← ROCK ISLAND → ← WHITE SIDE →

BRIDGE DECK REPAIRS 2007-1
 ROCK ISLAND & WHITESIDE

				90% FEDERAL 10% STATE X2 31-2A 286TH ST	100% ROCK ISLAND COUNTY X2 31-2A 286TH ST	90% FEDERAL 10% STATE X2 31-2A 317TH ST	100% ROCK ISLAND COUNTY X2 31-2A 317TH ST	90% FEDERAL 10% STATE X2 31-2A WILMOT RD	100% FENTON TOWNSHIP X2 31-2A WILMOT RD	90% FEDERAL 10% STATE X2 31-2A LYNDON RD	100% WHITESIDE COUNTY X2 31-2A LYNDON RD
PAY ITEM	PAY ITEM DESCRIPTION		TOTAL	S.N. 08	31-0126	S.N. 0	31-0132	S.N. 09	98-0058	S.N. 09	8-0066
NUMBER	PAT ITEM DESCRIPTION	UNIT	QUANTITY	QUAI	NTITY	QUA	NTITY	QUAI	NTITY	QUAN	ITITY
28100107 ST	ONE RIPRAP, CLASS A4	SQ. YD.	380	96		115		98		71	
28200200 Fit	TER FABRIC	SQ YD	380	96		115		98		71	
40603310 HC	DT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	324	53	23	64	26	63	14	69	12
42001300 PF	ROTECTIVE COAT	SQ. YD.	94				25		35		34
44004250 PA	AVED SHOULDER REMOVAL	SQ. YD.	91				25		30		36
	T-MX ASPHALT SURFACE REMOVAL, 1/2"  T-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ. YD.	4 <b>88</b> 2622	632	149	766	178	748	149		
	DT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ. YD.	951							827	124
48300400 PC	ORTLAND CEMENT CONCRETE SHOULDERS 9"	SQ. YD.	93				24		35		34
50102400 CC	ONCRETE REMOVAL	CU. YD.	32.1	6.6		9.1		8.3		8.1	
50157300 PF	ROTECTIVE SHIELD	SQ. YD.	1101	243		286		273		299	
50300255 CC	DINCRETE SUPERSTRUCTURE	CU. YD.	35.8	7.0		9.9		9.6		9,3	
50300300 PF	ROTECTIVE COAT	SQ. YD.	84	16		21		24		23	·
50500405 FU	IRNISHING AND ERECTING STRUCTURAL STEEL	POUND	6740	1520		1690		1570		1960	
50500715 JA	CK AND REMOVE EXISTING BEARINGS	EACH	34	8		8		8		10	
50600600 CL	EANING AND PAINTING STEEL BRIDGE NO. 1	LSUM	1	1							
50600700 CL	EANING AND PAINTING STEEL BRIDGE NO. 2	L SUM	1			1					
50600800 CL	EANING AND PAINTING STEEL BRIDGE NO. 3	LSUM	1.					1			
50600900 CL	EANING AND PAINTING STEEL BRIDGE NO. 4	LSUM	1							1	
50606401 CC	ONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 1	L SUM	1	1							
50606402 CC	ONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 2	L SUM	1			1					
50606403 CC	ONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	LSUM	1					11			<del></del>
50606404 CC	ONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	LSUM	1							1	
50800205 RE	INFORCEMENT BARS, EPOXY COATED	POUND	5210	1,040		1,360		1,420		1,390	
52000110 PR	REFORMED JOINT STRIP SEAL	FOOT	274	61		72		68		73	
52100010 EL	ASTOMERIC BEARING ASSEMBLY, TYPE I	EACH	34	8		8		8		10	
52100520 AN	ICHOR BOLTS, 1"	EACH	136	32		32		32		40	
58100200 W/	ATERPROOFING MEMBRANE SYSTEM	SQ. YD.	3520	622	147	755	175	737	147	816	121
60260100 INI	LETS TO BE ADJUSTED	EACH	12				4		4		4
67000400 EN	IGINEER'S FIELD OFFICE, TYPE A	CAL MO	8	2		2		2		2	
67100100 MC	DBILIZATION	L SUM	1	0.25		0.25		0.25		0.25	
70100207 TR	AFFIC CONTROL AND PROTECTION, STANDARD 701402	EACH	8	2		2		2		2	
70100450 TR	AFFIC CONTROL AND PROTECTION, STANDARD 701201	LSUM	1	0.25		0.25		0.25		0.25	
70100460 TR	AFFIC CONTROL AND PROTECTION, STANDARD 701306	LSUM	1	0.25		0.25		0.25		0.25	
70100700 TR	AFFIC CONTROL AND PROTECTION, STANDARD 701406	L SUM	1	0.25		0.25		0.25		0.25	
70300100 SH	ORT-TERM PAVEMENT MARKING	FOOT	1420	355		355		355		355	
70300520 PA	VEMENT MARKING TAPE, TYPE III LINE 4"	FOOT	48664	12,136		12,176		12,168		12,184	
70301000 W	ORK ZONE PAVEMENT MARKING REMOVAL	SQFT	16,221	4,045		4,059		4,056		4,061	***************************************
70400100 TE	MPORARY CONCRETE BARRIER	FOOT	486							486	
70400200 RE	LOCATE TEMPORARY CONCRETE BARRIER	FOOT	3366	948		968		964		486	

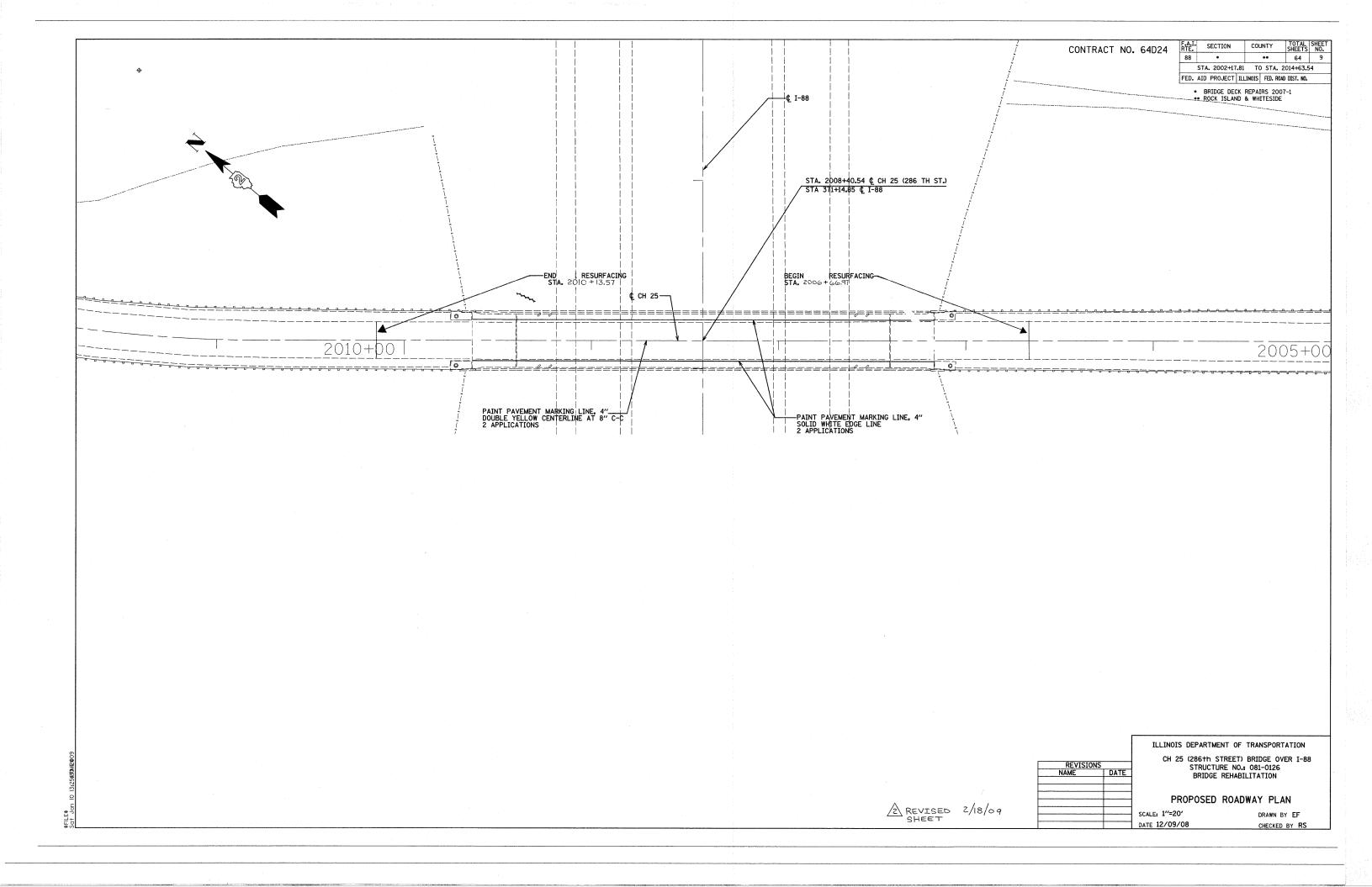
REVISIONS
NAME DATE

A REVISED 2/18/09

ILLINOIS DEPARTMENT OF TRANSPORTATION
BRIDGE REHABILITATION
OVER I-88
ROCK ISLAND AND
WHITESIDE COUNTIES
SUMMARY OF QUANTITIES

SUMMARY OF QUANTITIES

SCALE: NTS DATE 12/09/08 DRAWN BY EF CHECKED BY RS



Existing Plate to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flanae.

Jack and Remove Existing Bearing per special provision "Jack and Remove Existing Bearings." Jack capacity shall be 40 tons per girder.

R Q (k)

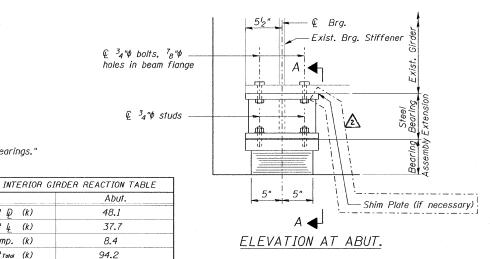
R 4 (k)

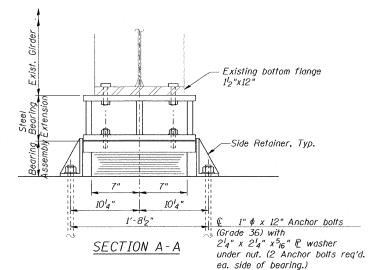
Imp. (k)

R Total (K)

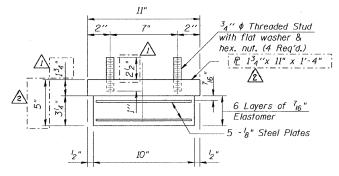
Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Jack and Remove Existing Bearings."

# EXISTING BEARING REMOVAL DETAIL



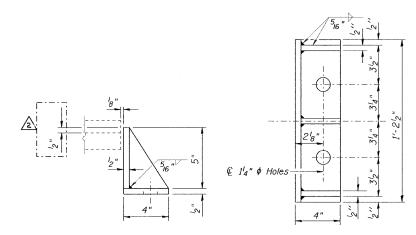


TYPE I ELASTOMERIC EXP. BRG.

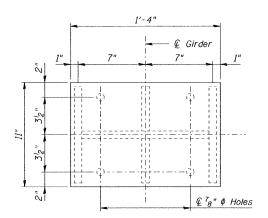


## BEARING ASSEMBLY

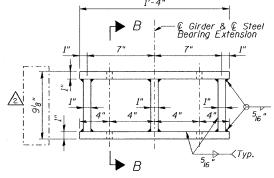
Shim plates shall not be placed under Bearing Assembly.



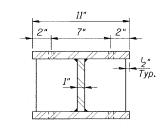
SIDE RETAINER Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN STEEL BEARING EXTENSION



ELEVATION STEEL BEARING EXTENSION



SECTION B-B

#### Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers, shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly and the Steel Bearing Extension shall conform to the requirements of AASHTO M 270 Grade 36.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New Steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

#### BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	8
Elastomeric Bearing Assembly, Type I	Each	8
Anchor Bolts, I"	Each	32
Furnishing and Erecting Structural Steel	Pound	1,520

STEEL BEARING EXTENSION

TYPE I ELASTOMERIC BEARING C.H. 25 (286th STREET) OVER I-88 F.A.I. ROUTE 88 SECTION: BRIDGE DECK REPAIRS 2007-1 ROCK ISLAND COUNTY STATION 2008+40.54 S.N. 081-0126

REVISED 2 2-18-09

4014.09\081-0126(CH26\_50+h Ave.)\00\081-0126-516.

DESIGNED

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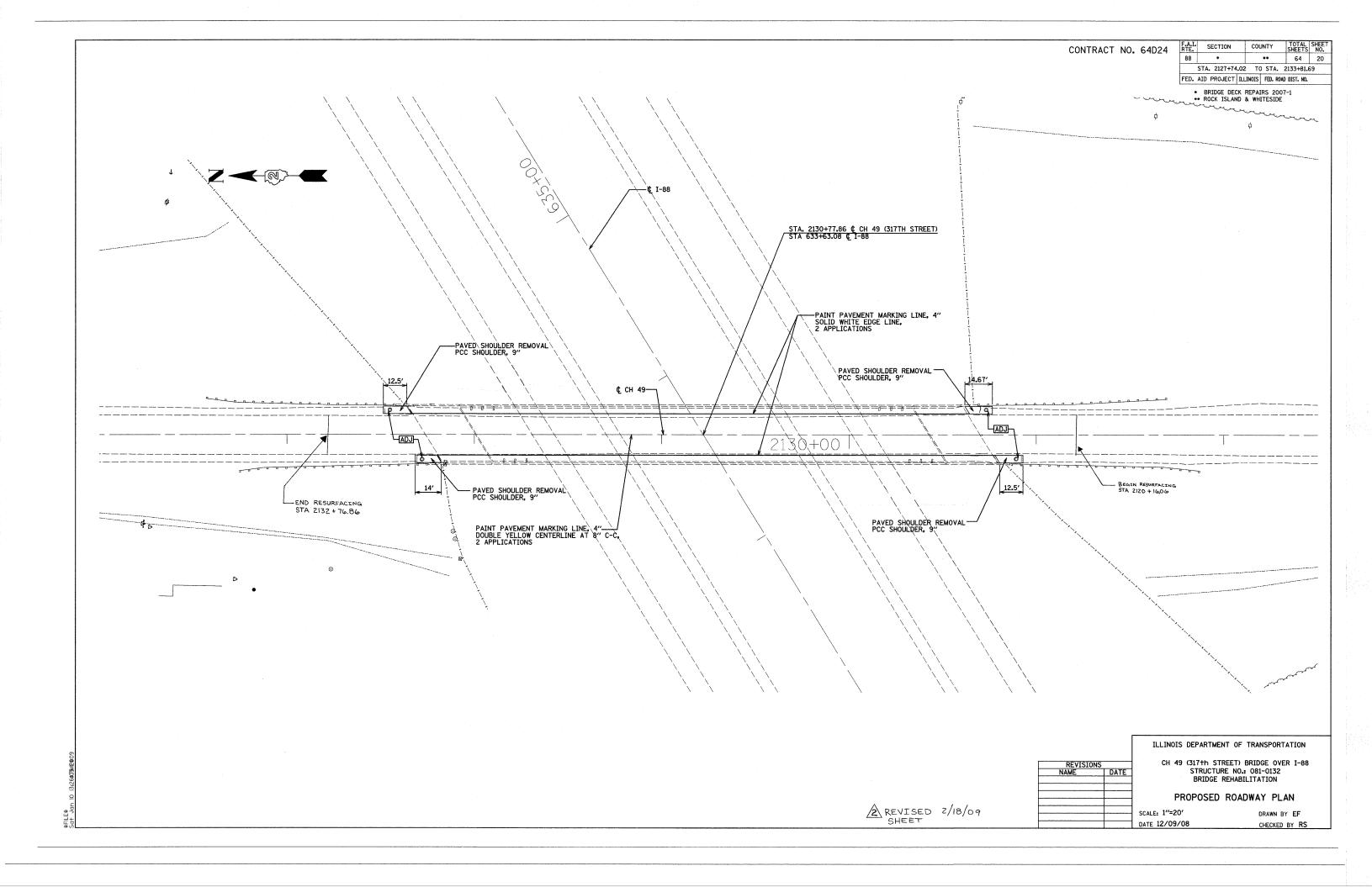
S.D.H. E.E.J.

M.S.M.

S.D.H.

DATE: 12-09-08

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC CHICAGO ILLINOIS



EXISTING BEARING REMOVAL DETAIL

using the air-arc method and grind smooth all weld material remaining on the bottom flanae. Jack and Remove Existing Bearing per special provision "Jack and Remove Existing Bearings."

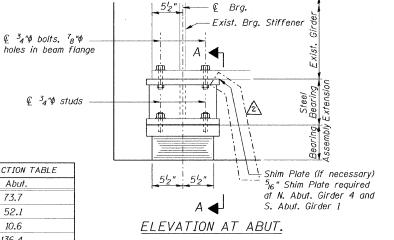
Jack capacity shall be 60 tons per girder. Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Jack and Remove

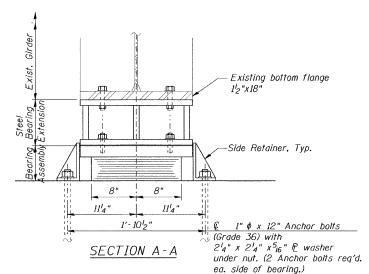
Existing Bearings."

#### INTERIOR GIRDER REACTION TABLE Abut. $R \mathcal{Q} (k)$ 73.7 R 4 (k) 52.1 Imp. (k)10.6 136.4 RTotal (k)

€ 34"\$ bolts, 78"\$

 $\mathcal{Q}^{3}$ 4" $\phi$  studs



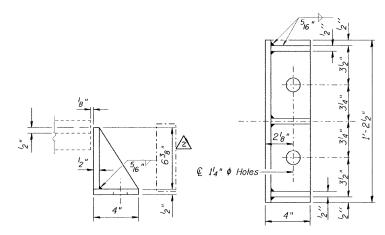


## TYPE I ELASTOMERIC EXP. BRG.

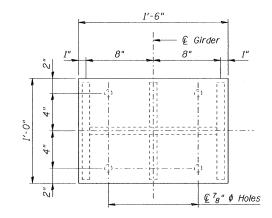
# 3<sub>4</sub>'' ¢ Threaded Stud with flat washer & hex. nut. (4 Reg'd.) P 28"x 1'-0"x 1'-6"! 2 7 Layers of ½" 6 - 1/8" Steel Plates 11"

## BEARING ASSEMBLY

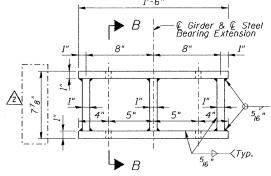
Shim plates shall not be placed under Bearing Assembly.



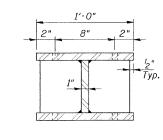
SIDE RETAINER Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN STEEL BEARING EXTENSION



ELEVATION STEEL BEARING EXTENSION



SECTION B-B

#### Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers, shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly and the Steel Bearing Extension shall conform to the requirements of AASHTO M 270 Grade 36.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New Steel extensions, shim plates and connection botts are included with Furnishing and Erecting Structural Steel.

#### BILL OF MATERIAL

Item	Unit	Total
Jack and Remove Existing Bearings	Each	8
Elastomeric Bearing Assembly, Type I	Each	8
Anchor Bolts, 1"	Each	32
Furnishing and Erecting Structural Steel	Pound	1,690

STEEL BEARING EXTENSION

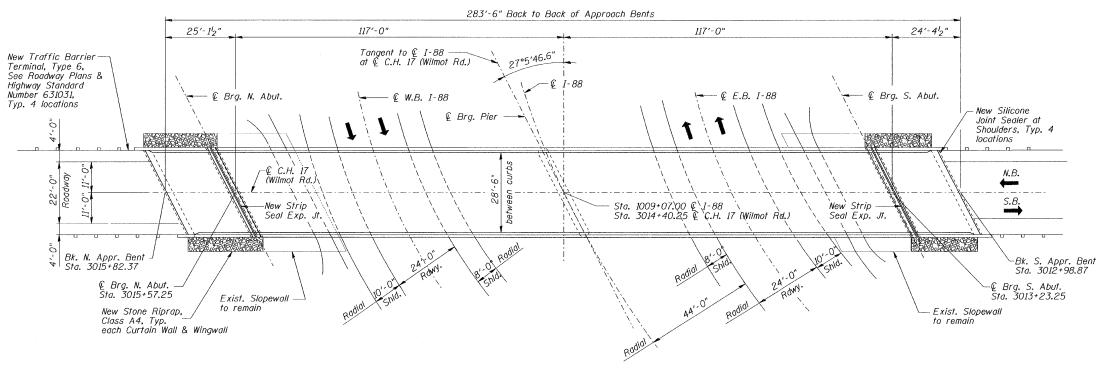
TYPE I ELASTOMERIC BEARING C.H. 49 (317th STREET) OVER I-88 F.A.I. ROUTE 88 SECTION: BRIDGE DECK REPAIRS 2007-1 ROCK ISLAND COUNTY STATION 2130+77.86 S.N. 081-0132

DATE: 12-09-08

2/18/09

S.D.H. E.E.J. CHECKED M.S.M. S.D.H. CHECKED

S+,)\00\08|\_0|32-S27.dgr



### TOTAL BILL OF MATERIAL

 $Z \leftarrow \emptyset \leftarrow \blacksquare$ 

ITEM	UNIT	QUANTITY
STONE RIPRAP, CLASS A4	SQ. YD.	98
FILTER FABRIC	SQ. YD.	98
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	75
HOT-MIX ASPHALT SURFACE REMOVAL (DECK)	SQ. YD.	897
CONCRETE REMOVAL	CU. YD.	8.3
PROTECTIVE SHIELD	SQ. YD.	273
CONCRETE SUPERSTRUCTURE	CU. YD.	9.6
PROTECTIVE COAT	SQ. YD.	24
CLEANING AND PAINTING STEEL BRIDGE NO. 3	L. SUM	1
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 3	L. SUM	1
REINFORCEMENT BARS, EPOXY COATED	POUND	1,420
PREFORMED JOINT STRIP SEAL	FOOT	68
JACK AND REMOVE EXISTING BEARINGS	EACH	8

PLAN

ITEM	UNIT	QUANTITY	
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	8	_ ^
ANCHOR BOLTS, 14"/2	EACH i	16	2
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND i	1690	į
PLUG EXISTING DECK DRAINS	EACH	36	_
SILICONE JOINT SEALER, I"	FOOT	18	
WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	884	
DRAINAGE SCUPPERS, DS-33	EACH	4	
STRUCTURAL REPAIR OF CONCRETE (DEPTH=<5")	SQ. FT.	198	
BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 3	L. SUM	1	
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	21	
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	27	
DECK SLAB REPAIR (PARTIAL)	SQ YD	63	

GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50.

No field welding is permitted except as specified in the contract documents.

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck at the expansion joint, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding 4 in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans and are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work, however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than  $50^{\circ}$  F.

All structural steel at expansion joints shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Preformed Joint Strip Seal.

Quantities for deck slab repair are approximate. Quantity of Deck Slab Repair (Full Depth, Type I) and Deck Slab Repair (Full Depth, Type II) are each assumed to be equal to 2.50% of the deck area. Quantity of Deck Slab Repair (Partial) is assumed to be equal to 7.5% of the deck area. Locations will be determined by the Resident Engineer following removal of the Hot-Mix Asphalt Surface Course. Actual repair locations shall be shown on the as-built plans. Contractor will be paid for the quantity furnished.

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures". All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System 1 -0Z/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.

A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site, see special provision for "Containment and Disposal of Lead Paint Cleaning Residues."

The SSPC QP1 & QP2 certifications will be required for this contract.

Existing plans are available from the District to determine painting quantities.



GENERAL PLAN & ELEVATION
C.H. 17 (WILMOT ROAD) OVER I-88
F.A.I. ROUTE 88
SECTION: BRIDGE DECK REPAIRS 2007-1
WHITESIDE COUNTY
STATION 3014+40.25

S.N. 098-0058
DATE: 12-09-08
GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC.

2 REVISED 2/18/09

n:/jobs2008/plo+\2001-40|4.09\098-0058(Wilmo+ Rd,)\CO\098-0058-9

DESIGNED

CHECKED

CHECKED

DRAWN

S.D.H.

F.F.J.

M.S.M.

S.D.H.

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4.7

Existing Plate to be removed using the air-arc method and grind smooth all weld material remaining on the bottom flange.

Jack and Remove Existing Bearing per special provision "Jack and Remove Existing Bearings." Jack capacity shall be 70 tons per girder.

R Q (k)

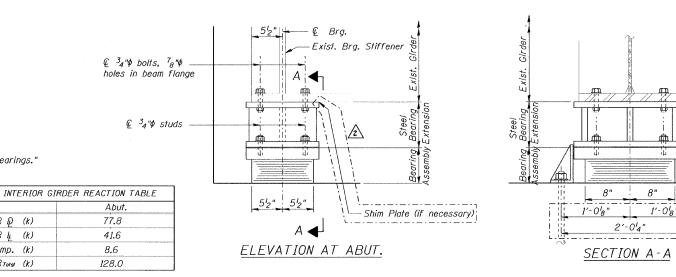
R 4 (k)

Imp. (k)

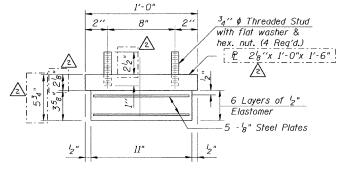
R Total (k)

Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Jack and Remove

# Existing Bearings." EXISTING BEARING REMOVAL DETAIL

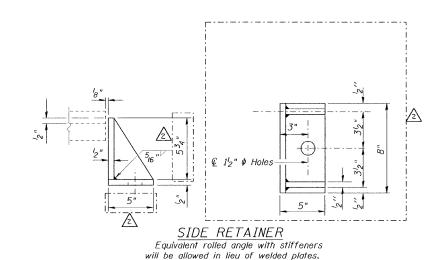


TYPE I ELASTOMERIC EXP. BRG.

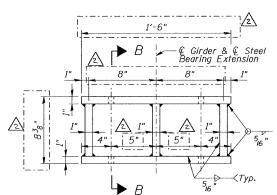


# BEARING ASSEMBLY

Shim plates shall not be placed under Bearing Assembly.







PLAN STEEL BEARING EXTENSION

1'-6"

ELEVATION STEEL BEARING EXTENSION

SECTION B-B

### STEEL BEARING EXTENSION

TYPE I ELASTOMERIC BEARING
C.H. 17 (WILMOT ROAD) OVER I-88
SECTION: BRIDGE DECK REPAIRS 2007-1
WHITESIDE COUNTY
STATION 3014+40.25
S.N. 098-0058
DATE. 12-09-08

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC CHICAGO ILLINOIS

REVISED 2/18/09

DESIGNED S.D.H. E.E.J. CHECKED M.S.M.

S.D.H. CHECKED

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Existing bottom flange

-Side Retainer, Typ.

 $1_4'' \phi \times 15''$  Anchor bolts

 $\frac{2}{3}$  (Grade 36) with  $2\frac{3}{4}$ " x  $2\frac{3}{4}$ " x  $\frac{5}{16}$ "  $\frac{16}{2}$  washer

2

under nut.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers shall be included in the cost of Elastomeric

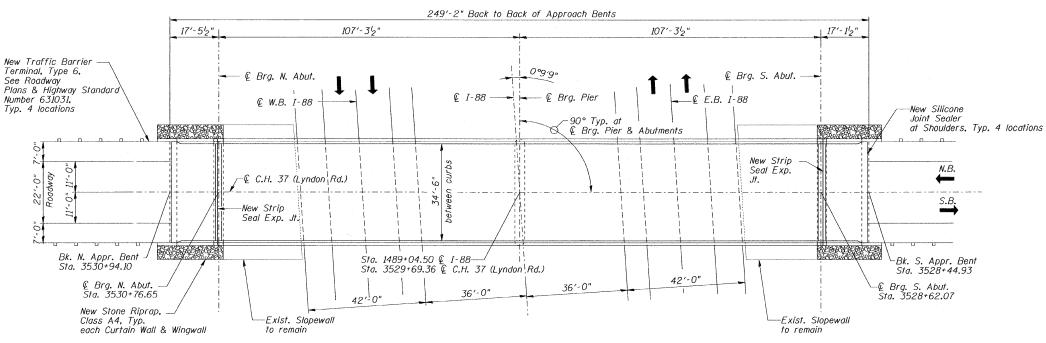
Bearing Assembly, Type I. The structural steel plates of the Bearing Assembly and the Steel Bearing Extension shall conform to the requirements of AASHTO M 270 Grade 36.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and Erecting Structural Steel.

New Steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

#### RILL OF MATERIAL

DILL OF MA	ILMIAL		
Item	Unit	Total	]
Jack and Remove Existing Bearings	Each	8	
Elastomeric Bearing Assembly, Type I	Each	8	
Anchor Bolts, 14" /2	Each i	16	$1i_{\Lambda}$
Furnishing and Erecting Structural Steel	Pound	1,690	1/21



PLAN

### TOTAL BILL OF MATERIAL

Z------

ITEM	UNIT	QUANTITY
STONE RIPRAP, CLASS A4	SQ. YD.	71
FILTER FABRIC	SQ. YD.	71
HOT-MIX ASPHALT SURFACE COURSE, MIX "C", N50	TON	79
HOT-MIX ASPHALT SURFACE REMOVAL (ASBESTOS)	SQ. YD.	951
CONCRETE REMOVAL	CU. YD.	8.1
PROTECTIVE SHIELD	SQ. YD.	299
CONCRETE SUPERSTRUCTURE	CU. YD.	9.3
PROTECTIVE COAT	SQ. YD.	23
CLEANING AND PAINTING STEEL BRIDGE NO. 4	L. SUM	1
CONTAINMENT AND DISPOSAL OF LEAD PAINT CLEANING RESIDUES NO. 4	L. SUM	1
REINFORCEMENT BARS, EPOXY COATED	POUND	1,390
PREFORMED JOINT STRIP SEAL	F00T	73
JACK AND REMOVE EXISTING BEARINGS	EACH	10

ITEM	UNIT	QUANTITY	
ELASTOMERIC BEARING ASSEMBLY, TYPE 1	EACH	10	
ANCHOR BOLTS, 1"	EACH	40	, ,
FURNISHING AND ERECTING STRUCTURAL STEEL	POUND	1920	[2]
PLUG EXISTING DECK DRAINS	EACH .	12	]-
SILICONE JOINT SEALER, 1"	F00T	28	}
WATERPROOFING MEMBRANE SYSTEM	SQ. YD.	937	
DRAINAGE SCUPPERS, DS-33	EACH	4	
STRUCTURAL REPAIR OF CONCRETE (DEPTH=<5")	SQ. FT.	176	
BRIDGE CLEANING AND PAINTING WARRANTY NUMBER 4	L. SUM	1	
DECK SLAB REPAIR (FULL DEPTH, TYPE I)	SQ YD	2	
DECK SLAB REPAIR (FULL DEPTH, TYPE II)	SQ YD	55	
DECK SLAB REPAIR (PARTIAL)	SQ YD	126	]

#### GENERAL NOTES

All structural steel shall be AASHTO M 270 Grade 50.

No field welding is permitted except as specified in the contract

Reinforcement bars shall conform to the requirements of ASTM A 706 Gr 60. See Special Provisions.

Reinforcement bars designated (E) shall be epoxy coated.

Prior to pouring the new concrete deck at the expansion joint, all heavy or loose rust, loose mill scale, and other loose or potentially detrimental foreign material shall be removed from the surfaces in contact with concrete. Tightly adhered paint may remain unless otherwise noted. Removal shall be accomplished by methods that will not damage the steel and the cost will be included in the pay item covering removal of the existing concrete.

As directed by the Engineer, existing construction accessories welded to the top flange of beams and girders shall be removed. The weld areas shall be ground flush and inspected for cracks using magnetic particle testing (MT) or dye penetrant testing (PT) by an individual acceptable to the Engineer. Any cracks that cannot be removed by grinding  $\frac{1}{4}$  in. deep shall be identified and reported to the Bureau of Bridges and Structures for further disposition. The cost of removing welded accessories, grinding and inspecting weld areas and grinding cracks will be paid for according to Article 109.04 of the Standard Specifications.

Plan dimensions and details relative to existing plans and are subject to routine variations. The Contractor shall field verify existing dimensions and details affecting new construction and make necessary approved adjustments prior to construction or ordering of materials. Such variations shall not be cause for additional compensation for a change in the scope of the work. however, the Contractor will be paid for the quantity actually furnished at the unit price bid for the work.

Protective Coat shall not be applied to surfaces to which Waterproofing Membrane System is applied.

The existing structural steel coating contains lead. The Contractor shall take appropriate precautions to deal with the presence of lead on this project.

Joint openings shall be adjusted according to Article 520.04 of the Standard Specifications when the deck is poured at an ambient temperature other than 50° F.

All structural steel at expansion joints shall be shop painted with the inorganic zinc rich primer per AASHTO M300, Type 1. Cost included with Preformed Joint Strip Seal.

Quantities for deck slab repair are approximate. Locations will be determined by the Resident Engineer following removal of the existing Hot-Mix Asphalt Surface Course. Actual repair locations shall be shown on the as-built plans. Contractor will be paid for the quantity furnished.

The existing Hot-Mix Asphalt Surface Course has tested positive for asbestos. Removal and disposal of the existing Hot-Mix Asphalt Surface Course shall be in accordance with the Special Provision for "Asbestos" Waterproofing Membrane or Asbestos Hot-Mix Asphalt Surface Removal".

Cleaning and painting of the existing structural steel shall be as specified in the special provision for "Cleaning and Painting Existing Steel Structures".

All existing steel shall be cleaned per Near White Blast Cleaning - SSPC-SP10. All existing steel shall be painted according to the requirements of Paint System I -OZ/E/U. The color of the final finish coat for all interior steel surfaces shall be Gray, Munsell No. 5B 7/1. The color of the final finish coat for the exterior and bottom flange of the fascia beams shall be Blue, Munsell No. 10B 3/6.

A minimum of 2 air monitors will be required to monitor abrasive blasting operations at this site, see special provision for "Containment and Disposal of Lead Paint Cleaning Residues."

The SSPC QP1 & QP2 certifications will be required for this contract.

Existing plans are available from the District to determine painting quantities.



GENERAL PLAN & ELEVATION C.H. 37 (LYNDON\_ROAD) OVER I-88 F.A.I. ROUTE 88 SECTION: BRIDGE DECK REPAIRS 2007-1 WHITESIDE COUNTY STATION 3529+69.36 S.N. 098-0066 DATE: 12-09-08

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC

REVISED 2/18/09

S.D.H.

E.E.J.

S.D.H.

DESIGNED

DRAWN

CHECKED

Existing Plate to be removed using the air-arc method and grind smooth all weld material remaining on the

Jack and Remove Existing Bearing per special provision "Jack and Remove Existing Bearings." Jack capacity shall be 50 tons per girder.

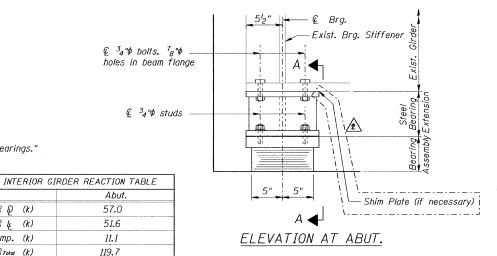
R 4 (k)

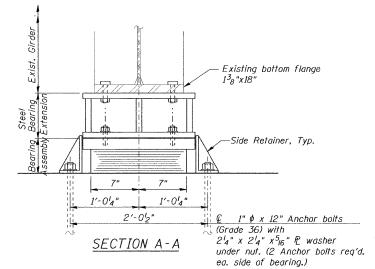
Imp. (k)

R Total (K)

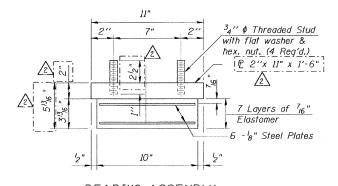
Burn existing anchor bolts flush with existing concrete surface. Grind existing anchor bolt smooth and seal with epoxy. Cost is incidental to "Jack and Remove Existing Bearings."

# EXISTING BEARING REMOVAL DETAIL



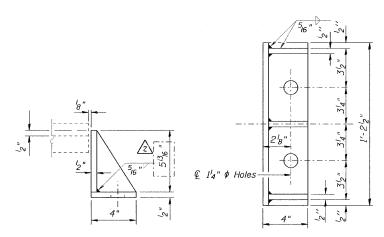


TYPE I ELASTOMERIC EXP. BRG.

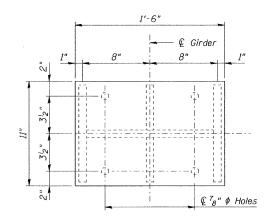


BEARING ASSEMBLY

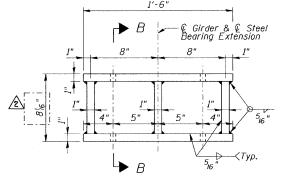
Shim plates shall not be placed under Bearing Assembly.



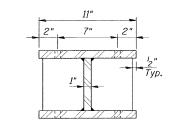
SIDE RETAINER Equivalent rolled angle with stiffeners will be allowed in lieu of welded plates.



PLAN STEEL BEARING EXTENSION



ELEVATION STEEL BEARING EXTENSION



SECTION B-B

#### Notes:

Anchor bolts shall be ASTM F1554 all-thread (or an Engineer-approved alternate material) of the grade(s) and diameter(s) specified. ASTM A307 Grade C anchor bolts may be used in lieu of ASTM F1554 Grade 36 (Fy=36ksi). The corresponding specified grade of AASHTO M314 anchor bolts may be used in lieu of ASTM F1554.

Drilled and set anchor bolts shall be installed according to Article 521.06 of the Standard Specifications.

Side retainers shall be included in the cost of Elastomeric Bearing Assembly, Type I.

The structural steel plates of the Bearing Assembly and the Steel Bearing Extension shall conform to the requirements of AASHTO M 270 Grade 36.

Prior to ordering any material, the Contractor shall verify in the field all bearing height and shim thickness dimensions. Diaphragm removal and reinstallation may be required to facilitate drilling holes. Cost included with Furnishing and

Erecting Structural Steel. New Steel extensions, shim plates and connection bolts are included with Furnishing and Erecting Structural Steel.

#### RILL OF MATERIAL

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Item	Unit	Total
Jack and Remove Existing Bearings	Each	10
Elastomeric Bearing Assembly, Type I	Each	10
Anchor Bolts, 1"	Each	40
Furnishing and Erecting Structural Steel	Pound	1,920

STEEL BEARING EXTENSION

TYPE I ELASTOMERIC BEARING C.H. 37 (LYNDON ROAD) OVER I-88 F.A.I. ROUTE 88 SECTION: BRIDGE DECK REPAIRS 2007-1 WHITESIDE COUNTY STATION 3529+69.36 S.N. 098-0066

GRAEF, ANHALT, SCHLOEMER & ASSOCIATES INC CHICAGO ILLINOIS

E.E.J. CHECKED M.S.M. S.D.H.

DESIGNED

S.D.H.

