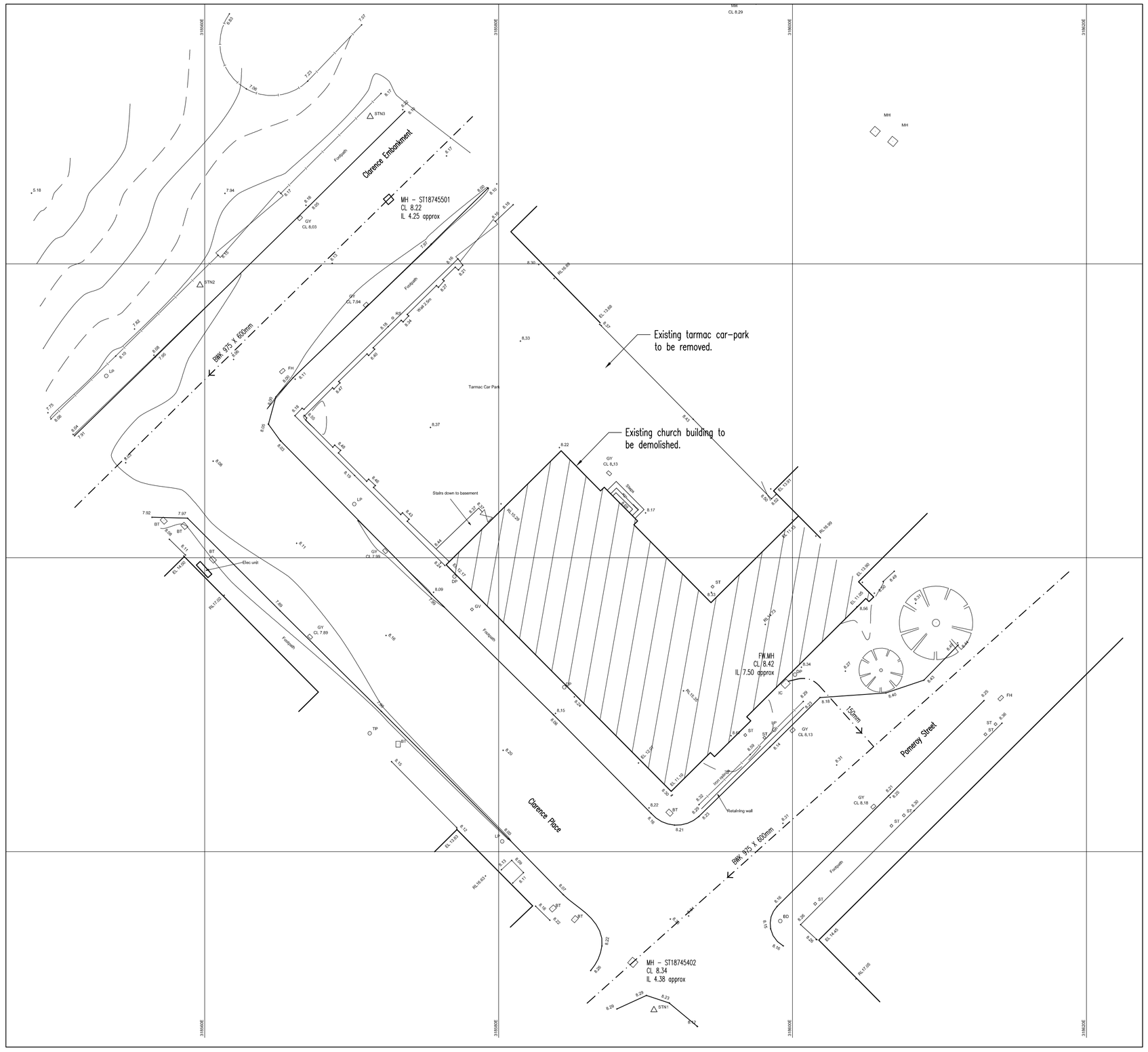
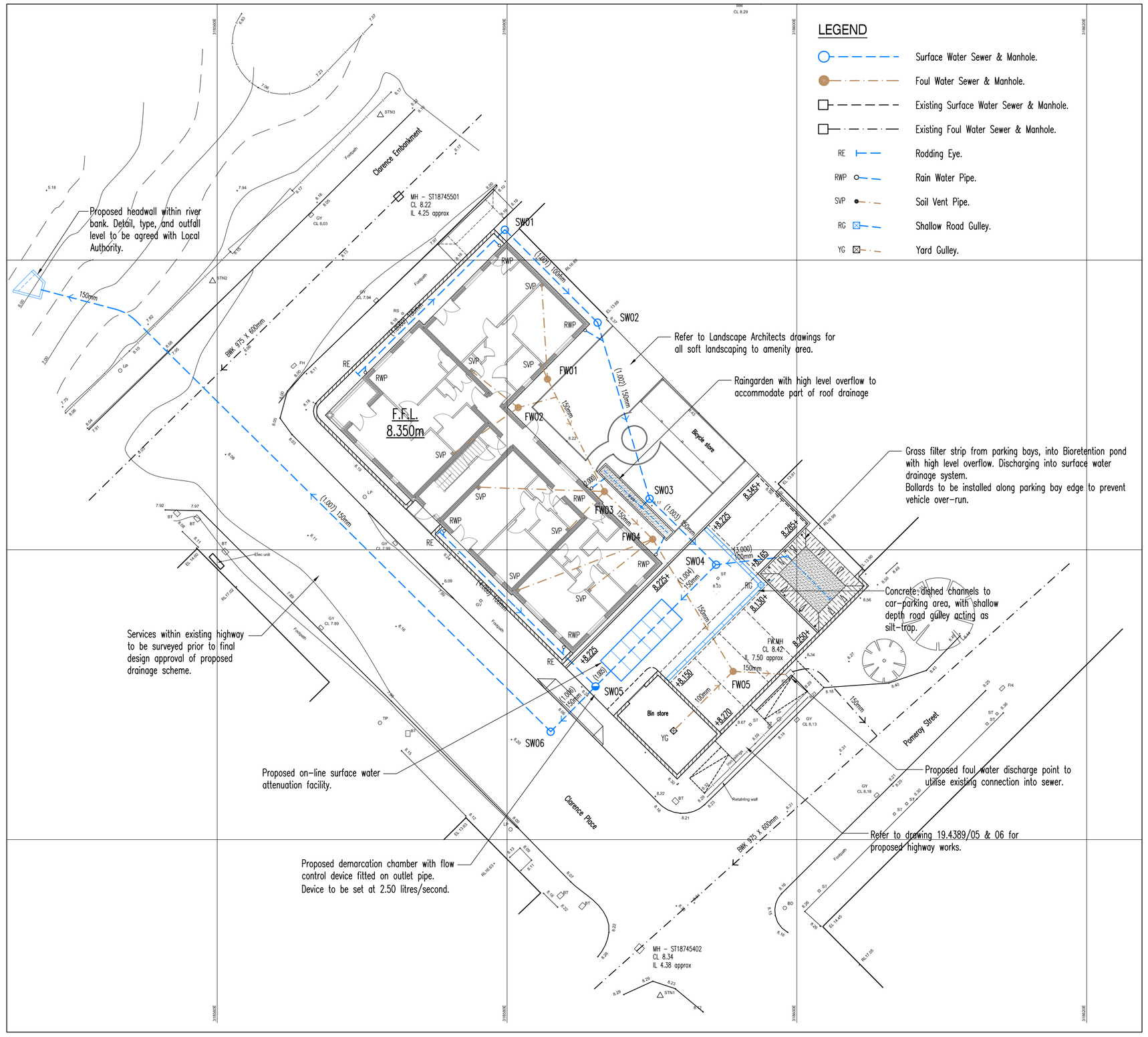
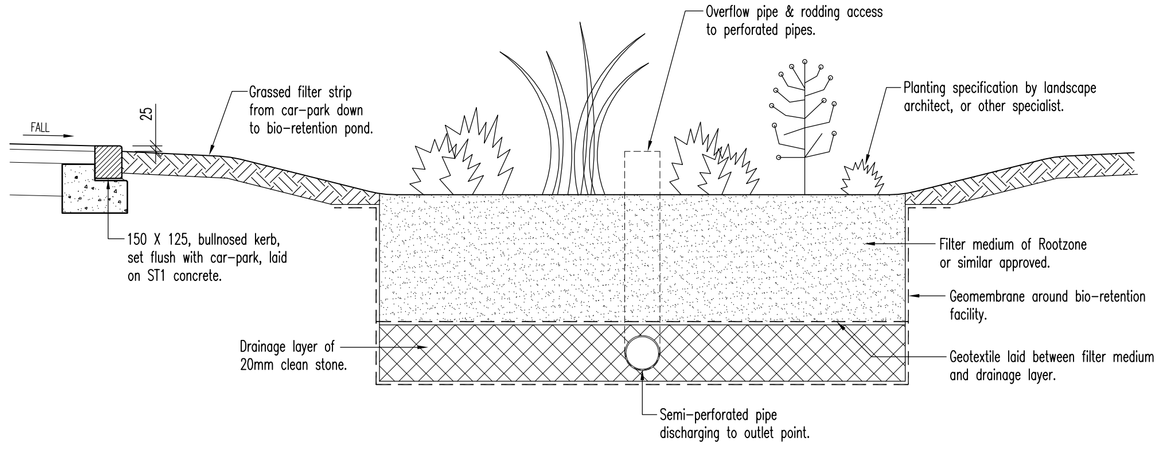


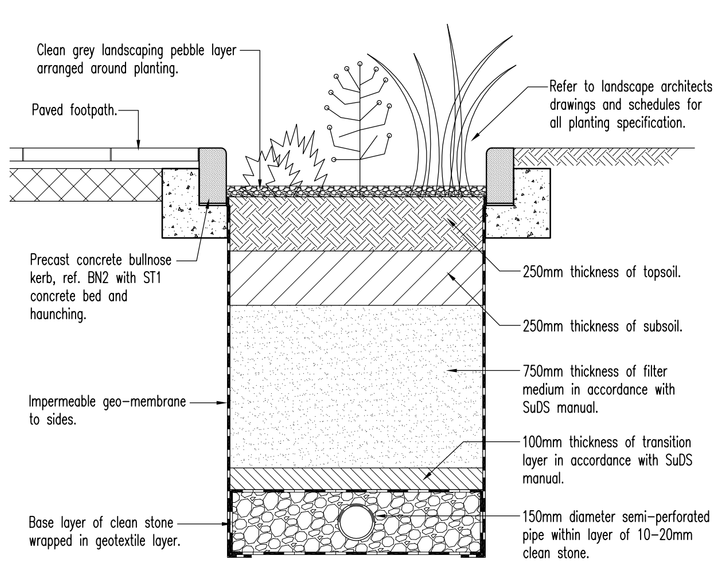
EXISTING SITE LAYOUT



PROPOSED SITE LAYOUT



SECTION THRO' TYPICAL BIO-RETENTION FACILITY



TYPICAL RAIN-GARDEN DETAIL

Note:
The specification in all respects shall be in accordance with the current Specification and Construction publication in force in the country at the time of construction.

GENERAL:

1. All dimensions are in millimetres. All levels are in metres.
2. Do not scale from this drawing – use figured dimensions only.
3. This drawing is to be read in conjunction with the latest Engineer's and Specialist's drawings and specifications.

MATERIALS & WORKMANSHIP:

1. All work shall comply with the relevant British standards, current Building Regulations and the specifications shown.
2. Where drains run close to the building, trenches are to be backfilled with concrete to levels in accordance with Building Regulations Part H.

PIPEWORK:

1. Pipework to conform to the following:-
   Vitrified clay systems with flexible joints to BS.65.
   Precast concrete systems with flexible joints to BS.5911.
   U.P.V.C. systems with flexible joints to BS.EN.1401-1.
2. UPVC pipes between 150-300mm diameter are to be structured wall pipes of stiffness class SN8.
3. Flexible joints shall be provided to all pipes within 600mm of inner face of manhole. Projecting pipes shall be surrounded with 150mm grade ST4 concrete cast monolithically with the manhole base.
4. Where pipes are encased in concrete the flexibility of the joints are to be maintained throughout the encasement. This should be provided by means of 20mm thick fibreboard, (or polystyrene), and positioned around the pipe at the centre of every joint at 6m centres max.
5. Pipes shall have granular bed and surround unless otherwise detailed. Granular material shall conform to BS.13242, and should be carefully placed and consolidated by hand in thin layers.
6. All pipework connections at manholes to be soffit to soffit.
7. The length of pipework between manholes to include for any short length pipes as necessary to achieve the configuration of rocker pipes and standard short length pipes at fixed manhole positions.
8. All pipework built into manholes to been either standard short lengths or cut lengths as appropriate.
9. Rocker pipes to be a maximum of 600mm long.
10. Maximum length of pipe within adoptable works to be 3m.
11. All saddle connections to be formed utilising proprietary junction sections.
12. All pipework beneath vehicular circulation areas and within 1m of such areas shall, where cover is less than 1200mm, receive a full concrete bed and surround, 900mm elsewhere.
13. All pipework beneath building footprint to receive full concrete bed and surround.
14. All down pipe connections to be 100mm nominal bore and all down pipes to have rodding access points approx. 1000mm above ground/finished floor level.

MANHOLE COVERS AND GRATINGS:

1. Covers shall be set at, or not more than 5mm below the surrounding level in paved areas. Inverts shall be within 5mm of given level, and may not cause the as-laid gradient of the pipes to vary from that given on the drawing by more than 10%.
2. All manhole covers in footways, pedestrian areas and comparable locations shall comply with the relevant B.S E.N 124, B125 kitemarked and they shall be of a non-rocking design which does not rely on the use of cushion inserts.

REV.	DATE	DRAWN	REVISION
D	25.05.21	JJD	Outlet point into river amended.
C	07.10.20	JJD	Proposed site plan updated to latest architectural layout.
B	18.05.20	JJD	SW discharge rate updated & pipe design numbers added.
A	21.02.20	JJD	Building layout updated. Minor revisions to drainage layout.

DRAWING ISSUE STATUS

- ☐ PRELIMINARY ISSUE
- ☐ TENDER ISSUE
- ☐ CONSTRUCTION ISSUE
- ☐ DESIGN DEVELOPMENT PRIOR TO TENDER
- ■ DESIGN DEVELOPMENT PRIOR TO CONSTRUCTION
- ☐ AS BUILT ISSUE

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PROJECT :
ST.CUTHBERTS REDEVELOPMENT

TITLE :
DRAINAGE SCHEME

DATE : MAY. 19	DRAWN : JJD	PROJECT No :	DRG. No :	REV :
SCALE : 1:200 (A1)	CHECKED : -	19.4389	01	D

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