

A d d e n d u m

Iowa Department of Transportation
Office of Contracts

Date of Letting: March 17, 2015
Date of Addendum: March 13, 2015

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
116	97-0297-048	PCC PAVEMENT - GRADE & REPLACE	WOODBURY	IM-NHS-029-7(048)149--03-97	17MAR116.A02

Make the following changes to the PROPOSAL SCHEDULE OF PRICES:

Change Proposal Line No. 0520 2435-0600020 MANHOLE ADJUSTMENT, MAJOR:

From: 2.000 EACH
To: 3.000 EACH

Change Proposal Line No. 1160 2529-5070110 PATCHES, FULL-DEPTH FINISH, BY AREA:

From: 94.500 SY
To: 117.100 SY

Change Proposal Line No. 1180 2529-5070120 PATCHES, FULL-DEPTH FINISH, BY COUNT:

From: 1.000 EACH
To: 5.000 EACH

Change Proposal Line No. 1290:

From: 2599-9999005 ('EACH' ITEM) MAST ARM SIGN SUPPORT STRUCTURE W/ FOUNDATION, 42'
To: 2599-9999005 ('EACH' ITEM) MAST ARM SIGN SUPPORT STRUCTURE W/ FOUNDATION, 46'

If the above changes are not made, they will be made as shown here.

Make the following changes to the PLAN:

SHEET C.5

Replace Plan Sheet C.5 with the attached Plan Sheet C.5. Revised the ESTIMATED REFERENCE INFORMATION for item 2501-8400171 TEMPORARY SHEET PILES, RETAINING WALL to include the following note:

Contractor is responsible for repairing utilities damaged by wall construction, at no additional cost to the contracting authority.

Revised the ESTIMATED REFERENCE INFORMATION for item 2435-0600020
MANHOLE ADJUSTMENT, MAJOR to read as follows:

This item involves adjustments to sanitary and storm sewer manholes as encountered during embankment construction. Work includes, but is not limited to, placing and compacting backfill in accordance with standard specifications, cutting walls, adding top portions, and work as described in Tab. 104-5B and Tab. 104-5B_SAN.

SHEET C.7

Replace Plan Sheet C.7 with the attached Plan Sheet C.7. Revised the DESCRIPTION of item 2599-9999005 ('EACH' ITEM) MAST ARM SIGN SUPPORT STRUCTURE W/ FOUNDATION, 42' to 2599-9999005 ('EACH' ITEM) MAST ARM SIGN SUPPORT STRUCTURE W/ FOUNDATION, 46'

Revised the ESTIMATED REFERENCE INFORMATION for item 2599-9999005 ('EACH' ITEM) MAST ARM SIGN SUPPORT STRUCTURE W/ FOUNDATION, 46' to include the following note:

Construction shall meet Iowa Standard Specification 2525.03H.

SHEET M.2

Replace Plan Sheet M.2 with the attached Plan Sheet M.2. Added Structure 852025 and Pipes XSTP01 and XSTP02 to tabulation 104-5B.

SHEET M.3

Replace Plan Sheet M.3 with the attached Plan Sheet M.3. Added Note 24 to tabulation 104-5B.

SHEET N.4

Replace Plan Sheet N.4 with the attached Plan Sheet N.4. Revised station of Mast Arm Sign Support from 2496+00 to 2469+00. Revised roadway offset from 12' to 16'. Revised cantilever arm length from 42' to 46'.

SHEET V.1

Replace Plan Sheet V.1 with the attached Plan Sheet V.1. Added existing pipes to profile view of wall. Added notes 2-5.

ESTIMATE REFERENCE INFORMATION	
Item No.	Item Code
	Description
26	2493-01000000
27	2493-01000020
28	2494-77750000
29	2494-77750005
30	2414-6441000
31	2416-01000018
32	2416-01000024
33	2416-11000024
34	2435-01-30172
35	2435-0130384
36	2435-0130396
37	2435-0140160
38	2435-0140184
39	2435-0140204
40	2435-0140200
41	2435-0140410
42	2435-0140410
43	2435-0140500
44	2435-02508000
45	2435-02510000
46	2435-02510100
47	2435-0251224
48	2435-0251400
49	2435-0251500
50	2435-0251500
51	2435-0251510
52	2435-06000020
53	2435-07000010
54	2501-02000042
55	2501-04000170
	ITEM NO. Item Code Description
Includes 78 CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 78 CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA. Includes 250 CY for Pipe Outlet at Missouri River (851418).	Includes 78 CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 15' 6" CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., and 15' 6" CY for Light Tower Footing at Sta. 2474+10.00 SFR1.
-	See U Sheets. Includes 293 CY For Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.
-	See U Sheets. Includes 9993 LB for Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.
-	Includes 1639 LB for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 1639 LB for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., and 1639 LB for Light Tower Footing at Sta. 2474+10.00 SFR1.
-	STEEL PIPE, PEDESTRIAN HAND RAILING
-	See U Sheets. Includes 28 LF for Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.
APRONS, CONCRETE, 18 IN. DIA. Refer to Tab. 104-56 in the M Sheets.	APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-58 in the M Sheets.
APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-58 in the M Sheets. Refer to Tab. 104-3 in the C Sheets.	APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-BB in the M Sheets. Refer to Tab. 104-3 in the C Sheets.
MANHOLE, SANITARY SEWER, SK-301, 72 IN. MANHOLE, SANITARY SEWER, SK-303, 84 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. Refer to Tab. 104-BB. Notes, and plan and profile in the UTL sheets. Submit shop drawings for Engineer's Ref to Tab. 104-3 in the C Sheets. This item includes 100% of the castings, chimney seals, and structures. Castings and chimney seals are incidental to this bid item.	CULVERT, CONCRETE, ROADWAY PIPE, 24 IN. DIA. Refer to Tab. 104-3 in the C Sheets.
MANHOLE, STORM SEWER, SW-401, 60 IN. MANHOLE, STORM SEWER, SW-401, 84 IN. Refer to Tab. 104-BB in the M Sheets.	MANHOLE, STORM SEWER, SW-402, TOP ONLY MANHOLE, STORM SEWER, SW-402, TOP ONLY Refer to Tab. 104-5B in the M Sheets. To be used in conjunction with SW-545, WELL ONLY.
MANHOLE, STORM SEWER, SW-404 (10' x 10')	MANHOLE, STORM SEWER, SW-404 (10' x 10') MANHOLE, STORM SEWER, SW-404 MODIFIED (10' x 10') MANHOLE, STORM SEWER, SW-404 MODIFIED (12' x 10') Refer to Tab. 104-5B in the M Sheets.
INTAKE, SW-508 INTAKE, SW-510 INTAKE, SW-510 MODIFIED	INTAKE, SW-512, 24 IN. INTAKE, SW-541 INTAKE, SW-545 (12')
INTAKE, SW-512, 24 IN.	INTAKE, SW-545, WELL ONLY INTAKE, SW-545 MODIFIED (12')
STORM SEWER, GRAVITY, MAIN, TRENCHED, 15 IN. This item involves adjustments to sanitary and storm manholes as encountered during embankment construction. Work shall be performed in accordance with standard specifications, cutting walls, adding top portions, and work as described in Tab. 104-5B San.	STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 15 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 18 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 24 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 30 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 36 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 42 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 48 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 72 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 48 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS IV), 48 IN.
TEMPORARY SHEET PILE AND SHORING	TEMPORARY SHEET PILE AND SHORING
The work consists of providing temporary shoring to facilitate construction staging and maintenance of traffic. The Contractor shall submit a temporary shoring plan to the Engineer for approval. The temporary shoring plan shall be designed and certified by a Professional Engineer licensed in the state of Iowa. The Contractor shall not proceed with installation of the temporary shoring without notice to proceed from the Engineer. Includes approximately 400 LF of temporary shoring.	The temporary shoring submittal shall include: Design Calculations (including global stability analysis) Soil properties Shoring material properties Shoring plan layout (including location of traffic)
ITEM NO. Item Code Description	
Includes 78 CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 78 CY for Light Tower Footing at Sta. 105+51.00 Floyd Blvd., 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA. Includes 250 CY for Pipe Outlet at Missouri River (851418).	ITEM NO. Item Code Description
-	ITEM NO. Item Code Description
STRUCTURAL CONCRETE (MISCELLANEOUS) Refer to P sheets. Includes 15' 6" CY for Light Tower footing at Sta. 105+51.00 Floyd Blvd., and 15' 6" CY for Light Tower footing at Sta. 2474+10.00 SFR1.	STRUCTURAL CONCRETE (RCB CULVERT) See U Sheets. Includes 293 CY For Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.
-	REINFORCING STEEL Refer to P sheets. Includes 9993 LB for Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.
-	STEEL PIPE, PEDESTRIAN HAND RAILING
APRONS, CONCRETE, 18 IN. DIA. Refer to Tab. 104-56 in the M Sheets.	APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-BB in the M Sheets.
APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-58 in the M Sheets. Refer to Tab. 104-3 in the C Sheets.	APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-BB in the M Sheets. Refer to Tab. 104-3 in the C Sheets.
MANHOLE, SANITARY SEWER, SK-301, 72 IN. MANHOLE, SANITARY SEWER, SK-303, 84 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. Refer to Tab. 104-BB. Notes, and plan and profile in the UTL sheets. Submit shop drawings for Engineer's Ref to Tab. 104-3 in the C Sheets. This item includes 100% of the castings, chimney seals, and structures. Castings and chimney seals are incidental to this bid item.	CULVERT, CONCRETE, ROADWAY PIPE, 24 IN. DIA. Refer to Tab. 104-3 in the C Sheets.
MANHOLE, STORM SEWER, SW-401, 60 IN. MANHOLE, STORM SEWER, SW-401, 84 IN. Refer to Tab. 104-BB in the M Sheets.	MANHOLE, STORM SEWER, SW-402, TOP ONLY MANHOLE, STORM SEWER, SW-402, TOP ONLY Refer to Tab. 104-5B in the M Sheets. To be used in conjunction with SW-545, WELL ONLY.
INTAKE, SW-508 INTAKE, SW-510 INTAKE, SW-510 MODIFIED	INTAKE, SW-512, 24 IN. INTAKE, SW-541 INTAKE, SW-545 (12')
STORM SEWER, GRAVITY, MAIN, TRENCHED, 15 IN. This item involves adjustments to sanitary and storm manholes as encountered during embankment construction. Work shall be performed in accordance with standard specifications, cutting walls, adding top portions, and work as described in Tab. 104-5B San.	STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 15 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 18 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 24 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 30 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 36 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 42 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS III), 48 IN. STORM SEWER, GRAVITY, MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 20000 (CLASS IV), 48 IN.
TEMPORARY SHEET PILE AND SHORING	TEMPORARY SHEET PILE AND SHORING
The work consists of providing temporary shoring to facilitate construction staging and maintenance of traffic. The Contractor shall submit a temporary shoring plan to the Engineer for approval. The temporary shoring plan shall be designed and certified by a Professional Engineer licensed in the state of Iowa. The Contractor shall not proceed with installation of the temporary shoring without notice to proceed from the Engineer. Includes approximately 400 LF of temporary shoring.	The temporary shoring submittal shall include: Design Calculations (including global stability analysis) Soil properties Shoring material properties Shoring plan layout (including location of traffic)

ESTIMATE REFERENCE INFORMATION			
Item No.	Item Code	Description	Shoring plan layout (including location of traffic)
26	2493-01000000	STRUCTURAL CONCRETE (MISCELLANEOUS) Refer to P sheets. Includes 15' 6" CY for Light Tower footing at Sta. 105+51.00 Floyd Blvd., and 15' 6" CY for Light Tower footing at Sta. 2474+10.00 SFR1.	ITEM NO. Item Code Description
27	2493-01000020	STRUCTURAL CONCRETE (RCB CULVERT) See U Sheets. Includes 293 CY For Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.	Method of Measurement: Lump Sum
28	2494-77750000	REINFORCING STEEL Refer to P sheets. Includes 9993 LB for Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.	Basis of Payment: Full compensation for cost of design, furnishing, installing and removal. All material used for shoring, except as noted to remain, shall remain the property of the Contractor. Shoring is to be removed only after backfilling has been completed. In addition to the requirements noted above, Article 107-07 of the Standard Specifications still applies.
29	2494-77750005	REINFORCING STEEL, EPOXY COATED Refer to P sheets. Includes 9993 LB for Light Tower footing at Sta. 105+51.00 Floyd Blvd., and 15' 6" CY for Light Tower footing at Sta. 2474+10.00 SFR1.	Ref to J Sheets for location and construction notes.
30	2414-6441000	STEEL PIPE, PEDESTRIAN HAND RAILING See U Sheets. Includes 28 LF for Twin 12' x 5' RCB Culvert and Headwall at Sta. 0+01.00 NBSKA.	ITEM NO. Item Code Description
31	2416-01000018	APRONS, CONCRETE, 18 IN. DIA. Refer to Tab. 104-56 in the M Sheets.	Method of Measurement: Lump Sum
32	2416-01000024	APRONS, CONCRETE, 24 IN. DIA. Refer to Tab. 104-58 in the M Sheets.	Basis of Payment: Full compensation for cost of design, furnishing, installing and removal. All material used for shoring shall remain in place. Shoring is to be removed by others after completion of future project. In addition to the requirements noted above, Article 107-07 of the Standard Specifications still applies.
33	2416-11000024	CULVERT, CONCRETE, ROADWAY PIPE, 24 IN. DIA. Refer to Tab. 104-3 in the C Sheets.	Contractor is responsible for repairing utilities damaged by wall construction, at no additional cost to the contracting authority. Refer to V Sheets for location and construction notes.
34	2435-01-30172	MANHOLE, SANITARY SEWER, SK-301, 72 IN. MANHOLE, SANITARY SEWER, SK-303, 84 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. MANHOLE, SANITARY SEWER, SK-303, 96 IN. Refer to Tab. 104-BB. Notes, and plan and profile in the UTL sheets. Submit shop drawings for Engineer's Ref to Tab. 104-3 in the C Sheets. This item includes 100% of the castings, chimney seals, and structures. Castings and chimney seals are incidental to this bid item.	ITEM NO. Item Code Description
35	2435-0130384	CULVERT, CONCRETE, ROADWAY PIPE, 24 IN. DIA. Refer to Tab. 104-BB in the M Sheets.	ITEM NO. Item Code Description
36	2435-0130396	MANHOLE, STORM SEWER, SW-402, TOP ONLY MANHOLE, STORM SEWER, SW-402, TOP ONLY Refer to Tab. 104-5B in the M Sheets. To be used in conjunction with SW-545, WELL ONLY.	ITEM NO. Item Code Description
37	2435-0140160	MANHOLE, STORM SEWER, SW-404 (10' x 10') MANHOLE, STORM SEWER, SW-404 MODIFIED (10' x 10') MANHOLE, STORM SEWER, SW-404 MODIFIED (12' x 10') Refer to Tab. 104-5B in the M Sheets.	ITEM NO. Item Code Description
38	2435-0140184	INTAKE, SW-508 INTAKE, SW-510 INTAKE, SW-510 MODIFIED	ITEM NO. Item Code Description
39	2435-0140204	INTAKE, SW-512, 24 IN. INTAKE, SW-541 INTAKE, SW-545 (12')	ITEM NO. Item Code Description
40	2435-0140200	INTAKE, SW-512, 24 IN. INTAKE, SW-541 INTAKE, SW-545 (12')	ITEM NO. Item Code Description
41	2435-0140410	INTAKE, SW-544 MODIFIED (10' x 10') INTAKE, SW-544 MODIFIED (12' x 10') Refer to Tab. 104-5B in the M Sheets.	ITEM NO. Item Code Description
42	2435-0140410	INTAKE, SW-544 MODIFIED (10' x 10') INTAKE, SW-544 MODIFIED (12' x 10') Refer to Tab. 104-5B in the M Sheets.	ITEM NO. Item Code Description
43	2435-0140500	INTAKE, SW-545 MODIFIED (12')	ITEM NO. Item Code Description
44	2435-02508000	INTAKE, SW-508	ITEM NO. Item Code Description
45	2435-02510000	INTAKE, SW-510 INTAKE, SW-510 MODIFIED	ITEM NO. Item Code Description
46	2435-02510100	INTAKE, SW-512, 24 IN.	ITEM NO. Item Code Description
47	2435-0251224	INTAKE, SW-541 INTAKE, SW-545 (12')	ITEM NO. Item Code Description
48	2435-0251400	INTAKE, SW-541 INTAKE, SW-545 (12')	ITEM NO. Item Code Description
49	2435-0251500	INTAKE, SW-545, WELL ONLY INTAKE, SW-545 MODIFIED (12')	ITEM NO. Item Code Description
50	2435-0251500	INTAKE, SW-545, WELL ONLY INTAKE, SW-545 MODIFIED (12')	ITEM NO. Item Code Description
51	2435-0251510	INTAKE, SW-545 MODIFIED (12')	ITEM NO. Item Code Description
52	2435-06000020	MANHOLE ADJUSTMENT, MAJOR This item involves adjustments to sanitary and storm manholes as encountered during embankment construction. Work shall be performed in accordance with standard specifications, cutting walls, adding top portions, and work as described in Tab. 104-5B San.	ITEM NO. Item Code Description
53	2435-07000010	CONNECTION TO EXISTING MANHOLE Refer to Tab. 104-BB. Notes, and plan and profile in the UTL sheets.	ITEM NO. Item Code Description
54	2501-02000042	PILES, STEEL, HP 10 X 42 Refer to P sheets. Includes 340 LF for Light Tower footing at Sta. 105+51.00 Floyd Blvd., 340 LF for Light Tower footing at Sta. 2474+10.00 SFR1.	ITEM NO. Item Code Description
55	2501-04000170	TEMPORARY SHEET PILE AND SHORING The work consists of providing temporary shoring to facilitate construction staging and maintenance of traffic. The Contractor shall submit a temporary shoring plan to the Engineer for approval. The temporary shoring plan shall be designed and certified by a Professional Engineer licensed in the state of Iowa. The Contractor shall not proceed with installation of the temporary shoring without notice to proceed from the Engineer. Includes approximately 400 LF of temporary shoring.	ITEM NO. Item Code Description
56	2501-04000171	TEMPORARY SHEET PILES, RETAINING WALL The work consists of providing temporary shoring to facilitate construction staging and maintenance of traffic. The Contractor shall submit a temporary shoring plan to the Engineer for approval. The temporary shoring plan shall be designed and certified by a Professional Engineer licensed in the state of Iowa. The Contractor shall not proceed with installation of the temporary shoring without notice to proceed from the Engineer. Includes approximately 288 LF (Wall #525) of steel sheet pile wall exposed face.	ITEM NO. Item Code Description
		Method of Measurement: Lump Sum	Method of Measurement: Lump Sum
		Basis of Payment: Full compensation for cost of design, furnishing, installing and removal. All material used for shoring, except as noted to remain, shall remain the property of the Contractor. Shoring is to be removed only after backfilling has been completed. In addition to the requirements noted above, Article 107-07 of the Standard Specifications still applies.	Basis of Payment: Full compensation for cost of design, furnishing, installing and removal. All material used for shoring, except as noted to remain, shall remain the property of the Contractor. Shoring is to be removed only after backfilling has been completed. In addition to the requirements noted above, Article 107-07 of the Standard Specifications still applies.
		Ref to J Sheets for location and construction notes.	Ref to J Sheets for location and construction notes.
		The temporary shoring submittal shall include: Design Calculations (including global stability analysis) Soil properties Shoring material properties Shoring plan layout (including location of traffic)	The temporary shoring submittal shall include: Design Calculations (including global stability analysis) Soil properties Shoring material properties Shoring plan layout (including location of traffic)
		Contracting authority. Refer to V Sheets for location and construction notes.	Contracting authority. Refer to V Sheets for location and construction notes.
		Includes approximately 288 LF of temporary shoring.	Includes approximately 288 LF of temporary shoring.
		Ref to Tab. 104-14 in the C sheets.	Ref to Tab. 104-14 in the C sheets.
		- REMOVE STORM SEWER PIPE LESS THAN OR EQUAL TO 36 IN.	- REMOVE STORM SEWER PIPE GREATER THAN 36 IN.
		Ref to Tab. 104-5B in the M sheets.	Ref to Tab. 104-5B in the M sheets.
		- SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 37500 (CLASS V), 48 IN.	- SANITARY SEWER GRAVITY MAIN, TRENCHED, REINFORCED CONCRETE PIPE (RCP), 37500 (CLASS V), 48 IN.
		For moisture content and compaction during placement. Couplings, concrete collars, final cleaning, and inspection shall be incidental to this bid item. Concrete collars shall be constructed per the standard road plan. Pipe embedment shall be per the standard road plan. Trench excavations greater than 20' shall have side	For moisture content and compaction during placement. Couplings, concrete collars, final cleaning, and inspection shall be incidental to this bid item. Concrete collars shall be constructed per the standard road plan. Pipe embedment shall be per the standard road plan. Trench excavations greater than 20' shall have side

ENGLISH IOWA DOT DESIGN TEAM Tymkowicz HDR\HR Green Inc.

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WOODBURY COUNTY PROJECT NUMBER IM-NHS-029-07-(48)149 - 03 - 97

SHEET NUMBER C.5

3/17/2015

ESTIMATE REFERENCE INFORMATION			
Item No.	Item Code	Description	
109	2527-9263131	Quantity includes first application plus a 5% allowance. Total quantity is Division 1. WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS Refer to Tab. 108-22 in the C sheets and the J sheets for details and locations of markings.	Refer to Tab. 108-22 in the C sheets and the J sheets for details and locations of markings.
110	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED Refer to J Sheets and Tab. 108-29 on the C Sheets for details and locations of applications.	Total quantity is Division 1.
111	2527-9263180	PAVEMENT MARKINGS REMOVED Refer to J Sheets and Tab. 108-22R in the C Sheets.	Total quantity is Division 1.
112	2528-840848	TEMPORARY BARRIER RAIL, CONCRETE Refer to J Sheets and Tab. 108-33 on C Sheets.	Unless otherwise stated in the plans, TBR shall be returned to the Riverside exit storage area.
113	2528-8445116	TRAFFIC CONTROL Refer to Traffic Control Plan on J Sheets. Includes Arrow Display Panels shown in the J Sheets and Standard Road Plans listed. Includes signing and devices to remain, as specified in the J Sheets.	Item includes 1433.3 LF of TBR that will become the property of Iowa DOT. Item includes an estimated nearly new condition and must be approved by the Engineer prior to placement. Contractor will be responsible for moving concrete temporary barrier rail to and from the site.
114	2528-9298050	PORTABLE DYNAMIC MESSAGE SIGN (PDM) Includes 3 PDM units in Stage 1, 2 and 2 PDM units in Stage 3.	Contractor will be responsible for furnishing all labor, equipment, and materials required to remove each light pole and associated auger style footing.
115	2529-2242304	CD JOINT ASSEMBLY, EACH 116 2529-5076110 PATCHES, FULL-DEPTH FINISH, BY AREA (50 FEET OR GREATER IN LENGTH) 117 2529-5076111 PATCHES, FULL-DEPTH FINISH, BY COUNT 118 2529-5076120 PATCHES, FULL-DEPTH FINISH, BY COUNT SUBBASE (PATCHES) 119 2529-8174910 Refer to Tab. 108-6C on C sheets.	Includes 300 LF of 6" standard curb. Existing pavement is 7" or 8" PCC pavement with 2" aggregate base. Restoring pavement markings is considered incidental to bid item.
120	2533-1498005	MOBILIZATION	Restoring pavement markings is considered incidental to bid item.
121	2551-8000110	TEMP CRASH CUSHION Refer to Traffic Control Plans on J Sheets and Tab 108-30 on C Sheets.	Includes 1 to become property of Iowa Dot.
122	2551-8000130	TEMP CRASH CUSHION, SEVERE USE (SU) Refer to Traffic Control Plans on J Sheets and Tab 108-30 on C Sheets.	Includes 1 to become property of Iowa Dot.
123	2554-0112008	WATER MAIN, TRITCHED, DUCTILE IRON PIPE (DIP), 8 IN. Refer to Tab. 104-5A (W), notes in the C Sheets, and plan and profile in the UTL Sheets.	Includes 1 to become property of Iowa Dot.
124	2554-0203000	FITTINGS BY WEIGHT, DUCTILE IRON Refer to Tab. 108-12 F1 in the C Sheets.	Contractor shall notify property owners a minimum of 24 hours in advance of shutdowns.
125	2554-0207008	VALVE, GATE, DIP, 8 IN. This bid item includes valve body, stem extension if necessary, and mechanical joint restrainer glands, and materials necessary for installation or valve in accordance with contract documents.	This bid item includes valve body, stem extension if necessary, and mechanical joint restrainer glands. This shall be considered full compensation for furnishing all tools, equipment, and materials necessary for installation of hydrant assembly in accordance with contract documents.
126	2554-0210201	PIPE HYDRANT ASSEMBLY, 100-201 Refer to Tabs. 104-11, W, and 108-11A (W) in the C Sheets. Refer to the UTL Sheets for hydrant locations and water main depth. Some assemblies may require extensions due to deeper water main. Contractor to verify and provide length required. Tracer wire location station is incidental to this bid item. This shall be considered full compensation for furnishing all tools, equipment, and materials necessary for installation of hydrant assembly in accordance with contract documents.	Contractor will be responsible for additional information. The contractor will be paid the contract lump sum price for transport and delivery of all of the identified materials and equipment to the designated stockpile location. Payment is full compensation for furnishing all labor, equipment, and materials required to load at the project site, transport, and unload identified materials/equipment at the delivery site.
127	2555-0999003	'CUBIC YARD' ITEM, C STONE Refer to Tab. 108-24. C-Stone shall be a manufactured aggregate made from class C fly ash. Contractor to supply and place a 12" thick C-Stone layer in maximum loose lifts of 4 inches for hand compaction equipment and 6 inches for riding compaction equipment. C-Stone shall be compacted to a minimum of 95 percent of ASTM D68 and moisture conditioned to within minus 3 percent to plus 2 percent of optimum moisture content as determined	Contractor will be paid the contract unit price for furnishing all labor, equipment, and materials necessary for the abandonment of pipe, cap, restrainer glands, and filling of annular space with flowable mortar.

ESTIMATE REFERENCE INFORMATION

Description

ESTIMATE REFERENCE INFORMATION			
Item No.	Item Code	Description	
109	2527-9263131	Quantity includes first application plus a 5% allowance. Total quantity is Division 1. WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS Refer to Tab. 108-22 in the C sheets and the J sheets for details and locations of markings.	Quantity includes first application plus a 5% allowance. Total quantity is Division 1. WET RETROREFLECTIVE REMOVABLE TAPE MARKINGS Refer to Tab. 108-22 in the C sheets and the J sheets for details and locations of markings.
110	2527-9263137	PAINTED SYMBOLS AND LEGENDS, WATERBORNE OR SOLVENT-BASED Refer to J Sheets and Tab. 108-29 on the C Sheets for details and locations of applications.	Total quantity is Division 1.
111	2527-9263180	PAVEMENT MARKINGS REMOVED Refer to J Sheets and Tab. 108-22R in the C Sheets.	Total quantity is Division 1.
112	2528-840848	TEMPORARY BARRIER RAIL, CONCRETE Refer to J Sheets and Tab. 108-33 on C Sheets.	Unless otherwise stated in the plans, TBR shall be returned to the Riverside exit storage area.
113	2528-8445116	TRAFFIC CONTROL Refer to Traffic Control Plan on J Sheets. Includes Arrow Display Panels shown in the J Sheets and Standard Road Plans listed. Includes signing and devices to remain, as specified in the J Sheets.	Item includes 1433.3 LF of TBR that will become the property of Iowa DOT. Item includes an estimated nearly new condition and must be approved by the Engineer prior to placement. Contractor will be responsible for moving concrete temporary barrier rail to and from the site.
114	2528-9298050	PORTABLE DYNAMIC MESSAGE SIGN (PDM) Includes 3 PDM units in Stage 1, 2 and 2 PDM units in Stage 3.	Contractor will be responsible for furnishing all labor, equipment, and materials required to remove each light pole and associated auger style footing.
115	2529-2242304	CD JOINT ASSEMBLY, EACH 116 2529-5076110 PATCHES, FULL-DEPTH FINISH, BY AREA (50 FEET OR GREATER IN LENGTH) 117 2529-5076111 PATCHES, FULL-DEPTH FINISH, BY COUNT 118 2529-5076120 PATCHES, FULL-DEPTH FINISH, BY COUNT SUBBASE (PATCHES) 119 2529-8174910 Refer to Tab. 108-6C on C sheets.	Includes 300 LF of 6" standard curb. Existing pavement is 7" or 8" PCC pavement with 2" aggregate base. Restoring pavement markings is considered incidental to bid item.
120	2533-1498005	MOBILIZATION	Restoring pavement markings is considered incidental to bid item.
121	2551-8000110	TEMP CRASH CUSHION Refer to Traffic Control Plans on J Sheets and Tab 108-30 on C Sheets.	Includes 1 to become property of Iowa Dot.
122	2551-8000130	TEMP CRASH CUSHION, SEVERE USE (SU) Refer to Traffic Control Plans on J Sheets and Tab 108-30 on C Sheets.	Includes 1 to become property of Iowa Dot.
123	2554-0112008	WATER MAIN, TRITCHED, DUCTILE IRON PIPE (DIP), 8 IN. Refer to Tab. 104-5A (W), notes in the C Sheets, and plan and profile in the UTL Sheets.	Includes 1 to become property of Iowa Dot.
124	2554-0203000	FITTINGS BY WEIGHT, DUCTILE IRON Refer to Tab. 108-12 F1 in the C Sheets.	Contractor shall notify property owners a minimum of 24 hours in advance of shutdowns.
125	2554-0207008	VALVE, GATE, DIP, 8 IN. This bid item includes valve body, stem extension if necessary, and mechanical joint restrainer glands, and materials necessary for installation or valve in accordance with contract documents.	This bid item includes valve body, stem extension if necessary, and mechanical joint restrainer glands. This shall be considered full compensation for furnishing all tools, equipment, and materials necessary for installation of hydrant assembly in accordance with contract documents.
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127	2555-0999003	'CUBIC YARD' ITEM, C STONE Refer to Tab. 108-24. C-Stone shall be a manufactured aggregate made from class C fly ash. Contractor to supply and place a 12" thick C-Stone layer in maximum loose lifts of 4 inches for hand compaction equipment and 6 inches for riding compaction equipment. C-Stone shall be compacted to a minimum of 95 percent of ASTM D68 and moisture conditioned to within minus 3 percent to plus 2 percent of optimum moisture content as determined	Contractor will be paid the contract unit price for furnishing all labor, equipment, and materials necessary for the abandonment of pipe, cap, restrainer glands, and filling of annular space with flowable mortar.

STORM SEWER**INTAKES AND UTILITY ACCESSES**

PIPS
 Design length, Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 3 ft length is added to each side of the design length to account for estimated length to center of structures.

No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade	Bottom Well	Other	Notes	Line Number	Intake/ Utility Access No.	Class 'D'	Design Length	Slope %	Flow Lines		Inlet Elevation	Outlet Elevation	Other Elevation	Pipe Profile Sheet No.	Notes	
												From	To	Bid* Length	FT				
851562	6+94.5, 17.77' RT (S15848_NEBA)	Connection to Existing Manhole	F=1082.45	N/A		Notes 1, 4, 19	p-851562	851562	851563	3750	96	15.0	12.0	1.60	1082.45	1082.26	M.13	Notes 1, 19	
851563	6+88.98, 0.98' RT (S15848_NEBA)	RF-13	F=1082.26	N/A		Note 28	p-851563	851563	851564	3750	96	12.0	112.0	1.60	1082.26	1080.47	M.13	Note 1	
851564	5+68.98, 0.98' RT (S15848_NEBA)	RF-13	F=1088.47	N/A		Note 29	p-851564	851564	851565	3750	96	271.0	268.0	1.60	1088.47	1076.18	M.12,M.13		
851565	3+70.46, 3.35' LT (S15848_NEBA)	RF-13	F=1088.70	SW-541	SW-541 (24") (Type 3E casting)	2083.50	T099	1510	2000	18	65.0	58.8	1.00	1084.00	1083.41	M.18			
851566	3+88.98, 4.33' LT (S15848_NEBA)	RF-13	F=1087.80	SW-542	SW-542 (24") (Type 3E casting)	1892.50	Note 1	1010	851565	851565	3000	18	43.0	36.9	1.00	1083.00	1082.63	M.18	Note 1
851567	2+34.98, 0.98' RT (S15848_NEBA)	RF-13	F=1094.11	SW-544	Modified (12" x 24")	1891.90	Note 1, 4, 6, 9	1014	851565(x4)	851565	3000	48	1164.0	288.0	1.60	1074.61	1070.90	M.12	Notes 3, 4, 22
851568	6+84.98, 0.98' RT (S15848_NEBA)	RF-13	F=1091.73	SW-545	Structure Outlet at River	1891.35	Note 14	1015	851566	851566	2000	24	27.0	24.0	1.00	1087.78/-	1087.54	M.18	Note 2
851569	6+96.98, 0.98' RT (S15848_NEBA)	RF-13	F=1076.00	N/A		Note 4													
851570	5+76.82, 15.96' RT (S15848_NEBA)	SW-211	F=1090.26	N/A		Note 14	p-851569	851569	851570	2000	18	32.0	32.0	0.65/-	1096.26/-	1096.05+/-	M.18	Note 1	
851571	5+74.56, 15.96' LT (S15848_NEBA)	SW-211	F=1090.05	N/A		Note 14													
851572	5+42.32, 16.67' RT (S15848_NEBA)	SW-211	F=1090.54	N/A		Note 14	p-851571	851571	851572	2000	18	40.0	40.0	1.43+/-	1096.54+/-	1089.97+/-	M.18	Note 1	
851573	5+71.81, 16.61' LT (S15848_NEBA)	SW-211	F=1089.97	N/A		Note 14													
852025	2489+18.37, 26.00' RT (SFRNT1)	Manhole Adjustment, Major	Ex=1092.57	N/A		Notes 1, 24	XSTP01	852025	852025	852025	48 RC	-	-	-	-	1079.21	-	Note 5	
							XSTP02	852025	-	58.5 x 36	RCAP	-	-	-	-	1076.28	-		

STORM SEWER**INTAKES AND UTILITY ACCESSES**

PIPES									
Design length Slope, and Flowlines are calculated from inside wall to inside wall along CL of pipe. An additional 3 ft length is added to each side of the design length to account for estimated length to center of structures.									
No.	Location Station and Offset	*Type or Standard Road Plan	Form Grade	Bottom Well	Other	Notes	Line Number	Utility Access No.	Pipe Size
							From	To	From FT
									FT
									Elevation
									Inlet Elevation
									Outlet Elevation
									Other Elevation
									Profile Sheet No.
									Notes
NOTES:									
1	Funding Source - Division 1 (Iowa DOT)								
2	Funding Source - Division 2 (Shared)								
3	Funding Source - Split funding source; Division 1 = 704', Division 2 = 499'								
4	Refer to U-sheets for Modified Standard Road Plans and Special Details								
5	For Information Only - U.A.C.								
6	Use SK-602, Type E Casting								
7	Use SK-602, Type F Casting								
8	Field verify existing pipe size/elevation. Connection of existing pipe shall be incidental to the associated proposed structure, including field bends as-needed.								
9	Offset or rotate riser sections and/or manhole opening to direction given in "Other" column. Station location refers to center of structure rather than center of casting. Steps shall be provided on continuous, vertical wall for full height of structure.								
10	Future Structure by others. Intended for pipe stub-out alignment purposes only. Given station location is pipe connection location at future structure, rather than future structure station location.								
11	Pipe stub-out from adjacent structure is for connecting future drainage system (by others). Construct cap at upstream end of pipe stub-out. Construct per RF-21, Concrete Pipe Cap, with cap thickness and reinforcing requirements to be at least equivalent to Class 2000 RCP of same size as adjacent pipe, and in a manner that enables removal without pipe damage in the future. Method to be approved by Engineer. Placement of cap is incidental to pipe construction. Other Elevation = FL elevation at upstream end of pipe stub.								
12	RF-3, Type 2 Apron shall be constructed per Road Design Detail 1407 - Detail of Special End Wall; See B-sheets. Apron slope shall match slope of adjacent proposed pipe.								
13	Interim top required with bottom well, paid for with SW-402, Top Only Bid Item. Keyed construction joint shall be provided along all 4 sides of bottom well, rather than 3, as detailed on Standard Road Plan SK-545. Two layers of roofing felt shall be provided at interface between bottom well and interim top for ease of removal with future project, by others. Interim top shall be constructed in accordance with "top" details shown in Standard Road Plan SK-402, without the 2" diameter opening. FG = Elevation of interim top section.								
14	Connection to be SW-211, Type PC-2 Concrete Collar Connection. Connection is considered incidental to associated proposed pipe construction. Adjacent proposed pipe lengths are measured to centerline of connection.								
15	Top section of structure to be minimum 1.5' below casting rim elevation to maintain minimum depth / clearance requirements.								
16	Intakes shall be constructed with keyed construction joint, as detailed on Standard Road Plan SK-545. Two layers of roofing felt shall be provided at interface of this construction joint for ease of removal / adjustment with future project, by others.								
17	Refer to U-sheets for detail "Storm Sewer Pipe P-85417" at Missouri River". Required footing shall be incidental to pipe construction. RF-14, Type 2 (Connected Pipe Joint) shall be used for two joints, and are incidental to pipe construction. Excavation and Revertment are paid for with Excavation, Class 26" and Revertment, Class B" Bid Items, respectively.								
18	Use of RF-14, Type 2 (Connected Pipe Joints) required for apron / pipe joint and next upstream joint in pipe (2 joints).								
19	Connection of proposed 96" RCP (P-851562) to Existing Structure (SK-546), is paid for with item "Connection to Existing Manhole". Concrete invert shall be constructed in structure and shall be considered incidental to the connection. Following 90° outfall corner of Pierce St. / Gordon Dr. intersection. Remover 1/2" steel reducer plate from upstream end of pipe (W). Reducer plate is located inside manhole at SE corner of Pierce St. / Gordon Dr. intersection. Removal of reducer plate shall be considered incidental to "Connection to Existing Manhole".								

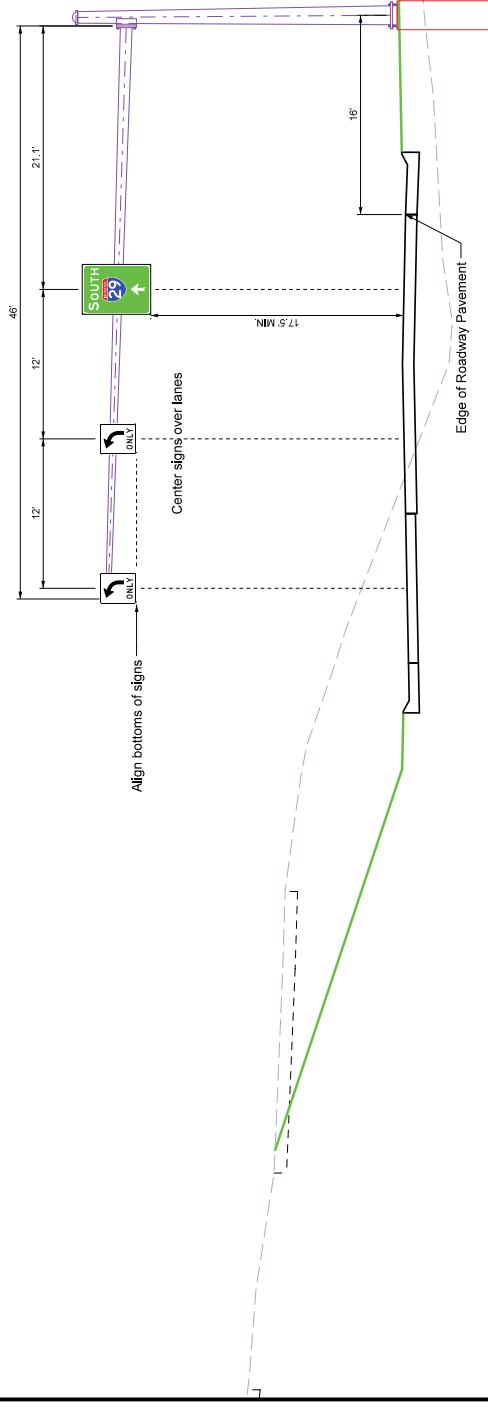
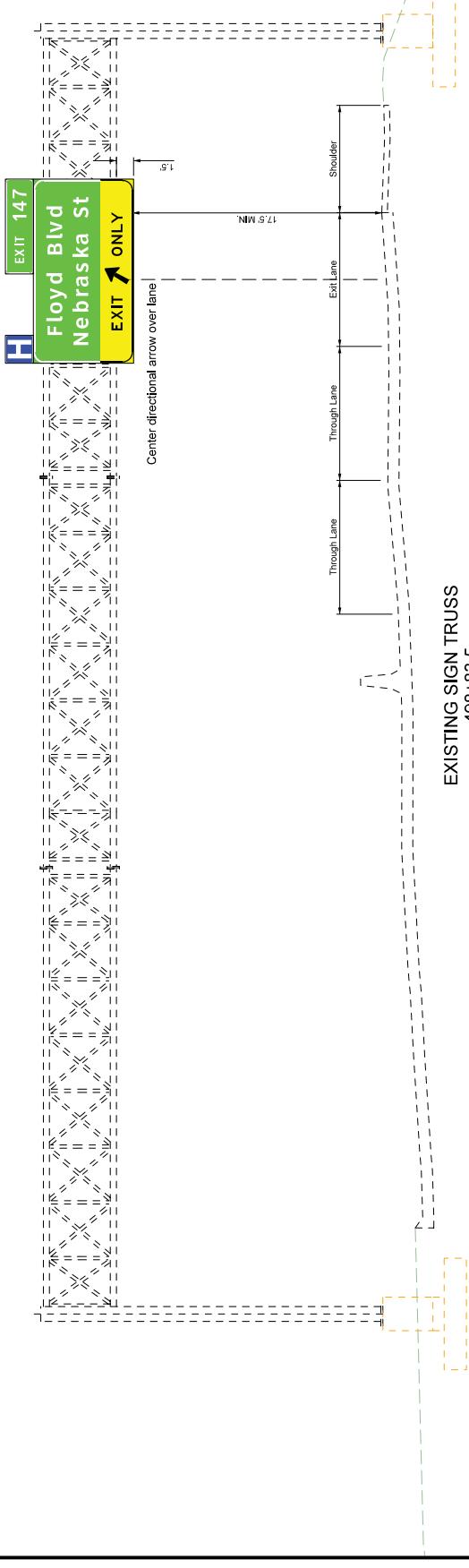
NOTES:

1 Funding Source - Division 1 (Iowa DOT)
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 4 Refer to U-sheets for Modified Standard Road Plans and Special Details
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 6 Use SK-602, Type E Casting
 7 Use SK-602, Type F Casting
 8 Field verify existing pipe size/elevation. Connection of existing pipe shall be incidental to the associated proposed structure, including field bends as-needed.
 9 Offset or rotate riser sections and/or manhole opening to direction given in "Other" column. Station location refers to center of structure rather than center of casting. Steps shall be provided on continuous, vertical wall for full height of structure.
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FILE NO.	ENGLISH	DESIGN TEAM JORGENSEN \ KENTON	WOODBURY COUNTY	PROJECT NUMBER	IM-NHS-029-7148149--03-97	SHEET NUMBER	N.4
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