A66 Northern Trans-Pennine project TR010062

4.4 Consultation Report Annex L: S47 consultation material Part 3

APFP Regulation 5(2)(q)

Planning Act 2008 Infrastructure Planning

(Applications: Prescribed Forms and Procedure)

Regulations 2009

Volume 4

June 2022

Infrastructure Planning

Planning Act 2008

The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009

A66 Northern Trans-Pennine Project Development Consent Order 202x

4.4 CONSULTATION REPORT ANNEX L PART 3

Regulation Number:	Regulation 5(2)(q)
Planning Inspectorate Scheme Reference	TR010062
Application Document Reference	4.4
Author:	A66 Northern Trans-Pennine Project Team, National Highways

Version	Date	Status of Version
Rev 1	13 June 2022	DCO Application

Contents

Part 1

1. S47 notice
2. Copy of S47 notice in Newspapers
3. Statutory public consultation leaflet/poster
4. Leaflet notification zone map
5. List of poster locations
6. Sample social media posts
7. Statutory public consultation press releases
8. Statutory public consultation brochure
9. Statutory public consultation feedback form
10. Statutory public consultation exhibition boards
11. Statutory public consultation target area
12. Map book
13. Copies of paid for advertising
14. Virtual consultation page
15. Project website
16. Newspaper adverts
17. Preliminary environmental information report – non-technical summary

Part 2

18. Preliminary environmental information report with appendices and figures

Part 3

19. Construction method and management statement

Part 4

20. Route development report

Part 5

21. Project design report

Part 6

22. Local traffic report

highways england

A66 Northern Trans-Pennine project

Draft Construction Method and Management Statement

Volume 1



CONTENTS

Executive Summary **1**
1 Introduction **2**
1.1 Introduction and Purpose of this Document 2
1.2 Project Context 3
1.3 Project Summary 3
M6 Junction 40 Penrith 3
M6 Junction 40 to Kemplay Bank 3
Penrith to Temple Sowerby (Center Parcs) 4
Temple Sowerby to Appleby 4
Appleby to Brough (Warcop) 5
Bowes Bypass 5
Cross Lanes to Rokeby 6
Stephen Bank to Carkin Moor (Layton) 6
A1(M) Junction 53 Scotch Corner 6
1.4 Structure of this Document 7
2 Construction Principles **8**
2.1 Overarching Principles of Construction Management 8
2.2 Optimum Route Design 8
2.3 Minimising Disruption and Maintaining Safety for Users 8
2.4 Optimum Works Phasing and Traffic Management 8
2.5 Managing Environmental Impacts 9
2.6 Suitable Compound Locations 9
2.7 Material Management and Storage 11
2.8 Safe Construction Management 12
2.9 Construction Duration 13
3 Indicative Construction Phasing and Programme Overview 14
3.1 Phases of Construction 14
3.2 Early Works 14
3.3 Main Works 15
3.4 Sequencing and Programme 16
4 Indicative Construction Plant and Vehicles, Methods and Materials Overview 18
4.1 Overview 18
4.2 Plant and Vehicles 18
4.3 Plant, Vehicles and Materials Movement 19

Bulk Earthworks 20
Imported or Building Materials 20
4.4 Site Access Points and Haul Roads 21
4.5 Construction Compound and Site Welfare Facilities 21
4.6 Service Diversion and Protection 21
4.7 New Road Construction 22
4.8 Overbridge Construction 22
4.9 Underpass Construction 23
4.10 Retaining Wall Construction 23
4.11 Earthworks 24
4.12 Drainage 25
5 Construction Traffic Management Principles Overview 26
6 Utilities Management Overview 28
7 Construction Environmental Management Overview 29
7.1 Overview 29
7.2 Environmental Impacts and Control Measures 29
8 Health and Safety Overview 30
9 Community Engagement Overview 32
10 Glossary 34
11 Abbreviations List 36

APPENDICES

NO TABLE OF CONTENTS ENTRIES FOUND.

TABLES

Table 1: Indicative compound locations per scheme 10
Table 2: Project wide indicative high level programme dates 17

FIGURES

No table of contents entries found.

Executive Summary

The A66 Northern Trans-Pennine project is a programme of works to improve the A66 between the M6 at Penrith and A1 at Scotch Corner. The project will involve upgrading single carriageway sections of road to dual carriageway standard and making improvements to the junctions along the route. The A66 is a key local, regional and national route for east/west journeys in the north of England, providing vital connections for freight, tourism and businesses across the UK.

The purpose of this Draft Construction Method Statement document is to outline the approach to managing the construction works for the A66 Northern Trans-Pennine project. This document is produced primarily to enable decision makers, local communities and other interested parties to understand the nature of the works and the various construction activities associated with the project. It is designed to be informative to those who are less familiar with construction and the methods, processes and procedures that will be implemented to deliver the project.

The Draft Construction Method Statement provides an overview on:

- Construction principles
- Indicative construction phasing and programme
- Key construction activities and processes
- Principles to inform traffic management and utilities management
- Environmental management during construction
- Health and safety considerations
- Community engagement during construction

The information provided in the Draft Construction Method Statement is subject to change, and more detailed plans, procedures and methodologies will be developed as the project develops, following continued liaison with key stakeholders and interested parties. An updated version of this document will be part of the Development Consent Order application process and then as part of the construction process.

1 Introduction

1.1 Introduction and Purpose of this Document

1.1.1 The purpose of this Draft Construction Method Statement (CMS) is to outline the approach to managing the construction works for the A66 Northern Trans-Pennine project (hereafter referred to as 'the project'). This document is produced primarily to enable decision makers, local communities and other interested parties to understand the nature of the works and the various construction activities associated with the project.

1.1.2 The information in this document provides an overview on: construction principles; key construction activities and processes; and principles to inform traffic management. In addition, the Draft CMS provides high-level indicative programme durations for each of the schemes within the project.

1.1.3 The Draft CMS helps to identify the impacts of the project on stakeholders and road users when works commence on this large-scale project. The Draft CMS is designed to be informative to those who are less familiar with construction and the methods, processes and procedures that will be implemented to deliver the project.

1.1.4 Major highways projects progress through a major projects lifecycle known as the Project Control Framework (PCF). The stages are:

- Pre-project phase:
  - Stage 0 (Strategy, shaping and prioritisation)
- Options phase:
  - Stage 1 (Options identification)
  - Stage 2 (Option selection)
- Development phase:
  - Stage 3 (Preliminary design)
  - Stage 4 (Statutory procedures and powers)
  - Stage 5 (Construction preparation)
- Construction phase:
  - Stage 6 (Construction, commissioning and handover)
  - Stage 7 (Closeout)

1.1.5 The project is currently at PCF Stage 3, with preliminary design being undertaken.

1.1.6 It should be noted that the information provided in the Draft CMS is subject to change, and seeks to inform the reader of acceptable design and construction approaches that may be deployed on each of the project schemes. Construction methodology is subject to third party approvals and detailed design, and therefore more detailed plans, procedures and methodologies will be developed as the project develops, following continued liaison with key stakeholders and interested parties.

1.1.7 An updated version of this Draft CMS document will be part of the DCO application process and then as part of the construction process, where detailed scheme specific method statements will be produced by the relevant contractors undertaking the works.

1.1.8 Some information included in this report may differ from that set out in the Preliminary Environmental Information Report (PEIR). The PEIR was produced as the design of the project was still under development, and therefore should be regarded as a preliminary account of the principal environmental issues identified to date. Further information on the function and status of the PEIR is provided in the PEIR document

itself. The Environmental Statement (ES) produced for DCO submission will be informed by the updated version of this document.

1.2 Project Context

1.2.1 The existing A66 is a key national and regional strategic transport corridor and link for a range of travel movements. It carries high levels of freight traffic and is an important route for tourism and connectivity for nearby communities. There are no direct rail alternatives for passenger or freight movements along the corridor.

1.2.2 The A66 corridor lies across three local planning authority administrative areas, namely Eden District, Durham County and Richmondshire District. It runs through the North Pennines Area of Outstanding Natural Beauty (AONB) between Brough and Bowes. The Lake District National Park is approximately 2km south-west of Penrith and the Yorkshire Dales National Park is located approximately 3.5km south of the A66.

1.2.3 Despite the strategic importance of the A66, the route between the M6 at Penrith and the A1(M) at Scotch Corner is only intermittently dualled and has six separate sections of single carriageway. The route also carries local slow moving agricultural and other traffic making short journeys, which can have an impaok ct on other users, especially on the single carriageway sections. The variable road standards, together with the lack of available diversionary routes when incidents occur, affects road safety, reliability, resilience and attractiveness of the route.

1.2.4 If the existing A66 route is not improved, it will constrain national and regional connectivity and may threaten the transformational growth envisaged by the Northern Powerhouse initiative and the achievement of the Government levelling up agenda.

1.3 Project Summary

1.3.1 The A66 Northern Trans-Pennine project is a programme of works to improve the A66 between the M6 at Penrith and A1 at Scotch Corner. The project will involve upgrading single carriageway sections of road to dual carriageway standard and making improvements to the junctions along the route. Parts of the project involve online widening of the carriageway and some are offline (in other words, new sections of road that follow a different route but reconnect into the main A66 alignment).

1.3.2 The project has been split into a number of schemes, summarised below.

M6 Junction 40 Penrith

1.3.3 The M6 Junction 40 Penrith scheme will provide a three-lane circulatory carriageway. The A66 between M6 Junction 40 and Kemplay Bank Roundabout will be widened to three lanes in each direction. Widening will be required on the following five approach arms to provide additional lanes and a dedicated left turn facility, each controlled under its own signal phase: M6 North, M6 South, A66 East, A66 West, and A592 Ullswater Road.

M6 Junction 40 to Kemplay Bank

1.3.4 The M6 Junction 40 to Kemplay Bank scheme will provide a new dual carriageway under Kemplay Bank Roundabout, allowing free-flowing traffic eastbound and westbound on the A66, improving access to Penrith and the A6. This scheme will include upgraded, replacement on- and off-slip roads to the roundabout, allowing users to safely join and leave the A66 in both directions. Minor realignment of the A6

and A686 arms will be required to accommodate the new slip roads serving the local road network.

Penrith to Temple Sowerby (Center Parcs)

1.3.5 The Penrith to Temple Sowerby (Center Parcs) scheme will provide full dualling of the existing A66 single carriageway section between Penrith and Temple Sowerby. The works for this section of the route will predominantly involve online widening using the existing carriageway to form one side of the new dual carriageway. The second carriageway will be constructed to the north of the existing carriageway.

1.3.6 A new grade-separated junction will be constructed to replace the existing Center Parcs junction to connect this facility with the new alignment of the A66. This will provide access to Center Parcs and the local road network. New left-in/left-out junctions will be provided to the B6262 and to St Ninian's Church on the Winderwath Estate, with associated acceleration and deceleration lanes to enable safe access to homes and businesses. The existing access serving Whinfell Holme Wastewater Treatment Works will also be converted to left-in/left-out, with the potential that this access will have to be relocated to the east to facilitate widening of the A66 over the existing utility corridor.

Temple Sowerby to Appleby

1.3.7 The Temple Sowerby to Appleby scheme is one of the schemes where there has been further consideration of sections of alternative alignments, to ensure the project complies with policy which seeks to protect the River Eden Special Area of Conservation (SAC) and heritage assets. Our evaluation of these alternatives has been informed through engagement with stakeholders, including the local communities, local authorities and environmental and heritage bodies. We have considered the options outlined and our preferred route for this scheme is the 'blue route', described below. The full reasons for this selection, and details of the other alternative alignment routes, are outlined in more detail in the Route Development Report.

1.3.8 The blue route is an evolved version of the route that was included in the Preferred Route Announcement (PRA) and will comprise a new offline bypass around the north of Kirkby Thore, a new bypass to the north of Crackenthorpe, and a number of new junctions and improvements. As the route travels south-east the alignment reduces the length of affected floodplain at the Trout Beck crossing. A new multi-span viaduct will be provided for the crossing over Trout Beck and its associated flood plain.

1.3.9 A new junction, referred to as the Temple Sowerby Bypass Junction, will provide connections between the existing A66 and the local road network. A short section of road will connect from Temple Sowerby Bypass Junction to the existing A66, allowing access for local traffic and other road users from Temple Sowerby to Crackenthorpe and to wider settlements. A new junction with merge and diverge lanes will be provided at Main Street to the north-east of Kirkby Thore. Main Street will pass over the proposed A66 alignment on a bridge structure. New bridge structures for both Station Road and Sleastonhowe Lane will enable access over the A66 for local traffic. A diversion will lead from Priest Lane to Station Road to maintain local traffic access.

1.3.10 At Crackenthorpe, a new junction with merge and diverge lanes on the westbound carriageway of the new A66 alignment will provide left-in/left-out access, linking to the previous A66 alignment and the B6542 and provide access to both Crackenthorpe and Appleby. Provision of an additional left-in junction to the eastbound carriageway

at the existing Appleby bypass junction will make better use of the existing infrastructure.

Appleby to Brough (Warcop)

1.3.11 The Appleby to Brough (Warcop) scheme comprises dualling a section of single carriageway between Coupland Beck and Brough, with a number of junction improvements to enable access on and off the A66 to improve user safety and reduce congestion. Appleby to Brough is one of the schemes where there has been further consideration of sections of alternative alignments, to ensure the project complies with policy which seeks to protect the North Pennines Area of Outstanding Natural Beauty (AONB) located to the north of the existing A66. Our evaluation of these alternatives has been informed through engagement with stakeholders, including the local communities, local authorities and environmental bodies. We have considered the options outlined and our preferred route for this scheme is the 'black-blue-blue route', described below. The full reasons for this selection, and details of the other alternative alignment routes, are outlined in more detail in the Route Development Report.

1.3.12 The western extent of the black-blue-black route comprises 2.6km of online widening with a new westbound carriageway to the south of the existing carriageway. A left-in/left-out junction will be provided at Café 66 providing access to the eastbound carriageway. A replacement underpass will be provided for New Hall Farm and Far Bank End and a left in/left out junction will be provided on the westbound carriageway. A new junction will provide a link to the B6259 to Sandford/Warcop.

1.3.13 The central part of the black-blue-black route will follow the line of the existing A66, by using the old A66 as the new eastbound carriageway and building the new westbound carriageway to the south. A new structure is proposed to cross the Moor Beck, and a new local road will be provided to the north of the new A66 dual carriageway in order to maintain local access and facilitate movement on and off the A66 to both Warcop and the Ministry of Defence facility.

1.3.14 The eastern portion of the black-blue-black route will continue to follow an alignment to the south of the existing A66 before tying into the Brough Bypass. The de-trunked sections of the A66 will enable use for access to the local road network west of Warcop and a new local road will be provided to the north from Turks Head into Brough. A left-only T-junction with diverge and merge tapers on the westbound carriage will be provided to maintain access to the properties on the south side of the new dual carriageway. Eastbound local movements to Brough would be via the accommodation bridge to join with the local road into Brough.

Bowes Bypass

1.3.15 The Bowes Bypass scheme will closely follow the existing A66 alignment to the north of the village of Bowes, with a new adjacent eastbound carriageway to the north. The existing carriageway will be changed to carry westbound traffic. At the junction with the A67, a new an underbridge will carry the proposed eastbound carriageway. Two new slip roads will accommodate traffic travelling to and from the east, providing access to and from the A67 and Bowes village. Access from Bowes to the A66 (via the Roman road known as The Street, and locally known as Low Road) will be stopped up, with the upgraded grade-separated Bowes Junction providing safer access for local traffic.

1.3.16 The A67 will be widened to the east to create a staggered junction and a right-turn lane for the eastbound on-slip. The existing eastbound off-slip will be realigned to the

north to make way for the new eastbound A66 carriageway. The existing westbound on-slip will have minor improvements made to create a safer merge.

Cross Lanes to Rokeby

1.3.17 The Cross Lanes to Rokeby scheme will be divert the A66 to the south of the Old Rectory and St. Mary's Church before re-joining the existing road at Rokeby.

1.3.18 The Cross Lanes to Rokeby scheme is one of the schemes where there has been further consideration of sections of alternative alignments, to ensure the project complies with policy which seeks to heritage assets. Our evaluation of these alternatives has been informed through engagement with stakeholders, including the local communities, local authorities and environmental and heritage bodies. There are alternative junction location options to produce three possible route options. We have considered the options outlined and our preferred route for this scheme is the 'black route', described below. The full reasons for this selection, and details of the other alternative alignment routes, are outlined in more detail in the Route Development Report.

1.3.19 Under the black route, at Cross Lanes it is proposed to remove the existing junctions which provide access to the B6277 Moorhouse Lane and Cross Lanes Organic Farm and Café, replacing it with a compact grade-separated junction on the A66, west of the existing Cross Lanes junction. The B6277 Moorhouse Lane and Rutherford Lane would be linked via a structure over the A66. Under the black route, at Rokeby it is proposed to remove the existing junction, replacing it with a compact grade-separated junction west of St. Mary's Church and the Old Rectory. This junction would be an underpass arrangement and would avoid direct impact on the Registered Park and Garden and the Old Rectory.

Stephen Bank to Carkin Moor (Layton)

1.3.20 The Stephen Bank to Carkin Moor (Layton) scheme will comprise a new dual carriageway section between Stephen Bank and Carkin Moor Farm. The new dual carriageway will be to the north of the existing A66 and the properties at Fox Hall and Mainsgill Farm, re-joining the existing A66 alignment after Mainsgill Farm.

1.3.21 The existing A66 will be de-trunked and will be used as a collector road for local access. In order to maintain existing access, this section of road will be realigned over a distance of 600m to facilitate the revised vertical realignment of Collier Lane, with an overbridge will be provided to link Collier Lane to the de-trunked A66. A new grade-separated junction to the western boundary of the existing alignment of Moor Lane will provide connectivity between the de-trunked A66 and the proposed mainline of the new A66. The southern section of Moor Lane will be realigned and placed into a cutting beneath the proposed mainline, and ultimately connected to grade-separated junction. The road will be widened through Carkin Moor Scheduled Monument to Carkin Moor Farm within the existing cutting, reducing impact on the scheduled monument itself.

A1(M) Junction 53 Scotch Corner

1.3.22 The A1(M) Junction 53 Scotch Corner scheme will widen the existing Middleton Tyas Lane approach at Scotch Corner roundabout from one lane to two lanes. In addition, it is proposed to alter road markings and kerbs on the circulatory carriageway to provide three lanes on the existing northern bridge structure.

1.4 Structure of this Document

1.4.1 This Draft CMS report will look to provide the reader with more information regarding the following topics in relation to the A66 project works:

- Construction Principles (**Chapter 2**) – A summary of the key principles that will be considered and managed during the design and delivery of the A66 project. Details are not provided for individual schemes, with the approaches being adopted across all schemes.
- Indicative Construction Phasing and Programme Overview (**Chapter 3**) – A summary of key construction sequences for the project, both offline and online along with high level indicative dates for key elements on each scheme.
- Indicative Construction Plant and Vehicles, Methods and Materials Overview (**Chapter 4**) – A summary of the likely construction methods and material management to be adopted on the project.
- Construction Traffic Management Principles Overview (**Chapter 5**) – A summary of key approaches to be adopted or considered when looking to safely manage traffic and construction works on the project.
- Utilities Management Overview (**Chapter 6**) – A summary of the key approaches to managing utilities through diversion or protection measures.
- Construction Environmental Management Overview (**Chapter 7**) – A summary of the key project and wider project environmental considerations during the design and construction stages.
- Health and Safety Overview (**Chapter 8**) – A summary of the importance of health and safety on the project and how it must be actively managed with engagement with all parties, with alignment to our safety goals and incentives.
- Community Engagement Overview (**Chapter 9**) – A summary of the key community engagement approaches to be adopted on the project in line with Highways England's wider approaches.

2 Construction Principles

2.1 Overarching Principles of Construction Management

2.1.1 The project incorporates eight schemes (of which some are combined for reporting purposes and so in this document are referred to as single schemes) – from M6 Junction 40 in Penrith to the west, to A1(M) Junction 53 Scotch Corner to the east. Whilst each scheme has its own context and bespoke elements associated with topography, land or structure requirements, all eight schemes will follow the same shared construction principles which will be core to the design and delivery of the project. These shared construction principles are set out in the remainder of this section.

2.2 Optimum Route Design

2.2.1 For each scheme, efficient route design will be considered noting the benefits and impacts of the route, material movements and the impacts on stakeholders. Further information on route design and evolution can be found in the Route Development Report.

2.2.2 Construction impacts have been considered in route selection and will continue to be during detailed design. Where possible, new land take has been reduced, along with the visual impacts on the surrounding area. The strategy for most schemes has been to look to identify an earthworks balance where material is excavated and then deposited to achieve a net balance, reducing material movements, disturbance and other associated construction impacts. Further development of earthworks design will continue as the detailed construction programme is finalised.

2.3 Minimising Disruption and Maintaining Safety for Users

2.3.1 The project construction design and management will take note of the long-term impacts of the schemes, looking to optimise the schemes route selection to improve safety and journey reliability time. Whilst also considering these factors, other road users and stakeholders' needs will be evaluated and incorporated into the design. This includes the provision of dedicated walkers, cyclists and horse-rider (WCH) infrastructure, and improved underpass or overbridge connections and the need to facilitate additional access roads or crossing points. Further information on this can be found in the Project Design Report.

2.3.2 The design will also take note of the implications of constructing the schemes whilst maintaining an operational A66, ensuring the works consider road users, WCH's and other stakeholders.

2.4 Optimum Works Phasing and Traffic Management

2.4.1 In order to deliver the schemes with minimum disruption, the construction phasing and traffic management logistics will be developed to ensure a balance is achieved on reducing the total duration of the works, whilst also ensuring a functional and safe road network is maintained during such works. Key schemes such as M6 Junction 40 to Kemplay Bank will feature significant traffic management interfaces due to the complexities of constructing the new road close to the M6, with notable traffic movements required to be maintained.

2.4.2 It is expected that during periods of construction there will be some limitations imposed on traffic, with some minor diversions expected for a small percentage of

traffic wanting to make shorter journeys. Such traffic management strategies will be communicated to road users and consultation with stakeholders to make them aware in advance, which may include but not be limited to stakeholder engagement events, letter drops, online communications or interactive road signs.

2.4.3 Through efficient design, construction activities will be optimised to undertake a large percentage of work away from live traffic, through phasing of the works and traffic management layouts. For a small percentage of works, additional traffic management will be required with some diversions and road closures possible to key activities such as bridge beam installations or key road connection points. Where possible any closures or additional traffic management controls will look to be minimised and implemented during off peak hours or periods, which may include overnight works or weekends.

2.4.4 Further information on construction traffic management is provided in Section 5: Construction Traffic Management Principles Overview.

2.5 Managing Environmental Impacts

2.5.1 Detailed construction methodologies will be closely assessed and selected to minimise construction impacts as far as possible, pursuant to the controls that will be put in place through Environmental Management Plans ('EMP'), compliance with which will be secured through the DCO.

2.5.2 As part of this, close attention will be paid to material movements, with the aim of seeking to achieve a cut and fill balance where possible to ensure large scale plant and vehicle emissions from earthworks are reduced.

2.5.3 Furthermore, key commitments relating to waste management, noise, dust and vibration, as set out in the EMP will be implemented, and where necessary, monitored. Surface run off and water discharge will also be controlled and where applicable, approvals or licences agreed to ensure there is no detriment to local water courses.

2.5.4 Further information on construction environmental management is provided in Section 7: Construction Traffic Environmental Management Overview.

2.6 Suitable Compound Locations

2.6.1 For a project of this scale and length, several access points or independent haul routes, work areas and compounds will need to be established. These will vary by scheme depending on their service requirements, traffic management phasing and the works being undertaken. Where bridges, overbridges, underpasses and culverts are required, more plant and materials will be required, thus larger work areas are to be expected.

2.6.2 On completion of the permanent works, some work locations will be integrated within the schemes landscaping helping to reduce further permanent works, whilst others will be removed.

2.6.3 When selecting locations for compounds or works, it will be ensured wherever possible and practical that: the areas are encompassed as part of the permanent works; that impacts to local stakeholders are minimised; and that suitable access and egress points to prevent disruption to the 'live' A66 are provided.

2.6.4 Compounds could range from small satellite areas of 2,000m^2 up to larger areas of 40,000m^2 or over, with proposed operative numbers and site working hours being

key to location selection. Suitable parking provisions will be made available to prevent local stakeholders from being impacted by the works.

2.6.5 The compound sizes will be relative to the available land, connectivity with the A66 and interface with utilities to minimise the environmental impacts of the works. Table 1 presents indicative main compound locations for each of the schemes.

Table 1: Indicative compound locations per scheme

Indicative compound locations per scheme			
Scheme / Chainage	**Location Descriptor**	**Compound Type**	**Approximate Duration**
M6 Junction 40 to Kemplay Bank	Potential compound located to the east of J40 on the M6 close to Cumbria council depot (A66 Westbound to M6 Southbound).	Site welfare, site vehicles, traffic management vehicles and small material storage.	61 months
	Potential compound located to the south, accessed via the local police headquarters access road.	Site welfare, site vehicles, traffic management vehicles and material storage area.	
Penrith to Temple Sowerby	Potential compound located to the north of the A66 with new access road formed off the main road.	Site welfare, site vehicles, traffic management vehicles and material storage.	45 months
	Potential compound located to the south of the A66 between the A66 and the junction with Center Parcs with new access road formed off the main road.	Site welfare, site vehicles, traffic management vehicles and material storage.	
Temple Sowerby to Appleby	Potential compound located to the north of the A66 where the route deviates from the existing A66 with new access road formed off the main road.	Site welfare, site vehicles, traffic management vehicles and material storage.	36 months
	Potential compound located to the north of the new A66, location near new proposed left-in/left-out junction A66 or utilisation of a possible designated material storage area.	Site welfare, site vehicles, traffic management vehicles and material storage.	
Appleby to Brough (Warcop)	Potential compound located to the south of the A66, between Sandford at the B6259 and Moorhouse Lane, with new access road formed off the B6259.	Site welfare, site vehicles, traffic management vehicles and material storage.	35 months
	Potential compound located to the south of the A66, between Warcop and Flitholme junctions passing East Field Farm, with new access road formed off the main road.	Site welfare, site vehicles, traffic management vehicles and material storage.	

Indicative compound locations per scheme			
Scheme / Chainage	**Location Descriptor**	**Compound Type**	**Approximate Duration**
Bowes Bypass	Potential compound located to the west of Clint Lane to the north of the A66 with new access road formed off the A67.	Site welfare, site vehicles, traffic management vehicles and material storage.	36 months
Cross Lanes to Rokeby	Potential compound located to the north of the A66, west of Cross Lanes Organic Farm Shop with new access road formed off the B6277.	Site welfare, site vehicles, traffic management vehicles and material storage.	27 months
	Potential compound located to the south of the A66, east of The Old Rectory with new access road formed off the existing A66.	Site welfare, site vehicles, traffic management vehicles.	
Stephen Bank to Carkin Moor	Potential compound located to the north of the A66, east of Collier Lane with new access road formed off Collier Lane.	Site welfare, site vehicles, traffic management vehicles and material storage.	18 months
A1(M) Junction 53 Scotch Corner	No compound proposed	Not applicable	Not applicable

2.6.6 Further information on construction compounds is provided in Section 4.5: Construction Compound and Site Welfare Facilities.

2.7 Material Management and Storage

2.7.1 For each of the schemes on the project, there will be varying storage requirements for imported materials and excavated earthworks fill. On each scheme, areas will look to be selected to optimise fill and reduce vehicle movements, both helping to reduce traffic for local road users and help with suitability imperatives. A key scheme that may require a large material import due to lack of locally recoverable fill from road construction activities is Cross Lanes to Rokeby.

2.7.2 Where possible storage areas will be established in those locations where large fill requirements are needed or where key structures are required. This will be subject to topography and land suitability. Material movements will be carefully programmed to reduce storage periods and subsequent double handing of the material, with a focus on first time placement.

2.7.3 Materials, both those brought onto the scheme and site-won, will look to be stored correctly to prevent deterioration and subsequent waste, as well as to minimise environment impacts and reduce water generation.

2.7.4 Chemicals, fuels, oils and other hazardous materials will be kept within locked storage areas with access restricted. For the storage of fuels and oils, adequate containment and, where required, secondary containment will be used. Bulk storage tanks will be integrally bunded and located within compound areas, away from general traffic movements and surface water drains and secured against

unauthorised discharge. Adequate provisions of spill protection measures will be provided at work and compound locations.

2.7.5 All timber products are to be from a 'Chain of Custody' source and certified to ensure legality and sustainability.

2.7.6 On the project there will be a commitment to reuse and recycle, driven predominantly by excavated topsoil and sub soil, but also with aggregates, demolition waste and timber products for associated concrete works. On some schemes such as M6 Junction 40 to Kemplay Bank, where sections of existing roads may be removed, material will look to be recovered and used within the schemes' permanent or temporary works, subject to no contamination or suitability issues.

2.7.7 Chemicals, fuels, oils and other hazardous materials will be kept within locked storage areas with access restricted. For the storage of fuels and oils, adequate containment and where required secondary containment will be used. Bulk storage tanks will be integrally bunded and located within compound areas, away from general traffic movements and surface water drains and secured against unauthorised discharge. Adequate provisions of spill protection measures will be provided at work and compound locations.

2.7.8 All timber products are to be from a 'Chain of Custody' source and certified to ensure legality and sustainability.

2.7.9 On the project there will be an imperative to reuse and recycle, driven predominantly by excavated topsoil and sub soil, but also with aggregates, demolition waste and timber products for associated concrete works. On some schemes such as M6 Junction 40 to Kemplay Bank, where sections of existing roads may be removed, material will look to be recovered and used within the schemes permanent or temporary works, subject to no contamination or suitability issues.

2.8 Safe Construction Management

2.8.1 Safety in design, construction and operation is paramount and will remain at the project's core throughout. The project is aligned to Highways England's health and safety commitments, with the clear focus of ensuring everyone associated with the A66 project, whether that be construction worker, road users and other stakeholders go 'home safe and well'. A positive health and safety culture will be instilled from concept design through to final handover and maintenance, throughout the supply chain.

2.8.2 The project will follow the Construction, Design and Management Regulations, ensuring the design represents a safe and constructable solution that maintains the safety of the workforce and general public.

2.8.3 On the project, site safety will be the highest priority. Plant and people interfaces will be managed with segregated walkways, appropriate signage and through audible or visual deterrent warning devices fitted to plant and machinery where suitable.

2.8.4 The workforce themselves play the biggest role in safe construction practices. The project will ensure that all operatives are suitably qualified and trained to undertake work on the schemes. Works will be planned and managed to ensure that the workforce's exposure to noise, dust and vibration is managed. All employees working on the schemes will be suitably briefed and empowered to stop work where they have any concerns.

2.8.5 Traffic management is an essential part of undertaking the works safely, both for the workforce and public. It will be appropriately planned, communicated and

implemented, ensuring works can take place with adequate segregation and diversions where appropriate from the live A66 traffic or other associated local roads.

2.9 Construction Duration

2.9.1 Construction durations will be realistic and reflective of the challenge of undertaking a number of complex infrastructure schemes both online (close proximity to live traffic) and offline, with various different construction phases to ensure the A66 remains 'live' (as in, the existing A66 can continue to be used as the new alignment or additional carriageways are constructed) and the workforce remains safe.

2.9.2 Offsite manufacturing will be utilised across the schemes where possible and appropriate, to minimise works on the A66 and reduce programme durations. Offsite manufacture of concrete and or steel structural elements could be used across all schemes, but due to the size of the Temple Sowerby to Appleby – Crackenthorpe scheme, offsite manufacture could be a significant opportunity where a bridge is required to cross the watercourse.

2.9.3 Principles from Highways England's Customer Service Strategy will form the basis of our approach to engagement and communications during construction. We will work to develop positive relationships with our customers and neighbours through providing timely and accurate information of our road works, such as keeping the public and local communities informed of timescales of scheme works. We will be preparing a Construction Engagement & Communications Strategy setting out the key construction activities and how we plan to communicate this to our customers and neighbours. It is likely that we would communicate construction activities through media announcements, social media accounts and posts, stakeholder and community events, stakeholder meetings and/or through roadside information signs. This Strategy would sit alongside the traffic management and diversion plans working together to form an overarching plan for construction.

2.9.4 Most construction works will be undertaken during standard day working hours of 7:30am until 6pm. In some instances, it may be essential to undertake works at night or weekends due to traffic management restrictions, with additional traffic management or closures required for works such as road connections or interface points, bridge beam lifts and deck pours. This will be considered further for the DCO application stage and the ES will consider the impacts of night time working.

3 Indicative Construction Phasing and Programme Overview

3.1 Phases of Construction

3.1.1 For each of the schemes on the project similar phases of works will be followed, with the amount of work being undertaken proportional to the size of the scheme.

- The **preparation phase of works** will encompass site access points, access roads, compounds and service diversion or protection measures.
- The **initial construction phase of works** will see the undertaking of mainline diversion routes, remediation to the carriageway for traffic management layout changes and possible demolition or ground remediation if required.
- The **main construction phase of works** will see the main construction works commence with the traffic management in place and will be divided into sub-phases to enable online and offline works to be completed whilst maintaining A66 traffic flows. As part of this phase a significant proportion of landscaping will take place.
- The **concluding phase of works** will see the demobilisation of temporary access points, access roads, compounds and the remaining landscaping undertaken.

3.1.2 As part of the works phases, the key works likely to be undertaken for each scheme are set out in Section 3.2 and Section 3.3. This information serves as a guide, with refinement on the approach to be finalised by the contractors undertaking the works. It should be noted that some elements of works could be undertaken at a different times dependent on feasibility, programme and technical constraints, and therefore a number of phases may all take place simultaneously, with the exception of the concluding phase.

3.1.3 As part of the project early works, elements of ground investigation and archaeology investigation will look to be undertaken early in the project to identify and challenges with respect to the permanent works design and proposed layout. These works are essential and will help inform the detailed design process.

3.2 Early Works

3.2.1 3.2.1 The preparation and initial works comprise of works outlined in Section 3.1, and may consists of:

- Contractor inductions, competency checks and training will be undertaken at various stages along the construction process (approach to be finalised in method statements and health and safety compliance documents).
- Contractor mobilisation, including access points and roads to situate temporary accommodation. This may also include the establishment of crossing points or temporary overbridge structures for scheme that have large scale earthworks operations.
- Site access and security with perimeter fencing.
- Delivery of larger plant items along with imported materials and supplies. Such equipment or materials will be used to construct larger temporary accommodation, access roads, parking, waste storage areas and material storage areas.
- Areas of interest, historical or protected importance be secured and fenced to prevent access.

- Temporary closures or diversion of footpaths or smaller access roads to facilitate early works on the schemes. This will be identified in greater detail at a later stage.
- Vegetation clearance in required work zones in line with the proposed design and approvals.
- Diversion of services or protection of services that do not require large scale traffic management. Works to be undertaken predominantly offline with the A66 still live. On some schemes there are number of high importance services that require attention to enable the main construction works programme to be reduced, helping to minimise the impacts for A66 road users.

3.3 Main Works

3.3.1 The main works are likely to consist of the main construction and concluding phases of works outlined in Section 3.1, and may consist of:

- Changes to drainage and surface water channels undertaken where required at possible cross over or pinch points to enable traffic to be effectively moved or relocated when required. Such works may be undertaken during quieter periods (such as overnight or weekends) wherever possible with temporary traffic management in place, but such works will be refined during the A66 project planning stages.
- Provision of suitable cross over locations, street furniture and relocation of some assets where required, along with areas of the central reserve remediating or reconstructing to enable traffic to be diverted safely away from the work locations. On all schemes, it is likely such works will take place within the existing dual carriageway parts approaching the schemes from either the westbound or eastbound direction with traffic likely to be restricted to one lane in each direction.
- For some schemes, to enable the offline construction works to be optimised diversion roads will be constructed close to the A66 to enable traffic to be located away from key construction works. The Stephen Bank to Carkin Moor scheme is likely to utilise a number of diversions to enable efficient construction whilst ensuring the A66 traffic flows are maintained.
- Any demolition works will be undertaken in a controlled process with safety controls and exclusion zones in place to keep stakeholders and road users safe.
- Establishment of traffic management, with A66 traffic diverted to enable work areas to become available. This will be undertaken in different phases utilising the existing A66 or the new carriageway to complete all works. Road connections and interface points will be appropriately managed to ensure traffic continues to flow, with minimal road closures being used to complete the roadworks.
- Delivery of plant and materials, to commence earthworks, structures and associated deep drainage. In most instances access will be granted to vehicles from the existing A66 via dedicated access and egress points. Once in the work area plant can be offloaded and used along with materials being delivered and excavated material moved. Vehicle movements will be carefully planned to ensure they are optimised, reducing double handling of material and reducing impacts on stakeholders or road users. Suitable provisions will be put in place to reduce vehicles moving the workforce to work locations, with work durations and times reflective to the work tasks. Where possible, most works taking place offline will commence during the day.

- During the works, structures including underpasses and overbridges (including abutments and piers) along with associated deep drainage will be constructed in line with the traffic management phasing. Works will be maximised within offline sections to reduce any potential road closures or restrictions required to be during online works. Where structures are required to be built close to live traffic, suitable temporary works provisions will be implemented to keep road users safe. Where structures are required to be constructed close to watercourses or floodplain areas, suitable measures will be adopted to keep the workforce safe, without causing damage or deterioration to the environment.
- Material excavation, movement, storage and placement. All schemes on the project, require earthworks to be undertaken to some extent to improve the new road alignment, improve safety and improve journey reliability times. As part of the earthwork's strategy, material will be excavated using a variety of plant including dozers and excavators. The material will be loaded into wagons and transported via dedicated haul routes or the current A66 to the desired location (ideal scenario) where it will be placed using both excavators and dozers. Compaction plant will then be used to ensure the material is suitably placed. Where works are taking place close to stakeholders, suitable communication will be established, along with possible mitigation measures to reduce the impacts of the construction works.
- Utility works not undertaken as part of the early site works (for example, due to access difficulties and traffic management challenges). Where possible, diversion routes adopted as part of the construction works will look to be permanently adopted. These works will be predominantly undertaken offline within the phased traffic management work areas.
- As part of the construction works, new local access roads, WCH routes and segregation fencing or screening installed. Such plant and materials movements will be coordinated with the main road construction and associated structures.
- Excavation and construction of water drainage ditches and attenuation ponds completed to control surface water runoff on the new A66 without having detrimental effects on the local environment. The earthworks and vehicle movements associated with these tasks will form part of the material and logistics management plan for all other works. The programming of such works will be driven by land availability and access.
- As the core works are completed within sections of the schemes, landscaping works will be undertaken along with the removal of temporary access roads, access points and other associated temporary works structures that have been used to facilitate construction.
- The final stage of the construction works will be the de-mobilisation of compound and storage areas on the project along with any access roads that will not be adopted by landowners through prior agreement. The remaining landscaping works will then be completed.

3.4 Sequencing and Programme

3.4.1 The sequencing and programming of the schemes are very similar, due to the nature of the works being undertaken. Where possible some elements on schemes could be delayed or accelerated relative to other schemes to help maximise benefits, most notably with earthworks and cut or fill balance requirements. The works will be divided into two main categories for programming purposes, with offline and online works.

Where possible offline works will be maximised through several traffic management phases, but it will also be essential to undertake online works.

3.4.2 Offline works may include but are not limited to the following activities:

- Haul roads
- Compounds
- Service diversions
- Embankment structures
- Abutments and piers
- Underpasses
- Deep drainage
- Main road construction

3.4.3 Online works may include but are not limited to the following activities:

- Access points off the A66
- Some service diversions
- Changes to central reserve areas for traffic management
- Installation and changes to traffic management
- Deep drainage connection
- Underpass connections
- Bridge beam and deck installations
- Road connections

3.4.4 The table below provide an outline view on the key works to be undertaken and the possible start dates along with durations. The variance in the possible start and finish dates reflects the inclusion of all eight schemes with the project wide programme. **It should be noted that the following information is indicative and will be finalised when the design has been approved and accepted. Start dates may be subject to change subject to detail design and approvals.**

Table 2: Project wide indicative high level programme dates

Project wide indicative high level programme dates				
	Start		**Finish**	
Ground & Archaeology investigation	2021	Q3	2023	Q2
Preparation & initial works - Enabling works for access	2022	Q4	2024	Q1
Preparation & initial works - Site establishment compounds, access roads	2023	Q3	2024	Q1
Preparation & initial works - Service diversions or protection measures	2022	Q3	2023	Q4
Main works - Service diversions or protection measures	2024	Q1	2026	Q4
Demolition works / site preparation works	2024	Q1	2025	Q1
Main works - Traffic management	2024	Q1	2026	Q4
Main works including landscaping works	2024	Q1	2028	Q4
Road commissioning	2026	Q2	2028	Q4

4 Indicative Construction Plant and Vehicles, Methods and Materials Overview

4.1 Overview

4.1.1 This section provides indicative information on the typical construction plant and vehicles, methods and materials that may be used on each of the schemes, with possible exceptions on A1(M) Junction 53 Scotch Corner which has a smaller scope of works. Until detail scheme design development is complete, the below information remains subject to refinement and change.

4.2 Plant and Vehicles

4.2.1 The following types of plant and vehicles are examples of the plant expected to be used on the project:

- **360 excavator** – This is a large excavation machine which sits on a rotating base with or without tracks. The machine is able to excavate a variety of ground condition, to differing depths along with the accurate placement of material. Excavators can have a variety of attachments, including buckets and hydraulic breakers and munchers to undertake demolition works. This type of plant will be commonly used to install services, roads and embankments, along with excavating foundations, ponds and ditches.
- **Earthworks roller** – This consists of a steel drum on which round or rectangular feet are attached to help compact placed earth. The plant can be used with or without a vibration function depending on the task, ground and degree of compaction required. This type of plant will be commonly used to compact embankments, large areas of fill or landscape zones.
- **Road construction roller** - This is fitted with one or two smooth surfaced drums that vary in width depending on the size of machine and weight selected. The drums have the ability to dead roll or vibrate the ground under the item of plant, depending on the compaction criteria and any restrictions. This type of plant will be commonly used to compact granular material for road constructions, asphalt surfacing, crane platforms or large laydown areas.
- **Bulldozer** – This is track or wheel-mounted with a forward-facing blade controlled by hydraulic rams. This type of plant will be commonly used to strip or remove vegetation, along with moving or levelling large volumes of earth in an efficient manner. They can also be used to reduced level dig large areas in preparation for embankments, ponds or structures to be built or formed.
- **Telehandler** – This is fitted with wheels and a large powerful telescopic boom with articulating head used of lifting or support materials. It can also be registered to be road legal, enabling the movement of materials both on site and between site locations. This type of plant will be commonly used to lift, move or support timber, wooden sheeting, concrete blocks, drainage products and other small to medium tools or products.
- **Ready-mix concrete wagon** – This is a road-travelling wagon that transports ready-mixed concrete from batching facilities to sites. The vehicles feature a large steel drum that continuously rotates to keep the concrete mixed which can unload the material via a metal chute. This type of plant will be commonly used to supply concrete for protection slabs, underpasses, overbridges and associated foundation, stem or deck elements.
- **Concrete pump** – This combines the abilities of a pump and crane. It features outrigging legs for stability and a large hydraulic pump at the core with hopper

to receive and pressurise the concrete into a feeder hose. They can move large volumes of concrete over significant distances to enable large concrete structures to be constructed quickly and efficiently. This type of plant will be commonly used to move concrete for protection slabs, underpasses, overbridges and associated foundation, stem or deck elements.

- **Dump truck (or dumper)** – There are a variety of dump trucks that could be used on the project including both articulated and non-articulated, depending on the amount of material to be moved and the working space restrictions. They feature a large steel storage bucket that is able to tip in the vertical plane to deposit the material, which is commonly loaded by another item of plant. This type of plant will be used to move excavated soil, aggregate, demolition waste and some construction materials.
- **Eight-wheel road wagon** – These material movement wagons are seen across the road network and are used to transport material to or between work locations. They feature a large steel container that is mounted to the back of a road legal lorry and have the ability to incline the container to release the transported load quickly. This type of vehicle will be commonly used to move earth and aggregate.
- **Wheel-mounted mobile crane** – This is mounted on a wheeled chassis with outrigger legs that are used to provide additional stability during lifts. The crane features a large telescopic boom with winch cable and lifting attachments. It is able to rotate 360 degrees in the horizontal plane to undertake lifting operations, with the amount of weight and distance it can operate at, proportional to the size and ground conditions. This type of plant will be commonly used to lift concrete shuttering, materials and small plant items.
- **Track-mounted mobile crane** – This is similar to a wheel mounted mobile crane but features large tracks with no supplementary outriggers. The main boom is normally a ridged lattice and not telescopic. It is normally used where construction works are required for longer periods and is also able to pick and carry loads, whilst also operating in slightly higher wind speeds. This type of plant will be commonly used to lift concrete shuttering, materials and small plant items.

4.3 Plant, Vehicles and Materials Movement

4.3.1 Plant and material movements will vary on each scheme due to the amount of earthworks, landscaping, new road construction and number of structures required. Schemes that may involve a significant number of wagon movements include: Temple Sowerby to Appleby – Crackenthorpe, Appleby to Brough and Stephen Bank to Carkin Moor. This is subject to final design development, route selection and approvals.

4.3.2 Plant movement will be undertaken to facilitate the establishment of the working areas on each scheme, with plant delivered via traffic management access points. There will be several small vehicles that access the schemes on a daily basis, to transport the workforce along with smaller ‘just-in-time’ materials.

4.3.3 The most notable plant and material movements on each project will be the movement of excavated material to meet cut and fill requirements. This will most likely be undertaken with dump trucks or eight-wheeled road wagons. The delivery of materials is likely to be via a variety of means, including concrete wagons, eight-wheeled road wagons and heavy goods vehicles. depending on the size, shape and type of material.

4.3.4 All vehicle movements will be coordinated and planned, with routes established offline where required to mitigate the impacts on the 'live' A66 traffic flows. Where vehicles require access and egress to work areas from the A66 they will require compliant high visibility safety measures to be fitted and will enter or exit via designated traffic management locations.

4.3.5 Where plant is required to work close to sensitive areas or close to stakeholders, additional measures are likely to be implemented which may have an impact on the type of plant selected or the number of and/or speed of the movements within an agreed period.

Bulk Earthworks

4.3.6 Where possible, bulk earthworks movements will take place down the new A66 route to limit the impacts on local stakeholders and users of the 'live' A66. Where there are limitations or where material is required to be stored or stockpiled a distance from where it is being excavated, dedicated haul routes will be considered and established where possible. In some instances, these will be made permanent and adopted as farm access roads.

4.3.7 In some situations on some schemes, it will be essential to use the existing A66 to move bulk earthworks material. Where this is required, traffic management will be assessed along with potential additional measures to protect the highway and road users.

4.3.8 For some schemes, temporary underpasses or overbridges will be considered to enable the efficient movement of bulk earthworks, helping to reduce material haul distances and interfaces with road users or stakeholders. Possible schemes (subject to final design and approvals) that may benefit from a temporary overbridge to make plant and material movements more efficient include Appleby to Brough and Cross Lanes to Rokeby.

4.3.9 For some schemes, bulk earthwork material that is unable to be placed at a fill requirement location will be taken to identified material storage areas, where it will be safely stored ready for use or incorporated into landscaping elements. Across the project there is an aim for all excavated material to be incorporated into the works unless it is unsuitable or untreatable, in order to prevent off-site disposal and increased movements.

Imported or Building Materials

4.3.10 Across each scheme, the type, amount and nature of the materials being delivered will determine how and where they are delivered. For the larger materials and quarried-based products, it is likely that they will be delivered direct to the work areas on each scheme. This will help reduce double handling, prevent damage to the product and optimise the construction programme.

4.3.11 Key materials that will be delivered close to the works areas on each scheme include quarried and recycled stone, large precast concrete products, formwork and shuttering, ready-mix concrete, steel bridge beams and asphalt-based products.

4.3.12 Smaller materials associated with drainage, ducting, lighting and communications are likely to be delivered to larger compound locations on each scheme, where the materials will be package managed and distributed out to the work areas using appropriately sized transport.

4.4 Site Access Points and Haul Roads

4.4.1 To undertake service diversion works and enable access off the A66 at work locations, access points will be formed along with site haul roads to enable the movement of plant and people efficiently at each of the schemes. Where required, it is likely that changes will be made to kerbing to enable access and egress. If services are present, protection slabs may be required dependent on the level of protection required.

4.4.2 To construct the access points, additional traffic management measures may be required. Once constructed, the access roads may be able to be completed offline with materials being supplied via the newly formed access and egress point. This will be assessed on a scheme-by-scheme basis.

4.5 Construction Compound and Site Welfare Facilities

4.5.1 Across the project, site compounds and satellite welfare facilities will be required to act as hubs for the workforce, project management and for vehicle or material storage, as discussed in section 2.6. The size of the compounds will vary on each scheme with the possibility of some large establishments being shared across two schemes. For each of the compound locations an access and egress will be formed as well as access roads.

4.5.2 As part of the site establishment works, drainage requirements will be assessed and where appropriated additional surface runoff attenuation will be provided. Key services will be diverted from identified locations and fed to the compounds where possible. This will help prevent off-grid power generation and onsite water or water storage, helping to improve the environmental impacts of the scheme whilst also mitigating additional vehicle movements and noise for stakeholders.

4.5.3 Temporary office and welfare facilities will be required on the schemes with the size of the setup relative to the works being undertaken and expected duration. For long term compounds, parking areas may receive an additional asphalt layer to improve site conditions and help reduce dust and noise for stakeholders and local communities.

4.5.4 On completion of the works the welfare units will be removed and the stone and asphalt areas excavated and sent off-site, with the area reinstated. The subsoil and topsoil will then be regraded, with a final landscaping package to ensure the area is left in good condition and in keeping with the local area.

4.6 Service Diversion and Protection

4.6.1 As part of any service diversions and protection measures form an integral part of the design, planning and construction process. Across all schemes on the project there are services which will require diverting or protecting to enable construction. In some instances, there will be a requirement for additional traffic management measures to be implemented to enable the works to be undertaken safely.

4.6.2 For larger interventions (which may include gas and electricity diversions), works are likely to be undertaken prior to the main works commencing on site. This will help to reduce disruption to stakeholders and road users, whilst ensuring the service is safely relocated ready for the construction works.

4.6.3 In many instances, smaller services currently located in the verges will be able to remain and will instead require temporary or permanent protection measures.

4.7 New Road Construction

4.7.1 As part of the road widening or construction process, new road carriageways are required to be constructed. Acknowledging that the design of each scheme has not been finalised, it is likely that the following construction process could be followed:

- Remove vegetation, topsoil and excavate subsoil within the specified dimensions of the pavement road box. Due to the changes in vertical alignment on the scheme, it may be essential to excavate more material out to reach the desired depth or in some instances undertake embankment construction works where the road is higher than existing levels.
- Imported stone (quarried or recycled) will then be deposited, levelled and compacted in layers in accordance with works specifications. This will be built up to within the start of the bituminous layer.
- Kerbs are likely to be installed next, along with associated road drainage elements, with the kerbs being bedded on imported ready-mix concrete and supported on the rear face in preparation for the placement of bituminous material.
- Bituminous material will be brought in and placed in layers.

4.8 Overbridge Construction

4.8.1 Several new overbridges are to be constructed across the project to carry roads over the A66. They will incorporate a deck supported on piers and abutments, which in turn is supported by foundations.

4.8.2 To construct a typical overbridge, it is common to prepare a work area in each verge and potentially one in the central reserve, depending on the structures span and support arrangements. Depending on traffic management restrictions, this may need to be undertaken across a number of phases. Subject to the site's ground investigation records and the size of the overbridge required, foundations may be a pile raft solution, individual piles or a mass fill concrete base.

4.8.3 To construct the piled foundation solution, a typical piling rig will be used to undertake the drilling and concreting of the piles below ground. Piles are normally circular columns in the ground, ranging from depths of 5m to over 15m made from concrete and steel reinforcement. Depending on the design these piles could be connected together at the surface with a large reinforced concrete structure which forms part of the abutment or pier walls.

4.8.4 To form the abutment and pier walls, it is likely that they will be cast insitu on site using concrete and steel reinforcement but this could also be undertaken offsite and the abuments/walls brought to site. To construct the walls, large wooden or metal shutters will be constructed to contain the concrete and steel reinforcement. Concrete will then be poured into the enclosed shutter using a crane or concrete pump.

4.8.5 Depending on the overbridge design and span arrangements, a central pier may not be required. In addition, the abutment walls could also be formed from precast units or reinforced concrete columns that are surrounded by earth retained solutions.

4.8.6 To form the bridge deck, it is likely that steel or precast concrete beams will be manufactured offsite and brought to the scheme in question via large road transport vehicles during a traffic management closure of the A66. The beams will then be lifted into position using a crane from a dedicated lift site on or off the A66 road.

4.8.7 Depending on the bridge deck design and size, an onsite pre-casting facility may be considered if it forms a viable construction and environmental solution. Infrastructure requirements must also be taken into consideration when evaluation this option.

4.8.8 Depending on the number of beams, their width and spacing, it is likely that precast panels will be placed between the beams to formulate the complete deck. It is then likely that steel reinforcement will be fixed on the newly formed surface and concrete placed, to integrate the beams and support formwork.

4.9 Underpass Construction

4.9.1 Several new underpasses are to be constructed across the project to carry roads under the A66. There are also a number of underpasses that are required to be extended. They are constructed in a similar process to an overbridge, with the asset commonly being situated below ground level. The underpass features foundations, retaining walls and a deck-type roof structure to enable the safe movement to people. It could also be constructed from cast insitu or pre-cast box culverts dependent on design, ground conditions and suitability.

4.9.2 To construct the underpass, excavation works will take place to reduce level dig the land to the underpass level. Depending on the foundations, the area could then have a piling platform installed to facilitate a piling rig to install reinforced concrete piles or see a large deep excavation formed to enable a mass fill concrete foundation to be constructed.

4.9.3 The construction of the walls is likely to be similar to the methodology detailed for the overbridge abutment walls.

4.9.4 The bridge deck roof will be constructed in a very similar format to that described in the overbridge section (Section 4.8).

4.10 Retaining Wall Construction

4.10.1 Across the project there are requirements for retaining walls where there is insufficient land available to conventionally grade the land at a shallow slope angle between two level differences.

4.10.2 Retaining walls can be constructed from a variety of different methods and materials, with their suitability dependent on ground conditions, topography, access, retained height requirements, retained length requirements and design life. The main (but not exhaustive) types of retained solution are listed below:

- **Continuous bored pile walls** – Continuous bored piles are a type of embedded retaining wall solution that are used to retain large level difference. The bored piles are commonly installed from ground level using a piling rig. Depending on the type of piling rig selected, concrete will be poured into the augured hole and followed by a steel reinforcement cage. Once the concrete has cured, earth can be excavated on one side of the pile to enable material to be retained. Where further support is required, a concrete slab may be cast against the piles to provide additional support.
- **Steel sheet pile-driven walls** – Sheet-piled walls are achieved by driving high strength corrugated sections of interlocking metal into the ground. The steel sections are driven individually using either high frequency vibration and/or impacting the head of the pile with a large weight. Once one pile is installed to the correct level, the next pile is pitched into position and the process continues. The wall acts in cantilever and facilitates material to be excavated out from one side to enable a retained wall solution. This type of installation method is

normally faster to install but commonly not used where very deep retaining wall solutions are required.

- **Reinforced concrete cantilevered walls** – These are concrete formed walls that integrate into an embankment, with fill material subsequently backfilled around the wall as it is constructed. The walls commonly feature a horizontal base and vertical wall section that are connected to utilise the fill material weight on the rear side of the wall to aid with stability. Walls can be pre-cast or cast in-situ. The size and width of the wall will be determined by the topography, ground and retained height requirements.
- **Mechanically stabilised or earth-retained solution walls** – Stabilised or reinforced earth walls are similar to reinforced concrete walls, in that they utilise the fill material to help support the wall. Reinforced earth walls are formed by placing and compacting layers of granular material between plastic geotextile fibres, with a concrete block face.

4.11 Earthworks

4.11.1 All the schemes involve the movement of materials, including the movement of cut or fill earthworks across the schemes (and in some cases between schemes). As part of the design, all schemes look to achieve a cut and fill balance whilst optimising the horizontal and vertical road geometry to improve traffic flows and safety. This is subject to final design and approvals. Based on current designs the Cross Lanes to Rokeby scheme may require a notable import of earth to enable the construction.

4.11.2 Due to the nature of the topography on the project, some scheme areas require large cuts and other areas require large proportions of fill. The key earthworks on the project are associated with the construction of the new A66 road, underpasses, overbridges, drainage ditches and attenuation ponds.

4.11.3 On the project, material will look to be excavated and moved when there are suitable locations to deposit the material within the permanent works design. This helps to optimise plant movements and reduce the environmental impacts of moving large volumes of material. When programme constraints do not allow, material will be moved to suitable stockpile locations along the schemes, where it will be stored in bunded areas ready to be transported again to its destination. Where possible, the material stockpiles will be located close to large future fill areas to reduce transport movements.

4.11.4 It is possible there may be a net shortage of earthworks material early in the project, which could be supplemented in the short term with the use of local borrow pit locations.

4.11.5 The movement of material on each of the schemes will be given detailed consideration to ensure the optimum routes are identified. Across the project, a number of independent haul roads may be established to help move material offline, with possible crossing points introduced to reduce or eliminate A66 movements.

4.11.6 On some schemes, the new A66 route will act as the haul road route and for some schemes that maintain large sections of the A66, it will be unavoidable to introduce material movements on the A66. Where possible, any haul roads and access points that are constructed will look to be adopted or incorporated into the permanent works.

4.11.7 The formation of drainage ditches and attenuation ponds will look to be undertaken early in the project unless access constraints do not permit. Such drainage will aid the control of surface run off, with additional settlement controls in place where required.

4.12 Drainage

4.12.1 Across the schemes a large amount of new drainage is required due to new routes being selected and additional widening of online existing routes. Common elements of drainage will include road gullies, kerb drainage units, carrier drains, filter drains, catch pits and chambers. The depth and size of the assets will vary and will be proportional to the volume of water required to be moved or attenuated.

4.12.2 Where possible existing assets will look to be used, with additional attenuation measures implemented to prevent overloading the current systems. Larger drainage products will most likely be delivered directly to the works areas, with smaller items delivered to compound areas in preparation redistribution out on each of the schemes.

5 Construction Traffic Management Principles Overview

5.1.1 To enable the safe and smooth delivery of the project, traffic management will be carefully planned for each scheme, to enable traffic to keep flowing whilst permitting construction works to be undertaken safely. As detailed designs are developed on each scheme, bespoke traffic management plans will be produced which will take into account current A66 traffic flows, turning requirements, and stakeholder access needs.

5.1.2 This Draft CMS does not serve as a detailed traffic management guide, but instead outlines the key traffic management principles which will be reflected in the bespoke traffic management plans:

- **Formation of access points** – Localised traffic management is likely to be required to enable contractors to safely form access points off the A66 to enable haul roads, work areas or service diversions to be undertaken. To enable these access points to be undertaken safely, it is likely to require off-peak lane closures and/or temporary traffic signals.
- **Offline works** – Where possible schemes will be programmed and planned to optimise offline working, maintaining A66 existing routes for as long as possible. Traffic management will be required around the tie-in points between the new and existing carriageways, or where the offline works may be too close to the existing A66 to carry out works without any protection.
- **Traffic navigation in traffic management areas** – Traffic will then be guided through the traffic management along the A66, using the available extent of the existing carriageway width so as not to restrict movement or introduce further hazards, along with new temporary relief sections to enable main offline construction works of junctions, overbridges and underpasses.
- **Traffic navigation on new road sections** – On completion of the first major phase of offline works, it will be essential to switch the traffic to enable the second phase of offline works to take place, where traffic is moved onto newly built sections of temporary relief road or new carriageway.
- **Online working during less busy periods** – To safely install, switch and remove traffic management in single lane sections, and areas where the existing road width do not allow for a safe work area under a single lane closure alone, closures will be required. Such closures will occur during less busy periods (such as overnight) where this is possible. For large construction elements, weekend closures may also be required. For some of the online work areas, it may not be possible to undertake some work activities safely such as drainage, kerbing and vehicle restraint works, thus closures during less busy times may also be needed for some elements.
- **Large activity road closures** – For some of the structures on the scheme, it will be essential to coordinate longer traffic management periods to safely install bridge beam and deck elements with no live traffic. In these instances, diversion routes will be set up with significant communication and press releases to ensure drivers and stakeholders are well informed. A full closure for a section of the A66 may be required for a weekend to undertake such work, with diversions established along with advanced notifications.
- **Traffic management at junctions** – Traffic management will be used to complete online works such as junctions and road tie-in points, with closures during less busy periods potentially required where road reconstruction is required or service crossings.

- **Keeping traffic moving** – The traffic management will be designed to allow traffic to travel through the works at the highest safe speed permissible. This speed should be no lower than is required to maintain safety. Where possible, the project will look to maintain a 60mph speed limit, although lower limits may be applied where working widths are tight and to manage the safety of road users and/or the workforce.

6 Utilities Management Overview

6.1.1 On the project, each scheme has specific services that will need to be diverted or protected as per the indicated methodologies list earlier in this report. Detailed work will be undertaken, covering the key services on each scheme, how they interact with the new A66, and the measures required.

6.1.2 Construction of the project will require the diversion, relocation or protection of several existing utility assets including water, wastewater, electricity and telecommunications. Wherever possible, services will be maintained, with engineered solutions sought to overcome challenges. Consultation will be undertaken with service providers and stakeholders regarding the services.

6.1.3 Wherever possible and required, services will be diverted or protected early in the project to mitigate potential programme delays. In some instances where carriageway crossings are required, it may be more efficient to deploy traffic management early and in isolation of the main works. This will help ensure that phased works are not affected or restricted.

6.1.4 The affected statutory utilities infrastructure is predominately located alongside roads. The main exceptions are high voltage electricity cables and water mains which commonly run direct between fixed asset points. The required diversions will be planned in detail by the contractor as part of the construction works.

6.1.5 On the project, key schemes that will require increased utilities management due to the number or complexity of the services are likely to be M6 Junction 40 to Kemplay Bank, Penrith to Temple Sowerby and Temple Sowerby to Appleby – Crackenthorpe.

7 Construction Environmental Management Overview

7.1 Overview

7.1.1 On the project, from design through to construction, environmental impacts will be considered and appropriately managed. This will be done pursaunt to detailed iterations of Environmental Management Plans, which will be in accordance with the first stage Environmental Management Plan submitted with the DCO application.

7.1.2 Furthermore, following the recent publications of Highways England's 2030/2040/2050 Net Zero Plan, Highway England have key environmental imperatives to be met as part of the construction of their projects, with a key focus on Net Zero, which looks for designers and contractors to achieve net zero emissions generation or impacts on maintenance and construction projects by 2040.

7.2 Environmental Impacts and Control Measures

7.2.1 There are a number of environmental impacts which have the potential to arise from the construction phase of the project, which will need to be mitigated for during construction of the project, pursuant to EMPs. The EIA process and Environmental Statement will consider required mitigation measures, and further details will be provided as part of the updated version of this document produced for DCO submission. Construction environmental management measures will also be covered in the EMP which will be submitted with the DCO application.

8 Health and Safety Overview

8.1.1 Health and safety on the project remains of paramount importance, across the design, construction and operation stages. The project will actively look to engage with management, the workforce and stakeholders to drive a proactive health and safety culture that will enable construction to take place seamlessly alongside the live A66 traffic. The project will challenge ways of working and standard practises to improve and develop safer ways of working that not only consider the workforce but the end user and associated stakeholders.

8.1.2 In summary of the health and safety principles noted in Section 2, it should be highlighted that the project is aligned to Highways England's health and safety commitments, with the clear focus of ensuring everyone associated with the A66 project, whether that be construction worker, road users and other stakeholders go 'home safe and well'.

8.1.3 All working on behalf of Highways England will align with our approach through the Collaborative Performance Framework (CPF) scoring system. During construction, contracts will develop a Safety Maturity Plan that demonstrates what actions are required by the contractor to ensure alignment.

8.1.4 A positive health and safety culture is instilled from concept design through to final handover and maintenance. The culture will be actively challenged and will be aligned with stakeholder engagement, promoting new learning. The A66 project will build off effective leadership and capable individuals, working as a team to ensure design and delivery are health and safety focused with clear expectations on what is required. This will be implemented throughout the supply chain, with the use of Common Intent Documents. In addition, Highways England's 'Raising the Bar' guidance will help provide practical guidance on how to comply with the Common Intent documents.

8.1.5 To ensure the safe construction of elements on schemes, temporary works will be closely managed to ensure the ground is suitably supported when undertaking such construction works. For elements such as underpasses, overbridges and culverts, temporary works will be required to enable construction whilst the A66 remains safe and operational. This is applicable to almost all schemes on the project.

8.1.6 On the project, site safety will be the highest priority. Plant and people interfaces will be managed with segregated walkways, appropriate signage and through audible or visual deterrent warning devices fitted to plant and machinery where suitable.

8.1.7 Technology will be utilised within plant to reduce or mitigate the need for operatives to work close to large machinery or be exposed to dust, noise or vibration. This might include Global Positioning System- (GPS)-guided excavation, compaction and placement plant for earthworks operations, and remote-control compaction machinery within deep excavations. Efforts to reuse and recycle materials on the project will also help reduce plant and vehicle movements, which in turn reduces expose and improves safety.

8.1.8 The workforce themselves play the biggest role in safe construction practices. The project will ensure that all operatives are suitably qualified and trained to undertake work on the schemes.

8.1.9 The design and traffic management strategy will ensure worker safety is a priority. It is imperative that all those who work on the road network are protected to undertake these improvement works without harm. Protection zones will be established to keep road users away from the construction works and where close interface is required, additional controls will be introduced and managed.

8.1.10 Works will be planned and managed to ensure that the workforce's exposure to noise, dust and vibration is managed. All employees working on the schemes will be suitably briefed and empowered to stop work where they have any concerns.

8.1.11 More detailed health and safety approaches and compliance with legislation will be covered in detailed construction reports as the project progresses.

9 Community Engagement Overview

9.1.1 Meaningful engagement with the local communities and stakeholders who are likely to be affected by the construction of the project will form an integral part of construction planning, programming, implementation, and delivery. Whilst the project will deliver benefits, road construction can also impact on those who live and work along the route as well as road users themselves. Understanding local perspectives on the main risks and opportunities relating to construction is not only welcome, but vital. It is therefore critical that everyone has the opportunity to provide feedback both before and during the construction process, and that local stakeholders are kept informed at each stage of the process.

9.1.2 Highways England will ensure that:

- Ensuring engagement and participation are inclusive, open, and transparent.
- Participants are encouraged to get involved at the appropriate time, by using the networks established by the project and engaging using different methods to maximise the reach of this engagement.
- Information is provided at key stages to allow for full consideration.
- Communication is facilitated through a range of methods in a range of appropriate locations.
- All enquiries will be fully considered, and feedback provided.

9.1.3 Highways England is committed to placing public engagement and meaningful dialogue with directly affected communities and other stakeholders at the heart of the construction process. At this stage in the development of the project, it is too early to define the exact ways in which the project will interact with local communities. However, potential mechanisms which are being considered to encourage engagement with local communities and stakeholders include:

- Continue to utilise the Community Liaison Groups (CLG) which are already established to support each local area. These groups are typically made up of representatives from the local community who are well placed to communicate messages to their networks. The CLG meetings provide an opportunity for details about the works and construction to be shared with the community representatives and opportunities for questions and answer sessions from the local community.
- CLGs chaired by a Public Liaison Officer (PLO) who are a direct line of contact and are responsible for direct engagement with landowners and local communities on the ground.
- Focus Groups are established and maintained as a forum for discussing themes in more detail. Focus Groups allow sharing of information and communication across representatives for specific themes and interest groups. There are currently dedicated Focus Groups for the following areas:
  - business and freight;
  - emergency and public services;
  - statutory environmental bodies;
  - walking, cycling and horse riding; and
  - local authorities.
- An Incident Management Plan is developed in conjunction with the local authorities, Highways England, local Police forces, Traffic Officers and other emergency services.
- A 24/7 Traffic Safety Control Officer (TSCO) presence is made available on site and the TSCO will be the first point of contact in the event of an incident.

- The Highways England telephone line is used to enable members of the public to raise any issues which will the project delivery team will respond to in a timely manner.
- Dedicated social media accounts could be used to disseminate relevant information.

9.1.4 It is recognised that engaging with the communities affected by the project and maintaining that engagement is key to the success of the project. This will be explored and identified in more detail as part of the development of a Community Engagement Plan. It is this document that will inform and direct the over-arching community engagement strategy throughout the construction process.

10 Glossary

Term	Definition
Applicant	Highways England
Application	This refers to an application for a Development Consent Order. An application consists of a series of documents and plans which are submitted to the Planning Inspectorate and published on its website.
Assessment	A process by which information about effects of a proposed plan, project or intervention is collected, assessed and used to inform decision-making.
Best Practicable Means	The best practicable environmental option - defined in the Control of Pollution Act 1974 and Environmental Protection Act 1990 as measures which are 'reasonably practicable having regard among other things to local conditions and circumstances, to the current state of technical knowledge and to financial implications'.
Consent	A statutory permission given to an applicant by a statutory authority, such as the local planning authority or the Secretary of State, that allows a development to be carried out within a specific area of land.
Consultation	A process by which regulatory authorities, statutory and non-statutory bodies are approached for information and opinions regarding a development proposal.
Design Manual for Roads and Bridges (DMRB)	A set of documents that provide a comprehensive manual system which accommodates all current standards, advice notes and other published documents relating to the design, assessment and operation of trunk roads.
Development Consent Order (DCO)	The means of obtaining permission for developments categorised as nationally significant infrastructure projects.
Ground investigation	To obtain information on the physical properties of soil and rock around a site.
Grade-separated junction	Roads crossing the carriageway pass at a different level, so as not to disrupt the flow of traffic. Slip roads connect the carriageway to the junction.
Impact	Change that is caused by an action (for example land clearing (action) during construction which results in habitat loss (impact)).
Legislation	A law or set of laws proposed by a government and given force/made official by a parliament.
Listed building	A structure which has been placed on the Statutory List of Buildings of Special Architectural or Historic Interest to protect its architectural and historic interest.
Monitoring	A continuing assessment of the performance of the project, including mitigation measures. This determines if effects occur as predicted or if operations remain within acceptable limits, and if mitigation measures are as effective as predicted.

Term	Definition
National Networks National Policy Statement 2014 (NN NPS)	A national policy document issued by the government which sets out the government's objectives and the need for the development of nationally significant infrastructure projects on road and rail networks in England. It is also known as National Policy Statement for National Networks. The NN NPS is the basis for the examination of a Development Consent Order application by the Planning Inspectorate and decisions by the Secretary of State. It was adopted as national policy by the UK Parliament in March 2015.
Operational	The functioning of a project on completion of construction.
Regulations	Official rules or acts to control something, generally made in relation to legislation.
Scoping	The process of identifying the issues to be addressed by the EIA process. It is a method of ensuring that an assessment focuses on the important issues and avoids those that are considered to be not significant.

11 Abbreviations List

Term	Definition
24/7	24 hours a day, seven days a week
CMS	Construction Method Statement
COSHH	Control of Substances Hazardous to Health
DCO	Development Consent Order
EMP	Environmental Management Plan(s)
GI	Ground Investigation
GPR	Ground Penetrating Radar
GPS	Global Positioning System
ha	Hectares
km	Kilometre
m^2	Square metres
m^3	Cubic metres
mph	Miles per hour
TSCO	Traffic Safety Control Officer
WCH	Walkers, cyclists and horse-riders

On 20 August 2021, it was announced that Highways England would be changing its name to National Highways. The name change reflects the role of the strategic road network – to connect the nation's regions – and the part it plays in setting Highway's standards across the UK.

We have continued this consultation under the Highways England branding to avoid confusion but will be rebranding this project as of 8 November.

The remit of the organisation has not changed and we will continue to operate and maintain England's motorways and A roads.

A66 Northern Trans-Pennine project

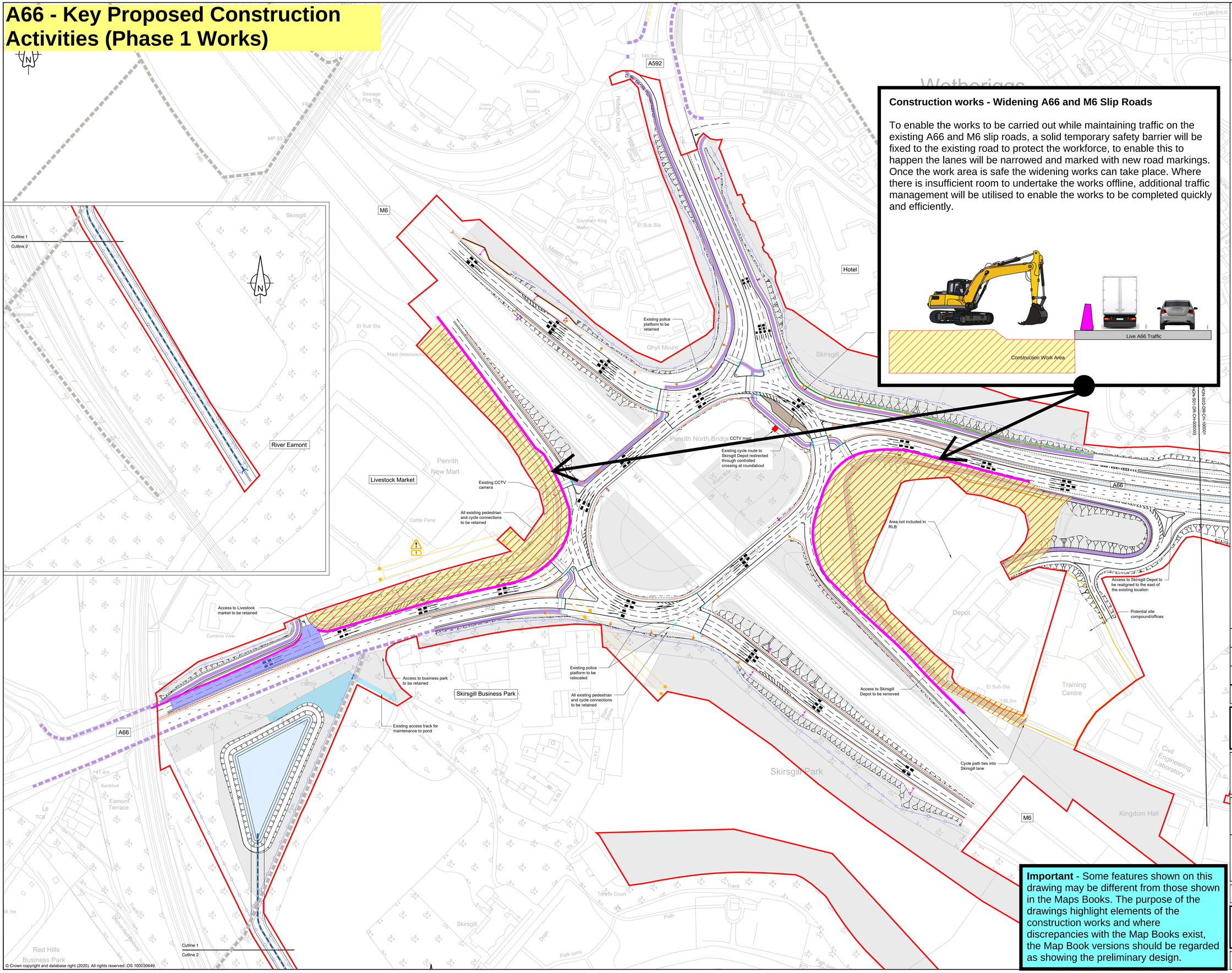
Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

M6 Junction 40

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Widening A66 and M6 Slip Roads

To enable the works to be carried out while maintaining traffic on the existing A66 and M6 slip roads, a solid temporary safety barrier will be fixed to the existing road to protect the workforce, to enable this to happen the lanes will be narrowed and marked with new road markings. Once the work area is safe the widening works can take place. Where there is insufficient room to undertake the works offline, additional traffic management will be utilised to enable the works to be completed quickly and efficiently.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Existing Footway/Footpath
- Existing Cycleway
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Revision details — dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
M6 Junction 40
General Arrangement
Sheet 1 of 1

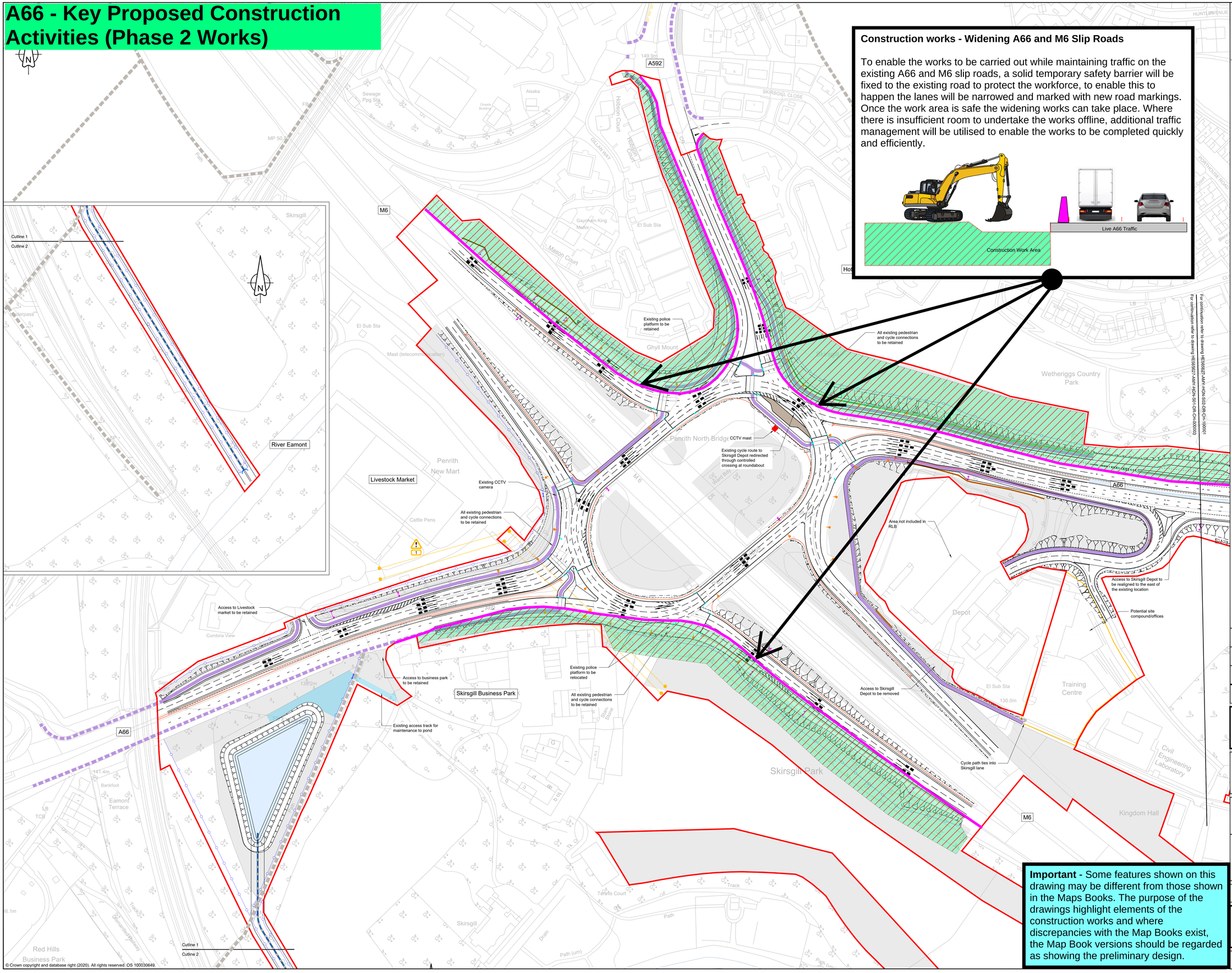
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - HGN - S01 - DR - CH - 000003

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)



© Crown copyright and database right (2020). All rights reserved. OS 100030649.

Construction works - Widening A66 and M6 Slip Roads

To enable the works to be carried out while maintaining traffic on the existing A66 and M6 slip roads, a solid temporary safety barrier will be fixed to the existing road to protect the workforce, to enable this to happen the lanes will be narrowed and marked with new road markings. Once the work area is safe the widening works can take place. Where there is insufficient room to undertake the works offline, additional traffic management will be utilised to enable the works to be completed quickly and efficiently.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Existing Footway/Footpath
- Existing Cycleway
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

For continuation refer to drawing HE565627-AMY-HGN-S02-DR-CH-100001

For continuation refer to drawing HE565627-AMY-HGN-S01-DR-CH-000003

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

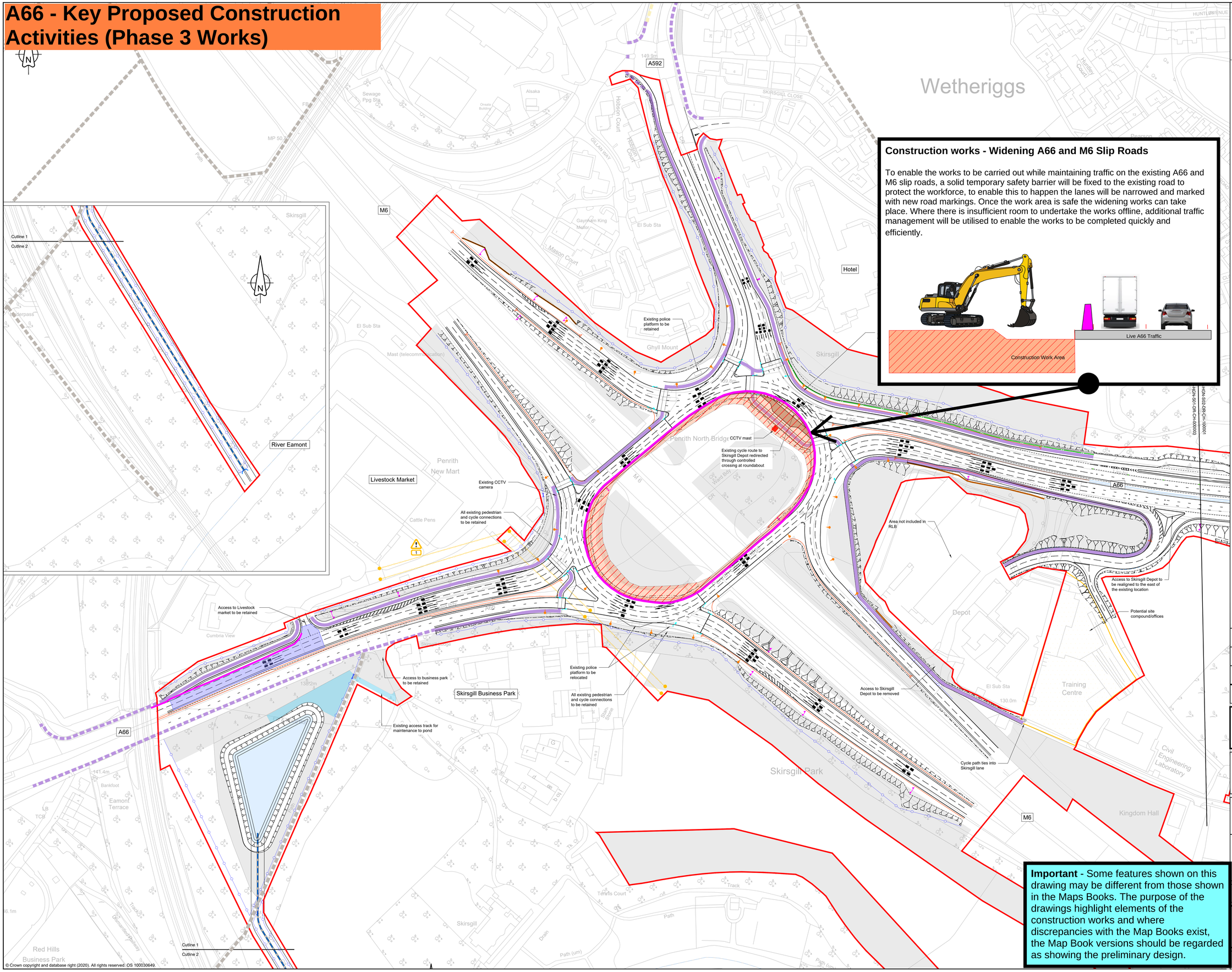
Drawing Title
M6 Junction 40
General Arrangement
Sheet 1 of 1

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S01 -DR-CH- 000003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 3 Works)



Construction works - Widening A66 and M6 Slip Roads

To enable the works to be carried out while maintaining traffic on the existing A66 and M6 slip roads, a solid temporary safety barrier will be fixed to the existing road to protect the workforce, to enable this to happen the lanes will be narrowed and marked with new road markings. Once the work area is safe the widening works can take place. Where there is insufficient room to undertake the works offline, additional traffic management will be utilised to enable the works to be completed quickly and efficiently.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Existing Footway/Footpath
- Existing Cycleway
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Revision details — dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
M6 Junction 40
General Arrangement
Sheet 1 of 1

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - HGN - S01 - DR - CH - 000003

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 Northern Trans-Pennine project

Draft Construction Method and Management Statement

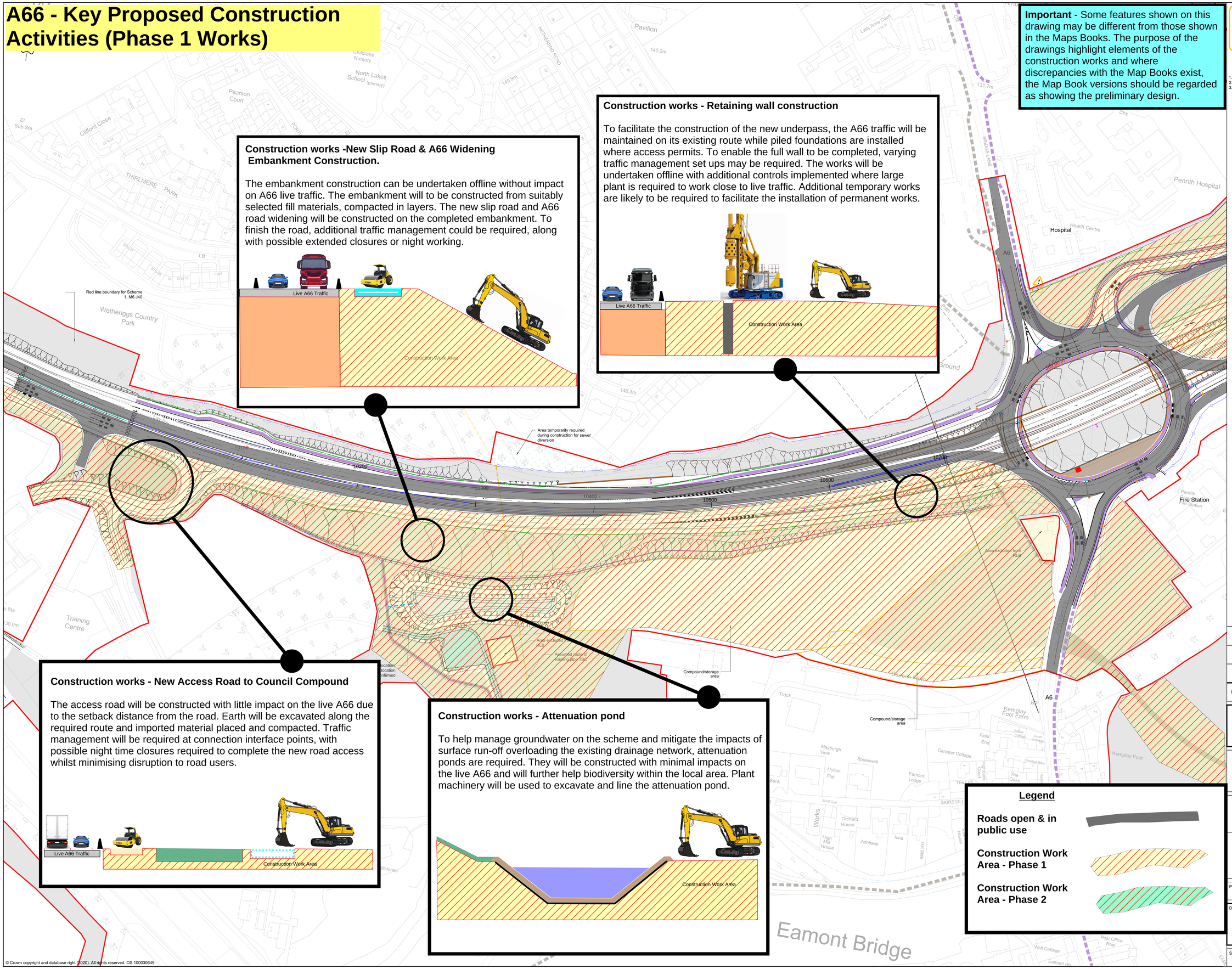
Indicative schematic drawings

Volume 2

M6 Junction 40 to Kemplay Bank

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Construction works -New Slip Road & A66 Widening Embankment Construction.

The embankment construction can be undertaken offline without impact on A66 live traffic. The embankment will to be constructed from suitably selected fill materials, compacted in layers. The new slip road and A66 road widening will be constructed on the completed embankment. To finish the road, additional traffic management could be required, along with possible extended closures or night working.

Construction works - Retaining wall construction

To facilitate the construction of the new underpass, the A66 traffic will be maintained on its existing route while piled foundations are installed where access permits. To enable the full wall to be completed, varying traffic management set ups may be required. The works will be undertaken offline with additional controls implemented where large plant is required to work close to live traffic. Additional temporary works are likely to be required to facilitate the installation of permanent works.

Construction works - New Access Road to Council Compound

The access road will be constructed with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required route and imported material placed and compacted. Traffic management will be required at connection interface points, with possible night time closures required to complete the new road access whilst minimising disruption to road users.

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be constructed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Legend

- Roads open & in public use
- Construction Work Area - Phase 1
- Construction Work Area - Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Haul Road
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	FBLA 22/02/21	FBLA 22/02/21	ASCR 22/02/21	DKID 22/02/21	---
P03.4	---	---	---	---	---

Revision details

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Kemplay Bank
General Arrangement
Sheet 1 of 2

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN -
S02 -DR-CH- 100001
Location | Type | Role | Number

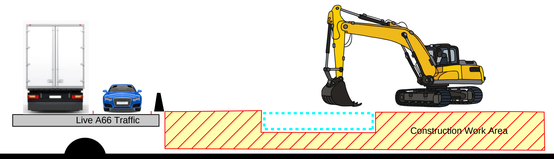
Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P03.4

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)

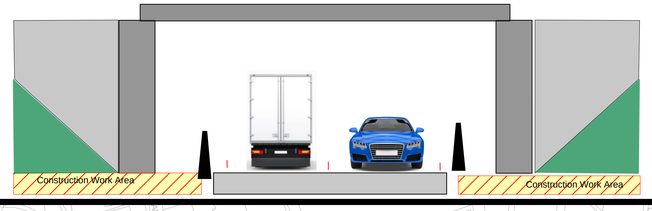
Construction works - Construction of new A686

Where possible the road will be constructed offline, within the construction work area. Where tie in connections are required, traffic management will be utilised to facilitate the works. To construct the new road section earth will be excavated along the required route and imported material placed and compacted.



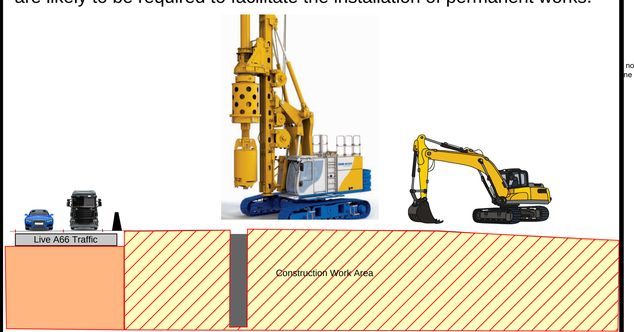
Construction works - Extend Underpass

To enable the new dual carriageway to be constructed it will be necessary to extend the existing underpass. The underpass will be designed to allow full access to the police headquarters at all times, the new abutment walls being set back to allow unimpeded construction. It is likely that additional traffic management will be required to install the underpass roof beams.



Construction works - Retaining wall construction

To facilitate the construction of the new duel underpass, the A66 traffic will be maintained on its existing route while piled foundations are installed where access permits. To enable the full wall to be completed, varying traffic management set ups may be required. The works will be undertaken offline with additional controls implemented where large plant is required to work close to live traffic. Additional temporary works are likely to be required to facilitate the installation of permanent works.



RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Please enter project specific hazards here.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Haul Road
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

P03		FBLA	FBLA	ASCR	DKID	SBAG
		20/05/21	20/05/21	20/05/21	20/05/21	20/05/21
P04		FBLA	FBLA	ASCR	DKID	SBAG
		27/05/21	27/05/21	27/05/21	01/06/21	01/06/21
P05	Design Freeze D+	FBLA	FBLA	ASCR	DKID	SBAG
		11/06/21	11/06/21	11/06/21	11/06/21	11/06/21
Revision	Revision details	Created	Checked	Reviewed	Approved	Authorised
		dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Kemplay Bank
General Arrangement
Sheet 2 of 2

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S02 -DR-CH- 100002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P05

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Book exist, the Map Book versions should be regarded as showing the preliminary design.

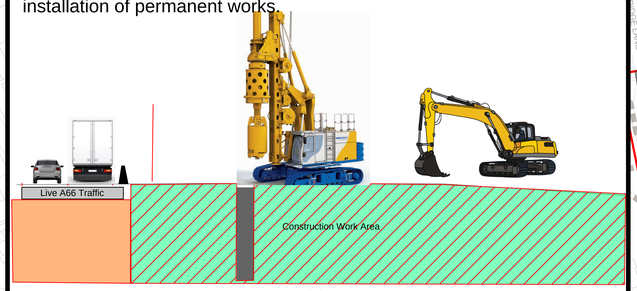
© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

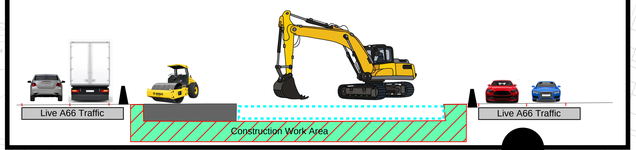
Construction works - Retaining wall construction

To facilitate the construction of the new underpass, the A66 traffic will be diverted with a new circulatory path to enable the continuation of the piled foundations. To provide access to previous areas that had live A66 traffic, the new eastbound slip road will be used to move the traffic away from the new proposed underpass location. To enable the full wall to be completed, varying traffic management set ups may be required. The works will be undertaken away from live with additional controls implemented where large plant is required to work close to live traffic. Additional temporary works are likely to be required to facilitate the installation of permanent works.



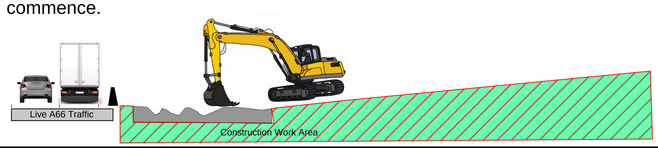
Construction works - New carriageway construction

With traffic diverted to the new slip roads, construction works can take place on the new carriageway. Due to the change in level some areas will require partial reconstruction and other areas full reconstruction. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via 8 wheeled wagons or dump trucks with suitable routes established to minimise disruption to the A66.



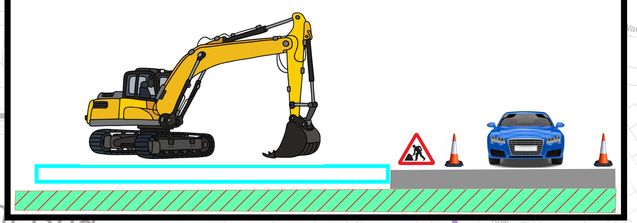
Construction works - New diversion route

To facilitate the construction of the new roundabout, a temporary orbital route is required to be established to enable the remaining deep retaining wall piling works to be undertaken where the old roundabout was located. Material will be removed and a large temporary stone platform established ready for the piling rig to return to finalise the retaining wall works. Excavation can then commence.



Construction works - New road alignment

Works will take place to realign the road to the new layout with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Legend

- **Roads open & in public use**
- **Construction Work Area - Phase 1**
- **Construction Work Area - Phase 2**

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Haul Road
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	--- ---
P02	FBLA 22/02/21	FBLA 22/02/21	ASCR 22/02/21	DKID 22/02/21	--- ---
P03.4	--- ---	--- ---	--- ---	--- ---	--- ---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Kemplay Bank
General Arrangement
Sheet 1 of 2

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

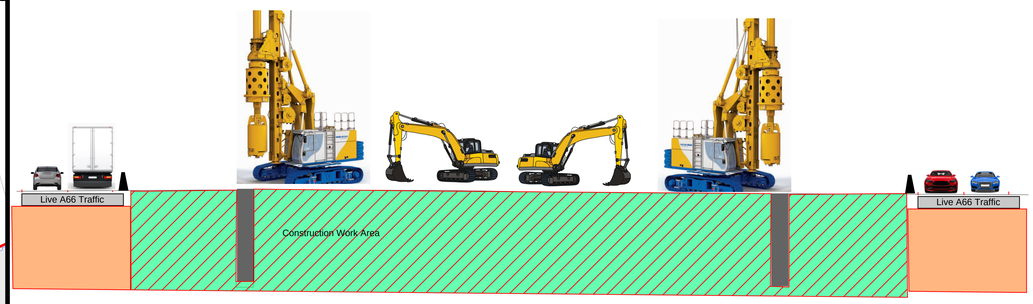
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S02 - DR - CH - 100001
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P03.4

A66 - Key Proposed Construction Activities (Phase 2 Works)

Construction works - New diversion route and continued underpass works

To facilitate the construction of the new underpass, the A66 traffic will be diverted with a new circulatory path to enable the continuation of the piled foundations. To provide access to previous areas that had live A66 traffic, the new eastbound slip road will be used to move the traffic away from the new proposed underpass location. To enable the full wall to be completed, varying traffic management set ups may be required. The works will be undertaken offline with additional controls implemented where large plant is required to work close to live traffic. Additional temporary works are likely to be required to facilitate the installation of permanent works.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

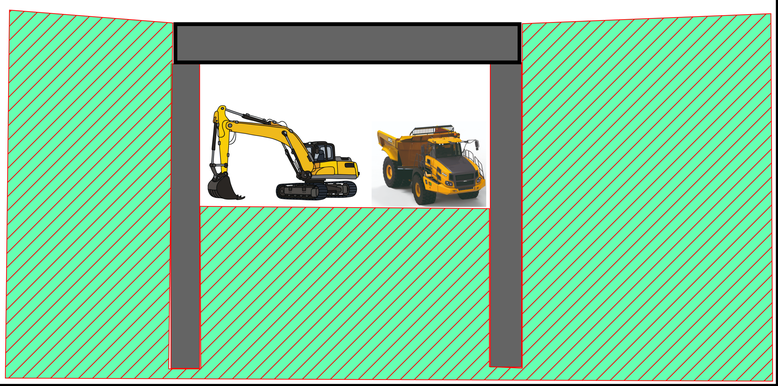
Construction works - New carriageway construction

With traffic diverted to the new slip roads, construction works can take place on the new carriageway. Due to the change in level, some areas will require partial reconstruction and other areas full reconstruction. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66.



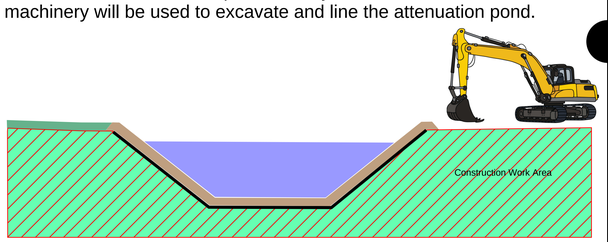
Construction works - Underpass excavation and bridge construction

Following the completion of the permanent piling works to retain the earth on the edges of the roundabout, excavation works will commence using excavators and articulated dump trucks, subject to suitable haul routes being established. Material will be moved to fill locations at Kemplay or onto other schemes. Once progressed the abutments will be formed and the bridge beams placed on top, enabling the deck to be completed. This will them be followed by road construction works to complete the new bridge.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Legend

Roads open & in public use

Construction Work Area - Phase 1

Construction Work Area - Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Please enter project specific hazards here.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Haul Road
- Maintenance Lay-by
- Compound/Storage Area
- Potential Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision					
P03	FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21
P04	FBLA 27/05/21	FBLA 27/05/21	ASCR 27/05/21	DKID 01/06/21	SBAG 01/06/21
P05	Design Freeze D+ FBLA 11/06/21	FBLA 11/06/21	ASCR 11/06/21	DKID 11/06/21	SBAG 11/06/21
Revision details	Created dd/mm/yy	Checked dd/mm/yy	Reviewed dd/mm/yy	Approved dd/mm/yy	Authorised dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Kemplay Bank
General Arrangement
Sheet 2 of 2

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S02 - DR - CH - 100002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P05

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

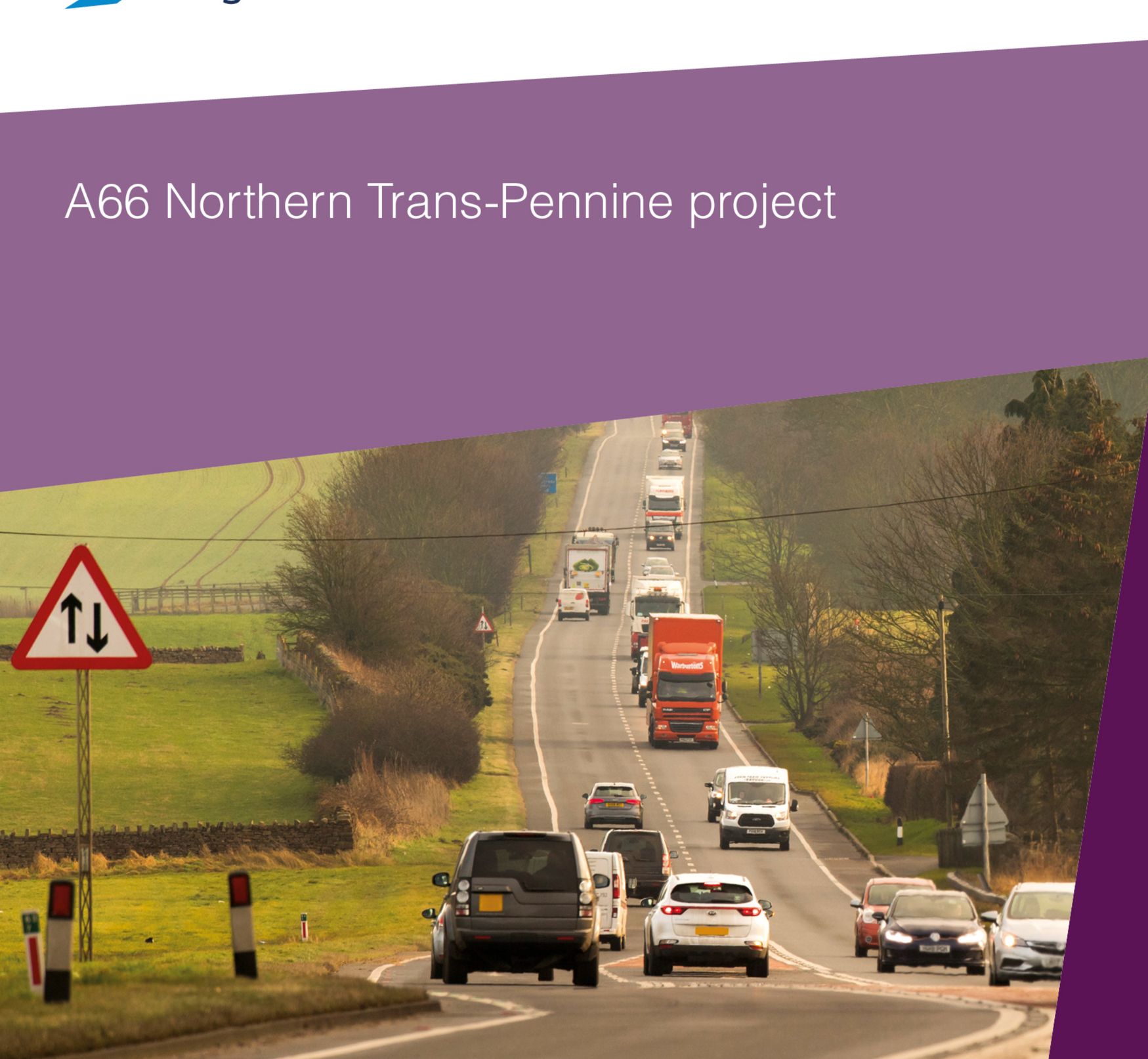
A66 Northern Trans-Pennine project

Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

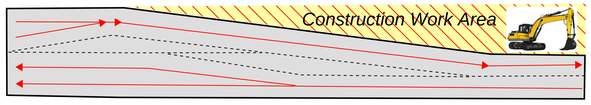
Penrith to Temple Sowerby



A66 - Key Proposed Construction Activities (Phase 1 Works)

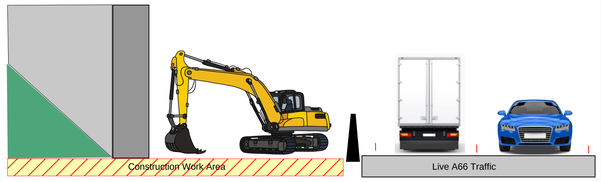
Traffic management for construction works

Traffic will be relocated / diverted using traffic management to enable works to safely take place.



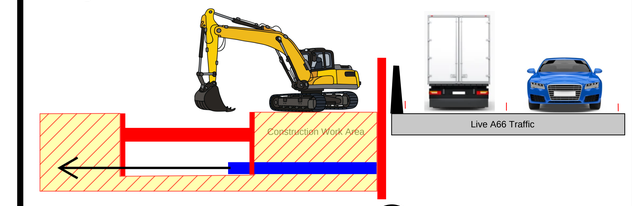
Construction works - Overbridge

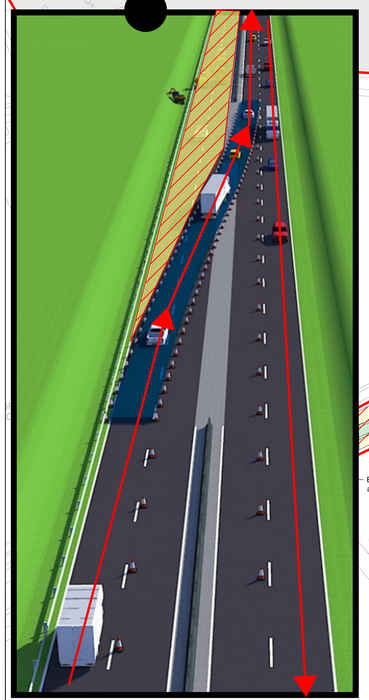
The overbridge has been designed with sufficient working widths to enable the construction of the abutment whilst A66 traffic is maintained. Once complete it will help reduce local access movements on and across the A66. The remaining part of the bridge will be constructed as part of the Westbound works, including the deck.

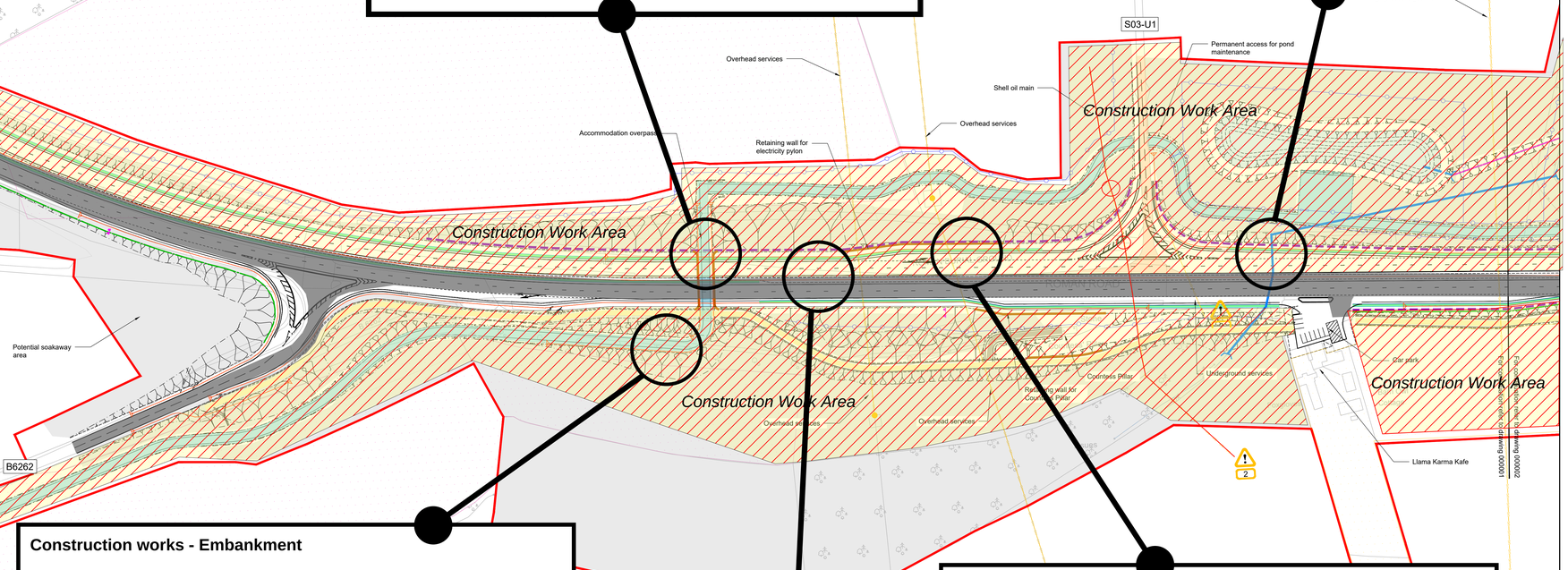


Construction works - Drainage culverts

Drainage works will be undertaken, assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.

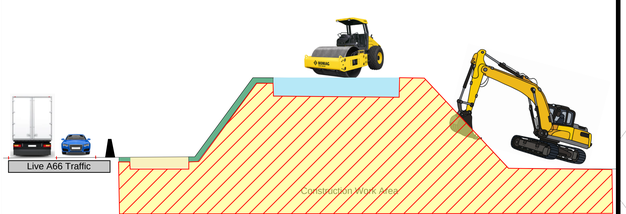






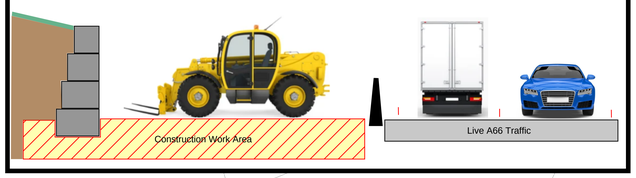
Construction works - Embankment

The embankment construction can be undertaken without impacting on A66 live traffic. The access road will help service local vehicles machinery, helping the new A66 scheme to flow smoothly with reduced turning vehicles. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top.



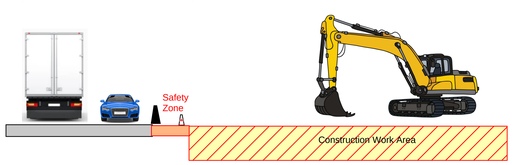
Construction works - Retaining wall

The retaining wall is essential to enable the widening new A66 carriageway to be constructed. The wall has a small footprint and helps minimise the impacts on the surrounding landscape. Upon completion the new A66 carriageway will be constructed away from the live A66.



Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	Freeze D+ FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

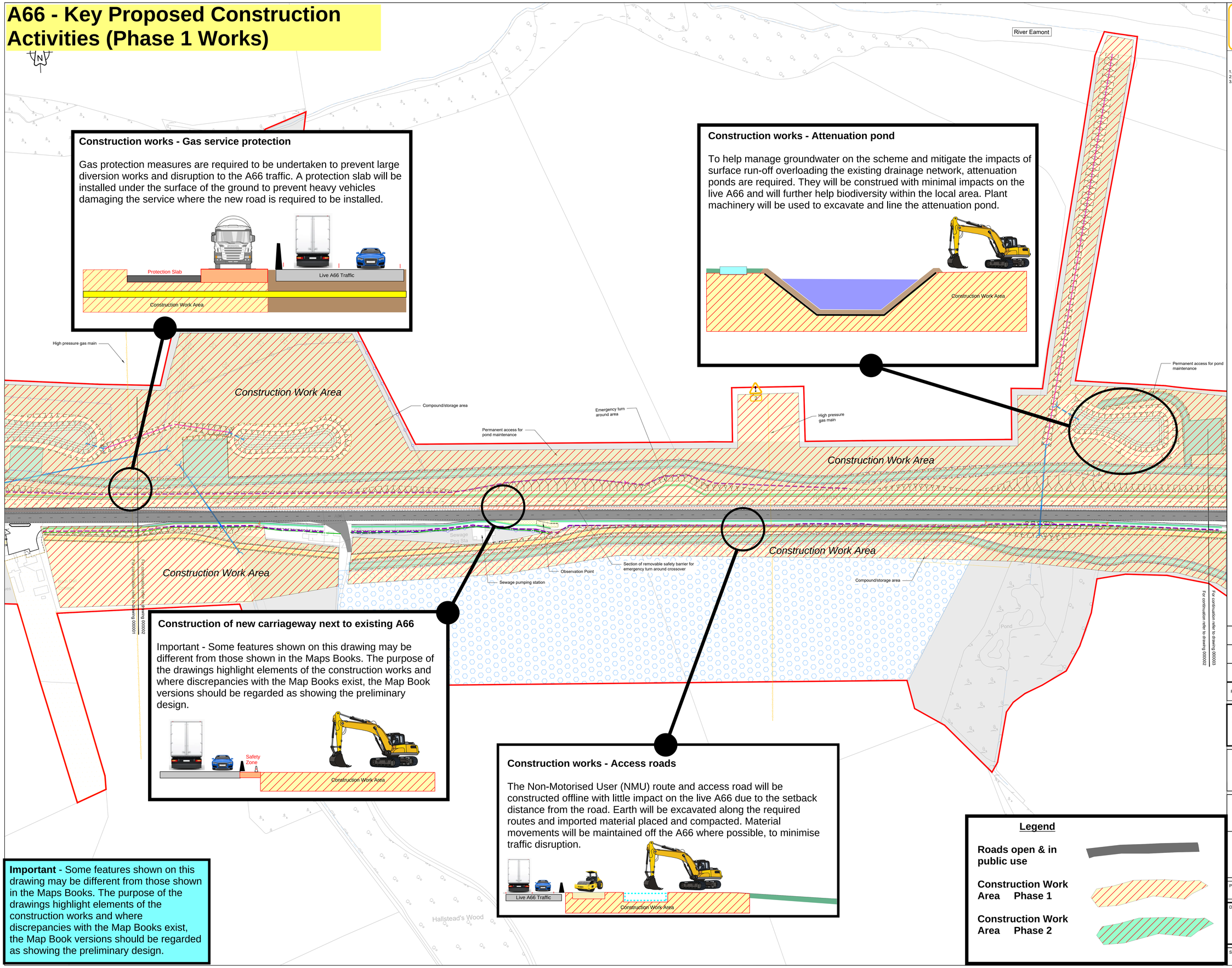
Drawing Title
Center Parcs
General Arrangement
Sheet 1 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200001
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Gas service protection

Gas protection measures are required to be undertaken to prevent large diversion works and disruption to the A66 traffic. A protection slab will be installed under the surface of the ground to prevent heavy vehicles damaging the service where the new road is required to be installed.

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Construction of new carriageway next to existing A66

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - Access roads

The Non-Motorised User (NMU) route and access road will be constructed offline with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted. Material movements will be maintained off the A66 where possible, to minimise traffic disruption.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21

Revision details

Created	Checked	Reviewed	Approved	Authorised
dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

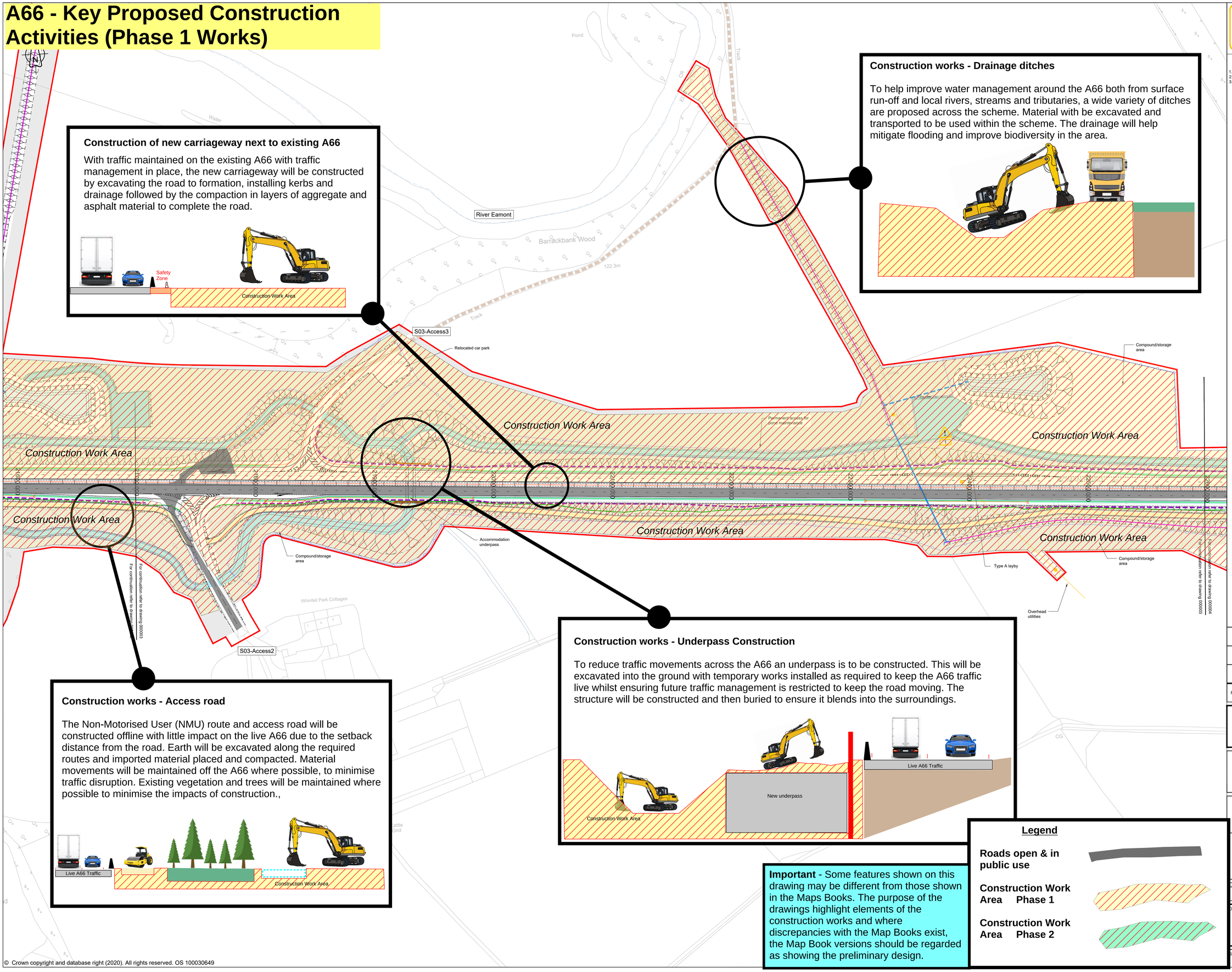
Drawing Title
Center Parcs
General Arrangement
Sheet 2 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.

Construction works - Drainage ditches

To help improve water management around the A66 both from surface run-off and local rivers, streams and tributaries, a wide variety of ditches are proposed across the scheme. Material with be excavated and transported to be used within the scheme. The drainage will help mitigate flooding and improve biodiversity in the area.

Construction works - Access road

The Non-Motorised User (NMU) route and access road will be constructed offline with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted. Material movements will be maintained off the A66 where possible, to minimise traffic disruption. Existing vegetation and trees will be maintained where possible to minimise the impacts of construction.,

Construction works - Underpass Construction

To reduce traffic movements across the A66 an underpass is to be constructed. This will be excavated into the ground with temporary works installed as required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed and then buried to ensure it blends into the surroundings.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

© Crown copyright and database right (2020). All rights reserved. OS 100030649

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 3 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

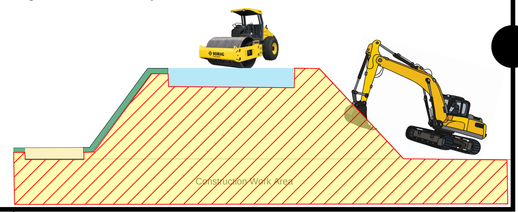
Project	Originator	Volume		
HE565627	AMY	HGN	-	
S03	-DR-	CH-	200003	
Location	Type	Role	Number	

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 1 Works)

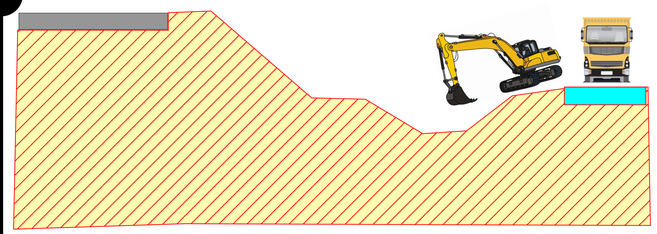
Construction works - A66 and access road embankment

The embankment construction will be undertaken without impact on A66 live traffic (traffic will be using the newly constructed diversion). The road will help service Centre Parcs, helping the new A66 scheme to flow smoothly with direct access points off the A66.
The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top.



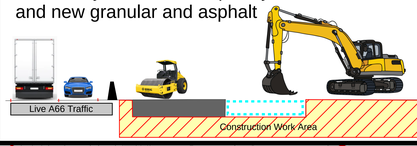
Construction works - Drainage ditches

To help improve water management around the A66 both from surface run-off and local rivers, streams and tributaries, a wide variety of ditches are proposed across the scheme. Material with be excavated and transported to be used within the scheme. The drainage will help mitigate flooding and improve biodiversity in the area.



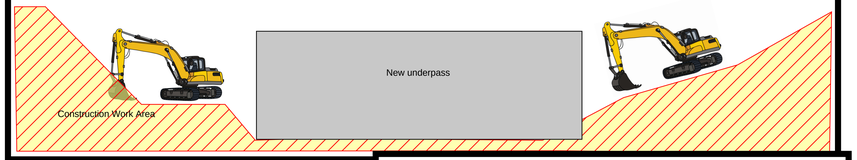
Construction works - New diversion route

To facilitate the construction of the new underpass for the Centre Parcs junctions, it is expected that a diversion route will be established to move traffic away from the work area. This will allow the works to be constructed away from live traffic, reducing programme times and aiding with safety. The new temporary road will be excavated out of the ground and new granular and asphalt



Construction works - Underpass Construction

The new access junction to Center Parcs requires an underpass is to be constructed. This will be excavated into the ground with temporary works. The structure will be constructed below ground and then the new A66 embankment constructed over the top.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Overhead Services.
Underground Services.

NOTES
All levels are in metres above Ordnance Datum.
All dimensions are in metres unless otherwise stated.
This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

---	---					
	---	---	---	---	---	---
	---	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---	
	17/02/21	17/02/21	17/02/21	17/02/21	---	
P02	Freeze D+					
	FBLA	FBLA	ASCR	DKID	SBAG	
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 4 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 - DR - CH - 200004
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

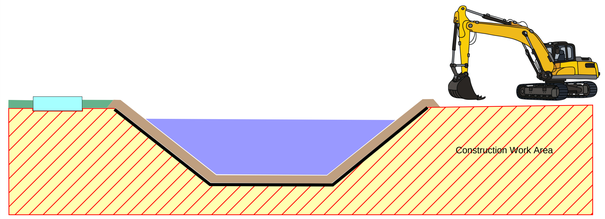
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

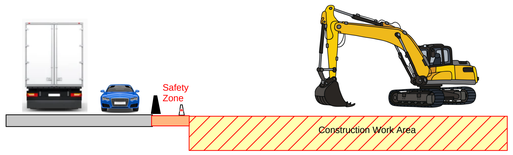
Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



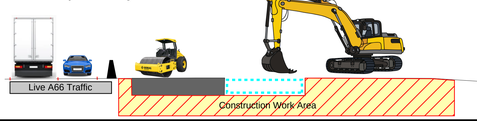
Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



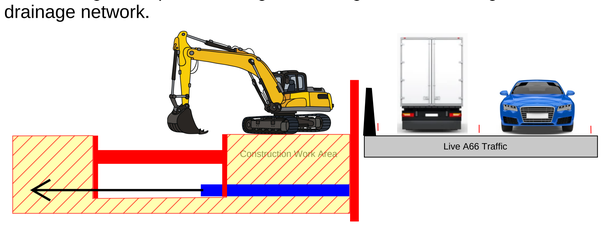
Construction works - New diversion route

To facilitate the construction of the new A66 in parts, it is expected that a diversion route will be established to move traffic away from the key work area. This will allow the works to be constructed away from live traffic, reducing programme times and aiding with safety. The new temporary road will be excavated out of the ground and new granular and asphalt layer installed.



Construction works - Drainage culverts

Drainage works will be undertaken, assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Overhead power cable
Lane End
School House
Hall
S03-Access4
Compound/storage area
Swine Gill
Permanent access for pond maintenance
Compound/storage area
For continuation refer to drawing 000004
For continuation refer to drawing 000005
For continuation refer to drawing 000006
For continuation refer to major viewport
For continuation refer to minor viewport
Issues
Track
Works

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision					
---	---				
	---	---	---	---	---
	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 5 of 6

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 - DR - CH - 200005
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

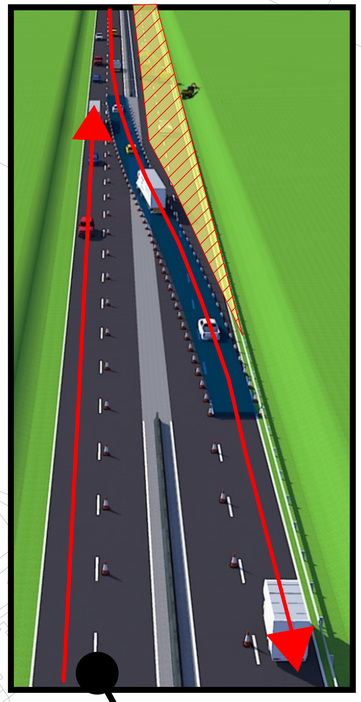
A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

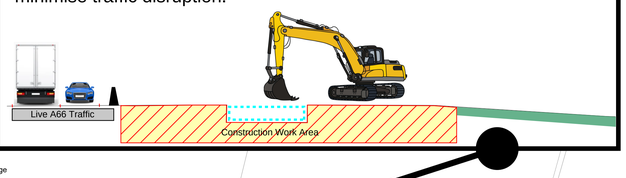
Construction Work Area Phase 1

Construction Work Area Phase 2



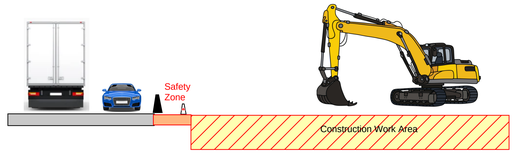
Construction works - Access roads

The access road will be constructed offline with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted. Material movements will be maintained off the A66 where possible, to minimise traffic disruption.



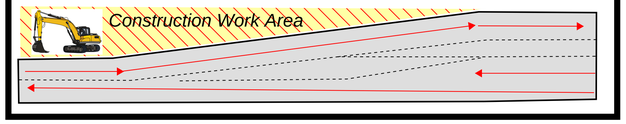
Construction of new carriageway next to existing A66

With traffic maintained on the existing A66 with traffic management in place, the new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



Traffic management for construction works

Traffic will be relocated / diverted using traffic management to enable works to safely take place.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Permanent access for pond maintenance
Compound/storage area
Type A layby
Existing cycleway to be removed and diverted via local road network
Permanent access for pond maintenance
For continuation refer to drawing 000006
For continuation refer to drawing 000005
For continuation refer to minor viewport
For continuation refer to major viewport
Woodside Bungalow
Woodside Farm Cottage
Track
Low Woodside
Lower
Swine Gill
Swine Gill Cottages
Dodds Barn
Whinfell House Farm Cottages
Whinfell House
Carpenters Barn
Cattle Grid
ROMAN ROAD
122.1m
123.3m
111.8m
108.6m
110.4m
105.2m
LB
CG

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

---	---					
	---	---	---	---	---	---
	---	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---	
	17/02/21	17/02/21	17/02/21	17/02/21	---	
P02	Freeze D+					
	FBLA	FBLA	ASCR	DKID	SBAG	
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

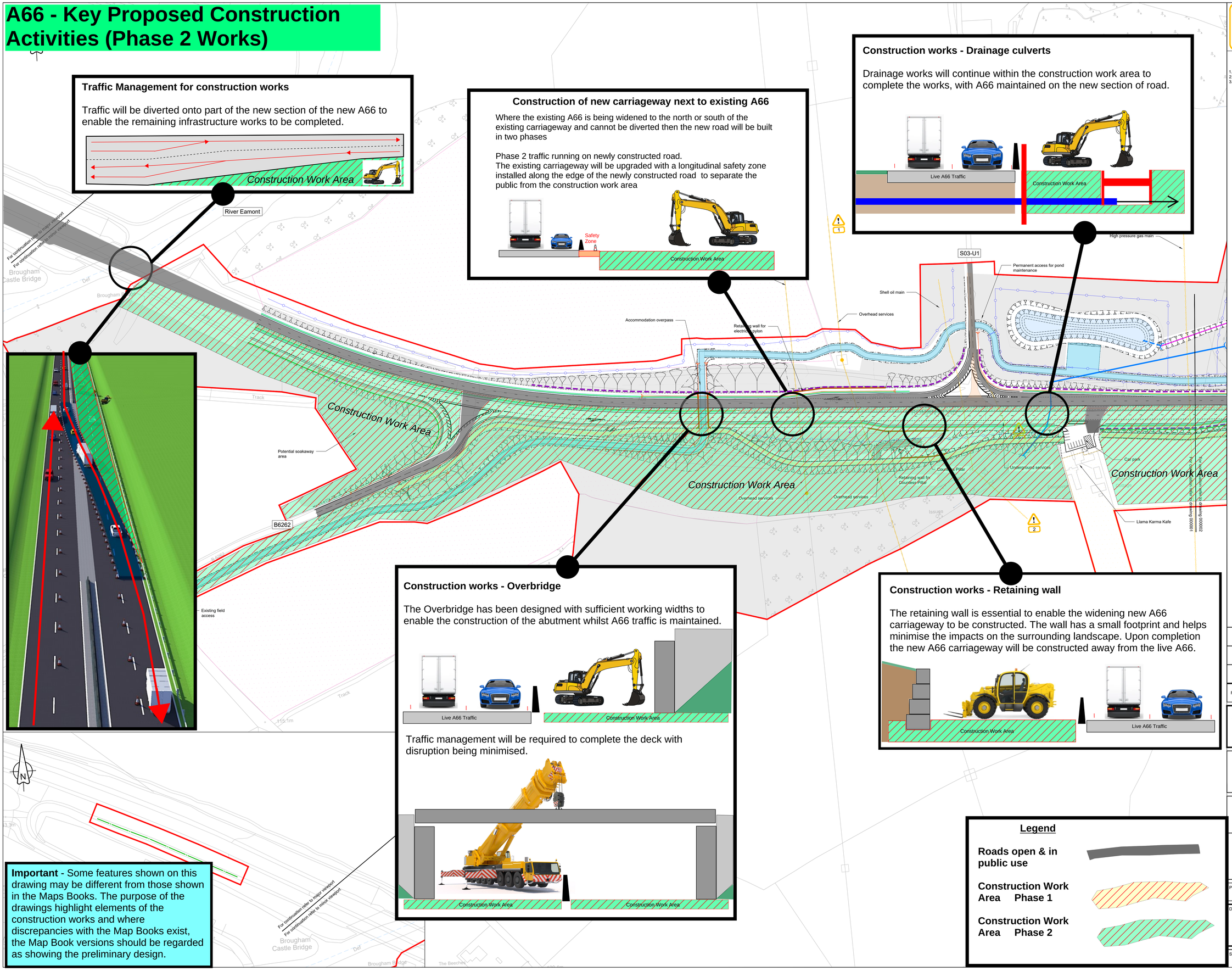
Drawing Title
Center Parcs
General Arrangement
Sheet 6 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 - DR - CH - 200006
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 2 Works)



Traffic Management for construction works

Traffic will be diverted onto part of the new section of the new A66 to enable the remaining infrastructure works to be completed.

Construction of new carriageway next to existing A66

Where the existing A66 is being widened to the north or south of the existing carriageway and cannot be diverted then the new road will be built in two phases

Phase 2 traffic running on newly constructed road.
The existing carriageway will be upgraded with a longitudinal safety zone installed along the edge of the newly constructed road to separate the public from the construction work area

Construction works - Drainage culverts

Drainage works will continue within the construction work area to complete the works, with A66 maintained on the new section of road.

Construction works - Overbridge

The Overbridge has been designed with sufficient working widths to enable the construction of the abutment whilst A66 traffic is maintained.

Traffic management will be required to complete the deck with disruption being minimised.

Construction works - Retaining wall

The retaining wall is essential to enable the widening new A66 carriageway to be constructed. The wall has a small footprint and helps minimise the impacts on the surrounding landscape. Upon completion the new A66 carriageway will be constructed away from the live A66.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	Freeze D+ FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Revision details

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 1 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200001
Location | Type | Role | Number

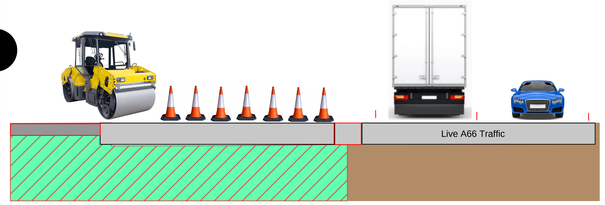
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - Local access road

Access for properties will be maintained with the exception of planned closures to isolated sections of the road to undertaken online road improvements.



Light Water

High pressure gas main

Compound/storage area

Emergency turn around area

Permanent access for pond maintenance

High pressure gas main

Permanent access for pond maintenance

Construction Work Area

Construction Work Area

Sewage pumping station

Observation Point

Section of removable safety barrier for emergency turn around crossover

Compound/storage area

Pond

Hallstead's Wood

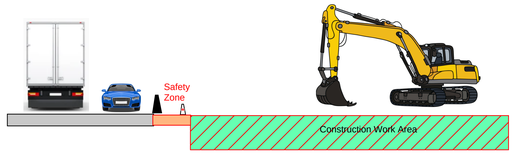
For continuation refer to drawing 000002

For continuation refer to drawing 000001

For continuation refer to drawing 000003

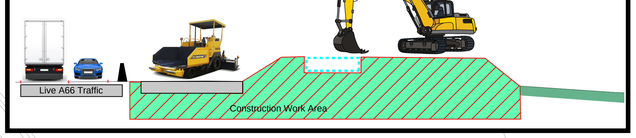
Construction of new carriageway

With traffic diverted onto part of the new A66 dual carriageway, the remain new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



Construction works - Observation point

With traffic diverted onto the new carriageway, upgrading works can take place on the old A66 ready for the new westbound dual carriageway. Works can also be undertaken on the observation platform, with material being excavated out read for road construction materials to be installed.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	Freeze D+ FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 2 of 6

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

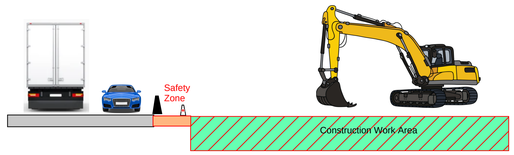
© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

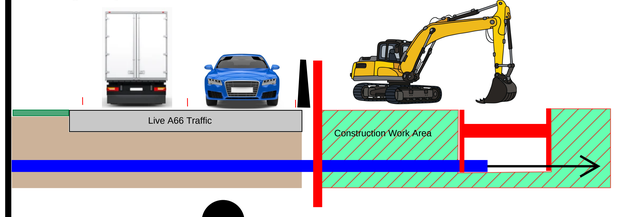
Construction of new carriageway

With traffic diverted onto part of the new A66 dual carriageway, the remain new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.



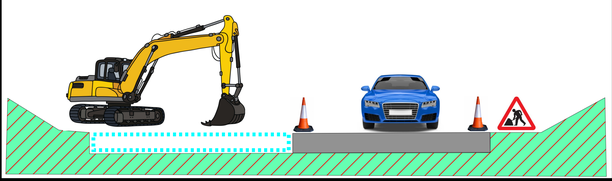
Construction works - Drainage culverts

Drainage works will continue within the construction work area to complete the works, with A66 maintained on the new section of A66 dual carriageway.



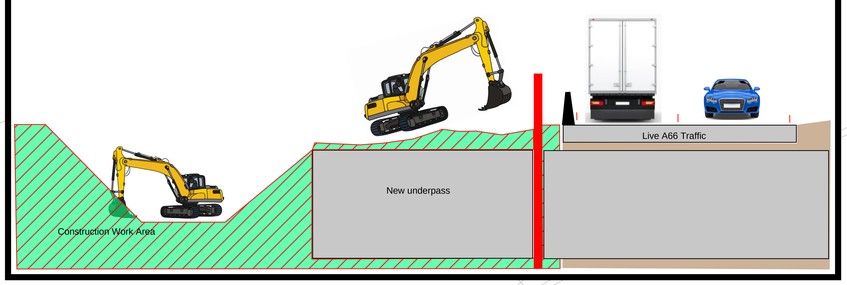
Construction works - Local Access

Access for properties will be maintained with the exception of planned closures to isolated sections of the road to undertaken online road improvements. It may be necessary to impose one way traffic restrictions or even a number of night closures on local access road connection points to complete the road in a timely manner.



Construction works - Underpass Construction

To reduce farm traffic movements across the A66, an underpass is to be completed. This will be excavated into the ground with temporary works required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed below ground and then buried to ensure it blends into the surroundings.



Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision					
---	---				
	---	---	---	---	---
	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKiD	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKiD	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21
Revision details					
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 3 of 6

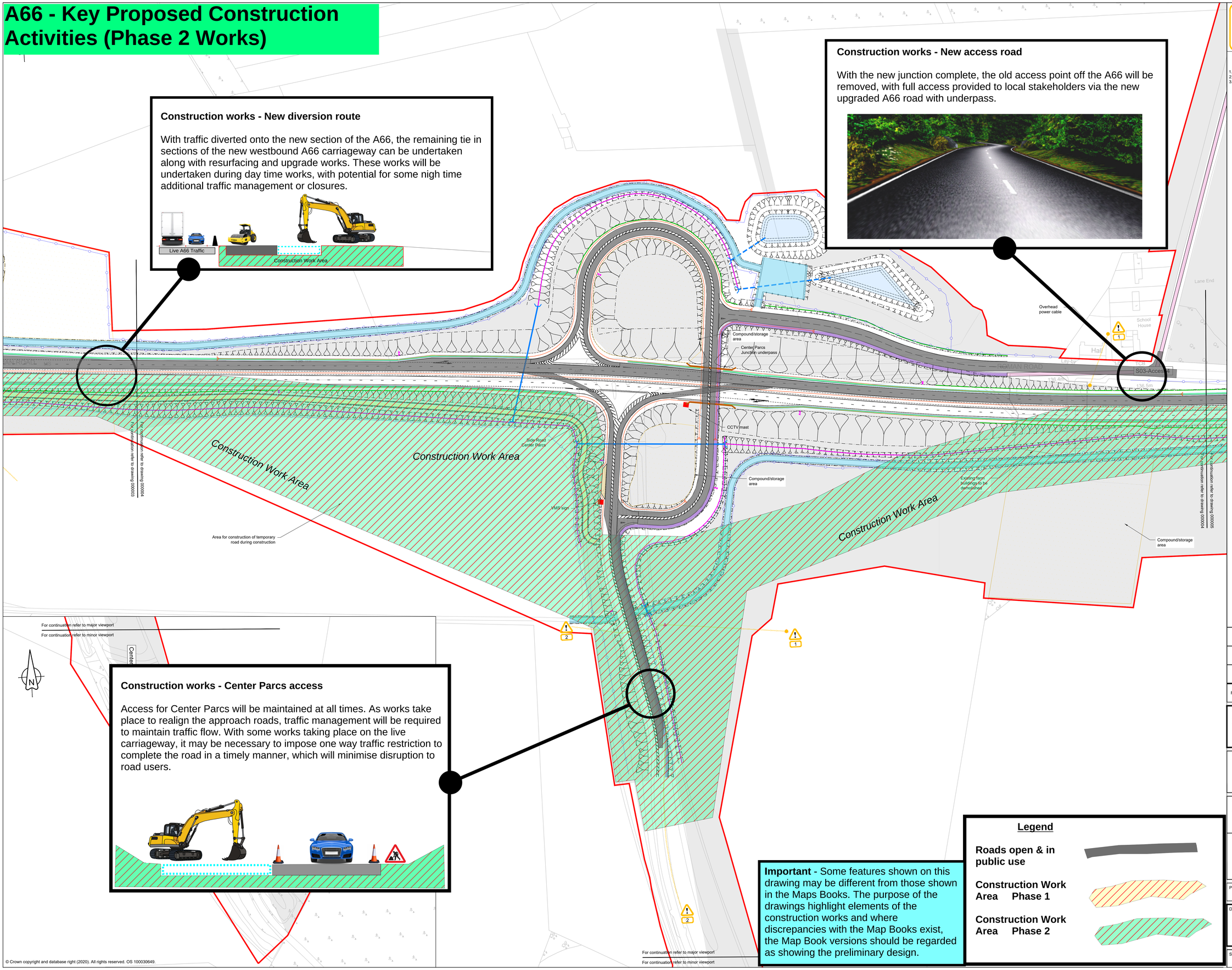
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 - DR - CH - 200003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

© Crown copyright and database right (2020). All rights reserved. OS 100030649

A66 - Key Proposed Construction Activities (Phase 2 Works)



Construction works - New diversion route

With traffic diverted onto the new section of the A66, the remaining tie in sections of the new westbound A66 carriageway can be undertaken along with resurfacing and upgrade works. These works will be undertaken during day time works, with potential for some nigh time additional traffic management or closures.

Construction works - New access road

With the new junction complete, the old access point off the A66 will be removed, with full access provided to local stakeholders via the new upgraded A66 road with underpass.

Construction works - Center Parcs access

Access for Center Parcs will be maintained at all times. As works take place to realign the approach roads, traffic management will be required to maintain traffic flow. With some works taking place on the live carriageway, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which will minimise disruption to road users.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
	---	---	---	---	---
	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 4 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

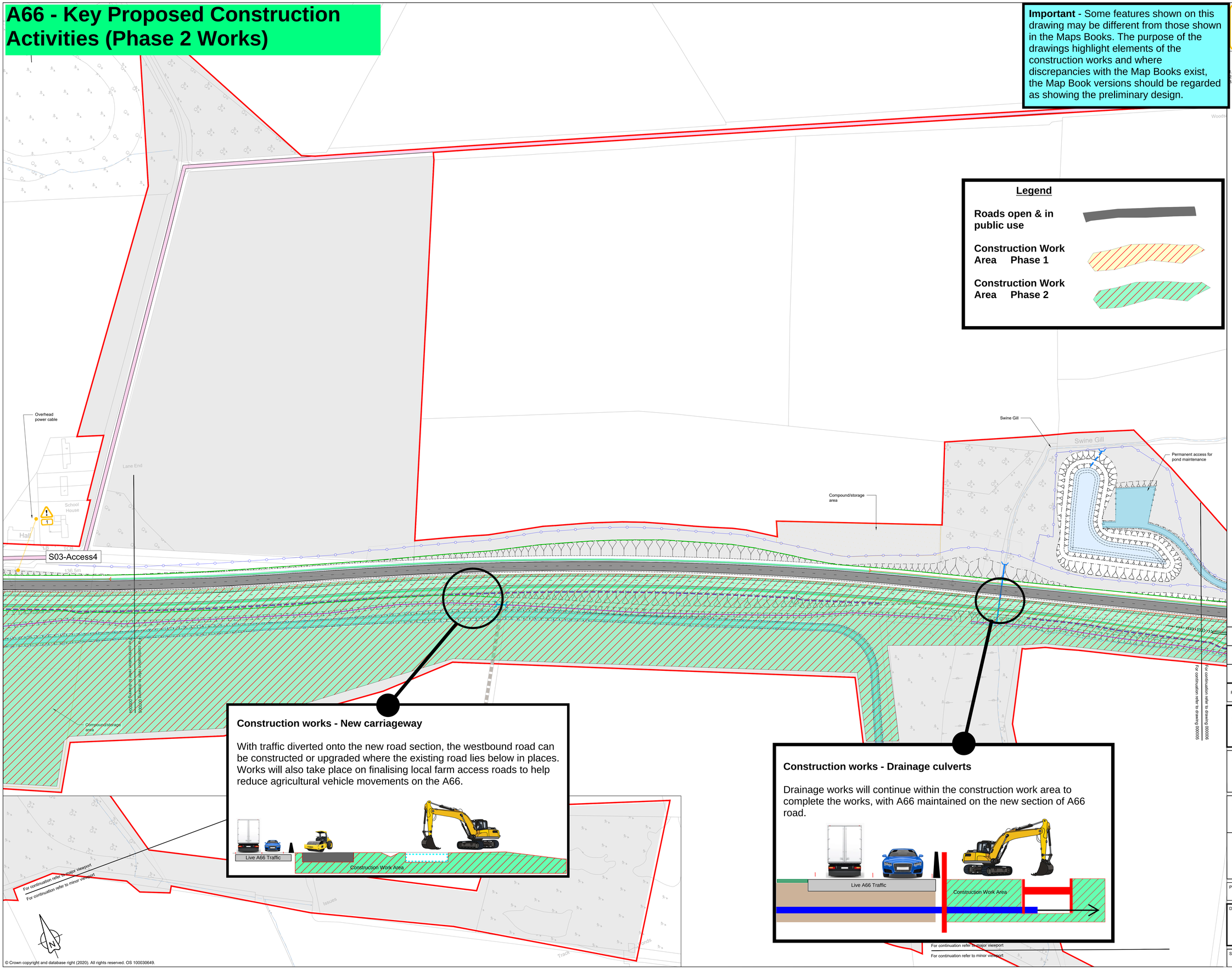
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S03 -DR-CH- 200004
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New carriageway

With traffic diverted onto the new road section, the westbound road can be constructed or upgraded where the existing road lies below in places. Works will also take place on finalising local farm access roads to help reduce agricultural vehicle movements on the A66.

Construction works - Drainage culverts

Drainage works will continue within the construction work area to complete the works, with A66 maintained on the new section of A66 road.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
	---	---	---	---	---
P01	FBLA	FBLA	ASCR	DKID	---
	17/02/21	17/02/21	17/02/21	17/02/21	---
P02	Freeze D+				
	FBLA	FBLA	ASCR	DKID	SBAG
	20/05/21	20/05/21	20/05/21	20/05/21	20/05/21

Revision details

Created	Checked	Reviewed	Approved	Authorised
dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 5 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S03	DR	CH	200005

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

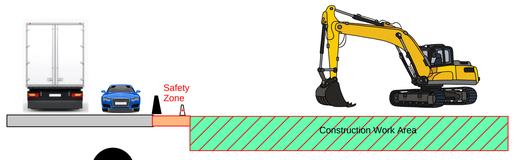
Roads open & in public use

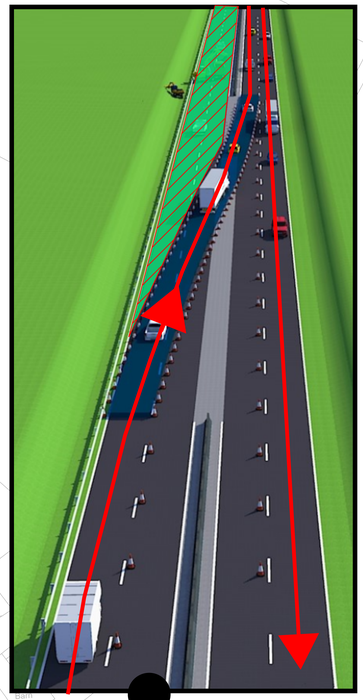
Construction Work Area Phase 1

Construction Work Area Phase 2

Construction of new carriageway

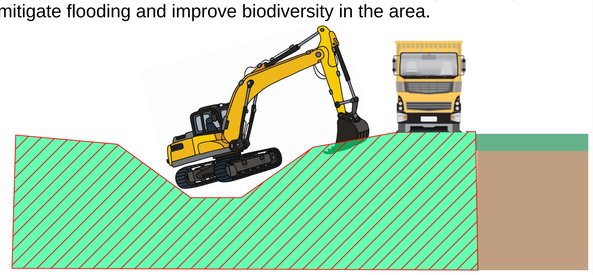
With traffic diverted onto part of the new A66 dual carriageway, the remain new carriageway will be constructed by excavating the road to formation, installing kerbs and drainage followed by the compaction in layers of aggregate and asphalt material to complete the road.





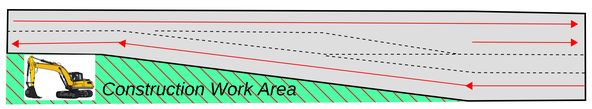
Construction works - Drainage ditches

To help improve water management around the A66 both from surface run-off and local rivers, streams and tributaries, a wide variety of ditches are proposed across the scheme. Material with be excavated and transported to be used within the scheme. The drainage will help mitigate flooding and improve biodiversity in the area.



Traffic management for construction works

Traffic will be diverted onto part of the new section of the new A66 to enable the remaining infrastructure works to be completed.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Flood Compensation Area
- Proposed Environmental Mitigation

THIS DRAWING IS TO BE READ IN CONJUNCTION WITH THE ASSOCIATED SCHEME TECHNICAL NOTE, HE565627-AMY-HGN-S02-TN-CH-000003

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	FBLA 17/02/21	FBLA 17/02/21	ASCR 17/02/21	DKID 17/02/21	---
P02	Freeze D+ FBLA 20/05/21	FBLA 20/05/21	ASCR 20/05/21	DKID 20/05/21	SBAG 20/05/21

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Center Parcs
General Arrangement
Sheet 6 of 6

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - HGN - S03 - DR - CH - 200006

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P02

A66 Northern Trans-Pennine project

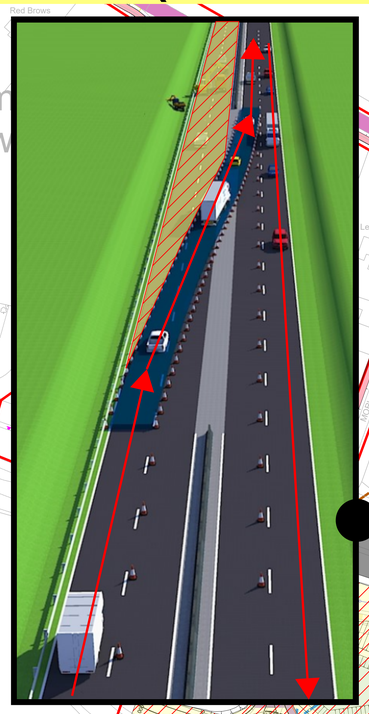
Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

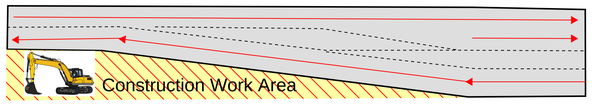
Temple Sowerby to Appleby - Crackenthorpe

A66 - Key Proposed Construction Activities (Phase 1 Works)



Traffic management for construction works

Traffic will be controlled with traffic management to enable the construction works to be undertaken safely.



Carriageway to be traffic calmed & signed to make it suitable for a quiet lane

Carriageway to be traffic calmed & signed to make it suitable for a quiet lane

Existing Underpass For grade separated junction.

Legend

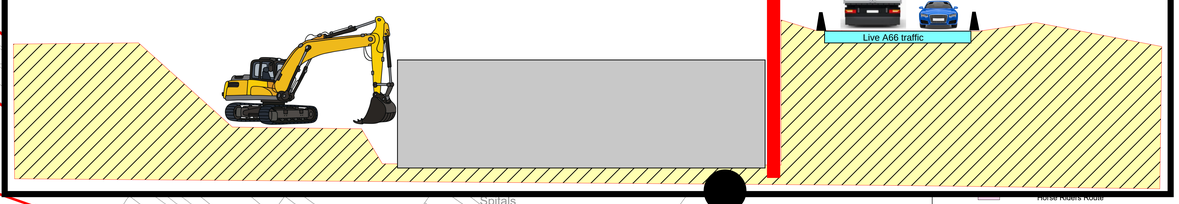
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - Underpass construction

To construct the underpass in an efficient manner, it is likely that the existing A66 traffic will be diverted onto a new temporary section of road to enable a large proportion of the underpass to be constructed offline. Material will be excavated and sent to stockpile locations, ready for reuse where suitable. Temporary works supports may be required during the works to ensure the ground is suitably supported. Once the underpass is installed, the ground will be back filled and the new A66 road constructed over the top.



KEY

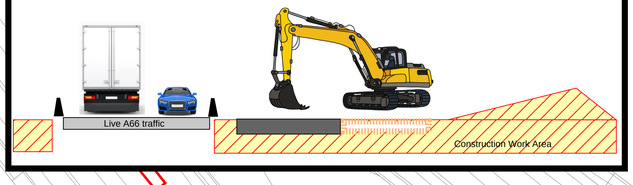
- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings

AONB
Retaining Wall
Major Overhead Services
Major Underground Services

Compact Roundabout
Suitable for occasional HGV use this roundabout links the extended Old A66 to the existing grade separated junction at this location, allowing all mover
Compact roundab
use by confident c
have any pedestri

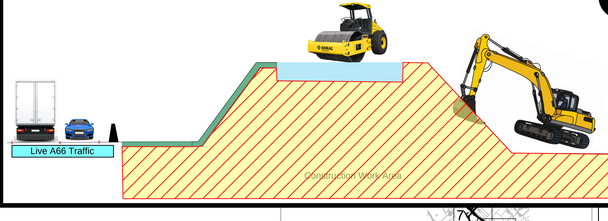
Construction works - New carriageway

With traffic maintained on the existing carriageway, works can take place on modifying and widening the new A66 carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed followed by the new road surface made from granular material and asphalt, compacted in layers.



Construction works - Embankment

The embankment construction can be undertaken offline without impact on A66 live traffic. The access road will help mitigate movements across the A66 once complete. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top.



Old A66 Extended
So residents of Kirkby Thore, Crackenthorpe and other surrounding villages do not need to use the realigned A66 to access Temple Sowerby the old A66 will be extended to the existing grade separated junction. This will also allow the existing bus service to continue along the same route that it currently does. This road may be used to access the adjacent farm fields. The 40mph speed limit will be continued to the roundabout.

Bank in front of slurry bed needs to be re-graded to tie into new highway levels

For continuation refer to sheet 1
For continuation refer to sheet 2

INSET A
INSET B
INSET D

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground services
Overhead services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby Blue Option General Arrangement Sheet 1 of 11 (Temple Sowerby Link)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000201
Location | Type | Role | Number

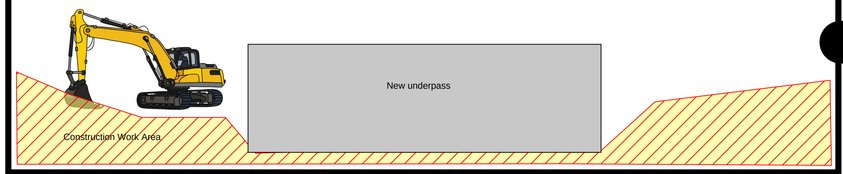
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

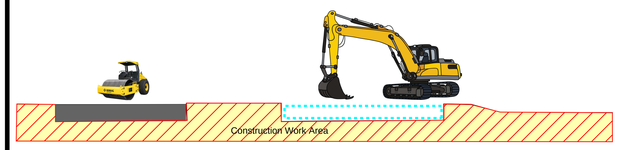
Construction works - Underpass construction

The underpass will help reduce movements across the new A66 and help improved safety for WCHs. This will be excavated into the ground with material transported to storage locations ready for re-use dependent on suitability. The structure will be constructed below ground and then buried to enable the new A66 to be constructed over the top.



Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material, following the installation of kerbs and drainage.



Old A66 Extended
So residents of Kirkby Thore, Crackenthorpe and other surrounding villages do not need to use the realigned A66 to access Temple Sowerby the old A66 will be extended to the existing grade separated junction. This will also allow the existing bus service to continue along the same route that it currently does. This road may be used to access the adjacent farm fields. The 40mph speed limit will be continued to the roundabout.

POTENTIAL COMPOUND

AREA FOR TOPSOIL STORAGE (3398 m²)

3m offset (from ditch)

3m offset

Slurry Bed

For continuation refer to sheet 1

For continuation refer to sheet 2

For continuation refer to sheet 3

For continuation refer to sheet 2

Bank in front of slurry bed needs to be re-graded to tie into new highway levels

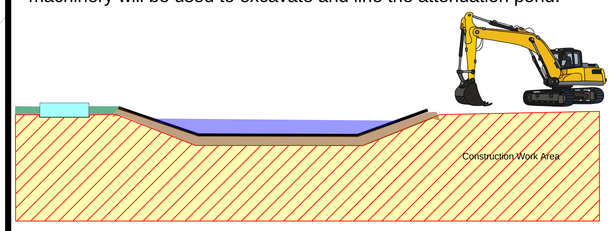
Feasibility to retain right turn lanes, ghost islands and pedestrian crossing to be investigated

Bridleway Diverted
The bridleway is diverted to Old Priest Lane, Cross Street, and along 'New' Priest Lane on the other side of the realigned A66.

Greythorne
Speculative Access
Speculative land ownership
Fell View
Lowmoor Row
New Bungalow
Stagecoach Cottage
Forge Cottage
Ostlers Cottage
Stables Cottage
Hayloft Cottage
Jockey Cottage
Pinfold Cottage

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

RESIDUAL DESIGN HAZARDS

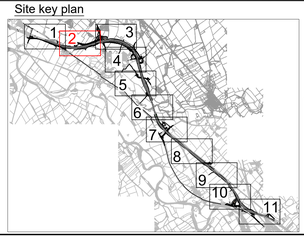
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision					
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 2 of 11
(Low Moor Caravan Park)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000202
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

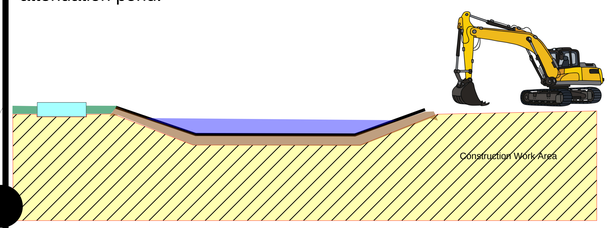
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - Attenuation pond

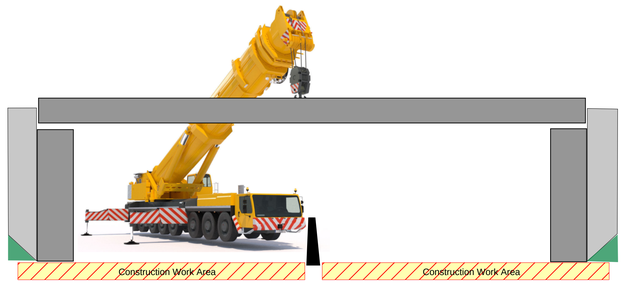
To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Construction works - Overbridge construction

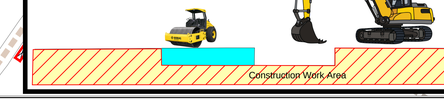
Works will only commence on this new infrastructure, once a diversion route is established. Where the new bridge is to be constructed on the line of the existing road a temporary road will be constructed adjacent to it to allow local access. This will enable both abutments and the deck to be constructed in one phase of works, minimising disruption to local traffic. With the diversion in place it is likely that the bridge beams can be installed with limited additional traffic management.





Construction works - New diversion route

To facilitate the construction of the new overbridge, a diversion route will be established to move traffic away from the work area. This will allow the new overbridge to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed.



3m offset (from drainage ditch)

3m offset (from ditch)

3m offset

3m offset (underpass)

Proposed Bridge For Cross Street.

Works within school boundary to be avoided by locally steepening the earthworks fill slope from 1:3 to 1:2.4

Proposed Metcalf Bridge

Bridleway and Farm Track Diverted
The bridleway and farm track is diverted along Main Street, to the new bridleway and farm track running along the British Gypsum access road.

AREA FOR TOPSOIL STORAGE (26232 m²)

Existing accesses/ gates to be maintained

Access to farm track via British Gypsum access road (subject to negotiation)

BRIDLEWAY 336/018

FOOTWAY 336/017

FOOTWAY 336/016

For continuation refer to sheet 3

For continuation refer to sheet 2

For continuation refer to sheet 3

For continuation refer to sheet 4

Pond

Ponds

Slurry Bed

Old Speculative sand quarry

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOA
- Abandoned Byway Open to All Traffic (B
- Existing Byway Open to All Traffic (BOAT
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

© Crown copyright and database right (2020). All rights reserved. OS 100030649

RESIDUAL DESIGN HAZARDS

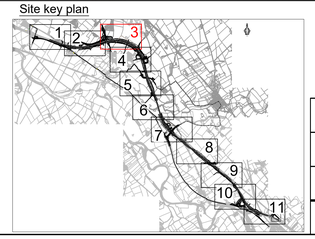
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	--- ---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 3 of 11
(Kirkby Thore School)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 -DR-CH- 000203
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

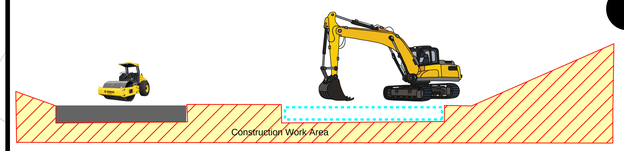
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

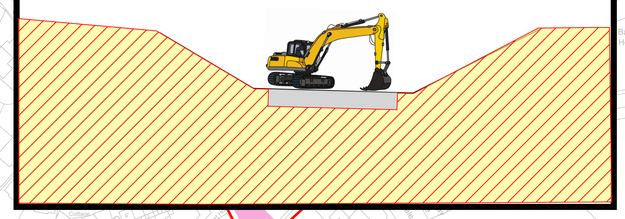
Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material.



Construction works - Access road

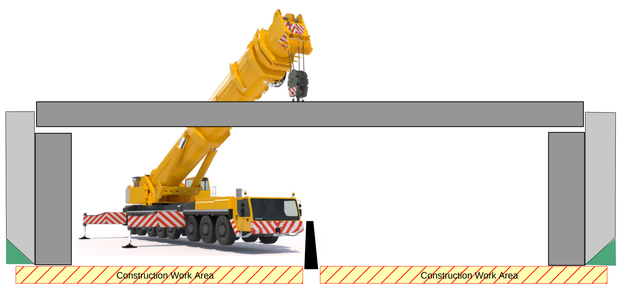
To construct the access road, the surrounding land will need to be reduced and the material locally stockpiled. Once down to formation the new access road can be constructed from imported granular materiel dependent on the final design.



Construction works - Overbridge Construction

With the existing local access road being maintained a safe distance from the new bridge work area, works on all element of the new overbridge can commence. With the works taking place away from live traffic, this will enable both abutments and the deck to be constructed in one phase of works, minimising disruption to local traffic. With the existing roads location it is likely that the bridge beams can be installed with limited additional traffic management.





British Gypsum Access Road
Right-left staggered junction preferred for road user safety and eliminated requirement to widen the bridge to improve visibility from the access road. Works within barn field boundary to be avoided. A section of this road is proposed to be constructed over gypsum mines.

Bridge Span Increased
Abutment wall moved back to allow for visibility splay

Pedestrian Crossing
Pedestrian crossing installed to access new footpath

Narrow Footway
Verge to be hardened to provide a narrow (1m wide) footway.

Access To Plantation
Access to plantation will need to be through farm field (subject to negiation with landowner)

Proposed Bridge For Main Street

3m offset

POTENTIAL COMPOUND
(appears unsuitable for compound - on steep incline from east - west)

For continuation refer to sheet 4

For continuation refer to sheet 5

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

FLOODPLAIN KEY

- Floodplain
  River Eden 1 in 2 year &
  Trout Beck 1 in 2 year
- Floodplain
  River Eden 1 in 100 year storm + 94% CC
  Trout Beck 1 in 20 year storm + 94% CC
- Floodplain
  River Eden 1 in 20 year storm + 94% CC
  Trout Beck 1 in 100 year storm + 94% CC

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

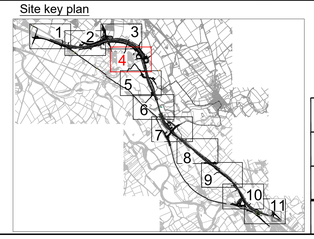
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 4 of 11
(British Gypsum Junction)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S0405	DR	CH	000204

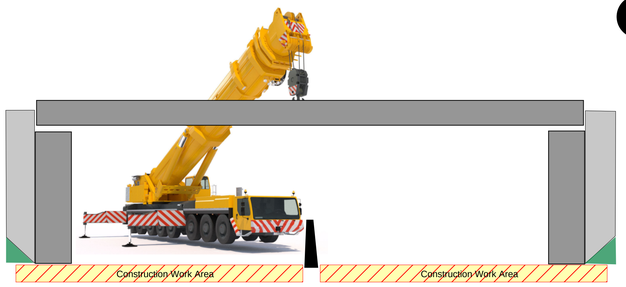
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Construction works - Overbridge construction

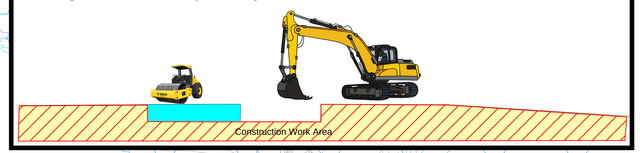
Works will only commence on this new infrastructure, once a diversion route is established. Where the new bridge is to be constructed on the line of the existing road, a temporary road will be constructed adjacent to it to allow local access. This will enable both abutments and the deck to be constructed in one phase of works, minimising disruption to local traffic. With the diversion in place it is likely that the bridge beams can be installed with limited additional traffic management.





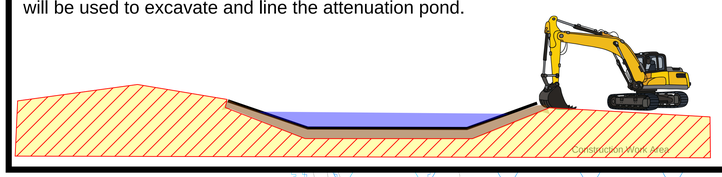
Construction works - New diversion route

To facilitate the construction of the new overbridge, a diversion route will be established to move traffic away from the work area. This will allow the new overbridge to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. Plant machinery will be used to excavate and line the attenuation pond.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

FLOODPLAIN KEY

- Floodplain: River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain: River Eden 1 in 100 year storm + 94% CC Trout Beck 1 in 20 year storm + 94% CC
- Floodplain: River Eden 1 in 20 year storm + 94% CC Trout Beck 1 in 100 year storm + 94% CC

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Proposed Bridge For Sleastonhow Lane

AREA FOR TOPSOIL STORAGE

AREA FOR TOPSOIL STORAGE

For continuation refer to sheet 4
For continuation refer to sheet 5
For continuation refer to sheet 5
For continuation refer to sheet 6

RESIDUAL DESIGN HAZARDS

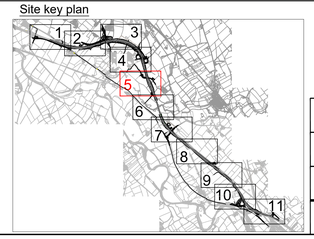
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details					

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 5 of 11
(Sleastonhow Lane)

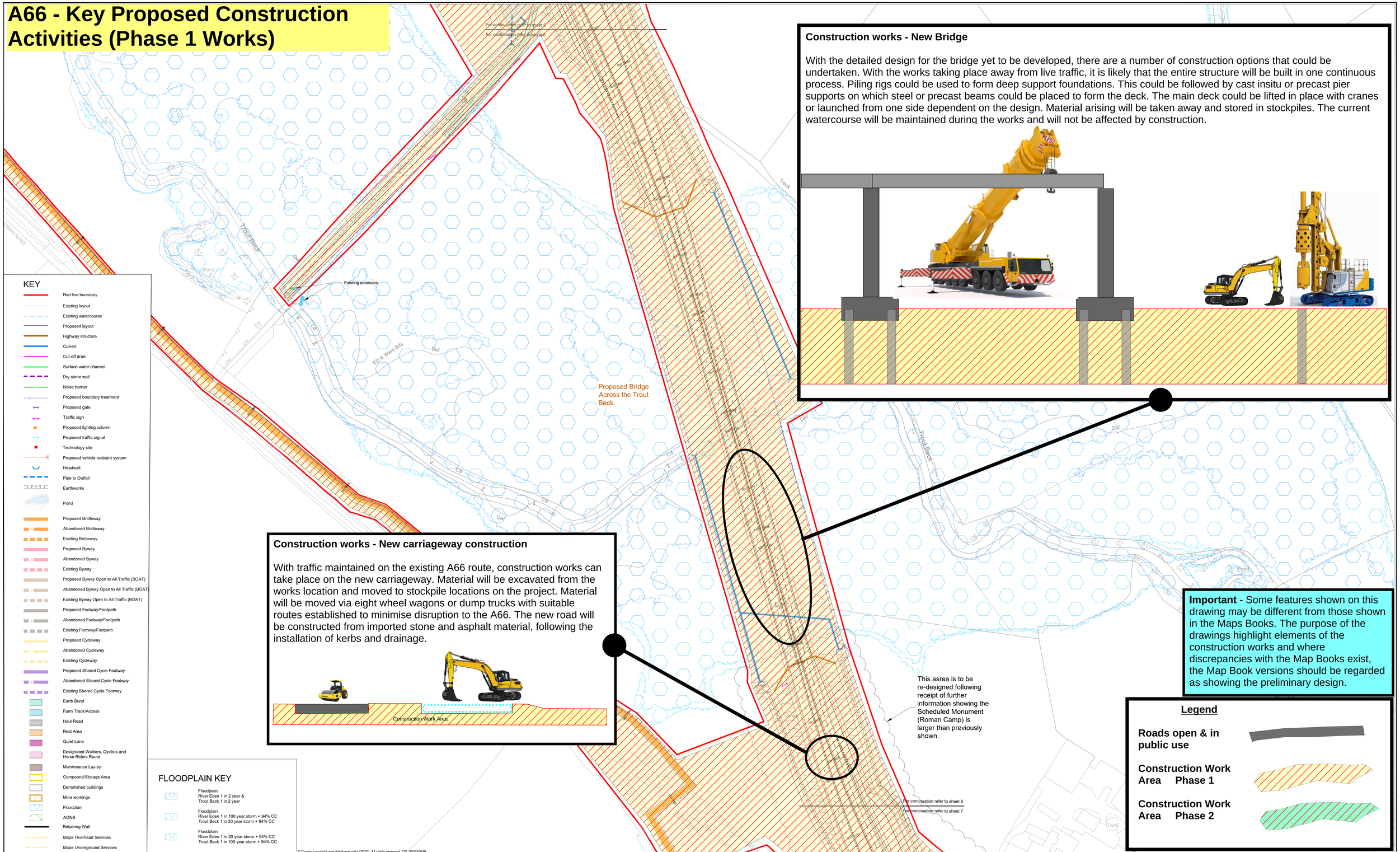
Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number

Project	Originator	Volume			
HE565627	- AMY	- HGN			
S0405	-DR-	CH-	000205		
Location	Type	Role	Number		

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - New Bridge

With the detailed design for the bridge yet to be developed, there are a number of construction options that could be undertaken. With the works taking place away from live traffic, it is likely that the entire structure will be built in one continuous process. Piling rigs could be used to form deep support foundations. This could be followed by cast insitu or precast pier supports on which steel or precast beams could be placed to form the deck. The main deck could be lifted in place with cranes or launched from one side dependent on the design. Material arising will be taken away and stored in stockpiles. The current watercourse will be maintained during the works and will not be affected by construction.

Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material, following the installation of kerbs and drainage.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

FLOODPLAIN KEY

- Floodplain — River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain — River Eden 1 in 100 year storm + 94% CC; Trout Beck 1 in 20 year storm + 94% CC
- Floodplain — River Eden 1 in 20 year storm + 94% CC; Trout Beck 1 in 100 year storm + 94% CC

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

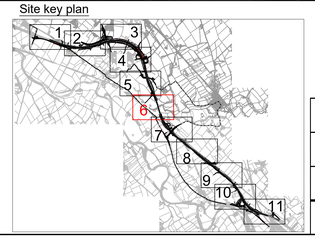
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision					
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

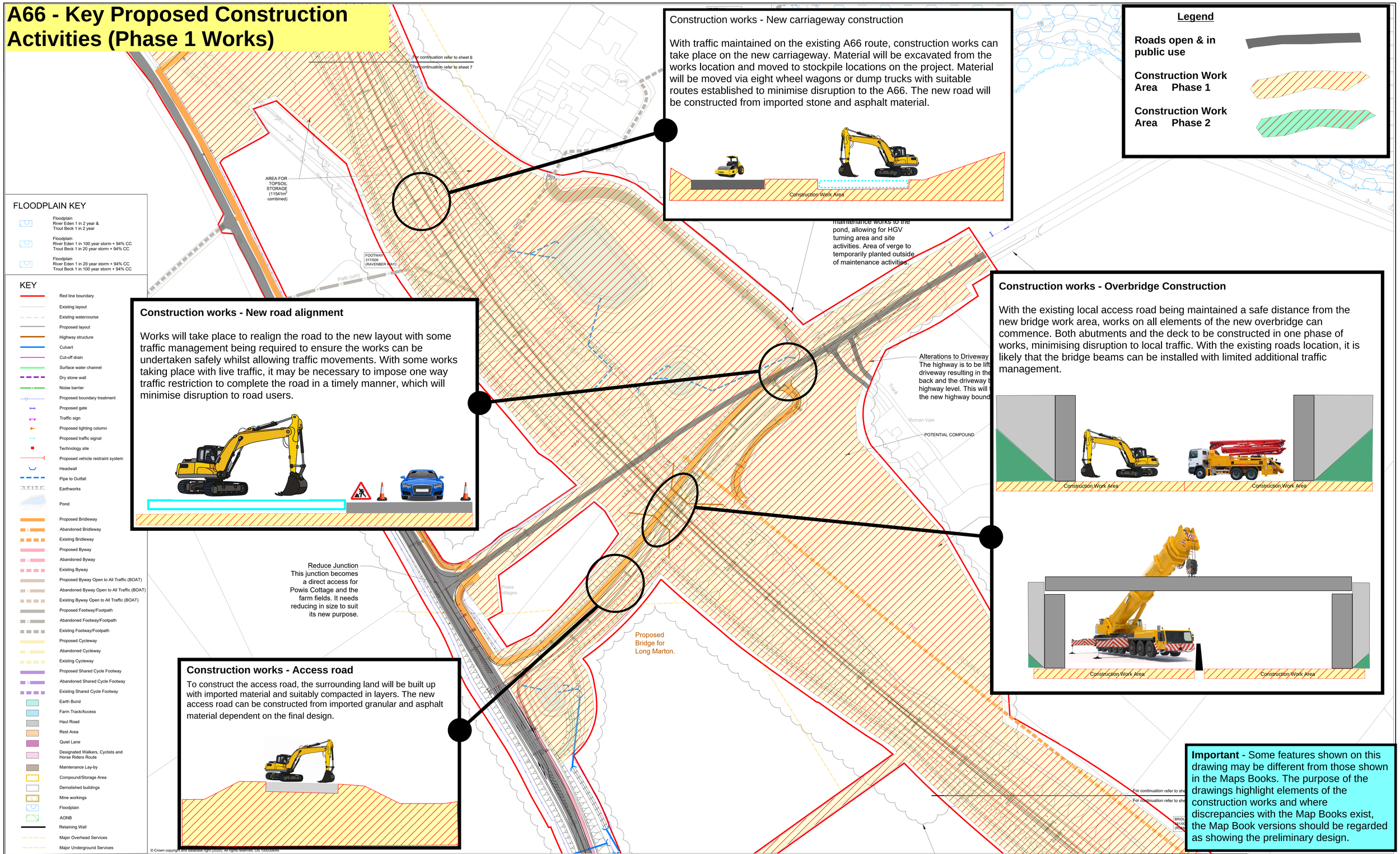
Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 6 of 11
(Trout Beck Crossing)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 - DR - CH - 000206

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material.

Legend

- Roads open & in public use
- Construction Work Area Phase 1
- Construction Work Area Phase 2

Construction works - New road alignment

Works will take place to realign the road to the new layout with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place with live traffic, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which will minimise disruption to road users.

Construction works - Overbridge Construction

With the existing local access road being maintained a safe distance from the new bridge work area, works on all elements of the new overbridge can commence. Both abutments and the deck to be constructed in one phase of works, minimising disruption to local traffic. With the existing roads location, it is likely that the bridge beams can be installed with limited additional traffic management.

Construction works - Access road

To construct the access road, the surrounding land will be built up with imported material and suitably compacted in layers. The new access road can be constructed from imported granular and asphalt material dependent on the final design.

FLOODPLAIN KEY

- Floodplain — River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain — River Eden 1 in 100 year storm + 94% CC Trout Beck 1 in 20 year storm + 94% CC
- Floodplain — River Eden 1 in 20 year storm + 94% CC Trout Beck 1 in 100 year storm + 94% CC

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

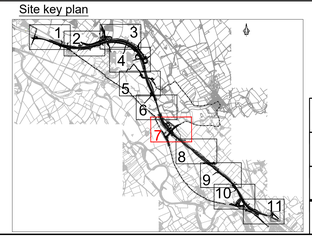
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services.
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 7 of 11
(Powis House Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 -DR-CH- 000207

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

For continuation refer to sheet 8

This asrea is to be re-designed following receipt of further information showing the Scheduled Monument (Roman Camp) is larger than previously shown.

Speculative land ownership; Speculative Access

ROMAN ROAD

Track

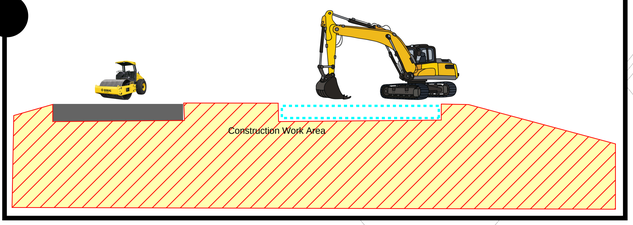
Far Broom

For continuation refer to sheet 8

For continuation refer to sheet 9

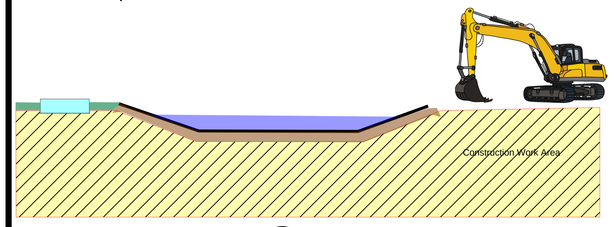
Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

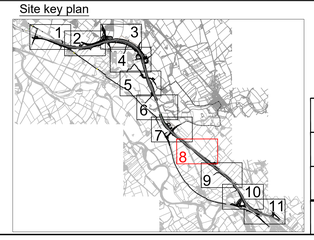
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
***	***	***	***	***	***
	***	***	***	***	***
***	***	***	***	***	***
	***	***	***	***	***
***	***	***	***	***	***
	***	***	***	***	***
P01	GCHI	GCHI	SHAL	KCRO	***
	08/09/21	08/09/21	08/09/21	08/09/21	***

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 8 of 11
(Crackenthorpe)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
***	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000208
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

AREA FOR TOPSOIL STORAGE (13391.5m²)

AREA FOR TOPSOIL STORAGE (9699m²)

Proposed Underpass For diverted farm track. 4m wide. 3.4m headroom.

For continuation refer to sheet 9

For continuation refer to sheet 10

Pond

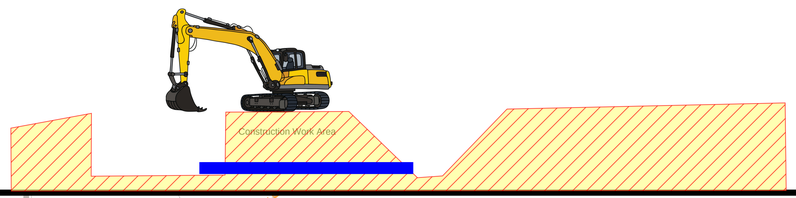
Construction works - New underpass

With the new underpass being at grade, it will be installed with limited earthworks or temporary works requirements. Once complete the new A66 embankment can be formed over the underpass and the new road surface constructed.



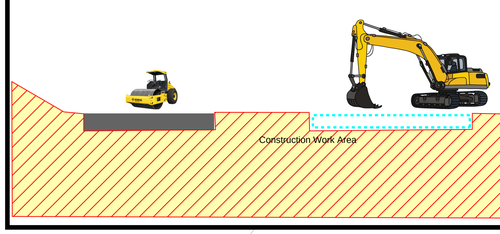
Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOA
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

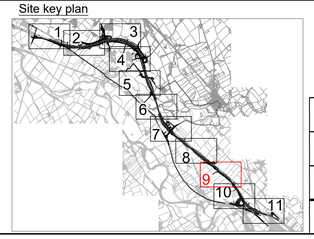
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision						
---	---	---	---	---	---	---
---	---	---	---	---	---	---
---	---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---	
	08/09/21	08/09/21	08/09/21	08/09/21	---	
Revision details	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 9 of 11
(Roger Head)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000209
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Proposed Underpass For diverted farm track. 4m wide. 3.4m headroom.

For continuation refer to sheet 9

For continuation refer to sheet 10

AREA FOR TOPSOIL STORAGE (9699m²)

FOOTWAY 317/004

Track

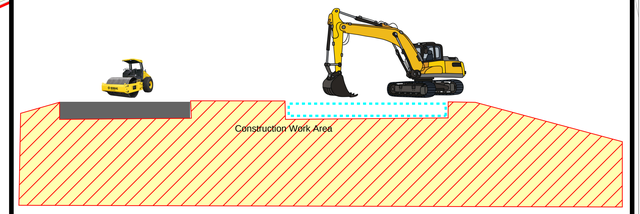
Issues

Chapel Hill

St Giles's Chapel (site of)

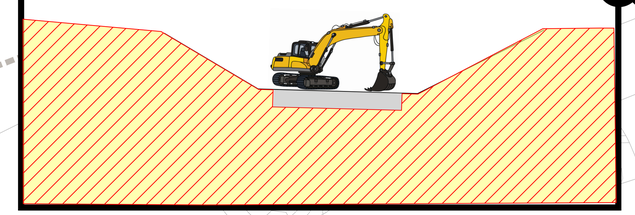
Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material.



Construction works - Access roads

To construct access roads, the surrounding land will need to be reduced and the material locally stockpiled. Once down to formation the new access road can be constructed from imported granular materiel dependent on the final design.



KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

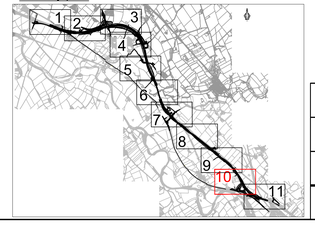
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services.
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details					
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 10 of 11
(B6542 Westbound Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000210
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Potential Rest Area
Possible 2800sqm area could potentially be a car park with basic facilities but would require retaining structure along realigned A66

Alterations to Direct Access
We may need to alter the levels in the direct access to tie into the reprofiled B6542

Widened Verge
Verge widened for visibility splay.

Existing railway bridge (not affected by these works)

Retaining Wall
May be required here. Mainline earthworks clash with Drainage Pond

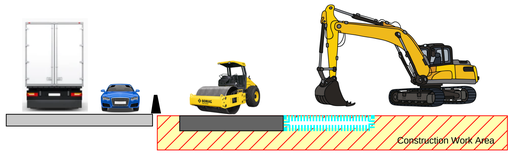
This Area is to be re-des
the impact on the Fair H

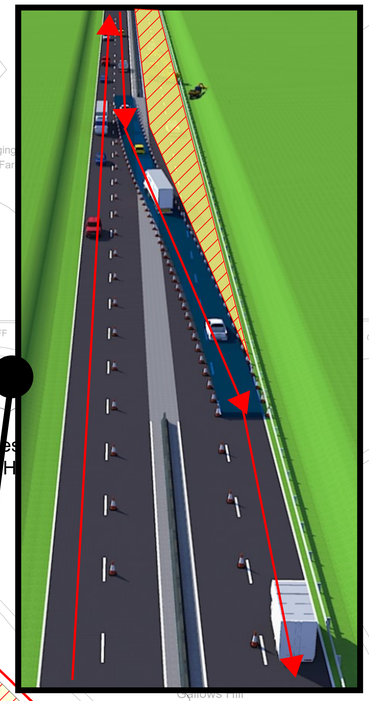
3m offset

BRIDLEWAY 317/003 (EDEN WAY)

Construction works - New carriageway next to existing A66

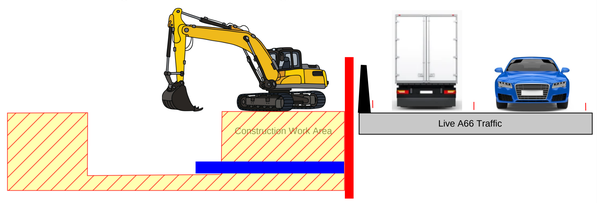
With traffic maintained on the existing road, works will take place to excavate and install the new road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed followed by the aggregate and asphalt material being compacted in layers to complete the road.



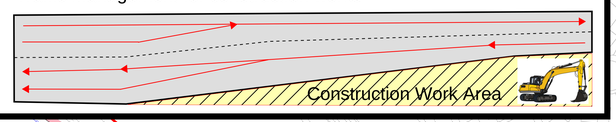


Construction works - Drainage culverts

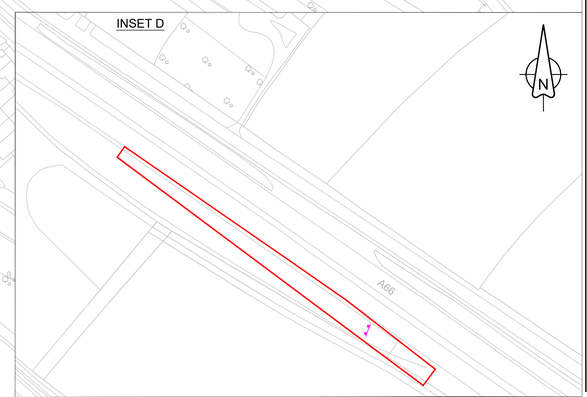
Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Traffic Management for construction works



INSET D



KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

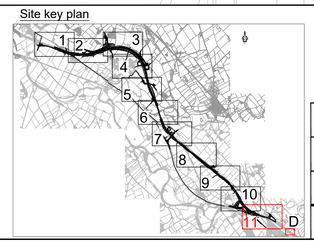
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services.
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

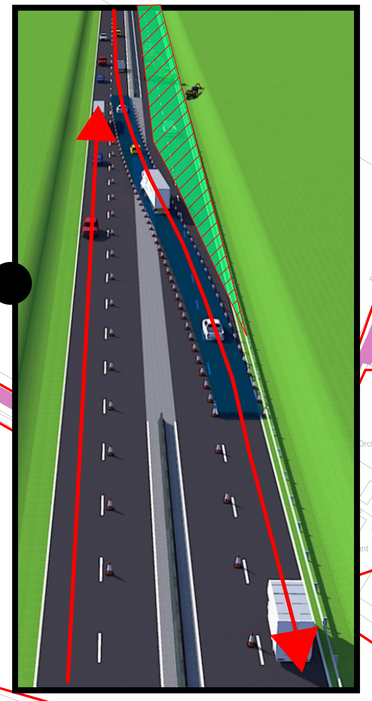
Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 11 of 11
(B6542 Eastbound Junction)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 -DR-CH- 000211

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

AONB
Retaining Wall
Major Overhead Services
Major Underground Services

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings

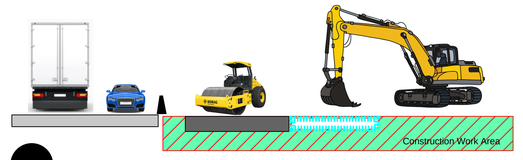
Carriageway & signed to quiet lane

Existing Underpass For grade separated junction.

Option to improve public access to local archeology

Construction works - New carriageway next to existing A66

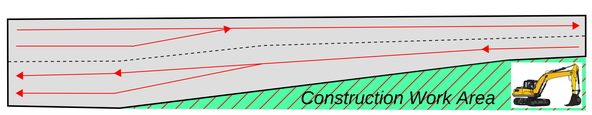
With traffic maintained on the existing road, Works will take place to excavate and install the new road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed followed by aggregate and asphalt being compacted in layers to form the new road.



Compact Roundabout
Suitable for occasional HGV use this roundabout links the extended Old A66 to the existing grade separated junction at this location, allowing all movements. the Compact roundabout is suitable for use by confident cyclists but wont have any pedestrian facilities.

Traffic Management for construction works

Traffic will be relocated on the new A66 carriageway to enable the old de-trunked A66 works to take place.



Old A66 Extended
So residents of Kirkby Thore, Crackenthorpe and other surrounding villages do not need to use the realigned A66 to access Temple Sowerby the old A66 will be extended to the existing grade separated junction. This will also allow the existing bus service to continue along the same route that it currently does. This road may be used to access the adjacent farm fields. The 40mph speed limit will be continued to the roundabout.

Anti-glare Wall
Where space is constrained an anti-glare wall (1.4m high) will replace the anti-glare earthwork bund. The anti-glare features prevent the headlights of vehicles on adjacent carriageways from dazzling the opposing drivers.

Existing Underpass For Spitals Farm.

Bank in front of slurry bed needs to be re-graded to tie into new highway levels

For continuation refer to sheet 1
For continuation refer to sheet 2

INSET A

INSET D

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground services
Overhead services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan

Revision	Created	Checked	Reviewed	Approved	Authorised
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	---

Revision details — dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby Blue Option General Arrangement Sheet 1 of 11 (Temple Sowerby Link)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000201
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

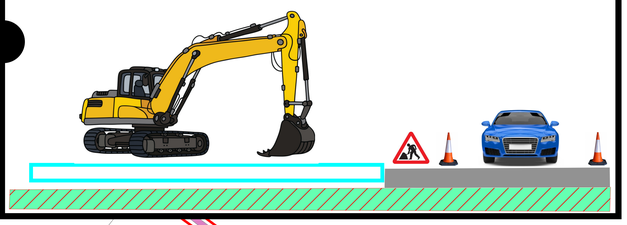
A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

Construction works - New road alignment

Works will take place to replace and upgrade the old de-trunked A66 following the main A66 traffic being diverted onto the new carriageway. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Old A66 Extended

So residents of Kirkby Thore, Crackenthorpe and other surrounding villages do not need to use the realigned A66 to access Temple Sowerby the old A66 will be extended to the existing grade separated junction. This will also allow the existing bus service to continue along the same route that it currently does. This road may be used to access the adjacent farm fields. The 40mph speed limit will be continued to the roundabout.

POTENTIAL COMPOUND

AREA FOR TOPSOIL STORAGE (3398 m²)

3m offset (from ditch)

3m offset

Slurry Bed

For continuation refer to sheet 1

For continuation refer to sheet 2

For continuation refer to sheet 3

For continuation refer to sheet 4

Bank in front of slurry bed needs to be re-graded to tie into new highway levels

Feasibility to retain right turn lanes, ghost islands and pedestrian crossing to be investigated

PRIEST LANE

Greythorne

Speculative Access

Speculative land ownership

Fell View

Lowmoor Row

New Bungalow

Stagecoach Cottage

Forge Cottage

Ostlers Cottage

Low Moor Caravan Park (Holiday Park)

Stables Cottage

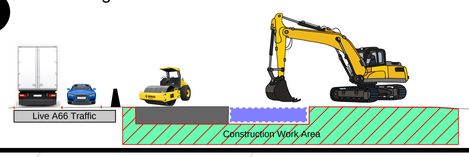
Hayloft Cottage

Jockey Cottage

Pinfold Cottage

Construction works - New diversion route

To facilitate the upgrading of the existing de-trunked road and the new A66 dual carriageway, a temporary connection road may be constructed to enable the A66 traffic to utilise the full capacity on the new road. This works could be undertaken in phase 1 or the start of phase 2 prior to the traffic being diverted.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond

- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

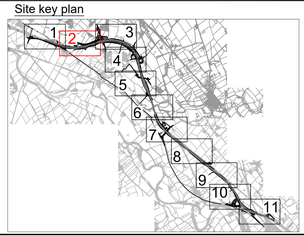
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision					
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 2 of 11
(Low Moor Caravan Park)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 - DR - CH - 000202

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

Legend

- Roads open & in public use
- Construction Work Area Phase 1
- Construction Work Area Phase 2

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOA
- Abandoned Byway Open to All Traffic (B
- Existing Byway Open to All Traffic (BOAT
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

3m offset (from drainage ditch)

3m offset (from ditch)

3m offset

3m offset (underpass)

BRIDLEWAY 335/018

BRIDLEWAY 336/018

FOOTWAY 336/013

Speculative land ownership

Slurry Bed

AREA FOR TOPSOIL STORAGE (26232 m²)

Proposed Bridge For Cross Street.

Works within school boundary to be avoided by locally steepening the earthworks fill slope from 1:3 to 1:2.4

For continuation refer to sheet 3

For continuation refer to sheet 2

Proposed Metcalf Bridge

and Farm Track Diverted
ridleway and farm track is
g Main Street, to the new
ay and farm track running
tish Gypsum access road.

Existing accesses/ gates to be maintained

Access to farm track via British Gypsum access road (subject to negotiation)

For continuation refer to sheet 3

For continuation refer to sheet 4

Construction works - Removal of old road

With the new access road and overpass in place, the final works can take place to remove the old road and complete the remaining earthworks profiling.



Construction Work Area

© Crown copyright and database right (2020). All rights reserved. OS 100030649

RESIDUAL DESIGN HAZARDS

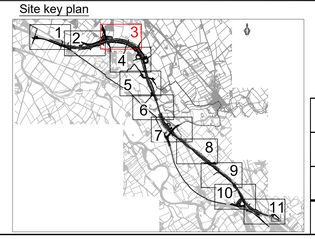
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
	Revision details				
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 3 of 11
(Kirkby Thore School)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S0405	DR	CH	000203

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Existing accesses to be repositioned to the track for safety

Footway
Narrow footway insta
front of school to con
Priest Lane bridleway
with Cross Street.

For continuation refer to sheet 3

For continuation refer to sheet 4

Turning Head
The old British Gypsum access road is stopped off with a turning head. Gate in turning head allows access to the farm fields.

Construction works - Removal of old road

With the new access road and overpass in place, the final works can take place to remove the old road and complete the remaining earthworks profiling.



Construction Work Area

hardened to provide a narrow (1m wide) footway.

Bridge Span Increased. Abutment wall moved back to allow for visibility splay

3m offset

British Gypsum Access Road
Right-left staggered junction preferred for road user safety and eliminated requirement to widen the bridge to improve visibility from the access road. Works within barn field boundary to be avoided. A section of this road is proposed to be constructed over gypsum mines.

Proposed Bridge For Main Street.

Access To Plantation
Access to plantation will need to be through farm field (subject to negotiation with landowner)

Off Street Parking
Off-street parking to be explored (to keep ain Street clear for rough traffic).

POTENTIAL COMPOUND
(appears unsuitable for compound - on steep incline from east - west)

3m offset

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

For continuation refer to sheet 4

For continuation refer to sheet 5

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

FLOODPLAIN KEY

- Floodplain
  River Eden 1 in 2 year &
  Trout Beck 1 in 2 year
- Floodplain
  River Eden 1 in 100 year storm + 94% CC
  Trout Beck 1 in 20 year storm + 94% CC
- Floodplain
  River Eden 1 in 20 year storm + 94% CC
  Trout Beck 1 in 100 year storm + 94% CC

RESIDUAL DESIGN HAZARDS

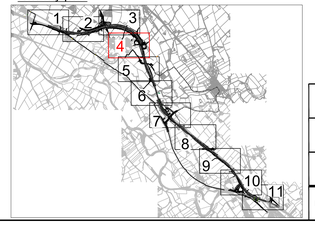
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 4 of 11
(British Gypsum Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000204
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

Construction works - Removal of old road

With the new access road and overpass in place, the final works can take place to remove the old road and complete the remaining earthworks profiling.



Construction Work Area

For continuation refer to sheet 4

For continuation refer to sheet 5

Proposed Bridge For Sleastonhow Lane

AREA FOR TOPSOIL STORAGE

AREA FOR TOPSOIL STORAGE

For continuation refer to sheet 5

For continuation refer to sheet 6

FLOODPLAIN KEY

- Floodplain — River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain — River Eden 1 in 100 year storm + 94% CC, Trout Beck 1 in 20 year storm + 94% CC
- Floodplain — River Eden 1 in 20 year storm + 94% CC, Trout Beck 1 in 100 year storm + 94% CC

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

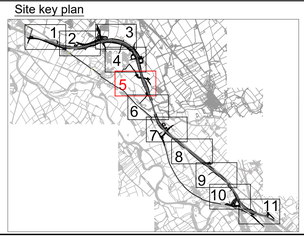
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision					
---	---				
---	---	---	---	---	---
---	---	---	---	---	---
---	---				
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby Blue Option General Arrangement Sheet 5 of 11 (Sleastonhow Lane)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

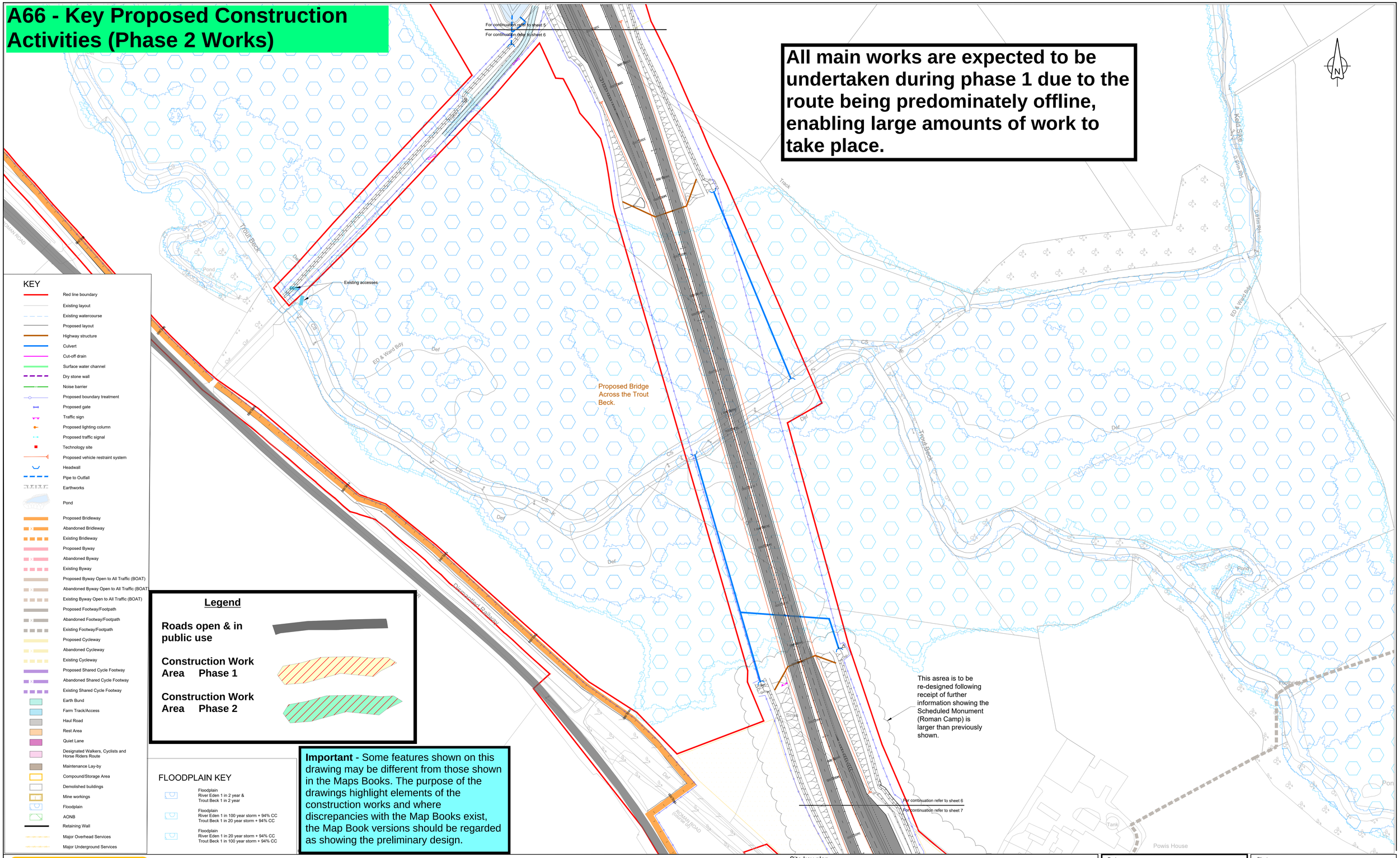
Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S0405	DR	CH	000205

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.



KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

FLOODPLAIN KEY

- Floodplain — River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain — River Eden 1 in 100 year storm + 94% CC Trout Beck 1 in 20 year storm + 94% CC
- Floodplain — River Eden 1 in 20 year storm + 94% CC Trout Beck 1 in 100 year storm + 94% CC

RESIDUAL DESIGN HAZARDS

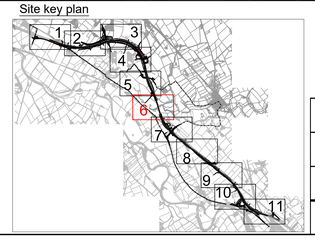
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	--- ---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 6 of 11
(Trout Beck Crossing)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR - CH - 000206
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

This asrea is to be re-designed following receipt of further information showing the Scheduled Monument (Roman Camp) is larger than previously shown.

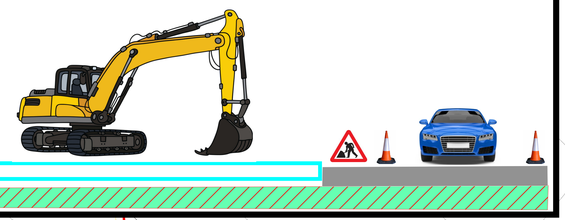
Highway Boundary E
The highway verge w
widened for planned
maintenance works to the
pond, allowing for HGV
turning area and site
activities. Area of verge to
temporarily planted outside
of maintenance activities.

Layby Reduced
A crossing point for the bridleway will be installed, reducing the length of verge that is being used as a layby.

Alterations to Driveway
The highway is to be lifted and widened in front of the driveway resulting in the boundary wall being moved back and the driveway being ramped up to the new highway level. This will the garden where it joins with the new highway boundary and new driveway levels.

Construction works - New road alignment

Works will take place to realign the road to the new layout with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Reduce Junction
This junction becomes a direct access for Powis Cottage and the

Proposed Bridge for Long Marton.

AREA FOR TOPSOIL STORAGE (11541m² combined)

FOOTWAY 341017 (RAVENBER WAY)

FOOTWAY 317/009 (RAVENBER WAY)

BRIDLEWAY 317/001 (ROMAN ROAD)

For continuation refer to sheet 6

For continuation refer to sheet 7

For continuation refer to sheet 8

Powis House

Ponds

Tank

ROMAN ROAD (course of)

ROMAN CAMP (site of)

LONG MARTON

Powis Cottages

Track

Path (um)

Dunghill

Ford

Ditch

Culvert

1:2.5

1:1.8

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

FLOODPLAIN KEY

- Floodplain — River Eden 1 in 2 year & Trout Beck 1 in 2 year
- Floodplain — River Eden 1 in 100 year storm + 94% CC Trout Beck 1 in 20 year storm + 94% CC
- Floodplain — River Eden 1 in 20 year storm + 94% CC Trout Beck 1 in 100 year storm + 94% CC

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

RESIDUAL DESIGN HAZARDS

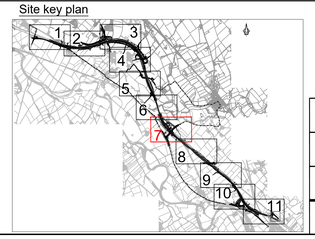
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services.
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing is to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	---

Revision details — dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

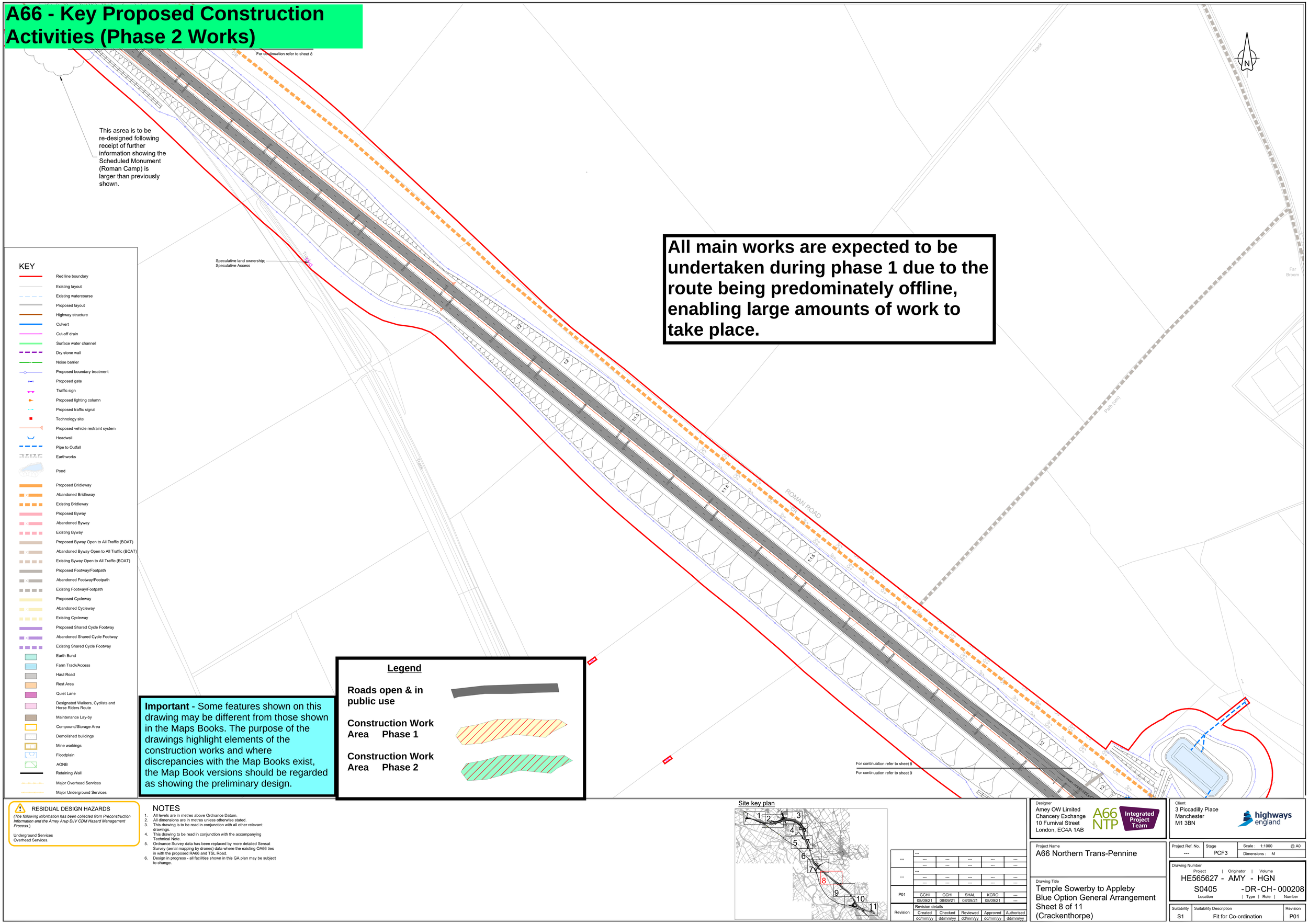
Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 7 of 11
(Powis House Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 - DR - CH - 000207

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)



All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan

---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby Blue Option General Arrangement Sheet 8 of 11 (Crackenthorpe)

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions :	M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
S0405 - DR-CH- 000208
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

All main works are expected to be undertaken during phase 1 due to the route being predominately offline, enabling large amounts of work to take place.

AREA FOR TOPSOIL STORAGE (13391.5m²)

Proposed Underpass For bridleway. 4m wide. 3.4m headroom.

ROMAN ROAD

Proposed Underpass For diverted farm track. 4m wide. 3.4m headroom.

AREA FOR TOPSOIL STORAGE (9699m²)

For continuation refer to sheet 9

For continuation refer to sheet 10

Pond

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOA
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

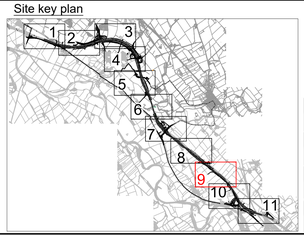
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



---	---					
	---	---	---	---	---	---
	---	---	---	---	---	---
---	---					
	---	---	---	---	---	---
	---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---	
	08/09/21	08/09/21	08/09/21	08/09/21	---	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 9 of 11
(Roger Head)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 - DR - CH - 000209

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

Proposed Underpass For diverted farm track. 4m wide. 3.4m headroom.

For continuation refer to sheet 9

For continuation refer to sheet 10

AREA FOR TOPSOIL STORAGE (9699m²)

FOOTWAY 341/004

FOOTWAY 317/004

ROMAN ROAD

ROMAN FORTLET (site of)

Track

Boner Heid

Chapel Hill

St Giles's Chapel (site of)

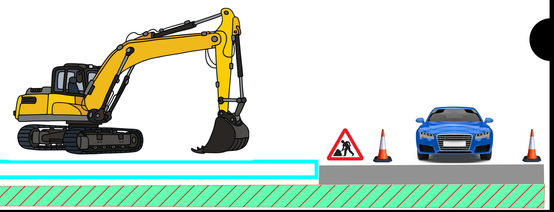
Chapel Wood

For continuation refer to sheet 10

For continuation refer to sheet 11

Construction works - New road alignment

Works will take place to realign the de-trunked A66 road to the new layout with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

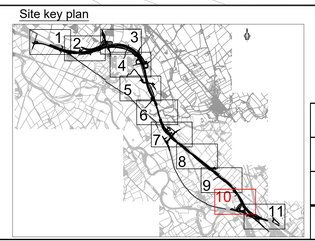
(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

Underground Services.
Overhead Services.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Site key plan



Revision					
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	GCHI	GCHI	SHAL	KCRO	---
	08/09/21	08/09/21	08/09/21	08/09/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 10 of 11
(B6542 Westbound Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

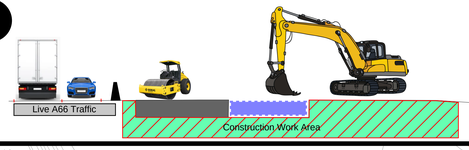
Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 -DR-CH- 000210

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

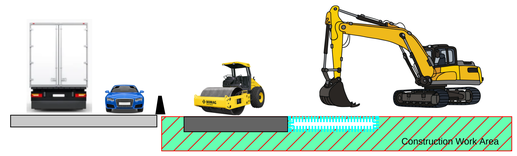
Construction works - New diversion route

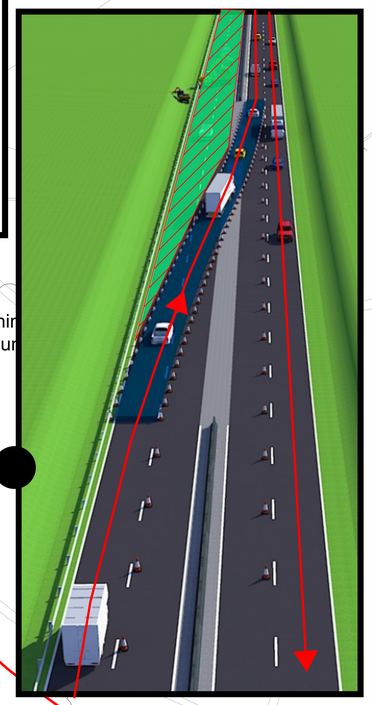
To facilitate the upgrading of the existing de-trunked road and the new A66 dual carriageway, a temporary connection road may be constructed to enable the A66 traffic to utilise the full capacity on the new road. This works could be undertaken in phase 1 or the start of phase 2 prior to the traffic being diverted.



Construction works - New carriageway next to existing A66

With traffic maintained on the existing road, works will take place to excavate and install the new road, with material being sent to stockpile locations and new imported material brought in for the road construction.





Potential Rest Area
Possible 2800sqm area could potentially be a car park with basic facilities but would require retaining structure along realigned A66

Alterations to Direct Acces
We may need to alter the levels in the direct access to tie into the reprofiled B6542

Existing railway bridge (not affected by these works)

This Area is to be re-designed to minir
the impact on the Fair Hill Show Grour

Widened Verge
Verge widened for visibility splay.

Retaining Wall
May be required here. Mainline earthworks clash with Drainage Pond

Improvements to B6542
We may improve the profile of the existing B6542 to improve visibility as this existing slip road will become a high speed road linking Appleby with western villages

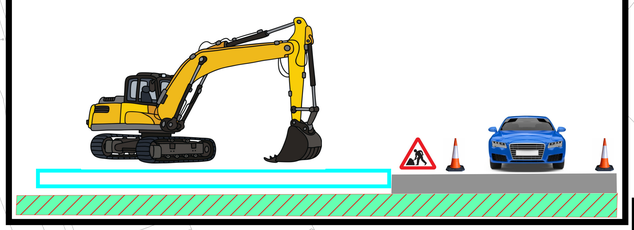
BRIDLEWAY 317/003 (EDEN WAY)

3m offset

St Nicholas's Hill

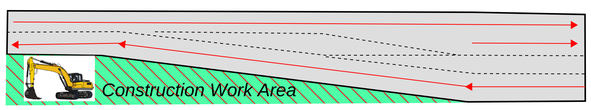
Construction works - New road alignment

Works will take place to realign the de-trunked A66 road to the new layout with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Traffic management for construction works

Traffic will be relocated back onto the existing section of the carriageway as it departs the new A66 carriageway.



KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Surface water channel
- Dry stone wall
- Noise barrier
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed traffic signal
- Technology site
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Byway
- Abandoned Byway
- Existing Byway
- Proposed Byway Open to All Traffic (BOAT)
- Abandoned Byway Open to All Traffic (BOAT)
- Existing Byway Open to All Traffic (BOAT)
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Cycleway
- Abandoned Cycleway
- Existing Cycleway
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Earth Bund
- Farm Track/Access
- Haul Road
- Rest Area
- Quiet Lane
- Designated Walkers, Cyclists and Horse Riders Route
- Maintenance Lay-by
- Compound/Storage Area
- Demolished buildings
- Mine workings
- Floodplain
- AONB
- Retaining Wall
- Major Overhead Services
- Major Underground Services

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

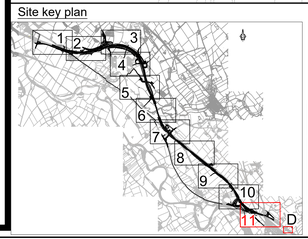
Underground Services.
Overhead Services

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.
4. This drawing to be read in conjunction with the accompanying Technical Note.
5. Ordnance Survey data has been replaced by more detailed Sensat Survey (aerial mapping by drones) data where the existing OA66 ties in with the proposed RA66 and TSL Road.
6. Design in progress - all facilities shown in this GA plan may be subject to change.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Site key plan



Revision	Created	Checked	Reviewed	Approved	Authorised
P01	GCHI 08/09/21	GCHI 08/09/21	SHAL 08/09/21	KCRO 08/09/21	---
	Revision details				
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

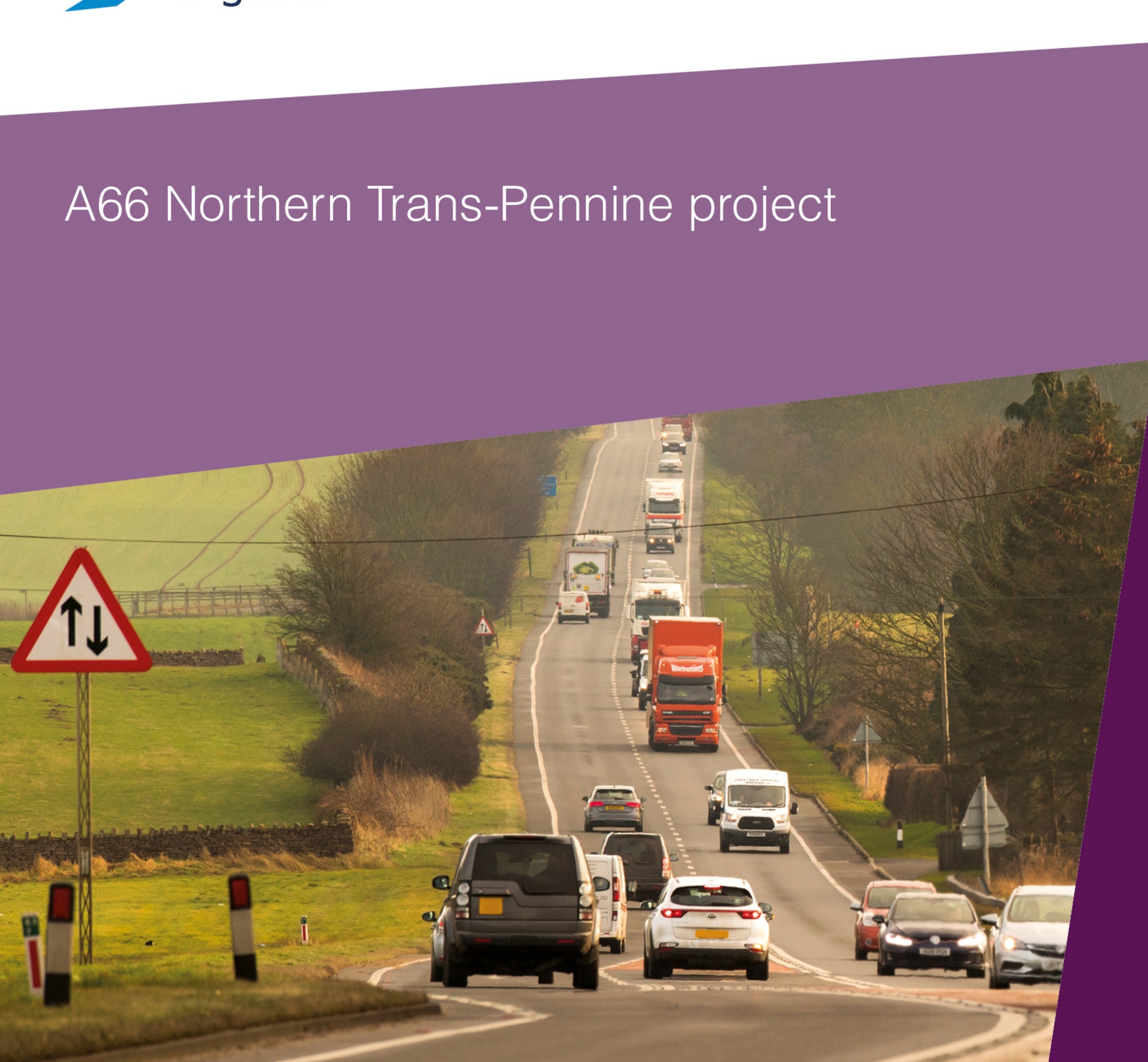
Drawing Title
Temple Sowerby to Appleby
Blue Option General Arrangement
Sheet 11 of 11
(B6542 Eastbound Junction)

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume
HE565627 - AMY - HGN
Location | Type | Role | Number
S0405 - DR - CH - 000211

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 Northern Trans-Pennine project



Draft Construction Method and Management Statement

Indicative schematic drawings

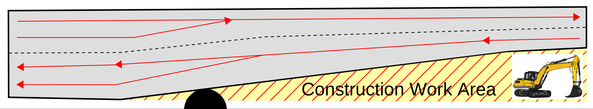
Volume 2

Appleby to Brough

A66 - Key Proposed Construction Activities (Phase 1 Works)

Traffic Management for construction works

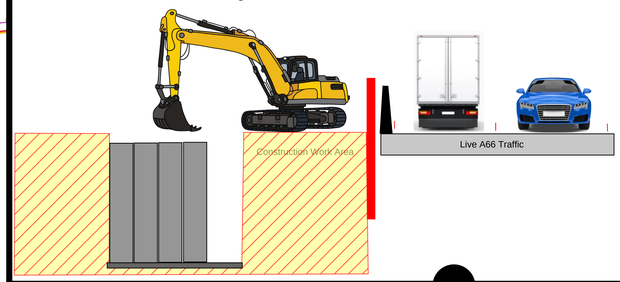
Traffic will diverted and managed using traffic management to ensure the A66 remains moving and works can be undertaken safely.



Cut off ditch to piped under track

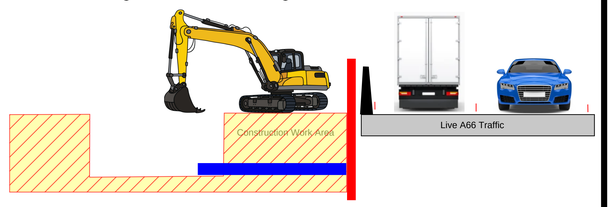
Construction works - New underpass

To enable the works to be carried out while maintaining traffic on the existing A66 a temporary works retaining solution may be utilised to enable the construction works to be undertaken safely. The ground will be excavated to formation level and the underpass constructed, with earth being replaced above the underpass once completed. The new road with kerbs and drainage can then be installed.



Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.

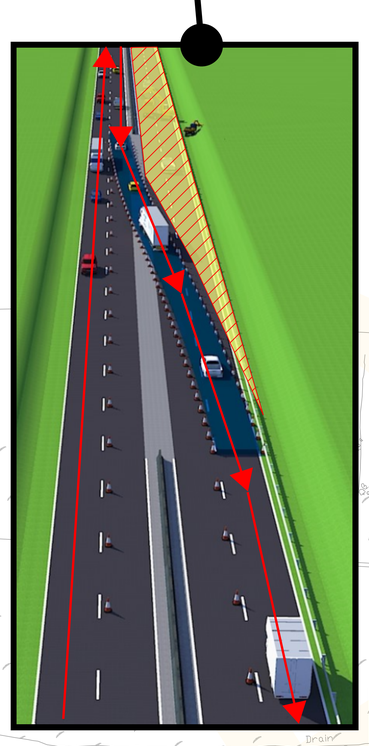


Underpass widened by 2m to allow segregated Footway/Bridgleway through structure

New Hall Farm Underpass

Mr Patterson land access track

Area required for construction
Dry stone wall replacement required along this length



Legend

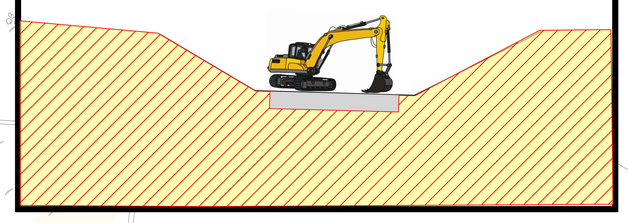
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

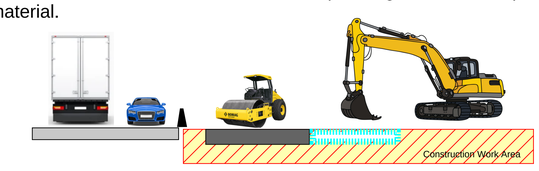
Construction works - Access roads

To construct the access road, the surrounding land will need to be reduced and the material locally stockpiled. Once down to formation the new access road can be constructed from imported granular materiel, following the installation of kerbs and drainage.



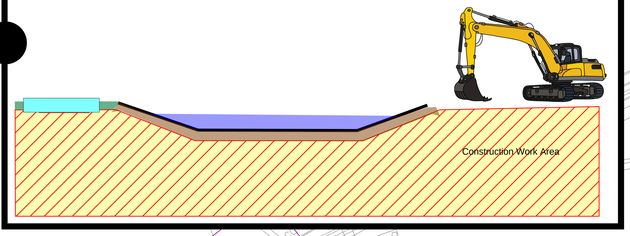
Construction works - New carriageway next to existing A66

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



Construction works - Attenuation ponds

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

© Crown copyright and database right (2021). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- H — MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01.1					

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

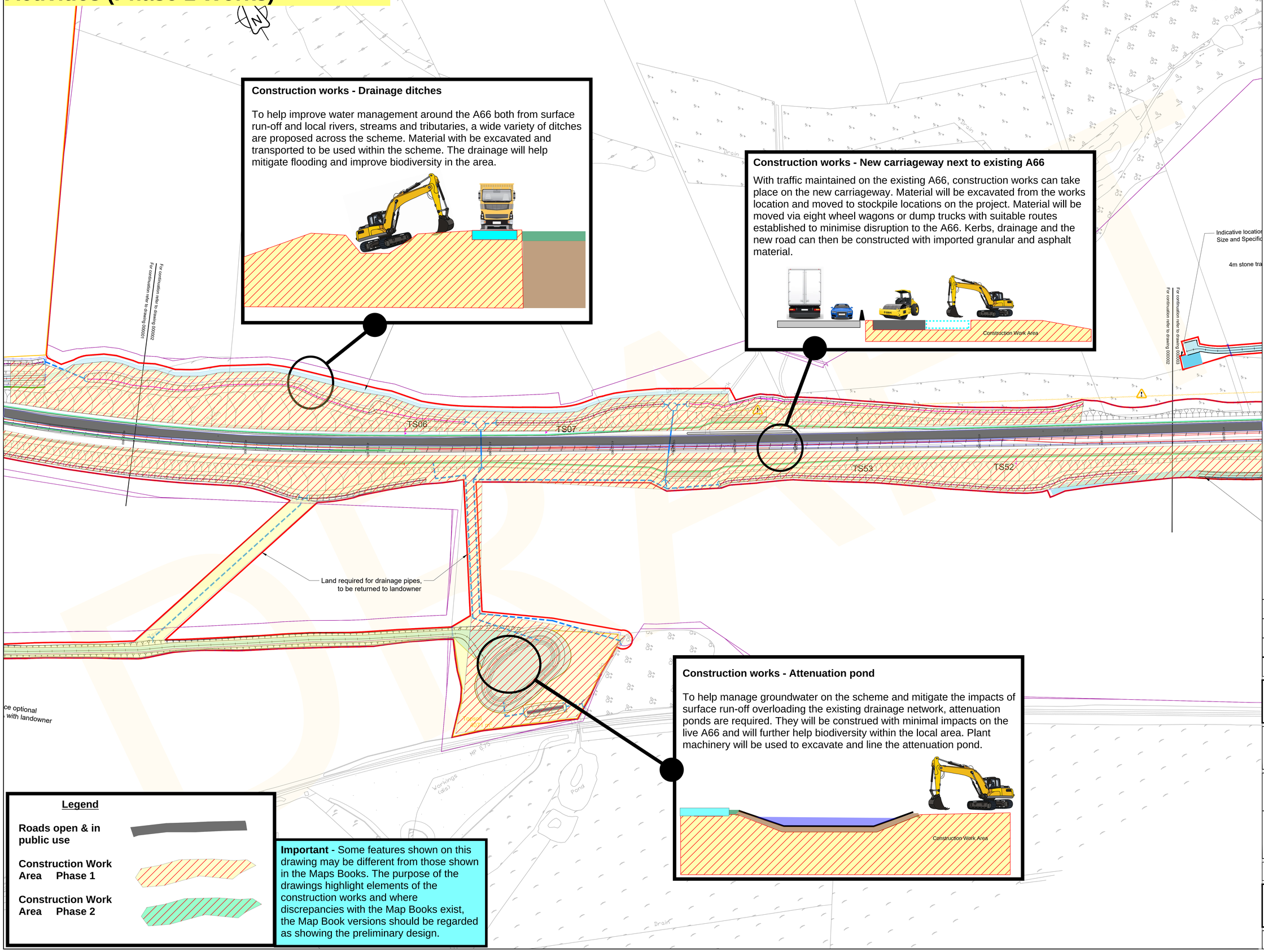
Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 1 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S06 - DR - CH - 398001

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Drainage ditches

To help improve water management around the A66 both from surface run-off and local rivers, streams and tributaries, a wide variety of ditches are proposed across the scheme. Material with be excavated and transported to be used within the scheme. The drainage will help mitigate flooding and improve biodiversity in the area.

Construction works - New carriageway next to existing A66

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 2 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 -DR-CH- 407002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Indicative location for sheep handling system. Size and Specification TBA

Indicative location for MOD Bylaw Flag

4m stone track to allow access for tenant farmer

Indicative location of private water supply to be confirmed by others

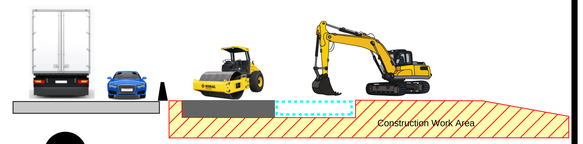
For continuation refer to drawing 400003

For continuation refer to drawing 400002

TS08 TS09 TS12 TS46 TS47 TS48 TS49

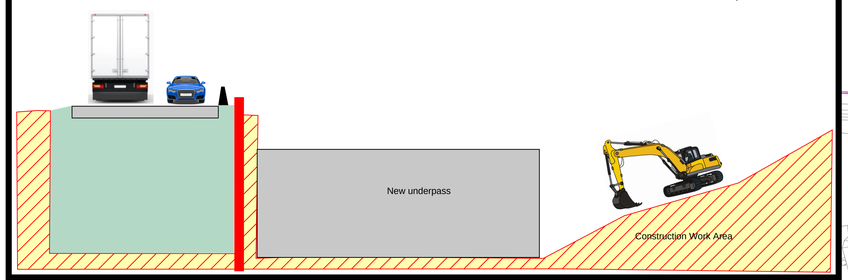
Construction works - New carriageway next to existing A66

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



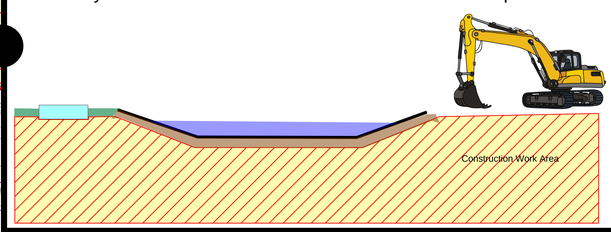
Construction works - Underpass construction

To reduce traffic movements across the A66, an underpass is to be constructed. This will be excavated into the ground with temporary works required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed below ground and then buried to ensure it blends into the surroundings. The new road can then be constructed above to enable the westbound new section of road to be completed.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- H MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 3 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 - DR - CH - 416003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

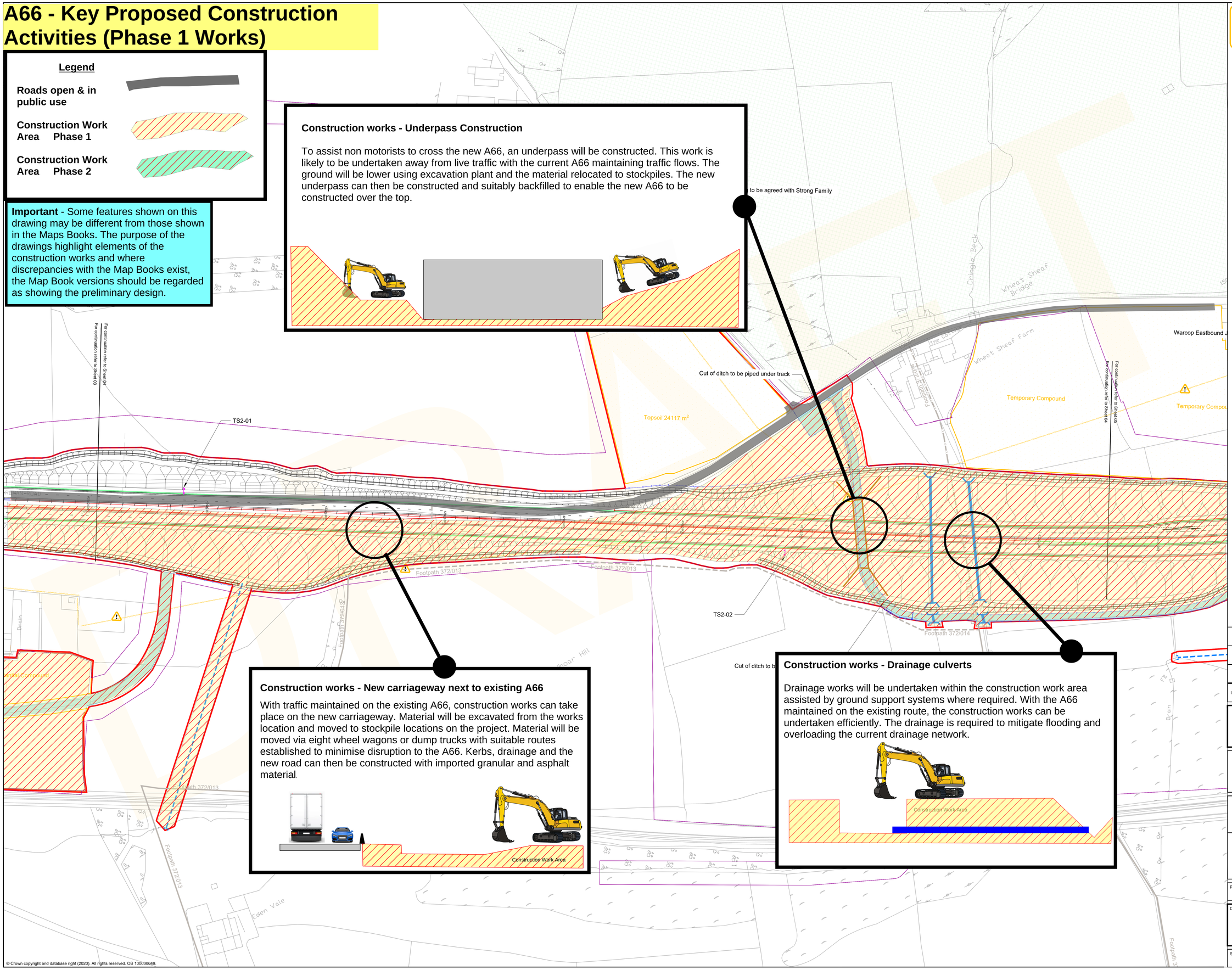
Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Construction works - Underpass Construction

To assist non motorists to cross the new A66, an underpass will be constructed. This work is likely to be undertaken away from live traffic with the current A66 maintaining traffic flows. The ground will be lower using excavation plant and the material relocated to stockpiles. The new underpass can then be constructed and suitably backfilled to enable the new A66 to be constructed over the top.

Construction works - New carriageway next to existing A66

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground support systems where required. With the A66 maintained on the existing route, the construction works can be undertaken efficiently. The drainage is required to mitigate flooding and overloading the current drainage network.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 4 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF2	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S06	DR	CH	424204

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

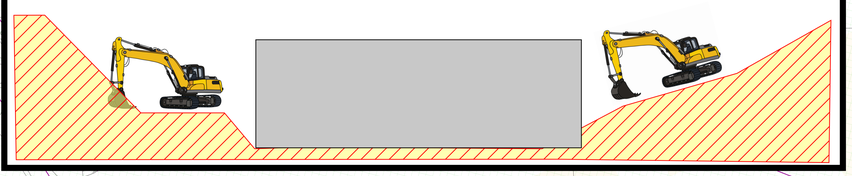
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - Underpass Construction

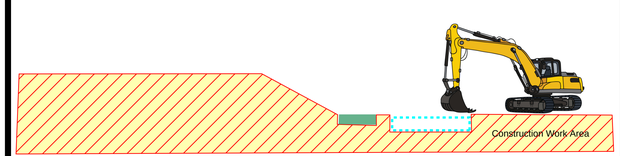
To assist non motorists to cross the new A66, an underpass will be constructed. This work is likely to be undertaken away from live traffic with the current A66 maintaining traffic flows. The ground will be lower using excavation plant and the material relocated to stockpiles. The new underpass can then be constructed and suitably backfilled to enable the new A66 to be constructed over the top.



Earthworks at 1:3 and could be steepened to reduce landtake

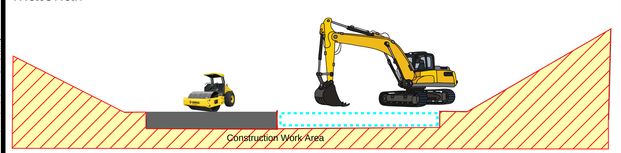
Construction works - Access road

The access road will be constructed with little impact on the live A66 due to the setback distance from the road. Earth will be excavated along the required routes and imported material placed and compacted after kerbs and drainage have been installed. Existing vegetation and trees will be maintained where possible to minimise the impacts of construction.,



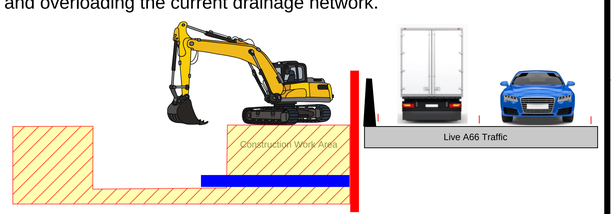
Construction works - New carriageway construction

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Warcop Eastbound Junction

TS2-03

TS2-04

TS2-05

TS2-06

TS2-07

TS2-08

TS2-09

Existing Moor Bridge to be demolished

Temporary Compound

Temporary Compound

For continuation refer to Sheet 04

For continuation refer to Sheet 05

For continuation refer to Sheet 05

For continuation refer to Sheet 06

Wheat Sheaf Bridge

Street House

Wheat Sheaf Farm

Walk Mill High Bridge

Footpath 372/021

Footpath 372/014

Footpath 372/001

Footbridge

Track

Warcop Training Area

Tanks

Posts

Sewage Works

Drain

FB

SP

TCP

Path (um)

Moor Beck

Coldbeck Lane

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 5 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	
HE565627 -	AMY -	HGN -	
S06	-DR-CH-	433205	
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New Access Roads

To enable the access road to be constructed, it is likely that the existing hill side will need to be re-profiled to ensure it is safe. Material will be excavated and stored in allocated stockpiles ready for re-sue where suitable. Once at formation, the new access road can be constructed from imported granular materiel and asphalt, after undertaking the kerbs and drainage works.



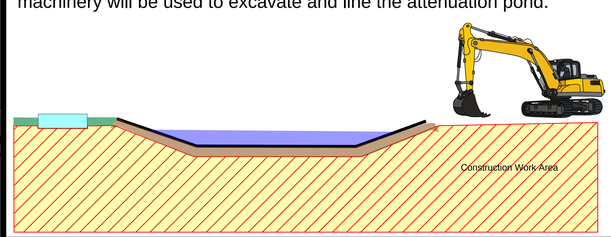
Construction works - Access roads

To construct access roads, the surrounding land will need to be reduced and the material locally stockpiled. Once up to formation using suitable fill material, the new access road can be constructed from imported granular materiel, after undertaking the kerbs and drainage works.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Landmarc Outside Storage Area
5m wide Landmarc access road
Recycling Centre (30x10m)
Rural Stores (15x15m)
Targetry and Plant Garages (15x15m)
Pack Fuel Store 6mx6m
Technicians Store 12mx12m
Target Workshop (20x20m)
TS2-10
TS2-11
TS2-12
TS2-13
TS2-08
TS2-09
Existing Moor Beck Bridge to be demolished
Openreach to be diverted
Local pinchpoint between earthworks and fencing
11 kV cable to be grounded as part of diversion works
Potential Brough Hill Fair Site 5.4acres
Pavilion
Storage Shed
Bridleway 372/010
Proposed passing bay: 5m tapers, 5m length, 5.5m cway width
For continuation refer to Sheet 05
For continuation refer to Sheet 06
For continuation refer to Sheet 07
For continuation refer to Sheet 08

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---	---
P01.1	---	---	---	---	---	---
		dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 6 of 10

Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions :	M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 - DR - CH - 441206
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

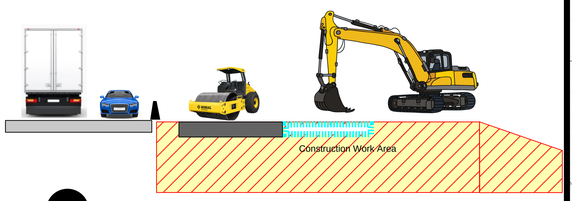
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

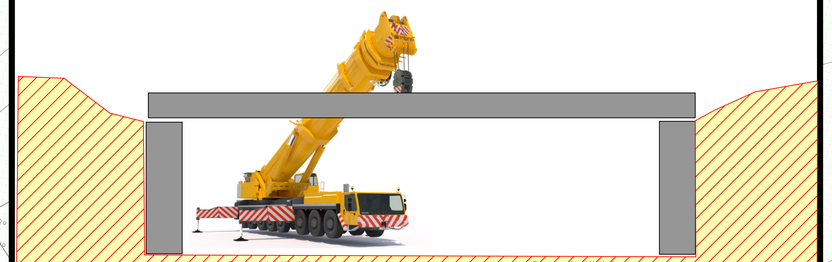
Construction works - New carriageway

With traffic maintained on the existing road, works will take place to excavate and install the new road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed, followed by granular and asphalt material placed in layers to form the new road.



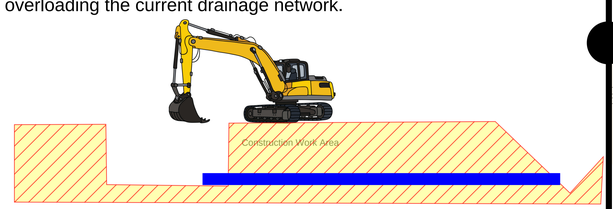
Construction works - Overbridge

Works on the underbridge can take place away from live traffic with minimal impacts to the A66 which is maintained on the current route. It is likely that the ground will be excavated to enable the abutment walls to be constructed. This will be followed by the installation of the roof beams. With the structure complete, the new A66 dual carriageway can be constructed above.



Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground support systems where required. With the A66 maintained on the existing route, the construction works can be undertaken efficiently. The drainage is required to mitigate flooding and overloading the current drainage network.



Construction works - New diversion route

To facilitate the construction of the new road a diversion route will be established to move traffic away from the work area. This will allow the new underbridge to be constructed in a safe and efficient manner. The new temporary road will be constructed from granular and asphalt material. It will be removed in later phases, once the new route is established.



Flitholme Road Underbridge

Target Workshop (20x20m)

Argocity and Plant Garages (15x15m)

Potential Brough Hill Fair Site

Potential Compound

Existing road to be broken out

Local access road to Flitholme

TS2-14

TS2-15

TS2-16

Footpath 372/020

Bridleway Track

Footpath

Brough Hill

Flitholme

Flitholme Cottages

Flitholme Grange

Langrigg

Tank

Drain

For continuation refer to Sheet 07

For continuation refer to Sheet 06

For continuation refer to Sheet 08

For continuation refer to Sheet 07

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 7 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S06 - DR - CH - 450207

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

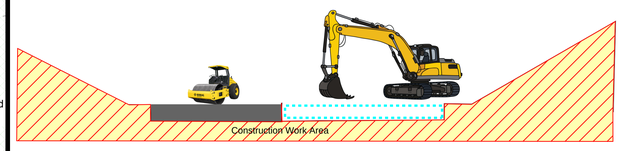
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

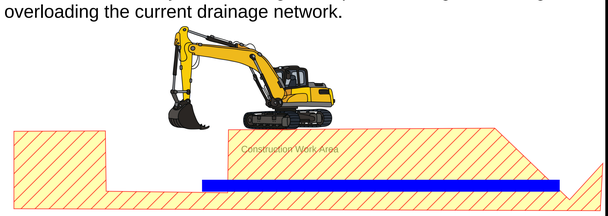
Construction works - New carriageway construction

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



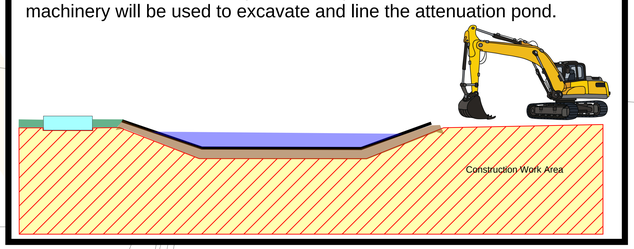
Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground support systems where required. With the A66 maintained on the existing route, the construction works can be undertaken efficiently. The drainage is required to mitigate flooding and overloading the current drainage network.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 8 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S06 - DR - CH - 458208

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

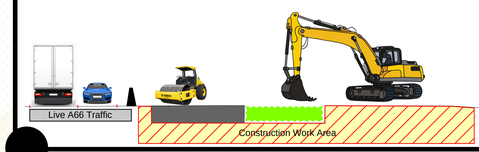
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

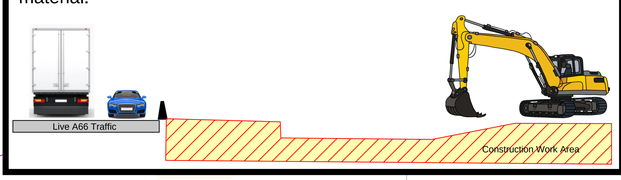
Construction works - New local access road

With traffic maintained on the existing A66, the new local access road can be constructed away from live traffic to minimise the impacts of the construction works on traffic flows. Where tie in connections are required to be undertaken with the existing road, additional traffic management may be required. The new road will be built up to a suitable formation level and a new granular and asphalt layer installed to form the new road in combination with new drainage and kerbs.



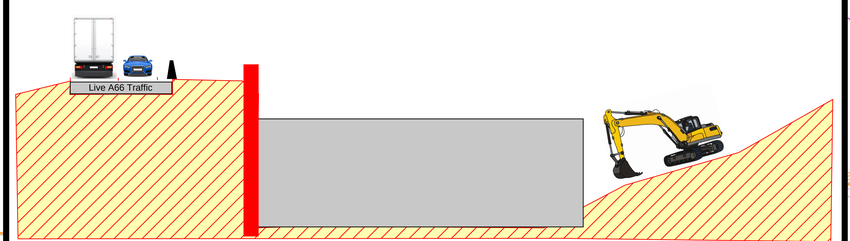
Construction works - New carriageway next to existing A66

With traffic maintained on the existing A66, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



Construction works - Underpass Construction

To assist non motorists to cross the new A66, an underpass will be constructed. The ground will be lower using excavation plant and the material relocated to stockpiles. The new underpass can then be constructed and suitably backfilled to enable the new A66 to be constructed over the top.



New Local Road linking detrunked A66 with Brough Mains Street

8m wide stone access track for West View Farm

Land required for construction of pond and track, be returned to farmer

Existing culvert retained (subject to structural assessment)

Topsoil 2389 m²

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- H — MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

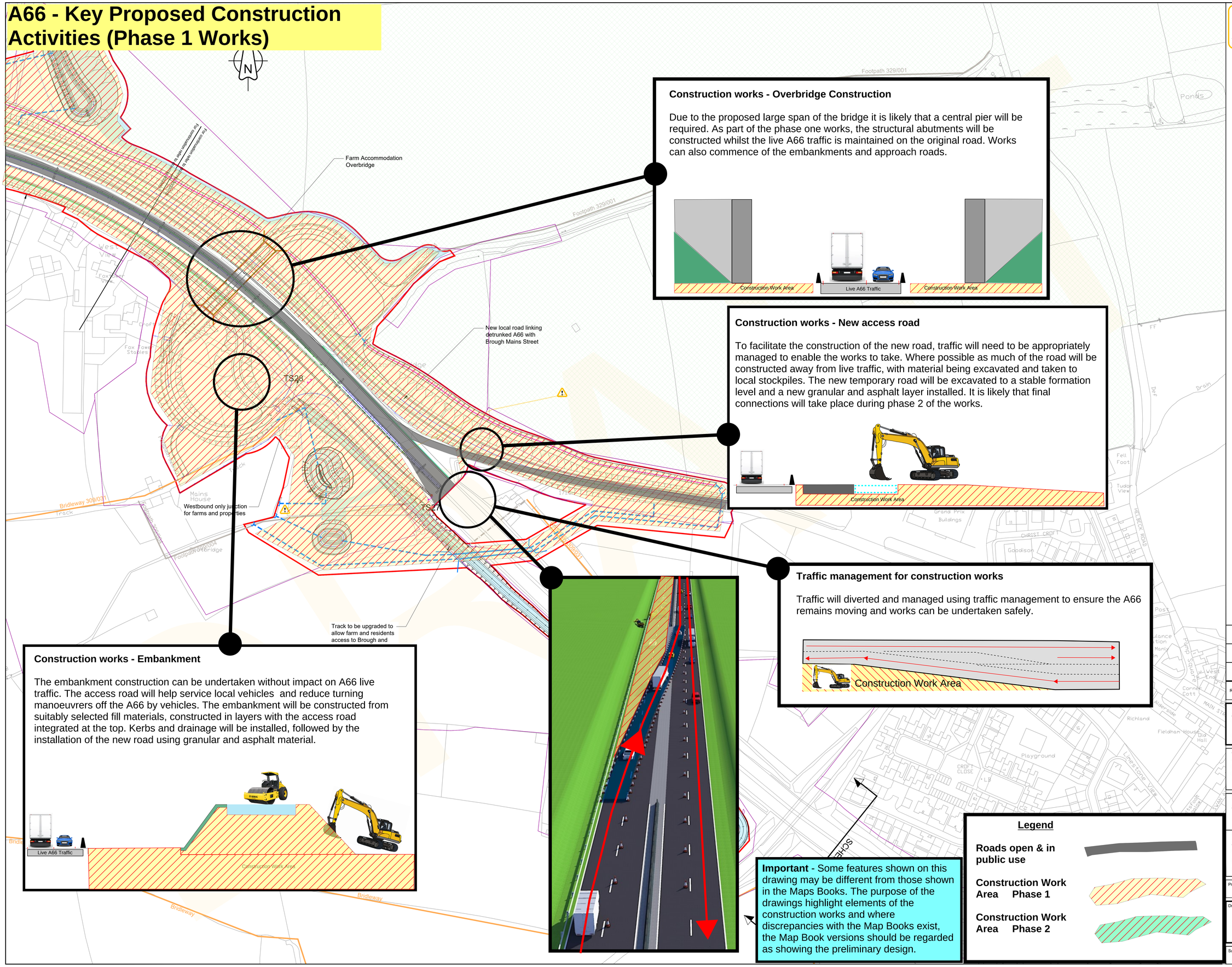
Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 9 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S06 - DR - CH - 467209

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Overbridge Construction

Due to the proposed large span of the bridge it is likely that a central pier will be required. As part of the phase one works, the structural abutments will be constructed whilst the live A66 traffic is maintained on the original road. Works can also commence of the embankments and approach roads.

Construction works - New access road

To facilitate the construction of the new road, traffic will need to be appropriately managed to enable the works to take. Where possible as much of the road will be constructed away from live traffic, with material being excavated and taken to local stockpiles. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed. It is likely that final connections will take place during phase 2 of the works.

Construction works - Embankment

The embankment construction can be undertaken without impact on A66 live traffic. The access road will help service local vehicles and reduce turning manoeuvrers off the A66 by vehicles. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top. Kerbs and drainage will be installed, followed by the installation of the new road using granular and asphalt material.

Traffic management for construction works

Traffic will diverted and managed using traffic management to ensure the A66 remains moving and works can be undertaken safely.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---	---
---	---	---	---	---	---	---
P01.1	---	---	---	---	---	---
		dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

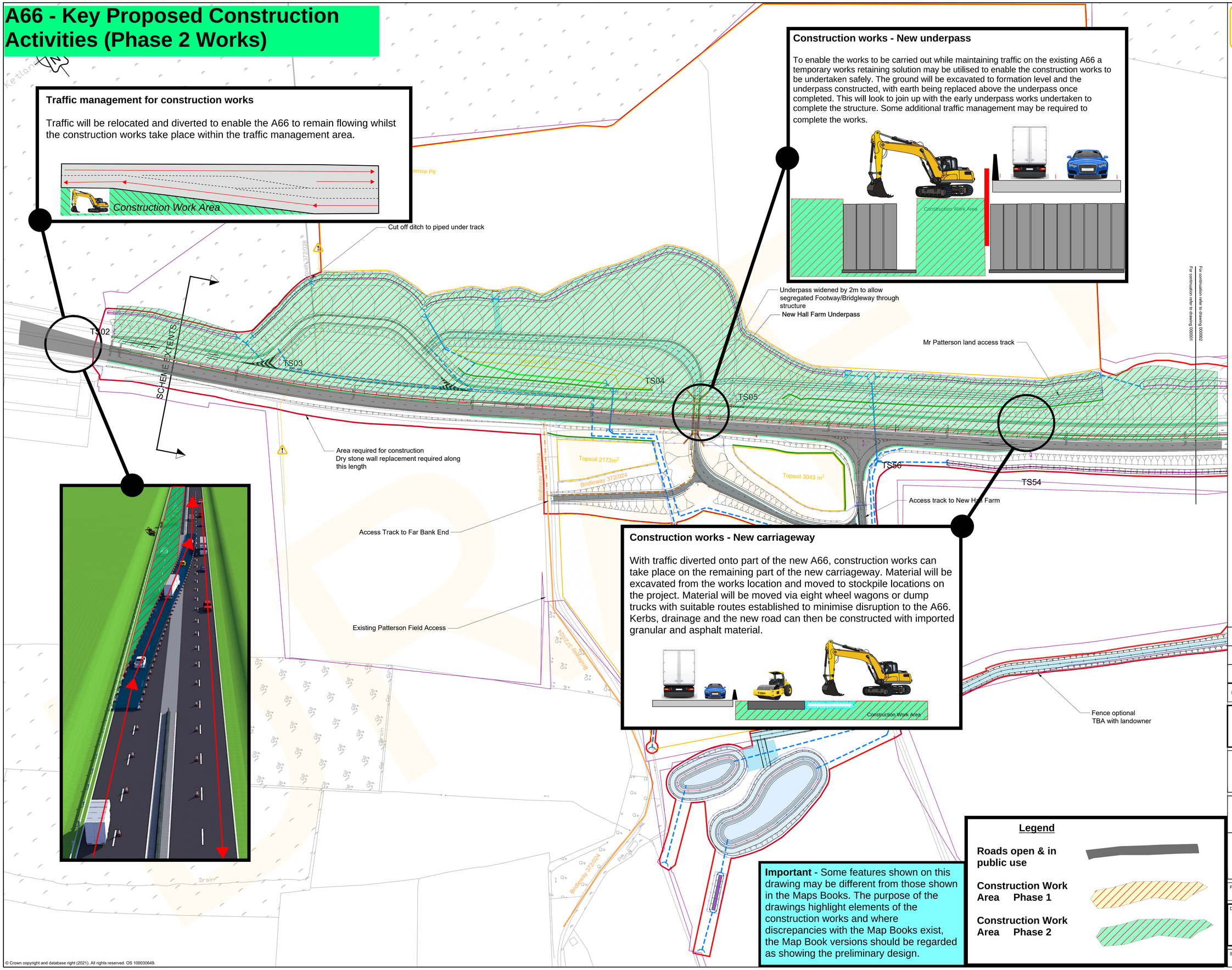
Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 10 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 - DR - CH - 476010
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)



Traffic management for construction works

Traffic will be relocated and diverted to enable the A66 to remain flowing whilst the construction works take place within the traffic management area.

Construction works - New underpass

To enable the works to be carried out while maintaining traffic on the existing A66 a temporary works retaining solution may be utilised to enable the construction works to be undertaken safely. The ground will be excavated to formation level and the underpass constructed, with earth being replaced above the underpass once completed. This will look to join up with the early underpass works undertaken to complete the structure. Some additional traffic management may be required to complete the works.

Construction works - New carriageway

With traffic diverted onto part of the new A66, construction works can take place on the remaining part of the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 1 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 -DR-CH- 398001
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

© Crown copyright and database right (2021). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

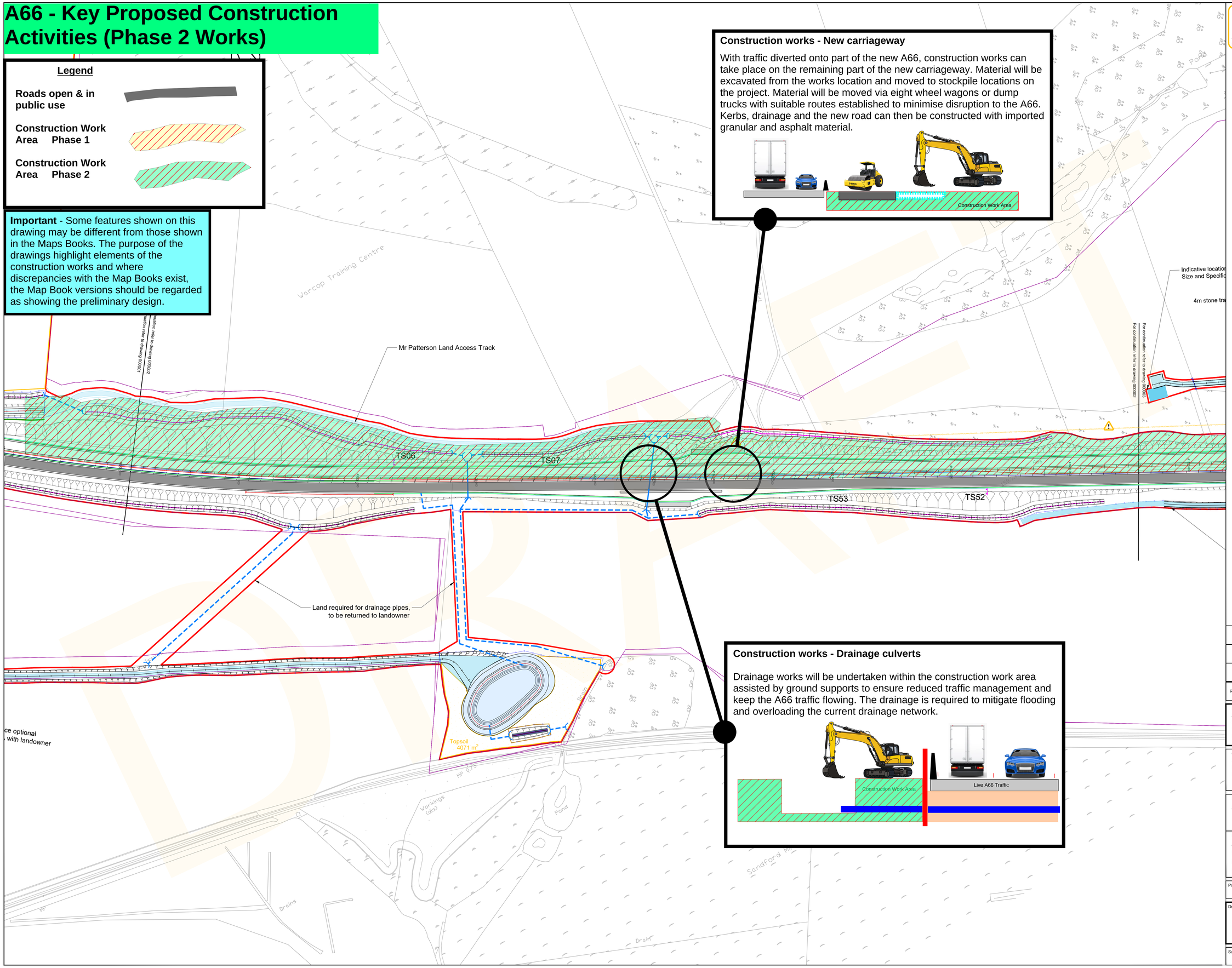
Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Construction works - New carriageway

With traffic diverted onto part of the new A66, construction works can take place on the remaining part of the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- H MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 2 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S06	DR	CH	407002

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

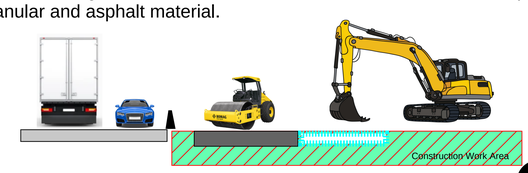
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

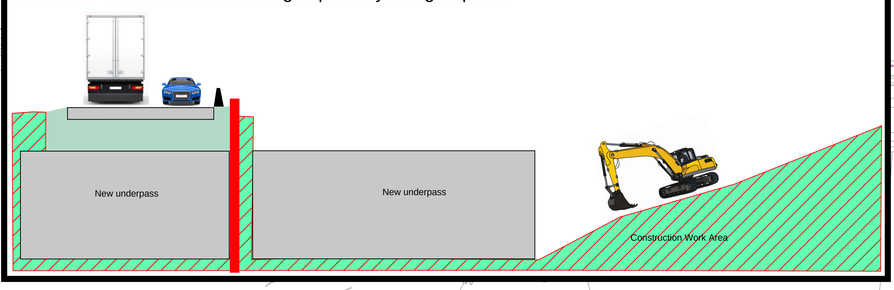
Construction works - New carriageway

With traffic diverted onto part of the new A66, construction works can take place on the remaining part of the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.



Construction works - Underpass construction

To reduce traffic movements across the A66, an underpass is to be constructed. This will be excavated into the ground with temporary works required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed below ground and then buried to ensure it blends into the surroundings. The new road with associated kerbs and drainage can then be constructed above. Works during this phase will connect up both elements of the underpass, with some additional traffic managed possibly being required.



Indicative location for sheep handling system. Size and Specification TBA

Indicative location for MOD Bylaw Flag

4m stone track to allow access for tenant farmer

4m stone track to allow access for tenant farmer

Indicative location of private water supply to be confirmed by others

Topsoil 4367 m²

Topsoil 4537 m²

Track being used as haul road due to pinch point: 8m stone track with 1m verges

For continuation refer to drawing 600002

For continuation refer to drawing 600004

TS08 TS09 TS12 TS46 TS47 TS48 TS49

Potential Compound

Potential Compound

Footpath 372/022

Footpath 372/013

Cringle Beck

Mire Sike

Platts

Pond

Pond

Track

Drain

Kirkgate

Bank End

Dyke

Lake

Footbridge

Tracks

Wood

Wood

Wood

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

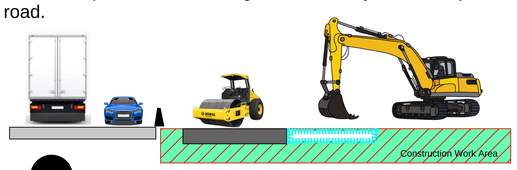
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

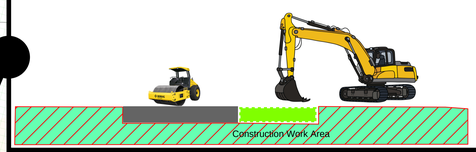
Construction works - New carriageway

With traffic now diverted on the new part of the A66, works will take place to excavate and install the remaining A66 road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed, followed by the granular and asphalt material being installed in layers to complete the new road.



Construction works - New De-trunked A66

Where the new de-trunked road ties in with the new overbridge access road, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



Re-profiling to be agreed with Strong Family

Cut of ditch to be piped under track

TS2-01

TS2-02

Cut of ditch to be piped under track

Temporary Compound

Temporary Compound

Footpath 372/013

Footpath 372/014

Footpath 372/014

Footpath 372/013

Footpath 372/013

Footpath 372/013

Footpath 372/013

Footpath 372/014

Footpath 372/014

Wildboar Hill

Eden Vale

Drain

Drain

Drain

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

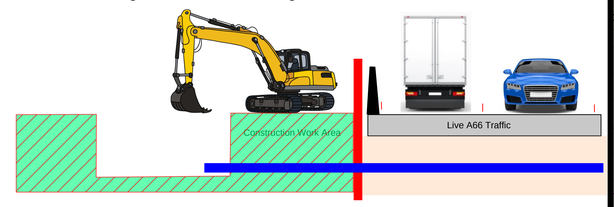
Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

TS2-03
TS2-04
TS2-05
TS2-06
TS2-07
TS2-08
TS2-09

Eastbound Junction
Temporary Compound
Temporary Compound
Existing Moor Bridge to be demolished
Earthworks at 1:3 could be steepened to reduce landtake
For continuation refer to Sheet 04
For continuation refer to Sheet 05
For continuation refer to Sheet 06
TBA with MOD ds with 3 yrd run pitch dimension guide
Footpath 372/021
Footpath 372/014
Warcop Training Centre
Sewage Works
Tanks
Earthwork
Track
Tennis Court
Walk Mill High Bridge
Walk Mill Beck
Hayber Beck
Coldbarn Lane
Street House
Moor Bridge

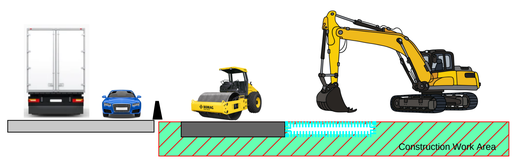
Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Construction works - New carriageway

With traffic now diverted on the new de-trunked road, works will take place to excavate and install the new A66 road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed, followed by the granular and asphalt material being installed in layers to complete the new road.



Construction works - New De-trunked A66

Where the new access road ties in with the old local access road, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 5 of 10

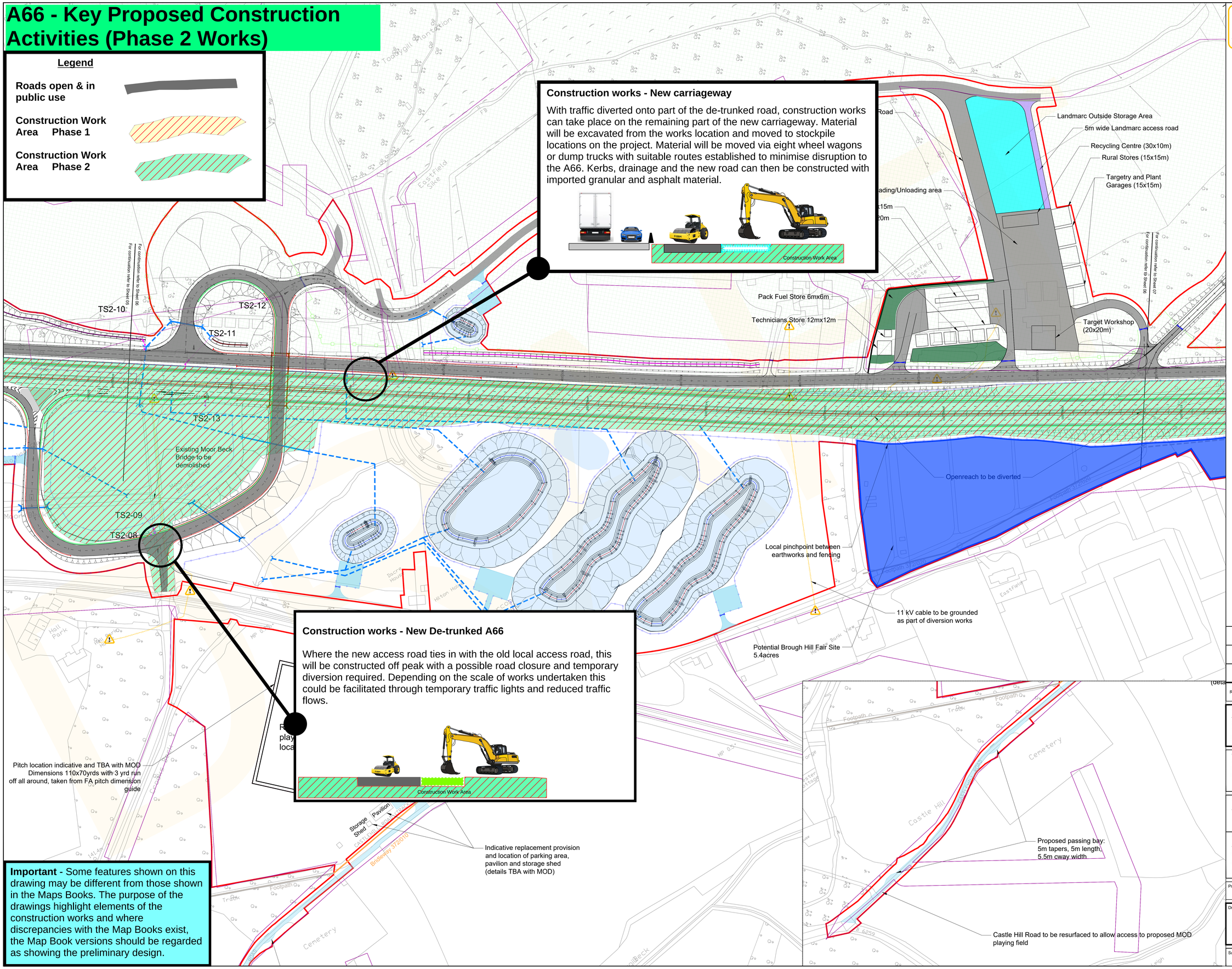
Project Ref. No.	Stage	Scale : 1:1000	@ A0
---	PCF3	Dimensions : M	

Drawing Number

Project	Originator	Volume	
HE565627	AMY	HGN	-
S06	DR	CH	433205
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- H MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 6 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 -DR-CH- 441206
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

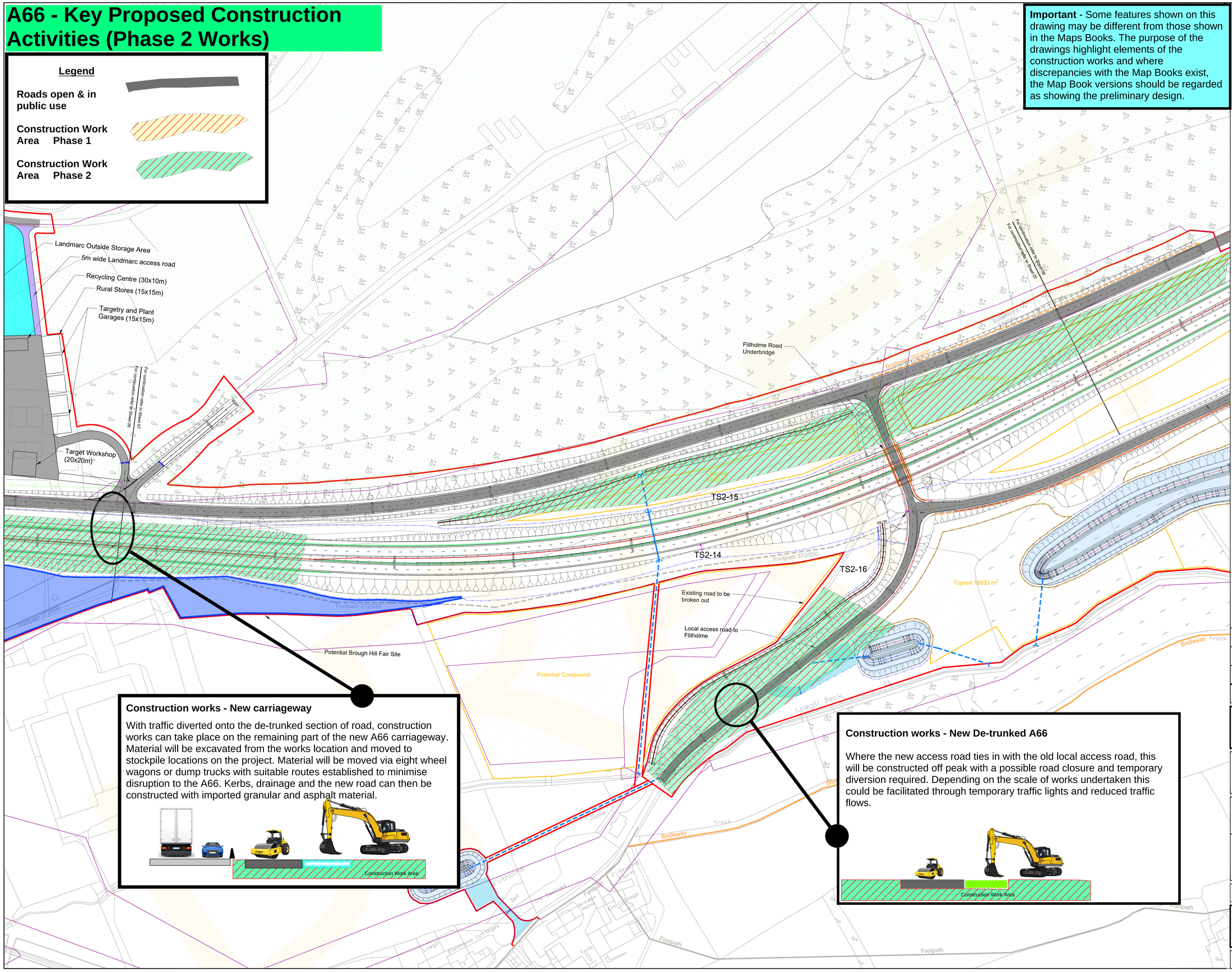
Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Construction works - New carriageway

With traffic diverted onto the de-trunked section of road, construction works can take place on the remaining part of the new A66 carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Construction works - New De-trunked A66

Where the new access road ties in with the old local access road, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 7 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S06	DR	CH	450207

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

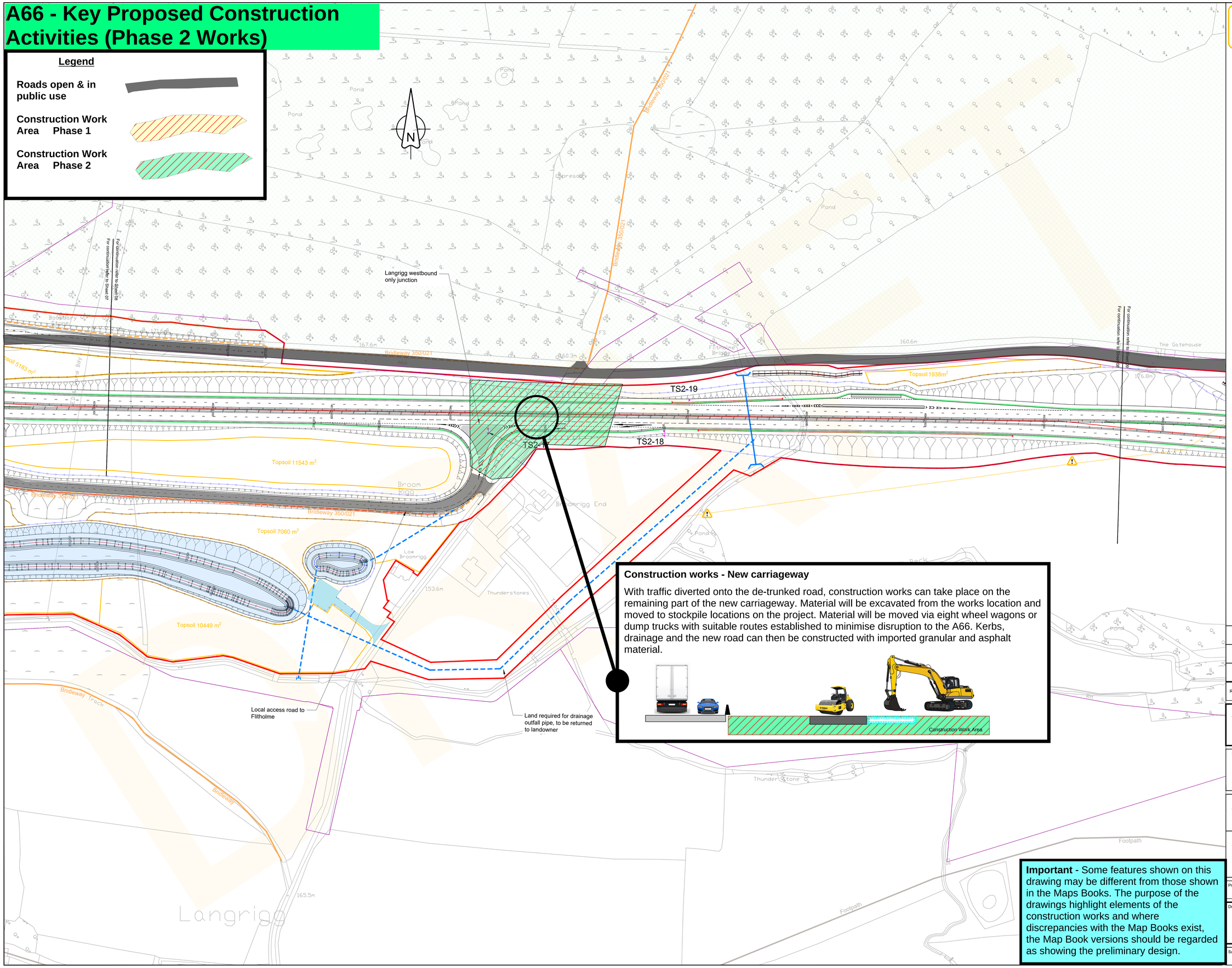
A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2



Construction works - New carriageway

With traffic diverted onto the de-trunked road, construction works can take place on the remaining part of the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details	Created	Checked	Reviewed	Approved	Authorised
---	---	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01.1	---	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 8 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume			
HE565627 -	AMY -	HGN -			
S06		- DR -	CH -	458208	
Location		Type	Role	Number	

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

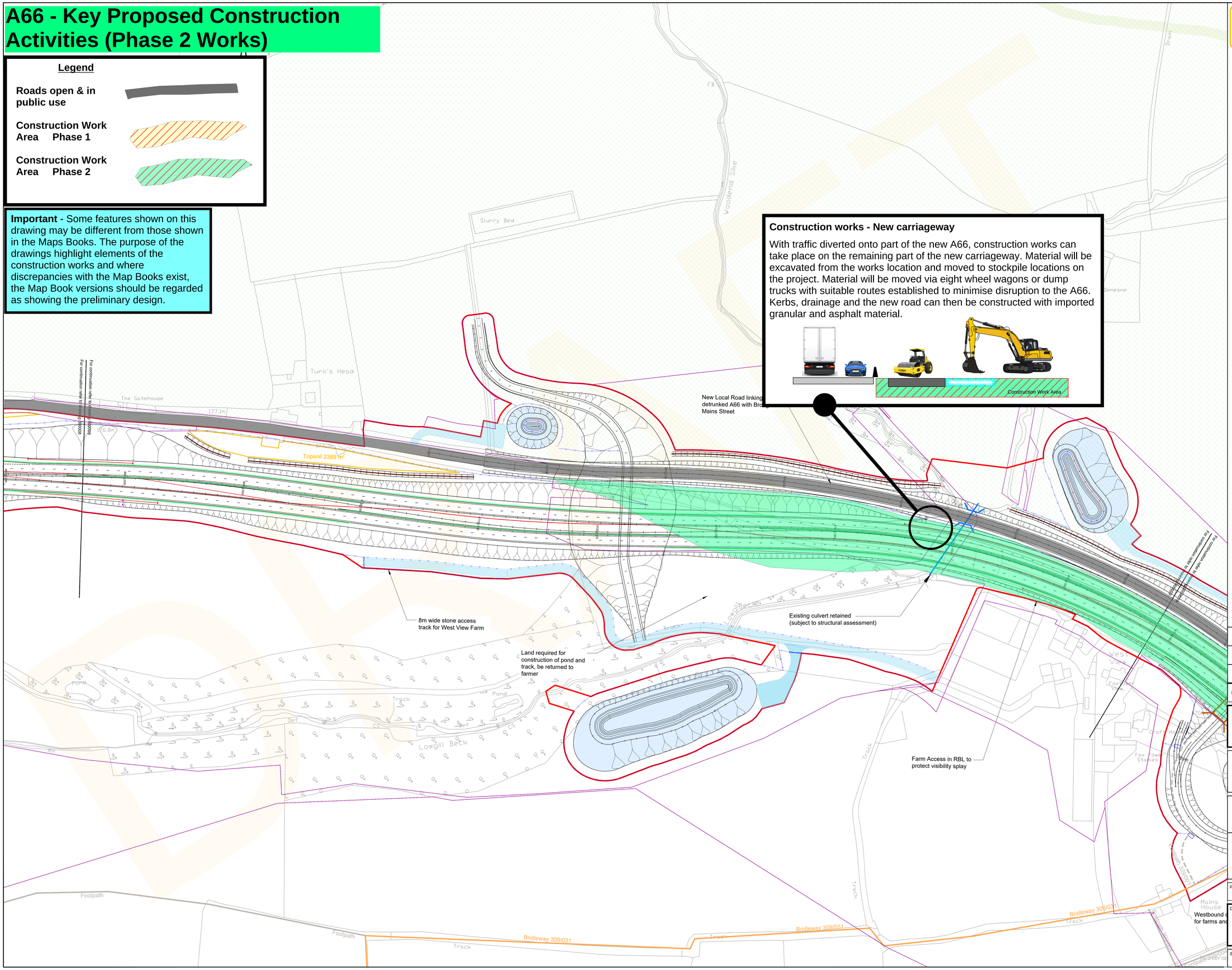
Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Construction works - New carriageway

With traffic diverted onto part of the new A66, construction works can take place on the remaining part of the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. Kerbs, drainage and the new road can then be constructed with imported granular and asphalt material.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 9 of 10

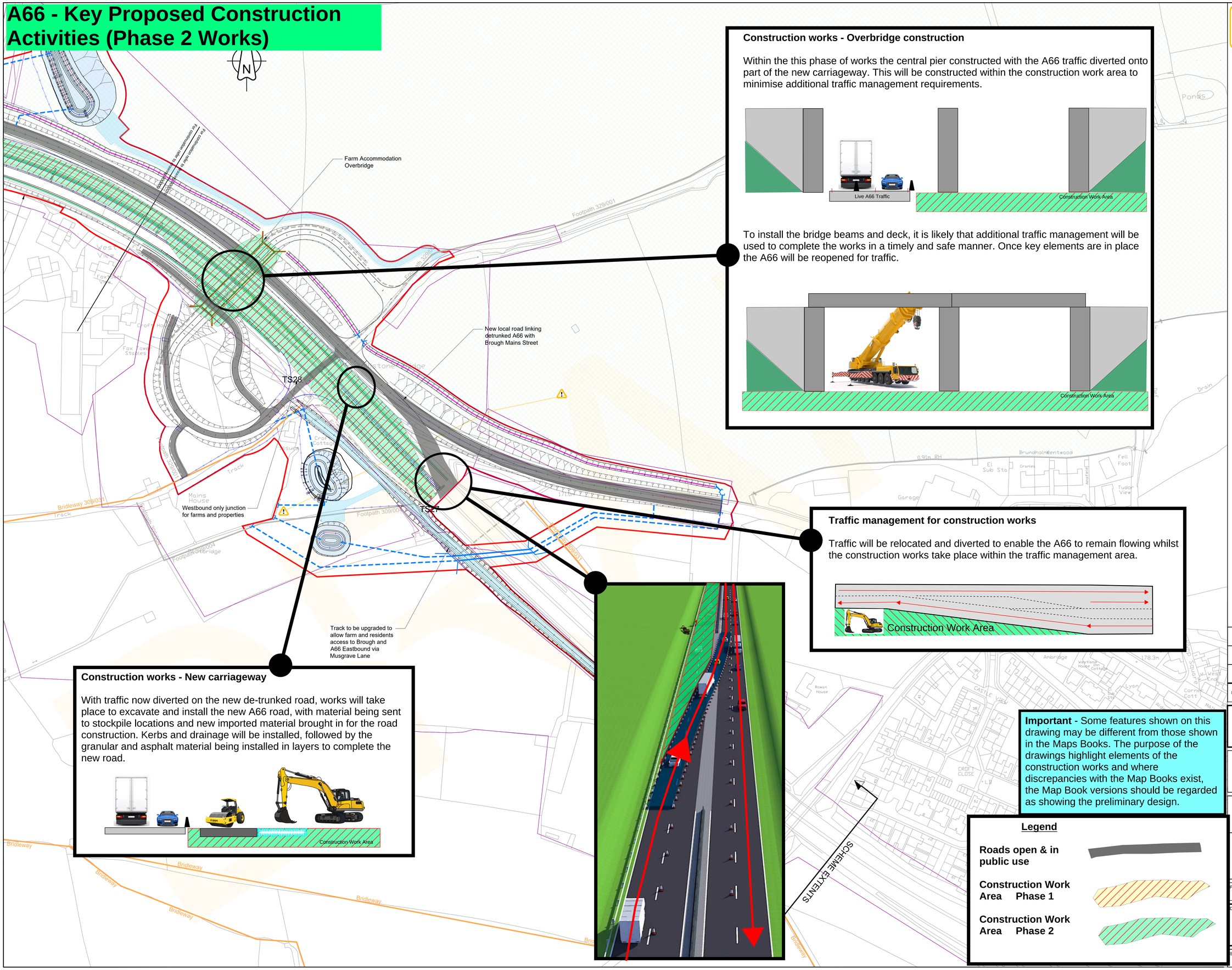
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S06	DR	CH	467209

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 - Key Proposed Construction Activities (Phase 2 Works)



Construction works - Overbridge construction

Within the this phase of works the central pier constructed with the A66 traffic diverted onto part of the new carriageway. This will be constructed within the construction work area to minimise additional traffic management requirements.

To install the bridge beams and deck, it is likely that additional traffic management will be used to complete the works in a timely and safe manner. Once key elements are in place the A66 will be reopened for traffic.

Traffic management for construction works

Traffic will be relocated and diverted to enable the A66 to remain flowing whilst the construction works take place within the traffic management area.

Construction works - New carriageway

With traffic now diverted on the new de-trunked road, works will take place to excavate and install the new A66 road, with material being sent to stockpile locations and new imported material brought in for the road construction. Kerbs and drainage will be installed, followed by the granular and asphalt material being installed in layers to complete the new road.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

1. Overhead Services.
2. Underground Services.

NOTES

1. All levels are in metres above Ordnance Survey Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings.

KEY

- Red Line Boundary
- Proposed Fence Line
- Existing Layout
- Proposed Layout
- Highway Structure
- Culvert
- Cut-off drain
- Earthworks
- Pond
- Footpath
- Proposed Footpath
- Abandoned Footpath
- Bridleway
- Proposed Bridleway
- Abandoned Bridleway
- Farm Track/Access
- Proposed Gate
- Compound/ Storage Locations
- Paved Area
- Area of Outstanding Natural Beauty
- Major Overhead Services
- Major Underground Services
- Headwall
- Pipe to Outfall
- Cattle Grid
- Hedge
- MOD Helipad
- Proposed Vehicle Restraint System
- Concrete Drainage Channel
- Sign Position
- Filter Drain
- MOD Boundary Fence
- Green Line Boundary
- Potential Brough Hill Fair Site

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01.1	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Appleby to Brough
Option 2 - (Black-Blue-Black)
General Arrangement
Sheet 10 of 10

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S06 - DR - CH - 476010
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P01.1

A66 Northern Trans-Pennine project

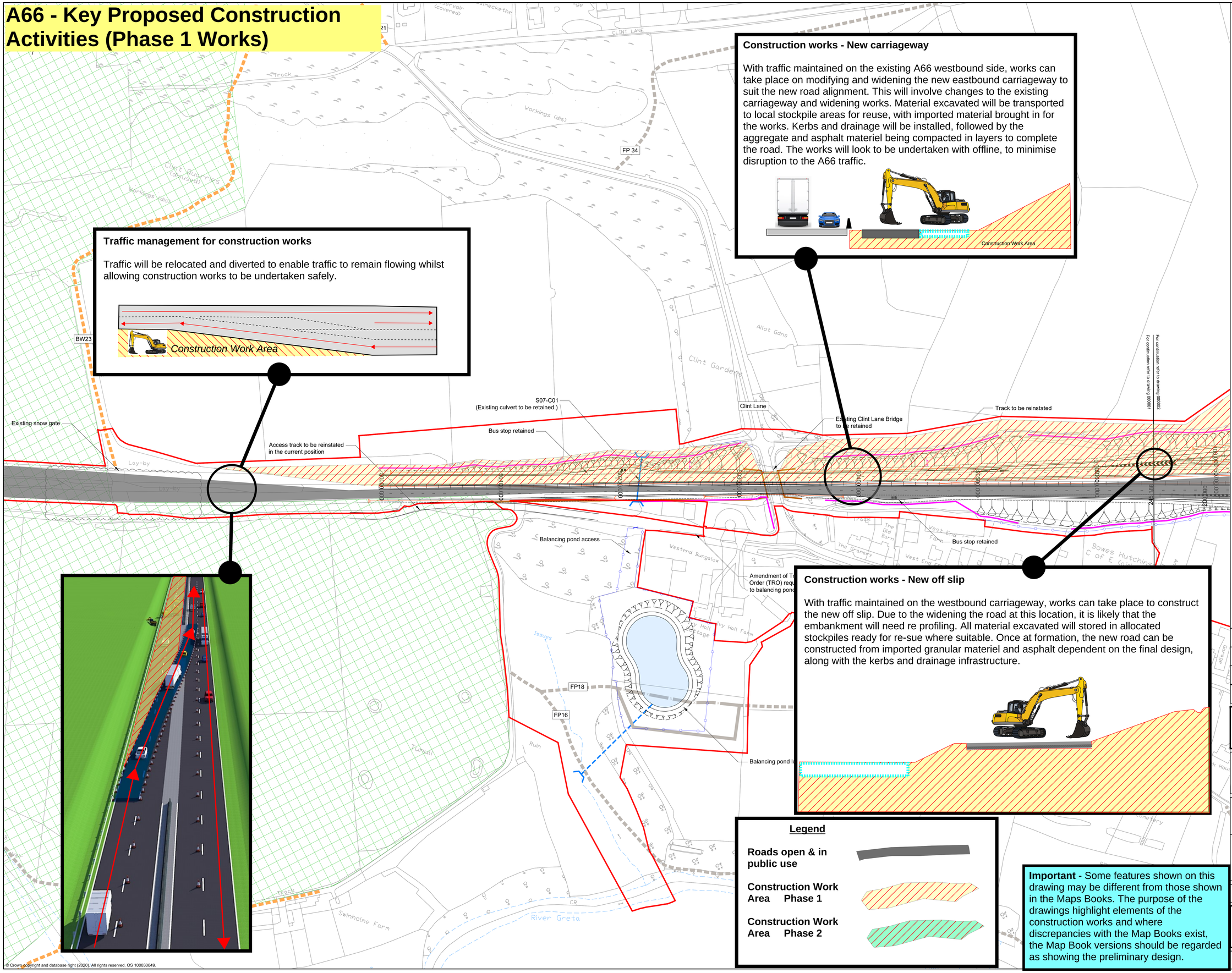
Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

Bowes Bypass

A66 - Key Proposed Construction Activities (Phase 1 Works)



Traffic management for construction works

Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.

Construction works - New carriageway

With traffic maintained on the existing A66 westbound side, works can take place on modifying and widening the new eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road. The works will look to be undertaken with offline, to minimise disruption to the A66 traffic.

Construction works - New off slip

With traffic maintained on the westbound carriageway, works can take place to construct the new off slip. Due to the widening the road at this location, it is likely that the embankment will need re profiling. All material excavated will stored in allocated stockpiles ready for re-sue where suitable. Once at formation, the new road can be constructed from imported granular materiel and asphalt dependent on the final design, along with the kerbs and drainage infrastructure.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 1 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 -DR-CH- 500001
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 1A Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

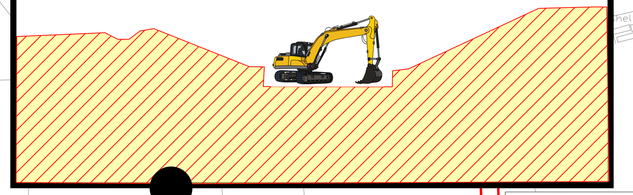
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

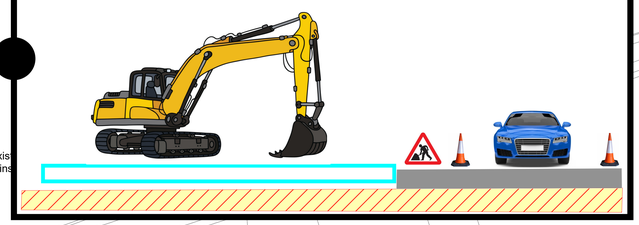
Construction works - Slip roads

The new road will be constructed away from the live A66 traffic with the traffic management in place. To form the road, excavated material is required to be loaded into wagons or dumpers to be stockpiled. Once down to formation the new road can be constructed as per the design using imported stone and asphalt material. Kerbs and drainage will also be installed to complete the road.



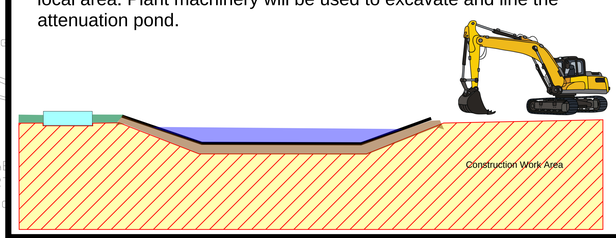
Construction works - New road alignment

Works will take place to install the new road with the existing A67 with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place close to live traffic, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



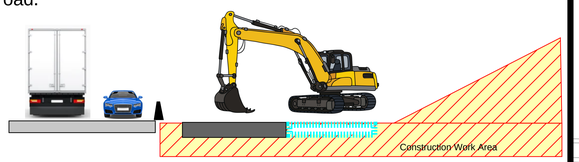
Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Construction works - New carriageway

With traffic maintained on the existing A66 westbound side, works can take place on modifying and widening the new eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road.



Proposed Bowes Junction underbridge

Lyndale Farm Underpass extended to the North

Existing Bowes Junction underbridge to be retained

S07-C02 (Existing culvert to be retained)

Existing Lyndale Farm Underpass southern portal to remain as existing

S07-C03

S07-C04

S07-C05

S07-C06

Maintenance Access S07-03

Maintenance Access S07-02

FP6

FP9

FP18

Bowes

Camp Site (disused)

Black Lodge

Bowes Hall

Old Police House

Low Road

Castle

ROMAN BATH (remains of)

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision						
---	---					
---	---					
P01	ISSUED FOR MODEL FREEZE D					
	SHOT	SHOT	THAL	RPEA	---	
	19/02/21	19/02/21	19/02/21	19/02/21	---	
	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 2 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

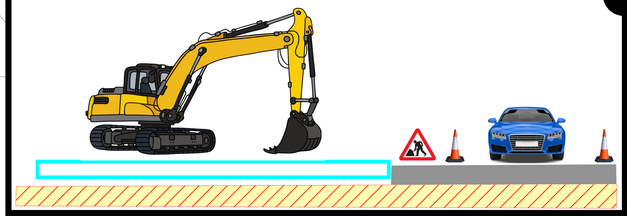
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 - DR - CH - 500002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 1B Works)

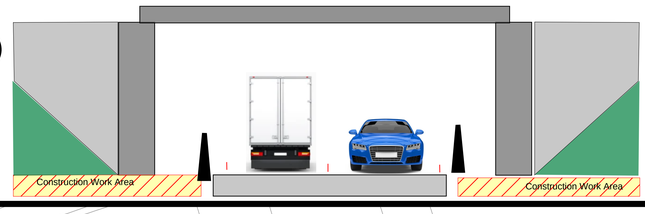
Construction works - New road alignment

Works will take place to install the new road with the existing A67 with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place online, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



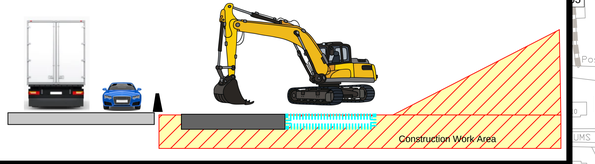
Construction works - Extend Underpass

To enable the new dual carriageway to be constructed it will be necessary to extend the existing underpass. To maintain traffic flows on the A67, it is likely that the abutments will be set back to enable them to be safely constructed whilst keeping traffic flowing. The abutment walls will be constructed and bridge beams place on top, followed by the deck and road. Additional traffic management is expected to lift the roof beams into place. Whilst the works are progressing, the existing A67 traffic will incur very little disruption.



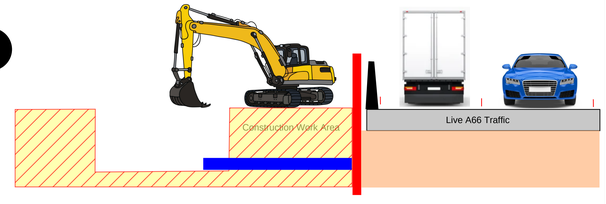
Construction works - New carriageway

With traffic maintained on the existing A66 westbound side, works can take place on modifying and widening the new eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road.



Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision					
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
Revision details	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 2 of 4

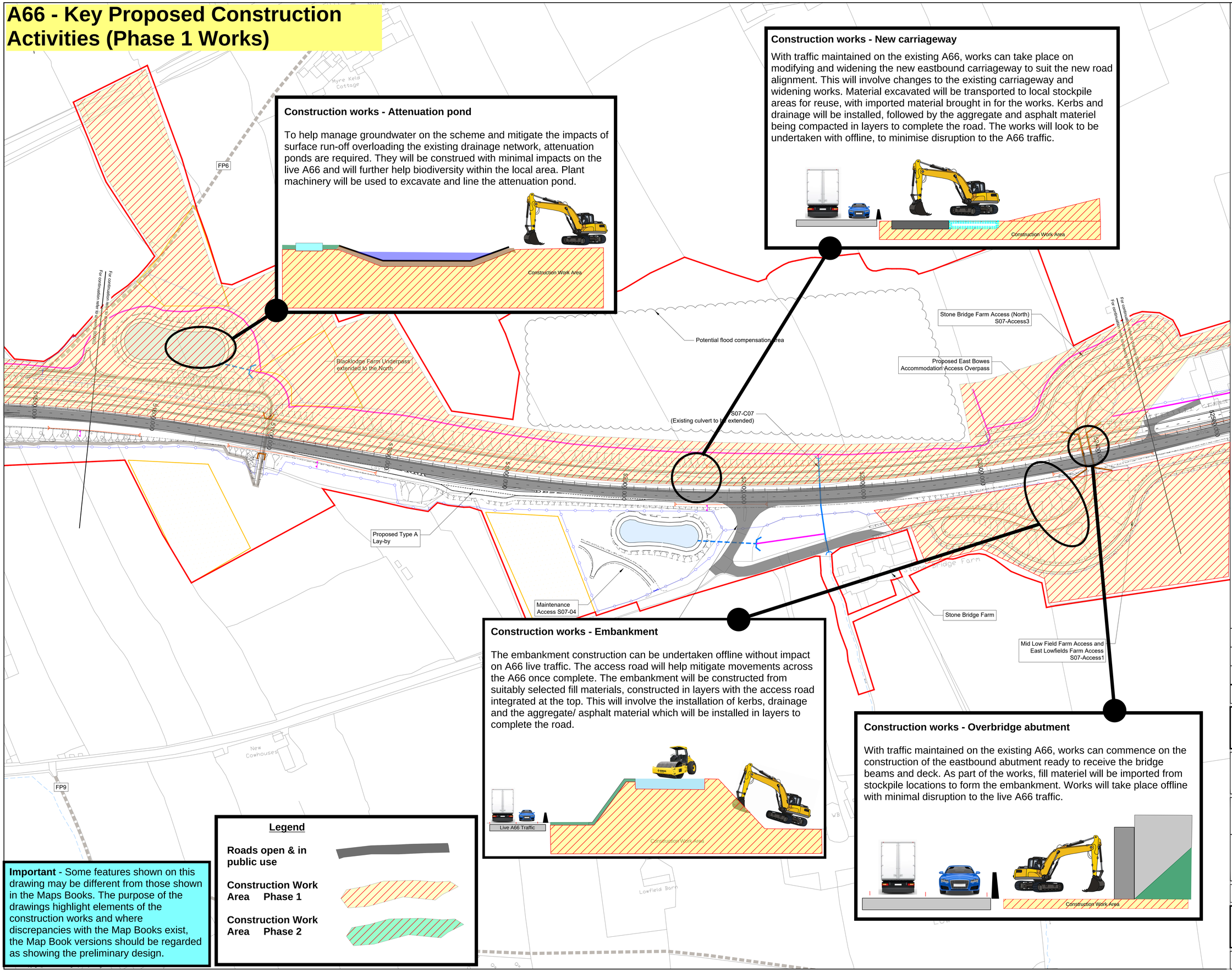
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - HGN - S07 - DR - CH - 500002

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Construction works - New carriageway

With traffic maintained on the existing A66, works can take place on modifying and widening the new eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road. The works will look to be undertaken with offline, to minimise disruption to the A66 traffic.

Construction works - Embankment

The embankment construction can be undertaken offline without impact on A66 live traffic. The access road will help mitigate movements across the A66 once complete. The embankment will be constructed from suitably selected fill materials, constructed in layers with the access road integrated at the top. This will involve the installation of kerbs, drainage and the aggregate/ asphalt material which will be installed in layers to complete the road.

Construction works - Overbridge abutment

With traffic maintained on the existing A66, works can commence on the construction of the eastbound abutment ready to receive the bridge beams and deck. As part of the works, fill materiel will be imported from stockpile locations to form the embankment. Works will take place offline with minimal disruption to the live A66 traffic.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 3 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

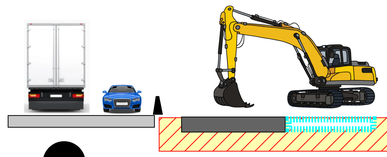
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 -DR-CH- 500003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

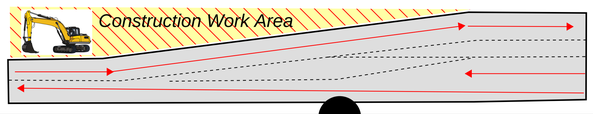
Construction works - New carriageway

With traffic maintained on the existing A66 westbound side, works can take place on modifying and widening the new eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road.



Traffic management for construction works

Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 4 of 4

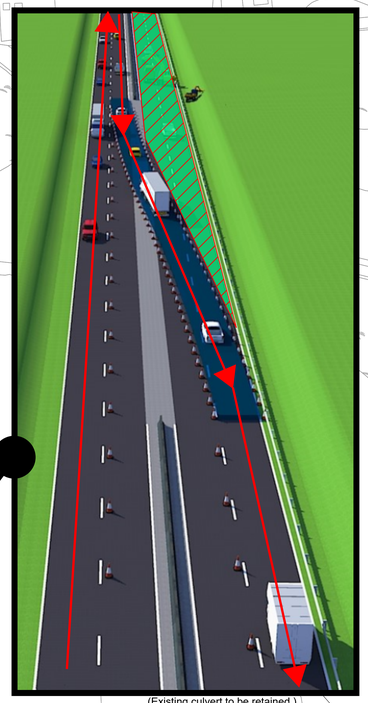
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 - DR - CH - 500004
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

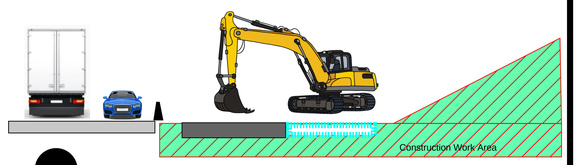
Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



(Existing culvert to be retained.)

Construction works - New carriageway

With traffic diverted onto part of the new A66, works can take place on modifying and widening the new westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road.



Existing snow gate

Access track to be reinstated in the current position

Bus stop retained

Clint Lane

Existing Clint Lane Bridge to be retained

Track to be reinstated

Balancing pond access

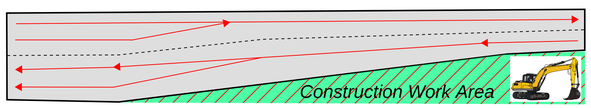
Amendment of Traffic Regulation Order (TRO) required to allow access to balancing ponds

Bus stop retained

Balancing pond location

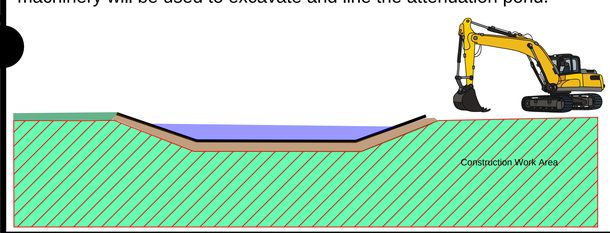
Traffic Management for construction works

Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 1 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 -DR-CH- 500001
Location | Type | Role | Number

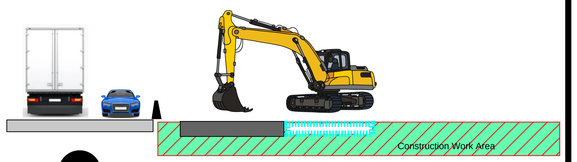
Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

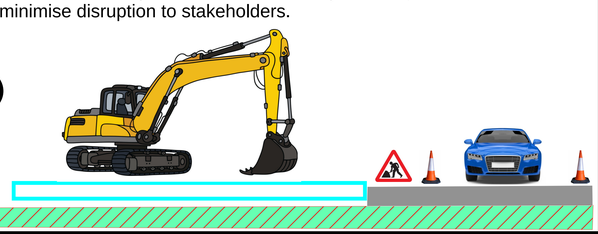
Construction works - New carriageway

With traffic diverted onto part of the new A66, works can take place on modifying and widening the new westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by the aggregate and asphalt materiel being compacted in layers to complete the road.



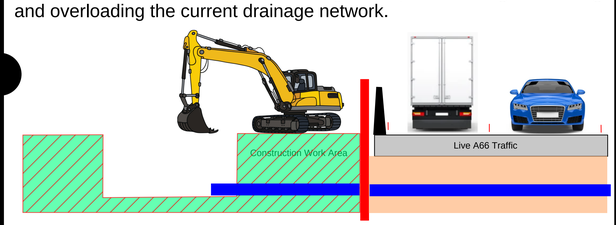
Construction works - New road alignment

Works will take place to install part of the new A66 dual carriageway section of road road with the existing road, with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. With some works taking place close to live traffic, it may be necessary to impose one way traffic restriction to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Construction works - Drainage culverts

Drainage works will be undertaken within the construction work area assisted by ground supports to ensure reduced traffic management and keep the A66 traffic flowing. The drainage is required to mitigate flooding and overloading the current drainage network.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

S07-C03
S07-C04
S07-C05
Maintenance Access S07-03
Existing farm buildings ruins to be demolished
Proposed Bowes Junction underbridge
A67
Lyndale Farm Underpass extended to the North
For continuation refer to drawing 000001
For continuation refer to drawing 000002
Existing Bowes Junction underbridge to be retained
S07-C02 (Existing culvert to be retained)
S07-C06
Maintenance Access S07-02
For continuation refer to drawing 000003
For continuation refer to drawing 000002
Bowes Hutchinson C of E (aided) School
Castle Terrace
Meadows Edge
The Old Chapel
Castle
LAVATRAE ROMAN FORT
Cemetery
ROMAN BATH (remains of)
BACK LANE
South Manor
Grey Dykes
Kiln Cottage
Giverny
Village Hall
Town End
West Byre
East Byre
Bowes Hall
Rose Cottage
Old Police House
Stone Bridge
ROMAN ROAD
THE ANNUMS
Black Lodge
Camp Site (disused)
Shelter
Path
FP16
FP17
FP18
FP33

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT 19/02/21	SHOT 19/02/21	THAL 19/02/21	RPEA 19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 2 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 - DR - CH - 500002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

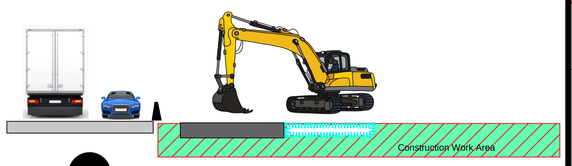
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

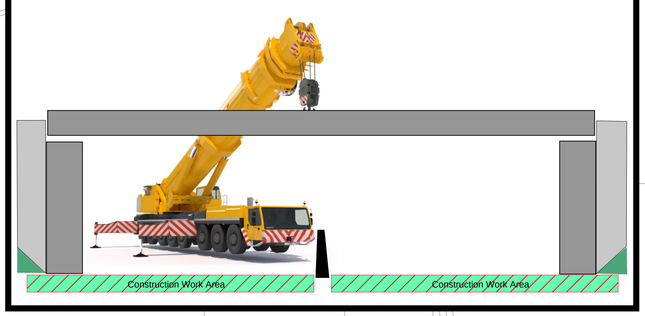
Construction works - New carriageway

With traffic diverted on the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will also be installed, followed by the compaction of aggregate and asphalt to complete the road.



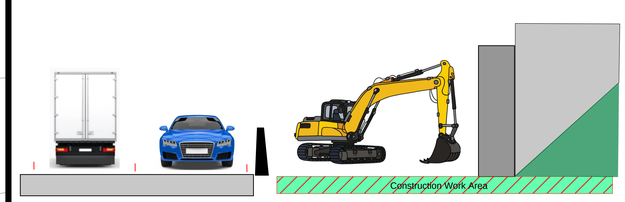
Construction works - Overbridge

On completion of the abutment, the bridge beams will be installed and the deck completed. Additional traffic management is likely to be required for this to take place and ensure the safety of the travelling public. On completion of the deck, the new road can be installed over the top and connections made with the embankment approach roads.



Construction works - Overbridge abutment

With traffic maintained on the eastbound carriageway, works can commence on the construction of the westbound abutment. As part of the works, fill materiel will be imported from stockpile locations to form the embankment.



Blacklodge Farm Underpass extended to the North

S07-C07
(Existing culvert to be extended)

Stone Bridge Farm Access (North)
S07-Access3

Proposed East Bowes Accommodation Access Overpass

Proposed Type A Lay-by

Stone Bridge Farm

Mid Low Field Farm Access and

Myre Kelo Cottage

New Cownouses

Lowfield Barn

Low Field Farm

Low Field

FP6

FP8

FP9

FP9

For continuation refer to drawing 500003

For continuation refer to drawing 500004

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

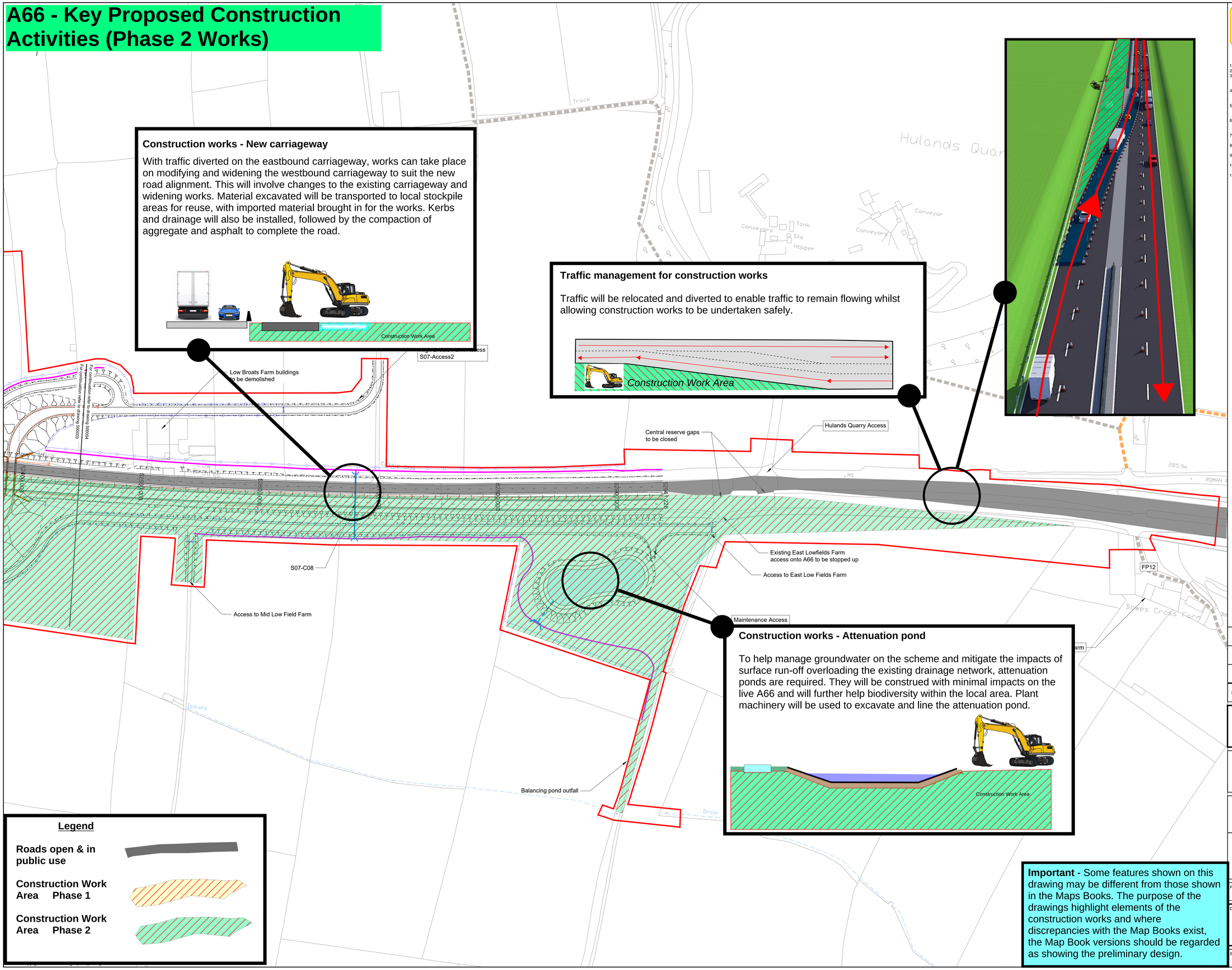
Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 3 of 4

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S07 -DR-CH- 500003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)



Construction works - New carriageway

With traffic diverted on the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will also be installed, followed by the compaction of aggregate and asphalt to complete the road.

Traffic management for construction works

Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S07-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Red line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Compound/Storage Area
- Demolished buildings
- AONB

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 7: Bowes Bypass
General Arrangement
Sheet 4 of 4

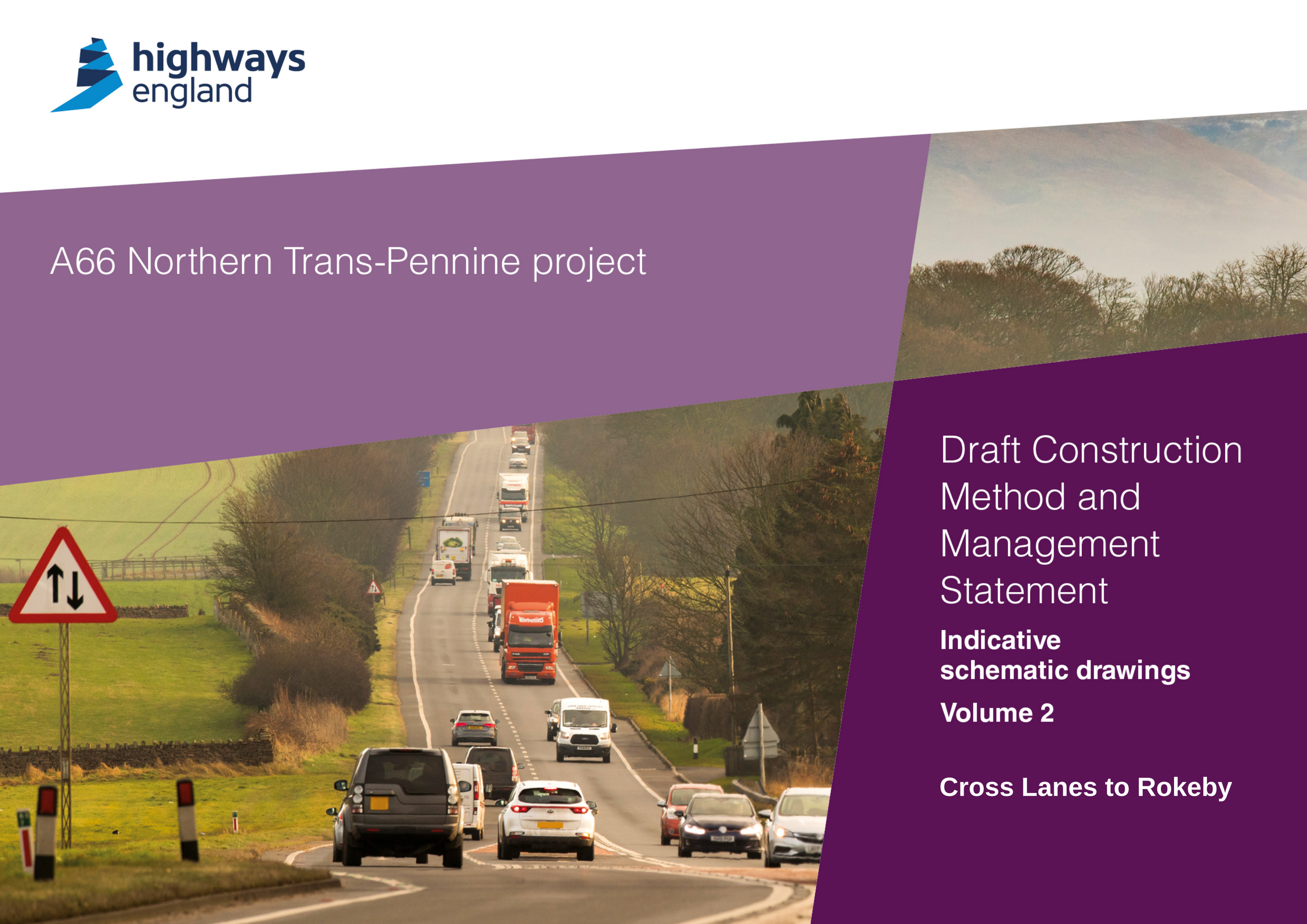
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S07	DR	CH	500004

Suitability	Suitability Description	Revision
S3	Fit for Internal Review and Comment	P01

A66 Northern Trans-Pennine project



Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

Cross Lanes to Rokeby

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

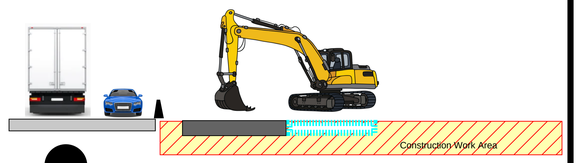
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

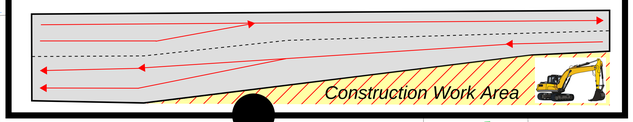
Construction works - New carriageway

With traffic diverted on the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by aggregate and asphalt being compacted in layers to form the new road. The works will be undertaken away from live traffic with traffic management in place, to minimise disruption to the A66 traffic.



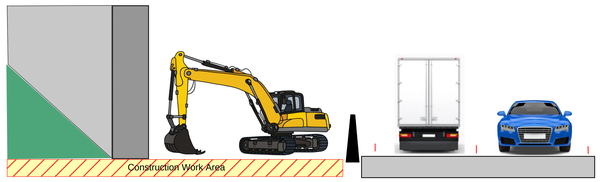
Traffic Management for construction works

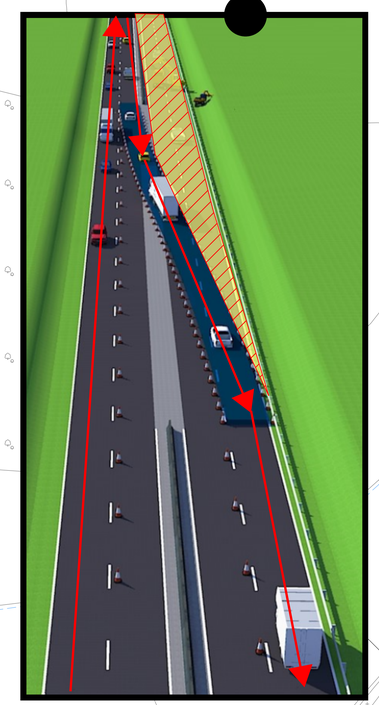
Traffic will be diverted to enable works to take place with traffic management in use.



Construction works - Overbridge

The overbridge has been designed with sufficient working widths to enable the construction of the abutment whilst A66 traffic is maintained. Once complete it will help reduce vehicle movements turning, helping to improve traffic flows. The remaining part of the bridge will be constructed as part of the next phases of works, including the deck.

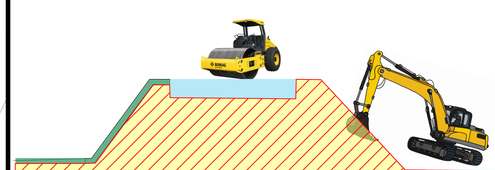




Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

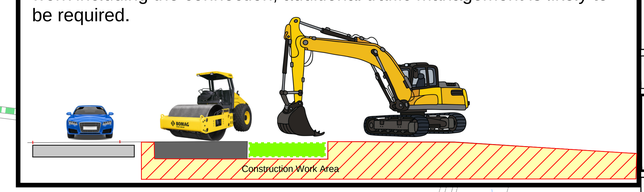
Construction works - Embankment

The embankment will be constructed from suitably selected fill materials, compacted in layers when complete the access road constructed. Drainage and kerbs will be followed by aggregate and asphalt being installed in layers to complete the new road surface.



Construction works - New road and upgrade works

Whilst the existing road remains operational, the new access roads will be constructed where possible, excluding the final connection elements. This will involve new kerbs, drainage and aggregate / asphalt material that is compacted in layers to form the new road. For some elements of work including the connection, additional traffic management is likely to be required.



Proposed link road connecting Rutherford Lane to B6277
Proposed compact connector road
Overbridge
Existing Rutherford Lane stopped-up
Proposed compact connector road
Existing Moorhouse Lane stopped-up
Cross Lanes Organic Farm Shop & Cafe
Moorhouse Lane
Cross Lanes
North Bitts
Poundergill
Tutta Beck
Tutta Bridge
FP7
FP8
FP14
218.2m
218.8m
235.0m

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 1 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S08 - DR - CH - 600001

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

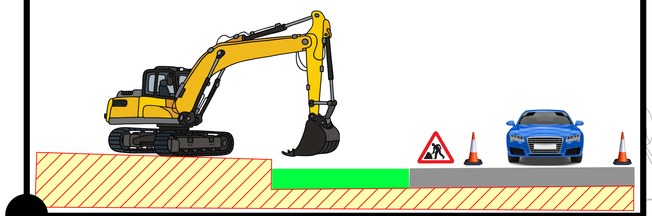
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

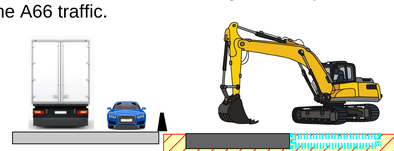
Construction works - Additional widening of A66

To enable the new A66 to be constructed safely away from live traffic, local construction of the east bound carriageway will be necessary. This will be undertaken, at this location, by moving the traffic to the Westbound carriageway and constructing the localised widening. Traffic will then be moved to the Eastbound carriageway so the westbound can be constructed.



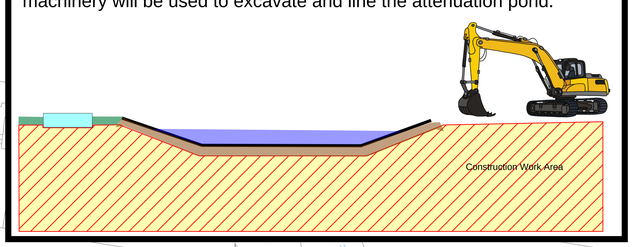
Construction works - New carriageway

With the localised widening completed and traffic diverted to the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by aggregate and asphalt being compacted in layers to form the new road. The works will look to be undertaken away from live traffic with traffic management in place, to minimise disruption to the A66 traffic.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Street Side Farm Access

Street Side Farm

Proposed Type A Lay-by

Access to Birk House Farm stopped-up

For continuation refer to drawing 600002

For continuation refer to drawing 600001

Tutta Bridge

The Cottage

Track

MOORHOUSE LANE

Graham's Wood

Manyfold Beck

Slurry Bed

Street Side Farm

Birk House

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 2 of 5

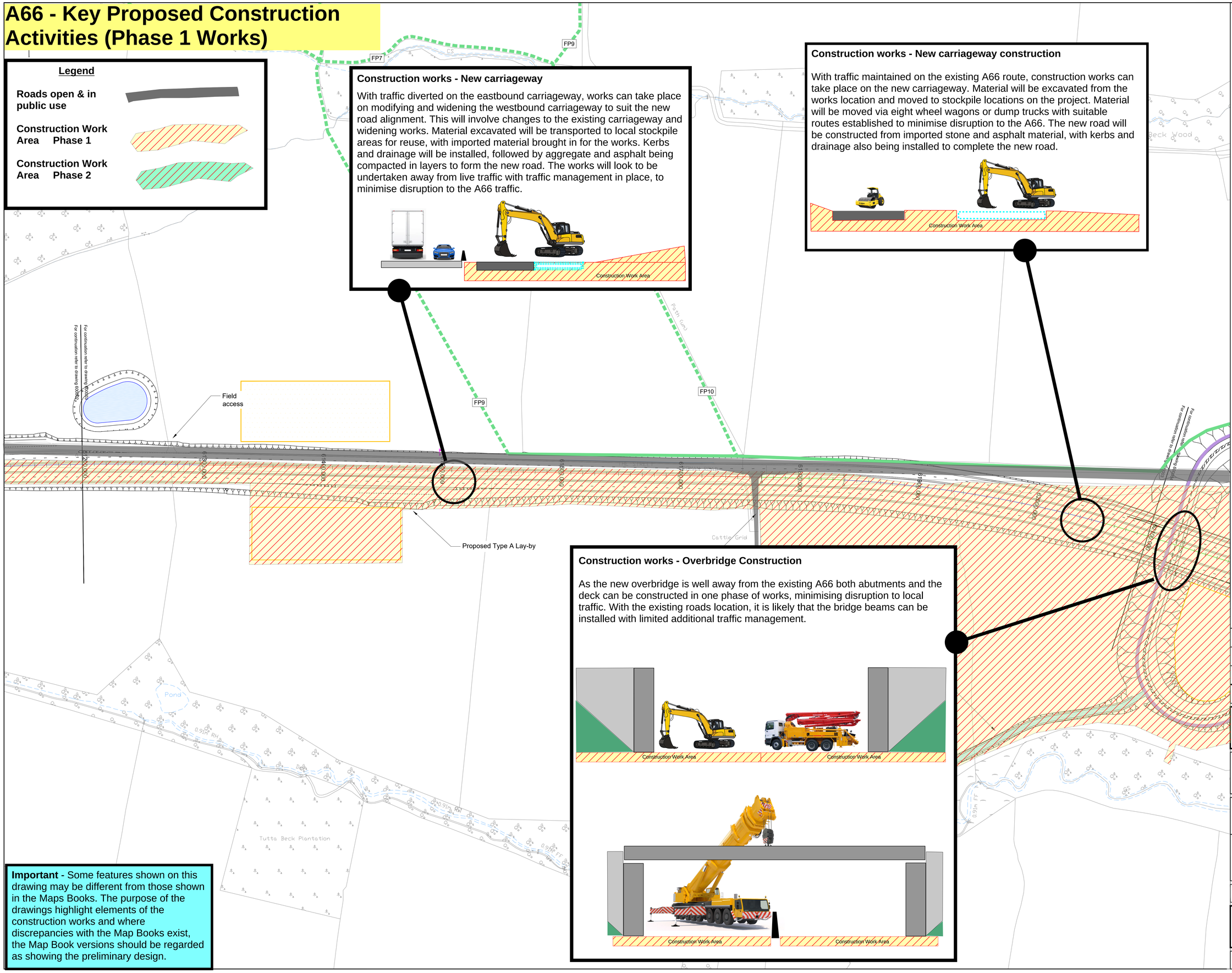
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 -DR-CH- 600002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New carriageway

With traffic diverted on the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by aggregate and asphalt being compacted in layers to form the new road. The works will look to be undertaken away from live traffic with traffic management in place, to minimise disruption to the A66 traffic.

Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material, with kerbs and drainage also being installed to complete the new road.

Construction works - Overbridge Construction

As the new overbridge is well away from the existing A66 both abutments and the deck can be constructed in one phase of works, minimising disruption to local traffic. With the existing roads location, it is likely that the bridge beams can be installed with limited additional traffic management.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
	---	---	---	---	---
	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 3 of 5

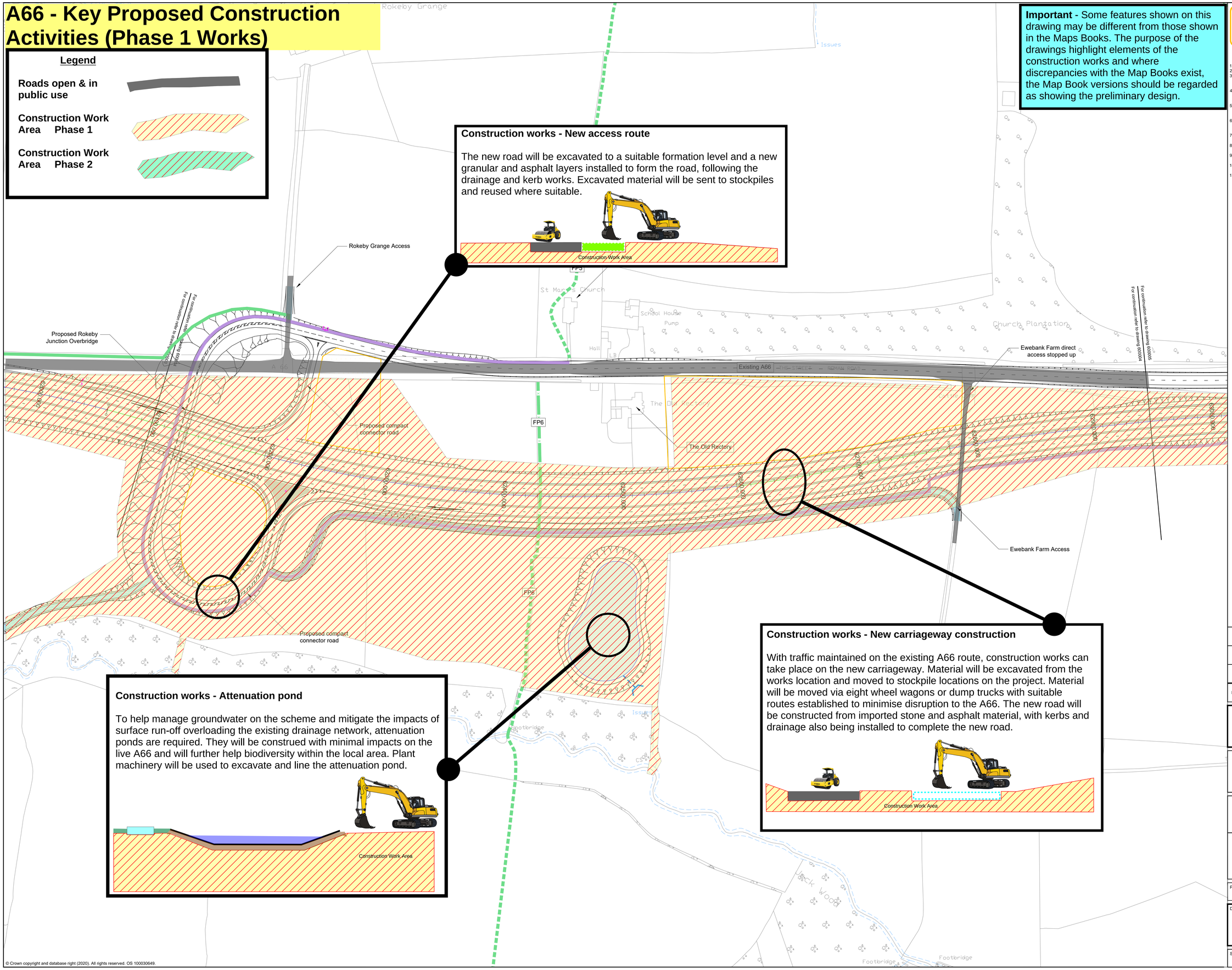
Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 -DR-CH- 600003
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New access route

The new road will be excavated to a suitable formation level and a new granular and asphalt layers installed to form the road, following the drainage and kerb works. Excavated material will be sent to stockpiles and reused where suitable.

Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material, with kerbs and drainage also being installed to complete the new road.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 4 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

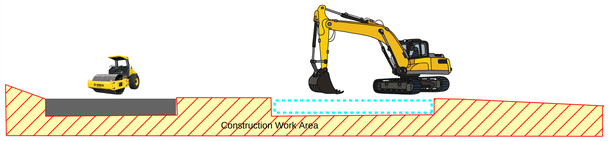
Project	Originator	Volume	Location	Type	Role	Number
HE565627	AMY	HGN	S08	DR	CH	600004

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

A66 - Key Proposed Construction Activities (Phase 1 Works)

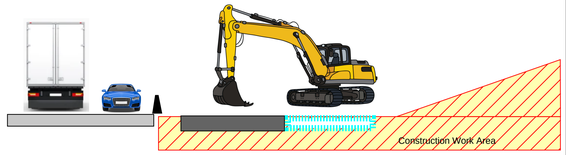
Construction works - New carriageway construction

With traffic maintained on the existing A66 route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. The new road will be constructed from imported stone and asphalt material, with kerbs and drainage also being installed to complete the new road.



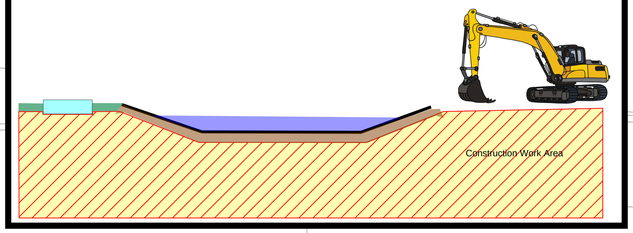
Construction works - New carriageway

With traffic diverted on the eastbound carriageway, works can take place on modifying and widening the westbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Material excavated will be transported to local stockpile areas for reuse, with imported material brought in for the works. Kerbs and drainage will be installed, followed by aggregate and asphalt being compacted in layers to form the new road. The works will look to be undertaken away from live traffic with traffic management in place, to minimise disruption to the A66 traffic.



Construction works - Attenuation pond

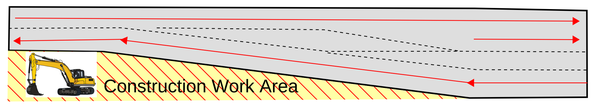
To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.

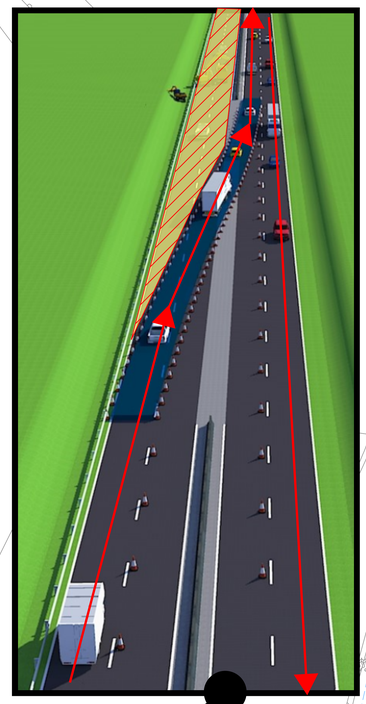


Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Traffic management for construction works

Traffic will managed by the traffic management to enable works to take place safely.





Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 5 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 - DR - CH - 600005
Location | Type | Role | Number

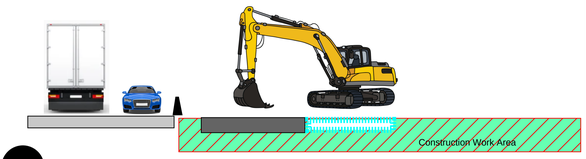
Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

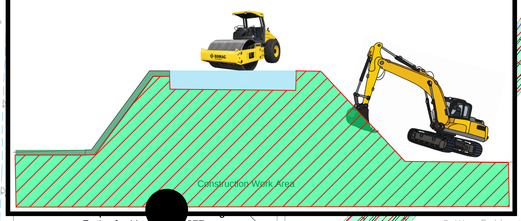
Construction works - New carriageway

With traffic diverted on the westbound carriageway, works can take place on modifying and widening the eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Excavated material will be transported to local stockpile areas for reuse, with imported aggregate and asphalt material brought in for the works. Kerbs and drainage will be installed, followed by the new road being constructed.



Construction works - Embankment

The access road will help mitigate movements across the A66 once complete. The embankment will be constructed in layers from suitably selected fill materials. Kerbs and drainage will then be installed, followed by the new road consisting of aggregate and asphalt.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

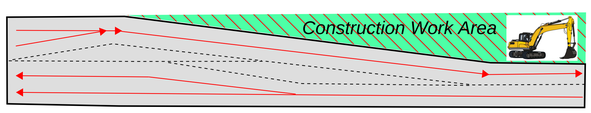
1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

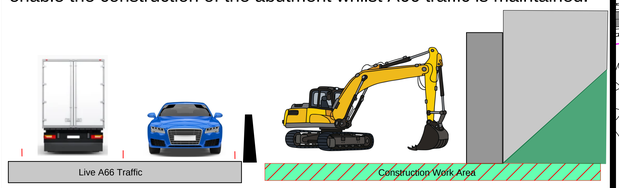
Traffic management for construction works

Traffic will be relocated onto part of the new A66 carriageway to enable the remaining works to safely take place.

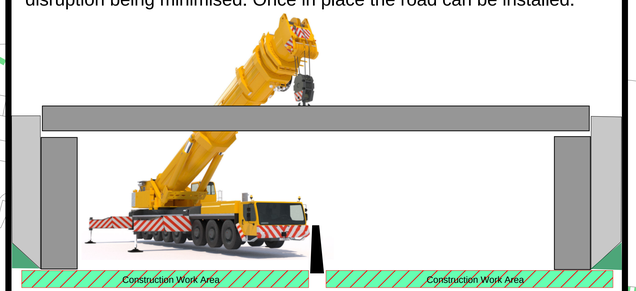


Construction works - Overbridge

The overbridge has been designed with sufficient working widths to enable the construction of the abutment whilst A66 traffic is maintained.



Traffic management will be required to complete the deck with disruption being minimised. Once in place the road can be installed.



Revision						
---	---					
	---	---	---	---	---	---
	---			---	---	---
P01	ISSUED FOR MODEL FREEZE D					
	SHOT	SHOT	THAL	RPEA	---	
	19/02/21	19/02/21	19/02/21	19/02/21	---	
P02.1	UPDATED FOR MODEL FREEZE E					
	---	---	---	---	---	---
	---	---	---	---	---	---
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 1 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 - DR - CH - 600001
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - New carriageway

With traffic diverted on the westbound carriageway, works can take place on modifying and widening the eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Excavated material will be transported to local stockpile areas for reuse, with imported aggregate and asphalt material brought in for the works. Kerbs and drainage will be installed, followed by the new road being constructed with the aggregate and asphalt.



© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 2 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number

Project	Originator	Volume	
HE565627 -	AMY -	HGN -	
S08	-DR-CH-	600002	
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

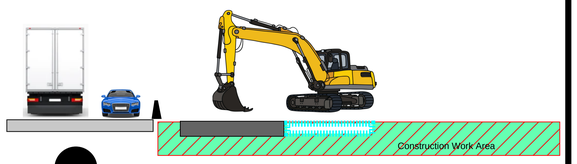
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

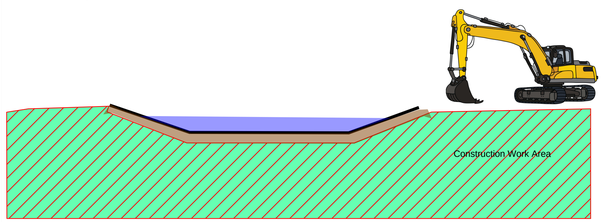
Construction works - New carriageway

With traffic diverted on the westbound carriageway, works can take place on modifying and widening the eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Excavated material will be transported to local stockpile areas for reuse, with imported aggregate and asphalt material brought in for the works. Kerbs and drainage will be installed, followed by the new road being constructed with the aggregate and asphalt.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Proposed Type A Lay-by

Tutta Beck Cottages direct access stopped-up

Tutta Beck Cottage Access

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

---	---					
	---	---	---	---	---	---
	---	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D					
	SHOT	SHOT	THAL	RPEA	---	
	19/02/21	19/02/21	19/02/21	19/02/21	---	
P02.1	UPDATED FOR MODEL FREEZE E					
	---	---	---	---	---	
	---	---	---	---	---	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 3 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

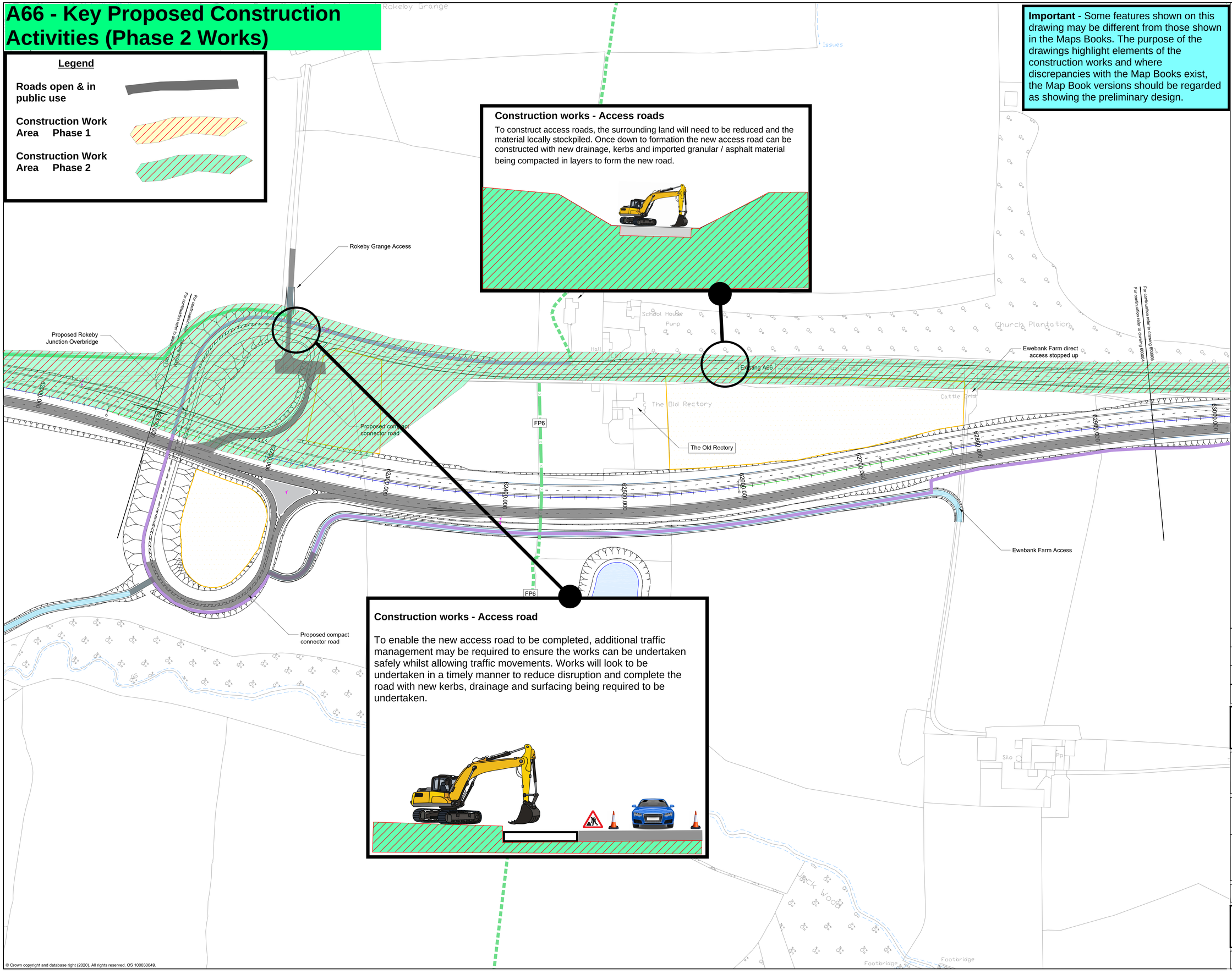
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
Location | Type | Role | Number
S08 - DR - CH - 600003

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - Access roads

To construct access roads, the surrounding land will need to be reduced and the material locally stockpiled. Once down to formation the new access road can be constructed with new drainage, kerbs and imported granular / asphalt material being compacted in layers to form the new road.

Construction works - Access road

To enable the new access road to be completed, additional traffic management may be required to ensure the works can be undertaken safely whilst allowing traffic movements. Works will look to be undertaken in a timely manner to reduce disruption and complete the road with new kerbs, drainage and surfacing being required to be undertaken.

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
	---	---	---	---	---
	---	---	---	---	---
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				
	---	---	---	---	---
	---	---	---	---	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 4 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 -DR-CH- 600004
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

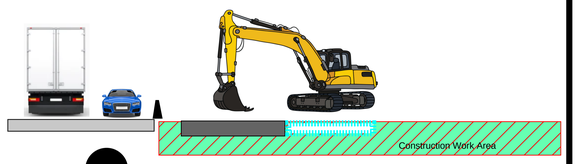
Roads open & in public use

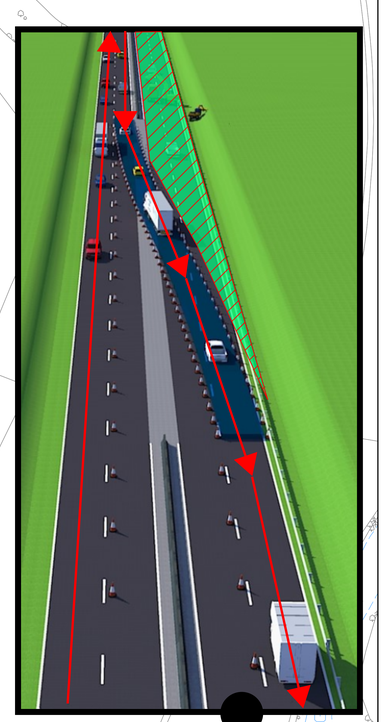
Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New carriageway

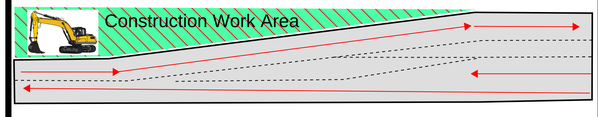
With traffic diverted on the westbound carriageway, works can take place on modifying and widening the eastbound carriageway to suit the new road alignment. This will involve changes to the existing carriageway and widening works. Excavated material will be transported to local stockpile areas for reuse, with imported aggregate and asphalt material brought in for the works. Kerbs and drainage will be installed, followed by the new road being constructed with the aggregate and asphalt.





Traffic management for construction works

The A66 will be re-routed using the traffic management to enable works to take place safely.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

RESIDUAL DESIGN HAZARDS

(The following information has been collected from Preconstruction Information and the Amey Arup DJV CDM Hazard Management Process.)

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S08-TN-CH-000001.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The culvert naming convention is scheme specific for design coordination purposes only. A more detailed naming convention is to be agreed at a later design stage.
6. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
7. Road markings, lighting columns and structures are indicative only and require further design development.
8. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
9. Boundary treatments, such as fencing, are subject to agreement with landowners and detailed design.
10. Proposed walking, cycling and horse riding routes are indicative only and subject to agreement with local authority and landowners.
11. A high level assessment of technology requirements has been completed, with allowance made in the red line boundary for any new installations.

KEY

- Green line boundary
- Existing layout
- Existing watercourse
- Proposed layout
- Highway structure
- Culvert
- Cut-off drain
- Filter Drain
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed lighting column
- Proposed vehicle restraint system
- Headwall
- Pipe to Outfall
- Earthworks
- Pond
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Proposed Shared Cycle Footway
- Abandoned Shared Cycle Footway
- Existing Shared Cycle Footway
- Farm Track/Access
- Compound/Storage Area
- Demolished buildings
- AONB
- Potential Environmental Mitigation

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---				
P01	ISSUED FOR MODEL FREEZE D				
	SHOT	SHOT	THAL	RPEA	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
P02.1	UPDATED FOR MODEL FREEZE E				

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Scheme 8: Cross Lanes to Rokeby
Black Option
General Arrangement
Sheet 5 of 5

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---	PCF3	Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - HGN -
S08 - DR - CH - 600005
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S0	Initial non-contractual code	P02.1

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 Northern Trans-Pennine project

Draft Construction Method and Management Statement

Indicative schematic drawings

Volume 2

Stephen Bank to Carkin Moor

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

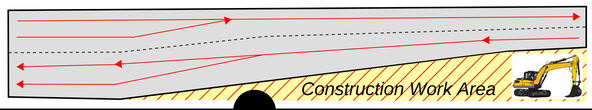
Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

NOTES
1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY
- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Traffic Management for construction works

Traffic will be diverted to enable works to take place safely.



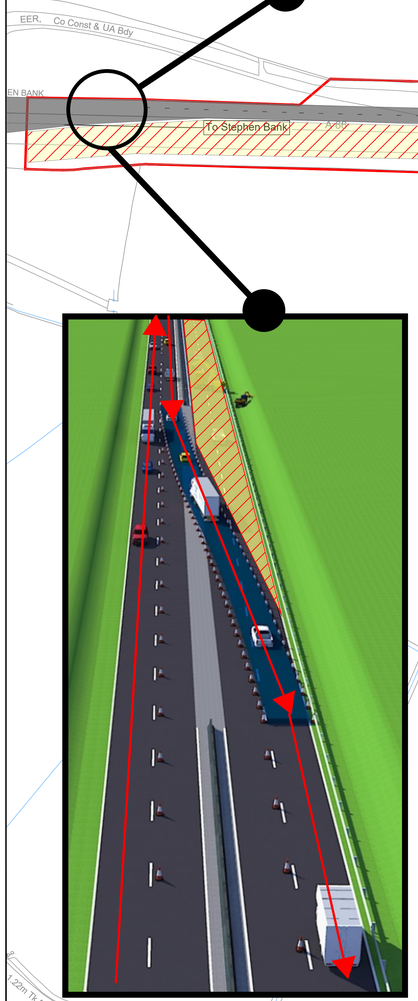
Construction works - New Detrunked A66

To facilitate the construction of the new dual carriageway the proposed detrunked section of the A66 will be constructed first and the A66 traffic diverted onto the detrunked road to enable the dual carriageway to be constructed. The new road will be excavated to a stable formation level and a new granular and asphalt layer installed, with the inclusion of new kerbs and drainage.



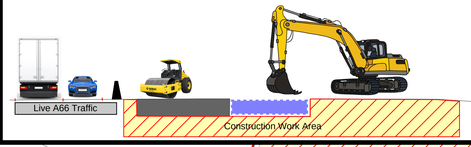
For Continuation refer to drawing 700001

For Continuation refer to drawing 700002



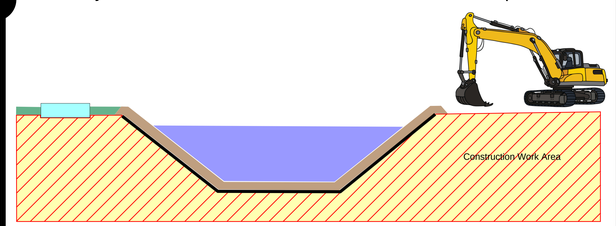
Construction works - New diversion route

To facilitate the construction of the new road a diversion route will be established to move traffic away from the work area. This will allow the new road to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed, with the inclusion of new kerbs and drainage.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



S09-C01

Central reserve gap closure

Browson Bank Farm access

Browson Bank

© Crown copyright and database right (2020). All rights reserved. OS 100030649

---	---					
---	---					
---	---					
P01	JMAR	JMAR	EKEL	TEGG	---	
	19/02/21	19/02/21	19/02/21	19/02/21	---	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 1 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
Location | Type | Role | Number
S09 - DR - CH - 700001

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

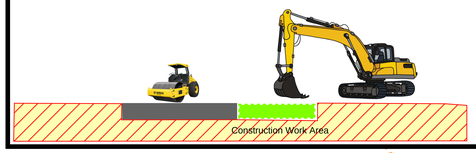
Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New De-trunked A66

Where the new de-trunked road ties in with the existing A66, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



For Continuation refer to drawing 700001

For Continuation refer to drawing 700002

For Continuation refer to drawing 700003

Allowance for relocated slurry tank if required

Exact access arrangement to slurry tank and field to be confirmed

Accommodation underpass

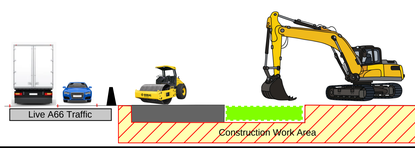
Proposed layby

Detrunked A66

Dick Scott Lane

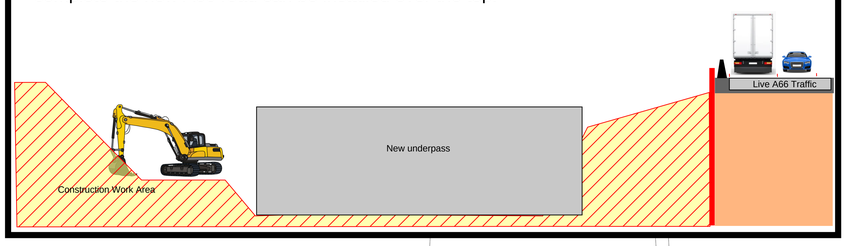
Construction works - New diversion route

To facilitate the construction of the new road, a diversion route will be established to move traffic away from the main work area. This will allow the new road to be constructed in a safe and efficient manner. The new road will be excavated to a stable formation level and a new granular and asphalt layer installed to complete the road surface after the kerbs and drainage have been placed.



Construction works - Underpass Construction

To reduce traffic movements across the A66 an underpass is to be constructed. This will be excavated into the ground with temporary works required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed below ground and then buried to ensure it blends into the surroundings. Once complete the new A66 road can be installed over the top.



NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

***	***					
	***	***	***	***	***	***
	***	***	***	***	***	***
***	***					
	***	***	***	***	***	***
	***	***	***	***	***	***
P01	JMAR	JMAR	EKEL	TEGG	***	
	19/02/21	19/02/21	19/02/21	19/02/21	***	
Revision	Revision details					
	Created	Checked	Reviewed	Approved	Authorised	
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 2 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
***		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 - DR - CH - 700002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New De-trunked A66

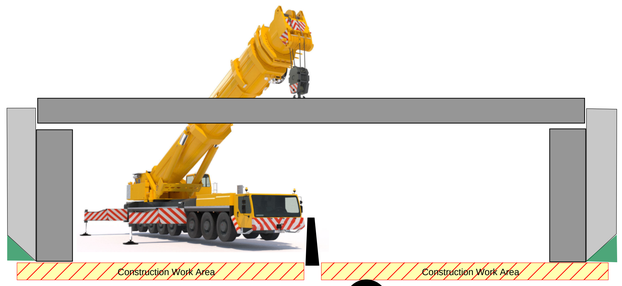
Where the new de-trunked road ties in with the existing A66, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



Construction works - Overbridge Construction

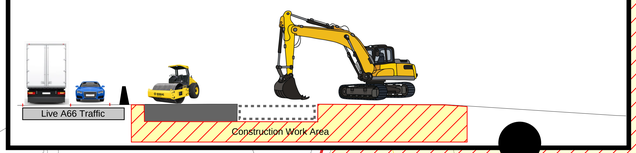
Works will only commence on this new infrastructure, once a diversion route is established. With traffic diverted and increased working space available, this will enable both abutments and the deck to be constructed in one phase of works, minimising disruption to A66 traffic. With the diversion in place it is likely that the bridge beams can be installed with limited additional traffic management. Once complete the road can be installed on the deck.





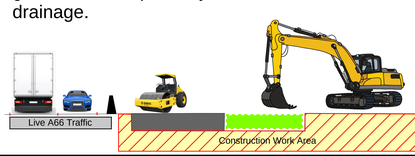
Construction works - New diversion route

To facilitate the construction of the new overbridge, a temporary link road is required to be constructed to divert traffic away from the work area. The road will be removed once the new overbridge is complete and in use, enabling the new A66 dual carriageway to be completed.



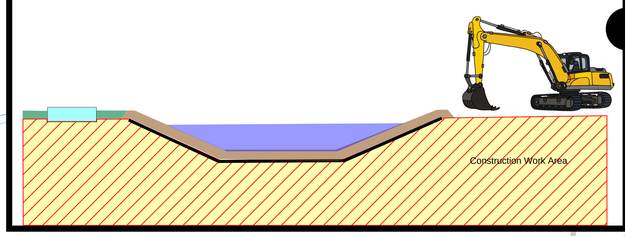
Construction works - New diversion route

To facilitate the construction of the new road, a diversion route will be established to move traffic away from the work area. This will allow the new road to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed, with the inclusion of new kerbs and drainage.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
P01	JMAR 19/02/21	JMAR 19/02/21	EKEL 19/02/21	TEGG 19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 1 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - GEN - S09 - DR - CH - 700001

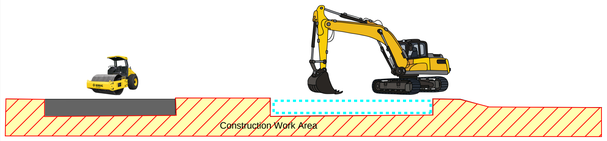
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 1 Works)

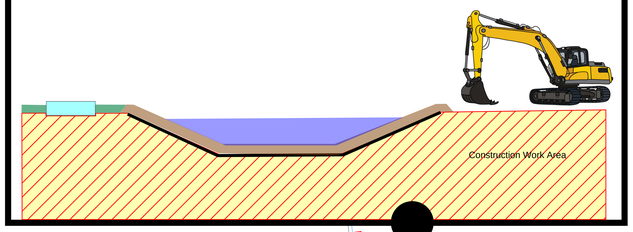
Construction works - New carriageway construction

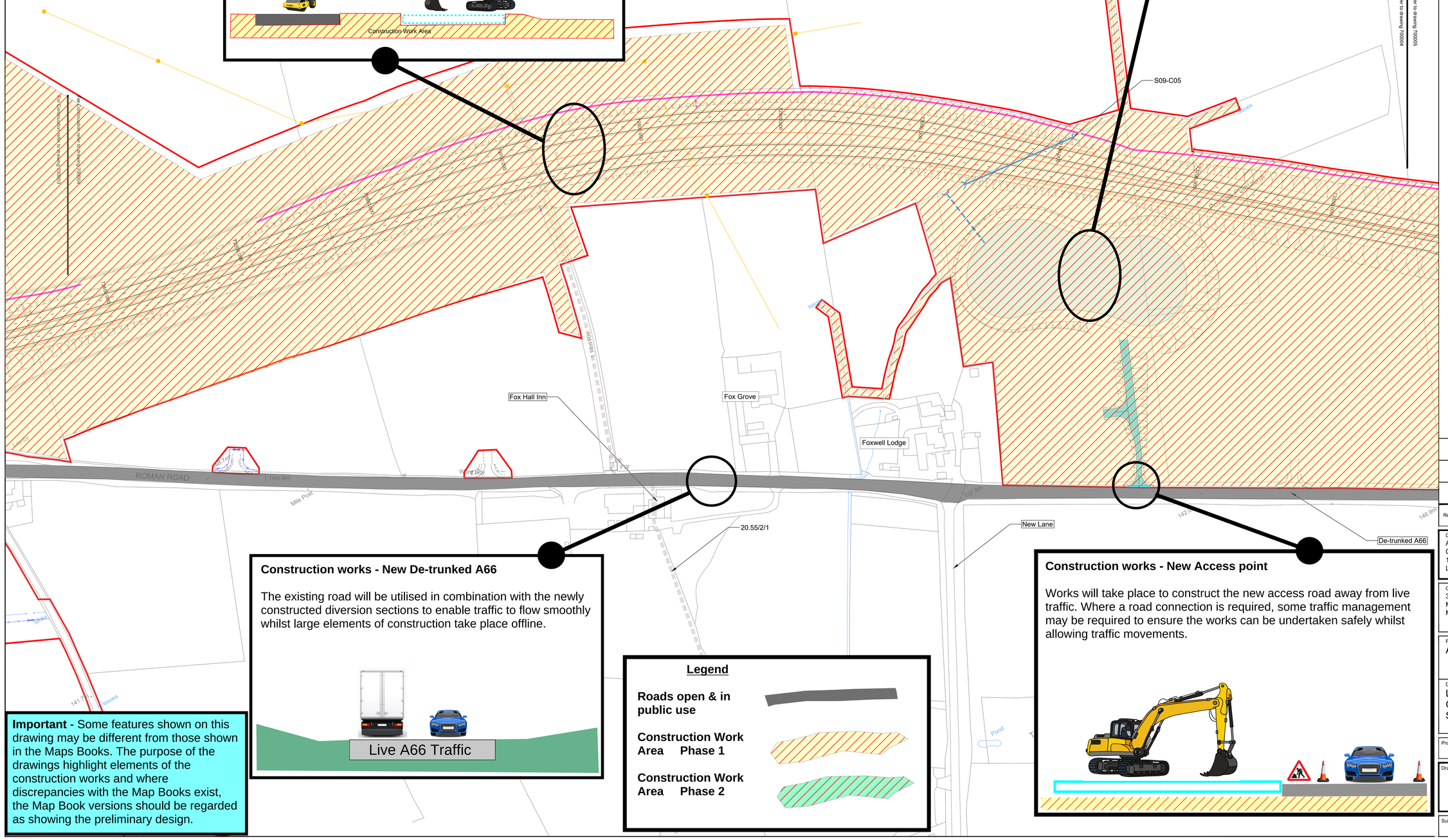
With traffic maintained on the existing A66 / de-trunked diversion route, construction works can take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. New kerbs and drainage will be installed, followed by aggregate and asphalt material compacted in layers to form the new road.



Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.





Construction works - New De-trunked A66

The existing road will be utilised in combination with the newly constructed diversion sections to enable traffic to flow smoothly whilst large elements of construction take place offline.

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Construction works - New Access point

Works will take place to construct the new access road away from live traffic. Where a road connection is required, some traffic management may be required to ensure the works can be undertaken safely whilst allowing traffic movements.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-SI09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Created	Checked	Reviewed	Approved	Authorised
P01	JMAR 19/02/21	JMAR 19/02/21	EKEL 19/02/21	TEGG 19/02/21	---

Revision details: dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 4 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume | Location | Type | Role | Number
HE565627 - AMY - GEN - S09 - DR - CH - 700004

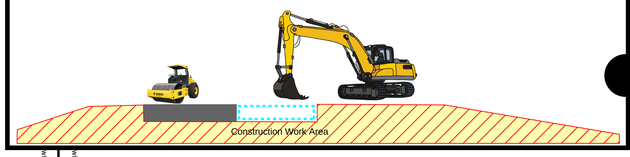
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

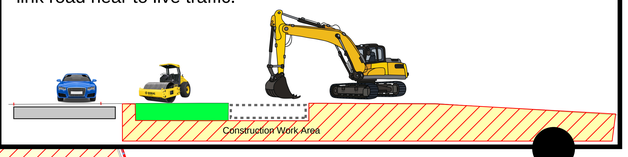
Construction works - Access road

To facilitate the construction of the new underpass, part of the new access road will be required to be constructed as a priority to enable traffic to be relocated away from the new underpass. The new road will be excavated to a stable formation level and a new granular and asphalt layer installed, with new kerbs and drainage.



Construction works - New diversion route

To facilitate the construction of the new underbridge, a temporary link road is required to be constructed to divert traffic away from the work area. The road will be removed once the new overbridge is complete and in use, enabling the new A66 dual carriageway to be completed. Additional traffic management may be required to complete parts of the link road near to live traffic.



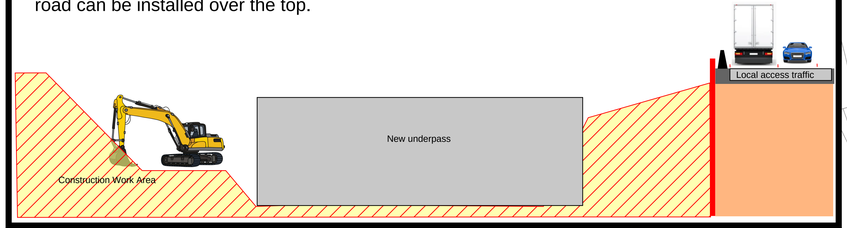
Construction works - New diversion route

To facilitate the construction of the new road, a diversion route will be established to move traffic away from the work area. This will allow the new road to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed, with the inclusion of new kerbs and drainage.



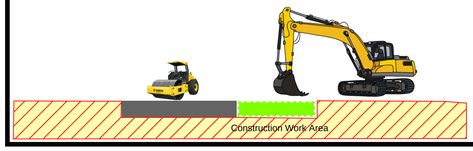
Construction works - Underpass Construction

Works will only take place once a diversion route has been established. To reduce traffic movements across the A66 an underpass is to be constructed. This will be excavated into the ground with temporary works required to keep the A66 traffic live whilst ensuring future traffic management is restricted to keep the road moving. The structure will be constructed below ground and then buried to ensure it blends into the surroundings. Once complete the new A66 road can be installed over the top.



Construction works - New De-trunked A66

Where the new de-trunked road ties in with the existing A66, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



Legend

- Roads open & in public use
- Construction Work Area Phase 1
- Construction Work Area Phase 2

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR	JMAR	EKEL	TEGG	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 5 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 - DR - CH - 700005
Location | Type | Role | Number

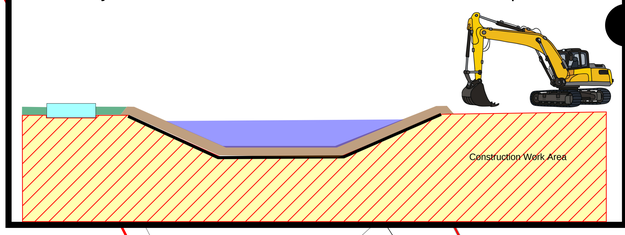
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 1 Works)

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

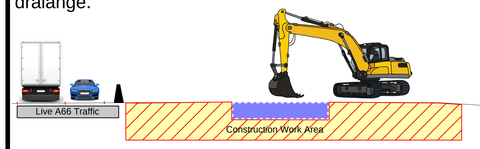
Construction works - Attenuation pond

To help manage groundwater on the scheme and mitigate the impacts of surface run-off overloading the existing drainage network, attenuation ponds are required. They will be construed with minimal impacts on the live A66 and will further help biodiversity within the local area. Plant machinery will be used to excavate and line the attenuation pond.



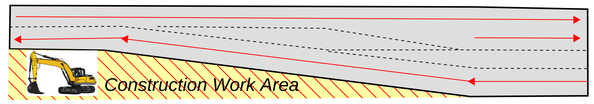
Construction works - New diversion route

To facilitate the construction of the new road, a diversion route will be established to move traffic away from the work area. This will allow the new road to be constructed in a safe and efficient manner. The new temporary road will be excavated to a stable formation level and a new granular and asphalt layer installed, along with new kerbs and draiange.



Traffic management for construction works

Traffic will diverted and managed via the traffic management to ensure the A66 remains moving and the workforce safe.



Carkin Moor Farm access

S09-C14

S09-C1

S09-C09
Existing culvert to be extended

For Continuation refer to drawing 700005

For Continuation refer to drawing 700006

Central reserve gap closure

Warrener Lane access

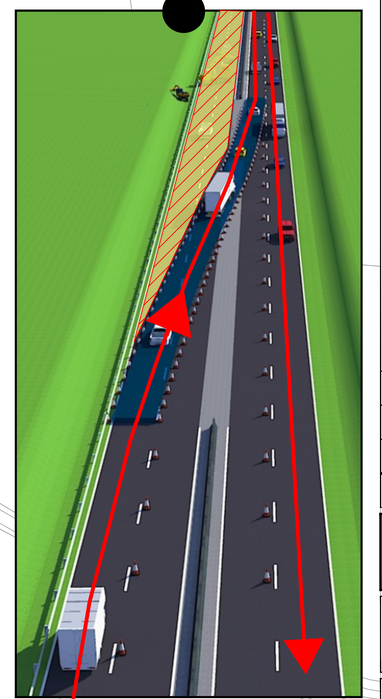
S09-C12

S09-C13

S09-C15

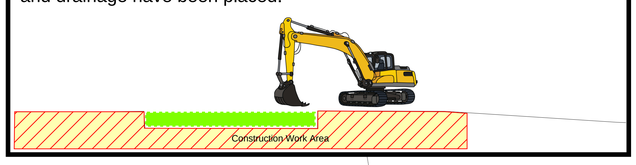
S09-C10

20.33/17/2



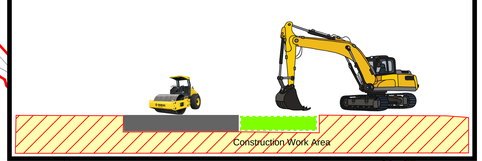
Construction works - New diversion route

To facilitate the construction of the new road, a diversion route will be established to move traffic away from the main work area. This will allow the new road to be constructed in a safe and efficient manner. The new road will be excavated to a stable formation level and a new granular and asphalt layer installed to complete the road surface after the kerbs and drainage have been placed.



Construction works - New road connection

Where the new de-trunked road ties in with the existing local access road, this will be constructed off peak with a possible road closure and temporary diversion required. Depending on the scale of works undertaken this could be facilitated through temporary traffic lights and reduced traffic flows.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR 19/02/21	JMAR 19/02/21	EKEL 19/02/21	TEGG 19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 6 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 - DR - CH - 700006
Location | Type | Role | Number

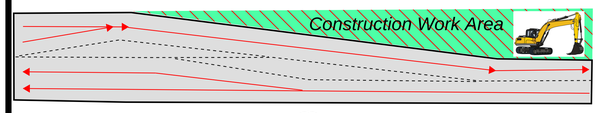
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

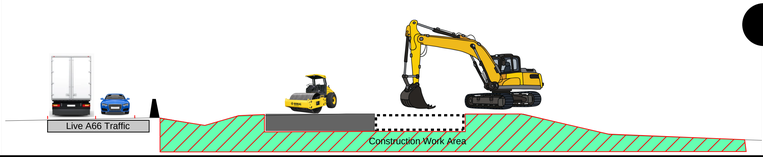
Traffic management for construction works

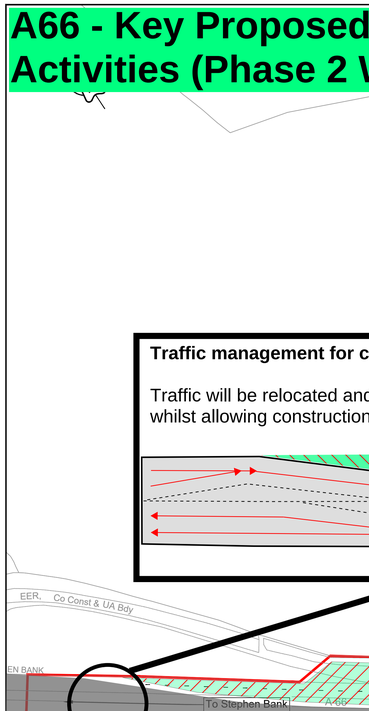
Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.



Construction works - New A66 Road construction

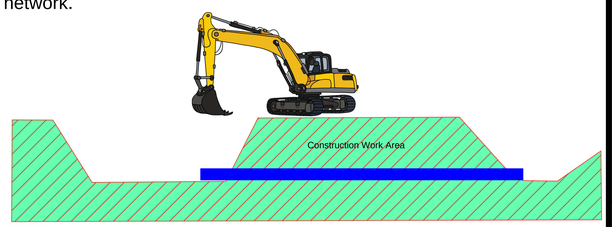
With the diversion route established and live traffic relocated, works can commence on widening and upgrading the existing road to form 2 dual carriageways. Excalvated material will be transported to stockpile locations. New drainage and kerbs will be installed, followed by granular material and asphalt compacted in layers to form the new road.





Construction works - Drainage culverts

Drainage works will be undertaken in full with the live A66 traffic diverted onto its new route. The works will be undertaken efficiently with reduced temporary works support required thanks to increased working room. Once installed, the new carriageway can be installed above. The drainage is required to mitigate flooding and overloading the current drainage network.



NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

For Continuation refer to drawing 700001

For Continuation refer to drawing 700002

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

- **Roads open & in public use**
- **Construction Work Area Phase 1**
- **Construction Work Area Phase 2**

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR	JMAR	EKEL	TEGG	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 1 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
Location | Type | Role | Number
S09 - DR - CH - 700001

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

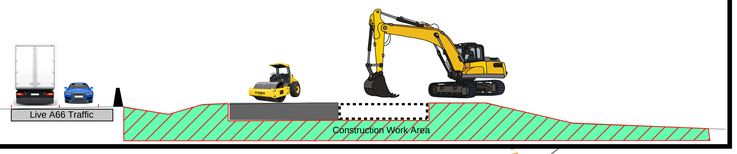
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Construction works - New A66 Road construction

With the diversion route established and live traffic relocated, works can commence on widening and upgrading the existing road to form 2 dual carriageways. Excavated material will be transported to stockpile locations. New drainage and kerbs will be installed, followed by granular material and asphalt compacted in layers to form the new road.



Allowance for relocated slurry tank if required

Exact access arrangement to slurry tank and field to be confirmed

Accommodation underpass

Proposed layby

Detrunked A66

Dick Scott Lane

For Continuation refer to drawing 700001

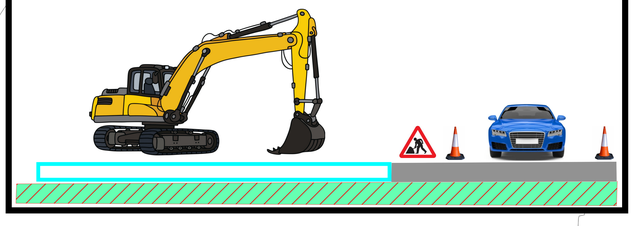
For Continuation refer to drawing 700002

For Continuation refer to drawing 700002

For Continuation refer to drawing 700003

Construction works - New underpass connection

Works will take place to connect the new underpass road with the de-trunked A66 with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. It may be necessary to impose one way traffic restriction during off peak hours to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



172.8m

155.1m

DICK SCOTT LANE

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision					
***	***				
	***	***	***	***	***
	***	***	***	***	***
***	***				
	***	***	***	***	***
	***	***	***	***	***
P01					
	JMAR	JMAR	EKEL	TEGG	***
	19/02/21	19/02/21	19/02/21	19/02/21	***
Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 2 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
***		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 - DR - CH - 700002
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

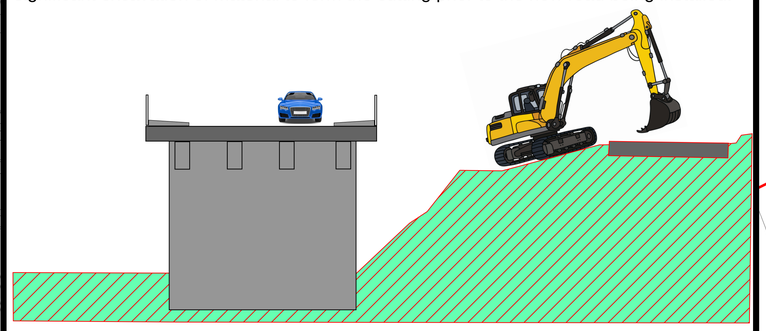
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

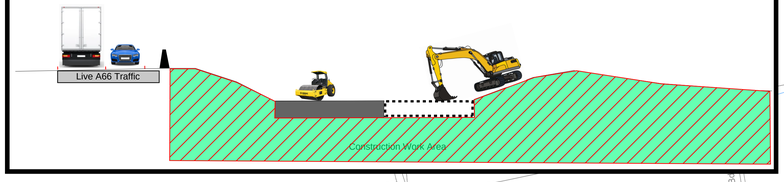
Construction works - A66 Main line works

With the new overbridge in place and operational, the temporary diversion route can be removed to enable the new A66 dual carriageway to be constructed. This will involve a significant excavation of material to form the cutting prior to the new road being installed.



Construction works - New A66 Road construction

With the diversion route established and live traffic relocated, works can commence on widening and upgrading the existing road to form 2 dual carriageways. Excavated material will be transported to stockpile locations. New drainage and kerbs will be installed, followed by granular material and asphalt compacted in layers to form the new road.



© Crown copyright and database right (2020). All rights reserved. OS 100030649.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR	JMAR	EKEL	TEGG	---
	19/02/21	19/02/21	19/02/21	19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 1 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

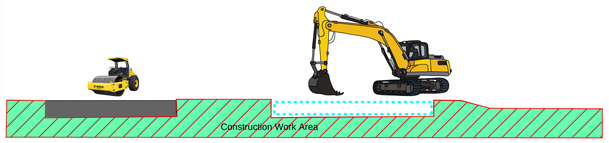
Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
Location | Type | Role | Number
S09 - DR - CH - 700001

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

A66 - Key Proposed Construction Activities (Phase 2 Works)

Construction works - New carriageway construction

With traffic maintained on the existing A66 / de-trunked diversion route, construction works can continue to take place on the new carriageway. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. New drainage and kerbs will be installed, followed by granular material and asphalt compacted in layers to form the new road.



Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

---	---					
---	---					
P01		JMAR	JMAR	EKEL	TEGG	---
		19/02/21	19/02/21	19/02/21	19/02/21	---

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 4 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number

Project	Originator	Volume	
HE565627 -	AMY -	GEN -	
S09	-DR-	CH-	700004
Location	Type	Role	Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

Legend

Roads open & in public use

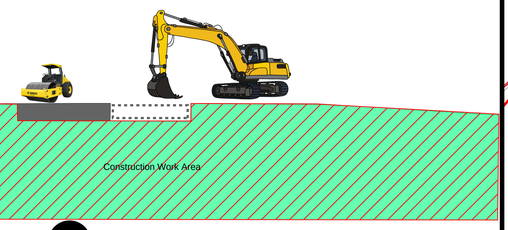
Construction Work Area Phase 1

Construction Work Area Phase 2

Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

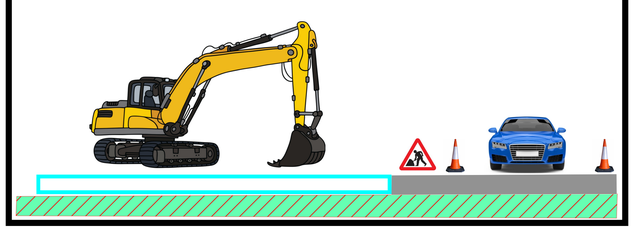
Construction works - New diversion route

With the new underpass constructed the remaining infrastructure works can take place on the new link roads and main A66 dual carriageway where the old diversion route was located. The works will take place away form live traffic with the new underpass in use.



Construction works - New underpass connection

Works will take place to connect the new link road with the de-trunked A66 with some traffic management being required to ensure the works can be undertaken safely whilst allowing traffic movements. It may be necessary to impose one way traffic restriction during off peak hours to complete the road in a timely manner, which looks to minimise disruption to stakeholders.



Monks Rest Farm

S09-C06

Moor Lane eastbound junction

Moor Lane Underbridge

S09-C07

Moor Lane westbound junction

De-trunked A66

S09-C08
Existing culvert under Mainsgill Bridge

Mainsgill Farm access

20.55/6/1

For Continuation refer to drawing 0000004

For Continuation refer to drawing 0000006

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-S09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Revision details				
	Created	Checked	Reviewed	Approved	Authorised
	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy
---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR 19/02/21	JMAR 19/02/21	EKEL 19/02/21	TEGG 19/02/21	---

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

A66 NTP Integrated Project Team

Client
3 Piccadilly Place
Manchester
M1 3BN

highways england

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 5 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 - DR - CH - 700005
Location | Type | Role | Number

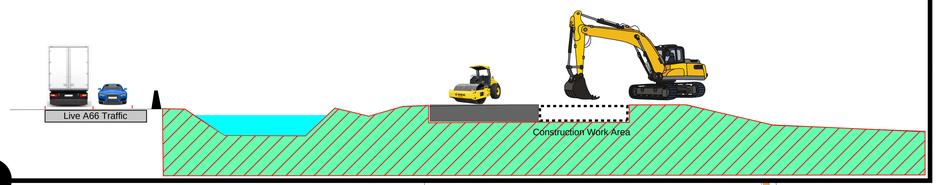
Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.

A66 - Key Proposed Construction Activities (Phase 2 Works)

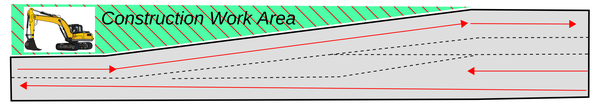
Construction works - New A66 Road construction

With the diversion route established and live traffic relocated, works can commence on widening and upgrading the existing road to form 2 dual carriageways. Material will be excavated from the works location and moved to stockpile locations on the project. Material will be moved via eight wheel wagons or dump trucks with suitable routes established to minimise disruption to the A66. New drainage and kerbs will be installed, followed by granular material and asphalt compacted in layers to form the new road.



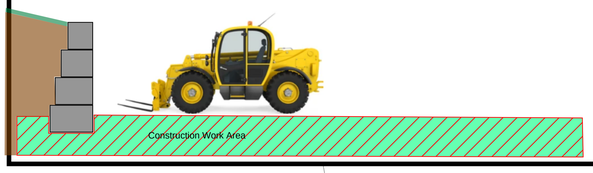
Traffic management for construction works

Traffic will be relocated and diverted to enable traffic to remain flowing whilst allowing construction works to be undertaken safely.

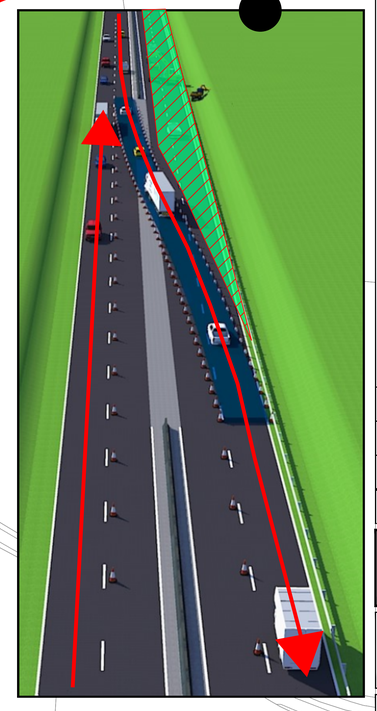


Construction works - Retaining wall

A retaining wall is to be constructed to protect the archaeological features that are known to exist in this area. The wall has a small footprint and helps minimise the impacts on the surrounding landscape. Upon completion the new A66 carriageway will be constructed.



Carkin Moor Farm access
S09-C14
S09-C11
Carkin Moor scheduled ancient monument
S09-C09
Existing culvert to be extended
For Continuation refer to drawing 700005
For Continuation refer to drawing 700006
Central reserve gap closure
Warrener Lane access
S09-C12
S09-C13
S09-C15
20.33/17/2



Important - Some features shown on this drawing may be different from those shown in the Maps Books. The purpose of the drawings highlight elements of the construction works and where discrepancies with the Map Books exist, the Map Book versions should be regarded as showing the preliminary design.

Legend

Roads open & in public use

Construction Work Area Phase 1

Construction Work Area Phase 2

NOTES

1. All levels are in metres above Ordnance Datum.
2. All dimensions are in metres unless otherwise stated.
3. This drawing is to be read in conjunction with all other relevant drawings and the accompanying technical note HE565627-AMY-HGN-SI09-TN-CH-000004.
4. The drainage design is of a sufficient level of detail to advise land take requirements and early stage design feasibility. Further design development to be undertaken.
5. The vehicle restraint system layout is a high level assessment and requires a detailed risk assessment (RRRAP) of the hazards present in the design.
6. Road markings and structures are indicative only and require further design development.
7. Traffic sign faces and locations are indicative only. Traffic signs will be developed at detailed design.
8. Fencing and gate locations subject to agreement with landowners.
9. Public Right of Way (footpaths and bridleways) diversions are indicative only and subject to agreement with local authority and landowners.

KEY

- Red line boundary
- Existing layout
- Proposed layout
- Highway structure
- Existing watercourse
- Culvert
- Cut-off drain
- Headwall
- Pipe to Outfall
- Pond
- Proposed boundary treatment
- Proposed gate
- Traffic sign
- Proposed vehicle restraint system
- Earthworks
- Proposed Bridleway
- Abandoned Bridleway
- Existing Bridleway
- Proposed Footway/Footpath
- Abandoned Footway/Footpath
- Existing Footway/Footpath
- Compound/Storage Area
- Farm Track/Access

Revision	Created	Checked	Reviewed	Approved	Authorised
---	---	---	---	---	---
---	---	---	---	---	---
P01	JMAR	JMAR	EKEL	TEGG	---
	19/02/21	19/02/21	19/02/21	19/02/21	---
Revision details	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy	dd/mm/yy

Designer
Amey OW Limited
Chancery Exchange
10 Furnival Street
London, EC4A 1AB

Client
3 Piccadilly Place
Manchester
M1 3BN

Project Name
A66 Northern Trans-Pennine

Drawing Title
Layton
General Arrangement
Sheet 6 of 7

Project Ref. No.	Stage	Scale : 1:1000 @ A0
---		Dimensions : M

Drawing Number
Project | Originator | Volume |
HE565627 - AMY - GEN -
S09 -DR-CH- 700006
Location | Type | Role | Number

Suitability	Suitability Description	Revision
S1	Fit for Co-ordination	P01

© Crown copyright and database right (2020). All rights reserved. OS 100030649.