

This historical pavement data is provided for information only. It includes a history of pavement work that has been contracted through the NDOT Construction letting process. This history is generalized to depict the primary strategy (or strategies) used for a given construction project and may not encompass all work that was performed to all sections of a roadway. Furthermore, it does not include any work performed by NDOT Maintenance forces.

Pavement Design Acronyms & Definitions

Definitions

B.S.B.C. – Bituminous Sand Base Course OR Bituminous Stabilized Base Course

B.M.S.C. – Bituminous Material Surface Course

GR. – Grading

G.R. – Guard Rail

BR. – Bridge

CONC. – Concrete Pavement

P.C. – Prime Coat

A.C. – Armor Coat

S.S.B.C. – Stabilized Sand Base course OR Stabilized Soil Base Course

B. M. – Bituminous Material

T.S.B. – Tar Stabilized Base

JRCP – Jointed Reinforced Concrete Pavement

CRCP – Continuously Reinforced Concrete Pavement

JPCP – Jointed Plain Concrete Pavement

Definitions

Stabilized Subgrade – Lime, Fly Ash, Cement, Cement Kiln Dust, etc. added to upper 8” of cohesive soil

Subgrade Stabilization – Soil Binder added to upper 6” of granular soil

Subgrade Preparation – Topsoil removed and top 6” of soil compacted

1997	1997
10.13	13.24
1997 CM-370-7(117)	10"X4

1988	1988
10.28	15.33
1988 F-370-7(1006)	1"X4

1975	1975
4.18	16.17
1975 FF-370-7(105)177	5"

1963	1963
10.49	16.17
1963 F-514(7)	8"X24' RC

Year	Year
Begin R.P.	End R.P.
Project #5:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #6:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #7:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #8:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #9:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #10:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #11:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #12:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #13:	Year, Project #

Year	Year
Begin R.P.	End R.P.
Project #14:	Year, Project #

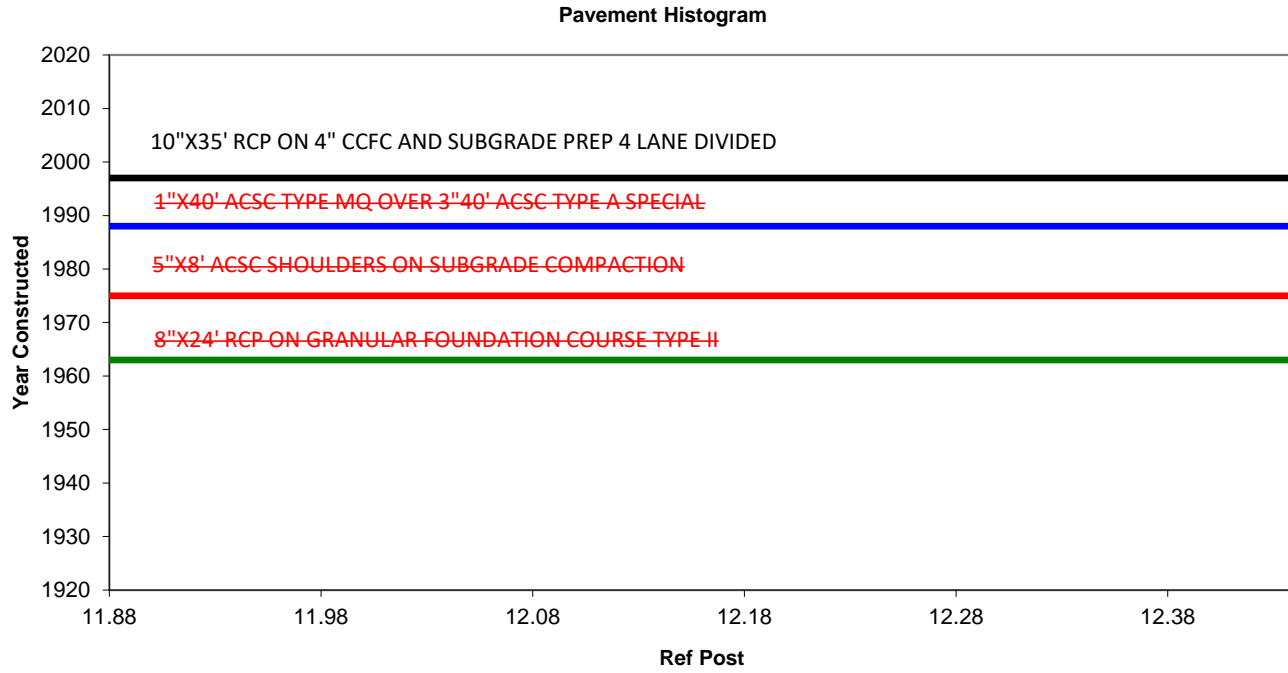
Hwy # N-370
 Location 66TH-60TH St. Intersections
 Project # ELEC-370-7(1034)
 C.N. 22700
 Ref Posts 11.88 12.44
 Date 8/15/2016
 Prepared by AARON MATZKE

Mainline Profile Summary:

10"X24' RCP ON 4" CCFC AND SUBGRADE PREP 4 LANE DIVIDED
 1"X24' ACSC TYPE MQ OVER 3"24' ACSC TYPE A SPECIAL
 8"X24' RCP ON GRANULAR FOUNDATION COURSE TYPE II

Shoulder Profile Summary:

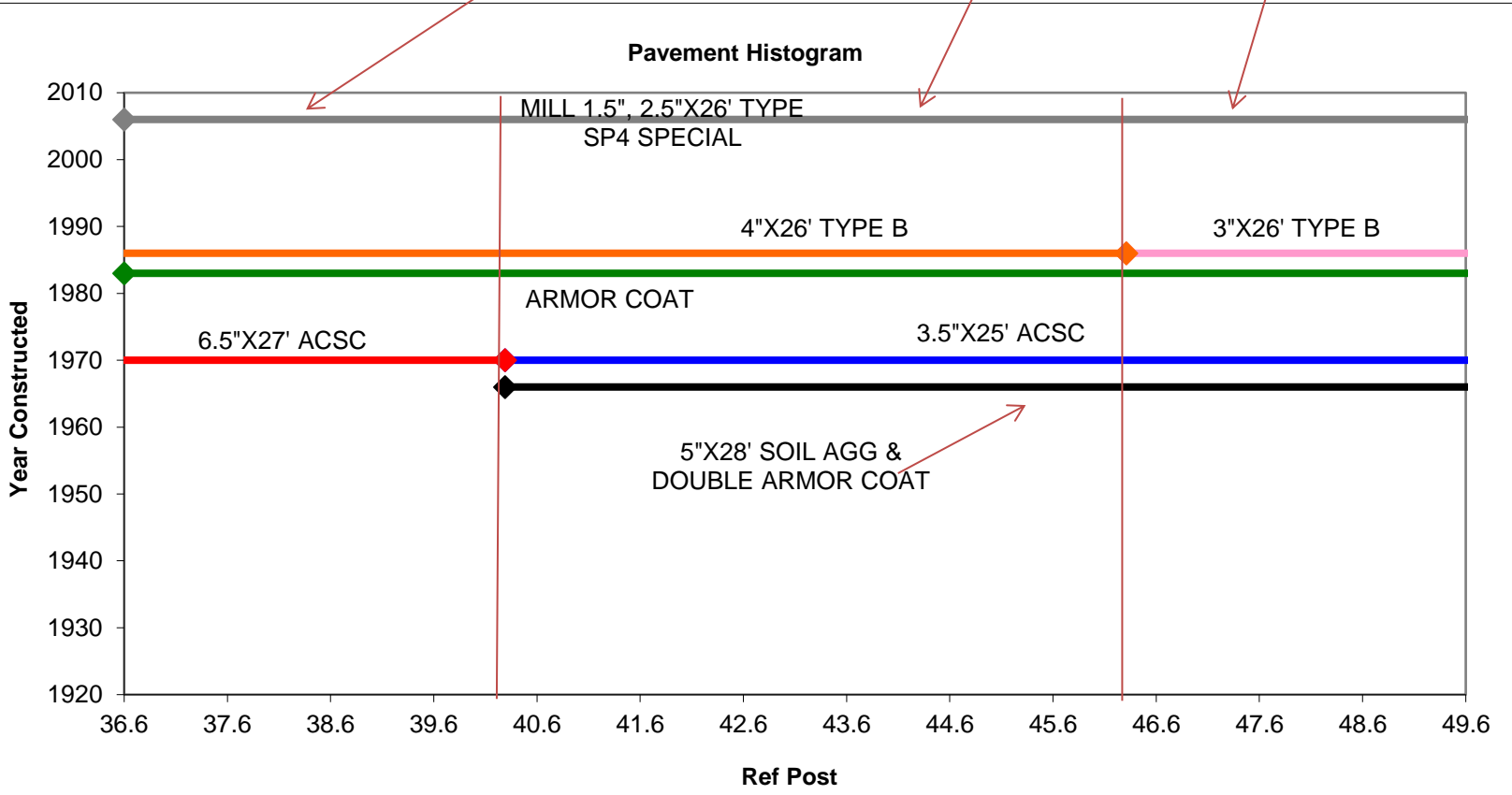
10"X8' RCP OUTSIDE AND 10"X3' RCP INSIDE SHOULDERS BOTH DIRECTIONS
 SHOULDERS 1"X8' ACSC TYPE MQ OVER 3"X8' ACSC TYPE A SPECIAL
 5"X8' ACSC SHOULDERS ON SUBGRADE COMPACTION



- 1997 CM-370-7(117) 10"X35' RCP ON 4" CRUSHED CONCRETE FOUNDATION COURSE AND SUBGRADE PREP
- 1988 F-370-7(1006) 1"X40' ACSC TYPE MQ OVER 3"40' ACSC TYPE A SPECIAL
- 1975 FF-370-7(105)177 5"X8' ACSC SHOULDERS ON SUBGRADE COMPACTION
- 1963 F-514(7) 8"X24' RCP ON GRANULAR FOUNDATION COURSE TYPE II

1966	1966
40.29	52.48
1966 S-429(7)	5"X28' SO
1970	1970
40.29	52.48
1970 S-429B	3.5"X25' AS
1970	1970
33.21	40.29
1970 S-429(8)	6.5"X27' A
1983	1983
36.6	52.5
1983 21(33-52)	ARMOR
1986	1986
46.31	52.5
1986 F-21-3(102)	3"X26'
1986	1986
33.42	46.31
1986 F-21-2(1005)	4"X26'
2004	2004
51.51	51.68
2004 EACSTPD-EACBH-2	
2006	2006
36.6	52.5
2006 PEP-21-2(1016)	MI
Year	Year
Begin R.P.	End R.P.
Project #9: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #10: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #11: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #12: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #13: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #14: Year, Project #	

Hwy #	N-21	11'-11.5" AC	8.5" AC	7.5" AC
Location	Eddyville Road N & S	RP 33.22-40.29	RP 40.29-46.31	RP 46.31-52.50
Project #	STP-21-2(117)	RP 33.22-40.29	Mill 1.5", 2.5" Type SP4 Special	Mill 1.5", 2.5" Type SP4 Special
C.N.	61636	Mill 1.5", 2.5" Type SP4 Special	2.5" 4"x26' Type B	1.5" 3"x26' Type B
Ref Posts	36.6 49.6	2.5" 4"x26' Type B	Armor Coat	Armor Coat
Date	10/17/2016	Armor Coat	3.5"x25' ACSC	3.5"x25' ACSC
Prepared by	Dennis Meinecke	6"-6.5"x27' ACSC	5'x28' Soil Agg & Dble Armor Coat	5'x28' Soil Agg & Dble Armor Coat



- 1966 S-429(7) 5"X28' SOIL AGG & DOUBLE ARMOR COAT
- 1970 S-429B 3.5"X25' ASPHALT CONCRETE SURFACE COURSE
- 1970 S-429(8) 6.5"X27' ASPHALT CONCRETE SURFACE COURSE
- 1983 21(33-52) ARMOR COAT
- 1986 F-21-3(102) 3"X26' ASPHALT CONCRETE TYPE B
- 1986 F-21-2(1005) 4"X26' ASPHALT CONCRETE TYPE B
- 2004 EACSTPD-EACBH-21-3(103) MILL 2", 2"X26' ASPHALTIC CONCRETE TYPE SP4.
- 2006 PEP-21-2(1016) MILL 1.5", 2.5"X26' ASPHALT CONCRETE TYPE SP4 SPECIAL

1969	1969
0	3.15
1969 I-80-3(30), 8"x24', 6"	

1988	1988
0	3.15
1988 IR-80-2(67), 5"x24',	

1998	1998
0	3.15
1998 EACIM-76-2(105) re	

2011	2011
0	3.15
2011 IM-80-3(119), remov	

Year	Year
Begin R.P.	End R.P.
Project #5: Year, Project #	

Year	Year
Begin R.P.	End R.P.
Project #6: Year, Project #	

Year	Year
Begin R.P.	End R.P.
Project #7: Year, Project #	

Year	Year
Begin R.P.	End R.P.
Project #8: Year, Project #	

Year	Year
Begin R.P.	End R.P.
Project #9: Year, Project #	

Year	Year
Begin R.P.	End R.P.
Project #10: Year, Project	

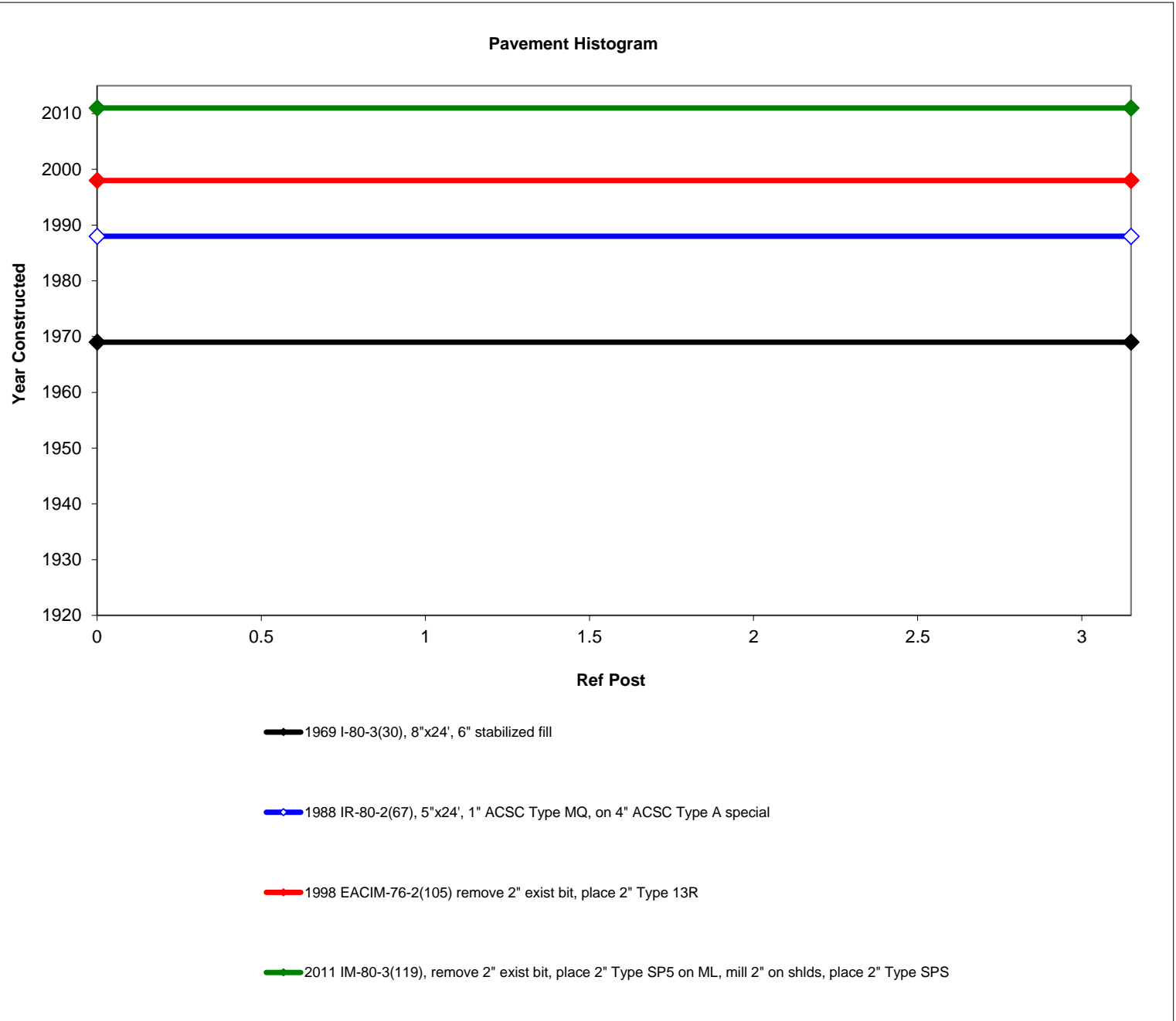
Year	Year
Begin R.P.	End R.P.
Project #11: Year, Project	

Year	Year
Begin R.P.	End R.P.
Project #12: Year, Project	

Year	Year
Begin R.P.	End R.P.
Project #13: Year, Project	

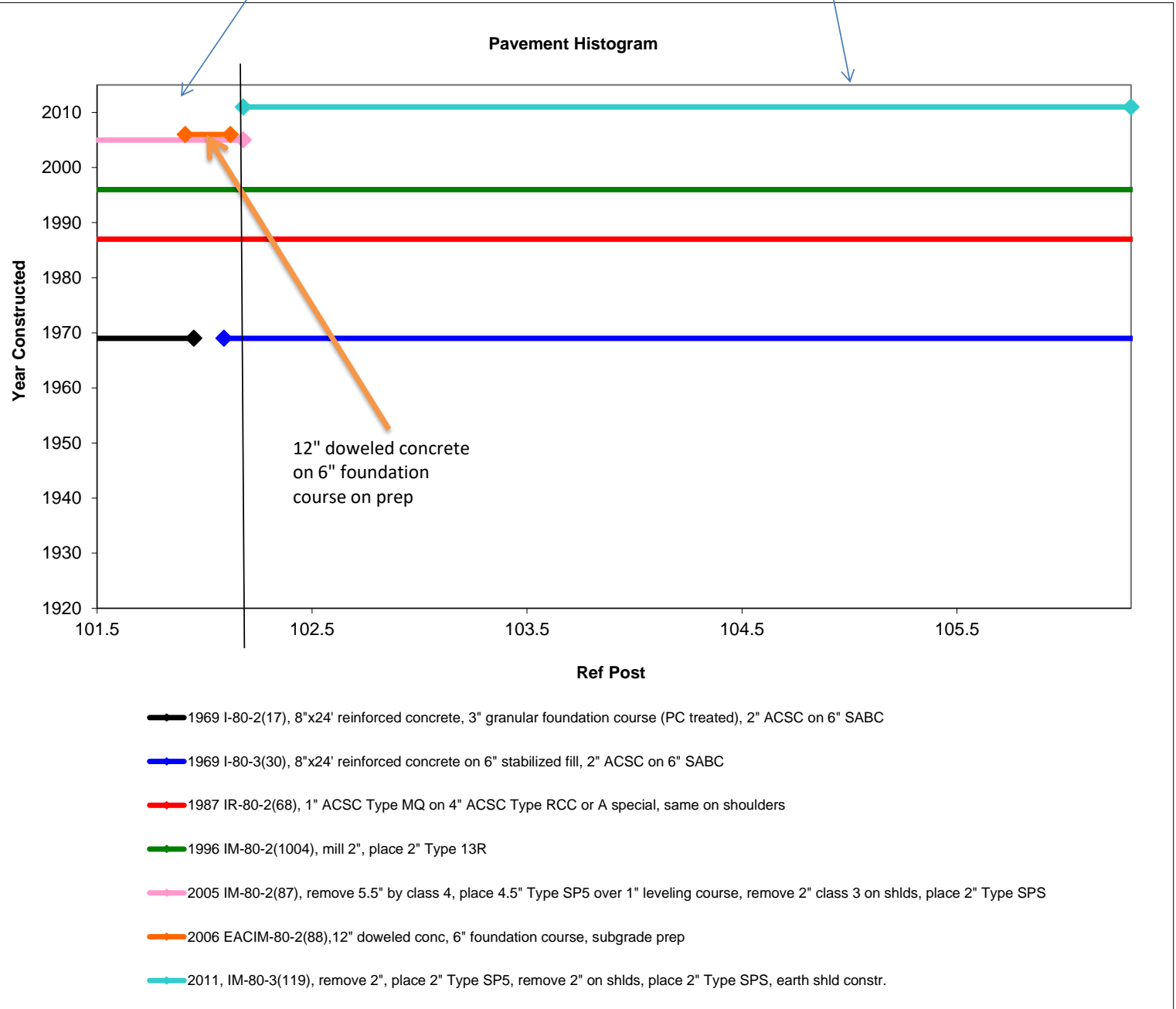
Year	Year
Begin R.P.	End R.P.
Project #14: Year, Project	

Hwy #	76	remove 2" exist bit, place 2" Type SP5	Shoulder Profile Summary:
Location	Big Springs West	remove 2" exist bit, place 2" Type 13R	mill 2", place 2" Type SPS
Project #	IM-80-2(100)	4" ACSC Type MQ, on 3" 4" ACSC Type A special	4" Type MQ, 4" 3" Type A
C.N.	61566	8" reinforced concrete	2"x10' ACSC
Ref Posts	0 3.15	6" stabilized fill	6" soil agg base course
Date	3/13/2013		
Prepared by	Nicole Jaber		



1969	1969
94.56	101.95
1969 I-80-2(17), 8"x24' re	
1969	1969
102.09	106.36
1969 I-80-3(30), 8"x24' re	
1987	1987
94.56	106.36
1987 IR-80-2(68), 1" ACS	
1996	1996
94.56	106.36
1996 IM-80-2(1004), mill 2	
2005	2005
94.56	102.18
2005 IM-80-2(87), remove	
2006	2006
101.91	102.12
2006 EACIM-80-2(88), 12"	
2011	2011
102.18	106.31
2011, IM-80-3(119), remo	
Year	Year
Begin R.P.	End R.P.
Project #8: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #9: Year, Project #	
Year	Year
Begin R.P.	End R.P.
Project #10: Year, Project	
Year	Year
Begin R.P.	End R.P.
Project #11: Year, Project	
Year	Year
Begin R.P.	End R.P.
Project #12: Year, Project	
Year	Year
Begin R.P.	End R.P.
Project #13: Year, Project	
Year	Year
Begin R.P.	End R.P.
Project #14: Year, Project	

Hwy #	80	Mainline Profile Summary:		Shoulder Profile Summary:	
Location	Big Springs West	mill class 4, 4.5" Type SP5 on 1" leveling course \ mill 2"/place 2" SP5		mill 2"/fill 2" Type SPS	
Project #	IM-80-2(100)	mill 2", place 2" Type 13R		4" MQ on 4" 3" Type A	
C.N.	61566	4" ACSC Type MQ on 4" 3" ACSC Type RCC or A special		2" ACSC on 6" SABC	
Ref Posts	101.5	8" reinforced concrete			
Date	3/13/2013	3" granular foundation course (PC treated) or 6" stabilized fill			
Prepared by	Nicole Jaber				



NDOT Asphalt Type Summary

(Revised 2/20/09)

TYPE	DESCRIPTION/USE
11	This mix is designed to have a crushed value of 80% for the combined mineral aggregate, with a maximum of 60% limestone for skid resistance and a 75 blow Marshall design and a target field air void of 4.0%. For use on high volume road with a truck count of 350 or more.
11R	This mix is identical to the type 11 except that a recycled asphalt pavement (RAP) is used to supplement the virgin aggregate. All properties are the same as that of the type 11.
13	This mix is designed to have a crushed value of 80% and composed of a minimum of 50% quartzite or granite and a 75 blow Marshall design and a target field air void of 4.0%. Used on high volume roads usually capping a type 11 and urban projects when placing 2-2 1/2 inches.
13R	This mix is identical to the type 13 except that a (RAP) is used to supplement the virgin aggregate. All properties are the same as that of the type 13.
14	This mix is designed to have a crushed value of 60% for the combined mineral aggregate, with a maximum of 60% limestone for skid resistance and a 50 blow Marshall design and a target field air void of 4.0%. Used on medium volume roads with truck traffic between 125 and 350.
14R	This mix is identical to type 14 except that a (RAP) is used to supplement the virgin aggregate. All properties are the same as that of the type 14.
17	This mix is designed to have a crushed value of 0% for the combined mineral aggregate, with a maximum of 60% limestone for skid resistance and a 50 blow Marshall design and a target field air void of 3.5%. Used for shoulders off the Interstate and Expressway system.
17C	This mix is designed to have a crushed value of 20% or 40% for the combined mineral aggregate, with a maximum of 60% limestone for skid resistance and a 50 blow Marshall design and a target field air void of 3.5%. The 20% is used for shoulders on interstate and expressways and for mainline when traffic is detoured with 125 trucks or less. The 40% is used for mainline under traffic with 125 trucks or less.
17R	This mix is identical to type 17 except that a (RAP) material is used to supplement the virgin aggregate. All properties are the same as that of the type 17.
17RC	This mix is identical to the type 17C, 20% or 40% except that a (RAP) material is used to supplement the virgin aggregate. All properties are the same as that of the type 17C.

1	This mix is composed of a combined mineral aggregate of not less than 50% crushed rock, crushed mineral aggregates which contain no more than 15% naturally occurring fine retained on the 10 sieve, 60% maximum limestone permitted. Used for the same type of projects as type 11.
1R	This mix is identical to type 1 except that a (RAP) material is used to supplement the virgin aggregate. Used in the same type of projects as type 11.
3	This mix is composed of crushed quartzite or granite and mineral filler if required. Used for the same type of projects as type 13.
3R	This mix is identical to type 3 except that a (RAP) material is used to supplement the virgin aggregate. Used in the same type of projects as type 13.
4	This mix is composed of not less than 30% crushed rock, crushed mineral aggregates which contain no more than 20% naturally occurring fine aggregates retained on the No. 10 sieve and mineral filler if required, 60% maximum limestone permitted. Used for the same type of projects as type 14.
4R	This mix is identical to type 4 except that a (RAP) material is used to supplement the virgin aggregate. Used in the same type of projects as type 14.
7	This mix is composed of a combined mineral aggregate, 60% maximum limestone permitted. Used for the same type of projects as type 17.
7R	This mix is identical to type 7 except that a (RAP) material is used to supplement the virgin aggregate. Used in the same type of projects as type 17.
II	This mix is composed of mineral aggregate No. 2-A, mineral aggregate No. 5 (fine sand) and mineral filler.
IIR	This mix is identical to type II except that a (RAP) material is used to supplement the virgin aggregate.
A	This mix is composed of crushed rock, mineral filler and 3-A crushed sand gravel. This mix was used as both a base and surface course.
A Special	This mix is composed of crushed rock, mineral filler and 3-A crushed sand gravel. This mix was used as a base course. The gradation of the crushed rock was slightly coarser and the percentage content of crushed rock in the mix higher than the A mix.
AX	This mix is composed of crushed rock, fly ash and mineral aggregate. It was used as both a base and surface course on the interstate.
AX Special	This mix is composed of the same material as type AX only this mix has a higher percentage of crushed rock. It was used as a base course on the Interstate.
Q	This mix is composed of crushed quartzite or crushed granite. This was used as a surface layer on the Interstate.

RQ	This mix is identical to type Q except that a (RAP) material is used to supplement the virgin aggregate. Used on same type of projects as Q.
MQ	This is an open graded mix composed of quartzite or granite gravel sand aggregate and mineral filler. Used on the surface layer of the Interstate.
CC, CC1 & CC2	These mixes are composed of crushed concrete, 3-A sand and mineral filler.
RCC	This mix is composed of (RAP), approximately 82% crushed concrete and 18% 3-A sand gravel. Used as a base course on the Interstate.
RAX	This mix is identical to the type AX except that it has a RAP material added to supplement the virgin aggregate. Used in the same line as type AX.
RAX Special	This mix is identical to the type AX Special except that it has a RAP material added to supplement the virgin aggregate. Used along the same lines as type AX Special.
SMA	Experimental European Mixture Stone Mastic Asphalt composed of crushed rock, 3A crushed sand gravel and mineral filler. Used on high traffic volume roads.
SUPERPAVE	This is a mix design system for specifying asphalt binders and mineral aggregates, developing and analyzing asphalt mixtures and establishing pavement performance prediction, based on cumulative equivalent single axle loads. In general SP4 and SP5 will be used on mainline pavements and SPS will be used on shoulders.
SPS	This is a <u>S</u> urfacing for <u>P</u> aved <u>S</u> houlder mix. This mix uses PG 58-28 (52-34 as of 2010) at a content to yield a target air void of 1.5%. It promotes the use of RAP at a content of 35 to 50% and thus reduces the amount of added binder and aggregates by as much as half. It contains no lime.
GGCRM	This is a <u>G</u> ap <u>G</u> raded <u>C</u> rumb <u>R</u> ubber <u>M</u> odified mix. Placed as a surface mix, usually 1.5" to 2.5" in thickness. This has the resemblance of a SMA (Stone Mastic Asphalt) mix. It is a high binder, rut and crack resistant surface which is still in research and development stages. Used on high volume roadways.
GGCRMLV	This is a <u>G</u> ap <u>G</u> raded <u>C</u> rumb <u>R</u> ubber <u>M</u> odified <u>L</u> ow <u>V</u> olume mix. Placed as a surface mix, usually 1.5" to 2.5" in thickness. This has the resemblance of a SMA (Stone Mastic Asphalt) mix. It is a high binder, rut and crack resistant surface which is still in research and development stages. Used on low to medium volume roadways.
LC	This mix is used as a type of SAMI (stress absorbing membrane interface). It is a fine graded mix. This leveling course is intended to slow down reflective cracking from the existing pavement and to provide an impermeable layer to resist the flow of water in the asphalt mix. This mix uses PG 70-28 (64-34 for non-interstate as of 2010) with a high binder content to produce a lower air void content (2.5%).

RLC	This mix is used as a leveling course for HLSS, FDR, and overlay projects. This mix is the same gradation as an "LC" but uses standard PG binder types and contents, and targets regular mainline volumetrics.
OGFC-CRM	This is an <u>O</u> pen <u>G</u> raded <u>F</u> riiction <u>C</u> ourse mix. Placed as a surface mix, usually 1" to 1.5" in thickness. This is coarser than a regular OGFC and contains higher binder amounts. This mix uses 58-28 binder that is modified with crumb rubber. Provides a high friction, drained and quiet pavement section. Used on mainline roadways and ramps.
HRB	This is a <u>H</u> igh <u>R</u> ap <u>B</u> ase mix. It is a very fine graded, single aggregate mix used in lower lifts only. It contains a minimum 25% or 35% RAP as specified and a maximum 50% RAP. The mix contains no lime and a minimum 5.5% of PG 64-22 (64-34 as of 2010) binder. It is a very stiff mix used on low to medium volume roadways.
SPL	This <u>S</u> tatic <u>P</u> ressure <u>L</u> oading mix is a well graded Marshall mix. There is a fine mix and a course mix. The mixes are used primarily for camper pads, parking lots, lower lifts, and temporary pavement. RAP is not required but often needed to achieve the required 230 psi bearing capacity. It contains no lime and a minimum 5.2% of PG 64-22 (64-34 as of 2010) binder.
SPR	This is a coarse but well graded mix used in lower lifts on low to medium volume roadways and surface lifts on low volume roadways. It is a gyratory mix created to replace the SPL mix. It requires lime, has a minimum 20% RAP and minimum 5.0% of 64-34 binder.