

# **AGENDA ITEM 7**

## **APPENDIX 2**

**2020/0037/NOT**

**PRIOR APPROVAL – SUPPORTING  
INFORMATION**

# Glen Clova Estate Caddam Wood – Track Construction

## Prior Approval Supporting Information



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## Summary

This proposal relates to the construction of approximately 1,016m of new track, upgrade of approximately 589m of existing tracks, creation of 1 new forest borrow pit and the installation or renewal of 3 water crossings. The new track is required in order to provide access to thin the timber on the upper slopes of Caddam Wood, extensive thinning has been undertaken on the lower slopes with no thinning undertaken on the upper slopes to date. Thinning operations will improve the timber quality of the crop whilst improving the biodiversity value of the wood. Timber arising from thinning operations will be utilised locally within the glen as Biomass, utilised at the Glen Clova Hotel. The access track will provide access to the upper slopes by smaller-scale timber harvesting equipment and will allow timber to be brought to the timber stack area close to the B955.

There is existing track infrastructure on the lower slopes which these new tracks will connect with. The upper slopes of Caddam Wood are situated on a series of shelves which severely limits access by timber harvesting equipment and therefore forest management.

The proposed new track as per this Prior Approval application, will significantly increase the forest management opportunities, provide sustainable local woodfuel and allow for improvement of timber crops through thinning.

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# 1.Introduction

## 1.1 Location

The project is located within Glen Clova Estate ground to the south of the River South in Angus. The elevation of the proposed route of the road ranges from approximately 240m to the east to 250m at the highest point. The grid reference to the proposal entrance is NO 323 727, and the nearest post code, DD8 4QQ. The proposal falls within the Cairngorm National Park boundary and administered by Angus Council – See *Location Map in Appendix 1.1 & 1.1a*

## 1.2 Site Description

Existing land use within the proposal area comprises of semi-mature conifer plantation

Soils over much of the proposed road line comprise mainly free draining upland brown earths and podzols on the upper slopes. Lower slopes are dominated with deeper brown-earth with surface water gleying.

## 2 Consultation

Angus Council Planning department were engaged at an early stage of planning this proposal. As the work is not for a full specification forest road suitable for road going HGV's, an EIA determination was submitted to Scottish Forestry (SF) in the first instance. As the proposal is situated entirely within the National Park boundary within 300m of the River South Esk SAC and more the half of the proposed tracks located within the Cairngorm Massif SPA, SF advised that Prior Notification would be required in this instance. A Prior Notification application was made to Angus Council who advised that due to the site sensitivities that Prior Approval would be required

Consultation feedback gained from the Prior Notification application submitted in May 2018 raised the following points:

### **Scottish Environmental Protection Agency (SEPA) –**

#### Water engineering works

- Developments should be designed to leave the water environment in a natural state with engineering activities such as culverts as culverts and bridges avoided where possible.
- SEPA have a policy against the closed culverting of watercourses as bridging structures for transportation routes. Culverts should be open to the river bed for invertebrates and possible fish
- The above should be added as a condition of any approval
- All operations will come under Controlled Activities Regulation (CAR) and will be covered by specific General Binding Rules (GBR)
- Application should make reference to "Construction of River Crossings Good Practice Guide"
- The inclusion of a Diffuse Pollution Control Plan (DPCP) as well as Pollution Prevention Plan (PPP)

- Where appropriate vegetation recovered from site should be used to re-vegetate excavations or where necessary appropriate native seed used to re-vegetate areas
- Borrow pits should only be permitted if there are significant environmental or economic benefits compared to obtaining material from local quarries, they are time limited, tied to a specific project and appropriate reclamation measures are in place
- No objections to the use of borrow pits from a planning perspective but would require further details of these, including a map showing location, size, depths and dimensions, location of storage of quarried material and restoration and aftercare proposals is provided in the PPP
- Applicant to contact with the local regulatory team to discuss in detail their plans for the crossing points and pollution prevention measures

**Scottish Natural Heritage (SNH)** – provided the following points for consideration and inclusion:

- Works should be carried out in accordance with a site specific method statement which identifies the measures required to minimise the risk of pollution during construction.
- The track is designed in accordance with our publication ‘Constructed tracks in the Scottish Uplands’ and SEPA’s publication “Engineering in the water environment: good practice guide: River crossings” .

**Cairngorm National Park Authority (CNPA)** – Raised the following issues relating the proposals

- The proposals are located within the Wildcat Priority Area
- Not enough information was provided with regard to Protected Species for Prior Notification recommendation
- Protected species survey would be required for Otters, Wildcats Red squirrels and Pine martens.
- Construction Method Statement detailing water crossings and precautions to deal with any potential impacts upon the SAC
- Potential for the new track to become a more prominent feature within the landscape than the current public road

### 3 Site Constraints

#### 3.1 Cairngorm National Park

The entire length of track construction and maintenance operations falls within the Cairngorm National Park Authority area. The proposed track will be partially visible from the B955, on the north side of the glen. There is potential for the track works to become a prominent and visible feature within the landscape when viewed from the B955 on the north side of the glen.

An experienced civil engineering contractor with a vast experience executing this type of project, including delivery of projects in areas of high landscape sensitivity, has been consulted with planning of the proposed track line. Following guidance provided in "SNH Constructed Tracks in the Scottish Uplands", the proposed route of the new road has been carefully assessed on the ground and links into existing estate tracks. Landscape was a major consideration when planning the route of the track with the alignment closely responding to landform. (*Appendix 3 - Landscape Appraisal*) (*Appendix 1 – 1.3 Constraints Map*)

In order to minimise the potential landscape impact of the proposed route, the track will be situated on natural shelves on the hillside, which will assist with landscaping and also coincide with drier routes with access to borrow pit material.

The route will follow existing track lines that are currently located within woodland, new tracks will follow contours and utilise natural land features to help gain height gradually and access drier routes. At the northern end of the proposals it will be necessary to construct a switch back to allow the track to meet up with the existing track network, much of this feature will occur on currently open ground, however the track will be designed to minimise the the cut and fill required and will also undertake create a landscaped outward facing verge and haunch to actively reduce visibility..

A landscape appraisal has been undertaken, with photographs taken from a viewpoint on the B955 from where the proposed roadline is potentially at its most prominent. The appraisal has concluded that much of the proposal will be screened by woodland and landform and will remain largely unseen when viewed from the surrounding area. As mentioned above a short section at the west end has the potential to be visible in the surrounding landscape this is due to the localised steepness of the landform and that the track construction will take place out with the woodland.

In order to fulfil the requirements of good landscaping the planning process has sought to align the track to follow contours and to be screened by the landform and mature woodland. Cut and fill will be kept to a minimum within steep, visible sections. Any cut sections will feature gently sloping sides and will be re-vegetated using turves won during construction of the formation where possible - See *Landscape Appraisal in Appendix 3*





*Example 1 of re-vegetating works using turves.*



*Example 2 of re-vegetating works*

### **Mitigation**

- Track designed with landscape in mind and knowledge of experienced engineer and contractors have been utilised.
- Contours followed where possible.
- SNH Constructed Tracks in the Scottish Uplands guidance followed.
- Existing woodland areas and landform provide screening for much of road.

- Cut and fill to be kept to a minimum during construction within steep areas.
- Cut sections re-vegetated where possible.
- Landscape Appraisal carried out.

### 3.2 River South Esk SAC

The River South Esk and associated tributaries are located to the north of the proposal and forms part of the River South Esk Special Area of Conservation. (*Appendix 1 – 1.3 Track Constraints Map*)

All works will be carefully planned, mapped and pegged out by a suitably experienced forest manager and operators will be supervised to ensure that these standards are met – per Forest and Water Guidelines, Fifth Edition, and SNH Constructed tracks in the Scottish Uplands .

Only approved and competent contractors and machine operators will be utilised and will be fully briefed on safe working, risks of diffuse pollution and protection of sensitive areas. Pollution control will be enforced by daily machine checks, carrying spill kits, and refuelling only at agreed locations. In addition, regular watercourse inspections, use of silt traps and silt fencing will be utilised to guard against silt movement – See *Diffuse Pollution Control Plan in Appendix 5*

#### **Mitigation**

- Use of bottomless culverts over larger watercourses will result in less excavation in the riparian zone and provide a buffer between excavations and the burn.
- Works to be carried out by competent contractors with a track record of similar works.
- Toolbox Talks briefed to all operators prior to works commencing.
- Works carried out during dry periods and work planning to alter depending upon weather conditions.
- Spill kits carried within all machinery.
- Fuel stored and refuelling carried out at agreed locations only.
- Watercourses inspected regularly.
- Use of silt traps and silt fencing to guard against silt movement.
- Diffuse Pollution Control Plan prepared and enforced.

### 3.3 Archaeology

A desk based survey has concluded that there is one feature of unscheduled archaeology that the proposed track upgrade line passes through. features - See *Appendix 1 – Archaeology Map in Appendix 1.5*

Feature Reference	Feature Description	Mitigation 1	Mitigation 2
NO37SW0017	South Inchdownie – Remains of farmstead – depicted on the OS 1864 map	Existing track currently dissects the site – no expansion of track footprint in this area	Site to be added to operational constraints map. Machines to be excluded from the area Walk over survey prior to starting Toolbox talk briefing

#### **Mitigation**

- Ground and desk based surveys carried out.
- Track footprint to be maintained where the route passes through archaeology area.
- No excavation of track within the archaeology area
- Walk over survey to be carried out prior to work commencing on site
- Operatives to be briefed on the potential for further archaeology

### 3.6 Breeding Birds

A breeding bird survey has not been undertaken as part of the site survey work. The road line will involve felling approximately 600 trees. Pre-operational checks will be carried out prior to undertaking any works and timings altered accordingly.

#### **Mitigation**

- Further surveys to be carried out prior to works commencing
- Work plans amended as necessary

### 3.7 Protected Species

Protected species were considered in conjunction with the SAC designated features. Otters, Pine martens and Wildcats formed the main focus of the survey, with the River South Esk and tributaries along the proposed route surveyed for otters. As the proposed track is located within the Wildcat Priority Area a 200m buffer around the proposed track line was surveyed for Wildcat.

The initial survey carried out between December 2018 and February 2019. The survey noted significant presence of Wildcat and frequent indicators of otters were noted along the entire length of the River South Esk. As such there is a likelihood that without appropriate mitigation there would potentially be impacts upon protected species. A number of camera traps were deployed on suitable denning habitat along the length of the proposed track and a number of locations have positively identified Wildcats with a high pelage score. Further surveys will be required prior to commencing and during works – See *protected species survey in Appendix 2*

### **Mitigation – Wildcats & Otters**

- Begin works within 12 months of the Protected species report (April 2019) to ensure data is current
- Ideally undertake operations outwith the breeding season (August – end of January)
- Appoint an Ecologist to oversee works and to provide survey assistance and advice during operations
- Adhere to a 200m buffer zone from known wildcat dens during the breeding season (February – August) and deploy camera traps to establish use
- Adhere to a 100m buffer zone from known wildcat dens out-with the breeding season (August – February) again deploying camera traps to establish use
- Undertake works within the buffer zone only under licence from SNH
- Frequent signs of Otter will require further surveys to be carried out prior to works commencing.
- Where holt sites are found an exclusion zone of 200m will be set up and, if appropriate reduced to 100m , where topography/landform allows.
- Otter resting sites will be buffered by 30m

## 4 Surveys

The following surveys have been undertaken;

- **Landscape** – Landscape appraisal undertaken and is included in Appendix 3
- **Designations (SPA, SAC)** - Scottish Forestry Land Information Search tool used to initially identify designations within the proposal area and wider landscape.
- **Archaeology** – See Archaeological Map in Appendix 1.10
- **Protected Species** - See Ecological Survey Report in Appendix 2

*See Appendices for details of all surveys carried out.*

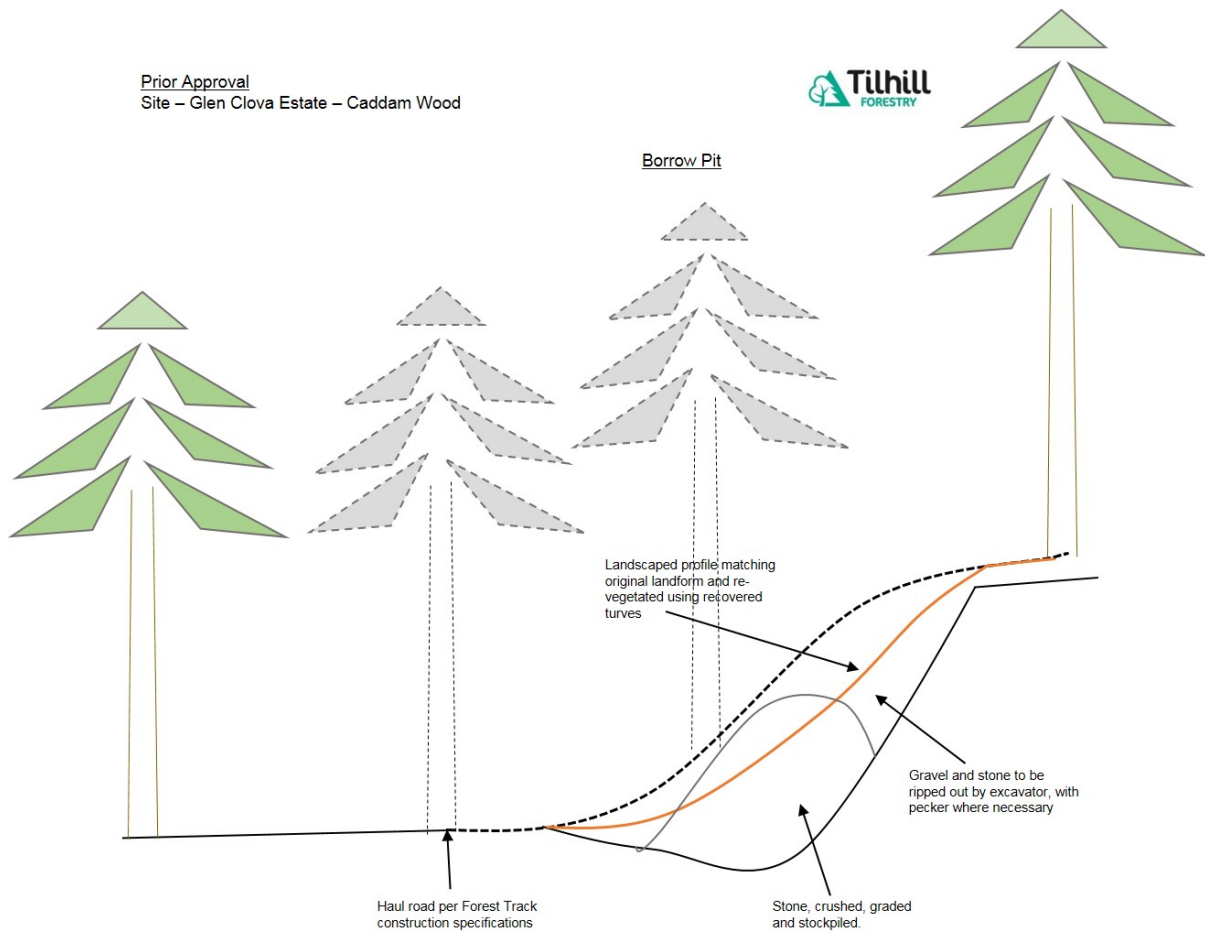
## 5 Construction Method Statement

### 5.1 Forest Quarry

1 single borrow pit location has been identified on the ground that will supply stone for the proposal.

The borrow pit will be located in existing woodland and based on a rock outcrop close to the line of the proposed track. The borrow pit will not be prominent within the landscape as it will be located within and screened by a stand of semi-mature trees, the location is also situated on a natural topographical shelf will also reduce any potential landscape impacts. On completion of this project the borrow pit will be restored and landscaped, with some of the foot print retained as a vehicle turning area.

It is estimated that 480m<sup>3</sup> (963t) of stone will be required for all track works. - See *borrow pit drawing & picture below. Also see Appendix 3 – Landscape Appraisal*



Date - 08/10/2019



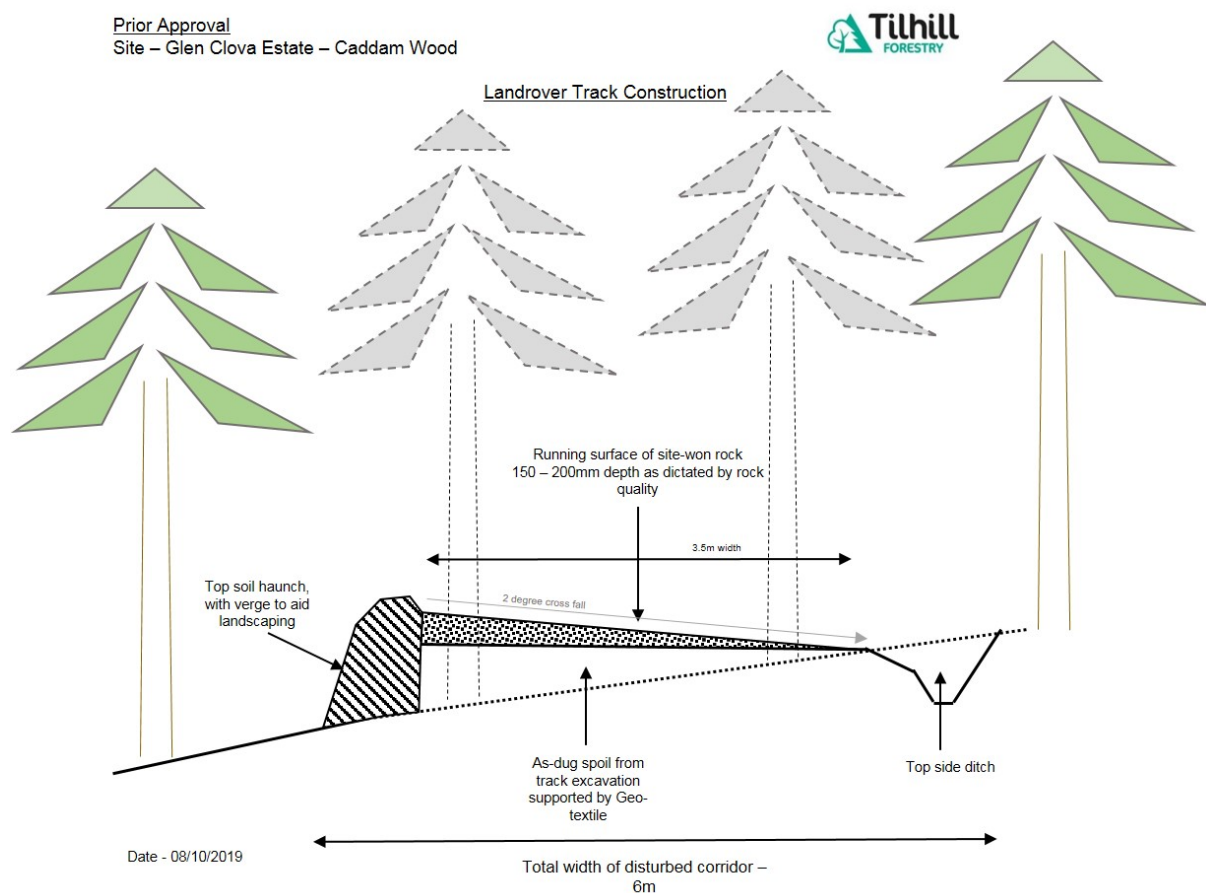
Example of restored and landscaped borrow pit

## 5.2 New Forestry Track

It is proposed to construct approximately 1,022m of new forest track (including turning areas), to link in with existing estate tracks which are to be upgraded to a similar specification. The total area of new road will be approximately 0.61ha, assuming an average of 6m wide formation, to include side drainage and corners.

Track construction will first comprise creating a running formation to a minimum width of 3.5m, and graded to a top side camber to shed surface water into new top side drains. Cut and fill will be kept to a minimum, particularly where visible in the landscape. Drains will be cut to at least 150mm below the edge of the road formation and will stop at least 5m short of watercourses and culverts, and silt traps installed to avoid pollution and sedimentation of watercourses. The road will be surfaced with locally won stone, hauled in from the nearest borrow pit, and spread to an average depth of 150mm to 200mm. The stone will be spread to an average width of 3.5m, more on corners, and tracked in with an excavator. Geotextile may also be used prior to surfacing with stone if there are any soft sections within the formation. The track surface will then be rolled to refusal using a heavy vibrating roller.

Tree felling will be required to facilitate the track construction in order to create a 6 metre clear corridor. Approximately 1,100 trees will need to be felled to accommodate the track construction.





*2 example photos of the above track specification*



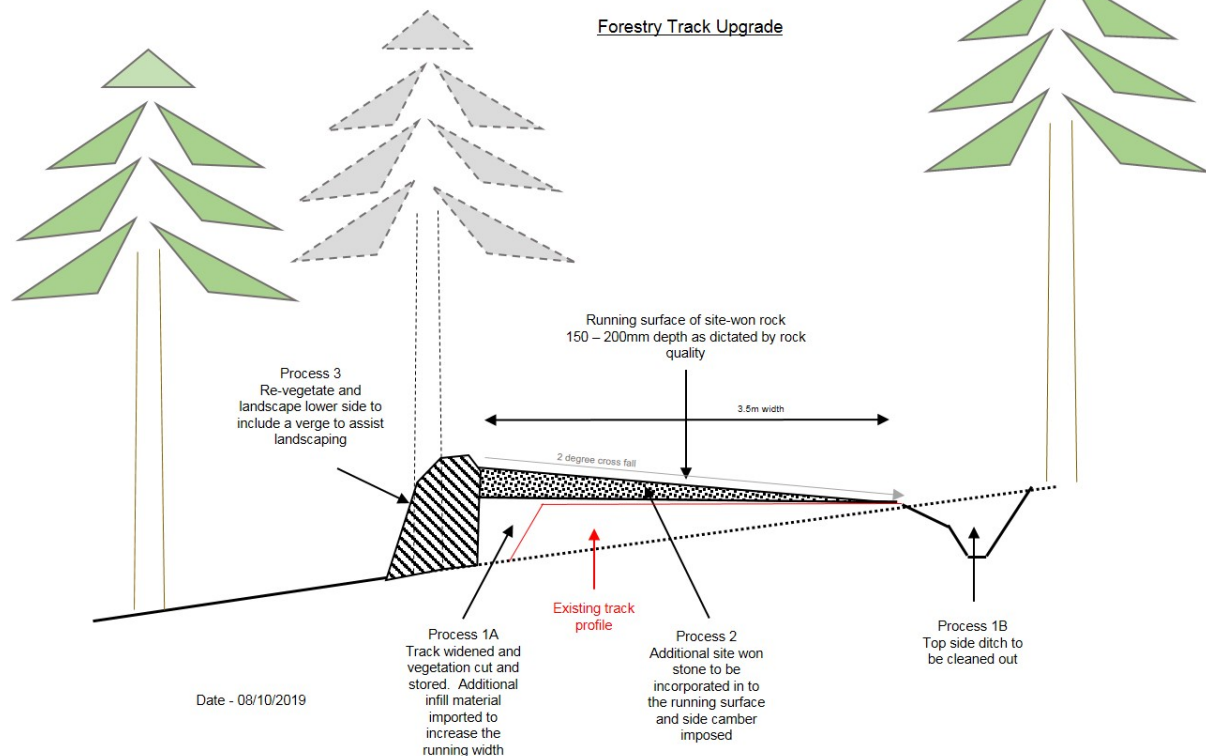
### 5.3 Upgrading existing track

Approximately 913m of existing track/track formation will be widened to approximately 3.5m and graded to a top side camber. Existing side ditches will be cleaned out and new drains cut where required.

The track will be surfaced with locally won stone to a depth of approximately 150 - 200mm x 3.5m in width, spread using a tracked excavator. The main function of the upgrading work will be to create running surface of consistent width, easy any current narrow curves/corners, culvert current open water-crossing and create a side camber to 2 degrees draining in to the top-side ditch.

It is anticipated that tree felling may be required in localised sections to facilitate sections where the track width requires widening however tree felling will not be extensive and is likely to involve felling no more than 50 trees.

Prior Approval  
Site – Glen Clova Estate – Caddam Wood





*Site photo of track to be upgraded*

## 5.4 Culvert Pipes

Culvert pipes will be installed where watercourses narrower than 1 metre are encountered during track construction. Existing culvert pipes on the sections of road proposed for upgrading will be inspected and replaced as required. All works will be subject to Controlled Activity Regulations (CAR), with all new culverts installed on watercourses detailed on a 1:50,000 scale map, registered with SEPA as an Engineering Activity.

Smaller 300mm culvert pipes will be installed at intervals of no more than 200m to direct water from roadside drains. The base of the culvert will be excavated approximately 100mm into the watercourse bed top and bottom. Trenches will be excavated down to firm ground (with all peat removed) where practicable. Stone revetments will be constructed to guide water into the pipe on the upstream side of the culvert using locally won stone where possible. Headwalls will be constructed upstream and downstream of the culvert to provide support for the culvert and new track using suitable stone also won locally. Mineral based as dug infill will be used as the base for the new track over the top of the pipe and this will be surfaced with locally won crushed stone.

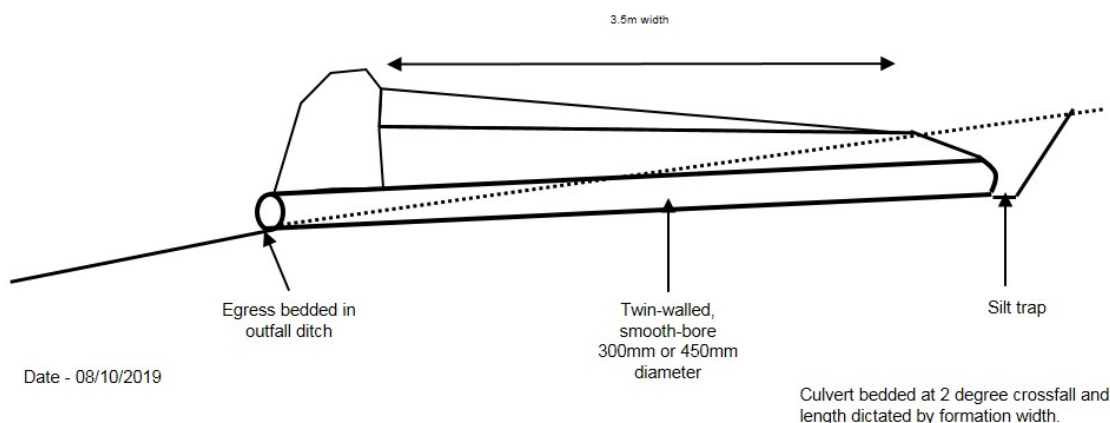
Prior Approval  
Site – Glen Clova Estate – Caddam Wood



### Culvert Detail

Culverts generally spaced at 50m to 100m intervals to intercept run-off and allow ground water crossflow

Watercourse culverts will be subject to SEPA licensing.



## 6. General Construction Works

All work be undertaken by experienced contractors and supervised under the direction of a civil engineer and forest manager with extensive experience.

All works will be carefully planned, mapped and pegged out by a suitably experienced forest manager and operators will be supervised to ensure that these standards are met – per Forest and Water Guidelines, Fifth Edition and SNH Constructed tracks in the Scottish Uplands .

Only approved and competent machine operators will be utilised and will be fully briefed on safe working, risks of diffuse pollution and protection of sensitive areas. Pollution control will be enforced by daily machine checks, carrying spill kits, and refuelling only at agreed locations. In addition, regular watercourse inspections, use of silt traps and silt fencing will be utilised to guard against silt movement All roading works will only be completed during dry weather to minimise risk of silt run-off. In addition, if it is felt that there is any risk of silt accessing the watercourse, then a silt trap fence will be installed – See *Appendices 4 to 6 for track construction detail.*

## 7. Approximate Timing & Duration of Works

It is anticipated that all works would be undertaken out with the Wildcat breeding season and will also aim to avoid, where possible, peak winter months from December through to February to minimise risk of diffuse pollution and ground damage. Construction work will commence in the east and work westwards. Works are estimated to take up to 1 months weather permitting if undertaken during the autumn/early winter.

## 8. Traffic Management Scheme (TMS)

It is estimated that the following plant/equipment will be used during construction;

- 15t 360-degree excavators x 2
- 10t dump trucks x 1
- 1 x stone crushing/grading plant.
- Various drainage pipes

This equates to approximately 6 HGV movements to/from site.

Plant and equipment will be brought into site as and when required and on differing days.

All road construction materials will be taken from borrow pits within the site and not brought in, thus a full TMS is not considered appropriate for this project.

The following rules will however apply to HGV movements;

- Vehicles will avoid traveling in convoy and there will be a minimum of 5 minutes separation between vehicles.

- Larger vehicles will display amber beacons to warn other road users of presence.

## 9. Diffuse Pollution Control Measures

Diffuse pollution will be a major consideration during this project due to the proximity of the River South Esk Special Area of Conservation (SAC).

Three watercourses are present within the vicinity of the proposed works and measures will be put in place during construction to ensure no silt enters the watercourses and ultimately into the SAC – See *Diffuse Pollution Control Plan in Appendix 5 and Appendix 4 Toolbox Talks*

## Appendices

1. Maps
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  - 1.2 Track Overview Map
  - 1.3 Track Constraints Map
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  - 1.5 Archaeology Map
  
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  - 4.5 TT38 – Sediment
  - 8.6 TT67 – Diffuse Pollution – Pictorial
  - 8.7 TT71 – Diffuse Pollution & Protecting the water environment
  - 4.8 TT82 – Wildcats
  - 4.9 Forestry & Water Scotland – Know the rules – 2<sup>nd</sup> edition
  
- 5 Diffuse Pollution Control Plan
- 6 Track Proposals – Drawings & Diagrams