# Addendum

Iowa Department of Transportation

Date of Letting: June 21, 2016

Office of Contracts

Date of Addendum: June 14, 2016

B.O.	Proposal ID	Proposal Work Type	County	Project Number	Addendum
156	57-1187-783	HMA SIDEWALK/TRAIL	LINN	EDP-1187(778)7Y-57 TAP-U-1187(783)8I-57	21JUN156.A01

Change Proposal Line No. 0010 2101-0850002 CLEARING AND GRUBBING:

From: 265.000 UNIT To: 280.000 UNIT

Add Proposal Line No. 0255 2599-9999009 TREE PROTECTION FENCE; 5,500.000 LF

Add Proposal Line No. 0265 2599-9999010 TREE PROTECTION; 1.000 LUMP

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

Make the following changes to the PROPOSAL PROVISIONS LIST AND TEXT:

Add the attached SP-157017

SPECIAL PROVISIONS FOR TREE PROTECTION

Linn County EDP-1187(778)--7Y-57

Effective Date June21, 2016

Replace SHEET NUMBER C.02, C.03 and D.01 With the attached SHEET NUMBER C.02, C.03 and D.01

EDP-1187(778)--7Y-57

Replace SHEET C.02 TAP-U-1187(783)--8I-57 With the attached SHEET NUMBER C.02



# SPECIAL PROVISIONS FOR TREE PROTECTION

Linn County EDP-1187(778)--7Y-57

Effective Date June 21, 2016

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

#### PART 1 - GENERAL

#### 1.01 SECTION INCLUDES

- A. Tree Protection Plan
- B. Installation of Tree Protection Measures
- C. Damage to Protected Trees
- **D.** Inspection and Documentation

# 1.02 DEFINITION OF TERMS AND ABBREVIATIONS

# **Work Zone Protected Tree**

A tree of any size that is located within the project's work zone and is to remain in place at the completion of the project.

# **Border Protected Tree**

A tree of any size that is located outside the project's work zone, but has branches extending over the work area, or whose trunk is located within 10 feet of the edge of the work area.

# **Tree Protection Limit**

The area around a tree, as defined in the Tree Protection Plan, in which no construction activity is allowed. If the tree protection limit is not defined in the Tree Protection Plan, it shall be considered to be equal to the Critical Root Radius.

# dbh: Diameter at breast height

The diameter of a tree's trunk in inches measured at a height of 4.5 feet above the natural ground level.

# **CRR: Critical Root Radius**

Expressed in feet equal to the dbh in inches (The CRR of a tree with a 12 inch dbh is 12 feet). This is the desired distance from the tree trunk at which fencing is installed and no construction activity is allowed.

#### 1.03 DESCRIPTION OF WORK

- **A.** The Contractor shall not damage any trees and shrubs which are not part of the removal plan, regardless of whether installation of tree protection measures is required or not. The contract documents may designate individual trees and/or areas of the project that require installation of tree protection measures as defined in this specification.
- **B.** This Section includes the identification of trees, preparation of a Tree Protection Plan for the construction area, and the deduction of payment to the Contractor for damage to a tree.
- C. The Contractor shall install all tree protection measures before the commencement of any construction activities.

#### 1.04 MEASUREMENT AND PAYMENT

- **A.** Tree Protection: Item will be paid for as a lump sum for the project. Item includes inventory, tree protection plan, documentation, inspection, and signing of work zone protected trees and border protected trees for the duration of the construction activity. The Engineer may make partial payments based upon estimates for the project completion.
- **B.** Tree Protection Fence: The number of linear feet of tree protection fence constructed will be determined by measuring along the fence at the bottom of the mesh fabric. The Contractor shall be paid the contract unit price for the number of linear feet of fence constructed and measured. This payment shall be full compensation for furnishing all materials, equipment, and labor to perform installation, maintenance, and removal of fencing. If other types of fence, such as silt fence, is installed and functions as tree protection fence, measurement and payment will not be made for this fence as tree protection fence.
- **C.** For each occurrence of tree protection fencing not installed as per the approved Tree Protection Plan or not properly maintained as described in Section 3.02A, the following shall be deducted from the amount due the Contractor: \$600 for the 1st occurrence, \$1200 for the 2nd occurrence, and \$1800 for the 3rd and subsequent occurrences. Fines shall be issued per daily, per tree, per occurrence.
- D. The condition of any tree damaged by the Contractor will be evaluated by the Municipal Arborist. The Contractor shall be required to repair damage to the tree as directed by the Municipal Arborist. This could include, but not be limited to trimming and pruning of the branches and roots in accordance with the current edition of the American National Standards Institute (ANSI) A300 Standards for Tree Care Operations, Part 1, Pruning. In addition to repairing the damage, an amount of \$1200 per tree shall be deducted from the amount due the Contractor for each tree damaged.
- E. When the Municipal Arborist determines the damaged tree needs to be removed, the contractor shall remove the tree and stump, and restore the sod area. Repair and removal of damaged trees shall be completed at no cost to the City. The Contractor shall also compensate the City for the mitigation cost of any damaged tree that is removed, in accordance with City ordinance. The Contractor shall also be liable to the owner of any tree located on private property that must be removed due to damage, for the full value of the tree. Documentation of such payment shall be provided to the City.

# **PART 2 - PRODUCTS**

#### 2.01 ORANGE MESH TREE PROTECTION FENCE

- **A.** Fabric shall meet the following material requirements:
  - 1. Height of 48 inches +2 inches and constructed of orange plastic mesh containing ultraviolet stabilizers to prevent degradation.
  - 2. Remain flexible down to 0°F.
  - 3. Minimum tensile strength of 250 pounds per foot in the longitudinal direction and 150 pounds per foot in the vertical direction.
  - 4. Maximum aperture opening of a nominal 4.5 square inches.
  - 5. Maximum porosity of 55% for the safety fence surface area.
  - 6. Available in rolls of at least 50 feet in length to minimize fence joints for an individual fence location.
- **B.** Fence posts shall meet the following requirements:
  - 1. Use T-section steel posts, 6 foot length.
  - Equip posts with lugs or other approved means to prevent the fence fabric from moving vertically.
  - 3. Use posts that weigh no less than 1.3 pounds per foot, exclusive of anchor plate.
  - 4. Provide each post with a steel anchor plat of adequate size, firmly attached.

# **PART 3 – EXECUTION**

#### 3.01 TREE PROTECTION PLAN

- **A.** The contractor shall submit a Tree Protection Plan to the Engineer prior to starting work. The plan shall include the following items:
  - 1. Work zone limits
  - 2. Location and size of trees to removed
  - 3. Location and size (dbh) of work zone protected trees
  - 4. Location and size (dbh) of border protected trees
  - 5. Proposed location of tree protection measures
  - 6. Phasing of the tree protection installation, including phasing for utility work, if necessary
  - 7. Location, size (dbh), and description of trees with existing damage that are not designated to be removed
  - 8. Location and size (dbh) of dead trees that are not designated to be removed
  - Location and description of proposed tree trimming to complete the required construction work
- **B.** The Contractor may submit an alternate to the installation of tree protection fencing, such as the installation of silt fencing along border trees, if such alternates provide acceptable tree protection. The Engineer shall have the sole authority for acceptance or rejection of alternates. Alternate plans may also take into consideration preliminary brush removal.

# 3.02 INSTALLATION AND MAINTENANCE OF TREE PROTECTION MEASURES

After approval of the Tree Protection Plan by the Engineer, and prior to starting construction work, the contractor shall install the tree protection fencing or other approved measures in accordance with the Tree Protection Plan. Install fence posts at an 8 foot maximum spacing or as required to prevent sagging. Securely attach the fence so it is in a vertical position without sagging. Locate and place the fence supports so they are not a safety hazard. Clearly mark with paint the trees to be removed in accordance with the Tree Protection Plan. No construction activity can commence until the tree protection fencing measures and the trees marked for removal have been reviewed on site by the Engineer. Phasing of the installation of tree protection measures will only be allowed if shown on the

approved Tree Protection Plan. Repair or replace any tree protection fence that is damaged, not in a vertical position or no longer providing the intended protection.

# 3.03 DAMAGES TO TREES

Damage to a work zone protected tree, a border protected tree, or any other tree not designated for removal shall be determined by the Engineer or Municipal Arborist and shall include but not be limited to:

- 1. Scratched or gouged bark.
- 2. Broken branches.
- 3. Compaction of soil within the specified tree protection limits.
- 4. Storage of materials within a tree's critical root radius.
- 5. Operation of equipment within the specified tree protection limits.
- 6. Parking of vehicles or equipment within a tree's critical root radius.
- 7. Spilling of harmful substances around or within a tree's critical root radius.

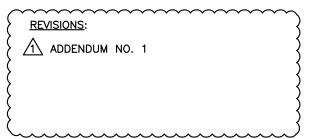
#### 3.04 INSPECTION AND DOCUMENTATION

- **A.** The Contractor shall periodically inspect the tree protection fencing, repair any deficiencies, and update the Tree Protection Plan. All updates shall be submitted to the Engineer for approval. Fencing shall be inspected daily, and the contractor shall specify who is inspecting the fence. A copy of the current Tree Protection Plan shall be available on the construction site.
- **B.** If any tree not designated for removal is damaged, the Contractor shall notify the Engineer with 48 hours.

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		ESTIMATED PROJECT QUANTITIES		
Item No.	Item Code	Item	Unit	Total
1	2101-0850002	CLEARING AND GRUBBING	UNIT (	280
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	CY	1050 4 1
3	2105-8425005	TOPSOIL, FURNISH AND SPREAD	CY	55
4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	CY	365
5	2111-8174100	GRANULAR SUBBASE	SY	3035
6	2123-7450020	SHOULDER FINISHING, EARTH	STA	41.20
7	2213-6745500	REMOVAL OF CURB	STA	0.75
8	2431-0000100	SEGMENTAL BLOCK RETAINING WALL	SF	315
9	2435-0251224	INTAKE, SW-512, 24 IN.	EACH	1
10	2435-0700020	CONNECTION TO EXISTING INTAKE	EACH	1
11	2503-0114215	STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 15 IN.	LF	27
12		RECREATIONAL TRAIL, HOT MIX ASPHALT, 4 IN.	SY	2600
13	2511-6745900	REMOVAL OF SIDEWALK	SY	25
14	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	SY	180
15	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	SY	80
16	2511-7528101	DETECTABLE WARNINGS	SF	86
17	2512-1725356	CURB AND GUTTER, P.C. CONCRETE, 3.5 FT.	LF	75
18	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	EACH	1
19	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	LF	168
20	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	SF	51
21		CONSTRUCTION SURVEY	LS	1
22	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	STA	6.30
23	2528-8445110	TRAFFIC CONTROL	LS	1
24	2533-4980005	MOBILIZATION	LS	1
25	2599-9999005	BIKE RACKS	EACH	13
26	2599-9999010	RELOCATE IRRIGATION SYSTEM COMPONENTS	LS	1
27	2601-2634100		ACRE	0.8
28	2601-2636044	SEEDING AND FERTILIZING (URBAN)	ACRE	0.8
29		STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	ACRE	0.8
30	2602-0000020	SILT FENCE	LF	1275
31		REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	LF	1275
32		MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	LF	510
33		PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.	LF	60
34_		MOBILIZATIONS, EROSION CONTROL	EACH_	3
$\overbrace{}_{35}$	2599-9999009	TREE PROTECTION FENCE	TIP'S	5500
36		TREE PROTECTION	LS	1 1
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New Code   See Table on Sheet C.02 for the removals. Triming shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trine felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trine felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trine felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trine felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the edge of the Trial. Trial felling shall be to 10' vertical clearance and 2' hostocitata clearance from the part and edge and the part of the part and edge and the part of the part and edge and the part of the part and edge and the part and edge and the part of the part and edge and the part and edge and the part of the part and edge and and the part of the part and edge and and the part of the part and edge and and the part of the part and edge and and the part of the part and edge and the part of the			ESTIMATE REFERENCE	INFORMATION
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5 211-16/14/100 GRANULAR SUBBASE 6 6 2123-4745002 SHOULDER FINISHING, EARTH Cumrify is measured at outside egg of shoulder. Material is included in 2102-2710070. 7 2213-6745000 SEGMENTAL BLOCK RETAINING WALL See Usheets. 8 2431-0000100 SEGMENTAL BLOCK RETAINING WALL See Usheets. 9 2435-0700020 CONNECTION TO EXISTING INTAKE 8 2431-0000100 SEGMENTAL BLOCK RETAINING WALL See Usheets. 10 2435-0700020 CONNECTION TO EXISTING INTAKE 8 269-0700020 CONNECTION TO EXISTING INTAKE 8 269-0700000000 RECREATIONAL TRAIL, HOT MIX ASPHALT, 4 IN 8 269-0700000000000000000000000000000000000	4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	
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7	6	2123-7450020	SHOULDER FINISHING, EARTH	
8	7	2213-6745500	REMOVAL OF CURB	This item is for the curb removal associated with the proposed ramps at the intersection of H
10 2435-0700020 CONNECTION TO EXISTING INTAKE 11 2531-07000 REMOVAL OF EXPETING INTAKE 12 2511-0700 REMOVAL OF SIDEWALK P.C. CONCRETE, 4 IN. 13 2511-0752004 SIDEWALK, P.C. CONCRETE, 4 IN. 14 2511-752006 SIDEWALK, P.C. CONCRETE, 4 IN. 15 2511-752006 SIDEWALK, P.C. CONCRETE, 6 IN. 16 2511-752006 SIDEWALK, P.C. CONCRETE, 6 IN. 17 2512-175200 SIDEWALK, P.C. CONCRETE, 6 IN. 18 2511-75200 SIDEWALK, P.C. CONCRETE, 6 IN. 19 2512-175200 DETECTABLE WARNINGS 10 2512-175200 DETECTABLE WARNINGS 11 2512-175200 DETECTABLE WARNINGS 11 2512-175200 DETECTABLE WARNINGS 11 2512-175200 DETECTABLE WARNINGS 12 2512-17520 DETECTABLE WARNINGS 13 2512-175200 DETECTABLE WARNINGS 14 2512-17520 DETECTABLE WARNINGS 15 2512-17520 DETECTABLE WARNINGS 16 2512-17520 DETECTABLE WARNINGS 17 2512-17520 DETECTABLE WARNINGS 18 2512-17520 DETECTABLE WARNINGS 18 2512-17520 DETECTABLE WARNINGS 19 2524-25200 DETECTABLE WARNINGS 19 2524-25200 DETECTABLE WARNINGS 10 2512-17520 DETECTABLE	8	2431-0000100	SEGMENTAL BLOCK RETAINING WALL	· • • • • • • • • • • • • • • • • • • •
11 2503-0114215 STORM SEWER GRAVITY MAIN. TRENCHED, RCP, 2000D (CLASS III), 15 IN Credited plant inspection is incidental to this item.  12 2511-0301400, RECREATIONAL TRAIL, HOT MIX ASPHALT, 4 IN.  13 2511-6745900 REMOVAL OF SIDEWALK  See Table on Sheet C.03. Concerte pads for the bike racks are included in this item. Certified plant inspection is incidental to this item.  15 2511-7526005 SIDEWALK, P.C. CONCRETE, 4 IN.  16 2511-7528005 SIDEWALK, P.C. CONCRETE, 6 IN.  See Table on Sheet C.03. Corette pads for the bike racks are included in this item. Certified plant inspection is incidental to this item.  See Table on Sheet C.03. Certified plant inspection is incidental to this item.  See Table on Sheet C.03. Certified plant inspection is incidental to this item.  See Table on Sheet C.03. Certified plant inspection is incidental to this item.  See Table on Sheet C.03. Certified plant inspection is incidental to this item.  16 2512-725356 CURB AND GUTTER, P.C. CONCRETE, 3.5 FT.  This tem is for the curb replacement associated with the proposed ramps at the intersection of H Avenue Mb. and Maplewood Drive NE. Certified plant inspection is incidental to this item.  18 2524-975010 PERFORATED SQUARE STEEL TUBE POSTS  See Table on Sheet C.03. See P Sheets.  20 2524-92326001 TYPE A SIGNS, SHEET ALUMINUM  See Table on Sheet C.03. See P Sheets.  21 2526-8285000 CONSTRUCTION SURVEY  22 2527-9263109 PAINTED PAINTED PAINTED AVENEMENT MARKING, WATERBORNE OR SQLVENT-BASED  23 2528-944510 TRAFFIC CONTROL  24 2533-4980006 MOBILIZATION  25 2599-999900 BIKE RACKS  See Table on Sheet C.03. See P Sheets.  See Table on Sheet C.03. See P She	9			See Sheet D.02.
12 2511-3031400 RECREATIONAL TRAIL, HOT MIX ASPHALT, 4 IN.  13 2511-6745900 REMOVAL OF SIDEWALK  14 2511-7526004 REMOVAL OF SIDEWALK  15 2511-7526005 SIDEWALK, P.C. CONCRETE, 4 IN.  15 2511-7526005 SIDEWALK, P.C. CONCRETE, 6 IN.  16 2511-7528101 DETECTABLE WARNINGS  17 2512-1728356 CURB AND GUTTER, P.C. CONCRETE, 3 5 FT.  18 2524-9752810 PETFORATED SOURCES, S. FT.  19 2524-97528010 REMOVAL OR SIDEWALK, P.C. CONCRETE, 3 5 FT.  19 2524-97528010 REMOVE AND REINSTALL SIGN AS PER PLAN  10 2524-9756010 REMOVE AND REINSTALL SIGN AS PER PLAN  10 2524-9276010 PETFORATED SOURCES TELL TUBE POSTS  11 2524-9276010 PETFORATED SOURCES TELL TUBE POSTS  12 2528-925001 TYPE A SIGNS, SHEET ALUMINUM  13 2524-925001 TYPE A SIGNS, SHEET ALUMINUM  14 2524-925001 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED  15 2529-99990005 BIKE RACKS  16 2599-9999000 RELOCATE IRRIGATION SYSTEM COMPONENTS  17 2600-2699-999000 BIKE RACKS  18 2600-0000020 SILT FENCE  28 2601-2684100 MULCHING  29 2601-2684100 MULCHING  20 2601-26842100 MULCHING  20 2602-0000020 SILT FENCE  20 2602-0000020 REMITED RAND SILT FENCE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000020 PRINTED PREPROE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED PREPROE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED PREPROE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED PREPROE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED PREPROE OR SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2602-0000000 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RAND SILT FENCE FOR DITCH CHECKS  20 2609-099900 PRINTED RA	10	2435-0700020	CONNECTION TO EXISTING INTAKE	See Sheet D.02.
13   2511-6745900   REMOVAL OF SIDEWALK   See Table on Sheet C.0.3. Concrete pads for the bike racks are included in this item.   See Table on Sheet C.0.3. Concrete pads for the bike racks are included in this item.   Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. Certified plant inspection is incidental to this item.   See Table on Sheet C.0.3. See Table on Sheet C.0.3. See P Sheets.   See Table on Sheet C.0.3. See P S	11			See Sheet D.02.
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15 2511-7528004 SIDEWALK, P.C. CONCRETE, 4 IN. 16 2511-7528004 SIDEWALK, P.C. CONCRETE, 6 IN. 17 2512-1752800 DETECTABLE WARNINGS 18 2512-1752800 DETECTABLE WARNINGS 19 2512-1752800 DETECTABLE WARNINGS 19 2512-1752800 DETECTABLE WARNINGS 20 2512-175280 DETECTABLE WARNINGS 20 2512-175280 DETECTABLE WARNINGS 20 2512-175280 DETECTABLE WARNINGS 21 2512-175280 DETECTABLE WARNINGS 21 2512-175280 DETECTABLE WARNINGS 21 2512-175280 DETECTABLE WARNINGS 22 2512-175280 DETECTABLE WARNINGS 23 2512-175280 DETECTABLE WARNINGS 2512-175280 DETECTABLE W	13	2511-6745900	REMOVAL OF SIDEWALK	
See Table on Sheet C.03. Detectable warning panels shall be "Armor-Tile" brand red fiberglass inserts.   This item is for the curb replacement associated with the proposed ramps at the intersection of H Avenue NE and Maplewood Drive NE. Certified plant inspection is incidental to this item.   See Sheet P.02.	14	2511-7526004	SIDEWALK, P.C. CONCRETE, 4 IN.	'
Inserts.  17 2512-1725356 CURB AND GUTTER, P.C. CONCRETE, 3.5 FT.  18 2524-6765010 REMOVE AND REINSTALL SIGN AS PER PLAN  19 2524-9276010 PERFORATED SQUARE STEEL TUBE POSTS  20 2524-9276010 PERFORATED SQUARE STEEL TUBE POSTS  20 2524-9276010 PERFORATED SQUARE STEEL TUBE POSTS  21 2526-8285000 CONSTRUCTION SURVEY  22 2527-9283109 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED  23 2528-8445110 TRAFFIC CONTROL  24 2533-4890005 MOBILIZATION SUSTEM COMPONENTS  25 2599-9999000 RELOCATE IRRIGATION SYSTEM COMPONENTS  26 2602-0000018 SEEDING AND FERTILIZING (URBAN)  27 2601-2634100 MULCHING  28 2601-2636044  29 2601-26342120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)  20 2602-0000036 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  30 2602-0000036 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  31 2602-0000036 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  35 2699-999900 MELLEATIONS EROSINE CONTROL  36 2699-9990000 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  36 2699-999000 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  37 2602-0000018 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  36 2692-999900 PTE POTTECTION FENCE  26 SPECIAL PROVE AND SURVEY PROVED THE CONTROL SEEDING AND FERDICE  27 2601-2634100 MOBILIZATIONS PER CONTROL DEVICE, 6 IN DIA.  38 2602-0000030 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  39 2602-0000008 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN DIA.  30 2602-0000007 PTE POTTECTION FENCE  26 SPECIAL PROVISION #SP-157017.	15	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	
Avenue NE and Maplewood Drive NE. Certified plant inspection is incidental to this item.	16	2511-7528101	DETECTABLE WARNINGS	- · · · · · · · · · · · · · · · · · · ·
18	17	2512-1725356	CURB AND GUTTER, P.C. CONCRETE, 3.5 FT.	· · · · · ·
2524-9325001 TYPE A SIGNS, SHEET ALUMINUM 2526-8285000 CONSTRUCTION SURVEY 2527-9263109 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED 2527-9263109 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED 2528-8445110 TRAFFIC CONTROL 24 2533-4980005 MOBILIZATION 25 2599-9999005 BIKE RACKS 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS 26 2599-9999010 QUantity is area bounded by grading limits with pavement area subtracted. 27 2601-2634100 MULCHING 28 2601-2636044 SEEDING AND FERTILIZING (URBAN) 29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) 30 2602-0000020 SILT FENCE 31 2602-0000010 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS 32 2602-0000010 MAINTENANCE OF SILT FENCE FOR DITCH CHECK Of length of silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed. 31 2602-0000010 MAINTENANCE OF SILT FENCE FOR DITCH CHECKS 32 2699-9999000 TRIEE PROTECTION FENCE 34 2602-0000300 MOBILIZATION SERSION CONTROL 35 2599-9999000 TRIEE PROTECTION FENCE 36 See Special Provision #SP-157017.	18	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	
21 2526-8285000 CONSTRUCTION SURVEY 22 2527-9263109 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED 23 2528-8445110 TRAFFIC CONTROL 24 2533-4980005 MOBILIZATION 25 2599-9999005 BIKE RACKS 26 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS 27 2601-2634100 MULCHING 28 2601-2634100 MULCHING 29 2601-2634100 SEEDING AND FERTILIZING (URBAN) 29 2601-26342120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) 30 2602-0000000 SILT FENCE 31 2602-0000011 REMOVAL OF SILT FENCE FOR DITCH CHECKS 32 2602-0000017 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS 33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 8 IN. DIA. 34 2602-0100016 TEEP POTECTION FENCE 35 See Special Provision #SP-157017. 36 See Special Provision #SP-157017.	19	2524-9276010	PERFORATED SQUARE STEEL TUBE POSTS	See Table on Sheet C.03. See P Sheets.
21 2526-8285000 CONSTRUCTION SURVEY 22 2527-9263109 PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED 23 2528-8445110 TRAFFIC CONTROL 24 2533-4980005 MOBILIZATION 25 2599-9999005 BIKE RACKS 26 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS 27 2601-2634100 MULCHING 28 2601-2634100 MULCHING 29 2601-2634100 MULCHING 20 2601-2634100 SEEDING AND FERTILIZING (URBAN) 30 2602-000020 SILT FENCE OR SILT FENCE FOR DITCH CHECKS 31 2602-000011 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS 32 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 8 IN. DIA. 34 2602-0010016 MOBILIZATION SEROSLON CONTROL 35 2599-99900 TREE PROTECTION FENCE 36 See Special Provision #SP-157017. 36 See Table on Sheet C.03. See P Sheets. 36 See Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 36 E Table on Sheet C.03. See P Sheets. 37 See K Sheet S. Bike racks shall be 2.375 inch galvanized "Saris Inverted U Bike Dock" or equivalent. Payment is each for all material, labor, and equipment required to relocate irrigation valve and backflow prevention system at STA 603+65. See Sheet D.02. 40 Quantity is area bounded by grading limits with pavement area subtracted. 40 Quantity is area bounded by grading limits with pavement area subtracted. 40 Quantity is area bounded by grading limits with pavement area subtracted. 40 See D Sheets. 40 Sheets. 40 Sheets. 40 Sheets. 50	20	2524-9325001	TYPE A SIGNS, SHEET ALUMINUM	See Table on Sheet C.03. See P Sheets.
23 2528-8445110 TRAFFIC CONTROL 24 2533-4980005 MOBILIZATION 25 2599-9999005 BIKE RACKS 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS 26 2599-9999010 Quantity is area bounded by grading limits with pavement area subtracted. 27 2601-2634100 SEEDING AND FERTILIZING (URBAN) 28 2601-2636044 SEEDING AND FERTILIZING (URBAN) 29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) 30 2602-0000020 SILT FENCE 31 2602-0000010 MAINTENANCE OF SILT FENCE FOR DITCH CHECKS 32 2602-0000010 MAINTENANCE OF SILT FENCE FOR DITCH CHECK 33 2602-0000000 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA. 34 2602-0010010 MOBILIZATIONS EROSION CONTROL 35 2599-999000 TREE PROTECTION FENCE See Special Provision #SP-157017.	21			
25 2593-9999005 BIKE RACKS  26 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS  26 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS  27 2601-2634100 MULCHING  28 2601-2636044 SEEDING AND FERTILIZING (URBAN)  29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)  30 2602-0000020 SILT FENCE  31 2602-0000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS  32 2602-000010 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS  33 2602-0000000 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS EROSION CONTROL  35 2599-9999009 TREE PROTECTION FENCE  See Special Provision #SP-157017.	22	2527-9263109	PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	See Table on Sheet C.03. See P Sheets.
25 2599-999905 BIKE RACKS  26 2599-9999010 RELOCATE IRRIGATION SYSTEM COMPONENTS  27 2601-2634100 MULCHING  28 2601-2636044 SEEDING AND FERTILIZING (URBAN)  29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)  30 2602-0000020 SILT FENCE  31 2602-0000011 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS  32 2602-0000010 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK  33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS EROSION CONTROL  35 2699-999000 TREE PROTECTION FENCE  See Special Provision #SP-157017.	23			
2599-999010 RELOCATE IRRIGATION SYSTEM COMPONENTS Payment is lump sum for all material and labor for complete installation. Payment is lump sum for all material, labor, and equipment required to relocate irrigation valve and backflow prevention system at STA 603+65. See Sheet D.02.  2601-2634100 MULCHING Quantity is area bounded by grading limits with pavement area subtracted. Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) Quantity is area bounded by grading limits with pavement area subtracted.  29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) Quantity is area bounded by grading limits with pavement area subtracted.  29 2602-0000020 SILT FENCE See D Sheets.  30 2602-0000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS See D Sheets.  31 2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK Ontractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS EROSION CONTROL  See Special Provision #SP-157017.	24	2533-4980005	MOBILIZATION	
26 2999-999010 RELOCATE IRRIGATION SYSTEM COMPONENTS  backflow prevention system at STA 603+65. See Sheet D.02.  27 2601-2634100 MULCHING  28 2601-2636044 SEEDING AND FERTILIZING (URBAN)  29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)  30 2602-0000020 SILT FENCE  31 2602-0000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS  32 2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK  33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS, EROSION CONTROL  35 2599-9999009 TREE PROTECTION FENCE  See Sheet D.02.  Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  Quantity is area bounded by grading limits with pavement area subtracted. See D Sheets.  See D Sheets.  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.	25	2599-9999005	BIKE RACKS	
28 2601-2636044 SEEDING AND FERTILIZING (URBAN)  Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  Quantity is area bounded by grading limits with pavement area subtracted.  See D Sheets.  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.	26	2599-9999010	RELOCATE IRRIGATION SYSTEM COMPONENTS	
28 2601-2636044 SEEDING AND FERTILIZING (URBAN)  Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  Quantity is area bounded by grading limits with pavement area subtracted. See special provisions for special requirements and specifications.  Quantity is area bounded by grading limits with pavement area subtracted.  See D Sheets.  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.	27	2601-2634100	MULCHING	
29 2601-2642120 STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) 30 2602-000020 SILT FENCE 31 2602-000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS 32 2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK 33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA. 34 2602-001010 MOBILIZATIONS, EROSION CONTROL 35 2599-9999009 TREE PROTECTION FENCE  See D Sheets.  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.		2601-2636044	SEEDING AND FERTILIZING (URBAN)	Quantity is area bounded by grading limits with pavement area subtracted. See special provisions
30 2602-000020 SILT FENCE 31 2602-000071 REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS 32 2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK 33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA. 34 2602-0010010 MOBILIZATIONS, EROSION CONTROL 35 2599-9999009 TREE PROTECTION FENCE  See D Sheets.  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.	29	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	
2602-0000101 MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK  33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS EROSION CONTROL  35 2599-9999009 TREE PROTECTION FENCE  Contractor shall clean out silt fence once 50% of the available capacity is reduced. Anticipate 40% of length of silt fence installed.  This item is for fiter socks at storm sewer structures. See D Sheets.  See Special Provision #SP-157017.				
32 2602-0000101 MAINTENANCE OF SILT FENCE FOR DITCH CHECK of length of silt fence installed.  33 2602-0000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA. This item is for fiter socks at storm sewer structures. See D Sheets.  34 2602-0010010 MOBILIZATIONS_EROSION_CONTROL  35 2599-9999009 TREE PROTECTION FENCE See Special Provision #SP-157017.	31	2602-0000071	REMOVAL OF SILT FENCE OR SILT FENCE FOR DITCH CHECKS	See D Sheets.
33 2602-000306 PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.  34 2602-0010010 MOBILIZATIONS, EROSION CONTROL  35 2599-999000 TREE PROTECTION FENCE  See Special Provision #SP-157017.	32	2602-0000101	MAINTENANCE OF SILT FENCE OR SILT FENCE FOR DITCH CHECK	
34 2602-0010010 MOBILIZATIONS, EROSION CONTROL 35 2599-999000 TREE PROTECTION FENCE See Special Provision #SP-157017.	33	2602-0000306	PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 6 IN. DIA.	•
( 35   2599-999000   TREE PROTECTION FENCE   See Special Provision #SP-157017.	34	2602-0010010	MOBILIZATIONS, EROSION CONTROL	
		2599-9999009	TREE PROTECTION FENCE	See Special Provision #SP-157017.
	36			



ROAD DESIGN \* CADD \* PRODUCED STATE OF IOWA FHWA REGION 7 FISCAL YEAR 2016 LINN COUNTY PROJECT NUMBER EDP-1187(778)--7Y-57 SHEET NUMBER C.02

						CLEAF	RING A	ND GR	UBBING	3							
Location			Trees, Stumps, Logs, and Down Timber Material Diameters														
Station & Offset	Reference Alignment	Work and Material Type	3"-6"	>6"-9"	>9"-12"		>15"-18"	>18"-24"	>24"-30"	>30"-36"	>36"-42"	>42"-48"	>48"-60"	>60"-72"	>72"	Calculated Units	Remarks
601+19, 8.6' L 601+41, 3.8' L	CEMAR Trail (Phase 1B) CEMAR Trail (Phase 1B)	Clearing and Grubbing Clearing and Grubbing	$\overline{x}$				7			$\overline{x}$						13.5	Pine Tree Pine Tree Pine Tree
601+88, 7.5' L	CEMAR Trail (Phase 1B)	Clearing and Grubbing					1									13.5	Pine Tree
602+16, 3.9' R	CEMAR Trail (Phase 1B)	Clearing and Grubbing							1							29.0	Deciduous, exact species unknown
603+13, 1.5' R	CEMAR Trail (Phase 1B)	Clearing and Grubbing	1													1.6	Bush
603+23, 1.2' R	CEMAR Trail (Phase 1B)	Clearing and Grubbing	1													1.6	Bush
900+19 to 900+50	Daniels Park Trail	Clearing and Grubbing	20													32.0	Bushes
900+73, 7.6' R	Daniels Park Trail	Clearing and Grubbing					1									13.5	Deciduous, exact species unknown
903+19, 6.3' R	Daniels Park Trail	Clearing and Grubbing		2												7.8	Deciduous, exact species unknown (twin
904+36, 5.7' R	Daniels Park Trail	Clearing and Grubbing	1													1.6	Deciduous, exact species unknown
905+09, 6.4' L	Daniels Park Trail	Clearing and Grubbing	1													1.6	Deciduous, exact species unknown
908+11, 2.3' L	Daniels Park Trail	Clearing and Grubbing					1									13.5	Deciduous, exact species unknown
909+48 to 909+99	Daniels Park Trail	Clearing and Grubbing			6											40.2	Bushes
909+90, 21.6' L	Daniels Park Trail	Clearing and Grubbing					2									27.0	Pine Tree (twin)
910+12, 23.1' L	Daniels Park Trail	Clearing and Grubbing						1								22.0	Pine Tree
910+90, 13.5' L	Daniels Park Trail	Clearing and Grubbing							1							29.0	Pine Tree
913+88, 0.7' R	Daniels Park Trail	Clearing and Grubbing			1											6.7	Deciduous, exact species unknown
914+50, 4.7' R	Daniels Park Trail	Clearing and Grubbing				1										9.4	Deciduous, exact species unknown
		Unit Weight	1.6	3.9	6.7	9.4	_ 13.5_	22	29	50	80	120	160	200	280	777	•
•		Totals Removals for Each Diameter	24	2	7	1 (	$\sim 6$	1	2	0	0	0	0	0	0	277.0	

ITEM CODE 2511-6745900				
	R	EMOVAL	OF SI	DEWALK
STATION T	TO STATION	Pavement Type	AREA Sq. Yds.	REMARKS
607+39	607+54	PCC, 4"	11.78	Ramp replacement on south side of H Avenue NE
607+49	607+64	PCC, 4"	10.00	Ramp replacement on north side of H Avenue NE
		Total	25	

			SID	EWALK	S		
Alignment Identification	Station to	o Station	Side	4" PCC Sidewalk SY	6" PCC Sidewalk SY	Detectable Warnings SF	Remarks
	600+18	600+97	L	54.2			6' wide sidewalk along H Ave
	600+76	601+09	В		29.6		Bicycle slip ramp
CEMAR Trail (Phase 1B)	606+94	607+15	В		24.5	31.5	NW corner of H Ave & Maplewood
	607+45	607+59	R	5.4	6.6	10.0	SE corner of H Ave & Maplewood
	607+41	607+65	В	10.0	13.7	20.0	NE corner of H Ave & Maplewood
	903+24	903+42	L	24.0			Bike rack pad
Daniels Park Trail	903+92	904+10	L	22.7			Bike rack pad
	907+33	907+50	R	39.4		24.0	6' wide sidewalk at I Ave
Parking Lot Spur	1000+42	100+58	R	14.2			Bike rack pad
							•
			TOTAL	180	80	86	

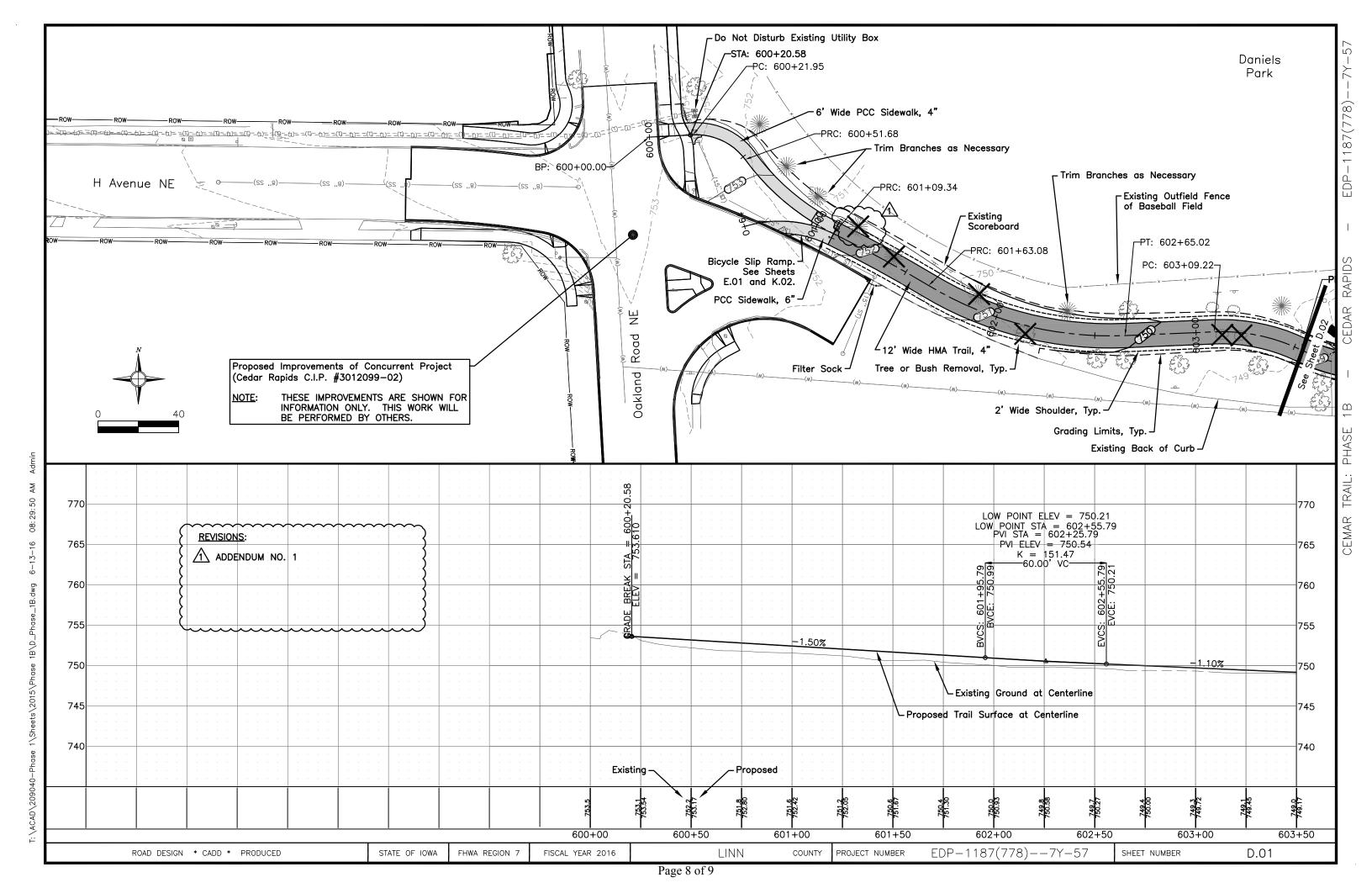
<u>Item Code</u> 2511-7526004, 2511-752600	6 2511-7528	3101						Item Code: 2524-92760	010 2524	1-93250C	)1
	,,,		SID	EWALK	(S			202 / 02/00	, 202	. 002000	
Alignment Identification	Station t	o Station	Side	4" PCC Sidewalk	6" PCC Sidewalk	Detectable Warnings	Remarks	Station	Offset	R1-1	R
				SY	SY	SF		600+79	R		
	600+18	600+97	L	54.2			6' wide sidewalk along H Ave	600+91	R		
	600+76	601+09	В		29.6		Bicycle slip ramp	601+09	L		
CEMAR Trail (Phase 1B)	606+94	607+15	В		24.5	31.5	NW corner of H Ave & Maplewood	601+59	L		
	607+45	607+59	R	5.4	6.6	10.0	SE corner of H Ave & Maplewood	606+98	L		
	607+41	607+65	В	10.0	13.7	20.0	NE corner of H Ave & Maplewood	606+99	R	1	
	903+24	903+42	L	24.0			Bike rack pad	905+53	R		T
Daniels Park Trail	903+92	904+10	L	22.7			Bike rack pad	907+31	R		
	907+33	907+50	R	39.4		24.0	6' wide sidewalk at I Ave	907+49	R		
Parking Lot Spur	1000+42	100+58	R	14.2			Bike rack pad	909+51	R		T
							·	914+77	L		
			TOTAL	180	80	86		914+77	R	1	
		•			•	•		1000+56	L		
								SUBTO	TAL	2	

					SIGN	IS AN	D PO	STS				
Station	Offset					Class	ification					Boot Longth
Station	Oliset	R1-1	R1-2	R5-3	D11-1a	D11-2	M5-2L	M6-2L	M6-2R	W11-2	W16-7pL	Post Length
600+79	R		1									12
600+91	R				1			1				12
601+09	L					1			1			12
601+59	L				1		1					12
606+98	L			1								12
606+99	R	1										12
905+53	R									1		15
907+31	R									1	1	15
907+49	R									1	1	15
909+51	R									1		15
914+77	L			1								12
914+77	R	1										12
1000+56	L			1								12
SUBTO	TAL	2	1	3	2	1	1	1	1	4	2	TOTAL (LF)
x AREA	(SF)	1.75	1.00	4.00	2.25	2.25	0.75	0.75	0.75	6.25	2.00	168
		3.50	1.00	12.00	4.50	2.25	0.75	0.75	0.75	25.00	4.00	
TOTAL	(SF)		•				51	•	•			

527-9263109							
	F	PAINT	ED P	AVEME	NT I	MARI	KINGS
1 = 30" Crosswalk Bar							
Loc	ation						Length (In Stations)
Alignment Identification	Station to	o Station	Side	1			
Daniels Park Trail	907	+42	R	0.24			
Daniels Park Trail	915+85	915+10		0.60			
Length Subtotals			0.84				
	Quantity Factors TOTAL			7.50 <b>6.30</b>			Based on 4" continuous stripe equivalen

CLASSIFICATION	TYPE	SIZE	AREA (SF
R1-1	Stop Sign	18"x18"	1.75
R1-2	Yield	18"x18"x18"	1.00
R5-3	No Motorized Vehicles	24"x24"	4.00
D11-1a	Bicycle Guide	18"x18"	2.25
D11-2	Pedestrian Guide	18"x18"	2.25
M5-2L	Advanced Turn Arrow Auxiliary (Left)	12"x9"	0.75
M6-2L	Directional Arrow Auxiliary (Left)	12"x9"	0.75
M6-2R	Directional Arrow Auxiliary (Right)	12"x9"	0.75
W11-2	Pedestrian	30"x30"	6.25
W16-7pL	Downward Diagonal Arrow (Left)	24"x12"	2.00

REVISIONS:
ADDENDUM NO. 1
}
}
}



ROAD DESIGN \* CADD \* PRODUCED

Item No.

Item Code

2101-0850001 CLEARING AND GRUBBING

2105-8425005 TOPSOIL, FURNISH AND SPREAD

2105-8425015 TOPSOIL, STRIP, SALVAGE AND SPREAD

2102-2710070 EXCAVATION, CLASS 10, ROADWAY AND BORROW

**ESTIMATED PROJECT QUANTITIES** 

Unit

CY

SY

STA

SY

TON

EACH

EACH

EACH

EACH

EACH

LF

LF

SY

SY

SY

SY

LF

SY

EACH

EACH

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SF

LS

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STA

LS LS

TLF

EACH

EACH

ACRE

EACH

FHWA REGION 7

FISCAL YEAR 2016

STATE OF IOWA

ACRE

LF

LF

SY

EACH

CY

ACRE 2.0

STA 71.00 2.35 755

Total

2100

185

1220

7100

120

1

2

1

505

185

4880

140

130

55

280

246

140

95

90

2

1

315

100

2.53

22.05

1

1

1600

2

2.3

2.3

1665

STA 22.05

ACRE 2.3

Item No.	Item Code	ltem	Description
1		CLEARING AND GRUBBING	Clearing and Grubbing shall be plan quantity. No measurement shall be made. Quantity is area bounded by grading limits for stations 800+82 to 806+15 and 831+41 to 839+01. Clearing and
.			Grubbing shall meet current DOT specifications.
			Overhaul shall not be measured or paid, but shall be incidental to the project. Volume includes
2	2102-2710070	EXCAVATION, CLASS 10, ROADWAY AND BORROW	additional 30% to Fill Volumes for compaction. Earthwork quantities are estimated as follows:
			Black Dirt = 1220 CY; Cut = 2100 CY; Fill+30% = 390 CY
			Quantity is 15% topsoil amendment to 2105-8425015 (TOPSOIL, STRIP, SALVAGE AND
3	2105 8425005	TOPSOIL, FURNISH AND SPREAD	SPREAD). Placement is not shown on the plans and shall be as directed by Engineer.
٠	2105-6425005	TOPSOIL, FORNISH AND SPREAD	Measurement shall be plan quantity. Payment shall be unit price and shall include overhaul,
			placement, spreading to plan grade, and all labor and machine costs to furnish and spread.
			Quantity is area bounded by grading limits with pavement area subtracted for stations 800+82 to
4	2105-8425015	TOPSOIL, STRIP, SALVAGE AND SPREAD	806+15 and 831+41 to 839+01, plus the area to the right side of the trail for stations 807+55 to
			831+41. Assumed 4-inch depth.
5	2111-817/1100	GRANULAR SUBBASE	Area includes 14' width along entire length of trail, plus area beneath sidewalk ramps, the drivewa
			on F Avenue, and the parking lot on K Avenue. Depth of granular subbase is 6".
6	2123-7450020	SHOULDER FINISHING, EARTH	Quantity is measured at outside edge of shoulder. Material is included in 2102-2710070.
			This item is for the curb removal associated with the proposed sidewalk ramps on F Avenue at 10
7	2213-6745500	REMOVAL OF CURB	Street and 17th Street, as well as the removal of the low profile curb on F Avenue. Thickness of
			existing pavement is 8".
8	2301-1032070	PCC PAVEMENT, CLASS C, CLASS 2 DURABILITY, 7 IN.	This item is for the paved parking lot on K Avenue. See Sheets D.07 and K.02. Certified plant
-		,	inspection is incidental to this item.
9	2315-8275025	SURFACING, DRIVEWAY, CLASS A CRUSHED STONE	This item is for the granular surfacing between the existing pavement and the proposed driveway
			F Avenue. See Sheets D.01 and K.01. Assumed 8" depth.
		MANHOLE, STORM SEWER, SW-401, 60 IN.	See Sheet M.05.
		INTAKE, SW-502, 48 IN.	See Sheets M.08 and M.09.
		INTAKE, SW-512, 24 IN.	See Sheets M.02 and M.08.
13	2435-0251300	INTAKE, SW-513	See Sheet M.01.
14	2435-0600010	MANHOLE ADJUSTMENT, MINOR	This item is for the adjustment of an existing sanitary sewer manhole located beneath a proposed sidewalk ramp. The adjustment will consist of rotating the exisiting cone section. See Sheet S.0
15	2435-0600110	INTAKE ADJUSTMENT, MINOR	This item is for the adjustment of an existing area intake at station 812+70. The adjustment will
		<u>'</u>	consist of raising the grate by adding adjustment rings. See Sheet M.03.
16	2502-8212206	SUBDRAIN, PERFORATED PLASTIC PIPE, 6 IN. DIA.	See Table on Sheet C.03. See M Sheets for plan and profile. See Sheet U.01 for details.
47	0500 0444045	CTORM CENTER ORANITY MAIN TRENCHER ROD COORD (CLACCIU) 45 IN	Trenching, engineering fabric, and pourus backfill are incidental to this item.
		STORM SEWER GRAVITY MAIN, TRENCHED, RCP, 2000D (CLASS III), 15 IN.	See Sheets M.02, M.08, and M.09.
		RECREATIONAL TRAIL, HOT MIX ASPHALT, 4 IN.	See B and D Sheets. Certified plant inspection is incidental to this item.
		RECREATIONAL TRAIL, PORTLAND CEMENT CONCRETE, 6 IN.	See B and D Sheets. Certified plant inspection is incidental to this item.
		REMOVAL OF SIDEWALK	See Table on Sheet C.03. Thickness of existing sidewalk is 4".
		SIDEWALK, P.C. CONCRETE, 4 IN.	See Table on Sheet C.03. Certified plant inspection is incidental to this item.
22	2511-7526006	SIDEWALK, P.C. CONCRETE, 6 IN.	See Table on Sheet C.03. Certified plant inspection is incidental to this item.
23	2511-7528101	DETECTABLE WARNINGS	See Table on Sheet C.03. Detectable warning panels shall be "Armor-Tile" brand red fiberglass inserts.
24	2512-1725156	CURB AND GUTTER, P.C. CONCRETE, 1.5 FT.	The item is for the curb replacement at the driveway on F Avenue. See Sheets D.01 and K.01.
			Certified plant inspection is incidental to this item.  This item is for the curb replacement associated with the proposed ramps on F Avenue and 16th
25	2512-1725256	CURB AND GUTTER, P.C. CONCRETE, 2.5 FT.	Street and 17th Street. See Sheets D.01 and D.02. Certified plant inspection is incidental to this litem.
			This item is for the proposed driveway on F Avenue. See Sheets D.01 and K.01. Certified plant
26	2515-2475007	DRIVEWAY, P.C. CONCRETE, 7 IN.	inspection is incidental to this item.
27	2524-6765010	REMOVE AND REINSTALL SIGN AS PER PLAN	See P Sheets.
		REMOVAL OF TYPE A SIGN	See P Sheets.
		REMOVAL OF TYPE A SIGN ASSEMBLY	See P Sheets.
		PERFORATED SQUARE STEEL TUBE POSTS	See Table on Sheet C.03. See P Sheets.
		TYPE A SIGNS, SHEET ALUMINUM	See Table on Sheet C.03. See P Sheets.
		CONSTRUCTION SURVEY	333 - 1.3 311 311 311 313 31 311 311 311
		PAINTED PAVEMENT MARKING, WATERBORNE OR SOLVENT-BASED	See Table on Sheet C.03. See P Sheets.
		PERMANENT TAPE MARKINGS, PROFILED PAVEMENT MARKING TAPE	See Table on Sheet C.03. See P Sheets.
		GROOVES CUT FOR PAVEMENT MARKINGS	See Table on Sheet C.03. See P Sheets. See Sheet U.01 for detail.
		TRAFFIC CONTROL	OGG TABLE OILOTICELO.UU. OGG F OILEGIS. OGG OILEGI U.UT 101 UGIAII.
		MOBILIZATION	Includes coordination with the athletic complex site contractor
31	2000-4900005	WOODELZATION	Includes coordination with the athletic complex site contractor.  Item includes removal of existing rail, ties, ballast or other track components in the construction a
		<b>\</b>	of the proposed trail. Removed items become the property of the contractor and shall be disposed.
			of properly. Method of Measurement shall be Track-Lineal-Foot per plan. No measurement shall
, *, * *	2505 7400000	REMOVAL OF RAILROAD TRACK	1 ' ' '
38	2393-1400200	INCINIOVAL OF RAILROAD TRACK	made. Basis of Payment shall be per contract unit price and shall include the removal of all track
$\sim\sim$			components, restoration of grade, proper disposal of all removed materials, and all labor and
		(	machine time required to remove the railroad track. See Sheets D.01 and D.07 for locations of
			abandoned railroad tracks.
20	2500 22222	COMMECTION TO EXISTING BOX OUT VERT	See Sheets M.02 and M.09. Measurement shall be on a count basis, payment shall be for each
39	∠599-9999005	CONNECTION TO EXISTING BOX CULVERT	connection and shall include supplying and installing all materials shown in the detail on Sheet U.C
			and all other equipment, materials, and labor necessary.
.	0.000	AUDDBAIN OF TANOUT	See Sheets M.02, M.04, and M.05. Measurement shall be on a count basis, payment shall be for
40	2599-9999005	SUBDRAIN CLEANOUT	each subdrain cleanout installed and shall include supplying and installing all materials shown in the
			detail on Sheet U.01, and all other equipment, materials, and labor necessary.
	2601-2634100		Quantity is the area described in Item No. 4.
		SEEDING AND FERTILIZING (URBAN)	Quantity is the area described in Item No. 4.
	2601-263604 <sub>4</sub>		10
42		STABILIZING CROP - SEEDING AND EERTH IZING (HDDAM)	Quantity is the area described in Item No. 4. See special provisions for special requirements and
		STABILIZING CROP - SEEDING AND FERTILIZING (URBAN)	specifications.
42	2601-2642120	STABILIZING CROP - SEEDING AND FERTILIZING (URBAN) PERIMETER AND SLOPE SEDIMENT CONTROL DEVICE, 9 IN. DIA.	Quantity is the area described in Item No. 4. See special provisions for special requirements and specifications.  See D Sheets. Contractor is responsible for SWPP and erosion control for stations 800+82 to 806+15 and 831+41 to 839+01.

COUNTY PROJECT NUMBER TAP-U-1187(783)--8I-57

SHEET NUMBER

C.02

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