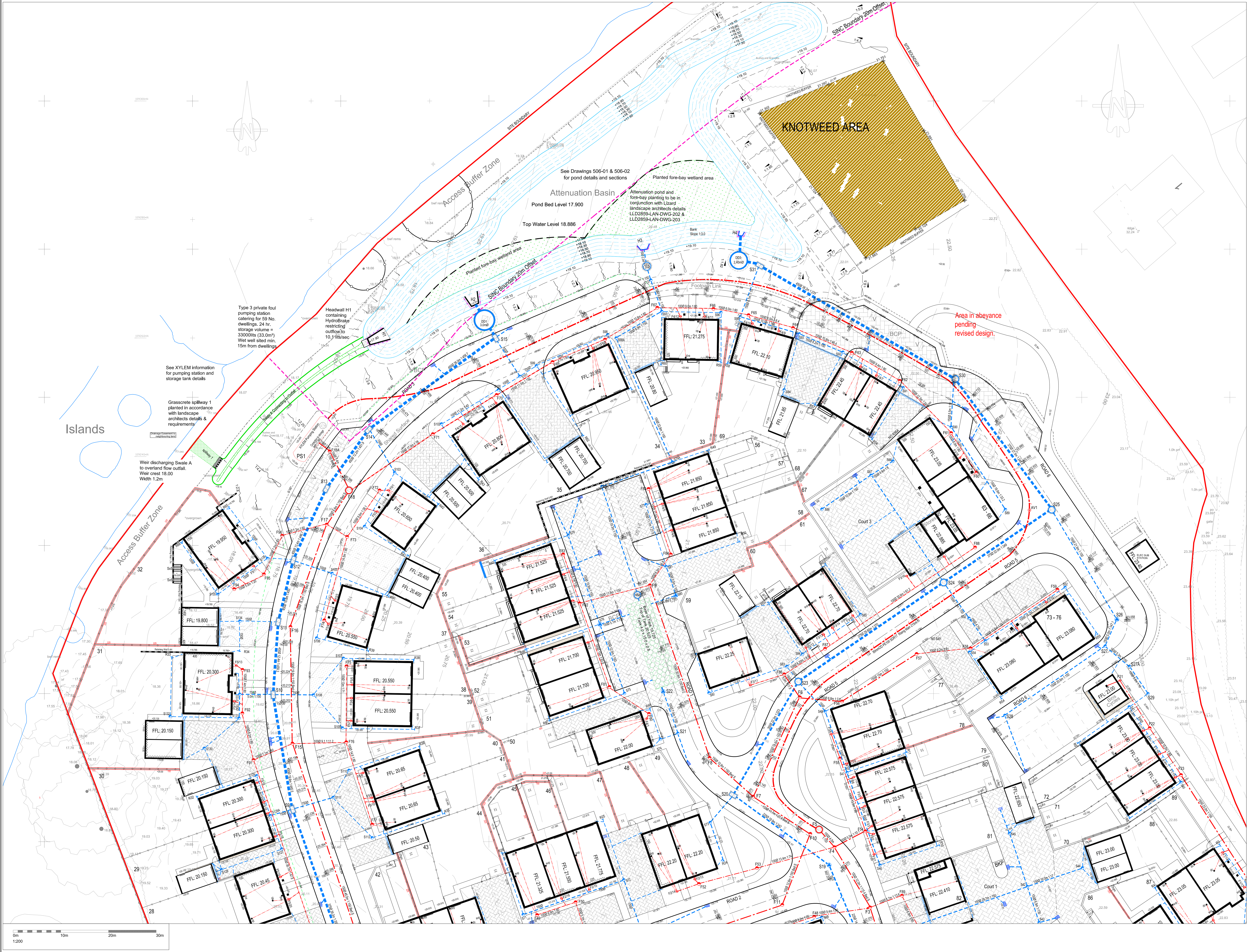
Islands
Access Buffer Zone
SITE BOUNDARY
SINC Boundary 20m Offset
See Drawings 506-01 & 506-02 for pond details and sections
Attenuation Basin
Pond Bed Level 17.900
Top Water Level 18.886
Planted fore-bay wetland area
Attenuation pond and fore-bay planting to be in conjunction with Lizard landscape architects details LLD2859-LAN-DWG-202 & LLD2859-LAN-DWG-203
Bank Slope 1:3.0
KNOTWEED AREA
Type 3 private foul pumping station catering for 59 No. dwellings. 24 hr. storage volume = 33000lits (33.0m³) Wet well sited min. 15m from dwellings
Headwall H1 containing HydroBrake restricting outflow to 10.1lits/sec
See XYLEM information for pumping station and storage tank details
Grasscrete spillway 1 planted in accordance with landscape architects details & requirements
Drainage Easement to neighbouring land
Weir discharging Swale A to overland flow outfall. Weir crest 18.00 Width 1.2m
Swale A Connecting to Outfall
XYLEM Pumping Station
PS1
Area in abeyance pending revised design.
Footpath Link
ROAD 2
ROAD 3
ROAD 5
ROAD 6
Court 1
Court 3
0m
10m
20m
30m
1:200

Notes:

1.All levels relate to Ordnance Datum.
2.All Highway work's on or adjacent to existing public highway shall be executed in accordance with the Traffic Safety Code for Roadwork's and Chapter 8 of the Traffic Signs Manual.
3.At the commencement of works on site the contractor is to carry out trial pits and liaise with Utility Companies in order to establish the exact position of all existing statutory utility plant in the vicinity of works and take adequate precautions or their protection.
4.The Contractor is to comply fully with the CDM Regulations in the course of constructing the works.
5.Highways in the vicinity of the works must be kept free from mud, debris and dust falling from vehicles or the wheels of vehicles connected with the works.
6.All drain and sewer pipes to be laid soffit to soffit, unless shown otherwise. All domestic sewers shall be 100mmØ unless shown otherwise. Connections from gullies shall be 150Ø.
7.Minimum gradient for 100Ø SW is 1:100 and 100Ø FW is 1:80 with one WC connected otherwise 1:40. Bedding for domestic drainage Class B. All pipe runs near buildings to comply with the Building Regulations 2010 Part H1.
8.Position of soil pipes, standing wastes, wc outlets etc. are shown on the Architect's working drawings. Rainwater downpipe positions are to be checked against Architects details to ensure compatibility. Rainwater downpipes to have rodding access facilities where surface water drainage passes under buildings.
9.All concrete and concrete products to be in accordance with BRE 363 for sulphates.
10.All slab levels shown are for guidance only and may need to be adjusted on site, subject to approval by the engineer.
11.Do not scale from this drawing, work only from stated dimensions or setting out details.
12.Refer to Drg No 502-03 for tables for manhole schedules and levels.
13. Where paths falls towards the front door use suitable linear/slot drainage sysytem connected to surface water system as per architects details.
14. All plots to have gardens sloping away from properties otherwise interceptor drains to be installed.
15. Prior to construction of any drainage works, the Contractor is to confirm the invert level of receiving sewer. Any variations from the designed level shown on the drawings shall be reported to the Engineer in advance of construction works commencing.
16. Where connections to drain runs are not at manholes/inspection chambers connections should be made using oblique 45° junctions.
17. This drawing is to be read in conjunction with all relevent engineering drawings issued by Kazys Narbutas Consulting and Elivia Homes for this site only.
18. Root barrier to be installed along length of adopted sewer as directed by and in

Legend:

	Existing foul water sewer
FB	New foul water sewer and manhole subject to S104 Agreement with Southern Water
	Type 2 foul water manhole (see drainage schedule on drg 502-03 for details)
F4	Domestic foul water gravity sewer (with backdrop connection)
	New foul water rising main in corporating air valve
	Type 3 foul and surface water manhole (see drainage schedule on drg 502-03 for details)
	Type 4 shallow PPIC inspection chamber
AV1	Air valve for rising main
S4	Domestic surface water drain.
	Type 5 silt trap inspection chamber
DD1	Polypipe SciCloneX hydrodynamic seperator to treat surface water run off
S5 S11	Type 6 surface water catchpit manholes (see drainage schedule on drg 502-03 for details)
	ACO drainage channel installed at entrance to all garages
	Overland drainage interceptor
Underbuild	Areas requiring underbuild brickwork
XYLEM Pumping Station PS1	Type 3 foul drainage pumping station (see Xylem for pump details)
	Retaining wall
	Direction of crossfall
	Garden Gradients- see Drg 504-01 & 02 for garden levels
150	Close board fence with concrete gravel board (height indicated)
FFL: 11.60	Proposed Finished Floor Level
10.40+	Proposed Garden Level (may be adjusted subject to discussion with Engineer)
S	Step 150mm or 75mm
	Tree root protection line
	1200mm post & rail fence around headwalls
🟩	Area of 'no dig' construction
▨	Permeable block paved drive and parking construction
▨	Block paved cariageway & parking courts
▨	Swale & Attenuation pond planting in conjunction with landscape architect details
▨	Surface water attenuation tank
▨	'grasscrete' spillway facilitating overland flow from swale to offsite
▨	Knotweed area - No unauthorised excavation to be undertaken

SAFETY, HEALTH & ENVIRONMENTAL INFORMATION
CDM Regulations 2015

In addition to the hazards/risks normally associated with the type of work detailed on this drawing note should be made of the following:

- Working in vicinity of live highway
- Services to be located prior to any excavation work being undertaken
- Working on live foul sewers
- Deep excavations

It is assumed that all works will be carried out by a competent contractor working, where appropriate, to an approved method statement. Contractor is not relieved of any of his obligations under all applicable health and safety regulations.

Rev.	Date	Details	Initials
S	31.05.24	Porch drainage added to plots 26, 31,32,34&35	KN
R	14.03.24	Interceptor drains removed, fence gravel boards extended	KN
Q	24.01.24	Sub station added	KN
P	17.01.24	Garden gradients and interceptor drains added, downstream defender replaced with Polypie SciCloneX	KN
O	27.11.23	Permeable paving & area in abeyance added	KN
N	12.10.23	Manhole F18 adjusted, F18A added	KN
M	09.10.23	Position F18 and pumping station adjusted to 'as built'	KN
L	26.08.23	Amendments to balancing pond , downstream defender added	KN
K	02.08.23	Air valve noted on rising main	KN
J	18.07.23	SINC boundary offset added	KN
I	06.06.23	Additional attenuation details added, FFL Plot 32 amended Swale C added, SW manholes adjusted	KN
H	03.05.23	Gradients S18-S19-S20 adjusted	KN
G	26.04.23	Pump station criteria amended and reference to Xylem added, tree protection fence in vicinity of pump station removed, additional survey requirement added, gradient F7-F10 adjusted	KN
F	17.02.23	Adopted foul sewer amended & associated changes	KN
E	16.02.23	Scale checked, Controflow flow restrictor added	KN
D	19.01.23	Road 1 attenuation, S31 & rising main re-positioned,	KN
C	09.01.23	Parking court surfacing amended	KN
B	05.01.23	Detailed pond and swale information added, attenuation tank added Road 1	KN
A	18.12.22	First Issue	KN

Drawing Status
CONSTRUCTION

Project
GRANGE ROAD
NETLEY

Client

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Drawing Title
Engineering Details
Drainage Layout

Drawn	Checked	Scales	Paper Size	Date
KN		1:200	A0	12.22

Job No.	Drawing No.	Revision
KNC2114	502-02	S

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Dimensions should be checked and verified on site and any discrepancies should be reported to Kazys Narbutas Consulting as soon as possible.