



Phase 1 Drainage Construction
Spine Road & Drainage



Phase 2 Drainage Construction
Substructure & Shared Access Road

Legend

- Surface Water Sewer to be provided as part of phased works
- Existing Surface Water Sewer within phased works
- Foul Water Sewer to be provided as part of phased works
- Existing Foul Water Sewer within phased works
- Site Boundary
- Overland Flow Direction
- Future development area
- Proposed Permeable Surface
- Proposed Attenuation Tank

NOTES: CONSTRUCTION POLLUTION AND CONTROL
(In accordance with the CIRIA SuDS MANUAL 2015)

TO BE READ IN CONJUNCTION WITH THE CONSTRUCTION SURFACE WATER MANAGEMENT PLAN DOCUMENT PRODUCED BY COCKSEGE CONTRACTORS LTD.

EXCAVATIONS AND EXPOSED GROUND
To help prevent volume runoff from site and reaching exposed ground, runoff diversion or interception devices should be placed upstream of any watercourse.

To help prevent the pollution from entering watercourses, silt trenches, hay bales or stilling ponds should be placed downstream.

STOCKPILES
Stockpiles are to be located away from any proposed watercourse or proposed on site drainage system, protective coverings are to be used where necessary to help prevent runoff stripping the stockpile.

PLANT AND WHEEL WASHING
Plant and wheel washing to be undertaken only where designated. The wheel washing area is to be discharged via gulleys into the attenuation tank via a silt trap. Zero runoff is to be allowed to discharge to watercourses or discharge into groundwater during construction.

HAUL ROADS
Haul road lengths are to be kept to a minimum. Gradients shall be shallow to avoid potential surface water runoff to surrounding areas. Where necessary, bunds or ditches shall be constructed to prevent excess runoff. haul roads should also be sprayed regularly to keep dust to a minimum. If the haul road is hard surfaced it shall be swept on a regular basis to prevent accumulation of dust and mud.

POLLUTION MITIGATION
Controlling a pollution event at source i.e. preventing it from happening in the first place will nearly always be less expensive than having to manage a pollution event.

It is best practice to retain vegetation cover, minimise soil stripping and establish new vegetation on bare ground at the earliest opportunity. Erosion of soils can be caused by wind but is normally attributed to rainfall. Sheet flows cause slips, gullies and rills to form whilst drainage channels can give rise to scouring of bed and banks, all factors that can increase the mobilisation of material.

Identifying key areas on site that require protection is another important aspect of planning, these include:

- haul roads and site compounds
- entrances to drains
- in drainage channels
- in lagoons
- on slopes

Legend

- Proposed Temporary Haul Road
- Areas of drainage to be installed within Phase 2B

CDM REGULATIONS HEALTH AND SAFETY INFORMATION FOR THE LIFETIME OF THE DEVELOPMENT

The hazards noted are in addition to the normal hazards and risks faced by a competent contractor when dealing with the type of works detailed on this drawing.

CONSTRUCTION RISKS:

1. Confined spaces entry and hazardous waste materials / gas.
2. Deep manholes / excavations
3. Contractor to locate services prior to excavating.
4. Asbestos may be present.
5. Drainage connection requires deep excavation temp works required.
6. Existing drains to be protected and bridged over where required.
7. Works adjacent to busy road and river. Watercourse / ditch levels may rise rapidly following prolonged periods of rainfall.
8. Soft ground during construction works particularly in wet weather.

MAINTENANCE/CLEANING RISKS:

1. Pavement deformations to be monitored to ensure that designed pavement falls are maintained. If significant deformation is allowed to propagate then localised flooding could occur.
2. Silt traps, drainage channels, permeable pavements and inspection chambers require the standard periodic inspection regime and cleaning routine to ensure continued performance and reduce the risk of flooding.
3. Works adjacent to Watercourse / ditch. Watercourse / ditch levels will vary during heavy rainfall events.
4. Potential for soft spots within existing ground after heavy rainfall.
5. Dust and noise impacts on local community.
6. Existing live services and utilities.
7. Deep manholes / excavations - appropriate entry equipment required.
8. Soft ground during construction works particularly in wet weather.

DEMOLITION / ADAPTION RISKS:

1. Apparatus located in landscaped areas has not been designed to support heavy vehicle loading.
2. The surface water drainage apparatus has been designed to accommodate the designed catchment area, no additional areas of hardstanding can be connection into the system without risk of localised flooding on site.
3. Hazardous waste materials / dust and debris released into the air.
4. Deep manholes / excavations - appropriate entry equipment required.
5. Works adjacent to river. Watercourse / ditch levels will vary during heavy rainfall events.
6. Unknown ground conditions during / after heavy rainfall.
7. Soft ground during construction works particularly in wet weather.

PRELIMINARY DRAWING:
This drawing is for preliminary purposes only and must not be read as a construction issue. The design is not fixed and design changes are likely.

Rev	Date	Description	By	Check
P1	01/08/23	Preliminary	RB	PP

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Client	Cocksege Building Contractors
Project	Barrett's Lane, Needham Market Suffolk IP68DL
Title	Construction Stage Drainage Plan
Scale @ A1	1:500
Status	Preliminary



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