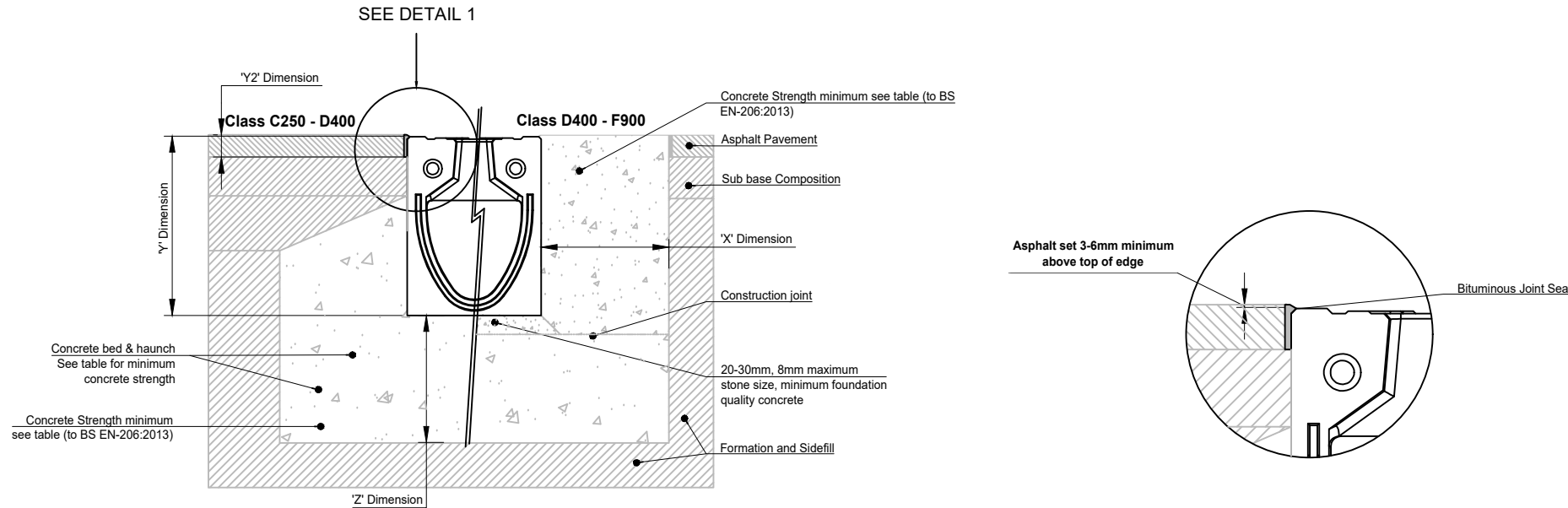
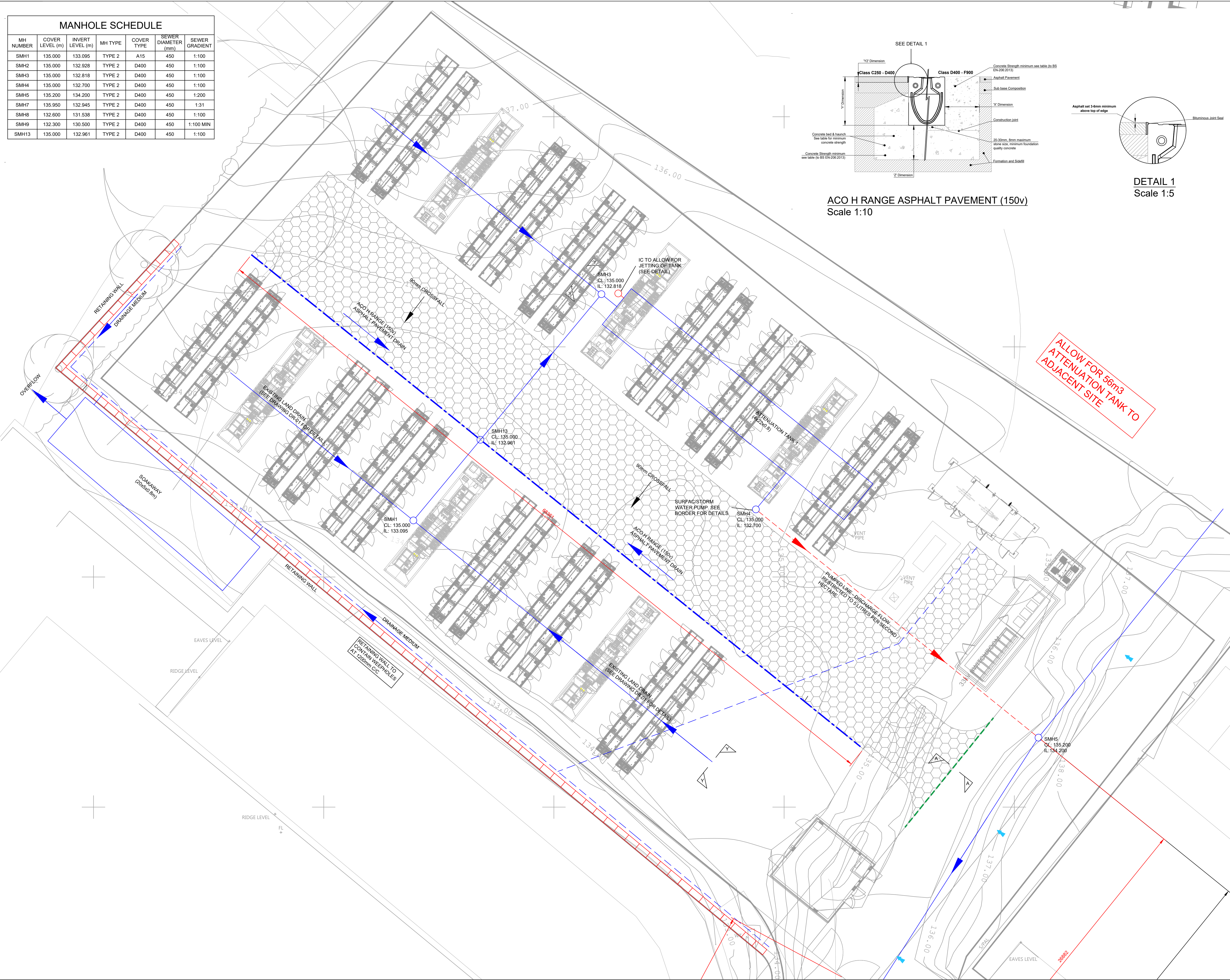


MANHOLE SCHEDULE						
MH NUMBER	COVER LEVEL (m)	INVERT LEVEL (m)	MH TYPE	COVER TYPE	SEWER DIAMETER (mm)	SEWER GRADIENT
SMH1	135.000	133.095	TYPE 2	A15	450	1:100
SMH2	135.000	132.928	TYPE 2	D400	450	1:100
SMH3	135.000	132.818	TYPE 2	D400	450	1:100
SMH4	135.000	132.700	TYPE 2	D400	450	1:100
SMH5	135.200	134.200	TYPE 2	D400	450	1:200
SMH7	135.950	132.945	TYPE 2	D400	450	1:31
SMH8	132.600	131.538	TYPE 2	D400	450	1:100
SMH9	132.300	130.500	TYPE 2	D400	450	1:100 MIN
SMH13	135.000	132.961	TYPE 2	D400	450	1:100

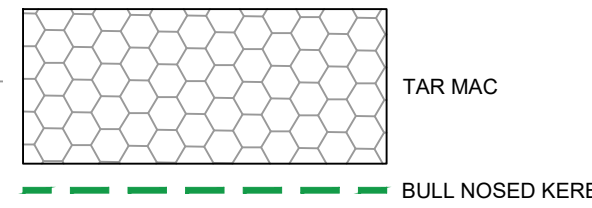


ACO H RANGE ASPHALT PAVEMENT (150v)
Scale 1:10

DETAIL 1
Scale 1:5

General Notes :

- 1.) Do not scale from this drawing except for planning purposes.
- 2.) All dimensions are in millimetres.
- 3.) All levels are in metres relative to datum.
- 4.) All dimensions stated are to be confirmed on site prior to commencement of any works and any discrepancies found are to be reported to Steve Morgan Associates Limited immediately.



WATER PUMP DETAILS:

WATER PUMP TO PUMP STORM WATER AT A HEAD OF 0.5m OVER A DISTANCE OF 30.966m.

ACO DRAINAGE NOTES

1.0 Load Class
Installation recommendations shown are ACO minimum recommendations for BS EN 1433:2002 load class requirements.

2.0 Ground Conditions

The long term performance of a channel installation to sustain vertical and lateral loads depends upon A) ground conditions B) stability of the adjacent pavement and C) a suitable concrete bed and surround. The recommended installation detail may require the minimum dimensions to be revised to achieve site specific load class requirements (referred to in 1.0 above).

3.0 Cutting and Joining

Mitre joints are formed by cutting the channels to the required angle and butting them together with appropriate sealant (e.g. Sikaflex 11FC or similar) or ACO Repair Kit. Where possible 90° joints and T's should be formed so that grailings do not have to be cut. Angles can be formed by connecting them using proprietary PVCu pipework attached to ACO inlet/outlet endcaps. For further details please contact ACO Design Services Team.
Note: For Load Classes higher than C250, mitred joints are not recommended in vehicular areas. Where requested ACO can custom manufacture angled junctions to order.

4.0 Isolation Joints

The channel must be isolated from the surrounding environment. An isolation joint must be positioned up to 1500mm from the channel wall. Any dowel bars must be located no nearer than 150mm from the channel wall. Other isolation joints in surrounding slab must be continued through the channel. Additional crack control may be required to comply with specifier requirements.

5.0 Installation into in-situ Slab

Where a channel is to be installed into an existing concrete slab it is necessary to cut a suitably sized pocket in the slab. The channel will then need to be bedded in polymer modified mortar of 25mm minimum thickness (this may vary depending on the type of mortar used). Engineering advice may be necessary.

6.0 Temporary Installation

A channel installation is not complete until the final surfacing is laid. In any temporary condition, i.e. with the channel walls projecting above adjacent ground, site traffic should not cross channels. Loose boards, stone fill or cover plates will not protect the channel walls or grating. A temporary channel crossing should be formed by raising the ground level locally, to 3 - 5mm above top of edge rail, either side of a channel for a distance of 750 to 1000mm, to form ramps. Note that the channel load class should be adequate to carry the site traffic.

7.0 Block Pavements

The channel must be supported laterally. Blocks laid directly against a channel must be laid as a soldier course and restrained from movement by bedding securely on the concrete haunch e.g. by using a polymer modified mortar for bed and perpendicular joints (e.g. RONAFIX mortar mix C or similar). Blocks or slabs bedded on sand remote from the channel should be set at a higher level to compensate for possible settlement of the paving in service.

8.0 Grate Locking System

Gratings should be securely fixed to the channel, where required, using an appropriate grate lock system (where available).

9.0 Channel Protection

Avoid contact between compaction equipment and top of ACO channel. The installer must ensure that the finished surface level lies above the top of the edge rail (by at least 3-6mm). Covering or protecting the grating, before concreting the haunch or laying blocks, removes the time and cost associated with cleaning the channel and grating of cement material and embedded stones. (Please note that ACO channels must be installed with the grating in place to prevent deformation of the channel).

10.0 Watertight Installation to BS EN 1433:2002

ACO channels should be installed without any gaps on a compacted channel foundation, taking into account the moulded arrow direction on the channel body and the sequence of channel types in the case of sloping channels. Installation must always begin at the lowest point.
Note: Iron products have good corrosion resistance to concrete and mortar products but may experience corrosion if high chloride and/or sulphate content is present. Use only good quality concrete and consider using corrosion inhibitors where necessary. The use of protective coatings, such as paint, can minimise the risk of corrosion.

REVISION	JH	19/11/25	AMENDED
	JH	27/10/25	AMENDED
	JH	23/06/25	AMENDED
	JH	10/04/25	AMENDED
	JH	18/02/25	AMENDED
	JH	07/01/25	AMENDED
	HG	19/12/24	AMENDED
	JH	18/12/24	AMENDED
DATE	JH	04/12/24	INITIAL ISSUE
REV	By	Date	Description

Client

Project Description
ROYAL BARN ROAD

Drawing Title
PROPOSED SITE DRAINAGE

Drawn JH Date 04/12/24

Checked SM Date 04/12/24

Scales 1:150@A1

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Project Number 1248769

Drawing Number GA-07

Rev I