

MEMORANDUM OF UNDERSTANDING

THIS MEMORANDUM OF UNDERSTANDING (this "MOU") is made and entered into this ____ day of December, 2015 ("Effective Date"), by and between the Town of Hudson, a Colorado municipal corporation (the "Town"), whose address is 557 Ash, Hudson, Colorado, 80642-0351, and Kerr-McGee Oil & Gas Onshore LP, a Delaware limited partnership ("KMG"), whose address is 1099 18th Street, Suite 1800, Denver, Colorado 80202. KMG and the Town may be referred to individually as a "Party" or collectively as the "Parties."

BACKGROUND and RECITALS:

A. As of the Effective Date, KMG possesses certain oil and gas leasehold and mineral interests both within and outside the legal corporate limits of the Town (the "Town Limits"). KMG currently operates oil and gas wells within and outside the Town Limits ("Existing Wells") and has the right, subject to applicable laws, to develop its current and future oil and gas leasehold and mineral interests by drilling additional wells both within and outside the Town Limits.

B. KMG may from time to time apply to drill and operate other new wells at locations depicted on Appendix A attached hereto and incorporated herein that either (1) require access via roads owned by the Town located within the Town Limits ("Town Roads"), but are located outside of the Town Limits (the "Non-Town Wells"), or (2) are located within Town Limits (the "Town Wells," and collectively with the Non-Town Wells, "Wells").

C. The Wells include those certain horizontal wells approved by the Town pursuant to a use by special review permit issued on October 21, 2015, and more particularly described and depicted therein (the "CC Open Wells").

D. In connection with its operations of the Wells, KMG intends to use the Town Roads for access, which use may result in certain impacts to such Town Roads above and beyond normal wear and tear.

E. In order to identify such impacts to Town Roads resulting from KMG's operation of the Wells, KMG has commissioned the following traffic management studies relating to KMG's operation of the Wells, which studies may include descriptions of the amount, nature and timing of expected traffic and plans to mitigate congestion:

(1) a road impact study performed by Arcadis at the expense of KMG, which consists of an assessment of the current condition of the Town Roads and analysis of KMG's proportionate share impact to Town Roads in connection with KMG's operation of the Wells (the "Arcadis Study"); and

(2) a traffic study of the impacts of KMG's operation of the Wells on the intersection of HWY 52 and the I-76 Frontage Road Felsburg Holt & Ullevig (the "FHU Study," and collectively with the Arcadis Study, the "Road Impact Studies").

F. Based on the Road Impact Studies, KMG has developed certain best management practices for KMG's operation of the Wells that may also reduce the potential impacts to the Town Roads.

G. The Town and KMG have, on or about even with the Effective Date, entered into that certain Contribution Agreement, which sets forth KMG's proportionate share obligation for costs associated with repairs to the Town Roads made necessary as a result of potential damage caused by KMG's temporary high impact traffic associated with construction, drilling and completions activities.

H. The Town and KMG have agreed to enter into this MOU in order to memorialize the Parties' agreement concerning KMG's use of the Town Roads in connection with the operation of the Wells and the implementation of certain best management practices.

AGREEMENT:

NOW THEREFORE, in consideration of the mutual covenants set forth in this MOU, the receipt and sufficiency is hereby acknowledged, the Parties agree as follows:

1. Intent to Supplement COGCC Rules and Regulations. The Parties recognize that pursuant to the Colorado Oil and Gas Conservation Act, Colo. Rev. Stat. §34-60-101 et seq. (the "Act"), the COGCC regulates the development and production of oil and gas resources in Colorado, and the Act authorizes the COGCC to adopt statewide rules and regulations, which the COGCC has done. The BMPs identified in this MOU are intended to supplement and are in addition to COGCC rules and regulations with respect to KMG's operation of the Wells. Notwithstanding the foregoing, in the event of an express conflict between this MOU and any COGCC rules, such COGCC rules will control.

2. Applicability. This MOU shall apply only to the Wells. Without limiting the generality of the foregoing, this MOU shall not apply to any wells or operations: (i) not within the Town Limits, so long as KMG's operations of such wells do not require use of the Town Roads; (ii) any wells for which KMG is not the primary operator, regardless of whether KMG may have an interest in the same; or (iii) that are Existing Wells drilled by KMG prior to the Effective Date. If, after the Effective Date, the Town annexes into the Town Limits lands on which KMG has then-existing operations, then this MOU shall also apply to any new Wells KMG drills on such annexed lands after annexation is completed.

3. Road Impact Studies. KMG will provide to the Town final versions of the Road Impact and Traffic Studies, and agrees to conduct its operations in compliance with such Studies, and implement the commercially reasonable recommendations in such Studies.

4. Maintenance and Repairs. The Contribution Agreement executed herewith shall cover repair and damage to the Town Roads. To the extent KMG's operations were to damage traffic control devices, water and sewer facilities, or other facilities owned by the Town within such Town Roads, then, at the mutual agreement of the parties, KMG will either repair, or be responsible for payment of the actual costs of repair, other than ordinary wear, directly caused by KMG in connection with KMG's operation of the Wells. As necessary, the Town will not withhold, condition, or delay any permits that may be necessary for such repair that the parties

choose for KMG to undertake. Except for repairs of damage to facilities referenced herein actually caused by KMG in connection with the operation of the Wells, any damage or excessive wear to the Town Roads shall not be the responsibility of KMG to remedy and the cost shall not be borne by KMG.

5. Municipal Code Ordinance Concerning Overweight Trucks. KMG will cause its contractors to obtain in advance of operations any necessary overweight vehicle permits in connection with the Wells, as required by the Hudson Municipal Code. The Parties agree that KMG has the rights to utilize the Town Roads in connection with the construction, drilling, producing and completions activities.

6. Best Management Practices.

(a) Road BMPs. KMG shall comply with the best management practices set forth in Appendix B attached hereto and incorporated herein ("Road BMPs") in connection with its use of any Town Roads for its operation of the Wells.

(b) Town BMPs. In addition to any applicable Road BMPs, KMG shall comply with the best management practices set forth in Appendix C attached hereto and incorporated herein ("Town BMPs," and collectively with the Road BMPs, the "BMPs") in connection with its operation of the Town Wells.

7. Term. This MOU is effective upon the Effective Date and shall remain in effect until the earlier to occur of (a) three (3) years from the Effective Date, or (b) the date upon which (i) the COGCC implements any rules, regulations, ordinances or best management practice guidelines regarding oil and gas development specifically in the Town Limits or in an area that includes the Town Limits, which provide for higher standards than the BMPs or (ii) the Town and the COGCC enter into any agreements binding on KMG regarding oil and gas development specifically in the Town Limits or in an area that includes the Town Limits (as applicable, the "Term"). Upon expiration of the Term, this MOU shall automatically terminate and be of no further force and effect without the need for any further action by the Parties. In the event of either (b)(i) or (b)(ii) above, those portions of this MOU not directly affected by such COGCC actions or agreements shall remain in effect, and the terms of Sections 3 and 5 of this MOU shall not terminate and shall continue to apply and remain in effect even if directly affected by such COGCC actions or agreements.

8. No Waiver of Rights. Nothing herein shall be interpreted as a waiver by KMG of any rights it has pursuant to its current and future oil and gas interests to explore for, drill and produce the oil and gas underlying or outside the Town Limits. Without limiting the generality of the foregoing and notwithstanding any other provision herein, even in the event of termination of this MOU, KMG shall retain all rights and benefits it has under approved Town issued permits, the Contribution Agreement and/or COGCC approved permits and such permits shall remain in full force and effect. Except as set forth in this MOU, the Town does not waive the rights it has pursuant to the laws of the State of Colorado or the Town Municipal Code.

9. Force Majeure. Neither Party will be liable for any delay or failure in performing under this MOU in the event and to the extent that the delay or failure arises out of causes beyond a Party's reasonable control, including, without limitation, war, civil commotion, act of God, strike or other stoppage (whether partial or total) of labor, or any law, decree, regulation or order of any government or governmental body (including any court or tribunal) other than the Town.

10. Authority to Execute MOU. Each Party represents that it has the full right and authority to enter into this MOU.

11. Governing Law. This MOU shall be governed and construed in accordance with the laws of the State of Colorado without reference to its conflicts of laws provisions.

12. No Third Party Beneficiaries. Except for the rights of enforcement by the COGCC with respect to the BMPs, if any, this MOU is not intended to, and does not, create any right, benefit, responsibility or obligation that may be enforced by any non-party. Additionally, nothing in this MOU shall entitle any third party to any claims, rights or remedies of any kind.

13. Notices. All notices and other correspondence related to this MOU shall be in writing and shall be delivered by: (i) certified mail with return receipt, (ii) hand delivery with signature or delivery receipt provided by a third party courier service (such as FedEx, UPS, etc.), (iii) fax transmission if verification of receipt is obtained, or (iv) email with return receipt, to the designated representative of the Party as indicated below. A Party may change its designated representative for notice purposes at any time by written notice to the other Party. The initial representatives of the Parties are as follows:

Town: Town of Hudson
 557 Ash St.
 Hudson, Colorado 80642-0351
 Attn: Town Administrator
 Telephone: 303-536-9311
 Fax: 303-536-4753
 Email: manager@hudsoncolorado.org

With copy to: Hoffmann, Parker, Wilson & Carberry, P.C.
 511 16th Street, Suite 610
 Denver, CO 80202
 Attn: Corey Y. Hoffmann, Town Attorney
 Fax: 303-825-1269
 Email: cyhoffmann@hpwclaw.com

KMG: Kerr-McGee Oil & Gas Onshore LP
 1099 18th Street, Suite 1800
 Denver, CO 80202
 Attn: Rockies Regulatory – Municipal Planning

IN WITNESS WHEREOF, the Parties have caused this MOU to be executed by a duly authorized representative on the day and year first above written.

TOWN:

The Town of Hudson
a Colorado municipal corporation

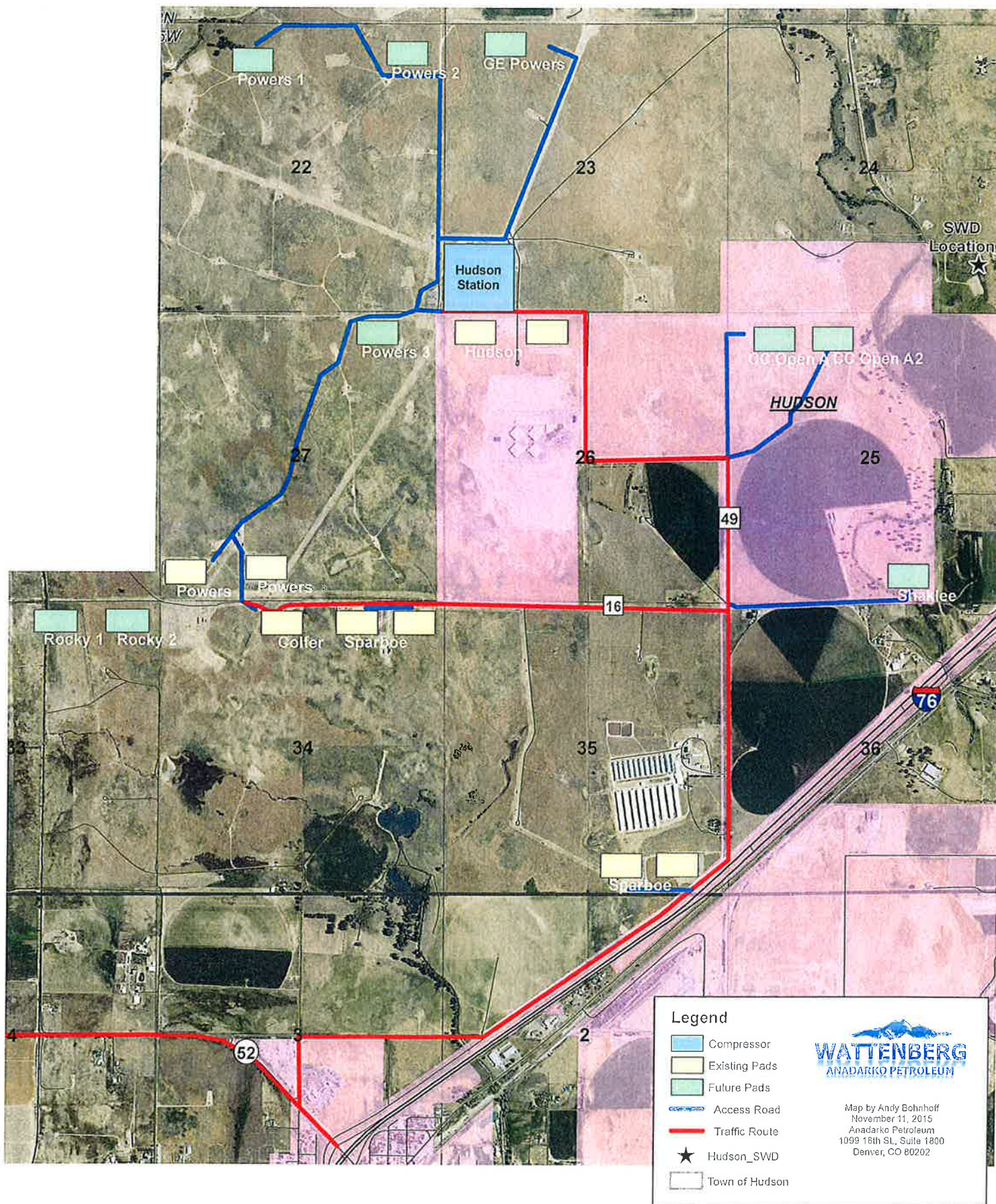
By: Raymond Patch
Name: RAYMOND Patch
Title: MAYOR

KMG:

Kerr-McGee Oil & Gas Onshore LP,
a Delaware limited partnership

By: Michael A. Nixon
Name: Michael A. Nixon
Title: Director, Land

APPENDIX A



APPENDIX B

Road BMPs

Following the Effective Date, KMG shall include the best management practices listed below on all Form 2s, Application for Permit to Drill, and Form 2As, Oil and Gas Location Assessment submitted to the COGCC for any Wells.

1. KMG will deliver the Road Impact Study to the Town prior to commencing any operations in connection with the Wells. The Town will have no obligation to issue any Notice to Proceed for the CC Open Wells prior to its receipt of the Road Impact Study.
2. KMG will commence good faith negotiations with the Town for an impact or contribution agreement based on the analysis presented in the Arcadis Study.
3. KMG will take reasonable steps to protect water and wastewater valve boxes and manholes and traffic control devices located along any of the Town Roads. KMG will promptly notify the Town of damages to any such Town facilities.
4. KMG and its subcontractors shall comply with the site specific traffic management plan incorporated into the FHU Study (the "Traffic Plan"), which may address the following with respect to the operations of the Wells: (1) expected traffic route and timing of such traffic on the Town Roads, (2) how traffic at the intersection HWY52 and I76 Frontage road will be managed and mitigated, and (3) what truck traffic restrictions will be put in place, if any. KMG and the Town will to the extent permitted by law amend this MOU to include the Traffic Plan as Appendix D, and the Town and KMG will cooperate to amend the Traffic Plan, as necessary, from time to time. Nothing herein shall prevent KMG from using traffic route (s) not identified in the Traffic Plan in the event of emergency or other need due to any other lack of access. KMG will act in good faith and communicate when feasible any change in access to the Town, to the extent such revised access includes Town Roads.
5. KMG will provide the Town an emergency response plan prior to commencing operations of the Wells.
7. Operator will promptly clean mud and other debris on Town Roads that may be caused by vehicles entering or leaving the Wells during construction, completion and operation of the Wells. Operator will grade and treat gravel Town Roads used to access the Wells, as depicted on the Traffic Plan, with mag chloride to reduce dust.

APPENDIX C

Town BMPs

1. **Communication** – KMG will, from time to time, provide the Town information regarding the timing and nature of major activities during construction, drilling and completion activities of Town Wells. KMG will meet periodically with the Town to discuss current and future operations.
2. **Information** – KMG shall provide Notice of Intent to Conduct Operations to the Town's Local Government Designee for all locations within a ½ mile of the Town Limits at least 30 days prior to submittal of the COGCC 2A Location Permit for any Town Wells.
3. **Fencing** – Operator shall install, following obtaining any required consent from the owner of the surface estate for any Town Wells, fencing or other sufficient barriers to protect Town Wells and related facilities. Such fencing shall comply with COGCC and Town regulations.

November 18, 2015

MEMORANDUM

TO: Ms. Patty Varra
Municipal Planning Analyst
Anadarko Petroleum

FROM: Lyle DeVries, P.E., PTOE
Tyler Spurlock, E.I.

SUBJECT: Traffic Analysis of Well Site Pads Accessed from SH 52 in Hudson, Colorado
FHU Reference No. 115-241-01

This memorandum summarizes the traffic impacts created by the nine proposed well site pads in the vicinity of Hudson, Colorado that Anadarko and subsidiary companies will be drilling over the next 15 months. These pads will be located north of State Highway (SH) 52 and west of I-76 (see **Figure 1**). All of the nine pads will have access from the newly relocated intersection of the West I-76 Frontage Road (W I-76 FR) and SH 52 and all traffic analyses are focused solely on this intersection. A summary of pad information is provided in **Table 1**, shown below.

Table 1. – Pad Information Summary

Site/Pad	Section	No. of Wells	Construction Start	Production Start
GE Powers	23	7	Late August 2015	Mid-April 2016
Powers 1	22	7	Mid-September 2015	Mid-May 2016
Powers 2	22	7	Late September 2015	Mid-May 2016
Powers 3	27	7	Late September 2015	Mid-May 2016
Shaklee	25	11	Early January 2016	Mid-November 2016
CC Open 1	25	3	Early February 2016	Mid-June 2016
CC Open 2	25	4	Early February 2016	Mid-June 2016
Rockies 1	33	2	Early June 2016	Early September 2016
Rockies 2	33	5	Early June 2016	Mid-November 2016

In the spring of 2014, the W I-76 FR intersection with SH 52 was relocated from its former location adjacent to the I-76 interchange at Hudson (Exit 31). This relocation accomplished several goals: it provides separation from the I-76 ramp intersections, the W I-76 FR now intersects SH 52 at a right angle, and it consolidates full-movement access for Love's Truck Stop and future development north of SH 52 at one location. Currently, there are no auxiliary lanes on SH 52 at this new intersection, though the Colorado Department of Transportation (CDOT) and the Town of Hudson have considered adding left and right auxiliary turn lanes at this location.

This analysis summarizes the existing traffic volumes on SH 52 at the W I-76 FR intersection. It also provides traffic forecasts for the construction and production phases of the well site pads and analyzes traffic operations at the W I-76 FR intersection with SH 52. Future traffic volumes incorporate background traffic growth, which includes traffic volumes from 87 room motel and 5,500 square foot, high turnover sit-down restaurant that are anticipated to be operational during the time frame of the future analyses.

Existing Traffic Volumes

Three separate traffic and vehicle classification counts were conducted in the vicinity of the study intersection:

- Six-hour turning movement counts at the SH 52 / W I-76 FR intersection (2 hours during the AM, noon, and PM peak periods),
- 24-hour classification counts on SH 52 east and west of the study intersection, and
- A 48-hour classification count on the W I-76 FR northeast of the Love's Truck Stop adjacent to SH 52.

This count data were compiled and are illustrated on **Figure 2 – Existing Conditions**. The traffic count information from the field is provided in **Appendix A**. It should be noted that the traffic volumes on W I-76 FR include trips to and from a number of existing oil and gas facilities north of SH 52 that are currently producing petroleum products.

From the Colorado Department of Transportation's (CDOT) OTIS database, it was found that SH 52 carries an average annual daily traffic (AADT) volume of approximately 8,100 vehicles per day (vpd) west of I-76 with 19 percent trucks. The posted speed limit on SH 52 is 45 mph. According to the State Highway Access Category Assignment Schedule (September 13, 2013), the segment of SH 52 immediately west of I-76 is categorized as a Non-Rural Arterial (NR-A) roadway.

Trip Generation

Trip generation for the nine well site pads was determined based on construction and operation information provided by the developer, Anadarko Petroleum. The development process for each well site pad includes six separate phases, which are summarized as follows:

1. Pipeline construction (approximately 30 days)
2. Site construction/preparation (approximately 20 days)
3. Drilling (sequential drilling – approximately 5 days per well)
4. Completion phase, including preparation (approximately 6 to 11 days per well)
5. Production facility construction (approximately 14 to 21 days per pad)
6. Production (ongoing)

Since the number of well sites for each pad generally differs (between 2 and 11 wells), separate trip generation worksheets corresponding to a range of well quantities were prepared and can be

found in **Appendix B**. These worksheets summarize weekday daily and AM, noon, and PM peak hour trip generation for the six phases. The key elements in forecasting the traffic volumes that will be using the intersection of SH 52 and the W I-76 FR are the duration of the total well construction process (which is dependent on the number of wells being drilled) and the phase of the process each well site pad is undergoing at any particular time. **Figure 3** was prepared to illustrate the anticipated month-by-month status of each well pad site and the phase that is underway. The combined total traffic volumes were determined on a daily basis, since this total is very dependent on each site's particular phase and its duration. **Figure 3** also includes a bar graph with the highest daily traffic volumes that could be encountered during each month through the end of 2016. The duration of the maximum traffic volumes during the highest months (above 1,000 vehicles per day) and the minimums during these months are also shown on the bar graph. This gives a perspective of the durations of the high traffic volume periods. During the entire development timeline of the sites, daily traffic volumes average approximately 770 trips per day.

Based on this analysis, November 2015 was determined to have the highest trip generation potential and was selected for detailed analyses. This period represents a worst case scenario for trip generation involving this project. As will be seen, the improvement recommendations resulting from this analysis are not wholly dependent on this peak.

Once construction of the pads is complete and they are fully in production, the number of trips in and out of the pads would decline significantly. This is due to the well site pads having pipelines to deliver the petroleum products from the operations. This reduces the expected operational traffic levels significantly.

Traffic Forecasts

Based on conversations with Anadarko Petroleum, almost all of the site traffic (95%) will access the site from the west, utilizing SH 52. Workers and truck drivers will be instructed to use this route to the greatest extent possible. This route to and from the west will minimize traffic impacts to the SH 52 / I-76 interchange and downtown area of Hudson. The results of the trip generation and distribution analyses are illustrated on **Figure 4** and summarized below in **Table 2**.

Table 2. – Trip Generation Summary

Development Phase	Daily Traffic Volumes	AM		Noon		PM	
		IN	OUT	IN	OUT	IN	OUT
Construction (Maximum Traffic Impact)	4560	126	63	98	91	63	126
Production	44	8	0	0	8	0	8

This figure includes the peak level of construction activity as well as the long-term level of traffic when all pads are in production. **Figure 4** shows daily volumes as well as turning movements resulting from AM, noon, and PM inbound and outbound volumes, including both vehicles and passenger car equivalents (which reflect the influence of large trucks). By adding these volumes to existing traffic at the study intersection and including background traffic growth, the peak short

term total traffic volumes were calculated, as shown on **Figure 5**. For the long-term production phase of all pads that will essentially begin in early 2017, current background traffic volumes were increased by the growth factor (3.5 percent per year) that CDOT forecasts for SH 52. At the request of Town Staff, all future traffic analysis scenarios incorporated vehicle trips to be generated by a motel and restaurant currently being developed in the vicinity of the SH 52/ W I-76 FR intersection. Vehicle trip estimates were developed using information from the *Trip Generation Manual* (Institute of Transportation Engineers, 9th Edition, 2012). These estimated trips were assigned to the surrounding roadway network based on guidance from Town Staff.

The site generated traffic that is shown on **Figure 4** was added to forecasted Year 2017 background traffic, resulting in the production phase volumes shown on **Figure 6**.

Analyses of Traffic Operations

Current and future traffic operations at the study intersection driveway were evaluated according to techniques documented in the Highway Capacity Manual, (Transportation Research Board, 2010) (HCM-2010). Level of service (LOS) is a qualitative measure of traffic operational conditions, based on roadway capacity and vehicle delay. Levels of service are described by a letter designation ranging from LOS A to LOS F; with LOS A representing the best possible conditions and LOS F representing congested conditions. For unsignalized intersections, levels of service are calculated for movements which must yield right-of-way to other traffic movements. Large vehicle percentage factors were included in the LOS analysis.

Figures 3, 5, and 6 provide the existing and short range future levels of service at the intersection of SH 52 and W I-76 FR. Since this intersection is stop sign controlled, the movements that must yield to oncoming traffic currently operate at LOS C or better for AM, noon and PM peak hours (**Figure 3**). During the construction phase (**Figure 5**), this intersection is anticipated to operate at LOS D or better during the peak hours of the anticipated peak day with the exception of the southbound left-turning movement from W I-76 FR onto SH 52 during the AM peak hour. This movement would experience the most delay (LOS E) because it must yield to all oncoming traffic. The projected delay is expected to be an average of 36.5 seconds per vehicle which is only 1.5 seconds higher than the threshold between LOS D and E. There is not expected to be significant queuing for this movement (less than 100' during the peak hour). Later during the production phase (**Figure 6**), level of service for these left-turning vehicles would improve to LOS C, mainly because well development traffic will dramatically reduce after construction is completed.

Auxiliary Lanes

The Colorado State Highway Access Code (SHAC) provides guidelines for determining auxiliary lane needs at the intersection of SH 52 and W I-76 FR. The SHAC requires that large vehicles, such as the trucks used in the construction phase of the proposed site, be converted to Passenger Car Equivalents (PCE) at a rate of 3:1. For intersections along a state highway that has an NR-A classification whose speed limit exceeds 40 mph, the following criteria apply:

- Westbound Right Turn Deceleration Lane: more than 25 vehicles (PCEs) per hour – turn lane length is based on deceleration distance
- Eastbound Left Turn Deceleration Lane: more than 10 vehicles (PCEs) per hour – turn lane length is based on deceleration plus storage distances
- Southbound to Westbound Right Turn Acceleration Lane: more than 50 vehicles (PCEs) per hour – turn lane length is based on acceleration distance

A comparison of the SHAC auxiliary lane criteria and the current turning movement volumes at the study intersection (see **Figure 3**) reveals that the westbound right turn deceleration lane criterion is exceeded during all three time periods that were analyzed. Since very little pad-related traffic utilizes this movement and much of the traffic is related to other development in the area, the requirement of an auxiliary turn lane is not the result of well development traffic at this intersection. The considerations for the westbound right turn deceleration lane are the result of traffic from other development in the project area.

The thresholds for an eastbound left turn deceleration lane and a southbound to westbound right turn acceleration lane are currently met based on all three peak hours (AM, noon, and PM). The threshold for a westbound right turn deceleration lane is currently met based on AM peak hour volumes only. Comparing the construction phase (**Figure 5**) and production phase (**Figure 6**) traffic volumes with the SHAC criteria reveals similar results. The volume criteria for both an eastbound left turn deceleration lane and westbound acceleration lane for right-turning vehicles are exceeded by a significant amount during the construction phase and exceeded to a lesser extent during the production phase.

Because existing and projected future traffic volumes (comprised of both site and background traffic) exceed SHAC criteria, it is recommended that the eastbound deceleration and westbound acceleration lanes be provided at the SH 52/W I-76 FR intersection. Considerations for the westbound right turn deceleration lane should also be made at this intersection, understanding that the need for the right turn lane is not triggered by oil and gas development. These lanes would need to be constructed to the following dimensions:

- Eastbound left turn deceleration lane (taper is included).
 - 435 feet of deceleration length.
 - 250 feet of storage length.
- Westbound acceleration lane (taper is included).
 - 550 feet of acceleration length.
- Westbound deceleration lane (taper is included).
 - 435 feet of deceleration length.

While the ultimate need for these lanes is evident based on SHAC criteria, it is our understanding that construction of these lanes in the near term future would cause a disruption in site development and ongoing production activity. In addition, the intensity of construction traffic is expected to be short-lived and operational analyses reveal no excessive delay (approximately 36.5 seconds/vehicle during peak hours) or queuing (100' or less during peak hours).

Therefore, it is recommended that alternative methods of easing the construction traffic impact on the intersection be explored in lieu of constructing the turn lanes in the near term future. A summary of potential short term mitigation measures is provided as follows for consideration:

- Travel Demand Management (TDM) Strategies: TDM strategies can be used to soften the intensity of site traffic during peak times by introducing time-of-day restrictions. Restricting the travel times of site generated traffic outside of peak hours (7:00 AM – 9:00 AM, 11:00 AM – 1:00 PM and 4:00 PM – 6:00 PM) as possible would reduce the traffic impact on the intersection of SH 52 and W I-76 FR.

- Temporary use of Weld County Road (WCR) 12 ½: The well sites could potentially be accessed via a WCR 12 ½ connection to SH 52, if some improvements can be made to this roadway. WCR 12 ½ is currently closed to traffic. Use of WCR 12 ½ could result in the reduced traffic volumes on W I-76 FR and reduce the overall impact to its intersection SH 52.

Signal Warrant Analysis

Peak construction phase volumes at the study intersection were analyzed to determine if a traffic signal is warranted. The Manual of Uniform Traffic Control Devices (MUTCD), 2009 contains nine warrants under which a signal at an intersection can be justified. Three of these warrants are directly related to traffic volumes using an intersection. The four-hour warrant was analyzed to determine if a signal might be warranted during the peak construction volume phase of this project. This warrant was chosen since almost all of the pad-generated traffic occurs during the AM and PM peak hours. **Figure 7** shows that only one of the peak hours meet the combined traffic volume requirements for the major and minor approaches. After the construction phase is concluded, projected traffic volumes are reduced and the intersection no longer approaches warrant criteria. Warrants will likely not be met until traffic volumes increase by approximately 20 to 30 percent. It should be noted that the southbound right-turning traffic volumes from the W I-76 FR are excluded from the analysis since there is no conflict with SH 52 traffic if an acceleration lane is constructed.

Summary and Recommendations

The nine well site pads will be under construction for approximately 15 months. Each pad will involve six phases of construction (followed by the production phase) and total volumes accessing SH 52 will be highly variable as each site moves through the process on its own individual schedule. During the construction phase, it was determined that November 2015 will experience the highest levels of peak hour trip generation. At this time, the intersection of SH 52 and the West I-76 Frontage Road could experience levels of service at LOS E for one movement if no improvements are made to the intersection. The delay experienced by this movement (southbound left turn) is 36.5 seconds, 1.5 seconds greater than the LOS D/E threshold. A queuing analysis reveals that there are no issues with queuing at the intersection. Based on the temporary nature of the well development traffic, these delays are not expected to be substantially detrimental to intersection operations.

SH 52 is under the jurisdiction of the Colorado Department of Transportation and the guidelines of the State Highway Access Code show that volume criteria for an eastbound left turn deceleration lane and a westbound right turn acceleration lane are currently met and would continue to be met during the construction and production phases of the project. The criterion for a westbound right turn deceleration lane is also met, largely due to the traffic volumes from the nearby development of a motel and restaurant, and is not a result of well development traffic.

Because existing and projected future traffic volumes (comprised of both site and background traffic) exceed SHAC criteria, it is recommended that the eastbound deceleration and westbound acceleration lanes be provided at the SH 52/W I-76 FR intersection. While the ultimate need for these lanes is evident based on SHAC criteria, it is our understanding that construction of these lanes in the near term future would cause a disruption in site development and ongoing production activity. In addition, the intensity of construction traffic is expected to be short-lived and operational analyses reveal no excessive delay or queuing (LOS D/E or better for movements during all time periods during construction).

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Ms. Patty Varra
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It is recommended that alternative methods of easing the construction traffic impact on the intersection be explored in lieu of constructing the turn lanes in the near term future. Potential short term mitigation measures include Travel Demand Management strategies and/or temporary use of WCR 12 ½.

In summary, it is recommended that turn lanes be installed after peak well construction activities are substantially complete, and traffic mitigation measures be considered for near term implementation. This letter provides some mitigation measures for consideration, and other ideas may come to light upon further discussion with Town of Hudson and CDOT Staff.

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Attachment – Figures 1 – 7

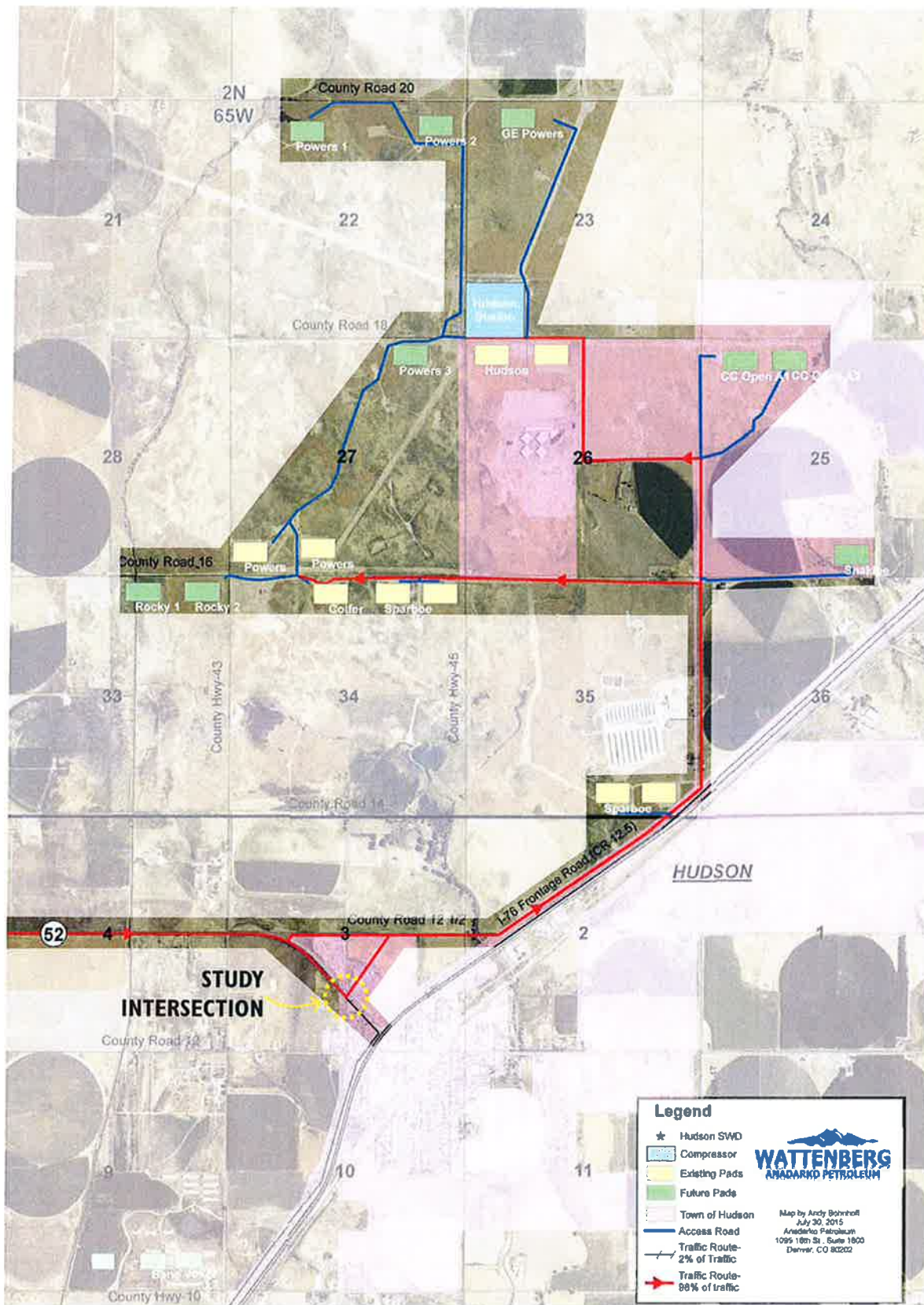
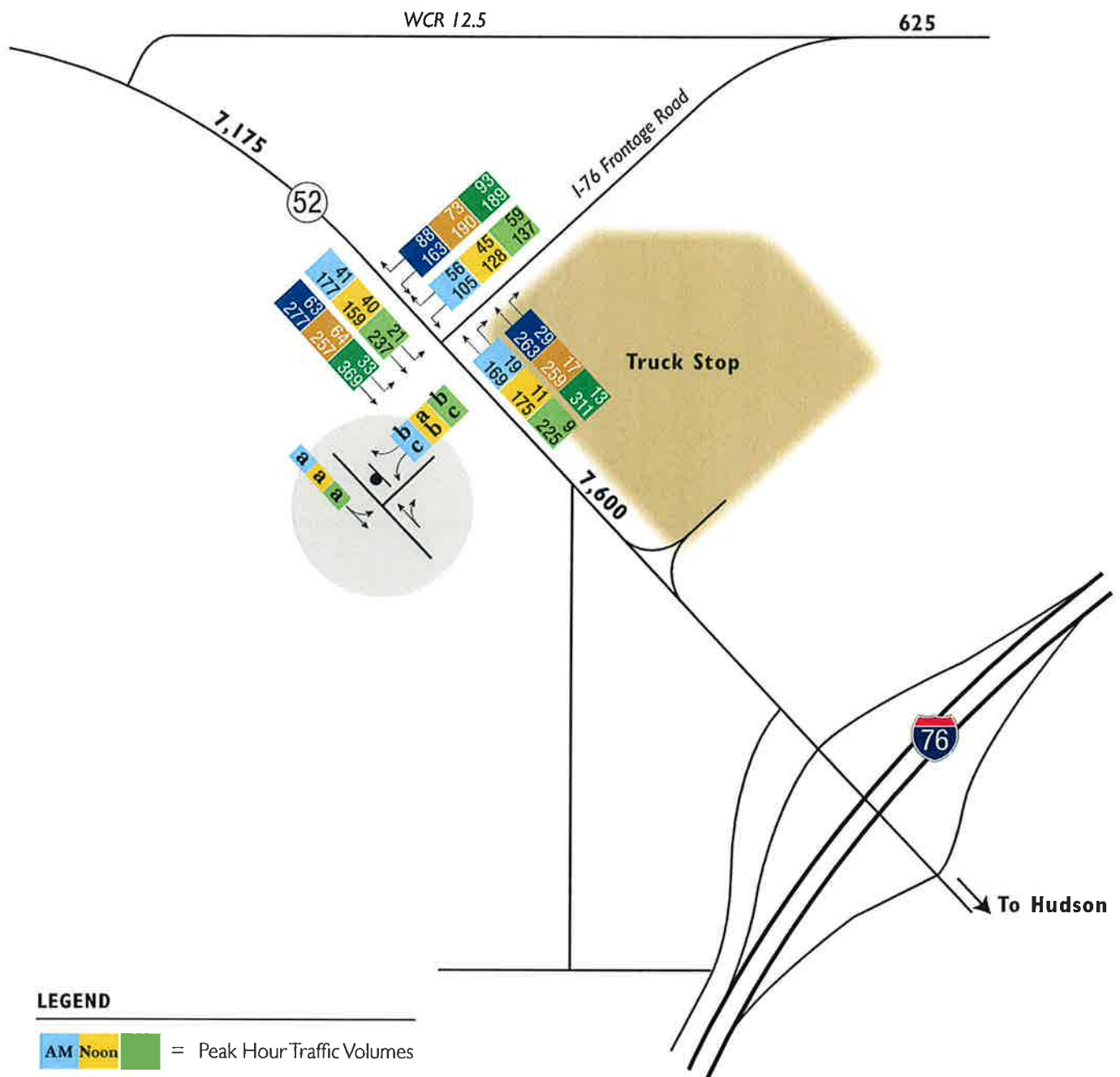


Figure 1
Vicinity Map





LEGEND

- AM Noon PM = Peak Hour Traffic Volumes
- AM Noon PM = Passenger Car Equivalent Volumes
- AM Noon PM = Peak Hour Signalized Intersection Level of Service
- XXXX = Daily Traffic Volume
- ↗ = Lane Assignment
- = Stop Sign

Figure 2
Existing Traffic Volumes
Lane Geometry and Level of Service



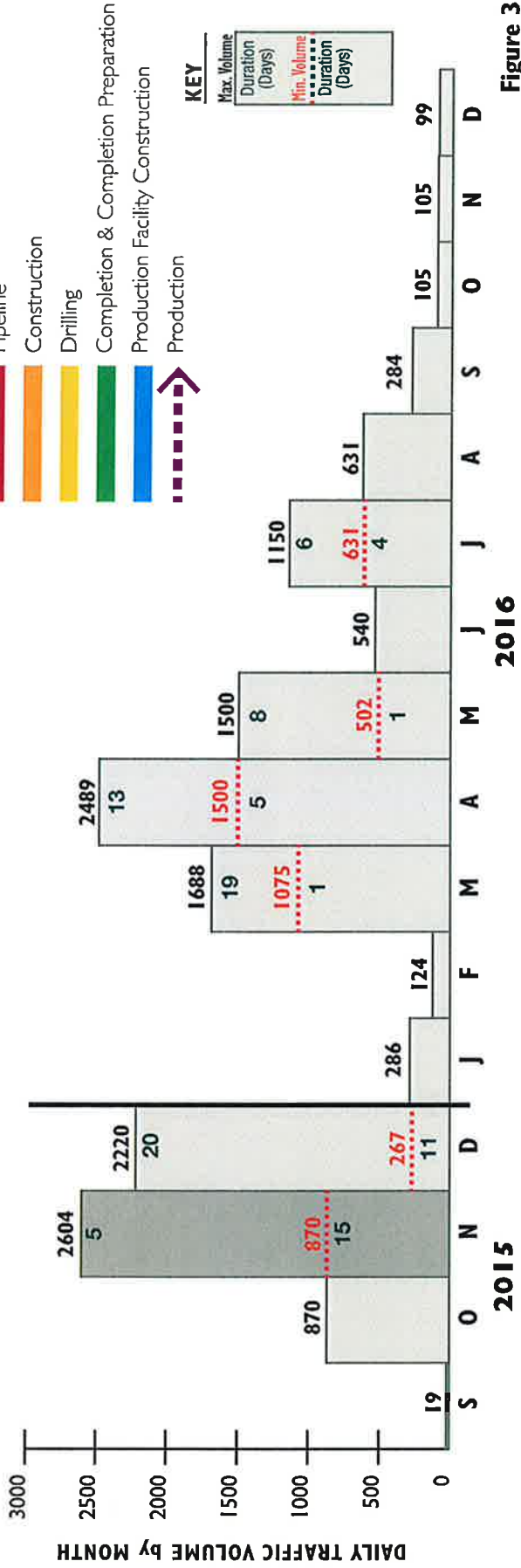
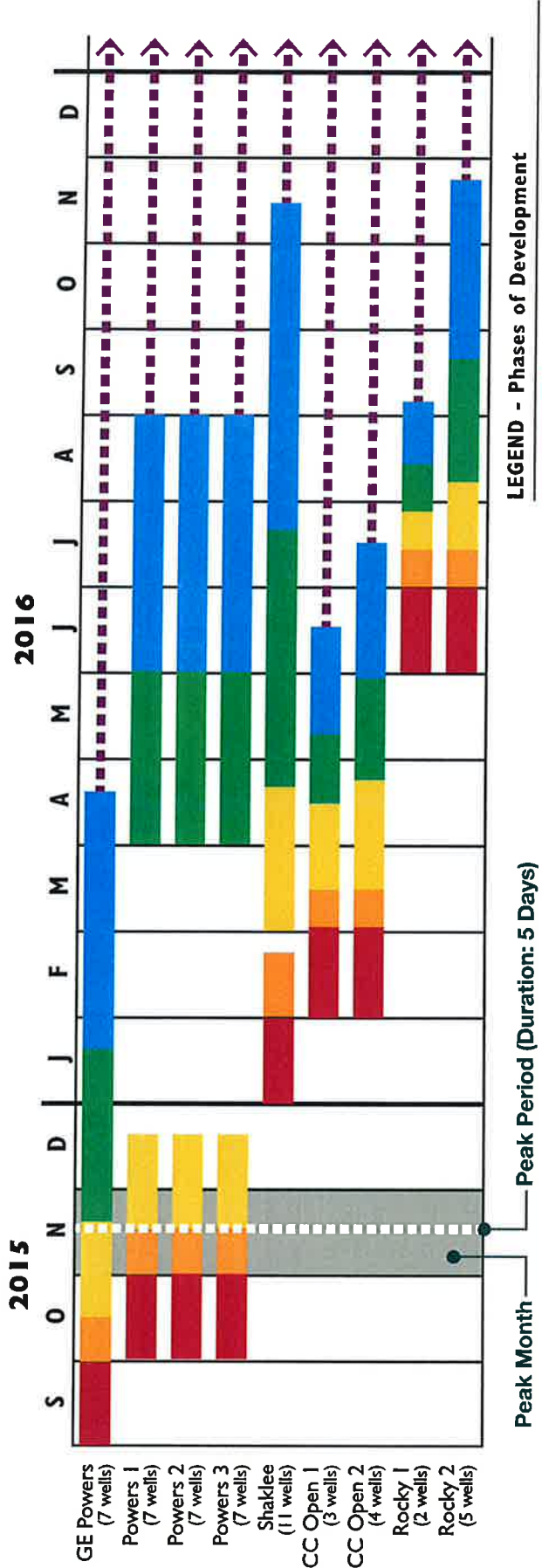
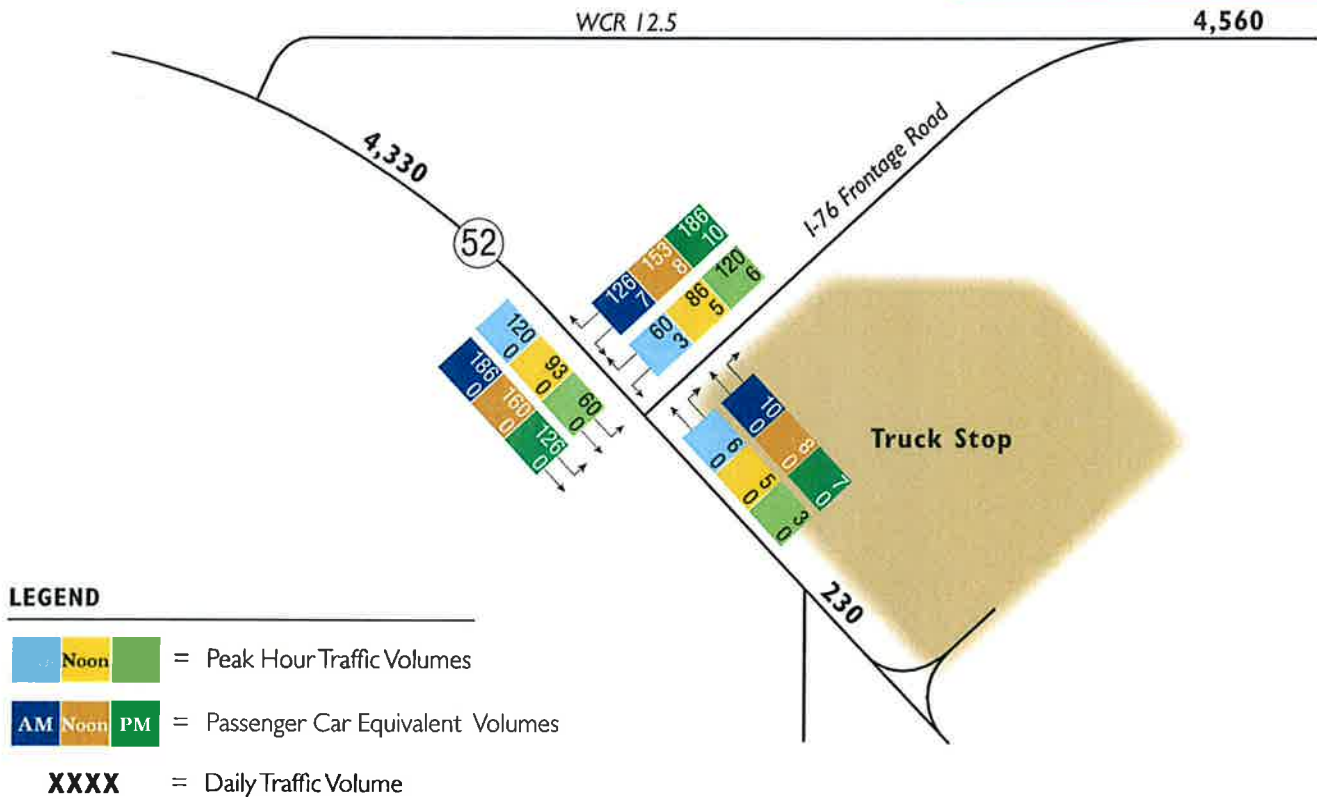


Figure 3
Development Timeline and Traffic Levels

PEAK CONSTRUCTION VOLUMES



PRODUCTION VOLUMES

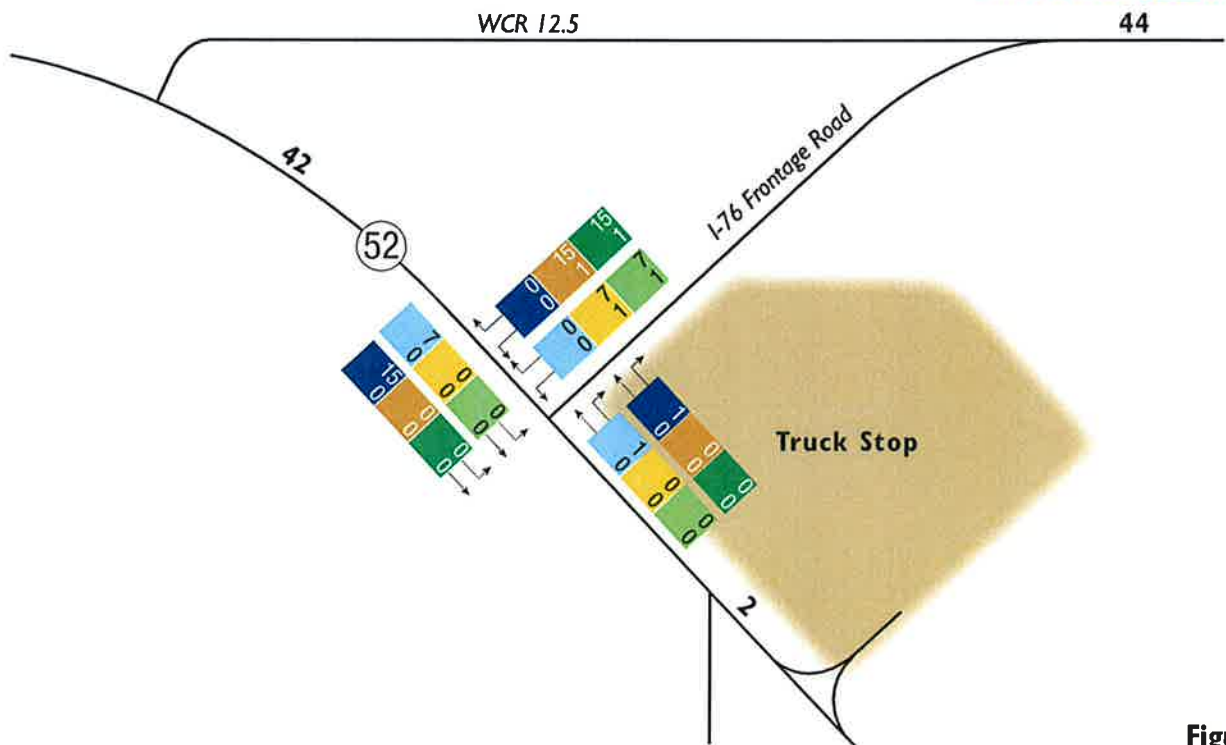
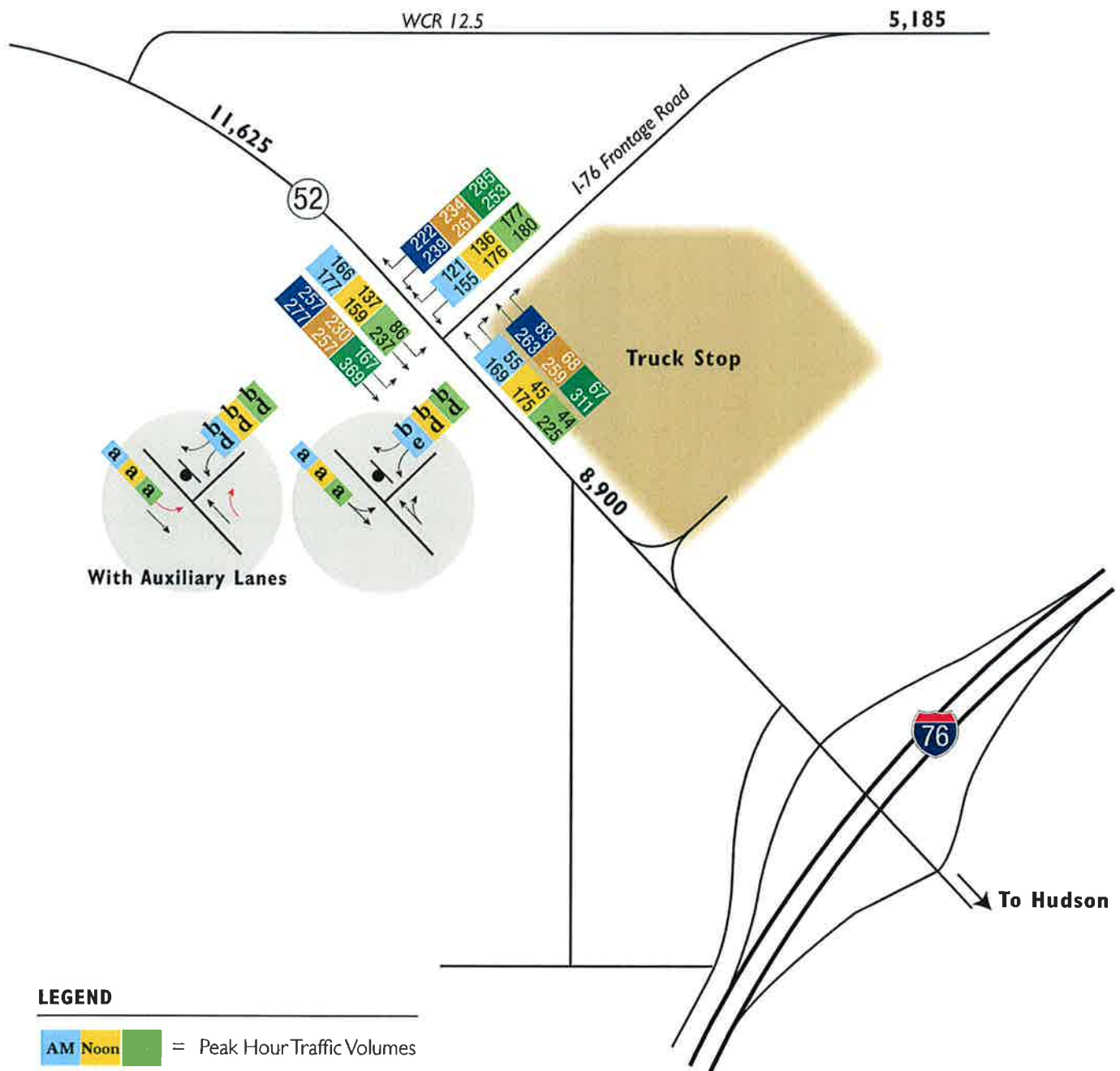


Figure 4
Construction and Production Phase
Site Generated Traffic





LEGEND

- AM Noon PM = Peak Hour Traffic Volumes
- AM Noon PM = Passenger Car Equivalent Volumes
- AM Noon PM = Peak Hour Signalized Intersection Level of Service
- XXXX = Daily Traffic Volume
- ↗ = Lane Assignment
- = Stop Sign

Figure 5
Total Traffic Analysis
During Peak Construction Phase



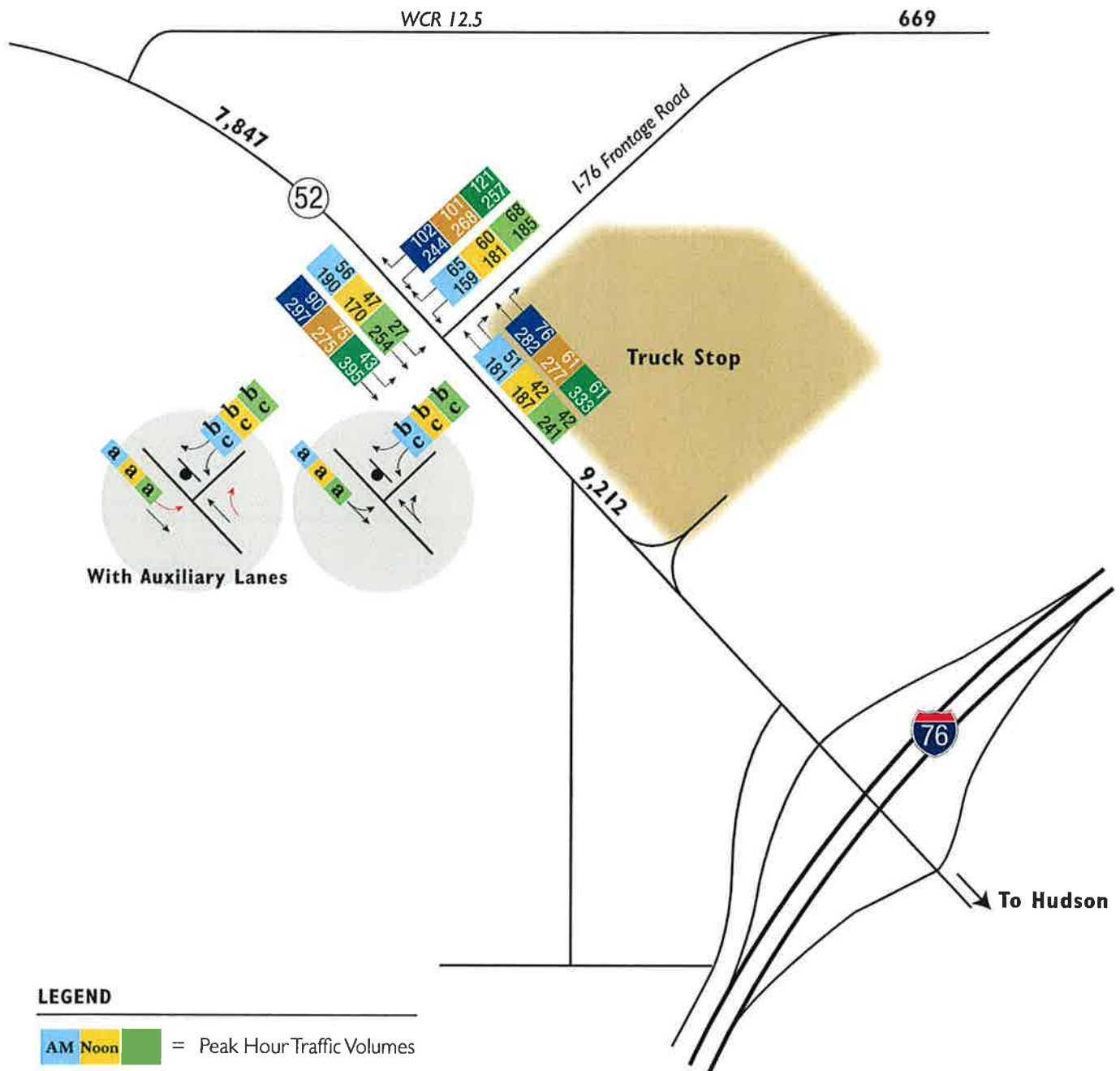
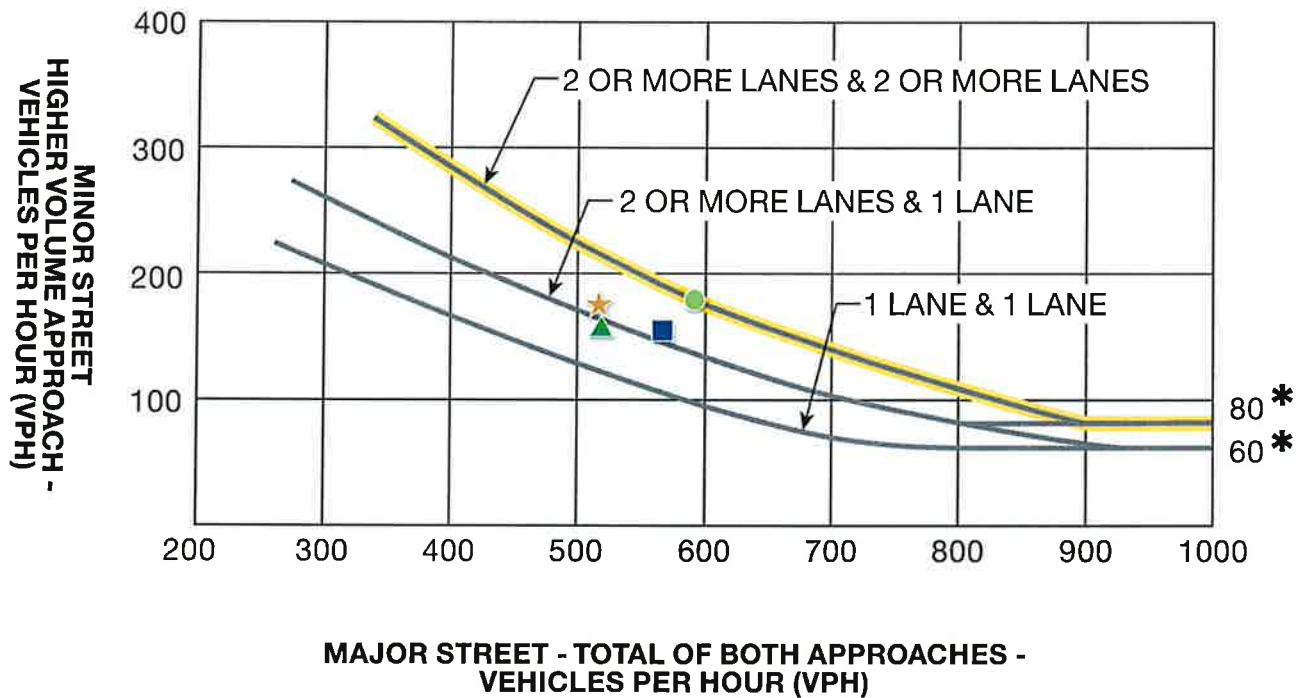


Figure 6
Total Traffic Analysis
Production Phase (Year 2017)





* Note: 80 vph applies as the lower threshold volume for a minor street approach with two or more lanes and 60 vph applies as the lower threshold volume for a minor street approach with one lane.

LEGEND

- = 4:00pm - 5:00pm (592,180)
- = 7:00am - 8:00am (567,155)
- ▲ = 5:00pm - 6:00pm (517, 157)
- ★ = 11:15am - 12:15pm (516,176)

Figure 7
Warrant 2

Four-Hour Vehicular Volume (70% Factor)
(Community Less than 10,000 Population or Above 40mph on Major Street)

November 18, 2015
Ms. Patty Varra
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Appendix A – Count Data

File Name : #1 HWY52&I76AM

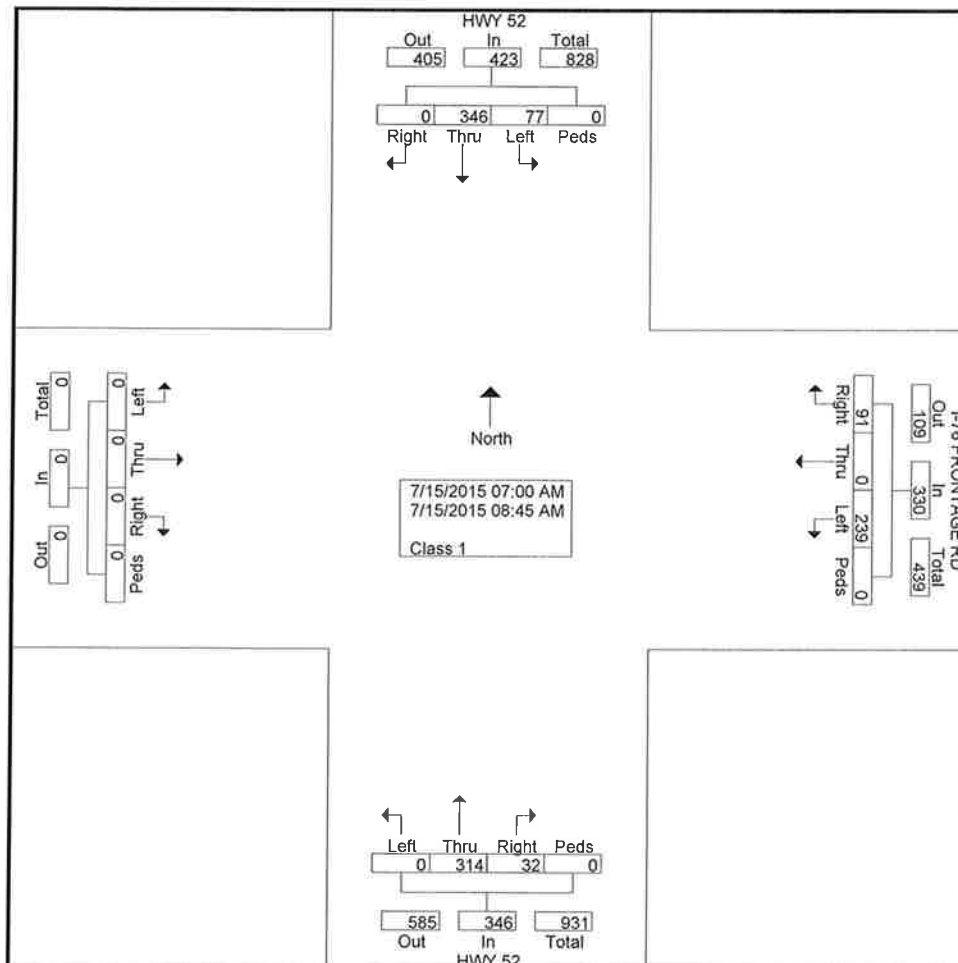
Site Code :

Start Date : 7/15/2015

Page No : 1

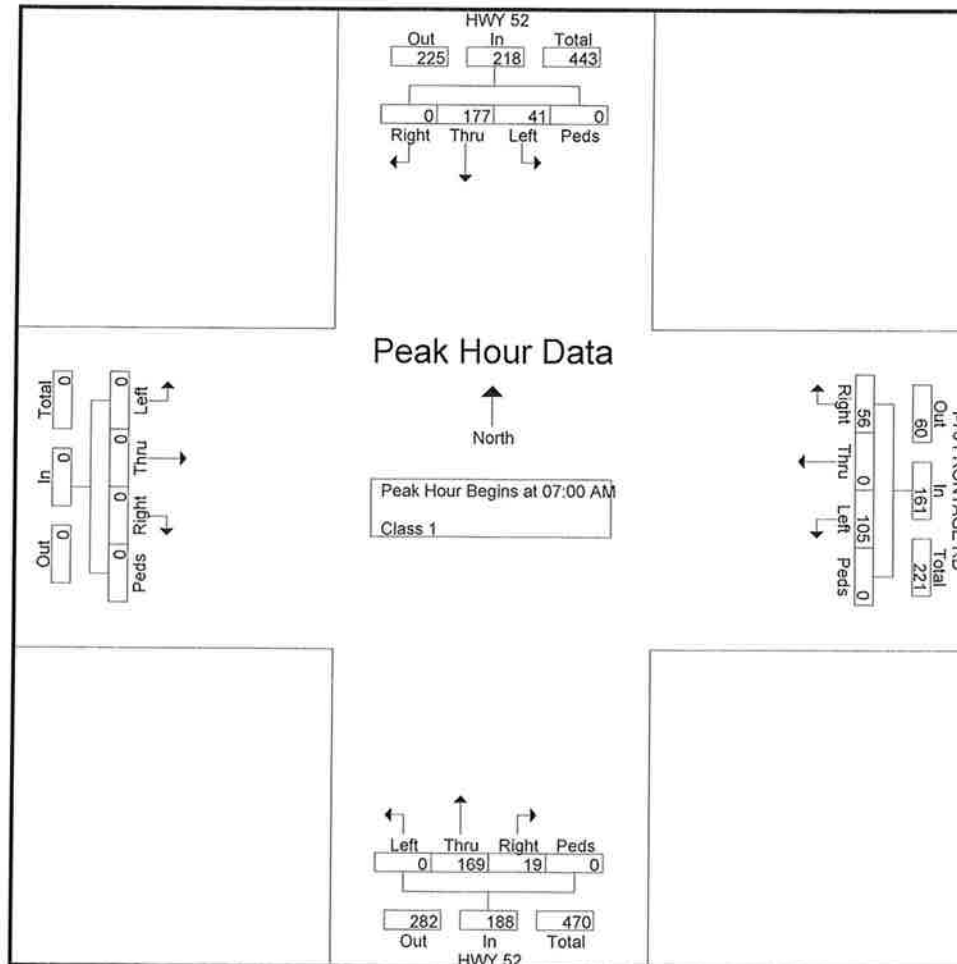
Groups Printed- Class 1

Start Time	HWY 52 Southbound				I-76 FRONTAGE RD Westbound				HWY 52 Northbound				Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
07:00 AM	0	36	7	0	14	0	30	0	2	45	0	0	0	0	0	0	134
07:15 AM	0	47	12	0	14	0	15	0	5	35	0	0	0	0	0	0	128
07:30 AM	0	42	9	0	12	0	31	0	5	40	0	0	0	0	0	0	139
07:45 AM	0	52	13	0	16	0	29	0	7	49	0	0	0	0	0	0	166
Total	0	177	41	0	56	0	105	0	19	169	0	0	0	0	0	0	567
08:00 AM	0	41	9	0	12	0	33	0	5	34	0	0	0	0	0	0	134
08:15 AM	0	37	11	0	7	0	36	0	2	31	0	0	0	0	0	0	124
08:30 AM	0	43	6	0	5	0	38	0	1	44	0	0	0	0	0	0	137
08:45 AM	0	48	10	0	11	0	27	0	5	36	0	0	0	0	0	0	137
Total	0	169	36	0	35	0	134	0	13	145	0	0	0	0	0	0	532
Grand Total	0	346	77	0	91	0	239	0	32	314	0	0	0	0	0	0	1099
Apprch %	0	81.8	18.2	0	27.6	0	72.4	0	9.2	90.8	0	0	0	0	0	0	
Total %	0	31.5	7	0	8.3	0	21.7	0	2.9	28.6	0	0	0	0	0	0	



File Name : #1 HWY52&I76AM
Site Code :
Start Date : 7/15/2015
Page No : 2

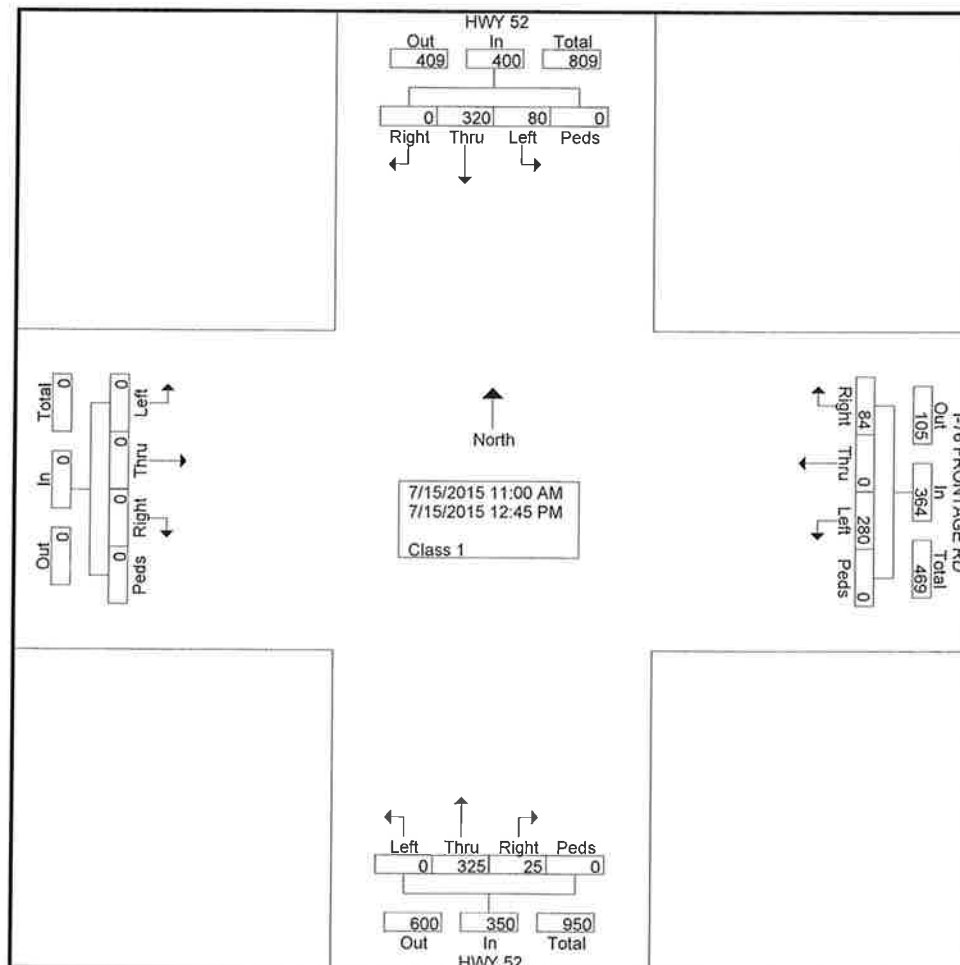
	HWY 52 Southbound					I-76 FRONTAGE RD Westbound					HWY 52 Northbound					Eastbound					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:00 AM																					
07:00 AM	0	36	7	0	43	14	0	30	0	44	2	45	0	0	47	0	0	0	0	0	134
07:15 AM	0	47	12	0	59	14	0	15	0	29	5	35	0	0	40	0	0	0	0	0	128
07:30 AM	0	42	9	0	51	12	0	31	0	43	5	40	0	0	45	0	0	0	0	0	139
07:45 AM	0	52	13	0	65	16	0	29	0	45	7	49	0	0	56	0	0	0	0	0	166
Total Volume	0	177	41	0	218	56	0	105	0	161	19	169	0	0	188	0	0	0	0	0	567
% App. Total	0	81.2	18.8	0		34.8	0	65.2	0		10.1	89.9	0	0		0	0	0	0	0	
PHF	.000	.851	.788	.000	.838	.875	.000	.847	.000	.894	.679	.862	.000	.000	.839	.000	.000	.000	.000	.000	.854



File Name : #1 HWY52&I76MID
Site Code :
Start Date : 7/15/2015
Page No : 1

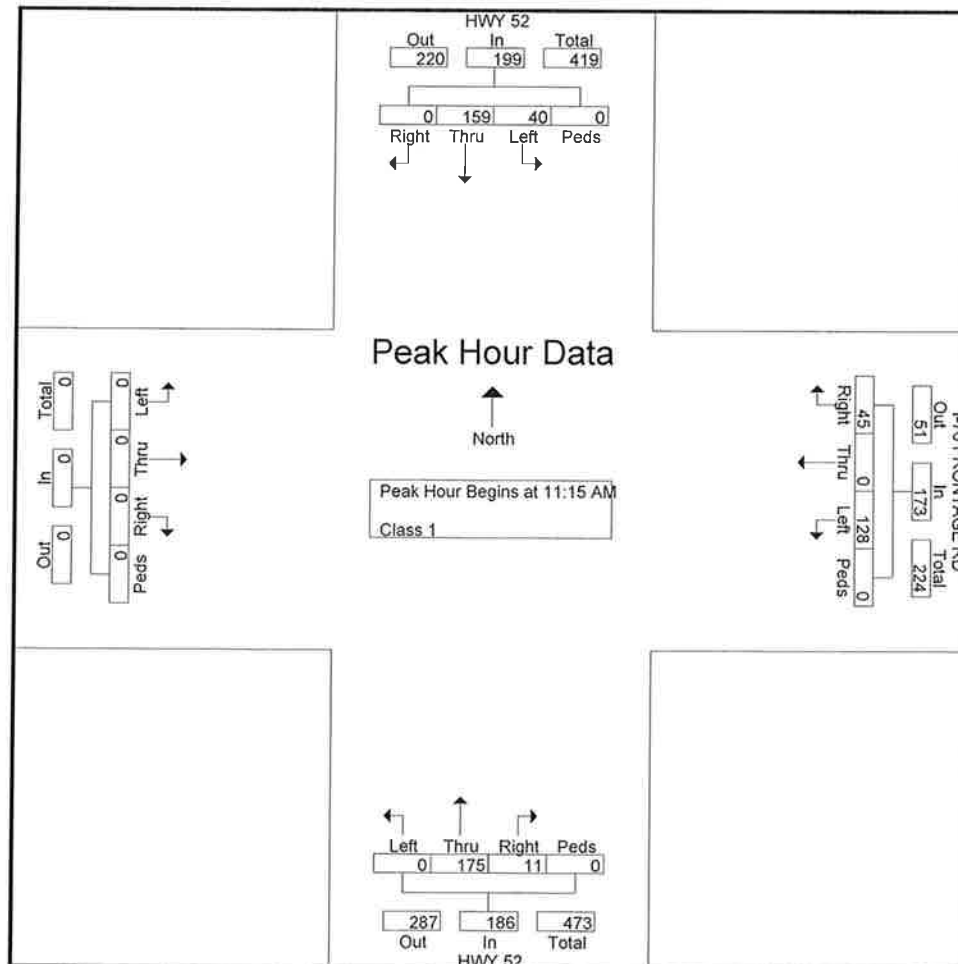
Groups Printed- Class 1

Start Time	HWY 52 Southbound				I-76 FRONTAGE RD Westbound				HWY 52 Northbound				Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
11:00 AM	0	45	6	0	12	0	35	0	2	30	0	0	0	0	0	0	130
11:15 AM	0	48	10	0	8	0	38	0	2	37	0	0	0	0	0	0	143
11:30 AM	0	45	9	0	13	0	38	0	3	39	0	0	0	0	0	0	147
11:45 AM	0	33	8	0	14	0	31	0	5	46	0	0	0	0	0	0	137
Total	0	171	33	0	47	0	142	0	12	152	0	0	0	0	0	0	557
12:00 PM	0	33	13	0	10	0	21	0	1	53	0	0	0	0	0	0	131
12:15 PM	0	38	6	0	5	0	49	0	3	40	0	0	0	0	0	0	141
12:30 PM	0	35	14	0	10	0	34	0	2	34	0	0	0	0	0	0	129
12:45 PM	0	43	14	0	12	0	34	0	7	46	0	0	0	0	0	0	156
Total	0	149	47	0	37	0	138	0	13	173	0	0	0	0	0	0	557
Grand Total	0	320	80	0	84	0	280	0	25	325	0	0	0	0	0	0	1114
Apprch %	0	80	20	0	23.1	0	76.9	0	7.1	92.9	0	0	0	0	0	0	
Total %	0	28.7	7.2	0	7.5	0	25.1	0	2.2	29.2	0	0	0	0	0	0	



File Name : #1 HWY52&I76MID
Site Code :
Start Date : 7/15/2015
Page No : 2

	HWY 52 Southbound					I-76 FRONTAGE RD Westbound					HWY 52 Northbound					Eastbound					
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	Int. Total
Peak Hour Analysis From 11:00 AM to 12:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 11:15 AM																					
11:15 AM	0	48	10	0	58	8	0	38	0	46	2	37	0	0	39	0	0	0	0	0	143
11:30 AM	0	45	9	0	54	13	0	38	0	51	3	39	0	0	42	0	0	0	0	0	147
11:45 AM	0	33	8	0	41	14	0	31	0	45	5	46	0	0	51	0	0	0	0	0	137
12:00 PM	0	33	13	0	46	10	0	21	0	31	1	53	0	0	54	0	0	0	0	0	131
Total Volume	0	159	40	0	199	45	0	128	0	173	11	175	0	0	186	0	0	0	0	0	558
% App. Total	0	79.9	20.1	0		26	0	74	0		5.9	94.1	0	0		0	0	0	0	0	
PHF	.000	.828	.769	.000	.858	.804	.000	.842	.000	.848	.550	.825	.000	.000	.861	.000	.000	.000	.000	.000	.949



File Name : #1 HWY52&I76PM

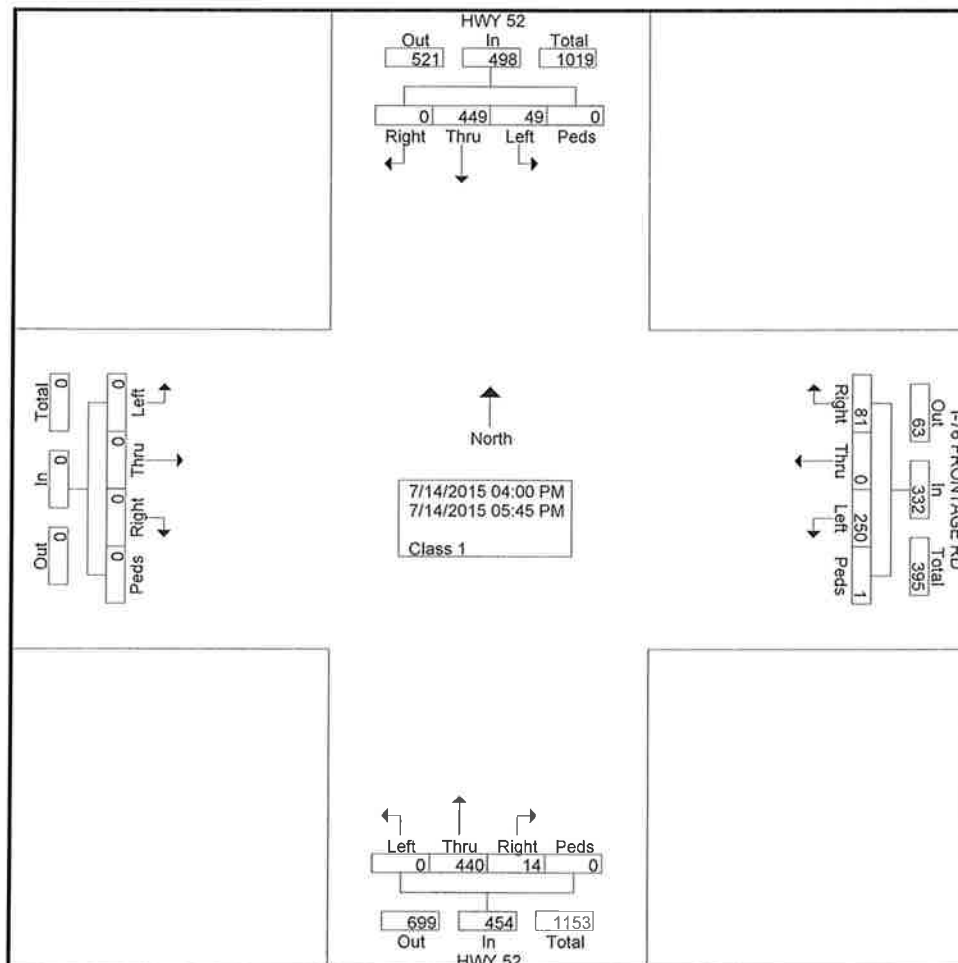
Site Code :

Start Date : 7/14/2015

Page No : 1

Groups Printed- Class 1

Start Time	HWY 52 Southbound				I-76 FRONTAGE RD Westbound				HWY 52 Northbound				Eastbound				Int. Total
	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	Right	Thru	Left	Peds	
04:00 PM	0	61	12	0	9	0	40	0	4	49	0	0	0	0	0	0	175
04:15 PM	0	66	5	0	13	0	33	0	4	48	0	0	0	0	0	0	169
04:30 PM	0	50	2	0	22	0	34	0	1	52	0	0	0	0	0	0	161
04:45 PM	0	57	9	0	15	0	43	0	1	55	0	0	0	0	0	0	180
Total	0	234	28	0	59	0	150	0	10	204	0	0	0	0	0	0	685
05:00 PM	0	64	5	0	9	0	27	0	3	70	0	0	0	0	0	0	178
05:15 PM	0	62	5	0	7	0	23	1	0	56	0	0	0	0	0	0	154
05:30 PM	0	48	5	0	4	0	24	0	0	57	0	0	0	0	0	0	138
05:45 PM	0	41	6	0	2	0	26	0	1	53	0	0	0	0	0	0	129
Total	0	215	21	0	22	0	100	1	4	236	0	0	0	0	0	0	599
Grand Total	0	449	49	0	81	0	250	1	14	440	0	0	0	0	0	0	1284
Apprch %	0	90.2	9.8	0	24.4	0	75.3	0.3	3.1	96.9	0	0	0	0	0	0	
Total %	0	35	3.8	0	6.3	0	19.5	0.1	1.1	34.3	0	0	0	0	0	0	



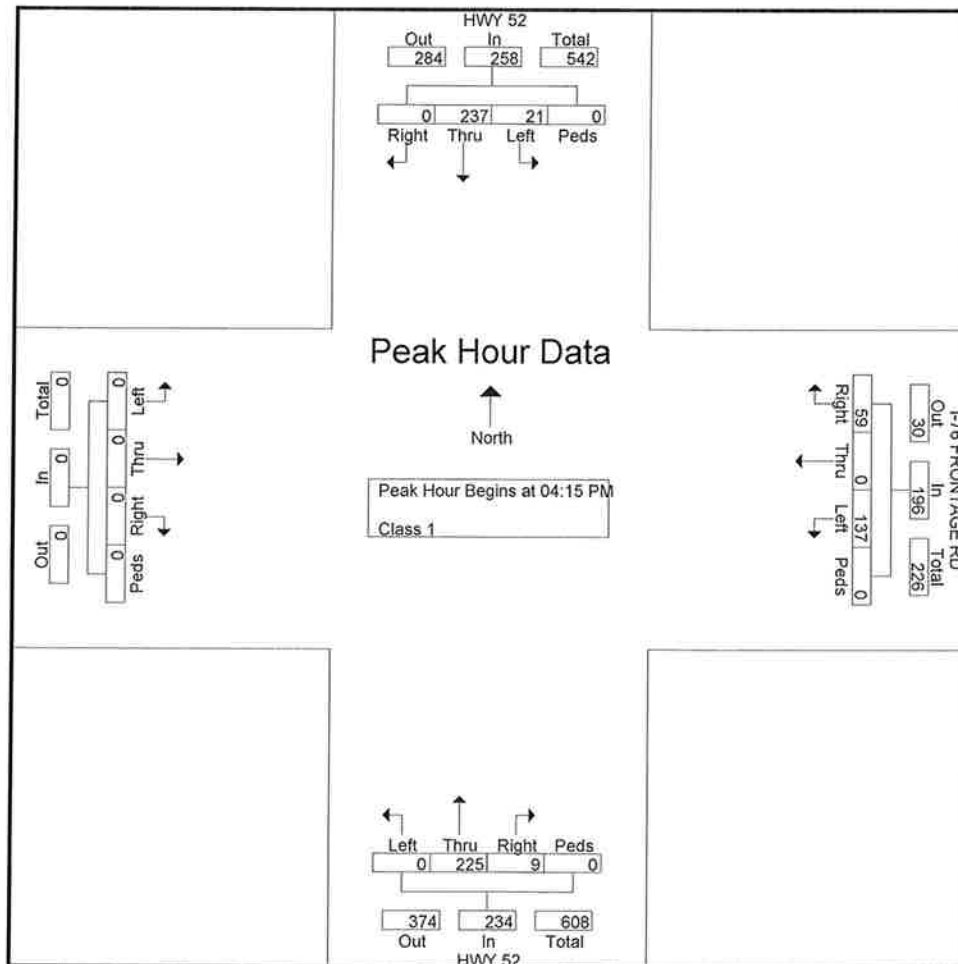
File Name : #1 HWY52&I76PM

Site Code :

Start Date : 7/14/2015

Page No : 2

	HWY 52 Southbound					I-76 FRONTAGE RD Westbound					HWY 52 Northbound					Eastbound					
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	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	66	5	0	71	13	0	33	0	46	4	48	0	0	52	0	0	0	0	0	169
04:30 PM	0	50	2	0	52	22	0	34	0	56	1	52	0	0	53	0	0	0	0	0	161
04:45 PM	0	57	9	0	66	15	0	43	0	58	1	55	0	0	56	0	0	0	0	0	180
05:00 PM	0	64	5	0	69	9	0	27	0	36	3	70	0	0	73	0	0	0	0	0	178
Total Volume	0	237	21	0	258	59	0	137	0	196	9	225	0	0	234	0	0	0	0	0	688
% App. Total	0	91.9	8.1	0		30.1	0	69.9	0		3.8	96.2	0	0		0	0	0	0	0	
PHF	.000	.898	.583	.000	.908	.670	.000	.797	.000	.845	.563	.804	.000	.000	.801	.000	.000	.000	.000	.000	.956



NB

File Name: Z:\NATHAN TUBES\2015\CO9701 - HUDSON OIL & GAS TMC & ADT 7-2015\2CLASS.TF2

Start Date: 7/16/2015

Start Time: 12:00:00 AM

Site Code: 2

Location 1: HWY 52 NO I-76 FRONTAGE RD

Location 2: HWY 52 NO I-76 FRONTAGE RD

Number	Date	Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Ax Double	5 Axle Double	>5 Ax Double	<5 Ax Multi	6 Axle Multi	>6 Ax Multi	Not Classified
1	7/16/2015	12:00 AM	0	0	2	0	0	0	0	0	1	1	0	0	0	0
2	7/16/2015	12:15 AM	0	2	0	0	2	0	0	0	4	0	0	0	0	0
3	7/16/2015	12:30 AM	0	1	0	1	0	0	0	0	2	0	0	0	0	0
4	7/16/2015	12:45 AM	0	3	0	0	0	0	0	0	0	0	0	0	0	0
5	7/16/2015	01:00 AM	0	4	1	0	0	0	0	0	0	0	0	0	0	0
6	7/16/2015	01:15 AM	0	4	1	0	1	0	0	0	1	0	0	0	0	0
7	7/16/2015	01:30 AM	0	2	0	1	0	0	0	0	0	0	0	0	0	0
8	7/16/2015	01:45 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	1
9	7/16/2015	02:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0
10	7/16/2015	02:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	1
11	7/16/2015	02:30 AM	0	1	0	1	0	0	0	0	1	0	0	0	0	0
12	7/16/2015	02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	7/16/2015	03:00 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	0
14	7/16/2015	03:15 AM	0	0	1	0	0	0	0	0	2	0	0	0	0	0
15	7/16/2015	03:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0
16	7/16/2015	03:45 AM	0	2	1	0	0	0	0	0	1	0	0	0	0	0
17	7/16/2015	04:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0
18	7/16/2015	04:15 AM	0	2	0	0	2	0	0	1	0	1	0	0	0	0
19	7/16/2015	04:30 AM	0	5	3	0	4	1	0	0	5	0	0	0	0	0
20	7/16/2015	04:45 AM	0	7	4	0	1	0	0	1	0	0	0	0	0	0
21	7/16/2015	05:00 AM	1	7	3	0	2	0	0	0	0	0	0	0	0	0
22	7/16/2015	05:15 AM	0	6	6	0	6	1	0	0	1	0	0	0	0	1
23	7/16/2015	05:30 AM	0	20	19	1	7	0	0	0	2	0	0	0	0	0
24	7/16/2015	05:45 AM	2	17	12	2	7	2	0	1	2	1	0	0	0	1
25	7/16/2015	06:00 AM	0	21	19	0	10	0	0	3	0	0	0	0	0	2
26	7/16/2015	06:15 AM	1	15	11	0	12	1	0	1	4	0	0	0	0	2
27	7/16/2015	06:30 AM	1	24	17	1	18	1	1	1	4	1	0	0	0	3
28	7/16/2015	06:45 AM	1	26	19	0	8	3	0	2	5	1	0	0	0	0
29	7/16/2015	07:00 AM	2	16	9	0	6	0	0	0	0	0	0	0	0	2
30	7/16/2015	07:15 AM	1	21	11	0	8	1	0	3	4	1	0	0	0	3
31	7/16/2015	07:30 AM	2	23	12	1	6	6	0	3	4	1	0	0	0	3
32	7/16/2015	07:45 AM	1	23	21	0	15	7	0	3	6	0	0	0	0	0
33	7/16/2015	08:00 AM	1	19	8	1	5	2	0	0	3	0	0	0	0	1
34	7/16/2015	08:15 AM	0	15	16	1	14	3	0	5	10	0	0	0	0	3
35	7/16/2015	08:30 AM	1	30	9	0	10	3	0	5	6	2	0	0	0	1
36	7/16/2015	08:45 AM	0	21	5	0	6	0	0	0	8	0	0	0	0	1
37	7/16/2015	09:00 AM	0	25	3	1	5	0	0	3	9	0	0	0	0	2
38	7/16/2015	09:15 AM	0	12	16	0	10	3	0	3	4	0	0	0	0	0
39	7/16/2015	09:30 AM	2	14	8	1	7	3	0	1	7	0	0	0	0	0
40	7/16/2015	09:45 AM	0	24	13	0	1	2	0	3	6	1	0	0	0	0
41	7/16/2015	10:00 AM	0	12	9	0	11	0	0	1	5	0	0	0	0	0
42	7/16/2015	10:15 AM	0	18	9	0	7	2	0	2	3	0	0	0	0	3
43	7/16/2015	10:30 AM	3	18	7	0	11	3	0	1	5	0	0	0	0	2
44	7/16/2015	10:45 AM	0	22	17	2	6	3	0	1	3	0	0	0	0	0
45	7/16/2015	11:00 AM	1	25	17	1	8	3	0	2	8	0	0	0	0	2
46	7/16/2015	11:15 AM	0	18	14	0	6	1	0	2	3	1	0	0	0	1
47	7/16/2015	11:30 AM	4	30	11	0	5	1	0	2	8	0	0	0	0	4
48	7/16/2015	11:45 AM	0	12	7	0	9	0	0	1	1	1	0	0	0	6
49	7/16/2015	12:00 PM	0	21	17	1	7	3	0	3	6	0	0	0	0	0
50	7/16/2015	12:15 PM	0	16	16	1	10	0	0	4	4	0	0	0	0	1
51	7/16/2015	12:30 PM	3	28	5	0	10	0	0	2	8	1	0	0	0	1
52	7/16/2015	12:45 PM	0	20	11	0	11	0	0	0	4	0	0	0	0	2
53	7/16/2015	01:00 PM	0	33	22	0	6	1	0	1	6	1	0	0	0	3
54	7/16/2015	01:15 PM	0	17	18	2	9	2	0	1	2	0	0	0	0	4
55	7/16/2015	01:30 PM	0	36	9	0	6	1	0	2	9	0	0	0	0	4
56	7/16/2015	01:45 PM	0	22	8	2	7	4	0	1	5	0	0	0	0	2
57	7/16/2015	02:00 PM	0	28	6	0	4	0	0	3	6	0	0	0	0	2
58	7/16/2015	02:15 PM	2	16	8	0	11	2	0	0	1	0	0	0	0	3
59	7/16/2015	02:30 PM	0	19	8	0	7	4	0	3	7	0	0	0	0	2
60	7/16/2015	02:45 PM	0	32	8	2	9	3	0	2	4	0	0	0	0	3
61	7/16/2015	03:00 PM	0	13	12	7	0	4	1	0	7	1	0	0	0	3
62	7/16/2015	03:15 PM	2	21	11	0	8	6	0	1	5	0	0	0	0	6
63	7/16/2015	03:30 PM	0	27	15	1	8	0	1	2	3	0	0	0	0	4
64	7/16/2015	03:45 PM	0	27	9	0	8	4	0	4	6	0	0	0	0	2
65	7/16/2015	04:00 PM	0	34	18	1	15	2	0	2	8	0	0	0	0	0
66	7/16/2015	04:15 PM	1	37	14	0	13	1	0	2	8	1	0	0	0	2
67	7/16/2015	04:30 PM	3	34	20	3	6	5	1	1	3	1	0	0	0	0
68	7/16/2015	04:45 PM	1	34	17	1	7	1	0	2	6	1	0	0	0	2
69	7/16/2015	05:00 PM	1	27	15	0	12	2	0	2	3	1	0	0	0	3
70	7/16/2015	05:15 PM	1	40	13	1	7	5	0	2	6	0	0	0	0	5
71	7/16/2015	05:30 PM	1	41	16	0	7	1	0	1	2	0	0	0	0	4
72	7/16/2015	05:45 PM	2	28	12	0	3	0	0	3	1	0	0	0	0	3
73	7/16/2015	06:00 PM	1	26	9	1	9	1	0	2	4	0	0	0	0	0
74	7/16/2015	06:15 PM	0	18	5	0	2	1	0	2	5	0	0	0	0	4
75	7/16/2015	06:30 PM	0	44	10	1	5	0	0	1	1	0	0	1	0	0
76	7/16/2015	06:45 PM	0	23	8	0	2	0	0	2	2	0	0	0	0	3
77	7/16/2015	07:00 PM	1	22	5	0	3	0	0	0	2	0	0	0	0	2
78	7/16/2015	07:15 PM	0	28	8	1	3	1	0	0	0	0	0	0	0	0
79	7/16/2015	07:30 PM	0	13	8	0	1	0	0	0	0	0	0	0	0	2
80	7/16/2015	07:45 PM	0	20	8	0	4	0	0	0	1	0	0	0	0	1
81	7/16/2015	08:00 PM	0	16	4	0	1	0	0	0	0	0	0	0	0	0
82	7/16/2015	08:15 PM	2	13	10	0	1	0	0	0	2	0	0	0	0	1
83	7/16/2015	08:30 PM	0	16	11	0	4	0	0	0	1	1	0	0	0	1
84	7/16/2015	08:45 PM	0	15	5	0	4	0	0	0	2	0	0	0	0	0
85	7/16/2015	09:00 PM	0	15	5	1	1	0	0	0	1	0	0	0	0	1
86	7/16/2015	09:15 PM	0	15	3	0	7	0	0	0	1	0	0	0	0	0
87	7/16/2015	09:30 PM	1	13	5	1	3	0	0	0	3	0	0	0	0	0
88	7/16/2015	09:45 PM	0	11	1	0	1	0	0	1	2	0	0	0	0	0
89	7/16/2015	10:00 PM	0	11	1	0	2	0	0	0	2	0	0	0	0	0
90	7/16/2015	10:15 PM	0	5	1	0	2	1	0	0	0	0	0	0	0	0
91	7/16/2015	10:30 PM	0	11	2	0	2	0	0	0	1	0	0	0	0	0
92	7/16/2015	10:45 PM	0	10	3	1	2	0	0	0	3	0	0	0	0	0
93	7/16/2015	11:00 PM	0	5	2	0	0	0	0	0	0	1	0	0	0	1
94	7/16/2015	11:15 PM	0	3	0	0	0	0	0	0	1	0	0	0	0	1
95	7/16/2015	11:30 PM	0	7	3	1	2	0	0	0	6	0	0	0	0	0
96	7/16/2015	11:45 PM	0	3	0	0	0	0	0	0	1	0	0	0	0	0

SB

File Name: Z:\WATHAN TUBES\2015\CO9701 - HUDSON OIL & GAS TMC & ADT 7-2015\2CLASS.TF2

Start Date: 7/16/2015

Start Time: 12:00:00 AM

Site Code: 2

Location 1: HWY 52 N/O I-76 FRONTAGE RD

Location 2: HWY 52 N/O I-76 FRONTAGE RD

Number	Date	Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Ax Double	5 Axle Double	>6 Ax Double	<6 Ax Multi	6 Axle Multi	>6 Ax Multi	Not Classified
1	7/16/2015	12:00 AM	0	0	1	0	1	0	0	0	0	1	0	0	0	1
2	7/16/2015	12:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
3	7/16/2015	12:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
4	7/16/2015	12:45 AM	0	1	1	0	0	0	0	0	1	0	0	0	0	0
5	7/16/2015	01:00 AM	0	3	2	0	0	0	0	0	0	0	0	0	0	0
6	7/16/2015	01:15 AM	0	1	0	0	2	0	0	0	0	0	0	0	0	0
7	7/16/2015	01:30 AM	0	1	0	0	0	0	0	1	3	0	0	0	0	0
8	7/16/2015	01:45 AM	0	2	1	0	0	0	0	1	3	0	0	0	0	1
9	7/16/2015	02:00 AM	0	1	0	0	0	0	0	1	2	0	0	0	0	0
10	7/16/2015	02:15 AM	0	2	0	0	1	0	0	1	0	0	0	0	0	1
11	7/16/2015	02:30 AM	0	1	0	2	0	0	0	2	0	0	0	0	0	0
12	7/16/2015	02:45 AM	0	1	0	0	0	0	0	0	1	0	0	0	0	0
13	7/16/2015	03:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
14	7/16/2015	03:15 AM	0	2	0	1	1	0	0	0	0	0	0	0	0	0
15	7/16/2015	03:30 AM	0	5	1	0	1	0	0	0	1	0	0	0	0	0
16	7/16/2015	03:45 AM	0	1	1	0	1	0	0	1	1	0	0	0	0	0
17	7/16/2015	04:00 AM	0	1	2	1	1	0	0	0	3	0	0	0	0	0
18	7/16/2015	04:15 AM	0	4	1	0	1	0	0	0	0	0	0	0	0	0
19	7/16/2015	04:30 AM	0	6	0	0	2	0	0	0	0	0	0	0	0	0
20	7/16/2015	04:45 AM	0	10	1	0	0	0	0	0	2	0	0	0	0	0
21	7/16/2015	05:00 AM	0	11	4	0	5	0	0	1	3	0	0	0	0	0
22	7/16/2015	05:15 AM	0	18	11	0	5	2	0	1	0	0	0	0	0	1
23	7/16/2015	05:30 AM	1	17	6	0	5	0	0	0	0	0	0	0	0	1
24	7/16/2015	05:45 AM	0	19	10	0	6	0	0	1	4	0	1	0	0	2
25	7/16/2015	06:00 AM	1	11	11	1	5	1	0	0	2	0	0	0	0	2
26	7/16/2015	06:15 AM	0	16	17	0	12	1	0	1	1	0	0	0	0	0
27	7/16/2015	06:30 AM	0	22	13	0	13	1	0	5	4	0	0	0	0	3
28	7/16/2015	06:45 AM	0	24	15	1	12	2	0	3	6	0	0	0	0	2
29	7/16/2015	07:00 AM	0	17	12	1	6	0	0	1	3	0	0	0	0	1
30	7/16/2015	07:15 AM	0	31	11	1	6	1	0	3	2	0	0	0	0	5
31	7/16/2015	07:30 AM	4	20	10	1	8	4	0	1	5	0	0	0	0	7
32	7/16/2015	07:45 AM	1	23	5	2	9	1	0	2	3	0	0	0	0	4
33	7/16/2015	08:00 AM	0	30	11	1	12	4	0	2	3	0	0	0	0	1
34	7/16/2015	08:15 AM	0	23	10	0	5	5	0	2	7	0	0	0	0	2
35	7/16/2015	08:30 AM	0	19	13	0	9	1	0	4	1	0	0	1	0	4
36	7/16/2015	08:45 AM	1	29	12	0	5	2	0	2	5	1	0	0	0	3
37	7/16/2015	09:00 AM	0	26	13	0	5	1	0	8	5	0	0	0	0	3
38	7/16/2015	09:15 AM	0	17	10	1	9	1	0	1	5	1	0	0	0	2
39	7/16/2015	09:30 AM	0	26	12	1	5	4	0	3	4	0	0	0	0	1
40	7/16/2015	09:45 AM	0	26	10	1	8	5	0	5	3	2	0	0	0	3
41	7/16/2015	10:00 AM	1	19	10	1	6	1	0	4	3	0	0	0	0	2
42	7/16/2015	10:15 AM	0	19	11	1	9	5	0	3	2	0	0	0	1	5
43	7/16/2015	10:30 AM	0	25	8	0	9	2	0	4	3	0	0	0	0	6
44	7/16/2015	10:45 AM	0	17	12	1	9	1	0	3	3	0	0	0	0	3
45	7/16/2015	11:00 AM	2	18	10	1	6	1	0	4	0	0	0	0	0	5
46	7/16/2015	11:15 AM	1	27	9	1	8	0	0	6	2	0	0	0	0	4
47	7/16/2015	11:30 AM	1	22	11	3	5	0	0	6	7	0	0	0	0	3
48	7/16/2015	11:45 AM	0	17	16	2	10	1	0	6	2	0	1	0	0	8
49	7/16/2015	12:00 PM	0	18	12	2	10	0	0	7	2	0	0	0	0	5
50	7/16/2015	12:15 PM	1	28	13	1	5	1	0	6	3	0	0	0	0	9
51	7/16/2015	12:30 PM	1	21	14	1	10	1	0	3	4	0	0	0	0	2
52	7/16/2015	12:45 PM	0	25	11	0	8	0	0	8	2	0	0	0	0	3
53	7/16/2015	01:00 PM	1	19	14	1	6	2	0	7	3	0	0	0	0	0
54	7/16/2015	01:15 PM	1	20	14	1	7	0	0	6	0	0	0	0	0	3
55	7/16/2015	01:30 PM	1	16	9	2	8	2	0	7	0	0	0	0	0	11
56	7/16/2015	01:45 PM	1	18	15	2	7	1	0	6	3	1	0	0	1	6
57	7/16/2015	02:00 PM	0	16	5	2	5	1	0	2	1	0	0	0	0	5
58	7/16/2015	02:15 PM	0	27	10	0	11	1	0	2	2	0	0	0	0	8
59	7/16/2015	02:30 PM	0	26	12	3	8	2	0	6	3	0	0	0	0	3
60	7/16/2015	02:45 PM	0	19	13	0	4	0	0	2	2	1	0	0	0	3
61	7/16/2015	03:00 PM	2	16	13	0	8	0	0	2	0	1	0	0	0	6
62	7/16/2015	03:15 PM	0	17	17	2	13	1	0	6	3	0	0	0	0	8
63	7/16/2015	03:30 PM	0	25	10	1	7	0	0	4	3	0	0	0	0	5
64	7/16/2015	03:45 PM	2	25	16	0	7	1	0	4	1	0	0	0	0	2
65	7/16/2015	04:00 PM	2	33	19	1	5	0	0	2	2	0	0	0	0	5
66	7/16/2015	04:15 PM	1	28	20	0	10	5	0	1	5	0	0	0	0	5
67	7/16/2015	04:30 PM	1	25	7	0	7	1	0	3	3	1	0	0	0	5
68	7/16/2015	04:45 PM	1	28	18	1	11	1	0	2	2	0	0	0	0	7
69	7/16/2015	05:00 PM	0	31	9	0	14	0	0	2	0	0	0	0	0	4
70	7/16/2015	05:15 PM	1	31	29	1	9	1	0	1	1	0	0	0	0	5
71	7/16/2015	05:30 PM	1	29	22	0	4	1	0	1	2	0	0	0	0	4
72	7/16/2015	05:45 PM	0	43	18	0	5	1	0	1	3	1	0	0	0	1
73	7/16/2015	06:00 PM	1	28	14	0	7	1	0	1	2	0	0	0	0	1
74	7/16/2015	06:15 PM	2	34	18	0	6	0	0	2	1	0	0	0	0	2
75	7/16/2015	06:30 PM	1	27	10	0	7	0	0	2	1	1	0	0	0	2
76	7/16/2015	06:45 PM	1	22	13	0	3	1	0	3	0	1	0	0	0	4
77	7/16/2015	07:00 PM	0	6	0	0	4	0	0	1	2	0	0	0	0	1
78	7/16/2015	07:15 PM	2	18	9	0	3	0	0	1	1	0	0	0	0	3
79	7/16/2015	07:30 PM	0	19	7	0	3	0	0	0	2	0	0	0	0	1
80	7/16/2015	07:45 PM	1	15	8	0	1	0	0	0	1	0	0	0	0	0
81	7/16/2015	08:00 PM	0	18	4	0	4	0	0	1	0	0	0	0	0	1
82	7/16/2015	08:15 PM	0	27	14	1	2	0	0	1	0	0	0	0	0	0
83	7/16/2015	08:30 PM	0	19	4	0	1	0	0	0	2	0	0	0	0	1
84	7/16/2015	08:45 PM	1	13	5	0	1	0	0	0	1	0	0	0	0	0
85	7/16/2015	09:00 PM	0	12	5	1	2	0	0	2	1	0	0	0	0	1
86	7/16/2015	09:15 PM	0	15	6	0	2	0	0	0	1	0	0	0	0	0
87	7/16/2015	09:30 PM	0	5	2	0	1	0	0	0	0	0	0	0	0	0
88	7/16/2015	09:45 PM	0	12	1	0	1	0	0	0	1	0	0	0	0	0
89	7/16/2015	10:00 PM	0	11	2	0	4	0	0	0	1	0	0	0	0	0
90	7/16/2015	10:15 PM	0	7	2	0	0	0	0	0	1	0	0	0	0	0
91	7/16/2015	10:30 PM	0	7	4	0	1	0	0	1	4	0	0	0	0	0
92	7/16/2015	10:45 PM	0	5	3	0	2	0	0	2	0	0	0	0	0	1
93	7/16/2015	11:00 PM	0	2	2	0	0	1	0	0	4	1	0	0	0	0
94	7/16/2015	11:15 PM	1	9	2	0	0	2	0	0	2	0	0	0	0	0
95	7/16/2015	11:30 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	0
96	7/16/2015	11:45 PM	0	1	0	0	0	0	0	0	2	0	0	0	0	0

NB

File Name: Z:\NATHAN TUBES\2015\COI\9701 - HUDSON OIL & GAS TMC & ADT 7-2015\3CLASS.TF2

Start Date: 7/15/2015

Start Time: 12:00:00 AM

Site Code: 3

Location 1 HWY 52 S/O I-76 FRONTAGE RD

Location 2 HWY 52 S/O I-76 FRONTAGE RD

Number	Date	Time	Bikes	Cars & Trailers	2-Axis Long	Buses	2-Axis Tire	3-Axis Single	4-Axis Single	<5-Axis Double	5-Axis Double	>6-Axis Double	<5-Axis Multi	6-Axis Multi	>6-Axis Multi	Not Classified
1	7/15/2015	12:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0
2	7/15/2015	12:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0
3	7/15/2015	12:30 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0
4	7/15/2015	12:45 AM	0	3	0	0	0	0	0	0	1	0	0	0	0	0
5	7/15/2015	01:00 AM	0	0	0	0	1	0	0	0	1	0	0	0	0	0
6	7/15/2015	01:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7	7/15/2015	01:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0
8	7/15/2015	01:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
9	7/15/2015	02:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
10	7/15/2015	02:15 AM	0	1	0	0	2	0	0	1	1	0	0	0	0	1
11	7/15/2015	02:30 AM	0	0	1	0	1	0	0	0	1	0	0	0	0	0
12	7/15/2015	02:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
13	7/15/2015	03:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0
14	7/15/2015	03:15 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	1
15	7/15/2015	03:30 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	2
16	7/15/2015	03:45 AM	0	1	0	0	0	0	0	1	0	0	0	0	0	1
17	7/15/2015	04:00 AM	0	1	0	1	1	0	0	0	0	0	0	0	0	0
18	7/15/2015	04:15 AM	0	3	0	1	1	0	0	0	0	0	0	0	0	0
19	7/15/2015	04:30 AM	0	7	4	0	1	0	0	0	0	0	0	0	0	0
20	7/15/2015	04:45 AM	0	5	5	0	4	0	0	1	3	0	0	0	0	1
21	7/15/2015	05:00 AM	0	9	5	0	1	0	0	0	0	0	0	0	0	2
22	7/15/2015	05:15 AM	0	9	8	0	5	0	0	0	2	0	0	0	0	1
23	7/15/2015	05:30 AM	0	26	19	0	9	0	0	1	0	1	0	0	0	2
24	7/15/2015	05:45 AM	0	18	11	3	10	1	0	0	1	0	0	0	0	4
25	7/15/2015	06:00 AM	0	16	17	1	10	0	0	0	9	0	0	0	0	6
26	7/15/2015	06:15 AM	0	21	13	0	13	1	0	1	1	0	0	0	0	5
27	7/15/2015	06:30 AM	0	31	16	2	10	0	0	0	1	0	0	0	0	3
28	7/15/2015	06:45 AM	0	26	20	1	10	2	0	1	0	0	0	0	0	2
29	7/15/2015	07:00 AM	1	22	11	0	6	0	0	2	3	0	0	0	0	1
30	7/15/2015	07:15 AM	1	17	7	3	4	0	0	0	5	0	0	0	0	5
31	7/15/2015	07:30 AM	0	19	10	1	8	1	0	5	4	0	0	0	0	4
32	7/15/2015	07:45 AM	0	26	12	0	4	1	0	5	1	0	0	0	0	3
33	7/15/2015	08:00 AM	0	18	11	0	6	0	0	2	2	0	0	0	0	2
34	7/15/2015	08:15 AM	1	16	8	1	3	2	0	1	2	0	0	0	0	2
35	7/15/2015	08:30 AM	1	22	9	0	9	1	0	1	2	0	0	0	0	2
36	7/15/2015	08:45 AM	1	15	6	0	8	1	0	1	7	1	0	0	0	3
37	7/15/2015	09:00 AM	1	11	11	0	4	0	0	2	5	0	0	0	0	1
38	7/15/2015	09:15 AM	0	15	13	1	4	2	0	3	2	0	0	0	0	6
39	7/15/2015	09:30 AM	0	13	6	0	4	0	0	2	2	0	0	0	0	3
40	7/15/2015	09:45 AM	0	21	6	0	3	1	0	2	3	0	0	0	0	2
41	7/15/2015	10:00 AM	0	11	8	0	8	1	0	2	2	0	0	0	0	3
42	7/15/2015	10:15 AM	0	14	6	2	5	4	0	2	5	0	0	0	0	2
43	7/15/2015	10:30 AM	0	13	10	1	3	1	0	1	2	0	0	0	0	2
44	7/15/2015	10:45 AM	0	11	10	1	4	0	0	2	0	0	0	0	0	3
45	7/15/2015	11:00 AM	0	13	11	1	2	0	0	3	1	0	0	0	0	0
46	7/15/2015	11:15 AM	0	16	5	0	2	2	0	0	3	0	0	0	0	10
47	7/15/2015	11:30 AM	1	24	15	0	4	0	0	5	1	0	0	0	0	6
48	7/15/2015	11:45 AM	0	23	13	1	8	0	0	7	2	1	0	0	0	5
49	7/15/2015	12:00 PM	2	19	13	0	7	1	0	2	2	0	0	0	0	4
50	7/15/2015	12:15 PM	1	14	4	1	7	1	0	3	5	0	0	0	0	1
51	7/15/2015	12:30 PM	1	22	8	1	9	0	0	0	2	0	0	0	0	4
52	7/15/2015	12:45 PM	1	24	7	0	9	1	1	3	2	0	0	0	0	6
53	7/15/2015	01:00 PM	0	19	8	1	9	2	0	1	1	0	0	0	0	7
54	7/15/2015	01:15 PM	1	15	9	0	5	7	0	4	4	0	0	0	0	2
55	7/15/2015	01:30 PM	0	23	18	0	7	2	0	0	1	0	0	0	0	8
56	7/15/2015	01:45 PM	0	12	6	1	4	0	0	1	3	0	0	0	0	4
57	7/15/2015	02:00 PM	0	13	5	0	4	0	0	0	3	0	0	0	0	3
58	7/15/2015	02:15 PM	0	25	9	1	2	1	0	2	0	0	0	0	0	1
59	7/15/2015	02:30 PM	0	25	10	2	3	1	0	1	2	0	0	0	0	6
60	7/15/2015	02:45 PM	2	29	14	1	10	0	0	1	2	1	0	0	0	4
61	7/15/2015	03:00 PM	1	20	12	0	10	3	0	3	5	0	0	0	0	1
62	7/15/2015	03:15 PM	4	27	8	1	7	0	0	3	2	0	0	0	0	6
63	7/15/2015	03:30 PM	1	24	18	0	6	3	0	1	3	0	0	0	0	2
64	7/15/2015	03:45 PM	0	27	10	1	2	2	0	4	0	0	0	0	0	5
65	7/15/2015	04:00 PM	2	22	10	1	3	1	0	2	1	0	0	0	0	3
66	7/15/2015	04:15 PM	2	22	17	0	4	0	0	2	2	0	0	0	0	6
67	7/15/2015	04:30 PM	1	25	11	0	8	2	0	1	3	0	0	0	0	3
68	7/15/2015	04:45 PM	1	25	17	0	9	0	0	1	1	0	0	0	0	7
69	7/15/2015	05:00 PM	3	37	13	0	9	1	0	0	1	0	0	0	0	4
70	7/15/2015	05:15 PM	0	31	8	0	8	1	0	1	0	0	0	0	0	7
71	7/15/2015	05:30 PM	1	33	10	0	6	1	0	1	1	0	0	0	0	1
72	7/15/2015	05:45 PM	0	26	10	0	9	0	0	0	0	0	0	0	0	2
73	7/15/2015	06:00 PM	1	21	8	1	4	0	0	0	0	0	0	0	0	1
74	7/15/2015	06:15 PM	0	15	6	0	4	0	0	2	3	0	0	0	0	2
75	7/15/2015	06:30 PM	0	19	5	0	5	0	0	1	2	0	0	0	0	1
76	7/15/2015	06:45 PM	1	17	4	0	3	0	0	1	3	0	0	0	0	2
77	7/15/2015	07:00 PM	0	7	8	0	3	0	0	0	3	0	0	0	0	1
78	7/15/2015	07:15 PM	0	17	4	0	4	0	0	1	0	0	0	0	0	2
79	7/15/2015	07:30 PM	1	17	8	0	2	0	0	0	0	0	0	0	0	0
80	7/15/2015	07:45 PM	0	11	3	1	1	0	0	1	1	0	0	0	0	0
81	7/15/2015	08:00 PM	0	5	8	0	0	0	0	1	1	0	0	0	0	1
82	7/15/2015	08:15 PM	0	13	2	0	0	0	1	0	1	0	0	0	0	1
83	7/15/2015	08:30 PM	0	9	4	0	0	0	0	0	0	0	0	0	0	0
84	7/15/2015	08:45 PM	0	2	1	1	0	0	0	1	1	0	0	0	0	0
85	7/15/2015	09:00 PM	0	8	2	0	3	0	0	0	1	0	0	0	0	0
86	7/15/2015	09:15 PM	0	13	2	0	0	0	0	0	1	0	0	0	0	0
87	7/15/2015	09:30 PM	0	4	0	0	0	0	0	0	0	0	0	0	0	0
88	7/15/2015	09:45 PM	0	2	1	0	0	0	0	1	0	0	0	0	0	0
89	7/15/2015	10:00 PM	0	8	0	1	1	0	0	0	0	0	0	0	0	0
90	7/15/2015	10:15 PM	0	4	1	1	0	0	0	1	0	0	0	0	0	0
91	7/15/2015	10:30 PM	0	5	3	0	0	0	0	1	0	0	0	0	0	0
92	7/15/2015	10:45 PM	0	3	0	0	0	0	0	2	1	0	0	0	0	0
93	7/15/2015	11:00 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0
94	7/15/2015	11:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0
95	7/15/2015	11:30 PM	1	4	1	0	0	0	0	2	0	0	0	0	0	0
96	7/15/2015	11:45 PM	0	3	0	0	1	0	0	0	2	0	0	0	0	0

SB

File Name: Z:\NATHAN TUBES\2015\CO\9701 - HUDSON OIL & GAS TMC & ADT 7-2015\3CLASS.TF2

Start Date: 7/15/2015

Start Time: 12:00:00 AM

Site Code: 3

Location 1: HWY 52 S/O I-76 FRONTAGE RD

Location 2: HWY 52 S/O I-76 FRONTAGE RD

Number	Date	Time	Bikes	Care & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>5 Axl Double	<5 Axl Multi	5 Axle Multi	>5 Axl Multi	Not Classified
1	7/15/2015	12:00 AM	0	6	0	0	0	0	0	0	1	0	0	0	0	0
2	7/15/2015	12:15 AM	0	4	0	0	1	0	0	1	3	0	0	0	0	0
3	7/15/2015	12:30 AM	0	0	0	0	1	0	0	0	3	0	0	1	0	0
4	7/15/2015	12:45 AM	0	5	0	0	0	1	0	0	1	0	0	0	0	0
5	7/15/2015	01:00 AM	0	7	1	0	0	0	0	0	1	0	0	2	0	0
6	7/15/2015	01:15 AM	0	3	1	0	1	0	0	0	2	0	0	0	0	0
7	7/15/2015	01:30 AM	0	3	0	0	0	0	0	0	2	0	0	0	0	0
8	7/15/2015	01:45 AM	0	1	2	0	0	0	0	0	4	0	1	1	0	0
9	7/15/2015	02:00 AM	0	1	0	0	0	0	0	0	4	0	0	1	0	0
10	7/15/2015	02:15 AM	0	19	0	1	1	0	0	0	2	0	0	0	0	0
11	7/15/2015	02:30 AM	0	4	0	0	4	0	0	0	7	0	0	0	0	0
12	7/15/2015	02:45 AM	0	2	0	0	2	0	0	0	3	1	0	0	0	0
13	7/15/2015	03:00 AM	0	4	1	0	2	0	0	0	1	0	0	0	0	0
14	7/15/2015	03:15 AM	0	0	1	0	2	0	0	0	7	0	0	0	0	1
15	7/15/2015	03:30 AM	0	1	0	0	1	1	0	0	4	0	0	0	0	0
16	7/15/2015	03:45 AM	0	2	1	0	1	0	0	0	4	0	0	0	0	0
17	7/15/2015	04:00 AM	0	2	2	1	2	0	0	1	1	0	0	0	0	0
18	7/15/2015	04:15 AM	0	3	2	0	2	0	0	0	12	0	0	0	0	0
19	7/15/2015	04:30 AM	0	7	4	0	1	1	0	0	8	0	0	0	0	0
20	7/15/2015	04:45 AM	2	13	5	2	3	3	0	0	4	0	0	2	0	0
21	7/15/2015	05:00 AM	0	9	5	0	5	0	0	0	10	2	0	0	0	1
22	7/15/2015	05:15 AM	0	15	6	0	5	1	1	2	8	1	1	0	0	1
23	7/15/2015	05:30 AM	1	19	11	0	5	1	0	0	9	0	0	1	0	3
24	7/15/2015	05:45 AM	3	20	8	0	4	3	0	0	2	0	0	0	0	4
25	7/15/2015	06:00 AM	2	12	21	2	8	2	0	0	10	0	0	0	0	5
26	7/15/2015	06:15 AM	3	19	14	0	15	4	1	4	8	0	0	0	1	5
27	7/15/2015	06:30 AM	0	25	15	0	16	2	0	2	12	0	0	1	0	2
28	7/15/2015	06:45 AM	2	17	8	1	10	3	0	0	10	0	0	1	0	5
29	7/15/2015	07:00 AM	0	24	8	0	6	1	1	2	9	0	0	0	0	2
30	7/15/2015	07:15 AM	1	32	15	0	9	1	0	2	8	1	0	1	1	3
31	7/15/2015	07:30 AM	3	23	16	0	10	2	0	3	8	1	0	1	0	3
32	7/15/2015	07:45 AM	0	31	17	2	12	1	0	6	17	1	0	0	0	2
33	7/15/2015	08:00 AM	0	29	14	1	4	9	0	2	6	0	0	0	1	4
34	7/15/2015	08:15 AM	2	32	13	3	10	3	0	3	11	0	0	0	0	3
35	7/15/2015	08:30 AM	2	28	12	0	9	5	0	0	10	1	1	0	0	8
36	7/15/2015	08:45 AM	0	33	29	0	5	2	0	3	14	0	0	1	0	5
37	7/15/2015	09:00 AM	0	32	18	3	2	5	0	2	12	1	0	1	0	2
38	7/15/2015	09:15 AM	0	47	9	1	5	5	0	1	11	2	0	0	0	3
39	7/15/2015	09:30 AM	0	24	20	1	7	2	0	1	11	0	0	0	0	3
40	7/15/2015	09:45 AM	1	23	10	2	5	0	0	2	7	1	0	1	0	2
41	7/15/2015	10:00 AM	0	30	15	1	11	4	0	4	13	2	0	1	0	1
42	7/15/2015	10:15 AM	2	30	17	0	7	3	0	1	13	0	0	1	0	0
43	7/15/2015	10:30 AM	1	29	17	2	0	1	1	0	12	2	0	0	0	3
44	7/15/2015	10:45 AM	3	31	17	4	8	5	0	4	12	0	0	0	0	2
45	7/15/2015	11:00 AM	1	25	18	1	6	3	0	0	13	1	0	1	0	2
46	7/15/2015	11:15 AM	3	31	14	0	11	2	0	3	12	2	0	0	0	7
47	7/15/2015	11:30 AM	3	32	18	2	8	5	0	4	16	0	0	0	1	1
48	7/15/2015	11:45 AM	1	14	10	0	10	2	0	0	8	0	0	1	0	3
49	7/15/2015	12:00 PM	0	28	19	1	6	4	0	2	8	0	0	1	0	5
50	7/15/2015	12:15 PM	0	33	24	1	8	0	0	0	14	0	0	0	1	4
51	7/15/2015	12:30 PM	1	33	14	1	4	1	1	5	9	0	0	0	0	1
52	7/15/2015	12:45 PM	1	28	14	2	14	5	0	4	11	0	0	0	0	2
53	7/15/2015	01:00 PM	1	22	11	2	9	5	1	2	8	1	0	0	0	3
54	7/15/2015	01:15 PM	1	20	12	1	10	3	2	4	11	0	0	1	0	6
55	7/15/2015	01:30 PM	1	38	20	1	4	1	0	3	11	0	0	0	0	2
56	7/15/2015	01:45 PM	0	17	20	1	12	4	0	3	20	1	0	1	1	2
57	7/15/2015	02:00 PM	1	28	17	1	9	4	0	1	11	0	0	0	0	3
58	7/15/2015	02:15 PM	2	26	14	0	4	4	1	1	18	0	0	1	0	3
59	7/15/2015	02:30 PM	0	28	7	0	9	0	0	0	10	0	0	0	0	1
60	7/15/2015	02:45 PM	1	28	18	1	7	5	0	0	10	0	0	0	0	5
61	7/15/2015	03:00 PM	1	29	16	2	9	5	0	2	7	0	0	0	0	6
62	7/15/2015	03:15 PM	1	22	13	1	9	3	0	3	12	2	0	0	0	2
63	7/15/2015	03:30 PM	3	31	18	1	7	6	1	3	10	1	0	0	0	5
64	7/15/2015	03:45 PM	0	29	14	0	9	2	0	2	9	1	0	0	0	4
65	7/15/2015	04:00 PM	2	58	17	2	10	1	0	4	11	0	0	0	0	4
66	7/15/2015	04:15 PM	2	47	25	2	14	4	1	3	11	0	0	0	0	5
67	7/15/2015	04:30 PM	2	40	28	1	16	2	0	2	5	0	0	0	0	4
68	7/15/2015	04:45 PM	0	34	21	0	15	2	0	2	6	0	0	0	0	2
69	7/15/2015	05:00 PM	1	46	16	1	15	4	0	4	8	1	0	0	1	3
70	7/15/2015	05:15 PM	2	39	26	0	11	1	0	1	7	1	0	0	0	2
71	7/15/2015	05:30 PM	1	29	14	1	3	0	0	4	9	0	0	0	0	5
72	7/15/2015	05:45 PM	0	34	13	0	3	0	0	3	9	0	0	0	0	1
73	7/15/2015	06:00 PM	0	32	16	1	5	0	1	1	6	0	0	0	0	2
74	7/15/2015	06:15 PM	1	33	21	0	6	1	0	5	5	0	0	0	0	2
75	7/15/2015	06:30 PM	1	29	17	0	4	1	0	1	8	0	0	0	0	1
76	7/15/2015	06:45 PM	1	32	10	0	4	1	0	2	12	0	0	0	0	0
77	7/15/2015	07:00 PM	1	32	8	0	2	1	0	1	6	0	0	1	0	0
78	7/15/2015	07:15 PM	1	20	10	1	5	2	0	1	11	0	0	0	0	1
79	7/15/2015	07:30 PM	0	25	7	1	4	0	0	2	8	0	0	2	0	0
80	7/15/2015	07:45 PM	1	15	9	1	3	1	0	0	4	1	0	0	0	1
81	7/15/2015	08:00 PM	1	10	4	0	5	0	0	0	7	0	0	0	0	2
82	7/15/2015	08:15 PM	1	14	4	0	0	0	0	0	2	0	0	0	0	1
83	7/15/2015	08:30 PM	0	9	7	0	2	0	0	1	4	0	0	0	0	0
84	7/15/2015	08:45 PM	2	15	3	0	0	0	0	1	3	0	0	0	0	0
85	7/15/2015	09:00 PM	0	20	6	0	1	1	0	1	6	0	0	0	0	0
86	7/15/2015	09:15 PM	0	9	7	1	2	0	0	0	3	0	0	2	0	0
87	7/15/2015	09:30 PM	0	9	1	0	2	0	0	1	7	0	0	1	0	0
88	7/15/2015	09:45 PM	1	10	5	0	0	1	0	0	2	0	0	0	0	1
89	7/15/2015	10:00 PM	0	11	1	0	2	0	0	0	6	0	0	0	0	0
90	7/15/2015	10:15 PM	0	10	3	0	2	0	0	0	2	1	0	1	0	0
91	7/15/2015	10:30 PM	0	9	3	0	0	0	0	0	6	0	1	0	0	0
92	7/15/2015	10:45 PM	1	7	1	0	0	1	0	0	1	0	0	0	0	0
93	7/15/2015	11:00 PM	0	7	0	0	1	0	0	0	10	0	1	0	0	1
94	7/15/2015	11:15 PM	0	5	4	2	1	0	0	0	2	0	0	0	0	0
95	7/15/2015	11:30 PM	1	6	1	0	1	0	0	0	7	0	0	0	0	2
96	7/15/2015	11:45 PM	0	4	2	0	2	0	0	0	7	0	0	0	0	0

File Name: Z:\NATHAN TUBES\2015\CO19701 - HUDSON OIL & GAS TMC & ADT 7-2015\4CLASS.TF2

Start Time: 12:00:00 AM

Location 1: I-76 FRONTAGE RD E/O CO RD 43 1/2

Location 2: I-76 FRONTAGE RD E/O CO RD 43 1/2

Number	Date	Time	Vehicle Configuration													Not Classed
			Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	
1	7/15/2015	12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2	7/15/2015	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	7/15/2015	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	7/15/2015	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	7/15/2015	01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7/15/2015	01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7/15/2015	01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7/15/2015	01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	7/15/2015	02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	7/15/2015	02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	7/15/2015	02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	7/15/2015	02:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
13	7/15/2015	03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	7/15/2015	03:15 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
15	7/15/2015	03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	7/15/2015	03:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
17	7/15/2015	04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	7/15/2015	04:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
19	7/15/2015	04:30 AM	0	2	1	0	0	0	0	0	0	0	0	0	0	0
20	7/15/2015	04:45 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0
21	7/15/2015	05:00 AM	0	3	1	0	1	0	0	0	0	0	0	0	0	0
22	7/15/2015	05:15 AM	0	4	5	0	0	0	0	0	0	0	0	0	0	0
23	7/15/2015	05:30 AM	0	7	3	0	1	0	0	0	0	0	0	0	0	0
24	7/15/2015	05:45 AM	0	3	1	0	1	0	0	0	0	0	0	0	1	0
25	7/15/2015	06:00 AM	0	8	0	0	2	0	0	0	0	0	0	0	0	0
26	7/15/2015	06:15 AM	0	8	12	0	8	0	0	0	0	0	0	0	0	0
27	7/15/2015	06:30 AM	0	10	6	1	16	0	0	0	0	0	0	0	0	0
28	7/15/2015	06:45 AM	0	1	2	0	2	0	0	0	1	0	0	0	0	0
29	7/15/2015	07:00 AM	0	1	1	0	1	0	0	0	1	0	0	0	1	0
30	7/15/2015	07:15 AM	0	1	1	0	3	0	0	0	0	0	0	0	0	0
31	7/15/2015	07:30 AM	0	3	2	0	0	0	1	0	0	0	0	0	0	0
32	7/15/2015	07:45 AM	0	1	2	0	2	0	0	2	0	0	0	0	0	0
33	7/15/2015	08:00 AM	0	2	1	0	2	0	0	0	1	0	0	0	0	0
34	7/15/2015	08:15 AM	0	0	1	0	4	0	0	0	0	0	0	0	0	0
35	7/15/2015	08:30 AM	0	0	0	0	2	0	0	1	0	0	0	0	0	0
36	7/15/2015	08:45 AM	0	1	0	0	7	0	0	0	0	0	0	0	0	0
37	7/15/2015	09:00 AM	0	1	3	0	1	0	0	0	0	0	0	0	0	0
38	7/15/2015	09:15 AM	0	0	1	0	5	0	0	0	0	0	0	0	0	0
39	7/15/2015	09:30 AM	0	2	3	0	3	0	0	0	0	0	0	0	0	0
40	7/15/2015	09:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0
41	7/15/2015	10:00 AM	0	1	1	0	0	0	0	1	2	0	0	0	0	0
42	7/15/2015	10:15 AM	0	1	0	0	1	1	0	0	0	0	0	0	0	0
43	7/15/2015	10:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0
44	7/15/2015	10:45 AM	0	1	1	0	0	0	0	0	0	0	0	0	0	0
45	7/15/2015	11:00 AM	0	1	2	0	3	0	0	0	3	0	0	0	0	0
46	7/15/2015	11:15 AM	0	0	2	0	2	0	0	0	0	0	0	0	0	0
47	7/15/2015	11:30 AM	0	1	1	0	3	1	0	0	0	0	0	0	0	0
48	7/15/2015	11:45 AM	0	1	1	0	3	0	0	0	0	0	0	0	0	0
49	7/15/2015	12:00 PM	0	2	1	0	1	0	0	0	1	0	0	0	0	0
50	7/15/2015	12:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0
51	7/15/2015	12:30 PM	0	2	1	0	4	1	0	0	1	0	0	0	0	0
52	7/15/2015	12:45 PM	0	1	2	0	2	0	0	0	0	0	0	0	0	0
53	7/15/2015	01:00 PM	0	1	1	1	1	0	0	0	1	0	0	0	0	0
54	7/15/2015	01:15 PM	0	3	0	0	4	0	0	1	1	0	0	0	0	0
55	7/15/2015	01:30 PM	0	0	0	0	4	0	0	0	1	0	0	0	0	0
56	7/15/2015	01:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	7/15/2015	02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58	7/15/2015	02:15 PM	1	0	2	0	0	0	0	0	0	0	0	0	0	0
59	7/15/2015	02:30 PM	0	0	0	0	2	0	0	0	1	0	0	0	0	2
60	7/15/2015	02:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
61	7/15/2015	03:00 PM	0	0	3	0	0	0	0	0	2	0	0	0	0	0
62	7/15/2015	03:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0
63	7/15/2015	03:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
64	7/15/2015	03:45 PM	0	0	2	0	1	0	0	0	0	0	0	0	0	0
65	7/15/2015	04:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
66	7/15/2015	04:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	0	0
67	7/15/2015	04:30 PM	0	1	0	0	0	0	0	1	1	0	0	0	0	0
68	7/15/2015	04:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
69	7/15/2015	05:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
70	7/15/2015	05:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
71	7/15/2015	05:30 PM	0	1	0	0	1	0	0	1	0	0	0	0	0	0
72	7/15/2015	05:45 PM	0	4	1	0	0	0	0	0	0	0	0	0	0	0
73	7/15/2015	06:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0
74	7/15/2015	06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
75	7/15/2015	06:30 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	1
76	7/15/2015	06:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0
77	7/15/2015	07:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
78	7/15/2015	07:15 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0
79	7/15/2015	07:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
80	7/15/2015	07:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
81	7/15/2015	08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	7/15/2015	08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	7/15/2015	08:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
84	7/15/2015	08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	7/15/2015	09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	7/15/2015	09:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
87	7/15/2015	09:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
88	7/15/2015	09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
89	7/15/2015	10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
90	7/15/2015	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0

File Name: Z:\WATHAN TUBES\2015\CO9701 - HUDSON OIL & GAS TMC & ADT 7-2015\4CLASS TF2

Start Time: 12:00:00 AM

Location 1: I-76 FRONTAGE RD E/O CO RD 43 1/2

Location 2: I-76 FRONTAGE RD E/O CO RD 43 1/2

Number	Date	Time	Vehicle Type													Not Classed
			Bikes	Cars & Trailers	2-Axis Long	Buses	2-Axis 6-Tire	3-Axis Single	4-Axis Single	<5-Axis Double	5-Axis Double	>5-Axis Double	<8-Axis Multi	6-Axis Multi	>6-Axis Multi	
1	7/15/2015	12:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
2	7/15/2015	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	7/15/2015	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	7/15/2015	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5	7/15/2015	01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6	7/15/2015	01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7	7/15/2015	01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8	7/15/2015	01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
9	7/15/2015	02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	7/15/2015	02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11	7/15/2015	02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	7/15/2015	02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13	7/15/2015	03:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14	7/15/2015	03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15	7/15/2015	03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16	7/15/2015	03:45 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0
17	7/15/2015	04:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
18	7/15/2015	04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19	7/15/2015	04:30 AM	0	6	1	0	0	0	0	0	0	0	0	0	0	0
20	7/15/2015	04:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21	7/15/2015	05:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22	7/15/2015	05:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
23	7/15/2015	05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
24	7/15/2015	05:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
25	7/15/2015	06:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	0	0
26	7/15/2015	06:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
27	7/15/2015	06:30 AM	0	0	1	0	1	0	0	0	0	0	0	0	0	0
28	7/15/2015	06:45 AM	0	3	1	0	3	0	0	0	0	0	0	0	0	0
29	7/15/2015	07:00 AM	0	1	0	0	1	0	0	0	0	0	0	0	0	0
30	7/15/2015	07:15 AM	0	0	2	0	0	0	0	0	1	0	0	0	0	0
31	7/15/2015	07:30 AM	0	0	0	0	3	0	0	0	0	0	0	0	0	0
32	7/15/2015	07:45 AM	0	1	2	1	2	0	0	0	0	0	0	0	0	0
33	7/15/2015	08:00 AM	0	2	0	0	2	0	0	0	0	0	0	0	0	0
34	7/15/2015	08:15 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0
35	7/15/2015	08:30 AM	0	0	4	0	0	0	0	0	1	0	0	0	0	0
36	7/15/2015	08:45 AM	0	1	0	0	1	0	0	0	1	0	0	0	0	0
37	7/15/2015	09:00 AM	0	1	1	0	1	0	0	0	0	0	0	0	0	0
38	7/15/2015	09:15 AM	0	1	1	0	2	0	0	0	1	0	0	0	0	0
39	7/15/2015	09:30 AM	0	3	0	0	3	0	0	0	1	0	0	0	0	0
40	7/15/2015	09:45 AM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
41	7/15/2015	10:00 AM	0	1	0	0	1	0	0	0	1	0	0	0	0	0
42	7/15/2015	10:15 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0
43	7/15/2015	10:30 AM	0	0	2	0	0	0	0	0	1	0	0	0	0	0
44	7/15/2015	10:45 AM	0	0	1	0	2	1	0	0	1	0	0	0	0	0
45	7/15/2015	11:00 AM	0	1	2	0	0	0	0	0	0	0	0	0	0	0
46	7/15/2015	11:15 AM	0	2	2	0	3	0	0	0	0	0	0	0	0	0
47	7/15/2015	11:30 AM	0	2	1	0	5	0	0	0	0	0	0	0	0	0
48	7/15/2015	11:45 AM	0	1	2	0	1	1	0	0	3	0	0	0	0	0
49	7/15/2015	12:00 PM	0	1	2	0	3	0	0	0	0	0	0	0	0	0
50	7/15/2015	12:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
51	7/15/2015	12:30 PM	0	1	0	0	7	0	0	0	0	0	0	0	0	0
52	7/15/2015	12:45 PM	0	0	0	0	3	0	0	0	1	0	0	0	0	0
53	7/15/2015	01:00 PM	0	1	0	0	3	1	0	0	0	0	0	0	0	0
54	7/15/2015	01:15 PM	0	2	0	0	4	0	0	1	0	0	0	0	0	0
55	7/15/2015	01:30 PM	1	1	2	0	0	0	0	0	1	0	0	0	0	0
56	7/15/2015	01:45 PM	0	0	0	0	4	0	0	0	1	0	0	0	0	0
57	7/15/2015	02:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
58	7/15/2015	02:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	3
59	7/15/2015	02:30 PM	0	2	0	0	0	0	0	0	0	0	0	0	0	0
60	7/15/2015	02:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	0	0
61	7/15/2015	03:00 PM	0	7	2	0	3	0	0	0	0	0	0	0	0	0
62	7/15/2015	03:15 PM	0	1	2	0	0	0	0	0	3	0	0	0	0	0
63	7/15/2015	03:30 PM	0	5	5	0	2	0	0	0	2	0	0	0	0	0
64	7/15/2015	03:45 PM	0	2	0	0	2	0	0	0	0	0	0	0	0	0
65	7/15/2015	04:00 PM	0	1	3	0	9	0	0	1	1	0	0	0	0	0
66	7/15/2015	04:15 PM	0	2	0	0	3	0	0	0	0	0	0	0	0	0
67	7/15/2015	04:30 PM	0	2	1	0	4	0	0	0	1	0	0	0	0	0
68	7/15/2015	04:45 PM	0	4	1	0	4	0	0	1	1	0	0	0	0	0
69	7/15/2015	05:00 PM	0	7	5	0	7	0	0	1	1	0	0	0	0	0
70	7/15/2015	05:15 PM	0	4	8	0	7	0	0	0	0	0	0	0	0	0
71	7/15/2015	05:30 PM	0	1	1	0	1	0	0	0	0	0	0	0	0	0
72	7/15/2015	05:45 PM	0	1	1	0	2	0	0	0	0	0	0	0	0	0
73	7/15/2015	06:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0
74	7/15/2015	06:15 PM	0	4	2	0	1	0	0	0	0	0	0	0	0	0
75	7/15/2015	06:30 PM	0	3	1	0	2	0	0	1	0	0	0	0	0	0
76	7/15/2015	06:45 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0
77	7/15/2015	07:00 PM	0	2	2	0	1	0	0	0	0	0	0	0	0	0
78	7/15/2015	07:15 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
79	7/15/2015	07:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
80	7/15/2015	07:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0
81	7/15/2015	08:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
82	7/15/2015	08:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
83	7/15/2015	08:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
84	7/15/2015	08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
85	7/15/2015	09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
86	7/15/2015	09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
87	7/15/2015	09:30 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0
88	7/15/2015	09:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0
89	7/15/2015	10:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0
90	7/15/2015	10:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
91	7/15/2015	10:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0

92	7/15/2015	10:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
93	7/15/2015	11:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
94	7/15/2015	11:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
95	7/15/2015	11:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
96	7/15/2015	11:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
97	7/16/2015	12:00 AM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0
98	7/16/2015	12:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
99	7/16/2015	12:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
100	7/16/2015	12:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
101	7/16/2015	01:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
102	7/16/2015	01:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
103	7/16/2015	01:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
104	7/16/2015	01:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
105	7/16/2015	02:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
106	7/16/2015	02:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
107	7/16/2015	02:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
108	7/16/2015	02:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
109	7/16/2015	03:00 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
110	7/16/2015	03:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
111	7/16/2015	03:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
112	7/16/2015	03:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
113	7/16/2015	04:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
114	7/16/2015	04:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
115	7/16/2015	04:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
116	7/16/2015	04:45 AM	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0
117	7/16/2015	05:00 AM	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
118	7/16/2015	05:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
119	7/16/2015	05:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
120	7/16/2015	05:45 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
121	7/16/2015	06:00 AM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
122	7/16/2015	06:15 AM	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0
123	7/16/2015	06:30 AM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
124	7/16/2015	06:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
125	7/16/2015	07:00 AM	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
126	7/16/2015	07:15 AM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
127	7/16/2015	07:30 AM	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0
128	7/16/2015	07:45 AM	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0
129	7/16/2015	08:00 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
130	7/16/2015	08:15 AM	0	2	1	0	1	0	0	0	0	1	0	0	0	0	0	0
131	7/16/2015	08:30 AM	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0
132	7/16/2015	08:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
133	7/16/2015	09:00 AM	0	0	2	0	1	0	0	0	0	1	0	0	0	0	0	0
134	7/16/2015	09:15 AM	0	1	0	0	3	0	0	1	1	0	0	0	0	0	0	0
135	7/16/2015	09:30 AM	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0
136	7/16/2015	09:45 AM	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0
137	7/16/2015	10:00 AM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	1
138	7/16/2015	10:15 AM	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0
139	7/16/2015	10:30 AM	0	0	1	1	1	0	0	2	1	0	0	0	0	0	0	0
140	7/16/2015	10:45 AM	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0
141	7/16/2015	11:00 AM	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0
142	7/16/2015	11:15 AM	0	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0
143	7/16/2015	11:30 AM	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0
144	7/16/2015	11:45 AM	0	0	0	0	4	0	0	1	0	0	0	0	0	0	0	0
145	7/16/2015	12:00 PM	0	4	1	0	3	1	0	0	1	0	0	0	0	0	0	0
146	7/16/2015	12:15 PM	0	2	1	0	3	0	0	1	1	0	0	0	0	0	0	0
147	7/16/2015	12:30 PM	0	1	0	0	3	0	0	1	1	0	0	0	0	0	0	0
148	7/16/2015	12:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0
149	7/16/2015	01:00 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
150	7/16/2015	01:15 PM	0	2	3	0	2	0	0	0	0	0	0	0	0	0	1	0
151	7/16/2015	01:30 PM	0	2	2	0	0	0	0	0	2	0	0	0	0	0	0	0
152	7/16/2015	01:45 PM	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0
153	7/16/2015	02:00 PM	0	2	1	0	2	0	0	0	0	0	0	0	0	0	0	0
154	7/16/2015	02:15 PM	0	0	2	0	4	0	0	0	2	0	0	0	0	0	0	0
155	7/16/2015	02:30 PM	0	6	1	0	6	1	0	0	1	0	0	0	0	0	0	0
156	7/16/2015	02:45 PM	0	2	0	0	2	1	0	0	0	0	0	0	0	0	0	0
157	7/16/2015	03:00 PM	0	9	6	0	3	0	0	0	0	0	0	0	0	0	0	0
158	7/16/2015	03:15 PM	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0
159	7/16/2015	03:30 PM	0	2	4	0	3	0	0	0	0	0	0	0	0	0	0	0
160	7/16/2015	03:45 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0
161	7/16/2015	04:00 PM	0	5	6	0	8	0	0	0	1	0	0	0	0	0	0	0
162	7/16/2015	04:15 PM	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0
163	7/16/2015	04:30 PM	0	1	0	0	2	0	0	0	1	0	0	0	0	0	0	0
164	7/16/2015	04:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
165	7/16/2015	05:00 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
166	7/16/2015	05:15 PM	0	1	1	0	2	0	0	1	0	0	0	0	0	0	0	0
167	7/16/2015	05:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
168	7/16/2015	05:45 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
169	7/16/2015	06:00 PM	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0
170	7/16/2015	06:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
171	7/16/2015	06:30 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
172	7/16/2015	06:45 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
173	7/16/2015	07:00 PM	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
174	7/16/2015	07:15 PM	0	10	3	0	0	0	0	0	0	0	0	0	0	0	0	0
175	7/16/2015	07:30 PM	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0
176	7/16/2015	07:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
177	7/16/2015	08:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
178	7/16/2015	08:15 PM	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0
179	7/16/2015	08:30 PM	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0
180	7/16/2015	08:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
181	7/16/2015	09:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
182	7/16/2015	09:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
183	7/16/2015	09:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
184	7/16/2015	09:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
185	7/16/201																	

Location 1: HWY 52 N/O I-76 FRONTAGE RD
Location 2: HWY 52 N/O I-76 FRONTAGE RD

[illegible]

NWB

[illegible]

Location 1: HWY 52 N/O I-76 FRONTAGE RD
Location 2: HWY 52 N/O I-76 FRONTAGE RD

[illegible]

NW B

[illegible]

Midday Peak Hour

Location 1: HWY 52 N/O I-76 FRONTAGE RD
Location 2: HWY 52 N/O I-76 FRONTAGE RD

SEB

Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6-Tire	3 Axle Single	4 Axle Single	<5 Axle Double	5 Axle Double	>5 Axle Double	<6 Axle Multi	6 Axle Multi	>6 Axle Multi	Not Classified
1	37	14	0	13	1	0	2	8	1	0	0	0	2
66 7/16/2015 04:15 PM													
3	34	20	3	6	5	1	1	3	1	0	0	0	0
67 7/16/2015 04:30 PM													
1	34	17	1	7	1	0	2	6	1	0	0	0	2
68 7/16/2015 04:45 PM													
1	27	15	0	12	2	0	2	3	1	0	0	0	3
69 7/16/2015 05:00 PM													
Total	6	132	66	4	38	9	1	7	20	4	0	0	7

November 18, 2015
Ms. Patty Varra
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Appendix B – Trip Generation Tables

Intersection

Int Delay, s/veh 4.5

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	41	177	169	19	105	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	28	28	28	28	28	28
Mvmt Flow	48	208	199	22	124	66

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	221	0	515
Stage 1	-	-	210
Stage 2	-	-	305
Critical Hdwy	4.38	-	6.68
Critical Hdwy Stg 1	-	-	5.68
Critical Hdwy Stg 2	-	-	5.68
Follow-up Hdwy	2.452	-	3.752
Pot Cap-1 Maneuver	1209	-	477
Stage 1	-	-	767
Stage 2	-	-	692
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1209	-	456
Mov Cap-2 Maneuver	-	-	456
Stage 1	-	-	767
Stage 2	-	-	661

Approach	SE	NW	SW
HCM Control Delay, s	1.5	0	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1209	-	456	769
HCM Lane V/C Ratio	-	-	0.04	-	0.271	0.086
HCM Control Delay (s)	-	-	8.1	0	15.8	10.1
HCM Lane LOS	-	-	A	A	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.1	0.3

Intersection

Int Delay, s/veh 4.7

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	40	159	175	11	128	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	31	31	24	24	24	31
Mvmt Flow	42	167	184	12	135	47

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	196	0	442
Stage 1	-	-	190
Stage 2	-	-	252
Critical Hdwy	4.41	-	6.64
Critical Hdwy Stg 1	-	-	5.64
Critical Hdwy Stg 2	-	-	5.64
Follow-up Hdwy	2.479	-	3.716
Pot Cap-1 Maneuver	1221	-	534
Stage 1	-	-	792
Stage 2	-	-	741
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1221	-	514
Mov Cap-2 Maneuver	-	-	514
Stage 1	-	-	792
Stage 2	-	-	713

Approach	SE	NW	SW
HCM Control Delay, s	1.6	0	13.3
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1221	-	514	783
HCM Lane V/C Ratio	-	-	0.034	-	0.262	0.06
HCM Control Delay (s)	-	-	8.1	0	14.5	9.9
HCM Lane LOS	-	-	A	A	B	A
HCM 95th %tile Q(veh)	-	-	0.1	-	1	0.2

Intersection

Int Delay, s/veh 4.3

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	21	237	225	9	137	59
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	28	28	19	19	19	28
Mvmt Flow	22	247	234	9	143	61

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	244	0	530
Stage 1	-	-	239
Stage 2	-	-	291
Critical Hdwy	4.38	-	6.59
Critical Hdwy Stg 1	-	-	5.59
Critical Hdwy Stg 2	-	-	5.59
Follow-up Hdwy	2.452	-	3.671
Pot Cap-1 Maneuver	1184	-	481
Stage 1	-	-	762
Stage 2	-	-	721
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1184	-	470
Mov Cap-2 Maneuver	-	-	470
Stage 1	-	-	762
Stage 2	-	-	705

Approach	SE	NW	SW
HCM Control Delay, s	0.7	0	14.3
HCM LOS			B

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1184	-	470	740
HCM Lane V/C Ratio	-	-	0.018	-	0.304	0.083
HCM Control Delay (s)	-	-	8.1	0	16	10.3
HCM Lane LOS	-	-	A	A	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.3	0.3

Intersection

Int Delay, s/veh 10

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	166	177	169	55	155	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	30	30	30	30	30
Mvmt Flow	180	192	184	60	168	132

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	243	0	767
Stage 1	-	-	214
Stage 2	-	-	553
Critical Hdwy	4.4	-	6.7
Critical Hdwy Stg 1	-	-	5.7
Critical Hdwy Stg 2	-	-	5.7
Follow-up Hdwy	2.47	-	3.77
Pot Cap-1 Maneuver	1176	-	333
Stage 1	-	-	760
Stage 2	-	-	524
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1176	-	276
Mov Cap-2 Maneuver	-	-	276
Stage 1	-	-	760
Stage 2	-	-	434

Approach	SE	NW	SW
HCM Control Delay, s	4.2	0	25.2
HCM LOS			D

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1176	-	276	760
HCM Lane V/C Ratio	-	-	0.153	-	0.61	0.173
HCM Control Delay (s)	-	-	8.6	0	36.5	10.7
HCM Lane LOS	-	-	A	A	E	B
HCM 95th %tile Q(veh)	-	-	0.5	-	3.7	0.6

Intersection

Int Delay, s/veh 9.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	137	159	175	45	176	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	30	30	30	30	30
Mvmt Flow	149	173	190	49	191	148

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	239	0	686
Stage 1	-	-	215
Stage 2	-	-	471
Critical Hdwy	4.4	-	6.7
Critical Hdwy Stg 1	-	-	5.7
Critical Hdwy Stg 2	-	-	5.7
Follow-up Hdwy	2.47	-	3.77
Pot Cap-1 Maneuver	1180	-	373
Stage 1	-	-	759
Stage 2	-	-	574
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1180	-	321
Mov Cap-2 Maneuver	-	-	321
Stage 1	-	-	759
Stage 2	-	-	494

Approach	SE	NW	SW
HCM Control Delay, s	3.9	0	22.5
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1180	-	321	759
HCM Lane V/C Ratio	-	-	0.126	-	0.596	0.195
HCM Control Delay (s)	-	-	8.5	0	31.5	10.9
HCM Lane LOS	-	-	A	A	D	B
HCM 95th %tile Q(veh)	-	-	0.4	-	3.6	0.7

Intersection

Int Delay, s/veh 8.8

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	86	237	225	44	180	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	27	27	27	27	27
Mvmt Flow	93	258	245	48	196	192

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	292	0	713
Stage 1	-	-	268
Stage 2	-	-	445
Critical Hdwy	4.37	-	6.67
Critical Hdwy Stg 1	-	-	5.67
Critical Hdwy Stg 2	-	-	5.67
Follow-up Hdwy	2.443	-	3.743
Pot Cap-1 Maneuver	1140	-	363
Stage 1	-	-	723
Stage 2	-	-	596
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1140	-	329
Mov Cap-2 Maneuver	-	-	329
Stage 1	-	-	723
Stage 2	-	-	539

Approach	SE	NW	SW
HCM Control Delay, s	2.2	0	21.4
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1140	-	329	714
HCM Lane V/C Ratio	-	-	0.082	-	0.595	0.269
HCM Control Delay (s)	-	-	8.4	0	30.8	11.9
HCM Lane LOS	-	-	A	A	D	B
HCM 95th %tile Q(veh)	-	-	0.3	-	3.6	1.1

Intersection						
Int Delay, s/veh	9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	166	177	169	55	155	121
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	30	30	30	30	30
Mvmt Flow	180	192	184	60	168	132
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	184	0	-	0	737	184
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	553	-
Critical Hdwy	4.4	-	-	-	6.7	6.5
Critical Hdwy Stg 1	-	-	-	-	5.7	-
Critical Hdwy Stg 2	-	-	-	-	5.7	-
Follow-up Hdwy	2.47	-	-	-	3.77	3.57
Pot Cap-1 Maneuver	1239	-	-	-	348	791
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1239	-	-	-	297	791
Mov Cap-2 Maneuver	-	-	-	-	297	-
Stage 1	-	-	-	-	785	-
Stage 2	-	-	-	-	448	-
Approach	SE		NW		SW	
HCM Control Delay, s	4.1		0		22.5	
HCM LOS					C	
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1239	-	297	791
HCM Lane V/C Ratio	-	-	0.146	-	0.567	0.166
HCM Control Delay (s)	-	-	8.4	-	31.9	10.5
HCM Lane LOS	-	-	A	-	D	B
HCM 95th %tile Q(veh)	-	-	0.5	-	3.3	0.6

Intersection

Int Delay, s/veh 9.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	137	159	175	45	176	136
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	30	30	30	30	30	30
Mvmt Flow	149	173	190	49	191	148

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	190	0	661
Stage 1	-	-	190
Stage 2	-	-	471
Critical Hdwy	4.4	-	6.7
Critical Hdwy Stg 1	-	-	5.7
Critical Hdwy Stg 2	-	-	5.7
Follow-up Hdwy	2.47	-	3.77
Pot Cap-1 Maneuver	1232	-	387
Stage 1	-	-	779
Stage 2	-	-	574
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1232	-	340
Mov Cap-2 Maneuver	-	-	340
Stage 1	-	-	779
Stage 2	-	-	505

Approach	SE	NW	SW
HCM Control Delay, s	3.9	0	20.6
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1232	-	340	785
HCM Lane V/C Ratio	-	-	0.121	-	0.563	0.188
HCM Control Delay (s)	-	-	8.3	-	28.4	10.6
HCM Lane LOS	-	-	A	-	D	B
HCM 95th %tile Q(veh)	-	-	0.4	-	3.3	0.7

Intersection

Int Delay, s/veh 8.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	86	237	225	44	180	177
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	27	27	27	27	27
Mvmt Flow	93	258	245	48	196	192

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	245	0	690
Stage 1	-	-	245
Stage 2	-	-	445
Critical Hdwy	4.37	-	6.67
Critical Hdwy Stg 1	-	-	5.67
Critical Hdwy Stg 2	-	-	5.67
Follow-up Hdwy	2.443	-	3.743
Pot Cap-1 Maneuver	1188	-	375
Stage 1	-	-	741
Stage 2	-	-	596
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1188	-	346
Mov Cap-2 Maneuver	-	-	346
Stage 1	-	-	741
Stage 2	-	-	549

Approach	SE	NW	SW
HCM Control Delay, s	2.2	0	19.9
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1188	-	346	736
HCM Lane V/C Ratio	-	-	0.079	-	0.565	0.261
HCM Control Delay (s)	-	-	8.3	-	28.1	11.6
HCM Lane LOS	-	-	A	-	D	B
HCM 95th %tile Q(veh)	-	-	0.3	-	3.3	1

Intersection

Int Delay, s/veh 5.9

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	56	190	181	51	159	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	28	28	28	28	28	28
Mvmt Flow	61	207	197	55	173	71

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	252	0	-	0	552	224
Stage 1	-	-	-	-	224	-
Stage 2	-	-	-	-	328	-
Critical Hdwy	4.38	-	-	-	6.68	6.48
Critical Hdwy Stg 1	-	-	-	-	5.68	-
Critical Hdwy Stg 2	-	-	-	-	5.68	-
Follow-up Hdwy	2.452	-	-	-	3.752	3.552
Pot Cap-1 Maneuver	1176	-	-	-	453	755
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	675	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1176	-	-	-	426	755
Mov Cap-2 Maneuver	-	-	-	-	426	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	635	-

Approach	SE	NW	SW
HCM Control Delay, s	1.9	0	16.5
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1176	-	426	755
HCM Lane V/C Ratio	-	-	0.052	-	0.406	0.094
HCM Control Delay (s)	-	-	8.2	0	19.1	10.3
HCM Lane LOS	-	-	A	A	C	B
HCM 95th %tile Q(veh)	-	-	0.2	-	1.9	0.3

Intersection

Int Delay, s/veh 6.4

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	47	170	187	42	181	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	27	27	27	27	27
Mvmt Flow	51	185	203	46	197	65

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	249	0	-	0	513	226
Stage 1	-	-	-	-	226	-
Stage 2	-	-	-	-	287	-
Critical Hdwy	4.37	-	-	-	6.67	6.47
Critical Hdwy Stg 1	-	-	-	-	5.67	-
Critical Hdwy Stg 2	-	-	-	-	5.67	-
Follow-up Hdwy	2.443	-	-	-	3.743	3.543
Pot Cap-1 Maneuver	1184	-	-	-	480	755
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	708	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1184	-	-	-	457	755
Mov Cap-2 Maneuver	-	-	-	-	457	-
Stage 1	-	-	-	-	756	-
Stage 2	-	-	-	-	674	-

Approach	SE	NW	SW
HCM Control Delay, s	1.8	0	16.6
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1184	-	457	755
HCM Lane V/C Ratio	-	-	0.043	-	0.431	0.086
HCM Control Delay (s)	-	-	8.2	0	18.7	10.2
HCM Lane LOS	-	-	A	A	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	2.1	0.3

Intersection

Int Delay, s/veh 6.2

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	27	254	241	42	185	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	24	24	24	24	24	24
Mvmt Flow	29	276	262	46	201	74

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	308	0	-	0	620	285
Stage 1	-	-	-	-	285	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.34	-	-	-	6.64	6.44
Critical Hdwy Stg 1	-	-	-	-	5.64	-
Critical Hdwy Stg 2	-	-	-	-	5.64	-
Follow-up Hdwy	2.416	-	-	-	3.716	3.516
Pot Cap-1 Maneuver	1138	-	-	-	418	704
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	678	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1138	-	-	-	405	704
Mov Cap-2 Maneuver	-	-	-	-	405	-
Stage 1	-	-	-	-	716	-
Stage 2	-	-	-	-	658	-

Approach	SE	NW	SW
HCM Control Delay, s	0.8	0	19.2
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1138	-	405	704
HCM Lane V/C Ratio	-	-	0.026	-	0.497	0.105
HCM Control Delay (s)	-	-	8.2	0	22.3	10.7
HCM Lane LOS	-	-	A	A	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	2.7	0.4

Intersection

Int Delay, s/veh 5.6

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	56	190	181	51	159	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	28	28	28	28	28	28
Mvmt Flow	61	207	197	55	173	71

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	197	0	525
Stage 1	-	-	197
Stage 2	-	-	328
Critical Hdwy	4.38	-	6.68
Critical Hdwy Stg 1	-	-	5.68
Critical Hdwy Stg 2	-	-	5.68
Follow-up Hdwy	2.452	-	3.752
Pot Cap-1 Maneuver	1235	-	470
Stage 1	-	-	778
Stage 2	-	-	675
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1235	-	447
Mov Cap-2 Maneuver	-	-	447
Stage 1	-	-	778
Stage 2	-	-	642

Approach	SE	NW	SW
HCM Control Delay, s	1.8	0	15.7
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1235	-	447	782
HCM Lane V/C Ratio	-	-	0.049	-	0.387	0.09
HCM Control Delay (s)	-	-	8.1	-	18	10.1
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.2	-	1.8	0.3

Intersection

Int Delay, s/veh 6.1

Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	47	170	187	42	181	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	27	27	27	27	27	27
Mvmt Flow	51	185	203	46	197	65

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	203	0	490
Stage 1	-	-	203
Stage 2	-	-	287
Critical Hdwy	4.37	-	6.67
Critical Hdwy Stg 1	-	-	5.67
Critical Hdwy Stg 2	-	-	5.67
Follow-up Hdwy	2.443	-	3.743
Pot Cap-1 Maneuver	1233	-	495
Stage 1	-	-	775
Stage 2	-	-	708
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1233	-	475
Mov Cap-2 Maneuver	-	-	475
Stage 1	-	-	775
Stage 2	-	-	679

Approach	SE	NW	SW
HCM Control Delay, s	1.7	0	15.9
HCM LOS			C

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1233	-	475	778
HCM Lane V/C Ratio	-	-	0.041	-	0.414	0.084
HCM Control Delay (s)	-	-	8	-	17.8	10.1
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	2	0.3

Intersection						
Int Delay, s/veh	5.9					
Movement	SEL	SET	NWT	NWR	SWL	SWR
Vol, veh/h	27	254	241	42	185	68
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	250	-	-	250	0	775
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	24	24	24	24	24	24
Mvmt Flow	29	276	262	46	201	74
Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	262	0	-	0	597	262
Stage 1	-	-	-	-	262	-
Stage 2	-	-	-	-	335	-
Critical Hdwy	4.34	-	-	-	6.64	6.44
Critical Hdwy Stg 1	-	-	-	-	5.64	-
Critical Hdwy Stg 2	-	-	-	-	5.64	-
Follow-up Hdwy	2.416	-	-	-	3.716	3.516
Pot Cap-1 Maneuver	1185	-	-	-	431	726
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	678	-
Platoon blocked, %	-	-	-	-	-	-
Mov Cap-1 Maneuver	1185	-	-	-	420	726
Mov Cap-2 Maneuver	-	-	-	-	420	-
Stage 1	-	-	-	-	733	-
Stage 2	-	-	-	-	661	-
Approach	SE		NW		SW	
HCM Control Delay, s	0.8		0		18.3	
HCM LOS					C	
Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SWLn1	SWLn2
Capacity (veh/h)	-	-	1185	-	420	726
HCM Lane V/C Ratio	-	-	0.025	-	0.479	0.102
HCM Control Delay (s)	-	-	8.1	-	21.2	10.5
HCM Lane LOS	-	-	A	-	C	B
HCM 95th %tile Q(veh)	-	-	0.1	-	2.5	0.3