

SAFETY HEALTH & ENVIRONMENTAL INFORMATION

In addition to the hazards/risks normally associated with the type of work detailed on this drawing, note the following risks and information.

Risks listed here are not exhaustive. Refer to Designer's Risk Assessment and pre-construction phase plan.

CONSTRUCTION

Managing flow & stage levels in River Exe
-Monitor flow levels & flood warnings.
-Check adequacy of cut-off & stability of cofferdams, if



Managing seepage flows through weir

-Monitor seepage

-Check stability of cut face in weir and assess
permeability of formation material.

Working near water

-Wear appropriate PPE



-Avoid working near water where possible
-Allow provision for fixed edge protection to eliminate
falls into water
-Allow provision for systems for work positioning and
fall arrest
-Assess bank stability / conditions considering access
for personnel and machinery

-Check adequacy of cut-off & stability of cofferdams



Risk of falls from height
-Check depth of excavations
-Allow provision for fixed guard rails to eliminate falls from height and appropriate means of access not involving ladders
-Allow provision for systems for work positioning and fall arrest



-Check cranage lifting facilities & constraints
-Check access weight & size restrictions for cranage at bridge crossings along access route to site



-Check for identified & unidentified services. Clearly highlight and services that may affect works

Interface with public & other site operations

-Check adequate warning signs and fencing in place

DEMOLITION

ENVIRONMENTAL

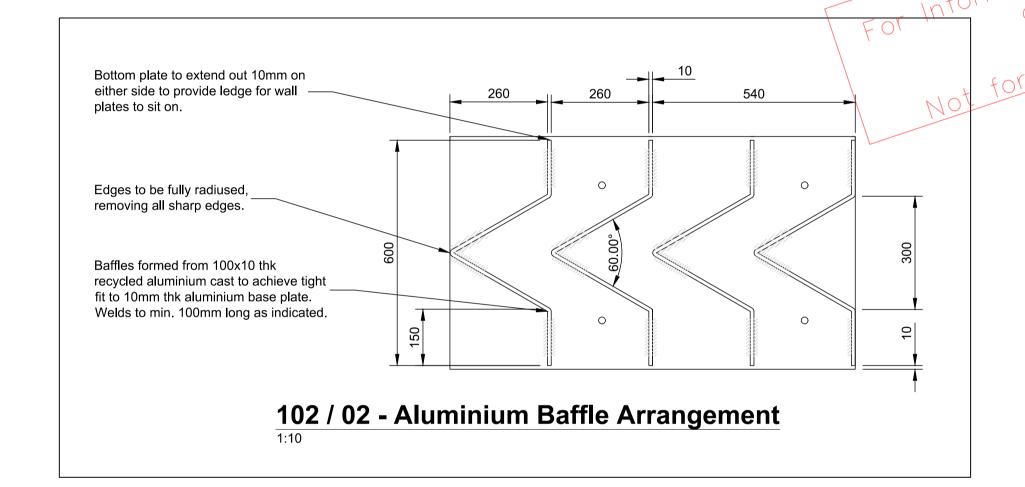
Pollution of Watercourse

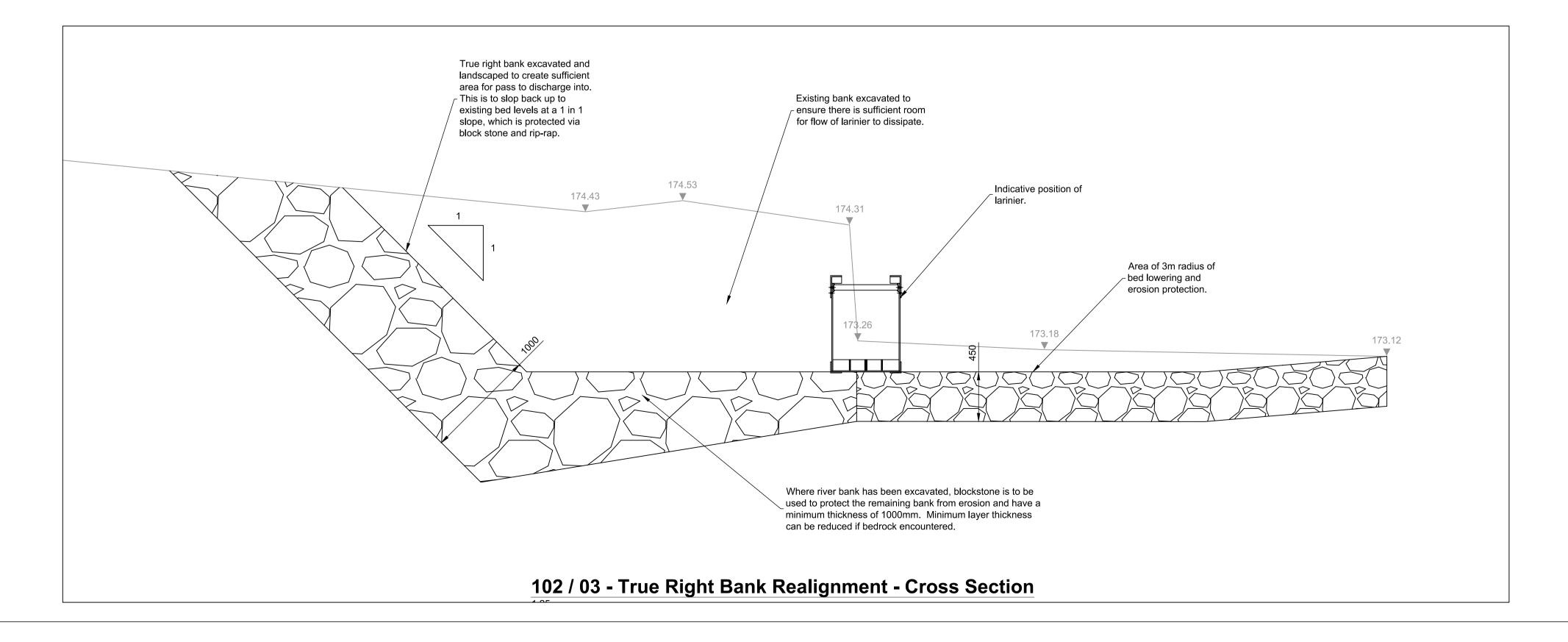
-Create a suitable dry working area
-Refer to 'Guidance for Pollution Prevention 2018'
-Produce a Site Waste Management Plan
-Produce a a Site Environmental Emergency Plan
- Have a suitable incident Response Plan in place

OPERATION & MAINTENANCE

For information relating to Use, Cleaning and Maintenance see the Health and Safety File

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement





NOTES:

1. DIMENSIONS:

2. SPECIFICATION:

Are in millimetres unless otherwise stated.
Marked thus (*) are approximate.
All levels are in metres to Site Datum.

All works to be carried out in accordance with the Environment Agency Minimum Technical Requirements which shall be the Civil Engineering Specification for the Water Industry (CESWI). All technical requirements clauses apply unless stated as deleted, amended or augmented in accordance with the EA WEM Contract Works Information documentation.

3. DRAWING INFORMATION

Site plans from topographical survey by the Westcountry Rivers Trust, August 2020. Contractor to check critical levels before setting out.

4. ALUMINIUM:
All structural aluminium alloys to BS 8118.

All aluminium components to be Alloy 6082T6, or similar approved.
All aluminium welds to be 10mm fillet unless otherwise

All aluminium welds to be 10mm fillet unless otherwise indicated. All welds to be continuous unless otherwise indicated.

All stainless steel to BS5950.

5. BOLTS:

All fasteners to be stainless steel A2 (304) set screws, M12 unless otherwise indicated in 14mm dia holes.
All fastness to have white nylon washers to isolate stainless steel fasteners from aluminium alloy extrusions & plates.

Washers to be M12 21mm x 2mm unless otherwise indicated

to suit set screw dia.

All nuts to be nyloc nuts.

Supporting structure to avoid bottom connector plates (&

bolted fixings).

6. FABRICATION:
Fabrication drawings to be prepared by the fabricator.
All fabricated structural steelwork & aluminium structures executed to conform to BS EN 1090-2.

All structural material components, used within the fabricated and executed structure, to conform to BS EN 1090-2 including NSSS V5 CE Marking Version.

Size of connection plates & bolt hole positions to suit fabrication tolerances and checked for fit prior to deliver to

site.
Existing weir profile to be surveyed prior to commencement of fabrication.

7. ASSEMBLY:
All bolted connection plates to receive bead line of Sika-flex.
8. MASS CONCRETE

All concrete to comply with BS 8500-2.
Concrete to have a minimum strength class of C40 / 50.
Designated Mix REQUIREMENTS:

- RC 40 / 50 - 20mm max. aggregate size

- S3 consistency class
Minimum cover to reinforcement C_{min} = 60mm.

All exposed edges to have 25mm chamfer, with exception to abutting joints.

Exposed formed concrete to have fair worked finish.

Exposed unformed concrete to have wood float finish.

Nominal 100mm layer of mass concrete blinding for pours.

 P02
 03/06/21
 Detailed Design - For Tender
 AF
 ML
 TC

 P01
 25/05/21
 Detailed Design - For Comment
 AF
 ML
 TC

 B02
 19/05/21
 GA Design - For Planning
 AF
 SP
 TC

 B01
 12/03/21
 Outline Design - For Discussion
 AF
 SP
 TC

 A01
 05/02/21
 Concept Design - For Information
 AF
 SP
 TC

Rev. Date Description

Detailed Design

Scales		Current Issue Signatures	
	As shown	Author A. Frampton	PAR
Original Size	Α1	Checker M.Lakin	M.L.
Datum	N/A	Approver T.Coe	136
Grid	N/A	C Copyright reserved	

Filename:

Client





PROJECT

Bridgetown Weir

TITLE

Larinier Pass – Sections & Details

Drawing No. Project No. Revision

102 - 02900 - P02

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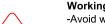


Managing seepage flows through weir -Monitor seepage

fall arrest

fall arrest

-Check stability of cut face in weir and assess permeability of formation material. -Check adequacy of cut-off & stability of cofferdams



Working near water -Avoid working near water where possible -Allow provision for fixed edge protection to eliminate falls into water -Allow provision for systems for work positioning and

-Assess bank stability / conditions considering access for personnel and machinery -Wear appropriate PPE

Risk of falls from height

-Check depth of excavations



-Allow provision for fixed guard rails to eliminate falls from height and appropriate means of access not -Allow provision for systems for work positioning and



-Check access weight & size restrictions for cranage at bridge crossings along access route to site

-Check cranage lifting facilities & constraints

highlight and services that may affect works



Interface with public & other site operations -Assess risk to public on site -Check adequate warning signs and fencing in place

-Check for identified & unidentified services. Clearly

DEMOLITION

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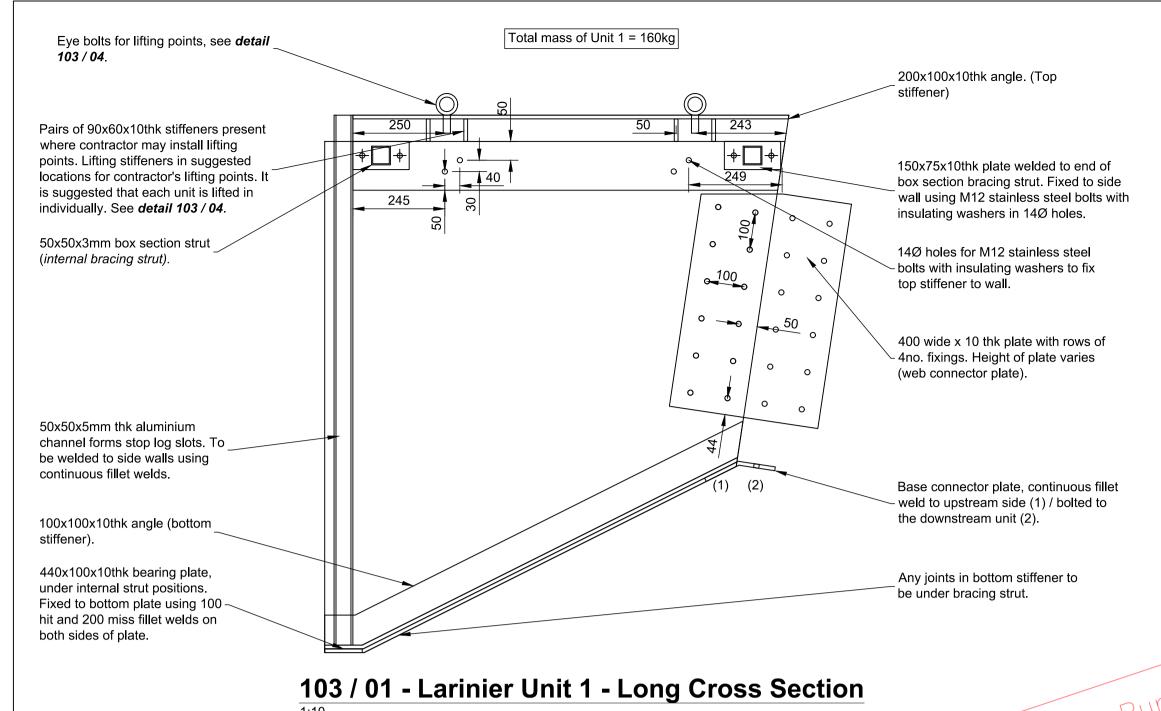


Pollution of Watercourse -Create a suitable dry working area -Refer to 'Guidance for Pollution Prevention 2018' -Produce a Site Waste Management Plan -Produce a a Site Environmental Emergency Plan - Have a suitable incident Response Plan in place

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Web connector

2no.Top stiffener: with

lifting points and stiffener

2no. Wall plate: with stop

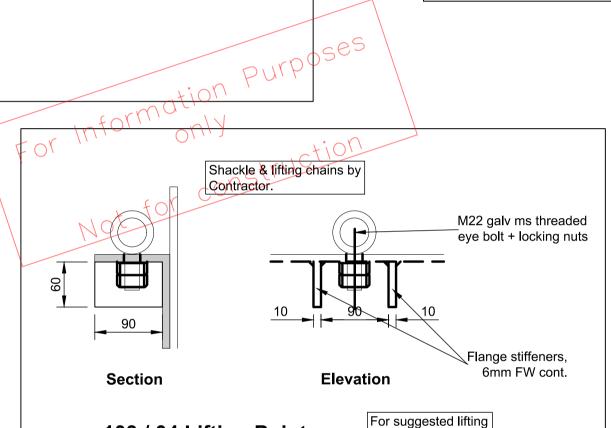
log slot and bracing struts.

2no. Bottom stiffener.

Base connector

Bearing Plate.

104 / 03 - Larinier Unit 1 - Components



103 / 04 Lifting Point

440x100x10 thk plate

bearing plate fixed to

runderside of base plate via

50x50x3mm box section strut

(internal bracing strut), welded

on each end to 150x75x10mm

100 hit & 200 miss fillet

200x100x10thk

- 10thk wall plate.

Pairs of 90x60x10thk stiffeners

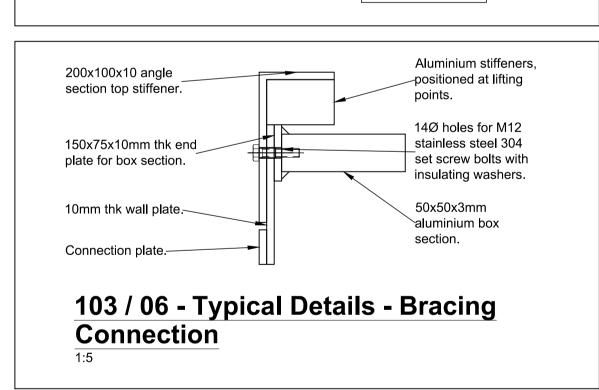
present where contractor may

install lifting points.

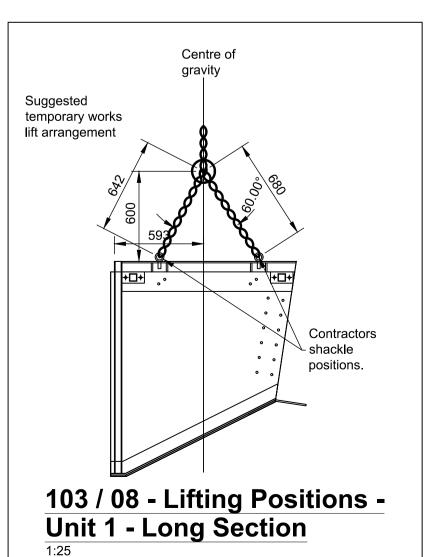
103 / 02 - Larinier Unit 1 - Plan View

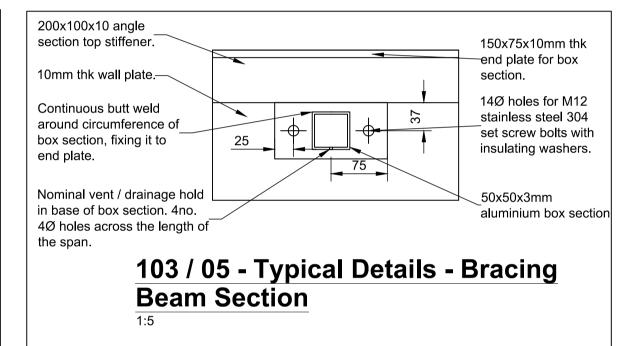
- angle. (Top

stiffener)



respective drawings.





400 wide x 10thk plate with

rows of 4no. M12 bolts in 14Ø

holes. (Web connector plate).

440x200x10 thk plate welded

- to underside of unit. (Base

400 wide x 10thk plate with

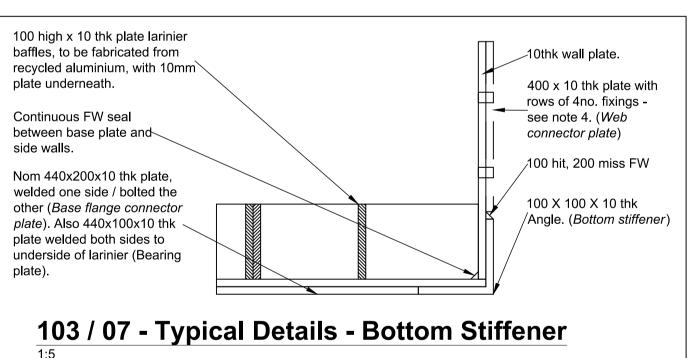
 $^{/}$ holes. (Web connector plate).

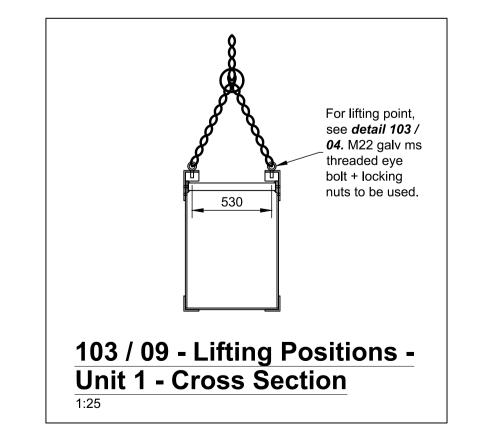
Length of plates vary.

rows of 4no. M12 bolts in 14Ø

connector plate)

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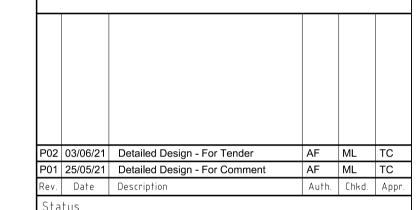
fabrication tolerances and checked for fit prior to deliver to Existing weir profile to be surveyed prior to commencement

Size of connection plates & bolt hole positions to suit

of fabrication.

7. ASSEMBLY:

All bolted connection plates to receive bead line of Sika-flex.



Detailed Design

Scales		Current Issue Signatures		
	As shown	Author A. Frampton	Philosophia	
Original Size	Α1	Checker M.Lakin	M.L'	
Datum	N/A	Approver T.Coe	156	
Grid	N/A	С Соруг	right reserved	





Bridgetown Weir

Larinier Unit 1 Details

Drawing No. Project No. Revision 103 – 02900 - P02