## Appendix A: <br> Project Location Maps, Existing On-Street Parking Plan, Alternative 4: Concept Graphic, Alternative 4: Typical Sections, Plans, Profiles



Figure 1.2.1
Project Location Map

| SCALE | DATE |
| :---: | :---: |
| NTS | $07 / 14$ |

$\prod_{\text {architects //engineers }} \mathrm{Bec} /$ /planners




Intersection Realigment Plan
Dewey Avenue / Driving Park Avenue Intersection Realignment Project
City of Rochester, New York

Dewey Ave / Driving Park Ave Intersection Realignment Project PC \#12105 City of Rochester $8 \sqrt[8]{8}$ nvironmental Services

Bergmann 28 East Main Street


www.bergmannoc.con
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DESIGN REPORT

Date

## TYPICAL SECTIONS



Dewey Ave / Driving
Park Ave Intersection Park Ave Intersection Realignment Project City of Rochester $\xrightarrow[8]{8}$ nvironmental Services Bergmann

200 Cirst federal Plaza

Rochester, New York 1461-1-1909 | oftice: 585.232 .5135 |
| :---: |
| fax: 555.232 .4652 |

tax: 585.232 .4652
www.bergmannoc.con
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DESIGN REPORT

Date

## TYPICAL SECTIONS

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DRIVING PARK AVENUE (4)
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## general plan

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Drawing Num
GP. 1


Dewey Ave / Driving Park Ave Intersection Realignment Project PC \#12105 City of Rochester


Department of Environmental Services architects / /engineerss // / planeress ${ }_{2}^{28}$ East Main Street
200 First Federal lial
200 First fe dereal Plaza

Rochester, New York 14614-1909 | office: 585.232 .5135 |
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DESIGN REPORT


## general plan

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Dewey Ave / Driving Park Ave Intersection Realignment Project PC \#12105


Department
Department of
Environmental Services
Bergmann architects // engineers // planners

| 28 East Main Street |
| :--- |
| 200 First Federal Plaza |

200 First Federal Plaza
Rochester, New York 14614-1909 oftice: 585.232 .5135
fax: 585.232 .4652
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DESIGN REPORT
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## PROFILES

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| Project Manager |
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## Appendix B: Environmental Information

## Environmental Scoping Checklist

| PIN：4755．55 | TYPE FUNDING：Federal Aid |
| :--- | :--- |
| DESCRIPTION：Dewey Avenue／Driving Park Avenue <br> Intersection Realignment Project | TOWN：City of Rochester |
|  | COUNTY：Monroe |


| SOCIAL，ECONOMIC AND ENVIRONMENTAL CONSIDERATIONS |  | RESOURCE PRESENT |  |  | RESOURCE IMPACTED |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N／A | YES | No | TBD | YES | No | TBD |
| Social |  |  |  |  |  |  |  |
| Land Use | 囚 |  |  |  | $\square$ | $\square$ | $\square$ |
| Neighborhoods and Community Cohesion | 区 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| General Social Groups Benefited or Harmed | 区 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| School Districts，Rec．Areas and Places of Worship | 区 | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ |
| Economic |  |  |  |  |  |  |  |
| Regional and Local Economies | 区 |  |  |  | $\square$ | $\square$ | $\square$ |
| Business Districts | $\square$ | 区 | $\square$ | $\square$ | 区 | $\square$ | $\square$ |
| Specific Business Impacts | $\square$ | 区 | $\square$ | $\square$ | 囚 | $\square$ | $\square$ |
| Environment |  |  |  |  |  |  |  |
| Wetlands | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Surface Waterbodies and Watercourses | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Wild，Scenic，and Recreational Rivers | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Navigable Waters | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Floodplains | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Coastal Resources | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Aquifers，Wells，and Reservoirs | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Stormwater Management | $\square$ |  |  |  | $\square$ | 区 | $\square$ |
| General Ecology and Wildlife Resources | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | 区 |
| Critical Environmental Areas | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Historic and Cultural Resources | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | 区 |
| Parks and Recreational Resources | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Visual Resources | $\square$ |  |  |  | $\square$ | $\square$ | 区 |
| Farmlands | $\square$ | $\square$ | 区 | $\square$ | $\square$ | $\square$ | $\square$ |
| Air Quality | $\square$ |  |  |  | $\square$ | $\square$ | 区 |
| Energy | $\square$ |  |  |  | $\square$ | $\square$ | 区 |
| Noise | $\square$ |  |  |  | $\square$ | $\square$ | 区 |
| Asbestos | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | 囚 |
| Contaminated and Hazardous Materials | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | $\square$ | 区 |
| Construction Effects | $\square$ |  |  |  | $\square$ | $\square$ | 区 |
| Indirect（Secondary）Effects | 区 |  |  |  | $\square$ | $\square$ | $\square$ |
| Environmental Cumulative Effects | 区 |  |  |  | $\square$ | $\square$ | $\square$ |

## Environmental Scoping Checklist

| PERMITS | APP． | N／A | TBD |
| :---: | :---: | :---: | :---: |
| NYSDEC： |  |  |  |
| State Pollutant Discharge Elimination System（SPDES）General Permit | $\square$ | 区 | $\square$ |
| New York State Department of Environmental Conservation，Article 24－ Freshwater Wetlands Permit | $\square$ | 区 | $\square$ |
| Mined Land Permit | $\square$ | 区 | $\square$ |
| Floodplain Variance | $\square$ | 区 | $\square$ |
| Wild，Scenic，Recreational Rivers Permit | $\square$ | 区 | $\square$ |
| Water Quality Certification（Blanket Sec 401） | $\square$ | 区 | $\square$ |
| Water Quality Certification（Individual Sec 401） | $\square$ | 区 | $\square$ |
| USCG： |  |  |  |
| U．S．Coast Guard Section 9 Permit | $\square$ | 区 | $\square$ |
| USACOE： |  |  |  |
| U．S．Army Corps of Engineers，Section 404 \＆10 Nationwide Permit－PCN $\square$ | $\square$ | 区 | $\square$ |
| U．S．Army Corps of Engineers，Section 404 Individual Permit | $\square$ | 区 | $\square$ |
| U．S．Army Corps of Engineers，Section 10 Permit | $\square$ | 囚 | $\square$ |
| NYSDOS： |  |  |  |
| Coastal Zone Consistency Certification Statement | $\square$ | 区 | $\square$ |
| EPA： |  |  |  |
| NPDES General Permit | $\square$ | 区 | $\square$ |


| EXECUTIVE ORDERS（Federal Aid） | APP． | N／A | tbd |
| :---: | :---: | :---: | :---: |
| EO 11990 Protection of Wetlands | $\square$ | 区 | $\square$ |
| EO 11988 Floodplains | $\square$ | 区 | $\square$ |
| EO 12372 Groundwater Assessment | $\square$ | 区 | $\square$ |
| EO 13112 Invasive Species | $\square$ | 区 | $\square$ |
| EO 12898 Environmental Justice | $\square$ | 区 | $\square$ |


| OTHER APPROVALS／AUTHORIZATIONS | APP． | N／A | TBD |
| :---: | :---: | :---: | :---: |
| Section 106 （National Historic Preservation Act）－SHPO，FHWA | $\square$ | 区 | $\square$ |
| Section 4（f）（Park，Wildlife Refuge and Historic Sites）－Resource Agency，FHWA | $\square$ | 区 | $\square$ |
| Section 6（f）（Land and Water Conservation Funds）－Resource Agency，FHWA | $\square$ | 区 | $\square$ |
| Local Waterfront Revitalization Prog．Consistency Rev．－Municipality，NYSDOS | $\square$ | 区 | $\square$ |
| Endangered Species Act－NYSDEC，USFWS，USACE，FHWA | 区 | $\square$ | $\square$ |
| Migratory Bird Act－USFWS | $\square$ | 区 | $\square$ |

$\qquad$
Version 9／16／11

## Federal Environmental Approval Worksheet

| PIN: 4755.55 | Comp. by:Jim Boggs, <br> Bergmann Associates | Date Comp.: 8/15/14 |
| :--- | :--- | :--- |
| DESCRIPTION: <br> Realignment | Fewey Avenue and Driving Park Avenue Intersection | NEPA CLASS: Class II |
|  | SEQR TYPE: Unlisted |  |
| LOCALITY (Village, Town, City): City of Rochester | COUNTY: Monroe |  |

## Purpose of this Worksheet:

- Communicate project National Environmental Policy Act (NEPA) classification to Federal Highway Administration (FHWA).
- Identify additional required FHWA environmental determinations, approvals and/or concurrences required before the Categorical Exclusion (CE) determination can be made
- Reflect the documentation in the Design Approval Document (DAD) and enable the approving authority (per PDM Exhibit 4-2) to make the CE determination


## Instructions: (also see "WorkshheetInstructions.doc")

Complete the worksheet prior to the end of Design Phase I. If project parameters or site condition changes result in potential resource impacts, re-do worksheet prior to Design Approval to confirm NEPA determination and recertify (on page 4)

Categorical Exclusion (CE)- a category of actions which do not individually or cumulatively have a significant effect on the human environment and which have been found to have no such effect in procedures adopted by a Federal agency (40 CFR 1508.4). Actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS) (23 CFR 771.115(b)).

## Step 1: Unusual Circumstances Threshold Determination - 23 CFR 771.117(b)

Any action which normally would be classified as a CE but could involve unusual circumstances (or even uncertainty) will require consultation with FHWA to determine if the CE classification is proper or whether an EA or EIS is required.

Do any, or the potential for any, unusual circumstances exist?

1. Significant environmental impacts;
2. Substantial controversy on environmental grounds;
3. Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or
4. Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action. YES $\square$ NO $\boxtimes$

- If yes to any of the above, contact the Main Office Project Liaison (MOPL) (see PDM Exhibit 4-1). If after consultation with FHWA it is determined that the project cannot be progressed as a CE, skip to step 4 and see PDM Chapter 4 for NEPA Class I (EIS) or Class III (EA) processing. -Or-
- If no to all, then this project qualifies as a Categorical Exclusion (CE); proceed to step 2.


## Federal Environmental Approval Worksheet

## Step 2：Other FHWA environmental actions required prior to CE Determination

Classification as a CE does not exempt the project from further environmental review．Compliance with Federal Statutes，Regulations and Executive Orders（EO＇s）must be documented．Refer to the Department＇s Project Development Manual（PDM）and Environmental Manual（TEM）to determine the requirements．

| 2.1 | Other required FHWA environmental independent determinations | FHWA <br> Independent Determination and／or Concurrence Required \＆ Received ${ }^{1}$ | Date FHWA determination issued | FHWA <br> Independent Determination and／or Concurrence not required or resource not present ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  |  | A | B | C |
| EO 11990 Protection of Wetlands Individual Finding |  | $\square$ | Date Received | ® |
| ESA Section 7 Threatened and Endangered Species |  | 》 | See Note Below | $\square$ |
| Section 106 （National Historic Preservation Act） |  | $\square$ | Date Received | 区 |
| 4（f）（Park，Wildlife Refuge Historic Sites and National Wild and Scenic Rivers） |  | $\square$ | Date Received | ® |
| 2.2 | Other FHWA environmental compliance and／or approvals／concurrence required | Resource present and threshold ${ }^{1}$ exceeded |  | Resource not present，or present but threshold ${ }^{1}$ not exceeded |
| EO 11988 Floodplains |  | $\square$ |  | 区 |
| EO 13112 Invasive Species |  | $\square$ |  | ® |
| EO 12898 Environmental Justice |  | $\square$ |  | 区 |
| Safe Drinking Water Act Section 1424（e） |  | $\square$ |  | 区 |
| U．S．Army Corps of Engineers，Section 404／10 NW 23 |  | $\square$ |  | 区 |
| Section 6（f）（Land and Water Conservation Funds） |  | $\square$ |  | 区 |
| Migratory Bird Treaty Act |  | $\square$ |  | 区 |
| 23CFR772 Type I Noise abatement |  | $\square$ |  | 区 |
| 2.3 | Other Environmental Issues requiring FHWA notification | Resource present and threshold ${ }^{1}$ exceeded |  | Resource not present，or present but threshold ${ }^{1}$ not exceeded |
| U．S．Army Corps of Engineers，Section 404／10 Individual Permit |  | $\square$ |  | 区 |
| National Wild and Scenic Rivers |  | $\square$ |  | 区 |
| U．S．Coast Guard Bridge Permit |  | $\square$ |  | 区 |
| Known hazardous waste site（only EPA National Priority list） |  | $\square$ |  | $\boxtimes$ |
| Project on or affecting Native American Lands |  | $\square$ |  | 区 |

Note：ESA Section 7 Request Letter for FHWA determination，attached．
Proceed to step 3.

[^0]FEAW＿Final．doc／Version

## Federal Environmental Approval Worksheet

## PIN: 4755.55

## Step 3: Who makes the NEPA Categorical Exclusion Determination?

FHWA Regulations describe two types of CEs; CEs listed in 23 CFR 771.117(c) [aka the C list], and CEs such as those listed in 23 CFR 771.117 (d) [aka the D list]. NYSDOT can make the CE determination for C list projects once all required approvals and concurrences have been secured. NEPA determination for d list projects has been retained by FHWA. NYSDOT can also make the CE determination where a project meets the July 15, 1996 FHWA NY Division NEPA Programmatic Categorical Exclusion memo criteria.

To determine by whom, FHWA or NYSDOT, and how the CE determination is made, follow the instructions beginning in section 3.1 of the table below:

|  | Condition | Action |
| :---: | :---: | :---: |
| ल | Determine whether FHWA or NYSDOT makes the CE determination. |  |
| ल | If the project is an action that would normally be a CE in 23 CFR 771.117 (c) (drop down list), check the "Yes" box. If not, check the "No" box. | If yes, NYSDOT can make the CE determination once all the approvals and coordinations required are complete. <br> Is the project an action that would normally be a CE in $\underline{23 \text { CFR771.117(c)? }}$ YES $\square$ NOZ Choose an item. <br> If yes, choose an item and proceed to step 3.1.1. If no, proceed to step 3.2. |
|  | Determine if any of the required environmental determinations, compliance and/or approvals/ concurrences are outstanding. | If there are: <br> - outstanding environmental determinations (Table 2.1:checks in column A without dates in column B) <br> - and/or circumstances requiring demonstration of applicable EO compliance or issues requiring FHWA environmental review (checks in column A in Table 2.2) <br> The project will use Memo Shell 2 (FHWA needs to review this project). <br> Proceed to step 4. <br> If the project does not meet the conditions above proceed to step 3.1.2. |
|  | Determine if any issues are present that require FHWA notification. | If there are: <br> - any issues requiring FHWA environmental notification (checks in column A in Table 2.3); then <br> The project will use Memo Shell 3 (FHWA must be notified of this project). <br> Proceed to step 4. <br> If the project does not meet the conditions above proceed to step 3.1.3. |
|  | No Determinations, Approvals, Concurrences or Notifications required. | The project will use Memo Shell 1 (memo to file). Proceed to step 4. |
|  | The project is a D list CE as per 23 CFR 771.117(d). Choose appropriate entry from drop down list. If "other" provide an explanation. | Certain actions eligible for categorical exclusion require NYSDOT to transmit documentation and a determination that a CE applies. Examples of activities that may proceed as a CE are listed in 23 CFR 771.117(d) (D list). Activities not directly listed on the D List also have the potential to proceed as a CE with submitted documentation (other). <br> All other environmental, social and economic factors that affect the project's NEPA classification, as per 23 CFR 771.117 and the July 1996 FHWA NY Division NEPA Programmatic Categorical Exclusion memo must still be addressed, for example the project: does not change the functional class; does not add mainline capacity; is not on new location; will not change travel patterns; acquires only minor amounts of ROW (temporary or permanent); does not cause displacements; does not change access control; is air quality exempt; is consistent with NYS Coastal Zone Management Plan; and the analysis and requirements of the Farmland Protection Policy Act have been satisfied. |

## Federal Environmental Approval Worksheet

The project is an action that would normally be a CE in 23 CFR 771.117(d). "Modernization of a highway by resurfacing, restoration, rehabilitation, reconstruction, adding shoulders, or adding auxiliary lanes (e.g., parking, weaving, turning, climbing).".

Other: provide explanation here
Proceed to step 3.2.1.

## PIN: 4755.55

|  | Determine if any of the required environmental determinations, compliance and/or approvals/ concurrences are outstanding and/or notification is required. | If there are: <br> - any outstanding environmental determinations (any checks in column $A$ without dates in column B in Table 2.1); <br> - and/or any circumstances requiring demonstration of applicable EO compliance (any checks in column A in Table 2.2); <br> - and/or issues requiring FHWA environmental notification (any checks in column $A$ in Table 2.3); then <br> The project will use Memo Shell 4 (MOPL and FHWA need to review this project). Proceed to Step 4. |
| :---: | :---: | :---: |
|  | Design Approval Document sent to FHWA | If the project: <br> - does not meet the conditions above (3.2.1), then the project has met the criteria established as per the programmatic agreement dated July 15, 1996. <br> The project will use Memo Shell 5 (memo to file). <br> Proceed to Step 4. |

## Step 4: Summary and Recommendation

- This project does qualify to be progressed as a Categorical Exclusion.
- The NEPA Determination is being made by FHWA
- All outstanding FHWA environmental approvals will be obtained and are listed here.

ESA Section 7 Threatened and Endangered Species

I certify that the information provided above is true and accurate and recommend the project be processed as described above.


Regional Environmental Unit Supervisor $\qquad$ Date $\qquad$
Print Name and Title: $\qquad$
Regional Local Project Liaison $\qquad$ Date $\qquad$
Print Name and Title:
(Locally Administered Projects Only)
Changes that may have occurred since the preparation of the worksheet which would create the need to go through the
Worksheet again include but are not limited to:

- A change in the scope of the proposed project.
- A change in the social, economic or environmental circumstances or the setting of the project study area (i.e. the affected environment).
- A change in the federal statutory environmental standards.
- Discovering new information not considered in the original process.
- A significant amount of time has passed (equal or greater than three years).


## Instructions for Completing

Part 1 - Project Information. The applicant or project sponsor is responsible for the completion of Part 1. Responses become part of the application for approval or funding, are subject to public review, and may be subject to further verification. Complete Part 1 based on information currently available. If additional research or investigation would be needed to fully respond to any item, please answer as thoroughly as possible based on current information.

Complete all items in Part 1. You may also provide any additional information which you believe will be needed by or useful to the lead agency; attach additional pages as necessary to supplement any item.



| 18. Does the proposed action include construction or other activities that result in the impoundment of water or other liquids (e.g. retention pond, waste lagoon, dam)? <br> If Yes, explain purpose and size: | NO | YES |
| :---: | :---: | :---: |
|  | $\square$ | $\square$ |
| 19. Has the site of the proposed action or an adjoining property been the location of an active or closed solid waste management facility? <br> If Yes, describe: | NO | YES |
|  | $\checkmark$ | $\square$ |
| 20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste? <br> If Yes, describe: $\qquad$ See attached. $\qquad$ | NO | YES |
|  | $\square \square$ |  |
|  |  |  |
| I AFFIRM THAT THE INFORMATION PROVIDED ABOVE IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE |  |  |
| Applicant/sponsor name: Jeron Rogers, P.E. Date: $7-8-1 /$ | Date: $7-8-1 /$ |  |

Part 2 - Impact Assessment. The Lead Agency is responsible for the completion of Part 2. Answer all of the following questions in Part 2 using the information contained in Part 1 and other materials submitted by the project sponsor or otherwise available to the reviewer. When answering the questions the reviewer should be guided by the concept "Have my responses been reasonable considering the scale and context of the proposed action?"

|  | No, or small impact may occur | Moderate to large impact may occur |
| :---: | :---: | :---: |
| 1. Will the proposed action create a material conflict with an adopted land use plan or zoning regulations? | $\checkmark$ |  |
| 2. Will the proposed action result in a change in the use or intensity of use of land? | $\checkmark$ |  |
| 3. Will the proposed action impair the character or quality of the existing community? | $\checkmark$ |  |
| 4. Will the proposed action have an impact on the environmental characteristics that caused the establishment of a Critical Environmental Area (CEA)? | $\checkmark$ |  |
| 5. Will the proposed action result in an adverse change in the existing level of traffic or affect existing infrastructure for mass transit, biking or walkway? | $\checkmark$ |  |
| 6. Will the proposed action cause an increase in the use of energy and it fails to incorporate reasonably available energy conservation or renewable energy opportunities? | $\checkmark$ |  |
| 7. Will the proposed action impact existing: <br> a. public / private water supplies? | $\checkmark$ |  |
| b. public / private wastewater treatment utilities? | $\checkmark$ |  |
| 8. Will the proposed action impair the character or quality of important historic, archaeological, architectural or aesthetic resources? | $\checkmark$ |  |
| 9. Will the proposed action result in an adverse change to natural resources (e.g., wetlands, waterbodies, groundwater, air quality, flora and fauna)? | $\checkmark$ |  |


|  | No, or <br> small <br> impact <br> may <br> occur | Moderate <br> to large <br> impact <br> may <br> occur |
| :--- | :--- | :--- | :--- |
| 10. Will the proposed action result in an increase in the potential for erosion, flooding or drainage <br> problems? | $\boxed{ }$ | $\square$ |
| 11. Will the proposed action create a hazard to environmental resources or human health? | $\square$ | $\square$ |

Part 3 - Determination of significance. The Lead Agency is responsible for the completion of Part 3. For every question in Part 2 that was answered "moderate to large impact may occur", or if there is a need to explain why a particular element of the proposed action may or will not result in a significant adverse environmental impact, please complete Part 3. Part 3 should, in sufficient detail, identify the impact, including any measures or design elements that have been included by the project sponsor to avoid or reduce impacts. Part 3 should also explain how the lead agency determined that the impact may or will not be significant. Each potential impact should be assessed considering its setting, probability of occurring, duration, irreversibility, geographic scope and magnitude. Also consider the potential for short-term, long-term and cumulative impacts.

See attached.

Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action may result in one or more potentially large or significant adverse impacts and an environmental impact statement is required.
Check this box if you have determined, based on the information and analysis above, and any supporting documentation, that the proposed action will not result in any significant adverse environmental impacts.



| Part 1 / Question 7 [Critical Environmental <br> Area] | No |
| :--- | :--- |
| Part 1 / Question 12a [National Register of <br> Historic Places] | No |
| Part 1 / Question 12b [Archeological Sites] | Yes |
| Part 1 / Question 13a [Wetlands or Other <br> Regulated Waterbodies] | No |
| Part 1 / Question 15 [Threatened or <br> Endangered] | Yes |
| Part 1 / Question 16 [100 Year Flood Plain] | No |
| Part 1 / Question 20 [Remediation Site] | Yes |

## Part I Attachment

## 12b. Is the proposed action located in an archeological sensitive area?

The entire project area is located in an archaeologically sensitive area; however, all of the proposed excavation will take place within existing pavement/sidewalk areas or areas previously disturbed by construction activities in the last 20 years. It is anticipated that any excavation below the existing pavement, greater than 2 feet in depth, will be limited to drainage facilities, underground utility relocations, and various light pole/traffic signal pole foundations. All other excavations are anticipated to be less than 2 feet in depth.

A Project Review Package was prepared for review by the New York State Department of Transportation Regional Cultural Resource Coordinator (CRC). In a memorandum dated May 22, 2014, the Regional CRC concluded that "the project activities have no potential to cause effects on historic properties in accordance with 36 CFR 800.3(a)(1) therefore, there are no further obligations for compliance with Section 106 of the National Historic Preservation Act." A copy of this memorandum is attached.

## 15. Does the site of the proposed action contain any species of animal, or associated habitats, listed by the State or Federal government as threatened or endangered?

In a letter dated April 7, 2014, the NYSDEC New York Natural Heritage Program stated that they "have no records of rare or state-listed animals or plans, or significant natural communities, at your site or in its immediate vicinity." A copy of this letter is included in Appendix B.

A review of the United States Fish and Wildlife Service (USFWS) Information, Planning and Conservation (IPAC) System of federally threatened and endangered species (listed and proposed species) lists the federally threatened species, bog turtle (Clemmys muhlenbergil). It also included the proposed endangered Northern longeared bat (Myotis septentrionalis).

The bog turtle is a semi-aquatic species. The bog turtle prefers open, sunny, spring fed wetlands in muck soils with scattered dry areas. The bog turtle is generally found in "mucky" open areas with high amounts of sunlight for basking and nesting. Since the project area is urban, with no wetlands or surface waters near the project site, there is no suitable habitat for the bog turtle.

In November 2013, the USFWS announced the proposed listing of the northern long-eared bat in October 2014, which will require the review of any tree removals greater than 3" diameter breast height (dbh) as suitable roosting habitat. Suitable habitat is defined as trees providing gaps underneath bark, in cavities, or in crevices of both live and dead trees. Other roosting locations include caves, mines and occasionally in barns and sheds. It should be noted that the "Northern Long-eared Bat Interim Conference and Planning Guidance" of January 6, 2014 notes on page 3 that "trees found in highly-developed urban areas (e.g. street trees, downtown areas) are extremely unlikely to be suitable NLEB habitat." During this interim period a biological evaluation of all tree removals has been conducted. In order to reduce the potential to impact this species, it is recommended that any tree removals occur during the approved winter cutting window of October 1 to March 31. At this time, it is estimated that 22 trees over 3 inches dbh would be removed as shown on Table 1.

| Table 1 |  |  |
| :---: | :---: | :--- |
| Estimated Number of Trees to be Removed. |  |  |
| Quadrant | Number | Size/Type |
| NW | 1 | $42^{\prime \prime}$ Maple |
| NE | 1 | $24 "$ Maple |
| NE | 1 | 18 " Maple |
| NE | 1 | $16 "$ Maple |
| NE | 2 | 14" Maple |
| NE | 1 | 10" Maple |
| NW | 2 | 8" Maple |
| NW | 1 | 6" Maple |
| NW | 1 | $42 "$ Hickory |
| NW | 2 | $16 "$ Locust |
| NW | 1 | $14 "$ Locust |
| SW | 1 | $14 "$ Crabapple |
| SW | 1 | $12 "$ Crabapple |
| SW | 1 | $10 "$ Crabapple |
| NW, SW | 2 | $8 "$ Crabapple |
| SW | 1 | 6" Crabapple |
| SW | 2 | $4 "$ Crabapple |
| Total | $\mathbf{2 2}$ |  |

It is recommended that the proposed project will have a "May Affect, not likely to adversely Affect" determination on this new proposed listed species. Consultation with USFWS is ongoing.

## 20. Has the site of the proposed action or an adjoining property been the subject of remediation (ongoing or completed) for hazardous waste?

There are two remediation sites in the general vicinity of the project.
One is the former site of the Dupont E I De Nemours \& Co Rochester at 666 Driving Park Avenue which is on the north side of Driving Park Avenue, west of Dewey Avenue, approximately 0.3 miles west of the proposed project. The site is currently vacant, but historically was a manufacturer of photography film and paper. The processes included the use of methanol, silver, cadmium, lead, and mercury. The site entered into the Brownfield Program in May of 2007. Based on the assumed northerly groundwater flow direction and distance from the project area, this site will not have a negative impact on the proposed project.

The other is the RG\&E Genesee River Gorge (Lower Falls), at Driving Park Bridge and Lake Avenue. It is located approximately 0.3 miles east of the intersection at Dewey Avenue and Driving Park Avenue. Various aromatic hydrocarbon materials were found during numerous investigations conducted between the Lower Falls and Upper Falls of the Genesee River at the RG\&E Station \#5 tunnels. The probable source of the contamination is coal tar. Based on the assumed groundwater flow direction to the east, this site will not have a negative impact on the proposed project. Also, the contamination found was within bedrock, and the proposed project will not have an impact on bedrock.

## Part 3 Attachment

Following the issuance of Part 1 of the Short Environmental Assessment Form (EAF), the project went through a public and agency review process. This process brought to light a minor safety concern inherent in the proposed geometry where westbound traffic on Driving Park Avenue would turn right (northbound) on to Dewey Avenue. To mitigate this concern, the geometry for the proposed intersection improvement was modified slightly to provide additional sight distance for this movement. The rendering originally attached (dated May 19, 2014) to the issued Part 1 of the Short EAF has therefore been replaced with the rendering attached to this document (dated June 23, 2014).

The address for Mr. Rogers in Part 1 of the Short EAF is being changed to 30 Church Street, Rochester, NY 14614.

Following is an expansion of the Brief Description of the Proposed Action:
Dewey Avenue and Driving Park Avenue currently meet at an offset intersection resulting in the need for two sets of traffic signals to control movements through the area. The northbound and southbound approaches are offset by approximately 180 feet which complicates mobility through the area. The offset configuration results in congestion, delays and accidents creating difficult travel conditions for all modes of transportation including vehicles, pedestrians, bicyclists, and mass transit users.

The proposed action would consolidate the offset intersections as shown on the attached rendering. The northern approach would be shifted west along Driving Park Avenue to align with the southbound approach of Dewey Avenue. There would be one travel lane and a left turn lane in each direction. There would also be a right turn roadway connecting Driving Park Avenue westbound with Dewey Avenue northbound. The intersection would simplify navigation along Dewey Avenue and eliminate one of two signals.

The proposed action would enhance overall mobility for all users of the intersection. The southbound bicycle lane would extend along Dewey Avenue through the intersection. Northbound travel on Dewey Avenue would be facilitated by a bicycle lane and shared lane use markings. Shared lane use markings would be added eastbound and westbound along Driving Park Avenue extending the existing markings through the project limits. Pedestrian accommodations and safety would be improved by eliminating one traffic signal and consolidating road crossings to a single location. Pedestrian crossings would be enhanced with high visibility markings. Transit mobility would improve through the intersection associated with a reduction in vehicle hours of delay. All sidewalks within project limits would be replaced. The area vacated by shifting Dewey Avenue west would provide an opportunity to develop a pocket park. Community aesthetics would be enhanced with streetscape and landscape features.

The proposed action would reduce congestion and improve highway safety as discussed in the expanded project description. It would also include enhanced bicycle and pedestrian facilities. These would all be beneficial impacts to the infrastructure for biking and walking (Part 2, Item 5).

The reduction of congestion and elimination of a traffic signal would also lower the potential for impacts to energy and the emission of greenhouse gases, which would be a beneficial impact to energy use (Part 2, Item 6).

As result of further project development, there may be no additional treatment as stated in Part 1, Item 11; however, there would be no net increase in the impervious pavement area as a result of the proposed action. Therefore the same amount of stormwater from the proposed action would continue to be directed to the combined sewer system (wastewater and stormwater), with no impact to that system (Part 2, Item 7.b.)

The proposed action is located in an archaeologically sensitive area. A Project Review Package was reviewed by the New York State Department of Transportation Regional Cultural Resource Coordinator (CRC). In a memorandum dated May 22, 2014, the Regional CRC concluded that "the project activities have no potential to cause effects on historic properties in accordance with 36 CFR 800.3(a)(1) therefore, there are no further obligations for compliance with Section 106 of the National Historic Preservation Act." The proposed action would therefore have no impact on historic properties, including archaeologic resources (Part 1, Item 12.b / Part 2, Item 8).

In Part 1 (Part 1, Item 15), the potential for the presence of the Northern long-eared bat (Myotis septentrionalis) is discussed. Based in the information and guidance available at this time, and assuming that any tree removals occur during the approved winter cutting window of October 1 to March 31, it is concluded that the proposed action would have a "May Affect, not likely to adversely Affect" determination on this new proposed listed species. This would translate to a small impact on the Northern long-eared bat (Part 2, Item 9).


Intersection Realigment Plan
Dewey Avenue / Driving Park Avenue Intersection Realignment Project
City of Rochester, New York

## Joe Martens

 CommissionerApril 07, 2014
James Bugs
Bergmann Associates
28 East Main Street, 200 First Federal Plaza
Rochester, NY 14614

Re: Dewey Ave./Driving Park Ave. Intersection Realignment Project (PIN 4755.55)
Town/City: City Of Rochester. County: Monroe.

Dear James Dogs :
In response to your recent request, we have reviewed the New York Natural Heritage Program database with respect to the above project.

We have no records of rare or state-listed animals or plants, or significant natural communities, at your site or in its immediate vicinity.

The absence of data does not necessarily mean that rare or state-listed species, natural communities or other significant habitats do not exist on or adjacent to the proposed site. Rather, our files currently do not contain information which indicates their presence. For most sites, comprehensive field surveys have not been conducted. We cannot provide a definitive statement on the presence or absence of all rare or state-listed species or significant natural communities. Depending on the nature of the project and the conditions at the project site, further information from on-site surveys or other resources may be required to fully assess impacts on biological resources.

This response applies only to known occurrences of rare or state-listed animals and plants, significant natural communities and other significant habitats maintained in the Natural Heritage Data bases. Your project may require additional review or permits; for information regarding other permits that may be required under state law for regulated areas or activities (e.g., regulated wetlands), please contact the appropriate NYS DEC Regional Office, Division of Environmental Permits, as listed at www.dec.ny.gov/about/39381.html.

Sincerely,


Andrea Chaloux
Environmental Review Specialist


## Natural Resources of Concern

This resource list is to be used for planning purposes only - it is not an official species list.

Endangered Species Act species list information for your project is available online and listed below for the following FWS Field Offices:

New York Ecological Services Field Office<br>3817 LUKER ROAD<br>CORTLAND, NY 13045<br>(607) 753-9334<br>http://www.fws.gov/northeast/nyfo/es/section7.htm

## Project Name:

Dewey Ave / Driving Park Ave

## Natural Resources of Concern

## Project Location Map:



## Project Counties:

Monroe, NY

Geographic coordinates (Open Geospatial Consortium Well-Known Text, NAD83): MULTIPOLYGON (( $-77.638675343 .1819391,-77.638670543 .1810002,-77.637624443 .1810159$, $-77.637592243 .1808398,-77.638547143 .1808477,-77.638525743 .1806716,-77.638671343 .1806712$, $-77.638718843 .1808633,-77.639416143 .1808398,-77.639378643 .1800262,-77.6396243 .1800144$, $-77.639598543 .1807851,-77.639662943 .1808516,-77.640655643 .1808359,-77.640649943 .1810159$, $-77.639930643 .1810198,-77.639935743 .1813602,-77.639463943 .1813445,-77.639474643 .181458$, $-77.639023743 .1814736,-77.639034743 .1819508,-77.638675343 .1819391)$ ))

## Natural Resources of Concern

## Project Type:

Transportation

## Endangered Species Act Species List (USFWS Endangered Species Program).

There are a total of $\mathbf{2}$ threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fishes may appear on the species list because a project could cause downstream effects on the species. Critical habitats listed under the Has Critical Habitat column may or may not lie within your project area. See the Critical habitats within your project area section below for critical habitat that lies within your project area. Please contact the designated FWS office if you have questions.

## Species that should be considered in an effects analysis for your project:

$\left.$| Mammals | Status |  | Has Critical Habitat | Contact |
| :--- | :--- | :--- | :--- | :--- |
| northern long-eared Bat <br> (Myotis septentrionalis) <br> Population: | Proposed <br> Endangered | species info |  |  |$\quad$| New York Ecological |
| :--- |
| Services Field Office | \right\rvert\, | Reptiles | Threatened | species info |
| :--- | :--- | :--- |

## Critical habitats within your project area:

There are no critical habitats within your project area.

## FWS National Wildlife Refuges (USFWS National Wildlife Refuges Program).

There are no refuges found within the vicinity of your project.

## FWS Migratory Birds (USFWS Migratory Bird Program).

Most species of birds, including eagles and other raptors, are protected under the Migratory Bird Treaty Act (16 U.S.C. 703). Bald eagles and golden eagles receive additional protection under the

## Natural Resources of Concern

Bald and Golden Eagle Protection Act (16 U.S.C. 668). The Service's Birds of Conservation Concern (2008) report identifies species, subspecies, and populations of all migratory nongame birds that, without additional conservation actions, are likely to become listed under the Endangered Species Act as amended (16 U.S.C 1531 et seq.).

Migratory bird information is not available for your project location.

## NWI Wetlands (USFWS National Wetlands Inventory).

The U.S. Fish and Wildlife Service is the principal Federal agency that provides information on the extent and status of wetlands in the U.S., via the National Wetlands Inventory Program (NWI). In addition to impacts to wetlands within your immediate project area, wetlands outside of your project area may need to be considered in any evaluation of project impacts, due to the hydrologic nature of wetlands (for example, project activities may affect local hydrology within, and outside of, your immediate project area). It may be helpful to refer to the USFWS National Wetland Inventory website. The designated FWS office can also assist you. Impacts to wetlands and other aquatic habitats from your project may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal Statutes. Project Proponents should discuss the relationship of these requirements to their project with the Regulatory Program of the appropriate U.S. Army Corps of Engineers District.

There are no wetlands found within the vicinity of your project.

## Species Conclusions Table

Project Name:
Date:
$\left.\begin{array}{|l|l|l|l|l|l|}\hline \begin{array}{l}\text { Species Name/Critical } \\ \text { Habitat }\end{array} & \begin{array}{l}\text { Potential } \\ \text { Habitat } \\ \text { Present? }\end{array} & \begin{array}{l}\text { Species } \\ \text { Present? }\end{array} & \begin{array}{l}\text { Critical } \\ \text { Habitat } \\ \text { Present? }\end{array} & \text { ESA / Eagle Act Determination } & \begin{array}{l}\text { Notes / Documentation Summary (include full } \\ \text { rationale in your report) }\end{array} \\ \hline \begin{array}{l}\text { Northern long-eared } \\ \text { bat (Myotis } \\ \text { septentrionalis) }\end{array} & \text { Yes } & \text { No } & & & \begin{array}{l}\text { Note: The Northern Long-eared Bat Interim } \\ \text { Conference and Planning Guidance of January 6, } \\ \text { 2014 notes on page 3 that "trees found in highly- } \\ \text { developed urban areas (e.g. street trees, } \\ \text { downtown areas) are extremely unlikely to be } \\ \text { suitable NLEB habitat. }\end{array} \\ \hline \begin{array}{l}\text { Bog Turtle (Clemmys } \\ \text { muhlenbergii) }\end{array} & \text { No } & \text { No } & & & \text { No wetlands present in this urban area. }\end{array}\right\}$

MEMORANDUM
DEPARTMENT OF TRANSPORTATION

## TO: Frank DiCostanzo, Regional Local Project Liaison

FROM: Chris Caraccilo, Regional Cultural Resource Coordinator

## SUBJECT: PROJECT SUBMITTAL PACKAGE - SECTION 106 RECOMMENDATIONS

## PIN 4755.55, DEWEY AVE AND DRIVING PARK AVENEUE INTERSECTION

 REALIGNMENT PROJECT, CITY OF ROCHESTER, MONROE COUNTYMay 22, 2014

As the Regional Cultural Resource Coordinator (RCRC) I have reviewed the Project Submittal Package (PSP) prepared for the above referenced Locally Administered Federal Aid project for assessment of obligations under Section 106 of the National Historic Preservation Act (36 CFR Part 800).

Based on review of this PSP, I conclude:
$\checkmark$ The project activities have no potential to cause effects on historic properties in accordance with 36 CFR 800.3(a)(1) therefore, there are no further obligations for compliance with Section 106 of the National Historic Preservation Act. This determination should be recorded in the project environmental documentation.

The project activities may cause effects on historic properties:
$\square \quad$ However, this is no potential for historic properties present. Therefore, there are no further obligations for compliance with Section 106 of the National Historic Preservation Act. This determination should be recorded in the project environmental documentation.
$\square \quad$ A Phase I Cultural Resource Survey is needed to identify historic and cultural resources. Based on project description and activities, the following preliminary Area of Potential Effect is recommended.Based on project description and activities in the PSP a preliminary Area of Potential Effect is provided.A bridge inventory and evaluation of National Register eligibility is needed for BIN $\qquad$ a pre-1961 bridge that has not been previously evaluated.A Finding Documentation package is needed to assess the project effect on one or more previously identified National Register (NR) listed and/ or NR eligible historic buildings, structures, bridges, districts, objects, or sites.

The following additional information is needed to complete our assessment:
$\square \quad$ Detailed project description \& activitiesProject location map showing project limits (USGS Quad)BIN and date of construction for pre-1961 bridge(s)Approximate limits of ground disturbance associated with proposed project activities (vertical \& horizontal)Photos of buildingsOther

TO: Michael T. Croce, P.E.<br>Bergmann Associates<br>28 East Main Street<br>Rochester, New York 14614-1909<br>FROM: Geoffrey R. Bijak, M.S.<br>Ravi Engineering \& Land Surveying, P.C.<br>DATE: $\quad$ May 20, 2014<br>PROJECT: PIN 4755.55<br>Dewey / Driving Park Realignment Intersection of Dewey Avenue and Driving Park Avenue City of Rochester, Monroe County, New York

SUBJECT: PRELIMINARY ASBESTOS AND LEAD PAINT ASSESSMENT

## PURPOSE

The purpose of this memorandum is to discuss the method and findings of the Preliminary Asbestos and Lead Paint Assessment conducted for the proposed realignment of the intersection of Dewey Avenue and Driving Park Avenue in the City of Rochester, New York. This assessment includes a preliminary evaluation of the Family Dollar.

## INTRODUCTION

Ravi Engineering \& Land Surveying, P.C. (RE\&LS), as a sub-consultant to Bergmann Associates has been retained by the City of Rochester to perform a Preliminary Asbestos and Lead Paint Assessment of the Family Dollar and intersection of Dewey Avenue and Driving Park Avenue in the City of Rochester, New York. The objective of this Preliminary Assessment was to identify suspect asbestos containing materials (ACMs) and lead paint that have the potential to be impacted by the proposed reconstruction project. This Preliminary Assessment is based on a review of available records and a visual inspection conducted on April 21, 2014.

A New York State Department of Labor (NYSDOL) Certified Asbestos Inspector and United States Environmental Protection Agency (USEPA) Certified Lead Risk Assessor completed this assessment. The asbestos assessment was performed in accordance with the New York State Department of Transportation's Environmental Manual, Chapter 4.4.19: Asbestos Management, and the USPEA 40 CFR Part 61.145 and 40 CFR Part 763, Subpart E. The lead paint assessment
was performed using sections of Chapter 7 of the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing, 2012 (HUD Guidelines) and the Occupational Safety and Health Administration 29 CFR 1926.62. (OSHA 1926.62.)

## HIGHWAY RECORD REVIEW

At the time of this Technical Memorandum, record plans were not yet available from the City of Rochester. When these plans are received they will be reviewed and pertinent findings will be included in our assessment report.

## AS-BUILT DRAWING REVIEW

As-built drawings were not available for the Family Dollar store. Based on aerial imagery provided by Environmental Data Resources (EDR) the parcel consisted of residential housing from 1938 to 1985. The property was vacant from 1985 until 1994. According to LandMax database, the Family Dollar was reported to be constructed in 1995. The construction date of the Family Dollar exempts this structure from lead-based paint testing. An asbestos inspection is required in accordance with 40 CFR Part 61.145.

## UTILITY RECORD REVIEW

Utility Record Review was coordinated with information received by the RE\&LS Survey Department. According to the responses received from various agencies in early April of 2014, the following companies reported underground utilities within the project limits:

- $\quad$ City of Rochester Water Bureau
- Frontier Telephone
- Monroe County Pure Waters (MCPW)
- Rochester Gas and Electric (RGE)
- Rochester District Heating
- Time Warner Cable


## City of Rochester Water Bureau

Two (2) record drawings entitled, "City of Rochester Water Bureau Water Record Map", dated March 11, 2014, designer unknown, were reviewed. Various pipe sizes were indicated including a 6 ", 16 ", and 20 " diameter water line. The construction material and paint of the water lines is currently unknown and subject to high variability due to modifications over many years. Based
on RE\&LS experience in the City of Rochester, the water lines are most likely constructed of unpainted ductile iron. We recommend conducting a visual inspection for suspect ACM's once excavation activities begin, to verify this assumption.

## Frontier Communications

Frontier Communications reported utilities on one untitled record drawing. This drawing indicates pre-cast concrete and PVC materials which are not considered suspect for ACM.

The presence of buried Orangeburg conduit is very likely. Orangeburg conduit exists in various locations throughout the greater Rochester area. We recommend conducting a visual inspection for this material once excavation activities begin.

## Monroe County Pure Waters

A total of twelve (12) record plans were reviewed from the MCPW. The plans viewed were from 1886, 1887, 1888, 1889, 1891, 1892, 1896, 1904, 1908, and 1914. These plans indicate the presence of a vitrified clay sanitary line. There were no recent records reviewed. We recommend conducting a visual inspection once excavation activities begin to verify the presence of the vitrified line, painted surfaces, and document suspect ACM's if present.

## Rochester Gas and Electric

Separate record plans for gas and electric were provided by RGE and reviewed. It could not be determined from the gas utility drawing titled " 508 " what construction materials were used. We recommend conducting a visual inspection once excavation activities begin to verify the presence of suspect ACM's and painted surfaces.

A total of nine (9) record plans were reviewed pertaining to electric utilities. These plans are titled "Driving Pk. Ave. 90.05, Driving Pk. Ave. 90.06, Driving Pk. Ave. 90.07, Dewey Ave. 128.08, Dewey Ave. 128.09, Dewey Ave. 128.10, Dewey Ave. 224.01, Selye Terr. 272.03, Finch Street $404.03 "$ Based on these records, PVC piping is present. PVC piping is not a suspect ACM and is rarely painted. We recommend conducting a visual inspection once excavation activities begin to verify the presence of suspect ACM's and painted surfaces to ensure these records are accurate.

## Rochester District Heating

Rochester District Heating commented on requests from RE\&LS survey department. RDH reported no utilities in the area. No further review is required.

## Time Warner Cable

Time Warner Cable reported utilities on one untitled record drawing. Based on the information provided, it could not be determined what these utilizes may be constructed of. We recommend conducting a visual inspection for suspect ACM's and painted surfaces once excavation activities begin.

## ASBESTOS SITE INVESTIGATION

A site investigation within the project limits was conducted on April 21, 2014 to identify suspect ACM's. The following visually accessible materials were identified:

## Family Dollar

1. Lay-in ceiling tiles (2)
2. Sheetrock walls and associated joint compound (5)
3. Base cove mastic (2)
4. Ceramic wall tile grout and associated mastic (4)
5. 12 " $\times 12$ " floor tiles and associated mastic (4)
6. Exterior caulks and sealants (6)
7. Stucco (3)
8. Duct caulk associated with forced air HVAC system (2)
9. Roof field and flashings (12)
( ) = number of samples proposed
Based on limited store access, we propose to collect approximately sixty (60) samples.

## Roads and Sidewalk

1. Black, felt material present between sidewalk joints (3)
2. Black, tough, tar-like material on sidewalk joints (3)
3. Hard, brown/tan granite curb joint mortar (3)
4. Dark grey mortar associated with steel grate vaults (3)
( ) = number of samples proposed
We propose to collect approximately twelve (12) samples for the roads and sidewalks surrounding the Dewey/Driving Park intersection and have those samples analyzed for asbestos content.

## LEAD PAINT INVESTIGATION

In addition to the asbestos inspection, a visual inventory of painted surfaces was created.

## Family Dollar

The Family Dollar was reportedly constructed in 1995. No lead-based paint testing will be performed in the Family Dollar. OSHA 1926.62 applies to all construction work where an employee may be occupationally exposed to lead. Employees performing demolition operations must follow OSHA 1926.62.

## Roads and Sidewalk

1. Yellow paint on posts and light pole base
2. Gray paint on light poles
3. Green paint on signal pole
4. Green paint on signal box
5. Various paints on traffic signs
6. Paint on bicycle racks

We propose to collect approximately six (6) samples on painted surfaces associated with the Dewey/Driving Park intersection and have those samples analyzed for lead paint. The employer must follow OSHA 1926.62 for worker exposure.

## CONCLUSIONS AND RECOMMENDATIONS

There are sixty (60) suspect ACM's that are required to be sampled and analyzed for asbestos in the event the Family Dollar will be demolished. Although each space was not visited within the store, we have accounted for an estimated number additional samples that may be present. There are twelve (12) suspect ACM's that are required to be sampled and analyzed for asbestos prior to road construction at the Dewey/Driving Park intersection. Suspect ACM's associated with the underground utilities are expected to be present. Based on our record review we cannot fully determine what, or how many suspect ACM's will be present. Once excavation activities begin, we recommend conducting a visual inspection on all excavated areas and collecting samples of suspect ACM's where present.

Lead paint is not expected to be present at the Family Dollar store and does not require sample collection and analysis based on the construction date and building function. Lead paint may be present on roads and sidewalks when painted materials are disturbed during construction activities. The employer of the workers involved in construction activities associated with the Dewey/Driving Park Project shall follow 29 CFR 1926.62.

Proposed sample locations for suspect ACM's and lead-based paint are located on the plans in Attachment A.

# ATTACHMENT A 

## Proposed Asbestos Sample Location Plans

Preliminary Assessment




MAP SOURCE:

|  |  | Project no. | Date: |
| :---: | :---: | :---: | :---: |
| RAVI ENGINEERING \& LAND SURVEYING, P.C. 2110 S. Clinton Avenue Rochester, New York 14618 | DEWEY AVENUE AND DRIVING PARK REALIGNMENT CITY OF ROCHESTER, MONROE COUNTY, NEW YORK | 40-14-035 | MAY 2014 |
|  |  | SCALE: | Drawng no: |
|  | PROPOSED ASBESTOS SAMPLE LOCATION PLAN | N.T.S. | 1 |

# ATTACHMENT B <br> Proposed Lead Paint Sample Location Plans 

Preliminary Assessment

Dewey/Driving Park Intersection


MAP SOURCE:

|  |  | Prouect no. | Date: |
| :---: | :---: | :---: | :---: |
| RAVI ENGINEERING \& LAND SURVEYING, P.C. 2110 S. Clinton Avenue Rochester, New York 14618 | DEWEY AVENUE AND DRIVING PARK REALIGNMENT CITY OF ROCHESTER, MONROE COUNTY, NEW YORK | 40-14-035 | MAY 2014 |
|  |  | SCALE: | Drawng no: |
|  | LEAD PAINT SAMPLE LOCATION PLAN | N.T.S. | 2 |

TO: Michael T. Croce, P.E.<br>Bergmann Associates<br>28 East Main Street // 200 First Federal Plaza<br>Rochester, New York 14614-1909<br>FROM: Elizabeth C. Kircher<br>Ravi Engineering \& Land Surveying, P.C.<br>DATE: May 20, 2014<br>PROJECT: PIN 4755.55<br>Dewey / Driving Park Realignment Intersection of Dewey Avenue and Driving Park Avenue City of Rochester, Monroe County, New York<br>SUBJECT: HAZARDOUS WASTE/CONTAMINATED MATERIALS SCREENING

## INTRODUCTION

Ravi Engineering \& Land Surveying, P.C. (RE\&LS), as a sub-consultant to Bergmann Associates, has been retained by the City of Rochester to perform a Hazardous Waste/Contaminated Materials Screening for the realignment of the intersection of Dewey Avenue and Driving Park Avenue, in the City of Rochester.

A Hazardous Material Screening was conducted for the project area in accordance with the New York State Department of Transportation’s Environmental Manual, Chapter 4.4.20.5 "Contaminated Materials and Hazardous Substances - General Methodology: Analysis and Evaluation". The objective of this screening was to identify hazardous materials that have the potential to be impacted by the proposed project. This screening is based on a review of available records and a visual inspection of the project area, conducted on April 16, 2014. The following information provides a summary of the findings of the Hazardous Waste Screening.

## Historical Sanborn Map Review

Sanborn Maps are utilized as part of the Hazardous Material Screening Report since they serve as an historical reference to prior land use. Available Sanborn Maps from various years were reviewed to indicate past land usage in and around the project area.

The process used for the Sanborn Map review is to highlight all addresses whose past use could be considered as an environmental concern. Examples of how a past land usage could lead to an environmental concern is the presence of contaminated soils from a former filling station,
automotive repair shop, large manufacturing plant, chemical plant, drycleaner, etc. Based on the location of such sites with respect to the project area and the specific past land use, the need for further investigation may be eliminated or warranted.

## Environmental Data Resources (EDR)

A review of local, State and Federal Environmental databases was conducted. Environmental Data Resources (EDR) Inc. was contracted to provide a comprehensive review of Federal, State and local listed data on potential hazardous waste sites in the project vicinity. A complete copy of the EDR report is available upon request. This data search was performed in accordance with ASTM E-1527-13 standards for minimum search distance. The use of the EDR resource allows for a comprehensive listing of sites of potential concern. The following table summarizes the information available through the EDR report:

Table 1: Environmental Records Review

| Standard Environmental Record Sources | Minimum Search Distance: (miles) | No. of Listed Properties ${ }^{1}$ |
| :---: | :---: | :---: |
| Federal CERCLIS | 0.5 | 1 |
| Federal CERCLIS NFRAP | 0.5 | 1 |
| Federal RCRA Generator | 0.25 | 4 |
| RCRA-Small Quantity Generators (SQG) | 0.25 | 2 |
| RCRA-Conditionally Exempt Small Quantity Generators (CESQG) | 0.25 | 2 |
| State and Tribal Equivalent CERCLIS | 1 | 2 |
| Vapor Reopened | 1 | 1 |
| State \& Tribal Landfill and/or Solid Waste Disposal (SWF/LF) | 0.5 | 0 |
| State \& Tribal Leaking Storage Tanks (LTANKS) | 0.5 | 7 |
| Local list of Registered Storage Tanks | 0.5 | 2 |
| State \& Tribal Registered Storage Tank List (UST) | 0.25 | 6 |
| Aboveground Storage Tank (AST) | 0.25 | 0 |
| State \& Tribal Brownfield sites | 0.5 | 2 |
| Additional Environmental Records |  |  |
| US Brownfield sites | 0.5 | 0 |
| Local List of Hazardous | 1 | 1 |
| Waste/Contaminated Sites (DEL SHWS) |  |  |
| Local List of Historically Registered Storage Tanks (HISTORICAL UST) | 0.25 | 2 |
| Records of Emergency Release Reports (NY SPILLS) | 0.125 | 18 |
| NY Historical (HIST) Spills | 0.125 | 0 |
| RCRA-NonGen | 0.25 | 6 |
| Hazardous Substance Waste Disposal Sites | 0.5 | 1 |


| Standard Environmental Record Sources | Minimum Search Distance: <br> (miles) | No. of Listed <br> Properties $^{\mathbf{1}}$ |
| :--- | :---: | :---: |
| (HSWDS) |  |  |
| Manifest Records | 0.25 | 10 |
| Drycleaners | 0.25 | 13 |
| US Historic Automobile Station listing | 0.25 | 16 |
| N |  |  |

Notes: ${ }^{1}$ some sites are listed in more than 1 record.

## EDR Findings Overview

A review of local, State, and Federal environmental databases indicates that there are 97 listed properties located within a 1 mile radius of the proposed project site. Many sites were eliminated from further review due to their location in relation to the project area.

## Project Site Walkover

The Hazardous Waste Screening also included a walkover of the proposed project area. The objective of the walkover is to obtain familiarity with the project area and properties located adjacent to the project limits, to note observable environmental concerns, review the characteristics of the project area, and identify areas exhibiting signs of possible environmental degradation. A walkover was completed on April 16, 2014. This site visit was limited to a street side evaluation of the project area; an interior and a detailed exterior inspection of the Family Dollar was not completed for PCB caulk or hazardous materials. Upon receipt of authorization to enter the Family Dollar structure, a site visit will be completed and the report will be revised accordingly.

## The following sites present the potential for environmental concern (See Attachment 1 for site locations):

## Site 1: 375 Driving Park Avenue and 835 Dewey Avenue

This site is located on the south side of Driving Park Avenue, west of Dewey Avenue.

## Project Area Walkover

The site is currently a Price Rite grocery store. No visual evidence of environmental contamination was observed.

## New York State Department of Environmental Conservation (NYSDEC) Spill Report Database

An incident at 375 Driving Park Avenue, identified as Spill\# 0107508, occurred on October 20, 2001 when a gas tank fell off a vehicle while in the parking lot. The spill was cleaned up by a responsible party. The spill was closed by the NYSDEC on October 23, 2001 with no further action required.

## EDR US Historic Cleaners List

The site is listed as a cleaners and dyers in 1960.
Conclusion and Recommendation

The spill at this site is considered closed due to the age and quantities of this spill. Any residual petroleum contamination present is expected to be minimal.

This site poses a potential for environmental concern to the proposed project due to its history as a cleaners and dyers that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 2: 374 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, west of Dewey Avenue.

## Project Area Walkover

The site is currently a residential home. No visual evidence of environmental contamination was observed.

## EDR US Historic Automobile Station listing

The site has been identified on the EDR US Hist Auto Stat list as an automobile repair and service facility in 2000.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as an automobile repair and service station. Automobile repair and service stations house hazardous materials and potentially generate hazardous waste. There is the potential for soils adjacent to the automotive shop to be contaminated by hazardous wastes or petroleum.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 3: 342 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, west of Dewey Avenue.

## Project Area Walkover

The site is currently a retail store parking lot. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a cleaners and dyers in 1950, 1945, and 1940.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a cleaners and dyers that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 4: 340 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, west of Dewey Avenue.

## Project Area Walkover

The site is currently a retail store parking lot. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a dry cleaner in 1985, 1982, 1975, 1970, 1965, and 1960.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a dry cleaners that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 5: Dewey Avenue and Driving Park Avenue Intersection

This site is located within the right of way at the intersection of Dewey Avenue and Driving Park Avenue.

## Project Area Walkover

The site is currently the intersection of Dewey Avenue and Driving Park Avenue. No visual evidence of environmental contamination was observed.

New York State Department of Environmental Conservation (NYSDEC) Spill Report Database
An incident at the intersection of Dewey Avenue and Driving Park Avenue, identified as Spill\# 9614769, occurred on March 24, 1997 when a Regional Transit Service (RTS) bus leaked approximately 10 gallons of transmission fluid. The spill was cleaned up by a responsible party. The spill was closed by the NYSDEC on March 24, 1997 with no further action required.

## Conclusion and Recommendation

The spill at this site is considered closed due to the age of this spill and quantity of transmission fluid spilled. Residual contamination if present is expected to be minimal.

## No further investigation of this site is recommended at this time.

## Site 6: 329 Driving Park Avenue

The site is located on the south side of Driving Park Avenue, east of Dewey Avenue.

## Project Area Walkover

The site is currently a retail store. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a "wash \& dry self-service laundry" in 1985, 1982, 1975, 1970, and 1945.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a cleaners that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 7: 320 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, east of Dewey Avenue.

## Project Area Walkover

The site is currently an auto repair shop. Several waste oil drums were observed. There were no stains or evidence of leaking drums.

## EDR US Historic Automobile Station listing

The site has been identified on the EDR US Hist Auto Stat list as a gasoline station, automobile repair and service station in 2012, 2011, 2010, 2009, 2008, 2007, 2005, 2004, 2003, 2002, 2001, 2000, 1999, 1992, 1985, 1982, 1975, 1960, 1955, 1950, 1945, 1940, 1935, 1930, and 1926.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a gasoline station, automobile repair and service station. Gasoline stations, automobile repair and service stations house hazardous materials and potentially generate hazardous waste. There is the potential for soils adjacent to this site to be contaminated by hazardous wastes or petroleum.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 8: 308 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, east of Dewey Avenue.

## Project Area Walkover

The site is currently a barber shop (Ronnie's Barber Shop). No visual evidence of environmental contamination was observed.

EDR US Historic Automobile Station listing
The site has been identified on the EDR US Hist Auto Stat list as an automobile garage in 1975, 1970, 1965, 1960, 1955, 1950, 1945, 1940, 1935, and 1930.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as an automobile garage. Automobile garages house hazardous materials and potentially generate hazardous waste. There is the potential for soils adjacent to the automotive shop to be contaminated by hazardous wastes or petroleum.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 9: 275 Driving Park Avenue

The site is located on the south side of Driving Park Avenue, east of Dewey Avenue.

## Project Area Walkover

The site currently houses a community development corporation. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a cleaners and dyers in 1960, 1955, and 1950.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a cleaners and dyers that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 10: 272 Driving Park Avenue

The site is located on the north side of Driving Park Avenue, east of Dewey Avenue.

## Project Area Walkover

The site is currently a residential home. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a cleaners and dyers in 1965.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a cleaners and dyers that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Site 11: 854 Dewey Avenue

The site is located on the east side of Dewey Avenue, north of Driving Park Avenue.

## Project Area Walkover

The site is currently a parking lot for the auto repair shop located at 320 Driving Park Avenue (Site 7). No visual evidence of environmental contamination was observed.

## Sanborn Maps

The Sanborn map from 1971 and 1950 indicate the site was a historic filling station. No gasoline tanks were noted on the maps.

## EDR US Historic Automobile Station listing

374 Driving Park Avenue has been identified on the EDR US Hist Auto Stat list as a gas station (Gulf Service Station) in 1970 and 1965.

## Conclusion and Recommendation

This site poses a potential for environmental concern to the proposed project due to its history as a filling station. Automotive stations house hazardous materials and potentially generate hazardous waste. There is the potential for soils adjacent to the site to be contaminated by hazardous wastes or petroleum.

If this site, or the adjacent right of way, will be disturbed by the construction it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present.

## Site 12: 818 Dewey Avenue

The site is located on the east side of Dewey Avenue, south of Driving Park Avenue.

## Project Area Walkover

The site is currently a barber shop, Bruce's Barber Shop. No visual evidence of environmental contamination was observed.

## EDR US Historic Cleaners List

The site is listed as a cleaners and dyers in 1945.
Conclusion and Recommendation
This site poses a potential for environmental concern to the proposed project due to its history as a cleaners and dyers that may have used solvents during the years of operation. Contamination may be present.

If this site, or the adjacent right of way, will be disturbed by the proposed project, it is recommended that a subsurface investigation be conducted to determine if contaminated soils are present within the area of the proposed impact.

## Conclusions/Recommendations - Hazardous Waste

In conclusion, 11 sites were identified as having the potential to present an environmental concern to the proposed project. Each site is listed below with the corresponding recommendation for further work (see Attachment 1 for site locations).

Table 2-Summary of Recommendations

| Site ID | Site address | Past/Current <br> land use | Reason for concern | Recommendation(s) |
| :---: | :--- | :--- | :--- | :--- |
| Site 1: | 375 Driving <br> Park Avenue <br> and 835 <br> Dewey <br> Avenue | Past: <br> Dwelling/Store/ <br> Historic dry <br> cleaners <br> Current: <br> Grocery Store | Potential contaminated <br> soils | Subsurface <br> investigation |
| Site 2: | 374 Driving <br> Park Avenue | Past: Auto <br> repair \& service <br> Current: <br> residential home | Potential contaminated <br> soils | Subsurface <br> investigation |
| Site 3 | 342 Driving <br> Park Avenue | Past: Historic <br>  <br> dyers <br> Current: <br> Parking lot | Potential contaminated <br> soils | Subsurface <br> investigation |


| Site ID | Site address | Past/Current land use | Reason for concern | Recommendation(s) |
| :---: | :---: | :---: | :---: | :---: |
| Site 4 | 340 Driving Park Avenue | Past: Historic dry cleaner Current: Parking lot | Potential contaminated soils | Subsurface investigation |
| Site 5 | Dewey Avenue and Driving Park Avenue Intersection | Right of way | Spill File | None |
| Site 6 | 329 Driving <br> Park Avenue | Past: Historic wash \& dry self-serve laundry Current: Retail stores | Potential contaminated soils | Subsurface investigation |
| Site 7 | 320 Driving Park Avenue | Past: Gas station/auto repair \& service Current: Auto repair shop | Potential contaminated soils | Subsurface investigation |
| Site 8 | 308 Driving Park Avenue | Past: Auto <br> garage <br> Current: <br> Barber shop | Potential contaminated soils | Subsurface investigation |
| Site 9 | 275 Driving Park Avenue | Past: Historic cleaners \& dyers <br> Current: <br> Community <br> Development <br> Corporation | Potential contaminated soils | Subsurface investigation |
| Site 10 | 272 Driving <br> Park Avenue | Past: Historic cleaners \& dyers <br> Current: <br> Residential home | Potential contaminated soils | Subsurface investigation |


| Site ID | Site address | Past/Current <br> land use | Reason for concern | Recommendation(s) |
| :---: | :--- | :--- | :--- | :--- |
| Site 11 | 854 Dewey <br> Avenue | Past: Historic <br> filling station <br> Current: <br> Parking lot | Potential contaminated <br> soils | Subsurface <br> investigation |
| Site 12 | 818 Dewey <br> Avenue | Past: Historic <br>  <br> dyers <br> Current: <br> Barber shop | Potential contaminated <br> soils | Subsurface <br> investigation |

As with any environmental assessment completed without subsurface environmental testing, the possibility of unknown subsurface contamination exists. Should suspect materials be encountered during the course of project execution, appropriate measures should be taken to report such contamination, determine the nature and extent of any possible hazardous materials, and for proper management of such materials.

Attachment 1: Site Location Map

# ATTACHMENT 1 

Site Location Map

Hazardous Waste/Contaminated Materials



## Appendix C: <br> Traffic Information

## Traffic Count Hourly Report

| ROAD \#: E920 | ROAD NAME: DRIVING PARK AV | FROM: NW COR NEWBRRY | TO: PIERPONT ST | COUNTY: | Monroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DIRECTION: Eastbound | FACTOR GROUP: 30 | REC. SERIAL \#: 1763 | FUNC. CLASS: 17 | CITY: | ROCHESTER |
| STATE DIR CODE: 1 | WK OF YR: 33 | PLACEMENT: 20' W fo Argo Pike | NHS: no | BIN: |  |
| DATE OF COUNT: 08/14/2008 |  | @ REF MARKER: | JURIS: City | RR CROSSING: |  |
| NOTES LANE 1: Week 33-Eb |  | ADDL DATA: | CC Stn: | HPMS SAMPLE: | : 30136420 |
|  |  | COUNT TYPE: VEHICLES | BATCH ID: DOT-r4 |  |  |

## COUNT TAKEN BY: ORG CODE: TST INITIALS: JSV

COUNT TYPE: VEHICLES
PROCESSED BY: ORG CODE: DOT INITIALS: TGB


|  |  |  |  |  |  |  |  | 7 | 8 | 9 | 10 |  | 12 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | DAILY | HIGH | HIGH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DAY | AM |  |  |  |  |  |  |  |  |  |  |  | PM |  |  |  |  |  |  |  |  |  |  |  | TOTAL | COUNT | HOUR |
| 1 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 14 | T |  |  |  |  |  |  |  |  |  |  |  | 152 | 157 | 165 | 189 | 236 | 243 | 178 | 132 | 110 | 133 | 88 | 63 | 59 |  |  |  |
| 15 | F | 35 | 22 | 14 | 8 | 18 | 42 | 117 | 206 | 164 | 150 | 146 | 155 | 154 | 170 | 205 | 234 | 207 | 196 | 145 | 147 | 116 | 104 | 73 | 69 | 2897 | 234 | 15 |
| 16 | S | 50 | 25 | 17 | 10 | 13 | 22 | 64 | 42 | 60 | 86 | 101 | 112 | 124 | 132 | 121 | 158 | 133 | 114 | 105 | 107 | 85 | 91 | 79 | 48 | 1899 | 158 | 15 |
| 17 | S | 34 | 29 | 25 | 13 | 8 | 13 | 32 | 27 | 41 | 74 | 91 | 107 | 104 | 92 | 105 | 103 | 109 | 95 | 109 | 101 | 80 | 72 | 63 | 55 | 1582 | 109 | 16 |
| 18 | M | 28 | 14 | 8 | 10 | 17 | 39 | 121 | 153 | 142 | 110 | 110 | 133 | 148 | 129 | 161 | 234 | 184 | 167 | 133 | 116 | 92 | 79 | 64 | 56 | 2448 | 234 | 15 |
| 19 | T | 36 | 19 | 4 | 8 | 15 | 42 | 119 | 188 | 148 | 116 | 123 | 127 | 130 | 139 | 150 | 202 | 197 | 175 | 129 | 118 | 102 | 75 | 64 | 69 | 2495 | 202 | 15 |
| 20 | W | 44 | 20 | 10 | 7 | 13 | 43 | 116 | 172 | 155 | 123 | 145 | 142 | 135 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




## Traffic Count Hourly Report

| ROAD \#: E920 | ROAD NAME: DRIVING PARK AV | FROM: NW COR NEWBRRY | TO: PIERPONT ST | COUNTY: | Monroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| DIRECTION: Westbound | FACTOR GROUP: 30 | REC. SERIAL \#: 1763 | FUNC. CLASS: 17 | CITY: | ROCHESTER |
| STATE DIR CODE: 2 | WK OF YR: 33 | PLACEMENT: 20' W fo Argo Pike | NHS: no | BIN: |  |
| DATE OF COUNT: 08/14/2008 |  | @ REF MARKER: | JURIS: City | RR CROSSING: |  |
| NOTES LANE 1: Week 33-Wb |  | ADDL DATA: | CC Stn: | HPMS SAMPLE: | : 30136420 |
|  |  | COUNT TYPE: VEHICLES | BATCH ID: DOT-r4con |  |  |

## COUNT TAKEN BY: ORG CODE: TST INITIALS: JSV

COUNT TYPE: VEHICLES
RROCESSED BY: ORG CODE: DOT INITIALS: TGB




| ROAD \#: COUNTY NAME: | E920 <br> Monroe | ROAD NAME: DRIVING PARK AV | YEAR: 2008 MONTH: August |  | STATION: | 431028 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGION CODE: | 4 |  | DIRECTION | East | West | TOTAL |
| FROM: | NW COR NEWBRRY |  | DIRECTION | East | West | TOTAL |
| TO: | PIERPONT ST |  | NUMBER OF VEHICLES | 2592 | 3132 | 5724 |
| REF-MARKER: |  |  | NUMBER OF AXLES | 5376 | 6405 | 11779 |
| END MILEPOINT: | 0110161 | NO. OF LANES: 2 | \% HEAVY VEHICLES (F4-F13) | 7.33\% | 6.00\% | 6.60\% |
| FUNC-CLASS: | 17 | HPMS NO: 30136420 | \% TRUCKS AND BUSES (F3-F13) | 21.76\% | 19.76\% | 20.67\% |
| STATION NO: | 1028 |  | AXLE CORRECTION FACTOR | 0.96 | 0.98 | 0.97 |

PROCESSED BY: ORG CODE: DOT INITIALS: TGB BATCH ID: DOT-r4contractorww34

| VEHICLE CLASS |  | F1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | F10 | F11 | F12 | F13 | TOTAL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| NO. OF AXLES |  | 2 | 2 | 2 | 2.5 | 2 | 3 | 4 | 3.5 | 5 | 6 | 5 | 6 | 8.75 |  |
| ENDING HOUR | 1:00 | 1 | 31 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
|  | 2:00 | 0 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
|  | 3:00 | 0 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 |
|  | 4:00 | 0 | 6 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 |
|  | 5:00 | 0 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
|  | 6:00 | 1 | 34 | 4 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 43 |
|  | 7:00 | 2 | 89 | 17 | 2 | 3 | 1 | 0 | 3 | 0 | 1 | 0 | 0 | 0 | 118 |
|  | 8:00 | 2 | 132 | 28 | 3 | 7 | 1 | 0 | 4 | 0 | 1 | 0 | 1 | 0 | 179 |
|  | 9:00 | 1 | 114 | 24 | 3 | 5 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 151 |
|  | 10:00 | 1 | 88 | 23 | 2 | 6 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 124 |
| DIRECTION East | 11:00 | 1 | 84 | 28 | 3 | 9 | 2 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 131 |
|  | 12:00 | 2 | 106 | 21 | 2 | 6 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 141 |
|  | 13:00 | 1 | 106 | 24 | 2 | 5 | 1 | 1 | 3 | 0 | 0 | 0 | 1 | 0 | 144 |
|  | 14:00 | 2 | 103 | 24 | 4 | 5 | 2 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 145 |
|  | 15:00 | 2 | 123 | 29 | 1 | 6 | 1 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 167 |
|  | 16:00 | 2 | 171 | 32 | 5 | 2 | 2 | 1 | 6 | 1 | 2 | 0 | 0 | 0 | 224 |
|  | 17:00 | 3 | 163 | 28 | 2 | 3 | 2 | 0 | 5 | 0 | 1 | 0 | 0 | 1 | 208 |
|  | 18:00 | 4 | 136 | 23 | 2 | 1 | 1 | 1 | 5 | 0 | 0 | 0 | 0 | 0 | 173 |
|  | 19:00 | 1 | 109 | 14 | 0 | 1 | 1 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 130 |
|  | 20:00 | 1 | 97 | 10 | 0 | 0 | 1 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 113 |
|  | 21:00 | 4 | 91 | 9 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 108 |
|  | 22:00 | 2 | 70 | 7 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 81 |
|  | 23:00 | 0 | 58 | 3 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 63 |
|  | 24:00 | 1 | 48 | 12 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 61 |
| TOTAL VEHICLES TOTAL AXLES |  | 34 | 1994 | 374 | 31 | 61 | 24 | 7 | 53 | 1 | 9 | 0 | 3 | 1 | 2592 |
|  |  | 68 | 3988 | 748 | 78 | 122 | 72 | 28 | 186 | 5 | 54 | 0 | 18 | 9 | 5376 |
| ENDING HOUR | 1:00 | 0 | 26 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 |
|  | 2:00 | 0 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
|  | 3:00 | 0 | 13 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 |
|  | 4:00 | 0 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 |
|  | 5:00 | 0 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
|  | 6:00 | 1 | 72 | 10 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 84 |
|  | 7:00 | 2 | 130 | 23 | 1 | 4 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 162 |
|  | 8:00 | 1 | 126 | 19 | 3 | 5 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 157 |
|  | 9:00 | 0 | 76 | 26 | 2 | 6 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 113 |
|  | 10:00 | 0 | 86 | 26 | 4 | 9 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 127 |
|  | 11:00 | 0 | 96 | 25 | 2 | 8 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 135 |
| DIRECTION West | 12:00 | 1 | 119 | 27 | 3 | 5 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 159 |
|  | 13:00 | 1 | 159 | 35 | 2 | 7 | 1 | 0 | 3 | 0 | 0 | 0 | 1 | 0 | 209 |
|  | 14:00 | 0 | 144 | 27 | 3 | 7 | 1 | 0 | 5 | 0 | 1 | 0 | 0 | 0 | 188 |
|  | 15:00 | 1 | 152 | 34 | 5 | 9 | 0 | 1 | 6 | 0 | 0 | 0 | 0 | 0 | 208 |
|  | 16:00 | 1 | 192 | 41 | 5 | 6 | 1 | 1 | 8 | 1 | 1 | 0 | 0 | 0 | 257 |
|  | 17:00 | 2 | 218 | 40 | 2 | 5 | 2 | 1 | 5 | 1 | 1 | 0 | 1 | 0 | 278 |
|  | 18:00 | 1 | 214 | 27 | 3 | 2 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 250 |
|  | 19:00 | 1 | 152 | 14 | 2 | 4 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 176 |
|  | 20:00 | 1 | 130 | 14 | 1 | 1 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 150 |
|  | 21:00 | 2 | 124 | 13 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 140 |
|  | 22:00 | 1 | 89 | 9 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 100 |
|  | 23:00 | 2 | 72 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 83 |
|  | 24:00 | 0 | 56 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 60 |
| TOTAL VEHICLES TOTAL AXLES |  | 18 | 2495 | 431 | 38 | 78 | 10 | 3 | 51 | 3 | 3 | 0 | 2 | 0 | 3132 |
|  |  | 36 | 4990 | 862 | 95 | 156 | 30 | 12 | 178 | 15 | 18 | 0 | 12 | 0 | 6405 |
| GRAND TOTAL VEHICLES GRAND TOTAL AXLES |  | 52 | 4489 | 805 | 69 | 139 | 34 | 10 | 104 | 4 | 12 | 0 | 5 | 1 | 5724 |
|  |  | 104 | 8978 | 1610 | 172 | 278 | 102 | 40 | 364 | 20 | 72 | 0 | 30 | 9 | 11781 |

TRAFFIC FLOW BY DIRECTION


F1. Motorcycles
F2. Autos*
F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes*
F4. Buses
55. 2 Axle, 6 -Tire Single Unit Trucks

F6. 3 Axle Single Unit Trucks
F7. 4 or More Axle Single Unit Trucks
F8. 4 or Less Axle Vehicles, One Unit is a Truck
F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
F10. 6 or More Double Unit Vehicles, One Unit is a Truck
F11.5 or Less Axle Multi-Unit Trucks
F12. 6 Axle Multi-Unit Trucks
F13. 7 or More Axle Multi-Unit Trucks

* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:

| RURAL | URBAN |
| :--- | :--- |
|  | SYSTEM |
| 01 | 11 PRINCIPAL ARTERIAL-INTERSTATE |
| 02 | 12 PRINCIPAL ARTERIAL-EXPRESSWAY |
| 02 | 14 PRINCIPAL ARTERIAL-OTHER |
| 06 | 16 MINOR ARTERIAL |
| 07 | 17 MAJOR COLLECTOR |
| 08 | 17 MINOR COLLECTOR |
| 09 | 19 LOCAL SYSTEM |


|  |  |
| :--- | :--- |
| Start date: | Thu 08/14/2008 11:00 |
| End date: | Wed 08/20/2008 13:45 |
| County: | Monroe |
| Town: | ROCHESTER |
| Speed limit: | 30 |


| Count duration: | 147 hours |
| :--- | :--- |
| Functional class: | 17 |
| Factor group: | 30 |
| Batch ID: | DOT-r4contractorww34 |
| Count taken by: | Org: TST Init: JSV |
| Processed by: | Org: DOT Init: TGB |


| Speeds, mph |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hour | $\begin{aligned} & 0.0- \\ & 20.0 \end{aligned}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| 1:00 | 1 | 4 | 5 | 20 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.1 | 32.3 | 36.5 | 38 |
| 2:00 | 2 | 2 | 6 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 30.0 | 37.6 | 20 |
| 3:00 | 0 | 1 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.4 | 30.0 | 34.7 | 8 |
| 4:00 | 1 | 1 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.3 | 30.0 | 39.0 | 8 |
| 5:00 | 1 | 1 | 4 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.4 | 32.6 | 38.6 | 16 |
| 6:00 | 2 | 4 | 7 | 16 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.8 | 32.6 | 38.8 | 42 |
| 7:00 | 3 | 8 | 24 | 46 | 28 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 30.7 | 32.6 | 38.2 | 116 |
| 8:00 | 8 | 14 | 41 | 69 | 42 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 29.4 | 31.9 | 37.2 | 177 |
| 9:00 | 6 | 12 | 39 | 59 | 30 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.4 | 31.6 | 37.1 | 151 |
| 10:00 | 4 | 12 | 36 | 48 | 18 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.2 | 31.0 | 36.3 | 123 |
| 11:00 | 10 | 14 | 40 | 44 | 18 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.3 | 30.2 | 35.7 | 130 |
| 12:00 | 6 | 11 | 42 | 51 | 26 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 29.1 | 31.2 | 36.9 | 141 |
| 13:00 | 7 | 16 | 43 | 54 | 22 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.4 | 0.7 | 0.7 | 0.7 | 0.7 | 28.5 | 30.7 | 36.0 | 146 |
| 14:00 | 6 | 14 | 47 | 55 | 17 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1.4 | 0.7 | 0.7 | 0.7 | 0.7 | 28.6 | 30.5 | 35.2 | 144 |
| 15:00 | 10 | 22 | 61 | 53 | 17 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 27.2 | 29.2 | 34.6 | 166 |
| 16:00 | 14 | 28 | 58 | 90 | 28 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 27.8 | 30.7 | 35.0 | 223 |
| 17:00 | 9 | 21 | 61 | 81 | 28 | 4 | 1 | 0 | 0 | 1 | 0 | 1 | 1 | 1.9 | 1.4 | 1.4 | 1.4 | 1.0 | 28.8 | 30.9 | 35.9 | 208 |
| 18:00 | 15 | 20 | 52 | 58 | 21 | 3 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 1.2 | 1.2 | 1.2 | 0.6 | 0.6 | 26.9 | 29.9 | 35.1 | 171 |
| 19:00 | 13 | 13 | 41 | 48 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 29.9 | 34.8 | 132 |
| 20:00 | 15 | 13 | 34 | 40 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.4 | 29.3 | 34.4 | 114 |
| 21:00 | 10 | 15 | 34 | 37 | 12 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 29.5 | 34.8 | 111 |
| 22:00 | 4 | 5 | 28 | 31 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 30.5 | 34.9 | 79 |
| 23:00 | 4 | 6 | 14 | 28 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.3 | 31.4 | 35.9 | 63 |
| 24:00 | 3 | 7 | 13 | 24 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.9 | 31.6 | 37.1 | 61 |
| Avg. Daily Total | 154 | 264 | 735 | 967 | 389 | 63 | 9 | 0 | 1 | 1 | 0 | 1 | 4 | 0.6 | 0.3 | 0.3 | 0.2 | 0.2 | 28.2 | 30.8 | 36.1 | 2588 |
| Percent | 6.0\% | 10.2\% | 28.4\% | 37.4\% | 15.0\% | 2.4\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.2\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent | 6.0\% | 16.2\% | 44.6\% | 81.9\% | 96.9\% | 99.4\% | 99.7\% | 99.7\% | 99.8\% | 99.8\% | 99.8\% | 99.8\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 6 | 11 | 31 | 40 | 16 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 108 |

TRAFFIC FLOW BY DIRECTION

| East | Avg. Speed 28.2 |  | 50th\% Speed 30.8 | 85th\% Speed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| West |  | 28.0 | 31.4 |  | 37.3 |
| Peak Hour Data |  |  |  |  |  |
| Direction | Hour | Count | 2-way | Hour | Count |
| East | 16 | 223 | A.M. | 8 | 332 |
| West | 17 | 274 | P.M. | 17 | 482 |



| Station: | 431028 |  |
| :--- | :---: | :---: |
| Road \#: | E920 Road name: DRIVING PARK AV |  |
| From: | NW COR NEWBRRY |  |
| To: | PIERPONT ST |  |
| Direction: | West |  |


| Count duration: | 147 hours |
| :--- | :--- |
| Functional class: | 17 |
| Factor group: | 30 |
| Batch ID: | DOT-r4contractorww34 |
| Count taken by: | Org: TST Init: JSV |
| Processed by: | Org: DOT Init: TGB |


|  |  |  |  |  |  |  |  | ds, mp |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hour | $\begin{gathered} 0.0- \\ 20.0 \end{gathered}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| 1:00 | 3 | 1 | 5 | 9 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 32.8 | 39.2 | 28 |
| 2:00 | 3 | 1 | 7 | 7 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4.8 | 4.8 | 0.0 | 0.0 | 0.0 | 25.9 | 29.7 | 34.9 | 21 |
| 3:00 | 1 | 1 | 3 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.1 | 32.6 | 38.7 | 14 |
| 4:00 | 1 | 0 | 2 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.9 | 33.8 | 39.0 | 12 |
| 5:00 | 2 | 0 | 4 | 6 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.1 | 33.4 | 39.2 | 20 |
| 6:00 | 5 | 4 | 20 | 33 | 17 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.2 | 0.0 | 0.0 | 0.0 | 0.0 | 29.3 | 32.0 | 37.8 | 84 |
| 7:00 | 16 | 13 | 34 | 58 | 32 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1.8 | 0.6 | 0.0 | 0.0 | 0.0 | 27.8 | 31.7 | 37.9 | 164 |
| 8:00 | 18 | 14 | 36 | 51 | 28 | 7 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0.6 | 0.6 | 0.6 | 0.6 | 0.0 | 26.8 | 31.0 | 37.3 | 155 |
| 9:00 | 12 | 13 | 22 | 40 | 20 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.9 | 31.2 | 37.1 | 112 |
| 10:00 | 14 | 13 | 34 | 44 | 18 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 26.5 | 30.3 | 35.9 | 127 |
| 11:00 | 12 | 13 | 31 | 48 | 22 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5 | 31.1 | 37.1 | 133 |
| 12:00 | 13 | 17 | 43 | 54 | 24 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 27.4 | 30.6 | 36.6 | 158 |
| 13:00 | 17 | 19 | 55 | 76 | 34 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 30.9 | 36.5 | 208 |
| 14:00 | 14 | 16 | 44 | 70 | 34 | 6 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 1.1 | 1.1 | 1.1 | 1.1 | 0.5 | 28.2 | 31.4 | 37.1 | 186 |
| 15:00 | 19 | 12 | 56 | 74 | 38 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1.4 | 0.5 | 0.0 | 0.0 | 0.0 | 27.8 | 31.2 | 37.1 | 208 |
| 16:00 | 20 | 16 | 53 | 106 | 52 | 6 | 1 | 0 | 0 | 0 | 1 | 1 | 1 | 1.6 | 1.2 | 1.2 | 1.2 | 1.2 | 28.6 | 31.9 | 37.3 | 257 |
| 17:00 | 19 | 12 | 56 | 105 | 66 | 12 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 1.5 | 0.4 | 0.4 | 0.4 | 0.4 | 29.3 | 32.4 | 38.1 | 274 |
| 18:00 | 17 | 13 | 48 | 97 | 64 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0.8 | 0.4 | 0.4 | 0.4 | 0.4 | 29.4 | 32.5 | 38.1 | 252 |
| 19:00 | 15 | 14 | 36 | 64 | 37 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 1 | 1.7 | 1.1 | 0.6 | 0.6 | 0.6 | 28.2 | 31.8 | 37.7 | 175 |
| 20:00 | 13 | 10 | 36 | 54 | 28 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 2.0 | 1.4 | 1.4 | 0.7 | 0.7 | 28.0 | 31.4 | 37.2 | 147 |
| 21:00 | 9 | 16 | 44 | 53 | 13 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 1.4 | 0.7 | 0.7 | 0.0 | 0.0 | 27.6 | 30.1 | 34.8 | 140 |
| 22:00 | 9 | 6 | 33 | 36 | 12 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.2 | 30.3 | 35.1 | 99 |
| 23:00 | 6 | 5 | 23 | 29 | 16 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 28.5 | 31.3 | 37.4 | 83 |
| 24:00 | 4 | 9 | 16 | 20 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 30.4 | 36.6 | 61 |
| Avg. Daily Total | 262 | 238 | 741 | 1142 | 587 | 113 | 19 | 4 | 2 | 2 | 2 | 2 | 4 | 1.1 | 0.5 | 0.4 | 0.3 | 0.3 | 28.0 | 31.4 | 37.3 | 3118 |
| Percent | 8.4\% | 7.6\% | 23.8\% | 36.6\% | 18.8\% | 3.6\% | 0.6\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% | 0.1\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent | 8.4\% | 16.0\% | 39.8\% | 76.4\% | 95.3\% | 98.9\% | 99.5\% | 99.6\% | 99.7\% | 99.7\% | 99.8\% | 99.9\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 11 | 10 | 31 | 48 | 24 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 130 |



## Traffic Count Hourly Report




| STATION: 431027 | STATE DIR CODE: 1 | PLACEMENT: 400 ft E of Pierpont |  | DATE OF COUNT |
| :---: | :---: | :---: | :---: | :---: |

## Traffic Count Hourly Report





$\begin{array}{lll}\text { PROCESSED BY: } & \text { ORG CODE: DOT INITIALS: MAB } & \text { BATCH ID: DOT-r4ww28 }\end{array}$


|  |  |
| :--- | :--- |
| Start date: | Wed 07/06/2011 14:00 |
| End date: | Wed 07/13/2011 13:45 |
| County: | Monroe |
| Town: | ROCHESTER |
| Speed limit: | 30 |
| LION\#: |  |


| Count duration: | 168 hours |
| :--- | :--- |
| Functional class: | 17 |
| Factor group: | 30 |
| Batch ID: | DOT-r4ww28 |
| Count taken by: | Org: TST Init: --- |
| Processed by: | Org: DOT Init: MAB |


| Station: | 431027 |  |
| :--- | :---: | :---: |
| Road \#: | E920 $\quad$ Road name: DRIVING PARK AV |  |
| From: | PIERPONT ST |  |
| To: | LAKE AVE |  |
| Direction: | East |  |

Counts have been summarized into NYSDOT El standard bins

Speeds, mph

| Hour | $\begin{gathered} 0.0- \\ 20.0 \end{gathered}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \% \text { Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1:00 | 8 | 14 | 26 | 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.4 | 27.2 | 32.9 | 66 |
| 2:00 | 9 | 10 | 14 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.0 | 25.6 | 31.6 | 41 |
| 3:00 | 10 | 6 | 10 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 21.3 | 25.8 | 33.2 | 35 |
| 4:00 | 2 | 4 | 9 | 6 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.8 | 28.7 | 36.3 | 25 |
| 5:00 | 0 | 4 | 12 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.9 | 29.4 | 34.4 | 29 |
| 6:00 | 3 | 9 | 27 | 26 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.2 | 29.9 | 35.0 | 76 |
| 7:00 | 9 | 14 | 73 | 75 | 24 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.5 | 0.0 | 0.0 | 0.0 | 28.5 | 30.3 | 34.9 | 199 |
| 8:00 | 16 | 30 | 112 | 105 | 27 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 29.6 | 34.5 | 295 |
| 9:00 | 17 | 27 | 118 | 115 | 35 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.9 | 29.9 | 34.7 | 316 |
| 10:00 | 19 | 31 | 102 | 89 | 25 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.9 | 29.2 | 34.4 | 269 |
| 11:00 | 18 | 36 | 103 | 75 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.5 | 28.6 | 34.0 | 255 |
| 12:00 | 24 | 46 | 106 | 69 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 25.5 | 27.9 | 33.4 | 261 |
| 13:00 | 27 | 53 | 123 | 86 | 16 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.7 | 28.1 | 33.5 | 309 |
| 14:00 | 19 | 35 | 124 | 96 | 23 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 28.9 | 34.1 | 301 |
| 15:00 | 19 | 46 | 125 | 93 | 22 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.7 | 28.6 | 33.9 | 307 |
| 16:00 | 23 | 49 | 141 | 103 | 22 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.5 | 28.5 | 33.8 | 341 |
| 17:00 | 39 | 49 | 146 | 85 | 19 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 27.9 | 33.3 | 340 |
| 18:00 | 33 | 45 | 133 | 87 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.4 | 28.1 | 33.4 | 316 |
| 19:00 | 22 | 45 | 116 | 74 | 17 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.9 | 28.1 | 33.5 | 276 |
| 20:00 | 20 | 34 | 97 | 70 | 15 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.1 | 28.5 | 33.8 | 240 |
| 21:00 | 13 | 38 | 94 | 64 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 28.3 | 33.7 | 225 |
| 22:00 | 16 | 42 | 95 | 42 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.3 | 27.3 | 32.4 | 203 |
| 23:00 | 7 | 26 | 62 | 40 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.7 | 28.2 | 33.6 | 145 |
| 24:00 | 5 | 23 | 51 | 32 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.9 | 28.2 | 33.8 | 121 |
| Avg. Daily Total | 378 | 716 | 2019 | 1468 | 356 | 48 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 26.3 | 28.5 | 33.9 | 4991 |
| Percent | 7.6\% | 14.3\% | 40.5\% | 29.4\% | 7.1\% | 1.0\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent | 7.6\% | 21.9\% | 62.4\% | 91.8\% | 98.9\% | 99.9\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 16 | 30 | 84 | 61 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 208 |


| East | Avg. Speed 26.3 |  | 50th\% Speed | 85th\% Speed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| West |  | 25.8 | 28.2 |  | 33.4 |
| Peak Hour Data |  |  |  |  |  |
| Direction | Hour | Count | 2-way | Hour | Count |
| East | 16 | 341 | A.M. | 12 | 565 |
| West | 18 | 475 | P.M. | 18 | 791 |



| Start date: | Wed 07/06/2011 14:00 |
| :--- | :--- |
| End date: | Wed 07/13/2011 13:45 |
| County: | Monroe |
| Town: | ROCHESTER |
| Speed limit: | 30 |
| LION\#: |  |


| Station: | 431027 |  |
| :--- | :---: | :---: |
| Road \#: | E920 $\quad$ Road name: DRIVING PARK AV |  |
| From: | PIERPONT ST |  |
| To: | LAKE AVE |  |
| Direction: | West |  |

Counts have been summarized into NYSDOT El standard bins

Speeds, mph

| Hour | $\begin{gathered} 0.0- \\ 20.0 \end{gathered}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \% \text { Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1:00 | 17 | 15 | 35 | 20 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.3 | 27.1 | 33.1 | 93 |
| 2:00 | 12 | 10 | 17 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.4 | 26.5 | 32.9 | 54 |
| 3:00 | 8 | 8 | 15 | 11 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.5 | 27.2 | 33.3 | 45 |
| 4:00 | 3 | 4 | 10 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.5 | 28.6 | 33.8 | 28 |
| 5:00 | 1 | 4 | 10 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.9 | 29.3 | 35.0 | 27 |
| 6:00 | 4 | 10 | 20 | 30 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.9 | 30.6 | 34.9 | 74 |
| 7:00 | 10 | 12 | 52 | 54 | 17 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 30.0 | 34.8 | 148 |
| 8:00 | 19 | 19 | 65 | 66 | 16 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.2 | 29.3 | 34.3 | 187 |
| 9:00 | 14 | 21 | 78 | 78 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 29.4 | 34.0 | 206 |
| 10:00 | 16 | 29 | 91 | 79 | 14 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.7 | 28.9 | 33.9 | 231 |
| 11:00 | 17 | 29 | 105 | 85 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.7 | 28.8 | 33.7 | 251 |
| 12:00 | 41 | 51 | 117 | 82 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.4 | 27.6 | 33.1 | 304 |
| 13:00 | 26 | 50 | 146 | 103 | 15 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.1 | 28.3 | 33.4 | 342 |
| 14:00 | 24 | 43 | 156 | 109 | 19 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.5 | 28.5 | 33.5 | 352 |
| 15:00 | 36 | 47 | 148 | 101 | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.6 | 28.2 | 33.6 | 355 |
| 16:00 | 32 | 67 | 177 | 96 | 20 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.7 | 27.8 | 33.2 | 395 |
| 17:00 | 55 | 75 | 193 | 107 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.6 | 27.5 | 32.8 | 450 |
| 18:00 | 50 | 88 | 204 | 116 | 16 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.9 | 27.5 | 32.7 | 475 |
| 19:00 | 34 | 52 | 156 | 93 | 14 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 25.4 | 27.9 | 33.1 | 352 |
| 20:00 | 21 | 48 | 128 | 87 | 14 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.1 | 28.2 | 33.3 | 299 |
| 21:00 | 20 | 42 | 123 | 75 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.1 | 28.1 | 33.2 | 274 |
| 22:00 | 13 | 38 | 116 | 68 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.4 | 28.1 | 32.9 | 242 |
| 23:00 | 11 | 28 | 84 | 59 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 28.4 | 33.4 | 191 |
| 24:00 | 9 | 23 | 57 | 43 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.4 | 28.4 | 33.5 | 140 |
| Avg. Daily Total | 493 | 813 | 2303 | 1591 | 282 | 32 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.8 | 28.2 | 33.4 | 5515 |
| Percent | 8.9\% | 14.7\% | 41.8\% | 28.8\% | 5.1\% | 0.6\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent | 8.9\% | 23.7\% | 65.4\% | 94.3\% | 99.4\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 21 | 34 | 96 | 66 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 230 |


| East | Avg. Speed 26.3 |  | 50th\% Speed | 85th\% Speed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| West |  | 25.8 | 28.2 |  | 33.4 |
| Peak Hour Data |  |  |  |  |  |
| Direction | Hour | Count | 2-way | Hour | Count |
| East | 16 | 341 | A.M. | 12 | 565 |
| West | 18 | 475 | P.M. | 18 | 791 |



## Traffic Count Hourly Report

| ROAD \#: | E710 | ROAD NAME: DEWEY AVE |
| :--- | :---: | :---: |
| DIRECTION: | Northbound | FACTOR GROUP: 30 |
| STATE DIR CODE: 1 | WK OF YR: | 28 |

FROM: FELIX ST
REC. SERIAL \#: 2551
PLACEMENT: 800' north of felix st @ REF MARKER:
ADDL DATA:
COUNT TYPE: AXLE PAIRS

TO: DRIVING PK AVE
FUNC. CLASS: 16
NHS: no
JURIS: City
CC Stn:
BATCH ID: DOT-DOTr4ww29

COUNTY:

## Monroe

CITY: ROCHESTER LION\#:
BIN:
RR CROSSING:
HPMS SAMPLE:

## COUNT TAKEN BY: ORG CODE: DOT INITIALS: NJA

|  |  | $\begin{gathered} 12 \\ \text { TO } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ \text { TO } \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ \text { TO } \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ \text { TO } \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ \text { TO } \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ \text { TO } \\ 6 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ \text { TO } \\ 7 \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ \text { TO } \\ 8 \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ \text { TO } \\ 9 \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ \text { TO } \\ 10 \\ \hline \end{gathered}$ | $\begin{aligned} & 10 \\ & \text { TO } \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 11 \\ & \text { TO } \\ & 12 \\ & \hline \end{aligned}$ | $\begin{gathered} 12 \\ \text { TO } \\ 1 \\ \hline \end{gathered}$ | $\begin{gathered} 1 \\ \text { TO } \\ 2 \\ \hline \end{gathered}$ | $\begin{gathered} 2 \\ \text { TO } \\ 3 \\ \hline \end{gathered}$ | $\begin{gathered} 3 \\ \text { TO } \\ 4 \\ \hline \end{gathered}$ | $\begin{gathered} 4 \\ \text { TO } \\ 5 \\ \hline \end{gathered}$ | $\begin{gathered} 5 \\ \text { TO } \\ 6 \\ \hline \end{gathered}$ | $\begin{gathered} 6 \\ \text { TO } \\ 7 \\ \hline \end{gathered}$ | $\begin{gathered} 7 \\ \text { TO } \\ 8 \\ \hline \end{gathered}$ | $\begin{gathered} 8 \\ \text { TO } \\ 9 \\ \hline \end{gathered}$ | $\begin{gathered} 9 \\ \text { TO } \\ 10 \\ \hline \end{gathered}$ | $\begin{aligned} & 10 \\ & \text { TO } \\ & 11 \\ & \hline \end{aligned}$ | $\begin{aligned} & 11 \\ & \text { TO } \\ & 12 \\ & \hline \end{aligned}$ | DAIL | DAILY <br> HIGH | $\begin{aligned} & \text { DAILY } \\ & \text { HIGH } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DAY |  |  |  |  |  | AM |  |  |  |  |  |  |  |  |  |  |  | PM |  |  |  |  |  |  | TOTAL | COUNT | HOUR |
| 1 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | T |  |  |  |  |  |  |  |  |  | 201 | 204 | 293 | 318 | 274 | 305 | 362 | 340 | 400 | 286 | 231 | 219 | 196 | 179 | 109 |  |  |  |
| 13 | W | 71 | 47 | 37 | 30 | 20 | 57 | 93 | 163 | 196 | 230 | 214 | 265 | 317 | 303 | 304 | 365 | 366 | 352 | 295 | 209 | 215 | 186 | 146 | 115 | 4596 | 366 | 16 |
| 14 | T | 72 | 38 | 30 | 24 | 15 | 53 | 99 | 174 | 188 | 200 | 266 | 269 | 291 | 323 | 343 | 339 | 377 | 377 | 301 | 241 | 232 | 233 | 187 | 125 | 4797 | 377 | 16 |
| 15 | F | 83 | 61 | 58 | 24 | 24 | 46 | 89 | 148 | 211 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| ROAD \#: E710 | ROAD NAME: DEWEY AVE | FROM: FELIX ST | TO: DRIVING PK AVE | COUNTY: | Monroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STATION: 432025 | STATE DIR CODE: 1 | PLACEMENT: 800' north of felix st |  | DATE OF COUNT: | 07/12/2011 |

## Traffic Count Hourly Report

| ROAD \#: | E710 | ROAD NAME: DEWEY AVE |  |
| :---: | :---: | :---: | :---: |
| DIRECTION: | Southbound | FACTOR GROUP: | 30 |
| STATE DIR CODE: |  | WK OF YR: | 28 |
| DATE OF COUNT: 0 | 07/12/2011 |  |  |
| NOTES LANE 1: sb | travel lane |  |  |
| COUNT TAKEN BY: | : ORG CODE | E: DOT INITIALS: NJA |  |

FROM: FELIX ST
REC. SERIAL \#: 2551
PLACEMENT: 800' north of felix st @ REF MARKER:
ADDL DATA:
COUNT TYPE: AXLE PAIRS

TO: DRIVING PK AVE
FUNC. CLASS: 16
NHS: no
JURIS: City
CC Stn:
BATCH ID: DOT-DOTr4ww29

COUNTY:

## Monroe

CITY: ROCHESTER LION\#:
BIN:
RR CROSSING:
HPMS SAMPLE:

|  |  | $\begin{gathered} 12 \\ \text { TO } \\ 1 \end{gathered}$ | $\begin{gathered} 1 \\ \text { TO } \\ 2 \end{gathered}$ | $\begin{gathered} 2 \\ \text { TO } \\ 3 \end{gathered}$ | $\begin{gathered} 3 \\ \text { TO } \\ 4 \end{gathered}$ | $\begin{gathered} 4 \\ \text { TO } \\ 5 \end{gathered}$ | $\begin{gathered} 5 \\ \text { TO } \\ 6 \end{gathered}$ | $\begin{gathered} 6 \\ \text { TO } \\ 7 \end{gathered}$ | $\begin{gathered} 7 \\ \text { TO } \\ 8 \end{gathered}$ | $\begin{gathered} 8 \\ \text { TO } \\ 9 \end{gathered}$ | $\begin{gathered} 9 \\ \text { TO } \\ 10 \end{gathered}$ | $\begin{aligned} & 10 \\ & \text { TO } \\ & 11 \end{aligned}$ | $\begin{aligned} & 11 \\ & \text { TO } \\ & 12 \end{aligned}$ | $\begin{gathered} 12 \\ \text { TO } \\ 1 \end{gathered}$ | $\begin{gathered} 1 \\ \text { TO } \\ 2 \end{gathered}$ | $\begin{gathered} 2 \\ \text { TO } \\ 3 \end{gathered}$ | $\begin{gathered} 3 \\ \text { TO } \\ 4 \end{gathered}$ | $\begin{gathered} 4 \\ \text { TO } \\ 5 \end{gathered}$ | $\begin{gathered} 5 \\ \text { TO } \\ 6 \end{gathered}$ | $\begin{gathered} 6 \\ \text { TO } \\ 7 \end{gathered}$ | $\begin{gathered} 7 \\ \text { TO } \\ 8 \end{gathered}$ | $\begin{gathered} 8 \\ \text { TO } \\ 9 \end{gathered}$ | $\begin{gathered} 9 \\ \text { TO } \\ 10 \end{gathered}$ | $\begin{aligned} & 10 \\ & \text { TO } \\ & 11 \end{aligned}$ | $\begin{aligned} & 11 \\ & \text { TO } \\ & 12 \end{aligned}$ | DAILY | DAILY <br> HIGH | DAILY <br> HIGH |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| DATE | DAY |  |  |  |  |  | AM |  |  |  |  |  |  |  |  |  |  |  | PM |  |  |  |  |  |  | TOTAL | COUNT | HOUR |
| 1 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 4 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | W |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 7 | T |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 8 | F |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | S |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | M |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12 | T |  |  |  |  |  |  |  |  |  | 272 | 241 | 296 | 296 | 281 | 318 | 282 | 310 | 237 | 279 | 240 | 240 | 211 | 156 | 102 |  |  |  |
| 13 | W | 83 | 45 | 38 | 17 | 24 | 49 | 154 | 324 | 260 | 241 | 234 | 268 | 275 | 306 | 274 | 289 | 306 | 234 | 263 | 255 | 234 | 189 | 143 | 121 | 4626 | 324 | 7 |
| 14 | T | 67 | 45 | 34 | 14 | 18 | 46 | 139 | 287 | 293 | 238 | 254 | 299 | 295 | 310 | 298 | 307 | 342 | 287 | 317 | 247 | 241 | 216 | 183 | 132 | 4909 | 342 | 16 |
| 15 | F | 76 | 63 | 54 | 23 | 22 | 50 | 149 | 291 | 264 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |



| ROAD \#: E710 | ROAD NAME: DEWEY AVE | FROM: FELIX ST | TO: DRIVING PK AVE | COUNTY: | Monroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STATION: 432025 | STATE DIR CODE: 2 | PLACEMENT: 800' north of felix st |  | DATE OF COUNT: | 07/12/2011 |

## Traffic Count Hourly Report





## Traffic Count Hourly Report




| ROAD \#: E710 | ROAD NAME: DEWEY AVE | FROM: DRIVING PK AVE | TO: RIDGEWAY AVE | COUNTY: | Monroe |
| :---: | :---: | :---: | :---: | :---: | :---: |
| STATION: 434049 | STATE DIR CODE: 2 | PLACEMENT: 50' N of Seneca Pkwy. |  | DATE OF COUNT: | 11/30/2011 |


| ROAD \#: COUNTY NAME: | E710 <br> Monroe |  | AD NAM | DEWE |  |  |  | $\begin{aligned} & \text { AR: } 2 \\ & \text { TH: } \end{aligned}$ | mber |  |  |  | ATION: |  | 049 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| REGION CODE: 4 | 4 |  |  |  |  |  | TION |  |  |  | North |  | South |  | TOTAL |
| FROM: | DRIVING P RIDGEWA |  |  |  |  |  | R O | HICLE |  |  | 7078 |  | 7589 |  | 14667 |
| REF-MARKER: |  |  |  |  |  |  | R | ES |  |  | 14247 |  | 15294 |  | 14667 |
| END MILEPOINT: | 0110210 |  | NO. OF | NES: | 4 |  | VY | ES | 13) |  | 3.43\% |  | 3.99\% |  | 3.72\% |
| FUNC-CLASS: 16 | 16 |  |  | S NO: |  |  | CKS | BUS | 3-F13) |  | 11.16\% |  | 12.54\% |  | 11.88\% |
| STATION NO: 40 | 4049 |  |  | ION\#: |  |  | COR | ON F | OR |  | 0.99 |  | 0.99 |  | 0.99 |
| COUNT TAKEN BY: OR | ORG CODE | T INIT | LS: GNL |  |  |  |  |  |  |  |  |  |  |  |  |
| PROCESSED BY: OR | ORG CODE | OT INITIA | ALS: MAB |  | H ID: | R4W |  |  |  |  |  |  |  |  |  |
| VEHICL | LE CLASS | F1 | F2 | F3 | F4 | F5 | F6 | F7 | F8 | F9 | F10 | F11 | F12 | F13 | TOTAL |
| NO. O | OF AXLES | 2 | 2 | 2 | 2.5 | 2 | 3 | 4 | 3.5 | 5 | 6 | 5 | 6 | 8.75 |  |
| ENDING HOUR | 1:00 | 0 | 72 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 75 |
|  | 2:00 | 0 | 47 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 50 |
|  | 3:00 | 0 | 34 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 |
|  | 4:00 | 1 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 |
|  | 5:00 | 1 | 25 | 3 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
|  | 6:00 | 0 | 55 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 62 |
|  | 7:00 | 1 | 120 | 15 | 2 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 145 |
|  | 8:00 | 3 | 304 | 41 | 6 | 16 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 373 |
|  | 9:00 | 4 | 240 | 27 | 3 | 11 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 288 |
|  | 10:00 | 6 | 279 | 31 | 2 | 10 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 332 |
| DIRECTION | 111:00 | 6 | 295 | 37 | 4 | 4 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 348 |
| North | 12:00 | 5 | 326 | 39 | 1 | 4 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 378 |
|  | 13:00 | 5 | 349 | 37 | 4 | 8 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 407 |
|  | 14:00 | 4 | 361 | 33 | 4 | 8 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 411 |
|  | 15:00 | 8 | 435 | 48 | 9 | 29 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 534 |
|  | 16:00 | 7 | 549 | 62 | 10 | 16 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 648 |
|  | 17:00 | 10 | 554 | 45 | 5 | 15 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 632 |
|  | 18:00 | 10 | 614 | 32 | 3 | 6 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 668 |
|  | 19:00 | 8 | 437 | 29 | 1 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 479 |
|  | 20:00 | 6 | 318 | 21 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 347 |
|  | 21:00 | 4 | 267 | 13 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 286 |
|  | 22:00 | 3 | 222 | 12 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 240 |
|  | 23:00 | 2 | 153 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 163 |
|  | 24:00 | 2 | 118 | 3 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 124 |
| TOTAL V | VEHICLES | 96 | 6192 | 547 | 56 | 142 | 11 | 0 | 33 | 1 | 0 | 0 | 0 | 0 | 7078 |
| TOTA | AL AXLES | 192 | 12384 | 1094 | 140 | 284 | 33 | 0 | 116 | 5 | 0 | 0 | 0 | 0 | 14247 |
|  | 1:00 | 0 | 79 | 6 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 87 |
| ENDING HOUR | 2:00 | 0 | 40 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 42 |
|  | 3:00 | 0 | 34 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 37 |
|  | 4:00 | 0 | 22 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 |
|  | 5:00 | 0 | 28 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 |
|  | 6:00 | 0 | 72 | 10 | 2 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 87 |
|  | 7:00 | 0 | 197 | 27 | 11 | 9 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 248 |
|  | 8:00 | 1 | 636 | 76 | 19 | 33 | 1 | 0 | 6 | 0 | 1 | 1 | 0 | 0 | 774 |
|  | 9:00 | 1 | 390 | 51 | 12 | 23 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 481 |
|  | 10:00 | 1 | 310 | 41 | 9 | 15 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 379 |
|  | 11:00 | 0 | 288 | 41 | 3 | 7 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 342 |
| DIRECTION | - 12:00 | 0 | 327 | 42 | 2 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 379 |
| South | 13:00 | 1 | 383 | 41 | 2 | 8 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 438 |
|  | 14:00 | 4 | 373 | 44 | 4 | 8 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 435 |
|  | 15:00 | 4 | 433 | 47 | 10 | 15 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 512 |
|  | 16:00 | 2 | 492 | 47 | 7 | 11 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 560 |
|  | 17:00 | 3 | 486 | 42 | 8 | 12 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 552 |
|  | 18:00 | 1 | 464 | 33 | 5 | 3 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 508 |
|  | 19:00 | 0 | 444 | 32 | 3 | 5 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 485 |
|  | 20:00 | 1 | 306 | 18 | 0 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 328 |
|  | 21:00 | 0 | 284 | 14 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 299 |
|  | 22:00 | 0 | 239 | 16 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 257 |
|  | 23:00 | 0 | 163 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 171 |
|  | 24:00 | 0 | 128 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 133 |
| TOTAL V | VEHICLES | 19 | 6618 | 649 | 97 | 162 | 8 | 0 | 33 | 1 | 1 | 1 | 0 | 0 | 7589 |
| TOTA | AL AXLES | 38 | 13236 | 1298 | 242 | 324 | 24 | 0 | 116 | 5 | 6 | 5 | 0 | 0 | 15294 |
| GRAND TOTAL V | VEHICLES | 115 | 12810 | 1196 | 153 | 304 | 19 | 0 | 66 | 2 | 1 | 1 | 0 | 0 | 14667 |
| GRAND TOTA | AL AXLES | 230 | 25620 | 2392 | 382 | 608 | 57 | 0 | 231 | 10 | 6 | 5 | 0 | 0 | 29541 |

F1. Motorcycles
2. Autos*

F3. 2 Axle, 4-Tire Pickups, Vans, Motorhomes*
F4. Buses
F5. 2 Axle, 6-Tire Single Unit Trucks
F6. 3 Axle Single Unit Trucks
F7. 4 or More Axle Single Unit Trucks
F8. 4 or Less Axle Vehicles, One Unit is a Truck
F9. 5 Axle Double Unit Vehicles, One Unit is a Truck
F10. 6 or More Double Unit Vehicles, One Unit is a Truck
F11.5 or Less Axle Multi-Unit Trucks
F12. 6 Axle Multi-Unit Trucks
F13. 7 or More Axle Multi-Unit Trucks

* INCLUDING THOSE HAULING TRAILERS

FUNCTIONAL CLASS CODES:


| RURAL | URBAN |
| :--- | :--- |
| 01 | 11 PRINCIPAL ARTERIAL-INTERSTATE |
| 02 | 12 PRINCIPAL ARTERIAL-EXPRESSWAY |
| 02 | 14 PRINCPAL ARTERIAL-OTHER |
| 06 | 16 MINOR ARTERIAL |
| 07 | 17 MAOR COLLECTOR |
| 08 | 17 MINOR COLLECTOR |
| 09 | 19 LOCAL SYSTEM |
|  |  |
|  |  |
|  |  |
|  |  |


|  |  |
| :--- | :--- |
| Start date: | Wed 11/30/2011 15:00 |
| End date: | Wed 12/07/2011 13:45 |
| County: | Monroe |
| Town: | ROCHESTER |
| Speed limit: | 30 |
| LON\#: |  |

## Date: 01/12/2012

| Station: | 434049 |
| :--- | :---: |
| Road \#: | E710 Road name: DEWEY AVE |
| From: | DRIVING PK AVE |
| To: | RIDGEWAY AVE |
| Direction: | North |
| Lanes: 1,2 |  |
| Counts have been summarized into NYSDOT El stan |  |

Counts have been summarized into NYSDOT El standard bins
Speeds, mph

| Count duration: | 167 hours |
| :--- | :--- |
| Functional class: | 16 |
| Factor group: | 30 |
| Batch ID: | DOT-R4WW49a |
| Count taken by: | Org: TST Init: GNL |
| Processed by: | Org: DOT Init: MAB |


| Speeds, mph |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hour | $\begin{aligned} & 0.0- \\ & 20.0 \end{aligned}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| 1:00 | 4 | 2 | 18 | 35 | 15 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.3 | 0.0 | 0.0 | 0.0 | 0.0 | 29.6 | 32.0 | 36.9 | 76 |
| 2:00 | 2 | 1 | 18 | 22 | 7 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 29.6 | 31.2 | 35.9 | 52 |
| 3:00 | 2 | 1 | 8 | 16 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.7 | 32.2 | 37.6 | 36 |
| 4:00 | 1 | 1 | 5 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 29.6 | 32.0 | 37.4 | 21 |
| 5:00 | 4 | 1 | 7 | 12 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.2 | 31.7 | 37.7 | 32 |
| 6:00 | 5 | 4 | 12 | 24 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.3 | 31.9 | 37.4 | 60 |
| 7:00 | 13 | 11 | 43 | 52 | 21 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 27.3 | 30.6 | 36.1 | 145 |
| 8:00 | 49 | 92 | 142 | 72 | 16 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.9 | 26.7 | 32.5 | 374 |
| 9:00 | 40 | 40 | 99 | 78 | 26 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 24.9 | 28.3 | 34.3 | 289 |
| 10:00 | 43 | 43 | 105 | 98 | 37 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.3 | 28.9 | 34.7 | 332 |
| 11:00 | 43 | 40 | 115 | 112 | 32 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 25.5 | 29.0 | 34.4 | 348 |
| 12:00 | 40 | 47 | 125 | 129 | 32 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.9 | 29.1 | 34.3 | 378 |
| 13:00 | 48 | 53 | 141 | 125 | 32 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.4 | 28.6 | 34.1 | 404 |
| 14:00 | 40 | 50 | 145 | 126 | 42 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0.2 | 0.0 | 0.0 | 0.0 | 26.3 | 29.0 | 34.6 | 412 |
| 15:00 | 92 | 103 | 171 | 120 | 45 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 23.6 | 27.2 | 33.7 | 535 |
| 16:00 | 137 | 139 | 191 | 145 | 29 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.5 | 26.3 | 32.9 | 646 |
| 17:00 | 120 | 126 | 202 | 144 | 37 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 23.1 | 26.8 | 33.2 | 633 |
| 18:00 | 130 | 137 | 223 | 143 | 33 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 22.8 | 26.6 | 32.8 | 669 |
| 19:00 | 56 | 76 | 182 | 131 | 32 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.0 | 28.0 | 33.6 | 479 |
| 20:00 | 30 | 31 | 122 | 126 | 30 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.8 | 29.6 | 34.5 | 346 |
| 21:00 | 28 | 27 | 89 | 109 | 28 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 30.0 | 34.6 | 286 |
| 22:00 | 16 | 21 | 83 | 88 | 26 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 30.0 | 34.8 | 239 |
| 23:00 | 14 | 12 | 48 | 66 | 22 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.4 | 30.7 | 35.0 | 164 |
| 24:00 | 9 | 4 | 39 | 51 | 19 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 31.1 | 36.1 | 126 |
| Avg. Daily Total | 966 | 1062 | 2333 | 2033 | 591 | 88 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 24.8 | 28.3 | 34.1 | 7082 |
| Percent 1 | 3.6\% | 15.0\% | 32.9\% | 28.7\% | 8.3\% | 1.2\% | 0.1\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent 13 | 3.6\% | 28.6\% | 61.6\% | 90.3\% | 98.6\% | 99.9\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 40 | 44 | 97 | 85 | 25 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 295 |


| North | Avg. Speed 24.8 |  | 50th\% Speed 28.3 | 85th\% Speed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| South |  | 25.6 | 28.7 |  | 34.5 |
| Peak Hour Data |  |  |  |  |  |
| Direction | Hour | Count | 2-way | Hour | Count |
| North | 18 | 669 | A.M. | 8 | 1147 |
| South | 8 | 773 | P.M. | 16 | 1206 |



|  |  |
| :--- | :--- |
| Start date: | Wed 11/30/2011 15:00 |
| End date: | Wed 12/07/2011 13:45 |
| County: | Monroe |
| Town: | ROCHESTER |
| Speed limit: | 30 |
| LON\#: |  |

## Date: 01/12/2012

| Station: | 434049 |
| :--- | :---: |
| Road \#: | E710 Road name: DEWEY AVE |
| From: | DRIVING PK AVE |
| To: | RIDGEWAY AVE |
| Direction: | South |
| Lanes: 1,2 |  |
| Counts have been summarized into NYSDOT El stan |  |

Counts have been summarized into NYSDOT El standard bins
Speeds, mph

| Hour | $\begin{aligned} & 0.0- \\ & 20.0 \end{aligned}$ | $\begin{array}{r} 20.1- \\ 25.0 \end{array}$ | $\begin{array}{r} 25.1- \\ 30.0 \end{array}$ | $\begin{array}{r} 30.1- \\ 35.0 \end{array}$ | $\begin{array}{r} 35.1- \\ 40.0 \end{array}$ | $\begin{array}{r} 40.1- \\ 45.0 \end{array}$ | $\begin{array}{r} 45.1- \\ 50.0 \end{array}$ | $\begin{array}{r} 50.1- \\ 55.0 \end{array}$ | $\begin{array}{r} 55.1- \\ 60.0 \end{array}$ | $\begin{array}{r} 60.1- \\ 65.0 \end{array}$ | $\begin{array}{r} 65.1- \\ 70.0 \end{array}$ | $\begin{array}{r} 70.1- \\ 75.0 \end{array}$ | $\begin{array}{r} 75.1- \\ 95.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 45.0 \end{array}$ | $\begin{array}{r} \% \text { Exc } \\ 50.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 55.0 \end{array}$ | $\begin{array}{r} \% \text { Exc } \\ 60.0 \end{array}$ | $\begin{array}{r} \text { \% Exc } \\ 65.0 \end{array}$ | Avg | 50th\% | 85th\% | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1:00 | 8 | 6 | 19 | 39 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5 | 31.3 | 35.5 | 86 |
| 2:00 | 3 | 2 | 12 | 17 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.5 | 31.4 | 36.9 | 43 |
| 3:00 | 2 | 2 | 12 | 14 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 30.8 | 35.6 | 36 |
| 4:00 | 2 | 2 | 8 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.6 | 30.4 | 36.6 | 25 |
| 5:00 | 3 | 5 | 10 | 9 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 26.0 | 28.8 | 34.7 | 31 |
| 6:00 | 4 | 7 | 22 | 36 | 12 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 2.3 | 0.0 | 0.0 | 0.0 | 0.0 | 29.3 | 31.6 | 37.5 | 88 |
| 7:00 | 13 | 29 | 72 | 81 | 43 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 1.2 | 0.4 | 0.0 | 0.0 | 0.0 | 28.4 | 30.7 | 37.1 | 250 |
| 8:00 | 95 | 190 | 320 | 131 | 34 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 24.0 | 26.6 | 32.0 | 773 |
| 9:00 | 33 | 73 | 168 | 136 | 56 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 26.9 | 29.0 | 34.9 | 479 |
| 10:00 | 21 | 37 | 128 | 134 | 47 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.9 | 30.1 | 35.0 | 376 |
| 11:00 | 28 | 37 | 110 | 115 | 42 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.1 | 29.9 | 35.1 | 342 |
| 12:00 | 30 | 45 | 116 | 127 | 48 | 11 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 27.2 | 30.0 | 35.6 | 380 |
| 13:00 | 31 | 54 | 131 | 156 | 52 | 12 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 27.4 | 30.1 | 35.1 | 438 |
| 14:00 | 57 | 47 | 129 | 139 | 57 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 25.6 | 29.5 | 35.0 | 437 |
| 15:00 | 93 | 68 | 179 | 127 | 40 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 23.7 | 27.7 | 33.8 | 512 |
| 16:00 | 106 | 82 | 202 | 133 | 32 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 23.3 | 27.3 | 33.3 | 560 |
| 17:00 | 124 | 76 | 182 | 135 | 30 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 22.6 | 27.1 | 33.2 | 550 |
| 18:00 | 76 | 70 | 184 | 137 | 36 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 24.4 | 28.0 | 33.8 | 508 |
| 19:00 | 53 | 71 | 178 | 139 | 38 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 25.5 | 28.4 | 34.0 | 485 |
| 20:00 | 30 | 36 | 112 | 110 | 34 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 26.6 | 29.4 | 34.7 | 329 |
| 21:00 | 24 | 32 | 102 | 102 | 33 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 27.0 | 29.6 | 34.8 | 299 |
| 22:00 | 16 | 28 | 94 | 88 | 27 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 27.5 | 29.6 | 34.7 | 259 |
| 23:00 | 6 | 19 | 56 | 65 | 21 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 28.6 | 30.4 | 35.0 | 171 |
| 24:00 | 9 | 9 | 35 | 52 | 23 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 28.4 | 31.3 | 36.8 | 133 |
| Avg. Daily Total | 867 | 1027 | 2581 | 2230 | 738 | 126 | 20 | 1 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 25.6 | 28.7 | 34.5 | 7590 |
| Percent 1 | 1.4\% | 13.5\% | 34.0\% | 29.4\% | 9.7\% | 1.7\% | 0.3\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% | 0.0\% |  |  |  |  |  |  |  |  |  |
| Cum. Percent 1 | 1.4\% | 25.0\% | 59.0\% | 88.3\% | 98.1\% | 99.7\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% | 100.0\% |  |  |  |  |  |  |  |  |  |
| Average hour | 36 | 43 | 108 | 93 | 31 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  |  |  |  |  | 316 |


| North | Avg. Speed |  | 50th\% Speed | 85th\% Speed |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| South |  | 25.6 | 28.7 |  | 34.1 |
|  |  |  |  |  | 34.5 |
| Peak Hour Data |  |  |  |  |  |
| Direction | Hour | Count | 2-way | Hour | Count |
| North | 18 | 669 | A.M. | 8 | 1147 |
| South | 8 | 773 | P.M. | 16 | 1206 |



# Bergmann Associates <br> 200 First Federal Plaza <br> 28 East Main Street <br> Rochester, NY 14614 

Dewey Ave/Driving Park Ave Intersection PIN 4755.55 Turning Movement Counts

File Name : 14-03-26 Dewey West \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 1

Groups Printed- Cars - Trucks - Buses

|  | Driving Park Avenue From East |  |  |  | Dewey Avenue From South |  |  |  | Driving Park Avenue From West |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Thru | Left | Peds | App. Total | Right | Left | Peds | App. Total | Right | Thru | Peds | App. Total | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 34 | 44 | 0 | 78 | 36 | 3 | 0 | 39 | 9 | 27 | 0 | 36 | 0 | 153 | 153 |
| 07:15 AM | 43 | 66 | 0 | 109 | 44 | 5 | 3 | 49 | 20 | 48 | 0 | 68 | 3 | 226 | 229 |
| 07:30 AM | 32 | 58 | 1 | 90 | 49 | 0 | 1 | 49 | 15 | 34 | 2 | 49 | 4 | 188 | 192 |
| 07:45 AM | 49 | 83 | 0 | 132 | 61 | 5 | 0 | 66 | 25 | 44 | 2 | 69 | 2 | 267 | 269 |
| Total | 158 | 251 | 1 | 409 | 190 | 13 | 4 | 203 | 69 | 153 | 4 | 222 | 9 | 834 | 843 |
| 08:00 AM | 46 | 61 | 0 | 107 | 59 | 10 | 1 | 69 | 12 | 33 | 1 | 45 | 2 | 221 | 223 |
| 08:15 AM | 36 | 59 | 0 | 95 | 40 | 8 | 2 | 48 | 16 | 37 | 2 | 53 | 4 | 196 | 200 |
| 08:30 AM | 34 | 70 | 0 | 104 | 43 | 2 | 0 | 45 | 12 | 25 | 3 | 37 | 3 | 186 | 189 |
| 08:45 AM | 27 | 54 | 2 | 81 | 54 | 7 | 0 | 61 | 16 | 31 | 0 | 47 | 2 | 189 | 191 |
| Total | 143 | 244 | 2 | 387 | 196 | 27 | 3 | 223 | 56 | 126 | 6 | 182 | 11 | 792 | 803 |

*** BREAK ***

| 03:30 PM | 57 | 69 | 4 | 126 | 89 | 7 | 6 | 96 | 15 | 39 | 3 | 54 | 13 | 276 | 289 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 03:45 PM | 73 | 99 | 2 | 172 | 105 | 13 | 2 | 118 | 16 | 44 | 5 | 60 | 9 | 350 | 359 |
| Total | 130 | 168 | 6 | 298 | 194 | 20 | 8 | 214 | 31 | 83 | 8 | 114 | 22 | 626 | 648 |
| 04:00 PM | 68 | 77 | 3 | 145 | 97 | 15 | 2 | 112 | 9 | 54 | 7 | 63 | 12 | 320 | 332 |
| 04:15 PM | 66 | 67 | 2 | 133 | 91 | 20 | 6 | 111 | 15 | 40 | 8 | 55 | 16 | 299 | 315 |
| 04:30 PM | 67 | 64 | 2 | 131 | 113 | 8 | 8 | 121 | 14 | 48 | 3 | 62 | 13 | 314 | 327 |
| 04:45 PM | 80 | 63 | 7 | 143 | 104 | 10 | 5 | 114 | 11 | 54 | 5 | 65 | 17 | 322 | 339 |
| Total | 281 | 271 | 14 | 552 | 405 | 53 | 21 | 458 | 49 | 196 | 23 | 245 | 58 | 1255 | 1313 |
| 05:00 PM | 58 | 84 | 1 | 142 | 102 | 14 | 6 | 116 | 15 | 55 | 7 | 70 | 14 | 328 | 342 |
| 05:15 PM | 50 | 61 | 0 | 111 | 107 | 12 | 3 | 119 | 17 | 58 | 6 | 75 | 9 | 305 | 314 |
| 05:30 PM | 71 | 68 | 3 | 139 | 107 | 14 | 9 | 121 | 9 | 45 | 3 | 54 | 15 | 314 | 329 |
| 05:45 PM | 60 | 63 | 5 | 123 | 78 | 14 | 4 | 92 | 8 | 38 | 4 | 46 | 13 | 261 | 274 |
| Total | 239 | 276 | 9 | 515 | 394 | 54 | 22 | 448 | 49 | 196 | 20 | 245 | 51 | 1208 | 1259 |
| Grand Total | 951 | 1210 | 32 | 2161 | 1379 | 167 | 58 | 1546 | 254 | 754 | 61 | 1008 | 151 | 4715 | 4866 |
| Apprch \% | 44 | 56 |  |  | 89.2 | 10.8 |  |  | 25.2 | 74.8 |  |  |  |  |  |
| Total \% | 20.2 | 25.7 |  | 45.8 | 29.2 | 3.5 |  | 32.8 | 5.4 | 16 |  | 21.4 | 3.1 | 96.9 |  |
| Cars | 833 | 1103 |  | 1968 | 1258 | 155 |  | 1471 | 239 | 695 |  | 995 | 0 | 0 | 4434 |
| \% Cars | 87.6 | 91.2 | 100 | 89.7 | 91.2 | 92.8 | 100 | 91.7 | 94.1 | 92.2 | 100 | 93.1 | 0 | 0 | 91.1 |
| Trucks | 14 | 14 |  | 28 | 17 | 3 |  | 20 | 5 | 8 |  | 13 | 0 | 0 | 61 |
| \% Trucks | 1.5 | 1.2 | 0 | 1.3 | 1.2 | 1.8 | 0 | 1.2 | 2 | 1.1 | 0 | 1.2 | 0 | 0 | 1.3 |
| Buses | 104 | 93 |  | 197 | 104 | 9 |  | 113 | 10 | 51 |  | 61 | 0 | 0 | 371 |
| \% Buses | 10.9 | 7.7 | 0 | 9 | 7.5 | 5.4 | 0 | 7 | 3.9 | 6.8 | 0 | 5.7 | 0 | 0 | 7.6 |

## Bergmann Associates

## 200 First Federal Plaza

## 28 East Main Street

Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey West \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 2


|  | Driving Park Avenue From East |  |  | Dewey Avenue From South |  |  | Driving Park Avenue From West |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Thru | Left | App. Total | Right | Left | App. Total | Right | Thru | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Entire Intersection Begins at 07:15 AM |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 43 | 66 | 109 | 44 | 5 | 49 | 20 | 48 | 68 | 226 |
| 07:30 AM | 32 | 58 | 90 | 49 | 0 | 49 | 15 | 34 | 49 | 188 |
| 07:45 AM | 49 | 83 | 132 | 61 | 5 | 66 | 25 | 44 | 69 | 267 |
| 08:00 AM | 46 | 61 | 107 | 59 | 10 | 69 | 12 | 33 | 45 | 221 |
| Total Volume | 170 | 268 | 438 | 213 | 20 | 233 | 72 | 159 | 231 | 902 |
| \% App. Total | 38.8 | 61.2 |  | 91.4 | 8.6 |  | 31.2 | 68.8 |  |  |
| PHF | . 867 | . 807 | . 830 | . 873 | . 500 | . 844 | . 720 | . 828 | . 837 | . 845 |
| Cars | 148 | 238 | 386 | 185 | 20 | 205 | 66 | 135 | 201 | 792 |
| \% Cars | 87.1 | 88.8 | 88.1 | 86.9 | 100 | 88.0 | 91.7 | 84.9 | 87.0 | 87.8 |
| Trucks | 2 | 0 | 2 | 1 | 0 | 1 | 1 | 0 | 1 | 4 |
| \% Trucks | 1.2 | 0 | 0.5 | 0.5 | 0 | 0.4 | 1.4 | 0 | 0.4 | 0.4 |
| Buses | 20 | 30 | 50 | 27 | 0 | 27 | 5 | 24 | 29 | 106 |
| \% Buses | 11.8 | 11.2 | 11.4 | 12.7 | 0 | 11.6 | 6.9 | 15.1 | 12.6 | 11.8 |

## Bergmann Associates

## 200 First Federal Plaza

## 28 East Main Street

Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey West \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 3


Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM

| 04:45 PM | 80 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:45 PM $05: 00 \mathrm{PM}$ | 80 | 63 | 143 142 | 104 | 10 | 114 | 11 | 54 | 65 | 322 |
| 05:00 PM | 58 | 84 | 142 | 102 | 14 | 116 | 15 | 55 | 70 | 328 |
| 05:15 PM | 50 | 61 | 111 | 107 | 12 | 119 | 17 | 58 | 75 | 305 |
| 05:30 PM | 71 | 68 | 139 | 107 | 14 | 121 | 9 | 45 | 54 | 314 |
| Total Volume | 259 | 276 | 535 | 420 | 50 | 470 | 52 | 212 | 264 | 1269 |
| \% App. Total | 48.4 | 51.6 |  | 89.4 | 10.6 |  | 19.7 | 80.3 |  |  |
| PHF | . 809 | . 821 | . 935 | . 981 | . 893 | . 971 | . 765 | . 914 | . 880 | . 967 |
| Cars | 225 | 260 | 485 | 402 | 47 | 449 | 52 | 207 | 259 | 1193 |
| \% Cars | 86.9 | 94.2 | 90.7 | 95.7 | 94.0 | 95.5 | 100 | 97.6 | 98.1 | 94.0 |
| Trucks | 4 | 5 | 9 | 1 | 0 | 1 | 0 | 1 | 1 | 11 |
| \% Trucks | 1.5 | 1.8 | 1.7 | 0.2 | 0 | 0.2 | 0 | 0.5 | 0.4 | 0.9 |
| Buses | 30 | 11 | 41 | 17 | 3 | 20 | 0 | 4 | 4 | 65 |
| \% Buses | 11.6 | 4.0 | 7.7 | 4.0 | 6.0 | 4.3 | 0 | 1.9 | 1.5 | 5.1 |

## Bergmann Associates

200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey West \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 4


# Bergmann Associates <br> 200 First Federal Plaza <br> 28 East Main Street <br> Rochester, NY 14614 

Dewey Ave/Driving Park Ave Intersection PIN 4755.55 Turning Movement Counts

File Name : 14-03-26 Dewey East \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No :1

Groups Printed- Cars - Trucks - Buses

|  | Dewey Avenue From North |  |  |  |  | Driving Park Avenue From East |  |  |  |  | BroezelStreetFrom South |  | Driving Park Avenue From West |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Exclu. Total | Inclu. Total | Int. Total |
| 07:00 AM | 44 | 12 | 26 | 1 | 82 | 20 | 37 | 4 | 2 | 61 | 0 | 0 | 1 | 18 | 40 | 0 | 59 | 3 | 202 | 205 |
| 07:15 AM | 72 | 8 | 37 | 2 | 117 | 12 | 37 | 5 | 0 | 54 | 0 | 0 | 2 | 44 | 50 | 0 | 96 | 2 | 267 | 269 |
| 07:30 AM | 65 | 15 | 52 | 3 | 132 | 16 | 29 | 3 | 2 | 48 | 0 | 0 | 0 | 28 | 57 | 0 | 85 | 5 | 265 | 270 |
| 07:45 AM | 90 | 12 | 64 | 0 | 166 | 18 | 49 | 9 | 1 | 76 | 0 | 0 | 0 | 36 | 69 | 1 | 105 | 2 | 347 | 349 |
| Total | 271 | 47 | 179 | 6 | 497 | 66 | 152 | 21 | 5 | 239 | 0 | 0 | 3 | 126 | 216 | 1 | 345 | 12 | 1081 | 1093 |
| 08:00 AM | 65 | 10 | 36 | 1 | 111 | 15 | 48 | 2 | 1 | 65 | 0 | 0 | 2 | 38 | 49 | 0 | 89 | 2 | 265 | 267 |
| 08:15 AM | 69 | 9 | 52 | 1 | 130 | 18 | 24 | 2 | 3 | 44 | 1 | 0 | 0 | 35 | 48 | 0 | 83 | 5 | 257 | 262 |
| 08:30 AM | 68 | 6 | 48 | 1 | 122 | 19 | 37 | 4 | 1 | 60 | 0 | 0 | 0 | 24 | 45 | 0 | 69 | 2 | 251 | 253 |
| 08:45 AM | 54 | 10 | 41 | 0 | 105 | 18 | 31 | 6 | 0 | 55 | 1 | 0 | 0 | 29 | 59 | 0 | 88 | 1 | 248 | 249 |
| Total | 256 | 35 | 177 | 3 | 468 | 70 | 140 | 14 | 5 | 224 | 2 | 0 | 2 | 126 | 201 | 0 | 329 | 10 | 1021 | 1031 |

*** BREAK ***

| 03:30 PM | 71 | 8 | 28 | 1 | 107 | 48 | 54 | 7 | 1 | 109 | 9 | 0 | 1 | 37 | 86 | 0 | 124 | 11 | 340 | 351 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 03:45 PM | 106 | 9 | 31 | 1 | 146 | 36 | 60 | 11 | 4 | 107 | 7 | 0 | 2 | 44 | 94 | 0 | 140 | 12 | 393 | 405 |
| Total | 177 | 17 | 59 | 2 | 253 | 84 | 114 | 18 | 5 | 216 | 16 | 0 | 3 | 81 | 180 | 0 | 264 | 23 | 733 | 756 |
| 04:00 PM | 89 | 8 | 35 | 9 | 132 | 27 | 56 | 12 | 7 | 95 | 5 | 0 | 4 | 45 | 90 | 1 | 139 | 22 | 366 | 388 |
| 04:15 PM | 62 | 7 | 20 | 1 | 89 | 25 | 66 | 6 | 2 | 97 | 18 | 0 | 2 | 41 | 68 | 1 | 111 | 22 | 297 | 319 |
| 04:30 PM | 80 | 6 | 30 | 0 | 116 | 34 | 56 | 7 | 0 | 97 | 9 | 0 | 3 | 50 | 87 | 3 | 140 | 12 | 353 | 365 |
| 04:45 PM | 83 | 8 | 28 | 4 | 119 | 32 | 52 | 5 | 6 | 89 | 2 | 0 | 1 | 42 | 102 | 1 | 145 | 13 | 353 | 366 |
| Total | 314 | 29 | 113 | 14 | 456 | 118 | 230 | 30 | 15 | 378 | 34 | 0 | 10 | 178 | 347 | 6 | 535 | 69 | 1369 | 1438 |
| 05:00 PM | 84 | 5 | 27 | 7 | 116 | 44 | 54 | 8 | 3 | 106 | 3 | 0 | 2 | 39 | 107 | 0 | 148 | 13 | 370 | 383 |
| 05:15 PM | 70 | 9 | 32 | 2 | 111 | 46 | 57 | 8 | 0 | 111 | 5 | 0 | 2 | 39 | 106 | 0 | 147 | 7 | 369 | 376 |
| 05:30 PM | 78 | 8 | 22 | 6 | 108 | 45 | 57 | 4 | 3 | 106 | 12 | 0 | 4 | 44 | 92 | 2 | 140 | 23 | 354 | 377 |
| 05:45 PM | 72 | 2 | 21 | 4 | 95 | 42 | 52 | 5 | 2 | 99 | 12 | 0 | 2 | 28 | 84 | 1 | 114 | 19 | 308 | 327 |
| Total | 304 | 24 | 102 | 19 | 430 | 177 | 220 | 25 | 8 | 422 | 32 | 0 | 10 | 150 | 389 | 3 | 549 | 62 | 1401 | 1463 |
| Grand Total | 1322 | 152 | 630 | 44 | 2104 | 515 | 856 | 108 | 38 | 1479 | 84 | 0 | 28 | 661 | 1333 | 10 | 2022 | 176 | 5605 | 5781 |
| Apprch \% | 62.8 | 7.2 | 29.9 |  |  | 34.8 | 57.9 | 7.3 |  |  |  |  | 1.4 | 32.7 | 65.9 |  |  |  |  |  |
| Total \% | 23.6 | 2.7 | 11.2 |  | 37.5 | 9.2 | 15.3 | 1.9 |  | 26.4 |  | 0 | 0.5 | 11.8 | 23.8 |  | 36.1 | 3 | 97 |  |
| Cars | 1197 | 146 | 599 |  | 1985 | 484 | 743 | 96 |  | 1361 |  | 84 | 25 | 605 | 1213 |  | 1853 | 0 | 0 | 5283 |
| \% Cars | 90.5 | 96.1 | 95.1 | 97.7 | 92.4 | 94 | 86.8 | 88.9 | 100 | 89.7 | 100 | 100 | 89.3 | 91.5 | 91 | 100 | 91.2 | 0 | 0 | 91.4 |
| Trucks | 17 | 0 | 1 |  | 19 | 3 | 15 | 0 |  | 18 |  | 0 | 0 | 5 | 15 |  | 20 | 0 | 0 | 57 |
| \% Trucks | 1.3 | 0 | 0.2 | 2.3 | 0.9 | 0.6 | 1.8 | 0 | 0 | 1.2 | 0 | 0 | 0 | 0.8 | 1.1 | 0 | , | 0 | 0 | 1 |
| Buses | 108 | 6 | 30 |  | 144 | 28 | 98 | 12 |  | 138 |  | 0 | 3 | 51 | 105 |  | 159 | 0 | 0 | 441 |
| \% Buses | 8.2 | 3.9 | 4.8 | 0 | 6.7 | 5.4 | 11.4 | 11.1 | 0 | 9.1 | 0 | 0 | 10.7 | 7.7 | 7.9 | 0 | 7.8 | 0 | 0 | 7.6 |

# Bergmann Associates 

## 200 First Federal Plaza

## 28 East Main Street

Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey East \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No :2


|  | Dewey Avenue From North |  |  |  | Driving Park Avenue From East |  |  |  | From South App. Total | Driving Park Avenue From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total |  | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for Enti | Interse | n Beg | at 07: | 5 AM |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 72 | 8 | 37 | 117 | 12 | 37 | 5 | 54 | 0 | 2 | 44 | 50 | 96 | 267 |
| 07:30 AM | 65 | 15 | 52 | 132 | 16 | 29 | 3 | 48 | 0 | 0 | 28 | 57 | 85 | 265 |
| 07:45 AM | 90 | 12 | 64 | 166 | 18 | 49 | 9 | 76 | 0 | 0 | 36 | 69 | 105 | 347 |
| 08:00 AM | 65 | 10 | 36 | 111 | 15 | 48 | 2 | 65 | 0 | 2 | 38 | 49 | 89 | 265 |
| Total Volume | 292 | 45 | 189 | 526 | 61 | 163 | 19 | 243 | 0 | 4 | 146 | 225 | 375 | 1144 |
| \% App. Total | 55.5 | 8.6 | 35.9 |  | 25.1 | 67.1 | 7.8 |  |  | 1.1 | 38.9 | 60 |  |  |
| PHF | . 811 | . 750 | . 738 | . 792 | . 847 | . 832 | . 528 | . 799 | . 000 | . 500 | . 830 | . 815 | . 893 | . 824 |
| Cars | 259 | 43 | 181 | 483 | 56 | 136 | 14 | 206 | 0 | 2 | 126 | 189 | 317 | 1006 |
| \% Cars | 88.7 | 95.6 | 95.8 | 91.8 | 91.8 | 83.4 | 73.7 | 84.8 | 0 | 50.0 | 86.3 | 84.0 | 84.5 | 87.9 |
| Trucks | 2 | 0 | 0 | 2 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 2 | 2 | 5 |
| \% Trucks | 0.7 | 0 | 0 | 0.4 | 0 | 0.6 | 0 | 0.4 | 0 | 0 | 0 | 0.9 | 0.5 | 0.4 |
| Buses | 31 | 2 | 8 | 41 | 5 | 26 | 5 | 36 | 0 | 2 | 20 | 34 | 56 | 133 |
| \% Buses | 10.6 | 4.4 | 4.2 | 7.8 | 8.2 | 16.0 | 26.3 | 14.8 | 0 | 50.0 | 13.7 | 15.1 | 14.9 | 11.6 |

# Bergmann Associates 

## 200 First Federal Plaza

## 28 East Main Street

Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey East \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 3


Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM


## Bergmann Associates

200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey East \& Driving Park
Site Code : 0
Start Date : 3/26/2014
Page No : 4


# Bergmann Associates <br> 200 First Federal Plaza <br> 28 East Main Street <br> Rochester, NY 14614 

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey \& Selye
Site Code : 0
Start Date : 3/26/2014
Page No : 1

Groups Printed- Cars - Trucks - Buses

|  | Dewey Avenue From North |  |  |  |  | Selye Terrace From East |  |  |  |  | Dewey Avenue From South |  |  |  |  | Selye Terrace From West |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Right | Thru | Left | Peds | App. Total | Exclu, Total | Inclu. Total | Int. Total |
| 07:00 AM | 6 | 66 | 3 | 3 | 75 | 2 | 1 | 0 | 1 | 3 | 2 | 56 | 0 | 0 | 58 | 2 | 3 | 1 | 3 | 6 | 7 | 142 | 149 |
| 07:15 AM | 10 | 108 | 4 | 0 | 122 | 3 | 0 | 0 | 1 | 3 | 2 | 66 | 3 | 0 | 71 | 8 | 2 | 0 | 9 | 10 | 10 | 206 | 216 |
| 07:30 AM | 5 | 133 | 8 | 4 | 146 | 1 | 0 | 1 | 2 | 2 | 1 | 70 | 1 | 0 | 72 | 1 | 2 | 3 | 0 | 6 | 6 | 226 | 232 |
| 07:45 AM | 5 | 154 | 9 | 0 | 168 | 2 | 1 | 0 | 1 | 3 | 3 | 84 | 0 | 0 | 87 | 3 | 1 | 1 | 3 | 5 | 4 | 263 | 267 |
| Total | 26 | 461 | 24 | 7 | 511 | 8 | 2 | 1 | 5 | 11 | 8 | 276 | 4 | 0 | 288 | 14 | 8 | 5 | 15 | 27 | 27 | 837 | 864 |
| 08:00 AM | 3 | 102 | 2 | 2 | 107 | 4 | 2 | 2 | 0 | 8 | 3 | 60 | 0 | 0 | 63 | 1 | 0 | 0 | 0 | 1 | 2 | 179 | 181 |
| 08:15 AM | 3 | 119 | 2 | 3 | 124 | 3 | 1 | 3 | 2 | 7 | 1 | 69 | 0 | 0 | 70 | 3 | 0 | 2 | 4 | 5 | 9 | 206 | 215 |
| 08:30 AM | 2 | 113 | 3 | 3 | 118 | 3 | 2 | 1 | 0 | 6 | 1 | 59 | 2 | 0 | 62 | 3 | 2 | 2 | 0 | 7 | 3 | 193 | 196 |
| 08:45 AM | 6 | 81 | 7 | 3 | 94 | 2 | 1 | 1 | 0 | 4 | 2 | 75 | 0 | 0 | 77 | 4 | 2 | 0 | 4 | 6 | 7 | 181 | 188 |
| Total | 14 | 415 | 14 | 11 | 443 | 12 | 6 | 7 | 2 | 25 | 7 | 263 | 2 | 0 | 272 | 11 | 4 | 4 | 8 | 19 | 21 | 759 | 780 |

*** BREAK ***

| 03:30 PM | 12 | 126 | 4 | 9 | 142 | 2 | 1 | 3 | 2 | 6 | 1 | 135 | 2 | 0 | 138 | 3 | 2 | 5 | 3 | 10 | 14 | 296 | 310 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 03:45 PM | 5 | 158 | 4 | 4 | 167 | 6 | 3 | 2 | 2 | 11 | 2 | 134 | 0 | 0 | 136 | 1 | 0 | 1 | 6 | 2 | 12 | 316 | 328 |
| Total | 17 | 284 | 8 | 13 | 309 | 8 | 4 | 5 | 4 | 17 | 3 | 269 | 2 | 0 | 274 | 4 | 2 | 6 | 9 | 12 | 26 | 612 | 638 |
| 04:00 PM | 8 | 139 | 6 | 5 | 153 | 3 | 1 | 1 | 2 | 5 | 0 | 120 | 4 | 0 | 124 | 0 | 0 | 2 | 6 | 2 | 13 | 284 | 297 |
| 04:15 PM | 7 | 109 | 6 | 1 | 122 | 7 | 0 | 1 | 3 | 8 | 5 | 97 | 0 | 0 | 102 | , | 3 | 4 | 5 | 9 | 9 | 241 | 250 |
| 04:30 PM | 4 | 117 | 3 | 2 | 124 | 3 | 4 | 4 | 5 | 11 | 1 | 124 | 2 | 0 | 127 | 3 | 1 | 2 | 1 | 6 | 8 | 268 | 276 |
| 04:45 PM | 3 | 127 | 5 | 2 | 135 | 5 | 2 | 1 | 8 | 8 | 2 | 133 | 0 | 0 | 135 | 0 | 1 | 1 | 5 | 2 | 15 | 280 | 295 |
| Total | 22 | 492 | 20 | 10 | 534 | 18 | 7 | 7 | 18 | 32 | 8 | 474 | 6 | 0 | 488 | 5 | 5 | 9 | 17 | 19 | 45 | 1073 | 1118 |
| 05:00 PM | 2 | 118 | 4 | 0 | 124 | 4 | 3 | 0 | 1 | 7 | 2 | 140 | 3 | 0 | 145 | 1 | 1 | 2 | 6 | 4 | 7 | 280 | 287 |
| 05:15 PM | 3 | 107 | 9 | 1 | 119 | 6 | 1 | 1 | 1 | 8 | 4 | 149 | 3 | 0 | 156 | 2 | 0 | 5 | 2 | 7 | 4 | 290 | 294 |
| 05:30 PM | 7 | 108 | 4 | 2 | 119 | 4 | 3 | 2 | 3 | 9 | 1 | 135 | 2 | 0 | 138 | 2 | 0 | 6 | 0 | 8 | 5 | 274 | 279 |
| 05:45 PM | 5 | 101 | 3 | 6 | 109 | 1 | 1 | 1 | 2 | 3 | 4 | 121 | 1 | 0 | 126 | 1 | 1 | 2 | 1 | 4 | 9 | 242 | 251 |
| Total | 17 | 434 | 20 | 9 | 471 | 15 | 8 | 4 | 7 | 27 | 11 | 545 | 9 | 0 | 565 | 6 | 2 | 15 | 9 | 23 | 25 | 1086 | 1111 |
| Grand Total | 96 | 2086 | 86 | 50 | 2268 | 61 | 27 | 24 | 36 | 112 | 37 | 1827 | 23 | 0 | 1887 | 40 | 21 | 39 | 58 | 100 | 144 | 4367 | 4511 |
| Apprch \% | 4.2 | 92 | 3.8 |  |  | 54.5 | 24.1 | 21.4 |  |  | 2 | 96.8 | 1.2 |  |  | 40 | 21 | 39 |  |  |  |  |  |
| Total \% | 2.2 | 47.8 | 2 |  | 51.9 | 1.4 | 0.6 | 0.5 |  | 2.6 | 0.8 | 41.8 | 0.5 |  | 43.2 | 0.9 | 0.5 | 0.9 |  | 2.3 | 3.2 | 96.8 |  |
| Cars | 90 | 1994 | 82 |  | 2216 | 53 | 26 | 23 |  | 138 | 35 | 1738 | 21 |  | 1794 | 39 | 19 | 39 |  | 155 | 0 | 0 | 4303 |
| \% Cars | 93.8 | 95.6 | 95.3 | 100 | 95.6 | 86.9 | 96.3 | 95.8 | 100 | 93.2 | 94.6 | 95.1 | 91.3 | 0 | 95.1 | 97.5 | 90.5 | 100 | 100 | 98.1 | 0 | 0 | 95.4 |
| Trucks | 0 | 21 | 0 |  | 21 | 1 | 0 | 0 |  | . | 0 | 21 | 0 |  | 21 | 0 | 0 | 0 |  | 0 | 0 | 0 | 43 |
| \% Trucks | 0 | 1 | 0 | 0 | 0.9 | 1.6 | 0 | 0 | 0 | 0.7 | 0 | 1.1 | 0 | 0 | 1.1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 |
| Buses | 6 | 71 | 4 |  | 81 | 7 | 1 | 1 |  | 9 | 2 | 68 | 2 |  | 72 | . | 2 | 0 |  | 3 | 0 | 0 | 165 |
| \% Buses | 6.2 | 3.4 | 4.7 | 0 | 3.5 | 11.5 | 3.7 | 4.2 | 0 | 6.1 | 5.4 | 3.7 | 8.7 | 0 | 3.8 | 2.5 | 9.5 | 0 | 0 | 1.9 | 0 | 0 | 3.7 |

# Bergmann Associates <br> 200 First Federal Plaza <br> 28 East Main Street <br> Rochester, NY 14614 

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey \& Selye
Site Code : 0
Start Date : 3/26/2014
Page No :2


|  | Dewey Avenue From North |  |  |  | Selye Terrace From East |  |  |  | Dewey Avenue From South |  |  |  | Selye Terrace From West |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Start Time | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Right | Thru | Left | App. Total | Int. Total |
| Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Peak Hour for E | tire Int | section | Begins | at 07:15 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 07:15 AM | 10 | 108 | 4 | 122 | 3 | 0 | 0 | 3 | 2 | 66 | 3 | 71 | 8 | 2 | 0 | 10 | 206 |
| 07:30 AM | 5 | 133 | 8 | 146 | 1 | 0 | 1 | 2 | 1 | 70 | 1 | 72 | 1 | 2 | 3 | 6 | 226 |
| 07:45 AM | 5 | 154 | 9 | 168 | 2 | 1 | 0 | 3 | 3 | 84 | 0 | 87 | 3 | 1 | 1 | 5 | 263 |
| 08:00 AM | 3 | 102 | 2 | 107 | 4 | 2 | 2 | 8 | 3 | 60 | 0 | 63 | 1 | 0 | 0 | 1 | 179 |
| Total Volume | 23 | 497 | 23 | 543 | 10 | 3 | 3 | 16 | 9 | 280 | 4 | 293 | 13 | 5 | 4 | 22 | 874 |
| \% App. Total | 4.2 | 91.5 | 4.2 |  | 62.5 | 18.8 | 18.8 |  | 3.1 | 95.6 | 1.4 |  | 59.1 | 22.7 | 18.2 |  |  |
| PHF | . 575 | . 807 | . 639 | . 808 | . 625 | . 375 | . 375 | . 500 | . 750 | . 833 | . 333 | . 842 | . 406 | . 625 | . 333 | . 550 | . 831 |
| Cars | 23 | 476 | 22 | 521 | 6 | 3 | 3 | 12 | 9 | 262 | 3 | 274 | 13 | 4 | 4 | 21 | 828 |
| \% Cars | 100 | 95.8 | 95.7 | 95.9 | 60.0 | 100 | 100 | 75.0 | 100 | 93.6 | 75.0 | 93.5 | 100 | 80.0 | 100 | 95.5 | 94.7 |
| Trucks | 0 | 3 | 0 | 3 | 1 | 0 | 0 | 1 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 6 |
| \% Trucks | 0 | 0.6 | 0 | 0.6 | 10.0 | 0 | 0 | 6.3 | 0 | 0.7 | 0 | 0.7 | 0 | 0 | 0 | 0 | 0.7 |
| Buses | 0 | 18 | 1 | 19 | 3 | 0 | 0 | 3 | 0 | 16 | 1 | 17 | 0 | 1 | 0 | 1 | 40 |
| \% Buses | 0 | 3.6 | 4.3 | 3.5 | 30.0 | 0 | 0 | 18.8 | 0 | 5.7 | 25.0 | 5.8 | 0 | 20.0 | 0 | 4.5 | 4.6 |

# Bergmann Associates 

200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey \& Selye
Site Code : 0
Start Date : 3/26/2014
Page No : 3


Peak Hour Analysis From 04:45 PM to 05:30 PM - Peak 1 of 1
Peak Hour for Entire Intersection Begins at 04:45 PM

| k Hour for | In | rsectio |  | 04:4 | 5 |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 04:45 PM | 3 | 127 | 5 | 135 | 5 | 2 | 1 | 8 | 2 | 133 | 0 | 135 | 0 | 1 | 1 | 2 | 280 |
| 05:00 PM | 2 | 118 | 4 | 124 | 4 | 3 | 0 | 7 | 2 | 140 | 3 | 145 | 1 | 1 | 2 | 4 | 280 |
| 05:15 PM | 3 | 107 | 9 | 119 | 6 | 1 |  | 8 | 4 | 149 | 3 | 156 | 2 | 0 | 5 | 7 | 290 |
| 05:30 PM | 7 | 108 | 4 | 119 | 4 | 3 | 2 | 9 | 1 | 135 | 2 | 138 | 2 | 0 | 6 | 8 | 274 |
| Total Volume | 15 | 460 | 22 | 497 | 19 | 9 | 4 | 32 | 9 | 557 | 8 | 574 | 5 | 2 | 14 | 21 | 1124 |
| \% App. Total | 3 | 92.6 | 4.4 |  | 59.4 | 28.1 | 12.5 |  | 1.6 | 97 | 1.4 |  | 23.8 | 9.5 | 66.7 |  |  |
| PHF | . 536 | . 906 | . 611 | . 920 | . 792 | . 750 | . 500 | . 889 | . 563 | . 935 | . 667 | . 920 | . 625 | 500 | . 583 | . 656 | . 969 |
| Cars | 15 | 439 | 22 | 476 | 19 | 8 | 4 | 31 | 9 | 540 | 8 | 557 | 5 | 2 | 14 | 21 | 1085 |
| \% Cars | 100 | 95.4 | 100 | 95.8 | 100 | 88.9 | 100 | 96.9 | 100 | 96.9 | 100 | 97.0 | 100 | 100 | 100 | 100 | 96.5 |
| Trucks | 0 | 8 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 0 | 0 | 0 | 12 |
| \% Trucks | 0 | 1.7 | 0 | 1.6 | 0 | 0 | 0 | 0 | 0 | 0.7 | 0 | 0.7 | 0 | 0 | 0 | 0 | 1.1 |
| Buses | 0 | 13 | 0 | 13 | 0 | 1 | 0 | 1 | 0 | 13 | 0 | 13 | 0 | 0 | 0 | 0 | 27 |
| \% Buses | 0 | 2.8 | 0 | 2.6 | 0 | 11.1 | 0 | 3.1 | 0 | 2.3 | 0 | 2.3 | 0 | 0 | 0 | 0 | 2.4 |

## Bergmann Associates

200 First Federal Plaza
28 East Main Street
Rochester, NY 14614

Dewey Ave/Driving Park Ave Intersection
PIN 4755.55
Turning Movement Counts

File Name : 14-03-26 Dewey \& Selye
Site Code : 0
Start Date : 3/26/2014
Page No : 4



## LEGEND:

## City of Rochester

Department of
Environmental Services
Dewey Ave / Driving Park Ave
Intersection Realignment Project
P.I.N. 4755.55

Exhibit 2.3.1.6. (1) - 1
2014 Existing
Peak Hour Turning Movements

| SHEET NO. | SCALE | DATE | B Berg mann |
| :---: | :---: | :---: | :---: |
| 1 | No Scale | $04 / 14$ | Basociates |



| ID Numbe | Case Numbe | Date | Location if Intersection | sec | rsection Na | Severity | Light | Character | Surf Cond. | Weather | Impact | Factort | Comments |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 | 33539972 | 8132010 | EB on Driving Park 200' of Dewey Ave | D | Price Rite | 0 Property Damage Only | 1 Daylight | Straight and Level | 1 Dry | 1 Clear | Rear End | eaction to Other Uninvolved Veh | quickly V1 struck V2, Stop cause by car turning into parking lot |
| 30 | 33767127 | 21012011 | SB on Dewey at Driving Park (Parking Lot) | D | Family Dollar | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | $1{ }^{\text {D }}$ ry | ${ }^{1}$ Clear | Right Angle | Driver InatentionDISistraction | SB V2 struck by V1 coming out of parking lot |
| 32 | 33770304 |  | Dewey | D | Family Dollar | 1 lijury | 1 Daylight | 1 Straight and Level | 2 Wet | 2 Cloudy | Rear End | Following to closely | NB V2 Stopped struck by NB V1 |
| 51 | ${ }^{33961798}$ | 7/1822011 | Dewey 100' Nof Driving Park | D | Family Dollar | 1 Non-Reportable | 1 Daylight | 1 Straight and Level | 2 Wet | 2 Cloudy | Right Angle | Failure to Y Yeld R Rightot-way | EB V1 exiting Family Dollar turning left on Dewey struck |
| 61 | 34041185 | 72011 | Driving Park at PriceRite | D | Price Rite | Iniury | Dayight | 1 Straight and Level | 1 Dry | 1 Clear | Left $T$ | View Obstructed / Limited | WB V1 turn left in front of V2. V1 attempting to enter |
| 66 | 34098089 | 11/1612011 | Dewey $100^{\prime} \mathrm{N}$ of Driving Park | D | Family Dollar | -1 Non-Reporable | 4 Dark-Road Lighted | 1 Straight and Level | 1 Dry | 1 Clear | Right Angle |  | SB V1 struck V2 exiting parking lot |
| 69 | 34116688 | 12112011 | Dewey $30^{\circ}$ N of Driving Park | D | Family Dollar | -1 Non-Reportable | 1 Daylight | 1 Straight and Level | 1 Dry | 1 Clear | Right Angle | Failure to Yield Right-o-way | V2 struck by V1 coming out of parking lo |
| ${ }^{73}$ | 34145659 | ${ }^{12123212011}$ | Diving Park $50^{\circ}$ E of Finch Street | D | Price Rite | 0 Property Damage Only | 4 Dark-Road Lighted | 1 Straight and Level | 1 Dry | 1 Clear | Right Angle | View Obstructed/Limited | WB V1 struck by V2 exting parking lot |
| 108 | 343688182 | $7 / 1612012$ | Diving Park at Dewey | D | Family Dollar | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | 1 Dry | 1 Clear | Right Angle | Failure to Yield Right-of-way | SB V2 struck by V1 exiting parking lot |
| ${ }_{1}^{16}$ | ${ }_{3}^{33401062}$ | 3/25/2010 | Dewey Ave 500' Nof Divivin Park | $\stackrel{N}{N}$ |  | $\frac{1}{1 \text { Injury }}$ | $\frac{1 \text { Daylight }}{1 \text { Dayight }}$ | 1 Striaht and Level | $1{ }^{1}$ Dry | $\frac{2 \text { cloudy }}{1 \text { Clear }}$ | $\underset{\text { Rear End }}{\substack{\text { Sideswipe }}}$ | Following to clisely | V1 stuck stopped SB V2 which struck SB |
| 25 | ${ }^{33708246}$ | ${ }^{12662010}$ | WB on Driving Park at Dewey | N |  | 1 Injury | 1 Daylight | 1 Straight and Level | Snowl/ | ${ }^{4}$ Snow | Rear End | Following to closely | WB V2 hit brakes WB V1 struck V2 |
| 29 | 33731623 | 1/12/2011 | Dewey at Selye | N | Selye | 1 Non-Reportable | 1 Daylight | Straight | 4 Snow |  | Rear | Pavement Slippery | SB V2 struck by V1 |
| 34 | 33777340 | 221712011 | NB on Dewey 200 to f Lexington | N |  | Property Damage Only | 3 Dusk | Straight and Level | 1 Dry | ${ }_{1}^{1}$ Clear | Rear End | ver Inattentionolistraction | fop for traticic, V2 was stopping. V1 tailed to stop hititing |
| 36 | 33883784 | 3/8/2011 | Driving Park 15' 'rom Dewey | N |  | 0 Property Damage Only | aylight | 1 Straight and Level | 1 Dry | 1 Clear | Rear End | Following to closely | d "suddenly" or emerg veh |
| 39 | ${ }^{338843760}$ | 4/15/2011 | SB Dewey 100 'trom Driving Park | N |  |  | 1 Daylight | 1 Straight and Level | 1 Dry | ${ }^{1} \mathrm{Cl}$ Cear | Right Angle | Ilure to Yield R Right-of-w | going striaght V1 exting parking lot struck V2 |
| ${ }_{46}^{46}$ | 33922094 33920874 | ${ }^{6 / 2222011} 5$ | Divivig Park 20 Feet E of Finch | N |  | -1 Non-Reporable | 1 Daylight | 1 Straight and Level | $\frac{1}{10}$ | $\frac{2 \text { cloudy }}{1 \text { Claar }}$ | Obiect | Obstruction Debris | EB V1 was struck by tree branch |
| 48 | 33930874 | 533120011 | Dewey 250' Sof orving Park | N |  | 1 lnjury | 1 Daylight | Straight and Level | 1 Dry | ${ }_{1}^{1}$ Clear | Pedestrian | Passing or Lane Usage Improper | NB V1 passed RTS Bus stuck pedesstrian |
| 55 56 | 34021063 34026882 | ${ }^{9 / 1822011} 9$ |  | N |  | ${ }_{\text {O Property Damage Only }}^{1 / 1 \text { Non-Reporatale }}$ | $\frac{4 \text { Dark-Road Lighted }}{1 \text { Daylight }}$ | 1 Straight and Level | $\frac{1 \text { Dry }}{1 \text { Dry }}$ | ${ }_{1}^{1} 1$ Clear ${ }^{\text {Clar }}$ | Overraking Right Angle | Driver InatentionDisistraction | WB V1 struck parked V2 |
| 68 | 34113961 | ${ }^{11 / 27 / 2011}$ | Driving Park $200^{\circ}$ E of Dewey | N |  | 0 Property Damage Only | 4 Dak-Road Lighted | 1 Straight and Level | 1 Dry | 1 Clear | Sideswipe | Passing or Lane Usage Improper | EBV2 sidesswiped by V1 |
| 72 | ${ }^{34143133}$ | 1212012011 | Driving Park 50' W of Dewey | N |  | ${ }^{-1}$ Non-Reportable | 3 Dusk | 1 Straight and Level | 1 Dry | 1 Clear | Overtaking | Driver Inattention / Distraction | WB V2 struck by V1 |
| 75 | 34151276 | 12123212011 | Diviving Park $50^{\circ}$ E off Finch Street | N |  | 0 Property Damage Only | 4 Dark-Road Lighted | Straight and Level | $2 \mathrm{Wet}^{\text {et }}$ | 3 Rain | Overtaking | Passing or Lane Usage Improper | WB V1 struck parked V2 |
| 85 | 34225874 | 38812012 | Driving Park $100^{\prime} \mathrm{W}$ of Dewey | N |  |  | 3 Dusk | Straight and Level | 2 Wet | ${ }^{3}$ Rain |  |  | EB V1 struck pedestrian that ran out from between parked C |
| 102 | 34321379 | 5/31/2012 | Dewey Avenue $55^{\circ}$ North of Diving Park | N |  | 1 Non-Reportable | 1 Dayight | Straight and Level | 1 Dry | ${ }_{1}^{1}$ Clear | Rear End | Driver Inatention/ Distraction | NB V3 rearended V2 which rearended |
| ${ }_{113}$ | 34366838 3443982 | ${ }^{771512012} 9$ | Diving Park 50. Wof Dewey | N |  | 0 Property Damage only | 4 Dark-Road Lighted | mioht and | I Dry | Ciar | Rear End | Driver Inatention / Distraction |  |
| 117 | ${ }^{33457142}$ | 10/22012 | Dewey $100{ }^{\prime}$ N of of Diving Park | N |  | trary | 1 Daylight | 1 Straight and Level | 2Wet | 2 Cloudy |  | Passing or Lane Usagel Improer |  |
| 134 | 34681335 | 226612013 | Dewey 150' Nof Driving Park | N |  | -1 Non-Reporabale | 1 Daylight | 1 Straight and Level | 1 Dry | ${ }_{1}$ Clear | Rear End | Driver I Iattention/ D Distraction | $V_{2}$ stopoed and was struck by SB |
| ${ }^{137}$ | NR2975763 | 6/3/2010 | Driving Park 40' of Finch | N |  | -1 Non-Reportable | 4 Dak-Road Lighted | 1 Straight and Level | 2 Wet | 3 Rain | Sideswipe | Passing or Lane Usage Improper | WB Parked V2 sideswiped by passing V1 |
| 139 | NR3106927 | $3 / 42011$ | Dewey at Lexington | N |  | -1 Non-Reportable | 1 Daylight | 1 Straight and Level | 1 Dry | 2 Cloudy | Rear End | Following too Closely |  |
| ${ }^{3}$ | ${ }^{33413273}$ | 45512010 | WB on Diviving Park at Dewey | Y | Dewey/Driving | 1 Ijury | 1 Daylight | 1 Straight and Level | 1 Dry | ${ }_{1}^{1}$ Clear | Rear End | Following to closely | WB V1 turning right stopped abrutly due to Ped WB V2 turning right struck |
| 4 | 33437579 | $5 / 312010$ | WB on Driving Park at Finch | Y | Finch | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | 1 Dry | ${ }_{1} 1$ Clear | Rear End | Following to closely | $V 2$ stopped behind uninvolved veh in front turining left WB $V 1$ vailed to stop struck |
| ${ }_{14}^{11}$ | 33540593 <br> 3352450 | ${ }^{7 / 2882010} 8$ | WB on Divivin Park at Finch | r | Finch | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | $1{ }^{1} \mathrm{Dry}$ | ${ }_{1}^{1 \text { Clear }}$ | Rear End | Driver InatentionDisitraction | WB V2 stopped quickl V1 struck V2 |
| ${ }_{14}^{18}$ | ${ }^{33552450} 3$ | ${ }^{8173122010}$ | WB on Din Dewey atar Selve Tery | Y | $\frac{\text { Dewey }{ }^{\text {Soriving }} \text { Selve }}{\text { S }}$ | ${ }_{0}{ }^{\text {a }}$ Property Diury Damage Only | 1 Daylight | 1 Straight and Level Level | $1{ }^{\text {cory }}$ | ${ }^{2}$ Clioudy | ${ }_{\text {Peigestranl }}$ |  | WB V V turning lett on Dewey striking pedestrian |
| 27 | 33709176 | 12123/2010 | WB on Diviving Park at Dewey | Y | Dewey Diviving | ${ }^{-1}$ Non-Reportable | 4 Dark-Road Lighted | Straight and Level | 1 Dry | ${ }^{1}$ Clear | Rear E | Following to closely | WB V2 stopped for trafic V1 rearended V2 |
|  | 16228 | 282010 | NB on Dewey at Selye Terr | Y |  | 0 Property Damage Only | Dark-Road | raight and Level | 2 Wet | 2 Cloudy | Right Angle | Failure to Yield Right of Way | SB V2 struck by V1 |
| 31 | 33769234 | 12124/2010 | Dewey at Selye | Y | Selye | 0 Property Damage Only | 4 Dark-Road Lighted | 1 Straight and Level | 2 Wet | 0 Other | Right A |  |  |
| 33 | 33770480 | 1/442011 | EB Divivg Park at Dewey | Y | Dewey/Driving | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | 2 Wet | 1 Clear | Rear End | Driver InatentionDISistraction | EB V1 stopped struck by EB V2 |
| 49 | ${ }^{339550760}$ | ${ }^{61822011}$ | Driving Park 20' ${ }^{\circ}$ of Dewey | Y | Dewey/Driving | 1 1niury | 1 Daylight | 1 Straight and Level | $1{ }^{\text {D }}$ ry | ${ }_{1}^{1 \text { Clear }}$ | Sidesswipe | Passing or Lane Usage Improper | V2 Stopped in No Standing Zone V1 went around struck ?? |
| 50 | 33954786 | 7/142011 | Driving Park at Dewey | Y | DeweylDriving | 1 1 niury | 1 Daylight | 1 Straight and Level | 1 Dry | 1 Clear | Pedestrian | Driver InatentionDistraction | WB Pedestrian crossing Dewey - struck by V turning right onto Driw |
| 58 59 | 34037759 <br> 34037265 | $1013 / 2011$ <br> $103 / 2011$ | Diving Park at Dewey | r | DeweyDiviving |  | 4 Darar-Road Lighted | 1 Straight and Level | $1{ }^{1} \mathrm{Dry}$ | ${ }^{1}{ }^{\text {Cliarar }}$ | Right Angle | Passing or Lane Usage Improe |  |
| 60 | 34037420 | 9/282011 | Driving Park at Broezel St. | $Y$ | Brozel | -1 Non-Reportable | 4 Dark-Road Lighted | 1 Straight and Level | 2 Wet | 3 Rain | Right Angle | Backing Unsaiely | WB V2 a ti light V1 backing out of sidestreet struck V2 |
| 63 | 34056288 | 10111/2011 | Dewey at Driving Park | Y | ewey ${ }^{\text {Drivin }}$ | -1 Non-Reportable | 1 Daylight | Straight and | 1 Dry |  | Rear End | View Obstructed /Limited | SB V2 stopped V1 rearended |
| 64 | 34071834 | 9/19/2011 | Dewey at Selye |  |  | 1 Iniury | 1 Daylight | Straight an | 1 Dry | ${ }_{1}$ Clear | Right Angle |  | EB V1 turning onto Dewey struck V |
| 76 | 34156464 | 1/2/2012 | Dewey $5^{\prime}$ N of Selye |  | Selye | -1 Non-Reporable | 1 Daylight | Straigh and Level | 1 Dry | ${ }_{1}{ }^{\text {Cliaar }}$ | Right Angle | Driver Inattention / Distraction | NB V2 struck by V1 |
| 81 | 34198580 | 28812012 | Driving Park at Broezel St. | Y | Brozel | -1 Non-Reportable | ylight | 1 Straight and Level | 1 Dry | 1 Clear | Overtaking | Passing or Lane Usage Improper | WB V2 stopped then decided to turn lett V1 merged out to turn left stricking V2 |
| ${ }_{83}^{86}$ | 34212070 <br> 3220355 | ${ }^{2 / 21 / 2012}$ | Dewey at Diving Park | Y | Dewey ${ }^{\text {diving }}$ | 1 niury | 4 Dark-Road Lighted | 1 Straight and Level | $1{ }^{1} \mathrm{Dry}$ | ${ }^{1 \text { Clear }}$ | ${ }_{\text {Pedestrian }}$ | Driver Inattentionjisitraction | WB V1 turning left on Dewey stiking pedestrian |
| 89 | ${ }_{3}{ }^{342545596}$ | $4{ }^{4 / 32012}$ | $\frac{\text { Diving Park a doweybiving Park }}{\text { Driving Park at Dewey }}$ | Y | Deweybiving | $\frac{-1 \text { Non-Reporatale }}{-1 \text { Neporable }}$ | 1 1 Daylight | 1 Straight and Level | $1{ }^{\text {d }}$ Dry | 1 Clear | Left Turn | Diver Inatention Oistraction | Opposite Direction - WB V1 turning let with green arrow V1/ stricking EB V2 |
| 93 | 34266939 | 1/1912012 | Dewey at Driving Park | Y | Dewey ${ }^{\text {diving }}$ | 0 Property Damage Only | 4 Dark-Road Lighted | Straight and Level | 4 Snowlce | 4 Snow | Left Turn |  | V1 turring onto Dewey struck by V2 |
| 99 | 34297176 | 5/312012 | Driving Park at Dewey | Y | Dewey/Driving | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | 1 Dry | 2 Cloudy | Overaking | Unsafe Lane Changing | merging into traftic from median struck |
| $\begin{array}{r}100 \\ \hline 109\end{array}$ | ${ }^{34306608}$ | 5/15/2012 | Dewey at Selye Terr | Y | Selye | -1 Non-Reporatale | 1 Daylight | 1 Striaght and Level | 1 Dry | 1 Clear | Rear End | Accelerator Defective | $\frac{\text { SB V1 stopped rearended by }}{\text { SB }}$ V2 |
| 112 | ${ }_{34414456}$ | 826612012 | Drivign Park $100^{\prime}$ W of Dewey | Y | Dewey ${ }^{\text {Soriving }}$ | -1 Non-Reporable | 1 Daylight | 1 Straight and Level | 1 Dry | ${ }^{1}$ Clear | Right Angle | Driver Inataention D Disistraction | EB V2 struck by V1 exiexting parking lot |
| 114 | 34441784 | 9/3/2012 | Dewey at Dewey Ave Driving Park | Y | Dewey Driving | -1 Non-Reportable | 1 Daylight | Straight and Level | 2 Wet | ${ }^{2}$ Cloudy | Left Turn | Other Vehicular | EB V1 struck by V2 turring left |
| 115 | 34443499 | 9/1512012 | Dewey at Dewey Ave Diviving Park | Y | Dewey Diviving | 0 Property Damage Only | 1 Daylight | 1 Straight and Level | 1 Dry | 2 Cloudy | Right Turn | View Obstructed /Limited |  |
| 116 | 34447878 | 9/1/2012 | Dewey at Diving Park |  | Dewey Driving | -1 Non-Reporatale | 1 Dayl | Straight and Level | 1 Dry | ${ }_{1} 1$ Clear | Rear End | Driver Inattention / Distraction | SB V2 rearended by SB V1 |
| ${ }^{118}$ | 3445623 <br> 3475275 | ${ }^{812012012}$ | Driving Park at Dewey | Y | Dewey Sioriving | 1 Injury | I Daylight | 1 Straight and Level | I Dry | T Clear | Right Angle |  | WBV struck E V2 |
| ${ }_{126}$ | ${ }_{34561817}$ | ${ }_{12 / 282012}$ | Divewey a selye | Y | Selye | In inury | 1 Daylight | 1 Straight and Level |  | ${ }_{\text {3 }}$ Clear | $\frac{\text { Right Angle }}{\text { Rear End }}$ | Driver Inatention/Distraction |  |
| 127 | 34561885 | 12422012 | Driving Park at Finch | Y |  | 1 lijury | 1 Daylight | 1 Straight and Level | 1 Dry | 2 Cloudy | Rear End | Following to closely | WB V2 struck WB V1 |
| 129 | 34581280 | 1211712012 | Dewey at Selye | Y | Selye | Non-Reportable | 1 Daylight | 1 Straight and Level | 1 Dry | 2 Cloudy | Rear End | ver Inattention / Distraction | SB V2 struck by SB V1 |




| Intersection | Approach | Movement | 2038 No-Build |  |  |  | 2038 No-Build - EB Blocked Lane |  |  |  | 2038 Alternative 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Delay (sec/veh) | LOS | Turning Movement Volumes | Total Delay (hr) | Delay (sec/veh) | LOS | Turning Movement Volumes | Total Delay (hr) | $\begin{gathered} \text { Delay } \\ \text { (sec/veh) } \end{gathered}$ | LOS | Turning Movement Volumes | Total Delay (hr) |
| Dewey Avenue and Driving Park Avenue (WEST) | Eastbound | Thru | 28.8 | C | 215 | 1.72 | 29.3 | C | 215 | 1.75 |  |  |  |  |
|  |  | Right | 8.2 | A | 92 | 0.21 | 8.2 | A | 92 | 0.21 |  |  |  |  |
|  |  | Approach | 22.6 | C |  |  | 23.0 | C |  |  |  |  |  |  |
|  | Westbound | Left | 19.4 | B | 348 | 1.88 | 19.3 | B | 348 | 1.87 |  |  |  |  |
|  |  | Thru | 8.4 | A | 298 | 0.70 | 8.4 | A | 298 | 0.70 |  |  |  |  |
|  |  | Approach | 14.3 | B |  |  | 14.3 | B |  |  |  |  |  |  |
|  | Northbound | Left | 20.5 | C | 26 | 0.15 | 20.5 | C | 26 | 0.15 |  |  |  |  |
|  |  | Right | 9.8 | A | 271 | 0.74 | 11.4 | B | 271 | 0.86 |  |  |  |  |
|  |  | Approach | 10.7 | B |  |  | 10.5 | B |  |  |  |  |  |  |
|  | Overall |  | 15.5 | B |  | 5.39 | 15.7 | B |  | 5.53 |  |  |  |  |
| Dewey Avenue and Driving Park Avenue / Broezel Street (EAST) | Eastbound | Left | 17.3 | B | 286 | 1.37 |  |  |  |  |  |  |  |  |
|  |  | Left/Thru/Right |  |  |  |  | 41.1 | D | 486 | 5.55 |  |  |  |  |
|  |  | Thru/Right | 8.4 | A | 200 | 0.47 |  |  |  |  |  |  |  |  |
|  |  | Approach | 13.6 | B |  |  | 41.1 | D |  |  |  |  |  |  |
|  | Westbound | Left/Thru | 36.0 | D | 299 | 2.99 | 37.5 | D | 299 | 3.11 |  |  |  |  |
|  |  | Right | 7.4 | A | 87 | 0.18 | 7.4 | A | 87 | 0.18 |  |  |  |  |
|  |  | Approach | 29.5 | C |  |  | 30.7 | C |  |  |  |  |  |  |
|  | Southbound | Left/Thru | 55.0 | E | 289 | 4.42 | 55.0 | E | 289 | 4.42 |  |  |  |  |
|  |  | Right | 11.5 | B | 371 | 1.19 | 11.5 | B | 371 | 1.19 |  |  |  |  |
|  |  | Approach | 30.6 | C |  |  | 30.6 | C |  |  |  |  |  |  |
|  | Overall |  | 24.9 | C |  | 10.61 | 34.0 | C |  | 14.44 |  |  |  |  |
| Dewey Avenue and Driving Park Avenue | Eastbound | Left |  |  |  |  |  |  |  |  | 26.1 | C | 56 | 0.41 |
|  |  | Thru/Right |  |  |  |  |  |  |  |  | 26.2 | C | 251 | 1.83 |
|  |  | Approach |  |  |  |  |  |  |  |  | 26.2 | C |  |  |
|  | Westbound | Left |  |  |  |  |  |  |  |  | 24.2 | C | 33 | 0.22 |
|  |  | Thru |  |  |  |  |  |  |  |  | 28.3 | C | 242 | 1.90 |
|  |  | Right |  |  |  |  |  |  |  |  | 0.9 | A | 87 | 0.02 |
|  |  | Approach |  |  |  |  |  |  |  |  | 21.3 | C |  |  |
|  | Northbound | Left |  |  |  |  |  |  |  |  | 41.0 | D | 26 | 0.30 |
|  |  | Thru/Right |  |  |  |  |  |  |  |  | 34.3 | C | 271 | 2.58 |
|  |  | Approach |  |  |  |  |  |  |  |  | 34.9 | C |  |  |
|  | Southbound | Left |  |  |  |  |  |  |  |  | 19.1 | B | 289 | 1.53 |
|  |  | Thru/Right |  |  |  |  |  |  |  |  | 20.3 | C | 371 | 2.09 |
|  |  | Approach |  |  |  |  |  |  |  |  | 19.8 | B |  |  |
|  | Overall |  |  |  |  |  |  |  |  |  | 24.1 | C |  | 10.88 |
| Driving Park Avenue and Broezel Street | Westbound | Left/Thru |  |  |  |  |  |  |  |  | 5 | A | 386 | 0.54 |
|  |  | Approach |  |  |  |  |  |  |  |  |  |  |  | 0.54 |
| AM Peak Hour Total |  |  |  |  |  | 16.00 |  |  |  | 19.97 |  |  |  | 11.42 |

PM Peak Hour


Notes:

1. Approach level of service assumed due to lack of available data from Synchro. Vehicle delay is approximated from SimTraffic microsimulation and HCS analysis

## PEDESTRIAN FACILITY DESIGN

## Exhibit 18-1 Pedestrian Generator Checklist

P.I.N.: 4755.55

Project Location: Dewey Avenue - Driving Park Avenue Intersection Realignment Project, City of Rochester

## PEDESTRIAN GENERATOR CHECKLIST

Note: The term "generator" in this document refers to both p3destrian generators (where pedestrians originate) and destinations (where pedestrians travel to).
A check of "yes" indicates a potential need to accommodate pedestrians and coordination with the Regional Bicycle and Pedestrian Coordinator is necessary during project scoping. Answers to the following questions should be checked with the local municipality to ensure accuracy.

| 1. | Is there an existing or planned sidewalk, trail, or pedestrian-crossing facility? | YES $\boxtimes$ NO $\square$ |
| :---: | :--- | :--- |
| 2. | Are there bus stops, transit stations or depots/terminals located in or within 800 m of the <br> project area? | YES $\boxtimes$ NO $\square$ |
| 3. | Is there more than occasional pedestrian activity? Evidence of pedestrian activity may <br> include a worn path. | YES $\boxtimes$ NO $\square$ |
| 4.Are there existing or approved plans for generators of pedestrian activity in or within 800 <br> m of the project that promote or have the potential to promote pedestrian traffic in the <br> project area, such as schools, parks, playgrounds, places of employment, places of <br> worship, post offices, municipal buildings, restaurants, shopping centers, or other <br> commercial areas, or shared-use paths? | YES $\boxtimes$ NO $\square$ |  |
| 5. | Are there existing or approved plans for seasonal generators of pedestrian activity in or <br> within 800 m of the project that promote or have the potential to promote pedestrian <br> traffic in the project area, such as ski resorts, state parks, camps, amusement parks? | YES $\square$ NO $\boxtimes$ |
| 6. | Is the project located in a residential area within 800 m of existing or planned pedestrian <br> generators such as those listed in 4 above? | YES $\boxtimes$ NO $\square$ |
| 7. | From record plans, were pedestrian facilities removed during a previous highway <br> reconstruction project? | YES $\square$ NO $\boxtimes$ |
| 8. | Did a study of secondary impacts indicate that the project promotes or is likely to <br> promote commercial and/or residential development within the intended life cycle of the <br> project? | YES $\square$ NO $\boxtimes$ |
| 9. | Does the community's comprehensive plan call for development of pedestrian facilities in <br> the area? | YES $\boxtimes$ NO $\square$ |
|  | Based on the ability of students to walk and bicycle to school, would the project benefit <br> from engineering measures under the Safe-Routes-To-School program? <br> Eligible infrastructure-related improvements must be within a 3.2 km radius of the project. | YES $\boxtimes$ NO $\square$ |
| 10 $\square$ |  |  |

Note: This checklist should be revisited due to a project delay or if site conditions or local planning changes during the project development process.

Comments: 800 m equates to approximately $1 / 2$ mile, 3.2 km equates to approximately 2 miles 2 - Numerous RTS bus stops within / adjacent to the project limits
6 - Residental neighborhoods and apartment buildings located within / adjacent to the project limits
8 - Corridor is already "built out" with commercial / residental development

Regional Bicycle and Pedestrian Coordinator: Bruce Cunningham (Bicycle Issues) (518)-272-4831, or Jon Harman (Pedestrian Issues) (585)-272-3358

Project Designer: Michael T. Croce, P.E., Bergmann Associates

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\emptyset 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{*}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 159 | 72 | 274 | 176 | 20 | 213 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.535 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 927 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 87 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 192 | 87 | 330 | 212 | 24 | 257 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 192 | 87 | 330 | 212 | 24 | 257 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



## Intersection Summary

Area Type:
Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 13.8
Intersection LOS: B
Intersection Capacity Utilization 48.5\%
ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 192 | 87 | 330 | 212 | 24 | 257 |  |
| Lane Group Flow (vph) | 0.36 | 0.18 | 0.59 | 0.24 | 0.03 | 0.28 |  |
| v/c Ratio | 26.4 | 6.7 | 15.0 | 8.1 | 17.6 | 8.8 |  |
| Control Delay | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.0 |  |
| Queue Delay | 26.4 | 6.7 | 15.3 | 8.7 | 17.6 | 8.8 |  |
| Total Delay | 84 | 0 | 70 | 43 | 8 | 61 |  |
| Queue Length 50th (ft) | 129 | 28 | 77 | 51 | 23 | 90 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (ft) | 539 | 487 | 763 | 1097 | 694 | 916 |  |
| Base Capacity (vph) | 0 | 0 | 109 | 564 | 0 | 0 |  |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 46 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.36 | 0.18 | 0.50 | 0.40 | 0.03 | 0.30 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^1]|  | 4 | $\rightarrow$ |  | 7 | $4$ |  | 4 | $\dagger$ |  | , | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{7}$ | 4 |  |  | 4 | 「 |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 225 | 143 | 4 | 19 | 158 | 68 | 0 | 0 | 0 | 183 | 45 | 292 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.996 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.995 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (prot) | 1646 | 1726 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Flt Permitted | 0.504 |  |  |  | 0.959 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (perm) | 873 | 1726 | 0 | 0 | 1662 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 3 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 271 | 172 | 5 | 23 | 190 | 82 | 0 | 0 | 0 | 220 | 54 | 352 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 271 | 177 | 0 | 0 | 213 | 82 | 0 | 0 | 0 | 0 | 274 | 352 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group $\quad ø 2 \quad \varnothing 7 \quad ø 8$ |
| :--- |
| Lanefonfigurations |
| Volume (vph) |
| Ideal Flow (vphpl) |
| Lane Width (ft) |
| Storage Length (ft) |
| Storage Lanes |
| Taper Length (ft) |
| Lane Util. Factor |
| Frt |
| Flt Protected |
| Satd. Flow (prot) |
| FIt Permitted |
| Satd. Flow (perm) |
| Right Turn on Red |
| Satd. Flow (RTOR) |
| Link Speed (mph) |
| Link Distance (ft) |
| Travel Time (s) |
| Peak Hour Factor |
| Heavy Vehicles (\%) |
| Adj. Flow (vph) |
| Shared Lane Traffic (\%) |
| Lane Group Flow (vph) |
| Enter Blocked Intersection |
| Lane Alignment |
| Median Width(ft) |
| Link Offset(ft) |
| Crosswalk Width(ft) |
| Two way Left Turn Lane |
| Headway Factor |
| Turning Speed (mph) |
| Number of Detectors |
| Detector Template |
| Leading Detector (ft) |
| Trailing Detector ( ft$)$ |
| Detector 1 Position(ft) |
| Detector 1 Size(ft) |
| Detector 1 Type |
| Detector 1 Channel |
| Detector 1 Extend (s) |
| Detector 1 Queue (s) |
| Detector 1 Delay (s) |
| Turn Type |
| Protected Phases |
| Permitted Phases |
| Detector Phase |
| Switch Phase |
| Minimum Initial (s) |


|  | $\stackrel{ }{*}$ |  |  |  |  |  |  | 4 | 7 | $\checkmark$ | $\frac{1}{7}$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) | 60.3 | 63.3 |  |  | 28.0 | 26.0 |  |  |  |  | 18.2 | 56.0 |
| Actuated g/C Ratio | 0.67 | 0.70 |  |  | 0.31 | 0.29 |  |  |  |  | 0.20 | 0.62 |
| v/c Ratio | 0.31 | 0.15 |  |  | 0.41 | 0.17 |  |  |  |  | 0.79 | 0.38 |
| Control Delay | 8.1 | 6.7 |  |  | 27.5 | 4.9 |  |  |  |  | 49.9 | 10.0 |
| Queue Delay | 0.6 | 0.8 |  |  | 0.1 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 8.7 | 7.5 |  |  | 27.6 | 4.9 |  |  |  |  | 49.9 | 10.0 |
| LOS | A | A |  |  | C | A |  |  |  |  | D | A |
| Approach Delay |  | 8.2 |  |  | 21.3 |  |  |  |  |  | 27.4 |  |
| Approach LOS |  | A |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 19.8
Intersection LOS: B
Intersection Capacity Utilization 46.2\% ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | 4 | $\rightarrow$ | $\leftarrow$ | 4 | $\downarrow$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 271 | 177 | 213 | 82 | 274 | 352 |
| v/c Ratio | 0.31 | 0.15 | 0.41 | 0.17 | 0.79 | 0.38 |
| Control Delay | 8.1 | 6.7 | 27.5 | 4.9 | 49.9 | 10.0 |
| Queue Delay | 0.6 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Delay | 8.7 | 7.5 | 27.6 | 4.9 | 49.9 | 10.0 |
| Queue Length 50th (tt) | 61 | 38 | 95 | 0 | 148 | 90 |
| Queue Length 95th (ft) | 94 | 63 | 144 | 20 | 198 | 128 |
| Internal Link Dist (tt) |  | 100 | 851 |  | 584 |  |
| Turn Bay Length (tt) | 75 |  |  | 75 |  | 275 |
| Base Capacity (vph) | 862 | 1214 | 517 | 494 | 449 | 913 |
| Starvation Cap Reductn | 293 | 790 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 14 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.48 | 0.42 | 0.42 | 0.17 | 0.61 | 0.39 |

Intersection Summary

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\emptyset 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{*}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 159 | 72 | 274 | 176 | 20 | 213 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.535 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 927 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 87 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 192 | 87 | 330 | 212 | 24 | 257 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 192 | 87 | 330 | 212 | 24 | 257 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



## Intersection Summary

Area Type:
Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: $3(3 \%)$, Referenced to phase 2:EBT and $6:$ WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 13.8
Intersection LOS: B
Intersection Capacity Utilization 48.5\%
ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 192 | 87 | 330 | 212 | 24 | 257 |  |
| Lane Group Flow (vph) | 0.36 | 0.18 | 0.59 | 0.24 | 0.03 | 0.28 |  |
| v/c Ratio | 26.4 | 6.7 | 14.9 | 8.1 | 17.6 | 8.8 |  |
| Control Delay | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.2 |  |
| Queue Delay | 26.4 | 6.7 | 15.2 | 8.7 | 17.6 | 9.0 |  |
| Total Delay | 84 | 0 | 70 | 43 | 8 | 61 |  |
| Queue Length 50th (ft) | 129 | 28 | 78 | 51 | 23 | 90 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (ft) | 539 | 487 | 763 | 1097 | 694 | 916 |  |
| Base Capacity (vph) | 0 | 0 | 109 | 564 | 0 | 0 |  |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 229 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.36 | 0.18 | 0.50 | 0.40 | 0.03 | 0.37 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^2]|  | $\rangle$ |  |  |  |  |  |  | $\dagger$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | $\uparrow$ | ${ }^{7}$ |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 225 | 143 | 4 | 19 | 158 | 68 | 0 | 0 | 0 | 183 | 45 | 292 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (t) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (tt) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Fit |  | 0.998 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected |  | 0.971 |  |  | 0.995 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (prot) | 0 | 1679 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Flt Permitted |  | 0.568 |  |  | 0.930 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (perm) | 0 | 982 | 0 | 0 | 1611 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 1 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (tt) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 271 | 172 | 5 | 23 | 190 | 82 | 0 | 0 | 0 | 220 | 54 | 352 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 448 | 0 | 0 | 213 | 82 | 0 | 0 | 0 | 0 | 274 | 352 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(tt) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(t) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group ø2 ¢7 ø8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane**onfigurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(t) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
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|  | 4 |  |  |  |  |  | - | $\uparrow$ | 7 | $\checkmark$ | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) |  | 60.3 |  |  | 28.0 | 26.0 |  |  |  |  | 18.2 | 56.0 |
| Actuated g/C Ratio |  | 0.67 |  |  | 0.31 | 0.29 |  |  |  |  | 0.20 | 0.62 |
| v/c Ratio |  | 0.49 |  |  | 0.43 | 0.17 |  |  |  |  | 0.79 | 0.38 |
| Control Delay |  | 10.7 |  |  | 27.8 | 4.9 |  |  |  |  | 49.9 | 10.0 |
| Queue Delay |  | 0.8 |  |  | 0.1 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 11.5 |  |  | 27.9 | 4.9 |  |  |  |  | 49.9 | 10.0 |
| LOS |  | B |  |  | C | A |  |  |  |  | D | A |
| Approach Delay |  | 11.5 |  |  | 21.5 |  |  |  |  |  | 27.4 |  |
| Approach LOS |  | B |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

## Area Type: <br> Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.79
Intersection Signal Delay: 20.9
Intersection LOS: C
Intersection Capacity Utilization 54.0\% ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |



[^3]


Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 213 | 55 | 294 | 276 | 53 | 423 |  |
| Lane Group Flow (vph) | 0.40 | 0.12 | 0.45 | 0.28 | 0.09 | 0.46 |  |
| v/c Ratio | 29.9 | 8.9 | 9.4 | 6.0 | 25.0 | 11.6 |  |
| Control Delay | 0.0 | 0.0 | 0.3 | 0.5 | 0.0 | 0.5 |  |
| Queue Delay | 29.9 | 8.9 | 9.7 | 6.5 | 25.0 | 12.1 |  |
| Total Delay | 106 | 1 | 50 | 46 | 22 | 128 |  |
| Queue Length 50th (ft) | 172 | 30 | 53 | 49 | 57 | 196 |  |
| Queue Length 95th (ft) | 172 |  |  |  |  |  |  |
| Internal Link Dist (ft) | 385 |  |  | 100 | 461 |  |  |
| Turn Bay Length (ft) |  | 75 | 75 |  | 200 |  |  |
| Base Capacity (vph) | 537 | 464 | 891 | 1247 | 595 | 927 |  |
| Starvation Cap Reductn | 0 | 0 | 209 | 596 | 0 | 0 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 193 |  |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Reduced v/c Ratio | 0.40 | 0.12 | 0.43 | 0.42 | 0.09 | 0.58 |  |

[^4]|  | 4 | $\rightarrow$ | $\checkmark$ | 7 |  | 4 | $4$ | 4 | \% |  | $\ddagger$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{*}$ | 4 |  |  | 4 | 7 |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 407 | 182 | 9 | 25 | 220 | 167 | 0 | 0 | 0 | 118 | 30 | 315 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.993 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 1646 | 1721 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted | 0.427 |  |  |  | 0.955 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 740 | 1721 | 0 | 0 | 1655 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 7 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 433 | 194 | 10 | 27 | 234 | 178 | 0 | 0 | 0 | 126 | 32 | 335 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 433 | 204 | 0 | 0 | 261 | 178 | 0 | 0 | 0 | 0 | 158 | 335 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group $\quad ø 2 \quad \varnothing 7 \quad ø 8$ |
| :--- |
| Lanefonfigurations |
| Volume (vph) |
| Ideal Flow (vphpl) |
| Lane Width (ft) |
| Storage Length (ft) |
| Storage Lanes |
| Taper Length (ft) |
| Lane Util. Factor |
| Frt |
| Flt Protected |
| Satd. Flow (prot) |
| FIt Permitted |
| Satd. Flow (perm) |
| Right Turn on Red |
| Satd. Flow (RTOR) |
| Link Speed (mph) |
| Link Distance (ft) |
| Travel Time (s) |
| Peak Hour Factor |
| Heavy Vehicles (\%) |
| Adj. Flow (vph) |
| Shared Lane Traffic (\%) |
| Lane Group Flow (vph) |
| Enter Blocked Intersection |
| Lane Alignment |
| Median Width(ft) |
| Link Offset(ft) |
| Crosswalk Width(ft) |
| Two way Left Turn Lane |
| Headway Factor |
| Turning Speed (mph) |
| Number of Detectors |
| Detector Template |
| Leading Detector (ft) |
| Trailing Detector ( ft$)$ |
| Detector 1 Position(ft) |
| Detector 1 Size(ft) |
| Detector 1 Type |
| Detector 1 Channel |
| Detector 1 Extend (s) |
| Detector 1 Queue (s) |
| Detector 1 Delay (s) |
| Turn Type |
| Protected Phases |
| Permitted Phases |
| Detector Phase |
| Switch Phase |
| Minimum Initial (s) |


|  | 4 |  |  |  |  |  |  | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) | 73.3 | 76.3 |  |  | 31.0 | 29.0 |  |  |  |  | 15.2 | 63.0 |
| Actuated g/C Ratio | 0.73 | 0.76 |  |  | 0.31 | 0.29 |  |  |  |  | 0.15 | 0.63 |
| v/c Ratio | 0.47 | 0.16 |  |  | 0.51 | 0.34 |  |  |  |  | 0.61 | 0.36 |
| Control Delay | 8.6 | 4.8 |  |  | 32.5 | 9.0 |  |  |  |  | 49.0 | 10.2 |
| Queue Delay | 0.8 | 0.9 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 9.4 | 5.7 |  |  | 32.5 | 9.0 |  |  |  |  | 49.0 | 10.2 |
| LOS | A | A |  |  | C | A |  |  |  |  | D | B |
| Approach Delay |  | 8.2 |  |  | 23.0 |  |  |  |  |  | 22.7 |  |
| Approach LOS |  | A |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 16.9
Intersection LOS: B
Intersection Capacity Utilization 54.9\% ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |



[^5]| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\varnothing 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{4}$ | 4 | ${ }^{7}$ | 「 |  |  |  |
| Volume (vph) | 200 | 52 | 276 | 259 | 50 | 398 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.496 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 859 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 52 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 213 | 55 | 294 | 276 | 53 | 423 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 213 | 55 | 294 | 276 | 53 | 423 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 213 | 55 | 294 | 276 | 53 | 423 |  |
| Lane Group Flow (vph) | 0.40 | 0.12 | 0.45 | 0.28 | 0.09 | 0.46 |  |
| v/c Ratio | 29.9 | 8.9 | 9.2 | 6.0 | 25.0 | 11.6 |  |
| Control Delay | 0.0 | 0.0 | 0.3 | 0.5 | 0.0 | 0.9 |  |
| Queue Delay | 29.9 | 8.9 | 9.5 | 6.5 | 25.0 | 12.5 |  |
| Total Delay | 106 | 1 | 51 | 46 | 22 | 128 |  |
| Queue Length 50th (ft) | 172 | 30 | 53 | 49 | 57 | 196 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) | 385 |  |  |  |  |  |  |
| Turn Bay Length (ft) |  | 75 | 75 |  | 200 |  |  |
| Base Capacity (vph) | 537 | 464 | 891 | 1247 | 595 | 927 |  |
| Starvation Cap Reductn | 0 | 0 | 214 | 606 | 0 | 0 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 258 |  |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Reduced v/c Ratio | 0.40 | 0.12 | 0.43 | 0.43 | 0.09 | 0.63 |  |

[^6]|  | $\stackrel{ }{*}$ |  |  |  |  |  | 4 | $\uparrow$ | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | 个 | F |  |  |  |  | $\uparrow$ | F |
| Volume (vph) | 407 | 182 | 9 | 25 | 220 | 167 | 0 | 0 | 0 | 118 | 30 | 315 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (t) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (tt) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Utill. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.998 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected |  | 0.967 |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 0 | 1672 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted |  | 0.464 |  |  | 0.905 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 0 | 802 | 0 | 0 | 1568 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 2 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 433 | 194 | 10 | 27 | 234 | 178 | 0 | 0 | 0 | 126 | 32 | 335 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 637 | 0 | 0 | 261 | 178 | 0 | 0 | 0 | 0 | 158 | 335 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | $\mathrm{pt}+0 \mathrm{~V}$ |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | - |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $\emptyset 2$ | ¢7 | $\varnothing 8$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(t) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
| 7/10/2014 2014 Existing PM - EB Blocked Bergmann Associates |  |  |  | Synchro 8 Repor Page 5 |


|  | $\rangle$ |  |  |  |  |  |  | 4 |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Effct Green (s) |  | 73.3 |  |  | 31.0 | 29.0 |  |  |  |  | 15.2 | 63.0 |
| Actuated g/C Ratio |  | 0.73 |  |  | 0.31 | 0.29 |  |  |  |  | 0.15 | 0.63 |
| v/c Ratio |  | 0.67 |  |  | 0.54 | 0.34 |  |  |  |  | 0.61 | 0.36 |
| Control Delay |  | 13.9 |  |  | 33.5 | 9.0 |  |  |  |  | 49.0 | 10.2 |
| Queue Delay |  | 0.8 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 14.7 |  |  | 33.5 | 9.0 |  |  |  |  | 49.0 | 10.2 |
| LOS |  | B |  |  | C | A |  |  |  |  | D | B |
| Approach Delay |  | 14.7 |  |  | 23.6 |  |  |  |  |  | 22.7 |  |
| Approach LOS |  | B |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

## Area Type: <br> Other

Cycle Length: 100
Actuated Cycle Length: 100
Offset: $0(0 \%)$, Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.67
Intersection Signal Delay: 19.7
Intersection LOS: B
Intersection Capacity Utilization 65.0\% ICU Level of Service C
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | $\rightarrow$ | $4$ | 4 |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 637 | 261 | 178 | 158 | 335 |
| v/c Ratio | 0.67 | 0.54 | 0.34 | 0.61 | 0.36 |
| Control Delay | 13.9 | 33.5 | 9.0 | 49.0 | 10.2 |
| Queue Delay | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 14.7 | 33.5 | 9.0 | 49.0 | 10.2 |
| Queue Length 50th (ft) | 196 | 137 | 14 | 95 | 93 |
| Queue Length 95th (ft) | 332 | 218 | 66 | 154 | 146 |
| Internal Link Dist (tt) | 100 | 851 |  | 584 |  |
| Turn Bay Length ( t ) |  |  | 75 |  | 275 |
| Base Capacity (vph) | 957 | 486 | 531 | 336 | 923 |
| Starvation Cap Reductn | 112 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.75 | 0.54 | 0.34 | 0.47 | 0.36 |

[^7]| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\emptyset 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{*}$ | 4 | ${ }^{*}$ | 「 |  |  |  |
| Volume (vph) | 176 | 75 | 285 | 244 | 21 | 222 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.505 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 875 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 90 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 212 | 90 | 343 | 294 | 25 | 267 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 212 | 90 | 343 | 294 | 25 | 267 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



## Intersection Summary

Area Type:
Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 13.6
Intersection LOS: B
Intersection Capacity Utilization 49.1\%
ICU Level of Service A
Analysis Period (min) 15


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 212 | 90 | 343 | 294 | 25 | 267 |  |
| Lane Group Flow (vph) | 0.39 | 0.18 | 0.62 | 0.33 | 0.04 | 0.29 |  |
| v/c Ratio | 27.0 | 6.5 | 14.6 | 7.6 | 18.0 | 8.9 |  |
| Control Delay | 0.0 | 0.0 | 0.4 | 0.7 | 0.0 | 0.0 |  |
| Queue Delay | 27.0 | 6.5 | 15.0 | 8.3 | 18.0 | 8.9 |  |
| Total Delay | 94 | 0 | 59 | 49 | 8 | 64 |  |
| Queue Length 50th (tt) | 142 | 28 | 70 | 60 | 24 | 94 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (tt) | 539 | 489 | 747 | 1097 | 685 | 916 |  |
| Base Capacity (vph) | 0 | 0 | 106 | 504 | 0 | 0 |  |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 49 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.39 | 0.18 | 0.54 | 0.50 | 0.04 | 0.31 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^8]|  | 4 | $\rightarrow$ |  | 7 | $4$ |  | 4 | $\dagger$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{1}$ | 4 |  |  | 4 | 「 |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 234 | 160 | 4 | 20 | 225 | 71 | 0 | 0 | 0 | 190 | 47 | 304 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.996 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.996 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 1646 | 1726 | 0 | 0 | 1726 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted | 0.387 |  |  |  | 0.966 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 671 | 1726 | 0 | 0 | 1674 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 3 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 282 | 193 | 5 | 24 | 271 | 86 | 0 | 0 | 0 | 229 | 57 | 366 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 282 | 198 | 0 | 0 | 295 | 86 | 0 | 0 | 0 | 0 | 286 | 366 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |



|  | 4 |  |  |  |  |  |  | $\uparrow$ | $p$ | $\checkmark$ | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) | 59.8 | 62.8 |  |  | 28.0 | 26.0 |  |  |  |  | 18.7 | 56.0 |
| Actuated g/C Ratio | 0.66 | 0.70 |  |  | 0.31 | 0.29 |  |  |  |  | 0.21 | 0.62 |
| v/c Ratio | 0.36 | 0.16 |  |  | 0.57 | 0.17 |  |  |  |  | 0.80 | 0.40 |
| Control Delay | 9.1 | 6.7 |  |  | 31.1 | 5.4 |  |  |  |  | 50.4 | 10.2 |
| Queue Delay | 0.8 | 0.8 |  |  | 0.1 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 9.9 | 7.6 |  |  | 31.1 | 5.4 |  |  |  |  | 50.4 | 10.2 |
| LOS | A | A |  |  | C | A |  |  |  |  | D | B |
| Approach Delay |  | 9.0 |  |  | 25.3 |  |  |  |  |  | 27.8 |  |
| Approach LOS |  | A |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 21.2
Intersection LOS: C
Intersection Capacity Utilization 50.2\% ICU Level of Service A
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | 4 | $\rightarrow$ | $\leftarrow$ | 4 | $\downarrow$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 282 | 198 | 295 | 86 | 286 | 366 |
| v/c Ratio | 0.36 | 0.16 | 0.57 | 0.17 | 0.80 | 0.40 |
| Control Delay | 9.1 | 6.7 | 31.1 | 5.4 | 50.4 | 10.2 |
| Queue Delay | 0.8 | 0.8 | 0.1 | 0.0 | 0.0 | 0.0 |
| Total Delay | 9.9 | 7.6 | 31.1 | 5.4 | 50.4 | 10.2 |
| Queue Length 50th (tt) | 63 | 42 | 139 | 0 | 154 | 95 |
| Queue Length 95th (ft) | 95 | 68 | 200 | 23 | 207 | 134 |
| Internal Link Dist (tt) |  | 100 | 851 |  | 584 |  |
| Turn Bay Length (tt) | 75 |  |  | 75 |  | 275 |
| Base Capacity (vph) | 791 | 1206 | 520 | 494 | 450 | 911 |
| Starvation Cap Reductn | 268 | 755 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 6 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.54 | 0.44 | 0.57 | 0.17 | 0.64 | 0.40 |

[^9]| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\emptyset 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{*}$ | 4 | ${ }^{*}$ | 「 |  |  |  |
| Volume (vph) | 176 | 75 | 285 | 244 | 21 | 222 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.505 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 875 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 90 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 212 | 90 | 343 | 294 | 25 | 267 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 212 | 90 | 343 | 294 | 25 | 267 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



Splits and Phases: 1101: Dewey (South) \& Driving Park



[^10]|  | 4 |  |  |  |  |  |  | $\uparrow$ |  |  | $\downarrow$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | 个 | 7 |  |  |  |  | $\hat{\uparrow}$ | F |
| Volume (vph) | 234 | 160 | 4 | 20 | 225 | 71 | 0 | 0 | 0 | 190 | 47 | 304 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (t) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (t) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (t) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Utill. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.999 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| FIt Protected |  | 0.971 |  |  | 0.996 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 0 | 1681 | 0 | 0 | 1726 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted |  | 0.445 |  |  | 0.942 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 0 | 770 | 0 | 0 | 1632 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 1 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 282 | 193 | 5 | 24 | 271 | 86 | 0 | 0 | 0 | 229 | 57 | 366 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 480 | 0 | 0 | 295 | 86 | 0 | 0 | 0 | 0 | 286 | 366 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial ( s ) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $ø 2$ | $\varnothing 7$ | $\emptyset 8$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (ft) |  |  |  |  |
| Storage Length (ft) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (ft) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (ft) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(ft) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(ft) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (ft) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(ft) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
| 5/28/2014 2018 No-Build AM - EB Parked Cars |  |  |  | Synchro 8 Report Page 5 |


|  | 4 |  |  |  |  | 4 |  | $\uparrow$ |  | , | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Effct Green (s) |  | 59.8 |  |  | 28.0 | 26.0 |  |  |  |  | 18.7 | 56.0 |
| Actuated g/C Ratio |  | 0.66 |  |  | 0.31 | 0.29 |  |  |  |  | 0.21 | 0.62 |
| v/c Ratio |  | 0.58 |  |  | 0.58 | 0.17 |  |  |  |  | 0.80 | 0.40 |
| Control Delay |  | 15.0 |  |  | 31.6 | 5.4 |  |  |  |  | 50.4 | 10.2 |
| Queue Delay |  | 1.7 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 16.7 |  |  | 31.6 | 5.4 |  |  |  |  | 50.4 | 10.2 |
| LOS |  | B |  |  | C | A |  |  |  |  | D | B |
| Approach Delay |  | 16.7 |  |  | 25.7 |  |  |  |  |  | 27.8 |  |
| Approach LOS |  | B |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.80
Intersection Signal Delay: 23.8 Intersection LOS: C
Intersection Capacity Utilization 58.8\% ICU Level of Service B
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |



[^11]| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\varnothing 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{4}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 254 | 54 | 287 | 282 | 52 | 414 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.415 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 719 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 43 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 270 | 57 | 305 | 300 | 55 | 440 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 270 | 57 | 305 | 300 | 55 | 440 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
|  | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group | 270 | 57 | 305 | 300 | 55 | 440 |
| Lane Group Flow (vph) | 0.50 | 0.12 | 0.48 | 0.29 | 0.09 | 0.47 |
| V/c Ratio | 32.2 | 11.9 | 10.8 | 5.7 | 25.9 | 11.9 |
| Control Delay | 0.0 | 0.0 | 0.4 | 0.6 | 0.0 | 0.6 |
| Queue Delay | 32.2 | 11.9 | 11.2 | 6.3 | 25.9 | 12.5 |
| Total Delay | 140 | 6 | 50 | 49 | 23 | 135 |
| Queue Length 50th (ft) | 220 | 36 | 50 | 49 | 60 | 207 |
| Queee Length 95th (ft) | 385 |  |  | 100 | 461 |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |
| Turn Bay Length (ft) | 537 | 457 | 848 | 1247 | 580 | 926 |
| Base Capacity (vph) | 0 | 0 | 205 | 597 | 0 | 0 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 207 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0.50 | 0.12 | 0.47 | 0.46 | 0.09 | 0.61 |

[^12]|  | 4 | $\rightarrow$ |  | 7 | $4$ | 4 | $4$ | $\dagger$ |  | , | $\dagger$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{7}$ | 4 |  |  | 4 | F |  |  |  |  | $\uparrow$ | 7 |
| Volume (vph) | 424 | 235 | 9 | 26 | 241 | 174 | 0 | 0 | 0 | 123 | 31 | 328 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.994 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 1646 | 1722 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted | 0.395 |  |  |  | 0.951 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 684 | 1722 | 0 | 0 | 1648 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 5 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 451 | 250 | 10 | 28 | 256 | 185 | 0 | 0 | 0 | 131 | 33 | 349 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 451 | 260 | 0 | 0 | 284 | 185 | 0 | 0 | 0 | 0 | 164 | 349 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $\varnothing 2$ | 67 | $\varnothing 8$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Utili. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(tt) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(ft) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
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|  | 4 |  |  |  |  |  |  | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) | 72.9 | 75.9 |  |  | 31.0 | 29.0 |  |  |  |  | 15.6 | 63.0 |
| Actuated g/C Ratio | 0.73 | 0.76 |  |  | 0.31 | 0.29 |  |  |  |  | 0.16 | 0.63 |
| v/c Ratio | 0.50 | 0.20 |  |  | 0.56 | 0.35 |  |  |  |  | 0.61 | 0.38 |
| Control Delay | 9.9 | 4.9 |  |  | 33.8 | 9.6 |  |  |  |  | 48.8 | 10.4 |
| Queue Delay | 1.1 | 0.9 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 11.0 | 5.8 |  |  | 33.8 | 9.6 |  |  |  |  | 48.8 | 10.4 |
| LOS | B | A |  |  | C | A |  |  |  |  | D | B |
| Approach Delay |  | 9.1 |  |  | 24.2 |  |  |  |  |  | 22.7 |  |
| Approach LOS |  | A |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

## Area Type: <br> Other

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.61
Intersection Signal Delay: 17.4
Intersection Capacity Utilization 57.3\%
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |



[^13]


Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 270 | 57 | 305 | 300 | 55 | 440 |  |
| Lane Group Flow (vph) | 0.50 | 0.12 | 0.48 | 0.29 | 0.09 | 0.47 |  |
| v/c Ratio | 32.2 | 11.9 | 10.6 | 5.7 | 25.9 | 11.9 |  |
| Control Delay | 0.5 | 0.0 | 0.4 | 0.6 | 0.0 | 1.4 |  |
| Queue Delay | 32.7 | 11.9 | 11.0 | 6.3 | 25.9 | 13.3 |  |
| Total Delay | 140 | 6 | 50 | 49 | 23 | 135 |  |
| Queue Length 50th (ft) | 220 | 36 | 50 | 49 | 60 | 207 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (ft) | 537 | 457 | 848 | 1247 | 580 | 926 |  |
| Base Capacity (vph) | 0 | 0 | 206 | 607 | 0 | 0 |  |
| Starvation Cap Reductn | 68 | 0 | 0 | 0 | 0 | 292 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.58 | 0.12 | 0.48 | 0.47 | 0.09 | 0.69 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^14]|  | $\rangle$ |  |  |  |  |  |  |  |  |  | $\downarrow$ | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | $\uparrow$ | 「 |  |  |  |  | $\uparrow$ | F |
| Volume (vph) | 424 | 235 | 9 | 26 | 241 | 174 | 0 | 0 | 0 | 123 | 31 | 328 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length ( t ) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Utill. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Fit |  | 0.998 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected |  | 0.969 |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 0 | 1676 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted |  | 0.441 |  |  | 0.899 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 0 | 763 | 0 | 0 | 1558 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 2 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 451 | 250 | 10 | 28 | 256 | 185 | 0 | 0 | 0 | 131 | 33 | 349 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 711 | 0 | 0 | 284 | 185 | 0 | 0 | 0 | 0 | 164 | 349 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(tt) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  | Cl+Ex | Cl+Ex | Cl+Ex |  |  |  | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial ( s ) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group ø2 ¢7 ø8 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane**onfigurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(tt) |  |  |  |  |
| Detector 1 Size(tt) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
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|  | 4 |  |  |  |  |  |  | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) |  | 72.9 |  |  | 31.0 | 29.0 |  |  |  |  | 15.6 | 63.0 |
| Actuated g/C Ratio |  | 0.73 |  |  | 0.31 | 0.29 |  |  |  |  | 0.16 | 0.63 |
| v/c Ratio |  | 0.76 |  |  | 0.59 | 0.35 |  |  |  |  | 0.61 | 0.38 |
| Control Delay |  | 19.9 |  |  | 35.1 | 9.6 |  |  |  |  | 48.8 | 10.4 |
| Queue Delay |  | 1.5 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 21.4 |  |  | 35.1 | 9.6 |  |  |  |  | 48.8 | 10.4 |
| LOS |  | C |  |  | D | A |  |  |  |  | D | B |
| Approach Delay |  | 21.4 |  |  | 25.0 |  |  |  |  |  | 22.7 |  |
| Approach LOS |  | C |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

## Area Type: <br> Other

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 22.8
Intersection Capacity Utilization 70.2\%
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | $\rightarrow$ | $\leftarrow$ | 4 |  | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 711 | 284 | 185 | 164 | 349 |
| v/c Ratio | 0.76 | 0.59 | 0.35 | 0.61 | 0.38 |
| Control Delay | 19.9 | 35.1 | 9.6 | 48.8 | 10.4 |
| Queue Delay | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 21.4 | 35.1 | 9.6 | 48.8 | 10.4 |
| Queue Length 50th (ft) | 262 | 152 | 18 | 98 | 99 |
| Queue Length 95th (ft) | \#427 | 239 | 71 | 159 | 154 |
| Internal Link Dist (tt) | 100 | 851 |  | 584 |  |
| Turn Bay Length (tt) |  |  | 75 |  | 275 |
| Base Capacity (vph) | 939 | 482 | 531 | 336 | 921 |
| Starvation Cap Reductn | 95 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.84 | 0.59 | 0.35 | 0.49 | 0.38 |

## Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.




|  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
|  | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group | 259 | 111 | 419 | 359 | 31 | 327 |
| Lane Group Flow (vph) | 0.48 | 0.23 | 0.73 | 0.38 | 0.05 | 0.36 |
| V/c Ratio | 28.8 | 8.2 | 18.4 | 7.1 | 20.5 | 9.6 |
| Control Delay | 0.0 | 0.0 | 1.0 | 1.3 | 0.0 | 0.2 |
| Queue Delay | 28.8 | 8.2 | 19.4 | 8.4 | 20.5 | 9.8 |
| Total Delay | 118 | 6 | 75 | 62 | 11 | 82 |
| Queue Length 50th (ft) | 173 | 37 | 79 | 67 | 31 | 117 |
| Queee Length 95th (ft) | 385 |  |  | 100 | 461 |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |
| Turn Bay Length (ft) | 539 | 493 | 711 | 1097 | 630 | 916 |
| Base Capacity (vph) | 0 | 0 | 113 | 521 | 0 | 0 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 139 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0.48 | 0.23 | 0.70 | 0.62 | 0.05 | 0.42 |

[^15]|  | 4 |  |  | $\bigcirc$ |  |  | 4 | $\dagger$ | 7 |  | $\ddagger$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{*}$ | 4 |  |  | + | 「 |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 286 | 195 | 5 | 24 | 275 | 87 | 0 | 0 | 0 | 232 | 57 | 371 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.996 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.996 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (prot) | 1646 | 1726 | 0 | 0 | 1726 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Flt Permitted | 0.298 |  |  |  | 0.961 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (perm) | 516 | 1726 | 0 | 0 | 1665 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 3 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 345 | 235 | 6 | 29 | 331 | 105 | 0 | 0 | 0 | 280 | 69 | 447 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 345 | 241 | 0 | 0 | 360 | 105 | 0 | 0 | 0 | 0 | 349 | 447 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |



|  | $\stackrel{ }{*}$ |  |  |  |  | 4 |  | $\uparrow$ | 7 | $\checkmark$ | $\frac{1}{7}$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) | 57.4 | 60.4 |  |  | 28.0 | 26.0 |  |  |  |  | 21.1 | 56.0 |
| Actuated g/C Ratio | 0.64 | 0.67 |  |  | 0.31 | 0.29 |  |  |  |  | 0.23 | 0.62 |
| $\mathrm{v} / \mathrm{c}$ Ratio | 0.49 | 0.21 |  |  | 0.69 | 0.21 |  |  |  |  | 0.87 | 0.49 |
| Control Delay | 15.4 | 7.5 |  |  | 35.6 | 7.4 |  |  |  |  | 55.0 | 11.5 |
| Queue Delay | 1.9 | 0.9 |  |  | 0.4 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 17.3 | 8.4 |  |  | 36.0 | 7.4 |  |  |  |  | 55.0 | 11.5 |
| LOS | B | A |  |  | D | A |  |  |  |  | D | B |
| Approach Delay |  | 13.6 |  |  | 29.5 |  |  |  |  |  | 30.6 |  |
| Approach LOS |  | B |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 24.9 Intersection LOS: C
Intersection Capacity Utilization 58.7\% ICU Level of Service B
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | $\rangle$ |  | $\leftarrow$ | 4 |  | $\checkmark$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 345 | 241 | 360 | 105 | 349 | 447 |
| v/c Ratio | 0.49 | 0.21 | 0.69 | 0.21 | 0.87 | 0.49 |
| Control Delay | 15.4 | 7.5 | 35.6 | 7.4 | 55.0 | 11.5 |
| Queue Delay | 1.9 | 0.9 | 0.4 | 0.0 | 0.0 | 0.0 |
| Total Delay | 17.3 | 8.4 | 36.0 | 7.4 | 55.0 | 11.5 |
| Queue Length 50th (tt) | 91 | 56 | 179 | 3 | 186 | 125 |
| Queue Length 95th (ft) | 153 | 81 | 249 | 34 | \#258 | 173 |
| Internal Link Dist (tt) |  | 100 | 851 |  | 584 |  |
| Turn Bay Length ( t ) | 75 |  |  | 75 |  | 275 |
| Base Capacity (vph) | 699 | 1160 | 518 | 494 | 449 | 908 |
| Starvation Cap Reductn | 213 | 664 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 18 | 0 | 0 | 21 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.71 | 0.49 | 0.72 | 0.21 | 0.78 | 0.50 |
| Intersection Summary |  |  |  |  |  |  |
| \# 95th percentile volume exceeds capacity, queue may be longer.Queue shown is maximum after two cycles. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |


| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\emptyset 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{*}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 215 | 92 | 348 | 298 | 26 | 271 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.437 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 757 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 96 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 259 | 111 | 419 | 359 | 31 | 327 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 259 | 111 | 419 | 359 | 31 | 327 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



## Intersection Summary

Area Type:
Other
Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 15.7
Intersection LOS: B
Intersection Capacity Utilization 53.9\%
ICU Level of Service A
Analysis Period (min) 15


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| EBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 259 | 111 | 419 | 359 | 31 | 327 |  |
| Lane Group Flow (vph) | 0.48 | 0.23 | 0.73 | 0.38 | 0.05 | 0.36 |  |
| v/c Ratio | 28.8 | 8.2 | 18.3 | 7.1 | 20.5 | 9.6 |  |
| Control Delay | 0.5 | 0.0 | 1.0 | 1.4 | 0.0 | 0.9 |  |
| Queue Delay | 29.3 | 8.2 | 19.3 | 8.4 | 20.5 | 10.5 |  |
| Total Delay | 118 | 6 | 75 | 62 | 11 | 82 |  |
| Queue Length 50th (ft) | 173 | 37 | 79 | 67 | 31 | 117 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (ft) | 539 | 493 | 711 | 1097 | 630 | 916 |  |
| Base Capacity (vph) | 0 | 0 | 113 | 527 | 0 | 0 |  |
| Starvation Cap Reductn | 72 | 0 | 0 | 0 | 0 | 342 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.55 | 0.23 | 0.70 | 0.63 | 0.05 | 0.57 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^16]|  | 4 | $\rightarrow$ |  | 7 |  | 4 | $4$ | $\dagger$ | \% | ( | $\dagger$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | 4 | F |  |  |  |  | $\uparrow$ | 7 |
| Volume (vph) | 286 | 195 | 5 | 24 | 275 | 87 | 0 | 0 | 0 | 232 | 57 | 371 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.999 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected |  | 0.971 |  |  | 0.996 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (prot) | 0 | 1681 | 0 | 0 | 1726 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Flt Permitted |  | 0.349 |  |  | 0.931 |  |  |  |  |  | 0.961 |  |
| Satd. Flow (perm) | 0 | 604 | 0 | 0 | 1613 | 1473 | 0 | 0 | 0 | 0 | 1723 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 1 |  |  |  | 97 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 345 | 235 | 6 | 29 | 331 | 105 | 0 | 0 | 0 | 280 | 69 | 447 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 586 | 0 | 0 | 360 | 105 | 0 | 0 | 0 | 0 | 349 | 447 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $ø 2$ | $\varnothing 7$ | $\emptyset 8$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (ft) |  |  |  |  |
| Storage Length (ft) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (ft) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (ft) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(ft) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(ft) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (ft) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(ft) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
| 5/28/2014 2038 No-Build AM - EB Parked Cars |  |  |  | Synchro 8 Report Page 5 |


|  | 4 |  |  |  |  |  | - | $\uparrow$ | 7 | $\checkmark$ | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 30.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 29.0 | 29.0 |  |
| Total Split (\%) | 33.3\% |  |  | 34.4\% | 34.4\% | 34.4\% |  |  |  | 32.2\% | 32.2\% |  |
| Maximum Green (s) | 24.5 |  |  | 25.0 | 25.0 | 25.0 |  |  |  | 23.5 | 23.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) |  | 57.4 |  |  | 28.0 | 26.0 |  |  |  |  | 21.1 | 56.0 |
| Actuated g/C Ratio |  | 0.64 |  |  | 0.31 | 0.29 |  |  |  |  | 0.23 | 0.62 |
| v/c Ratio |  | 0.80 |  |  | 0.72 | 0.21 |  |  |  |  | 0.87 | 0.49 |
| Control Delay |  | 28.9 |  |  | 37.1 | 7.4 |  |  |  |  | 55.0 | 11.5 |
| Queue Delay |  | 12.3 |  |  | 0.4 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 41.1 |  |  | 37.5 | 7.4 |  |  |  |  | 55.0 | 11.5 |
| LOS |  | D |  |  | D | A |  |  |  |  | D | B |
| Approach Delay |  | 41.1 |  |  | 30.7 |  |  |  |  |  | 30.6 |  |
| Approach LOS |  | D |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other

Cycle Length: 90
Actuated Cycle Length: 90
Offset: 3 (3\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.87
Intersection Signal Delay: 34.0
Intersection LOS: C
Intersection Capacity Utilization 69.3\% ICU Level of Service C
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 31.0 | 29.0 | 30.0 |
| Total Split (\%) | $34 \%$ | $32 \%$ | $33 \%$ |
| Maximum Green (s) | 25.0 | 23.5 | 24.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | $\rightarrow$ |  | 4 | $\dagger$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 586 | 360 | 105 | 349 | 447 |
| v/c Ratio | 0.80 | 0.72 | 0.21 | 0.87 | 0.49 |
| Control Delay | 28.9 | 37.1 | 7.4 | 55.0 | 11.5 |
| Queue Delay | 12.3 | 0.4 | 0.0 | 0.0 | 0.0 |
| Total Delay | 41.1 | 37.5 | 7.4 | 55.0 | 11.5 |
| Queue Length 50th (ft) | 225 | 180 | 3 | 186 | 125 |
| Queue Length 95th (ft) | \#309 | 252 | 34 | \#258 | 173 |
| Internal Link Dist (ft) | 100 | 851 |  | 584 |  |
| Turn Bay Length (ft) |  |  | 75 |  | 275 |
| Base Capacity (vph) | 737 | 501 | 494 | 449 | 908 |
| Starvation Cap Reductn | 136 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 16 | 0 | 0 | 21 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.98 | 0.74 | 0.21 | 0.78 | 0.50 |

## Intersection Summary

\# 95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\varnothing 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{4}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 310 | 66 | 350 | 344 | 63 | 505 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.332 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 575 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 43 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 330 | 70 | 372 | 366 | 67 | 537 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 330 | 70 | 372 | 366 | 67 | 537 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |  |
| LBT | EBR | WBL | WBT | NBL | NBR |  |  |
| Lane Group | 330 | 70 | 372 | 366 | 67 | 537 |  |
| Lane Group Flow (vph) | 0.61 | 0.15 | 0.56 | 0.33 | 0.14 | 0.58 |  |
| v/c Ratio | 35.3 | 13.7 | 12.6 | 4.6 | 29.9 | 13.9 |  |
| Control Delay | 0.0 | 0.0 | 1.2 | 1.0 | 0.0 | 9.1 |  |
| Queue Delay | 35.3 | 13.7 | 13.7 | 5.7 | 29.9 | 23.1 |  |
| Total Delay | 178 | 12 | 57 | 50 | 31 | 182 |  |
| Queue Length 50th (ft) | 272 | 46 | 84 | 53 | 72 | 279 |  |
| Queue Length 95th (ft) | 385 |  |  | 100 | 461 |  |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |  |
| Turn Bay Length (ft) | 537 | 457 | 803 | 1247 | 496 | 924 |  |
| Base Capacity (vph) | 0 | 0 | 231 | 624 | 0 | 0 |  |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 349 |  |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Storage Cap Reductn | 0.61 | 0.15 | 0.65 | 0.59 | 0.14 | 0.93 |  |
| Reduced v/c Ratio |  |  |  |  |  |  |  |

[^17]|  | 4 |  | 1 | 7 |  |  | $4$ | 4 | \% |  | $\ddagger$ | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ${ }^{1}$ | 4 |  |  | 4 | F゙ |  |  |  |  | $\uparrow$ | 「 |
| Volume (vph) | 517 | 287 | 11 | 32 | 294 | 212 | 0 | 0 | 0 | 150 | 38 | 400 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (ft) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (ft) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 1 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (ft) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.994 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected | 0.950 |  |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 1646 | 1722 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted | 0.308 |  |  |  | 0.942 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 534 | 1722 | 0 | 0 | 1632 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 5 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 550 | 305 | 12 | 34 | 313 | 226 | 0 | 0 | 0 | 160 | 40 | 426 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 550 | 317 | 0 | 0 | 347 | 226 | 0 | 0 | 0 | 0 | 200 | 426 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(ft) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 0 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 19 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 0 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $\varnothing 2$ | $\emptyset 7$ | ø8 |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Utili. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(tt) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(ft) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
| 7/10/2014 2038 No-Build PM Bergmann Associates |  |  |  | Synchro 8 Report Page 5 |


|  | 4 |  |  |  |  | 4 | 4 | $\uparrow$ | $p$ | $\downarrow$ | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | -2.5 |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) | 3.0 |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Effict Green (s) | 71.0 | 74.0 |  |  | 31.0 | 29.0 |  |  |  |  | 17.5 | 63.0 |
| Actuated g/C Ratio | 0.71 | 0.74 |  |  | 0.31 | 0.29 |  |  |  |  | 0.18 | 0.63 |
| v/c Ratio | 0.67 | 0.25 |  |  | 0.69 | 0.43 |  |  |  |  | 0.66 | 0.46 |
| Control Delay | 17.9 | 5.2 |  |  | 38.5 | 13.3 |  |  |  |  | 49.3 | 11.6 |
| Queue Delay | 5.2 | 1.3 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay | 23.2 | 6.5 |  |  | 38.5 | 13.3 |  |  |  |  | 49.3 | 11.6 |
| LOS | C | A |  |  | D | B |  |  |  |  | D | B |
| Approach Delay |  | 17.0 |  |  | 28.6 |  |  |  |  |  | 23.7 |  |
| Approach LOS |  | B |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 85
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 0.69
Intersection Signal Delay: 22.2
Intersection LOS: C
Intersection Capacity Utilization 67.4\% ICU Level of Service C
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |



[^18]| Lane Group | EBT | EBR | WBL | WBT | NBL | NBR | $ø 3$ | $\varnothing 4$ | $ø 6$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | 4 | 「 | ${ }^{4}$ | 4 | ${ }^{1}$ | 「 |  |  |  |
| Volume (vph) | 310 | 66 | 350 | 344 | 63 | 505 |  |  |  |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |  |  |  |
| Lane Width (ft) | 11 | 11 | 11 | 11 | 11 | 11 |  |  |  |
| Storage Length (ft) |  | 75 | 75 |  | 200 | 0 |  |  |  |
| Storage Lanes |  | 1 | 1 |  | 1 | 1 |  |  |  |
| Taper Length (ft) |  |  | 25 |  | 25 |  |  |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |  |  |  |
| Frt |  | 0.850 |  |  |  | 0.850 |  |  |  |
| Flt Protected |  |  | 0.950 |  | 0.950 |  |  |  |  |
| Satd. Flow (prot) | 1733 | 1473 | 1646 | 1733 | 1646 | 1473 |  |  |  |
| Flt Permitted |  |  | 0.332 |  | 0.950 |  |  |  |  |
| Satd. Flow (perm) | 1733 | 1473 | 575 | 1733 | 1646 | 1473 |  |  |  |
| Right Turn on Red |  | Yes |  |  |  | No |  |  |  |
| Satd. Flow (RTOR) |  | 43 |  |  |  |  |  |  |  |
| Link Speed (mph) | 30 |  |  | 30 | 30 |  |  |  |  |
| Link Distance (ft) | 465 |  |  | 180 | 541 |  |  |  |  |
| Travel Time (s) | 10.6 |  |  | 4.1 | 12.3 |  |  |  |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |  |  |  |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |  |  |  |
| Adj. Flow (vph) | 330 | 70 | 372 | 366 | 67 | 537 |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 330 | 70 | 372 | 366 | 67 | 537 |  |  |  |
| Enter Blocked Intersection | No | No | No | No | No | No |  |  |  |
| Lane Alignment | Left | Right | Left | Left | Left | Right |  |  |  |
| Median Width(ft) | 11 |  |  | 11 | 11 |  |  |  |  |
| Link Offset(ft) | 0 |  |  | 0 | 0 |  |  |  |  |
| Crosswalk Width(ft) | 16 |  |  | 16 | 16 |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |  |  |  |
| Turning Speed (mph) |  | 9 | 15 |  | 15 | 9 |  |  |  |
| Number of Detectors | 2 | 2 | 1 | 0 | 2 | 2 |  |  |  |
| Detector Template |  |  |  |  |  |  |  |  |  |
| Leading Detector (ft) | 26 | 26 | 50 | 0 | 26 | 26 |  |  |  |
| Trailing Detector (ft) | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |
| Detector 1 Position(ft) | 20 | 20 | 0 | 19 | 0 | 0 |  |  |  |
| Detector 1 Size(ft) | 6 | 6 | 50 | 0 | 6 | 6 |  |  |  |
| Detector 1 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  |  |  |
| Detector 2 Position(ft) | 0 | 0 |  |  | 20 | 20 |  |  |  |
| Detector 2 Size(ft) | 6 | 6 |  |  | 6 | 6 |  |  |  |
| Detector 2 Type | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  |
| Detector 2 Channel |  |  |  |  |  |  |  |  |  |
| Detector 2 Extend (s) | 0.0 | 0.0 |  |  | 0.0 | 0.0 |  |  |  |
| Turn Type | NA | Perm | custom | NA | Prot | pt+ov |  |  |  |
| Protected Phases | 2 |  | 7 | 67 | 8 | 78 | 3 | 4 | 6 |



Splits and Phases: 1101: Dewey (South) \& Driving Park


|  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |  |
|  | EBT | EBR | WBL | WBT | NBL | NBR |
| Lane Group | 330 | 70 | 372 | 366 | 67 | 537 |
| Lane Group Flow (vph) | 0.61 | 0.15 | 0.56 | 0.33 | 0.14 | 0.58 |
| V/C Ratio | 35.3 | 13.7 | 12.3 | 4.6 | 29.9 | 13.9 |
| Control Delay | 20.1 | 0.0 | 1.2 | 1.1 | 0.0 | 0.2 |
| Queue Delay | 55.4 | 13.7 | 13.5 | 5.8 | 29.9 | 14.1 |
| Total Delay | 178 | 12 | 52 | 50 | 31 | 182 |
| Queue Length 50th (ft) | 272 | 46 | 84 | 53 | 72 | 279 |
| Queee Length 95th (ft) | 385 |  |  | 100 | 461 |  |
| Internal Link Dist (ft) |  | 75 | 75 |  | 200 |  |
| Turn Bay Length (ft) | 537 | 457 | 803 | 1247 | 496 | 924 |
| Base Capacity (vph) | 0 | 0 | 231 | 636 | 0 | 0 |
| Starvation Cap Reductn | 199 | 0 | 0 | 0 | 0 | 55 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0.98 | 0.15 | 0.65 | 0.60 | 0.14 | 0.62 |

[^19]|  | $\stackrel{ }{*}$ |  |  | 7 |  |  | 4 | $\dagger$ | $p$ |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  | $\uparrow$ |  |  | $\uparrow$ | 「 |  |  |  |  | $\uparrow$ | F |
| Volume (vph) | 517 | 287 | 11 | 32 | 294 | 212 | 0 | 0 | 0 | 150 | 38 | 400 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 12 | 12 | 11 | 11 | 12 | 12 | 12 | 11 | 12 | 11 |
| Storage Length (tt) | 75 |  | 0 | 0 |  | 75 | 0 |  | 0 | 0 |  | 275 |
| Storage Lanes | 0 |  | 0 | 0 |  | 1 | 0 |  | 0 | 0 |  | 1 |
| Taper Length (tt) | 25 |  |  | 25 |  |  | 25 |  |  | 25 |  |  |
| Lane Utill. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.998 |  |  |  | 0.850 |  |  |  |  |  | 0.850 |
| Flt Protected |  | 0.969 |  |  | 0.995 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (prot) | 0 | 1676 | 0 | 0 | 1724 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Flt Permitted |  | 0.349 |  |  | 0.885 |  |  |  |  |  | 0.962 |  |
| Satd. Flow (perm) | 0 | 604 | 0 | 0 | 1533 | 1473 | 0 | 0 | 0 | 0 | 1724 | 1473 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | No |
| Satd. Flow (RTOR) |  | 2 |  |  |  | 147 |  |  |  |  |  |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 180 |  |  | 931 |  |  | 272 |  |  | 664 |  |
| Travel Time (s) |  | 4.1 |  |  | 21.2 |  |  | 6.2 |  |  | 15.1 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 550 | 305 | 12 | 34 | 313 | 226 | 0 | 0 | 0 | 160 | 40 | 426 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 0 | 867 | 0 | 0 | 347 | 226 | 0 | 0 | 0 | 0 | 200 | 426 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 8 |  |  | 0 |  |  | 12 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 30 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  | Yes |  |
| Headway Factor | 1.04 | 1.04 | 1.00 | 1.00 | 1.04 | 1.04 | 1.00 | 1.00 | 1.00 | 1.04 | 1.00 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 |  |  |  | 1 | 1 | 0 |
| Detector Template |  |  |  | Left |  |  |  |  |  |  |  |  |
| Leading Detector (tt) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 0 |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 |  |  |  | 0 | 0 | 0 |
| Detector 1 Size(ft) | 50 | 50 |  | 20 | 40 | 40 |  |  |  | 40 | 40 | 25 |
| Detector 1 Type | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |  |  |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ |
| Detector 1 Channel |  |  |  |  |  |  |  |  |  |  |  |  |
| Detector 1 Extend (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 |  |  |  | 0.0 | 0.0 | 0.0 |
| Turn Type | custom | NA |  | Perm | NA | Perm |  |  |  | Split | NA | pt+ov |
| Protected Phases | 4 | 24 |  |  | 6 |  |  |  |  | 3 | 3 | 34 |
| Permitted Phases | 2 |  |  | 6 |  | 6 |  |  |  |  |  |  |
| Detector Phase | 4 | 24 |  | 6 | 6 | 6 |  |  |  | 3 | 3 | 34 |
| Switch Phase |  |  |  |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 8.0 |  |  | 12.0 | 12.0 | 12.0 |  |  |  | 8.0 | 8.0 |  |
| Minimum Split (s) | 25.0 |  |  | 31.0 | 31.0 | 31.0 |  |  |  | 25.0 | 25.0 |  |


| Lane Group | $\varnothing 2$ | ¢7 | $\varnothing 8$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Lane Configurations |  |  |  |  |
| Volume (vph) |  |  |  |  |
| Ideal Flow (vphpl) |  |  |  |  |
| Lane Width (tt) |  |  |  |  |
| Storage Length (tt) |  |  |  |  |
| Storage Lanes |  |  |  |  |
| Taper Length (tt) |  |  |  |  |
| Lane Util. Factor |  |  |  |  |
| Frt |  |  |  |  |
| Flt Protected |  |  |  |  |
| Satd. Flow (prot) |  |  |  |  |
| Flt Permitted |  |  |  |  |
| Satd. Flow (perm) |  |  |  |  |
| Right Turn on Red |  |  |  |  |
| Satd. Flow (RTOR) |  |  |  |  |
| Link Speed (mph) |  |  |  |  |
| Link Distance (tt) |  |  |  |  |
| Travel Time (s) |  |  |  |  |
| Peak Hour Factor |  |  |  |  |
| Heavy Vehicles (\%) |  |  |  |  |
| Adj. Flow (vph) |  |  |  |  |
| Shared Lane Traffic (\%) |  |  |  |  |
| Lane Group Flow (vph) |  |  |  |  |
| Enter Blocked Intersection |  |  |  |  |
| Lane Alignment |  |  |  |  |
| Median Width(tt) |  |  |  |  |
| Link Offset(ft) |  |  |  |  |
| Crosswalk Width(tt) |  |  |  |  |
| Two way Left Turn Lane |  |  |  |  |
| Headway Factor |  |  |  |  |
| Turning Speed (mph) |  |  |  |  |
| Number of Detectors |  |  |  |  |
| Detector Template |  |  |  |  |
| Leading Detector (tt) |  |  |  |  |
| Trailing Detector (ft) |  |  |  |  |
| Detector 1 Position(t) |  |  |  |  |
| Detector 1 Size(ft) |  |  |  |  |
| Detector 1 Type |  |  |  |  |
| Detector 1 Channel |  |  |  |  |
| Detector 1 Extend (s) |  |  |  |  |
| Detector 1 Queue (s) |  |  |  |  |
| Detector 1 Delay (s) |  |  |  |  |
| Turn Type |  |  |  |  |
| Protected Phases | 2 | 7 | 8 |  |
| Permitted Phases |  |  |  |  |
| Detector Phase |  |  |  |  |
| Switch Phase |  |  |  |  |
| Minimum Initial (s) | 12.0 | 8.0 | 16.0 |  |
| Minimum Split (s) | 31.0 | 29.0 | 25.0 |  |
| 7/10/2014 2038 No-Build PM - EB Blocked Bergmann Associates |  |  |  | Synchro 8 Repor Page 5 |


|  | 4 |  |  |  |  |  |  | 4 |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 41.0 |  |  | 34.0 | 34.0 | 34.0 |  |  |  | 25.0 | 25.0 |  |
| Total Split (\%) | 41.0\% |  |  | 34.0\% | 34.0\% | 34.0\% |  |  |  | 25.0\% | 25.0\% |  |
| Maximum Green (s) | 35.5 |  |  | 28.0 | 28.0 | 28.0 |  |  |  | 19.5 | 19.5 |  |
| Yellow Time (s) | 3.5 |  |  | 4.0 | 4.0 | 4.0 |  |  |  | 3.5 | 3.5 |  |
| All-Red Time (s) | 2.0 |  |  | 2.0 | 2.0 | 2.0 |  |  |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) |  |  |  |  | -3.0 | -1.0 |  |  |  |  | 0.0 |  |
| Total Lost Time (s) |  |  |  |  | 3.0 | 5.0 |  |  |  |  | 5.5 |  |
| Lead/Lag | Lag |  |  |  |  |  |  |  |  | Lead | Lead |  |
| Lead-Lag Optimize? |  |  |  |  |  |  |  |  |  |  |  |  |
| Vehicle Extension (s) | 2.0 |  |  | 3.0 | 3.0 | 3.0 |  |  |  | 2.0 | 2.0 |  |
| Recall Mode | None |  |  | C-Max | C-Max | C-Max |  |  |  | None | None |  |
| Walk Time (s) | 7.0 |  |  | 9.0 | 9.0 | 9.0 |  |  |  | 7.0 | 7.0 |  |
| Flash Dont Walk (s) | 12.0 |  |  | 15.0 | 15.0 | 15.0 |  |  |  | 12.0 | 12.0 |  |
| Pedestrian Calls (\#/hr) | 0 |  |  | 0 | 0 | 0 |  |  |  | 0 | 0 |  |
| Act Efftt Green (s) |  | 71.0 |  |  | 31.0 | 29.0 |  |  |  |  | 17.5 | 63.0 |
| Actuated g/C Ratio |  | 0.71 |  |  | 0.31 | 0.29 |  |  |  |  | 0.18 | 0.63 |
| v/c Ratio |  | 1.01 |  |  | 0.73 | 0.43 |  |  |  |  | 0.66 | 0.46 |
| Control Delay |  | 54.4 |  |  | 41.3 | 13.3 |  |  |  |  | 49.3 | 11.6 |
| Queue Delay |  | 30.2 |  |  | 0.0 | 0.0 |  |  |  |  | 0.0 | 0.0 |
| Total Delay |  | 84.6 |  |  | 41.3 | 13.3 |  |  |  |  | 49.3 | 11.6 |
| LOS |  | F |  |  | D | B |  |  |  |  | D | B |
| Approach Delay |  | 84.6 |  |  | 30.2 |  |  |  |  |  | 23.7 |  |
| Approach LOS |  | F |  |  | C |  |  |  |  |  | C |  |

## Intersection Summary

## Area Type: Other

Cycle Length: 100
Actuated Cycle Length: 100
Offset: 0 (0\%), Referenced to phase 2:EBT and 6:WBTL, Start of Green
Natural Cycle: 95
Control Type: Actuated-Coordinated
Maximum v/c Ratio: 1.01
Intersection Signal Delay: 51.1
Intersection LOS: D
Intersection Capacity Utilization 83.2\% ICU Level of Service E
Analysis Period (min) 15
Splits and Phases: 1102: Driving Park \& Dewey (North)


| Lane Group | $ø 2$ | $\varnothing 7$ | $\varnothing 8$ |
| :--- | ---: | ---: | ---: |
| Total Split (s) | 34.0 | 41.0 | 25.0 |
| Total Split (\%) | $34 \%$ | $41 \%$ | $25 \%$ |
| Maximum Green (s) | 28.0 | 35.5 | 19.5 |
| Yellow Time (s) | 4.0 | 3.5 | 3.5 |
| All-Red Time (s) | 2.0 | 2.0 | 2.0 |
| Lost Time Adjust (s) |  |  |  |
| Total Lost Time (s) |  |  |  |
| Lead/Lag |  | Lead | Lag |
| Lead-Lag Optimize? | 3.0 | 2.0 | 3.0 |
| Vehicle Extension (s) | C-Max | None | Max |
| Recall Mode | 9.0 | 8.0 | 7.0 |
| Walk Time (s) | 15.0 | 12.0 | 12.0 |
| Flash Dont Walk (s) | 0 | 0 | 0 |
| Pedestrian Calls (\#/hr) |  |  |  |
| Act Effct Green (s) |  |  |  |
| Actuated g/C Ratio |  |  |  |
| v/c Ratio |  |  |  |
| Control Delay |  |  |  |
| Queue Delay |  |  |  |


|  | $\rightarrow$ |  |  |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBT | WBT | WBR | SBT | SBR |
| Lane Group Flow (vph) | 867 | 347 | 226 | 200 | 426 |
| $\mathrm{v} / \mathrm{c}$ Ratio | 1.01 | 0.73 | 0.43 | 0.66 | 0.46 |
| Control Delay | 54.4 | 41.3 | 13.3 | 49.3 | 11.6 |
| Queue Delay | 30.2 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 84.6 | 41.3 | 13.3 | 49.3 | 11.6 |
| Queue Length 50th (tt) | $\sim 488$ | 196 | 38 | 117 | 129 |
| Queue Length 95th (ft) | \#728 | \#307 | 103 | 192 | 199 |
| Internal Link Dist (tt) | 100 | 851 |  | 584 |  |
| Turn Bay Length ( t ) |  |  | 75 |  | 275 |
| Base Capacity (vph) | 857 | 475 | 531 | 336 | 927 |
| Starvation Cap Reductn | 66 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 13 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 1.10 | 0.73 | 0.43 | 0.60 | 0.47 |
| Intersection Summary |  |  |  |  |  |
| ~ Volume exceeds capacity, queue is theoretically infinite. |  |  |  |  |  |
| Queue shown is maximum after two cycles. |  |  |  |  |  |
| \# 95th percentile volume exceeds capacity, queue may be longer. |  |  |  |  |  |
| Queue shown is maximum after two cycles. |  |  |  |  |  |


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | $\uparrow$ |  | \% | $\uparrow$ | F | ${ }^{7}$ | ¢ |  | \% | 1 |  |
| Volume (vph) | 45 | 131 | 75 | 27 | 198 | 71 | 21 | 189 | 33 | 237 | 258 | 46 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (tt) | 125 |  | 75 | 0 |  | 0 | 100 |  | 0 | 150 |  | 0 |
| Storage Lanes | 1 |  | 0 | 1 |  | 1 | 1 |  | 0 | 1 |  | 0 |
| Taper Length (tt) | 100 |  |  | 25 |  |  | 50 |  |  | 75 |  |  |
| Lane Utill. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.946 |  |  |  | 0.850 |  | 0.978 |  |  | 0.977 |  |
| Flt Protected | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  |
| Satd. Flow (prot) | 1646 | 1639 | 0 | 1646 | 1733 | 1473 | 1646 | 1695 | 0 | 1646 | 1693 | 0 |
| Flt Permitted | 0.542 |  |  | 0.529 |  |  | 0.950 |  |  | 0.418 |  |  |
| Satd. Flow (perm) | 939 | 1639 | 0 | 917 | 1733 | 1473 | 1646 | 1695 | 0 | 724 | 1693 | 0 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |
| Satd. Flow (RTOR) |  | 33 |  |  |  | 182 |  | 10 |  |  | 11 |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (tt) |  | 465 |  |  | 249 |  |  | 541 |  |  | 329 |  |
| Travel Time (s) |  | 10.6 |  |  | 5.7 |  |  | 12.3 |  |  | 7.5 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 54 | 158 | 90 | 33 | 239 | 86 | 25 | 228 | 40 | 286 | 311 | 55 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 54 | 248 | 0 | 33 | 239 | 86 | 25 | 268 | 0 | 286 | 366 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 11 |  |  | 11 |  |  | 11 |  |
| Link Offset(ft) |  | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 |  |
| Detector Template | Left |  |  | Left |  | Right | Left |  |  | Left |  |  |
| Leading Detector (tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Size(ft) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Detector 1 Type | Cl+Ex | Cl+Ex |  | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | Cl+Ex |  | Cl+Ex | Cl+Ex |  |

Detector 1 Channel

| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Turn Type | Perm | NA | Perm | NA | Perm | Prot | NA | pm+pt | NA |
| Protected Phases |  | 2 |  | 6 |  | 8 | 3 | 4 | 7 |
| Permitted Phases | 2 |  | 6 |  | 6 |  | 3 | 7 | 7 |
| Detector Phase | 2 | 2 | 6 | 6 | 6 | 8 | 3 | 4 | 7 |
| Switch Phase |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 7.0 | 10.0 | 7.0 | 10.0 |
| Minimum Split (s) | 27.0 | 27.0 | 32.0 | 32.0 | 32.0 | 13.0 | 25.0 | 13.0 | 27.0 |


|  | $\stackrel{ }{*}$ |  |  |  |  |  | 4 | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 33.0 | 33.0 |  | 33.0 | 33.0 | 33.0 | 17.0 | 30.0 |  | 27.0 | 40.0 |  |
| Total Split (\%) | 36.7\% | 36.7\% |  | 36.7\% | 36.7\% | 36.7\% | 18.9\% | 33.3\% |  | 30.0\% | 44.4\% |  |
| Maximum Green (s) | 27.0 | 27.0 |  | 27.0 | 27.0 | 27.0 | 11.0 | 24.0 |  | 21.0 | 34.0 |  |
| Yellow Time (s) | 4.0 | 4.0 |  | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |  | 4.0 | 4.0 |  |
| All-Red Time (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Lost Time (s) | 6.0 | 6.0 |  | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |  | 6.0 | 6.0 |  |
| Lead/Lag |  |  |  |  |  |  | Lead | Lag |  | Lead | Lag |  |
| Lead-Lag Optimize? |  |  |  |  |  |  | Yes | Yes |  | Yes | Yes |  |
| Vehicle Extension (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Recall Mode | Max | Max |  | Max | Max | Max | None | Max |  | None | Max |  |
| Walk Time (s) | 7.0 | 7.0 |  | 7.0 | 7.0 | 7.0 |  | 7.0 |  |  | 7.0 |  |
| Flash Dont Walk (s) | 14.0 | 14.0 |  | 19.0 | 19.0 | 19.0 |  | 12.0 |  |  | 14.0 |  |
| Pedestrian Calls (\#/hr) | 12 | 12 |  | 12 | 12 | 12 |  | 12 |  |  | 12 |  |
| Act Efftt Green (s) | 27.0 | 27.0 |  | 27.0 | 27.0 | 27.0 | 7.2 | 24.5 |  | 43.2 | 38.1 |  |
| Actuated g/C Ratio | 0.33 | 0.33 |  | 0.33 | 0.33 | 0.33 | 0.09 | 0.30 |  | 0.52 | 0.46 |  |
| v/c Ratio | 0.18 | 0.44 |  | 0.11 | 0.42 | 0.14 | 0.17 | 0.52 |  | 0.55 | 0.46 |  |
| Control Delay | 23.0 | 22.5 |  | 22.0 | 25.2 | 0.5 | 39.3 | 28.3 |  | 15.4 | 18.6 |  |
| Queue Delay | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Delay | 23.0 | 22.5 |  | 22.0 | 25.2 | 0.5 | 39.3 | 28.3 |  | 15.4 | 18.6 |  |
| LOS | C | C |  | C | C | A | D | C |  | B | B |  |
| Approach Delay |  | 22.6 |  |  | 19.0 |  |  | 29.2 |  |  | 17.2 |  |
| Approach LOS |  | C |  |  | B |  |  | C |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| Area Type: Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Cycle Length: 90 |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length: 82.3 |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural Cycle: 75 |  |  |  |  |  |  |  |  |  |  |  |  |
| Control Type: Actuated-Uncoordinated |  |  |  |  |  |  |  |  |  |  |  |  |
| Maximum v/c Ratio: 0.55 |  |  |  |  |  |  |  |  |  |  |  |  |
| Intersection Signal Delay: 20.8 |  |  |  | Intersection LOS: C |  |  |  |  |  |  |  |  |
| Intersection Capacity Utilization 64.9\% |  |  |  | ICU Level of Service C |  |  |  |  |  |  |  |  |
| Analysis Period (min) 15 |  |  |  |  |  |  |  |  |  |  |  |  |

Splits and Phases: 1101: Dewey (South)/Dewey (North) \& Driving Park


|  | $\rangle$ | $\rightarrow$ | 7 | $\longleftarrow$ | 4 | 4 | $\dagger$ |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
| Lane Group Flow (vph) | 54 | 248 | 33 | 239 | 86 | 25 | 268 | 286 | 366 |
| v/c Ratio | 0.18 | 0.44 | 0.11 | 0.42 | 0.14 | 0.17 | 0.52 | 0.55 | 0.46 |
| Control Delay | 23.0 | 22.5 | 22.0 | 25.2 | 0.5 | 39.3 | 28.3 | 15.4 | 18.6 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 23.0 | 22.5 | 22.0 | 25.2 | 0.5 | 39.3 | 28.3 | 15.4 | 18.6 |
| Queue Length 50th (tt) | 19 | 84 | 12 | 94 | 0 | 12 | 110 | 80 | 103 |
| Queue Length 95th (ft) | 47 | 146 | 32 | 155 | 0 | 34 | 179 | 116 | 208 |
| Internal Link Dist (tt) |  | 385 |  | 169 |  |  | 461 |  | 249 |
| Turn Bay Length (tt) | 125 |  |  |  |  | 100 |  | 150 |  |
| Base Capacity (vph) | 308 | 560 | 301 | 569 | 606 | 220 | 511 | 615 | 790 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.18 | 0.44 | 0.11 | 0.42 | 0.14 | 0.11 | 0.52 | 0.47 | 0.46 |

Intersection Summary

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | $\uparrow$ |  | ${ }_{7}$ | $\uparrow$ | F | ${ }^{7}$ | F |  | \% | $\hat{1}$ |  |
| Volume (vph) | 72 | 182 | 54 | 8 | 233 | 174 | 52 | 352 | 62 | 154 | 279 | 49 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (tt) | 125 |  | 75 | 0 |  | 0 | 100 |  | 0 | 150 |  | 0 |
| Storage Lanes | 1 |  | 0 | 1 |  | 1 | 1 |  | 0 | 1 |  | 0 |
| Taper Length (t) | 100 |  |  | 25 |  |  | 50 |  |  | 75 |  |  |
| Lane Utili. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.966 |  |  |  | 0.850 |  | 0.977 |  |  | 0.978 |  |
| FIt Protected | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  |
| Satd. Flow (prot) | 1646 | 1674 | 0 | 1646 | 1733 | 1473 | 1646 | 1693 | 0 | 1646 | 1695 | 0 |
| Flt Permitted | 0.515 |  |  | 0.511 |  |  | 0.950 |  |  | 0.323 |  |  |
| Satd. Flow (perm) | 892 | 1674 | 0 | 885 | 1733 | 1473 | 1646 | 1693 | 0 | 560 | 1695 | 0 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |
| Satd. Flow (RTOR) |  | 16 |  |  |  | 185 |  | 10 |  |  | 9 |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (tt) |  | 465 |  |  | 249 |  |  | 541 |  |  | 329 |  |
| Travel Time (s) |  | 10.6 |  |  | 5.7 |  |  | 12.3 |  |  | 7.5 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 77 | 194 | 57 | 9 | 248 | 185 | 55 | 374 | 66 | 164 | 297 | 52 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 77 | 251 | 0 | 9 | 248 | 185 | 55 | 440 | 0 | 164 | 349 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(tt) |  | 11 |  |  | 11 |  |  | 11 |  |  | 11 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 |  |
| Detector Template | Left |  |  | Left |  | Right | Left |  |  | Left |  |  |
| Leading Detector (tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Size(tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Detector 1 Type | Cl+Ex | Cl+Ex |  | Cl+Ex | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | Cl+Ex |  | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ |  |

Detector 1 Channel

| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Turn Type | Perm | NA | Perm | NA | Perm | Prot | NA | pm+pt | NA |
| Protected Phases |  | 2 |  | 6 |  | 8 | 3 | 4 | 7 |
| Permitted Phases | 2 |  | 6 |  | 6 |  | 3 | 7 | 7 |
| Detector Phase | 2 | 2 | 6 | 6 | 6 | 8 | 3 | 4 | 7 |
| Switch Phase |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 7.0 | 10.0 | 7.0 | 10.0 |
| Minimum Split (s) | 27.0 | 27.0 | 32.0 | 32.0 | 32.0 | 13.0 | 25.0 | 13.0 | 27.0 |


|  | $\stackrel{ }{*}$ |  |  |  |  |  | 4 | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 38.0 | 38.0 |  | 38.0 | 38.0 | 38.0 | 26.0 | 45.0 |  | 17.0 | 36.0 |  |
| Total Split (\%) | 38.0\% | 38.0\% |  | 38.0\% | 38.0\% | 38.0\% | 26.0\% | 45.0\% |  | 17.0\% | 36.0\% |  |
| Maximum Green (s) | 32.0 | 32.0 |  | 32.0 | 32.0 | 32.0 | 20.0 | 39.0 |  | 11.0 | 30.0 |  |
| Yellow Time (s) | 4.0 | 4.0 |  | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |  | 4.0 | 4.0 |  |
| All-Red Time (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Lost Time (s) | 6.0 | 6.0 |  | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |  | 6.0 | 6.0 |  |
| Lead/Lag |  |  |  |  |  |  | Lead | Lag |  | Lead | Lag |  |
| Lead-Lag Optimize? |  |  |  |  |  |  | Yes | Yes |  | Yes | Yes |  |
| Vehicle Extension (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Recall Mode | Max | Max |  | Max | Max | Max | None | Max |  | None | Max |  |
| Walk Time (s) | 7.0 | 7.0 |  | 7.0 | 7.0 | 7.0 |  | 7.0 |  |  | 7.0 |  |
| Flash Dont Walk (s) | 14.0 | 14.0 |  | 19.0 | 19.0 | 19.0 |  | 12.0 |  |  | 14.0 |  |
| Pedestrian Calls (\#/hr) | 12 | 12 |  | 12 | 12 | 12 |  | 12 |  |  | 12 |  |
| Act Efftt Green (s) | 32.0 | 32.0 |  | 32.0 | 32.0 | 32.0 | 8.4 | 39.0 |  | 50.2 | 42.5 |  |
| Actuated g/C Ratio | 0.33 | 0.33 |  | 0.33 | 0.33 | 0.33 | 0.09 | 0.40 |  | 0.51 | 0.43 |  |
| v/c Ratio | 0.27 | 0.45 |  | 0.03 | 0.44 | 0.31 | 0.39 | 0.65 |  | 0.42 | 0.47 |  |
| Control Delay | 28.0 | 27.9 |  | 23.8 | 29.4 | 5.3 | 50.8 | 29.2 |  | 14.7 | 23.4 |  |
| Queue Delay | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Delay | 28.0 | 27.9 |  | 23.8 | 29.4 | 5.3 | 50.8 | 29.2 |  | 14.7 | 23.4 |  |
| LOS | C | C |  | C | C | A | D | C |  | B | C |  |
| Approach Delay |  | 27.9 |  |  | 19.2 |  |  | 31.6 |  |  | 20.6 |  |
| Approach LOS |  | C |  |  | B |  |  | C |  |  | C |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| Area Type: Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Cycle Length: 100 |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length: 98.2 |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural Cycle: 75 |  |  |  |  |  |  |  |  |  |  |  |  |
| Control Type: Actuated-Uncoordinated |  |  |  |  |  |  |  |  |  |  |  |  |
| Maximum v/c Ratio: 0.65 |  |  |  |  |  |  |  |  |  |  |  |  |
| Intersection Signal Delay: 24.6 |  |  |  | Intersection LOS: C |  |  |  |  |  |  |  |  |
| Intersection Capacity Utilization 72.0\% |  |  |  | ICU Level of Service C |  |  |  |  |  |  |  |  |
| Analysis Period (min) 15 |  |  |  |  |  |  |

Splits and Phases: 1101: Dewey (South)/Dewey (North) \& Driving Park


|  | $\rangle$ | $\rightarrow$ | $\downarrow$ | $\longleftarrow$ | 4 | 4 | $\dagger$ |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
| Lane Group Flow (vph) | 77 | 251 | 9 | 248 | 185 | 55 | 440 | 164 | 349 |
| v/c Ratio | 0.27 | 0.45 | 0.03 | 0.44 | 0.31 | 0.39 | 0.65 | 0.42 | 0.47 |
| Control Delay | 28.0 | 27.9 | 23.8 | 29.4 | 5.3 | 50.8 | 29.2 | 14.7 | 23.4 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 28.0 | 27.9 | 23.8 | 29.4 | 5.3 | 50.8 | 29.2 | 14.7 | 23.4 |
| Queue Length 50th (tt) | 35 | 115 | 4 | 121 | 0 | 33 | 215 | 48 | 153 |
| Queue Length 95th (ft) | 76 | 192 | 16 | 198 | 47 | 71 | 333 | 82 | 251 |
| Internal Link Dist (tt) |  | 385 |  | 169 |  |  | 461 |  | 249 |
| Turn Bay Length (tt) | 125 |  |  |  |  | 100 |  | 150 |  |
| Base Capacity (vph) | 290 | 556 | 288 | 564 | 604 | 335 | 678 | 413 | 738 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.27 | 0.45 | 0.03 | 0.44 | 0.31 | 0.16 | 0.65 | 0.40 | 0.47 |

Intersection Summary

| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | $\uparrow$ |  | ${ }^{7}$ | $\uparrow$ | F | ${ }^{7}$ | ${ }^{1}$ |  | \% | F |  |
| Volume (vph) | 56 | 159 | 92 | 33 | 242 | 87 | 26 | 230 | 41 | 289 | 315 | 56 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (tt) | 125 |  | 75 | 0 |  | 0 | 100 |  | 0 | 150 |  | 0 |
| Storage Lanes | 1 |  | 0 | 1 |  | 1 | 1 |  | 0 | 1 |  | 0 |
| Taper Length (tt) | 100 |  |  | 25 |  |  | 50 |  |  | 75 |  |  |
| Lane Utili. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt |  | 0.945 |  |  |  | 0.850 |  | 0.977 |  |  | 0.978 |  |
| FIt Protected | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  |
| Satd. Flow (prot) | 1646 | 1637 | 0 | 1646 | 1733 | 1473 | 1646 | 1693 | 0 | 1646 | 1695 | 0 |
| Flt Permitted | 0.457 |  |  | 0.442 |  |  | 0.950 |  |  | 0.342 |  |  |
| Satd. Flow (perm) | 792 | 1637 | 0 | 766 | 1733 | 1473 | 1646 | 1693 | 0 | 593 | 1695 | 0 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |
| Satd. Flow (RTOR) |  | 33 |  |  |  | 182 |  | 10 |  |  | 11 |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 465 |  |  | 249 |  |  | 541 |  |  | 329 |  |
| Travel Time (s) |  | 10.6 |  |  | 5.7 |  |  | 12.3 |  |  | 7.5 |  |
| Peak Hour Factor | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 | 0.83 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 67 | 192 | 111 | 40 | 292 | 105 | 31 | 277 | 49 | 348 | 380 | 67 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 67 | 303 | 0 | 40 | 292 | 105 | 31 | 326 | 0 | 348 | 447 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 11 |  |  | 11 |  |  | 11 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |
| Crosswalk Width(tt) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 |  |
| Detector Template | Left |  |  | Left |  | Right | Left |  |  | Left |  |  |
| Leading Detector (tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Size(tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Detector 1 Type | Cl+Ex | Cl+Ex |  | Cl+Ex | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex | Cl+Ex |  | Cl+Ex | Cl+Ex |  |

Detector 1 Channel

| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Turn Type | Perm | NA | Perm | NA | Perm | Prot | NA | pm+pt | NA |
| Protected Phases |  | 2 |  | 6 |  | 8 | 3 | 4 | 7 |
| Permitted Phases | 2 |  | 6 |  | 6 |  | 3 | 7 | 7 |
| Detector Phase | 2 | 2 | 6 | 6 | 6 | 8 | 3 | 4 | 7 |
| Switch Phase |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 7.0 | 10.0 | 7.0 | 10.0 |
| Minimum Split (s) | 27.0 | 27.0 | 32.0 | 32.0 | 32.0 | 13.0 | 25.0 | 13.0 | 27.0 |



Splits and Phases: 1101: Dewey (South)/Dewey (North) \& Driving Park


|  | $\rangle$ | $\rightarrow$ | 7 | $\longleftarrow$ | 4 | 4 | $\dagger$ |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
| Lane Group Flow (vph) | 67 | 303 | 40 | 292 | 105 | 31 | 326 | 348 | 447 |
| v/c Ratio | 0.26 | 0.55 | 0.16 | 0.53 | 0.18 | 0.22 | 0.67 | 0.69 | 0.55 |
| Control Delay | 26.1 | 26.2 | 24.2 | 28.3 | 0.9 | 41.0 | 34.3 | 19.1 | 20.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 26.1 | 26.2 | 24.2 | 28.3 | 0.9 | 41.0 | 34.3 | 19.1 | 20.3 |
| Queue Length 50th (tt) | 26 | 116 | 15 | 124 | 0 | 16 | 146 | 101 | 135 |
| Queue Length 95th (ft) | 59 | 192 | 39 | 199 | 0 | 41 | 232 | 142 | 265 |
| Internal Link Dist (tt) |  | 385 |  | 169 |  |  | 461 |  | 249 |
| Turn Bay Length (tt) | 125 |  |  |  |  | 100 |  | 150 |  |
| Base Capacity (vph) | 254 | 548 | 246 | 556 | 597 | 215 | 490 | 580 | 808 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.26 | 0.55 | 0.16 | 0.53 | 0.18 | 0.14 | 0.67 | 0.60 | 0.55 |

[^20]| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Configurations | \% | $\uparrow$ |  | ${ }^{7}$ | $\uparrow$ | 「 | \% | $\hat{6}$ |  | \% | $\hat{\beta}$ |  |
| Volume (vph) | 88 | 222 | 66 | 10 | 284 | 212 | 63 | 429 | 76 | 188 | 340 | 60 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Width (tt) | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 | 11 |
| Storage Length (tt) | 125 |  | 85 | 0 |  | 0 | 100 |  | 0 | 150 |  | 0 |
| Storage Lanes | 1 |  | 0 | 1 |  | 1 | 1 |  | 0 | 1 |  | 0 |
| Taper Length (tt) | 100 |  |  | 25 |  |  | 50 |  |  | 75 |  |  |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Fit |  | 0.966 |  |  |  | 0.850 |  | 0.977 |  |  | 0.977 |  |
| Flt Protected | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  | 0.950 |  |  |
| Satd. Flow (prot) | 1646 | 1674 | 0 | 1646 | 1733 | 1473 | 1646 | 1693 | 0 | 1646 | 1693 | 0 |
| Flt Permitted | 0.395 |  |  | 0.388 |  |  | 0.950 |  |  | 0.269 |  |  |
| Satd. Flow (perm) | 684 | 1674 | 0 | 672 | 1733 | 1473 | 1646 | 1693 | 0 | 466 | 1693 | 0 |
| Right Turn on Red |  |  | Yes |  |  | Yes |  |  | Yes |  |  | Yes |
| Satd. Flow (RTOR) |  | 15 |  |  |  | 226 |  | 11 |  |  | 10 |  |
| Link Speed (mph) |  | 30 |  |  | 30 |  |  | 30 |  |  | 30 |  |
| Link Distance (ft) |  | 465 |  |  | 249 |  |  | 541 |  |  | 329 |  |
| Travel Time (s) |  | 10.6 |  |  | 5.7 |  |  | 12.3 |  |  | 7.5 |  |
| Peak Hour Factor | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 | 0.94 |
| Heavy Vehicles (\%) | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% | 6\% |
| Adj. Flow (vph) | 94 | 236 | 70 | 11 | 302 | 226 | 67 | 456 | 81 | 200 | 362 | 64 |
| Shared Lane Traffic (\%) |  |  |  |  |  |  |  |  |  |  |  |  |
| Lane Group Flow (vph) | 94 | 306 | 0 | 11 | 302 | 226 | 67 | 537 | 0 | 200 | 426 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(t) |  | 11 |  |  | 11 |  |  | 11 |  |  | 11 |  |
| Link Offset(tt) |  | 0 |  |  | 0 |  |  | 0 |  |  | 0 |  |
| Crosswalk Width(ft) |  | 16 |  |  | 16 |  |  | 16 |  |  | 16 |  |
| Two way Left Turn Lane |  |  |  |  |  |  |  |  |  |  |  |  |
| Headway Factor | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 | 1.04 |
| Turning Speed (mph) | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 | 15 |  | 9 |
| Number of Detectors | 1 | 1 |  | 1 | 1 | 1 | 1 | 1 |  | 1 | 1 |  |
| Detector Template | Left |  |  | Left |  | Right | Left |  |  | Left |  |  |
| Leading Detector (tt) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Trailing Detector (ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Position(ft) | 0 | 0 |  | 0 | 0 | 0 | 0 | 0 |  | 0 | 0 |  |
| Detector 1 Size(ft) | 30 | 30 |  | 30 | 30 | 20 | 30 | 30 |  | 30 | 30 |  |
| Detector 1 Type | Cl+Ex | Cl+Ex |  | Cl+Ex | Cl+Ex | $\mathrm{Cl}+\mathrm{Ex}$ | $\mathrm{Cl}+\mathrm{Ex}$ | Cl+Ex |  | Cl+Ex | Cl+Ex |  |

Detector 1 Channel

| Detector 1 Extend (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Detector 1 Queue (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Turn Type | Perm | NA | Perm | NA | Perm | Prot | NA | pm+pt | NA |
| Protected Phases |  | 2 |  | 6 |  | 8 | 3 | 4 | 7 |
| Permitted Phases | 2 |  | 6 |  | 6 |  | 3 | 7 | 7 |
| Detector Phase | 2 | 2 | 6 | 6 | 6 | 8 | 3 | 4 | 7 |
| Switch Phase |  |  |  |  |  |  |  |  |  |
| Minimum Initial (s) | 10.0 | 10.0 | 10.0 | 10.0 | 10.0 | 7.0 | 10.0 | 7.0 | 10.0 |
| Minimum Split (s) | 27.0 | 27.0 | 32.0 | 32.0 | 32.0 | 13.0 | 25.0 | 13.0 | 27.0 |


|  | $\rangle$ |  |  | 7 |  | 4 | 4 | $\uparrow$ |  |  | $\downarrow$ | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Total Split (s) | 33.0 | 33.0 |  | 33.0 | 33.0 | 33.0 | 24.0 | 49.0 |  | 18.0 | 43.0 |  |
| Total Split (\%) | 33.0\% | 33.0\% |  | 33.0\% | 33.0\% | 33.0\% | 24.0\% | 49.0\% |  | 18.0\% | 43.0\% |  |
| Maximum Green (s) | 27.0 | 27.0 |  | 27.0 | 27.0 | 27.0 | 18.0 | 43.0 |  | 12.0 | 37.0 |  |
| Yellow Time (s) | 4.0 | 4.0 |  | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 |  | 4.0 | 4.0 |  |
| All-Red Time (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Lost Time Adjust (s) | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Lost Time (s) | 6.0 | 6.0 |  | 6.0 | 6.0 | 6.0 | 6.0 | 6.0 |  | 6.0 | 6.0 |  |
| Lead/Lag |  |  |  |  |  |  | Lead | Lag |  | Lead | Lag |  |
| Lead-Lag Optimize? |  |  |  |  |  |  | Yes | Yes |  | Yes | Yes |  |
| Vehicle Extension (s) | 2.0 | 2.0 |  | 2.0 | 2.0 | 2.0 | 2.0 | 2.0 |  | 2.0 | 2.0 |  |
| Recall Mode | Max | Max |  | Max | Max | Max | None | Max |  | None | Max |  |
| Walk Time (s) | 7.0 | 7.0 |  | 7.0 | 7.0 | 7.0 |  | 7.0 |  |  | 7.0 |  |
| Flash Dont Walk (s) | 14.0 | 14.0 |  | 19.0 | 19.0 | 19.0 |  | 12.0 |  |  | 14.0 |  |
| Pedestrian Calls (\#/hr) | 12 | 12 |  | 12 | 12 | 12 |  | 12 |  |  | 12 |  |
| Act Efft Green (s) | 27.0 | 27.0 |  | 27.0 | 27.0 | 27.0 | 8.9 | 43.0 |  | 54.7 | 46.5 |  |
| Actuated g/C Ratio | 0.28 | 0.28 |  | 0.28 | 0.28 | 0.28 | 0.09 | 0.44 |  | 0.56 | 0.48 |  |
| v/c Ratio | 0.50 | 0.65 |  | 0.06 | 0.63 | 0.40 | 0.45 | 0.72 |  | 0.53 | 0.53 |  |
| Control Delay | 41.1 | 37.3 |  | 28.1 | 38.3 | 6.2 | 51.7 | 28.7 |  | 14.5 | 21.8 |  |
| Queue Delay | 0.0 | 0.0 |  | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |  | 0.0 | 0.0 |  |
| Total Delay | 41.1 | 37.3 |  | 28.1 | 38.3 | 6.2 | 51.7 | 28.7 |  | 14.5 | 21.8 |  |
| LOS | D | D |  | C | D | A | D | C |  | B | C |  |
| Approach Delay |  | 38.2 |  |  | 24.6 |  |  | 31.3 |  |  | 19.5 |  |
| Approach LOS |  | D |  |  | C |  |  | C |  |  | B |  |
| Intersection Summary |  |  |  |  |  |  |  |  |  |  |  |  |
| Area Type: Other |  |  |  |  |  |  |  |  |  |  |  |  |
| Cycle Length: 100 |  |  |  |  |  |  |  |  |  |  |  |  |
| Actuated Cycle Length: 97.7 |  |  |  |  |  |  |  |  |  |  |  |  |
| Natural Cycle: 75 |  |  |  |  |  |  |  |  |  |  |  |  |
| Control Type: Semi Act-Uncoord |  |  |  |  |  |  |  |  |  |  |  |  |
| Maximum v/c Ratio: 0.72 |  |  |  |  |  |  |  |  |  |  |  |  |
| Intersection Signal Delay: 27.5 |  |  |  | Intersection LOS: C |  |  |  |  |  |  |  |  |
| Intersection Capacity Utilization 81.6\% |  |  |  | ICU Level of Service D |  |  |  |  |  |  |  |  |
| Analysis Period (min) 15 |  |  |  |  |  |  |  |  |  |  |  |  |

Splits and Phases: 1101: Dewey (South)/Dewey (North) \& Driving Park


|  | 4 | $\rightarrow$ | 7 | $\longleftarrow$ | 4 | 4 | $\dagger$ |  | $\downarrow$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT |
| Lane Group Flow (vph) | 94 | 306 | 11 | 302 | 226 | 67 | 537 | 200 | 426 |
| v/c Ratio | 0.50 | 0.65 | 0.06 | 0.63 | 0.40 | 0.45 | 0.72 | 0.53 | 0.53 |
| Control Delay | 41.1 | 37.3 | 28.1 | 38.3 | 6.2 | 51.7 | 28.7 | 14.5 | 21.8 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 41.1 | 37.3 | 28.1 | 38.3 | 6.2 | 51.7 | 28.7 | 14.5 | 21.8 |
| Queue Length 50th (tt) | 49 | 160 | 5 | 165 | 0 | 40 | 261 | 52 | 183 |
| Queue Length 95th (ft) | 106 | 260 | 20 | 264 | 56 | 82 | 404 | 86 | 297 |
| Internal Link Dist (tt) |  | 385 |  | 169 |  |  | 461 |  | 249 |
| Turn Bay Length (tt) | 125 |  |  |  |  | 100 |  | 150 |  |
| Base Capacity (vph) | 188 | 473 | 185 | 478 | 570 | 303 | 751 | 411 | 810 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.50 | 0.65 | 0.06 | 0.63 | 0.40 | 0.22 | 0.72 | 0.49 | 0.53 |

[^21]
## Appendix D: Pavement Information

# PAVEMENT EVALUATI ON \& TREATMENT SELECTI ON REPORT (PETSR) 

11/15/2013

FINAL 8/19/2014

## General

Region: 4
County: Monroe
Route No.: $\begin{aligned} & \text { Dewey Ave } \\ & \text { Driving Park Ave }\end{aligned}$ PIN: 4755.55
Project Description: Dewey Avenue / Driving Park Avenue Intersection Realignment Project
Begin RM: NA End RM: NA Total Length: Less than 500 ft of each approach to intersection
Latest Pavement Rehabilitation/Treatment Date(s): Driving Park Ave - Surface Repair / True \& Leveling (2014) Dewey Ave - Cold Milling and Single Course Overlay (2012)
Original Contract Date(s): Spring 2016 (earliest)

## Related Pavement Data:

Traffic AADT (Range): | 5,610 to |
| :---: |
| 10,810 |
| Date: 2014 \% Trucks: $6 \%$ Average |

Sufficiency Rating Surface Score: NA Date: NA

## Roadway Features

| Roadway: | Divided $\square$ | Non-Divided 区 | Concrete Median Barrier $\square$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Median: | Flush 区 | Raised $\square$ |  |  |
| Curbs: | Mountable $\square$ | Non-Mountable $\boldsymbol{\searrow}$ | HMA $\square \quad$ PCC $\square$ | Stone $\mathbb{}$ |
| Gutter: | None $\boldsymbol{\chi}$ | Present $\square$ | Location: |  |
| MIARDS/C | ARDS: None $\boldsymbol{\chi}$ | Present $\square$ | Location: |  |

Travel Lanes:
Number: 1-2 Width(s): 10 ft to 12 ft and varies
Type: $\quad$ Reinforced PCC $\square$ Non-Reinforced PCC $\square$ HMA X HMA over PCC $\square$ With one core showing underlaying brick layer
Thickness (normal): Total: 6.5" - 12" (HMA:6.5" - 12" PCC: 0" )
Reinforced and Non-Reinforced PCC Pavements only:
Slab Length:
Load Transfer Type: $\quad$ Dowels $\square 2$ Component $\square$
Transverse Joints: Contraction $\square \quad$ Expansion $\square$
Subbase: Type: Crushed Thickness (nominal): 3" - 5"
Stone, Sand,
Shoulders: and/or Gravel
Type: HMA X PCC $\square$ Gravel $\square$ Thickness: 6.5"-12"
Surface Treatment/Stabilized Gravel $\square$ Thickness:
Width: Left: None Right: 0 ft to 8 ft
Drainage Type: Open System $\square$ Closed System $\mathbb{Z}$

# PAVEMENT EVALUATI ON \& TREATMENT SELECTI ON REPORT (PETSR) 



## EXISTING PAVEMENT CONDITION REMARKS:

The existing pavement section along Dewey Avenue appears to be in relatively good condition due to the recent resurfacing operation. The existing pavement section along Driving Park Avenue shows moderate distress including cracking, rutting, numerious utility repairs, pot holes, etc.

## EXISTING SHOULDER REMARKS:

Existing shoulders are paved and in similar condition to that of the adjacent pavement surface.

## REMARKS AND PAVEMENT RECOMMENDATIONS:

Reconstruction of the existing pavement surface is recommended due to existing conditions of the pavement along Driving Park Avenue and the proposed intersection realignment. Changes in horizontal alignment and grade will be necessary to realign the existing intersection.

## GEOTECHNICAL REMARKS AND RECOMMENDATIONS:

Existing subgrade soil conditions were characterized as poor after subsurface exploration. It is recommended that subgrade soils be observed as they are exposed during construction and properly rectified. This could involve isolated areas of undercut and replacement with suitable material. Underdrain and geotextile stabilization / separation is recommended at the subgrade / subbase interface. No other special geotechnical techniques or considerations are anticipated that would affect the design or construction within the project limits.

# PAVEMENT EVALUATION \& TREATMENT SELECTION REPORT (PETSR) <br> 11/15/2013 

## Treatment Options:

1. Rehabilitation - cold milling with single or multiple course overlay
2. Full Depth Portland Cement Concrete Pavement
3. Full Depth Hot Mix Asphalt (HMA) Pavement

Results of Life Cycle Cost Analysis:<br>Not required per Table 3-2 of the NYSDOT Comprehensive Pavement Design Manual.

## Recommendations:

Within the project limits, fully reconstruct the existing pavement with a full depth HMA pavement section due to the proposed intersection realignment and condition of Driving Park Ave. Proposed hot mix asphalt (HMA) pavement sections would be in accordance with the City of Rochester standard pavement section. These were verified with the Equivalent Single Axle Loading (ESAL) pavement design procedure as outlined in the NYSDOT Comprehensive. Pavement Design Manual. The expected pavement surface life would be 20 years with an expected total pavement service life of 50 years. New asphalt shoulders would also be constructed to full depth.
If you have any questions regarding this report, please contact at 585-232-5137 x380
Michael T. Croce, PE

Prepared by: Thomas R Detrie, PE
Date: 8/15/14

Approved by: Seesen/hor
Date:

Professional Engineering Seal for Recommendations to Use Beyond Preservation Treatments:


8/19/2014

Appendix E: Geotechnical Information


A SUBSIDIARY OF SJB SERVICES, INC.

CORPORATE/ BUFFALO OFFICE 5167 South Park Avenue Hamburg, NY 14075
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ALBANY OFFICE
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60 Miller Street Cortland, NY 13045
Phone: (607) 758-7182 Fax: (607) 758-7188
(丸 ROCHESTER OFFICE
535 Summit Point Drive Henrietta, NY 14467
Phone: (585) 359-2730 Fax: (585) 359-9668

## MEMBER

$\widehat{A C E C N} N$ York

# Final Geotechnical Evalluation Report for Proposed Realignment Project <br> Dewey Avenue \& Driving Park Avenue Intersection <br> PIN 4755.55 <br> City of Rochester, Monroe County, New York 

## Prepared For:

Bergmann Associates
28 East Main Street
200 First Federal Plaza
Rochester, New York 14614-1909

Prepared By:
Empire Geo-Services, Inc.
535 Summit Point Drive
Henrietta, New York 14467


Project No.: RE-14-017
August 2014

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Fax: (607) 758-7188

X ROCHESTER OFFICE
535 Summit Point Drive Henrietta, NY 14467 Phone: (585) 359-2730 Fax: (585) 359-9668

## MEMBER

August 19, 2014
Project No. RE-14-017

Bergmann Associates
28 East Main Street
200 First Federal Plaza
Rochester, New York 14614
Attention: Mr. Michael T. Croce, P.E. Project Manager

Re: Final Geotechnical Evaluation Report for Proposed Realignment Project
Dewey Avenue \& Driving Park Avenue
PIN 4755.55
Rochester, Monroe County, New York
Dear Mr. Croce,
Pursuant to your request and authorization, Empire Geo-Services, Inc. (Empire) completed a subsurface exploration and subgrade evaluation with regard to the proposed Realignment Project (PIN 4755.55) planned at the intersection of Dewey Avenue and Driving Park Avenue in the City of Rochester, Monroe County, New York. The approximate location of the project site is shown on Figure 1.

This work was completed at the request and authorization of Bergmann Associates (Bergmann) in accordance with our May 20, 2014 proposal, which was approved on July 1, 2014. SJB Services, Inc. (SJB), Empire's affiliated subsurface exploration company, completed the subsurface exploration program, which included a total of four (4) pavement cores and three (3) test borings.

The purpose of our work was to investigate the existing pavement and subgrade conditions at the existing intersection and to develop appropriate design parameters and construction recommendations to assist Bergmann in the redesign and construction of the existing pavement areas. In addition, several indigenous soil samples were tested in our laboratory to provide an indication of the corrosion potential with regard to buried metallic conduits. Figure 2 shows the approximate location of this area and the exploration locations.

## SUBSURFACE EXPLORATION

Exploration of the existing asphalt pavement, subbase and subgrade conditions was completed by SJB on July 7, 2014. This work included extracting pavement cores of the existing asphalt concrete, sampling and measuring the underlying subbase layer, as well as sampling the underlying subgrade soils.

The pavement core and test boring locations were designated as B-1 through B-4 on a site plan provided to Empire by Bergmann. The exploration locations were then staked in the field by SJB using tape measurements referenced to existing site features. Due to the existing underground utilities located in the vicinity of test boring B-1, SJB was unable to sample the underlying subgrade soils (advance the test boring), and therefore, SJB just extracted the pavement core and hand sampled the subbase material. The approximate exploration locations are shown on Figure 2.

Portable coring equipment was utilized to obtain a nominal 6-inch diameter core sample of the asphaltic concrete at each location. The underlying subbase was then sampled and its thickness measured at the core locations after the pavement cores were extracted.

Test borings B-2 through B-4 were then advanced in the subbase and subgrade soils using hollow stem auger and split spoon soil sampling methods. Split spoon samples and Standard Penetration Tests (SPTs) were then taken continuously in the underlying subgrade soils to a depth of 10 feet below the existing ground surface. The split spoon sampling and SPTs were completed in general accordance with ASTM D 1586 - "Standard Test Method for Penetration Test and Split-Barrel Sampling of Soils".

A geologist from SJB prepared the test boring logs based on visual observation of the recovered soil samples, and review of the driller's field notes. The soil samples were described based on a visual/manual estimation of the grain size distribution, along with characteristics such as color, relative density, consistency, moisture, etc. The test boring logs are presented in Appendix A, along with general information and a key of terms and symbols used to prepare the logs.

The thickness of the pavement core samples were measured and photographed in our laboratory. The core photographs are presented in Appendix B. The thicknesses of the asphalt concrete and subbase layer encountered at each location, along with a general description of the underlying subgrade soils, are summarized on Table No. 1.

## LABORATORY TESTING

The soil samples collected between depths of about 4 feet to 6 feet from test borings B-3 and B-4 and a composite sample of the soil collected from test boring B-2 between depths of 4 feet to 8 feet are currently being tested in SJB's geotechnical testing laboratory for resistivity, redox, pH , moisture, and sulfides according to procedures established by the Ductile Iron Pipe Research Association (DIPRA test). This testing will provide an indication of the corrosion potential of the on-site soils with regard to buried metallic conduits. The laboratory test data has been submitted under a separate cover letter.

## SUBSURFACE CONDITIONS

## Summary of Pavement, Subbase and Subsurface Conditions Encountered

## General

The thicknesses of the asphalt concrete and subbase layer encountered at each exploration location, along with a general description of the underlying subgrade soils, are summarized on Table No. 1 and below. In addition, a thickness breakdown and description of the various components (i.e. top, binder, base) making up the asphalt concrete layer are presented on Table No. 1.

## Pavement, Subbase and Subsurface Conditions

Asphalt concrete was encountered at the surface of each pavement core/test boring location. The thickness of the asphaltic concrete core samples obtained varied from 6.5 -inches to 12.0 -inches. In most cases, the pavement cores obtained appeared to be in a relatively good condition as minimal pitting and/or deterioration between and within the various asphalt concrete courses was apparent.

Beneath the asphalt at test boring location B-3, brick was encountered. The brick was about 4-inches thick and had a vertical crack through the center.

Beneath the asphaltic concrete or brick, a subbase layer was apparent at each location. The subbase consisted of crushed stone, sand and/or gravel or possibly crushed concrete. The thickness of the subbase course encountered was typically 3 -inches to 5 -inches. A geotextile fabric was not apparent beneath the subbase materials at any location.

Bergmann Associates
PIN 4755.55
August 19, 2014
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We note that the asphalt and subbase measurements are widely spaced. In addition, the subbase material was measured within the test boring hole, and should therefore be considered approximate. It should be expected that the thickness of the asphalt or subbase could vary significantly dependent upon location.

Beneath the crushed stone subbase course at test boring location B-2, sand and gravel fill soils were encountered. The fill soils were found to extend to a depth of about 3 feet at this location. Fill soils were not present at the remaining boring locations (B-3 and B-4). It should be expected, however, that fill soils will vary between and away from the boring locations, will be dependent upon the native site topography and will extend to at least the bottom of any utility lines within the proposed project site area.

Beneath the fill at test boring location B-2 and the subbase material at borings B-3 and B-4, indigenous soils consisting of brown sand intermixed with gravel and/or silt were encountered. The sand soils grade to a brown clayey silt soil below a depth of about 4 feet or 6 feet at the boring locations. The clayey soils extend to boring completion at test borings B-2 and B-4. Silty sand soil deposits were encountered beneath the clay soils at a depth of about 8 feet at test boring B-3. The silty sand soils extend to boring completion at this location. The indigenous soils are classified as SM, SP-SM and ML group soils using the Unified Soil Classification System (USCS).

Standard Penetration Test (SPT) "N" values obtained in the subgrade soils directly beneath the subbase indicate the subgrades are generally of a loose to firm relative density. The deeper subgrade soils generally consist of medium to hard consistency clayey silt soils and firm to very compact sand soils.

Freestanding water was not apparent in any of the test holes immediately following the completion of drilling operations. Accordingly, based on the groundwater measurements within the test borings as well as the "moist" nature of the soil samples recovered, it appears a permanent groundwater condition (i.e. groundwater table) was not encountered within the depths explored at the boring locations. The installation of a groundwater observation well would help to better define the groundwater conditions present on the site.

Although not observed in the test borings, it is possible that some localized perched or trapped groundwater may be present within the looser or more granular zones of fill and indigenous soils, which overlie the less permeable indigenous soils. Perched groundwater conditions can be particularly more prevalent
following heavy or extended periods of precipitation and during seasonally wet periods. Both perched and general groundwater conditions should be expected to vary with location and with changes in soil conditions, precipitation and seasonal conditions.

## GEOTECHNICAL CONSIDERATIONS AND RECOMMENDATIONS

The test boring data suggests the upper soils, which make up the pavement structure subgrades, generally vary in composition ranging from loose to firm, gravelly sand, silty sand or silty/gravelly sand. The drainage characteristics of these subgrade soils are variable ranging from "good" to "fair-poor".

It is our understanding, the proposed realignment project is expected to consist of full depth reconstruction. This will include removal of the existing asphalt concrete pavement, excavation of the underlying subbase, as well as the subgrade soils, as necessary to establish the new pavement profile (grade), preparation of the exposed subgrades for the new pavement structure, and placement of a new pavement subbase course and asphalt concrete pavement surface. In addition, due to the varying drainage characteristics of the subgrade soils, we would recommend installation of pavement structure drainage, as discussed further below.

Based on the site conditions and our analysis of subgrade conditions encountered in the test borings, an effective roadbed Soil Resilient Modulus (Mr) of 3,000 psi can be used in the analyses as being representative of the less favorable subgrade soil conditions encountered. This Mr value correlates to subgrade CBR value of approximately 3.5 to 4 . This is contingent upon proper preparation and protection of the existing subgrade soils, as discussed further below.

In addition, the subgrade support characteristics of the upper subgrade soils are expected to vary, therefore, a woven polypropylene stabilization/separation geotextile (i.e., Mirafi 600X or approved suitable equivalent) is recommended prior to placement of the subbase stone.

In all cases we recommend that the existing soil subgrades be proof-rolled and evaluated prior to the placement of any subgrade fill required to raise site grades and/or the placement of the subbase course for the new pavement structure construction. In addition, the surface of the existing soil subgrades should be thoroughly compacted with numerous passes of a vibratory smooth drum roller (i.e. 10 tons or greater) to further compact the soils prior to placement of any additional subgrade fill and/or the new pavement subbase.

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Placement and compaction of all subgrade fill to raise site grades, if necessary or the pavement subbase should be observed and tested by a representative of Empire (i.e. by our affiliated materials testing company, SJB Services, Inc.). We recommend the subbase or any site grade fill consist of a crusher run stone, as described below.

## Structural Fill Material (Subbase Stone)

Structural Fill, used as subbase stone or as site grade fill, should consist of crusher run stone, which should be free of clay, organics and friable or deleterious particles. As a minimum, the crusher stone should meet the requirements of New York State Department of Transportation, Standard Specifications, Item 304.12 - Type 2 Subbase, with the following gradation requirements.

| Sieve Size <br> Distribution |  | Percent Finer <br> by Weight |
| :--- | :--- | :---: |
| 2 inch |  | 100 |
| $1 / 4$ inch |  | $25-60$ |
| No. 40 |  | $5-40$ |
| No. 200 |  | $0-10$ |

The crusher run stone Structural Fill should be compacted to a minimum of 95 percent of the maximum dry density as measured by the modified Proctor test (ASTM D1557). Placement of the fill should not exceed a maximum loose lift thickness of 8 to 10 inches. It may be necessary to reduce the loose lift thickness depending on the type of compaction equipment used so that the required density is attained. The crusher run stone should have a moisture content within two percent of the optimum moisture content prior to compaction.

## Additional Design Considerations and Recommendations

The installation of underdrains or edge drains are recommended to drain the pavement subbase course and subgrades in order to limit the potential for frost action and improve pavement structure performance and design life.

Underdrains should include a geotextile (i.e. Mirafi 160 N or suitable equivalent), selected considering drainage and filtration, installed around drainage stone surrounding a slotted or perforated drain pipe. The drainage stone should be sized in accordance with the pipe slotting or perforations. A crushed aggregate conforming to NYSDOT Standard Specifications Section 703-02, Size Designation No. 1 ( $1 / 2$-inch washed gravel or stone) is generally acceptable for

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slotted underdrain pipe. The underdrain pipes should be set in the bottom of the subbase layer, or preferably below the top of the soil subgrade elevation. The drainage stone and surrounding geotextile should extend above the underdrain pipe and into the subbase layer. Underdrain pipes should be connected to the storm water drainage system.

Alternatively, the pavement subbase course should be allowed, as a minimum, to daylight/drain to an adjacent perimeter drainage swale or other drainage relief point. Accumulation of water on pavement subgrades should be avoided by grading the subgrade to a slope of at least 2 percent to allow drainage to the edge drains or drainage swale.

## Pavement Construction Considerations

Existing asphalt pavement, as well as any surface slabs, vegetation, topsoil, soils containing organics, demolition rubble, or otherwise wet, soft, or unsuitable material should be removed in the areas to be fully reconstructed or within new pavement areas. Following removal of the surface materials and excavation to the proposed subgrades, the exposed subgrades should be thoroughly compacted and proof-rolled. The subgrade compaction and proof-rolling should be performed, prior to any required fill placement and ground improvement, using a vibratory smooth drum roller weighing at least 10 tons. The roller should be operated in the vibratory mode for compacting the subgrades and in the static mode for proof rolling. The roller should complete at least four (4) passes over the exposed subgrades for the compaction/densification operation and at least two (2) passes for the proof rolling evaluation.

The subgrade proof-rolling and compaction should be done under the guidance of, and observed by, a representative of Empire. It may be necessary to waive the compaction and/or proof-rolling requirement which will be dependent on the type of subgrade conditions exposed (i.e. cohesive vs. granular) and/or if wet subgrades are present. This should be determined by Empire. Any areas, which appear wet, loose, soft, unstable or otherwise contain unsuitable materials, should be undercut. Over excavation, which may be required as the result of the subgrade inspection and/or proof-rolling, should be performed based on evaluation of the conditions and guidance provided by Empire. Resulting over-excavations should be backfilled with additional subbase stone.

The pavement construction can proceed on suitable subgrade soils following the proof-rolling and compaction evaluation. Installation of adjacent geotextile panels should have minimum overlap of 12 to 18 inches. Construction of the asphaltic

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concrete courses (i.e., binder and top) should be performed in accordance with NYSDOT Standard Specification Section 400. In addition, placement of asphalt concrete courses should not be permitted on wet or snow covered surfaces or when the subgrade surface is less than $40^{\circ} \mathrm{F}$.

## CONCLUDING REMARKS

This report was prepared to assist with design and construction of the proposed Realignment Project (PIN 4755.55) planned at the intersection of Dewey Avenue and Driving Park Avenue in the City of Rochester, Monroe County, New York. The report has been prepared for the exclusive use of Bergmann Associates and other members of the design team, for specific application to this site and this project only.

The recommendations were prepared based on Empire Geo-Services, Inc.'s understanding of the proposed project, as described herein, and through the application of generally accepted soils and foundation engineering practices. No warranties, expressed or inferred, are made by the conclusions, opinions, recommendations or services provided.

Empire Geo-Services, Inc. should be retained to review specifications and monitor the site work / pavement construction to verify that the recommendations were properly interpreted and implemented.

Important information regarding the use and interpretation of this report is presented in Appendix C.

Respectfully Submitted:

EMPIRE GEO-SERVICES, INC.


Wanda M. Allen, P.E.
Geotechnical Engineer


John J. Danzer, P.E.
Senior Geotechnical Engineer and Project Reviewer

TABLE

TABLE 1
SUMMARY OF EXISTING PAVEMENT STRUCTURE AND SUBGRADE CONDITIONS
PROPOSED REALIGNMENT PROJECT
DEWEY AVENUE \& DRIVING PARK AVENUE INTERSECTION
PIN 4755.55
CITY OF ROCHESTER, MONROE COUNTY, NEW YORK

|  |  | Existing Asphalt Concrete (AC) Pavement |  |  |  |  | Subbase Material | Subbase Thickness(inches) | Subgrade Soil Conditions |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Core Number | Pavement Surface Material | Top Course Thickness (inches) | Binder Course (BI) <br> Thickness (inches) | Base Course (BA) or Underlying Binder Course (BI) or Brick (BR) Thickness (inches) |  | Total AC Pavement Thicknes (inches) |  |  | Subgrade Material Type | Relative Density or Consistency of Subgrade | Subgrade Drainage Characteristics |
| B-1 | Asphalt Concrete | 2.50 | 2.50 | 7.00 | BA | 12.0 | Crushed Stone | 5 | NA | NA | NA |
| B-2 | Asphalt Concrete | 2.00 | 2.25 | 5.75 | BA | 10.0 | Crushed Stone | 3 | SAND and Gravel (FILL) | Loose to Firm | Good |
| B-3 | Asphalt Concrete | 1.75 | 4.75 | 4.00 | BR | 6.5 | Sand | 3 | Silty SAND (SM) | Loose to Firm | Fair to Poor |
| B-4 | Asphalt Concrete | 4.25 | 1.75 | 3.00 | BI | 9.0 | Gravel \& Sand or Crushed Concrete | 5 | Gravelly/Silty fine SAND (SP-SM) | Loose to Firm | Fair |

Notes
1.) NA - Not Applicable
2.) Underlying subgrade soils at boring location B-1 was not sampled due to underground utilities in the vicinity of the test boring

## FIGURES




## APPENDIX A

## SUBSURFACE EXPLORATION LOGS






## APPENDIX B

## ASPHALT PAVEMENT CORE PHOTOGRAPHS





| CORE NUMBER | DESCRIPTION |
| :---: | :---: |
| B-2 | TOTAL CORE LENGTH = 10" CORE DIAMETER = 5-3/4" |
|  | Asphalt Top Course = 2" <br> Asphalt Binder Course = 2-1/4" <br> Asphalt Base Course = 5-3/4" |

DRIVING PARK AVE AND DEWEY AVE RECONSTRUCTION ROCHESTER, NEW YORK CORE SUMMARY


| CORE | DESCRIPTION |
| :---: | :---: |
| NUMBER | TOTAL CORE LENGTH = 10-1/2" |
| CORE DIAMETER $=5-3 / 4 "$ |  |



| CORE | DESCRIPTION |
| :---: | :---: |
| NUMBER | TOTAL CORE LENGTH = 9" |
| CORE DIAMETER = 5-3/4" |  |
| B-4 | Asphalt Top Course $=4-1 / 4 "$ <br> Asphalt Binder Course $=1-3 / 4 "$ <br> Asphalt Binder Course $=3 "$ |

APPENDIX C
REPORT LIMITATIONS

## GEOTECHNICAL REPORT LIMITATIONS

Empire Geo-Services, Inc. (Empire) has endeavored to meet the generally accepted standard of care for the services completed, and in doing so is obliged to advise the geotechnical report user of our report limitations. Empire believes that providing information about the report preparation and limitations is essential to help the user reduce geotechnical-related delays, cost over-runs, and other problems that can develop during the design and construction process. Empire would be pleased to answer any questions regarding the following limitations and use of our report to assist the user in assessing risks and planning for site development and construction.

PROJECT SPECIFIC FACTORS: The conclusions and recommendations provided in our geotechnical report were prepared based on project specific factors described in the report, such as size, loading, and intended use of structures; general configuration of structures, roadways, and parking lots; existing and proposed site grading; and any other pertinent project information. Changes to the project details may alter the factors considered in development of the report conclusions and recommendations. Accordingly, Empire cannot accept responsibility for problems which may develop if we are not consulted regarding any changes to the project specific factors that were assumed during the report preparation.

SUBSURFACE CONDITIONS: The site exploration investigated subsurface conditions only at discrete test locations. Empire has used judgement to infer subsurface conditions between the discrete test locations, and on this basis the conclusions and recommendations in our geotechnical report were developed. It should be understood that the overall subsurface conditions inferred by Empire may vary from those revealed during construction, and these variations may impact on the assumptions made in developing the report conclusions and recommendations. For this reason, Empire should be retained during construction to confirm that conditions are as expected, and to refine our conclusions and recommendations in the event that conditions are encountered that were not disclosed during the site exploration program.

USE OF GEOTECHNICAL REPORT: Unless indicated otherwise, our geotechnical report has been prepared for the use of our client for specific application to the site and project conditions described in the report. Without consulting with Empire, our geotechnical report should not be applied by any party to other sites or for any uses other than those originally intended.

CHANGES IN SITE CONDITIONS: Surface and subsurface conditions are subject to change at a project site subsequent to preparation of the geotechnical report. Changes may include, but are not limited to, floods, earthquakes, groundwater fluctuations, and construction activities at the site and/or adjoining properties. Empire should be informed of any such changes to determine if additional investigative and/or evaluation work is warranted.

MISINTERPRETATION OF REPORT: The conclusions and recommendations contained in our geotechnical report are subject to misinterpretation. To limit this possibility, Empire should review project plans and specifications relative to geotechnical issues to confirm that the recommendations contained in our report have been properly interpreted and applied.

Subsurface exploration logs and other report data are also subject to misinterpretation by others if they are separated from the geotechnical report. This often occurs when copies of logs are given to contractors during the bid preparation process. To minimize the potential for misinterpretation, the subsurface logs should not be separated from our geotechnical report and the use of excerpted or incomplete portions of the report should be avoided.

OTHER LIMITATIONS: Geotechnical engineering is less exact than other design disciplines, as it is based partly on judgement and opinion. For this reason, our geotechnical report may include clauses that identify the limits of Empire's responsibility, or that may describe other limitations specific to a project. These clauses are intended to help all parties recognize their responsibilities and to assist them in assessing risks and decision making. Empire would be pleased to discuss these clauses and to answer any questions that may arise.

## Appendix F: Non-Standard Feature Justifications

| NON-STANDARD FEATURE JUSTIFICATION (in accordance with HDM §2.8) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PIN: | 4755.55 |  | NHS (Y/N): |  | No |
| Route No. \& Name: | Dewey Avenue |  | Functional Class: |  | Urban Minor Arterial |
| Project Type: | Major Intersection Reconstruction |  | Design Class: |  | Urban Arterial |
| \% Trucks: | 6\% |  | Terrain: |  | Rolling |
| ADT (2038): | 13,730 |  | Truck Access/Qualifying Hwy. |  | Yes / No |
| a. - Description of Non-Standard Feature |  |  |  |  |  |
| Type of Feature (e.g., horizonta curve radius): |  | Horizontal Curve Radius |  |  |  |
| Location: |  | Dewey Avenue, Sta. DA 9+49.58 to Sta. DA 10+98.00, Sta. DA 11+74.05 to Sta. DA 13+21.66 |  |  |  |
| Standard Value: |  | 371 ft (@ e= 4.0\%) |  | Design Speed: | 35 mph |
| Existing Value: |  | None |  | Advisory Speed: | None |
| Proposed Value: |  | $171 \mathrm{ft}\left(@ \mathrm{e}=\mathrm{NC}^{1}\right.$ ) |  | Advisory Speed: | 25 mph |
| b. - Accident Analysis |  |  |  |  |  |
| Current Accident Rate: |  | 6.15 Acc/mvm |  |  |  |
| Statewide Rate: <br> Is the non-standard feature a contributing factor? |  | $2.48 \mathrm{Acc} / \mathrm{mvm}$ |  |  |  |
|  |  |  | horizontal | does not currently |  |
| Anticipated Accident Rates, Severity, and Costs: |  | The overall accident rate is expected to remain the same or decrease given the proposed improvements and the low speed urban environment. |  |  |  |
| c. - Cost Estimates |  |  |  |  |  |
| Cost to Fully Meet Standards: Cost(s) For Incremental Improvements: |  | \$300,000 - \$750,000 (Estimated, pending the number of right-of-way acquisitions) |  |  |  |
|  |  | Not applicable. Increasing the radius results in impacts to the adjacent properties. |  |  |  |
| d. - Mitigation (e.g., increased superelevation and speed change lane length for a non-standard ramp radius): |  |  |  |  |  |
| Consideration to install appropriate curve warning signs and advisory speed plaques, compliant with the current MUTCD standards, for both northbound and southbound drivers. Operating speeds along these curves should be lower than the design speed due to the location of the signalized intersection and adjacent intersections with Lexington Avenue and Selye Terrace, and general tight urban nature of the corridor. |  |  |  |  |  |
| e. - Compatibility with Adjacent Segments \& Future Plans: |  |  |  |  |  |
| There are similar curves on adjacent roadway segments within the City of Rochester. There are no plans to widen or reconstruct the adjacent segments. There is an angled intersection $1 / 2$ mile to the south at Emerson Street. |  |  |  |  |  |
| f. - Other Factors (e.g., Social, Economic \& Environmental): |  |  |  |  |  |
| Significant right-of-way acquisitions would be required in order to fully meet standards. These would impact include four (4) residential properties and one (1) historic property. |  |  |  |  |  |
| g. - Proposed Treatment (i.e., Recommendation): |  |  |  |  |  |
| Construct the proposed curve (radius = 171 ft ) and roadway cross slope ( $2 \%$ normal crown) on Dewey Avenue. Curve warning and advisory speed signs would be reviewed in detailed design to mitigate this feature. |  |  |  |  |  |

1. Normal crown (NC) retained to facilitate tie-to to Selye Terrace. Allowable in a low-speed urban environment per AASHTO / NYSDOT.



## Appendix G:

Public Involvement Plan and Meeting Summaries City of Rochester
Dewey/Driving Park Intersection Realignment Draft Public Participation Plan NYSDOT PIN 4755.55 City of Rochester Project ID 12105

The City of Rochester is advancing an intersection realignment project to eliminate the offset intersections of Dewey Avenue and Driving Park Avenue. The Public Participation Plan for the Dewey Avenue/Driving Park Avenue Intersection Realignment Project identifies the number and type of meetings that will be conducted to solicit input on the design process. It also identifies key stakeholders for the project. The plan provides municipal staff, the consultant, and stakeholders with guidelines to ensure that the community is involved in the project development and that the process is transparent.

## Introduction

The City of Rochester is advancing an intersection realignment project to eliminate the offset intersections of Dewey Avenue and Driving Park Avenue. The realignment project will occur 550 feet north and south of Dewey Avenue and 550 feet east and west of Driving Park Avenue. This Public Participation Plan for the Dewey Avenue/Driving Park Avenue Intersection Realignment Project identifies the number and type of meetings that will be conducted to solicit input on the design process. It also identifies key stakeholders for the project. The plan provides municipal staff, the consultant, and stakeholders with guidelines to ensure that the community is involved in the project development and that the process is transparent.

This document is a starting point, developed in March 2014, at the beginning of the project. Other opportunities for public engagement, not identified
in this plan, may be identified and implemented at later stages of the project.

## Project Partners

This section of the Plan describes specific different roles and responsibilities of each partner, and describes how each group will be involved.



The City of Rochester is the project administrator. The City will manage the project and have a contractual relationship with the design consultant. City staff will be involved in the design development. Public meetings will be advertised through the City's media contacts and on the City website.

Key stakeholders will provide input too the overall vision of the project. Key stakeholders will include the Dewey/Driving Park FIS Neighborhood Group, Dewey/Driving Park business owners, Rochester Walks, RGRTA, RRCDC, RDP, Rochester Cycling Alliance, Maplewood Neighborhood Association,

The Holy Rosary Apartments, Mary's Place, RGRTA, and Edgerton Neighborhood.

The public will have an opportunity to provide valuable input into the intersection realignment project at the public information meeting.

## Participation Methods for Stakeholders

The methods used in the project will be aimed at developing and maintaining project communication, identifying participants, maximizing participant exchange and providing an accurate and timely record and reports.

The project will include one public information meeting/public hearing with advisory agencies, local officials, and citizens. The purpose of the meeting will be to present the proposed design. The meeting will be in an open house format. The consultant will organize, facilitate and develop meeting summaries for this meeting. Public meeting advertisements will be in compliance with the New York State Open Meetings Law. The public hearing will comply with New York State eminent domain procedures law.

Up to seven working group meetings with stakeholders will be scheduled during project. Three of these meetings will take place during the preliminary design phase. Participants will include neighborhood and business stakeholder groups. The purpose of the preliminary design phase meeting will be to present the proposed alternatives and obtain feedback on the proposed project. Four stakeholder meetings will be held during the detailed design with neighborhood and business stakeholder groups. The purpose of these four meetings will be to present the proposed design and streetscape features and to obtain feedback.

## Public Engagement Tools

Several different tools will be employed to organize information, document input and evaluate the stakeholder participation process.

The consultant will develop a stakeholder database with the name, address, and email address of each person involved in the project. City staff will provide initial information to populate the database, and additional information will be gathered through the outreach process. The database will be used to communicate with stakeholders throughout the project.


Meeting notices will provide the date, time, location, and purpose of each meeting. Public meeting advertisements will be in compliance with the New York State Open Meetings Law.

Stakeholder meeting materials will consist of meeting invitations, meetings agenda, renderings, graphics, and meeting summaries.

Public meeting materials will consist of a media release, a meeting agenda, renderings, graphics, a PowerPoint presentation, and meeting summaries. The consultant will provide all of these materials to the City of Rochester in a timely manner for posting on the project web page.

The consultant will collect verbal public comments at the public meeting. Written public comments may also be submitted up to two weeks after the last public meeting through the City of Rochester website. Emails will be directed to Paul Way at the City of Rochester.

## Project Schedule

| Task | Date |
| :---: | :---: |
| Neighborhood Steering Committee | 2005 through <br> 2008 |
| First meeting during preliminary design to present and obtain feedback <br> with FIS Neighborhood Group DC | $3 / 19 / 14$ |
| Second meeting during preliminary design to present and obtain feedback <br> with merchants | $4 / 10 / 14$ |
| Outreach with Maplewood Neighborhood Association | $4 / 24 / 14$ |
| Utility and Agency Coordination Meeting | $4 / 28 / 14$ |
| Public Outreach to Merchants | $5 / 7 / 14$ |
| Third meeting during preliminary design to present and obtain feedback <br> with Maplewood Neighborhood Association | $5 / 19 / 14$ |
| Fourth meeting during preliminary design to present and obtain feedback <br> with the Edgerton Neighborhood | $6 / 23 / 14$ |
| Public Comment Period Ends | $6 / 30 / 14$ |
| Public Comments Addressed/Pre-Final Design Report Submission | $7 / 11 / 14$ |



## City of Rochester

Dewey Avenue/Driving Park Avenue Intersection Realignment Project
City Project ID\# 12105
NYSDOT PIN: 4755.55

## Meeting Summary

LOCATION: NCS Community Development Corporation<br>275 Driving Park Avenue<br>DATE: Wednesday, March 19, 2014<br>TIME: $\quad$ 5:45 PM to 7:00 PM

## PRESENT:

Paul Way, City of Rochester
Theodora Finn, City of Rochester
Thad Schofield, City of Rochester
Ron Penders, NCS
Pete Saks, NCS
Mike Croce, Bergmann Associates
Tom Detrie, Bergmann Associates
Tanya Zwahlen, Highland Planning
Anna Liisa Keller, Highland Planning
Diane Argauer
Bill Collins
Jon Greenbaum, ABC / Rochester Walks
Chuck Heehua
Charlie Heinst
Chris Koehler

Dalton LaBarge, NCS
Eli Mizrahi, Owner of Dewey’s Subs
Melissa Molongo, ABC / Rochester Walks
Nelson Motzer
Andreas Rau
Lynnette Robertson, NeighborWorks
Trin Ruc
Maggie Spaulding
Barbara Steffer
Sam Taylor
Verna Taylor
Michael Toombs

## I. Welcome \& Introductions

Theodora Finn, City of Rochester, welcomed meeting participants and thanked them for coming. Meeting attendees introduced themselves.

## II. Overview

Paul Way, City of Rochester, provided a brief overview. Mr. Way explained that the project is state and federally funded. There is funding for the design and Right of Way (ROW) Acquisition but construction for the project is not yet funded. A decision was made to commit and move ahead without a construction funding source and to take advantage of the ROW funding, which is set in the federal fiscal year 2014, ending September 30, 2014. The project needs to have formal design approval by this date. Hence the fast pace of this project.

## III. Background

A copy of the meeting presentation is included as Appendix A. Mike Croce, Bergmann Associates, reviewed the agencies and organizations involved in the project, including NYSDOT, Monroe County DOT, Bergmann Associates, Highland Planning, and neighborhood groups and associations. Mr. Croce reviewed the limits of the project area: Dewey Avenue, 550 ft . north and south of the offset intersection; and Driving Park Avenue 550 ft . east and west of the offset intersection. Historically the intersection has been hard for vehicles to navigate. The project will
also make the project area more pedestrian and bicycle friendly. The concepts included in the Community Based Vision plan developed by the Rochester Regional Community Design Center five years ago will be used as a starting point for this project.

## Past Design Charette Goals:

- Eliminate jog and replace with a traffic circle or direct connection
- Community Investment - Façade improvements, etc.
- Improve Bicycle Environment
- Improve Pedestrian Environment
- Improve Bus Stops
- Improve / increase on-street parking
- Gateway Treatment / Streetscape


## IV. Goals, Objectives, and Outcomes

Mr. Croce provided information about the preliminary project goals, objectives, and outcomes:

- Reduce vehicular congestion and improve highway safety by eliminating offset intersection
- Improve multimodal facilities (bicycle / pedestrian / transit)
- Improve community aesthetics with streetscape and landscape features
- Enhance the viability of this intersection as a neighborhood node


## V. Refined Concept Plan

Mr. Croce explained that data collection has just begun. There have been 130 collisions documented over a three-year period. He noted that $3 \%$ of traffic is from trucks making deliveries so there is a need to accommodate their movements. The aim is to improve pedestrian accommodation and safety. The project would also reduce vehicular congestion especially during peak hours. Other environmental and/or aesthetic improvements would help this project to spark future community investment.

Key Design Challenges:

- Consensus on Design
- On-street vs. Off-street Parking
- Adaptive re-use of open space
- Community features / needs including landscape elements.


## VI. Schedule

Data collection is underway. This will intensify quickly as consensus on design details must be reached before this summer.

- Existing condition studies, public outreach, and conceptual development (Spring 2014)
- Develop consensus on proposed design, project goals and objectives (Spring-Summer 2014)
- Design Documentation Complete (August 2014)
- Design Approval (September 2014)
architects // engineers // planners


## VII. Purpose of Public Outreach / Ways to Get Involved

Tanya Zwahlen described the elements of the Public Participation Plan (PPP) for the Dewey Avenue/Driving Park Avenue Intersection Realignment Project. The PPP is intended to provide City staff, partner agencies, the consultant team, and project stakeholders with readily accessible and easily understandable guidelines for ensuring that the public has meaningful opportunities to participate in the development of the project. The PPP describes the methods used throughout the study development and the purpose of the Dewey/Driving Park Intersection Realignment Project. There will be seven meetings with neighborhood and business stakeholder groups during the preliminary and detailed design stages, and a public meeting/hearing. The PPP also describes several different tools that will be employed to organize information, document input, and evaluate the stakeholder participation process, such as a stakeholder database, media releases, the City's website, and evaluation methods. Ms. Zwahlen explained that the document is a starting point developed at the beginning of the project and that feedback is welcomed.

## VIII. Open Comment Discussion

Mike Croce and Tanya Zwahlen facilitated the public comment/discussion on design elements. A compilation of comments is included below:

## One-Way Segment

- The group discussed the one-way segment headed northbound for westbound right turning traffic from Driving Park Avenue. Elimination of the one-way street should be considered in order to expand the pocket park. The one-way street would isolate the park. Driveway access and truck turn accommodations must be considered as the design continues to evolve.
- This area will be challenging for pedestrians. Consider raising it to make it safer if not removed.
- Monroe County DOT may not approve of the "Z" shaped crosswalks, so the design team will consider removing the marked crossing of Driving Park Avenue at Broezel Street.


## Access

- New signage is needed to prevent side streets from getting blocked, i.e. Selye Terrace.


## Streetscape

- Extend the streetscape enhancements further north and south if possible.
- Think about interesting crosswalk treatments; they must be durable.


## Crosswalk

- The crosswalk at Broezel Street will be problematic. If you want people to walk, design it for pedestrians.
- The traffic signal could potentially incorporate leading pedestrian intervals and other enhancements improving the pedestrian crossing experience at the main intersection.


## Family Dollar

- What is the impact on Family Dollar? Where would they relocate? To be determined.
- What will this space be used for? Need to discuss.
- Family Dollar site is not well maintained with trash overflowing the dumpster.


## Parking

- Maplewood Books needs parking which has been a potential cause for a lack of redevelopment at this site.
- Can more parking be provided?


## Project Schedule

- Detailed design would take up to a year subsequent to design approval.
- The City is committed to build the project within 10 years, hopefully sooner.
- Need to be conscious of other projects happening so construction doesn't overlap (e.g. Ridgeway in 2015 and the Driving Park Bridge).


## Other

- Will this design speed traffic up? An advantage to the confusing intersection is that it makes vehicles drive slower.
- Accident patterns need to be understood before the design is started so the solution is created around that. Accident studies are underway.
- School buses need to be accommodated from westbound Driving Park Avenue moving northbound on Dewey Avenue.
- Rochester Walks has pedestrian counts they will share with the City of Rochester.


## IX. Closing

Ms. Finn thanked participants for their attendance and participation. Next steps will be additional community outreach, design development, utility coordination, and the public meeting / hearing scheduled for later this summer.


City of Rochester<br>Dewey Avenue / Driving Park Avenue Intersection Realignment Project PIN 4755.55<br>Summary of April 2014 Stakeholder Outreach

In April 2014, the City of Rochester and Highland Planning conducted outreach to property owners, business owners, and residents regarding the Dewey Avenue/ Driving Park Avenue Intersection Realignment Project. The purpose of the outreach was to provide project information, share the current design concept, discuss the proposed parking scenarios and obtain input from key stakeholders. The current design removes $18-20$ on-street parking spaces, and the City is considering the design and construction of a municipal parking lot at the northwest corner of Dewey Avenue and Driving Park Avenue to replace these parking spaces. The outreach was intended to solicit input about whether or not the community believes there is a need for a municipal lot, and, if so, whether or not property owners would be willing to establish a special tax assessment district to maintain and insure the parking lot.

## Door-to-door Outreach

April 2, 2014
Thad Schofield (City of Rochester), Tanya Zwahlen (Highland Planning), and Anna Liisa Keller (Highland Planning) visited businesses on Dewey Avenue and Driving Park Avenue on April 2, 2014. The team shared the current design concept, the locations of the $18-20$ parking spots that will be removed, and discussed the proposed loss of on-street parking. Businesses included Sharp Edgez Barber Shop, Naughty by Nature clothing, Rochester Seafood Plus, Southern Meats \& Deli, Variety Wireless, Ronnie’s Barber Shop, and Clinton \& Ralston Auto Repair. The group placed a letter from the City in the mailboxes of all residences in the impacted area. The letter notified residents of the project and the upcoming meeting date and location on April 10, 2014 at NCS Community Development Corporation.

## Stakeholder Engagement Meeting

April 10, 2014

The City hosted a meeting on April 10, 2014 at the offices of NCS at 275 Driving Park Avenue. Paul Way (City of Rochester) provided an overview of the project and the proposed loss of onstreet parking. He also described how the management of the municipal lot would be organized. Property owners in the impacted area would assume financial responsibility for maintenance and insurance of the parking lot. Staff from the City's Department of Neighborhood and Business Development would analyze the number of parking spaces each business requires in order to determine which properties would be included in the special tax assessment district. Tom Detrie (Bergmann Associates) reviewed the project objectives. Tanya Zwahlen (Highland Planning) facilitated a discussion with meeting attendees. A list of meeting attendees is included as Appendix A. A summary of comments from the door-to-door outreach and the stakeholder meeting is below.

## Comments made by businesses owners during the 4/2/14 outreach:

- The project will be good for the commercial district. Thank you for sharing these plans.
- Realigning the intersection won’t be great for my business. Currently vehicles stopped at the traffic signal heading southbound on Dewey Avenue face my storefront. I get a lot of customers from being in this high visibility location.
- Family Dollar is an asset to the commercial district. It generates pedestrian and vehicular traffic that helps the surrounding small businesses.
- Businesses will be negatively impacts by the project. And then we will be asked to pay for the maintenance of the lot that we weren't in favor of creating. This does not make sense.
- This project will create a parking issue for my customers and my business will become less visible to vehicles traveling southbound on Dewey Avenue.


## Comments submitted by phone:

- I like the idea. Keep us informed.


## Comments made at the $4 / 10 / 14$ public meeting:

- Will properties that have their own parking lot also have to pay for the new lot?
- Neighborhood and Business Development will conduct an analysis to determine how many parking spaces each property requires based on its square footage and use. If the current number of off-street parking spaces is more than the calculation, the property will not be included in the special tax assessment district. If the property has a parking deficit, they will be included in the special tax assessment district and their fee will be based on the number of parking spots they need.
- Will there be parking regulations for the proposed lot?
- There can be. If there are, the City's Parking Bureau would enforce the parking regulations.
- Can we meter the lot so the city assumes financial responsibility?
- The lot likely will not be metered, because we would not want to discourage people from visiting the commercial district and using the parking lot.
- For twenty years, there was a municipality owned metered lot on Dewey Ave. No one ever used it.
- Who benefits from this lot? The Price Rite parking lot is open and is empty at night. Local businesses often park in the Price Rite lot. It seems as though only the main commercial section will benefit from the proposed lot.
- Is Family Dollar the only building that's being removed?
- Yes
- What is the time frame for this project?
- Currently, the project is in the planning stage. The design and right-of-way phase is funded. Construction funding is not secured, but the City is committed to the project and is actively seeking funding.
- Is the purpose of this project to address traffic flow concerns?
- The main objective of this project is to improve safety for pedestrians.
- The Price Rite loading area on Dewey Avenue creates a traffic flow issue. Traffic comes to a complete stop when trucks are unloading.
- The Bergmann team is aware of this and will keep this in mind during the design process. However, this project will not resolve this issue nor further impact their operations.
- If the municipal parking lot is not advanced, what are the other options for the use of the Family Dollar space?
- The building could be redeveloped.
- Family Dollar is a big asset to the community. A lot of the smaller businesses depend off of it. It is a mistake to remove it.
- What's the point of creating a new lot? The Family Dollar's parking lot gets used for the businesses that the new lot would serve, and property and businesses owners don't have to pay for its upkeep.
- Don't see parking being a problem. There isn't a need to create a new lot.
- Will the new lot be lighted?
- Yes.
- How much will it cost?
- That is unknown. The City has not yet conducted the analysis to quantify the cost of the lot and the cost to each property owner.
- Will there be time regulations for the spaces in front of the businesses?
- Yes, most likely it will be a two hour maximum
- The green space north of Driving Park Avenue should include a playground or a park with grills and picnic tables.
- The Family Dollar building could be redeveloped as a recreation center.
- Have you considered a roundabout?
- Yes, that was one consideration. However, it will impact more private property than the current design.


## Appendix A: April $\mathbf{1 0}^{\text {th }}$ Meeting Attendees

Paul Way, City DES

Theo Finn, City of Rochester
Thad Schofield, City of Rochester
Tom Detrie, Bergmann Associates
Tanya Zwahlen, Highland Planning
Anna Liisa Keller, Highland Planning
Linda Gonzalez, NCS
Dale Anderson, 818-820 Dewey Avenue
Clinton Dixon, Clinton \& Ralston Auto Repair
Joseph Garofanello, 795 Dewey Avenue
Tykim Whisonart, Sharp Edgez
Tom, Rochester Seafood Plus

City of Rochester
Dewey Avenue/Driving Park Avenue Intersection Realignment Project
May 7, 2014
Summary of outreach
Participants:
Bob Richmond
Facilities Manager, Price Rite
Diane Argauer
Northwest Neighborhood
Outreach Center

| John Smith |
| :--- |
| Total Information |
| Maplewood Books |

Tanya Zwahlen, (Highland Planning) called three key stakeholders on Wednesday, May 7, 2014 to discuss the Dewey Avenue/Driving Park Avenue Intersection Realignment Project. The existing issues surrounding the project are listed below:

- The current proposed design would impact the existing Family Dollar parking lot.
- The layout of the roadway, sidewalks, curb lawn, etc. would not require full removal of the Family Dollar building. The property would remain in the property owner's hands with the potential for future redevelopment.
- The proposed design would eliminate 18-20 existing on-street parking spaces. The remainder of the Family Dollar parking lot could provide space for the construction of an off-street parking lot to replace these spaces. The City of Rochester is willing to construct this lot as part of the proposed project, but desires the creation of a Municipal Parking Lot Assessment District to fund future maintenance activities.
- Comments received at a April $10^{\text {th }}$ public meeting, from business owners located immediately adjacent to the intersection, were not in overwhelming support of the construction of a lot or the creation of the parking assessment district. Some believe that the Family Dollar actually brings "pass-by" business to their establishments.
- A public meeting will be held at 6PM on Monday, May $19^{\text {th }}$ at the Aquinas Institute regarding this project.

A summary of comments by Price Rite, Northwest Neighborhood Outreach Center and Total Information/Maplewood Books follows:

- Price Rite does not need a municipal parking lot since they have on-site parking. They would like to review the current concept and will provide comments.
- Northwest Neighborhood Outreach Center may have a future need for a municipal lot to support their education center programming.
- John Smith (Total Information/Maplewood Books) is not interested in contributing to a special tax assessment district to maintain a municipal lot. His business does not require
- Each of these stakeholders will attend or send a representative to the $5 / 19$ public meeting.
- Tanya Zwahlen will follow up with an email to each of these stakeholders with the 5/19 meeting agenda, the $3 / 19$ FIS meeting summary, the schematic of on-street parking that will be impacted, the concept showing the municipal parking lot, and the current project concept.


# Dewey Avenue / Driving Park Avenue Intersection Realignment Project <br> PIN 4755.55 <br> City ID\# 12105 

Public Meeting \#1
Monday, May 19, 2014 6:00 PM to 8:00 PM
The Aquinas Institute of Rochester, Cafeteria 1127 Dewey Avenue

## I. Welcome and Introductions

Jeron Rogers (Assistant City Engineer: City of Rochester and Project Manager) welcomed participants to the meeting. Mike Croce provided an overview of the study goals and objectives. The purpose of this meeting was to reach consensus on design elements and solicit input from the Maplewood Neighborhood Association as well as the general public.

## II. Project Overview

## Goals, Objectives and Outcomes

The purpose of the project is to realign Dewey Avenue at Driving Park. The agencies and organizations involved in the project include the City of Rochester, NYSDOT, Monroe County DOT, Bergmann Associates, Highland Planning, merchants, and neighborhood associations. The project area is Dewey Avenue, 550 ft . north and south of the offset intersection; and Driving Park Avenue 550 ft . east and west of the offset intersection.

The goal of the study is to develop a vision for the Dewey Avenue / Driving Park Avenue Corridor that will improve conditions, operations, safety, and pedestrian/bicyclist accommodation.

Project objectives:

- Reduce vehicular congestion and improve safety by eliminating the offset intersection
- Improve bicycle, pedestrians and transit accommodations
- Improve community aesthetics with streetscape and landscape features
- Enhance viability of this neighborhood node


## Schedule

The consultant team is advancing a study of existing conditions, conducting public outreach and developing the conceptual design. Consensus on proposed project goals and objectives will take place in May and June 2014. Design documentation will be completed and presented at the final public meeting in June 2014. Design approval will occur before September 2014. Design, bidding, and construction will take place after design approval.

## III. Preliminary Findings

## Traffic and Safety Studies

Findings based on turning movement counts and traffic observations (pedestrian, bus and truck movements) in March 2013 reveal there is a large volume of north-south traffic. This traffic includes RTS buses, school buses, and trucks making local deliveries. Traffic flows well except in peak periods. Parked cars also interrupt traffic flow.

Sixty-five (65) accidents were reported between 2010-2013. Fifty-two percent (52\%) were intersection related, $28 \%$ resulted in injury, $74 \%$ occurred during daylight hours and $5 \%$ involved pedestrians. The predominant collision types were rear end ( 25 or $38 \%$ ), right angle ( 19 or $29 \%$ ) and overtaking ( 7 or $11 \%)$.

## Concept Plan

The current concept plan is included as Appendix A. This concept includes a turn lane from Driving Park to Dewey. The plan includes pedestrian crossings, bike lanes, parking and streetscape improvements. The current design allows easier traffic movements for buses and trucks. The new curvature on Dewey Avenue would result in speeds in the $25-30 \mathrm{mph}$ range. The pedestrian crossing and pocket parking would be raised (curbed).

## Public Outreach

The City held a meeting with the FIS Stakeholders Group on March 19, 2014. Outreach was conducted to property owners and merchants in April to gather input regarding the proposed parking plan. A meeting with merchants and property owners was held on April 10, 2014 to discuss parking. At that time, based on feedback from all major stakeholders, the City has directed the design team to exclude a municipal parking lot from the project.

## IV. Facilitated Group Discussion

## Concept Plan / Parking

- If the curb cut is removed at 858-862 Dewey Avenue, outreach to Mr. Fidele is needed
- Not in favor of municipal parking lot; it would create issues, trash, nuisance
- Crosswalk needed at Broezel Street
- Broezel Street can be used for parking by seafood customers and LA Nails customers
- Broezel Street residents expressed some concern about increased parking on their street. They stated that on street parking on Broezel is tight already.
- Decorative crosswalks are desired. Would that be captured in this phase or the detailed design phase?
- They prefer the version of the pocket park with more green than concrete.
- Parking impacts for the nail salon and Ronnie's barber shop would be a concern
- Fear that property owner of Family Dollar store will not maintain property if the building is demolished
- Are we keeping Family Dollar store or not?
- Future redevelopment is not in the City's control
- Redevelopment of Family Dollar is possible; City is committed to working on this
- A large transit stop area is needed north of Driving Park Avenue. This stop is heavily used.
- Actuated buses stick out in travel lane.
- Right of Way Acquisition is funded?
- Yes
- At the westbound turn lane to northbound Dewey, add special signs or markings alerting bicyclists to the presence of motorists.
- Is there storage for vehicles northbound on Dewey?
- Yes, there is storage for up to two vehicles in the lane
- Curb cuts at Clinton and Ralston Auto will impact their new planters
- Good job; This is a difficult intersection to redesign
- We want this project!
- How long will construction take?
- One full season from Fall to Summer plus minor finish activities the following year
- Will traffic be diverted?
- This is a detail to be studied during detailed design and MCDOT will review
- What will the year of completion be?
- Not currently known as construction is not currently funded. However, by spending the federal dollars associated with preliminary design, the City is essentially committing to completing the project within 10 years of design approval.


## Parking \& Street Amenities

- The Maplewood Neighborhood Association Garden Committee would like its Maplewood Gateway garden at Dewey / Driving Park moved to the new public space / pocket park
- Permeable substances are a good idea, i.e. rain garden
- Features that ease maintenance would be good to include in the design; especially access to water. Self irrigating beds?
- RG\&E is planning to relocate utilities including the vault at the southeast corner of Family Dollar.
- Eliminate walls/hardscape to reduce costs. Keep green space.
- Maplewood Neighborhood Association cannot maintain the entire park.
- Keep to the aesthetic of Olmsted Parkways. Do they have a special tax assessment district?
- Concrete will have maintenance costs too; there would be weeds and it would be ugly as it ages
- It can be green without grass, i.e. ferns
- Prospective uses of the pocket park: Chess boards and sets, large rocks, park benches (must have rails to deter sleeping people), pop-up concerts at performance space, no benches! Chairs that you can move; wall/seat. Stools made of stones, no grills, discourage skateboards.
- Design a flat area in center of park for performance; not a fountain/planter.
- Design for activity; kids to play and the Burmese population to congregate
- Street trees versus boulders / bollards
- Good signal to drivers
- Boulders / bollards along the roadside can be dangerous
- Park should be lit, but don't impact residential units
- Pedestrian scale lighting is desired
- Pedestrian actuated signals with countdown timers and lead pedestrians signals are desired
- Put back bicycle racks
- Can we make the triangle pedestrian island more safe and attractive?
- Low level planting is possible
- Pedestrian signals
- Lake Ave. islands have reflector signs/ poles that are unattractive. Design these in now.
- Make this space feel safe for pedestrians
- 45-60 feet / 6 feet is size where pedestrians feel safe.
- It will be curbed and raised
- Will there be lighting?
- Do you anticipate change in pedestrian counts due to island? There is a great amount of jaywalking
No signal possible at Broezel. Without a signal the City prefers there be no crosswalk
- West of Broezel crosswalk needed without signal
- Would red light camera deter drivers at this spot for pedestrians? Is one proposed?
- None proposed.
- Park will have loitering unless there is an active purpose
- We want a wide variety of people congregating, including kids, elderly, handicapped.
- Should be inclusive.
- Programming such as performances, chess gardens will be important and a clothesline arts display lights on wires.
- Community members should be a part of the project steering task force committee in further design phases.


## IV. Next Steps

Tanya Zwahlen encouraged meeting participants to submit comment sheets and email them to jrogers@cityofrochester.gov. The next public meeting will be in June 2014.

The above constitutes our understanding of issues discussed and decisions reached during the meeting. Please notify the undersigned, in writing, with any errors or omissions within five business days.

Best regards,

## Highland Planning LLC



Anna Liisa Keller
cc: All in Attendance, BA Project file

## Dewey Avenue / Driving Park Avenue Intersection Realignment Project <br> PIN 4755.55 <br> City ID\# 12105

## Public Meeting \#2

Monday, June 23, 2014 6:00 PM to 8:00 PM
The Aquinas Institute of Rochester, Cafeteria 1127 Dewey Avenue

## In Attendance:

Diane Argauer<br>John Bretz<br>Bill Collins<br>Karen Cox<br>Michael Croce, Bergmann Associates<br>Frank DiCostanzo<br>Debbie DiFrancesco<br>Gary DiFrancesco<br>Theo Finn, City of Rochester<br>Sean Finucque<br>Ed Gralord<br>James Hartman<br>Anna Liisa Keller, Highland Planning<br>Barb Ann Kudiec<br>John McMahon<br>Melissa Molongo<br>Elizabeth Murphy<br>Jeron Rogers, City of Rochester<br>Thad Schofield, City of Rochester<br>Sara Scott<br>Bob Stevenson<br>Peter Wlodarczyk, Bergmann Associates<br>Tanya Zwahlen, Highland Planning

## I. Welcome and Introductions

Jeron Rogers (Manager of Special Projects and Project Manager, City of Rochester) welcomed participants to the meeting. Mike Croce (Project Manager, Bergmann Associates) provided an overview of the study goals and objectives. A copy of the presentation is included as Appendix A.

## II. Project Purpose and Need

## Goals and Objectives

The purpose of the project is to realign Dewey Avenue at Driving Park. The agencies and organizations involved in the project include the City of Rochester, NYSDOT, Monroe County DOT, Bergmann Associates, Highland Planning, merchants, and neighborhood associations. The project area is Dewey Avenue, 550 ft . north and south of the offset intersection; and Driving Park Avenue 550 ft . east and west of the offset intersection.

The goal of the study is to develop a vision for the Dewey Avenue / Driving Park Avenue Corridor that will improve conditions, operations, safety, and pedestrian/bicyclist accommodation.

Project objectives:

- Reduce vehicular congestion and improve safety by eliminating the offset intersection
- Improve bicycle, pedestrians and transit accommodations
- Improve community aesthetics with streetscape and landscape features
- Enhance viability of this neighborhood node


## Existing Conditions

Findings based on turning movement counts and traffic observations (pedestrian, bus and truck movements) in March 2013 reveal there is a large volume of north-south traffic. This traffic includes RTS buses, school buses, and trucks making local deliveries. Traffic flows well except in peak periods. Parked cars also interrupt traffic flow.

Sixty-five (65) accidents were reported between 2010-2013. Fifty-two percent (52\%) were intersection related, $28 \%$ resulted in injury, $74 \%$ occurred during daylight hours and $5 \%$ involved pedestrians. The predominant collision types were rear end ( 25 or $38 \%$ ), right angle ( 19 or $29 \%$ ) and overtaking ( 7 or 11\%).

## III. Public Outreach Process

The City held a meeting with the FIS Stakeholders Group on March 19, 2014. Outreach was conducted to property owners and merchants in April to gather input regarding the proposed parking plan. A meeting with merchants and property owners was held on April 10, 2014 to discuss parking. At that time, based on feedback from all major stakeholders, the City directed the design team to exclude a municipal parking lot from the project. The first public meeting in collaboration with the Maplewood Neighborhood Association was held May 19, 2014.

Input has received from public outreach efforts has influenced changes to the project design. This included ideas on the shape of the intersection, pedestrian crossing locations, aesthetics and layout of the pocket park, and relocation of the community garden.

## IV. Proposed Design Summary

After the second public meeting but prior to a review of the proposed concept plan with the Monroe County DOT, it was determined that stopping sight distance approaching the intersection from the south would not be adequate to ensure safety for all traffic (motorists, pedestrians, and bicyclists) given the most recent iteration of the project design. Therefore, the design team explored multiple options for increasing the sight distance. After consideration of several options the City and MCDOT developed consensus that the best option to pursue would involve a new turning roadway from Driving Park Avenue to Dewey Avenue. This turning roadway would pass through an area previously reserved for the pocket park. The revised plan would continue to include pedestrian crossings, bike lanes, parking and streetscape improvements. It would also preserve the opportunity to establish a pocket park.

## V. Costs and Schedule

Design approval must occur before September 2014. Design, bidding, and construction will take place after design approval. The Construction phase is not currently funded nor programmed. It could happen as soon as within in two (2) years of the completion of design or within ten (10) years.

Programmed right of way funds $=\$ 1.1$ million
Anticipated construction cost $=\$ 2.1$ million
Construction funding is being actively pursued by the City of Rochester.

## VI. Questions \& Discussion

- The proposed design impacts Rochester Walks Route. The project should replace stencils/signs.
- Rochester Walks will be coordinated with during construction. It is the intent of the project to continue to support the existing route.
- What materials will be used in the triangular island?
- Grass, plantings, sidewalks, other pervious treatments, community garden - to be determined during detailed design.
- Who will maintain the island?
- The City of Rochester continues to explore options and possibilities for maintenance of the island and proposed pocket park.
- Barb Ann from MNA would like to be included in the landscape design for the new public neighborhood garden. She would like water access to be incorporated into this design.
- Will streetscape/park features be in the island?
- Potentially.
- What speeds are the roads designed for?
- Curves north of Dewey Avenue and Driving Park Avenue intersection would be designed for 25 MPH . The speed limit for all roadways in the project area is 30MPH.
- The design will move traffic faster. Why are we doing this project?
- The current configuration creates congestion and delay. This concept design is in response to the community's vision plan. Safety enhancements for all users is also a key focus.
- Where will snow storage be?
- In the curb lawn area next to the sidewalk
- Can this design be posted to the City website?
- Yes.
- Where will park users park their vehicles?
- They would use adjacent on-street spaces. The community did not support the creation of an off street lot.
- How far north will street amenities like lights extend?
- Street amenities will be designed to cover the area shown on the plans; however, the City is looking for additional funding to extend enhancements farther up Dewey Avenue. The desire is to eventually cover the entire FIS area. That work is likely to be done as part of a separate project.
- Will there be lighting in the park or triangle?
- Yes, pedestrian-scaled lighting is anticipated.
- What are Family Dollar intentions? Will this be vacant?
- We don't know yet. The City would work with the property owner to reposition the property for a new tenant.
- Will the Family Dollar building have to come down?
- The entire building does not have to be demolished. A portion must be demolished but a new facade could be built if the owners choose to retain the remaining portion.
- How is Clinton Ralston Auto repair impacted?
- One access point will be removed, but a second access point to Driving Park would be re-established. The owner of that property has been engaged in the project planning.
- What will the construction schedule look like?
- Construction would probably take place from spring to winter (approximately one construction season) with some finish activities taking place in the spring of the following year.
- Please ask MCDOT if a raised crosswalk at Broezel Street to slow westbound traffic on Driving Park is feasible. A crosswalk is needed because there is a heavy amount of neighborhood foot traffic here. The park will create a cut through.
- The angle of the revised turning roadway at Driving Park Avenue should be increased from 45 degrees to 85 degrees to slow traffic.
- The design must balance traffic calming, pedestrian accommodation, and truck accommodation.

Tanya Zwahlen encouraged meeting participants to submit comment sheets and email them to jrogers@cityofrochester.gov. A copy of a comment sheet submitted by a meeting participant is included as Appendix B.

The above constitutes our understanding of issues discussed and decisions reached during the meeting. Please notify the undersigned, in writing, with any errors or omissions within five business days.

Best regards,

## Highland Planning LLC



Anna Liisa Keller
cc: All in Attendance, BA Project file

## Public Comment Summary

Two (2) public meetings were held in May and June 2014. Project representatives specifically reached out to local business owners and affected property owners. The public meetings consisted of a formal presentation followed by a comment period to record additional input. The public comment period, during which individuals could provide additional comments to the City of Rochester in writing, ended on June 30, 2014. Summaries of the public meetings including verbal comments received are provided in the meeting minutes in Appendix G.

Subsequent to the May 2014 public meeting, content from the meeting was relayed to the Focus Investment Strategies Group by the City of Rochester. The group had several comments which are summarized below.

- Broezel Street residents expressed some concern about increased parking on their street. They stated that on-street parking on Broezel Street is tight already.

No additional parking will be added to Broezel Street. The intersection realignment project would eliminate a total of sixteen (16) on-street parking spaces, therefore, the neighborhood is likely to see a greater demand for on-street parking in the surrounding area during certain times of the day.

- Decorative crosswalks are desired.

The installation of decorative crosswalks will be considered in detailed design. The community will be solicited for input on the general streetscape and pocket park design.

- A pocket park with more green space is preferred over concrete.

The current concept plan includes a balance of "green" verses concrete treatments, with the exact nature of the "green" treatment to be determined in detailed design. The community will be solicited for input on the general streetscape and pocket park design.

Only one (1) written comment was received during the public comment period. A summary of the comment is provided below.

- Where would the Maplewood SIGN be relocated?

The exact location of the "Welcome to Maplewood" sign would be determined during detailed design. Coordination with the Maplewood Neighborhood Association will occur.

- For the final design of the triangle, I want to be part of the group picking design to relocate the garden. The garden can be distributed in 3 or 4 sections. Why plant grass that has to be mowed when you can have a garden?

The current concept plan includes a balance of "green" verses concrete treatments, with the exact nature of the "green" treatment to be determined in detailed design. The community will be solicited for input on the general streetscape and pocket park design. Specific outreach to the Maplewood Neighborhood Association would occur during detailed design. The names and contact information of specific individuals interested in participating in further design activities have been noted.

- Please post the design on the City web page and let me know where it is.

The City of Rochester will make project documents available on its website.

## Appendix H: Right-of-Way Information

## CONCEPTUAL STAGE RELOCATION PLAN

Dewey Avenue and Driving Park Avenue Intersection Realignment PIN 4755.55

Projected Letting Date - January, 2016


CITY OF ROCHESTER, COUNTY OF MONROE, STATE OF NEW YORK


Date:


Title: $\qquad$

## INTRODUCTION

The purpose of this Conceptual Stage Relocation Plan is to analyze the relocation needs associated with the proposed displacement of one commercial tenant to accommodate the realignment of the intersection of Dewey Avenue and Driving Park Avenue in the City of Rochester. This analysis is based on a study of the general characteristics of the area, a determination of the general nature of the business displacement, and a survey of available facilities in the area.

## ALTERNATIVES CONSIDERED

The four alternatives considered for the project are described below. Graphic representations of the alternatives are contained in Exhibit B.

## Alternative 1: Null

This alternative would involve no action. The intersection would remain in its current configuration. No impacts to private property would occur. The project objectives or programming goals would not be satisfied by this alternative and will not be considered further.

## Alternative 2: Dewey Avenue Re-Alignment, North and South Approach

This alternative would shift the northern Dewey Avenue approach west and the southern approach east creating one intersection between Dewey Avenue and Driving Park Avenue, eliminating the offset intersection. This alternative would impact two commercial lots located at the southwest and northwest corners of the intersection. However, due to increased acquisitions and impacts to historical properties this alternative will not satisfy the project objective or programming goal and therefore will not be considered further.

## Alternative 3: Modern Roundabout

This alternative would create a modern roundabout intersection replacing the current offset intersection for Dewey Park and Driving Park Avenue. However, due to increased acquisitions that would include two commercial properties on the northwest and southeast corners and impacts to historical properties this alternative will not satisfy the project objective or the programming goal and therefore will not be considered further.

## Alternative 4: Dewey Avenue Re-Alignment

This alternative considers aligning the northern approach of the intersection with the southern approach, eliminating the offset intersection. This realignment would impact an existing commercial property at the northwest corner of the intersection. This alternative would be enhanced by the consolidation of pedestrian street crossings to one location, provide dedicated bicycle lanes and eliminate multiple turns for traveling vehicles. This alternative is the preferred alternative.

## DESCRIPTION OF THE AREA

Dewey Avenue and Driving Park Avenue intersect at a commercial node in the heart of a Focused Investment Strategy Area (FIS). The FIS area bridges two distinct neighborhoods. The Maplewood Neighborhood is located to the north and the Edgerton Neighborhood is located to the south. Driving Park Avenue is the dividing line between the two neighborhoods.

The area is located approximately three miles northwest of downtown Rochester, and about one-half mile west of the Genesee River, in the Northwest Quadrant in the City of Rochester's Sector 2. Dewey Avenue has been described as Maplewood's Main Street, with a variety of commercial properties interspersed among the residential properties. The majority of the properties are residential. Occupancy rates are slightly less than fifty percent.

Dewey Avenue is one of the major north-south arterials in the Northwest Quadrant and carries a large volume of automobile and truck traffic to commercial, industrial and residential sites. Driving Park Avenue is an east-west arterial which also has a high traffic count. The Driving Park Bridge is one of four major bridges spanning the Genesee River within the Northwest Quadrant.

## RELOCATION ANALYSIS

The preferred alternative would result in the partial acquisition of a commercial property located at the northwest corner of Dewey Avenue and Driving Park Avenue. The subject property is comprised of $0.67 \pm$ acre of land, and is improved with a $10,540 \pm$ square foot building and an asphalt parking lot with amenities. The proposed impact is sufficient to necessitate the removal of the existing structure. The property is currently occupied by a commercial tenant. The tenant operates a retail store at the location.


Tax Map 090.82-1-36.001-354 Driving Park Avenue

The market search focused on improved commercial retail properties for rent. Currently available offerings in the market are outlined in Exhibit C.

## RELOCATION ASSISTANCE AND SERVICES

## In effecting the relocation activities on this project, the following assurances are made:

1. As part of the preparation procedure for the acquisition stage relocation plan, each site occupant will be personally interviewed to determine specific relocation needs.
2. The acquisition and relocation assistance programs will be conducted in accordance with the requirements and standards of the Uniform Relocation Assistance and Real Property Acquisition Act of 1970, as amended (the "Uniform Act").
3. All site occupants will be furnished a copy of the Federal informational booklet and will be informed of all benefits to which they may be entitled.
4. No site occupant will be required to move from his or her property without at least 90 days written notice.
5. Comparable replacement housing will be available and offered to all residential occupants.
6. The relocation program will be carried out in an orderly, humane and timely fashion.
7. Relocation assistance will be offered to all Displacees without discrimination
8. An onsite relocation office will not be established on the project site. Staff from R.K. Hite \& Co., Inc, PO Box 130, 87 Genesee Street, Avon, New York 14414, phone number 585-226-6702, will be able to provide relocation assistance at hours convenient to the Displacees.

## CONCLUSION

There are a sufficient number of available commercial properties on the market in the area to accomplish the successful relocation of the displacee affected by this project. There are no highway construction or other projects by any public or private agency scheduled which would affect the availability of replacement property. It is estimated that the relocation on this project can be accomplished within six months from the date of the notice of eligibility.

PREPARED By:___ Nancy A. Mullin__ DATE: May 29, 2014
Nancy A. Mullin, Property Rights Specialist

## EXHIBIT A - LOCATION MAP



## EXHIBIT B - ALTERNATIVES

- Alternative 2 - Dewey Avenue Re-Alignment, North and South Approach
- Alternative 3 - Modern Roundabout
- Alternative 4 - Dewey Avenue Re-Alignment,





EXHIBIT C - NON-RESIDENTIAL MARKET OFFERINGS

| PROPERTY TYPE | ADDRESS | $\begin{aligned} & \text { BUILDING } \\ & \text { (SQ. FT.) } \end{aligned}$ | MONTHLY RENT Per Sq. Ft. |
| :---: | :---: | :---: | :---: |
| Retail Strip Center | 406 Hamlin Clarkson TL <br> Road, Hamlin, NY 14464 | 10,000 | \$ 8.00 |
| Retail Strip Center | 2599 Henrietta Road, Rochester, NY 14623 | $\begin{array}{\|l\|} \hline \text { Min. - 9,000 } \\ \text { Max. - 18,000 } \\ \hline \end{array}$ | \$ 9.00 |
| Retail Strip <br> Center | 6600 Fourth Section Rd. Brockport, NY 14420 | $\begin{array}{\|l\|} \hline \text { Min. - 9,000 } \\ \text { Max. - 18,000 } \\ \hline \end{array}$ | Negotiable |
| Community <br> Shopping Center | 1600 W. Ridge Rd., <br> Rochester, NY 14615 | 9,000 | \$ 18.00 |
| Retail Strip Center | 3450 Winton Place, <br> Rochester, NY 14623 | 14,586 | \$ 8.00 |
| Strip Center | 1106 Ridge Road, Rochester, NY 14621 | 11,000 | \$ 7.00 |
| Shopping Center | 2345 Buffalo Road, <br> Rochester, NY 14624 | 11,000 | \$8.00 |
| Retail Strip <br> Center | 2833 W Ridge Road <br> Rochester, NY 14626 | 11,322 | Negotiable |
| Free Standing | 1851 Empire Blvd. <br> Webster, NY 14580 | 11,348 | \$ 16.00 |
| Retail Strip Center | 5247 Ridge Road West Spencerport, NY 14559 | $\begin{aligned} & \text { Min. - 10,000 } \\ & \text { Max. - 20,000 } \end{aligned}$ | \$ 4.50-\$5.00 |
| Power Center | 3600 Dewey Ave. <br> Rochester, NY $14616$ | $\begin{aligned} & \text { Min. }-10,000 \\ & \text { Max. - 42,000 } \end{aligned}$ | \$ 12.00 |
| Neighborhood Center | 2199 Henrietta Rd., Rochester, NY 14623 | 15,000 | \$ 14.00 |
| Retail Strip <br> Center | 376 Jefferson Rd., <br> Rochester, NY $14623$ | 20,000 | \$ 12.00 |

## EXHIBIT D - SOURCES

Scott Burdett - Flaum Management Company - 5/26/14 \& 5/27/2014
Theodora Finn - Sr. Community Housing Planner, Northwest Quadrant, City of Rochester 5/28/14
Ryan Gage, Real Estate Broker, Caliber Brokerage - 585-454-4500 Ext. 120-5/26/2014
www.Showcase.com - Commercial Listings - 5/23/14 \& 5/26/2014
www.loopnet.com - Commercial Listings - 5/23/2014
www.cityofrochester.gov. - Neighborhood Area and Project Description - 5/26/14 \& 27/2014

## Appendix I: Miscellaneous

# Smart Growth Screening Tool 

## Prepared By: Michael T. Croce, PE

## Smart Growth Screening Tool (STEP 1)

NYSDOT \& Local Sponsors - Fill out the Smart Growth Screening Tool until the directions indicate to STOP for the project type under consideration. For all other projects, complete answering the questions. For any questions, refer to Smart Growth Guidance document.

Title of Proposed Project: Dewey Avenue / Driving Park Avenue Intersection Realignment Location of Project: City of Rochester, NY

Brief Description: This project would realign the intersection of Dewey Avenue and Driving Park Avenue, eliminating the offset intersections.

## A. Infrastructure:

## Addresses SG Law criterion a. -

(To advance projects for the use, maintenance or improvement of existing infrastructure) 1 Does this project use, maintain, or improve existing infrastructure?
Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$

Explain: (use this space to expand on your answers above - the form has no limitations on the length of your narrative)

This alternative would consolidate the offset intersections. The northern approach would be shifted west along Driving Park Avenue to align with the southbound approach of Dewey Avenue. There would be one travel lane and a left turn lane in each direction. There would also be a right turn roadway connecting Driving Park Avenue westbound with Dewey Avenue northbound. The intersection would simplify navigation along Dewey Avenue and eliminate one of two signals.

Overall mobility for all users of the intersection would be enhanced. The southbound bicycle lane would extend along Dewey Avenue through the intersection. Northbound travel on Dewey Avenue would be facilitated by a bicycle lane and shared lane use markings. Shared lane use markings would be added eastbound and westbound along Driving Park Avenue extending the existing markings through the project limits. Pedestrian accommodations and safety would be improved by eliminating one traffic signal and consolidating road crossings to a single location. Pedestrian crossings would be enhanced with high visibility markings. Transit mobility would improve through the intersection associated with a reduction in vehicle hours of delay. All sidewalks within project limits would be replaced. The area vacated by

## Smart Growth Screening Tool

shifting Dewey Avenue west would provide an opportunity to develop a pocket park. Community aesthetics would be enhanced with streetscape and landscape features.

## Maintenance Projects Only

a. Continue with screening tool for the four (4) types of maintenance projects listed below, as defined in NYSDOT PDM Exhibit 7-1 and described in 7-4:
https://www.dot.ny.gov/divisions/engineering/design/dqab/pdm

- Shoulder rehabilitation and/or repair;
- Upgrade sign(s) and/or traffic signals;
- Park \& ride lot rehabilitation;
- $\mathbb{R}$ projects that include single course surfacing (inlay or overlay), per Chapter 7 of the NYSDOT Highway Design Manual.
b. For all other maintenance projects, STOP here. Attach this document to the programmatic Smart Growth Impact Statement and signed Attestation for M aintenance projects.

For all other projects (other than maintenance), continue with screening tool.

## B. Sustainability:

NYSDOT defines Sustainability as follows: A sustainable society manages resources in a way that fulfills the community/social, economic and environmental needs of the present without compromising the needs and opportunities of future generations. A transportation system that supports a sustainable society is one that:

- Allows individual and societal transportation needs to be met in a manner consistent with human and ecosystem health and with equity within and between generations.
O Is safe, affordable, and accessible, operates efficiently, offers choice of transport mode, and supports a vibrant economy.
- Protects and preserves the environment by limiting transportation emissions and wastes, minimizes the consumption of resources and enhances the existing environment as practicable.
For more information on the Department's Sustainability strategy, refer to Appendix 1of the Smart Growth Guidance and the NYSDOT web site, www.dot.ny.gov/programs/greenlites/sustainability
(Addresses SG Law criterion j : to promote sustainability by strengthening existing and creating new communities which reduce greenhouse gas emissions and do not compromise the needs of future


## Smart Growth Screening Tool

generations, by among other means encouraging broad based public involvement in developing and implementing a community plan and ensuring the governance structure is adequate to sustain and implement.)
1 Will this project promote sustainability by strengthening existing communities?
Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
2. Will the project reduce greenhouse gas emissions?
Yes
区
No $\square$
N/A

Explain: (use this space to expand on your answers above)
This project would replace the offset signalized intersections with a single signalized intersection at Dewey Avenue and Driving Park Avenue. Overall, vehicular congestion would be reduced given the elimination of one signalized intersection. Additionally, it would improve traffic flow along Dewey Avenue and Driving Park Avenue. New pedestrian and bicyclist facilities are being installed along with signalized pedestrian crossings. This is in order to improve facilities and safety for all users.

## C. Smart Growth Location:

Plans and investments should preserve our communities by promoting its distinct identity through a local vision created by its citizens.
(Addresses SG Law criteria b and c: to advance projects located in municipal centers; to advance projects in developed areas or areas designated for concentrated infill development in a municipally approved comprehensive land use plan, local waterfront revitalization plan and/or brownfield opportunity area plan.)
1 Is this project located in a developed area?
Yes $\boxtimes$
No $\square$
N/A
2. Is the project located in a municipal center?

Yes $\square \quad$ No $\boxtimes \quad$ N/A $\square$
3. Will this project foster downtown revitalization?

Yes $\square \quad$ No $\boxtimes \quad$ N/A $\square$
4.

Is this project located in an area designated for concentrated infill development in a municipally approved comprehensive land use plan, waterfront revitalization plan, or Brownfield Opportunity Area plan?
Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$

## Smart Growth Screening Tool

Explain: (use this space to expand on your answers above)
The project area is already "built out" with various land uses including both residential and commercial. Immediately adjacent to the the intersections are various commerical businesses including Price Rite and a block of small store fronts. The project is located within the Dewey Driving Park Focused Investment Strategy Area and an Urban Renewal District. The goals of this revitalization effort include improving curb appeal to enhance neighborhoods, investing in commercial development to create a healthy neighborhood shopping center, and creating an attractive neighborhood to live in.

## D. Mixed Use Compact Development:

Future planning and development should assure the availability of a range of choices in housing and affordability, employment, education transportation and other essential services to encourage a jobs/housing balance and vibrant community-based workforce.
(Addresses SG Law criteria e and i: to foster mixed land uses and compact development, downtown revitalization, brownfield redevelopment, the enhancement of beauty in public spaces, the diversity and affordability of housing in proximity to places of employment, recreation and commercial development and the integration of all income groups; to ensure predictability in building and land use codes.)

1 Will this project foster mixed land uses?
Yes $\square \quad$ No $\square \quad$ N/A $\boxtimes$
2. Will the project foster brownfield redevelopment?

Yes
NoN/A 『
3. Will this project foster enhancement of beauty in public spaces?

Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
4. Will the project foster a diversity of housing in proximity to places of employment and/or recreation?

Yes $\square$ No $\square$
N/A $\boxtimes$
5. Will the project foster a diversity of housing in proximity to places of commercial development and/or compact development?
Yes $\square \quad$ No $\square \quad$ N/A $\boxtimes$
6. Will this project foster integration of all income groups and/or age groups?

Yes $\square \quad$ No $\square \quad$ N/A $\boxtimes$
7. Will the project ensure predictability in land use codes?

Yes $\square \quad$ No $\square \quad$ N/A $\boxtimes$

## Smart Growth Screening Tool

8. Will the project ensure predictability in building codes?

Yes $\square$ No $\square$ N/A $\square$
Explain: (use this space to expand on your answers above)
This project proposes to improve the streetscape and landscape adjacent to the intersection of Dewey Avenue and Driving Park Avenue. This includes a pocket park, decorative light fixtures, and other surface treatments. These enhancements would improve the aesthetics of the area and help reinforce this area as a neighborhood node. The proposed realignment would facilitate adjacent redevelopment given reduced vehicular delays and improved mobility.

## E. Transportation and Access:

NYSDOT recognizes that Smart Growth encourages communities to offer a wide range of transportation options, from walking and biking to transit and automobiles, which increase people's access to jobs, goods, services, and recreation.
(Addresses SG Law criterion f: to provide mobility through transportation choices including improved public transportation and reduced automobile dependency.)

1 Will this project provide public transit?
Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
2. Will this project enable reduced automobile dependency?

Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
3. Will this project improve bicycle and pedestrian facilities (such as shoulder widening to provide for on-road bike lanes, lane striping, crosswalks, new or expanded sidewalks or new/improved pedestrian signals)?
Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
(Note: Question 3 is an expansion on question 2. The recently passed Complete Streets legislation requires that consideration be given to complete street design features in the planning, design, construction, reconstruction and rehabilitation, but not including resurfacing, maintenance, or pavement recycling of such projects.)

## Smart Growth Screening Tool

Explain: (use this space to expand on your answers above)
The project would include the reconstruction of pedestrian facilities, relocation and improvement of bus stops, and close a gap in existing bicycle facilities on either side of the intersection. Pedestrian facilities would be ADAAG / PROWAG compliant with signalized pedestrian crossings at the intersections, marked crosswalks, and curb ramps with detectable warning units. Bicycle lanes along Dewey Avenue would be connected as part of this project. Existing shared lane use markings along Driving Park Avenue would be extended through the intersection.

## F. Coordinated, Community-Based Planning:

Past experience has shown that early and continuing input in the transportation planning process leads to better decisions and more effective use of limited resources. For information on community based planning efforts, the MPO may be a good resource if the project is located within the MPO planning area.
(Addresses SG Law criteria g and h: to coordinate between state and local government and intermunicipal and regional planning; to participate in community based planning and collaboration.)

1 Has there been participation in community-based planning and collaboration on the project? Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
2. Is the project consistent with local plans?
Yes
No $\square$
N/A
3. Is the project consistent with county, regional, and state plans?

Yes $\boxtimes \quad$ No $\square \quad$ N/A $\square$
4. Has there been coordination between inter-municipal/regional planning and state planning on the project?
Yes $\boxtimes$
No $\square$
N/A $\square$

Explain: (use this space to expand on your answers above)
Public meetings regarding the intersection realignment have been held to provide the public opportunities to make formal statements of position before any final decisions are made. Meetings have been held to discuss the project with residents, commuters, and various neighborhood groups. The project has been discussed with various local officials. It is consistent with a concept developed during a community charrette held by the Rochester Regional Community Design Center.

## Smart Growth Screening Tool

## G. Stewardship of Natural and Cultural Resources:

Clean water, clean air and natural open land are essential elements of public health and quality of life for New York State residents, visitors, and future generations. Restoring and protecting natural assets, and open space, promoting energy efficiency, and green building, should be incorporated into all land use and infrastructure planning decisions.
(Addresses SG Law criterion d :To protect, preserve and enhance the State's resources, including agricultural land, forests surface and ground water, air quality, recreation and open space, scenic areas and significant historic and archeological resources.)
1 Will the project protect, preserve, and/or enhance agricultural land and/or forests?
YesNo $\square$ N/A $\boxtimes$
2. Will the project protect, preserve, and/or enhance surface water and/or groundwater?
Yes $\boxtimes$
No $\square$
N/A $\square$
3. Will the project protect, preserve, and/or enhance air quality?
Yes $\boxtimes$
NoN/A
4. Will the project protect, preserve, and/or enhance recreation and/or open space?
Yes $\square$
No
N/A $\boxtimes$
5. Will the project protect, preserve, and/or enhance scenic areas?
Yes $\qquad$ NoN/A $\boxtimes$
6. Will the project protect, preserve, and/or enhance historic and/or archeological resources?
Yes $\boxtimes$
No $\square$
N/A $\square$
Explain: (use this space to expand on your answers above)

All surface water within the project area would be collected and sent for treatment prior to being released. Enhancements to air quality would be realized due to reduced vehicle delay. The project would incorporate appropriate landscaping to enhance aesthetics and complement the surrounding area. The project would thoughtfully consider potential impacts to adjacent historic and archeological resources.

## Smart Growth Screening Tool

## Smart Growth Impact Statement (STEP 2)

NYSDOT: Complete a Smart Growth Impact Statement (SGIS) below using the information from the Screening Tool.
Local Sponsors: The local sponsors are not responsible for completing a Smart Growth Impact Statement. Proceed to Step 3.

## Smart Growth Impact Statement

## PIN: 4755.55

## Project Name: Dew ey Avenue / Driving Park Avenue Intersection Realignment

Pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act. This project has been determined to meet the relevant criteria, to the extent practicable, described in ECL Sec. 6-0107. Specifically, the project:
© Proposes to realign the intersection of Dewey Avenue and Driving Park Avenue by eliminating the offset intersections and install a single signalized intersection.

- Addresses geometric deficiencies at the offset intersection to improve traffic flow, reduce vehicular congestion, and improve highway safety.
อ Improves multimodal accommodation for pedestrians, bicyclists, and transit users.
© Improves the visual quality of the built environment and adjoining streetscape.
© Enhance the stature of this intersection as a neighborhood node for commercial and recreational activity.
ข Has received concurrence from the community through various forms of public outreach and public meetings held by the City of Rochester.
ə Is consistent with the local Focused Investment Strategy Area goals.
ง

This publically supported infrastructure project complies with the state policy of maximizing the social, economic and environmental benefits from public infrastructure development. The project will not contribute to the unnecessary costs of sprawl development, including environmental degradation, disinvestment in urban and suburban communities, or loss of open space induced by sprawl.

## Smart Growth Screening Tool

## Review \& Attestation Instructions (STEP 3)

Local Sponsors: Once the Smart Growth Screening Tool is completed, the next step is to submit the project certification statement (Section A) to Responsible Local Official for signature. After signing the document, the completed Screening Tool and Certification statement should be sent to NYSDOT for review as noted below.

NYSDOT: For state-let projects, the Screening Tool and SGIS is forwarded to Regional Director/ RPPM/Main Office Program Director or designee for review, and upon approval, the attestation is signed (Section B.2). For locally administered projects, the sponsor's submission and certification statement is reviewed by NYSDOT staff, the appropriate box (Section B.1) is checked, and the attestation is signed (Section B.2).

## A. CERTIFICATION (LOCAL PROJECT)

I HEREBY CERTIFY, to the best of my knowledge, all of the above to be true and correct.

Preparer of this document:

Thames R. Bethe
Signature
Project Engineer
Title

Responsible Local Official (for local projects):


Signature


Title

6/6/2014
Date

Thomas R. Detrie, P.E.
Printed Name


Printed Name

## Smart Growth Screening Tool

## B. ATTESTATION (NYSDOT)

## 1. I HEREBY:

X
Concur with the above certification, thereby attesting that this project is in compliance with the State Smart Growth Public Infrastructure Policy Act
$\square$ Concur with the above certification, with the following conditions (information requests, confirming studies, project modifications, etc.):
(Attach additional sheets as needed)do not concur with the above certification, thereby deeming this project ineligible to be a recipient of State funding or a subrecipient of Federal funding in accordance with the State Smart Growth Public Infrastructure Policy Act.
2. NOW THEREFORE, pursuant to ECL Article 6, this project is compliant with the New York State Smart Growth Public Infrastructure Policy Act, to the extent practicable, as described in the attached Smart Growth Impact Statement.

NYSDOT Commissioner, Regional Director, MO Program Director, Regional Planning \& Programming Manager (or official designee):



[^0]:    ${ }^{1}$ See thresholds．doc
    1／31／2014
    1．0FEAW＿final＿v2．docx

[^1]:    Intersection Summary

[^2]:    Intersection Summary

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