

MINUTES OF THE FOURTH MEETING

ADVISORY COMMITTEE ON THE LAKE PARKWAY EXTENSION STUDY

DATE: June 13, 2011
TIME: 10:00 a.m.
PLACE: General Mitchell International Airport
Mitchell Gallery of Flight Museum – Sijan Room
Upper Concourse Level
Milwaukee, Wisconsin

Members Present

Patricia Jursik, Chair Supervisor, 8th District, Milwaukee County Board
Dick Bolender Mayor, City of Oak Creek
Tony Day Mayor, City of Cudahy
Michael Loughran (representing Jeffrey Mantes).....Chief Planning & Developments Engineer,
City of Milwaukee
Al Richards Mayor, City of St. Francis
Thomas Schmidt (representing Christine Sinicki)Citizen
Jack Takerian Director of Transportation and Public Works, Milwaukee County
Thomas Zepecki..... Mayor, City of South Milwaukee

Staff Present

Kenneth R. Yunker Executive Director, SEWRPC
Christopher Hiebert.....Chief Transportation Engineer, SEWRPC
Ryan W. Hoel..... Principal Engineer, SEWRPC
Eric Lynde..... Senior Planner/Engineer, SEWRPC

Guests Present

Edward A. Baisch Airport Engineer, General Mitchell International Airport
C. Barry Bateman..... Airport Director, General Mitchell International Airport
Rollin Bertran..... Director of Highway Operations,
Department of Transportation and Public Works, Milwaukee County
Rhonda Black.....Real Estate Specialist,
128th Air Refueling Wing, Wisconsin Air National Guard
Melinda Dejewski City Engineer/Director of Public Works, City of St. Francis
J. Heath Duncan Major, Civil Engineering Commander,
128th Air Refueling Wing, Wisconsin Air National Guard
Michelle Kendall..... Lieutenant Colonel, Deputy Commander, Mission Support Group,
128th Air Refueling Wing, Wisconsin Air National Guard
Mary Jo Lange Director of Public Works, City of Cudahy
Michael J. Maierle Long-Range Planning Manager, City of Milwaukee
Gerald Peterson.....City Administrator, City of Oak Creek
Tom Rave.....Executive Director, The Gateway to Milwaukee
Timothy RhodeCity Administrator, City of St. Francis
David Tapia..... Project Manager, Bloom Companies, LLC
Charlie WebbSenior Project Engineer, CH2M Hill, Inc.
James R. Zsebe.....Project Manager, General Mitchell International Airport

ROLL CALL

Chair Jursik called the meeting to order at 10:05 a.m. She indicated that a sign-in sheet was being circulated for the purposes of taking roll and recording the names of all persons in attendance at the meeting, and she declared a quorum of the Committee present. Chair Jursik suggested, and the Committee agreed, that the second item on the agenda—review and approval of minutes of the meeting held on February 16, 2011—be taken up by the Committee following the fifth item—consideration of alternative treatments at each roadway crossing of the Lake Parkway extension along General Mitchell International Airport.

Chair Jursik stated that she is continuing to receive interest in the study from individuals in Racine County, and noted that she had provided updates on the Lake Parkway extension planning effort at two meetings of a committee created by the Caledonia Village Board to consider the possible extension of the Lake Parkway into Racine County.

DISCUSSION OF POTENTIAL ISSUES ASSOCIATED WITH CONSTRUCTING A LAKE PARKWAY EXTENSION NEAR GENERAL MITCHELL INTERNATIONAL AIRPORT

Chair Jursik stated that she and Commission staff had a meeting with Airport Director Bateman and other General Mitchell International Airport (GMIA) staff, and a meeting with Colonel Metzgar and other representatives of the 128th Air Refueling Wing, including Colonel Julio Barron of the State of Wisconsin, Department of Military Affairs. Chair Jursik then asked Mr. Yunker to summarize the potential restrictions of constructing the Lake Parkway extension along GMIA and potential impacts to the 128th Air Refueling Wing of the Wisconsin Air National Guard (see Attachment 1 to these minutes for a copy of the presentation used by Mr. Yunker). The following discussion by the Committee took place during and following the summary provided by Mr. Yunker:

1. South Milwaukee Mayor Zepecki asked whether the Lake Parkway extension could be constructed below Grange Avenue so that a higher level of security could be maintained at the existing and planned 128th Air Refueling Wing facilities. Mr. Yunker indicated that the Commission staff would analyze this alternative.
2. Responding to an inquiry by Oak Creek Mayor Bolender, Mr. Yunker stated that a jughandle ramp would not likely encroach into navigable airspace at College Avenue. He noted, however, that the jughandle ramp and light poles at this location may be above the Milwaukee County height restriction of 35 feet. He added that a variance to the Milwaukee County ordinance restricting the height of a new structure adjacent to GMIA would be required should FAA approve the proposed construction of the facility.
3. Chair Jursik stated that the 128th Air Refueling Wing was very important to the community and that she was confident the concerns expressed by the 128th Air Refueling Wing could be addressed. Mr. Yunker added that the 128th Air Refueling Wing did not identify any issue that would appear to make construction of a Lake Parkway extension infeasible.
4. South Milwaukee Mayor Zepecki asked whether the 128th Air Refueling Wing could expand their facilities on the undeveloped land located within GMIA north of College Avenue and west of the Union Pacific Railroad (UPR) line. Chair Jursik responded that a remediated landfill is located in that area which limits what can be built on the site. Maj. Duncan added that the Wisconsin Air National Guard had previously determined that the 128th Air Refueling Wing could not build facilities in that area due to the remediated landfill site.

5. Chair Jursik asked Airport Director Bateman to discuss the planned new GMIA parallel east-west runway just north of College Avenue. Airport Director Bateman stated that the runway would provide a significant increase in the capacity of GMIA. He indicated that while a new east-west runway was planned to be constructed around the year 2020, the trend of airlines operating larger and fuller aircraft and advances in air-traffic control resulting in less restrictive flight spacing requirements, would potentially increase the capacity of GMIA and delay the need for the planned east-west runway to beyond the year 2020.

REPORT BY COMMISSION STAFF ON DISCUSSIONS WITH WE ENERGIES AND AMERICAN TRANSMISSION COMPANY STAFFS

Mr. Yunker indicated that the Commission staff has been in contact with utility companies along the potential Lake Parkway extension corridor to determine potential impacts to their facilities that may result from consideration of construction of a Lake Parkway extension between Layton Avenue and STH 100. He noted that the Commission staff specifically had been in contact with We Energies and American Transmission Company (ATC), and also with McLeodUSA, Milwaukee Metropolitan Sewerage District (MMSD), and West Shore Pipeline. He then provided a summary of the potential impacts (see Attachment 2 to these minutes for a copy of the presentation used by Mr. Yunker).

During the presentation, Mr. Yunker indicated that ATC transmission lines were located between Forest Hill Avenue and a point about 1,000 feet north of College Avenue. He noted that between Forest Hill Avenue and Rawson Avenue there would be adequate undeveloped land available east of the We Energies right-of-way to accommodate the Lake Parkway extension, with the Lake Parkway extension located either partially within or entirely outside the We Energies right-of-way. He further noted that between Rawson Avenue and a point about 1,000 feet north of College Avenue there would not be adequate undeveloped land available east of the We Energies right-of-way to accommodate the Lake Parkway extension. Along this section of the We Energies right-of-way, the amount of open land is limited due to the existing residential and industrial development, the proposed U.S. Postal Service facility, and the existing railroad. Mr. Yunker also noted that, based on ATC's desired easement width for their transmission lines, the We Energies and UPR right-of-ways would not be wide enough to accommodate both the relocated ATC transmission lines and the Lake Parkway extension. He stated that ATC had indicated that their transmission lines could be relocated within or along the UPR right-of-way with a less than desired easement provided that the transmission line poles can be constructed immediately adjacent to the Lake Parkway extension and that the minimum required separation from the existing UPR line is maintained. He added that this would result in ATC needing to purchase an easement from UPR and ATC needing to coordinate with the Wisconsin Department of Transportation (WisDOT) and UPR when improving or maintaining the relocated transmission lines. He stated that ATC had also indicated that their transmission lines could be buried along this section of the We Energies right-of-way, but that burying them would be undesirable due to the difficulty in maintaining buried lines and the significantly higher cost to bury lines.

Mr. Yunker then noted that during the preliminary engineering and environmental impact study conducted for a Lake Parkway extension by WisDOT in the early 1990's, WisDOT had proposed an alignment located adjacent to the We Energies right-of-way, which would have avoided impacts to utilities located in that right-of-way. He indicated that the Commission staff would present to the Advisory Committee at a future meeting the results of an analysis of the potential impacts of locating the Lake Parkway extension outside the We Energies right-of-way between Edgerton Avenue and Rawson Avenue. He added that while WisDOT would likely consider the alignment of the Lake Parkway extension recommended by the Committee, the final determination of whether and how the Lake Parkway extension should be constructed would be made by WisDOT following the preliminary engineering and environmental impact study.

The following discussion by the Committee took place during and following the summary provided by Mr. Yunker:

1. Mr. Takerian stated that MMSD is near completion of the purchase of the idle petroleum pipeline owned by West Shore Pipeline, located predominantly west of the UPR right-of-way, which MMSD intends to use for a connection between the Jones Island wastewater treatment facility and a landfill site in the Muskego area.
2. South Milwaukee Mayor Zepecki asked whether there was sufficient available land to locate the Lake Parkway extension east of the We Energies right-of-way to avoid impacting any utilities. Mr. Yunker responded that there is limited undeveloped land available between Edgerton Avenue and Rawson Avenue to construct the Lake Parkway extension east of the We Energies right-of-way. He indicated that there would be adequate undeveloped land available between Rawson Avenue and Forest Hill Avenue to construct the Lake Parkway extension east of the We Energies right-of-way. He noted that the We Energies right-of-way diverges from the UPR right-of-way south of Forest Hill Avenue, and that there is adequate undeveloped land available to construct the Lake Parkway extension between Forest Hill Avenue and STH 100.

CONSIDERATION OF ALTERNATIVE TREATMENTS AT EACH ROADWAY CROSSING OF THE LAKE PARKWAY EXTENSION ALONG GENERAL MITCHELL INTERNATIONAL AIRPORT

Chair Jursik stated that the Committee would consider at this meeting alternative roadway crossing treatments for the potential Lake Parkway extension along GMIA, including at Layton Avenue, Edgerton Avenue, Grange Avenue, and College Avenue. She noted that consideration of alternative crossing treatments at the remaining roadways south of College Avenue would be considered at the next meeting. She asked Mr. Yunker to summarize the alternative treatments proposed at each roadway crossing along GMIA (see Attachment 3 to these minutes for a copy of the presentation used by Mr. Yunker). He noted that the Committee had approved two recommended crossing treatments of the Lake Parkway extension at its previous meeting—an overpass with no access at Forest Hill Avenue, and the provision of cul-de-sacs on Ryan Road on each side of the Lake Parkway extension. The following discussion by the Committee took place during and following the summary provided by Mr. Yunker:

Layton Avenue/Edgerton Avenue

1. Mr. Yunker noted that the Committee had agreed to the consideration of two options for Layton Avenue and Edgerton Avenue at its previous meeting—one option expanding the existing Layton Avenue interchange from a half to a full interchange and eliminating existing access at Edgerton Avenue, and one option that would provide an at-grade intersection at Edgerton Avenue and maintain the existing half interchange at Layton Avenue.
2. Responding to an inquiry by South Milwaukee Mayor Zepecki, Mr. Yunker stated that the location for the potential access on Layton Avenue to the 128th Air Refueling Wing facilities is an existing entrance located west of the existing half interchange for the existing Lake Parkway, and that the entrance would not be affected by expanding the existing half interchange at Layton Avenue to a full interchange.
3. Cudahy Mayor Day expressed concern regarding potential impacts of a northbound off-ramp for the Lake Parkway extension at Layton Avenue on the proposed Cobalt Partners retail development located southwest of Pennsylvania and Layton Avenues. Mr. Yunker indicated that a northbound off-ramp to Layton Avenue may minimally impact the proposed Cobalt site. He stated that the Commission staff would work with City of Cudahy staff to develop an alternative that would further minimize potential impacts to the proposed Cobalt development site. Chair

Jursik noted that the proposed Cobalt site could benefit from having access to the Lake Parkway via a full interchange at Layton Avenue.

[Secretary's Note: The City of Cudahy provided Commission staff with a third alternative crossing treatment at Layton and Edgerton Avenues. The alternative consists of adding a southbound on-ramp onto the potential Lake Parkway extension to the existing half interchange at Layton Avenue, and providing northbound on- and off-ramps at Edgerton Avenue. The Commission staff will analyze this alternative and present the results of the analysis to the Advisory Committee at a future meeting.]

4. Cudahy Mayor Day expressed concern that a full interchange at Layton Avenue may increase the level of traffic volume on Layton Avenue. Mr. Yunker noted that the level of traffic volume on Pennsylvania Avenue would likely increase with an at-grade intersection at Edgerton Avenue. Cudahy Mayor Day suggested that Pennsylvania Avenue may be able to better accommodate an increase in traffic than Layton Avenue.
5. Chair Jursik suggested, and the Committee agreed, to postpone approving recommended crossing treatments at Layton Avenue and Edgerton Avenue until the Committee is able to review further information regarding the potential impacts of alternative crossing treatments at Layton Avenue and Edgerton Avenue.

Grange Avenue

1. Mr. Yunker noted that the Commission staff was proposing to analyze one alternative at Grange Avenue—an overpass with no access. He also noted that an at-grade intersection would be possible should the 128th Air Refueling Wing relocate the secured access to their facilities to Layton Avenue and/or College Avenue, and close the secured access at Grange Avenue.
2. Chair Jursik suggested, and the Committee agreed, to postpone approving a recommended crossing treatment at Grange Avenue until the Committee is able to review further information regarding the potential impacts of constructing the Lake Parkway extension below Grange Avenue, as requested by South Milwaukee Mayor Zepecki.

College Avenue

1. Chair Jursik stated that should a jughandle ramp be provided at College Avenue, she would prefer a full interchange at Layton Avenue rather than an at-grade intersection at Edgerton Avenue based on the concern that the Lake Parkway extension would not operate efficiently should traffic signals be installed at both an at-grade intersection at Edgerton Avenue and at a jughandle ramp at College Avenue. Mr. Yunker noted if no access to the Lake Parkway extension is provided at College Avenue, adjacent arterial streets and highways would potentially have higher traffic volumes because traffic would be required to access the Lake Parkway extension at either Rawson Avenue, or Layton and Edgerton Avenues.
2. Oak Creek Mayor Bolender indicated that he would prefer a jughandle ramp at College Avenue, as it would provide access for the traffic generated by the proposed U.S. Postal Service facility to the Lake Parkway extension rather than to local streets in the City of Oak Creek.
3. Chair Jursik noted that College Avenue is currently being widened from two to four traffic lanes between Howell Avenue and Pennsylvania Avenue, and a roundabout is being constructed on College Avenue east of the UPR line. She also noted that it appears the proposed U.S. Postal Service facility will proceed to construction.

4. South Milwaukee Mayor Zepecki made a motion for the Committee to approve an overpass with jughandle ramp access as the recommended crossing treatment of the Lake Parkway extension at College Avenue. The motion was seconded by Oak Creek Mayor Bolender, and carried unanimously by the Committee.

REVIEW AND APPROVAL OF MINUTES OF FEBRUARY 16, 2011, MEETING

A motion to approve the minutes of the February 16th meeting as presented was made by South Milwaukee Mayor Zepecki, seconded by Oak Creek Mayor Bolender, and carried unanimously by the Committee.

DETERMINATION OF NEXT MEETING DATE AND LOCATION

Mr. Yunker suggested that, at its next meeting, the Advisory Committee would review the results of further analysis of potential impacts of alternative crossing treatments at Layton, Edgerton, and Grange Avenues, including potential impacts to the proposed Cobalt Partners retail development; consider the alternative crossing treatments at the remaining roadway crossings south of College Avenue, including the location of an at-grade intersection at STH 100 preferred by the City of Oak Creek; and review the potential impacts of locating the Lake Parkway extension outside the We Energies right-of-way between Edgerton Avenue and Rawson Avenue.

Chair Jursik requested that the Commission staff also provide at the next meeting an exhibit depicting the recommended crossing treatments approved to date by the Committee.


Following discussion by the Committee, Chair Jursik suggested that the next Committee meeting be tentatively scheduled for 10:00 a.m. on Monday, September 26, 2011, in the City of Cudahy. Cudahy Mayor Day indicated he would attempt to reserve the Cudahy Family Library at 3500 Library Drive, Cudahy, Wisconsin.

ADJOURNMENT


There being no further business to come before the Committee, the meeting was adjourned at 11:27 a.m.

Respectfully submitted,

Kenneth R. Yunker
Recording Secretary




**Lake Parkway Extension Study:
Potential Restrictions Along GMIA and
Impacts to 128th Air Refueling Wing**



#157588

June 13, 2011



**Discussions with GMIA staff and
128th Air Refueling Wing Representatives**

- **Commission staff met with GMIA staff to discuss potential restrictions with constructing the extension of the Lake Parkway adjacent to GMIA.**
- **Supervisor Jursik and Commission staff met with:**
 - **Airport Director Bateman and other GMIA staff on March 29, 2011, and**
 - **Col. Metzgar and other Representatives of the 128th Air Refueling Wing on April 1, 2011.**

2



Two Major Issues were Identified and Discussed

- **Height restrictions for constructing Lake Parkway extension along GMIA.**
 - **FAA requirements limiting the construction of a facility within the navigable airspace of an airport.**
 - **Milwaukee County's ordinance restricting the height of new facilities adjacent to GMIA.**
- **Effect of Lake Parkway extension on operation and potential expansion of 128th Air Refueling Wing.**


3



FAA Requirements Limiting Construction of Facilities within Navigable Airspace of Airports

- **Construction of any project that could affect the navigable airspace would need to be reviewed and approved by FAA.**
- **The railroad is a controlling obstruction along the east side of GMIA.**
- **The height of the structure (roadway or railroad) would include the height of the tallest vehicle.**
- **The height of light poles would also be considered by FAA.**
 - **May limit number and height of light poles that could be constructed adjacent to GMIA.**

4



Other Related Issues Discussed with GMIA Staff

- **FAA restrictions regarding the construction of facilities that could attract wildlife.**
 - **Could affect location and type of storm water management facilities and landscaping features that could be provided adjacent to GMIA.**
- **New east-west runway is planned north of College Avenue.**

5



Milwaukee County Height Restriction Ordinance

- **Restricts the height of new facilities around GMIA.**
- **The height restrictions are 35 feet above existing ground adjacent to GMIA, and are higher further away from GMIA.**
- **A variance could potentially be granted should FAA approve the proposed construction of the facility.**

6



Results of Analysis of Height Restrictions along General Mitchell International Airport

- **Commission staff analyzed the potential height of the Lake Parkway extension along GMIA.**
- **Five locations of concern along GMIA were identified and analyzed:**
 - **300 feet north of Grange Avenue**
 - **Grange Avenue**
 - **1,700 feet north of College Avenue**
 - **College Avenue**
 - **850 feet south of College Avenue**

7



About 300 feet North of Grange Avenue

- **Near where two runways converge.**
 - **Results in the navigable airspace being low.**
 - **The airspace appears to be lower than the existing railroad at this location.**
- **May be allowed to encroach into the navigable airspace at this location given the railroad is considered the controlling obstruction.**
- **It may be possible to construct the potential Lake Parkway extension to not encroach into the airspace, but it may affect the ability to construct an overpass at Grange Avenue.**

8



Grange and College Avenues

- **The navigable airspace at these locations appears to be high enough that a structure with a vehicle crossing over these roadways would not encroach into the navigable airspace.**
- **At Grange Avenue, the top of the highest vehicle at on the potential Lake Parkway extension over Grange Avenue is estimated to be about the same height of the highest train on the existing railroad.**
- **The light poles on the structures would potentially be above the height restriction of 35 feet, potentially requiring a variance to the Milwaukee County ordinance.**

9



About 1,700 feet North of College Avenue

- **Location of planned east-west runway.**
- **The navigable airspace at this location appears high enough that the Lake Parkway extension would not encroach into the navigable airspace.**

10



About 850 feet South of College Avenue

- **Location of the potential jughandle ramp.**
 - **Would provide access to College Avenue under an alternative crossing treatment to the Lake Parkway extension.**
- **The navigable airspace appears to be high enough that the jughandle ramp would not encroach into the navigable airspace.**
- **The structure and light poles would potentially be above the height restriction of 35 feet, potentially requiring a variance to the Milwaukee County ordinance.**

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Summary of Analysis of Height Restrictions Along GMIA

- **Analysis by Commission staff, thus far, does not indicate that constructing Lake Parkway extension along GMIA would be infeasible.**
- **Ultimately, FAA would determine whether the Lake Parkway extension can be built along and near GMIA.**
 - **The implementing agency (WisDOT) would need to submit plans to FAA during preliminary engineering and environmental impact study.**

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128th Air Refueling Wing Concerns

- **128th Air Refueling Wing expressed concerns regarding potential Lake Parkway extension:**
 - **Potential effect on their planned facilities along Grange Avenue.**
 - **Need to maintain security of existing and future facilities.**
 - **Need for suitable locations for secured access to their facilities.**

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Planned Expansion of 128th Air Refueling Wing Facilities

- **Have plans to expand facilities on property owned along Grange Avenue east of the Union Pacific Railroad and Lake Parkway extension.**
- **Desire the stationing of newer refueling tanker planes at 128th Air Refueling Wing site.**
- **Construction of Lake Parkway extension along or through expansion site may affect the level of security possible at the site.**

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Maintain Security of Facilities

- **128th Air Refueling Wing representatives provided comments on potential Lake Parkway extension related to security for their existing and planned facilities:**
 - **Prefer Lake Parkway extension not be located adjacent to their planned facilities along Grange Avenue.**
 - **Desire the construction of Lake Parkway extension to be below railroad.**
 - **Where Lake Parkway extension would be elevated, desire use of barrier walls.**
 - **Prefer Lake Parkway extension be constructed as far east as possible.**
 - **Prefer full interchange at Layton Avenue over at-grade intersection at Edgerton Avenue.**


15



Location of Secure Gates to Site

- **Currently planning to move existing secured gate to Grange Avenue just west of Pennsylvania Avenue.**
- **Lake Parkway extension (along with railroad) would be behind the relocated secured gate.**
- **Secured gate could be relocated to other locations:**
 - **College Avenue**
 - **Layton Avenue**
- **Use of other locations than Grange Avenue may allow for Grange Avenue entrance to 128th Air Refueling Wing to be closed.**
 - **This would allow the Lake Parkway extension to potentially be constructed at grade at this location.**


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Potential College Avenue Gate Location

- Existing entrance along College Avenue occasionally used to access 128th Air Refueling Wing facilities.
- Roadway would need to be constructed.
 - Desire a “serpentine” route for roadway (not straight, direct route).
- Concern with constructing roadway on remediated landfill site owned by City of Milwaukee.
 - Ground above remediated area is unstable.
 - U.S. Air Force engineers may not allow construction.
- Airport plan shows an access road in same location.
 - GMIA staff indicated that access road could potentially be moved to allow for roadway to 128th Air Refueling Wing facilities.

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Potential Layton Avenue Gate Location

- Existing gate system at this location.
- 128th Air Refueling Wing would be willing to swap their land along Grange Avenue for land currently used for hangars.
 - Hangar area is currently leased to individual private owners of small aircraft.
- 128th Air Refueling Wing facilities would not be located in a contiguous location.
 - Security forces would need to split personnel, but would likely be acceptable.
- Concerned about burning pit within aircraft rescue and firefighter training area located between hangar area and current 128th Air Refueling Wing facilities.
 - Potential environmental issue.

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**Lake Parkway Extension Study:
Potential Impacts to Utilities in
Corridor**



#157556

June 13, 2011




**Discussions with Staffs of
Utility Companies in
Lake Parkway Extension Corridor**

Commission staff met and had phone conversations with staffs of We Energies and American Transmission Company (ATC) regarding a Lake Parkway extension between Edgerton Avenue and STH 100.

Commission staff also had phone conversations with three other utility companies in the corridor:

- **McLeodUSA fiber optics,**
- **Milwaukee Metropolitan Sewerage District (MMSD), and**
- **West Shore Pipeline.**

2




Potential Impacts to We Energies Facilities

We Energies owns three types of facilities within their right-of-way between Edgerton Avenue and Forest Hill Avenue:

- Electric distribution lines and poles,
- Gas pipelines and regulator stations, and
- Fiber optic cables leased to McLeodUSA.

3



Potential Impacts to We Energies Gas and Electric Facilities

- **Between Edgerton Avenue and Rawson Avenue:**
 - Lake Parkway extension would likely be constructed within We Energies right-of-way, requiring electric and gas facilities to be relocated.
- **Between Rawson Avenue and Forest Hill Avenue:**
 - Lake Parkway extension could potentially be constructed outside We Energies right-of-way, avoiding need to relocate electric and gas facilities.
 - Should Lake Parkway extension be constructed within We Energies right-of-way, electric and gas facilities would need to be relocated.

4



Potential Impacts to We Energies Fiber Optics Lines

- **Direct-buried 180-count fiber optics.**
- **Lake Parkway extension could be constructed over fiber optic lines if McLeodUSA can maintain access to them.**

5



American Transmission Company (ATC)

Double circuit, 138 kV electric transmission lines and poles:

- **Located within We Energies right-of-way between a point about 1,000 feet north of College Avenue and about Forest Hill Avenue.**
- **Poles spaced about 500 to 600 feet apart.**
- **Would likely need to be relocated where Lake Parkway extension would be constructed within We Energies right-of-way.**

6



Relocating ATC Lines on Overhead Poles

- **Desired easement for maintaining lines is about 80 feet.**
 - **However, a narrower easement of about 60 feet may be possible.**
- **Relocating lines east of Lake Parkway extension:**
 - **ATC would desire lines to be at least 40 feet from any existing development.**
- **Relocating lines west of Lake Parkway extension:**
 - **ATC would desire lines to be at least 25 feet from Union Pacific Railroad (UPR) right-of-way.**
 - **ATC would desire not to relocate facilities within UPR right-of-way.**

7



Relocating ATC Lines on Overhead Poles (continued)

- **ATC lines can be relocated adjacent to Lake Parkway extension:**
 - **Sag of lines must be at least 23 feet above roadway.**
 - **ATC may need to disrupt traffic on Lake Parkway extension and crossing roadways to work on lines if they hang over roadways.**
- **Height restrictions may affect the height of lines and poles along GMIA.**
- **The “blow out” point of an ATC line is required to be at least 16 feet from a rail line.**
 - **The “blow out” point of a line is typically 6-7 feet from where it is attached to the arm of the pole.**

8



Relocating ATC Facilities – Between 1,000 feet North of College Avenue and Rawson Avenue

- **We Energies and UPR right-of-ways not wide enough to provide ATC's desired easement and Lake Parkway extension due to:**
 - Existing and planned development to east, and
 - UPR rail line to west.
- **Two options:**
 - Bury transmission lines, or
 - Relocate lines within narrower easement adjacent to or within UPR right-of-way.
- **From just north of Rawson Avenue to Rawson Avenue extension could diverge from We Energies right-of-way to:**
 - Avoid existing substation, and
 - Provide for a 90 degree intersection with Rawson Avenue.



Between 1,000 feet North of College Avenue and Rawson Avenue - Burying Transmission Lines

- **Cost could be 20 times greater than relocating on overhead poles.**
- **Would require above-ground connections at both ends.**
 - Likely necessitating expansion of two existing substations.
- **Buried lines undesirable due to:**
 - Higher cost,
 - Difficult to maintain,
 - Need for higher capacity lines, and
 - Need for additional time for design and construction.



Between 1,000 feet North of College Avenue and Rawson Avenue - Relocating ATC Lines Adjacent to UPR Rail Lines

- **ATC staff indicated narrower easement between UPR rail lines and Lake Parkway extension was feasible.**
- **However, they provided a list of possible concerns and issues:**
 - **Would be more difficult to maintain.**
 - **Need to coordinate improvements and maintenance to their lines with WisDOT and UPR.**
 - **May affect need and location of relocation of other utilities' facilities.**
 - **Would need to acquire easement from UPR.**
 - **Need to follow height restrictions along GMIA.**
 - **Need to maintain adequate clearance of lines above potential structures at and south of College Avenue.**
 - **Protective barriers would be needed at base of ATC poles.**

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Relocating ATC Facilities – Between Rawson Avenue and Forest Hill Avenue

- **Adequate amount of area east of the We Energies right-of-way to accommodate Lake Parkway extension.**
- **Two options could be considered:**
 - **Lake Parkway extension partially located within We Energies right-of-way**
 - **Would allow for more desirable easement for maintaining relocated ATC lines.**
 - **Lake Parkway extension located entirely outside We Energies right-of-way.**
 - **Would avoid impacting ATC lines.**

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Locations of Height Restriction Concerns Along GMIA

- **Tops of ATC structures would need to remain below FAA navigable airspace.**
- **ATC staff identified three locations of concern related to height restrictions along GMIA:**
 - **Cell tower on top of existing ATC pole located 1,000 feet north of College Avenue.**
 - **Potential structure over College Avenue.**
 - **Potential jughandle ramp about 850 feet south of College Avenue.**
- **If lines cannot be elevated over Lake Parkway extension due to height restrictions along GMIA, ATC would likely need additional easements to relocate lines around Lake Parkway extension.**

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Milwaukee Metropolitan Sewerage District (MMSD)

- **Interplant Solids Pipeline (ISP):**
 - **Force main connecting South Shore and Jones Island wastewater treatment plants.**
 - **Four 16-inch pipes located within We Energies and UPR rights-of-way between Edgerton Avenue and about Forest Hill Avenue.**
 - **Lake Parkway extension could likely be constructed above ISP, similar to existing Lake Parkway, should MMSD be able to maintain access to ISP from surface.**

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West Shore Pipeline

- **Idle petroleum pipeline.**
 - **MMSD currently negotiating purchase of West Shore Pipeline, which MMSD would use to connect landfill site in Muskego area to Jones Island wastewater treatment plant.**
 - **From Layton Avenue to about 650 feet south of Layton Avenue, pipeline may be impacted if Layton Avenue converted from half to full interchange.**
 - **From 650 feet south of Layton Avenue to a point midway between College and Rawson Avenues, pipeline is west of UPR right-of-way and would not likely be impacted by Lake Parkway extension.**




**Lake Parkway Extension Study:
Consideration of Alternative Crossing
Treatments along Airport**



#157557

June 13, 2011




**Recommended Lake Parkway
Extension Crossing Treatments**

At previous meeting, Advisory Committee agreed to a recommended intersection treatment at two crossings:

- **Forest Hill Avenue – overpass with no access to the Lake Parkway extension**
- **Ryan Road – cul-de-sac on both sides of Lake Parkway extension**


2



Alternative Treatments at Remaining Roadway Crossings

	Roadway Crossing	Alternative 1		Alternative 2	
		Potential Treatment of Lake Parkway	Access Provided	Potential Treatment of Lake Parkway	Access Provided
To be Considered at June 13 Meeting	Layton Avenue (CTH Y)	Convert half interchange to full interchange (construct SB on ramp and NB off ramp)	Yes	Maintain half interchange (SB off ramp and NB on ramp)	Yes
	Edgerton Avenue	Remove current connection	No	At-grade intersection	Yes
	Grange Avenue	Overpass with no access (Lake Parkway over)	No		
	College Avenue (CTH ZZ)	Overpass with no access (Lake Parkway over)	No	Overpass with "jughandle" ramp (Lake Parkway over)	Yes
To be Considered at Future Meeting	Rawson Avenue (CTH BB)	Grade-separated interchange (Lake Parkway under)	Yes	At-grade intersection on existing Rawson Avenue bridge	Yes
	Drexel Avenue	Grade-separated interchange (Lake Parkway over)	Yes	At-grade intersection	Yes
	Puetz Road	Grade-separated interchange (Lake Parkway over)	Yes	At-grade intersection	Yes
	STH 100	At-grade intersection	Yes	At-grade intersection	Yes

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Layton Avenue (CTH Y)/Edgerton Avenue Alternative Crossing Treatments

Existing conditions


- **Half interchange at Layton Avenue with NB on ramp and SB off ramp for existing Lake Parkway**
- **Existing Lake Parkway terminates at intersection of Pennsylvania and Edgerton Avenues**

Potential close proximity of new SB on ramp and NB off ramp at existing Layton Avenue interchange to full Edgerton Avenue intersection may not allow adequate spacing to permit both.

Thus, Advisory Committee agreed to consider two options for Layton and Edgerton Avenues:

- **Expand existing Layton Avenue interchange from half to full interchange and eliminate existing access at Edgerton Avenue**
- **Maintain half interchange at Layton Avenue and provide at-grade intersection at Edgerton Avenue**

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**Layton Avenue (CTH Y)/Edgerton Avenue
Alternative Crossing Treatments
(continued)**


Advantages - Expand existing Layton Avenue interchange from half to full interchange and eliminate existing access at Edgerton Avenue

- Interchange would be safer than at-grade intersection
- Interchange would provide more efficient travel on Lake Parkway
- Access to both directions of Lake Parkway would be on a major east-west arterial (Layton Avenue)

Advantages - Maintain half interchange at Layton Avenue and provide at-grade intersection at Edgerton Avenue

- Lower construction cost (\$7.3 million vs. \$11.4 million)
- Intersection would provide direct access to major industrial area in City of Cudahy via Edgerton Avenue

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**Layton Avenue (CTH Y)/Edgerton Avenue
Alternative Crossing Treatments
(continued)**

Additional considerations:

- Constructing NB off ramp to Layton Avenue may minimally impact proposed Cobalt retail development to be located south of Layton Avenue (CTH Y) and between the existing Lake Parkway and Pennsylvania Avenue.
- Both alternative crossing treatments may disturb remediated landfill site located between existing Lake Parkway and Pennsylvania Avenue
- Both alternatives would require a new bridge structure over the Edgerton Channel


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Grange Avenue Alternative Crossing Treatments

- **Grange Avenue provides access to 128th Air Refueling Wing facilities**
- **128th Air Refueling Wing is planning to redevelop land adjacent to We Energies right-of-way at this location**
- **128th Air Refueling Wing may not be able to properly control access to their facilities if access to Lake Parkway extension is provided at Grange Avenue**


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Grange Avenue Alternative Crossing Treatments (continued)

- **Thus, only one alternative is proposed for consideration – An overpass with no access to Lake Parkway extension**
 - **Estimated cost of \$9.7 million**
 - **Potential security concerns remain with elevated structure adjacent to 128th Air Refueling Wing facilities**
 - **May need to construct barrier walls along Lake Parkway extension at this location**
- **However, should entrance to 128th Air Refueling Wing be relocated, may be possible to construct Lake Parkway extension at-grade:**
 - **Eliminates need for bridge structure**
 - **Would reduce estimated cost by about \$6.8 million if no access provided to Lake Parkway extension**

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College Avenue (CTH ZZ) Alternative Crossing Treatments

College Avenue is a major east-west arterial


Limitations for constructing at-grade intersection and diamond interchange at College Avenue along Lake Parkway extension:

- Union Pacific Railroad
- Proposed U.S. Postal Service site
- Existing industrial development

Thus, Advisory Committee agreed to consider two options for College Avenue:

- Overpass with no access to Lake Parkway extension
- Overpass with jughandle ramp access to Lake Parkway extension

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College Avenue (CTH ZZ) Alternative Crossing Treatments (continued)

Advantages - Overpass with no access to Lake Parkway extension

- Lower construction cost (\$18.2 million vs. \$32.3 million)
- May be safer than intersection at jughandle ramp
- Would provide more efficient travel on Lake Parkway
- Less right-of-way needed (9.9 acres vs. 13.6 acres)

Advantages - Overpass with jughandle ramp access to Lake Parkway extension

- Would provide access to major east-west arterial
- Would provide better access to Lake Parkway; otherwise, nearest access would be via Rawson Avenue (1 mile south) or via Edgerton or Layton Avenues (1.5 miles north)
- Would serve existing industrial development, proposed U.S. Postal Service site, and other planned development

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College Avenue (CTH ZZ) Alternative Crossing Treatments (continued)

Additional considerations:

- **Intersection for jughandle ramp at College Avenue (west of railroad) would not likely impact operation of planned roundabout on College Avenue (east of railroad)**
- **Both alternative crossing treatments would avoid impacting proposed U.S. Postal Service development**
- **Both alternative crossing treatments would potentially impact about 2.6 acres of wetlands**