



York Flood Alleviation Scheme Clementhorpe

Construction Traffic Management Plan
February 2021

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Quality Assurance

| | |
|------------------------|------------------------------------|
| Project name | York Flood Alleviation Scheme |
| Project 1B1S reference | ENV0002071C-JBAB-ZZ-B08-RP-PL-0003 |
| Date | Feb 2021 |
| Version number | P06 |
| Author | Steven Taylor |

Document History

| Version | Status | Issue date | Prepared by | Reviewed by |
|---------|--------|-----------------------------|---------------|-------------|
| P03 | Draft | 27 th April 2020 | Steven Taylor | John Davies |
| P04 | Draft | 9 th Oct 2020 | Steven Taylor | Stuart Box |
| P05 | Draft | 2 nd Feb 2021 | Steven Taylor | Stuart Box |
| P06 | Draft | 2 nd Feb 2021 | Steven Taylor | Stuart Box |

Published by:
Environment Agency
Horizon House, Deanery Road,
Bristol BS1 5AH
www.gov.uk/environment-agency

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Executive summary

This Construction Traffic Management Plan (CTMP) sets out the anticipated construction traffic, impacts and routing arrangements during the construction of the new flood defences in the Clementhorpe area of the city of York.

This document has been prepared in consultation with CYC Highways Development Control and other relevant York Council Authorities. The CTMP will be updated over the course of the project as new information arises.

Contents

| | |
|---|-----------|
| Executive summary | i |
| Contents | ii |
| Table of Figures..... | iv |
| Table of Tables..... | v |
| 1 Vehicle Information | 1 |
| 1.1 <i>Construction related vehicle numbers by month</i> | 1 |
| 1.2 <i>Construction machinery by month</i> | 3 |
| 1.3 <i>Construction worker vehicle numbers</i> | 4 |
| 1.4 <i>Private vehicle numbers</i> | 4 |
| 1.4.1 Roomzzz Hotel vehicles | 4 |
| 1.4.2 Caravan Park vehicles | 4 |
| 1.4.3 Rowntree Park car park vehicles..... | 4 |
| 1.4.4 Pedestrian and cyclists..... | 4 |
| 1.5 <i>Construction, employee and delivery vehicles access</i> | 5 |
| 1.5.1 Construction vehicles | 5 |
| 1.5.2 Employee vehicles | 5 |
| 1.5.3 Delivery vehicles | 5 |
| 1.6 <i>Private vehicles access</i> | 5 |
| 1.6.1 Caravan park vehicles | 5 |
| 1.6.2 Rowntree Park, Roomzzz Hotel and houseboat vehicles..... | 5 |
| 2 Working Hours..... | 6 |
| 3 Site Maintenance | 7 |
| 4 Vehicle routing and waiting..... | 8 |
| 4.1 <i>The road closure</i> | 8 |
| 4.2 <i>Pedestrian and cyclist diversion route map</i> | 9 |
| 4.3 <i>Pedestrian and cyclist diversion route sign schedule</i> | 10 |
| 4.3.1 Pedestrians/ Trans Pennine Trail | 11 |
| 4.3.2 Cyclists/National Cycle Route 65/ Trans Pennine Trail | 11 |
| 4.4 <i>Vehicle Diversions</i> | 12 |
| 4.4.1 Vehicle approach | 12 |
| 4.4.2 Vehicle exit | 13 |
| 4.5 <i>Vehicle diversion route sign schedule</i> | 14 |
| 4.6 <i>The Access Route</i> | 15 |
| 4.7 <i>Access route modifications & detail</i> | 16 |

| | | |
|-------|--|-----------|
| 4.7.1 | Bishopthorpe Road/ Butcher Terrace Junction | 16 |
| 4.7.2 | Butcher Terrace | 18 |
| 4.7.3 | Access road (Adjacent to site compound) | 19 |
| 4.7.4 | Terry Avenue (Between access road and Dukes Wharf) | 23 |
| 4.7.5 | Terry Avenue (Adjacent to Skeldergate Bridge) | 26 |
| 4.7.6 | Clementhorpe | 27 |
| 4.8 | <i>Additional Access Management Information</i> | 29 |
| 5 | Communications | 31 |
| 5.1 | <i>Community Engagement</i> | 31 |
| 5.2 | <i>Active Feedback</i> | 31 |
| 6 | The review period | 33 |
| 6.1 | <i>Monitoring</i> | 33 |
| 7 | Emergency procedures | 34 |
| 7.1 | <i>Access for Emergency Vehicles</i> | 34 |
| 8 | Control Measures | 35 |
| 8.1 | <i>Construction Environmental Management Plan</i> | 35 |
| 9 | Road Safety Audit | 36 |

Table of Figures

| | |
|--|----|
| Figure 1 – Terry Avenue road closure | 8 |
| Figure 2 - Pedestrian and cyclist diversions | 9 |
| Figure 3 - Pedestrian and cyclist diversion route sign schedule | 10 |
| Figure 4 - Purple arrows show vehicle diversion routes for approach to Clementhorpe area. | 12 |
| Figure 5 – Blue arrows show vehicle diversion routes for exit from Clementhorpe area. | 13 |
| Figure 6 - Vehicle diversion route sign schedule | 14 |
| Figure 7 – Access route | 15 |
| Figure 8 –Showing existing cycling infrastructure at Bishopthorpe Road/ Butcher Terrace junction as highlighted in red | 16 |
| Figure 9 - Swept path analyses - Bishopthorpe Road/ Butcher Terrace | 17 |
| Figure 10 - Plan view showing proposed parking bay suspensions on northern side of Butcher Terrace | 18 |
| Figure 11 - Elevation showing proposed parking bay suspensions on northern side of Butcher Terrace | 19 |
| Figure 12 - Plan of site compound. Red area = vehicular routing, Green area = pedestrian & cyclist routing. | 20 |
| Figure 13 - Swept path analyses demonstrating compound manoeuvres | 21 |
| Figure 14 - Overview of adopted highway | 22 |
| Figure 15 - Diagram of speed cushion - 3000 x 1900 x 75mm | 23 |
| Figure 16 - Overview of passing place and speed cushion locations | 24 |
| Figure 17 - Segregation and routing of pedestrians and cyclists (purple) | 25 |
| Figure 18 - Swept path analysis for Skeldergate, Clementhorpe and the Butcher Terrace turning head | 28 |

Table of Tables

| | |
|--|----|
| Table 1 - Construction vehicle numbers and type by month. Vehicle numbers broken down by junction location | 1 |
| Table 2 - Expected construction machinery by month | 3 |
| Table 3- Number of permanent construction workers by phase | 4 |
| Table 4 - Mitigations to be implemented for vehicles and pedestrians overview | 29 |

1 Vehicle Information

1.1 Construction related vehicle numbers by month

The below vehicle numbers (Table 1) are estimates of those required at different stages within the construction programme. Large vehicle movements will be extremely rare, occurring mainly during the mobilisation and demobilisation of the site compound/ deep soil mixing compound. These are located on Butcher Terrace and Terry Avenue (adjacent to Skeldergate Bridge) respectively. Large vehicles of this type will head directly to their destination.

Small and large site vans will travel between the compound and worksite on Terry Avenue. The number of movements between the compound and the worksite has been estimated at 60 per day. This is based on 1 vehicle per operative (due to COVID-19 restrictions) and on average, 10 operatives working per day. Each operative might be expected to have 6 back and forth trips for lunch, breaks etc. These movements are not included in Table 1.

To a lesser extent, there will also be instances when vehicles are required to leave site and use Bishopthorpe road/ Bishopgate Street to access via Skeldergate. Vehicles using Clementhorpe access will be restricted to just the direct deliveries/ collections as part of the install works.

For the delivery of materials / equipment to site there will be a detailed route access map and information pertaining to current site restrictions which will be sent out in advance to all suppliers and contractors.

Banksman will be in place for planned deliveries to site to ensure pedestrian and cyclist safety. In the event of an extra-long vehicle requiring access the banksman will manoeuvre the vehicle across to the other side of the road once it is safe to do so to then allow it to swing into the site compound unloading area. The delivery entrances will be managed by the security guard and the activities recorded as required.

Table 1 - Construction vehicle numbers and type by month. Vehicle numbers broken down by junction location

| BISHOPTHORPE RD / BUTCHER TERRACE | | 2021 | | | | | | | | | | 2022 | | | | | | | | | |
|--|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|--|--|--|
| VEHICLE SIZE / MONTH | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | CONTROL OF PLANT MOVEMENTS | | |
| Small site van - 4.0m long* | 0 | 1 | 2 | 2 | 2 | 2 | 2 | 2 | 3 | 3 | 3 | 3 | 2 | 1 | 1 | 1 | 1 | 1 | No banksman required | | |
| Large site van - 6.0m long* | 0 | 4 | 6 | 6 | 6 | 6 | 6 | 6 | 8 | 8 | 8 | 8 | 6 | 4 | 4 | 4 | 4 | 4 | No banksman required | | |
| 7.5T delivery vehicle - 8.35m long | 0 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | No banksman required | | |
| 18T delivery vehicle - 11.50m long | 0 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | Banksman from top of Butcher Terrace to compound | | |
| 20T haulage vehicle/tanker - 9.8m long | 0 | 5 | 2 | 2 | 2 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | 2 | 2 | 2 | 2 | 5 | Banksman from top of Butcher Terrace to compound | | |
| Low loader vehicle - 15.6m long | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | Banksman from top of Butcher Terrace to compound | | |
| Artic vehicle - 16.65m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from top of Butcher Terrace to compound | | |
| TOTALS | 0 | 16 | 14 | 14 | 15 | 14 | 14 | 15 | 14 | 14 | 14 | 14 | 11 | 11 | 11 | 11 | 11 | 15 | | | |

**BISHOPTHORPE ROAD /
CLEMENTHORPE**

| CLEMENTHORPE | | | | | | | | | | 2021 | | | | | | | | | | 2022 | | | | | | | | | |
|--|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|--|------|--|--|--|--|--|--|--|--|--|
| VEHICLE SIZE / MONTH | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | CONTROL OF PLANT MOVEMENTS | | | | | | | | | | |
| Small site van - 4.0m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Will use Butcher Terrace Access | | | | | | | | | | |
| Large site van - 6.0m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Will use Butcher Terrace Access | | | | | | | | | | |
| 7.5T delivery vehicle - 8.35m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Will use Butcher Terrace Access | | | | | | | | | | |
| 18T delivery vehicle - 11.50m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Will use Butcher Terrace Access | | | | | | | | | | |
| 20T haulage vehicle/tanker - 9.8m long | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Will use Butcher Terrace Access | | | | | | | | | | |
| Low loader vehicle - 15.6m long | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from top of Clementhorpe (Grouting setup) | | | | | | | | | | |
| Artic vehicle - 16.65m long | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from top of Clementhorpe (Grouting setup) | | | | | | | | | | |
| TOTALS | 0 | 0 | 0 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | | | | | | | | | | |

**SKELDERGATE / TERRY
AVENUE**

| AVENUE | 2021 | | | | | | | | | | | | 2022 | | | | | | | |
|--|---------|----------|-------|-------|-----|------|------|--------|-----------|---------|----------|----------|---------|----------|-------|-------|-----|------|--|--|
| VEHICLE SIZE / MONTH | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | JULY | AUGUST | SEPTEMBER | OCTOBER | NOVEMBER | DECEMBER | JANUARY | FEBRUARY | MARCH | APRIL | MAY | JUNE | CONTROL OF PLANT MOVEMENTS | |
| Small site van - 4.0m long | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | No banksman required | |
| Large site van - 6.0m long | 0 | 0 | 0 | 3 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | No banksman required | |
| 7.5T delivery vehicle - 8.35m long | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from Skeldergate (Grouting setup) | |
| 18T delivery vehicle - 11.50m long | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from Skeldergate (Grouting setup) | |
| 20T haulage vehicle/tanker - 9.8m long | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | Banksman from Skeldergate (Grouting setup) | |
| Low loader vehicle - 15.6m long | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | No Access possible | |
| Artic vehicle - 16.65m long | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | N/A | No Access possible | |
| TOTALS | 0 | 0 | 0 | 7 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | | |

1.2 Construction machinery by month

The below vehicles will be delivered by lorry or low loader as appropriate. Most of the plant will be stored close to its location of operation. However, where practicable, certain plant which is more mobile may be stored at the site compound at the end of the working day. Any movement of plant will be done in such a way as to minimise disturbance to the residents. The deep soil mixing process will use its own dedicated batching plant which connects to the deep soil mixing machine via hosing. The raw materials of this process include water and cement. Deliveries of raw materials to the batching plant will be required to maintain the deep soil mixing operation. Delivery will take place via Skeldergate and Terry Avenue, close to Skeldergate Bridge.

Table 2 - Expected construction machinery by month

| Month | Type & Size | | |
|---|---|---|---|
| February 2021 - Site access & compound excavations | 21T steel tracked excavator | 13T rubber tracked excavator | 9T Cabbed dumper |
| February 2021 - Site access & compound construction | 20T Stone tipper lorries Concrete wagons | Tarmac tipper lorries and surfacing plant | 5T rubber tracked excavator |
| March 2021 – Dig downs for services | 8T rubber tracked excavator | 21T wheeled excavator | 20T Muck away wagons 20T Stone tipper lorries |
| May 2021 – Grout curtain installation | 1 x 8t Piling Rig (Klemm KR708 or similar) | 1x deep soil mixing rig and batching plant | 3 x deep soil mixing tankers/ raw material deliveries |
| June 2021 – Flood gate installation | 1x 30t Mobile Crane | 20T Stone tipper lorries Concrete wagons | 20T Muck away wagons |
| June 2022 – Road reinstatement | 20T Stone tipper lorries | Large drum roller | Tarmac tipper lorries and surfacing plant |

1.3 Construction worker vehicle numbers

Table 3- Number of permanent construction workers by phase

| Month | No. of construction workers |
|----------------|-----------------------------|
| 01/21 to 04/21 | 20 |
| 05/21 to 10/21 | 30 |
| 11/21 to 02/22 | 20 |
| 03/22 to 06/22 | 20 |

Based on a worst-case scenario, there will be up to 30 two-way trips for the majority of the construction phase, in the AM and PM peak periods (07:30-08:30 and 17:00-18:00 hours).

1.4 Private vehicle numbers

Private traffic will be free to access the below premises 24 hours a day.

1.4.1 Roomzzz Hotel vehicles

Vehicles will comprise of service vehicles, private cars and taxis. The maximum anticipated number of two way vehicles movements to Roomzzz Hotel will be 33 in the am peak.

1.4.2 Caravan Park vehicles

Vehicles will comprise of cars towing caravans, motorhomes, private cars and service vehicles. In terms of park guests, it is estimated that there will be 70 arrivals and departures on Sundays and 45 arrivals and departures on other days of the week. Discussions have been held with the caravan park to stagger arrivals of guests. Unfortunately this will not be possible due to the logistics of organisation as well as the unpredictability of guests adhering to specific times. Instead, the Caravan Park will aim to hold early arrivals on site to prevent backing up into the highway.

1.4.3 Rowntree Park car park vehicles

Vehicles will comprise primarily of private cars. According to ticket purchase records, August is the busiest month with on average 2,176 transactions which equates to 7 per hour (based on a 10 hour day).

1.4.4 Pedestrian and cyclists

Pedestrians and cyclists will access the above premises along Terry Avenue from Butcher Terrace or through Rowntree Park during opening hours.

1.5 Construction, employee and delivery vehicles access

1.5.1 Construction vehicles

The majority of the construction traffic will service the site compound, and the worksite via Butcher Terrace and Terry Avenue. The deep soil mixing batching plant will be serviced via Skeldergate and Terry Avenue, close to Skeldergate Bridge. Minimal construction traffic will use Clementhorpe except for specific utility diversion works and for the delivery/ collection of the deep soil mixing plant and equipment.

1.5.2 Employee vehicles

Employees will park personal vehicles at the site compound which they will access via Butcher Terrace. Employees will then walk, or use site vans to reach the worksite.

1.5.3 Delivery vehicles

Apart from deliveries to the deep soil mixing batching plant, adjacent to Skeldergate Bridge. All deliveries will be received at the site compound via Butcher Terrace. As mentioned in section 2, deliveries to and dispatches from the site compound by certain vehicles will be time restricted.

1.6 Private vehicles access

1.6.1 Caravan park vehicles

The caravan park will be accessed via Butcher Terrace and Terry Avenue. Guests of the caravan park will arrive at 13:00 and check out at 12:00. Early arrivals will be parked within the boundaries of the caravan park prior to processing to reduce congestion on Butcher Terrace and Terry Avenue. Sufficient caravan park diversion signage will be made available on all major approaches to the facility and passing places will be clearly defined. Management will be reviewed and discussed with the caravan site at regular intervals as works progress. Arrangements have been made to ensure caravan park guests are provided updated directions to the park as well as information relating to the construction of the flood defences. Guests will be strongly encouraged to not arrive early.

1.6.2 Rowntree Park, Roomzzz Hotel and houseboat vehicles

Rowntree Park car park will be accessed via Butcher Terrace and Terry Avenue.

Vehicle access for the boat moorings is not required as alternative parking will be provided at either Roomzzz Hotel, the Caravan Park or both. Pedestrian access to the houseboats will be maintained via a gate located on the riverside of Terry Avenue, close to Dukes Wharf. This gate will be secured with a padlock or combination code. The gate will lead into segregated access around the worksite to all boats. There may be times when the access needs to be changed to accommodate the construction works but this will be well managed and communicated in advance to the houseboats.

Sufficient Roomzzz Hotel diversion signage will be made available on all major approaches to the hotel and passing places will be clearly defined.

2 Working Hours

Working hours will be 07:30 to 17:00 hours, Monday to Friday. Only in exceptional circumstances would weekend working be carried out between 09:00 and 13:00 on Saturdays. This would be communicated via the Environment Agency's usual methods in advance to allow residents to make adequate preparations.

Deliveries to and dispatch from the site compound only, for large vehicles equal to or in excess of 7.5t, shall be confined to 09:30 to 14:30 Monday to Friday (school term time) and 09:00 to 17:00 (school holidays or when schools are closed). In exceptional circumstances, deliveries and dispatches to the site compound will take place between 09:00 to 13:00 hours on Saturdays. Smaller vehicles, such as delivery vans will not be restricted by these times and will deliver to and dispatch from the site compound between 09:00 to 17:00 Monday to Friday and in exceptional circumstances, 09:00 to 13:00 hours on Saturdays.

Deliveries to and dispatch from site will be restricted on race days as outlined here, <https://www.yorkracecourse.co.uk/news-york-2021-season-dates.html?cat=3>.

Lockdown and social distancing dependent, current race day fixtures would impact the following days:

- Wednesday 12th to Friday 14th May 2021
- Friday 11th June 2021
- Friday 9th July 2021
- Friday 23rd July 2021
- Wednesday 18th to Friday 20th August 2021
- Friday 8th October 2021

2022 fixtures are yet to be confirmed.

3 Site Maintenance

A road sweeper will be made available to remove deposits of mud and/ or other debris on Butcher Terrace and Terry Avenue.

The existing footway on the west side of Terry Avenue will be initially and regularly cleaned of debris to ensure pedestrians are not discouraged from using it.

4 Vehicle routing and waiting

4.1 The road closure

As part of the construction work, Terry Avenue, north of Skeldergate Bridge to Dukes Wharf will be closed to pedestrians, cyclists and vehicles as shown in Figure 1.

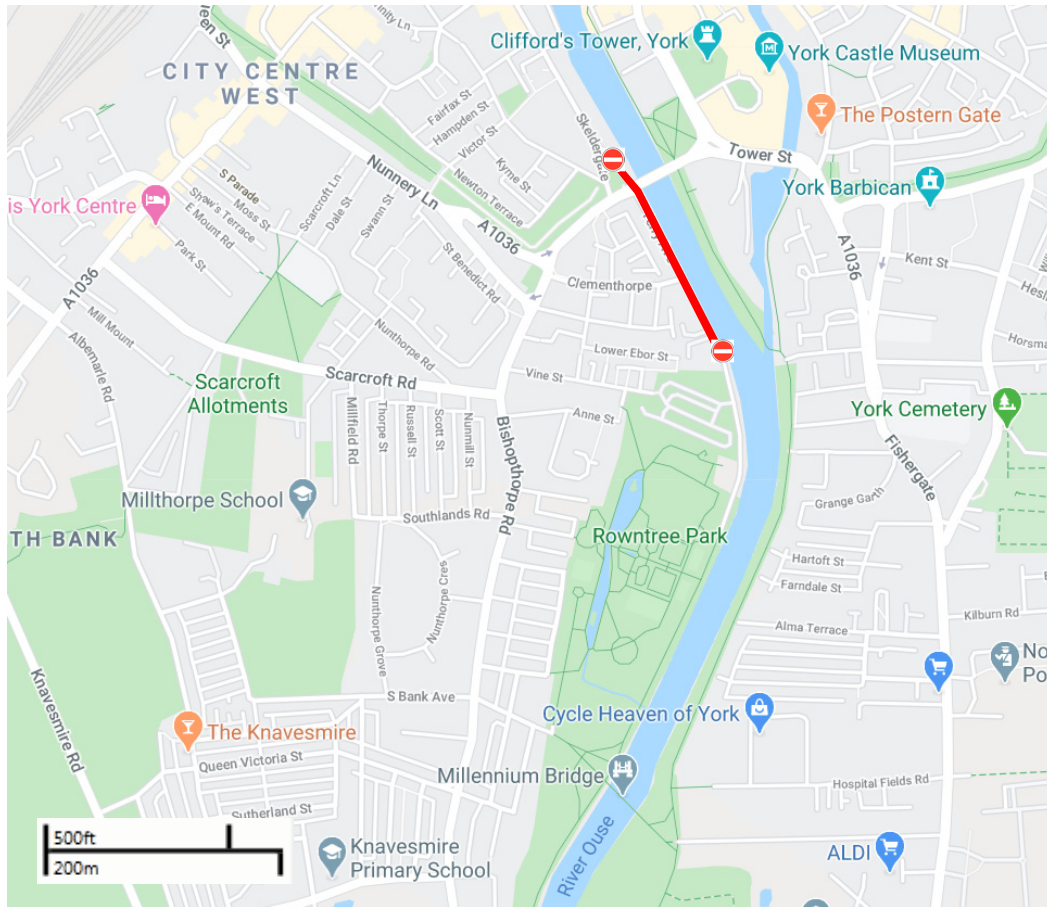


Figure 1 – Terry Avenue road closure

A Temporary Traffic Regulation Order (TTRO) has been submitted to CYC highways and has been approved. The road closure will be in place for 12 months from 01 March 2021. The Caravan Park, Rowntree Park car park and Roomzzz Hotel will be forced to use the new access route. Dukes Wharf will be required to use its rear entrance for the duration of the road closure. The main car park entrance to Waterfront House will be available most of the time, but will be closed to facilitate works at the Clementhorpe/ Terry Avenue junction. During these times, Waterfront House will be required to use its rear entrance.

4.2 Pedestrian and cyclist diversion route map

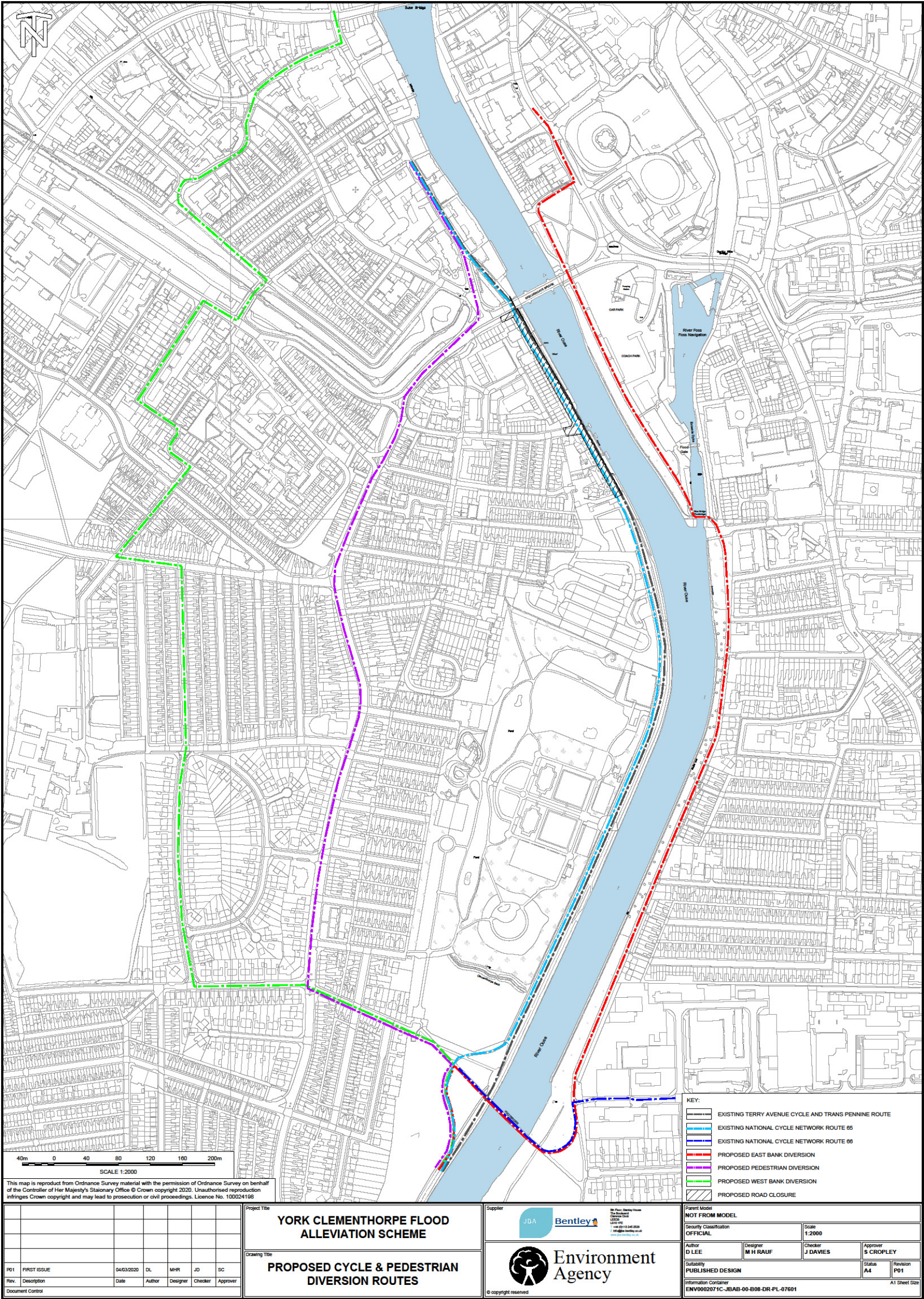


Figure 2 - Pedestrian and cyclist diversions

Figure 3 - Pedestrian and cyclist diversion route sign schedule



The diversion options that have been proposed for users of Terry Avenue & Clementhorpe have been developed from an initial limited selection. The site constraints and restricted access to Terry Avenue have led to viable alternatives being difficult to establish. However, the project team believe the proposed routes are workable alternatives and use existing and available infrastructure. Discussions have been held between the EA, cyclist groups and York City Council on a number of the diversion proposals.

4.3.1 Pedestrians/ Trans Pennine Trail

Our proposed diversion is along Bishopthorpe Road.

4.3.2 Cyclists/National Cycle Route 65/ Trans Pennine Trail

There are two proposed diversions:

1. Via the eastern bank of the River Ouse (existing City of York cycling infrastructure);
2. Via Nunthorpe Grove (existing City of York cycling infrastructure).

4.4 Vehicle Diversions

4.4.1 Vehicle approach

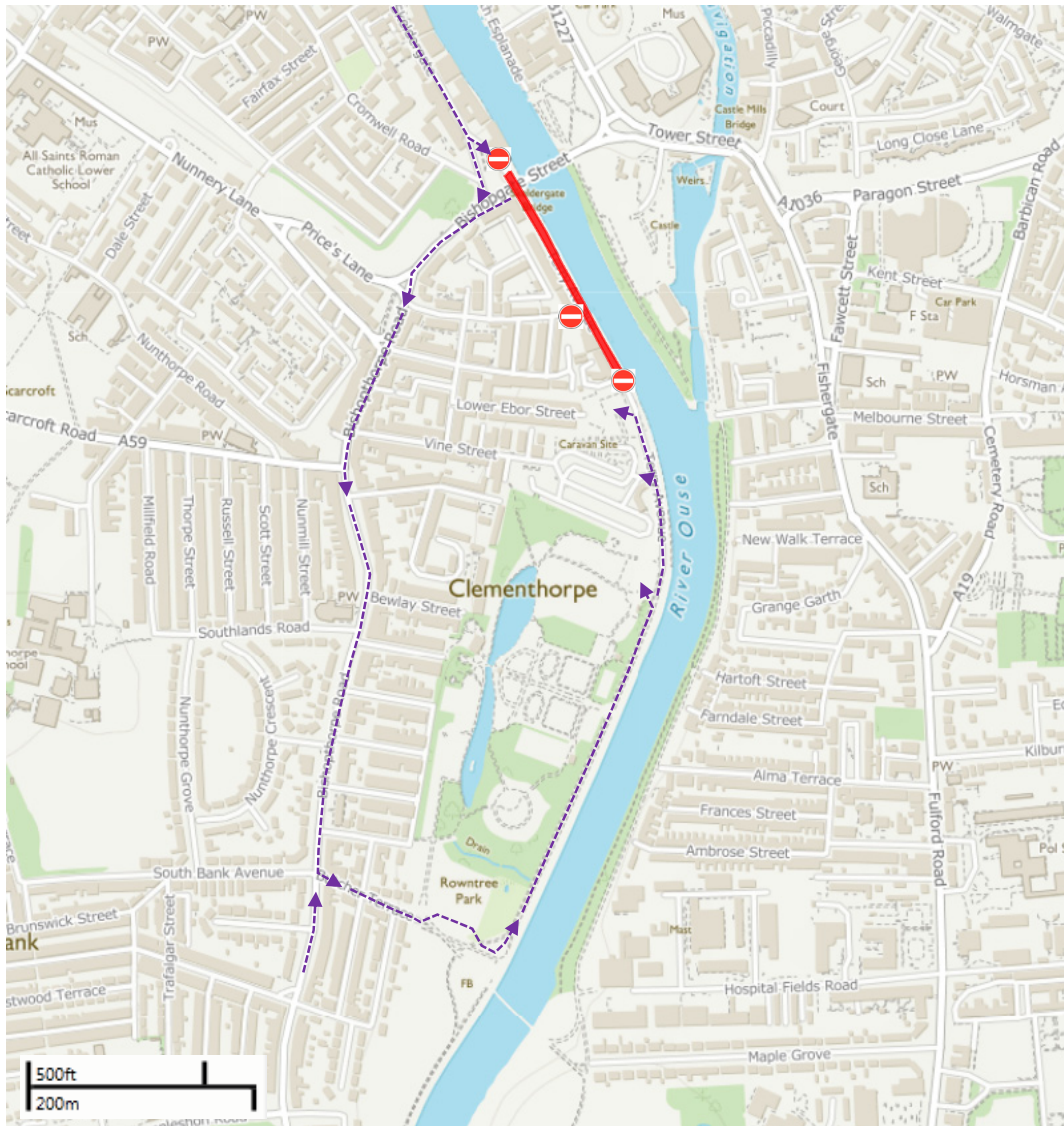


Figure 4 - Purple arrows show vehicle diversion routes for approach to Clementhorpe area.

4.4.2 Vehicle exit



Figure 5 – Blue arrows show vehicle diversion routes for exit from Clementhorpe area.

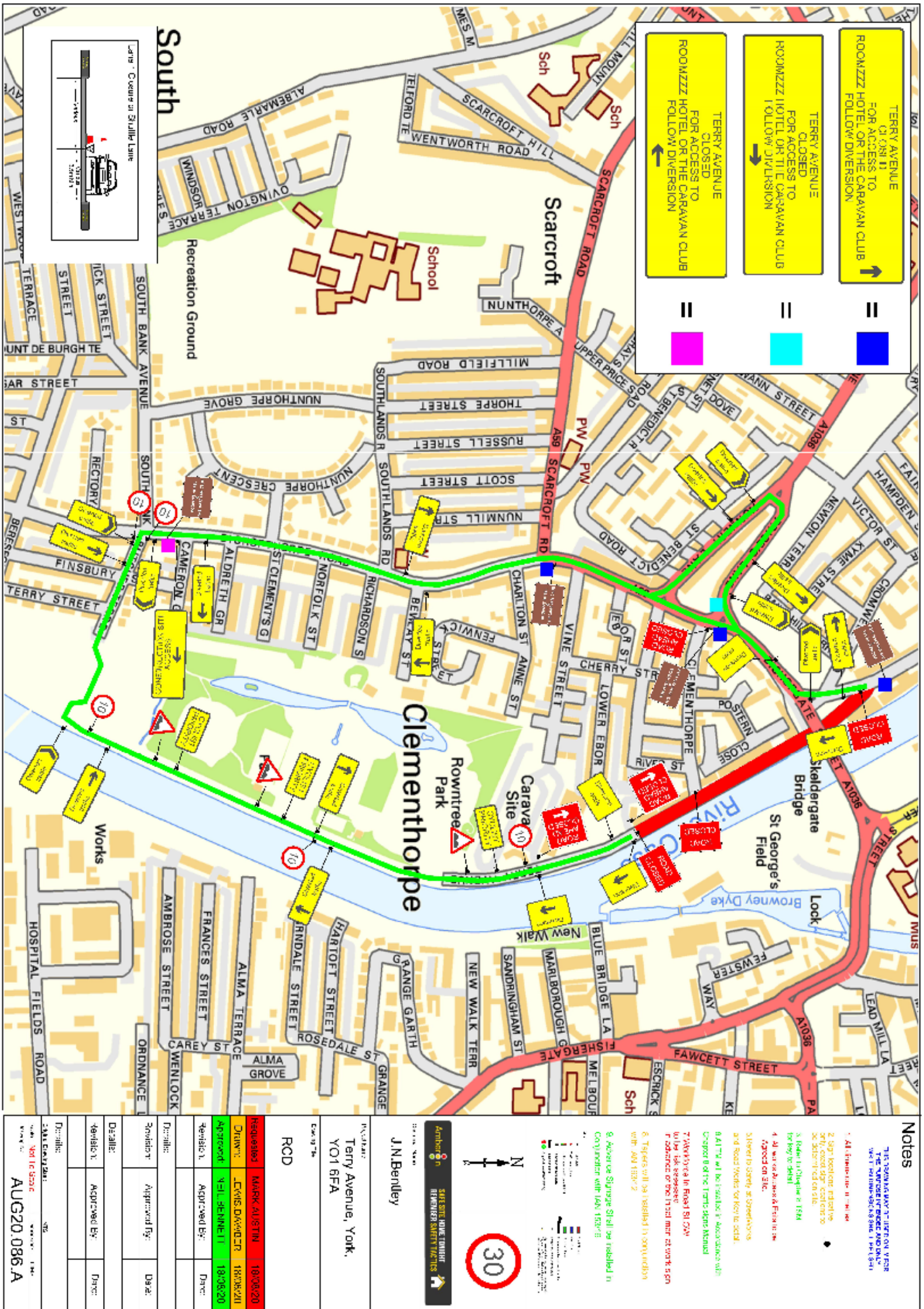


Figure 6 - Vehicle diversion route sign schedule

4.6 The Access Route

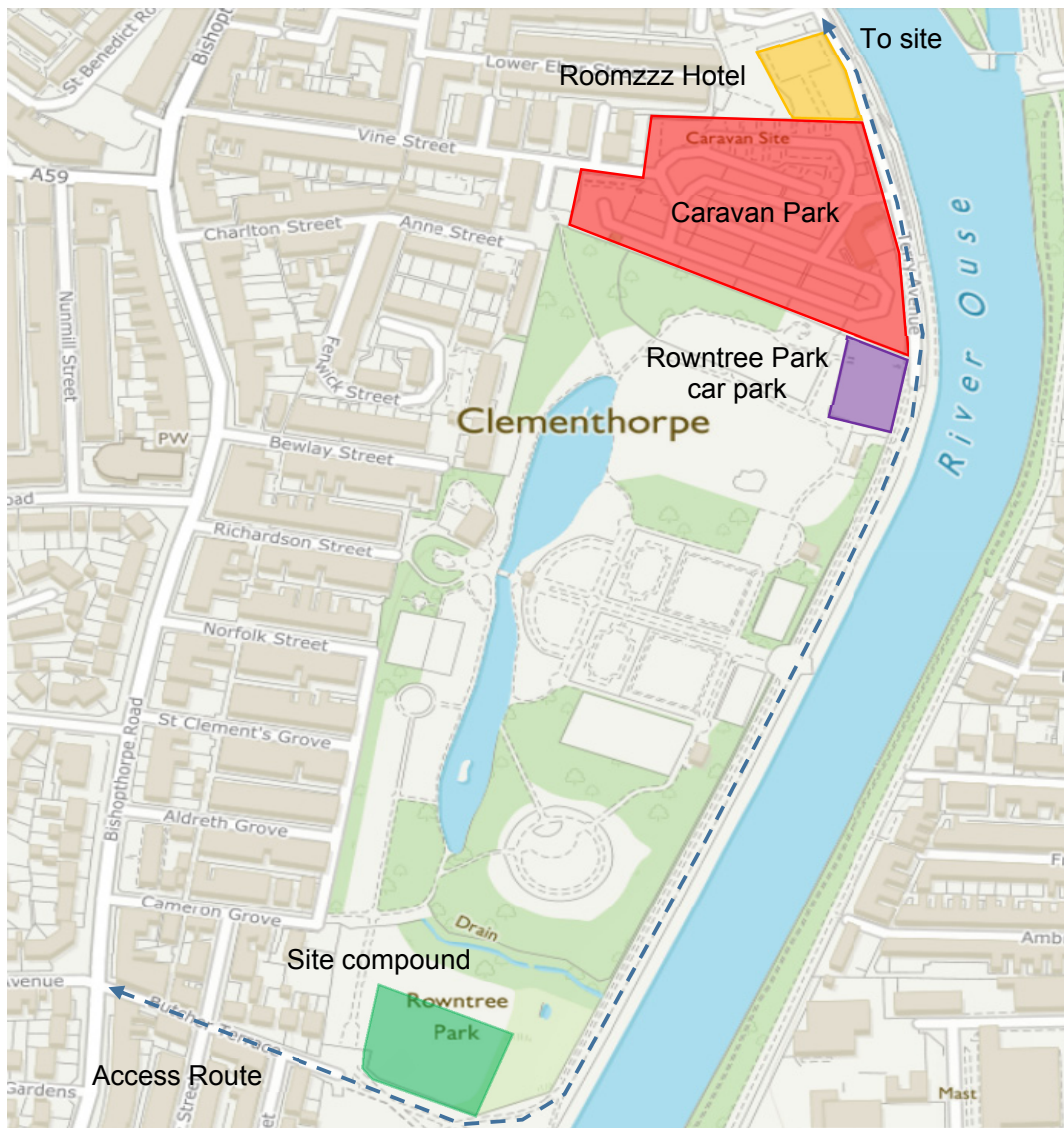


Figure 7 – Access route

To ensure continuity of access throughout the Terry Avenue closure, the above access route (Figure 7) will be used for construction vehicles between the site compound and the site as well as private vehicles destined for Roomzzz Hotel, the Caravan Park, Rowntree Park car park and the Houseboats.

The access route will be open to pedestrians and cyclists but access will not be permitted through the construction site on Terry Avenue between Dukes Wharf and north of Skeldergate Bridge. Cyclists and pedestrians wishing to bypass the construction site or are travelling north to south will be required to adopt the west or east diversion route to navigate around the Terry Avenue road closure. Refer to Figure 2 for diversion details.

4.7 Access route modifications & detail

4.7.1 Bishopthorpe Road/ Butcher Terrace Junction



Figure 8 –Showing existing cycling infrastructure at Bishopthorpe Road/ Butcher Terrace junction as highlighted in red

Our swept path analyses have demonstrated that large articulated construction vehicles in excess of 15m in length or fixed vehicles in excess of 10m will be unable to turn right into Butcher Terrace from Bishopthorpe Road and left turns from Butcher Terrace onto Bishopthorpe Road will also not be possible for articulated construction vehicles in excess of 15m in length and rigid vehicles in excess of 12m.

Therefore, larger vehicles will approach the junction from the north and turn left into Butcher Terrace. Similarly, larger vehicles leaving Butcher Terrace will turn right to head north along Bishopthorpe Road. Swept path analyses for this junction can be found below (Figure 9).

All large vehicles will be escorted by banksman when making the turn. The number of large vehicles making this turn will be minimal which will ensure reduced disturbance within the shopping area along Bishopthorpe Road. Larger vehicles will continue to head north along Bishopthorpe Road towards Fulford Road or the A1036 and out of the city. Where possible, deliveries will be made using smaller vehicles.

All other vehicles related to the construction will approach from and be directed to the south on Bishopthorpe Road.

Haulers will be informed ahead of delivery/ collection about the correct route to take to reach the compound depending on vehicle size.

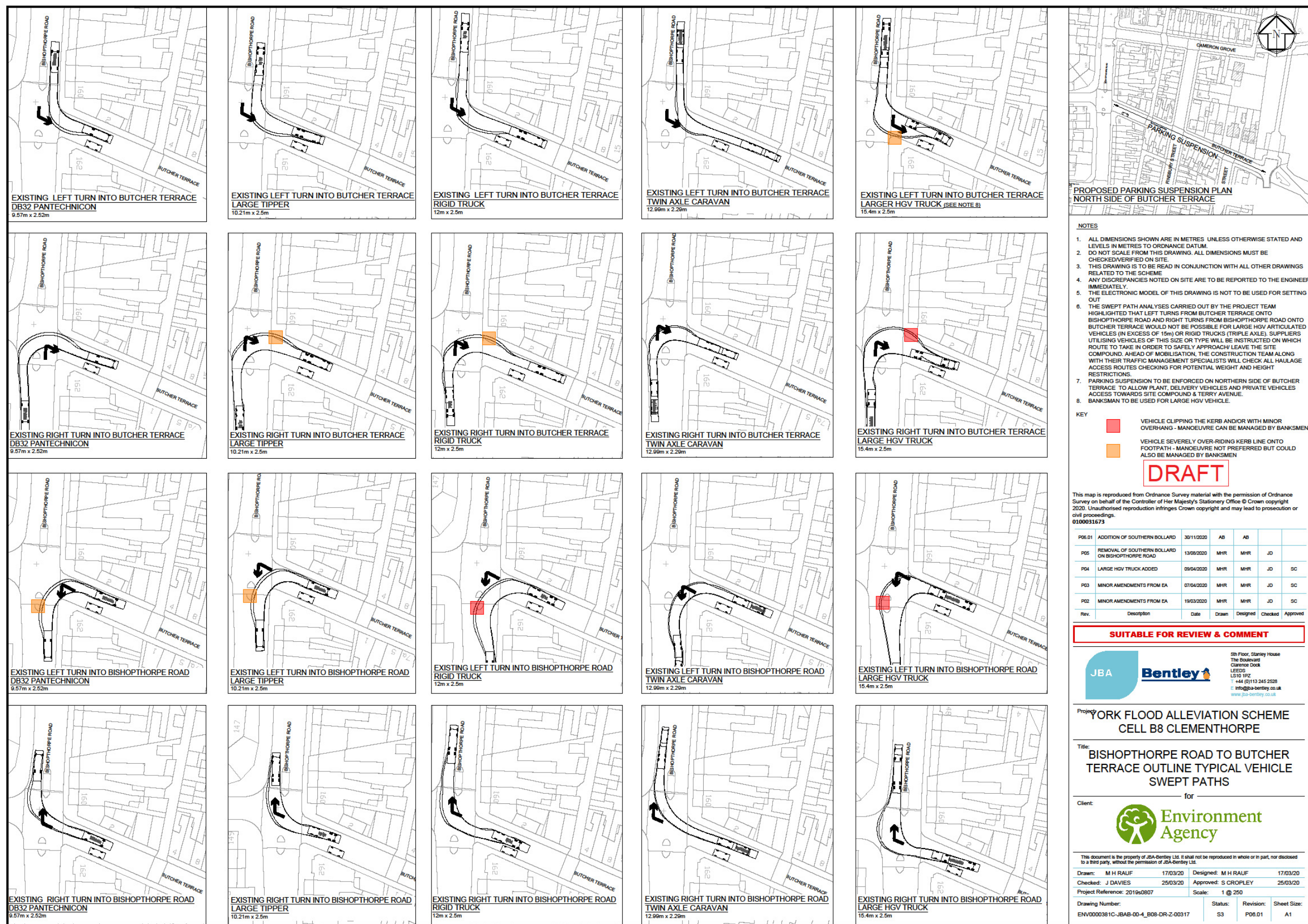


Figure 9 - Swept path analyses - Bishopthorpe Road/ Butcher Terrace

4.7.2 Butcher Terrace

To allow for increased traffic flow and additional space for users such as cyclists, a temporary Traffic Regulation Order (TTO) will be implemented to suspend parking on the northern side of the road between Bishopthorpe Road and the compound location (see Figure 10 & Figure 11). Double yellow lines and potentially no parking cones will be used down the northern side of the street. Access for those houses with private driveways will not be impacted. It is recognised that these additional restrictions are likely to inconvenience some residents, so to mitigate this we will provide an alternative temporary residents' parking area immediately outside our compound area. Residents will need to display any relevant parking permits as the compound parking will be an extension of parking zone R58C. The alternative parking will not be available until the bays are constructed. During this time, residents will be required to find their own parking.

An advisory speed limit of 10mph along Butcher Terrace will be in effect.

Cycle usage is at its height in the morning and evening peaks. Despite Butcher Terrace being the main access route for construction vehicles, it is thought that the majority of the traffic will be leisure-based and occur mainly outside of the peak cycling times. Traffic data shows that in the past five years there have been no accidents recorded along Butcher Terrace and only one minor injury accident recorded at the junction with Bishopthorpe Road.

A holding area will be available at York Racecourse coach park should there be insufficient capacity to accept a delivery in the compound or if multiple vehicles arrive simultaneously. To reduce the likelihood of this, keen planning and communication with haulers will be undertaken.

The use of adjacent roads to access the site compound by construction traffic will not be permitted.



Figure 10 - Plan view showing proposed parking bay suspensions on northern side of Butcher Terrace



Figure 11 - Elevation showing proposed parking bay suspensions on northern side of Butcher Terrace

4.7.3 Access road (Adjacent to site compound)

Access to the site compound will be via the end of Butcher Terrace. Construction and private vehicles will utilise the access road to access the compound and Terry Avenue. Please refer to Figure 12 for details on traffic routing on the access road as well as within the site compound. The compound will comprise of two access gates. One main gate and a secondary gate to facilitate access for larger vehicles. This secondary gate will remain closed when not needed.

Figure 12 demonstrates our approach to segregating vehicles from pedestrians and cyclists along the access road. All vehicular traffic, both construction and public will navigate via the red bounded areas whilst cyclists and pedestrians will navigate via the green bounded areas. Suitable barriers and fencing will be installed to prevent cross traffic. Existing lighting columns which clash with the highway will be relocated or temporary lighting provided.

Butcher Terrace displaced parking will be located within the boundary of the compound but accessed independently of it.

Construction vehicles entering the compound will complete any turning manoeuvres within the confines of the compound to prevent reversing within the public highway, refer to Figure 13. Construction vehicle movements in and out of the compound will be under the supervision of a banksman.

The access road itself, where possible, will use existing paved and tarmacked infrastructure (see Figure 14), but this will be widened to accommodate vehicular traffic. Grassed areas adjacent to the existing infrastructure will be taken to facilitate this but will be reinstated post construction. A licence has been agreed between the EA and CYC to enable the use of adjacent land to widen the existing highway. Existing bollards will be moved to allow vehicular access but prevent misuse of Millennium Bridge. Constructed ramps will be installed where required.

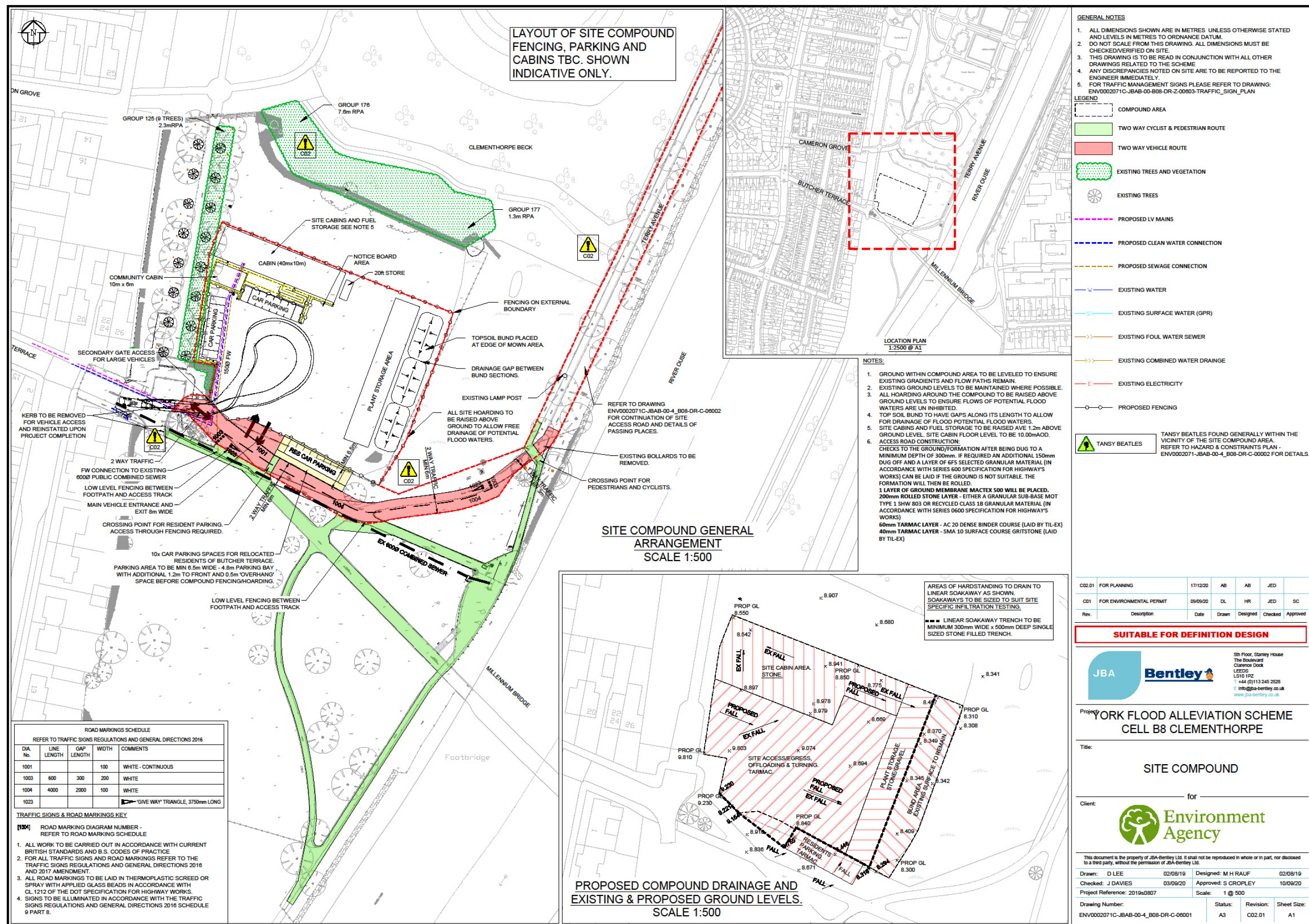


Figure 12 - Plan of site compound. Red area = vehicular routing, Green area = pedestrian & cyclist routing.

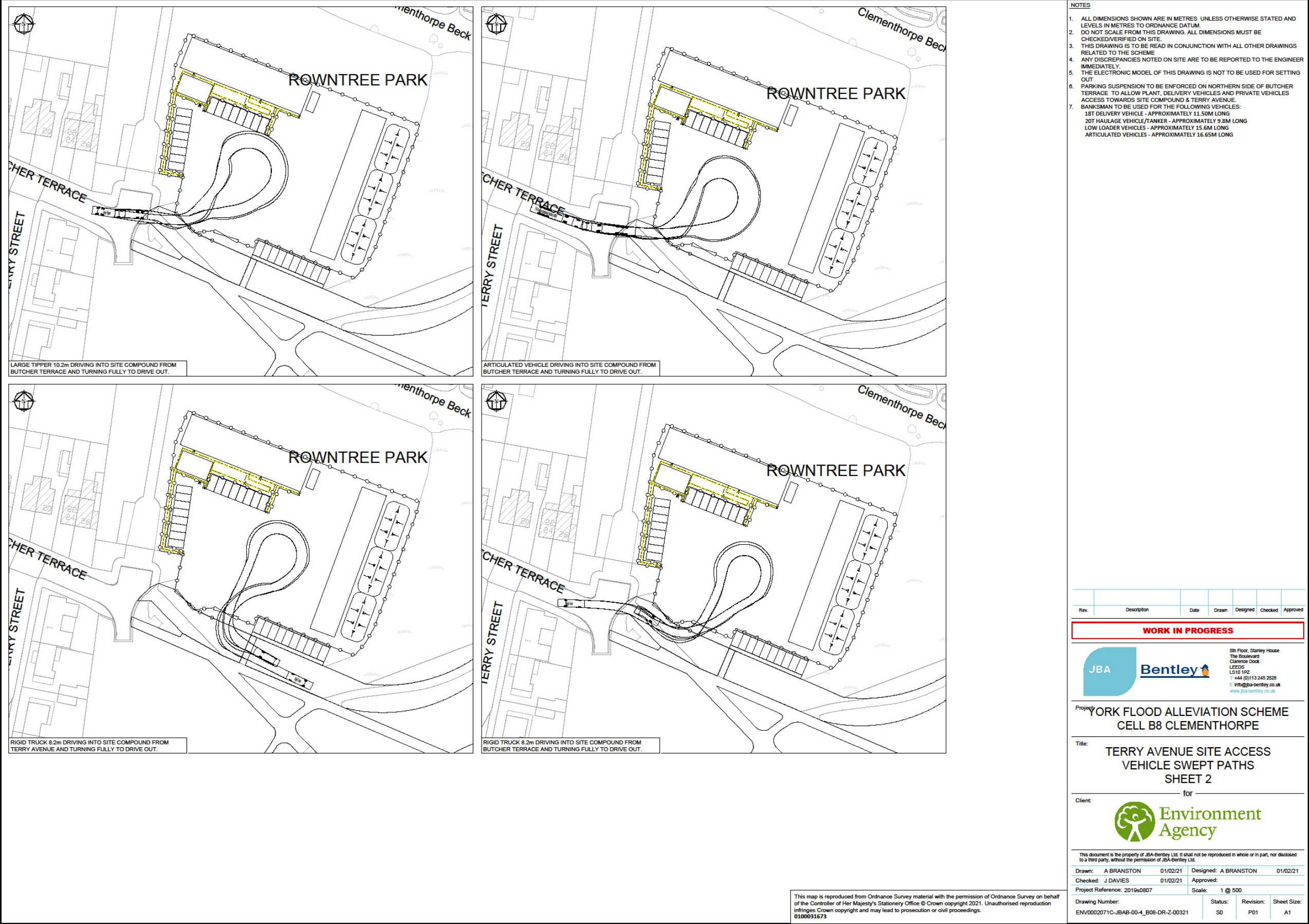




Figure 14 - Overview of adopted highway

4.7.4 Terry Avenue (Between access road and Dukes Wharf)

Due to the linearity and narrowness of Terry Avenue it is necessary to install a series of vertical traffic calming measures or speed cushions (Figure 15) and passing places (Figure 16). Figure 16 shows the location of the speed cushions and passing places which will be located between the southernmost point of Rowntree Park and Dukes Wharf. Speed cushions will be placed at 70m centres and passing places installed in suitable locations. Six potential areas have been identified, five in the grass verge between trees, and one in front of the main gates to Rowntree Park.

Pedestrian safety will be maintained by directing users to the pavement which runs the length of the highway. Foliage and debris along the western footpath of Terry Avenue will be kept as clear as possible to encourage its use. Our site team will actively monitor this stretch of pavement and take action when required.

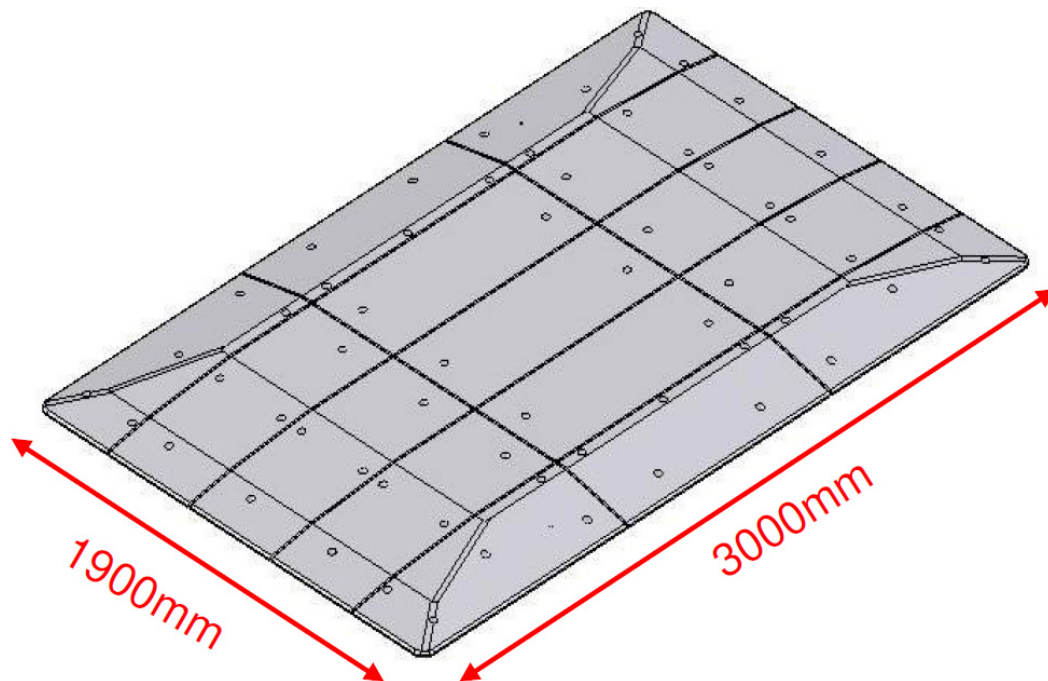


Figure 15 - Diagram of speed cushion - 3000 x 1900 x 75mm

Crossing points will be installed to allow pedestrian access to the River Ouse viewing decks. These will be identified with pedestrian crossing point signage and road vehicles warned of these pedestrian crossing points in advance.

Smaller construction vehicles (work vans, delivery vehicles and 20T haulage wagons) will access the construction site via Terry Avenue where possible rather than Clementhorpe. These vehicles will be turned/ reversed within our road closure area, see Figure 18.

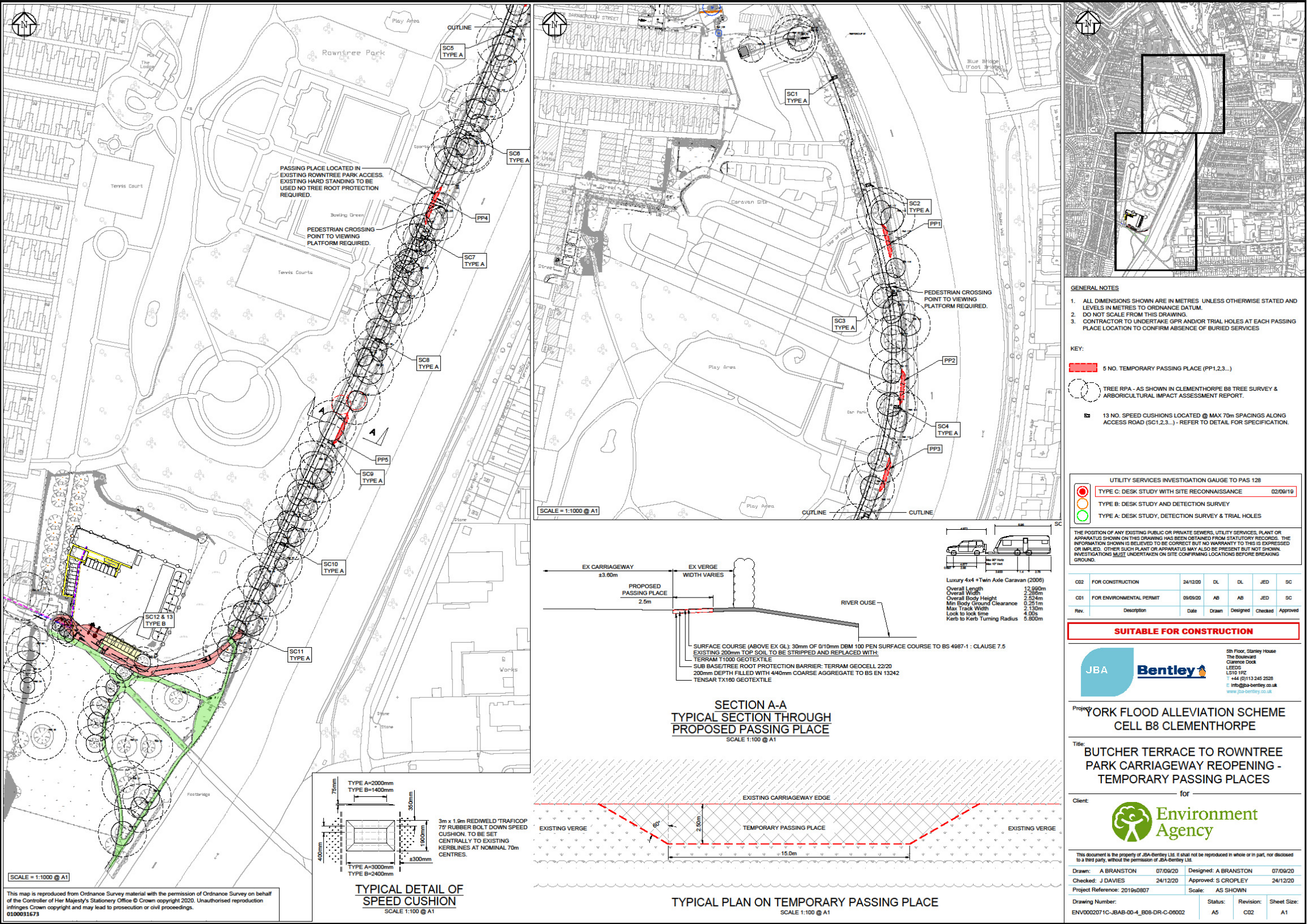


Figure 16 - Overview of passing place and speed cushion locations



Figure 17 - Segregation and routing of pedestrians and cyclists (purple)

4.7.5 Terry Avenue (Adjacent to Skeldergate Bridge)

In the main, access to Terry Avenue, via Skeldergate, will be used by deep soil mixing supply vehicles providing materials for the deep soil mixing works. These critical supply vehicles will reverse down Terry Avenue from Skeldergate towards Skeldergate Bridge under the control of a banksman. When leaving Terry Avenue, vehicles will head down Skeldergate towards Micklegate/ Bridge Street. Alternatively, vehicles can turn left out of Terry Avenue towards Bishopgate Street but our swept path analyses indicate that this is a difficult manoeuvre. On arrival, vehicles will pull up on Skeldergate and signal the banksman prior to the manoeuvre taking place.

Deep soil mixing tankers will approach and exit York via the A64. Due to the difficult left turn from Terry Avenue onto Skeldergate, tankers will reach the A64 via Bridge Street => Tower Street => Fulford Road, in most cases.

Refer to Figure 18 for swept path analyses.

4.7.6 Clementhorpe

At Clementhorpe larger vehicles (Articulated and Low-loader vehicles) will need access/ egress for deliveries/ collections of larger plant and equipment, specifically as part of setting up and removing our sub-contractor's deep soil mixing compound and installing the below ground flood defences. The access/ egress has already been assessed for suitability and safety by our site team and sub-contractor. Transit of these large vehicles will be under the control of a banksman at all times from the top of Clementhorpe down through site and then reversing/ manoeuvring into place. Banksman will also be used when these vehicles leave site via Clementhorpe.

There will need to be other vehicles on occasion accessing Clementhorpe as there will be works on the dry side of the proposed flood gate. These vehicles will be under the control of a banksman as required.

Refer to Figure 18 for swept path analyses.

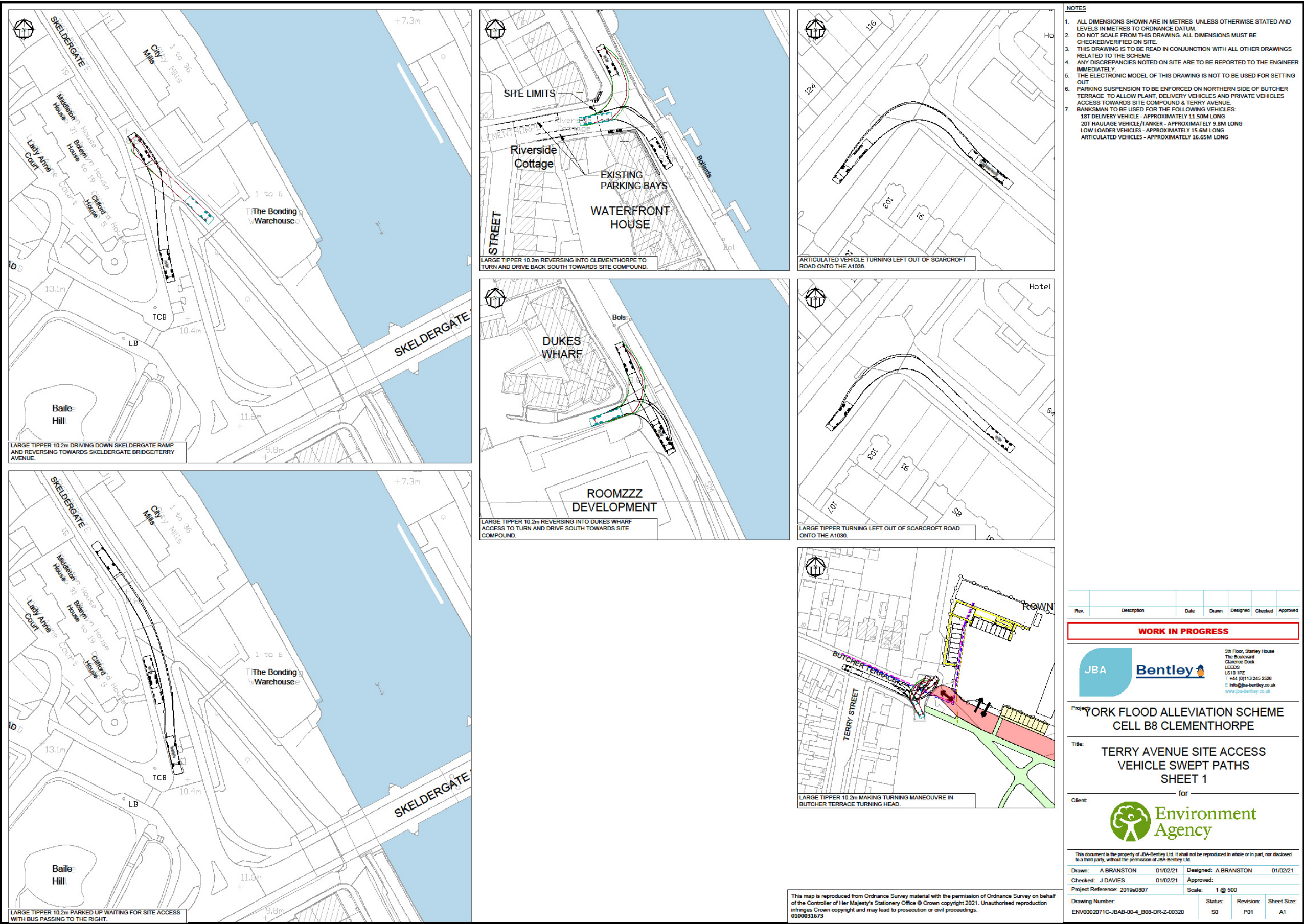


Figure 18 - Swept path analysis for Skeldergate, Clementhorpe and the Butcher Terrace turning head

4.8 Additional Access Management Information

Table 4 - Mitigations to be implemented for vehicles and pedestrians overview

| Description | Vehicle Routes | Pedestrian Routes |
|---------------------------------------|--|---|
| Site Entrance and Exit | Adequate sight lines, maps, security and vehicle management. | Signage displayed, and instruction given. Crossing point over public highway established and clearly outlined. Vehicle marshal to be in place for planned deliveries to site to ensure pedestrian safety. |
| Parking Areas | Separate delivery unloading area and parking spaces. Delivery entrance managed and activities recorded. Crossing points established where traffic enters and leaves the parking area. | Pedestrian walkway marked around perimeter of car park to limit distances travelled within car movement area. |
| Offices and Welfare Facilities | Office and welfare facilities will be in a secure compound, with segregation barriers to prevent vehicle access. Signs used to direct traffic into parking areas and away from the secure compound. | Site compound established as a pedestrian only zone. Instruction given to staff in site induction to provide information on the traffic management plan within the site compound. |
| Primary Traffic Routes | One-way system provides a safe means of access through the site and minimises the number of pedestrian crossings required. This will also be available to prevent any reversing on the adjacent roads. | Segregated pedestrian walkway established away from traffic route. Pedestrian crossing point provided with good visibility splays. |
| Storage Areas and Loading Bays | Storage area clearly segregated and situated away from areas with high pedestrian activity. Traffic flow managed to maintain a one-way system within the storage area. | Pedestrian activity managed within storage compound and highlighted in site induction. Warning signs erected to alert drivers of the potential for pedestrian movements with the area. |

| | | |
|--|--|---|
| Butcher Terrace residents temporary parking bays outside JNB compound | 10 Spaces provided for residents due to the parking suspension on the northern side of Butcher Terrace | Drivers going to and from their cars will follow the pedestrian routes and signage will be placed to highlight that these parking bays are for residents parking only and to be left clear. |
| Rowntree Park Car Park and Park Maintenance area | Access along Terry Avenue with signage warning of pedestrian crossing points. Passing places clearly defined. | Access along the footpath as usual with segregation between pedestrians and vehicles. Crossing points with clear signage warning of vehicles. |
| York Rowntree Park Caravan Club | Access along Terry Avenue with signage warning of pedestrian crossing points. Passing places clearly defined. This will be reviewed as works progress. | Access along the footpath as usual with segregation between pedestrians and vehicles. Crossing points with clear signage warning of vehicles. |
| Roomzzz Hotel | Access along Terry Avenue with signage warning of pedestrian crossing points. Passing places clearly defined. Customers and delivery vehicles will be advised of the access restrictions. There has been additional signage advised to be installed on all major routes into York. | Access along the footpath as usual with segregation between pedestrians and vehicles. Crossing points with clear signage warning of vehicles. |
| Boat Moorings on Terry Avenue | Vehicle access for moorings is not anticipated as replacement parking will be provided but will be discussed with site team and moorings owners as Construction works progress. | Contact numbers for the site team and the moorings owners will be shared. |

5 Communications

5.1 Community Engagement

The Environment Agency will engage with the community throughout the construction phase. This engagement will take the form of regular updates on the progress of the scheme. We will also utilise a notice board close to the compound with key messages.

It may also be necessary to carry out bespoke communications with residents to inform them of emergency works or potential deviations from the CTMP. These communications will be handled by our comms team and distributed via social media and hardcopy if required.

Please also refer to the Construction Environment Management Plan (CEMP) Appendix B: York Contractor Engagement Code of Practice.

5.2 Active Feedback

We will be encouraging feedback from residents and the public about our performance whilst constructing the Clementhorpe flood defences. We will be making available contact information on our compound notice board and site entrances which will allow the public to contact us about concerns, complaints and praise. We will also be providing a community engagement cabin within the boundaries of the site compound which will be open for the public to drop in and speak with a member of staff. The cabin will be accessible from Rowntree Park rather than the construction site compound. The opening days and hours for the engagement cabin are yet to be decided.

The Environment Agency has a number of existing processes and procedures which will be applicable to any issues or complaints submitted to the team. In some instances, these processes and procedures will be adjusted to suit the requirements of the scheme.

To begin with, any issues or complaints will be logged in a control document (Excel spreadsheet) recording the:

- Name of the correspondent
- The date of the correspondence;
- The date that the correspondence must be replied to;
- The subject matter;
- The person responsible for the response;
- The actions that are required to resolve the matter;
- Whether the matter was resolved; and
- Whether the matter has been logged as a complaint

Details of how to contact us will be present on our website, on all public notice boards around the site, within the community engagement cabin and by request from our York flood plan e-mail account (yorkfloodplan@environment-agency.gov.uk).

At present, we aim to respond to correspondence within ten working days. We usually respond much quicker than this, however, some queries that rely on information from external parties can sometimes take longer periods.

For all correspondence, including that which contains complaints, we will attempt to resolve the matter via providing the necessary information, or taking the necessary

actions. If the correspondent remains unsatisfied with the steps that we have taken, we will continue to engage and seek to resolve the matter, whilst also advising the correspondent as to how they can submit a formal complaint. This advice will include information about the complaints process, which is as follows:

Complaints process

We define a complaint as "any expression of dissatisfaction about our work decisions or our staff". A complaint can therefore be related to any aspect of our work (or that of our contractors), staff behaviour or our communications.

If you are dissatisfied with our work please contact us at:-

National Customer Contact Centre

PO Box 544

Rotherham

S60 1BY

Email: enquiries@environment-agency.gov.uk

Telephone 03708 506 506

Telephone from outside the UK +44 (0) 114 282 5312

Monday to Friday, 8am to 6pm.

We operate a two-stage complaints process with the emphasis being on understanding and resolving the customer's complaint at Stage 1. If a customer remains dissatisfied after the initial response, we will escalate the complaint to a manager for further review and response.

Should the customer still be dissatisfied on completion of Stage 2 they may refer the complaint to the relevant ombudsman. The ombudsman is independent of the Environment Agency and will only consider complaints after we have had the chance to resolve them.

6 The review period

6.1 Monitoring

The site construction team and visitors will be briefed on the content of the Construction Traffic Management Plan and be empowered to highlight any areas on site that need improvement. There will be a weekly review by the site manager and areas revised accordingly to ensure the safe passage of all road users, including pedestrians and cyclists.

As agreed with the council, the CTMP as well as traffic mitigation and pedestrian and cyclist diversion routes will be monitored on a regular basis. The first stage of monitoring will take place within six weeks of commencement of development and then nominally every 3 months, or whenever particular issues of concern arise. A safety review by an independent road safety auditor will also be conducted post mobilisation.

Recommendations will be considered, agreed with the council and implemented as necessary. The CTMP will be updated in light of any agreed changes.

The Environment Agency will endeavour to address issues once reported by the public as quickly as possible by the process outlined in section 5.2. Any issues brought to our attention will be logged, categorised and discussed at review meetings for the benefit of all. Specific areas of concerns can be flagged and closely monitored for future reporting.

Agendas and minutes will be made publically available for transparency. Concerns or issues raised by the public or lobby groups must be submitted to the Environment Agency in the first instance via the process outlined in section 5.2. These issues will then be raised at review meetings with the council.

7 Emergency procedures

Please refer to our flood evacuation plan. In the event of an emergency the site team will notify e-mail/ call a member of the highways team to inform them that emergency procedures will be implemented. It may be prudent for highways to provide the EA with an “on-call” out of hour’s list of contacts in case an evacuation is needed outside of standard working hours.

Once communicated with the council, we will then inform the public and relevant stakeholders of our evacuation via e-mail and social media platforms. We will also use groups such as the Clementhorpe Emergency Committee to spread the message.

7.1 Access for Emergency Vehicles

All temporary access points are sufficient to allow access for the emergency services.

8 Control Measures

8.1 Construction Environmental Management Plan

The Construction Environmental Management Plan (CEMP) includes measures that will maintain highway safety during construction, for example regular road sweeping as well as mitigation of noise, vibration and dust.

9 Road Safety Audit

An RSA level 1 and 2 has been carried out in conjunction with York Council. The RSA 1 and 2 provided recommendations that will be implemented as part of this CTMP.

Once the construction compound is mobilised, construction and diversion routes established, a safety inspection will be undertaken by an independent road safety auditor in conjunction with City of York Council. Any issues flagged by the safety inspection will be discussed with City of York Council and where necessary remedied.

When the scheme is substantially complete, a level 3 RSA will be conducted to assess the impact of permanent changes to the highway.

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floodline 0345 988 1188 (24 hours)

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