



Purchasing Division
Finance Department
Room 120
411 West First Street
Duluth, Minnesota 55802

218-730-5340
purchasing@duluthmn.gov

Addendum 1
Solicitation 20-99323
2020 Street Preservation Project

This addendum serves to notify all bidders of the following changes to the solicitation documents:

1. The bid deadline is extended to Wednesday, April 15, 2020 at 2:00 pm.
2. Attached is a Covid-19 Project Shutdown Plan outlining requirements should a shutdown of the project be required due to the Covid-19 pandemic.
3. During the City Hall closure due to COVID-19, bid bonds may be emailed to purchasing@duluthmn.gov or mailed to arrive at the Purchasing office at the address above prior to the bid deadline. Bid bonds may not be dropped off in person.
4. CHANGES TO PROJECT MANUAL
 - a. Changes have been made to Exhibit A – Item Listing.
5. CHANGES TO DRAWINGS
 - a. See attached Sheets 5-9 (Statement of Estimated Quantities) for additional pay items to be included in the work. Item 13, 2123.612 Compactor (Hour) has been added.
 - b. See attached Sheet 10 which has been updated for notes related to the addition of the compactor hours.
 - c. See attached Sheet 11 for changes in detail references in the notes on that sheet.
 - d. See attached Sheet 12 for changes in construction details, adding detail drawing (7/12) showing a typical section for ditch to be constructed under Item 2105.603 Construct Drainage Ditch (LF). Note 15 on Sheet 10 also describes what is included under this pay item.
6. CLARIFICATIONS/ADDITIONS

- a. Bituminous overlays and mill/overlay sections of the project shall use Type SP 9.5 Wearing Course Mixture (3,B). The note referencing mix type in the typical sections for overlays and mill/overlays should say “SPWEA340B”. The correct mix totals are shown in the Statement of Estimated Quantities. Revised typical section sheets with corrected mix nomenclature shall be issued prior to construction to the selected Contractor.
- b. Reclamation segments of the project shall use Type SP 9.5 Wearing Course Mixture (3,C).
- c. Bituminous Patching Mixture (Ton) will be used and paid for only when bituminous mixture is placed in the roadway for filling potholes and depressions (see Note 16, Sheet 10). Payment for bituminous mixture used for patching along sections of replaced curbs or pedestrian ramps shall be considered as incidental to the curb pay item.
- d. For clarification, specifications for Item 2231.509 Bituminous Patching Mixture (Ton) require the contractor to provide bituminous patching material matching the type of material used in the first layer of bituminous surfacing placed on the reconditions surface. Because the patching mixture will be used only on segments of the project with overlays or mill/overlays, the mixture shall be considered a mix design the same as the mixture being used for those portions of the project, or SPWEA340B.
- e. There are two (2) MnDOT seed mixtures used on this project—one (Mix 25-131) is a commercial turf mix for restoration of boulevard areas, and the second (Mix 33-361) is for ponds and wet areas in NW Minnesota.
- f. Item 16, 2215.504 Full Depth Reclamation (SY), shall follow MnDOT Standard Specifications for Construction 2215.1.B. This shall include up to a 2-foot shoulder per the typical sections shown in the plan and as directed by the Engineer. Payment for this item shall be inclusive of the items of work listed.
- g. Additional Motor Grader and Compactor hours are provided as a part of the work for the grading of gravel roadways before overlaying. Gravel road grading will be done under the supervision of City of Duluth Project Engineer with a 2-day notice. Additional Motor Grader and Compactor hours are also provided on reclaim sections for grading out areas where shoulders/parking areas need to be established beyond the standard 2-foot shoulder width.
- h. Special Provisions have been updated as follows:

SP-7 (1206) PREPARATION OF PROPOSAL

The provisions of MN/DOT 1206 are supplemented and/or modified with the following:

1206.1. "Preparation and Delivery", is modified as follows:

The **first paragraph** shall be deleted and replaced with the following:

Bidders must use the City of Duluth electronic bidding process through Bid Express®. For electronic bidding, the Bidder shall submit the electronic Proposal through the bidexpress.com website.

The **third paragraph** shall be deleted and replaced with the following:

The Bidder shall submit the Proposal Guaranty electronically or file a hard copy of the Proposal Guaranty with the City Purchasing Division by the bid opening date specified in the Invitation for Bids. Due to the COVID-19 pandemic and the closure of City buildings, a copy of the Proposal Guaranty in the form of a Bid Bond may be emailed to purchasing@duluthmn.gov. The emailed bid bond must be received prior to the bid opening and must be verifiable with the surety company.

SP-19 (2531) CONCRETE CURBING (ADA RAMP COMPLETION)

The provisions of 2531 of the City of Duluth 'Construction Standards' are supplemented with the following:

All work, including restoration, for pedestrian ADA ramp placement shall be completed within 2 weeks of pedestrian ADA ramp removal. All completed pedestrian ADA ramps shall be made safe for crossing, and maintained, at all times with a bituminous patch ramp placed between the concrete and bituminous surfaces until the roadway surfacing work has been completed. Additionally, all concrete curb replacement shall have the adjacent roadway patched with bituminous pavement from the time of replacement until the roadway surfacing work has been completed. Work for placement, maintenance and removal of the bituminous patching material will be considered incidental to the payment for concrete curb ramps or concrete curbing.

Please acknowledge receipt of this Addendum by checking the acknowledgment box within the www.bidexpress.com solicitation. Failure to acknowledge this addendum may disqualify your bid.

Posted: **April 6, 2020**

City of Duluth, MN

Covid-19 Project Shutdown Plan

In the event that employee illness or a governmental agency requires that the project cease due to the Covid-19 Virus, prior to suspension, the contractor shall provide a written plan to the architect/engineer on the project and the City for their prior approval and, upon such approval, shall be implemented by the contractor as part of this contract. The plan shall include the following requirements which shall apply to the status of the work at the time of interruption:

1. Time, if any, between the determination of the necessity of suspension and the actual suspension of work will be allocated in this order of priority; Life Safety Issues, Asset Integrity, Environmental Impacts, & Economic Impacts.
2. Excavations will be completed or temporarily filled.
3. Equipment will be removed from the site or secured by the contractor.
4. Physical barricades shall be installed as necessary to protect the work from damage or destruction and the public from injury in the event of trespass on the site.
5. Warning signs shall be installed where reasonably necessary to warn the public of any hazardous condition on the site.
6. Erosion control necessary to protect the site shall be in place and functioning and vegetation shall be in place and properly protected; all exposed and or erodible soil surfaces shall be fully stabilized per the SWPPP/NPDES permit requirements.
7. Onsite materials shall be removed from the site to safe storage or protected on site from damage or theft.

3:17 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\seq-sheets.dwg

STATEMENT OF ESTIMATED QUANTITIES

ITEM NO.	NOTE ON SHEET 10	CHART LETTER	SPEC NO.	ITEM	UNIT	TOTAL	OVERLAYS									
							Vermilion Rd - End of Pavement to Claymore	Elk St - Vermilion Rd to Lochaire	South Rd - Howard Gnesen to Kenwood Dr	Kenwood Dr - Catherine to South Road	Tyrol - Hutchinson to Cul-de-Sac	Hillcrest - Gearhart to Springvale	131st Ave W - TH 23 to Mission Creek Parkway	Medina St - 6th St to 7th St & N Central Ave to 8th	N 46th Ave W - 8th St. to Medina St.	Prescott St. - TH 23 to 96th Ave W
1			2021.501	MOBILIZATION	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
2		A	2104.502	REMOVE CATCH BASIN	EACH	10	0	0	0	0	0	0	0	0	0	0
3		A	2104.502	SALVAGE SIGN TYPE C	EACH	9	0	0	0	0	0	0	0	0	0	0
4		A	2104.503	REMOVE PIPE CULVERTS	LIN FT	190	38	0	0	0	0	0	0	0	0	0
5	3	A	2104.503	REMOVE CURB AND GUTTER	LIN FT	5793	0	0	0	0	115	0	0	0	0	0
6	3	A	2104.518	REMOVE CONCRETE WALK	SQ FT	17384	0	0	0	0	0	0	0	98	0	917
7	3	A	2104.518	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	244	0	0	0	0	0	0	0	0	0	0
8	3	A	2104.518	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	2100	59	0	0	0	0	0	0	0	0	0
9		C	2105.507	COMMON EXCAVATION	CU YD	425	5	0	384	11	0	3	7	0	0	0
10	15	C	2105.603	CONSTRUCT DRAINAGE DITCH	LIN FT	376	350	0	0	0	0	0	0	0	0	0
11	13	C, D	2118.509	AGGREGATE SURFACING CLASS 5	CU YD	370	11	10	22	4	0	13	8	0	0	16
12	10	B	2123.510	MOTOR GRADER	HOURL	111	40	0	12	0	0	0	0	0	0	0
13	10	B	2123.612	COMPACTOR	HOURL	111	40	0	12	0	0	0	0	0	0	0
14		B	2130.528	WATER	MG GALLON	77	27	0	8	0	0	0	0	0	0	0
15	7	B	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	13615	0	0	0	0	0	0	0	0	0	0
16	1	B	2215.504	FULL DEPTH RECLAMATION	SQ YD	54445	0	0	0	0	0	0	0	0	0	0
17	19	C	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	30	0	0	0	0	0	0	0	0	0	0
18	16, 17	D	2231.509	BITUMINOUS PATCHING MIXTURE	TON	3221	399	98	127	24	56	108	82	30	6	56
19	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	55933	0	0	0	0	0	0	0	0	0	0
20	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	47630	0	0	0	0	0	0	0	0	0	0
21	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	3174	0	0	0	0	0	0	0	0	0	0
22	6, 8, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	24207	3987	983	1268	236	559	1082	821	304	55	563
23	6, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12433	0	0	0	0	0	0	0	0	0	0
24	20	F	2501.502	12" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
25	20	F	2501.502	15" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
26	20	F	2501.502	18" CS PIPE APRON	EACH	2	2	0	0	0	0	0	0	0	0	0
27	20	F	2501.502	12" RC PIPE APRON	EACH	1	0	0	0	0	0	0	0	0	0	0
28	20	F	2501.502	18" RC PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
29	20	F	2501.503	12" CS PIPE CULVERT	LIN FT	22	0	0	0	0	0	0	0	0	0	0
30	20	F	2501.503	15" CS PIPE CULVERT	LIN FT	40	0	0	0	0	0	0	0	0	0	0
31	20	F	2501.503	18" CS PIPE CULVERT	LIN FT	38	38	0	0	0	0	0	0	0	0	0
32	20	F	2501.503	12" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	114	0	0	0	0	0	0	0	0	0	0
33	20	F	2501.503	18" RCP PIPE CULVERT DESIGN 3006 CLASS V	EACH	40	0	0	0	0	0	0	0	0	0	0
34		F	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9	0	0	0	0	0	0	0	0	0	0
35	5	F	2504.602	ADJUST VALVE BOX	EACH	35	1	0	0	0	3	4	15	0	0	2
36		F	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	16	0	0	0	0	0	0	0	0	0	0
37	20	F	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	9	0	0	0	0	0	0	0	0	0	0
38		F	2506.502	CASTING ASSEMBLY	EACH	10	0	0	0	0	0	0	0	0	0	0
39		F	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	33	0	0	0	0	0	0	0	0	0	0
40	12	F	2506.602	ADJUST FRAME AND RING CASTING	EACH	85	0	0	0	0	6	0	0	0	0	5
41		F	2506.602	CONNECT INTO EXISTING MH OR CB	EACH	1	0	0	0	0	0	0	0	0	0	0
42	11	F	2506.602	ADJUST FRAME AND RING CASTING (SPECIAL)	EACH	50	0	0	0	0	10	10	0	2	0	8
43	2, 4, 14	E	2521.518	4" CONCRETE WALK	SQ FT	10234	0	0	0	0	0	0	0	72	0	370
44	2, 4, 14	E	2521.518	6" CONCRETE WALK	SQ FT	7150	0	0	0	0	0	0	0	26	0	547
45	4	E	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	5793	0	0	0	0	115	0	0	0	0	0
46	2	E	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	224	0	0	0	0	0	0	0	0	0	0
47	4	E	2531.603	CONCRETE CURB DESIGN V	LIN FT	38	0	0	0	0	0	0	0	0	0	0
48	4, 14	E	2531.618	TRUNCATED DOMES	SQ FT	1799	0	0	0	0	0	0	0	9	0	72
49		F	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	4	0	0	0	0	0	0	1	0	0	0
50		A	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	4	0	0	3	0	0	0	0	0	0	0
51			2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
52		G	2564.502	INSTALL SIGN PANEL TYPE C	EACH	9	0	0	0	0	0	0	0	0	0	0
53			2575.601	EROSION CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
54	2	C	2575.602	SITE RESTORATION	EACH	105	0	0	0	0	0	0	0	1	0	6
55		G	2582.503	4" SOLID LINE PAINT	LIN FT	34892	0	0	0	0	0	0	0	0	0	0
56		G	2582.503	12" SOLID LINE PAINT	LIN FT	48	0	0	0	0	0	0	0	0	0	0
57		G	2582.503	24" SOLID LINE PAINT	LIN FT	36	0	0	0	0	0	0	0	0	0	0
58		G	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	22628	0	0	0	0	0	0	0	0	0	0
59		G	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	186	0	0	0	0	0	0	0	0	0	0

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 03/13/2020

SIGNATURE: 

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.:

1692

STATE AID PROJECT NO.:

N/A

DRAWN BY:

CJL

STATEMENT OF ESTIMATED QUANTITIES-1 OF 5

SHEET NO.

5

OF

247

3:17 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\seq-sheets.dwg

STATEMENT OF ESTIMATED QUANTITIES															
ITEM NO.	NOTE ON SHEET 10	CHART LETTER	SPEC NO.	ITEM	UNIT	TOTAL	OVERLAYS								
							96th Ave W - Heard St. to Prescott St.	W Skyline Pkwy - Mountain Dr to 100th Ave W	W 9th St - 128th Ave W to 131st Ave W	97th Ave W - Prescott St to McCuen St	Norwood St - 47th Ave E to 48th Ave E	E Heard St. - TH 23 to Dead End	E Carterett - Commonwealth to Gate	W 6th St - 466 ft E of 8th Ave W to 932 ft E of 8th Ave W	N 56th Ave W - Highland to Medina
1			2021.501	MOBILIZATION	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
2		A	2104.502	REMOVE CATCH BASIN	EACH	10	1	0	0	0	0	0	0	0	0
3		A	2104.502	SALVAGE SIGN TYPE C	EACH	9	0	0	0	0	0	0	0	0	0
4		A	2104.503	REMOVE PIPE CULVERTS	LIN FT	190	45	0	0	0	0	0	0	0	0
5	3	A	2104.503	REMOVE CURB AND GUTTER	LIN FT	5793	0	0	0	0	0	0	0	0	173
6	3	A	2104.518	REMOVE CONCRETE WALK	SQ FT	17384	0	0	0	0	0	1337	0	0	0
7	3	A	2104.518	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	244	0	0	0	0	0	0	0	0	0
8	3	A	2104.518	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	2100	0	0	0	0	0	0	0	0	30
9		C	2105.507	COMMON EXCAVATION	CU YD	425	0	0	0	0	0	0	0	0	0
10	15	C	2105.603	CONSTRUCT DRAINAGE DITCH	LIN FT	376	0	0	0	0	0	0	0	0	0
11	13	C, D	2118.509	AGGREGATE SURFACING CLASS 5	CU YD	370	18	34	16	75	0	44	0	0	0
12	10	B	2123.510	MOTOR GRADER	HOURL	111	0	0	0	0	0	0	0	0	0
13	10	B	2123.612	COMPACTOR	HOURL	111	0	0	0	0	0	0	0	0	0
14	10	B	2130.523	WATER	M GALLON	77	0	0	0	0	0	0	0	0	0
15	7	B	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	13615	0	0	0	0	0	0	0	0	0
16	1	B	2215.504	FULL DEPTH RECLAMATION	SQ YD	54445	0	0	0	0	0	0	0	0	0
17	19	C	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	30	0	0	0	0	0	0	0	0	0
18	16, 17	D	2231.509	BITUMINOUS PATCHING MIXTURE	TON	3221	25	308	31	13	23	61	11	140	20
19	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	55933	0	0	0	0	0	0	0	0	0
20	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	47630	0	0	0	0	0	0	0	0	0
21	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	3174	0	0	0	0	0	0	0	0	0
22	6, 8, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	24207	245	3083	310	132	233	605	113	1403	195
23	6, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12433	0	0	0	0	0	0	0	0	0
24	20	F	2501.502	12" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0
25	20	F	2501.502	15" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0
26	20	F	2501.502	18" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0
27	20	F	2501.502	12" RC PIPE APRON	EACH	1	0	0	0	0	0	0	0	0	0
28	20	F	2501.502	18" RC PIPE APRON	EACH	2	2	0	0	0	0	0	0	0	0
29	20	F	2501.503	12" CS PIPE CULVERT	LIN FT	22	0	0	0	0	0	0	0	0	0
30	20	F	2501.503	15" CS PIPE CULVERT	LIN FT	40	0	0	0	0	0	0	0	0	0
31	20	F	2501.503	18" CS PIPE CULVERT	LIN FT	38	0	0	0	0	0	0	0	0	0
32	20	F	2501.503	12" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	114	0	0	0	0	0	0	0	0	0
33	20	F	2501.503	18" RCP PIPE CULVERT DESIGN 3006 CLASS V	EACH	40	40	0	0	0	0	0	0	0	0
34		F	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9	2	0	0	0	0	0	0	0	0
35	5	F	2504.602	ADJUST VALVE BOX	EACH	35	2	0	0	1	2	1	0	0	1
36		F	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	16	0	0	0	0	0	0	0	0	0
37	20	F	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	9	0	0	0	0	0	0	0	0	0
38		F	2506.502	CASTING ASSEMBLY	EACH	10	0	0	0	0	0	0	0	0	0
39		F	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	33	0	0	0	0	0	0	2	0	0
40	12	F	2506.602	ADJUST FRAME AND RING CASTING	EACH	85	2	0	0	0	0	0	0	0	0
41		F	2506.602	CONNECT INTO EXISTING MH OR CB	EACH	1	0	0	0	0	0	0	0	0	0
42	11	F	2506.602	ADJUST FRAME AND RING CASTING (SPECIAL)	EACH	50	1	0	1	1	1	8	0	0	1
43	2, 4, 14	E	2521.518	4" CONCRETE WALK	SQ FT	10234	0	0	0	0	0	129	0	0	0
44	2, 4, 14	E	2521.518	6" CONCRETE WALK	SQ FT	7150	0	0	0	0	0	1208	0	0	0
45	4	E	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	5793	0	0	0	0	0	0	0	0	173
46	2	E	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	224	0	0	0	0	0	0	0	0	30
47	4	E	2531.603	CONCRETE CURB DESIGN V	LIN FT	38	0	0	0	0	0	0	0	0	0
48	4, 14	E	2531.618	TRUNCATED DOMES	SQ FT	1799	0	0	0	0	0	171	0	0	0
49		F	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	4	0	0	0	0	0	0	0	0	0
50		A	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	4	0	0	0	0	0	0	0	0	0
51			2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
52		G	2564.502	INSTALL SIGN PANEL TYPE C	EACH	9	0	0	0	0	0	0	0	0	0
53			2575.601	EROSION CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
54	2	C	2575.602	SITE RESTORATION	EACH	105	2	0	0	0	0	12	0	0	0
55		G	2582.503	4" SOLID LINE PAINT	LIN FT	34892	0	11970	0	0	0	0	0	0	0
56		G	2582.503	12" SOLID LINE PAINT	LIN FT	48	0	48	0	0	0	0	0	0	0
57		G	2582.503	24" SOLID LINE PAINT	LIN FT	36	0	0	0	0	0	0	0	0	0
58		G	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	22628	0	5965	0	0	0	0	0	0	0
59		G	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	186	0	0	0	0	0	0	0	0	0

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: 

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.:

1692

STATE AID PROJECT NO.:

N/A

DRAWN BY: CJL

STATEMENT OF ESTIMATED QUANTITIES-2 OF 5

SHEET NO. 6 OF 247

3:17 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\seq-sheets.dwg

STATEMENT OF ESTIMATED QUANTITIES

							MILL & OVERLAYS									
ITEM NO.	NOTE ON SHEET 10	CHART LETTER	SPEC NO.	ITEM	UNIT	TOTAL	Oakley St - 43rd Ave E to 47th Ave E	Norwood St - 43rd Ave E to 47th Ave E	Crosley Ave - Glenwood to Avondale St	47th Ave E - Glenwood to Norwood St	Vermilion Rd - Oxford Ave to End of Pavement	Stuart Court - Brookline to W St. Marie St	Melrose Ave - Arrowhead to Brookline	Basswood Ave - Orange St. to Quince St	Adirondack St - Hutchinson Rd to Allegheny St	Wellington - Pacific to Grand Forks
1			2021.501	MOBILIZATION	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
2		A	2104.502	REMOVE CATCH BASIN	EACH	10	0	0	0	0	0	0	0	0	0	4
3		A	2104.502	SALVAGE SIGN TYPE C	EACH	9	0	0	0	0	0	0	0	0	0	0
4		A	2104.503	REMOVE PIPE CULVERTS	LIN FT	190	0	0	0	22	0	0	0	0	77	0
5	3	A	2104.503	REMOVE CURB AND GUTTER	LIN FT	5793	706	301	1237	385	69	0	0	0	195	454
6	3	A	2104.518	REMOVE CONCRETE WALK	SQ FT	17384	0	115	163	668	116	0	67	110	0	1884
7	3	A	2104.518	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	244	47	7	53	0	0	0	0	0	3	0
8	3	A	2104.518	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	2100	0	0	11	0	0	0	0	0	59	0
9		C	2105.507	COMMON EXCAVATION	CU YD	425	0	0	0	0	0	0	0	0	0	0
10	15	C	2105.603	CONSTRUCT DRAINAGE DITCH	LIN FT	376	0	0	0	0	0	0	0	0	0	0
11	13	C, D	2118.509	AGGREGATE SURFACING CLASS 5	CU YD	370	0	0	0	0	0	0	0	0	2	0
12	10	B	2123.510	MOOTOR GRADER	HOOR	111	0	0	0	0	0	0	0	0	0	0
13	10	B	2123.612	COMPACTOR	HOOR	111	0	0	0	0	0	0	0	0	0	0
14		B	2130.528	WATER	M GALLON	77	0	0	0	0	0	0	0	0	0	0
15	7	B	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	13615	0	0	0	0	0	0	0	0	0	0
16	1	B	2215.504	FULL DEPTH RECLAMATION	SQ YD	54445	0	0	0	0	0	0	0	0	0	0
17	19	C	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	30	0	0	0	0	0	0	0	0	0	0
18	16, 17	D	2231.509	BITUMINOUS PATCHING MIXTURE	TON	3221	117	106	231	107	97	35	43	33	123	79
19	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	55933	4860	4398	9587	0	4019	1463	1776	1363	0	3282
20	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	47630	0	0	0	4459	0	0	0	0	5075	0
21	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	3174	0	0	0	0	0	0	0	0	0	0
22	6, 8, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	24207	583	528	1152	535	483	176	213	164	615	394
23	6, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12433	0	0	0	0	0	0	0	0	0	0
24	20	F	2501.502	12" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
25	20	F	2501.502	15" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
26	20	F	2501.502	18" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
27	20	F	2501.502	12" RC PIPE APRON	EACH	1	0	0	0	0	0	0	0	0	1	0
28	20	F	2501.502	18" RC PIPE APRON	EACH	2	0	0	0	0	0	0	0	0	0	0
29	20	F	2501.503	12" CS PIPE CULVERT	LIN FT	22	0	0	0	0	0	0	0	0	0	0
30	20	F	2501.503	15" CS PIPE CULVERT	LIN FT	40	0	0	0	0	0	0	0	0	0	0
31	20	F	2501.503	18" CS PIPE CULVERT	LIN FT	38	0	0	0	0	0	0	0	0	0	0
32	20	F	2501.503	12" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	114	0	0	0	0	0	0	0	0	68	0
33	20	F	2501.503	18" RCP PIPE CULVERT DESIGN 3006 CLASS V	EACH	40	0	0	0	0	0	0	0	0	0	0
34		F	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9	0	0	0	0	0	0	0	0	0	4
35	5	F	2504.602	ADJUST VALVE BOX	EACH	35	0	0	0	0	0	0	0	0	0	0
36		F	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	16	0	3	3	0	0	0	0	0	0	0
37	20	F	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	9	0	0	0	0	0	0	0	0	0	4
38		F	2506.502	CASTING ASSEMBLY	EACH	10	0	0	0	0	0	0	0	0	0	4
39		F	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	33	1	0	0	2	0	0	0	0	0	0
40	12	F	2506.602	ADJUST FRAME AND RING CASTING	EACH	85	5	1	11	7	4	0	0	0	0	4
41		F	2506.602	CONNECT INTO EXISTING MH OR CB	EACH	1	0	0	0	0	0	0	0	0	0	0
42	11	F	2506.602	ADJUST FRAME AND RING CASTING (SPECIAL)	EACH	50	0	0	0	0	0	0	0	0	0	0
43	2, 4, 14	E	2521.518	4" CONCRETE WALK	SQ FT	10234	0	64	58	457	58	0	19	44	0	1201
44	2, 4, 14	E	2521.518	6" CONCRETE WALK	SQ FT	7150	0	51	105	211	58	0	48	66	0	683
45	4	E	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	5793	706	301	1237	385	69	0	0	0	195	454
46	2	E	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	224	47	7	64	0	0	0	0	0	36	0
47	4	E	2531.603	CONCRETE CURB DESIGN V	LIN FT	38	0	0	0	0	0	0	0	0	0	0
48	4, 14	E	2531.618	TRUNCATED DOMES	SQ FT	1799	0	25	18	89	9	0	9	10	0	254
49		F	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	4	0	1	0	0	0	0	0	0	0	0
50		A	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	4	0	0	0	0	0	0	0	0	0	0
51			2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
52		G	2564.502	INSTALL SIGN PANEL TYPE C	EACH	9	0	0	0	0	0	0	0	0	0	0
53			2575.601	EROSION CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024	0.024
54	2	C	2575.602	SITE RESTORATION	EACH	105	0	1	2	4	1	0	1	1	0	12
55		G	2582.503	4" SOLID LINE PAINT	LIN FT	34892	0	0	0	0	0	0	0	0	0	0
56		G	2582.503	12" SOLID LINE PAINT	LIN FT	48	0	0	0	0	0	0	0	0	0	0
57		G	2582.503	24" SOLID LINE PAINT	LIN FT	36	0	0	0	0	0	0	0	0	0	0
58		G	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	22628	0	0	1872	0	0	0	0	0	0	0
59		G	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	186	0	0	0	0	0	0	0	0	0	0

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

DATE: 03/13/2020

SIGNATURE: 

Jeffrey S. Goetzman
TYPE NAME

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.:

1692

STATE AID PROJECT NO.:

N/A

DRAWN BY:

CJL

STATEMENT OF ESTIMATED QUANTITIES-3 OF 5

SHEET NO. 7 OF

247

3:17 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\seq-sheets.dwg

STATEMENT OF ESTIMATED QUANTITIES												
ITEM NO.	NOTE ON SHEET 10	CHART LETTER	SPEC NO.	ITEM	UNIT	TOTAL	MILL & OVERLAYS					
							Exeter - Pacific to Grand Forks	W Michigan - 17 1/2 Ave W to 21 1/2 Ave W	Restormel St	Pacific Ave - Third St to Exeter St	S 63rd Ave W - Heard St. to Prescott St.	78th Ave W - TH23 to RR Tracks
1			2021.501	MOBILIZATION	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024
2		A	2104.502	REMOVE CATCH BASIN	EACH	10	0	2	0	0	0	0
3		A	2104.502	SALVAGE SIGN TYPE C	EACH	9	0	8	0	1	0	0
4		A	2104.503	REMOVE PIPE CULVERTS	LIN FT	190	0	0	0	0	0	0
5	3	A	2104.503	REMOVE CURB AND GUTTER	LIN FT	5793	372	638	430	283	357	12
6	3	A	2104.518	REMOVE CONCRETE WALK	SQ FT	17384	1793	3877	2051	1755	1317	0
7	3	A	2104.518	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	244	10	0	0	0	14	0
8	3	A	2104.518	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	2100	16	0	0	0	0	0
9		C	2105.507	COMMON EXCAVATION	CU YD	425	0	0	0	0	0	0
10	15	C	2105.603	CONSTRUCT DRAINAGE DITCH	LIN FT	376	0	0	0	0	0	0
11	13	C, D	2118.509	AGGREGATE SURFACING CLASS 5	CU YD	370	0	0	0	0	2	0
12	10	B	2123.510	MOTOR GRADER	HOURL	111	0	0	0	0	0	0
13	10	B	2123.612	COMPACTOR	HOURL	111	0	0	0	0	0	0
14		B	2130.523	WATER	MGALLON	77	0	0	0	0	0	0
15	7	B	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	13615	0	0	0	0	0	0
16	1	B	2215.504	FULL DEPTH RECLAMATION	SQ YD	54445	0	0	0	0	0	0
17	19	C	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	30	0	0	0	0	0	0
18	16, 17	D	2231.509	BITUMINOUS PATCHING MIXTURE	TON	3221	72	202	95	77	114	70
19	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	55933	2992	8413	3939	3195	3720	2926
20	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	47630	0	0	0	0	0	0
21	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	3174	0	0	0	0	0	0
22	6, 8, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	24207	360	1011	473	384	571	352
23	6, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12433	0	0	0	0	0	0
24	20	F	2501.502	12" CS PIPE APRON	EACH	2	0	0	0	0	0	0
25	20	F	2501.502	15" CS PIPE APRON	EACH	2	0	0	0	0	0	0
26	20	F	2501.502	18" CS PIPE APRON	EACH	2	0	0	0	0	0	0
27	20	F	2501.502	12" RC PIPE APRON	EACH	1	0	0	0	0	0	0
28	20	F	2501.502	18" RC PIPE APRON	EACH	2	0	0	0	0	0	0
29	20	F	2501.503	12" CS PIPE CULVERT	LIN FT	22	0	0	0	0	0	0
30	20	F	2501.503	15" CS PIPE CULVERT	LIN FT	40	0	0	0	0	0	0
31	20	F	2501.503	18" CS PIPE CULVERT	LIN FT	38	0	0	0	0	0	0
32	20	F	2501.503	12" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	114	0	0	0	0	0	0
33	20	F	2501.503	18" RCP PIPE CULVERT DESIGN 3006 CLASS V	EACH	40	0	0	0	0	0	0
34		F	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9	0	2	0	0	0	0
35	5	F	2504.602	ADJUST VALVE BOX	EACH	35	0	0	0	0	0	0
36		F	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	16	0	0	0	0	0	0
37	20	F	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	9	0	2	0	0	0	0
38		F	2506.502	CASTING ASSEMBLY	EACH	10	0	2	0	0	0	0
39		F	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	33	0	0	0	0	0	0
40	12	F	2506.602	ADJUST FRAME AND RING CASTING	EACH	85	6	7	7	4	7	0
41		F	2506.602	CONNECT INTO EXISTING MH OR CB	EACH	1	0	0	0	0	0	0
42	11	F	2506.602	ADJUST FRAME AND RING CASTING (SPECIAL)	EACH	50	0	0	0	0	0	0
43	2, 4, 14	E	2521.518	4" CONCRETE WALK	SQ FT	10234	1159	2374	1368	1224	893	0
44	2, 4, 14	E	2521.518	6" CONCRETE WALK	SQ FT	7150	634	1503	683	531	424	0
45	4	E	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	5793	372	638	430	283	357	12
46	2	E	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	224	26	0	0	0	14	0
47	4	E	2531.603	CONCRETE CURB DESIGN V	LIN FT	38	0	0	0	38	0	0
48	4, 14	E	2531.618	TRUNCATED DOMES	SQ FT	1799	208	314	236	188	128	0
49		F	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	4	0	0	0	0	0	0
50		A	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	4	0	0	0	0	0	0
51			2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024
52		G	2564.502	INSTALL SIGN PANEL TYPE C	EACH	9	0	8	0	1	0	0
53			2575.601	EROSION CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024
54	2	C	2575.602	SITE RESTORATION	EACH	105	10	18	12	8	8	0
55		G	2582.503	4" SOLID LINE PAINT	LIN FT	34892	0	0	0	0	0	0
56		G	2582.503	12" SOLID LINE PAINT	LIN FT	48	0	0	0	0	0	0
57		G	2582.503	24" SOLID LINE PAINT	LIN FT	36	0	0	0	0	36	0
58		G	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	22628	0	1641	0	0	0	0
59		G	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	186	0	0	0	0	186	0

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: 

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.:

1692

STATE AID PROJECT NO.:

N/A

DRAWN BY: CJL

STATEMENT OF ESTIMATED QUANTITIES-4 OF 5

SHEET NO. 8 OF 247

3:17 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\seq-sheets.dwg

STATEMENT OF ESTIMATED QUANTITIES							RECLAIMS						
ITEM NO.	NOTE ON SHEET 10	CHART LETTER	SPEC NO.	ITEM	UNIT	TOTAL	Norton Rd	W 5th Ave - 4th St to 6th St	Basswood Ave - Central Entrance to Ideal St	Mulberry - Basswood to Arlington	Stanford - Swan Lake Rd to Terrace St	Medina St. - Central Ave to Dead End West	Ideal - Joshua to Eklund
1			2021.501	MOBILIZATION	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024
2		A	2104.502	REMOVE CATCH BASIN	EACH	10	0	3	0	0	0	0	0
3		A	2104.502	SALVAGE SIGN TYPE C	EACH	9	0	0	0	0	0	0	0
4		A	2104.503	REMOVE PIPE CULVERTS	LIN FT	190	0	8	0	0	0	0	0
5	3	A	2104.503	REMOVE CURB AND GUTTER	LIN FT	5793	0	55	0	0	0	11	0
6	3	A	2104.518	REMOVE CONCRETE WALK	SQ FT	17384	0	953	163	0	0	0	0
7	3	A	2104.518	REMOVE CONCRETE DRIVEWAY PAVEMENT	SQ YD	244	72	0	0	38	0	0	0
8	3	A	2104.518	REMOVE BITUMINOUS DRIVEWAY PAVEMENT	SQ YD	2100	879	125	381	95	125	51	269
9		C	2105.507	COMMON EXCAVATION	CU YD	425	0	5	10	0	0	0	0
10	15	C	2105.603	CONSTRUCT DRAINAGE DITCH	LIN FT	376	0	0	0	26	0	0	0
11	13	C, D	2118.509	AGGREGATE SURFACING CLASS 5	CU YD	370	50	0	13	5	4	15	8
12	10	B	2123.510	MOTOR GRADER	HOUR	111	32	3	12	2	4	2	4
13	10	B	2123.612	COMPACTOR	HOUR	111	32	3	12	2	4	2	4
14		B	2130.523	WATER	GALLON	77	21	2	8	2	4	2	3
15	7	B	2131.506	CALCIUM CHLORIDE SOLUTION	GALLON	13615	7832	604	2525	476	809	465	904
16	1	B	2215.504	FULL DEPTH RECLAMATION	SQ YD	54445	31326	2414	10095	1901	3235	1860	3614
17	19	C	2215.507	HAUL FULL DEPTH RECLAMATION (LV)	CU YD	30	0	30	0	0	0	0	0
18	16, 17	D	2231.509	BITUMINOUS PATCHING MIXTURE	TON	3221	2	0	0	0	2	0	0
19	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (1.5")	SQ YD	55933	0	0	0	0	0	0	0
20	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (2.0")	SQ YD	47630	31326	0	3137	1901	1732	0	0
21	1, 18	B	2232.504	MILL BITUMINOUS SURFACE (3.0")	SQ YD	3174	0	0	1314	0	0	1860	0
22	6, 8, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,B)	TON	24207	15	0	0	0	21	0	0
23	6, 9, 17	D	2360.509	TYPE SP 9.5 WEARING COURSE MIXTURE (3,C)	TON	12433	7519	507	2121	400	680	447	759
24	20	F	2501.502	12" CS PIPE APRON	EACH	2	0	0	0	2	0	0	0
25	20	F	2501.502	15" CS PIPE APRON	EACH	2	0	0	2	0	0	0	0
26	20	F	2501.502	18" CS PIPE APRON	EACH	2	0	0	0	0	0	0	0
27	20	F	2501.502	12" RC PIPE APRON	EACH	1	0	0	0	0	0	0	0
28	20	F	2501.502	18" RC PIPE APRON	EACH	2	0	0	0	0	0	0	0
29	20	F	2501.503	12" CS PIPE CULVERT	LIN FT	22	0	0	0	22	0	0	0
30	20	F	2501.503	15" CS PIPE CULVERT	LIN FT	40	0	0	40	0	0	0	0
31	20	F	2501.503	18" CS PIPE CULVERT	LIN FT	38	0	0	0	0	0	0	0
32	20	F	2501.503	12" RC PIPE CULVERT DESIGN 3006 CLASS V	LIN FT	114	0	8	38	0	0	0	0
33	20	F	2501.503	18" RCP PIPE CULVERT DESIGN 3006 CLASS V	EACH	40	0	0	0	0	0	0	0
34		F	2503.602	CONNECT TO EXISTING STORM SEWER	EACH	9	0	1	0	0	0	0	0
35	5	F	2504.602	ADJUST VALVE BOX	EACH	35	0	0	3	0	0	0	0
36		F	2504.602	CONCRETE ENCASED VALVE BOX COLLAR	EACH	16	1	3	1	0	4	0	1
37	20	F	2506.502	CONSTRUCT DRAINAGE STRUCTURE DESIGN G	EACH	9	0	2	1	0	0	0	0
38		F	2506.502	CASTING ASSEMBLY	EACH	10	0	3	1	0	0	0	0
39		F	2506.602	CONCRETE ENCASED CASTING COLLAR	EACH	33	0	5	12	1	5	2	3
40	12	F	2506.602	ADJUST FRAME AND RING CASTING	EACH	85	0	6	2	0	0	1	0
41		F	2506.602	CONNECT INTO EXISTING MH OR CB	EACH	1	0	0	1	0	0	0	0
42	11	F	2506.602	ADJUST FRAME AND RING CASTING (SPECIAL)	EACH	50	0	0	6	0	1	0	0
43	2, 4, 14	E	2521.518	4" CONCRETE WALK	SQ FT	10234	0	664	80	0	0	0	0
44	2, 4, 14	E	2521.518	6" CONCRETE WALK	SQ FT	7150	0	289	83	0	0	0	0
45	4	E	2531.503	CONCRETE CURB AND GUTTER DESIGN B624	LIN FT	5793	0	55	0	0	0	11	0
46	2	E	2531.504	7" CONCRETE DRIVEWAY PAVEMENT	SQ YD	224	0	0	0	0	0	0	0
47	4	E	2531.603	CONCRETE CURB DESIGN V	LIN FT	38	0	0	0	0	0	0	0
48	4, 14	E	2531.618	TRUNCATED DOMES	SQ FT	1799	0	43	16	0	0	0	0
49		F	2540.602	CONSTRUCT SURVEY MONUMENT	EACH	4	0	0	0	0	1	1	0
50		A	2540.602	RELOCATE MAIL BOX SUPPORT	EACH	4	0	0	1	0	0	0	0
51			2563.601	TRAFFIC CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024
52		G	2564.502	INSTALL SIGN PANEL TYPE C	EACH	9	0	0	0	0	0	0	0
53			2575.601	EROSION CONTROL	LUMP SUM	1	0.024	0.024	0.024	0.024	0.024	0.024	0.024
54	2	C	2575.602	SITE RESTORATION	EACH	105	0	4	2	0	0	0	0
55		G	2582.503	4" SOLID LINE PAINT	LIN FT	34892	22922	0	0	0	0	0	0
56		G	2582.503	12" SOLID LINE PAINT	LIN FT	48	0	0	0	0	0	0	0
57		G	2582.503	24" SOLID LINE PAINT	LIN FT	36	0	0	0	0	0	0	0
58		G	2582.503	4" DOUBLE SOLID LINE PAINT	LIN FT	22628	11461	0	1029	660	0	0	0
59		G	2582.518	PAVEMENT MESSAGE PAINT	SQ FT	186	0	0	0	0	0	0	0

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: 

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.:

1692

STATE AID PROJECT NO.:

N/A

DRAWN BY: CJL

STATEMENT OF ESTIMATED QUANTITIES-5 OF 5

SHEET NO. 9 OF 247

3:57 PM

4/2/2020

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\2020_transsttl.dwg

PLAN LEGEND

RIGHT OF WAY LINE	_____
DITCH CENTERLINE	-----
FENCE LINE	-x-x-x-x-x-x-x-x-
RETAINING WALL	~~~~~
GRAVEL LINE	-----
GUARD RAIL	—□—□—□—□—
RAILROAD TRACK	+++++
TREE LINE	~~~~~
STREAM FLOW LINE	—ooo—ooo—ooo—
WETLAND LIMIT	—WET—WET—WET—WET—
LAKESHORE	-----
EX SANITARY SEWER	—>—>—>—>—
PR SANITARY SEWER	—>—>—>—>—
AB SANITARY SEWER	-----AB-SSWR-----AB-SSWR-----
EX FORCE MAIN	—FM—FM—FM—FM—
PR FORCE MAIN	—FM—FM—FM—FM—
AB FORCE MAIN	-----AB-SSWR-----AB-SSWR-----
EX STORM SEWER	—>—>—>—>—
PR STORM SEWER	—>—>—>—>—
AB STORM SEWER	-----AB-STRM-----AB-STRM-----
EX WATER MAIN	— — — — — — —
PR WATER MAIN	— — — — — — —
AB WATER MAIN	-----AB-WTR-----AB-WTR-----AB-WTR-----
EX GAS MAIN	—GAS—GAS—GAS—GAS—
PR GAS MAIN	—GAS—GAS—GAS—GAS—
AB GAS MAIN	-----AB-GAS-----AB-GAS-----AB-GAS-----
EX STEAM LINE	—STEAM—STEAM—STEAM—
PR STEAM LINE	—STEAM—STEAM—STEAM—
AB STEAM LINE	-----AB-STEAM-----AB-STEAM-----
UG TV CABLE	—TV-BUR—TV-BUR—
OH TV CABLE	—TEL-OH—TEL-OH—
AB TV CABLE	-----AB-CATV-----AB-CATV-----AB-CATV-----
UG ELECTRIC LINE	—E-BUR—E-BUR—
OH ELECTRIC LINE	—E-OH—E-OH—E-OH—
AB ELECTRIC	-----AB-ELEC-----AB-ELEC-----AB-ELEC-----
UG FIBER OPTIC CABLE	—FO-BUR—FO-BUR—
OH FIBER OPTIC CABLE	—F/O-OH—F/O-OH—
AB FIBER OPTIC CABLE	-----AB-F/O-----AB-F/O-----AB-F/O-----
UG TELEPHONE	—T-BUR—T-BUR—
OH TELEPHONE	—TEL-OH—TEL-OH—
AB TELEPHONE	-----AB-TEL-----AB-TEL-----AB-TEL-----

ABBREVIATIONS USED IN THIS PLAN

AB = ABANDONED	OH = OVERHEAD
EX = EXISTING OR IN-PLACE	PL = PLACE
PR = PROPOSED	REM = REMOVE
UG = UNDERGROUND	

SURVEYS AND RIGHT OF WAY

THE CONTRACTOR SHALL PRESERVE ALL LAND AND PROPERTY CORNERS, VERTICAL & HORIZONTAL CONTROLS, SURVEY AND RIGHT OF WAY MONUMENTS. THE RIGHT OF WAY SHOWN IN THIS PLAN GIVES A GRAPHICAL LOCATION WITH RESPECT TO THE PLAN ALIGNMENTS. FOR EXACT RIGHT OF WAY LIMITS, SEE MAP ON FILE WITH THE CITY OF DULUTH.

CONSTRUCTION NOTES:

- IN-PLACE BITUMINOUS PAVEMENT AND AGGREGATE BASE THICKNESSES SHOWN IN THIS PLAN ARE APPROXIMATE. VALUES INDICATED IN THE TYPICAL SECTIONS MAY NOT REFLECT ACTUAL FIELD CONDITIONS. DISCREPANCIES FOUND IN THE FIELD SHALL BE DISCUSSED WITH THE ENGINEER PRIOR TO COMMENCEMENT OF MILLING AND RECLAIMING OPERATIONS.
- REINFORCING BARS, COMMON EXCAVATION, AGGREGATE BASE, CLASS 5 AND TURF ESTABLISHMENT ARE INCIDENTAL TO THE INSTALLATION OF WALKS. DRIVEWAY APRONS, AND CURB & GUTTER. ALL WALKS WILL INCLUDE A 6" AGGREGATE CLASS 5 BASE. TURF ESTABLISHMENT INCLUDES: SOIL PREPARATION, 4" MIN. COMMON TOPSOIL BORROW, SEED MIXTURE 25-131 (120 LBS/ACRE), AND WATER. A SEPARATE BID ITEM HAS BEEN CREATED FOR THE GRADING OF PEDESTRIAN RAMP AREAS OUTSIDE OF THE CONCRETE WALKS.
- SAWING PAVEMENT (BITUMINOUS OR CONCRETE) FULL DEPTH IS INCIDENTAL TO REMOVALS.
- TEMPORARY PEDESTRIAN ACCESS ROUTES MUST BE MAINTAINED ALL TIMES WHILE WORKING ON ADA IMPROVEMENTS.
- ALL VALVE BOX ADJUSTMENTS WILL BE PAID FOR UNDER ADJUST VALVE BOX REGARDLESS OF TYPE OF UTILITY (WATER, GAS, OR SANITARY).
- CALCULATIONS FOR BITUMINOUS PAVING ARE COMPUTED USING 120-LBS/SY/IN,
- CALCIUM CHLORIDE QUANTITIES ARE COMPUTED USING AN APPLICATION RATE OF 0.25 GAL/SY. AREAS COMPUTATION IS STREET WIDTH BY STREET LENGTH.
- DRIVEWAY APRONS ON OVERLAYS SHALL BE TIED BACK INTO EXISTING UTILIZING A TAPER MILLING PROCESS TO ALLOW FOR A SMOOTH AND FLUSH TRANSITION SEE DETAIL 5 ON SHEET 12. TAPER MILLING DRIVEWAY APRONS AND SAWING OF JOINTS SHALL BE INCIDENTAL.
- ALL SIDE STREETS AND BEGINNING AND ENDING TIE-INS TO EXISTING ON RECLAIMS AND OVERLAYS SHALL BE TAPER MILLED AT A DISTANCE REQUIRED TO MAKE A SMOOTH TRANSITION AT A DESIGN SPEED OF 30 MPH SEE DETAILS 1 AND 2 ON SHEET 12. ALL ROADWAY TAPER MILLS AND SAWING OF JOINTS SHALL BE INCIDENTAL.
- MOTOR GRADER AND COMPACTOR HOURS ARE TO BE PAID TO GRADE AND COMPACT EXISTING GRAVEL ROADS PRIOR TO PAVING AND TO GRADE OUT PARKING AREAS AS CALLED OUT ON THE PLANS. GRADING AND COMPACTION FOR 2 FT SHOULDERS IS INCIDENTAL TO FULL DEPTH RECLAMATION.
- ADJUST FRAME AND RING CASTINGS (SPECIAL) SHALL INCLUDE A CAST IRON ADJUSTMENT RING (NEENAH R-1979 OR ESS BROTHERS) PLACED ON TOP OF THE EXISTING CASTING TO RAISE THE GRADE OF THE COVER TO 3/8" BELOW THE FINISHED PAVEMENT ELEVATION.
- ADJUST FRAME AND RING CASTING INCLUDES ADJUSTING THE ELEVATION OF THE EXISTING STRUCTURE AS DIRECTED BY THE ENGINEER AND IN ACCORDANCE WITH CITY REQUIREMENTS.
- GRAVEL DRIVEWAYS AND GRAVEL ROADWAYS SHALL RECEIVE CLASS 5 TAPERED APRON TO TIE-IN EXISTING DRIVEWAYS AND ROADWAYS TO THE EDGE OF BITUMINOUS PAVEMENT. QUANTITY INCLUDED WITH AGGREGATE SURFACING CLASS 5 BID ITEM.
- ALL PED RAMPS SHALL BE DESIGNED BY THE CONTRACTOR AND CONSTRUCTED TO MEET ADA REGULATIONS. PED RAMP LAYOUTS SHOWN ON PLAN SHEETS ARE SCHEMATIC REPRESENTATIONS OF THE PROPOSED WORK. LAYOUTS SHALL BE MODIFIED WHERE NECESSARY TO MEET ADA GRADES IN THE FIELD.
- CONSTRUCTION OF DRAINAGE DITCHES SHALL INCLUDE COMMON EXCAVATION, GRADING, SHAPING, REMOVAL OF VEGETATION AND TOPSOIL, SEEDING (SEED MIXTURE 33-361 AT 35 LBS/ACRE) AND EROSION CONTROL BLANKETS CATEGORY 3K.
- A BITUMINOUS PATCHING QUANTITY IS PROVIDED ON MILL & OVERLAYS AND OVERLAYS TO ALLOW FOR PATCHING OF POTHOLES AND MAJOR DEPRESSIONS. PATCHING AREAS WILL BE DETERMINED BY THE ENGINEER IN THE FIELD. PATCHING MIXTURE SHALL BE SPWEA340B (3,B).
- ALL SURFACES RECEIVING OR ADJUTING NEW BITUMINOUS PAVEMENT MUST RECEIVE TACK COAT IN ACCORDANCE WITH MnDOT SPECIFICATIONS AND APPLICATION RATES. TACK COAT IS INCLUSIVE.
- MILLING DEPTHS SPECIFIED ARE APPROXIMATE. ENGINEER RESERVES RIGHT TO MAKE MINOR ADJUSTMENTS TO MILLING DEPTHS WITHOUT RECLASSIFYING PAY ITEM FOR CHANGES IN MILLING DEPTH.
- HAULING FULL DEPTH RECLAMATION IS FOR WHEN EXCESS FULL DEPTH RECLAMATION CANNOT BE REUSED ON THE SAME STREET BY GRADING AND NEEDS TO BE MOVED BY TRUCK OFFSITE OR TO ANOTHER LOCATION.
- BEDDING, BACKFILL, GRADING, AND TURF ESTABLISHMENT IS INCLUSIVE TO STORM SEWER WORK. STORM SEWER BEDDING AND BACKFILL TO FOLLOW CITY DETAIL EX-3 FOR CONCRETE AND CORRUGATED STEEL.

GENERAL REQUIREMENTS

TABULATION CHART INDEX	
CHART	DESCRIPTION
A	REMOVALS & SAWING
B	MILLING OPERATIONS
C	BITUMINOUS PAVEMENT
D	PROPOSED CONCRETE WORK
E	ENCASEMENT AND REPAIR
F	PAVEMENT MARKINGS

MnDOT STANDARD PLATES	
THE FOLLOWING STANDARD PLATES SHALL APPLY ON THIS PROJECT	
PLATE NO.	DESCRIPTION
4006L	MANHOLE OR CATCHBASIN – PRECAST DESIGNS G & H
7038A	DETECTABLE WARNING SURFACE
7100H	CONCRETE CURB AND GUTTER – DESIGN B AND DESIGN V
7111J	INSTALLATION OF CATCH BASIN CASTINGS
8000J	CHANNELIZERS

CITY OF DULUTH STANDARD DETAILS	
THE FOLLOWING STANDARD DETAILS SHALL APPLY ON THIS PROJECT	
DETAIL NO.	DESCRIPTION
EX-1	PVC AND CORRUGATED POLYETHYLENE SEWER PIPE BEDDING
EX-3	CONCRETE STORM SEWER BEDDING
STRM-2B	CATCH BASIN/CURB BOX CASTINGS
STRM-3B	CATCH BASIN CASTINGS
STRM-4	FABRIC WRAPPED CATCH BASIN
STRM-5	STORM MANHOLE NON-PAVED AREAS
STRM-5A	CONCRETE ENCASED CASTING COLLAR FOR STORM MH
STRM-6	GUTTER SWALE
STRM-7	GUTTER STAMP
T-2	SIGN & BREAKAWAY MOUNT INSTALLATION
W-19	CONCRETE ENCASED VALVE BOX COLLAR

PLAN SYMBOLS

EX SANITARY MANHOLE	
EX SANITARY CLEANOUT	
EX STORM MANHOLE	
EX STORM CATCHBASIN	
EX WATER MANHOLE	
EX WATER VALVE	
EX WATER HYDRANT	
EX. WATER SHUTOFF	
EX. WATER & GAS MH	
EX. GAS MANHOLE	
EX. GAS VALVE	
EX. GAS SHUTOFF	
EX. STEAM MANHOLE	
EX. TELEPHONE MANHOLE	
EX. ELECTRIC MANHOLE	
EX. UTILITY POLE	
EX. LIGHT POLE	
EX. ELECTRIC VAULT	
EX. GUY ANCHOR	
EX. ELECTRIC TRANSFORMER	
EX. STREET LIGHT	
EX. SIGNAL W/STREET LIGHT	
EX. HAND HOLE	
EX. TELEPHONE PEDESTAL	
EX. WELL	
EX. SIGN	
EX. DECIDUOUS TREE	
EX. CONIFEROUS TREE	
EX. PARKING METER	
BENCHMARK	
CONTROL POINT	
FOUND CI MONUMENT	
SOIL BORING	

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: _____

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.: 1692 STATE AID PROJECT NO.: N/A

DRAWN BY: CJL

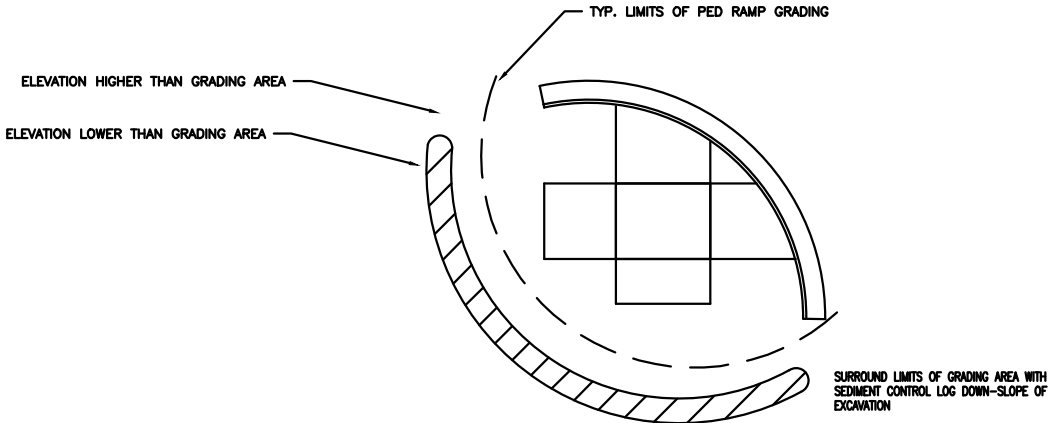
LEGEND-NOTES-INDEX

SHEET NO. 10 OF 247

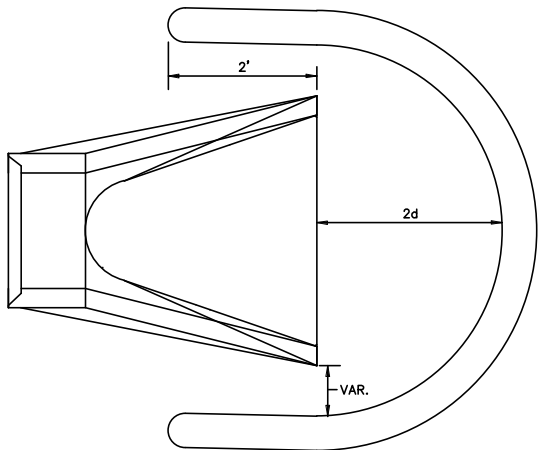
k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\2020_transitl.dwg 4/2/2020 3:21 PM

EROSION CONTROL NOTES (ALL WORK INCLUSIVE TO EROSION CONTROL LUMP SUM BID ITEM):

- 1. PROTECT STORM INLETS IMMEDIATELY DOWN-SLOPE OF ANY EXCAVATION WORK UTILIZING DETAIL 5 ON THIS SHEET UNTIL TURF ESTABLISHMENT IS COMPLETED AND ESTABLISHED TO THE POINT ACCEPTABLE TO THE ENGINEER.
- 2. PROTECT CULVERT INLETS IMMEDIATELY DOWN-SLOPE OF ANY EXCAVATION WORK UTILIZING DETAIL 2 ON THIS SHEET UNTIL TURF ESTABLISHMENT IS COMPLETED AND ESTABLISHED TO THE POINT ACCEPTABLE TO THE ENGINEER.
- 3. PROTECT PERIMETER OF EXCAVATIONS UTILIZING DETAIL 1 ON THIS SHEET UNTIL TURF ESTABLISHMENT IS COMPLETED AND ESTABLISHED TO THE POINT ACCEPTABLE TO THE ENGINEER.
- 4. ENGINEER RESERVES THE RIGHT TO DIRECT CONTRACTOR TO MODIFY AND/OR ADD EROSION CONTROL MEASURES IN THE FIELD AS NEEDED TO PREVENT SILT FROM LEAVING THE PROJECT SITE.

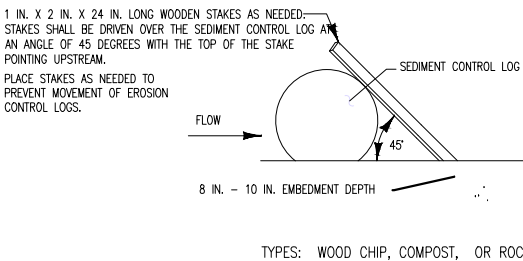


1 TYPICAL PED RAMP GRADING EROSION CONTROL
11 NO SCALE

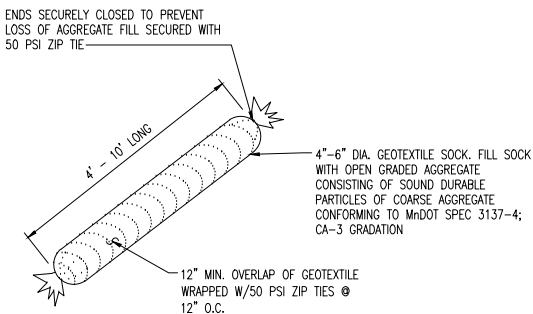


SEDIMENT CONTROL LOG WEIR
(COMPOST, WOOD CHIP, OR ROCK)
d = CULVERT SIZE: 12"-36"

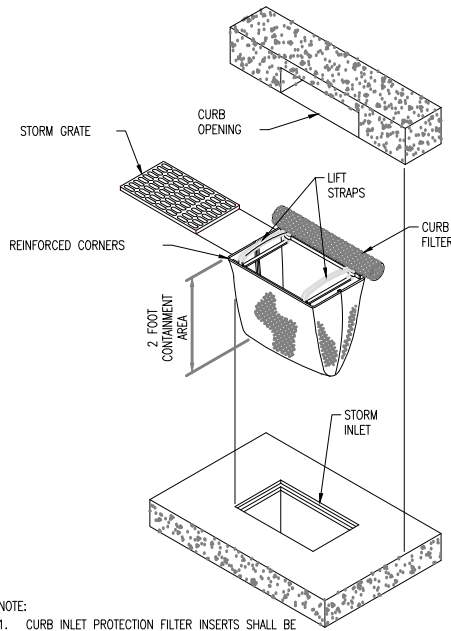
2 CULVERT END PROTECTION
11 NO SCALE



3 SEDIMENT CONTROL LOG STAKING
11 NO SCALE



4 ROCK FILTER LOG TYPE COMPOST DETAIL
11 NO SCALE



NOTE:
1. CURB INLET PROTECTION FILTER INSERTS SHALL BE DANDY CURB SACK, DANDY PRODUCTS INC. OR APPROVED EQUAL.

5 STORM INLET PROTECTION DETAIL
11 NO SCALE

REVISION DATE: 04/02/2020

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE: *Jeffrey S. Goetzman*

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.: 1692

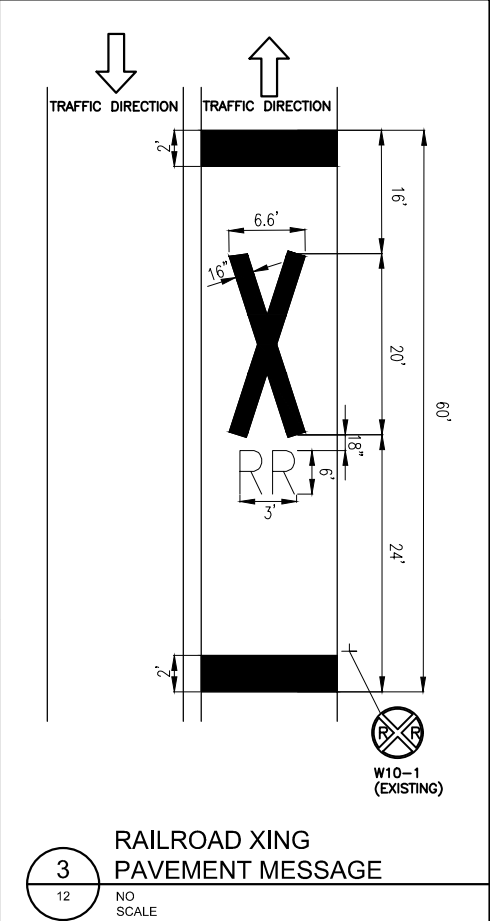
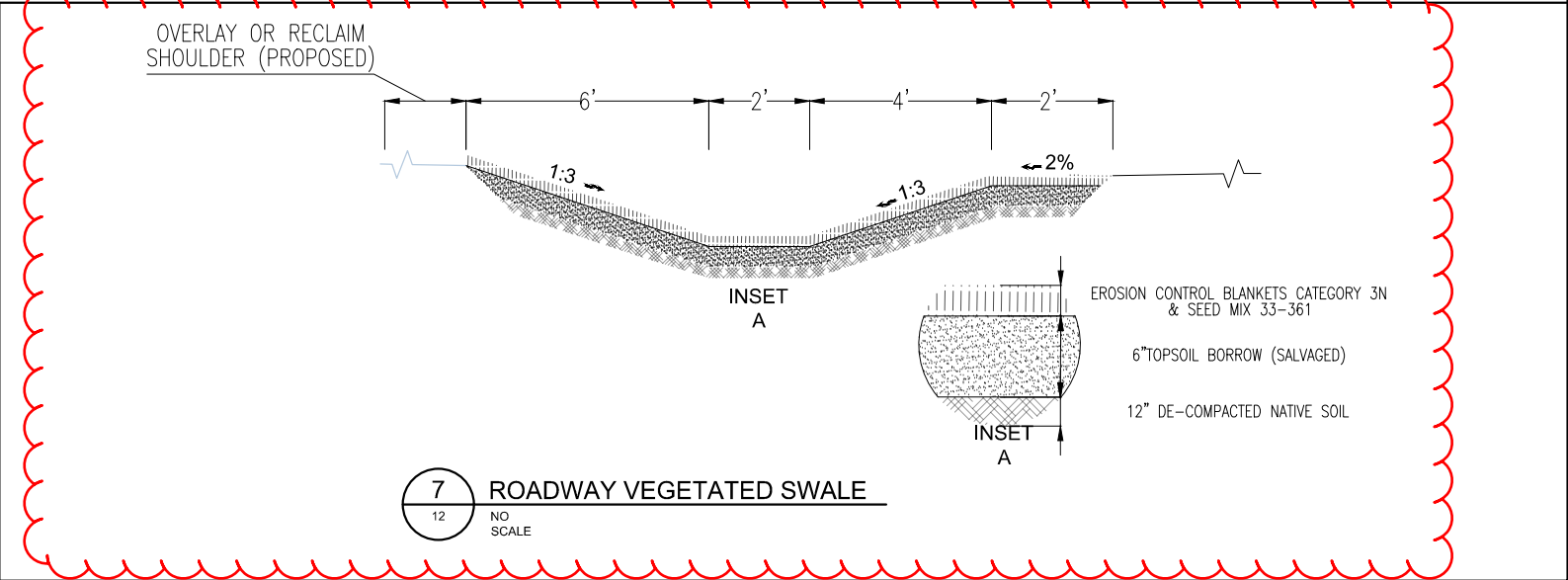
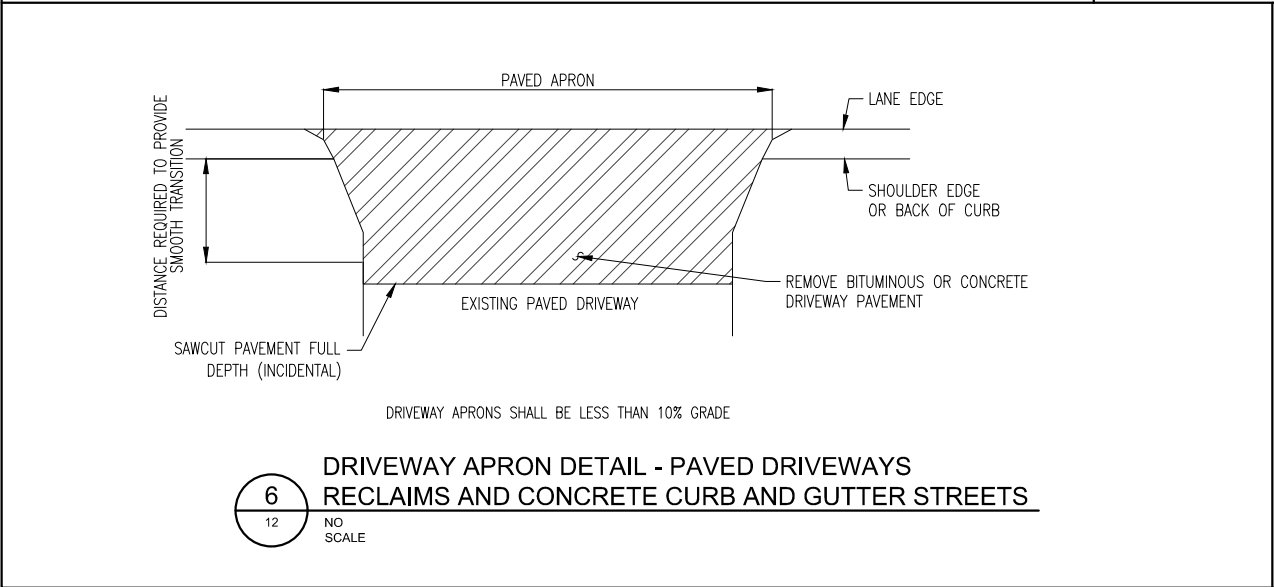
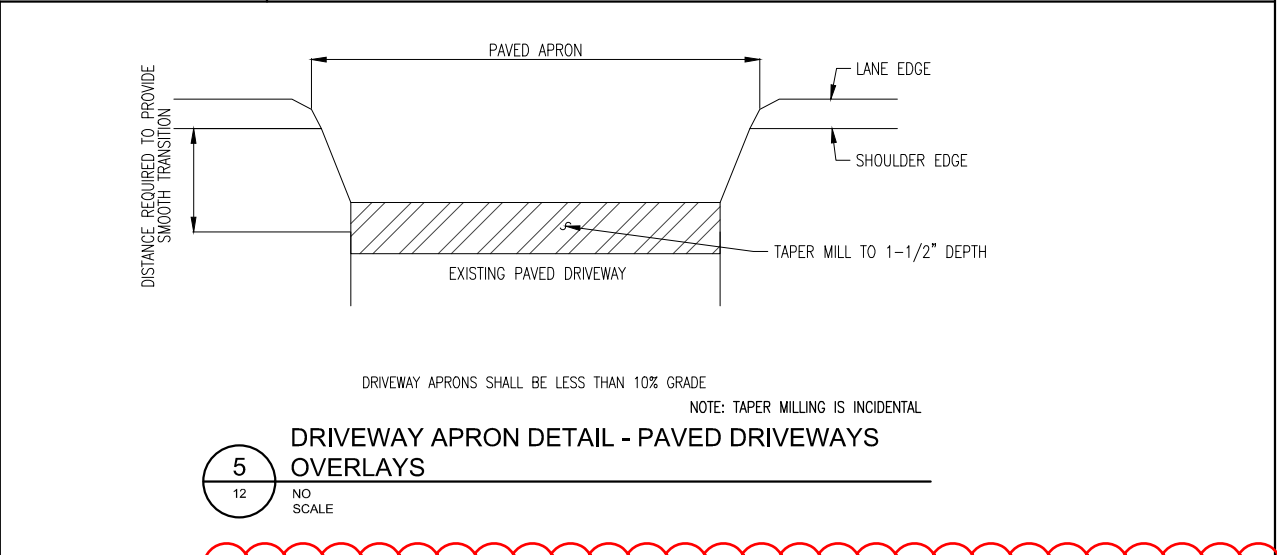
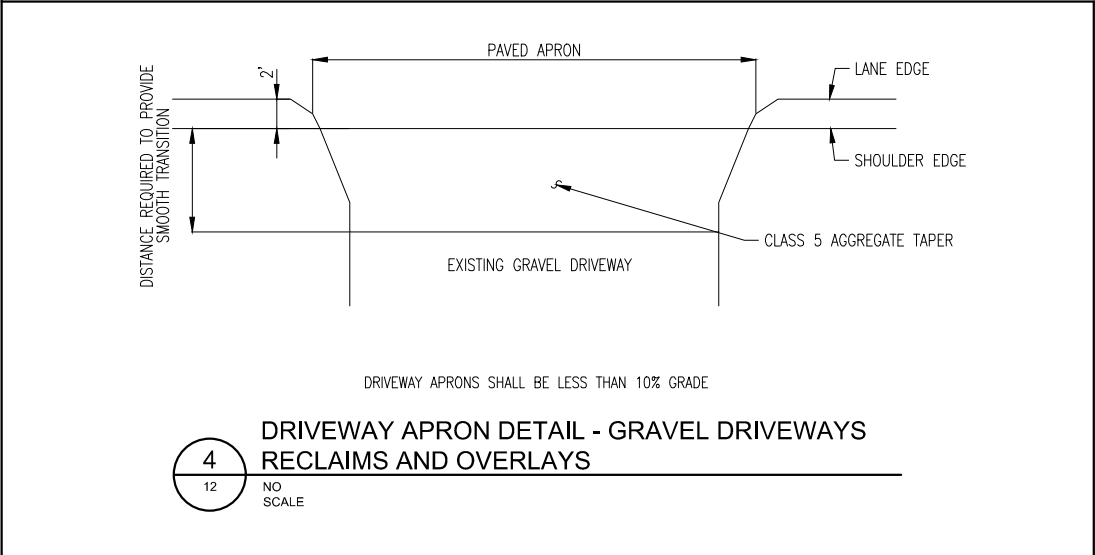
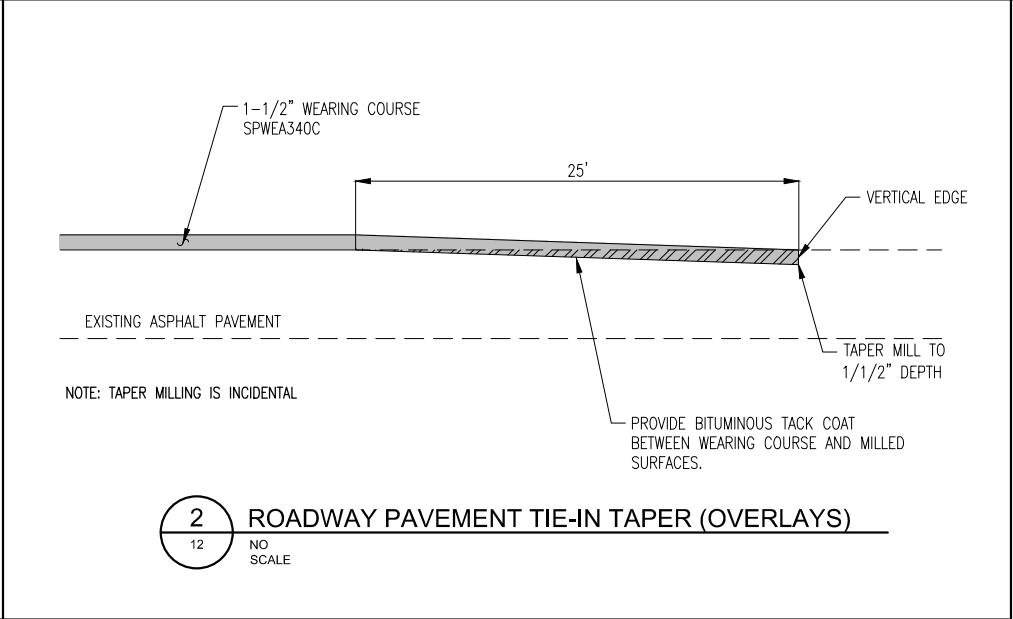
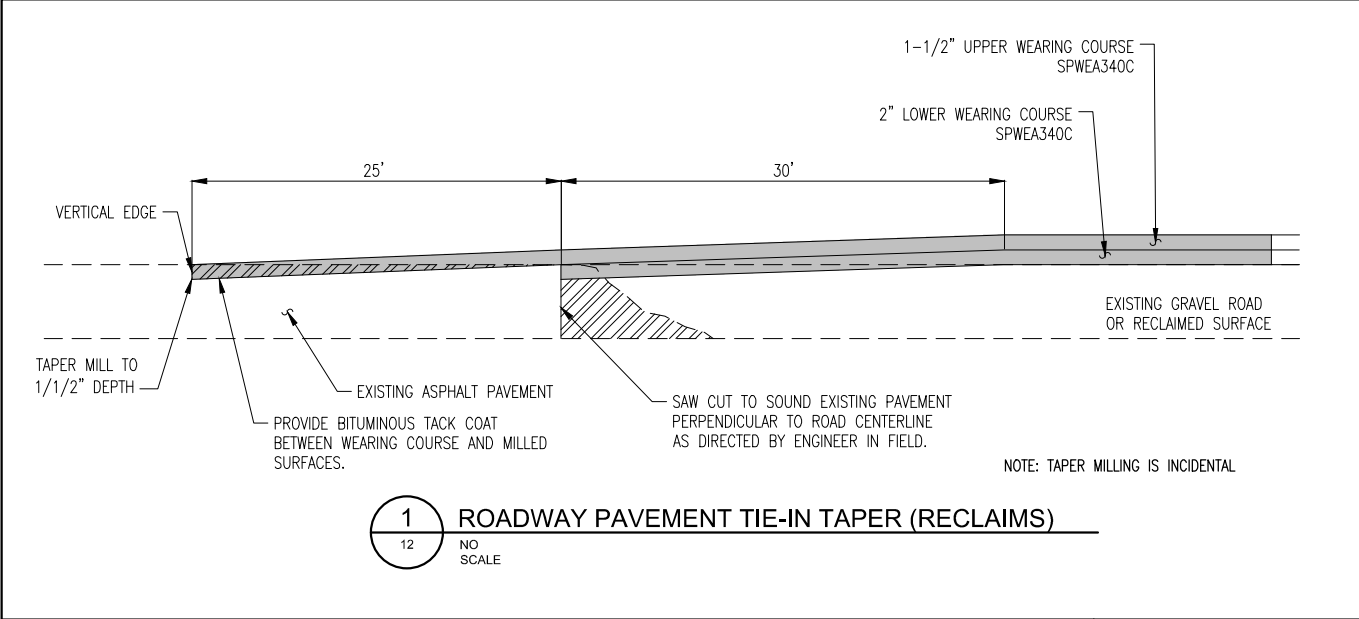
STATE AID PROJECT NO.: N/A

DRAWN BY: CJL

EROSION CONTROL

SHEET NO. 11 OF 247

k:\a-f\duluth_city\17650000\04_production\01_cad\02_sheets\2020_transttl.dwg 4/2/2020 3:21 PM



I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.

SIGNATURE:

Jeffrey S. Goetzman
TYPE NAME

DATE: 03/13/2020

LIC. NO.: 26422



CITY OF DULUTH
ENGINEERING DIVISION
411 W. 1ST ST. STE. 211
DULUTH, MN 55802

Duluth 2020 Street Preservation

CITY PROJECT NO.: 1692

STATE AID PROJECT NO.: N/A

REVISION DATE: 04/02/2020

DRAWN BY: CJL

PAVING, DITCHING AND MARKINGS DETAILS

SHEET NO. 12 OF 247