INTERNATIONAL ROAD DYNAMICS INC.

LTPP SPS PHASE II

WEIGH-IN-MOTION SITE ACCEPTABILITY ASSESSMENT REPORT

NEW MEXICO SPS-1
LTPP ID 350100
JUNE 10, 2005
CLIN 1001 TASK ORDER 3

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

The New Mexico SPS-1 pavement test site, on I-25 approximately 35 miles north of Las Cruces, was visited on June 9th, 2005, by the CLIN 1 team. The team performed an extensive search for a suitable Weigh-in-Motion (WIM) site over a several mile range of I-25 deemed to have the same truck composition as that passing through the SPS test sections. Although the focus of the search was to find a suitable northbound outside lane location for a WIM installation, consideration was also given to the other 3 lanes in case the State might opt to supplement the WIM instrumented SPS lane with WIM instrumentation in the other lanes. Given the terrain in this region, the roadway's "long wavelength" pavement profile problems, and the difficulty in locating easily accessible power and phone services, no "ideal" WIM site could be located. However, the team eventually identified a location which could potentially best meet the site assessment evaluation criteria and a site acceptability assessment was performed at this location. The selected WIM site is located on I-25 at Mile Post 36.1 just north of the Rincon Road interchange in Dona Ana County. It is proposed to install a WIM system for the northbound outside lane approximately 1468 feet upstream of the SPS-1 pavement test section 350101. Based upon our site evaluation and discussions with the State, it is recommended that a new WIM system utilizing Bending Plate technology be installed after corrective action has been taken to address pavement structural issues.

The selected WIM site is located within a tangent section of roadway with a relatively flat grade immediately followed by a short radius horizontal curvature and a short stretch of steep uphill grade (reported to be 4 %). The State's existing WIM system's northbound scales are situated in a section of roadway within this horizontal curvature and uphill grade 530 feet downstream of the proposed new WIM scale location. Vehicles track smoothly through this section at a moderate rate of speed. The observed traffic flow was light on this four lane Interstate. The existing roadway pavement at this location is asphalt concrete (AC), consisting of a +/- 1 inch chip seal or open grade type wearing course over dense grade courses. The State advises that the pavement thickness is 12 inches. There is some longitudinal raveling and cracking in the wheel tracks of the wearing course, however the pavement appears to be structurally sound. Although much of the roadway in the vicinity of the SPS test sections exhibits significant "long wavelength" pavement profile problems, the 400 foot section of roadway selected for installation of the "WIM Pavement" appears to contain only minor profile problems.

Overhead power lines were observed on the west side of the roadway in the community of Rincon, with the nearest pole estimated to be 1800 feet from the proposed new cabinet location. An existing telephone service is located at the existing WIM cabinet adjacent to the southbound lanes. It would require approximately 700 feet of underground conduit, including a bore under the roadway, to extend this service to the new cabinet location. The State will need

to determine the accessibility options for power and phone and provide service drops within 25 feet of the proposed new WIM cabinet location.

The structural stability of the existing AC pavement is not suitable for the installation of WIM weighing sensors, and as such it will be necessary that the State replace 400' of the existing AC pavement with a PCC WIM slab with a minimum thickness of 12 inches to accommodate the new WIM system's bending plate sensors. Following installation of the new PCC WIM slab, the slab's surface as well as the PCC/AC transverse cold joints should be blanket ground to meet SPS pavement smoothness requirements for SPS WIM systems.

Upon completion of these corrective actions, a follow-up evaluation of the pavement should be made. Such evaluation should include visual observation of the new PCC WIM slab's structural stability and visual observation of trucks passing through the site. In addition to these visual observations, new profile data should be provided to the team for analysis. Upon confirmation that the pavement is acceptable in terms of structural soundness and smoothness such that the pavement is adequate for the WIM system to meet SPS accuracy requirements, this site can be instrumented with WIM.

2.0 EXISTING ROADWAY

2.1 PAVEMENT AND GEOMETRICS

The SPS-1 is a flexible pavement study. The pavement test sections are located in the outside northbound lane. The existing roadway pavement approaching, through, and departing both the existing WIM site as well as the proposed new WIM site is AC, consisting of a +/- 1 inch wearing course over dense grade courses. The outside and inside (median) shoulders are dense grade AC. The two northbound lanes are each nominally 12 feet wide with a 15 foot wide outside shoulder and a 7 foot wide inside shoulder. The roadway in which the pavement test sections are located has sections of tangent horizontal alignment but there are many sections with uphill and downhill grades to accommodate the hilly terrain. In regard to cross slope, the northbound outside lane typically slopes 1.5% toward the outside shoulder.

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 is a northbound on ramp from Rincon Road whose shoulder line taper ends approximately 570 feet in advance of the proposed WIM scale location. However, due to the light usage of this on ramp it should not effect traffic flow detrimental to WIM system performance. Trucks are “cruising” through the site at constant speeds. In that there are no on/off locations between the WIM site and SPS site, the truck traffic composition at the WIM site is the same as that at the SPS site.

3.0 SITE CONFORMANCE TO EVALUATION CRITERIA

3.1 PAVEMENT TYPE AND CONDITION- REQUIRES ATTENTION

The existing AC pavement approaching, through, and departing the selected WIM site is in fair condition, but the +/- 1" wearing course over dense grade base courses does not provide a pavement structurally adequate for the installation of a WIM's weighing sensors. It is recommended that a section of the existing AC pavement between 375 feet in advance of and 75 feet following the proposed new scale location be removed and replaced with a blanket ground PCC WIM slab with a minimum thickness of 12 inches.

3.2 OBSERVED PAVEMENT SMOOTHNESS- WILL REQUIRE ATTENTION

Following installation of a 400 foot PCC WIM slab, experience dictates that the smoothness of the slab will need to be improved to facilitate the new WIM system's meeting SPS accuracy requirements. The new PCC WIM slab as well as the PCC/AC transverse cold joints on each end of the slab should be blanket ground. Following pavement grinding, a reassessment of the pavement's structural stability and smoothness should be made.

3.3 ANALYSIS OF PAVEMENT PROFILE DATA- REQUIRES ATTENTION

The profile data collected by the NRSC on November 22, 2003, with the LTPP Profiler and analyzed by the Phase I contractor (Phase 1 Contractor Assessment Report 3/04/2004) will not be applicable to the newly selected WIM site pavement if a new PCC WIM slab is installed. Following the installation of a blanket ground PCC WIM slab at the recommended new WIM site location, new profile data should be collected and analyzed by the CLIN 1 team to verify whether or not the smoothness of the pavement from 325 feet in advance of to 75 feet following the WIM scale location meets the smoothness requirements for installation of a WIM system.

3.4 ROADWAY GEOMETRICS- PASS

Although the selected WIM site immediately precedes a short radius horizontal curvature and an uphill grade, the site itself is located within a tangent section of the roadway with minimal grade. The lane in which the sensors are to be installed is 12 feet wide. The "best fit" for the WIM site does result in the scales being located in a superelevation transition from a cross slope to the outside shoulder to a cross slope to the inside shoulder due to the site's being immediately in advance of the horizontal curvature. However, it appears that this cross slope transition will not hinder proper roadway drainage or affect WIM system performance.

3.5 TRAFFIC OPERATING CHARACTERISTICS- PASS

The general traffic pattern is free flowing with good lane discipline. Although the selected WIM site is immediately downstream from an interchange on ramp, very little traffic was observed using this on ramp and any effect on the mainline traffic flow was negligible. 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

There are no exit/entrance locations between the WIM site and the SPS-1 pavement test sections.

3.7 POTENTIAL WIM INTERFERENCE SOURCES- PASS

None

3.8 ACCESS TO POWER AND PHONE SERVICES- NEEDS ATTENTION

Power and phone services are present in the vicinity of the selected WIM site and would appear to be accessible for use at the WIM site. Telephone service could probably be extended from the existing WIM cabinet utilizing a bore under the roadway and trenching to the new WIM cabinet location (+/- 700 feet.) However, providing an AC power service point adjacent to the new cabinet location might be costly. The State will need to explore available options for an affordable way to provide power and phone 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 at the site adjacent to the roadway with over 40 feet clearance from the traveled way. There is good visibility of the sensors and approaching vehicles from the cabinet location. There is adequate room adjacent to the cabinet location for service facilities. Roadway and overall site drainage is good. There is no foreseen potential for ponding or flooding at the cabinet or 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 light traffic conditions, good approach sight distance, minor usage of the preceding interchange on ramp, 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 TEST TRUCK CIRCUIT - PASS

The nearest northbound truck turnaround for use by calibration and validation test trucks is I-25 Exit 41 (Hatch, SR 26), which is located 5.2 miles downstream of the WIM site. The nearest useable southbound test truck turnaround is I-25 Exit 32 (Upham), which is located 3.2 miles upstream of the WIM site. The test truck round trip circuit route is 17 miles. In utilizing the northbound Exit 41 off ramp, the drivers will have to determine the best way to get turned around for the southbound return. The interchange itself does not provide for an easily maneuvered turnaround and it may be necessary to travel toward or into the community of Hatch to find a suitable turnaround location. The southbound Exit 25 interchange should pose no maneuvering problem in returning northbound. The estimated lap time is 20 to 25 minutes. For the lower speed test truck runs, it might be possible for the test trucks to use the southbound I-25 Exit 35 (Rincon Road), immediately south of the proposed WIM site.

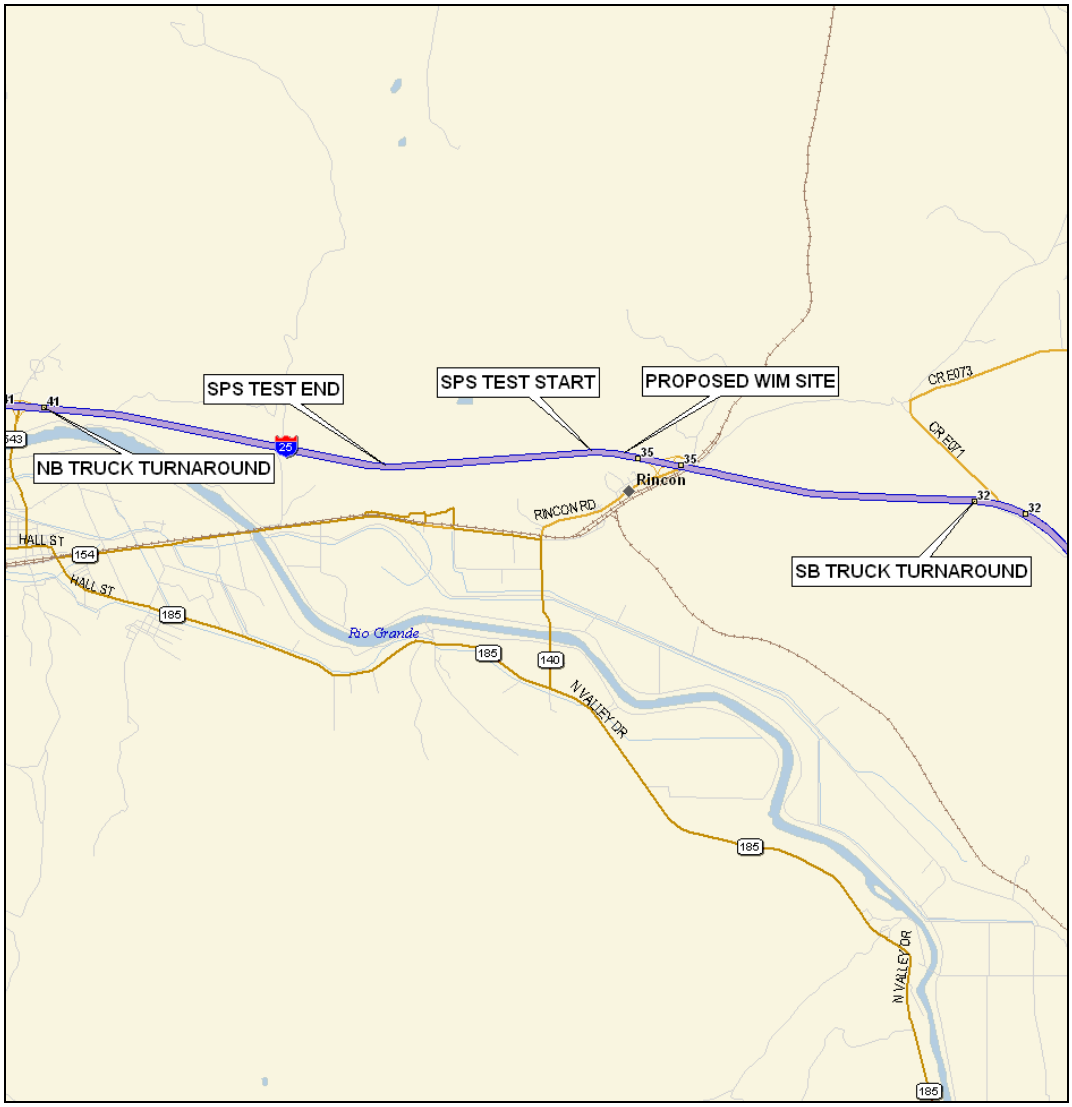


Figure 1: Truck Circuit Map

3.12 RECOMMENDATIONS ON SITE ACCEPTANCE / CORRECTIVE ACTIONS

The State will need to determine the best options for power and phone access and provide service points within 25 feet of the proposed WIM cabinet location. And, the State will need to install a 400 foot blanket ground PCC WIM slab with a minimum thickness of 12 inches. A follow-up assessment of the WIM site pavement will need to be made, including an analysis of new profile data.

4.0 TRAFFIC DATA REVIEW

Vehicle distributions of all trucks (FHWA Class 4 and higher)
(Not Available)

Vehicle distributions for heavy trucks (FHWA Class 6 and higher)
(Not Available)

Volume of trucks comprising of 10 % or more of truck population
(Not Available)

Volume of trucks comprising 10 % or more of heavy truck population
(Not Available)

After discussions with the State, it has been determined that current traffic data containing the above mentioned information is not available.

5.0 PAVEMENT EVALUATION

In determining WIM site acceptability, visual on-site observation of the existing AC pavement was made by the CLIN 1 Team. Additionally, the analysis of the then current profile data performed by the Phase I contractor (Phase 1 Contractor Assessment Report 3/04/2004) was reviewed.

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 new WIM scale location. Pictures were taken to document the surface condition, several of which are presented in Appendix E.

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

The existing AC pavement was constructed in 1997 (according to the State). Although the structural condition of the AC pavement and shoulder throughout the 400 ft section appear to be fair to good, the +/-1 inch wearing course over dense grade coarse bases is not a structurally suitable pavement for the installation of WIM weigh sensors. A PCC WIM slab with a minimum 12 inch thickness should be installed.

5.1.2 AC PAVEMENT UPSTREAM AND DOWNSTREAM OF PCC WIM SLAB

As exists, there are no discernable differences between the 400 ft "WIM Pavement" section and the "WIM Pavement" approach and departure pavements included in the 1000 ft evaluation section. The entire 1000 foot section was constructed in 1997. Only minor rutting and minor longitudinal cracking and raveling were noted in the wheel tracks of the wearing course. These pavements are in fair to good condition.

5.1.3 SHOULDER CONDITION

The roadway shoulders are AC throughout the study area and were constructed in 1997 in conjunction with the traveled way pavement. Little or no distress was observed in the shoulder pavement. This pavement is in good condition.

5.2 SURFACE PROFILE

Observations of trucks and other vehicle types over a several mile stretch of I-25 in the vicinity of the SPS pavement test sections indicated significant "long wavelength" pavement profile problems. In that this type of profile problem would be difficult to correct when installing a new PCC WIM slab, these profile problems severely restricted the options as to where a WIM site should be located. Vehicles approaching and passing through the location ultimately selected for the installation of the new WIM scales displayed only minor body motion indicating that there are no existing significant "long wavelength" profile problems which

might be built right back into the PCC WIM slab if, as is typical, the lane's outside shoulder and adjacent lane profiles are used as "forms" for construction of the new PCC slab. It is noted that significant vehicle body motion was observed at 500 feet in advance of the proposed scale location (175 feet in advance of the start of the proposed 400 foot PCC WIM slab). However, this body motion appeared to dampen out before the vehicles reached the proposed scale location.

Several automobile "drive throughs" by the CLIN 1 team members appeared to confirm the above noted observations. Only minor vehicle body motion could be felt when passing through the proposed scale location.

5.3 PAVEMENT EVALUATION SUMMARY

Based upon our on-site observations, it is recommended that WIM weighing sensors not be installed in the existing AC pavement, particularly given that the pavement's wearing course is a +/- 1" thick chip seal or open grade type material. For a structurally secure installation of the WIM's weighing sensors, 400 feet of the existing AC pavement should be replaced with a blanket ground PCC WIM slab.

Upon completion of the new PCC WIM slab installation, the site's pavement will need to be re-evaluated for structural stability and smoothness and new profiling data provided to our team for analysis to confirm that the pavement's smoothness meets requirements for installation of an SPS WIM site.

6.0 PROPOSED WIM SITE- INFORMATION

6.1 LOCATION – I-25 MP 36.1

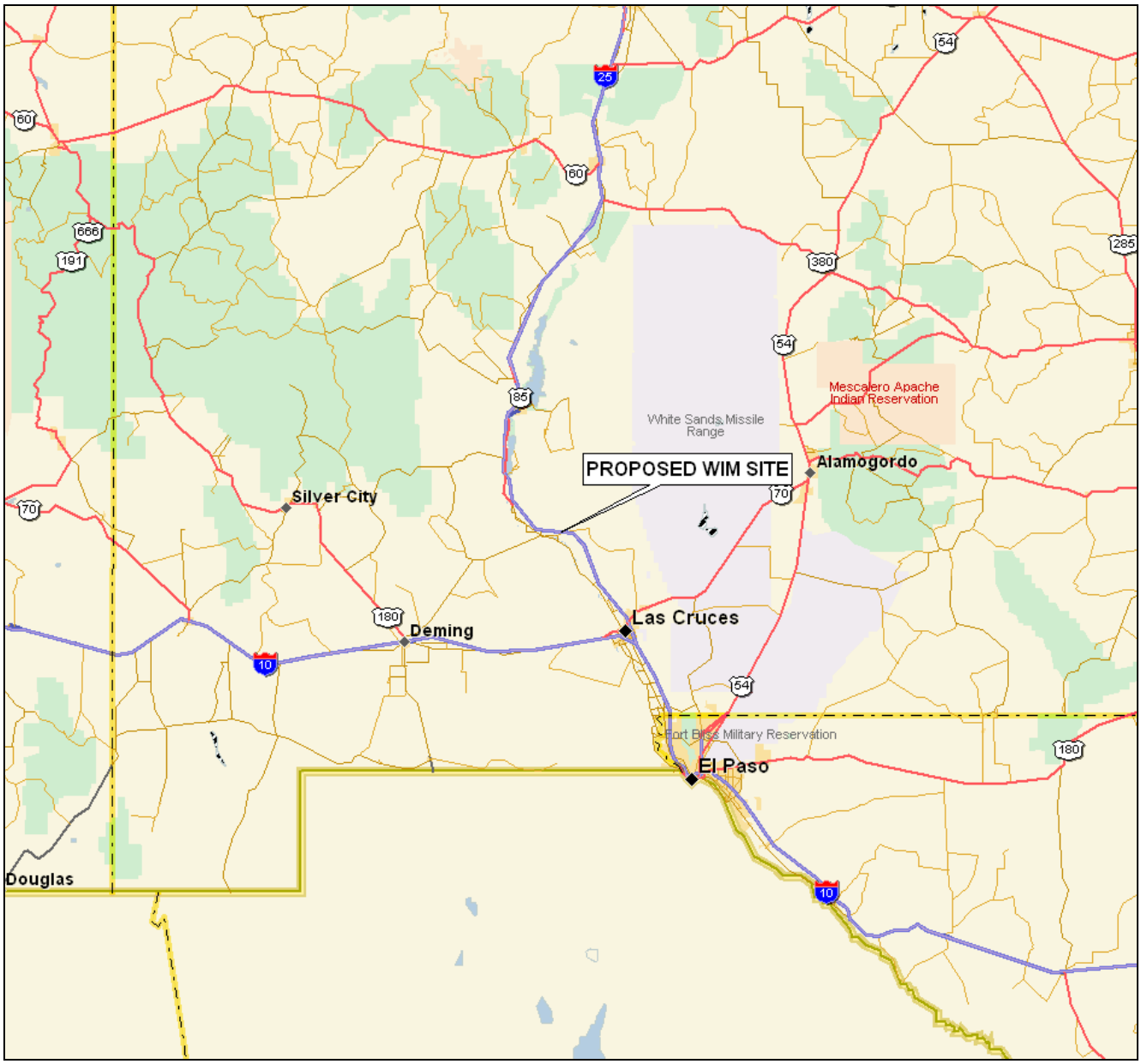


Figure 2: Map of the I-25 WIM Site

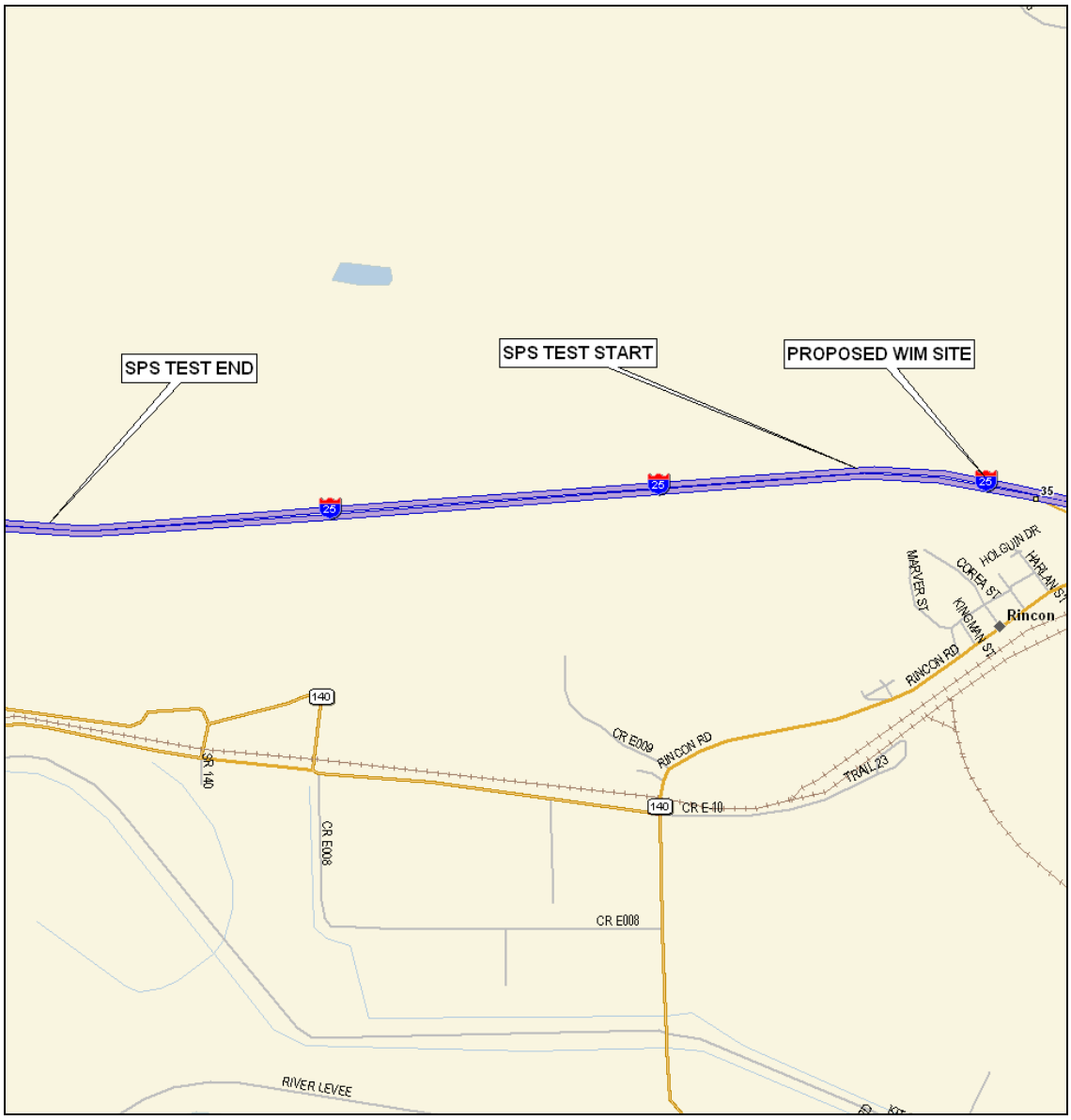


Figure 3: Map of the I-25 WIM Site at Milepost 36.1

The LTPP SPS-1 test sections are located approximately 35 miles North of Las Cruces near Rincon in the northbound outside lane of I-25.

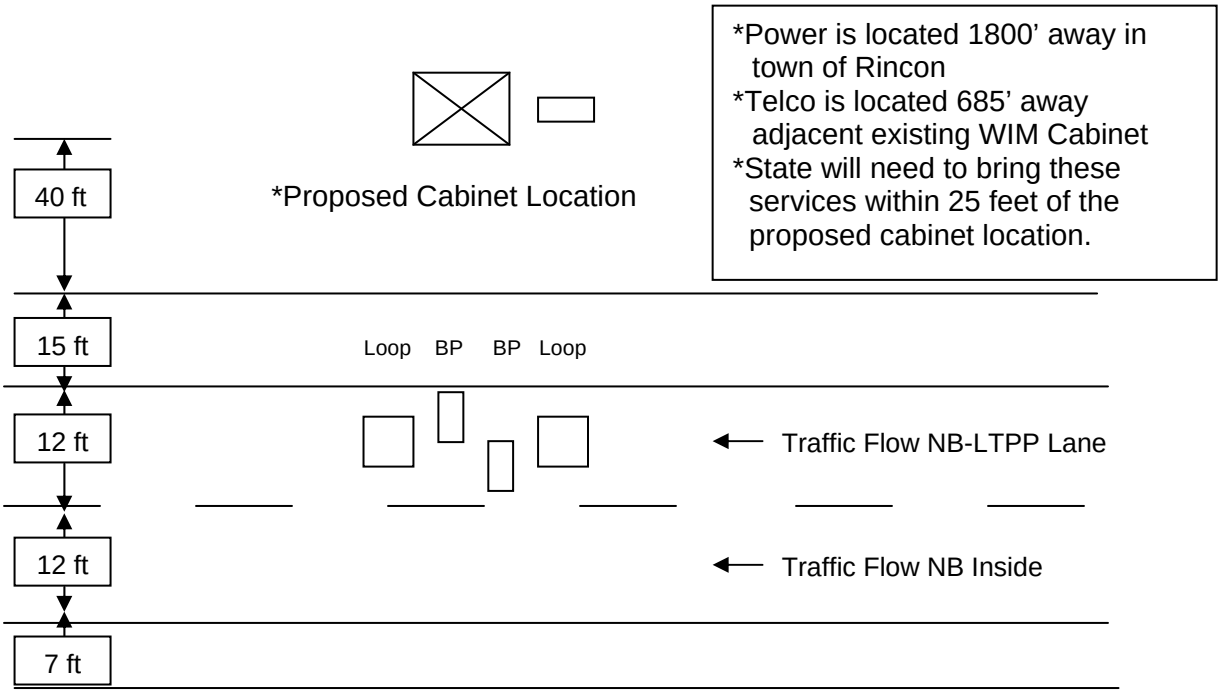
The location for the proposed WIM system installation is the northbound outside lane at Milepost 36.1 which is 1468 feet upstream of the SPS-1 test section 350101 and 530 feet upstream of the existing WIM scales. The proposed WIM controller cabinet will be located inside the Right of Way opposite the new scales, approximately 40 feet from the edge of traveled way.

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 530 feet upstream of the existing WIM scales. This location has been marked with a "WIM" in white paint on the outside shoulder. During the CLIN 2 design stage, 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



*Proposed WIM In-Road Location
N32 Degrees 40.6573'
W107 Degrees 3.9170'

Figure 4: Proposed WIM Site Layout

A.0 COORDINATION DETAILS

Task Order #3, which authorized the CLIN 1001 "Determine Acceptability of Proposed Site" for the New Mexico SPS-1 Site (LTPP ID 350100), was issued on May 27, 2005.

Contacts were made with interested parties as follows:

- Contracting Officer's Technical Representative (COTR)
  - Debbie Walker – FHWA-LTPP ph: 202-493-3068
  - Initial contact made May 27, 2005
- State Highway Agency (SHA)
  - Alvaro Vigil – SHA/NMDOT ph: 505-827-5665
  - Initial contact made May 27, 2005
- LTPP Regional Support Contractor (RSC)
  - Mark Gardner – RSC/Fugro ph: 512-977-1800
  - Initial contact made May 27, 2005
- FHWA Division Office
  - Steve Von Stein – FHWA Div Rep ph: 505-820-2028
  - Initial contact made May 27, 2005

The "Pre-Visit Handout Guide" was distributed on May 27, 2005, to the following individuals:

- Alvaro Vigil
- Debbie Walker

The site was visited on June 9, 2005, by Roy Czinku (IRD), Rich Quinley (WIMTECH), and Joe Stone (NMDOT).

A briefing session was held via teleconference 11:00 AM on June 9, 2005. Roy Czinku (IRD), Alvaro Vigil (NMDOT), and Steve Von Stein (FHWA) were in attendance.

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INTERNATIONAL ROAD DYNAMICS INC.

LTPP SPS PHASE II

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

NEW MEXICO SPS-1 LTPP ID 350100

Date: May 27, 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 via teleconference 11:00 AM on June 9, 2005
b. Site visit
   i. June 9, 2005

B.2 BRIEFING SESSION MAY 31, 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. Alvaro Vigil – SHA/NMDOT ph: 505-827-5665
c. LTPP Regional Support Contractor (RSC)
   i. Mark Gardner – RSC/Fugro ph: 512-977-1800
d. FHWA Division Office
   i. Steve Von Stein – FHWA Div Rep ph: 505-820-2028

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-25 Mile Post 36.1 NB Outside Lane
b. Briefing session location
   i. Teleconference
c. Nearest major airport
   i. El Paso 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

NEW MEXICO SPS-1 LTPP ID 350100

Date of Site Visit: June 9, 2005

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-25 Mile Post: 36.1 Direction: NB Lane: Outside

Proposed WIM Site is 1468 feet upstream of SPS Test Section 350101

C.1.1 EXISTING ROADWAY SURROUNDING THE PROPOSED WIM SITE

Type Pavement: AC Pavement Age: 8 years

Lane Width: 12 feet- varies somewhat Thickness: 12 inches

Observed Structural Soundness: Fair to good

Observed Smoothness: Long Wavelength issues throughout the SPS Test Section and site search area

Outside NB Shoulder Type: AC Width: 15 feet

Outside NB Shoulder Condition: Good

Inside NB Shoulder Type: AC Width: 7 feet

Inside SB Shoulder Condition: Good

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

Type: AC Structural Soundness: Fair to good Smoothness: Fair

Thickness: 12 inches Jointed or Continuous: not applicable

Notes/Comments on Pavement:

The roadway is Asphalt Concrete Pavement with a +/- 1" chip seal or open grade type material over dense grade base courses. The wearing course has some longitudinal raveling and cracking in the wheel tracks. There are noticeable Long Wavelength issues with this roadway throughout the SPS Test Section and WIM site search area. Significant body motion can be observed when watching oncoming traffic approximately 500 feet in advance of the proposed WIM location (175 feet in advance of the start of the WIM pavement). There is also some body motion noted through the WIM pavement section and at the proposed scale location. Based on previous profiling the pavement does not currently meet required SPS smoothness specifications for WIM installation.

C.1.3 ROADWAY GEOMETRICS

Horizontal Alignment Tangent Grade Minimal Grade(< 0.5%)

Cross-slope See Notes Lane width Nominal 12 feet

C.1.4 OBSERVED TRAFFIC OPERATING CHARACTERISTICS

Passing, merging, not following lane lines? Good Lane Discipline - occasional passing

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

Traffic signals or interchanges affecting traffic flow? See Notes

Other adverse traffic flow conditions? None, Traffic Flow is Light

Truck traffic at "cruising" speed and no lugging? No Lugging, Smooth Flow

Truck traffic staying within lane lines? Yes, Trucks Track within Lane and shoulder lines

Observed truck suspension or body motion dynamics? Significant body motion, but not too bad through selected WIM scale location.

Truck traffic composition same at WIM site and SPS site? Yes

Truck traffic on/off locations between WIM site and SPS site? None

Notes/Comments on Geometrics and/or Traffic Operating Characteristics:
The site is located at the end of a straightaway with a short radius curve immediately following the proposed WIM location. The grade is relatively flat through the selected WIM site location, but a short steep grade immediately follows the WIM site. With regards to cross slope it is noted that the proposed scale location is within a super elevation transition from tangent to a curve to the left. It appears that the transverse slope of the pavement at the start of the proposed 400' WIM pavement slopes to the outside shoulder, is almost flat at the proposed scale location, and slopes toward the median at 75' beyond the scale location (end of WIM pavement). There is some crowing at the lane line. Vehicles track smoothly through this area at speeds between 70 and 80 MPH (posted speed is 75 MPH). There is an on ramp to the main line with its shoulder striping taper ending at the main line 570' upstream of the proposed WIM scales location. This ramp has very little traffic and will not be a factor with regards to truck traffic flow or system performance. There is very good lane discipline at this site. Traffic flow is light on this four lane, (two each direction) roadway.

C.1.5 ACCESS TO UTILITY SERVICES

Potential source(s) for power: AC power is available on the west side of the roadway within the town of Rincon. It is estimated that the distance from the closest available power pole to the new cabinet location would be approximately 1800 feet. The existing WIM system uses solar power and has no AC power service at its cabinet.

Potential source(s) for telephone: Telephone Service is available at the existing WIM cabinet (adjacent to SB lanes) which is located 685 feet from the proposed WIM location (adjacent to NB lanes).

C.1.6 EQUIPMENT INSTALLATION CAPABILITY

Adequate location for controller cabinet? Yes, Large area inside R/W opposite scales

Distance from edge of traveled way to cabinet? 40 feet clearance

Visibility from cabinet of sensors and approaching vehicles? Very Good

Adequate location for service facilities? Yes, Large area adjacent to right of way

Adequate drainage for scale pits? Yes

Adequate roadway and overall site drainage? Yes

Potential for ponding or flooding at cabinet or pullboxes? Minimal

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 inside shoulder for single lane traffic shift.

Notes/Comments on Equipment Installation Capability:
The State will need to bring AC power to within 25 feet of the proposed WIM location. The Roadway Traffic is fairly light. We will have to work closely with the State to coordinate lane closures.

C.1.7 POTENTIAL WIM SENSOR/EQUIPMENT INTERFERENCE SOURCES

Overhead power lines? None Adjacent railroad? None

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

Direction NB - Nearest usable truck turnaround location:

I-25 Exit 41, Hatch SR26 Distance from WIM: 5.2 Miles

Direction SB - Nearest usable truck turnaround location:

-25 Exit 32, Upham Distance from WIM: 3.2 Mile

Circuit travel distance: 16.8 Miles Estimated lap time: 20 Minutes

Potential circuit route restrictions? Trucks will have to determine best way to turn around on the NB Exit. This exit is not a conventional on/off ramp and the trucks may have some difficulty negotiating the change in direction to south bound.

Identification and location of trucking firm and certified static scales:

Name TA Las Cruces Contact Jeff Wilcox

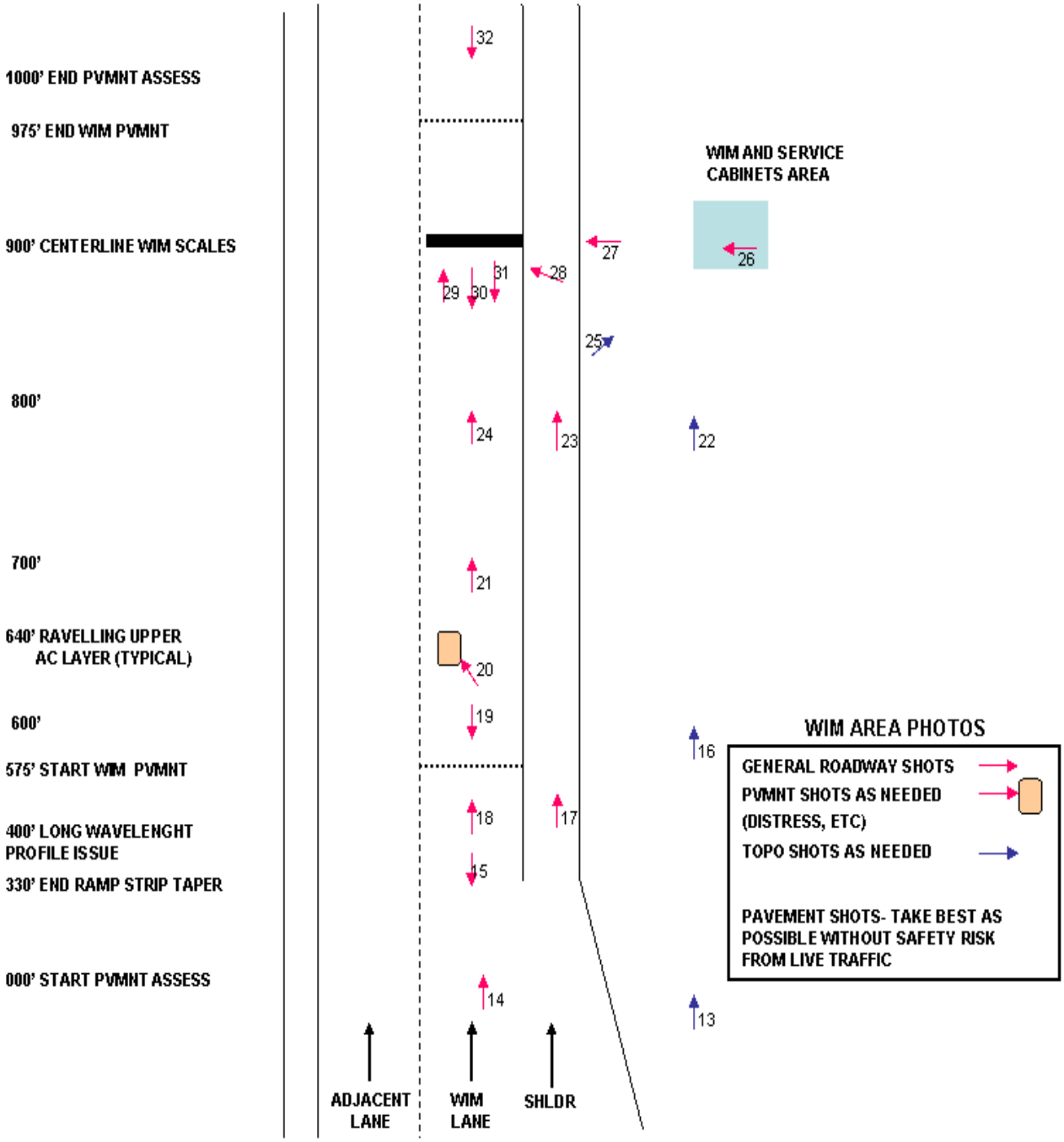
Address I-10 Exit 139, Las Cruces, New Mexico

Phone 505-527-7400 Hours 8:00 a.m. – 5:00 p.m.

Notes/Comments on Test Truck Circuit and Static Weighing Facility

TA Las Cruces is located approximately 35 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.1.9 LOCATION LOG OF PHOTOS



C.2 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 paint
☑ String Line
☑ Line Level
☑ Hammer and Concrete Nails
☐ _____

Request furnish on-site by Highway Agency:
☐ Spray can white 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
☑ Foul 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	LTPP
LTPP Traffic Data	*SPS PROJECT ID	350100
WIM SITE INVENTORY	*SPS WIM ID	SPS-1

1.* ROUTE I-25 MILEPOST 36.1 LTPP DIRECTION -N S E W

2.* WIM SITE DESCRIPTION - Grade < 0.5 % Sag vertical Y / N
Nearest SPS section upstream of the site None
Distance from sensor to nearest upstream SPS Section None ft

3.* LANE CONFIGURATION
Lanes in LTPP direction 2 Lanes NB 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 15 ft

4.* PAVEMENT TYPE AC, +/- 1" wearing course over dense grade

8. RAMPS OR INTERSECTIONS
Intersection/driveway within 300 m upstream of sensor location Y / N - distance No
Intersection/driveway within 300 m downstream of sensor location Y / N- distance No
Is shoulder routinely used for turns or passing? Y / N No

Form completed by: Roy Czinku - IRD Date: June 10, 2005

E.0 PHOTOGRAPHS

E.1.1 SPS TEST SECTION MARKER

E.1.2 GENERAL SITE VIEW OF THE ROADWAY APPROACHING WIM SITE

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

E.1.4 UPSTREAM VIEW OF ROADWAY APPROACHING 400' WIM PAVEMENT SECTION

E.1.5 RAVELING/CRACKING IN WHEEL TRACK OF WEARING COURSE, TYPICAL

E.1.6 EDGE OF WEARING COARSE AT SHOULDER

E.1.7 RECOMMENDED SCALE LOCATION

E.1.8 PAVEMENT AT END OF 400' WIM PAVEMENT SECTION

E.1.9 RECOMMENDED CABINET LOCATION

E.1.10 OVERHEAD POWER LINES IN TOWN OF RINCON

E.1.11 EXISTING TELEPHONE SERVICE AT EXISTING WIM CABINET

E.1.12 EXISTING WIM CABINET AND SOLAR PANELS