

- TO: Mayor and Council
- FROM: Howard S. Lazarus, City Administrator
- CC: Tom Crawford, CFO Derek Delacourt, Community Services Area Administrator Jen Grimes, Senior Infrastructure Lead Matthew Horning, City Treasure Craig Hupy, Public Services Area Administrator Nick Hutchinson, City Engineer Mike Kennedy, Fire Chief Matt Kulhanek, Airport and Facilities Manager Brett Lenart, Planning Manager Michael Pettigrew, Deputy Treasurer Missy Stults, Sustainability and Innovations Manager
- SUBJECT: Council Agenda Responses

DATE: September 4, 2018

#### <u>AC – 3</u> - Memorandum from City Administrator: Crosswalk Streetlight Implementation - August 30, 2018

**Question:** What is the definition of "sufficiently lit crosswalk?" Can you reference crosswalk illumination standards? (Councilmember Bannister)

**Response:** The City currently requires lighting for uncontrolled crosswalks to be designed in accordance with Federal Highway guidance for nighttime visibility. Street light assets meet the guidance set forth in the *IESNA American National Standard Practice for Roadway Lighting (RP-8-14)*. Street light placement is based on the guidance provided in FHWA's *Informational Report on Lighting Design for Midblock Crosswalks*. The focus on new street light locations for uncontrolled crosswalks is to provide positive contrast lighting to illuminate the pedestrian for improved visibility to approaching motorists.

**Question**: Is this crosswalk illumination or does it include a streetlight in the area? (Councilmember Bannister)

**Response:** This lighting is for streetlights at uncontrolled crosswalks only.

<u>Question</u>: Does the crosswalk lighting extend a few feet beyond the roadway to illuminate a pedestrian standing in the curb ramp? (Councilmember Bannister)

**<u>Response</u>**: The primary focus is to illuminate pedestrians while they are in the roadway and in the crosswalk. The ramp benefits from lighting as well but this isn't the primary focus.

<u>Question</u>: Is the lighting source located away from trees and other vegetation that may reduce crosswalk illumination, as it does at the mid-block crosswalk on Huron east of State? (Councilmember Bannister)

**<u>Response</u>**: Yes, it is the intent of to place the lights where they will have the most impact and away from obstructions.

<u>CA-2</u> – Resolution Authorizing Sanitary Sewer Capital Recovery Charges for 3122 Geddes Ave. (\$25,954.00)

<u>CA-3</u> – Resolution Authorizing Sanitary Sewer Capital Recovery Charges for 3151 Geddes Ave. (\$25,954.00)

<u>CA-4</u> - Resolution Authorizing Sanitary Sewer Capital Recovery Charges for 3125 Geddes Ave. (\$25,954.00)

**Question:** How was the interest rate for the financing calculated? (Councilmember Warpehoski)

**Response:** Interest is calculated per City of Ann Arbor Code 1:571 (3) (b): "For sanitary sewer capital recovery charges or single lot assessments for sanitary sewer capital recovery charges, the rate of interest to be charge thereon shall not exceed 1% per annum above the interest rate for the most recent competitively sold and unsubsidized bond issued to finance similar water supply system improvements."

**Question:** Is 15 years the maximum duration for financing the recovery charges? (Councilmember Warpehoski)

**Response:** Yes. The number of installments allowed by City Code is covered in 1:275 (2).

**Question:** Are other users eligible for this kind of extended capital recovery financing? For example, I heard from the owners of a brewery that opened in the Fifth Ward that they

were caught off guard with the capital recovery changes and the burden of paying them prior to opening the business was a serious cash flow challenge, but it was a cost they could have better accommodated had there been a way to pay off the charges postopening as revenue came in. (Councilmember Warpehoski)

**<u>Response</u>**: Yes. City Code 1:275 (1) states that "It shall be the policy of the city to permit special assessments and single lot assessment for local public improvements, and single lot assessments for water capital recovery charges and sanitary capital recovery charges to be paid in installments."

<u>Question</u>: What accommodations are available for low income or fixed income homeowners annexed into the City and needing to pay high recovery fees like this? (Councilmember Warpehoski)

**Response:** There are no special accommodations available for low or fixed income homeowners in City Code. They are eligible for the same plans as discussed above. However, since the charge will be included on future tax billing, the resident may be able to defer the tax payment as far out as April 30 of the following year it is charged, if eligible. Also, staff is investigating if Washtenaw County Community Development is able to provide assistance in some way.

#### <u>CA-9</u> - Resolution to Ratify the Issuance of an Emergency Purchase Order to Sutphen Corporation for the Repair of Ann Arbor Fire Department Tower 1 by the City Administrator (\$79,392.35)

**Question:** The incident clearly shows the value of Fire response to accidents. Why, though, do we dispatch the tower truck to incidents like this rather than an engine or other vehicle that has a long capital cost, lower operational cost, and more redundancy within our fleet? (Councilmember Warpehoski)

**<u>Response</u>**: The fire department is working to adjust our responses to the freeway for the very reasons cited. Ideally, we would like to deploy a trailer-mounted attenuator (similar to what MDOT uses for their work crews) on our freeway responses. We have submitted a staffing proposal to the union that does not increase our fleet or FTE count and would allow for the response of this type of vehicle. Ideally, we would try this concept for 90-days by renting an attenuator.

**Question:** Regarding CA-9, I understand the City may have recourse and will explore its ability to recover some/all of the repair cost from the owners of the semi-truck or the two passenger vehicles that struck the apparatus – can you please provide an update on the cost recovery effort? (Councilmember Lumm)

**<u>Response</u>**: The City is awaiting information from the prosecutor's office, as well as specific cost detail regarding the repairs. Once we have more complete information, we will file a claim with the insured's carrier.

### <u>CA-13</u> - Resolution to Approve a Work Order with Microsoft Corporation to enter one year of Premier Support (\$50,000.00)

**Question:** Regarding CA-13, the cover memo references "Premier Support" which implies an elevated level of support over the basic/normal. If that's accurate, is Premier Support what we have now and what does it give us over the standard support level? (Councilmember Lumm)

**Response:** We are renewing Premier Support as something that we have maintained for several years. Benefits of the Premier Support agreement included a dedicated Technical Account Manager available to escalate and oversee support incidents, proactive services designed to help us better leverage our Microsoft products and investments, and health check services to help us correct configurations to optimal best practices.

Premier Support allows us to interact with more senior level support technicians that can often improve resolution times when issues occur where working with support is warranted.

# <u>CA-15</u> - Resolution to Authorize a Municipal Street Lighting Purchase Agreement with DTE Energy and to Appropriate Funds for the Conversion of 378 - DTE Owned Mercury Vapor Street Lights to LED (\$65,354.00) (8 Votes Required)

**Question:** Q1. The cover memo uses the phrase "these remaining streetlights" which suggests these 378 being converted are the only mercury vapor lights left in the City. Is that correct? If not, how many are left and do we have a sense when full conversion will be completed? (Councilmember Lumm)

**<u>Response</u>**: These are all of the remaining mercury vapor lights (note: we still have high pressure sodium DTE fixtures)

**Question:** Q2. This conversion was not in the FY19 budget so why is it now being proposed? (Councilmember Lumm)

**Response:** This was mostly due to DTE's schedule. After the FY19 budget process, they informed the City that they had additional capacity to move forward with converting the conventional streetlight fixtures to LEDs so we began working with them to find which conversion would make the most financial sense. We didn't anticipate them having the time in their schedule to make these changes this fiscal year, hence why they weren't originally budgeted.

**Question**: Q3. The City has a dedicated fund for "energy projects". Why wouldn't that fund be the source of funding for this conversion? (Councilmember Lumm)

**Response:** The energy fund is managed by the Office of Sustainability & Innovations (fund 0002), which is used to make loans to other departments for energy efficiency improvements. Once the loan is made, the department makes annual payments back to the energy fund with the savings accrued through the project. In the case of these streetlight conversions, the general fund was preferred as it allows us to make a lump sum payment as opposed to an annual payment, which would increase annual operating costs.

## <u>CA-18</u> - Resolution to Approve a Lease Agreement between the City and Solo Aviation Inc. for Office Space Located at the Ann Arbor Municipal Airport

**Question:** Shouldn't this be an 8-vote item under section 14.3 of the City Charter? (Councilmember Warpehoski)

**<u>Response</u>**: Thank you for catching this. The file has been updated to reflect an 8-Vote requirement.

<u>CA-19</u> - Resolution to Approve a Grant Contract with the Michigan Department of Transportation for Work Related to the Environmental Assessment Study for the Safety Extension of Runway 6/24 at the Ann Arbor Municipal Airport (\$279,100.00)

<u>CA-20</u> - Resolution to Approve a Professional Services Agreement between the City and Mead & Hunt Inc. for Work Related to the Environmental Assessment Study for the Safety Extension of Runway 6/24 at the Ann Arbor Municipal Airport (\$275,592.01)

<u>CA-21</u> - Resolution to Approve a Reimbursement Agreement with the Federal Aviation Administration for Work Related to the Environmental Assessment Study for the Safety Extension of Runway 6/24 at the Ann Arbor Municipal Airport (\$27,914.50)

**Question:** Q1. I recognize that as noted in the cover memo to CA-19, "The requested action in no way approves any construction or bidding to make any changes to the runway." Can you also please confirm that if the FAA issues a Finding of No Significant Impact once the EA is completed, but the City does not choose to proceed, that the City is not liable to reimburse any or all of the federal grant funds? (Councilmember Lumm)

**Response:** The grant funds under consideration by Council this evening, and those previously approved by Council, are specific to the environmental assessment of the proposed safety extension of runway 06/24. Completion of that assessment process will ensure that the City has no liability for repayment of federal grant funds. Upon completion of the environmental assessment, if the City decides not to move forward on

the proposed runway extension project, there is no liability for repayment of federal grant funds.

**Question:** Can you provide a chronology of the efforts taken in pursuit of the runway extension? (Councilmember Eaton)

**Response:** A memorandum was provided to City Council from the City Administrator's Office on August 29, 2018 that provided a history of the environmental assessment efforts for the proposed project. This memorandum is also included on tonight's agenda as Item AC-2.

**Question:** How much has been spent, in local, state, and federal funds, on the environmental assessment at the airport, prior to this grant? (Councilmember Eaton)

**Response:** Local funding in the amount of \$9,913.00 has come from the City's Airport Fund. The state has contributed \$56,262.00 in funding from the Michigan Department of Transportation, Office of Aeronautics. The federal contribution in the amount of \$330,325.00 has come from the FAA's Airport Improvement program. All funding has come from fees paid by users of aviation industry services

**Question:** Please provide a copy of the 2017 FAA comments "that required an updated noise study, wildlife hazard assessment, and wetlands assessment." (Councilmember Eaton)

**Response:** A copy of the February 2017 comments from the FAA and the detailed comment matrix are attached. This document resulted in a series of conference calls between the FAA, City and State of Michigan to determine which comments were warranted and what expectations the FAA had for the revisions to the environmental assessment document.

**Question:** Could this \$279,100 Grant Contract be used to assess the environmental impact of the existing airport, instead of the runway extension? (Councilmember Bannister)

**Response:** The proposed grant contract, approved by the Michigan Aeronautics Commission, is specifically designated for the evaluation of potential environmental impacts for the proposed safety extension of runway 06/24. It cannot be used for other purposes.

**Question:** MDOT-Aero maintains a list of consulting firms in Michigan that are qualified to complete this type of work. Did the City offer this contract for competitive bid to companies on the MDOT list of firms? If not, why not? (Councilmember Eaton)

**<u>Response</u>**: The City did not competitively bid this contract from the list of MDOT-Aero firms. MDOT-Aero usually rotates airport environmental assessment work between the qualified firms on their list after getting feedback from the airport on their needs and preferences. In this case, the airport, MDOT-Aero and the FAA discussed the firms

best qualified to complete the revisions from MDOT-Aero's list and determined that Mead & Hunt was the most qualified. Since the environmental assessment work is not starting fresh from the beginning but revising and updating an existing document, the parties agreed a firm with robust resources like Mead & Hunt would be beneficial. In addition, Mead & Hunt was one of the few firms that had experience with the new noise model required by the FAA. This apparently is the first use of this noise model by a Michigan airport.

**Question:** Q2. On CA-21, the cover memo suggests indicates the City "can" be reimbursed 95% of the actual costs by MDOT. Is that reimbursement at the discretion of MDOT or just a matter of applying for it? (Councilmember Lumm)

**Response:** The airport receives non-primary entitlement funds through the Airport Improvement Program each year for eligible projects. The reimbursement to the City for 95% of the actual costs of an FAA Reimbusement Agreement is an eligible project under that program. The reimbursement to the City, which would be through a grant contract which must be approved by the Michigan Aeronautics Commission, is more a matter of just applying for it.

**Question:** Q3. Assuming all the resolutions are adopted by Council, what is the projected timeline for completion of the updated EA including the 3<sup>rd</sup> public hearing and public comment period? Is this (like the train station) a 30-day public comment period? (Councilmember Lumm)

**Response:** The Consulting Engineer anticipates an approximately nine month period from the notice to proceed to complete the draft environmental assessment and have it available for public and agency comments, including the public hearing. Two important components to meeting that schedule are approval by City Council at tonight's meeting and reasonable response time from the FAA. Delay in approving the contract may cause the Engineer to miss the window of opportunity to complete the wetlands assessment this fall, which would push back the overall schedule. The FAA has requested to review the Engineer's findings as they complete various sections of the document. Significant delays in their response may impact the schedule as well. The public comment period is a 30-day period like the train station.

# <u>B-1</u> – An Ordinance to Amend Section 5.17.3G of Chapter 55 (Unified Development Code) of Title V of the Code of the City of Ann Arbor (Medical Marijuana Provisioning Center Location Restriction) (Ordinance No. ORD-18-21)

**Question:** Regarding B-1, the agenda does not show a public hearing on this item. Second reading was postponed at the August 23<sup>rd</sup> meeting and I thought that public hearings were continued when second readings of ordinances are postponed – am I missing something? (Councilmember Lumm)

**Response:** The public hearing was held and closed at the August 23 Council meeting.

**Question:** If approved, would this 1000 feet restriction be more than the restrictions the City places on a drugstore/pharmacy and a liquor store/bar and other places that sell tobacco? (Councilmember Bannister)

#### Response: Yes.

**Question:** Has any estimate been made of the new annual tax revenue that the City might receive from dispensaries that could be used to support schools, roads and local government? (Councilmember Bannister)

#### Response: No.

<u>B-2</u> – An Ordinance to Amend the Zoning Map, Being a Part of Section 5:10.2 of Chapter 55 of Title V of the Code of the City of Ann Arbor, Zoning of 6.4 Acres from C1A/R (Campus Business Residential District) WITH CONDITIONS to C1A/R WITH CONDITIONS (AS AMENDED), 1140 Broadway Rezoning, (CPC Recommendation: Approval - 9 Yeas and 0 Nays) (Ordinance No. ORD-18-24)

**Question:** Please show us how the reciprocal easement effectively enforced the .9 parking spaces per unit lot split across three parcels. It appears the condo parcel physically contains more parking and there is no enforcement to assure the lot split remains in compliance with the parking requirement as required. (Councilmember Bannister)

**<u>Response</u>**: The easement would ensure that each parcel would continue to have access to the required parking. The easement will ensure for example that parcel B can maintain access to parking provided on parcel A. City Code provides for such arrangements.

**Question:** FEMA suggested the city have language to protect itself for future maintenance costs. Where is that addressed? (Councilmember Bannister)

**<u>Response</u>**: This is addressed through the authority to enforce CLOMR-F requirements through the Michigan Building Code and through the requirement included on the site plan.

**Question:** The development documents still call this a mixed use urban village and will enshrine that language legally. That creates a precedent with three parcels at 0%, 0%, and 3% commercial being called mixed use. This language should be removed. (Councilmember Bannister)

**<u>Response</u>**: The development still includes mixed uses, as it is site planned as a single development. It is not necessary to remove this language.

**Question:** Roundabout: May we have a copy of the third party consultant's evaluation report? Were pedestrians and cyclists addressed in this report? (Councilmember Bannister)

**<u>Response</u>**: The result of the analyses for the roundabout are attached to this email. The file "Revised TIS Review Comments 6-21-17 Response.pdf" provides a response to the various design scenarios proposed (page 3, item G).

**G. Broadway Street and Proposed Site Driveway-Intersection Alternatives** 13. The all-way stop, three-way stop, roundabout and signalize options shows vehicles waiting to make the left turn from westbound Broadway Street to southbound Plymouth Road backing up through the intersection/roundabout.

The SimTraffic analysis outputs, which show the average of five simulation runs conducted for each analysis scenario, display a 95th percentile queue length on this approach of 103 feet and 180 feet (4-8 vehicles) during the AM and PM peak hours, respectively. It is possible that occasional short periods of vehicle queues could extend through the intersection on an isolated single signal cycle basis, the capacity at the signalized intersection of Plymouth Road and Broadway Street will also be efficiently utilized by the constant adjustments of the SCOOT adaptive signal system. Overall, any of the three options (traffic signal control excluded) for traffic control at this intersection will operate acceptably, with the roundabout providing the best option.

Additional comments were made by the transportation engineers in Traffic Reviews #5 and #6 – which include consideration for the bicycle and pedestrian accommodations as part of the project (note: not all comments are not directly related to the roundabout but rather access to the site in general).

**Question:** Regarding B-2, can you please explain why staff believes the proposed new condition that only this site plan can be constructed is in the City's best interests and should be accepted? If it is not accepted, but the revised condition on height limits is accepted, what would be the major parameters in terms of height, mass, FAR, parking, setbacks etc for future site plans on this C1A/R (with conditions) zoned site(s)? (Councilmember Lumm)

**Response:** Staff believes that the proposed new condition is desirable as codifies the expected development plan which was approved by City Council. This ensures for example that residential uses be included, where they would not be required by the C1A/R Conditional Zoning alone. Based on the voluntary nature of conditional zoning, it is not appropriate for City Council to unilaterally select among offered conditions in a piecemeal form. The proposed petition should be considered in its entirety. Without this amendment, all of the standard requirements of the C1A/R would apply.

#### <u>C-1</u> – An Ordinance to Amend Section 9:106. - Periodic Fire Safety Inspections Required, of Chapter 111 of Title IX of the Ann Arbor City Code

**Question:** Regarding C-1, the cover memo indicates the ordinance changes are to "reflect current inspection practices" which sounds like more clean-up and alignment than substantive change. Is that an accurate assessment or are there any changes in inspection frequency for any building types and if so, how will those owners be notified of the change? (Councilmember Lumm)

**<u>Response</u>**: Correct, this is more of a clean-up and alignment with actual practices than a substantive change. This matter was actually brought forth during meetings with business owners to discuss the revised inspection rates, which went into effect July 1, 2018.

<u>Question</u>: Also on C-1, do we have any benchmark data with regard to frequency of inspections in other similar sized cities and/or University communities? (Councilmember Lumm)

**<u>Response</u>**: No, we do not have benchmark data with other university communities.

## <u>DC-1</u> - Resolution Confirming Next Steps in Community Participation and Engagement in Developing the City Budget and Spending Priorities

**Question**: What other costs (including internal staff time costs) are necessary "to adopt the Priority Based Budgeting (PBB) approach"? (Councilmember Warpehoski)

**<u>Response</u>**: The recommended direction for the PBB initiative is to just utilize the survey portion of the process at this time. Staff estimates the survey, as expanded by direction in Council's resolution, will require approximately 1 week of staff time between now & Dec. 1<sup>st</sup>. This estimate is comprised of:

- Survey Design (3 full days includes 2 meetings with the vendor, data preparation, and a meeting with available Council members.
- Survey Roll-out (1/2 day) due to the limited time before the Dec. 1<sup>st</sup> deadline, as well as existing staff resources presently being focused on the FY2020/2021 budget preparation, most of the survey outreach efforts will need to be electronic in nature.
- Data Collection and Analysis negligible staff time is needed during this phase since PBB would be performing most of the work.
- Development of Final Report (1.5 days) this includes reviewing the final report, discussing alignment with city resources, and preparing a presentation for Council.

**Question**: How would this affect the next 2-year budget planning cycle? (Councilmember Warpehoski)

**Response:** The results of the survey should be available for Council's December Retreat. Depending on how it is received, a budget request for additional funding (approx. \$60k one time and \$30k recurring) could be considered during the development of the FY2020/2021 financial plan. If approved, that would provide resources to perform the other phases of the PBB methodology in the summer/fall of 2019.

<u>Question</u>: Is there adequate time to retool our budget process? (Councilmember Warpehoski)

**Response:** Only the survey portion of the process is recommended at this time. The rest of the PBB process would not be available during the FY2020 budget development. If additional funding is approved in the FY2020 budget, additional PBB information would be available during the FY2021 budget development.

#### <u>DC-2</u> – Resolution to Direct that the City Administrator and City Planning Commission Evaluate Rezoning of Certain Properties Along South Ashley Street and Properties in the Area of Davis Avenue, Hoover Avenue, Edgewood Place, Wilder Place, and Main Street

**Question:** Regarding DC-2, the first whereas clause indicates that "City Council has received requests from property owners to evaluate rezoning." While I recognize the benefits of rezoning these properties consistent with the Master Plan recommendations of single and two-family use, I'm wondering what the process and rules are with regard to rezoning areas/multiple properties. Do all property owners need to formally request the rezoning? What if some object? Can the city initiate re-zoning (if so, under what circumstances) or does rezoning have be owner-initiated? Can you please provide some clarification on the process/rules? (Councilmember Lumm)

**<u>Response</u>**: Rezonings can be initiated by City Council, the Planning Commission, or property owners. This applies to individual or areas comprising multiple properties. The City Council can rezone property with or without the concurrence of property owners, so long as the prescribed procedures are followed.

### <u>DB-4</u> - Resolution to Approve Second Amendment to Articles of Incorporation of the Economic Development Corporation of the City of Ann Arbor

**Question:** Regarding DB-4, is there some specific activity being contemplated by the EDC/A2 that is prompting this request and if so, can you please elaborate a bit on what that is? (Councilmember Lumm)

**Response:** There is no specific activity prompting this request.

#### Federal Aviation Administration Great Lakes Region Detailed Comments on the Draft Environmental Assessment For Ann Arbor Municipal Airport February 2017

1. The EA needs to be written in compliance with new FAA Order 1050.1F, especially Chapter 3, Affected Environment and Environmental Consequences. Since this section is essentially the heart of the EA and provides the analysis upon which the FONSI would be based, it is imperative that this section is written in accordance with FAA's latest NEPA implementing regulation, Order 1050.1F. Significant changes between old Order 1050.1E and new Order 1050.1F pertain to impact categories and in order for this EA to properly evaluate anticipated impacts resulting from implementation of the proposed action, the new order must be followed. The sponsor's rationale for not following Order 1050.1F is that the EA has been in process since 2009 and that "no change in content" would result from following the new Order; this is inaccurate for the following reasons. As the sponsor stated in their January 2017 Notice of Public Information Meeting for the draft EA that "the original 2010 EA has been revised and updated" such a claim cannot be made if the document does not adhere to Order 1050.1F. Furthermore, if the EA was revised in accordance with Order 1050.1F there certainly would be changes in content, as impact categories have changed. As this EA will be issued as a substantially new draft to the public, it must adhere to the requirements of new Order 1050.1F. Further, provide documentation that the surrounding and or existing conditions have not changed and update all correspondence with Agencies to verify that there are still no impacts that might rise to a level of significance.

2. A new wetlands survey and coordination with the proper authorities must be completed. The last field survey was conducted in 2009; a new survey would provide updated affected environment information to determine the extent of anticipated impacts. This in turn would provide the basis for permit applicability and extent and type of mitigation requirements. The sponsor's insistence to "complete a real-time field review of project areas to confirm the presence of wetlands, or lack thereof, during project design" (i.e. post-NEPA) goes against the spirit, logic, and requirements of NEPA and CEQ implementing regulations.

3. The document does not contain a proper discussion of the State Block Grant Program (SBGP). Such a discussion is important for the reader to distinguish between the listed Federal, state, and local proposed actions. It is important for the reader to be able to understand sources of funding, sponsor role, and extent of FAA involvement and how it differs from non SBGP projects.

4. Purpose and Need Statement. The statement is not concise and is incomplete in establishing a purpose and need. This chapter does not provide clear justification for all of the issues that were included in the chapter. Additionally other considerations are presented but are not fully incorporated into the P/N chapter (and/or other chapters of the EA). Having a well-defined purpose and need

FAA comments on Ann Arbor DEA February 2017

statement along with adequate justification is critical in establishing the objectives that are used in identifying and developing the feasible alternatives.

5. The discussion indicating FAA will provide environmental approval to allow SBGP funds to be eligible for projects is inaccurate. This statement is direct opposition to the FAA's Advisory Circular (AC) 150/5100-21 State Block Grant Program. The AC for SBGP clearly indicates that the SBGP state will provide the environmental approval to allow for SBGP funds to be for eligible projects. Only SBGP funds are being used therefore the State has the responsibility to provide environmental approval. There is no Federal approval required for this proposed action in terms of funding.

6. Use of B-II Small Aircraft for Design. It's not clear to the reader how the B-II Small vs. B-II Large distinction is derived. The documents analysis of user surveys results in a determination that the B-II Small is the critical aircraft, however it's not clear how this determination is made as the user surveys also indicate that there are almost an equal number of B-II Large aircraft operations, compared to B-II Small aircraft (on average 52% Small vs 48% Large). B-II Large ops are not sufficiently taken into account or discussed, nor are the smaller sized A-I/B-I operations. The impact to B-II Small users is also not clear. Additional information and analysis of B-II Large and A-I/B-I operations would provide certainty that the B-II Small is the appropriate aircraft for use in design since both B-II Small and B-II Large operations are individually less than the 500 threshold for regular use. Incomplete information may lead readers to infer that B-II large critical aircraft are using the airport regularly, yet it doesn't appear to have been included in this environmental review (e.g. noise).

7. Noise analysis. A revaluation was conducted in 2014 on the 2009 noise modeling results. The document arrives at the conclusion that the 2009 contours are still valid. This reevaluation is based on the existence of the same fleet mix and decrease in operations. The EA will need to provide clear documentation the fleet mix currently using the airport is representative of 2009 analysis. This is required to demonstrate the noise contours are accurate. The EA does not have a noise contour map for year 2022/23 (5 years after implementation). Recommend strong consideration be given to run the AEDT model to establish the noise contours.

8. Safety – Line of Sight - The document briefly discuses a line of sight issue at Taxiway A1 (not visible from the ATCT), also identified as Hotspot 1, as a benefit of the project (Purpose and Need Chapter). The document needs to go further in discussing the issue and/or how the proposed action will improve or resolves the issue.

9. The DEA indicates a goal is to allow the "majority of critical aircraft to safely operate at their optimum capabilities without weight restrictions," and references Paragraph 103 of FAA Advisory Circular 150/5325-4B, Runway Length Requirements for Airport Design. This paragraph states, "The design objective for the main primary runway is to provide a runway length for all airplanes that will regularly use it without causing operational weight restrictions." That same document would only justify a runway length of 4,200. The EA does not provide sufficient justification to illustrate the need for the length identified. What are the current "optimum capabilities and weight restrictions" impacts

FAA comments on Ann Arbor DEA February 2017

experienced by the aircraft regularly using the runway? Provide examples of local factors that explain the current and expected usage of the airport. These factors should support the assumption that forecasted growth will return to the airport rather than the historic trend over the past 15 years.

10. Forecast. The document uses the FAA Terminal Area Forecast (TAF) and MDOT State Aviation System Plan Forecast to justify consistency and growth in the number of B-II Small operations; however, the DEA does not discuss how the forecasts are developed nor the assumptions made to substantiate growth. It's important for the reader to fully understand how the forecast is developed. Providing discussion on how the forecasts were developed prevents the potential misunderstanding or misuse of the forecast by illustrating how they're applicable to current local conditions.

11. Decrease in Operations at ARB. The general trend over the past 15 years has been a decrease in B-II operations at ARB (there have been some years where ops are constant). However the document does not provide an evaluation to account for the significant decrease in operations in the early 2000's and 2007-2009. The absence of explanation puts into doubt the validity of the forecasted growth as the TAF is based primarily on time series analysis and historic trends. Providing explanation of potential reasons for one-off decreases provides contrast to the historic data's decrease over time.

FAA comments on Ann Arbor DEA February 2017

Ann Arbor Municipal Airport (ARB), Ann Arbor Michigan - Draft Environmental Assessment FAA Combined Comment Matrix .-February 2017...

. .

Comment Number	Section Number	Paragraph	FAA Comment	MDOT Comment Resolution (Oct 2016)	FAA Response (Feb 2017)
m	1. 80 4	ī	The Intro and background sections are discussing the State Standards, What are the Federal Requirements, in a diddron to the State eqmits? Chineta Aircraft (15, 1), 8, use of runway, Aircraft Activity (1,5,2) and Characteristics (Recommendations (1,5,3) all need to be in the background section before purpose and need section. Into m P & N needs to be in the background section	On April 21 2015 the FAA-Region provided a 2011 Environmental Assessment from Broughorox's Clow intermedional Anport, as an example for Assessment from Broughorox's Clow intermedional Anport, as an example for ABOT-AERO to follow while re-organizing and revising this draft AERO put significant effort into modeling this draft after the Bolingbrook example and believes the content is consistent. The draft EA was revised to try and clarify believes the issued here, yet remain consistent with the oramble previously provided.	The FAA provided the Boingbrock Clow international Airport EA as a representative example of a document for the State to use as a guide to preparing the Dreft EA for Ann Arbor. The FAA is prepared to discuss its applicabily to this document with the State in the upcoming meetings.
4	2	۵	Need a discussion of the SBGP so that the reader is before able to understand the division of proposed actions between state and Federal	Revised dran EA	The document does not contain a proper discussion of the State Block Grant Program (SECP). Such a discussion is important for the reader to distinguish between the listed Federal, state, and local proposed actions. It is important for the reader to be able to understant occures of funding, sponsor role, and artent of FAA involvement and how it differs from non SBCP projects.
÷	4	ail	The purpose and needs statement should be complete and concise This would include statem the problem that is looking to be addressed. A statement of overal safe and efficient and usable is a general statement and should be tightened up to reflect the discussion that follows. It is confusing on why the line of sight issue is singled out in the statement. Consider revising this statement.	On April. 21 2015 the FAA-Regron provided a 2011 Environmental Assessment from Boungbrook's clow intermational Auron, as an example for MDDT-AERO to follow while re-organizing and revising this draft AERO but significant effort into modeling this draft after the Bolingbrook example and believes the content is consistent. The draft EA was revised to try and clarify the issue relised here, yet remain consistent with the example previously provided.	
ž	5	۵	This paragraph is general in nature. A runway of 3,000 feet would allow without load restrictions with 2005, with on 4,500, 5,000, or 10,000. The paragraph should instead define the tunway length needs of the atricatit regularly vising the tunway, including hau lengths and loads rather than suddenly put out that 4,300 ft. would satisfy ft.	As explained in Section 15 3, The FA recommended trunway length of 4.200 feet at RR was obtained by calculation following the methodology fertermoed in Chapter 2 of FAA Advisory Circular 150(3525-46). Foruway bength Requirements for Anjoro Design, a pathleation that is used anonally by the agency. The methodology and figures referenced in this section of the AC result in recommended trunway lengths that are amont- specie. That they eaver by thurdneos of leip from site ta site, depending on the specific articlar teachmended trunway lengths that are amont- specie. The Device and they and may manum turn termperatures used in the Carsult an extendent of the from site ta site, depending of Figure 2-2 of Chapter 2 of the AC shows that a runway length of apport in the Denver are had an relevation of 5.00 feet MLS. Instrobation of Figure 2-2 of Chapter 2 of the AC shows that a runway length of apportormended or of 3.00 feet to stard and starbort start apport in the Denver area and an machine appretised starborts apport in the Denver area and an machine and starbort start apports and the state with calegory B-1 cructal articraft in Medigan. Theoremended for the state with calegory B-1 cructal articraft in Medigan. Theoremended for a state with calegory B-1 cructal articraft in the state arrow in the state with calegory B-1 cructal articraft in the state arrow in the state with calegory B-1 cructal articraft in the S-2 feet MEL. The AERO turnway length recommendation of 4, 300 feet ta starborts and and for at arrowit arrow in a stroper to any straph of 4, 300 feet ta starborts of the same cructal array of transferences a runway length of a stroper starborts and arrow of the starborts articraft articraft articraft in the B- straft calesticcuron. The eason with the profest of strate strates both arrow of AERO turnway length recommendations for criticral aircraft in the B- it Small calesqory.	The response still does not appear to identify how the 3,00 ft was determined or why a longer runway is not necessary (given the operations by B-II large alrecht). This is the first inne 4,300 ft is subscussed in the document and analysis of user surveys results in a determination that the B-II Small is the critical alrecht. However it's not clear how this determination is made as a surveys results in a determination that the B-II Small is the critical alrecht. However it's not clear how this determination is made as inverse clear how this determination is made and and results of the user surveys also indicate that three are almost an equal more of B-II Large alrecht operations. compared to B-II Small is the first fon average 52% Small vs 48% Large). B-II Large ops are not sufficiant information and analysis of B-II Large ops are ported and A-VB-I operations are individually tests in the the B-II Large and A-VB-I operations are individually tests in the B-II Large operation and analysis of B-II Large operations are individually test in the B-II Large operation are and the B-II Large operation and analysis of B-II Large operation are and the analitis the appropriate and the B-II Large operation and analysis of B-II Large operation are and the analysis of B-II Large operation are and the B-II Large operation are andon and the B-II Large operation are another and an another and another and another and another and another and another and the B-II Large operation are another a
ŝ	1 2 2	ω	The example seems to be an extreme case, how often does thu user use the another and what type of B-II aircaft is it? Why do they base at ARB mislead of another close airport if they cannot use the aircaft to its max capablity above 40 degree F?	S50 Excelled. The user's business from ARB annually in Cessa The Costa Clation S50XL Maximum Takedr (Weight (MTOW) is 550 Excelled. The user's business is based in Ann Arbor and the proximity to 16,800 lbs. Above the 12,500 lbs theshold used for annway length the eliport provides convenience and a significant time savings over other King Air 200, the Clation user is going to have a vasity different notest arports local arports larger than the critical aircraft and the open of the quote kg poing to be included, then it should clarify an type of aircraft and the benefits of the 4,300 ft runway to their ops, even though the benefits of the 4,300 ft	The Cessna Citation 580XL Maxmum Takeoff Weight (MTOW) is 168.00 lbs. Above the 12,500 lbs theshold used for runway length caktuatison. Though it is true that this is also a B-li arcarit hake the King Air 200, the Citation user is going to have a P-li arcarit hake the Tunway expredience than the King Air pilot. If the quote is going to be included, than it should clearly identify the type of arcaraf as larger than the critical aircraft and the benefits of the 4, 300 ft runway to their cips, even though they may need a longer nunway.
16	15.1	*	"Part 135 operators must reduce the useable length of the runway by anywhere from 20-35% based on runway conditions" has this quote been verified through citation to the actual Part 1357	The corporate pilot quotation regarding Part 135 operators has been venified include a footnote indicating the citation location to 14 CFR 135.385 paragraphs (b) and (f).	Include a footnote indicating the station location

ify versus what e FAA guidelines	<ul> <li>n.nuway is extended to e of the eventual</li> <li>e of the eventual</li> <li>e distinction is denved</li> <li>autis in a determination</li> <li>ever it's not clear how ever it's not clear how all a not clear how ever it's not clear how ever</li></ul>	s and bottom of page a extention other than
Clarify what the FAA standards are and justify versus what justification is for the 4,300 foot runway. The FAA guidelines appear to only support a 4,200 foot runway.	Page 13 and 17 (first full paragraph). If the nuway is extended to 4.300 could along built and, and is that one of the eventual objectives to land larger jets? The documents analysis of user surveys results in a determination that the B-II Small is the critical alricraft, however it's not clear how this determination is made as the user surveys and ondrate that the documents analysis of user surveys results in a determination that the B-II Small is the critical alricraft, however it's not clear how this determination is made as the user surveys also indicate that there are almost an equal number of B-II Large administrican black factuased. Incl are the smaller stored A-IIB-1 operations. The impact to B-II Small sizes is also not clear. Additional information and analysis of B-II Large and A-IIB-1 operations. The impact to B-II Small sizes is also not clear. Additional information are analysis of B-II Large and A-IIB-1 operations. The impact to B-II Small size and B-II Large operations. The are analysis of B-II Large and A-IIB-1 operations are impact to B-II Small and B-II Large operations. The impact to B-II Small and B-II Large operations are individually less than the 500 threshold for regular use. Incomplete information may lead readers to nifer that B-II large critical aircraft are using the ariport regularly, yet have uncopalient information are using the ariport regularly, yet have uncopalient information and the ariport regularly, yet have	Top of page 13 discussion on User Surveys and bottom of page 17: there is still no actual justification for the extention other than that it is for B-II category aircraft.
ction 1.5.3 of the draft EA, utilization of current FAA andards results in a recommended runway length of 4,200 unway length of 4,300 feet. Although the unway length of 4,300 feet. Although the are very similar, the reason that 4,300 feet was a ret very similar, the reason that 4,300 feet was AERO current standards for runway length AERO current standards for nuway length		The reason has User Survey Raports were reliad upon in this study is that they distinguish between the various arcraft makes and models. while the TAF and Tower Counts do not. From the various make and model information, anroat a proport cargopties, design groups, weight information, anroat a proport cargopties, design groups, weight determined. The TAF shows tuda trumbers of forecastic algories can be determined. The TAF shows tuda trumbers of forecastic operations, but no distribution of anroat makes or models. The Tower Counts reports distribution of anroat makes or models. The Tower Counts reports are used a sources (user surveys. TAF reports, and Tower Count reports) are used appropriately in this study. As stated in paragraph 1.5.4, the current TAF (which is prepared by FCA) personnel and all of these sources were used appropriation spectations at PAR from yard and the se- surcess were used appropriation spectations at the form and and the or sources were used appropriating operations at PAR from yard and the or forecastic. Confinually increasing operations at and updated annually forecasts continually area to reveal the article and updated annually forecasts continually area to reveal the article and updated annually induced periodically) also forecastis.
	Clarify whether the category 5 II Small Aircraft requires a runway tength of up to 4,300, or do the larger B-II airplanes require this tength? The Small B-II may be on the lower end of the spectrum?	
FA	4	((ast)) several
1,5.3	1 5.3 8	4 9 9
φ.	3	33

There appears to be a disconnect as to how the TAF applies to local conditions at the anoth in the IEA. The doubt T State Anation System Plan Forecast to justify consistency and MDOT State Anaton System Plan Forecast to justify consistency and growth in the number of B hi Small optendors. Thow were, the DEA does not discuss how the forecasts are doveloped nor the assumptions are the access to severe the DEA does not discuss how the forecasts are doveloped or the reader to Killy understanding the write developed are the reader to Killy understanding how the forecasts are doveloped. Providing discussion on how the forecasts were developed are write the potential misurderstanding or misuse of the forecast is developed are the PA is an applicable to current local conditions. The fact propared to assist the FA in meeting its prepared to assist the FA in meeting its polarising and satisfor the anatives of the forecasts for the anative of recent tends. The TAF is prepared to assist the FA in meeting its polarision particular analysis of historical verdes and review of recent tends. The TAF is prepared to assist the FA is a basis for its productions and local conditions are authonices and other avision partners are based priori in the forecasts are based along with input from national trends of the arise of along mith of orthore are based along mithod with input from national trends of the along a distribution are based along with input from national trends of the along a distribution and the along a distribution analysis of himterion and based by the along a distribution and a sufficiences are based along a sufficience and super along a distribution and a sufficience and based and along the distribution and a distribution and along a write analysis of historical trends of the anation along a with input from national trends.	It appears that the document does not address why BJI aincaft overations have historically been steady or declined. Please add wording as to why it its believed that B-II operations will grow besides only referencing the TAF and MASP. Referencing the TAF and MASP only could lead the reader to believe that the growh identified in the TAF and MASP are the only aspects analyzed. In other words, add a description of why the TAF is analyzed. In other words, add a description of why the TAF is relevant to the local conditions.	Please provide further clarification on why the 2014 data is best used to determine future B-II operations rather than using a larger subset of data (i.e. 5 year overago). We recommend adding a comparison of the 2014 data used to a 5 year average to determine which is a better representation of operations to carry forward.
	Ses made and deinforution Jodde to Serifield II. 5.4 as requested A area salo been added to User Survey Report No. 4 (Exhibit 1 of 10x A-4 of the draft EA) which Clarifies the number of amnual non conducted in 2014 by specific aircraft models, the operations and exclusively by category B-11 aircraft houdes, the operations mad exclusively by category B-11 aircraft houdes, the operations are exclusively by category B-11 aircraft houdes. The previous of the 551 that were menutoed in the previous draft of the EA A 4 544 amual operations were performed by the combined B-11 and categories of aircraft. The leakt in Section 15.4 as well as numbers on regrading a "steady of downward trend in B-11 ops" from year 2010 in Table 1-1 have been roweed accordingly. In answer to FAA's on regrading a "steady of downward trend in B-11 ops" from year 2010 mated annual B-11 operations during this time frame. From a low of 537 gh of 600. These numbers were based on the minor fluctuations in a downwards and upwards. The numbers are also relakvely close to each according of the total D-operations at ARB during the time frame in question. In on S. Since the TAF (which is prepared by FA A personnel) shows that durinal Operations at ARB are forecasted to increase every year and all and the all all be substanniated to increase every year for whild also increases beyond the 538 list were documentied in 2014 As in the text of revised Section 1.5.4 of the draft EA, even if B-11 costegory for while all operations at ARB are forecasted to increase every year and all all all and the state forecasted to increase every year and all all all and the text of revised Section 1.5.4 of the draft EA, even if B-11 category for while all operations are increasendy the whole and trunkely entation sould be substantiated through the year (very uninkey) if tatal opera	Changes made and clanification added to Section 1.5.4 as requested in answer to FAA's questions, FlightWarer data was used in the determination of 8-11 operations rots unvey data years 2007 and 2009, and FAA's Traffic Flow Management System Counts (TFMSC) data was used in the determination of B-II operations for survey data year 2014. Thils is clearly explanded in User Survey Report Nos. 2. 3, and 1 (see Aprices 4.7. A-3. and A-4 of the dirft EA). Also, Exhibit in meach of these three reports shows a sismp of the specific B-II category and ret that were included in these
I the TAF is used to project forecasted e atport twore a locality developed Does the airport understand hww the s reality a good indicator of B-II filmerant s reality a good indicator of B-II filmerant	<ul> <li>It is logical to conclude that operations by Bull caregoor aircaft and larger will also increase beyond the 551 that were documented in 2014. "Table 1-1 indicates that the 5-year trend in B-II ops. Why is th logical to 2014 is a staady or downward trend in B-II ops. Why is the 10017 - does the 551 include just B-II aircaft or B-II and larger as indicated in the paragraph?</li> <li>How many of the 551 ops by B-II aircaft are by the representative king Ar 200 or aircaft with 10 or more passenger sears?</li> </ul>	"These numbers have been calculated based on the percentage of actual B-II operations. " Why wasn't flight actual B-II operations to actual Total Operations " Why wasn't flight actual B-II operations to actual to determine actual used by B-II aircraft over more years? Was FAA or flight Avene data compared to the Airport User Survey data used for 2007, 2009, and 2014?
4		۵ ا
		2 2 4
7	25	26

all bullets 1, 2, 3 is reading the second th	
--	--

.

ection be removed are of sight is not isted as an objective. Need to make sure the PIN tatement is concise. clearly stated, focus, whi justification and opjectives. Please provide better clanity/flow when tracking the PIN ection. Isinfy that the preferred ALT 3 is to remove 150 from the east end the runway, (adding back, 153° on the west end) plus the adding are 755° and the filting to the southwest. Section needs to use the environmental impact categories pecified in FAA Order 1050.1F, paragraph 4-1 the tute of the methodologies need to be included in the paragraph to the view of antifing to the feater flow was possible to the methodologies need to be included in the paragraph to the view of 2015, using the latest information from 2012. Intertion of the ordine matter MACS, Washineaw (Livingston, according to the Federal Register EPA 40 CFR Plant 611 which was controled in Jame 20, Vitatiendaw (Livingston, according to the Federal Register EPA 40 CFR Plant 611 which was controled in Jame VI 25 is Unclassified attainment. Clarify that is data submitted is correct. In our of the data from MDECI (Do not er in Appendix D. there is a Land and Wrater Management and volands leiten).	aection be removed	

			It is not clear if this area is in a nonattainment area or maintenance	Based on the 2014 Aprilia Devertial of Michigan is in attainment. Disact undate with the mast second at a state	Diverse under with the meet means are availabled
96	60 4	4	all owner activity and a maintenned tale was achieved. What calculations ed. The cling of the court case should tions should be clied.	To be a contract or contract and counter report on monograph in its internation to the following is an excerpt directly from the 2014 Michigan Annual An Quality Report published in June 2015 - "Michigan ambient NO2 levels have always been well beach. Since March 3, 1975 and reast in Michigan have been in attainment for the annual NO2 MAA QSal monutoring sites have had an annual NO2 concentration at less than half of the 0.025 ppm MAACS. A security the DEC requested a daggraph on of uncossifiable/attainment for the annue and secure and a secure to the 0.025 ppm MAACS. A security the DEC requested a daggraph on of the 0.025 ppm MAACS. A security measurements that would justity classifying these attainment areas as either serious or moderate nonettairmentateras" (DEC 2016 Attainment Map Appendix C)	rease update with the most recent all quality data
103	352	4	What about solis? The paragraph also mentions a new water tine. Please provide more into on the water tine	The City replaced an existing raw (univeated) water line with a new 30" raw I water line in 2010 along the east side of the attront / Accountin H).	Please provide context for the new water ane, as this is the first and only time 4 is maniformed in the downmont
			xpanded. What does the	3.9 Threatened & Endangered	Since this is the first time this is mentioned in the document, either
107	38	6	agreement call for? Why does it exist?	Species and Section 4.2 Mitigation Measures.	describe the agreement with Audubon or reference the section(s) in which it is discussed in oreater detail
108	38	4	Third sentence: What does the Audubon society think of this? Were It they contacted as part of the EA public outreach process?	Revised draft EA	It appears that this comment was not addressed. Please revise document over addicate comment
115	3.9	3	nent of jed)	As scorn as this draft EA is finalized, the regulatory agencies will be contacted in winning and given the opportunity to review, comment and/or update their instructions.	Please update before the EA is finalized
			Update June 2009 survey. As part of the weltands analysis, was located of the veltands analysis, was located of the so, did they make a junsdictional determination have the rary weltands on the Rwy 06 approach, as it that it is not served on an under the surved on the rule of the surved of the surved of the rule of		The time to determine the presence of wetlands (and anticipated impacts) is during the NEPA process, not later during design. Although USACE may not have jurisdiction over the wetlands near
112	310	-		uneed, noting programs to show proper permitming tequentients are intend in the costs and intend in the interverse properties of the suborty over centarial welfands, the USEPA has appred that MDEC has compliance welfands, the USEPA has appred that MDEC has compliance to concluded that the wellands at ARB are not regulated by USACE to concluded that the wellands at ARB are not regulated by USACE.	The runwardwardward with a moutened and weat weat we cu-u-us is that jurisdictional and will it be impacted by the removal of the ODALS in any way? Also, the 7/2209 letter from MDEQ states that their findings are valid only until 7/21/12, so it would seem that this needs to be updated.
118	3.17		Why is this a separate section, as it is not an impact category?	Hazardous Waste Sites are an impact caregory under 1050 1E (Addressed by Comment No 73)	This was reterning to section 3.17, not 3.18. Comment remains valid. Please revise in accordance with Order 1050 1F
125	4.2.2	-	What about BMPs for air and water quality?	quences of Preferred Alternative Sections of their legones.	Although BMPs are mentioned in other sections, it is a good idea to mention them acain, as they are a form of mitication.

ł.



June 21, 2017

VIA EMAIL

Ms. Cynthia Redinger, PE, PTOE City of Ann Arbor 301 E. Huron St., P.O. Box 8647 Ann Arbor, MI 48107

#### RE: Response to Comments 1140 Broadway Traffic Impact Study-Revised Study Ann Arbor, Michigan

Dear Ms. Redinger:

Fleis & VandenBrink (F&V) staff has completed this letter in response to the comments provided by the City of Ann Arbor in their review letter dated June 1, 2017, and to the comments provided by the City of Ann Arbor and HRC in their review letters dated June 1 and 2, 2017 respectively and the meeting held on June 12, 2017 to discuss the comments. F&V's responses to these comments pursuant to the conversations and correspondence with HRC and the City of Ann Arbor are summarized herein.

Furthermore, as a general note, the Morningside Lower Town TIS Report and associated Synchro and SimTraffic files have been revised to reflect the comments provided by the City of Ann Arbor and HRC as reproduced herein. To accurate evaluate the study intersections, two sets of analysis Synchro models were developed.

The first set of Synchro analysis files were used to conduct the Highway Capacity Manual (HCM) analysis. The second set of Synchro analysis files were used to run the SimTraffic microsimulation to model the SCOOT adaptive signal system as accurately as possible. Although the SimTraffic analysis software is not capable of adjusting signal phase splits and offsets in real-time like the SCOOT adaptive traffic controllers in use in the City of Ann Arbor at several of the study intersections, optimizing the signal phase splits and offsets at all study intersections to the greatest extent possible allowed for more accurate modeling of projected traffic conditions.

#### City of Ann Arbor Comments - June 1, 2017

1. Moore & Pontiac Trail, Westbound Moore approach lane assignment should have shared LT/Thru and RT. Right turn movement does not have STOP control, and enter blocked intersection.

#### The Synchro model and the TIS have been updated to reflect these operations.

2. SB Pontiac Trail approaching Swift should have both lanes continue to SB swift approaching Broadway.

#### The Synchro model and the TIS have been updated to reflect this geometry.

3. Broadway & Plymouth, remove median on south leg; vehicle-lane assignment is incorrect.

#### The Synchro model and TIS has been updated to reflect this geometry.

4. Broadway/Plymouth & Maiden, outbound Broadway should be perm-prot, instead of permissive only; phasing sequence is incorrect.

#### The Synchro model and the TIS have been updated to reflect these operations

5. Broadway & Swift, SB Swift should be NTOR.

#### The Synchro model and the TIS have been updated to reflect these operations

6. Why the signalized intersections at Fuller & Cedar Bend, and at Fuller & Bonisteel are not analyzed, and skipped to the signalized intersection at Fuller & Glaizer.

### These intersections were added into the model at the request of the City for modeling purposes only. No operational analysis was provided for these intersections nor are they included in the TIS.

7. What is the design (horizon) year for Fuller/Maiden intersection? Should Lower Town look at least 5-10 years after build-out, as this is a complex development generating more than 300 peak hour trips?

#### A five-year horizon (2027) analysis has been completed in the revised TIS.

8. Maiden & Neilson signal warrant analysis should cover all applicable warrants. Lack of traffic data should not be the reason for not evaluating signal warrant. Pedestrian related signal warrants should also be evaluated.

Pedestrian-related signal warrants were evaluated; traffic control signalization is not warranted at this location on the basis of peak hour or four-hour pedestrian volumes. The relevant signal warrants are included in the revised TIS.

#### HRC Comments - June 2, 2017

#### A. Synchro/SimTraffic Models

1. Confirm existing operation of Broadway/Maiden Lane intersection and westbound Maiden Lane right turn overlap in the existing Synchro models.

### This right-turn overlap was added at the request of the City. It was also observed during the field review performed at this intersection.

2. The existing and background PM SimTraffic models freeze up when running.

This has been corrected in the revised analysis. As noted above, the simulation-specific analysis files are included with the deliverables.

#### B. Existing with Improvements

3. An exclusive right turn lane for westbound Maiden Lane to northbound Plymouth Street is recommended in the study; however, this is existing. It appears that an exclusive left turn lane is being recommended by the study. Please clarify.

#### The recommendations of the study include the following:

"Construct additional lane to provide a three-lane approach at the westbound Maiden Lane approach (turning north on Plymouth Road). Provide a left turn lane, a through lane, and a right turn lane at this approach."

4. During the PM peak hour, the southbound Plymouth Road queues at Broadway Street/Maiden Lane/Moore Street are still unacceptable.

This has been corrected in the revised analysis. Simulation-specific analysis files are included in the submission package.

#### C. Background with Improvements

5. During the PM peak hour, the southbound Plymouth Road and northbound Broadway Street queues at Maiden Lane/Moore Street are still unacceptable.

This has been corrected in the revised analysis. As noted above, the simulation-specific analysis files are included with the deliverables.

#### D. Trip Generation

6. The total new trips in Table 6 should be total trips generated minus the pass-by trips. Please revise.

#### This typographical error has been corrected.

7. Revise the calculated person-trips in Table 8 as rounding is still off.

A typographical error has been corrected in the table, but the trip generation calculations are correct.

8. Describe how the pass by trips were included in the modal split trip generation (Table 10).

The remaining pass-by trips not accounted for in the Vehicular Trips pass-by calculations were assumed to be mid-block pedestrian pass-by trips. This pedestrian pass-by travel pattern involves exiting and reentering a mid-block sidewalk to reach the retail storefronts; these trips do not appear on the study road network.

9. The note for Table 10 states that the values have been rounded up to the nearest whole number. This is not always the case.

Since we are using person-trips, for this study it is important to remember that the modal split trip generation numbers displayed in Table 10 will not add up to the person-trip generation numbers displayed in Table 8 because of the vehicle occupancy rates utilized in the calculations. A single vehicle trip is not equivalent to a single person-trip.

#### E. Trip Distribution and Assignment

10. Explain why only pass-by trips were shown entering the parking area south of the Broadway Avenue/W. Site Drive and no new trips were added here.

While it is reasonable to assume that some new trips may also utilize this parking area, all new trips associated with the retail development were assigned to the site driveways. This created a reasonable composition of both *pass-by* and *new* site-generated retail trips utilizing the storefront parking area and the site driveways.

11. Existing pass-by trips are not shown leaving any site drives in Figure 5. Please revise.

The pass-by trips are shown using the parking area directly adjacent to the storefronts.

#### F. Future with Improvements

12. During the AM and PM peak hours, the intersection of Plymouth Road/Broadway Street/Maiden Lane/Moore Street has approaches that operate with unacceptable levels of service and delays worse than background with improvements. Provide recommendations for mitigating this increase in delay.

The intersection capacity has been increased to the maximum reasonable extent allowable. This additional capacity will be efficiently utilized by the constant adjustments of the SCOOT adaptive signal system.

It is also important to note that in general, *Future Conditions with Improvements* operates better than *Background Conditions*, and many movements and approaches currently operating with critical delays and LOS have been mitigated with the proposed improvements, which are warranted under existing conditions. This comparison is shown in Table 14 in the revised TIS.

#### G. Broadway Street and Proposed Site Driveway-Intersection Alternatives

13. The all-way stop, three-way stop, roundabout and signalize options shows vehicles waiting to make the left turn from westbound Broadway Street to southbound Plymouth Road backing up through the intersection/roundabout.

The SimTraffic analysis outputs, which show the average of five simulation runs conducted for each analysis scenario, display a 95<sup>th</sup> percentile queue length on this approach of 103 feet and 180 feet (4-8 vehicles) during the AM and PM peak hours, respectively. It is possible that occasional short periods of vehicle queues could extend through the intersection on an isolated single signal cycle basis, the capacity at the signalized intersection of Plymouth Road and Broadway Street will also be efficiently utilized by the constant adjustments of the SCOOT adaptive signal system. Overall, any of the three options (traffic signal control excluded) for traffic control at this intersection will operate acceptably, with the roundabout providing the best option.

#### H. Conclusions

14. Conclusions number 2 and 10 have contradicting information.

#### This has been updated in the revised TIS report.

If you have any questions or concerns, please contact our office.

Sincerely,

FLEIS & VANDENBRINK ENGINEERING, INC.

Julie M. Kucell

Julie M. Kroll, PE, PTOE Sr. Project Manager

BMH:jmk

#### Attached:

City of Ann Arbor Comments from June 1, 2017 HRC Comments from June 2, 2017





TO:	Alexis DiLeo, Planning and Development Services Unit
FROM:	Luke Liu, Project Management Services Unit
DATE:	June 1, 2017
SUBJECT:	SP17-009 Traffic Review
CC:	via TRAKiT

In addition to HRC independent review.

- Moore & Pontiac Trail, Westbound Moore approach lane assignment should have shared LT/Thru and RT. Right turn movement does not have STOP control, and enter blocked intersection.
- SB Pontiac Trail approaching Swift should have both lanes continue to SB swift approaching Broadway.
- Broadway & Plymouth, remove median on south leg; vehicle-lane assignment is incorrect.
- Broadway/Plymouth & Maiden, outbound Broadway should be perm-prot, instead of permissive only; phasing sequence is incorrect.
- Broadway & Swift, SB Swift should be NTOR.
- Why the signalized intersections at Fuller & Cedar Bend, and at Fuller & Bonisteel are not analyzed, and skipped to the signalized intersection at Fuller & Glaizer.
- What is the design (horizon) year for Fuller/Maiden intersection? Should Lower Town look at least 5-10 years after build-out, as this is a complex development generating more than 300 peak hour trips?
- Maiden & Neilson signal warrant analysis should cover all applicable warrants. Lack of traffic data should not be the reason for not evaluating signal warrant. Pedestrian related signal warrants should also be evaluated.



PRINCIPALS Daniel W. Mitchell Nancy M.D. Faught Keith D. McCormack Jesse B. VanDeCreek Roland N. Alix Michael C. MacDonald James F. Burton Charles E. Hart

#### **SENIOR ASSOCIATES**

Gary J. Tressel Randal L. Ford William R. Davis Dennis J. Benoit Robert F. DeFrain Thomas D. LaCross Albert P. Mickalich Timothy H. Sullivan Thomas G. Maxwell

#### ASSOCIATES

Marvin A. Olane Marshall J. Grazioli Donna M. Martin Colleen L. Hill-Stramsak Bradley W. Shepler Karyn M. Stickel Jane M. Graham Todd J. Sneathen Aaron A. Uranga Salvatore Conigliaro

#### HUBBELL, ROTH & CLARK, INC.

OFFICE: 555 Hulet Drive Bloomfield Hills, MI 48302-0360 MAILING: PO Box 824 Bloomfield Hills, MI 48303-0824 PHONE: 248.454.6300 FAX: 248.454.6312 WEBSITE: www.hrcengr.com EMAIL: info@hrcengr.com June 2, 2017

City of Ann Arbor 301 E. Huron St, PO Box 8647 Ann Arbor, MI 48107

Attn: Cynthia Redinger, PE, PTOE, Traffic Engineer

Re: 1140 Broadway Traffic Impact Study Review HRC Job No. 20170332

Dear Ms. Redinger:

Hubbell, Roth & Clark, Inc. (HRC) and the City have reviewed the revised Morningside Lower Town Traffic Study conducted by Fleis & Vandenbrink dated May 15, 2017. Our comments are as follows:

- $\equiv$  <u>Synchro/SimTraffic Models</u>
  - $\equiv$  Remove the additional eastbound through lane, east of the dummy node between Fuller Road and Neilson Court.
  - $\equiv$  The westbound Moore approach lane assignment at Pontiac Trail should have one shared left turn/through lane and one dedicated right turn lane, the right turn movement is not stop controlled and allow vehicles to enter blocked intersection.
  - Southbound Pontiac Trail approaching Swift Street should have both lanes continue to southbound Swift Street approaching Broadway Street.
  - $\equiv$  Remove the median on the south leg of the Broadway Street/Plymouth intersection and correct the vehicle-lane assignment.
  - $\equiv$  At Broadway Street/Plymouth and Maiden, outbound Broadway Street should be permissive-protective, instead of permissive only. The phasing sequence is incorrect.
  - $\equiv$  Southbound Swift at Broadway should be no turn on red.
  - $\equiv$  Include the signalized intersections of Fuller Road/Cedar Bend Drive and Fuller Road/Bonisteel Boulevard in the model.
  - $\equiv$  The existing and background PM SimTraffic models freeze up when running.
- *≡ Existing with Improvements* 
  - $\equiv$  An exclusive right turn lane for westbound Maiden Lane to northbound Plymouth Street is recommended in the study; however, this is existing. It appears that an exclusive left turn lane is being recommended by the study. Please clarify.
  - $\equiv$  During the PM peak hour, the southbound Plymouth Road queues at Broadway Street/Maiden Lane/Moore Street are still unacceptable.
- *Background with Improvements* 
  - $\equiv$  During the PM peak hour, the southbound Plymouth Road and northbound Broadway Street queues at Maiden Lane/Moore Street are still unacceptable.



Ms. Cynthia Redinger, PE, PTOE June 2, 2017 HRC Job Number 20170332 Page 2 of 3

- $\equiv$  <u>Trip Generation</u>
  - $\equiv$  The total new trips in Table 6 should be total trips generated minus the pass-by trips. Please revise.
  - $\equiv$  Revise the calculated person-trips in Table 8 as rounding is still off.
  - $\equiv$  Describe how the pass by trips were included in the modal split trip generation (Table 10).
  - $\equiv$  The note for Table 10 states that the values have been rounded up to the nearest whole number. This is not always the case.
- *<u>Trip Distribution and Assignment</u>* 
  - $\equiv$  Explain why only pass-by trips were shown entering the parking area south of the Broadway Avenue/W. Site Drive and no new trips were added here.
  - $\equiv$  Existing pass-by trips are not shown leaving any site drives in Figure 5. Please revise.
- *Future with Improvements* 
  - $\equiv$  Provide a more complete signal warrant analysis at the intersection of Maiden Lane and Nielson Court. Even though 24-hours of data were not collected, the five hours that were can still be applied to all the warrants. Pedestrian related warrants should also be considered.
  - During the AM and PM peak hours, the intersection of Plymouth Road/Broadway Street/Maiden Lane/Moore Street has approaches that operate with unacceptable levels of service and delays worse than background with improvements. Provide recommendations for mitigating this increase in delay.
- *Broadway Street and Proposed Site Driveway-Intersection Alternatives* 
  - $\equiv$  The all-way stop, three-way stop, roundabout and signalize options shows vehicles waiting to make the left turn from westbound Broadway Street to southbound Plymouth Road backing up through the intersection/roundabout.
- <u>Conclusions</u>
  - $\equiv$  Conclusions number 2 and 10 have contradicting information.

In addition, the City is requesting a design horizon year of 10 years after build out to be included in the study due to the large size of the development and high number of projected peak hour generated trips.



Ms. Cynthia Redinger, PE, PTOE June 2, 2017 HRC Job Number 20170332 Page 3 of 3

If you have any questions or require any additional information, please contact the undersigned.

Very truly yours,

HUBBELL, ROTH & CLARK, INC.

Lia Michaels

Lia Michaels, P.E., PTOE Project Engineer

LFM/lfm

pc: City of Ann Arbor; Luke Liu HRC; C. Hill-Stramsak, File



TO:	Alexis DiLeo, Planning and Development Services Unit
FROM:	Cynthia Redinger, Luke Liu, Public Services - Engineering
DATE:	September 18, 2017
SUBJECT:	SP17-009 Traffic Review
CC:	via TRAKiT

The application is approved once the following mitigation need is addressed in transportation impact analysis.

With site-generated trips, the intersection of Maiden Lane & Nielsen Court meets criteria for RRFB to assist servicing non-motorized demand crossing Maiden Lane. Traffic volume on Maiden Lane is very high during commuting peaks that there is no sufficient gap for safe crossing. The intersection of Maiden & Nielsen shall be equipped with a standard traffic signal or RRFB crossing treatment.

## **Review Memo**

To: From:	Alexis DiLeo, Planning and Development Services Cynthia Redinger, PE, PTOE, Public Services Area – Engineering Luke Liu, PE, PTOE, Public Services Area - Engineering
CC:	Via Trakit
Date:	August 25, 2017
Re:	SP17-009: 1140 Broadway

This application is **not** recommended for approval.

Transportation Impact Analysis:

The applicant's engineer provided responses to the following comments. Several of the comments have not been satisfied at this time.

- Future with Improvements: Provide a more complete signal warrant analysis at the intersection of Maiden Lane and Nielson Court. Even through 24-hours of data were not collected, the five hours that were can still be applied to all the warrants. Pedestrian related warrants should also be considered.
  - The applicant's engineer has not completed the work requested. The previously requested analysis shall be submitted as a condition to traffic engineering approval. The requested analysis at the intersection of Maiden Lane and and Nielsen Court will be used to determine if a traffic signal is currently warranted, if conditions nearly meet warrants, or if another type of device is required to support pedestrians and bicyclists crossing Maiden Lane at Nielsen Court. Submittal of signal warrant spreadsheet as an Excel file is required.
- Future with Improvements: During the AM and PM peak hours, the intersection of Plymouth Road/Broadway Street/Maiden Lane/Moore Street has approaches that operate with unacceptable levels of service and delays worse than background with improvements. Provide recommendations for mitigating this increase in delay.
  - The applicant's engineer has clarified their analysis results. The resulting proposed conditions analysis results will not meet the requirements established in the City's Land Use Regulations Attachment D. In order to offset this deficiency traffic engineering staff recommends the applicant's mitigation strategy include additional traffic detection to optimize SCOOT signal control operations. The recommended strategy includes motor vehicle detection and bicycle detection

using GRIDSMART camera at the existing signalized intersections of Broadway & Swift, Broadway & Maiden, Plymouth & Broadway, and Barton & Plymouth.

- Broadway Street and Proposed Site Driveway-Intersection Alternatives: *The all-way stop, three-way stop, roundabout and signalize options shows vehicles waiting to make the left turn from westbound Broadway Street to southbound Plymouth Road backing up through the intersection/roundabout.* 
  - The applicant's proposed intersection does not meet the recommendations of the Michigan Access Management Guidebook for corner clearance. While the existing public right of way access, i.e. the old Broadway alignment, has an access point at this location that access point is extremely low volume. The proposed site access will create a scenario with far more trips destined for the existing signalized intersection. The applicant has proposed a roundabout at this location to minimize the negative impacts of the new intersection on the existing signalized intersection. The applicant's engineer has acknowledged that the queuing will occasionally extend between the two intersections creating an undesired condition.

Responses to further staff comments include:

 The engineer's response to these comments does not acknowledge the City's need to review the requests data and analyses in order to ensure a complete transportation system that will be reasonably safe and convenient for all modes of travel. Only the output of some analyses were provided. Please provide source analysis for review as previously requested.