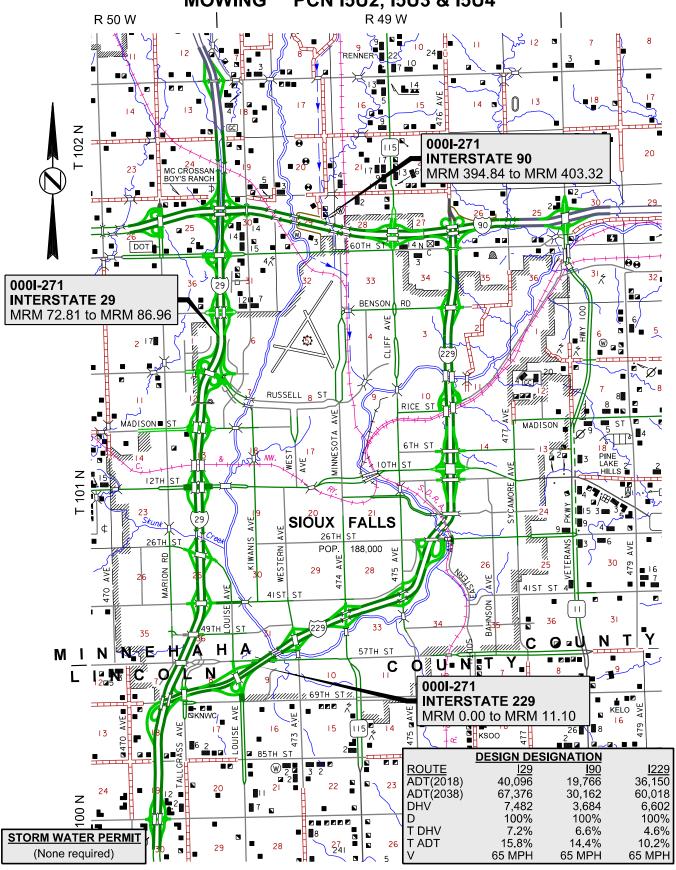
000I-271 INTERSTATES 29, 90 & 229 MINNEHAHA & LINCOLN COUNTIES MOWING PCN I5U2, I5U3 & I5U4



Sheet 1 of 48

INDEX OF SHEETS

Sheet 1 Layout Map

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ESTIMATE OF QUANTITIES

2020 PCN I5U2

Bid Item Number	ltem	Quantity	Unit
009E0197	Mobilization 1	1	Each
900E2300	Mowing (Total of all 3 Mowing Cycles)	4263.9	Acre

2021 PCN I5U3

Bid Item Number	ltem	Quantity	Unit
009E0198	Mobilization 2	1	Each
900E2300	Mowing (Total of all 3 Mowing Cycles)	4355.7	Acre

2022 PCN I5U4

Bid Item Number	ltem	Quantity	Unit
009E0199	Mobilization 3	1	Each
900E2300	Mowing (Total of all 3 Mowing Cycles)	4290	Acre

SPECIFICATIONS

Standard Specifications for Roads and Bridges, 2015 Edition and Required Provisions, Supplemental Specifications and Special Provisions as included in the Proposal.

000I-271 MINNEHAHA & LINCOLN COUNTIES TABLE OF MOWING IN 2020 - PCN I5U2

			AN	INUAL MO	WING ACR	ES
LOCA	TION		1ST	2ND	3RD	2020
		AREA TO BE MOWED IN 2020	MOWING	MOWING	MOWING	2020
MRM TO	OWKW		CYCLE	CYCLE	CYCLE	TOTALS:
		129				
72.81	74.01	Tea Interchange Exit 73	35.9	35.9	35.9	107.7
74.01	74.65	Between Exit 73 and Exit 75	15.7	15.7	15.7	47.1
74.65	75.74	I29 Systems Interchange Exit 75	48.0	48.0	48.0	144.0
75.74	76.24	Between Exit 75 and 57th Street	8.7	8.7	8.7	26.1
76.24	77.05	Between 57th Street and 41st Street	18.2	18.2	18.2	54.6
77.05	77.81	41st Street Interchange Exit 77	21.9	21.9	21.9	65.7
77.81	78.34	26th Street Interchange Exit 78	32.1	32.1	32.1	96.3
78.34	78.82	Between 26th Street and 12th Street	7.5	7.5	7.5	22.5
78.82	79.53	12th Street Interchange Exit 79	17.3	17.3	17.3	51.9
79.53	80.02	Between 12th Street and Madison Street	13.0	13.0	13.0	39.0
80.02	80.73	Madison Street Interchange Exit 80	23.8	23.8	23.8	71.4
80.73	82.00	Russell Street Interchange Exit 81	84.0	84.0	84.0	252.0
82.00	82.77	Benson Road Interchange Exit 82	22.3	22.3	22.3	66.9
82.77	83.89	60th St North Interchange Exit 83	81.1	81.1	81.1	243.3
83.89	84.55	I29 Systems Interchange Exit 84	42.3	42.3	42.3	126.9
84.55	85.98	Between Exit 84 and Exit 86	71.3	71.3	71.3	213.9
85.98	85.96	Renner Interchange Exit 86	52.5	52.5	52.5	157.5
		I29 TOTALS:	595.6	595.6	595.6	1786.8
		190				
394.84	396.10	Marion Road Interchange Exit 395	75.6	75.6	75.6	226.8
396.10	396.98	I90 Systems Interchange Exit 396	33.3	33.3	33.3	99.9
396.98	397.85	Between Kiwanis Avenue and Big Sioux River	26.8	26.8	26.8	80.4
397.85	399.11	Between Big Sioux River and Cliff Avenue	35.0	35.0	35.0	105.0
399.11	400.16	Cliff Avenue Interchange Exit 399	28.1	28.1	28.1	84.3
400.16	401.00	I90 Systems Interchange Exit 400	40.6	40.6	40.6	121.8
401.00	401.86	Between Exit 400 and Exit 402	24.8	24.8	24.8	74.4
401.86	403.32	Hwy 100 Interchange Exit 402	55.0	55.0	55.0	165.0
		I90 TOTALS:	319.2	319.2	319.2	957.6
		1229				
0.00	0.08	I229 Systems Interchange	53.9	53.9	53.9	161.7
0.08	0.39	Between Solberg Avenue and Louise Avenue	7.3	7.3	7.3	21.9
0.39		Louise Avenue Interchange Exit 1C	78.3			
1.26	1.81	Between Louise Avenue and Western Avenue	21.4	21.4		64.2
1.81	2.36	Western Avenue Interchange Exit 2	20.9	20.9	20.9	62.7
2.36	2.78	Between Western Avenue and Minnesota Avenue	9.9	9.9	9.9	29.7
2.78	3.32	Minnesota Avenue Interchange Exit 3	22.7	22.7	22.7	68.1
3.32	3.85	Between Minnesota Avenue and Cliff Avenue	12.8	12.8	12.8	38.4
3.85	4.69	Cliff Avenue Interchange Exit 4	34.1	34.1	34.1	102.3
4.69	5.31	26th Street Interchange Exit 5	0.0	0.0	0.0	0.0
5.31	6.40	Between 26th Street and 12th Street	25.0	25.0	25.0	75.0
6.40	7.44	10th Street Interchange Exit 6 and North	30.0	30.0	30.0	90.0
7.44	8.53	Rice Street Interchange Exit 7 and North	53.1	53.1	53.1	159.3
8.53	9.15	North of Big Sioux River and North	23.9	23.9	23.9	71.7
9.15	9.70	Benson Road Interchange Exit 9	51.0	51.0	51.0	153.0
9.70	10.47	Between Benson Road and 60th Street North	24.7	24.7	24.7	74.1
10.47	11.10	I229 Systems Interchange Exit 10	37.5	37.5	37.5	112.5
		I229 TOTALS:	506.5	506.5	506.5	1519.5
		2020 MOWING CYCLE TOTALS:		1421.3		4263.9

0001-271 MINNEHAHA & LINCOLN COUNTIES TABLE OF MOWING IN 2021 - PCN I5U3

			AN	INUAL MO	WING ACR	ES
LOCA	TION		1ST	2ND	3RD	2024
		AREA TO BE MOWED IN 2021	MOWING	MOWING	MOWING	2021
MRM TO	JINKINI		CYCLE	CYCLE	CYCLE	TOTALS:
		129				
72.81	74.01	Tea Interchange Exit 73	35.9	35.9	35.9	107.7
74.01	74.65	Between Exit 73 and Exit 75	15.7	15.7	15.7	47.1
74.65	75.74	I29 Systems Interchange Exit 75	48.0	48.0	48.0	144.0
75.74	76.24	Between Exit 75 and 57th Street	8.7	8.7	8.7	26.1
76.24	77.05	Between 57th Street and 41st Street	18.2	18.2	18.2	54.6
77.05	77.81	41st Street Interchange Exit 77	21.9	21.9	21.9	65.7
77.81	78.34	26th Street Interchange Exit 78	32.1	32.1	32.1	96.3
78.34	78.82	Between 26th Street and 12th Street	7.5	7.5	7.5	22.5
78.82	79.53	12th Street Interchange Exit 79	17.3	17.3	17.3	51.9
79.53	80.02	Between 12th Street and Madison Street	13.0	13.0	13.0	39.0
80.02	80.73	Madison Street Interchange Exit 80	23.8	23.8	23.8	71.4
80.73	82.00	Russell Street Interchange Exit 81	84.0	84.0	84.0	252.0
82.00	82.77	Benson Road Interchange Exit 82	22.3	22.3	22.3	66.9
82.77	83.89	60th St North Interchange Exit 83	81.1	81.1	81.1	243.3
83.89	84.55	I29 Systems Interchange Exit 84	42.3	42.3	42.3	126.9
84.55	85.98	Between Exit 84 and Exit 86	71.3	71.3	71.3	213.9
85.98	85.96	Renner Interchange Exit 86	52.5	52.5	52.5	157.5
		I29 TOTALS:	595.6	595.6	595.6	1786.8
		190				
394.84	396.10	Marion Road Interchange Exit 395	75.6	75.6	75.6	226.8
396.10	396.98	I90 Systems Interchange Exit 396	33.3	33.3	33.3	99.9
396.98	397.85	Between Kiwanis Avenue and Big Sioux River	26.8	26.8	26.8	80.4
397.85	399.11	Between Big Sioux River and Cliff Avenue	35.0	35.0	35.0	105.0
399.11	400.16	Cliff Avenue Interchange Exit 399	28.1	28.1	28.1	84.3
400.16	401.00	I90 Systems Interchange Exit 400	40.6	40.6	40.6	121.8
401.00	401.86	Between Exit 400 and Exit 402	24.8	24.8	24.8	74.4
401.86	403.32	Hwy 100 Interchange Exit 402	55.0	55.0	55.0	165.0
		I90 TOTALS:		319.2		
		1229	0.0.2	0.0.2	0.0.2	00110
0.00	0.08	I229 Systems Interchange	53.9	53.9	53.9	161.7
0.08	0.39	Between Solberg Avenue and Louise Avenue	7.3	7.3		21.9
0.39		Louise Avenue Interchange Exit 1C	78.3			
1.26	1.81	Between Louise Avenue and Western Avenue	21.4	21.4		64.2
1.81	2.36	Western Avenue Interchange Exit 2	20.9	20.9	20.9	62.7
2.36	2.78	Between Western Avenue and Minnesota Avenue	9.9	9.9		29.7
2.78	3.32	Minnesota Avenue Interchange Exit 3	22.7	22.7	22.7	68.1
3.32	3.85	Between Minnesota Avenue and Cliff Avenue	12.8	12.8	12.8	38.4
3.85	4.69	Cliff Avenue Interchange Exit 4	34.1	34.1	34.1	102.3
4.69	5.31	26th Street Interchange Exit 5	30.6	30.6	30.6	91.8
5.31	6.40	Between 26th Street and 12th Street	25.0	25.0	25.0	75.0
6.40	7.44	10th Street Interchange Exit 6 and North	30.0	30.0	30.0	90.0
7.44	8.53	Rice Street Interchange Exit 7 and North	53.1	53.1	53.1	159.3
8.53	9.15	North of Big Sioux River and North	23.9	23.9	23.9	71.7
9.15	9.70	Benson Road Interchange Exit 9	51.0	51.0		153.0
9.70	10.47	Between Benson Road and 60th Street North	24.7	24.7	24.7	74.1
10.47	11.10	I229 Systems Interchange Exit 10	37.5	37.5		112.5
		I229 TOTALS:	537.1	537.1	537.1	1611.3
	2021 MOWING CYCLE TOTAL			1451.9	1451.9	4300./

000I-271 MINNEHAHA & LINCOLN COUNTIES TABLE OF MOWING IN 2022 - PCN I5U4

ANNUAL MOWING ACRE				ES		
LOCA	TION		1ST	2ND	3RD	2022
MRM TO		AREA TO BE MOWED IN 2022	MOWING	MOWING	MOWING	TOTALS:
			CYCLE	CYCLE	CYCLE	TOTALO.
		129				
72.81	74.01	Tea Interchange Exit 73	35.9	35.9		
74.01	74.65	Between Exit 73 and Exit 75	15.7	15.7	15.7	47.1
74.65	75.74	I29 Systems Interchange Exit 75	48.0	48.0	48.0	144.0
75.74	76.24	Between Exit 75 and 57th Street	8.7	8.7	8.7	26.1
76.24	77.05	Between 57th Street and 41st Street	18.2	18.2	18.2	54.6
77.05	77.81	41st Street Interchange Exit 77	0.0	0.0	0.0	0.0
77.81	78.34	26th Street Interchange Exit 78	32.1	32.1	32.1	96.3
78.34	78.82	Between 26th Street and 12th Street	7.5	7.5	7.5	22.5
78.82	79.53	12th Street Interchange Exit 79	17.3	17.3	17.3	51.9
79.53	80.02	Between 12th Street and Madison Street	13.0	13.0	13.0	39.0
80.02	80.73	Madison Street Interchange Exit 80	23.8	23.8	23.8	71.4
80.73	82.00	Russell Street Interchange Exit 81	84.0	84.0	84.0	252.0
82.00	82.77	Benson Road Interchange Exit 82	22.3	22.3	22.3	66.9
82.77	83.89	60th St North Interchange Exit 83	81.1	81.1	81.1	243.3
83.89	84.55	I29 Systems Interchange Exit 84	42.3	42.3	42.3	126.9
84.55	85.98	Between Exit 84 and Exit 86	71.3	71.3	71.3	213.9
85.98	85.96	Renner Interchange Exit 86	52.5	52.5	52.5	157.5
		I29 TOTALS:	573.7	573.7	573.7	1721.1
		190				
394.84	396.10	Marion Road Interchange Exit 395	75.6	75.6	75.6	226.8
396.10	396.98	I90 Systems Interchange Exit 396	33.3	33.3	33.3	99.9
396.98	397.85	Between Kiwanis Avenue and Big Sioux River	26.8	26.8	26.8	80.4
397.85	399.11	Between Big Sioux River and Cliff Avenue	35.0	35.0	35.0	105.0
399.11	400.16	Cliff Avenue Interchange Exit 399	28.1	28.1	28.1	84.3
400.16	401.00	I90 Systems Interchange Exit 400	40.6	40.6	40.6	121.8
401.00	401.86	Between Exit 400 and Exit 402	24.8	24.8	24.8	74.4
401.86	403.32	Hwy 100 Interchange Exit 402	55.0	55.0	55.0	165.0
		I90 TOTALS:	319.2	319.2	319.2	957.6
		1229	0.0.2	0.0.2	0.0.2	00110
0.00	0.08	I229 Systems Interchange	53.9	53.9	53.9	161.7
0.08	0.39	Between Solberg Avenue and Louise Avenue	7.3	7.3	7.3	21.9
0.39	1.26	Louise Avenue Interchange Exit 1C	78.3	78.3	78.3	234.9
1.26	1.81	Between Louise Avenue and Western Avenue	21.4	21.4		
1.81	2.36	Western Avenue Interchange Exit 2	20.9	20.9		62.7
2.36	2.78	Between Western Avenue and Minnesota Avenue	9.9	9.9		29.7
2.78	3.32	Minnesota Avenue Interchange Exit 3	22.7	22.7	22.7	68.1
3.32	3.85	Between Minnesota Avenue and Cliff Avenue	12.8	12.8		38.4
3.85	4.69	Cliff Avenue Interchange Exit 4	34.1	34.1	34.1	102.3
4.69	5.31	26th Street Interchange Exit 5	30.6	30.6		91.8
5.31	6.40	Between 26th Street and 12th Street	25.0	25.0		75.0
6.40	7.44	10th Street Interchange Exit 6 and North	30.0	30.0		90.0
7.44	8.53	Rice Street Interchange Exit 7 and North	53.1	53.1	53.1	159.3
8.53	9.15	North of Big Sioux River and North	23.9	23.9		71.7
9.15	9.70	Benson Road Interchange Exit 9	51.0	51.0		153.0
9.70	10.47	Between Benson Road and 60th Street North	24.7	24.7	24.7	74.1
10.47	11.10	I229 Systems Interchange Exit 10	37.5	37.5		112.5
. 5. 17	0					
		I229 TOTALS:	537.1	537.1	537.1	1611.3
		2022 MOWING CYCLE TOTALS:	1430.0	1430.0	1430.0	4290.0

DESCRIPTION OF WORK

The work will consist of mowing grass and other vegetation within the right-of-way of Interstates 29, 90 and 229 looping the City of Sioux Falls as shown in these plans.

CONTRACT PERIOD - 3 YEARS

The contract start date is the date the contract is awarded to the Contractor. The contract completion date is the last date the Contractor performs services for the Department.

EQUIPMENT

- 1. The mowing may be performed with tractor operated rotary, flail or sickle mowers. Other types of cutting machines may be used but will require approval prior to use.
- 2. All rotary mowers must be equipped with safety chains or approved devices to prevent damage to property from flying debris from under the mower.
- 3. The mower/tractor will be equipped with a flashing amber light mounted on the top of the tractor visible for 360°. A strobe light with 600,000 candle power or a revolving light with a 4" sealed beam unit is acceptable (minimum requirements).
- 4. A slow moving emblem will be required to be mounted on the mowing unit visible from the rear.
- 5. Mowers will be kept in good operating condition at all times and produce a clean, sharp cut of vegetation.

MOWING REQUIREMENTS

- The start of mowing operations will be determined by the Engineer. Mowing will not begin until the
 vegetation reaches an average height of 12 inches. Mowing cycle is defined as all tractor mowing and hand
 trimming.
- The Contractor will begin moving operations within ten days after notification.
- Each mowing cycle (first, second & third) will consist of all areas within the right-of-way as detailed in the plans.
- 4. Mowing equipment will not be allowed on the driving lanes or shoulders.
- After mowing has started, the Contractor will be required to complete each mowing cycle within eighteen calendar days unless otherwise extended by the Engineer. Failure to complete a mowing cycle within the specified timeframe will result in liquidated damages being assessed.
- 6. Unless otherwise directed by the Engineer, mowing of the Project will be performed three times between the dates of May 1 and October 31. The first mowing cycle will be done prior to June 15. The second mowing cycle will be done between July 10 and August 10. The third mowing cycle will be done between October 1 and October 31. In the event that vegetation does not reach the average height of 12 inches, the mowing schedule may be adjusted and/or the third mowing cycle may be eliminated (partially or in full).
- 7. Vegetation will be mowed to a height of four to six inches.
- 8. The Contractor will confine all operations to daylight hours with no work performed on Sundays or State Holidays unless authorized by the Engineer.
- All mowed areas will be left in a neat appearing condition upon completion of the mowing. Strips of uncut grass or piles of cut grass will not be left in the mowed areas. Baling will not be permitted within the area covered under this contract.

MOWING REQUIREMENTS (CONTINUED)

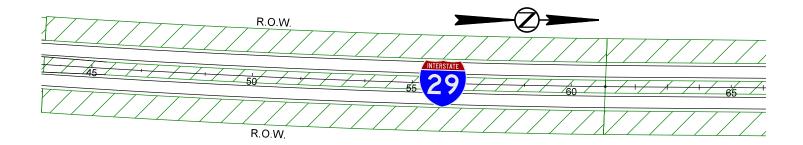
- 10. Hand trimming will be required along noise walls, stabilization walls, bridge bents/abutments, barrier, guardrail, curb & gutter, and around culvert openings, sign supports, delineators, and columns, power, signal and light poles, footings, trees and shrubbery, improvement areas, and other appurtenances. Hand trimming will also be required along the right-of-way fence in front of the Country Club Golf Course, the mobile home sales park and First Premiere Bank. Riprap areas are not included in the acreage specified in the plans, however, hand trimming will be required to cut weeds down, in and around all riprap areas, including bridge ends and the riprap section along the west side of I29 north of 57th Street.
 - Hand trimming will be done on the entire project during all three cycles of Mowing. Hand trimming will be completed within the timeframe of each mowing cycle. Cost for hand trimming will be incidental to the contract unit price per acre for Mowing.
- 11. I29 Exit 77, 41st Street interchange area is scheduled to be under construction in 2022 and mowing (first, second and third mowing cycles) is not anticipated at Exit 77 in 2022 but is subject to change as directed by the Engineer. The first, second and third cycles in the Table of Mowing in 2022 have been zeroed out to reflect this.
 - I229 Exit 5, 26th Street interchange area will be under construction in 2020 and mowing (first, second and third mowing cycles) is not anticipated at Exit 5 in 2020 but is subject to change as directed by the Engineer. The first, second and third cycles in the Table of Mowing in 2020 have been zeroed out to reflect this.
 - Other sections of this project may also be removed from the contract due to construction or other reasons. No payment will be made for sections of the project that are removed from the plans and no adjustment will be allowed to the contract unit prices as result of removed sections.
- 12. Additional areas can be ordered mowed for control of noxious weeds, sight distance or for appearance. Areas included in the mowing summary may also be deleted as determined by the Engineer.
- 13. Mowing of inslopes or backslopes steeper than 2.5:1 and wet and/or other inaccessible areas will not be required unless the vegetation interferes with safe sight distance to the driving public, which then may require hand mowing.
- 14. Sanitary sewer manholes are in place within the mowing area at various locations throughout the project. It is the Contractor's responsibility to verify these locations. If a manhole is disturbed due to the Contractor's operations, the City of Sioux Falls will be contacted immediately. Any damage caused by the Contractor's operations will be repaired at the Contractor's expense.
- 15. Mowing adjacent to, inside, or between guardrail installations and other appurtenances will be required. The method of getting the mowers into such areas must have Engineer approval or be hand mowed. Prior to bidding, it is the Contractor's responsibility to identify equipment needs to accomplish the work
- 16. If equipment is left on the project overnight, it cannot be left in the median. The equipment must be parked near the right-of-way fence line. Equipment will not be left unattended within thirty feet of the roadway shoulder at any time.
- 17. Mower movement in and out of the median and crossing traffic lanes will be kept to a minimum. Mowing equipment will not cross mainline interstate Monday through Friday during the hours 7:30am to 8:30am and 4:00pm to 6:00pm. Bridges will be crossed using the proper lanes and travel only in the true direction of traffic. The Contractor will take all needed precautions when it is necessary to cross the traffic lanes. Mowing equipment will not be allowed to swing out into the driving lanes while mowing around delineator posts along the edge of the driving lanes.
- 18. Trees have been planted in the surrounding area of the I29/I229 Systems Interchange and I229 Interchange Exit 1C, Louise Avenue. The Contractor will take care and not damage the trees. Any trees damaged will be replaced at the Contractor's expense.

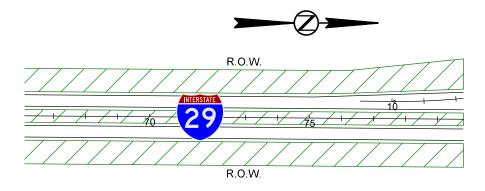
MEASUREMENT AND PAYMENT

- Payment for Mobilization 1, 2 or 3 will be made at the contract unit price per each and is payment for the work necessary to establish, modify and/or organize the facilities, equipment, and personnel to provide mowing as per this contract. Payment for Mobilization 1 will take place once, after contract award, and payment for Mobilization 2 or 3 will take place once, in each of the successive 2 years of the contract, provided that the contract is renewed and, provided that the Contractor demonstrates to the Department that the aforementioned mobilization work is accomplished.
- Mowing will be paid by the acre. The acres shown in the Table of Mowing will be the basis for measurement.
 Changes in the mowing from what is shown in the Tables of Mowing will be measured separately for payment and added or deducted as applicable.
 - The contract unit price per acre will be full compensation for furnishing all labor, equipment, supplies, and incidentals necessary to complete each mowing, including hand trimming areas.
- 3. The acres of mowing were determined by horizontal width and length computations referenced to mile reference markers. No deductions were made in these computations for inaccessible areas or other nonmowable areas.
- 4. A payment will be made after the satisfactory completion of each mowing cycle. An interim payment can be made if requested by the Contractor but it will be limited to one interim payment per mowing cycle.

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000I-271 INTERSTATE 29 MOWING

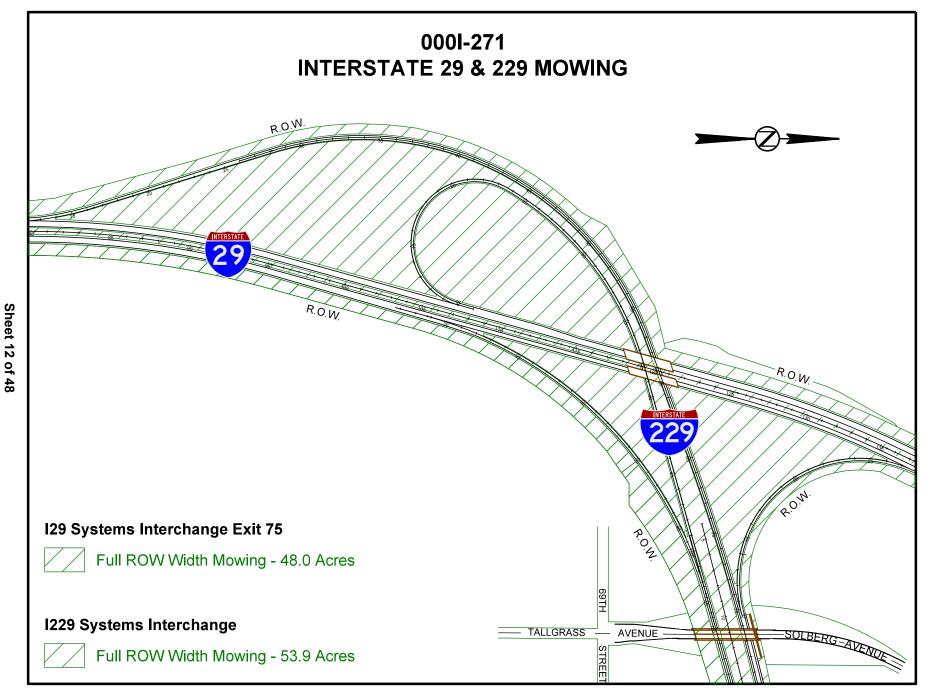




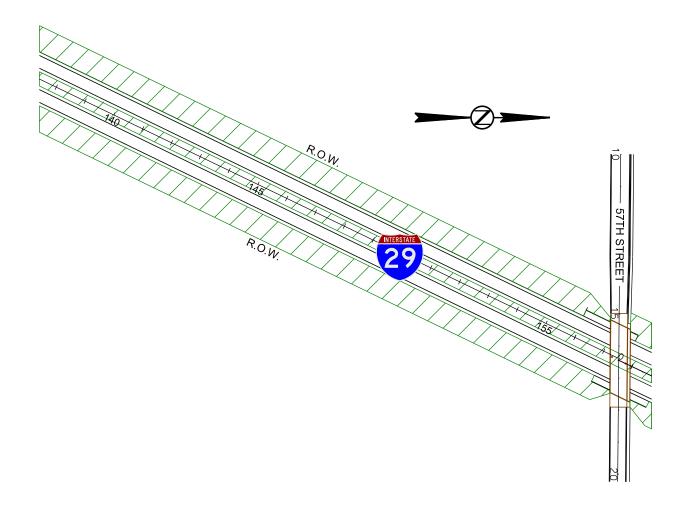
I29 between Exit 73 and Exit 75

Sheet 11 of 48

Full ROW Width Mowing - 15.7 Acres



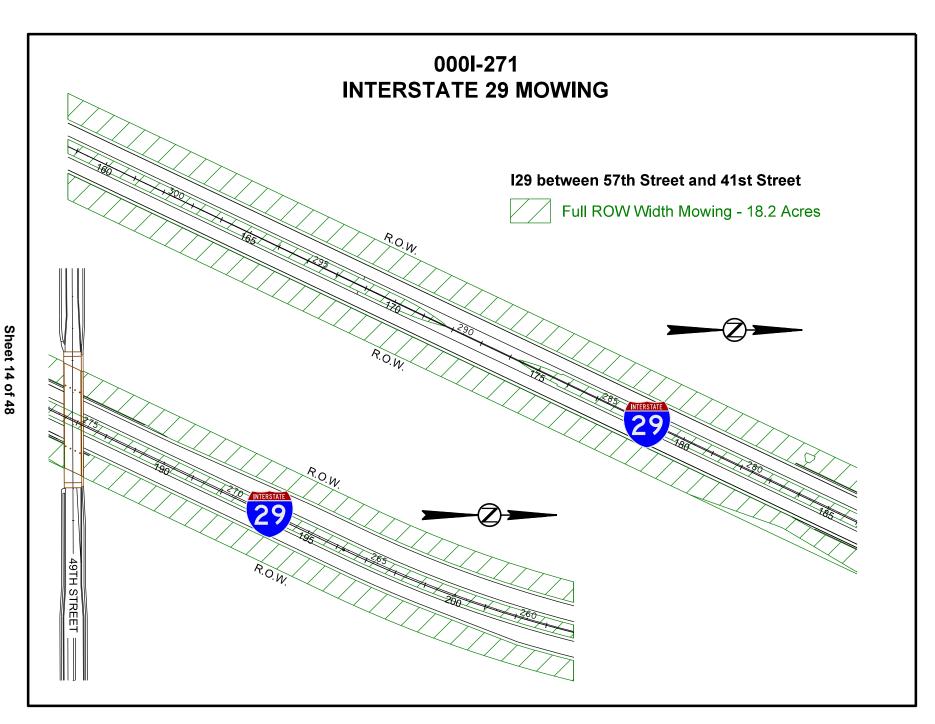
0001-271 INTERSTATE 29 MOWING



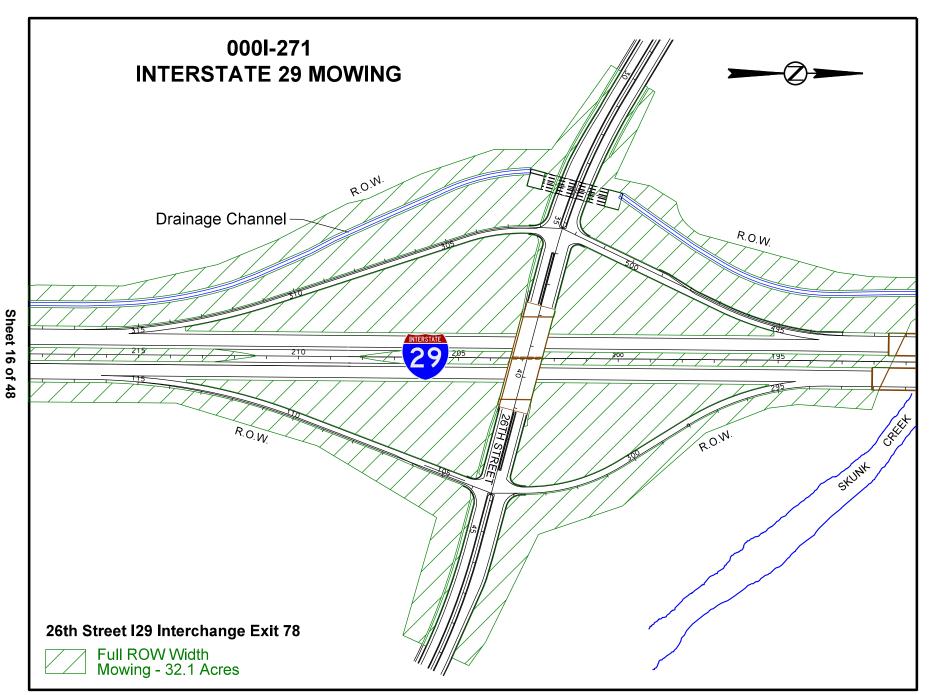
I29 between Exit 75 and 57th Street

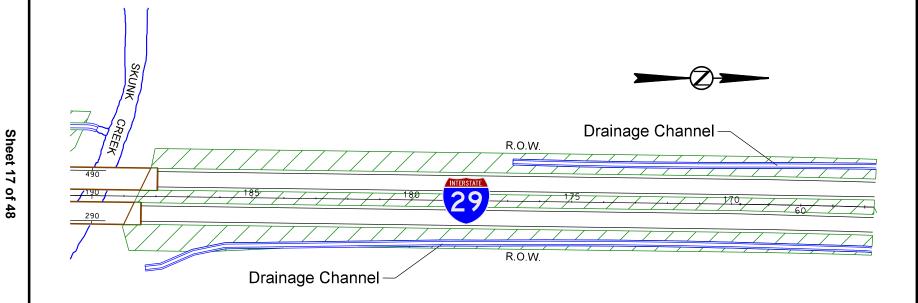


Full ROW Width Mowing - 8.7 Acres



Sheet 15 of 48





I29 between 26th Street and 12th Street



Full ROW Width Mowing - 7.5 Acres

R.O.W.

R.O.W.

12TH STREET

Drainage Channel

R.O.W.

Sheet 18 of 48

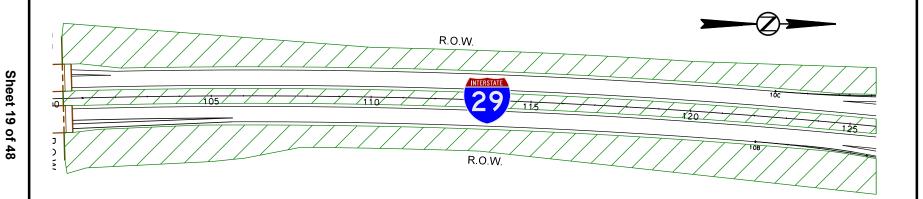
Full ROW Width Mowing - 17.3 Acres

Drainage Channel

R.O.W.

000I-271 **INTERSTATE 29 MOWING**

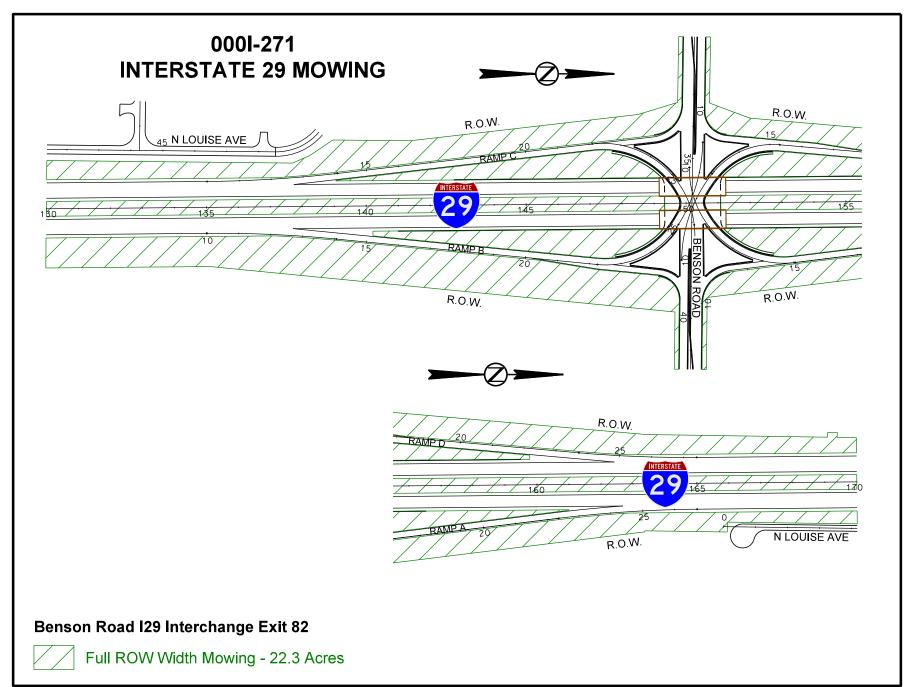
Drainage Channel

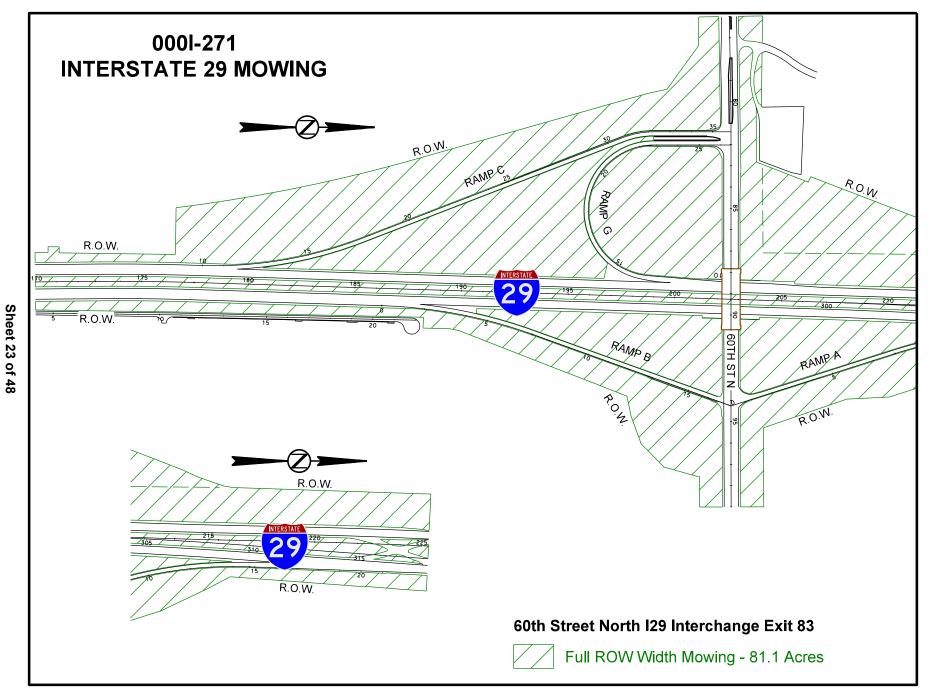


I29 between 12th Street and Madison Street



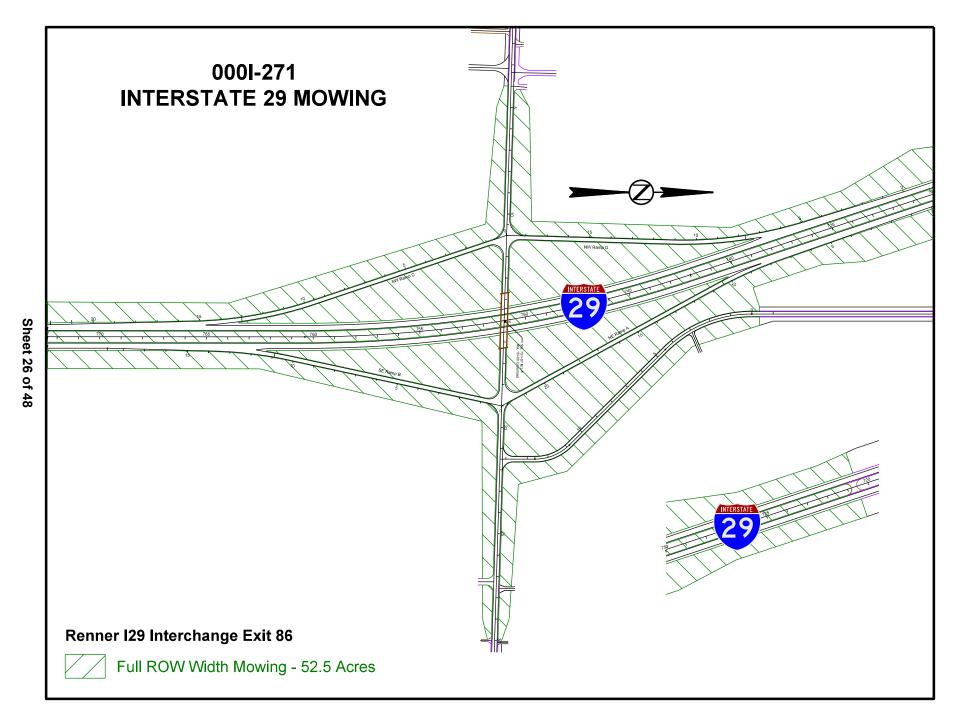
Full ROW Width Mowing - 13.0 Acres

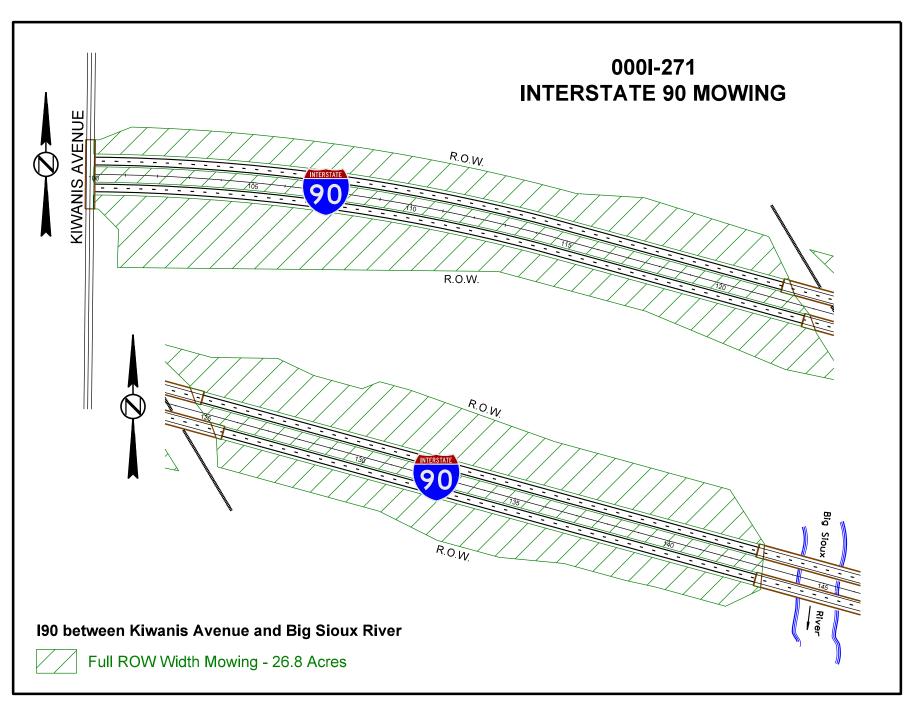




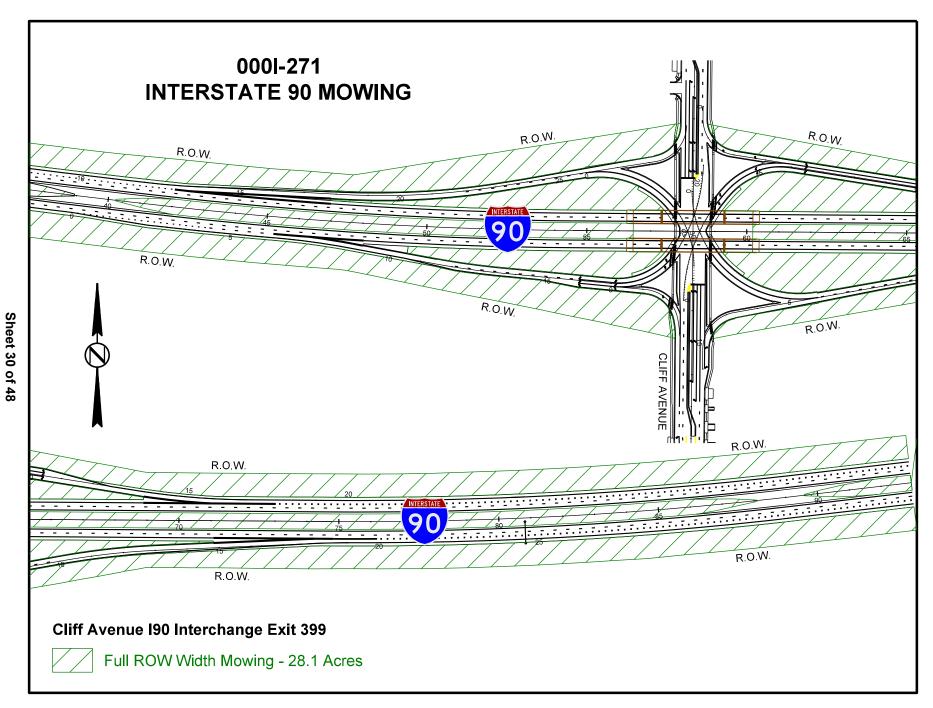
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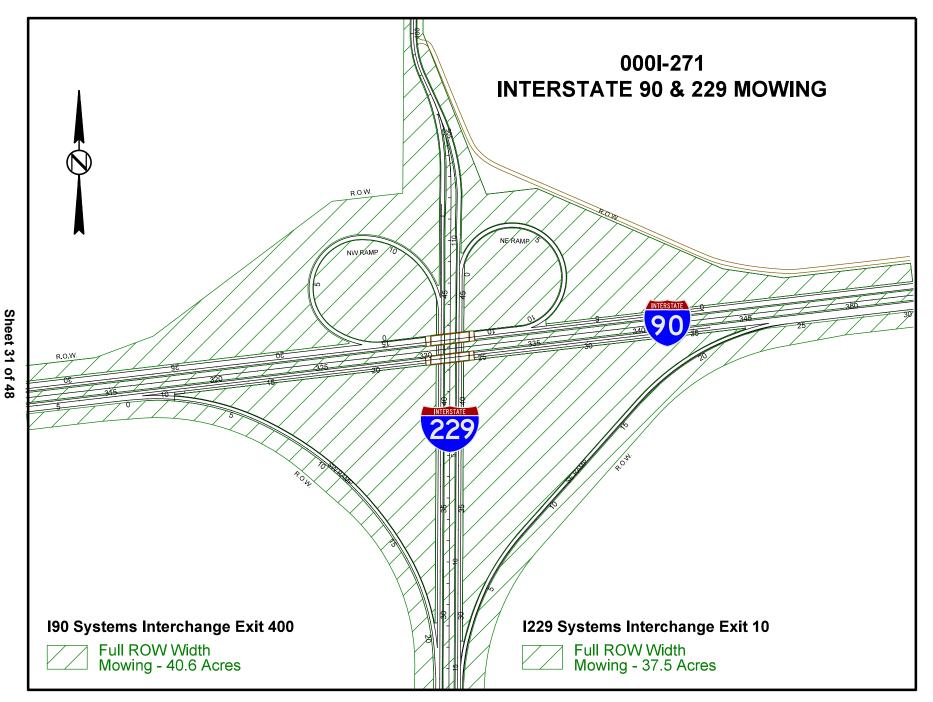
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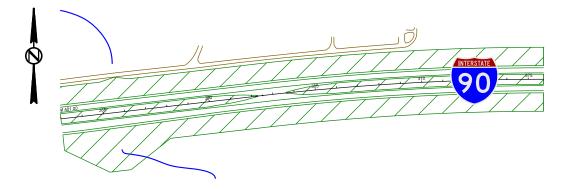


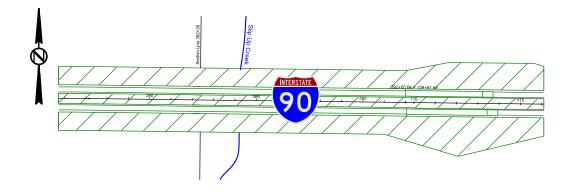
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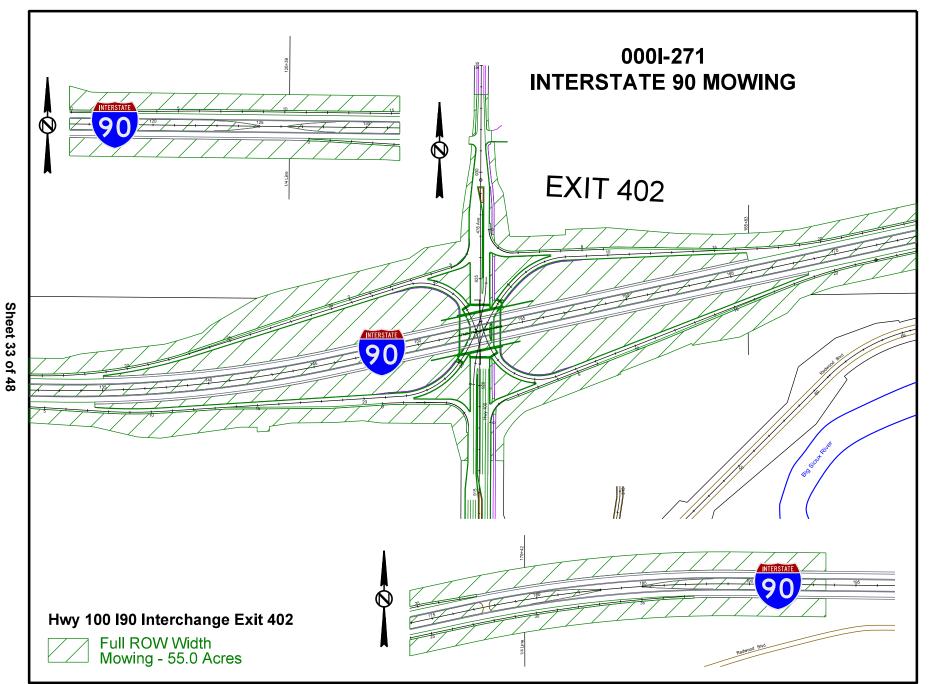


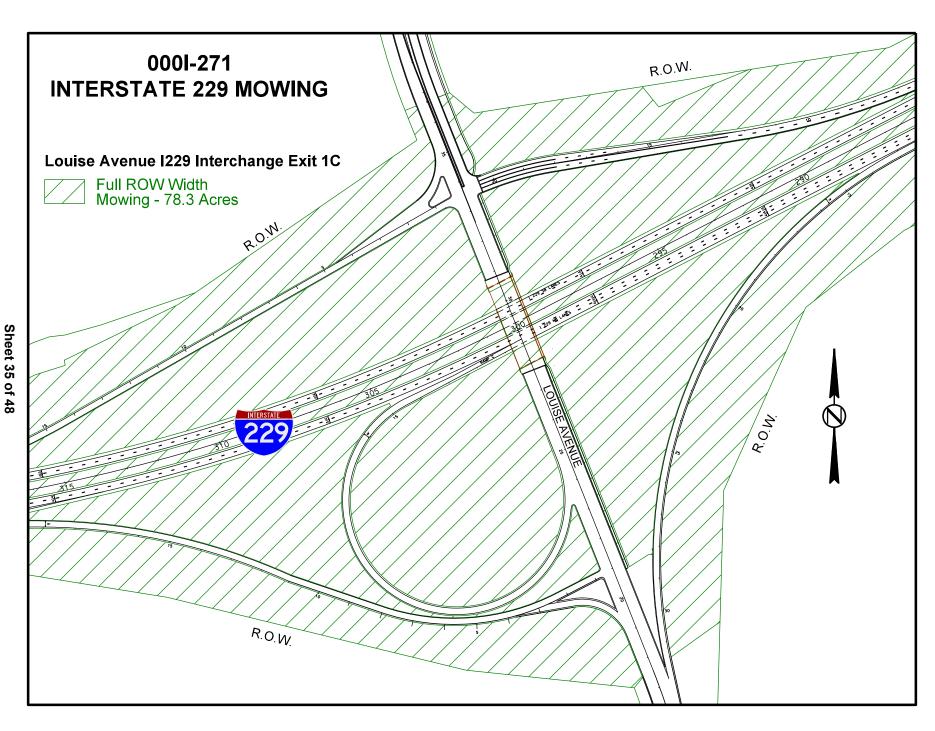
190 between Exit 400 and I90 Exit 402



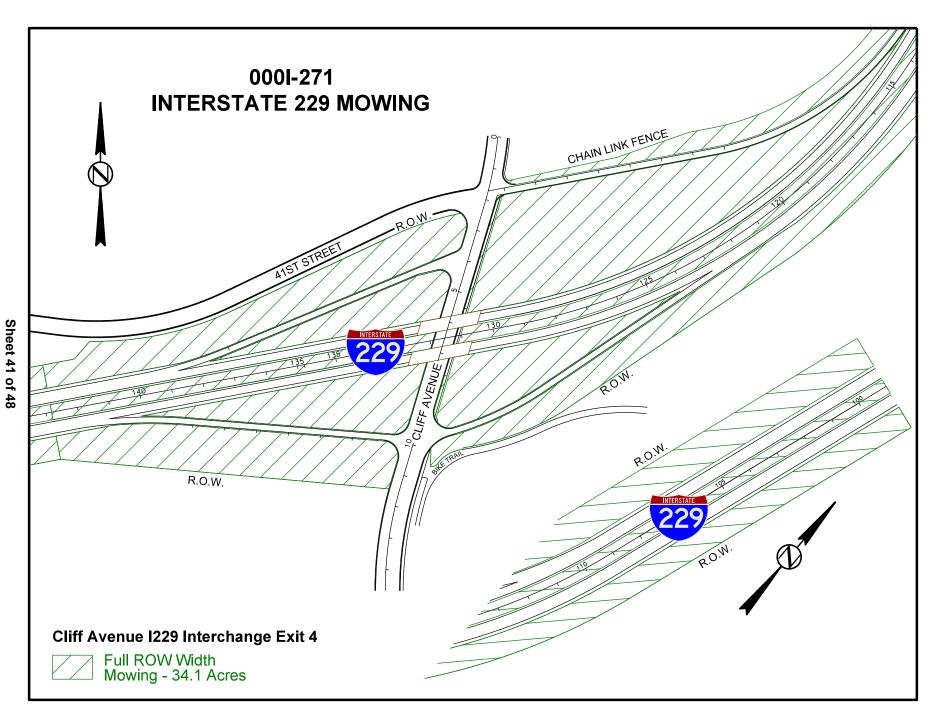
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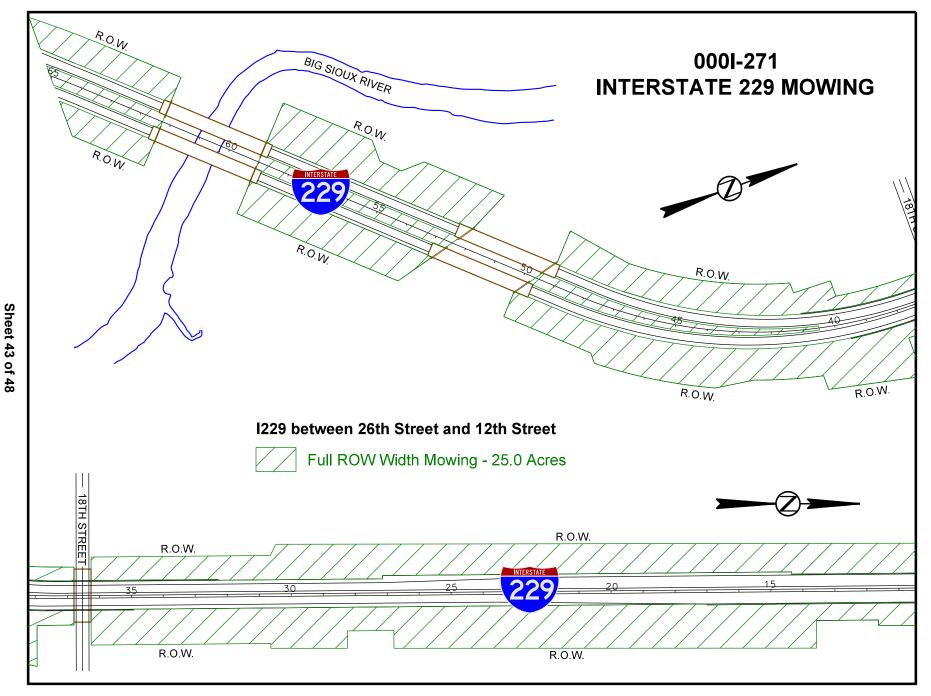
Full ROW Width Mowing - 24.8 Acres



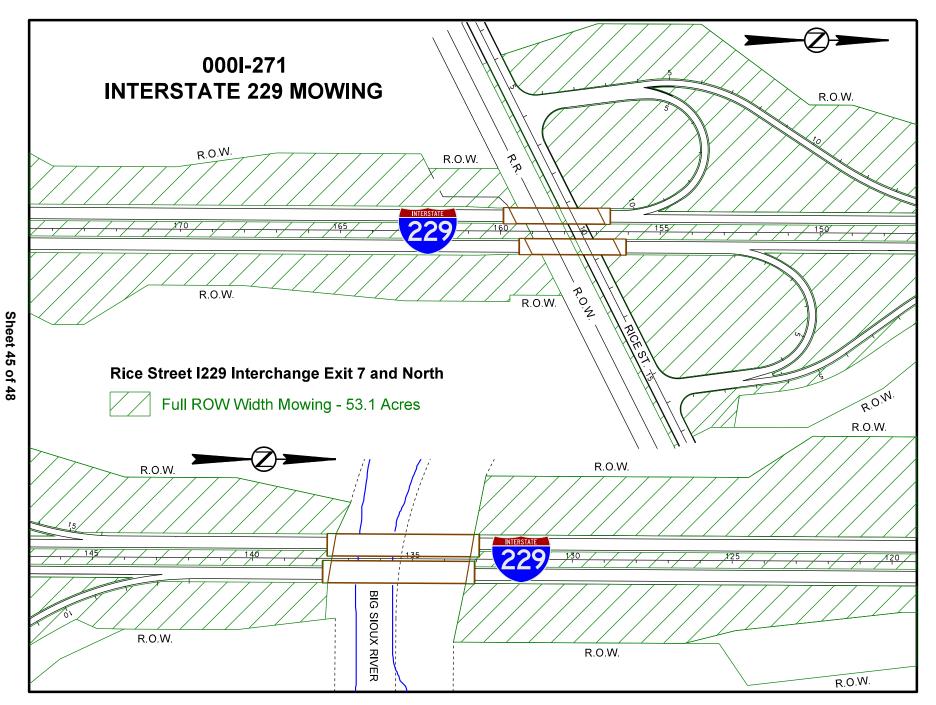


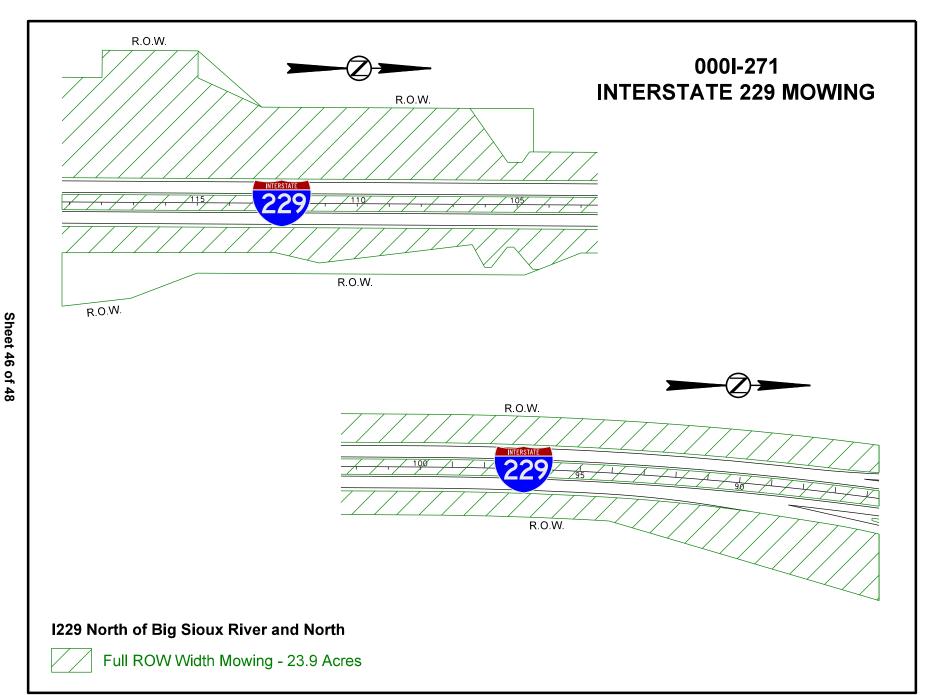
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0001-271
MINNEHAHA & LINCOLN COUNTIES

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