

Subject: Secondary and Emergency Access Roads**APPROVALS:**

Mazhar Hajhossein, Director
Robert Billard, Executive Director
Dale Bendfeld, Acting Chief Administrative Officer

Recommendation(s):

That it be recommended that Council approve a 2016 capital budget amendment to advance the preliminary design of emergency access roads for the communities of Abasand, Beacon Hill and Wood Buffalo, as set out in Attachment 3.

Summary:

On June 28, 2016, Council passed the following resolution regarding Service Access Roads:
“Moved that Administration be directed to:

- (a) Explore the possibility of opening new service access roads for the communities of Abasand, Beacon Hill, Waterways and Wood Buffalo, including the necessary permits and approvals for such roads and;
- (b) Include all costs associated with opening the service access roads referenced in (a) above in its request to the Government of Alberta for funding to compensate for extraordinary costs arising from the wildfires.”

Administration studied the feasibility of providing secondary and emergency access roads for the communities that were directly impacted by the wildfire, particularly Abasand, Beacon Hill, Waterways and Wood Buffalo. Administration briefed Council on the study findings on August 16, 2016. Based on feedback from members of Council, this Council Report summarizes the main findings and challenges in the study, and recommends a phased approach to implement a roadway access plan in these neighborhoods.

Background:

Administration explored multiple access points that could serve as secondary and emergency roads for the impacted communities of Abasand, Beacon Hill, Waterways and Wood Buffalo. The proposed six (6) access roads (A to F), listed below and shown on Attachment 1, represent feasible connections between these neighborhoods and the roadway network in the urban area. Attachment 1 also shows alternative connections (G to I) that Administration explored but were found impractical to pursue.

Abasand and Beacon Hill Secondary Access Road

The study explored the feasibility to construct an eight (8.0) meter wide gravel road west of Abasand, extending south in between the Horse and Hangingstone Rivers along the utility corridor and connecting with the landfill site. A roadway segment from Beacon Hill will connect to this road starting south of the community, extending westward and crossing the Hangingstone River over a bailey bridge. In the future, there may be an option to connect this road with Highway 63 at Saprae Creek Trail intersection, see Attachment 1 - Abasand/Beacon Hill, Connection A.

Abasand Emergency Egress Road

This access point explores the feasibility to upgrade an existing three (3.0) meter paved trail to a five (5.0) meter wide road for vehicular egress from the top of Abasand at Abbottswood Drive down to Abasand Drive (just north of Grayling Terrace). There is also the potential to connect this road with Highway 63 southbound traffic only, see Attachment 1 - Abasand, Connection B.

Beacon Hill Secondary Access Road

This alignment includes a new eight (8.0) meter wide gravel road connecting the existing service road west of Highway 63 to the first intersection in the Beacon Hill community (Beacon Hill Drive at Beacon Hill Drive), see Attachment 1 - Beacon Hill, Connection C.

Beacon Hill Emergency Egress Road

This access point includes an emergency five (5.0) meter wide gravel egress route that would enable traffic to exit Beacon Hill along the east side of the community (Beacon Hill Drive), and to connect with Highway 63 southbound, see Attachment 1 – Beacon Hill, Connection D.

Wood Buffalo Emergency Egress Road

This egress road would provide a five (5.0) meter paved connection between Wood Buffalo and Thickwood by way of upgrading an existing three (3.0) meter wide paved trail between Woodward Lane and Wolverine Drive, see Attachment 1 - Wood Buffalo, Connection E

Waterways/Lower Townsite Emergency Access (Saline Creek Parkway)

This access route would include an eight (8.0) meter wide gravel road which would connect Waterways with Saline Creek Parkway. The alignment would start at the end of the existing Saline Creek Parkway by the Airport and it would run perpendicular to the Clearwater Valley slope on top of Saline Creek Plateau. It would descend the slope approximately 90 meters and connect with the existing Saline Creek Parkway at Waterways. The Parkway will provide an alternate route to Highway 63 between the Athabasca Bridge and Saprae Creek Trail; see Attachment 1 - Waterways, Connection F.

Potential challenges for Proposed Connections A to F:

The potential challenges associated with some of the roadway connections include river crossings, geotechnical challenges, environmental considerations, approval from Alberta Transportation to connect to Highway 63 and land ownership issues among others. The emergency access roads consist of short segments that could be completed in one construction season, pending on all necessary permit approvals. However, Abasand/Beacon Hill Access Road, Connection A, and Saline Creek Parkway, Connection F, would take longer to complete depending on found challenges and availability of funds.

Alternative connections (G to I):

The study also considered other alternate connections such as:

- A looped connection from Abasand to incorporate the proposed Riverbend Point Subdivision, see Attachment 1 - Abasand/Beacon Hill, Alternative Connection G.
- An alternative to the Saline Creek Parkway Connection that would utilize the existing trail that follows the old Cliff Avenue Road, see Attachment 1 – Waterways, Alternative Connection H.
- Upgrading the existing trail south of Wood Buffalo between Real Martin Drive and Signal Road to provide emergency egress, see Attachment 1 - Wood Buffalo, Alternative Connection I.

These access points were found impractical to pursue based on costs, suitability, timing, functionality, and other potential challenges such as safety and environmental considerations. Therefore, they were not included in Attachment 2, estimated cost and schedule.

Budget/Financial Implications:

The costs and schedule of proposed feasible roadway connections (A to F), including estimated construction duration are presented in Attachment 2. The costs in Attachment 2 are preliminary and could vary significantly as the predesign and detailed design progresses. A full geotechnical study is needed to determine detailed estimated costs.

The Capital amendment for 2016 is presented in Attachment 3. This includes Predesign budget request for Connections (B to E) for a total of \$100,000. The design and construction budget will be presented as part of the 2017 capital budget approval process. The predesign, design and construction for Connections A and C are to be decided later.

One of the main principles of the Disaster Recovery Program (DRP) is to repair, rebuild, and restore public works and essential community services to their pre-disaster functional capabilities. Since the 2016 wildfire, the idea of providing alternate routes, secondary and emergency access roads became a consideration for the communities in the urban area. Administration would pursue a funding request under the DRP guidelines or any other available grant funding.

Rationale for Recommendation(s):

The new roadway alignments will provide the communities with alternate and secondary routes during emergencies. Some of these alignments will also help in the demolition/rebuild of the communities, as they will separate the construction traffic from the residential traffic in certain areas, pending timely completion.

The project implementation strategy through a phased approach includes the following phases:

- Phase 1 – Predesign for B, C, D and E, in 2016
- Phase 2 – Design for connections B, D, E, and F, in 2017

- Phase 3 – Construction for connections B, D, E, in 2017, and F in 2018
- Phase 4 – Predesign for A, TBD
- Phase 5– Design for connections A & C, TBD
- Phase 6 – Construction for connections A & C, TBD

Strategic Plan Linkages:

Pillar 1 – Building Responsible Government

Pillar 2 – Building Balanced Regional Services

Pillar 3 – Building a Vibrant Economy Together

Pillar 4 – Building an Effective Land Strategy

Pillar 5 – Building a Reliable Transportation System

Attachment(s):

1. Secondary and Emergency Access Road (Connections A to I)
2. Estimated Costs and Schedule (Connections A to F)
3. Capital Budget Amendment for 2016 Predesign