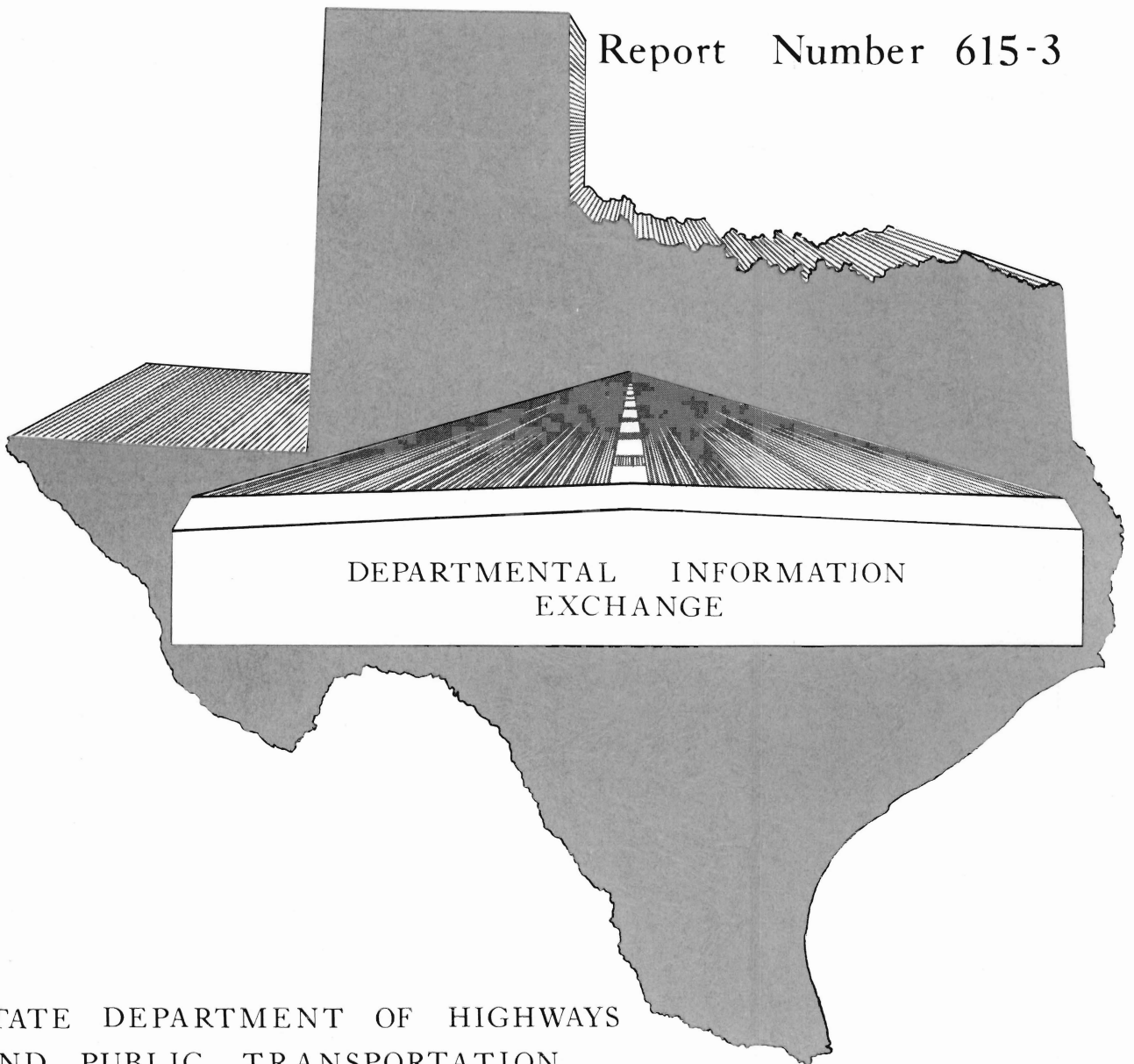


# EXPERIMENTAL PROJECTS

## TEST SECTIONS OF VARIOUS ASPHALTIC MIXTURES AND SPRINKLE TREATMENTS

Report Number 615-3



STATE DEPARTMENT OF HIGHWAYS  
AND PUBLIC TRANSPORTATION



TEST SECTIONS  
OF  
VARIOUS ASPHALTIC MIXTURES  
AND  
SPRINKLE TREATMENTS

FM 1604, Bexar County  
Project C 73-5-38  
Contr. 2452-2-8  
Contr. 2452-3-19

A FINAL REPORT

Experimental Projects Report 615-3

May 1, 1981

Prepared By  
Richard H. Magers  
Supervising Laboratory Engineer

DISCLAIMER STATEMENT

The material contained in this report is experimental in nature and is published for informational purposes only. Any discrepancies with official views or policies of the DHT should be discussed with the appropriate Austin Division prior to implementation of the procedures or results.

Note: Data included herein incorporates that skid resistance data shown in experimental projects Report No. 615-2, dated July 1976.

### ACKNOWLEDGMENT

I first met Don Frye, Sr. when I was "loaned" to the San Antonio Urban Expressway System from the Bexar County Residency in February, 1954.

I was, and continue to be, totally impressed with Don's dedication towards the department as a whole, and towards better, more economical, paving aggregates.

I replaced Don on his retirement in August 1977, and see him on occasion.

As of this writing, he and Eva are living near Harwood, outside of Luling, Texas, and enjoying his retirement.

*RHM*

4-8-81

As described in Report 615-1, the various test sections were placed to identify possible combinations and/or blends which could be available to the State for improving skid resistance.

The paving operations on FM 1604 were accomplished in early winter (November-December) 1974. The description of the work is covered in Report 615-1.

Skidding began in January 1975, and continued through April 1979. We had hoped to have a full five (5) year skid performance history of this work, but increased traffic, commercial development, etc. required modifications of intersections, addition of left turn lanes, channalization, etc. During the April 1979 skidding, we found we had lost two (2) test sections to improvements. When we prepared for the December 1979 skids, we found that we had lost four (4) additional test sections due to resurfacing.

As an idea of the traffic growth, the memorandum of ADT (1975 thru 1979) at Attachment B provides some indicators of San Antonio's growth. We recently surveyed the test sections to determine what, if any were left. One (1) section East Bound (EB #2) and four West Bound (WB 4, 5, 6, 7) of the original eighteen (18) test sections were all that remained.

This final report is for the purpose of providing four and one half ( $4\frac{1}{2}$ ) years of skid resistance test data on the FM 1604. We feel that results shown warrant additional evaluation of these type surfaces.

Although we did not attempt any "silly putty" texture evaluation, visual observation still provides that in areas which were sprinkle treated, and where we had significant loss of the sprinkle rock, the pock marks left by the sprinkle rock provides some additional texturing for skid resistance.

Project C 73-5-38, Bexar County  
SKID RESISTANCE VALUES

TEST SECTION	<u>1-14-75</u>	<u>2-14-75</u>	<u>3-17-75</u>	<u>6-3-75</u>	<u>8-18-75</u>	<u>11-5-75</u>	<u>3-3-76</u>	<u>5-27-76</u>
Westbound No. 1: PV 33/W Sprinkle	80	68	65	59	49	46	42	44
Westbound No. 2: PV 33 W/Sprinkle	79	60	59	64	53	46	48	50
Westbound No. 3: PV 32 W/20% Lt. Wt.	54	56	53	52	44	41	41	43
Westbound No. 4: PV 32 W/20% Lt. Wt.	54	53	52	51	43	40	40	41
Westbound No. 5: PV 32 W/10.8% Lt. Wt.	50	51	50	48	40	37	38	39
Westbound No. 6: PV 32 W/30.2% Lt. Wt.	44	49	51	47	35	33	36	37
Westbound No. 7: PV 32 W/25.2% Lt. Wt.	50	49	50	43	36	36	36	38
Westbound No. 8: PV 32 W/8.1% Lt. Wt.	47	48	46	46	38	34	35	39
Westbound No. 9: PV 32 Raw	52	51	49	44	39	30	28	31
Westbound No. 10: PV 33 Raw	52	47	47	43	38	32	31	31
Eastbound No. 1: PV 33 Raw	46	47	44	43	33	28	27	29
Eastbound No. 2: PV 32 W/20% Lt. Wt.	52	53	54	53	42	39	39	43
Eastbound No. 3: PV 35 W/20% Lt. Wt.	50	55	53	51	42	37	39	40
Eastbound No. 4: PV 33 W/Sprinkle	77	61	58	56	45	41	43	43
Eastbound No. 5: PV 33 W/Sprinkle	71	63	58	54	44	39	41	42
Eastbound No. 6: PV 33 W/Sprinkle	76	57	54	49	39	36	36	38
Eastbound No. 7: PV 33 W/Sprinkle	75	58	59	52	43	37	38	40
Eastbound No. 8: PV 33 W/Sprinkle	85	64	No Test Equip. Failed	59	46	43	41	46

ATTACHMENT "A"  
To Narrative Report of Test Sections On  
FM 1604

Project C 73-5-38, Bexar County  
SKID RESISTANCE VALUES

<u>TEST SECTION</u>	<u>9-29-76</u>	<u>3-10-77</u>	<u>7-25-77</u>	<u>3-30-78</u>	<u>7-12-78</u>	<u>10-20-78</u>	<u>4-25-79</u>
Westbound No. 1: PV 33/W Sprinkle	45	43	43	42	-	47	41
Westbound No. 2: PV 33 W/Sprinkle	48	48	46	51	-	51	50
Westbound No. 3: PV 32 W/20% Lt. Wt.	42	38	43	39	-	42	38
Westbound No. 4: PV 32 W/20% Lt. Wt.	41	38	41	38	-	41	38
Westbound No. 5: PV 32 W/10.8% Lt. Wt.	38	34	40	36	-	37	36
Westbound No. 6: PV 32 W/30.2% Lt. Wt.	35	33	32	33	-	35	33
Westbound No. 7: PV 32 W/25.2% Lt. Wt.	37	35	37	35	-	35	35
Westbound No. 8: PV 32 W/8.1% Lt. Wt.	36	33	34	33	-	32	32
Westbound No. 9: PV 32 Raw	33	31	29	28	-	35	31
Westbound No. 10: PV 33 Raw	31	27	31	27	-	27	26
Eastbound No. 1: PV 33 Raw	30	24	28	-	25	26	24
Eastbound No. 2: PV 32 W/20% Lt. Wt.	42	37	41	-	38	41	37
Eastbound No. 3: PV 35 W/20% Lt. Wt.	36	34	39	-	37	38	35
Eastbound No. 4: PV 33 W/Sprinkle	44	39	43	-	40	39	37
Eastbound No. 5: PV 33 W/Sprinkle	42	38	42	-	33	36	34
Eastbound No. 6: PV 33 W/Sprinkle	39	34	38	-	31	34	-
Eastbound No. 7: PV 33 W/Sprinkle	39	34	37	-	36	38	-
Eastbound No. 8: PV 33 W/Sprinkle	45	43	42	-	41	42	37



INTEROFFICE MEMORANDUM

TO: Richard H. Magers

FROM: Milton M. Dietert

SUBJECT: Average Daily Traffic at various locations on Loop 1604  
Control: 2452-2  
Bexar County

Date March 13, 1981

Responsible


Desk .....

Reference to your interoffice memorandum dated March 3, 1981, requesting Average Daily Traffic on Loop 1604 at various locations for years 1975 thru 1979.

Shown below is Annual Average Daily Traffic for locations indicated and years indicated.

	1975	1976	1977	1978	1979
Loop 1604 at I.H. 10 West	6320	6900	8550	10,010	11,620
Loop 1604 at F.M. 1535	4960	5840	6000	6910	6580
Loop 1604 at F.M. 2696	N/A	N/A	N/A	N/A	N/A
Loop 1604 at U.S. 281 North	5240	6040	6150	7110	6570

If we can be of further assistance, please advise.

  
Milton M. Dietert

MMD:CAC:vz