## **Appendix 3 – Summary of Applicant Supporting Information**

Supplementary EIA Report - this document considers the effects of the proposed development on the social and economic environment having regard to any likely associated restrictions it may place on the future use of land. This report concludes that there would be impacts on the Carnoustie Golf Links during the construction phase with a number of holes closed on the Buddon Course. In order to minimise impacts construction period would include the programming of the installation of cable ducts in the winter months, which would allow for playing surfaces at the Buddon Course to be reinstated and available for normal play by May. The disruption is therefore expected to be temporary and to be mainly in the winter months. During the operational phase there would be no restrictions placed on the operation of the golf courses. In relation to the hosting of golf events most of the infrastructure associated with these events is located out with the cable route area and this basis there would be no restrictions placed on the hosting of major golfing events. In relation to impacts on other recreational uses restrictions would be in place during the construction phase with there being no restrictions during the operational phase. Impacts on the MOD land will occur during the construction phase, but these will be mitigated through a land agreement and during the operational phase there would be no restrictions on the land use. In respect of agricultural land uses disruption will occur during the construction phase however mitigation measures are incorporated through the CEMP and land agreements out with the planning process which results in a negligible impact. The cable is to be installed deeper than normal agricultural ploughing depths with manhole covers sited to reduce impacts and it is concluded that there would be no restrictions placed on the future use of agricultural land.

Cable Pulling Method Statement – this document has been submitted in support of discharging condition 1(b)(i) and explains the installation of the cables into the ducting. It indicates the process comprises two phases ducting the entire cable route (plough technique at Carnoustie golf course) and phase two: pulling the cable through these ducts. The phase two process involves the formation of a temporary pulling pit at specific locations along the cable route for each circuit then a winch is used to pull the cable which will generally be on a cable trailer or other fixed construction through the respective duct. Following installation of the cables the temporary joint bays will be reinstated with the proposed permanent above ground features provided at each of the joint bays.

Carnoustie Golf Course Ploughing Method Statement - this document has been provided in support of Condition 1(b)(v) and details the cable installation technique across the Barry Links. This identifies that a cable ploughing technology will be utilised it is a more efficient and minimises environmental impact in comparison to a trenching technique. The installation process involves the cutting of a narrow slit into the soil with the cables inserted into the ground by specialist machinery including a Spider Plough Unit, Tracked Winch, Smooth Wheeled Roller and lorries supplying cement bound sand. Prior to works commencing the proposed ploughing circuit will be identified and set out in conjunction with the Carnoustie Golf Links. During the installation process the plough is pulled forward by the winch at walking pace, creating a groove in the ground at the desired burial depth. The cable ducts and CBS sand are fed into the ground through the plough chute as the plough is pulled forward. Operatives are responsible for monitoring every aspect of the process at all times. No immediate reinstatement work should be required as a result of the ploughing as the groove created by the plough will be closed by a smooth wheeled roller following the convoy. After completion of the works all equipment is removed from site. A post-operation walk down will be completed to ensure no outstanding issues along the route.

Cable Route Permanent Above Ground Features – this document has been provided in support of Condition 1(b)(ii) and details the permanent above ground features that will be present once the cable has been constructed. The features that will be present along the

cable route are standard manhole covers that measure 1500mm x 1000mm and 900mm x 900mm. Cable marker posts will also be inserted into the ground at land boundaries and where the cable changes direction. These features project 578mm above ground level and have a width of 215mm. In agricultural fields timber post and rail fencing will be erected around the concrete surround of the manhole cover.

Cable Route Landscape Statement Part 1 and 2 - this document is required to satisfy the requirements of Condition 1(b) (iii) of the planning permission in principle and identifies the landscape features affected by the cable installation and sets out the landscape mitigation and reinstatement measures to be applied along the 19km onshore cable route. It indicates the majority of field boundaries along the route consist of traditional stone walls. Where these are impacted by works an experienced and approved dry stone waller will be appointed to record heights, form, alignment and detailing of each stone wall. The walls will then be dismantled carefully by hand, and stone will be stored for use in re-construction. After the cable has been laid, the stone walls will be reinstated. Where the existing wall is in poor condition the replacement wall will be constructed to an improved standard to create a continuous new wall. In relation to water crossings these will be undertaken using HDD techniques and large scale machinery will not operate within 20m of watercourses which will ensures hedgerows, trees and ecology immediately adjacent to watercourses will therefore be unaffected. Where hedgerows are crossed using open cut trenching techniques, measures will be taken to minimise vegetation removal and damage. Hedgerow sections that need to be removed will be cleared outside of the bird breeding season. Following construction, full reinstatement of all hedgerow sections will be completed. Replacement planting will comprise native hedgerow species. Any trees that are removed along the cable route will be replaced with the same species where possible. The replacement planting of trees will be as close as is possible to the original position of the tree with trees planted at a proportion of five trees to each tree removed. Ditches that are impacted during the course of the construction programme will be reinstated after the cables have been laid in order to preserve existing drainage patterns along the cable route. In relation to the MoD land ecological surveys will be undertaken and the findings of these surveys will ensure the land is reinstated to standards, condition and habitat type specified by an ecologist. Impacts on the Buddon Links Golf Course will require holes to be closed during the construction phase of this section of the cable route. Ecological surveys of the course will be undertaken, and the applicant will employ agronomist specialists to specify and oversee works to reinstate the course to a high playing standard.

Compound Phasing Plan – this document has been provided in support of Condition 1(b)(iv) and identifies the location and number of construction compounds associated with cable route development. It indicates three compounds are associated with Zone 1 and two are associated with Zone 2. It identifies the location for each compound and specifies when works to provide each are to be commenced along with a date when the compounds are to be removed by. A description of what each compound is to comprise is also provided. The main compound is located at the western end of Barry Links and accommodates the main office, personnel car park and welfare set up. All fuel, cables and other materials will be initially stored at this location. The other compounds are satellite compounds that comprise self-contained temporary welfare facility with water/ sewer tank, powered generator. This area will be used for operative welfare, storage of ducting and small material storage, plant storage

Cable Route Phasing Plan (Zone 1) – this document is required to satisfy the requirements of Condition 1(b) (v) of the planning permission in principle and breaks down the individual phases of works associated with the installation of the landfall cable between the Mean Low Water Spring Mark and Templehall, Newbigging. The phasing plan indicates that the construction of this phase of the cable route will take approximately 23 months to complete. The phases comprise the initial site enabling works; ducting installation works between each

of the joint bays; cable pulling and jointing works and the powering of each circuit. Across Carnoustie Golf Links the phasing for works over this area will take around 22 months to complete. The phases comprise the initial site enabling works; works at landfall that take place between October and March only; ducting installation works between the transition joint bay and joint bays; offshore export cable pull in; cable pulling and jointing works and the powering of each circuit.

Construction Traffic Management Routing Plan (Cable Route) - this document is required to satisfy the requirements of Condition 2(a) (i) of the planning permission in principle and describes the measures to be implemented in order to manage and minimise the impact of construction traffic related to construction of the cable route. It identifies the type and volume of vehicles to be utilised in the delivery of construction materials; provides an assessment of the suitability of the proposed vehicle routes, including assessment of bridge capacities to accommodate the type and volume of traffic to be generated by the development; identifies mitigation measures required to be undertaken to public roads to facilitate construction traffic; provides procedures for liaison with the Roads Authority including for winter maintenance and dealing with vehicle breakdowns; a dust and dirt management strategy, including sheeting and wheel cleaning prior to departure from the site; details for the erection and maintenance of warning/information signs for the duration of the works, at site accesses and crossovers on private haul roads or tracks used by construction traffic and pedestrians, cyclists or equestrians; arrangements for the monitoring, reviewing and reporting on the implementation of the approved plan; and procedures for dealing with non-compliance with the approved plan; details the likely movements of construction traffic over Barry Links level crossing. The document is accompanied by a DVD dilapidation survey of the construction routes and confirms that regular inspections during the works to identify and address any damage to the roads and monitor the effectiveness of any temporary protection measures will be made. Should any damage be identified this will be promptly addressed in consultation with the roads authority. At the end of the construction works any agreed reinstatement works will be carried out and a final DVD dilapidation survey carried out to record the successful completion of the works.

Construction Environmental Management Plan (CEMP) - this document is required to satisfy the requirements of Condition 2(a) (ii) of the planning permission in principle and outlines how the construction project will avoid, minimise or mitigate effects on the environment and surrounding area. The CEMP identifies and maps known environmental constraints that need to be taken into account during the construction of the development. Specific information is provided on the roles and responsibilities of individuals who are involved in the project and how they ensure environmental compliance will be achieved. Specific information on how pollution prevention is to be achieved is provided along with mitigation measures should an incident occur. A dust and air quality management plan will be implemented which incorporates mitigation measures to deal with dust generation related to construction operations; earthwork operations and vehicle movements. A noise and vibration management plan is incorporated to ensure compliance with permitted hours of operation; legal noise constraints; identification of noise mitigation buffers; method statements for the mitigation of construction noise and vibration are identified; a survey programme and route noise surveying at sensitive receptors and a complaint investigation and resolution procedure is identified. A soil management plan is incorporated which details how excavated materials will be dealt with. This identifies soils would be handled and stored; how contaminated soil would be dealt with; biosecurity measures to prevent cross contamination between agricultural landholdings; a reinstatement scheme for soils and landscaping. A drainage management plan is included which details how existing land drainage will be identified along with measures for their protection during construction works and reinstatement following completion of works. A site waste management plan is included which details how waste reduction is to be implemented at the site and also how this is to be monitored throughout the construction phase. A water quality monitoring plan has been undertaken and this identifies potential impacts on surface water bodies and private water supplies at risk from the proposed development. This identifies monitoring and reporting procedures for the assessment of water quality. Ecology protection will be undertaken through the appointment of a qualified Ecological Clerk of Works (ECoW) for the duration of the construction, 6 months prior to the commencement of the development pre-construction surveys will be undertaken for all protected species, bats and birds, non-native species, and protected habitats (including identification of waterbodies habitats that may provide suitable fish spawning). The ECoW will advise appointed contractors in avoiding, minimising and mitigating adverse effects and on all such matters of species and habitat protections and on compliance to this CEMP. In relation to archaeological protection a Written Scheme of Investigation (WSI), will be prepared to satisfy condition 11 of the PPP and the works will be undertaken in accordance with this document. Tree works will be undertaken in accordance with a tree protection plan which will identify trees that may require root protection or translocation, prior to the start of construction. In relation to land use and public access fencing will be erected to demark working areas and where required alternative routes will be provided where there is the potential for pedestrian and construction traffic to share routes. Provision is also made for procedures for dealing with environmental incident and emergency responses.

**Dust and Air Quality Management Plan** – this document forms part of the CEMP and outlines how dust and air quality will be managed throughout the construction of the development. Detailed mitigation measures are proposed which include daily review of weather forecasts and consideration for rescheduling works; provision of wheel washing facilities; dust suppression; locate machinery and dust causing activities away from receptors as far as possible; incorporate screening where possible; undertake regular site inspections; use gas-powered generators rather than diesel; ensure sand and other aggregates are stored in bunded areas and are not allowed to dry out or are sheeted; ensure fine powdered materials are delivered in enclosed tankers and stored in secured silos; plant and equipment will be inspected on a weekly basis to ensure they are operating correctly. Daily on-site and off-site visual inspections in relation to dust and air quality and the appropriateness of the mitigation measures employed will be undertaken with the results recorded and made available for inspection if requested. A complaint handling process is also incorporated into the document.

**Noise and Vibration Management Plan** – this document forms part of the CEMP and details the noise and vibration impacts associated with the construction of the development on sensitive receptors and identifies mitigation measures that are proposed to reduce impacts. It identifies the relevant conditions attached to 16/00520/EIAN and confirms that works will be undertaken in compliance with the planning conditions. Where management and mitigation is required in relation to noise it indicates that contractors will apply best practicable measures to all work phases across the route and conformity with BS 5228 – 1 and BS 5228 – 2: 2009 + A1:2014 Code of Practice for Noise and Vibration Control on Construction on Open Sites will be achieved. In relation to vibration management and mitigation it is proposed to locate haul roads and land occupation is away from existing infrastructure; ensure that the risk of damage to neighbouring properties is effectively managed and ensure that routine compliance monitoring is undertaken throughout the project, by appropriately trained personnel. The plan also incorporates noise and vibration monitoring procedures and complaint investigation and resolution procedures.

**Pre and Post Construction Drainage Report** – this document forms part of the CEMP and assesses the impact of the works to install the underground cable on existing land drainage systems and naturally occurring water bodies or courses. To keep the working area as dry as possible it is necessary to divert any potential drainage or surface water away from the working corridor. To achieve this temporary change will be required to existing land drainage systems. The mitigation measures proposed include excavation of new ditches; excavation

of cut off drain ditches; incorporation of silt fencing; placement of straw bales some of which will be wrapped in terram; placement of oil brooms; formation of temporary settlement lagoons and swales; formation of stone weirs and check dams. The document incorporates a scheme for reinstatement following completion of the cable route construction (or phase thereof) including reinstatement of agricultural land, drainage systems, private water supplies and landscape resources. Following the completion of construction all field drains and existing water courses will be restored to their pre-construction condition. Full details of the reinstatement works including the drainage maintenance register, drainage map and reinstatement details will be provided to the Planning Authority.

**Electromagnetic Field Report** – this document is required to satisfy the requirements of Condition 2(a) (iii) of the planning permission in principle and demonstrates that the scheme has been designed to comply with Electro Magnetic Field (EMF) emission limits set by the National Radiological Protection Board (NRPB). This document advises that the exposure level introduced by the installation of HV cable will remain sensibly below the values recommended EMF emissions limits and should therefore not be considered as a threat for public health.

Access Management Plan – this document is required to satisfy the requirements of Condition 2(c) (i) of the planning permission in principle and identifies the measures to be implemented in order to manage and minimise the impact on access during the construction of the onshore cable. This identifies 7 Core Paths that would be affected by the works – 168, 169, 170, 171, 186, 187 and 190 along with impacts on other paths and tracks where access rights apply and proposes mitigation to deal with the respective impacts. The impacts on each path varies with some requiring temporary closures, diversions and traffic management where others would not have to be closed or diverted. Mitigation measures include preconstruction community engagement; appointment of a community liaison officer who is responsible for communicating with Angus Council; placement of visible notices; post updates on applicant's website; engage with affected land owners to agree on the most practical methods of managing access during construction works and erection of safety fencing to avoid conflicts occurring.

Landfall HDD Construction Methodology Statement – this document has been provided to satisfy the requirements of Condition 2(c)(ii) and explains the concept design and method proposed to install the ducting at the landfall location. It explains that the HDD profile and proposed length of drill has been optimised to provide the required operational and logistical solution based on the known site conditions and limitations. The profile (Appendix A) has been optimised to avoid disruption to the coastal defence system and to avoid the existing large Scottish Water GRP rising main sewer which is routed along the boundary of the MOD Barry Buddon Training Area and MOD Sea Danger Area. Initial surveys have been undertaken to inform the design to date however further surveys are required to validate and support the detailed design process, to ensure safe delivery of the works, and to record baseline land conditions prior to construction. To enable the HDD construction a levelled site working area will be formed by altering the existing land form along with improvements to the existing access track. A site compound will be formed comprising construction machinery/equipment; mud pit; temporary buildings and parking areas. The installation of the ducts involves the drilling of a pilot hole from onshore to offshore without exiting the seabed; this hole is re-drilled three times to increase its size; a reception pit is created at the offshore reception point; polyethylene high density liner pipe is floated in connected to the drill pipe and pulled from the shore end through the pre-drilled bore into position (this process is repeated for circuits 2 and 3); trenches are then excavated from the HDD entry points to the transition joint bay and ducts installed and backfilled then the HDD construction equipment is demobilised from the site. Cables will then be installed in the ducts by pulling through the ducts from the delivery vessel to the transition jointing bay. Monitoring points will be set up at random locations around the rock armour to identify if any movement arises during the works

liaison and a remediation plan would be agreed with Angus Council. A post completion monitoring scheme is also incorporated into the method statement.

**Landfall Rock Armour Survey Report** – this document has been provided to satisfy the requirements of Condition 2(c)(ii) and comprises a survey of the section of rock armour affected by the development. This consists of a photographic survey and measurements of the individual rock armour units and a topographic survey from May 2018 which provides a baseline assessment.

Beach Lowering Assessment - this document has been provided to assess the estimated beach lowering rates at the landfall site at Carnoustie. The assessment has been developed to help understand the requirements for the depth of cable burial at the landfall site, to reduce the risk of erosion exposing the cables in the future. The assessment comprises a study to investigate the potential rate of change to the beach profile, assess the potential risk of exposure of the High Density Polyethylene (HDPE) pipes in which the cables are installed and make recommendations with regards to any measures that could be implemented to avoid future exposure. The assessment recommends that a topographical survey be carried out to identify and map the contours of the seabed, beach and rock revetment prior to construction. Following reinstatement, a repeat topographical survey should be carried out to confirm that the original profiles and bathymetry have been restored; the beach and adjoining sea bed levels along the line of the proposed cable landfall trench should be monitored on an annual basis during the operation of the projects, to ensure that there is adequate cover to the HDPE pipes to prevent the risk of pipe exposure; in the event that the beach levels drop faster than anticipated and there is a risk that the HDPE pipes will be exposed, then the HDPE pipes should be reburied; due to potential long term affects to coastal processes and sediment transport on the beach, reburial should be preferred to rock armour protection and weighted collars or other means should be used to prevent the risk of the HDPE pipes being floated up to the surface of the beach due to storm wave induced liquefication.

**PPP Condition Tracker** – this provides a background to the history of the proposal and describes the approach taken provides details of the information submitted and the specific matters within Conditions 1 and 2 of planning permission 16/00520/EIAN to which it relates. A detail of the development parameters for the final detailed design of the cable route and associated temporary and permanent ancillary works are provided along with specific details that make up the proposal (the specific route, depth, ducting, jointing bays and number of cables and the siting, design and external appearance of other permanent above ground feature associated with the cable route).

Flood Risk Mitigation Plan – this document has been prepared to assess the risk of flooding in each of the construction compound locations and also details control measures which will be taken to ensure that the potential for flooding is minimised to avoid the potential risk of damage and/or contamination. The document concludes that all the proposed construction compounds are positioned away from any existing water courses and are therefore at a low risk of flooding. Each of the compounds are to be constructed from layers of clean stone and geotextile as these materials are impermeable. All surface water diverted from the compound areas via cut off drains will be passed through silt fencing to ensure no clean water is contaminated by any silt build up or construction debris, velocities of flows will be controlled via check dams.

**Habitat Management Plan** – this document has been submitted to discharge condition 14 of planning application 16/00520/EIAN. The document provides information on Habitat Restoration and Enhancement for the onshore transmission works. The HMP sets out objectives to reinstate habitats for the onshore elements of the development, to achieve an increase in biodiversity value. This will be achieved through a combination of measures,

including - reinstatement of habitats; hedgerow and tree planting; translocation of species; biodiversity enhancement; and control of invasive species. Post construction a programme of vegetation monitoring will be implemented which includes monitoring of translocated plant populations or any planting carried out to enhance biodiversity with new tree and hedgerow planting also monitored for a period of two years.