dandara
new homes

Construction Management Plan

Land at Stakers Farm
North End Road, Yapton

Rev: A

Date: 13th March 2020

Office Address: Roman House, South Hampshire Industrial Park, Eddystone Road, Totton, SO40 3SA
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ARUN DISTRICT COUNCIL Y/72/20/RES

Document Control

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Approved by:	Paul Ebbs	Production Director	

Revision	Date	Description	Prepared	Reviewed	Approved
A	27.03.20	Initial issue for planning	MA	COB	PE
B	17.09.20	Section 3.1 updated to clarify access arrangements and Appendix B updated to include location of wheel washing facilities as per West Sussex County Council comments.	MA	COB	PE

Internal Distribution

Revision	Date	Name	Position	Department

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1 Introduction

1.1 Background

This Construction Management Plan (CMP) was written and targeted specifically for Dandara's proposed 70 residential unit scheme (Y/44/17/OUT) as part of a 108 unit development, Yapton, located on North End Road, Yapton.

The nature of construction and its associated activities, has the potential to cause an impact on the local area and its existing residents if improperly managed, coordinated and mitigated. Therefore, the purpose of this CMP is to ensure that the impact of the development's construction work on local residents and the nearby highway network is kept to an absolute minimum.

1.2 Objectives

The primary objective of this CMP is to comprehensively demonstrate how impacts of the construction traffic upon North End Road and the local highway network will be successfully managed, coordinated and mitigated to provide safe, suitable and convenient access for all users, while also protecting nearby residents' living conditions.

The secondary objective of this CMP is to submit to the Local Planning Authority, Arun District Council, to satisfy and discharge planning Condition of Outline Application Ref: Y/44/17/OUT.

1.3 Scope

It is intended that the agreed CMP will cover the following**:**

- The anticipated number, frequency and type of vehicles used during construction (Section 4.6)
- The method of access, routing, frequency and types of vehicles used during construction (Section 3.1, 3.2 & 4.3)
- The parking of vehicles by site operatives and visitors (Section 5.3)
- The loading and unloading of plant, materials and waste (Section 4.4)
- The storage of plant and materials used in construction (Section 4.6)
- The erection and maintenance of security hoarding (Section 5.9)
- The provision of wheel washing facilities and other works required to mitigate the impact of construction traffic upon the public highway (Section 4.7)
- Details of public engagement prior to and during construction (Section 5.7)

2 Proposed Works

2.1 Site Background

Yapton is a greenfield site that is used primarily for animal grazing use by the adjacent Stakers Farm. It has no known previous use other than for agricultural land.

The Yapton C of E primary school is located on the eastern boundary, with hedges separating the land, and some land on the site will be retained for potential future use by the school.

The north of the site abuts the 38-unit scheme under planning reference 'Y.88.18.OUT' through which this site will be accessed. An existing residential development is also located east of the site, on the other side of North End Road.

2.2 Construction Programme

The total construction duration is anticipated to be in the region of 11 months, with groundworks proposed for February 2021.

The construction programme is influenced by several constraints, including the available working space and resources. As such, the development will be completed in approximately 4 stages to permit the most efficient means of working.

All works will be completed within our site boundary.

The Plots currently scheduled within each Stage are as follows:

- Stage 1: Plots 39-60
- Stage 2: Plots 61-71
- Stage 3: Plots 98-108
- Stage 4: Plots 72-97

2.3 Enabling Works

Enabling works will consist of earthworks and associated topsoil strip, without the requirement for major vegetation clearance or removal of excavated materials.

The proposed site levels have been designed using a "cut and fill" approach, to optimise the re-use of excavated materials locally at the site and significantly reducing construction traffic movements in/out of the site during this stage.

Trees and areas of vegetation to be retained will be protected from adverse effects during construction through the installation of temporary fencing, as appropriate and in accordance with the approved tree protection measures prior to the works.

All of the main estate roads, including unallocated vehicular spaces, and adjacent footways will be first constructed prior to Plot construction up to base level, with a temporary wearing course used for construction traffic.

2.4 Construction of Substructures and Superstructures

The construction period minus the preliminary works is anticipated to be 12 months. A typical construction programme for each unit is shown in Table 1, illustrating the activities undertaken and the corresponding durations.

Table 1 – Construction programme for a typical unit

Activity	Duration (Weeks)
Foundation, Drainage and Oversite	4
Brickwork and Joist	7
Roof Carcass	2
Glazing and First Fix	2
Plastering / Drylining	2
Second Fix	2
Tiling and Decorating	2
Finishes and Externals	2
Quality Control Final Inspection, CML and Handover	4
Total Duration:	**27**

3 Vehicle Access and Restrictions

3.1 Site Access

Access to the site is made off the B2132, North End Road and through the proposed development under planning application ref: Y/88/18/OUT. the proposed site entrance will be constructed as per the Construction Management Plan (CMP) approved under condition 2 of the separate access planning application (Ref: Y/17/20PL).

3.2 Proposed Estate Roads

Any temporary onsite haul roads will form the geometry of the proposed estate roads that have been designed to accommodate the tracking of a fire tender and refuse vehicle.

A swept path analysis for a large tipper has been undertaken, confirming that the proposed access is suitable for construction vehicles and is shown in Appendix C.

Table 2 – Comparison between Fire Tender, Refuse Vehicle and Large Tipper

Specification (units)	Fire Tender	Refuse Vehicle	Large Tipper
Overall Length (m)	8.680	9.860	10.201
Overall Width (m)	2.180	2.450	2.500
Overall Body Height (m)	3.452	3.814	2.893
Min. Body Ground Clearance (m)	0.337	0.366	0.343
Track Width (m)	2.121	2.450	2.500
Lock to Lock Time (seconds)	6.00	4.00	6.00
Kerb to Kerb Turning Radius (m)	7.910	9.500	11.550

3.3 Site Restrictions

Due to the limited site compound area, deliveries should be made ‘just in time’, with strictly no construction traffic queuing on North End Road and its vicinity.

There is the Yapton C of E primary school located on the boundary of the site, with students and families using North End Road as a means of commute by walking, cycling or by car. As such, there will be a restriction on deliveries to reduce the impacts of construction traffic and material deliveries during peak hours.

Suppliers will be advised that there will be no deliveries made to the site during the hours of:

- 8:00am – 9:00am
- 2:45pm – 3:45pm

Construction traffic must not use Ford Road in Arundel as their route when accessing or leaving the site. Caution should be given to the railway crossing located on North End Road 0.40 miles north of the site.

4 Construction Traffic Management

4.1 Site Location

Figure 2 shows the location of the development within Yapton and the wider highway network.

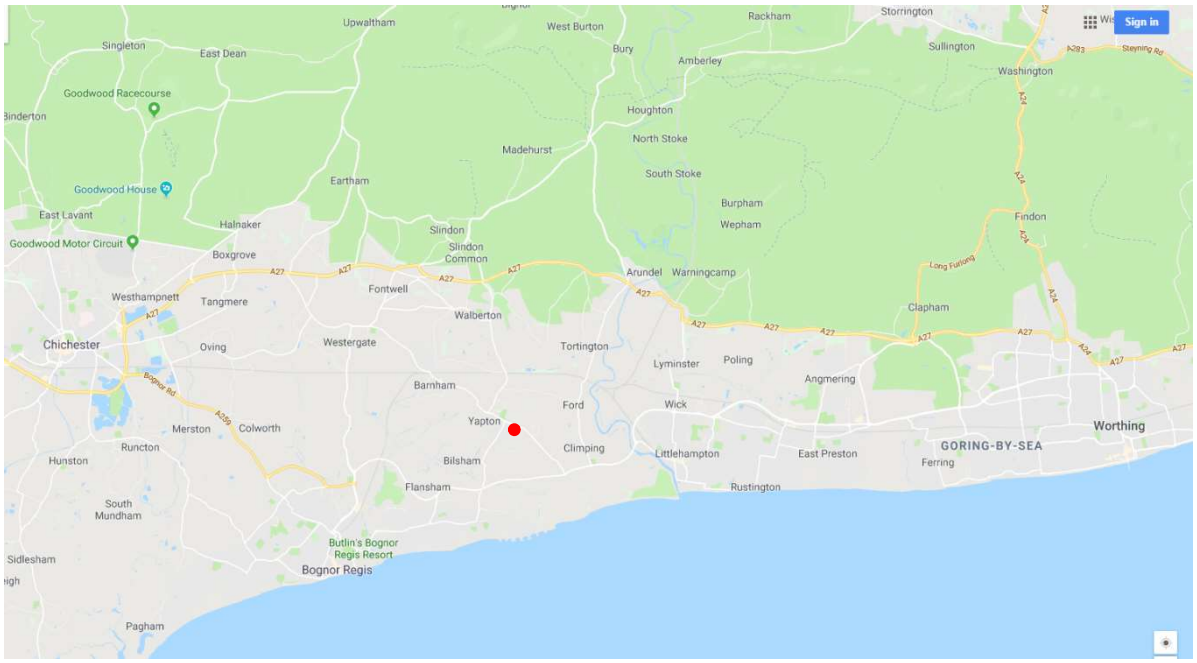

Figure 2 – Indicative Site Location within the wider Highway Network

4.2 Heavy Goods Vehicles

Heavy Goods Vehicles (HGV's), including that typically used for construction related traffic, are permitted to use any classification of road for access and deliveries, hence it is difficult to restrict their movements. The situation is made increasingly more difficult due to HGV's being operated by other companies, suppliers and organisations out of our direct control; who may not fully understand or appreciate the potential consequences and impacts of their HGV movements. However, this CMS and supporting appendices will be issued to appropriate third parties who will be directly involved in the development, on how best to manage their HGV movements, to ensure minimal impact on the surrounding highway network.

As a main through route, HGV's are directed to use the most appropriate route via motorways, dual carriageways and main roads.

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4.3 Construction Access Route

The main routes into Yapton are via the A27, B2132 and B2233. Research has been undertaken to assess the most suitable routes for construction traffic utilising these road networks towards Yapton.

Figures 3, 4 and 5 show routes from various strategic locations that were checked by inputting vehicle dimensions from Table 1 into an online freight journey planner, which contains information on the locations of any height, weight and width restrictions along the proposed route.

Therefore, a strategy for the means of access for construction traffic has been determined by assessing the local road conditions, in addition with the site vehicular access and associated restrictions. As a result, Appendix A shows the recommended route for construction traffic local to the site, to minimise the impacts associated with the construction of the Yapton development on the local highway network.

A copy of the pre-determined recommended routes in the form of the 'Construction Access Map' (Appendix A) will be distributed to our suppliers and sub-contractors who will be involved with the site.

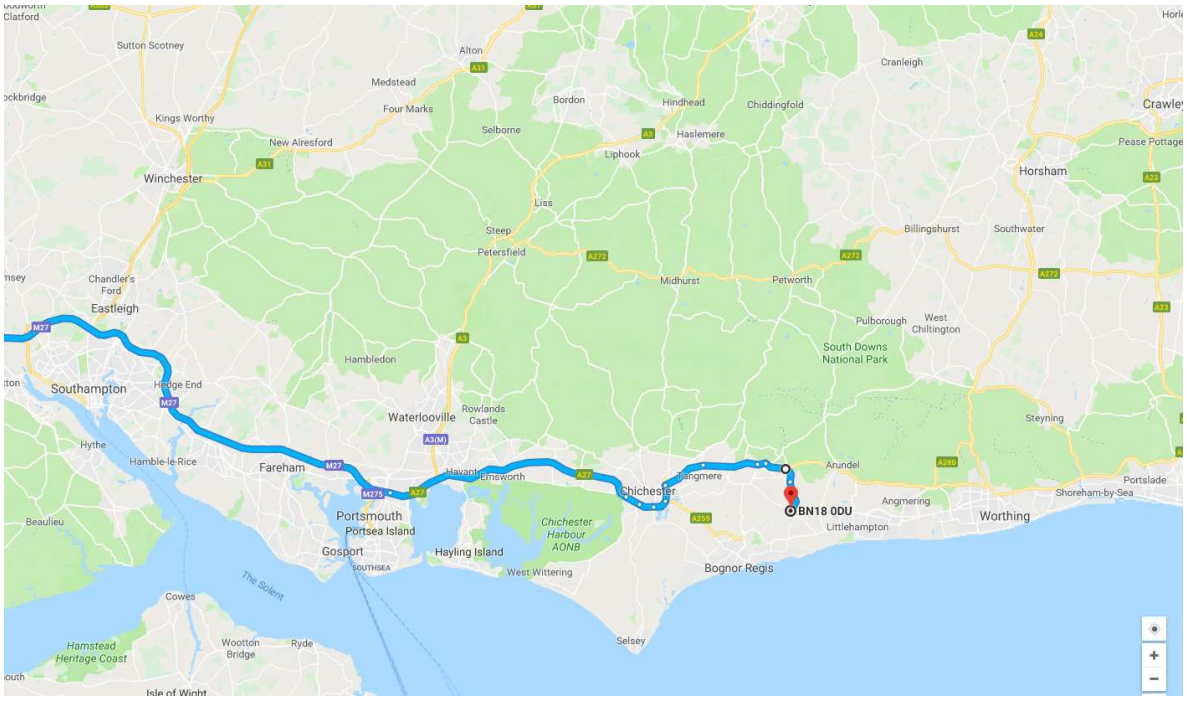

Figure 3 – Construction Access to North End Road from Chichester, Portsmouth and Southampton

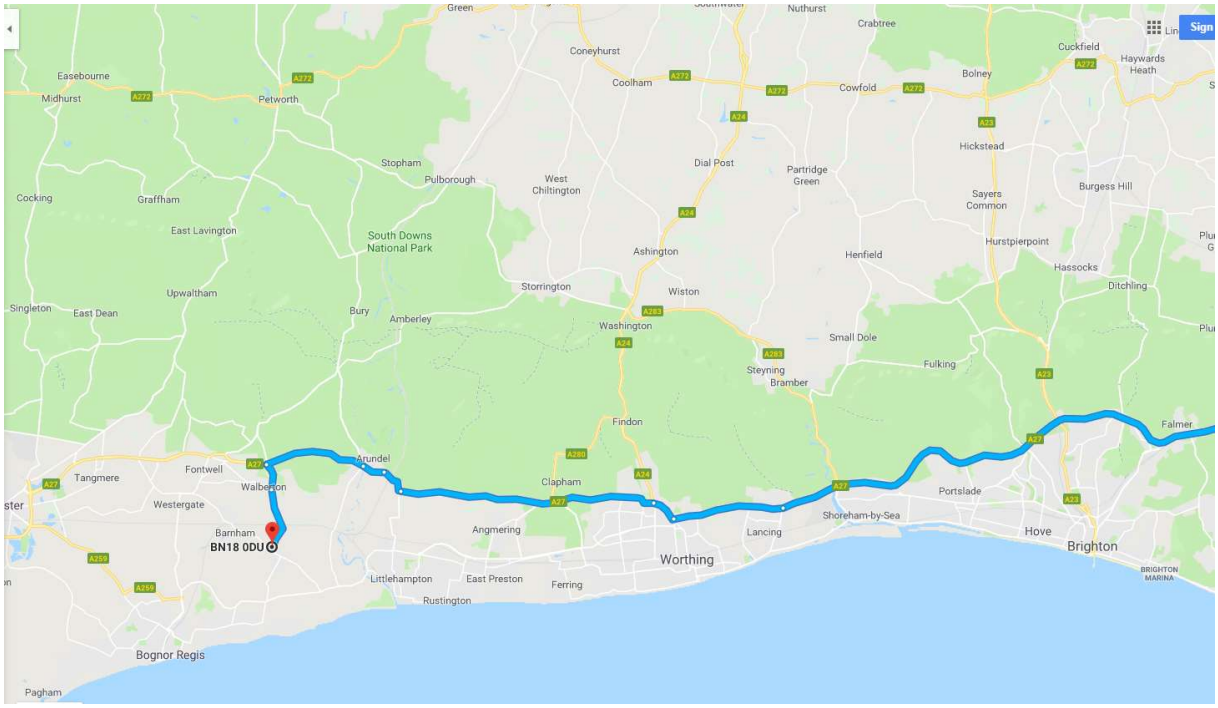

Figure 4 – Construction Access to North End Road from Worthing, Brighton and Eastbourne

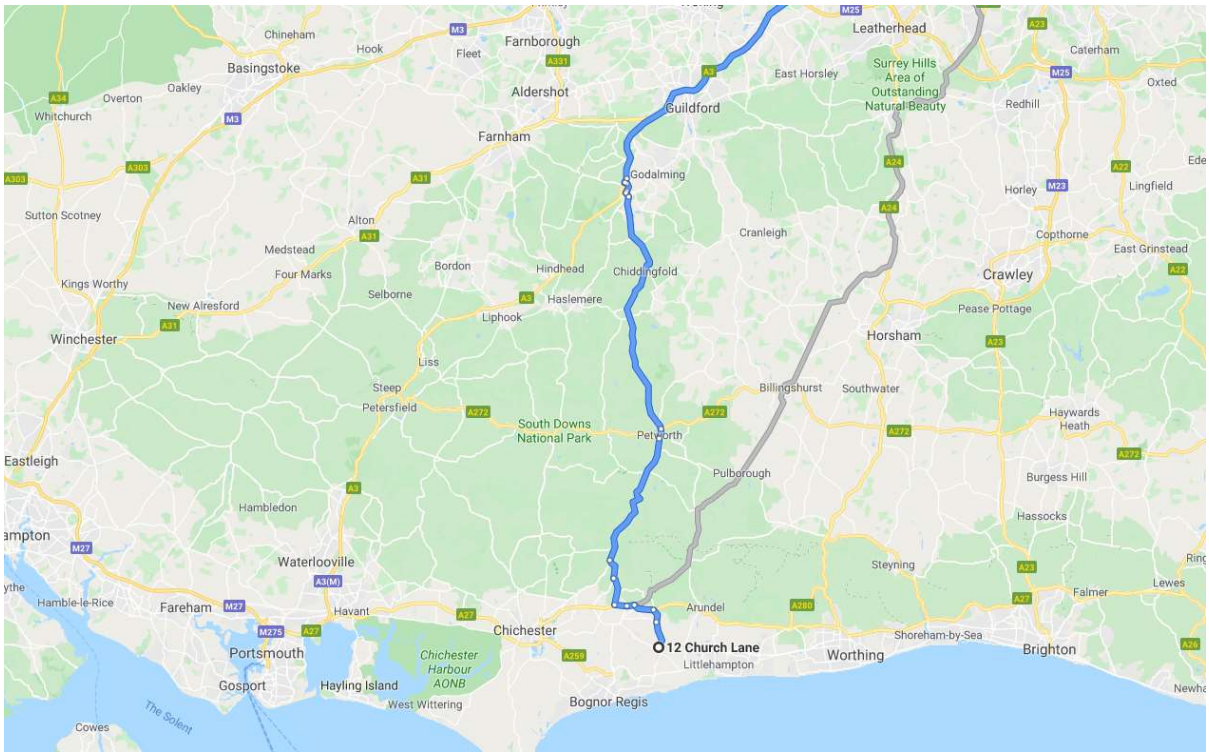

Figure 5 – Construction Access to North End Road from Guildford and London

4.4 Loading, Unloading and Storage of Plant Materials

To facilitate the efficient and safe loading and unloading of plant and materials, in addition to 4 No. 20'x8' secure stores within the main compound, a loading and secure storage area will be temporarily provided as indicated on the 'Construction Environmental Method Plan' in Appendix B.

Materials for use in the works will be stockpiled in the site compound, temporary storage area or adjacent to the immediate work area. Material storage areas shall be suitably demarcated, and segregation shall be maintained at all stages to ensure minimal contamination and/or waste.

4.5 Turning Facilities

There is to be no reversing into the site or onto North End Road.

All vehicular turning is to be restricted on site, with the Principal Contractor providing such facility as part of their proposed Traffic Management Plan. It is recommended that a turning head is constructed near the compound to enable construction traffic to safely turn on site and enable access/egress to the site in a forward gear. This has been demonstrated on the 'Construction Method Plan' in Appendix B.

4.6 Onsite Holding Areas

It is anticipated that through organised project planning by the Site Manager, deliveries can be scheduled to stagger throughout the day, particularly avoiding peak hours, as well as avoiding multiple deliveries on site at the same time.

An estimation of the primary delivery frequencies, when required, is shown in Table 3. The frequencies in Table 3 are only indicative and are not to be looked at as an absolute total or minimum and are subject to change according to the stage of build.

Where it is unavoidable and multiple deliveries occur and/or are attempting to leave the site simultaneously, construction vehicles will be conducted to a lay-by within the site as a temporary holding area if deemed necessary by the Site Manager or Gateman.

Table 3 – Schedule of Estimated Primary Deliveries

Materials	Stages Required	Estimated Frequency
Large Plant and Equipment	E and Completion	2 per day
Aggregates	E, SS	6 per day
General Contractors Materials	E, SS, L	6 per day
Fuel Deliveries	SS	1 per week
General Deliveries	E, SS, L	4 per day

E = Enabling Works; SS = Substructures and Superstructures; L = Landscaping

4.7 Wheel Washing Facilities

Due to the nature of the cohesive materials on site, it is likely that tyres will gather material from the site before surfaced roads have been constructed. The presence of mud can constitute a public nuisance and loss, or injury, can result in a claim for negligence. Due to the occurrence of materials collecting on tyres being unavoidable at certain stages of the works, active measures will be taken to prevent dirt, mud and debris from being deposited on the road.

As a first defence, vehicles shall first be limited to trafficking on hard surfaces on the site, where possible, to minimise initial collation of materials on tyres. Vehicles will also abide by the site speeds of no more than 10mph, or that stated otherwise on site, primarily for safety purposes, but also to help retain any dirt and debris on the vehicle.

For all vehicles leaving the site at North End Road, wheel wash facilities will be used in the form and specification of a manned hand-held jet wash, with road sweepers on full time where necessary whilst importing any fill material. No vehicles leaving the site will have mud on its tyres. All vehicles leaving the site will be inspected and confirmed to be sufficiently clean to prevent the migration of dirt and debris onto North End Road and the nearby public highway. This will be monitored daily by the Principal Contractor's Site Manager to ensure public highways and site roads are kept clean.

4.8 Air Quality and Dust Suppression

Dust is particularly problematic for unpaved granular roads; however temporary haul roads are to be capped with a tarmac surfacing to prevent fines from the sub-base material from being airborne from vehicle movements and tyre 'plucking'.

The likelihood of dust is ultimately determined by the local geological strata, which is more likely in loose particulate strata like sandstones and chalks. The predominant soil type is clay, which is a cohesive material and should not give rise to fugitive dust in the interim, prior to the tarmac surfacing.

If unforeseen fugitive dust occurs, then the generated dust will be mitigated in general accordance with BRE Report 456 – 'Control of dust from construction and demolition activities. This includes damping down of fill material embankments and/or haul roads using towed spray bowsers.

5 Construction Organisation

5.1 Site Compound

The ground workers will be Principal Contractor during the enabling works and prior to Dandara having an onsite presence. The ground workers will have a satellite compound, which will allow its location to be moved in accordance with the necessary phasing of construction. The satellite compound will still comprise of the necessary temporary cabins, welfare, and material storage.

Once Dandara become Principal Contractor at the start of the house building phase, a construction site compound will be set up as indicated on the 'Construction Environmental Method Plan' in Appendix B. The site compound will have segregated areas for pedestrians and vehicles, allocated parking spaces, offices for staff, canteen, drying area, toilets and material storage.

5.2 Welfare Facilities

In accordance with the Construction Design and Management Regulations 2015, welfare facilities on site will include:

- Suitable and sufficient sanitary convenience
- Suitable and sufficient washing facilities, including showers
- Adequate supply of wholesome drinking water
- Suitable and sufficient changing rooms and lockers
- Suitable and sufficient rest rooms

5.3 Parking for Site Operatives and Visitors

Specific parking areas as indicated on the 'Construction Method Plan' in Appendix B, will be located adjacent to the compound with overflow available at strategic locations around the site to suit the current area of works or to avoid conflict with occupations.

Additional temporary parking at peak periods of construction will be provided when necessary, utilising some of the constructed unallocated vehicular spaces spread across the site that will be formed up to base level. Parking areas will be clearly signed and monitored by the Site Manager.

A total of 26 parking spaces are available at the main compound (Site Manager, Forklift Driver, Building Control or Dandara Office Staff Visitor, and Site Operatives) and a further 16 available in proposed visitor bays pre-occupation. The total of 42 potential spaces is deemed suitable and sufficient parking to accommodate the anticipated staff of approximately 50 (assuming the typical car share for the trades contractors).

All personnel transportation vehicles will be required to park within the designated areas and strictly no parking will be permitted on North End Road. Only construction plant will be permitted overnight parking onsite.

5.4 Hours of Working

In general, site working hours are envisaged as being within the following:

- Monday to Friday: 8:00am to 6:00pm
- Saturday: 8:00am to 1:00pm
- Sundays or Bank Holidays: No construction activity will take place

5.5 Noise

All works will be undertaken in accordance with the Control of Noise at Work Regulations 2005, including the associated Lower Exposure Action Value of 80dB, Upper Exposure Action Value of 85dB and Exposure Limit Value of 87dB.

As approved for guidance by The Control of Noise (Code of Practice for Construction and Open Sites) (England) Order 2015 statutory instrument, the British Standard BS5228 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise, will be used to guide basic methods of noise control relating to construction.

Where the operative and/or Site Manager believes a significant disturbance may be caused, the Site Manager will contact the nearby property owner/resident to inform them of the intended works and their duration, and if required what measures are being employed to mitigate.

5.6 Site Contacts

The ground worker who has been appointed to undertake the groundworks element of the scheme and who is initially the Principal Contractor for the main works is:

TBC – Contractor not yet appointed but information will be provided to the Local Authority as soon as this information becomes available.

- Foreman TBC (Mobile: TBC)
- Contract Manager TBC (Mobile: TBC)

Once the development has reached the oversite stage (approximately 16 weeks), the groundworker will step down as Principal Contractor and will then be the responsibility and duty of Dandara.

Dandara Limited (Southern), Roman House, South Hampshire Industrial Park, Eddystone Road, Totton, Hampshire, SO40 3SA

- Site Manager TBC (Mobile: TBC)
- Construction Manager TBC (Mobile: TBC)

Dandara's Site Manager will be located on site and responsible for the day-to-day operations of the development. If Dandara's Site Manager is unavailable, then the Construction Manager should be contacted as the secondary point of contact for any enquiries regarding the construction of the development.

5.7 Communication Strategy

Communication to the local residents and commerce about the works will be through a letter drop before commencing the works. The site will be continually monitored to ensure compliance with the CMP requirements and company procedures. Any non-conformances will be highlighted at monthly team meetings and a remedial strategy implemented as soon as is reasonably practicable.

5.8 Responsibilities of the Principal Contractor

It will be the responsibility of the Principal Contractor's Site Manager for ensuring that the construction activities relating to the proposed development are undertaken in strict accordance with this CMP.

A contractor (including a Principal Contractor) appointed to work on a project will have the skills, knowledge and experience necessary to fulfil the role that they are appointed to undertake, in a manner that secures the health and safety of any person affected by the project, in accordance with the Construction (Design and Management) Regulations 2015.

All site personnel, visitors, sub-contractors and suppliers will be expected to abide by this CMP. Where delivery drivers will be regularly coming to the site, they will be issued with copies of this plan either as paper copies or in electronic form. The plan will also be posted on the site office notice board and will be discussed during the site induction as part of the site traffic management plan.

5.9 Security Hoarding

Security hoarding or fencing is to be erected along all necessary boundaries. Refer to the Construction Environmental Method Plan in Appendix B for full details on their location. Safe access for vehicles and a separate pedestrian's access is to be provided, where possible, at the site entrance.

Weekly maintenance checks will be undertaken to establish any damage and general condition of the hoarding/fencing.

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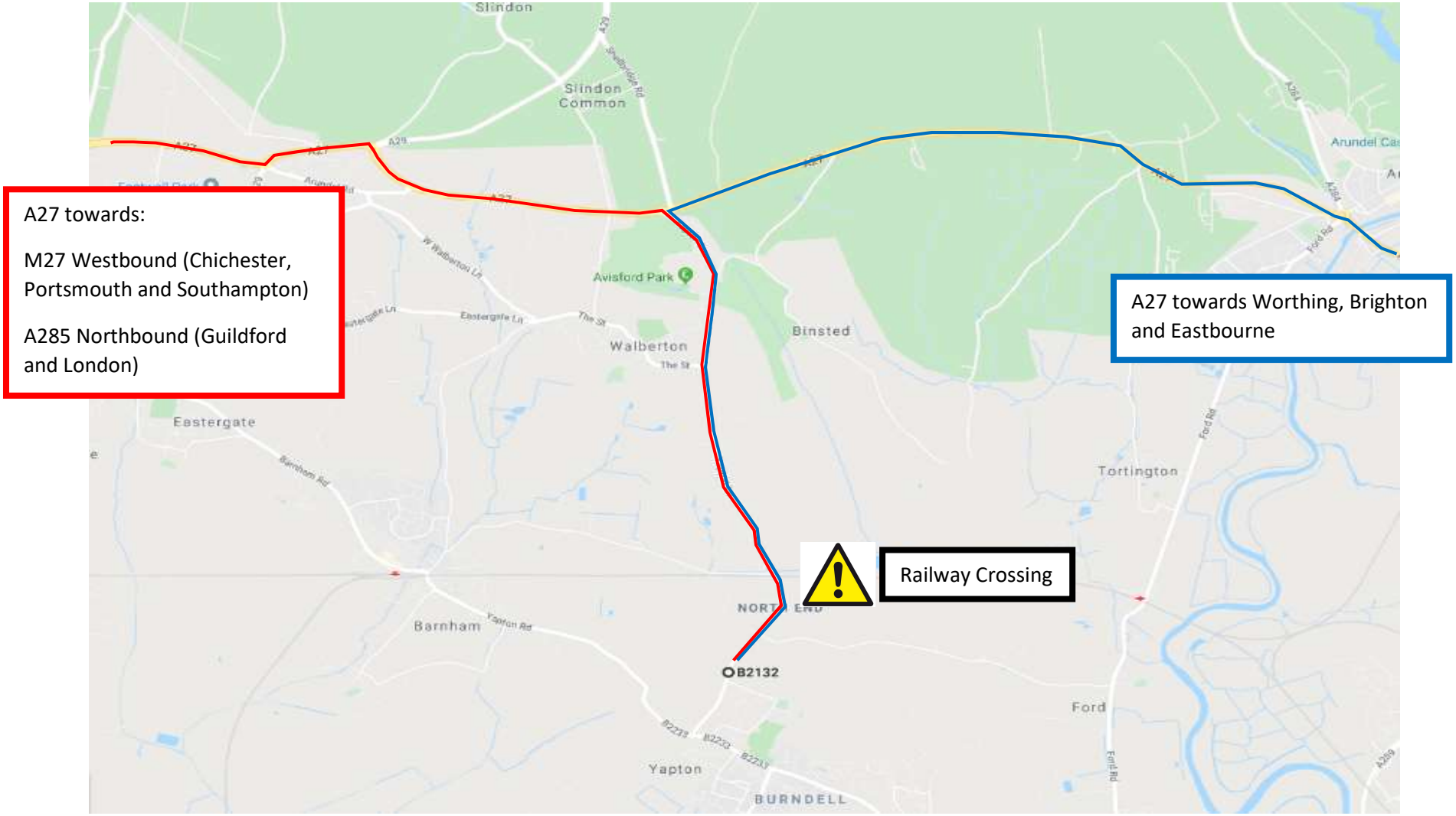
Appendix A Construction Access Map

ARUN DISTRICT COUNCIL Y/72/20/RES



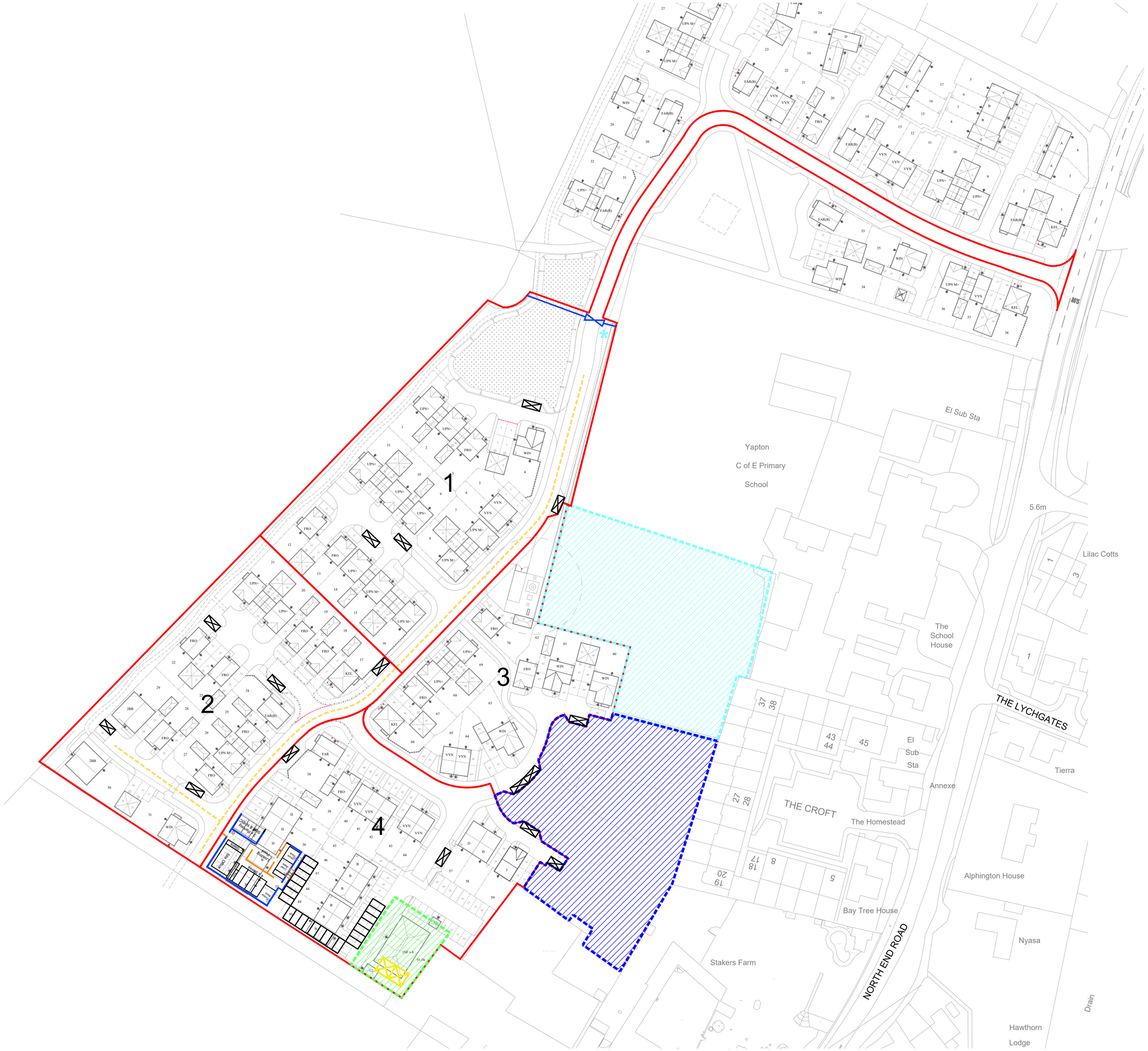
Construction Access Map

Land at Stakers Farm, North End Road, Yapton, BN18 ODU

No deliveries shall take place between 08:30-09:00 and 14:45-15:45 to avoid spike in traffic around School Areas

Appendix B Construction Method Plan

ARUN DISTRICT COUNCIL Y/72/20/RES



Legend:

- Land Fenced Off and Handed Over to Yapton CE Primary School
- Topsoil Storage Area
- Material Storage
- Silos
- Vehicle Routing
- Timber Fencing
- Timber Hoarding
- Lay-By / On-Site Holding Area
- Staff / Visitor Parking
- Location of wheel washing facilities

Note: Layout indicative only. Please refer to Architect's proposed site plan for full detailed layout.

Rev.	Date	Description	Initial
E	17/09/20	Wheel washing facilities added	MA
D	23/07/20	Site layout updated	MA
C	16/03/20	Site layout updated	MA
B	09/01/20	Site layout updated	MA
A	30/10/19	Initial issue	MA

Development
North End Road, Yapton

Drawing Title
Engineering Details
Construction Method Plan

Status
FOR INFORMATION

dandara
new homes
Roman House, South Hampshire Industrial Park,
Eddystone Road, Totton, SO40 3SA
Tel: 02382 124061

Scale	Paper Size	Date	Drawn	Checked
NTS	A1	30/10/19	MA	COB

Drwg. No.	Rev.
YAP-CMP-02	E

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Appendix C Large Tipper Tracking

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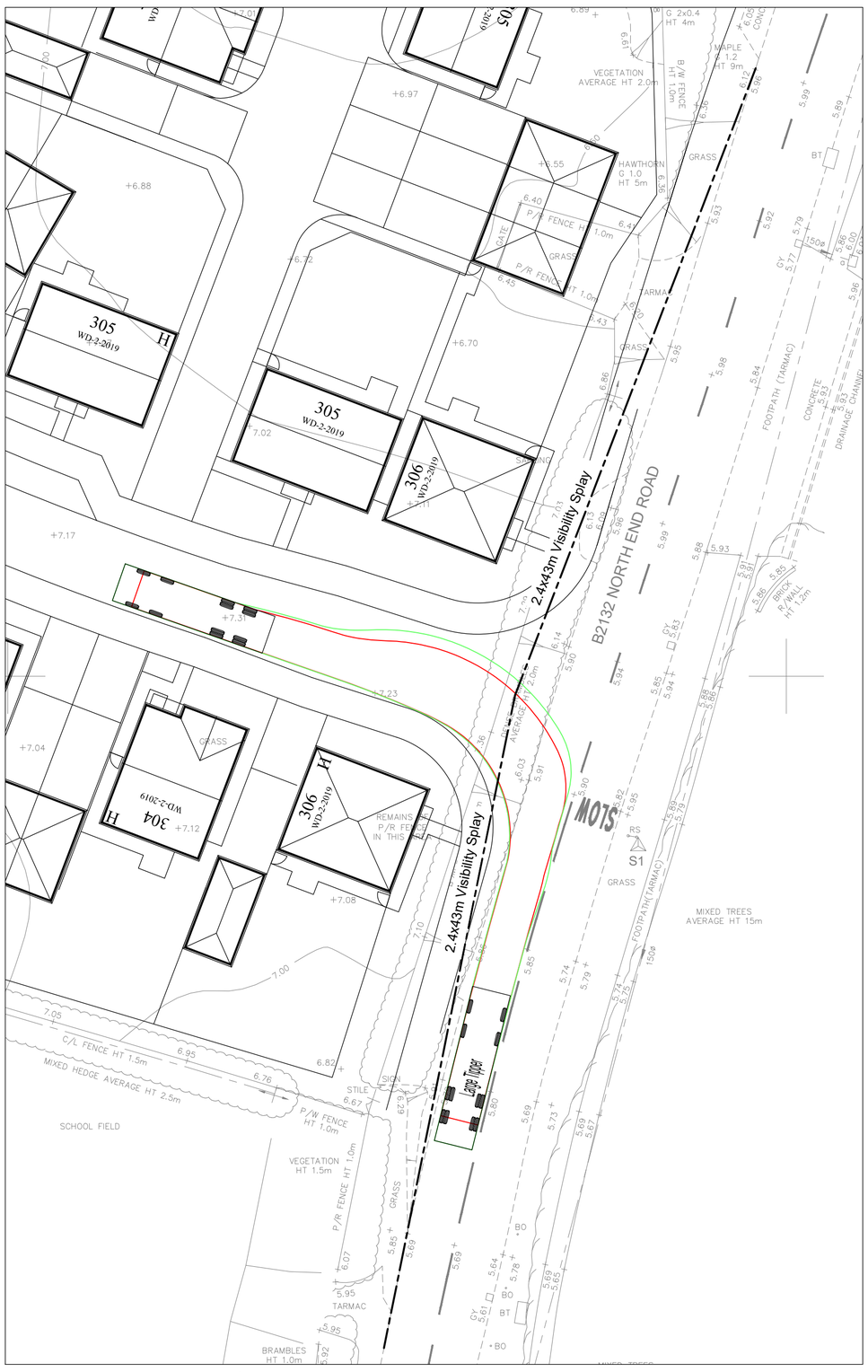
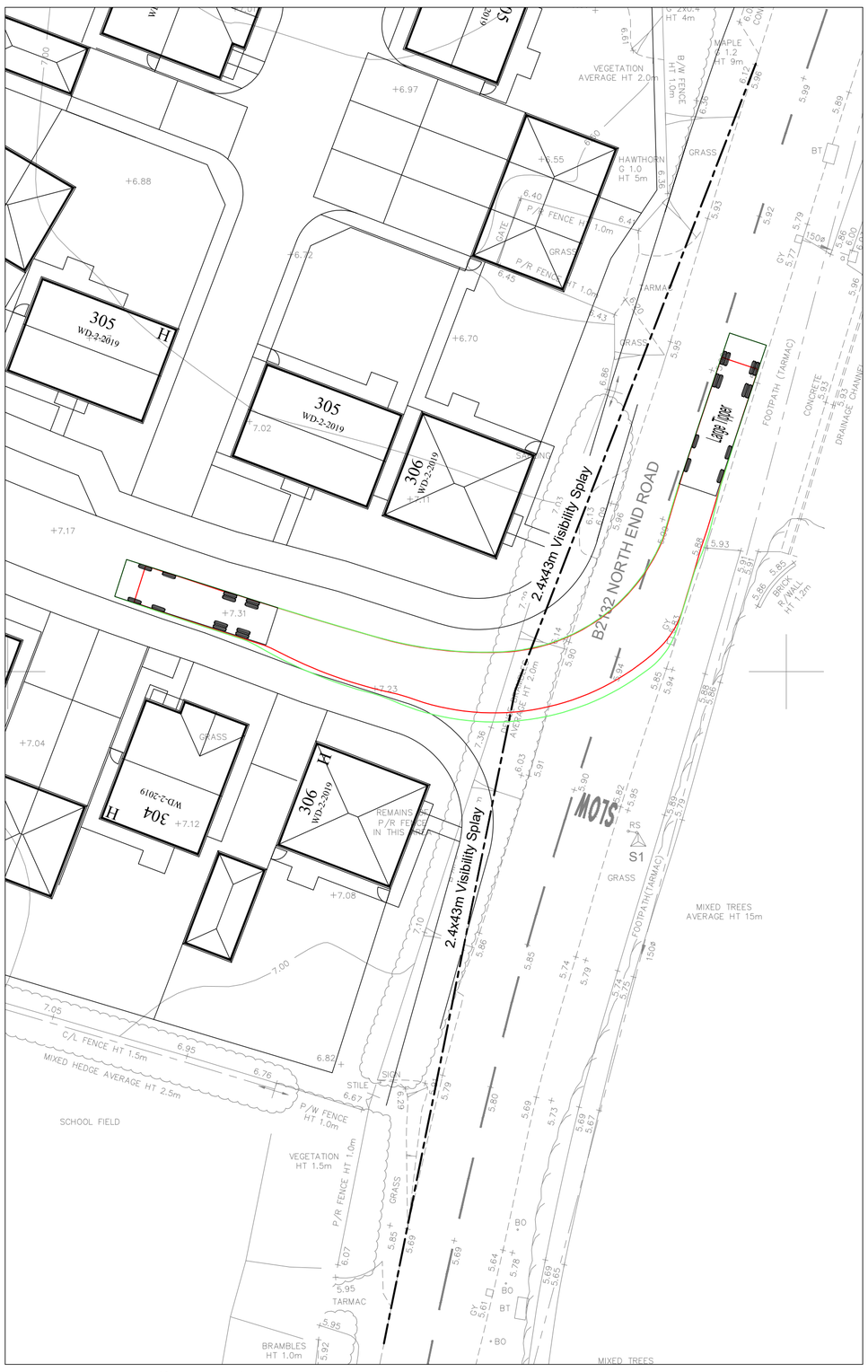
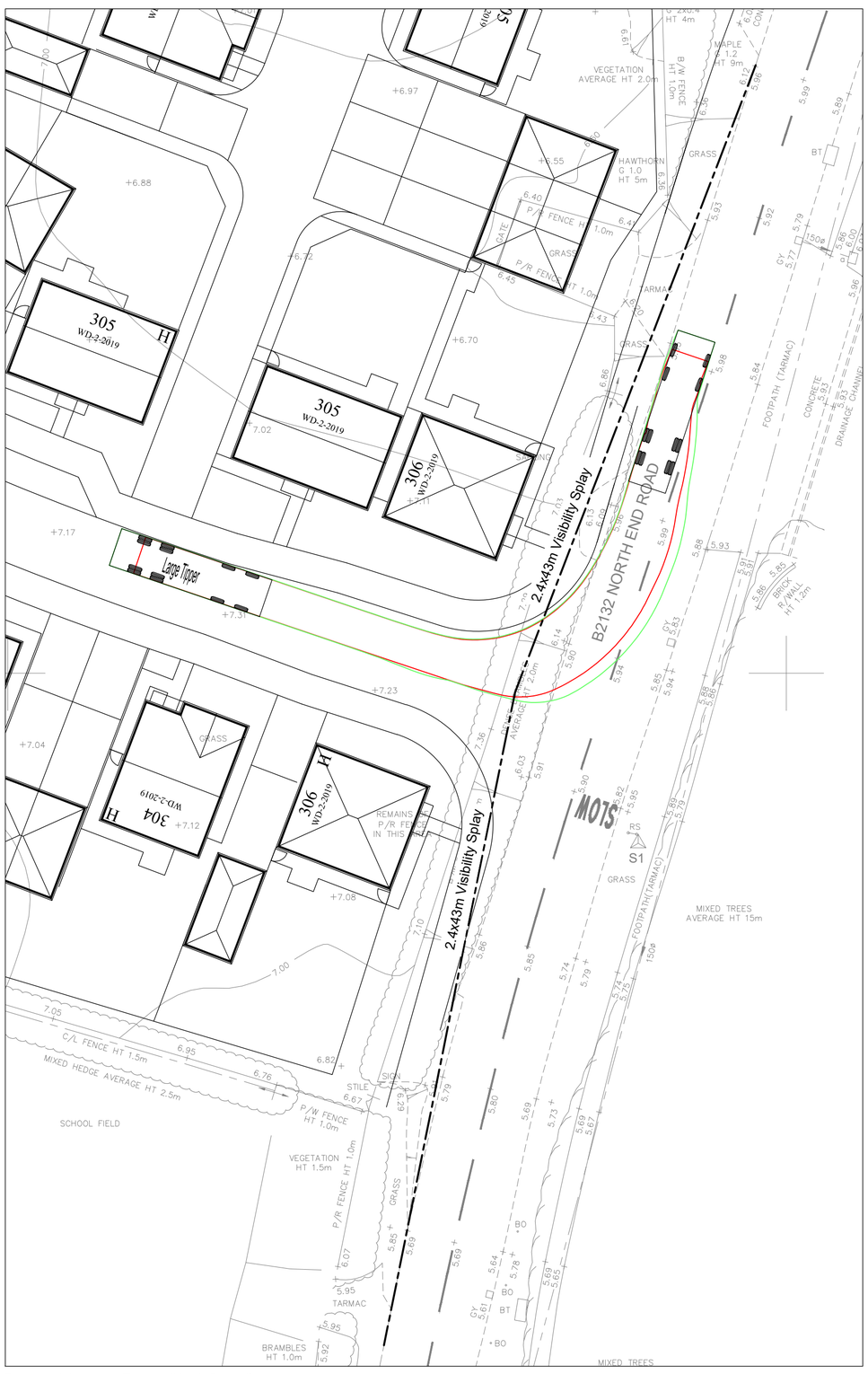


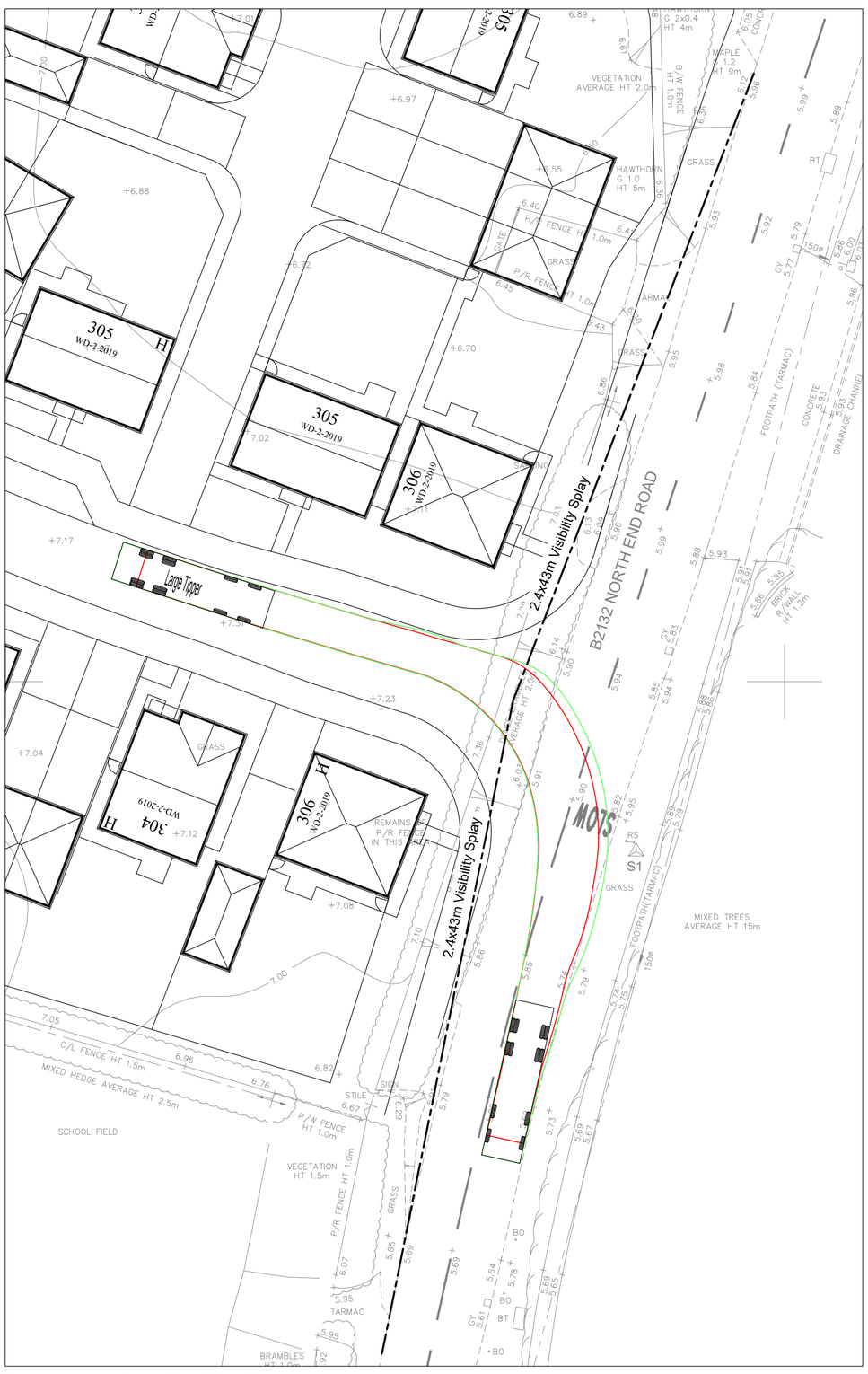
Proposed Access - Entry (North Bound)



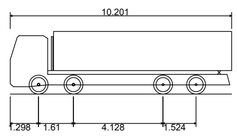
Proposed Access - Entry (South Bound)



Proposed Access - Egress (North Bound)



Proposed Access - Egress (South Bound)



Large Tipper	
Overall Length	10.201m
Overall Width	2.495m
Overall Body Height	2.890m
Min Body Ground Clearance	0.341m
Track Width	2.471m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.550m

Note: Layout indicative only. Please refer to Architect's proposed site plan for full detailed layout.

Rev.	Date	Description	Initial
B	16.03.20	Note added	MA
A	22.11.19	Initial issue	MA

Development
North End Road, Yapton

Drawing Title
Large Tipper Vehicle Tracking
Proposed Site Access

Status
FOR INFORMATION

dandara new homes
Roman House, South Hampshire Industrial Park,
Eddystone Road, Totton, SO40 3SA
Tel: 02382 124061

Scale	Paper Size	Date	Drawn	Checked
1:200	A1	22.11.19	MA	COB

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YAP-TRA-02	B

ARUN DISTRICT COUNCIL Y/72/20/RES