOF



IT

Descrizione

Sistema di giunzione a pavimento per giunti carrabili impermeabili fino a 100 mm soggetti ad elevati movimenti fino a ± 40 mm per parcheggi e piazzali in ambienti residenziali, commerciali ed industriali soggetti a traffico di auto, veicoli con pneumatici e mezzi di soccorso. Il sistema è realizzato con sottostruttura in acciaio zincato ed alluminio e finitura in acciaio INOX ad alto spessore. L'impermeabilizzazione è realizzata da una speciale membrana non forata né interrotta, saldabile a sé stessa ed alle adiacenti guaine bituminose elastomeriche con aria calda ed è protetta da un soffietto superficiale a doppia cavità in gomma/pvc da esterni, saldabile a caldo con se stesso per garantire continuità. Senza fissaggi in vista. Il sistema compensa anche cedimenti verticali. A scelta membrane interne non forate compatibili anche con pvc e poliolefine.

- Grande movimento
- Lunghezza sottostruttura 3 m, barre INOX in vista 1,5 m
- Fissaggio autofilettante L=50 mm. A richiesta fino a L=160 mm
- Senza foratura né interruzione della guaina.

A richiesta: barre a misura, pezzi speciali, versioni ad angolo, larghezze di giunto superiori, altezze a misura.

EN

Description

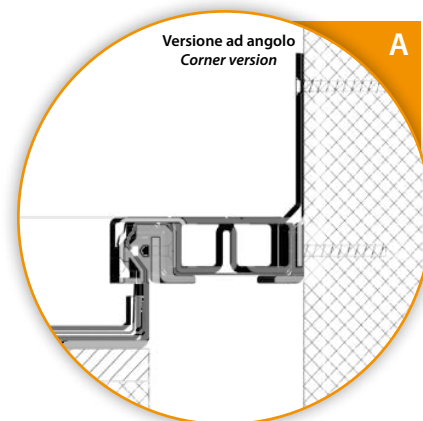
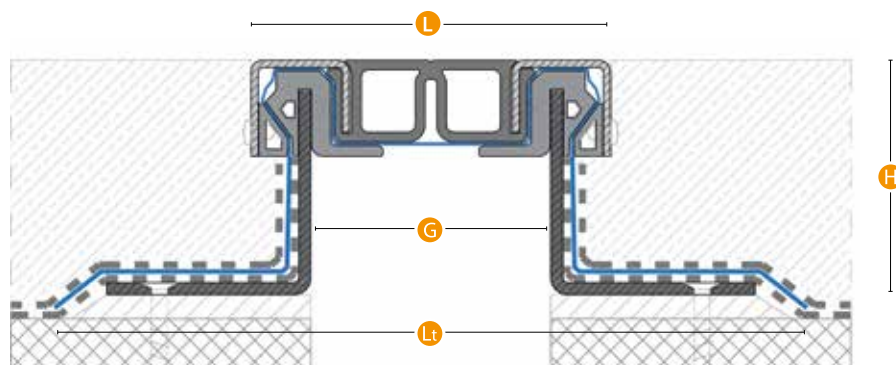
Watertight expansion joint system for structural joints up to 100 mm, subject to movements up to ± 40 mm. Ideal for parking, commercial and industrial areas. Suitable for emergency vehicles and full-wheel forklifts transit. The system is made of a sub-structure in aluminum and galvanized steel. The external surface is made of high-thickness stainless steel. Waterproofing is ensured by an undrilled membrane protected by a rubber gasket.

Available a choice of internal membranes compatible with bitumen, PVC, TPO.

- High movements
- Bar length 3 m, external surface 1,5 m
- Self-tapping fixing L= 50 mm. On request until L=160 mm
- Undrilled membrane

On request: profiles to length, special pieces, corner version, different heights.

Sezione / Section



Serie K WPROOF

Ambito Field	Pavimento Floor	Sistema System	G	L	Lt	H	Mov. tot. TERMICO Tot. thermic mov.	Mov. tot. SISMICO Seismic tot. mov.
Uso Use	Pedonale - Pneumatico Pedestrian - Tyre	K WPROOF G100 H80	100	150	270	80	30 (+/- 15)	80 (+/- 40)
		K WPROOF G100 H100	100	150	320	100	30 (+/- 15)	80 (+/- 40)
Transito Transit (pag. 06)	A - B - C - F - G	K WPROOF G100 H150	100	150	270	150	30 (+/- 15)	80 (+/- 40)
		K WPROOF G100 H200	100	150	270	200	30 (+/- 15)	80 (+/- 40)
Finitura Finish	Acciaio / Alluminio / Gomma Steel / Aluminium / Rubber							

Valori in mm / Values in mm



www.tecnokgiunti.it - per il download di:

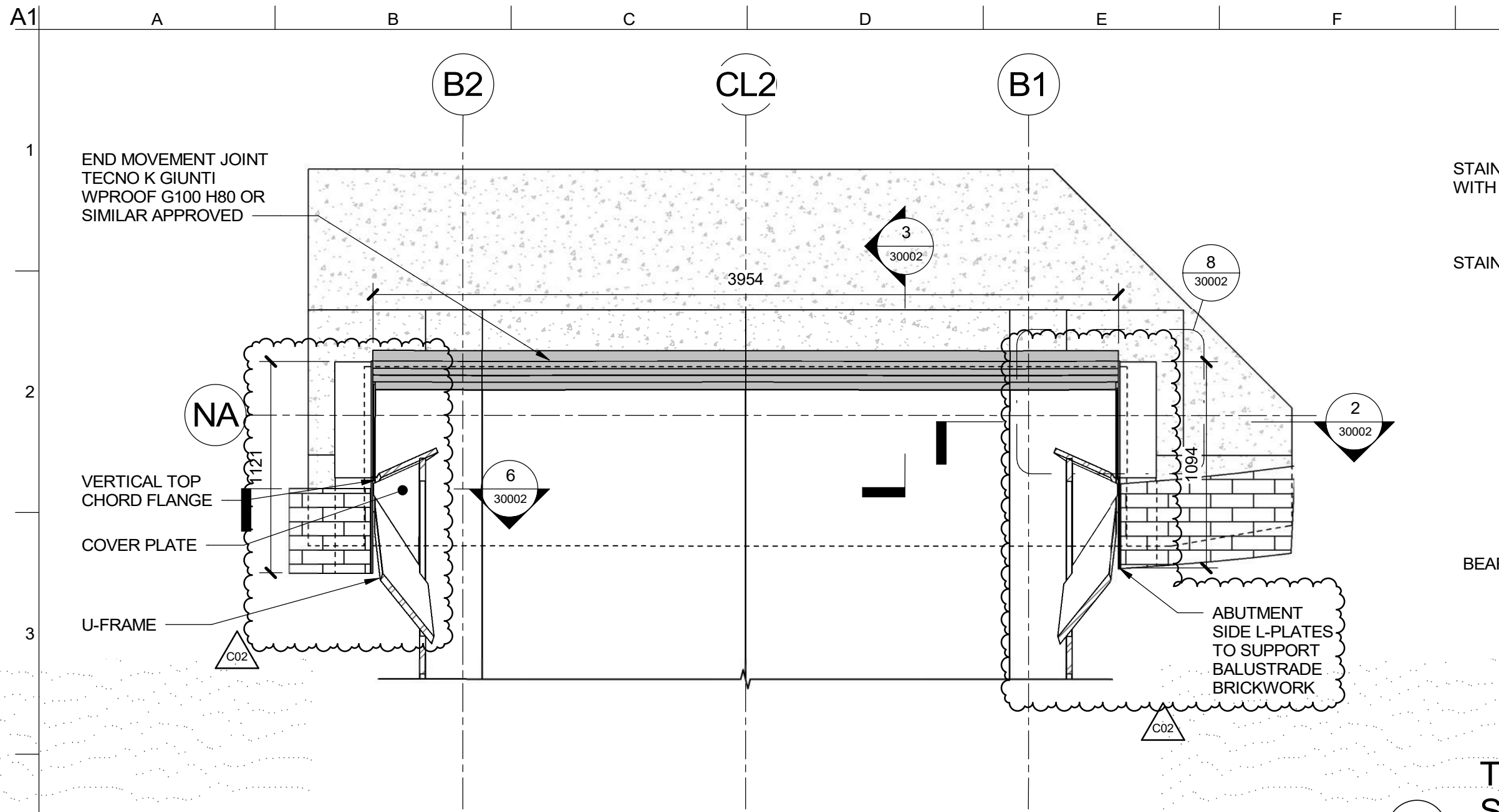
BIM / Dwg / Scheda in pdf / Voce di Capitolato / Scheda di Posa in Opera / Manuale di Manutenzione / Caratteristiche dei materiali



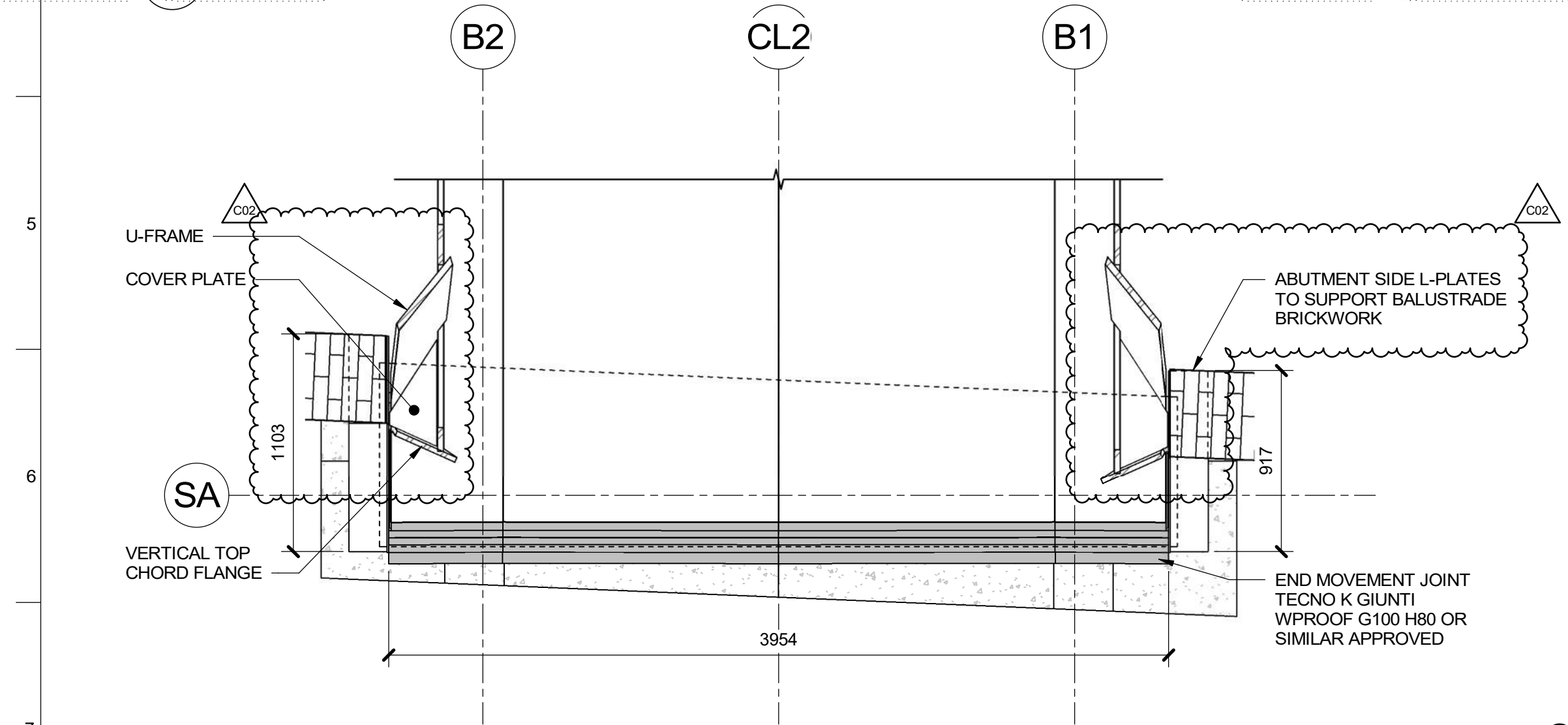
TECNOKGIUNTI
Seismic Joint Covers

Tecno K Giunti S.r.l.
Sede legale: Via Laurentina (km 25), n°68
Pomezia 00071 (RM) Italy
C.F. e P.Iva: 12059091004

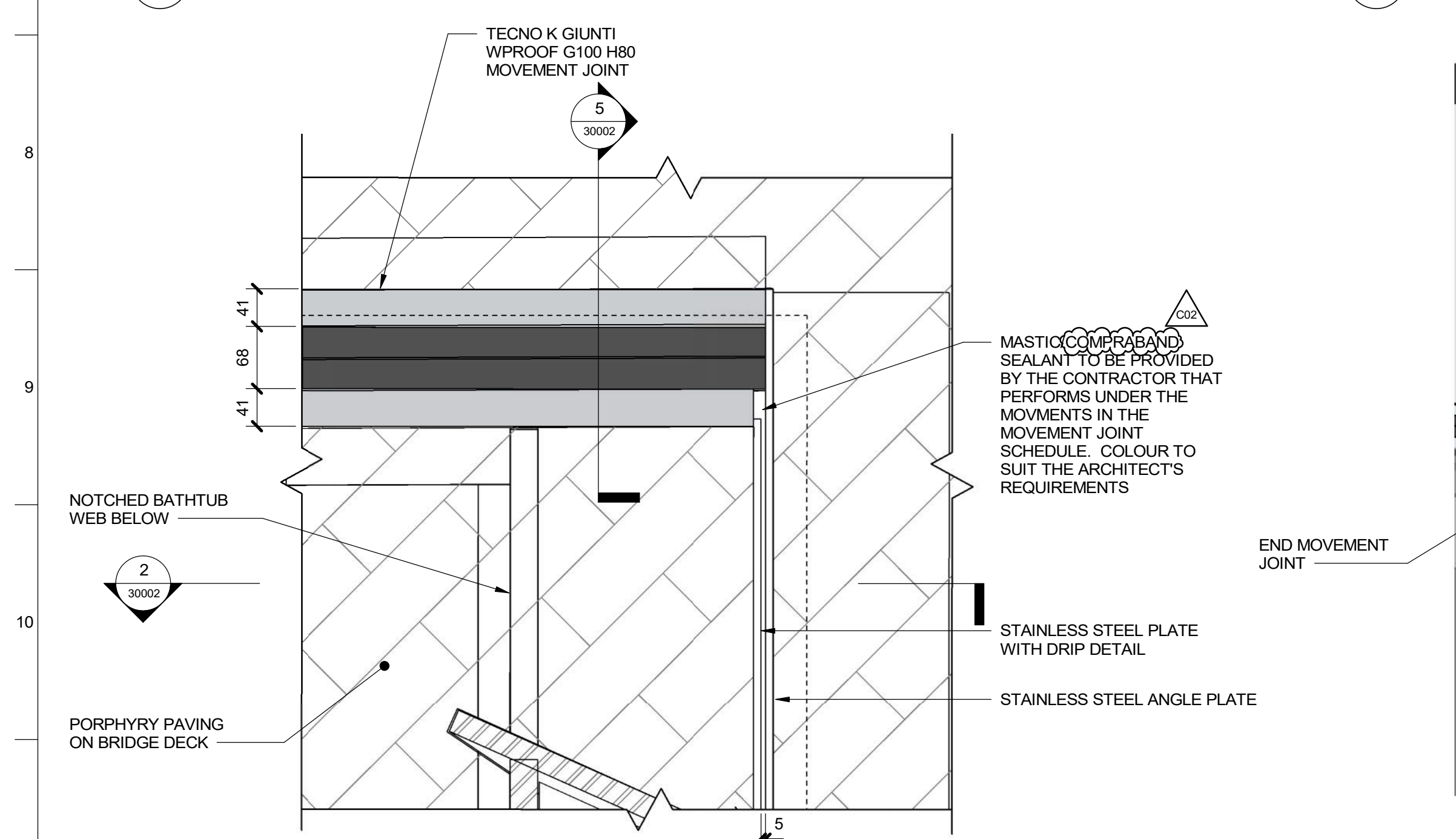
**Stabilimento produttivo,
ufficio tecnico e commerciale:**
via Pietà, n°96 - Savignano sul Rubicone 47039 (FC) Italy
t. +39 0541 945909 - info@tecnokgiunti.it



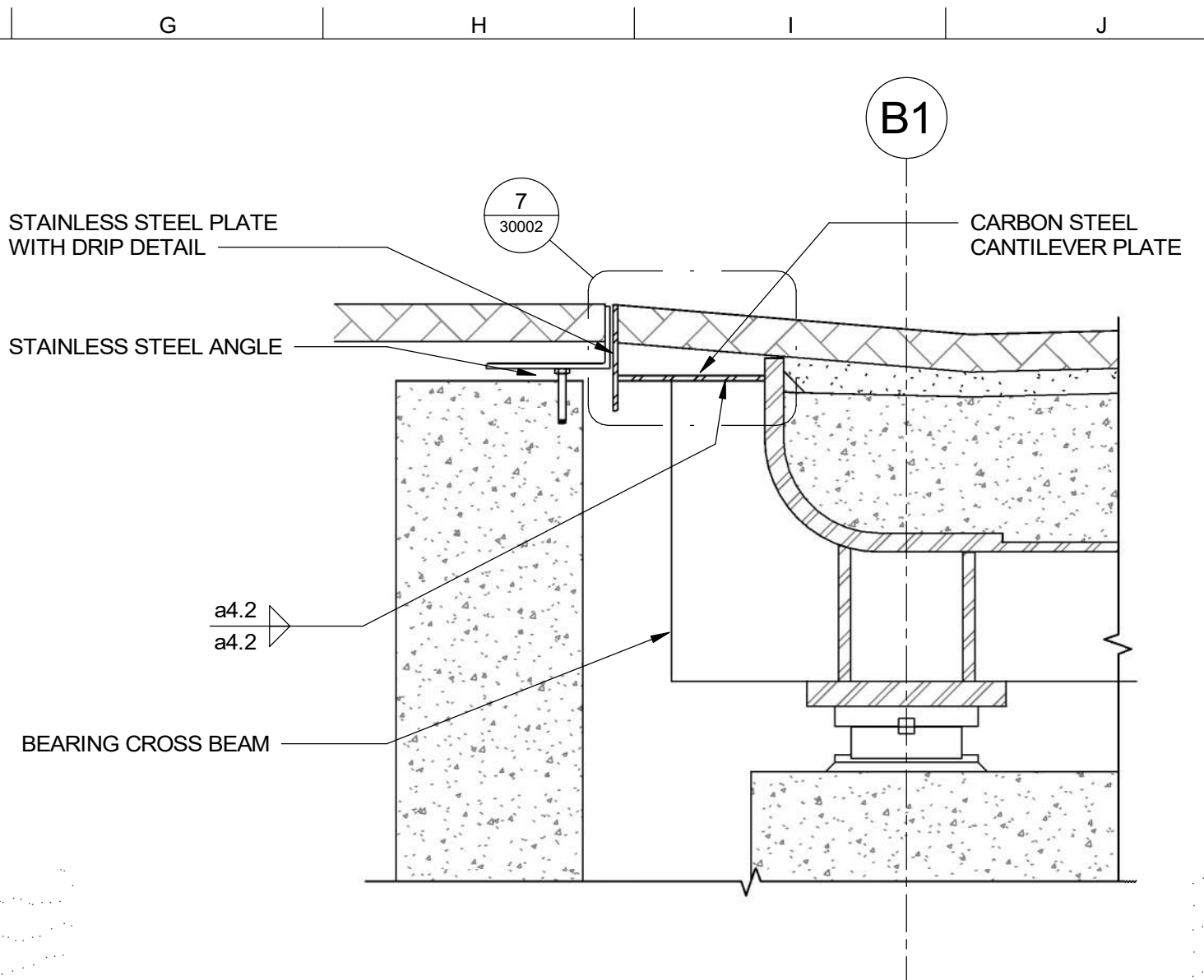
1 PLAN ON NORTH MOVEMENT JOINT
1 : 25



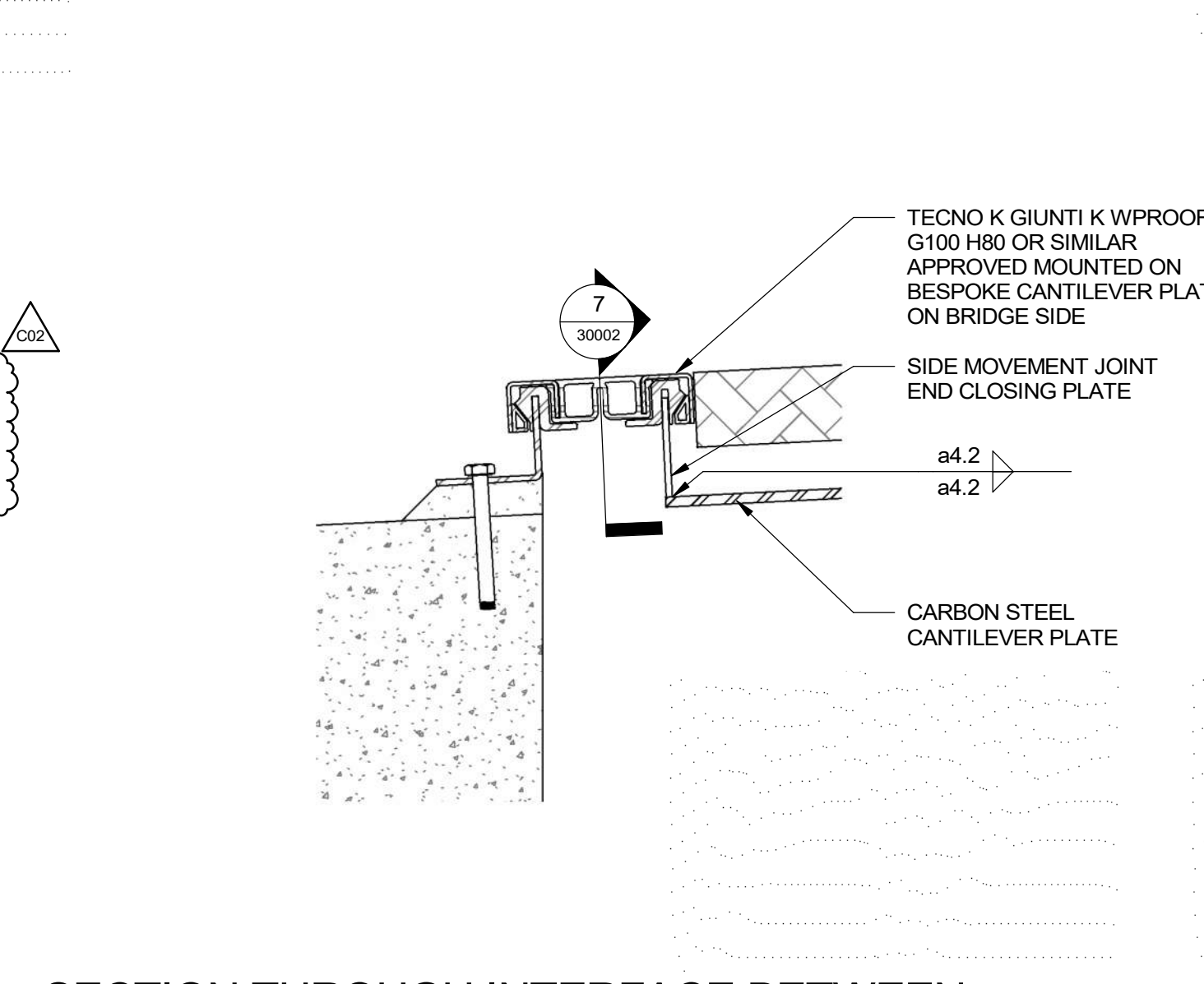
4 PLAN ON SOUTH MOVEMENT JOINT
1 : 25



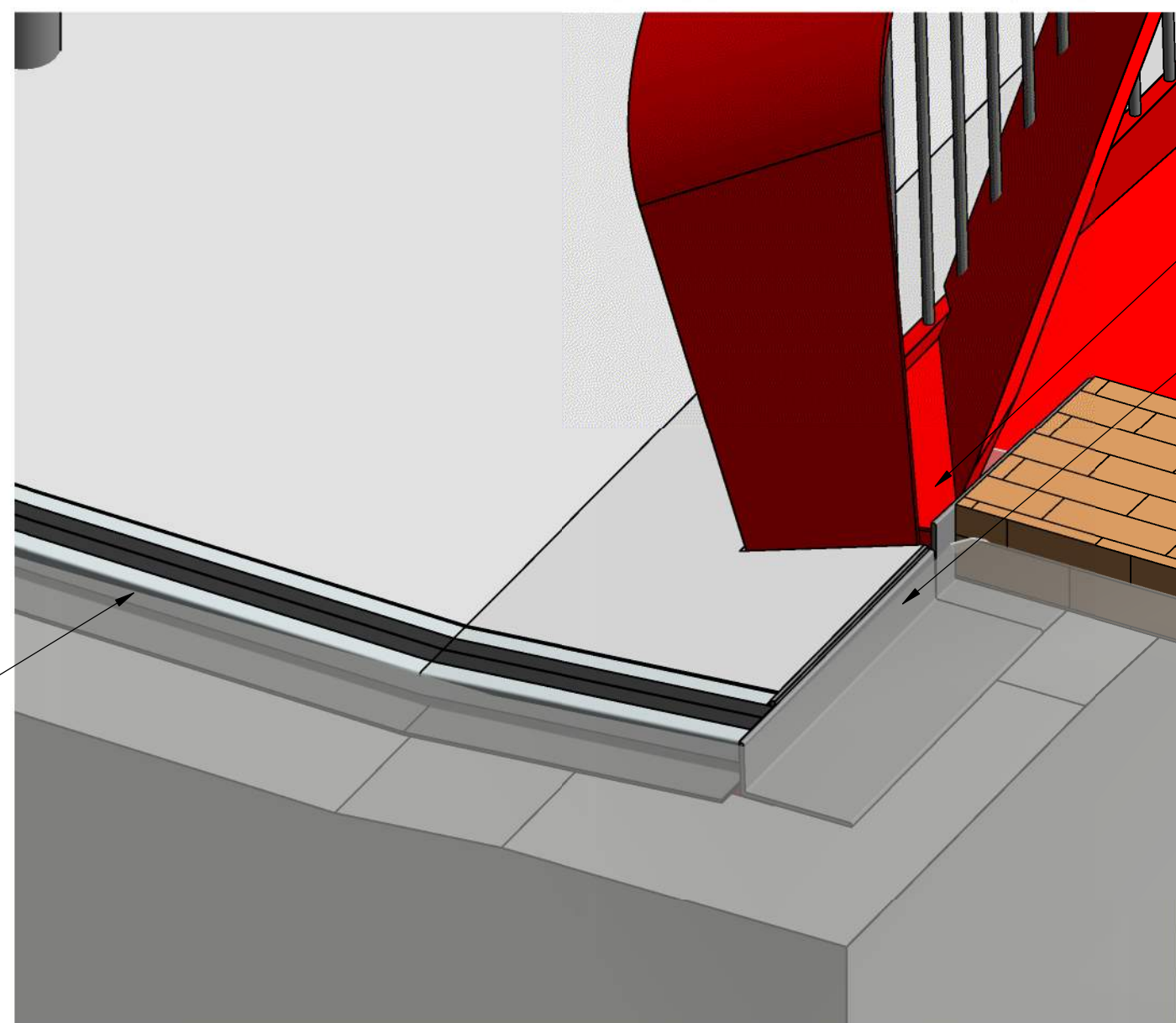
8 PLAN ON TYPICAL MOVEMENT JOINT CORNER DETAIL
1 : 5



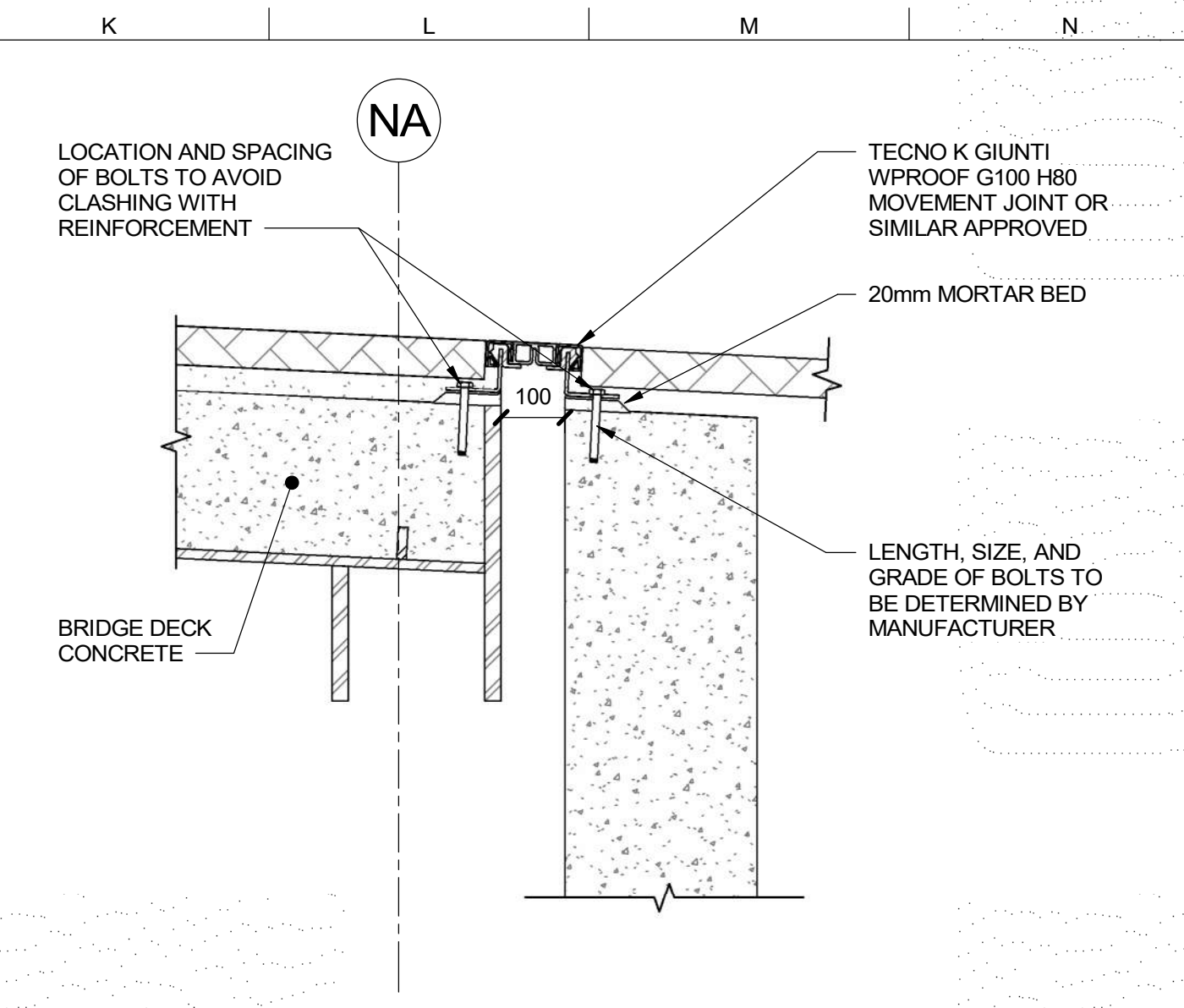
2 TYPICAL SECTION THROUGH SIDE MOVEMENT JOINT
1 : 10



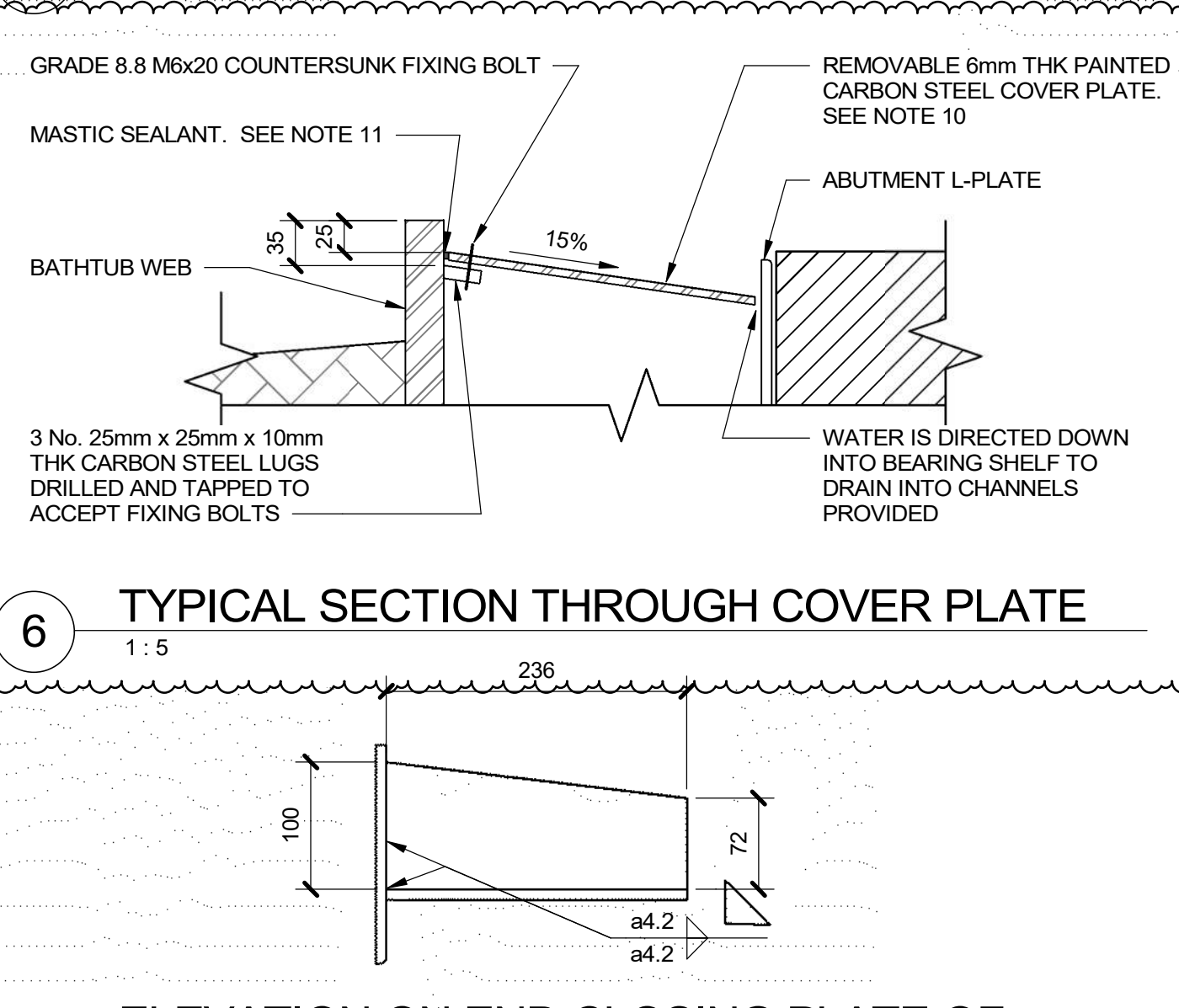
5 SECTION THROUGH INTERFACE BETWEEN END AND SIDE MOVEMENT JOINTS
1 : 5



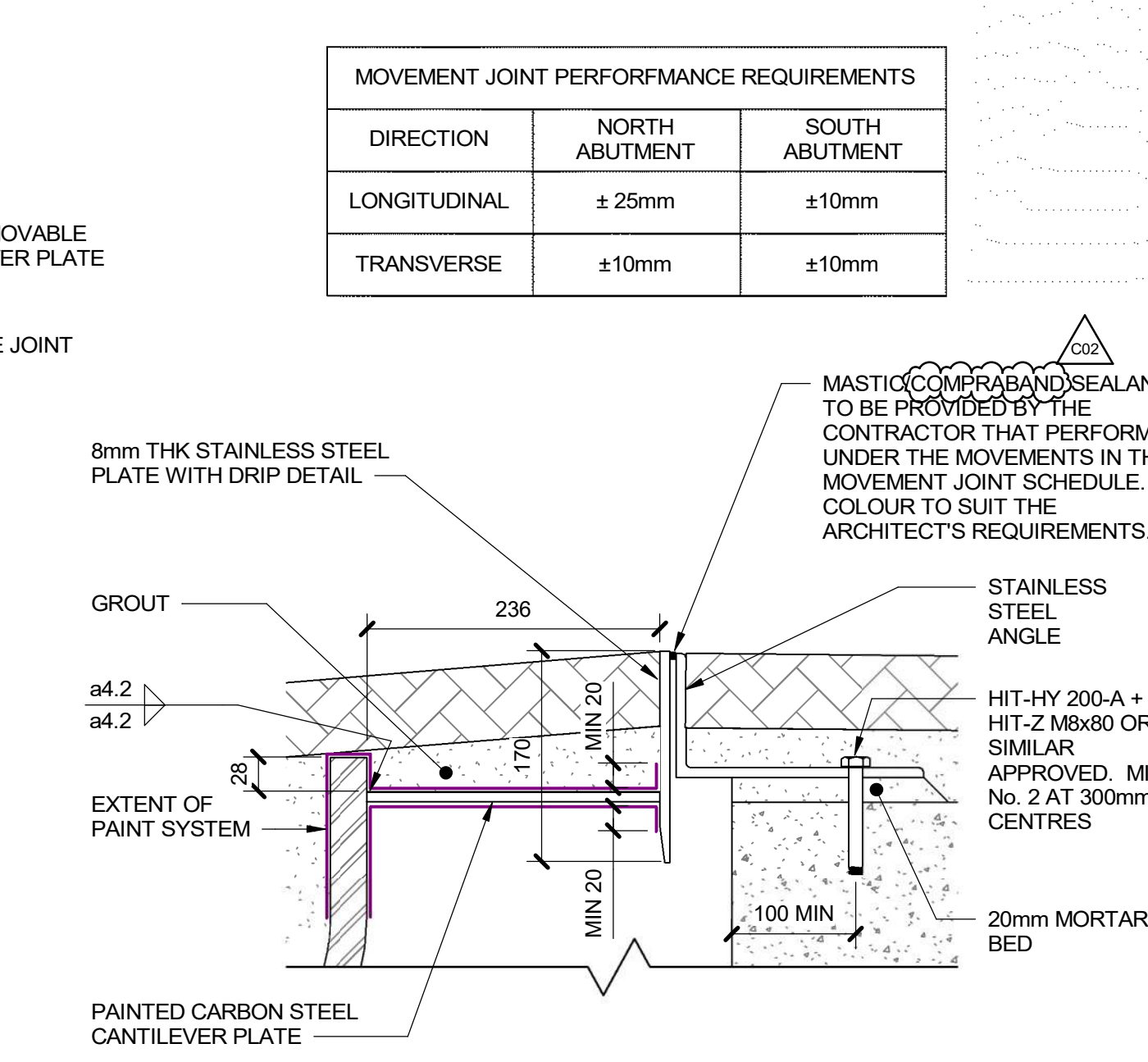
9 PERSPECTIVE VIEW ON TYPICAL MOVEMENT JOINTS



3 TYPICAL SECTION THROUGH END MOVEMENT JOINT
1 : 10




7 ELEVATION ON END CLOSING PLATE OF SIDE MOVEMENT JOINT
1 : 5



10 SIDE JOINT DETAIL
1 : 5

- Notes:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE GENERAL NOTES ON DRAWING KXC-ARP-BR2-XX-DR-CB-00003.
 - MOVEMENT JOINT TO BE TECNOK GIUNTI K WPROOF G100 H80 OR SIMILAR APPROVED AND ACCEPTED BY DESIGNER.
 - MORTAR TO HAVE SAME STRENGTH AS ADJACENT ABUTMENT CONCRETE AND TO BE IN ACCORDANCE WITH MOVEMENT JOINT MANUFACTURER'S INSTRUCTIONS AND SPECIFICATION.
 - THE BRIDGE DECK TOC AND ABUTMENT WALL TOC HAVE A CROSS FALL. THE MOVEMENT JOINT SHALL FOLLOW THE CROSS FALL.
 - JOINTS TO BE INSTALLED WHEN THE EFFECTIVE TEMPERATURE IS IN THE RANGE OF +4C TO +22C. ADJUSTMENTS WILL BE REQUIRED IF THE TEMPERATURE IS OUTSIDE THIS RANGE.
 - THE DESIGN AND INSTALLATION OF THE JOINT SHALL BE SUCH THAT IT CAN BE REMOVED AND REPLACED WITHOUT THE NEED TO BREAKOUT CONCRETE.
 - PROPOSED METHOD OF INSTALLATION TO BE SUBMITTED TO THE DESIGNER FOR APPROVAL.
 - THE CONTRACTOR SHALL SUBMIT TO THE DESIGNER A MAINTENANCE REGIME FOR THE INSTALLED JOINT.
 - FOR PAVING LEVELS BEHIND THE ABUTMENTS REFER TO LANDSCAPE DRAWINGS.
 - EXACT DIMENSIONS OF COVER PLATE TO BE DETERMINED ON SITE FOR AS BUILT STEELWORK AND ABUTMENT.
 - GAP BETWEEN COVER PLATE AND BRIDGE STEELWORK TO BE SEALED WITH MASTIC SEALANT. COLOUR TO BE APPROVED BY THE ARCHITECT AND CLIENT. MASTIC SEALANT TO BE REAPPLIED AFTER EVERY INSPECTION.

<div></div>	
DOCUMENT REVIEW	
Status:	
A	For Client Review
B	Comments to be incorporated
B	Minor Comments - For Client Review
C	Rejected - correct and resubmit within 5 working days
Checked By:	
Date:	
This review does not change the duties and scope of each company as set out in their respective contracts	

C02	22/01/21	JHB	SF	IW
CONTRACTOR COMMENTS ADDED				
C01	18/12/20	JHB	SF	IW
ISSUED FOR CONSTRUCTION				
P01	06/11/20	JHB	SF	IW
FOR CHECKER REVIEW				
Rev	Date	By	Chkd	Appd

ARUP

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www.arup.com

Client

GALLDRIS

Project Title

KINGS CROSS BRIDGE 2 (BR2)

Drawing Title

**STRUCTURES
MOVEMENT JOINT DETAILS**

Scale at A1 As indicated

Role CIVIL BRIDGES

Suitability A1 - SUITABLE FOR CONSTRUCTION

Arup Job No 268962-00 Rev C02



Name KXC-ARP-BR2-XX-DR-CB-30002

PUBLISHED

<i>Kings Cross Bridge 2</i>		
Document Ref. & Rev.	Package Description	Company Name
KXC-GDR-BR2-XX-TS-W-0005 Rev 01	Gullies (North)	Galldris
Date of Issue:	21-12-2020	

Specification Section & Clause:	KXC-ARP-BR2-XX-SP-CB-00001_C01
Area / Location:	North Triangle
Detailed description of area / item / equipment:	North end of bridge at pavement level ACO Gully and cover as attached datasheets

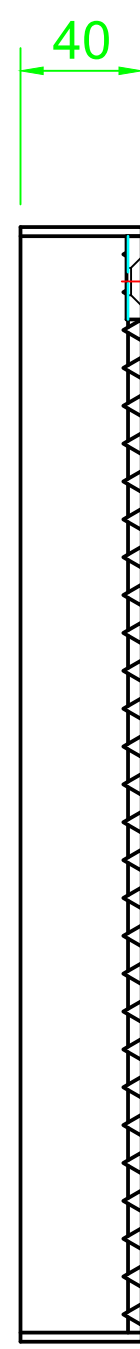
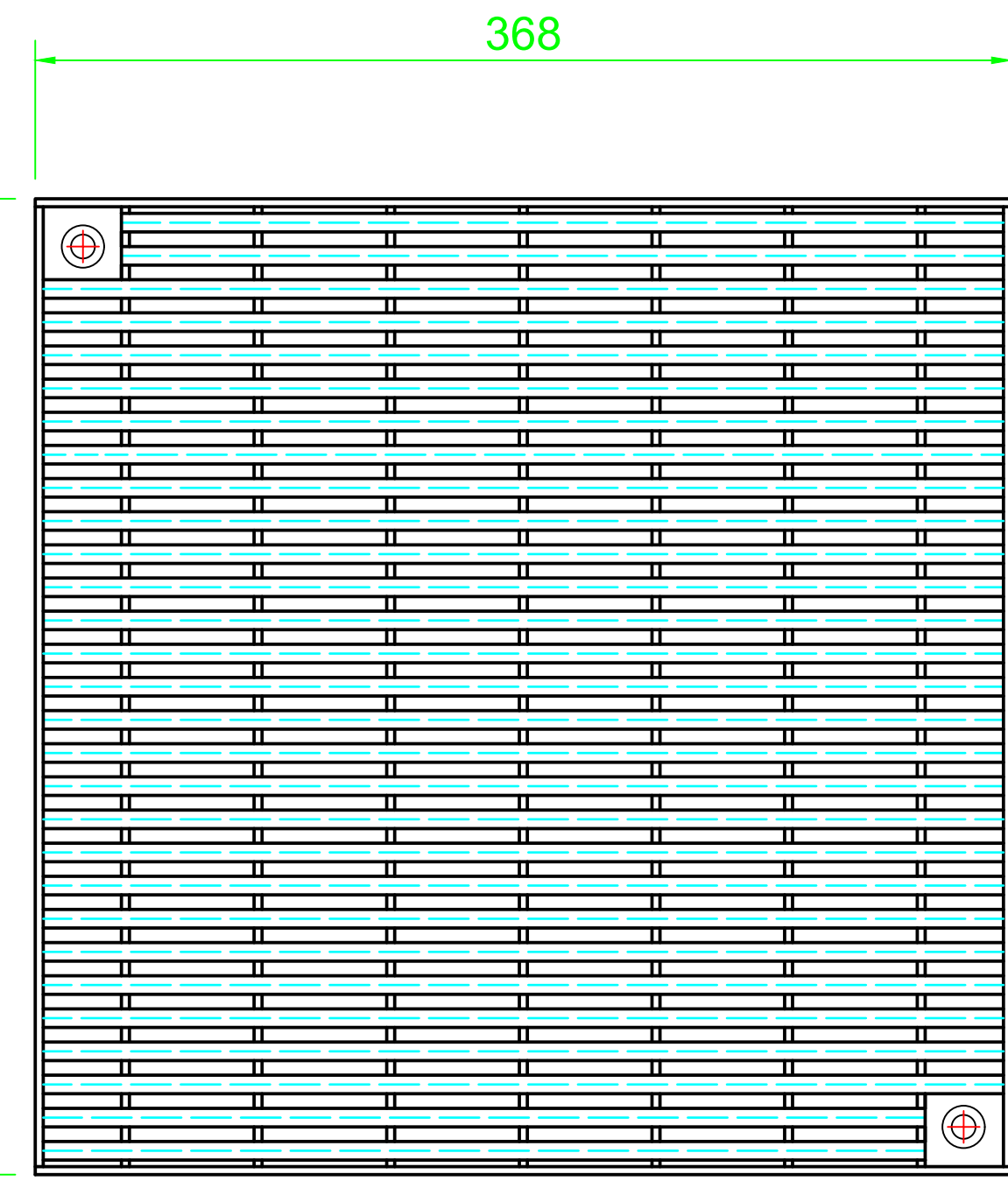
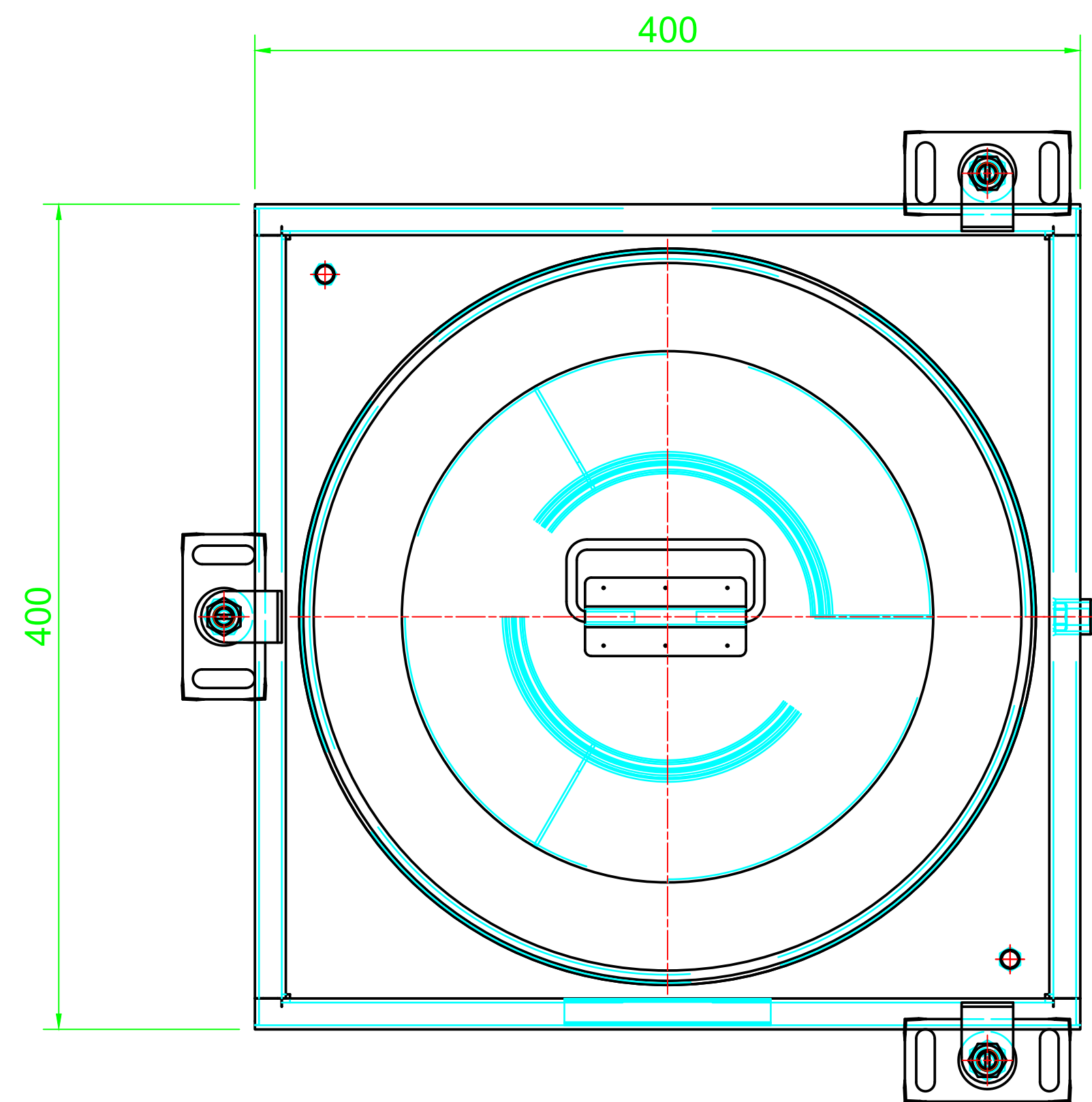
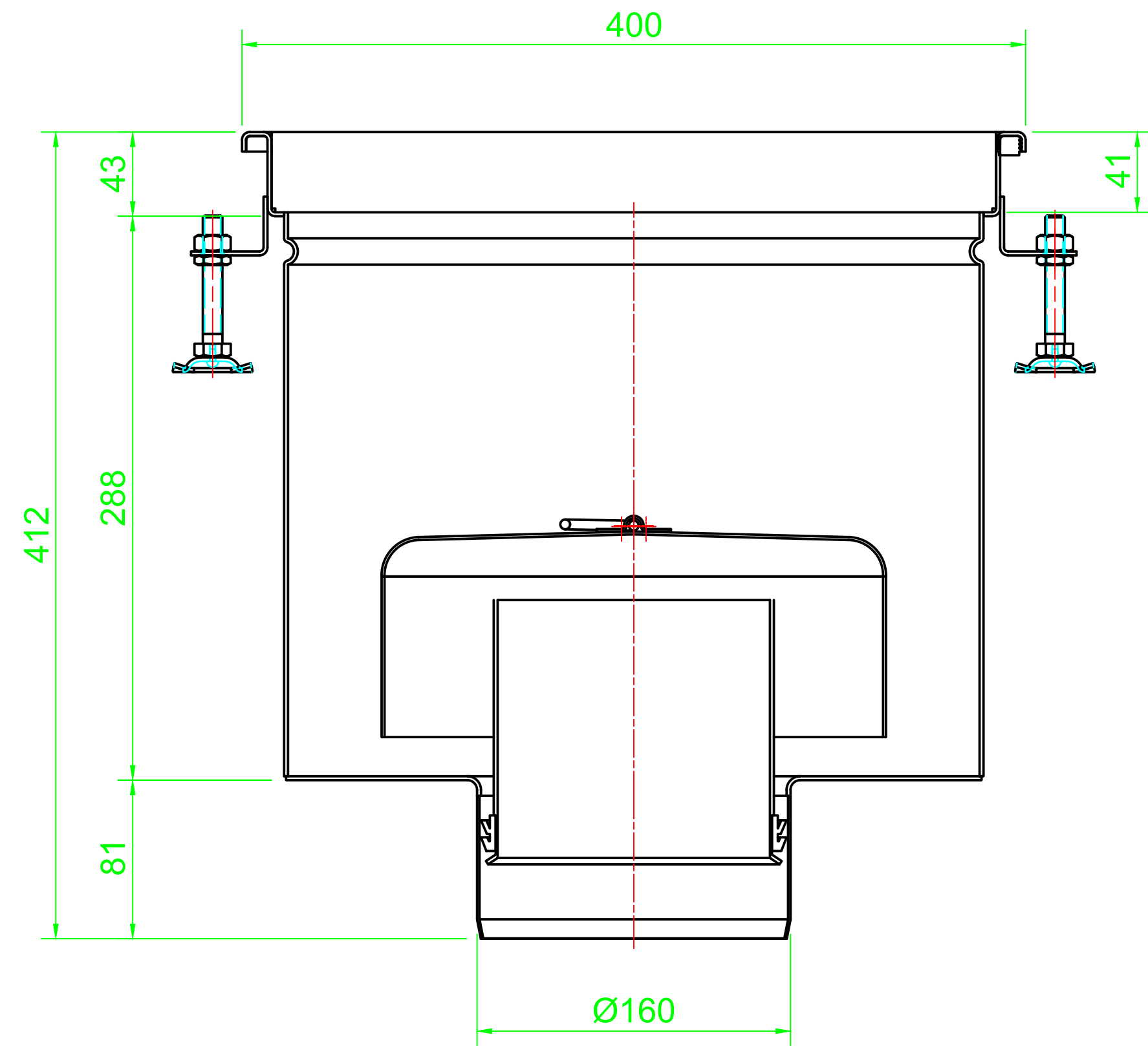
Photographs:

Part No	Description	Top size (mm)	Body dia (mm)	Depth 1 overall (mm)	Spigot dia (mm)	Flow rate (l/s)	Weight (kg)
05766	Gully 357 FKO Vertical Outlet S/S 304	400x400	357	336 (+80)	Ø160	10.0	12.00
15766	Gully 357 FKO Vertical Outlet S/S 316	400x400	357	336 (+80)	Ø160	10.0	12.00

†Spigot depth in brackets.

Comments:

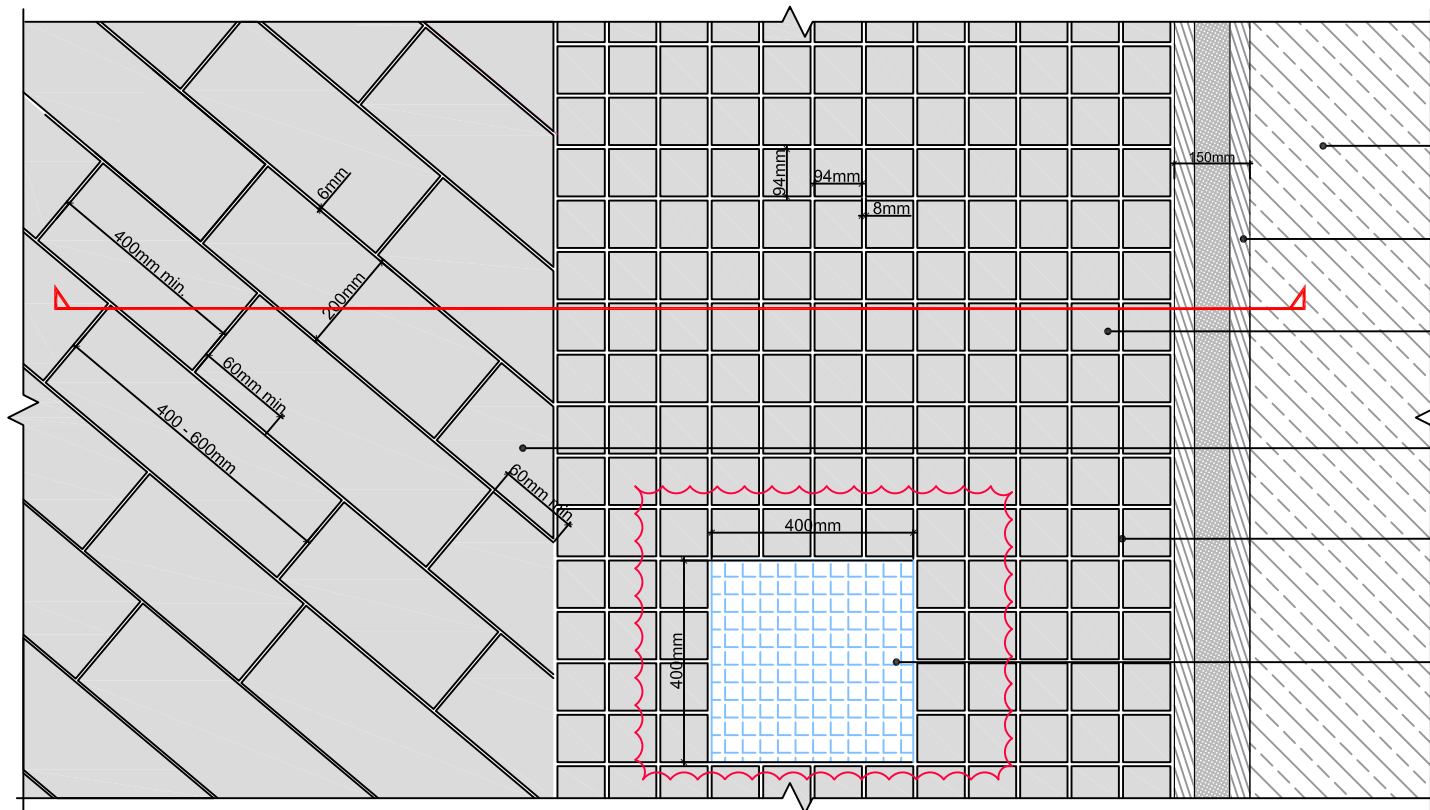


Qty. 2 No.

Qty. 2 No.

Channel	Gully 357
Gratings	Heelsafe Grate / Locked / 316 st st
Outlet	Ø160x 80 Long c/w Foul Air Trap.
Channels over 3000mm in length will include bolted flange plates	
Levelling feet at approx 1500 centres	
Fixing Tangs at approx 400 centres.	
For full bespoke channel tolerances and specifications, please contact ACO Building Drainage	
NOTE: CHANNEL INVERT DEPTH SHOWN THUS 60	

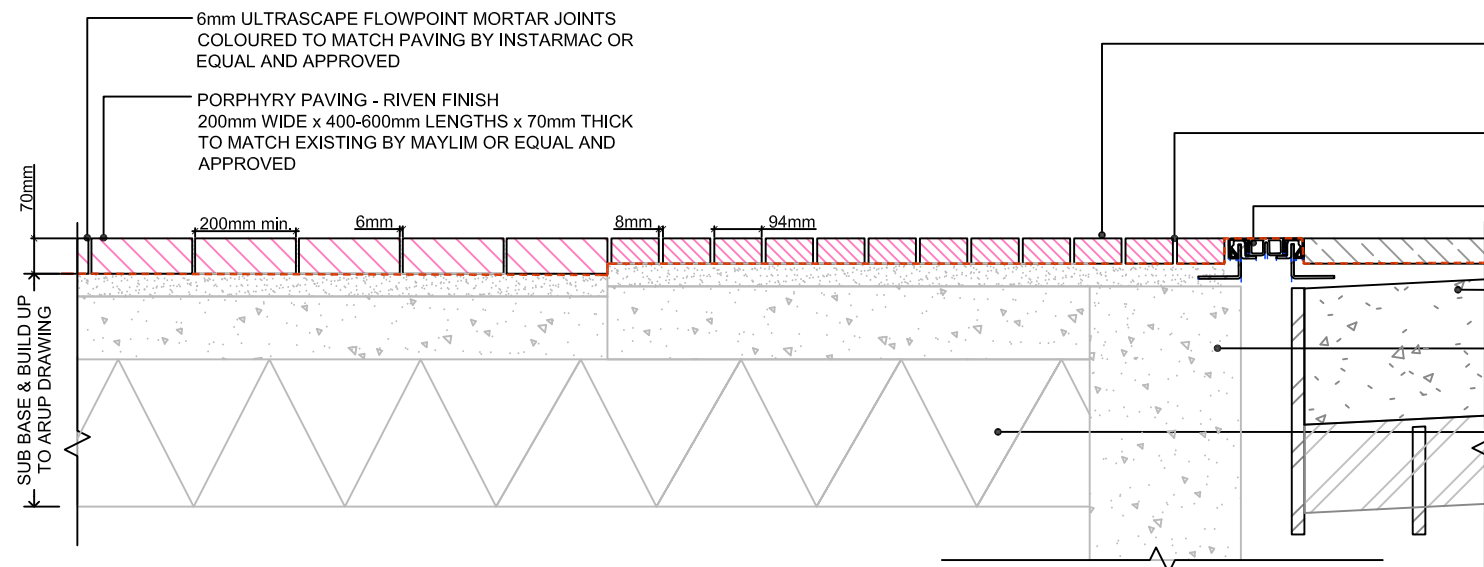
A		25.2.2021	First Issue			JR
Issue	Date	Name	Description			Name
Drawn:	25.2.2021	JR	ACO Business Centre Custom Road, Bedford, Bedfordshire, MK41 1Q.F. Tel: 01462 816868 Fax: 01462 851460 E-mail: aco@aco.co.uk Website: www.aco.co.uk	Information contained in this drawing is copyright property of ACO Building Drainage. Any reproduction in part or whole without written permission of ACO Building Drainage is prohibited.		ACO
Checked:	25.2.2021	MG				
Scale:	NTS	SS316 (1.4404)				
Project/Contractor			Drawing No.		Issue:	Projection: ISO-E
Kings Cross Central Bridge 2			E1-P18-31048-3		A	
Description			Gully 357 with locked Heelsafe Grate		A1	



DETAIL H01a - PLAN LAYOUT OF NORTH ABUTMENT PAVING & BRIDGE INTERFACE
SCALE 1:15 @ A3

- FOR BRIDGE PAVING PATTERN, REFER TO DRAWINGS KXC-ALD-BR2-XX-DR-LA-90203
- MOVEMENT JOINT INDICATIVE ONLY, TO ARUPS DRAWINGS AND SPECIFICATION
- NEW PORPHYRY SETTS - RIVEN FINISH
94mm x 94mm x 50mm THICK COLOUR TO MATCH EXISTING PORPHYRY BY MAYLIM OR EQUAL AND APPROVED
- NEW PORPHYRY PAVING - RIVEN FINISH
200mm WIDE x 400-600mm LENGTHS x 70mm THICK TO MATCH EXISTING AT THE TRIANGLE BY MAYLIM OR EQUAL & APPROVED
- 8mm ULTRASCAPE FLOWPOINT MORTAR JOINTS COLOURED TO MATCH PAVING BY INSTARMAC OR EQUAL AND APPROVED
- 400mm x 400mm tbc DRAINAGE GULLY TO ARUP SPECIFICATIONS & DETAILS

NOTE: LEVELS VARY DEPENDANT ON LOCATION AND ARE NOT SHOWN FOR CLARITY, REFER TO ARUP SURFACE LEVELS DRAWINGS



DETAIL H01b - SECTION THROUGH NORTH ABUTMENT PORPHYRY PAVING & BRIDGE INTERFACE
SCALE 1:15 @ A3

- NEW PORPHYRY SETTS - RIVEN FINISH
94mm x 94mm x 50mm THICK COLOUR TO MATCH EXISTING PORPHYRY BY MAYLIM OR EQUAL AND APPROVED
- 8mm ULTRASCAPE FLOWPOINT MORTAR JOINTS COLOURED TO MATCH PAVING (CHARCOAL) BY INSTARMAC OR EQUAL AND APPROVED
- MOVEMENT JOINT INDICATIVE ONLY, TO ARUPS DRAWINGS AND SPECIFICATION
- BRIDGE STRUCTURE AND BUILDUPS INDICATIVE ONLY - TO ARUP DETAILS AND SPECIFICATION
- BRIDGE ABUTMENT INDICATIVE ONLY - TO ARUP DETAILS AND SPECIFICATIONS
- CONCRETE FOUNDATION AND PAVING BUILDUPS INDICATIVE ONLY TO ARUP DETAILS AND SPECIFICATION

LOCATION
TO NORTH BRIDGE ABUTMENT

All dimensions to be verified on site. If fixed dimensions to be provided to those scales. Any areas indicated on this drawing are for guidance only, no responsibility is taken for their accuracy.
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CDM/H&S:
The works illustrated on this drawing have been reviewed against the Design CDM Risk Register and significant risks are noted as:
Construction:
• Handling heavy materials
• Working at height
• Working adjacent to existing structures and buildings
Maintenance:
• Light bulb changing

NOTES / KEY:

REFERENCE DRAWINGS/DOCUMENTS

REVISIONS

P01 First issue for Review / comment 27.01.2021

no. issued date

CLIENT:

GALLDRIS

LANDSCAPE ARCHITECT:
The Threshing Barn
Signal Park Barns
Chesherton, Nr. Bicester
Oxfordshire, OX25 1TD
Tel: 01869 249779
Email: mail@appliedlandscape.co.uk
ALD
applied landscape design

PROJECT:

**BR2 BRIDGE
KINGS CROSS CENTRAL**

DRAWING TITLE:

**PAVING DETAILS
NORTH ABUTMENT
PORPHYRY PAVING**

drawn: CW	scale: 1:15 @ A3
checked: KmJ	status: REVIEW
date: 28.04.2017	xref file ref: ALD861_LDbase

DRAWING NUMBER:
KXC-ALD-BR2-XX-DR-LA-90721

REVISION:
P01

ORIGINAL A3 SIZE SHEET

QUALITY CONTROL			
Consultant / Contractor Acceptance			
ALD	Signature:	Moxon	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:
ARUP	Signature:	Argent	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:

Alternatively record of approval can be through Asite.

<i>Kings Cross Bridge 2</i>		
Document Ref. & Rev.	Package Description	Company Name
KXC-GDR-BR2-XX-TS-W-0008 Rev 00	Bedding mortar – South pavement	Galldris
Date of Issue:	06-05-2021	

Specification Section & Clause:	KXC-ARP-BR2-XX-SP-CB-00001_C01
Area / Location:	Goods Way Footpath
Detailed description of area / item / equipment:	South end of bridge at pavement level Bedding mortar to paving as BS 7533

Data Sheet: See attached
Comments:

QUALITY CONTROL			
Consultant / Contractor Acceptance			
ALD	Signature:	Moxon	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:
ARUP	Signature:	Argent	Signature:
	Print Name:		Print Name:
	Position:		Position:
	Date:		Date:

Alternatively record of approval can be through Asite.

Pro-Bed HS Fine Bedding Concrete BULK

Applications

UltraScape Pro-Bed HS fine bedding concrete is specifically formulated to meet and exceed the strict demands of BS 7533. The product provides a perfect bound base for natural stone paving and cobbles, concrete paving, flags and block paving, which once laid with UltraScape Pro-Bed HS ECO are able to accept foot traffic after just 12 hours and vehicular traffic after 24 hours. The material is also not subject to environmental erosion, which can lead to increased point loads on slabs and consequent breakage.

Technical

UltraScape Pro-Bed HS is formulated from selected cements and graded fillers. The pre-blended fine bedding concrete is supplied in 25kg bags or alternatively, for those large projects, in 30 tonne bulk silos. The product can be laid from 10mm to 75mm in one pass with greater depths achievable using successive layers. The material mixes easily on-site with the addition of water and provides a compressive strength of 38N/mm² after 28 days complying fully with BS 7533. This material should not be used in temperatures below 5°C.

Preparation

It is of vital importance that the supporting layer that is to receive UltraScape Pro-Bed HS is stable and not liable to settlement or heave. Supporting structures must be cleaned, pre-soaked and all ponded water must be removed prior to application. To promote bond, the supporting layer can be primed using UltraScape Pro-Prime slurry primer. Please note that this product is suitable only for bound/rigid construction, not for unbound/flexible applications.

Mixing

Add between 2.4 and 2.8 litres of clean water to a suitable mixing vessel. Slowly add the contents of one 25kg bag. Mix mechanically for a minimum of 3 minutes and a maximum of 5 minutes. Do not add extra water or part mix bags.

Priming

To increase overall product performance, prime the supporting layer with UltraScape Pro-Prime before applying UltraScape Pro-Bed HS. Priming the roadbase is not a requirement of the British Standard for pavements constructed on a bound base. It is of vital importance that the underside of all paving elements are primed in accordance with BS 7533. For full details consult the manufacturer or refer to the UltraScape Pro-Prime datasheet.

Note: The bonding characteristics of UltraScape Pro-Bed HS will only be achieved when the product is used in conjunction with UltraScape Pro-Prime.



Features & Benefits

- Can be laid from 10-75mm in one pass
- Shrinkage compensated
- BS 7533 compliant
- Small contractor friendly units
- Bulk Silos for larger projects
- Pre-blended - just add water
- Open to pedestrian traffic in 12 hours
- Open to vehicular traffic in 24 hours
- Long-term durability



Provision of Joints

Consideration must be given to movement joints within a bound or rigid construction. Always consult the Project Engineer/Architect for details regarding movement joints.

Health, Safety and Environmental

Please ensure that appropriate PPE is used when preparing, mixing and applying products. Always wash hands before consuming food and make sure that materials are kept safely out of reach of children and animals. Please dispose of packaging and waste responsibly and in accordance with local authority requirements. A full material safety data sheet relating to this product is available from instarmac.co.uk

Quality Assurance

All products are manufactured in a plant whose quality management system is certified / registered as being in conformity with BS EN ISO 9001, ISO 14001 and OHSAS 18001. Our products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or continuous control over where and how projects are used. All products are sold subject to our conditions of sales, copies of which may be obtained upon request.

Product Details

Unit/Packaging	30 tonne bulk silo
Coverage	17.8m ² per tonne at 30mm bed depth Please visit ultrascape.co.uk for a free online product calculator.
Density	2088kg/m ³
Colour	Grey*

**As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the enclosed product.

Physical Properties (UKAS Accredited)

Test Age	Compressive Strength*	Flexural Strength	Adhesion* (without primer)	Adhesion* (with primer)	Shrinkage %
1 day	20N/mm ²	-	0.72N/mm ²	1.73N/mm ²	0.01%
7 days	36N/mm ²	6.5N/mm ²	0.96N/mm ²	2.02N/mm ²	0.04%
28 days	38N/mm ²	7.5N/mm ²	1.25N/mm ²	2.18N/mm ²	0.09%
Modulus of elasticity	28 days	<21500 N/mm ²			
Workability	50 minutes @ 20°C				

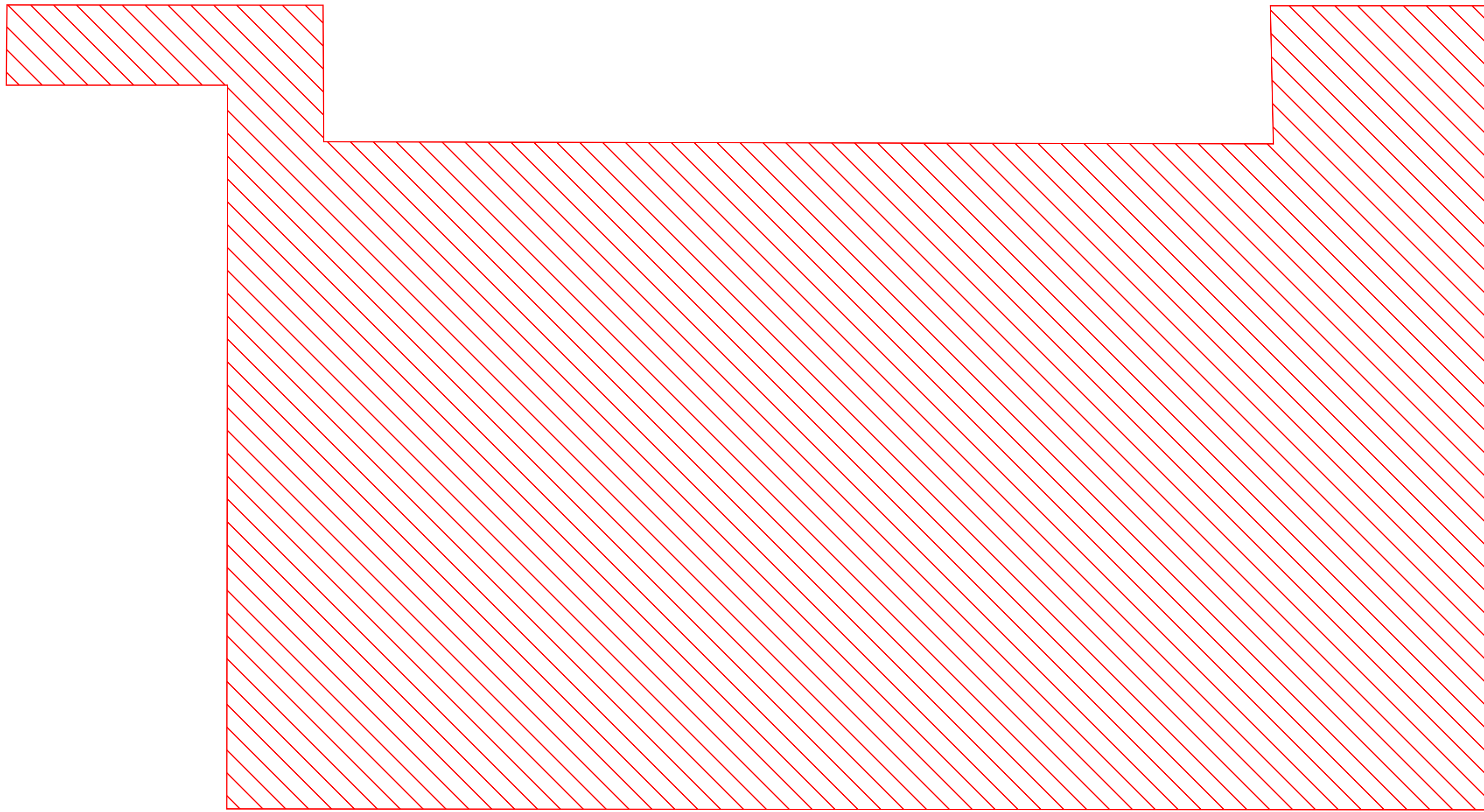
*Depending on temperatures - test carried out at 20°C. Cool temperatures retard, warm temperatures accelerate product performance. As with all raw materials, colour variation may occur. Please note that this does not affect the consistency or characteristics of the enclosed product.

Contact Us

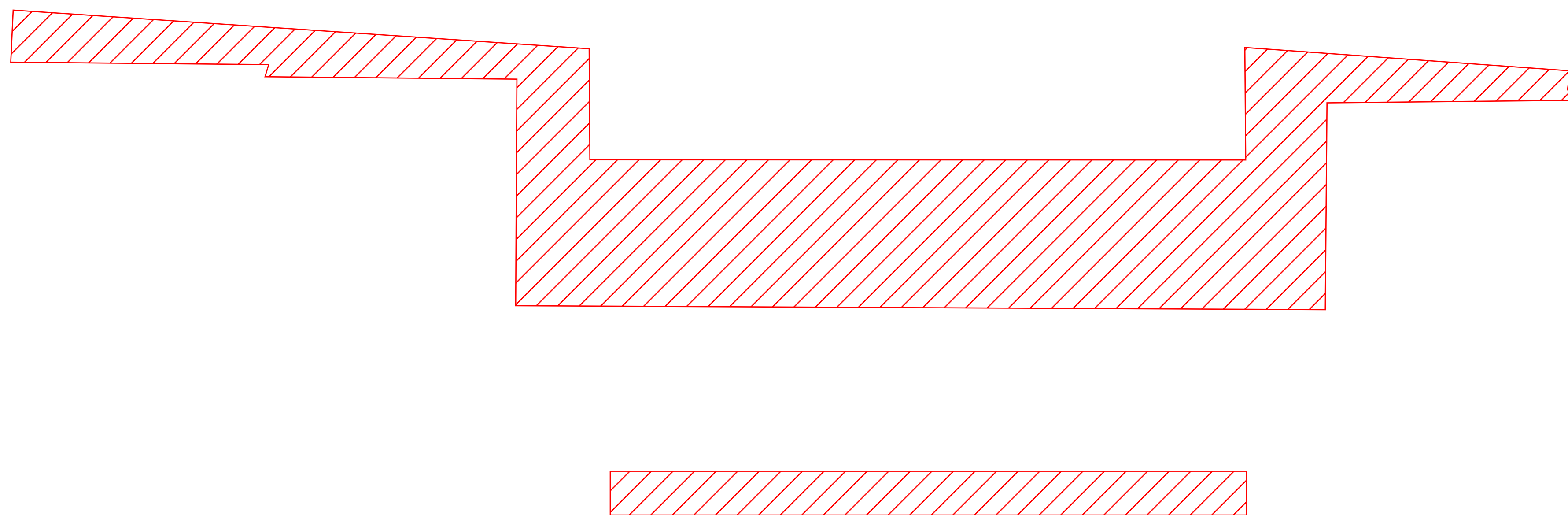
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Extent of replacement
brickwork hatched red



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brickwork hatched red

