



To: **Committee of the Whole**

Agenda Section: Corporate Services
Division: Engineering, Planning and Environment
Department: Solid Waste Management

Item Number: CCW - 16-376

Meeting Date: November 8, 2016

Subject: Environmental Resource Recovery Centre – Project Update

Recommendation

That Item CCW 16-376, dated November 8, 2016, regarding Environmental Resource Recovery Centre – Project Update, be received.

Executive Summary

Further to *Item CCW 16-301 – Solid Waste Management Infrastructure Projects – Project Update* (September 13, 2016), various studies at 2976 Horseshoe Valley Road West, Springwater, are being finalized in preparation for submission of Planning applications later this month. The purpose of this item is to provide:

- a summary of additional archaeological work undertaken at 2976 Horseshoe Valley Road West, Springwater;
- details regarding the conceptual site plan (facility footprint and access location); and
- an updated Development Strategy timeline, including timing for submission of Planning applications.

Additional archaeological work was conducted this fall to delineate the pioneer homestead area identified in the initial archaeological assessment. With fieldwork complete, cataloguing of artifacts and reporting is now being undertaken. Further to this, the GHD consulting team has been working with the archaeological consultant to determine how best to move forward – seeking to place the facility footprint in the optimal location on the property and, from that, determine the implications on the archaeological find and mitigation requirements.

The location of the facility footprint and other site features (such as the access road) will consider findings from all studies – details such as wetland areas delineated in the Environmental Impact Study (EIS) and the best location for access based on the Traffic Impact Study (TIS). In addition, it will incorporate all legislative requirements (required setbacks, for example), best practices, and initial feedback received from neighbouring landowners.

Considering all factors, it is anticipated that the footprint will be shifted slightly to the southeast from the preliminary location determined in the siting studies. GHD has determined that this is the best location for the facility and will allow for adequate buffers from the archaeological find (conserved in situ) and offer additional advantages such as increased buffer distances to wetland areas noted in the EIS and to the western property boundary. Justification for the relocation – including details of odour and noise modelling and mitigation measures – will be outlined further in forthcoming technical reports.

As the additional archaeological work has delayed submission of the Planning applications, a revised Development Strategy timeline is presented in this Item. The impact on the project will be a delay of approximately 80 days – pushing the anticipated commissioning of the Materials Management Facility (MMF) and Organics Processing Facility (OPF) to June 2019 and June 2021, respectively.

Background/Analysis/Options

The purpose of this Item is to provide an update on development of the Environmental Resource Recovery Centre (ERRC) – including information on further archaeological work that has been undertaken on the property, details on the conceptual site plan currently being prepared for submission with Planning applications, and presentation of an updated Development Strategy timeline.

Previous staff reports regarding development of these facilities, consultants' technical reports, communication material from public information and consultation sessions, and minutes of Community Engagement Committee meetings can be found at www.simcoe.ca/errc.

Preparation for Planning Applications

As outlined in *Item CCW 16-301 – Solid Waste Management Infrastructure Projects – Project Update* (September 13, 2016), amendments to the County Official Plan as well as the Township of Springwater Official Plan and Zoning By-law are required for 2976 Horseshoe Valley Road West, Springwater. Further to this, the following studies are being finalized for submission and review by County Planning staff and the Township of Springwater:

- Environmental Impact Study (EIS)
- Geotechnical/Hydrogeological Study
- Traffic Impact Study (TIS)
- Archaeological Assessment/Cultural Heritage Resource Assessment
- Agricultural Impact Assessment/Soil Quality Testing
- Functional Servicing Report
- Noise Impact Study
- Odour Impact Assessment
- Site Plan
- Stormwater Management Study
- Hazard Land Assessment
- Planning Justification Report

Note that consultation with the Ministry of Municipal Affairs (MMA), the Ministry of Natural Resources and Forestry (MNR), Nottawasaga Valley Conservation Authority (NVCA), and Township of Springwater and County Planning staff has been on-going and will continue as reports are finalized and the Planning applications are furthered.

Archaeological Assessment Update

As outlined in Item CCW 16-301, a preliminary update in late August from the County's archaeological consultant, ASI, indicated that the initial Stage 1/Stage 2 assessment had identified one historical Euro-Canadian archaeological site on the area designated for the facility footprint. Further information since received from ASI has indicated that the artifacts collected are typical of an 1840 –1880 southern Ontario Euro-Canadian assemblage and have cultural heritage value. The find, located on the footprint's northern boundary, has the signature of a farmstead occupation, given that the artifacts recovered were mainly household objects (i.e. ceramics) or associated with historical structures (nails) or barnyard activities (harness buckles). Further to this, a Stage 3 Archaeological Assessment was required to determine the nature and the extent of the identified features, assess if the site has further cultural heritage value or interest, and to determine requirements for Stage 4 mitigation.

Stage 3 work was undertaken in mid-September, with 32 test pits excavated in the area. Approximately 1,740 Euro-Canadian historical artifacts were recovered and initial information from ASI has indicated that these date back to 1830 to 1870. Although the Stage 3 report will be submitted to the County by early November, discussion with ASI has indicated that some form of Stage 4 mitigation will be required. As outlined by the Ontario Ministry of Tourism, Culture and Sport (see link provided in Reference Documents), Stage 4 involves the mitigation of development impacts and *"conservation can involve putting long-term protection measures in place around an archaeological site to protect it intact. The site is then avoided while development proceeds around it. This is called protection 'in situ' and is always the preferred option for mitigation of development impacts to a site. If protection is not viable, mitigation can involve documenting and removing an archaeological site, through excavation, before development takes place."*

Further to this, the GHD consulting team (including their ecologist, hydrogeologist, and geotechnical engineers) have been working with ASI to determine how best to proceed – seeking to place the facility footprint in the optimal location on the property and, from that, determine the implications on the archaeological find and mitigation requirements.

Conceptual Site Plan

As stated above, determining the best location of the facility footprint and access road for the conceptual site plan will be a concerted effort and apply findings from the various studies which have been undertaken. It is an iterative process which will consider environmental conditions (such as wetland areas) outlined in the Environmental Impact Study (EIS), location of the archaeological find, topography, findings from the Traffic Impact Study (TIS), legislative requirements (including required setbacks), and best practices. In addition, it is noted that neighbouring landowners along the western property boundary had indicated some concern at the meeting held on September 8, 2016 about on-site buffer distances and the impact, for example, on visual screening (outlined in the neighbouring landowner meeting notes, *Item CCW 16-357 – Organics Processing Facility – Recommendation for Project Delivery Method*, October 25, 2016, Schedule 3).

Although the location of the footprint determined in the previous siting studies would meet all requirements, Stage 4 excavation of the archaeological site would be required. Again, although this would be a viable option, protection in situ is the preferred alternative. In consideration of this and feedback received from neighbouring landowners, GHD has revised the location of the footprint – an anticipated shift of approximately 80 m south, 70 m east. The revised footprint location would allow adequate buffers from the archaeological find (conserved in situ) and offer additional advantages such as increased buffer distances to wetland areas noted in the EIS and to

the western property boundary. It is also noted that the access location has been modified to consider the TIS and environmental conditions at the southeast corner of the property.

Although buffer distance to the closest sensitive receptor located east of the site will be decreased, there is the potential to locate buildings within the footprint to maintain significant separation distance, keeping a buffer of approximately 350 to 450 m. For clarity, it should be noted that there are no specific requirements for buffer distances to this type of facility. Site-specific studies are undertaken, however, to determine impacts (such as noise and odour) and, if required, appropriate mitigation measures. Determining the site layout (and subsequent buffer distances), technology selection, and design are all considered to be important factors in mitigation of impacts. Justification for the relocation – including details of odour and noise modelling and mitigation measures – will be outlined further in forthcoming technical reports to be submitted with the Planning applications.

The GHD team has reviewed all studies to determine the implications of revising the footprint, with the scope of three studies being expanded to consider the revised footprint and access locations. ASI completed additional Stage 2 archaeological work in October, at a cost of \$15,733. Also, additional boreholes and/or monitoring wells (and potentiality subsequent groundwater/surface water monitoring locations) may be required in consideration of the revised footprint. GHD is currently assessing the need to expand the subsurface investigation(s). Additional details will be provided in forthcoming hydrogeological/geotechnical studies as this work could potentially be undertaken in consultation with the Ministry of the Environment and Climate Change (MOECC) as the Environmental Compliance Approval (ECA) application is furthered.

Going forward, GHD will continue to refine the conceptual site plan in preparation for its submission with the Planning applications. With further project development, including design of the MMF and selection of OPF technology, the consulting team will be working in consultation with the County and Township of Springwater Planning staff and approval agencies to finalize the facility layout and site plan.

Revised Development Strategy Timeline

As indicated in Item CCW 16-301, the archaeological find has delayed submission of the Planning applications. The impact of the Stage 3 investigation, further studies undertaken to support relocation of the footprint, and allotting the Township of Springwater 30 days to review the application for completeness, is expected to be a delay of approximately 80 days. GHD has submitted a revised Development Strategy timeline (letter and Gantt chart from GHD Limited, October 24, 2016) outlining the timing for Planning and Environmental Compliance Approval (ECA) approvals and procurement, design, and construction of the MMF and OPF. This has been provided for reference as Schedule 1 and, in addition, presented graphically as Schedule 2. It is noted that this timeline is expected to be a living document and will likely evolve over time as various milestones are completed. In addition, timing of key milestones is contingent on obtaining both the Planning and ECA approvals within the timeframe outlined.

Highlights from the revised timeline include:

- November 18, 2016 - submission of Planning applications
- April 2017 - presentation of preliminary business case – organics management options
- November to June 2017 - Planning application review period
- May 2018 - presentation of final business case – Organics Processing Facility
- June 2019 - commissioning of MMF
- June 2021- commissioning of OPF

Next Steps

As outlined above, the Planning process will be initiated on November 18 with submission of planning applications. Work will continue on the preliminary business case for organics management options – including retaining a consultant to undertake the business case and releasing Request for Information (RFI) later this fall.

Financial and Resource Implications

To date, approximately \$195,000 and \$180,000 has been spent on development of the Organics Processing Facility and the Materials Management Facility projects, respectively (to end of September 2016). Remaining 2016 expenses relating to project development are estimated to be \$750,000 (\$130,000 allocated to the OPF and \$700,000 allocated to the MMF). Initial funding for these two projects was included in the 2014 budget and transferred to reserve.

Relationship to Corporate Strategic Plan

In regard to long-term processing of organics, the Solid Waste Management Strategy (Strategy) recommended development of a centralized composting facility within the County. Public input indicated support for in-County processing as well as for the addition of pet waste and diapers to the program. This item also supports the Strategy recommendation to develop transfer capacity infrastructure to manage garbage and recyclables generated within the County.

Reference Documents

- Item CCW 16-165 (May 24, 2016) Solid Waste Management Infrastructure Projects – Development Strategy
- Item CCW 16-301 (September 13, 2016) Solid Waste Management Infrastructure Projects – Project Update
- Item CCW 16-357 (October 25, 2016) Organics Processing Facility – Recommendation for Project Delivery Method
- Ontario Ministry of Tourism, Culture and Sport – Archaeology Programs Unit, Archaeological assessments
http://www.mtc.gov.on.ca/en/archaeology/archaeology_assessments.shtml#a7

Attachments

Schedule 1 – updated Development Strategy – Gantt chart (GHD Limited, October 24, 2016)
Schedule 2 – updated Development Strategy – project timeline



for CCW 16-376
Schedule 1.pdf



for CCW 16-376
Schedule 2.pdf

Prepared By: Stephanie Mack, P.Eng., Special Projects Supervisor

Approvals:

Rob McCullough, Director, Solid Waste Management
Debbie Korolnek, P.Eng., General Manager, EPE
Trevor Wilcox, General Manager, Corporate Performance
Mark Aitken, Chief Administrative Officer

October 25, 2016
October 25, 2016
November 1, 2016
November 1, 2016



October 24, 2016

Reference No. 086822

Stephanie Mack
Special Projects Supervisor
County of Simcoe, Solid Waste Management
1110 Highway 26
Midhurst, ON
L0L 1X0

Dear Ms. Mack:

**Re: County of Simcoe – Environmental Resource Recovery Centre
Revised Development Strategy Timeline**

Please refer to the attached Development Strategy Timeline for the proposed Environmental Resource Recovery Centre (ERRC) at 2976 Horseshoe Valley Road West (Site). As a result of the additional archaeological investigations carried out at the Site, the timeline has been revised to reflect submission of the Official Plan Amendment and Zoning By-Law Amendment applications to Springwater Township on November 18, 2016.

Should you have any questions, please do not hesitate to contact me.

Sincerely,

GHD

A handwritten signature in black ink, appearing to read "Brian Dermody", with a stylized flourish at the end.

Brian Dermody, P. Eng.

BD/sw/14

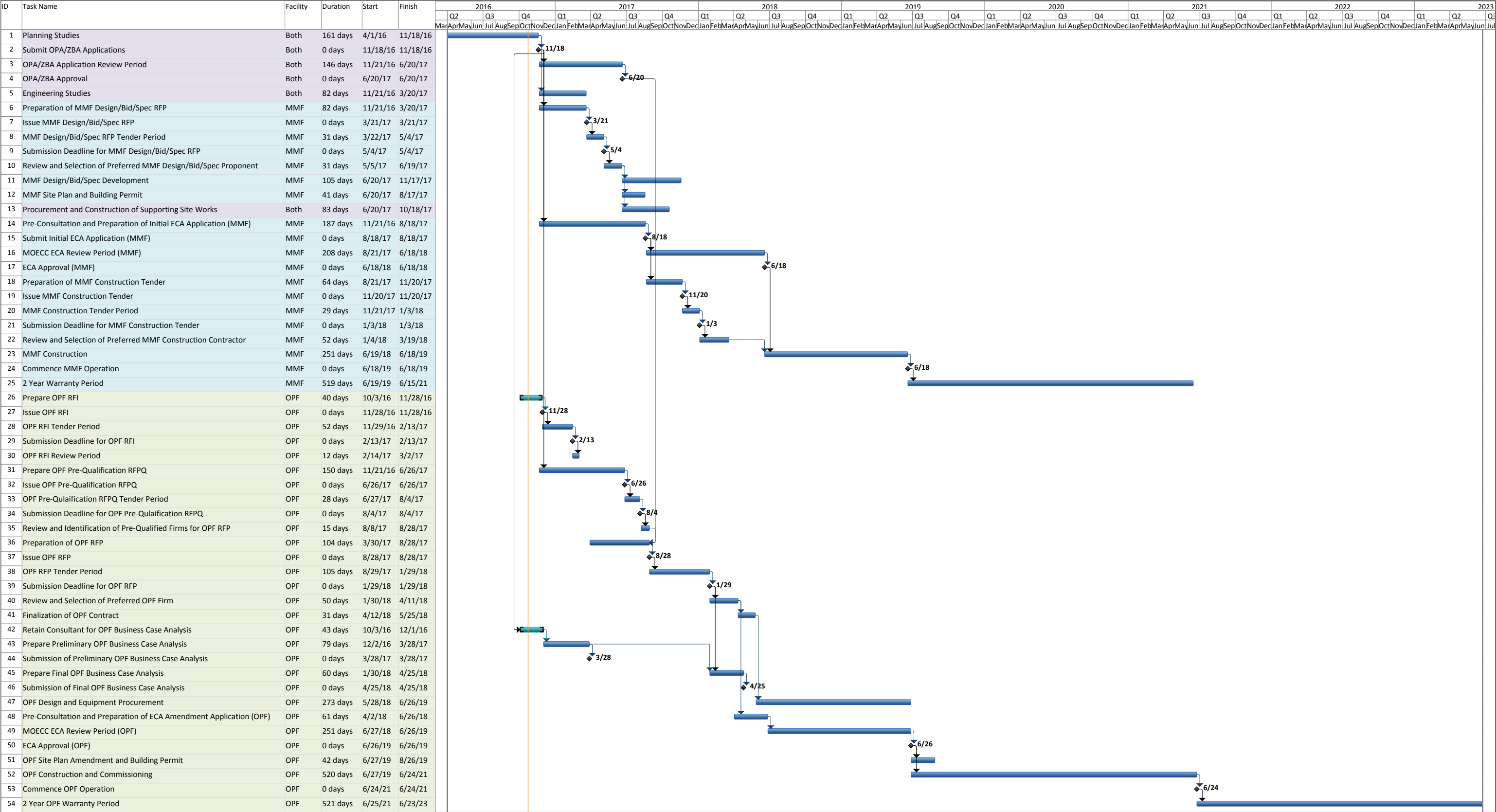
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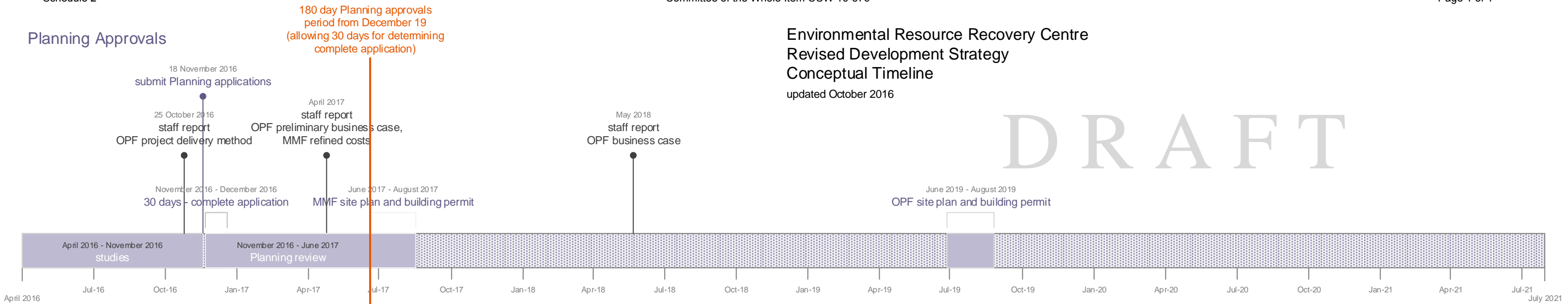
Attachment 1



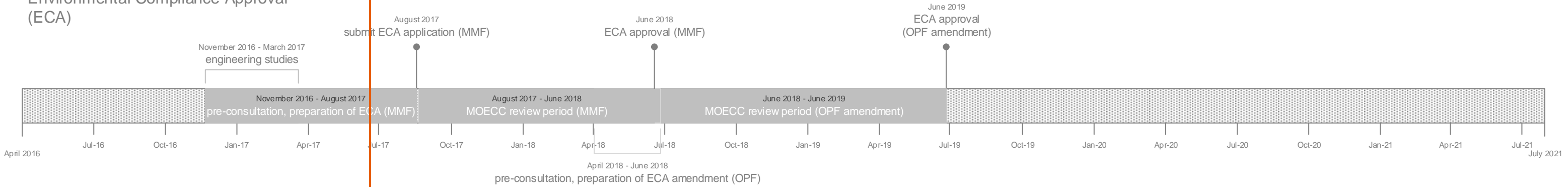
Environmental Resource Recovery Centre
Revised Development Strategy Timeline - October 2016



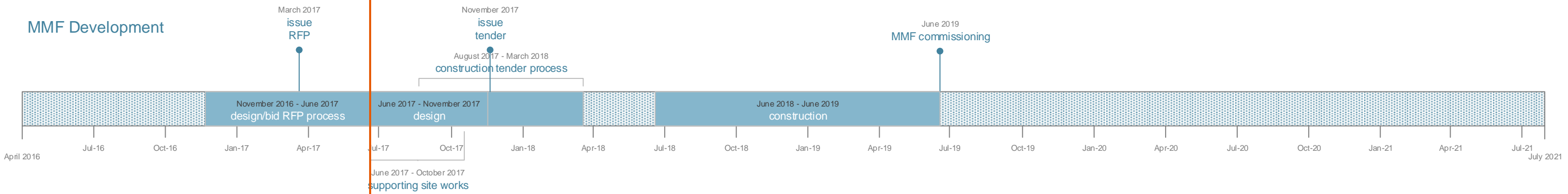
Planning Approvals



Environmental Compliance Approval (ECA)



MMF Development



OPF Development



Note:
Timing of key milestones is contingent on obtaining both the Planning and ECA approvals within the timeframe outlined.