MGB FILE NO.	17/IMD-003				
IN THE MATTER OF	AN INTERMUNICIPAL DISPUTE FILED PURSUANT TO SECTION 690 OF THE MUNICIPAL GOVERNMENT ACT, R.S.A. 2000 CHAPTER M-26 WITH RESPECT TO ROCKY VIEW COUNTY BYLAW NO. C-7700-2017, OMNI AREA STRUCTURE PLAN				
INITIATING MUNICIPALITY	CITY OF CALGARY				
RESPONDENT MUNICIPALITY	ROCKY VIEW COUNTY				
DOCUMENT	CITY OF CALGARY EVIDENCE REBUTTAL TO ROCKY VIEW COUNTY SUBMISSIONS				
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#### CITY OF CALGARY TRANSPORTATION REBUTTAL

#### INTRODUCTION

- 1. Rocky View County submitted materials in an attempt to show that the City's concerns regarding development in the Omni ASP area have; (i) been addressed, (ii) that the City's concerns are based on overestimating traffic impacts, or (iii) underestimate build out rates of development that do not typically occur in the County. After reviewing these materials, the City still contends that the build out of the Omni ASP will detrimentally affect The City of Calgary's Transportation Network.
- 2. The City utilized an engineering consultant, CIMA+, to draft a response letter entitled "Response to Rocky View County July 6, 2018 Submission" dated July 16, 2018 which rebuts many of the County's comments regarding the original CIMA+ report. In additon, the County alleges that the original study was flawed and overestimated traffic impacts and as such, that there were no transportation impacts. In addition, the County alleges that and specifically identifies the significant reductions to Omni and Conrich ASP trip generation and related impacts on east west streets connecting to the City (tables 1 and 2). The CIMA+ response letter clearly shows that even using County reduced suggested land uses and trip generation rates, significant congestion will be generated and significant transportation infrastructure will still be required to mitigate the traffic impacts of the build out of the Omni ASP. The City of Calgary reviewed the CIMA+ response letter, methodologies and conclusions and agrees with the findings. The City of Calgary further confirms that the letter was completed by qualified professional transportation engineers in Alberta, and that all methodology and analysis follow transportation industry standards to identify transportation impact of development.

"Response to Rocky View County July 6, 2018 Submission" dated July 16, 2018 ("CIMA+ Response Letter") [TAB 1]

- 3. It is clear to the City that development of the ASP lands will result in usage of City transportation systems beyond the capacity of the system without any practical or current mitigation commitments from Rocky View County. The detriment to the City is reasonably likely to occur and to have a significant impact on the City. There are three main areas of Transportation-related detriment:
- Failure to mitigate traffic impacts of the Omni ASP on City of Calgary
  transportation systems: ASP-generated traffic uses will still strip the capacity of the
  City's transportation system without any commitment on the part of the County to
  mitigate Omni ASP traffic issues. Even analyzing County suggested land use types and
  trip generation rates yields severe congestion on the City mobility network and causes
  the need for large pieces of expensive transportation infrastructure to be built well in
  advance of City anticipated timing to mitigate the impacts of the Omni development.
- Failure to mitigate significant City-funded capital costs of transportation
  infrastructure required to support the Omni ASP: the significant traffic generated by
  development contemplated in the ASP will compel the City of Calgary to fund significant
  capital costs of transportation infrastructure to support the Omni ASP without any
  practical commitment on the part of the County to contribute to the funding or
  construction of the required infrastructure. The majority of the infrastructure needed is
  not contained within the County's existing or draft offsite levy bylaws, there has been no

commitment from any Omni ASP landowners to fund any of the infrastructure and so it is likely these large costs will fall back on the City.

Failure to mitigate traffic safety issues: traffic generated by development
contemplated in the ASP has the potential to lead to significant congestion and
potentially a large increase in motor vehicle incidents, which will result in the reduction of
traffic safety on City transportation systems without any commitment on the part of the
County to mitigate ASP-related traffic safety issues.

### 1.1 CITY RESPONSE TO COUNTY'S SUMMARY OF TRANSPORTATION STUDIES PREPARED FOR OMNI AND CONRICH DEVELOPMENT

- 4. The County provided multiple technical studies that were needed to ensure that the types of development proposed in the Omni ASP and nearby Conrich ASP could be accommodated with an efficient future road network. Each study is responded to in the following sections and City concerns and inconsistencies between each is identified.
- 5. The City of Calgary does not agree with the County Transportation Response page 6, paragraph 22, "that the results of the Conrich Network Analysis show that the future daily traffic volumes generated at full build out of the Conrich ASP can be accommodated as development proceeds". The City's review of the Conrich Area Network Study was one of the primary reasons behind the City of Calgary Appeal of the Conrich ASP. Trip generating potential and potential traffic impacts on the City mobility network and potential large infrastructure costs were a main concern. This study identified the true impact of the build out of the Conrich ASP and omitted analyzing the impacts of City streets and intersections. As identified in the original CIMA+ study, the traffic impacts of the Conrich ASP require many large potentially City funded transportation infrastructure projects in the \$100's of millions range to be constructed, and no commitment has been provided by the County to fund or mitigate these traffic impacts or improvements.
- 6. As a part of the Conrich ASP settlement between the City and County, the Municipal Government Board directed that the City and County undertake the 84 Street NE Study. It should be noted that the study has not yet been completed, as evidenced in the City letter to the County of March 7, 2018 stating that the study was sufficiently complete for the purpose of the City's review of the East Stoney Outline Plan but that much work still needed to be done and follow up discussions between the County and City and landowner partners would need to happen prior to the City approving the study. The City was surprised that Watt Consulting had updated recommendations of the study without further discussions with the City when it was sent a copy in June 2018. No follow-up on the 84 Street NE study has been provided by the County either. As the study and recommendations are not finalized, important details of street cross-section, intersection improvements are still to be finalized between the City, the County and landowner partners. The City is concerned that the County is providing an incomplete study to support the Omni ASP when important technical details are still to be determined. The City is interested in continuing discussions on the study to finalize all relevant technical details that relate to potential infrastructure design and potential costs for 84 Street NE.

County Transportation Response [84th Street Study, TAB E]

## County Transportation Response [March 7, 2018 letter from Tom Hopkins to Rick Wiljamaa, TAB S]

7. The 84 Street NE study also does not take into account the full impact of County development for the Omni ASP as evidenced by the County Transportation Response on page 8 paragraph 25 that the "full build-out of the Omni ASP with a 20% reduction for transit and multi-modal". As the County has stated later in the County Transportation Response on page 18, paragraph 65 "the County plans for the worst case scenario, which does not account for alternative modes of transportation as their impact in the rural area is not significant and there is a need to understand the network requirements in the event regional transit is not available". As the intent of the study was to develop long term functional design of 84 Street NE, underestimating or reducing the full impact of the Omni ASP would affect overall design volumes which were used to develop the functional design recommendations. If full Omni ASP build out volumes were used within the study, it is likely that design recommendations; including cross-section and intersection improvements could change significantly and more infrastructure and costs may be required to support the build-out of the Omni ASP than were identified in the study.

### County Transportation Response [March 7, 2018 letter from Tom Hopkins to Rick Wiljamaa, TAB S]

- 8. The second study identified in the Conrich ASP settlement was the East Stoney Trail Infrastructure Analysis. As stated in the County's Transportation Response page 2, paragraph 5 the City believes this to be an important future joint study between the City and County. Discussions have occurred between County and City staff as recently as the end of June 2018 and the City is committed to continuing these discussions to further the terms of reference and start the project in the future. The City was surprised by the County's statement about commitment, as recent discussions were a form of reestablishing a commitment to the project moving forward. The City had asked the County throughout the review of the Omni ASP to progress significantly with the project prior to approval of the Omni ASP to address the significant traffic impacts of both ASPs and address infrastructure staging and funding. Unfortunately, this future study does not address the City's concerns with County traffic impacts, staging and funding of large potential transportation projects as was the City's hope as a part of the Conrich ASP settlement.
- 9. The main transportation study for the Omni ASP, was the Omni ASP Structure Plan Network Analysis with related technical memos from September 2017. The City had major concerns with this study and it was the primary reason for the appeal of the ASP. As part of the City review of the ASP, the City had identified major issues with the study and the majority of infrastructure that would be affected from the CIMA+ study as specific concerns, beyond the County's assertion the City is only concerned about the McKnight/84 St intersection. As identified in table 1 of the CIMA+ response letter, traffic volumes for the build out of the background Conrich ASP lands were reduced significantly from the Conrich ASP Network study (33987 vehicle trips per hour to 16208 PM vehicle trips per hour). As well, in table 2, east-west trips generated by Conrich and Omni were reduced from 18611 PM vehicle trips per hour (from Conrich ASP for Conrich traffic only) to 16448 PM vehicle trips per hour for County assumptions of build out of both Conrich and Omni ASPs. In table 1, even between the Omni ASP scenario 1 to the technical memo a few months later, the Omni trip generation was reduced from 16965 PM vehicle trips per hour to 10458 Pm vehicle trips per hour. From the Conrich study to the 84 street study and related memos, the traffic impact of the Conrich ASP has been approximately halved and

the full impact of build out of both ASPs has been reduced by approximately 22500 Pm vehicle trips per hour. As noted in the CIMA+ report, the County has reduced traffic volumes generated by both the Conrich ASP and the Omni ASP significantly. However, the Omni study does not take into account the full impact of development of the ASPs nor does it accurately reflect the timing of or the specific need for major transportation infrastructure that is required to mitigate the severe congestion that would be created by the build out of both ASPs. As such, the City does not agree with the County's conclusions on page 5, paragraph 15 of its Transportation Response "that a safe and efficient road network can be designed to accommodate the land uses proposed in the Omni ASP". Both the original CIMA+ report and the CIMA+ response letter confirm that the build out of the Omni lands has significant traffic impacts and that the County has significantly reduced traffic impacts of the the Omni development through the various studies that have been provided.

### CIMA+ Response Letter, page 2,3, tables 1 & 2, [TAB 1]

- 10. The 84 Street NE/McKnight Interchange Functional Planning Study (County Transportation Response, Tab K) was undertaken as a follow-up to recommendations from the 84 Street NE study. The City was surprised to see that the project started in February 2018, as the City was not informed that the project was started by the County, even though it ties directly to the joint 84 Street NE study and the City only became aware through this appeal. Unfortunately, this study used the same trip generation assumptions from the 84 Street NE study that underestimated the impact of the Omni ASP and artificially reduced traffic volumes that were used as the basis of the functional design. It is beneficial that the County undertook the study to identify the potential cost of intersection improvements. However, the volumes used underestimate the impact of the ASP and may underestimate the full scope of improvements required and related costs to construct and could greatly overestimate the time until the infrastructure is needed compelling the City to participate in funding the infrastructure that was never envisioned by either the City or the County prior to Omni and Conrich ASPs. Further, the CIMA+ response letter also identified that the analysis is only limited to the one intersection and does not analyze the impacts on the Stoney Trail/McKnight Bv interchange and intersections or impacts to the east on City streets. As such, this study both underestimates traffic impact of the ASP (potentially under sizing needed infrastructure or overestimating when the infrastructure is needed) and omits analysis of other potential City funded infrastructure.
- 11. As noted within the CIMA+ response letter (Tab 1) tables 1 and 2, the various studies that have been completed in support of the Omni ASP have reduced combined traffic volumes generated by the Omni and Conrich ASPs by over 24000 PM vehicular trips per hour of an original impact of both of approximately 50000 PM vehicular trips per hour. It should be specifically emphasized that these vehicular trips generated are per hour in the PM peak, not per day. 84 Street NE, which has been identified as a local arterial street, has a typical daily capacity of approximately 15000 20000 vehicles per day. As a result, even the overall reduced hourly trip generation of the ASPs of over 26000 Pm vehicles trips per hour would exceed the expected daily volumes on such a street. There is a combined reduction of County traffic impact of just less than half of full impacts shown in the Conrich ASP Network Analysis and the Omni ASP Network Analysis for each. As such, this large volume reduction through the various studies does not account for the full impact of the ASPs as stated. In addition, it greatly overestimates the time until large Omni ASP related

infrastructure is needed and may not even identify the full scope of infrastructure needed to support the ASP traffic impacts.

CIMA+ Response Letter tables 1 and 2 [TAB 1]

12. Rocky View County submitted two reports which reviewed and critiqued the City technical reports in response to the City's original transportation evidence. The first report; "Review of the Submission by the City of Calgary" prepared by Watt Consulting Group, dated June 29, 2018 (County Transportation Response, Tab B); was not stamped by a Professional Engineer in Alberta nor was a permit to practice number or stamp affixed to the report as per APEGA practice for authenticating professional documents (APEGA Practice Standard for Authenticating Professional Documents). The second report, "Review of Submission by the City of Calgary related to Omni Development would increase Motor Vehicle Collisions" prepared by Watt Consulting Group, dated July 3, 2018 (County Transportation Response, Tab C) was stamped by a professional engineer in Alberta but did not have a permit to practice number or stamp affixed to the report. As such, the City is concerned with and questions the quality of content and engineering opinions contained in both reports as the authoring engineer and or the engineering company have not authenticated both reports as per standard engineering practice in the province and have not taken responsibility for the engineering review and opinions included.

APEGA Practice Standard for Authenticating Professional Documents [TAB 2]

- 13. The County submitted multiple technical reports in support of their claims. However, the quality and value of some of these reports are questionable and do not demonstrate that the County has mitigated the traffic impacts, large capital infrastructure costs and or traffic safety issues generated by the build out of the Omni ASP, due to the following:
  - One of the studies is not completed, nor have the conclusions been agreed to by the study partners and the study reduces potential Omni ASP traffic impacts based on transit/active modes that the County has stated that they do not have, illustrating they are underestimating the impacts of County development.

County Transportation Response ["84th Street Study" prepared by Watt Consulting Group dated May 17, 2018. TAB E]

Multiple studies do not take into account and/or greatly reduce the traffic impacts
of both the Conrich ASP and Omni ASP; thereby greatly underestimating the traffic
impacts and trigger points for potential infrastructure needed to support the build
out of both ASPs and do not represent or include the full traffic impact of the Omni
ASP (and even the Conrich ASP) and some omit or do not include the impacts of
County development on City infrastructure that would also be needed to support
the traffic generated by the ASPs.

County Transportation Response ["84th Street Study" prepared by Watt Consulting Group dated May 17, 2018, TAB E]

County Transportation Response ["McKnight Blvd/84 St NE Interchange-Functional Planning Study" prepared by Watt Consulting Group dated July 3, 2018, TAB Fl County Transportation Response [Technical Memorandum: "Trip Generation and Densities" prepared by Watt Consulting Group, dated September, 2017, TAB H]

County Transportation Response ["McKnight Blvd/84<sup>th</sup> St NE Interchange-Functional Planning Study Proposal" prepared by Watt Consulting Group, dated February 14, 2018, TAB K]

 A couple of the reports do not follow engineering practice in Alberta for authenticating professional documents and the City questions the recommendations and opinions if the Engineer or firm did not take responsibility for and authenticate the document as per typical practice.

County Transportation Response ["Review of the Submission by the City of Calgary" prepared by Watt Consulting Group, dated June 28, 2018, TAB B]

County Transportation Response ["Review of Submission by the City of Calgary related to Omni Development would increase Motor Vehicle Collisions" prepared by Watt Consulting Group, dated July 3, 2018, TAB C]

# 1.2 FAILURE TO MITIGATE OMNI ASP TRAFFIC IMPACTS OF TRANSPORTATION INFRASTRUCTURE ON CITY OF CALGARY

14. The CIMA+ response letter (Tab 1) responds to many of the comments within both the County Transportation Response and Watt technical review with regards to land use, trip generation and build out assumptions from the original CIMA+ study. One of the County's assertions was that City development will trigger upgrades in advance of the Omni ASP. To support City growth, the City's regional transportation model (RTM) has identified long term growth of City development. This is specifically identified in the CIMA+ response letter, Appendix 1, where the City of Calgary anticipated transportation projects are listed for the years 2028, 2038, 2048 and 2076 from the City's regional transportation model (RTM). As can be seen from these plots, without the Omni ASP, the City would not be anticipating the need for any of the major infrastructure noted in the original CIMA+ study until at least 2048. The McKnight Bv/84 St interchange has not been anticipated at all within the City's long term plans (2076). It should be noted that these long term infrastructure plans are based on long term city development and additional information provided by the County for surrounding areas that were provided in 2015. It should also be noted that the Conrich and Omni ASPs have been specifically identified to trigger the need for major infrastructure in advance of being triggered by City development. A good example of this is from the Omni ASP Network Study where the ultimate Stoney Trail/Airport Trail interchange is recommended to be in place before 2030, where the City anticipates it being required by 2048 or later.

CIMA + Letter, Appendix 1 [TAB 1]

15. The County alleges that land use and trip generation assumptions in the original CIMA+ report are flawed and not reasonable for what the County normally sees (County Transportation Response, "Review of the Submissions by the City of Calgary" prepared by Watt Consulting Group, dated June 29, 2018 pages 2-4). The CIMA+ response letter (Tab 1), responds to most of the comments about land uses and trip generation and then

further compares County suggested trip generation from table 5 to trip generation from the original CIMA+ study to reflect County realities. Comparing the County suggested land use mix and trip generating potential of 10458 Pm vehicular trips per hour to the trip generating potential of 30% of proposed land use from the original CIMA+ study at approximately 4950 PM vehicular trips per hour. As the 4950 Pm trips still cause significant congestion and require all of the major infrastructure that was identified in the first study. As such, the CIMA+ letter identifies that even using County suggested land uses and trip generation rates for the Omni ASP creates significant traffic detrimental impacts on surrounding City streets and would require significant infrastructure to be constructed to mitigate those impacts. As previously identified, the Omni ASP Network study greatly reduces the traffic volumes generated by the build out of both the Conrich and Omni ASPs. The Omni ASP Network Analysis has not recommended upgrades that will accommodate the ASP traffic.

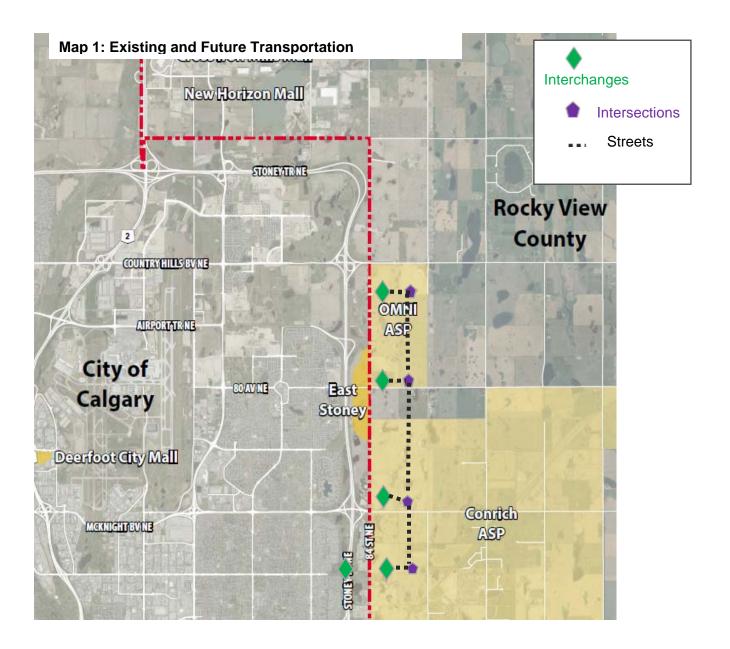
16. The County stated at pages 2-4 of its Transportation Response that the City's assumptions of build out are not in line with typical County build out. The original CIMA+ study assumed a build out of 10 years based on Genesis intent to build out and the County states build out should be 20-25 years. The City would suggest that the traffic impact and detriment to the City would be the same either way and could not be anticipated by the City and would be directly caused by the Omni ASP build out. Looking at TAB 3: City of Calgary Anticipated Jobs and Population for years 2028,2038,2048, 2076, looking at land use assumptions from the City RTM for the area representing Omni ASP (TZ 2151 and 2152), from information from the County prior to the ASP, the City had anticipated approximately 274 jobs and 44 people in 2028 and 530 jobs 46 people in 2038. By 2076 Omni was expected to have 688 jobs and 80 people. It should be noted that land use assumptions for Omni area were provided by the County prior to the ASP and align with densities and land uses assumed for Omni within the Rocky View County Plan. These land use assumptions are the basis for determining long term infrastructure needs that the City would anticipate that would include the Omni ASP area growth as referenced above.

City of Calgary Anticipated Population and Jobs for years: 2028, 2038, 2048, 2076 for Omni area from Forecasting Toolbox [TAB 3]

17. In contrast, from a recent intermunicipal project, at TAB 4: the Calgary North Regional Transportation Study, the County had provided to the consultant their anticipated assumptions of 2388 jobs and 20 people in 2028 and 4388 jobs and people in 2038 for the Omni area. As can be seen, the City assumptions for build out of Omni in 2076 are 3.5 times lower for jobs than assumed by the County in 2028 and 6.5 times less than County assumptions for 2038. Clearly, the County intends for the Omni area densities to greatly exceed those shown in the County Plan and exceed the City's long term (year 2076) anticipated growth in jobs by over 6.5 times by 2038. As the City RTM land use assumptions and City growth link directly to anticipated transportation infrastructure needs and timing (as in the appendix of the CIMA+ response letter at Tab 1), it is clear that whether Omni build outs in 2028 or 2038, that it will have a significant detrimental impact beyond the City development growth that could not be anticipated by the City.

Rocky View County Anticipated Population and Jobs for years 2028, 2038 for Omni area: from Rocky View County input to the ongoing Integrated Calgary North Region Transportation Study, May 2018, by ISL Engineering and Land Services [TAB 4]

- 18. In combination with unanticipated growth in the Omni area as identified above, the significant reductions in combined ASP traffic volumes by almost half on a PM peak hour basis that were shown in supporting technical studies identified in section 1.1 of this rebuttal, it is likely that the growth of the Omni and Conrich ASPs will likely trigger major infrastructure much sooner than the stated 20 year build out of the area and would push the need for most of the infrastructure ahead by decades from when it would be assumed to be needed and would more closely align with infrastructure needed in the CIMA+ study and CIMA+ response letter.
- 19. Specific transportation improvements that would be needed, even using the County's suggested land uses and trip generation identified in the CIMA+ response letter, would be required to support build out of the ASP include:
  - Stoney Trail & Country Hills By NE interchange ultimate upgrade
  - Stoney Trail & Airport Trail NE interchange upgrade and connection to 84 Street intersection
  - Airport Trail NE street connection, west of 60 Street to Metis Trail NE
  - Stoney Trail flyover with 64 Avenue NE and connection to 84 Street intersection
  - Construction of 84 Street NE from Country Hills Boulevard to McKnight Boulevard, as per draft 84 Street NE study
  - Stoney Trail & McKnight Bv interchange ultimate upgrade



- McKnight Bv and 68 Street NE interchange
  - McKnight Bv and 84 Street interchange
  - Many intersection and turn movement improvements to support Omni ASP
- 20. The majority of the above infrastructure is not anticipated to be needed for growth of the City, and County Plan densities and growth within the Omni ASP and Conrich ASP areas until 2048 or later as identified in the City's anticipated transportation projects in Appendix 1 of the CIMA+ response letter (Tab 1). The Conrich ASP Network study (County Transportation Response, "Omni Area Structure Plan Network Analysis" prepared by Watt Consulting Group, dated August 1, 2017, Tab D) identifies that the Airport Trail / Stoney Trail ultimate interchange will be required prior to 2030 which would be approximately 20 years earlier than anticipated or planned for by the City. Overall, some of the projects needed to support the Omni ASP, like the 64 Ave flyover and McKnight Bv/84 Street

interchange have not been anticipated until 2076 or not envisioned at all within anticipated projects but could be triggered in next 10 to 20 years, bringing some infrastructure forward by 3 to 4 decades or identifying new infrastructure that was never envisioned and could not be anticipated to be needed by City growth or densities in the ASP areas that align with the County Plan.

21. There has been no commitment from Rocky View County to mitigate the majority of these excessive and severe traffic detrimental impacts that would be generated by the build out of the Omni ASP on the City of Calgary transportation system even if full build out was to occur within 20 years, as the severe traffic impacts of the ASPs have been underestimated in County technical studies and infrastructure may be needed much sooner than anticipated by the City. The County has not mitigated the significant traffic impacts of their development on the City of Calgary and will require major transportation infrastructure to be constructed which is likely to fall on the City to construct and pay for.

### 1.3 FAILURE TO MITIGATE OMNI ASP CAPITAL COSTS OF TRANSPORTATION INFRASTRUCTURE ON CITY OF CALGARY

- 22. As noted previously in the City's original transportation evidence, the City's current Transportation Offsite Levy bylaw is intended to cover the costs of major transportation infrastructure that would be needed to support City growth and the growth assumptions provided by other jurisdictions in the Calgary region. The County originally provided land use assumptions for the Conrich and Omni ASP areas that aligned with the County Plan and were used as a part of their analysis with the City's RTM to identify projects required by development impacts and trigger points for when they would be needed. The current offsite levy bylaw and infrastructure lists are based on assumptions for land use identified in the City of Calgary Anticipated Population and Jobs for years: 2028, 2038, 2048, 2076 for the Omni area from the Forecasting Toolbox (TAB 3) for the years 2028,2038, 2048 and 2076 within the Omni ASP and Conrich ASP. The infrastructure that is identified in the bylaw is assumed to be required as per the anticipated projects lists contained within Appendix 1 of the CIMA+ response letter (TAB 1). The offsite levy bylaw calculations do not assume the full build out of the Omni ASP and Conrich ASP, as per the technical studies identified within section 1.1 of this rebuttal. As such, the levy does not account for the full Omni infrastructure lists identified in the CIMA+ response letter, as it only identifies those projects that are needed to support City growth, regional growth provided by other jurisdictions and specifically the County Plan densities of the two ASPs (which are much less and impactful than the land uses and traffic impacts identified in County supporting studies in section 1.1 of this rebuttal or within the original CIMA+ study or CIMA+ response letter. As such, the offsite levy would not be able to fund the infrastructure required by Omni ASP build out.
- 23. The County states that any infrastructure required to support the Omni ASP would be either funded by: (i) off-site levy bylaw, developer pays with payback, (ii) future intermunicipal off-site levies or (iii) through future cost sharing studies like the East Stoney Transportation Infrastructure Analysis. As identified in the CIMA+ study, the build out of the Omni ASP could potentially compel the City to fund between \$60 Million and \$240 Million of infrastructure and the City is concerned that the County's existing methods of funding cannot address or cover these costs.
- 24. As identified in section 1.2 of this rebuttal, many transportation infrastructure improvements would be required to support the build out of Omni ASP lands. It is both not clear whether the County can fund any of the needed projects with their existing or

draft offsite levy bylaws or whether any Omni or Conrich landowner will commit to funding any of the major infrastructure. As such, it is very likely that the City of Calgary will suffer detriment in being compelled to fund the many improvements required to support the ASP, as outlined in the CIMA+ study as well as the recently identified interchange at McKnight/84 st (estimated cost of \$42 Million) and to advance future capital cost spending ahead of what would be anticipated by the City, potentially by decades.

### County Transportation Response ["84<sup>th</sup> Street Study" prepared by Watt Consulting Group dated July 3, 2018, TAB F]

- 25. The County submitted their current Transportation Offsite Levy Bylaw (c7356-2014 County Transportation Response, Tab T) to support claims the County could use the levy to fund some of the infrastructure. Reviewing the bylaw, the majority of the Omni ASP infrastructure are not included and levy funds would not be able to be spent on them. The only Omni related project that is included is the McKnight Bv widening expansion project (between Stoney Trail and 84 St) at \$5.5 Million. Of the \$60-\$240 Million worth of needed infrastructure identified in the CIMA+ study, none of it is included within the current bylaw. It should be noted that the McKnight/84 St interchange is not included so the potential infrastructure costs could be increased to \$102 to \$282 Million and are not included within the current County levy as a funding source. It should also be noted that 84 Street NE costs are not included within the bylaw and costs to the City for 84 Street improvements could be higher than originally identified. It is clear that the existing levy bylaw does not contain most of the Omni ASP infrastructure and would not be able to be used as a funding source to mitigate the impacts on the City that would be caused by the traffic impacts of the build out of the Omni ASP.
- 26. The County also submitted the draft Regional Transportation Offsite Levy Bylaw (c7805-2018 County Transportation Response, Tab U). The City understands that the bylaw was presented at County Council last week and was given first reading with a tabling until after consultation is completed. The City was very surprised that the County was presenting a regional transportation offsite levy withiout engaging the City prior to the Council hearing and earlier in this appeal process. There is a major risk that the passing of the draft bylaw could compel the city to change its transportation offsite levy bylaw. Especially since there are no plans to do so in the near future. Any disruption to The City's levy programme represents a significant risk to the City.
- 27. The County contends that the draft bylaw will help alleviate the City's concerns regarding potential capital costs related to county development. Reviewing the draft levy bylaw, an additional Omni related project has been added; a cost share of \$19.245 Million for the McKnight Bv/Stoney Trail interchange that the City estimated as a \$30 Million project previously. As such, the draft bylaw may be only able to cover a small portion of potential City funded overall infrastructure costs but potential cost of \$82.75 Million to \$262.75 Million are not contained within the bylaw and would not be able to be used as a funding source. As such, neither the existing transportation offsite levy bylaw or the draft regional transportation offsite levy bylaw can fund this significant potentially City funded infrastructure that would be caused by build out of the Omni ASP and the County has added potential risk to the City that it must revise its own transportation offsite levy bylaw if the draft regional transportation offsite levy bylaw is considered. All of which creates a great deal of uncertainty and risk for the City.
- 28. The County stated that infrastructure could also be funded by developers. No Omni ASP or Conrich ASP landowner has committed to fund any of these improvements. As such,

the City is concerned that County offsite levy bylaws and/or developers cannot or will not fund any of this infrastructure increasing the potential for the City to fund the infrastructure that would support the build out and mitigate the traffic impacts of the build out of the Omni ASP.

- 29. The County also stated that potential solutions could be intermunicipal offsite levy bylaws or the East Stoney Trail Infrastructure study and that there is lots of time for the County to work with the City to address major infrastructure needs in the Omni area, including staging, cost sharing and funding. The City is interested in investigating these joint studies but they will take some time to complete and do not offer a real solution to funding of this infrastructure to support the Omni ASP. As noted previously, the County has continuously reduced the traffic impacts of Omni and Conrich developments so much that the needed infrastructure and capital costs identified could be required even before the 10 -20 year period and the City is concerned that the County is relying on future potential studies/bylaws that rely on the City to cost share, instead of providing practical funding mechanisms for the County to cover the major costs of infrastructure related to their development in the ASP. The City contends that the County has not mitigated the significant infrastructure cost detriment that they claim they have through levy bylaws or developer funding. All of the options offered are speculative at best. The City detriment risk would not be mitigated.
- 30. At a minimum, \$82.75 Million of potential City-funded major transportation capital projects will be needed to support the Omni ASP. This expense would result in significant detriment to the City and Calgary ratepayers for infrastructure that is needed because of County development. The County has not specifically committed to fund these projects and does not have existing means of covering these costs either through offsite levy bylaw or by developers funding the infrastructure. As identified in section 1.1 and 1.2 of this rebuttal, the County has not taken into account the full impact of their development in their various studies which will likely trigger the need for most of the noted infrastructure ahead by decades into or before the 10-20 year range without a clear funding source that could support and fund the needed infrastructure.

### 1.4 FAILURE TO MITIGATE TRAFFIC SAFETY ISSUES FROM ASP ON CITY OF CALGARY

- 31. Rocky View County has submitted two reports (Watt technical review, and Review of MVC's at Tabs B and C of its Transportation Response) referencing traffic safety as it relates to the Omni ASP in response to the City's concerns about traffic safety related to the Omni ASP build out. Both reports were identified within section 1.1 of this rebuttal, as the City is concerned with both and the quality of content and engineering opinions contained in both reports. This concerns stems from the fact that neither the authoring engineer nor the engineering company have authenticated both reports as per standard engineering practice in the province and have not taken responsibility for the engineering review and opinions included.
- 32. The CIMA+ response letter (Tab 1) responds to the questions in the Watt technical review referencing traffic safety as it related to potential traffic safety issues related to Omni ASP traffic volume increases. The CIMA + response letter identifies that severe congestion will still be likely and probable even if using county suggested trip generation rates and as such traffic safety related statements tied to severe congestion and traffic volume increase

would still be valid that were identified in the CIMA+ study. As such, the traffic impacts would be so great that there would be a potential increase in traffic incidents and reduction of traffic safety on City streets caused by the build out of the Omni ASP with no mitigation identified by the County.

- 33. Responses to the questions within the Review of MVC report are provided within the City Emergency Services Rebuttal, as the analysis was carried out by the Calgary Fire Department. The City contends that the City MVC report shows a relationship between increased motor vehicle incidents within a kilometre of larger shopping centres (as proposed in Omni area) and shows that the Omni ASP could have the potential for increases to motor vehicle incidents on City streets and infrastructure related to the build out of Omni, beyond the traffic safety issues caused by large increases in traffic that were identified above.
- 34. There has been no commitment by Rocky View County to mitigate the potentially large increase in incidents and reduction of traffic safety for Calgary drivers associated with the build out of the Omni commercial lands, nor are there any specific policies within the ASP to address potential increased traffic safety issues caused by the Omni ASP build out.
- 35. Given that these issues have not been addressed by the County, any mitigation measures or traffic safety related infrastructure improvements, and any emergency services response to increased motor vehicle incidents, would likely fall to the City in addition to the probable capital costs identified in section 1.2 of this rebuttal By enacting the ASP as is, development in the County has the very real potential to reduce the traffic safety on City streets and inflict extra capital and operating costs on the City to mitigate and/or respond to these serious traffic safety issues.

#### SUMMARY OF TRANSPORTATION REBUTTAL AND DETRIMENT TO CITY OF CALGARY

- 36. To summarize, Rocky View County, through their transportation Response and supporting documents has not demonstrated that the County has addressed transportation detrimental impacts on The City of Calgary. The City of Calgary has further demonstrated through this Transportation Rebuttal and supporting documents that the development proposed through the Omni ASP creates significant impact and detriment to the City of Calgary's transportation systems. These detriments to the City are both likely and probable as a part of the Omni ASP approval.
- 37. It is clear to the City that development of the ASP lands will result in usage of City transportation systems beyond the capacity of the system without any practical or current mitigation commitments from Rocky View County to address the impacts on the City. The detriment is reasonably likely to occur and to have a significant impact on the City. There are three main areas of Transportation-related detriment:
  - Failure to mitigate traffic impacts of the Omni ASP on City of Calgary
    transportation systems: ASP-generated traffic uses will still strip the capacity of the
    City's transportation system without any commitment on the part of the County to
    mitigate Omni ASP traffic issues. Even analyzing County suggested land use types
    and trip generation rates yields severe congestion on the City mobility network and
    causes the need for large pieces of transportation infrastructure to be built well in
    advance of City anticipated timing to mitigate the impacts of the Omni development.

- Failure to mitigate significant City-funded capital costs of transportation infrastructure required to support the Omni ASP: the significant traffic generated by development contemplated in the ASP will compel the City of Calgary to fund significant capital costs of transportation infrastructure to support the Omni ASP without any practical commitment on the part of the County to contribute to the funding or construction of the required infrastructure. The majority of the infrastructure needed is not contained within the existing or draft offsite levy bylaws, there has been no commitment from any Omni ASP landowners to fund any of the infrastructure and so it is likely these large costs will fall back on the City.
- Failure to mitigate traffic safety issues: traffic generated by development contemplated in the ASP has the potential to lead to significant congestion and potentially a large increase in motor vehicle incidents, which will result in the reduction of traffic safety on City transportation systems without any commitment on the part of the County to mitigate ASP-related traffic safety issues.

### INDEX TO CITY OF CALGARY TRANSPORTATION SUPPORTING MATERIALS

TAB 1: "Response to Rocky View County July 6, 2018 Submission" dated July 16, 2018
 TAB 2: APEGA Practice Standard for Authenticating Professional Documents
 TAB 3: City of Calgary Anticipated Population and Jobs for years: 2028, 2038, 2048, 2076 for Omni area from Forecasting Toolbox
 TAB 4: Rocky View County Anticipated Population and Jobs for years 2028, 2038 for Omni area: from Rocky View County input to the ongoing Integrated Calgary North Region Transportation Study, May 2018, by ISL Engineering and Land Services



16 July 2018

Mr. Tom Hopkins, M.Eng., P.Eng. Acting Manager, Transportation Development Services The City of Calgary P.O. Box 2100, Stn. M Calgary, AB T2P 2M5

Subject: Response to Rocky View County July 6, 2018 Submission

Y/Ref. CTYPO0000696542

O/Ref. CA000431

Mr. Hopkins,

We have completed our review of Rocky View County's July 6, 2018 submission to the Municipal Government Board and have summarized our responses and follow up comments in this letter.

An overarching theme through the comments relates to which traffic volumes best represent the volumes that are expected to be generated by build out of the Omni ASP area. To facilitate responding to each of the comments, we have summarized key traffic volumes for each of the studies. **Table 1** is a summary of the total trip generation associated with the Omni ASP area for each study scenario.

**Table 2** includes two-way, afternoon peak hour post development traffic forecast for each of the east-west routes between Calgary and Rocky View that will be impacted by development in Omni. The location for these volumes is between the Stoney Trail east ramps/limits and 84<sup>th</sup> Street for each road. This information is relevant since it provides an overall indication of both Omni generated traffic and future background traffic that has been incorporated into analysis. Comparing the volumes at these locations also provides an indication of the forecast traffic assumed to be using Calgary's road system.

These summaries highlight important differences that should be acknowledged and considered when comparing the various traffic forecasts.





Table 1: Omni and Conrich Trip Generation for Different Study Scenarios

Plan Area	Report Title	Author	Date	Total Afternoon Peak Hour Trips (vehicles per hour)
Conrich	Conrich Area Network Study	Watt	February 18, 2015	33,987
Conrich	Technical Memorandum (regarding Omni ASP) - 100% scenario	Watt	September 25, 2017	23,154
Conrich	Technical Memorandum (Regarding Omni ASP) - 70% scenario	Watt	September 25, 2017	16,208
Omni	Omni ASP Network Analysis - Scenario 1	Watt	August 1, 2017	16,965
Omni	Technical Memorandum	Watt	Undated; (Tab H.7 in	10,458
Omni	Technical Memorandum	Watt	September 14, 2017	Not Reported
Omni	Technical Memorandum	Watt	September 25, 2017	Not Reported
Omni	84 <sup>th</sup> Street NE Study of Alignment, Classification and Access Management	Watt	May 17, 2018	Not Reported
Omni	McKnight Boulevard and 84 Street NE Interchange Functional Planning Study	Watt	July 3, 2018	Not Reported
Omni	Omni ASP Appeal: Transportation Network Study - 100% scenario	CIMA+	May 22, 2018	15,339
Omni	Omni ASP Appeal: Transportation Network Study - 30% scenario	CIMA+	May 22, 2018	4,602





Table 2: Forecast Afternoon Peak Hour Two-Way Traffic between Calgary and Rocky View by Route and Scenario

Author	Title	Date	Description/Assumptions	Country Hills BV	Airport TR	64 AV	McKnight BV	Total
WATT	Conrich Area Network Study	1-Feb-15	- Conrich development only	6,499	3,763	107	8,242	18,611
WATT	Omni ASP Network Analysis - Scenario 1	1-Aug-17		3,438	7,317	-	11,065	21,820
WATT	Technical Memorandum - Scenario 5	14-Sep- 17	2040 Rocky View County Traffic Forecasting Model - Post-Development -Network Assumptions Per Section 2 -Land Use Assumptions Per Section 1	1,914	2,776	2,762	5,847	13,299
WATT	Technical Memorandum - Scenario 6	14-Sep- 17	2040 Post development with 20% reduction for Transit -Network Assumptions Per Section 2 -Land Use Assumptions Per Section 1	1,942	2,662	2,682	5,612	12,898
WATT	Technical Memorandum - Scenario 7	25-Sep- 17	2040 Rocky View County Traffic Forecasting Model - Post-Development -Network Assumptions Per Section 2 -Land Use Assumptions Per Section 1	2,558	3,775	2,325	7,129	15,787
WATT	Technical Memorandum - Scenario 7A	25-Sep- 17	2040 Post development with 20% reduction for Transit -Network Assumptions Per Section 2 -Land Use Assumptions Per Section 1	2,471	3,616	2,299	6,939	15,325
WATT	84 Street NE Study of Alignment, Classification and Access Management	17-May- 18	Assumptions approved by Rocky View County	2,505	3,999	2,428	7,516	16,448
CIMA+	OMNI ASP Appeal - Transportation Network Study	22-May- 18	100% Forecast	5,820	6,477	3,040	9,757	25,094
CIMA+	OMNI ASP Appeal - Transportation Network Study	22-May- 18	30% of Development Forecast	3,978	3,294	2,311	6,989	16,572





Comments on the July 6, 2018 Rocky View County Response and June 29, 2018 letter regarding the "Review of the Submission by the City of Calgary" from Watt Consulting Group follow.

#### **Rocky View County Transportation Response**

Point 11, which refers to Stage 1 including full build-out of the Conrich area and full build out of the Janet area.

• Note that in Table 1, the total Omni generated traffic volume used in the August 1, 2017 Omni Network Analysis is 16,965. When comparing the volume crossing between Calgary and Rocky View County in Table 2, the increase in afternoon peak hour volume between the Conrich Network Analysis and the date Omni Network Analysis is 3,209 vehicles per hour. This represents 19% of the total volume using these routes. In comparison, the CIMA+ report assumes, based upon City of Calgary forecast model information and a knowledge of the area, that 65% of inbound traffic and 51% of outbound traffic generated by the Omni area would use these routes. It appears that between the Conrich ASP and the Omni ASP Network Analysis dated August 1, 2017, trip making between Rocky View and Calgary was reduced, and the reason is not explained.

Point 12, which refers to Stage 2 analysis indicating build-out of the Conrich and Janet areas according the information provided by the County, plus reduced ratio of net to gross developable area.

- It is assumed that the report which addresses the Stage 2 analysis is the Watt Technical Memorandum dated September 14, 2017, which is included in the County's July 6, 2018 submission under Tab H. 2. This memo indicates that the expected percentage build out by 2040 of Conrich is 8% and 15% for Janet based on Rocky View County. As Table 2 indicates, forecast afternoon peak hour volumes crossing between Rocky View and Calgary are 13,299 for Scenario 5 and 12,898 for Scenario 6, which assumes 20% of trips are by transit. Since no transit service is planned for this area, further comparison focusses on Scenario 5. Notably, crossing volumes are reduced by 5,312 compared to the Conrich Network Analysis (which includes no traffic from Omni) and 8,521 compared to the Omni Network Analysis. This reduction in forecast volumes on these City of Calgary roads is significant, and suggests that the analysis in this memo does not fully reflect the potential impact.
- The Conrich and Janet ASP's are approved, and do not contain policy that would limit development to these levels of the potential build-out within these or any time horizons. Use of an expected percentage build out for background traffic, while providing information useful for some planning purposes, this does not provide the best information for assessing the feasibility of full build out of a plan area or the worst-case impacts. County administration do not have explicit mechanisms to limit development or the timing of development in these areas to an amount less than what is allowed under the ASP's and City By-laws, as indicated in the Network Analysis documents produced for each ASP. Rocky View County Council is the development authority for land use re-





designations, and even if County administration recommends deferral of development approval until infrastructure funding is resolved, Council can still approve the development, thereby impacting the City of Calgary.

 Use of the Stage 2 analysis produces significantly lower volumes on City of Calgary roads than the August 1, 2017 Omni Network Analysis, and does not accurately reflect levels of development that could be realized in the area. This analysis is not appropriate for evaluating the impact on City of Calgary infrastructure.

Point 14, which notes that significant wetlands exist in the area, and will cover up to 115 hectares (284 acres) of land and indicates that less land would be available for traffic-generating uses than in the City's CIMA+ traffic report.

- In CIMA+'s "Omni ASP Appeal: Transportation Network Study" dated May 22, 2018
  - The ratio of overall site size to floor area for approved commercial developments in Rocky View County were determined using data from the County's web site. Details of sites choses and approval dates are summarized in Table 2-2 of the CIMA+ report. Specific features of the sites were comparable to the Omni area, including creeks, municipal reserve and historical resources. This ratio was applied to commercial development in the Omni area.
  - o For industrial development, ratios of developable area to total area were similarly determined from approved Rocky View development identified on the County's website, with the findings summarized in Table 2-3. Sites for this comparison were within the Cooperative Stormwater Management Initiative (CSMI) boundaries, the Shepard Regional Drainage Plan Area, or had significant wetlands.
- However, if the County and County developers elect to use smaller ratios of developable area to gross area, it should be noted that Table 1 of this letter indicates that in CIMA+'s "Omni ASP Appeal: Transportation Network Study" dated May 22, 2018, 30% of the afternoon peak hour trips generated by the forecast land use for Omni equal 4,602 trips. In comparison, the Watt Technical Memorandum (undated) predicts a total of 10,458 afternoon peak hour trips. The analysis of the 30% development level, summarized in Section 3.9.2 including Tables 3-9 to 3-12 (pages 54 to 60) of the CIMA+ report indicate that significant infrastructure upgrades will be required due to the number of trips generated from 30% of the development. Trips generated from 30% of the development are lower than the total trip making predicted in the undated Watt Technical Memorandum that incorporates the lower ratios of land coverage. Therefore, the selection of developable land ratio, generating trips within the ranges considered in either analysis, still has detrimental impacts on the City's road network.





### Point 15, which summarized the findings of the Omni Network Analysis.

- This point does not refer to a specific version of the Omni Network Analysis.
- In reviewing the documents provided, most of the recommendation appear in the Watt Technical Memorandum dated September 14, 2017 or the undated memorandum under Tab H. 1. of the Rocky View County submission. As indicated in Table 1 and Table 2 of this letter, these conclusions are based on lower volumes of background traffic and post development traffic than would be reflected by full build out.
- As noted in comments in this letter on point 11, point 12 and point 14, these conclusions align with partial build out of development in the approved Conrich and Janet areas. As development rates are not confined to the conditions assumed in the forecasts, the conclusions do not accurately reflect the potential impact on the City of Calgary.

### Point 16, regarding the requirement to submit a TIA and meet technical conditions required by the TIA ensuring that required road infrastructure is in place in support of development.

• Mechanisms are in place to require the submission of a TIA and to require development agreements as a condition of approval of subdivision applications, however there is no explicit requirement that specific infrastructure identified by the City as required will be included in those agreements. Further, the capital cost of most of the improvements identified by the City (see Table E-1 of CIMA+'s "Omni ASP Appeal: Transportation Network Study" dated May 22, 2018) are in the 10's of millions of dollars and beyond the funding capability of most developers.

### Point 17, regarding designation of Highway Commercial Uses.

- Implementation of the Highway Commercial areas in the Omni ASP does not guarantee reduced traffic generation of the plan area. The undated Watt Technical memorandum included in Tab H. 1. of the County's submission indicates expected traffic generation for a mix of uses allowed under the ASP and expected to be developed in the area. TABLE 1: TRIP GENERATION HIGHWAY COMMERCIAL AS PER INFORMATION FROM THE ITE TRIP GENERATION MANUAL, included in this Watt memo, indicates that a mix of uses totalling 183,000 square feet of building area, would generate 696 total trip ends during the afternoon peak hour. This equates to 3.80 afternoon peak hour trips per 1,000 square feet of floor area.
- In comparison, the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9<sup>th</sup> Edition (the same source cited in the Watt memorandum) provides an afternoon peak hour rate of 3.71 trips per 1,000 square feet of floor area.
- Therefore, the trip generation for the mix of highway commercial uses is slightly higher than the ITE Shopping Centre rate which would apply to the other commercial uses in the area.







Point 18, indicating that the technical studies prepared for the Omni ASP demonstrate that the long-term network is achievable, and that the ASP outlines the requirements to ensure network functionality as development progresses.

- Tables 1 and 2 of this letter indicate significant reductions in background traffic and Omni
  development generated volumes used in progressively more recent Watt reports. The term "longterm", and associated assumptions for development in approved ASP areas (Conrich and Janet),
  plus traffic volume estimates vary significantly from report to report. This statement that the longterm network is achievable is not clearly supported based upon the analysis provided.
- The ASP identifies requirements to submit Transportation Impact Assessments (TIA's) and to consult with the City of Calgary, however neither the ASP nor other By-laws or policies ensure that infrastructure is in place. As the development authority for the land uses is Rocky View County Council and the approval authority for the significant infrastructure improvements required to be funded is the City of Calgary Council, each which are free to adopt recommendations that do or do not align with recommendation from their respective administrations, there are many risks associated with this model.

Point 22, stating that the results of the Conrich Network Analysis were incorporated into the Omni Network Analysis to ensure functionality of the road network for both areas.

- As the comparison in Table 2 of this letter indicates, forecast afternoon peak hour volumes between Rocky View County and the City of Calgary increase by just 3,209 vehicles, despite the corresponding Omni Network Analysis and memos indicating trip generation of between 10,458 and 16,965 vehicles per hour in that time period. Although 100% of the additional trips are not expected to travel along these routes, the expected distribution and route assignment is expected to be more than 19% to 31%. Based upon City of Calgary transportation forecast modelling for Conrich and reasonable adjustment of these assumptions for Omni, these routes are expected to carry 65% of the inbound and 51% of the outbound traffic in the afternoon peak hour.
- Further, subsequent analysis indicates further reductions in volumes which are not ensured by any
  policy in the ASP, resulting in volumes crossing between Rocky View and Calgary that are lower
  than those forecast in the Conrich analysis. This leads to uncertainty about the conclusion that a
  road network that can function for both areas.

Point 25, regarding the description of build-out scenarios for the 84th Street study.

• Table 2 of this letter includes afternoon peak hour volumes crossing between Rocky View and Calgary from the May 17, 2018 84<sup>th</sup> Street Study of Alignment, Right-of-Way, Classifications and Access Management. As the table indicates, total traffic forecast to cross between Rocky View and Calgary for this study is lower for the 84<sup>th</sup> Street study than either the Conrich Network Analysis or the Omni Network Analysis dated August 1, 2017.





Point 27, regarding the 84<sup>th</sup> Street study providing guidance of evaluation of development applications in the ASP area, and the City being provided the opportunity through the circulation process to review the TIAs and work through concerns.

 As illustrated in Table 2 from this letter, traffic volumes generated for the 84<sup>th</sup> Street study area could be higher than those used in the 84<sup>th</sup> Street study, since there is no specific policy in the ASP that restricts development to the amount that will fit within the infrastructure identified through the 84<sup>th</sup> Street study.

Point 29, regarding the assumption that the Conrich ASP will be fully built out and the Omni and East Stoney ASP's will be 80% built out for the 84<sup>th</sup> / McKnight Study.

Forecast afternoon peak hour volumes crossing McKnight Boulevard are included in **Table 2** of this letter for the 84<sup>th</sup> Street study and each of the other reports included in the County's submission. Based upon the "McKnight Boulevard & 84<sup>th</sup> Street NE – Interchange Functional Planning Study" dated July 3, 2018 by Watt Consulting Group, (Tab F in the County's submission), the two-way afternoon peak hour volume on McKnight Boulevard between 84<sup>th</sup> Street and the Stoney Trail east ramp totals 6,644 vehicles. This is 4,421 vehicles per hour less than the 11,065 vehicles forecast for this location in the Conrich Network analysis, and is also less than the volumes forecast in any of the other studies.

Point 30 refers to the 84<sup>th</sup> / McKnight study as recommending an appropriate ultimate configuration for the 84<sup>th</sup> / McKnight intersection.

- As described in the previous point, the volumes forecast for this study use only 60% of the volumes for the section of McKnight just west of 84<sup>th</sup> Street compared to the August 2017 Omni Network Analysis. No evaluation of the August 2017 Omni Network Analysis volumes, previously referred to as the "worst case" scenario, was included in the report.
- The evaluation is limited to this one intersection, and does not indicate the impacts on the Stoney Trail interchange ramp terminal intersections, or other intersections west of Stoney Trail in the City of Calgary. The proposed improvement would provide significant east-west capacity at this one location, however the ability for other intersections in the City of Calgary to accommodate additional volumes, and improvements required to accommodate the additional volumes, are important to the overall evaluation and have not been provided.

Point 31 refers to the County's confidence in the 84<sup>th</sup> / McKnight study, the 84<sup>th</sup> Street study and the Omni Network Analysis provide sufficient evidence that the road network in the area can upgraded to accommodate development in the Omni and Conrich areas.

• There is concern that due to the successive volume reductions used in the analysis for the more recent studies, as illustrated in **Table 1** and **Table 2** from this letter, and statements in the Rocky





View County July 6, 2018 submission that refer to the Omni Network Analysis without specifying the date or scenario analyzed, that this confidence is misplaced and presents a risk to the City of Calgary that analysis results could be misinterpreted and applied inappropriately to the detriment of the City of Calgary.

Point 37, first bullet, stating that the City ignores the fact that the Omni Network Analysis takes into account existing and planned development capacity and that planned City Development will trigger upgrades in advance of the Omni development, second bullet indicating that the CIMA+ report uses incorrect assumptions, fourth bullet stating policies and implementation mechanisms.

- Table 1 and Table 2 from this letter indicate that the 84<sup>th</sup> Street Study and McKnight Boulevard & 84 Street NE Interchange Functional Planning Study include lower trip generation for the Omni development and lower background traffic from Conrich and Janet than the Omni Network Analysis dated August 2017. However, the lower traffic forecast studies are the studies used by the County to draw conclusions about the improvements required.
- The CIMA+ report was developed based upon assumptions that consider already approved development in the County (see notes on point 14), and further analyzed the impact of two development scenarios: 100% of Omni and 30% of Omni. The total Omni based trip generation for Omni generates less traffic than any of the studies completed for the County, as summarized in Table 1. The 30% development scenario indicates significant unfunded improvements are required to support 30% build out of the Omni area, and with those improvements constructed, traffic congestion is expected.
- Further, the CIMA+ report was completed by a Professional Traffic Operations Engineer (P.T.O.E) and Professional Engineer (P.Eng.) and further reviewed and endorsed by a second CIMA+ P.Eng. plus a P.Eng. at the City.
- City development that will use this network is the East Stoney Area Structure Plan, located east of Stoney Trail between Airport Trail and the alignment for 64<sup>th</sup> Avenue NE. This development is expected to include approximately 1,850 residential units, an elementary school, a middle school and approximately 29,000 square feet of commercial area. Total trip generation for the afternoon peak hour is estimated to be approximately 2,000 trips. Analysis indicates that only developer funded improvements will be required to accommodate this development. Referring to Table 1 of this letter, the East Stoney Area Structure Plan makes up a small percentage of the total traffic volumes generated by developments in Conrich, Omni and East Stoney.
- Two of the ramps in the future Airport Trail interchange (southbound to westbound and eastbound to northbound) will benefit Cornerstone, and the McKnight & 68<sup>th</sup> Street upgrade from an intersection to an interchange will benefit this surrounding industrial area in Calgary, however neither of the improvements are anticipated to be needed before 2040 at the earliest.





Point 40, stating that the Omni Network Analysis and subsequent studies take into account projected traffic and recommend upgrades that will accommodate additional traffic.

• Comments provided on Points 11, 12, 14, 18, 22, 25, 27, 29, 30 and 31, plus **Table 1** and **Table 2** in this letter, explain the concern that projected development has not been adequately taken into account by the County.

#### Point 41, regarding CIMA+'s build-out traffic timeline assumptions for the Omni ASP

- Prediction of timelines for build out of area structure plans is not an exact science, since
  development relies on developers allocating resources in the area. The marketing materials on
  timelines for development indicated on a website managed by the major landowner in the Omni
  area, Genesis, provides and indication of their intent to proceed with development as early as
  possible.
- For the infrastructure projects indicated in Table E-1 of the CIMA+ "Omni ASP Appeal: Transportation Network Study", in addition to not being accounted for in the City's 4-year and 10-year capital plans, review of the City of Calgary's "Forecasting Toolbox", which takes into account a 60-year planning horizon indicates that none of the projects that are anticipated by the City are expected to be built before the 2040 to 2048 time frame (22 to 30 years from now). The link to this resource is below.
- http://www.calgary.ca/Transportation/TP/Pages/Planning/Forecasting/Forecasting-Toolbox.aspx
- Excerpts from this source for the periods: 2016 to 2028; 2029 to 2039; 2040 to 2048 and 2048 to the Long-Term Scenario are included in Attachment 1 of this letter.
- Therefore, the problem for the City of not having funding for the projects could persist for as long as 30 years, which is longer than the timeframe envisioned in the Omni ASP (page 20).

#### Point 42 introduces the Watt Technical Review

Comments on this memorandum are included in a separate section below

#### Point 43 indicates that the CIMA+ report indicates that no traffic is assigned to some routes.

- 84<sup>th</sup> Street & Highway 564/Country Hills Boulevard eastbound right turns and westbound left turns
  - trips have been assigned to the eastbound and westbound left turn and are illustrated in Figure 3.5A of the Omni ASP Appeal: Transportation Network Study, May 22, 2018
- 84<sup>th</sup> Street & Townshop Road 250/McKnight Boulevard eastbound left turn and westbound right turn







- Figure 3.5D of the Omni ASP Appeal: Transportation Network Study, May 22, 2018
   illustrates trips assigned to the eastbound left turn
- It is correct that no trips were assigned to the westbound right turn. Trips destined from Omni to the East Stoney area are assumed to use other routes due to the heavily congested conditions expected at McKnight Boulevard and 84<sup>th</sup> Street at full build out. The analysis indicates that each of the intersections along 84<sup>th</sup> Street would be over capacity at full build out and at 30% of build out, therefore adjustment of distribution patterns to assign more traffic to this movement is not expected to change the outcome of the analysis.
- The CIMA+ report does not appear to show traffic being generated by the OMNI development driving north on 84<sup>th</sup> Street NE and Range Road 285 although this is a logical connection to Highway 564
  - The report did not illustrate volumes assigned to Range Road 285 since it is under the County's jurisdiction, however the analysis does assume that this road will be used to support the Omni development.
  - Trip distribution for the plan area was developed based traffic patterns in the City of Calgary forecast run for Conrich, summarized in Table 3-6 of the Omni ASP Appeal: Transportation Network Study, May 22, 2018 report. Based upon the City's regionally based forecast model, there was no evidence of travel to and from the north via Range Road 285. For the afternoon peak hour, 4% of inbound trips and 10% of outbound trips were assigned to travel north via Country Hills Boulevard, Stoney Trail and other routes north from there.
  - For Omni, it was assumed that this proportion travelling north via Country Hills and Stoney Trail will increase to 7% of inbound trips and 15% of outbound trips due to the area being closer to Balzac and Airdrie. If improvements are made to Range Road 285 through and north of the plan area, a portion of these trips may divert from the route they have been assigned to. However, this would result in some of the 7% of inbound and 15% of outbound trips choosing Range Road 285 instead of Country Hills and Stoney Trail. Therefore, there may be a small reduction of volumes at the intersection of 84<sup>th</sup> Street and Country Hills Boulevard/Highway 564. This intersection is shown to be significantly over capacity at full build out and at 30% build out, therefore a reduction of a portion of 7% and 15% of inbound and outbound trips respectively would not change the conclusions summarized in Table E-1.





### Point 44, regarding differences in land use assumptions, such as drive through and high turnover restaurants in the highway commercial land uses.

- It is noted that based upon Table 1, the total trip generation for the Omni area based upon the Omni Network Analysis dated August 1, 2017 is higher than the trip generation in the CIMA+ Omni ASP Appeal: Transportation Network Study, May 22, 2018 report
- Further, the assumption that there could be drive through restaurants and high turnover restaurants is in no way prohibited by ASP Policy and these uses are typical in other highway commercial type areas found on other secondary highways in Alberta.
- It is noted that the CIMA+ report concluded that even at 30% of the forecast trip generation for the Omni area, the full package of City infrastructure projects would still be required to support the development.

## Point 45, regarding use of the Genesis marking materials for their Omni lands as an indication of built form and development rate.

- As noted in Point 14, if development is reduced to 30% of the full build out (ie a 70% reduction of development and trips) assumed in Omni ASP Appeal: Transportation Network Study, May 22, 2018 report, the resulting impacts still require the package of infrastructure projects indicated in Table E-1, therefore reduction of developable area by 20% would not change the result
- As noted in Point 41, even if development is over 20+ years rather than 10, the same detriment of
  infrastructure requirements coming ahead of the City's anticipated schedule for constructing them
  is expected

#### Point 46, regarding net developable area and build out schedule

Addressed in Point 45

# Point 47, regarding assumption about land use in the CIMA+ report vs. the County's experience, and the Watt analysis resulting in volumes that are approximately 30% less than those found in the CIMA+ analysis

As indicated in Point 45, development volumes 30% of those analyzed result in a detrimental impact
for the City, which is 70% less than the full development volumes predicted by CIMA+. A reduction
of trips generated by the Omni development by 30% would still result in the improvements
summarized in Table E-1 of the CIMA+ report being required.

#### Point 48, regarding assumptions made in the City's background traffic forecast.

 The background forecast completed using the City's EMME transportation forecasting model, and included in Appendix A of the Omni ASP Appeal: Transportation Network Study, May 22, 2018







report was a custom model run developed to support the City's review and mediation of the Conrich Area Structure Plan and does not reflect the City's intention to construct these improvements by this date. It was developed as a method of testing whether construction of these projects would accommodate the Conrich development. It was determined by the City and CIMA+ to be a suitable basis for estimating future background traffic for the Omni ASP Appeal: Transportation Network Study, May 22, 2018 report.

- The information in the City's on-line forecasting toolbox indicates the City's current plans for future infrastructure projects in this area. As noted in the comments on Point 41, none of the infrastructure projects listed in Table E-1 are anticipated to be constructed by the City before 2040.
- The major infrastructure project package assumed for future background conditions reflects the maximum number of crossings and interchanges that are possible for east-west trips crossing Stoney Trail. The Omni development would necessitate additional intersection lanes and longer storage lanes for turning movements at key intersections along 84th Street NE.

Point 52 refers to the County undertaking more analysis than the City did when sharing the East Stoney ASP, and states that it is inaccurate to suggest that the County failed to consider and fully address impacts on the City's Transportation Infrastructure

- As indicated in Point 37 (final bullet), the size of the East Stoney ASP is relatively small and clearly
  defined compared to the Omni and Conrich areas, and the impacts minor. The Omni area has a
  much larger range of possible development scenarios than East Stoney, and because of the
  broader number of options for development, analysis of multiple scenarios is prudent in order to
  develop a feasible transportation plan for the plan area.
- As is evident from the County's July 6, 2018 submission, multiple iterations of the network analysis were undertaken. However, as evident from Table 1 and Table 2, the effect of each subsequent analysis was to revise the input assumptions to that the total traffic forecast by the area was reduced to a level for which a package of infrastructure projects could be developed. Policy statements were added to the ASP, however as noted in comments on Point 17 regarding Highway Commercial uses, the policy as written does not ensure lower trip generation potential for the plan area. Nor do the policy additions ensure that County funding sources will be available to contribute fairly to improvement costs.
- The City appealed the Area Structure Plan and commissioned the Omni ASP Appeal: Transportation Network Study, May 22, 2018 report because its concerns had not been addressed through the ASP review process.





#### Point 56 states that the East Stoney ASP and Cornerstone ASP will have impacts on the County.

- The magnitude of the East Stoney ASP is discussed in the comments on point 37. No major infrastructure projects are required to support this development.
- The Cornerstone ASP has no impacts on Rocky View County infrastructure as the development is fully within the City, west and south of northeast Stoney Trail. ASP development can be serviced within the plan area and within the City, with very little traffic demand to/from the County. Any future travel into Rocky View County would depend on development in Rocky View attracting traffic from this area, and other areas of Calgary. In that case, the Rocky View County tax base would benefit from the development in their jurisdiction paying property taxes to the County, which could contribute to the County's tax base for funding any required road upgrades to serve that development.

Point 57 indicates that the ASP encourages alternative modes of transportation such as the use of a public or private transit system and infers that this makes provisions to reduce automobile usage within the Omni area.

While policy statements encouraging alternative modes of transportation can be part of an effective
plan to reduce automobile usage, on its own it is unlikely to be effective. Policies that require
specific measures and identify funding responsibilities and sources would also be required for
effectiveness.

Points 63 and 64 provide an excerpt from the City's East Stoney ASP regarding transit routes that provide direct and convenient connections within the Plan area, to and from the Primary Transit Network, and infers that this statement addresses a future LRT connection

• The intent of the statement in the East Stoney ASP is not to infer that the LRT will be extended to the East Stoney ASP area, but rather that a future transit service between the East Stoney area and the existing Whitehorn or Westwinds Station is planned when available funding and competing priorities permit. Map 5 of the East Stoney ASP illustrates these potential connections, and when read with the excerpt in Rocky View County's Point 64, clarifies the intent.

Point 66 states that the Omni Network Analysis and related studies demonstrate that the future transportation network is viable and can be implemented throughout the planning process as local plans are prepared.

 The content of this letter points out various problems with the analysis, coordinated approvals of land use planning and infrastructure construction, and the lack of clarity of plans and policies in the Omni ASP.





### Point 77 states that the County maintains that the transportation infrastructure improvements required in the northeast quadrant of Calgary are related to City development.

- Analysis conducted for the Cornerstone ASP and East Stoney ASP did not indicate the need for any of the projects identified in Omni ASP Appeal: Transportation Network Study, May 22, 2018 report Table E-1.
- Background traffic indicated in the CIMA+ report is from the Conrich ASP area in Rocky View
  County, and significant infrastructure improvements will be required to support build out of that plan
  area. The City receives no property tax nor off-site levy benefits from development in the Conrich
  area, therefore any funding for these improvements would be drawn from off-site levies from City
  of Calgary developments and the general tax base for City of Calgary.

## Point 83 indicates that all infrastructure costs related to site development in the Omni area is the responsibility of developers or is collected through off-site levies.

• The approved Rocky View County Off-Site levy bylaw was consulted during the preparation of CIMA's Omni ASP Appeal: Transportation Network Study, May 22, 2018 report, and the projects included in Table E-1, which identifies unfunded infrastructure, include neither projects that are of a scale to be funded by developers nor are they included in the County's bylaw. Therefore, there is no evidence that a source for Rocky View County funding contributions has been established

## Point 86 refers to an interchange not serving the Omni ASP exclusively, but benefitting City of Calgary areas including Cornerstone, Northeast Community A and East Stoney.

- Although it is unclear which interchange is being referred to in this statement, it is notable that these
  City developments do not trigger the need for any of the projects listed in Table E-1 of the Omni
  ASP Appeal: Transportation Network Study, May 22, 2018 report. The improvements become
  required when the Conrich area and the Omni area, build out.
- Following development in Conrich and Omni, trips may be made between these areas of the County and the above noted areas of the City, however without Conrich and Omni developing, there would be insufficient traffic between the areas to necessitate the projects.
- There is an expectation from residents, developers and business owners in Calgary that funds
  collected through property taxes and off-site levies would be allocated to benefit areas that are
  funding the improvements. In the case of development in Omni and Conrich, off site levies and
  property taxes would be paid to the County, which would then have funds available to build the
  required infrastructure.





#### Review of the Submission of the City of Calgary, Watt Consulting, July 3, 2018

#### Comments on Land Use on Pages 2 and 3 of letter

- Land uses and development sizes in the CIMA+ Omni ASP Appeal: Transportation Network Study, May 22, 2018 report were developed based upon a review of similar approved sites in Rocky View County, and based upon specific land uses referenced in the ASP itself, as summarized in Tables 2-1, 2-2 and 2-3 of the report
- No specific limitations on development that would ensure smaller or lower trip generating developments are evident in the ASP, therefore it is reasonable to assume that this, or even a higher level of development, could meet the requirements of the ASP.
- However, even if development levels are lower than assumed in the CIMA+ report trip generation,
  a sensitivity analysis detailed in Section 3.9.2 of the report indicates that the package of
  infrastructure projects would be required if the Omni development built out to 30% of the full level
  of development analyzed (ie a 70% reduction in trip generation). Reductions in trip making due to
  the different assumptions identified in the Watt Consulting letter amount to less than a 70%
  reduction in trips, therefore these changes in assumptions would not change the outcome of the
  analysis.

#### Comments on total trip generation on page 4 of letter

- Table 1 of this letter provides a similar comparison
- Comments in the point above regarding land use indicate that with even lower levels of trip
  generation, the impacts still result in the need for the package of improvements identified in Table
  E-1

#### Comments on Traffic Distribution

 This is a repeat of Point 43 from the Rocky View County Transportation Response and the details are addressed under the Point 43 heading of this letter.

### Comment about missing laning information at intersections and statement that signal timings were not optimized

- Appendix E of the CIMA+ report includes the traffic signal analysis (Synchro) reports for all scenarios analyzed in the study and those reports each include a line with graphics indicating the lane configuration used for each intersection in the analysis.
- Traffic signal timings phasing and timings were optimized for each intersection in each scenario.







### **Additional Supporting Information**

The City's authentication page is appended to this letter as Attachment 2.

CIMA+ will prepare SimTraffic animation files to illustrate future traffic operation with 100% and 30% of afternoon peak hour forecast volumes. These can be presented to the Municipal Government Board in support of our Omni ASP Appeal: Transportation Network Study report.

Please let me know how we can assist further with this project.



Kari Fellows, P.Eng., PTOE Sr. Urban Transportation Planner PERMIT TO PRACTICE
CIMA CANADA INC.
PERMIT NUMBER: P-8204

The Association of Professional Engineers and Geoscientists of Alberta

This letter was reviewed by René Rosvold, P.Eng.



2 Attachments







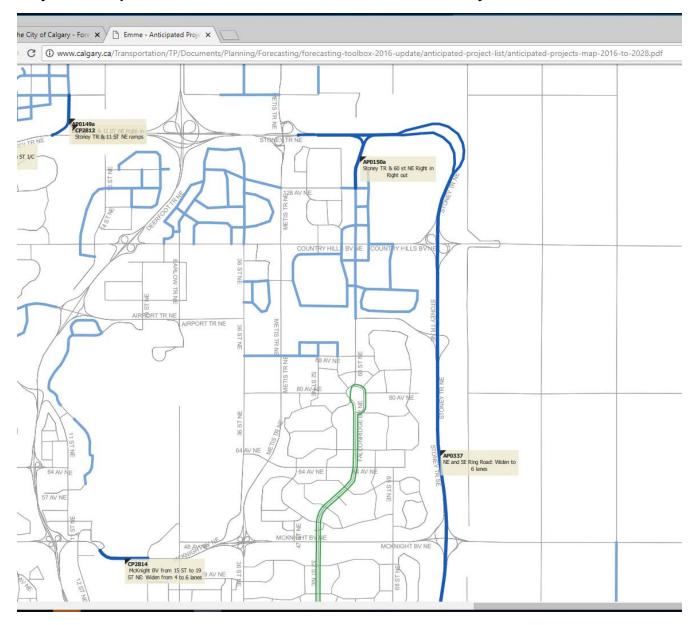
### **Attachment 1:**

**City of Calgary Expected Transportation Infrastructure Projects** 





# City of Calgary Expected Transportation Infrastructure Projects Projects Anticipated between 2016 and 2028 near Northeast Stoney Trail



### Source:

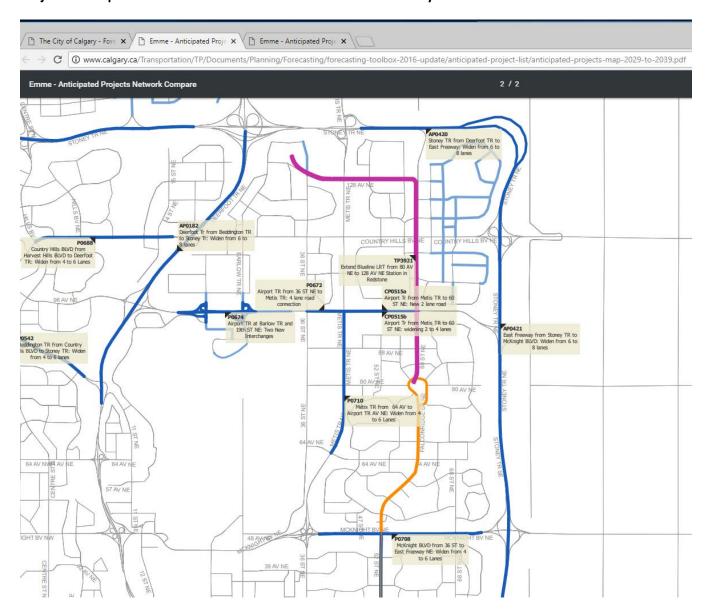
http://www.calgary.ca/Transportation/TP/Documents/Planning/Forecasting/forecasting-toolbox-2016-update/anticipated-projects-list/anticipated-projects-map-2016-to-2028.pdf







## City of Calgary Expected Transportation Infrastructure Projects Projects Anticipated between 2029 and 2039 near Northeast Stoney Trail



#### Source:

http://www.calgary.ca/Transportation/TP/Documents/Planning/Forecasting/forecasting-toolbox-2016-update/anticipated-projects-list/anticipated-projects-map-2029-to-2039.pdf







# City of Calgary Expected Transportation Infrastructure Projects Projects Anticipated between 2040 and 2048 near Northeast Stoney Trail



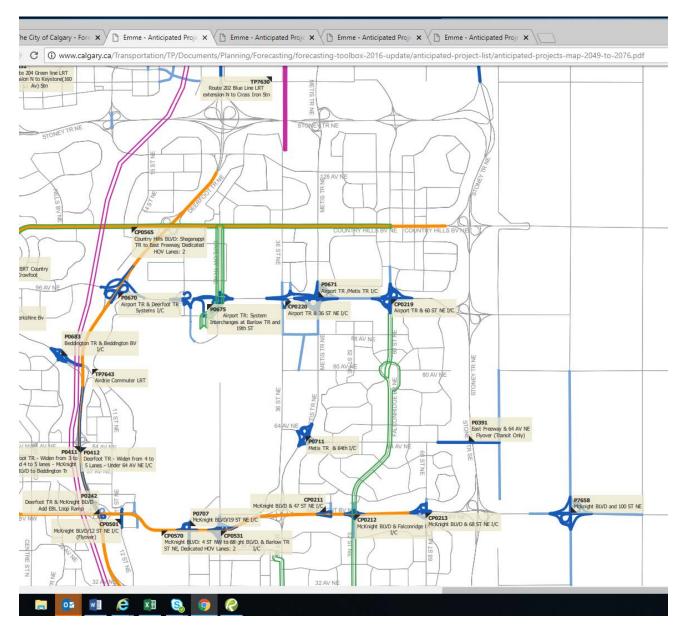
#### Source:

 $\frac{http://www.calgary.ca/Transportation/TP/Documents/Planning/Forecasting/forecasting-toolbox-2016-update/anticipated-projects-list/anticipated-projects-map-2040-to-2048.pdf$ 





# City of Calgary Expected Transportation Infrastructure Projects Projects Anticipated between 2048 and the Long Range Scenario near Northeast Stoney Trail



#### Source:

http://www.calgary.ca/Transportation/TP/Documents/Planning/Forecasting/forecasting-toolbox-2016-update/anticipated-projects-list/anticipated-projects-map-2049-to-2076.pdf







# **Attachment 2:**

**City of Calgary Authentication Page** 



July 16, 2018

I, Tom Hopkins, M.Eng., P.Eng. authenticate the submission of this document titled *Response to Rocky View County July 6, 2018 submission*" memo completed by CIMA+, dated July 16, 2018



for the purposes of the Omni Area Structure Plan Intermunicipal Appeal. The City of Calgary agrees with the findings and conclusions contained within this memo. The specific contents of the document remain the responsibility of the engineer of record and their company.



Professional Engineer Authentication Tom Hopkins, M.Eng, P.Eng PERMIT TO PRACTICE
CITY OF CALGARY

Signature

Date 16, 2018

PERMIT NUMBER: P 4428

The Association of Professional Engineers.
Geologists and Geophysicists of Alberta

Corporate Permit to Practice
The City of Calgary



January 2013

The Association of Professional Engineers and Geoscientists of Alberta

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#### **FOREWORD**

APEGA publishes practice standards and guidelines for the purpose of educating its members and the public about matters of professional practice. Practice standards and guidelines are not intended to be short courses in engineering or geoscience. In general, these documents are produced to meet the following objectives:

- To assist APEGA members in performing their professional role in accordance with the Engineering and Geoscience Professions Act and the Engineering and Geoscience Professions Regulation under the act.
- To help the public understand the role of APEGA members and the responsibilities members have when performing their professional services.

This practice standard is a revision of the previous document published in April 2002. Although the regulatory requirements regarding authentication of professional documents have not changed, the revised practice standard provides additional information on stamping procedures and management of engineering and geoscience documents.

Questions or suggestions concerning this document should be addressed to:

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#### 1. OVERVIEW

The Engineering and Geoscience Professions Act and the Engineering and Geoscience Professions Regulation under the Act govern the practice of engineering and geoscience in the province of Alberta. APEGA is the authority that administers that legislation, including matters concerning the use of professional members' stamps.

Essentially, Alberta law requires every professional member who performs a task that is within the practice of engineering or geoscience to authenticate (stamp, sign and date) all final documents prepared or reviewed by the member as part of that task before the documents are issued. The requirement applies equally to an employee working for an employer or to a consultant working for a client.

The stamp and signature signify that a licensed professional member of APEGA has accepted responsibility for the engineering or geoscience work represented in the authenticated document. A stamp is only issued to an individual who is qualified to practice engineering or geoscience in some capacity. The stamp is not a warranty or a guarantee of accuracy, however.

Other pieces of legislation (e.g., acts, regulations, codes, etc.) in addition to the EGP Act also require certain documents to be authenticated. Client and contractual requirements for authentication of documents are to be consistent with the regulatory requirements for authentication. No one can request a professional member's stamp on a document where there is no regulatory requirement for the stamp. The resolution of any disputes falls within APEGA's jurisdiction.

# 1.1 Scope

This is a standard of practice for use of the professional stamp when authenticating engineering and geoscience documents. The procedures outlined apply equally to documents that are prepared by employee professionals for use by their employers "in house" and to documents that are prepared by professional members or permit holders for use by external parties.

# 1.2 Purpose

This standard is meant to assist professional members in complying with the statutory requirements for authenticating professional documents. It is also intended to provide guidance concerning proper use of the stamp and advice on matters related to handling professional documents, such as revisions, storage, transmittal, etc.

#### 1.3 Definitions

For the purposes of this standard, the following terms and definitions apply.

#### Act

The Engineering and Geoscience Professions Act.

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#### **Association**

The Association of Professional Engineers, Geologists and Geophysicists of Alberta (APEGA).

#### As-built or as-acquired document

A document that reflects the installed, fabricated, constructed or commissioned condition of an item or project based on information provided by another party and not verified by the professional member. In the geophysical community, such documents are referred to as "as-acquired", e.g., an as-acquired realignment of a seismic line.

#### **Authentication**

Application of the professional member's stamp, signature and date.

#### Discipline

A specific field of practice within a profession, e.g., electrical engineering, mechanical engineering, etc.

#### **Engineering document**

A document that expresses engineering work, typically as a result of an analysis or design process, e.g., engineering drawings; specifications and design requirements; instructions; design notes and calculations; reports based on engineering judgment that document recommendations, opinions, evaluations, certifications, condition assessments, analysis or verifications.

#### Final document

A professional document issued to another person on which that person is permitted to rely, for the intended purpose of that document, e.g., a tender document might not be complete for construction purposes, but it is final for tender purposes. Documents provided for review or comments are not considered to be final documents.

#### Geoscience document

A document that expresses geological or geophysical work, typically as a result of an interpretation, analysis or design process, such as seismic programs, maps, cross-sections and reports.

#### Integrity (of professional documents)

The ability to verify that the information contained in the document has not been changed since the document was authenticated, and that the medium used provides stability and the required longevity to the information.

#### Issued (or issuing)

Issuing a document means providing a document that a professional member has stamped and signed (authenticated) directly. For the purposes of interpreting this practice standard, providing someone with a copy of an authenticated document is not considered to be issuing the document.

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#### Permit holder

A partnership or other association of persons or a corporation that holds a permit under the *Engineering and Geoscience Professions Act* .

#### Permit number

The number issued by the Association to a permit holder entitled to engage in the practice of engineering or geoscience.

#### Person

A corporation, company, association, firm, partnership, society, or other organization, as well as an individual.

#### **Professional document**

An engineering document or a geoscience document in any form or medium (e.g., paper, mylar, electronic, etc.), Referred to in the Act and Regulations as "document of a professional nature."

#### Professional member

A professional engineer, professional geologist, professional geophysicist, professional licensee (engineering), professional licensee (geological), professional licensee (geophysical) or licensee entitled to engage in the practice of engineering or geoscience under the Act.

#### Record drawing/document

A professional document prepared by the professional member to record design changes to an initial design for which he or she has accepted responsibility and which represents the final design of the project. Typically issued or retained as verification that on-site conditions are in accordance with the final design.

#### Regulations

Engineering and Geoscience Professions Regulation

#### Stamp

The stamp issued by the Association to a professional member, in the form of a rubber stamp, an embossing seal or an electronic file.

#### 2. PROFESSIONAL RESPONSIBILITIES AND LIABILITY

# 2.1 Professional member's responsibility

A professional member is responsible for practicing in accordance with the Act, Regulations and the *Code of Ethics*.

A professional member shall only apply his or her stamp to professional documents he or she has prepared or to professional documents that were prepared under his or her supervision and control. In the case of professional documents prepared by someone

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else, a professional member shall only apply his or her stamp to the documents after thoroughly reviewing the documents and accepting professional responsibility for them.

A professional member is responsible for maintaining custody and control of his or her stamp at all times. The professional member shall apply the stamp personally or he or she may allow the stamp to be applied by a person acting under his or her direct control.

A professional member shall personally sign the documents to which his or her stamp has been applied.

Someone who fails to authenticate a final document that he or she prepares and issues, or someone who authenticates and issues a document prepared by another person without performing a thorough review, is in violation of the Act and Regulations and the *Code of Ethics*.

A professional member shall only use the stamp while registered with the Association and while having the right to practice. A professional member shall return the stamp to the Association when required to do so.

# 2.2 Permit holder's responsibility

A permit holder is corporately responsible for the integrity of its projects. A permit holder is responsible for putting in place a system that enables professional practice to be carried out by professionals having the training and experience in the fields of the profession contained in the document. The organization is responsible for putting sufficient quality control procedures in place to preclude errors or omissions in the technical content of a professional document so that the result is a complete and accurate document. A permit holder is responsible for carrying out its business in accordance with the APEGA *Code of Ethics*.

A more extensive discussion of the responsibilities of professional members (permit holders and individuals) is contained in APEGA's *Professional Practice - A Guideline*.

# 2.3 Liability

Liability is a legal responsibility for some harm or loss caused to another person. APEGA has no authority to determine legal liability. The jurisdiction to resolve disputes concerning liability rests with the courts. Not authenticating a professional document does not relieve a professional member from any legal liability that might arise as a result of the work contained in a document that the professional member prepared and issued. A court could find a professional member, a permit-holding employer, or both, liable whether or not such a document was authenticated. Authentication merely serves as a means to identify the professional member who accepted responsibility for the document.

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## 3. AUTHENTICATION PROCESS

# 3.1 Professional stamps

Authentication of a professional document shall consist of applying the professional member's stamp to the document, signing the document and indicating the date when the document was stamped. The Act and Regulations do not provide for any other form of authentication. A document showing only a phrase such as, "Original stamped by \_\_\_\_" is not an authenticated document.

The member's signature should appear beside or across the stamp without obscuring the member's name.

The date should appear below the stamp and shall be in a format that is not ambiguous. For example, 10-12-11 is ambiguous, as is 09-08-2011.

#### 3.2 Permit numbers

The Regulations also require that when a permit holder is carrying on the practice of engineering or geoscience, professional documents shall also show the permit number issued by the Association to the permit holder (section 49).

The permit number should appear in the proximity of the professional member's stamp. For example, it may be part of a title block on a drawing, map or cross-section. The significance of the number should be obvious. Someone unfamiliar with the professions would not necessarily interpret "P1234", by itself, as a permit number. The number should be accompanied by words such as "APEGA Permit" or "APEGA Permit to Practice". No signature is required to accompany the permit number.

Where two or more permit holders produce different components of the same document, all permit numbers shall appear on the document.

The presence of a permit number indicates that the permit holder is registered and entitled to engage in the practice of engineering or geoscience.

Permit numbers are not required on documents issued by professional members who are self-employed, i.e., who do not "belong" to a permit holder.

Note: The Regulations no longer require the APEGA permit stamp to be applied to professional documents, only a permit number. The permit stamp may still be used as a means of applying the permit number, however. Permit holders may employ the permit stamp as a means of quality control, if they wish.

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# 3.3 Professional documents requiring authentication

#### **Documents destined for outside Alberta**

Professional members practicing in Alberta occasionally prepare final documents for use outside Alberta. Strictly speaking, all such documents must be authenticated, in accordance with the Regulations, since the practice of engineering or geoscience takes place in Alberta.

However, jurisdictions outside Alberta may have authentication requirements of their own and Alberta authentication is not recognized (e.g., other provinces in Canada and foreign countries). In such cases, if a professional member applies a professional stamp that he or she obtained from the jurisdiction where the documents will be used, then the APEGA stamp and permit number do not need to be applied. If the jurisdiction has no authentication requirements, then the APEGA authentication should be applied.

#### What to stamp

The Regulations require a professional member to authenticate all final documents of a professional nature that he or she has prepared or reviewed (section 54) or reproductions or copies of the documents (sections 3, 6 and 8 of the Act). A professional member's authentication indicates that he or she has accepted professional responsibility for the documents.

The Act and Regulations refer specifically to several kinds of documents that require authentication, including: a plan, drawing, detail drawing, map, geological cross-section, geophysical cross-section, specification, report or other document or a reproduction of any of them (sections 3, 6 and 8 of the Act and section 54 of the Regulations).

"Final" means a document that is intended to be relied on by others. "Final" also means "final for the purposes intended." For example, engineering drawings submitted for the purpose of obtaining permits or approvals might not contain all the details required for construction, but those drawings are considered final for approval purposes and must be authenticated, with a clear indication of their restricted purpose.

The content of a document determines whether it is a professional document. An engineering document is a document that expresses engineering work carried out by a professional member who is licensed to practice engineering. Geological and geophysical documents are defined similarly.

The Regulations do not differentiate between documents prepared by a consultant for a client and those prepared by employee professionals for use internally by their employer.

Forms for government or regulatory authorities that specifically require a professional's stamp (e.g., schedules under the *Alberta Building Code*) shall also be authenticated.

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#### What not to stamp

Professional documents that are provided to someone only for review and comment (drafts) are not considered to be final and should not be stamped. When the review is completed and the decision is made as to the content of the document that will be issued, the document will then require authentication.

Documents that do not contain work of a professional nature should not be authenticated (e.g., contracts, checklists, cost estimates, construction schedules, progress claims, payment verifications, correspondence, brochures, etc.).

Occasionally, legislation other than the EGP Act requires that a task be done by certain qualified persons that are specified in the legislation. Where they are included with persons from other occupations, engineers or geoscientists should not stamp any documents required by the legislation unless the work is clearly of a professional nature (i.e., engineering or geoscience).

Documents that reflect the installed, fabricated, constructed or commissioned condition of an item or project based on information provided by another party, and that has not been verified by the professional member, should not be authenticated. This practice standard defines such documents in the engineering profession as "as-built" drawings. In the geophysical community, such documents are commonly referred to as "as-acquired", e.g., an as-acquired realignment of a seismic line.

Technical journal articles, conference papers, magazine articles, slide presentations, etc., are considered to be informative pieces prepared for general information. They are not considered to be final documents on which someone would be expected to take action. Such items should not be authenticated.

# 3.4 Authentication procedures

#### **Single Discipline Documents**

In the strictest sense, the Regulations could be interpreted as requiring all professional members who jointly prepare a document to each authenticate the document. Where a professional document has been prepared by more than one professional member in the same discipline, it may be authenticated by each of them, although this is not a requirement. The document shall be authenticated by at least one professional member, preferably the individual responsible for coordinating the work of the team, or by the supervisory individual if he or she was sufficiently involved in overseeing the work.

The decision as to who will authenticate a professional document should be made prior to any work on its preparation.

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#### **Multi-Discipline Documents**

A professional document that contains components that have been prepared or reviewed by professional members of different disciplines shall be authenticated by a professional member who is able to accept responsibility for the work related to each of those disciplines. The responsibility of each professional member who authenticates the document should be clearly indicated on the document.

#### As-built and record engineering drawings

As-built drawings, as defined here, are drawings that have been prepared or marked up by someone other than the authoring engineer, e.g., a contractor or other persons not under the direct supervision and control of the engineer. The drawings are intended to represent the on-site conditions that are not shown on the original drawings. Changes to the engineer's design may have been initiated by someone else to accommodate site conditions. If the engineer is not in a position to accept responsibility for the content of as-built drawings, they should not be authenticated.

Recognizing that the Regulations allow a professional member to stamp a drawing or other document prepared by another person, if the engineer is in a position to "thoroughly review" the changes and accept responsibility for them, the engineer may stamp the marked-up as-built drawing as being representative of actual on-site conditions if he or she has verified that is the case.

Record drawings, as defined here, are drawings prepared by the engineer to record design changes for which he or she has accepted responsibility. The changes may have been made by the engineer previously through authenticated change orders, directives, etc., and those changes are subsequently being incorporated into one representative drawing along with the original design elements, representing the final design for the project. Since the engineer is responsible for the content of record drawings, he or she is required to authenticate them.

If the record drawings are being used as a means to verify that construction has been done in accordance with the design, the engineer will have had to have spent a sufficient amount of time on site (frequent visits or continuous presence) before being able to provide such an assurance. The engineer should determine in advance whether the client requires such verification.

#### As-acquired documents

Typically used in reference to geoscience documents such as seismic programs, asacquired information is another party's representation of what occurred in the field. Geoscientists should not stamp as-acquired documents, e.g., a realignment of a seismic line by a geophysical contractor from that initially laid out by a geophysicist. If the geophysicist can verify the realignment and is willing to accept responsibility for the realignment and record that, he or she can issue an authenticated record document.

#### Change orders, directives, field instructions

Recognizing that such changes could be small, numerous or issued verbally, change orders, field instructions, etc. that affect the design in an authenticated document must

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be authenticated prior to being implemented, but if that is not reasonable or practical, then the changes should be clearly communicated, documented and then authenticated in a timely fashion.

Timely fashion will need to be interpreted in the context of the particular work being done. For example, the effects of several email instructions could be incorporated into an authenticated drawing during a subsequent design drawing revision or preparation of a record drawing.

#### Design Notes, Calculations and Geoscience Interpretations

Design notes, calculations or geoscience interpretations (e.g. cross-sections, stratigraphic interpretations, etc.) are usually considered to be the property of the professional member for his or her own use. If the design notes, calculations or interpretations are issued to another person, either in accordance with the scope of the project or by agreement, the cover, title or signature sheet shall be authenticated in a manner that clearly indicates acceptance of professional responsibility for the notes or calculations without needing to authenticate each page. Design notes and calculations should be prepared in a format which records the names of the responsible professional members, designers and checkers and the dates on which their work was performed. Calculations and design notes that are kept as part of the member's work file for his or her reference do not need to be authenticated.

#### **Engineering Testing Laboratory Reports**

Reports issued by testing laboratories prepared by or under the supervision of a professional member as appropriate shall be authenticated by him or her whenever such reports go beyond the tabulation of test data (e.g., composition of material, breaking stress, etc.) and proceed to:

- Interpret the data to draw conclusions as to the characteristics of the material or device, or parts thereof.
- Express engineering judgment in the form of recommendations derived from the results of the test.
- Present design work in the form of plans, specifications, and other instruments involving the practice of engineering.

#### **Geoscience Documents Requiring Authentication (examples)**

Note: Transitory interpretations which are subject to review and frequent modification, used internally within an organization, would not be considered to be final documents requiring authentication.

#### Resource or reserve reports

Final reports (of any kind or length) based on geoscience judgment, documenting recommendations, opinions, evaluations, certifications, condition assessments, analysis or verification.

#### Maps

Final maps that represent geoscience interpretation such as, but not limited to, isopach/isocore maps, pore volume estimate maps, structure contour maps,

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stratigraphic interpretations, surficial geology maps, bedrock maps and resource or reserve distribution maps of any kind Including derived information, e.g., structural depth equivalent, predicted porosity, lithology, etc. Maps shall be individually authenticated if they are not part of a bound report.

#### Final Drilling programs/prognoses or completion plans

Including assessment of potential lost circulation zones, high pressure zones, high acid content, etc.

#### Seismic programs

Including changes to such programs, field survey design documents, design assumptions, data processing parameters

#### Mine plans

Oilsands, coal mining, including reclamation plans.

#### **Manuals**

Manuals based on engineering or geoscience work prepared for direction and guidance of others shall be authenticated using the same principles of quality control and professional responsibility as apply to other professional documents.

#### **Preliminary documents**

Preliminary documents that are issued for some restricted purpose where someone may rely on those documents shall be authenticated. The documents shall include a notation clearly identifying their intended purposes or limitations, e.g., "not for construction", "for tender purposes only", "for budget purposes only", "for site planning only", as appropriate.

#### Reports

A report of any size or format shall be authenticated by authenticating the cover, title or signature sheet without having to authenticate each page.

#### **Reviewed Documents**

The Regulations allow a professional member to authenticate a document representing engineering or geoscience work that was prepared by another person. Before applying his or her stamp and signature to the document, the professional member is required to thoroughly review the document, performing sufficient checks, calculations, research or other work that will enable the professional member to accept responsibility for the document.

The professional member's authentication will be regarded in the same manner as if he or she was the original author. The professional member should describe, either in notes or attached documents, the extent of the review.

#### Revisions

Authenticated documents occasionally need to be revised during the course of a project or as part of a new project. Revising a professional document constitutes professional

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practice. To ensure that professional members are not unknowingly accepting responsibility for work they did not do, it is important that documents, once authenticated, are not modified without undergoing an appropriate revision process.

A professional document that has been revised shall be authenticated in a manner that clearly indicates the revising professional member's acceptance of responsibility for the revisions and the effects of those revisions. Care should be taken in documenting the revisions to clearly identify the boundary of professional responsibility between the original and revised documents.

When revision of a document authenticated by another professional member is required for an ongoing project, the original authenticated document should be retained. The professional member revising the document should apply his or her stamp and signature to the revision, clearly identifying the changes and who is responsible for them.

When revision of a document (particularly a drawing) authenticated by another professional member for a completed project is required for a new project, the following procedure should be used: The document used as the basis of the new work should be clearly identified by a note, drawing method (e.g. lighter or ghosted lines) or an identifying mark as work previously done by others; the original stamp and signature should not appear; the professional member revising the document should add his or her stamp and signature, clearly identifying the revisions and who is responsible for them.

#### Sets of plans, drawings, detailed drawings

Each drawing which is in a set of plans or drawings, and which can be used individually for its intended purpose, shall be authenticated.

#### Shop or Fabricator drawings

Several kinds of drawings might be referred to as shop drawings or fabricator drawings. The fabricator commonly prepares such drawings after he or she reviews the drawings and specifications supplied by a professional member. Authentication requirements are as follows:

#### Fabricator general arrangement drawings

Drawings that specifically describe the location of structural members, connections and components to be supplied by the fabricator, and that may be reproducible copies of the drawings provided by a professional member on which the fabricator's information is noted, are not considered to be design drawings and therefore do not require authentication.

#### Fabricator detail drawings

Drawings produced by the fabricator to provide information needed by shop personnel to fabricate or assemble the items are not required to be authenticated since they do not contain any fabricator's engineering design.

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#### Fabricator design drawings

Structural elements or special connections that have been designed specifically for a particular application by a professional member acting for a fabricator shall be authenticated.

#### Fabricator proprietary items

Drawings for proprietary items (such as open web steel joists) shall be authenticated by the professional member who prepared them.

#### Standard connections

A professional member may specify that standard connections be selected from industry handbooks. Although the connection drawings do not require authentication, the professional member responsible for their selection shall authenticate the specification.

#### Erector drawings

Drawings or documents produced by the erector to address temporary loading, temporary bracing, falsework and erection sequence instructions shall be authenticated.

#### Software

Computer software programs developed by a professional member that involve the practice of the professions constitute professional documents and are required to be stamped. These include, for example, programmable logic controller (PLC) code, application, modeling and simulation programs. The original version or modifications of the program or code (either written or electronic) shall be authenticated.

Packaged software programs may be authenticated by including a separate sheet in the package showing the name and version of the program along with the professional member's stamp, signature and date. For the electronic version of the software program, a member's professional stamp, signature and date should appear in the equivalent of the "About" feature under the "Help" tab commonly found in most software programs.

For PLC (programmable logic controller) code or DCS (distributed control system) code, a professional member's stamp, signature and date should appear on a print-out of the code or a graphical representation of the code, either in paper or electronic format. Similarly for firmware, the stamp should appear on a graphical presentation of the firmware (e.g., SAMA diagram, cause and effect diagram, process control narrative, etc.).

#### **Specifications**

Specifications that contain engineering or geoscience decisions shall be authenticated if the specifications are not part of a drawing or other authenticated document, e.g., a specification for concrete strength that does not appear on a foundation design, as a building industry example. As another example, in the area of equipment certification, the Occupational Health & Safety Code requires an engineer to authenticate "specifications" which includes written instructions, procedures, drawings or other documents relating to equipment, supplies and work processes or operations.

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Not every page of a multi-page set of specifications needs to be authenticated if the cover, title or signature page of the specification bundle is authenticated.

#### Standard drawings

A professional member might be asked to prepare a design drawing that is intended to be used in more than a single instance. The decision whether or not to authenticate such a standard/generic drawing can only be made by the professional member who prepared the drawing. If it is not possible to sufficiently limit or specify the conditions under which the drawing can be used, the drawing should be left unauthenticated.

A professional member who subsequently uses an unauthenticated standard drawing is responsible for determining that the drawing is suitable for the current purpose and for its authentication.

#### **Translated documents**

Occasionally a professional member is required to provide a professional document in a language other than his or her own. Typically, the professional member will have the document translated into another language. An issue arises where the professional member is not able to read the translation and is unable to determine whether the translator has correctly translated the document. Translation errors possibly could become construction errors.

In such instances, the professional member should employ the services of a certified translator and obtain a written declaration that the translated text is identical in meaning to that of the original. If the translator is not certified by a recognized certification body, the translator's declaration should be notarized. The professional member can then authenticate the original and translated documents.

#### 4. DOCUMENT MANAGEMENT

# 4.1 Approving and issuing documents

Professional members should have a formal process for preparing, authorizing and issuing professional documents. The process should include the following procedures, as a minimum:

- Checking to ensure that a document is complete for its intended purpose and that it accurately expresses the output of the professional member's design or analysis;
- Verifying to ensure the document meets the requirements of the work as expressed by codes, standards, APEGA guidelines and contractual requirements;
- Approval by a professional member who acknowledges that the document meets professional standards and accepts responsibility for it by stamping, signing and dating it.

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The Act states that a member is to apply his or her stamp (accompanied by a signature, as per the Regulations) to either of the following:

- · a final document, or
- a reproduction (copy) of a final document.

The party to whom a final document is issued is entitled to receive an original stamp and signature on either an original document or on a reproduction of the original document. A reproduction is considered to be a photocopy, fax, PDF, etc. Where an originally-stamped/signed document has been provided, or is not required to be provided, providing reproductions of stamped documents is acceptable.

# 4.2 Retention of professional documents

There are no requirements in the EGP Act, Regulations or APEGA's by-laws for retaining professional documents. However, copies or originals of authenticated documents are usually kept for reference purposes or for defence against legal claims. A professional document kept in case of possible legal action should be retained at least until the period of professional liability expires. The Alberta *Limitations Act* that came into force on March 1, 1999 provides for a total maximum time of 10 years to discover an "injury" and make a claim. Within those 10 years, the claim must be made within 2 years from the date that the necessary basis of a claim was discovered. Depending on circumstances such as the nature of the work involved, the likelihood of litigation might suggest that the retention period could be shorter. Members who have professional liability insurance should also consult their insurers about their requirements for document retention.

Documents that are retained should be stored in a manner that maintains their integrity and prevents unauthorized use of the documents or the professional stamps and signatures that appear on them. Copies of documents that have been issued to clients should be identified as archival documents to the effect: "This copy or document is for record purposes and shall not be revised."

Employee professionals might ask if they can keep copies of the documents that they prepared or authenticated. Employers may choose to allow that, but they are not obligated or compelled to provide copies, or to allow employees to take copies, since the documents are the property of the employer not the employee.

# 4.3 Document ownership and use of other professional members' documents

Copyright in a professional document belongs to the author. Professional members must not use someone else's document from a completed project as the basis for a new project without the consent of the author.

In *The Canadian Law of Architecture and Engineering*, the authors distinguish between the ownership of drawings, specifications and other documents and the ownership of copyright. They say "the ownership of drawings and related documents refers to the ownership of the drawings themselves, and is governed by the contract between the architect or engineer and the client. The ownership of copyright, on the other hand, refers

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to the ownership of the expression of the idea embodied in the drawings and the right to reproduce that expression. Architects or engineers who create the copyright work retain copyright in the work unless they expressly assign it to another." <sup>1</sup>

## Professional members as independent contractors

Where a professional member or permit holder is in the position of independent contractor providing services to a client, the professional is not considered to be the client's agent for such purposes. Documents created by professional members only to help them in performing their professional duties are theirs. Unless a contract between the professional member and the client specifies otherwise, documents prepared for the client at the client's request belong to the client once the client has paid for them. However, the copyright in the documents is owned by the professional member and the design, for example, cannot be reproduced by the client without the professional member's consent, subject to any agreement between them to the contrary.

#### Professional members as agents of their clients or employers

Professional members might act as agents for their clients for different reasons. They could represent the clients in negotiations with contractors, authorities having jurisdiction or other professionals. Based on the reference noted below, it appears that: Drawings and documents prepared for the client by the professional in that capacity belong to the client. Documents provided by the professional member to an authority for project approval on behalf of the client belong to the client. Similarly, professional members who are employees would be considered agents of their employers, not independent contractors. With regard to copyright, where work is performed under a service contract or under employment, the copyright belongs firstly to the employer unless there is an agreement otherwise.

Matters of copyright should be discussed prior to commencement of work, and it may be appropriate to seek legal counsel. The information above is not to be construed as legal opinion or advice.

# 4.4 Dual stamping

Some clients may have a requirement for two consulting professional members to stamp a document such as a design drawing, e.g., a design engineer and a checking engineer. Dual stamping is not a requirement under the Regulations. One engineer's stamp is sufficient if the engineer is in a position to accept responsibility for the drawing. That would not preclude the client from including in its contract with the consultant the provision for another engineer to review the original engineer's work. As recognized in the Regulations, a professional member is allowed to review the work of another person and stamp that work after a thorough review. The designer and the checker would thus both bear responsibility for the design drawing that they authenticated.

<sup>&</sup>lt;sup>1</sup> Beverley M. McLachlin, Wilfred J. Wallace, and Arthur M. Grant, *The Canadian Law of Architecture and Engineering,* Second edition, (Vancouver, BC: Butterworths Canada Ltd., 1994), 264.

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#### 5. ELECTRONIC DOCUMENTS

It is acceptable for a professional document to be prepared, authenticated and issued solely in electronic form. The following authentication requirements must be met:

- The document must show the image of the professional member's stamp.
- The document must show the image of the professional member's hand-written signature.
- The document must show the date on which the professional member stamped and signed it.
- The document must incorporate a digital signature/certificate obtained from APEGA.

In keeping with Section 4.1, the party to whom a final electronic document is issued is entitled to receive a document incorporating a digital signature/certificate. However, electronic *copies* of authenticated documents may be provided to someone without the copies themselves incorporating a digital signature/certificate if copies are acceptable to the recipient. Copies are not the actual authenticated documents, they are only copies. If a copy is not acceptable, then an electronic document that has been signed using the APEGA digital signature will need to be issued, or a "wet" stamped and "wet" signed paper document will need to be issued.

For example, if a professional member stamps and signs a paper document and issues that authenticated document, the professional member can provide *copies* of that authenticated document in electronic form (e.g., a PDF) without a digital signature/certificate. This is considered as being no different from providing copies in hard form (e.g., paper photocopies, mylars, etc.) without a "wet" signature and stamp on the copies. In other words, if receiving a document by fax is acceptable to the recipient, then receiving a PDF of the document by email should also be acceptable.

# 5.1 Stamp Image

The Regulations stipulate that, "A professional member or licensee shall not acquire a stamp or seal from any source other than the Registrar." Scanning another member's stamp and altering the image to insert a new name is not acceptable.

A professional member may obtain an electronic stamp in only one of two ways:

- by requesting an electronic stamp (computer file) from APEGA, or
- by scanning the imprint of his or her own manual stamp obtained from APEGA.

The image of an electronic stamp must correspond in all aspects to the original stamp issued by APEGA in order to preserve its characteristics. The size of an electronic stamp image must be sufficient to ensure the elements of the stamp are legible.

As with the manual stamp, the professional member shall ensure that access to the electronic stamp remains under his or her control to prevent unauthorized use. The

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stamp shall be applied by the professional member or by a person acting under the member's direct control.

# 5.2 Hand-written Signature Image

The image of the professional member's hand-written signature may be obtained by the member scanning his or her signature. It must appear with the stamp and the date on which the document was stamped and signed.

# 5.3 Digital Signature/Certificate

The term "digital signature" refers to a mathematical technological process using asymmetric cryptography to demonstrate the authenticity of a document. It does not mean the visual image of a hand-written signature. The digital signature and certificate for authenticating an electronic document may only be obtained from APEGA. Ordering information is available on APEGA's website. Since the visual image of a written signature is capable of being copied, the secure digital signature is required for documents that are issued electronically. The digital certificate verifies that the document was signed by a professional member of APEGA and that the content of the document has not changed since it was signed.

The member must not disclose to anyone the personal security codes enabling use of his or her digital signature.

# 5.4 Storing Electronic Documents

Authenticated electronic documents that are retained for reference or liability purposes should be stored in a manner that maintains their integrity. If that is not possible, the electronic documents should be stored without stamps and signatures and hardcopy versions retained instead.

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#### **APPENDIX**

#### A-1 SUPERVISION AND CONTROL

The Act restricts the practice of engineering or geoscience to professional members or to persons who are under their direct supervision and control. For the purpose of this practice standard, an adequate supervision and control system is defined as a system which permits a professional member to accept professional responsibility for the results of the engineering, geological or geophysical tasks performed by others working under a professional member's supervision and control.

Judging the adequacy of a supervisory and control system is an exercise in risk management. No system will guarantee perfect results. However the following factors, if properly considered, could increase the probability of satisfactory work.

- The training and experience (knowledge) of the supervisor.
- The training and experience (knowledge) of the persons performing the tasks.
- The reliability of the persons performing the tasks.
- The degree of technological novelty of the tasks.
- The degree of complexity of the tasks.
- The number of discrete tasks and technical disciplines being controlled.
- The physical distance between the supervisor and the persons performing the tasks.
- The communication system between the supervisor and the persons performing the tasks.
- The formality of the approval process.
- The schedule within which the tasks should be accomplished.

The ultimate criteria for judging the adequacy of a supervision and control system is the quality of the completed work as represented by the final documents.

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# A-2 EXCERPTS FROM THE ACT, REGULATIONS AND BY-LAWS

# A-2.1 Who may use a stamp and permit number

The Engineering and Geoscience Professions Act spells out who is allowed to apply the professional stamp or the permit number and under what circumstances it may be applied.

# **Engineers**

- **3(2)** No individual, corporation, partnership or other entity, except a professional engineer, licensee or permit holder entitled to engage in the practice of engineering, shall affix the stamp or seal of a professional engineer or licensee or the permit number of a permit holder or allow that stamp, seal or permit number to be affixed to a plan, drawing, detail drawing, specification or other document or a reproduction of any of them unless
- (a) that plan, drawing, detail drawing, specification, other document or reproduction was prepared by or under the supervision and control of, and
- (b) the stamp, seal or permit number is affixed with the knowledge and consent or in accordance with the direction of

the professional engineer or licensee to whom or the permit holder to which the stamp, seal or permit number was issued.

(3) Notwithstanding subsection (2), a professional engineer, licensee or permit holder may affix a stamp, seal or permit number, as the case may be, to a plan, drawing, detail drawing, specification, other document or reproduction prepared by other persons if the professional engineer, licensee or permit holder completes a thorough review of and accepts professional responsibility for that plan, drawing, detail drawing, specification, other document or reproduction.

#### **Geoscientists**

- **6(2)** No individual, corporation, partnership or other entity, except a professional geoscientist or a licensee or permit holder entitled to engage in the practice of geoscience, shall affix the stamp or seal of a professional geoscientist or licensee or the permit number of a permit holder or allow that stamp, seal or permit number to be affixed to a map, geoscientific cross-section, specification, report or other document or a reproduction of any of them unless
- (a) that map, geoscientific cross-section, specification, report, other document or reproduction was prepared by or under the supervision and control of, and

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- (b) the stamp, seal or permit number is affixed with the knowledge and consent or in accordance with the direction of the professional geoscientist or licensee to whom or the permit holder to which the stamp, seal or permit number was issued.
- (3) Notwithstanding subsection (2), a professional geoscientist, licensee or permit holder may affix a stamp, seal or permit number, as the case may be, to a map, geoscientific cross-section, specification, report, other document or reproduction prepared by other persons if the professional geoscientist, licensee or permit holder completes a thorough review of and accepts professional responsibility for that map, geoscientific cross-section, specification, report, other document or reproduction.

#### **Professional Licensees**

- **83.2**(1) No individual, corporation, partnership or other entity, except a professional licensee (engineering), shall affix the stamp or seal of a professional licensee (engineering) or allow that stamp or seal to be affixed to a plan, drawing, detail drawing, specification or other document or a reproduction of any of them unless
- (a) that plan, drawing, detail drawing, specification, other document or reproduction was prepared by or under the supervision and control of, and
- (b) the stamp or seal is affixed with the knowledge and consent or in accordance with the direction of

the professional licensee (engineering) to whom the stamp or seal was issued.

- (2) Notwithstanding subsection (1), a professional licensee (engineering) may affix a stamp or seal to a plan, drawing, detail drawing, specification, other document or reproduction prepared by other persons if the professional licensee (engineering) completes a thorough review of and accepts professional responsibility for that plan, drawing, detail drawing, specification, other document or reproduction.
- **83.3**(1) No individual, corporation, partnership or other entity, except a professional licensee (geoscience), shall affix the stamp or seal of a professional licensee (geoscience), or allow that stamp or seal to be affixed, to a map, geoscientific cross-section, specification, report or other document or a reproduction of any of them unless
- (a) that map, geoscientific cross-section, specification, report, other document or reproduction was prepared by or under the supervision and control of, and
- (b) the stamp or seal is affixed with the knowledge and consent or in accordance with the direction of

the professional licensee (geoscience), as the case may be, to whom the stamp or seal was issued.

(2) Notwithstanding subsection (1), a professional licensee (geoscience) may affix a stamp or seal to a map, geoscientific cross-section, specification, report or other document or reproduction prepared by other persons if the professional licensee (geoscience), as the

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case may be, completes a thorough review of and accepts professional responsibility for that map, geoscientific cross-section, specification, report, other document or reproduction.

# A-2.2 How the stamp and permit number are to be used

The Act also addresses how the stamp and the permit number are to be used.

- **78**(1) A professional member, licensee or restricted practitioner shall, in accordance with the regulations,
  - (a) sign documents or records, and
  - (b) stamp or seal documents or records.
- (2) A permit holder shall affix its permit number on documents or records in accordance with the regulations.
- **86.2**(1) Sections ... 78 ...apply to a professional licensee as if the professional licensee were a professional member.

# Stamp

From the Engineering and Geoscience Professions Regulation:

- **54**(1) A stamp or seal issued to a professional member or licensee must at all times remain under that person's direct control and must be applied by the professional member or licensee, or by a person acting under the professional member's or licensee's immediate and direct control, to all final plans, specifications, reports or documents of a professional nature
  - (a) that were prepared by the professional member or licensee or under the professional member's or licensee's supervision and control, or
  - (b) that were prepared by another person in circumstances where the professional member or licensee has thoroughly reviewed them and accepted professional responsibility for them.
- (2) No person shall permit a stamp or seal to be physically located in a manner that would allow its use by a person other than the professional member or licensee to whom it was issued.
- (3) When a stamp or seal is applied, the professional member or licensee to whom it was issued shall ensure that the stamp or seal is accompanied with that person's signature and the date on which the stamp or seal is applied.

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- (4) A stamp or seal may be applied to the cover page or final page of reports or documents in a manner which clearly indicates acceptance of professional responsibility for the reports or documents, without being applied to each page.
- (5) A professional member or licensee shall not acquire a stamp or seal from any source other than the Registrar.
- (6) A professional member or licensee shall only use a stamp or seal while that person is registered pursuant to this Regulation.
- (7) Stamps and seals are the property of the Association and a person in possession of a stamp or seal shall surrender it to the Association on demand.
- (8) A professional member or licensee may, with the approval of the Registrar, apply a computer generated facsimile of the stamp or seal if that person otherwise meets the requirements of the Act and this Regulation.

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#### **Permit Number**

From the Engineering and Geoscience Professions Regulation:

- **49** When the practice of engineering or geoscience is carried on by a partnership, corporation or other entity pursuant to a permit under section 48, all final plans, specifications, reports or documents of a professional nature must
  - (a) be signed by, and stamped or sealed with the stamp or seal of
    - (i) the professional member or licensee who prepared them or under whose supervision and control they were prepared, or
    - (ii) in the case of plans, specifications, reports or documents that were prepared by other persons, the professional member or licensee who thoroughly reviewed and accepted professional responsibility for them.

and

(b) show the permit number issued to the partnership, corporation or other entity under section 48.

# A-2.3 Surrender of the stamp

The by-laws of the Association outline the circumstances requiring return of the stamp to APEGA.

- **35** Professional members, licensees, permit holders, certificate holders, and registered professional technologists shall surrender to the Registrar, forthwith upon development of any of the following eventualities, any seals, stamps and certificates that have been issued to them:
  - (a) temporary withdrawal of the professional member, licensee, permit holder, certificate holder, or registered professional technologist from practice of the profession for a period estimated to exceed 1 year;
  - (b) resignation of the professional member, licensee, permit holder, certificate holder, or registered professional technologist from the Association;
  - (c) the suspension or cancellation of the professional membership, license, permit or certificate.

# City of Calgary Anticipated Population and Jobs for years: 2028, 2038, 2048, 2076 for Omni area from Forecasting Toolbox:

http://www.calgary.ca/Transportation/TP/Pages/Planning/Forecasting/Forecasting-Toolbox.aspx?master=old

OMNI ASP LANDS shown in Transportation Zones (TZ): TZ 2151 & 2152

2028 - City of Calgary Anticipated Jobs

TZ: 3584 Jobs: 0		TZ: 3583 Jobs: 63		TZ: 3582 Jobs: 61
	TZ: 3579 Jobs: 273	TZ: 3580 Jobs: 137	TZ: 3581 Jobs: 137	TZ: 3509 Jobs: 124
	TZ: 2151 Jobs: 137	TZ: 3578 Jobs: 137	TZ: 3577 Jobs: 137	TZ: 3576 Jobs: 126
	Jobs: 137  TZ: 2153 Jobs: 237	TZ: 3573 Jobs: 237		
	TZ: 2154 Jobs: 172	TZ: 3572 Jobs: 251	TZ: 3574 Jobs: 174	TZ: 3510 Jobs: 97
	TZ: 1822 Jobs: 239	TZ: 3571 Jobs: 266	TZ: 3570 Jobs: 284	TZ: 3511
	TZ: 1821 Jobs: 172	TZ: 3568 Jobs: 274	TZ: 3569 Jobs: 174	Jobs: 103

2039 - City of Calgary Anticipated Jobs

TZ: 3579	TZ: 3580	TZ: 3581	TZ: 3509
Jobs: 395	Jobs: 265	Jobs: 265	Jobs: 252
TZ: 2151	TZ: 3578	TZ: 3577	TZ: 3576
Jobs: 265	Jobs: 265	Jobs: 265	Jobs: 254
TZ: 2152 Jobs: 265			
TZ: 2153 Jobs: 418	TZ: 3573 Jobs: 418		
TZ: 2154	TZ: 3572	TZ: 3574	TZ: 3510
Jobs: 351	Jobs: 432	Jobs: 353	Jobs: 224
TZ: 1822	TZ: 3571	TZ: 3570	TZ: 3511
Jobs: 420	Jobs: 447	Jobs: 466	
TZ: 1821	TZ: 3568	TZ: 3569	Jobs: 231
Jobs: 351	Jobs: 456	Jobs: 353	

2048 - City of Calgary Anticipated Jobs

TZ: 3579	TZ: 3580	TZ: 3581	TZ: 3509
Jobs: 413	Jobs: 283	Jobs: 283	Jobs: 270
TZ: 2151 Jobs: 283	TZ: 3578 Jobs: 283	TZ: 3577 Jobs: 283	TZ: 3576 Jobs: 272
TZ: 2152 Jobs: 283			
TZ: 2153 Jobs: 460	TZ: 3573 Jobs: 460		
TZ: 2154	TZ: 3572	TZ: 3574	TZ: 3510
Jobs: 393	Jobs: 474	Jobs: 395	Jobs: 242
TZ: 1822	TZ: 3571	TZ: 3570	TZ: 3511
Jobs: 462	Jobs: 489	Jobs: 508	
TZ: 1821	TZ: 3568	TZ: 3569	Jobs: 249
Jobs: 393	Jobs: 498	Jobs: 395	

2076 - City of Calgary Anticipated Jobs

TZ: 3579	TZ: 3580	TZ: 3581	TZ: 3509
Jobs: 362	Jobs: 344	Jobs: 344	Jobs: 331
TZ: 2151 Jobs: 344	TZ: 3578 Jobs: 344	T2: 3577 Jobs: 344	T2: 3576 Jobs: 333
TZ: 2152 Jobs: 344			
TZ: 2153 Jobs: 600	TZ: 3573 Jobs: 600		
TZ: 2154	TZ: 3572	TZ: 3574	TZ: 3510
Jobs: 532	Jobs: 614	Jobs: 534	Jobs: 302
TZ: 1822	TZ: 3571	TZ: 3570	T7: 2011
Jobs: 602	Jobs: 629	Jobs: 648	
TZ: 1821	TZ: 3568	TZ: 3569	TZ: 3511
Jobs: 532	Jobs: 638	Jobs: 534	Jobs: 310

2028 - City of Calgary Anticipated Population

TZ: 3579	TZ: 3580	TZ: 3581	TZ: 3509
Pop: 32	Pop: 105	Pop: 205	Pop: 266
TZ: 2151 Pop: 27	TZ: 3578 Pop: 59	TZ: 3577 Pop: 14	TZ: 3576 Pop: 195
TZ: 2152 Pop: 17			
TZ: 2153 Pop: 45	TZ: 3573 Pop: 50		
TZ: 2154	TZ: 3572	TZ: 3574	TZ: 3510
Pop: 65	Pop: 42	Pop: 53	Pop: 53
TZ: 1822	TZ: 3571	TZ: 3570	TZ: 3511
Pop: 61	Pop: 48	Pop: 180	
TZ: 1821	TZ: 3568	TZ: 3569	Pop: 46
Pop: 54	Pop: 320	Pop: 233	

2039 - City of Calgary Anticipated Population

TZ: 3579	TZ: 3580	TZ: 3581	TZ: 3509
Pop: 24	Pop: 111	Pop: 196	Pop: 288
TZ: 2151	TZ: 3578	TZ: 3577	TZ: 3576
Pop: 30	Pop: 52	Pop: 12	Pop: 214
TZ: 2152 Pop: 16			
TZ: 2153 Pop: 42	TZ: 3573 Pop: 44		
TZ: 2154	TZ: 3572	TZ: 3574	TZ: 3510
Pop: 67	Pop: 34	Pop: 48	Pop: 61
TZ: 1822	TZ: 3571	TZ: 3570	TZ: 3511
Pop: 69	Pop: 36	Pop: 184	
TZ: 1821	TZ: 3568	TZ: 3569	Pop: 52
Pop: 46	Pop: 295	Pop: 236	

OMNI ASP LANDS in Transportation Zones (TZ): TZ 2151 & TZ 2152]

2048 - City of Calgary Anticipated Population

TZ: 3579 Pop: 28	TZ: 3580 Pop: 113	TZ: 3581 Pop: 204	TZ: 3509 Pop: 337
TZ: 2151 Pop: 30	TZ: 3578 Pop: 77	TZ: 3577 Pop: 17	TZ: 3576 Pop: 281
TZ: 2152 Pop: 24			
TZ: 2153 Pop: 64	TZ: 3573 Pop: 64	TZ: 3574 Pop: 72	
TZ: 2154 Pop: 71	TZ: 3572 Pop: 47		TZ: 3510 Pop: 61
TZ: 1822 Pop: 69	TZ: 3571 Pop: 48	TZ: 3570 Pop: 187	TZ: 3511
TZ: 1821 Pop: 66	TZ: 3568 Pop: 309	TZ: 3569 Pop: 252	Pop: 52

OMNI ASP LANDS in Transportation Zones (TZ): TZ 2151 & TZ 2152

2076 - City of Calgary Anticipated Population

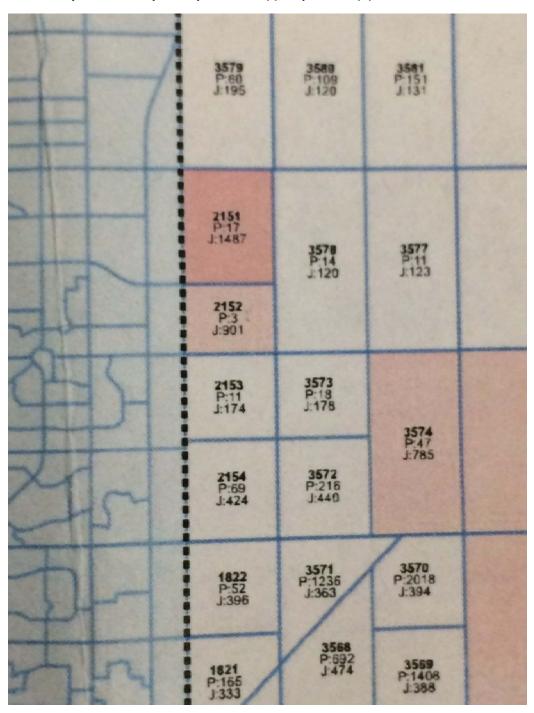
TZ: 3579 Pop: 40	TZ: 3580 Pop: 121	TZ: 3581 Pop: 229	TZ: 3509 Pop: 489
TZ: 2151 Pop: 30	TZ: 3578 Pop: 153	TZ: 3577 Pop: 34	TZ: 3576 Pop: 489
TZ: 2152 Pop: 50			
TZ: 2153 Pop: 131	TZ: 3573 Pop: 128	TZ: 3574 Pop: 146	
TZ: 2154 Pop: 84	TZ: 3572 Pop: 87		TZ: 3510 Pop: 60
TZ: 1822 Pop: 69	TZ: 3571 Pop: 84	TZ: 3570 Pop: 197	TZ: 3511
TZ: 1821 Pop: 128	TZ: 3568 Pop: 353	TZ: 3569 Pop: 302	Pop: 52

OMNI ASP LANDS in Transportation Zones (TZ): TZ 2151 & TZ 2152

Rocky View County Anticipated Population and Jobs for years 2028, 2038 for Omni area: from Rocky View County input to the ongoing *Integrated Calgary North Region Transportation Study*, May 2018, by ISL Engineering and Land Services.

OMNI ASP LANDS shown in Transportation Zones (TZ): TZ 2151 & 2152

2028 Rocky View County Anticipated Jobs (J), Population (P)



2038 Rocky View County Anticipated Jobs (J), Population (P)

	<b>3579</b> P:98 J:316	3580 P:100 J:212	3581 P:102 J:212	
Andrew Marie M Marie Marie Ma	<b>2151</b> P:5 J:2736	<b>3578</b> P:8 J:212	3577 P:15 J:212	
many of the gradult received and the second	<b>2152</b> P:3 J:1653			
and and the same	2153 P:15 J:294	<b>3573</b> P:15 J:302	3574	
A death house the same	<b>2154</b> P:58 J:756	<b>3572</b> P:371 J:769	3574 P:78 J:1422	
The formulation of the second	<b>1822</b> P:33 J:704	3571 P:2244 J:537	<b>3570</b> P:3557 J:672	
David Street	Anna commence de la c	3568 P:991	3569	

#### **City of Calgary Emergency Services Rebuttal**

- 1) The County states in paragraph 3 of its Emergency Services Response: The County does not intend to rely on the City to provide emergency services to Omni and cites Part 15 of the Omni ASP. Policy 15.2 states that: Fire Services in the Plan area will be provided from existing and/or proposed County emergency service facilities and, where appropriate, by contract from adjacent municipalities.
  - a) As the City is directly adjacent to the proposed ASP and is a contract municipality adjacent to the County, if the County does not intend to rely on the City then the policy should clearly identify that in the language described in Part 15.2. The Secondary Fire Agreement between the County and The City is included in The City's Legal Brief, Tab 6. Portions of the OMNI ASP lands are included in the agreement, which thereby makes The City a secondary fire service provider for some of these lands.
  - b) Further, the Policy should clarify that as stated in the rebuttal by the County, at no time for any type of Fire Services response will the County look to the City for response to the Omni area such as for hazardous materials incidents.
  - c) In the County Emergency Services Response, Paragraphs 4 and 5 are unclear. Paragraph 4 states that Balzac station 107 has a response time into Omni of less than 8 minutes while the future "proposed" Conrich station will be approximately 7.5 minutes. Paragraph 5 then speaks to an additional fire station to be built in the Conrich area to service the gap between the Conrich and Balzac areas, including Omni. The average response time from the new Conrich Fire Station 107 to the Omni area will be less than 10 minutes.
- 2) The table of Mutual Aid Response data from the County as listed in Paragraph 16 of its Emergency Services Response is incorrect and inaccurate. Only true agreement requests for service from CFD should be included in these numbers and not errors in dispatching of units that arise from the 911 dispatch centre based upon initial caller information provided There is no mutual aid agreement in place between the two municipalities, only a secondary response agreement.
- 3) County statement in paragraph 10 of its Emergency Services Response speaks to the number of requests for service in Balzac East and Omni. The County tries to compare the volumes between the 2 developments but the type of developments are not equal. Omni is a much more diverse and densified development than Balzac East including combinations of retail, industrial and residential. Therefore it is extrapolated that the call volume will be higher than Balzac east.
- 4) Paragraph 18 of the County Emergency Services Response is also inaccurate. Although section 5.3 of the agreement references that buildings, occupancies or processes that pose an unacceptable risk will not be covered by the agreement, it does not state that the City will not respond to any and all hazardous materials incidents.

- a) 5.3 Buildings, occupancies or processes that pose unacceptable risks or safety concerns for City personnel, will also not be covered by this Agreement and will not qualify to receive any Secondary Emergency Response. Unacceptable hazards include, but are not limited to, any one or more of the following:
  - fireworks or explosives storage or manufacturing,
  - tire storage/dump,
  - refuse dumps.
  - petroleum or gas extraction or production,
  - hazardous materials storage, or
  - manufacturing requiring hazardous processes.
- b) Further, Paragraph 18 references that for HAZMAT responses, the County typically calls on the private sector to assist. This does not preclude the County from requesting the City for assistance and in fact the City has responded to the County for HAZMAT responses in the past. There were a total of 7 responses from The CFD into the county in the last 5 years.
- c) The County states that all County firefighters are trained according to NFPA, which is the same requirement for City firefighters. Base level NFPA 1001 firefighting training requires firefighters to be trained to a hazmat NFPA 472 Operations level to conduct defensive actions only. The City fire service has special apparatus, equipment and firefighters trained to provide an NFPA 472 Technician and Specialist level in order to provide offensive hazmat response and actively mitigate HAZMAT responses. These events require large amounts of resources and specialized equipment of which there are few municipalities within the Province that provide this service. The closest areas that provide this service to the Omni ASP would be Edmonton, Red Deer, Calgary, Lethbridge, and Medicine Hat.
- d) The County states that many Calgary firefighters are employed at the County as well. This point is moot when it comes to their skills, training and abilities as they are only able to perform at the level of training, response protocols and response service level that the municipality they are working for at the time allows. A Calgary firefighter cannot use a higher level of training or response protocol while working for the County than the County allows and is aligned with the overall level approved by the County for all firefighters performing the work. A Calgary firefighter working in the County would not have access to the same level of equipment and apparatus as when there are on shift in Calgary.
- 5) County Emergency Services Response Page 5, Paragraph 20 does not accurately reflect the discussions that occurred. This is more accurately reflected in County response Paragraph 24. In 2017, the discussions that occurred between Fire Chief Smith and Deputy Chief Uzeloc were in regards to the City providing Automatic Aid into the County, primarily around the west side of the City specifically in the Springbank and Bearspaw areas of the County. When asked about other areas of the County Chief Smith advised that the need for Automatic Aid was not being contemplated at that time but there was no specific discussions regarding Omni at all and nothing to indicate that the County would not still look to the City for secondary response in other areas of the County including Conrich and Omni.

- 6) In County Emergency Services Response Paragraph 35, the County states that it operates 7 stations and has 250 firefighters. Several of these stations are positioned in proximity to the edge of the City on the west, east and north borders. The concern of the City remains that even if not called to support the Omni ASP in the event of a large response and with the County pulling multiple stations around its municipality to respond to Omni, the City will be called upon to respond into other areas of the County due to its reduced capabilities and the strain on the City will still occur.
- 7) The City provides the attached Tab 1 Calgary Fire Department (CFD) Rebuttal to WATT Consulting Group's Review of the Submission by the City of Calgary (Volume 1 Tab C of Rocky View's Transportation Response) INCREASE IN MOTOR VEHICLE COLLISIONS (MVCs) to respond to County Emergency Services Response Paragraphs 38 and 39. The methodology used to calculate the 146% increase was based on a similar example in Calgary with Deerfoot Meadows, where the city experienced a significant increase in the number of MVCs. In 2004, the number of MVCs was only 24 within 1,000 metres of the location and in 2010, this number increased to 59. Then in 2016, the number slightly decreased, which reflected that the increased population did not influence the increased MVCs. The CFD also saw the number of MVCs increase from 2 on the Southland/Deerfoot interchange, to 10 in 2010. The calculation was based on proximity to a shopping centre and looked at the concentration of MVCs.
- 8) In an effort to quantify the number of MVCs which occur near to shopping centres service areas were created from access points around the perimeter of each identified area. The service areas identify major roads within 500m, 1000m, 1500m and 2000m of each access point. From these service areas, the CFD determined how many of the MVCs from 2015 to 2017 were within these proximities to a shopping centre. The data showed that 24% of all MVCs across the City occurred within 500 meters of a shopping centre.
- 9) County statements in Paragraph 40 of its Emergency Services Response are incorrect. The City is NOT compensated by the Province for any MVC responses on any Provincial roadways including Stoney Trail, the QEII or Highway 8. This is a long-standing issue for The City. Therefore any increase in MVC responses as a result of the Omni ASP will have a negative effect on City service including performance reliability and concentration specifically in the NE quadrant of the City which is already the busiest quadrant for the City. Since Stoney Trail lies within the City boundary adjacent to the Omni area, CFD will have no choice but to respond to these events. As performance decreases and affects citizen outcomes and service levels, the City will need to look at increased investment in fire services in this quadrant. As mentioned above, the County does not have the same apparatus, equipment, training or service levels as that of the City. If the County was to respond into the City to assist with MVC's, aside from OHS, labor, insurance, and information and reporting requirement issues, citizens in Calgary may receive a different level of service than other areas serviced solely by the City creating a 2 tiered level of service for citizens. Recently, City of Calgary Council has reaffirmed that it does not want a 2 tiered level of fire service in the City.

#### INDEX TO CITY OF CALGARY EMERGENCY SERVICES REBUTTAL

TAB 1	Calgary Fire Department (CFD) Rebuttal to WATT Consulting Group's Review of
	the Submission by the City of Calgary
TAB 2	Rourke Haggith Resume

Calgary Fire Department (CFD) Rebuttal to WATT Consulting Group's Review of the Submission by the City of Calgary (Volume 1 Tab C of Rocky View's Transportation Response) – INCREASE IN MOTOR VEHICLE COLLISIONS (MVCs)

The Calgary Fire Department (CFD) has tracked an increase of MVCs occurring adjacent to large commercial developments. Deerfoot Meadows was chosen as a similar commercial/industrial community in size and composition as the proposed OMNI development.

The CFD provides this document in a question and answer format to address the concerns with the City's MVC study raised by WATT.

a. How the number of crashes varied for the years between 2004-2010 and 2010-2016.

**Answer**: Trends were reflective of what was shown in the three-year table. Incident counts increased to a peak in 2010 and then hovered slightly above or below that number through to 2016.

- What were traffic volumes on Deerfoot during these years?
   Answer: In regard to traffic volumes on Deerfoot, CFD mapping had access only to traffic volume data from 2015.
- c. Section E Point 14 States "the following section provides evidence of how large commercial developments result in an increase in MVCs. Of particular concern is that the MVCs do no typically occur in direct proximity to merchandize shopping centre zones, but rather on route to the shopping centre and therefore would significantly increase the incidence of MVCs within the city of Calgary boundaries"

It should be noted that if the above statement were correct, it would apply to any other land use generating vehicular trips (residential, office, industrial, parks, etc.)

Motor vehicle collisions are a result of vehicle exposure to the road network and the probability of a collision occurring is based on the built environment (i.e. road infrastructure) including posted and operational speeds, traffic controls in the area, number and location of accesses, signage etc. This would mean that there is nothing special about a shopping centre over other land uses to generate collisions and the above statement would be counter intuitive to the Point in E-15: "The City of Calgary completed a spatial analysis related to MVCs. This analysis showed a clear correlate between shopping centre boundaries and high-density locations for MVCs"

Answer: The CFD looked at varying (500-2000m) distances from a shopping centre and the number of MVCs that the CFD responded to. Traffic volume was also considered with respect to shopping centres and MVC incident density. While there is some correlation between traffic volume and MVC density, not all high-volume roads also have high density of MVCs. This may indicate a possible link between the high frequency and volume of intersections often found near shopping centres and a large number of MVC's also found in these areas. The examples given of residential, office, industrial, parks, etc do not always have the same road design as often found in or near shopping centres (which is correlated to MVC's).

d. Section E Point 16: How is a 146% increase to MVCs determined? It seems to be based on the example of Deerfoot Meadows; Appendix G page 253 directly and not by the OMNI development site context.

**Answer**: The increase is a hypothetical estimate based on a historical example available in the City of Calgary (Deerfoot Meadows), which saw that increase between 2004 and 2010. Using historical data and similar communities to help predict future incidents is standard in the Fire Service industry.

- e. Section E Page 4, Table showing an estimated 286 incidents per year. It should be noted that Omni is located within Rocky View County and would be serviced by the Rocky View County Emergency Services. Consequently, the following answers are required.
  - 1. How many of these incidents would the CFD be expected to provide mutual aid?

**Answer**: Incidents that were predictively modeled in the table, are the total estimated number of responses for the development using incidents per square km rate in similar developments. It is unknown exactly how many would require CFD assistance and dependent on the County using mutual aid, and the number of apparatus sent per dispatch protocols.

2. How much mutual aid does the CFD currently supply Rocky View County?

**Answer**: CFD will respond to Rocky View County if requested currently. CFD anticipates that regional mutual aid may increase in the next couple of years.

3. Also it is not clear how values in the table below were estimated.

**Answer**: The values were estimated based on CFD's incident trend data for similar communities made of Industrial/Commercial development over several years. Incident trends used full-build out estimates and incorporated trends seen

both overall in the city of Calgary, as well as in commercial/industrial developments.

f. Do the MVCs on the density maps include collisions on private property related to parking (pertaining to slower moving vehicles)? Of these, how many were responded to by the Calgary Fire Department? Commercial developments tend to have a higher number of property damage only collisions related to parking maneuvers.

**Answer**: The MVCs shown on the map are only those on major roadways and those within the boundaries defined for each shopping centre. The CFD has access only to MVCs which they responded to.

g. What defines low, medium, and high-density incident areas?

**Answer**: The Incident density classes were calculated using the geometric interval method. The classes are defined so that each has approximately the same number of values.

h. What aspect was used to attribute MVCs to the shopping centres?

**Answer**: MVCs were attributed to MVCs using proximity.

i. Has the analysis of MVCs in the shopping areas been carried out outside of the operating hours?

**Answer**: Yes, incidents were used from all times of day.

j. Do reporting collisions incidents indicate that drivers were either on their way to or from shopping centres?

**Answer**: No, this information is not available to the CFD.

k. Were traffic volumes in the subject areas analyzed?

**Answer:** Traffic volumes were used only as a static layer for comparison in the correlation maps. Traffic volume data is collected by another Business Unit and only the most recent data is available.

# Resume not available to public

### CITY OF CALGARY PLANNING REBUTTAL TO ROCKY VIEW COUNTY PLANNING RESPONSE

The City of Calgary maintains that its two primary planning concerns are that:

- A. The Omni ASP does not align with the County's existing statutory policy, thereby causing significant uncertainty for The City and is detrimental to The City's ability to Plan for its own infrastructure and services.
- B. The Omni ASP will cause detrimental impacts to the City's transportation infrastructure and emergency services.
- A. The Omni ASP does not align with the County's existing statutory policy, thereby causing significant uncertainty for The City which is detrimental to its ability to Plan for its own infrastructure and services.
  - 1. The City of Calgary maintains its position that the Omni ASP is inconsistent with Rocky View County's Municipal Development Plan therefore also making it inconsistent with the Intermunicipal Development Plan. The County's significant diversion from the stated policy and intent of its MDP causes substantial uncertainty for The City of Calgary and is detrimental to its ability to plan for infrastructure and servicing within its own borders.

#### **Inconsistency with Approved Statutory Plans**

#### A.1 Rocky View 2060: Growth Management Strategy (2009)

- 2. The Rocky View 2060: Growth Management Strategy (2009) (County Planning Response at Tab D) is a non-statutory high-level plan as indicated in the policy hierarchy within the Growth Management Strategy on page 9 and as stated on page 11: "The Growth Management Strategy establishes the foundation and direction for more detailed municipal statutory plans and decisions regarding land-use and development". The plan also provides additional clarity on page 11 stating that "The following planning policy documents will be used to further implement the details of the Growth Management Strategy:
  - Municipal Development Plan: a statutory document to provide specific policy direction for managing future growth in the context of the Growth Management Strategy."
- 3. As the non-statutory Growth Plan was completed in 2009 and the County Plan Bylaw c-7280-2013 (the Municipal Development Plan) was adopted by Council in 2013 and amended in 2017, sound professional practice and logic suggests that the MDP, particularly as a Statutory Plan, functionally supersedes the Growth Plan and provides Council approved, refined, planning direction for growth. As such, The County's reliance on the Growth Plan for planning justification is logically inconsistent with sound professional practice.

#### A.2 County Plan – 2013

- 4. The City of Calgary does not dispute the designation of the location of the Omni ASP as a Highway Business Area on Map 1 of the County Plan. In fact, it has incorporated the assumption of future Highway Business Area development at Omni in its growth management planning. The City's expressed concern is that the proposed ASP and scale of uses proposed does not conform to the size, purpose, and character of a Highway Business Area as defined in the County Plan. If the ASP is approved in its current form, the resulting higher scale and intensity development will cause detriment to The City and the infrastructure and services it has already planned and budgeted for, including the calucation of levies within The City, which were based upon the Country Plan density assumptions.
- 5. Rocky View County states in their Planning Response (page 22, Part II. Response to Planning Concerns at A. 1. Inconsistency with Approved Statutory Plans, paragraph 2) that the only distinction in the County Plan between a Regional Business Centre and a Highway Business Area is their size, which The County argues refers to the size of ASP area. The County provides further comparisons of Highway Business Area ASPs to Regional Business Centre ASPs in attempts to justify that the Omni ASP is smaller scale than a Regional Business Centre like the Balzac East or Conrich ASPs and would thus have less impact. This is illogical and poor planning rationale, as The County is confounding the size of a planning area with the development area and intensity of types of uses within a planning area.
- 6. In its own County Plan (**County Planning Response at Tab B**), Section 14.10, lists the characteristics of a Highway Business Area, it states in list item (d) that they have a "Limited **development area** close to one or all of the quadrants of the intersection or interchange". The policy clearly states that Highway Business Areas are to have a limited development area, not a limited planning area. Distinction of types of land use areas strictly by size of planning area is illogical and would be completely ineffectual, as it would allow for any type or scale of land use within a planning area and render the designations useless.
- 7. Based on Rocky View County's policy framework, the City of Calgary could not have reasonably anticipated the greater intensity and scale of development as contained within the Omni Highway Business Area ASP. The County Plan, in addition to specifying location and size of business areas, includes a purpose statement and a list of characteristics for Highway Business Areas and Regional Business Centres.
- 8. The County plan defines a "Highway Business Area" as:
  - "...an area intended to take advantage of the provincial highway system. They are of limited size and should be located in proximity to highway intersections and interchanges. The purpose of a highway business area is to contribute to the County's fiscal goals, provide destination commercial and business services, provide services to the travelling public, and offer local employment opportunities" (Pg. 62 of County Plan, County Planning Response at Tab B).

- 9. The County plan defines "Regional Business Centres" as:
  - "...large areas of commercial and industrial development within the County. The purpose of a regional business centre is to provide regional and national business services, and local and regional employment opportunities. Regional business centres make a significant contribution in achieving the County's fiscal goals." (Pg. 61 of County Plan County Planning Response at Tab B).
- 10. These two definitions indicate a difference in size, as well as distinction in the scale of uses within the purpose statement. A Highway Business Area, as stated in these definitions, contributes to the County's fiscal goals, while the Regional Business Centre significantly contributes to the County's fiscal goals. The purpose of a Highway Business Area is to provide local employment opportunities, while a Regional Business Centre's purpose is to provide regional and national business services and local and regional employment opportunities. The City stands firm that the Omni ASP, which indicates regional scale commercial development, is a scale of development that is inappropriate for a Highway Business Area. This scale of development should be located in an existing Regional Business Centre, as per the County Plan policies 14.7 and 14.8 (County Planning Response at Tab B).
- 11. The County argues that just because the definition of a Highway Business Area states that its purpose is to provide local employment, it does not restrict the provision of regional employment in a Highway Business Area (Rocky View Planning Response, Part II. Response to Planning Concerns, A. 1. Inconsistency with Approved Statutory Plans, page 22, paragraph 3). Again, this is poor planning rationale, as there is no logical reason for having a hierarchy of business areas if they essentially have no meaning. Using this logic, any scale or intensity of use could occur in any business area which would negate the purpose of having separate business area designations and undermine The County's entire planning regime. This loose interpretation of the County Plan creates even further planning uncertainty for The City of Calgary.
- 12. The County Plan lists 8 characteristics of a Highway Business Area in policy 14.10 (Page 62, County Plan, County Planning Response at Tab B):
  - Located along intersections or interchanges with the provincial highway network;
  - b. Land uses consistent with that of a highway business area
  - c. Limited development area close to one or all of the quadrants of the intersection or interchange
  - d. Planned in a comprehensive manner and not subject to incremental expansion
  - e. Meet the environmental, infrastructure, and financial goals and policies of this plan
  - f. Minimize adverse impacts on existing agriculture or residential development
  - g. Developed in consultation with Alberta Transportation
  - h. Consistent with the provincial freeway and access location plans.

- 13. The City concludes that the Omni ASP does not meet characteristics b and c. The land uses of a highway business area are described as destination commercial and business services and services for the travelling public, which offer local employment opportunities. The Omni ASP proposes regionally scaled destination commercial development, in addition to highway commercial and light industrial uses, which have greater impacts on both The County and The City of Calgary's infrastructure and servicing than a Highway Business Area does.
- 14. The significant scale and scope of operations and uses as proposed in the Omni ASP are more consistent with the purpose and character of a Regional Business Centre (pages 61 & 62 of the County Plan, County Planning Response at Tab B); therefore, the Omni ASP, in its current form, is inappropriate for its Highway Business Area location. The Omni ASP area does not have the transportation network capacity to service the proposed development. In addition, Policy 14.7 of the County Plan states that The County will not be developing any new Regional Business Centres until the existing ones reach full buildout. (Page 62 of the County Plan, County Planning Response at Tab B) This has not yet occured in Rocky View County. The City of Calgary's planning and growth management assumptions have been based on this understanding.

#### A.3 Rocky View County/City of Calgary Intermunicipal Development Plan (IDP) – 2012

- 15. As stated previously, the Rocky View 2060 Growth Plan is a non-statutory plan which has been functionally superseded by the County Plan (Municipal Development Plan). With its adoption in 2013, the County Plan overrides the Growth Plan with respect to the policies in the IDP:
  - **Policy 8.1.2** Rocky View County Growth Corridors should be developed in accordance with Rocky View 2060 Growth Management Plan and other Rocky View County statutory and local plans, as they may be updated from time to time (**IDP page 22 County Planning Response at Tab C**).
- 16. The County Plan identifies the Omni ASP area as a Highway Business Area (**County Plan, Map 1 County Planning Response at Tab B**), and from the City's perspective this supersedes and refines the non-statutory Growth Plan's indication of a Business Node/Regional Employment Centre.
- 17. With the proposed scale of development in the Omni ASP corresponding to the purpose and scale of a Regional Business Centre in the County Plan, the ASP conflicts with Map 4 Growth Corridors/Areas of the IDP. The Omni ASP area is not indicated as a Rocky View County Growth Corridor, while all of the other Regional Business Centres, areas of large future growth, are indicated by red arrows.

#### A.4 Creation of Planning Uncertainty for the City

18. The City of Calgary acknowledged that the Omni ASP was to be planned as a Highway Business Area, as stated in the County Plan. What The City was unable to predict was the larger scale and intensity of uses concentrated in the Omni ASP area, beyond what was specified in the County Plan definition of a Highway Business Area.

- 19. The City of Calgary maintains that the Omni ASP, because it is significantly misaligned with the County's existing statutory MDP, creates substantial planning uncertainty which causes detriment to The City. The Omni ASP will set a precedent for development of a large scale of use and intensity occurring wherever suits The County. This ad hoc form of planning results in The City of Calgary losing all ability to predict and incorporate adjacent Rocky View County development into its own growth management, infrastructure, and servicing plans. The City will suffer detriment when it is forced to reprioritize its infrastructure investments to deal with the unpredicted infrastructure burden of the Omni ASP, and any future developments of significant scale that Rocky View County allows contrary to its own statutory plan policies.
- 20. Development of the Omni ASP, with its current policies, will result in the City having additional infrastructure costs within a short timeframe, which it will have no authority to recoup from the developer. Policies 16.4, 17.10, and 18.5 of the ASP are vague and do not prevent risks to The City of Calgary from this development. While the ASP policies indicate coordinating with adjacent municipalities, the only one of which is The City of Calgary, they do not provide adequate indication of how infrastructure improvements required to support the development of Omni would be funded on The City side of the border.
- 21. Rocky View County indicates (Rocky View County Planning Response, page 8, Map 5) that the Omni ASP is the combination of two Highway Business Areas that are indicated in Map 1 of the County Plan. The cited reason for consolidating these two areas was for infrastructure and servicing efficiencies; however, the consolidation of two Highway Business Areas also consolidates the impacts of development into one concentrated area. This means that instead of distributing transportation demand across a network, the demand is concentrated in one area of the network. In addition to neglecting to acknowledge the combined impact in the Omni ASP, The County has permitted a greater scale of business uses within the combined planning area, creating even further demand than two Highway Business Areas. The City of Calgary did not anticipate the combined load of two Highway Business Areas in one consolidated location, let alone the additional intensity of uses proposed in the Omni ASP beyond that of two Highway Business Areas. The City will now be forced to change its own infrastructure and servicing priorities to mitigate the impacts of a Regional Business Area scale development adjacent to its boundary.

#### A.5 East Stoney ASP

22. The City of Calgary does not support Rocky View County's critique of the East Stoney ASP as a matter of relevance to this appeal (Rocky View Planning Response at TAB I). The Rocky View critique of the East Stoney ASP is unwarranted and unsubstantiated. Rocky View County was significantly involved in the East Stoney ASP plan making process and supported the final plan in its letter of support prior to Calgary City Council Public Hearing (Letter from RVC May 4 2017, TAB 1). Additionally, Rocky View County did not request mediation nor initiate an appeal relative to the East Stoney

- ASP. The Calgary Planning Commission (CPC) also recommended Council to approve the East Stoney ASP.
- 23. What is critically missing from The County's critique of the East Stoney ASP is recognition of Calgary's Growth Management Overlay system that ensures development is aligned with The City's municipal budgeting and growth management prioritization process. East Stoney Policy 8.3.1 states that "Development shall not occur until the Growth Management Overlay is removed. See Map 7: Growth Management Overlay" (Map 7, page 35, East Stoney ASP, Rocky View Planning Response at TAB I). The City of Calgary uses Growth Management Overlays to manage growth by ensuring that development cannot occur until sufficient transportation, water, and fire infrastructure required to support development is available. This is a very different planning regime as contrasted to Rocky View County.
- 24. The County further criticized The City's approach to ASP development regarding the timing of a complete Transportation Network Analysis. As stated in a City of Calgary letter to Rocky View County on April 6, 2017 (TAB 2) a general analysis was completed by City of Calgary Transportation Planning and the landowner's transportation consultant. The City then provided The County with a fulsome Transportation Impact Assessment at the time of outline plan which was prior to formal adoption of the East Stoney ASP (TAB 1).
- 25. Rocky View County incorrectly portrayed The City as not responsive to Rocky View County concerns and as failing to address traffic and stormwater concerns. It has been demonstrated in this rebuttal that the necessary detailed studies had been submitted for Rocky View County review prior to approval of the East Stoney ASP and that the portrait of an inconsiderate neighbor was incorrectly painted by The County.
- 26. Furthermore, Rocky View County's insistence that the considerations of the Calgary Planning Commission (CPC) as relevant to this appeal are not valid. The advice provided by CPC as part of its recommendation is not the subject of this appeal. It is critical to note that CPC did recommend that Council approve the East Stoney ASP.

#### A.6 Omni ASP will download detrimental impact to the City

27. As mentioned in the County's Planning Submission "Generally speaking, citizens of any municipality are not concerned with municipal boundaries and will access businesses and services in whatever jurisdiction are most convenient to their everyday lives." (Rocky View County Planning Response, page 26, point #2). The City of Calgary agrees with this statement. Free moving citizens and business will use existing and future City of Calgary transportation networks to travel to and from the Omni ASP area. These transportation networks, however, were planned to be maintained and improved by The City to accommodate a Highway Business Area level of traffic demand. The Omni ASP anticipates regional scaled uses, beyond those indicated in Rocky View County's Statutory Plans. The intensive uses will overwhelm the existing and planned

- City transportation network and wll result in citizens on both side of the border experiencing extreme traffic congestion.
- 28. The intensive development envisioned in the Omni ASP will place significant pressure on the City of Calgary to reprioritize its infrastructure and service investments away from existing infrastructure priority areas. Traffic congestion created by development in Omni will create citizen and business pressure on The City to reprioritize its infrastructure investments. As traffic congestion from the Omni development grows on City of Calgary roads, Calgary's existing priorities for infrastructure investment will need to be adjusted in order to accommodate development in Rocky View County.

### B. The Omni ASP will cause detrimental impacts to the City's transportation infrastructure and emergency services.

- 29. As described in further detail in The City's Transportation and Emergency Services Rebuttals, the development of Omni ASP in its current state will cause detrimental transportation network failures on both sides of the municipal boundary and detriment to City Emergency services.
- 30. The intensive development envisioned in the Omni ASP will place significant pressure on the City of Calgary to reprioritize its infrastructure and service investments away from its own priority areas and shift resources to facilitating development beyond Calgary's boundaries with no guarantee of contribution from Rocky Viewy County and the developer.

## <u>CITY OF CALGARY PLANNING REBUTTAL TO ROCKY VIEW COUNTY PLANNING RESPONSE: SUPPORTING DOCUMENTS</u>

**Tab 1:** Rocky View County Circulation Comments for East Stoney Area Structure Plan dated May 4, 2017

**Tab 2**: City of Calgary Response to Rocky View County Response to East Stoney Area Structure Plan dated April 6, 2017





May 4, 2017

Mr. Morgan Huber, Planner City of Calgary Calgary Municipal Building 12<sup>th</sup> Floor, 800 MacLeod Trail SE Calgary AB, T2G 2M3

Dear Mr. Huber:

#### **RE: East Stoney Area Structure Plan Comments**

Thank you for providing a response to our revised circulation comments, dated April 6, 2017. The County appreciates the efforts City Administration has made to address out concerns with the proposed Area Structure Plan. The County is still concerned about the future transportation and stormwater solutions for this area, particularly with respect to connectivity and impact on the adjacent County lands. However, the County recognizes that the critical information pertaining to transportation and stormwater management will be provided at the Outline Plan/Land Use Amendment stage for the East Stoney project.

City Administration has provided us the opportunity to review the Transportation Impact Assessment and Hybrid Master Drainage Plan that was submitted in support of the Outline Plan/Land Use Amendment, prior to the adoption of the Area Structure Plan approval, which is outside your typical process. The County appreciates this accommodation and will submit formal comments on the Transportation Impact Assessment and Hybrid Master Drainage Plan through the circulation of the Outline Plan/Land Use Amendment.

The County understands that the City's process will be to amend the Area Structure Plan approval process and remove the Growth Management Overlay to implement the Outline Plan. At that time, if the policies of the Area Structure Plan do not reflect the requirements of the technical studies, the County respectfully requests an amendment to the Plan be made to ensure there is no adverse impact or detriment to the County. This will alleviate the County's concerns.

The County remains committed to working with the City on the 84<sup>th</sup> Street NE Study, the Omni Area Structure Plan, the East Stoney Area Structure Plan, and Outline Plan/Land Use Amendment to ensure the area is planned in a comprehensive, integrated manner that benefits lands on both sides of the municipal boundary. Thank you for your attention to this matter.

Regards,

**ROCKY VIEW COUNTY** 

Andrea Bryden, Municipal Planner

Cc:

Neil Younger, Senior Planner – Intergovernmental & Corporate Strategy, City of Calgary Richard Barss, Manager Intergovernmental Affairs, Rocky View County

April 6, 2017

Andrea Bryden, Municipal Planner Rocky View County 911 – 32 Avenue NE Calgary, AB T2E 6X6

Dear Ms. Bryden:

#### RE: Rocky View County Comments - East Stoney Area Structure Plan

Thank you for taking the time to review the revised East Stoney Area Structure Plan (ASP) and provide comments by letter on March 29, 2017. With respect to the County concerns about the City moving forward with the ASP approval process in the absence of critical information pertaining to transportation and stormwater management – that is what the Growth Management Overlay removal / Outline Plan approval process is intended for.

As mentioned in previous email correspondence, there are still multiple opportunities for both municipalities and their respective developers to work together to plan and develop this area in a comprehensive and cohesive manner through the Growth Management Overlay removal, Land Use Amendment, and Outline Plan processes.

In response to the key issues of concern for Rocky View County, the City provides the following:

- 1. The City of Calgary does not prepare Stormwater Management Plans or Master Drainage Plans at the ASP stage.
- A high level review of the water, sanitary and stormwater servicing requirements was completed by the City's Technical Advisory Committee and the developer's consultant group and subsequent policies were included in the East Stoney ASP to ensure that the Master Drainage Plan for the Plan Area must be approved by the City of Calgary's Water Resources Business Unit prior to Outline Plan/Land Use Amendment Approval, in consultation with Rocky View County. Mitigation of potential adverse impacts of development to watercourses and adjacent landowners shall also be included in the approved Master Drainage Plan. Outputs of the approved Master Drainage Plan significant enough to alter land use may require an amendment to the East Stoney ASP.
- 2. This City does not prepare a formal Transportation Network Analysis (Transportation Impact Assessment) at ASP stage.
- A general analysis was completed by the City's Transportation Planning group and the landowner's transportation consultant for the local and regional transportation network policies were then included in the ASP to ensure that at the Outline Plan/Land Use Amendment stage a Transportation Impact Analysis would be required to confirm the street classifications and intersection treatment are adequate.

It is understood by the City that the two parties will jointly create a Terms of Reference for the 84 Street NE Study and that it should be completed prior to approval of local plans (County Conceptual Schemes/City Outline Plans); however, this does not reference Area Structure Plans. The draft Terms of Reference currently under review by both municipalities also states that if the 84 Street Study has not been completed by the City and the County prior to approval of local plans, the Study must be prepared by the development proponent in conjunction with the local plan. The City has not prepared a formal position on the OMNI Area Structure Plan at this time is continues to be committed to working with the County on comprehensive and integrated planning.

The developer submitted a formal Land Use Amendment and Outline Plan application for the East Stoney lands on March 31, 2017. The application is being processed by the intake staff this week and should be ready for circulation to the City's CPAG team for review shortly. As such, we are able to share the Transportation Impact Assessment (attached) and Hybrid Master Drainage Plan (anticipated to be submitted to the City by April 7, 2017) with the County as requested. It should be noted that this is not the typical process for the City to provide these studies prior to ASP approval, but there is a unique opportunity given the City Council direction (Notice of Motion 2016-08) to undertake the ASP, Land Use Amendment, and Outline Plan processes concurrently.

At this time, the City is confident that the general residential uses proposed in the East Stoney ASP will not have a detrimental impact on the County. Should any technical issues arise through the review of the Land Use Amendment, Outline Plan, and Growth Management Overlay removal applications on these lands, we are committed to working collaboratively with the County and local developers to resolve them. We look forward to working with you further on this matter.

Regards,

Morgan Huber, RPP, MCIP

Planner 2, North Team

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rganfancytluber

Attachments: RVC Letter RE: East Stoney Area Structure Plan Comments – March 29, 2017

East Stoney Transportation Impact Assessment - prepared by Bunt & Associates Engineering Ltd.

cc: Chris O'Hara, General Manager, Rocky View County

Sherry Baers, Manager Planning Services, Rocky View County

Richard Barss, Acting Manager Intergovernmental Affairs, Rocky View County

Matthias Tita, Director - Community Planning, City of Calgary

Jamal Ramjohn, Manager – Community Planning North, City of Calgary

Neil Younger, Senior Planner – Intergovernmental & Corporate Strategy, City of Calgary