

Stuart Morrison  
Scottish Water  
31 Henderson Drive  
Inverness  
Scotland  
IV1 1TR

Please ask for / Foighnich airson: Simon Hindson  
Direct Dial / Àireamh fòn: 01463 255196  
Email / Post-d: [simon.hindson@highland.gov.uk](mailto:simon.hindson@highland.gov.uk)

Our Ref / Ur n-àireamh-iùil: 16/02464/FUL & 16/05382/FUL  
Your Ref / Ar n-àireamh-iùil:

Date / Ceann-là: 06 December 2016

By e-mail to [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir,

**Planning Permission 16/02464/FUL - Installation of an Ultra Violet Treatment Plant at the Ardersier Wastewater Treatment Plant at Land 40m West of Wastewater Treatment Works, Ardersier**

I write with reference to the above planning permission and the submissions made to The Highland Council with regard to the Conditions 1, 2, 3, 4 and 5 of your planning permission. I will address each of these in turn.

Condition 1 - Site access

Condition 1 states: *“No development shall commence on site until details of how the proposed access arrangements are implemented and submitted to and agreed in writing by the planning authority and thereafter so implemented in accordance with the approved details.”*

*For the avoidance of doubt, following completion of the new access no access may be taken to the Waste Water Treatment Works via the pre-existing access.”*

The information submitted included a covering letter and a drawing showing the proposed access arrangement.

In considering the submissions which have been made I have consulted our Transport Planning Team.

The plan is clear that post completion of the growth project, Scottish Water will use the new access road exclusively. Importantly once operational the main access into the site will be via the access approved under Planning Permission 16/02464/FUL. It is also clear that the existing access to the shore will be kept free from obstruction for existing users.

Taking the above into consideration, I am content that the submitted plan is sufficient to consider the condition satisfied. The following drawing is hereby approved and shall be implemented:

- Drawing Title: General Site Layout Access Road, Site Compound and Fencing Plan, Drawing Number 5000061980-WW-DRA-04151001-0A, Dated 21/11/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 22 November 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

Condition 2 - Construction Traffic Management Plan

Condition 2 states: *“No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and agreed in writing by the Planning Authority.”*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Construction Traffic Management Plan. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a minimum of 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Construction Traffic Management Plan detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Construction Traffic Management Plan for submission to the Planning Authority.”*

The information submitted included a covering letter and a copy of the Construction Traffic Management Plan (CTMP).

In considering the submissions which have been made I have consulted our Transport Planning Team. I also invited comment from elected Local Members over a period of 5 working days.

Firstly, I am satisfied that Scottish Water undertook consultation and provided evidence as to how this was taken into account in preparing the CTMP.

In terms of the CTMP, following the initial submission on 22 November 2016 a revised Traffic Management Plan was submitted to the Planning Authority on 06 December 2016 for consideration. This addressed matters raised by the Planning Authority in relation to Traffic Management Plan. This included:

- A commitment to no construction traffic through the village between 08:30 - 09:30 and 14:30 – 15:30 Monday to Friday during school term times.
- Consideration of the provision of real-time notification of escorted vehicle runs along the C1005, or a point of contact local to the site that residents along the C1005 could contact to check the latest situation with regards to escorted vehicle runs.
- Clarification of road closure times as being the same as the site construction times (07:30 – 18:00 Monday to Friday and 07:30 – 13:00 on Saturday, with no construction activity on Sundays.) Any alternative times should not be outside 07:00 – 19:00 Monday to Friday and 07:00 – 13:30 on Saturday.
- A commitment that Scottish Water will take all opportunities to maximise the lengthening and widening of passing places on the C1005 to better accommodate potential conflicts between construction and non-construction traffic.
- A commitment that Scottish Water will quickly repair any major defects that develop as a result of their operations that are a risk to either construction or public traffic using those routes.

It was also recommended that traffic counters were put in place on the C1005 and the B9006 were put in place to monitor vehicular movements, thus providing valuable information to Scottish Water during the construction period. While you have not committed to this you have confirmed that Scottish Water will be logging the vehicular movements to and from the site. This is considered acceptable in relation to the provisions of the condition.

Taking the above into consideration, I am content that the submitted Construction Traffic Management Plan is sufficient to consider the condition satisfied. The following document is hereby approved and shall be implemented:

- Document Title: Ardersier Waste Water Treatment Works Traffic Management Plan, Revision 1.2, Produced by Scottish Water, dated 05/12/2016 and submitted to the Planning Authority on 05 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

### Condition 3 - Landscaping

Condition 3 states: *“No development shall commence until details of a scheme of hard and soft landscaping works have been submitted to, and approved in writing by, the Planning Authority.*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Landscaping Scheme. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a*

*minimum 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Landscaping Scheme detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Landscaping Scheme for submission to the Planning Authority.*

*Details of the scheme shall include:*

- i. All earthworks and existing and finished ground levels in relation to an identified fixed datum point;*
- ii. A plan showing existing landscaping features and vegetation to be retained. This must demonstrate the efforts to minimise the loss of existing landscaping features and vegetation;*
- iii. The location, design and including materials, of any existing or proposed walls, fences and gates;*
- iv. All soft landscaping and planting works, including plans and schedules showing the location, species and size of each individual tree and/or shrub and planting densities. For the avoidance of doubt this shall include details of additional planting on the eastern boundary and northern boundary and include species which are already present in the area including Whinn and Gorse; and*
- v. A programme for preparation, completion and subsequent on-going maintenance and protection of all landscaping works.*

*Landscaping works shall be carried out in accordance with the approved scheme. All planting, seeding or turfing as may be comprised in the approved details shall be carried out in the first planting and seeding seasons following the commencement of development, unless otherwise stated in the approved scheme.*

*Any trees or plants which within a period of five years from the completion of the development die, for whatever reason are removed or damaged shall be replaced in the next planting season with others of the same size and species."*

The information submitted included a covering letter and a copy of a landscaping plan and site sections.

In considering the submissions which have been made I invited comment from elected Local Members over a period of 5 working days.

Firstly, I am satisfied that Scottish Water undertook consultation. It is noted that no public comments were received on matters related to landscaping.

In terms of the Landscaping Plan, following the initial submission on 22 November 2016 a revised Landscaping Plan was submitted to the Planning Authority on 02 December 2016 for consideration. This addressed matters raised by the Planning Authority or those which needed modification to accord with the pre-submission advice provided by the Council's Forestry Officer. This included:

- Details of gates and fencing as per part (iv) of condition 3.
- Further details of the planting mix and some revisions to planting types to reflect the location of the development.
- A review of the sections through the site to ensure that they accorded with the revisions to the landscaping plan.
- A revision to the red-line boundary to ensure that it accorded with the red-line boundary shown on the approved planning application drawings.

It is understood that Scottish Water engaged both a landscape architect and an ecologist in bringing forward the landscaping plan.

Having reviewed the submitted plans and information I am content that the level of landscaping proposed and the planting mix is appropriate to the site. I am also content that the fencing proposed is sufficient. In considering whether these accord, I have considered the location of the site and the surrounding sensitivities including, but not limited to, climate, existing planting / landscaping and nature conservation. As such the following plans are hereby approved:

- Drawing Title: Site Layout Plan Landscaping, Site Compound and Fencing Plan, Drawing Number 5000061980-WW-DRA-04158001-0F, Dated 06/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 06 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section Locations, Drawing Number 5000061980-WW-DRA-04158002-0D, Dated 06/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 06 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section A-A, Drawing Number 5000061980-WW-DRA-04158003-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section B-B, Drawing Number 5000061980-WW-DRA-04158004-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section C-C, Drawing Number 5000061980-WW-DRA-04158005-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section D-D, Drawing Number 5000061980-WW-DRA-04158006-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

#### Condition 4 - Operational Traffic Management Plan

Condition 4 states: *“No development shall commence on site until an operational phase Traffic Management Plan (including a routing plan for all delivery and maintenance vehicles) has been submitted to, and approved in writing by, the Planning Authority.*

*The approved operational traffic management plan shall be implemented prior to the hereby permitted development coming into use and remain in place in perpetuity, unless otherwise agreed in writing by the Planning Authority.”*

In considering the submissions which have been made I have consulted our Transport Planning Team. I also invited comment from elected Local Members over a period of 5 working days.

Following the initial submission on 22 November 2016 a revised Operational Traffic Management Plan (OTMP) was submitted to the Planning Authority on 06 December 2016 for consideration. This addressed matters raised by the Planning Authority in relation to OTMP. This included:

- Recording of trips to and from the site in order to monitor the effectiveness of the OTMP.

Taking the above into consideration, I am content that the submitted Operational Traffic Management Plan is sufficient to consider the condition satisfied. The following document is hereby approved and shall be implemented:

- Document Title: Ardersier Waste Water Treatment Works Operational Traffic Management Plan, Revision 1.1, Produced by Scottish Water, dated 06/12/2016 and submitted to the Planning Authority on 06 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged.

#### Condition 5 - Community Liaison Group

Condition 5 states: *“No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and affected local Community Councils.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events and tourist seasons are considered and appropriate*

*measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.”*

The information submitted comprised a letter of intent detailing Scottish Water’s proposed approach to community liaison.

I also note that invitations have been sent out by Scottish Water seeking to organise the first meeting of the community liaison group. That invitation clearly sets out the draft terms of reference for the group. Those will be agreed at the first meeting. I note the proposed membership of the group and recommend that the meetings are open to the public.

Having reviewed the content of the letter and follow up information I am satisfied that the group will, in due course, serve to function as per the requirements of Condition 5.

In sending out the invitation I consider that the group is now established and note that the first meeting will be held as soon as possible.

#### Further Comments

Before development commences you are required to submit a Notification of Initiation of Development Form. A copy of the form was attached to your Decision Notice.

Should you require any further information or clarification on any of the above, please do not hesitate to contact me on 01463 255196.

Yours sincerely,

**Simon Hindson**

Acting Principal Planner - Development Management

Scottish Water

By e-mail only to

[Lynn.Taggart@SCOTTISHWATER.CO.UK](mailto:Lynn.Taggart@SCOTTISHWATER.CO.UK)  
[Stuart.Morrison@SCOTTISHWATER.CO.UK](mailto:Stuart.Morrison@SCOTTISHWATER.CO.UK)

>

Please ask for: Simon Hindson  
Direct Dial: 01463 255196  
E-mail: [simon.hindson@highland.gov.uk](mailto:simon.hindson@highland.gov.uk)  
Our Ref: 16/02464/FULIN  
Your Ref:  
Date: 07 December 2016

Dear Scott,

**PLANNING PERMISSION 16/02464/FUL - UV TREATMENT PLANT, ARDERSIER  
WWTW, ARDERSIER**

I refer to the Planning Permission 16/02464/FUL, your email dated 06 December 2016 and the Notification of Initiation of Development attached to the aforementioned email.

I can confirm that the suspensive conditions related to the above development have been satisfied and as such development can commence.

As you are aware, the conditions attached to your planning permission include the delivery of mitigation works as agreed through the satisfaction of conditions 1-5 of your planning permission. These mitigation works require to be delivered in line with the details and timescales set out in these documents and the conditions attached to your planning permission.

You are reminded that once the development is complete you are required to submit a Notification of Completion of Development. A copy of this for you to complete was sent to you with the planning permission documents.

Please do not hesitate to contact me using the details at the top of this letter if you have any further queries.

Yours Sincerely,

**Simon Hindson  
Acting Principal Planner – Development Management**



**Scottish  
Water**

Trusted to serve Scotland

## **Community Liaison Group – Terms of Reference and membership**

### **16/02464/FUL Installation of an Ultra Violet Treatment plant at the Ardersier Wastewater Treatment Works**

The aim of the Community Liaison Group is to create a programme of engagement between with the community council, local people and other stakeholders through the construction of works at the Ardersier Wastewater Treatment Works as granted under the above planning application to help Scottish Water to identify issues of concern.

Scottish Water has invited stakeholders to attend the first meeting which is to be arranged as soon as possible. The group will meet regularly (as required) and minutes will be taken and published on the Scottish Water web page (<https://www.scottishwater.co.uk/investment-and-communities/your-community/ardesier>).

#### **Stakeholder group membership**

It is proposed that the Group shall consist of representatives from: -

- Scottish Water,
- The Highland Council including the Manager for Ward 18, representatives from the Development and Infrastructure Service (Planning) and Local Elected Members.
- Ardersier and Petty Community Council.

#### **Stakeholder Group – Terms of Reference**

- Review the effectiveness of the Traffic Management Plan associated with the above development and other associated works;
- Ensure that local events are fully considered during the planned works;
- Listen to a range of views to establish if any other mitigation measures could be implemented during the construction timetable;

02/12/2016



Castle House  
6 Castle Drive  
Carnegie Campus  
Dunfermline  
KY11 8GG

0800 0778778

[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

Dear Sir/Madam,

**16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT WORKS**

I refer to the above planning permission granted on 4 October 2016 by The Highland Council in relation to the installation of a UV Treatment Plant and associated works at the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. This letter relates to Condition 5 which reads as follows;

*No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and local Community Council.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events are considered and appropriate measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.*

The aim of the community liaison group is to create a programme of engagement with the local community, elected representatives and stakeholders throughout the construction element of the project. This will enable informed debate that will help Scottish Water identify areas of concern, explore solutions and progress this project.

We would like to hold the first meeting either during the week beginning 12 December or the week beginning 9 January. Please can I ask you to email me ([judy.wakker@scottishwater.co.uk](mailto:judy.wakker@scottishwater.co.uk)) your availability during these two weeks. Once we



have confirmed a date I will arrange a suitable venue. At the first meeting I would like us to agree the terms of reference for the group, the potential agenda and any additional invitees. I have attached a draft terms of reference and included the list of invitees to this first meeting at the bottom of this letter.

If you have any queries, please contact me.

Yours faithfully,

*Judy Wakker*

**Judy Wakker**  
**Community Relations Manager**

**Invitees:**

The Highland Council:      Ward Manager Robie Bain  
   Planning Officer Simon Hindson

The Highland Council:      Councillor Roddy Balfour  
   Councillor Trish Robertson  
   Councillor Glynis Sinclair  
   Councillor Kate Stephen

Ardersier and Petty Community Council

22/11/2016



Area Planning Office  
Kintail House  
Beechwood Business Park  
Inverness  
IV2 3BW

Specialist Service Delivery  
31 Henderson Drive  
Inverness  
IV1 1TR

T: 07443876619  
E: [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir/Madam,

## **INFORMATION REQUIRED FOR PLANNING CONDITION TO BE DISCHARGED**

### **16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT PLANT**

I refer to the above planning permission granted on the 4<sup>th</sup> of October 2016 by the Highland Council in relation to the construction of a new Wastewater Treatment Works and associated works adjacent to the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the amendment of Condition 1 of the above Planning Permission. The Condition reads as follows;

*1. No development shall commence on site until details of how the proposed access arrangements are to be implemented are submitted to and agreed in writing by the planning authority and thereafter so implemented in accordance with the approved details.*

*For the avoidance of doubt, following completion of the new access, use of the existing access shall cease for access to the Waste Water Treatment Works to the satisfaction of the planning authority.*

The enclosed plan demonstrates the proposed access arrangements in terms of its dimensions, visibility splays and the extent to which the bitumen surfacing will extend from the carriageway. In addition, the intended form of construction is depicted as well as the proposed drainage arrangements to prevent water running back onto the public road.

The existing access will be retained for operational use for the duration of construction. However, it is Scottish Water's intention to move its operational traffic to the new access when the works are complete, although it must be stressed that this is currently aspirational and no such agreement has been reached with the Highland Council. The existing access will be retained for users in perpetuity and it will be kept free from obstruction for the duration of the construction programme.

I trust that the submitted information will be to the satisfaction of the Highland Council.

If you have any queries, please contact me.

Yours faithfully,

Stuart Morrison  
Planning Advisor  
**Scottish Water**



Area Planning Office  
Kintail House  
Beechwood Business Park  
Inverness  
IV2 3BW

**Specialist Service Delivery**

31 Henderson Drive  
Inverness  
IV1 1TR

T: 07443876619

E: [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir/Madam,

**INFORMATION REQUIRED FOR PLANNING CONDITION TO BE DISCHARGED**

**16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT PLANT**

I refer to the above planning permission granted on the 4<sup>th</sup> of October 2016 by the Highland Council in relation to the installation of a new UV Treatment Plant and associated works adjacent to the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the purification of Condition 5 of the above Planning Permission. The Condition reads as follows;

*5. No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and Local Community Council.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events are considered and appropriate measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.*

As a responsible developer, Scottish Water has undertaken and will continue engagement and consultation with the local community during the construction of Ardersier WwTW. As such, and as per the relevant planning condition, Scottish Water has established an effective Community Liaison Group.

The group aims to provide a forum for Scottish Water and its contractors to present information on plans during construction, including traffic management, deliveries and construction works, and allow the Highland Council, the Community Council and other interested stakeholders to feed back their views and any issues encountered. Concerns will be documented and acted upon by Scottish Water accordingly.

The first meeting of the group will be arranged for as soon as possible and it will meet on a regular basis for the duration of the works. Each meeting will be minuted and minutes made publicly available to view on Scottish Water's website once approved by the group.

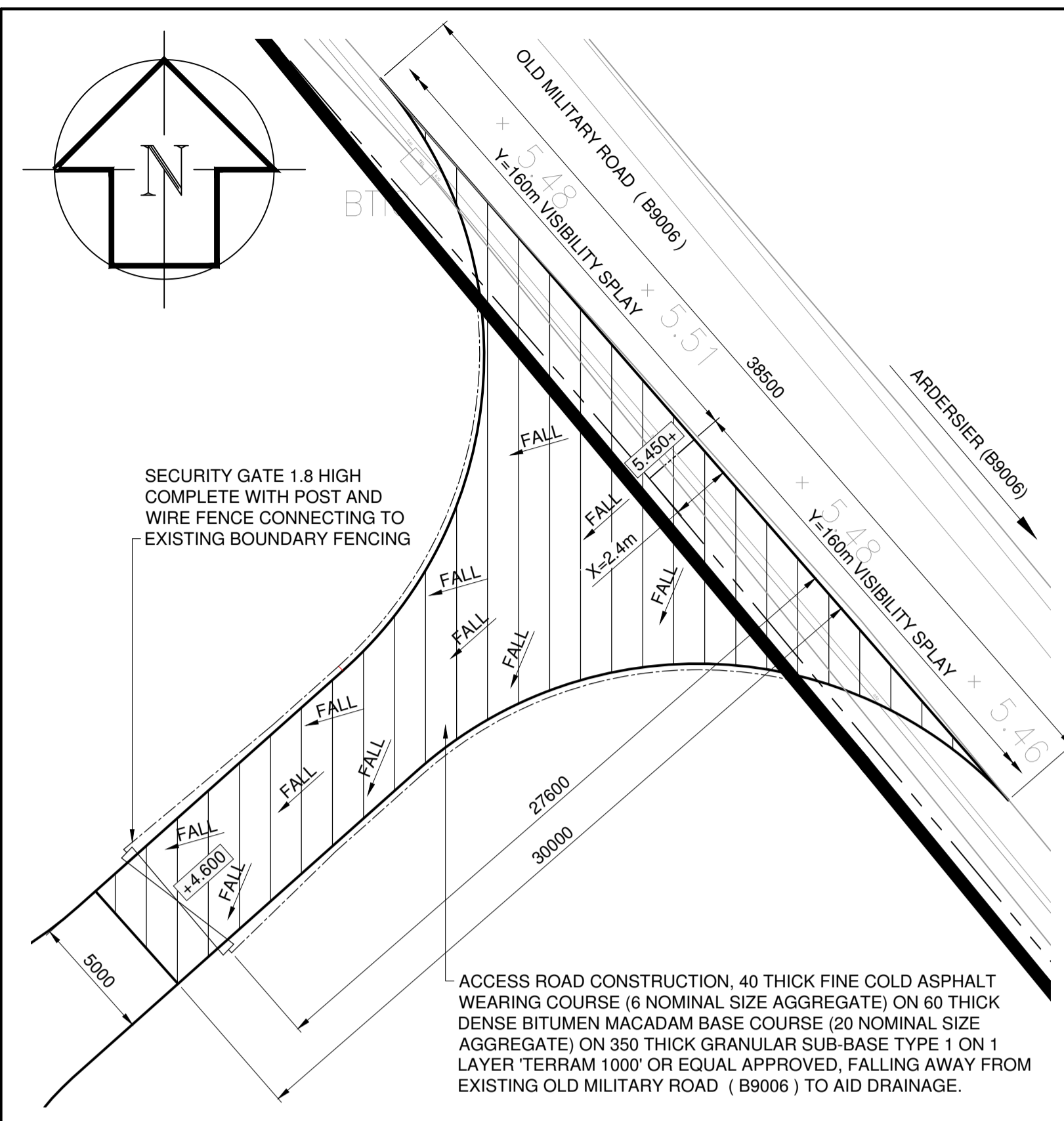
Members of the public will also be kept regularly updated on the latest project information through our mailing list and project website. If necessary, the Scottish Water complaints procedure will be used to log any complaints arising from the works and the Community Liaison Group will be supported by weekly drop in sessions which will provide an opportunity for appropriate action or resolution to be carried out in collaboration with local residents.

I trust that the submitted information will be to the satisfaction of the Highland Council.

If you have any queries, please contact me.

Yours faithfully,

Stuart Morrison  
Planning Advisor  
**Scottish Water**



**NOTE**  
POST THE GROWTH PROJECT CONSTRUCTION, SCOTTISH WATER WILL USE THE NEW ACCESS ROAD EXCLUSIVELY WITH THE ORIGINAL ACCESS ROAD RETAINED IN PERPETUITY FOR EXISTING USERS.

**NOTE**  
EXISTING ROAD ACCESS GATE. THE ACCESS WILL BE KEPT FREE FROM OBSTRUCTION AT ALL TIMES FOR EXISTING USERS.

**NOTE**  
ACCESS ROAD TO BE USED FOR CONSTRUCTION TRAFFIC WHEN FORMED. OPERATIONAL RESOURCES WILL STILL USE THE EXISTING ACCESS ROAD UNTIL THE NEW ACCESS ROAD IS FULLY CONSTRUCTED UNDER THE GROWTH PROJECT.

REFERENCE	EASTING	NORTHING
SP01	277586.636	856150.135
SP02	277583.146	856146.554
SP03	277546.487	856157.255
SP04	277542.906	856160.745
SP05	277552.018	856162.930
SP06	277566.159	856163.111
SP07	277569.648	856166.692
SP08	277569.467	856180.833
SP09	277546.745	856164.684
SP10	277546.436	856188.723
SP11	277550.275	856192.662
SP12	277552.782	856190.219
SP13	277571.165	856190.455
SP14	277574.277	856185.768
SP15	277581.477	856185.729
SP16	277574.077	856193.443
SP17	277576.765	856196.201
SP18	277584.157	856189.004
SP19	277584.195	856195.944
SP20	277616.098	856228.677
SP21	277622.588	856227.574
SP22	277625.716	856223.166
SP23	277626.432	856222.468
SP24	277629.922	856226.049
SP25	277629.205	856226.747
SP26	277629.531	856241.373
SP27	277612.733	856233.104
SP28	277611.164	856239.680
SP29	277602.746	856244.855
SP30	277606.585	856248.794
SP31	277629.763	856248.278
SP32	277630.454	856248.894
SP33	277633.781	856245.161
SP34	277643.405	856253.741
SP35	277640.419	856257.777
SP36	277667.232	856252.556
SP37	277641.928	856281.631

- NOTES:**
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
  - HISTORICAL RECORD DRAWINGS SHOW TWO CONFLICTING OUTFALL AND INLET (FORT GEORGE) ROUTES. ACTUAL ROUTE OF OUTFALL AND INLET FROM FORT GEORGE TO BE CONFIRMED ON SITE.
  - DETAILS OF EXISTING SERVICES AND STRUCTURES BASED ON HISTORICAL DRAWINGS AND RECORDS. ALL DETAILS OF EXISTING SERVICES AND STRUCTURES SHOULD BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS AND DIVERTED IF NECESSARY.
  - GROUND CONDITIONS - ANTICIPATED SOIL CONDITIONS FOR HARDCORE ROAD CONSTRUCTION - M/AE AND INLET (FORT GEORGE) ESTIMATED CBR 3.5% TBC. ESTIMATED GROUND WATER LEVEL AT 3.390 AOD (TBC).

**LEGEND:**

- EXISTING SITE BOUNDARY
- EXISTING WORKS

ESD INTERNAL DESIGN REVIEW		
(DRAWING NOT FOR USE WHEN STAMP PRESENT)		
DISCIPLINE	REVIEWED BY	DATE
CIVIL		
PROCESS		
MECHANICAL		
ELECTRICAL		
ICA		
RETURN TO:		BY:

**SCOTTISH WATER HEALTH AND SAFETY INFORMATION**  
IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING (SEE FULL DRA NO. FOR DETAILS)

CONSTRUCTION PHASE	
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
SW OPs HANDLING / LIFTING STRATEGY	
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK	

A0	FOR INFORMATION	DM	21/11/16
Rev	Description	Drawn	Chkd

This drawing is the property of Scottish Water and must not be copied or used for any purpose other than that for which it is supplied without the written consent of Scottish Water.

SCOTTISH WATER  
CASTLE HOUSE  
6 CASTLE HOUSE  
CARNEGIE CAMPUS  
DUNFERMLINE  
FIFE KY11 8GG  
TEL: 01383 848200  
FAX: 01383 848371

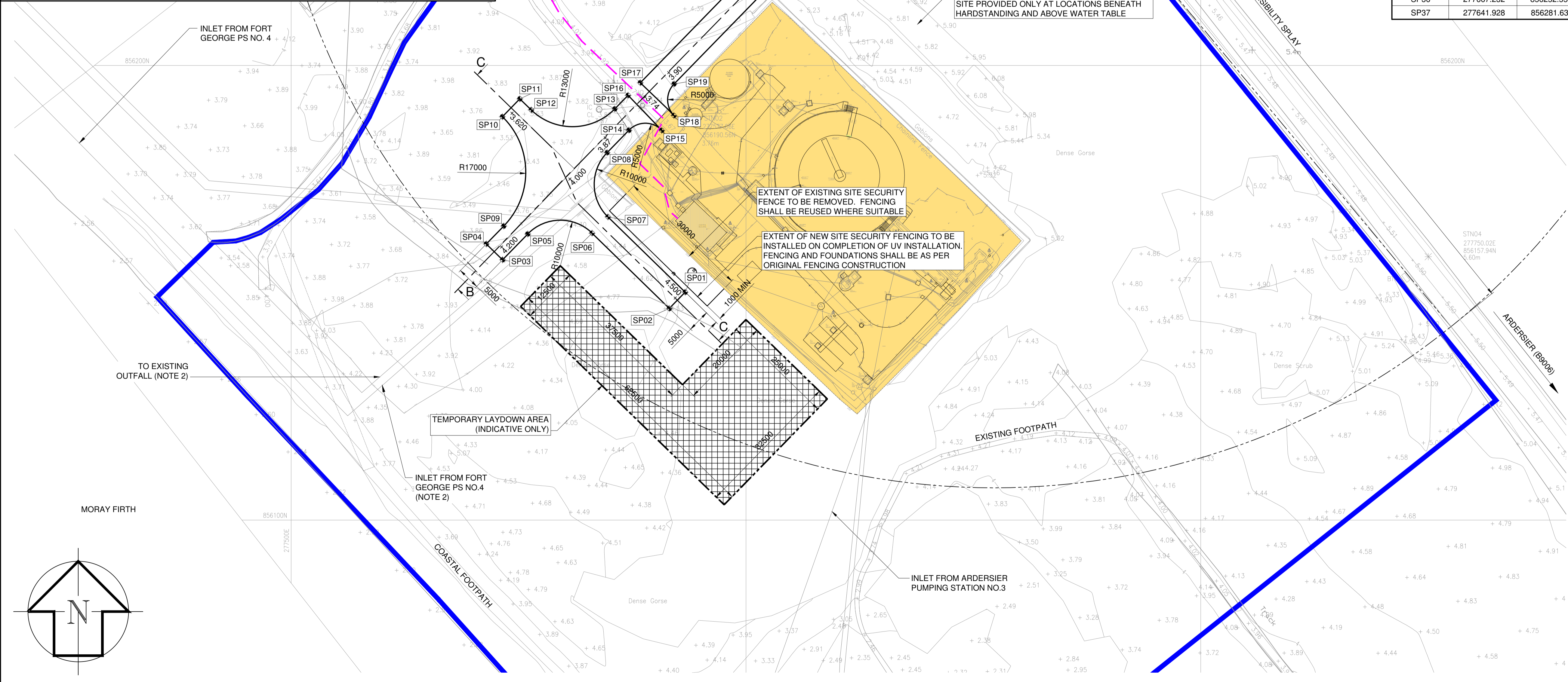
THE BRIDGE  
BUCHANAN GATE BUSINESS PARK  
CUMBERNAULD ROAD  
STIRPS, GLASGOW  
G33 8FB  
TEL: 07821 491

Originated By	Drawn By	Checked By	Approved By
SC	DM		
Date	Date	Date	Date
01/09/16	21/11/16		
Scale	Status		
1:500 @ A1	FOR INFORMATION		

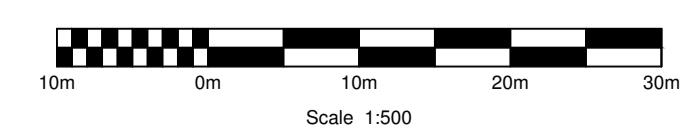
**Project Title**  
ARDESIER WwTW  
UV PLANT OPTION

**Drawing Title**  
GENERAL SITE LAYOUT  
ACCESS ROAD, SITE COMPOUND  
AND FENCING PLAN

ELLIPSE EQUIPMENT No. 00500061980  
ELLIPSE PLANT No. STW001241 | AUTOCODE No. 5000120000  
Drawing No. 5000061980-WW-DRA-04151001-0A



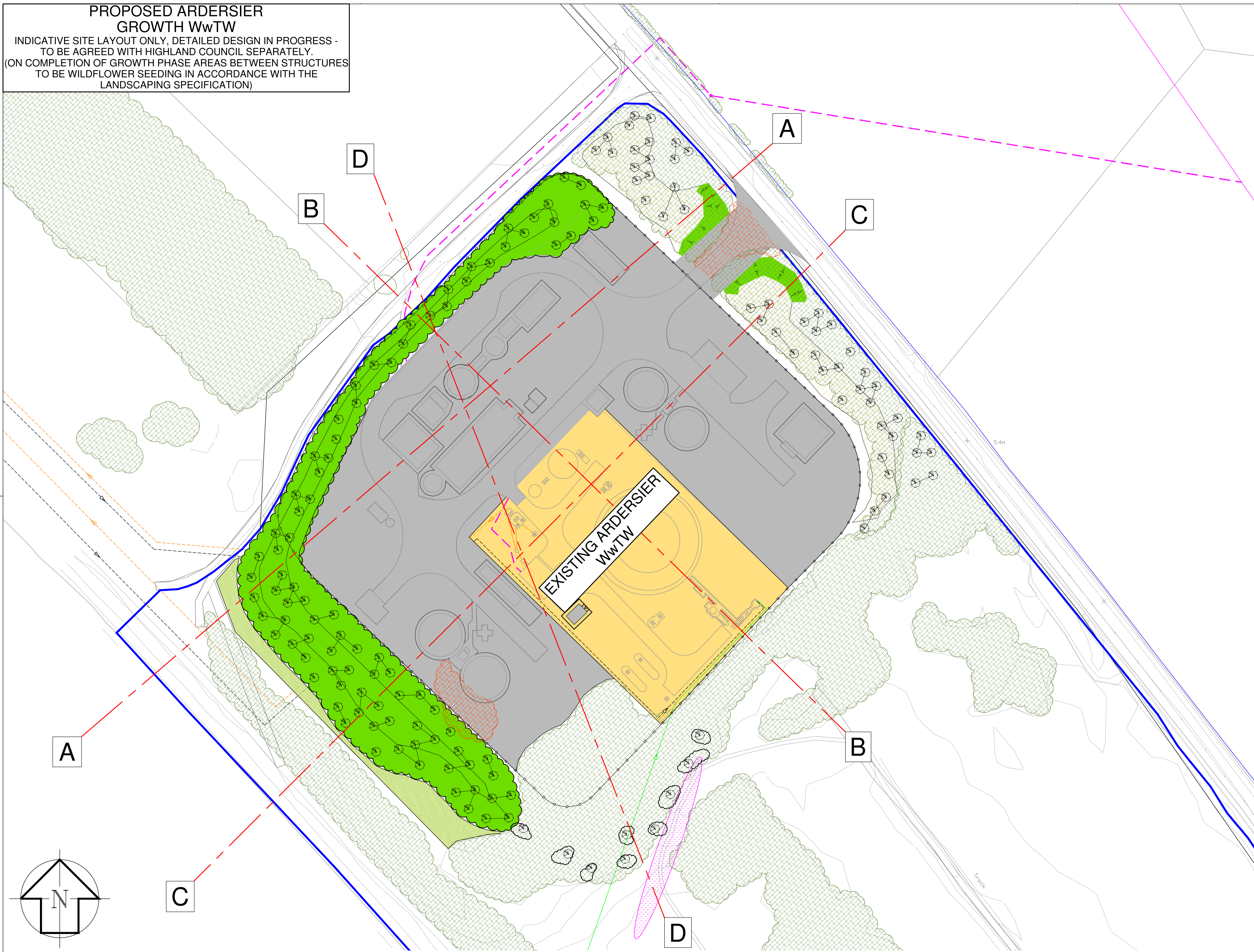
**GENERAL SITE LAYOUT  
ACCESS ROAD, SITE COMPOUND AND FENCING PLAN**  
SCALE 1:500





**PROPOSED ARDELSIER  
GROWTH WwTW**

INDICATIVE SITE LAYOUT ONLY, DETAILED DESIGN IN PROGRESS -  
TO BE AGREED WITH HIGHLAND COUNCIL SEPARATELY.  
(ON COMPLETION OF GROWTH PHASE AREAS BETWEEN STRUCTURES  
TO BE WILDFLOWER SEEDING IN ACCORDANCE WITH THE  
LANDSCAPING SPECIFICATION)



**SITE LAYOUT PLAN - LANDSCAPING - SECTION LOCATIONS**  
SCALE 1:500

- NOTES**
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLIMENT LANDSCAPING PROPOSALS.
  - CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS:
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - CROSS SECTION A-A - 5000061980-WW-DRA-04158003
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

**KEY**

SCOTTISH WATER OWNED LAND - WWTW

**SCOTTISH WATER  
HEALTH AND SAFETY INFORMATION**

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :

CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:

SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:

SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK

Rev	Description	Drawn	Chk'd	App'd	Date
01	AREA OF PROPOSED DEVELOPMENT (RED LINE) REMOVED	DM	GC	GC	06/12/16
02	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	01/12/16
03	PLANNING ISSUE	DM	GD	GD	04/11/16
04	PLANNING ISSUE	DM	GD	GD	03/11/16
05	PLANNING ISSUE	DM	XX	XX	XX/XX/XX

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FAX: 01383 848371

**esd**  
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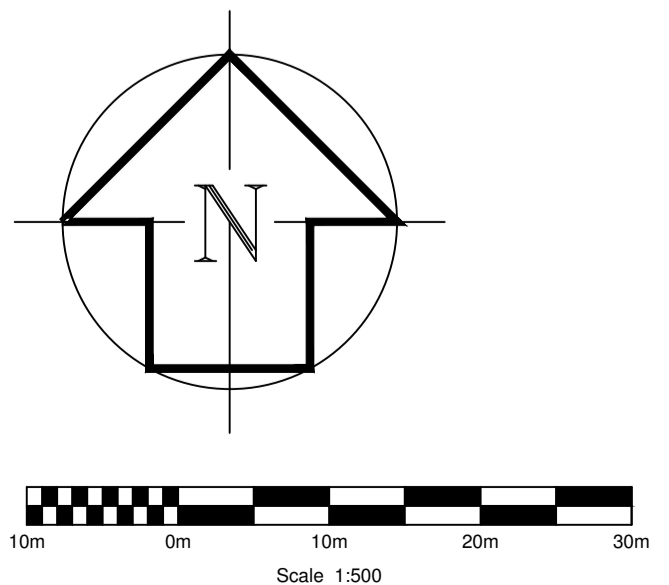
THE BRIDGE  
BUCHANAN GATE BUSINESS PARK  
CARRERNAULD ROAD  
STEPHENS, GLASGOW  
G3 7PB

Originated By	Drawn By	Checked By	Approved By
WM	DM	GC	GC
Date	Date	Date	Date
22/08/16	03/11/16	06/12/16	06/12/16
Scale	Status		
1:500 @ A1	PLANNING ISSUE		

Project Title  
**ARDELSIER WwTW  
GROWTH**

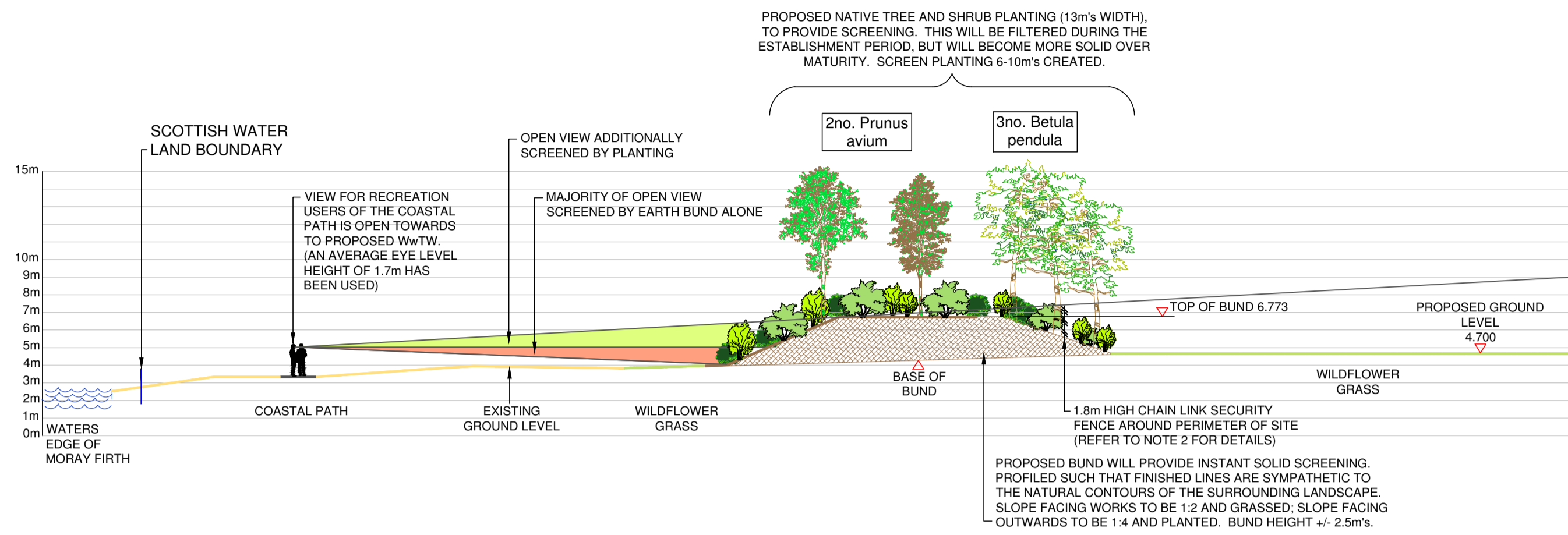
Drawing Title  
**SITE LAYOUT PLAN  
LANDSCAPING - SECTION LOCATIONS**

ELLIPSE EQUIPMENT No. 5000061980  
ELLIPSE PLANT No. STW000379 AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158002-0E**

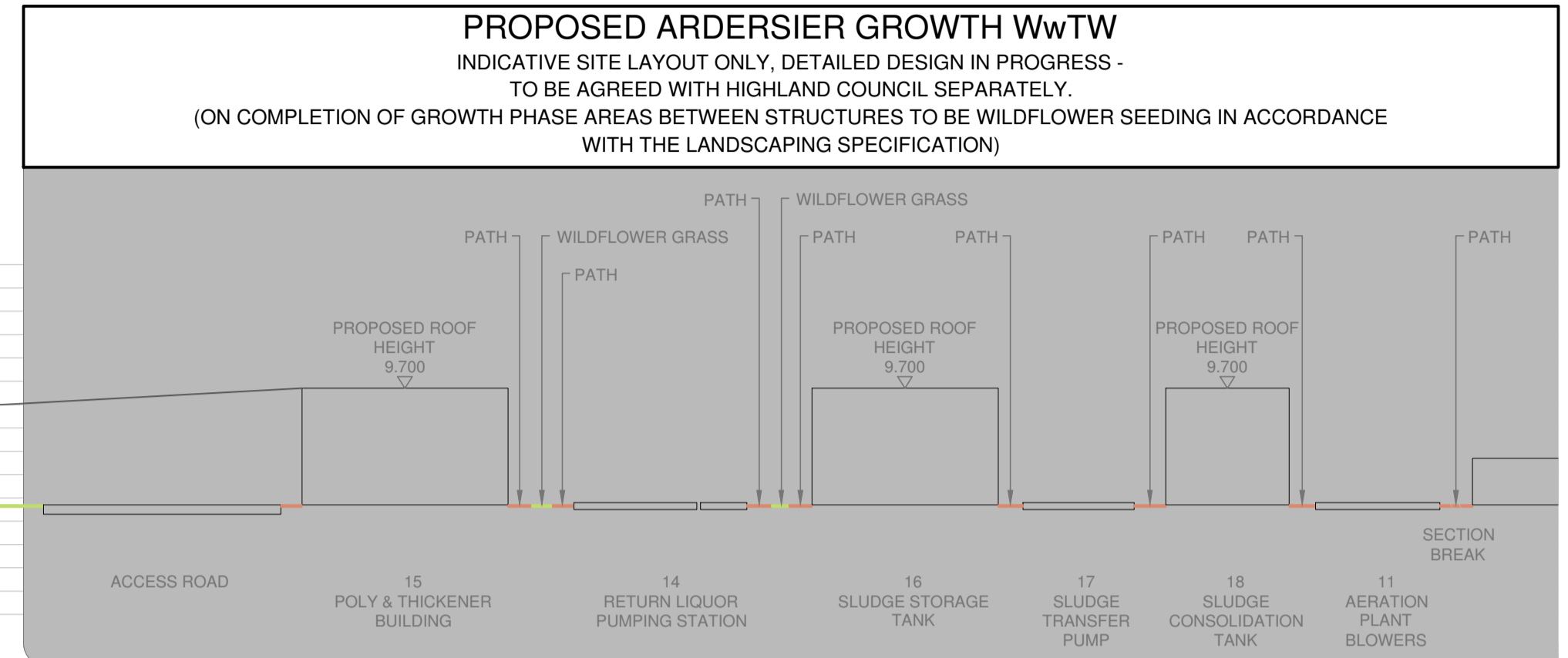
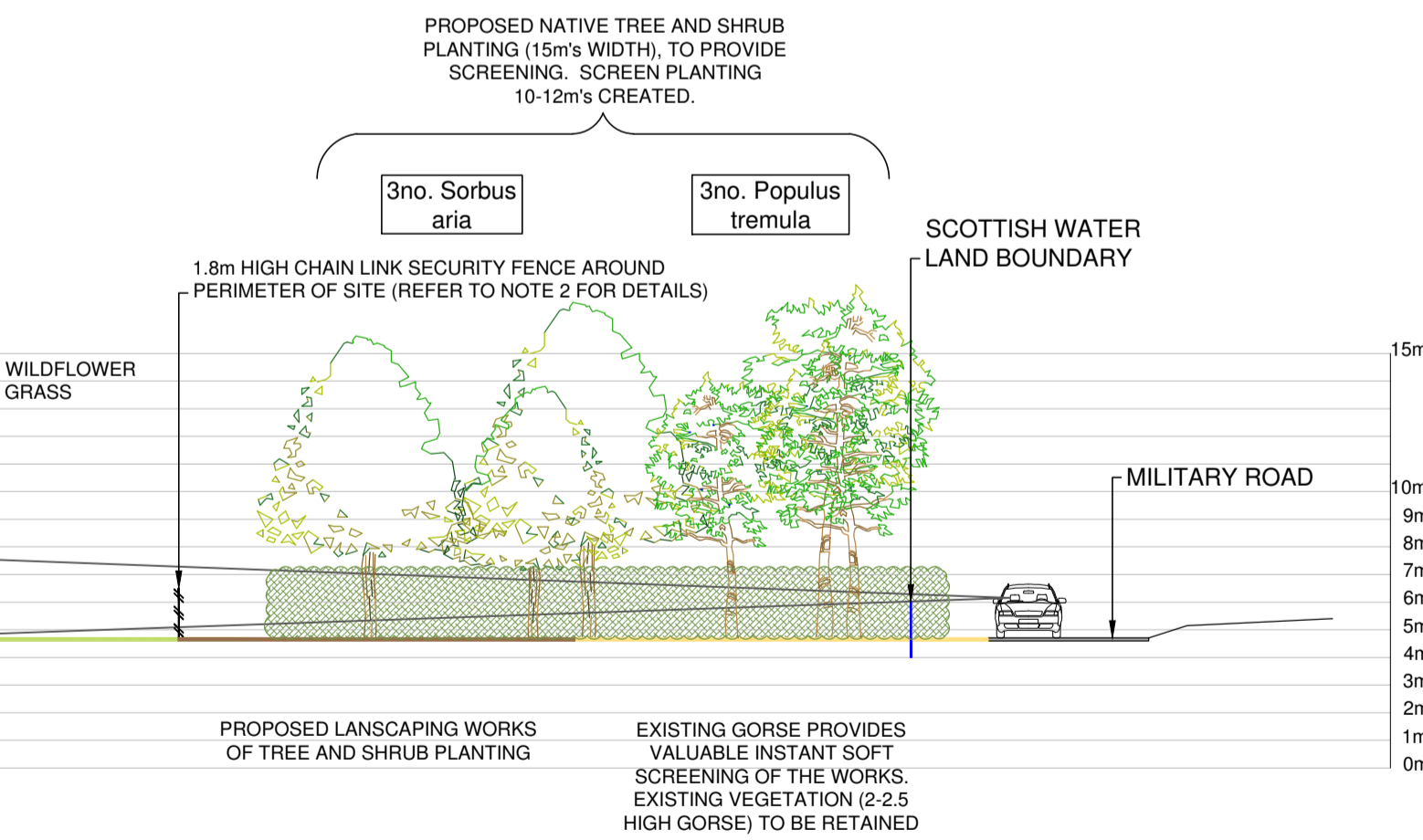
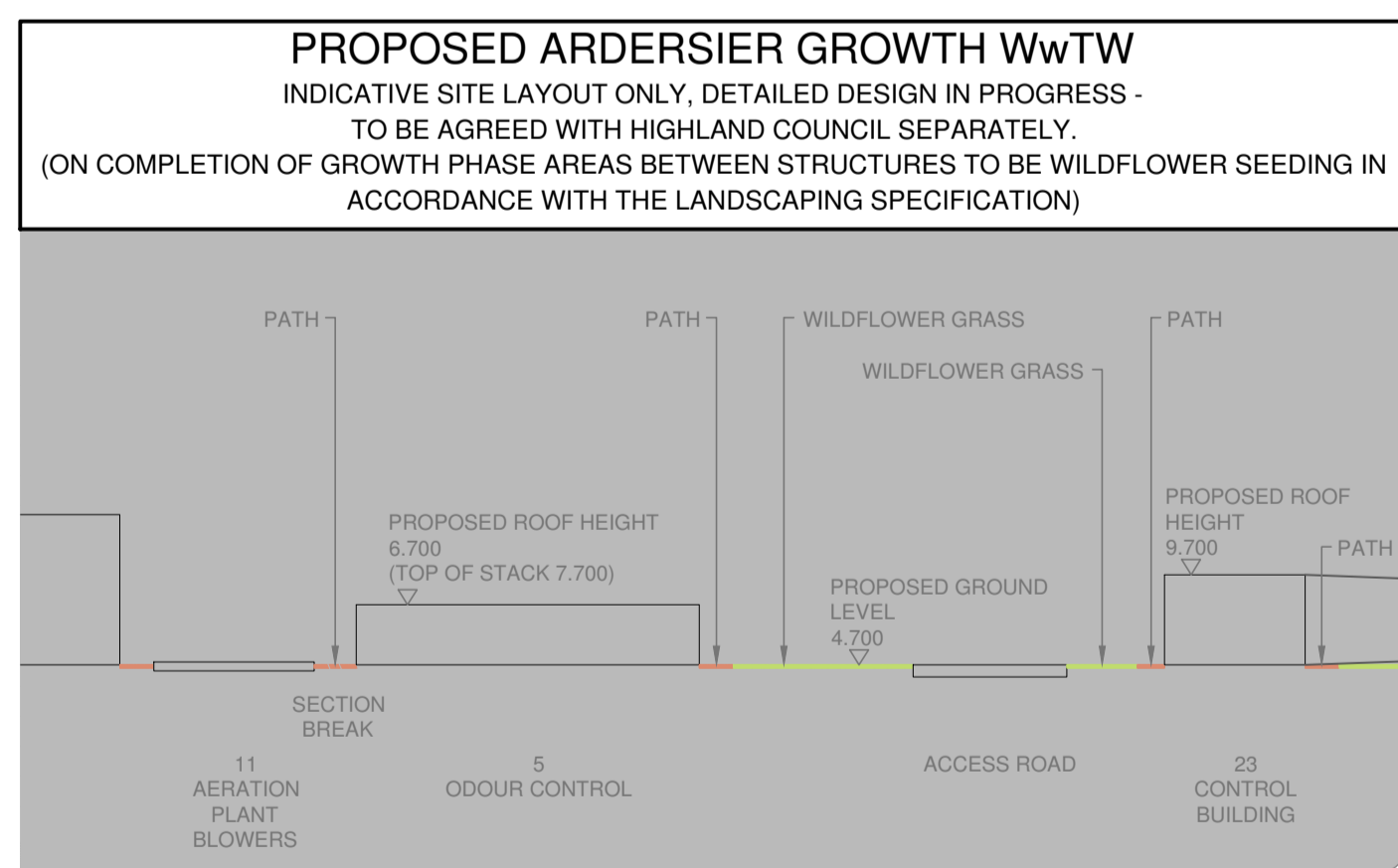




# SECTION A-A COASTAL VIEW



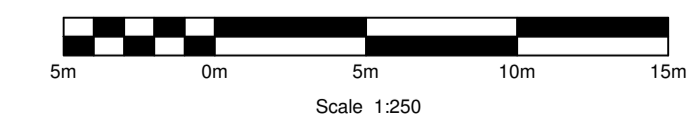
SECTION A-A  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250



- NOTES (CONTINUED)
- CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS;
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

**KEY**

- EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
- EXISTING COASTAL PATH
- PROPOSED NATIVE TREE AND SHRUB PLANTING
- PROPOSED WILDFLOWER AND GRASS PLANTING
- PROPOSED PATH
- VIEW SCREENED BY PLANTING
- VIEW SCREENED BY BUND
- PROPOSED EARTH BUND
- PROPOSED NATIVE TREE AND SHRUB PLANTING



- NOTES**
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLEMENT LANDSCAPING PROPOSALS.
  - 1.8m HIGH CHAIN LINK SECURITY FENCE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. CHAIN LINK TO BE PLASTIC COATED 50mm x 50mm x 3.55mm DIA. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. ALL WIRE TO BE GALVANISED MILD STEEL. CONCRETE FOR POSTS TO BE CLASS ST4 OR GEN3. STRAINING POSTS TO BE PROVIDED AT ALL ENDS, CORNERS, CHANGE IN DIRECTION, CHANGE IN VERTICAL ALIGNMENT & AT LEAST EVERY 50 METRES. INTERMEDIATE POSTS TO BE PROVIDED AT INTERVALS NOT GREATER THAN 3m. DETAILS TO BE PROVIDED AT FINAL DESIGN.
  - ENTRANCE GATE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. INFILL OF GATE TO BE CHAIN LINK TO MATCH FENCING AND TO BE FLUSH WITH OUTSIDE FACE OF GATE. RETAINED IN PLACE BY GALVANISED STRETCHER BARS. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. HINGES SHALL BE ADJUSTABLE, FOLLOWING ADJUSTMENT OF THE GATES THE ADJUSTMENT METALWORK SHALL BE RENDERED TAMPERPROOF AND INACCESSIBLE FROM THE OUTSIDE. LOCKING BAR TO BE SECURED IN A STEEL BOX AND TO HAVE A HOLE TO RECEIVE PADLOCK. PADLOCK PROTECTED BY STEEL COVER ALLOWING ACCESS TO PADLOCK BY HAND ONLY FROM UNDERNEATH THE COVER. CONCRETE FOR POST FOOTINGS TO BE CLASS ST4 OR GEN3. DETAILS TO BE PROVIDED AT FINAL DESIGN.

NOTES (CONTINUED)

SCOTTISH WATER HEALTH AND SAFETY INFORMATION	
IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :	
CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:
SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK	

Rev	Description	Drawn	Chk'd	App'd	Date
OC	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	02/12/16
OB	PLANNING ISSUE	DM	GD	GD	03/11/16
OA	PLANNING ISSUE	DM	XX	XX	XX/XX/XX

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BUCHANAN GATE BUSINESS PARK  
CUMBERNAULD ROAD  
STEPPS, GLASGOW  
G3 7PE

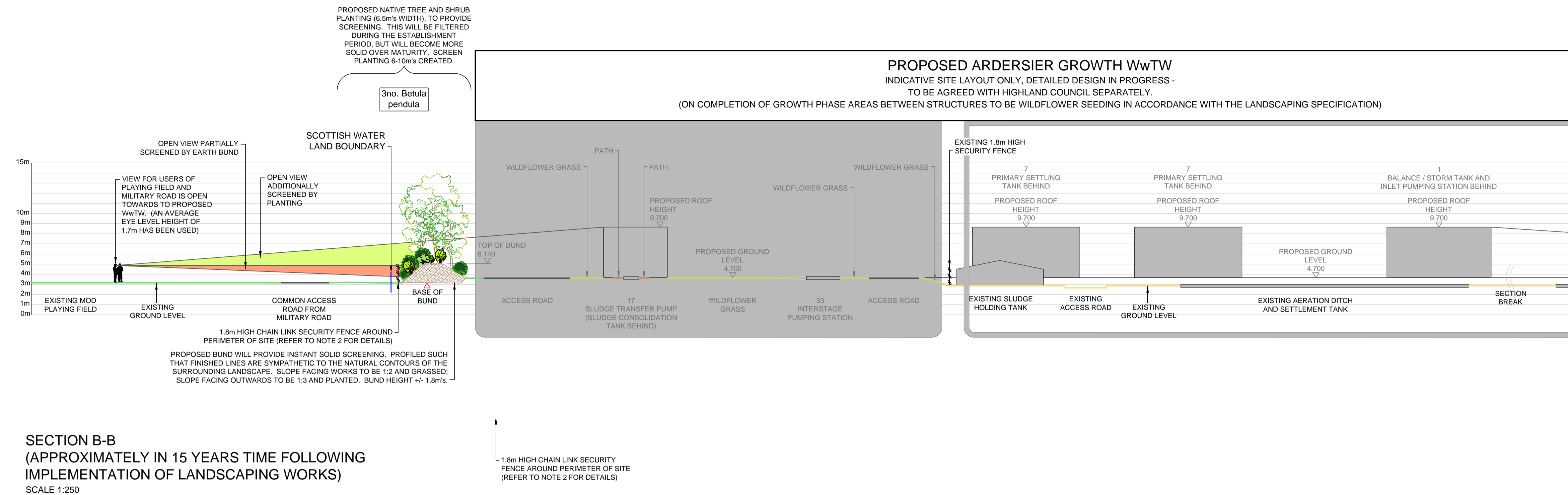
Originated By WM	Drawn By DM	Checked By GC	Approved By GC
Date 22/08/16	Date 03/11/16	Date 02/12/16	Date 02/12/16
Scale 1:250 @ A1		Status PLANNING ISSUE	

Project Title  
**ARDERSIER WwTW GROWTH**

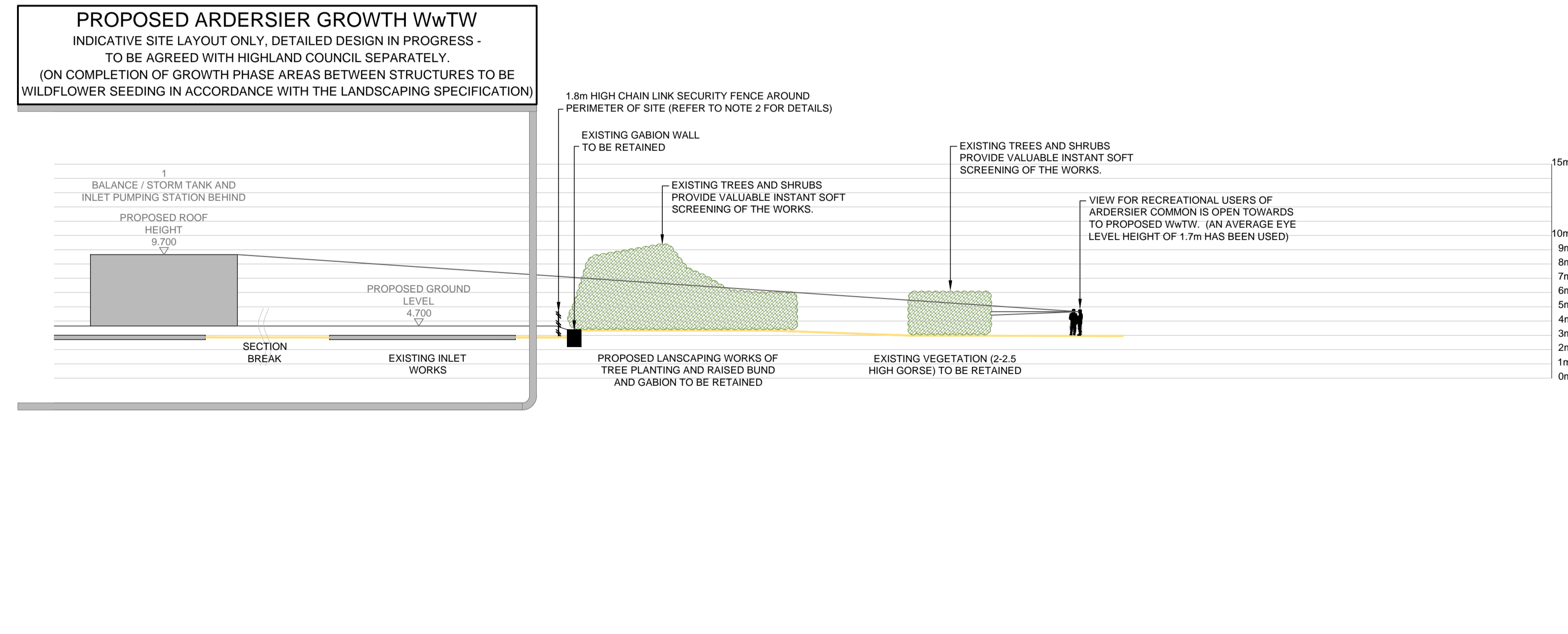
Drawing Title  
**SITE LAYOUT PLAN LANDSCAPING - SECTION A-A**

ELLIPSE EQUIPMENT No. 5000061980  
ELLIPSE PLANT No. STW000379 AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158003-OC**

# SECTION B-B PLAYING FIELDS VIEW



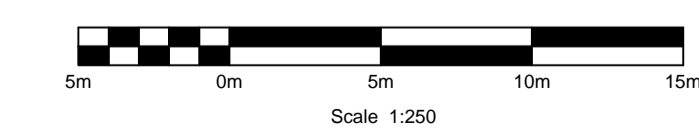
# SECTION B-B (APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS) SCALE 1:250



- NOTES (CONTINUED)
- 4. CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS;
  - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
  - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
  - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
  - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
  - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
  - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

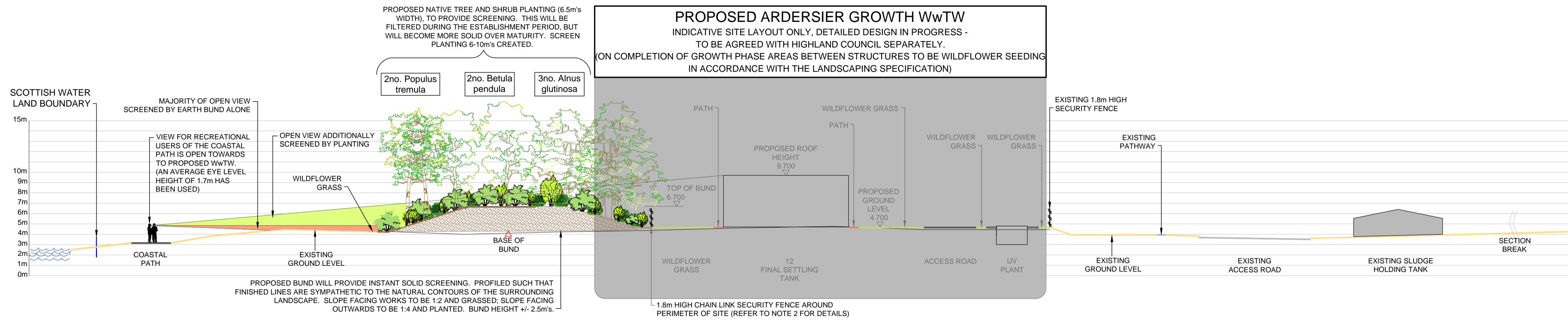
KEY

- EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
- EXISTING COASTAL PATH
- PROPOSED NATIVE TREE AND SHRUB PLANTING
- PROPOSED WILDFLOWER AND GRASS PLANTING
- PROPOSED PATH
- VIEW SCREENED BY PLANTING
- VIEW SCREENED BY BUND
- PROPOSED EARTH BUND
- PROPOSED NATIVE TREE AND SHRUB PLANTING

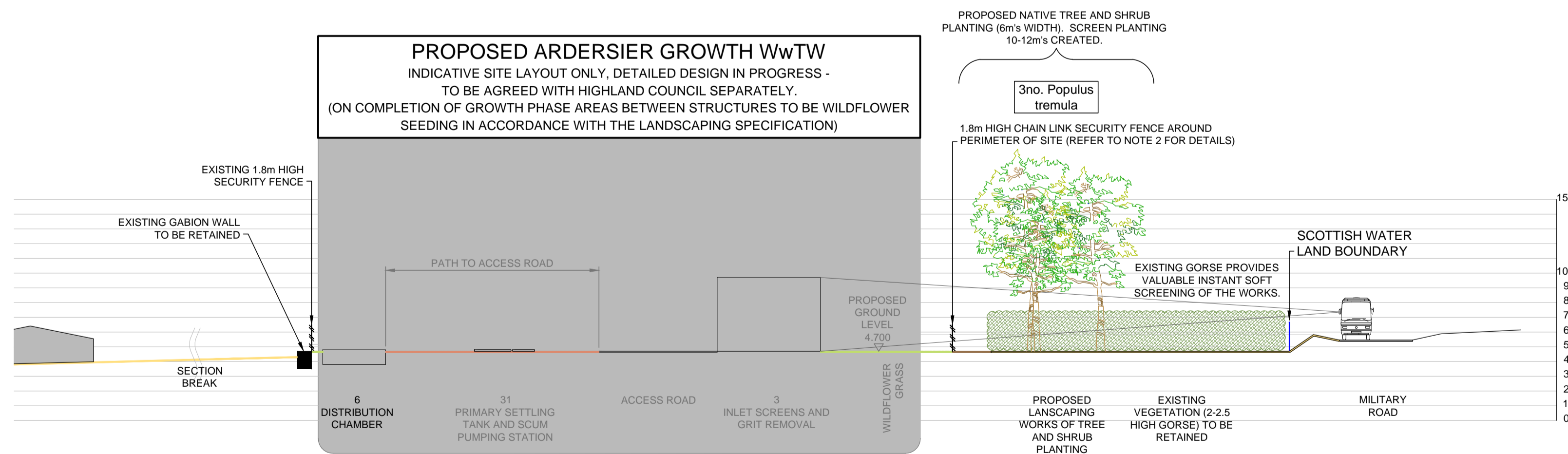


This data is based upon the O.S. map by Scottish Water with the permission of Her Majesty's Stationery Office. © Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Licence Number: GD0313650017					Original Size <b>A1</b>
<b>NOTES</b>					
<ol style="list-style-type: none"> <li>EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLEMENT LANDSCAPING PROPOSALS.</li> <li>1.8m HIGH CHAIN LINK SECURITY FENCE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. CHAIN LINK TO BE PLASTIC COATED 50mm x 50mm x 3.55mm DIA. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. ALL WIRE TO BE GALVANISED MILD STEEL. CONCRETE FOR POSTS TO BE CLASS ST4 OR GEN3. STRAINING POSTS TO BE PROVIDED AT ALL ENDS, CORNERS, CHANGE IN DIRECTION, CHANGE IN VERTICAL ALIGNMENT &amp; AT LEAST EVERY 50 METRES. INTERMEDIATE POSTS TO BE PROVIDED AT INTERVALS NOT GREATER THAN 3m. DETAILS TO BE PROVIDED AT FINAL DESIGN.</li> <li>ENTRANCE GATE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. INFILL OF GATE TO BE CHAIN LINK TO MATCH FENCING AND TO BE FLUSH WITH OUTSIDE FACE OF GATE. RETAINED IN PLACE BY GALVANISED STRETCHER BARS. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. HINGES SHALL BE ADJUSTABLE, FOLLOWING ADJUSTMENT OF THE GATES THE ADJUSTMENT METALWORK SHALL BE RENDERED TAMPERPROOF AND INACCESSIBLE FROM THE OUTSIDE. LOCKING BAR TO BE SECURED IN A STEEL BOX AND TO HAVE A HOLE TO RECEIVE PADLOCK. PADLOCK PROTECTED BY STEEL COVER ALLOWING ACCESS TO PADLOCK BY HAND ONLY FROM UNDERNEATH THE COVER. CONCRETE FOR POST FOOTINGS TO BE CLASS ST4 OR GEN3. DETAILS TO BE PROVIDED AT FINAL DESIGN.</li> </ol>					
NOTES (CONTINUED)					
SCOTTISH WATER HEALTH AND SAFETY INFORMATION					
IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :					
CONSTRUCTION PHASE					
RESIDUAL RISK:		ACTION REQUIRED:			
SW OPs ACCESS – HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT					
POINTS REQUIRING ACCESS:		METHOD OF ACCESS:			
SW OPs HANDLING / LIFTING STRATEGY					
ITEMS REQUIRING HANDLING:		METHOD OF HANDLING:			
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK					
OC	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	02/12/16
OB	PLANNING ISSUE	DM	GD	GD	03/11/16
OA	PLANNING ISSUE	DM	XX	XX	XX/XX/XX
Rev	Description	Drawn	Chkd	App'd	Date
<small>This drawing is the property of Scottish Water and must not be copied or used for any purpose other than that for which it is supplied without the written consent of Scottish Water.</small>					
		SCOTTISH WATER CASTLE HOUSE 6 CASTLE HOUSE CARNEGIE CAMPUS DUNFERMLINE FIFE KY11 8GG TEL: 01383 848200 FAX: 01383 848371			
		THE BRIDGE BUCHANAN GATE BUSINESS PARK CURRIEMALD ROAD STEPHENS, GLASGOW G3 7PB			
Originated By	Drawn By	Checked By	Checked By	Approved By	
WM	DM	GC	GC	GC	
Date	Date	Date	Date	Date	
22/08/16	03/11/16	02/12/16	02/12/16	02/12/16	
Scale	Status				
1:250 @ A1	PLANNING ISSUE				
Project Title <b>ARDERSIER WwTW GROWTH</b>					
Drawing Title <b>SITE LAYOUT PLAN LANDSCAPING - SECTION B-B</b>					
ELLIPSE EQUIPMENT No. 5000061980					
ELLIPSE PLANT No. STW000379		AUTOCODE No. 5001290000			
Drawing No. <b>5000061980-WW-DRA-04158004-0C</b>					

# SECTION C-C PLAYING FIELDS VIEW



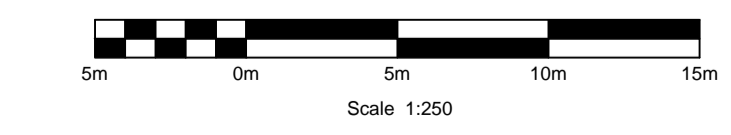
SECTION C-C  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING  
IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250



- NOTES (CONTINUED)
- CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS:
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

KEY

[Yellow line]	EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
[Green line]	EXISTING COASTAL PATH
[Green area]	PROPOSED NATIVE TREE AND SHRUB PLANTING
[Green area]	PROPOSED WILDFLOWER AND GRASS PLANTING
[Red line]	PROPOSED PATH
[Green area]	VIEW SCREENED BY PLANTING
[Orange area]	VIEW SCREENED BY BUND
[Grey area]	PROPOSED EARTH BUND
[Green area]	PROPOSED NATIVE TREE AND SHRUB PLANTING



- NOTES
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLEMENT LANDSCAPING PROPOSALS.
  - 1.8m HIGH CHAIN LINK SECURITY FENCE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. CHAIN LINK TO BE PLASTIC COATED 50mm x 50mm x 3.55mm DIA. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. ALL WIRE TO BE GALVANISED MILD STEEL. CONCRETE FOR POSTS TO BE CLASS ST4 OR GEN3. STRAINING POSTS TO BE PROVIDED AT ALL ENDS, CORNERS, CHANGE IN DIRECTION, CHANGE IN VERTICAL ALIGNMENT & AT LEAST EVERY 50 METRES. INTERMEDIATE POSTS TO BE PROVIDED AT INTERVALS NOT GREATER THAN 3m. DETAILS TO BE PROVIDED AT FINAL DESIGN.
  - ENTRANCE GATE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. INFILL OF GATE TO BE CHAIN LINK TO MATCH FENCING AND TO BE FLUSH WITH OUTSIDE FACE OF GATE, RETAINED IN PLACE BY GALVANISED STRETCHER BARS. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. HINGES SHALL BE ADJUSTABLE. FOLLOWING ADJUSTMENT OF THE GATES THE ADJUSTMENT METALWORK SHALL BE RENDERED TAMPERPROOF AND INACCESSIBLE FROM THE OUTSIDE. LOCKING BAR TO BE SECURED IN A STEEL BOX AND TO HAVE A HOLE TO RECEIVE PADLOCK. PADLOCK PROTECTED BY STEEL COVER ALLOWING ACCESS TO PADLOCK BY HAND ONLY FROM UNDERNEATH THE COVER. CONCRETE FOR POST FOOTINGS TO BE CLASS ST4 OR GEN3. DETAILS TO BE PROVIDED AT FINAL DESIGN.

NOTES (CONTINUED)

SCOTTISH WATER  
HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :

CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:
SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK

OC	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	02/12/16
OB	PLANNING ISSUE	DM	GD	GD	03/11/16
DA	PLANNING ISSUE	DM	XX	XX	xx/xx/xx
Rev	Description	Drawn	Chk'd	App'd.	Date

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THE BRIDGE  
BUCHANAN GATE BUSINESS PARK  
CUMBERNAULD ROAD  
STEEPS, GLASGOW  
G3 7EP

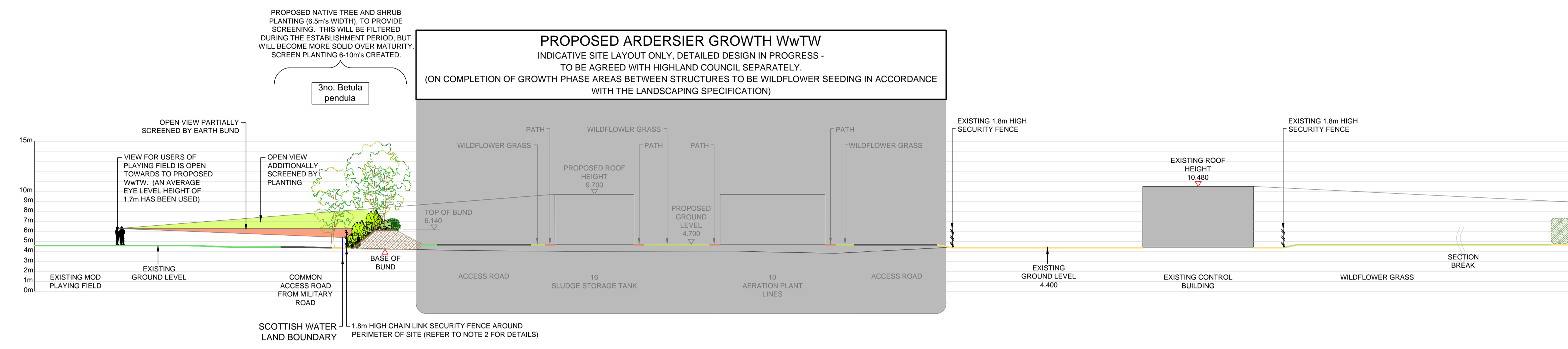
Originated By WM	Drawn By DM	Checked By GC	Approved By GC
Date 22/08/16	Date 03/11/16	Date 02/12/16	Date 02/12/16
Scale 1:250 @ A1	Status PLANNING ISSUE		

Project Title  
**ARDERSIER WwTW  
GROWTH**

Drawing Title  
**SITE LAYOUT PLAN  
LANDSCAPING - SECTION C-C**

ELLIPSE EQUIPMENT No. 5000061980  
ELLIPSE PLANT No. STW000379 / AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158005-0C**

# SECTION D-D ARDERSIER COMMON VIEW



SECTION D-D  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250

- NOTES
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLEMENT LANDSCAPING PROPOSALS.
  - 1.8m HIGH CHAIN LINK SECURITY FENCE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. CHAIN LINK TO BE PLASTIC COATED 50mm x 50mm x 3.55mm DIA. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. ALL WIRE TO BE GALVANISED MILD STEEL. CONCRETE FOR POSTS TO BE CLASS ST4 OR GEN3. STRAINING POSTS TO BE PROVIDED AT ALL ENDS, CORNERS, CHANGE IN DIRECTION, CHANGE IN VERTICAL ALIGNMENT & AT LEAST EVERY 50 METRES. INTERMEDIATE POSTS TO BE PROVIDED AT INTERVALS NOT GREATER THAN 3m. DETAILS TO BE PROVIDED AT FINAL DESIGN.
  - ENTRANCE GATE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. INFILL OF GATE TO BE CHAIN LINK TO MATCH FENCING AND TO BE FLUSH WITH OUTSIDE FACE OF GATE, RETAINED IN PLACE BY GALVANISED STRETCHER BARS. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. HINGES SHALL BE ADJUSTABLE, FOLLOWING ADJUSTMENT OF THE GATES THE ADJUSTMENT METALWORK SHALL BE RENDERED TAMPERPROOF AND INACCESSIBLE FROM THE OUTSIDE. LOCKING BAR TO BE SECURED IN A STEEL BOX AND TO HAVE A HOLE TO RECEIVE PADLOCK. PADLOCK PROTECTED BY STEEL COVER ALLOWING ACCESS TO PADLOCK BY HAND ONLY FROM UNDERNEATH THE COVER. CONCRETE FOR POST FOOTINGS TO BE CLASS ST4 OR GEN3. DETAILS TO BE PROVIDED AT FINAL DESIGN.
- NOTES (CONTINUED)

SCOTTISH WATER  
HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :

CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:
SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK.

OC	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	02/12/16
OB	PLANNING ISSUE	DM	GD	GD	03/11/16
DA	PLANNING ISSUE	DM	XX	XX	xx/xx/xx
Rev	Description	Drawn	Chk'd	App'd	Date

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Originated By WM	Drawn By DM	Checked By GC	Approved By GC
Date 22/08/16	Date 03/11/16	Date 02/12/16	Date 02/12/16
Scale 1:250 @ A1	Status PLANNING ISSUE		

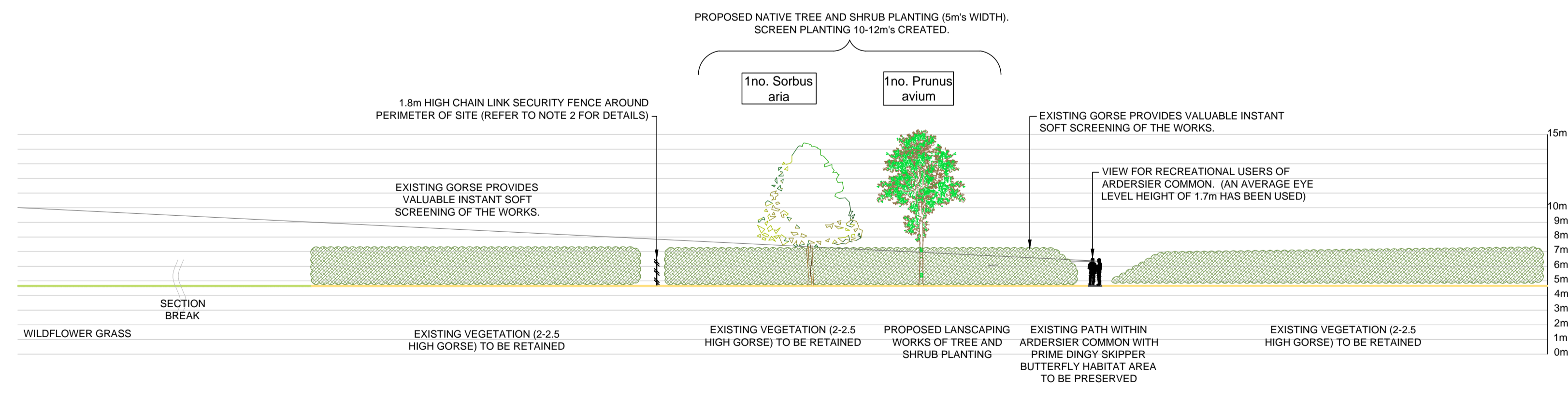
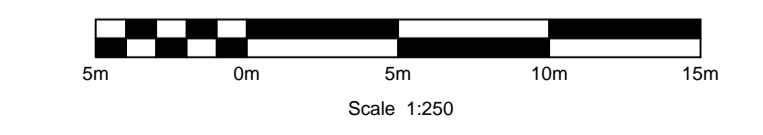
Project Title  
**ARDERSIER WWTW GROWTH**

Drawing Title  
**SITE LAYOUT PLAN LANDSCAPING - SECTION D-D**

ELLIPSE EQUIPMENT No. 5000061980  
ELLIPSE PLANT No. STW000379 / AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158006-0C**

- NOTES (CONTINUED)
- CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS:
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

- KEY
- EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
  - EXISTING COASTAL PATH
  - PROPOSED NATIVE TREE AND SHRUB PLANTING
  - PROPOSED WILDFLOWER AND GRASS PLANTING
  - PROPOSED PATH
  - VIEW SCREENED BY PLANTING
  - VIEW SCREENED BY BUND
  - PROPOSED EARTH BUND
  - PROPOSED NATIVE TREE AND SHRUB PLANTING



SECTION D-D  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250



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## **Ardersier Wastewater Treatment Works**

### **TRAFFIC MANAGEMENT PLAN**

<b>Rev No.</b>	<b>Description</b>	<b>Date</b>
0.1	Draft for Consultation	13 <sup>th</sup> October 2016
0.2	Final Draft	17 <sup>th</sup> November 2016
1.0	Final for Issue	22 <sup>nd</sup> November 2016
1.1	Updated following final comments from THC	2 <sup>nd</sup> December 2016
1.2	Updated following further comments from THC	5 <sup>th</sup> December 2016



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# 1. Introduction

## 1.1. General Information

The village of Ardersier is located on the Moray Firth. It is approximately 10 miles north east of Inverness, 7 miles west of Nairn and 2 miles south east of Fort George (see Figure 1)

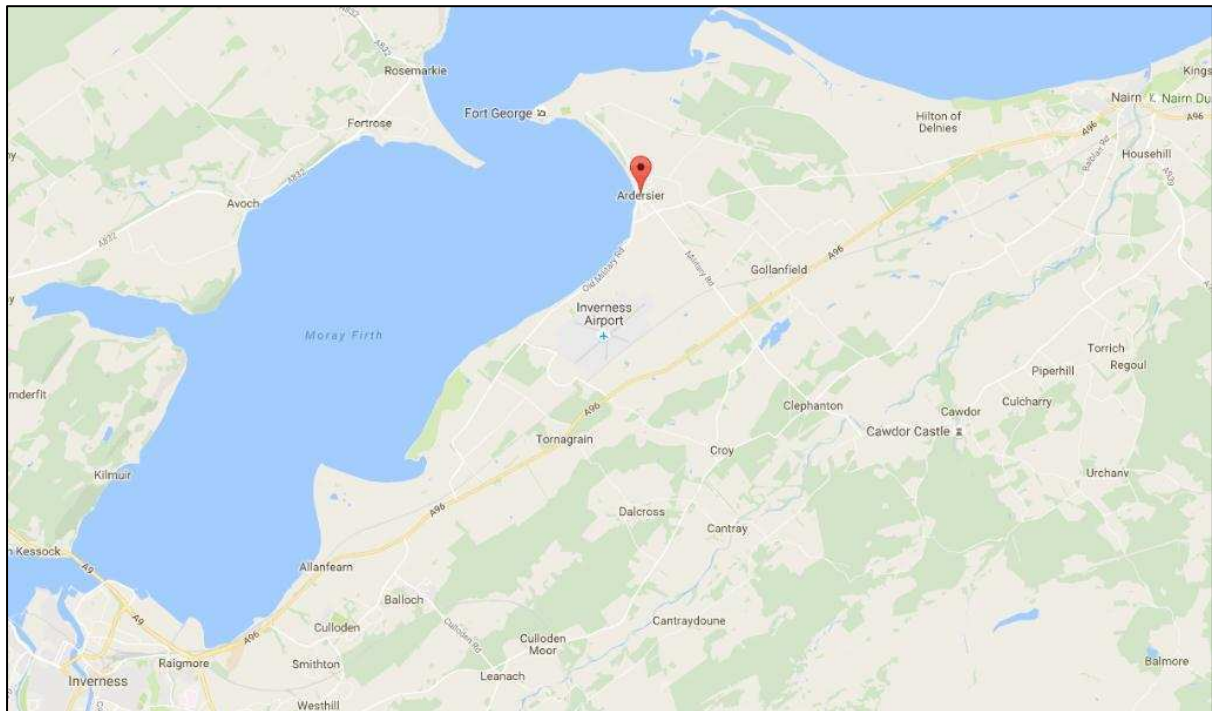


Figure 1

Scottish Water has received the grant of planning permission for the upgrade of Ardersier Wastewater Treatment Works (WWTW).

The work has been split into three projects:

- The extension of the existing waste water treatment works, which has operated for many years outside of Ardersier. Planning permission has been secured for the extension to the existing works under reference 10/02007/FUL and for the early implementation of Ultra Violet Treatment under reference 16/02464/FUL.
- The installation of a new underground waste water pipeline, which will transfer waste water from new developments in the area to the treatment works.
- The extension to the existing outfall pipe from the waste water treatment works to the north of the MOD firing range, near Fort George.

The locations of each of these are shown in Figure 2 and a description of each follows.



Figure 2

### 1.1.1. UV Project and Growth Project

These works will take place entirely on land owned by Scottish Water, adjacent to the existing Ardersier WwTW approximately 1km to the north west of the village. Access to the site will be from the public road (B9006) and the proposed construction traffic routes are along public roads only.

### 1.1.2. Outfall Extension Project

The outfall pipe for the WWTW currently discharges into the Moray Firth to the north east of Fort George. The extension of this pipe will involve construction work on the coast adjacent to the MOD firing range at Fort George and from the use of a barge platform just

off the coast. Site access for the outfall extension will be taken around the junction of the B9006 and the C1005 (Sunny Hillock to Fort George road).

The jack up barge is envisaged to be operated out of the Whiteness dock area and traffic management for this option is included in this plan. Should this not be available, an alternative harbour will be sought, reducing the traffic movements in this area.

### 1.1.3. Pipelines Project

The proposed route of the pipeline project is to enter the village from the south along the B9093, passing the Cheese Pantry and continuing along Stuart Street before turning off along the coastal path.

## 1.2. Scope

This document sets out the proposed Traffic Management Plan for the construction associated with the above noted works.

The requirement for a Traffic Management Plan is set out in Condition No. 15 of the WWTW Planning Permission (10/02007/FUL) which states:

*"Development shall not commence on site unless a Traffic Management Plan (TMP) to identify all traffic management aspects of the development has been submitted to and agreed in writing by the planning authority. Thereafter there may be no deviation from the approved TMP unless the written approval of the planning authority is first obtained."*

Planning permission for the installation of the UV equipment (16/02464/FUL) also includes a requirement under Condition No. 2 that states:

*"No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and agreed in writing by the Planning Authority.*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Construction Traffic Management Plan. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a minimum of 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Construction Traffic Management Plan detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Construction Traffic Management Plan for submission to the Planning Authority.*

Thereafter the agreed CTMP shall be implemented in accordance with the approved Plan to the satisfaction of the planning authority.”

Although there are no planning conditions associated with works on the Outfall Extension Project or the village section (along Stuart Street) of the underground pipeline from Tornagrain, Inverness Airport and Castle Stuart developments, access/egress routes to these sites have been noted within this Traffic Management Plan for completeness.

It should be noted that this document does not cover the specific traffic management arrangements for the Stuart Street work planned to be done under a separate road closure (NRSWA covers this work). The plan does however cover the main access and egress routes for plant and materials. Until further site survey work is completed it is unknown whether a full road closure of Stuart Street is required. Any requirements will be discussed with the relevant stakeholders.

### 1.3. Route Assessment for the WWTW

A ‘Route Access Assessment Report’ was completed by Mott MacDonald in 2010 and initially identified 6 potential options for traffic management routes. These routes are shown in Figure 3.

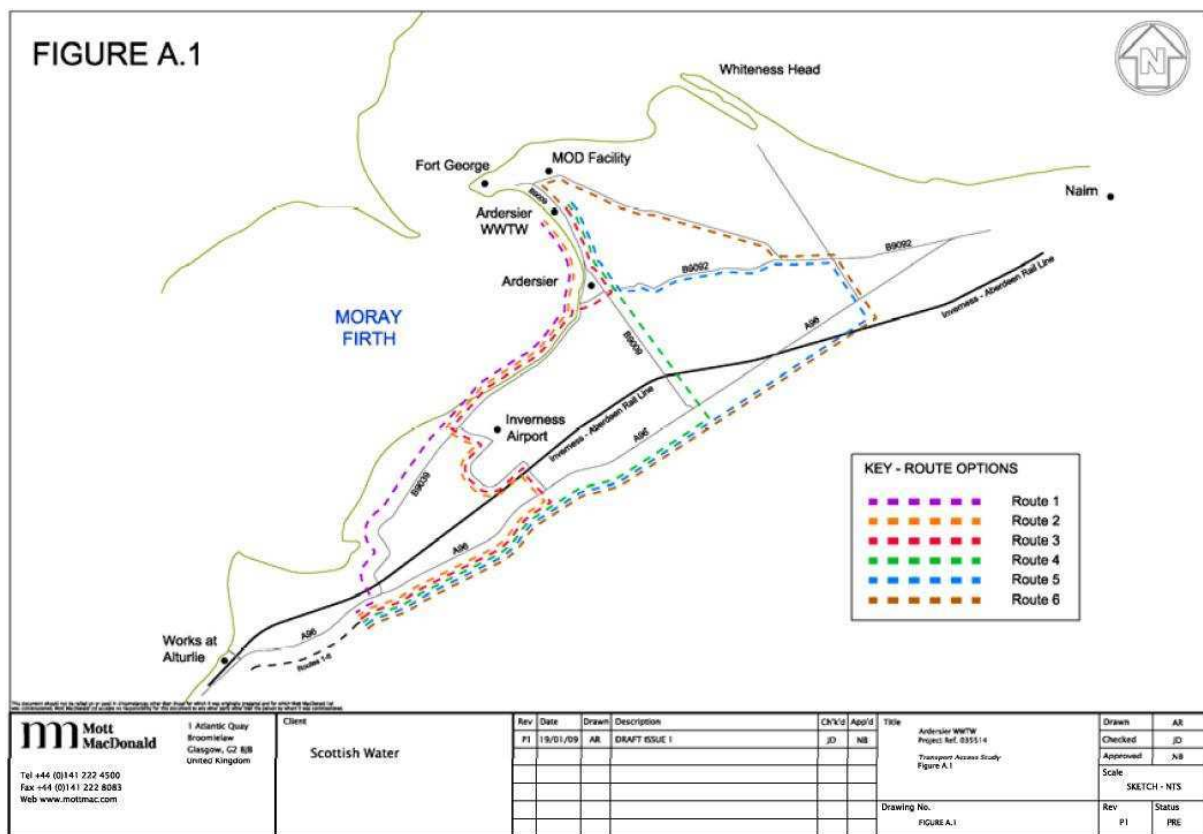


Figure 3

Following consultation and discussion with The Highland Council these options were reduced to 3 routes as shown in Figure 4.

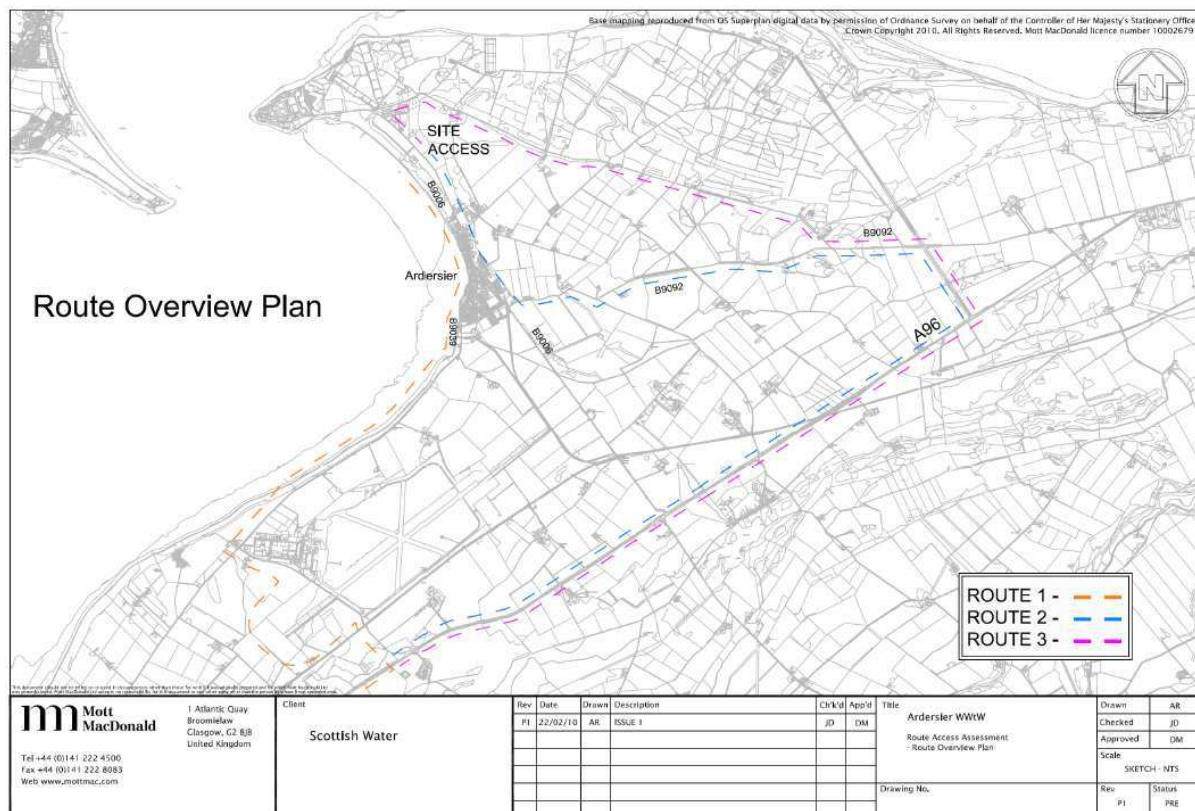


Figure 4

All three of these routes were identified as having the potential for use by construction traffic. However the use of Route 3, the C1005 road, from the B9092 (near Sunny Hillock) through Baddock and Kirkton and onwards to join the B9006 near Fort George, was identified as potentially needing significant infrastructure accommodation works to enable its use as a route for all construction traffic.

Route 1 through the village via Stuart Street was recommended by the Mott MacDonald Report. However, a review of the sight lines and junction of Stuart Street (B9039) and High Street (B9006) led to route 1 being discounted and route 2 being selected as the preferred route.

The preferred traffic management route (route 2) was presented at the community information events in June /July 2016.

Following feedback from the information events and from Community Council meetings, a review was undertaken of the potential use of the C1005 road from the B9092 (near Sunny Hillock) to the B9006 near Fort George.

A Traffic Management Route Option Review Report was completed by The Highland Council which identified a number of potential improvements that may be required for each of the traffic management routes to enable them to be used as the preferred option.

Subsequent site visits, route walkovers, and meetings with The Highland Council have taken place to try to develop and agree potential traffic management solutions.

#### **1.4. Innovation to reduce traffic impact**

Our plans include innovations which have reduced the number of vehicle movements through the use of modular assembly solutions and innovative construction methods.

Modular assembly solutions are factory built / off-site assemblies which are developed and produced to suit a specific application or set of site conditions. These can significantly reduce the time spent on site in the delivery of projects. They limit the impact from traffic movements through the reduction in travel of personnel and plant to/from site, reductions in individual deliveries of materials and a reduction in the production of waste materials.

Through challenging our construction technique for the outfall, we have been able to considerably reduce the number of HEAVY VEHICLE movements associated with this element of our works. This has involved changing to a barge based construction platform for the majority of the outfall's construction, not only reducing the aggregate imports required but also allowing piles and some other materials to be brought in by sea to reduce site traffic in the Ardersier area.

## 2. Consultation

As required by the Planning Permission for the UV Installation project (16/02464/FUL) the draft traffic management plan was issued to the Community Council and Local Members for an initial period of 2 weeks consultation.

The plan was also issued to 35 properties which were identified through Scottish Water's GIS system as being close to the proposed C1005 route.

Following contact from the Community Council, the consultation period was extended for an extra week to move it beyond the Community Council Meeting date. Following a further request to extend the consultation at the Community Council meeting, the consultation period closed on 11<sup>th</sup> November following a 4 week consultation period.

During the consultation period, representatives from SW attended a residents meeting with approximately 20-30 residents and also attended the Community Council Meeting.

Feedback from the consultation period has been considered and, where appropriate, updates to the TMP have been made.

### 2.1. Key feedback from Consultation on the TMP

During the Consultation period, feedback was received relating to a number of areas of concern, including:

- Volume of Traffic on C1005
- C1005 Not Suitable for Heavy Vehicles
- Potential Conflict with other Users of the Road
- Safety Risk
- Disruption
- Noise/Vibration
- Use of the Road in the Winter
- Repair and Maintenance
- Traffic through the village
- Specific Local Impacts
- Lack of Operational Traffic Information

These have been reviewed and, where possible, the TMP has been updated.

#### 2.1.1. Alternative access through Whiteness

An alternative route option through Whiteness was considered following feedback from local residents however this was ruled out following discussions with the MOD, Defence Estates and the owners of Whiteness port.

### **2.1.2. Further upgrade works to C1005**

Additional passing place improvements have now been agreed with the Highland Council in order to mitigate conflict with other users.

### **2.1.3. Use of the B9006 High Street for Light Vehicles**

The main changes following consultation with the community is that light vehicles will access the site through the village. This will mitigate the concerns raised by residents along the C1005 regarding the volume of traffic accessing the site through this route and their concerns regarding the risk of accidents on the narrow roads. Heavy vehicle movements will still use this route to mitigate the impact if they were to go through the village. The amended approach is considered to balance the impact of vehicle volumes on the C1005 and through the village.

The numbers of light vehicles, whilst relatively low in the context of existing village traffic, would have been more significant in relation to the existing traffic on the C1005. This change spreads the traffic across a wider road network.

## **2.2. Ongoing Liaison**

A Community Liaison Group is being established and will run for the duration of the projects. The group will provide a forum for Scottish Water and their contractors to present information on plans during construction, including traffic management, and allow the local community council and representatives of the community and other interested stakeholders, impacted by the development, to feedback their views and any issues encountered. Scottish Water will keep a log of vehicle movements to and from the site which will be used to inform discussion during these meetings.

Concerns will be documented and acted upon by Scottish Water accordingly. Each meeting will be minuted and minutes will be made publicly available to view.

Members of the public will also be kept updated via our Communications Team and through the Scottish Water website.



## 3. Traffic Routes

### 3.1. Vehicle Types

For the purposes of the traffic management plan, vehicles are divided into two groups,

- Heavy vehicles
- Light vehicles (<3.5T)

Where required, heavy vehicle traffic will be 'journey managed' under increased control measures to ensure the proposed routes can be utilised safely in conjunction with other users.

#### 3.1.1. Heavy Vehicles

Three heavy vehicle traffic management routes are included in this plan:

1. **The C1005 Sunny Hillock to Fort George route** - For heavy vehicle traffic accessing the WWTW (UV and Growth Project), the Outfall Extension Site, and for pipeline materials required for work in the northern section of the pipeline route.
2. **Access to the Whiteness dock** – For materials, plant, equipment and personnel accessing the barge loading site.
3. **The B9093 from Dalcross** – For materials, plant, equipment and personnel accessing the pipeline route along Stuart Street.

#### 3.1.2. Light Vehicles

A key change from the consultation on the draft TMP is that light vehicle traffic will no longer be guided to use the C1005 route to the WWTW and Outfall sites.





Light vehicle traffic entering the WWTW and Outfall sites will be guided to use the following routes.

4. **B9006 High Street** - For light vehicle traffic accessing the WWTW (UV and Growth Project), the Outfall Extension Site, and for work in the northern section of the pipeline route.

All access to the Whiteness site will follow the same route as outlined for heavy vehicle traffic.

All access to the pipeline work on Stuart Street will follow the same route as outlined for heavy traffic.

### 3.2. Key to Traffic Route Maps

KEY	
	Main Access Route (2 way traffic)
	Main Access on non-public road
	Road Closure
	HGV Holding Area

### 3.3. The C1005 (Sunny Hillock to Fort George) Route

All heavy vehicle construction traffic will be directed to and from the WWTW (UV and Growth) and the Outfall site via this route. This route will also be used for some of the pipeline heavy vehicle traffic when significant materials, plant and equipment are brought in for use in the northern section of the pipeline beyond the village.

The majority of heavy vehicle deliveries will use this route where reasonably practicable.

#### 3.3.1. Route Summary

From A96 to Ardersier WWTW Site (Route Length 7.8km)

High level descriptions of the traffic management route are included below and are also shown on the map in Figure 5.

From A96T Whiteness Junction:

- McDermott's Road (900m)
- Left turn on to B9092
- Ahead B9092 (970m)
- Ahead past Kebbuckstone junction
- Right turn at Sunny Hillock on to Muir of Balnagowan to Fort George Road (C1005)

- Travel 1680m on to Upper Carse Junction
- Ahead at Upper Carse at Link Road Junction
- Ahead to the crossroads at Baddock (900m)
- Ahead to Junction at Giack (660m) – ROAD CLOSURE STARTS
- Ahead to Kirkton - ROAD CLOSURE ENDS JUST PRIOR TO KIRKTON
- Ahead to B9006 High Street/Fort George Road
- Left turn on B9006 to Construction site.
- Right turn into construction site.

From Ardersier SW WWTW Site to A96:

- Turn Left out of site onto B9006
- Ahead B9006 High Street/Fort George Road
- Right turn to C1005 (Fort George-Muir of Balnagowan Road)
- Ahead through Kirkton –ROAD CLOSURE STARTS
- Ahead passing junction at Giack – ROAD CLOSURE ENDS
- Ahead crossroads at Baddock
- Ahead at Upper Carse junction
- Ahead to Sunny Hillock junction
- Left on B9092
- Ahead past Kebbuckstone junction
- Right turn onto McDermott's Road
- Ahead to A96T

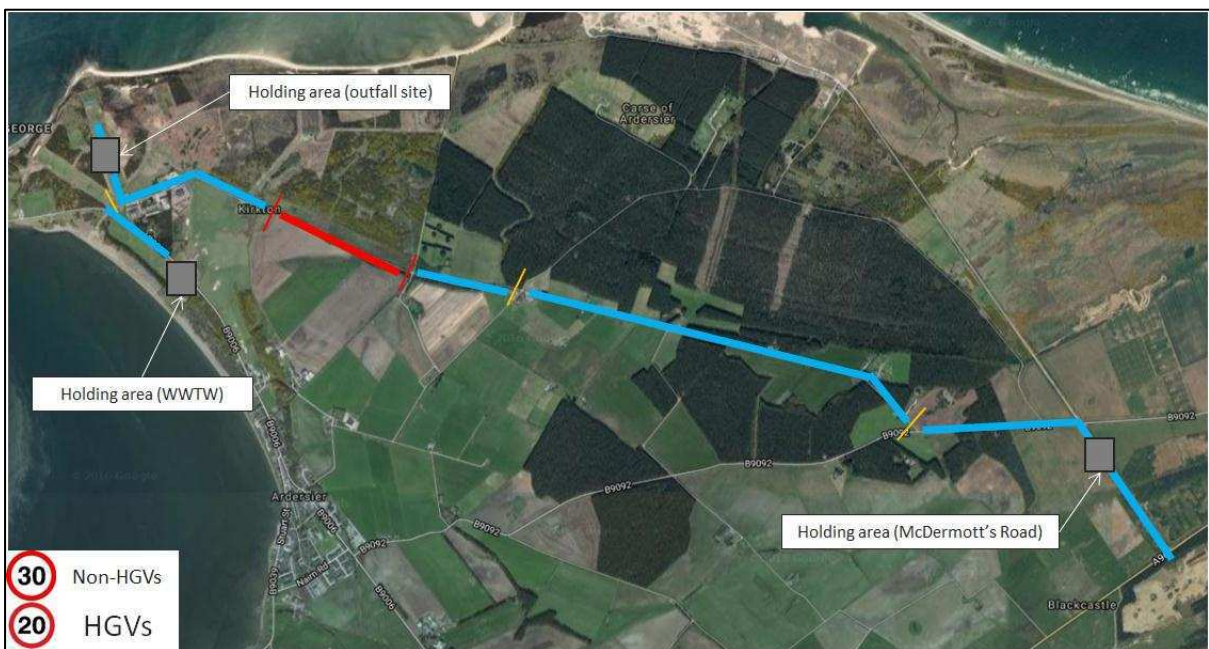


Figure 5

### **3.3.2. Route Activities**

#### ***3.3.2.1. Pre-Works Requirements***

A pre-start survey of the convoy route took place on the 20<sup>th</sup> September 2016 between representatives of Highland Council and Scottish Water.

The survey was to ascertain the existing condition of the road, identify works needed to protect the road against damage which would prevent its safe use, and identify works required to allow the required traffic movements. It should be noted that these works were agreed on the basis of a 'journey management' plan for heavy vehicles, allowing their movements to be controlled and managed more closely than on an 'open road' basis.

These upgrades will be completed prior to the bulk of work starting on site at the WWTW. Traffic management drawings, layouts, notices and Temporary Traffic Regulation Orders (TTROs) / Temporary Traffic Regulation Notices (TTRNs) will be sought in advance of any operations.

In finalising this schedule of improvements, Scottish Water will maximise the lengthening and widening of passing on the C1005 to better accommodate potential conflicts between construction and non-construction traffic.

#### ***3.3.2.2. Road Closure***

To support safe transit of construction vehicles along the route, a road closure along a section of the C1005 will be put in place via a TTRO.

This closure will be between the junction at Giack (west of the property 'Littleton') and just prior to Kirkton. This will allow free two-way access to the property of Littleton from the Baddock end and will allow free access down the unclassified side road at this point but will prevent through traffic to Kirkton. Two-way traffic will be maintained from the B9006 at Fort George to the hamlet of Kirkton allowing residents, businesses and other users to access from this end.

Signage will be installed at either end of the C1005 advising of the closure and also at the Baddock junction to the east of the road closure. Signage will advise of "Road Ahead Closed" and "Access Only".

Construction vehicles passing the road closure will be required to remove barriers for passage and replace once past.

The road closure is proposed to remain in place for the duration of the construction period however, in response to feedback regarding the potential disruption due to the road closure, Scottish Water will seek to reduce the periods of closure to align more closely with the operating hours of the sites and the construction activity. For clarity, it is envisaged that the road closure will be in place between;

- 07.00-19.00 Monday to Friday;
- 07.00-13.30 Saturday.

This will be reviewed once the road improvement activity has been completed and will be done in conjunction with the Community Liaison Group. This will hopefully enable local access to use the road outwith construction periods, both during the week and at weekends.

### *3.3.2.3. Heavy Vehicle Traffic – ‘Journey Management’*

It is proposed that all heavy vehicle movements are done under journey management to support smooth traffic management and mitigate impact on other road users.

A convoy and scout vehicle system will be employed for all heavy vehicles travelling through the C1005 traffic management route. The vehicles will be clearly liveried to indicate their purpose.

A holding area will be established at the McDermott’s Road (see figure 3) for incoming heavy vehicles to await convoy escort. Clear signage with contact & operating information will be placed. Incoming heavy construction vehicles will wait at the holding area and contact the controller. A convoy controller will be appointed to assume charge of the operation.

Equivalent holding areas will be established at the WWTW site and within the Outfall site where outgoing heavy vehicles will wait to be escorted back along the C1005 route.

The controller will receive calls from people requiring convoyed access and will deploy the convoy vehicles. Both a scout vehicle and an escort vehicle will be deployed to ensure that any oncoming traffic is safely held in a passing place whilst the heavy vehicle travels along the route.

The scouting vehicle will proceed first, followed by the escort vehicle leading the heavy construction vehicles.

The scout will proceed forward to the first designated passing place to see the road is clear of oncoming traffic. If the road is clear to the passing place then the scout will radio for the escort vehicle to follow up to the passing place and wait there. The scout will then proceed towards the next designated passing place where the process will repeat.

Should the scout encounter an oncoming vehicle it will hold the driver in the nearest passing place until the convoy passes.

The convoy will continue on to the site under escort.

This procedure will also apply for heavy vehicles exiting site, starting from a holding point at the WWTW or Outfall sites and continuing along the C1005 to the B9092.

Instruction will be given to all staff, subcontractors, etc on the convoy system as part of their site safety induction.

Instructions will be given on delivery orders to use the convoy system where appropriate and of the routes to be taken.

Appropriate signage will be placed on all approaches, clearly identifying the different work areas and directing vehicles and those requiring access.

#### ***3.3.2.4. Maximum Speed of Vehicles through the route***

For heavy construction vehicles the advisory speed will be 20mph and this will be managed by the convoy vehicle. To support the safe movement of heavy vehicles, there will be a 30mph advisory speed limit on the road for all other traffic.

### **3.3.3. Communication Methodology**

#### ***3.3.3.1. Signage***

Signage will be erected at the ends and approaches of affected roads to advise drivers of changes, restrictions, directions and diversions. Signage for construction traffic will be clearly marked to ensure that the different work areas, and the appropriate traffic management routes, are clearly identified.

#### ***3.3.3.2. Employees, Sub-contractors and suppliers***

All site employed drivers will be inducted to the traffic management plan and regular Toolbox Talks will be carried out throughout the project to remind and refresh drivers of the TMP and any changes to requirements.

The traffic management plan will be communicated with Sub-contractors and toolbox talks shared as appropriate.

Orders for deliveries by suppliers will be accompanied by detailed instructions explaining the traffic management requirements. Toolbox Talks will also be shared with suppliers who will do significant numbers of deliveries for the projects.

#### ***3.3.3.3. Residents & Businesses***

Letters will be sent out to all residents and business operators affected by the traffic management system. These groups will also be able to give feedback by the Community Liaison Group or direct to the Project Communications Advisor allocated to the project (see section 8).

Scottish Water will investigate options for providing information to residents regarding movement of escorted vehicles down the C1005. These will include options ranging from near 'real time' through to a point of contact for residents to contact to check the latest situation with regards to escorted vehicle movements. Proposals will be set out through the Community Liaison Group.

#### ***3.3.3.4. Ministry of Defence***

Close co-ordination with the MOD will continue to ensure essential access is maintained for the duration of the works and to manage significant operational manoeuvres.

#### ***3.3.3.5. Other***

Co-ordination will be undertaken with the refuse & recycling collection services and Royal Mail. This will be done through the TTRO process.

Arrangements will also be in place to ensure that our traffic management plans work in conjunction with significant events such as the Military Tattoo.

Scottish Water will be liaising with the school bus service to determine the scheduled drop-off and pick-up times at points affected by the C1005 traffic management route and will take steps to avoid construction traffic runs at those times.

### ***3.3.3.6. Emergency Services***

Emergency services will have access to the route at all times and will be given the convoy controllers contact details to advise of any operations. The convoy controller will liaise with the emergency services to ascertain when the route can be used again. Following the decision to allow Light Vehicles through the village, the potential impact on Emergency Services is further reduced.

### **3.3.4. Monitoring of Road Condition during Construction Phases**

Regular pre start drive over to check for potholes, safety items and obstructions will be logged by the convoy controller and recorded in an operations log or suitable document. The convoy driver will be expected to report any safety defects developing during the operation shift to the controller. A stock of Instant Road Repair will be held to effect quick repairs of potholes and the like. Regular end of shift drive overs will be carried out to check for defects requiring repair prior to the next operation.

During hot periods any bleeding of fatting up areas can be treated by gritting using the convoy vehicle and a gritter.

In addition to the above, a fortnightly inspection by suitably qualified and experienced staff will be undertaken to look for any signs of potential major defects developing (E.g. embankment slippage, slumping, over-runs, etc).

Regular Joint Inspections will be undertaken with The Highland Council and the Council will also have the ability to monitor road condition on an ad-hoc basis throughout the construction period. Scottish Water will work closely with The Highland Council during this period.

Scottish Water will make timely repairs to any major defects that develop as a result of their operations that are a risk to either construction or public traffic using the route.

### **3.3.5. Winter Maintenance Provisions**

A daily meteorological report will be obtained by the site for the convoy controller, to warn of winter conditions. Additionally agreement from the council will be sought to supply their daily action plan to alert the site to the likelihood of winter maintenance operations being required.



As part of the morning checks the controller can assess the route for treatment requirements.

A demountable gritter of 0.5m<sup>3</sup> capacity or more mounted on a pick up would allow for spread rates to a lane width of at least 20g/sq.m. The gritter body can be mounted on the convoy vehicle so as always to be on hand. It can be transferred to any replacement convoy vehicle.

As supply of road salt of 6-10mm grading will be utilised for any pre salting. A covered supply of 50/50 sand salt mix would be kept on site for treating post freezing surfaces. The sand in the mix would give instant grip while the salt worked to thaw the ice.

### **3.3.6. Section 96 Provisions**

Prior to the works there will be a pre-camp survey jointly carried out with the Highland Council as Roads Authority.

Post works a joint dilapidation survey will be carried out with the Roads Authority. Under the Roads Scotland Act 1984 Section 96 the roads authority are entitled to compensation for extraordinary expenses for damage caused by the operator by excessively heavy or extraordinary traffic.

It is proposed that Scottish Water will agree the extent of any damage caused by the construction traffic on the proposed site access routes with the council, using the pre camp and dilapidation surveys as reference.

Scottish Water will fund the repairs after the construction of their project is completed which means that the council will incur no extra ordinary expenses in this respect. Whether Highland Council carry out those works required then are reimbursed for them or whether Scottish Water engage a road maintenance contractor direct to do the work will be agreed.

### **3.3.7. Enforcement of the Traffic Management Methodology**

The road closure will be covered by temporary traffic regulation orders. Since the project spans beyond the maximum 18 months duration of a TTRO then consecutive TTROs may be required.

The speed of escorted vehicles will be controlled by the escort vehicle at the head of the convoy.

There will be an advisory speed limit applied to the road and appropriate signage installed.

Unwanted ingress of traffic to the closed section will be controlled by barriers and any illegal manoeuvres will be reported to the police. Dash-Cam video cameras will be considered to allow monitoring of activity.

Signed diversions will be in place to direct traffic that is not able to use the closed section of route.

The method of operation will be included in the project method statements and the health and safety plan, therefore breaches by employees or site staff will be a disciplinary issue.

Contractor and sub-contractor site information packs/contracts will require compliance with the TMP.

### 3.4. Access to the Whiteness Dock

Whiteness Dock is currently the proposed docking harbour for the barge that will be used for the construction of elements of the outfall extension. This route description is included based on this current proposal.

All deliveries of materials, plant, equipment and personnel to this site will access via the McDermott's road (see figure 6)



Figure 6

There are no varying traffic management plans for this route and all vehicles will follow the below plan.

No pre-works, road closures or journey management arrangements are required for this route.

### **3.4.1. Route Summary**

From A96T Whiteness Junction:

- McDermott's Road (900m)
- Cross the B9092 and exit the public road system, continuing down the old McDermott's road to the dock.

From Whiteness Dock

- Exit site along the old McDermott's road to join the public road at the junction of the B9092 and the McDermott's road.
- Cross the B9092 onto McDermott's Road (900m)
- Exit onto A96T from Whiteness Junction

### **3.4.2. Communications Methodology**

#### ***3.4.2.1. Signage***

Signage will be installed to direct vehicles to the Whiteness site and will also be installed to advise that this route is private and not open to public use.

#### ***3.4.2.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.2.3.2

## **3.5. B9093 from Dalcross to the pipeline works**

This will be the main route used by heavy construction vehicles accessing the pipeline construction along Stuart Street. All heavy vehicle traffic accessing the pipeline works from the south will follow this route.

There is no specific light vehicle traffic management route to the south end of Stuart Street however light vehicle movements have been estimated within the tables in section 4.

As noted within section 3.2, any significant heavy vehicle deliveries of materials, plant and equipment for use in the northern section of the pipeline route beyond the village will be brought in via Route 1 of this Traffic Management Plan.

Materials holding areas will be established at both the northern and southern sides of the pipeline work and many of the large deliveries will be brought to these points before being moved into the construction area in smaller quantities as required.

It is recognised that, while traffic will be directed to use the prescribed traffic management routes, some vehicular access into the village will occur in order to access local facilities and services such as shops, accommodation, cafes, etc. It is also recognised that there will be unavoidable vehicular access into the village for the construction of the pipeline itself. This plan covers the traffic management routes for bringing materials to and from the area but does not cover traffic management plans for vehicle movements within the pipeline construction area itself.

Estimated vehicle movements forecast within section 4 are based on the current design.

### **3.5.1. Route Summary**

High level bullets of the traffic management route are included below and are also shown on the map in Figure 7.

#### **Access to Stuart Street**

- Traffic exits the A96T at the Airport / Mid Coul roundabout junction
- Follows North around the airport exiting past Dalcross Industrial Estate to the junction with the B9039
- Turn right onto B9093 and head North West, passing the junction with the B9092 (Nairn Road) and onto Stuart Street.

#### **Exiting the Stuart Street Pipeline site**

- Exit Stuart Street at the southern end and join the B9093
- Pass the junction of the B9092 (Nairn Road) and head south easterly to the Hillhead Access Road into the Airport
- Turn left at the Hillhead access road into the airport, passing Dalcross Industrial Estate
- Follow the road south, bypassing the airport site (signpost Inverness)
- Exit the airport road onto the A96T at the Airport / Mid Coul roundabout onto the A96T



Figure 7

### 3.5.2. Route Activities

#### 3.5.2.1. Pre Works Requirements

No specific pre-works are required for accessing the site from the south by this proposed route other than the installation of signage.

Any specific requirements identified following understanding of the construction methodology will be included in the specific arrangements for that work.

### ***3.5.2.2. Road Closure***

Road closure requirements for the works along Stuart Street are unknown until further survey work is completed in the area. Once understood, this will form part of specific traffic management arrangements for this portion of the construction.

### ***3.5.2.3. Maximum Speed of Vehicles through the route***

There are speed limits already in force on this access route and drivers accessing via these routes will operate to these limits. No further restrictions on speed are envisaged at this point however any specific arrangements for the work along Stuart Street will be identified once the construction methods are understood.

## **3.5.3. Communication Methodology**

### ***3.5.3.1. Signage***

Signage will be installed from the A96T for construction traffic to direct them to the Stuart Street works.

### ***3.5.3.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.3.3.2

### ***3.5.3.3. Residents & Businesses***

Specific communications to the local residents and businesses affected by the works, along Stuart Street will be articulated once the method of construction is better understood.

## **3.5.4. Monitoring of Road Condition during construction phases.**

The site manager will be responsible for monitoring road conditions along Stuart Street during the works. A record of daily checks, reports and actions will be kept on site.

A stock of Instant Road Repair will be kept to affect any urgent repairs required. Laying and compaction tools will be available to the site as required.

### **3.5.5. Winter Maintenance Provisions.**

Winter maintenance cover, where the road is kept open, will remain the responsibility of the council.

Winter maintenance within any site area will be the responsibility of the contractor under site safety rules.

### **3.5.6. Section 96 Provisions**

Section 96 provisions will apply for this route in the same fashion as outlined in section 3.3.6.

## **3.6. B9006 High Street**

Following the feedback from the Consultation for the draft TMP, a key change is to remove the requirement for light vehicle traffic to use the C1005, instead guiding light vehicle traffic to access the WWTW and the outfall site through the village.

### **3.6.1. Route Summary**

No specific routes to or from the B9006 High Street access route have been specified as these will depend on the direction from which the vehicles arrive. It is generally expected that:

- Vehicles will entering from the East will access via the B9092 to join the B9006.
- Vehicles entering from the West will access via the B9093

### **3.6.2. Route Activities**

#### ***3.6.2.1. Pre Works Requirements***

No specific pre-works are required for light vehicle traffic accessing of the site from this route other than the installation of signage.

### ***3.6.2.2. Maximum Speed of Vehicles through the route***

There are speed limits already in force on this access route and drivers accessing via these routes will operate to these limits. No further restrictions on speed are envisaged at this point however any specific arrangements for the work in Stuart Street will be identified once the construction methods are understood.

### **3.6.3. Communication Methodology**

#### ***3.6.3.1. Signage***

Signage will be installed as required to ensure that heavy vehicle traffic does not use this route.

#### ***3.6.3.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.3.3.2

#### ***3.6.3.3. Residents & Businesses***

Letter communications will be carried out to all residents and business operators affected by the traffic management system. These groups will also be able to give feedback by the Community Liaison Group or direct to the Project Communications Advisor allocated to the project (see section 8).

### **3.6.4. Section 96 Provisions**

Section 96 provisions will apply for this route in the same fashion as outlined in section 3.3.6.



## 4. Estimated Traffic Flows

The tables below summarise the estimated construction traffic movements along each of the routes. Average and peak monthly figures are given and these are broken down to average daily figures.

For the purposes of this section, HGV vehicles are defined as vehicles >7.5T

Where applicable, peaking factors have been applied to estimate peak figures.

Due to delays in some of the elements of the project, there is a risk that overlap occurs between the different elements of the work in the area. The peak month figures have accounted for this risk and peaks are therefore calculated on overlap of the projects.

Numbers contained in the tables are 'movements'. One vehicle travelling into site and back out is counted as 2 movements.

### 4.1. Estimated Vehicle Movements along the C1005 or B9006 (High Street)

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
<b>C1005 Sunny Hillock to Fort George</b>  <b>OR</b>  <b>B9006 High Street</b>  <b>(Note: Route will depend on vehicle type as per TMP)</b>	TOTAL	HGV	Dec 16 to Oct 18	2889	126	5.0	279	11
		Non-HGV		20703	900	36.0	1692	68
	Growth Project	HGV	Jan 17 to Oct 18	2050	93	4	125	5
		Non-HGV		16600	755	30	1013	41
	UV Installation	HGV	Dec 16 to May 17	293	49	2	79	3
		Non-HGV		1075	179	7	250	10
	Outfall Extension	HGV	Dec 17 to April 17	210	42	2	53	2
		Non-HGV		2788	558	22	778	31
	Pipeline	HGV	Jan 17 to April 17	336	84	4	87	4
		Non-HGV		240	60	3	66	3

#### 4.2. Estimated Vehicle Movements to/from Whiteness

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
Access to Whiteness Dock	Outfall Extension	HGV	Jan 17 to April 17	140	35	2	44	2
		Non-HGV		896	224	9	280	11

#### 4.3. Estimated Pipeline Vehicle Movements along the B9039 to Stuart Street

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
Dalcross to Stuart Street	Pipeline	HGV	Jan 17 to April 17	395	99	4.0	109	4.3
		Non-HGV		2000	500	20.0	550	22.0

## 5. Site times

Site Times are:

- 07:30 – 18:00 on Monday to Friday and
- 07:30 – 13:00 on Saturday
- The site will be closed on Sundays.

Most site commuter traffic will be entering the site between 07:00 and 08:00 and will leave after 18:00 (13:00 on Saturdays). This will therefore not significantly affect school times.

Scottish Water will, wherever practicable, avoid all construction traffic movements through the village at key school traffic times of 08:30 to 09:30 and 14:30 to 15:30 (during term times).

## **6. Operational Traffic**

### **6.1. UV Project**

An Operational Phase TMP has been produced for the UV Installation Project as required by Condition 4 of the Planning Permission (16/02464/FUL.)

### **6.2. Growth Project**

There are no significant changes envisaged to the Operational Traffic as a result of the delivery of the Growth Project.

#### **6.2.1. Planned attendance:**

Planned Operational attendance at site is currently 3 times per week and this is not forecast to change once the Growth Project is complete.

Ground maintenance is undertaken on a 4 weekly basis throughout the summer by framework contractor and this will continue once the upgrade is complete.

Planned mechanical and electrical maintenance is completed based on the maintenance scheduling system with visits approximately monthly for planned maintenance.

Planned cleaning of tanks can take place on an ad-hoc basis, resulting in a number of additional tanker movements to and from site.

Tanker movements are the significant HGV movement associated with the wastewater treatment process. Tankers currently take sludge from the site 2 to 3 times per week. Although there will be an increase in the Population Equivalent of the works, the more modern nature of the technology being installed will initially result in a decrease in the number of tanker movements, rising back to current levels once the design capacity of the new works is reached. In effect, the improved Dry Solids Content that is achieved in the modern sludge stream means that less water is carried per tanker and therefore more sludge is carried, reducing the number of vehicles for the same volume of incoming sewage.

#### **6.2.2. Reactive attendance:**

As with the current wastewater treatment works, response to telemetry alarms, intruder alarms and incidents can generate additional operator visits. Calls of this nature are generally very low and will not have a significant impact on traffic volumes.

Equipment breakdown also generates additional maintenance visits in order to repair or replace equipment but again it is expected that these volumes will be extremely low.

Where process treatment units require reactive intervention there is sometimes the need to empty and clean tanks or re-seed the biological process. Although this generates additional tanker visits, this is a very infrequent occurrence.

### **6.2.3. Changes to the Current Arrangements for Operational Traffic**

Due to there being no significant changes to the operational traffic as part of the proposed works, it is not proposed that any changes will be made to the routing plans for operational vehicles.

Operational vehicles will however use the new access arrangements in place for the site.

## 7. Points of Contact

Key points of contact will be made available throughout the project and these will be communicated through the Liaison Group, via our Communications Team, and via the Scottish Water website.

Our current point of contact is:

- Trish Wilson (Project Communications Advisor)

Contact can be made through our Customer Contact Centre on 0800 0778 778.



**Scottish  
Water**  
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## **Ardersier Wastewater Treatment Works**

### **OPERATIONAL PHASE TRAFFIC MANAGEMENT PLAN**

#### **UV TREATMENT INSTALLATION**

<b>Rev No.</b>	<b>Description</b>	<b>Date</b>
0.1	Draft	15 <sup>th</sup> November 2016
0.2	Final Draft	17th November 2016
1.0	Final for Issue	18th November 2016
1.1	Final to Address Comments from THC	6 <sup>th</sup> December 2016

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## **1. Introduction**

### **1.1. Background**

Scottish Water has been granted planning permission for the Installation of UV Treatment at Ardersier WWTW under Planning Permission Application 16/02464/FUL.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the amendment of Condition 4 of the above Planning Permission. The Condition reads as follows

*No development shall commence on site until an operational phase Traffic Management Plan (including a routing plan for all delivery and maintenance vehicles) has been submitted to, and approved in writing by, the Planning Authority.*

*The approved operational traffic management plan shall be implemented prior to the hereby permitted development coming into use and remain in place in perpetuity, unless otherwise agreed in writing by the Planning Authority.*

*Reason: In the interests of road safety.*

### **1.2. Scope**

This document identifies the traffic management arrangements at Ardersier WWTW and highlights changes required as a result of the installation of UV treatment as granted planning permission in 2016 (16/02464/FUL).

This document forms the operational phase Traffic Management Plan as required by Condition 4 of the Planning Permission for UV Installation.

## **2. Current Site attendance**

### **2.1. Planned attendance**

The site is currently visited approximately 3 times a week by an operator in a van. Tanker movements are currently 2 to 3 per week.

Ground maintenance is undertaken on a 4 weekly basis throughout the summer by framework contractor.

Planned mechanical and electrical maintenance is completed based on the maintenance scheduling system with visits approximately monthly for planned maintenance.

Planned cleaning of tanks can take place on an adhoc basis, resulting in a number of additional tanker movements to and from site.

## **2.2.Reactive attendance:**

Response to telemetry alarms, intruder alarms and incidents can generate additional operator visits.

Equipment breakdown also generates additional maintenance visits in order to repair or replace equipment.

Where process treatment units require reactive intervention there is sometimes the need to empty and clean tanks or re-seed the biological process. This generates additional tanker visits.

## **2.3.Recording of Vehicle Movements**

Scottish Water maintain records of tanker movements to and from the site. In addition visitors must sign in and out of the site providing a record of visits to the site.

# **1. Operational Traffic Changes as a result of the UV Treatment Installation**

No significant changes will occur to the operational traffic as a result of the UV Treatment Installation.

There will be no extra sludge or waste production as part of this project.

The number of planned operational visits to the site will not be affected by the installation of the UV equipment.

Operational Maintenance of the UV equipment will carried out during normal operational site visits and maintenance by the Mechanical/Electrical Maintenance Team will be programmed along with existing plant maintenance task. Normal servicing of the UV will be twice per year.

As per current procedures, response to telemetry alarms and incidents could generate additional operator visits.

The installation of UV will not affect the operation or maintenance requirements of any of the existing process units.

## **2. Routing Plan**

Vehicles currently accessing the site use the public road network and their routes vary depending on the location/direction from which they approach the site. There are no restrictions on the routes currently used. The main routes currently used are listed below:

- B9093
- B9006
- B9092
- C1005

As there is insignificant change to the operational phase traffic movements it is not proposed that any changes are made to the current traffic management arrangements in regards to route specification.

## **3. Access changes required as part of this Operational Traffic Management Plan**

Once the new access has been formed, all vehicles will access site via the new access road from the B9006. The access from the existing entrance will be abandoned.

Signage will be installed advising of new access and closure of old access.

Stuart Morrison  
Scottish Water  
31 Henderson Drive  
Inverness  
Scotland  
IV1 1TR

Please ask for / Foighnich airson: Simon Hindson  
Direct Dial / Àireamh fòn: 01463 255196  
Email / Post-d: [simon.hindson@highland.gov.uk](mailto:simon.hindson@highland.gov.uk)  
  
Our Ref / Ur n-àireamh-iùil: 16/02464/FUL & 16/05382/FUL  
Your Ref / Ar n-àireamh-iùil:  
  
Date / Ceann-là: 06 December 2016

By e-mail to [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir,

**Planning Permission 16/02464/FUL - Installation of an Ultra Violet Treatment Plant at the Ardersier Wastewater Treatment Plant at Land 40m West of Wastewater Treatment Works, Ardersier**

I write with reference to the above planning permission and the submissions made to The Highland Council with regard to the Conditions 1, 2, 3, 4 and 5 of your planning permission. I will address each of these in turn.

Condition 1 - Site access

Condition 1 states: *“No development shall commence on site until details of how the proposed access arrangements are implemented and submitted to and agreed in writing by the planning authority and thereafter so implemented in accordance with the approved details.”*

*For the avoidance of doubt, following completion of the new access no access may be taken to the Waste Water Treatment Works via the pre-existing access.”*

The information submitted included a covering letter and a drawing showing the proposed access arrangement.

In considering the submissions which have been made I have consulted our Transport Planning Team.

The plan is clear that post completion of the growth project, Scottish Water will use the new access road exclusively. Importantly once operational the main access into the site will be via the access approved under Planning Permission 16/02464/FUL. It is also clear that the existing access to the shore will be kept free from obstruction for existing users.

Taking the above into consideration, I am content that the submitted plan is sufficient to consider the condition satisfied. The following drawing is hereby approved and shall be implemented:

- Drawing Title: General Site Layout Access Road, Site Compound and Fencing Plan, Drawing Number 5000061980-WW-DRA-04151001-0A, Dated 21/11/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 22 November 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

Condition 2 - Construction Traffic Management Plan

Condition 2 states: *“No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and agreed in writing by the Planning Authority.”*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Construction Traffic Management Plan. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a minimum of 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Construction Traffic Management Plan detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Construction Traffic Management Plan for submission to the Planning Authority.”*

The information submitted included a covering letter and a copy of the Construction Traffic Management Plan (CTMP).

In considering the submissions which have been made I have consulted our Transport Planning Team. I also invited comment from elected Local Members over a period of 5 working days.

Firstly, I am satisfied that Scottish Water undertook consultation and provided evidence as to how this was taken into account in preparing the CTMP.

In terms of the CTMP, following the initial submission on 22 November 2016 a revised Traffic Management Plan was submitted to the Planning Authority on 06 December 2016 for consideration. This addressed matters raised by the Planning Authority in relation to Traffic Management Plan. This included:

- A commitment to no construction traffic through the village between 08:30 - 09:30 and 14:30 – 15:30 Monday to Friday during school term times.
- Consideration of the provision of real-time notification of escorted vehicle runs along the C1005, or a point of contact local to the site that residents along the C1005 could contact to check the latest situation with regards to escorted vehicle runs.
- Clarification of road closure times as being the same as the site construction times (07:30 – 18:00 Monday to Friday and 07:30 – 13:00 on Saturday, with no construction activity on Sundays.) Any alternative times should not be outside 07:00 – 19:00 Monday to Friday and 07:00 – 13:30 on Saturday.
- A commitment that Scottish Water will take all opportunities to maximise the lengthening and widening of passing places on the C1005 to better accommodate potential conflicts between construction and non-construction traffic.
- A commitment that Scottish Water will quickly repair any major defects that develop as a result of their operations that are a risk to either construction or public traffic using those routes.

It was also recommended that traffic counters were put in place on the C1005 and the B9006 were put in place to monitor vehicular movements, thus providing valuable information to Scottish Water during the construction period. While you have not committed to this you have confirmed that Scottish Water will be logging the vehicular movements to and from the site. This is considered acceptable in relation to the provisions of the condition.

Taking the above into consideration, I am content that the submitted Construction Traffic Management Plan is sufficient to consider the condition satisfied. The following document is hereby approved and shall be implemented:

- Document Title: Ardersier Waste Water Treatment Works Traffic Management Plan, Revision 1.2, Produced by Scottish Water, dated 05/12/2016 and submitted to the Planning Authority on 05 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

### Condition 3 - Landscaping

Condition 3 states: *“No development shall commence until details of a scheme of hard and soft landscaping works have been submitted to, and approved in writing by, the Planning Authority.*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Landscaping Scheme. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a*

*minimum 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Landscaping Scheme detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Landscaping Scheme for submission to the Planning Authority.*

*Details of the scheme shall include:*

- i. All earthworks and existing and finished ground levels in relation to an identified fixed datum point;*
- ii. A plan showing existing landscaping features and vegetation to be retained. This must demonstrate the efforts to minimise the loss of existing landscaping features and vegetation;*
- iii. The location, design and including materials, of any existing or proposed walls, fences and gates;*
- iv. All soft landscaping and planting works, including plans and schedules showing the location, species and size of each individual tree and/or shrub and planting densities. For the avoidance of doubt this shall include details of additional planting on the eastern boundary and northern boundary and include species which are already present in the area including Whinn and Gorse; and*
- v. A programme for preparation, completion and subsequent on-going maintenance and protection of all landscaping works.*

*Landscaping works shall be carried out in accordance with the approved scheme. All planting, seeding or turfing as may be comprised in the approved details shall be carried out in the first planting and seeding seasons following the commencement of development, unless otherwise stated in the approved scheme.*

*Any trees or plants which within a period of five years from the completion of the development die, for whatever reason are removed or damaged shall be replaced in the next planting season with others of the same size and species."*

The information submitted included a covering letter and a copy of a landscaping plan and site sections.

In considering the submissions which have been made I invited comment from elected Local Members over a period of 5 working days.

Firstly, I am satisfied that Scottish Water undertook consultation. It is noted that no public comments were received on matters related to landscaping.

In terms of the Landscaping Plan, following the initial submission on 22 November 2016 a revised Landscaping Plan was submitted to the Planning Authority on 02 December 2016 for consideration. This addressed matters raised by the Planning Authority or those which needed modification to accord with the pre-submission advice provided by the Council's Forestry Officer. This included:

- Details of gates and fencing as per part (iv) of condition 3.
- Further details of the planting mix and some revisions to planting types to reflect the location of the development.
- A review of the sections through the site to ensure that they accorded with the revisions to the landscaping plan.
- A revision to the red-line boundary to ensure that it accorded with the red-line boundary shown on the approved planning application drawings.

It is understood that Scottish Water engaged both a landscape architect and an ecologist in bringing forward the landscaping plan.

Having reviewed the submitted plans and information I am content that the level of landscaping proposed and the planting mix is appropriate to the site. I am also content that the fencing proposed is sufficient. In considering whether these accord, I have considered the location of the site and the surrounding sensitivities including, but not limited to, climate, existing planting / landscaping and nature conservation. As such the following plans are hereby approved:

- Drawing Title: Site Layout Plan Landscaping, Site Compound and Fencing Plan, Drawing Number 5000061980-WW-DRA-04158001-0F, Dated 06/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 06 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section Locations, Drawing Number 5000061980-WW-DRA-04158002-0D, Dated 06/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 06 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section A-A, Drawing Number 5000061980-WW-DRA-04158003-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section B-B, Drawing Number 5000061980-WW-DRA-04158004-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section C-C, Drawing Number 5000061980-WW-DRA-04158005-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.
- Drawing Title: Site Layout Plan Landscaping - Section D-D, Drawing Number 5000061980-WW-DRA-04158006-0C, Dated 02/12/16, Prepared by ESD for Scottish Water and submitted to the Planning Authority on 02 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged. The condition may be discharged once development has been completed in line with the approved details.

#### Condition 4 - Operational Traffic Management Plan

Condition 4 states: *“No development shall commence on site until an operational phase Traffic Management Plan (including a routing plan for all delivery and maintenance vehicles) has been submitted to, and approved in writing by, the Planning Authority.*

*The approved operational traffic management plan shall be implemented prior to the hereby permitted development coming into use and remain in place in perpetuity, unless otherwise agreed in writing by the Planning Authority.”*

In considering the submissions which have been made I have consulted our Transport Planning Team. I also invited comment from elected Local Members over a period of 5 working days.

Following the initial submission on 22 November 2016 a revised Operational Traffic Management Plan (OTMP) was submitted to the Planning Authority on 06 December 2016 for consideration. This addressed matters raised by the Planning Authority in relation to OTMP. This included:

- Recording of trips to and from the site in order to monitor the effectiveness of the OTMP.

Taking the above into consideration, I am content that the submitted Operational Traffic Management Plan is sufficient to consider the condition satisfied. The following document is hereby approved and shall be implemented:

- Document Title: Ardersier Waste Water Treatment Works Operational Traffic Management Plan, Revision 1.1, Produced by Scottish Water, dated 06/12/2016 and submitted to the Planning Authority on 06 December 2016.

For the avoidance of doubt the condition is satisfied but not discharged.

#### Condition 5 - Community Liaison Group

Condition 5 states: *“No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and affected local Community Councils.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events and tourist seasons are considered and appropriate*

*measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.”*

The information submitted comprised a letter of intent detailing Scottish Water's proposed approach to community liaison.

I also note that invitations have been sent out by Scottish Water seeking to organise the first meeting of the community liaison group. That invitation clearly sets out the draft terms of reference for the group. Those will be agreed at the first meeting. I note the proposed membership of the group and recommend that the meetings are open to the public.

Having reviewed the content of the letter and follow up information I am satisfied that the group will, in due course, serve to function as per the requirements of Condition 5.

In sending out the invitation I consider that the group is now established and note that the first meeting will be held as soon as possible.

#### Further Comments

Before development commences you are required to submit a Notification of Initiation of Development Form. A copy of the form was attached to your Decision Notice.

Should you require any further information or clarification on any of the above, please do not hesitate to contact me on 01463 255196.

Yours sincerely,

**Simon Hindson**

Acting Principal Planner - Development Management



Scottish Water

By e-mail only to

[Lynn.Taggart@SCOTTISHWATER.CO.UK](mailto:Lynn.Taggart@SCOTTISHWATER.CO.UK)  
[Stuart.Morrison@SCOTTISHWATER.CO.UK](mailto:Stuart.Morrison@SCOTTISHWATER.CO.UK)

>

Please ask for: Simon Hindson  
Direct Dial: 01463 255196  
E-mail: [simon.hindson@highland.gov.uk](mailto:simon.hindson@highland.gov.uk)  
Our Ref: 16/02464/FULIN  
Your Ref:  
Date: 07 December 2016

Dear Scott,

**PLANNING PERMISSION 16/02464/FUL - UV TREATMENT PLANT, ARDESIER  
WWTW, ARDESIER**

I refer to the Planning Permission 16/02464/FUL, your email dated 06 December 2016 and the Notification of Initiation of Development attached to the aforementioned email.

I can confirm that the suspensive conditions related to the above development have been satisfied and as such development can commence.

As you are aware, the conditions attached to your planning permission include the delivery of mitigation works as agreed through the satisfaction of conditions 1-5 of your planning permission. These mitigation works require to be delivered in line with the details and timescales set out in these documents and the conditions attached to your planning permission.

You are reminded that once the development is complete you are required to submit a Notification of Completion of Development. A copy of this for you to complete was sent to you with the planning permission documents.

Please do not hesitate to contact me using the details at the top of this letter if you have any further queries.

Yours Sincerely,

**Simon Hindson  
Acting Principal Planner – Development Management**



**Scottish  
Water**  
Trusted to serve Scotland

## **Community Liaison Group – Terms of Reference and membership**

### **16/02464/FUL Installation of an Ultra Violet Treatment plant at the Ardersier Wastewater Treatment Works**

The aim of the Community Liaison Group is to create a programme of engagement between with the community council, local people and other stakeholders through the construction of works at the Ardersier Wastewater Treatment Works as granted under the above planning application to help Scottish Water to identify issues of concern.

Scottish Water has invited stakeholders to attend the first meeting which is to be arranged as soon as possible. The group will meet regularly (as required) and minutes will be taken and published on the Scottish Water web page (<https://www.scottishwater.co.uk/investment-and-communities/your-community/ardesier>).

#### **Stakeholder group membership**

It is proposed that the Group shall consist of representatives from: -

- Scottish Water,
- The Highland Council including the Manager for Ward 18, representatives from the Development and Infrastructure Service (Planning) and Local Elected Members.
- Ardersier and Petty Community Council.

#### **Stakeholder Group – Terms of Reference**

- Review the effectiveness of the Traffic Management Plan associated with the above development and other associated works;
- Ensure that local events are fully considered during the planned works;
- Listen to a range of views to establish if any other mitigation measures could be implemented during the construction timetable;

02/12/2016



Castle House  
6 Castle Drive  
Carnegie Campus  
Dunfermline  
KY11 8GG

0800 0778778

[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

Dear Sir/Madam,

**16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT WORKS**

I refer to the above planning permission granted on 4 October 2016 by The Highland Council in relation to the installation of a UV Treatment Plant and associated works at the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. This letter relates to Condition 5 which reads as follows;

*No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and local Community Council.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events are considered and appropriate measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.*

The aim of the community liaison group is to create a programme of engagement with the local community, elected representatives and stakeholders throughout the construction element of the project. This will enable informed debate that will help Scottish Water identify areas of concern, explore solutions and progress this project.

We would like to hold the first meeting either during the week beginning 12 December or the week beginning 9 January. Please can I ask you to email me ([judy.wakker@scottishwater.co.uk](mailto:judy.wakker@scottishwater.co.uk)) your availability during these two weeks. Once we

have confirmed a date I will arrange a suitable venue. At the first meeting I would like us to agree the terms of reference for the group, the potential agenda and any additional invitees. I have attached a draft terms of reference and included the list of invitees to this first meeting at the bottom of this letter.

If you have any queries, please contact me.

Yours faithfully,

*Judy Wakker*

**Judy Wakker**  
**Community Relations Manager**

**Invitees:**

The Highland Council:      Ward Manager Robie Bain  
   Planning Officer Simon Hindson

The Highland Council:      Councillor Roddy Balfour  
   Councillor Trish Robertson  
   Councillor Glynis Sinclair  
   Councillor Kate Stephen

Ardersier and Petty Community Council

22/11/2016



Area Planning Office  
Kintail House  
Beechwood Business Park  
Inverness  
IV2 3BW

**Specialist Service Delivery**

31 Henderson Drive  
Inverness  
IV1 1TR

T: 07443876619

E: [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir/Madam,

**INFORMATION REQUIRED FOR PLANNING CONDITION TO BE DISCHARGED**

**16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT PLANT**

I refer to the above planning permission granted on the 4<sup>th</sup> of October 2016 by the Highland Council in relation to the construction of a new Wastewater Treatment Works and associated works adjacent to the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the amendment of Condition 1 of the above Planning Permission. The Condition reads as follows;

*1. No development shall commence on site until details of how the proposed access arrangements are to be implemented are submitted to and agreed in writing by the planning authority and thereafter so implemented in accordance with the approved details.*

*For the avoidance of doubt, following completion of the new access, use of the existing access shall cease for access to the Waste Water Treatment Works to the satisfaction of the planning authority.*

The enclosed plan demonstrates the proposed access arrangements in terms of its dimensions, visibility splays and the extent to which the bitumen surfacing will extend from the carriageway. In addition, the intended form of construction is depicted as well as the proposed drainage arrangements to prevent water running back onto the public road.

The existing access will be retained for operational use for the duration of construction. However, it is Scottish Water's intention to move its operational traffic to the new access when the works are complete, although it must be stressed that this is currently aspirational and no such agreement has been reached with the Highland Council. The existing access will be retained for users in perpetuity and it will be kept free from obstruction for the duration of the construction programme.

I trust that the submitted information will be to the satisfaction of the Highland Council.

If you have any queries, please contact me.

Yours faithfully,

Stuart Morrison  
Planning Advisor  
**Scottish Water**



Area Planning Office  
Kintail House  
Beechwood Business Park  
Inverness  
IV2 3BW

**Specialist Service Delivery**

31 Henderson Drive  
Inverness  
IV1 1TR

T: 07443876619

E: [stuart.morrison@scottishwater.co.uk](mailto:stuart.morrison@scottishwater.co.uk)

Dear Sir/Madam,

**INFORMATION REQUIRED FOR PLANNING CONDITION TO BE DISCHARGED**

**16/02464/FUL INSTALLATION OF AN ULTRA VIOLET TREATMENT PLANT AT THE ARDERSIER WASTEWATER TREATMENT PLANT**

I refer to the above planning permission granted on the 4<sup>th</sup> of October 2016 by the Highland Council in relation to the installation of a new UV Treatment Plant and associated works adjacent to the existing Ardersier Wastewater Treatment Works.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the purification of Condition 5 of the above Planning Permission. The Condition reads as follows;

*5. No development shall commence until a community liaison group is established by the developer, in collaboration with The Highland Council and Local Community Council.*

*The group shall act as a vehicle for the community to be kept informed of project progress and, in particular, should allow advanced dialogue on the provision of all transport-related mitigation measures and to keep under review the timing of the deliveries to the site.*

*This should also ensure that local events are considered and appropriate measures to co-ordinate deliveries and work with these and any other major projects in the area to ensure no conflict between construction traffic and the increased traffic generated by such events / seasons / developments.*

*The liaison group, or element of any combined liaison group relating to this development, shall be maintained until the construction has been completed and is fully operational.*

As a responsible developer, Scottish Water has undertaken and will continue engagement and consultation with the local community during the construction of Ardersier WwTW. As such, and as per the relevant planning condition, Scottish Water has established an effective Community Liaison Group.

The group aims to provide a forum for Scottish Water and its contractors to present information on plans during construction, including traffic management, deliveries and construction works, and allow the Highland Council, the Community Council and other interested stakeholders to feed back their views and any issues encountered. Concerns will be documented and acted upon by Scottish Water accordingly.

The first meeting of the group will be arranged for as soon as possible and it will meet on a regular basis for the duration of the works. Each meeting will be minuted and minutes made publicly available to view on Scottish Water's website once approved by the group.

Members of the public will also be kept regularly updated on the latest project information through our mailing list and project website. If necessary, the Scottish Water complaints procedure will be used to log any complaints arising from the works and the Community Liaison Group will be supported by weekly drop in sessions which will provide an opportunity for appropriate action or resolution to be carried out in collaboration with local residents.

I trust that the submitted information will be to the satisfaction of the Highland Council.

If you have any queries, please contact me.

Yours faithfully,

Stuart Morrison  
Planning Advisor  
**Scottish Water**



REFERENCE	EASTING	NORTHING
SP01	277586.636	856150.135
SP02	277583.146	856146.554
SP03	277546.487	856157.255
SP04	277542.906	856160.745
SP05	277552.018	856162.930
SP06	277566.159	856163.111
SP07	277569.648	856166.692
SP08	277569.467	856180.833
SP09	277546.745	856164.684
SP10	277546.436	856188.723
SP11	277550.275	856192.662
SP12	277552.782	856190.219
SP13	277571.165	856190.455
SP14	277574.277	856185.768
SP15	277581.477	856185.729
SP16	277574.077	856193.443
SP17	277576.765	856196.201
SP18	277584.157	856189.004
SP19	277584.195	856195.944
SP20	277616.098	856228.677
SP21	277622.588	856227.574
SP22	277625.716	856223.166
SP23	277626.432	856222.468
SP24	277629.922	856226.049
SP25	277629.205	856226.747
SP26	277629.531	856241.373
SP27	277612.733	856233.104
SP28	277611.164	856239.680
SP29	277602.746	856244.855
SP30	277606.585	856248.794
SP31	277629.763	856248.278
SP32	277630.454	856248.894
SP33	277633.781	856245.161
SP34	277643.405	856253.741
SP35	277640.419	856257.777
SP36	277667.232	856252.556
SP37	277641.928	856281.631

- NOTES:**
- ALL DIMENSIONS IN MILLIMETRES AND ALL LEVELS IN METRES AOD UNLESS SHOWN OTHERWISE.
  - HISTORICAL RECORD DRAWINGS SHOW TWO CONFLICTING OUTFALL AND INLET (FORT GEORGE) ROUTES. ACTUAL ROUTE OF OUTFALL AND INLET FROM FORT GEORGE TO BE CONFIRMED ON SITE.
  - DETAILS OF EXISTING SERVICES AND STRUCTURES BASED ON HISTORICAL DRAWINGS AND RECORDS. ALL DETAILS OF EXISTING SERVICES AND STRUCTURES SHOULD BE CHECKED ON SITE PRIOR TO THE COMMENCEMENT OF ANY WORKS AND DIVERTED IF NECESSARY.
  - GROUND CONDITIONS - ANTICIPATED SOIL CONDITIONS FOR HARDCORE ROAD CONSTRUCTION - M4 AND INLET (FORT GEORGE) ESTIMATED CBR 3.5% TBC. ESTIMATED GROUND WATER LEVEL AT 3.390 AOD (TBC).

**LEGEND:**

- EXISTING SITE BOUNDARY
- EXISTING WORKS

ESD INTERNAL DESIGN REVIEW		
(DRAWING NOT FOR USE WHEN STAMP PRESENT)		
DISCIPLINE	REVIEWED BY	DATE
CIVIL		
PROCESS		
MECHANICAL		
ELECTRICAL		
ICA		
RETURN TO:		
BY:		

**SCOTTISH WATER HEALTH AND SAFETY INFORMATION**

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING (SEE FULL DRA NO. FOR DETAILS)

CONSTRUCTION PHASE				
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT				
SW OPs HANDLING / LIFTING STRATEGY				
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK				
A0	FOR INFORMATION	DM		21/11/16
Rev	Description	Drawn	Chkd	App'd

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Originated By SC	Drawn By DM	Checked By	Approved By
Date 01/09/16	Date 21/11/16	Date	Date
Scale 1:500 @ A1	Status FOR INFORMATION		

Project Title	ARDESIER WwTW UV PLANT OPTION
Drawing Title	GENERAL SITE LAYOUT ACCESS ROAD, SITE COMPOUND AND FENCING PLAN
ELLIPSE EQUIPMENT No.	005000061980
ELLIPSE PLANT No.	STW001241   AUTOCODE No. 5000120000
Drawing No.	5000061980-WW-DRA-04151001-0A

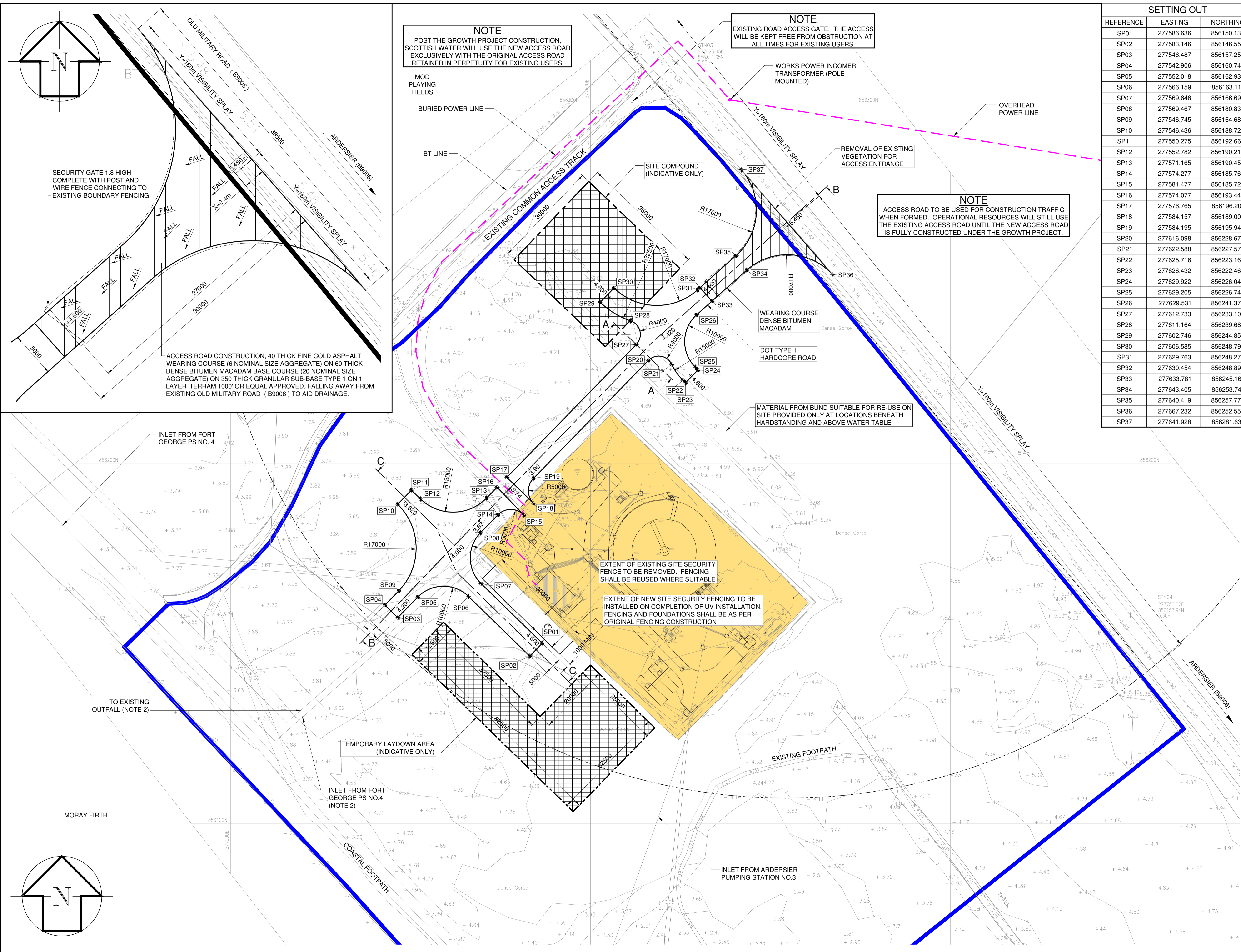
**NOTE**  
POST THE GROWTH PROJECT CONSTRUCTION, SCOTTISH WATER WILL USE THE NEW ACCESS ROAD EXCLUSIVELY WITH THE ORIGINAL ACCESS ROAD RETAINED IN PERPETUITY FOR EXISTING USERS.

**NOTE**  
EXISTING ROAD ACCESS GATE. THE ACCESS WILL BE KEPT FREE FROM OBSTRUCTION AT ALL TIMES FOR EXISTING USERS.

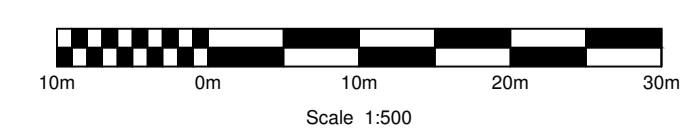
**NOTE**  
ACCESS ROAD TO BE USED FOR CONSTRUCTION TRAFFIC WHEN FORMED. OPERATIONAL RESOURCES WILL STILL USE THE EXISTING ACCESS ROAD UNTIL THE NEW ACCESS ROAD IS FULLY CONSTRUCTED UNDER THE GROWTH PROJECT.

EXTENT OF EXISTING SITE SECURITY FENCE TO BE REMOVED. FENCING SHALL BE REUSED WHERE SUITABLE

EXTENT OF NEW SITE SECURITY FENCING TO BE INSTALLED ON COMPLETION OF UV INSTALLATION. FENCING AND FOUNDATIONS SHALL BE AS PER ORIGINAL FENCING CONSTRUCTION



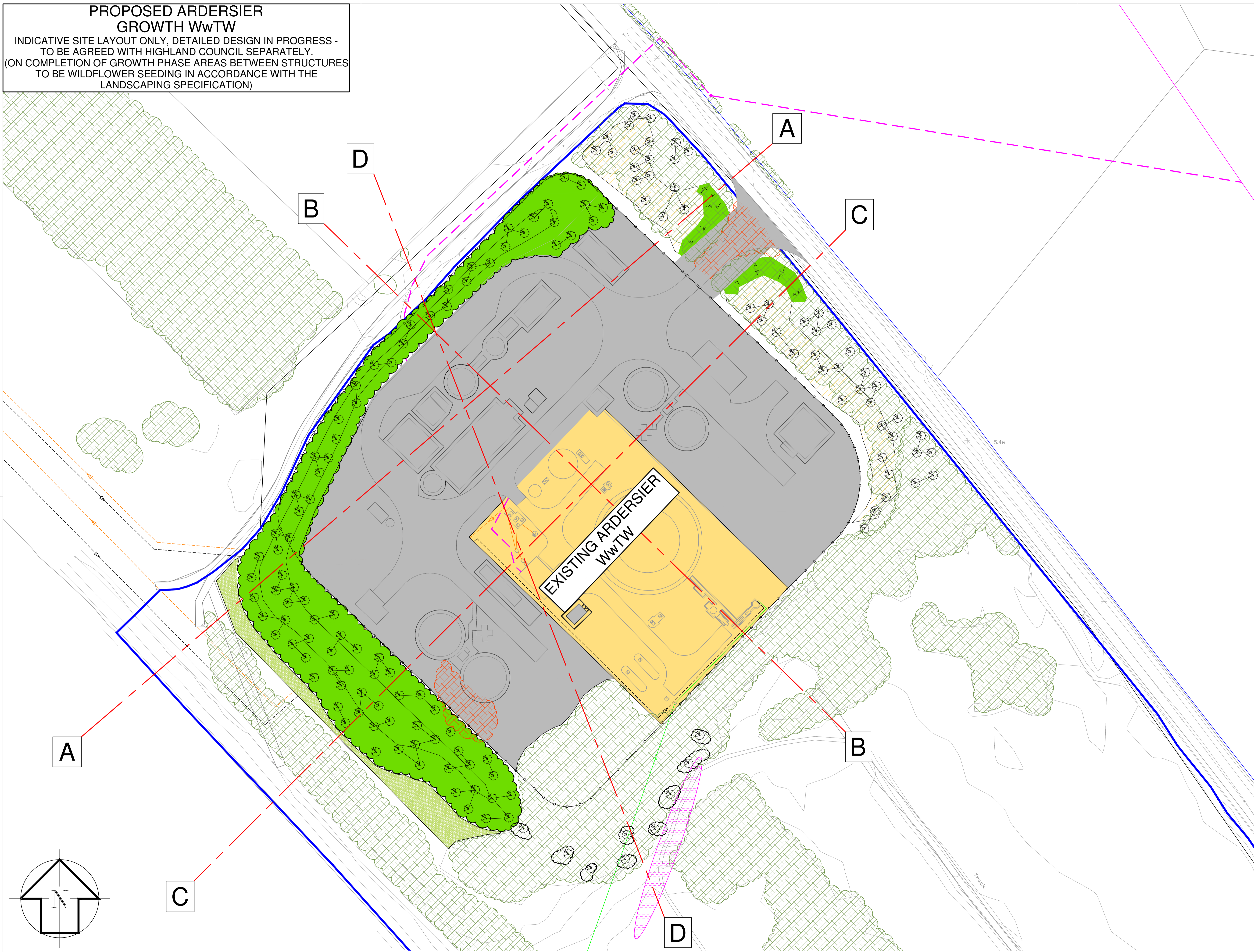
**GENERAL SITE LAYOUT  
ACCESS ROAD, SITE COMPOUND AND FENCING PLAN**  
SCALE 1:500





**PROPOSED ARDELSIER  
GROWTH WwTW**

INDICATIVE SITE LAYOUT ONLY, DETAILED DESIGN IN PROGRESS -  
TO BE AGREED WITH HIGHLAND COUNCIL SEPARATELY.  
(ON COMPLETION OF GROWTH PHASE AREAS BETWEEN STRUCTURES  
TO BE WILDFLOWER SEEDING IN ACCORDANCE WITH THE  
LANDSCAPING SPECIFICATION)



**SITE LAYOUT PLAN - LANDSCAPING - SECTION LOCATIONS**  
SCALE 1:500

- NOTES**
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BOUNDING AREAS TO COMPLIMENT LANDSCAPING PROPOSALS.
  - CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS:
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - CROSS SECTION A-A - 5000061980-WW-DRA-04158003
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

**KEY**

SCOTTISH WATER OWNED LAND - WWTW

**SCOTTISH WATER  
HEALTH AND SAFETY INFORMATION**

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :

CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:
SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:

IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK

Rev	Description	Drawn	Chk'd	App'd	Date
0E	AREA OF PROPOSED DEVELOPMENT (RED LINE) REMOVED	DM	GC	GC	06/12/16
0D	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	01/12/16
0C	PLANNING ISSUE	DM	GD	GD	04/11/16
0B	PLANNING ISSUE	DM	GD	GD	03/11/16
0A	PLANNING ISSUE	DM	XX	XX	XX/XX/XX

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**Scottish Water**  
Trusted to serve Scotland

SCOTTISH WATER  
CASTLE HOUSE  
6 CASTLE HOUSE  
CARNegie CAMPUS  
DUNFERMLINE  
FIFE KY11 8GG  
TEL: 01383 848200  
FAX: 01383 848371

**esd**  
efficient service delivery

THE BRIDGE  
BUCHANAN GATE BUSINESS PARK  
CURRIENALD ROAD  
STEPHENS, GLASGOW  
G3 7PB

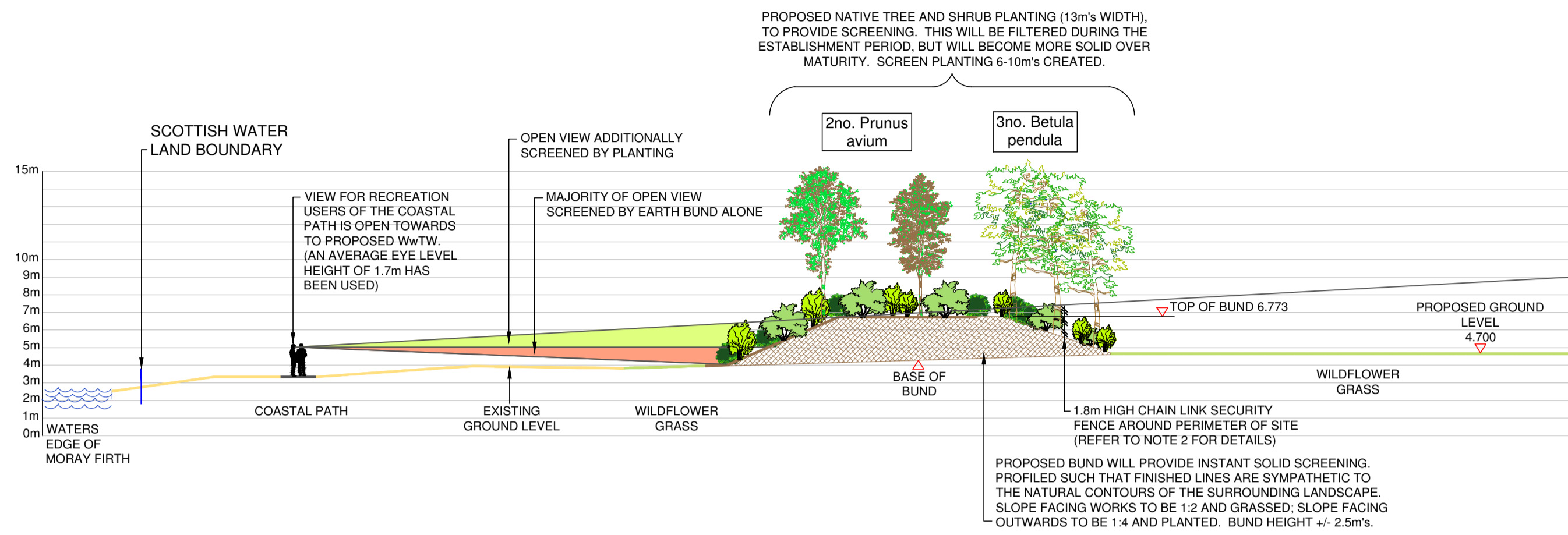
Originated By	Drawn By	Checked By	Approved By
WM	DM	GC	GC
Date	Date	Date	Date
22/08/16	03/11/16	06/12/16	06/12/16
Scale	Status		
1:500 @ A1	PLANNING ISSUE		

Project Title  
**ARDELSIER WwTW  
GROWTH**

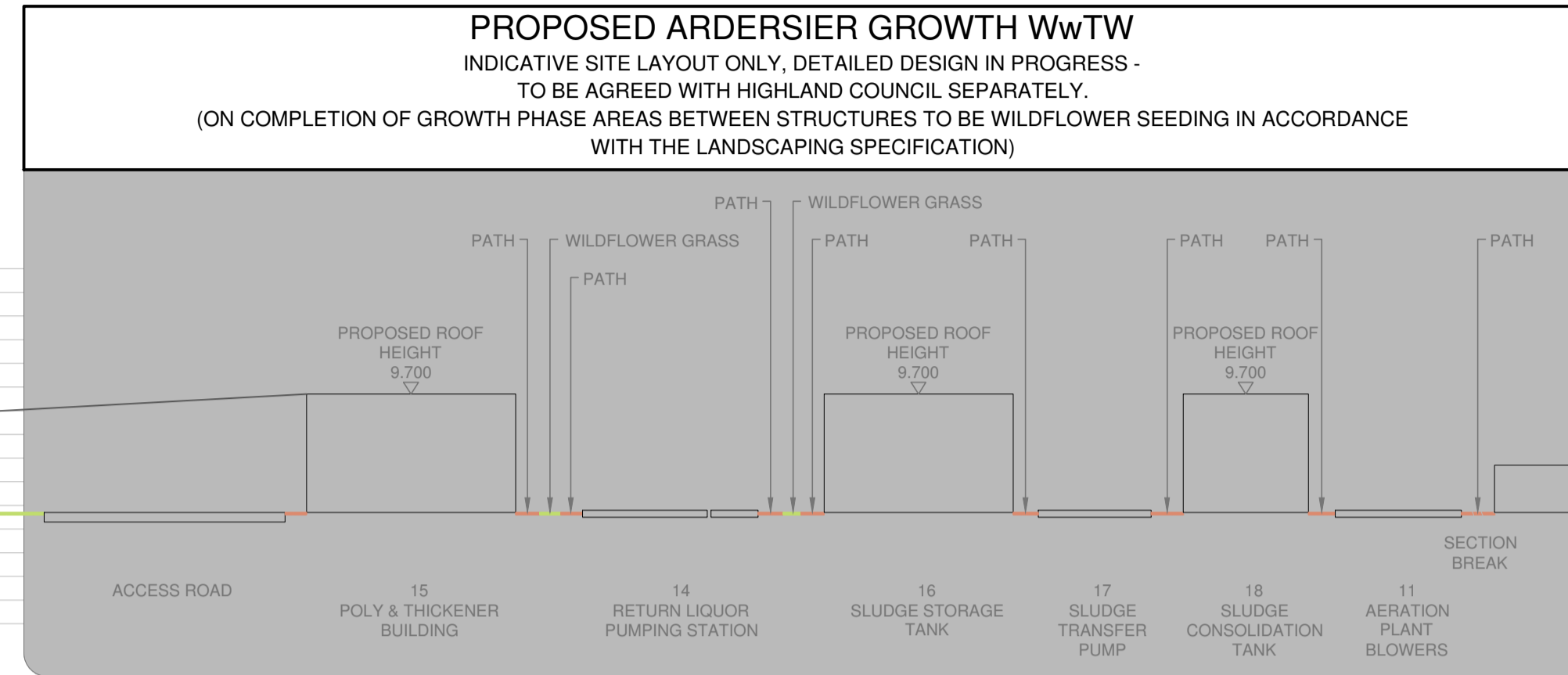
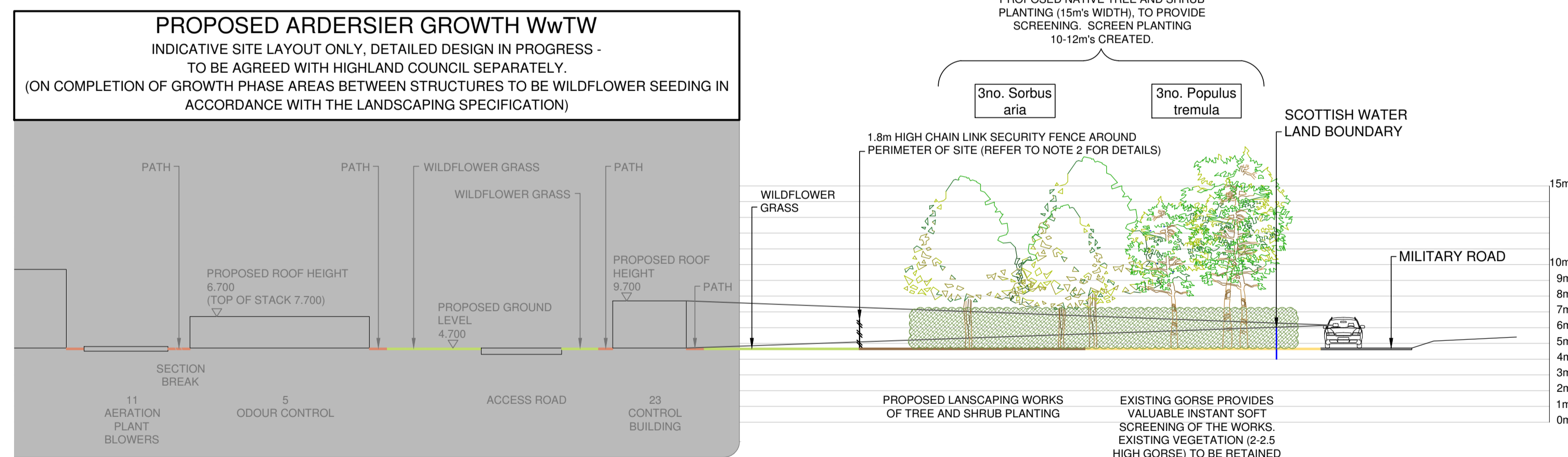
Drawing Title  
**SITE LAYOUT PLAN  
LANDSCAPING - SECTION LOCATIONS**

ELLIPSE EQUIPMENT No. 5000061980  
ELLIPSE PLANT No. STW000379 AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158002-0E**

# SECTION A-A COASTAL VIEW



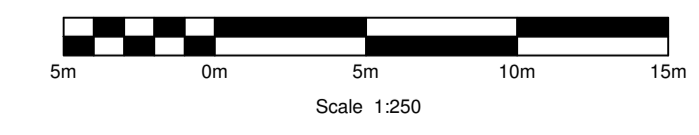
SECTION A-A  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250



- NOTES (CONTINUED)
- CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS:
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

KEY

- EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
- EXISTING COASTAL PATH
- PROPOSED NATIVE TREE AND SHRUB PLANTING
- PROPOSED WILDFLOWER AND GRASS PLANTING
- PROPOSED PATH
- VIEW SCREENED BY PLANTING
- VIEW SCREENED BY BUND
- PROPOSED EARTH BUND
- PROPOSED NATIVE TREE AND SHRUB PLANTING



- NOTES
- EXISTING GORSE PROVIDES VALUABLE INSTANT SOFT SCREENING OF THE WORKS. ADDITIONAL NATIVE GORSE TO BE INTRODUCED TO BUNDING AREAS TO COMPLEMENT LANDSCAPING PROPOSALS.
  - 1.8m HIGH CHAIN LINK SECURITY FENCE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. CHAIN LINK TO BE PLASTIC COATED 50mm x 50mm x 3.55mm DIA. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. ALL WIRE TO BE GALVANISED MILD STEEL. CONCRETE FOR POSTS TO BE CLASS ST4 OR GEN3. STRAINING POSTS TO BE PROVIDED AT ALL ENDS, CORNERS, CHANGE IN DIRECTION, CHANGE IN VERTICAL ALIGNMENT & AT LEAST EVERY 50 METRES. INTERMEDIATE POSTS TO BE PROVIDED AT INTERVALS NOT GREATER THAN 3m. DETAILS TO BE PROVIDED AT FINAL DESIGN.
  - ENTRANCE GATE TO B.S.1722 : PART 10 "SPECIFICATION FOR ANTI-INTRUDER FENCES IN CHAIN LINK AND WELDED MESH" APPLIES. INFILL OF GATE TO BE CHAIN LINK TO MATCH FENCING AND TO BE FLUSH WITH OUTSIDE FACE OF GATE. RETAINED IN PLACE BY GALVANISED STRETCHER BARS. ALL STEEL FITTINGS TO BE HOT DIP GALVANISED TO BS.EN 1461. HINGES SHALL BE ADJUSTABLE, FOLLOWING ADJUSTMENT OF THE GATES THE ADJUSTMENT METALWORK SHALL BE RENDERED TAMPERPROOF AND INACCESSIBLE FROM THE OUTSIDE. LOCKING BAR TO BE SECURED IN A STEEL BOX AND TO HAVE A HOLE TO RECEIVE PADLOCK. PADLOCK PROTECTED BY STEEL COVER ALLOWING ACCESS TO PADLOCK BY HAND ONLY FROM UNDERNEATH THE COVER. CONCRETE FOR POST FOOTINGS TO BE CLASS ST4 OR GEN3. DETAILS TO BE PROVIDED AT FINAL DESIGN.

NOTES (CONTINUED)

SCOTTISH WATER  
HEALTH AND SAFETY INFORMATION

IN ADDITION TO THE HAZARDS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, PLEASE NOTE THE FOLLOWING :

CONSTRUCTION PHASE	
RESIDUAL RISK:	ACTION REQUIRED:
SW OPs ACCESS - HORIZONTAL, VERTICAL, PEDESTRIAN, VEHICLE/PLANT	
POINTS REQUIRING ACCESS:	METHOD OF ACCESS:
SW OPs HANDLING / LIFTING STRATEGY	
ITEMS REQUIRING HANDLING:	METHOD OF HANDLING:
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK	

Rev	Description	Drawn	Chkd	App'd	Date
OC	AMENDED TREE SPECIES AND PLANTING LOCATIONS/DENSITIES PER HIGHLAND COUNCIL COMMENTS	DM	GC	GC	02/12/16
OB	PLANNING ISSUE	DM	GD	GD	03/11/16
OA	PLANNING ISSUE	DM	XX	XX	XX/XX/XX

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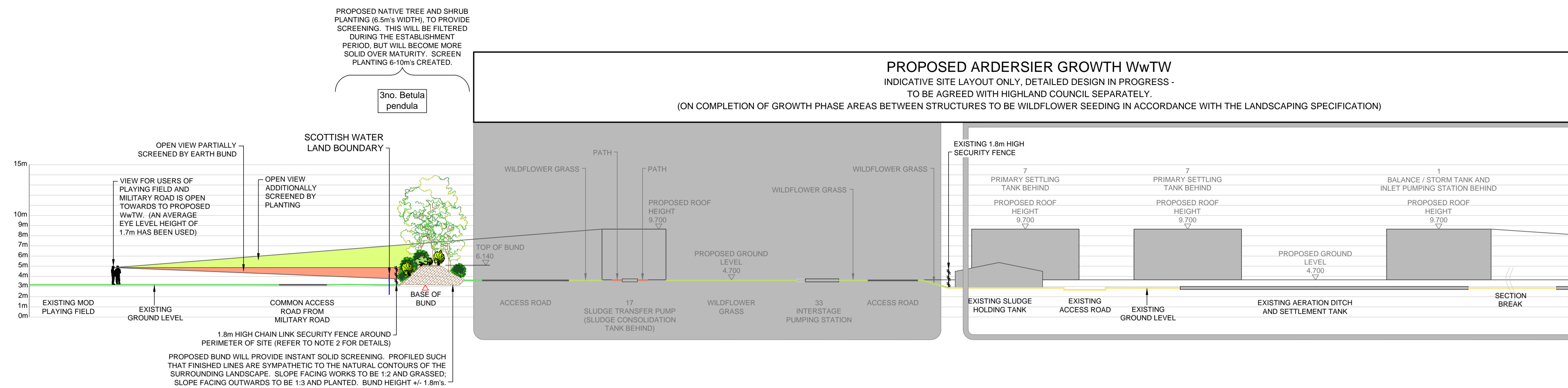
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WM	DM	GC	GC
Date	Date	Date	Date
22/08/16	03/11/16	02/12/16	02/12/16
Scale	Status		
1:250 @ A1	PLANNING ISSUE		

Project Title  
**ARDERSIER WWTW GROWTH**

Drawing Title  
**SITE LAYOUT PLAN LANDSCAPING - SECTION A-A**

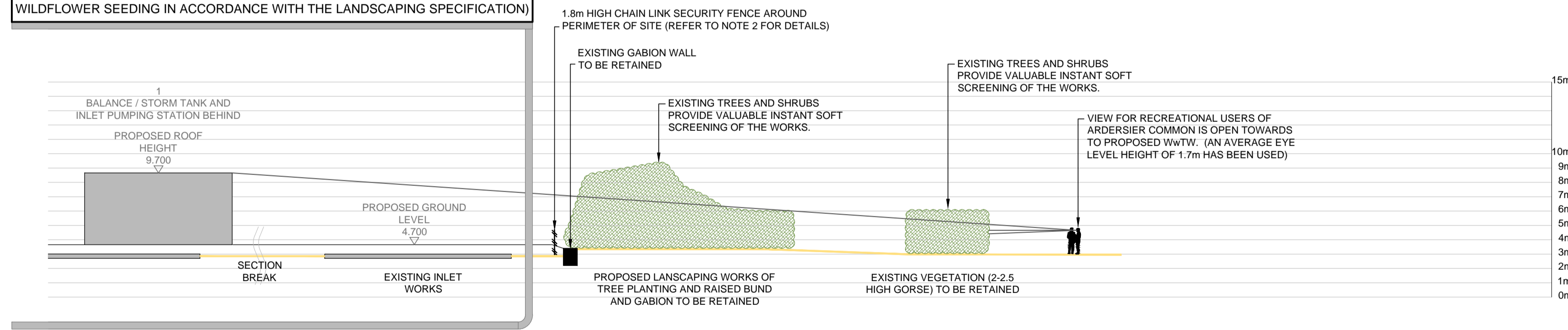
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ELLIPSE PLANT No. STW000379 AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158003-OC**

# SECTION B-B PLAYING FIELDS VIEW



SECTION B-B  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING  
IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250

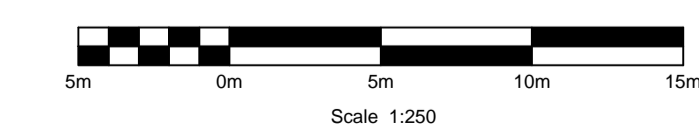
PROPOSED ARDERSIER GROWTH WwTW  
INDICATIVE SITE LAYOUT ONLY, DETAILED DESIGN IN PROGRESS -  
TO BE AGREED WITH HIGHLAND COUNCIL SEPARATELY.  
(ON COMPLETION OF GROWTH PHASE AREAS BETWEEN STRUCTURES TO BE  
WILDFLOWER SEEDING IN ACCORDANCE WITH THE LANDSCAPING SPECIFICATION)



- NOTES (CONTINUED)
- CROSS-REFERENCE WITH THE FOLLOWING LANDSCAPING DOCUMENTS;
    - LANDSCAPE AND VISUAL IMPACT AND LIGHTING ASSESSMENT - TECHNICAL APPENDIX F
    - LANDSCAPE MITIGATION PLAN - 5000061980-WW-DRA-04158001
    - PLAN LOCATING CROSS SECTIONS - 5000061980-WW-DRA-04158002
    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

KEY

[Symbol]	EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
[Symbol]	EXISTING COASTAL PATH
[Symbol]	PROPOSED NATIVE TREE AND SHRUB PLANTING
[Symbol]	PROPOSED WILDFLOWER AND GRASS PLANTING
[Symbol]	PROPOSED PATH
[Symbol]	VIEW SCREENED BY PLANTING
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NOTES (CONTINUED)

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POINTS REQUIRING ACCESS:		METHOD OF ACCESS:	
SW OPs HANDLING / LIFTING STRATEGY			
ITEMS REQUIRING HANDLING:		METHOD OF HANDLING:	
IT IS ASSUMED THAT ALL WORKS WILL BE CARRIED OUT BY A COMPETENT PERSON WORKING, WHERE APPROPRIATE, TO AN APPROVED SAFE SYSTEM OF WORK			

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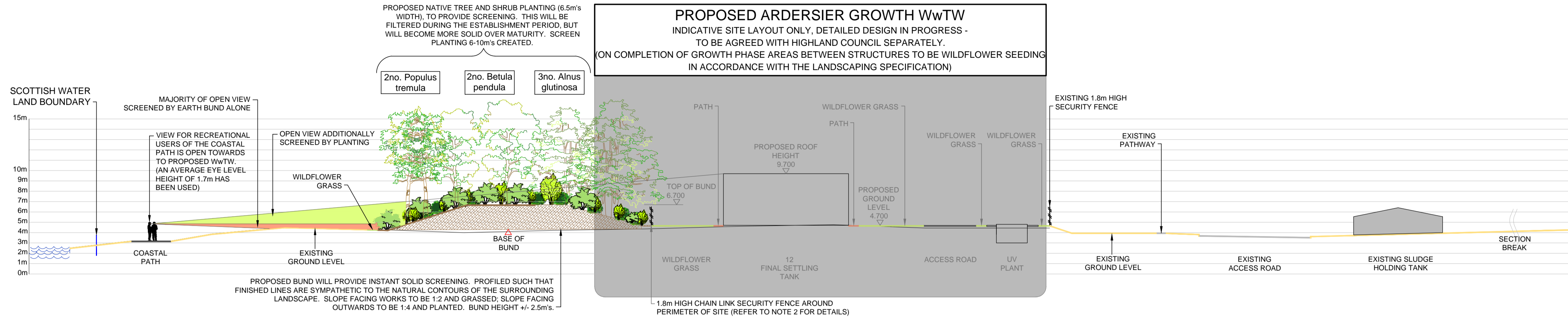
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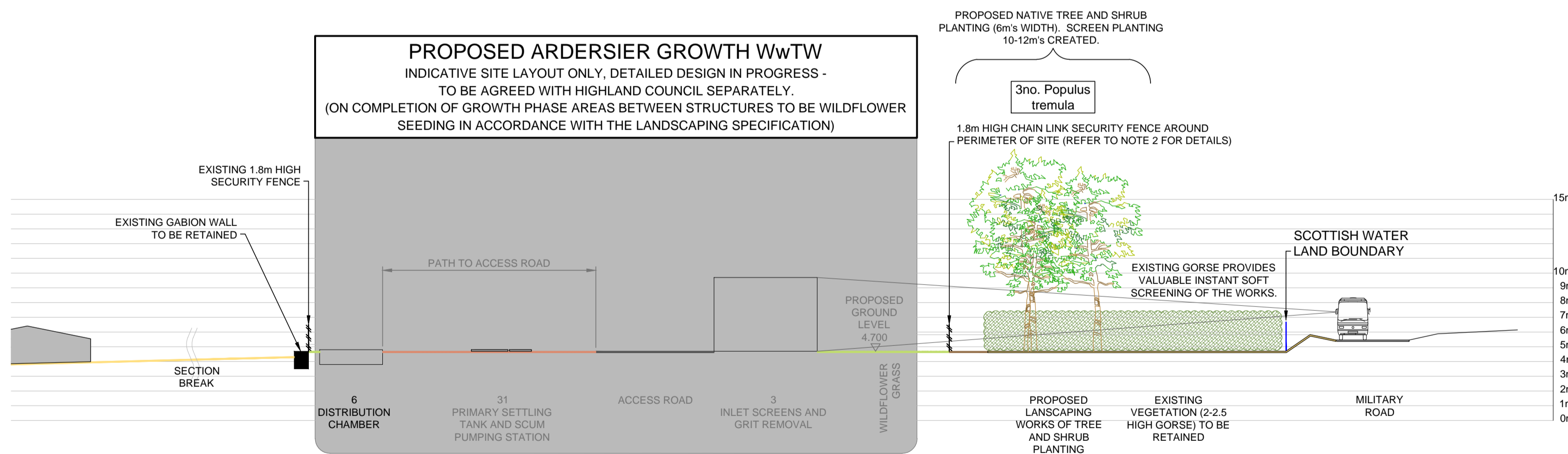
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Date 22/08/16	Date 03/11/16	Date 02/12/16	Date 02/12/16
Scale 1:250 @ A1	Status PLANNING ISSUE		

Project Title	ARDERSIER WwTW GROWTH
Drawing Title	SITE LAYOUT PLAN LANDSCAPING - SECTION B-B
ELLIPSE EQUIPMENT No.	5000061980
ELLIPSE PLANT No.	STW000379
AUTOCODE No.	5001290000
Drawing No.	5000061980-WW-DRA-04158004-0C

# SECTION C-C PLAYING FIELDS VIEW



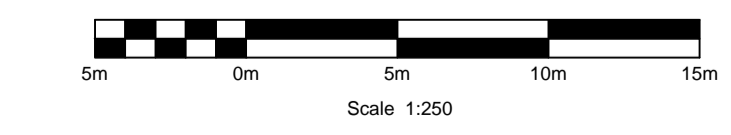
SECTION C-C  
(APPROXIMATELY IN 15 YEARS TIME FOLLOWING IMPLEMENTATION OF LANDSCAPING WORKS)  
SCALE 1:250



- NOTES (CONTINUED)
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    - CROSS SECTION B-B - 5000061980-WW-DRA-04158004
    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

KEY

[Yellow line]	EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
[Green line]	EXISTING COASTAL PATH
[Green area]	PROPOSED NATIVE TREE AND SHRUB PLANTING
[Green area]	PROPOSED WILDFLOWER AND GRASS PLANTING
[Red line]	PROPOSED PATH
[Green area]	VIEW SCREENED BY PLANTING
[Orange area]	VIEW SCREENED BY BUND
[Brown area]	PROPOSED EARTH BUND
[Green area]	PROPOSED NATIVE TREE AND SHRUB PLANTING



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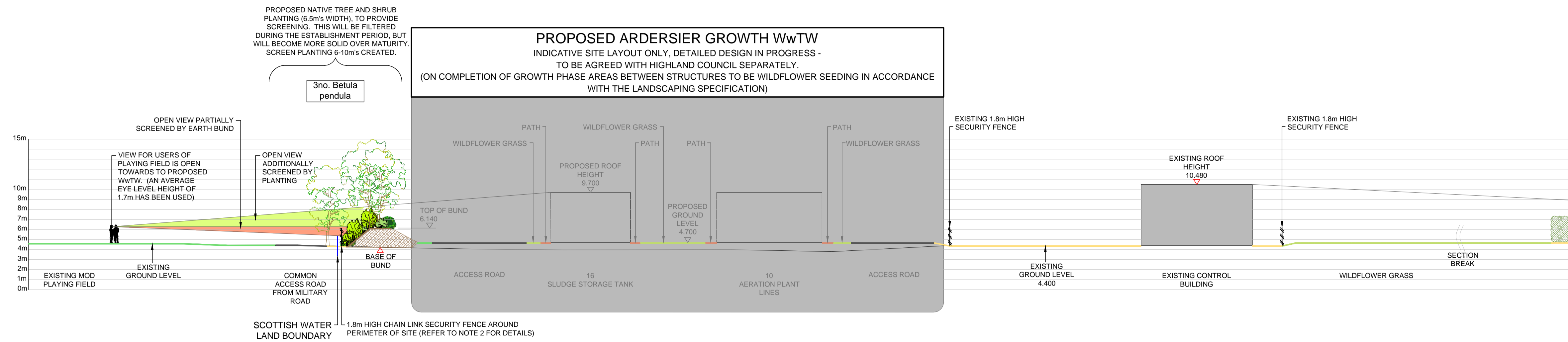
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Scale 1:250 @ A1	Status PLANNING ISSUE		

Project Title  
**ARDERSIER WwTW GROWTH**

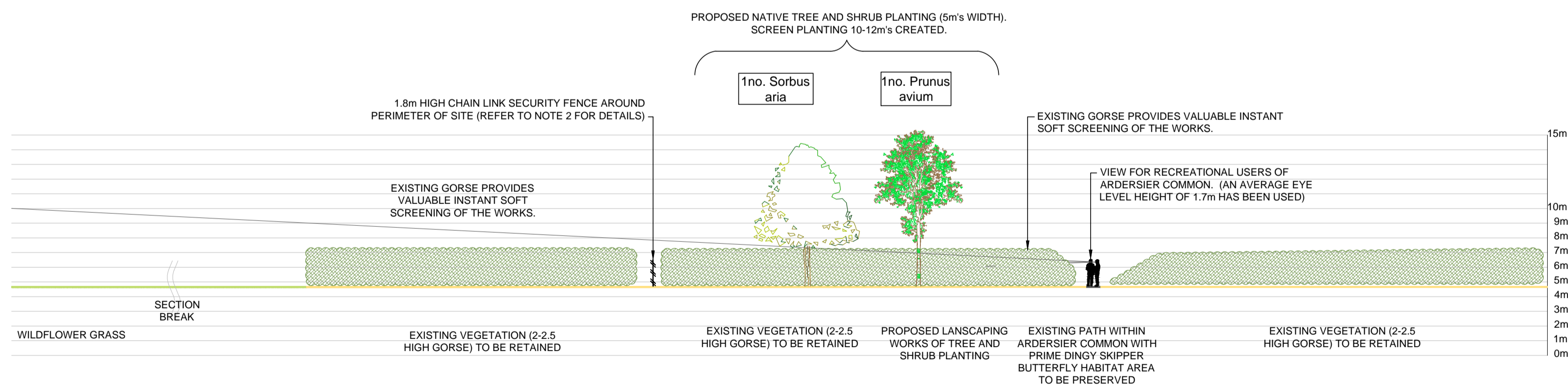
Drawing Title  
**SITE LAYOUT PLAN LANDSCAPING - SECTION C-C**

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ELLIPSE PLANT No. STW000379 / AUTOCODE No. 5001290000  
Drawing No.  
**5000061980-WW-DRA-04158005-0C**

# SECTION D-D ARDERSIER COMMON VIEW



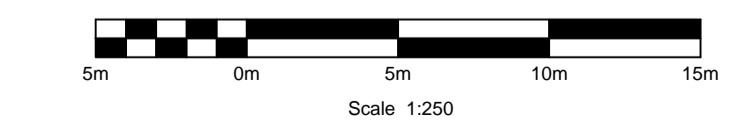
SECTION D-D  
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SCALE 1:250



- NOTES (CONTINUED)
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    - CROSS SECTION C-C - 5000061980-WW-DRA-04158005
    - CROSS SECTION D-D - 5000061980-WW-DRA-04158006

KEY

	EXISTING GROUND LEVEL, EXISTING BEACH, SURFACE OF EXISTING WTW
	EXISTING COASTAL PATH
	PROPOSED NATIVE TREE AND SHRUB PLANTING
	PROPOSED WILDFLOWER AND GRASS PLANTING
	PROPOSED PATH
	VIEW SCREENED BY PLANTING
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Project Title  
**ARDERSIER WWTW GROWTH**

Drawing Title  
**SITE LAYOUT PLAN LANDSCAPING - SECTION D-D**

ELLIPSE EQUIPMENT No. 5000061980  
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Drawing No.  
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## **Ardersier Wastewater Treatment Works**

### **TRAFFIC MANAGEMENT PLAN**

<b>Rev No.</b>	<b>Description</b>	<b>Date</b>
0.1	Draft for Consultation	13 <sup>th</sup> October 2016
0.2	Final Draft	17 <sup>th</sup> November 2016
1.0	Final for Issue	22 <sup>nd</sup> November 2016
1.1	Updated following final comments from THC	2 <sup>nd</sup> December 2016
1.2	Updated following further comments from THC	5 <sup>th</sup> December 2016





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# 1. Introduction

## 1.1. General Information

The village of Ardersier is located on the Moray Firth. It is approximately 10 miles north east of Inverness, 7 miles west of Nairn and 2 miles south east of Fort George (see Figure 1)

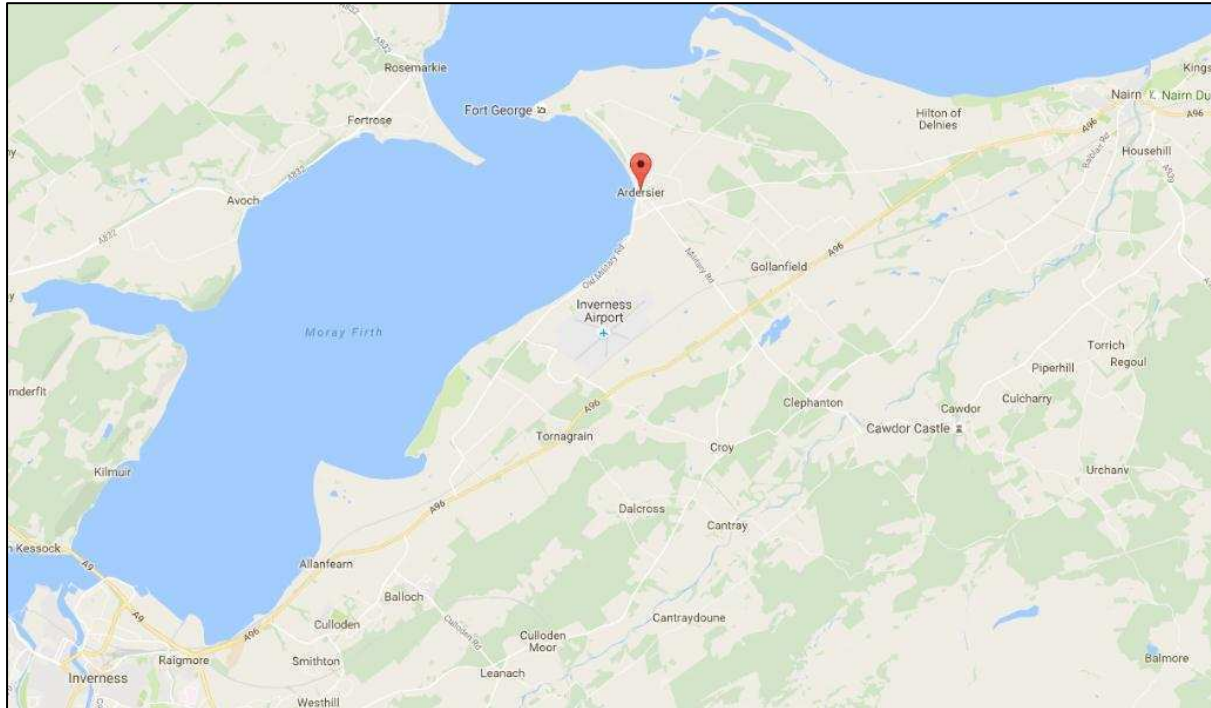


Figure 1

Scottish Water has received the grant of planning permission for the upgrade of Ardersier Wastewater Treatment Works (WWTW).

The work has been split into three projects:

- The extension of the existing waste water treatment works, which has operated for many years outside of Ardersier. Planning permission has been secured for the extension to the existing works under reference 10/02007/FUL and for the early implementation of Ultra Violet Treatment under reference 16/02464/FUL.
- The installation of a new underground waste water pipeline, which will transfer waste water from new developments in the area to the treatment works.
- The extension to the existing outfall pipe from the waste water treatment works to the north of the MOD firing range, near Fort George.

The locations of each of these are shown in Figure 2 and a description of each follows.



Figure 2

### 1.1.1. UV Project and Growth Project

These works will take place entirely on land owned by Scottish Water, adjacent to the existing Ardersier WwTW approximately 1km to the north west of the village. Access to the site will be from the public road (B9006) and the proposed construction traffic routes are along public roads only.

### 1.1.2. Outfall Extension Project

The outfall pipe for the WWTW currently discharges into the Moray Firth to the north east of Fort George. The extension of this pipe will involve construction work on the coast adjacent to the MOD firing range at Fort George and from the use of a barge platform just

off the coast. Site access for the outfall extension will be taken around the junction of the B9006 and the C1005 (Sunny Hillock to Fort George road).

The jack up barge is envisaged to be operated out of the Whiteness dock area and traffic management for this option is included in this plan. Should this not be available, an alternative harbour will be sought, reducing the traffic movements in this area.

### 1.1.3. Pipelines Project

The proposed route of the pipeline project is to enter the village from the south along the B9093, passing the Cheese Pantry and continuing along Stuart Street before turning off along the coastal path.

## 1.2. Scope

This document sets out the proposed Traffic Management Plan for the construction associated with the above noted works.

The requirement for a Traffic Management Plan is set out in Condition No. 15 of the WWTW Planning Permission (10/02007/FUL) which states:

*"Development shall not commence on site unless a Traffic Management Plan (TMP) to identify all traffic management aspects of the development has been submitted to and agreed in writing by the planning authority. Thereafter there may be no deviation from the approved TMP unless the written approval of the planning authority is first obtained."*

Planning permission for the installation of the UV equipment (16/02464/FUL) also includes a requirement under Condition No. 2 that states:

*"No development shall commence until a Construction Traffic Management Plan (CTMP) has been submitted to, and agreed in writing by the Planning Authority.*

*In advance of submission to the Planning Authority the applicant shall consult with the community on the content of the Construction Traffic Management Plan. For the avoidance of doubt, the consultation shall as a minimum include consultation with the Community Council and provide the community council with a minimum of 14 day period of comment. Thereafter, the applicant shall submit a report to the Planning Authority alongside the Construction Traffic Management Plan detailing the consultation undertaken, any responses received and how these responses have been taken into account when preparing the final Construction Traffic Management Plan for submission to the Planning Authority.*

Thereafter the agreed CTMP shall be implemented in accordance with the approved Plan to the satisfaction of the planning authority.”

Although there are no planning conditions associated with works on the Outfall Extension Project or the village section (along Stuart Street) of the underground pipeline from Tornagrain, Inverness Airport and Castle Stuart developments, access/egress routes to these sites have been noted within this Traffic Management Plan for completeness.

It should be noted that this document does not cover the specific traffic management arrangements for the Stuart Street work planned to be done under a separate road closure (NRSWA covers this work). The plan does however cover the main access and egress routes for plant and materials. Until further site survey work is completed it is unknown whether a full road closure of Stuart Street is required. Any requirements will be discussed with the relevant stakeholders.

### 1.3. Route Assessment for the WWTW

A ‘Route Access Assessment Report’ was completed by Mott MacDonald in 2010 and initially identified 6 potential options for traffic management routes. These routes are shown in Figure 3.

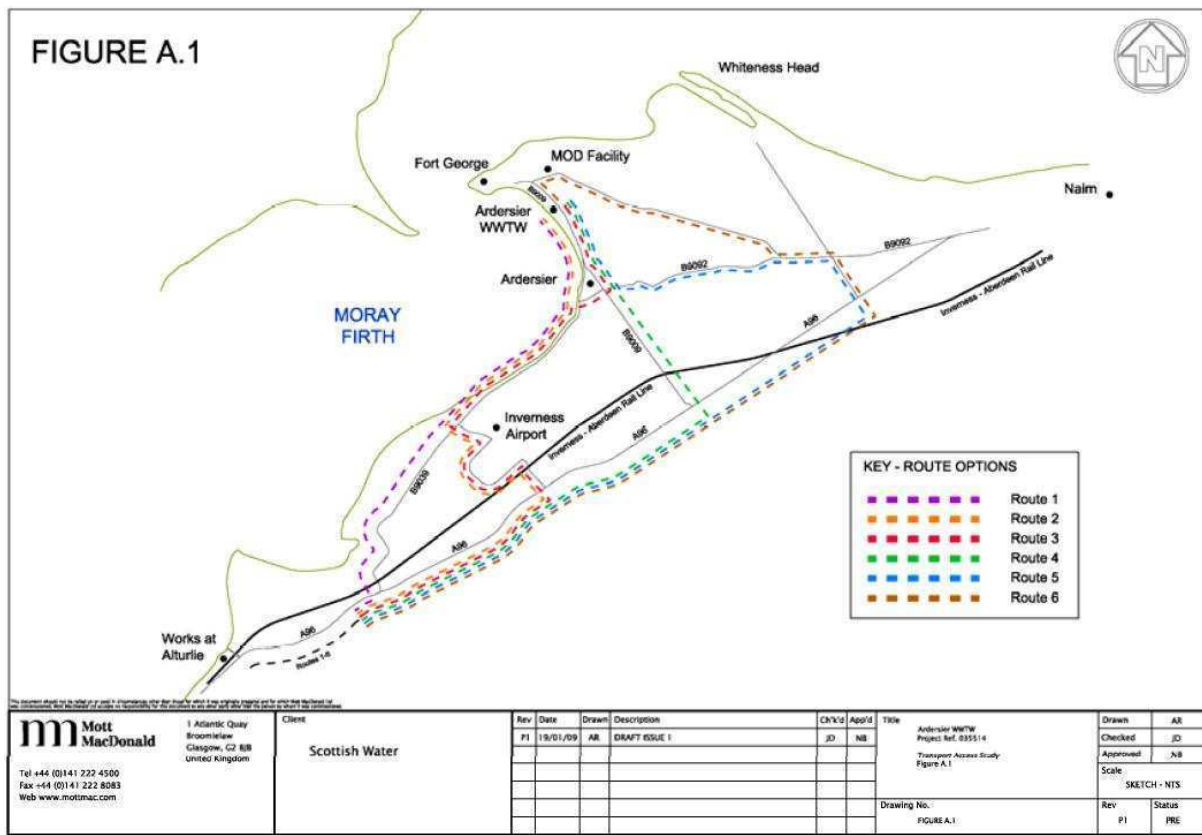


Figure 3

Following consultation and discussion with The Highland Council these options were reduced to 3 routes as shown in Figure 4.

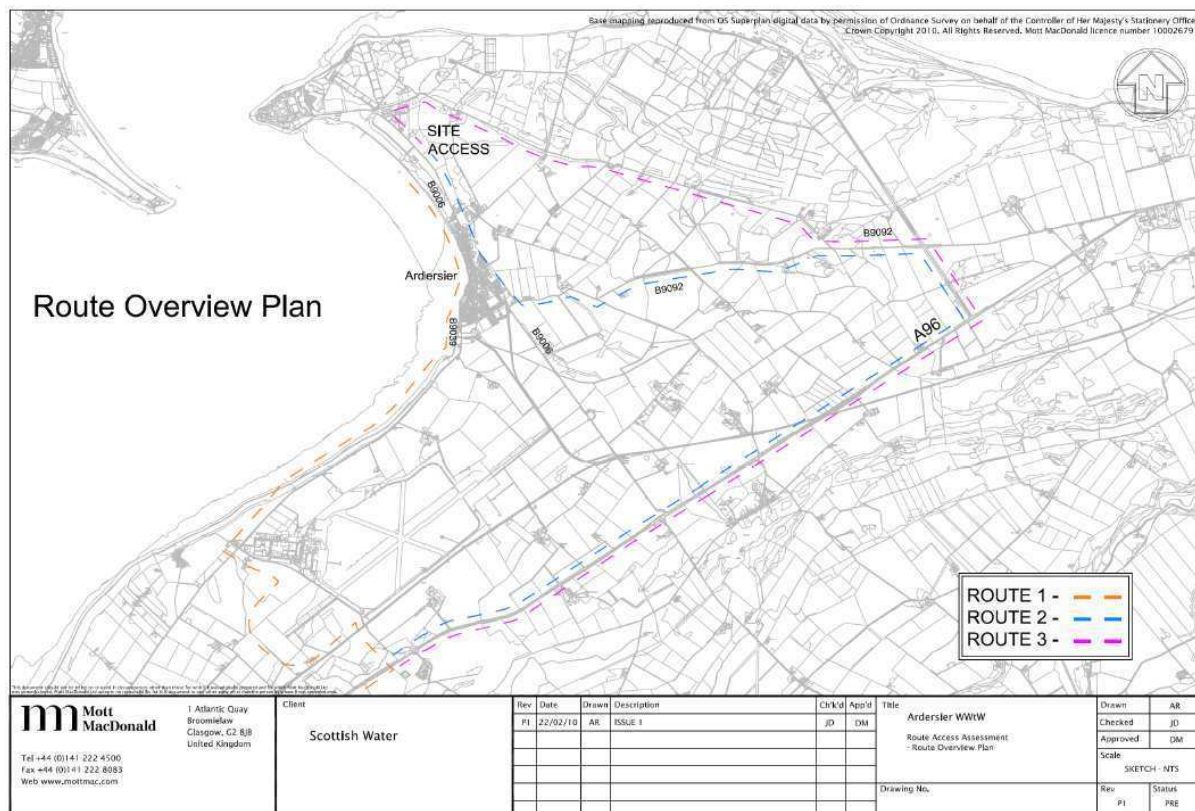


Figure 4

All three of these routes were identified as having the potential for use by construction traffic. However the use of Route 3, the C1005 road, from the B9092 (near Sunny Hillock) through Baddock and Kirkton and onwards to join the B9006 near Fort George, was identified as potentially needing significant infrastructure accommodation works to enable its use as a route for all construction traffic.

Route 1 through the village via Stuart Street was recommended by the Mott MacDonald Report. However, a review of the sight lines and junction of Stuart Street (B9039) and High Street (B9006) led to route 1 being discounted and route 2 being selected as the preferred route.

The preferred traffic management route (route 2) was presented at the community information events in June /July 2016.



Following feedback from the information events and from Community Council meetings, a review was undertaken of the potential use of the C1005 road from the B9092 (near Sunny Hillock) to the B9006 near Fort George.

A Traffic Management Route Option Review Report was completed by The Highland Council which identified a number of potential improvements that may be required for each of the traffic management routes to enable them to be used as the preferred option.

Subsequent site visits, route walkovers, and meetings with The Highland Council have taken place to try to develop and agree potential traffic management solutions.

#### **1.4. Innovation to reduce traffic impact**

Our plans include innovations which have reduced the number of vehicle movements through the use of modular assembly solutions and innovative construction methods.

Modular assembly solutions are factory built / off-site assemblies which are developed and produced to suit a specific application or set of site conditions. These can significantly reduce the time spent on site in the delivery of projects. They limit the impact from traffic movements through the reduction in travel of personnel and plant to/from site, reductions in individual deliveries of materials and a reduction in the production of waste materials.

Through challenging our construction technique for the outfall, we have been able to considerably reduce the number of HEAVY VEHICLE movements associated with this element of our works. This has involved changing to a barge based construction platform for the majority of the outfall's construction, not only reducing the aggregate imports required but also allowing piles and some other materials to be brought in by sea to reduce site traffic in the Ardersier area.

## 2. Consultation

As required by the Planning Permission for the UV Installation project (16/02464/FUL) the draft traffic management plan was issued to the Community Council and Local Members for an initial period of 2 weeks consultation.

The plan was also issued to 35 properties which were identified through Scottish Water's GIS system as being close to the proposed C1005 route.

Following contact from the Community Council, the consultation period was extended for an extra week to move it beyond the Community Council Meeting date. Following a further request to extend the consultation at the Community Council meeting, the consultation period closed on 11<sup>th</sup> November following a 4 week consultation period.

During the consultation period, representatives from SW attended a residents meeting with approximately 20-30 residents and also attended the Community Council Meeting.

Feedback from the consultation period has been considered and, where appropriate, updates to the TMP have been made.

### 2.1. Key feedback from Consultation on the TMP

During the Consultation period, feedback was received relating to a number of areas of concern, including:

- Volume of Traffic on C1005
- C1005 Not Suitable for Heavy Vehicles
- Potential Conflict with other Users of the Road
- Safety Risk
- Disruption
- Noise/Vibration
- Use of the Road in the Winter
- Repair and Maintenance
- Traffic through the village
- Specific Local Impacts
- Lack of Operational Traffic Information

These have been reviewed and, where possible, the TMP has been updated.

#### 2.1.1. Alternative access through Whiteness

An alternative route option through Whiteness was considered following feedback from local residents however this was ruled out following discussions with the MOD, Defence Estates and the owners of Whiteness port.

### **2.1.2. Further upgrade works to C1005**

Additional passing place improvements have now been agreed with the Highland Council in order to mitigate conflict with other users.

### **2.1.3. Use of the B9006 High Street for Light Vehicles**

The main changes following consultation with the community is that light vehicles will access the site through the village. This will mitigate the concerns raised by residents along the C1005 regarding the volume of traffic accessing the site through this route and their concerns regarding the risk of accidents on the narrow roads. Heavy vehicle movements will still use this route to mitigate the impact if they were to go through the village. The amended approach is considered to balance the impact of vehicle volumes on the C1005 and through the village.

The numbers of light vehicles, whilst relatively low in the context of existing village traffic, would have been more significant in relation to the existing traffic on the C1005. This change spreads the traffic across a wider road network.

## **2.2. Ongoing Liaison**

A Community Liaison Group is being established and will run for the duration of the projects. The group will provide a forum for Scottish Water and their contractors to present information on plans during construction, including traffic management, and allow the local community council and representatives of the community and other interested stakeholders, impacted by the development, to feedback their views and any issues encountered. Scottish Water will keep a log of vehicle movements to and from the site which will be used to inform discussion during these meetings.

Concerns will be documented and acted upon by Scottish Water accordingly. Each meeting will be minuted and minutes will be made publicly available to view.

Members of the public will also be kept updated via our Communications Team and through the Scottish Water website.

## 3. Traffic Routes

### 3.1. Vehicle Types

For the purposes of the traffic management plan, vehicles are divided into two groups,

- Heavy vehicles
- Light vehicles (<3.5T)

Where required, heavy vehicle traffic will be 'journey managed' under increased control measures to ensure the proposed routes can be utilised safely in conjunction with other users.

#### 3.1.1. Heavy Vehicles

Three heavy vehicle traffic management routes are included in this plan:

1. **The C1005 Sunny Hillock to Fort George route** - For heavy vehicle traffic accessing the WWTW (UV and Growth Project), the Outfall Extension Site, and for pipeline materials required for work in the northern section of the pipeline route.
2. **Access to the Whiteness dock** – For materials, plant, equipment and personnel accessing the barge loading site.
3. **The B9093 from Dalcross** – For materials, plant, equipment and personnel accessing the pipeline route along Stuart Street.

#### 3.1.2. Light Vehicles

A key change from the consultation on the draft TMP is that light vehicle traffic will no longer be guided to use the C1005 route to the WWTW and Outfall sites.





Light vehicle traffic entering the WWTW and Outfall sites will be guided to use the following routes.

4. **B9006 High Street** - For light vehicle traffic accessing the WWTW (UV and Growth Project), the Outfall Extension Site, and for work in the northern section of the pipeline route.

All access to the Whiteness site will follow the same route as outlined for heavy vehicle traffic.

All access to the pipeline work on Stuart Street will follow the same route as outlined for heavy traffic.

### 3.2. Key to Traffic Route Maps

KEY	
	Main Access Route (2 way traffic)
	Main Access on non-public road
	Road Closure
	HGV Holding Area

### 3.3. The C1005 (Sunny Hillock to Fort George) Route

All heavy vehicle construction traffic will be directed to and from the WWTW (UV and Growth) and the Outfall site via this route. This route will also be used for some of the pipeline heavy vehicle traffic when significant materials, plant and equipment are brought in for use in the northern section of the pipeline beyond the village.

The majority of heavy vehicle deliveries will use this route where reasonably practicable.

#### 3.3.1. Route Summary

From A96 to Ardersier WWTW Site (Route Length 7.8km)

High level descriptions of the traffic management route are included below and are also shown on the map in Figure 5.

From A96T Whiteness Junction:

- McDermott's Road (900m)
- Left turn on to B9092
- Ahead B9092 (970m)
- Ahead past Kebbuckstone junction
- Right turn at Sunny Hillock on to Muir of Balnagowan to Fort George Road (C1005)

- Travel 1680m on to Upper Carse Junction
- Ahead at Upper Carse at Link Road Junction
- Ahead to the crossroads at Baddock (900m)
- Ahead to Junction at Giack (660m) – ROAD CLOSURE STARTS
- Ahead to Kirkton - ROAD CLOSURE ENDS JUST PRIOR TO KIRKTON
- Ahead to B9006 High Street/Fort George Road
- Left turn on B9006 to Construction site.
- Right turn into construction site.

From Ardersier SW WWTW Site to A96:

- Turn Left out of site onto B9006
- Ahead B9006 High Street/Fort George Road
- Right turn to C1005 (Fort George-Muir of Balnagowan Road)
- Ahead through Kirkton –ROAD CLOSURE STARTS
- Ahead passing junction at Giack – ROAD CLOSURE ENDS
- Ahead crossroads at Baddock
- Ahead at Upper Carse junction
- Ahead to Sunny Hillock junction
- Left on B9092
- Ahead past Kebbuckstone junction
- Right turn onto McDermott's Road
- Ahead to A96T

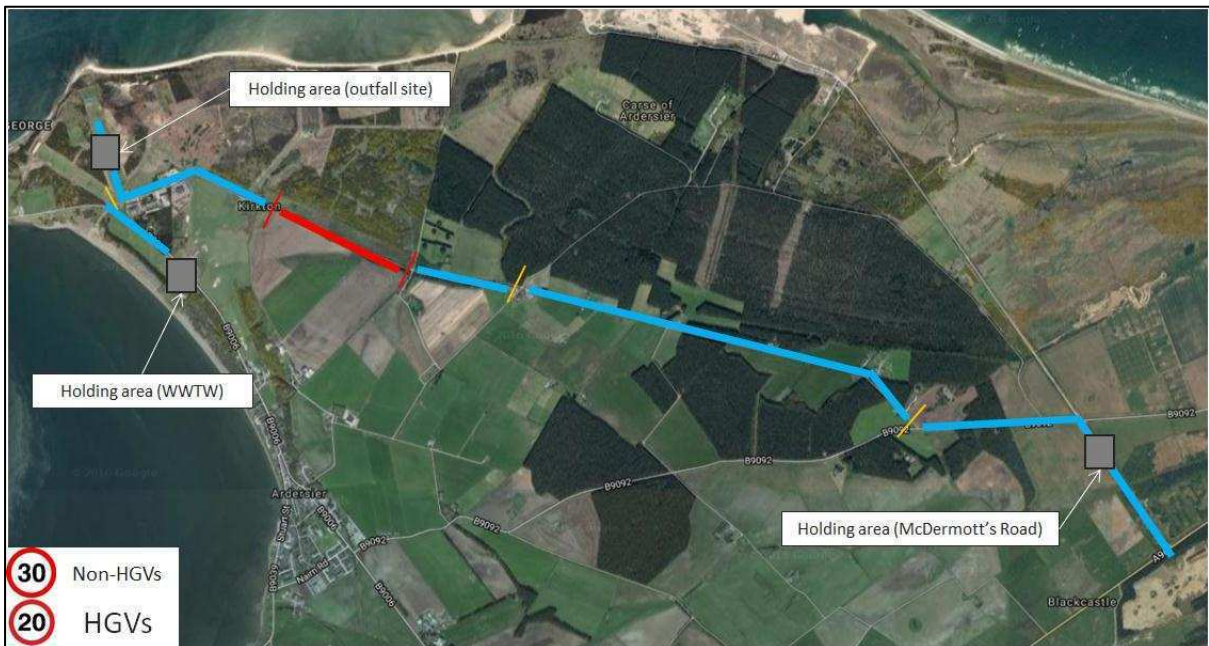


Figure 5

### **3.3.2. Route Activities**

#### ***3.3.2.1. Pre-Works Requirements***

A pre-start survey of the convoy route took place on the 20<sup>th</sup> September 2016 between representatives of Highland Council and Scottish Water.

The survey was to ascertain the existing condition of the road, identify works needed to protect the road against damage which would prevent its safe use, and identify works required to allow the required traffic movements. It should be noted that these works were agreed on the basis of a 'journey management' plan for heavy vehicles, allowing their movements to be controlled and managed more closely than on an 'open road' basis.

These upgrades will be completed prior to the bulk of work starting on site at the WWTW. Traffic management drawings, layouts, notices and Temporary Traffic Regulation Orders (TTROs) / Temporary Traffic Regulation Notices (TTRNs) will be sought in advance of any operations.

In finalising this schedule of improvements, Scottish Water will maximise the lengthening and widening of passing on the C1005 to better accommodate potential conflicts between construction and non-construction traffic.

#### ***3.3.2.2. Road Closure***

To support safe transit of construction vehicles along the route, a road closure along a section of the C1005 will be put in place via a TTRO.

This closure will be between the junction at Giack (west of the property 'Littleton') and just prior to Kirkton. This will allow free two-way access to the property of Littleton from the Baddock end and will allow free access down the unclassified side road at this point but will prevent through traffic to Kirkton. Two-way traffic will be maintained from the B9006 at Fort George to the hamlet of Kirkton allowing residents, businesses and other users to access from this end.

Signage will be installed at either end of the C1005 advising of the closure and also at the Baddock junction to the east of the road closure. Signage will advise of "Road Ahead Closed" and "Access Only".

Construction vehicles passing the road closure will be required to remove barriers for passage and replace once past.

The road closure is proposed to remain in place for the duration of the construction period however, in response to feedback regarding the potential disruption due to the road closure, Scottish Water will seek to reduce the periods of closure to align more closely with the operating hours of the sites and the construction activity. For clarity, it is envisaged that the road closure will be in place between;

- 07.00-19.00 Monday to Friday;
- 07.00-13.30 Saturday.

This will be reviewed once the road improvement activity has been completed and will be done in conjunction with the Community Liaison Group. This will hopefully enable local access to use the road outwith construction periods, both during the week and at weekends.

### *3.3.2.3. Heavy Vehicle Traffic – ‘Journey Management’*

It is proposed that all heavy vehicle movements are done under journey management to support smooth traffic management and mitigate impact on other road users.

A convoy and scout vehicle system will be employed for all heavy vehicles travelling through the C1005 traffic management route. The vehicles will be clearly liveried to indicate their purpose.

A holding area will be established at the McDermott’s Road (see figure 3) for incoming heavy vehicles to await convoy escort. Clear signage with contact & operating information will be placed. Incoming heavy construction vehicles will wait at the holding area and contact the controller. A convoy controller will be appointed to assume charge of the operation.

Equivalent holding areas will be established at the WWTW site and within the Outfall site where outgoing heavy vehicles will wait to be escorted back along the C1005 route.

The controller will receive calls from people requiring convoyed access and will deploy the convoy vehicles. Both a scout vehicle and an escort vehicle will be deployed to ensure that any oncoming traffic is safely held in a passing place whilst the heavy vehicle travels along the route.

The scouting vehicle will proceed first, followed by the escort vehicle leading the heavy construction vehicles.



The scout will proceed forward to the first designated passing place to see the road is clear of oncoming traffic. If the road is clear to the passing place then the scout will radio for the escort vehicle to follow up to the passing place and wait there. The scout will then proceed towards the next designated passing place where the process will repeat.

Should the scout encounter an oncoming vehicle it will hold the driver in the nearest passing place until the convoy passes.

The convoy will continue on to the site under escort.

This procedure will also apply for heavy vehicles exiting site, starting from a holding point at the WWTW or Outfall sites and continuing along the C1005 to the B9092.

Instruction will be given to all staff, subcontractors, etc on the convoy system as part of their site safety induction.

Instructions will be given on delivery orders to use the convoy system where appropriate and of the routes to be taken.

Appropriate signage will be placed on all approaches, clearly identifying the different work areas and directing vehicles and those requiring access.

#### ***3.3.2.4. Maximum Speed of Vehicles through the route***

For heavy construction vehicles the advisory speed will be 20mph and this will be managed by the convoy vehicle. To support the safe movement of heavy vehicles, there will be a 30mph advisory speed limit on the road for all other traffic.

### **3.3.3. Communication Methodology**

#### ***3.3.3.1. Signage***

Signage will be erected at the ends and approaches of affected roads to advise drivers of changes, restrictions, directions and diversions. Signage for construction traffic will be clearly marked to ensure that the different work areas, and the appropriate traffic management routes, are clearly identified.

#### ***3.3.3.2. Employees, Sub-contractors and suppliers***

All site employed drivers will be inducted to the traffic management plan and regular Toolbox Talks will be carried out throughout the project to remind and refresh drivers of the TMP and any changes to requirements.

The traffic management plan will be communicated with Sub-contractors and toolbox talks shared as appropriate.

Orders for deliveries by suppliers will be accompanied by detailed instructions explaining the traffic management requirements. Toolbox Talks will also be shared with suppliers who will do significant numbers of deliveries for the projects.

#### ***3.3.3.3. Residents & Businesses***

Letters will be sent out to all residents and business operators affected by the traffic management system. These groups will also be able to give feedback by the Community Liaison Group or direct to the Project Communications Advisor allocated to the project (see section 8).

Scottish Water will investigate options for providing information to residents regarding movement of escorted vehicles down the C1005. These will include options ranging from near 'real time' through to a point of contact for residents to contact to check the latest situation with regards to escorted vehicle movements. Proposals will be set out through the Community Liaison Group.

#### ***3.3.3.4. Ministry of Defence***

Close co-ordination with the MOD will continue to ensure essential access is maintained for the duration of the works and to manage significant operational manoeuvres.

#### ***3.3.3.5. Other***

Co-ordination will be undertaken with the refuse & recycling collection services and Royal Mail. This will be done through the TTRO process.

Arrangements will also be in place to ensure that our traffic management plans work in conjunction with significant events such as the Military Tattoo.

Scottish Water will be liaising with the school bus service to determine the scheduled drop-off and pick-up times at points affected by the C1005 traffic management route and will take steps to avoid construction traffic runs at those times.

### ***3.3.3.6. Emergency Services***

Emergency services will have access to the route at all times and will be given the convoy controllers contact details to advise of any operations. The convoy controller will liaise with the emergency services to ascertain when the route can be used again. Following the decision to allow Light Vehicles through the village, the potential impact on Emergency Services is further reduced.

### **3.3.4. Monitoring of Road Condition during Construction Phases**

Regular pre start drive over to check for potholes, safety items and obstructions will be logged by the convoy controller and recorded in an operations log or suitable document. The convoy driver will be expected to report any safety defects developing during the operation shift to the controller. A stock of Instant Road Repair will be held to effect quick repairs of potholes and the like. Regular end of shift drive overs will be carried out to check for defects requiring repair prior to the next operation.

During hot periods any bleeding of fatting up areas can be treated by gritting using the convoy vehicle and a gritter.

In addition to the above, a fortnightly inspection by suitably qualified and experienced staff will be undertaken to look for any signs of potential major defects developing (E.g. embankment slippage, slumping, over-runs, etc).

Regular Joint Inspections will be undertaken with The Highland Council and the Council will also have the ability to monitor road condition on an ad-hoc basis throughout the construction period. Scottish Water will work closely with The Highland Council during this period.

Scottish Water will make timely repairs to any major defects that develop as a result of their operations that are a risk to either construction or public traffic using the route.

### **3.3.5. Winter Maintenance Provisions**

A daily meteorological report will be obtained by the site for the convoy controller, to warn of winter conditions. Additionally agreement from the council will be sought to supply their daily action plan to alert the site to the likelihood of winter maintenance operations being required.

As part of the morning checks the controller can assess the route for treatment requirements.

A demountable gritter of 0.5m<sup>3</sup> capacity or more mounted on a pick up would allow for spread rates to a lane width of at least 20g/sq.m. The gritter body can be mounted on the convoy vehicle so as always to be on hand. It can be transferred to any replacement convoy vehicle.

As supply of road salt of 6-10mm grading will be utilised for any pre salting. A covered supply of 50/50 sand salt mix would be kept on site for treating post freezing surfaces. The sand in the mix would give instant grip while the salt worked to thaw the ice.

### **3.3.6. Section 96 Provisions**

Prior to the works there will be a pre-camp survey jointly carried out with the Highland Council as Roads Authority.

Post works a joint dilapidation survey will be carried out with the Roads Authority. Under the Roads Scotland Act 1984 Section 96 the roads authority are entitled to compensation for extraordinary expenses for damage caused by the operator by excessively heavy or extraordinary traffic.

It is proposed that Scottish Water will agree the extent of any damage caused by the construction traffic on the proposed site access routes with the council, using the pre camp and dilapidation surveys as reference.

Scottish Water will fund the repairs after the construction of their project is completed which means that the council will incur no extra ordinary expenses in this respect. Whether Highland Council carry out those works required then are reimbursed for them or whether Scottish Water engage a road maintenance contractor direct to do the work will be agreed.

### **3.3.7. Enforcement of the Traffic Management Methodology**

The road closure will be covered by temporary traffic regulation orders. Since the project spans beyond the maximum 18 months duration of a TTRO then consecutive TTROs may be required.

The speed of escorted vehicles will be controlled by the escort vehicle at the head of the convoy.

There will be an advisory speed limit applied to the road and appropriate signage installed.

Unwanted ingress of traffic to the closed section will be controlled by barriers and any illegal manoeuvres will be reported to the police. Dash-Cam video cameras will be considered to allow monitoring of activity.

Signed diversions will be in place to direct traffic that is not able to use the closed section of route.

The method of operation will be included in the project method statements and the health and safety plan, therefore breaches by employees or site staff will be a disciplinary issue.

Contractor and sub-contractor site information packs/contracts will require compliance with the TMP.

### 3.4. Access to the Whiteness Dock

Whiteness Dock is currently the proposed docking harbour for the barge that will be used for the construction of elements of the outfall extension. This route description is included based on this current proposal.

All deliveries of materials, plant, equipment and personnel to this site will access via the McDermott's road (see figure 6)



Figure 6

There are no varying traffic management plans for this route and all vehicles will follow the below plan.

No pre-works, road closures or journey management arrangements are required for this route.

### **3.4.1. Route Summary**

From A96T Whiteness Junction:

- McDermott's Road (900m)
- Cross the B9092 and exit the public road system, continuing down the old McDermott's road to the dock.

From Whiteness Dock

- Exit site along the old McDermott's road to join the public road at the junction of the B9092 and the McDermott's road.
- Cross the B9092 onto McDermott's Road (900m)
- Exit onto A96T from Whiteness Junction

### **3.4.2. Communications Methodology**

#### ***3.4.2.1. Signage***

Signage will be installed to direct vehicles to the Whiteness site and will also be installed to advise that this route is private and not open to public use.

#### ***3.4.2.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.2.3.2

## **3.5. B9093 from Dalcross to the pipeline works**

This will be the main route used by heavy construction vehicles accessing the pipeline construction along Stuart Street. All heavy vehicle traffic accessing the pipeline works from the south will follow this route.

There is no specific light vehicle traffic management route to the south end of Stuart Street however light vehicle movements have been estimated within the tables in section 4.

As noted within section 3.2, any significant heavy vehicle deliveries of materials, plant and equipment for use in the northern section of the pipeline route beyond the village will be brought in via Route 1 of this Traffic Management Plan.

Materials holding areas will be established at both the northern and southern sides of the pipeline work and many of the large deliveries will be brought to these points before being moved into the construction area in smaller quantities as required.

It is recognised that, while traffic will be directed to use the prescribed traffic management routes, some vehicular access into the village will occur in order to access local facilities and services such as shops, accommodation, cafes, etc. It is also recognised that there will be unavoidable vehicular access into the village for the construction of the pipeline itself. This plan covers the traffic management routes for bringing materials to and from the area but does not cover traffic management plans for vehicle movements within the pipeline construction area itself.

Estimated vehicle movements forecast within section 4 are based on the current design.

### **3.5.1. Route Summary**

High level bullets of the traffic management route are included below and are also shown on the map in Figure 7.

#### **Access to Stuart Street**

- Traffic exits the A96T at the Airport / Mid Coul roundabout junction
- Follows North around the airport exiting past Dalcross Industrial Estate to the junction with the B9039
- Turn right onto B9093 and head North West, passing the junction with the B9092 (Nairn Road) and onto Stuart Street.

#### **Exiting the Stuart Street Pipeline site**

- Exit Stuart Street at the southern end and join the B9093
- Pass the junction of the B9092 (Nairn Road) and head south easterly to the Hillhead Access Road into the Airport
- Turn left at the Hillhead access road into the airport, passing Dalcross Industrial Estate
- Follow the road south, bypassing the airport site (signpost Inverness)
- Exit the airport road onto the A96T at the Airport / Mid Coul roundabout onto the A96T

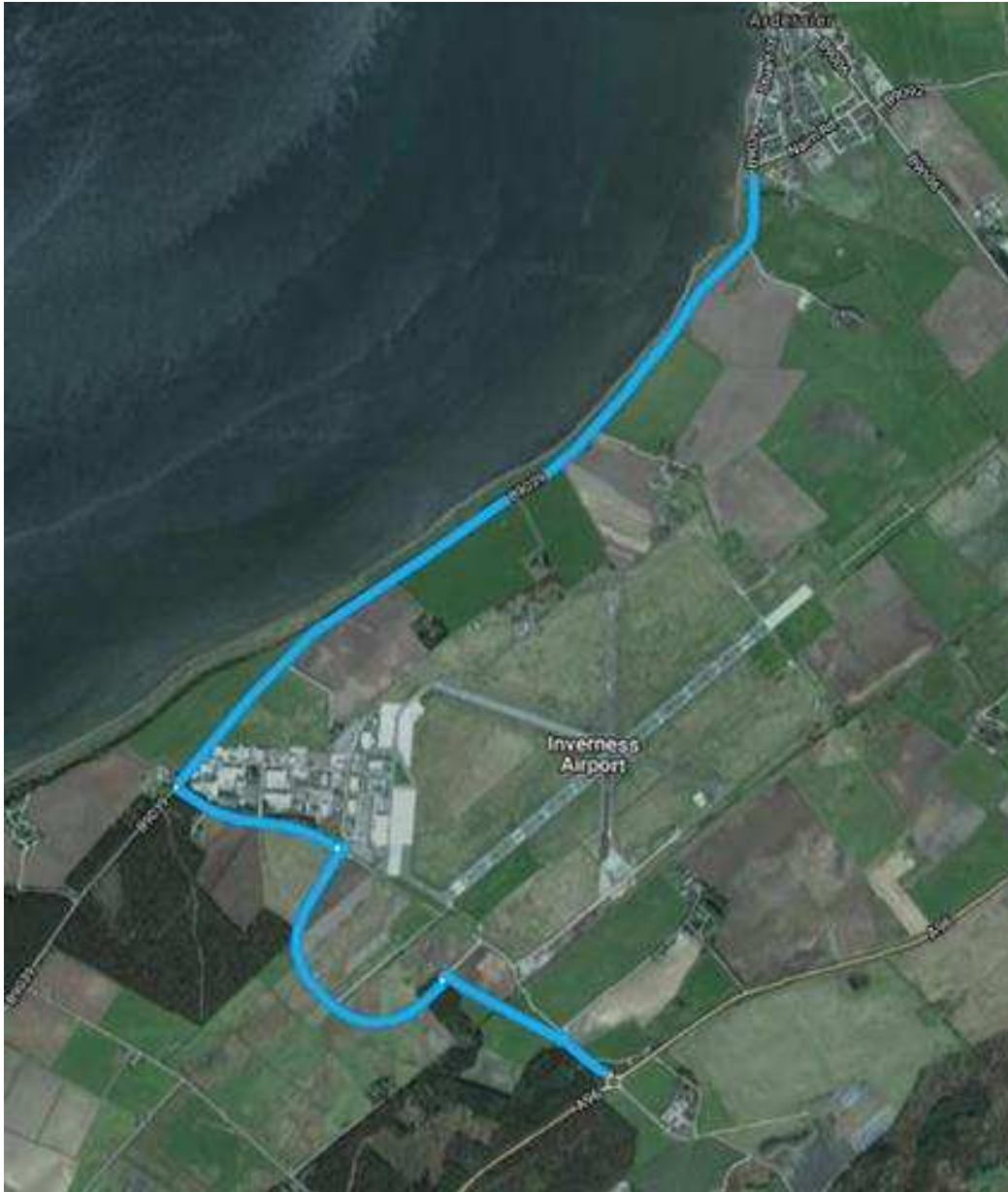


Figure 7

### 3.5.2. Route Activities

#### 3.5.2.1. Pre Works Requirements

No specific pre-works are required for accessing the site from the south by this proposed route other than the installation of signage.

Any specific requirements identified following understanding of the construction methodology will be included in the specific arrangements for that work.



### ***3.5.2.2. Road Closure***

Road closure requirements for the works along Stuart Street are unknown until further survey work is completed in the area. Once understood, this will form part of specific traffic management arrangements for this portion of the construction.

### ***3.5.2.3. Maximum Speed of Vehicles through the route***

There are speed limits already in force on this access route and drivers accessing via these routes will operate to these limits. No further restrictions on speed are envisaged at this point however any specific arrangements for the work along Stuart Street will be identified once the construction methods are understood.

## **3.5.3. Communication Methodology**

### ***3.5.3.1. Signage***

Signage will be installed from the A96T for construction traffic to direct them to the Stuart Street works.

### ***3.5.3.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.3.3.2

### ***3.5.3.3. Residents & Businesses***

Specific communications to the local residents and businesses affected by the works, along Stuart Street will be articulated once the method of construction is better understood.

## **3.5.4. Monitoring of Road Condition during construction phases.**

The site manager will be responsible for monitoring road conditions along Stuart Street during the works. A record of daily checks, reports and actions will be kept on site.

A stock of Instant Road Repair will be kept to affect any urgent repairs required. Laying and compaction tools will be available to the site as required.

### **3.5.5. Winter Maintenance Provisions.**

Winter maintenance cover, where the road is kept open, will remain the responsibility of the council.

Winter maintenance within any site area will be the responsibility of the contractor under site safety rules.

### **3.5.6. Section 96 Provisions**

Section 96 provisions will apply for this route in the same fashion as outlined in section 3.3.6.

## **3.6. B9006 High Street**

Following the feedback from the Consultation for the draft TMP, a key change is to remove the requirement for light vehicle traffic to use the C1005, instead guiding light vehicle traffic to access the WWTW and the outfall site through the village.

### **3.6.1. Route Summary**

No specific routes to or from the B9006 High Street access route have been specified as these will depend on the direction from which the vehicles arrive. It is generally expected that:

- Vehicles will entering from the East will access via the B9092 to join the B9006.
- Vehicles entering from the West will access via the B9093

### **3.6.2. Route Activities**

#### ***3.6.2.1. Pre Works Requirements***

No specific pre-works are required for light vehicle traffic accessing of the site from this route other than the installation of signage.

### ***3.6.2.2. Maximum Speed of Vehicles through the route***

There are speed limits already in force on this access route and drivers accessing via these routes will operate to these limits. No further restrictions on speed are envisaged at this point however any specific arrangements for the work in Stuart Street will be identified once the construction methods are understood.

### **3.6.3. Communication Methodology**

#### ***3.6.3.1. Signage***

Signage will be installed as required to ensure that heavy vehicle traffic does not use this route.

#### ***3.6.3.2. Employees, Sub-contractors and suppliers***

Communications for employees, sub-contractors and suppliers will be undertaken as outlined in section 3.3.3.2

#### ***3.6.3.3. Residents & Businesses***

Letter communications will be carried out to all residents and business operators affected by the traffic management system. These groups will also be able to give feedback by the Community Liaison Group or direct to the Project Communications Advisor allocated to the project (see section 8).

### **3.6.4. Section 96 Provisions**

Section 96 provisions will apply for this route in the same fashion as outlined in section 3.3.6.

## 4. Estimated Traffic Flows

The tables below summarise the estimated construction traffic movements along each of the routes. Average and peak monthly figures are given and these are broken down to average daily figures.

For the purposes of this section, HGV vehicles are defined as vehicles >7.5T

Where applicable, peaking factors have been applied to estimate peak figures.

Due to delays in some of the elements of the project, there is a risk that overlap occurs between the different elements of the work in the area. The peak month figures have accounted for this risk and peaks are therefore calculated on overlap of the projects.

Numbers contained in the tables are 'movements'. One vehicle travelling into site and back out is counted as 2 movements.

### 4.1. Estimated Vehicle Movements along the C1005 or B9006 (High Street)

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
<b>C1005 Sunny Hillock to Fort George</b>  <b>OR</b>  <b>B9006 High Street</b>  <b>(Note: Route will depend on vehicle type as per TMP)</b>	TOTAL	HGV	Dec 16 to Oct 18	2889	126	5.0	279	11
		Non-HGV		20703	900	36.0	1692	68
	Growth Project	HGV	Jan 17 to Oct 18	2050	93	4	125	5
		Non-HGV		16600	755	30	1013	41
	UV Installation	HGV	Dec 16 to May 17	293	49	2	79	3
		Non-HGV		1075	179	7	250	10
	Outfall Extension	HGV	Dec 17 to April 17	210	42	2	53	2
		Non-HGV		2788	558	22	778	31
	Pipeline	HGV	Jan 17 to April 17	336	84	4	87	4
		Non-HGV		240	60	3	66	3

#### 4.2. Estimated Vehicle Movements to/from Whiteness

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
Access to Whiteness Dock	Outfall Extension	HGV	Jan 17 to April 17	140	35	2	44	2
		Non-HGV		896	224	9	280	11

#### 4.3. Estimated Pipeline Vehicle Movements along the B9039 to Stuart Street

		Vehicle Type	Period	Total	Monthly Average	Average Day	Peak Month	Average Day Peak Month
Dalcross to Stuart Street	Pipeline	HGV	Jan 17 to April 17	395	99	4.0	109	4.3
		Non-HGV		2000	500	20.0	550	22.0

## 5. Site times

Site Times are:

- 07:30 – 18:00 on Monday to Friday and
- 07:30 – 13:00 on Saturday
- The site will be closed on Sundays.

Most site commuter traffic will be entering the site between 07:00 and 08:00 and will leave after 18:00 (13:00 on Saturdays). This will therefore not significantly affect school times.

Scottish Water will, wherever practicable, avoid all construction traffic movements through the village at key school traffic times of 08:30 to 09:30 and 14:30 to 15:30 (during term times).

## **6. Operational Traffic**

### **6.1. UV Project**

An Operational Phase TMP has been produced for the UV Installation Project as required by Condition 4 of the Planning Permission (16/02464/FUL.)

### **6.2. Growth Project**

There are no significant changes envisaged to the Operational Traffic as a result of the delivery of the Growth Project.

#### **6.2.1. Planned attendance:**

Planned Operational attendance at site is currently 3 times per week and this is not forecast to change once the Growth Project is complete.

Ground maintenance is undertaken on a 4 weekly basis throughout the summer by framework contractor and this will continue once the upgrade is complete.

Planned mechanical and electrical maintenance is completed based on the maintenance scheduling system with visits approximately monthly for planned maintenance.

Planned cleaning of tanks can take place on an ad-hoc basis, resulting in a number of additional tanker movements to and from site.

Tanker movements are the significant HGV movement associated with the wastewater treatment process. Tankers currently take sludge from the site 2 to 3 times per week. Although there will be an increase in the Population Equivalent of the works, the more modern nature of the technology being installed will initially result in a decrease in the number of tanker movements, rising back to current levels once the design capacity of the new works is reached. In effect, the improved Dry Solids Content that is achieved in the modern sludge stream means that less water is carried per tanker and therefore more sludge is carried, reducing the number of vehicles for the same volume of incoming sewage.

#### **6.2.2. Reactive attendance:**

As with the current wastewater treatment works, response to telemetry alarms, intruder alarms and incidents can generate additional operator visits. Calls of this nature are generally very low and will not have a significant impact on traffic volumes.

Equipment breakdown also generates additional maintenance visits in order to repair or replace equipment but again it is expected that these volumes will be extremely low.

Where process treatment units require reactive intervention there is sometimes the need to empty and clean tanks or re-seed the biological process. Although this generates additional tanker visits, this is a very infrequent occurrence.

### **6.2.3. Changes to the Current Arrangements for Operational Traffic**

Due to there being no significant changes to the operational traffic as part of the proposed works, it is not proposed that any changes will be made to the routing plans for operational vehicles.

Operational vehicles will however use the new access arrangements in place for the site.



## 7. Points of Contact

Key points of contact will be made available throughout the project and these will be communicated through the Liaison Group, via our Communications Team, and via the Scottish Water website.

Our current point of contact is:

- Trish Wilson (Project Communications Advisor)

Contact can be made through our Customer Contact Centre on 0800 0778 778.



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## **Ardersier Wastewater Treatment Works**

### **OPERATIONAL PHASE TRAFFIC MANAGEMENT PLAN**

#### **UV TREATMENT INSTALLATION**

<b>Rev No.</b>	<b>Description</b>	<b>Date</b>
0.1	Draft	15 <sup>th</sup> November 2016
0.2	Final Draft	17th November 2016
1.0	Final for Issue	18th November 2016
1.1	Final to Address Comments from THC	6 <sup>th</sup> December 2016

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## **1. Introduction**

### **1.1. Background**

Scottish Water has been granted planning permission for the Installation of UV Treatment at Ardersier WWTW under Planning Permission Application 16/02464/FUL.

The above planning permission was granted subject to compliance with various conditions, some of which are suspensive and require purification by the Highland Council before development commences. In this case, Scottish Water is seeking to agree the amendment of Condition 4 of the above Planning Permission. The Condition reads as follows

*No development shall commence on site until an operational phase Traffic Management Plan (including a routing plan for all delivery and maintenance vehicles) has been submitted to, and approved in writing by, the Planning Authority.*

*The approved operational traffic management plan shall be implemented prior to the hereby permitted development coming into use and remain in place in perpetuity, unless otherwise agreed in writing by the Planning Authority.*

*Reason: In the interests of road safety.*

### **1.2. Scope**

This document identifies the traffic management arrangements at Ardersier WWTW and highlights changes required as a result of the installation of UV treatment as granted planning permission in 2016 (16/02464/FUL).

This document forms the operational phase Traffic Management Plan as required by Condition 4 of the Planning Permission for UV Installation.

## **2. Current Site attendance**

### **2.1. Planned attendance**

The site is currently visited approximately 3 times a week by an operator in a van. Tanker movements are currently 2 to 3 per week.

Ground maintenance is undertaken on a 4 weekly basis throughout the summer by framework contractor.

Planned mechanical and electrical maintenance is completed based on the maintenance scheduling system with visits approximately monthly for planned maintenance.

Planned cleaning of tanks can take place on an adhoc basis, resulting in a number of additional tanker movements to and from site.

## **2.2.Reactive attendance:**

Response to telemetry alarms, intruder alarms and incidents can generate additional operator visits.

Equipment breakdown also generates additional maintenance visits in order to repair or replace equipment.

Where process treatment units require reactive intervention there is sometimes the need to empty and clean tanks or re-seed the biological process. This generates additional tanker visits.

## **2.3.Recording of Vehicle Movements**

Scottish Water maintain records of tanker movements to and from the site. In addition visitors must sign in and out of the site providing a record of visits to the site.

# **1. Operational Traffic Changes as a result of the UV Treatment Installation**

No significant changes will occur to the operational traffic as a result of the UV Treatment Installation.

There will be no extra sludge or waste production as part of this project.

The number of planned operational visits to the site will not be affected by the installation of the UV equipment.

Operational Maintenance of the UV equipment will carried out during normal operational site visits and maintenance by the Mechanical/Electrical Maintenance Team will be programmed along with existing plant maintenance task. Normal servicing of the UV will be twice per year.

As per current procedures, response to telemetry alarms and incidents could generate additional operator visits.

The installation of UV will not affect the operation or maintenance requirements of any of the existing process units.

## **2. Routing Plan**

Vehicles currently accessing the site use the public road network and their routes vary depending on the location/direction from which they approach the site. There are no restrictions on the routes currently used. The main routes currently used are listed below:

- B9093
- B9006
- B9092
- C1005

As there is insignificant change to the operational phase traffic movements it is not proposed that any changes are made to the current traffic management arrangements in regards to route specification.

## **3. Access changes required as part of this Operational Traffic Management Plan**

Once the new access has been formed, all vehicles will access site via the new access road from the B9006. The access from the existing entrance will be abandoned.

Signage will be installed advising of new access and closure of old access.