



ACEC – INDOT Inspection Committee

SNBI Repository

May 16th, 2024





■ Repository Details

- SNBI ITAMS interface under development
 - Tables to store values created
 - Field input objects have been placed on tabs corresponding to SNBI Section/Subsections
 - Last we checked, plenty of work to finish required drop downs, to established data validation and to make more readable.
- **Repository** – Word I chose to represent spreadsheets to be used for early import





■ Repository Details

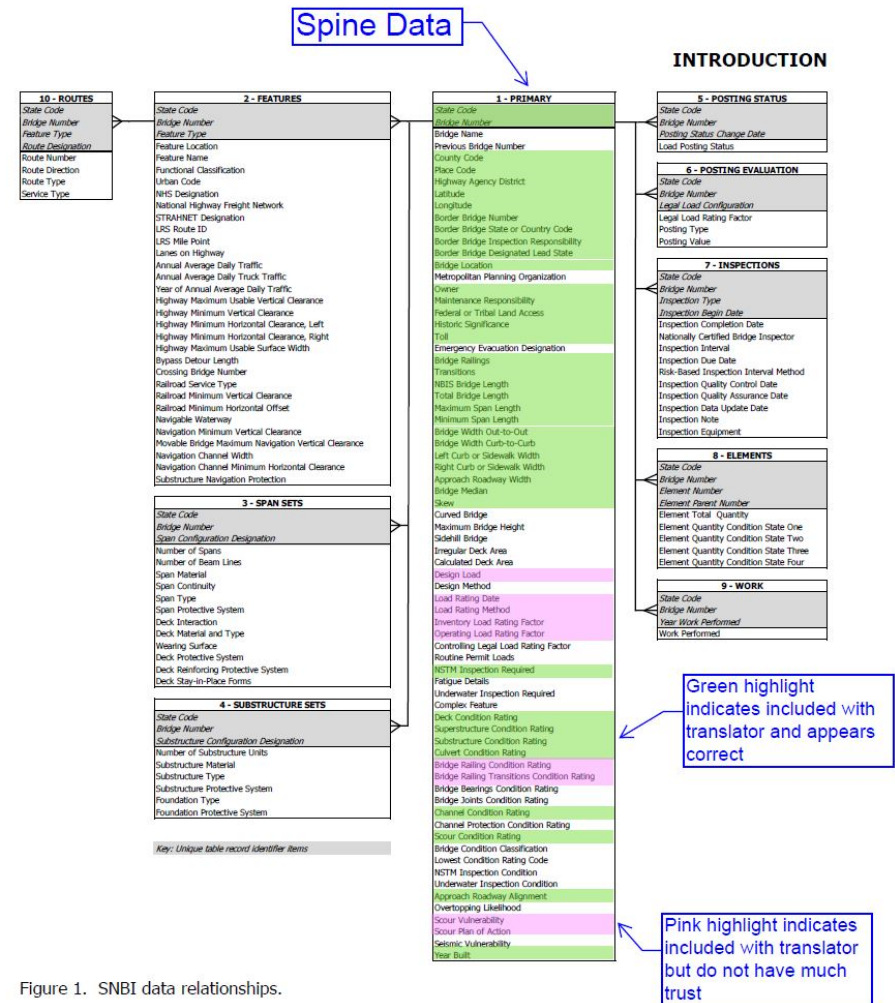
- INDOT has developed simple import spreadsheets.
- Try to limit spreadsheet tab to single SNBI subsection. Helps with QCQA and readability
- Focusing on Figure 1- Spine, Section 4 – Features and Section 2 – Spans & Substructures





■ Figure 1 – Spine – Fed Tape Translator

- B.L.02 County Code
- B.L.03 Place Code
- B.L.04 Highway Agency District
- B.L.05 Latitude
- B.L.06 Longitude
- B.L.07 Border Bridge Number
- B.L.09 Border Bridge Inspection Responsibility
- B.L.10 Border Bridge Designated Lead State
- B.L.11 Bridge Location
- B.CL.01 Owner
- B.CL.01 Maintenance Responsibility
- B.CL.02 Federal or Tribal Land Access
- B.CL.03 Historic Significance
- B.CL.04 Toll
- B.RH.01 Bridge Railing
- B.RH.01 Transitions
- B.G.01 NBIS Bridge Length
- B.G.02 Total Bridge Length
- B.G.03 Maximum Span Length
- B.G.04 Minimum Span Length
- B.G.05 Bridge Width Out-to-Out
- B.G.06 Bridge Width Curb-to-Curb
- B.G.07 Left Curb or Sidewalk Width
- B.G.08 Right Curb or Sidewalk Width
- B.G.09 Approach Roadway Width
- B.G.10 Bridge Median
- B.G.11 Skew
- B.IR.01 NSTM Inspection Required
- B.C.01 Deck Condition Rating
- B.C.02 Superstructure Condition Rating
- B.C.03 Substructure Condition Rating
- B.C.04 Culvert Condition Rating
- B.C.09 Channel Condition Rating
- B.C.11 Scour Condition Rating
- B.AP.01 Approach Roadway Alignment
- B.W.01 Year Built





■ SNBI Section 4 – Features

Subsection 4.1 Feature ID

Establish from over & under records data

- B.F.01 Feature Type (Designation)
- B.F.02 Feature Location (Carried, below, etc)
- B.F.03 Feature Name

Subsection 4.2 Routes

- Not addressing now
- Many-to-one relation to H0# feature types

Subsection 4.3 Highways

- Not addressing now
- Should mostly come from under record values
- We will be testing to see what we can do

Subsection 4.4 Railroads

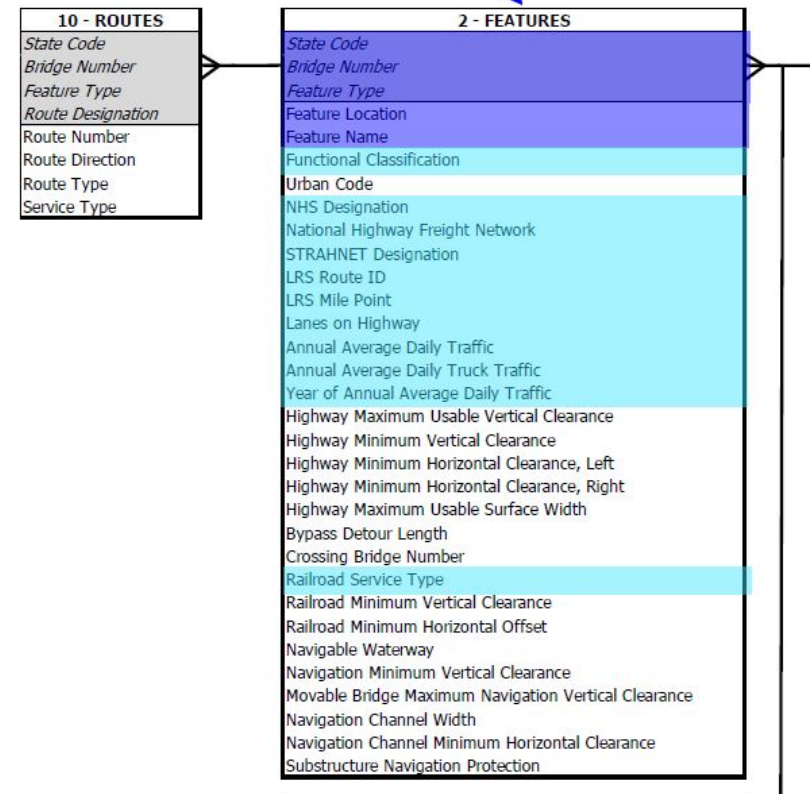
Using INDOT Railroad GIS Layer & Under record data

- B.RR.01 RR Service Type (GIS)
- B.RR.02 RR Minimum Vertical Clearance
- B.RR.03 RR Minimum Horizontal Offset

Subsection 4.5 Navigable Waterway

- Not addressing now
- Should not be that many applicable assets

Feature Data



ITAMS - SNBI



- **SNBI Sub-Section 4.1 – Feature ID (H0#)**
 - Example for highway under records

	A	B	C	D	E	F	K	L	M	N	O
	Asset Code	ASSET_NAME	Feature Type	Feature Location	Feature Name	NBI5A	NBI5B	NBI5C	NBI5D	NBI 006 Feature Crossed	NBI7
2	000050	UnderRecord_A	H02	B	I-74 EB	A	1	1	00074	I-74 EB	SR 1
3	000050	UnderRecord_B	H03	B	I-74 WB	B	1	1	00074	I-74 WB	SR 1
4	000210	UnderRecord_A	H02	B	I-70 EB	A	1	1	00070	I-70 EB	SR 1
5	000210	UnderRecord_B	H03	B	I-70 WB	B	1	1	00070	I-70 WB	SR 1
6	000425	UnderRecord_A	H02	B	I-469 EB	A	1	1	00469	I-469 EB	SR 1
7	000425	UnderRecord_B	H03	B	I-469 WB	B	1	1	00469	I-469 WB	SR 1
8	000435	UnderRecord_A	H02	B	I-69 NB	A	1	1	00069	I-69 NB	SR 1/DUPONT RD
9	000435	UnderRecord_B	H03	B	I-69 SB	B	1	1	00069	I-69 SB	SR 1/DUPONT RD
10	000540	UnderRecord_2	H01	B	SR 2	2	3	1	00002	SR2	CONRAIL RR
11	000800	UnderRecord_A	H02	B	I-74 EB	A	1	1	00074	I-74 EB	SR 3
12	000800	UnderRecord_B	H03	B	I-74 WB	B	1	1	00074	I-74 WB	SR 3
13	000890	UnderRecord_2	H01	B	SR 3	2	3	1	00003	SR 3	ABANDONED RR
14	000960	UnderRecord_A	H02	B	US 35 NB	A	2	1	00035	US 35 NB	SR 3 NB
15	000960	UnderRecord_B	H03	B	US 35 SB	B	2	1	00035	US 35 SB	SR 3 NB
16	000970	UnderRecord_A	H02	B	US 35 NB	A	2	1	00035	US 35 NB	SR 3 SB
17	000970	UnderRecord_B	H03	B	US 35 SB	B	2	1	00035	US 35 SB	SR 3 SB
18	001000	UnderRecord_A	H02	B	US 35 NB	A	2	1	00035	US 35 NB	BURLINGTON ROAD
19	001000	UnderRecord_B	H03	B	US 35 SB	B	2	1	00035	US 35 SB	BURLINGTON ROAD
20	001030	UnderRecord_A	H02	B	Memorial Dr/E 12Th EB	A	5	1	00000	MEMORIAL DR/E 12TH EB	US 35 NB
21	001030	UnderRecord_B	H03	B	Memorial Dr/E 12Th WB	B	2	1	00000	MEMORIAL DR/E 12TH WB	US 35 NB
22	001040	UnderRecord_A	H02	B	Memorial Dr/E 12Th EB	A	5	1	00000	MEMORIAL DR (E. 12TH)	US 35 SB
23	001040	UnderRecord_B	H03	B	Memorial Dr/E 12Th WB	B	5	1	00000	MEMORIAL DR (E. 12TH)	US 35 SB
24	001090	UnderRecord_A	H02	B	SR 32 EB	A	3	1	00032	SR 32 EB	US 35 NB





- **SNBI Sub-Section 4.1 – Feature ID (R0#)**
 - Example for Railroad - Finalized

	A	B	C	D
1				
2	AN (15)	AN (3)	AN(1)	AN(300)
3	B.ID.01	B.F.01	B.F.02	B.F.03
4	Bridge Number	Feature Type	Feature Location	Feature Name
5	000010	R01	B	Central Railroad Company of Indiana
6	000540	R01	C	Norfolk Southern Railroad
7	000640	R01	B	CSX Railroad
8	000890	R01	C	Unknown
9	001070	R01	B	CSX Railroad
10	001080	R01	B	CSX Railroad
11	001110	R01	B	Norfolk Southern Railroad
12	001120	R01	B	Norfolk Southern Railroad
13	001170	R01	B	Norfolk Southern Railroad
14	001180	R01	B	Norfolk Southern Railroad
15	001346	R01	B	CSX Railroad
16	001347	R01	B	CSX Railroad
17	001359	R01	B	Norfolk Southern Railroad
18	001360	R01	B	Norfolk Southern Railroad
19	001390	R01	C	Indiana Northeastern Railroad
20	001430	R01	B	Grand Trunk Western Railroad
21	001600	R01	C	Norfolk Southern Railroad
22	001630	R01	B	CSX Railroad
23	001681	R01	B	CSX Railroad
24	001726	R01	B	CSX Railroad
25	001750	R01	C	CSX Railroad
26	001811	R01	B	Norfolk Southern Railroad
27	001990	R01	B	CSX Railroad
28	002090	R01	C	Norfolk Southern Railroad



ITAMS - SNBI



■ SNBI Sub-Section 4.1 – Feature ID (R0#)

■ Example for Railroad – Working Sheet

	A	B	C	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1															F/FE/P/PE/M/ME/I	Only report when B.F.02 = B	Only report when B.F.02 = B
2																	
3	B.ID.01										AN (15) B.ID.01	AN (3) B.F.01	AN(1) B.F.02	AN(300) B.F.03	AN (2) B.RR.01	B.RR.02	B.RR.03
4	ASSET_CODE	ASSET_NAME	Index	RR_ABOVE	RR_BELOW	UNDER_REF FEAT_VERT	NBI_054B_MIN VERT_UNDERCLER	UNDER_REF FEAT_HOR	NBI_055B_MIN AT_UNDERCLER	Multiple RR_Owner	Bridge Number	Feature Type	Feature Location	Feature Name	Railroad Service Type	Railroad Minimum Vertical Clearance	Railroad Minimum Horizontal Clearance
6	000540	002-45-00765	1	RR on Bridge	N/A	Highway	13.94	Highway	003.5	No	000540	R01	C	Norfolk Southern Railroad	F		
7	000640	002-64-02213 B	1	N/A	RR under Bridge	Railroad	22.58	Railroad	019.5	No	000640	R01	B	CSX Railroad	F	22.6	19.5
8	000890	003-33-02614	1	RR on Bridge	N/A	Highway	14.28	Highway	001.5	No	000890	R01	C	Unknown	I		
9	001070	(35)3-18-02396 BNBL	1	N/A	RR under Bridge	Railroad	22.42	Railroad	020.5	No	001070	R01	B	CSX Railroad	F	22.4	20.5
10	001080	(35)3-18-02396 JBSB	1	N/A	RR under Bridge	Railroad	22.5	Railroad	021.6	No	001080	R01	B	CSX Railroad	F	22.5	21.6
11	001110	(35)3-18-02397 BNBL	1	N/A	RR under Bridge	Railroad	22.75	Railroad	025.8	No	001110	R01	B	Norfolk Southern Railroad	F	22.8	25.8
12	001120	(35)3-18-02397 BSBL	1	N/A	RR under Bridge	Railroad	22	Railroad	025.8	No	001120	R01	B	Norfolk Southern Railroad	F	22.0	25.8
13	001170	(35)3-18-02398 BNBL	1	N/A	RR under Bridge	Highway	16.56	Highway	011.0	No	001170	R01	B	Norfolk Southern Railroad	F	16.6	11.0
14	001180	(35)3-18-02398 BSBL	1	N/A	RR under Bridge	Highway	19.02	Railroad	011.0	No	001180	R01	B	Norfolk Southern Railroad	F	19.0	11.0
15	001346	003-57-02566 NBL	1	N/A	RR under Bridge	Railroad	23.5	Railroad	017.3	No	001346	R01	B	CSX Railroad	F	23.5	17.3
16	001347	003-57-02566 SBL	1	N/A	RR under Bridge	Railroad	23.33	Railroad	017.3	No	001347	R01	B	CSX Railroad	F	23.3	17.3
17	001359	003-57-02389 JANB	1	N/A	RR under Bridge	Railroad	23	Railroad	015.7	No	001359	R01	B	Norfolk Southern Railroad	F	23.0	15.7
18	001360	003-57-02389 BSBL	1	N/A	RR under Bridge	Railroad	22.58	Railroad	016.0	No	001360	R01	B	Norfolk Southern Railroad	F	22.6	16.0
19	001390	003-44-02478	1	RR on Bridge	N/A	Highway	14.63	Highway	006.0	No	001390	R01	C	Indiana Northeastern Railroad	F		
20	001430	004-46-02468 B	1	N/A	RR under Bridge	Railroad	22.92	Railroad	019.3	No	001430	R01	B	Grand Trunk Western Railroad	F	22.9	19.3
21	001600	005-57-02480	1	RR on Bridge	N/A	Highway	00.00	Highway	002.5	No	001600	R01	C	Norfolk Southern Railroad	F		
22	001630	006-64-00790 C	1	N/A	RR under Bridge	Railroad	23.17	Railroad	007.8	No	001630	R01	B	CSX Railroad	F	23.2	7.8
23	001681	006-46-09863	1	N/A	RR under Bridge	Highway	16.08	Highway	018.8	No	001681	R01	B	CSX Railroad	F	16.1	18.8
24	001726	006-50-02544 A	1	N/A	RR under Bridge	Railroad	23.67	Railroad	019.7	No	001726	R01	B	CSX Railroad	F	23.7	19.7
25	001750	106-50-02645	1	RR on Bridge	N/A	Highway	14.41	Highway	010.1	No	001750	R01	C	CSX Railroad	F		
26	001811	006-57-02686	1	N/A	RR under Bridge	Railroad	23.5	Railroad	044.0	No	001811	R01	B	Norfolk Southern Railroad	F	23.5	44.0
27	001990	(3)7-40-02154 B	1	N/A	RR under Bridge	Railroad	23.04	Railroad	014.0	No	001990	R01	B	CSX Railroad	F	23.0	14.0
28	002090	(231)8-45-02006	1	RR on Bridge	N/A	Highway	13.61	Highway	002.6	No	002090	R01	C	Norfolk Southern Railroad	F		



ITAMS - SNBI



- **SNBI Sub-Section 4.1 – Feature ID (W0#)**
 - Example for Waterway – Working Sheet

	A	B	C	D	E	F	G	H	I	J	K
1		AN (3)	AN(1)	AN(300)							
2		B.F.01	B.F.02	B.F.03							
3	ASSET_CODE	Feature Type	Feature Location	Feature Name	ASSET_NAME	NBI_006_FEATURE_INTERSECTED	NBI_007_FACILITY_CARRIED	NBI_009_LOCATION	NBI_071_WT_RWY_ADEQ_RATING	WATERWAY_ABOVE	WATERWAY_BELOW
4	000021	W01	B	Branch Black River	I64-04-10025	BR BLACK RIVER	SR 69, WB I-64 RAMI	00.16 W JCT SR 69	9	N/A	Over Waterway(W##)
5	000022	W01	B	Branch Black River	I64-04-10026	BR BLACK RIVER	I-64 EB/WB	00.16 W JCT SR 69	9	N/A	Over Waterway(W##)
6	000023	W01	B	Branch Black River	069-65-10027	BR BLACK RIVER	SR 69	00.16 S I-64	8	N/A	Over Waterway(W##)
7	000030	W01	B	Brushy Fork	(1)56-15-01300 B	BRUSHY FORK	SR 1	07.16 S I-74	8	N/A	Over Waterway(W##)
8	000040	W01	B	Slab Camp Creek	(1)56-15-01299 A	SLAB CAMP CREEK	SR 1	05.70 S I-74	7	N/A	Over Waterway(W##)
9	000070	W01	B	Whitewater River	001-24-06069 A	WHITEWATER RIVER	SR 1	00.31 S US 52	9	N/A	Over Waterway(W##)
10	000080	W01	B	Butlers Run	001-24-00987 A	BUTLERS RUN	SR 1	01.12 N SR 101	7	N/A	Over Waterway(W##)
11	000090	W01	B	Butlers Run	001-24-01120	BUTLERS RUN	SR 1	01.65 N SR 101	7	N/A	Over Waterway(W##)
12	000100	W01	B	Little Duck Creek	001-24-00201 B	LITTLE DUCK CREEK	SR 1	07.15 N SR 101	6	N/A	Over Waterway(W##)
13	000110	W01	B	Duck Creek	001-24-00041 A	DUCK CREEK	SR 1	07.24 N SR 101	7	N/A	Over Waterway(W##)
14	000120	W01	B	Wilson Creek	001-21-00988 A	WILSON CREEK	SR 1	04.64 S SR 44	9	N/A	Over Waterway(W##)
15	000130	W01	B	Village Creek	001-21-04578 B	VILLAGE CREEK	SR 1	01.59 S SR 44	9	N/A	Over Waterway(W##)
16	000140	W01	B	Whitewater River	(1)44-21-00086 B	WHITEWATER RIVER	SR 1/SR 44	00.05 N SR 44	9	N/A	Over Waterway(W##)
17	000160	W01	B	Lick Creek	001-21-03230 C	LICK CREEK	SR 1	03.88 N SR 44	9	N/A	Over Waterway(W##)
18	000165	W01	B	Mud Run	001-21-08258	MUD RUN	SR 1	05.32 N SR 44	9	N/A	Over Waterway(W##)
19	000180	W01	B	Shaker Run	001-89-03900 A	SHAKER RUN	SR 1	05.95 S US 40	9	N/A	Over Waterway(W##)
20	000190	W01	B	Whitewater River	001-89-05197 B	WHITEWATER RIVER	SR 1	00.80 S US 40	9	N/A	Over Waterway(W##)
21	000225	W01	B	Whitewater River	001-89-04579 A	WHITEWATER RIVER	SR 1	00.10 S US 35	9	N/A	Over Waterway(W##)
22	000250	W01	B	Lamb Ditch	001-68-08102	LAMB DITCH	SR 1	04.31 N US 36	9	N/A	Over Waterway(W##)
23	000260	W01	B	Cabin Creek	001-68-07155	CABIN CRFFK	SR 1	02.62 S SR 32	9	N/A	Over Waterway(W##)





■ SNBI Section 2 – Bridge Material & Type

Subsection 2.1 Spans Material & Type

- B.SP.01 Span Configuration Designation
- B.SP.02 Number of Spans
- B.SP.03 Number of Beam Lines
- B.SP.04 Span Material
- B.SP.05 Span Continuity
- B.SP.06 Span Type
- B.SP.07 Span Protective System
- B.SP.08 Deck Interaction
- B.SP.09 Deck Material and Type
- B.SP.10 Wearing Surface
- B.SP.11 Deck Protective System
- B.SP.12 Deck Reinforcing Protective System
- B.SP.13 Deck Stay-in-Place Forms

Subsection 2.3 Substructure Material & Type

- B.SB.01 Substructure Configuration Designation
- B.SB.02 Number of Substructure Units
- B.SB.03 Substructure Material
- B.SB.04 Substructure Type
- B.SB.05 Substructure Protective System
- B.SB.06 Foundation Type
- B.SB.06 Foundation Protective System

3 - SPAN SETS
State Code
Bridge Number
Span Configuration Designation
Number of Spans
Number of Beam Lines
Span Material
Span Continuity
Span Type
Span Protective System
Deck Interaction
Deck Material and Type
Wearing Surface
Deck Protective System
Deck Reinforcing Protective System
Deck Stay-in-Place Forms

4 - SUBSTRUCTURE SETS
State Code
Bridge Number
Substructure Configuration Designation
Number of Substructure Units
Substructure Material
Substructure Type
Substructure Protective System
Foundation Type
Foundation Protective System

Bridge Me
Skew
Curved Bri
Maximum
Sidehill Bri
Irregular C
Calculated
Design Lo
Design Me
Load Ratir
Load Ratir
Inventory
Operating
Controlling
Routine Pe
NSTM Ins
Fatigue De
Underwate
Complex F
Deck Conc
Superstruc
Substructu
Culvert Co
Bridge Rai
Bridge Rai
Bridge Bea
Bridge Joi
Channel C
Channel P
Scour Cor



ITAMS - SNBI



■ SNBI Section 2 – Bridge Material & Type

■ Example for Superstructure – Working Sheet

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1		Data Entry Complete																					
2				AN (15)	AN(3)	N(4,0)	N(3,0)	AN(3)	AN(1)	AN(3)	AN(3)	AN(2)	AN(3)	AN(3)	AN(3)	AN(3)	AN(3)						
3				B.ID.01	B.SP.01	B.SP.02	B.SP.03	B.SP.04	B.SP.05	B.SP.06	B.SP.07	B.SP.08	B.SP.09	B.SP.10	B.SP.11	B.SP.12	B.SP.13						
4	Bridge Name	Record Complete	Waterway Crossing	Bridge Number	Span Configuration Designation	Number of Spans	Number of Beam Lines	Span Material	Span Continuity	Span Type	Span Protective System	Deck Interaction	Deck Material and Type	Wearing Surface	Deck Protective System	Deck Reinforcing Protective System	Deck Stay-In-Place Forms	NBI_043	NBI_044	NBI_045	NBI_046	NBI_107	NBI_108
5	001-15-02474 A	Data Entry Complete		000010	M01	3	8	S01	2	G02	C01	NC	C01	C03	C02	C01	0	402	000	3	0	1	101
11	001-15-04683 B	Data Entry Complete		000050	M01	4	11	S01	2	G02	C01	CU	C01	C01	C02	C01	M01	402	000	4	0	1	101
12	001-24-06069 A	Data Entry Complete	Yes	000070	M01	7	7	S01	2	G02	C01	CU	C01	C03	C02	0	0	402	000	7	0	1	300
18	001-21-04578 B		Yes	000130	M01	3		C03	3	G02	0	CU	C01	C01	C02	C01	M01	602	000	3	0	1	101
19	(1)44-21-00086 B		Yes	000140	M01	7		C03	3	G02	0	CU	C01	C01	C02	C01	M01	602	000	7	0	1	101
20	001-21-03230 C		Yes	000160	M01	1		S01/S02	1	G02	C01	CU	C01	C01	C02	C01	M01	302	000	1	0	1	101
23	001-89-05197 B		Yes	000190	M01	4		S01/S02	2	G02	C01	CU	C01	C03	C02	0	0	402	000	4	0	1	300
24	001-89-04968 C			000210	M01	2		S01/S02	2	G02	C01	CU	C01	C03	C02	C01	M01	402	000	2	0	1	301
26	001-89-02472			000230	M01	3		S01/S02	2	G02	C01	CU	C01	B01	C02	0	0	402	000	3	0	1	690
29	001-68-06091 A		Yes	000270	M01	3		C03	3	G02	0	CU	C01	C03	C02	C01	M01	602	000	3	0	1	301
41	001-38-01188 B	Data Entry Complete	Yes	000360	M01	1	7	C03	1	G02	0	CU	C01	C03	C02	0	0	502	000	1	0	1	300
47	001-02-06950			000425	M01	2		S01/S02	2	G02	C01	CU	C01	C01	C02	C01	M01	402	000	2	0	1	101
51	001-02-07267	Data Entry Complete	Yes	000450	M01	3	6	S01	2	G02	C01	CU	C01	C01	C02	C01	M01	402	000	3	0	1	101
55	001-17-06097	Data Entry Complete	Yes	000490	M01	1	6	C03	1	G02	0	CU	C01	C01	C02	C01	0	502	000	1	0	1	101
60	002-45-07714	Data Entry Complete	Yes	000530	M01	1	6	C03	1	G02	0	CU	C01	C01	C02	C01	M01	502	000	1	0	1	101

