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STATE OF MICHIGAN

JOHN ENGLER, GOVERNOR
DEPARTMENT OF TRANSPORTATION
GRAND REGION OFFICE
1420 FRONT AVENUE NW, GRAND RAPIDS, MICHIGAN 49504
PHONE: 616-451-3091 FAX: 616-451-0707
GREGORY J. ROSINE, DIRECTOR

October 25, 2001

Mr. Ryan Cotton, City Manager
City of Grand Haven
519 Washington Ave.
Grand Haven, Michigan 49417-1486

Dear Mr. Cotton:

Enclosed are Michigan Department of Transportation (MDOT) responses to City Council questions regarding US-31(Beacon Boulevard) from the City of Grand Haven work session, the evening of October 1, 2001. Maps indicating the phased improvements within the City were provided to you last week, as requested. The responses have been revised and updated based on subsequent conversations with you and URS Corporation staff.

Some questions regarding specific design issues are beyond the scope of the Environmental Impact Statement (EIS) process, and can be addressed by the City and MDOT during the final design phase of the US-31 project. The Final EIS is expected to be completed and submitted to the Federal Highway Administration (FHWA) by the end of this year. The US-31 Preferred Alternative in the Final EIS will include both a proposed new freeway route, generally along the 120th Avenue corridor east of Grand Haven, as well as improvements to the existing US-31 route. Final design cannot begin until the EIS is approved by FHWA. Construction schedules for all phases of the US-31 project will depend on statewide funding availability.

Please feel free to call either me, or Vicki Weerstra, Associate Region Engineer-Development, at (616) 451-3091, if you have any questions. Thank you for your support for the US-31 project.

Sincerely,

Dennis J. Kent
Grand Region Transportation Planner

cc: V. Weerstra
M. Alghurabi
T. Petko, URS Corp.
Rod Wyns

Encl.

US-31 ISSUES in the CITY of GRAND HAVEN

The following are Michigan Department of Transportation (MDOT) responses to City Council questions regarding US-31(Beacon Boulevard) from the City of Grand Haven work session, the evening of October 1, 2001, and subsequent discussions with the City Manager:

Ottawa County Road Commission Property Issue

For the **North** parcel - OCRC 1 (north of Adams St):

Alt. w/ new bridge adjacent to the existing US-31: will need **2.41 of 3.00 acres, or 80%** of the parcel, (As presently drawn in Appendix A)

Alt. **w/ 3rd St.** bridge, **w/o** bridge adjacent to US-31: will need **1.30 of 3.00 acres, or 43%** of the parcel, (As will be modified in Appendix A)

For the **South** parcel - OCRC 2 (south of Adams St.):

Alt. w/ new bridge adjacent to the existing US-31: will need **0.63 of 3.54 acres, or 18%** of the parcel, (As presently drawn in Appendix A)

Alt **w/ 3rd St.** bridge, **w/o** bridge adjacent to US-31: will need **0.60 of 3.54 acres, or 17%** of the parcel, (As will be modified in Appendix A)

These alternatives assume a right-of-way (ROW) line 5 meters off the edge of the travel lane. (See attached maps.)

DETENTION POND

Some additional land will be needed for detention ponds related to the new bridge construction, and modified Beacon Blvd. However, MDOT detention needs could be coordinated with City detention needs related to the future north-end redevelopment project. The proposed MDOT detention pond discharge could be directed to any location within the north-end development area, adjacent areas, and/or in combination with MDOT excess property. Potential detention pond locations will be dependent upon a site having the appropriate slope, storm-water volumes, and soil conditions. Detention ponds can become an amenity to the any future development projects within the City, if planned for from the beginning. The drawing in the Draft EIS/Appendix A shows one potential location for the detention pond, within the referenced parcels. MDOT has no authority to acquire property outside of direct project impacts for detention, mitigation, etc. However, we are willing to discuss alternate locations for the pond with willing property owners, including the City. Any sites located off MDOT owned ROW will require participation agreements, per applicable state laws and regulations

MDOT needs to account for approximately **2.5 acre-ft.** of detention in this area, which includes run-off from the US-31 bridge and a portion of Beacon Blvd., before the water is released into the Grand River or the South Channel. Run-off discharged directly into a body of water or wetland is not acceptable to the Resource Agencies or the public, as was noted in numerous public and agency comments throughout the Draft EIS process. Based on this volume of water, some possible detention pond surface area requirements are as follows: **@ 1ft in depth, 2.44 acres of surface area; @ 2 ft in depth, 1.22 acres of surface area.; @ 4ft in depth, 0.61 acres of surface area.** Exact dimensions, locations, and access issues will be modified during the final design phase of the US-31 project, and once City plans are known for the area.

p.2/US-31/GH

7th Street Relocation - EB to NB Turning Movement Change

The current (2000) Peak Hour Volume (PHV) for the existing **7th St. NB left-turn** movement is: **AM - 100 vehicles and PM - 225 vehicles.** Traffic model estimates indicate that, with closing **one block of 7th Street to NB traffic**, approximately **50% of the EB to NB** traffic (~110 vehicles in the PM peak hour) will go to the improved **Columbus St.** intersection to turn left onto NB US-31; **20%** (~45 vehicles in the PM peak hour) will go to the **Jackson St.** signal to turn left; and **30%** (~70 vehicles in the PM peak hour) will use the relocated 7th St. NB access at **Madison St. or Elliot St.** to make the indirect left to NB US-31. **Columbus Street** has more excess capacity to accept this movement and also provides more direct access for downtown traffic than Jackson Street does; therefore, it is able to accommodate more of the relocated EB to NB 7th St. movements. (**SB** 7th Street access from US-31 will **not** change. In addition, **new access to 7th St., from NB US-31 via Madison St. extended,** is also provided with the relocation of 7th St.)

Based on re-assigning the **7th Street EB to NB left-turn volumes,** the estimated volumes on the Columbus, Jackson, and Madison/Elliot routes would be as follows:

EB to NB US-31- Left-turn PHV's in 2000 - 7th St. Vicinity in Grand Haven

	7th Street	Columbus	Jackson	Madison/Elliot
Existing				
AM	100	50	150	n/a
PM	225	125	275	n/a
Change from 7th Street EB>NB closure				
AM	-100	+50	+20	+30
PM	-225	+110	+45	+70
Total w/ Existing 7th Street EB>NB Closure				
AM	0	100	170	30
PM	0	235	320	70

PHASING/SCHEDULES

The exact timing of the proposed improvements to the existing US-31 corridor (Beacon Blvd.) in Grand Haven are dependent on, federal approval of the Final EIS, statewide funding availability and US-31 traffic operational needs in the City. Based on previous discussions with the City, our intent is to begin constructing the segment of the new US-31freeway route, between I-96 and M-45, first. This segment will provide the desired new Grand River crossing, which is a priority for the area, and it will have the most direct affect on Beacon Blvd. traffic in Grand Haven. Concurrently, our plan is to construct **Phase 1** of the Beacon Blvd. modifications in Grand Haven, to address the most immediate traffic issues along US-31 within the City. Initially, the existing **NB 7th St. movement to US-31 could remain open**; however, the relocation of the 7th St. NB movement to Madison St. extended, would be implemented in the future based on traffic operational needs in that area. **Phase 2** would begin after the segment of the new freeway route including the second Grand River crossing is operational, or when traffic conditions within the city indicated a need for additional improvements along Beacon Blvd. The exact timing of Phase two's implementation should remain flexible enough to address future City and MDOT traffic issues as they develop, and to accommodate the safety of the motoring public. Replacement of the existing **US-31 bascule bridge** and connecting roadway improvements will be implemented when needed, based on the bridge condition, as the last stage of Phase 2; replacement is not expected before 15 to 25 years.

p.3/US-31/GH

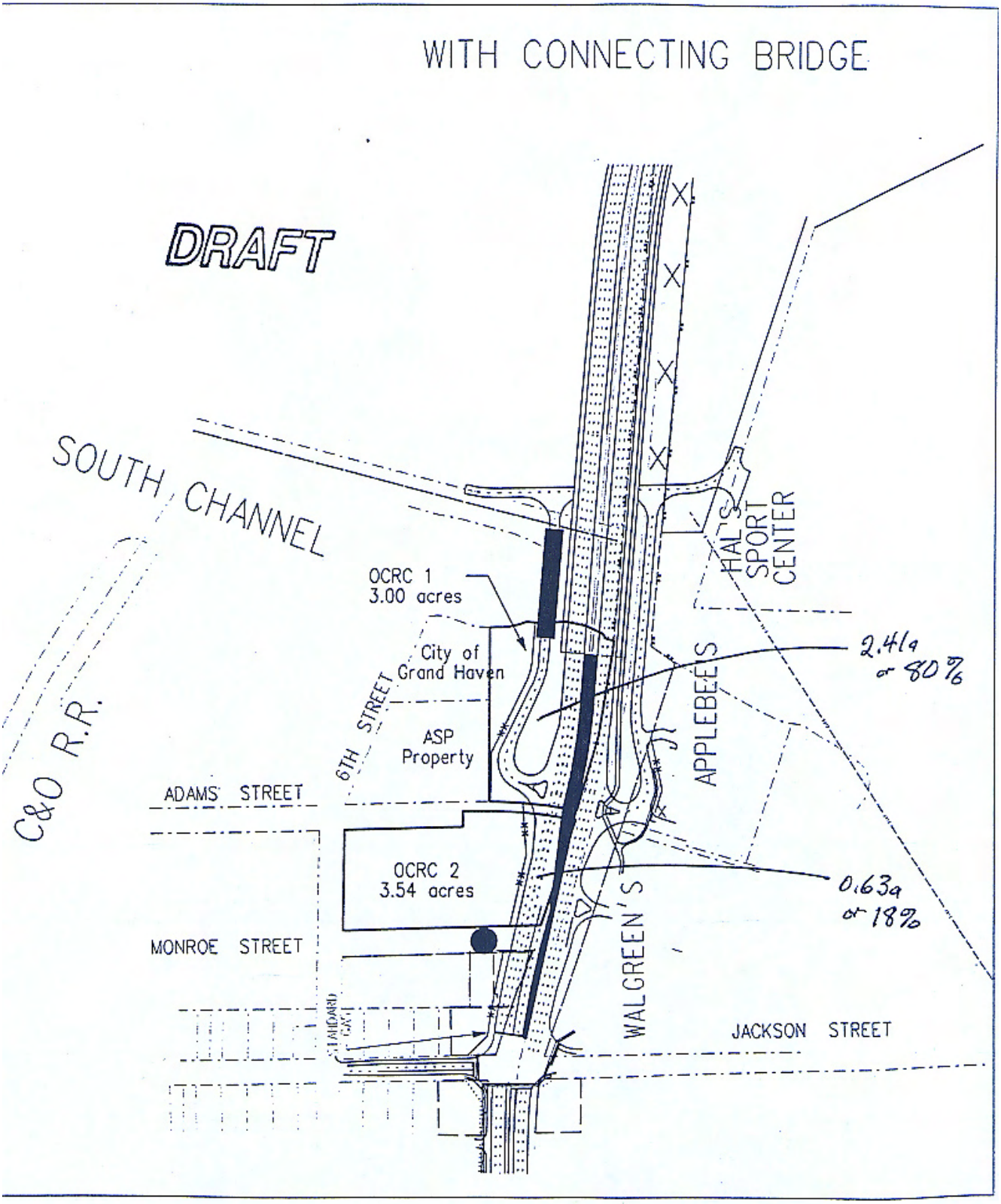
SUMMARY

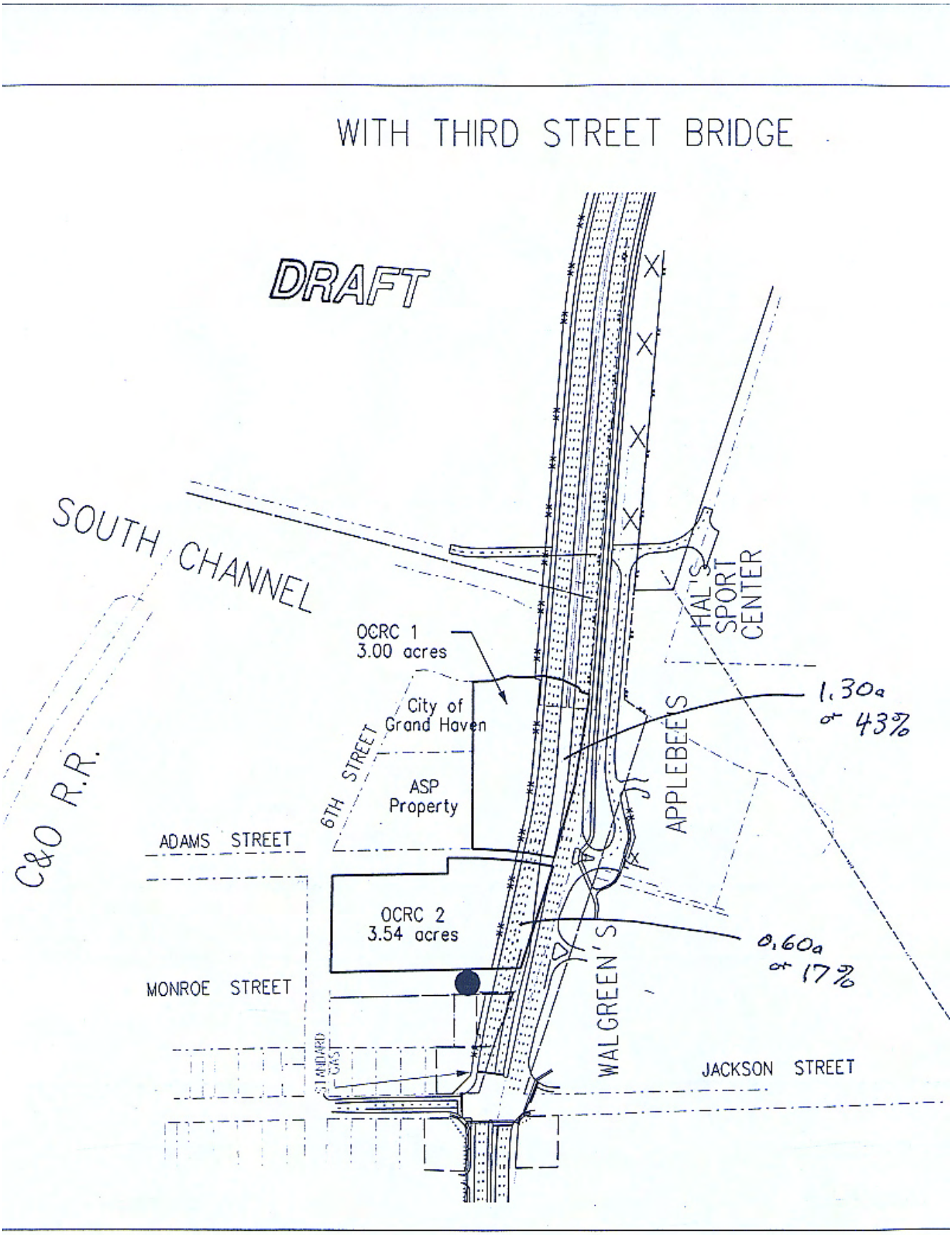
Under an interim scenario in Phase 1, the **NB 7th St. movement to US-31 could remain open**; however, the relocation of the 7th St. NB movement would be implemented in the future based on traffic operational needs in that area. The NB 7th St. relocation scenario would close **one block of 7th St., to NB traffic only**, north of Madison St.; concurrently, **Madison St.** would be extended to US-31 from 7th St. Relocated NB 7th St. traffic could then use indirect left-turns to access NB US-31 from either **Madison or Elliot Sts.** With the 7th St. relocation, **new access is also provided to the 7th St. area, with a direct left-turn from NB US-31 via Madison St. extended**. The **7th St. SB route will remain open** from US-31, and **7th St, south of Madison St., will remain open,** under all scenarios. The EB to NB left-turning movements could be made either directly from Columbus St. to US-31, or indirectly from Madison or Elliot Streets, to US-31, under the relocated 7th St. scenario. The **SB traffic route from US-31 to 7th St.** would remain unchanged from the current routing in all phases.

With the relocation of the NB 7th Street movement, much of the EB to NB left-turn movements are expected to be rerouted to the **improved Columbus St.** intersection at US-31, which will have a new dedicated NB lane added in Phase 1 for this turning traffic. Columbus St. should be able to accept most of the left turning vehicles from NB 7th St., since it has excess existing and future capacity in the AM and PM peak-hours. Traffic tends to avoid intersections with more delays in favor of less congested routes, like Columbus, Madison, and Elliot Streets. Based on this analysis, none of the US-31 intersections at Columbus, Jackson, Madison or Elliot seem to create a problem that would prevent the proposed relocation of the NB 7th St. movement to Madison St. extended. Grand Haven could also sign and promote **Columbus St.** as an exit from downtown and encourage people to use this route, versus Jackson Street, to access NB US-31. Dual EB left-turn lanes and a traffic signal have been recommended at the **Columbus St./Beacon Blvd. intersection,** to accommodate the anticipated EB to NB left-turning movements from relocated 7th St. Before adding a new signal at Columbus St., or any other locations along US-31, the affects of the additional signal must be considered within the context of overall signal spacing and US-31 corridor traffic operations in the City, at the time of construction. Specific issues like this are usually addressed during the final design phase of a project.

Specific design issues are beyond the scope of the EIS process, and can be addressed by the City and MDOT during the final design phase of the US-31 project. The Final EIS is expected to be completed and submitted to the Federal Highway Administration (FHWA) by the end of this year. Final design cannot begin until the EIS is approved by FHWA.

(Attachment)


WITH CONNECTING BRIDGE
DRAFT
SOUTH CHANNEL
C&O R.R.
OCRC 1
3.00 acres
City of
Grand Haven
ASP
Property
6TH STREET
ADAMS STREET
OCRC 2
3.54 acres
MONROE STREET
HAL'S
SPORT
CENTER
APPLEBEE'S
WALGREEN'S
JACKSON STREET
2.41a
or 80%
0.63a
or 18%


WITH THIRD STREET BRIDGE
DRAFT
SOUTH CHANNEL
C&O R.R.
OCRC 1
3.00 acres
City of
Grand Haven
ASP
Property
6TH STREET
ADAMS STREET
OCRC 2
3.54 acres
MONROE STREET
STANDARD CAST
HAL'S SPORT CENTER
APPLEBEE'S
WALGREEN'S
JACKSON STREET
1.30a
@ 43%
0.60a
@ 17%

Williams & Works

• a tradition of service •

• Engineers
• Planners
• Surveyors

October 26, 2001

Mr. Ryan Cotton, City Manager
City of Grand Haven
519 Washington Ave.
Grand Haven, MI 49417-1486

Re: 7th Street/US-31 Intersection

Dear Ryan:

As requested, I have reviewed some various alternatives to the 7th Street/Madison Street/US-31 (Beacon Blvd) intersection being proposed by the Michigan Department of Transportation (MDOT) as a part of the US-31 by-pass EIS. My review is based on our meeting on Thursday, October 18, 2001, in your office with members of the City Council and City Staff to discuss Grand Haven's concerns related to the proposed intersection configuration and my subsequent conversations with Dennis Kent of MDOT regarding the intersection and traffic information furnished by Dennis contained in a document labeled "US-31 Issues in Grand Haven – Draft" dated October 22, 2001.

Grand Haven's concerns regarding the proposed 7th Street/Madison Street/US-31 (Beacon Blvd) intersection relate primarily to the reconfiguration of the east bound (EB) 7th Street to north bound (NB) US-31 movement. Currently, EB 7th Street traffic can cross SB US-31 and merge into the left through or left turn lane on NB US-31, thereby giving EB 7th Street traffic direct access to NB US-31. The proposed intersection configuration requires EB 7th Street traffic to make an indirect left turn from Madison Street to NB US-31. This involves a right turn from Madison Street onto SB US-31 traveling two blocks south to Fulton Street and making a left turn through the median and onto NB US-31. The City is extremely concerned that the described reconfiguration will significantly change the amount of EB traffic on 7th Street thereby having an adverse impact on the commercial/retail business along 7th Street and, in addition, makes access to NB US-31 more inconvenient for residents in the immediate area. The City's concern regarding EB traffic on 7th Street and its potential impact on commercial/retail business along 7th Street is supported by MDOT's traffic model which suggests that 70% of the current traffic on EB 7th Street will find alternate routes at peak times of the day.

CITY MANAGER'S OFFICE
RECEIVED
OCT 3 1 2001
CITY OF GRAND HAVEN

h:/GH/2001 Projects/201079/US-31 Phone (616) 224-1500 • Fax (616) 224-1501
549 Ottawa Ave. N.W. • Grand Rapids, MI 49503

It should be noted that subsequent to our meeting on October 18, 2001, MDOT has proposed that the 7th Street/Madison Street/US-31 intersection could remain "as is" in it's current configuration through Phase I of the by-pass project. The operation of the intersection in its current configuration would be monitored to determine if modifications or construction of the proposed intersection reconfiguration is required. I believe this is a prudent approach to the problem. It may be determined that the intersection in its current configuration functions just fine with the addition of the through lanes on US-31 (Beacon Blvd.) and with the by-pass open to traffic, in which case no major intersection reconstruction would be necessary.

Should it be determined during this evaluation/monitoring period that modifications to the intersection are necessary, the possible alternative intersection configurations we have discussed could be evaluated along with MDOT's proposed improvements.

The following is a description and discussion of each intersection alternative including MDOT's proposed reconfiguration:

1. MDOT proposed 7th Street Intersection with indirect left turn to NB US-31 (refer to MDOT illustrations attached).

   - Pros:
     a. Provides access from NB US-31 to Madison Street/7th Street, this currently cannot be done.
     b. No signals required.
   - Cons:
     a. Restricts direct access from EB 7th Street to NB US-31 and will re-direct approximately 70% of the EB 7th Street traffic to other access points.

2. Construct an intersection at Madison Street and US-31 similar to Columbus Street and close the existing access from EB 7th Street to NB US-31.

   - Pros:
     a. Maintains the status quo. This alternate will function similarly to the current intersection.
     b. Improves safety by "squaring up" the intersection with US-31.
     c. Improves functionality of the left turn maneuver from 7th Street/Madison Street to NB US-31 by moving this access point further south from the Jackson Street. intersection.
     d. No signals required.

- Cons: a. Maintains status quo. No access from NB US-31 to 7th Street/Madison Street is possible, which is also the current situation.

3. Construct a full four-leg signalized intersection with Madison Street and US-31 or Elliott Street and US-31 and close the existing access from EB 7th Street to NB US-31.

- Pros: a. Provides access in all directions.
  b. Promotes access from neighborhoods on the east side of the City to the west side and visa versa.
- Cons: a. May be too close to the Jackson Street intersection to function properly, thereby re-directing traffic that would like to use this route to other non-desirable routes.
  b. This alternate also has the potential of disrupting the flow of traffic on US-31.
  c. Signals are required.
  (MDOT would need to review and model this configuration to determine its feasibility)

The alternatives presented should be reviewed and evaluated after the by-pass and Phase I are completed and new operational data is collected on the 7th Street/US-31 intersection. This will also provide an opportunity to review any new trends related to land/property development and traffic generators, which could be critical to determining the best intersection configuration for this location. The best intersection configuration may not be one of these alternatives when all of these factors are evaluated in 8-10 years. But, given the current information, the City's preference would be Alternate 2 or 3 as defined above.

If you should have any questions or require additional information, please don't hesitate to contact me.

Sincerely,
Williams & Works, Inc.

Roger C. Johr, P.E.

hs/GH/2001 Projects/201079/US-31