INTERNATIONAL ROAD DYNAMICS INC.

LTPP SPS PHASE II

WEIGH-IN-MOTION SITE ACCEPTABILITY ASSESSMENT REPORT

COLORADO SPS-2
LTPP ID 080200
APRIL 10, 2006
CLIN 2001 TASK ORDER 12

CONTRACT NO. DTFH61-05-D-00001

U.S. Department of Transportation
Federal Highway Administration

LONG TERM Pavement PERFORMANCE

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1.0 EXECUTIVE SUMMARY

On April 5th and 6th, 2006, a Weigh-in-Motion (WIM) site acceptability assessment was performed for The Colorado SPS-2 site. This assessment was the second performed at this site. The first assessment was performed on July 23rd and 25th, 2005 by the CLIN 1 Team. This first assessment entailed an extensive search for a suitable SPS WIM site location and, upon locating a suitable site, the CLIN 1 Team recommended that 400 feet of the existing PCC pavement be blanket ground to meet smoothness requirements for an SPS "WIM Pavement". It was also a recommendation of the CLIN 1 report (July 25, 2005) that another pavement evaluation be performed following pavement corrective action. On April 5th a re-check of the general pavement condition was made by a CLIN 1 Team member and on April 6, 2006, the State performed a blanket grind of the designated 400 foot "WIM Pavement". The CLIN 1 team member observed the grinding operation and performed a straightedge check of the pavement's smoothness. Upon completion of the grinding operation and straightedge check, a pavement assessment was performed.

This WIM site is located approximately 55 miles Northeast of central Denver on I-76 near the town of Keenesburg in Weld County in the Eastbound outside lane at Mile Post 39.7 approximately 20 miles downstream of the SPS-2 pavement test section 080223. As previously noted, this site was selected during the first site assessment. Based upon our site evaluations and discussions with the State, it is recommended that a new WIM system utilizing Bending Plate technology be installed at this location.

The selected WIM site is located within a tangent section of roadway and the grade is relatively flat. Vehicles track smoothly through this area at speeds between 70 and 80 MPH. Traffic flow is light on this four lane Interstate.

The existing roadway pavement at this location consists of three year old structurally sound 10 inch thick PCC. As such, it not necessary that the State replace the existing pavement with a 400 foot PCC slab to accommodate the WIM system's in-pavement sensors. Additionally, the 400 foot section of pavement 325 feet in advance of to 75 feet following the planned WIM scale location has been blanket ground to conform to smoothness requirements for SPS WIM sites.

Power and telephone services utilized for the existing WIM system are available for the proposed new system. Both the AC service panel and the telephone network interface box are situated 300 feet upstream of the proposed new WIM cabinet location. The State will need to extend these services to service points within 25 feet of the new cabinet location.

This site meets all selection criteria and can be instrumented with a bending plate WIM system.

2.0 EXISTING ROADWAY

2.1 PAVEMENT AND GEOMETRICS

The existing roadway pavement as well as the outside and inside (median) shoulders approaching, through, and departing the proposed WIM site are PCC. The two Eastbound lanes, constructed in 2003, are each 12 feet wide with a 10 foot wide outside shoulder and a 4 foot wide inside (median) shoulder. It is noted that at this location the shoulder line markings are on the shoulder adjacent to the edge of traveled way instead of on the traveled way side as is more typical. The mainline pavement's thickness is 10 inches. The alignment is tangent and the grade is relatively flat. Piezo WIM sensors are currently located in the PCCP roadway 400 upstream of the proposed new scale location.

2.2 OBSERVED TRAFFIC OPERATING CHARACTERISTICS

The light traffic flow exhibited good lane discipline, staying well within the lane and shoulder line markings. Traffic is free flowing at all times at speeds between 70 and 80 MPH (posted speed limit is 75 MPH for all traffic). There are no signals or merging in the WIM site vicinity. Trucks are "cruising" through the site at constant speeds.

3.0 SITE CONFORMANCE TO EVALUATION CRITERIA

3.1 PAVEMENT TYPE AND CONDITION- PASS

The PCC approach, WIM, and departure pavements are in very good condition

3.2 OBSERVED PAVEMENT SMOOTHNESS- PASS

The existing pavement, 325 feet in advance of and 75 feet following the proposed WIM scale location ("WIM Pavement"), was blanket ground and checked with a straightedge immediately prior to the pavement assessment.

3.3 ANALYSIS OF PAVEMENT PROFILE DATA

Based upon a straightedge check of the blanket ground "WIM Pavement" section, extremely smooth drive-through checks, and the observing of trucks and other vehicles approaching and passing over the WIM scale location, an analysis of pavement profile data prior to WIM system installation is not deemed necessary.

3.4 ROADWAY GEOMETRICS- PASS

The roadway's horizontal alignment is tangent, grade is minimal, and the lane in which the sensors are to be installed is 12 feet wide. The pavement cross slope is adequate for proper roadway drainage.

3.5 TRAFFIC OPERATING CHARACTERISTICS- PASS

The general traffic pattern is free flowing with good lane discipline. There are no interchanges or signals affecting traffic flow. The truck traffic is cruising through the site and staying within the lane lines.

3.6 TRUCK TRAFFIC COMPARISON BETWEEN WIM AND TEST SITE- PASS

The proposed WIM site location is 20 miles downstream of the SPS-2 test site and there are on and off points that could be used by local truck traffic. Actually, there are interchanges within the SPS test section, including the recently completed E-70 interchange. The State asserts that for the most part the Eastbound truck traffic composition at the proposed WIM site location is the same as that through the SPS-2 test section location.

3.7 POTENTIAL WIM INTERFERENCE SOURCES- PASS

The nearest source of any potential interference, overhead power lines, is 300 feet upstream of the proposed WIM system location. These are "service" lines and will not interfere with system performance.

3.8 ACCESS TO POWER AND PHONE SERVICES- PASS

Both power and phone are readily accessible 300 feet upstream of the proposed new WIM cabinet location. The State will need to extend existing power and phone services to service points within 25 feet of the proposed WIM cabinet location.

3.9 EQUIPMENT INSTALLATION CAPABILITY- PASS

There is an adequate location for the WIM controller cabinet opposite the scale location between the roadway and the highway right-of-way fence. The cabinet should be installed at 30 foot clearance from the edge of traveled way to utilize the higher ground of the roadway embankment, minimizing the chance of ponding water. There is good visibility from the cabinet location of the sensors and approaching vehicles. There is adequate room adjacent to the cabinet location for service facilities. Roadway and overall site drainage is very good but it would appear that ponding or movement of water is likely to occur between the toe of the roadway embankment and the right-of-way fence. There is no foreseen potential for ponding or flooding at the recommended cabinet and pullbox locations. There is adequate topography for scale pit drainage. The width and structural stability of the adjacent lane and median shoulder allow a lane closure and traffic shift which will provide safe clearance in the work zone from live traffic during installation of the WIM system.

3.10 POTENTIAL TRAFFIC CONTROL / WORK ZONE SAFETY ISSUES- PASS

The traffic control should go smoothly, given the good approach sight distance, the lack of nearby intersections or interchanges, and the ability to move traffic's left wheels onto the adjacent lane's median shoulder. No other work zone safety issues are foreseen at this rural site.

3.11 TRUCK CIRCUIT- PASS

The nearest usable EB truck turnaround is I-76 Exit 48 (Roggen), which is located 8 miles downstream of the WIM site.

The nearest useable WB truck turnaround is I- 76 Exit 39 (Keenesburg), which is located 1 mile upstream of the WIM site.

The test truck round trip circuit route is 18 miles. There are no foreseen potential restrictions and the turnaround locations are easily accessed and maneuvered. The estimated lap time is 20 minutes.

Figure 1: Truck Circuit Map, SPS-2 WIM Site on I-76

3.12 RECOMMENDATIONS ON SITE ACCEPTANCE / CORRECTIVE ACTIONS

The State will need to extend existing power and phone services to service points within 25 feet of the proposed WIM cabinet location.

The recommended WIM site location conforms to FHWA's recommendation and preference that the WIM system's scales be installed in PCC pavement with such pavement being structurally sound and smooth 325 ft. prior to and 75 ft. following the scales.

It is recommended that a bending plate WIM system be installed at the selected WIM site location.

4.0 TRAFFIC DATA REVIEW

Vehicle distributions of all trucks (FHWA Class 4 and higher) – 25.3%

Vehicle distributions for heavy trucks (FHWA Class 6 and higher) – 24.6%

Volume of trucks comprising of 10 % or more of truck population

Class 9 vehicles – 69.0%

Volume of heavy trucks comprising 10 % or more of heavy truck population

Class 9 vehicles – 78.1%

The 2004 Traffic Volumes provided indicate the ADT to be 16,000

The data as noted has been collected by Colorado Department of Transportation as supplied from existing 2001 though 2003 traffic studies.

5.0 PAVEMENT EVALUATION

In determining WIM site acceptability, visual on-site observation of the existing PCC pavement was made by a CLIN 1 Team member.

5.1 SURFACE CONDITION

The site evaluation concentrated efforts on the range of pavement from 900 feet prior to and 100 feet following the proposed WIM scale location. Pictures were taken to document the surface condition, several of which are presented in Appendix E.

5.1.1 PCC PAVEMENT 325 FEET IN ADVANCE OF AND 75 FEET FOLLOWING PROPOSED WIM SCALE LOCATION ("WIM PAVEMENT")

The PCC pavement was constructed in 2003 (according to the State) and blanket ground on April 6th, 2006. The structural condition of the PCC pavement and shoulder throughout the 400 foot section appear to be very good. This existing pavement has dowelled perpendicular transverse weakened plane joints with nominal 15 foot spacings. These joints are sealed. The joints as well as the sealant are in excellent condition. The State advises that the pavement is 10 inch thick.

5.1.2 PCC PAVEMENT UPSTREAM AND DOWNSTREAM OF WIM PAVEMENT

Other than the blanket grinding of the 400 foot "WIM Pavement" section, there are no discernable differences between the "WIM Pavement" section and its approach and departure pavements included in the 1000 foot evaluation section. The entire 1000 foot section was constructed in 2003. There are no distress conditions of any consequence. These pavements are in very good condition and the joints are sealed and in excellent condition.

5.1.3 SHOULDER CONDITION

The roadway shoulders are PCC throughout the study area and were constructed in 2003 in conjunction with the traveled way pavement. There are no distress conditions of any consequence in the shoulder pavement. The shoulder pavement is in very good condition and the sealed joints are well maintained.

5.2 SURFACE PROFILE

The "WIM Pavement" section, 325 feet in advance of and 75 feet following the planned scale location, was blanket ground on April 6th, 2006, immediately preceding the pavement evaluation.

A straightedge check of the "WIM Pavement" section following the grind indicated that the pavement smoothness conforms to the criteria for an SPS WIM site.

Observations of trucks and other vehicle types approaching and passing through the selected scale location area indicated only minimal body motion. Several automobile “drive throughs” by the CLIN 1 team member appeared to confirm the above noted observations. Only minimal vehicle body motion could be felt.

5.3 PAVEMENT EVALUATION SUMMARY

Based upon on-site observations by our Team member, the structure and the smoothness of the existing PCC pavement are both deemed adequate for the installation of a bending plate WIM system.

6.0 PROPOSED WIM SITE- INFORMATION

6.1 LOCATION – I-76, MP 39.7

Figure 2: Map of the I-76 WIM Site

Figure 3: Map of the I-76 WIM Site at Milepost 39.7

The location for the proposed WIM site is the Eastbound outside lane at milepost 39.7 near the community of Keenesburg, approximately 55 miles Northeast of central Denver. The proposed location of the new scales is 400 feet downstream from existing piezo WIM scales. The proposed WIM controller cabinet will be located approximately 30 feet off the edge of shoulder on the embankment slope opposite the new bending plate scales.

This proposed new WIM site is approximately 20 miles downstream from the SPS-2 pavement study location.

7.0 RECOMMENDED WIM TECHNOLOGY

Based upon the site conditions and discussions with the State, the bending plate technology is recommended for use at this site. It will meet the accuracy expectations of the State and provide the best value in terms of performance with minimal down time.

The centerline of the Bending Plate weigh pads should be installed approximately 400 feet downstream of the existing piezo WIM scales. The location of both the leading and trailing bending plates have been marked with “WIM” in orange paint on the outside shoulder. During installation, the layout of the existing transverse weakened plane joints will be analyzed to best fit the in-road sensors among the joints to optimize constructability and structural stability.

7.1 RECOMMENDED LOCATION AND LAYOUT FOR THE WIM SYSTEM

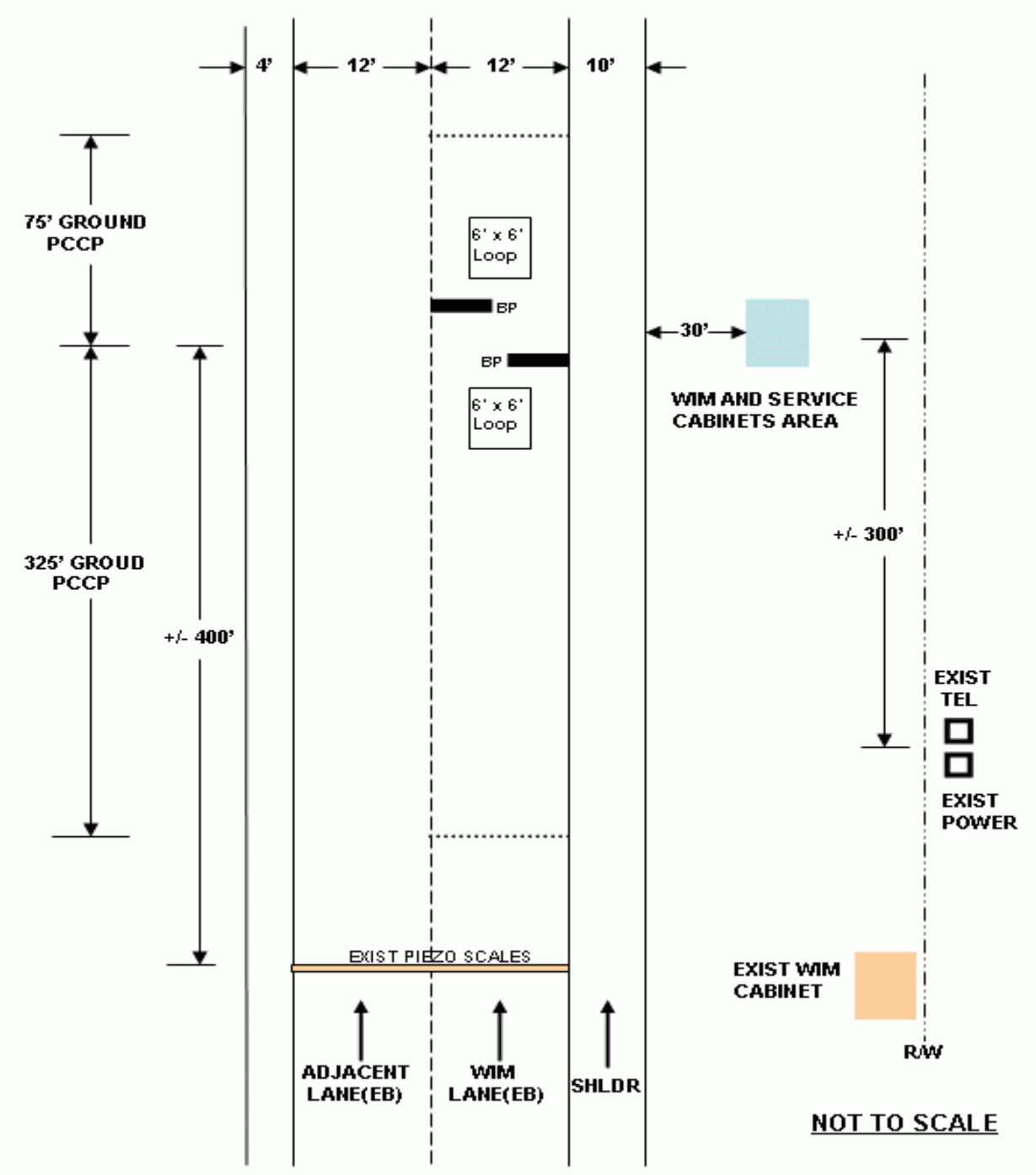

Figure 4: Proposed WIM Site Layout

GPS Coordinates for System: N 40° 7.109' , W 104° 30.509'

A.0 COORDINATION DETAILS

Task Order 12, which authorized the CLIN 2001 "Determine Acceptability of Proposed Site" for the Colorado SPS-2 Site (LTPP ID 080200), was issued on March 17, 2006. This Site Acceptability Assessment was a follow up to our original assessment performed on July 23rd and 25th , 2005, at which time it was determined that corrective action to the smoothness of the existing PCC pavement would be necessary.

Contacts were initially made with interested parties as follows:

- Contracting Officer's Technical Representative (COTR)
  - Debbie Walker – FHWA-LTPP ph: 202-493-3068
- State Highway Agency (SHA)
  - William (Skip) Outcalt – SHA/CDOT ph: 785-296-6863
- LTPP Regional Support Contractor (RSC)
  - Jason Puccinelli – RSC/Nichols ph: 775-329-4955
- FHWA Division Office
  - Jean Wallace– FHWA Div Rep ph: 303-969-6730 x382

The original "Pre-Visit Handout Guide" was distributed on July 15, 2005, to the following individuals:

- William (Skip) Outcalt
- Jason Puccinelli
- Jean Wallace
- Debbie Walker

For this current assessment, various telephone and e-mail contacts were made with SHA representative Skip Outcalt by both Roy Czinku (IRD) and Rich Quinley (WIM TECH) to coordinate the date of the assessment in conjunction with the State's blanket grinding of the existing PCC pavement.

Rich Quinley (WIMTECH) met with the SHA representative Skip Outcalt on-site on April 5th, 2006, and made the site assessment on April 6th, 2006, immediately following the State's performing a blanket grind of the 400' PCC "WIM Pavement" section. Following the grinding operation Rich Quinley advised Skip Outcalt that the ground pavement surface conformed to SPS WIM pavement smoothness criteria. Skip Outcalt advised that he would be available following by phone or e-mail following the site assessment to provide any additional information regarding the site needed for the CLIN 2001 Report.

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INTERNATIONAL ROAD DYNAMICS INC.

LTPP SPS PHASE II

WEIGH-IN-MOTION SITE ACCEPTABILITY PRE-VISIT HANDOUT GUIDE

COLORADO SPS-2
LTPP ID 080200

Date: July 25, 2005

CONTRACT NO. DTFH61-05-D-00001

U.S. Department of Transportation
Federal Highway Administration

LONG TERM PAVEMENT PERFORMANCE

B.0 PRE-VISIT HANDOUT GUIDE

B.1 SCHEDULE

a. Briefing session
   i. Meeting is scheduled for 9:00 a.m. July 25, 2005 at the Colorado DOT Research & Development Branch, 1325 Colorado Blvd., Suite B 600, Denver Colorado 80222
b. Site visit
   i. July 23, 2005 thru July 25, 2005

B.2 BRIEFING SESSION JULY 25, 2005, POINTS OF CONTACT, PHONE NO

a. Contracting Officer's Technical Representative (COTR)
   i. Debbie Walker – FHWA-LTPP ph: 202-493-3068
b. State Highway Agency (SHA)
   i. William (Skip) Outcalt – SHA/CDOT ph: 785-296-6863
c. LTPP Regional Support Contractor (RSC)
   i. Jason Puccinelli – RSC/Nichols ph: 775-329-4955
d. FHWA Division Office
   i. Jean Wallace– FHWA Div Rep ph: 303-969-6730 x382

B.3 INFORMATION REQUESTS

a. From COTR
   i. FHWA Division contact person
   ii. New pavement profile from RSC if recent profile data unavailable
b. From RSC
   i. SHA contact person
   ii. SPS roadway section layouts (plan view and/or stationing or mileposts)
   iii. Recent pavement profile data (within the past year)
c. From SHA
   i. As-built info on roadway at proposed site
      1. Pavement cross section and structural section
      2. Alignment and grade
      3. Any utilities located in WIM install work area
   ii. Location and general availability of power and phone services, service providers, service provider contacts and phone numbers (may be beneficial if power and phone utility reps be requested to participate in briefing session and/or site visit)
   iii. Will SHA agree to extend power and phone services from existing available access points to demarcation points near planned controller cabinet location?
   iv. If existing roadway pavement is AC or inadequate PCC will SHA consider replacement with 400' PCC slab if recommended per site assessment?

v. What permits will be needed to install equipment and what are procedures and time frames for obtainment?
vi. Required cabinet clear zone from edge of traveled way?
vii. If no detour routing available at proposed site (or three or more adjacent lanes), will SHA permit shifting inside lane traffic partially onto inside shoulder to provide safe clearance during installation in outside lane?
viii. Historic truck traffic data?

B.4 SITE LOCATION INFORMATION

a. Proposed WIM site
   i. I-76 Mile Post 39.7 EB Outside Lane
b. Briefing session location
   i. Colorado DOT Research & Development Branch, 1325 Colorado Blvd., Suite B 600, Denver Colorado 80222
c. Nearest major airport
   i. Denver International Airport

Distribution --- COTR, RSC, SHA, FHWA Division, Site Assessment Team

INTERNATIONAL ROAD DYNAMICS INC.

LTPP SPS PHASE II

WEIGH-IN-MOTION SITE ACCEPTABILITY

SITE VISIT EVALUATION FORM

COLORADO SPS-2 LTPP ID 080200

Date of Site Visit: April 05 and 06, 2006
By: Rich Quinley

CONTRACT NO. DTFH61-05-D-00001

U.S. Department of Transportation
Federal Highway Administration

LONG TERM Pavement PERFORMANCE

C.0 SITE EVALUATION FORM

C.1 PROPOSED WIM LOCATION

Proposed WIM Site Location – 4 Lane Roadway (2 Lanes each Direction)

Route: I-76 Mile Post: 39.7 Direction: EB Lane: Outside

Proposed WIM Site approximately 20 miles East of SPS Test Section 080223. The Site is located in Weld County.

C.1.1 EXISTING ROADWAY SURROUNDING THE PROPOSED WIM SITE

Type Pavement: PCC

Pavement Age: 3 years old

Lane Width: 12 feet

Thickness: 10 inches

Observed Structural Soundness: Very Good

Observed Smoothness: Fair

Outside WB Shoulder Type: PCC

Width: 10 feet

Outside WB Shoulder Condition: Very Good

Inside WB Shoulder Type: PCC

Width: 4 feet

Inside WB Shoulder Condition: Very Good

C.1.2 PAVEMENT 325' PRIOR AND 75' FOLLOWING WIM SCALE LOCATION

Type: PCC Structural Soundness: Very Good Smoothness: Very Good (Ground)

Thickness: 10 inches Jointed or Continuous: Jointed (15' perpendicular) – dowelled

Notes/Comments on Pavement:
The existing roadway pavement is PCC and is in very good condition. The pavement was blanket ground by the State immediately prior to this pavement assessment and meets SPS WIM pavement smoothness criteria based upon straightedge checks I made. The selected location is approximately 20 miles downstream of the SPS Test Sections. This site has been selected due to the quality of pavement and Power & Telephone availability (there is existing Piezo WIM System at this location).

C.1.3 ROADWAY GEOMETRICS

Horizontal Alignment: Tangent Grade: Minimal (Less than 0.5 %)

Cross-slope: 1.5% Lane width: 12 feet

C.1.4 OBSERVED TRAFFIC OPERATING CHARACTERISTICS

Passing, merging, not following lane lines? Good Lane Discipline

Stop and go traffic, congestion periods? Free Flowing at all Times

Traffic signals/interchanges affecting traffic? No signals or merging

Other adverse traffic flow conditions? None, traffic flow is light

Truck traffic at "cruising" speed (no lugging)? No lugging, smooth flow

Truck traffic staying within lane lines? Yes, good lane discipline

Observed truck suspension or body motion dynamics? Minimal

Truck traffic composition same at WIM site and SPS site? See notes

Truck traffic on/off locations between WIM site and SPS site? See notes

Posted Speed Limit: 75 MPH

Observed Truck Speeds: 70 – 80 MPH

Notes/Comments on Geometrics and/or Traffic Operating Characteristics:
Due to the layout of the newly constructed on/off ramps to accommodate E470 Toll Road, traffic throughout the SPS Test Sections have been affected somewhat. At a meeting with the State it was noted that this and other interchanges along the I-76 corridor did not impact the study. For the most part truck traffic composition from the SPS Test Section to the Proposed WIM Location is the same. The grade is less than 0.5% throughout the vicinity of the WIM site location. Vehicles track smoothly through this area at speeds between 70 and 80 MPH. The posted speed limit is 75 MPH for all traffic. There is very good lane discipline at this site. Traffic flow is light on this four lane, two direction Interstate.

C.1.5 ACCESS TO UTILITY SERVICES

Potential source(s) for power: An existing Piezo WIM Site is located 400 feet West of the proposed WIM location. There is an AC Service located approximately 300 feet upstream of the proposed WIM location.

Potential source(s) for telephone: An existing Piezo WIM Site is located 400 feet West of the proposed WIM location. There is an Telephone Service located approximately 300 feet upstream of the proposed WIM location

C.1.6 EQUIPMENT INSTALLATION CAPABILITY

Adequate location for controller cabinet? Yes, Large area between roadway and R/W fence.

Distance from edge of traveled way to cabinet? 30 feet from edge of shoulder to keep cabinet and pullboxes on highest ground possible.

Visibility from cabinet of sensors and approaching vehicles? Very Good

Adequate location for service facilities? Yes, Large area between roadway and R/W

Adequate drainage for scale pits? Yes

Adequate roadway and overall site drainage? Yes, except from toe of embankment to R/W fence.

Potential for ponding or flooding at cabinet or pullboxes? Minimal at recommended location.

Potential for traffic control problems during installation? Minimal

Ability to provide safe clearance in work zone from live traffic via:

- ☑ OK from State Agency to use opposite shoulder for traffic shift
- ☐ Multiple Adjacent Lanes

Notes/Comments on Equipment Installation Capability:
The State will need to provide power and phone service points within 25 feet of the proposed WIM cabinet location. The roadway traffic is light but travelling at a high rate of speed. We will have to work closely with the State to coordinate closures lane. There are 4 feet available on inside lane shoulder to accommodate a traffic shift.

C.1.7 POTENTIAL WIM SENSOR/EQUIPMENT INTERFERENCE SOURCES

Overhead power lines? 300 feet West of proposed WIM location, no problem
Adjacent railroad? 1500 feet South of proposed WIM location, no problem

C.1.8 CONDITIONS FOR USE OF TEST TRUCKS FOR CALIBRATION AND EVALUATIONS

Direction EB - Nearest usable truck turnaround location:

I-76, Exit 48 Roggen Distance from WIM: 8 Miles

Direction WB - Nearest usable truck turnaround location:

I-76, Exit 39 Keenesburg Distance from WIM: 1 Miles

Circuit travel distance: 18 Miles Estimated lap time: 20 Minutes

Potential circuit route restrictions? None

Identification and location of trucking firm and certified static scales:

Name Pilot Travel Center Contact Chuck Hall

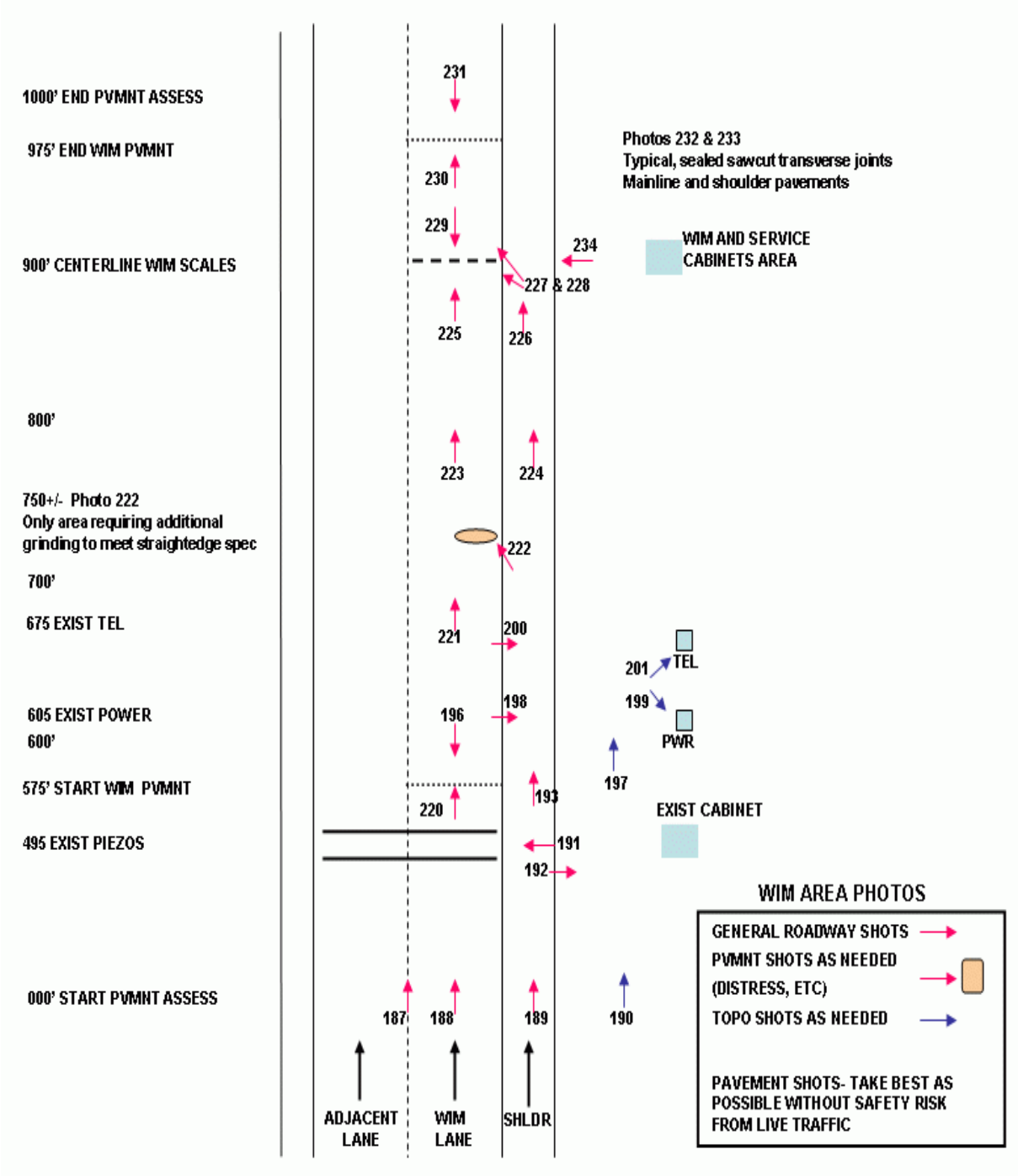
Address I-70, Exit 276A, Denver, Colorado

Phone 303-292-6303 Hours 24 hrs.

Notes/Comments on Test Truck Circuit and Static Weighing Facility

Pilot Travel Center is located approximately 37 miles from the Proposed WIM Site. They can recommend hauling companies that have 3S2 Tractor Trailer Air Ride vehicles and drivers available given 2-3 weeks notice. They have a certified static scale located at their facility.

C.2 LOCATION LOG OF PHOTOS



C.3 EQUIPMENT AND MATERIALS

☑ Site Evaluation Forms
☑ Graph paper and note paper
☑ Clipboard
☑ Pens & pencils
☐ Small stapler
☑ Digital camera, with PC cable
☑ GPS receiver
☑ Notebook PC
☑ Calculator
☑ Cell phone
☑ Site Pre-visit Handout Guide
☑ Metal tape measure (25 ft.)
☑ Measuring wheel (ft.) and/or 100 ft. rag tape
☑ Folding rule (6 foot)
☑ Hand level
☑ Small torpedo level
☑ Keel markers
☑ Spray can ~~white~~ orange paint
☑ String Line
☐ Line Level
☐ Hammer and Concrete Nails

Request furnish on-site by Highway Agency:
☑ 12' Straight edge
☑ Spray can ~~white~~ orange paint
☐ Lath, 4 ft.
☐ Hammer
☐ Misc. small tools
☑ Keys for known Agency service cabinets
Note: Key for existing cabinet is a standard Type II

Proper attire for field work and expected weather:
☑ Durable shoes
☑ Cold weather layering
☑ Rain gear
☐ _____

Safety equipment per State Highway Agency requirements:
☑ Hard hat
☑ Safety vest – type Hi-Vis Safety Yellow
☑ Steel toe shoes
☐ Other required equipment _____

D.0 SHEET 17

Sheet 17	*STATE_CODE	08
LTPP Traffic Data	*SPS PROJECT ID	080200
WIM SITE INVENTORY	*SPS WIM_ID	SPS-2

1.* ROUTE I-76 MILEPOST 39.7 LTPP DIRECTION - E

2.* WIM SITE DESCRIPTION - Grade <0.5 % Sag vertical N
Nearest SPS section upstream of the site 080223
Distance from sensor to nearest upstream SPS Section 20 miles

3.* LANE CONFIGURATION
Lanes in LTPP direction 2 Lane width 12 ft

Median -
1 – painted
2 – physical barrier
3 – grass
4 – none

Shoulder -
1 – curb and gutter
2 – paved AC
3 – paved PCC
4 – unpaved
5 – none

Shoulder width 10 ft

4.* PAVEMENT TYPE 10 inch thick jointed & doweled PCC

8. RAMPS OR INTERSECTIONS
Intersection/driveway within 300 m upstream of sensor location N
Intersection/driveway within 300 m downstream of sensor location N
Is shoulder routinely used for turns or passing? N

Form completed by: Rich Quinley – WIM TECH Date: April 07, 2006

E.0 PHOTOGRAPHS

E.1.1 GENERAL SITE VIEW OF THE ROADWAY APPROACHING WIM SITE

E.1.2 EXIST PIEZO WIM 400' IN ADVANCE NEW WIM

E.1.3 DOWNSTREAM VIEW OF ROADWAY AT START OF WIM PAVEMENT SECTION

E.1.4 UPSTREAM VIEW OF ROADWAY AT START OF WIM PAVEMENT SECTION

E.1.5 PAVEMENT JOINT, TYP.

E.1.6 RECOMMENDED SCALE LOCATION, STAGGERED LAYOUT

E.1.7 RECOMMENDED SCALE LOCATION, LEAD SCALE

E.1.8 RECOMMENDED CABINET LOCATION, ON EMBANKMENT SLOPE

E.1.9 WIM SITE, FACING UPSTREAM

E.1.10 EXISTING POWER SERVICE

E.1.11 EXISTING TELEPHONE SERVICE

E.1.12 EXISTING WIM CABINET

E.1.13 LTPP SPS-2 TEST SECTION MARKER