

# Valley County Planning & Zoning Department

219 N. Main  
PO Box 1350  
Cascade, ID 83611  
www.co.valley.id.us  
Phone 208-382-7115  
Fax 208-382-7119



## Conditional Use Permit Application

TO BE COMPLETED BY THE PLANNING AND ZONING DEPARTMENT

FILE # \_\_\_\_\_

FEE \$ \_\_\_\_\_

ACCEPTED BY \_\_\_\_\_

DEPOSIT \$ \_\_\_\_\_

CROSS REFERENCE FILE(S): \_\_\_\_\_

DATE \_\_\_\_\_

PROPOSED USE: \_\_\_\_\_

When an application has been submitted, it will be reviewed in order to determine compliance with application requirements.  
A hearing date will be scheduled only after an application has been accepted as complete or if applicant requests the hearing in writing.

Applicant's Signature:  Date: 5/22/2020

The following must be completed and submitted with the conditional use permit application:

- ❖ A detailed project description disclosing the purpose, strategy, and time frame of construction. Include a phasing plan if appropriate.
- ❖ A plot plan, drawn to scale, showing the boundaries, dimensions, area of lot, existing and proposed utilities, streets, easements, parking, setbacks, and buildings.
- ❖ A landscaping plan, drawn to scale, showing elements such as trees, shrubs, ground covers, and vines. Include a plant list indicating the size, quantity, location and name (both botanical and common) of all plant material to be used.
- ❖ A site grading plan clearly showing the existing site topography and detailing the best management practices for surface water management, siltation, sedimentation, and blowing of dirt and debris caused by grading, excavation, open cuts, side slopes, and other site preparation and development.
- ❖ A lighting plan.
- ❖ Names and addresses of property owners within 300 feet of the property lines. Information can be obtained through the Assessor's Office. Only one copy of this list is required.
- ❖ Ten (10) copies of the application, project description, plot plan, landscaping plan, grading plan, and impact report are required.

We recommend you review the Valley County Codes online at [www.co.valley.id.us/planning-zoning](http://www.co.valley.id.us/planning-zoning) or at the Planning & Zoning Office at 219 North Main Street, Cascade, Idaho

APPLICANT Midas Gold Idaho, Inc. PHONE (208) 901-3060

Owner  Purchaser  Lessee  Renter

APPLICANT'S MAILING ADDRESS 13181 Hwy 55; PO Box 429, Donnelly ID. ZIP 83615

OWNER'S NAME Idaho Gold Resources Company, LLC.

OWNER'S MAILING ADDRESS 405 S. Eighth St. Suite 201, Boise, Id ZIP 83702

AGENT/REPRESENTATIVE \_\_\_\_\_ FAX \_\_\_\_\_ PHONE (208) 901-3060

AGENT/REPRESENTATIVE ADDRESS \_\_\_\_\_ ZIP \_\_\_\_\_

CONTACT PERSON (if different from above) Kyle Fend

CONTACT'S ADDRESS Boise, Id ZIP 83702 PHONE (208) 901-3047

ADDRESS OF SUBJECT PROPERTY NA

PROPERTY DESCRIPTION (either lot, block & subdivision name or attach a recorded deed with a metes and bounds description.)

W 1/2 Section 07, Township 14 North, Range 5 East.

TAX PARCEL NUMBER RP14N05E074475

Quarter W 1/2 Section 07 Township 14N Range 5E

1. PROPOSED USE: Residential  Civic or Community  Commercial  Industrial

2. SIZE OF PROPERTY 25.06 Acres  or Square Feet

3. EXISTING LAND USES AND STRUCTURES ON THE PROPERTY ARE AS FOLLOWS:  
Property is vacant. Zone class is 413 Comm Rural Tract.

4. ARE THERE ANY KNOWN HAZARDS ON OR NEAR THE PROPERTY (such as canals, hazardous material spills, soil or water contamination)? If so, describe and give location: None

5. ADJACENT PROPERTIES HAVE THE FOLLOWING BUILDING TYPES AND/OR USES:

North Warm Lake Road. Grazing

South Grazing

East Grazing

West Warm Lake Road. Grazing

6. MAXIMUM PROPOSED STRUCTURE HEIGHT: 30 feet

7a. NON-RESIDENTIAL STRUCTURES OR ADDITIONS (If applicable):

Number of Proposed Structures: 5 Number of Existing Structures: 0

Proposed Gross Square Feet

Existing Gross Square Feet

1<sup>st</sup> Floor \_\_\_\_\_

1<sup>st</sup> Floor \_\_\_\_\_

2<sup>nd</sup> Floor \_\_\_\_\_

2<sup>nd</sup> Floor \_\_\_\_\_

Total See Site Plan details Figure 1-2

Total \_\_\_\_\_

8a. TYPE OF RESIDENTIAL USE (If applicable): NA  
Single family residence  Mobile home for single family residence  Multiple residences on one parcel

8b. SQUARE FOOTAGE OF PROPOSED RESIDENTIAL STRUCTURES (If applicable): NA

SQUARE FOOTAGE OF EXISTING RESIDENTIAL STRUCTURES: NA

8c. DENSITY OF DWELLING UNITS PER ACRE: NA

9. SITE DESIGN:

Percentage of site devoted to building coverage: 6%

Percentage of site devoted to landscaping: 30%

Percentage of site devoted to roads or driveways: 42%

Percentage of site devoted to other uses: 22%, describe: Lay-down area

Total: **100%**

10. PARKING (If applicable):

**Office Use Only**

a. Handicapped spaces proposed: 26

Handicapped spaces required: 2

b. Parking spaces proposed: 290

Parking spaces required: 31

c. Number of compact spaces proposed: 0

Number of compact spaces allowed: 0

d. Restricted parking spaces proposed: 0

e. Are you proposing off-site parking: no

11. SETBACKS:

**BUILDING**

**Office Use Only**

**PARKING**

**Office Use Only**

Proposed

Required

Proposed

Required

Front

See Appendix B - Site Plans

Rear

Side

Street Side

12a. NUMBER OF EXISTING ROADS: 0 Width: \_\_\_\_\_ Private or Public? \_\_\_\_\_

Are the existing road surfaces paved or graveled? N/A

12b. NUMBER OF PROPOSED ROADS: 0 Proposed width: \_\_\_\_\_

Will the proposed roads be publicly or privately maintained? Privately

Proposed road construction: Gravel  Paved

13a. EXISTING UTILITIES ON THE PROPERTY ARE AS FOLLOWS:

None

13b. PROPOSED UTILITIES: Electricity

Proposed utility easement width \_\_\_\_\_ Location \_\_\_\_\_

14a. SEWAGE WASTE DISPOSAL METHOD: Septic  Central Sewage Treatment Facility

14b. POTABLE WATER SOURCE: Public  Water Association  Individual

If individual, has a test well been drilled? No Depth \_\_\_\_\_ Flow \_\_\_\_\_ Purity Verified? \_\_\_\_\_

Nearest adjacent well ID# 452604 Depth 305ft Flow 10gpm

15. ARE THERE ANY EXISTING IRRIGATION SYSTEMS? No  
Are you proposing any alterations, improvements, extensions or new construction? \_\_\_\_\_  
If yes, Explain: N/A  
\_\_\_\_\_  
\_\_\_\_\_
16. DRAINAGE (Proposed method of on-site retention): Stormwater swales  
Any special drains? No (Please attach map)  
Soil type (Information can be obtained from the Soil Conservation District): ID17 Donnel Sandy Loam
- 17a. IS ANY PORTION OF THE PROPERTY LOCATED IN A FLOODWAY OR 100-YR FLOODPLAIN?  
(Information can be obtained from the Planning & Zoning Office) Area of minimal flood hazard
- 17b. DOES ANY PORTION OF THIS PARCEL HAVE SLOPES IN EXCESS OF 15%? No
- 17c. ARE THERE WETLANDS LOCATED ON ANY PORTION OF THE PROPERTY? Yes
18. IS THERE ANY SITE GRADING OR PREPARATION PROPOSED? Yes If yes, Explain:  
The site will be cleared and graded to accommodate for buildings and parking facilities detailed in the attached drawings.  
\_\_\_\_\_  
\_\_\_\_\_
19. COMPLETE ATTACHED PLAN FOR IRRIGATION if you have water rights and are in an irrigation district.
20. COMPLETE ATTACHED WEED CONTROL AGREEMENT
21. COMPLETE ATTACHED IMPACT REPORT. It must address potential environmental, economic, and social impacts and how these impacts are to be minimized.





VALLEY COUNTY
PLANNING & ZONING DEPARTMENT

219 North Main Street
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APPLICATION FOR IRRIGATION PLAN APPROVAL

submitted with C.U.P. & Subdivision Applications

(Idaho Code 31-3805)

Applicant(s): Idaho Gold Resources Company, LLC.

405 S. Eight St. Suite 201, Boise ID. 83702

Mailing Address City, State Zip

Telephone Numbers: 208-901-3060

Location of Subject Property: Scott Valley
(Property Address or Two Nearest Cross Streets)

Assessor's Account Number(s): RP RP14N05E074475 Section 7 Township 14 Range 5

C.U.P Number:

This land: [ ] Has water rights available to it
[X] Is dry and has no water rights available to it. If dry, please sign this document and return to the Planning & Zoning Department as part of your application.

Idaho Code 31-3805 states that when all or part of a subdivision is "located within the boundaries of an existing irrigation district or canal company, ditch association, or like irrigation water deliver entity ... no subdivision plat or amendment to a subdivision plat or any other plat or map recognized by the city or county for the division of land will be accepted, approved, and recorded unless:"

- A. The appropriate water rights and assessment of those water rights have been transferred from said lands or excluded from an irrigation entity by the owner; or
B. The owner filing the subdivision plat or amendment to a subdivision plat or map has provided for the division of land of underground tile or conduit for lots of one acre or less or a suitable system for lots of more than one acre which will deliver water to those land owners within the subdivision who are also within the irrigation entity with the appropriate approvals:
1. For proposed subdivisions located within an area of city impact, both city and county zoning authorities must approve such irrigation system in accordance with 50-the irrigation system.
2. For proposed subdivisions outside of negotiated areas of city impact, the delivery system must be approved by the Planning and Zoning Commission and the Board of County Commissioners with the advice of the irrigation entity charged with the delivery of water to said lands.

To better understand your irrigation request, we need to ask you a few questions. A list of the map requirements follows the short questionnaire. Any missing information may result in the delay of your request before the Planning and Zoning Commission and ultimately the approval of your irrigation plan by the Board of County Commissioners as part of final plat approval.

1. Are you within an area of negotiated City Impact? \_\_\_\_ Yes \_\_\_\_ No

2. What is the name of the irrigation and drainage entities servicing the property?

Irrigation: \_\_\_\_\_

Drainage: \_\_\_\_\_

3. How many acres is the property being subdivided? \_\_\_\_\_

4. What percentage of this property has water? \_\_\_\_\_

5. How many inches of water are available to the property? \_\_\_\_\_

6. How is the land currently irrigated?  surface  sprinkler  irrigation well  
 above ground pipe  underground pipe

7. How is the land to be irrigated after it is subdivided?

surface  sprinkler  irrigation well  
 above ground pipe  underground pipe

8. Please describe how the head gate/pump connects to the canal and irrigated land and where ditches &/or pipes go.

\_\_\_\_\_  
 N/A  
 \_\_\_\_\_

9. Is there an irrigation easement(s) on the property?  Yes  No

10. How do you plan to retain storm and excess water on each lot? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

11. How do you plan to process this storm water and/or excess irrigation water prior to it entering the established drainage system? (i.e. oil, grease, contaminated aggregates) \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

## Irrigation Plan Map Requirements

The irrigation plan must be on a scalable map and show all of the irrigation system including all supply and drainage structures and easements. Please include the following information on your map:

- All canals, ditches, and laterals with their respective names.
- Head gate location and/or point of delivery of water to the property by the irrigation entity.
- Pipe location and sizes, if any
- Rise locations and types, if any.
- Easements of all private ditches that supply adjacent properties (i.e. supply ditches and drainage ways).
- Slope of the property in various locations.
- Direction of water flow (use short arrows on your map to indicate water flow direction → ).
- Direction of wastewater flow (use long arrows on your map to indicate waste water direction → ).
- Location of drainage ponds or swales, if any where wastewater will be retained on property
- Other information: \_\_\_\_\_

Also, provide the following documentation:

- Legal description of the property. N/A
- Proof of ownership.
- A written response from the irrigation entity and/or proof of agency notification.
- Copy of any water users' association agreement currently in effect which shows water schedules and maintenance responsibilities.
- Copy of all new easements ready for recording (irrigation supply and drainage).
- If you are in a city area of impact, please include a copy of the approvals by the city planning and zoning commission and city council of your irrigation plan.

=====Applicant Acknowledgement=====

I, the undersigned, agree that prior to the Planning and Zoning Department accepting this application, I am responsible to have all the required information and site plans.

I further acknowledge that the irrigation system, as approved by the Planning and Zoning Commission and ultimately the Board of County Commissioners, must be bonded and/or installed prior to the recording of the plat or building permit.

Signed: \_\_\_\_\_  
Applicant / Property Owner

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_  
(Application Submitted)



# VALLEY COUNTY

## WEED CONTROL AGREEMENT

The purpose of this agreement is to establish a cooperative relationship between Valley County and the undersigned Cooperator to protect the natural and economic values in the Upper Payette River watershed from damages related to the invasion and expansion of infestations of noxious weeds and invasive plants. This is a cooperative effort to prevent, eradicate, contain and control noxious weeds and invasive plants on public and private lands in this area. Factors related to the spread of weeds are not related to ownership nor controllable at agency boundaries. This agreement formalizes the cooperative strategy for management of these weeds addressed in Valley County's Integrated Weed Management Plan.

In this continuing effort to control Noxious Weeds, Valley County Weed Control will consult with the undersigned Cooperator and outline weed identification techniques, present optional control methods and recommend proper land management practices.

The undersigned Cooperator acknowledges that he/she is aware of any potential or real noxious weed problems on his/her private property and agrees to control said weeds in a timely manner using proper land management principles.

### COOPERATOR

Midas Gold Idaho, Inc.

13181 Hwy 55, PO Box 429

Donnelly, ID 83615

By: Kyle Fend *KF*

By: \_\_\_\_\_  
Valley County Weed Control

Date: 5/22/2020

Date: \_\_\_\_\_

## IMPACT REPORT (from Valley County Code 3-5-3-D)

You may add information to the blanks below or attach additional sheets.

Please see Section 2 of Project Description document

- ❖ An impact report shall be required for all proposed Conditional Uses.
- ❖ The impact report shall address potential environmental, economic, and social impacts and how these impacts are to be minimized as follows:
  1. Traffic volume, character, and patterns including adequacy of existing or proposed street width, surfacing, alignment, gradient, and traffic control features or devices, and maintenance. Contrast existing with the changes the proposal will bring during construction and after completion, build-out, or full occupancy of the proposed development. Include pedestrian, bicycle, auto, and truck traffic.
  2. Provision for the mitigation of impacts on housing affordability.
  3. Noise and vibration levels that exist and compare to those that will be added during construction, normal activities, and special activities. Include indoor and outdoor, day and night variations.
  4. Heat and glare that exist and that might be introduced from all possible sources such as autos in parking areas, outdoor lights, water or glass surfaces, buildings or outdoor activities.
  5. Particulate emissions to the air including smoke, dust, chemicals, gasses, or fumes, etc., both existing and what may be added by the proposed uses.

6. Water demand, discharge, supply source, and disposal method for potable uses, domestic uses, and fire protection. Identify existing surface water drainage, wet lands, flood prone areas and potential changes. Identify existing ground water and surface water quality and potential changes due to this proposal.
  
7. Fire, explosion, and other hazards existing and proposed. Identify how activities on neighboring property may affect the proposed use.
  
8. Removal of existing vegetation or effects thereon including disturbance of wet lands, general stability of soils, slopes, and embankments and the potential for sedimentation of disturbed soils.
  
9. Include practices that will be used to stabilize soils and restore or replace vegetation.
  
10. Soil characteristics and potential problems in regard to slope stability, embankments, building foundation, utility and road construction. Include suitability for supporting proposed landscaping.
  
11. Site grading or improvements including cuts and fills, drainage courses and impoundments, sound and sight buffers, landscaping, fencing, utilities, and open areas.

12. Visibility from public roads, adjoining property, and buildings. Include what will be done to reduce visibility of all parts of the proposal but especially cuts and fills and buildings. Include the affect of shadows from new features on neighboring property.

13. Reasons for selecting the particular location including topographic, geographic and similar features, historic, adjoining land ownership or use, access to public lands, recreation, utilities, streets, etc., in order to illustrate compatibility with and opportunities presented by existing land uses or character.

14. Approximation of increased revenue from change in property tax assessment, new jobs available to local residents, and increased local expenditures.

15. Approximation of costs for additional public services, facilities, and other economic impacts.

16. State how the proposed development will impact existing developments providing the same or similar products or services.

17. State what natural resources or materials are available at or near the site that will be used in a process to produce a product and the impacts resulting from the depletion of the resource. Describe the process in detail and describe the impacts of each part.

**18. What will be the impacts of a project abandoned at partial completion?**

**19. Number of residential dwelling units, other buildings and building sites, and square footage or gross non-residential floor space to be available.**

**20. Stages of development in geographic terms and proposed construction time schedule.**

**21. Anticipated range of sale, lease or rental prices for dwelling units, building or other site, or non-residential floor space in order to insure compatibility with adjacent land use and development.**



# Project Description for Stibnite Gold Project Logistics Facility

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Midas Gold Idaho, Inc.



**August 2019**

Prepared by: Brown and Caldwell



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## SECTION 1: INTRODUCTION

### 1.1 Purpose of Conditional Use Permit

Midas Gold Idaho, Inc. (Midas Gold or Applicant), is seeking a conditional use permit to construct a logistics facility that will support mining operations at the Stibnite Gold Project in central Idaho.

This Project Description is prepared in compliance with the Valley County Land Use and Development Ordinance (Ord. 10-06, 8-23-2010) and Valley County's Conditional Use Permit Application.

### 1.2 Property Location and Description

The proposed Stibnite Gold Logistics Facility (Logistics Facility) will be located on Warm Lake Road, approximately 8.5 miles east of Highway 55 (See Figure 1-1). The Logistics Facility will be located on approximately 25 acres of vacant land with frontage on Warm Lake Road, which is Valley County Tax Parcel Number RP14N05E074475 (Property). The Property is bounded by Warm Lake Road to the west and vacant land to the north, east, and south. The Property is currently a mixture of dry upland forest, small open meadows, and pocket wetlands. Figure 1-2 illustrates the Logistics Facility layout. The Logistics Facility is conditionally allowed under Valley County Code Table 9-3-1 as a light industrial use with administrative offices and laboratory functions to support the Stibnite Gold Project.

#### 1.2.1 Project Description

The Logistics Facility is proposed to reduce traffic to and from the Stibnite Gold Project site and provide more regular weekday jobs within the local community. The Logistics Facility will include four buildings: (i) an administrative office/assay laboratory, (ii) warehouse, (iii) hazardous materials storage, and (iv) a core sampling and storage building. The Logistics Facility will also include parking facilities, a truck staging area, and a laydown area (See Figure 1-2). Appendix A provides additional Site Plans including building setback measurements and adjacent property owners. The phasing and timing for the Logistics Facility is outlined in the Impact Report below.

The administrative office/assay laboratory building will include offices for safety and environmental services, human resources, purchasing and accounting personnel, and managers. The assay laboratory will be the primary location for sample preparation, analysis, and reporting for mine operations. Process and mine rock samples will be delivered daily to the assay laboratory for processing and analysis, and the results will be transmitted electronically to the Stibnite Gold Project site.

The warehouse will be used to store parts and supplies. Additional exterior storage will be located at the laydown yard. A parking and staging area is included for trucks traveling to the Stibnite Gold Project site.

The hazardous materials storage building will be used to store hazardous materials that are generated at the Logistics Facility prior to being shipped out for disposal as per the Resource Conservation and Recovery Act requirements.

Applicant will maintain a parking and assembly area at the Logistics Facility for employees and contractors using the bus or vanpooling to the mine. The parking area will accommodate approximately 300 light vehicles. Buses and vans will transport employees and contractors to the Stibnite Gold Project site from the Logistics Facility. Applicant will mandate the use of pooled transportation where applicable.

The Logistics Facility will be powered by a direct line connection to the Idaho Power Company powerline near Cascade, Idaho.

Figure 1-1. Vicinity Map

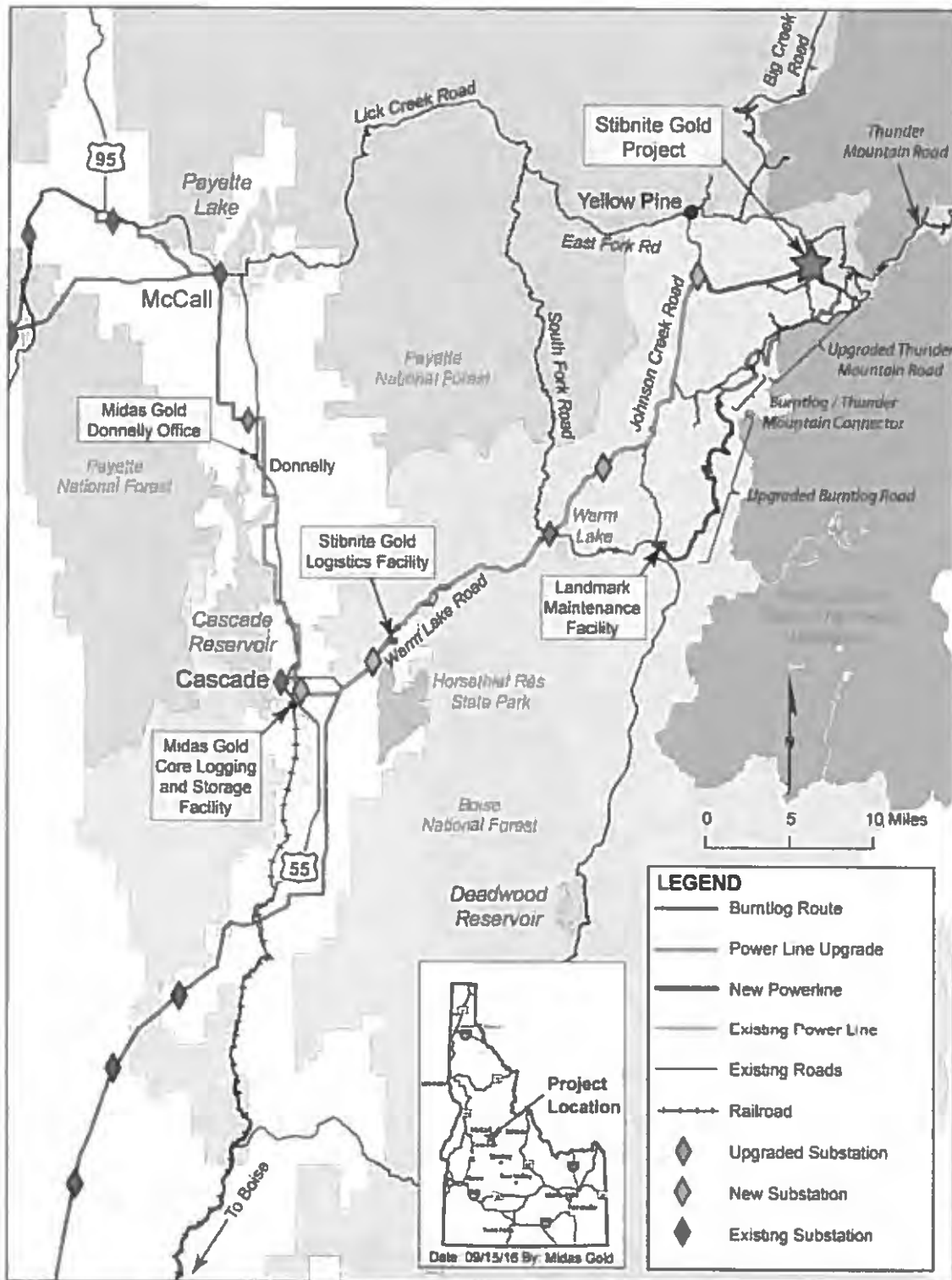


Figure 1-2. SGLF Site Map





## SECTION 2: IMPACT REPORT

Section 3 contains the impact report information requested in pages 9–12 of the Conditional Use Permit Application and Valley County Code § 9-5-3-D.

The italicized text below was pulled directly from the Conditional Use Permit Application. Some sections may group impact analysis depending on resource and subject.

### 2.1 Impacts Report

#### 2.1.1 Traffic

*Traffic volume, character, and patterns including adequacy of existing or proposed street width, surfacing, alignment, gradient, and traffic control features or devices, and maintenance. Contrast existing with the changes the proposal will bring during construction and after completion, build out, or full occupancy of the proposed development. Include pedestrian, bicycle, auto, and truck traffic.*

Impacts to local and regional traffic were studied in a Transportation Impact Study (**Appendix B**) prepared by HDR (HDR 2017) to evaluate issues and needed improvements to maintain an adequate level of service and safety on the transportation network serving the Logistics Facility. The study also provides the Logistics Facility access location and crash analyses and a review of circulation and parking. The Logistics Facility will serve as a parking and assembly area for employees and contractors using the bus or vanpooling to the SGP site. Employees will be required to bus and vanpool from the Logistics Facility to the Stibnite Gold Project to reduce vehicle trips.

Three ingress/egress entries are proposed at the Logistics Facility; all enter and exit onto Warm Lake Road. Two of the ingress/egress entries are new and would be used while the area is occupied. The third ingress/egress is an existing access point and would be used for construction access and not used during normal operations. The proposed ingress/egress areas would modify Warm Lake Road at those areas (*See Figure 1-2*). The following summarizes the principal findings of the Transportation Impact Study related to the Logistics Facility.

#### **State Highway 55 Corridor**

Based on the Traffic Impact Study, the State Highway 55 (SH-55) corridor included in the study area from Horseshoe Bend to New Meadows currently experiences excessive delay and congestion during weekday peak hours between Cascade and McCall. The congested area grows to include the segments between Banks and McCall on the weekends. This congestion is estimated to increase by 2040 to include the entire stretch of SH-55 between Banks and McCall during both weekday and weekend peak hours if no improvements to the highway are made. This congestion occurs with or without the proposed Logistics Facility development (HDR 2017).

## Study Intersections

All the study intersections, except for the SH-55/US-95 intersection, show the need for capacity improvements through the analysis years (2020, 2030, and 2040) with and without the proposed Logistic Facility (HDR 2017). Applicant is working with appropriate Idaho Department of Transportation personnel to design necessary upgrades to the affected intersections to mitigate the impacts of the Logistics Facility.

The 2017 Transportation Impact Study reviewed the proposed circulation and parking design, layout, and number of stalls and found they are appropriate for the Logistics Facility development and meet Valley County requirements. Please see the Transportation Impact Study in Appendix B for a full description of impacts and recommendations for the SGLF and travel corridor.

[need a conclusion]

### 2.1.2 Housing Affordability

#### *Provision for the mitigation of impacts on housing affordability*

Chapter 8 of the Valley County Comprehensive Plan (Valley County 2018) summarizes concerns about housing affordability in Valley County. The county commissioned an assessment that identified a shortage of affordable houses in Valley County and identified the need for affordable housing for Valley County workers. The Logistics Facility does not have any employee housing or residential facilities planned and would not impact housing affordability directly.

The Stibnite Gold Project will bring high paying jobs to Valley County and will continue to grow the employment base as it moves into operations. The Plan of Restoration and Operations estimates a total of 524 to 670 salaried and hourly personnel would be employed during Stibnite Gold Project operations. Of those employees, 20% to 50% are anticipated to reside within Valley and Adams counties (Highland Economics 2018). This estimate includes 26–30 jobs at the Logistics Facility. Another part of operations at the Stibnite Gold Project is to construct and maintain housing at the mine site. The combination of onsite housing and high-paying jobs would have an indirect positive impact on housing affordability in Valley County.

### 2.1.3 Noise Impacts

#### *Noise and vibration levels that exist and compare to those that will be added during construction, normal activities, and special activities. Include indoor and outdoor, day and night variations.*

Noise and vibration levels will increase during construction activities at the Logistics Facility. These activities include the phases of construction, clearing and grubbing (year 2021), grading and leveling (year 2021), and construction and buildout (years 2021–2023). Noise and vibration levels would vary daily depending on activity, equipment used, and working hours. The highest level of vibration levels would occur during site grading and leveling, which would include necessary soil compaction for building site preparation and access and parking locations. These levels would be typical for building construction. Any vibration impacts would be localized and likely contained on site.

Construction noise would start at the beginning of clearing and grubbing and continue through full construction buildout. Large and small equipment typical of light construction and personal vehicle travel to and from the construction site would contribute to construction noise. Impacts to adjacent

property would be minimal due to the lack of residential properties nearby. Forested vegetation at the Logistics Facility and adjacent properties will help reduce noise levels for nearby properties.

After completing the SGLF, noise and vibration impacts will be substantially reduced. The main source of noise and vibration will be vehicle travel and vehicle loading/unloading activities. Noises will include vehicle operation, forklift operation, backup alarms, and miscellaneous material contact noise. In addition, there will be noise contributions from core cutting and breaking that occur in the laboratory building. Other contributors to noise during operations would include climate control machinery (air conditioners), typical office machinery, and other miscellaneous sources.

The Logistics Facility will operate Monday through Friday, 8:00 a.m. to 5:00 p.m. with occasional weekend use. Noise levels will be reduced during operations by applying the following avoidance and mitigation measures:

- Construction equipment engines will be equipped with adequate mufflers, intake silencers, and engine enclosures to minimize noise generation.
- Appropriate sound dampening and muffling equipment will be used to minimize noise excursion from equipment and facilities.
- When practicable, pumps, generators, and engines will be turned off when not in use to avoid unnecessary noise generation and reduce energy consumption.
- Electrical power will be used during operations to eliminate diesel generator noise, except in emergency situations when grid power is down, and emergency backup generators are in use.
- Heavy equipment transshipment vehicles will be required to have engine brake muffling systems to reduce engine brake noise.

During off hours, noise will be greatly reduced by turning off any unnecessary equipment and shutting down nonessential power.

#### **2.1.4 Heat and Glare Impacts**

*Heat and glare that exist and that might be introduced from all possible sources such as autos in parking areas, outdoor lights, water or glass surfaces, buildings or outdoor activities.*

Given the rural nature and small scale of the Logistics Facility, impacts from additional heat and glare are anticipated to be minimal and would be restricted to the immediate area.

The Property is currently vacant land, and no heat or glare issues occur at or near the Property. The proposed Logistics Facility would contribute minimal levels of heat due to clearing vegetation, small engine use, reduced shade, and sun reflection from vehicles and the four proposed buildings. Constructing the Logistics Facility would also create impacts from sun glare from building materials and vehicle sun reflection. Midas Gold plans to reduce these impacts by leaving natural vegetation and open areas undisturbed and incorporated into the facility design to break up any cumulative effects of windshield glare.

While outside lighting at night is essential for safe operations, proper designs, along with Dark Skies lighting principles will mitigate ecological impacts in addition to protecting Idaho's nighttime skies. Midas Gold intends to light only what is needed, with an appropriate amount and type of light, only when lighting is needed. The Logistics Facility Lighting Plan is included in **Appendix C** for further review, with locations, examples of light type and shielding.

### 2.1.5 Particulate Emissions

*Particulate emissions to the air including smoke, dust, chemicals, gasses, or fumes, etc., both existing and what may be added by the proposed uses.*

Particulate emissions during construction and operation of the Logistics Facility will include dust and normal emissions from construction equipment, vehicular traffic, propane-fired building heaters, emergency generators, and the assay laboratory. Appropriate best operating practices will be adopted to minimize the particulate emissions.

### 2.1.6 Water

*Water demand, discharge, supply source, and disposal method for potable uses, domestic uses, and fire protection. Identify existing surface water drainage, wetlands, flood prone areas and potential changes. Identify existing ground water and surface water quality and potential changes due to this proposal.*

The Property is currently dry with no existing well or water supply. Applicant proposes to drill and install a domestic well to meet water demands for the Logistics Facility. The well water will be used for the onsite office, laboratory, and warehouse facilities and will also be available for fire protection at the Logistics Facility. All grey water produced at the Logistics Facility will be handled through a septic and leach field system or trucked offsite to a local wastewater facility.

The Property is generally flat and gently slopes from west to east toward Big Creek. Surface water drainage generally flows down gradient from west to east, from Warm Lake Road towards Big Creek, east of the Property. Localized depressions act as water catchments and allow surface water to collect and infiltrate during precipitation events and seasonal snow melt. There will be large snow storage zones that will allow for snow maintenance and stormwater infiltration areas, keeping all stormwater on site. There are two wetland areas on the Property, as shown on the site plan (Appendix A). These areas will be properly identified and protected during and after construction.

### 2.1.7 Fire, Explosion and Other Hazards

*Fire, explosion, and other hazards existing and proposed. Identify how activities on neighboring property may affect the proposed use.*

Existing fire hazards on the Property are similar to most upland forest land in Valley County. Timber on the Property has been thinned and the understory reduced by land practices and grazing. This has reduced the fuel available on the Property. Ignition sources include light vehicle travel on Property and passing public traffic on Warm Lake Road. No explosion or other hazards exist on the Property.

The Logistics Facility may store small quantities of various chemicals and hazardous materials during construction and operation. Applicant will manage the use of chemicals and hazardous materials to prevent spills, fires, or explosions to protect worker health and safety and the surrounding natural resources by taking the following actions:

- Hazardous chemicals will be transported in U.S. Department of Transportation (USDOT)-certified containers and by USDOT-registered transporters, who will comply with applicable USDOT, Occupational Safety and Health Act, and Mine Safety and Health Administration regulations.

- Personnel transporting, handling, or using any hazardous chemicals will be trained to ensure the safe use of such materials.
- Hazardous chemicals will be stored pursuant to per manufacturer recommendations and Occupational Safety and Health Administration regulations for safety and to prevent environmental releases.
- Fuel and other petroleum products at the site will be stored in aboveground containment structures with appropriate secondary containment measures.
- Applicant will maintain a Spill Prevention, Control, and Countermeasures (SPCC) Plan for the operation as required by 40 Code of Federal Regulations Part 112. The SPCC plan will address site-specific spill prevention measures, fuel haul guidelines, fuel unloading procedures, inspections, secondary containment of all onsite fuel storage tanks, and staff training.

All facilities will have fire extinguishers and smoke detectors and will meet fire and building code requirements for health and safety.

### **2.1.8 Vegetation Removal**

*Removal of existing vegetation or effects thereon including disturbance of wetlands, general stability of soils, slopes, and embankments and the potential for sedimentation of disturbed soils.*

The Property will be cleared, grubbed, and graded. Removal of timber, shrubs and grasses, and forbs will be phased to match the progression of construction and to reduce the time graded soils are exposed to erosion elements. No wetlands or wetland vegetation will be disturbed during construction or operation.

Prior to and during construction, Applicant will use construction best management practices (BMPs) to prevent erosion and the transport of sediment offsite or into wetland areas. The BMPs will be inspected weekly for their condition and effectiveness. If any areas of improvement are identified, changes will be made immediately.

Any areas of the Property not identified for grading or facility construction will be left in their current condition, including preserving existing vegetation. Areas disturbed during construction activities, but not compacted for parking or facility footprint, will be seeded with plant species native to Valley County to promote return to its current condition and inhibit noxious weed growth. This process will help stabilize disturbed soils and contribute to visual aesthetics.

### **2.1.9 Soil Stability**

*Include practices that will be used to stabilize soils and restore or replace vegetation.*

Silt fences, drainage swales, mulch or erosion matting, and temporary seeding will be used during construction and operation to stabilize soils. In addition, areas surrounding the facilities will be permanently stabilized with mulch, gravel, and/or landscaping, following construction.

### **2.1.10 Soil characteristics**

*Soil characteristics and potential problems in regard to slope stability, embankments, building foundation, utility and road construction. Include suitability for supporting proposed landscaping.*

The soil type on the Property is ID17-Donnel Sandy Loam. This soil consists of sandy loam and stratified loamy sand to sandy loam. According to the Soil Survey of Valley Area, Idaho, the Donnelly series have only slight restrictions for buildings and roads. This soil type does not present any problems for the proposed Logistics Facility. Proper soil amendments will be installed for landscaping materials during installation.

### **2.1.11 Site Grading Plans**

*Site grading or improvements including cuts and fills, drainage courses and impoundments, sound and sight buffers, landscaping, fencing, utilities, and open areas.*

The Property is overall level with minimal natural elevation change. Site grading will be conducted to provide a level parking and working area and promote onsite stormwater runoff towards and to support wetlands contained within the Property footprint, or to naturally occurring vegetated swales. Grading activities will include proper erosion control BMPs to minimize erosion from the Property. The Logistics Facility will include an 8-foot tall chain link fence topped with concertina wire around the perimeter. Applicant will preserve a natural vegetative buffer blocking visibility from Warm Lake Road to the extent possible throughout construction and operation. Open areas will be located outside the fence at both the north and south ends of the Property. The overall site grading plan is included in **Appendix D** for additional detail.

### **2.1.12 Visual Impacts**

*Visibility from public roads, adjoining property, and buildings. Include what will be done to reduce visibility of all parts of the proposal but especially cuts and fills and buildings. Include the effect of shadows from new features on neighboring property.*

Applicant will use early planning and design features to minimize contrast with the surrounding landscape to meet the visual resource management objectives of the area. The Logistics Facility will not be visible from Highway 55 or by landowners in Cascade and the surrounding valley. The adjacent land is currently used for grazing and has minimal human use. The Logistics Facility will be visible from adjacent parcels but will only have minimal impacts to the visual resource due to vegetative buffers and variations in topography.

Applicant will preserve a natural vegetative buffer blocking visibility from Warm Lake Road to the extent possible throughout construction and operation. The facility will be visible from Warm Lake Road in the immediate vicinity but will be partially blocked by the vegetation buffer between the road and the facility infrastructure. The facility will only be partially visible from adjacent parcels due to the natural forested barrier between the cleared areas and the parcel boundary.

Visible cuts and fills will be revegetated with native seed to reduce visual contrast from Warm Lake Road. Open natural areas and undisturbed wetland areas will help break up the parking areas and building sites. Building materials will be compliant with Valley County code and will be colored to reduce visual contrast between buildings and surrounding natural areas. Shadows from office and warehouse buildings will be minimal and have only minimal local shading impacts.

### **2.1.13 Site Selection**

*Reasons for selecting the particular location including topographic, geographic and similar features, historic, adjoining land ownership or use, access to public lands, recreation, utilities,*



*streets, etc., in order to illustrate compatibility with and opportunities presented by existing land uses or character.*

The selection of the Property was strategic for operating the Stibnite Gold Project as a satellite facility for office, laboratory, and warehouse positions. The Logistics Facility will act as a shipping consolidation and employee shuttle site to reduce trips to the Stibnite Gold Project site. The location was selected based on its proximity to SH- 55 for easy access but visually obscured from the scenic highway and community of Cascade. The Property is surrounded by lands used for grazing, reducing construction and operation noise and visual impacts to area residents.

The Logistics Facility is located near an existing power line that can supply power to the facility with minimal additional infrastructure. It is also adjacent to Warm Lake Road, reducing impacts from site access points. The Property is relatively flat, reducing grading efforts for site preparation and potential for erosion and sediment transport during construction and operation. Although wetlands occur on site, they are avoidable and will not be impacted by the Logistics Facility.

#### **2.1.14 Revenue and Economic Impacts**

*Approximation of increased revenue from change in property tax assessment, new jobs available to local residents, and increased local expenditures.*

Applicant will make a significant contribution to the Valley County economy in terms of direct and indirect employment and wages during the life of the Stibnite Gold Project. During operations, total project employment could reach a peak of approximately 670 people and will average approximately 600 people; this workforce includes personnel employed at the Logistics Facility. Approximately \$448.2 million in local income over the life of the mine is anticipated. Local tax impacts from property tax receipts are estimated at \$3.8 million over the life of the mine. Indirect impacts to local industries are expected to be \$14.9 million during construction and operations. Induced impacts from re-spending of wages is expected to be \$6.7 million during construction and operations. The Logistics Facility is a key component to the success of the Stibnite Gold Project.

*Approximation of costs for additional public services, facilities, and other economic impacts.*

The Logistics Facility will not require additional public services or facilities.

*State how the proposed development will impact existing developments providing the same or similar products or services.*

There are no known existing developments that provide similar services in Valley County and thus the Logistics Facility would have a positive impact, providing a new service to the County and reducing impacts by consolidating travel to the Stibnite Gold Project site.

#### **2.1.15 Natural Resource Use**

*State what natural resources or materials are available at or near the site that will be used in a process to produce a product and the impacts resulting from the depletion of the resource. Describe the process in detail and describe the impacts of each part.*

No natural resources or materials would be used at or near the Property to produce product at the Logistics Facility. Timber will be cleared during facility construction and used on site as wetland exclusionary fencing or sold.

### 2.1.16 Construction Description, Timing, and Sale

*What will be the impacts of a project abandoned at partial completion?*

The Logistics Facility is part of a larger mining operation that is currently going through federal, state, and local permitting. Applicant intends to construct the Logistics Facility and maintain ownership through completion of the Stibnite Gold Project.

*Number of residential dwelling units, other buildings and building sites, and square footage or gross non-residential floor space to be available.*

The Logistics Facility will have four non-residential buildings totaling approximately 64,380 square feet of available floor space.

*Stages of development in geographic terms and proposed construction time schedule.*

The timing of construction of the Logistics Facility is dependent on completing the permitting for the Stibnite Gold Project. The Stibnite Gold Project is broken into three phases: construction, operations, and reclamation and closure. Constructing the Logistics Facility will occur over a 3-year period starting with clearing and grubbing in 2021. Grading and leveling will follow in the summer/fall of 2021 with construction and buildout starting in 2021 or 2022. The construction of the future core building would be following 2023. The projected start of mining operations at the Stibnite Gold Project is expected in 2023 and continues to approximately 2037. Reclamation and closure activities will take an additional 3+ years with completion after 2040. The Logistics Facility will operate through the end of reclamation and closure and then be kept for other company purposes.

*Anticipated range of sale, lease or rental prices for dwelling units, building or other site, or nonresidential floor space in order to insure compatibility with adjacent land use and development.*

Applicant does not anticipate renting or leasing any of its non-residential floor space during operations.



## SECTION 3: REFERENCES

### 3.1 References Cited

HDR, *Transportation Impact Study, Midas Gold Idaho, Inc. Stibnite Gold Logistics Facilities, Valley County, Idaho*. September 20, 2017.

Highland Economics, LLC, *Economic Impact Analysis of the Stibnite Gold Project*, April 17, 2018.

Midas Gold, *Stibnite Gold Project, Valley County, Idaho, Plan of Restoration and Operations*, September 2016.

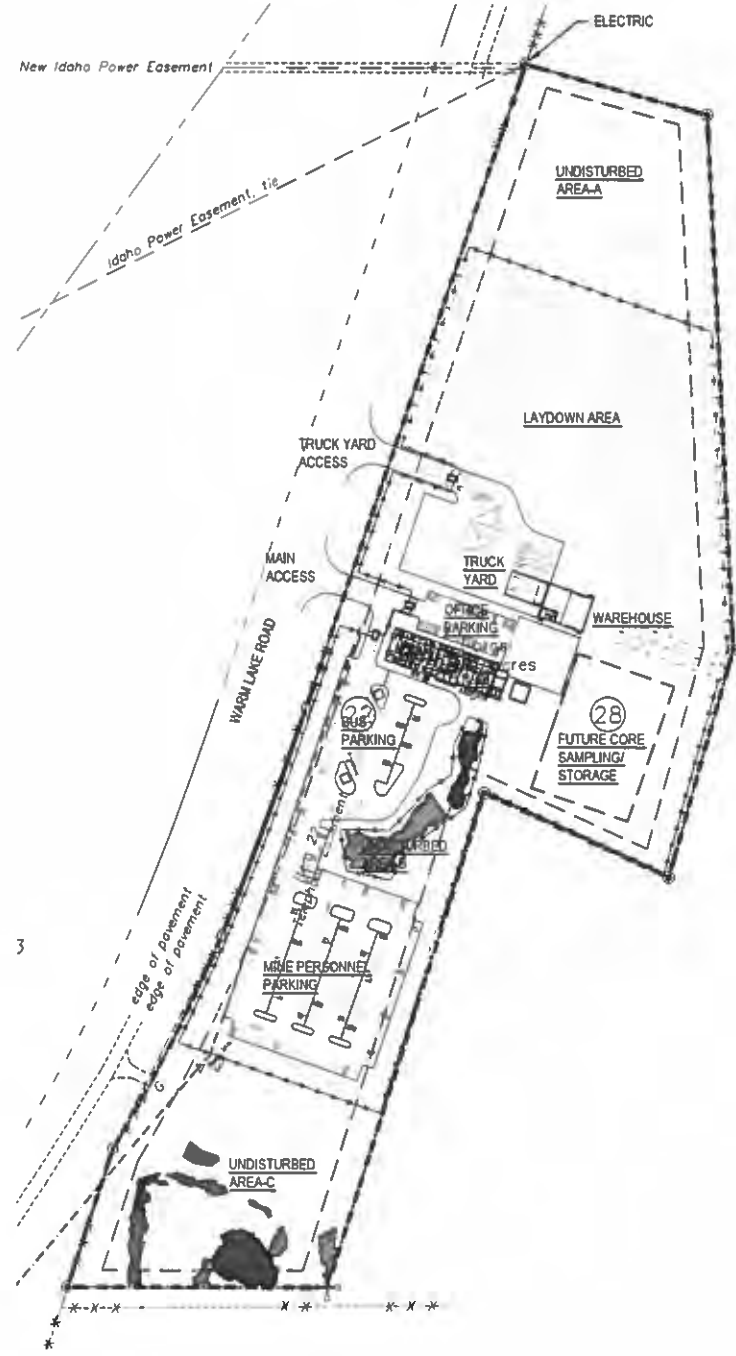
United States Department of Agriculture Soil Conservation Service, University of Idaho College of Agriculture, and Idaho Soil Conservation Commission, *Soil Survey of Valley Area, Idaho*, 1981, 157 pages.

Valley County, *Idaho Comprehensive Plan*, Revised November 26, 2018.



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**Appendix A**  
**SGLF Site Plans**



**LOGISTICS FACILITY OVERALL SITE PLAN**



SCALE IN FEET



**LOCATION MAP**  
NOT TO SCALE

**WETLANDS TYPE**

- EMERGENT
- SCRUB-SHRUB
- WETLAND DELINEATED DURING FIELD SEASON 2011-2016

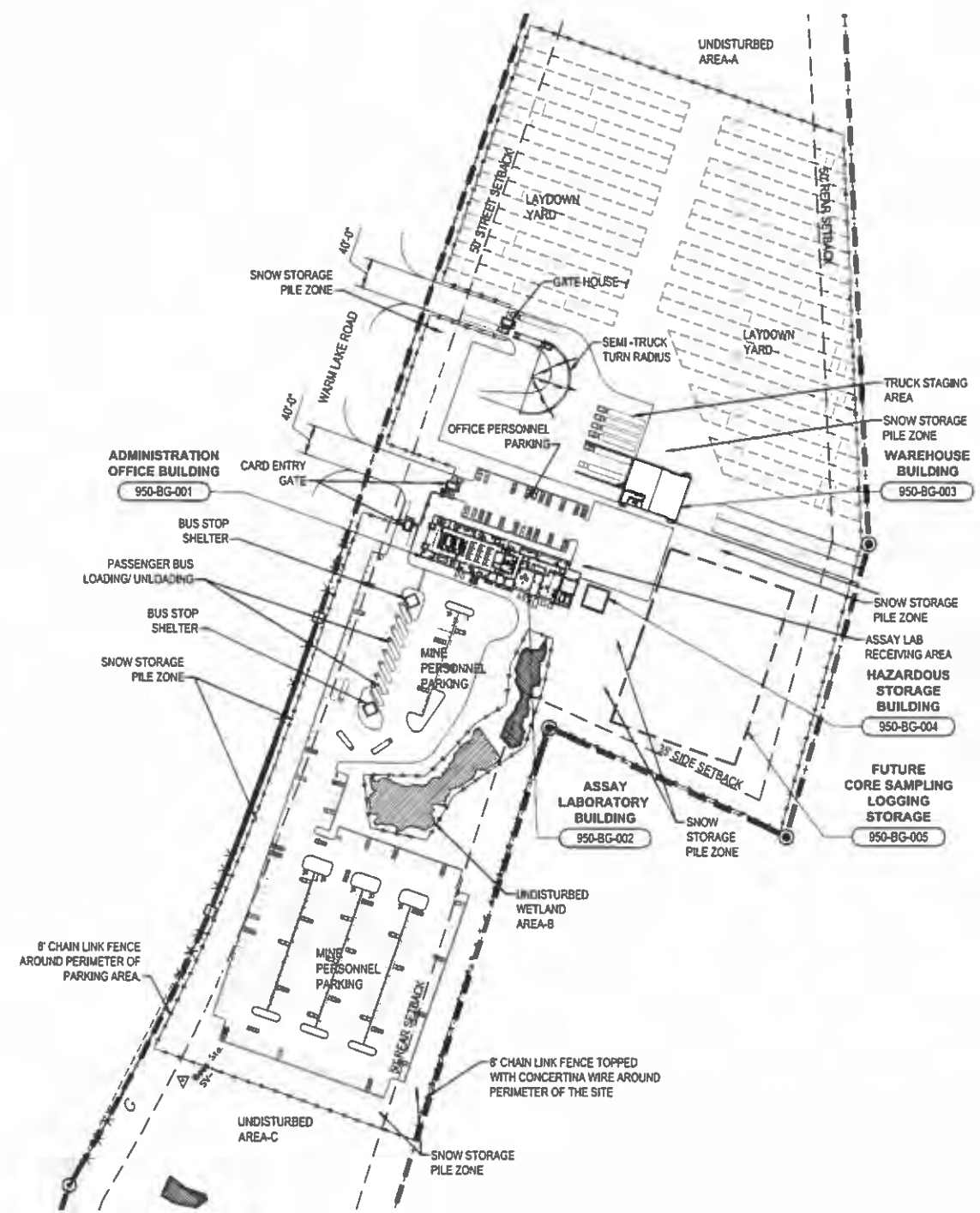
**SITE**

- AREA 25.01 ACRES
- LAY DOWN AREA - 244,072 S.F. (5.6 ACRES)
- UNDISTURBED AREAS:
  - AREA A = 139,989 S.F. (3.21 ACRES)
  - AREA B = 21,404 S.F. (.49 ACRES)
  - AREA C = 167,386 S.F. (3.82 ACRES)
  - TOTAL UNDISTURBED AREA = 328,779 S.F. (7.52 ACRES)

**PROPERTY ENTRY POINTS: 2**

**BUILDINGS:**

- ADMIN OFFICE, 950-BG-001 - 6,480 S.F.  
BUILDING HEIGHT - 16'  
(OFFICE AND LAB SPACES ARE MODULAR BUILDINGS. ADMIN OFFICE IS NINE - 12' X 60' MODULAR UNITS.)
- ASSAY LAB, 950-BG-002 - 7,200 S.F.  
BUILDING HEIGHT 16'  
(ASSAY LAB IS 7 - 12' X 60' MODULAR UNITS PLUS 36' X 20' BUILT RECEIVING AREA)
- WAREHOUSE, 950-BG-003 - 4,800 S.F.  
BUILDING HEIGHT - 25'  
WAREHOUSE DOCKS SPACES - 3
- HAZARDOUS STORAGE BUILDING, 950-BG-004 - 900 S.F.  
BUILDING HEIGHT - 16'
- FUTURE CORE BUILDING, 950-BG-005 - 45,000 S.F.  
BUILDING HEIGHT - 30'
- PARKING:**  
PARKING PROVIDED FOR PRIVATE AUTOMOBILES - 290 SPACES  
OFFICE PERSONNEL PARKING - 31 SPACES  
BUS PARKING - 8 SPACES  
SEMI TRUCK STAGING SPACES - 4 SPACES



**LOGISTICS FACILITY PARTIAL SITE PLAN**



SCALE IN FEET

**PRELIMINARY**  
NOT FOR CONSTRUCTION

DO NOT SCALE 11x17 DRAWINGS



REFERENCES		REFERENCES		REVISIONS				REVISIONS				SCALE AS NOTED		DATE		
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT	NO.	DESCRIPTION	#	APPD.	DATE	CLIENT	
950-GA-101	STIBNITE ADMIN OFFICE PLAN															
950-GA-102	STIBNITE ASSAY LABORATORY PLAN															

**M3** ARCHITECTURE  
ENGINEERING  
CONSTRUCTION MANAGEMENT  
www.m3eng.com

**STIBNITE GOLD - FEASIBILITY STUDY**  
**LOGISTICS FACILITY GENERAL ARRANGEMENT SITE PLAN**  
PROJECT NO. MD-PN170045  
DWG. NO. **950-GA-001**  
REV. NO. P2  
DATE 16 JUN 11

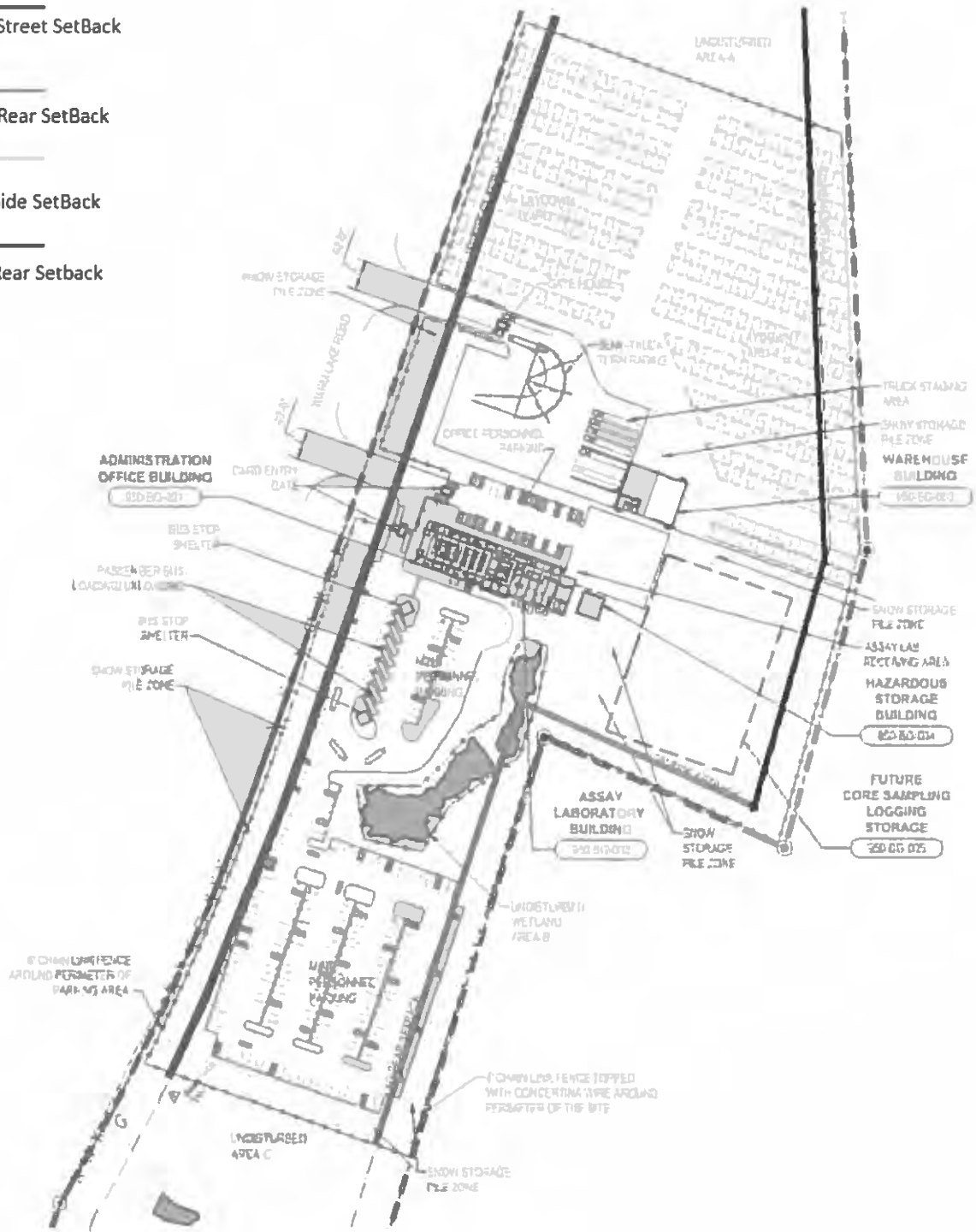
### Building SetBack Measurements

50' Street SetBack








50' Rear SetBack

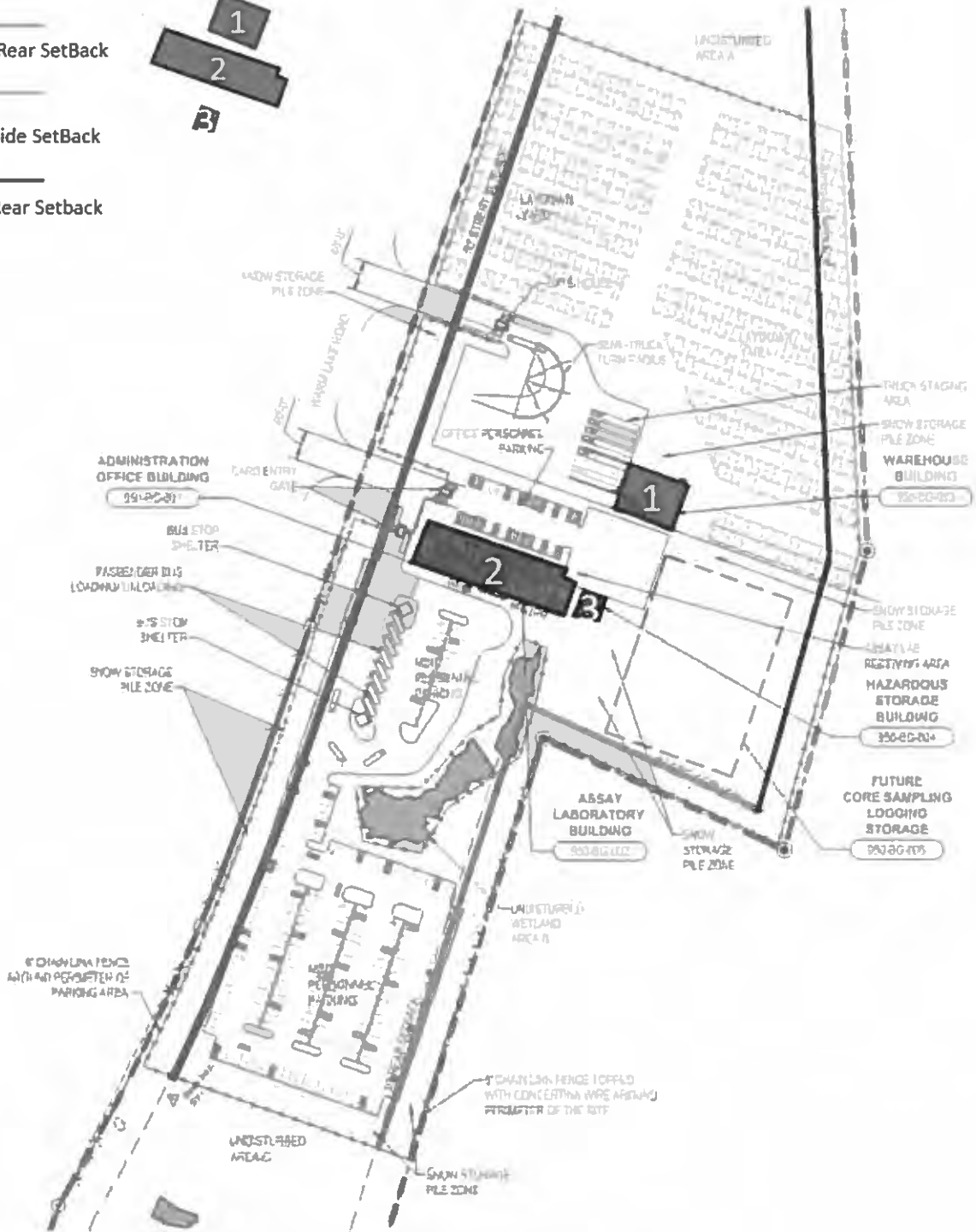
35' Side SetBack

50' Rear Setback



**LOGISTICS FACILITY PARTIAL SITE PLAN**

-  50' Street SetBack
  -  50' Rear SetBack
  -  35' Side SetBack
  -  50' Rear SetBack
- Facility Buildings**
-  1
  -  2
  -  3



**LOGISTICS FACILITY PARTIAL SITE PLAN**

50' Street SetBack Facility Buildings

50' Rear SetBack

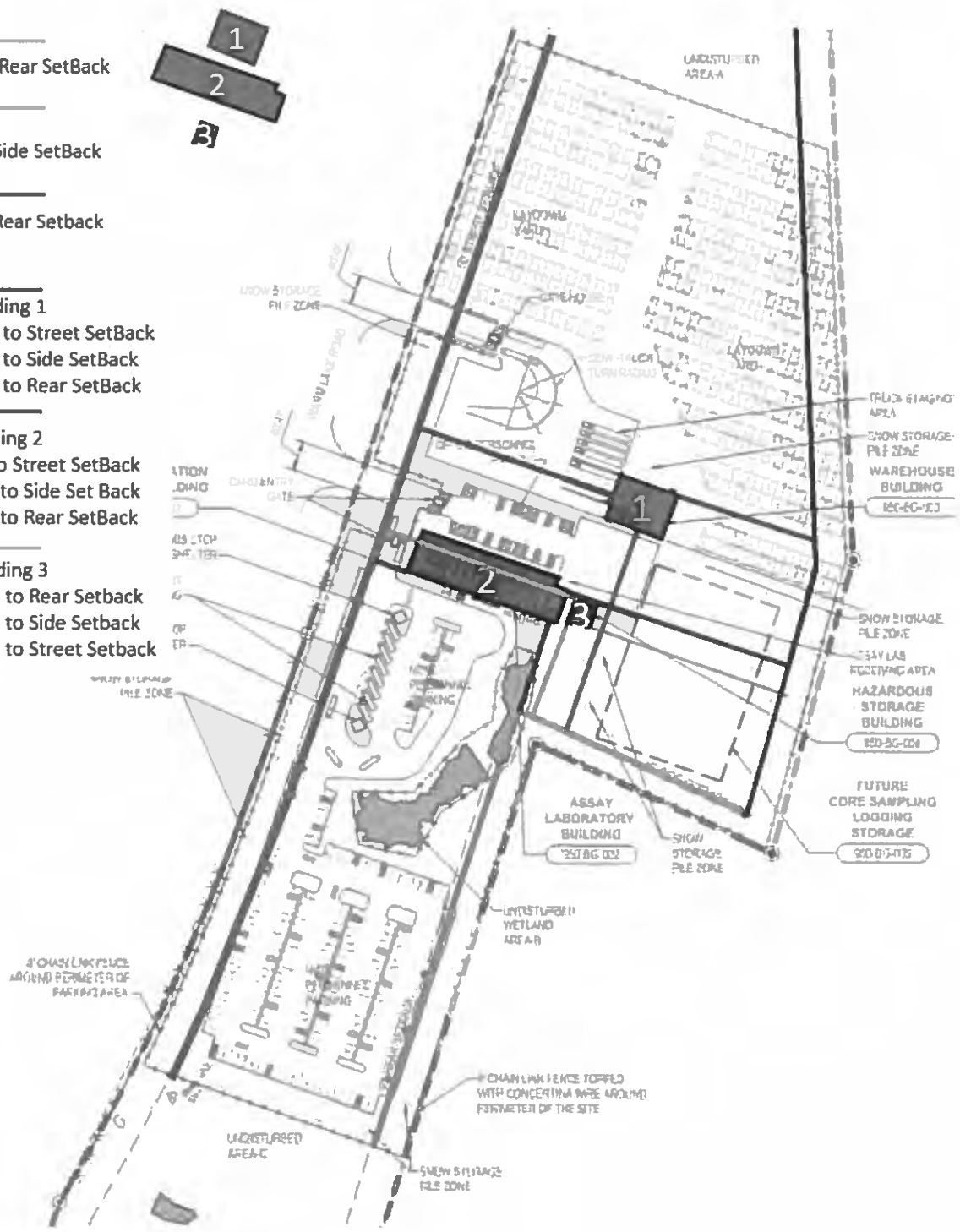
35' Side SetBack

50' Rear SetBack

**Building 1**  
 285' to Street SetBack  
 296' to Side SetBack  
 198' to Rear SetBack

**Building 2**  
 55' to Street SetBack  
 130' to Side Set Back  
 320' to Rear SetBack

**Building 3**  
 277' to Rear Setback  
 198' to Side Setback  
 298' to Street Setback



**LOGISTICS FACILITY PARTIAL SITE PLAN**

50' Street SetBack

Parking Lots

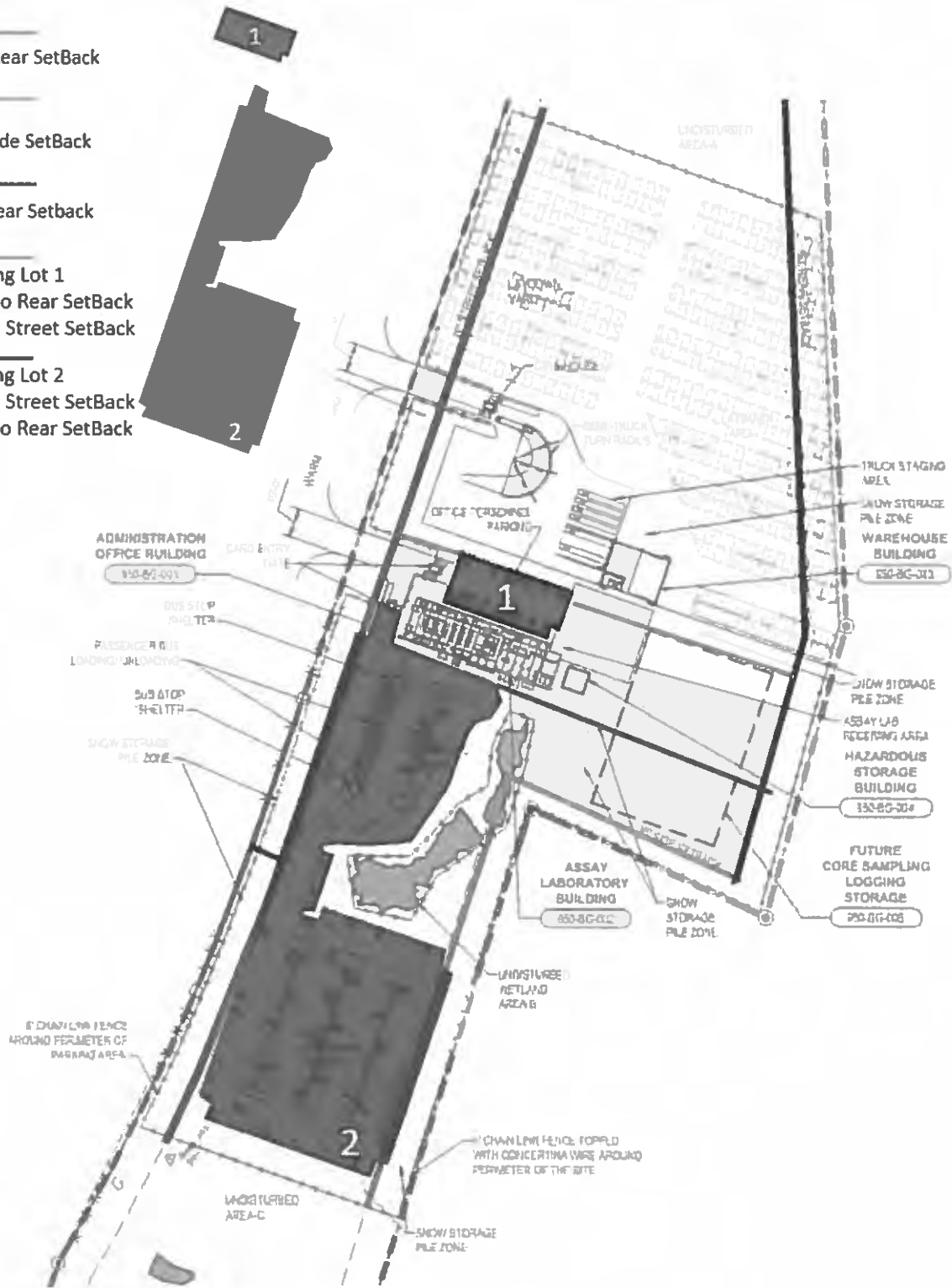
50' Rear SetBack

35' Side SetBack

50' Rear SetBack

Parking Lot 1  
338' to Rear SetBack  
91' to Street SetBack

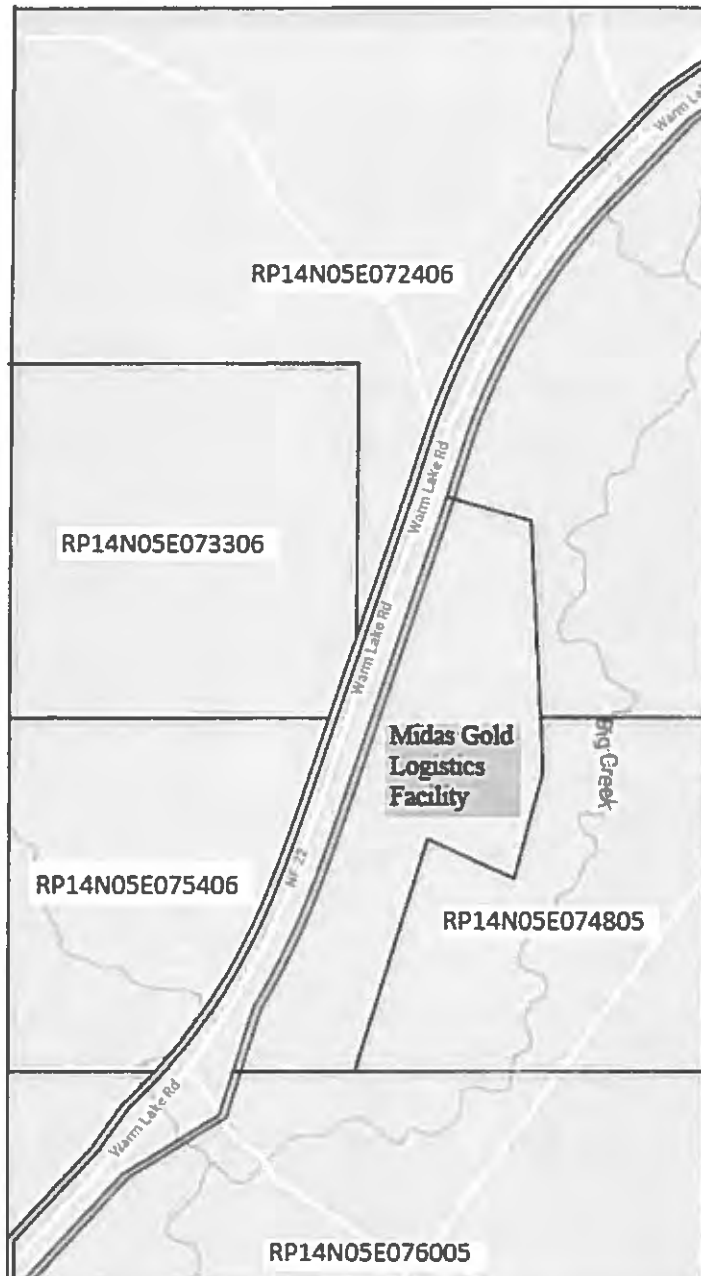
Parking Lot 2  
47' to Street SetBack  
382' to Rear SetBack



**LOGISTICS FACILITY PARTIAL SITE PLAN**



**ADJACENT PROPERTY OWNERS**



**Parcel Number:** RP14N05E075406  
**Homeowner Name:** LITTLE ENTERPRISES LTD PARTNERSHIP  
**Attention Line:** C/O BRADLEY J LITTLE  
**Mailing Address:** PO BOX 488  
**Mailing City:** EMMETT ID 83617  
**Mailing Zip:** 83617  
**Display Description:** GOV'T LOT 3 LESS WARM LAKE ROAD ROW AND LESS SW'RLY PT TAX #1 S7 T14N R5E MEDIUM CLASS TIMBER  
**Legal Acres:** 28.37070000000

**Parcel Number:** RP14N05E073306  
**Homeowner Name:** LITTLE LAND & LIVESTOCK CO  
**Attention Line:**  
**Mailing Address:** PO BOX 488  
**Mailing City:** EMMETT ID 83617  
**Mailing Zip:** 83617  
**Display Description:** GOV'T LOT 2 LESS WARM LAKE ROAD ROW S7 T14N R5E  
**Legal Acres:** 38.98600000000

**Parcel Number:** RP14N05E074805  
**Homeowner Name:** LITTLE ENTERPRISES LTD PARTNERSHIP  
**Attention Line:** C/O BRADLEY J LITTLE  
**Mailing Address:** PO BOX 488  
**Mailing City:** EMMETT ID 83617  
**Mailing Zip:** 83617  
**Display Description:** NE4 SW4 LESS WARM LAKE ROAD ROW AND LESS CNTR PT TAX #1 S7 T14N R5E  
**Legal Acres:** 29.45800000000

**Parcel Number:** RP14N05E076005  
**Homeowner Name:** LITTLE ENTERPRISES LTD PARTNERSHIP  
**Attention Line:** C/O BRADLEY J LITTLE  
**Mailing Address:** PO BOX 488  
**Mailing City:** EMMETT ID 83617  
**Mailing Zip:** 83617  
**Display Description:** GOV'T LOT 4 LESS WARM LAKE ROAD ROW SESW S7 T14N R5E MEDIUM CLASS TIMBER  
**Legal Acres:** 74.96000000000

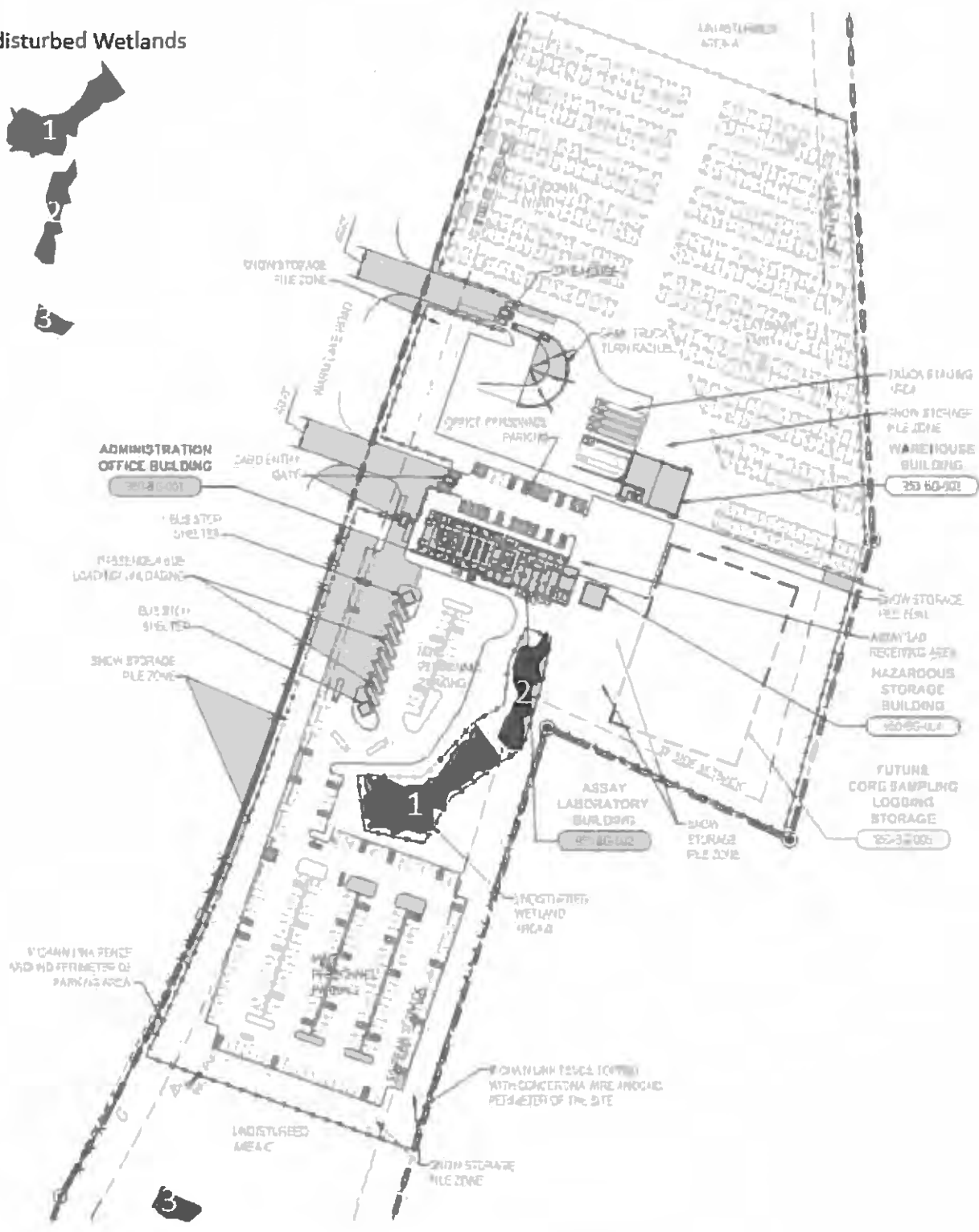
VALLEY COUNTY, IDAHO PARCEL INFORMATION SYSTEM



**Parcel Number:** RP14N05E072406  
**Homeowner Name:** LITTLE ENTERPRISES LTD PARTNERSHIP  
**Attention Line:** C/O BRADLEY J LITTLE  
**Mailing Address:** PO BOX 488  
**Mailing City:** EMMETT ID 83617  
**Mailing Zip:** 83617  
**Display Description:** GOV'T LOT 1; E/2 NW4 LESS WARM LAKE ROAD ROW AND LESS NE'RLY PT TAX #1 S7 T14N R5E MEDIUM CLASS TIMBER  
**Legal Acres:** 101.56880000000

### Undisturbed Wetlands

Undisturbed Wetlands



**LOGISTICS FACILITY PARTIAL SITE PLAN**

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**Appendix B**  
**Transportation Impact Study**



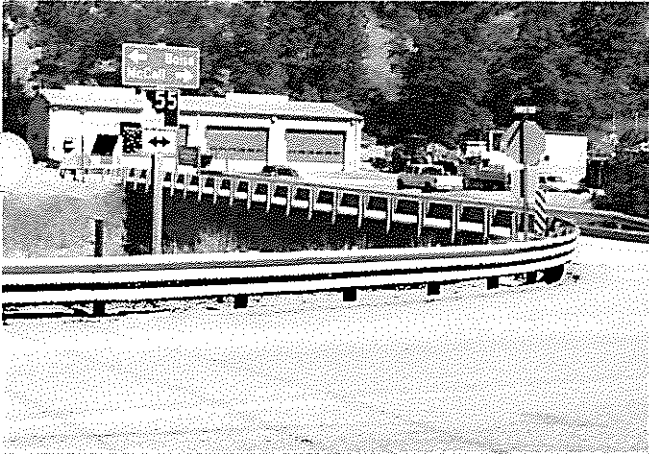


# Transportation Impact Study

Midas Gold Idaho, Inc.  
Stibnite Gold Logistics Facilities

*Valley County, Idaho*

September 20, 2017



Prepared for







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## Acronyms

AADT	annual average daily traffic
AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
ATR	automatic traffic recorder
EB	eastbound
EBL	eastbound left turn movement
EBT	eastbound through movement
EBL/T	eastbound left turn/through shared lane
EBL/T/R	eastbound left turn/through/right turn shared movement
EBR	eastbound right turn movement
FHWA	Federal Highway Administration
HCM	Highway capacity Manual
HDR	HDR Engineering, Inc.
HSM	Highway Safety Manual
IDAPA	Idaho Administrative Procedures Act
ITD	Idaho Transportation Department
ITIP	FY2018-24 Draft Idaho Transportation Investment Program
KN	Key number
L2	L2 Data Collection
LOS	level of service
MGII	Midas Gold Idaho, Inc.
mph	miles per hour
MPO	metropolitan planning organization
MUTCD	Manual on Uniform Traffic Control Devices
MV	million vehicles entering intersection
NB	northbound
NBL	northbound left turn movement
NBL/T/R	northbound left turn/through/right turn shared movement
NBT/R	northbound through/right turn shared movement
NBR	northbound right turn movement
NCHRP	National Cooperative Highway Research Program
PDO	property damage only
Project	Stibnite Gold Project
PTSF	Percent-time spent following
SB	southbound
SBL	southbound left turn movement
SBL/T/R	southbound left turn/through/right turn shared movement
SBT/R	southbound through/right turn shared movement
SBR	southbound right turn movement
SGLF	Stibnite Gold Logistics Facility
SH-55	State Highway 55
s/veh	seconds per vehicle
TIS	transportation impact study
US-95	U.S. Highway 95
v/c	volume to capacity ratio
WB	westbound
WBL	westbound left turn movement
WBL/T	westbound left turn/through shared lane
WBL/T/R	westbound left turn/through/right turn shared movement
WBT	westbound through movement
WBR	westbound right turn movement



## Executive Summary

Midas Gold Idaho, Inc. (MGII) proposes to restore the historic Stibnite, Idaho, mine site before, during, and after developing a modern mining operation that produces gold, silver, and the strategic mineral, antimony. MGII's plan for restoration and operation is to conduct site cleanup, mining, ore processing, and reclamation work at its Stibnite Gold Project (Project) in central Idaho.

In an effort to reduce traffic to and from the Project, reduce on-site employee housing requirements, and provide more regular weekday jobs within the local community, MGII will locate off-site administrative offices for the operation in Valley County with easy access to State Highway 55 (SH-55) and the Warm Lake Highway. These facilities will be collectively known as the Stibnite Gold Logistics Facilities (SGLF) and will be located approximately 7 miles east of SH-55 on Warm Lake Road as shown in **Figure 1**. All figures are found in **Appendix A**.

Presently, the Idaho Transportation Department (ITD) is studying SH-55 to identify current and future needs throughout the corridor. The study will result in three corridor plans (north, central, and south) that identify policies and projects important to the development of this major arterial over the next 20 years. MGII is committed to working with ITD, Valley County, and local communities to improve the state and local transportation system to mitigate impacts associated with their operations. This transportation impact study (TIS) has been prepared to achieve that goal.

### Purpose of Report and Study Objectives

The purpose of this TIS is to evaluate transportation issues and needed improvements to maintain adequate level of service (LOS) and safety on the state and local transportation network serving the SGLF. The TIS objectives include the following:

1. Analyzing all surface transportation modes that will be affected by the proposed SGLF, including light and heavy motor vehicles, pedestrians, bicycles, and public transportation services.
2. Determining whether transportation improvements to the study area roadways and intersections are necessary to accommodate traffic volumes generated by the park and ride and associated improvements.
3. Evaluating safety issues and determining appropriate mitigation.
4. Coordinating improvements with ITD District 3, Valley County, and local city transportation plans and projects.

### SGLF Location, Site Plan, and Study Area

The SGLF is located in Valley County, Idaho, approximately 7 miles east of SH-55 on Warm Lake Road. The site location is presented in **Figure 1**. A preliminary site plan of the proposed SGLF development is presented in **Figure 2**. The layout is conceptual for the purposes of this study and may be updated.

The transportation impact analysis area is larger than the SGLF due to the trip generation impacts expected along SH-55 north and south of Warm Lake Road. The study area is presented in **Figure 1** and includes SH-55, the Banks-Lowman Road, Warm Lake Road, Deinhard Lane, Boydston Street,

and U.S. Highway 95 (US-95) north and west of New Meadows, Idaho, and the intersections associated with these roadways. Also included in the study are the four driveway approaches from the SGLF to Warm Lake Road.

## Description of On-site Development

The SGLF will include offices for safety and environmental services, human resources, purchasing and accounting personnel, and management. These personnel will coordinate procurement and payment for the goods and services required at the Project.

MGII's main assay laboratory will be included in the SGLF. The assay laboratory will be the primary location for sample preparation, analysis and reporting for production, exploration and specialty sampling for mine operations. Process and mine rock production samples will be delivered daily to the laboratory for processing and analysis, and the results will be transmitted electronically to the mine operations and exploration personnel at the Project.

The SGLF will also have warehousing capabilities, including indoor warehouses and an outdoor laydown storage area to accumulate parts and supplies to be transported to the mine. This area will include a parking and staging area for trucks to use prior to traveling to the Project.

In addition to the parking and staging area for trucks, MGII will maintain a parking and assembly area as part of its SGLF for employees and contractors using bus or van pooling to the Project. The parking area will accommodate approximately 250 light vehicles. MGII will make busing and vans available for employee and contractor transportation from the SGLF to the Project and will mandate their use. The SGLF will have four driveways to Warm Lake Road as shown in **Figure 2**.

## Improvement Phasing and Timing

The Project development and operations, including the SGLF, are broken into three distinct phases: 1) construction, 2) operations, and 3) reclamation and closure.

MGII estimates Project construction will begin in 2019 and last approximately 3 years, with peak construction traffic occurring during the year 2020. Most of the construction work and associated traffic will be concentrated from May to November during the construction years. MGII anticipates the SGLF will be constructed and operational by the year 2020.

Once construction is complete, MGII will conduct mine operations year-round through the year 2037. Mine operations traffic will include workforce transportation, supply haulage, and some miscellaneous traffic for support at the SGLF and the mine site.

Following operations, MGII estimates Project reclamation and closure will be complete in the year 2040. To avoid winter conditions, MGII expects that most of the closure and final reclamation traffic to the Project will occur over the warmer 7-month period from May through November with minimal traffic necessary for ongoing monitoring purposes.

## Studies Undertaken

This TIS includes capacity analyses of the impacted roadways and intersections for 2020, 2030, and 2040 given Background Weekday and Weekend conditions, as well as for Build Weekday



conditions. The TIS also includes SGLF access location and crash analyses, and a review of circulation and parking.

## Principal Findings

### SH-55 Corridor

The SH-55 corridor included in the study area from Horseshoe Bend to New Meadows currently experiences excessive delay and congestion during Weekday peak hours between Cascade and McCall. The congested area grows to include the segments between Banks and McCall on the weekends. This congestion is estimated to increase in the analysis years and include the entire stretch of SH-55 between Banks and McCall during both Weekday and Weekend peak hours by 2040 if no improvements to the highway are made.

ITD should continue to analyze potential improvements to SH-55 along the entire study area through their corridor study to address the congestion issues on the highway. This congestion occurs with or without the proposed SGLF improvements.

### Study Intersections

All of the study intersections, except for the SH-55 / US-95 intersection, show the need for capacity improvements through the analysis years with and without the proposed SGLF. Details of proposed improvements and how MGII can participate with ITD and local jurisdictions in those improvements are listed in the Recommendations section.

## Recommendations

### SGLF Access/Circulation Plan

The proposed circulation and parking design, layout, and number of stalls is appropriate for the SGLF development and meets Valley County requirements. The access and circulation should be implemented as presented in the site plan (**Figure 2**).

Based on the findings of this study, it is recommended that MGII follow these development guidelines:

1. Provide adequate sight distance for all driveways to Warm Lake Road.
2. Provide on-site parking that meets Valley County requirements, including drive aisle widths between parking stalls and for fire lanes.
3. Design and construct the proposed driveways to Warm Lake Road to accommodate public emergency vehicles, including fire trucks and ambulances, following Valley County standards for driveway width.
4. Provide pedestrian access from the parking areas to the sidewalks and pathways to the SGLF buildings and warehouse that follows Americans with Disabilities Act (ADA) requirements.



## Transportation System Improvements and Phasing

Table ES-1 summarizes the existing intersection configuration and control, and the improvements recommended for the study area intersections. The table also recommends a schedule for when the improvements should be provided, based on when the intersection operations are estimated to fail, in terms of short-term (2018-2022), medium-term (2023-2029), and long-term (2030-2040). Additional details are presented in Section 8, Recommendations.

Table ES-1. Recommended Intersection Improvements & Schedule

Intersection	Existing Configuration and Control	Improvement Description	Schedule
SH-55 / Banks-Lowman Road	<ul style="list-style-type: none"> <li>Single lane for all movements on all four approaches to the intersection</li> <li>Stop control for eastbound and westbound approaches</li> </ul>	<ul style="list-style-type: none"> <li>Install signal control with the existing lane configuration</li> </ul>	Short-term
SH-55 / Warm Lake Road	<ul style="list-style-type: none"> <li>Single lane for all movements on all three approaches to the intersection</li> <li>Stop control for westbound approach</li> </ul>	<ul style="list-style-type: none"> <li>Install roundabout control</li> </ul>	Short-term
SH-55 / Deinhard Lane	<ul style="list-style-type: none"> <li>Four-leg intersection controlled by a traffic signal</li> <li>SH-55 approaches each have one shared lane for through and right-turn movements with a dedicated left-turn lane</li> <li>Deinhard Lane approaches each have one shared lane for through and left-turn movements and a dedicated right-turn lane</li> </ul>	<ul style="list-style-type: none"> <li>Install additional dedicated left-turn lanes on Deinhard Lane and dedicated right-turn lanes on SH-55</li> <li>Improve curb radii in all for corners of the intersection</li> <li>Update signal timing</li> </ul>	Short-term
SH-55 / Boydston Street	<ul style="list-style-type: none"> <li>Single lane for all movements on SH-55 approaches to the intersection</li> <li>Separate right-turn and left-turn lanes on the Boydston approach</li> <li>Stop control for northbound approach</li> </ul>	<ul style="list-style-type: none"> <li>Install signal control or roundabout control based on additional analysis</li> </ul>	Medium-term
SH-55 / US-95	<ul style="list-style-type: none"> <li>Four-leg intersection</li> <li>Stop control for all approaches</li> <li>Single lane for all movements for all approaches to the intersection except southbound approach</li> <li>Southbound approach has one shared lane for left-turn and through movements and a dedicated right-turn lane</li> </ul>	<ul style="list-style-type: none"> <li>No improvements recommended</li> </ul>	N/A



## Improvement Implementation & Future Analysis

As MGII develops the SGLF, they are open to discussions about potential partnership opportunities with ITD and the cities and counties to provide recommended improvements not already described in the MGII's *Plan of Restoration and Operations* (2016).

ITD should monitor traffic volumes at the study intersections. If ITD identifies or suspects unforeseen deficiencies, they should analyze and mitigate in coordination with the cities and counties.

ITD should coordinate an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the SH-55 / Banks-Lowman Road intersection as part of their SH-55 corridor study. This analysis should determine appropriate capacity and safety treatments at the intersection, potentially including traffic signal control, additional turn lanes, and structure replacements and/or widening.







# 1 Introduction

Midas Gold Idaho, Inc. (MGII) proposes to restore the historic Stibnite, Idaho, mine site before, during, and after developing a modern mining operation that produces gold, silver, and the strategic mineral, antimony. MGII's plan for restoration and operation is to conduct site cleanup, mining, ore processing, and reclamation work at its Stibnite Gold Project (Project) in central Idaho.

In an effort to reduce traffic to and from the Project, reduce on-site employee housing requirements, and provide more regular weekday jobs within the local community, MGII will locate off-site administrative offices for the operation in Valley County with easy access to State Highway 55 (SH-55) and the Warm Lake Highway. These facilities will be collectively known as the Stibnite Gold Logistics Facilities (SGLF) and will be located approximately 7 miles east of SH-55 on Warm Lake Road as shown in **Figure 1**. All figures are found in **Appendix A**.

Presently, the Idaho Transportation Department (ITD) is studying SH-55 to identify current and future needs throughout the corridor. The study will result in three corridor plans (north, central, and south) that identify policies and projects important to the development of this major arterial over the next 20 years. MGII is committed to working with ITD, Valley County, and local communities to improve the state and local transportation system to mitigate impacts associated with their operations. This transportation impact study (TIS) is intended to help achieve that goal.

## 1.1 Purpose of Report and Study Objectives

The purpose of this TIS is to evaluate transportation issues and needed improvements to maintain adequate level of service (LOS) and safety on the state and local transportation network serving the SGLF. The TIS objectives include the following:

1. Analyzing all surface transportation modes that will be affected by the proposed SGLF, including light and heavy motor vehicles, pedestrians, bicycles, and public transportation services.
2. Determining whether transportation improvements to the study area roadways and intersections are necessary to accommodate traffic volumes generated by the park and ride and associated improvements.
3. Evaluating safety issues and determining appropriate mitigation.
4. Coordinating improvements with ITD District 3, Valley County, and local city transportation plans and projects.

HDR Engineering, Inc. (HDR) prepared this TIS in accordance with the ITD Board Policy 4005, which refers to Idaho Administrative Procedures Act (IDAPA) section 39.03.42 – Rules Governing Highway Right-of-Way Encroachments on State Rights-of-Way. Per this section, a TIS is not required if the development generates fewer than 100 new trips in the peak hours and fewer than 1,000 trips daily. However, due to the nature of the development and because SH-55 is the primary access to the facilities, ITD requested MGII develop this TIS to identify issues and potential improvements for the study intersections and roadways. HDR met with ITD District 3 staff as well as City of McCall staff to discuss the proposed improvements and determine the scope of the transportation analysis. Meeting notes are included in **Appendix B**.

This study is not a comprehensive evaluation of the SH-55 corridor, but investigates specific intersections and segments along that highway to identify improvements needed at key locations.

## 2 Proposed Development

### 2.1 SGLF Location, Site Plan, and Study Area

The SGLF is located in Valley County, Idaho, approximately 7 miles east of SH-55 on Warm Lake Road. The site location is presented in **Figure 1**. A preliminary site plan of the proposed SGLF development is presented in **Figure 2**. The layout is conceptual for the purposes of the study and may be updated.

The transportation impact analysis area is larger than the SGLF due to the trip generation impacts expected along SH-55 north and south of Warm Lake Road. The study area is presented in **Figure 1** and includes SH-55 the Banks-Lowman Road, Warm Lake Road, Deinhard Lane, Boydstun Street, U.S. Highway 95 (US-95) north and west of New Meadows, Idaho, and the intersections associated with these roadways. Also included in the study are the four driveway approaches from the SGLF to Warm Lake Road.

### 2.2 Off-site Development

No large developments are anticipated in the study area in the near future. Therefore, this TIS applied an average annual growth rate to existing traffic volumes to account for regional growth and any redevelopment in the study area that will likely occur over the next 20 years.

#### 2.2.1 Planned Roadway Capacity Improvements

There are no funded transportation capacity improvement projects in the vicinity of the SGLF.

ITD has the following projects scheduled in the study area in their FY2018-24 *Draft Idaho Transportation Investment Program* (ITIP):

- Key Number (KN) 19784, STC-3904, Warm Lake Highway, Valley Co.: Resurface/restore and rehabilitate the road from SH-55 to milepost 34.3 in 2018.
- KN ORN20653, SH-55, FY19 Cascade 4 Americans with Disabilities Act (ADA) Ramps: Improve pedestrian ramps in Cascade in 2019.
- KN ORN20407, SH-55, Donnelly to Deinhard, Valley Co.: Resurface/restore and rehabilitate SH-55 from Donnelly to Deinhard Lane in 2023/24.
- KN 13961, SH-55, Zachary Rd. to Goose Creek Grade, Valley/Adams Co.: Resurface the pavement to preserve the structural capacity of the existing roadway and add two retaining walls. Portions of this project have been recently completed.
- KN ORN20408, SH-55, Deinhard Ln. to Zachary Rd., McCall: This project will resurface the pavement to preserve the structural capacity of the existing roadway.



## 2.3 Description of On-site Development

### 2.3.1 Land Use and Density

The SGLF will include offices for safety and environmental services, human resources, purchasing and accounting personnel, and management. These personnel will coordinate procurement and payment for the goods and services required at the Project.

MGII's main assay laboratory will be included in the SGLF. The assay laboratory will be the primary location for sample preparation, analysis and reporting for production, exploration and specialty sampling for mine operations. Process and mine rock production samples will be delivered daily to the laboratory for processing and analysis, and the results will be transmitted electronically to the mine operations and exploration personnel at the Project.

The SGLF will have warehousing capabilities, including indoor warehouses and an outdoor laydown storage area to accumulate parts and supplies to be transported to the Project. This area will include a parking and staging area for trucks to park prior to traveling to the Project. MGII will require supply truck drivers to check in at the SGLF and direct them to either proceed to the Project or unload at the warehouse for temporary storage and assembly of their load. A truck scale will be located at the SGLF to verify loads going into or out of the warehouse area. The check-in process will include general safety and road readiness inspections of incoming trucks and equipment being transported to the Project. MGII will require and inspect its heavy equipment transshipment vehicles for items such as safety equipment, installed and maintained engine brake muffling systems to reduce engine brake noise, and general equipment safety checks. MGII will contractually require its suppliers, who ship loads directly to the Project, to maintain and inspect their equipment for the same safety and engine brake muffling systems.

MGII will also maintain a parking and assembly area as part of its SGLF for employees and contractors using bus or van pooling to the Project. The parking area will accommodate approximately 250 light vehicles. MGII will make busing and vans available for employee and contractor transportation from the SGLF to the Project and will mandate their use. The SGLF will have four driveways to Warm Lake Road as shown in **Figure 2**.

### 2.3.2 Improvement Phasing and Timing

The Project development and operations, including the SGLF, are broken into three distinct phases: 1) construction, 2) operations, and 3) reclamation and closure.

MGII estimates mine construction will begin in 2019 and last approximately 3 years, with peak construction traffic occurring during the year 2020. Most of the construction work and associated traffic will be concentrated from May to November during the construction years. MGII anticipates the SGLF will be constructed and operational by the year 2020.

Once construction is complete, MGII will conduct mine operations year-round through the year 2037. Mine operations traffic will include workforce transportation, supply haulage, and some miscellaneous traffic for support at the SGLF and the mine site.

Following operations, MGII estimates Project reclamation and closure will be complete in the year 2040. To avoid winter conditions, MGII expects that most of the closure and final reclamation traffic

to the Project will occur over the warmer 7-month period from May through November and minimal traffic will be necessary for ongoing monitoring purposes.

### 2.3.3 Zoning

The SGLF is located in an area designated as Rural in the *Valley County Comprehensive Plan* (Valley County, Revised August 2010). It is several miles east of the City of Cascade Area of Impact.

The planned zoning around each of the study intersections is as follows:

- SH-55/Banks Lowman Road
  - This intersection is in Boise County.
  - The area immediately around the intersection is planned for conservation area as public lands (Boise County Generalized Land Use Map, 2008).
- SH-55/Warm Lake Road
  - This intersection is within the City of Cascade impact area.
  - The area immediately around the intersection is zoned agriculture/forestry (*City of Cascade Comprehensive Plan Update, 2017*).
- SH-55/Deinhard Lane
  - This intersection is within the City of McCall city limits.
  - The southwest quadrant is zoned for the McCall Municipal Airport and the remaining quadrants are zoned for Community Commercial (City of McCall Official Zoning Map, Adopted 2012).
- SH-55/Boydstun Street
  - This intersection is within the City of McCall city limits.
  - All of the parcels adjacent to the intersection are zoned for Community Commercial. The areas further north, south, and west of the intersection are zoned Low Density Residential (City of McCall Official Zoning Map, Adopted 2012).
- SH-55/US-95
  - This intersection is within the City of New Meadows city limits.
  - The area all around the intersection is zoned Central Business (City of New Meadows Zoning Map, June 2008).

## 3 Background Conditions

### 3.1 Existing Land Use

The parcel of land where the SGLF will be located is currently used for agricultural purposes. The land uses around each of the study intersections is as follows:

- SH-55/Banks Lowman Road

- Commercial uses south of the intersection with river rafting businesses using the boat launch off the west leg. ITD has a maintenance yard off the west leg as well.
- SH-55/Warm Lake Road
  - Primarily agricultural uses.
- SH-55/Deinhard Lane
  - Primarily commercial land uses around the intersection, including grocery stores, hotels, and retail businesses, with the McCall Municipal Airport located in the southwest quadrant.
- SH-55/Boydston Street
  - Primarily residential land uses north and west of the intersection with commercial uses to the east and south.
- SH-55/US-95
  - Primarily residential land uses around the intersection with commercial uses to the west.

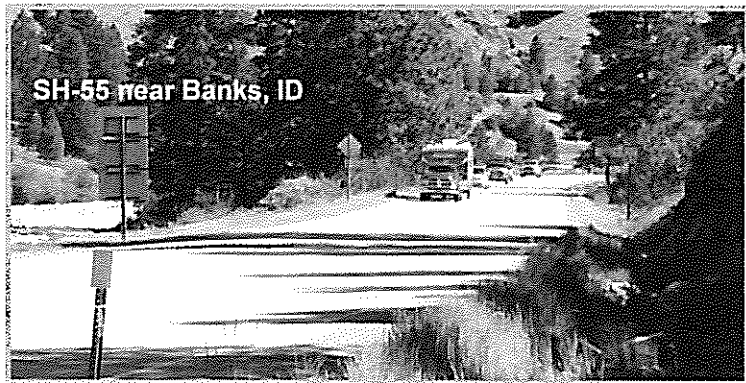
## 3.2 SGLF Accessibility

### 3.2.1 Transportation System

#### 3.2.1.1 ROADWAYS

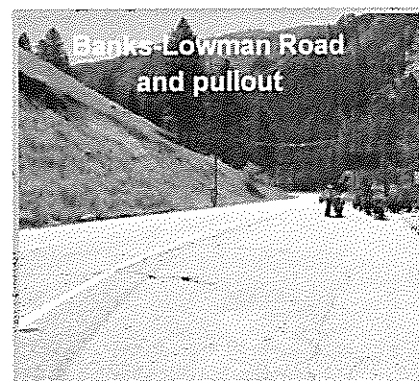
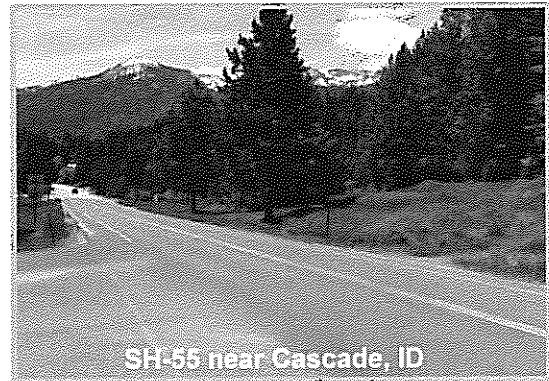
The existing roadway system included in the study is described as follows and presented in **Figure 1**. Functional classification is based on the current functional classification maps for ITD, Valley County, City of McCall, and the City of Cascade.

- SH-55 is a state highway that begins in Marsing, Idaho, and travels through the cities of Caldwell, Nampa, Meridian, Boise, Eagle, Horseshoe Bend, Cascade, Donnelly, McCall, and ends at New Meadows at the junction with US-95. Within the study area, it



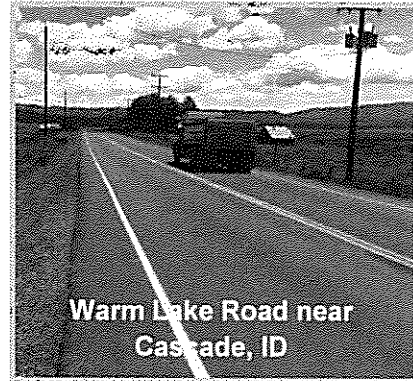
travels north and south from Banks-Lowman Road along the Payette River to Round Valley and the City of Cascade, then on to the City of McCall, and then travels east and west to the City of New Meadows. SH-55 is functionally classified as a principal arterial. The highway primarily has one travel lane in each direction with varying shoulder widths along its length. The travel lanes are approximately 12 feet wide each with shoulder width ranging from 1 to 6 feet. There are passing lanes and slow vehicle turnouts at various locations along its length based on the speed limit and terrain. These are especially important as the highway travels through the narrow canyon along the Payette River. Specific speed limits and terrain types along the study length include the following:

- From the City of Horseshoe Bend to Smiths Ferry, the speed limit is 55 miles per hour (mph) with several reduced speed warning signs on tight curves. The terrain is mountainous through this section.
- From Smiths Ferry to Round Valley, the speed limit is 45 mph with several reduced speed warning signs on tight curves. The terrain is mountainous through this section.
- From Round Valley to the City of Cascade, the speed limit is 65 mph. The speed limit is reduced incrementally to 50 mph, then 35 mph, then 25 mph as SH-55 travels through the City of Cascade, then is increased incrementally to 35 mph, 50 mph, and 65 mph north of the city limits. The terrain is flat through this section. SH-55 is also named Main Street in the City of Cascade.
- From the City of Cascade to the City of Donnelly, the speed limit is 65 mph. The speed limit is reduced incrementally to 45 mph, then 35 mph, then 25 mph as SH-55 travels through the City of Donnelly, then is increased incrementally to 35 mph, 45 mph, and 65 mph north of the city limits. The terrain is rolling through this section. SH-55 is also named Main Street in the City of Donnelly.
- From the City of Donnelly to Lake Fork, the speed limit is 65 mph. The speed limit is reduced to 45 mph through Lake Fork and then is increased to 55 mph. The terrain is flat through this section.
- From Lake Fork to the City of McCall, the speed limit is 55 mph. The speed limit is reduced incrementally to 45 mph, then 35 mph, then 25 mph as SH-55 travels through the City of McCall, then is increased incrementally to 35 mph, 45 mph, and 55 mph west of the city limits. The terrain is flat through this section. SH-55 is named N. 3<sup>rd</sup> Street as it enters the City of McCall from the south; once it turns to the west, it is named E. Lake Street.
- From the City of McCall to the City of New Meadows, there are sections of SH-55 with speed limits of 55 mph and 45 mph with several reduced speed warning signs on tight curves. The speed limit is reduced incrementally to 35 mph, then 25 mph as SH-55 travels into the City of New Meadows. The terrain is mountainous through this section.
- Banks-Lowman Road (STC 3823) is a two-way, two-lane roadway that connects SH-55 with communities and recreation sites along the South Fork of the Payette River. It primarily travels east and west; is an all-weather, asphalt paved road; and is functionally classified as a major collector. In the study area, it has a posted speed limit of 50 mph with several reduced speed warning signs on tight curves. Each travel lane is approximately 12 feet wide with narrow 1-foot-wide shoulders and guardrail along the south edge of



pavement between the road and the river.

- Warm Lake Road (Valley County 10-579) is a two-way, two-lane roadway that connects SH-55 with communities and recreation sites to the east. It primarily travels east and west; is an all-weather, asphalt paved road; and is functionally classified as a major collector. In the study area, it has a posted speed limit of 50 mph with several reduced speed warning signs on tight curves. It was recently rebuilt with 12-foot-wide travel lanes and 3-foot-wide paved shoulders.



Warm Lake Road near  
Cascade, ID

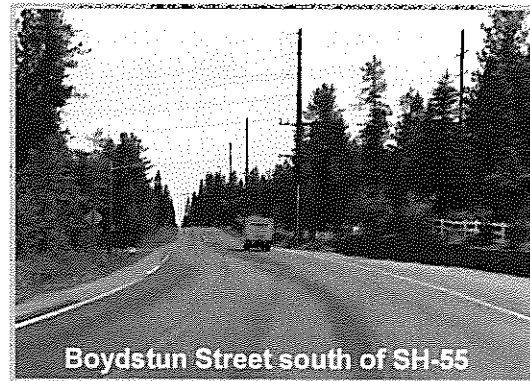
- Deinhard Lane is an east-west two-way, two-lane roadway. It is an all-weather, asphalt paved road and is functionally classified as a minor arterial. In the study area, it has a posted speed limit of 25 mph near the SH-55 intersection and increases to 35 mph to the west with several warning signs on tight curves. It has 12-foot-wide travel lanes and 5-foot-wide paved shoulders that allow on-street bike lanes. There is curb, gutter, and sidewalk along portions of the street near the

SH-55 intersection. There is a section where both bike lanes are on the south side of the roadway through a steeper section with guardrail and over the Payette River Bridge. It transitions to Boydston Street at the curve where the roadway travels north and south.



Deinhard Lane west of SH-55

- Boydston Street is a north-south two-way, two-lane roadway. It is an all-weather, asphalt paved road, and is functionally classified as a minor arterial. In the study area, it has a posted speed limit of 25 mph near the SH-55 intersection that increases to 35 mph to the south. It has 12-foot-wide travel lanes and 5-foot-wide paved shoulders that allow on-street bike lanes.



Boydston Street south of SH-55

- US-95 is functionally classified as a principal arterial. The highway has one 12-foot travel lane in each direction with 6-foot-wide shoulders. In the study area, it has a posted speed limit of 25 mph near the SH-55 intersection and then increases as it travels out of New Meadows.
- Norris Avenue is a local street with one 12-foot travel lane in each direction with no shoulders and a posted speed limit of 25 mph.

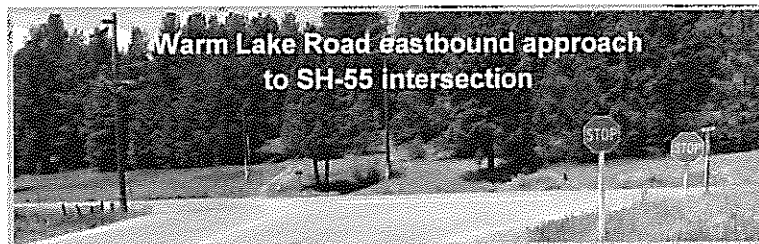
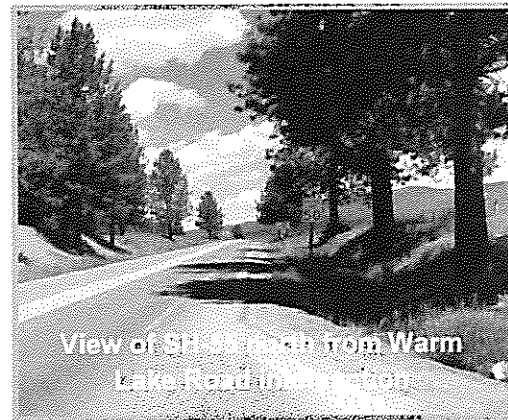
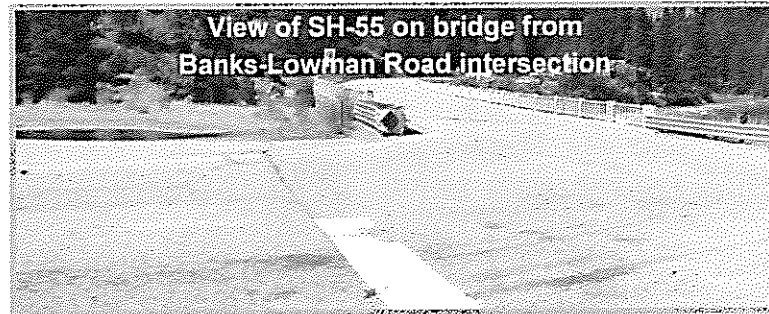
- MGII will use the Burntlog and Thunder Mountain access roads to access the Project. They have developed improvement and maintenance plans in coordination with Valley County for these roads along with Warm Lake Road. These roads are not included in the study and analysis of this TIS. Specific information is available in MGII's *Plan of Restoration and Operations* (2016).

### 3.2.1.2 INTERSECTIONS

- The SH-55/Banks Lowman Road intersection is controlled by stop signs on Banks-Lowman Road and access road legs. The SH-55 and Banks-Lowman Road approaches each have

one shared lane for all movements through the intersection and one lane leaving the intersection. The SH-55 northbound approach is on the bridge over the South Fork of the Payette River with the guardrail and crash attenuators ending at the intersection. The bridge is on a curve that, when combined with the bridge railing, creates a sight distance issue to the south for the east and west legs. The Banks-Lowman Road westbound approach widens at the intersection to allow two vehicles to simultaneously turn left and right. There is a pullout area just to the south of this leg of the intersection. The eastbound approach from the parking area and ITD maintenance yard is a one-lane bridge.

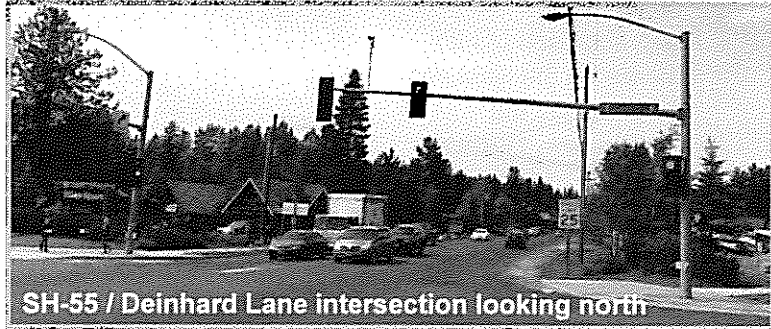
- The SH-55/Warm Lake Road intersection is a three-leg intersection controlled by a stop sign on the Warm Lake Road approach to SH-55. Each of the approaches has one shared lane for all movements through the intersection and one lane leaving the intersection. The Warm Lake Road approach widens at the intersection to allow two vehicles to simultaneously turn left and



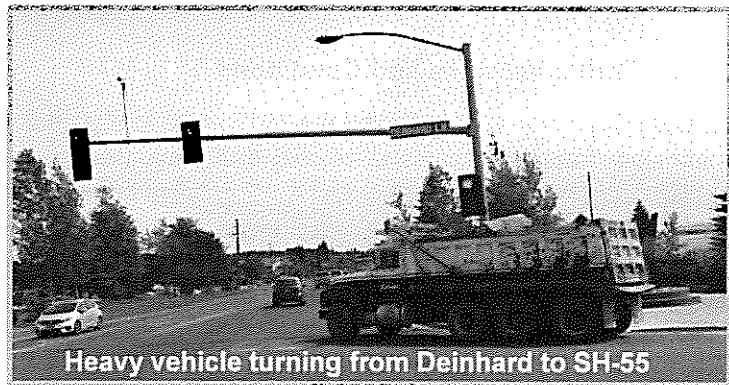


right. The SH-55 speed limit increases from 35 mph to 50 mph just north of the intersection. SH-55 climbs on a grade north of the intersection as well and there is a berm and several large trees on the east side of SH-55 that all combine to limit sight distance for vehicles stopped on Warm Lake Road.

- The SH-55/Deinhard Lane intersection is a four-leg intersection controlled by a traffic signal. Each of the SH-55 approaches has one shared lane for through and right-turn movements with a dedicated left-turn bay. Each of the Deinhard Lane approaches has one shared lane for through and left-turn movements and a dedicated right-turn bay. Deinhard Lane approaches are at a slight skew to SH-55. Each approach has one lane leaving the intersection except for the south approach, which has a through lane and dedicated right-turn lane to access the McCall Municipal Airport.

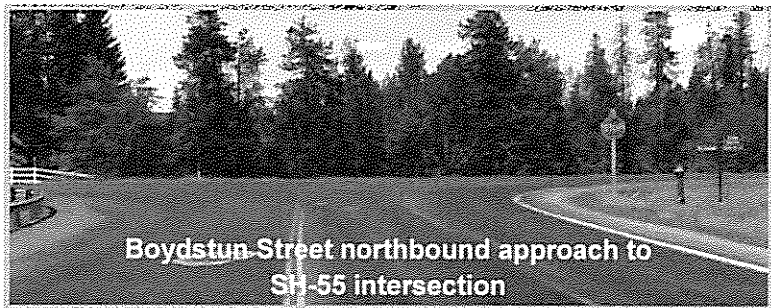


SH-55 / Deinhard Lane intersection looking north



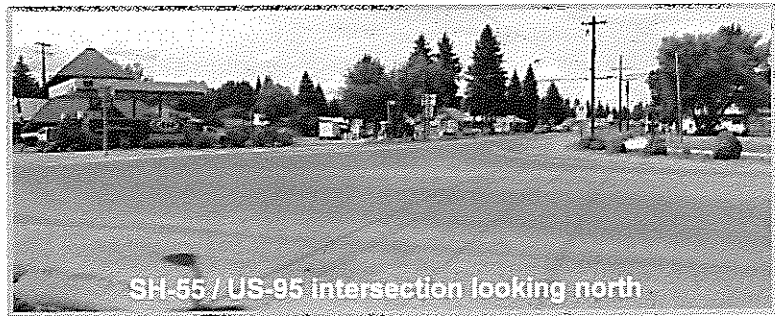
Heavy vehicle turning from Deinhard to SH-55

- The SH-55/Boydston Street intersection is a three-leg intersection controlled by a stop sign on the Boydston Street approach to SH-55. Each of the SH-55 approaches has one shared lane for all movements through the intersection and one lane leaving the intersection. The Boydston Street approach has separate dedicated left- and right-turn lanes. The left-turn bay has approximately 200 feet of storage.



Boydston Street northbound approach to SH-55 intersection

- The SH-55/US-95 intersection is a four-leg intersection with all-way stop control. SH-55 ends on the westbound approach and US-95 travels on the west and north legs of the intersection. The south leg is a local street



named Norris Avenue. All of the approaches, except the southbound approach, have one shared lane for all movements through the intersection. The southbound right-turn movement is separated from the intersection with separate turn lane with yield control. The edge of pavement for the southbound and westbound right-turn movements has been widened to accommodate heavy vehicles. Each leg has one lane leaving the intersection.

### 3.2.2 Traffic Volumes and Conditions

L2 Data Collection (L2) collected the 2017 AM and PM peak hour turning movement volumes at each study intersection as well as daily traffic volumes on the study roadway segments. These are shown graphically in **Figures 3** and **4**. L2 collected the weekday traffic volumes at the intersections and roadways on June 14, 2017, during the AM and PM peak hours for the roadways. These are presented in **Figure 3**. L2 collected weekend traffic volumes during the historic peak hours, Friday evening for traffic heading north and Sunday afternoon for traffic heading south, on Friday June 16, 2017, and Sunday June 18, 2017. These are presented in **Figure 4**. Traffic count data is presented in **Appendix C**.

In addition to the data L2 collected, this TIS examines historic traffic data collected from the following ITD automatic traffic recorders (ATRs):

- #182 on SH-55 north of Banks-Lowman Road
- # 183 on Banks-Lowman Road east of SH-55
- #184 on SH-55 south of Banks-Lowman Road
- # 43 on SH-55 near Donnelly, ID
- # 243 on SH-55 between Donnelly, ID and McCall, ID
- # 244 on SH-55 east of New Meadows, ID

These data show an interesting trend. Traffic volumes for the year 2016 are approaching, and in the case of the segment near the Banks-Lowman Road, exceed the levels that were last reported in 2007 before the Great Recession. Volumes dropped off between 2007 and 2012 and then began increasing again. The 2007 volumes were not available for the # 243 and # 244 ATRs.

The historic ATR traffic volumes also show a distinct seasonality to travel demand, with the highest demand occurring in the summer months, varying from 1.4 to 1.8 times higher than the annual average daily traffic (AADT) during June, July, and August. The winter months (December, January, and February) vary from 0.6 to 0.8 times the AADT.

This TIS also examines holiday traffic volumes for the last 5 years for each SH-55 ATR for the McCall Winter Carnival, Memorial Day, the Fourth of July, and Labor Day events. Volumes during the McCall Winter Carnival increased to almost double the AADT on SH-55 south of McCall. During

the Memorial Day and Labor Day weekends, volumes increased from 1.5 to 2 times the AADT volumes. The highest differentials were during the Fourth of July holiday, when volumes recorded at all of the ATRs increased from 2 to 2.6 times the corresponding AADT. Details of the ATR data analysis are found in **Appendix D**.

### 3.2.3 Public Transportation Service

Valley County Transit provides bus service from McCall City Hall to Harpo's Chevron in Cascade with stops at the McCall post office, the Lake Fork mercantile, the recycling transfer site in Donnelly near the Donnelly Fire Department, and at the Ashley Inn in Cascade. This service runs every hour between 5:55 AM to 7:15 PM.

Currently, the City of McCall has bus routes that travel on SH-55 between Jacob Street and Boydston Street. The bus routes also travel on Boydston Street from SH-55 to Rio Vista Boulevard.

### 3.2.4 Pedestrian and Bicycle Accessibility

There are designated pedestrian sidewalks, pedestrian ramps, and pedestrian crossings on SH-55 when it travels through the cities within the study area, including Cascade, Donnelly, and McCall. There are no designated bicycle routes on SH-55 in the study area. There are pedestrian ramps and pedestrian crosswalks for all legs of the SH-55 and Deinhard Lane intersection that connect to existing sidewalk and pathways.



Deinhard Lane and Boydston Street have bicycle lanes included in the shoulder on both sides of the street.

### 3.2.5 Existing Relevant Transportation Plans

Presently, ITD is studying SH-55 to identify current and future needs throughout the corridor. The study will result in three corridor plans that identify policies and projects important to the development of this major arterial over the next 20 years. The South Corridor Plan includes SH-55 from ION Junction in Owyhee County to Interstate 84 (I-84) in Canyon County. The Central Corridor Plan includes SH-55 from State Street in Ada County to Banks-Lowman Road in Boise County. The North Corridor Plan includes SH-55 from Banks-Lowman Road to New Meadows in Adams County, the same segments included in this TIS. Potential improvements being studied include the following:

- Improvements to the SH-55/Banks-Lowman Road intersection
- Wildlife crossings at appropriate locations
- Improved pedestrian crossings in the City of Cascade
- Turn bays at the SH-55/Warm Lake Road intersection
- Passing lanes at appropriate locations

The City of McCall *Master Transportation Plan* is currently being updated. A draft plan is expected for public review in the fall of 2017. It will identify transportation improvements, including proposed bike routes and pathway improvements in the City of McCall. The following are recommendations from the draft plan for study roadways.

- Install a traffic signal at the 3<sup>rd</sup> Street (SH-55)/Railroad Avenue-Lenora Street intersection.
  - This signal will reduce delay for side-street traffic and help mitigate conflicts between pedestrians and motor vehicles.
  - This location is the highest priority of the two 3<sup>rd</sup> Street (SH-55) intersections identified for signalization.
  - Implementation considerations:
    - Improvements will require coordination with ITD, which owns 3<sup>rd</sup> Street (SH-55) and further engineering study.
    - The City of McCall is actively investigating hiring crossing guards for this intersection. The effectiveness of this strategy should be evaluated before deciding whether to move forward with pursuing a signal at this intersection.
    - This project may not be competitive under ITD's current funding structure without a financial partnership from the City of McCall.
- Install a traffic signal at the 3<sup>rd</sup> Street (SH-55)/Park Street intersection.
  - Similar notes as for the 3<sup>rd</sup> Street (SH-55)/Railroad Avenue-Lenora Street intersection, except this location is a lower priority.
- Construct a roundabout or traffic signal at the Boydston Street/W. Lake Street intersection.
  - Further study will be required to evaluate feasibility and trade-offs between these two options.
  - Improvements will need to be coordinated with ITD and any efforts to designate Deinhard Lane-Boydston Street as a bypass route.
- Incrementally implement Deinhard Lane-Boydston Street between 3<sup>rd</sup> Street and Lake Street as a bypass to SH-55.
  - This would involve officially designating this route as an alternate freight route through signage and communication with the freight community.
  - Turning movement radii for freight vehicles will need to be evaluated at SH-55 intersections.
  - Prior to implementing this project, the City of McCall will need to confirm that restrictions on using this route as a freight bypass have been lifted.

Funding considerations and schedules have not been set for these potential projects.

The *City of Cascade Comprehensive Plan* is being updated and is in draft form now. It includes the following recommendations for SH-55 and intersecting streets:

- Coordinate with ITD to develop a specific SH-55 corridor transportation plan to safely accommodate increased traffic.
- Add sidewalk along SH-55 in downtown and natural surface pathways north and south of downtown

The *Valley County Master Transportation Plan* was completed in 2008. It discusses Warm Lake Road but does not identify any planned improvements for that road.



## 4 Projected Traffic

### 4.1 SGLF Traffic

#### 4.1.1 Trip Generation

Using MGII's *Plan of Restoration and Operations* (2016), this TIS calculates forecasted new vehicle trips to and from the SGLF. The Project will create new traffic and all of it will travel on SH-55 to Warm Lake Road. Almost all of the traffic will travel to the SGLF and then offload passengers and materials to be shipped to the Project. A small percentage of trips will travel directly to the Project. MGII has focused on minimizing access road traffic and maximizing road safety by doing the following:

- Including work functions at the SGLF, including a laboratory, warehouse, offices, employee parking, and equipment and materials laydown areas.
- Consolidating freight at the SGLF to reduce truck traffic.
- Scheduling materials and personnel transport during the 5-day workweek to avoid including SGLF traffic on SH-55 during the weekends.
- Using bus transport for shift changes to transport employees from the mine to the SGLF and back on weekdays.
- Using radio-controlled and GPS-tracked trucks and busses where possible.
- Implementing SGLF check-in processes that will support hours of road use and safety, including chains and appropriate tires on lighter vehicles in the winter.

Employees will be prevented from driving their own vehicles to the Project. They will be required to use mine-provided buses from McCall, Donnelly, Cascade, and other communities along the route to the mine. MGII will maintain a parking and assembly area at the SGLF for employees and contractors using bus or van pooling to the mine. MGII will also provide a parking lot near the Project main guard shack for private vehicles that may arrive due to vendors or other unexpected visitors. The SGLF will have a large parking lot to accommodate employee parking so they can take buses and shuttles to the site, which will have employee housing on-site. Workday hours will be from 6 AM to 8 PM, which puts these trips on study roadways during off-peak hours, reducing trips during the peak commuting hours. Daily traffic to the mine will be substantially minimized by using buses and vans to transport employees and contractors. Use of buses/vans and staggered work cycles will also allow for less and dispersed traffic on the access roads into the Project, reducing the potential for accidents and greenhouse gas emissions.

MGII's *Plan of Restoration and Operations* (2016) includes tables 12-1, 12-2, and 12-3, estimating the total number of vehicles on an AADT basis accessing the SGLF during the construction phase, operations phase, and closure and reclamation phase, respectively. Based on these AADT volumes, trip generation for the SGLF for each phase is shown in **Table 1**. These estimated trips represent the peak volumes for each phase and will represent the highest loadings on the transportation network. MGII is committed to minimizing impacts to the existing transportation network and its users and does not anticipate having trips run during the weekend, especially during peak travel times for recreational traffic.

Table 1. SGLF Trip Generation

Phase (Analysis Year)	Trip Volumes							
	Light Vehicles			Heavy Vehicles			Weekday Daily Distribution on SH-55	
	Weekday Daily Trips	Weekday AM Peak Hour	Weekday PM Peak Hour	Weekday Daily Trips	Weekday AM Peak Hour	Weekday PM Peak Hour	North of Warm Lake Road	South of Warm Lake Road
Construction (2020)*	20	11	11	45	4	4	22	43
Operations (2030)	19	10	10	49	4	5	23	45
Closure and Reclamation (2040)*	12	6	6	14	1	1	9	17

Source: *Plan of Restoration and Operations*, MGII 2016

\*Trips will be concentrated between the months of May and November

#### 4.1.2 Trip Distribution and Assignment

The estimated trips are distributed to the transportation network based on existing movements. This study assumes that one-third of the trips to and from the SGLF will come from the north and two-thirds will come from the south based on previous work and estimated origins of material deliveries and personnel. The last two columns of **Table 1** show the estimated total daily trips on SH-55 north and south of Warm Lake Road as vehicles access the SGLF. All trips are assumed to travel on Deinhard Lane and Boydston Street rather than following SH-55 through downtown McCall.

#### 4.1.3 Modal Split

All generated trips follow the MGII estimates for light and heavy vehicles based on the commitments listed above and in the *Plan of Restoration and Operations*.

### 4.2 Background Travel Demand Projections

#### 4.2.1 Method of Projection

There is no metropolitan planning organization (MPO) in the study area. Therefore, there are no existing travel demand forecast models for the analysis years of 2020, 2030, and 2040. HDR developed forecasts using existing traffic counts and historical growth rates determined from the ATR data along SH-55. As described previously, ATR traffic volumes for the year 2016 are approaching if not exceeding the levels that were last reported before the Great Recession. Volumes dropped off between 2007 and 2012 and then began increasing again. The average growth rate for the last 5 years is very aggressive at over 4 percent.

After reviewing the longer term historical growth rates beyond the previous 5 years, and comparing them to the City of McCall estimated growth rate as they update their *Master Transportation Plan*,



HDR applied an annual growth rate of 3 percent to forecast 2020, 2030, and 2040 Background traffic volumes. This is consistent with McCall's plan and with historic trends. The growth rate is a conservative forecasting method that accounts for future unknown development in the study area.

The 2020, 2030, and 2040 Background traffic volumes are shown in **figures 5** through **10**. Background Weekday traffic volumes for each analysis year are presented in **figures 5, 7, and 9**. Background Weekend traffic volumes for each analysis year are presented in **figures 6, 8, and 10**.

#### **4.2.2 Pass-by and Shared Trips**

The SGLF is a new facility and all of the generated vehicle trips are expected to originate or terminate there. No pass-by or shared trips are assumed, which provides a conservative estimate of the Build impacts on the transportation system.

### **4.3 Analysis Year Build Traffic**

Estimated Background traffic volumes for the years 2020, 2030, and 2040 are added to the trips generated by the SGLF for the appropriate phase to provide Build condition traffic volumes shown in **figures 11** through **16**. These forecasts are for Weekday conditions when the SGLF is open and operating.

## **5 Transportation Analysis**

### **5.1 SGLF Access**

SH-55 provides arterial street access and Warm Lake Road provides local street access to the SGLF as previously described.

#### **5.1.1 Circulation and Parking**

MGII will maintain a parking and assembly area as part of its SGLF for employees and contractors using bus or van pooling to the Project. The parking area will accommodate approximately 250 light vehicles. MGII will make busing and vans available for employee and contractor transportation to the Project and will mandate their use.

There are four proposed driveways to the SGLF as depicted in **Figure 2**. One driveway will serve heavy vehicles accessing the truck staging area and warehouse, and the other three will access the parking and bus unloading areas for mine personnel and the office building. The third driveway will also provide heavy-vehicle access to the laydown yard. The driveways serving heavy vehicles, including buses, will be 40 feet wide to accommodate the larger vehicles. The driveways for light vehicles will be 30 feet wide. Each driveway will have one lane for entering the SGLF and one shared lane for left- and right-turn movements to exit the SGLF.

### **5.2 Capacity and Level of Service**

Capacity is defined as the maximum rate at which vehicles can pass through a given point in an hour under prevailing conditions. *Highway Capacity Manual 2010* (HCM 2010) procedures measure intersection capacity by evaluating the critical lane groups that require the adequate gaps in cross-traffic for stop-controlled and roundabout intersections and the most amount of green time for



signalized intersections. A volume to capacity (v/c) ratio less than 0.85 generally indicates that adequate capacity is available and vehicles are not expected to experience significant queues and delays. As the v/c ratio approaches 1.0, traffic flow may become unstable and significant delay and queuing conditions may occur. Once the demand exceeds capacity, defined as a v/c ratio greater than 1.0, traffic flow is unstable and excessive delay and queuing is expected.

Observations of traffic volumes provide an understanding of the general nature of traffic, but are insufficient to indicate either the ability of the network to carry additional traffic or the quality of service provided by the street system. For this reason, the concept of level of service (LOS) was developed to correlate numerical traffic operational data to subjective descriptions of traffic performance at intersections. Each movement of traffic has delay associated with it, and therefore a correlating LOS. LOS is defined as the system of six designated ranges from "A" (best) to "F" (worst) used to evaluate performance.

To identify capacity deficiencies and street improvement needs, ITD has identified a LOS threshold of LOS C for rural mountainous and urban/suburban areas. This study identifies improvements necessary to achieve LOS C at the intersections in the forecast years.

**Table 2** presents the HCM 2010 LOS thresholds at stop-controlled and signalized intersections. HDR performed an operational analysis following HCM 2010 procedures using Trafficware's Synchro software (version 9.1) to determine v/c ratios and LOS. For roundabout analysis, HDR used SIDRA 7.0 software for the analysis because it provides a more accurate representation of roundabout operations than Synchro. According to the U.S. Transportation Research Board document, "Roundabout Practices", SIDRA is the most widely-used software tool in the United States for roundabout capacity and performance analysis. The HCM 2010 and more recent HCM 6 acknowledge the need to use alternative models in view of various shortcomings it lists about the HCM roundabout capacity model. SIDRA is one of the alternative tools referred to in the HCM.

The results of the capacity analysis for the various years and conditions are presented showing the critical movements at stop-controlled intersections, specifically the left turn movements, which generally experience the most delay as they have the most conflict. A determination for improvement recommendations for stop-controlled intersections are based on these left turn movement results. If a lane is shared, the results for all movements from that lane are presented. Overall intersection and individual movement results are presented for signalized intersections. Each approach result is presented for roundabouts.

Table 2. LOS Thresholds for Motor Vehicles at Intersections

LOS	Stop-controlled Intersection Control Delay (s/veh)	Signalized Intersection Control Delay (s/veh)
A	<= 10	<= 10
B	10-15	10-20
C	15-25	20-35
D	25-35	35-55
E	35-50	55-80
F	>50	>80





HDR estimated the LOS for the roadway segments adjacent to the study intersections following HCM 2010 procedures for Class I and Class II two-lane highways during the AM and PM peak hours. SH-55 and US-95 are Class I highways because they are primary connectors of major traffic generators and intercity routes that primarily allow motorists to travel at high speeds. Banks-Lowman Road, Warm Lake Road, Deinhard Lane, and Boydstun Street are Class II highways because they are scenic or recreational routes passing through rugged terrain or serve relatively short trips and provide access to the Class I facilities. **Table 3** presents the LOS criteria for Class I and Class II highways defined by the HCM 2010.

Table 3. LOS Thresholds for Motor Vehicles on Class I and Class II Highways

LOS	Class I Highways	Class II Highways
	PTSF	PTSF
A	≤35	≤40
B	>35–50	>40–55
C	>50–65	>55–70
D	>65–80	>70–85
E	>80	>85

LOS is quantified based on percent-time spent following (PTSF), or the time a motorist on the analyzed roadway will spend following another vehicle on the highway. The time spent following increases as traffic volume and congestion increases. For example, if the time spent following on a Class II highway is more than 40 percent, the LOS will fall from A to B and so forth.

### 5.2.1 Existing Conditions

HDR analyzed study area intersections under Weekday and Weekend Existing conditions using the observed traffic volumes shown in **figures 3** and **4**, respectively, with existing lane configurations and traffic control. The results of the intersection analysis are shown in **Table 4** and **Table 5** for Weekday and Weekend conditions, respectively.



Table 4. Existing Weekday Conditions (2017) Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks-Lowman Road	EBL	A	0.01	8.7	B	0.03	10.6
	WBL	B	0.09	10.7	B	0.15	12.6
	NBL	A	0.01	7.4	A	0.01	7.6
	SBL	A	0.01	7.6	A	0.01	7.8
SH-55 / Warm Lake Road	WBL/R	B	0.04	10.0	B	0.06	11.9
	SBL	A	0.01	7.5	A	0.01	7.9
SH-55 / Deinhard Lane	<b>Total</b>	<b>B</b>		<b>13.4</b>	<b>C</b>		<b>32.2</b>
	EBL/T	B	0.42	11.4	C	0.80	30.1
	EBR	A	0.10	8.8	B	0.23	10.7
	WBL/T	B	0.45	13.3	F	1.14	100+
	WBR	A	0.14	9.0	B	0.24	10.7
	NBL	B	0.22	11.1	B	0.29	12.1
	NBT/R	B	0.71	16.5	B	0.71	18.1
	SBL	B	0.15	11.9	B	0.29	12.1
	SBT/R	B	0.43	14.8	B	0.71	18.1
SH-55 / Boydston Street	WBL	A	0.04	7.8	A	0.04	7.9
	NBL	B	0.07	11.4	C	0.24	15.0
	NBR	A	0.08	9.5	A	0.07	9.8
SH-55 / US-95	EBL/T/R	A	0.19	9.1	A	0.25	9.6
	WBL/T/R	A	0.11	7.8	A	0.29	9.1
	NBL/T/R	A	0.02	7.7	A	0.02	8.3
	SBL/T	A	0.08	8.8	A	0.12	9.6

Most of the intersections are estimated to operate at acceptable LOS given Existing conditions. The westbound left-turn movement at the SH-55 and Deinhard Lane signalized intersection operates at LOS F in Weekday and Weekend PM peak hours. The eastbound and westbound left-turn movements at the SH-55 / Banks-Lowman Road intersection fail during the Weekend peak hours.



Table 5. Existing Weekend Conditions (2017) Intersection Analysis Results

Intersection	Movement	Friday Evening Peak Hour			Sunday Afternoon Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	E	0.31	39.5	C	0.08	22.9
	WBL	F	1.81	100+	E	0.43	40.0
	NBL	A	0.02	9.1	A	0.01	7.6
	SBL	A	0.01	78.3	B	0.11	10.3
SH-55 / Warm Lake Road	WBL/R	C	0.26	20.6	C	0.10	15.5
	SBL	A	0.01	8.1	A	0.01	8.8
	<b>Total</b>	<b>B</b>		<b>17.9</b>	<b>C</b>		<b>28.4</b>
SH-55 / Deinhard Lane	EBL/T	B	0.55	15.7	B	0.63	18.3
	EBR	B	0.20	10.7	B	0.18	10.9
	WBL/T	C	0.75	31.6	F	1.07	100+
	WBR	B	0.14	10.4	B	0.16	10.8
	NBL	B	0.22	11.9	B	0.26	11.8
	NBT/R	B	0.74	18.7	C	0.79	20.8
	SBL	B	0.18	12.0	B	0.19	12.4
	SBT/R	B	0.74	18.8	B	0.61	16.5
SH-55 / Boydston Street	WBL	A	0.03	8.0	A	0.03	7.7
	NBL	B	0.14	14.1	B	0.16	12.9
	NBR	A	0.06	9.9	A	0.06	9.5
SH-55 / US- 95	EBL/T/R	A	0.21	9.1	A	0.25	9.3
	WBL/T/R	A	0.27	9.0	A	0.28	9.0
	NBL/T/R	A	0.02	8.4	A	0.02	8.3
	SBL/T	B	0.21	10.2	A	0.14	9.7

All of the roadway segments are estimated to operate at acceptable LOS given Weekday Existing conditions except for the SH-55 segment south of McCall that shows vehicles following each other over 70 percent of the time. On the Weekend, the SH-55 segments from Banks to McCall are estimated to operate at LOS D and E as vehicles are following each other 70 to 90 percent of the time. Printouts of the full Existing intersection and roadway analyses are presented in **Appendix E**.

## 5.2.2 Background Conditions

### 5.2.2.1 2020 BACKGROUND CONDITIONS

HDR analyzed study area intersections under 2020 Background conditions using the forecasted traffic volumes shown in figures 5 and 6. The results of the 2020 Background conditions intersection analysis are shown in Table 6 and Table 7.



Table 6. 2020 Background Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	A	0.01	8.7	B	0.03	10.7
	WBL	B	0.01	11.0	B	0.17	13.3
	NBL	A	0.01	7.4	A	0.01	7.7
	SBL	A	0.01	7.7	A	0.01	7.8
SH-55 / Warm Lake Road	WBL/R	B	0.04	10.2	B	0.07	12.4
	SBL	A	0.01	7.5	A	0.01	8.0
	<b>Total</b>	<b>B</b>		<b>16.3</b>	<b>D</b>		<b>41.6</b>
	EBL/T	B	0.61	16.1	D	0.91	49.2
SH-55 / Deinhard Lane	EBR	A	0.11	9.3	B	0.26	11.5
	WBL/T	C	0.71	27.5	F	1.27	100+
	WBR	A	0.15	9.5	B	0.26	11.5
	NBL	B	0.25	11.9	B	0.32	12.2
	NBT/R	B	0.74	17.9	B	0.74	19.3
	SBL	B	0.18	12.7	B	0.32	12.2
	SBT/R	B	0.44	15.7	B	0.73	19.3
SH-55 / Boydston Street	WBL	A	0.04	7.8	A	0.04	7.9
	NBL	B	0.09	11.8	C	0.27	16.0
	NBR	A	0.07	9.6	A	0.07	9.9
SH-55 / US- 95	EBL/T/R	A	0.21	9.2	A	0.28	9.5
	WBL/T/R	A	0.12	7.9	A	0.32	9.15
	NBL/T/R	A	0.03	7.7	A	0.02	8.3
	SBL/T	A	0.09	8.9	A	0.14	9.8

Most of the intersections are estimated to operate at acceptable LOS given 2020 Background conditions. The westbound left-turn movement at the SH-55 and Deinhard Lane signalized intersection operates at LOS F in Weekday and Weekend PM peak hours. The eastbound and westbound left-turn movements at the SH-55 / Banks-Lowman Road intersection fail during the Weekend peak hours.



Table 7. 2020 Background Weekend Conditions Intersection Analysis Results

Intersection	Movement	Friday Evening Peak Hour			Sunday Afternoon Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	F	0.41	54.3	D	0.11	26.6
	WBL	F	2.38	100+	F	0.57	59.1
	NBL	A	0.02	9.3	A	0.01	7.7
	SBL	A	0.01	8.5	B	0.14	11.0
SH-55 / Warm Lake Road	WBL/R	C	0.26	24.1	C	0.12	16.8
	SBL	A	0.01	8.2	A	0.01	9.0
	<b>Total</b>	<b>B</b>		<b>20.7</b>	<b>D</b>		<b>35.8</b>
SH-55 / Deinhard Lane	EBL/T	B	0.62	18.6	C	0.70	23.4
	EBR	B	0.23	11.4	B	0.20	11.7
	WBL/T	D	0.84	46.4	F	1.20	100+
	WBR	B	0.16	11.0	B	0.18	11.5
	NBL	B	0.25	12.0	B	0.29	11.6
	NBT/R	C	0.77	20.3	C	0.82	23.4
	SBL	B	0.20	12.0	B	0.22	12.5
	SBT/R	C	0.77	20.6	B	0.63	17.0
SH-55 / Boydston Street	WBL	A	0.04	8.0	A	0.03	7.8
	NBL	C	0.17	15.4	B	0.19	13.7
	NBR	A	0.07	10.2	A	0.07	9.6
SH-55 / US- 95	EBL/T/R	A	0.23	9.5	A	0.27	9.6
	WBL/T/R	A	0.30	9.4	A	0.31	9.4
	NBL/T/R	A	0.03	8.6	A	0.02	8.5
	SBL/T	B	0.24	10.6	A	0.15	9.9

All of the roadway segments are estimated to operate at acceptable LOS given 2020 Background Weekday conditions, except for the SH-55 segment south of McCall that shows vehicles following each other over 70 percent of the time. During Weekend conditions, the SH-55 segments from Banks to McCall are estimated to operate at LOS D and E as vehicles are following each other 70 to 90 percent of the time.

Printouts of the full 2020 background intersection and roadway analyses are presented in Appendix F.

5.2.2.2 2030 BACKGROUND CONDITIONS

HDR analyzed study area intersections under 2030 Background Conditions using the forecasted traffic volumes shown in figures 7 and 8. The results of the 2030 Background conditions intersection analysis are shown in Table 8 and Table 9.

Table 8. 2030 Background Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	A	0.01	8.8	B	0.05	12.1
	WBL	B	0.15	12.3	C	0.29	17.5
	NBL	A	0.01	7.4	A	0.01	7.8
	SBL	A	0.01	7.9	A	0.02	8.0
SH-55 / Warm Lake Road	WBL/R	B	0.06	11.0	B	0.12	14.8
	SBL	A	0.01	7.6	A	0.01	8.2
	<b>Total</b>	<b>C</b>		<b>31.4</b>	<b>F</b>		<b>100+</b>
SH-55 / Deinhard Lane	EBL/T	D	0.91	51.0	F	1.32	100+
	EBR	B	0.16	11.6	B	0.38	14.2
	WBL/T	F	1.04	100+	F	2.06	100+
	WBR	B	0.22	11.9	B	0.38	14.2
	NBL	B	0.32	11.4	B	0.48	13.5
	NBT/R	C	0.84	24.8	C	0.87	29.2
	SBL	B	0.26	12.8	B	0.48	13.6
	SBT/R	B	0.48	15.5	C	0.76	21.9
SH-55 / Boydston Street	WBL	A	0.06	8.1	A	0.06	8.3
	NBL	B	0.16	14.0	D	0.51	27.4
	NBR	B	0.11	10.3	B	0.11	10.8
SH-55 / US- 95	EBL/T/R	B	0.29	10.2	B	0.40	11.8
	WBL/T/R	A	0.17	8.4	B	0.47	11.7
	NBL/T/R	A	0.03	8.1	A	0.03	9.2
	SBL/T	A	0.09	7.8	B	0.14	10.9

Most of the intersections are estimated to operate at acceptable LOS given 2030 Background conditions. The eastbound and westbound left-turn movements at SH-55 and Deinhard Lane operate at LOS F in Weekday PM peak hours and overall the intersection operates at LOS F due to the delay.



Table 9. 2030 Background Weekend Conditions Intersection Analysis Results

Intersection	Movement	Friday Evening Peak Hour			Sunday Afternoon Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	F	1.47	100+	F	0.34	72.8
	WBL	F	7.05	100+	F	1.94	100+
	NBL	B	0.04	10.5	A	0.02	7.8
	SBL	A	0.02	9.0	B	0.24	13.7
SH-55 / Warm Lake Road	WBL/R	F	0.70	64.4	D	0.23	25.2
	SBL	A	0.01	8.7	A	0.01	9.9
	<b>Total</b>	<b>D</b>		<b>45.3</b>	<b>F</b>		<b>82.6</b>
SH-55 / Deinhard Lane	EBL/T	E	0.90	55.2	E	0.99	77.7
	EBR	B	0.33	13.7	B	0.28	13.4
	WBL/T	F	1.22	100+	F	1.73	100+
	WBR	B	0.23	13.1	B	0.26	13.3
	NBL	B	0.38	13.5	B	0.44	12.7
	NBT/R	D	0.93	38.5	F	1.01	55.8
	SBL	B	0.32	13.4	B	0.37	14.1
	SBT/R	D	0.92	36.7	C	0.78	22.9
SH-55 / Boydston Street	WBL	A	0.06	8.5	A	0.05	8.1
	NBL	D	0.37	26.8	C	0.33	18.6
	NBR	B	0.10	11.1	B	0.11	10.4
SH-55 / US- 95	EBL/T/R	B	0.34	11.2	B	0.40	11.6
	WBL/T/R	B	0.44	11.8	B	0.45	11.5
	NBL/T/R	A	0.04	9.3	A	0.03	9.2
	SBL/T	B	0.34	12.5	B	0.22	9.0

The eastbound and westbound left-turn movements and the northbound and southbound right-turn movements at SH-55 and Deinhard Lane fail under Weekend conditions and the amount of delay on Deinhard Lane during the Weekend PM peak hour conditions causes the entire intersection to operate at LOS F. The eastbound and westbound left-turn movements at the SH-55 / Banks-Lowman Road intersection fail during the Weekend peak hours.

All of the roadway segments are estimated to operate at acceptable LOS given 2030 Weekday Background conditions, except for the SH-55 segments south of McCall and around Banks. The analysis for these segments shows vehicles following each other 70 to 80 percent of the time. During the Weekend conditions, the SH-55 segments from Banks to McCall are estimated to operate at LOS D and E as vehicles are following each other 70 to 90 percent of the time. Printouts of the full 2030 Background intersection and roadway analyses are presented in **Appendix G**.



5.2.2.3 2040 BACKGROUND CONDITIONS

HDR analyzed study area intersections under 2040 Background conditions using the forecasted traffic volumes shown in figures 9 and 10. The results of the 2040 Background conditions intersection analysis are shown in Table 10 and Table 11.

Table 10. 2040 Background Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	A	0.01	9.0	B	0.10	14.7
	WBL	C	0.25	15.2	D	0.56	32.4
	NBL	A	0.01	7.5	A	0.01	8.1
	SBL	A	0.01	8.1	A	0.02	8.4
SH-55 / Warm Lake Road	WBL/R	B	0.10	12.4	C	0.22	20.1
	SBL	A	0.01	7.8	A	0.02	8.8
	<b>Total</b>	<b>E</b>		<b>79.6</b>	<b>F</b>		<b>100+</b>
SH-55 / Deinhard Lane	EBL/T	F	1.29	100+	F	2.36	100+
	EBR	B	0.23	13.2	B	0.52	15.9
	WBL/T	F	1.47	100+	F	3.81	100+
	WBR	B	0.31	13.7	B	0.53	16.0
	NBL	B	0.46	12.1	C	0.72	21.6
	NBT/R	F	1.05	67.2	F	1.14	98.6
	SBL	B	0.42	14.4	C	0.76	24.3
	SBT/R	B	0.61	17.3	F	1.16	100+
SH-55 / Boydston Street	WBL	A	0.08	8.5	A	0.09	8.8
	NBL	C	0.28	18.9	F	1.04	100+
	NBR	B	0.16	11.3	B	0.18	12.2
SH-55 / US- 95	EBL/T/R	B	0.41	12.3	C	0.59	17.0
	WBL/T/R	A	0.24	9.5	C	0.69	19.2
	NBL/T/R	A	0.05	8.8	B	0.05	10.4
	SBL/T	B	0.18	10.4	B	0.29	13.0

Most of the intersections are estimated to operate at acceptable LOS given 2040 Background conditions. The eastbound and westbound left-turn movements and northbound and southbound right-turn movements at SH-55 and Deinhard Lane operate at LOS F in Weekday AM and PM peak hours with the overall intersection operating at LOS E in the AM peak hour and LOS F in the PM peak hour. The northbound left-turn movement at the SH-55 / Boydston Street intersection also fails in the Weekday PM peak hour.





Table 11. 2040 Background Weekend Conditions Intersection Analysis Results

Intersection	Movement	Friday Evening Peak Hour			Sunday Afternoon Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	F	1.81	100+	F	0.34	100+
	WBL	F	7.05	100+	F	2.05	100+
	NBL	B	0.04	9.1	A	0.03	8.1
	SBL	B	0.02	8.3	B	0.47	23.3
SH-55 / Warm Lake Road	WBL/R	F	1.89	100+	F	0.54	60.4
	SBL	A	0.03	9.4	B	0.02	11.5
	<b>Total</b>	<b>F</b>		<b>100+</b>	<b>F</b>		<b>100+</b>
SH-55 / Deinhard Lane	EBL/T	F	1.22	100+	F	1.39	100+
	EBR	B	0.44	14.8	B	0.39	14.7
	WBL/T	F	1.65	100+	F	3.24	100+
	WBR	B	0.31	13.8	B	0.36	14.5
	NBL	B	0.55	14.8	C	0.73	21.8
	NBT/R	F	1.27	100+	F	1.35	100+
	SBL	B	0.46	14.3	B	0.47	14.7
	SBT/R	F	1.25	100+	F	1.05	68.3
SH-55 / Boydstun Street	WBL	A	0.09	9.1	A	0.07	8.4
	NBL	F	0.67	55.6	E	0.63	37.6
	NBR	B	0.16	12.8	B	0.16	11.3
SH-55 / US- 95	EBL/T/R	C	0.51	15.3	C	0.59	16.8
	WBL/T/R	C	0.67	19.0	C	0.68	18.5
	NBL/T/R	B	0.07	10.7	B	0.06	10.5
	SBL/T	C	0.50	17.0	B	0.33	13.5

The eastbound and westbound left-turn movements and the northbound and southbound right-turn movements at SH-55 and Deinhard Lane fail under Weekend conditions, causing the entire intersection to fail during both the AM and PM peak hours. The eastbound and westbound left-turn movements at the SH-55 / Banks-Lowman Road intersection fail during the Weekend peak hours. The westbound left turn at the SH-55 / Warm Lake Road intersection and the northbound left-turn movement at the SH-55 / Boydston Street intersection also fail in the Weekend peak hours.

All of the roadway segments are estimated to operate at acceptable LOS given 2040 Weekday Background conditions, except for the SH-55 segments from Banks to McCall that show vehicles following each other 70 to 90 percent of the time. During Weekend conditions, the SH-55 segments from Banks to McCall are estimated to operate at LOS D and E as vehicles are following each other 70 to 90 percent of the time.

Printouts of the full 2040 background intersection and roadway analyses are presented in **Appendix H**.

### 5.2.3 Build Conditions

Build conditions include the forecast travel demand with the SGLF constructed and operational at its location on Warm Lake Road. The following analysis identifies how roadways and intersections are estimated to operate with MGII traffic traveling to and from the SGLF during each phase. Weekend conditions are not analyzed under Build conditions assuming that MGII will not have vehicles traveling on SH-55 during the weekend.

#### 5.2.3.1 2020 BUILD CONDITIONS

HDR analyzed study area intersections under 2020 Build conditions, when construction on the mine Project is at its peak, using the forecasted traffic volumes shown in **figures 11** and **12**. The results of the 2020 Build conditions intersection analysis are shown in **Table 12** for Weekday conditions.

The intersections are estimated to operate at the same LOS with Build conditions as the 2020 Background Weekday conditions. The westbound left-turn movement at the SH-55 and Deinhard Lane signalized intersection operates at LOS F in the PM peak hour. The capacity analysis results for the driveways to the SGLF are not shown in the table as they all are estimated to operate at LOS A.

All of the roadway segments are estimated to operate at acceptable LOS given 2020 Build Weekday conditions, except for the SH-55 segment south of McCall that shows vehicles following each other over 70 percent of the time.

Printouts of the full 2020 Build intersection and roadway analyses are presented in **Appendix I**.



Table 12. 2020 Build Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	A	0.01	8.7	B	0.03	10.8
	WBL	B	0.01	11.1	B	0.17	13.5
	NBL	A	0.01	7.4	A	0.01	7.7
	SBL	A	0.01	7.7	A	0.01	7.8
SH-55 / Warm Lake Road	WBL/R	B	0.05	10.4	B	0.10	12.8
	SBL	A	0.01	7.7	A	0.01	8.2
	<b>Total</b>	<b>B</b>		<b>16.3</b>	<b>D</b>		<b>41.5</b>
SH-55 / Deinhard Lane	EBL/T	B	0.61	16.1	D	0.91	49.2
	EBR	A	0.11	9.4	B	0.26	11.5
	WBL/T	C	0.71	27.5	F	1.27	100+
	WBR	A	0.15	9.5	B	0.26	11.5
	NBL	B	0.25	11.9	B	0.33	12.3
	NBT/R	B	0.74	17.9	B	0.74	19.3
	SBL	B	0.18	12.7	B	0.32	12.2
	SBT/R	B	0.44	15.7	B	0.73	19.4
SH-55 / Boydston Street	WBL	A	0.04	7.8	A	0.04	7.9
	NBL	B	0.10	11.9	C	0.29	16.3
	NBR	A	0.07	9.7	A	0.07	9.9
SH-55 / US- 95	EBL/T/R	A	0.21	9.3	A	0.28	10.0
	WBL/T/R	A	0.12	7.9	A	0.33	9.6
	NBL/T/R	A	0.03	7.7	A	0.02	8.5
	SBL/T	A	0.10	9.0	A	0.14	9.9

5.2.3.2 2030 BUILD CONDITIONS

HDR analyzed study area intersections under 2030 Build conditions, when operations at the mine Project are at their peak, using the forecasted traffic volumes shown in figures 13 and 14. The results of the 2030 Build conditions intersection analysis are shown in Table 13 for Weekday conditions.

Most of the intersections are estimated to operate at the same LOS with Build conditions as the 2030 Background Weekday conditions. The eastbound and westbound left-turn movements at SH-55 and Deinhard Lane operate at LOS F in the AM and PM peak hours. The westbound left-turn movement at the Warm Lake Road intersection operates at LOS C with the SGLF trips included, degrading from LOS B estimated with 2030 Background conditions. The capacity analysis results for the driveways to the SGLF are not shown in the table as they all are estimated to operate at LOS A.

Table 13. 2030 Build Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	EBL	A	0.01	8.8	B	0.05	12.2
	WBL	B	0.15	12.5	C	0.30	17.7
	NBL	A	0.01	7.4	A	0.01	7.9
	SBL	A	0.01	7.9	A	0.02	8.1
SH-55 / Warm Lake Road	WBL/R	B	0.07	11.3	C	0.15	15.3
	SBL	A	0.01	7.7	A	0.01	8.5
	<b>Total</b>	<b>C</b>		<b>31.4</b>	<b>F</b>		<b>100+</b>
SH-55 / Deinhard Lane	EBL/T	D	0.91	51.0	F	1.32	100+
	EBR	B	0.17	11.6	B	0.38	14.2
	WBL/T	F	1.04	100+	F	2.06	100+
	WBR	B	0.22	11.9	B	0.38	14.2
	NBL	B	0.33	11.5	B	0.49	13.6
	NBT/R	C	0.84	24.8	C	0.87	29.3
	SBL	B	0.26	12.8	B	0.48	13.6
	SBT/R	B	0.49	15.6	C	0.87	30.0
SH-55 / Boydston Street	WBL	A	0.06	8.1	A	0.06	8.2
	NBL	B	0.16	14.1	D	0.51	26.9
	NBR	B	0.11	10.3	B	0.11	10.6
	EBL/T/R	B	0.29	10.2	B	0.40	11.9
SH-55 / US- 95	WBL/T/R	A	0.17	8.4	B	0.47	11.8
	NBL/T/R	A	0.03	8.1	A	0.03	9.2
	SBL/T	A	0.13	9.5	B	0.20	11.0

All of the roadway segments are estimated to operate at acceptable LOS given 2030 Weekday Build conditions, except for the SH-55 segments south of McCall and around Banks that show vehicles following each other 70 to 80 percent of the time. Printouts of the full 2030 Build intersection and roadway analyses are presented in **Appendix J**.

5.2.3.3 2040 BUILD CONDITIONS

HDR analyzed study area intersections under 2040 Build conditions, when reclamation and closeout activities at the mine Project are at their peak, using the forecasted traffic volumes shown in **figures 15 and 16**. The results of the 2040 Build conditions intersection analysis are shown in **Table 14** for Weekday conditions.



Table 14. 2040 Build Weekday Conditions Intersection Analysis Results

Intersection	Movement	AM Peak Hour			PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks-Lowman Road	EBL	A	0.01	9.0	B	0.10	14.7
	WBL	C	0.25	15.3	D	0.56	32.6
	NBL	A	0.01	7.5	A	0.01	8.1
	SBL	A	0.01	8.1	A	0.02	8.4
SH-55 / Warm Lake Road	WBL/R	B	0.10	12.4	C	0.24	20.8
	SBL	A	0.01	7.9	A	0.02	8.8
SH-55 / Deinhard Lane	<b>Total</b>	<b>E</b>		<b>79.5</b>	<b>F</b>		<b>100+</b>
	EBL/T	F	1.29	100+	F	2.36	100+
	EBR	B	0.23	13.2	B	0.52	15.9
	WBL/T	F	1.47	100+	F	3.82	100+
	WBR	B	0.31	13.7	B	0.53	16.0
	NBL	B	0.46	12.1	C	0.73	21.8
	NBT/R	F	1.05	67.2	F	1.14	98.6
	SBL	B	0.42	14.4	C	0.76	24.3
SH-55 / Boydston Street	WBL	A	0.08	8.5	A	0.09	8.7
	NBL	C	0.31	21.3	F	1.03	100+
	NBR	B	0.16	11.3	B	0.17	12.0
SH-55 / US-95	EBL/T/R	B	0.41	12.0	C	0.59	17.1
	WBL/T/R	A	0.24	9.3	C	0.69	19.3
	NBL/T/R	A	0.05	8.7	B	0.05	10.4
	SBL/T	B	0.18	10.4	B	0.30	13.0

Most of the intersections are estimated to operate at the same LOS with Build conditions as the 2040 Build Weekday conditions. The eastbound and westbound left-turn movements and northbound and southbound right-turn movements at the SH-55 and Deinhard Lane signalized intersection operates at LOS F in Weekday AM and PM peak hours. The northbound left-turn movement at the SH-55 / Boydston Street intersection also fails in the Weekday PM peak hour. The capacity analysis results for the driveways to the SGLF are not shown in the table as they all are estimated to operate at LOS A.

All of the roadway segments are estimated to operate at acceptable LOS given 2040 Weekday Build conditions, except for the SH-55 segments from Banks to McCall that show vehicles following each other 70 to 90 percent of the time. Printouts of the full 2040 background intersection and roadway analyses are presented in **Appendix K**.



### 5.3 Safety & Crashes

HDR obtained crash data for 5 full years (2011-2015) for the intersections included in the study from the ITD Office of Highway Safety. These data are included in **Appendix L**. Crashes occurred at the intersections shown in **Table 15**, which summarizes the crash history and presents calculated intersection crash rates. Per ITD's crash reports, no reported crashes occurred at the SH-55/Warm Lake Road or SH-55/US-95 intersections. **Table 16** summarizes the types of crashes at each intersection.

Table 15. Crash Summary

Intersection	2011-2015 Crashes				Existing Crash Rates			
	Total	# of Fatalities	# of Injury	# of PDO	Total/Year	Fatal & Injury/Year	PDO Crashes/Year	Annual Crashes / MV <sup>1</sup>
SH-55 / Banks-Lowman Road	2	0	1	1	0.40	0.20	0.20	0.16
SH-55 / Warm Lake Road	0	0	0	0	0.00	0.00	0.00	0.00
SH-55 / Deinhard Lane	3	0	0	3	0.60	0.00	0.60	0.16
SH-55 / Boydston Street	2	0	1	1	0.40	0.00	0.20	0.13
SH-55 / US-95	0	0	0	0	0.00	0.00	0.00	0.00

<sup>1</sup>Calculated by average crashes per year divided by current ADT at intersection\*365 days/1,000,000

There were no fatalities reported and almost 60 percent of all crashes were property damage only. There is no clear pattern to the crashes with so few occurring at each intersection. The head-on turning and angle crashes indicate unexpected turning from the roadway into driveways and intersections. Inattention and failure to yield were the most common contributing factors for all crashes.

Table 16. Crash Type Summary

Intersection	Crash Types			
	Angle	Angle Turning	Embankment	Head-on Turning
SH-55 / Banks-Lowman Road	1	1	-	-
SH-55 / Warm Lake Road	-	-	-	-
SH-55 / Deinhard Lane	-	1	-	2
SH-55 / Boydston Street	1	-	1	-
SH-55 / US-95	-	-	-	-
<b>Totals</b>	<b>2</b>	<b>2</b>	<b>1</b>	<b>2</b>



The expected crash rates at the intersections are calculated following the American Association of State Highway and Transportation Officials (AASHTO) *Highway Safety Manual* (HSM) predictive method. This method estimates expected average crash frequency for similar intersections based on the characteristics of the study intersections, including traffic volumes, control, lane configuration, etc. The spreadsheets used to calculate these rates are found in **Appendix L**. The results of these calculations are presented in **Table 17** for 2017, 2020, 2030, and 2040 conditions. All of the intersections analyzed have existing crash rates less than the predicted crash rates. The Banks-Lowman Road intersection with SH-55 has higher predicted crash rates than the other intersections due to the lack of turn lanes and difficult sight distance issues with the bridge railing on the south and west legs.

Adequate sight distance should be provided at each study intersection to promote good decision-making by motorists attempting to enter or cross traffic on public streets. Sight distance should be analyzed with the correct sight triangle as defined in the AASHTO *A Policy on Geometric Design of Highways and Streets 2011*, 6<sup>th</sup> Edition, Section 9.5 Intersection Sight Distance.



Table 17. Predicted Crash Rates

Intersection	2017 Predicted Crash Rates				2020 Predicted Crash Rates			
	Total/ Year	Fatal & Injury/ Year	PDO Crashes/ Year	Annual Crashes/ MV <sup>1</sup>	Total/ Year	Fatal & Injury/ Year	PDO Crashes/ Year	Annual Crashes/ MV <sup>1</sup>
SH-55 / Banks-Lowman Road	3.12	1.34	1.77	0.05	3.53	1.52	2.01	1.32
SH-55 / Warm Lake Road	1.38	0.57	0.81	0.12	1.58	0.65	0.92	0.63
SH-55 / Deinhard Lane	0.70	0.22	0.48	0.04	0.79	0.24	0.55	0.19
SH-55 / Boydston Street	0.42	0.15	0.26	0.03	0.47	0.17	0.30	0.14
SH-55 / US-95	0.87	0.30	0.57	0.05	0.97	0.34	0.63	0.28

Intersection	2030 Predicted Crash Rates				2040 Predicted Crash Rates			
	Total/ Year	Fatal & Injury/ Year	PDO Crashes/ Year	Annual Crashes/ MV <sup>1</sup>	Total/ Year	Fatal & Injury/ Year	PDO Crashes/ Year	Annual Crashes/ MV <sup>1</sup>
SH-55 / Banks-Lowman Road	5.11	2.20	2.91	1.43	7.29	3.14	4.15	1.52
SH-55 / Warm Lake Road	2.32	0.96	1.36	0.67	3.43	1.42	2.00	0.74
SH-55 / Deinhard Lane	1.14	0.35	0.78	0.19	1.55	0.49	1.06	0.21
SH-55 / Boydston Street	0.68	0.24	0.44	0.15	1.00	0.33	0.69	0.16
SH-55 / US-95	1.27	0.46	0.81	0.27	1.68	0.63	1.05	0.26

<sup>1</sup>Calculated by average crashes per year divided by current ADT at intersection\*365 days/1,000,000





## 6 Improvement Analysis

### 6.1 Improvements to Accommodate Existing Traffic

The capacity analyses of existing conditions indicate that all of the impacted roadways and intersections meet LOS requirements and operate adequately. No capacity improvements are recommended for existing operations.

### 6.2 Improvements to Accommodate Background Traffic

#### 6.2.1 2020 Background Conditions

##### 6.2.1.1 WEEKDAY

The capacity analyses of 2020 Background conditions indicate that all of the study roadways and intersections meet the recommended LOS thresholds and operate adequately, except the SH-55 and Deinhard Lane signalized intersection, which fails in Weekday PM peak. Improvements to address the failing eastbound and westbound left-turn movements include adding eastbound and westbound dedicated left-turn lanes to the intersection and updating the signal timing to allow for protected/permissive flashing yellow arrow phasing for these movements.

HDR performed a capacity analysis for the SH-55 / Deinhard Lane intersection for the Weekday PM and Weekend Friday evening hours as they are time periods the intersection fails. The results are shown in **Table 18**. This analysis shows that with the given 2020 Background conditions, the intersection will operate at an acceptable LOS with the added left-turn lanes and updated signal timing.

The SH-55 intersections with Banks-Lowman Road (northbound and southbound left-turn movements) and Boydston Street (westbound left-turn movement) meet the left-turn lane warrant identified in Table 1, Recommended left-turn treatment warrants for rural two-lane highways, of the National Cooperative Highway Research Program (NCHRP) *Report 745 Left-Turn Accommodations at Unsignalized Intersections* (2016) with weekday volumes. This report is identified in the *ITD Traffic Manual: Idaho Supplementary Guidance to the MUTCD* (December 2016) to determine warrants for left-turn lanes on uncontrolled highways. The northbound right-turn movement at the Banks-Lowman Road meets the right-turn lane warrant identified in Figure 3B-1 of the *ITD Traffic Manual: Idaho Supplementary Guidance to the MUTCD* (December 2016) for the northbound approach with Weekday conditions. The intersections and turn movements operate at an adequate LOS without the warranted turn lanes.

##### 6.2.1.2 WEEKEND

Analysis of the 2020 Weekend forecasts shows the same failure for the westbound left-turn movement at the SH-55 and Deinhard Lane signalized intersection. Adding eastbound and westbound left-turn lanes on Deinhard and updating the signal timing the same as described for Weekday conditions will adequately serve the intersection.

The eastbound and westbound left-turn movements at the SH-55 intersection with the Banks-Lowman Road fail both Friday evening and Sunday afternoon. This intersection is right at the confluence of the North Fork and South Fork of the Payette River and the northbound and eastbound legs are on bridges, making widening with turn lanes or as a roundabout very expensive



and difficult. Adding signal control with the existing lane configuration provides opportunities for the left-turn movements to access SH-55 and improves the overall LOS for the intersection. The results are shown in **Table 18**.

Table 18. 2020 Background Improvements Intersection Analysis Results

Intersection	Movement	Weekday PM Peak Hour			Friday Evening		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Deinhard Lane	<b>Total</b>	<b>B</b>		<b>19.1</b>	<b>B</b>		<b>18.4</b>
	EBL	C	0.64	27.9	C	0.58	26.8
	EBT	B	0.43	18.9	B	0.37	19.1
	EBR	C	0.56	20.3	C	0.51	20.5
	WBL	D	0.79	35.9	C	0.77	31.7
	WBT	B	0.33	17.5	B	0.33	17.9
	WBR	B	0.50	18.8	B	0.39	18.4
	NBL	B	0.31	11.7	B	0.28	10.3
	NBT/R	B	0.73	18.3	B	0.79	19.5
	SBL	B	0.31	11.7	B	0.2	11.1
	SBT/R	B	0.73	18.1	B	0.62	15.0
Intersection	Movement	Friday Evening Peak Hour			Sunday Afternoon Peak Hour		
SH-55 / Banks- Lowman Road	<b>Total</b>	<b>B</b>		<b>14.1</b>	<b>B</b>		<b>13.8</b>
	EB	B	0.05	11.6	A	0.08	9.5
	WB	B	0.19	12.2	B	0.59	13.1
	NB	B	0.90	17.5	A	0.60	9.6
	SB	A	0.37	4.0	B	0.84	17.2

The SH-55 intersection with Banks-Lowman Road meets the right-turn lane warrant identified in the *ITD Traffic Manual: Idaho Supplementary Guidance to the MUTCD* for the northbound approach with Weekend conditions. The northbound right-turn movement at the Warm Lake Road intersection and the eastbound right-turn movement at the Boydston Street intersection also meet this warrant with weekend volumes. These intersections and identified right- turn movements operate at an adequate LOS without the turn lane.

Printouts of the full 2020 Background improvement analyses are presented in **Appendix M**.



## 6.2.2 2030 Background Conditions

### 6.2.2.1 WEEKDAY

The capacity analyses of 2030 Background conditions indicate that all of the study roadways and intersections continue to meet the recommended LOS thresholds and operate adequately, except the SH-55 and Deinhard Lane signalized intersection, which fails AM and PM peak hours. The same recommendation for the 2020 Weekday Background conditions will address the failing eastbound and westbound left-turn movements by adding eastbound and westbound dedicated left-turn lanes to the intersection and updating the signal timing to allow for protected/permissive flashing yellow arrow phasing for these movements.

However, this option fails to address the heavy northbound and southbound right-turn movements. Therefore, HDR analyzed another alternative that adds dedicated northbound and southbound right-turn lanes to the intersection in addition to the added eastbound and westbound left-turn lanes, and updates the signal timing to accommodate these movements. The results of the capacity analysis for both alternatives are shown in **Table 19**. Alternative 2 with dedicated left- and right-turn lanes on all approaches operates adequately to serve weekday and weekend turning movements.



Table 19. 2030 Deinhard Lane Background Improvements Intersection Analysis Results

Intersection	Movement	Weekday PM Peak Hour			Friday Evening		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Deinhard Lane	<b>Alternative 1 – Add EB right-turn &amp; WB left-turn lanes</b>						
	<b>Total</b>	<b>C</b>		<b>32.5</b>	<b>D</b>		<b>36.6</b>
	EBL	D	0.78	46.0	C	0.68	32.3
	EBT	C	0.51	22.0	C	0.44	21.7
	EBR	C	0.65	23.9	C	0.58	23.3
	WBL	F	0.95	81.9	D	0.82	48.8
	WBT	C	0.40	20.2	B	0.38	19.6
	WBR	C	0.60	22.3	C	0.43	20.1
	NBL	B	0.52	15.7	B	0.45	13.2
	NBT/R	D	0.90	36.8	F	1.04	66.1
	SBL	B	0.52	15.6	B	0.37	14.5
	SBT/R	D	0.90	35.9	C	0.80	24.0
	<b>Alternative 2 – Add EB &amp; WB left-turn lanes, NB &amp; SB right-turn lanes</b>						
	<b>Total</b>	<b>C</b>		<b>21.5</b>	<b>C</b>		<b>21.2</b>
	EBL	D	0.78	35.5	C	0.68	32.4
	EBT	C	0.51	21.9	C	0.44	21.8
	EBR	C	0.65	23.8	C	0.58	23.4
	WBL	D	0.79	37.2	C	0.78	32.3
	WBT	B	0.36	19.1	B	0.37	19.4
	WBR	C	0.55	20.9	B	0.42	19.9
NBL	B	0.46	14.6	B	0.40	12.3	
NBT	C	0.69	20.8	C	0.85	26.8	
NBR	B	0.21	11.4	A	0.15	9.3	
SBL	B	0.43	14.1	B	0.31	13.4	
SBT	C	0.77	23.3	B	0.65	17.9	
SBR	B	0.17	12.6	B	0.13	11.3	

The northbound left-turn movement at the Boydston Street intersection falls to LOS D in this analysis year with Weekday conditions. It meets the left-turn lane and right-turn warrants described under 2030 Background conditions. Additional potential improvement alternatives at this intersection



include roundabout and signal control identified in the *Draft City of McCall Master Transportation Plan*. HDR analyzed these three alternatives under 2030 Weekday conditions and results are shown in **Table 20**. All of the alternatives will serve the travel demand adequately. Printouts of the full analyses are presented in **Appendix N**.

Table 20. 2030 Background Boydston Street Improvements Intersection Analysis Results

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Boydston Street	<b>Alternative 1 – Add EB right &amp; WB left-turn lanes</b>						
	NBL	B	0.14	13.1	C	0.45	22.9
	NBR	A	0.10	9.8	B	0.10	10.2
	WBL	A	0.19	7.8	A	0.05	7.9
	<b>Alternative 2 – Single Lane Roundabout</b>						
	EB	A	0.23	4.9	A	0.29	5.4
	WB	A	0.16	4.3	A	0.35	6.6
	NB	A	0.15	4.8	A	0.23	5.6
	<b>Alternative 3 – Signal Control</b>						
	<b>Total</b>	<b>A</b>		<b>8.1</b>	<b>A</b>		<b>7.9</b>
	EBT	A	0.47	9.7	A	0.49	9.2
	EBR	A	0.32	9.1	A	0.25	8.1
	WBL	A	0.13	5.9	A	0.12	5.5
	WBT	A	0.15	4.0	A	0.35	4.3
	NBL	A	0.24	9.5	B	0.54	12.5
NBT	A	0.30	9.8	B	0.29	11.1	

6.2.2.2 WEEKEND

Analysis of the 2030 Weekend forecasts shows the same failure for the eastbound and westbound left-turn movements as well as the northbound and southbound right-turns at the SH-55 and Deinhard Lane signalized intersection. Adding dedicated turn lanes for these movements and updating the signal timing the same as described for Weekday conditions will adequately serve the intersection as shown in **Table 19**.

The eastbound and westbound left-turn movements at the SH-55 intersection with the Banks-Lowman Road fail both Friday evening and Sunday afternoon. Adding signal control with the existing lane configuration provides opportunities for the left-turn movements to access SH-55 and improves the overall LOS for the intersection. The results are shown in **Table 21**.

The westbound left-turn movement at the SH-55 intersection with Warm Lake Road fails both Friday evening and Sunday afternoon. It meets the left-turn lane and right-turn warrants described under



2030 Background conditions for the southbound left-turn movement and the northbound right-turn movement. Additional potential improvement alternatives at this intersection include roundabout and signal. These three alternatives are analyzed under 2030 Weekend conditions and results are shown in **Table 21**. Alternative 1 does not serve the westbound left-turn movement well and fails. Alternatives 2 and 3, roundabout and signal control, respectively, will serve the weekend travel demand adequately. Printouts of the full analyses are presented in **Appendix N**.

The improvement alternatives for the Boydston Street intersection are analyzed with 2030 Weekend conditions and results are shown in **Table 21**. All of the alternatives will serve the travel demand adequately. Printouts of the full analyses are presented in **Appendix N**.

Table 21. 2030 Weekend Background Improvements Intersection Analysis Results

Intersection	Movement	Friday Evening			Sunday Afternoon		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	<b>Total</b>	<b>B</b>		<b>16.6</b>	<b>D</b>		<b>38.8</b>
	EB	D	0.13	40.1	C	0.14	27.3
	WB	D	0.53	44.2	F	1.16	100+
	NB	B	0.91	15.6	A	0.62	9.8
	SB	B	0.76	10.5	B	0.84	16.0
SH-55 / Warm Lake Road	<b>Alternative 1 – Add NB right &amp; SB left-turn lanes</b>						
	WBL	C	0.21	23.1	F	0.648	54.5
	SBL	A	0.012	9.4	A	0.017	8.4
	<b>Alternative 2 – Single Lane Roundabout</b>						
	WB	A	0.08	6.6	A	0.13	5.5
	NB	B	0.65	10.5	A	0.40	6.5
	SB	A	0.24	4.8	B	0.64	11.1
	<b>Alternative 3 – Signal Control</b>						
	<b>Total</b>	<b>A</b>		<b>6.0</b>	<b>A</b>		<b>6.2</b>
	WBL	B	0.38	19.6	B	0.61	18.8
	WBR	B	0.17	17.9	B	0.09	14.8
	NBT	A	0.74	7.0	A	0.51	6.4
	NBR	A	0.14	3.8	A	0.12	4.8
SBL	A	0.03	5.1	A	0.03	4.2	
SBT	A	0.24	2.1	A	0.67	4.5	
SH-55 / Boydston Street	<b>Alternative 1 – Add EB right &amp; WB left-turn lanes</b>						
	NBL	C	0.30	17.1	C	0.29	19.9
	NBR	A	0.10	9.9	B	0.09	10.6
	WBL	A	0.05	7.8	A	0.05	8.1



Table 21. 2030 Weekend Background Improvements Intersection Analysis Results

Intersection	Movement	Friday Evening			Sunday Afternoon		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
<b>Alternative 2 – Single Lane Roundabout</b>							
	EB	A	0.24	4.9	A	0.35	6.0
	WB	A	0.29	5.6	A	0.32	5.9
	NB	A	0.19	5.0	A	0.16	5.1
<b>Alternative 3 – Signal Control</b>							
	<b>Total</b>	<b>A</b>		<b>7.6</b>	<b>A</b>		<b>7.5</b>
	EBT	A	0.45	9.1	A	0.55	9.2
	EBR	A	0.23	8.2	A	0.25	7.8
	WBL	A	0.11	5.6	A	0.12	5.5
	WBT	A	0.31	4.3	A	0.34	4.1
	NBL	B	0.40	10.9	B	0.33	11.9
	NBT	B	0.28	10.4	B	0.25	11.6

### 6.2.3 2040 Background Conditions

#### 6.2.3.1 WEEKDAY

The capacity analyses of 2040 Background conditions indicate that all of the study roadways and intersections continue to meet the recommended LOS thresholds and operate adequately, except the SH-55 intersections with Banks-Lowman Road, Deinhard Lane, and Boydston Street. The Alternative 2 improvements for the 2040 Weekday and Weekend Background conditions for Deinhard Lane are analyzed and presented in **Table 22**. Overall the intersection is estimated to operate well but does not meet the LOS C threshold.



Table 22. 2040 Deinhard Lane Background Improvements Intersection Analysis Results

Intersection	Movement	Weekday PM Peak Hour			Friday Evening		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
<b>Alternative 2 – Add EB &amp; WB left-turn lanes, NB &amp; SB right-turn lanes</b>							
SH-55 / Deinhard Lane	<b>Total</b>	<b>D</b>		<b>39.4</b>	<b>D</b>		<b>52.7</b>
	EBL	D	0.79	48.2	D	0.78	38.9
	EBT	C	0.59	24.6	C	0.51	24.0
	EBR	C	0.76	30.7	C	0.67	26.3
	WBL	E	0.95	75.8	D	0.82	46.1
	WBT	C	0.44	21.5	C	0.41	20.3
	WBR	C	0.67	25.7	C	0.47	21.0
	NBL	D	0.88	46.4	C	0.75	26.0
	NBT	D	0.92	43.5	F	1.20	127.4
	NBR	B	0.27	13.0	B	0.20	10.4
	SBL	C	0.77	29.0	B	0.52	17.9
	SBT	E	0.99	60.0	D	0.91	38.2
	SBR	B	0.21	13.6	B	0.18	13.2

The westbound left-turn movements at the SH-55 intersection with the Banks-Lowman Road fail in 2040 Weekday Background conditions. Adding signal control with the existing lane configuration provides opportunities for the left-turn movements to access SH-55 and improves the overall LOS for the intersection. The results are shown in **Table 23**.

The northbound left-turn movement at the Boydston Street intersection falls to LOS F in this analysis year with Weekday conditions. The same three alternatives are analyzed under 2040 Weekday conditions and results are shown in **Table 23**. Adding turn lanes on SH-55 does not adequately serve the intersection as the northbound left-turn movement still fails. The roundabout and signal control will serve the travel demand adequately. Printouts of the full analyses are presented in **Appendix O**.





Table 23. 2040 Weekday Background Improvements Intersection Analysis Results

Intersection	Movement	Weekday AM Peak Hour			Weekday PM Peak Hour		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	<b>Total</b>	<b>A</b>		<b>6.0</b>	<b>A</b>		<b>6.4</b>
	EB	A	0.02	7.2	A	0.08	8.9
	WB	A	0.19	7.9	A	0.30	10
	NB	A	0.48	5.9	A	0.50	5.9
	SB	A	0.18	4.7	A	0.42	5.4
SH-55 / Boydston Street	<b>Alternative 1 -- Add EB right &amp; WB left-turn lanes</b>						
	NBL	C	0.24	16.7	F	0.89	75.8
	NBR	B	0.15	10.6	B	0.15	11.2
	WBL	A	0.07	8.0	A	0.08	8.3
	<b>Alternative 2 -- Single Lane Roundabout</b>						
	EB	A	0.33	6.0	A	0.40	6.8
	WB	A	0.22	5.0	A	0.51	9.2
	NB	A	0.22	5.8	A	0.34	7.4
	<b>Alternative 3 -- Signal Control</b>						
	<b>Total</b>	<b>A</b>		<b>8.5</b>	<b>A</b>		<b>9.1</b>
	EBT	A	0.52	9.8	B	0.59	10.6
	EBR	A	0.36	9.1	A	0.30	9.0
	WBL	A	0.17	5.7	A	0.18	6.2
	WBT	A	0.18	3.8	A	0.46	5.2
NBL	B	0.35	11.3	B	0.64	14.5	
NBT	B	0.44	12.0	B	0.34	12.5	

6.2.3.2 WEEKEND

Analysis of the 2040 Weekend forecasts shows the same failure for the eastbound and westbound left-turn movements as well as the northbound and southbound right turns at the SH-55 and Deinhard Lane signalized intersection. Adding dedicated turn lanes for these movements and updating the signal timing the same as described for Alternatives 2 in Weekday conditions will adequately serve the intersection as shown in Table 22.

The eastbound and westbound left-turn movements at the SH-55 intersection with the Banks-Lowman Road fail both Friday evening and Sunday afternoon. Adding signal control with the existing lane configuration provides opportunities for the left-turn movements to access SH-55 and improves



the overall LOS for the intersection. However, the signalized intersection alternative fails to meet the LOS C threshold in 2040 weekend conditions. The results are shown in **Table 24**.

The westbound left-turn movement at the SH-55 intersection with Warm Lake Road fails both Friday evening and Sunday afternoon. Alternative 1, adding turn lanes and keeping stop control, fails with 2030 Weekend conditions and so is not analyzed for 2040. Alternatives 2 and 3, roundabout and signal control, respectively, are analyzed under 2040 Weekend conditions and results are shown in **Table 24**. Alternatives 2 and 3, roundabout and signal control, respectively, will serve the weekend travel demand adequately.

The alternative 2 and 3 improvements for the Boydston Street intersection are analyzed with 2040 Weekend conditions since Alternative 1 failed in Weekday conditions. Results are shown in **Table 24**. Both alternatives 2 and 3 will serve the travel demand adequately. Printouts of the full analyses are presented in **Appendix O**.

Table 24. 2040 Weekend Background Improvements Intersection Analysis Results

Intersection	Movement	Friday Evening			Sunday Afternoon		
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)
SH-55 / Banks- Lowman Road	<b>Total</b>	<b>F</b>		<b>100+</b>	<b>F</b>		<b>100+</b>
	EB	D	0.14	39.4	D	0.24	37.1
	WB	D	0.61	44.8	F	1.92	100+
	NB	F	1.26	100+	B	0.88	18.7
	SB	F	1.59	100+	E	1.06	59.5
SH-55 / Warm Lake Road	<b>Alternative 2 -- Single Lane Roundabout</b>						
	WB	A	0.14	6.6	A	0.21	5.5
	NB	C	0.87	10.5	A	0.55	6.5
	SB	A	0.33	4.8	C	0.89	11.1
	<b>Alternative 3 -- Signal Control</b>						
	<b>Total</b>	<b>B</b>		<b>11.0</b>	<b>A</b>		<b>8.8</b>
	WBL	C	0.45	24.9	C	0.73	26.5
	WBR	C	0.20	22.8	C	0.10	20.2
	NBT	B	0.89	15.0	A	0.58	6.9
	NBR	A	0.17	3.6	A	0.13	4.6
SBL	A	0.06	9.0	A	0.05	4.7	
SBT	A	0.31	2.1	A	0.82	8.0	



Table 24. 2040 Weekend Background Improvements Intersection Analysis Results

Intersection	Movement	Friday Evening			Sunday Afternoon			
		LOS	v/c	Delay (s/veh)	LOS	v/c	Delay (s/veh)	
<b>Alternative 2 – Single Lane Roundabout</b>								
SH-55 / Boydston Street	EB	A	0.33	4.9	A	0.45	6.0	
	WB	A	0.40	5.6	A	0.47	5.9	
	NB	A	0.27	5.0	A	0.24	5.1	
	<b>Alternative 3 – Signal Control</b>							
	<b>Total</b>	<b>A</b>		<b>8.3</b>	<b>A</b>		<b>8.2</b>	
	EBT	A	0.52	9.6	B	0.66	10.0	
	EBR	A	0.26	8.3	A	0.30	7.9	
WBL	A	0.15	5.6	A	0.17	5.8		
WBT	A	0.39	4.5	A	0.44	4.2		
NBL	B	0.56	13.4	B	0.48	14.2		
NBT	B	0.39	12.3	B	0.37	13.6		

### 6.3 Additional Improvements to Accommodate Build Traffic

The operations analysis with the SGLF trips follows the same pattern of operational and capacity results and failures as the Background conditions for each analysis year Weekday conditions (2020, 2030, and 2040). The same improvements will operate adequately with the SGLF trips added to the background trips. No additional improvements are needed to accommodate the Build conditions. Results of the 2020, 2030, and 2040 Build conditions are found in **appendices M, N, and O**, respectively.

#### 6.3.1 Access Design and Turn Lane Warrants

Dedicated turn lanes are warranted on SH-55 for the following intersections following the appropriate warrant tables in *NCHRP Report 745 Left-Turn Accommodations at Unsignalized Intersections* and the *ITD Traffic Manual: Idaho Supplementary Guidance to the MUTCD* for Background and Build conditions:

- SH-55 / Banks-Lowman Road – northbound and southbound right- and left-turn lanes
- SH-55 / Warm Lake Road – northbound right-turn lane and southbound left-turn lane
- SH-55 / Boydston Street – eastbound left-turn lane and westbound right-turn lane

These turn lanes are included with the stop control and signal control alternative improvements for the Warm Lake Road and Boydston Street intersections. They are not included with the Banks-Lowman Road intersection due to the structural and terrain constraints.

The driveways accessing the SGLF from Warm Lake Road should be designed following the *Valley County Minimum Standards for Public Road Design and Construction* (April 16, 2008).

## 7 Conclusions

### 7.1 SGLF Accessibility

The current public road accessibility on SH-55 and Warm Lake Road is acceptable for existing and forecast Background and Build conditions in all analysis years providing the necessary improvements are as described in the Section 8, Recommendations.

### 7.2 Transportation Impacts and Need for Improvements

The improvements recommended for study area intersections are necessary based on the analyses completed. Improvements specific to the SGLF include the proposed driveways to Warm Lake Road and study intersection improvements recommended in the Recommendations section.

### 7.3 Compliance with Local Codes

The proposed SGLF improvements are consistent with existing and planned land uses and other Valley County code requirements.

## 8 Recommendations

### 8.1 SGLF Access/Circulation Plan

The proposed circulation and parking design, layout, and number of stalls is appropriate for the SGLF development and meet Valley County requirements. The access and circulation should be implemented as presented in the site plan (**Figure 2**).

Based on the findings of this study, it is recommended that the following development guidelines be followed:

1. Provide adequate sight distance for all driveways to Warm Lake Road.
2. Provide on-site parking that meets Valley County requirements, including for drive aisles between parking stalls and for fire lanes.
3. Design and construct the proposed driveways to Warm Lake Road to accommodate public emergency vehicles, including fire trucks and ambulances, following Valley County standards for driveway width.
4. Provide pedestrian access from the parking areas to the sidewalks and pathways to the SGLF buildings and warehouse that follows ADA requirements.

### 8.2 Transportation System Improvements and Phasing

**Table 25** summarizes the existing intersection configuration and control and the improvements recommended for the study area intersections. The table also recommends a schedule for when the improvements should be provided, based on when the intersection operations are estimated to fail, in terms of short-term (2018-2022), medium-term (2023-2029), and long-term (2030-2040).



Table 25. Recommended Intersection Improvements & Schedule

Intersection	Existing Configuration and Control	Improvement Description	Schedule
SH-55 / Banks-Lowman Road	<ul style="list-style-type: none"> <li>Single lane for all movements on all four approaches to the intersection</li> <li>Stop control for eastbound and westbound approaches</li> </ul>	<ul style="list-style-type: none"> <li>Install signal control with the existing lane configuration</li> </ul>	Short-term
SH-55 / Warm Lake Road	<ul style="list-style-type: none"> <li>Single lane for all movements on all three approaches to the intersection</li> <li>Stop control for westbound approach</li> </ul>	<ul style="list-style-type: none"> <li>Install roundabout control</li> </ul>	Short-term
SH-55 / Deinhard Lane	<ul style="list-style-type: none"> <li>Four-leg intersection controlled by a traffic signal</li> <li>SH-55 approaches each have one shared lane for through and right-turn movements with a dedicated left-turn lane</li> <li>Deinhard Lane approaches each have one shared lane for through and left-turn movements and a dedicated right-turn lane</li> </ul>	<ul style="list-style-type: none"> <li>Install additional dedicated left-turn lanes on Deinhard Lane and dedicated right-turn lanes on SH-55</li> <li>Improve curb radii in all for corners of the intersection</li> <li>Update signal timing</li> </ul>	Short-term
SH-55 / Boydston Street	<ul style="list-style-type: none"> <li>Single lane for all movements on SH-55 approaches to the intersection</li> <li>Separate right-turn and left-turn lanes on the Boydston approach</li> <li>Stop control for northbound approach</li> </ul>	<ul style="list-style-type: none"> <li>Install signal control or roundabout control based on additional analysis</li> </ul>	Medium-term
SH-55 / US-95	<ul style="list-style-type: none"> <li>Four-leg intersection</li> <li>Stop control for all approaches</li> <li>Single lane for all movements for all approaches to the intersection except southbound approach</li> <li>Southbound approach has one shared lane for left-turn and through movements and a dedicated right-turn lane</li> </ul>	<ul style="list-style-type: none"> <li>No improvements recommended</li> </ul>	N/A

The SH-55 / Banks-Lowman Road intersection should be improved with signal control as the intersection is right at the confluence of the North Fork and South Fork of the Payette River and the northbound and eastbound legs are on bridges, making widening for turn lanes or for a roundabout very expensive and difficult. This intersection is estimated to fail with 2020 Weekend conditions.

The SH-55 / Warm Lake Road intersection should be improved with roundabout control. The intersection currently meets warrants to add turn lanes to the SH-55 approaches, but these will not adequately serve the intersection through the analysis year 2040 in the Background Weekday, Weekend, or Build conditions.

A roundabout is recommended over a traffic signal at this intersection for the following reasons:

- The speed limit increases from 35 mph to 50 mph north of this intersection. A roundabout will provide positive physical guidance to slow vehicles down as they navigate the roundabout at 20 mph or less. A roundabout design also addresses the sight distance concerns for vehicles stopped on the westbound approach looking north along SH-55

- A roundabout will provide a natural gateway treatment to the City of Cascade as vehicles travel from the north into town.
- In discussions with ITD, a roundabout is desirable at this location for long-term capacity improvements as it will have fewer electrical maintenance requirements than a traffic signal.

The SH-55 / Deinhard Lane intersection should be improved with additional dedicated eastbound and westbound left-turn lanes on Deinhard Lane, and dedicated northbound and southbound right-turn lanes on SH-55 to serve the proposed demand. The signal timing should be updated to accommodate these additional turn lanes as well. The curb radii at the intersection should be designed to accommodate the right-turning heavy vehicles traveling to the SGLF as well as emergency vehicles and other heavy vehicles in the area. Pedestrian crossings at the signalized intersection should continue to be accommodated.

The SH-55 / Boydston Street intersection should be improved with either signal control or roundabout control by the year 2030 to serve the proposed demand as it fails under Background Weekday, Weekend, and Build conditions. The specific intersection improvements should be analyzed in more detail as there will be major right-of-way impacts for these improvements.

The SH-55 / US-95 intersection is estimated to operate with adequate LOS throughout all of the analysis years and conditions. No additional improvements are recommended at this time for this intersection.

ITD should continue to analyze potential improvements to SH-55 along the entire study area as part of their corridor study to address the congestion issues at the study intersections and on the highway segments between study intersections. This congestion has been shown to occur with or without the proposed SGLF improvements.

MGII should continue to coordinate the improvement and maintenance of the Burntlog and Thunder Mountain access roads to access the Project in coordination with Valley County.

## 9 Improvement Implementation & Future Analysis

As MGII develops the SGLF, they are open to discussions about potential partnership opportunities with ITD and the cities and counties to provide recommended improvements not already described in MGII's *Plan of Restoration and Operations (2016)*.

ITD should monitor traffic volumes at the study intersections. If unforeseen deficiencies are identified and/or suspected, they should be analyzed and mitigated in coordination with the cities and counties.

ITD should coordinate an engineering study of traffic conditions, pedestrian characteristics, and physical characteristics of the SH-55 / Banks-Lowman Road intersection as part of their SH-55 corridor study. This analysis should determine appropriate capacity and safety treatments at the intersection, potentially including traffic signal control, additional turn lanes, and structure replacements and/or widening.



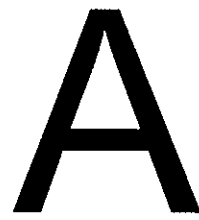
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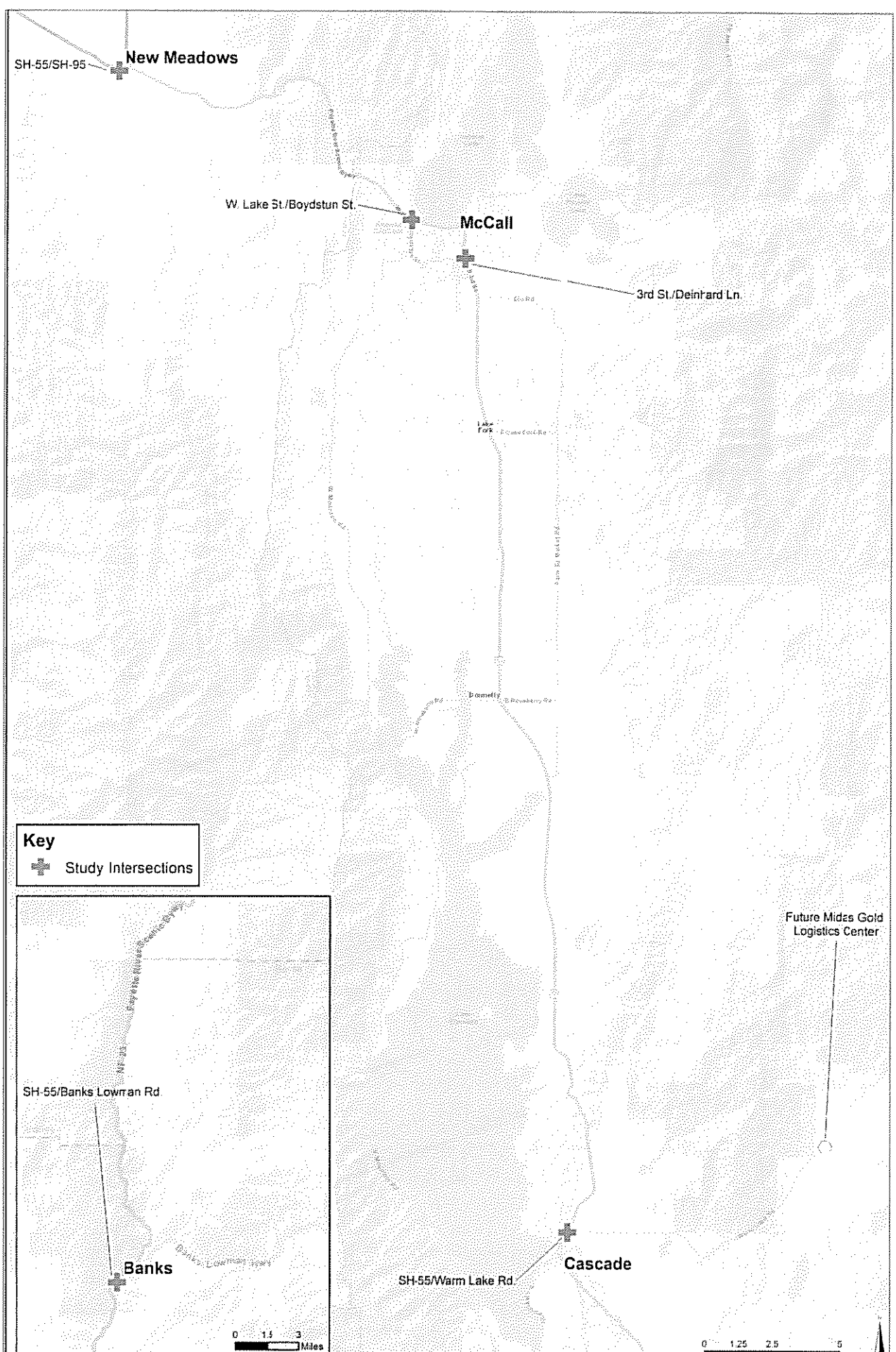




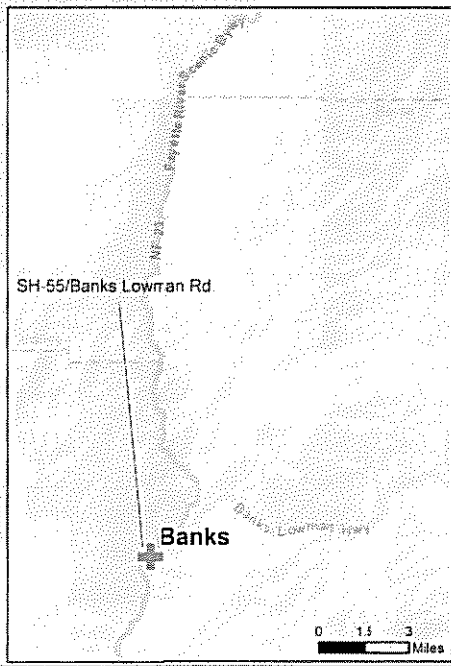
A

Figures





**Key**  
 + Study Intersections



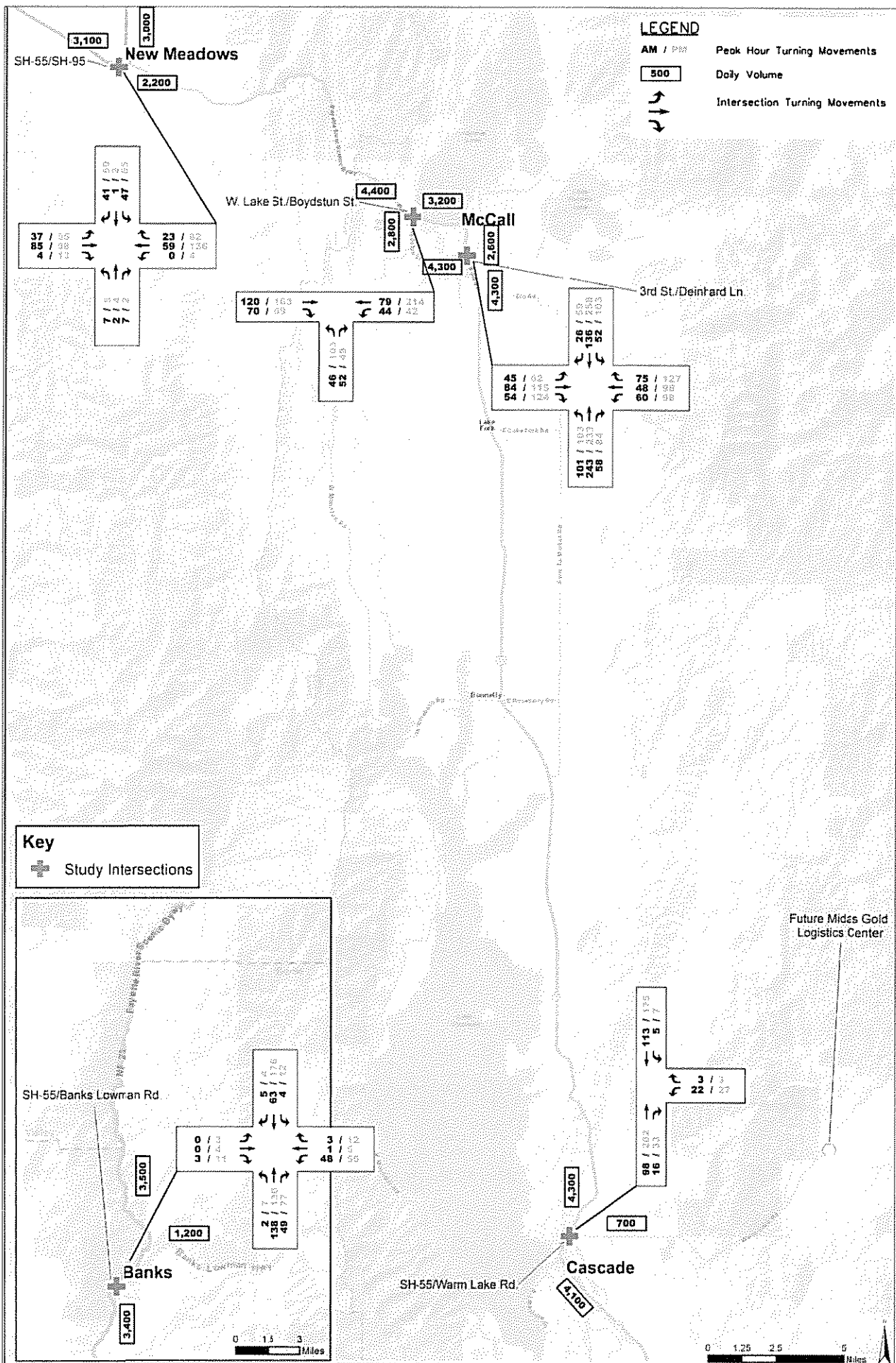
Future Midas Gold Logistics Center

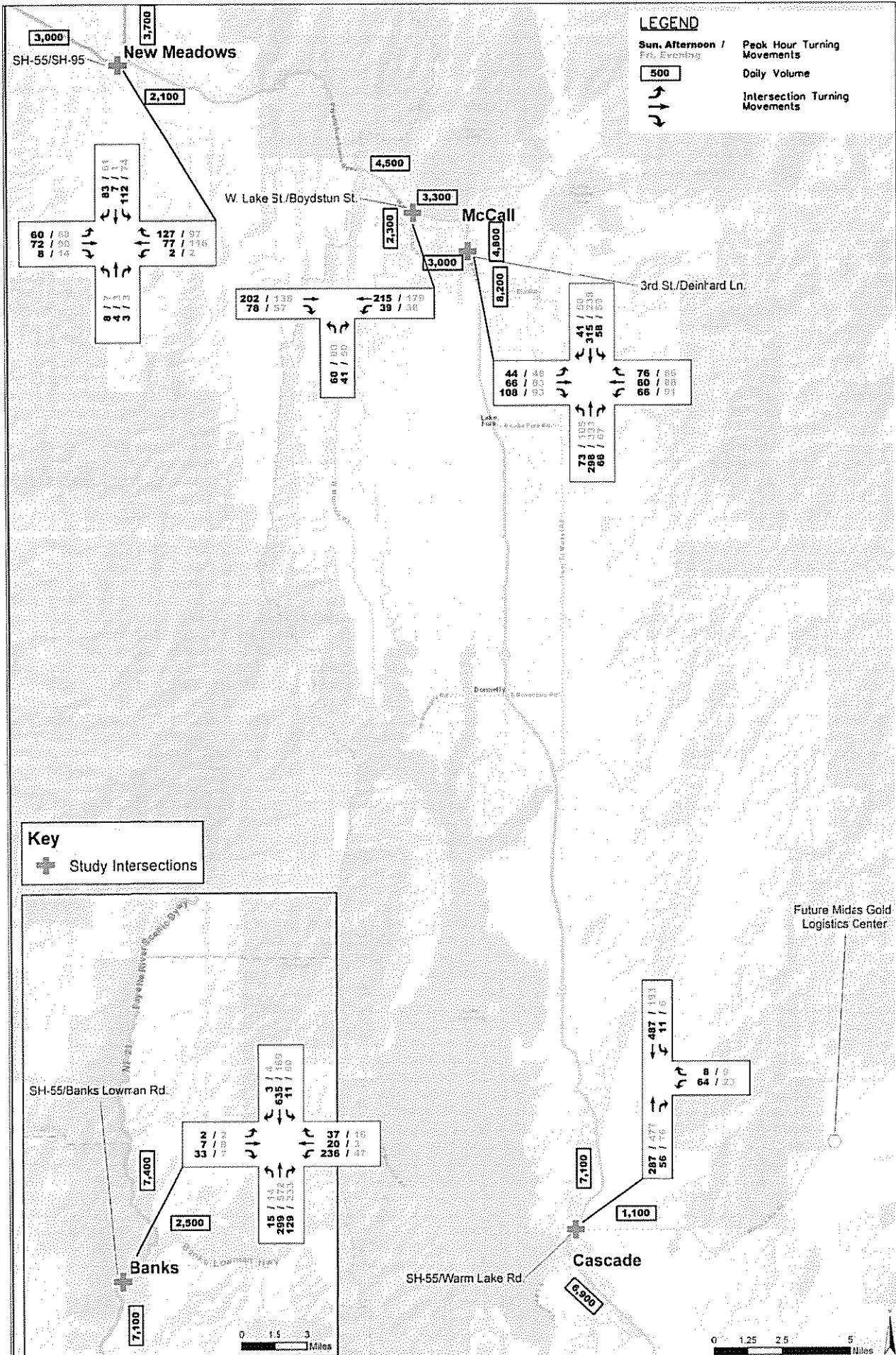


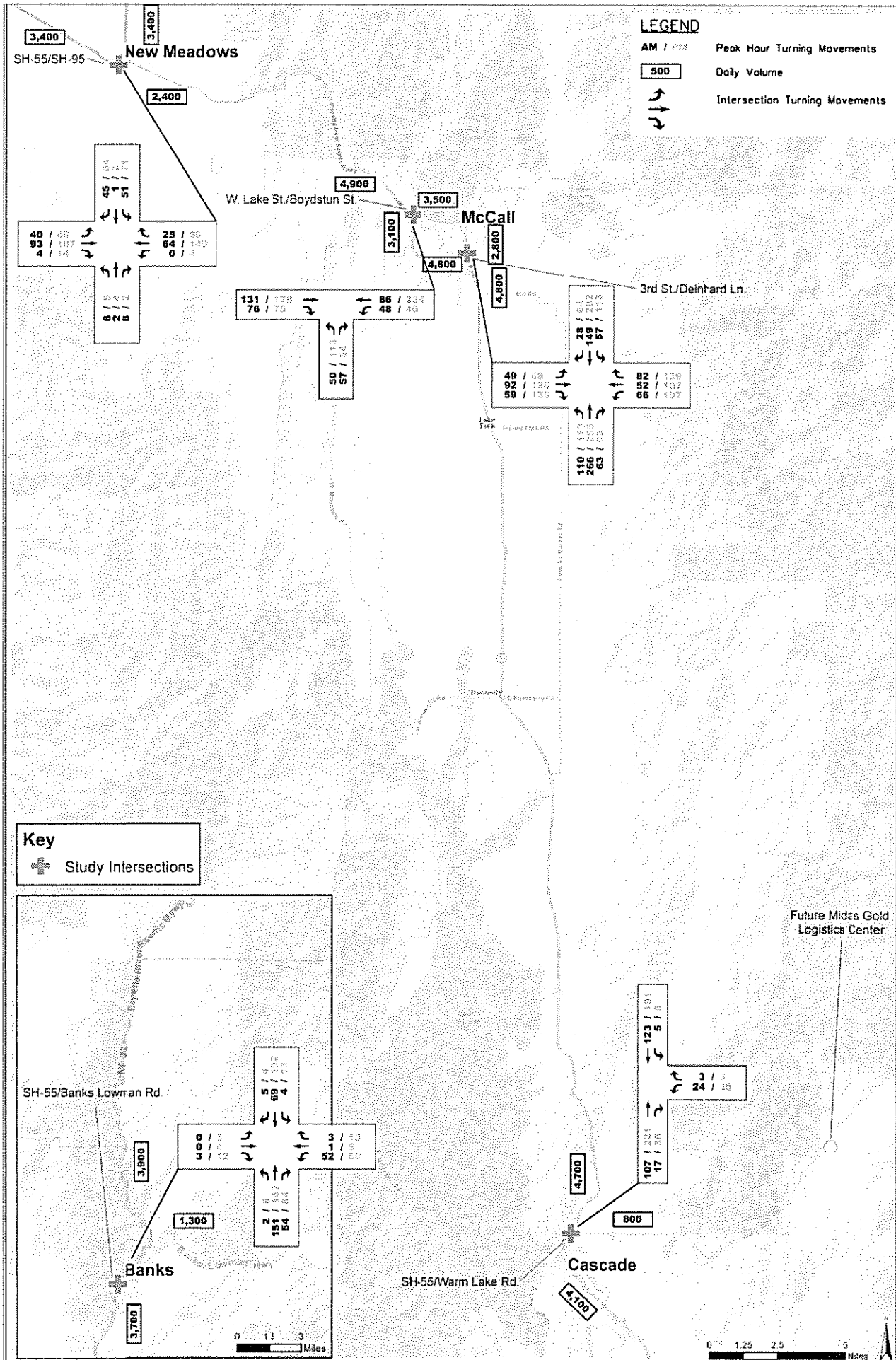
MIDAS GOLD TRANSPORTATION IMPACT STUDY  
 VICINITY MAP

FIGURE 1

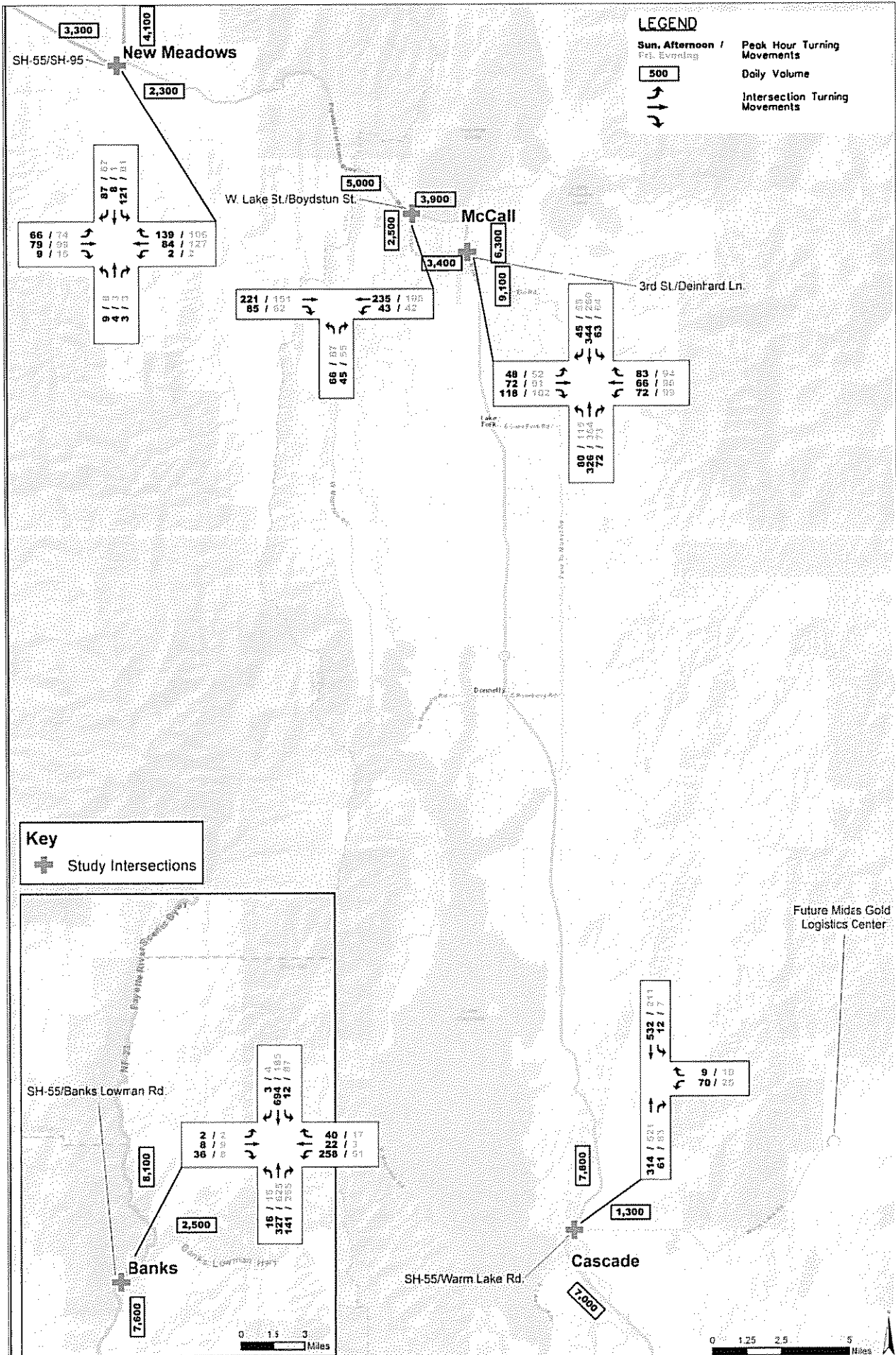








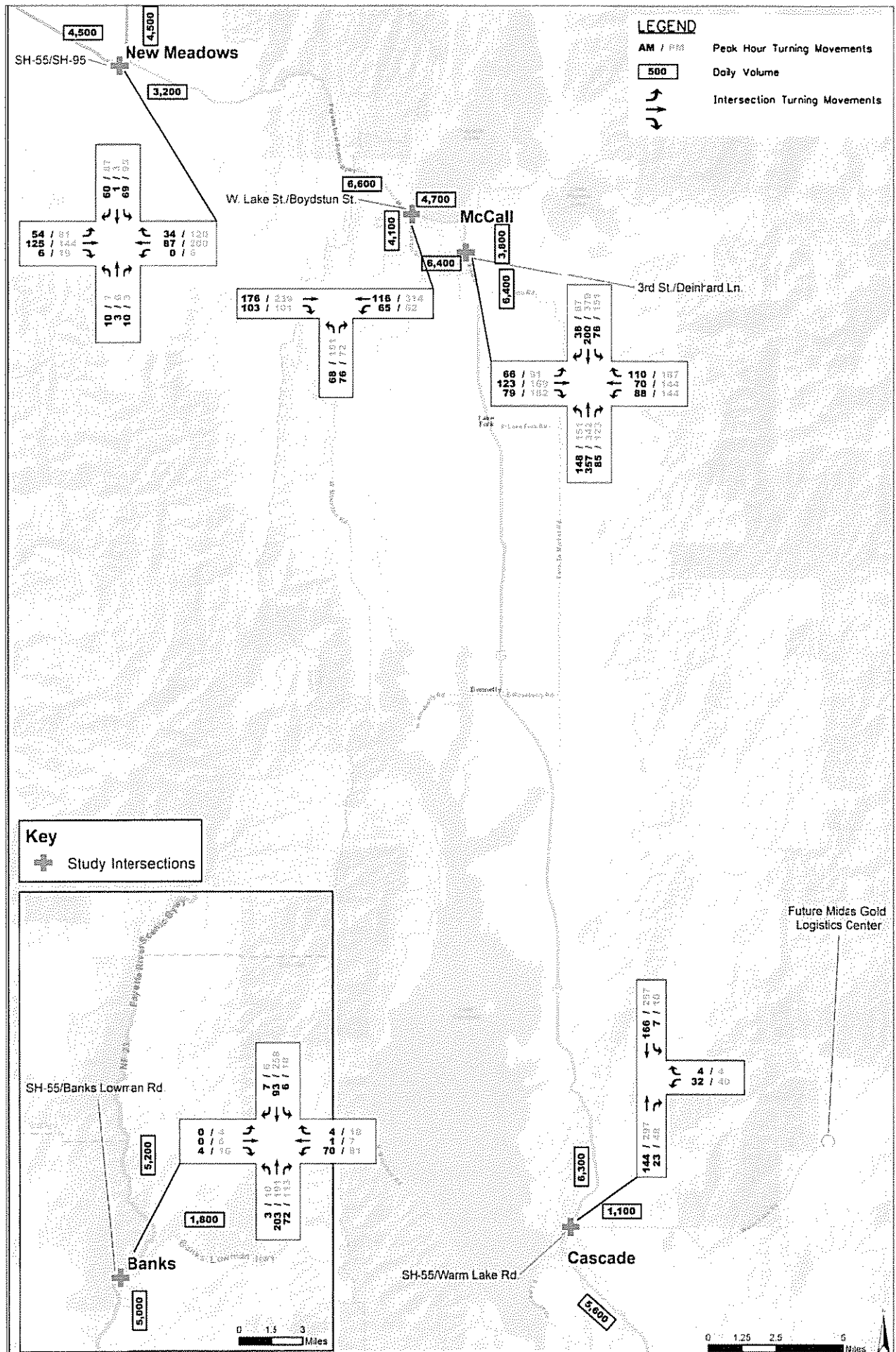




MIDAS GOLD TRANSPORTATION IMPACT STUDY  
 BACKGROUND WEEKEND (2020) TRAFFIC VOLUMES

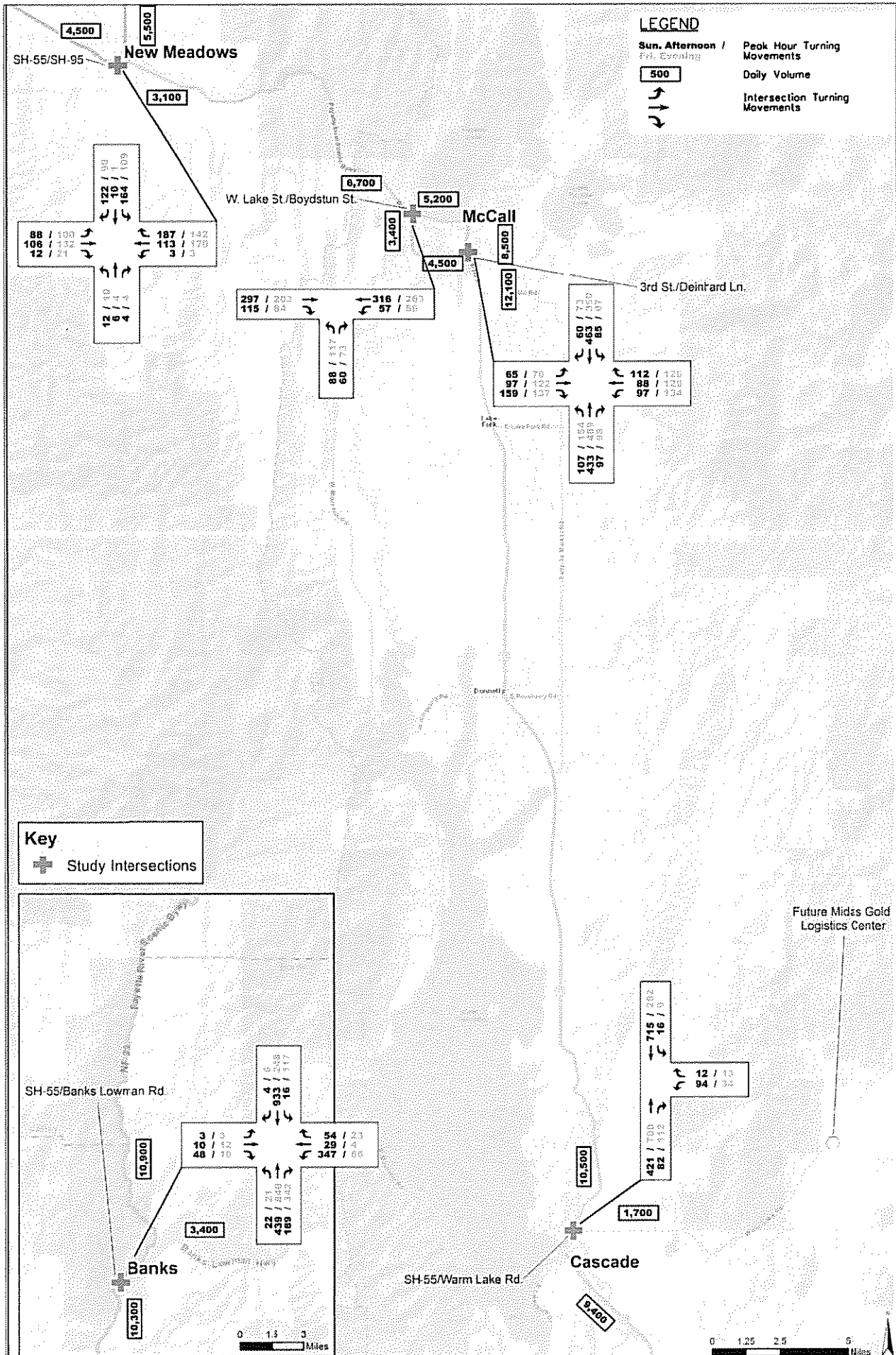
FIGURE 6

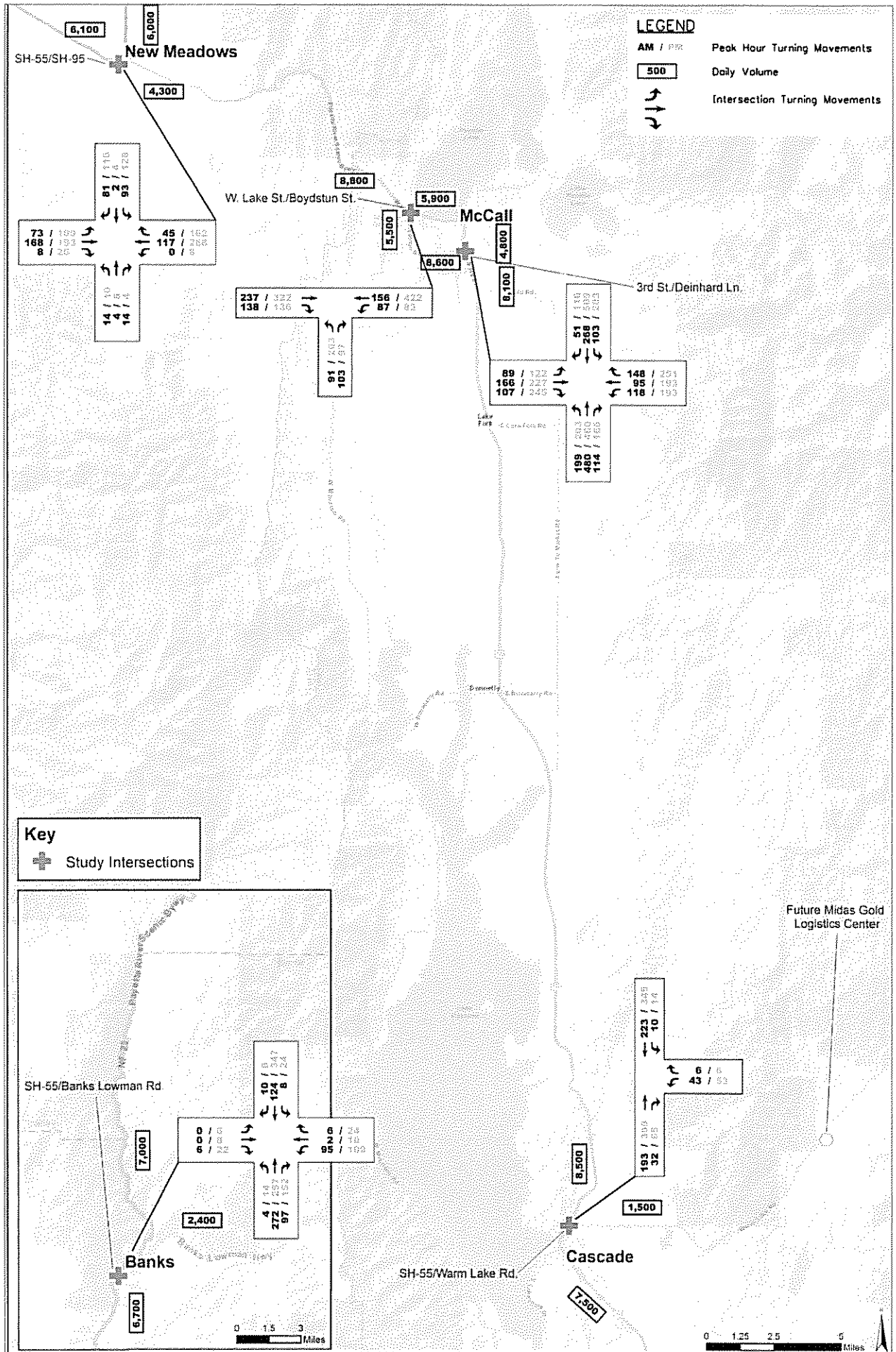




MIDAS GOLD TRANSPORTATION IMPACT STUDY  
BACKGROUND WEEKDAY (2030) TRAFFIC VOLUMES

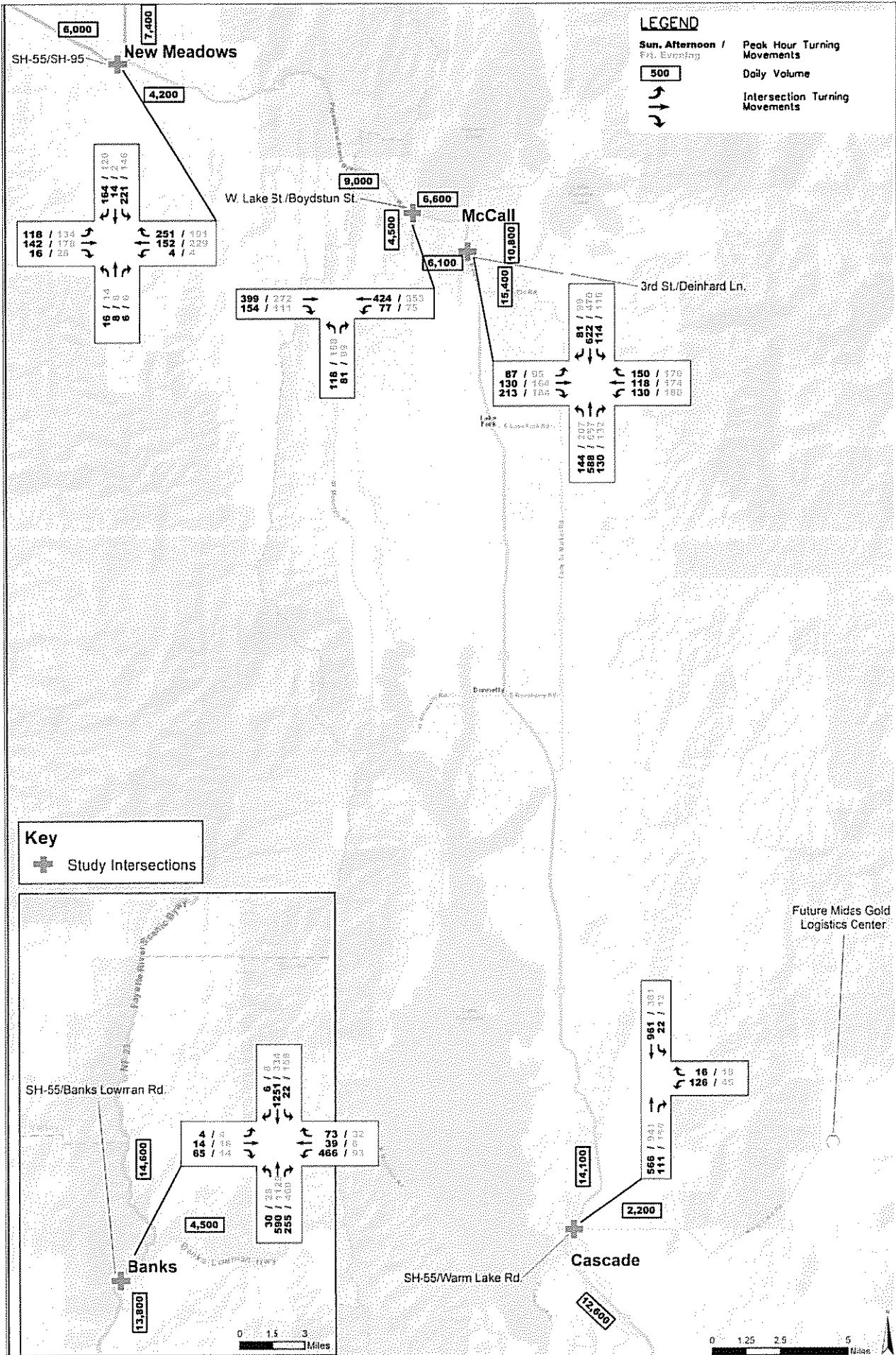
FIGURE 7





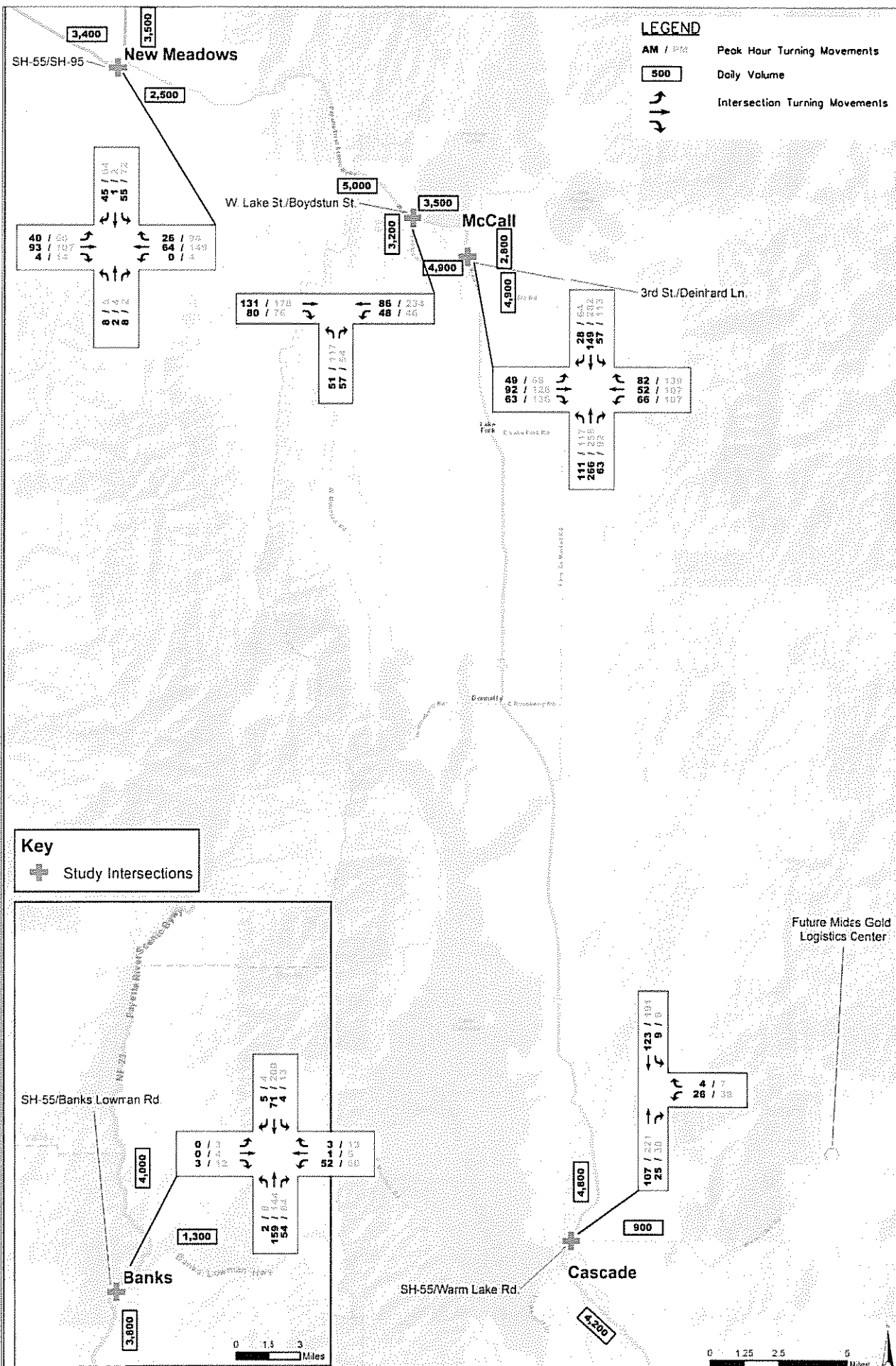
MIDAS GOLD TRANSPORTATION IMPACT STUDY  
BACKGROUND WEEKDAY (2040) TRAFFIC VOLUMES

FIGURE 9



MIDAS GOLD TRANSPORTATION IMPACT STUDY  
BACKGROUND WEEKEND (2040) TRAFFIC VOLUMES

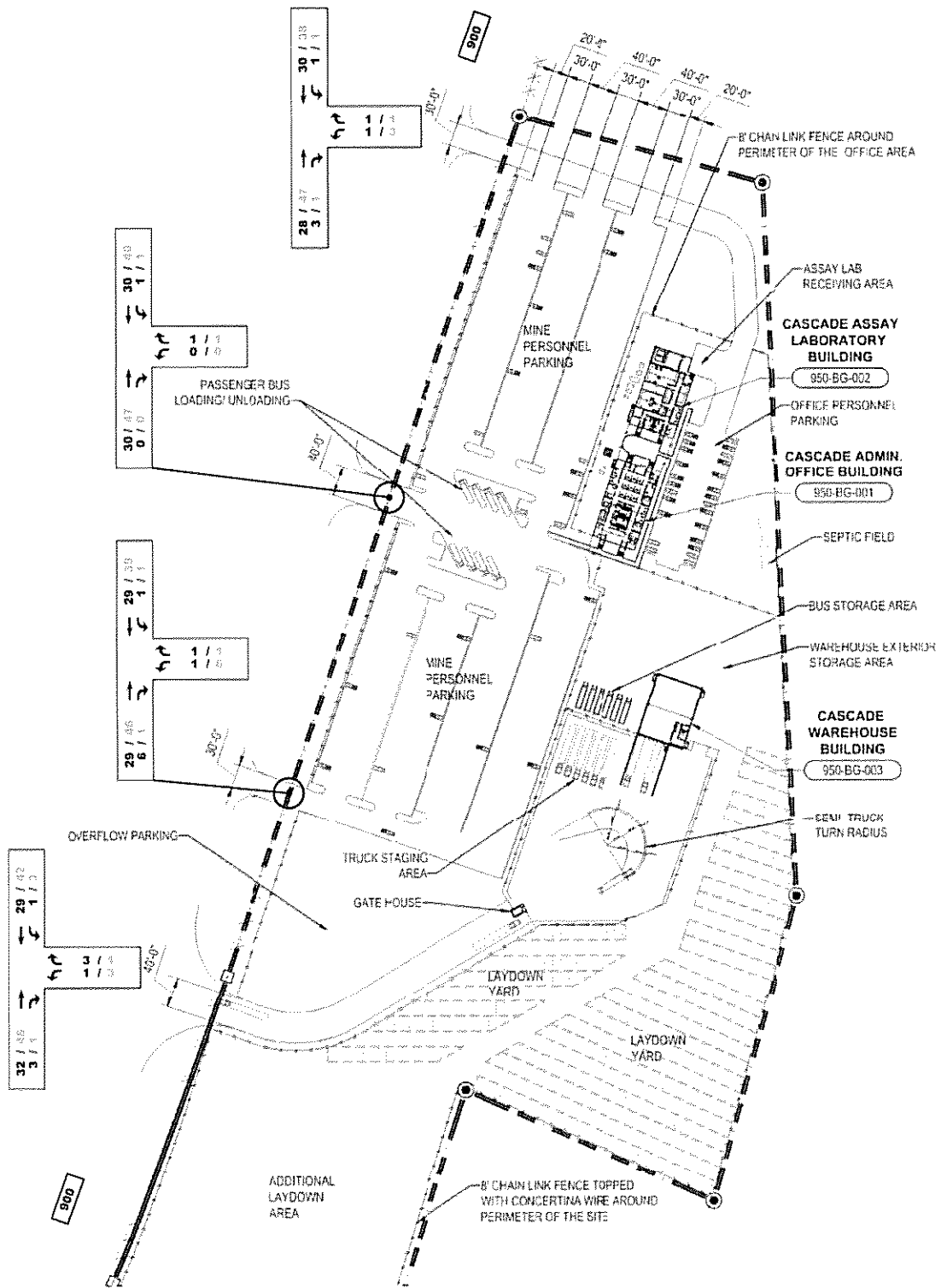
FIGURE 10





**LEGEND**

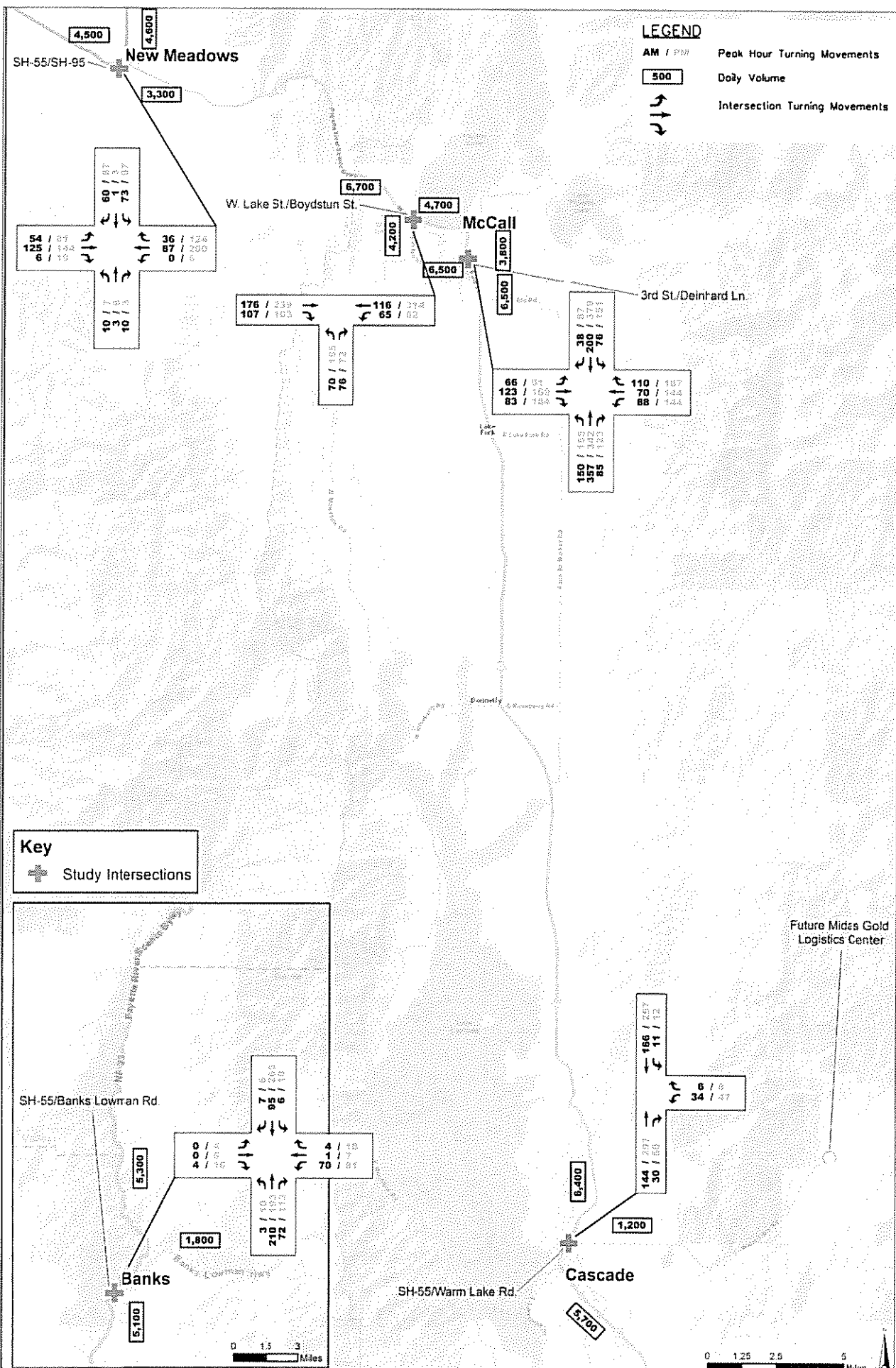
- AM / PM Peak Hour Turning Movements
- 500 Daily Volume
- Intersection Turning Movements



**CASCADe TRANSIT FACILITY PARTIAL SITE PLAN**

SCALE: 1" = 100'



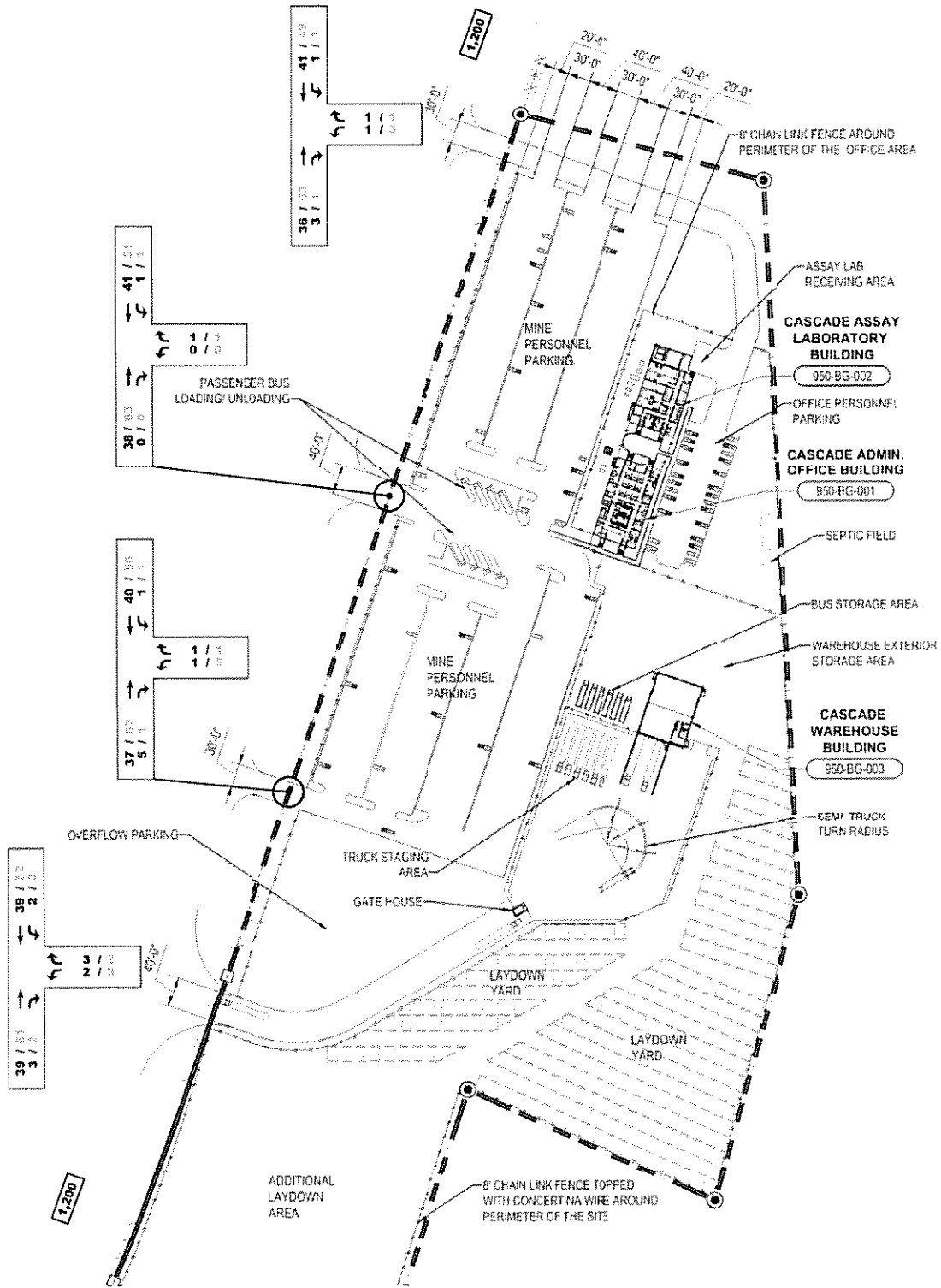






**LEGEND**

- AM / PM Peak Hour Turning Movements
- 500 Daily Volume
- Intersection Turning Movements

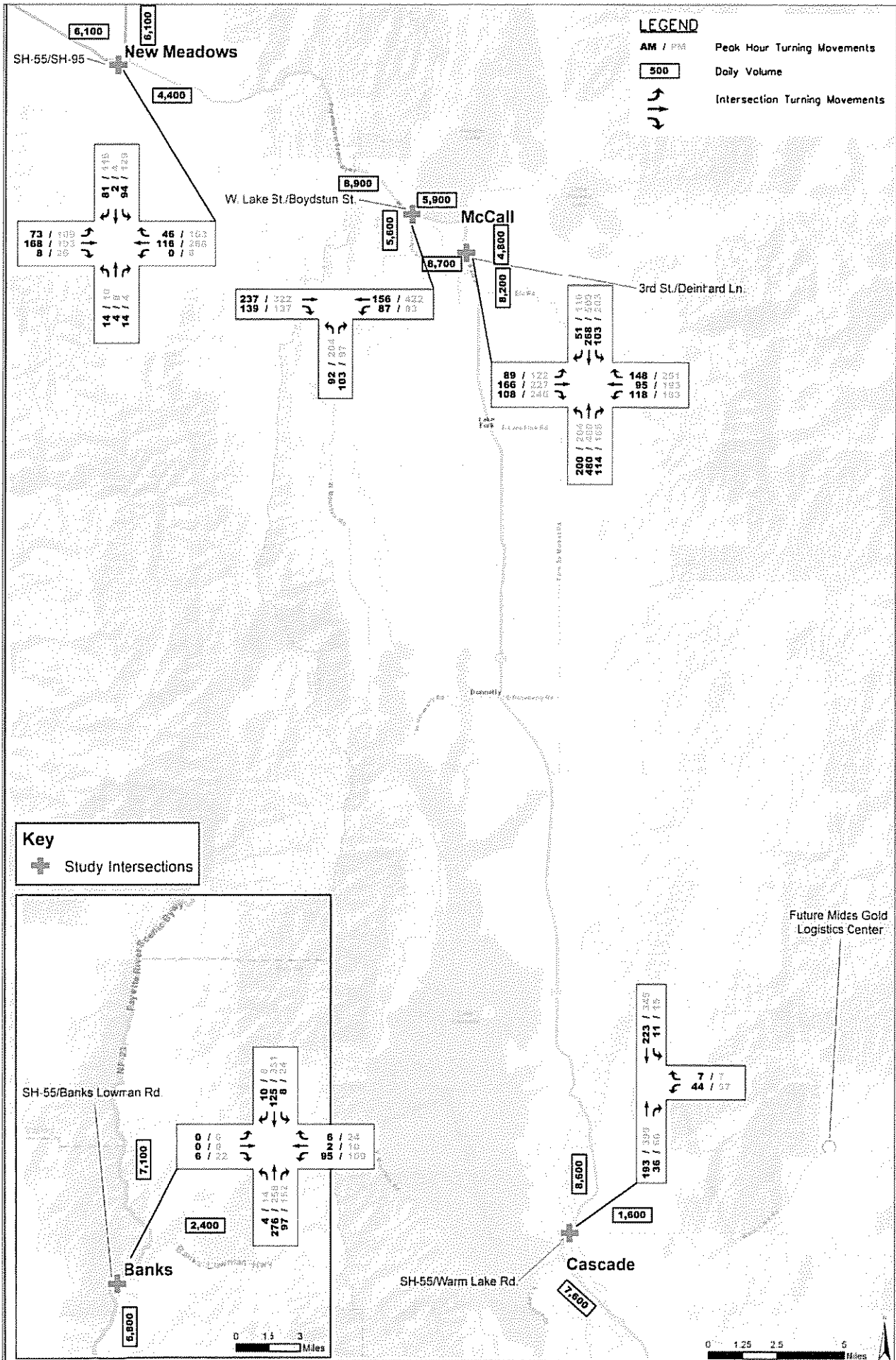


**CASCADE TRANSIT FACILITY PARTIAL SITE PLAN**

SCALE: 1"=100'

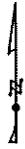






MIDAS GOLD TRANSPORTATION IMPACT STUDY  
 BUILDOUT WEEKDAY (2040) TRAFFIC VOLUMES

FIGURE 15



**LEGEND**

AM / PM

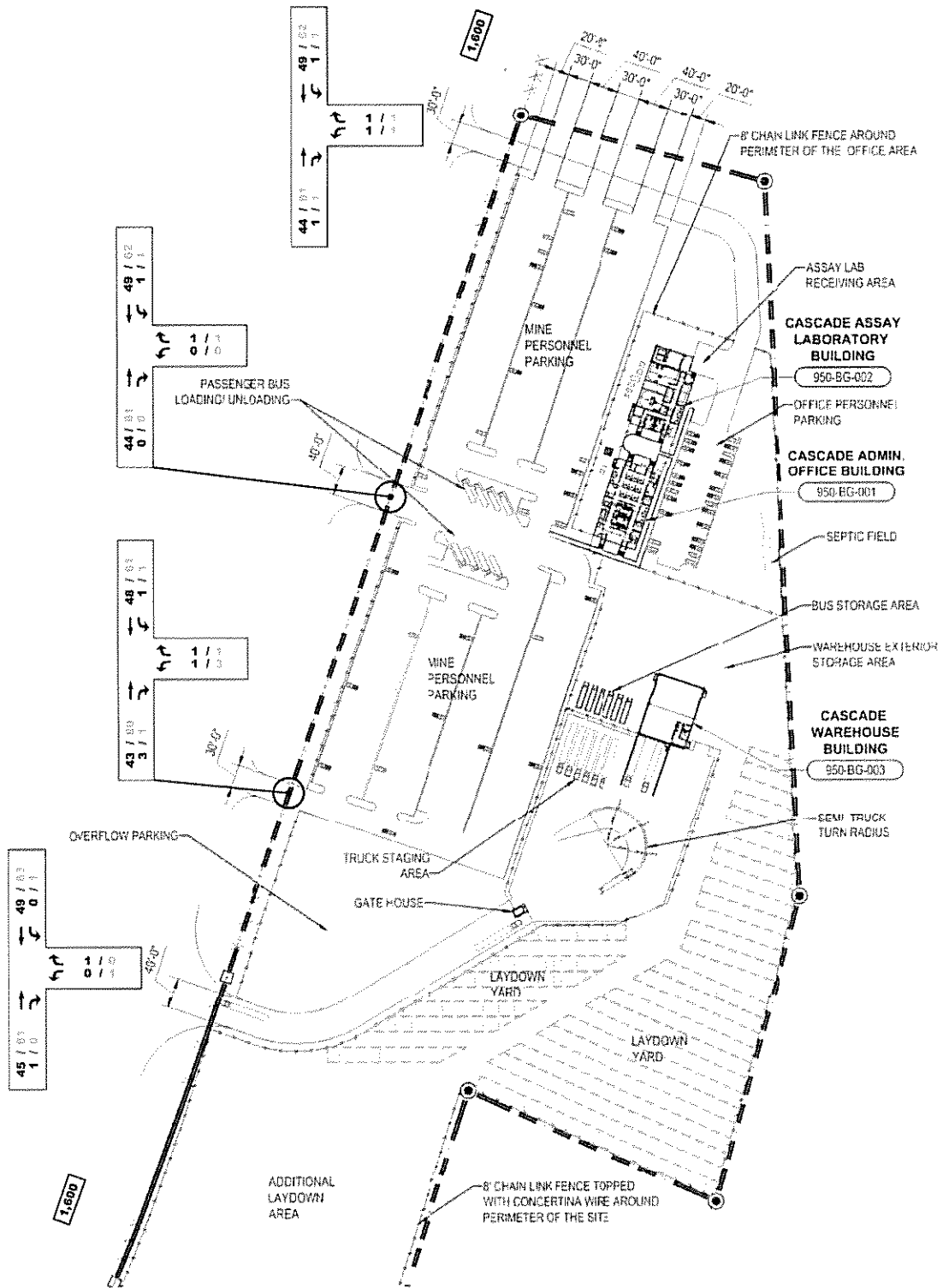
Peak Hour Turning Movements

500

Daily Volume



Intersection Turning Movements



**CASCADE TRANSIT FACILITY PARTIAL SITE PLAN**

SCALE: 1"=100'





# B

Meeting Notes





# Meeting Minutes

**Project:** Midas Gold Idaho, Inc. (MGII) Logistics Center Idaho Transportation Department (ITD) Encroachment Permit

**Subject:** ITD Transportation Impact Study (TIS) Discussion and Requirements

**Date:** Monday, April 17, 2017

**Location:** ITD District 3 Region Large Conference Room

<b>Attendees:</b> Shona Tonkin, ITD District 3 Permits Coordinator	Ken Couch, ITD District 3 Development Services Coordinator
Mark Wasdahl, ITD District 3 Planning	Rocky Chase, Midas Gold VP Environment & Permitting
Christine Whittaker, HDR Project Manager	Cameron Waite, HDR Traffic Engineer

### *Topic*

### *Action Items*

- |   |   |  |
|---|---|--|
| 1 | Participants met to follow up on meeting July 2106 to discuss the MGII logistics center project that will support the Stibnite Mine and ITD's requirements for their traffic impacts to SH-55. MGII has procured a parcel of land for the logistics center on Warm Lake Road in Scott Valley. Employees, materials, and deliveries will use the SH-55/Warm Lake Road intersection to access the logistics center and then the Stibnite Mine. The materials obtained from the mine (gold and antimony) will be shipped via this intersection to port or rail facilities for delivery to customers. MGII has a core log facility in Cascade and office near Donnelly. Most likely these will be consolidated to the logistics center. They may keep some administration responsibilities in rented office space in Cascade.   | MGII will provide HDR the detailed plan for construction and operations at the logistic center and mine for analysis in the required TIS, including daily vehicle trips in and out of the site as well as origins and destinations.  |
| 2 | ITD requires a TIS to determine the improvements needed to accommodate the logistics center and mine traffic and maintain the necessary level of service (LOS) at the SH-55 intersections with Warm Lake Road, Deinhard Lane, Boydston Street, US-95, and the Banks-Lowman Highway. Deinhard Lane and Boydston Street make up the bypass for heavy trucks around the City of McCall so they do not have to travel through downtown. ITD would like HDR to analyze normal weekday traffic conditions as well as Friday evening and Sunday evening conditions (highest traffic volumes). ITD's automatic traffic recorders (ATR) are available for historical data. Parties agreed to wait until June to gather the counts so more recreation traffic is captured. HDR will look at historical traffic volumes on Memorial Day, the Fourth of July, and Labor Day, and identify how much higher those volumes are than typical summer days. | HDR has L2 Data Collection under contract to obtain current traffic counts at the intersections for the time periods identified in June. HDR reviewed the ITD ATR on SH-55, 182, 183, 184 (near Banks-Lowman highway), 43 (Donnelly), 243 (Paddy Flat), and 244 (Packer John). Peak hour son Friday evenings in June, July, and August the last few years was consistently from 5 to 7 pm and on Sunday from 12 to 2 pm. |



	<b>Topic</b>	<b>Action Items</b>
3	HDR contacted Valley County and the cities of McCall and Cascade to see if they have additional intersections or roadways they want to include in the TIS. They did not, but McCall is very interested in swapping the truck route on Deinhard and Boydston with ITD so that SH-55 follows the truck route and the downtown streets would be city streets. ITD will require the City of McCall to update the truck route to ITD design standards before ITD can assume responsibility. McCall's concerns is accommodating 48-foot and 53-foot trucks that struggle to make the 90 degree turn in town.	HDR will coordinate with these entities and convey to McCall that in order to exchange roadways, McCall will have to update the road to current ITD standards before discussions about swapping can be held.
4	Mark is leading a SH-55 corridor study. HDR will coordinate identified improvement needs in the canyon on SH-55 with him. There are recently completed projects and projects that will be completed this summer that will help with some areas. Projects include Goose Creek upgrades, Brundage Road improvements, a rock fall mitigation project south of the Rainbow Bridge, and passing lanes south of Smith's Ferry. There are also some large salvage contracts ITD is currently reviewing to gather lumber from the river.	ITD identified that the Goose Creek curve upgrades and improvements are complete and the left turn lane at the intersection will be completed this year. ITD will provide a list of recent improvements on SH-55 and plans as requested by HDR for reference during the TIS.
5	Discussing the schedule, with counts completed by mid-June, Cameron committed to submitting a draft TIS to MGII by mid-July. After their review and edits, Cameron will update and MGII will submit the draft TIS to ITD. Shona explained they are currently 6 to 8 weeks out on returning reviewed documents. If all goes well, MGII should get an ITD-2109 permit from ITD in late fall.	HDR will work to expedite the draft TIS to get it to ITD as soon as possible. Cameron will send an example ITD-2109 form for Rocky to review.
6	Shona explained the TIS should accompany the signed ITD-2109 permit along with the \$50 permit fee. The permit can be submitted at any time, and once approved, is good for 5 years. The permit can be extended as needed to meet schedule changes for logistics center implementation.	HDR will prepare the TIS and permit and coordinate the signature and fee with ITD. HDR will coordinate with ITD and MGII, as needed, in the future for extensions.



## Telephone Record

Date: Tuesday, July 12, 2016

Project: Midas Gold Logistics Center ITD Encroachment Permit

Project No: HDR 10027847

Call to: Jeff McFadden, Valley County Road Superintendent

Phone No: 208-382-7195

Call from: Christine Whittaker & Cameron Waite, HDR

Phone No: 208-387-7004

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Subject: Transportation Impact Study Requirements

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### **Discussion, Agreement, and/or Action:**

Christine and Cameron called Jeff McFadden to discuss the Midas Gold, Inc. (MGI) logistics center project and the Idaho Transportation Department's (ITD) requirements for an encroachment permit and transportation impact study (TIS). HDR explained that ITD wants MGI to analyze the State Highway 55 (SH-55) intersections with Warm Lake Road, Deinhard Lane, and Boydston Street, and SH-55 in the Payette River canyon to the south. Jeff agreed with ITD's approach and stated the SH-55/Warm Lake Road intersection is his main concern. Valley County is currently starting a road improvement project on Warm Lake Road; they will complete the Landmark intersection next week followed by the segment east of SH-55. Jeff indicated HDR can contact Cody Janson at Parametrix to obtain the construction schedule.

Christine explained the project timeline and that HDR will be doing some noise studies soon, both for baseline and during the Warm Lake Road construction, in order to gain an understanding of potential noise levels from MGI truck traffic.



# Meeting Minutes

**Project:** Midas Gold, Inc. Logistics Center ITD Encroachment Permit

**Subject:** ITD Transportation Impact Study Discussion and Requirements

**Date:** Monday, July 11, 2016

**Location:** ITD District 3 Large Conference Room

**Attendees:** Shona Tonkin, ITD District 3 Permits Coordinator                      Ken Couch, ITD District 3 Development Services Coordinator

Rocky Chase, Midas Gold VP Environment & Permitting                      Christine Whittaker, HDR Project Manager

Cameron Waite, HDR Traffic Engineer

## Topics

- 1 HDR, Midas Gold, Inc. (MGI), and Idaho Transportation Department (ITD), District 3, met to follow up on our first meeting in early May to discuss 1) MGI logistics center project that will support the Stibnite Mine and 2) ITD's requirements for project-related traffic impacts to State Highway 55 (SH-55). MGI is close to procuring a parcel of land for the logistics center on Warm Lake Road about 4-miles east of SH-55. Employees, materials, and deliveries will use the SH-55/ Warm Lake Road intersection to access the logistics center and then the Stibnite Gold Mine. MGI will ship the materials obtained from the mine (gold and antimony) via this intersection to port or rail facilities for delivery to customers.
- 2 ITD requires a TIS to determine if improvements are needed to 1) accommodate the logistics center and mine traffic, and 2) maintain the necessary level of service (LOS) at the SH-55 intersections with Warm Lake Road, Deinhard Lane, and Boydston Street. Deinhard Lane and Boydston Street are part of the bypass for heavy trucks around the City of McCall to avoid truck traffic through downtown. ITD would like HDR to analyze normal weekday traffic conditions as well as Friday evening and Sunday evening conditions (highest traffic volumes).
- 3 Shona requested that HDR look at potential improvements, such as passing lanes, in the Payette River canyon on SH-55. ITD recently completed projects and is planning more that will help improve some areas, including passing lanes south of Smiths' Ferry and the State Highway 95 (SH-95) Goose Creek upgrades last year.

## Action Items

MGI will provide to HDR the detailed plan for construction and operations at the logistic center and mine for analysis in the required transportation impact study (TIS), including daily vehicle trips in and out of the site and origins and destinations.

HDR will contact Valley County and the City of McCall to see if they have additional intersections or roadways they want to include in the TIS. HDR will obtain current traffic counts at the three intersections for the time periods identified.

Shona will provide to HDR a list of recent improvements on SH-55 and future plans for reference during the TIS.





### Topics

- 4 Rocky explained that the likely schedule for the project includes National Environmental Policy Act (NEPA) and permit documents being completed and approved in 3 to 5 years, a 3-year construction period, and operations for 12 to 15 years. All parties agreed to analyze the design year 2040 as final horizon or closing year, as the Community Planning Association (COMPASS) has travel demand forecasts available for that year.
- 5 Shona explained the TIS should accompany the signed permit along with the \$50 permit fee. MGI can submit the permit at any time; once approved, it is valid for 5 years. The permit can be extended as needed to meet schedule changes for logistics center implementation.
- 6 Shona explained that MGI/HDR will need cooperation and authority from Valley County to complete the intersection improvements at SH-55/ Warm Lake Road, and cooperation and authority from the City of McCall to complete the intersection improvements at SH-55/ Deinhard Lane and Boydston Street. MGI/HDR will need to demonstrate that the proposed improvements will accommodate the necessary design vehicle (WB-67).

### Action Items

HDR will analyze the following assumed horizon years:

- Construction peak (2020)
- Operations peak (2030)
- Closing year (2040)

HDR will prepare the TIS and permit and coordinate the signature and fee with ITD. HDR will coordinate with ITD and MGI as needed in the future for extensions.

HDR will contact Valley County and the City of McCall to explain the project, the TIS, and get their input for analysis and approval. HDR will submit the TIS to each jurisdiction, along with ITD, for review and approval.



# Meeting Minutes

Project: Midas Gold, Inc. Stibnite G old Project  
Subject: Access onto Sate Highway System (HWY 55)  
Date: Friday, April 29, 2016  
Location: Idaho Transportation Department, District 3  
Attendees: Rocky Chase, Midas Gold, Inc. Erika Bowman, ITD D3  
Christine Whittaker, HDR Ken Couch, ITD D3  
Cameron Waite, HDR

## ***Topic: Midas Gold, Inc., Stibnite Gold Project – Access to State Highway 55***

- 1 Rocky provided an overview of the project, specifically the logistics center that will likely be located between Donnelly and Cascade, with traffic traveling HWY 55 and accessing Warm Lake Road coming and going to the project site. The logistics center will accommodate parking for 250+ employee vehicles; employees will be bused to the project site. Numerous large trucks will also come and go from the logistics center on a daily basis. The exact location of the logistics center has yet to be determined. Midas is looking at various options since the property they intended to purchase became unavailable.
- 2 Idaho Administrative Procedures Act rules promulgated in 2012 (IDAPA 39.03.42) spell out the rules governing highway rights-of-way and encroachments. The area of interest is classified as a regional section of highway.  
The key topics in the IDAPA rule pertaining to the project include the following:
  - Section 300 General Regulations (page 11)
  - Section 400 for location and design standards for approaches to state highways (page 12)
    - 03 Signal and Approach Spacing
    - Table 1 for approach and signalized intersection spacing (page 13)
      - SH-55 is a regional route. The three areas Ken described are (rural, transitional, urban), and then the spacing requirements in the table
    - Figure 1 shows where the spacings in table 1 apply (page 14)
    - 400.03.f & g discuss the traffic impact study requirements
- 3 Midas would have to pay for any required Highway 55 upgrades required to accommodate access onto HWY 55.
- 4 A traffic impact study would be required if the traffic hits 1,000 trips per day or exceeds 100 vehicles per peak hour.
- 5 After identifying a new location for the logistics center, Midas will set up another meeting with ITD and Valley County to discuss the location, and Midas will prepare a traffic impact study.

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Traffic Count Data



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.14  
 Site Code : 0000000  
 Start Date : 6/14/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

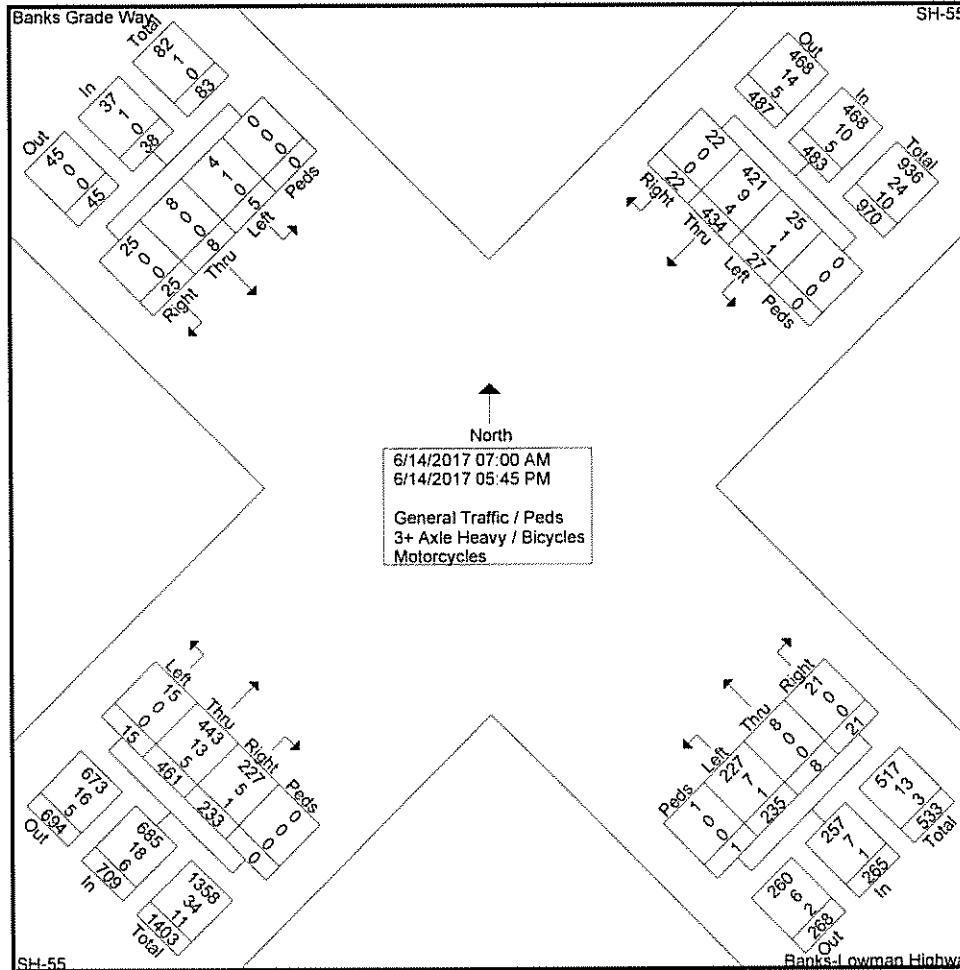
Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	0	6	0	0	6	0	0	11	0	11	4	15	0	0	19	1	0	0	0	1	37
07:15 AM	0	13	0	0	13	0	1	15	0	16	4	14	0	0	18	0	0	0	0	0	47
07:30 AM	1	15	0	0	16	1	0	12	0	13	7	15	2	0	24	0	0	0	0	0	53
07:45 AM	1	13	1	0	15	1	1	14	0	16	17	20	1	0	38	3	0	0	0	3	72
<b>Total</b>	<b>2</b>	<b>47</b>	<b>1</b>	<b>0</b>	<b>50</b>	<b>2</b>	<b>2</b>	<b>52</b>	<b>0</b>	<b>56</b>	<b>32</b>	<b>64</b>	<b>3</b>	<b>0</b>	<b>99</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>209</b>
08:00 AM	3	20	2	0	25	1	0	13	0	14	20	36	2	0	58	1	0	0	0	1	98
08:15 AM	0	10	0	0	10	1	0	14	1	16	8	37	0	0	45	0	0	0	0	0	71
08:30 AM	1	16	1	0	18	1	1	11	0	13	12	31	0	0	43	1	0	0	0	1	75
08:45 AM	1	17	1	0	19	0	0	10	0	10	9	34	0	0	43	1	0	0	0	1	73
<b>Total</b>	<b>5</b>	<b>63</b>	<b>4</b>	<b>0</b>	<b>72</b>	<b>3</b>	<b>1</b>	<b>48</b>	<b>1</b>	<b>53</b>	<b>49</b>	<b>138</b>	<b>2</b>	<b>0</b>	<b>189</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>317</b>
-----																					
04:00 PM	1	47	3	0	51	1	0	26	0	27	22	39	0	0	61	1	1	0	0	2	141
04:15 PM	2	31	1	0	34	1	0	22	0	23	15	28	2	0	45	3	0	1	0	4	106
04:30 PM	3	40	3	0	46	1	0	17	0	18	10	29	1	0	40	1	3	1	0	5	109
04:45 PM	2	45	3	0	50	4	1	16	0	21	16	35	1	0	52	2	1	0	0	3	126
<b>Total</b>	<b>8</b>	<b>163</b>	<b>10</b>	<b>0</b>	<b>181</b>	<b>7</b>	<b>1</b>	<b>81</b>	<b>0</b>	<b>89</b>	<b>63</b>	<b>131</b>	<b>4</b>	<b>0</b>	<b>198</b>	<b>7</b>	<b>5</b>	<b>2</b>	<b>0</b>	<b>14</b>	<b>482</b>
05:00 PM	0	38	1	0	39	4	1	7	0	12	17	41	2	0	60	2	0	1	0	3	114
05:15 PM	1	40	2	0	43	0	3	16	0	19	17	21	3	0	41	4	2	1	0	7	110
05:30 PM	1	53	6	0	60	4	0	16	0	20	27	33	1	0	61	3	1	1	0	5	146
05:45 PM	5	30	3	0	38	1	0	15	0	16	28	33	0	0	61	2	0	0	0	2	117
<b>Total</b>	<b>7</b>	<b>161</b>	<b>12</b>	<b>0</b>	<b>180</b>	<b>9</b>	<b>4</b>	<b>54</b>	<b>0</b>	<b>67</b>	<b>89</b>	<b>128</b>	<b>6</b>	<b>0</b>	<b>223</b>	<b>11</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>17</b>	<b>487</b>
<b>Grand Total</b>	<b>22</b>	<b>434</b>	<b>27</b>	<b>0</b>	<b>483</b>	<b>21</b>	<b>8</b>	<b>235</b>	<b>1</b>	<b>265</b>	<b>233</b>	<b>461</b>	<b>15</b>	<b>0</b>	<b>709</b>	<b>25</b>	<b>8</b>	<b>5</b>	<b>0</b>	<b>38</b>	<b>1495</b>
<b>Apprch %</b>	<b>4.6</b>	<b>89.9</b>	<b>5.6</b>	<b>0</b>		<b>7.9</b>	<b>3</b>	<b>88.7</b>	<b>0.4</b>		<b>32.9</b>	<b>65</b>	<b>2.1</b>	<b>0</b>		<b>65.8</b>	<b>21.1</b>	<b>13.2</b>	<b>0</b>		
<b>Total %</b>	<b>1.5</b>	<b>29</b>	<b>1.8</b>	<b>0</b>	<b>32.3</b>	<b>1.4</b>	<b>0.5</b>	<b>15.7</b>	<b>0.1</b>	<b>17.7</b>	<b>15.6</b>	<b>30.8</b>	<b>1</b>	<b>0</b>	<b>47.4</b>	<b>1.7</b>	<b>0.5</b>	<b>0.3</b>	<b>0</b>	<b>2.5</b>	
<b>General Traffic / Peds</b>	<b>22</b>	<b>421</b>	<b>25</b>	<b>0</b>	<b>468</b>	<b>21</b>	<b>8</b>	<b>227</b>	<b>1</b>	<b>257</b>	<b>227</b>	<b>443</b>	<b>15</b>	<b>0</b>	<b>685</b>	<b>25</b>	<b>8</b>	<b>4</b>	<b>0</b>	<b>37</b>	<b>1447</b>
<b>% General Traffic / Peds</b>	<b>100</b>	<b>97</b>	<b>92.6</b>	<b>0</b>	<b>96.9</b>	<b>100</b>	<b>100</b>	<b>96.6</b>	<b>100</b>	<b>97</b>	<b>97.4</b>	<b>96.1</b>	<b>100</b>	<b>0</b>	<b>96.6</b>	<b>100</b>	<b>100</b>	<b>80</b>	<b>0</b>	<b>97.4</b>	<b>96.8</b>
<b>3+ Axle Heavy / Bicycles</b>	<b>0</b>	<b>9</b>	<b>1</b>	<b>0</b>	<b>10</b>	<b>0</b>	<b>0</b>	<b>7</b>	<b>0</b>	<b>7</b>	<b>5</b>	<b>13</b>	<b>0</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>36</b>
<b>% 3+ Axle Heavy / Bicycles</b>	<b>0</b>	<b>2.1</b>	<b>3.7</b>	<b>0</b>	<b>2.1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>2.6</b>	<b>2.1</b>	<b>2.8</b>	<b>0</b>	<b>0</b>	<b>2.5</b>	<b>0</b>	<b>0</b>	<b>20</b>	<b>0</b>	<b>2.6</b>	<b>2.4</b>
<b>Motorcycles</b>	<b>0</b>	<b>4</b>	<b>1</b>	<b>0</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>0</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>12</b>
<b>% Motorcycles</b>	<b>0</b>	<b>0.9</b>	<b>3.7</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0.4</b>	<b>0</b>	<b>0.4</b>	<b>0.4</b>	<b>1.1</b>	<b>0</b>	<b>0</b>	<b>0.8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0.8</b>

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 2



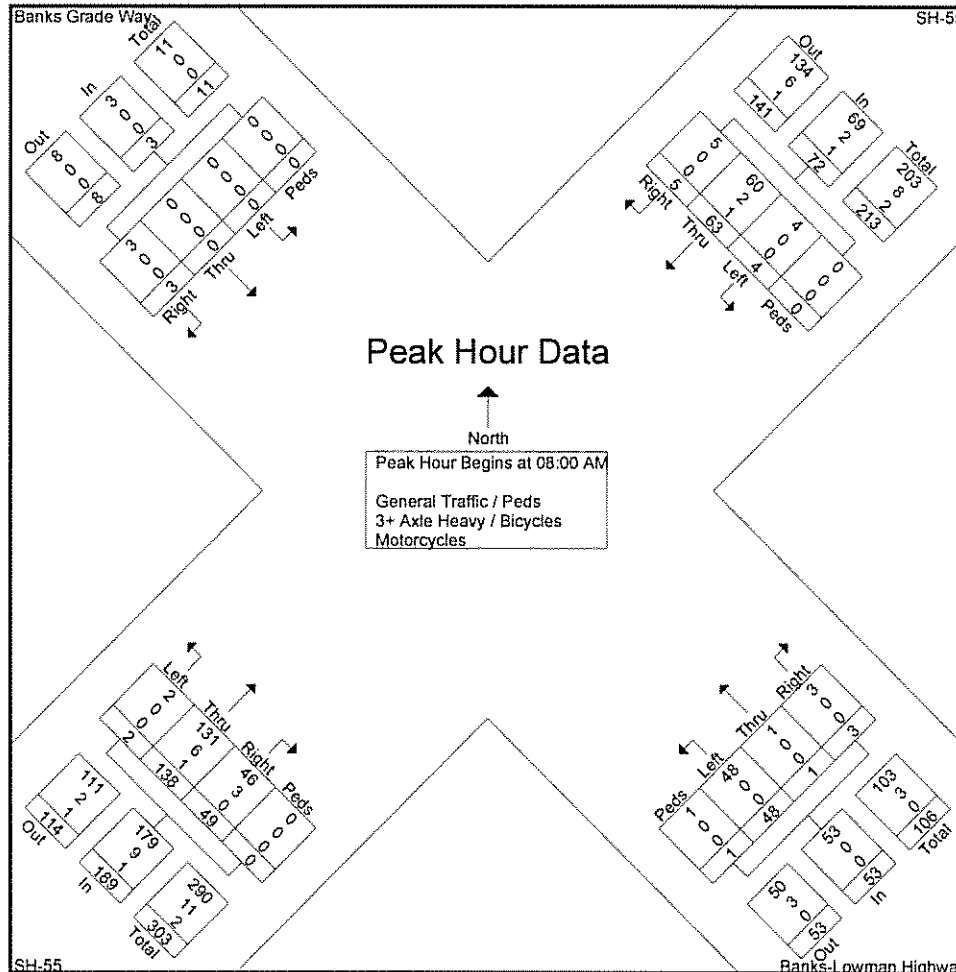
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 3

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 08:00 AM																					
08:00 AM	3	20	2	0	25	1	0	13	0	14	20	36	2	0	58	1	0	0	0	1	98
08:15 AM	0	10	0	0	10	1	0	14	1	16	8	37	0	0	45	0	0	0	0	0	71
08:30 AM	1	16	1	0	18	1	1	11	0	13	12	31	0	0	43	1	0	0	0	1	75
08:45 AM	1	17	1	0	19	0	0	10	0	10	9	34	0	0	43	1	0	0	0	1	73
Total Volume	5	63	4	0	72	3	1	48	1	53	49	138	2	0	189	3	0	0	0	3	317
% App. Total	6.9	87.5	5.6	0		5.7	1.9	90.6	1.9		25.9	73	1.1	0		100	0	0	0		
PHF	.417	.788	.500	.000	.720	.750	.250	.857	.250	.828	.613	.932	.250	.000	.815	.750	.000	.000	.000	.750	.809
General Traffic / Peds	5	60	4	0	69	3	1	48	1	53	46	131	2	0	179	3	0	0	0	3	304
% General Traffic / Peds	100	95.2	100	0	95.8	100	100	100	100	100	93.9	94.9	100	0	94.7	100	0	0	0	100	95.9
3+ Axle Heavy / Bicycles	0	2	0	0	2	0	0	0	0	0	3	6	0	0	9	0	0	0	0	0	11
% 3+ Axle Heavy / Bicycles	0	3.2	0	0	2.8	0	0	0	0	0	6.1	4.3	0	0	4.8	0	0	0	0	0	3.5
Motorcycles	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
% Motorcycles	0	1.6	0	0	1.4	0	0	0	0	0	0	0.7	0	0	0.5	0	0	0	0	0	0.6



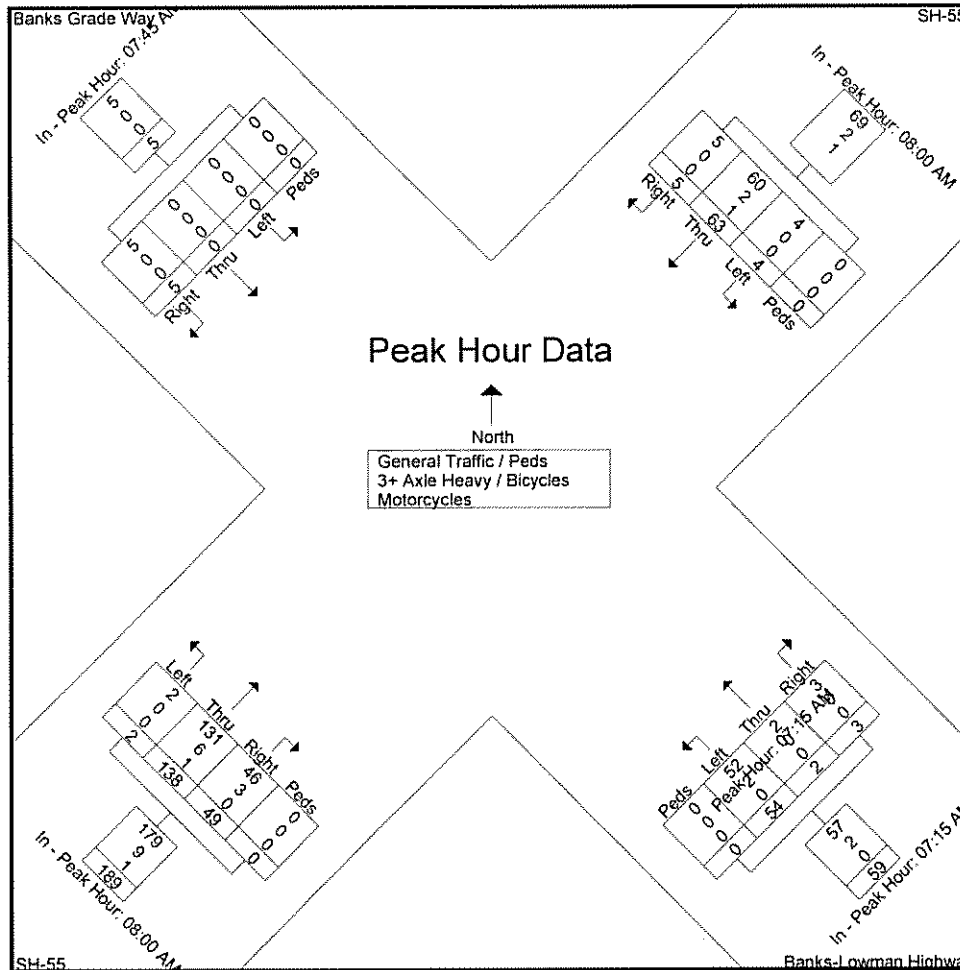
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 4

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour for Each Approach Begins at:																					
	08:00 AM					07:15 AM					08:00 AM					07:45 AM					
+0 mins.	3	20	2	0	25	0	1	15	0	16	20	36	2	0	58	3	0	0	0	3	
+15 mins.	0	10	0	0	10	1	0	12	0	13	8	37	0	0	45	1	0	0	0	1	
+30 mins.	1	16	1	0	18	1	1	14	0	16	12	31	0	0	43	0	0	0	0	0	
+45 mins.	1	17	1	0	19	1	0	13	0	14	9	34	0	0	43	1	0	0	0	1	
Total Volume	5	63	4	0	72	3	2	54	0	59	49	138	2	0	189	5	0	0	0	5	
% App. Total	6.9	87.5	5.6	0		5.1	3.4	91.5	0		25.9	73	1.1	0		100	0	0	0		
PHF	.417	.788	.500	.000	.720	.750	.500	.900	.000	.922	.613	.932	.250	.000	.815	.417	.000	.000	.000	.417	
General Traffic / Peds	5	60	4	0	69	3	2	52	0	57	46	131	2	0	179	5	0	0	0	5	
% General Traffic / Peds	100	95.2	100	0	95.8	100	100	96.3	0	96.6	93.9	94.9	100	0	94.7	100	0	0	0	100	
3+ Axle Heavy / Bicycles	0	2	0	0	2	0	0	2	0	2	3	6	0	0	9	0	0	0	0	0	
% 3+ Axle Heavy / Bicycles	0	3.2	0	0	2.8	0	0	3.7	0	3.4	6.1	4.3	0	0	4.8	0	0	0	0	0	
Motorcycles	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
% Motorcycles	0	1.6	0	0	1.4	0	0	0	0	0	0	0.7	0	0	0.5	0	0	0	0	0	





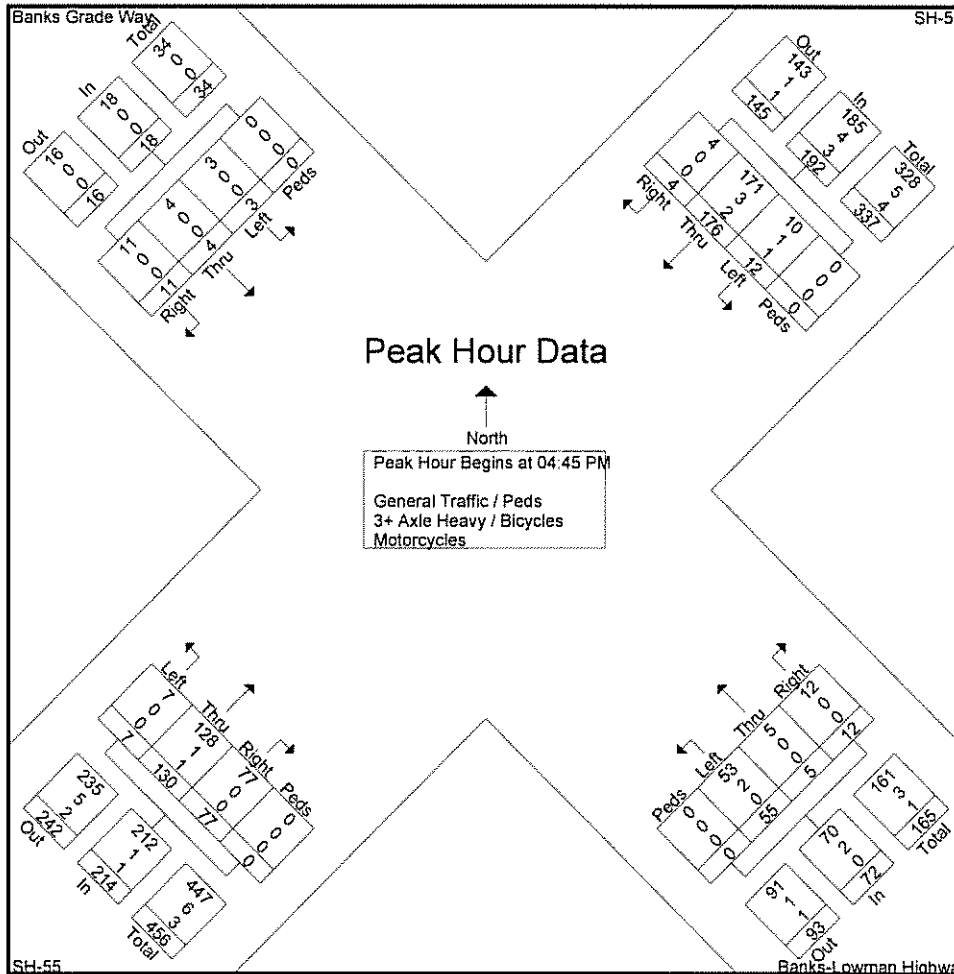
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 5

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	2	45	3	0	50	4	1	16	0	21	16	35	1	0	52	2	1	0	0	3	126
05:00 PM	0	38	1	0	39	4	1	7	0	12	17	41	2	0	60	2	0	1	0	3	114
05:15 PM	1	40	2	0	43	0	3	16	0	19	17	21	3	0	41	4	2	1	0	7	110
05:30 PM	1	53	6	0	60	4	0	16	0	20	27	33	1	0	61	3	1	1	0	5	146
Total Volume	4	176	12	0	192	12	5	55	0	72	77	130	7	0	214	11	4	3	0	18	496
% App. Total	2.1	91.7	6.2	0		16.7	6.9	76.4	0		36	60.7	3.3	0		61.1	22.2	16.7	0		
PHF	.500	.830	.500	.000	.800	.750	.417	.859	.000	.857	.713	.793	.583	.000	.877	.688	.500	.750	.000	.643	.849
General Traffic / Peds	4	171	10	0	185	12	5	53	0	70	77	128	7	0	212	11	4	3	0	18	485
% General Traffic / Peds	100	97.2	83.3	0	96.4	100	100	96.4	0	97.2	100	98.5	100	0	99.1	100	100	100	0	100	97.8
3+ Axle Heavy / Bicycles	0	3	1	0	4	0	0	2	0	2	0	1	0	0	1	0	0	0	0	0	7
% 3+ Axle Heavy / Bicycles	0	1.7	8.3	0	2.1	0	0	3.6	0	2.8	0	0.8	0	0	0.5	0	0	0	0	0	1.4
Motorcycles	0	2	1	0	3	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	4
% Motorcycles	0	1.1	8.3	0	1.6	0	0	0	0	0	0	0.8	0	0	0.5	0	0	0	0	0	0.8



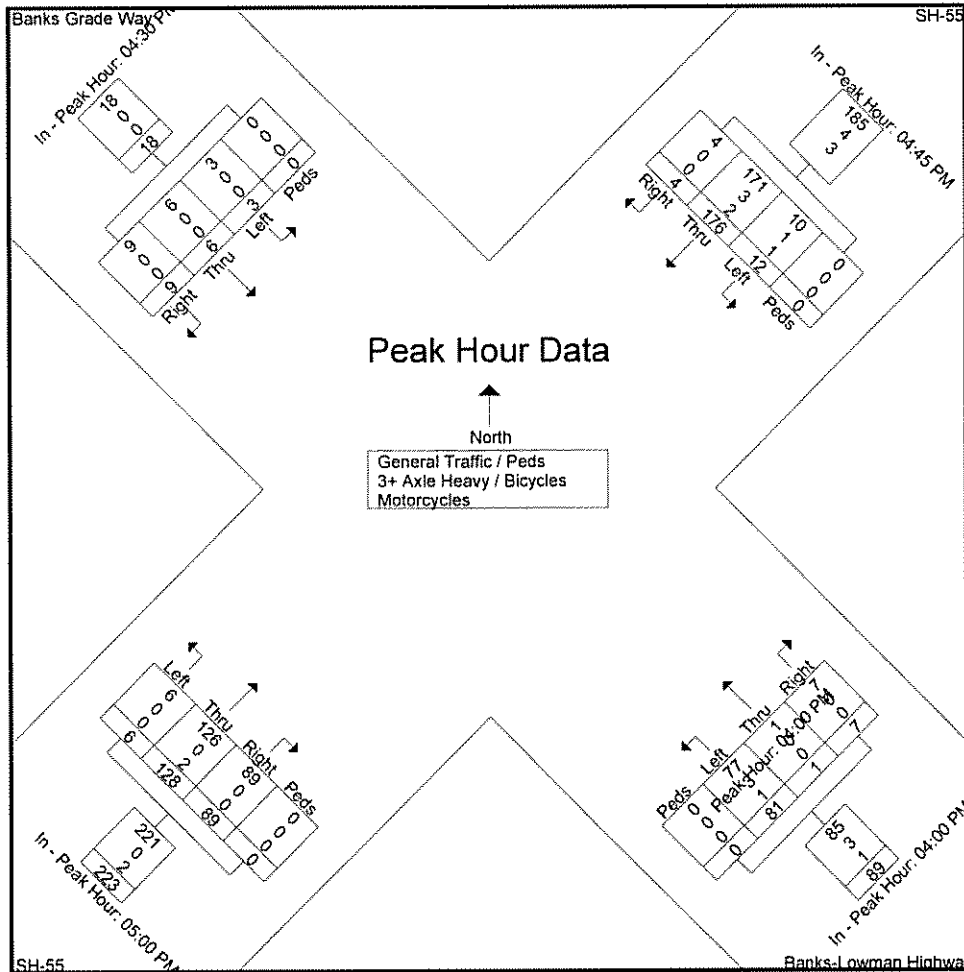
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 6

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:45 PM					04:00 PM					05:00 PM					04:30 PM					
+0 mins.	2	45	3	0	50	1	0	26	0	27	17	41	2	0	60	1	3	1	0	5	
+15 mins.	0	38	1	0	39	1	0	22	0	23	17	21	3	0	41	2	1	0	0	3	
+30 mins.	1	40	2	0	43	1	0	17	0	18	27	33	1	0	61	2	0	1	0	3	
+45 mins.	1	53	6	0	60	4	1	16	0	21	28	33	0	0	61	4	2	1	0	7	
Total Volume	4	176	12	0	192	7	1	81	0	89	89	128	6	0	223	9	6	3	0	18	
% App. Total	2.1	91.7	6.2	0		7.9	1.1	91	0		39.9	57.4	2.7	0		50	33.3	16.7	0		
PHF	.500	.830	.500	.000	.800	.438	.250	.779	.000	.824	.795	.780	.500	.000	.914	.563	.500	.750	.000	.643	
General Traffic / Peds	4	171	10	0	185	7	1	77	0	85	89	126	6	0	221	9	6	3	0	18	
% General Traffic / Peds	100	97.2	83.3	0	96.4	100	100	95.1	0	95.5	100	98.4	100	0	99.1	100	100	100	0	100	
3+ Axle Heavy / Bicycle	0	3	1	0	4	0	0	3	0	3	0	0	0	0	0	0	0	0	0	0	
% 3+ Axle Heavy / Bicycle	0	1.7	8.3	0	2.1	0	0	3.7	0	3.4	0	0	0	0	0	0	0	0	0	0	
Motorcycles	0	2	1	0	3	0	0	1	0	1	0	2	0	0	2	0	0	0	0	0	
% Motorcycles	0	1.1	8.3	0	1.6	0	0	1.2	0	1.1	0	1.6	0	0	0.9	0	0	0	0	0	



# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Banks Lowman-Hwy  
City, State: Banks, Idaho  
Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.14  
Site Code : 00000000  
Start Date : 6/14/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

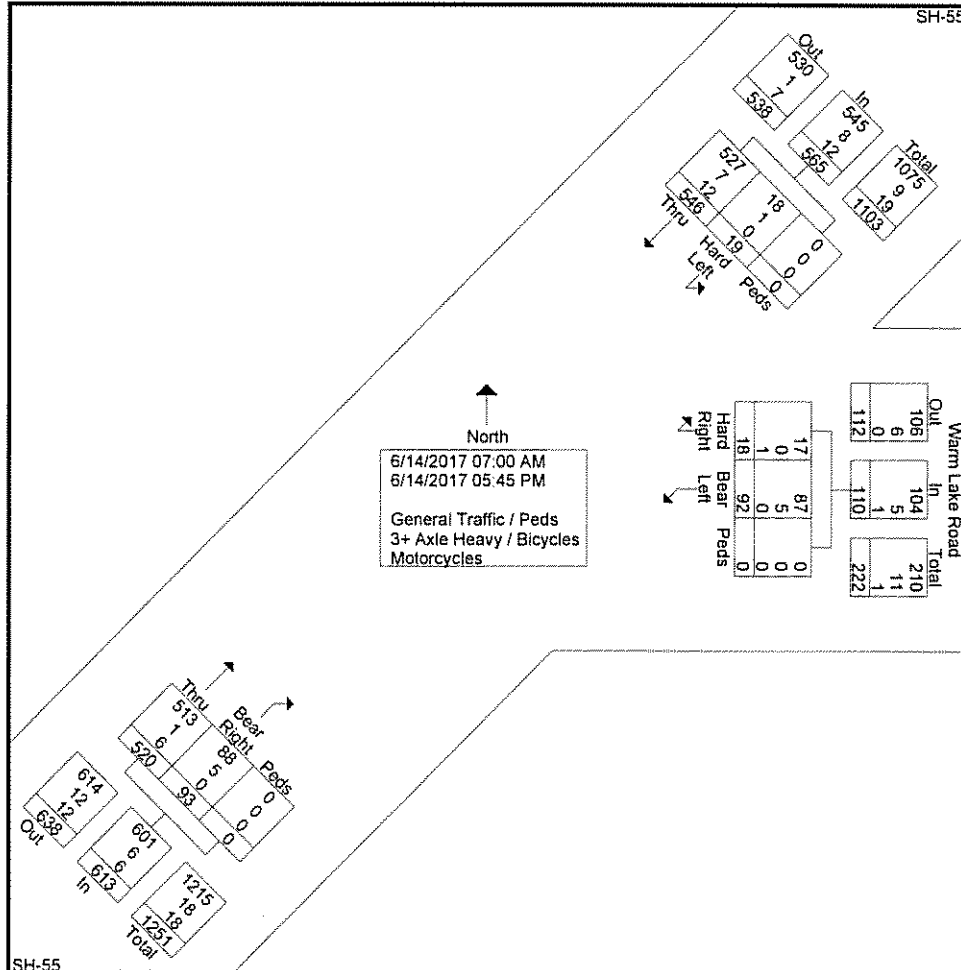
Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
07:00 AM	22	1	0	23	2	14	0	16	1	2	0	3	42
07:15 AM	15	0	0	15	1	28	0	29	1	5	0	6	50
07:30 AM	17	0	0	17	1	26	0	27	0	5	0	5	49
07:45 AM	16	1	0	17	3	17	0	20	1	6	0	7	44
<b>Total</b>	<b>70</b>	<b>2</b>	<b>0</b>	<b>72</b>	<b>7</b>	<b>85</b>	<b>0</b>	<b>92</b>	<b>3</b>	<b>18</b>	<b>0</b>	<b>21</b>	<b>185</b>
08:00 AM	22	2	0	24	4	24	0	28	1	4	0	5	57
08:15 AM	26	1	0	27	7	29	0	36	1	8	0	9	72
08:30 AM	28	2	0	30	1	20	0	21	1	3	0	4	55
08:45 AM	37	0	0	37	4	25	0	29	0	7	0	7	73
<b>Total</b>	<b>113</b>	<b>5</b>	<b>0</b>	<b>118</b>	<b>16</b>	<b>98</b>	<b>0</b>	<b>114</b>	<b>3</b>	<b>22</b>	<b>0</b>	<b>25</b>	<b>257</b>
-----													
04:00 PM	54	2	0	56	12	52	0	64	0	9	0	9	129
04:15 PM	37	0	0	37	6	51	0	57	0	5	0	5	99
04:30 PM	43	3	0	46	8	64	0	72	2	5	0	7	125
04:45 PM	41	2	0	43	7	35	0	42	1	8	0	9	94
<b>Total</b>	<b>175</b>	<b>7</b>	<b>0</b>	<b>182</b>	<b>33</b>	<b>202</b>	<b>0</b>	<b>235</b>	<b>3</b>	<b>27</b>	<b>0</b>	<b>30</b>	<b>447</b>
05:00 PM	38	1	0	39	8	35	0	43	2	9	0	11	93
05:15 PM	43	0	0	43	11	24	0	35	5	2	0	7	88
05:30 PM	58	2	0	60	8	40	0	48	1	4	0	5	113
05:45 PM	49	2	0	51	10	36	0	46	1	10	0	11	108
<b>Total</b>	<b>188</b>	<b>5</b>	<b>0</b>	<b>193</b>	<b>37</b>	<b>135</b>	<b>0</b>	<b>172</b>	<b>9</b>	<b>25</b>	<b>0</b>	<b>34</b>	<b>399</b>
<b>Grand Total</b>	<b>546</b>	<b>19</b>	<b>0</b>	<b>565</b>	<b>93</b>	<b>520</b>	<b>0</b>	<b>613</b>	<b>18</b>	<b>92</b>	<b>0</b>	<b>110</b>	<b>1288</b>
<b>Apprch %</b>	<b>96.6</b>	<b>3.4</b>	<b>0</b>		<b>15.2</b>	<b>84.8</b>	<b>0</b>		<b>16.4</b>	<b>83.6</b>	<b>0</b>		
<b>Total %</b>	<b>42.4</b>	<b>1.5</b>	<b>0</b>	<b>43.9</b>	<b>7.2</b>	<b>40.4</b>	<b>0</b>	<b>47.6</b>	<b>1.4</b>	<b>7.1</b>	<b>0</b>	<b>8.5</b>	
General Traffic / Peds	527	18	0	545	88	513	0	601	17	87	0	104	1250
% General Traffic / Peds	96.5	94.7	0	96.5	94.6	98.7	0	98	94.4	94.6	0	94.5	97
3+ Axle Heavy / Bicycles	7	1	0	8	5	1	0	6	0	5	0	5	19
% 3+ Axle Heavy / Bicycles	1.3	5.3	0	1.4	5.4	0.2	0	1	0	5.4	0	4.5	1.5
Motorcycles	12	0	0	12	0	6	0	6	1	0	0	1	19
% Motorcycles	2.2	0	0	2.1	0	1.2	0	1	5.6	0	0	0.9	1.5

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 2



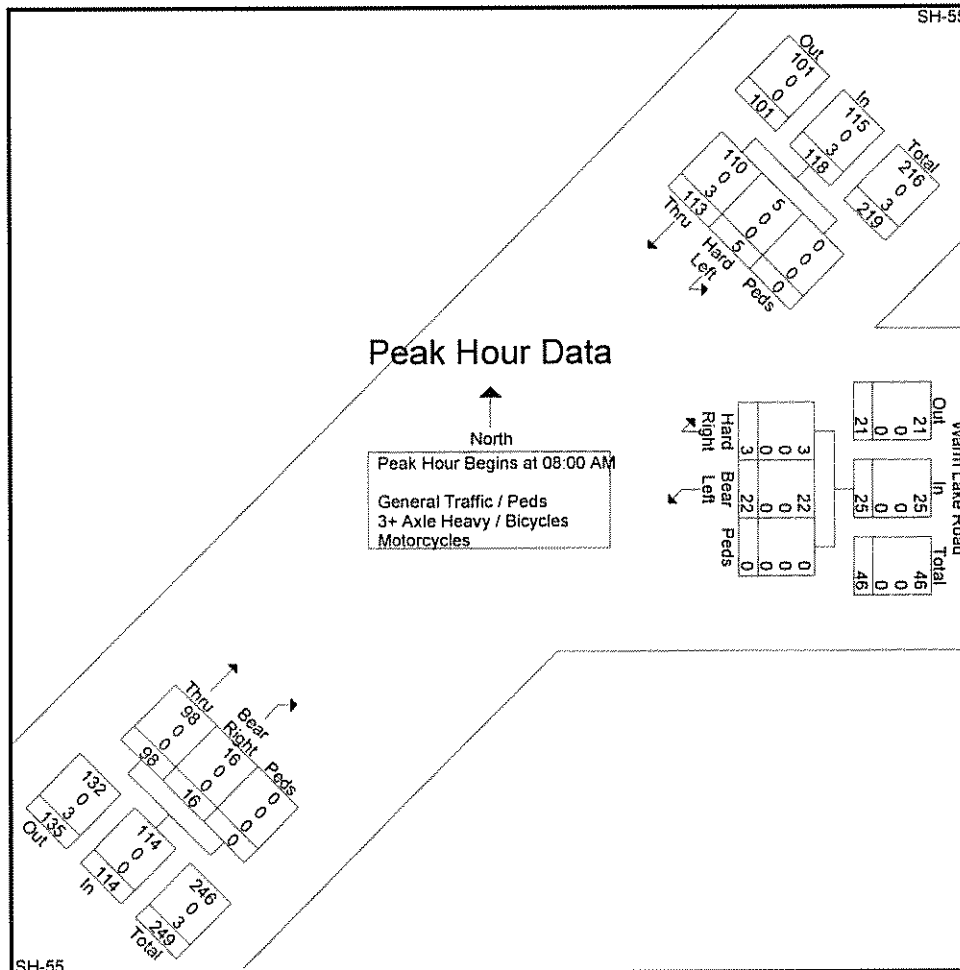
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 3

Start Time	SH-55 From Northeast			SH-55 From Southwest			Warm Lake Road From East				Int. Total		
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left		Peds	App. Total
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	22	2	0	24	4	24	0	28	1	4	0	5	57
08:15 AM	26	1	0	27	7	29	0	36	1	8	0	9	72
08:30 AM	28	2	0	30	1	20	0	21	1	3	0	4	55
08:45 AM	37	0	0	37	4	25	0	29	0	7	0	7	73
Total Volume	113	5	0	118	16	98	0	114	3	22	0	25	254
% App. Total	95.8	4.2	0		14	86	0		12	88	0		98.8
PHF	.764	.625	.000	.797	.571	.845	.000	.792	.750	.688	.000	.694	.880
General Traffic / Peds	110	5	0	115	16	98	0	114	3	22	0	25	254
% General Traffic / Peds	97.3	100	0	97.5	100	100	0	100	100	100	0	100	98.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	3	0	0	3	0	0	0	0	0	0	0	0	3
% Motorcycles	2.7	0	0	2.5	0	0	0	0	0	0	0	0	1.2



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

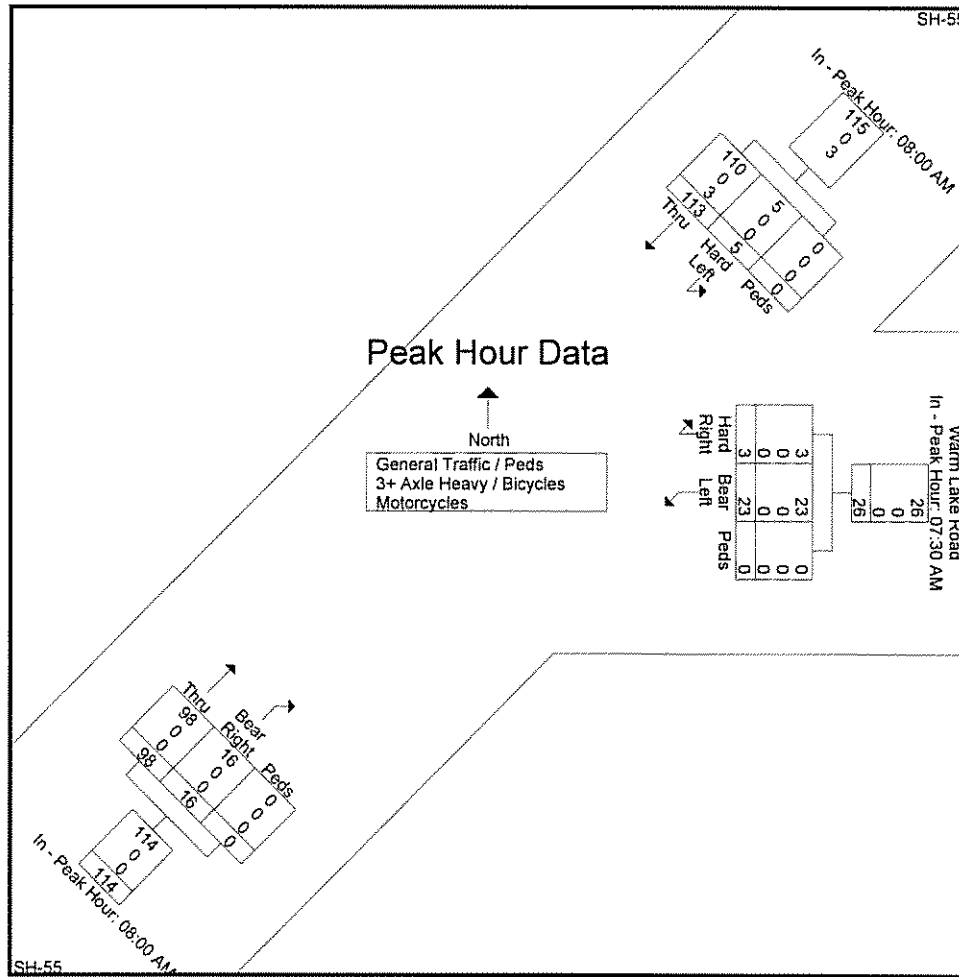
File Name : SH-55 & Warm Lake Rd 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 4

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	

Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	08:00 AM				08:00 AM				07:30 AM			
+0 mins.	22	2	0	24	4	24	0	28	0	5	0	5
+15 mins.	26	1	0	27	7	29	0	36	1	6	0	7
+30 mins.	28	2	0	30	1	20	0	21	1	4	0	5
+45 mins.	37	0	0	37	4	25	0	29	1	8	0	9
Total Volume	113	5	0	118	16	98	0	114	3	23	0	26
% App. Total	95.8	4.2	0		14	86	0		11.5	88.5	0	
PHF	.764	.625	.000	.797	.571	.845	.000	.792	.750	.719	.000	.722
General Traffic / Peds	110	5	0	115	16	98	0	114	3	23	0	26
% General Traffic / Peds	97.3	100	0	97.5	100	100	0	100	100	100	0	100
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	3	0	0	3	0	0	0	0	0	0	0	0
% Motorcycles	2.7	0	0	2.5	0	0	0	0	0	0	0	0



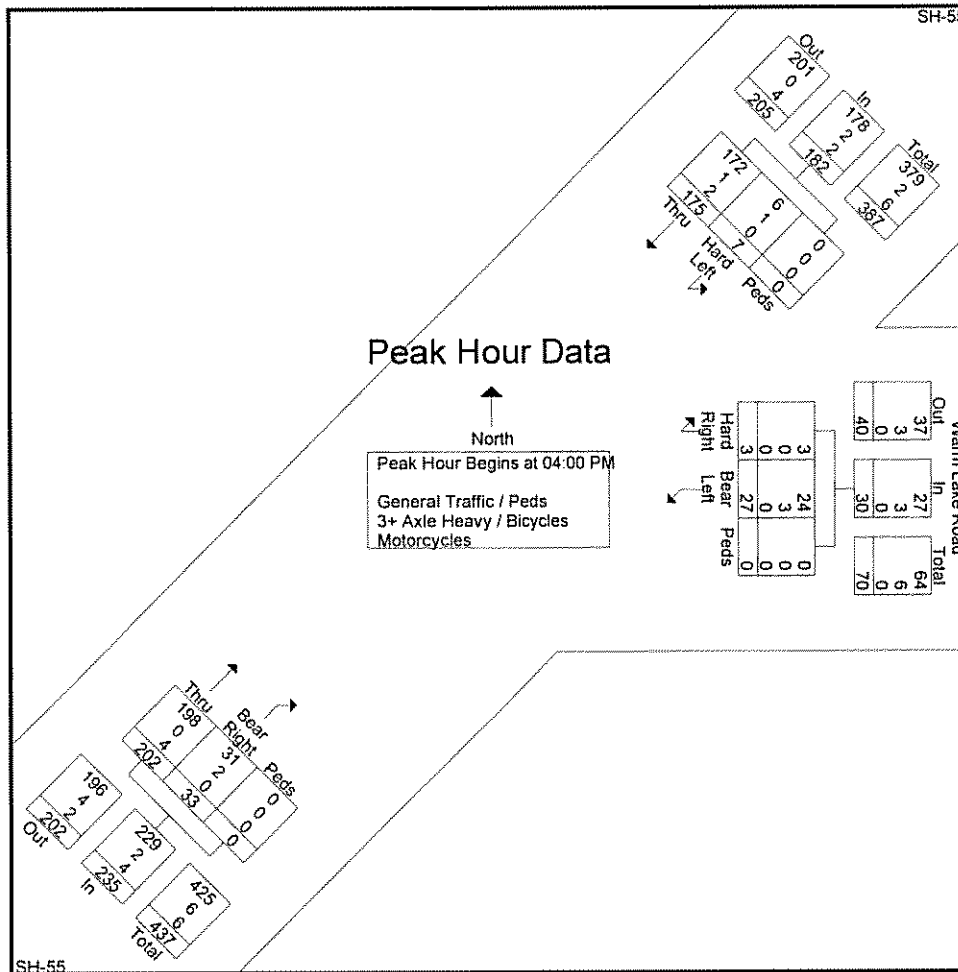
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 5

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:00 PM													
04:00 PM	54	2	0	56	12	52	0	64	0	9	0	9	129
04:15 PM	37	0	0	37	6	51	0	57	0	5	0	5	99
04:30 PM	43	3	0	46	8	64	0	72	2	5	0	7	125
04:45 PM	41	2	0	43	7	35	0	42	1	8	0	9	94
Total Volume	175	7	0	182	33	202	0	235	3	27	0	30	447
% App. Total	96.2	3.8	0		14	86	0		10	90	0		
PHF	.810	.583	.000	.813	.688	.789	.000	.816	.375	.750	.000	.833	.866
General Traffic / Peds	172	6	0	178	31	198	0	229	3	24	0	27	434
% General Traffic / Peds	98.3	85.7	0	97.8	93.9	98.0	0	97.4	100	88.9	0	90.0	97.1
3+ Axle Heavy / Bicycles	1	1	0	2	2	0	0	2	0	3	0	3	7
% 3+ Axle Heavy / Bicycles	0.6	14.3	0	1.1	6.1	0	0	0.9	0	11.1	0	10.0	1.6
Motorcycles	2	0	0	2	0	4	0	4	0	0	0	0	6
% Motorcycles	1.1	0	0	1.1	0	2.0	0	1.7	0	0	0	0	1.3





# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

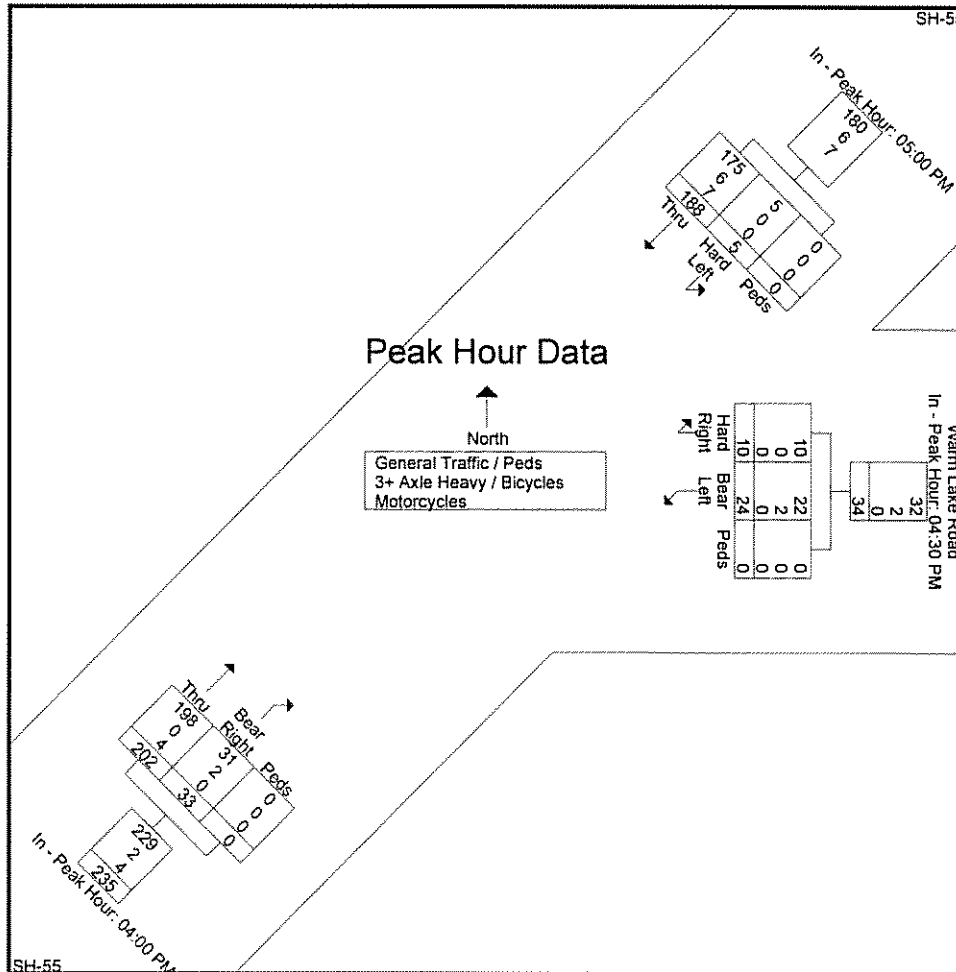
File Name : SH-55 & Warm Lake Rd 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 6

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				04:00 PM				04:30 PM			
+0 mins.	38	1	0	39	12	52	0	64	2	5	0	7
+15 mins.	43	0	0	43	6	51	0	57	1	8	0	9
+30 mins.	58	2	0	60	8	64	0	72	2	9	0	11
+45 mins.	49	2	0	51	7	35	0	42	5	2	0	7
Total Volume	188	5	0	193	33	202	0	235	10	24	0	34
% App. Total	97.4	2.6	0		14	86	0		29.4	70.6	0	
PHF	.810	.625	.000	.804	.688	.789	.000	.816	.500	.667	.000	.773
General Traffic / Peds	175	5	0	180	31	198	0	229	10	22	0	32
% General Traffic / Peds	93.1	100	0	93.3	93.9	98	0	97.4	100	91.7	0	94.1
3+ Axle Heavy / Bicycles	6	0	0	6	2	0	0	2	0	2	0	2
% 3+ Axle Heavy / Bicycles	3.2	0	0	3.1	6.1	0	0	0.9	0	8.3	0	5.9
Motorcycles	7	0	0	7	0	4	0	4	0	0	0	0
% Motorcycles	3.7	0	0	3.6	0	2	0	1.7	0	0	0	0



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Warm Lake Rd  
City, State: Cascade, Idaho  
Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6  
Site Code : 00000000  
Start Date : 6/14/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	10	18	8	0	36	4	4	3	0	11	7	33	16	0	56	9	6	4	0	19	122
07:15 AM	8	24	16	0	48	8	6	11	0	25	15	21	23	0	59	14	9	7	0	30	162
07:30 AM	9	17	9	0	35	12	17	3	0	32	16	53	27	0	96	24	12	4	0	40	203
07:45 AM	10	39	20	0	69	14	11	9	0	34	23	65	45	0	133	15	30	18	0	63	299
Total	37	98	53	0	188	38	38	26	0	102	61	172	111	0	344	62	57	33	0	152	786
08:00 AM	6	33	13	0	52	21	12	18	0	51	14	59	32	0	105	15	19	10	0	44	252
08:15 AM	4	30	6	0	40	20	13	16	0	49	15	63	11	0	89	11	17	10	0	38	216
08:30 AM	6	34	13	1	54	20	12	17	0	49	6	56	13	0	75	13	18	7	0	38	216
08:45 AM	14	43	21	1	79	20	18	10	0	48	15	59	18	0	92	13	21	18	0	52	271
Total	30	140	53	2	225	81	55	61	0	197	50	237	74	0	361	52	75	45	0	172	955
-----																					
04:00 PM	8	82	27	3	120	21	16	23	0	60	23	53	21	1	98	28	23	13	2	66	344
04:15 PM	13	65	20	1	99	30	27	23	0	80	14	49	20	0	83	18	20	15	2	55	317
04:30 PM	16	58	27	0	101	29	22	26	0	77	18	60	29	0	107	21	33	21	0	75	360
04:45 PM	12	64	31	0	107	29	22	19	0	70	28	67	30	3	128	22	25	6	0	53	358
Total	49	269	105	4	427	109	87	91	0	287	83	229	100	4	416	89	101	55	4	249	1379
05:00 PM	12	82	25	6	125	40	28	31	0	99	23	58	27	0	108	37	37	19	1	94	426
05:15 PM	19	54	20	2	95	29	26	22	0	77	15	48	17	0	80	44	20	16	0	80	332
05:30 PM	15	67	14	0	96	24	27	26	0	77	15	45	19	0	79	18	16	11	0	45	297
05:45 PM	8	77	11	2	98	16	12	19	1	48	7	37	16	1	61	22	14	11	0	47	254
Total	54	280	70	10	414	109	93	98	1	301	60	188	79	1	328	121	87	57	1	266	1309
Grand Total	170	787	281	16	1254	337	273	276	1	887	254	826	364	5	1449	324	320	190	5	839	4429
Apprch %	13.6	62.8	22.4	1.3		38	30.8	31.1	0.1		17.5	57	25.1	0.3		38.6	38.1	22.6	0.6		
Total %	3.8	17.8	6.3	0.4	28.3	7.6	6.2	6.2	0	20	5.7	18.6	8.2	0.1	32.7	7.3	7.2	4.3	0.1	18.9	
General Traffic / Peds	164	765	280	14	1223	335	269	264	0	868	247	810	346	4	1407	312	318	184	5	819	4317
% General Traffic / Peds	96.5	97.2	99.6	87.5	97.5	99.4	98.5	95.7	0	97.9	97.2	98.1	95.1	80	97.1	96.3	99.4	96.8	100	97.6	97.5
3+ Axle Heavy / Bicycles	5	13	1	2	21	2	3	11	1	17	7	12	12	1	32	10	2	2	0	14	84
% 3+ Axle Heavy / Bicycles	2.9	1.7	0.4	12.5	1.7	0.6	1.1	4	100	1.9	2.8	1.5	3.3	20	2.2	3.1	0.6	1.1	0	1.7	1.9
Motorcycles	1	9	0	0	10	0	1	1	0	2	0	4	6	0	10	2	0	4	0	6	28
% Motorcycles	0.6	1.1	0	0	0.8	0	0.4	0.4	0	0.2	0	0.5	1.6	0	0.7	0.6	0	2.1	0	0.7	0.6

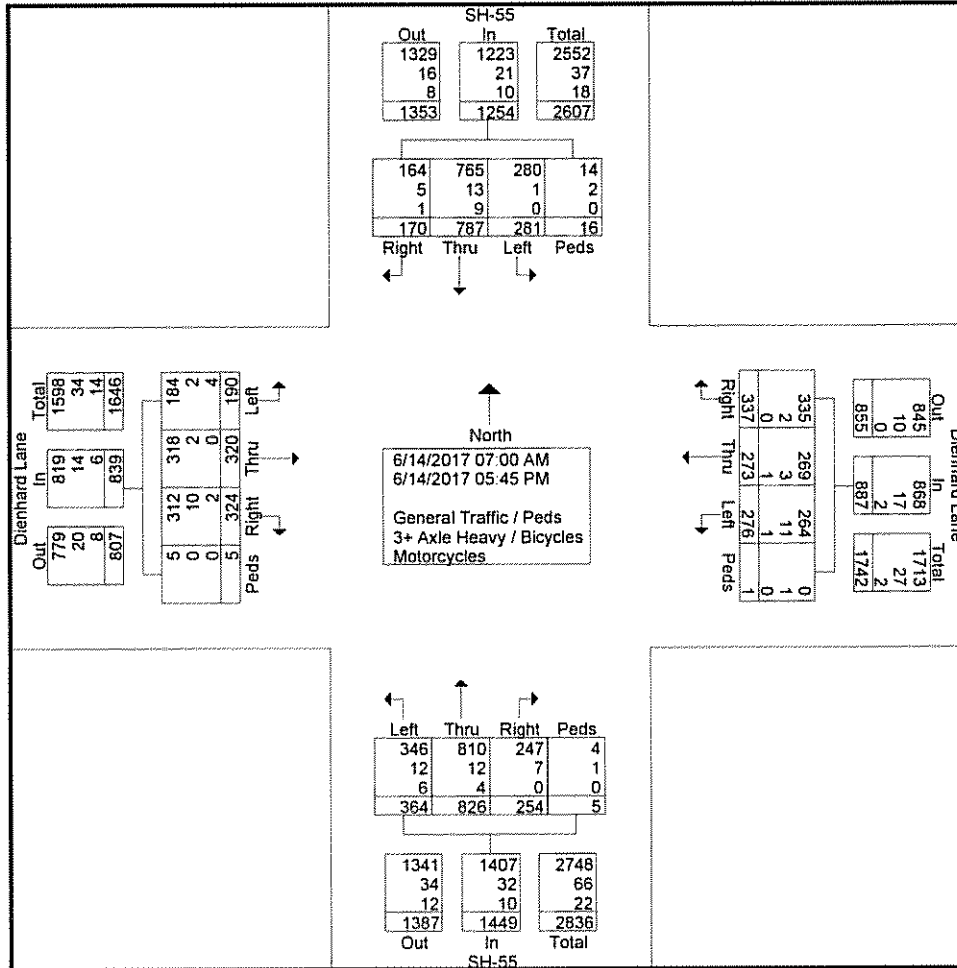
# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 2



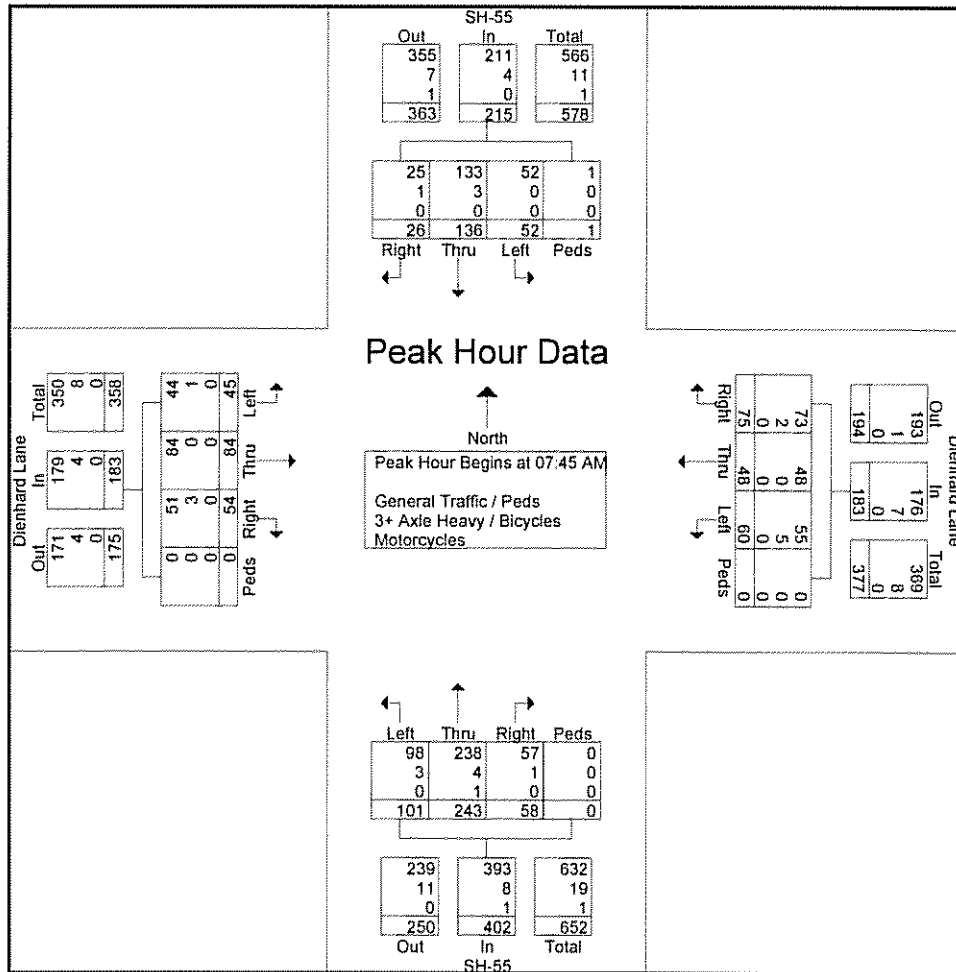
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 3

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	10	39	20	0	69	14	11	9	0	34	23	65	45	0	133	15	30	18	0	63	299
08:00 AM	6	33	13	0	52	21	12	18	0	51	14	59	32	0	105	15	19	10	0	44	252
08:15 AM	4	30	6	0	40	20	13	16	0	49	15	63	11	0	89	11	17	10	0	38	216
08:30 AM	6	34	13	1	54	20	12	17	0	49	6	56	13	0	75	13	18	7	0	38	216
Total Volume	26	136	52	1	215	75	48	60	0	183	58	243	101	0	402	54	84	45	0	183	983
% App. Total	12.1	63.3	24.2	0.5		41	26.2	32.8	0		14.4	60.4	25.1	0		29.5	45.9	24.6	0		
PHF	.650	.872	.650	.250	.779	.893	.923	.833	.000	.897	.630	.935	.561	.000	.756	.900	.700	.625	.000	.726	.822
General Traffic / Peds	25	133	52	1	211	73	48	55	0	176	57	238	98	0	393	51	84	44	0	179	959
% General Traffic / Peds	96.2	97.8	100	100	98.1	97.3	100	91.7	0	96.2	98.3	97.9	97.0	0	97.8	94.4	100	97.8	0	97.8	97.6
3+ Axle Heavy / Bicycle	1	3	0	0	4	2	0	5	0	7	1	4	3	0	8	3	0	1	0	4	23
% 3+ Axle Heavy / Bicycle	3.8	2.2	0	0	1.9	2.7	0	8.3	0	3.8	1.7	1.6	3.0	0	2.0	5.6	0	2.2	0	2.2	2.3
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0.2	0	0	0	0	0	0.1



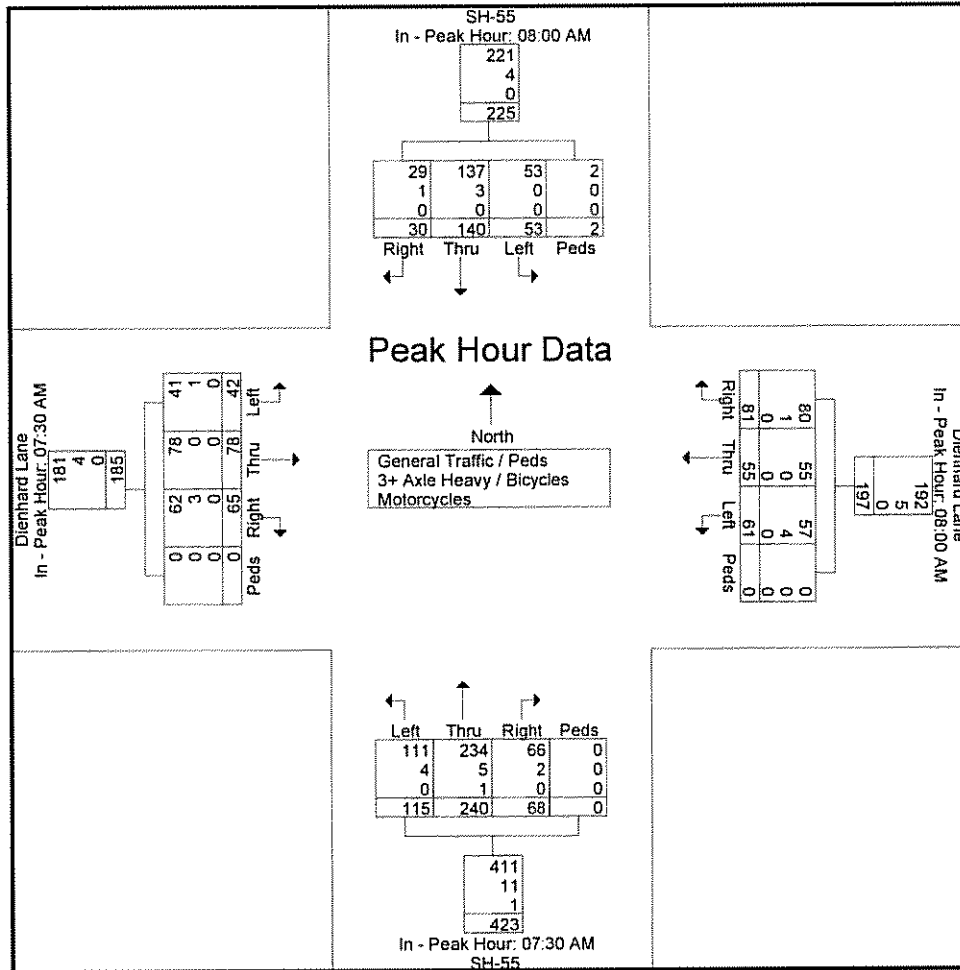
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 4

Start Time	SH-55 From North					Dienhard Lane From East					SH-55 From South					Dienhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	08:00 AM					08:00 AM					07:30 AM					07:30 AM					
+0 mins.	6	33	13	0	52	21	12	18	0	51	16	53	27	0	96	24	12	4	0	40	
+15 mins.	4	30	6	0	40	20	13	16	0	49	23	65	45	0	133	15	30	18	0	63	
+30 mins.	6	34	13	1	54	20	12	17	0	49	14	59	32	0	105	15	19	10	0	44	
+45 mins.	14	43	21	1	79	20	18	10	0	48	15	63	11	0	89	11	17	10	0	38	
Total Volume	30	140	53	2	225	81	55	61	0	197	68	240	115	0	423	65	78	42	0	185	
% App. Total	13.3	62.2	23.6	0.9		41.1	27.9	31	0		16.1	56.7	27.2	0		35.1	42.2	22.7	0		
PHF	.536	.814	.631	.500	.712	.964	.764	.847	.000	.966	.739	.923	.639	.000	.795	.677	.650	.583	.000	.734	
General Traffic / Peds	29	137	53	2	221	80	55	57	0	192	66	234	111	0	411	62	78	41	0	181	
% General Traffic / Peds	96.7	97.9	100	100	98.2	98.8	100	93.4	0	97.5	97.1	97.5	96.5	0	97.2	95.4	100	97.6	0	97.8	
3+ Axle Heavy / Bicycles	1	3	0	0	4	1	0	4	0	5	2	5	4	0	11	3	0	1	0	4	
% 3+ Axle Heavy / Bicycles	3.3	2.1	0	0	1.8	1.2	0	6.6	0	2.5	2.9	2.1	3.5	0	2.6	4.6	0	2.4	0	2.2	
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0.4	0	0	0.2	0	0	0	0	0	



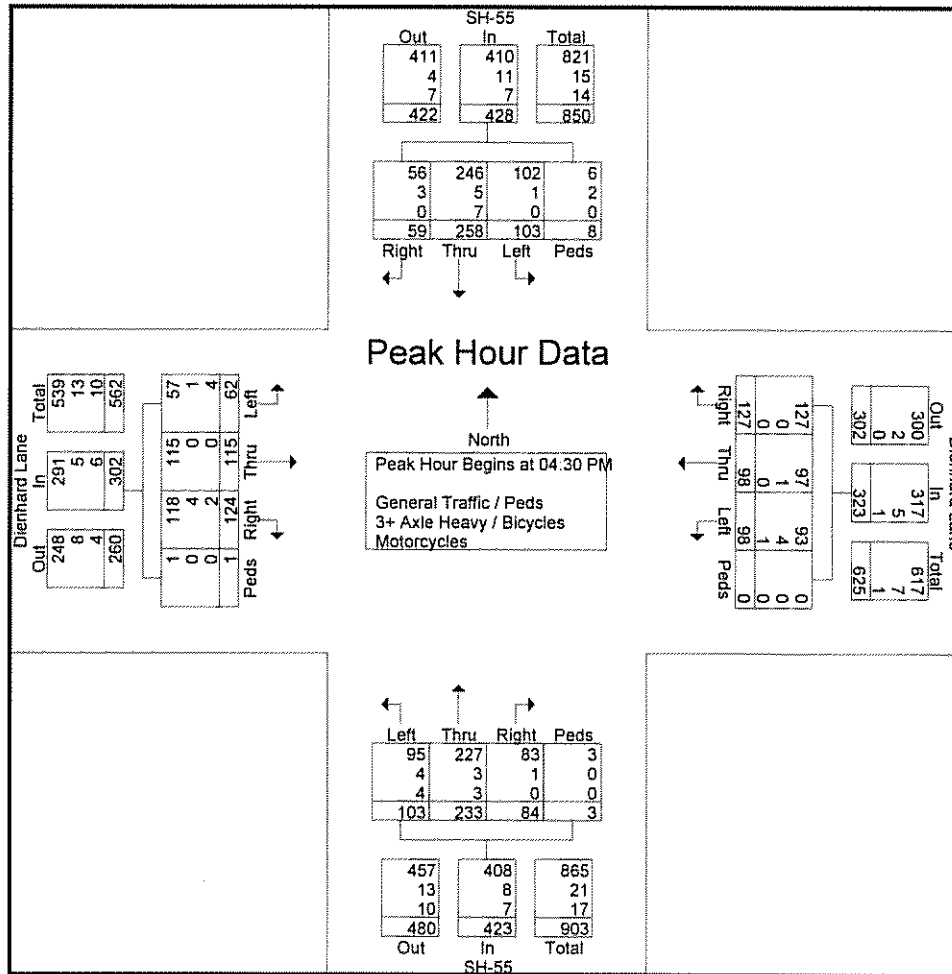
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 5

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	16	58	27	0	101	29	22	26	0	77	18	60	29	0	107	21	33	21	0	75	360
04:45 PM	12	64	31	0	107	29	22	19	0	70	28	67	30	3	128	22	25	6	0	53	358
05:00 PM	12	82	25	6	125	40	28	31	0	99	23	58	27	0	108	37	37	19	1	94	426
05:15 PM	19	54	20	2	95	29	26	22	0	77	15	48	17	0	80	44	20	16	0	80	332
Total Volume	59	258	103	8	428	127	98	98	0	323	84	233	103	3	423	124	115	62	1	302	1476
% App. Total	13.8	60.3	24.1	1.9		39.3	30.3	30.3	0		19.9	55.1	24.3	0.7		41.1	38.1	20.5	0.3		
PHF	.776	.787	.831	.333	.856	.794	.875	.790	.000	.816	.750	.869	.858	.250	.826	.705	.777	.738	.250	.803	.866
General Traffic / Peds	56	246	102	6	410	127	97	93	0	317	83	227	95	3	408	118	115	57	1	291	1426
% General Traffic / Peds	94.9	95.3	99.0	75.0	95.8	100	99.0	94.9	0	98.1	98.8	97.4	92.2	100	96.5	95.2	100	91.9	100	96.4	96.6
3+ Axle Heavy / Bicycles	3	5	1	2	11	0	1	4	0	5	1	3	4	0	8	4	0	1	0	5	29
% 3+ Axle Heavy / Bicycles	5.1	1.9	1.0	25.0	2.6	0	1.0	4.1	0	1.5	1.2	1.3	3.9	0	1.9	3.2	0	1.6	0	1.7	2.0
Motorcycles	0	7	0	0	7	0	0	1	0	1	0	3	4	0	7	2	0	4	0	6	21
% Motorcycles	0	2.7	0	0	1.6	0	0	1.0	0	0.3	0	1.3	3.9	0	1.7	1.6	0	6.5	0	2.0	1.4



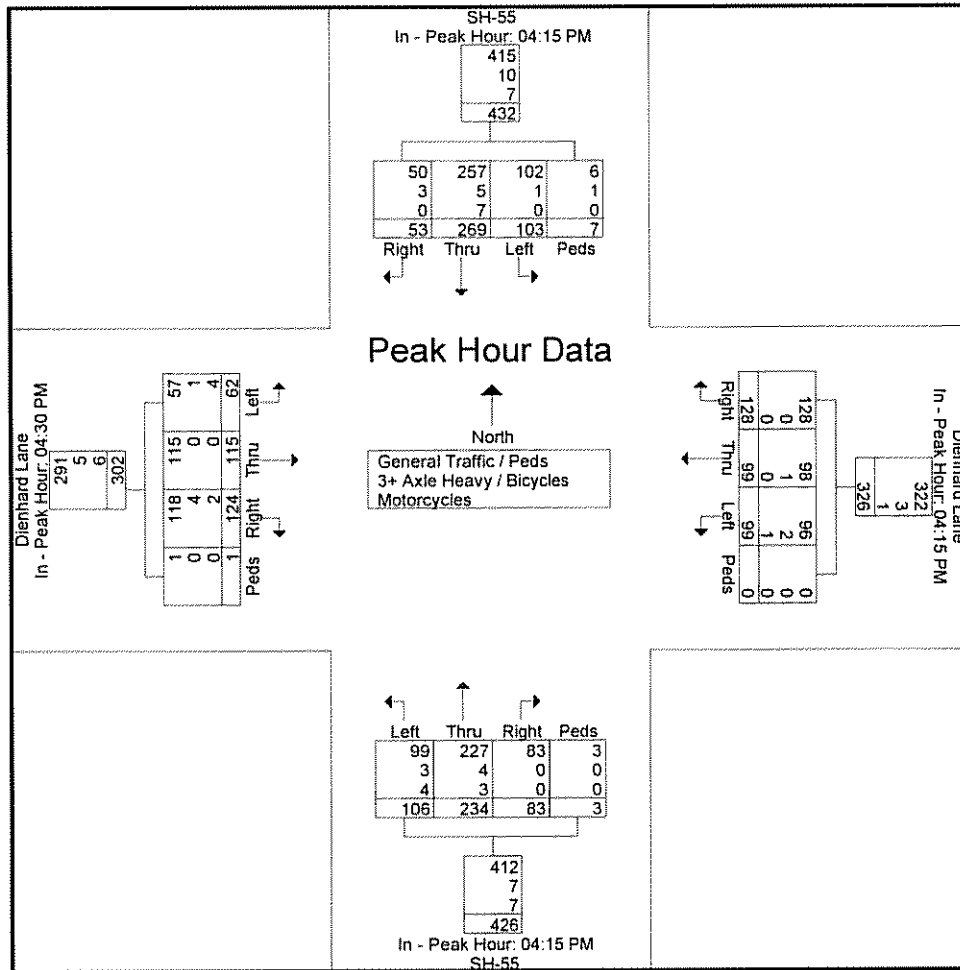
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 6

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	04:15 PM					04:15 PM					04:15 PM					04:30 PM					
+0 mins.	13	65	20	1	99	30	27	23	0	80	14	49	20	0	83	21	33	21	0	75	
+15 mins.	16	58	27	0	101	29	22	26	0	77	18	60	29	0	107	22	25	6	0	53	
+30 mins.	12	64	31	0	107	29	22	19	0	70	28	67	30	3	128	37	37	19	1	94	
+45 mins.	12	82	25	6	125	40	28	31	0	99	23	58	27	0	108	44	20	16	0	80	
Total Volume	53	269	103	7	432	128	99	99	0	326	83	234	106	3	426	124	115	62	1	302	
% App. Total	12.3	62.3	23.8	1.6		39.3	30.4	30.4	0		19.5	54.9	24.9	0.7		41.1	38.1	20.5	0.3		
PHF	.828	.820	.831	.292	.864	.800	.884	.798	.000	.823	.741	.873	.883	.250	.832	.705	.777	.738	.250	.803	
General Traffic / Peds	50	257	102	6	415	128	98	96	0	322	83	227	99	3	412	118	115	57	1	291	
% General Traffic / Peds	94.3	95.5	99	85.7	96.1	100	99	97	0	98.8	100	97	93.4	100	96.7	95.2	100	91.9	100	96.4	
3+ Axle Heavy / Bicycles	3	5	1	1	10	0	1	2	0	3	0	4	3	0	7	4	0	1	0	5	
% 3+ Axle Heavy / Bicycles	5.7	1.9	1	14.3	2.3	0	1	2	0	0.9	0	1.7	2.8	0	1.6	3.2	0	1.6	0	1.7	
Motorcycles	0	7	0	0	7	0	0	1	0	1	0	3	4	0	7	2	0	4	0	6	
% Motorcycles	0	2.6	0	0	1.6	0	0	1	0	0.3	0	1.3	3.8	0	1.6	1.6	0	6.5	0	2	





# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Deinhard Lane  
City, State: McCall, Idaho  
Control: Signalized

File Name : SH-55 & Deinhard 6.14  
Site Code : 00000000  
Start Date : 6/14/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

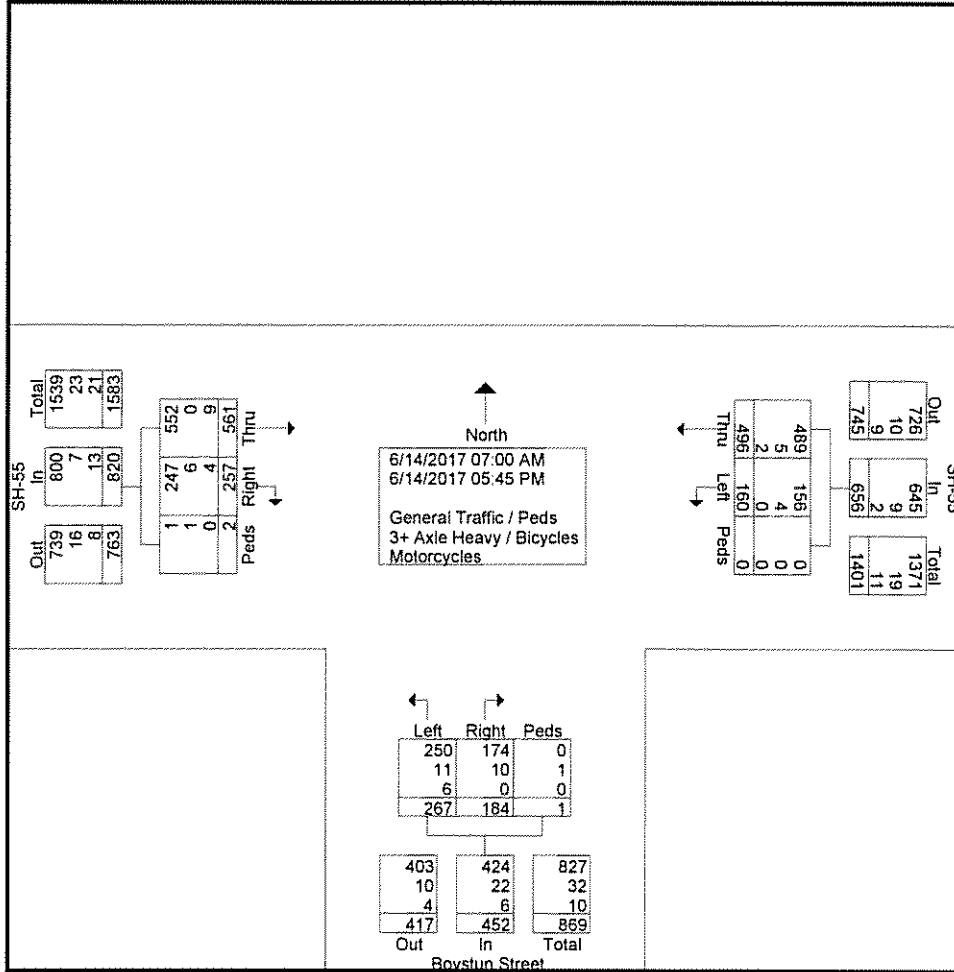
Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
07:00 AM	11	6	0	17	2	7	1	10	11	14	0	25	52
07:15 AM	15	5	0	20	11	10	0	21	14	25	0	39	80
07:30 AM	18	3	0	21	7	7	0	14	20	26	0	46	81
07:45 AM	16	4	0	20	14	11	0	25	22	52	0	74	119
<b>Total</b>	<b>60</b>	<b>18</b>	<b>0</b>	<b>78</b>	<b>34</b>	<b>35</b>	<b>1</b>	<b>70</b>	<b>67</b>	<b>117</b>	<b>0</b>	<b>184</b>	<b>332</b>
08:00 AM	17	6	0	23	15	7	0	22	13	17	0	30	75
08:15 AM	23	6	0	29	7	10	0	17	13	26	1	40	86
08:30 AM	18	9	0	27	17	17	0	34	20	43	0	63	124
08:45 AM	21	23	0	44	13	12	0	25	24	34	1	59	128
<b>Total</b>	<b>79</b>	<b>44</b>	<b>0</b>	<b>123</b>	<b>52</b>	<b>46</b>	<b>0</b>	<b>98</b>	<b>70</b>	<b>120</b>	<b>2</b>	<b>192</b>	<b>413</b>
-----													
04:00 PM	39	20	0	59	17	18	0	35	13	48	0	61	155
04:15 PM	36	14	0	50	6	19	0	25	11	45	0	56	131
04:30 PM	36	11	0	47	4	26	0	30	12	34	0	46	123
04:45 PM	57	13	0	70	17	34	0	51	22	47	0	69	190
<b>Total</b>	<b>168</b>	<b>58</b>	<b>0</b>	<b>226</b>	<b>44</b>	<b>97</b>	<b>0</b>	<b>141</b>	<b>58</b>	<b>174</b>	<b>0</b>	<b>232</b>	<b>599</b>
05:00 PM	58	10	0	68	14	25	0	39	18	46	0	64	171
05:15 PM	53	6	0	59	7	21	0	28	21	43	0	64	155
05:30 PM	46	13	0	59	11	23	0	34	8	27	0	35	128
05:45 PM	32	11	0	43	22	20	0	42	15	34	0	49	134
<b>Total</b>	<b>189</b>	<b>40</b>	<b>0</b>	<b>229</b>	<b>54</b>	<b>89</b>	<b>0</b>	<b>143</b>	<b>62</b>	<b>150</b>	<b>0</b>	<b>212</b>	<b>584</b>
<b>Grand Total</b>	<b>496</b>	<b>160</b>	<b>0</b>	<b>656</b>	<b>184</b>	<b>267</b>	<b>1</b>	<b>452</b>	<b>257</b>	<b>561</b>	<b>2</b>	<b>820</b>	<b>1928</b>
<b>Approch %</b>	<b>75.6</b>	<b>24.4</b>	<b>0</b>		<b>40.7</b>	<b>59.1</b>	<b>0.2</b>		<b>31.3</b>	<b>68.4</b>	<b>0.2</b>		
<b>Total %</b>	<b>25.7</b>	<b>8.3</b>	<b>0</b>	<b>34</b>	<b>9.5</b>	<b>13.8</b>	<b>0.1</b>	<b>23.4</b>	<b>13.3</b>	<b>29.1</b>	<b>0.1</b>	<b>42.5</b>	
General Traffic / Peds	489	156	0	645	174	250	0	424	247	552	1	800	1869
% General Traffic / Peds	98.6	97.5	0	98.3	94.6	93.6	0	93.8	96.1	98.4	50	97.6	96.9
3+ Axle Heavy / Bicycles	5	4	0	9	10	11	1	22	6	0	1	7	38
% 3+ Axle Heavy / Bicycles	1	2.5	0	1.4	5.4	4.1	100	4.9	2.3	0	50	0.9	2
Motorcycles	2	0	0	2	0	6	0	6	4	9	0	13	21
% Motorcycles	0.4	0	0	0.3	0	2.2	0	1.3	1.6	1.6	0	1.6	1.1

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 2



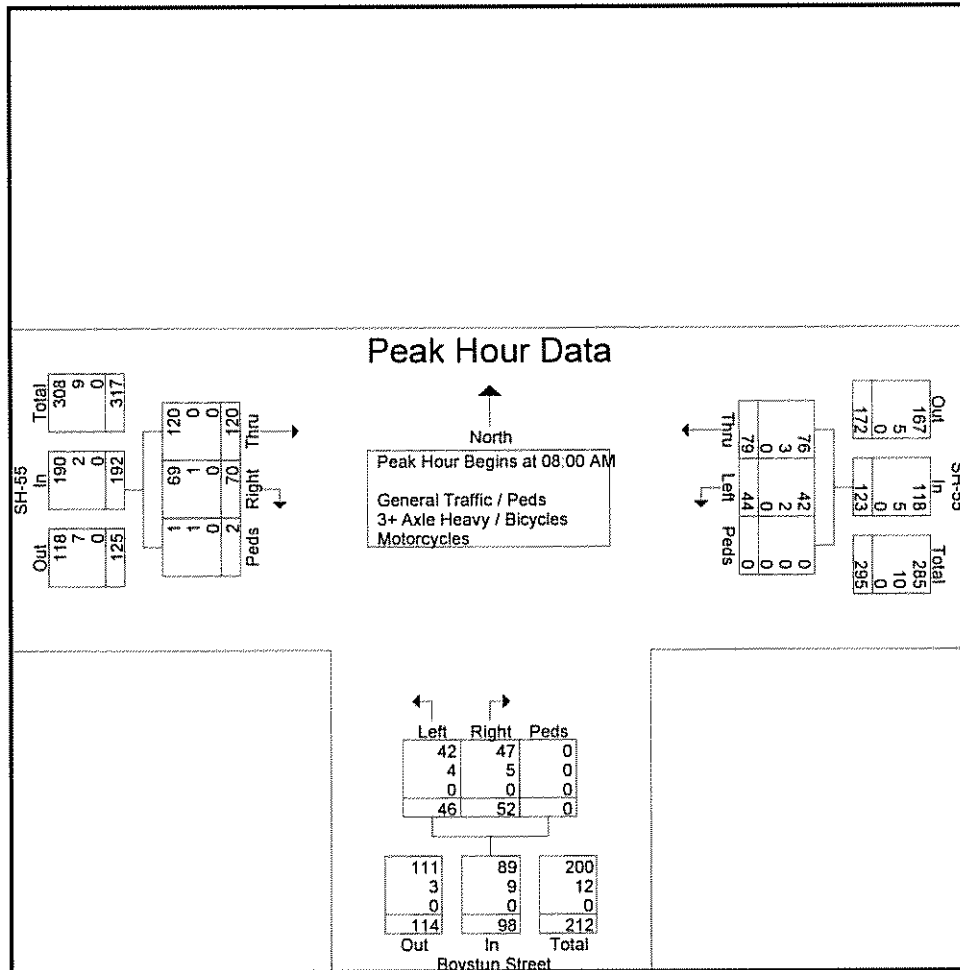
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6  
 Site Code : 0000000  
 Start Date : 6/14/2017  
 Page No : 3

Start Time	SH-55 From East				Boystun Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 08:00 AM													
08:00 AM	17	6	0	23	15	7	0	22	13	17	0	30	75
08:15 AM	23	6	0	29	7	10	0	17	13	26	1	40	86
08:30 AM	18	9	0	27	17	17	0	34	20	43	0	63	124
08:45 AM	21	23	0	44	13	12	0	25	24	34	1	59	128
Total Volume	79	44	0	123	52	46	0	98	70	120	2	192	413
% App. Total	64.2	35.8	0		53.1	46.9	0		36.5	62.5	1		
PHF	.859	.478	.000	.699	.765	.676	.000	.721	.729	.698	.500	.762	.807
General Traffic / Peds	76	42	0	118	47	42	0	89	69	120	1	190	397
% General Traffic / Peds	96.2	95.5	0	95.9	90.4	91.3	0	90.8	98.6	100	50.0	99.0	96.1
3+ Axle Heavy / Bicycles	3	2	0	5	5	4	0	9	1	0	1	2	16
% 3+ Axle Heavy / Bicycles	3.8	4.5	0	4.1	9.6	8.7	0	9.2	1.4	0	50.0	1.0	3.9
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0



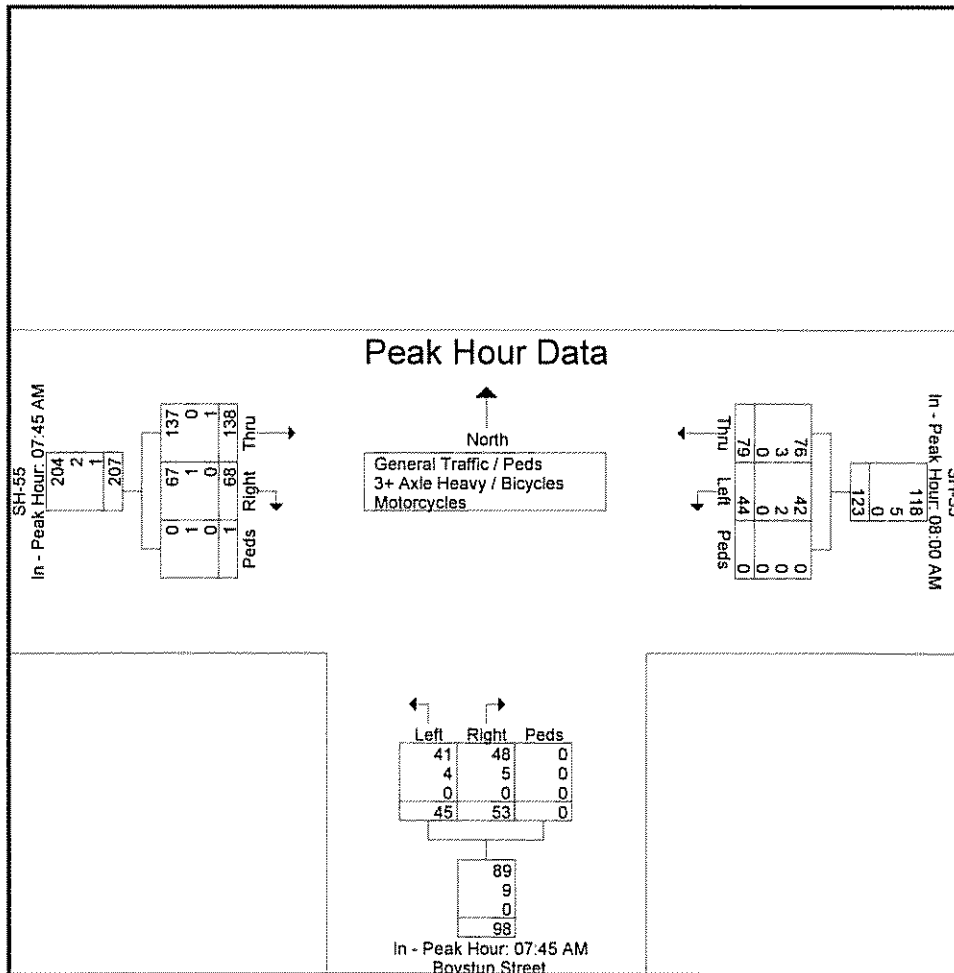
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 4

Start Time	SH-55 From East				Boystun Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1													
Peak Hour for Each Approach Begins at:													
	08:00 AM				07:45 AM				07:45 AM				
+0 mins.	17	6	0	23	14	11	0	25	22	52	0	74	
+15 mins.	23	6	0	29	15	7	0	22	13	17	0	30	
+30 mins.	18	9	0	27	7	10	0	17	13	26	1	40	
+45 mins.	21	23	0	44	17	17	0	34	20	43	0	63	
Total Volume	79	44	0	123	53	45	0	98	68	138	1	207	
% App. Total	64.2	35.8	0		54.1	45.9	0		32.9	66.7	0.5		
PHF	.859	.478	.000	.699	.779	.662	.000	.721	.773	.663	.250	.699	
General Traffic / Peds	76	42	0	118	48	41	0	89	67	137	0	204	
% General Traffic / Peds	96.2	95.5	0	95.9	90.6	91.1	0	90.8	98.5	99.3	0	98.6	
3+ Axle Heavy / Bicycles	3	2	0	5	5	4	0	9	1	0	1	2	
% 3+ Axle Heavy / Bicycles	3.8	4.5	0	4.1	9.4	8.9	0	9.2	1.5	0	100	1	
Motorcycles	0	0	0	0	0	0	0	0	0	1	0	1	
% Motorcycles	0	0	0	0	0	0	0	0	0	0.7	0	0.5	



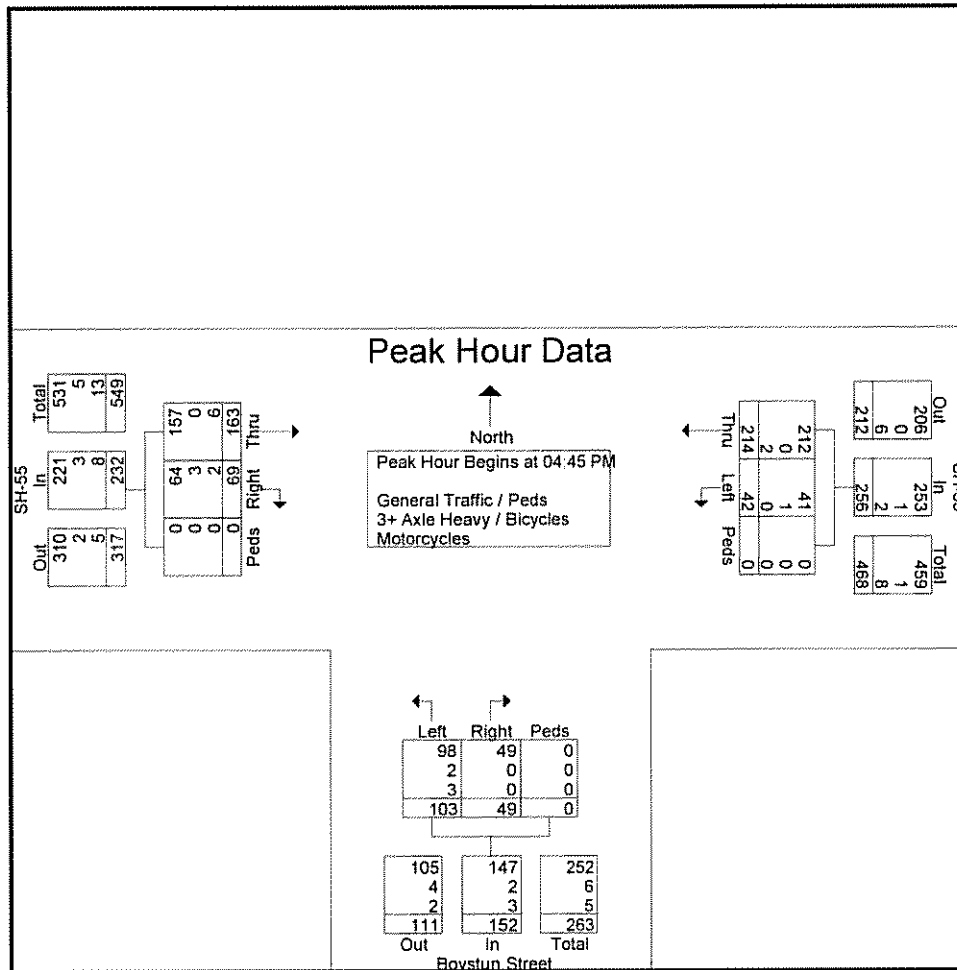
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 5

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 04:45 PM													
04:45 PM	57	13	0	70	17	34	0	51	22	47	0	69	190
05:00 PM	58	10	0	68	14	25	0	39	18	46	0	64	171
05:15 PM	53	6	0	59	7	21	0	28	21	43	0	64	151
05:30 PM	46	13	0	59	11	23	0	34	8	27	0	35	128
Total Volume	214	42	0	256	49	103	0	152	69	163	0	232	640
% App. Total	83.6	16.4	0		32.2	67.8	0		29.7	70.3	0		
PHF	.922	.808	.000	.914	.721	.757	.000	.745	.784	.867	.000	.841	.842
General Traffic / Peds	212	41	0	253	49	98	0	147	64	157	0	221	621
% General Traffic / Peds	99.1	97.6	0	98.8	100	95.1	0	96.7	92.8	96.3	0	95.3	97.0
3+ Axle Heavy / Bicycles	0	1	0	1	0	2	0	2	3	0	0	3	6
% 3+ Axle Heavy / Bicycles	0	2.4	0	0.4	0	1.9	0	1.3	4.3	0	0	1.3	0.9
Motorcycles	2	0	0	2	0	3	0	3	2	6	0	8	13
% Motorcycles	0.9	0	0	0.8	0	2.9	0	2.0	2.9	3.7	0	3.4	2.0



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

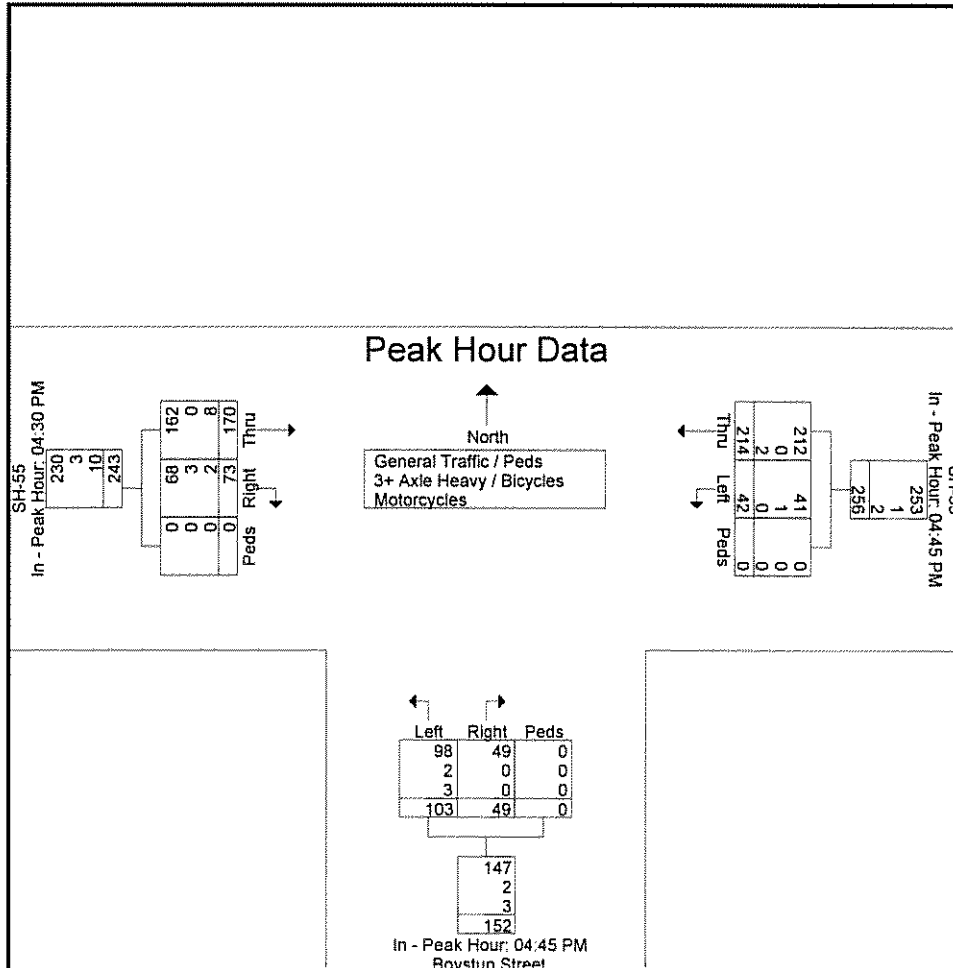
File Name : SH-55 & Boydston 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 6

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:45 PM				04:45 PM				04:30 PM			
+0 mins.	57	13	0	70	17	34	0	51	12	34	0	46
+15 mins.	58	10	0	68	14	25	0	39	22	47	0	69
+30 mins.	53	6	0	59	7	21	0	28	18	46	0	64
+45 mins.	46	13	0	59	11	23	0	34	21	43	0	64
Total Volume	214	42	0	256	49	103	0	152	73	170	0	243
% App. Total	83.6	16.4	0		32.2	67.8	0		30	70	0	
PHF	.922	.808	.000	.914	.721	.757	.000	.745	.830	.904	.000	.880
General Traffic / Peds	212	41	0	253	49	98	0	147	68	162	0	230
% General Traffic / Peds	99.1	97.6	0	98.8	100	95.1	0	96.7	93.2	95.3	0	94.7
3+ Axle Heavy / Bicycles	0	1	0	1	0	2	0	2	3	0	0	3
% 3+ Axle Heavy / Bicycles	0	2.4	0	0.4	0	1.9	0	1.3	4.1	0	0	1.2
Motorcycles	2	0	0	2	0	3	0	3	2	8	0	10
% Motorcycles	0.9	0	0	0.8	0	2.9	0	2	2.7	4.7	0	4.1



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Boydston St  
City, State: McCall, Idaho  
Control: Stop Sign

File Name : SH-55 & Boydston 6  
Site Code : 00000000  
Start Date : 6/14/2017  
Page No : 7

Image 1





# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

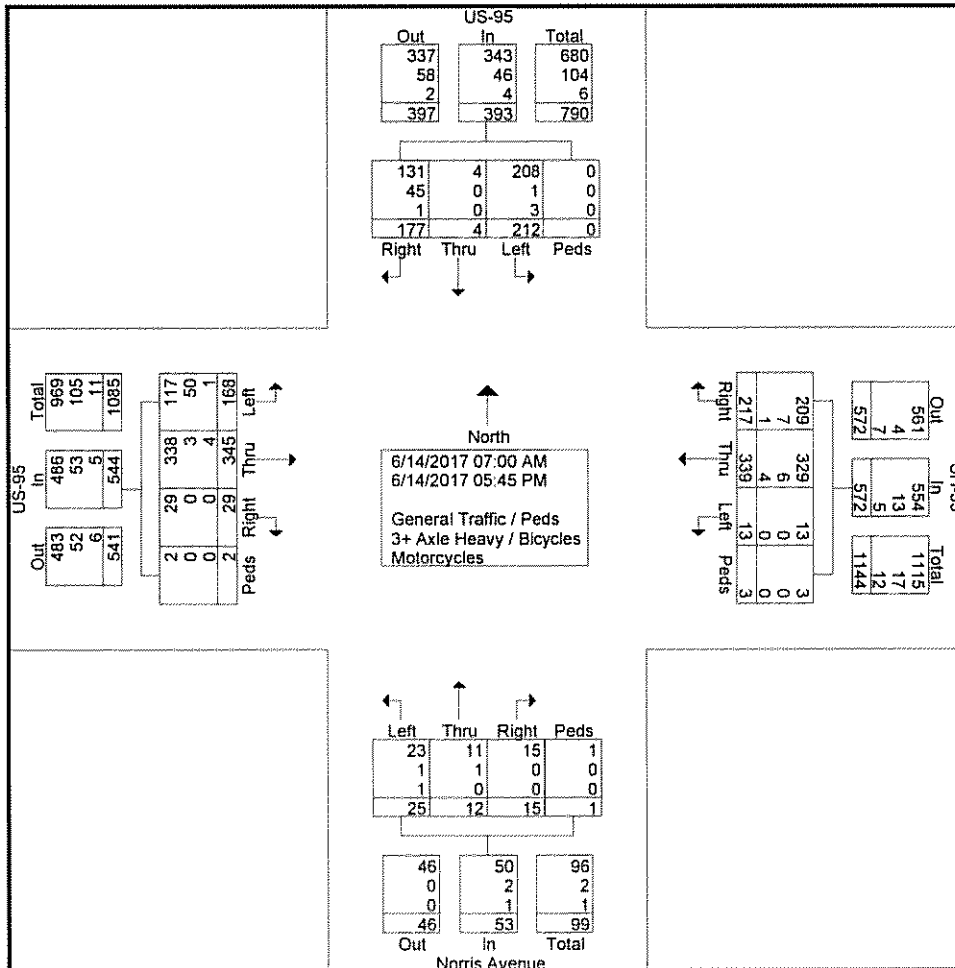
Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
07:00 AM	4	0	5	0	9	5	7	1	0	13	1	0	3	0	4	2	19	4	0	25	51
07:15 AM	5	0	6	0	11	5	12	0	1	18	1	0	4	0	5	0	28	7	0	35	69
07:30 AM	11	0	19	0	30	7	8	0	0	15	3	1	3	0	7	1	29	5	0	35	87
07:45 AM	13	1	8	0	22	3	19	0	0	22	1	0	2	0	3	1	19	9	0	29	76
Total	33	1	38	0	72	20	46	1	1	68	6	1	12	0	19	4	95	25	0	124	283
08:00 AM	12	0	8	0	20	5	11	0	0	16	2	0	0	0	2	2	14	11	0	27	65
08:15 AM	5	0	12	0	17	8	21	0	0	29	1	1	2	0	4	0	23	12	0	35	85
08:30 AM	7	0	13	0	20	7	12	1	0	20	2	1	1	0	4	0	22	10	0	32	76
08:45 AM	15	0	8	0	23	12	19	0	0	31	0	1	0	0	1	0	18	10	0	28	83
Total	39	0	41	0	80	32	63	1	0	96	5	3	3	0	11	2	77	43	0	122	309
-----																					
04:00 PM	14	0	18	0	32	32	21	2	0	55	0	1	2	1	4	2	15	6	0	23	114
04:15 PM	19	0	16	0	35	20	21	3	2	46	1	1	1	0	3	3	17	19	2	41	125
04:30 PM	5	0	18	0	23	13	29	1	0	43	0	1	1	0	2	2	24	14	0	40	108
04:45 PM	12	0	19	0	31	13	32	1	0	46	0	2	1	0	3	2	27	10	0	39	119
Total	50	0	71	0	121	78	103	7	2	190	1	5	5	1	12	9	83	49	2	143	466
05:00 PM	23	0	18	0	41	31	30	1	0	62	0	1	2	0	3	1	29	15	0	45	151
05:15 PM	9	0	11	0	20	21	41	0	0	62	1	1	2	0	4	6	15	14	0	35	121
05:30 PM	15	2	17	0	34	17	33	2	0	52	1	0	0	0	1	4	27	16	0	47	134
05:45 PM	8	1	16	0	25	18	23	1	0	42	1	1	1	0	3	3	19	6	0	28	98
Total	55	3	62	0	120	87	127	4	0	218	3	3	5	0	11	14	90	51	0	155	504
Grand Total	177	4	212	0	393	217	339	13	3	572	15	12	25	1	53	29	345	168	2	544	1562
Approch %	45	1	53.9	0		37.9	59.3	2.3	0.5		28.3	22.6	47.2	1.9		5.3	63.4	30.9	0.4		
Total %	11.3	0.3	13.6	0	25.2	13.9	21.7	0.8	0.2	36.6	1	0.8	1.6	0.1	3.4	1.9	22.1	10.8	0.1	34.8	
General Traffic / Peds	131	4	208	0	343	209	329	13	3	554	15	11	23	1	50	29	338	117	2	486	1433
% General Traffic / Peds	74	100	98.1	0	87.3	96.3	97.1	100	100	96.9	100	91.7	92	100	94.3	100	98	69.6	100	89.3	91.7
3+ Axle Heavy / Bicycles	45	0	1	0	46	7	6	0	0	13	0	1	1	0	2	0	3	50	0	53	114
% 3+ Axle Heavy / Bicycles	25.4	0	0.5	0	11.7	3.2	1.8	0	0	2.3	0	8.3	4	0	3.8	0	0.9	29.8	0	9.7	7.3
Motorcycles	1	0	3	0	4	1	4	0	0	5	0	0	1	0	1	0	4	1	0	5	15
% Motorcycles	0.6	0	1.4	0	1	0.5	1.2	0	0	0.9	0	0	4	0	1.9	0	1.2	0.6	0	0.9	1

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 2



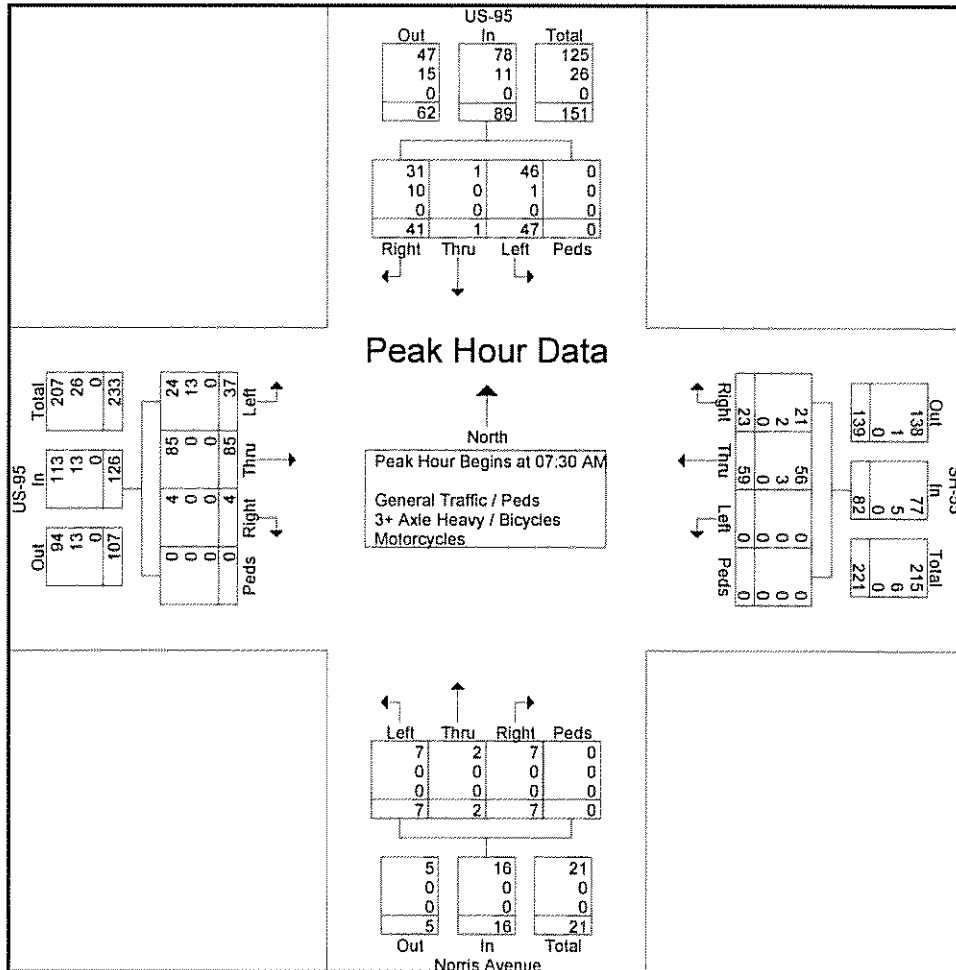
# L2 Data Collection

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 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 3

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 07:00 AM to 11:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:30 AM																					
07:30 AM	11	0	19	0	30	7	8	0	0	15	3	1	3	0	7	1	29	5	0	35	87
07:45 AM	13	1	8	0	22	3	19	0	0	22	1	0	2	0	3	1	19	9	0	29	76
08:00 AM	12	0	8	0	20	5	11	0	0	16	2	0	0	0	2	2	14	11	0	27	65
08:15 AM	5	0	12	0	17	8	21	0	0	29	1	1	2	0	4	0	23	12	0	35	85
Total Volume	41	1	47	0	89	23	59	0	0	82	7	2	7	0	16	4	85	37	0	126	313
% App. Total	46.1	1.1	52.8	0		28	72	0	0		43.8	12.5	43.8	0		3.2	67.5	29.4	0		
PHF	.788	.250	.618	.000	.742	.719	.702	.000	.000	.707	.583	.500	.583	.000	.571	.500	.733	.771	.000	.900	.899
General Traffic / Peds	31	1	46	0	78	21	56	0	0	77	7	2	7	0	16	4	85	24	0	113	284
% General Traffic / Peds	75.6	100	97.9	0	87.6	91.3	94.9	0	0	93.9	100	100	100	0	100	100	100	64.9	0	89.7	90.7
3+ Axle Heavy / Bicycles	10	0	1	0	11	2	3	0	0	5	0	0	0	0	0	0	0	13	0	13	29
% 3+ Axle Heavy / Bicycles	24.4	0	2.1	0	12.4	8.7	5.1	0	0	6.1	0	0	0	0	0	0	0	35.1	0	10.3	9.3
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





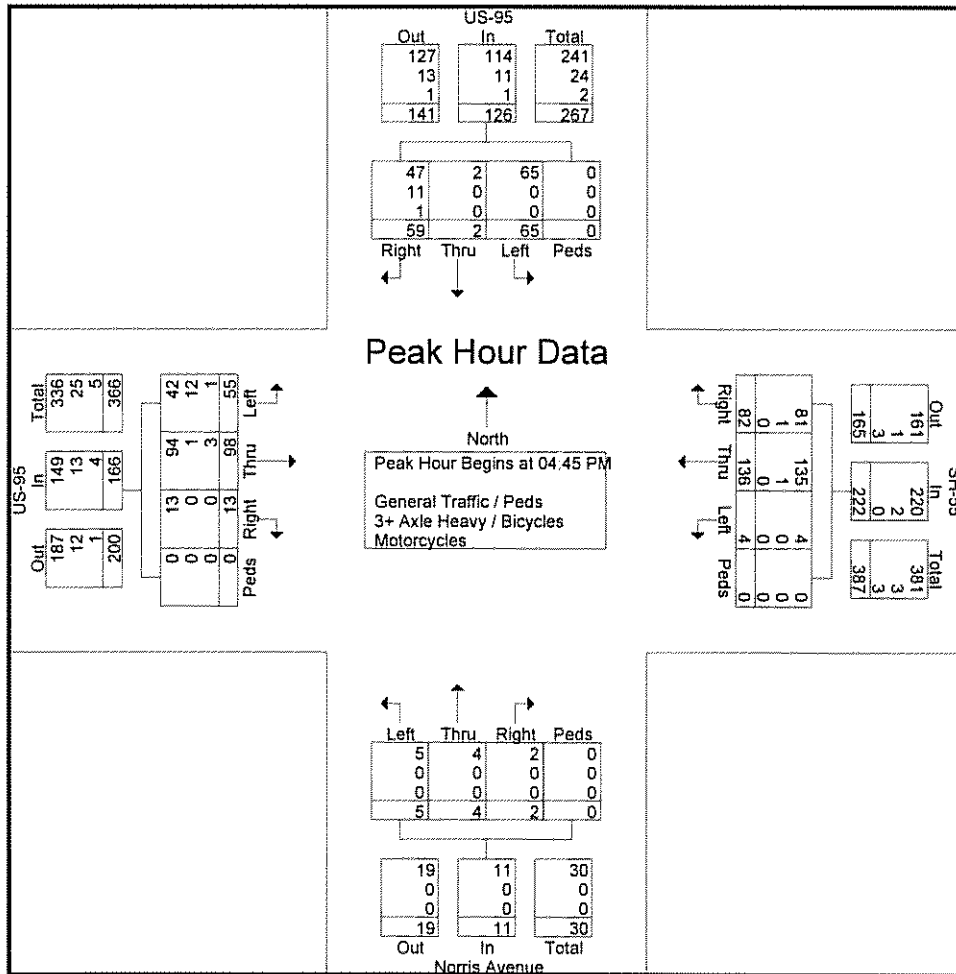
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6.14  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 5

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:45 PM																					
04:45 PM	12	0	19	0	31	13	32	1	0	46	0	2	1	0	3	2	27	10	0	39	119
05:00 PM	23	0	18	0	41	31	30	1	0	62	0	1	2	0	3	1	29	15	0	45	151
05:15 PM	9	0	11	0	20	21	41	0	0	62	1	1	2	0	4	6	15	14	0	35	121
05:30 PM	15	2	17	0	34	17	33	2	0	52	1	0	0	0	1	4	27	16	0	47	134
Total Volume	59	2	65	0	126	82	136	4	0	222	2	4	5	0	11	13	98	55	0	166	525
% App. Total	46.8	1.6	51.6	0		36.9	61.3	1.8	0		18.2	36.4	45.5	0		7.8	59	33.1	0		
PHF	.641	.250	.855	.000	.768	.661	.829	.500	.000	.895	.500	.500	.625	.000	.688	.542	.845	.859	.000	.883	.869
General Traffic / Peds	47	2	65	0	114	81	135	4	0	220	2	4	5	0	11	13	94	42	0	149	494
% General Traffic / Peds	79.7	100	100	0	90.5	98.8	99.3	100	0	99.1	100	100	100	0	100	100	95.9	76.4	0	89.8	94.1
3+ Axle Heavy / Bicycles	11	0	0	0	11	1	1	0	0	2	0	0	0	0	0	0	1	12	0	13	26
% 3+ Axle Heavy / Bicycles	18.6	0	0	0	8.7	1.2	0.7	0	0	0.9	0	0	0	0	0	0	1.0	21.8	0	7.8	5.0
Motorcycles	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	1	0	4	5
% Motorcycles	1.7	0	0	0	0.8	0	0	0	0	0	0	0	0	0	0	3.1	1.8	0	2.4	1.0	



# L2 Data Collection

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 Idaho (208) 860-7554 Utah (801) 413-2993

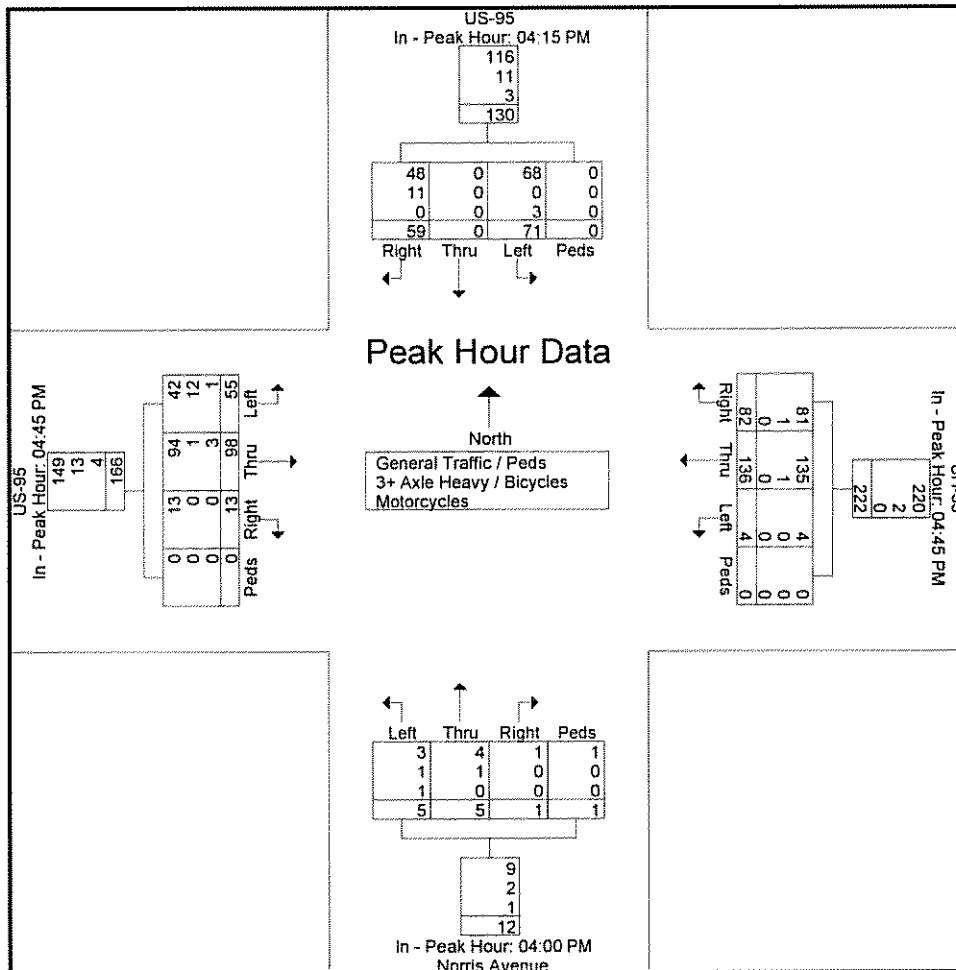
Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6  
 Site Code : 00000000  
 Start Date : 6/14/2017  
 Page No : 6

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 05:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	04:15 PM					04:45 PM					04:00 PM					04:45 PM				
+0 mins.	19	0	16	0	35	13	32	1	0	46	0	1	2	1	4	2	27	10	0	39
+15 mins.	5	0	18	0	23	31	30	1	0	62	1	1	1	0	3	1	29	15	0	45
+30 mins.	12	0	19	0	31	21	41	0	0	62	0	1	1	0	2	6	15	14	0	35
+45 mins.	23	0	18	0	41	17	33	2	0	52	0	2	1	0	3	4	27	16	0	47
Total Volume	59	0	71	0	130	82	136	4	0	222	1	5	5	1	12	13	98	55	0	166
% App. Total	45.4	0	54.6	0		36.9	61.3	1.8	0		8.3	41.7	41.7	8.3		7.8	59	33.1	0	
PHF	.641	.000	.934	.000	.793	.661	.829	.500	.000	.895	.250	.625	.625	.250	.750	.542	.845	.859	.000	.883
General Traffic / Peds	48	0	68	0	116	81	135	4	0	220	1	4	3	1	9	13	94	42	0	149
% General Traffic / Peds	81.4	0	95.8	0	89.2	98.8	99.3	100	0	99.1	100	80	60	100	75	100	95.9	76.4	0	89.8
3+ Axle Heavy / Bicycles	11	0	0	0	11	1	1	0	0	2	0	1	1	0	2	0	1	12	0	13
% 3+ Axle Heavy / Bicycles	18.6	0	0	0	8.5	1.2	0.7	0	0	0.9	0	20	20	0	16.7	0	1	21.8	0	7.8
Motorcycles	0	0	3	0	3	0	0	0	0	0	0	0	1	0	1	0	3	1	0	4
% Motorcycles	0	0	4.2	0	2.3	0	0	0	0	0	0	0	20	0	8.3	0	3.1	1.8	0	2.4



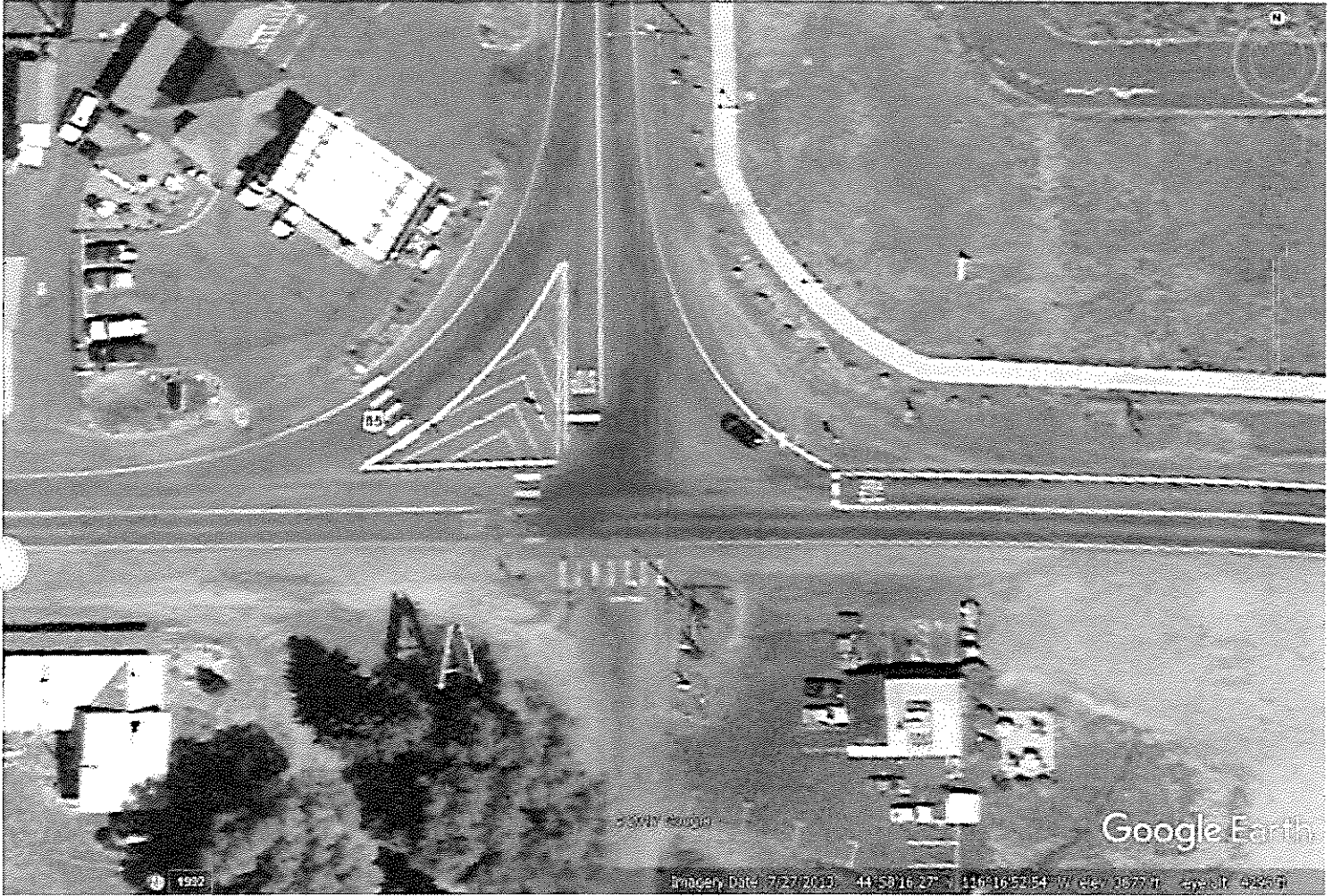
# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / US-95  
City, State: New Meadows, Idaho  
Control: Stop Sign

File Name : SH-55 & US-95 6.14  
Site Code : 00000000  
Start Date : 6/14/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
05:00 PM	0	38	2	0	40	1	0	12	0	13	66	134	1	0	201	3	0	0	0	3	257
05:15 PM	2	39	15	0	56	5	3	15	0	23	59	131	5	0	195	5	0	2	0	7	281
05:30 PM	0	45	18	0	63	2	0	15	0	17	45	131	2	0	178	1	0	0	0	1	259
05:45 PM	1	42	29	0	72	4	1	11	0	16	61	122	5	3	191	1	2	0	0	3	282
Total	3	164	64	0	231	12	4	53	0	69	231	518	13	3	765	10	2	2	0	14	1079
06:00 PM	1	45	15	0	61	7	0	11	0	18	57	156	5	1	219	5	3	2	1	11	309
06:15 PM	2	37	18	0	57	3	2	10	0	15	70	163	2	4	239	0	3	0	0	3	314
06:30 PM	1	29	6	0	36	2	0	8	0	10	60	150	0	0	210	1	0	0	0	1	257
06:45 PM	0	37	11	0	48	2	0	12	0	14	64	146	6	0	216	2	1	0	0	3	281
Total	4	148	50	0	202	14	2	41	0	57	251	615	13	5	884	8	7	2	1	18	1161
Grand Total	7	312	114	0	433	26	6	94	0	126	482	1133	26	8	1649	18	9	4	1	32	2240
Apprch %	1.6	72.1	26.3	0		20.6	4.8	74.6	0		29.2	68.7	1.6	0.5		56.2	28.1	12.5	3.1		
Total %	0.3	13.9	5.1	0	19.3	1.2	0.3	4.2	0	5.6	21.5	50.6	1.2	0.4	73.6	0.8	0.4	0.2	0	1.4	
General Traffic / Peds	7	310	112	0	429	24	6	91	0	121	480	1126	26	8	1640	18	9	4	1	32	2222
% General Traffic / Peds	100	99.4	98.2	0	99.1	92.3	100	96.8	0	96	99.6	99.4	100	100	99.5	100	100	100	100	100	99.2
3+ Axle Heavy / Bicycles	0	1	1	0	2	0	0	2	0	2	1	2	0	0	3	0	0	0	0	0	7
% 3+ Axle Heavy / Bicycles	0	0.3	0.9	0	0.5	0	0	2.1	0	1.6	0.2	0.2	0	0	0.2	0	0	0	0	0	0.3
Motorcycles	0	1	1	0	2	2	0	1	0	3	1	5	0	0	6	0	0	0	0	0	11
% Motorcycles	0	0.3	0.9	0	0.5	7.7	0	1.1	0	2.4	0.2	0.4	0	0	0.4	0	0	0	0	0	0.5

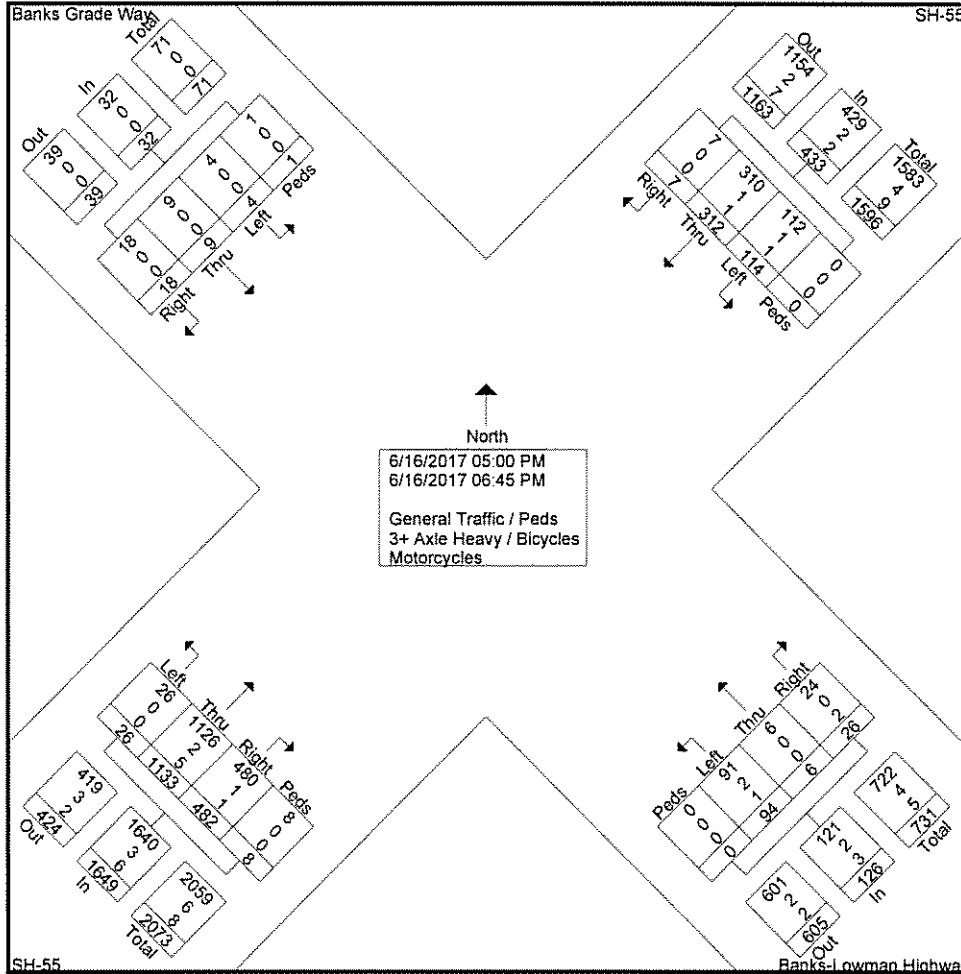


# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 2



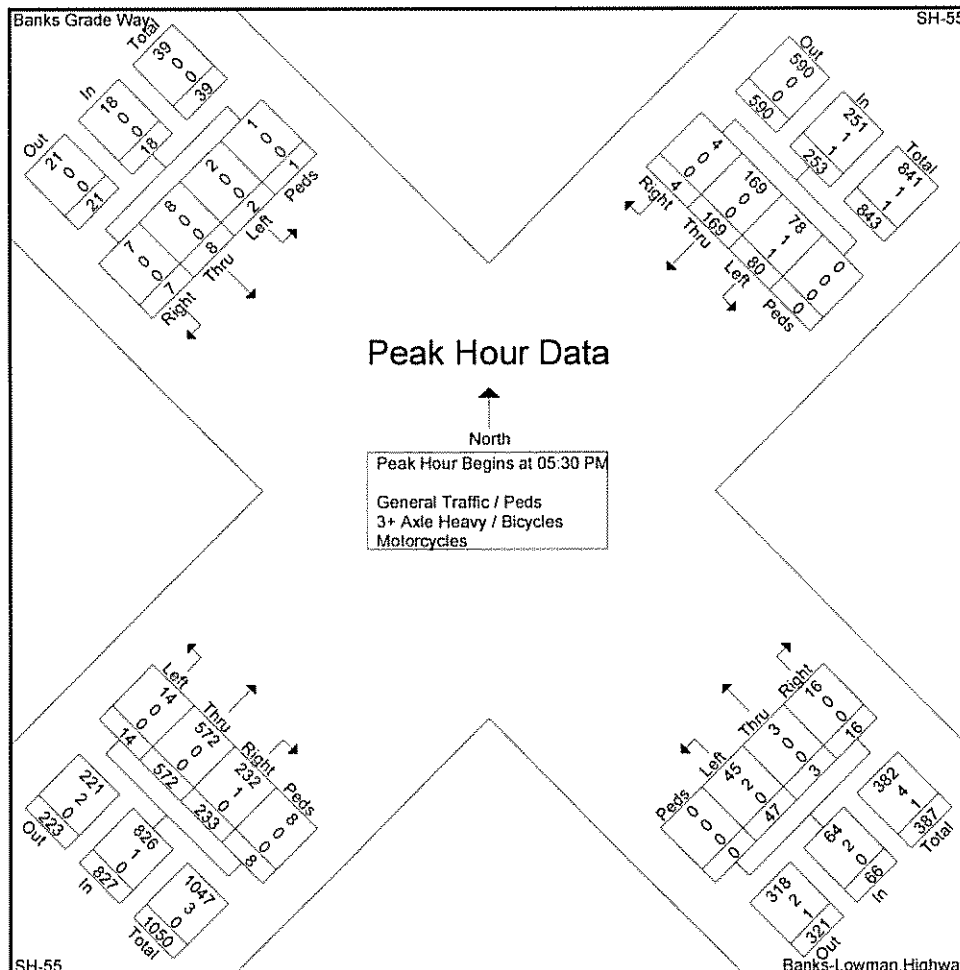
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 3

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:30 PM																					
05:30 PM	0	45	18	0	63	2	0	15	0	17	45	131	2	0	178	1	0	0	0	1	259
05:45 PM	1	42	29	0	72	4	1	11	0	16	61	122	5	3	191	1	2	0	0	3	282
06:00 PM	1	45	15	0	61	7	0	11	0	18	57	156	5	1	219	5	3	2	1	11	309
06:15 PM	2	37	18	0	57	3	2	10	0	15	70	163	2	4	239	0	3	0	0	3	314
Total Volume	4	169	80	0	253	16	3	47	0	66	233	572	14	8	827	7	8	2	1	18	1164
% App. Total	1.6	66.8	31.6	0		24.2	4.5	71.2	0		28.2	69.2	1.7	1		38.9	44.4	11.1	5.6		
PHF	.500	.939	.690	.000	.878	.571	.375	.783	.000	.917	.832	.877	.700	.500	.865	.350	.667	.250	.250	.409	.927
General Traffic / Peds	4	169	78	0	251	16	3	45	0	64	232	572	14	8	826	7	8	2	1	18	1159
% General Traffic / Peds	100	100	97.5	0	99.2	100	100	95.7	0	97.0	99.6	100	100	100	99.9	100	100	100	100	100	99.6
3+ Axle Heavy / Bicycle	0	0	1	0	1	0	0	2	0	2	1	0	0	0	1	0	0	0	0	0	4
% 3+ Axle Heavy / Bicycle	0	0	1.3	0	0.4	0	0	4.3	0	3.0	0.4	0	0	0	0.1	0	0	0	0	0	0.3
Motorcycles	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Motorcycles	0	0	1.3	0	0.4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1



# L2 Data Collection

L2DataCollection.com  
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Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

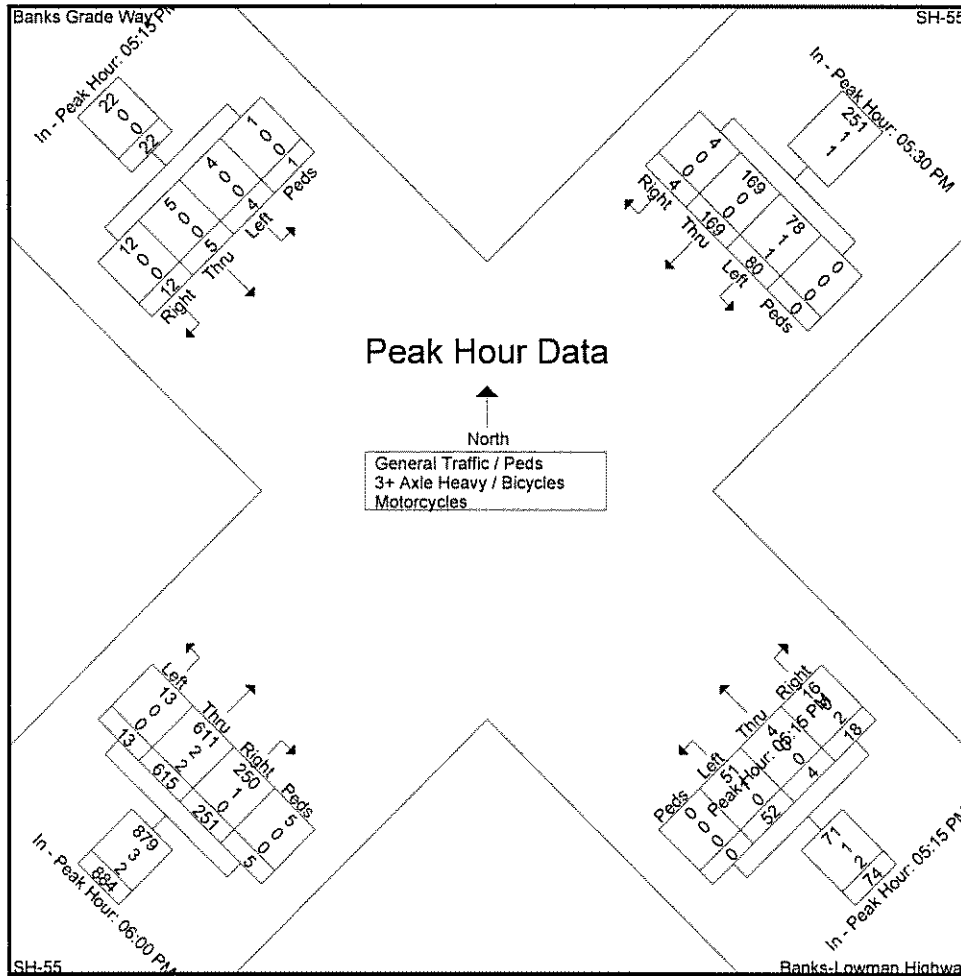
File Name : SH-55 & Banks Lowman Hwy 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 4

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:30 PM					05:15 PM					06:00 PM					05:15 PM				
+0 mins.	0	45	18	0	63	5	3	15	0	23	57	156	5	1	219	5	0	2	0	7
+15 mins.	1	42	29	0	72	2	0	15	0	17	70	163	2	4	239	1	0	0	0	1
+30 mins.	1	45	15	0	61	4	1	11	0	16	60	150	0	0	210	1	2	0	0	3
+45 mins.	2	37	18	0	57	7	0	11	0	18	64	146	6	0	216	5	3	2	1	11
Total Volume	4	169	80	0	253	18	4	52	0	74	251	615	13	5	884	12	5	4	1	22
% App. Total	1.6	66.8	31.6	0		24.3	5.4	70.3	0		28.4	69.6	1.5	0.6		54.5	22.7	18.2	4.5	
PHF	.500	.939	.690	.000	.878	.643	.333	.867	.000	.804	.896	.943	.542	.313	.925	.600	.417	.500	.250	.500
General Traffic / Peds	4	169	78	0	251	16	4	51	0	71	250	611	13	5	879	12	5	4	1	22
% General Traffic / Peds	100	100	97.5	0	99.2	88.9	100	98.1	0	95.9	99.6	99.3	100	100	99.4	100	100	100	100	100
3+ Axle Heavy / Bicycles	0	0	1	0	1	0	0	1	0	1	1	2	0	0	3	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	1.2	0	0.4	0	0	1.9	0	1.4	0.4	0.3	0	0	0.3	0	0	0	0	0
Motorcycles	0	0	1	0	1	2	0	0	0	2	0	2	0	0	2	0	0	0	0	0
% Motorcycles	0	0	1.2	0	0.4	11.1	0	0	0	2.7	0	0.3	0	0	0.2	0	0	0	0	0



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Banks Lowman-Hwy  
City, State: Banks, Idaho  
Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
Site Code : 00000000  
Start Date : 6/16/2017  
Page No : 5

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

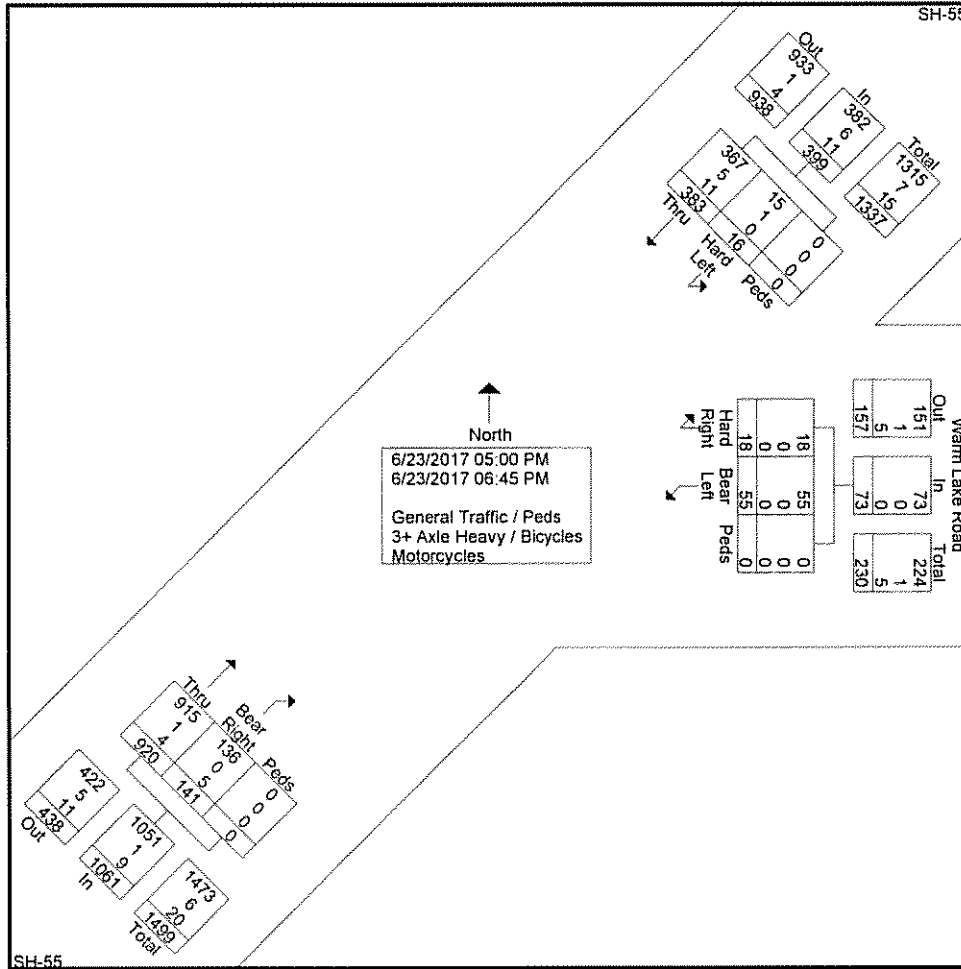
Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
05:00 PM	48	2	0	50	12	117	0	129	0	13	0	13	192
05:15 PM	47	2	0	49	19	122	0	141	4	7	0	11	201
05:30 PM	49	3	0	52	14	111	0	125	5	8	0	13	190
05:45 PM	46	3	0	49	20	93	0	113	0	4	0	4	166
Total	190	10	0	200	65	443	0	508	9	32	0	41	749
06:00 PM	64	2	0	66	14	107	0	121	1	8	0	9	196
06:15 PM	47	1	0	48	16	105	0	121	4	9	0	13	182
06:30 PM	42	3	0	45	25	140	0	165	1	4	0	5	215
06:45 PM	40	0	0	40	21	125	0	146	3	2	0	5	191
Total	193	6	0	199	76	477	0	553	9	23	0	32	784
Grand Total	383	16	0	399	141	920	0	1061	18	55	0	73	1533
Apprch %	96	4	0		13.3	86.7	0		24.7	75.3	0		
Total %	25	1	0	26	9.2	60	0	69.2	1.2	3.6	0	4.8	
General Traffic / Peds	367	15	0	382	136	915	0	1051	18	55	0	73	1506
% General Traffic / Peds	95.8	93.8	0	95.7	96.5	99.5	0	99.1	100	100	0	100	98.2
3+ Axle Heavy / Bicycles	5	1	0	6	0	1	0	1	0	0	0	0	7
% 3+ Axle Heavy / Bicycles	1.3	6.2	0	1.5	0	0.1	0	0.1	0	0	0	0	0.5
Motorcycles	11	0	0	11	5	4	0	9	0	0	0	0	20
% Motorcycles	2.9	0	0	2.8	3.5	0.4	0	0.8	0	0	0	0	1.3

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 2



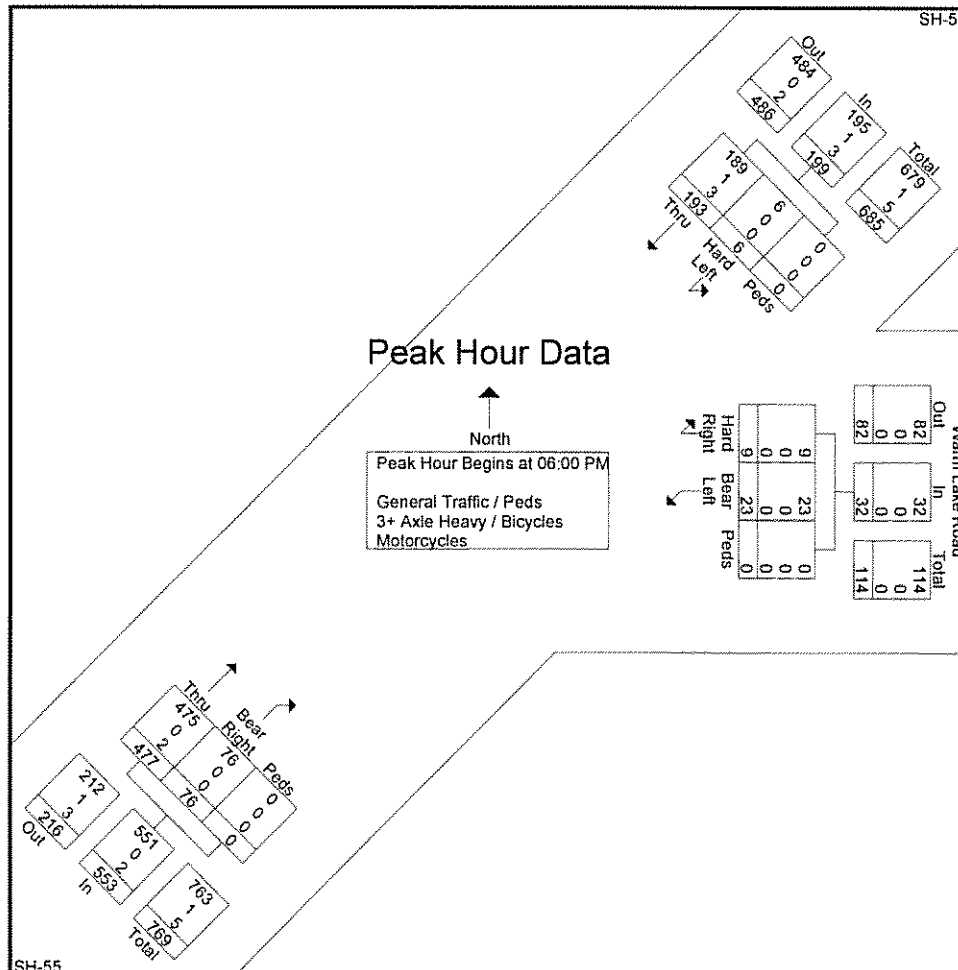
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 3

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 06:00 PM													
06:00 PM	64	2	0	66	14	107	0	121	1	8	0	9	196
06:15 PM	47	1	0	48	16	105	0	121	4	9	0	13	182
06:30 PM	42	3	0	45	25	140	0	165	1	4	0	5	215
06:45 PM	40	0	0	40	21	125	0	146	3	2	0	5	191
Total Volume	193	6	0	199	76	477	0	553	9	23	0	32	784
% App. Total	97	3	0		13.7	86.3	0		28.1	71.9	0		
PHF	.754	.500	.000	.754	.760	.852	.000	.838	.563	.639	.000	.615	.912
General Traffic / Peds	189	6	0	195	76	475	0	551	9	23	0	32	778
% General Traffic / Peds	97.9	100	0	98.0	100	99.6	0	99.6	100	100	0	100	99.2
3+ Axle Heavy / Bicycles	1	0	0	1	0	0	0	0	0	0	0	0	1
% 3+ Axle Heavy / Bicycles	0.5	0	0	0.5	0	0	0	0	0	0	0	0	0.1
Motorcycles	3	0	0	3	0	2	0	2	0	0	0	0	5
% Motorcycles	1.6	0	0	1.5	0	0.4	0	0.4	0	0	0	0	0.6



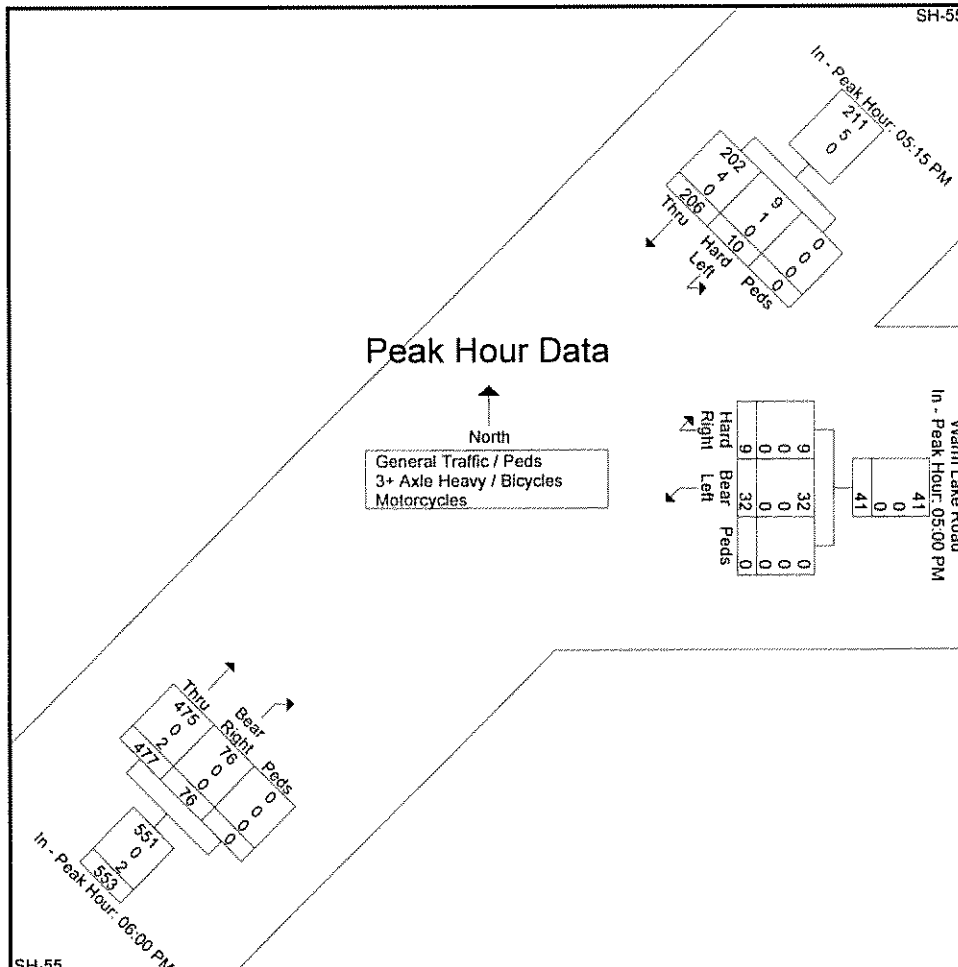
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 4

Start Time	SH-55 From Northeast				Bear Right	SH-55 From Southwest			Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total		Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Each Approach Begins at:													
	05:15 PM				06:00 PM				05:00 PM				
+0 mins.	47	2	0	49	14	107	0	121	0	13	0	0	13
+15 mins.	49	3	0	52	16	105	0	121	4	7	0	0	11
+30 mins.	46	3	0	49	25	140	0	165	5	8	0	0	13
+45 mins.	64	2	0	66	21	125	0	146	0	4	0	0	4
Total Volume	206	10	0	216	76	477	0	553	9	32	0	0	41
% App. Total	95.4	4.6	0		13.7	86.3	0		22	78	0		
PHF	.805	.833	.000	.818	.760	.852	.000	.838	.450	.615	.000		.788
General Traffic / Peds	202	9	0	211	76	475	0	551	9	32	0	0	41
% General Traffic / Peds	98.1	90	0	97.7	100	99.6	0	99.6	100	100	0	0	100
3+ Axle Heavy / Bicycles	4	1	0	5	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	1.9	10	0	2.3	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	2	0	2	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0.4	0	0.4	0	0	0	0	0





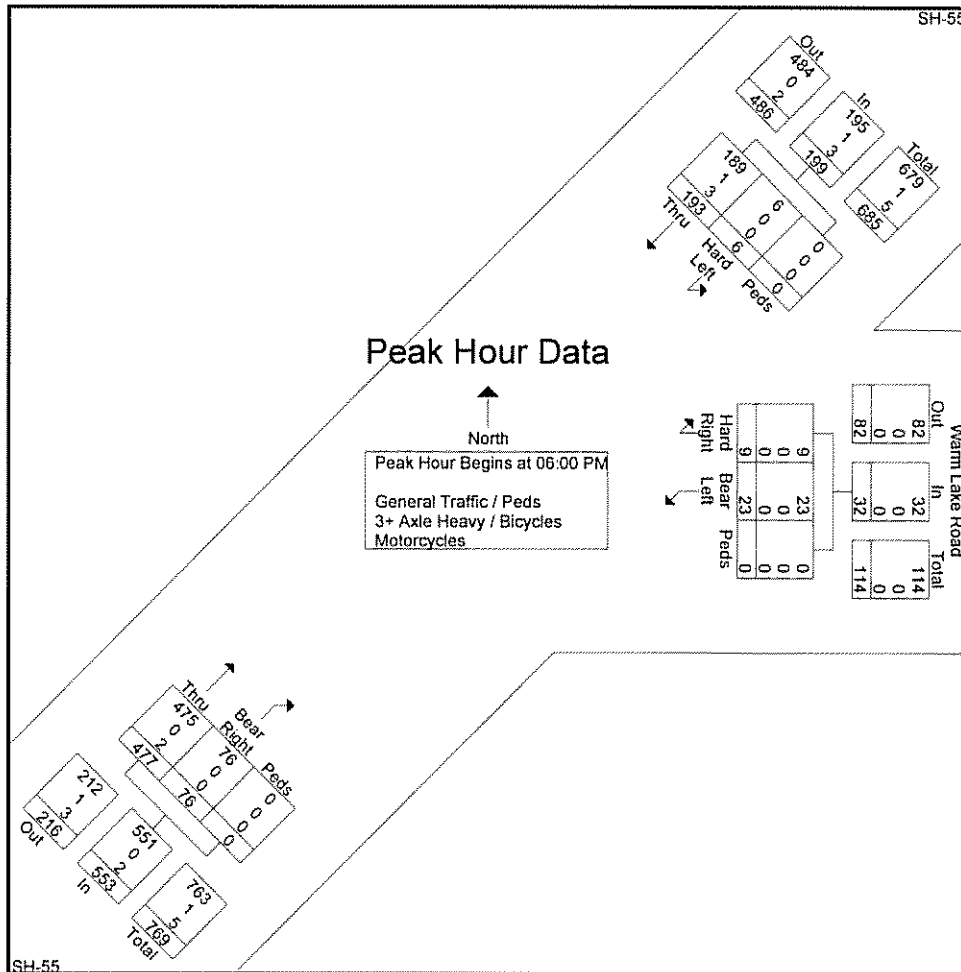
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 5

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 06:00 PM													
06:00 PM	64	2	0	66	14	107	0	121	1	8	0	9	196
06:15 PM	47	1	0	48	16	105	0	121	4	9	0	13	182
06:30 PM	42	3	0	45	25	140	0	165	1	4	0	5	215
06:45 PM	40	0	0	40	21	125	0	146	3	2	0	5	191
Total Volume	193	6	0	199	76	477	0	553	9	23	0	32	784
% App. Total	97	3	0		13.7	86.3	0		28.1	71.9	0		
PHF	.754	.500	.000	.754	.760	.852	.000	.838	.563	.639	.000	.615	.912
General Traffic / Peds	189	6	0	195	76	475	0	551	9	23	0	32	778
% General Traffic / Peds	97.9	100	0	98.0	100	99.6	0	99.6	100	100	0	100	99.2
3+ Axle Heavy / Bicycles	1	0	0	1	0	0	0	0	0	0	0	0	1
% 3+ Axle Heavy / Bicycles	0.5	0	0	0.5	0	0	0	0	0	0	0	0	0.1
Motorcycles	3	0	0	3	0	2	0	2	0	0	0	0	5
% Motorcycles	1.6	0	0	1.5	0	0.4	0	0.4	0	0	0	0	0.6



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

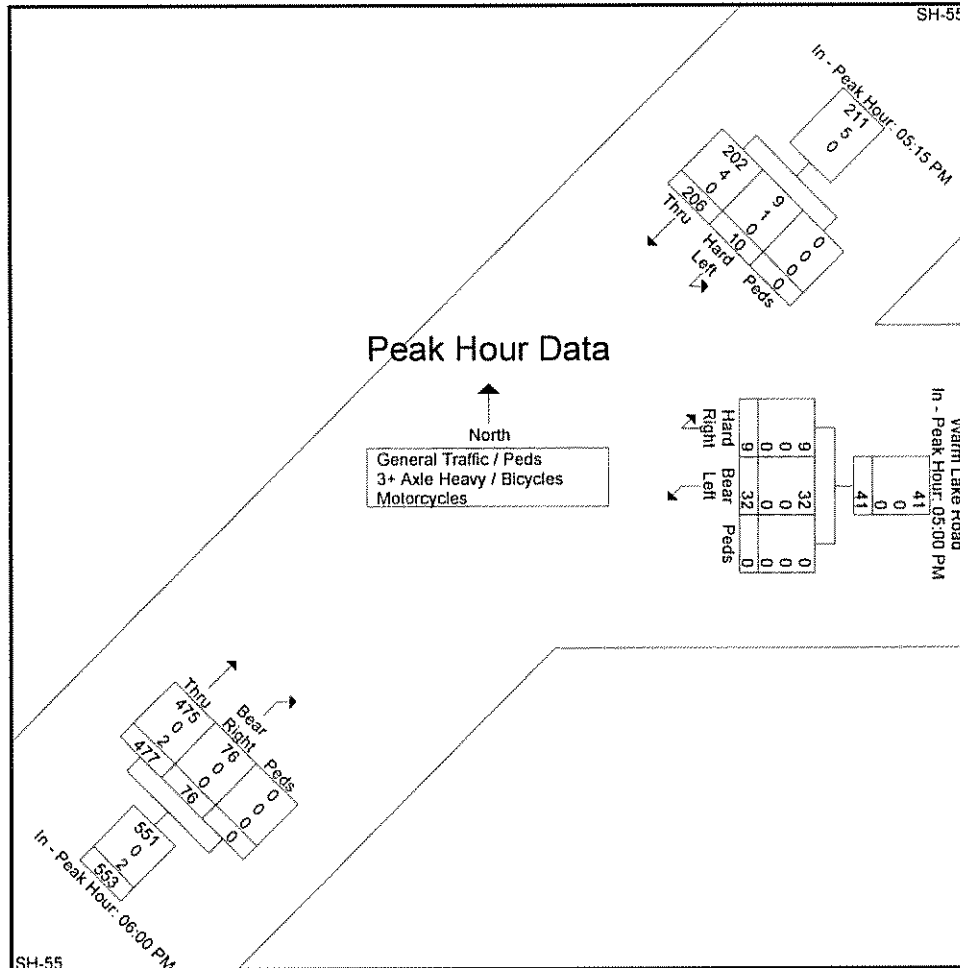
File Name : SH-55 & Warm Lake Rd 6.23  
 Site Code : 00000000  
 Start Date : 6/23/2017  
 Page No : 6

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:15 PM				06:00 PM				05:00 PM			
+0 mins.	47	2	0	49	14	107	0	121	0	13	0	13
+15 mins.	49	3	0	52	16	105	0	121	4	7	0	11
+30 mins.	46	3	0	49	25	140	0	165	5	8	0	13
+45 mins.	64	2	0	66	21	125	0	146	0	4	0	4
Total Volume	206	10	0	216	76	477	0	553	9	32	0	41
% App. Total	95.4	4.6	0		13.7	86.3	0		22	78	0	
PHF	.805	.833	.000	.818	.760	.852	.000	.838	.450	.615	.000	.788
General Traffic / Peds	202	9	0	211	76	475	0	551	9	32	0	41
% General Traffic / Peds	98.1	90	0	97.7	100	99.6	0	99.6	100	100	0	100
3+ Axle Heavy / Bicycles	4	1	0	5	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	1.9	10	0	2.3	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	2	0	2	0	0	0	0
% Motorcycles	0	0	0	0	0	0.4	0	0.4	0	0	0	0



# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Warm Lake Rd  
City, State: Cascade, Idaho  
Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.23  
Site Code : 00000000  
Start Date : 6/23/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

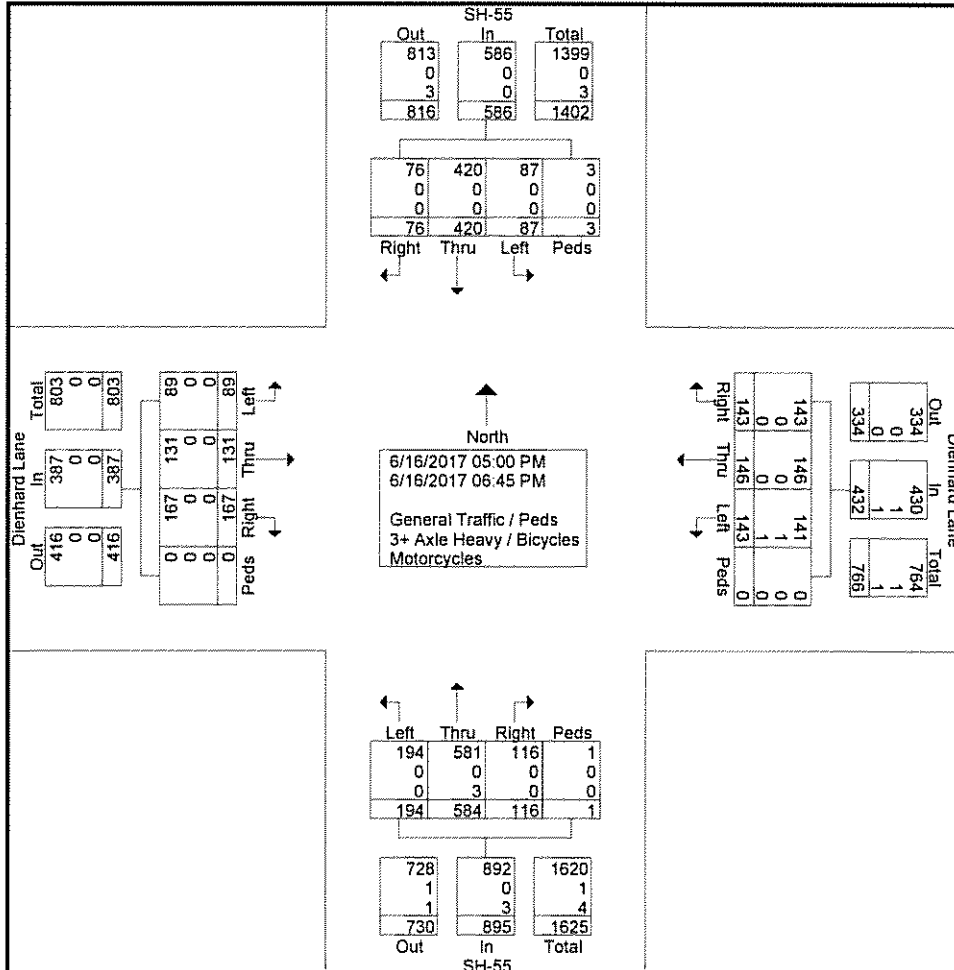
Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
05:00 PM	18	71	21	0	110	23	26	23	0	72	17	84	26	0	127	22	26	19	0	67	376
05:15 PM	12	51	16	0	79	24	25	25	0	74	13	80	33	0	126	28	20	11	0	59	338
05:30 PM	8	66	11	0	85	25	21	26	0	72	15	79	21	1	116	21	18	10	0	49	322
05:45 PM	12	50	11	0	73	14	16	17	0	47	22	90	25	0	137	22	19	8	0	49	306
Total	50	238	59	0	347	86	88	91	0	265	67	333	105	1	506	93	83	48	0	224	1342
06:00 PM	4	53	3	1	61	16	21	20	0	57	8	66	26	0	100	14	16	7	0	37	255
06:15 PM	7	42	11	0	60	14	14	8	0	36	17	61	19	0	97	16	12	4	0	32	225
06:30 PM	8	44	7	2	61	15	11	19	0	45	12	72	22	0	106	17	8	18	0	43	255
06:45 PM	7	43	7	0	57	12	12	5	0	29	12	52	22	0	86	27	12	12	0	51	223
Total	26	182	28	3	239	57	58	52	0	167	49	251	89	0	389	74	48	41	0	163	958
Grand Total	76	420	87	3	586	143	146	143	0	432	116	584	194	1	895	167	131	89	0	387	2300
Apprch %	13	71.7	14.8	0.5		33.1	33.8	33.1	0		13	65.3	21.7	0.1		43.2	33.9	23	0		
Total %	3.3	18.3	3.8	0.1	25.5	6.2	6.3	6.2	0	18.8	5	25.4	8.4	0	38.9	7.3	5.7	3.9	0	16.8	
General Traffic / Peds	76	420	87	3	586	143	146	141	0	430	116	581	194	1	892	167	131	89	0	387	2295
% General Traffic / Peds	100	100	100	100	100	100	100	98.6	0	99.5	100	99.5	100	100	99.7	100	100	100	0	100	99.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0.7	0	0.2	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	1	0	1	0	3	0	0	3	0	0	0	0	0	4
% Motorcycles	0	0	0	0	0	0	0	0.7	0	0.2	0	0.5	0	0	0.3	0	0	0	0	0	0.2

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 2



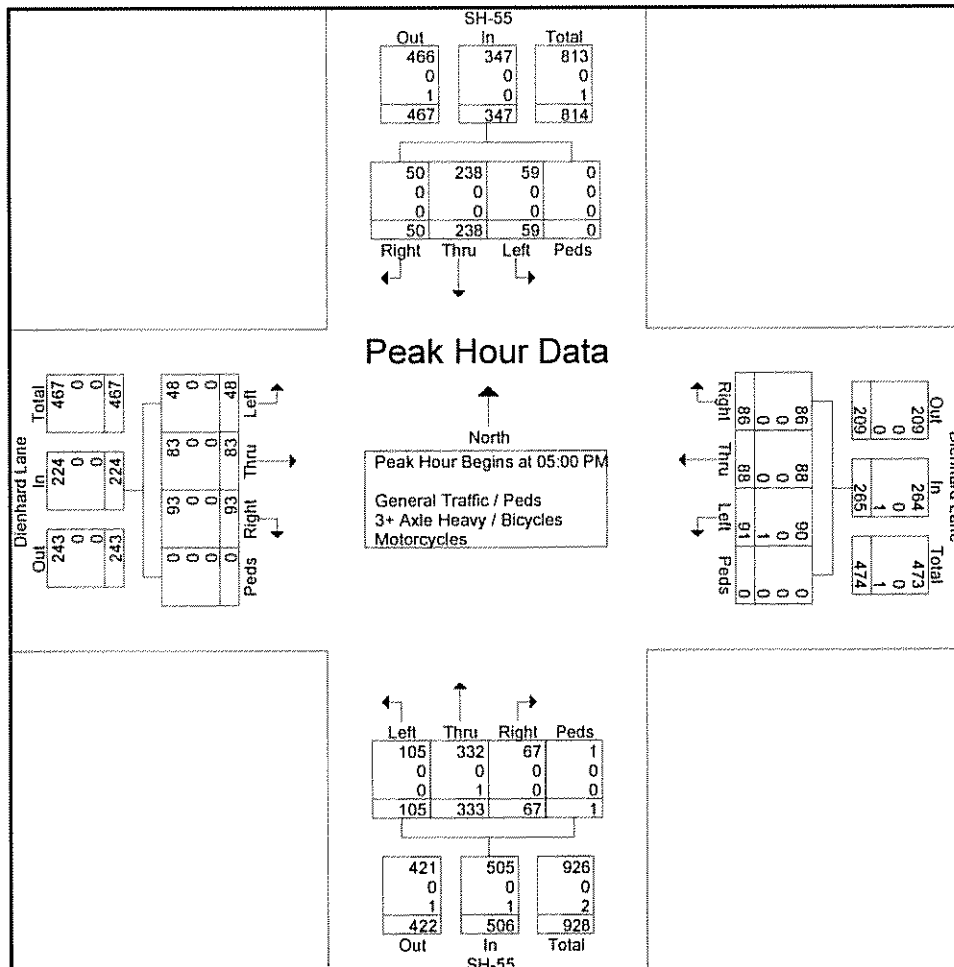
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 3

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	18	71	21	0	110	23	26	23	0	72	17	84	26	0	127	22	26	19	0	67	376
05:15 PM	12	51	16	0	79	24	25	25	0	74	13	80	33	0	126	28	20	11	0	59	338
05:30 PM	8	66	11	0	85	25	21	26	0	72	15	79	21	1	116	21	18	10	0	49	322
05:45 PM	12	50	11	0	73	14	16	17	0	47	22	90	25	0	137	22	19	8	0	49	306
Total Volume	50	238	59	0	347	86	88	91	0	265	67	333	105	1	506	93	83	48	0	224	1342
% App. Total	14.4	68.6	17	0		32.5	33.2	34.3	0		13.2	65.8	20.8	0.2		41.5	37.1	21.4	0		
PHF	.694	.838	.702	.000	.789	.860	.846	.875	.000	.895	.761	.925	.795	.250	.923	.830	.798	.632	.000	.836	.892
General Traffic / Peds	50	238	59	0	347	86	88	90	0	264	67	332	105	1	505	93	83	48	0	224	1340
% General Traffic / Peds	100	100	100	0	100	100	100	98.9	0	99.6	100	99.7	100	100	99.8	100	100	100	0	100	99.9
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
% Motorcycles	0	0	0	0	0	0	0	1.1	0	0.4	0	0.3	0	0	0.2	0	0	0	0	0	0.1



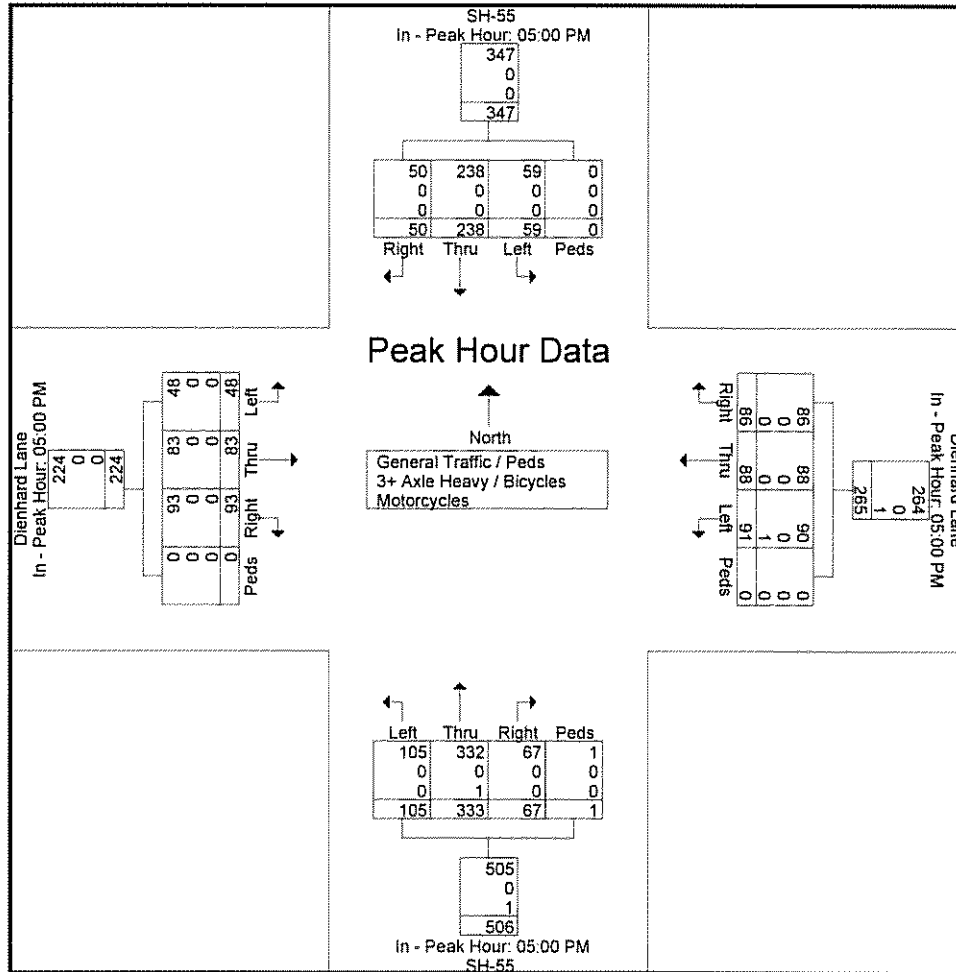
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 4

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					05:00 PM					05:00 PM					
+0 mins.	18	71	21	0	110	23	26	23	0	72	17	84	26	0	127	22	26	19	0	67	
+15 mins.	12	51	16	0	79	24	25	25	0	74	13	80	33	0	126	28	20	11	0	59	
+30 mins.	8	66	11	0	85	25	21	26	0	72	15	79	21	1	116	21	18	10	0	49	
+45 mins.	12	50	11	0	73	14	16	17	0	47	22	90	25	0	137	22	19	8	0	49	
Total Volume	50	238	59	0	347	86	88	91	0	265	67	333	105	1	506	93	83	48	0	224	
% App. Total	14.4	68.6	17	0		32.5	33.2	34.3	0		13.2	65.8	20.8	0.2		41.5	37.1	21.4	0		
PHF	.694	.838	.702	.000	.789	.860	.846	.875	.000	.895	.761	.925	.795	.250	.923	.830	.798	.632	.000	.836	
General Traffic / Peds	50	238	59	0	347	86	88	90	0	264	67	332	105	1	505	93	83	48	0	224	
% General Traffic / Peds	100	100	100	0	100	100	100	98.9	0	99.6	100	99.7	100	100	99.8	100	100	100	0	100	
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Motorcycles	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	
% Motorcycles	0	0	0	0	0	0	0	1.1	0	0.4	0	0.3	0	0	0.2	0	0	0	0	0	



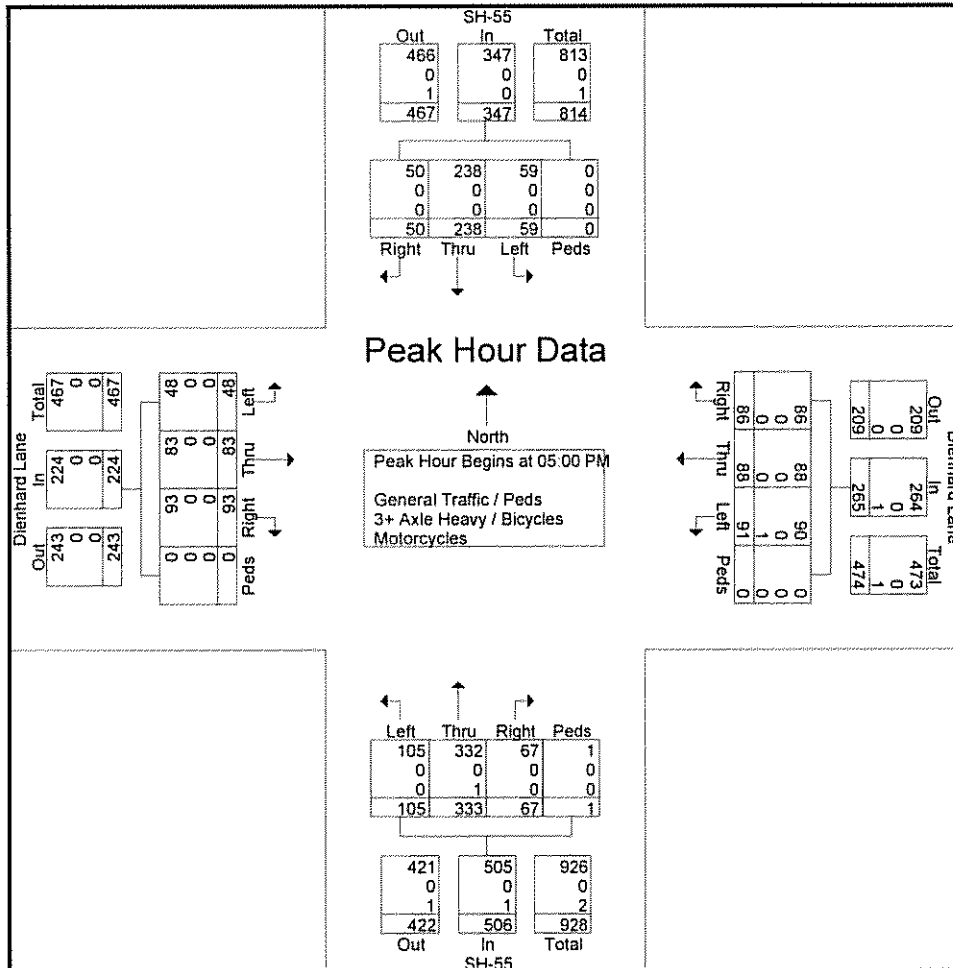
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 5

Start Time	SH-55 From North					Dienhard Lane From East					SH-55 From South					Dienhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	18	71	21	0	110	23	26	23	0	72	17	84	26	0	127	22	26	19	0	67	376
05:15 PM	12	51	16	0	79	24	25	25	0	74	13	80	33	0	126	28	20	11	0	59	338
05:30 PM	8	66	11	0	85	25	21	26	0	72	15	79	21	1	116	21	18	10	0	49	322
05:45 PM	12	50	11	0	73	14	16	17	0	47	22	90	25	0	137	22	19	8	0	49	306
Total Volume	50	238	59	0	347	86	88	91	0	265	67	333	105	1	506	93	83	48	0	224	1342
% App. Total	14.4	68.6	17	0		32.5	33.2	34.3	0		13.2	65.8	20.8	0.2		41.5	37.1	21.4	0		
PHF	.694	.838	.702	.000	.789	.860	.846	.875	.000	.895	.761	.925	.795	.250	.923	.830	.798	.632	.000	.836	.892
General Traffic / Peds	50	238	59	0	347	86	88	90	0	264	67	332	105	1	505	93	83	48	0	224	1340
% General Traffic / Peds	100	100	100	0	100	100	100	98.9	0	99.6	100	99.7	100	100	99.8	100	100	100	0	100	99.9
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	2
% Motorcycles	0	0	0	0	0	0	0	1.1	0	0.4	0	0.3	0	0	0.2	0	0	0	0	0	0.1





# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

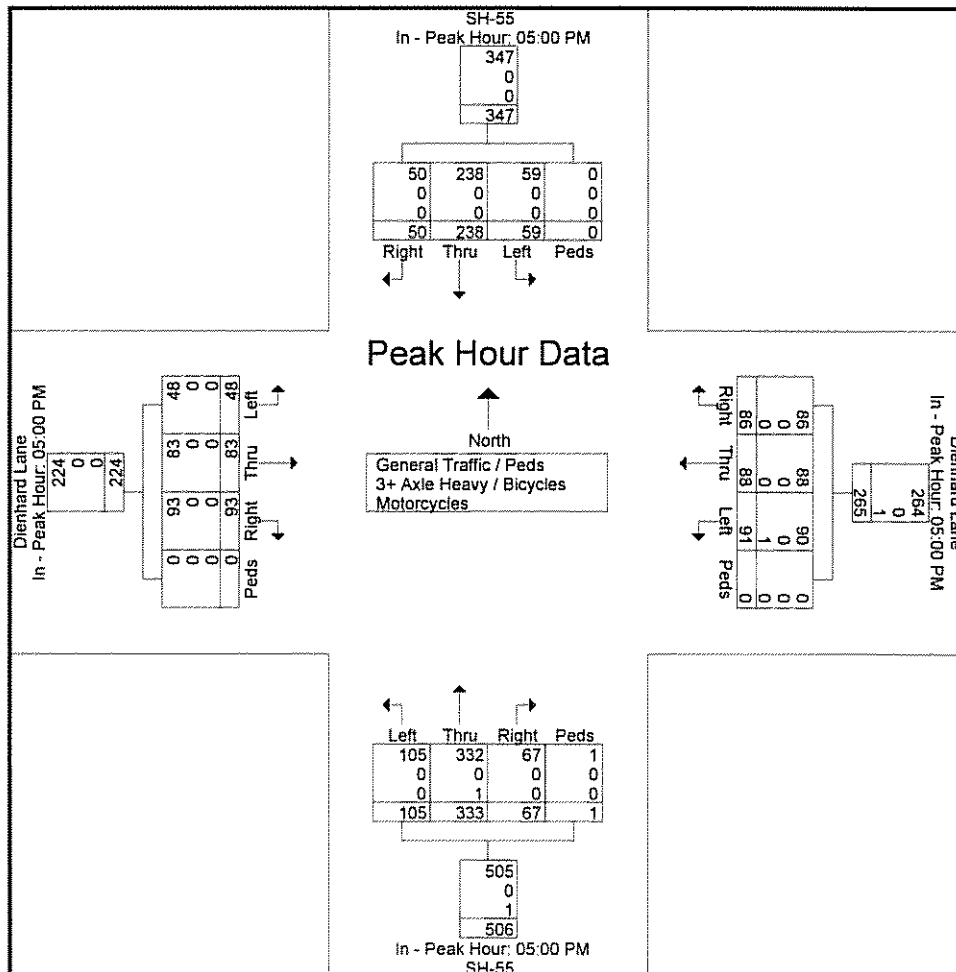
File Name : SH-55 & Deinhard 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 6

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					05:00 PM					05:00 PM					05:00 PM				
+0 mins.	18	71	21	0	110	23	26	23	0	72	17	84	26	0	127	22	26	19	0	67
+15 mins.	12	51	16	0	79	24	25	25	0	74	13	80	33	0	126	28	20	11	0	59
+30 mins.	8	66	11	0	85	25	21	26	0	72	15	79	21	1	116	21	18	10	0	49
+45 mins.	12	50	11	0	73	14	16	17	0	47	22	90	25	0	137	22	19	8	0	49
Total Volume	50	238	59	0	347	86	88	91	0	265	67	333	105	1	506	93	83	48	0	224
% App. Total	14.4	68.6	17	0		32.5	33.2	34.3	0		13.2	65.8	20.8	0.2		41.5	37.1	21.4	0	
PHF	.694	.838	.702	.000	.789	.860	.846	.875	.000	.895	.761	.925	.795	.250	.923	.830	.798	.632	.000	.836
General Traffic / Peds	50	238	59	0	347	86	88	90	0	264	67	332	105	1	505	93	83	48	0	224
% General Traffic / Peds	100	100	100	0	100	100	100	98.9	0	99.6	100	99.7	100	100	99.8	100	100	100	0	100
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	0	0	0	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	1.1	0	0.4	0	0.3	0	0	0.2	0	0	0	0	0



# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Deinhard Lane  
City, State: McCall, Idaho  
Control: Signalized

File Name : SH-55 & Deinhard 6  
Site Code : 00000000  
Start Date : 6/16/2017  
Page No : 7

Image 1



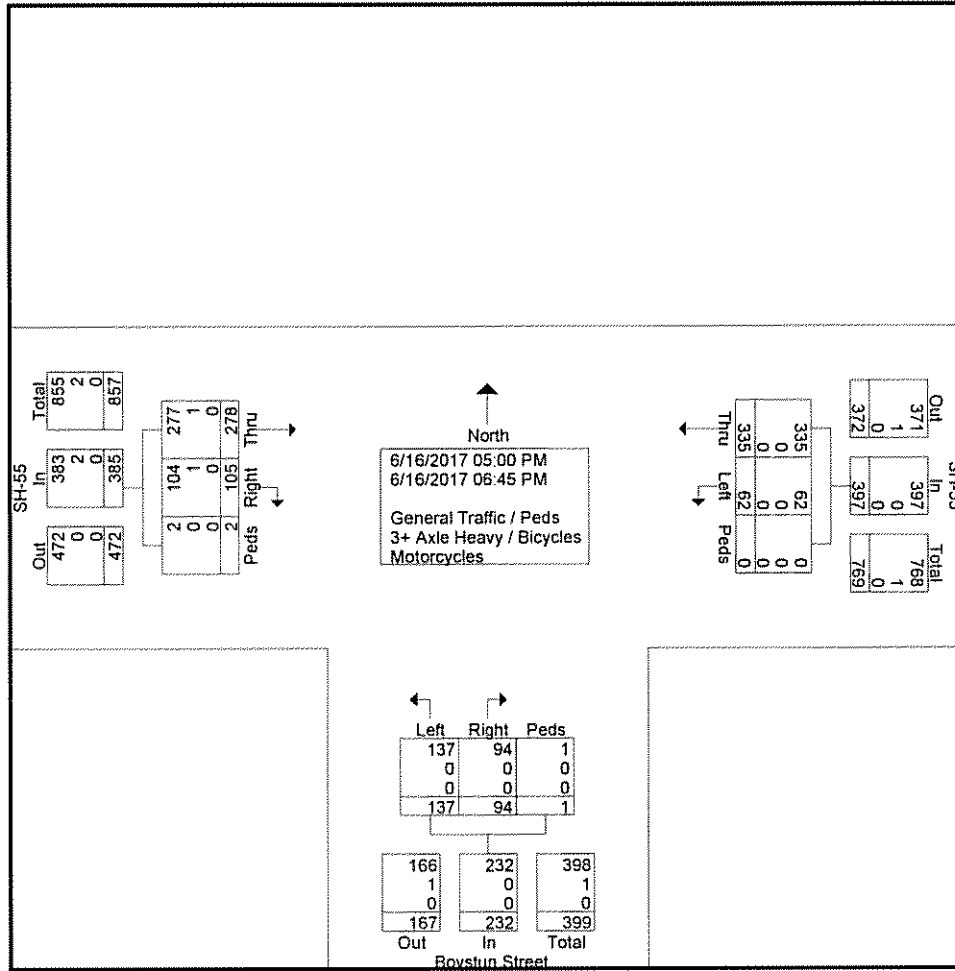


# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 2



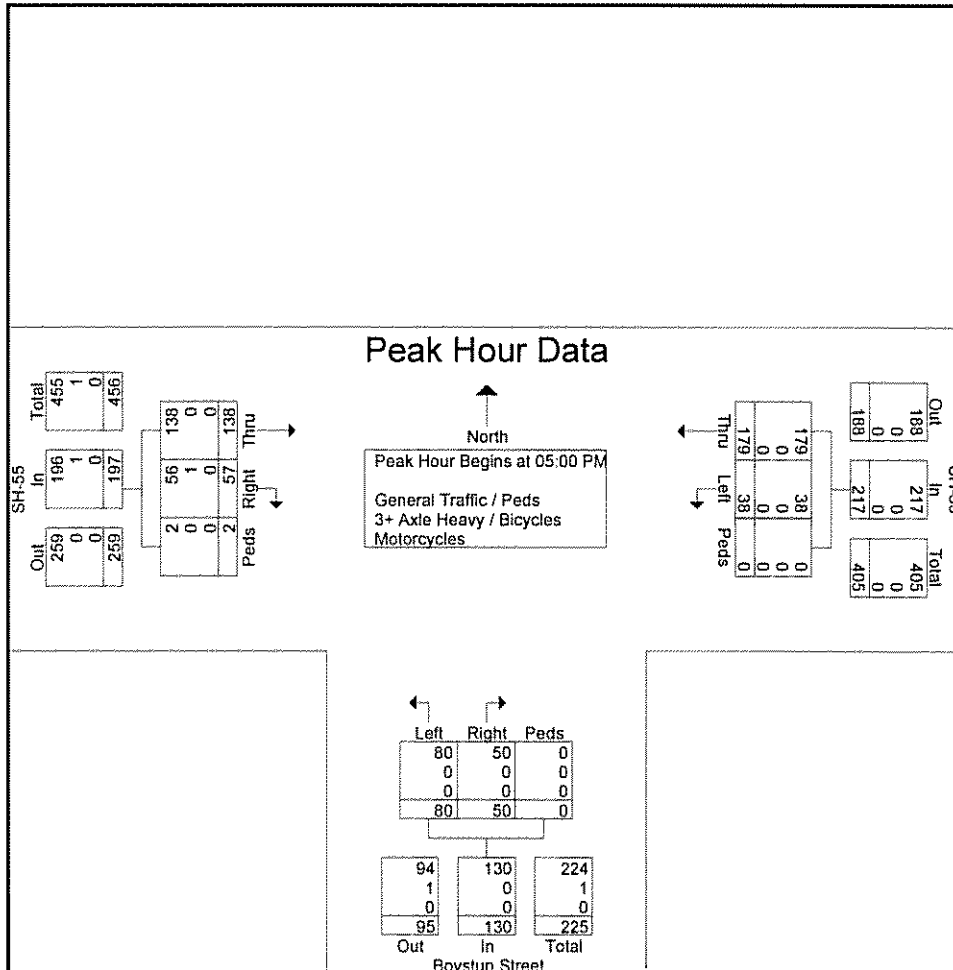
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 3

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 05:00 PM													
05:00 PM	60	11	0	71	14	22	0	36	9	29	0	38	145
05:15 PM	38	7	0	45	11	25	0	36	16	30	0	46	127
05:30 PM	45	9	0	54	12	18	0	30	12	36	2	50	134
05:45 PM	36	11	0	47	13	15	0	28	20	43	0	63	138
Total Volume	179	38	0	217	50	80	0	130	57	138	2	197	544
% App. Total	82.5	17.5	0		38.5	61.5	0		28.9	70.1	1		
PHF	.746	.864	.000	.764	.893	.800	.000	.903	.713	.802	.250	.782	.938
General Traffic / Peds	179	38	0	217	50	80	0	130	56	138	2	196	543
% General Traffic / Peds	100	100	0	100	100	100	0	100	98.2	100	100	99.5	99.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1	0	0	1	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1.8	0	0	0.5	0.2
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0



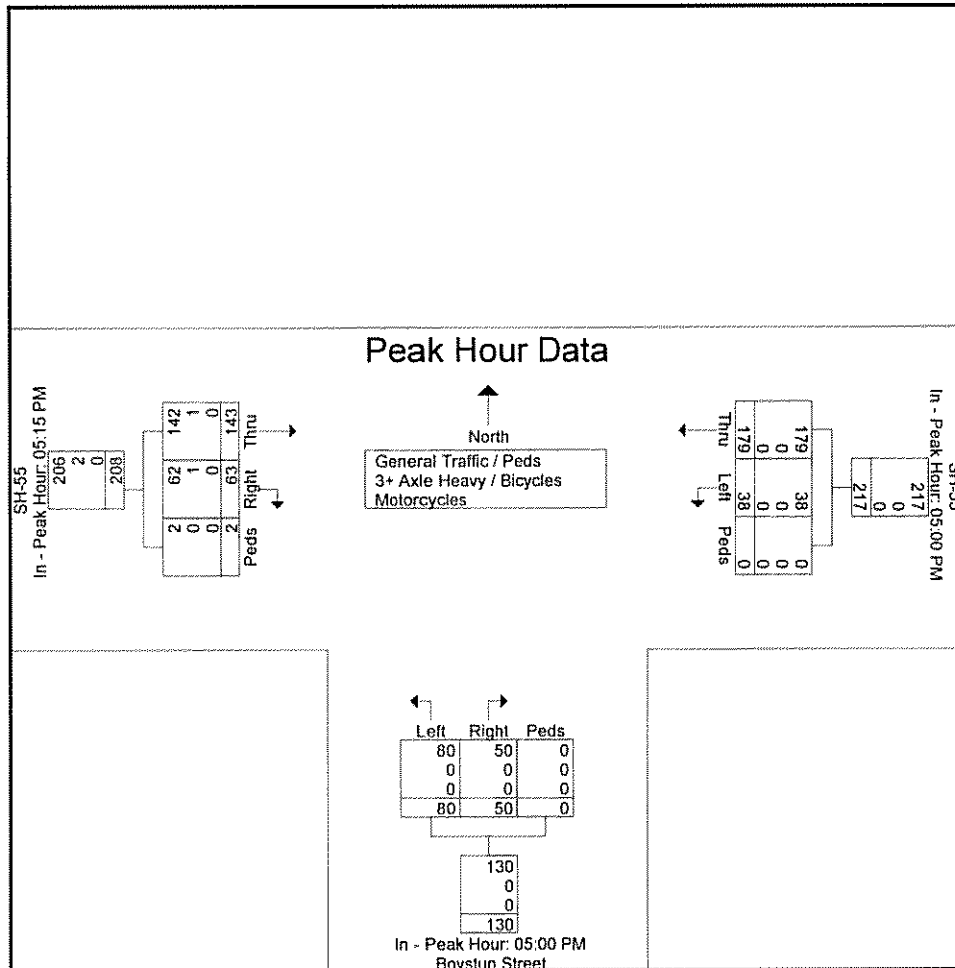
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

File Name : SH-55 & Boydston 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 4

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1													
Peak Hour for Each Approach Begins at:													
	05:00 PM				05:00 PM				05:15 PM				
+0 mins.	60	11	0	71	14	22	0	36	16	30	0	46	
+15 mins.	38	7	0	45	11	25	0	36	12	36	2	50	
+30 mins.	45	9	0	54	12	18	0	30	20	43	0	63	
+45 mins.	36	11	0	47	13	15	0	28	15	34	0	49	
Total Volume	179	38	0	217	50	80	0	130	63	143	2	208	
% App. Total	82.5	17.5	0		38.5	61.5	0		30.3	68.8	1		
PHF	.746	.864	.000	.764	.893	.800	.000	.903	.788	.831	.250	.825	
General Traffic / Peds	179	38	0	217	50	80	0	130	62	142	2	206	
% General Traffic / Peds	100	100	0	100	100	100	0	100	98.4	99.3	100	99	
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1	1	0	2	
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1.6	0.7	0	1	
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

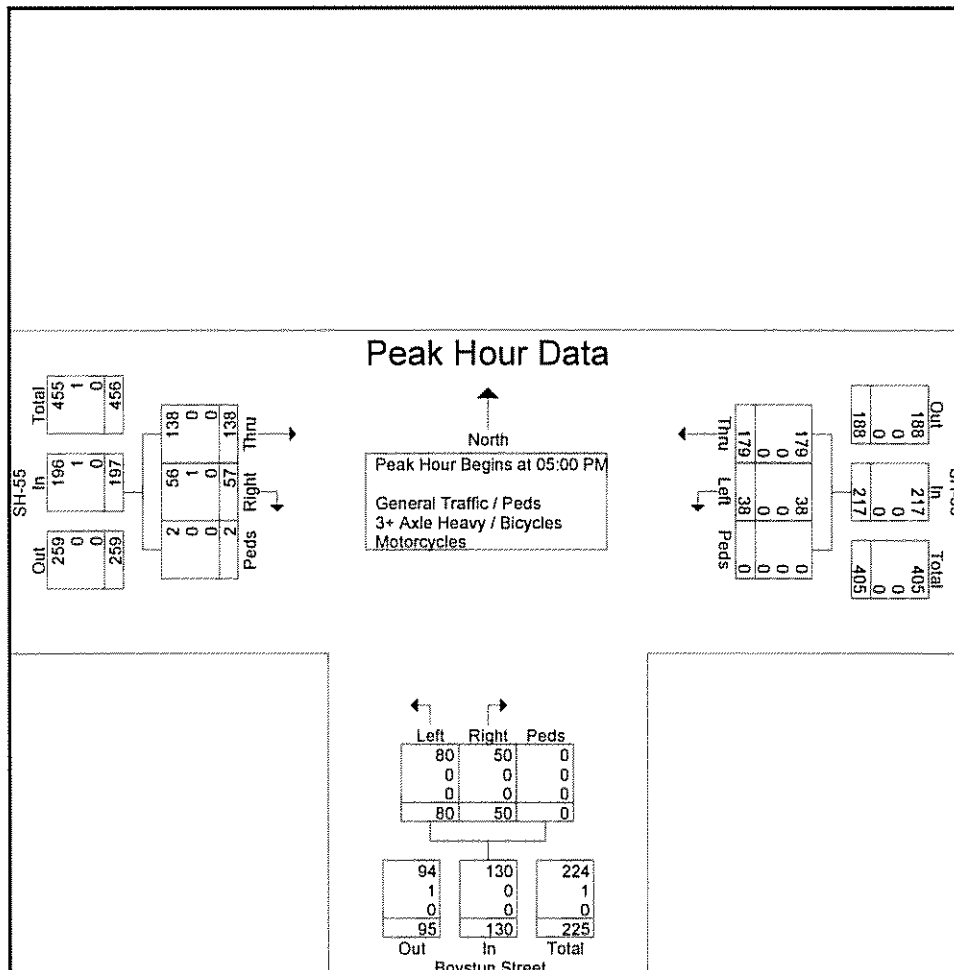
File Name : SH-55 & Boydston 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 5

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Entire Intersection Begins at 05:00 PM

05:00 PM	60	11	0	71	14	22	0	36	9	29	0	38	145
05:15 PM	38	7	0	45	11	25	0	36	16	30	0	46	127
05:30 PM	45	9	0	54	12	18	0	30	12	36	2	50	134
05:45 PM	36	11	0	47	13	15	0	28	20	43	0	63	138
Total Volume	179	38	0	217	50	80	0	130	57	138	2	197	544
% App. Total	82.5	17.5	0		38.5	61.5	0		28.9	70.1	1		
PHF	.746	.864	.000	.764	.893	.800	.000	.903	.713	.802	.250	.782	.938
General Traffic / Peds	179	38	0	217	50	80	0	130	56	138	2	196	543
% General Traffic / Peds	100	100	0	100	100	100	0	100	98.2	100	100	99.5	99.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1	0	0	1	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1.8	0	0	0.5	0.2
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

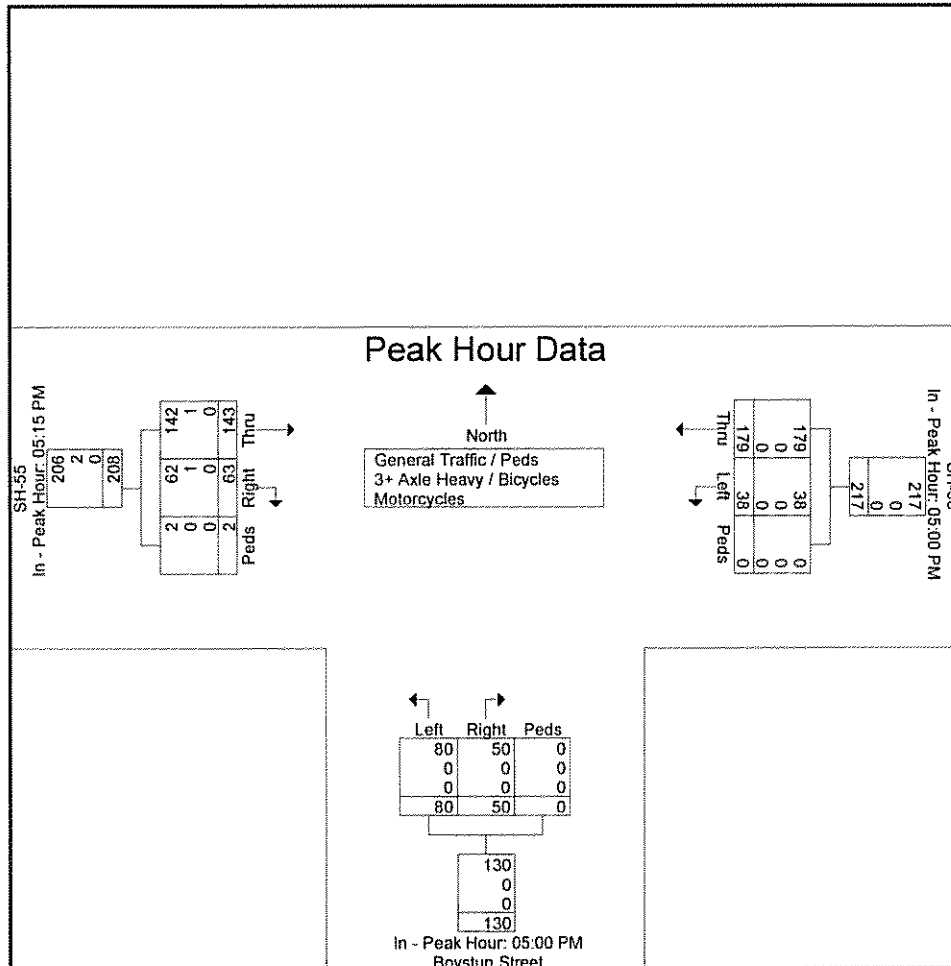
File Name : SH-55 & Boydston 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 6

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM				05:00 PM				05:15 PM			
+0 mins.	60	11	0	71	14	22	0	36	16	30	0	46
+15 mins.	38	7	0	45	11	25	0	36	12	36	2	50
+30 mins.	45	9	0	54	12	18	0	30	20	43	0	63
+45 mins.	36	11	0	47	13	15	0	28	15	34	0	49
Total Volume	179	38	0	217	50	80	0	130	63	143	2	208
% App. Total	82.5	17.5	0		38.5	61.5	0		30.3	68.8	1	
PHF	.746	.864	.000	.764	.893	.800	.000	.903	.788	.831	.250	.825
General Traffic / Peds	179	38	0	217	50	80	0	130	62	142	2	206
% General Traffic / Peds	100	100	0	100	100	100	0	100	98.4	99.3	100	99
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1	1	0	2
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1.6	0.7	0	1
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0





# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Boydston St  
City, State: McCall, Idaho  
Control: Stop Sign

File Name : SH-55 & Boydston 6.16  
Site Code : 00000000  
Start Date : 6/16/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

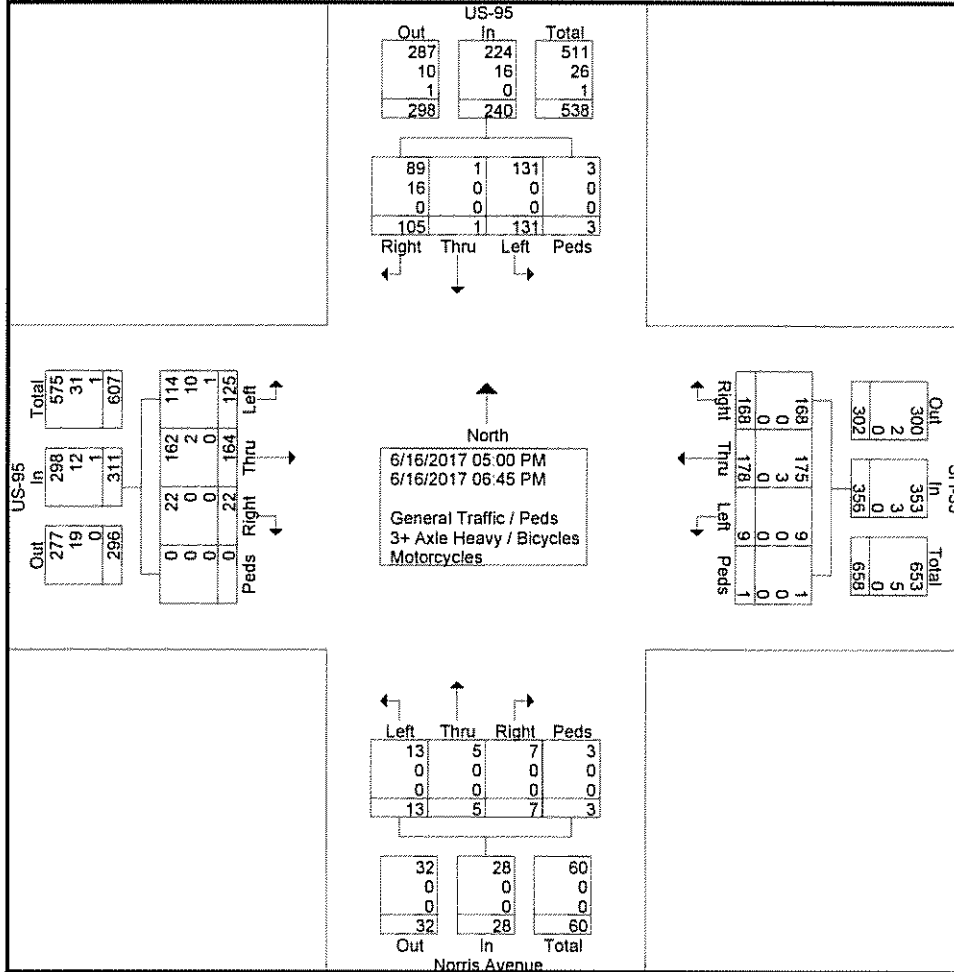
Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
05:00 PM	15	0	12	0	27	24	40	1	0	65	1	2	3	0	6	1	21	19	0	41	139
05:15 PM	13	1	13	0	27	25	30	0	0	55	1	1	3	0	5	2	35	16	0	53	140
05:30 PM	21	0	34	1	56	24	19	1	0	44	0	0	0	3	3	6	16	14	0	36	139
05:45 PM	12	0	15	0	27	24	27	0	0	51	1	0	1	0	2	5	18	19	0	42	122
Total	61	1	74	1	137	97	116	2	0	215	3	3	7	3	16	14	90	68	0	172	540
06:00 PM	11	0	15	1	27	17	24	0	1	42	1	1	1	0	3	1	24	19	0	44	116
06:15 PM	11	0	11	0	22	14	14	3	0	31	1	1	2	0	4	4	22	17	0	43	100
06:30 PM	10	0	21	0	31	18	11	1	0	30	2	0	3	0	5	1	16	9	0	26	92
06:45 PM	12	0	10	1	23	22	13	3	0	38	0	0	0	0	0	2	12	12	0	26	87
Total	44	0	57	2	103	71	62	7	1	141	4	2	6	0	12	8	74	57	0	139	395
Grand Total	105	1	131	3	240	168	178	9	1	356	7	5	13	3	28	22	164	125	0	311	935
Apprch %	43.8	0.4	54.6	1.2		47.2	50	2.5	0.3		25	17.9	46.4	10.7		7.1	52.7	40.2	0		
Total %	11.2	0.1	14	0.3	25.7	18	19	1	0.1	38.1	0.7	0.5	1.4	0.3	3	2.4	17.5	13.4	0	33.3	
General Traffic / Peds	89	1	131	3	224	168	175	9	1	353	7	5	13	3	28	22	162	114	0	298	903
% General Traffic / Peds	84.8	100	100	100	93.3	100	98.3	100	100	99.2	100	100	100	100	100	100	98.8	91.2	0	95.8	96.6
3+ Axle Heavy / Bicycles	16	0	0	0	16	0	3	0	0	3	0	0	0	0	0	0	2	10	0	12	31
% 3+ Axle Heavy / Bicycles	15.2	0	0	0	6.7	0	1.7	0	0	0.8	0	0	0	0	0	0	1.2	8	0	3.9	3.3
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.8	0	0.3	0.1

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 2



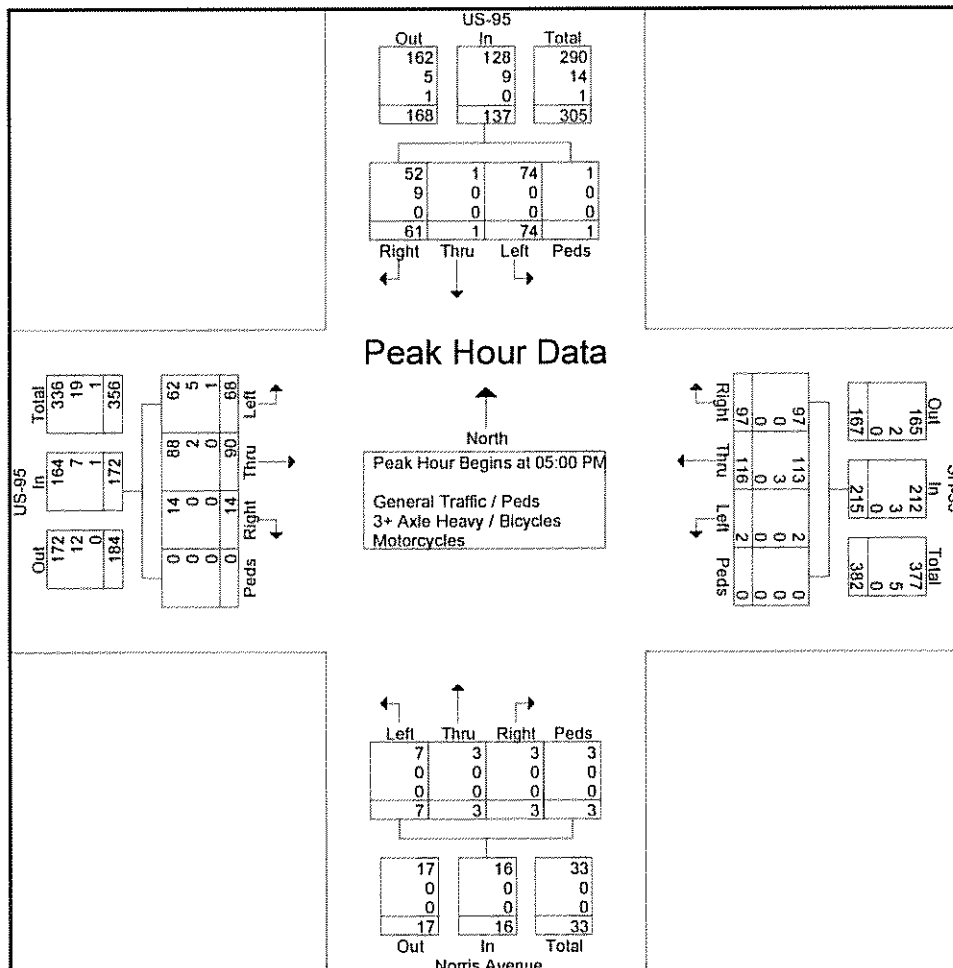
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 3

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	15	0	12	0	27	24	40	1	0	65	1	2	3	0	6	1	21	19	0	41	139
05:15 PM	13	1	13	0	27	25	30	0	0	55	1	1	3	0	5	2	35	16	0	53	140
05:30 PM	21	0	34	1	56	24	19	1	0	44	0	0	0	3	3	6	16	14	0	36	139
05:45 PM	12	0	15	0	27	24	27	0	0	51	1	0	1	0	2	5	18	19	0	42	122
Total Volume	61	1	74	1	137	97	116	2	0	215	3	3	7	3	16	14	90	68	0	172	540
% App. Total	44.5	0.7	54	0.7		45.1	54	0.9	0		18.8	18.8	43.8	18.8		8.1	52.3	39.5	0		
PHF	.726	.250	.544	.250	.612	.970	.725	.500	.000	.827	.750	.375	.583	.250	.667	.583	.643	.895	.000	.811	.964
General Traffic / Peds	52	1	74	1	128	97	113	2	0	212	3	3	7	3	16	14	88	62	0	164	520
% General Traffic / Peds	85.2	100	100	100	93.4	100	97.4	100	0	98.6	100	100	100	100	100	100	97.8	91.2	0	95.3	96.3
3+ Axle Heavy / Bicycles	9	0	0	0	9	0	3	0	0	3	0	0	0	0	0	0	2	5	0	7	19
% 3+ Axle Heavy / Bicycles	14.8	0	0	0	6.6	0	2.6	0	0	1.4	0	0	0	0	0	0	2.2	7.4	0	4.1	3.5
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0.6	0.2



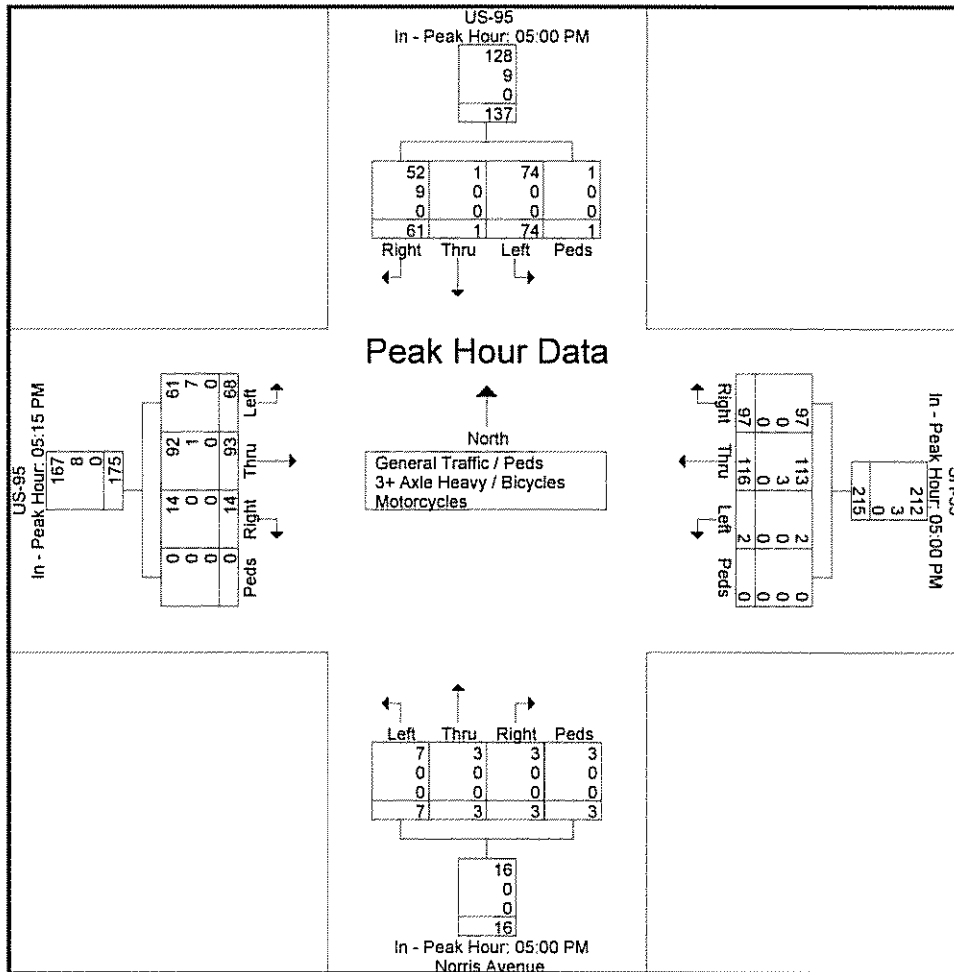
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 4

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	05:00 PM					05:00 PM					05:00 PM					05:15 PM					
+0 mins.	15	0	12	0	27	24	40	1	0	65	1	2	3	0	6	2	35	16	0	53	
+15 mins.	13	1	13	0	27	25	30	0	0	55	1	1	3	0	5	6	16	14	0	36	
+30 mins.	21	0	34	1	56	24	19	1	0	44	0	0	0	3	3	5	18	19	0	42	
+45 mins.	12	0	15	0	27	24	27	0	0	51	1	0	1	0	2	1	24	19	0	44	
Total Volume	61	1	74	1	137	97	116	2	0	215	3	3	7	3	16	14	93	68	0	175	
% App. Total	44.5	0.7	54	0.7		45.1	54	0.9	0		18.8	18.8	43.8	18.8		8	53.1	38.9	0		
PHF	.726	.250	.544	.250	.612	.970	.725	.500	.000	.827	.750	.375	.583	.250	.667	.583	.664	.895	.000	.825	
General Traffic / Peds	52	1	74	1	128	97	113	2	0	212	3	3	7	3	16	14	92	61	0	167	
% General Traffic / Peds	85.2	100	100	100	93.4	100	97.4	100	0	98.6	100	100	100	100	100	100	98.9	89.7	0	95.4	
3+ Axle Heavy / Bicycles	9	0	0	0	9	0	3	0	0	3	0	0	0	0	0	0	1	7	0	8	
% 3+ Axle Heavy / Bicycles	14.8	0	0	0	6.6	0	2.6	0	0	1.4	0	0	0	0	0	0	1.1	10.3	0	4.6	
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	



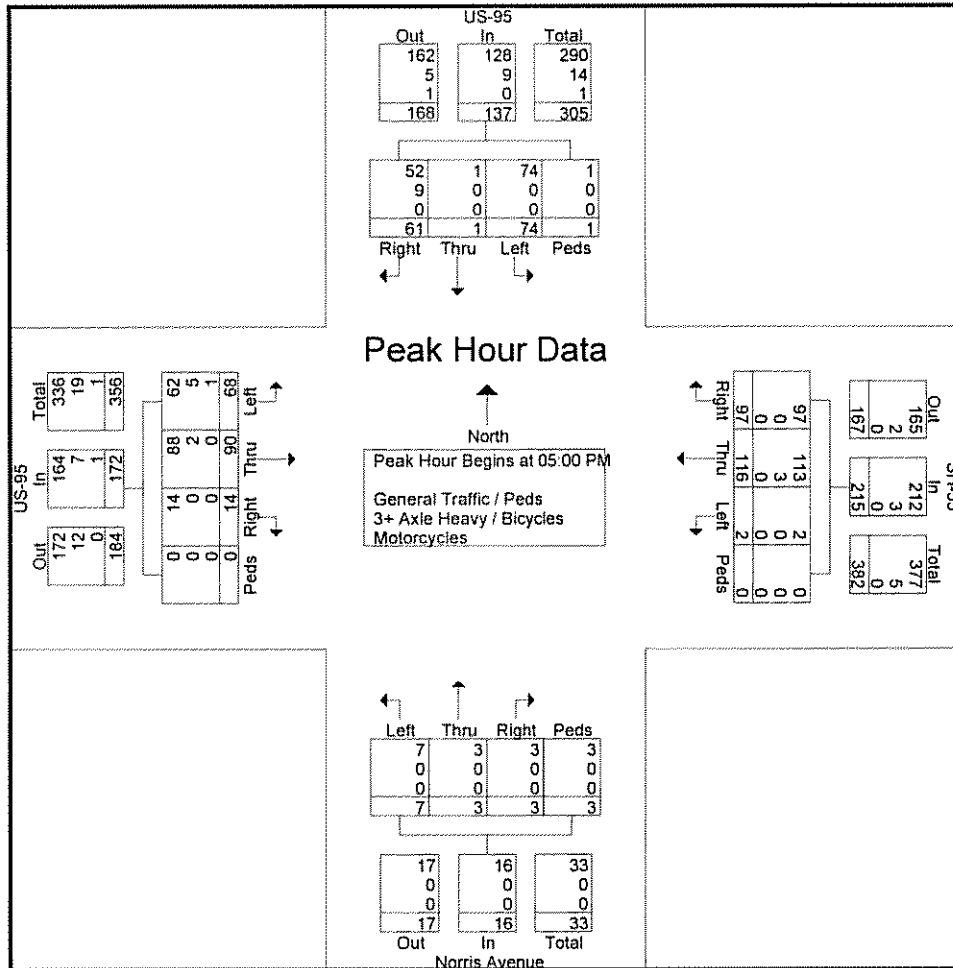
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

File Name : SH-55 & US-95 6  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 5

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 05:00 PM																					
05:00 PM	15	0	12	0	27	24	40	1	0	65	1	2	3	0	6	1	21	19	0	41	139
05:15 PM	13	1	13	0	27	25	30	0	0	55	1	1	3	0	5	2	35	16	0	53	140
05:30 PM	21	0	34	1	56	24	19	1	0	44	0	0	0	3	3	6	16	14	0	36	139
05:45 PM	12	0	15	0	27	24	27	0	0	51	1	0	1	0	2	5	18	19	0	42	122
Total Volume	61	1	74	1	137	97	116	2	0	215	3	3	7	3	16	14	90	68	0	172	540
% App. Total	44.5	0.7	54	0.7		45.1	54	0.9	0		18.8	18.8	43.8	18.8		8.1	52.3	39.5	0		
PHF	.726	.250	.544	.250	.612	.970	.725	.500	.000	.827	.750	.375	.583	.250	.667	.583	.643	.895	.000	.811	.964
General Traffic / Peds	52	1	74	1	128	97	113	2	0	212	3	3	7	3	16	14	88	62	0	164	520
% General Traffic / Peds	85.2	100	100	100	93.4	100	97.4	100	0	98.6	100	100	100	100	100	100	97.8	91.2	0	95.3	96.3
3+ Axle Heavy / Bicycles	9	0	0	0	9	0	3	0	0	3	0	0	0	0	0	0	2	5	0	7	19
% 3+ Axle Heavy / Bicycles	14.8	0	0	0	6.6	0	2.6	0	0	1.4	0	0	0	0	0	0	2.2	7.4	0	4.1	3.5
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1.5	0	0.6	0.2



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / US-95  
 City, State: New Meadows, Idaho  
 Control: Stop Sign

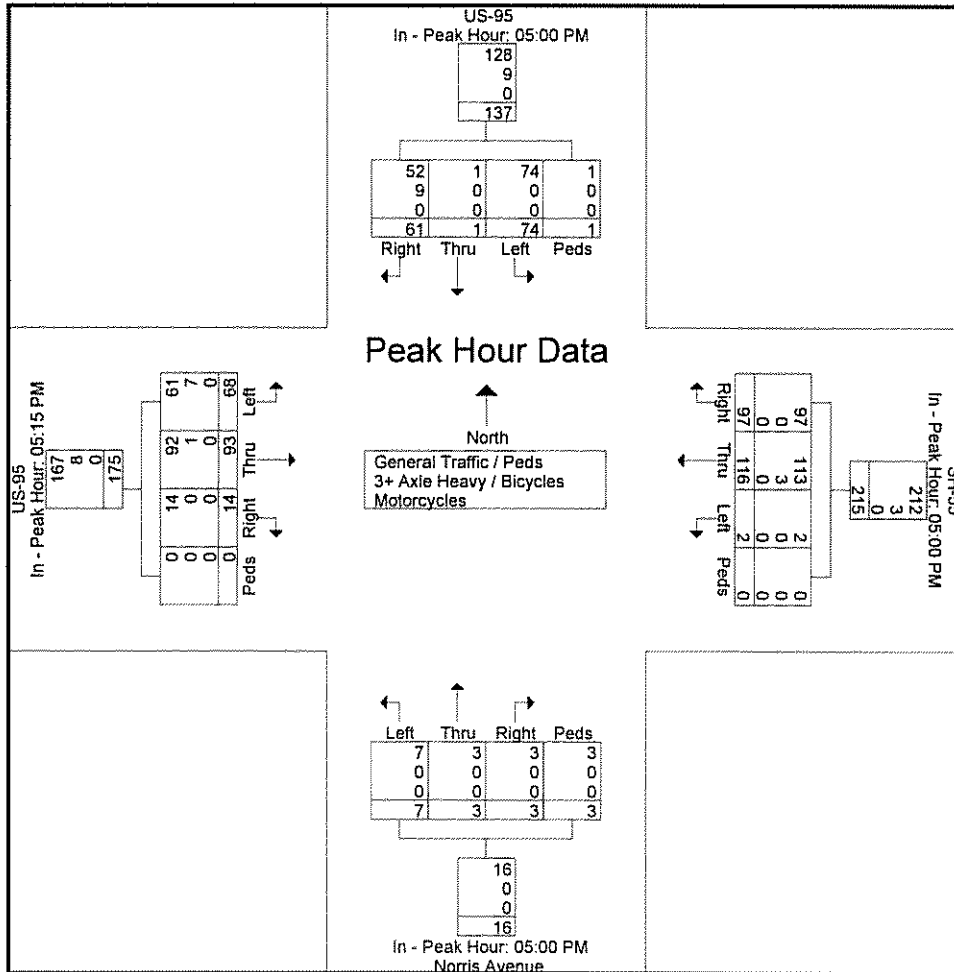
File Name : SH-55 & US-95 6.16  
 Site Code : 00000000  
 Start Date : 6/16/2017  
 Page No : 6

Start Time	US-95 From North					SH-55 From East					Norris Avenue From South					US-95 From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 05:00 PM to 06:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	05:00 PM					05:00 PM					05:00 PM					05:15 PM				
+0 mins.	15	0	12	0	27	24	40	1	0	65	1	2	3	0	6	2	35	16	0	53
+15 mins.	13	1	13	0	27	25	30	0	0	55	1	1	3	0	5	6	16	14	0	36
+30 mins.	21	0	34	1	56	24	19	1	0	44	0	0	0	3	3	5	18	19	0	42
+45 mins.	12	0	15	0	27	24	27	0	0	51	1	0	1	0	2	1	24	19	0	44
Total Volume	61	1	74	1	137	97	116	2	0	215	3	3	7	3	16	14	93	68	0	175
% App. Total	44.5	0.7	54	0.7		45.1	54	0.9	0		18.8	18.8	43.8	18.8		8	53.1	38.9	0	
PHF	.726	.250	.544	.250	.612	.970	.725	.500	.000	.827	.750	.375	.583	.250	.667	.583	.664	.895	.000	.825
General Traffic / Peds	52	1	74	1	128	97	113	2	0	212	3	3	7	3	16	14	92	61	0	167
% General Traffic / Peds	85.2	100	100	100	93.4	100	97.4	100	0	98.6	100	100	100	100	100	100	98.9	89.7	0	95.4
3+ Axle Heavy / Bicycles	9	0	0	0	9	0	3	0	0	3	0	0	0	0	0	0	1	7	0	8
% 3+ Axle Heavy / Bicycles	14.8	0	0	0	6.6	0	2.6	0	0	1.4	0	0	0	0	0	0	1.1	10.3	0	4.6
Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Motorcycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0





# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / US-95  
City, State: New Meadows, Idaho  
Control: Stop Sign

File Name : SH-55 & US-95 6  
Site Code : 00000000  
Start Date : 6/16/2017  
Page No : 7

Image 1





# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.18  
 Site Code : Sunday  
 Start Date : 6/18/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

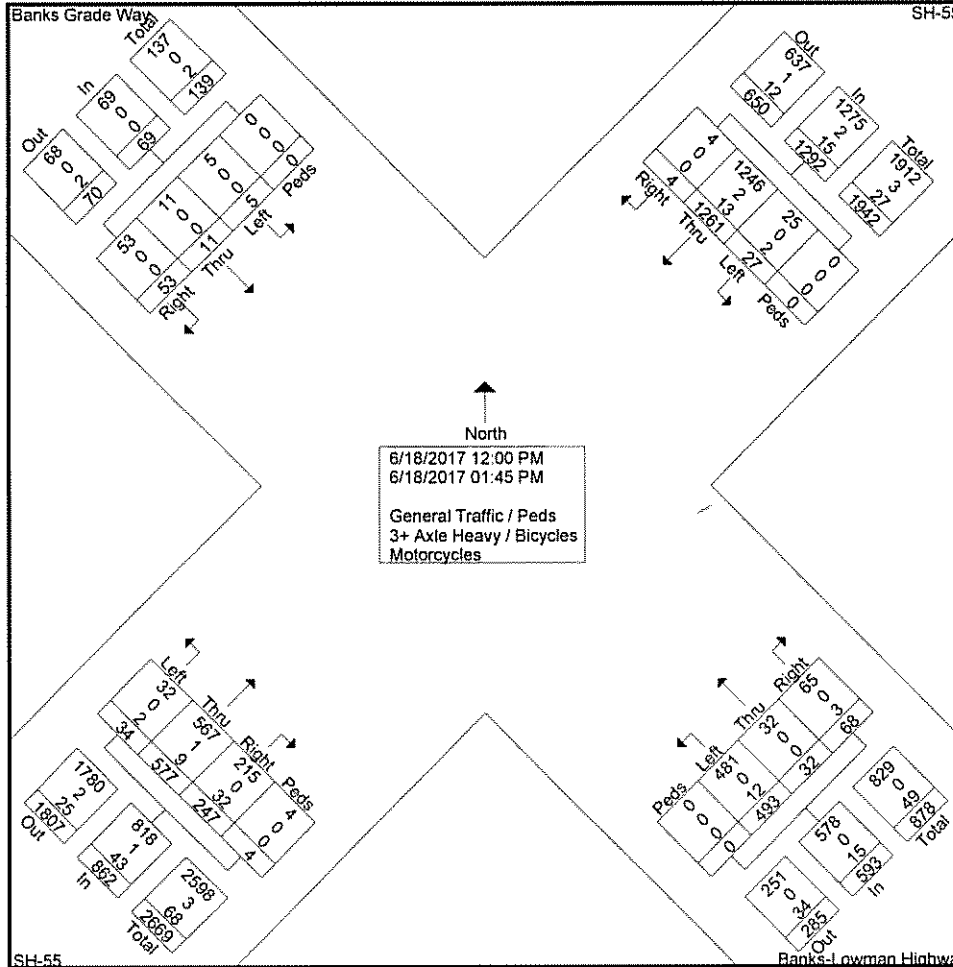
Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
12:00 PM	0	164	3	0	167	9	12	46	0	67	23	79	0	0	102	12	2	0	0	14	350
12:15 PM	1	157	2	0	160	11	0	58	0	69	41	91	3	1	136	9	1	0	0	10	375
12:30 PM	0	150	2	0	152	12	4	76	0	92	31	67	7	0	105	2	0	1	0	3	352
12:45 PM	2	164	4	0	170	5	4	56	0	65	34	62	5	0	101	10	4	1	0	15	351
<b>Total</b>	<b>3</b>	<b>635</b>	<b>11</b>	<b>0</b>	<b>649</b>	<b>37</b>	<b>20</b>	<b>236</b>	<b>0</b>	<b>293</b>	<b>129</b>	<b>299</b>	<b>15</b>	<b>1</b>	<b>444</b>	<b>33</b>	<b>7</b>	<b>2</b>	<b>0</b>	<b>42</b>	<b>1428</b>
01:00 PM	1	157	6	0	164	7	3	64	0	74	39	59	3	1	102	7	1	0	0	8	348
01:15 PM	0	156	4	0	160	6	6	68	0	80	29	79	5	0	113	2	2	0	0	4	357
01:30 PM	0	176	3	0	179	10	2	50	0	62	32	71	8	1	112	4	0	2	0	6	359
01:45 PM	0	137	3	0	140	8	1	75	0	84	18	69	3	1	91	7	1	1	0	9	324
<b>Total</b>	<b>1</b>	<b>626</b>	<b>16</b>	<b>0</b>	<b>643</b>	<b>31</b>	<b>12</b>	<b>257</b>	<b>0</b>	<b>300</b>	<b>118</b>	<b>278</b>	<b>19</b>	<b>3</b>	<b>418</b>	<b>20</b>	<b>4</b>	<b>3</b>	<b>0</b>	<b>27</b>	<b>1388</b>
<b>Grand Total</b>	<b>4</b>	<b>1261</b>	<b>27</b>	<b>0</b>	<b>1292</b>	<b>68</b>	<b>32</b>	<b>493</b>	<b>0</b>	<b>593</b>	<b>247</b>	<b>577</b>	<b>34</b>	<b>4</b>	<b>862</b>	<b>53</b>	<b>11</b>	<b>5</b>	<b>0</b>	<b>69</b>	<b>2816</b>
<b>Apprch %</b>	<b>0.3</b>	<b>97.6</b>	<b>2.1</b>	<b>0</b>		<b>11.5</b>	<b>5.4</b>	<b>83.1</b>	<b>0</b>		<b>28.7</b>	<b>66.9</b>	<b>3.9</b>	<b>0.5</b>		<b>76.8</b>	<b>15.9</b>	<b>7.2</b>	<b>0</b>		
<b>Total %</b>	<b>0.1</b>	<b>44.8</b>	<b>1</b>	<b>0</b>	<b>45.9</b>	<b>2.4</b>	<b>1.1</b>	<b>17.5</b>	<b>0</b>	<b>21.1</b>	<b>8.8</b>	<b>20.5</b>	<b>1.2</b>	<b>0.1</b>	<b>30.6</b>	<b>1.9</b>	<b>0.4</b>	<b>0.2</b>	<b>0</b>	<b>2.5</b>	
General Traffic / Peds	4	1246	25	0	1275	65	32	481	0	578	215	567	32	4	818	53	11	5	0	69	2740
% General Traffic / Peds	100	98.8	92.6	0	98.7	95.6	100	97.6	0	97.5	87	98.3	94.1	100	94.9	100	100	100	0	100	97.3
3+ Axle Heavy / Bicycle	0	2	0	0	2	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	3
% 3+ Axle Heavy / Bicycle	0	0.2	0	0	0.2	0	0	0	0	0	0	0.2	0	0	0.1	0	0	0	0	0	0.1
Motorcycles	0	13	2	0	15	3	0	12	0	15	32	9	2	0	43	0	0	0	0	0	73
% Motorcycles	0	1	7.4	0	1.2	4.4	0	2.4	0	2.5	13	1.6	5.9	0	5	0	0	0	0	0	2.6

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : Sunday  
 Start Date : 6/18/2017  
 Page No : 2



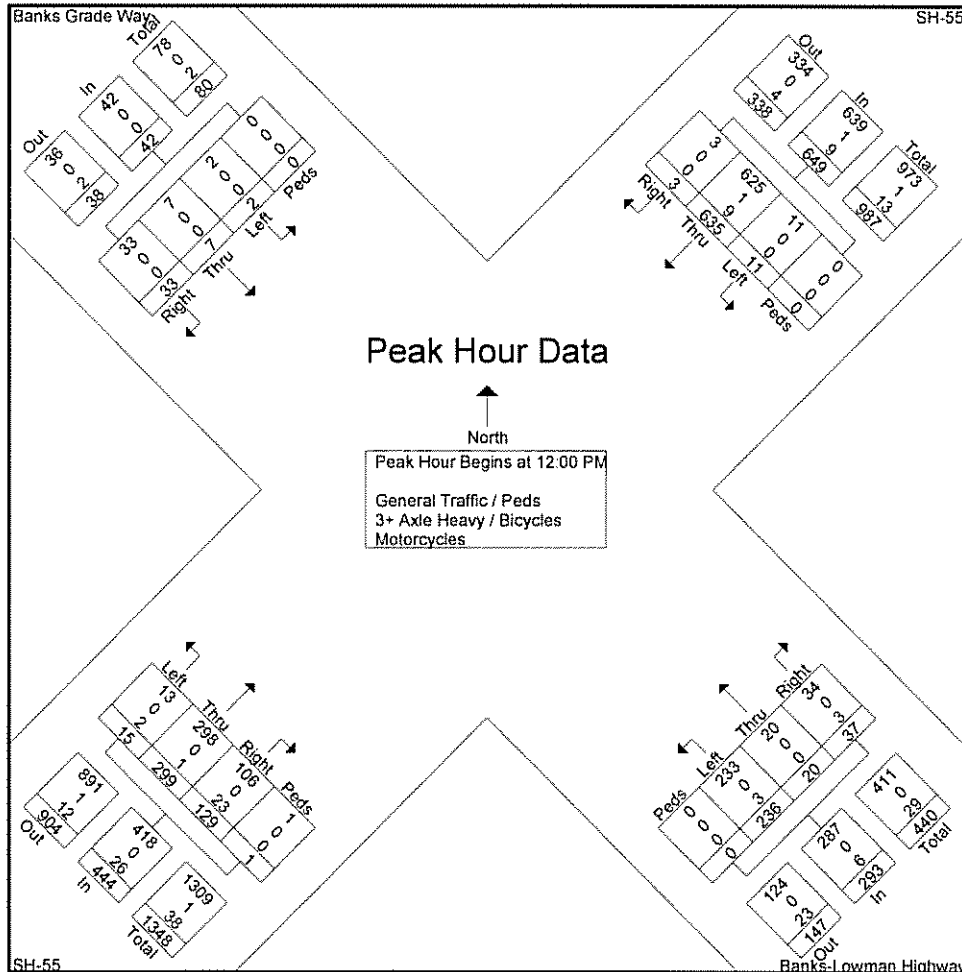
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.18  
 Site Code : Sunday  
 Start Date : 6/18/2017  
 Page No : 3

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	0	164	3	0	167	9	12	46	0	67	23	79	0	0	102	12	2	0	0	14	350
12:15 PM	1	157	2	0	160	11	0	58	0	69	41	91	3	1	136	9	1	0	0	10	375
12:30 PM	0	150	2	0	152	12	4	76	0	92	31	67	7	0	105	2	0	1	0	3	352
12:45 PM	2	164	4	0	170	5	4	56	0	65	34	62	5	0	101	10	4	1	0	15	351
Total Volume	3	635	11	0	649	37	20	236	0	293	129	299	15	1	444	33	7	2	0	42	1428
% App. Total	0.5	97.8	1.7	0		12.6	6.8	80.5	0		29.1	67.3	3.4	0.2		78.6	16.7	4.8	0		
PHF	.375	.968	.688	.000	.954	.771	.417	.776	.000	.796	.787	.821	.536	.250	.816	.688	.438	.500	.000	.700	.952
General Traffic / Peds	3	625	11	0	639	34	20	233	0	287	106	298	13	1	418	33	7	2	0	42	1386
% General Traffic / Peds	100	98.4	100	0	98.5	91.9	100	98.7	0	98.0	82.2	99.7	86.7	100	94.1	100	100	100	0	100	97.1
3+ Axle Heavy / Bicycle	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% 3+ Axle Heavy / Bicycle	0	0.2	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1
Motorcycles	0	9	0	0	9	3	0	3	0	6	23	1	2	0	26	0	0	0	0	0	41
% Motorcycles	0	1.4	0	0	1.4	8.1	0	1.3	0	2.0	17.8	0.3	13.3	0	5.9	0	0	0	0	0	2.9



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

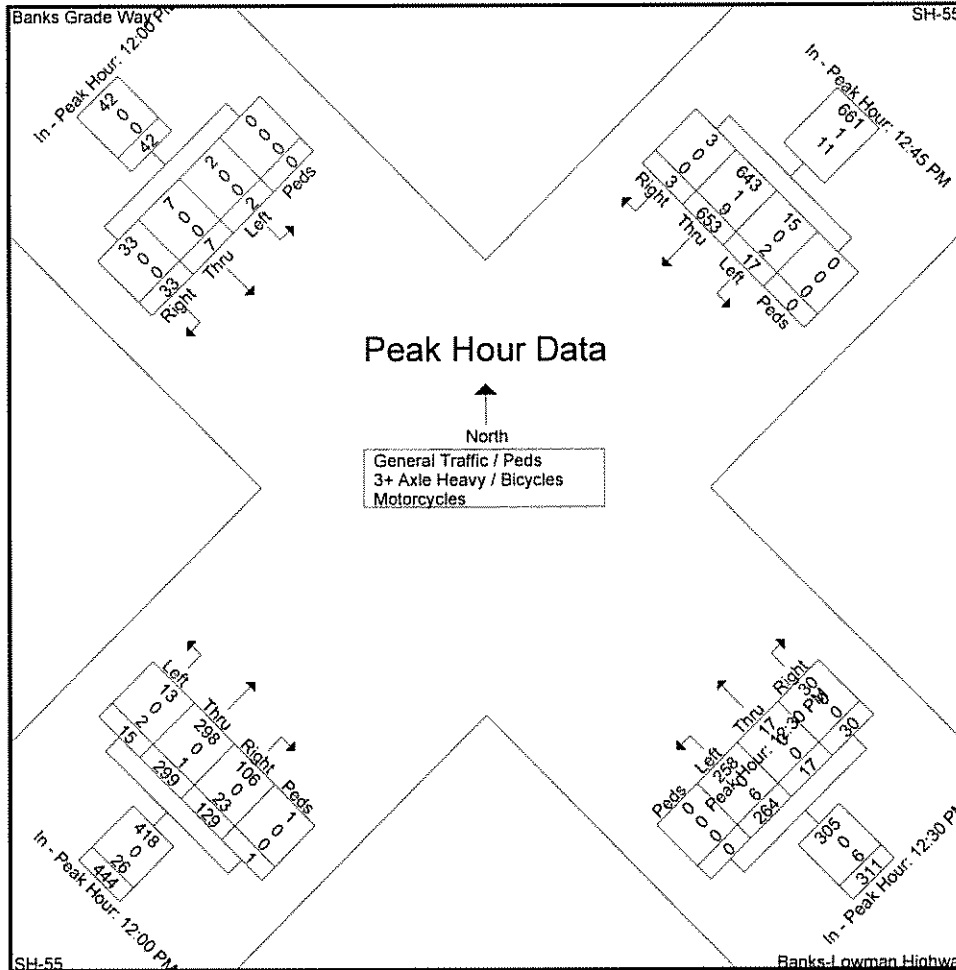
Study: HDR0014  
 Intersection: SH-55 / Banks Lowman-Hwy  
 City, State: Banks, Idaho  
 Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6  
 Site Code : Sunday  
 Start Date : 6/18/2017  
 Page No : 4

Start Time	SH-55 From Northeast					Banks-Lowman Highway From Southeast					SH-55 From Southwest					Banks Grade Way From Northwest					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1  
 Peak Hour for Each Approach Begins at:

	12:45 PM					12:30 PM					12:00 PM					12:00 PM				
+0 mins.	2	164	4	0	170	12	4	76	0	92	23	79	0	0	102	12	2	0	0	14
+15 mins.	1	157	6	0	164	5	4	56	0	65	41	91	3	1	136	9	1	0	0	10
+30 mins.	0	156	4	0	160	7	3	64	0	74	31	67	7	0	105	2	0	1	0	3
+45 mins.	0	176	3	0	179	6	6	68	0	80	34	62	5	0	101	10	4	1	0	15
Total Volume	3	653	17	0	673	30	17	264	0	311	129	299	15	1	444	33	7	2	0	42
% App. Total	0.4	97	2.5	0		9.6	5.5	84.9	0		29.1	67.3	3.4	0.2		78.6	16.7	4.8	0	
PHF	.375	.928	.708	.000	.940	.625	.708	.868	.000	.845	.787	.821	.536	.250	.816	.688	.438	.500	.000	.700
General Traffic / Peds	3	643	15	0	661	30	17	258	0	305	106	298	13	1	418	33	7	2	0	42
% General Traffic / Peds	100	98.5	88.2	0	98.2	100	100	97.7	0	98.1	82.2	99.7	86.7	100	94.1	100	100	100	0	100
3+ Axle Heavy / Bicycles	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0.2	0	0	0.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	9	2	0	11	0	0	6	0	6	23	1	2	0	26	0	0	0	0	0
% Motorcycles	0	1.4	11.8	0	1.6	0	0	2.3	0	1.9	17.8	0.3	13.3	0	5.9	0	0	0	0	0



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Banks Lowman-Hwy  
City, State: Banks, Idaho  
Control: Stop Sign

File Name : SH-55 & Banks Lowman Hwy 6.18  
Site Code : Sunday  
Start Date : 6/18/2017  
Page No : 5

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

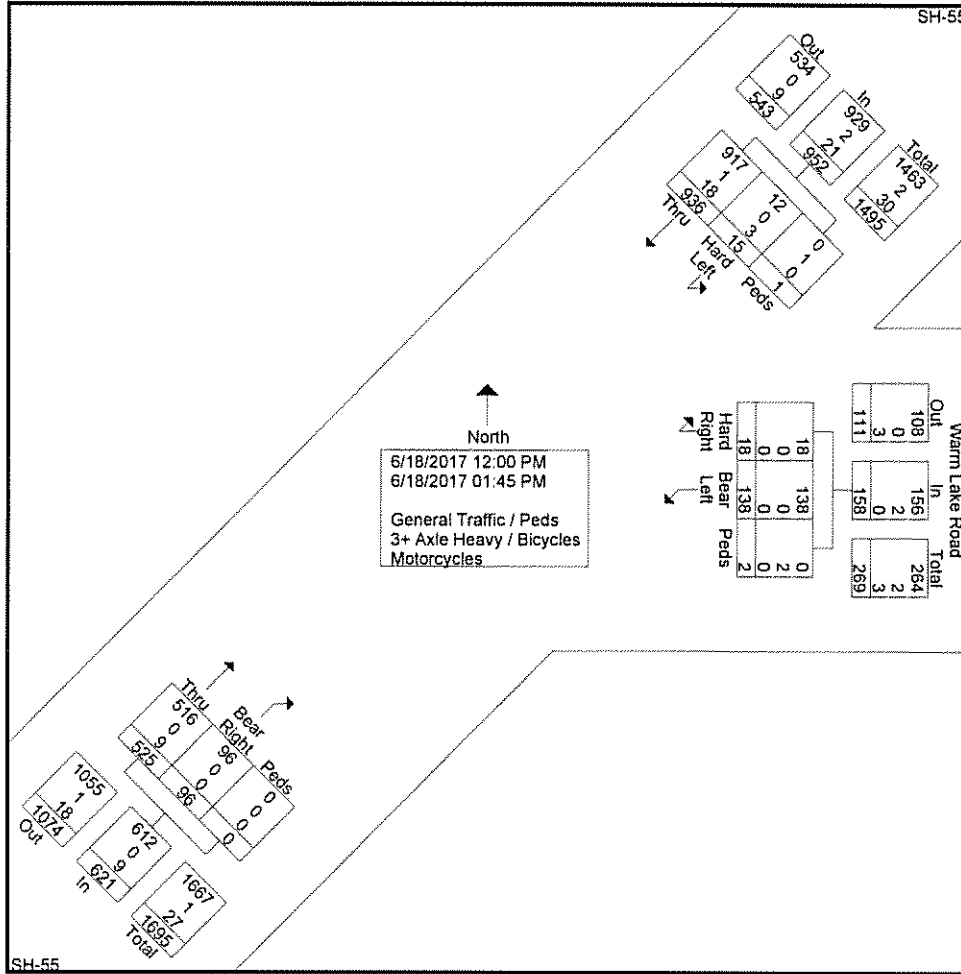
Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
12:00 PM	130	1	0	131	7	53	0	60	2	20	0	22	213
12:15 PM	113	0	0	113	7	60	0	67	2	14	0	16	196
12:30 PM	92	2	0	94	17	69	0	86	2	25	1	28	208
12:45 PM	114	1	1	116	9	56	0	65	4	15	0	19	200
Total	449	4	1	454	40	238	0	278	10	74	1	85	817
01:00 PM	101	4	0	105	17	82	0	99	2	16	0	18	222
01:15 PM	123	2	0	125	10	73	0	83	2	16	1	19	227
01:30 PM	144	1	0	145	15	77	0	92	3	18	0	21	258
01:45 PM	119	4	0	123	14	55	0	69	1	14	0	15	207
Total	487	11	0	498	56	287	0	343	8	64	1	73	914
Grand Total	936	15	1	952	96	525	0	621	18	138	2	158	1731
Apprch %	98.3	1.6	0.1		15.5	84.5	0		11.4	87.3	1.3		
Total %	54.1	0.9	0.1	55	5.5	30.3	0	35.9	1	8	0.1	9.1	
General Traffic / Peds	917	12	0	929	96	516	0	612	18	138	0	156	1697
% General Traffic / Peds	98	80	0	97.6	100	98.3	0	98.6	100	100	0	98.7	98
3+ Axle Heavy / Bicycles	1	0	1	2	0	0	0	0	0	0	2	2	4
% 3+ Axle Heavy / Bicycles	0.1	0	100	0.2	0	0	0	0	0	0	100	1.3	0.2
Motorcycles	18	3	0	21	0	9	0	9	0	0	0	0	0
% Motorcycles	1.9	20	0	2.2	0	1.7	0	1.4	0	0	0	0	1.1

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 2







# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

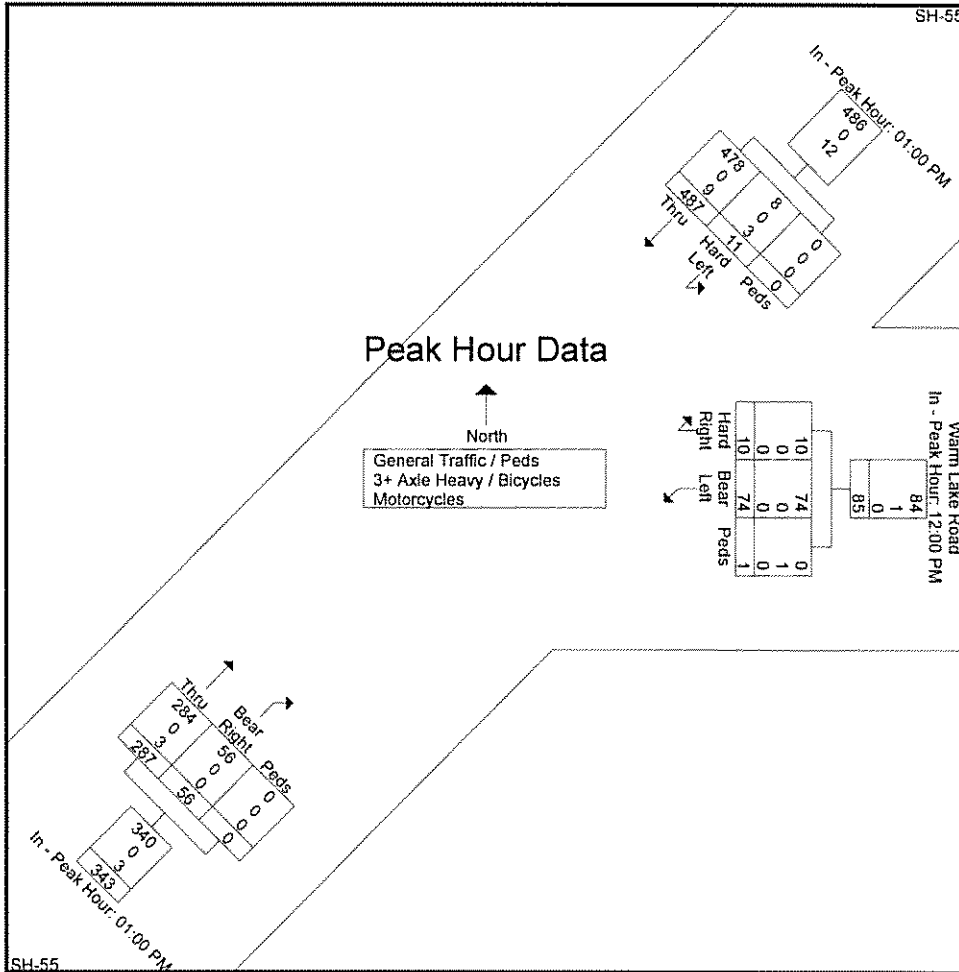
File Name : SH-55 & Warm Lake Rd 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 4

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:00 PM				01:00 PM				12:00 PM			
+0 mins.	101	4	0	105	17	82	0	99	2	20	0	22
+15 mins.	123	2	0	125	10	73	0	83	2	14	0	16
+30 mins.	144	1	0	145	15	77	0	92	2	25	1	28
+45 mins.	119	4	0	123	14	55	0	69	4	15	0	19
Total Volume	487	11	0	498	56	287	0	343	10	74	1	85
% App. Total	97.8	2.2	0		16.3	83.7	0		11.8	87.1	1.2	
PHF	.845	.688	.000	.859	.824	.875	.000	.866	.625	.740	.250	.759
General Traffic / Peds	478	8	0	486	56	284	0	340	10	74	0	84
% General Traffic / Peds	98.2	72.7	0	97.6	100	99	0	99.1	100	100	0	98.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	1	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	100	1.2
Motorcycles	9	3	0	12	0	3	0	3	0	0	0	0
% Motorcycles	1.8	27.3	0	2.4	0	1	0	0.9	0	0	0	0



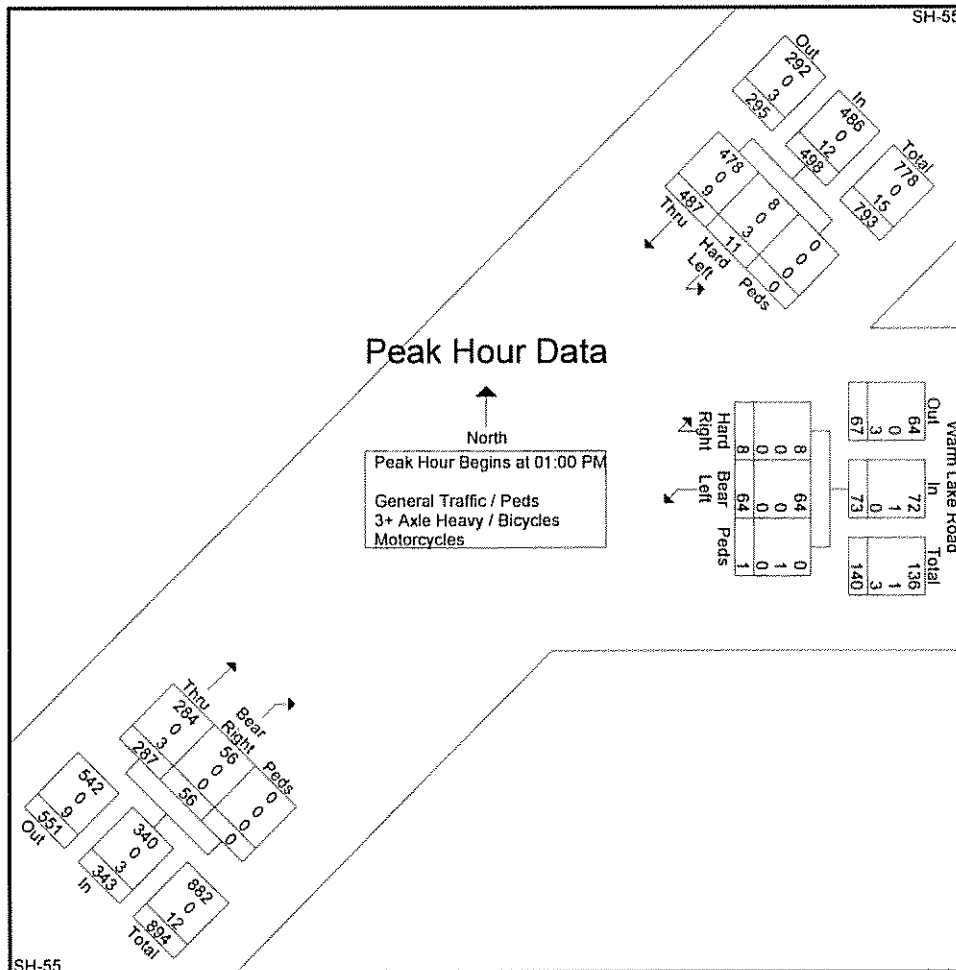
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 5

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1													
Peak Hour for Entire Intersection Begins at 01:00 PM													
01:00 PM	101	4	0	105	17	82	0	99	2	16	0	18	222
01:15 PM	123	2	0	125	10	73	0	83	2	16	1	19	227
01:30 PM	144	1	0	145	15	77	0	92	3	18	0	21	258
01:45 PM	119	4	0	123	14	55	0	69	1	14	0	15	207
Total Volume	487	11	0	498	56	287	0	343	8	64	1	73	914
% App. Total	97.8	2.2	0		16.3	83.7	0		11	87.7	1.4		
PHF	.845	.688	.000	.859	.824	.875	.000	.866	.667	.889	.250	.869	.886
General Traffic / Peds	478	8	0	486	56	284	0	340	8	64	0	72	898
% General Traffic / Peds	98.2	72.7	0	97.6	100	99.0	0	99.1	100	100	0	98.6	98.2
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	1	1	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	100	1.4	0.1
Motorcycles	9	3	0	12	0	3	0	3	0	0	0	0	15
% Motorcycles	1.8	27.3	0	2.4	0	1.0	0	0.9	0	0	0	0	1.6



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Warm Lake Rd  
 City, State: Cascade, Idaho  
 Control: Stop Sign

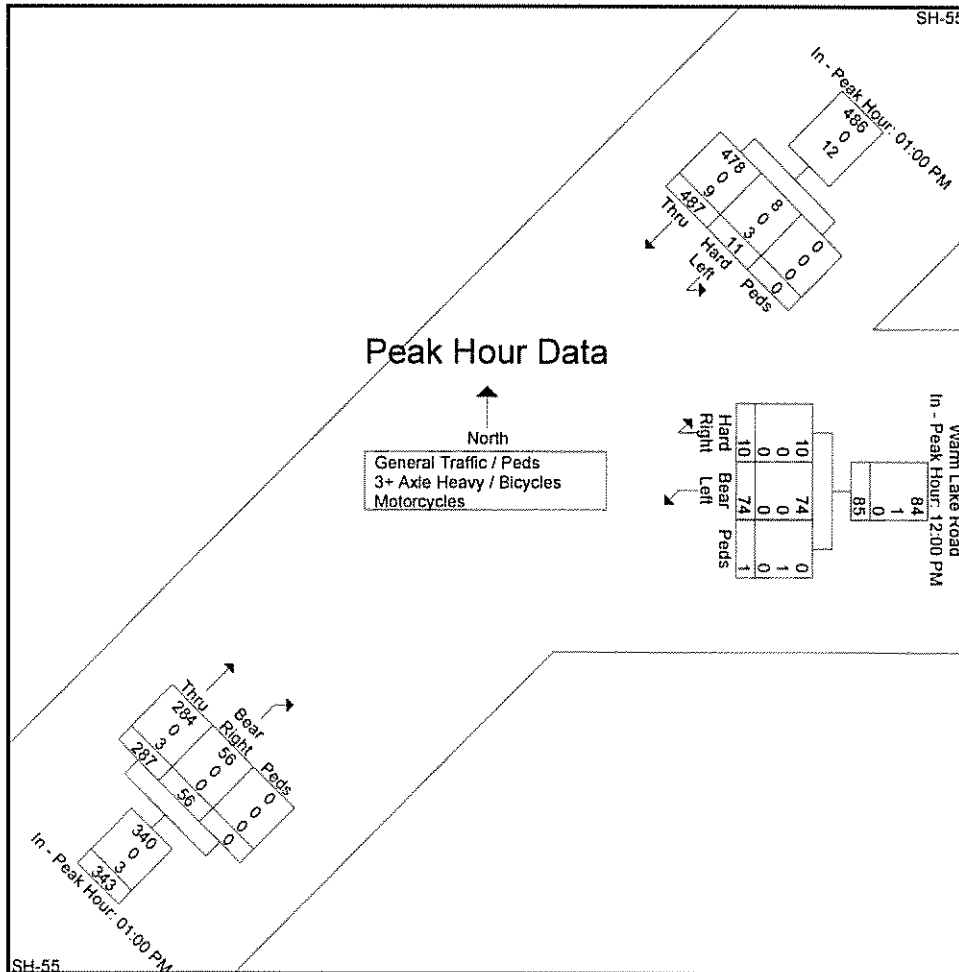
File Name : SH-55 & Warm Lake Rd 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 6

Start Time	SH-55 From Northeast				SH-55 From Southwest				Warm Lake Road From East				Int. Total
	Thru	Hard Left	Peds	App. Total	Bear Right	Thru	Peds	App. Total	Hard Right	Bear Left	Peds	App. Total	

Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	01:00 PM				01:00 PM				12:00 PM			
+0 mins.	101	4	0	105	17	82	0	99	2	20	0	22
+15 mins.	123	2	0	125	10	73	0	83	2	14	0	16
+30 mins.	144	1	0	145	15	77	0	92	2	25	1	28
+45 mins.	119	4	0	123	14	55	0	69	4	15	0	19
Total Volume	487	11	0	498	56	287	0	343	10	74	1	85
% App. Total	97.8	2.2	0		16.3	83.7	0		11.8	87.1	1.2	
PHF	.845	.688	.000	.859	.824	.875	.000	.866	.625	.740	.250	.759
General Traffic / Peds	478	8	0	486	56	284	0	340	10	74	0	84
% General Traffic / Peds	98.2	72.7	0	97.6	100	99	0	99.1	100	100	0	98.8
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	1	1
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	100	1.2
Motorcycles	9	3	0	12	0	3	0	3	0	0	0	0
% Motorcycles	1.8	27.3	0	2.4	0	1	0	0.9	0	0	0	0



# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Warm Lake Rd  
City, State: Cascade, Idaho  
Control: Stop Sign

File Name : SH-55 & Warm Lake Rd 6.18  
Site Code : 00000000  
Start Date : 6/18/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com

Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

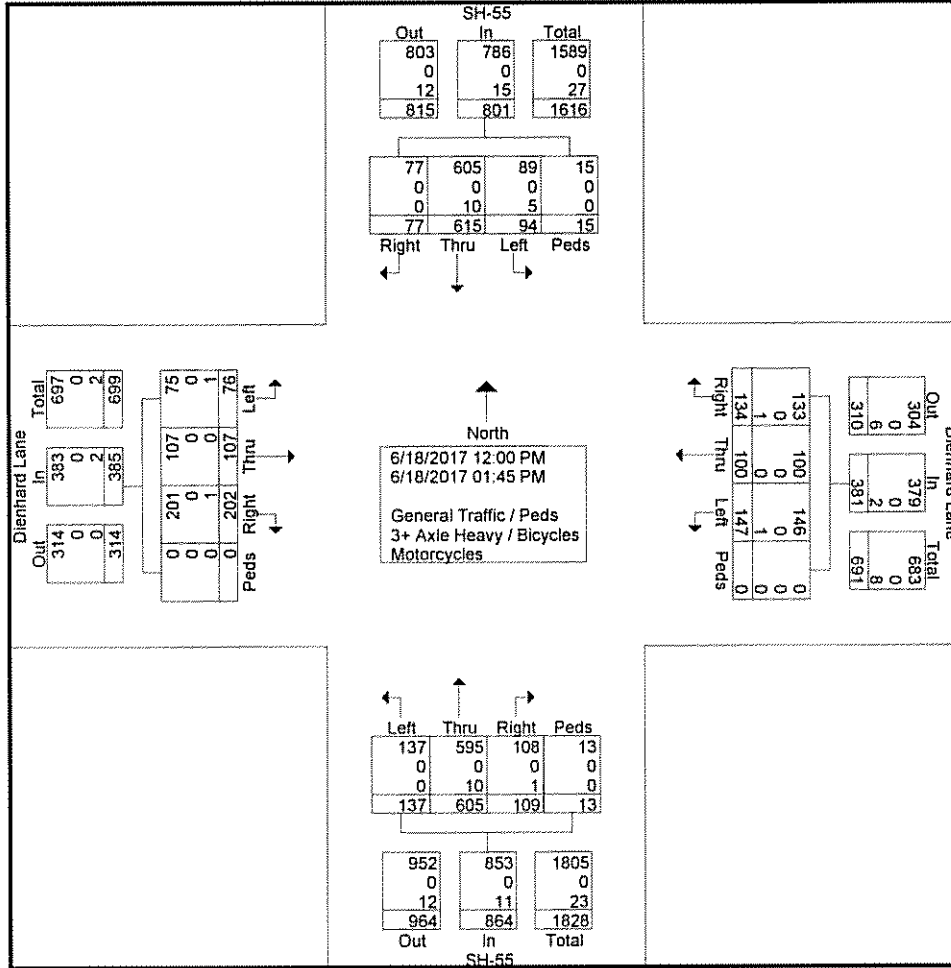
Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
12:00 PM	12	77	12	2	103	14	9	14	0	37	19	83	18	0	120	17	19	11	0	47	307
12:15 PM	12	75	18	1	106	11	13	15	0	39	20	86	27	0	133	35	12	14	0	61	339
12:30 PM	11	87	15	0	113	25	19	18	0	62	12	65	14	0	91	31	15	9	0	55	321
12:45 PM	6	76	13	9	104	26	19	19	0	64	15	64	14	1	94	25	20	10	0	55	317
<b>Total</b>	<b>41</b>	<b>315</b>	<b>58</b>	<b>12</b>	<b>426</b>	<b>76</b>	<b>60</b>	<b>66</b>	<b>0</b>	<b>202</b>	<b>66</b>	<b>298</b>	<b>73</b>	<b>1</b>	<b>438</b>	<b>108</b>	<b>66</b>	<b>44</b>	<b>0</b>	<b>218</b>	<b>1284</b>
01:00 PM	6	91	10	1	108	15	7	18	0	40	14	75	22	10	121	25	9	4	0	38	307
01:15 PM	13	75	13	2	103	10	15	21	0	46	10	77	11	0	98	22	10	8	0	40	287
01:30 PM	13	65	8	0	86	14	6	18	0	38	6	78	21	0	105	24	11	8	0	43	272
01:45 PM	4	69	5	0	78	19	12	24	0	55	13	77	10	2	102	23	11	12	0	46	281
<b>Total</b>	<b>36</b>	<b>300</b>	<b>36</b>	<b>3</b>	<b>375</b>	<b>58</b>	<b>40</b>	<b>81</b>	<b>0</b>	<b>179</b>	<b>43</b>	<b>307</b>	<b>64</b>	<b>12</b>	<b>426</b>	<b>94</b>	<b>41</b>	<b>32</b>	<b>0</b>	<b>167</b>	<b>1147</b>
<b>Grand Total</b>	<b>77</b>	<b>615</b>	<b>94</b>	<b>15</b>	<b>801</b>	<b>134</b>	<b>100</b>	<b>147</b>	<b>0</b>	<b>381</b>	<b>109</b>	<b>605</b>	<b>137</b>	<b>13</b>	<b>864</b>	<b>202</b>	<b>107</b>	<b>76</b>	<b>0</b>	<b>385</b>	<b>2431</b>
<b>Apprch %</b>	<b>9.6</b>	<b>76.8</b>	<b>11.7</b>	<b>1.9</b>		<b>35.2</b>	<b>26.2</b>	<b>38.6</b>	<b>0</b>		<b>12.6</b>	<b>70</b>	<b>15.9</b>	<b>1.5</b>		<b>52.5</b>	<b>27.8</b>	<b>19.7</b>	<b>0</b>		
<b>Total %</b>	<b>3.2</b>	<b>25.3</b>	<b>3.9</b>	<b>0.6</b>	<b>32.9</b>	<b>5.5</b>	<b>4.1</b>	<b>6</b>	<b>0</b>	<b>15.7</b>	<b>4.5</b>	<b>24.9</b>	<b>5.6</b>	<b>0.5</b>	<b>35.5</b>	<b>8.3</b>	<b>4.4</b>	<b>3.1</b>	<b>0</b>	<b>15.8</b>	
General Traffic / Peds	77	605	89	15	786	133	100	146	0	379	108	595	137	13	853	201	107	75	0	383	2401
% General Traffic / Peds	100	98.4	94.7	100	98.1	99.3	100	99.3	0	99.5	99.1	98.3	100	100	98.7	99.5	100	98.7	0	99.5	98.8
3+ Axle Heavy / Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	10	5	0	15	1	0	1	0	2	1	10	0	0	11	1	0	1	0	2	30
% Motorcycles	0	1.6	5.3	0	1.9	0.7	0	0.7	0	0.5	0.9	1.7	0	0	1.3	0.5	0	1.3	0	0.5	1.2

# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 2



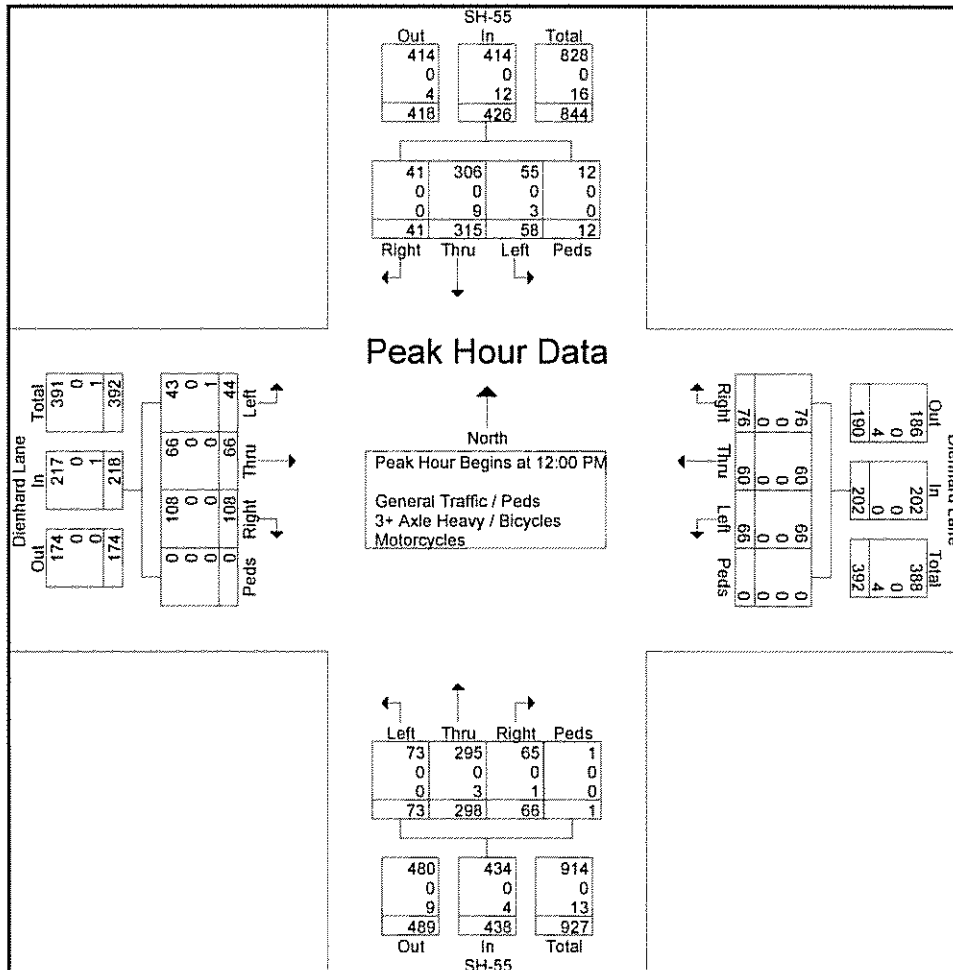
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 3

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	12	77	12	2	103	14	9	14	0	37	19	83	18	0	120	17	19	11	0	47	307
12:15 PM	12	75	18	1	106	11	13	15	0	39	20	86	27	0	133	35	12	14	0	61	339
12:30 PM	11	87	15	0	113	25	19	18	0	62	12	65	14	0	91	31	15	9	0	55	321
12:45 PM	6	76	13	9	104	26	19	19	0	64	15	64	14	1	94	25	20	10	0	55	317
Total Volume	41	315	58	12	426	76	60	66	0	202	66	298	73	1	438	108	66	44	0	218	1284
% App. Total	9.6	73.9	13.6	2.8		37.6	29.7	32.7	0		15.1	68	16.7	0.2		49.5	30.3	20.2	0		
PHF	.854	.905	.806	.333	.942	.731	.789	.868	.000	.789	.825	.866	.676	.250	.823	.771	.825	.786	.000	.893	.947
General Traffic / Peds	41	306	55	12	414	76	60	66	0	202	65	295	73	1	434	108	66	43	0	217	1267
% General Traffic / Peds	100	97.1	94.8	100	97.2	100	100	100	0	100	98.5	99.0	100	100	99.1	100	100	97.7	0	99.5	98.7
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	9	3	0	12	0	0	0	0	0	1	3	0	0	4	0	0	1	0	1	17
% Motorcycles	0	2.9	5.2	0	2.8	0	0	0	0	0	1.5	1.0	0	0	0.9	0	0	2.3	0	0.5	1.3







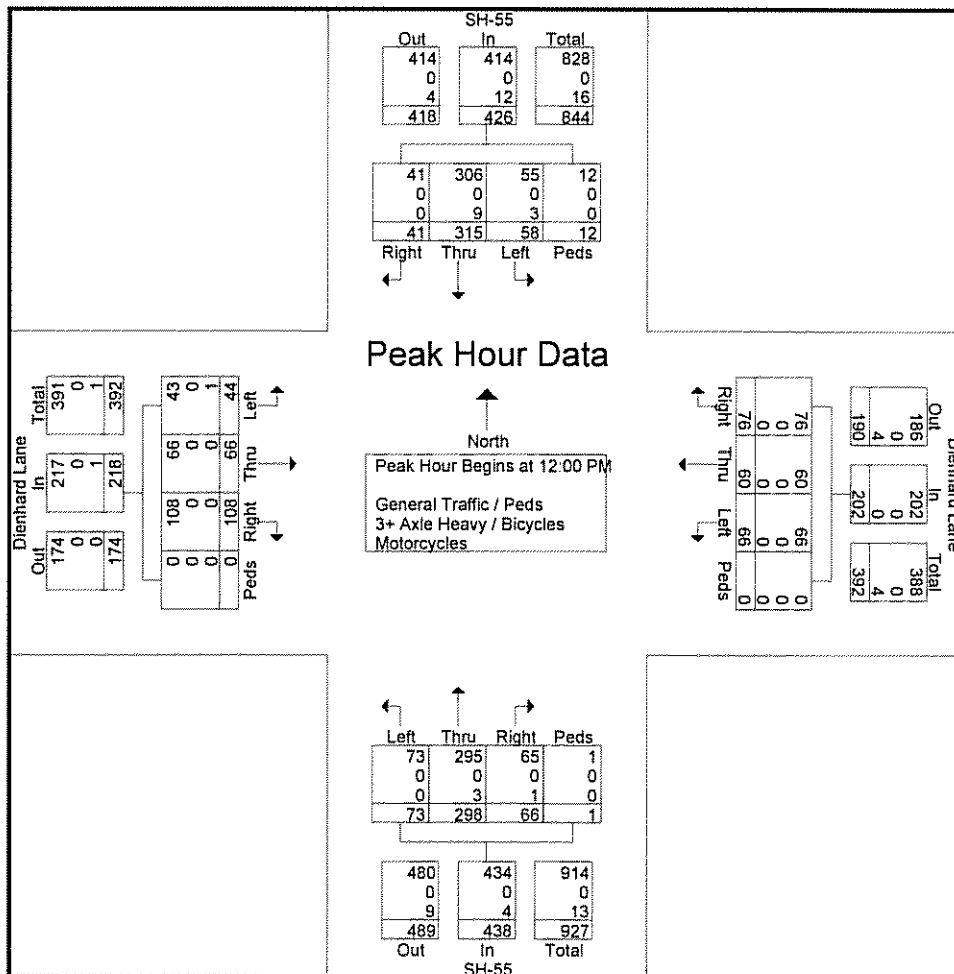
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 5

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 12:00 PM																					
12:00 PM	12	77	12	2	103	14	9	14	0	37	19	83	18	0	120	17	19	11	0	47	307
12:15 PM	12	75	18	1	106	11	13	15	0	39	20	86	27	0	133	35	12	14	0	61	339
12:30 PM	11	87	15	0	113	25	19	18	0	62	12	65	14	0	91	31	15	9	0	55	321
12:45 PM	6	76	13	9	104	26	19	19	0	64	15	64	14	1	94	25	20	10	0	55	317
Total Volume	41	315	58	12	426	76	60	66	0	202	66	298	73	1	438	108	66	44	0	218	1284
% App. Total	9.6	73.9	13.6	2.8		37.6	29.7	32.7	0		15.1	68	16.7	0.2		49.5	30.3	20.2	0		
PHF	.854	.905	.806	.333	.942	.731	.789	.868	.000	.789	.825	.866	.676	.250	.823	.771	.825	.786	.000	.893	.947
General Traffic / Peds	41	306	55	12	414	76	60	66	0	202	65	295	73	1	434	108	66	43	0	217	1267
% General Traffic / Peds	100	97.1	94.8	100	97.2	100	100	100	0	100	98.5	99.0	100	100	99.1	100	100	97.7	0	99.5	98.7
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Motorcycles	0	9	3	0	12	0	0	0	0	0	1	3	0	0	4	0	0	1	0	1	17
% Motorcycles	0	2.9	5.2	0	2.8	0	0	0	0	0	1.5	1.0	0	0	0.9	0	0	2.3	0	0.5	1.3



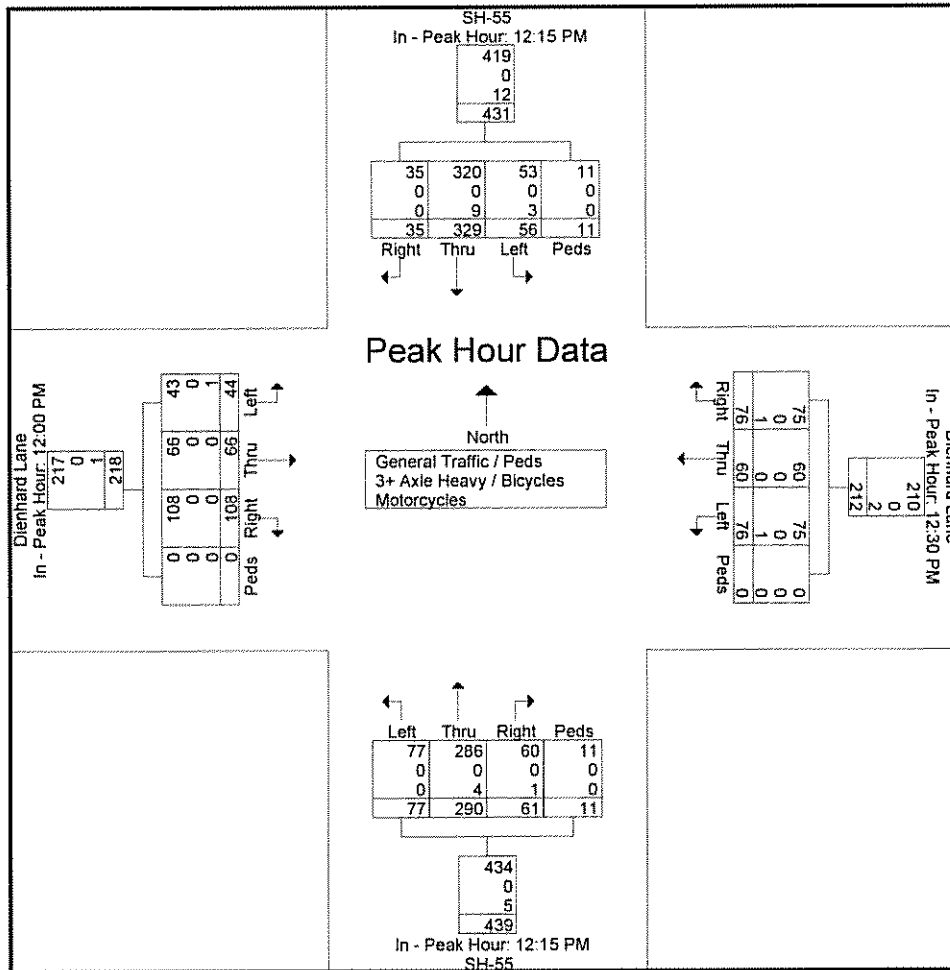
# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Deinhard Lane  
 City, State: McCall, Idaho  
 Control: Signalized

File Name : SH-55 & Deinhard 6  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 6

Start Time	SH-55 From North					Deinhard Lane From East					SH-55 From South					Deinhard Lane From West					Int. Total
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	
Peak Hour Analysis From 12:00 PM to 01:45 PM - Peak 1 of 1																					
Peak Hour for Each Approach Begins at:																					
	12:15 PM					12:30 PM					12:15 PM					12:00 PM					
+0 mins.	12	75	18	1	106	25	19	18	0	62	20	86	27	0	133	17	19	11	0	47	
+15 mins.	11	87	15	0	113	26	19	19	0	64	12	65	14	0	91	35	12	14	0	61	
+30 mins.	6	76	13	9	104	15	7	18	0	40	15	64	14	1	94	31	15	9	0	55	
+45 mins.	6	91	10	1	108	10	15	21	0	46	14	75	22	10	121	25	20	10	0	55	
Total Volume	35	329	56	11	431	76	60	76	0	212	61	290	77	11	439	108	66	44	0	218	
% App. Total	8.1	76.3	13	2.6		35.8	28.3	35.8	0		13.9	66.1	17.5	2.5		49.5	30.3	20.2	0		
PHF	.729	.904	.778	.306	.954	.731	.789	.905	.000	.828	.763	.843	.713	.275	.825	.771	.825	.786	.000	.893	
General Traffic / Peds	35	320	53	11	419	75	60	75	0	210	60	286	77	11	434	108	66	43	0	217	
% General Traffic / Peds	100	97.3	94.6	100	97.2	98.7	100	98.7	0	99.1	98.4	98.6	100	100	98.9	100	100	97.7	0	99.5	
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Motorcycles	0	9	3	0	12	1	0	1	0	2	1	4	0	0	5	0	0	1	0	1	
% Motorcycles	0	2.7	5.4	0	2.8	1.3	0	1.3	0	0.9	1.6	1.4	0	0	1.1	0	0	2.3	0	0.5	



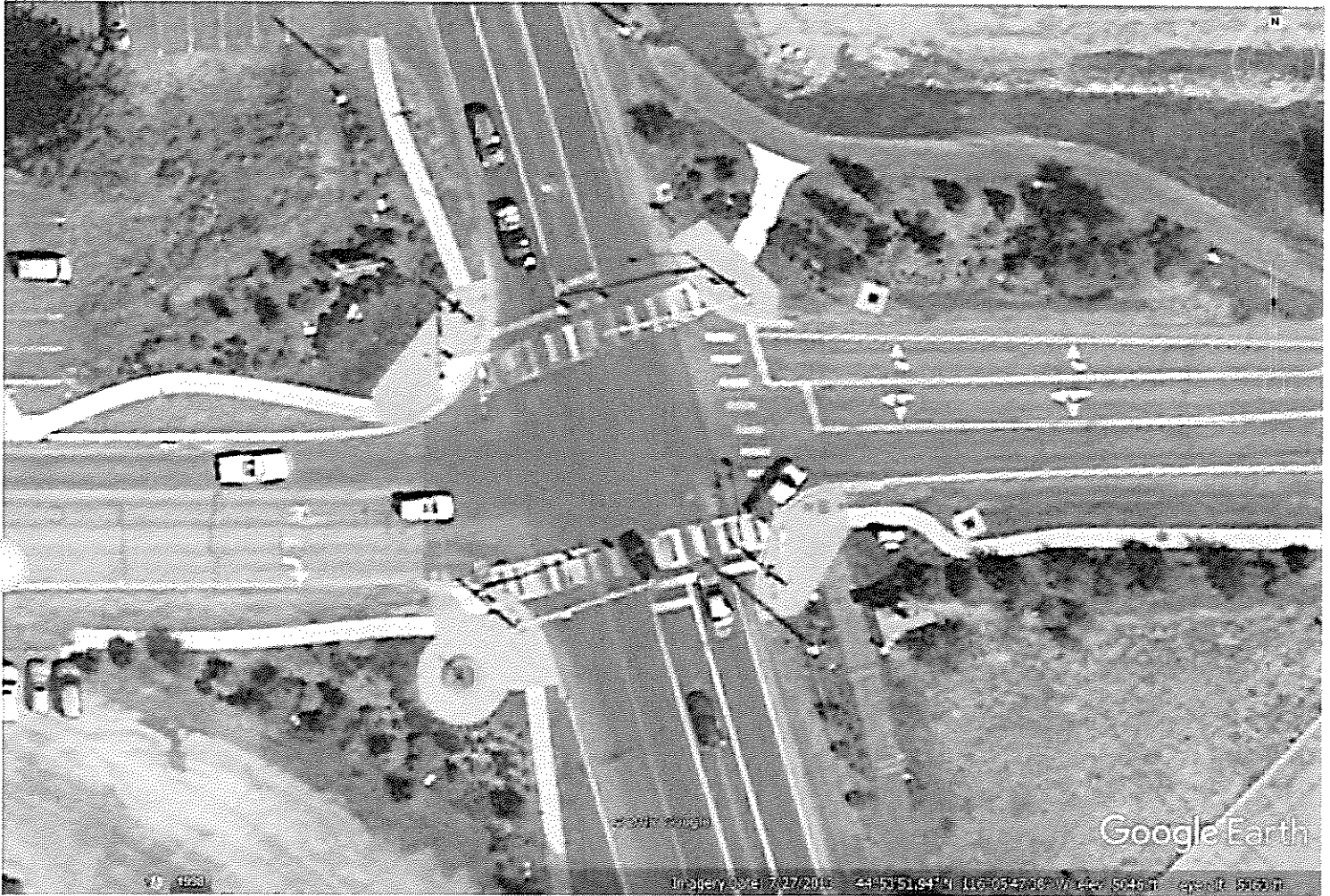
# L2 Data Collection

L2DataCollection.com  
Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
Intersection: SH-55 / Deinhard Lane  
City, State: McCall, Idaho  
Control: Signalized

File Name : SH-55 & Deinhard 6.18  
Site Code : 00000000  
Start Date : 6/18/2017  
Page No : 7

Image 1



# L2 Data Collection

L2DataCollection.com  
 Idaho (208) 860-7554 Utah (801) 413-2993

Study: HDR0014  
 Intersection: SH-55 / Boydston St  
 City, State: McCall, Idaho  
 Control: Stop Sign

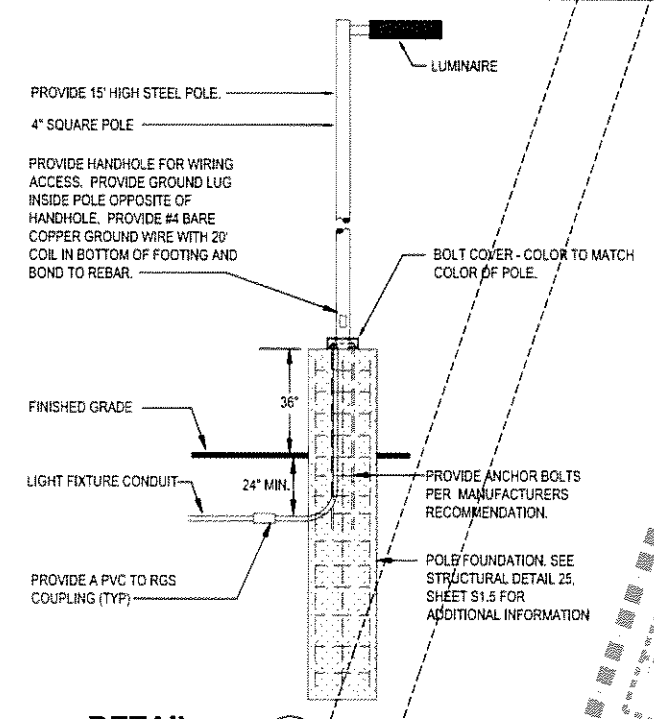
File Name : SH-55 & Boydston 6.18  
 Site Code : 00000000  
 Start Date : 6/18/2017  
 Page No : 1

## Groups Printed- General Traffic / Peds - 3+ Axle Heavy / Bicycles - Motorcycles

Start Time	SH-55 From East				Boydston Street From South				SH-55 From West				Int. Total
	Thru	Left	Peds	App. Total	Right	Left	Peds	App. Total	Right	Thru	Peds	App. Total	
12:00 PM	58	10	0	68	7	9	2	18	25	40	0	65	151
12:15 PM	62	13	0	75	12	17	0	29	17	65	0	82	186
12:30 PM	55	10	1	66	10	17	2	29	22	44	0	66	161
12:45 PM	40	6	0	46	12	17	0	29	14	53	0	67	142
Total	215	39	1	255	41	60	4	105	78	202	0	280	640
01:00 PM	48	7	0	55	8	18	0	26	15	35	0	50	131
01:15 PM	54	10	0	64	8	17	2	27	30	41	0	71	162
01:30 PM	48	7	0	55	14	22	0	36	21	49	0	70	161
01:45 PM	55	5	2	62	16	6	2	24	22	45	0	67	153
Total	205	29	2	236	46	63	4	113	88	170	0	258	607
Grand Total	420	68	3	491	87	123	8	218	166	372	0	538	1247
Apprch %	85.5	13.8	0.6		39.9	56.4	3.7		30.9	69.1	0		
Total %	33.7	5.5	0.2	39.4	7	9.9	0.6	17.5	13.3	29.8	0	43.1	
General Traffic / Peds	411	68	3	482	83	122	8	213	161	352	0	513	1208
% General Traffic / Peds	97.9	100	100	98.2	95.4	99.2	100	97.7	97	94.6	0	95.4	96.9
3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	1	1	0	2	2
% 3+ Axle Heavy / Bicycles	0	0	0	0	0	0	0	0	0.6	0.3	0	0.4	0.2
Motorcycles	9	0	0	9	4	1	0	5	4	19	0	23	33
% Motorcycles	2.1	0	0	1.8	4.6	0.8	0	2.3	2.4	5.1	0	4.3	3

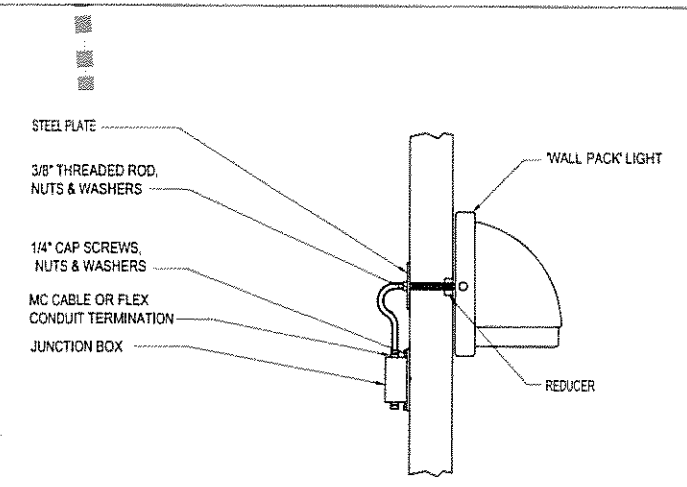
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**Appendix C**  
**SGLF Lighting Plan**



**DETAIL**  
SCALE: N.T.S.

UNDISTURBED  
AREA-A



**DETAIL**  
SCALE: N.T.S.

LIGHT FIXTURE SCHEDULE							
TYPE	DESCRIPTION/ MANUFACTURER	VOLT	LAMPS	MOUNTING	FINISH	MAX VA	REMARKS
P1	SINGLE HEAD PARKING LOT LIGHT LITHONIA LIGHTING DSX0-LED-P6-30K-T3M-MVOLT-SPA	MULTIVOLT	LED 14,829 LUMENS	POLE MOUNTED SEE DETAIL THIS SHEET	TBD	134	<ul style="list-style-type: none"> <li>PROVIDE FULL CUT OFF</li> <li>CONFIRM FINISH W/ CLIENT PRIOR TO ORDERING</li> </ul>
W1	WALL MOUNTED BUILDING LIGHT LITHONIA LIGHTING DSXW1-LED-20C-530-30K-T3M-MVOLT	MULTIVOLT	LED 3,993 LUMENS	WALL	TBD	35	<ul style="list-style-type: none"> <li>PROVIDE FULL CUT OFF</li> </ul>
W1E	WALL MOUNTED BUILDING LIGHT LITHONIA LIGHTING DSXW1-LED-20C-530-30K-T3M-MVOLT	MULTIVOLT	LED 3,993 LUMENS	WALL	TBD	35	<ul style="list-style-type: none"> <li>PROVIDE FULL CUT OFF</li> <li>EMERGENCY BATTERY PACK</li> </ul>

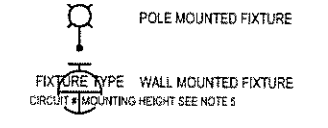
WARM LAKE ROAD

LAYDOWN YARD

MATCH LINE  
FOR CONTINUATION.  
SEE DRAWING 950-EL-302

**LOGISTICS FACILITY EXTERIOR LIGHTING PLAN**  
SCALE: 1" = 30'

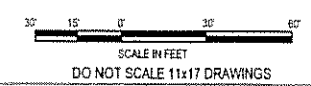
**LIGHT FIXTURES**



**NOTES:**

- LIGHTING FIXTURES SHALL COMPLY WITH VALLEY COUNTY LIGHTING ORDINANCE, (Ord. 05-2, 11-8-2004)
- THE POLE MOUNTED FIXTURE SHALL BE MOUNTED AT A HEIGHT OF 18'.
- LIGHT FIXTURE SHALL BE FULL CUT-OFF.
- LIGHT FIXTURE SHALL NOT EXCEED 3000K.
- WALL MOUNTED FIXTURE HEIGHT WILL BE A FOOT (1') ABOVE DOORS AND ROLL UP DOORS. OTHERWISE THE MOUNTING HEIGHT SHALL BE 10' ABOVE FINISH FLOOR OR GRADE.

**PRELIMINARY**  
NOT FOR CONSTRUCTION



REFERENCES		REFERENCES		REVISIONS				REVISIONS				SCALE: AS NOTED		DATE	
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT
000-GA-108	LOGISTICS FACILITY PLAN														
950-EL-302	LOGISTICS FACILITY EXTERIOR LIGHTING PLAN SHEET 2														

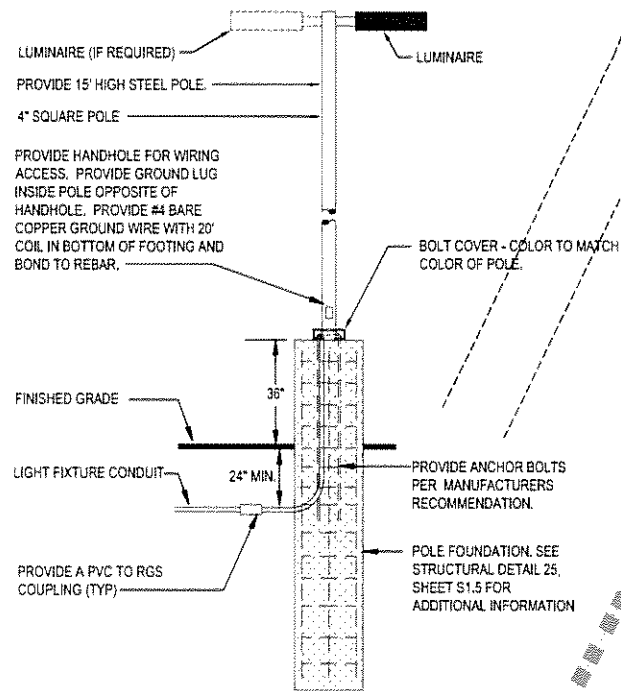
**m3** ARCHITECTURE  
ENGINEERING  
CONSTRUCTION MANAGEMENT  
www.m3eng.com

STIBNITE GOLD - FEASIBILITY STUDY

**ELECTRICAL LOGISTICS FACILITY EXTERIOR LIGHTING PLAN SHEET 1**

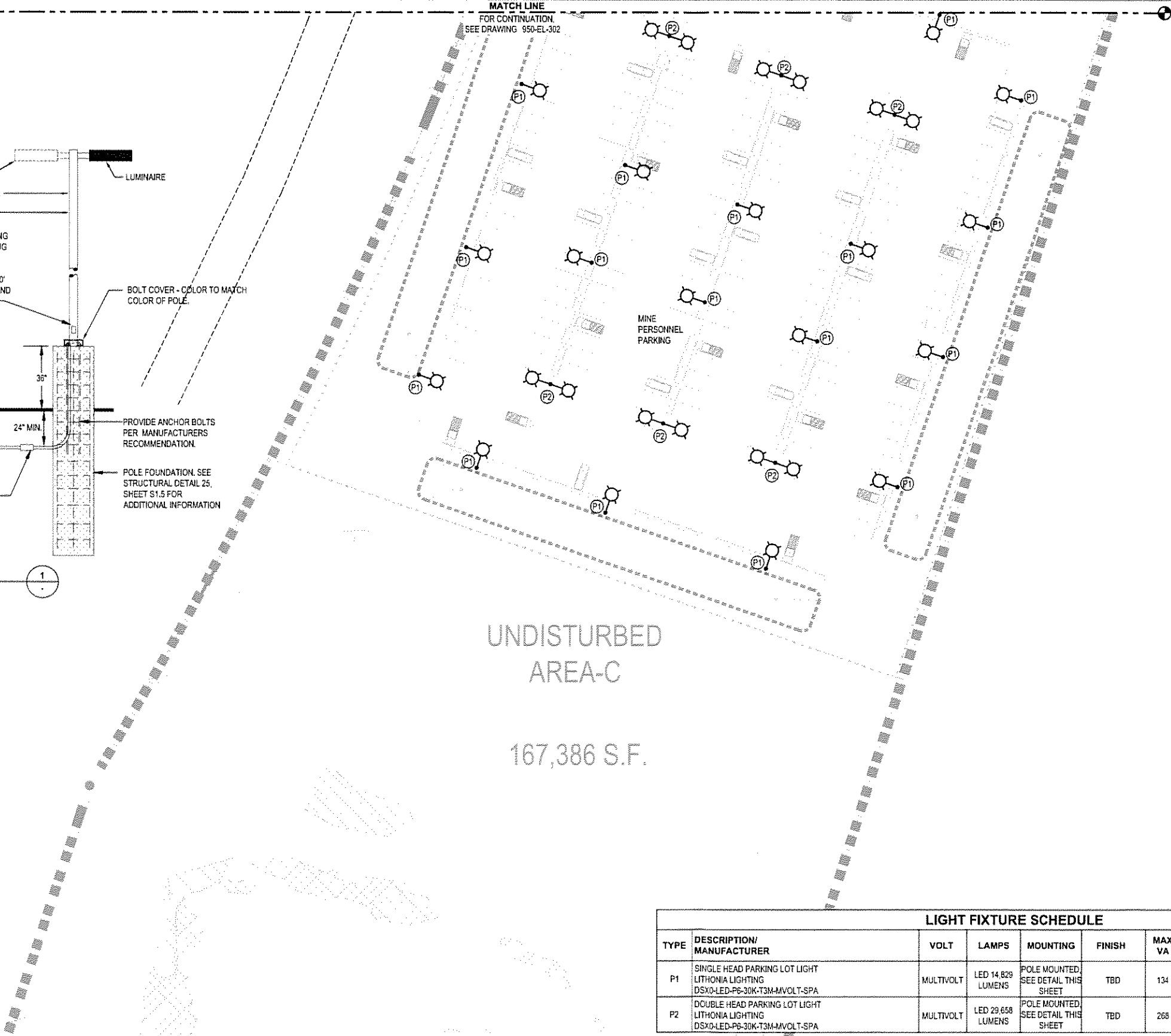
PROJECT NO. M3-PH-TD04S  
DWG. NO. **950-EL-301**  
REV: P2 DATE 17 APR 20

The User/Client is responsible for obtaining all necessary permits and approvals. The User/Client is responsible for providing all necessary information and data. The User/Client is responsible for providing all necessary access to the site. The User/Client is responsible for providing all necessary resources. The User/Client is responsible for providing all necessary support. The User/Client is responsible for providing all necessary information and data. The User/Client is responsible for providing all necessary access to the site. The User/Client is responsible for providing all necessary resources. The User/Client is responsible for providing all necessary support.



**DETAIL 1**  
SCALE: N.T.S.

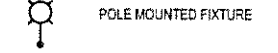
MATCH LINE  
FOR CONTINUATION  
SEE DRAWING 950-EL-302



UNDISTURBED  
AREA-C

167,386 S.F.

**LIGHT FIXTURES**



**NOTES:**

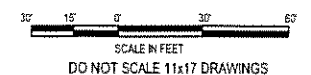
1. LIGHTING FIXTURES SHALL COMPLY WITH VALLEY COUNTY LIGHTING ORDINANCE, (Ord. 05-2, 11-8-2004)
2. THE POLE MOUNTED FIXTURE SHALL BE MOUNTED AT A HEIGHT OF 18'.
3. LIGHT FIXTURE SHALL BE FULL CUT-OFF.
4. LIGHT FIXTURE SHALL NOT EXCEED 3000K.

**LIGHT FIXTURE SCHEDULE**

TYPE	DESCRIPTION/ MANUFACTURER	VOLT	LAMPS	MOUNTING	FINISH	MAX VA	REMARKS
P1	SINGLE HEAD PARKING LOT LIGHT LITHONIA LIGHTING DSX0-LED-P6-30K-T3M-MVOLT-SPA	MULTIVOLT	LED 14,829 LUMENS	POLE MOUNTED SEE DETAIL THIS SHEET	TBD	134	<ul style="list-style-type: none"> <li>• PROVIDE FULL CUT OFF</li> <li>• CONFIRM FINISH W/ CLIENT PRIOR TO ORDERING</li> </ul>
P2	DOUBLE HEAD PARKING LOT LIGHT LITHONIA LIGHTING DSX0-LED-P6-30K-T3M-MVOLT-SPA	MULTIVOLT	LED 29,658 LUMENS	POLE MOUNTED SEE DETAIL THIS SHEET	TBD	268	<ul style="list-style-type: none"> <li>• PROVIDE FULL CUT OFF</li> <li>• CONFIRM FINISH W/ CLIENT PRIOR TO ORDERING</li> </ul>

**LOGISTICS FACILITY EXTERIOR LIGHTING PLAN**  
SCALE: 1" = 30'

**PRELIMINARY**  
NOT FOR CONSTRUCTION



REFERENCES		REFERENCES		REVISIONS						REVISIONS					
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT
000-GA-108	LOGISTICS FACILITY PLAN														
950-EL-302	LOGISTICS FACILITY EXTERIOR LIGHTING PLAN SHEET 2														

**3M** ARCHITECTURE  
ENGINEERING  
CONSTRUCTION MANAGEMENT  
www.m3eng.com

**STIBNITE GOLD - FEASIBILITY STUDY**  
**ELECTRICAL LOGISTICS FACILITY EXTERIOR LIGHTING PLAN SHEET 3**  
PROJECT NO. MS-PH170045  
DWG. NO. **950-EL-303**  
REV. NO. P2 DATE 17 APR 20

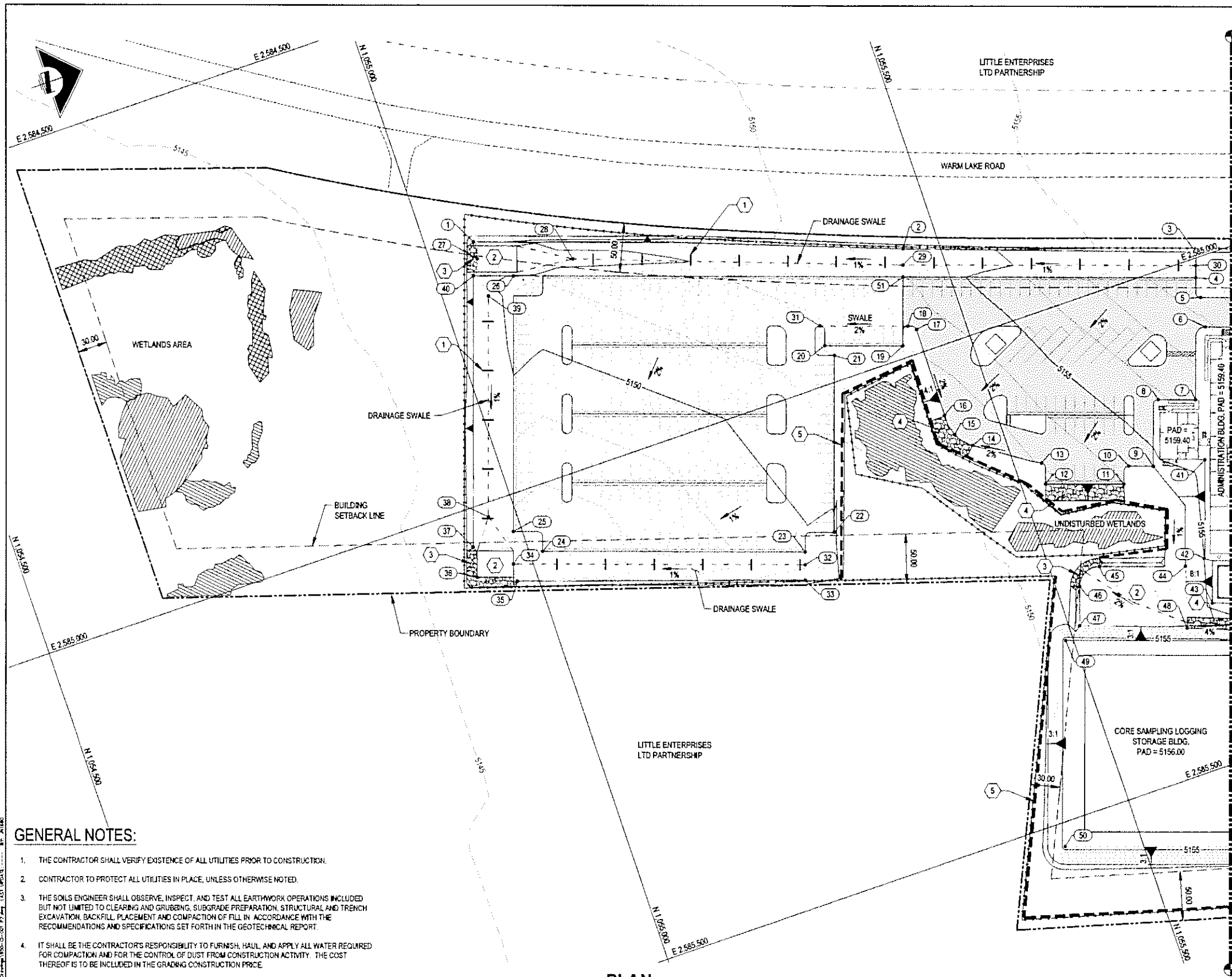
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**Appendix D**  
**SGLF Grading Plan**





POINT#	NORTHING	EASTING	ELEVATION
1	1055048.57	2584744.73	5149.00
2	1055463.45	2584894.30	5153.62
3	1055746.23	2584994.58	5158.05
4	1055737.78	2585019.09	5158.82
5	1055735.97	2585039.62	5158.40
6	1055730.92	2585069.61	5157.79
7	1055697.31	2585136.38	5156.44
8	1055661.05	2585123.87	5155.83
9	1055634.23	2585185.29	5154.70
10	1055610.60	2585178.14	5154.30
11	1055599.88	2585193.84	5153.90
12	1055524.23	2585157.75	5152.70
13	1055527.14	2585146.30	5153.10
14	1055466.44	2585106.52	5152.02
15	1055452.49	2585090.12	5152.01
16	1055448.87	2585068.03	5152.09
17	1055449.75	2584976.25	5153.48
18	1055442.58	2584970.17	5153.28
19	1055431.34	2584967.44	5153.73
20	1055355.71	2584961.36	5152.32
21	1055361.90	2584974.07	5152.00
22	1055303.21	2585144.24	5149.75
23	1055268.33	2585153.36	5149.75
24	1055013.09	2585065.33	5147.00
25	1054991.25	2585036.64	5147.62
26	1055076.01	2584790.66	5150.21
27	1055046.69	2584762.40	5147.00
28	1055139.15	2584794.01	5148.85
29	1055458.08	2584909.90	5153.30
30	1055741.67	2585007.37	5157.80
31	1055357.50	2584940.82	5151.91
32	1055264.07	2585165.75	5148.75
33	1055259.12	2585180.41	5149.75
34	1054980.52	2585068.12	5145.75
35	1054978.81	2585065.83	5147.75
36	1054941.21	2585068.66	5145.75
37	1054947.40	2585038.41	5147.77
38	1054971.93	2585014.27	5146.13
39	1055045.06	2584801.70	5148.50
40	1055037.23	2584777.51	5149.00
41	1055686.66	2585197.18	5156.44
42	1055653.27	2585292.11	5155.00
43	1055646.61	2585337.97	5155.65
44	1055632.58	2585293.19	5152.61
45	1055549.19	2585265.22	5150.50
46	1055523.77	2585277.62	5150.50
47	1055510.59	2585315.88	5151.00
48	1055613.69	2585353.55	5152.22
49	1055492.11	2585325.23	5156.00
50	1055423.64	2585323.75	5156.00
51	1055454.16	2584921.27	5153.95

POINT#	NORTHING	EASTING	ELEVATION
38	1054971.93	2585014.27	5146.13
39	1055045.06	2584801.70	5148.50
40	1055037.23	2584777.51	5149.00
41	1055686.66	2585197.18	5156.44
42	1055653.27	2585292.11	5155.00
43	1055646.61	2585337.97	5155.65
44	1055632.58	2585293.19	5152.61
45	1055549.19	2585265.22	5150.50
46	1055523.77	2585277.62	5150.50
47	1055510.59	2585315.88	5151.00
48	1055613.69	2585353.55	5152.22
49	1055492.11	2585325.23	5156.00
50	1055423.64	2585323.75	5156.00
51	1055454.16	2584921.27	5153.95

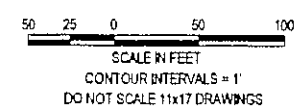
- GENERAL NOTES:**
1. THE CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
  2. CONTRACTOR TO PROTECT ALL UTILITIES IN PLACE, UNLESS OTHERWISE NOTED.
  3. THE SOILS ENGINEER SHALL OBSERVE, INSPECT, AND TEST ALL EARTHWORK OPERATIONS INCLUDED BUT NOT LIMITED TO CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION, BACKFILL, PLACEMENT AND COMPACTION OF FILL IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE GEOTECHNICAL REPORT.
  4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL, AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.

UNADJUSTED QUANTITIES			
	CUT (CUBIC YARD)	FILL (CUBIC YARD)	NET
LOGISTICS FACILITY	20,170	35,170	15,000 (FILL)

**PLAN**  
SCALE: 1" = 50'

**PRELIMINARY**  
NOT FOR CONSTRUCTION

- LEGEND**
- ASPHALT PAVING
  - RIPRAP
  - GRAVEL OVERLAY
  - WETLANDS
  - BIG CREEK
  - PROPERTY BOUNDARY
  - CHAIN LINK FENCE
  - EXISTING CONTOUR MAJOR
  - EXISTING CONTOUR MINOR
  - DESIGN CONTOUR MAJOR
  - DESIGN CONTOUR MINOR



- KEY NOTES**
- 1 STRAW LOGS SPACED 50' O.C.
  - 2 DETENTION / SEDIMENT BASIN
  - 3 RIPRAP BERM
  - 4 RIPRAP SPILLWAY
  - 5 SILT FENCE

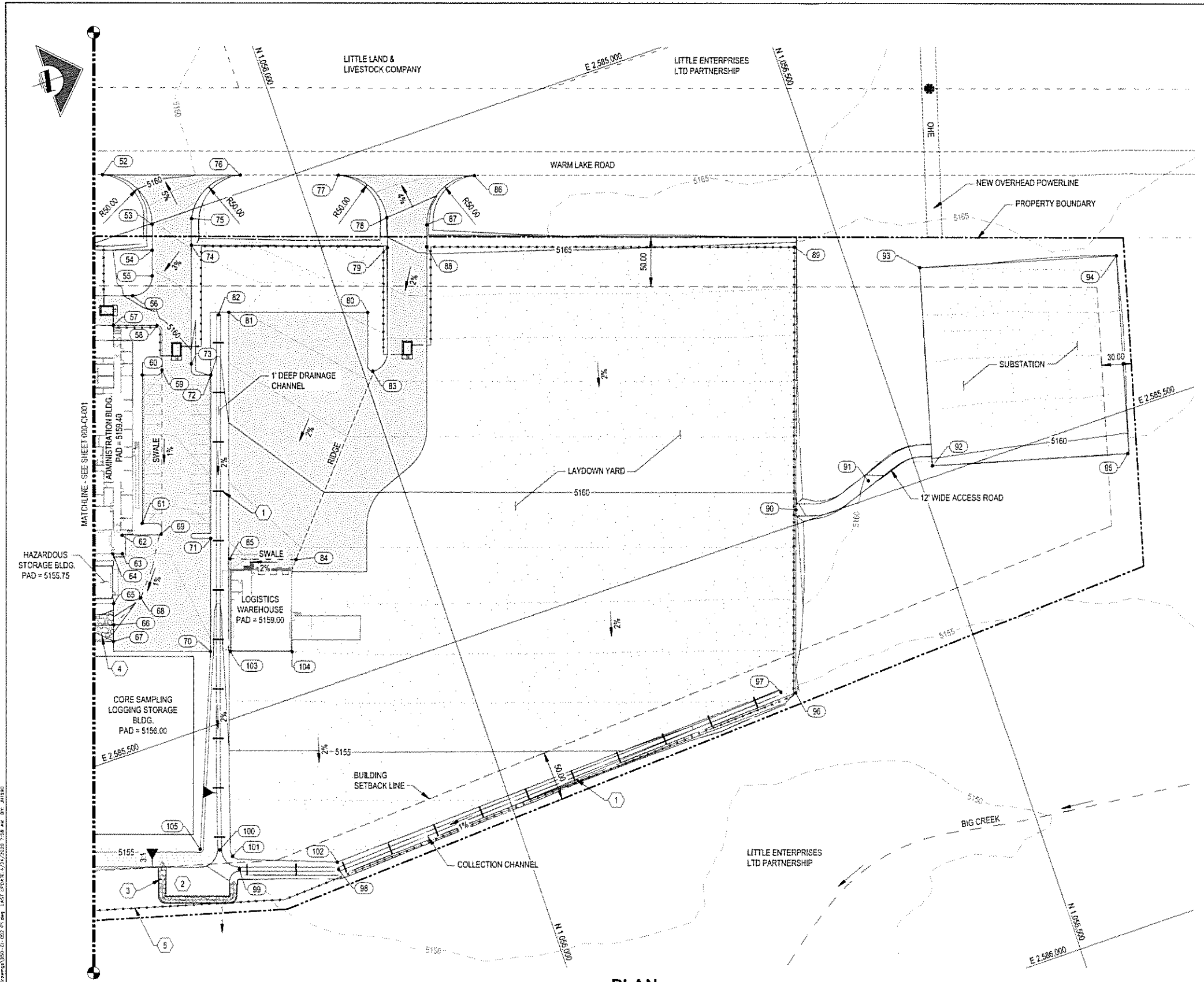
REFERENCES		REFERENCES		REVISIONS						REVISIONS					
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950-CH002	GRADING PLAN SHEET 2														

SCALE: 1" = 50'  
 DESIGNED BY: JLW  
 APR 20  
 DRAWN BY: JLW  
 APR 20  
 CHECKED BY: JLN  
 PROJECT MGR: LB  
 CLIENT APPR.

**STIBNITE GOLD - FEASIBILITY STUDY**  
**LOGISTICS FACILITY**  
**CIVIL**  
**GRADING PLAN**  
**SHEET 1**

PROJECT NO. MS-FH17006  
 DWG. NO. **950-CI-001**  
 REV. NO. DATE  
 P2 24 APR 20





**PLAN**  
SCALE: 1" = 50'

POINT TABLE			
POINT#	NORTHING	EASTING	ELEVATION
52	1055813.57	2584937.33	5158.13
53	1055844.54	2585000.88	5161.90
54	1055836.01	2585025.60	5161.38
55	1055827.58	2585050.06	5160.86
56	1055802.16	2585062.45	5160.23
57	1055774.20	2585084.54	5158.71
58	1055816.00	2585098.96	5159.59
59	1055806.05	2585143.13	5158.90
60	1055785.52	2585141.34	5159.36
61	1055736.61	2585283.14	5157.11
62	1055713.54	2585287.83	5157.00
63	1055707.64	2585305.79	5156.05
64	1055698.68	2585302.69	5156.20
65	1055682.98	2585350.51	5155.54
66	1055675.92	2585370.98	5154.65
67	1055670.48	2585386.75	5155.42
68	1055710.77	2585353.75	5155.08
69	1055751.31	2585299.61	5156.52
70	1055760.55	2585428.40	5155.90
71	1055797.95	2585320.16	5156.82
72	1055851.69	2585164.16	5160.05
73	1055836.51	2585146.85	5159.72
74	1055875.64	2585033.73	5162.12
75	1055884.64	2585008.40	5162.39
76	1055945.91	2584982.98	5160.96
77	1055040.45	2585015.59	5162.49
78	1056073.28	2585072.10	5165.00

POINT TABLE			
POINT#	NORTHING	EASTING	ELEVATION
79	1056063.89	2585100.96	5164.79
80	1056023.65	2585156.31	5163.27
81	1055889.69	2585110.11	5161.85
82	1055879.17	2585109.03	5160.85
83	1056009.09	2585213.85	5162.17
84	1055873.05	2585368.61	5158.78
85	1055809.71	2585346.03	5157.73
86	1056171.32	2585060.92	5164.07
87	1056109.23	2585092.20	5165.65
88	1056102.06	2585113.00	5165.14
89	1056454.76	2585234.65	5164.90
90	1056370.26	2585465.81	5159.79
91	1056450.22	2585482.44	5159.88
92	1056516.39	2585489.11	5159.85
93	1056563.40	2585295.94	5163.91
94	1056762.24	2585349.14	5164.35
95	1056708.08	2585541.74	5159.51
96	1056309.88	2585660.86	5154.88
97	1056296.23	2585655.52	5156.00
98	1055812.60	2585678.98	5151.00
99	1055716.80	2585646.00	5150.07
100	1055704.21	2585621.18	5150.00
101	1055714.69	2585631.38	5152.86
102	1055813.79	2585671.72	5152.75
103	1055779.46	2585434.92	5157.00
104	1055839.02	2585455.46	5157.00
105	1055685.53	2585614.08	5156.00

**GENERAL NOTES:**

- THE CONTRACTOR SHALL VERIFY EXISTENCE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- CONTRACTOR TO PROTECT ALL UTILITIES IN PLACE, UNLESS OTHERWISE NOTED.
- THE SOILS ENGINEER SHALL OBSERVE, INSPECT, AND TEST ALL EARTHWORK OPERATIONS INCLUDED BUT NOT LIMITED TO CLEARING AND GRUBBING, SUBGRADE PREPARATION, STRUCTURAL AND TRENCH EXCAVATION, BACKFILL, PLACEMENT AND COMPACTION OF FILL IN ACCORDANCE WITH THE RECOMMENDATIONS AND SPECIFICATIONS SET FORTH IN THE GEOTECHNICAL REPORT.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FURNISH, HAUL AND APPLY ALL WATER REQUIRED FOR COMPACTION AND FOR THE CONTROL OF DUST FROM CONSTRUCTION ACTIVITY. THE COST THEREOF IS TO BE INCLUDED IN THE GRADING CONSTRUCTION PRICE.

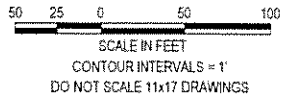
**LEGEND**

- ASPHALT PAVING
- ROCK RIP RAP BANK PROTECTION
- GRAVEL OVERLAY
- WETLANDS
- BIG CREEK
- PROPERTY BOUNDARY
- CHAIN LINK FENCE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- DESIGN CONTOUR MAJOR
- DESIGN CONTOUR MINOR

**KEY NOTES**

- STRAW LOGS SPACED 50' O.C.
- DETENTION / SEDIMENTATION BASIN
- RIPRAP BERM
- RIPRAP SPILLWAY
- SILT FENCE

**PRELIMINARY**  
NOT FOR CONSTRUCTION



REFERENCES		REFERENCES		REVISIONS				REVISIONS				SCALE: 1" = 50'		DATE	
DWG. NO.	TITLE	DWG. NO.	TITLE	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT	NO.	DESCRIPTION	BY	APPD.	DATE	CLIENT
950-CH-001	GRADING PLAN SHEET 1														

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**GRADING PLAN**  
**SHEET 2**

PROJECT NO. M3-PH170045  
DWG. NO. **950-CI-002**  
REV. NO. PZ  
DATE 24 APR 20