

|                                                                                                                                                                                                                     |  |                                  |                          |                                                        |                     |                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------|--------------------------|--------------------------------------------------------|---------------------|-------------------------------------------------------|--|
| <b>AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT</b>                                                                                                                                                           |  |                                  | 1. CONTRACT ID CODE<br>J |                                                        | PAGE 1 OF 100 PAGES |                                                       |  |
| 2. AMENDMENT/MODIFICATION NUMBER<br>0005                                                                                                                                                                            |  | 3. EFFECTIVE DATE<br>29 JUL 2026 |                          | 4. REQUISITION/PURCHASE REQUISITION NUMBER             |                     | 5. PROJECT NUMBER (If applicable)<br>444304           |  |
| 6. ISSUED BY<br>W072 ENDIST CHICAGO<br>KO CONTRACTING DIVISION, 231 S LASALLE STREET<br>CHICAGO, IL 60604-1437<br>UNITED STATES<br>ERICKA HILLARD, EMAIL: ERICKA.D.HILLARD@USACE.ARMY.MIL TELEPHONE: (312) 846-5378 |  | CODE<br>W912P6                   |                          | 7. ADMINISTERED BY (If other than Item 6)<br>SCD: PAS: |                     | CODE                                                  |  |
| 8. NAME AND ADDRESS OF CONTRACTOR (Number, street, county, State and ZIP Code)                                                                                                                                      |  |                                  |                          | <input checked="" type="checkbox"/>                    |                     | 9A. AMENDMENT OF SOLICITATION NUMBER<br>W912P626RA009 |  |
|                                                                                                                                                                                                                     |  |                                  |                          | <input checked="" type="checkbox"/>                    |                     | 9B. DATED (SEE ITEM 11)<br>28 APR 2026                |  |
|                                                                                                                                                                                                                     |  |                                  |                          | <input type="checkbox"/>                               |                     | 10A. MODIFICATION OF CONTRACT/ORDER NUMBER            |  |
|                                                                                                                                                                                                                     |  |                                  |                          | <input type="checkbox"/>                               |                     | 10B. DATED (SEE ITEM 13)                              |  |
| CODE                                                                                                                                                                                                                |  | FACILITY CODE                    |                          |                                                        |                     |                                                       |  |

### 11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☒ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☒ is extended. ☐ is not extended.

Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended, by one of the following methods:

(a) By completing items 8 and 15, and returning 1 copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

### 12. ACCOUNTING AND APPROPRIATION DATA (If required)

SEE SECTION G - CONTRACT ADMINISTRATION DATA

### 13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NUMBER AS DESCRIBED IN ITEM 14.

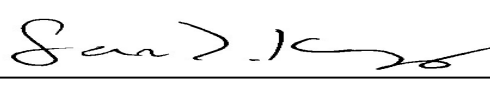
|                          |                                                                                                                                                                                                                       |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CHECK ONE                | A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NUMBER IN ITEM 10A.                                                                   |
| <input type="checkbox"/> |                                                                                                                                                                                                                       |
| <input type="checkbox"/> | B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation data, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b). |
| <input type="checkbox"/> | C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:                                                                                                                                              |
| <input type="checkbox"/> | D. OTHER (Specify type of modification and authority)                                                                                                                                                                 |

**E. IMPORTANT:** Contractor ☐ is not ☐ is required to sign this document and return \_\_\_\_\_ copies to the issuing office.

### 14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

See Schedule

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

|                                               |                  |                                                                                                                       |                                 |
|-----------------------------------------------|------------------|-----------------------------------------------------------------------------------------------------------------------|---------------------------------|
| 15A. NAME AND TITLE OF SIGNER (Type or print) |                  | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print)<br>SARA T. KING                                            |                                 |
| 15B. CONTRACTOR/OFFEROR                       | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA<br> | 16C. DATE SIGNED<br>29 JUL 2026 |
| (Signature of person authorized to sign)      |                  | (Signature of Contracting Officer)                                                                                    |                                 |

Previous edition unusable

## **SECTION SF 30 BLOCK 14 CONTINUATION PAGE**

### **SUMMARY OF CHANGES**

**Block 14 (Description of Amendment/Modification):** REFERENCE: REQUEST FOR PROPOSAL NO. W912P626RA009, " UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II - AQUATIC ECOSYSTEM RESTORATION - POLLACK LAKE AND HASTINGS CREEK (RAVEN GLEN), ANTIOCH, LAKE COUNTY, ILLINOIS"

A. The Proposal Due Date is EXTENDED by this Amendment. The response date is extended to August 12, 2026; the response time is unchanged. Therefore, proposals shall be submitted prior to 1:00 p.m. (Central Time) on August 12, 2026.

B. By this amendment, the government is providing a revised price breakout schedule (Section 00 10 00 - Solicitation Contract Form), which modifies CLINs to Option CLINs: 0004AD (Rock Check Dam Installation), 0006-0006AC (Water Control Structure Removal), 0008CB (Old Field/Degraded Prairie), 0008EB (Savanna), and 0008FA (Woodland Seeding). CLINs 0005-0005AH (Culvert Crossing Replacement) have been relabeled as RESERVED and are removed its in entirety. As a result of this revision, Offerors shall provide their prices on the Revised Price Breakout Schedule.

C. By this amendment, the enclosed hereunder Drawing Sheets have been revised, replacing the previously furnished respective sheets: 1) The "Option" label has been added to sheets CD401 and CD500. 2) The following sheets have been removed from the plan set due to the removal of culvert work: CD402, C-002, CG303-304, CG401, S-101, S-501, S-502, and S-503-505. 3) The following sheets have been edited for the option work of the water control structure: CD105, CD401, CD500, and CE102. 4) The following sheets have been edited for the removal of culvert work: G-002, CD101-CD103, CD106, CD502, CG103, CG104, CG105, CG201, CG301, CG302, and CG403.

D. By this amendment, the enclosed hereunder Specification Sections have been revised, replacing the previously furnished respective sections: 1) The following sections were removed entirely from the specifications: 03 30 53 MISCELLANEOUS CAST-IN-PLACE CONCRETE, 05 05 20 POST-INSTALLATION CONCRETE AND MASONRY ANCHORS, 05 12 00 STRUCTURAL STEEL, 33 40 00 STORMWATER UTILITIES, and 34 71 13.16 VEHICLE CRASH BARRIERS. 2) Section 01 11 00 Summary of Work was edited to remove culvert work. 3) Section 01 20 00 Price and Payment Procedures was edited to remove culvert work CLINs. 4) Section 02 41 00 Demolition was edited to remove culvert work. 5) Section 31 00 00 Earthwork was edited to remove multiple paragraphs related to subgrade, embankment fill, bedding material, geogrid reinforcement, and grading. 6) Section 32 92 19.10 Plant List Attachment was adjusted for the option work CLINs.

E. By this amendment, the corresponding changes modify Section 00 01 05 - List of Drawings, which is enclosed hereunder.

F. IL20 Wage Determination is updated.

### **Section 00 00 00 - Procurement and Contracting Requirements**



The following changes have been made:

| INFORMATION       | FROM        | TO          |
|-------------------|-------------|-------------|
| Response Due Date | 04 Jun 2026 | 12 Aug 2026 |

Section 00 01 15 - List of Drawing Sheets

Miscellaneous text in this section has been modified to:

| SHEET NUMBER | SHEET REFERENCE | TITLE                             |
|--------------|-----------------|-----------------------------------|
| 1            | G-001           | COVER SHEET                       |
| 2            | G-002           | INDEX OF SHEETS                   |
| 3            | G-003           | GENERAL NOTES, LEGEND AND SYMBOLS |
| 4            | G-004           | GENERAL LINSTYLES                 |
| 5            | G-005           | ABBREVIATIONS                     |
| 6            | G-006           | GENERAL PROJECT KEYMAP            |
|              |                 |                                   |

|    |       |                                                        |
|----|-------|--------------------------------------------------------|
| 7  | G-007 | PROJECT STAGING AND STORAGE - PLAN 1                   |
| 8  | G-008 | PROJECT STAGING AND STORAGE - PLAN 2                   |
| 9  | G-009 | PROJECT STAGING AND STORAGE - PLAN 3                   |
| 10 | V-001 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 1 |
| 11 | V-002 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 2 |
| 12 | V-003 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 3 |
| 13 | V-004 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 4 |
| 14 | V-005 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 5 |
| 15 | V-101 | SURVEY CONTROL INFORMATION                             |
| 16 | V-102 | EXISTING CONDITIONS PLAN 1                             |
|    |       |                                                        |

|    |       |                                               |
|----|-------|-----------------------------------------------|
| 17 | V-103 | EXISTING CONDITIONS PLAN 2                    |
| 18 | V-104 | EXISTING CONDITIONS PLAN 3                    |
| 19 | VU101 | EXISTING COMBINED UTILITIES PLAN 1            |
| 20 | VU102 | EXISTING COMBINED UTILITIES PLAN 2            |
| 21 | VU103 | EXISTING COMBINED UTILITIES PLAN 3            |
| 22 | B-001 | BORING LOCATION PLAN                          |
| 23 | B-301 | BORING LOCATION SECTION 1                     |
| 24 | B-302 | BORING LOCATION SECTION 2                     |
| 25 | B-303 | SOIL BORING PROFILE SECTION - TRAIL ALIGNMENT |
| 26 | CD101 | CIVIL DISABLEMENT PLAN 1                      |
| 27 | CD102 | CIVIL DISABLEMENT PLAN 2                      |
| 28 | CD103 | CIVIL DISABLEMENT PLAN 3                      |

|    |         |                                                   |
|----|---------|---------------------------------------------------|
| 29 | CD104   | CIVIL DEMOLITION PLAN 1                           |
| 30 | CD105   | CIVIL DEMOLITION PLAN 2                           |
| 31 | CD106   | CIVIL DEMOLITION PLAN 3                           |
| 32 | CD401   | OPTION - PROJECT DEMOLITION PHOTOGRAPHS 1         |
| 33 | REMOVED | REMOVED                                           |
| 34 | CD500   | OPTION - WATER CONTROL STRUCTURE PLAN AND SECTION |
| 35 | CD501   | CIVIL DEMOLITION DETAILS 1                        |
| 36 | CD502   | CIVIL DEMOLITION DETAILS 2                        |
| 37 | C-001   | HASTINGS CREEK ALIGNMENT                          |
| 38 | REMOVED | REMOVED                                           |
| 39 | CE101   | ECOSYSTEM RESTORATION PLAN 1                      |
| 40 | CE102   | ECOSYSTEM RESTORATION PLAN 2                      |

|    |       |                                      |
|----|-------|--------------------------------------|
|    |       |                                      |
| 41 | CE103 | ECOSYSTEM RESTORATION PLAN 3         |
| 42 | CE501 | ECOSYSTEM RESTORATION DETAILS        |
| 43 | CG101 | CIVIL GRADING PLAN 1                 |
| 44 | CG102 | CIVIL GRADING PLAN 2                 |
| 45 | CG103 | CIVIL GRADING PLAN 3                 |
| 46 | CG104 | CHANNEL GRADING PLAN 1               |
| 47 | CG105 | CHANNEL GRADING PLAN 2               |
| 48 | CG201 | CIVIL GRADING PROFILE 1              |
| 49 | CG202 | CIVIL GRADING PROFILE 2              |
| 50 | CG203 | CIVIL GRADING PROFILE 3              |
| 51 | CG301 | ECOSYSTEM RESTORATION SECTION PLAN 1 |
| 52 | CG302 | ECOSYSTEM RESTORATION SECTION PLAN 2 |
|    |       |                                      |

|    |         |                                             |
|----|---------|---------------------------------------------|
| 53 | REMOVED | REMOVED                                     |
| 54 | REMOVED | REMOVED                                     |
| 55 | CG401   | CIVIL ENLARGED GRADING PLAN 1               |
| 56 | CG402   | CIVIL ENLARGED GRADING PLAN 2               |
| 57 | REMOVED | REMOVED                                     |
| 58 | CG501   | CIVIL PROPOSED ECOSYSTEM FEATURES DETAILS 1 |
| 59 | CG502   | CIVIL PROPOSED ECOSYSTEM FEATURES DETAILS 2 |
| 60 | REMOVED | REMOVED                                     |
| 61 | REMOVED | REMOVED                                     |
| 62 | REMOVED | REMOVED                                     |
| 63 | REMOVED | REMOVED                                     |
| 64 | REMOVED | REMOVED                                     |
| 65 | REMOVED | REMOVED                                     |
| 66 | r-001   | REFERENCE DRAWING 1                         |

## Section 00 10 00 - Solicitation, Contract Line Item Number (CLIN) Schedule

Miscellaneous text in this section has been modified to:

Enter total base price (total of CLINS 0001 - 0004AC, 0004AE - 0004AH, 0007 - 0008CA, 0008DA - 0008EA, and 0009 - 0009AA): \_\_\_\_\_

Enter total options price (total of CLINS 0004AD, 0006 - 0006AC, 0008CB, 0008EB, 0008FA, 0010 - 0016AA): \_\_\_\_\_

The following CLIN(s) / SLIN(s) / ELIN(s) were modified:

Option Line Item 0004AD

| INFORMATION | FROM | TO  |
|-------------|------|-----|
| Option      | No   | Yes |

Option Line Item 0005

| INFORMATION | FROM                         | TO       |
|-------------|------------------------------|----------|
| Description | CULVERT CROSSING REPLACEMENT | RESERVED |
| Option      | No                           | Yes      |

Option Line Item 0006

| INFORMATION | FROM | TO  |
|-------------|------|-----|
| Option      | No   | Yes |

Option Line Item 0006AA

| INFORMATION | FROM | TO |
|-------------|------|----|
|             |      |    |

|        |    |     |
|--------|----|-----|
| Option | No | Yes |
|--------|----|-----|

Option Line Item 0006AB

|                    |             |           |
|--------------------|-------------|-----------|
| <b>INFORMATION</b> | <b>FROM</b> | <b>TO</b> |
| Option             | No          | Yes       |

Option Line Item 0006AC

|                    |             |           |
|--------------------|-------------|-----------|
| <b>INFORMATION</b> | <b>FROM</b> | <b>TO</b> |
| Option             | No          | Yes       |

Option Line Item 0008CB

|                    |             |           |
|--------------------|-------------|-----------|
| <b>INFORMATION</b> | <b>FROM</b> | <b>TO</b> |
| Option             | No          | Yes       |

Option Line Item 0008EB

|                    |             |           |
|--------------------|-------------|-----------|
| <b>INFORMATION</b> | <b>FROM</b> | <b>TO</b> |
| Option             | No          | Yes       |

Option Line Item 0008FA

|                    |             |           |
|--------------------|-------------|-----------|
| <b>INFORMATION</b> | <b>FROM</b> | <b>TO</b> |
| Option             | No          | Yes       |

**The following CLIN(s) / SLIN(s) / ELIN(s) were deleted:**

| Item       | Supplies / Services                                                                                                               | Quantity | Unit | Unit Price | Amount |
|------------|-----------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------|
| 0005A<br>A | DEMOLITION AND<br>REMOVAL OF EXISTING<br>CROSSING<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm<br>Fixed Price | 1        | Job  |            |        |

| Item | Supplies / Services | Quantity | Unit | Unit Price | Amount |
|------|---------------------|----------|------|------------|--------|
|------|---------------------|----------|------|------------|--------|



|            |                                                                                                                       |   |     |  |  |
|------------|-----------------------------------------------------------------------------------------------------------------------|---|-----|--|--|
| 0005A<br>B | BOX CULVERT AND BOX CULVERT INSTALLATION<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm Fixed Price | 1 | Job |  |  |
|------------|-----------------------------------------------------------------------------------------------------------------------|---|-----|--|--|

| Item       | Supplies / Services                                                                                                | Quantity | Unit | Unit Price | Amount |
|------------|--------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------|
| 0005A<br>C | DEMOLITION AND CLEARING FOR NEW TRAIL<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm Fixed Price | 0.5      | Acre |            |        |

| Item       | Supplies / Services                                                                                                | Quantity | Unit | Unit Price | Amount |
|------------|--------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------|
| 0005A<br>D | BASE EARTHWORK FOR TRAIL INSTALLATION<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm Fixed Price | 1        | Job  |            |        |

| Item | Supplies / Services | Quantity | Unit | Unit Price | Amount |
|------|---------------------|----------|------|------------|--------|
|      |                     |          |      |            |        |

|            |                                                                                                              |   |     |  |  |
|------------|--------------------------------------------------------------------------------------------------------------|---|-----|--|--|
| 0005A<br>E | GRAVEL TRAIL<br>INSTALLATION<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm<br>Fixed Price | 1 | Job |  |  |
|------------|--------------------------------------------------------------------------------------------------------------|---|-----|--|--|

| Item       | Supplies / Services                                                                                                    | Quantity | Unit | Unit Price | Amount |
|------------|------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------|
| 0005A<br>F | EMBANKMENT FILL WITH<br>DRAINAGE LAYER<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm<br>Fixed Price | 1        | Job  |            |        |

| Item       | Supplies / Services                                                                                                           | Quantity | Unit | Unit Price | Amount |
|------------|-------------------------------------------------------------------------------------------------------------------------------|----------|------|------------|--------|
| 0005A<br>G | FABRICATION OF BASE<br>PLATE OF GUARD<br>RAIL<br><br>Classification<br>: None<br><br>Pricing Arrangement: Firm<br>Fixed Price | 1        | Job  |            |        |

| Item       | Supplies / Services         | Quantity | Unit | Unit Price | Amount |
|------------|-----------------------------|----------|------|------------|--------|
| 0005A<br>H | ACQUIRING GUARD RAIL<br>AND | 1        | Job  |            |        |

|  |                                          |  |  |  |  |
|--|------------------------------------------|--|--|--|--|
|  | INSTALLATION                             |  |  |  |  |
|  | Classification<br>: None                 |  |  |  |  |
|  | Pricing Arrangement: Firm<br>Fixed Price |  |  |  |  |

## Section 00 73 00 - Supplementary Conditions

**Miscellaneous text in this section has been modified to:**

### **Commencement, Prosecution, and Completion of Work.**

The Contractor shall be required to (a) commence work under this contract within 10 calendar days calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than *1,825 calendar days after notice to proceed*. The time stated for completion shall include final cleanup of the premises.

"General Decision Number: IL20260020 07/14/2026

State: Illinois

Construction Types: Building, Heavy, Highway and Residential

Counties: Illinois Counties of

Boone, Cook, De Kalb, Du Page, Grundy,

Henry, Kane, Kankakee, Kendall, Lake,

McHenry, McLean, Ogle, Peoria, Rock

Island, Tazewell, Will, Winnebago and

Woodford

Landscaping work on Building, Residential, Heavy and Highway Construction Projects

Modification Number Publication Date

0 01/02/2026

1 05/18/2026

2 07/14/2026

ENGI0150-013 06/01/2024

Rates Fringes

OPERATORS- BUILDING AND HIGHWAY CONSTRUCTION

(LANDSCAPE WORK): THE LANDSCAPE WORK FOR THE

LANDSCAPE EQUIPMENT OPERATOR EXCLUDES THE

PREPARATION OF SUB-GRADE PRIOR TO APPLICATION OF

FINISH LANDSCAPE MATERIALS AND THE UTILIZATION OF

ANY EQUIPMENT OVER ONE CUBIC YARD. INCLUDES ANGLE

DOZER, SMALL; BOBCAT AND OTHER SIMILAR TYPE

MACHINES, 1 CU YD OR LESS; CHIPPING MACHINE;

COMBINATION BACKHOE AND FRONT END LOADER 1 CU YD OR

LESS; FORK LIFT TRUCK; HI-REACH AND

HIGH-RANGER;HYDRAULIC BOOM WITH CLAM;LOG SKIDDER;

STRAW BLOWER AND SEEDER; STUMP MACHINE;TRACTORS,

CRAWLERS, RUBBER TIRE TRACTORS, HIGHLIFT SHOVELS OR

FRONT END LOADERS 1 CU YD OR LESS; TREE SPADES,

ALL; UTILITY TRACTOR AND ATTACHMENTS, AND RUBBER

TIRE FRONT END LOADER OR SIMILAR MACHINE OF 1 TO

1.5 CU YD SOLELY USED FOR PLACEMENT OF LARGE  
DECORATIVE BOULDERS, TREES WITH BALLED SOIL, AND  
OTHER DECORATIVE LANDSCAPE MATERIAL TOO LARGE TO BE  
ACCOMMODATED IN A 1 CU YD BUCKET. ALL OTHER  
EQUIPMENT UTILIZED FOR PERFORMING LANDSCAPE WORK,  
TREE TRIMMING OR REMOVAL OF STEES, AND TO INSTALL  
PLANTS; TRANSPORT TREES; EXCAVATE PLANT PITS; PLACE  
SOIL AND OTHER LANDSCAPE MATERIALS; AND APPLY  
FINISH LANDSCAPE MATERIAL ON SUBGRADE PREPARED BY  
OTHERS. (FOOTNOTE: A. HEALTH AND WELFARE  
CONTRIBUTION IS \$1,780.00 PER MONTH. B. PAID  
HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY; FOURTH OF  
JULY; LABOR DAY; THANKSGIVING DAY; AND CHRISTMAS  
DAY PROVIDED THAT ALL SUCH EMPLOYEES SHALL HAVE IN  
FACT WORKED THEIR REGULARLY SCHEDULED WORK DAY  
IMMEDIATELY PRECEDING AND THE REGULARLY SCHEDULED  
WORK DAY IMMEDIATELY SUCCEEDING THE OCCURRENCE OF  
SUCH HOLIDAY.) (BOONE, COOK, DUPAGE, GRUNDY, KANE,  
KENDALL, LAKE, MCHENRY, AND WILL COUNTIES) .....\$ 37.55 9.50

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ENGI0150-023 06/01/2024

Rates Fringes

OPERATORS- HIGHWAY CONSTRUCTION (LANDSCAPE WORK):

THE LANDSCAPE WORK FOR THE LANDSCAPE EQUIPMENT OPERATOR INCLUDES THE PREPARATION OF SUB-GRADE PRIOR TO APPLICATION OF FINISH LANDSCAPE MATERIALS AND THE UTILIZATION OF ANY EQUIPMENT OVER ONE CUBIC YARD. INCLUDES THE FOLLOWING: ANGLE DOZER, SMALL; BOBCAT AND OTHER SIMILAR TYPE MACHINES, 1 CU YD OR LESS; CHIPPING MACHINE; COMBINATION BACKHOE AND FRONT END LOADER 1 CU YD OR LESS; FORK LIFT TRUCK; HI-REACH AND HIGH-RANGER; HYDRAULIC BOOM WITH CLAM; LOG SKIDDER; STRAW BLOWER AND SEEDER; STUMP MACHINE; TRACTORS, CRAWLERS, RUBBER TIRE TRACTORS, HIGHLIFT SHOVELS OR FRONT END LOADERS 1 CU YD OR LESS; TREE SPADES, ALL; UTILITY TRACTOR AND ATTACHMENTS, AND RUBBER TIRE FRONT END LOADER OR SIMILAR MACHINE OF 1 TO 1.5 CU YD SOLELY USED FOR PLACEMENT OF LARGE DECORATIVE BOULDERS, TREES WITH BALLED SOIL, AND OTHER DECORATIVE LANDSCAPE MATERIAL TOO LARGE TO BE ACCOMMODATED IN A 1 CU YD BUCKET. ALL OTHER EQUIPMENT UTILIZED FOR PERFORMING LANDSCAPE WORK, TREE TRIMMING OR REMOVAL OF STEES, AND TO INSTALL PLANTS; TRANSPORT TREES; EXCAVATE PLANT PITS; PLACE SOIL AND OTHER LANDSCAPE MATERIALS; AND APPLY FINISH LANDSCAPE MATERIAL ON SUBGRADE PREPARED BY OTHERS. (FOOTNOTE: A. HEALTH

AND WELFARE CONTRIBUTION IS \$1,780.00 PER MONTH.

B. PAID HOLIDAYS: NEW YEAR'S DAY; MEMORIAL DAY;  
FOURTH OF JULY; LABOR DAY; THANKSGIVING DAY; AND  
CHRISTMAS DAY PROVIDED THAT ALL SUCH EMPLOYEES  
SHALL HAVE IN FACT WORKED THEIR REGULARLY SCHEDULED  
WORK DAY IMMEDIATELY PRECEDING AND THE REGULARLY  
SCHEDULED WORK DAY IMMEDIATELY SUCCEEDING THE  
OCCURRENCE OF SUCH HOLIDAY.) (HENRY, MCLEAN, OGLE,  
PEORIA, ROCK ISLAND, TAZEWELL, WINNEBAGO, AND  
WOODFORD COUNTIES) .....\$ 37.55 9.50

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LABO0032-004 05/01/2025

Rates Fringes

LANDSCAPE LABORER- HIGHWAY CONSTRUCTION (WINNEBAGO  
COUNTY) .....\$ 47.04 36.31

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LABO0309-006 01/01/2024

Rates Fringes

LANDSCAPE LABORER- HIGHWAY CONSTRUCTION (ROCK  
ISLAND COUNTY).....\$ 33.77 23.60

-----  
LABO0362-003 05/01/2018

Rates Fringes

LANDSCAPE LABORER- HIGHWAY CONSTRUCTION (MCLEAN  
COUNTY) .....\$ 31.08 24.43

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LABO0538-011 05/01/2024

Rates Fringes

LANDSCAPE LABORER-HIGHWAY CONSTRUCTION (HENRY  
COUNTY) .....\$ 35.23 28.10

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LABO0751-004 05/01/2021

Rates Fringes

LANDSCAPE LABORER-HIGHWAY CONSTRUCTION (KANKAKEE  
COUNTY) .....\$ 39.44 32.54

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LABO0996-004 05/01/2018

Rates Fringes

LANDSCAPE LABORER- HIGHWAY CONSTRUCTION (PEORIA,  
TAZEWELL, AND WOODFORD COUNTIES) .....\$ 32.73 23.74

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SUIL1993-001 01/19/1993

Rates Fringes

LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE DRIVER 2 & 3 AXLES. (GRUNDY, LAKE & WILL  
COUNTIES).....\$ 11.86 2.81

LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-



LANDSCAPE LABORERS (DE KALB COUNTY) .....\$ 7.25 0.00  
LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE LABORERS (DU PAGE COUNTY).....\$ 7.25  
LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE LABORERS. (COOK COUNTY).....\$ 7.25 0.00  
LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE OPERATORS (DE KALB COUNTY) .....\$ 7.25 0.00  
LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE PLANTSMAN (DE KALB COUNTY) .....\$ 9.66 0.26  
LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE PLANTSMAN (GRUNDY, LAKE & WILL COUNTIES) . \$ 12.00 3.32  
LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE PLANTSMAN (BOONE, GRUNDY, KANE, KENDALL,  
LAKE, MCHENRY, & WILL COUNTIES).....\$ 9.73 2.05  
LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE LABORERS (COOK COUNTY).....\$ 7.25 0.00  
LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE LABORERS (DE KALB COUNTY).....\$ 7.25 0.00  
LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE OPERATORS (DU PAGE COUNTY).....\$ 10.75 0.00  
LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-  
LANDSCAPE PLANTSMAN (DE KALB COUNTY).....\$ 9.66 0.26

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SUIL1993-002 01/19/1993

Rates Fringes

LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE LABORERS (BOONE, GRUNDY, KANE, KENDALL,  
LAKE, MCHENRY, AND WILL COUNTIES) .....\$ 7.25 0.00

LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE PLANTSMAN (COOK COUNTY).....\$ 9.80 1.82

LABORER: BUILDING CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE PLANTSMAN (DU PAGE COUNTY) .....\$ 9.04 1.16

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE DRIVER, 2 & 3 AXLES (BOONE, GRUNDY, KANE,  
KENDALL, LAKE, MCHENRY & WILL COUNTIES).....\$ 11.94 2.42

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE LABORERS (BOONE, GRUNDY, KANE, KENDALL,  
LAKE, MCHENRY, & WILL COUNTIES).....\$ 7.25 0.00

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE OPERATORS (BOONE, GRUNDY, KANE, KENDALL,  
LAKE, MCHENRY, & WILL COUNTIES).....\$ 13.11 3.01

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE DRIVER, 2 & 3 AXLES (COOK COUNTY).....\$ 9.93 1.89

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE OPERATORS (COOK COUNTY).....\$ 10.98 2.12

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE OPERATORS (DE KALB COUNTY).....\$ 7.25 0.00

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE PLANTSMAN (DE KALB COUNTY).....\$ 9.66 0.26

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE DRIVER, 2 & 3 AXLES (DU PAGE COUNTY).....\$ 8.32 1.02

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE LABORERS (DU PAGE COUNTY).....\$ 7.25 0.00

LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE LABORER (DE KALB COUNTY).....\$ 7.25 0.00

LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE OPERATORS (DE KALB COUNTY).....\$ 7.25 0.00

LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE DRIVER (KANKAKEE COUNTY).....\$ 8.75 0.17

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SUIL1993-003 01/19/1993

Rates Fringes

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE PLANTSMAN (COOK COUNTY).....\$ 10.08 2.06

LABORER: HEAVY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE PLANTSMAN (DU PAGE COUNTY).....\$ 10.65 0.00

LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-

LANDSCAPE OPERATOR (KANKAKEE COUNTY).....\$ 16.57 3.56

LABORER: HIGHWAY CONSTRUCTION (LANDSCAPE WORK)-

TRUCK DRIVERS, 2 & 3 AXLES (PEORIA, TAZEWELL, &

WOODFORD COUNTIES).....\$ 17.58 5.88

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TEAM0026-005 05/01/2025

Rates Fringes

TRUCK DRIVER, GROUP 1- DRIVERS ON 2 AXLES HAULING  
LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES  
AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE  
UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES;  
MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP  
TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO  
AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO  
6,000 LB CAPACITY. (MCLEAN (SOUTH OF A STRAIGHT  
LINE FROM WHERE ROUTE 24 INTERSECTS THE WOODFORD  
COUNTY LINE IN A SOUTHEAST DIRECTION TO THE SOUTH  
SOUTHWEST CORNER OF LIVINGSTON COUNTY) COUNTY).....\$ 45.29 25.42

TRUCK DRIVER, GROUP 2 - 2 OR 3 AXLES HAULING LESS  
THAN 9 TONS BUT HAULING LESS THAN 16 TONS; A-FRAME  
WINCH TRUCKS; HYDROLIFT TRUCKS; VACTOR TRUCKS OR  
SIMILAR EQUIPMENT WHEN USED FOR TRANSPORTATION  
PURPOSES; FORKLIFT OVER 6,000 LB. CAPACITY; WINCH  
TRUCKS; AND FOUR AXLE COMBINATION UNITS. (MCLEAN  
(SOUTH OF A STRAIGHT LINE FROM WHERE ROUTE 24  
INTERSECTS THE WOODFORD COUNTY LINE IN A SOUTHEAST  
DIRECTION TO THE SOUTH SOUTHWEST CORNER OF

LIVINGSTON COUNTY) COUNTY).....\$ 45.88 25.42

TRUCK DRIVER, GROUP 3- 2, 3, OR 4 AXLES HAULING 16  
TONS OR MORE; 5 AXLES OR MORE COMBINATION UNITS;  
DRIVERS ON WATER PULLS; ARTICULATED DUMP TRUCKS;  
MECHANICS AND WORKING FOREPERSONS. (MCLEAN (SOUTH  
OF A STRAIGHT LINE FROM WHERE ROUTE 24 INTERSECTS  
THE WOODFORD COUNTY LINE IN A SOUTHEAST DIRECTION  
TO THE SOUTH SOUTHWEST CORNER OF LIVINGSTON COUNTY)  
COUNTY).....\$ 46.15 25.42

TRUCK DRIVER, GROUP 4- LOW BOY AND OIL  
DISTRIBUTORS. (MCLEAN (SOUTH OF A STRAIGHT LINE  
FROM WHERE ROUTE 24 INTERSECTS THE WOODFORD COUNTY  
LINE IN A SOUTHEAST DIRECTION TO THE SOUTH  
SOUTHWEST CORNER OF LIVINGSTON COUNTY) COUNTY).....\$ 46.54 25.42

TRUCK DRIVER, GROUP 5- DRIVERS WHO REQUIRE SPECIAL  
PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS  
WASTE WORK. (MCLEAN (SOUTH OF A STRAIGHT LINE  
FROM WHERE ROUTE 24 INTERSECTS THE WOODFORD COUNTY  
LINE IN A SOUTHEAST DIRECTION TO THE SOUTH  
SOUTHWEST CORNER OF LIVINGSTON COUNTY) COUNTY).....\$ 47.64 25.42

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TEAM0179-004 06/01/2025

Rates Fringes

TRUCK DRIVER: 2-3 AXLES. FOOTNOTES: A.HEALTH AND  
WELFARE \$448.80 PER WEEK; PENSION \$562.80 PER WEEK  
B. LOWBOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

(GRUNDY, KENDALL, MCLEAN (NORTH OF A STRAIGHT LINE  
STARTING AT THE INTERSECTION OF MCLEAN-WOODFORD  
COUNTIES LINE & ROUTE 24 IN A SOUTHEASTERN  
DIRECTION TO THE SOUTH SOUTHWEST CORNER OF  
LIVINGSTON COUNTY), WILL, AND WOODFORD (NORTHEAST  
CORNER EAST OF ROUTE 51/251 & NORTH OF ROUTE 24)  
COUNTIES).....\$ 46.12 0.30

TRUCK DRIVER: 4 AXLES. FOOTNOTES: A.HEALTH AND  
WELFARE \$448.80 PER WEEK; PENSION \$562.80 PER WEEK  
B. LOWBOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

(GRUNDY, KENDALL, MCLEAN (NORTH OF A STRAIGHT LINE  
STARTING AT THE INTERSECTION OF MCLEAN-WOODFORD  
COUNTIES LINE & ROUTE 24 IN A SOUTHEASTERN  
DIRECTION TO THE SOUTH SOUTHWEST CORNER OF  
LIVINGSTON COUNTY), WILL, AND WOODFORD (NORTHEAST  
CORNER EAST OF ROUTE 51/251 & NORTH OF ROUTE 24)  
COUNTIES).....\$ 46.27 0.30

TRUCK DRIVER: 5 AXLES. FOOTNOTES: A.HEALTH AND  
WELFARE \$448.80 PER WEEK; PENSION \$562.80 PER WEEK  
B. LOWBOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

(GRUNDY, KENDALL, MCLEAN (NORTH OF A STRAIGHT LINE  
STARTING AT THE INTERSECTION OF MCLEAN-WOODFORD  
COUNTIES LINE & ROUTE 24 IN A SOUTHEASTERN  
DIRECTION TO THE SOUTH SOUTHWEST CORNER OF  
LIVINGSTON COUNTY), WILL, AND WOODFORD (NORTHEAST  
CORNER EAST OF ROUTE 51/251 & NORTH OF ROUTE 24)  
COUNTIES).....\$ 46.47 0.30

TRUCK DRIVER: 6 AXLES. FOOTNOTES: A.HEALTH AND  
WELFARE \$448.80 PER WEEK; PENSION \$562.80 PER WEEK  
B. LOWBOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

(GRUNDY, KENDALL, MCLEAN (NORTH OF A STRAIGHT LINE  
STARTING AT THE INTERSECTION OF MCLEAN-WOODFORD  
COUNTIES LINE & ROUTE 24 IN A SOUTHEASTERN  
DIRECTION TO THE SOUTH SOUTHWEST CORNER OF  
LIVINGSTON COUNTY), WILL, AND WOODFORD (NORTHEAST  
CORNER EAST OF ROUTE 51/251 & NORTH OF ROUTE 24)

COUNTIES).....\$ 46.67 0.30

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TEAM0179-008 06/01/2024

Rates Fringes

TRUCK DRIVER: 2 OR 3 AXLES. FOOTNOTES: A.

\$1055.60 PER WEEK. LOW-BOY WORK CLASSIFICATION IS

AN ADDITIONAL \$1.50 PER HOUR AN ADDITIONAL \$.20

PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH MORE

THAN SIX (6) AXLES. (KANKAKEE COUNTY) .....\$ 44.82 0.25

TRUCK DRIVER: 4 AXLES. FOOTNOTES: A. \$1055.60 PER

WEEK. LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL

\$1.50 PER HOUR AN ADDITIONAL \$.20 PER AXLE SHALL

BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)

AXLES. (KANKAKEE COUNTY) .....\$ 44.97 0.25

TRUCK DRIVER: 5 AXLES. FOOTNOTES: A. \$1055.60 PER

WEEK. LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL

\$1.50 PER HOUR AN ADDITIONAL \$.20 PER AXLE SHALL

BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)

AXLES. (KANKAKEE COUNTY) .....\$ 45.17 0.25

TRUCK DRIVER: 6 AXLES. FOOTNOTES: A. \$1055.60 PER

WEEK. LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL

\$1.50 PER HOUR AN ADDITIONAL \$.20 PER AXLE SHALL

BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)

AXLES. (KANKAKEE COUNTY).....\$ 45.37 0.25



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TEAM0301-001 06/01/2024

Rates Fringes

TRUCK DRIVER: 2-3 AXLES. FOOTNOTES: A.\$500.00 PER  
WEEK PENSION. B. LOWBOY IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID  
HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (LAKE AND MCHENRY  
COUNTIES).....\$ 44.54 13.40

TRUCK DRIVER: 4 AXLES. FOOTNOTES: A.\$500.00 PER  
WEEK PENSION. B. LOWBOY IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID  
HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE

1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (LAKE AND MCHENRY  
COUNTIES).....\$ 44.69 13.40

TRUCK DRIVER: 5 AXLES. FOOTNOTES: A.\$500.00 PER  
WEEK PENSION. B. LOWBOY IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID  
HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (LAKE AND MCHENRY  
COUNTIES).....\$ 44.89 13.40

TRUCK DRIVER: 6 AXLES. FOOTNOTES: A.\$500.00 PER  
WEEK PENSION. B. LOWBOY IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID  
HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE

1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (LAKE AND MCHENRY  
COUNTIES).....\$ 45.09 13.40

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TEAM0325-004 06/01/2025

Rates Fringes

TRUCK DRIVER: 2 - 3 AXLES. FOOTNOTE: AN  
ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. (BOONE AND  
WINNEBAGO COUNTIES).....\$ 48.47 26.70

TRUCK DRIVER: 4 AXLES. FOOTNOTE: AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. (BOONE AND WINNEBAGO  
COUNTIES).....\$ 48.62 26.70

TRUCK DRIVER: 5 AXLES. FOOTNOTE: AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. (BOONE AND WINNEBAGO  
COUNTIES).....\$ 48.82 26.70

TRUCK DRIVER: 6 AXLES. FOOTNOTE: AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. (BOONE AND WINNEBAGO  
COUNTIES).....\$ 48.93 26.70

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TEAM0330-004 06/01/2025

Rates Fringes

TRUCK DRIVER: 2-3 AXLES. FOOTNOTE: A. HEALTH AND  
WELFARE \$468.00 PER WEEK; PENSION \$644.34 PER WEEK.

LOW BOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (DEKALB AND OGLE  
(NORTH OF ROUTE 72/EAST OF ROUTE 251, ADELINE,  
BYRON, CRESTON, DEMENT, FORRESTON NORTH OF ROUTE  
72, LEAF RIVER NORTH OF ROUTE 72, LYNNVILLE,  
MONROE, ROCHELLE, & SCOTT) COUNTIES) .....\$ 44.83 0.30

TRUCK DRIVER: 4 AXLES. FOOTNOTE: A. HEALTH AND  
WELFARE \$468.00 PER WEEK; PENSION \$644.34 PER WEEK.

LOW BOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (DEKALB AND OGLE  
(NORTH OF ROUTE 72/EAST OF ROUTE 251, ADELINE,  
BYRON, CRESTON, DEMENT, FORRESTON NORTH OF ROUTE  
72, LEAF RIVER NORTH OF ROUTE 72, LYNNVILLE,  
MONROE, ROCHELLE, & SCOTT) COUNTIES) .....\$ 44.98 0.30

TRUCK DRIVER: 5 AXLES. FOOTNOTE: A. HEALTH AND  
WELFARE \$468.00 PER WEEK; PENSION \$644.34 PER WEEK.

LOW BOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (DEKALB AND OGLE

(NORTH OF ROUTE 72/EAST OF ROUTE 251, ADELINE,  
BYRON, CRESTON, DEMENT, FORRESTON NORTH OF ROUTE  
72, LEAF RIVER NORTH OF ROUTE 72, LYNNVILLE,  
MONROE, ROCHELLE, & SCOTT) COUNTIES) .....\$ 45.18 0.30

TRUCK DRIVER: 6 AXLES. FOOTNOTE: A. HEALTH AND  
WELFARE \$468.00 PER WEEK; PENSION \$644.34 PER WEEK.

LOW BOY CLASSIFICATION IS AN ADDITIONAL \$1.50 PER  
HOUR AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR  
ALL VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN  
1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE  
1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID  
VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION. (DEKALB AND OGLE

(NORTH OF ROUTE 72/EAST OF ROUTE 251, ADELINE,  
BYRON, CRESTON, DEMENT, FORRESTON NORTH OF ROUTE  
72, LEAF RIVER NORTH OF ROUTE 72, LYNNVILLE,  
MONROE, ROCHELLE, & SCOTT) COUNTIES) .....\$ 45.38 0.30

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TEAM0371-004 05/01/2025

Rates Fringes

TRUCK DRIVER, GROUP 1- DRIVERS ON 2 AXLES HAULING

LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES  
AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE  
UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES;  
MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP  
TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO  
AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO  
6,000 LB CAPACITY. (HENRY AND ROCK ISLAND  
COUNTIES).....\$ 45.35 25.72

TRUCK DRIVER, GROUP 2- 2 OR 3 AXLES HAULING MORE  
THAN 9 TONS BUT HAULING LESS THAN 16 TONS; A-FRAME  
WINCH TRUCKS; HYDROLIFT TRUCKS; VACTOR TRUCKS OR  
SIMILAR EQUIPMENT WHEN USED FOR TRANSPORTATION  
PURPOSES; FORKLIFT OVER 6,000 LB. CAPACITY; WINCH  
TRUCKS; AND FOUR AXLE COMBINATION UNITS. (HENRY AND  
ROCK ISLAND COUNTIES).....\$ 45.93 25.72

TRUCK DRIVER, GROUP 3- 2, 3, OR 4 AXLES HAULING 16  
TONS OR MORE; 5-AXLES OR MORE COMBINATION UNITS;  
DRIVERS ON WATER PULLS; ARTICULATED DUMP TRUCKS;  
MECHANICS AND WORKING FOREPERSONS. (HENRY AND ROCK  
ISLAND COUNTIES).....\$ 46.25 25.72

TRUCK DRIVER, GROUP 4- LOW BOY AND OIL  
DISTRIBUTORS. (HENRY AND ROCK ISLAND COUNTIES).....\$ 46.60 25.72

TRUCK DRIVER, GROUP 5- DRIVERS WHO REQUIRE SPECIAL

PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS  
WASTE WORK. (HENRY AND ROCK ISLAND COUNTIES).....\$ 47.71 25.72

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TEAM0627-004 05/01/2024

Rates Fringes

TRUCK DRIVER, GROUP 1- DRIVERS ON 2 AXLES HAULING  
LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES  
AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE  
UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES;  
MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP  
TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO  
AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO  
6,000 LB CAPACITY. (PEORIA, TAZEWELL, AND WOODFORD  
COUNTIES).....\$ 43.24 24.27

TRUCK DRIVER, GROUP 2- 2 OR 3 AXLES HAULING MORE  
THAN 9 TONS BUT HAULING LESS THAN 16 TONS; A-FRAME  
WINCH TRUCKS; HYDROLIFT TRUCKS; VACTOR TRUCKS OR  
SIMILAR EQUIPMENT WHEN USED FOR TRANSPORTATION  
PURPOSES; FORKLIFT OVER 6,000 LB. CAPACITY; WINCH  
TRUCKS; AND FOUR AXLE COMBINATION UNITS. (PEORIA,  
TAZEWELL, AND WOODFORD COUNTIES).....\$ 43.83 24.27

TRUCK DRIVER, GROUP 3- 2, 3, OR 4 AXLES HAULING 16  
TONS OR MORE; 5 AXLES OR MORE COMBINATION UNITS;  
DRIVERS ON WATER PULLS; ARTICULATED DUMP TRUCKS;



MECHANICS AND WORKING FOREPERSONS. (PEORIA,  
TAZEWELL, AND WOODFORD COUNTIES).....\$ 44.10 24.27

TRUCK DRIVER, GROUP 4- LOW BOY AND OIL

DISTRIBUTORS. (PEORIA, TAZEWELL, AND WOODFORD  
COUNTIES).....\$ 44.49 24.27

TRUCK DRIVER, GROUP 5- DRIVERS WHO REQUIRE SPECIAL  
PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS  
WASTE WORK. (PEORIA, TAZEWELL, AND WOODFORD  
COUNTIES).....\$ 45.59 24.27

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TEAM0673-003 06/01/2025

Rates Fringes

TRUCK DRIVER: 2-3 AXLES. FOOTNOTE: A. AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL

VEHICLES WITH MORE THAN SIX (6) AXLES. LOW-BOY IS

AN ADDITIONAL \$1.50 PER HOUR HEALTH AND WELFARE:

\$453.20 PER WEEK. PENSION: \$589.90 PER WEEK. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND

CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE IN

1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE

1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID

VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20

YEARS - 4 WEEKS PAID VACATION. (DU PAGE AND KANE  
COUNTIES).....\$ 45.31 0.30

TRUCK DRIVER: 4 AXLES. FOOTNOTE: A. AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. LOW-BOY IS AN ADDITIONAL  
\$1.50 PER HOUR HEALTH AND WELFARE: \$453.20 PER  
WEEK. PENSON: \$589.90 PER WEEK. PAID HOLIDAYS:  
NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY,  
LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.

900 STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR  
FOR THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. (DU PAGE AND KANE COUNTIES).....\$ 45.46 0.30

TRUCK DRIVER: 5 AXLES. FOOTNOTE: A. AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. LOW-BOY IS AN ADDITIONAL  
\$1.50 PER HOUR HEALTH AND WELFARE: \$453.20 PER  
WEEK. PENSON: \$589.90 PER WEEK. PAID HOLIDAYS:  
NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY,  
LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.

900 STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR  
FOR THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS

- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. (DU PAGE AND KANE COUNTIES).....\$ 45.66 0.30  
TRUCK DRIVER: 6 AXLES. FOOTNOTE: A. AN ADDITIONAL  
\$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH  
MORE THAN SIX (6) AXLES. LOW-BOY IS AN ADDITIONAL  
\$1.50 PER HOUR HEALTH AND WELFARE: \$453.20 PER  
WEEK. PENSON: \$589.90 PER WEEK. PAID HOLIDAYS:  
NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY,  
LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY.  
900 STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR  
FOR THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. (DU PAGE AND KANE COUNTIES).....\$ 45.86 0.30

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TEAM0722-005 05/01/2025

Rates Fringes

TRUCK DRIVER, GROUP 1- DRIVERS ON 2 AXLES HAULING  
LESS THAN 9 TONS; AIR COMPRESSOR & WELDING MACHINES  
AND BROOMS, INCLUDING THOSE PULLED BY SEPARATE  
UNITS; TRUCK DRIVER HELPER, WAREHOUSE EMPLOYEES;  
MECHANIC HELPERS; GREASERS AND TIREMEN; PICK-UP  
TRUCKS WHEN HAULING MATERIAL, TOOLS, OR WORKERS TO

AND FROM AND ON THE JOB SITE; AND FORKLIFTS UP TO  
6,000 LB CAPACITY. (OGLE (NORTH OF ROUTE 72/EAST  
OF ROUTE 251) COUNTY).....\$ 45.29 25.42

TRUCK DRIVER, GROUP 2- 2 OR 3 AXLES HAULING MORE  
THAN 9 TONS BUT HAULING LESS THAN 16 TONS; A-FRAME  
WINCH TRUCKS; HYUDROLIFT TRUCKS; VACTOR TRUCKS OR  
SIMILAR EQUIPMENT WHEN USED FOR TRANSPORTATION  
PURPOSES; FORKLIFT OVER 6,000 LB. CAPACITY; WINCH  
TRUCKS; AND FOUR AXLE COMBINATION UNITS. (OGLE  
(NORTH OF ROUTE 72/EAST OF ROUTE 251) COUNTY).....\$ 45.88 25.42

TRUCK DRIVER, GROUP 3- 2, 3, OR 4 AXLES HAULING 16  
TONS OR MORE; 5-AXLES OR MORE COMBINATION UNITS;  
DRIVERS ON WATER PULLS; ARTICULATED DUMP TRUCKS;  
MECHANICS AND WORKING FOREPERSONS. (OGLE (NORTH OF  
ROUTE 72/EAST OF ROUTE 251) COUNTY).....\$ 46.15 25.42

TRUCK DRIVER, GROUP 4- LOW BOY AND OIL  
DISTRIBUTORS. (OGLE (NORTH OF ROUTE 72/EAST OF  
ROUTE 251) COUNTY).....\$ 46.54 25.42

TRUCK DRIVER, GROUP 5- DRIVERS WHO REQUIRE SPECIAL  
PROTECTIVE CLOTHING WHILE EMPLOYED ON HAZARDOUS  
WASTE WORK. (OGLE (NORTH OF ROUTE 72/EAST OF ROUTE  
251) COUNTY).....\$ 47.64 25.42

## Rates Fringes

TRUCK DRIVER: 2 OR 3 AXLES (HEAVY AND HIGHWAY).

FOOTNOTES: A. PAID HOLIDAYS: NEW YEAR'S DAY,  
MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,  
THANKSGIVING DAY, AND CHRISTMAS DAY. B. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR  
THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. C. AN ADDITIONAL \$.20 PER AXLE SHALL BE  
PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH  
AND WELFARE: \$448.80 PER WEEK. PENSION: \$562.80  
PER WEEK. (COOK COUNTY) .....\$ 45.55 30.27

TRUCK DRIVER: 4 AXLES (HEAVY AND HIGHWAY).

FOOTNOTES: A. PAID HOLIDAYS: NEW YEAR'S DAY,  
MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,  
THANKSGIVING DAY, AND CHRISTMAS DAY. B. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR  
THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. C. AN ADDITIONAL \$.20 PER AXLE SHALL BE

PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH

AND WELFARE: \$448.80 PER WEEK. PENSION: \$562.80

PER WEEK. (COOK COUNTY) .....\$ 45.80 30.27

TRUCK DRIVER: 5 AXLES (HEAVY AND HIGHWAY).

FOOTNOTES: A. PAID HOLIDAYS: NEW YEAR'S DAY,

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,

THANKSGIVING DAY, AND CHRISTMAS DAY. B. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR

THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID

VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS

- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID

VACATION. C. AN ADDITIONAL \$.20 PER AXLE SHALL BE

PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH

AND WELFARE: \$448.80 PER WEEK. PENSION: \$562.80

PER WEEK. (COOK COUNTY) .....\$ 46.00 30.27

TRUCK DRIVER: 6 AXLES (HEAVY AND HIGHWAY).

FOOTNOTES: A. PAID HOLIDAYS: NEW YEAR'S DAY,

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,

THANKSGIVING DAY, AND CHRISTMAS DAY. B. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR

THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID

VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS

- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. C. AN ADDITIONAL \$.20 PER AXLE SHALL BE  
PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES.  
LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH  
AND WELFARE: \$448.80 PER WEEK. PENSION: \$562.80  
PER WEEK. (COOK COUNTY) .....\$ 46.20 30.27

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TEAM0786-001 06/01/2025

Rates Fringes

TRUCK DRIVER: 2 & 3 AXLES. (BUILDING AND  
RESIDENTIAL). FOOTNOTES: A. AN ADDITIONAL \$.20 PER  
AXLE SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN  
SIX (6) AXLES. LOW-BOY WORK CLASSIFICATION IS AN  
ADDITIONAL \$1.50 PER HOUR. HEALTH AND WELFARE:  
\$445.00 PER WEEK. PENSION: \$408 PER WEEK. B. 900  
STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR  
THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION. PAID HOLIDAYS: NEW YEAR'S DAY,  
MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,  
THANKSGIVING DAY, AND CHRISTMAS DAY. (COOK COUNTY)..\$ 53.95 0.30  
TRUCK DRIVER: 4 AXLES. (BUILDING AND RESIDENTIAL).

FOOTNOTES: A. AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES. LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH AND WELFARE: \$445.00 PER WEEK. PENSION: \$408 PER WEEK. B. 900 STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID VACATION. PAID HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND CHRISTMAS DAY. (COOK COUNTY).....\$ 54.21 0.30 TRUCK DRIVER: 5 AXLES. (BUILDING AND RESIDENTIAL).

FOOTNOTES: A. AN ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES. LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR. HEALTH AND WELFARE: \$445.00 PER WEEK. PENSION: \$408 PER WEEK. B. 900 STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID VACATION. PAID HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND



CHRISTMAS DAY. (COOK COUNTY).....\$ 54.43 0.30

TRUCK DRIVER: 6 AXLES. (BUILDING AND RESIDENTIAL).

FOOTNOTES: A. AN ADDITIONAL \$.20 PER AXLE SHALL BE  
PAID FOR ALL VEHICLES WITH MORE THAN SIX (6) AXLES.

LOW-BOY WORK CLASSIFICATION IS AN ADDITIONAL \$1.50  
PER HOUR. HEALTH AND WELFARE: \$445.00 PER WEEK.

PENSION: \$408 PER WEEK. B. 900 STRAIGHT TIME HOURS  
OR MORE IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER  
SHALL RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2

WEEKS PAID VACATION; 10 YEARS - 3 WEEKS PAID  
VACATION; 20 YEARS - 4 WEEKS PAID VACATION. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. (COOK COUNTY).....\$ 54.64 0.30

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave  
for Federal Contractors applies to all contracts subject to the  
Davis-Bacon Act for which the contract is awarded (and any  
solicitation was issued) on or after January 1, 2017. If this

contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually.

Additional information on contractor requirements and worker protections under Executive Order 13658 is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than SU, UAVG, SA, or SC denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers.

0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE:

UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio.

The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

#### Survey Rate Identifiers

The SU identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME

refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination.

The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

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## WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

Branch of Wage Surveys

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to [BCWD-Office@dol.gov](mailto:BCWD-Office@dol.gov) or by mail to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Requests for review and reconsideration can be submitted via email to [dba.reconsideration@dol.gov](mailto:dba.reconsideration@dol.gov) or by mail to:

Wage and Hour Administrator

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210.

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END OF GENERAL DECISION"

"General Decision Number: IL20260011 05/21/2026

State: Illinois

Construction Types: Heavy and Highway

Counties: Illinois Counties of

Boone, De Kalb, Du Page, Kane, Kendall,

Lake, McHenry and Will

Excludes Landscape Projects

Modification Number Publication Date

0 01/02/2026

1 05/18/2026



2 05/21/2026

CARP0555-003 06/01/2022

Rates Fringes

CARPENTER: HEAVY & HIGHWAY (DUPAGE ANE LAKE

COUNTIES).....\$ 52.01 38.85

CARPENTER: BUILDING (DUPAGE ANE LAKE COUNTIES).....\$ 52.01 38.85

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CARP0555-008 06/01/2020

Rates Fringes

CARPENTER AND PILEDRIVER (WILL COUNTY).....\$ 49.76 38.26

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CARP0555-011 06/01/2022

Rates Fringes

CARPENTER AND PILEDRIVER (KANE, MCHENRY (NORTH OF

HWY 52), AND KENDALL COUNTIES).....\$ 52.01 38.86

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CARP0790-003 05/01/2025

Rates Fringes

CARPENTER (DE KALB COUNTY).....\$ 48.60 38.53

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CARP0790-004 05/01/2025

Rates Fringes

CARPENTER (CARROLL, JO DAVIESS, LEE, OGLE (OREGON

AND SOUTH THEREOF), STEPHENSON, AND WHITESIDE  
COUNTIES).....\$ 48.60 38.53

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CARP0792-003 05/01/2025

Rates Fringes

CARPENTER (BOONE COUNTY).....\$ 51.00 36.13

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ELEC0009-002 05/26/2024

Rates Fringes

LINE CONSTRUCTION: LINEMAN AND EQUIPMENT OPERATOR  
(WILL COUNTY).....\$ 62.10 37.29

LINE CONSTRUCTION: GROUNDMAN (WILL COUNTY).....\$ 48.44 29.09

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ELEC0117-001 06/02/2025

Rates Fringes

ELECTRICIAN (KANE (NORTHERN HALF) AND MCHENRY (ALL)  
COUNTIES).....\$ 59.11 42.23

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ELEC0150-001 06/03/2024

Rates Fringes

ELECTRICIAN (LAKE COUNTY).....\$ 48.28 50.46

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ELEC0176-011 06/01/2023

Rates Fringes

ELECTRICIAN (WILL COUNTY).....\$ 52.00 45.01

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ELEC0196-001 03/06/2023

Rates Fringes

LINE CONSTRUCTION: LINEMAN, SUBSTATION TECHNICIAN,  
CABLE SPLICING TECHNICIAN, DIGGER OPERATOR, CRANE  
OPERATOR 20 TONS AND ABOVE, AND SIGNAL TECHNICIAN

(BOONE, DEKALB, DUPAGE, KANE, KENDALL, LAKE, AND  
MCHENRY COUNTIES) FOOTNOTE: A. PAID HOLIDAYS:

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, AND  
THANKSGIVING DAY.....\$ 59.17 27.12

LINE CONSTRUCTION: GROUNDMAN TRUCK DRIVER (BOONE,  
DEKALB, DUPAGE, KANE, KENDALL, LAKE, AND MCHENRY  
COUNTIES) FOOTNOTE: A. PAID HOLIDAYS:

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, AND  
THANKSGIVING DAY.....\$ 39.19 20.32

LINE CONSTRUCTION: GROUNDMAN (BOONE, DEKALB,  
DUPAGE, KANE, KENDALL, LAKE, AND MCHENRY COUNTIES)

FOOTNOTE: A. PAID HOLIDAYS: MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, AND THANKSGIVING DAY...\$ 37.81 19.86

LINE CONSTRUCTION: EQUIPMENT OPERATOR (BOONE,  
DEKALB, DUPAGE, KANE, KENDALL, LAKE, AND MCHENRY  
COUNTIES) FOOTNOTE: A. PAID HOLIDAYS:

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY, AND  
THANKSGIVING DAY.....\$ 49.22 23.73

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ELEC0364-003 06/02/2025

Rates Fringes

ELECTRICIAN (BOONE (ALL) & DEKALB (REMAINDER)  
COUNTIES).....\$ 62.61 43.96

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ELEC0461-006 06/02/2025

Rates Fringes

ELECTRICIAN (DEKALB (SANDWICH TWP), KANE (SOUTHERN  
HALF) & KENDALL (ALL) COUNTIES).....\$ 60.17 43.50

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ELEC0701-001 06/03/2019

Rates Fringes

ELECTRICIAN (DUPAGE COUNTY).....\$ 41.00 43.40

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ENGI0150-015 06/01/2025

Rates Fringes

OPERATOR: POWER EQUIPMENT, GROUP 5 OILERS (BOONE  
AND DE KALB COUNTIES) PREMIUM PAY: LONG BOOM :  
CRANES & DERRICKS 90' TO 150' INCLUDING JIB  
RECEIVE AN EXTRA \$.50 PER HOUR. CRANES & DERRICKS  
OVER 150' INCLUDING JIB RECEIVE AN EXTRA \$.50 PER

HOUR PLUS AN ADDITIONAL \$.10 FOR EACH ADDITIONAL 10' OF BOOM OR JIB. CAPACITY PAY: CRANES & DERRICKS WITH MAXIMUM CAPACITY EXCEEDING 50 TON WITH LESS THAN 90' OF BOOM OR JIB SHALL BE COMPENSATED \$.01 PER HOUR FOR EACH TON OF THE RATED CAPACITY IN EXCESS OF 50 TON. LONG BOOM PAY AND CAPACITY PAY CANNOT BE COMBINED. CRANE MOUNTED EARTH AUGER, RAISED AND BLIND HOLE DRILLS, AND TRUCK MOUNTED DRILL RIGS RECEIVE AN EXTRA \$.50 PER HOUR. CRETER CRANES: WHEN THE CRETER CRANE IS EQUIPPED WITH A CONVEYOR SYSTEM CAPABLE OF EXTENDING 70' OR MORE, THE ENGINEER SHALL RECEIVE AN EXTRA \$.50 PER HOUR. TRUCK MOUNTED CONCRETE PUMPS: WHEN THE TRUCK MOUNTED CONCRETE PUMP IS EQUIPPED WITH A BOOM, WHICH IS CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER SHALL RECEIVE \$.50 PER HOUR EXTRA. TRUCK MOUNTED CONCRETE CONVEYOR: TRUCK MOUNTED CONCRETE CONVEYORS EQUIPPED WITH CONVEYORS THAT ARE CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER SHALL RECEIVE AN EXTRA \$.50 PER HOUR. UNDERGROUND WORK: EMPLOYEES WORKING IN TUNNELS, SHAFTS, ETC. SHALL BE PAID AN ADDITIONAL \$.40 PER HOUR. EMPLOYEES

WORKING UNDER AIR PRESSURE 1/2 POUND TO 7 POUNDS

SHALL RECEIVE AN ADDITIONAL \$.50 PER HOUR.

EMPLOYEES WORKING UNDER AIR PRESSURE OF 7 POUNDS OR

OVER SHALL RECEIVE \$.65 PER HOUR MORE. MINING

MACHINES- BORING MACHINES: THE CREW OPERATING

AND MAINTAINING THE MINING MACHINES SHALL BE

COMPENSATED AN ADDITIONAL \$.50 PER HOUR.....\$ 50.85 51.05

OPERATOR: POWER EQUIPMENT, GROUP 4 AIR COMPRESSOR

- SMALL 185 AND UNDER (1 TO 5 NOT TO EXCEED A TOTAL

OF 300 FT); AIR COMPRESSOR - LARGE OVER 185;

ASPHALT SPREADER BACKEND MAN; COMBINATION - SMALL

EQUIPMENT OPERATOR; GENERATORS - SMALL 50 KW AND

UNDER; GENERATORS - LARGE , OVER 50 KW; HEATERS,

MECHANICAL; HYDRAULIC POWER UNIT (PILE DRIVING,

EXTRACTING OR DRILLING); LIGHT PLANTS ALL (1 TO 5);

PUMPS, OVER 3"" (1 TO 3, NOT TO EXCEED A TOTAL OF

300 FT); PUMPS, WELL POINTS; TRACTAIRE; WELDING

MACHINES (2 THROUGH 5); WINCHES, 4 SMALL ELECTRIC

DRILL WINCHES; BOBCATS UP TO AND INCLUDING .75 CU

YD (BOONE AND DE KALB COUNTIES) PREMIUM PAY:

LONG BOOM : CRANES & DERRICKS 90' TO 150'

INCLUDING JIB RECEIVE AN EXTRA \$.50 PER HOUR.

CRANES & DERRICKS OVER 150' INCLUDING JIB RECEIVE

AN EXTRA \$.50 PER HOUR PLUS AN ADDITIONAL \$.10 FOR

EACH ADDITIONAL 10' OF BOOM OR JIB. CAPACITY  
PAY: CRANES & DERRICKS WITH MAXIMUM CAPACITY  
EXCEEDING 50 TON WITH LESS THAN 90' OF BOOM OR JIB  
SHALL BE COMPENSATED \$.01 PER HOUR FOR EACH TON OF  
THE RATED CAPACITY IN EXCESS OF 50 TON. LONG  
BOOM PAY AND CAPACITY PAY CANNOT BE COMBINED.  
CRANE MOUNTED EARTH AUGER, RAISED AND BLIND HOLE  
DRILLS, AND TRUCK MOUNTED DRILL RIGS RECEIVE AN  
EXTRA \$.50 PER HOUR. CRETER CRANES: WHEN THE  
CRETER CRANE IS EQUIPPED WITH A CONVEYOR SYSTEM  
CAPABLE OF EXTENDING 70' OR MORE, THE ENGINEER  
SHALL RECEIVE AN EXTRA \$.50 PER HOUR. TRUCK  
MOUNTED CONCRETE PUMPS: WHEN THE TRUCK MOUNTED  
CONCRETE PUMP IS EQUIPPED WITH A BOOM, WHICH IS  
CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER  
SHALL RECEIVE \$.50 PER HOUR EXTRA. TRUCK  
MOUNTED CONCRETE CONVEYOR: TRUCK MOUNTED  
CONCRETE CONVEYORS EQUIPPED WITH CONVEYORS THAT  
ARE CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER  
SHALL RECEIVE AN EXTRA \$.50 PER HOUR.  
UNDERGROUND WORK: EMPLOYEES WORKING IN TUNNELS,  
SHAFTS, ETC. SHALL BE PAID AN ADDITIONAL \$.40 PER  
HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE 1/2

POUND TO 7 POUNDS SHALL RECEIVE AN ADDITIONAL \$.50  
PER HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE OF  
7 POUNDS OR OVER SHALL RECEIVE \$.65 PER HOUR MORE.

MINING MACHINES- BORING MACHINES: THE CREW  
OPERATING AND MAINTAINING THE MINING MACHINES SHALL  
BE COMPENSATED AN ADDITIONAL \$.50 PER HOUR.....\$ 53.30 51.05

OPERATOR: POWER EQUIPMENT, GROUP 3 BOILERS;  
BROOMS, ALL POWER PROPELLED; CEMENT SUPPLY TENDER;  
COMPRESSOR, COMMON RECEIVER (2); CONCRETE MIXER,  
TWO BAG AND OVER; CONVEYOR, PORTABLE; FARM TYPE  
TRACTORS USED FOR MOWING, SEEDING, ETC; FIREMAN ON  
BOILERS; FORKLIFT TRUCKS; GROUTING MACHINES;  
HOISTS, AUTOMATIC; HOISTS, ALL ELEVATORS; HOISTS,  
TUGGER SINGLE DRUM; JEEP DIGGERS; PIPE JACKING  
MACHINES; POST- HOLE DIGGER; POWER SAW, CONCRETE,  
POWER DRIVEN; PUG MILLS; ROLLERS, OTHER THAN  
ASPHALT; SEED AND STRAW BLOWER; STEAM GENERATORS;  
STUMP MACHINE; WINCH TRUCKS WITH A-FRAME; WORK  
BOATS; TAMPER-FORM MOTOR DRIVEN (BOONE AND DE KALB  
COUNTIES) PREMIUM PAY: LONG BOOM : CRANES &  
DERRICKS 90' TO 150' INCLUDING JIB RECEIVE AN EXTRA  
\$.50 PER HOUR. CRANES & DERRICKS OVER 150'  
INCLUDING JIB RECEIVE AN EXTRA \$.50 PER HOUR PLUS  
AN ADDITIONAL \$.10 FOR EACH ADDITIONAL 10' OF BOOM



OR JIB. CAPACITY PAY: CRANES & DERRICKS WITH  
MAXIMUM CAPACITY EXCEEDING 50 TON WITH LESS THAN  
90' OF BOOM OR JIB SHALL BE COMPENSATED \$.01 PER  
HOUR FOR EACH TON OF THE RATED CAPACITY IN EXCESS  
OF 50 TON. LONG BOOM PAY AND CAPACITY PAY CANNOT  
BE COMBINED. CRANE MOUNTED EARTH AUGER, RAISED  
AND BLIND HOLE DRILLS, AND TRUCK MOUNTED DRILL  
RIGS RECEIVE AN EXTRA \$.50 PER HOUR. CRETER

CRANES: WHEN THE CRETER CRANE IS EQUIPPED WITH A  
CONVEYOR SYSTEM CAPABLE OF EXTENDING 70' OR MORE,  
THE ENGINEER SHALL RECEIVE AN EXTRA \$.50 PER HOUR.

TRUCK MOUNTED CONCRETE PUMPS: WHEN THE TRUCK  
MOUNTED CONCRETE PUMP IS EQUIPPED WITH A BOOM,  
WHICH IS CAPABLE OF EXTENDING 90' OR MORE, THE  
ENGINEER SHALL RECEIVE \$.50 PER HOUR EXTRA.

TRUCK MOUNTED CONCRETE CONVEYOR: TRUCK MOUNTED  
CONCRETE CONVEYORS EQUIPPED WITH CONVEYORS THAT  
ARE CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER  
SHALL RECEIVE AN EXTRA \$.50 PER HOUR.

UNDERGROUND WORK: EMPLOYEES WORKING IN TUNNELS,  
SHAFTS, ETC. SHALL BE PAID AN ADDITIONAL \$.40 PER  
HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE 1/2  
POUND TO 7 POUNDS SHALL RECEIVE AN ADDITIONAL \$.50

PER HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE OF  
7 POUNDS OR OVER SHALL RECEIVE \$.65 PER HOUR MORE.

MINING MACHINES- BORING MACHINES: THE CREW

OPERATING AND MAINTAINING THE MINING MACHINES SHALL

BE COMPENSATED AN ADDITIONAL \$.50 PER HOUR.....\$ 54.75 51.05

OPERATOR: POWER EQUIPMENT, GROUP 2 BATCH PLANT;

BITUMINOUS MIXER; BOBCATS OVER .75 CU YD; BOILER

AND THROTTLE VALVE; BULLDOZER; CAR LOADER TRAILING

CONVEYORS; COMBINATION BACKHOE FRONT END LOADER

MACHINE, LESS THAN 1 CU YD BACKHOE BUCKET WITH

ATTACHMENTS; COMPRESSOR AND THROTTLE VALVE;

COMPRESSOR, COMMON RECEIVER (3); CONCRETE BREAKER

OR HYDRO HAMMER; CONCRETE GRINDING MACHINE;

CONCRETE MIXER OR PAVER 7S SERIES TO AND INCLUDING

27 CU FT; CONCRETE SPREADER; CONCRETE CURING

MACHINE, BURLAP MACHINE; BELTING MACHINE AND

SEALING MACHINE; CONVEYOR MUCK CARS (HAGLUND OR

SIMILAR TYPE); FINISHING MACHINE-CONCRETE; GREASER

ENGINEER; HIGHLIFT SHOVELS OR FRONT END LOADER;

HOIST-SEWER DRAGGING MACHINE; HYDRAULIC BOOM

TRUCKS, ALL ATTACHMENTS; LOCOMOTIVES, DINKY; PUMP

CRETES, SQUEEZE CRETES-SCREW TYPE PUMPS, GYPSUM

BULKER AND PUMP; ROLLER ASPHALT; ROTARY SNOW PLOWS;

ROTOTILLER, SEAMAN, ETC SELF-PROPELLED;

SCOOPS-TRACTOR DRAWN; SELF-PROPELLED COMPACTOR;  
SPREADER-CHIP- STONE ETC; SCRAPER; SCRAPER-PRIME  
MOVER IN TANDEM REGARDLESS OF SIZE (ADD \$1.00 TO TO  
GROUP 2 HOURLY RATE FOR EACH HOUR AND FOR EACH  
MACHINE ATTACHED THERETO); TANK CAR HEATER;  
TRACTORS, PUSH, PULLING SHEEPS FOOT, DISC, OR  
COMPACTOR, ETC; TUG BOATS PREMIUM PAY: LONG  
BOOM : CRANES & DERRICKS 90' TO 150' INCLUDING  
JIB RECEIVE AN EXTRA \$.50 PER HOUR. CRANES &  
DERRICKS OVER 150' INCLUDING JIB RECEIVE AN EXTRA  
\$.50 PER HOUR PLUS AN ADDITIONAL \$.10 FOR EACH  
ADDITIONAL 10' OF BOOM OR JIB. CAPACITY PAY:  
CRANES & DERRICKS WITH MAXIMUM CAPACITY EXCEEDING  
50 TON WITH LESS THAN 90' OF BOOM OR JIB SHALL BE  
COMPENSATED \$.01 PER HOUR FOR EACH TON OF THE  
RATED CAPACITY IN EXCESS OF 50 TON. LONG BOOM  
PAY AND CAPACITY PAY CANNOT BE COMBINED. CRANE  
MOUNTED EARTH AUGER, RAISED AND BLIND HOLE DRILLS,  
AND TRUCK MOUNTED DRILL RIGS RECEIVE AN EXTRA \$.50  
PER HOUR. CRETER CRANES: WHEN THE CRETER  
CRANE IS EQUIPPED WITH A CONVEYOR SYSTEM CAPABLE  
OF EXTENDING 70' OR MORE, THE ENGINEER SHALL  
RECEIVE AN EXTRA \$.50 PER HOUR. TRUCK MOUNTED

CONCRETE PUMPS: WHEN THE TRUCK MOUNTED CONCRETE PUMP IS EQUIPPED WITH A BOOM, WHICH IS CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER SHALL RECEIVE \$.50 PER HOUR EXTRA. TRUCK MOUNTED CONCRETE

CONVEYOR: TRUCK MOUNTED CONCRETE CONVEYORS EQUIPPED WITH CONVEYORS THAT ARE CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER SHALL RECEIVE AN EXTRA \$.50 PER HOUR. UNDERGROUND WORK:

EMPLOYEES WORKING IN TUNNELS, SHAFTS, ETC. SHALL BE PAID AN ADDITIONAL \$.40 PER HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE 1/2 POUND TO 7 POUNDS SHALL RECEIVE AN ADDITIONAL \$.50 PER HOUR.

EMPLOYEES WORKING UNDER AIR PRESSURE OF 7 POUNDS OR OVER SHALL RECEIVE \$.65 PER HOUR MORE. MINING MACHINES- BORING MACHINES: THE CREW OPERATING AND MAINTAINING THE MINING MACHINES SHALL BE COMPENSATED AN ADDITIONAL \$.50 PER HOUR. (BOONE AND DE KALB COUNTIES).....\$ 56.05 51.05

OPERATOR: POWER EQUIPMENT, GROUP 1 ASPHALT PLANT; ASPHALT HEATER AND PLANER COMBINATION; ASPHALT SPREADER; ASPHALT SILO TENDER; AUTOGRADER, GOMACO OR SIMILAR; BELT LOADER; CAISSON RIGS; CAR DUMPER, CENTRAL REDI-MIX PLANT; COMBINATION BACKHOE FRONT END LOADER MACHINE (1 CU YD OR OVER BACKHOE BUCKET

WITH ATTACHMENTS); BACKHOE WITH SHEAR ATTACHMENT;  
CONCRETE BREAKER (TRUCK MOUNTED); CONCRETE  
CONVEYOR; CONCRETE PAVER OVER 27E CU FT; CONCRETE  
PLACER; CONCRETE TUBE FLOAT; CRANES, ALL  
ATTACHMENTS; CRANES, HAMMERHEAD, LINDEN, PECO AND  
MACHINES OF A LIKE NATURE; CRETER CRANE; CRUSHER,  
STONE; DERRICKS; DERRICK BOATS; DERRICKS,  
TRAVELING; DREDGES; FIELD MECHANIC WELDER; FORMLESS  
CURB AND GUTTER MACHINE; GRADALL AND MACHINES OF A  
LIKE NATURE; GRADER, ELEVATING; GRADER, MOTOR  
GRADER, MOTOR PATROL, AUTO PATROL, FORM GRADER,  
PULL GRADER, SUBGRADER; GUARD RAIL POST DRIVER  
MOUNTED; HOISTS, ONE, TWO, AND THREE DRUM;  
HYDRAULIC BACKHOES; LOCOMOTIVE, ALL MUCKING  
MACHINE; PILE DRIVERS AND SKID RIG; PRE-STRESS  
MACHINE; PUMP CRETES DUAL RAM; ROCK DRILL-CRAWLER  
OR SKID RIG; ROCK DRILL TRUCK MOUNTED; ROTO MILL  
GRINDER, 36" AND OVER; ROTO MILL GRINDER, LESS THAN  
36"; SLIP- FORM PAVER; SOIL TEST DRILL RIG, TRUCK  
MOUNTED; STRADDLE BUGGIES; GCI CRANE AND SIMILAR;  
HYDRAULIC TELESCOPING FORM (TUNNEL); TIE BACK  
MACHINE; TRACTOR DRAWN BELT LOADER: TRACTOR DRAWN  
BELT LOADER WITH ATTACHED PUSHER; TRACTOR WITH

BOOM; TRACTAIRE WITH ATTACHMENT; TRAFFIC BARRIER  
CONVEYOR MACHINE; RAISED OR BLIND HOE DRILL (TUNNEL  
& SHAFT); TRENCHING MACHINE; TRUCK MOUNTED CONCRETE  
PUMP WITH BOOM; TRUCK MOUNTED CONCRETE CONVEYOR;  
UNDERGROUND BORING AND/OR MINING MACHINES UNDER 5  
FT; WHEEL EXCAVATOR & WIDENER (APSCO) (BOONE AND  
DE KALB COUNTIES) PREMIUM PAY: LONG BOOM :  
CRANES & DERRICKS 90' TO 150' INCLUDING JIB RECEIVE  
AN EXTRA \$.50 PER HOUR. CRANES & DERRICKS OVER  
150' INCLUDING JIB RECEIVE AN EXTRA \$.50 PER HOUR  
PLUS AN ADDITIONAL \$.10 FOR EACH ADDITIONAL 10' OF  
BOOM OR JIB. CAPACITY PAY: CRANES & DERRICKS  
WITH MAXIMUM CAPACITY EXCEEDING 50 TON WITH LESS  
THAN 90' OF BOOM OR JIB SHALL BE COMPENSATED \$.01  
PER HOUR FOR EACH TON OF THE RATED CAPACITY IN  
EXCESS OF 50 TON. LONG BOOM PAY AND CAPACITY PAY  
CANNOT BE COMBINED. CRANE MOUNTED EARTH AUGER,  
RAISED AND BLIND HOLE DRILLS, AND TRUCK MOUNTED  
DRILL RIGS RECEIVE AN EXTRA \$.50 PER HOUR.  
CRETER CRANES: WHEN THE CRETER CRANE IS EQUIPPED  
WITH A CONVEYOR SYSTEM CAPABLE OF EXTENDING 70' OR  
MORE, THE ENGINEER SHALL RECEIVE AN EXTRA \$.50 PER  
HOUR. TRUCK MOUNTED CONCRETE PUMPS: WHEN THE  
TRUCK MOUNTED CONCRETE PUMP IS EQUIPPED WITH A

BOOM, WHICH IS CAPABLE OF EXTENDING 90' OR MORE,  
THE ENGINEER SHALL RECEIVE \$.50 PER HOUR EXTRA.

TRUCK MOUNTED CONCRETE CONVEYOR: TRUCK MOUNTED  
CONCRETE CONVEYORS EQUIPPED WITH CONVEYORS THAT  
ARE CAPABLE OF EXTENDING 90' OR MORE, THE ENGINEER  
SHALL RECEIVE AN EXTRA \$.50 PER HOUR.

UNDERGROUND WORK: EMPLOYEES WORKING IN TUNNELS,  
SHAFTS, ETC. SHALL BE PAID AN ADDITIONAL \$.40 PER  
HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE 1/2  
POUND TO 7 POUNDS SHALL RECEIVE AN ADDITIONAL \$.50  
PER HOUR. EMPLOYEES WORKING UNDER AIR PRESSURE OF  
7 POUNDS OR OVER SHALL RECEIVE \$.65 PER HOUR MORE.

MINING MACHINES- BORING MACHINES: THE CREW  
OPERATING AND MAINTAINING THE MINING MACHINES SHALL  
BE COMPENSATED AN ADDITIONAL \$.50 PER HOUR.....\$ 56.60 51.05

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ENGI0150-024 06/01/2025

Rates Fringes

OPERATOR: POWER EQUIPMENT, GROUP 5 BOBCATS (ALL);  
BRICK FORKLIFTS; OILERS; DIRECTIONAL BORING  
(DUPAGE, KANE, KENDALL, LAKE, MCHENRY, AND WILL  
COUNTIES) .....\$ 57.80 51.00

OPERATOR: POWER EQUIPMENT, GROUP 4 AIR COMPRESSOR

- SMALL 250 AND UNDER (1 TO 5 NOT TO EXCEED A TOTAL OF 300 FT); AIR COMPRESSOR - LARGE OVER 250;  
COMBINATION - SMALL EQUIPMENT OPERATOR; DIRECTIONAL BORING MACHINE; GENERATORS - SMALL 50 KW AND UNDER; GENERATORS - LARGE , OVER 50 KW; HEATERS, MECHANICAL; HYDRAULIC POWER UNIT (PILE DRIVING, EXTRACTING OR DRILLING); LIGHT PLANTS (1 TO 5); PUMPS, OVER 3" (1 TO 3, NOT TO EXCEED A TOTAL OF 300 FT); PUMPS, WELL POINTS; TRACTAIRE; WELDING MACHINES (2 THROUGH 5); WINCHES, 4 SMALL ELECTRIC DRILL WINCHES; (DUPAGE, KANE, KENDALL, LAKE, MCHENRY, AND WILL COUNTIES).....\$ 59.00 51.00  
OPERATOR: POWER EQUIPMENT, GROUP 3 BOILERS;  
BROOMS, ALL POWER PROPELLED; CEMENT SUPPLY TENDER; COMPRESSOR, COMMON RECEIVER (2); CONCRETE MIXER, TWO BAG AND OVER; CONVEYOR, PORTABLE; FARM TYPE TRACTORS USED FOR MOWING, SEEDING, ETC; FIREMAN ON BOILERS; FORKLIFT TRUCKS; GROUTING MACHINES; HOISTS, AUTOMATIC; HOISTS, ALL ELEVATORS; HOISTS, TUGGER SINGLE DRUM; JEEP DIGGERS; LOW BOYS; PIPE JACKING MACHINES; POST-HOLE DIGGER; POWER SAW, CONCRETE, POWER DRIVEN; PUG MILLS; ROLLERS, OTHER THAN ASPHALT; SEED AND STRAW BLOWER; STEAM GENERATORS; STUMP MACHINE; WINCH TRUCKS WITH



A-FRAME; WORK BOATS; TAMPER-FORM MOTOR DRIVEN  
(DUPAGE, KANE, KENDALL, LAKE, MCHENRY, AND WILL  
COUNTIES).....\$ 60.40 51.00

OPERATOR: POWER EQUIPMENT, GROUP 2 BATCH PLANT\*;  
BITUMINOUS MIXER; BOILER AND THROTTLE VALVE;  
BULLDOZER; CAR LOADER TRAILING CONVEYORS;  
COMBINATION BACKHOE FRONT END LOADER MACHINE,  
(LESS THAN 1 CU YD BACKHOE BUCKET WITH  
ATTACHMENTS); COMPRESSOR AND THROTTLE VALVE;  
COMPRESSOR, COMMON RECEIVER (3); CONCRETE BREAKER  
OR HYDRO HAMMER; CONCRETE GRINDING MACHINE;  
CONCRETE MIXER OR PAVER 7S SERIES TO AND INCLUDING  
27 CU FT; CONCRETE SPREADER; CONCRETE CURING  
MACHINE; BURLAP MACHINE; BELTING MACHINE AND  
SEALING MACHINE; CONCRETE WHEEL SAW; CONVEYOR MUCK  
CARS (HAGLUND OR SIMILAR TYPE); DRILLS (ALL);  
FINISHING MACHINE-CONCRETE; GREASER ENGINEER;  
HIGHLIFT SHOVELS OR FRONT END LOADER; HOIST- SEWER  
DRAGGING MACHINE; HYDRAULIC BOOM TRUCKS, ALL  
ATTACHMENTS; HYDRO-BLASTER (REQUIRES TWO  
OPERATORS); LASER SCREED\*; LOCOMOTIVES, DINKY;  
OFF-ROAD HAULING UNITS (INCLUDING ARTICULATING);  
PUMP CRETES; SQUEEZE CRETES-SCREW TYPE PUMPS,

GYPSUM BULKER AND PUMP; ROLLER ASPHALT; ROTARY SNOW  
PLOWS; ROTOTILLER, SEAMAN, SELF-PROPELLED;  
SCOOPS-TRACTOR DRAWN; SELF- PROPELLED COMPACTOR;  
SPREADER-CHIP-STONE; SCRAPER; SCRAPER-PRIME MOVER  
IN TANDEM REGARDLESS OF SIZE (ADD \$1.00 TO GROUP 2  
HOURLY RATE FOR EACH HOUR AND FOR EACH MACHINE  
ATTACHED THERETO ADD \$1.00 TO GROUP 2 HOURLY RATE  
FOR EACH HOUR); TANK CAR HEATER; TRACTORS, PUSH,  
PULLING SHEEPS FOOT, DISC, OR COMPACTOR, ETC; TUG  
BOATS (DUPAGE, KANE, KENDALL, LAKE, MCHENRY, AND  
WILL COUNTIES) \*REQUIRES OILER.....\$ 62.45 51.00  
OPERATOR: POWER EQUIPMENT, GROUP 1 ASPHALT PLANT\*;  
ASPHALT HEATER AND PLANER COMBINATION; ASPHALT  
HEATER SCARFIRE\*, ASPHALT SPREADER; AUTOGRADER/  
GOMACO OR SIMILAR; ABG PAVER\*, BACKHOES WITH  
CAISSON ATTACHMENT\*, BALLAST REGULATOR, BELT  
LOADER\*; CAISSON RIGS\*CAR DUMPER, CENTRAL REDI-MIX  
PLANT\*, COMBINATION BACKHOE; FRONT END LOADER  
MACHINE (1 CU YD OR OVER BACKHOE BUCKET OR WITH  
ATTACHMENTS); CONCRETE BREAKER (TRUCK MOUNTED);  
CONCRETE CONVEYOR; CONCRETE PAVER OVER 27E CU FT\*;  
CONCRETE PLACER\*; CONCRETE TUBE FLOAT; CRANES, ALL  
ATTACHMENTS\*; CRANES, HAMMERHEAD, LINDEN, PECO AND  
MACHINES OF A LIKE NATURE\*; CRETER CRANE; CRUSHER,

STONE; ALL DERRICKS; DERRICK BOATS; DERRICKS,  
TRAVELING\*; DOWELL MACHINE WITH AIR COMPRESSOR  
(\$1.00 ABOVE CLASS 1); DREDGES\*; FIELD MECHANIC  
WELDER; FORMLESS CURB AND GUTTER MACHINE\*; GRADALL  
AND MACHINES OF A LIKE NATURE\*; GRADER, ELEVATING;  
GRADER, MOTOR GRADER, MOTOR PATROL, AUTO PATROL,  
FORM GRADER, PULL GRADER, SUBGRADER; GUARD RAIL  
POST DRIVER MOUNTED\*; HOISTS, ONE, TWO, AND THREE  
DRUM; HYDRAULIC BACKHOES\*; BACKHOES WITH SHEAR  
ATTACHMENTS\*; MUCKING MACHINE; PILE DRIVERS AND  
SKID RIG\*; PRE-STRESS MACHINE; PUMP CRETES DUAL RAM  
(REQUIRES FREQUENT LUBRICATION AND WATER)\*; ROCK  
DRILL- CRAWLER OR SKID RIG\*; ROCK DRILL TRUCK  
MOUNTED\*; ROCK/ TRACK TAMPER; ROTO MILL GRINDER,  
(36" AND OVER)\*; SLIP-FORM PAVER\*; SOIL TEST DRILL  
RIG, TRUCK MOUNTED\*; STRADDLE BUGGIES; HYDRAULIC  
TELESCOPING FORM (TUNNEL); TRACTOR DRAWN BELT  
LOADER\*; TRACTOR DRAWN BELT LOADER WITH ATTACHED  
PUSHER (TWO ENGINEERS); TRACTOR WITH BOOM;  
TRACTAIRE WITH ATTACHMENT; TRAFFIC BARRIER TRANSFER  
MACHINE\*; TRENCHING MACHINE; TRUCK MOUNTED CONCRETE  
PUMP WITH BOOM\*; UNDERGROUND BORING AND/OR MINING  
MACHINES 5 FT IN DIAMETER AND OVER TUNNEL, ETC.\*;

WHEEL EXCAVATOR\* & WIDENER (APSCO); RAISED OR BLIND  
HOE DRILL, TUNNEL & SHAFT\* (DUPAGE, KANE, KENDALL,  
LAKE, MCHENRY, AND WILL COUNTIES) .....\$ 63.00 51.00

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IRON0001-014 06/01/2025

Rates Fringes

IRONWORKER: STRUCTURAL AND REINFORCING (DU PAGE  
(EASTERN 1/4), LAKE, AND MCHENRY (HEBRON,  
WOODSTOCK, AND EAST THEREOF) COUNTIES).....\$ 62.46 46.58

IRONWORKER: SHEETER (DU PAGE (EASTERN 1/4), LAKE,  
AND MCHENRY (HEBRON, WOODSTOCK, AND EAST THEREOF)  
COUNTIES).....\$ 62.71 46.58

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IRON0063-003 06/01/2025

Rates Fringes

IRONWORKER, ORNAMENTAL (LAKE, DUPAGE (EASTERN 1/4)  
AND MCHENRY (HEBRON, WOODSTOCK & EAST THEREOF)  
COUNTIES).....\$ 59.26 44.81

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IRON0393-003 06/01/2021

Rates Fringes

IRONWORKER (DEKALB (SOUTHEASTERN 2/3 INCLUDING  
SYCAMORE AND DEKALB), DUPAGE (REMAINDER), KANE,  
KENDALL (NORTHERN PART), AND MCHENRY (SOUTHEAST

1/4) COUNTIES).....\$ 48.83 39.84

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IRON0444-006 06/01/2022

Rates Fringes

IRONWORKER (KENDALL (SOUTHERN PART) AND WILL

COUNTIES).....\$ 47.80 42.50

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IRON0498-003 06/01/2021

Rates Fringes

IRONWORKER (BOONE, DEKALB (EXCEPT SOUTHEAST), AND

MCHENRY (NORTHWEST) COUNTIES).....\$ 41.37 44.41

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LABO0002-004 06/01/2025

Rates Fringes

LABORER, SEWER CONSTRUCTION: GROUP 5 ASBESTOS

ABATEMENT LABORERS, TOXIC AND HAZARDOUS WASTE

REMOVAL LABORERS & DOSIMETER USE (ANY DEVICE)

MONITORING NUCLEAR EXPOSURE. (DUPAGE COUNTY).....\$ 51.40 36.94

LABORER, SEWER CONSTRUCTION: GROUP 4 BOTTOM MEN;

BRACERS-BRACING; BRICKLAYER'S TENDER; CATCH BASIN

DIGGER; DRAINLAYER; DYNAMITER; FORM MEN;

JACKHAMMERMEN; POWERPAC; PIPELAYERS; RODDERS;

WELDERS & BURNERS; WELL POINT SYSTEM MEN. (DUPAGE

COUNTY).....\$ 51.75 36.94

LABORER, SEWER CONSTRUCTION: GROUP 3 CEMENT

CARRIERS; CEMENT MIXERS; CONCRETE REPAIRMEN; MORTAR

MEN; SCAFFOLD MEN; AND SECOND BOTTOM MEN. (DUPAGE

COUNTY).....\$ 51.63 36.94

LABORER, SEWER CONSTRUCTION: GROUP 2 CONCRETE

LABORERS; STEEL SETTERS. (DUPAGE COUNTY).....\$ 51.53 36.94

LABORER, SEWER CONSTRUCTION: GROUP 1 SIGNALMEN TOP

LABORERS, AND ALL OTHER LABORERS NOT MENTIONED.

(DUPAGE COUNTY).....\$ 51.40 36.94

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LABO0002-009 06/01/2025

Rates Fringes

LABORER, TUNNEL: GROUP 5 ASBESTOS ABATEMENT

LABORER; TOXIC AND HAZARDOUS WASTE REMOVAL LABORER;

DOSIMETER (ANY DEVICE) MONITORING NUCLEAR EXPOSURE

(DUPAGE COUNTY) .....\$ 51.40 36.94

LABORER, TUNNEL: GROUP 4 AIR TRAC DRILL OPERATOR;

MINER; BRICKLAYER TENDERS; CONCRETE BLOWER

OPERATOR; DRILLERS; DYNAMITERS; ERECTOR OPERATOR;

FORM MEN; JACKHAMMERMEN; POWERPAC; MINING MACHINE

OPERATORS; MUCKING MACHINE OPERATOR; LASER BEAM

OPERATOR; LINER PLATE AND RING SETTERS; SHIELD

DRIVERS; POWER KNIFE OPERATOR; WELDER- BURNERS;

PIPE JACKING MACHINE OPERATOR; SKINNERS;  
MAINTENANCE TECHNICIAN (DUPAGE COUNTY).....\$ 51.75 36.94  
LABORER, TUNNEL: GROUP 3 CONCRETE REPAIRMEN; LOCK  
TENDERS (PRESSURE SIDE); MORTAR MEN; MUCKERS; GROUT  
MACHINE OPERATORS; TRACK LAYERS (DUPAGE COUNTY).....\$ 51.63 36.94  
LABORER, TUNNEL: GROUP 2 AIR HOIST OPERATOR; KEY  
BOARD OPERATOR; CONCRETE LABORER; GROUT; LOCK  
TENDERS (FREE AIR SIDE); STEEL SETTERS; TUGGERS;  
SWITCHMEN; CAR PUSHER (DUPAGE COUNTY).....\$ 51.53 36.94  
LABORER, TUNNEL: GROUP 1 CAGE TENDERS; DUMPMEN;  
FLAGMEN; SIGNALMEN; TOP LABORERS (DUPAGE COUNTY)....\$ 51.40 36.94  
LABORER, COMPRESSED AIR: 34 LBS AND OVER (DU PAGE  
COUNTY).....\$ 55.40 36.94  
LABORER, COMPRESSED AIR, 27-33 lbs (DU PAGE COUNTY).\$ 54.40 36.94  
LABORER, COMPRESSED AIR, 21-26 lbs (DU PAGE COUNTY).\$ 53.40 36.94  
LABORER, COMPRESSED AIR, 16-20 lbs (DU PAGE COUNTY).\$ 52.90 36.94  
LABORER, COMPRESSED AIR, 0-15 lbs (DU PAGE COUNTY)..\$ 52.40 36.94

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LABO0032-007 05/01/2025

Rates Fringes

LABORER: SKILLED LABORER SKILLED LABORER:  
ASBESTOS ABATEMENT WORKER; HAZARDOUS WASTE WORKER  
HANDLING ANY MATERIALS WITH ANY FOREIGN MATTER

HARMFUL TO SKIN OR CLOTHING, TRACK LABOR, CEMENT HANDLER, CHLORIDE HANDLER, UNLOADING & LABORERS WITH STEEL WORKERS & RE-BARS, WET CONCRETE WORKERS, TUNNEL TENDERS IN FREE AIR, BATCH DUMPER, MASON TENDER, KETTLE & TAR MAN, TANK CLEANER, PLASTIC INSTALLER, SCAFFOLD WORKER, MOTORIZED BUGGIES OR MOTORIZED UNIT USED FOR WET CONCRETE OR HANDLING OF BUILDING MATERIALS, LABORERS WITH DE-WATERING SYSTEMS, SEWER WORKERS PLUS DEPTH, VIBRATOR OPERATOR; CEMENT SILICA, CLAY, FLY ASH, LIME & PLASTERS HANDLERS (BULK OR BAG); COFFERDAM WORKER PLUS DEPTH, CONCRETE PAVING, PLACING, CUTTING & TYING OF REINFORCING, DECK HAND, DREDGE HAND AND SHORE LABORER, BANKMAN ON FLOATING PLANT, GRADE CHECKER, POWER TOOLS, FRONT END MAN ON CHIP SPREADER, CAISSON WORKER PLUS DEPTH, GUNNITE NOZZLEMAN, LEADMAN ON SEWER WORK, WELDER, CUTTER, BURNER & TORCHMAN, CHAIN SAW OPERATOR, JACKHAMMER & DRILL OPERATOR, LAYOUT MAN AND/OR TILE LAYER, STEEL FORM SETTER - STREET & HIGHWAY, AIR TAMPING HAMMERMAN, SIGNAL MAN ON CRANE, CONCRETE SAW OPERATOR, SCREENMAN ON ASPHALT PAVER, TENDING MASONS WITH HOT MATERIAL OR WHERE FOREIGN MATERIALS ARE USED, MORTAR MIXER OPERATOR, MULTIPLE CONCRETE



DUCT - LEADMAN, LUTEMAN, ASPHALT RAKER CURB ASPHALT  
MACHINE OPERATOR, READY MIX SCALEMAN PERMANENT  
PORTABLE OR TEMPORART PLANT, LABORER HANDLING  
MASTERPLATE OR SIMILAR MATERIALS, LASER BEAM  
OPERATOR, CONCRETE BURNING MACHINE OPERATOR, CORING  
MACHINE OPERATOR, PLASTER TENDER, UNDERPINNING &  
SHORING OF BUILDINGS, PUMP MAN, MANHOLE & CATCH  
BASIN, DIRT & STONE TAMPER, HOSEMAN ON CONCRETE  
PUMP. (DE KALB COUNTY).....\$ 50.39 36.31

LABORER: GENERAL LABORER GENERAL LABORER:  
CARPENTER TENDER, TOOL CRIBMAN, FIREMAN OR  
SALAMANDER TENDER, FLAGMAN, GRAVEL BOX MAN, BUMPMAN  
& SPOTTER, FORM HANDLER, MATERIAL HANDLER, FENCING  
LABORER, CLEANING LUMBER, PIT MAN, MATERIAL  
CHECKER, LANDSCAPER, UNLOADING EXPLOSIVES, LAYING  
OF SOD, PLANTING OF TREES, ASPHALT WORKERS WITH  
MACHINE & LAYERS, ASPHALT PLANT LABORER, WRECKING,  
FIRE-PROOFING, DRIVING STAKES, STRINGLINES FOR ALL  
MACHINERY, WINDOW CLEANING, DEMOLITION WORKER,  
EXPLOSIVE HANDLING, TRIMMING & REMOVAL OF TREES,  
MULTI-PLATE PIPE, PILOT CARS FOR TRAFFIC CONTROL,  
POWER RIGGING (DE KALB COUNTY).....\$ 47.04 36.31

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LABO0075-002 06/01/2025

Rates Fringes

LABORER GROUP 7 DOSIMETER (ANY DEVICE) USED FOR  
MONITORING NUCLEAR EXPOSURE; ASBESTOS ABATEMENT  
WORKER; TOXIC AND HAZARDOUS WASTE REMOVAL LABORER;  
AND CHIMNEY AND SILO LABORERS FOR EVERY ADDITIONAL  
50 FEET OR ANY PART THEREOF ABOVE 100 FEET HIGH  
(WILL COUNTY).....\$ 51.60 36.94

LABORER GROUP 6 ALL UNDERGROUND CAVERN LABORERS;  
CAISSON LABORERS 50 FEET OR MORE BELOW GROUND  
LEVEL; LABORERS WORKING UNDER RADIO ACTIVE  
CONDITIONS (SUITING UP); BLASTING MEN (POWDERMEN)  
(WILL COUNTY).....\$ 51.75 36.94

LABORER GROUP 5 GUNNITE NOZZLE MEN; CAISSON  
LABORERS AND ALL TAMPING HAMMERS FROM 150 LBS AND  
OVER; FROM 15 FEET BELOW GROUND LEVEL DOWN TO 50  
FEET; AND ALL LABORERS WORKING INSIDE OF A SPHERE  
OR ANY TYPE OF TANK FOR EVERY ADDITIONAL 50 FEET OR  
PART THEREOF ABOVE 100 FEET IN HEIGHT (WILL COUNTY).\$ 51.60 36.94

LABORER GROUP 4 TUNNEL MINERS, AND ALL LABORERS  
INSIDE TUNNEL; AIR BLOW PIPEMEN; TORCHMEN  
(BURNERS); MORTARING MEN ON SEWER AND DRAIN PIPE  
(THE APPLYING OF MORTAR AND COMPOSITION MIXES); ALL  
BOTTOM MEN ON SEWER WORK-ALL SEWER AND DRAIN

PIPELAYERS-MULTIPLE CONCRETE DUCT OR ANY OTHER TYPE  
OF PIPE USED ON PUBLIC UTILITY WORK-8 FEET OR MORE  
BELOW GROUND LEVEL, AND ALL OTHER SEWER AND TRENCH  
LABORERS 8 FEET OR MORE BELOW GROUND LEVEL  
REGARDLESS OF EXCAVATION AREA; ALL LABOR WORK  
INSIDE COFFERDAM; USE OF A 10 FOOT OR MORE DRILL  
STEEL FOR HAND HELD DRILLS; CAISSON LABORERS GROUND  
LEVEL DOWN 15 FEET; ALL AIR TOOLS 8 FEET OR MORE  
BELOW GROUND LEVEL; ALL LABORERS WORKING ON  
SWINGING-SUSPENDED OR ANY TYPE OR MAKE OF  
SCAFFOLDS, 48 FEET TO 100 FEET; ALL CHIMNEY AND  
SILO LABORERS WORKING AT A HEIGHT OF 48 TO 100  
FEET; ALL TAMPING HAMMERS OVER 150 LBS.; ALL  
LABORERS WORKING INSIDE OF A SPHERE OR ANY TYPE OR  
MAKE OF TANK AT A HEIGHT OF 48 FEET TO 100 FEET;  
ALL HYDRAULIC, ELECTRIC AND AIR TOOLS OR ANY OTHER  
TYPE 8 FEET OR MORE BELOW GROUND LEVEL;  
VIBRATORS-ANY TYPE-8 FEET OR MORE BELOW GROUND  
LEVEL (WILL COUNTY).....\$ 51.75 36.94  
LABORER GROUP 3 ASPHALT RAKERS; HOD CARRIERS;  
PLASTERER LABORERS; GUNNITE LABORERS, SLAB FOR  
SETTERS ON ROADS, HIGHWAYS, STREETS, AIRPORT  
RUNAWAYS, AND RADII (ANY TYPE OF FORM) STRINGLINE

MEN FOR ALL AFOREMENTIONED WORK; WAGON AND TOWER  
DRILLERS ON LAND AND FLOATING PLANT USED ON  
DREDGING; ASPHALT GUNNERS AND PLUG MEN  
(UNDERCOATING ON ROAD WORK); MORTAR PUMP LABORERS;  
PLASTER PUMP LABORERS (WILL COUNTY).....\$ 51.40 36.94  
LABORER GROUP 2 SEWER AND DRAIN PIPE LAYERS AND  
MULTIPLE CONCRETE DUCT OR ANY OTHER TYPE OF PIPE  
USED, ON PUBLIC UTILITY WORK (GROUND LEVEL TO 8  
FEET); PUMPCRETE PIPE HANDLERS (WILL COUNTY).....\$ 51.75 36.94  
LABORER GROUP 1 MORTAR MIXERS, HANDLING ASPHALT  
SHINGLES; SCAFFOLDS; SEWER AND TRENCH WORK (GROUND  
LEVEL DOWN TO 8 FEET); CATCH BASIN AND MANHOLE  
DIGGERS, MESH HANDLING ON ROAD WORK; CEMENT AND  
MINERAL FILLER HANDLER; CONCRETE PUDDLERS; BATCH  
DUMPERS (CEMENT & ASPHALT); VIBRATOR OPERATORS;  
SAND AND STONE WHEELERS TO MIXER HANDLERS);  
CONCRETE WHEELERS; AIRTAMPING HAMMERMEN; CONCRETE &  
PAVING BREAKERS; ROCK DRILLERS/JACKHAMMERMEN;  
CHIPPING HAMMERMEN 1-BAG MIXER; ASPHALT LABORER;  
CHAIN AND POWER SAWS; PIT MEN; FENCING LABORERS;  
MASON TENDERS (MORTAR AND BRICK WHEELER); KETTLEMEN  
& TARMEN, TANK CLEANERS; SCAFFOLD AND STAGING  
LABORERS; POT FIREMEN (TARMEN); HEATERS TENDER FOR  
ANY PURPOSE; WATER PUMPS (PORTABLE WATER PUMPS

SHALL BE TENDED BY LABORERS IF THE EMPLOYER DETERMINES TENDING IS REQUIRED); RIP RAP; HANDLING OF SLAB STEEL ROAD FORMS IN ANY MANNER, EXCEPT ROAD FORM SETTING, SETTING CENTER STRIPS, CONTRACTION AND EXPANSION JOINTS (ROAD WORK); UNLOADING AND HANDLING OF LUMBER, BRICK, TRANSITE MATERIALS, CAST IRON WATER PIPE, REINFORCED CONCRETE RODS, SEWER AND DRAIN TILE, RAILROAD TILES AND ALL OTHER CREOSOTED MATERIALS; PAVING BLOCKS AND CONCRETE FORMS; HANDLING OF INSULATION OF ANY TYPE; ALL WORK INVOLVING THE UNLOADING OF MATERIALS, FIXTURES, OR FURNISHING, WHETHER CRATED OR UNCRATED; ALL MORTAR AND COMPOSITION MIXERS OF SEWER WORK; TRACK LABORERS; CHIMNEY AND SILO LABORERS WORKING AT A HEIGHT OF 1 TO 48 FEET; ALL LABORERS WORKING ON SWINGING SUSPENDED, OR ANY TYPE OR MAKE OF SCAFFOLDING 1 TO 48 FEET; ALL LABORERS WORKING INSIDE A SPHERE OR ANY TYPE OR MAKE OF TANK; WORKING INSIDE A SPHERE OR ANY TYPE OR MAKE OF TANK FROM BOTTOM TO A HEIGHT OF 48 FEET; FORM STRIPPERS (ANY TYPE); MECHANICAL OR MOTORIZED BUGGIES, FOR CONCRETE OR MASONS EMPLOYERS; USE OF SKID STEER LOADS OR ANY OTHER MACHINERY WHICH REPLACES THE

WHEELBARROW OR BUGGY; HANDLING MULTIPLE CONCRETE  
DUCT OR ANY OTHER TYPE OF PIPE USED IN PUBLIC  
UTILITY WORK UNLESS OTHERWISE SPECIFIED HEREIN;  
SNAPPING OF WALL TIES AND REMOVAL OF RODS; DRILLING  
OF ANCHOR BOLT HOLES; CONCRETE OR ASPHALT CLIPPER  
TYPE SAWS AND SELF-PROPELLED SAWS; SHOULDER AND  
GRADE LABORERS; ALL HYDRAULIC ELECTRIC AND AIR OR  
ANY OTHER TYPE OF TOOLS; GROUTING AND CAULKING;  
CLEANING LUMBER, NAIL PULLING, DECK HAND;  
DREDGEHAND; SHORE LABORER; BANKMEN ON FLOATING  
PLANT; TOOL AND MATERIAL CHECKERS; SIGNALMEN AND  
FLAGMEN ON ALL CONSTRUCTION WORK; CLEANING OF  
DEBRIS; REMOVAL OF TREES; CONCRETE CURING,  
TEMPORARY CONCRETE PROTECTION REGARDLESS OF MANNER  
OR MATERIALS USED; LABORERS ON APSCO; JANITORIAL;  
WRECKING AND DEMOLITION LABORERS (WILL COUNTY).....\$ 51.40 36.94

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LABO0149-002 06/01/2025

Rates Fringes

LABORER GROUP 9 ASBESTOS APATEMENT LABORERS, TOXIC  
& HAZARDOUS WASTE REMOVAL LABORERS & DOSIMETER (ANY  
DEVICE) MONITORING NUCLEAR EXPOSURE (BOONE, KANE,  
KENDALL, AND MCHENRY COUNTIES).....\$ 52.40 36.94

LABORER GROUP 8 FLAGMAN (BOONE, KANE, KENDALL, AND

MCHENRY COUNTIES).....\$ 51.40 36.94

LABORER GROUP 7 CAISSON DIGGERS, DYNAMITERS (BOONE,  
KANE, KENDALL, AND MCHENRY COUNTIES).....\$ 51.75 36.94

LABORER GROUP 6 TUNNEL LABORERS, TILE LAYERS &  
BOTTOM MEN (BOONE, KANE, KENDALL, AND MCHENRY  
COUNTIES).....\$ 51.75 36.94

LABORER GROUP 5 CHAIN SAW MAN, JACKHAMMER MAN,  
DRILLMAN, CONCRETE BREADERS & AIR SPADE (BOONE,  
KANE, KENDALL, AND MCHENRY COUNTIES).....\$ 51.63 36.94

LABORER GROUP 4 STRINGLINE & FORM SETTER; TORCHMAN  
(DEMOLITION), SHEETING & CRIBBING, BLACK TOP RAKERS  
& LUTEMEN, MACHINE SCREWMEN (BOONE, KANE, KENDALL,  
AND MCHENRY COUNTIES).....\$ 51.68 36.94

LABORER GROUP 3 MORTAR & CONCRETE MIXERS (BOONE,  
KANE, KENDALL, AND MCHENRY COUNTIES).....\$ 51.68 36.94

LABORER GROUP 2 AIR TAMPERS & VIBRATORS (BOONE,  
KANE, KENDALL, AND MCHENRY COUNTIES).....\$ 51.68 36.94

LABORER GROUP 1 COMMON LABORER, ASPHALT LABORER,  
ASPHALT PLANT LABORER, STRIPING LABORER, CLIPPER  
TYPE CONCRETE SAW, SELF-PROPELLED SAWS (BOONE,  
KANE, KENDALL, AND MCHENRY COUNTIES).....\$ 51.40 36.94

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LABO0152-003 06/01/2025

Rates Fringes

LABORER GROUP 6 ASBESTOS ABATEMENT LABORERS; TOXIC

AND HAZARDOUS WASTE REMOVAL LABORERS; DOSIMETER

(ANY DEVICE MONITORING NUCLEAR EXPOSURE) (LAKE

COUNTY).....\$ 51.60 36.94

LABORER GROUP 5 CEMENT GUN NOZZLE (GUNITE) (LAKE

COUNTY).....\$ 51.60 36.94

LABORER GROUP 4 RAKERS AND LUTEMEN; MACHINE

SCREWMAN; KETTLEMEN; MIXERMEN, DRUM-MEN;

JACKHAMMERMEN (ASPHALT); MITE BOX SPREADERS;

LABORERS ON BIRCH OVERMAN AND SIMILAR SPREADER

EQUIPMENT; LABORERS ON APSCO; LABORERS ON AIR

COMPRESSORS; PAVING FORM SETTERS; JACKHAMMERMAN

(CONCRETE); POWER DRIVE CONCRETE SAWS (LAKE COUNTY).\$ 51.63 36.94

LABORER GROUP 3 ASPHALT TAMPERS AND SMOOTHERS (LAKE

COUNTY).....\$ 51.40 36.94

LABORER GROUP 2 CEMENT GUN LABORERS (LAKE COUNTY)...\$ 51.48 36.94

LABORER GROUP 1 GENERAL LABORERS; ASPHALT (LAKE

COUNTY).....\$ 51.40 36.94

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PAIN0014-003 06/01/2024

Rates Fringes

PAINTER: BRUSH ONLY (LAKE AND WILL COUNTIES).....\$ 53.05 33.91

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PAIN0030-001 06/01/2024

Rates Fringes

PAINTER: BRUSH, DRYWALL TAPER/FINISHER,  
SANDBLASTER, AND SPRAY (DE KALB, DU PAGE, KANE,  
KENDALL AND MCHENRY COUNTIES).....\$ 53.05 27.63

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PAIN0030-004 06/01/2024

Rates Fringes

PAINTER: BRUSH, ROLLER, SPRAY, SANDBLASTING,  
PAPERHANGER, DRYWALL FINISHING, TAPER, AND SPRAY  
STRUCTURAL STEEL (BOONE, JO DAVIESS, LEE, OGLE,  
STEPHENSON AND WINNEBAGO COUNTIES).....\$ 45.15 29.41

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PLAS0011-002 06/01/2023

Rates Fringes

CEMENT MASON/CONCRETE FINISHER (WILL COUNTY).....\$ 46.25 45.10

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PLAS0011-008 06/01/2023

Rates Fringes

CEMENT MASON/CONCRETE FINISHER (DE KALB, KANE,  
KENDALL, AND MCHENRY COUNTIES).....\$ 50.70 40.60

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PLAS0011-013 06/01/2023

Rates Fringes

CEMENT MASON/CONCRETE FINISHER (LAKE COUNTY).....\$ 48.50 42.82

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PLAS0011-015 06/01/2023

Rates Fringes

PLASTERER (BOONE COUNTY).....\$ 37.90 37.66

CEMENT MASON/CONCRETE FINISHER (BOONE COUNTY).....\$ 41.03 36.39

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PLAS0803-001 08/01/2010

Rates Fringes

CEMENT MASON/CONCRETE FINISHER (DUPAGE COUNTY).....\$ 38.00 24.03

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TEAM0179-002 06/01/2025

Rates Fringes

TRUCK DRIVER: 6 AXLE TRUCKS (KENDALL AND WILL

COUNTIES) FOOTNOTES: A.HEALTH AND WELFARE

\$448.80 PER WEEK; PENSION \$562.80 PER WEEK. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL

VEHICLES WITH MORE THAN SIX (6) AXLES.....\$ 46.67 0.30

TRUCK DRIVER: 5 AXLE TRUCKS (KENDALL AND WILL

COUNTIES) FOOTNOTES: A.HEALTH AND WELFARE

\$448.80 PER WEEK; PENSION \$562.80 PER WEEK. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES.....\$ 46.47 0.30

TRUCK DRIVER: 4 AXLE TRUCKS (KENDALL AND WILL  
COUNTIES) FOOTNOTES: A.HEALTH AND WELFARE  
\$448.80 PER WEEK; PENSION \$562.80 PER WEEK. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES.....\$ 46.27 0.30

TRUCK DRIVER: 2 OR 3 AXLE TRUCKS (KENDALL AND WILL  
COUNTIES) FOOTNOTES: A.HEALTH AND WELFARE  
\$448.80 PER WEEK; PENSION \$562.80 PER WEEK. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES.....\$ 46.12 0.30

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TEAM0301-001 06/01/2024

Rates Fringes

TRUCK DRIVER: 6 AXLES (LAKE AND MCHENRY COUNTIES)

FOOTNOTES: A.\$500.00 PER WEEK PENSION. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL

VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 45.09 13.40

TRUCK DRIVER: 5 AXLES (LAKE AND MCHENRY COUNTIES)

FOOTNOTES: A.\$500.00 PER WEEK PENSION. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN  
ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 44.89 13.40

TRUCK DRIVER: 4 AXLES (LAKE AND MCHENRY COUNTIES)

FOOTNOTES: A.\$500.00 PER WEEK PENSION. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN  
ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 44.69 13.40

TRUCK DRIVER: 2-3 AXLES (LAKE AND MCHENRY COUNTIES)

FOOTNOTES: A.\$500.00 PER WEEK PENSION. B.

LOWBOY IS AN ADDITIONAL \$1.50 PER HOUR AN  
ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 44.54 13.40

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TEAM0325-004 06/01/2025

Rates Fringes

TRUCK DRIVER: 6 AXLES (BOONE AND WINNEBAGO  
COUNTIES) FOOTNOTE: AN ADDITIONAL \$.20 PER AXLE

SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX

(6) AXLES.....\$ 48.93 26.70

TRUCK DRIVER: 5 AXLES (BOONE AND WINNEBAGO

COUNTIES) FOOTNOTE: AN ADDITIONAL \$.20 PER AXLE

SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX

(6) AXLES.....\$ 48.82 26.70

TRUCK DRIVER: 4 AXLES (BOONE AND WINNEBAGO

COUNTIES) FOOTNOTE: AN ADDITIONAL \$.20 PER AXLE

SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX

(6) AXLES.....\$ 48.62 26.70

TRUCK DRIVER: 2 - 3 AXLES (BOONE AND WINNEBAGO

COUNTIES) FOOTNOTE: AN ADDITIONAL \$.20 PER AXLE

SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX

(6) AXLES.....\$ 48.47 26.70

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TEAM0330-002 06/01/2025

Rates Fringes

TRUCK DRIVER: 6 AXLES (DEKALB COUNTY)

FOOTNOTE: A.HEALTH AND WELFARE \$468.00 PER

WEEK;PENSION \$644.34 PER WEEK LOW BOY

CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL

VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 45.38 0.30

TRUCK DRIVER: 5 AXLES (DEKALB COUNTY)

FOOTNOTE: A.HEALTH AND WELFARE \$468.00 PER  
WEEK;PENSION \$644.34 PER WEEK LOW BOY

CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR AN  
ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 45.18 0.30

TRUCK DRIVER: 4 AXLES (DEKALB COUNTY)

FOOTNOTE: A.HEALTH AND WELFARE \$468.00 PER  
WEEK;PENSION \$644.34 PER WEEK LOW BOY

CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL  
VEHICLES WITH MORE THAN SIX (6) AXLES. PAID  
HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,  
INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND  
CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE  
IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL  
RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS  
PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20  
YEARS - 4 WEEKS PAID VACATION.....\$ 44.98 0.30

TRUCK DRIVER: 2-3 AXLES (DEKALB COUNTY)

FOOTNOTE: A.HEALTH AND WELFARE \$468.00 PER

WEEK;PENSION \$644.34 PER WEEK LOW BOY

CLASSIFICATION IS AN ADDITIONAL \$1.50 PER HOUR AN

ADDITIONAL \$.20 PER AXLE SHALL BE PAID FOR ALL

VEHICLES WITH MORE THAN SIX (6) AXLES. PAID

HOLIDAYS: NEW YEAR'S DAY, MEMORIAL DAY,

INDEPENDENCE DAY, LABOR DAY, THANKSGIVING DAY, AND

CHRISTMAS DAY. 900 STRAIGHT TIME HOURS OR MORE

IN 1 CALENDAR YEAR FOR THE SAME EMPLOYER SHALL

RECEIVE 1 WEEK PAID VACATION; 3 YEARS - 2 WEEKS

PAID VACATION; 10 YEARS - 3 WEEKS PAID VACATION; 20

YEARS - 4 WEEKS PAID VACATION.....\$ 44.83 0.30

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TEAM0673-003 06/01/2025



## Rates Fringes

TRUCK DRIVER: 6 AXLES (DU PAGE AND KANE COUNTIES)

FOOTNOTE: A. AN ADDITIONAL \$.20 PER AXLE SHALL  
BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)  
AXLES. LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR

HEALTH AND WELFARE: \$453.20 PER WEEK PENSON:  
\$589.90 PER WEEK PAID HOLIDAYS: NEW YEAR'S DAY,  
MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,  
THANKSGIVING DAY, AND CHRISTMAS DAY. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR  
THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION.....\$ 45.86 0.30

TRUCK DRIVER: 5 AXLES (DU PAGE AND KANE COUNTIES)

FOOTNOTE: A. AN ADDITIONAL \$.20 PER AXLE SHALL  
BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)  
AXLES. LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR

HEALTH AND WELFARE: \$453.20 PER WEEK PENSON:  
\$589.90 PER WEEK PAID HOLIDAYS: NEW YEAR'S DAY,  
MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,  
THANKSGIVING DAY, AND CHRISTMAS DAY. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR

THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION.....\$ 45.66 0.30

TRUCK DRIVER: 4 AXLES (DU PAGE AND KANE COUNTIES)

FOOTNOTE: A. AN ADDITIONAL \$.20 PER AXLE SHALL  
BE PAID FOR ALL VEHICLES WITH MORE THAN SIX (6)

AXLES. LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR

HEALTH AND WELFARE: \$453.20 PER WEEK PENSION:

\$589.90 PER WEEK PAID HOLIDAYS: NEW YEAR'S DAY,

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,

THANKSGIVING DAY, AND CHRISTMAS DAY. 900

STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR

THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID

VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS

- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID

VACATION.....\$ 45.46 0.30

TRUCK DRIVER: 2-3 AXLES (DU PAGE AND KANE COUNTIES)

FOOTNOTE: A. AN ADDITIONAL \$.20 PER AXLE

SHALL BE PAID FOR ALL VEHICLES WITH MORE THAN SIX

(6) AXLES. LOW-BOY IS AN ADDITIONAL \$1.50 PER HOUR

HEALTH AND WELFARE: \$453.20 PER WEEK PENSION:

\$589.90 PER WEEK PAID HOLIDAYS: NEW YEAR'S DAY,

MEMORIAL DAY, INDEPENDENCE DAY, LABOR DAY,

THANKSGIVING DAY, AND CHRISTMAS DAY. 900  
STRAIGHT TIME HOURS OR MORE IN 1 CALENDAR YEAR FOR  
THE SAME EMPLOYER SHALL RECEIVE 1 WEEK PAID  
VACATION; 3 YEARS - 2 WEEKS PAID VACATION; 10 YEARS  
- 3 WEEKS PAID VACATION; 20 YEARS - 4 WEEKS PAID  
VACATION.....\$ 45.31 0.30

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TEAM0731-002 04/01/2025

Rates Fringes

TRAFFIC CONTROL DEVICE MONITOR (TRAFFIC SAFETY  
WORKER: PRIMARY DUTIES INCLUDE BUT ARE NOT LIMITED  
TO THE DELIVERY, MAINTENANCE AND PICK-UP OF TRAFFIC  
CONTROL DEVICES, THE SET-UP AND INSTALLATION OF  
TRAFFIC SIGNS, PAVEMENT MARKINGS, BARRICADES, CRASH  
BARRELS AND GLARE SCREENS, TRAFFIC CONTROL  
SURVEILLANCE, THE REPAIR AND MAINTENANCE TRUCKS,  
CARS, ARROW BOARDS, MESSAGE SIGNS, BARRICADE AND  
SIGN FABRICATION EQUIPMENT).....\$ 43.40 22.71

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WELDERS - Receive rate prescribed for craft performing  
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave

for Federal Contractors applies to all contracts subject to the

Davis-Bacon Act for which the contract is awarded (and any

solicitation was issued) on or after January 1, 2017. If this

contract is covered by the EO, the contractor must provide

employees with 1 hour of paid sick leave for every 30 hours

they work, up to 56 hours of paid sick leave each year.

Employees must be permitted to use paid sick leave for their

own illness, injury or other health-related needs, including

preventive care; to assist a family member (or person who is

like family to the employee) who is ill, injured, or has other

health-related needs, including preventive care; or for reasons

resulting from, or to assist a family member (or person who is

like family to the employee) who is a victim of, domestic

violence, sexual assault, or stalking. Additional information

on contractor requirements and worker protections under the EO

is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Note: Executive Order 13658 generally applies to contracts subject

to the Davis-Bacon Act that were awarded on or between January 1,

2015 and January 29, 2022, and that have not been renewed or

extended on or after January 30, 2022. Executive Order 13658 does

not apply to contracts subject only to the Davis-Bacon Related Acts

regardless of when they were awarded. If a contract is subject to

Executive Order 13658, the contractor must pay all covered workers

at least \$13.65 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract from May 11, 2026, through December 31, 2026. The applicable Executive Order minimum wage rate will be adjusted annually.

Additional information on contractor requirements and worker protections under Executive Order 13658 is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than SU, UAVG, SA, or SC denotes that a union rate was

prevailing for that classification in the survey. Example:

PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE:

UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio.

The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

#### Survey Rate Identifiers

The SU identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

SU wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The SA identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the SA identifier took effect under state law in the state from which the rates were adopted.

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#### WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can be:

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch



of Wage Surveys. Requests can be submitted via email to

davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

Regarding any other wage determination matter such as  
conformance decisions, requests for initial decisions should be  
directed to the WHD Branch of Construction Wage Determinations.

Requests can be submitted via email to BCWD-Office@dol.gov or  
by mail to:

Branch of Construction Wage Determinations

Wage and Hour Division

U.S. Department of Labor

200 Constitution Avenue, N.W.

Washington, DC 20210

2) If an initial decision has been issued, then any interested  
party (those affected by the action) that disagrees with the  
decision can request review and reconsideration from the Wage  
and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7).

Requests for review and reconsideration can be submitted via  
email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210.

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END OF GENERAL DECISION

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Project Name: Upper Des Plaines River Phase II Ecosystem Restoration - Raven Glen

Site: L-39 Pollack Lake & Hastings Creek Restoration

Date: 7/24/2026

Cost Estimator: J. Grgic

Project Lead: Ivan Navarro

REVISED PRICE BREAKOUT SCHEDULE - AMENDMENT 0005

| ITEM             |    |   |   | DESCRIPTION                                                                  | Quantity | U/M  | Unit Price | Amount |
|------------------|----|---|---|------------------------------------------------------------------------------|----------|------|------------|--------|
| <b>BID ITEMS</b> |    |   |   |                                                                              |          |      |            |        |
| 00               | 01 |   |   | <b>MOBILIZATION/DEMOBILIZATION</b>                                           | 1        | JOB  |            |        |
| 00               | 01 | A | A | MOBILIZATION/DEMOBILIZATION                                                  | 1        | JOB  |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 02 |   |   | <b>STREAM REMEANDERING</b>                                                   |          |      |            |        |
| 00               | 02 | A | A | CUT                                                                          | 27,000   | CY   |            |        |
| 00               | 02 | A | B | RIFFLES                                                                      | 4        | EA   |            |        |
| 00               | 02 | A | C | COBBLE BARS                                                                  | 3        | EA   |            |        |
| 00               | 02 | A | D | COBBLE BARS WITH BOULDER CLUSTER                                             | 3        | EA   |            |        |
| 00               | 02 | A | E | EXISTING CREEK FILL                                                          | 6,750    | CY   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 03 |   |   | <b>SPOIL PILE GRADING (5:1 GRADING)</b>                                      |          |      |            |        |
| 00               | 03 | A | A | FILL                                                                         | 20,475   | CY   |            |        |
| 00               | 03 | A | B | SEEDING                                                                      | 2        | ACRE |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 04 |   |   | <b>DRAIN TILE DISABLEMENT</b>                                                |          |      |            |        |
| 00               | 04 | A | A | DRAIN TILE DISABLEMENT                                                       | 10,511   | LF   |            |        |
| 00               | 04 | A | B | DISPOSAL OF POLY DRAIN TILE                                                  | 1        | JOB  |            |        |
| 00               | 04 | A | C | CLAY BREAKS WITH BENTONITE FILL                                              | 66       | EA   |            |        |
| 00               | 04 | A | E | OBSERVATION RISER STRUCTURE INSTALLATION                                     | 11       | EA   |            |        |
| 00               | 04 | A | F | STORM DRAIN PIPE INSTALLATION                                                | 1,704    | LF   |            |        |
| 00               | 04 | A | G | STORM INLET STRUCTURE                                                        | 2        | EA   |            |        |
| 00               | 04 | A | H | RIPRAP OUTLET PROTECTION                                                     | 1        | EA   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 05 |   |   | <b>RESERVED</b>                                                              |          |      |            |        |
| 00               | 05 | A | A | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | B | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | C | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | D | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | E | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | F | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | G | RESERVED                                                                     |          |      |            |        |
| 00               | 05 | A | H | RESERVED                                                                     |          |      |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 07 |   |   | <b>ECO REMOVAL</b>                                                           |          |      |            |        |
| 00               | 07 | A | A | TREE & SHRUB REMOVAL                                                         | 1        | JOB  |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 07 | A | B | INVASIVE SPECIES CONTROL, ESTABLISHMENT, MAINTENANCE & MONITORING ACTIVITIES | 1        | JOB  |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 08 |   |   | <b>NATIVE PLANTING</b>                                                       |          |      |            |        |
| 00               | 08 | A |   | <b>STREAM/EARTHWORK</b>                                                      |          |      |            |        |
| 00               | 08 | A | A | SEEDING                                                                      | 11       | AC   |            |        |
| 00               | 08 | A | B | PLUGS                                                                        | 73,000   | EA   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 08 | B |   | <b>WETLANDS</b>                                                              |          |      |            |        |
| 00               | 08 | B | A | SEEDING                                                                      | 76       | AC   |            |        |
| 00               | 08 | B | B | PLUGS                                                                        | 125,000  | EA   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 08 | C |   | <b>OLD FIELD/DEGRADED PRAIRIE</b>                                            |          |      |            |        |
| 00               | 08 | C | A | SEEDING                                                                      | 10       | AC   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 08 | D |   | <b>PRAIRIE CONVERSION</b>                                                    |          |      |            |        |
| 00               | 08 | D | A | SEEDING                                                                      | 50       | AC   |            |        |
| 00               | 08 | D | B | PLUGS                                                                        | 18,000   | EA   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 08 | E |   | <b>SAVANNA</b>                                                               |          |      |            |        |
| 00               | 08 | E | A | SEEDING                                                                      | 60       | AC   |            |        |
|                  |    |   |   |                                                                              |          |      |            |        |
| 00               | 09 |   |   | <b>ADAPTIVE MANAGEMENT</b>                                                   |          |      |            |        |
| 00               | 09 | A | A | RIFFLES                                                                      | 3        | EA   |            |        |
|                  |    |   |   | <b>TOTAL BASE</b>                                                            |          |      |            |        |

| ITEM |    |   |   | DESCRIPTION                                      | Quantity | U/M | Unit Price | Amount |
|------|----|---|---|--------------------------------------------------|----------|-----|------------|--------|
|      |    |   |   | <b>OPTIONS CLINS</b>                             |          |     |            |        |
| 00   | 04 | A | D | ROCK CHECK DAM INSTALLATION                      | 17       | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 06 |   |   | <b>WATER CONTROL STRUCTURE REMOVAL</b>           |          |     |            |        |
| 00   | 06 | A | A | DEMOLISH/REMOVE CONCRETE WATER CONTROL STRUCTURE | 1        | JOB |            |        |
| 00   | 06 | A | B | POST DEMOLITION GRADING                          | 0.5      | AC  |            |        |
| 00   | 06 | A | C | RIFFLES                                          | 2        | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
|      |    |   |   | <b>ADDITIONAL NATIVE PLANTING</b>                |          |     |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 08 | C |   | <b>OLD FIELD/DEGRADED PRAIRIE</b>                |          |     |            |        |
| 00   | 08 | C | B | PLUGS                                            | 10,000   | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 08 | E |   | <b>SAVANNA</b>                                   |          |     |            |        |
| 00   | 08 | E | B | PLUGS                                            | 28,000   | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 08 | F |   | <b>WOODLAND</b>                                  |          |     |            |        |
| 00   | 08 | F | A | SEEDING                                          | 25       | AC  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 10 |   |   | <b>WETLANDS</b>                                  |          |     |            |        |
| 00   | 10 | A | A | SEEDING (YEAR 3) OPTION                          | 3,550    | OZ  |            |        |
| 00   | 10 | A | B | PLUGS (YEAR 3) OPTION                            | 95,000   | EA  |            |        |
| 00   | 10 | A | C | TREES/SHRUBS (1 GALLON)                          | 700      | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 11 |   |   | <b>OLD FIELD/DEGRADED PRAIRIE</b>                |          |     |            |        |
| 00   | 11 | A | A | SEEDING (YEAR 2) OPTION                          | 85       | AC  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 12 |   |   | <b>PRAIRIE CONVERSION</b>                        |          |     |            |        |
| 00   | 12 | A | A | SEEDING (YEAR 3) OPTION                          | 4,050    | OZ  |            |        |
| 00   | 12 | A | B | PLUGS (YEAR 3) OPTION                            | 25,000   | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 13 |   |   | <b>SAVANNA</b>                                   |          |     |            |        |
| 00   | 13 | A | A | SEEDING (YEAR 3) OPTION                          | 4,860    | OZ  |            |        |
| 00   | 13 | A | B | PLUGS (YEAR 3) OPTION                            | 35,000   | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 14 |   |   | <b>OLD FIELD/DEGRADED PRAIRIE</b>                |          |     |            |        |
| 00   | 14 | A | A | SEEDING (YEAR 3)                                 | 3,458    | OZ  |            |        |
| 00   | 14 | A | B | PLUGS (YEAR 3)                                   | 23,000   | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 15 |   |   | <b>ADAPTIVE MANAGEMENT</b>                       |          |     |            |        |
| 00   | 15 | A | A | COBBLE BARS                                      | 3        | EA  |            |        |
|      |    |   |   |                                                  |          |     |            |        |
| 00   | 16 |   |   | <b>DISABLEMENT PLAN</b>                          |          |     |            |        |
| 00   | 16 | A | A | ROCK CHECK DAM                                   | 9        | EA  |            |        |
|      |    |   |   | <b>TOTAL OPTION</b>                              |          |     |            |        |

END OF REVISED PRICE BREAKOUT SCHEDULE - AMENDMENT 0005



UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK ) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS



SOLICITATION NO.: W912P62-6-R-A009  
CONTRACT NO.: TBD  
ISSUE DATE: JUNE 2026  
CERTIFIED FINAL DOCUMENTS - RTA

THIS PROJECT WAS DESIGNED BY THE CHICAGO DISTRICT CORPS OF ENGINEERS. THE INITIALS OR SIGNATURES AND REGISTRATION DESIGNATIONS OF INDIVIDUALS APPEAR ON THESE PROJECT DOCUMENTS WITHIN THE SCOPE OF THEIR EMPLOYMENT AS REQUIRED BY ER 1110-1-8152. SIGNATURES INDICATE OFFICIAL RECOMMENDATION OF ALL DRAWINGS IN THIS SET.

SIGNATURE AFFIXED BELOW INDICATE OFFICIAL  
RECOMMENDATION AND APPROVAL FOR ALL  
DRAWINGS CONTAINED IN THE SHEET INDEX.

APPROVAL RECOMMENDED BY:

/S/ PATRICK KENNEDY  
PATRICK KENNEDY  
PROJECT MANAGER

APPROVED BY:

REVIEWED BY:

/S/ LOUIS D. WISLOCKI, P.E.  
LOUIS D. WISLOCKI, P.E. DATE  
DQC TEAM LEADER

/S/ JOHN GROBOSKI, P.E.  
JOHN GROBOSKI, P.E. DATE  
CHIEF, DESIGN BRANCH

[illegible]

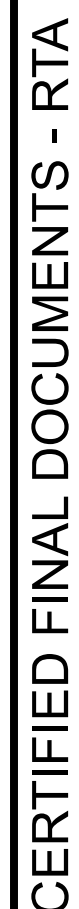
|                                                                                                         |                                                                                                                                                                                                                      |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LAKE STREET, 1500<br>CHICAGO, ILLINOIS 60604 | DRAWN BY: R. MUHAMMAD<br>SOLICITATION NO.: W912P2R2-R-A009<br>CHECKED BY: A. WILLIAMS<br>CONTRACT NO.:<br>TBD<br>SUBMITTED BY: R. MUHAMMAD<br>PROJECT ID: 44304-66C9B7<br>FILE NAME: 44304-66C9B7 G-001.dgn<br>SIZE: |
|---------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

AQUATIC ECOSYSTEM RESTORATION  
 RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
 ANTIOCH, LAKE COUNTY, ILLINOIS

SHEET ID  
G-001



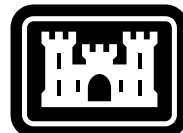
| SHEET NUMBER | TITLE | SHEET REFERENCE                                                   |
|--------------|-------|-------------------------------------------------------------------|
| 1            | G-001 | COVER SHEET                                                       |
| 2            | G-002 | INDEX OF SHEETS                                                   |
| 3            | G-003 | GENERAL NOTES, LEGEND AND SYMBOLS                                 |
| 4            | G-004 | GENERAL LIFESTYLES                                                |
| 5            | G-005 | ABBREVIATIONS                                                     |
| 6            | G-006 | GENERAL PROJECT KEYMAP                                            |
| 7            | G-007 | PROJECT STAGING AND STORAGE - PLAN 1                              |
| 8            | G-008 | PROJECT STAGING AND STORAGE - PLAN 2                              |
| 9            | G-009 | PROJECT STAGING AND STORAGE - PLAN 3                              |
| 10           | V-001 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 1            |
| 11           | V-002 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 2            |
| 12           | V-003 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 3            |
| 13           | V-004 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 4            |
| 14           | V-005 | EXISTING TREES TO BE PROTECTED COORDINATE TABLE PLAN 5            |
| 15           | V-101 | SURVEY CONTROL INFORMATION                                        |
| 16           | V-102 | EXISTING CONDITIONS PLAN 1                                        |
| 17           | V-103 | EXISTING CONDITIONS PLAN 2                                        |
| 18           | V-104 | EXISTING CONDITIONS PLAN 3                                        |
| 19           | VU101 | EXISTING COMBINED UTILITIES PLAN 1                                |
| 20           | VU102 | EXISTING COMBINED UTILITIES PLAN 2                                |
| 21           | VU103 | EXISTING COMBINED UTILITIES PLAN 3                                |
| 22           | B-001 | BORING LOCATION PLAN                                              |
| 23           | B-301 | SOIL BORING PROFILE SECTION 1                                     |
| 24           | B-302 | SOIL BORING PROFILE SECTION 2                                     |
| 25           | B-303 | SOIL BORING PROFILE SECTION - TRAIL ALIGNMENT                     |
| 26           | CD101 | CIVIL DISABLEMENT PLAN 1                                          |
| 27           | CD102 | CIVIL DISABLEMENT PLAN 2                                          |
| 28           | CD103 | CIVIL DISABLEMENT PLAN 3                                          |
| 29           | CD104 | CIVIL DEMOLITION PLAN 1                                           |
| 30           | CD105 | CIVIL DEMOLITION PLAN 2                                           |
| 31           | CD106 | CIVIL DEMOLITION PLAN 3                                           |
| 32           | CD401 | OPTION - PROJECT DEMOLITION PHOTOGRAPHS 1 --TITLE CHANGED         |
| 33           | CD402 | OPTION - PROJECT DEMOLITION PHOTOGRAPHS 2 --REMOVED               |
| 34           | CD500 | OPTION - WATER CONTROL STRUCTURE PLAN AND SECTION --TITLE CHANGED |
| 35           | CD501 | CIVIL DEMOLITION DETAILS 1                                        |
| 36           | CD502 | CIVIL DEMOLITION DETAILS 2                                        |
| 37           | C-001 | HASTINGS CREEK ALIGNMENT                                          |
| 38           | S-002 | TRAIL ALIGNMENTS --REMOVED                                        |
| 39           | CE101 | ECOSYSTEM RESTORATION PLAN 1                                      |
| 40           | CE102 | ECOSYSTEM RESTORATION PLAN 2                                      |
| 41           | CE103 | ECOSYSTEM RESTORATION PLAN 3                                      |
| 42           | CE501 | ECOSYSTEM RESTORATION DETAILS                                     |
| 43           | CG101 | CIVIL GRADING PLAN 1                                              |
| 44           | CG102 | CIVIL GRADING PLAN 2                                              |
| 45           | CG103 | CIVIL GRADING PLAN 3                                              |
| 46           | CG104 | CHANNEL GRADING PLAN 1                                            |
| 47           | CG105 | CHANNEL GRADING PLAN 2                                            |
| 48           | CG201 | CIVIL GRADING PROFILE 1                                           |
| 49           | CG202 | CIVIL GRADING PROFILE 2                                           |
| 50           | CG203 | CIVIL GRADING PROFILE 3                                           |
| 51           | CG301 | ECOSYSTEM RESTORATION SECTION PLAN 1                              |
| 52           | CG302 | ECOSYSTEM RESTORATION SECTION PLAN 2                              |
| 53           | CG303 | ECOSYSTEM RESTORATION SECTION PLAN 3                              |
| 54           | CG401 | ECOSYSTEM RESTORATION SECTION PLAN 4                              |
| 55           | CG401 | CIVIL ENLARGED GRADING PLAN 1                                     |
| 56           | CG402 | CIVIL ENLARGED GRADING PLAN 2                                     |
| 57           | CG403 | CIVIL ENLARGED GRADING PLAN 3 --REMOVED                           |
| 58           | CG501 | CIVIL PROPOSED ECOSYSTEM FEATURES DETAILS 1                       |
| 59           | CG502 | CIVIL PROPOSED ECOSYSTEM FEATURES DETAILS 2                       |
| 60           | S-101 | STRUCTURAL PLAN & ELEVATION 1 --REMOVED                           |
| 61           | S-601 | CECROD DETAILS --REMOVED                                          |
| 62           | S-602 | STRUCTURAL BOWEL DETAIL --REMOVED                                 |
| 63           | S-603 | STRUCTURAL GUARD RAIL DETAILS 1 --REMOVED                         |
| 64           | S-604 | STRUCTURAL GUARD RAIL DETAILS 2 --REMOVED                         |
| 65           | S-605 | STRUCTURAL GUARD RAIL DETAILS 3 --REMOVED                         |
| 66           | R-001 | REFERENCE DRAWING 1                                               |





|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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|                             | <div>PROJECT GENERAL NOTES:</div> <div>1. THE CONTRACTOR SHALL FOLLOW ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS. PERMITS SHALL BE OBTAINED AS REQUIRED PRIOR TO COMMENCING WITH CONSTRUCTION.</div> <div>2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRCTOR SHALL FIELD VERIFY ALL DIMENSIONS, LOCATIONS AND ELEVATIONS. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER'S AUTHORIZED REPRESENTATIVE OF ANY SIGNIFICANT DISCREPANCIES.</div> <div>3. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) USING CURRENT GEOID, U.S. SURVEY FEET.</div> <div>4. HORIZONTAL DATUM AND DISTANCES ARE REFERENCED TO ILLINOIS EAST STATE PLANE, U.S. SURVEY FEET.</div> <div>5. OBSTRUCTIONS VISIBLE IN THE IMAGES MAY NOT BE IN THAT LOCATION AT THE TIME OF WORK, AS OBSTRUCTIONS MAY HAVE BEEN MOVED. SITE VISITS SHOULD BE MADE TO VERIFY ANY CURRENT OBSTRUCTIONS IN THE WORK AREA, AS DESCRIBED IN THE SPECIFICATIONS.</div> <div>6. PLANIMETRICS, TOPOGRAPHICAL, BOUNDARY AND UTILITY SURVEYS WERE PERFORMED IN ACCORDANCE WITH UNITED STATES ARMY CORPS OF ENGINEERS ENGINEERING MANUALS, ASCE 38-02 STANDARD GUIDELINES.</div> <div>7. THE CONTRACTOR SHALL CONSULT WITH ALL UTILITY SYSTEM OWNERS ON SITE. CONTRACTOR SHALL VERIFY UTILITIES TO PROCEED VIA THE FOLLOWING INFORMATION:<br/><br/>JULIE: CALL 811 OR (800)892-0123<br/>SITE: <a href="https://www.illinois1call.com/">HTTPS://WWW.ILLINOIS1CALL.COM/</a></div> <div>8. THE LOCATION, SIZE, AND MATERIAL OF EXISTING PIPES, DUCTS, CONDUITS AND OTHER UNDERGROUND STRUCTURES AND THE LOCATION OF PROPERTY LINES SHOWN ON THESE PLANS ARE NOT WARRENTED TO BE EXACT, NOR IS IT WARRENTED THAT ALL ARE SHOWN. THE CONTRACTOR SHALL HAVE NO CLAIM ON THAT ACCOUNT SHOULD THERE BE OTHER THAN SHOWN.</div> <div>9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SUPPORT AND PROTECTION OF EXISTING UTILITIES AND STRUCTURES, AS WELL AS REPAIR AND/OR REPLACEMENT COSTS OF UTILITIES DAMAGED DURING CONSTRUCTION WHETHER ABOVE OR BELOW GRADE AT NO ADDITIONAL COST TO THE GOVERNMENT.</div> <div>10. THE CONTRACTOR SHALL NOTIFY THE GOVERNMENT OF ANY SUBSURFACE UTILITY OR OTHER PIPE NOT SHOWN ON THE DRAWINGS THAT IS ENCOUNTERED DURING CONSTRUCTION, ALSO ADD TO AS-BUILTS.</div> <div>11. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF EXCAVATED MATERIALS ONTO DESIGNATED AREAS IN THE PROJECT AREA.</div> <div>12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSING OF ALL CONSTRUCTION DEBRIS OFF-SITE IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE AND FEDERAL LAWS AT NO ADDITIONAL COST TO THE GOVERNMENT.</div> <div>13. EXISTING STRUCTURES, SIGNAGE, AND OTHER FACILITIES TO REMAIN SHALL BE PROTECTED FROM DAMAGE AND IF DAMAGED, SHALL BE REPLACED TO THE SATISFACTION OF THE OWNER AND AT NO COST TO THE GOVERNMENT, ANY PAVEMENT, UTILITY, OR OTHER FACILITY WHICH IS REMOVED TO ACCOMMODATE CONSTRUCTION ACTIVITIY OR DAMAGED DURING CONSTRUCTION ACTIVITIY SHALL BE REPLACED IN KIND AT NO COST TO THE GOVERNMENT.</div> <div>14. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH EM 385-1-1, DATED 15 MARCH 2024.</div> <div>15. ALL STAGING, STORAGE AND TEMPORARY EASEMENT AREAS SHALL BE RESTORED TO PRE-CONSTRUCTION GRADE AND CONDITIONS AT THE COMPLETION OF WORK.</div> <div>16. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE PATHS AND CULVERTS TO PREVENT FLOODING DUE TO CONSTRUCTION ACTIVITIES.</div> <div>17. THROUGHOUT CONSTRUCTION. CONTRACTOR SHALL COORDINATE WITH FACILITIES OWNERS AS NEEDED.</div> <div>18. CONTRACTOR SHALL PROVIDE ACCESS FOR EMERGENCY VEHICLES AT ALL TIMES.</div> <div>19. TRAFFIC INGRESS AND EGRESS FOR THE FACILITY SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.</div> |   |   |   |   |   |   |   |   |    |    |    |    |    |    | <div><div>GRID LETTER/NUMBER</div><div><div>A1</div><div>TITLE / DETAIL / SECTION / ELEVATION</div><div>SCALE: 1"=1" FULL SIZE</div></div></div> <div><div>A1</div><div>TITLE / DETAIL / SECTION / ELEVATION</div><div>SCALE: 1"=1" FULL SIZE</div><div><div>0</div><div>1ft</div><div>2ft</div></div></div> <div><div>A1</div><div>TITLE / DETAIL / SECTION / ELEVATION</div><div>SCALE: 1"=1" FULL SIZE</div><div><div>0</div><div>1ft</div><div>2ft</div></div></div> <div><div><div>X#</div><div>X-###</div></div><div><div>A1</div><div>TITLE / DETAIL / SECTION / ELEVATION</div><div>SCALE: 1"=1" FULL SIZE</div><div><div>0</div><div>1ft</div><div>2ft</div></div></div><div><div>THIS IS BACK-REFERENCE GRID LOCATION WHERE THE DETAIL / SECTION / ELEVATION INDICATOR IS FOUND ON A SHEET.</div><div>THIS BACK-REFERENCE LOCATION OF THE FIRST SHEET WHERE THE INDICATOR CAN BE FOUND.</div></div><div>DRAWING AREA TITLE / DETAIL / SECTION / ELEVATION INDICATOR</div></div> |    |    |    |    | <table><tr><td>ISSUE DATE:<br/>JUNE 2026</td><td>SOLICITATION NO.:<br/>444304-66C9B7</td></tr><tr><td>DRAWN BY:<br/>R. MUHAMMAD</td><td>CHECKED BY:<br/>R. MUHAMMAD</td></tr><tr><td>DESIGNED BY:<br/>R. MUHAMMAD</td><td>PROJECT ID:<br/>444304-66C9B7</td></tr><tr><td>FILE NAME:<br/>444304-66C9B7</td><td>ANSID:<br/>G-003.dgn</td></tr></table> <div>CHICAGO DISTRICT<br/>231 S. LASALLE ST. SUITE 1500<br/>CHICAGO, ILLINOIS 60604</div> |  |  |  |  | ISSUE DATE:<br>JUNE 2026 | SOLICITATION NO.:<br>444304-66C9B7 | DRAWN BY:<br>R. MUHAMMAD | CHECKED BY:<br>R. MUHAMMAD | DESIGNED BY:<br>R. MUHAMMAD | PROJECT ID:<br>444304-66C9B7 | FILE NAME:<br>444304-66C9B7 | ANSID:<br>G-003.dgn | <div>UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II<br/>AQUATIC ECOSYSTEM RESTORATION<br/>RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE<br/>ANTIOCH, LAKE COUNTY, ILLINOIS</div> <div>GENERAL NOTES, LEGEND AND SYMBOLS</div> |  |  |  |  | <div>SHEET ID</div> <div>G-003</div> |  |  |  |  |
| ISSUE DATE:<br>JUNE 2026    | SOLICITATION NO.:<br>444304-66C9B7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       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| DRAWN BY:<br>R. MUHAMMAD    | CHECKED BY:<br>R. MUHAMMAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 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| DESIGNED BY:<br>R. MUHAMMAD | PROJECT ID:<br>444304-66C9B7                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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**US Army Corps  
of Engineers®**

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|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>D. MUHAMMAD<br>DRAWN BY:<br>R. MUHAMMAD<br>CHECKED BY:<br>R. MUHAMMAD<br>SUBMITTED BY:<br>A. KARR<br>SIZE:<br>ANSI D | ISSUE DATE:<br>JUNE 1970<br>REVISION NO.:<br>W01 PR2 SR-A009<br>CONTRACT NO.:<br>TBD<br>PROJECT ID:<br>4443304-66C9B7<br>FILE NAME:<br>4443304-66C9B7 G-004.dgn |
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UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

GENERAL LIFESTYLES

SHEET ID

G-004

|                               |       |     |
|-------------------------------|-------|-----|
| INDUSTRIAL HOT WATER - RETURN | _____ | IHR |
| INDUSTRIAL HOT WATER - SUPPLY | _____ | IWS |
| INDUSTRIAL WASTE              | _____ | INW |
| NON-POTABLE WATER             | _____ | NPW |
| WASTE - ACID                  | _____ | AW  |
| VENT - ACID                   | _____ | AV  |
| LIQUID OXYGEN                 | _____ | LOX |

|                              |  |
|------------------------------|--|
| GEOTEXTILE                   |  |
| DITCH BARRIER                |  |
| DITCH AND BERM BARRIER       |  |
| RIPRAP - PLAN VIEW           |  |
| SHEET PILE                   |  |
| SHEET PILE - HIDDEN          |  |
| FENCE                        |  |
| FENCE - SECURITY - GENERIC   |  |
| BARRIER - SECURITY - MASONRY |  |
| FENCE 2                      |  |
| LAWN SPRINKLER               |  |
| TREE LINE                    |  |
| UTILITY CONDUIT              |  |
| UTILITY LINE                 |  |
| UG UTILITY LINE              |  |
| CHILLED WATER - RETURN       |  |
| CHILLED WATER - SUPPLY       |  |
| WATER LINE                   |  |
| WATER - COLD                 |  |
| WATER - HOT                  |  |
| WATER - PUBLIC MAIN          |  |
| FIRE PROTECTION WATER SUPPLY |  |
| SANITARY SEWER - FORCE       |  |
| DITCH                        |  |
| CULVERT                      |  |
| CULVERT PROFILE              |  |
| JET FUEL                     |  |
| ELECTRICAL PRIMARY           |  |
| UG ELECTRICAL PRIMARY        |  |
| ELECTRICAL SECONDARY         |  |
| UG ELECTRICAL SECONDARY      |  |
| SGL PHASE PRIMARY            |  |
| 2-PHASE PRIMARY              |  |
| 3-PHASE PRIMARY              |  |
| SGL PHASE SECONDARY          |  |
| 2-PHASE SECONDARY            |  |
| 3-PHASE SECONDARY            |  |
| DUCT BANK                    |  |
| SUB DRAIN                    |  |
| ELEC PRIM AND COMM           |  |
| UG ELEC PRIM AND COMM        |  |
| ELEC PRIM AND FIBER          |  |
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| COMM AND FIBER               |  |
| UG COMM AND FIBER            |  |
| GROUND SYSTEM CIRCUITS       |  |
| UG GROUND SYSTEM CIRCUITS    |  |
| APPROACH LIGHT SEMIFLUSH     |  |
| GUARDRAIL                    |  |
| RAILROAD                     |  |
| SHORE LINE                   |  |
| NEW LEVEE                    |  |
| FEDERAL LEVEE                |  |
| NON-FEDERAL LEVEE            |  |
| BERM                         |  |
| ARGON                        |  |
| HELIUM                       |  |
| LIQUID NITROGEN              |  |
| NITROUS OXIDE                |  |
| HYDROGEN                     |  |
| OXYGEN                       |  |
| NITROGEN                     |  |
| CHEMICAL - SUPPLY            |  |
| FILL                         |  |
| INDUSTRIAL COLD WATER        |  |

GAS - LOW PRESSURE  
 BRINE - RETURN  
 BRINE - SUPPLY  
 DUAL TEMPERATURE - RETURN  
 DUAL TEMPERATURE - SUPPLY  
 GLYCOL - RETURN  
 GLYCOL - SUPPLY  
 HOT WATER - HIGH TEMPERATURE - RETURN  
 HOT WATER - HIGH TEMPERATURE - SUPPLY  
 HOT WATER - LOW TEMPERATURE - RETURN  
 HOT WATER - LOW TEMPERATURE - SUPPLY  
 HOT WATER - MEDIUM TEMPERATURE - RETURN  
 HOT WATER - MEDIUM TEMPERATURE - SUPPLY  
 CONDENSER WATER - RETURN  
 CONDENSER WATER - SUPPLY  
 CONDENSATE FLOW  
 CONDENSATE - DRAIN  
 STEAM CONDENSATE - HIGH PRESSURE  
 STEAM CONDENSATE - LOW PRESSURE  
 STEAM CONDENSATE - MEDIUM PRESSURE  
 PUMPED CONDENSATE  
 STEAM - HIGH PRESSURE  
 STEAM - LOW PRESSURE  
 STEAM - MEDIUM PRESSURE  
 WATER - MAKE UP  
 AIR RELIEF  
 REFRIGERANT - DISCHARGE  
 REFRIGERANT LIQUID OVERFEED - RETURN  
 REFRIGERANT - LIQUID  
 REFRIGERANT - SUCTION  
 VACUUM PUMP DISCHARGE  
 BOILER BLOW DOWN  
 BOILER FEED WATER  
 COOLING TOWER WATER - RETURN  
 COOLING TOWER WATER - SUPPLY  
 HUMIDIFICATION  
 BUSWAY  
 CABLE LADDER  
 CONDUIT - FLEXIBLE  
 CONDUIT - RIGID  
 DIRECT CURRENT  
 TROLLEY DUCT  
 WIREWAY  
 AUDIO - AES DIGITAL  
 AUDIO - ANALOG  
 AUDIO - DIGITAL  
 AUDIO - MICROPHONE  
 COMMUNICATION  
 UG COMMUNICATION  
 DATA IP  
 FIBEROPTICS  
 HDMI  
 INTERCOM  
 NURSE CALL  
 RADIO FREQUENCY  
 SPEAKER  
 TELEPHONE  
 VIDEO - ASI DIGITAL  
 VIDEO - COMPONENT - RGBHV  
 VIDEO - SYNCHRONIZED  
 VIDEO - COMPOSITE - ANALOG  
 VIDEO - SDI DIGITAL  
 CABLE TV  
 CLOSED CIRCUIT TV  
 FIRE ALARM  
 BANK - LEFT  
 BANK - RIGHT  
 GEOBAR  
 GEOBLANKET  
 GEOCELL  
 GEOGRID  
 GEOMAT  
 GEONET  
 GEOSPACER  
 GEOSTRIP  
 GEOSYNTHETIC ELECTROKINETIC  
 GEOSYNTHETIC SURFICIAL EROSION CONTROL

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RIGHT OF WAY  
CONSTRUCTION CONTRACT LIMIT  
CONSTRUCTION EASEMENT  
GOVERNMENT TAKING LINE  
PROPERTY LINE  
MS1 DOT  
MEDIUM DASH  
MS3 LONG DASH  
MS4 DOT DASH  
MS5 SHORT DASH  
MS6 DASH DOT DOT  
FIRE-RATED SMOKE BARRIER - 4 HOUR  
HIDDEN LINE  
CENTER LINE  
PHANTOM LINE  
BREAK LINE  
MASK  
SILT FENCE  
SUPER SILT FENCE  
MER MULTIELECTRODE RESISTIVITY  
DEMOLITION LINE  
SLASH DEMOLITION LINE  
HAZARDOUS MATERIALS  
CONSTRUCTION JOINT  
LONGITUDINAL CONTRACTION JOINT  
TRANSVERSE CONTRACTION JOINT  
EXPANSION JOINT/THICKENED EDGE  
EXPANSION JOINT  
WELDED WIRE FABRIC  
FIRE-RATED - .5 HOUR  
FIRE-RATED - .75 HOUR  
FIRE-RATED - 1 HOUR  
070500-904 FIRE-RATED - 2 HOUR  
070500-905 FIRE-RATED - 3 HOUR  
070500-906 FIRE-RATED - 4 HOUR  
FIRE-RATED SMOKE BARRIER - .5 HOUR  
FIRE-RATED SMOKE BARRIER - .75 HOUR  
FIRE-RATED SMOKE BARRIER - 1 HOUR  
FIRE-RATED SMOKE BARRIER - 2 HOUR  
FIRE-RATED SMOKE BARRIER - 3 HOUR  
FIRE-RATED SMOKE BARRIER - 4 HOUR  
RESIST PASSAGE OF SMOKE  
SMOKE BARRIER  
VACUUM - CLEANING  
PNEUMATIC TUBE RUN  
FIRE PROTECTION - SUPPLY  
STANDPIPE - DRY  
STANDPIPE - WET  
STANDPIPE - COMBINATION  
DOMESTIC WATER - COLD  
WATER - DRINKING RETURN  
WATER - DRINKING SUPPLY  
DOMESTIC WATER - HOT - RETURN  
DOMESTIC WATER - HOT - SUPPLY  
WATER - SOFT COLD  
DRAIN  
DRAIN - INDIRECT  
GRAY WATER  
VENT  
SANITARY WASTE  
WASTE & VENT COMBINATION  
DRAIN - STORM  
AIR - COMPRESSED  
WATER - TEMPERED RETURN  
WATER - TEMPERED SUPPLY  
VACUUM - AIR  
WATER - DEIONIZED  
WATER - DISTILLED  
FUEL OIL DISCHARGE  
FUEL OIL FILL  
FUEL OIL GAUGE  
FUEL OIL RETURN  
FUEL OIL SUPPLY  
FUEL OIL TANK VENT  
GAS - HIGH PRESSURE  
GAS - LIQUEFIED PETROLEUM  
GAS - LOW PRESSURE

## NON-STANDARD (DISCIPLINE) SYMBOLS LEGEND

1. CUSTOM LINSTYLES NOT FOUND ON THIS SHEET REFER TO EACH ENGINEERING INDIVIDUAL DISCIPLINES LEGEND.



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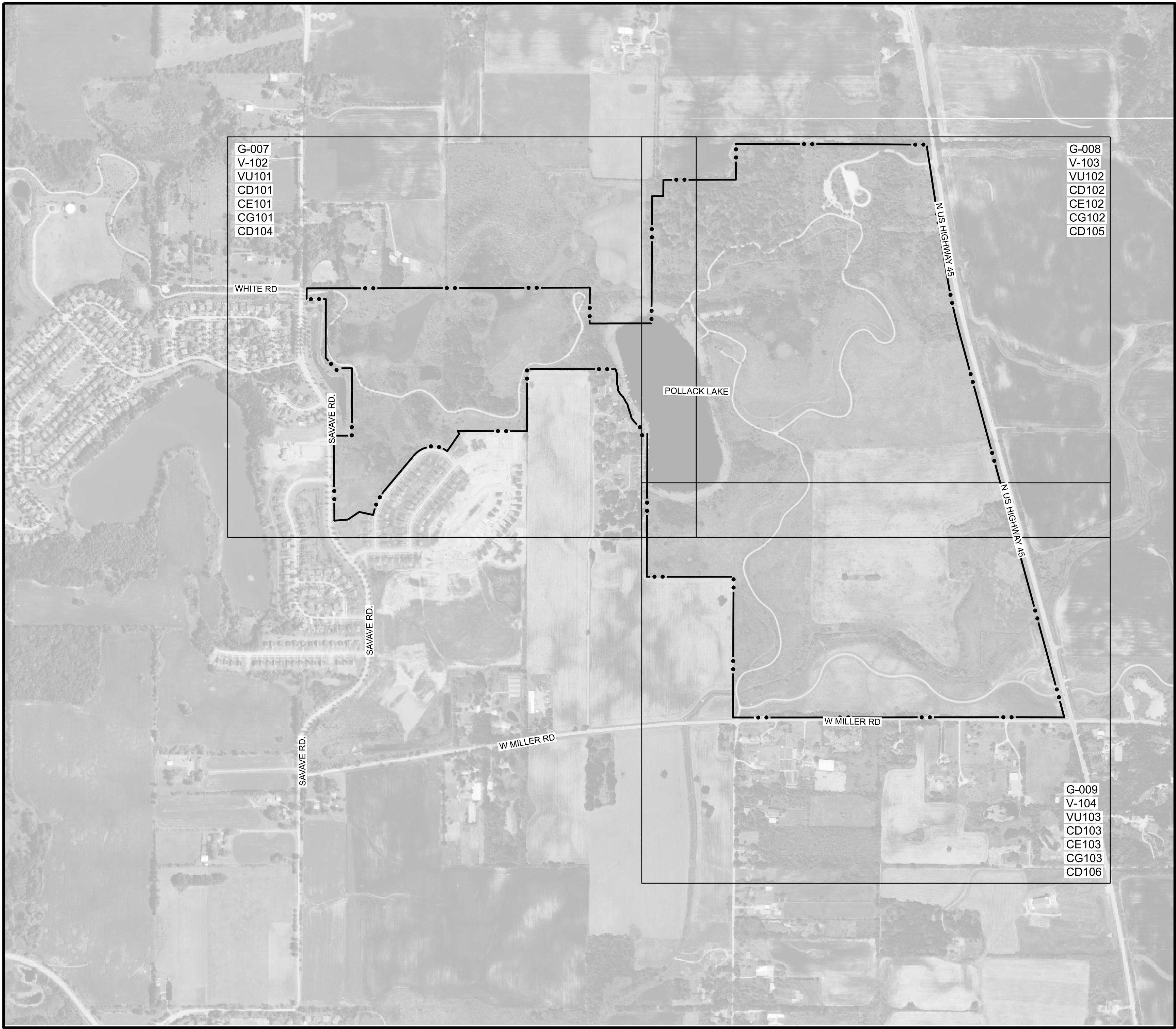
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|---------------------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST, SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>R. MUHAMMAD  | ISSUE DATE:<br>JUNE 2020              |
|                                                                                                               | CHECKED BY:<br>A. WILLIAMS   | PROJECT NO.:<br>W012P02-AR-RA009      |
|                                                                                                               | SUBMITTED BY:<br>R. MUHAMMAD | CONTRACT NO.:<br>TBD                  |
|                                                                                                               | DRAWN BY:<br>R. MUHAMMAD     | PROJECT ID:<br>444304-46C9B7          |
|                                                                                                               | SCALE:<br>AS SHOWN           | FILE NAME:<br>444304-46C9B7 G-006.dgn |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLOCK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

GENERAL PROJECT KEYMAP

SHEET ID  
G-006



A1

## GENERAL PROJECT KEYMAP

SCALE: 1"=600'







G-007

CERTIFIED FINAL DOCUMENTS - RTA











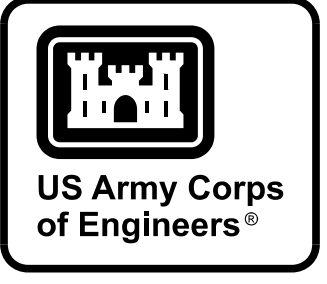
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
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|   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| P |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| N |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| M |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| L |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| K |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| J |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| H |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| G |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
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| F |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
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| E |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| D |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| C |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| B |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|   |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| A |   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

| COORDINATE TABLE FOR EXISTING TREES TO BE PROTECTED |                                        |             |               |                            |
|-----------------------------------------------------|----------------------------------------|-------------|---------------|----------------------------|
| POINT                                               | IL EAST NAD 83 STATE PLANE COORDINATES |             | DIAMETER (IN) | SPECIES                    |
|                                                     | NORTHING (Y)                           | EASTING (X) |               |                            |
| 1                                                   | 2110534.741                            | 1069222.607 | 8             | Quercus macrocarpa         |
| 2                                                   | 2110550.833                            | 1069246.254 | 5             | Quercus macrocarpa         |
| 3                                                   | 2110532.886                            | 1069271.336 | 10            | Quercus bicolor            |
| 4                                                   | 2110496.18                             | 1069288.735 | 9             | Quercus macrocarpa         |
| 5                                                   | 2110423.025                            | 1069288.831 | 30            | Gletri                     |
| 6                                                   | 2110411.609                            | 1069313.013 | 4             | Quercus macrocarpa         |
| 7                                                   | 2110294.542                            | 1069310.167 | 23            | Gletri                     |
| 8                                                   | 2110224.742                            | 1069303.436 | 31            | Gletri                     |
| 9                                                   | 2110189.614                            | 1069281.08  | 18            | Quercus rubra              |
| 10                                                  | 2110179.63                             | 1069270.332 | 30            | Gletri                     |
| 11                                                  | 2110167.911                            | 1069260.707 | 27            | Gletri                     |
| 12                                                  | 2110124.53                             | 1069002.944 | 5             | Quercus bicolor            |
| 13                                                  | 2110270                                | 1069040.651 | 10            | Quercus rubra              |
| 14                                                  | 2110039.767                            | 1069045.294 | 5             | Quercus bicolor            |
| 15                                                  | 2110054.064                            | 1069043.446 | 5             | Quercus bicolor            |
| 16                                                  | 2110043.599                            | 1069066.921 | 5             | Quercus bicolor            |
| 17                                                  | 2110085.862                            | 1069074.58  | 23            | Gletri                     |
| 18                                                  | 2110075.368                            | 1069085.36  | 24            | Gletri                     |
| 19                                                  | 2110001.749                            | 1069130.004 | 6             | Quercus rubra              |
| 20                                                  | 2109990.723                            | 1069130.558 | 7             | Quercus rubra              |
| 21                                                  | 2109995.01                             | 1069144.379 | 5             | Quercus rubra              |
| 22                                                  | 2109977.659                            | 1069163.506 | 5             | Quercus macrocarpa         |
| 23                                                  | 2109951.988                            | 1069158.333 | 5             | Quercus macrocarpa         |
| 24                                                  | 2109949.538                            | 1069129.771 | 6             | Quercus macrocarpa         |
| 25                                                  | 2110108.066                            | 1069308.345 | 4             | Crataegus crus-galli stand |
| 26                                                  | 2109626.538                            | 1069713.605 | 38            | Popdel                     |
| 27                                                  | 2109598.048                            | 1069776.821 | 27            | Ulmus spp                  |
| 28                                                  | 2109622.802                            | 1069888.223 | 31            | Ulmus spp                  |
| 29                                                  | 2109639.082                            | 1069846.293 | 38            | Quercus macrocarpa         |
| 30                                                  | 2109980.819                            | 1069848.049 | 2             | Carova                     |
| 31                                                  | 2110010.105                            | 1069860.692 | 38            | Quercus macrocarpa         |
| 32                                                  | 2110090.765                            | 1069884.251 | 4             | Quercus macrocarpa         |
| 33                                                  | 2110050.277                            | 1069898.935 | 5             | Quercus macrocarpa         |
| 34                                                  | 2110050.277                            | 1069898.935 | 5             | Quercus macrocarpa         |
| 35                                                  | 2110104.587                            | 1069899.863 | 4             | Quercus macrocarpa         |
| 36                                                  | 2110102.769                            | 1069893.419 | 3             | Quercus macrocarpa         |
| 37                                                  | 2110128.589                            | 1069897.543 | 2             | Quercus macrocarpa         |
| 38                                                  | 2110128.788                            | 1069895.853 | 2             | Quercus macrocarpa         |
| 39                                                  | 2110141.761                            | 1069895.247 | 1             | Quercus macrocarpa         |
| 40                                                  | 2110499.034                            | 1067684.528 | 57            | Quercus rubra              |
| 41                                                  | 2110464.221                            | 1069344.338 | 7             | Quercus macrocarpa         |
| 42                                                  | 2110448.266                            | 1069348.796 | 12            | Quercus macrocarpa         |
| 43                                                  | 2110435.455                            | 1069354.915 | 4             | Quercus macrocarpa         |
| 44                                                  | 2110425.229                            | 1069354.955 | 14            | Quercus macrocarpa         |
| 45                                                  | 2110394.703                            | 1069335.36  | 7             | Quercus macrocarpa         |
| 46                                                  | 2110402.447                            | 1069332.28  | 6             | Quercus macrocarpa         |
| 47                                                  | 2110417.744                            | 1069377.567 | 11            | Quercus macrocarpa         |
| 48                                                  | 2110378.738                            | 1069412.614 | 8             | Quercus macrocarpa         |
| 49                                                  | 2110445.072                            | 1069419.643 | 43            | Quercus macrocarpa         |
| 50                                                  | 2110458.713                            | 1069441.725 | 17            | Quercus macrocarpa         |
| 51                                                  | 2110457.226                            | 1069452.148 | 8             | Quercus macrocarpa         |
| 52                                                  | 2110447.883                            | 1069449.374 | 7             | Quercus macrocarpa         |
| 53                                                  | 2110441.716                            | 1069465.239 | 9             | Quercus macrocarpa         |
| 54                                                  | 2110456.278                            | 1069460.824 | 10            | Quercus macrocarpa         |
| 55                                                  | 2110468.116                            | 1069456.079 | 11            | Quercus macrocarpa         |
| 56                                                  | 2110454.98                             | 1069496.747 | 18            | Quercus macrocarpa         |
| 57                                                  | 2110429.797                            | 1069477.519 | 8             | Quercus macrocarpa         |
| 58                                                  | 2110445.272                            | 1069518.93  | 11            | Acer macrocarpa            |
| 59                                                  | 2110480.273                            | 1069685.267 | 34            | Acer saccharinum           |
| 60                                                  | 2110707.118                            | 1069772.392 | 44            | Catalpa speciosa           |
| 61                                                  | 2110514.117                            | 1069798.069 | 8             | Quercus rubra              |
| 62                                                  | 2110452.519                            | 1069790.433 | 13            | Quercus macrocarpa         |
| 63                                                  | 2110448.694                            | 1069779.778 | 15            | Quercus macrocarpa         |
| 64                                                  | 2110437.694                            | 1069793.762 | 12            | Quercus macrocarpa         |
| 65                                                  | 2110439.209                            | 1069786.69  | 13            | Quercus macrocarpa         |
| 66                                                  | 2110444.317                            | 1069774.86  | 11            | Quercus macrocarpa         |
| 67                                                  | 2110430.657                            | 1069820.502 | 15            | Quercus macrocarpa         |
| 68                                                  | 2110431.201                            | 1069824.167 | 9             | Quercus macrocarpa         |
| 69                                                  | 2110442.605                            | 1069821.661 | 14            | Quercus macrocarpa         |
| 70                                                  | 2110451.309                            | 1069831.911 | 8             | Quercus macrocarpa         |

| COORDINATE TABLE FOR EXISTING TREES TO BE PROTECTED |                                        |             |               |                    |
|-----------------------------------------------------|----------------------------------------|-------------|---------------|--------------------|
| POINT                                               | IL EAST NAD 83 STATE PLANE COORDINATES |             | DIAMETER (IN) | SPECIES            |
|                                                     | NORTHING (Y)                           | EASTING (X) |               |                    |
| 71                                                  | 2110448.56                             | 1069837.484 | 6             | Quercus macrocarpa |
| 72                                                  | 2110435.065                            | 1069836.682 | 8             | Quercus macrocarpa |
| 73                                                  | 2110432.941                            | 1069848.414 | 6             | Quercus macrocarpa |
| 74                                                  | 2110448.673                            | 1069862.897 | 7             | Quercus macrocarpa |
| 75                                                  | 2110443.424                            | 1069868.32  | 6             | Quercus macrocarpa |
| 76                                                  | 2110404.363                            | 1069857.532 | 9             | Quercus macrocarpa |
| 77                                                  | 2110397.877                            | 1069853.83  | 8             | Quercus macrocarpa |
| 78                                                  | 2110401.938                            | 1069867.059 | 14            | Quercus macrocarpa |
| 79                                                  | 2110400.756                            | 1069878.837 | 15            | Quercus macrocarpa |
| 80                                                  | 2110414.316                            | 1069873.597 | 14            | Quercus macrocarpa |
| 81                                                  | 2110373.39                             | 1069842.205 | 17            | Quercus macrocarpa |
| 82                                                  | 2110386.209                            | 1069830.065 | 12            | Quercus macrocarpa |
| 83                                                  | 2110381.725                            | 1069838.745 | 7             | Quercus macrocarpa |
| 84                                                  | 2110373.922                            | 1069850.654 | 8             | Quercus macrocarpa |
| 85                                                  | 2110374.685                            | 1069854.789 | 9             | Quercus macrocarpa |
| 86                                                  | 2110356.239                            | 1069843.763 | 13            | Quercus macrocarpa |
| 87                                                  | 2110351.225                            | 1069853.69  | 8             | Quercus macrocarpa |
| 88                                                  | 2110343.641                            | 1069864.775 | 9             | Quercus macrocarpa |
| 89                                                  | 2110323.049                            | 1069889.855 | 15            | Quercus macrocarpa |
| 90                                                  | 2110316.71                             | 1069892.088 | 20            | Quercus macrocarpa |
| 91                                                  | 2110279.106                            | 1069865.172 | 13            | Quercus macrocarpa |
| 92                                                  | 2110291.952                            | 1069866.721 | 10            | Quercus macrocarpa |
| 93                                                  | 2110306.635                            | 1069860.962 | 11            | Quercus macrocarpa |
| 94                                                  | 2110313.796                            | 1069865.057 | 15            | Quercus macrocarpa |
| 95                                                  | 2110316.196                            | 1069855.687 | 14            | Quercus macrocarpa |
| 96                                                  | 2110330.056                            | 1069843.877 | 8             | Quercus macrocarpa |
| 97                                                  | 2110339.737                            | 1069828.517 | 12            | Quercus macrocarpa |
| 98                                                  | 2110332.916                            | 1069809.171 | 11            | Quercus macrocarpa |
| 99                                                  | 2110321.812                            | 1069826.604 | 12            | Quercus macrocarpa |
| 100                                                 | 2110303.435                            | 1069818.074 | 9             | Quercus macrocarpa |
| 101                                                 | 2110301.462                            | 1069809.6   | 7             | Quercus macrocarpa |
| 102                                                 | 2110314.087                            | 1069793.256 | 7             | Quercus macrocarpa |
| 103                                                 | 2110317.273                            | 1069779.349 | 7             | Quercus macrocarpa |
| 104                                                 | 2110301.677                            | 1069799.827 | 9             | Quercus macrocarpa |
| 105                                                 | 2110296.074                            | 1069795.128 | 13            | Quercus macrocarpa |
| 106                                                 | 2110281.243                            | 1069790.938 | 9             | Quercus macrocarpa |
| 107                                                 | 2110267.338                            | 1069771.814 | 12            | Quercus macrocarpa |
| 108                                                 | 2110281.296                            | 1069768.692 | 13            | Quercus macrocarpa |
| 109                                                 | 2110249.462                            | 1069739.349 | 14            | Quercus macrocarpa |
| 110                                                 | 2110254.281                            | 1069731.528 | 15            | Quercus macrocarpa |
| 111                                                 | 2110269.783                            | 1069737.683 | 9             | Quercus macrocarpa |
| 112                                                 | 2110277.945                            | 1069743.063 | 18            | Quercus macrocarpa |
| 113                                                 | 2110275.284                            | 1069736.198 | 12            | Quercus macrocarpa |
| 114                                                 | 2110295.588                            | 1069708.838 | 17            | Quercus macrocarpa |
| 115                                                 | 2110300.431                            | 1069710.252 | 11            | Quercus macrocarpa |
| 116                                                 | 2110307.249                            | 1069721.841 | 12            | Quercus macrocarpa |
| 117                                                 | 2110305.782                            | 1069715.574 | 12            | Quercus macrocarpa |



|     |             |                                                     |             |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|-----|-------------|-----------------------------------------------------|-------------|---------------------|-------------|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|
|     |             | 2                                                   | 3           | 4                   | 5           | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
| P   |             |                                                     |             |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| N   |             | COORDINATE TABLE FOR EXISTING TREES TO BE PROTECTED |             |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | POINT       | IL EAST NAD 83 STATE PLANE COORDINATES              |             | DIAMETER (IN)       | SPECIES     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     |             | NORTHING (Y)                                        | EASTING (X) |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 141         | 2109396.213                                         | 1068797.755 | 27                  | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 142         | 2109997.093                                         | 1068952.986 | 5                   | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 143 | 2110020.48  | 1068982.223                                         | 8           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 144 | 2109997.109 | 1068993.221                                         | 7           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 145 | 2109988.944 | 1069024.347                                         | 9           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 146 | 2110101.456 | 1068946.405                                         | 9           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 147 | 2110100.418 | 1068945.187                                         | 3           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 148 | 2110026.113 | 1068895.896                                         | 24          | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 149 | 2108511.116 | 1068324.972                                         | 3           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 150 | 2108493.057 | 1068311.831                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 151 | 2108505.069 | 1068288.961                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 152 | 2108525.552 | 1068284.818                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 153 | 2108566.874 | 1068277.397                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 154 | 2108553.81  | 1068258.781                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 155 | 2108557.198 | 1068236.273                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 156 | 2108508.138 | 1068269.718                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 157 | 2108548.177 | 1068219.043                                         | 1           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 158 | 2108553.217 | 1068200.524                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 159 | 2108579.423 | 1068210.31                                          | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 160 | 2108615.463 | 1068266.507                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 161 | 2108624.354 | 1068227.513                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 162 | 2108631.054 | 1068188.963                                         | 8           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 163 | 2108646.646 | 1068190.199                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 164 | 2108636.293 | 1068177.122                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 165 | 2108594.115 | 1068195.218                                         | 8           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 166 | 2108586.091 | 1068185.213                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 167 | 2108573.091 | 1068185.193                                         | 3           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 168 | 2108581.023 | 1068158.348                                         | 8           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 169 | 2108554.881 | 1068181.749                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 170 | 2108609.33  | 1068154.351                                         | 10          | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 171 | 2108644.816 | 1068149.811                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 172 | 2108680.861 | 1068147.548                                         | 7           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 173 | 2108667.638 | 1068131.62                                          | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 174 | 2108641.064 | 1068129.19                                          | 8           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 175 | 2108613.236 | 1068118.212                                         | 3           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 176 | 2108581.923 | 1068119.966                                         | 1           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 177 | 2108600.165 | 1068110.965                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 178 | 2108592.696 | 1068103.652                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 179 | 2108604.332 | 1068088.157                                         | 2           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 180 | 2108640.939 | 1068087.59                                          | 3           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 181 | 2108657.086 | 1068089.3                                           | 1           | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 182 | 2108594.368 | 1068074.759                                         | 2           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 183 | 2108536.217 | 1068027.894                                         | 34          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 184 | 2108514.641 | 1068011.462                                         | 23          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 185 | 2108504.987 | 1068034.311                                         | 15          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 186 | 2108471.738 | 1068054.19                                          | 24          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 187 | 2108437.645 | 1068043.26                                          | 33          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 188 | 2108449.205 | 1068028.636                                         | 30          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 189 | 2108421.51  | 1068053.528                                         | 44          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 190 | 2108414.893 | 1068046.491                                         | 37          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 191 | 2108463.485 | 1068082.803                                         | 26          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 192 | 2108471.507 | 1068062.197                                         | 17          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 193 | 2108482.497 | 1068045.564                                         | 17          | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 194 | 2108494.475 | 1068056.952                                         | 15          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 195 | 2108528.007 | 1068053.145                                         | 28          | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 196 | 2108532.311 | 1068067.163                                         | 31          | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 197 | 2108535.983 | 1068059.373                                         | 29          | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 198 | 2108544.697 | 1068091.954                                         | 27          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 199 | 2108544.394 | 1068085.435                                         | 22          | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 200 | 2108522.68  | 1068115.603                                         | 19          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 201 | 2108587.824 | 1068062.423                                         | 2           | Quercus alba        |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 202 | 2108513.794 | 1068127.017                                         | 35          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 203 | 2108597.677 | 1068065.572                                         | 3           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 204 | 2108590.59  | 1068055.933                                         | 2           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 205 | 2108594.871 | 1068021.767                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 206 | 2108593.007 | 1068008.633                                         | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 207 | 2108620.472 | 1068032.857                                         | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 208 | 2108638.464 | 1068016.464                                         | 4           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 209 | 2108660.013 | 1068019.367                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 210 | 2108622.078 | 1067990.107                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| M   |             |                                                     |             |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | POINT       | IL EAST NAD 83 STATE PLANE COORDINATES              |             | DIAMETER (IN)       | SPECIES     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     |             | NORTHING (Y)                                        | EASTING (X) |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 211         | 2108611.264                                         | 1067991.84  | 2                   | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 212         | 2108636.642                                         | 1067979.929 | 3                   | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 213 | 2108652.298 | 1067971.886                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 214 | 2108673.466 | 1067972.518                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 215 | 2108676.194 | 1067990.457                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 216 | 2108453.928 | 1068195.286                                         | 28          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 217 | 2108472.786 | 1068202.824                                         | 32          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 218 | 2108474.275 | 1068537.27                                          | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 219 | 2108451.402 | 1068642.239                                         | 42          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 220 | 2108492.818 | 1068670.978                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 221 | 2108379.291 | 1068214.585                                         | 7           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 222 | 2108336.088 | 1068224.27                                          | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 223 | 2108101.339 | 1068280.641                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 224 | 2108167.309 | 1068331.68                                          | 9           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 225 | 2107750.225 | 1068141.037                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 226 | 2107690.67  | 1068144.915                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 227 | 2107667.855 | 1068194.619                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 228 | 2107708.887 | 1068227.527                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 229 | 2107649.882 | 1068187.192                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 230 | 2107365.868 | 1067639.255                                         | 41          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 231 | 2107815.222 | 1067676.065                                         | 27          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 232 | 2107830.788 | 1067636.315                                         | 7           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 233 | 2107848.469 | 1067614.394                                         | 6           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 234 | 2107828.923 | 1067581.782                                         | 6           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 235 | 2107864.262 | 1067541.354                                         | 25          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 236 | 2107780.047 | 1067489.712                                         | 33          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 237 | 2107815.947 | 1067456.862                                         | 25          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 238 | 2107857.305 | 1067494.173                                         | 23          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 239 | 2107834.853 | 1067419.35                                          | 34          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 240 | 2107839.006 | 1067366.647                                         | 29          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 241 | 2107894.481 | 1067316.806                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 242 | 2107927.007 | 1067344.139                                         | 23          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 243 | 2107905.25  | 1067359.071                                         | 13          | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 244 | 2107863.175 | 1067297.542                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 245 | 2107648.391 | 1067352.116                                         | 9           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 246 | 2107648.667 | 1067407.153                                         | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 247 | 2107667.358 | 1067438.94                                          | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 248 | 2107349.068 | 1068991.576                                         | 29          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 249 | 2107340.452 | 1069216.183                                         | 19          | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 250 | 2107345.843 | 1069284.715                                         | 18          | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 251 | 2107336.718 | 1069306.859                                         | 9           | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 252 | 2107802.61  | 1070491.934                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 253 | 2107963.428 | 1070453.268                                         | 30          | Juglans nigra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 254 | 2107961.281 | 1070392.002                                         | 29          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 255 | 2109338.686 | 1070036.549                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 256 | 2109500.407 | 1069714.477                                         | 11          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 257 | 2110044.379 | 1069039.051                                         | 8           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 258 | 2109830.084 | 1067592.485                                         | 42          | Ace sai             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 259 | 2109766.901 | 1067589.654                                         | 8           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 260 | 2109654.63  | 1067709.234                                         | 14          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 261 | 2109658.588 | 1067738.384                                         | 9           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 262 | 2109648.589 | 1067743.599                                         | 4           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 263 | 2109635.37  | 1067761.375                                         | 5           | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 264 | 2109640.291 | 1067780.804                                         | 13          | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 265 | 2109661.748 | 1067807.919                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 266 | 2109614.452 | 1067835.81                                          | 5           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 267 | 2109650.854 | 1067852.027                                         | 15          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 268 | 2109656.055 | 1067850.86                                          | 5           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 269 | 2109670.787 | 1067863.624                                         | 7           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 270 | 2109643.924 | 1067882.954                                         | 16          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 271 | 2109632.592 | 1067953.254                                         | 17          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 272 | 2109618.653 | 1067979.554                                         | 7           | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 273 | 2109612.635 | 1067998                                             | 18          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 274 | 2109566.563 | 1067675.258                                         | 14          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 275 | 2109524.184 | 1067721.957                                         | 13          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 276 | 2109523.757 | 1067716.974                                         | 8           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 277 | 2109526.48  | 1067717.051                                         | 9           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 278 | 2108506.427 | 1068134.49                                          | 35          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 279 | 2108398.654 | 1068124.451                                         | 24          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 280 | 2108408.964 | 1068118.879                                         | 24          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| L   |             |                                                     |             |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | POINT       | IL EAST NAD 83 STATE PLANE COORDINATES              |             | DIAMETER (IN)       | SPECIES     |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     |             | NORTHING (Y)                                        | EASTING (X) |                     |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 211         | 2108611.264                                         | 1067991.84  | 2                   | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
|     | 212         | 2108636.642                                         | 1067979.929 | 3                   | Carya ovata |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 213 | 2108652.298 | 1067971.886                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 214 | 2108673.466 | 1067972.518                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 215 | 2108676.194 | 1067990.457                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 216 | 2108453.928 | 1068195.286                                         | 28          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 217 | 2108472.786 | 1068202.824                                         | 32          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 218 | 2108474.275 | 1068537.27                                          | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 219 | 2108451.402 | 1068642.239                                         | 42          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 220 | 2108492.818 | 1068670.978                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 221 | 2108379.291 | 1068214.585                                         | 7           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 222 | 2108336.088 | 1068224.27                                          | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 223 | 2108101.339 | 1068280.641                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 224 | 2108167.309 | 1068331.68                                          | 9           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 225 | 2107750.225 | 1068141.037                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 226 | 2107690.67  | 1068144.915                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 227 | 2107667.855 | 1068194.619                                         | 2           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 228 | 2107708.887 | 1068227.527                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 229 | 2107649.882 | 1068187.192                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 230 | 2107365.868 | 1067639.255                                         | 41          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 231 | 2107815.222 | 1067676.065                                         | 27          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 232 | 2107830.788 | 1067636.315                                         | 7           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 233 | 2107848.469 | 1067614.394                                         | 6           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 234 | 2107828.923 | 1067581.782                                         | 6           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 235 | 2107864.262 | 1067541.354                                         | 25          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 236 | 2107780.047 | 1067489.712                                         | 33          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 237 | 2107815.947 | 1067456.862                                         | 25          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 238 | 2107857.305 | 1067494.173                                         | 23          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 239 | 2107834.853 | 1067419.35                                          | 34          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 240 | 2107839.006 | 1067366.647                                         | 29          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 241 | 2107894.481 | 1067316.806                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 242 | 2107927.007 | 1067344.139                                         | 23          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 243 | 2107905.25  | 1067359.071                                         | 13          | Quercus rubra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 244 | 2107863.175 | 1067297.542                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 245 | 2107648.391 | 1067352.116                                         | 9           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 246 | 2107648.667 | 1067407.153                                         | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 247 | 2107667.358 | 1067438.94                                          | 1           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 248 | 2107349.068 | 1068991.576                                         | 29          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 249 | 2107340.452 | 1069216.183                                         | 19          | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 250 | 2107345.843 | 1069284.715                                         | 18          | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 251 | 2107336.718 | 1069306.859                                         | 9           | Cel occ             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 252 | 2107802.61  | 1070491.934                                         | 8           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 253 | 2107963.428 | 1070453.268                                         | 30          | Juglans nigra       |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 254 | 2107961.281 | 1070392.002                                         | 29          | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 255 | 2109338.686 | 1070036.549                                         | 1           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 256 | 2109500.407 | 1069714.477                                         | 11          | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 257 | 2110044.379 | 1069039.051                                         | 8           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 258 | 2109830.084 | 1067592.485                                         | 42          | Ace sai             |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 259 | 2109766.901 | 1067589.654                                         | 8           | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 260 | 2109654.63  | 1067709.234                                         | 14          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 261 | 2109658.588 | 1067738.384                                         | 9           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 262 | 2109648.589 | 1067743.599                                         | 4           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 263 | 2109635.37  | 1067761.375                                         | 5           | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 264 | 2109640.291 | 1067780.804                                         | 13          | Quercus palustris   |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 265 | 2109661.748 | 1067807.919                                         | 6           | Quercus macrocarpa  |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 266 | 2109614.452 | 1067835.81                                          | 5           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 267 | 2109650.854 | 1067852.027                                         | 15          | Populus tremuloides |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |
| 268 | 2109656.055 | 1067850.86                                          | 5           | Carya ovata         |             |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |

[illegible]

|                                                                                                          |                             |                                       |
|----------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. CASAS STREET, 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>R. MUHAMMAD | ISSUE DATE:<br>JUNE 2026              |
|                                                                                                          | DRAWN BY:<br>R. MUHAMMAD    | SOLICITATION NO.:<br>W912P62-6R-A009  |
|                                                                                                          | CHECKED BY:<br>R. MUHAMMAD  | CONTRACT NO.:<br>TBD                  |
|                                                                                                          | SUBMITTED BY:<br>A. KARR    | PROJECT ID:<br>444304-46C9B7          |
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UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK CREEK AND EASTING CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

EXISTING TREES TO BE PROTECTED  
COORDINATE TABLE PLAN 2

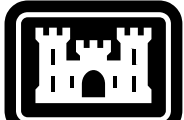
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| COORDINATE TABLE FOR EXISTING TREES TO BE PROTECTED |                                        |             |               |                     |
|-----------------------------------------------------|----------------------------------------|-------------|---------------|---------------------|
| POINT                                               | IL EAST NAD 83 STATE PLANE COORDINATES |             | DIAMETER (IN) | SPECIES             |
|                                                     | NORTHING (Y)                           | EASTING (X) |               |                     |
| 281                                                 | 2108417.126                            | 1068116.041 | 13            | Quercus macrocarpa  |
| 282                                                 | 2108406.433                            | 1068099.82  | 20            | Quercus macrocarpa  |
| 283                                                 | 2108393.891                            | 1068139.382 | 27            | Quercus macrocarpa  |
| 284                                                 | 2108398.308                            | 1068148.973 | 27            | Quercus macrocarpa  |
| 285                                                 | 2108399.32                             | 1068158.926 | 22            | Quercus macrocarpa  |
| 286                                                 | 2108384.49                             | 1068172.745 | 21            | Quercus macrocarpa  |
| 287                                                 | 2108424.74                             | 1068166.494 | 19            | Quercus macrocarpa  |
| 288                                                 | 2108431.145                            | 1068184.175 | 10            | Quercus alba        |
| 289                                                 | 2108426.284                            | 1068187.115 | 28            | Quercus macrocarpa  |
| 290                                                 | 2108440.647                            | 1068194.091 | 36            | Quercus macrocarpa  |
| 291                                                 | 2108448.688                            | 1068205.548 | 40            | Quercus macrocarpa  |
| 292                                                 | 2108478.295                            | 1068175.79  | 34            | Quercus macrocarpa  |
| 293                                                 | 2108425.674                            | 1068656.989 | 41            | Quercus macrocarpa  |
| 294                                                 | 2108173.437                            | 1068168.734 | 1             | Quercus macrocarpa  |
| 295                                                 | 2108179.078                            | 1068256.206 | 4             | Quercus macrocarpa  |
| 296                                                 | 2108221.916                            | 1068291.26  | 26            | Carya ovata         |
| 297                                                 | 2107723.849                            | 1068167.67  | 41            | Quercus macrocarpa  |
| 298                                                 | 2107712.073                            | 1068121.935 | 1             | Quercus macrocarpa  |
| 299                                                 | 2107707.59                             | 1068133.489 | 1             | Quercus macrocarpa  |
| 300                                                 | 2107424.923                            | 1067695.132 | 48            | Quercus macrocarpa  |
| 301                                                 | 2107880.93                             | 1067599.63  | 30            | Carya ovata         |
| 302                                                 | 2107894.266                            | 1067559.107 | 24            | Carya ovata         |
| 303                                                 | 2107942.211                            | 1067513.13  | 20            | Carya ovata         |
| 304                                                 | 2107984.908                            | 1067465.274 | 26            | Carya ovata         |
| 305                                                 | 2107872.907                            | 1067400.806 | 8             | Carya ovata         |
| 306                                                 | 2107876.814                            | 1067391.456 | 9             | Carya ovata         |
| 307                                                 | 2107871.802                            | 1067380.858 | 11            | Carya ovata         |
| 308                                                 | 2107919.301                            | 1067371.366 | 20            | Quercus rubra       |
| 309                                                 | 2107919.857                            | 1067338.108 | 27            | Carya ovata         |
| 310                                                 | 2107927.772                            | 1067331.016 | 17            | Quercus rubra       |
| 311                                                 | 2107981.349                            | 1067305.052 | 17            | Quercus rubra       |
| 312                                                 | 2107931.115                            | 1067308.482 | 22            | Carya ovata         |
| 313                                                 | 2107709.569                            | 1067365.034 | 39            | Quercus macrocarpa  |
| 314                                                 | 2106813.13                             | 1069494.86  | 40            | Quercus macrocarpa  |
| 315                                                 | 2106706.209                            | 1069644.253 | 46            | Quercus macrocarpa  |
| 316                                                 | 2107816.602                            | 1070485.735 | 19            | Juglans nigra       |
| 317                                                 | 2107870.177                            | 1070442.348 | 29            | Juglans nigra       |
| 318                                                 | 2109763.917                            | 1067628.194 | 7             | Populus tremuloides |
| 319                                                 | 2109663.469                            | 1067741.467 | 20            | Quercus palustris   |
| 320                                                 | 2109659.518                            | 1067773.999 | 11            | Populus tremuloides |
| 321                                                 | 2109631.07                             | 1067781.561 | 10            | Populus tremuloides |
| 322                                                 | 2109669.459                            | 1067788.662 | 16            | Pru ser             |
| 323                                                 | 2109677.044                            | 1067846.049 | 12            | Populus tremuloides |
| 324                                                 | 2109603.368                            | 1067804.657 | 12            | Populus tremuloides |
| 325                                                 | 2109637.513                            | 1067887.225 | 12            | Populus tremuloides |
| 326                                                 | 2109645.489                            | 1067881.591 | 13            | Quercus palustris   |
| 327                                                 | 2109655.966                            | 1067911.562 | 18            | Quercus palustris   |
| 328                                                 | 2109645.688                            | 1067989.592 | 15            | Quercus palustris   |
| 329                                                 | 2109591.457                            | 1068063.363 | 12            | Quercus palustris   |
| 330                                                 | 2109555.238                            | 1068129.015 | 14            | Quercus palustris   |
| 331                                                 | 2109504.76                             | 1067693.461 | 19            | Quercus macrocarpa  |
| 332                                                 | 2108729.674                            | 1066037.33  | 23            | Carya ovata         |
| 333                                                 | 2108790.847                            | 1066061.422 | 23            | Carya ovata         |
| 334                                                 | 2108720.19                             | 1065981.147 | 5             | Quercus macrocarpa  |
| 335                                                 | 2108738.041                            | 1065916.881 | 8             | Quercus macrocarpa  |
| 336                                                 | 2108745.702                            | 1065879.689 | 4             | Quercus macrocarpa  |
| 337                                                 | 2108775.764                            | 1065807.971 | 5             | Quercus macrocarpa  |
| 338                                                 | 2108761.824                            | 1065764.978 | 5             | Quercus macrocarpa  |
| 339                                                 | 2108788.099                            | 1065716.87  | 5             | Quercus macrocarpa  |
| 340                                                 | 2108795.168                            | 1065659.765 | 5             | Quercus macrocarpa  |
| 341                                                 | 2108838.686                            | 1065945.326 | 8             | Quercus macrocarpa  |
| 342                                                 | 2109855.123                            | 1066588.869 | 12            | Quercus macrocarpa  |
| 343                                                 | 2109898.135                            | 1066581.949 | 10            | Quercus macrocarpa  |
| 344                                                 | 2109948.191                            | 1066590.521 | 12            | Quercus macrocarpa  |
| 345                                                 | 2109930.962                            | 1066548.886 | 11            | Quercus macrocarpa  |
| 346                                                 | 2109955.61                             | 1066393.188 | 39            | Quercus macrocarpa  |
| 347                                                 | 2109891.67                             | 1066437.428 | 36            | Quercus macrocarpa  |
| 348                                                 | 2109622.628                            | 1066535.529 | 20            | Carya ovata         |
| 349                                                 | 2109637.325                            | 1066527.446 | 19            | Carya ovata         |
| 350                                                 | 2109639.691                            | 1066540.115 | 22            | Carya ovata         |

| COORDINATE TABLE FOR EXISTING TREES TO BE PROTECTED |                                        |             |               |                    |
|-----------------------------------------------------|----------------------------------------|-------------|---------------|--------------------|
| POINT                                               | IL EAST NAD 83 STATE PLANE COORDINATES |             | DIAMETER (IN) | SPECIES            |
|                                                     | NORTHING (Y)                           | EASTING (X) |               |                    |
| 351                                                 | 2109573.128                            | 1066501.36  | 38            | Quercus alba       |
| 352                                                 | 2109549.366                            | 1066414.285 | 31            | Quercus macrocarpa |
| 353                                                 | 2109485.79                             | 1066426.116 | 28            | Quercus macrocarpa |
| 354                                                 | 2109489.94                             | 1066389.277 | 35            | Quercus macrocarpa |
| 355                                                 | 2109471.58                             | 1066410.051 | 28            | Quercus macrocarpa |
| 356                                                 | 2109512.634                            | 1066617.716 | 45            | Quercus alba       |
| 357                                                 | 2109473.043                            | 1066643.035 | 36            | Quercus macrocarpa |
| 358                                                 | 2109490.085                            | 1066676.383 | 24            | Quercus alba       |
| 359                                                 | 2109485.217                            | 1066703.502 | 42            | Quercus alba       |
| 360                                                 | 2109502.857                            | 1066737.597 | 19            | Carya ovata        |
| 361                                                 | 2109425.872                            | 1066756.119 | 47            | Quercus macrocarpa |
| 362                                                 | 2109314.547                            | 1066731.316 | 24            | Quercus alba       |
| 363                                                 | 2109336.804                            | 1066722.057 | 30            | Quercus alba       |
| 364                                                 | 2109351.107                            | 1066717.121 | 27            | Quercus alba       |
| 365                                                 | 2109347.783                            | 1066675.406 | 25            | Quercus alba       |
| 366                                                 | 2109340.078                            | 1066687.188 | 26            | Quercus alba       |
| 367                                                 | 2109313.121                            | 1066684.339 | 22            | Carya ovata        |
| 368                                                 | 2109286.672                            | 1066703.026 | 24            | Quercus alba       |
| 369                                                 | 2109327.566                            | 1066673.769 | 29            | Quercus macrocarpa |
| 370                                                 | 2109325.129                            | 1066650.773 | 32            | Quercus alba       |
| 371                                                 | 2109359.102                            | 1066627.251 | 34            | Quercus alba       |
| 372                                                 | 2109379.276                            | 1066615.803 | 6             | Carya ovata        |
| 373                                                 | 2109403.443                            | 1066649.183 | 6             | Carya ovata        |
| 374                                                 | 2109489.047                            | 1066558.968 | 5             | Quercus macrocarpa |
| 375                                                 | 2109416.247                            | 1066460.731 | 5             | Quercus macrocarpa |
| 376                                                 | 2109414.851                            | 1066512.95  | 3             | Quercus macrocarpa |
| 377                                                 | 2109389.095                            | 1066480.477 | 7             | Quercus macrocarpa |
| 378                                                 | 2109070.289                            | 1066026.9   | 6             | Quercus macrocarpa |
| 379                                                 | 2109071.359                            | 1065982.094 | 8             | Quercus macrocarpa |
| 380                                                 | 2109040.708                            | 1066056.554 | 6             | Quercus macrocarpa |
| 381                                                 | 2109004.166                            | 1066043.129 | 5             | Quercus macrocarpa |
| 382                                                 | 2108971.8                              | 1066050.104 | 4             | Quercus macrocarpa |
| 383                                                 | 2109654.735                            | 1065598.157 | 40            | Quercus macrocarpa |
| 384                                                 | 2109679.538                            | 1065657.938 | 48            | Quercus macrocarpa |
| 385                                                 | 2109843.149                            | 1065591.76  | 20            | Carya ovata        |
| 386                                                 | 2109837.914                            | 1065608.141 | 22            | Carya ovata        |
| 387                                                 | 2109856.711                            | 1065587.03  | 18            | Carya ovata        |
| 388                                                 | 2109863.614                            | 1065657.934 | 25            | Carya ovata        |
| 389                                                 | 2109848.451                            | 1065653.631 | 19            | Carya ovata        |
| 390                                                 | 2109891.849                            | 1065608.474 | 20            | Carya ovata        |
| 391                                                 | 2109690.326                            | 1065350.272 | 19            | Carya ovata        |
| 392                                                 | 2109039.727                            | 1064978.65  | 6             | Quercus macrocarpa |
| 393                                                 | 2108993.81                             | 1064952.96  | 6             | Quercus macrocarpa |
| 394                                                 | 2108974.656                            | 1064896.777 | 6             | Quercus macrocarpa |
| 395                                                 | 2109193.351                            | 1064497.082 | 11            | Quercus macrocarpa |
| 396                                                 | 2109179.769                            | 1064524.705 | 12            | Quercus macrocarpa |
| 397                                                 | 2109119.345                            | 1064517.105 | 8             | Quercus macrocarpa |
| 398                                                 | 2109074.34                             | 1064577.992 | 8             | Quercus rubra      |
| 399                                                 | 2109101.904                            | 1064584.268 | 13            | Quercus rubra      |
| 400                                                 | 2109052.326                            | 1064613.31  | 7             | Quercus macrocarpa |
| 401                                                 | 2109025.928                            | 1064659.994 | 5             | Quercus rubra      |
| 402                                                 | 2109062.08                             | 1064687.137 | 10            | Quercus rubra      |
| 403                                                 | 2108664.189                            | 1065324.028 | 38            | Quercus macrocarpa |
| 404                                                 | 2108716.884                            | 1065324.157 | 34            | Quercus macrocarpa |
| 405                                                 | 2108772.558                            | 1065309.504 | 10            | Quercus rubra      |
| 406                                                 | 2108788.829                            | 1065246.088 | 10            | Quercus rubra      |
| 407                                                 | 2108845.793                            | 1065261.549 | 8             | Quercus rubra      |
| 408                                                 | 2108886.111                            | 1065358.091 | 9             | Quercus macrocarpa |
| 409                                                 | 2108898.966                            | 1065457.819 | 11            | Quercus macrocarpa |
| 410                                                 | 2108852.526                            | 1065435.245 | 8             | Quercus macrocarpa |
| 411                                                 | 2108796.267                            | 1065449.236 | 7             | Quercus macrocarpa |
| 412                                                 | 2108759.08                             | 1065427.914 | 8             | Quercus rubra      |
| 413                                                 | 2108767.894                            | 1065478.461 | 9             | Quercus rubra      |
| 414                                                 | 2108847.27                             | 1065500.676 | 5             | Quercus macrocarpa |

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| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:  | R. MUHAMMAD             | ISSUE DATE:   | JUNE 2026      |
|                                                                                                               | DRAWN BY:     | R. MUHAMMAD             | PROJECT NO.:  | W912PR2-R-A009 |
|                                                                                                               | CHECKED BY:   | R. MUHAMMAD             | CONTRACT NO.: | TBD            |
|                                                                                                               | SUBMITTED BY: | A. KARR                 | PROJECT ID:   | 444304-66C9B7  |
|                                                                                                               | SIZE:         | FILE NAME:              |               |                |
|                                                                                                               | ANSI D        | 444304-66C9B7 V-101.dgn |               |                |

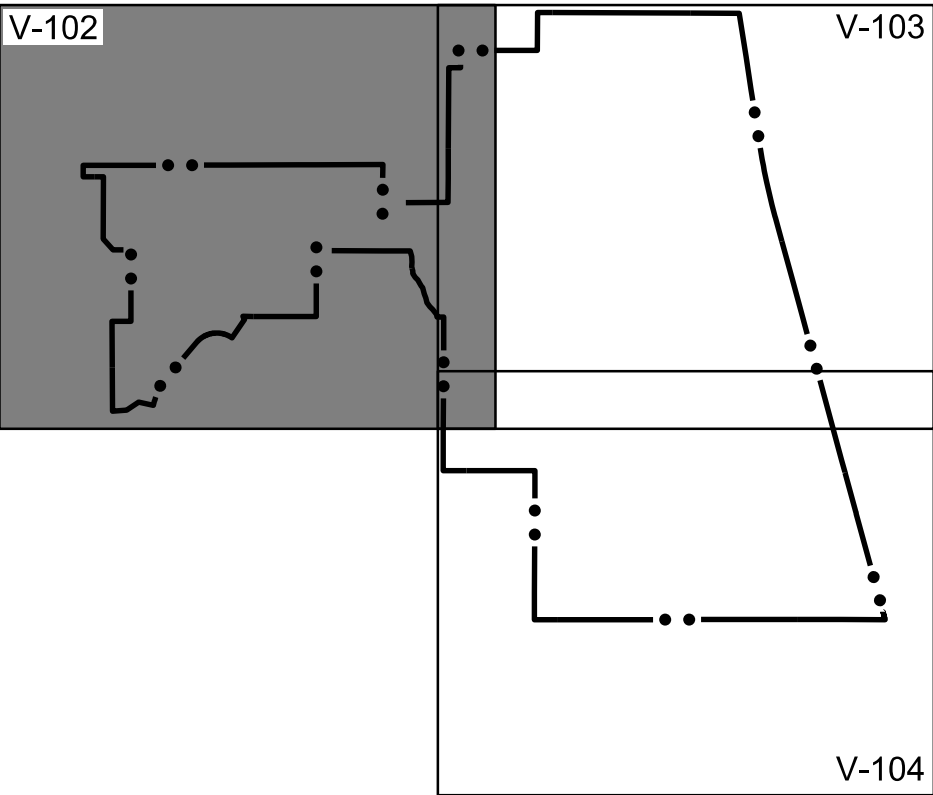
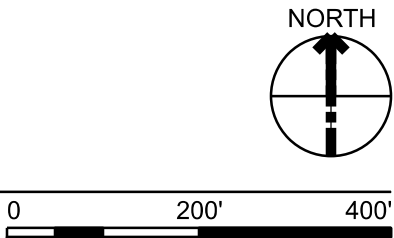
UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

SURVEY CONTROL INFORMATION

SHEET ID  
V-101

**CERTIFIED FINAL DOCUMENTS - RTA**





# V-102

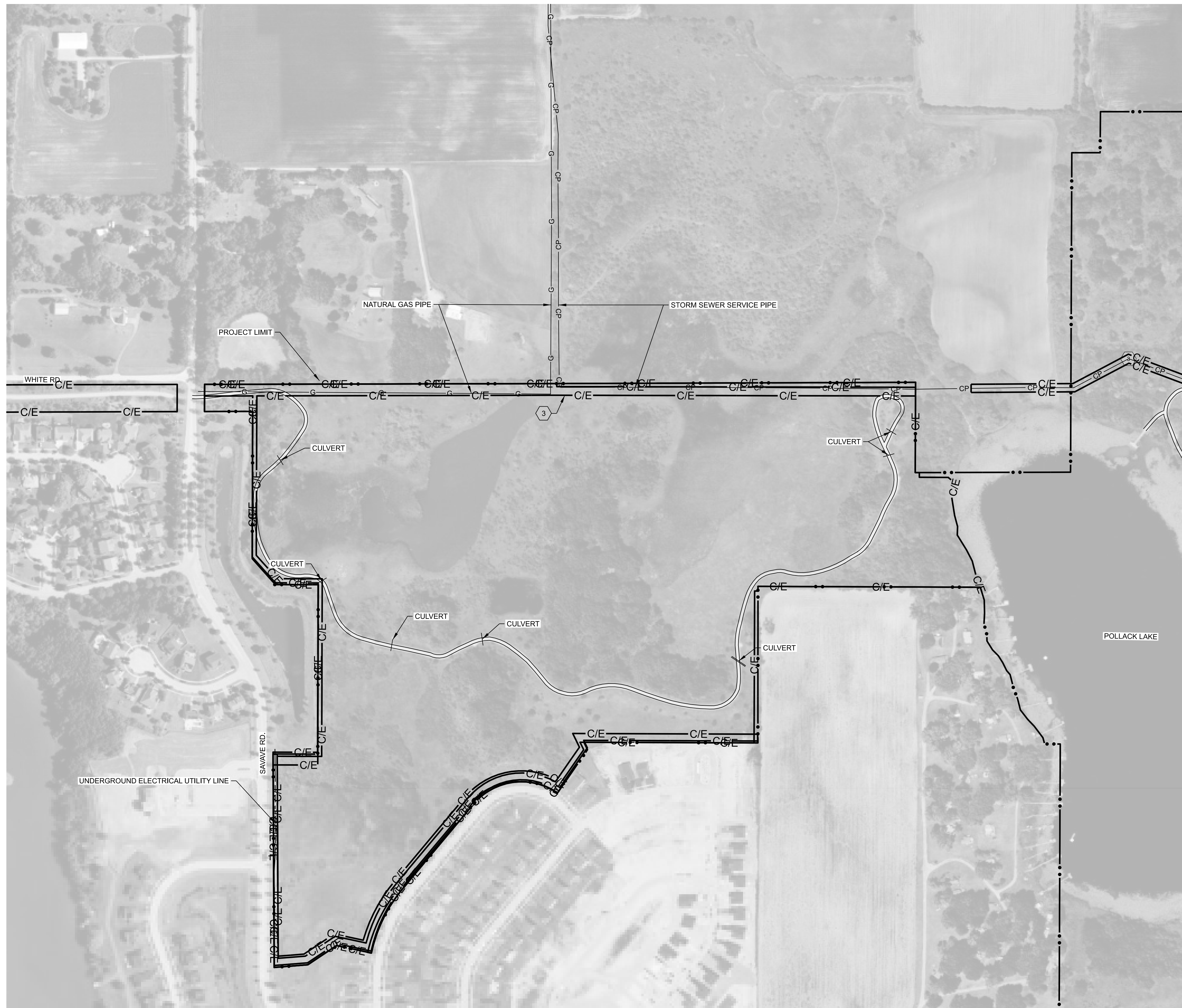












**A1** EXISTING COMBINED UTILITIES PLAN 1  
SCALE: 1"=200'

## GENERAL UTILITY NOTES

1. CONTRACTOR IS RESPONSIBLE FOR COORDINATING ALL UTILITIES AND FIELD VERIFYING ALL EXISTING UTILITIES. THE CONTRACTING OFFICER SHALL BE NOTIFIED OF ANY CONFLICTS OR DISCREPANCIES PRIOR TO INSTALLATION.
  2. LOCATIONS OF EXISTING UTILITIES PROVIDED FROM BASE MAPS AND VISIBLE FEATURES; ACTUAL LOCATION SHALL BE VERIFIED BY THE CONTRACTOR.
  3. SOME UTILITIES WERE LOCATED DURING USACE'S SITE SURVEY ON AUGUST 2024. ALL UTILITIES IN EXCAVATION AREAS WILL NEED TO BE CONFIRMED PRIOR TO START OF CONSTRUCTION. ANY DISCREPANCIES SHALL BE BROUGHT UP TO THE COR PRIOR TO CONSTRUCTION.
  4. EXISTING LIQUEFIED PETROLEUM LINE IS A HIGH PRESSURE (800 LBS+) STEEL 16 INCH DIAMETER PIPE AND IS OWNED AND MANAGED BY WEST SHORE PIPE LINE COMPANY. AREA POC IS:  

BILL O' MALLEY  
847-878-3428  
WOMALLEY@BUCKEYE.COM
- FOR EMERGENCIES REACH OUT TO BUCKEYE PARTNERS HOTLINE (EASEMENT MANAGER) : 1-888-625-7310
5. ANY EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COORDINATED WITH COR AND WEST SHORE PIPE LINE COMPANY PRIOR TO THE START OF EXCAVATION.
  6. EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COMPLETED DURING THE SUPERVISION OF COR AND WEST SHORE PIPE LINE COMPANY REPRESENTATIVE.

BILL O' MALLEY  
847-878-3428  
WOMALLEY@BUCKEYE.COM

FOR EMERGENCIES REACH OUT TO BUCKEYE PARTNERS HOTLINE  
(LEASEMENT MANAGER) : 1-888-625-7310

5. ANY EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COORDINATED WITH COR AND WEST SHORE PIPE LINE COMPANY PRIOR TO THE START OF EXCAVATION.
6. EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COMPLETED DURING THE SUPERVISION OF COR AND WEST SHORE PIPE LINE COMPANY REPRESENTATIVE.

## SHEET KEYNOTES

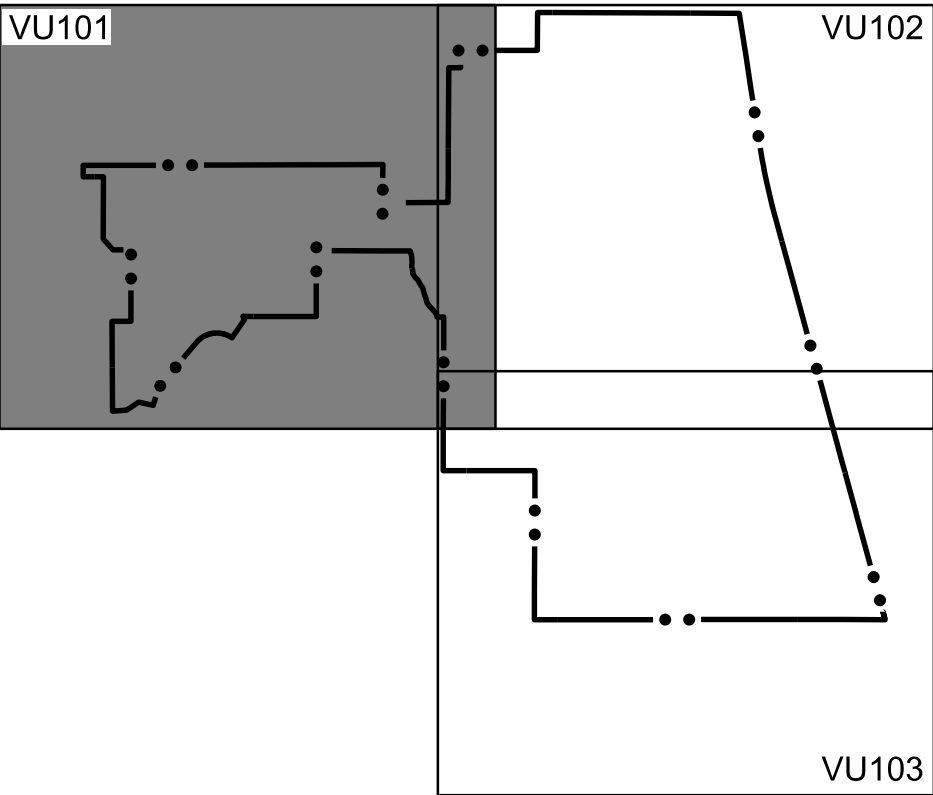
1. WEST SHORE PIPE LINE COMPANY
2. GRUBB DRAINAGE DISTRICT
3. CITY OF ANTIOCH

## LEGEND

- |                                                                                     |                              |
|-------------------------------------------------------------------------------------|------------------------------|
|  | WORKING LIMITS               |
|  | EASEMENT                     |
|  | EXISTING STORM SEWER         |
|  | EXISTING NATURAL GAS         |
|  | EXISTING LIQUIFIED PETROLEUM |
|  | EXISTING OVERHEAD ELECTRICAL |

## EXISTING UTILITIES

### KEY MAP



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|                                                                                           |                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | R. MUHAMMAD<br>SOLICITATION NO.: W912P2-6-R-A009<br>CHECKED BY: R. MUHAMMAD<br>CONTRACT NO.: RD<br>PROJECT ID: 444304-66C9B7<br>FILE NAME: 444304-66C9B7_VU101.dgn |
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CERTIFIED FINAL DOCUMENTS - RTA













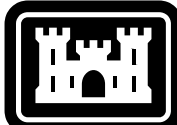
1. GENERAL NOTES APPLY TO ALL BORING LOG SHEETS B-001 THROUGH B-302.
2. GENERAL: THE UNIFIED SOIL CLASSIFICATION SYSTEM IS USED TO IDENTIFY BASIC SOIL TYPE. THE LEGEND REPRESENTS ONLY THE BASIC SOILS. TO COMPLETE THE CLASSIFICATION, PERTINENT INFORMATION IS ADDED TO THE RIGHT AND LEFT OF THE BORING STAFF. NOTES PERTAINING TO A SPECIFIC BORING ARE SHOWN BELOW THE BORING STAFF.
3. MC: THE NATURAL MOISTURE CONTENT IN PERCENT OF DRY WEIGHT (W) IS SHOWN TO THE LEFT OF THE BORING STAFF.
4. N: NUMBER OF BLOWS TO DRIVE STANDARD SPLIT SPOON ONE FOOT WITH 140 LB HAMMER AND 30-INCH DROP IS SHOWN TO THE RIGHT OF THE BORING STAFF.
5. QP/Q: UNCONFINED COMPRESSIVE STRENGTH (TSF) FROM POCKET PENETROMETER AND UNCONFINED COMPRESSIVE STRENGTH TESTS ARE SHOWN TO THE RIGHT OF THE BORING STAFF.
6. INFORMATION SHOWN IS LIMITED DATA ONLY. FOR ADDITIONAL SUBSURFACE DATA BASED ON FIELD AND LAB TESTING RESULTS, PLEASE REFER TO BORING LOGS INCLUDED WITH 31 00 00 EARTHWORK SPECIFICATION.

## GEOTECHNICAL LEGEND

1. LEGEND APPLIES TO ALL BORING LOG SHEETS B-301 THROUGH B-302.

|                                                                                       |                                        |                                                                                       |                                      |
|---------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------|--------------------------------------|
|    | Boulders and Cobbles                   |    | ML - Silt                            |
|    | CH - Fat Clay                          |    | OH - Organic Fat Clay                |
|    | CL - Lean Clay                         |    | OL - Organic Lean Clay               |
|    | CL-ML - Silty Clay                     |    | OL/OH - Organic Soil                 |
|    | Concrete                               |    | PT - Peat                            |
|    | Fill                                   |    | Sandstone                            |
|    | GC - Clayey Gravel                     |    | SC - Clayey Sand                     |
|    | GC-GM - Silty Clayey Gravel            |    | SC-SM - Silty Clayey Sand            |
|    | GM - Silty Gravel                      |    | Shale                                |
|    | GP - Poorly Graded Gravel              |    | SM - Silty Sand                      |
|    | GP-GC - Poorly Graded Gravel with Clay |    | SP - Poorly Graded Sand              |
|    | GP-GM - Poorly Graded Gravel with Silt |    | SP-SC - Poorly Graded Sand with Clay |
|    | GW - Well Graded Gravel                |    | SP-SM - Poorly Graded Sand with Silt |
|    | GW-GC - Well Graded Gravel with Clay   |    | SW - Well Graded Sand                |
|    | GW-GM - Well Graded Gravel with Silt   |    | SW-SC - Well Graded Sand with Clay   |
|   | Limestone                              |   | SW-SM - Well Graded Sand with Silt   |
|  | MH - Elastic Silt                      |  | Topsoil                              |
|                                                                                       |                                        |  | Water                                |

| BORING LOCATION (ILLINOIS EAST STATE PLANE NAD 83) |          |         |           |
|----------------------------------------------------|----------|---------|-----------|
| BORING ID                                          | NORTHING | EASTING | ELEVATION |
| SB10-PE3                                           | 2106740  | 1068771 | 754.4     |
| SB1-CE1                                            | 2106308  | 1068046 | 757.4     |
| SB2-CE2                                            | 2106275  | 1068056 | 755.4     |
| SB3-TE1                                            | 2106228  | 1068092 | 756.5     |
| SB4-TE2                                            | 2106374  | 1068047 | 756.1     |
| SB5-BE1                                            | 2106177  | 1068745 | 770.2     |
| SB6-BE2                                            | 2106189  | 1069522 | 763.9     |
| SB7-BE3                                            | 2106126  | 1070217 | 756.1     |
| SB8-PE1                                            | 2106482  | 1070288 | 749.2     |
| SB9-PE2                                            | 2106984  | 1069319 | 751.5     |



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|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>C. ANICHINI SCHAAL<br>CHECKED BY:<br>R. MUHAMMAD<br>DESIGNED BY:<br>L. VANDEN BERG P.E.<br>SUBMITTED BY:<br>J. L. CHANDLER<br>PROJECT ID:<br>444304-46C9B7 | ISSUE DATE:<br>JUNE 2026<br>DRAWING NO.:<br>W01000000-0009<br>CONTRACT NO.:<br>TBD<br>FILE NAME:<br>444304-46C9B7-B-001.dgn |
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UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

BORING LOCATION PLAN

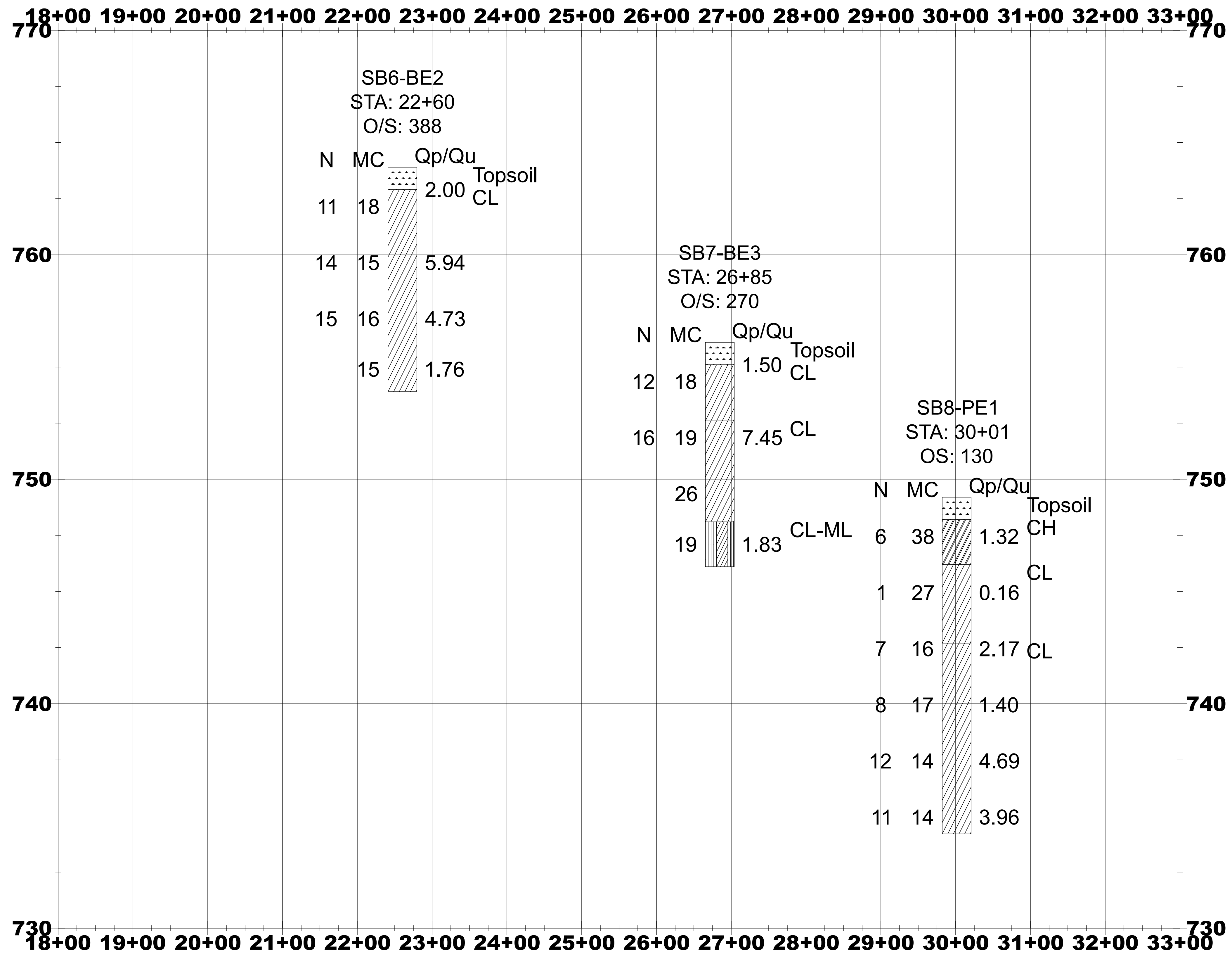
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**B-001**





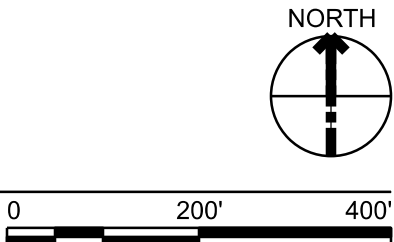












# DISABLEMENT PLAN SHEET 1

SCALE: 1"=200'

| Label | Material | Width (in.) | Length (ft.) | Depth (in.) |
|-------|----------|-------------|--------------|-------------|
| A-A   | Clay     | 8           | 246          | -           |
| A-B   | Clay     | 2.5         | 195          | 38          |
| A-C   | Clay     | 8           | 734          | -           |
| A-D   | Clay     | 3           | 178          | 36          |
| A-E   | Clay     | 2.5         | 17           | -           |
| A-F   | Clay     | 2           | 812          | 32          |
| A-G   | Clay     | 3           | 1107         | 30          |
| A-H   | Clay     | 3           | 572          | 25          |
| A-I   | Clay     | 5           | 496          | 36          |
| A-J   | Clay     | 3           | 379          | 32          |
| A-K   | Clay     | 3           | 542          | 48          |
| A-L   | Clay     | 2           | 144          | 50          |
| A-M   | Clay     | 2           | 242          | 22          |
| A-N   | Clay     | 4           | 245          | 42          |
| A-O   | Clay     | 2           | 292          | 31          |
| A-P   | Clay     | 10          | 2485         | 60          |
| A-Q   | Clay     | 5           | 209          | -           |
| A-R   | Clay     | 8           | 119          | 44          |
| A-S   | Clay     | 4           | 277          | 21          |
| A-T   | Clay     | 10          | 957          | 67          |
| A-U   | Clay     | 6           | 610          | 67          |
| B-A   | Poly     | 6           | 358          | 32          |
| B-B   | Poly     | 6           | 613          | 29          |
| B-C   | Poly     | 6           | 1217         | 36          |
| B-D   | Poly     | 6           | 2359         | 50          |
| B-E   | Poly     | 6           | 871          | 37          |
| B-F   | Poly     | 4           | 638          | 33          |
| B-G   | Poly     | 4           | 277          | 44          |
| B-H   | Poly     | 4           | 234          | 34          |
| B-I   | Poly     | 5           | 547          | 45          |
| B-J   | Poly     | 6           | 761          | 47          |
| B-K   | Poly     | 4           | 446          | 44          |
| B-L   | Poly     | 8           | 402          | 39          |
| B-M   | Poly     | 4           | 297          | 35          |
| B-N   | Poly     | 12          | 521          | 46          |
| B-O   | Poly     | 5           | 560          | -           |
| B-P   | Poly     | 8           | 27           | 34          |
| C-A   | Concrete | 8           | 85           | -           |

# CD101



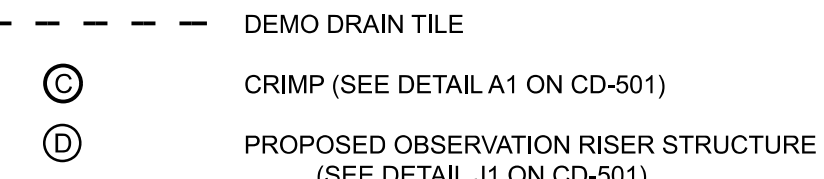


1. THE CONTRACTOR SHALL FOLLOW ALL GOVERNING REGULATIONS AND SHALL OBTAIN ALL NECESSARY PUBLIC AGENCY PERMITS. PERMITS SHALL BE OBTAINED AS REQUIRED PRIOR TO COMMENCING WITH CONSTRUCTION.
2. PRIOR TO BEGINNING CONSTRUCTION, THE CONTRACTOR SHALL FIELD VERIFY ALL DIMENSIONS, LOCATIONS AND ELEVATIONS. CONTRACTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTING OFFICER'S AUTHORIZED REPRESENTATIVE OF ANY SIGNIFICANT DISCREPANCIES.
3. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAD83) USING CURRENT GEOID, U.S. SURVEY FEET.
4. HORIZONTAL DATUM AND DISTANCES ARE REFERENCED TO LOCAL STATE PLANE, U.S. SURVEY FEET.
5. OBSTRUCTIONS VISIBLE IN THE IMAGES MAY NOT BE IN THAT LOCATION AT THE TIME OF WORK, AS OBSTRUCTIONS MAY HAVE BEEN MOVED. SITE VISITS SHOULD BE MADE TO VERIFY ANY CURRENT OBSTRUCTIONS IN THE WORK AREA, AS DESCRIBED IN THE SPECIFICATIONS.
6. EXISTING DRAIN TILE DATA WAS OBTAINED FROM A SURVEY DONE BY HEY AND ASSOCIATES, INC. COMPLETED IN NOVEMBER 2013 AND A SURVEY DONE BY HUDDLESTON MCBRIDE COMPLETED IN SEPTEMBER 2014.
7. ANY EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COORDINATED WITH COR AND WEST SHORE PIPE LINE COMPANY PRIOR TO THE START OF EXCAVATION.
8. EXCAVATION NEAR LIQUEFIED PETROLEUM LINE EASEMENT MUST BE COMPLETED DURING THE SUPERVISION OF COR AND WEST SHORE PIPE LINE COMPANY REPRESENTATIVE.
9. LINE B-O, B-P, AND C-A ARE TO BE ABANDONED IN PLACE.

## SHEET KEYNOTES

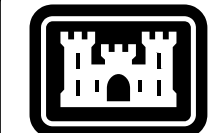
1. INSTALL ROCK CHECK DAM - (OPTION WORK). 
2. INSTALL OBSERVATION RISER STRUCTURE TO CONNECT SOLID PIPE TO EXISTING TILE AT PROPERTY LINE. RISER DEPTH TO BE CONFIRMED AFTER EXPOSURE OF LINE.
3. INSTALL SOLID PIPE. LENGTH AND DIAMETER PER PLAN.
4. ABANDON DRAIN TILE UNDER EXISTING TRAIL, PETROLEUM LINE, BERM OF PERMANENTLY PONDED WETLAND AREAS. SEE DETAIL H8 ON CD501.
5. VERIFY CULVERT INVERT ELEVATIONS WITH SURVEY.
6. INSTALL NEW STORMWATER INLET/METAL END SECTION STRUCTURE. SEE DETAIL G1 ON CD502.
7. REPLACE RIPRAP OUTLET PROTECTION. SEE DETAIL A12 ON CD502.

## LEGEND



|                                                                                       |                                                                              |
|---------------------------------------------------------------------------------------|------------------------------------------------------------------------------|
|    | CHURN TIRE                                                                   |
|    | DEMO DRAIN TILE                                                              |
|  | CRIMP (SEE DETAIL A1 ON CD-501)                                              |
|  | PROPOSED OBSERVATION RISER STRUCTURE<br>(SEE DETAIL J1 ON CD-501)            |
|  | PROPOSED SOLID PIPE (SEE DETAIL A13 ON CD-501)                               |
|  | PROPOSED ROCK CHECK DAM - (OPTION WORK)<br>(SEE DETAILS A1 AND D1 ON CD-502) |
|  | CONSTRUCTION LIMITS                                                          |
|  | EASEMENTS                                                                    |
|  | TEMPORARY STAGING AREAS                                                      |

| Label | Material | Width (in.) | Length (ft.) | Depth (in.) |
|-------|----------|-------------|--------------|-------------|
| A-A   | Clay     | 8           | 246          | -           |
| A-B   | Clay     | 2.5         | 195          | 38          |
| A-C   | Clay     | 8           | 734          | -           |
| A-D   | Clay     | 3           | 178          | 36          |
| A-E   | Clay     | 2.5         | 17           | -           |
| A-F   | Clay     | 2           | 812          | 32          |
| A-G   | Clay     | 3           | 1107         | 30          |
| A-H   | Clay     | 3           | 572          | 25          |
| A-I   | Clay     | 5           | 496          | 36          |
| A-J   | Clay     | 3           | 379          | 32          |
| A-K   | Clay     | 3           | 542          | 48          |
| A-L   | Clay     | 2           | 144          | 50          |
| A-M   | Clay     | 2           | 242          | 22          |
| A-N   | Clay     | 4           | 245          | 42          |
| A-O   | Clay     | 2           | 292          | 31          |
| A-P   | Clay     | 10          | 2485         | 60          |
| A-Q   | Clay     | 5           | 209          | -           |
| A-R   | Clay     | 8           | 119          | 44          |
| A-S   | Clay     | 4           | 277          | 21          |
| A-T   | Clay     | 10          | 957          | 67          |
| A-U   | Clay     | 6           | 610          | 67          |
| B-A   | Poly     | 6           | 358          | 32          |
| B-B   | Poly     | 6           | 613          | 29          |
| B-C   | Poly     | 6           | 1217         | 36          |
| B-D   | Poly     | 6           | 2359         | 50          |
| B-E   | Poly     | 6           | 871          | 37          |
| B-F   | Poly     | 4           | 638          | 33          |
| B-G   | Poly     | 4           | 277          | 44          |
| B-H   | Poly     | 4           | 234          | 34          |
| B-I   | Poly     | 5           | 547          | 45          |
| B-J   | Poly     | 6           | 761          | 47          |
| B-K   | Poly     | 4           | 446          | 44          |
| B-L   | Poly     | 8           | 402          | 39          |
| B-M   | Poly     | 4           | 297          | 35          |
| B-N   | Poly     | 12          | 521          | 46          |
| B-O   | Poly     | 5           | 560          | -           |
| B-P   | Poly     | 8           | 27           | 34          |
| C-A   | Concrete | 8           | 85           | -           |



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|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. NAWROK<br>CHECKED BY:<br>A. WILLIAMS<br>SUBMITTED BY:<br>L. VANDEN BERG<br>PROJECT ID:<br>444304-460397<br>FILE NAME:<br>444304-460397-CD102.dgn | ISSUE DATE:<br>JUNE 2026<br>DRAWING NO.:<br>W012P02-SR-RA009<br>CONTRACT NO.:<br>TBD |
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UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL DISABLEMENT PLAN 2

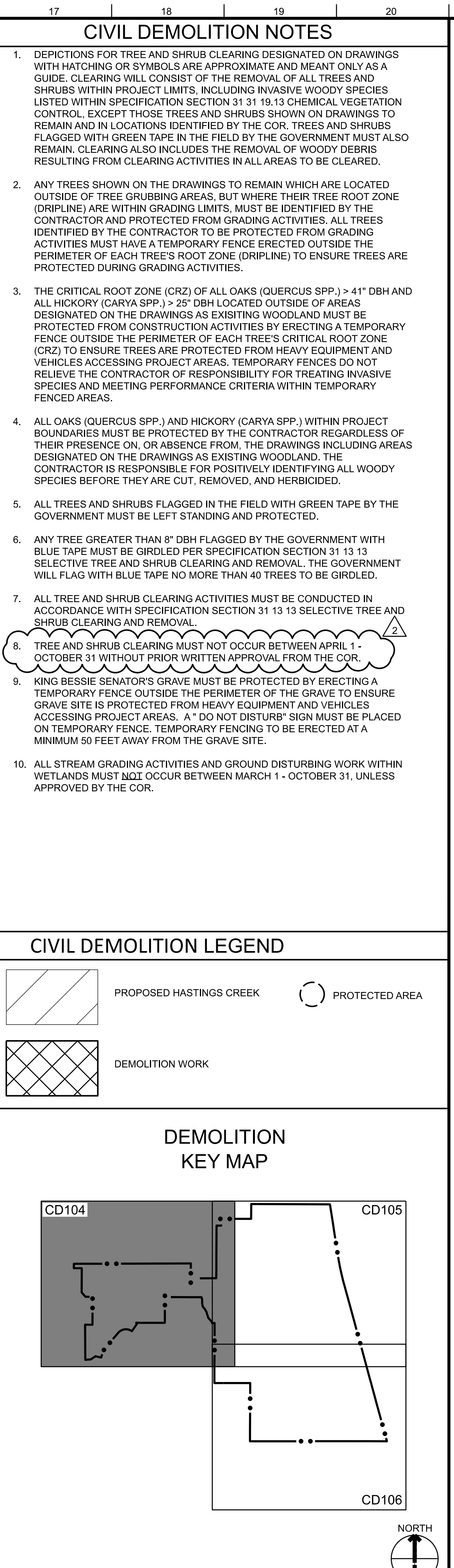
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| UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II<br>AQUATIC ECOSYSTEM RESTORATION<br>RAVEN GLEN (POLLOCK LAKE AND HASTINGS CREEK) - FOREST PRESERVE<br>ANTOCH, LAKE COUNTY, ILLINOIS<br><br>CIVIL DEMOLITION PLAN 1 |  | U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST., SUITE 1500<br>CHICAGO, ILLINOIS 60604 |  |
|                                                                                                                                                                                                                     |  | DESIGNED BY:<br>L. NAVARRO                                                                                    |  |
|                                                                                                                                                                                                                     |  | DRAWN BY:<br>A. WILLIAMS                                                                                      |  |
|                                                                                                                                                                                                                     |  | CHECKED BY:<br>L. VANDEN BERG P.E.                                                                            |  |
|                                                                                                                                                                                                                     |  | SUBMITTED BY:<br>L. VANDEN BERG P.E.                                                                          |  |
|                                                                                                                                                                                                                     |  | ISSUE DATE:<br>JUNE 2025                                                                                      |  |
|                                                                                                                                                                                                                     |  | SOLICITATION NO.:<br>W912P62-R-A-009                                                                          |  |
|                                                                                                                                                                                                                     |  | CONTRACT NO.:<br>TBD                                                                                          |  |
|                                                                                                                                                                                                                     |  | PROJECT ID:<br>44304-66C9B7                                                                                   |  |
|                                                                                                                                                                                                                     |  | FILE NAME:<br>SIZE:                                                                                           |  |
|                                                                                                                                                                                                                     |  | ANSI D<br>44304-66C9B7-CD104.dgn                                                                              |  |
|                                                                                                                                                                                                                     |  | MARK<br>2                                                                                                     |  |
|                                                                                                                                                                                                                     |  | GENERAL UPDATES<br>DESCRIPTION                                                                                |  |
|                                                                                                                                                                                                                     |  | DATE                                                                                                          |  |





### CIVIL DEMOLITION NOTES

- DEPICTIONS FOR TREE AND SHRUB CLEARING DESIGNATED ON DRAWINGS WITH HATCHING OR SYMBOLS ARE APPROXIMATE AND MEANT ONLY AS A GUIDE. CLEARING WILL CONSIST OF THE REMOVAL OF ALL TREES AND SHRUBS WITHIN PROJECT LIMITS, INCLUDING INVASIVE WOODY SPECIES LISTED WITHIN SPECIFICATION SECTION 31 31 19.13 CHEMICAL VEGETATION CONTROL, EXCEPT THOSE TREES AND SHRUBS SHOWN ON DRAWINGS TO REMAIN AND IN LOCATIONS IDENTIFIED BY THE COR. TREES AND SHRUBS FLAGGED WITH GREEN TAPE IN THE FIELD BY THE GOVERNMENT MUST ALSO REMAIN. CLEARING ALSO INCLUDES THE REMOVAL OF WOODY DEBRIS RESULTING FROM CLEARING ACTIVITIES IN ALL AREAS TO BE CLEARED.
- ANY TREES SHOWN ON THE DRAWINGS TO REMAIN WHICH ARE LOCATED OUTSIDE OF TREE GRUBBING AREAS, BUT WHERE THEIR TREE ROOT ZONE (DRIPLINE) ARE WITHIN GRADING LIMITS, MUST BE IDENTIFIED BY THE CONTRACTOR AND PROTECTED FROM GRADING ACTIVITIES. ALL TREES IDENTIFIED BY THE CONTRACTOR TO BE PROTECTED FROM GRADING ACTIVITIES MUST HAVE A TEMPORARY FENCE ERECTED OUTSIDE THE PERIMETER OF EACH TREE'S ROOT ZONE (DRIPLINE) TO ENSURE TREES ARE PROTECTED DURING GRADING ACTIVITIES.
- THE CRITICAL ROOT ZONE (CRZ) OF ALL OAKS (QUERCUS SPP.) > 41" DBH AND ALL HICKORY (CARYA SPP.) > 25" DBH LOCATED OUTSIDE OF AREAS DESIGNATED ON THE DRAWINGS AS EXISTING WOODLAND MUST BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY ERECTING A TEMPORARY FENCE OUTSIDE THE PERIMETER OF EACH TREE'S CRITICAL ROOT ZONE (CRZ) TO ENSURE TREES ARE PROTECTED FROM HEAVY EQUIPMENT AND VEHICLES ACCESSING PROJECT AREAS. TEMPORARY FENCES DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR TREATING INVASIVE SPECIES AND MEETING PERFORMANCE CRITERIA WITHIN TEMPORARY FENCED AREAS.
- ALL OAKS (QUERCUS SPP.) AND HICKORY (CARYA SPP.) WITHIN PROJECT BOUNDARIES MUST BE PROTECTED BY THE CONTRACTOR REGARDLESS OF THEIR PRESENCE ON, OR ABSENCE FROM, THE DRAWINGS INCLUDING AREAS DESIGNATED ON THE DRAWINGS AS EXISTING WOODLAND. THE CONTRACTOR IS RESPONSIBLE FOR POSITIVELY IDENTIFYING ALL WOODY SPECIES BEFORE THEY ARE CUT, REMOVED, AND HERBICIDED.
- ALL TREES AND SHRUBS FLAGGED IN THE FIELD WITH GREEN TAPE BY THE GOVERNMENT MUST BE LEFT STANDING AND PROTECTED.
- ANY TREE GREATER THAN 8" DBH FLAGGED BY THE GOVERNMENT WITH BLUE TAPE MUST BE GIRDLED PER SPECIFICATION SECTION 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL. THE GOVERNMENT WILL FLAG WITH BLUE TAPE NO MORE THAN 40 TREES TO BE GIRDLED.
- ALL TREE AND SHRUB CLEARING ACTIVITIES MUST BE CONDUCTED IN ACCORDANCE WITH SPECIFICATION SECTION 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL.
- TREE AND SHRUB CLEARING MUST NOT OCCUR BETWEEN APRIL 1 - OCTOBER 31 WITHOUT PRIOR WRITTEN APPROVAL FROM THE COR.
- KING BESSIE SENATOR'S GRAVE MUST BE PROTECTED BY ERECTING A TEMPORARY FENCE OUTSIDE THE PERIMETER OF THE GRAVE TO ENSURE GRAVE SITE IS PROTECTED FROM HEAVY EQUIPMENT AND VEHICLES ACCESSING PROJECT AREAS. A "DO NOT DISTURB" SIGN MUST BE PLACED ON TEMPORARY FENCE. TEMPORARY FENCING TO BE ERECTED AT A MINIMUM 50 FEET AWAY FROM THE GRAVE SITE.
- ALL STREAM GRADING ACTIVITIES AND GROUND DISTURBING WORK WITHIN WETLANDS MUST NOT OCCUR BETWEEN MARCH 1 - OCTOBER 31, UNLESS APPROVED BY THE COR.

### CIVIL DEMOLITION LEGEND

PROPOSED HASTINGS CREEK

PROTECTED AREA

DEMOLITION WORK

### DEMOLITION KEY MAP

CD104

CD105

CD106

NORTH

U.S. ARMY CORPS OF ENGINEERS  
CHICAGO DISTRICT  
231 S. LA SALLE ST. SUITE 1500  
CHICAGO, ILLINOIS 60604

ISSUE DATE:  
JUNE 2026

SOLICITATION NO.:  
CD104-2026-0009

CONTRACT NO.:  
TBD

CHECKED BY:  
L. VANDEN BERG P.E.

SUBMITTED BY:  
L. VANDEN BERG P.E.

PROJECT ID:  
444304-66C9B7

FILE NAME:  
444304-66C9B7-CD105.dgn

ANSI D

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL DEMOLITION PLAN 2

SHEET ID

CD105

US Army Corps of Engineers®

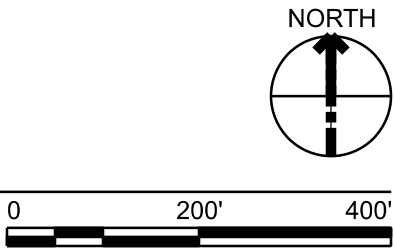
444304-66C9B7-CD105.dgn

PD: 11:13:51 AM 7/27/2026

DS:

CERTIFIED FINAL DOCUMENTS - RTA





- ### CIVIL DEMOLITION NOTES
1. DEPICTIONS FOR TREE AND SHRUB CLEARING DESIGNATED ON DRAWINGS WITH HATCHING OR SYMBOLS ARE APPROXIMATE AND MEANT ONLY AS A GUIDE. CLEARING WILL CONSIST OF THE REMOVAL OF ALL TREES AND SHRUBS WITHIN PROJECT LIMITS, INCLUDING INVASIVE WOODY SPECIES LISTED WITHIN SPECIFICATION SECTION 31 31 19.13 CHEMICAL VEGETATION CONTROL, EXCEPT THOSE TREES AND SHRUBS SHOWN ON DRAWINGS TO REMAIN AND IN LOCATIONS IDENTIFIED BY THE COR. TREES AND SHRUBS FLAGGED WITH GREEN TAPE IN THE FIELD BY THE GOVERNMENT MUST ALSO REMAIN. CLEARING ALSO INCLUDES THE REMOVAL OF WOODY DEBRIS RESULTING FROM CLEARING ACTIVITIES IN ALL AREAS TO BE CLEARED.
  2. ANY TREES SHOWN ON THE DRAWINGS TO REMAIN WHICH ARE LOCATED OUTSIDE OF TREE GRUBBING AREAS, BUT WHERE THEIR TREE ROOT ZONE (DRIPLINE) ARE WITHIN GRADING LIMITS, MUST BE IDENTIFIED BY THE CONTRACTOR AND PROTECTED FROM GRADING ACTIVITIES. ALL TREES IDENTIFIED BY THE CONTRACTOR TO BE PROTECTED FROM GRADING ACTIVITIES MUST HAVE A TEMPORARY FENCE ERECTED OUTSIDE THE PERIMETER OF EACH TREE'S ROOT ZONE (DRIPLINE) TO ENSURE TREES ARE PROTECTED DURING GRADING ACTIVITIES.
  3. THE CRITICAL ROOT ZONE (CRZ) OF ALL OAKS (QUERCUS SPP.) > 41" DBH AND ALL HICKORY (CARYA SPP.) > 25" DBH LOCATED OUTSIDE OF AREAS DESIGNATED ON THE DRAWINGS AS EXISTING WOODLAND MUST BE PROTECTED FROM CONSTRUCTION ACTIVITIES BY ERECTING A TEMPORARY FENCE OUTSIDE THE PERIMETER OF EACH TREE'S CRITICAL ROOT ZONE (CRZ) TO ENSURE TREES ARE PROTECTED FROM HEAVY EQUIPMENT AND VEHICLES ACCESSING PROJECT AREAS. TEMPORARY FENCES DO NOT RELIEVE THE CONTRACTOR OF RESPONSIBILITY FOR TREATING INVASIVE SPECIES AND MEETING PERFORMANCE CRITERIA WITHIN TEMPORARY FENCED AREAS.
  4. ALL OAKS (QUERCUS SPP.) AND HICKORY (CARYA SPP.) WITHIN PROJECT BOUNDARIES MUST BE PROTECTED BY THE CONTRACTOR REGARDLESS OF THEIR PRESENCE ON, OR ABSENCE FROM, THE DRAWINGS INCLUDING AREAS DESIGNATED ON THE DRAWINGS AS EXISTING WOODLAND. THE CONTRACTOR IS RESPONSIBLE FOR POSITIVELY IDENTIFYING ALL WOODY SPECIES BEFORE THEY ARE CUT, REMOVED, AND HERBICIDED.
  5. ALL TREES AND SHRUBS FLAGGED IN THE FIELD WITH GREEN TAPE BY THE GOVERNMENT MUST BE LEFT STANDING AND PROTECTED.
  6. ANY TREE GREATER THAN 8" DBH FLAGGED BY THE GOVERNMENT WITH BLUE TAPE MUST BE GIRDLED PER SPECIFICATION SECTION 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL. THE GOVERNMENT WILL FLAG WITH BLUE TAPE NO MORE THAN 40 TREES TO BE GIRDLED.
  7. ALL TREE AND SHRUB CLEARING ACTIVITIES MUST BE CONDUCTED IN ACCORDANCE WITH SPECIFICATION SECTION 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL.
  8. TREE AND SHRUB CLEARING MUST NOT OCCUR BETWEEN APRIL 1 - OCTOBER 31 WITHOUT PRIOR WRITTEN APPROVAL FROM THE COR.
  9. KING BESSIE SENATOR'S GRAVE MUST BE PROTECTED BY ERECTING A TEMPORARY FENCE OUTSIDE THE PERIMETER OF THE GRAVE TO ENSURE GRAVE SITE IS PROTECTED FROM HEAVY EQUIPMENT AND VEHICLES ACCESSING PROJECT AREAS. A "DO NOT DISTURB" SIGN MUST BE PLACED ON TEMPORARY FENCE. TEMPORARY FENCING TO BE ERECTED AT A MINIMUM 50 FEET AWAY FROM THE GRAVE SITE.
  10. ALL STREAM GRADING ACTIVITIES AND GROUND DISTURBING WORK WITHIN WETLANDS MUST NOT OCCUR BETWEEN MARCH 1 - OCTOBER 31, UNLESS APPROVED BY THE COR.

### CIVIL DEMOLITION LEGEND

PROPOSED HASTINGS CREEK

PROTECTED AREA

DEMOLITION WORK

### DEMOLITION KEY MAP

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL DEMOLITION PLAN 3

SHEET ID

CD106

444304-66C9B7-CD106.dgn

|                                      |                                       |
|--------------------------------------|---------------------------------------|
| DESIGNED BY:<br>L. NAVARRO           | ISSUE DATE:<br>JUNE 2026              |
| DRAWN BY:<br>L. NAVARRO              | SOLICITATION NO.:<br>CD106-26-0009    |
| CHECKED BY:<br>L. VANDEN BERG P.E.   | CONTRACT NO.:<br>TBD                  |
| SUBMITTED BY:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-66C9B7          |
| SIZE:<br>ANSI D                      | FILE NAME:<br>444304-66C9B7-CD106.dgn |

U.S. ARMY CORPS OF ENGINEERS  
CHICAGO DISTRICT  
231 S. LA SALLE ST. SUITE 1500  
CHICAGO, ILLINOIS 60604

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL DEMOLITION PLAN 3





**A1** WATER CONTROL STRUCTURE - UPSTREAM  
SCALE: NTS



**A11** WATER CONTROL STRUCTURE - UP-STREAM -  
ENGULFING TREE  
SCALE: NTS

CERTIFIED FINAL DOCUMENTS - RTA

44430+46C9B7-CD407.dgn      PD: 11:15:08 AM 7/27/2026      DS:





H1 DOWNSTREAM OF CULVERT CROSSING AT CREEK  
SCALE: NTS

SCALE: NTS



H11 TOP OF EXISTING CULVERT CROSSING  
SCALE: NTS

SCALE: NTS



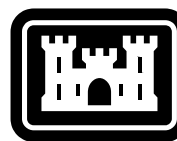
RAVEN GLEN - HASTINGS CREEK TRAIL  
CULVERT EAST SIDE (OUTFALL)

SCALE: NTS



RAVEN GLEN - HASTINGS CREEK TRAIL  
CULVERT - WEST SIDE

SCALE: NTS



|           |                                              |            |
|-----------|----------------------------------------------|------------|
| A<br>MARY | SHEET REMOVED - NOT PART OF CONTRACT SECTION | 06/25/2026 |
|           |                                              | 25         |

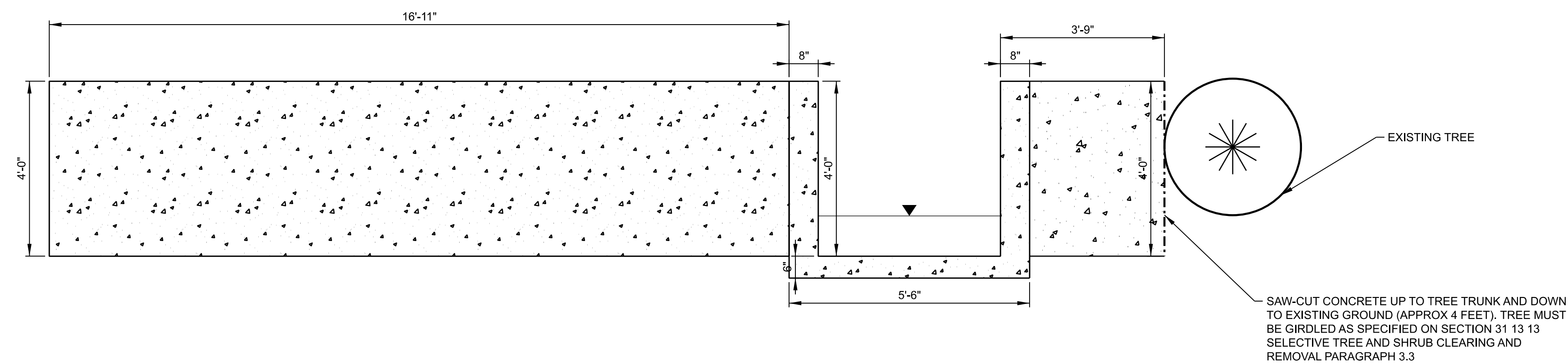
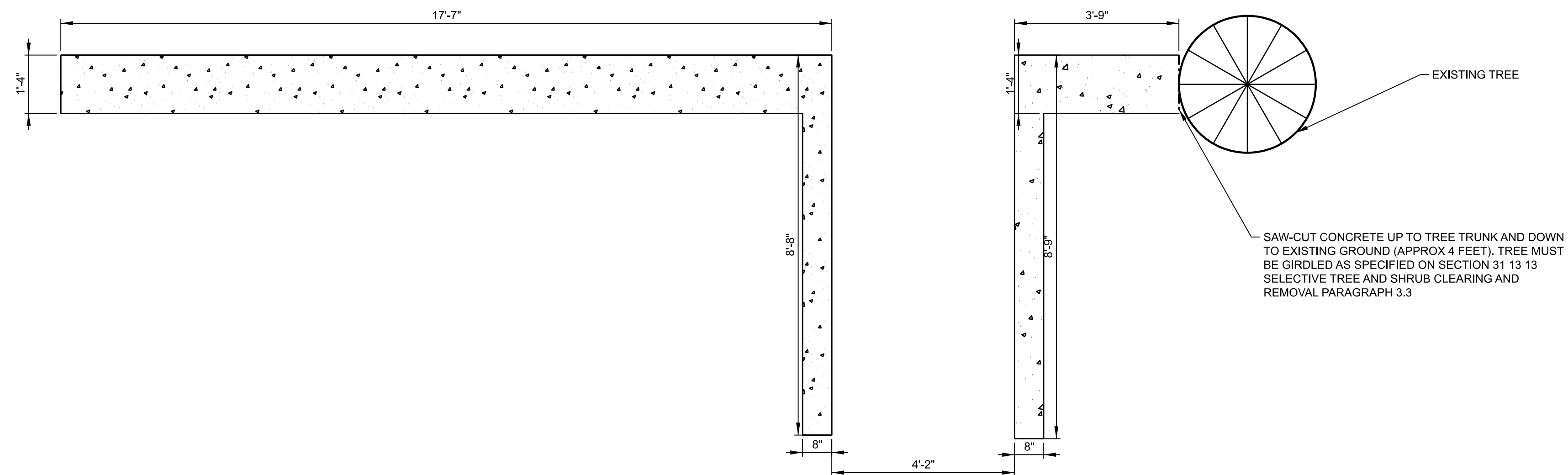
|                                                                                                              |                                                                                                                                     |                                                                                               |                          |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. NAVARO<br>DRAWN BY:<br>R. MUHAMMAD<br>CHECKED BY:<br>L. VANDEN BERG P.E.<br>SUBMITTED BY:<br>L. VANDEN BERG P.E. | SOLICITATION NO.:<br>W912P62-6-R-A009<br>CONTRACT NO.:<br>TBD<br>PROJECT ID:<br>444304-48C9B7 | ISSUE DATE:<br>JUNE 2026 |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|--------------------------|

UPPER DIES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
HRAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

PROJECT DEMOLITION PHOTOGRAPHS 2

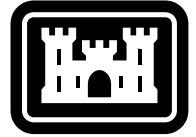
SHEET ID  
CD402





# F1 WATER CONTROL STRUCTURE PLAN SCALE: N.T.S

**A1** WATER CONTROL STRUCTURE SECTION  
SCALE: N.T.S.

[illegible]

|                                                                                                              |                                                                                                                                                                                                        |                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. NAVARRO<br><br>DRAWN BY:<br>R. MUHAMMAD<br><br>CHECKED BY:<br>L. VANDEN BERG P.E.<br><br>SUBMITTED BY:<br>L. VANDEN BERG P.E.<br><br>SIZE:<br>FILE NAME:<br>444304-66C987-CD500.dgn | ISSUE DATE:<br>JUNE 2026<br><br>SPECIFICATION NO:<br>W912P62-6-R-A009<br><br>CONTRACT NO.:<br>TBD<br><br>PROJECT ID:<br>444304-66C987 |
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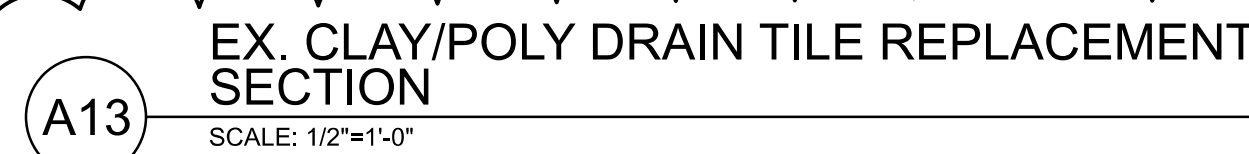
UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

OPTION - WATER CONTROL STRUCTURE PLAN AND SECTION

SHEET ID

CD500





1. THESE DETAILS MAY BE ADJUSTED WITH THE APPROVAL OF THE COR. ALL CHANGES SHALL BE RECORDED ON FINAL AS-BUILT DRAWINGS.

[illegible]

|                                                                                                              |                                     |                                        |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------|----------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. NAVARRO          | ISSUE DATE:<br>JUNE 2026               |
|                                                                                                              | DRAWN BY:<br>R. WU                  | SOLICITATION NO.:<br>W912P0232-RAJ019  |
|                                                                                                              | CHECKED BY:<br>M. MUHAMMAD          | CONTRACT NO.:<br>CONTRACT NO.          |
|                                                                                                              | DESIGNED BY:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-66G3987          |
|                                                                                                              | SIZE:<br>L. VANDEN BERG P.E.        | FILE NAME:<br>444304-66G3987-C0501.dgn |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL DEMOLITION DETAILS

SHEET ID  
CD501



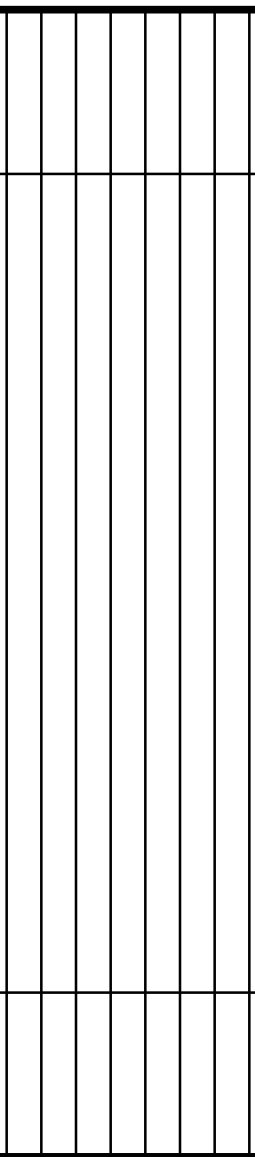






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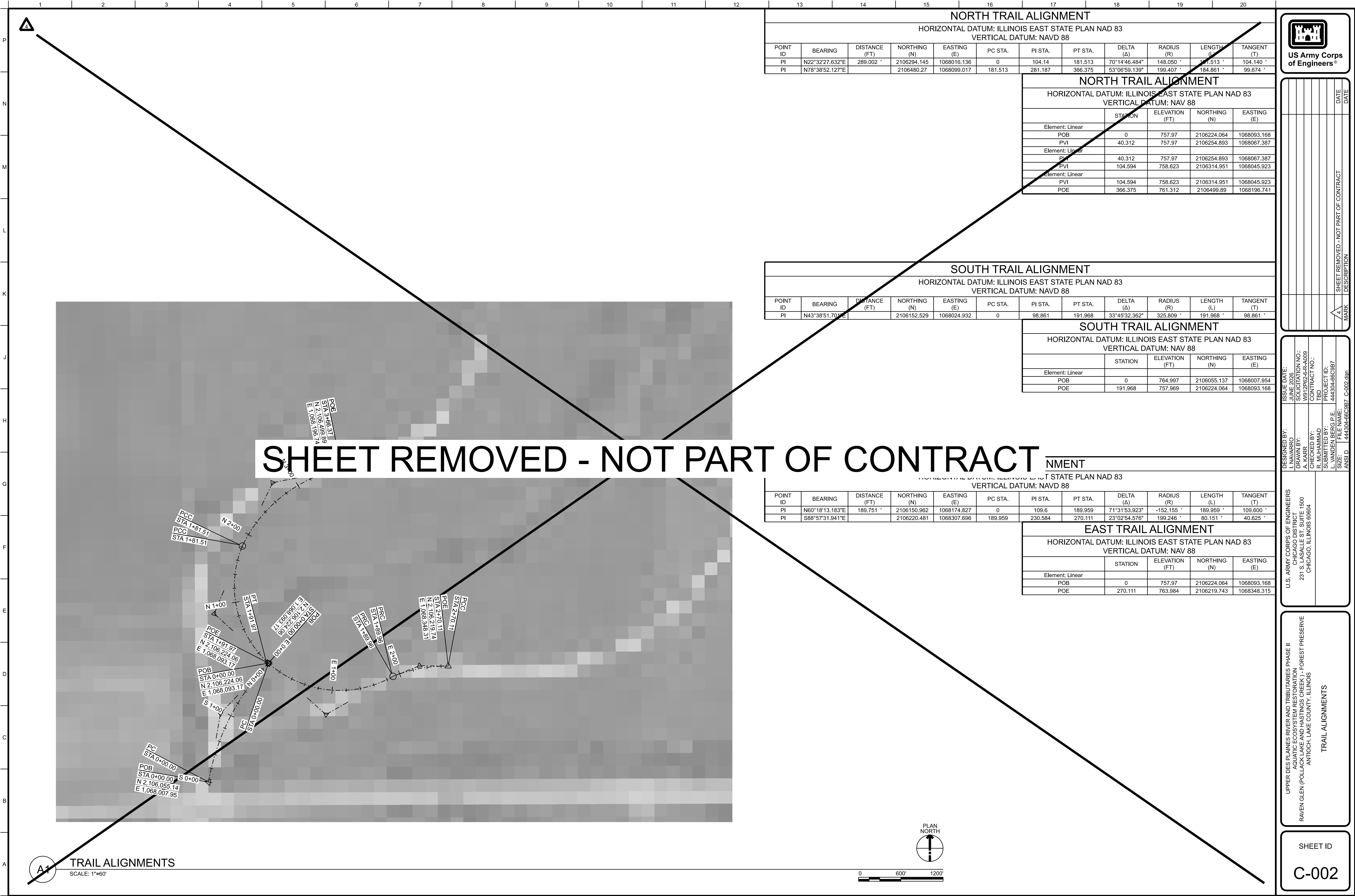
| HASTING CREEK ALIGNMENT                          |         |           |                 |             |
|--------------------------------------------------|---------|-----------|-----------------|-------------|
| HORIZONTAL DATUM ILLINOIS EAST STATE PLAN NAD 83 |         |           |                 |             |
| VERTICAL DATUM NAVD 88                           |         |           |                 |             |
|                                                  | STATION | ELEVATION | NORTHING<br>(Y) | EASTING (X) |
| Element: Linear                                  |         |           |                 |             |
| POB                                              | 0+00    | 748.425   | 2106267.032     | 1067967.506 |
| POE                                              | 36+93   | 743.659   | 2106984.096     | 1070765.164 |



UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

C-001





US Army Corps of Engineers®

|                                      |                                                                                                   |                            |                                      |                                       |
|--------------------------------------|---------------------------------------------------------------------------------------------------|----------------------------|--------------------------------------|---------------------------------------|
| ISSUE DATE:<br>JUNE 2028             | SOLICITATION NO.:<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | CONTRACT NO.:<br>C-002     | PROJECT ID:<br>444304-66C9B7         | FILE NAME:<br>444304-66C9B7_C-002.gdp |
| DESIGNED BY:<br>L. NAVARRO           | DRAWN BY:<br>R. MUHAMMAD                                                                          | CHECKED BY:<br>R. MUHAMMAD | SUBMITTED BY:<br>L. VANDEN BERG P.E. | ANSI D:                               |
| SHEET REMOVED - NOT PART OF CONTRACT |                                                                                                   |                            |                                      |                                       |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

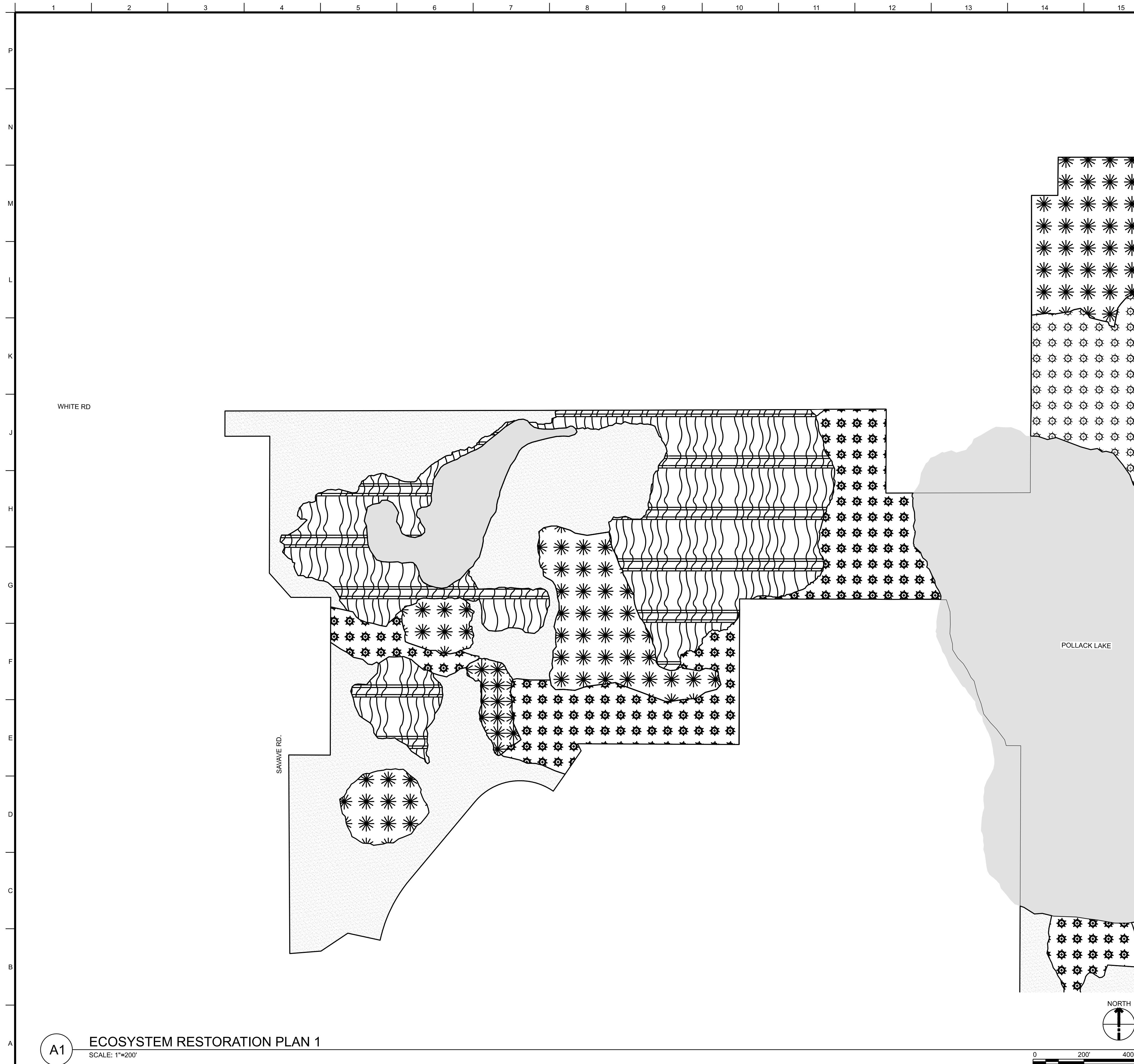
TRAIL ALIGNMENTS

SHEET ID

C-002

CERTIFIED FINAL DOCUMENTS - RTA





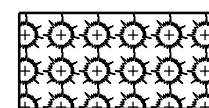
## ECO-RESTORATION GENERAL NOTES

1. INVASIVE SPECIES TREATMENTS AND CONTROL MUST BE PERFORMED IN ALL AREAS WITHIN PROJECT LIMITS AND IN ACCORDANCE WITH SPECIFICATION SECTION 31 31 19.13 CHEMICAL VEGETATION CONTROL AND SPECIFICATION SECTION 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES TO MEET PERFORMANCE CRITERIA.
2. SEEDING AND PLANTING MUST OCCUR IN ALL AREAS WITHIN PROJECT LIMITS AND IN ACCORDANCE WITH SPECIFICATION SECTION 32 92 19.10 NATIVE PLANTS AND SPECIFICATION SECTION 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES.
3. PRESCRIBED BURNS MUST BE PERFORMED IN ALL AREAS WITHIN PROJECT LIMITS AND IN ACCORDANCE WITH SPECIFICATION SECTION 31 31 19.16 PRESCRIPTION BURNING.
4. SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL MUST BE PERFORMED IN ALL AREAS WITHIN PROJECT LIMITS AND IN ACCORDANCE WITH SPECIFICATION SECTION 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL.
5. DEPICTIONS FOR RESTORATION WORK DESIGNATED ON DRAWINGS WITH HATCHING OR SYMBOLS ARE APPROXIMATE AND MEANT ONLY AS A GUIDE. THE CONTRACTOR MUST COORDINATE WITH THE COR AND LANDOWNER TO PROVIDE PLANS OF RESTORATION WORK INCLUDED IN VARIOUS SUBMITTALS FOR APPROVAL REQUIRED UNDER THE SPECIFICATIONS LISTED ABOVE AND SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION AND COORDINATED WITH ALL OTHER CONSTRUCTION ACTIVITIES AND SPECIFICATIONS.
6. COBBLE BARS AND COBBLE BARS WITH BOULDER CLUSTERS ARE TO BE PLACED IN THE INSIDE BEND OF THE CHANNEL UNLESS OTHERWISE NOTED.

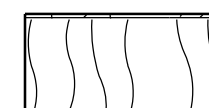
## ECO-RESTORATION LEGEND



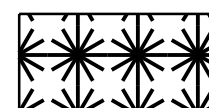
HASTINGS CREEK



SAVANNA



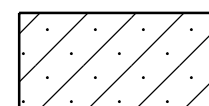
WETLAND



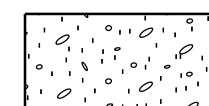
WOODLAND



OLD FIELD /  
DEGRADED PRAIRIE



TURF

AG /  
PRAIRIE CONVERSION

WATER



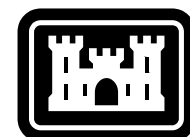
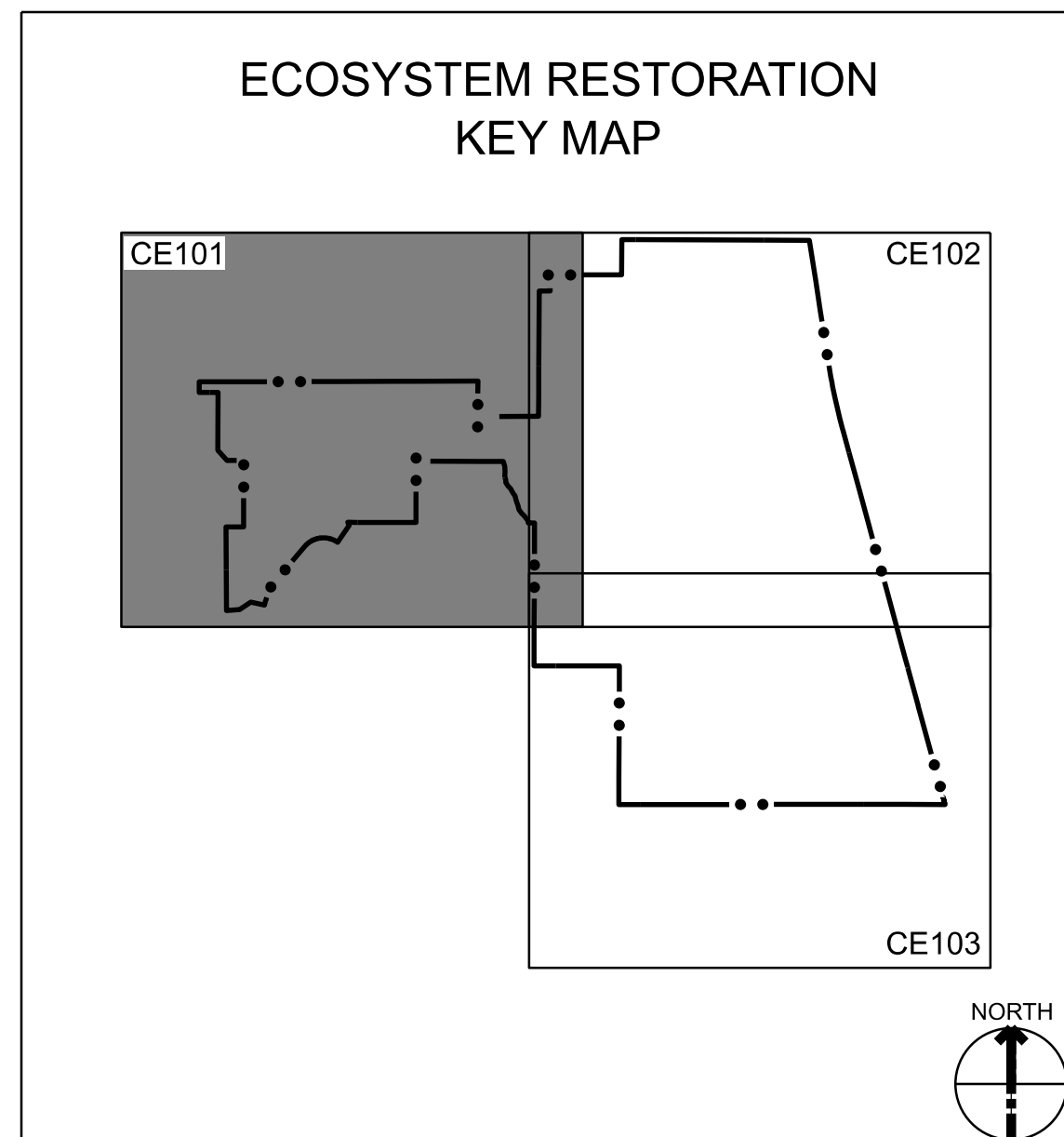
COBBLE BAR (SEE SHEET CE501 - DETAIL H1)



COBBLE BAR WITH BOULDER CLUSTER (SEE SHEET CE501 - DETAIL A1)



RIFFLE (SEE SHEET CE501 - DETAIL H11)



**US Army Corps  
of Engineers®**

[illegible]

|                                                                                                               |                                       |                                   |
|---------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. INABARRIO          | ISSUE DATE:<br>JUNE 2026          |
|                                                                                                               | DRAWN BY:<br>CHICAGO DISTRICT         | SOLICITATION NO.:<br>CPCD-PRC-089 |
|                                                                                                               | CHECKED BY:<br>L. VANDEN BERG P.E.    | CONTRACT NO.:<br>TBD              |
|                                                                                                               | SUBMITTED BY:<br>L. VANDEN BERG P.E.  | PROJECT ID:<br>441304-665987      |
|                                                                                                               | ANSI/ISO<br>441304-665987-2-F-101.dwg |                                   |

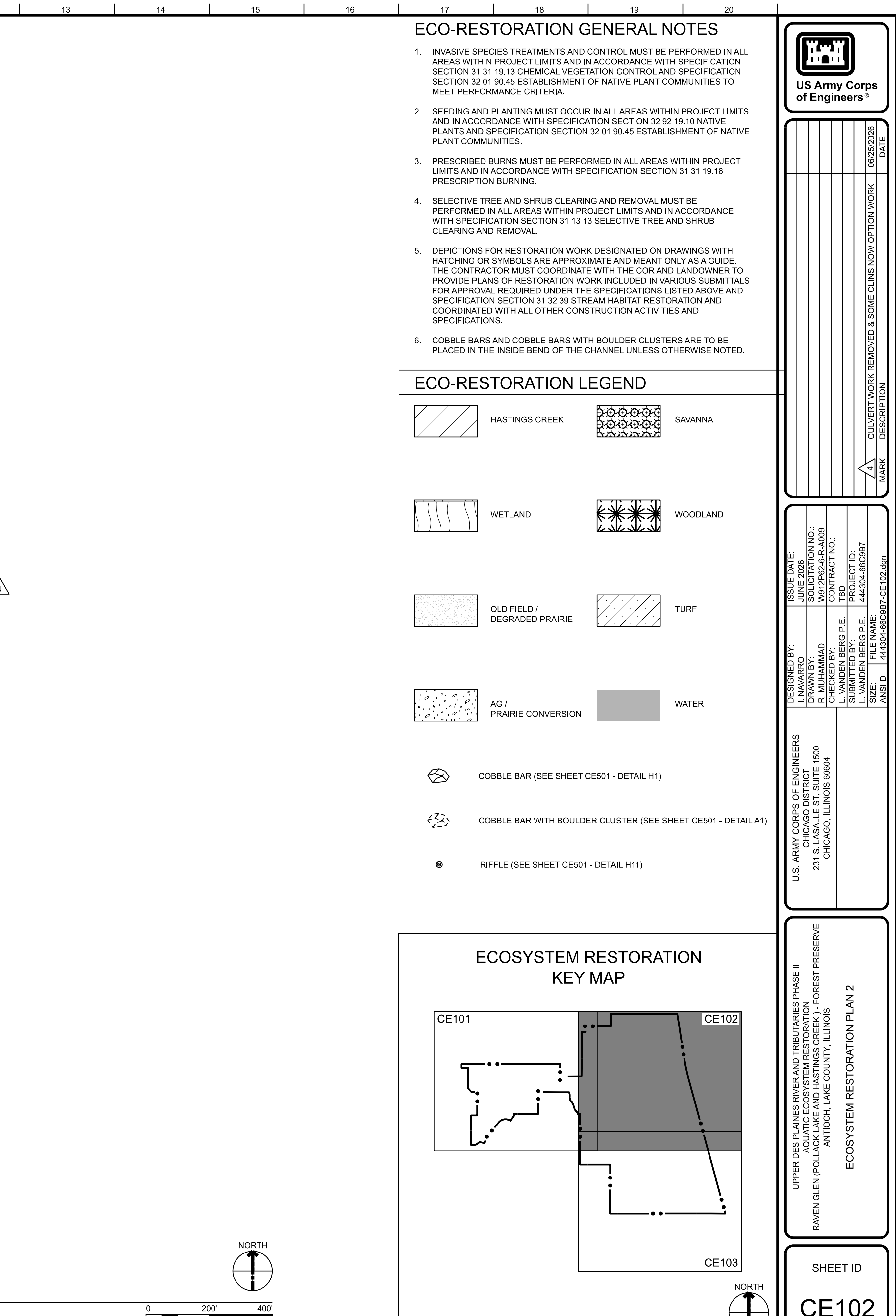
UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

ECOSYSTEM RESTORATION PLAN 1

SHEET ID

# CE101



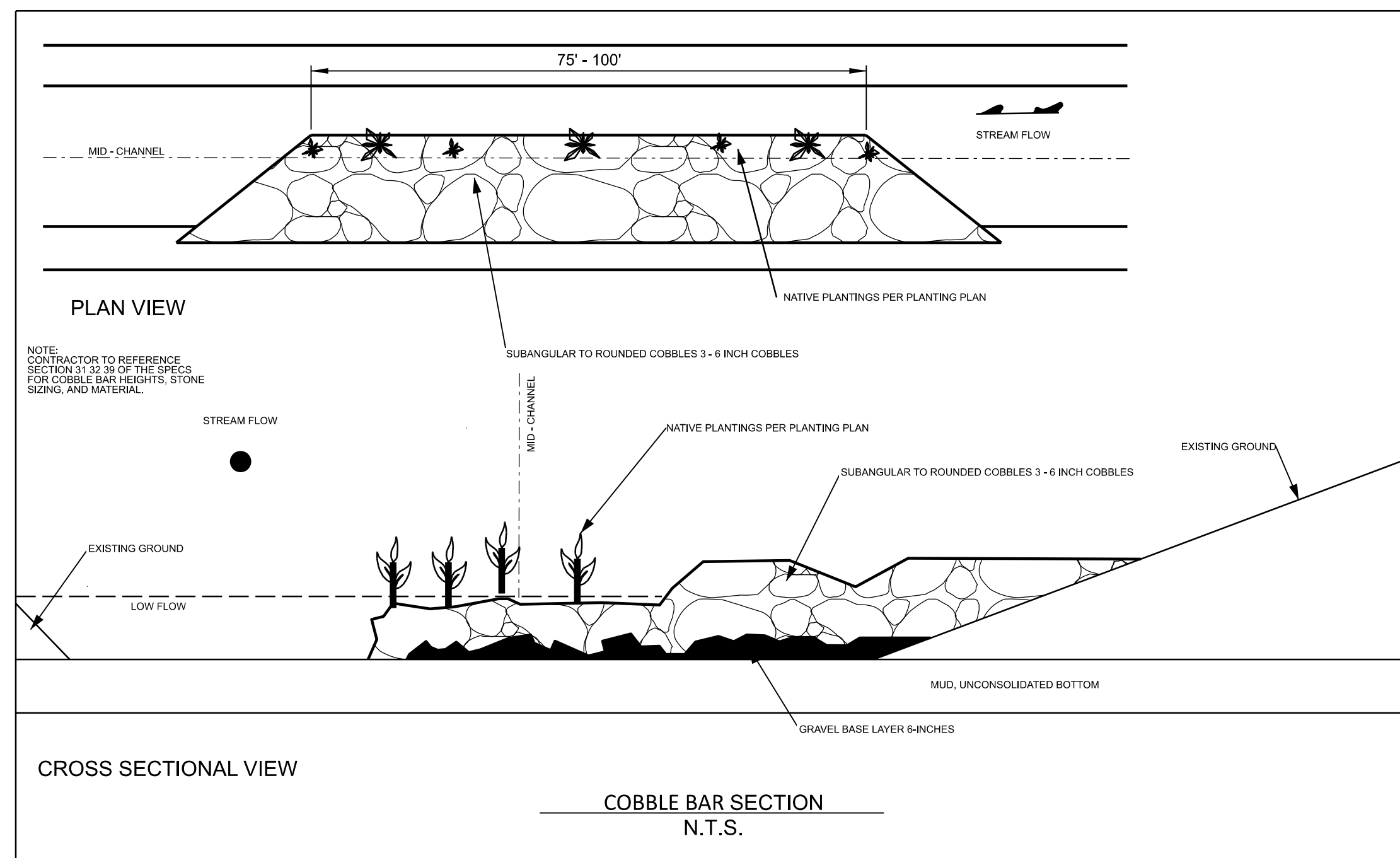


RTIFIED FINAL DOCUMENTS - RTA

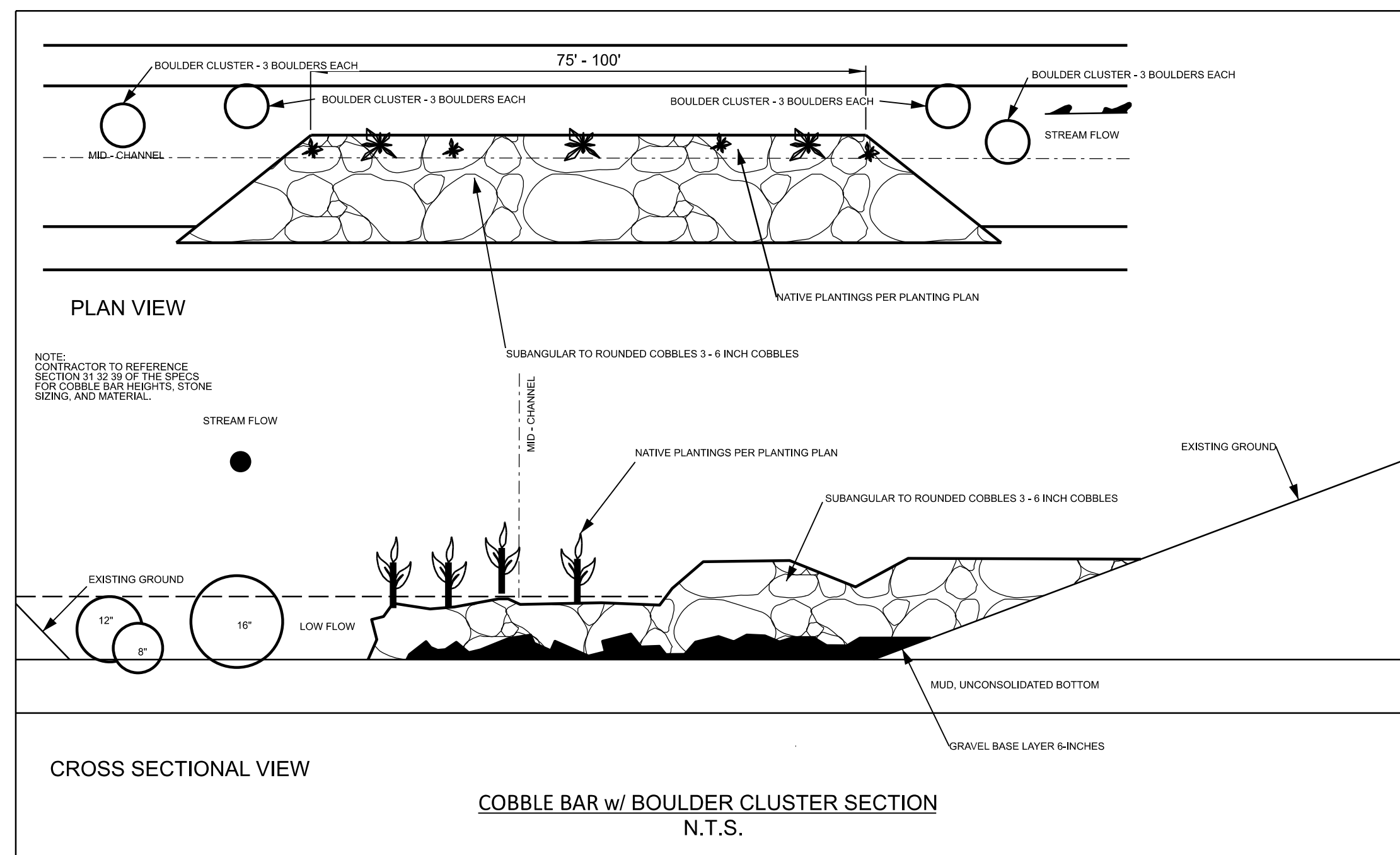




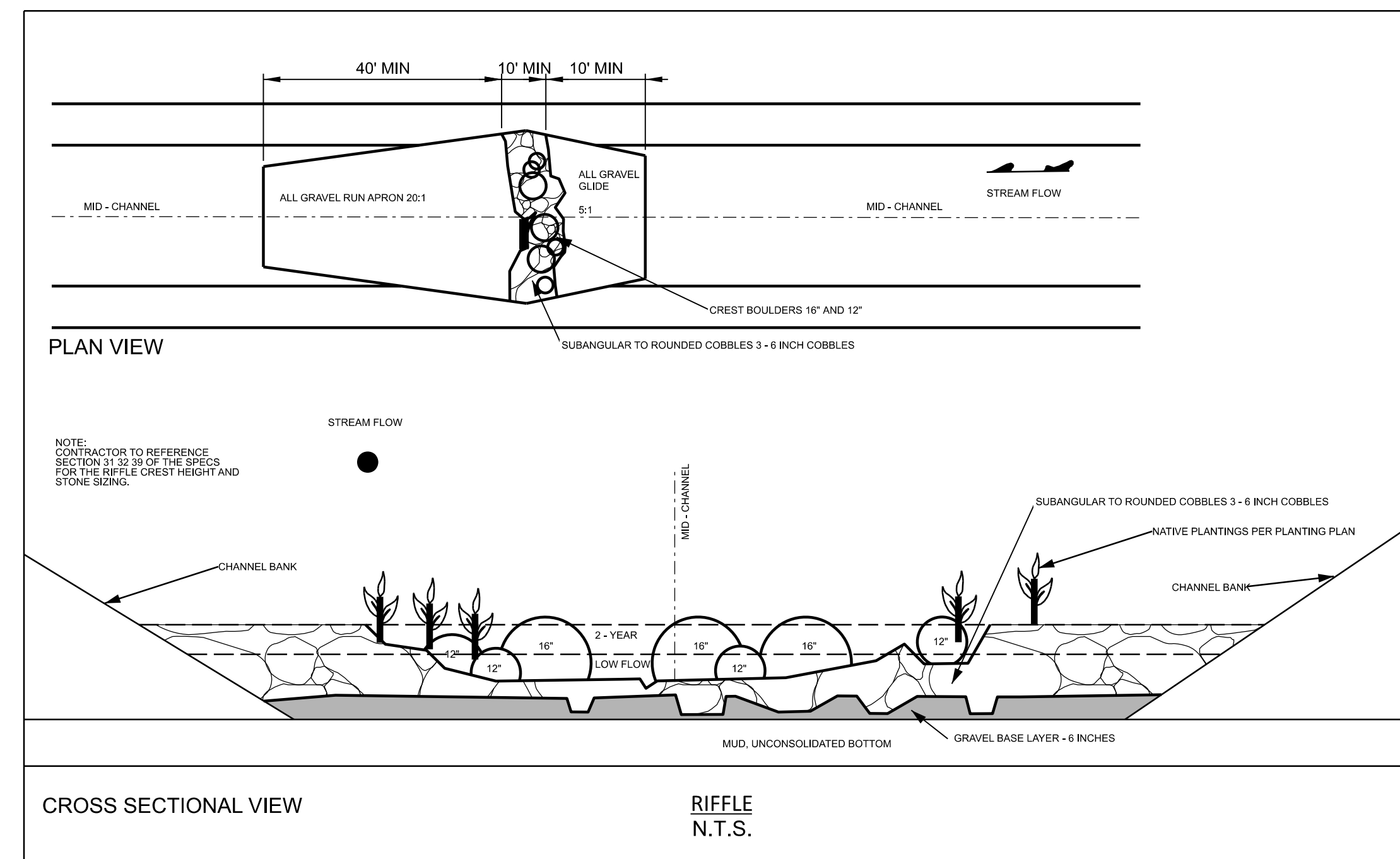




H1 TYPICAL COBBLE BAR  
SCALE: NTS



A1 TYPICAL COBBLE BAR W/ BOULDER CLUSTERS  
SCALE: NTS



**H11** **TYPICAL RIFFLE**  
SCALE: NTS

[illegible]

|                                                                                                              |                                                                                                                                        |                                                                                                             |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>DRAWN BY:<br>CHECKED BY:<br>L. VANDEN BERG P.E.<br>SUBMITTED BY:<br>L. VANDEN BERG P.E.<br>FILE NAME:<br>444304-66C9B7 | ISSUE DATE:<br>SOLICITATION NO.:<br>W91262-6-R-0009<br>CONTRACT NO.:<br>TBD<br>PROJECT ID:<br>444304-66C9B7 |
|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

SHEET ID  
CE501





SCALE: 1"=200'

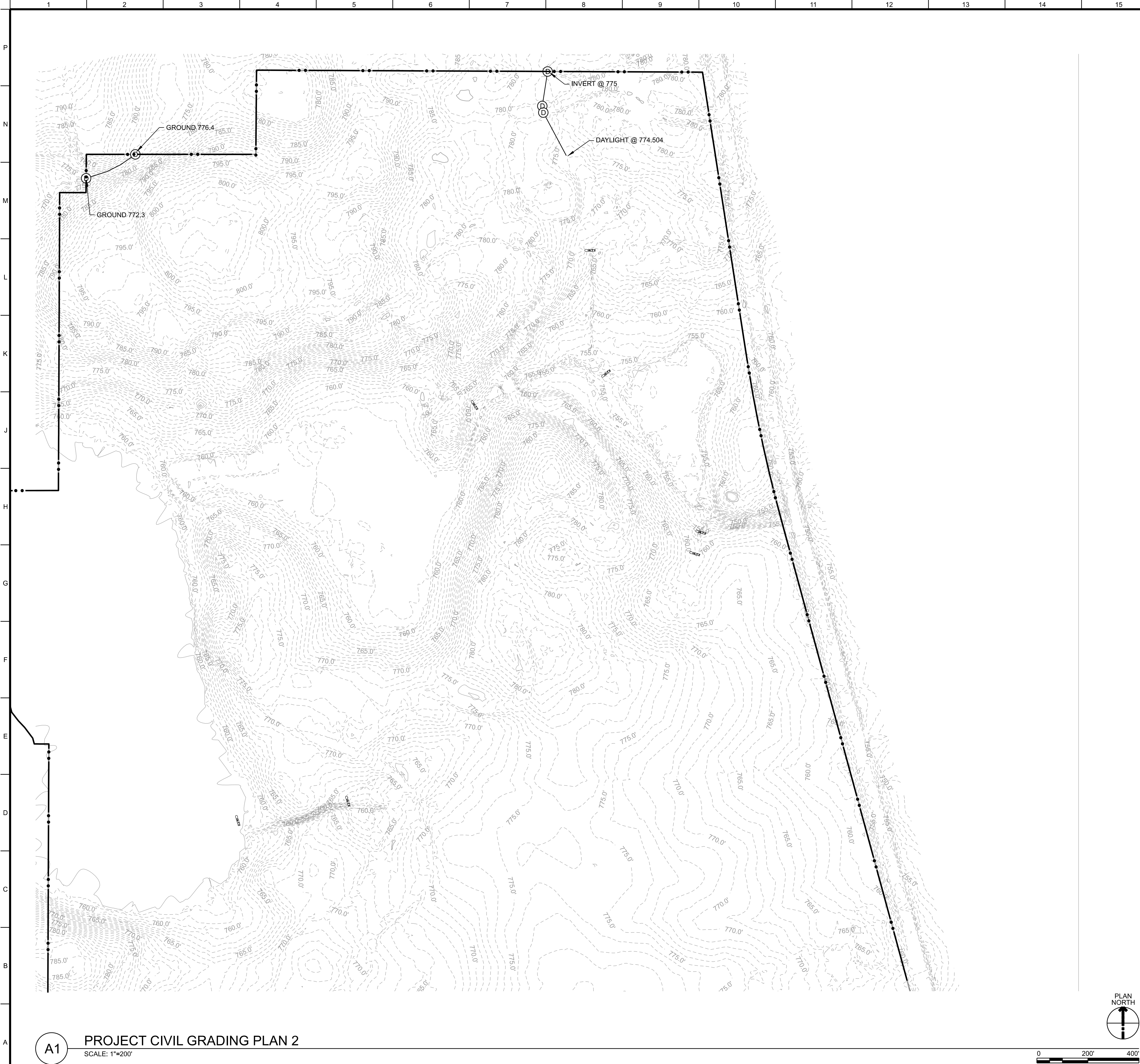


SHEET ID  
CG101

1. ALL STREAM GRADING ACTIVITIES AND GROUND DISTURBING WORK WITHIN WETLANDS MUST NOT OCCUR BETWEEN MARCH 1- OCTOBER 31, UNLESS APPROVED BY THE COR.
2. PRIOR TO COMMENCING WORK IN THE EXISTING CHANNEL, SUBMIT EXCAVATION PLAN DETAILING THE SEQUENCE OF CONSTRUCTION AND TEMPORARY MEASURES FOR IN-CHANNEL WORK.
3. EARTHWORK AND EXCAVATION MUST BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 00 00.
4. REFER TO SHEETS V-102 TO V-104 FOR WORK LIMIT COORDINATES.
5. LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.
6. SEE SHEET CE-501 FOR IN-STREAM FEATURES DETAILS.
7. EXCESS EXCAVATED MATERIAL NOT USED WILL BE PLACED ON DESIGNATED SPOIL PILE AREA.







A1 PROJECT CIVIL GRADING PLAN 2  
SCALE: 1"=200'

GRADING NOTES:

1. ALL STREAM GRADING ACTIVITIES AND GROUND DISTURBING WORK WITHIN WETLANDS MUST NOT OCCUR BETWEEN MARCH 1- OCTOBER 31, UNLESS APPROVED BY THE COR.
2. PRIOR TO COMMENCING WORK IN THE EXISTING CHANNEL, SUBMIT EXCAVATION PLAN DETAILING THE SEQUENCE OF CONSTRUCTION AND TEMPORARY MEASURES FOR IN-CHANNEL WORK.
3. EARTHWORK AND EXCAVATION MUST BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 00 00.
4. REFER TO SHEETS V-102 TO V-104 FOR WORK LIMIT COORDINATES.
5. LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.
6. SEE SHEET CE-501 FOR IN-STREAM FEATURES DETAILS.
7. EXCESS EXCAVATED MATERIAL NOT USED WILL BE PLACED ON DESIGNATED SPOIL PILE AREA.



US Army Corps  
of Engineers®

| MARK | DESCRIPTION | DATE |
|------|-------------|------|
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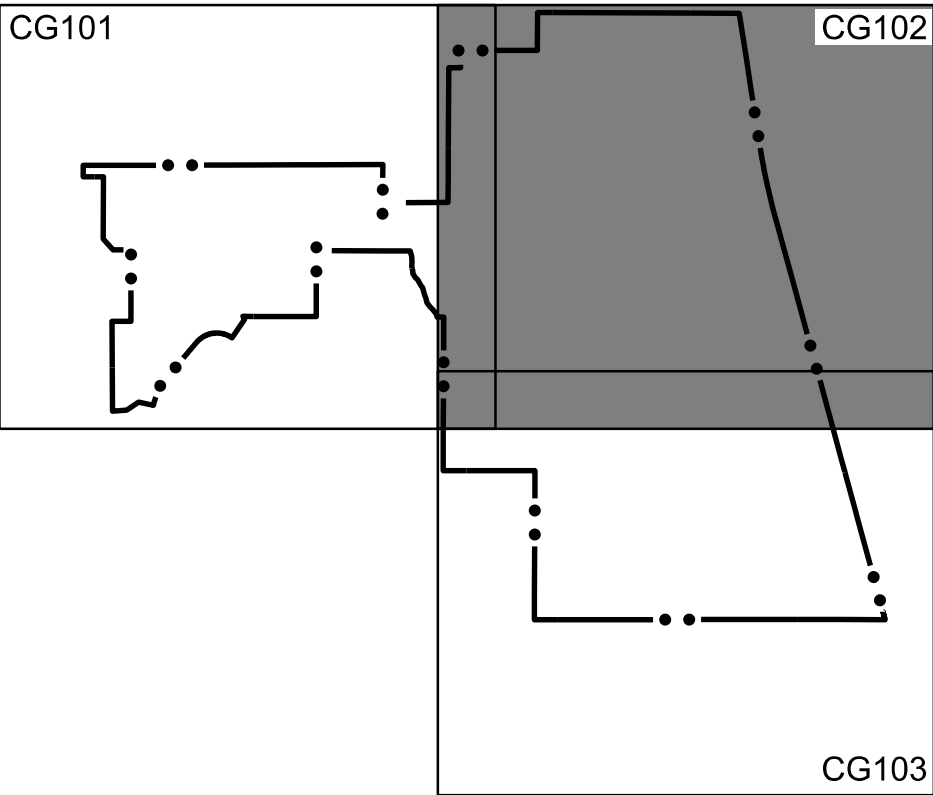
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|--------------------------------------|---------------------------------------|
| DESIGNED BY:<br>L. NAVARRO           | ISSUE DATE:<br>JUNE 2026              |
| DRAWN BY:<br>L. NAVARRO              | SOLICITATION NO.:<br>444304-66C9B7    |
| CHECKED BY:<br>L. VANDEN BERG P.E.   | CONTRACT NO.:<br>444304-66C9B7        |
| SUBMITTED BY:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-66C9B7          |
| SIZE:<br>ANSI D                      | FILE NAME:<br>444304-66C9B7-CG102.dgn |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS  
CIVIL GRADING PLAN 2

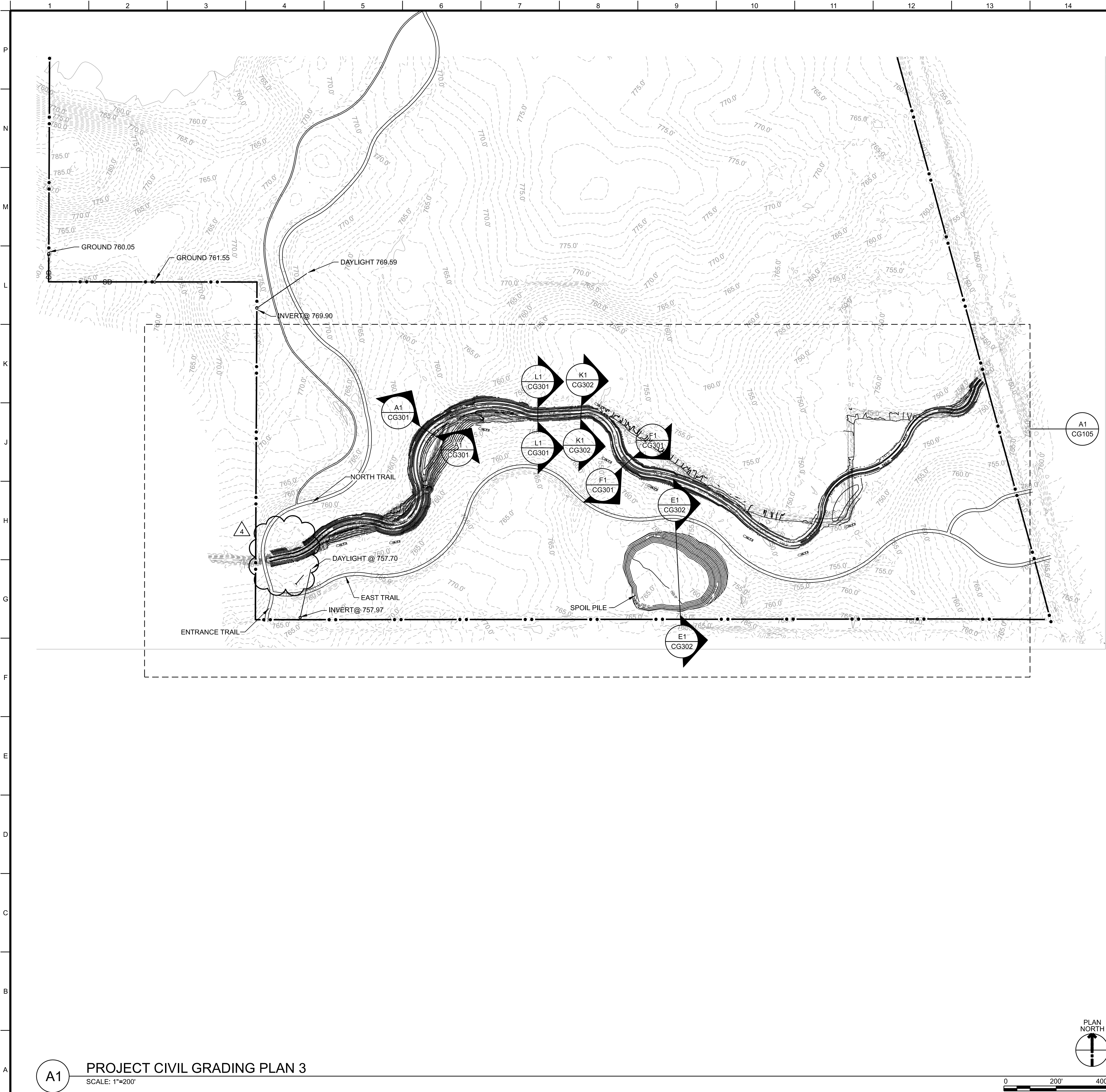
SHEET ID

CG102

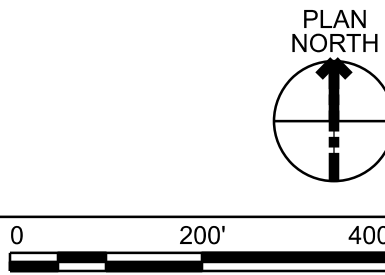
CIVIL GRADING  
KEY MAP





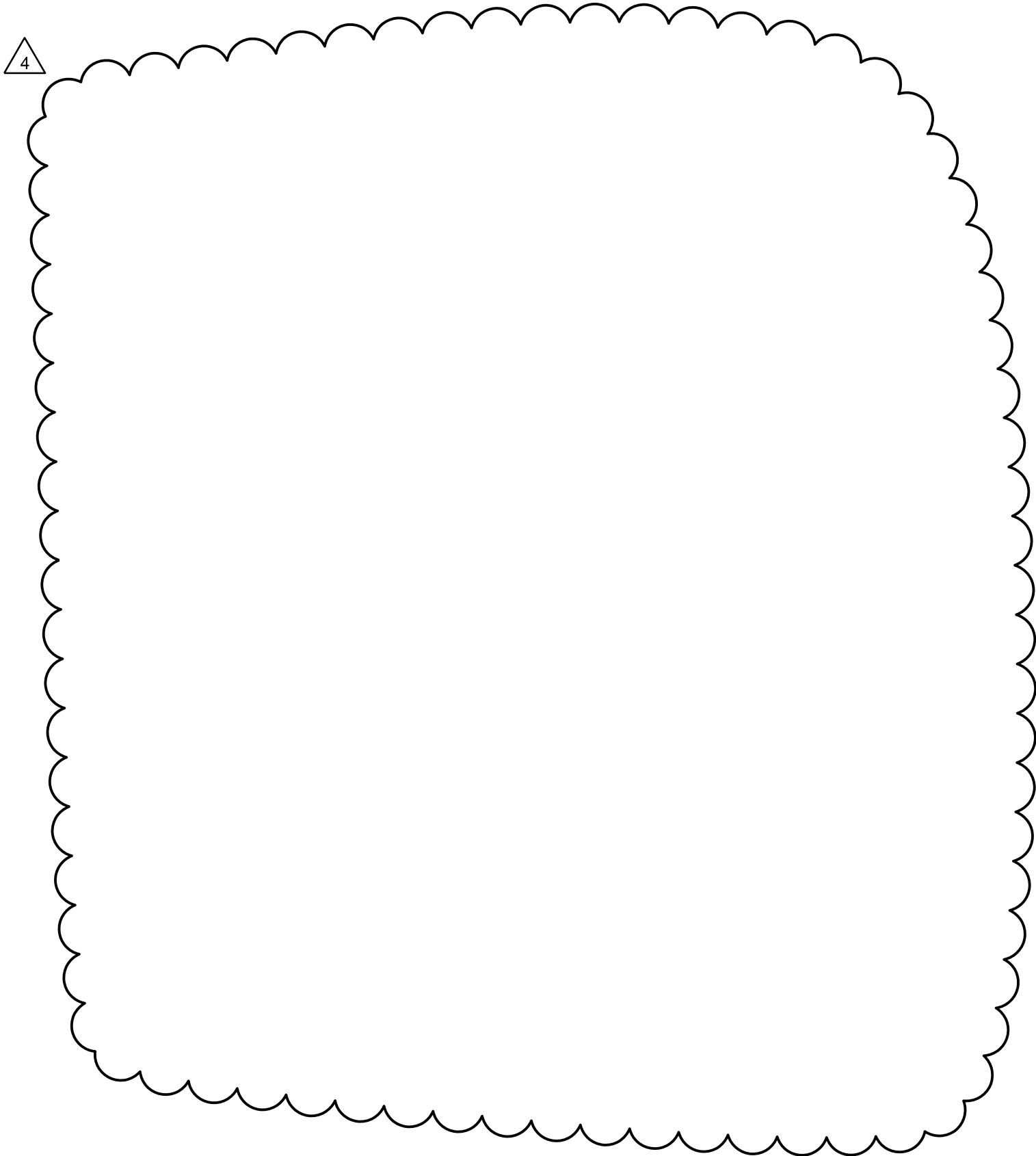


**A1** PROJECT CIVIL GRADING PLAN 3  
SCALE: 1"=200'

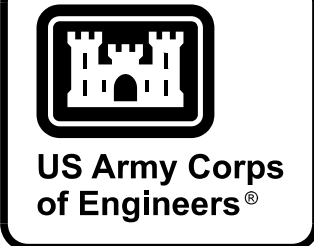
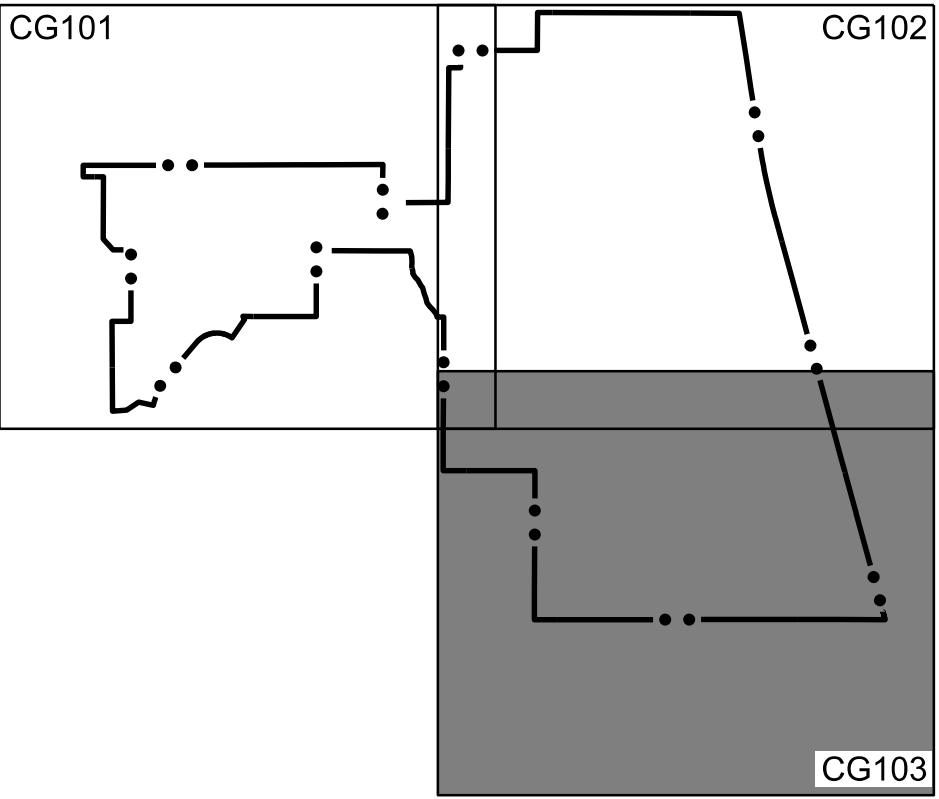


**GRADING NOTES:**

1. ALL STREAM GRADING ACTIVITIES AND GROUND DISTURBING WORK WITHIN WETLANDS MUST NOT OCCUR BETWEEN MARCH 1- OCTOBER 31, UNLESS APPROVED BY THE COR.
2. PRIOR TO COMMENCING WORK IN THE EXISTING CHANNEL, SUBMIT EXCAVATION PLAN DETAILING THE SEQUENCE OF CONSTRUCTION AND TEMPORARY MEASURES FOR IN-CHANNEL WORK.
3. EARTHWORK AND EXCAVATION MUST BE PERFORMED IN ACCORDANCE WITH SPECIFICATION SECTION 31 00 00.
4. REFER TO SHEETS V-102 TO V-104 FOR WORK LIMIT COORDINATES.
5. LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.
6. SEE SHEET CE-501 FOR IN-STREAM FEATURES DETAILS.
7. EXCESS EXCAVATED MATERIAL NOT USED WILL BE PLACED ON DESIGNATED SPOIL PILE AREA.



**CIVIL GRADING  
KEY MAP**



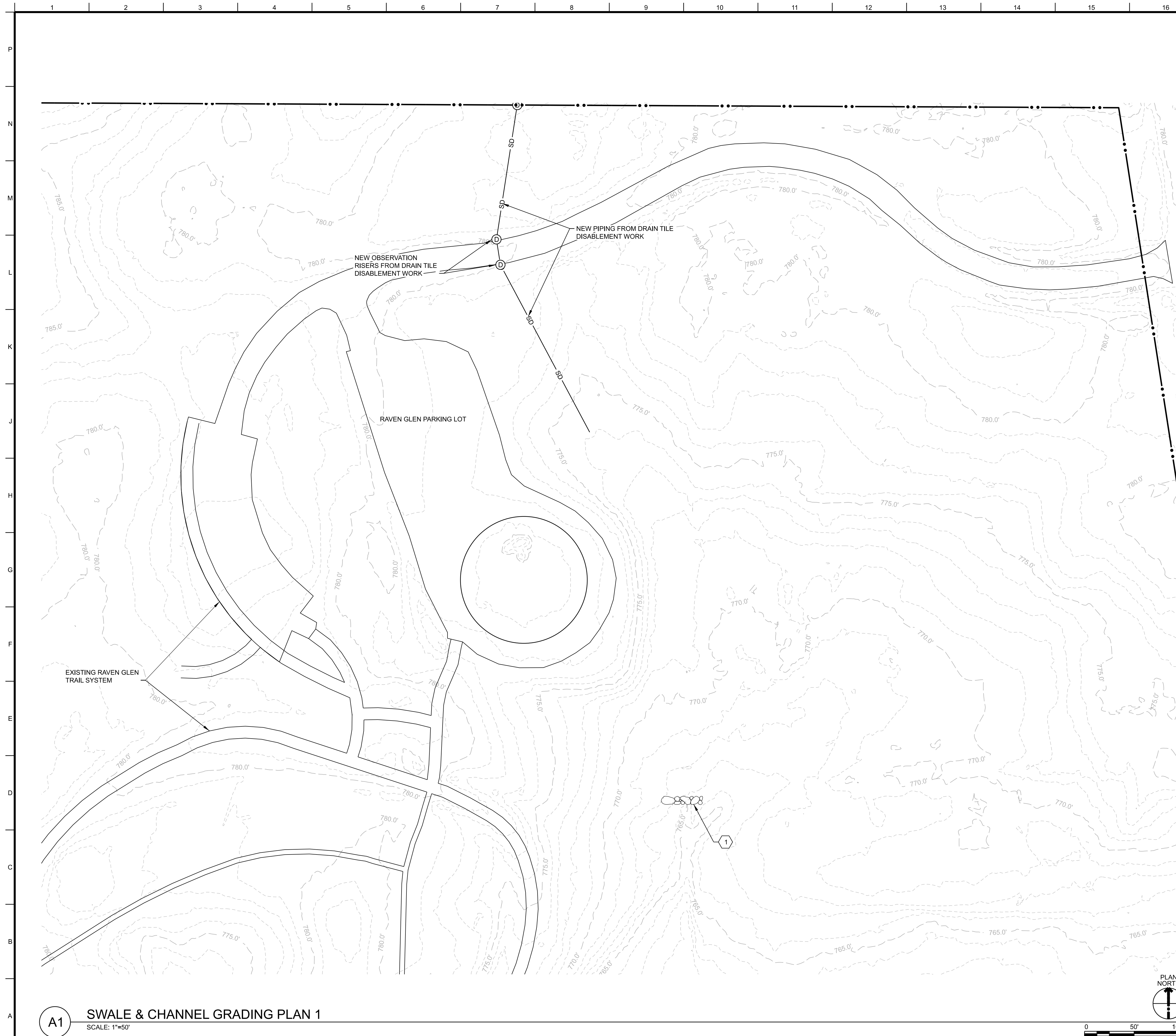
| DATE       | DESCRIPTION                                         | MARK |
|------------|-----------------------------------------------------|------|
| 06/25/2026 | CULVERT WORK REMOVED AND SOME CLINS NOW OPTION WORK | 4    |

|                                       |                                                    |
|---------------------------------------|----------------------------------------------------|
| DESIGNED BY:<br>L. NAVARRO            | ISSUE DATE:<br>JUNE 2026                           |
| DRAWN BY:<br>CHICAGO DISTRICT         | SOLICITATION NO.:<br>231 S. LASALLE ST. SUITE 1500 |
| CHECKED BY:<br>L. VANDEN BERG P.E.    | CONTRACT NO.:<br>444304-66C9B7                     |
| SUBMITTED BY:<br>L. VANDEN BERG P.E.  | PROJECT ID:<br>444304-66C9B7                       |
| FILE NAME:<br>444304-66C9B7-CG103.dgn | SIZE:<br>444304-66C9B7                             |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS  
CIVIL GRADING PLAN 3

SHEET ID  
**CG103**





## SWALE &amp; CHANNEL GRADING PLAN NOTES

1. REFER TO SHEETS V-102 TO V-104 FOR WORK LIMIT COORDINATES.
2. LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.
3. SEE SHEET CE-501 FOR IN-STREAM FEATURES DETAILS.

## SHEET KEYNOTES

1. OPTION WORK - INSTALL ROCK CHECK DAM PER DETAIL A1 AND D1 ON SHEET CD-502

## LEGEND

|                                                                                     |                                  |
|-------------------------------------------------------------------------------------|----------------------------------|
|  | PROPOSED MAJOR CONTOURS EVERY 5' |
|  | PROPOSED MINOR CONTOURS EVERY 1' |
|  | EXISTING MAJOR CONTOURS EVERY 5' |
|  | EXISTING MINOR CONTOURS EVERY 1' |
| XXX.0'                                                                              | ELEVATION                        |
|  | EXISTING CHANNEL FILL AREA       |

[illegible]

|                                                                                                               |                                 |                                        |
|---------------------------------------------------------------------------------------------------------------|---------------------------------|----------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>I. INABARO      | ISSUE DATE:<br>JUNE 2026               |
|                                                                                                               | DRAWN BY:<br>A. HEGEDUS         | SOLICITATION NO.:<br>CG2P25-PC-A009    |
|                                                                                                               | CHECKED BY:<br>R. MUHAMMAD      | CG CONTRACT NO.:<br>TBD                |
|                                                                                                               | SUBMITTED BY:<br>L. VANDEN BERG | PROJECT ID:<br>444394-66C9B7           |
|                                                                                                               | SIZE:<br>ANSI D                 | FILE NAME:<br>444-304-66C9B7-CG104.dgn |

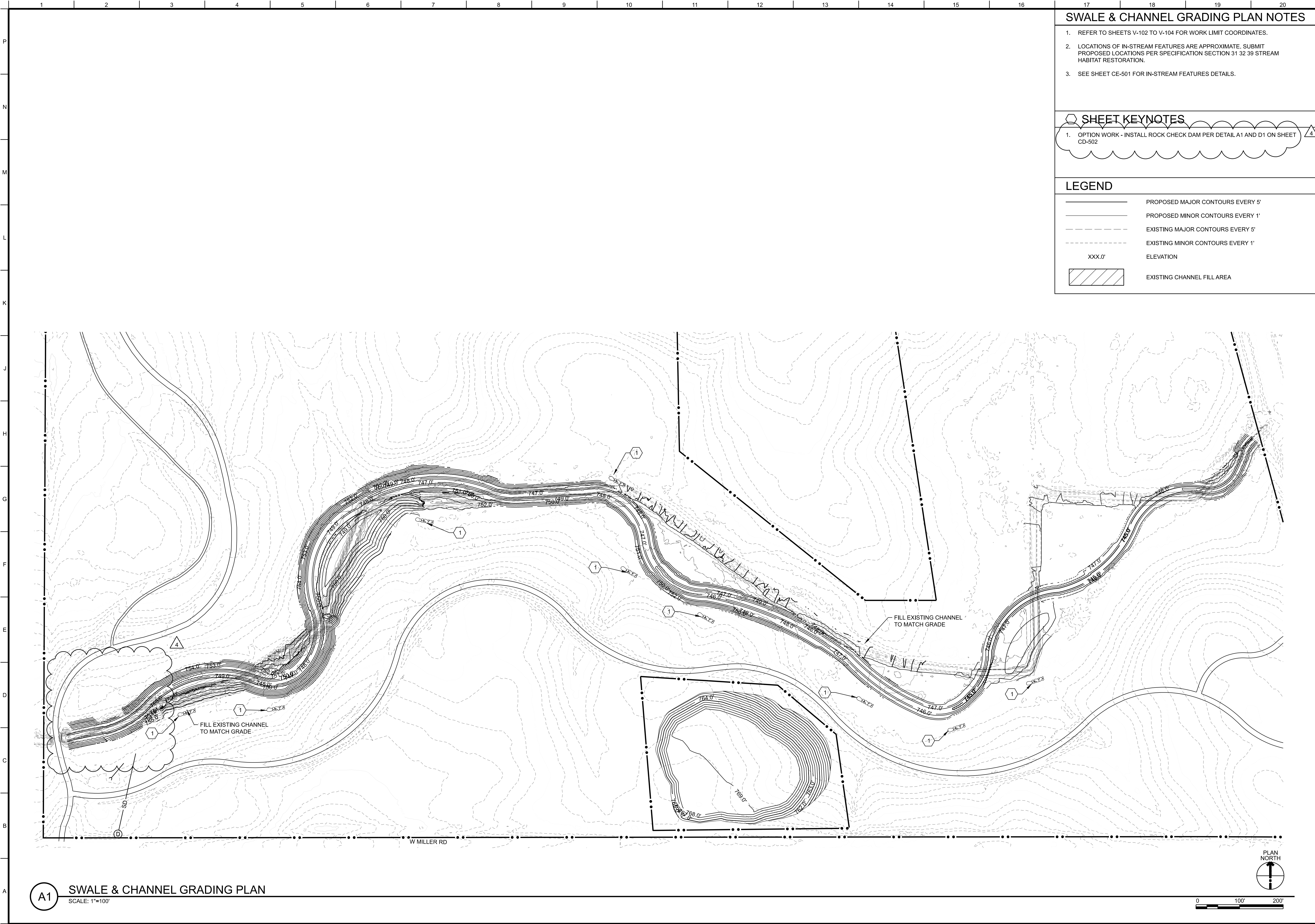
UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CHANNEL GRADING PLAN 1

SHEET ID  
CG104

**CERTIFIED FINAL DOCUMENTS - RTA**





SWALE & CHANNEL GRADING PLAN NOTES

1. REFER TO SHEETS V-102 TO V-104 FOR WORK LIMIT COORDINATES.
2. LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.
3. SEE SHEET CE-501 FOR IN-STREAM FEATURES DETAILS.

SHEET KEYNOTES

1. OPTION WORK - INSTALL ROCK CHECK DAM PER DETAIL A1 AND D1 ON SHEET CD-502

LEGEND

- PROPOSED MAJOR CONTOURS EVERY 5'
- PROPOSED MINOR CONTOURS EVERY 1'
- EXISTING MAJOR CONTOURS EVERY 5'
- EXISTING MINOR CONTOURS EVERY 1'
- XXX.0'
- ELEVATION
- EXISTING CHANNEL FILL AREA

US Army Corps of Engineers®

|                                                                |                                |
|----------------------------------------------------------------|--------------------------------|
| ISSUE DATE:                                                    | JUNE 2026                      |
| DESIGNED BY:                                                   | L. NAVARRO                     |
| DRAWN BY:                                                      | CHICAGO DISTRICT               |
| CHECKED BY:                                                    | R. MUHAMMAD                    |
| SUBMITTED BY:                                                  | L. VANDEN BERG P.E.            |
| FILE NAME:                                                     | 444304-66C9B7-5G105.dgn        |
| ANSI D:                                                        | 444304-66C9B7-5G105.dgn        |
| PROJECT NO.:                                                   | 444304-66C9B7                  |
| CONTRACT NO.:                                                  | TBD                            |
| SOLICITATION NO.:                                              | 444304-66C9B7                  |
| U.S. ARMY CORPS OF ENGINEERS                                   | CHICAGO DISTRICT               |
| 231 S. LASALLE ST. SUITE 1500                                  | CHICAGO, ILLINOIS 60604        |
| UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II               | AQUATIC ECOSYSTEM RESTORATION  |
| RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE | ANTIOCH, LAKE COUNTY, ILLINOIS |
| CHANNEL GRADING PLAN 2                                         |                                |
| SHEET ID                                                       | CG105                          |

CERTIFIED FINAL DOCUMENTS - RTA

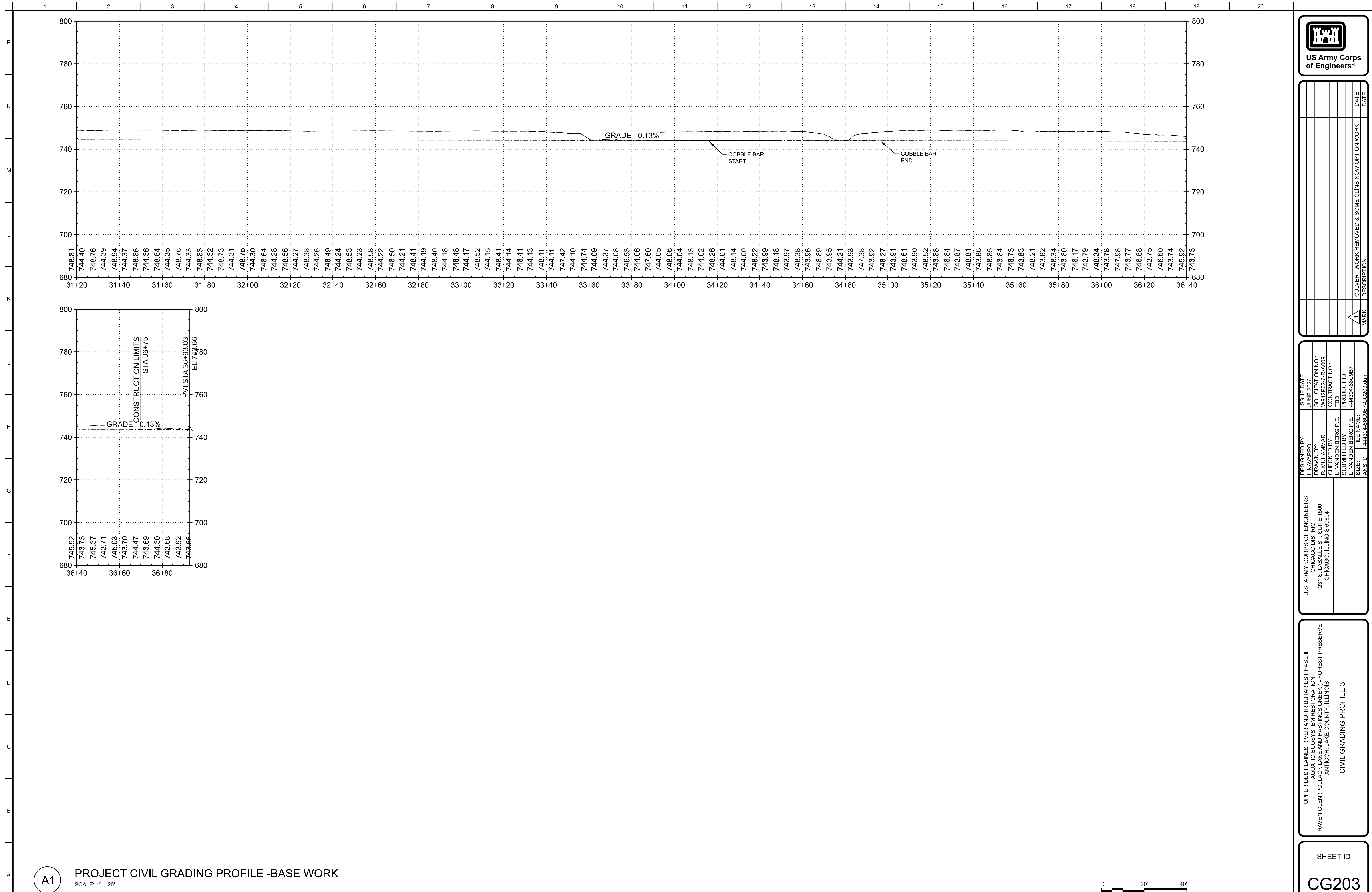












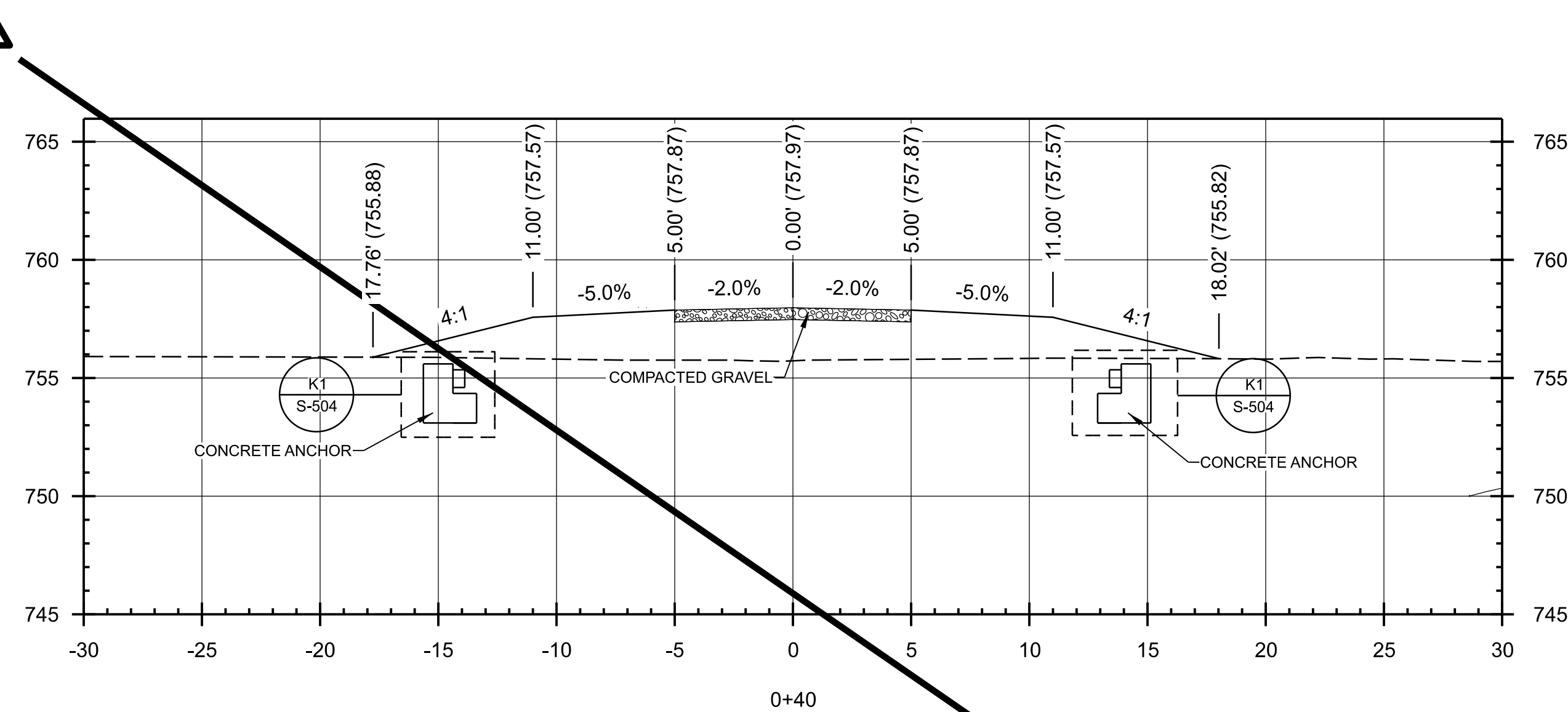




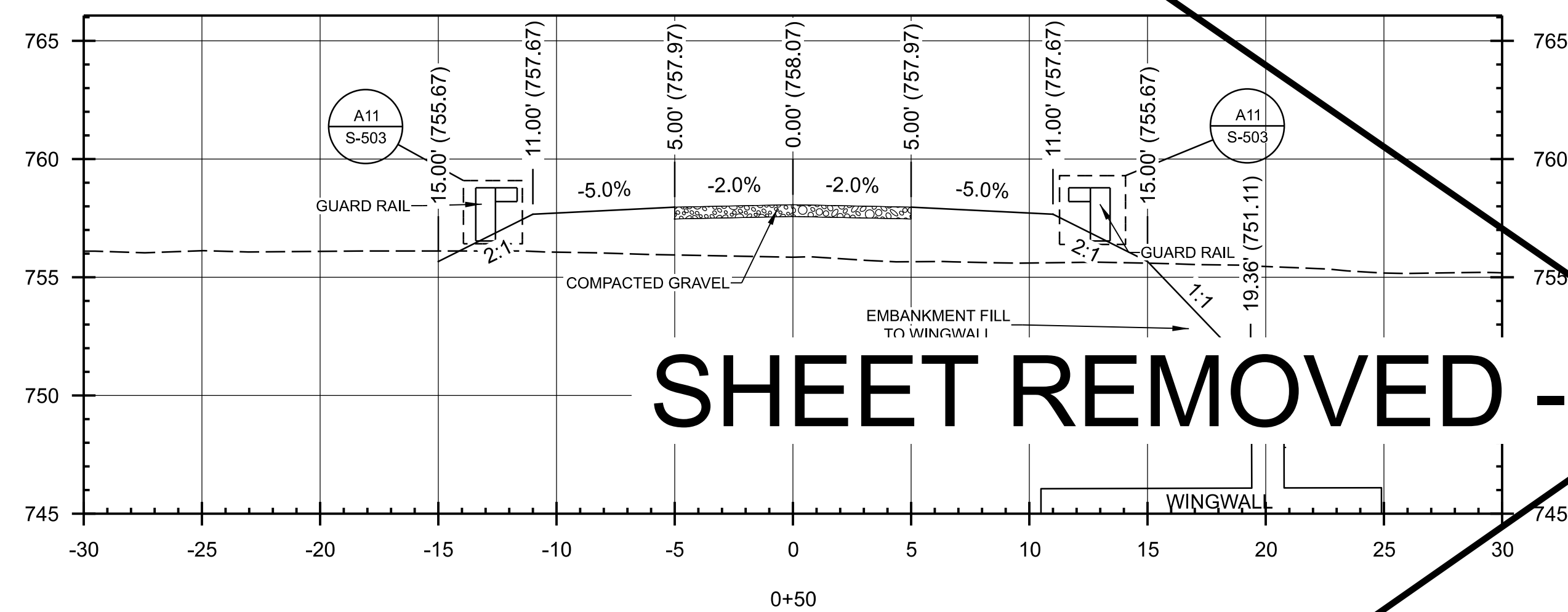




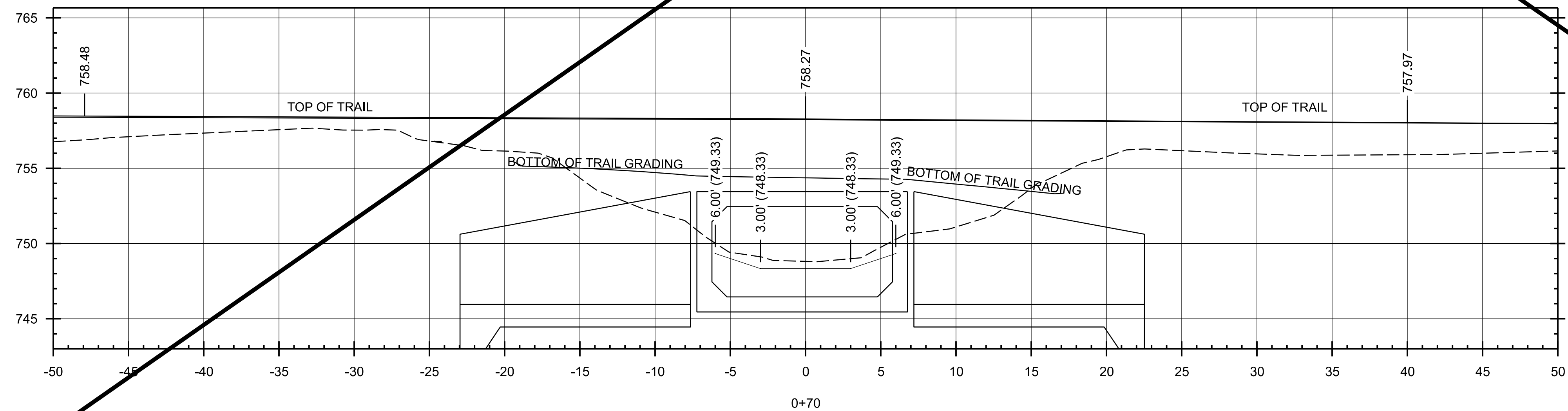




K1 TRAIL OVER CULVERT SECTION 1  
SCALE: 1"=5'



F1 TRAIL OVER CULVERT SECTION 2  
SCALE: 1"=5'



**CULVERT UNDER TRAIL CROSS SECTION**  
SCALE: 1"=5'

|               |  |
|---------------|--|
| GENERAL NOTES |  |
|---------------|--|

1. TRAIL CROSS SECTIONS CUT FROM "NORTH TRAIL ALIGNMENT". SEE SHEET C-002 FOR ALIGNMENT STATIONING AND LOCATION.
2. TRAIL CROSS SECTIONS ARE CUT PERPENDICULAR TO TRAIL ALIGNMENT. CULVERT AND WINGWALLS ARE SHOWN SKEWED DUE TO FEATURES NOT BEING PERPENDICULAR TO THE TRAIL ALIGNMENT. SEE STRUCTURAL SHEETS FOR CULVERT AND WINGWALL DIMENSIONS.
3. EMBANKMENT FILL AREAS MUST BE SEEDING IN ACCORDANCE WITH SPECIFICATION SECTION 32 92 19.10 NATIVE PLANTS

[illegible]

|                                                          |                                  |                                       |
|----------------------------------------------------------|----------------------------------|---------------------------------------|
| 231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DRAWN BY:<br>A. WILLIAMS         | SOLICITATION NO.:<br>W912P62-8-R-A009 |
|                                                          | CHECKED BY:<br>VANDEN BERG P.E.  | CONTRACT NO.:<br>TBD                  |
|                                                          | SUPPLIER:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-66C9B7          |
|                                                          | SIZE:<br>FILE NAME:              |                                       |
|                                                          | ANSI D                           | 444304-66C9B7-CG-303.dgn              |

RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

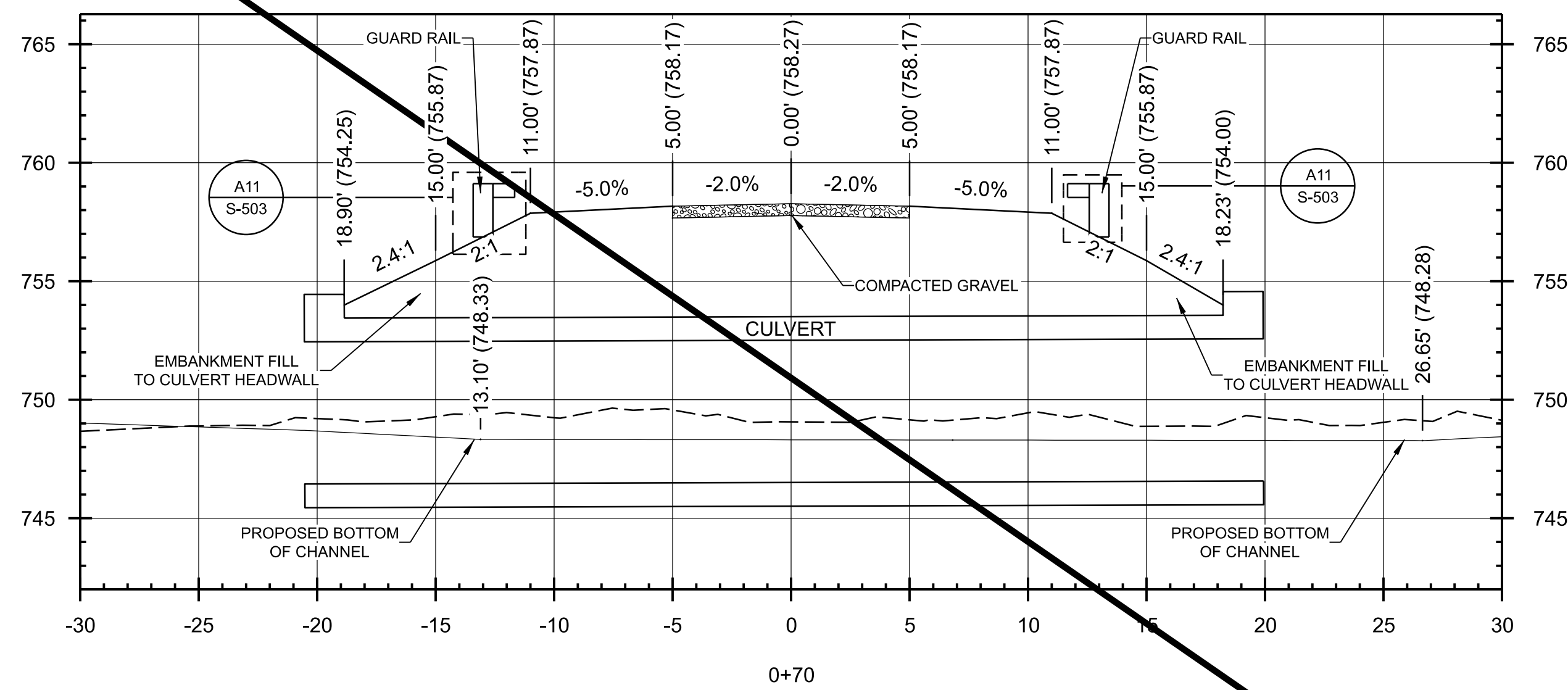
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## ECOSYSTEM RESTORATION SECTION PLAN 3

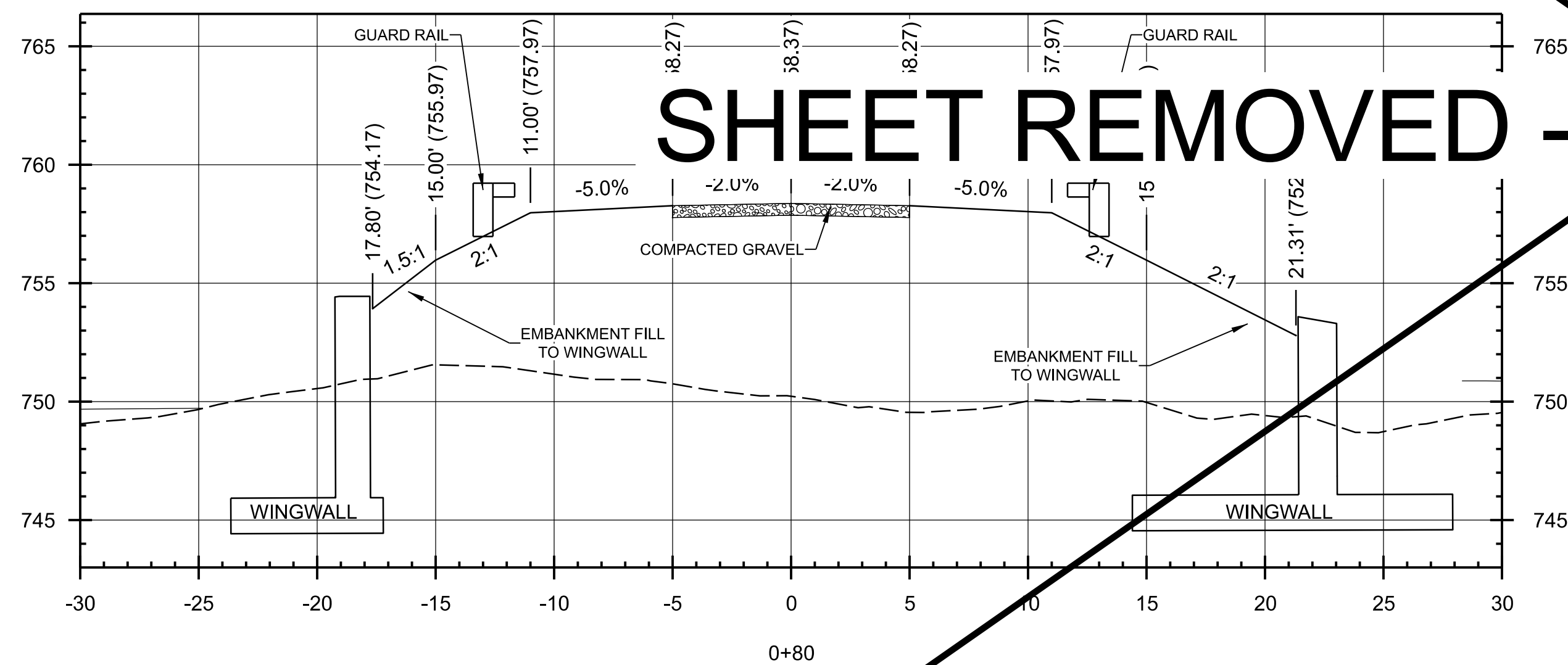
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SHEET ID  
CG303



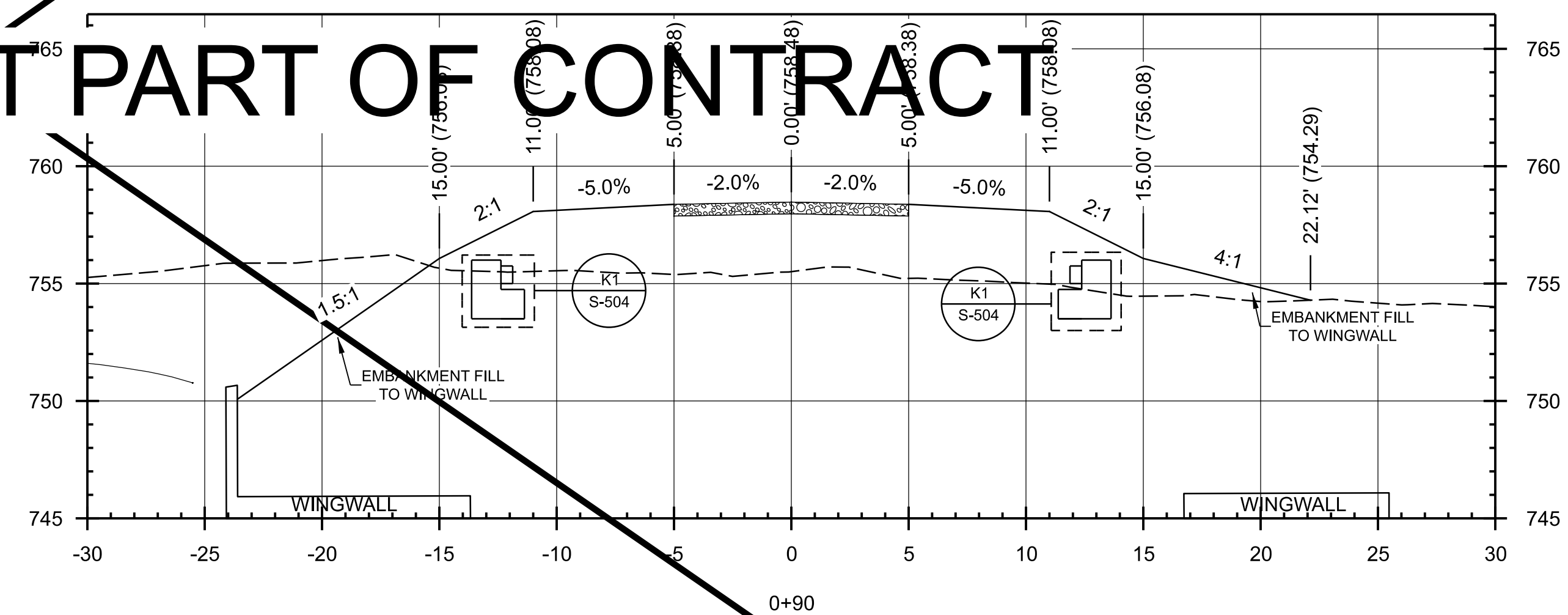


J1 TRAIL OVER CULVERT CROSS SECTION 4  
SCALE: 1"=5'



**D1** TRAIL OVER CULVERT CROSS SECTION 5  
SCALE: 1"=5'

SHEET REMOVED - NOT PART OF CONTRACT



**D11** TRAIL OVER CULVERT CROSS SECTION 6  
SCALE: 1"=5'

- |               |  |
|---------------|--|
| GENERAL NOTES |  |
|---------------|--|

1. TRAIL CROSS SECTIONS CUT FROM "NORTH TRAIL ALIGNMENT". SEE SHEET C-002 FOR ALIGNMENT STATIONING AND LOCATION.
2. TRAIL CROSS SECTIONS ARE CUT PERPENDICULAR TO TRAIL ALIGNMENT. CULVERT AND WINGWALLS ARE SHOWN SKEWED DUE TO FEATURES NOT BEING PERPENDICULAR TO THE TRAIL ALIGNMENT. SEE STRUCTURAL SHEETS FOR CULVERT AND WINGWALL DIMENSIONS.
3. EMBANKMENT FILL AREAS MUST BE SEEDDED IN ACCORDANCE WITH SPECIFICATION SECTION 32 92 19.10 NATIVE PLANTS



**U.S. Army Corps  
of Engineers®**

[illegible]

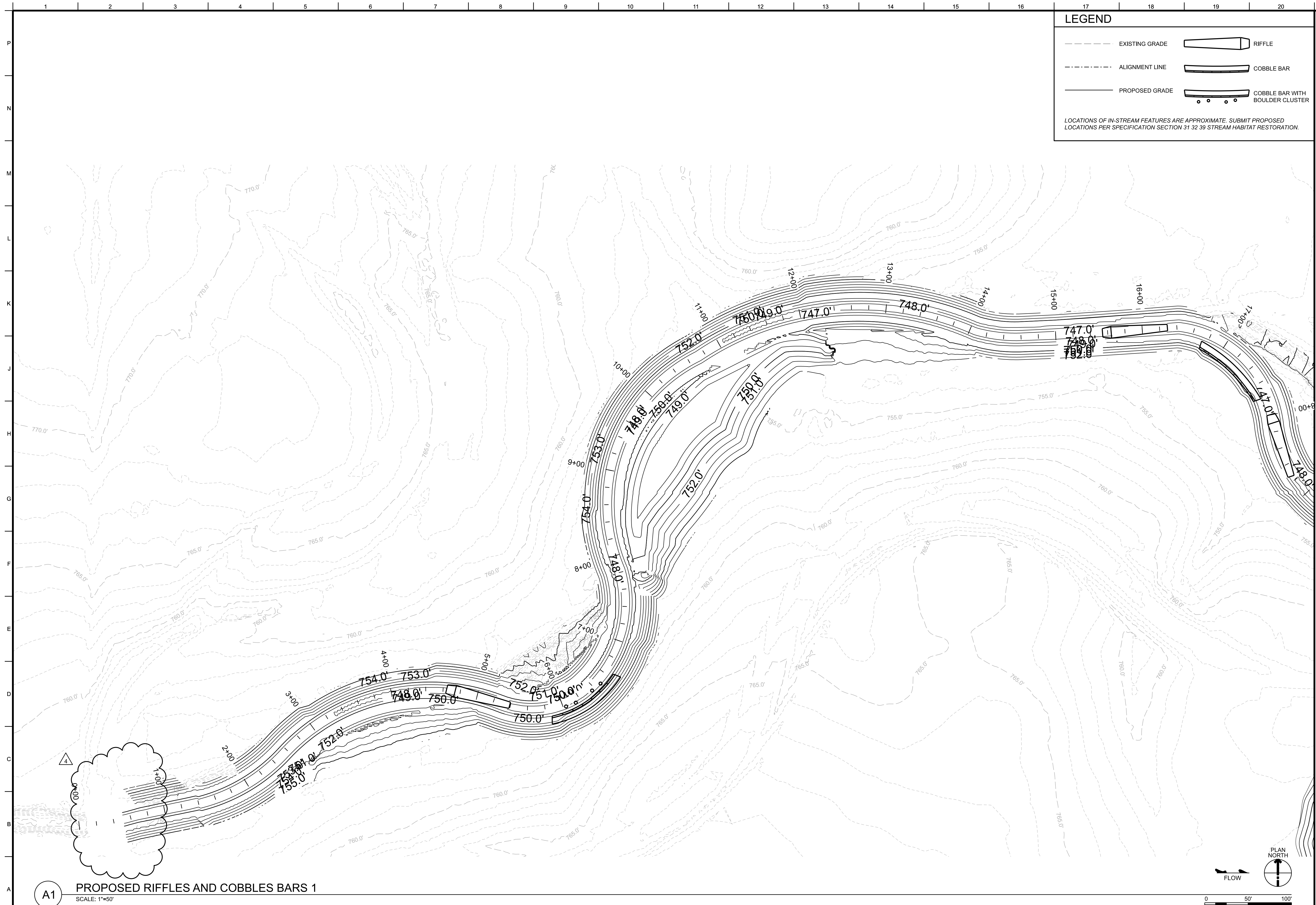
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|-----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| 231 S. WICKACRE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DRAWN BY: A. WILLIAMS<br>CHECKED BY: L. VANDEN BERG P.E.<br>SUBMITTED BY: L. VANDEN BERG P.E.<br>SIZE: 1/4" = 1'-0"<br>ANSID: 444501-26C9B7-CG-304.dgn |
|                                                           | SOLICITATION NO.: W912P62-6-R-A009<br>CONTRACT NO.: TBD<br>PROJECT ID: 444304-46C9B7                                                                   |

RAVEN GLEN (POLLOCK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

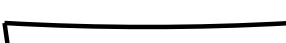
SHEET ID

CG304





# LEGEND

|           |                |                                                                                     |                                 |
|-----------|----------------|-------------------------------------------------------------------------------------|---------------------------------|
| ---       | EXISTING GRADE |  | RIFFLE                          |
| -.-.-.-.- | ALIGNMENT LINE |  | COBBLE BAR                      |
| —         | PROPOSED GRADE |  | COBBLE BAR WITH BOULDER CLUSTER |

LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.



US Army Corps  
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[illegible]

|                                                                                                               |                                      |                                       |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>L. VANDEN BERG P.E.  | ISSUE DATE:<br>JUNE 2008              |
|                                                                                                               | DRAWN BY:<br>A. WILLIAMS             | SOLUTION NO.:<br>W312P82-5R-A009      |
|                                                                                                               | CHECKED BY:                          | CONTRACT NO.:<br>TBD                  |
|                                                                                                               | SUBMITTED BY:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-68C9B7          |
|                                                                                                               | SIZE:<br>ANSI D                      | FILE NAME:<br>444304-68C9B7-C5401.dgn |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

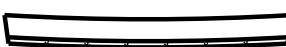
CIVIL ENLARGED GRADING PLAN 1

SHEET ID  
CG401





# LEGEND

|           |                |                                                                                     |                                 |
|-----------|----------------|-------------------------------------------------------------------------------------|---------------------------------|
| ---       | EXISTING GRADE |  | RIFFLE                          |
| -.-.-.-.- | ALIGNMENT LINE |  | COBBLE BAR                      |
| —         | PROPOSED GRADE |  | COBBLE BAR WITH BOULDER CLUSTER |

LOCATIONS OF IN-STREAM FEATURES ARE APPROXIMATE. SUBMIT PROPOSED LOCATIONS PER SPECIFICATION SECTION 31 32 39 STREAM HABITAT RESTORATION.

[illegible]

|                                                                                                               |               |                     |                         |                 |
|---------------------------------------------------------------------------------------------------------------|---------------|---------------------|-------------------------|-----------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:  | L. VANDEN BERG      | ISSUE DATE:             | JUNE 2026       |
|                                                                                                               | DRAWN BY:     | A. WILLIAMS         | SOLICITATION NO.:       | W912P69-5R-A009 |
|                                                                                                               | CHECKED BY:   | L. VANDEN BERG P.E. | CONTRACT NO.:           | TBD             |
|                                                                                                               | SUBMITTED BY: | L. VANDEN BERG P.E. | PROJECT ID:             | 444304-66C9B7   |
|                                                                                                               | SIZE:         | FILE NAME:          | 444304-66C9B7-GA402.dgn |                 |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL ENLARGED GRADING PLAN 2

SHEET ID  
CG402





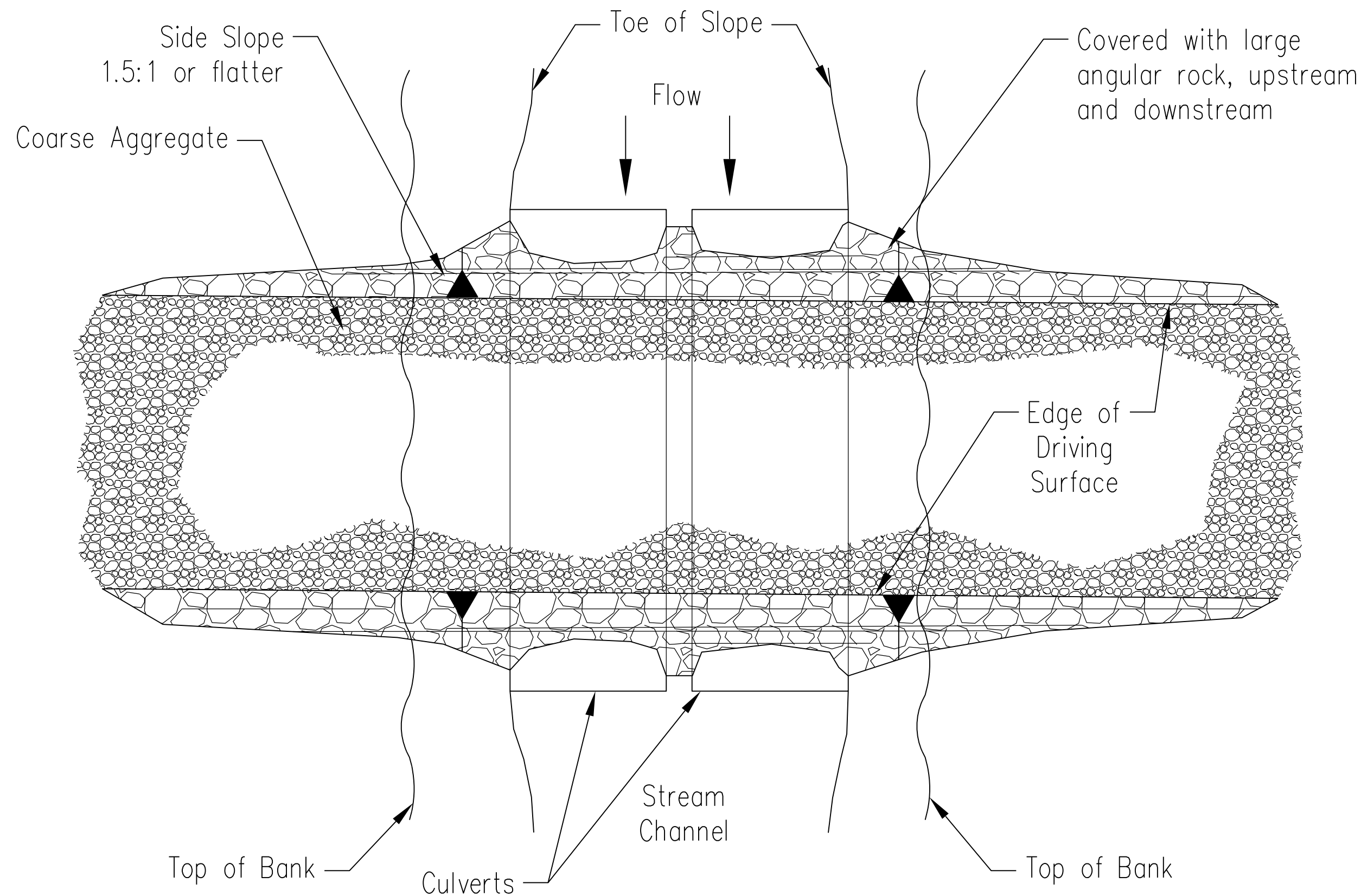




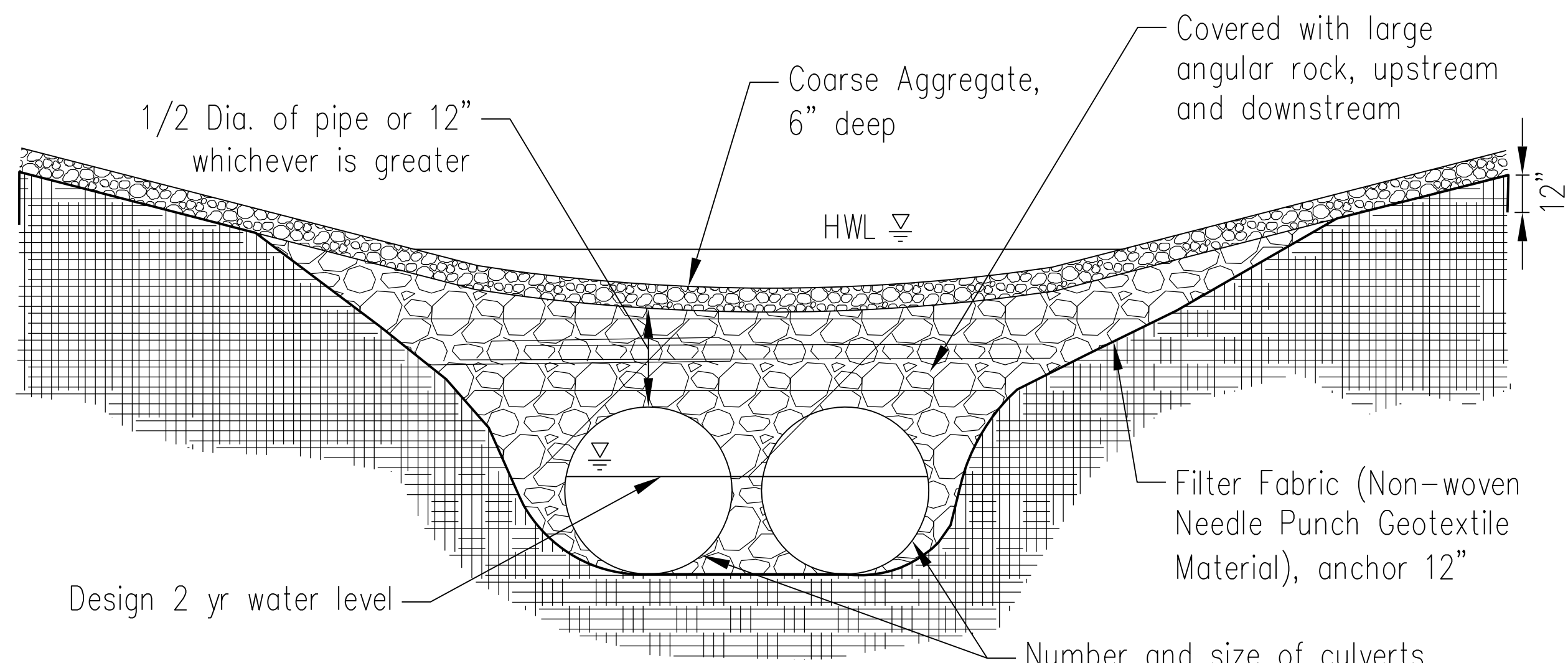


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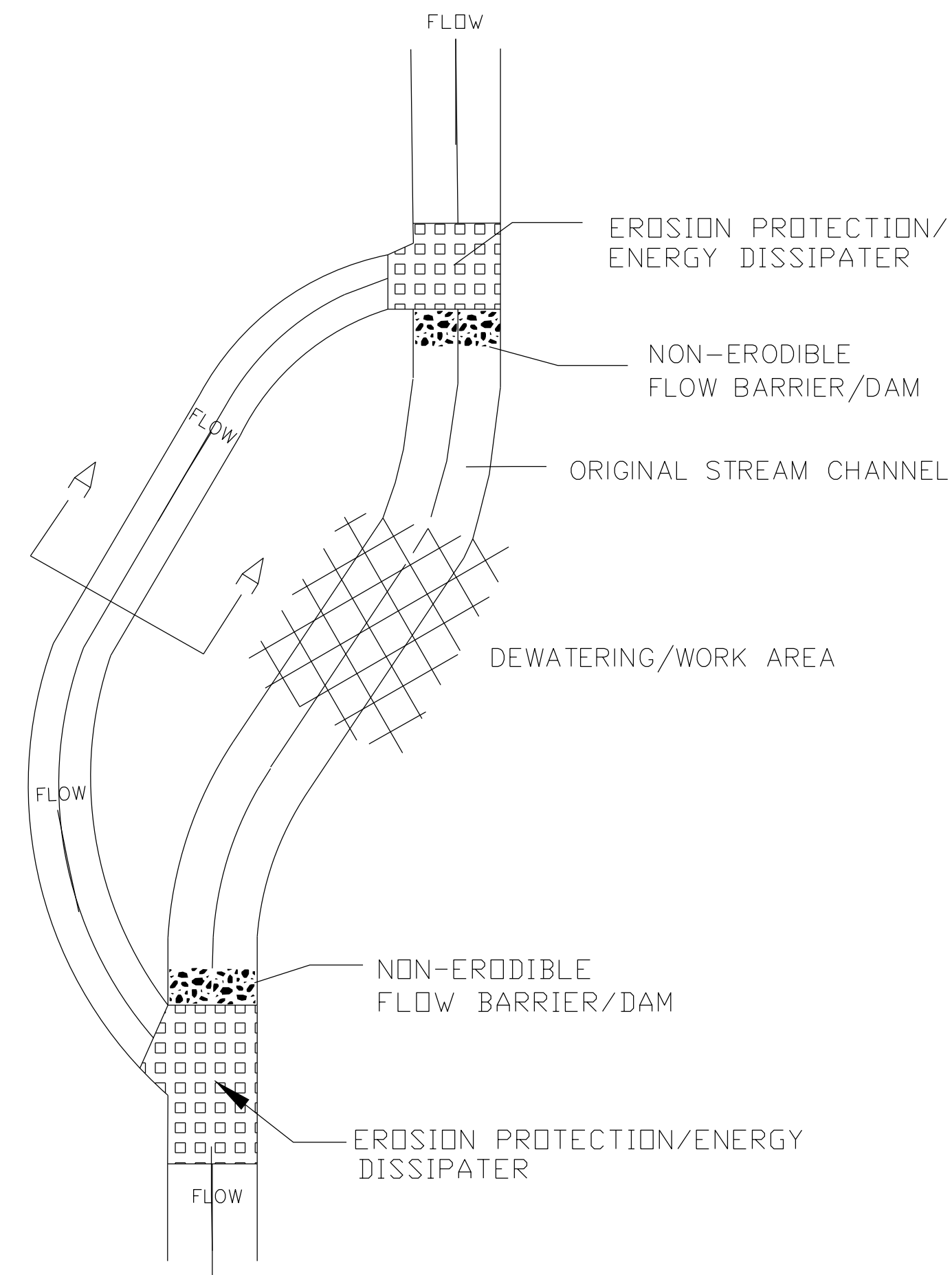
PLAN



ELEVATION

A1

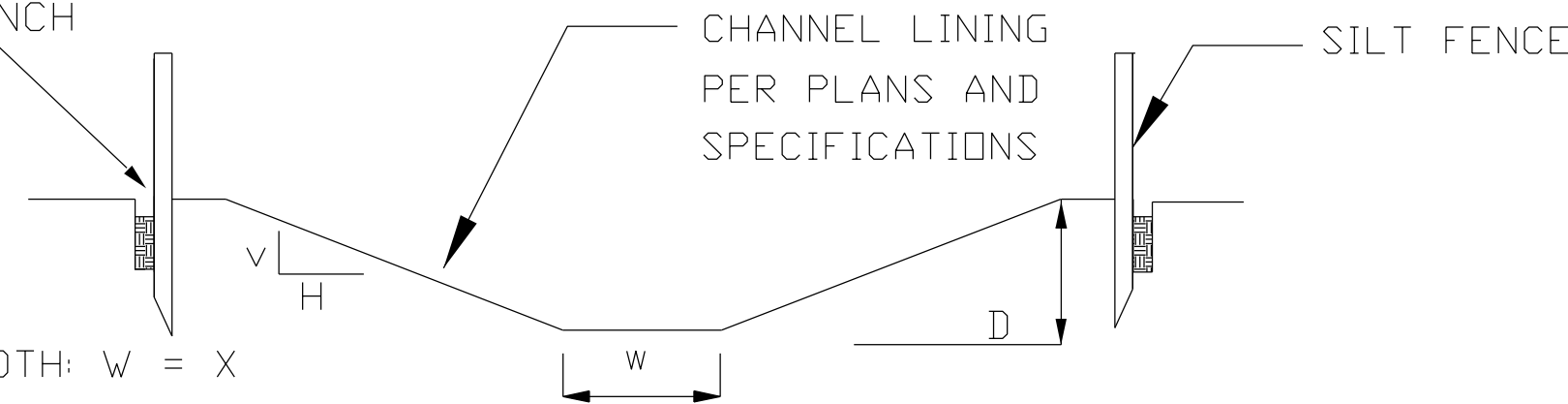
TEMPORARY STREAM CROSSING  
SCALE: NTS



TYPICAL DIVERSION CHANNEL PLAN

ENTRENCH GEOTEXTILE  
(WHEN USED) AND SILT  
FENCE IN SAME TRENCH

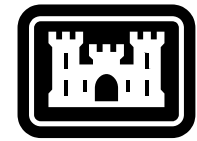
SIDE SLOPE: H:V = X  
CHANNEL BOTTOM WIDTH: W = X  
CHANNEL DEPTH: D = X  
(DEPTH MAY VARY)



TYPICAL DIVERSION CHANNEL CROSS SECTION

A12

TEMPORARY STREAM DIVERSION  
SCALE: 1/2"=1'-0"



US Army Corps  
of Engineers®

| DATE | MARK | DESCRIPTION     |
|------|------|-----------------|
|      | 2    | GENERAL UPDATES |

|                                      |                                        |
|--------------------------------------|----------------------------------------|
| DESIGNED BY:<br>L. NAVARRO           | ISSUE DATE:<br>JUNE 2026               |
| DRAWN BY:<br>L. NAVARRO              | SOLICITATION NO.:<br>444304-66C9B7     |
| CHECKED BY:<br>L. VANDEN BERG P.E.   | CONTRACT NO.:<br>444304-66C9B7         |
| SUBMITTED BY:<br>L. VANDEN BERG P.E. | PROJECT ID:<br>444304-66C9B7           |
| SIZE:<br>ANSI D                      | FILE NAME:<br>444304-66C9B7-CG-502.dgn |

U.S. ARMY CORPS OF ENGINEERS  
CHICAGO DISTRICT  
231 S. LASALLE ST. SUITE 1500  
CHICAGO, ILLINOIS 60604

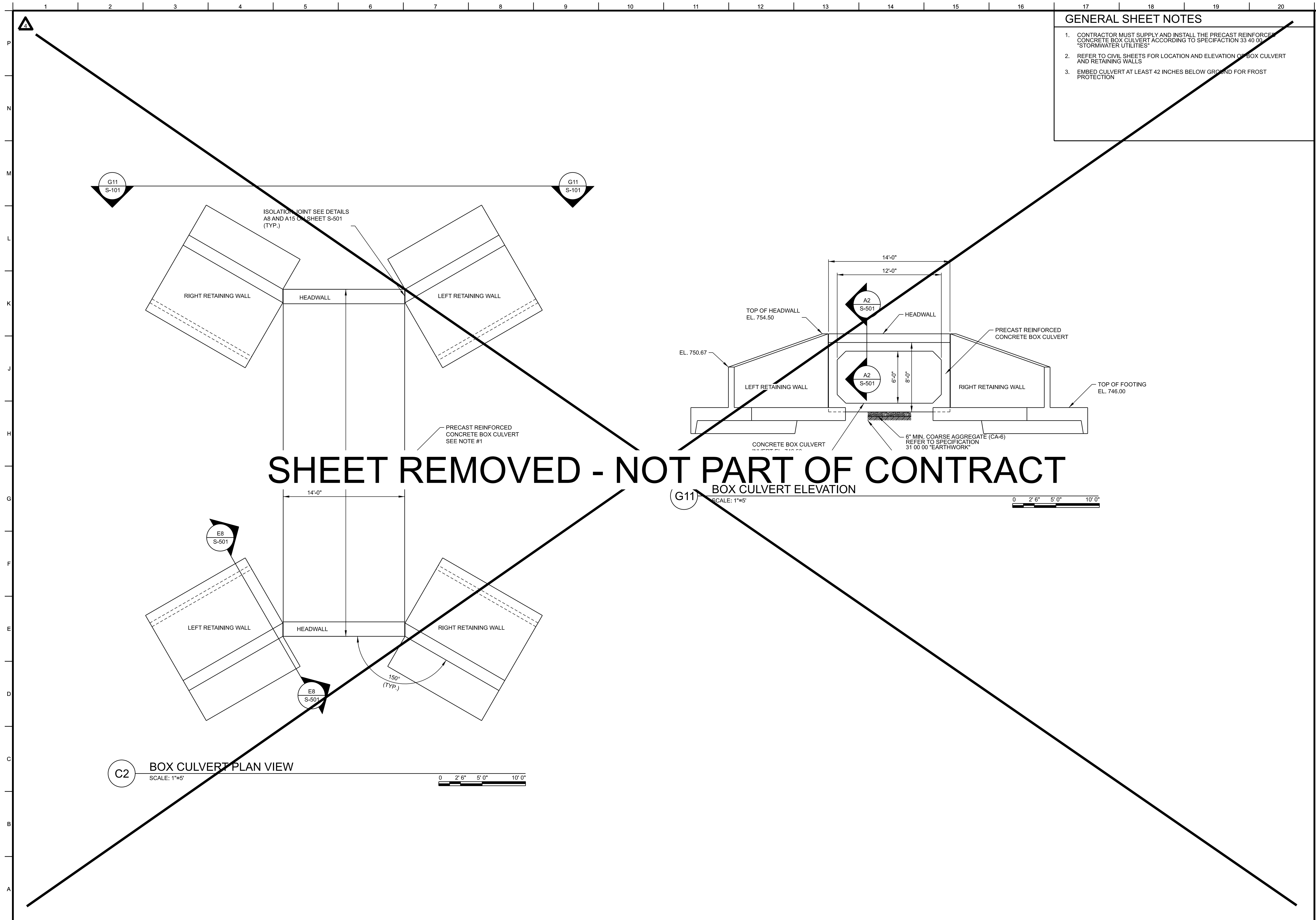
UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLOCK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

CIVIL PROPOSED ECOSYSTEM FEATURES DETAILS 2

SHEET ID

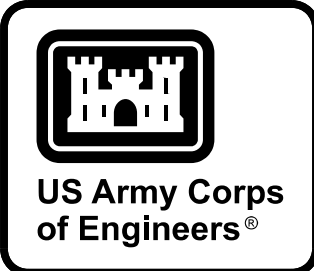
CG502





## GENERAL SHEET NOTES

1. CONTRACTOR MUST SUPPLY AND INSTALL THE PRECAST REINFORCED CONCRETE BOX CULVERT ACCORDING TO SPECIFICATION 33 40 00 "STORMWATER UTILITIES"
2. REFER TO CIVIL SHEETS FOR LOCATION AND ELEVATION OF BOX CULVERT AND RETAINING WALLS
3. EMBED CULVERT AT LEAST 42 INCHES BELOW GROUND FOR FROST PROTECTION

[illegible]

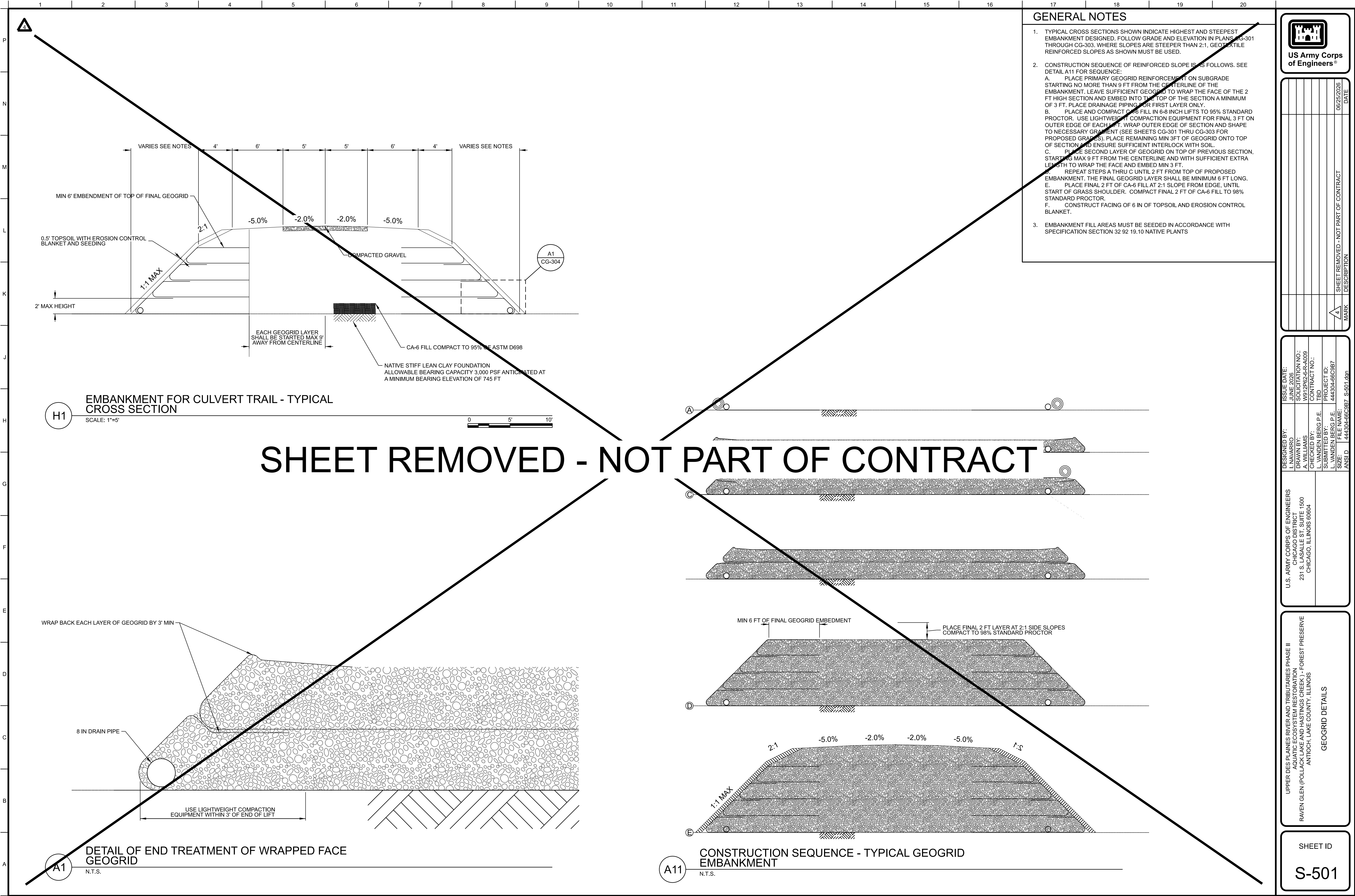
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|--------------------------------------------------------------------------------------------------------------|------------------------------------|------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | DESIGNED BY:<br>N. MCLEMORE        | ISSUE DATE:<br>JUNE 2026     |
|                                                                                                              | DRAWN BY:<br>DAVID BKS             | NOTATION NO:<br>N/A          |
|                                                                                                              | CHECKED BY:<br>R. MUHAMMAD         | CONTRACT NO.:<br>TBD         |
|                                                                                                              | SUBMITTED BY:<br>YVES LEONIS, P.E. | PROJECT ID:<br>444394-66-987 |
|                                                                                                              | SIZE:<br>FILE NAME:                |                              |
|                                                                                                              | ANSI D<br>444394-66-987 S-101.dgn  |                              |

UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II  
AQUATIC ECOSYSTEM RESTORATION  
RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

STRUCTURAL PLAN & ELEVATION 1

SHEET ID  
S-101





**US Army Corps of Engineers®**

|                                                                                                                                                                                       |                                       |                                                      |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|------------------------------------------------------|
| ISSUE DATE:<br>JUNE 2026                                                                                                                                                              | SOLICITATION NO.:<br>444304-66C9B7    | DATE:<br>06/25/2026                                  |
| DRAWN BY:<br>L. NAVARRO                                                                                                                                                               | CHECKED BY:<br>L. VANDEN BERG P.E.    | MARK:<br>4                                           |
| DESIGNED BY:<br>L. NAVARRO                                                                                                                                                            | SUBMITTED BY:<br>L. VANDEN BERG P.E.  | DESCRIPTION:<br>SHEET REMOVED - NOT PART OF CONTRACT |
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604                                                                         | PROJECT ID:<br>444304-66C9B7          |                                                      |
| UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II<br>AQUATIC ECOSYSTEM RESTORATION<br>RAVEN GLEN (POLLOCK LAKE AND HASTINGS CREEK) - FOREST PRESERVE<br>ANTIOCH, LAKE COUNTY, ILLINOIS | FILE NAME:<br>444304-66C9B7_S-501.dgn |                                                      |
| GEOGRID DETAILS                                                                                                                                                                       |                                       |                                                      |
| SHEET ID<br><b>S-501</b>                                                                                                                                                              |                                       |                                                      |

444304-66C9B7\_S-501.dgn

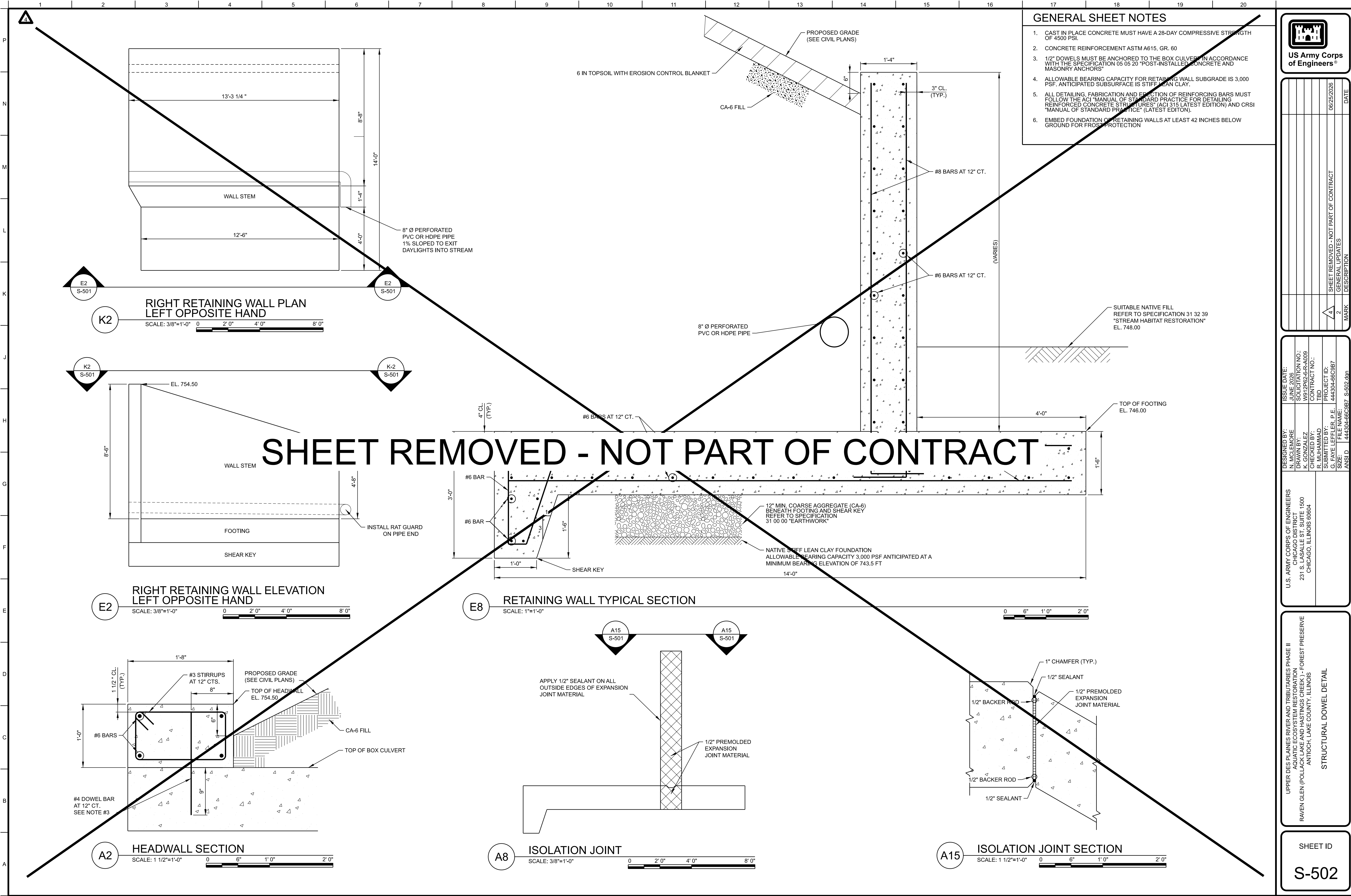
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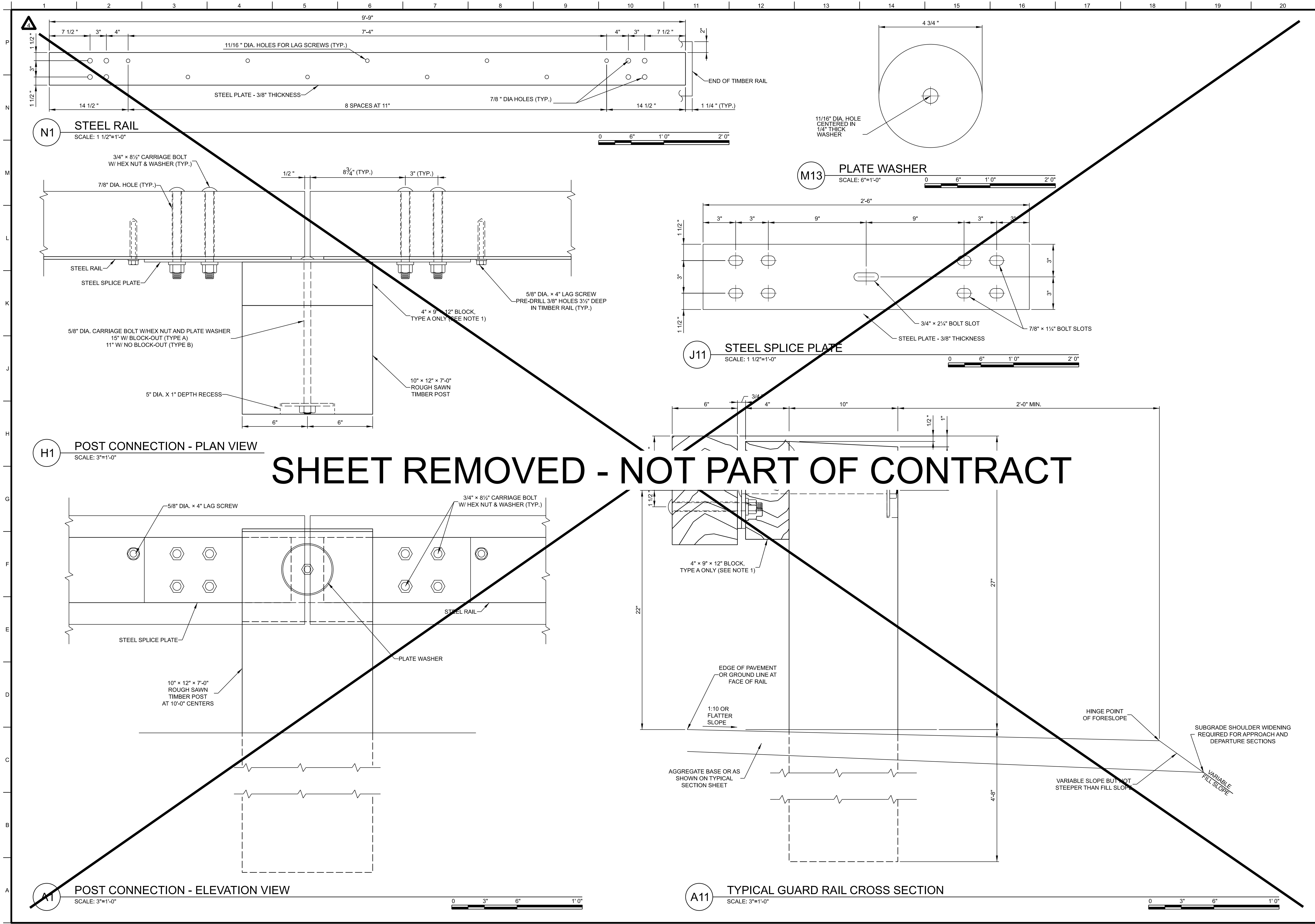
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CERTIFIED FINAL DOCUMENTS - RTA

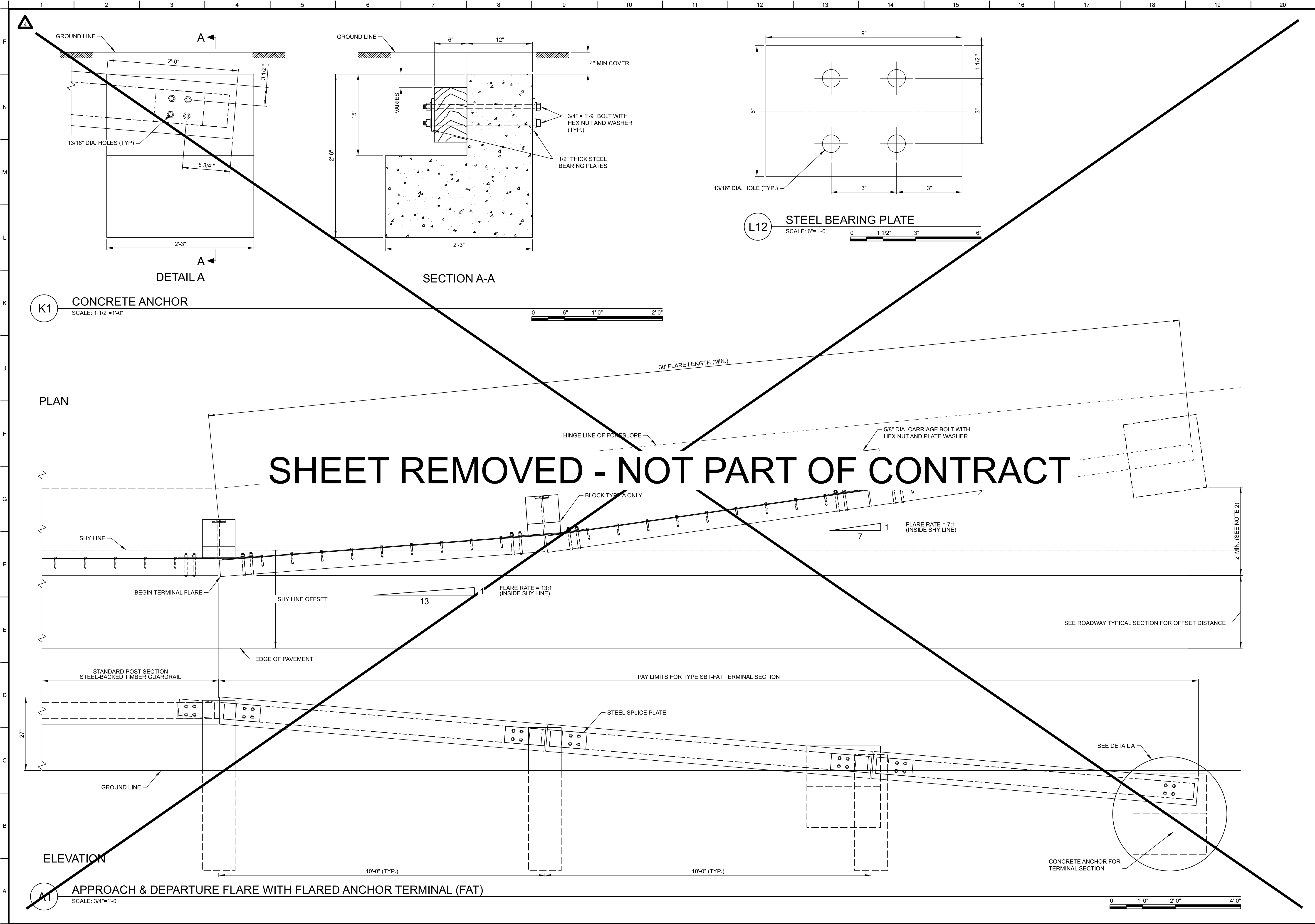


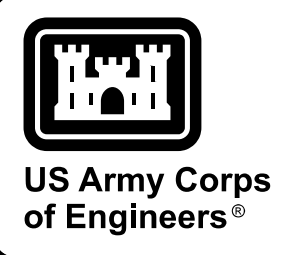












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of Engineers®

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|----------------------------------------|---------------------------------------|
| DESIGNED BY:<br>N. MCLEMORE            | ISSUE DATE:<br>JUNE 2026              |
| DRAWN BY:<br>R. MUHAMMAD               | SOLICITATION NO.:<br>444304-66C9B7    |
| CHECKED BY:<br>G. FAYE LEFFLER, P.E.   | CONTRACT NO.:<br>444304-66C9B7        |
| SUBMITTED BY:<br>G. FAYE LEFFLER, P.E. | PROJECT ID:<br>444304-66C9B7          |
| SIZE:<br>ANSI D                        | FILE NAME:<br>444304-66C9B7 S-504.dgn |

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|---------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LA SALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II<br>AQUATIC ECOSYSTEM RESTORATION<br>RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE<br>ANTIOCH, LAKE COUNTY, ILLINOIS |
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|                                 |
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| STRUCTURAL GUARD RAIL DETAILS 2 |
|---------------------------------|

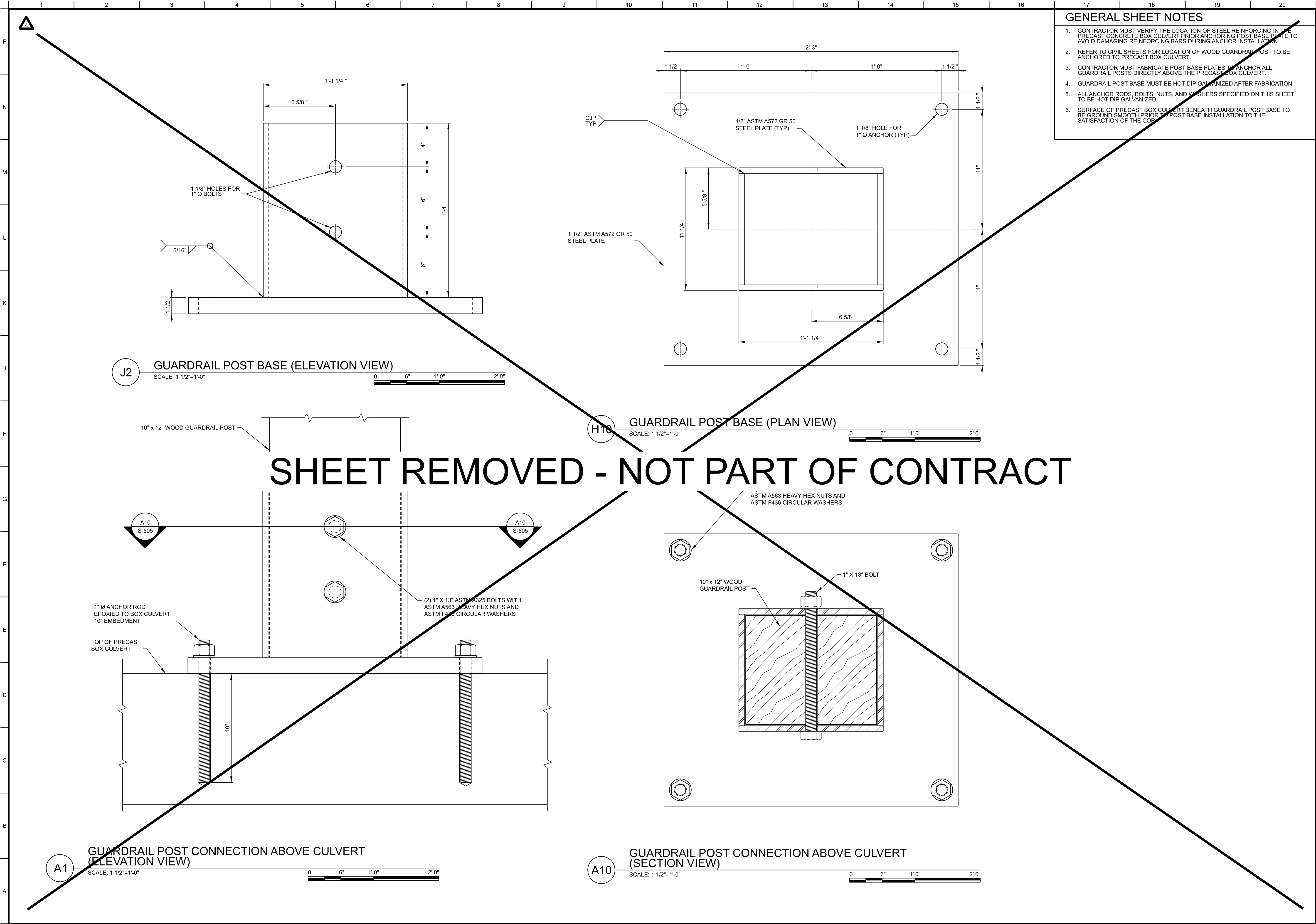
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| SHEET ID |
| S-504    |

CERTIFIED FINAL DOCUMENTS - RTA

PD: 11:26:29 AM 7/27/2026

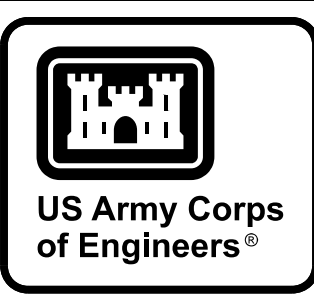
444304-66C9B7 S-504.dgn





GENERAL SHEET NOTES

1. CONTRACTOR MUST VERIFY THE LOCATION OF STEEL REINFORCING IN THE PRECAST CONCRETE BOX CULVERT PRIOR ANCHORING POST BASE PLATE TO AVOID DAMAGING REINFORCING BARS DURING ANCHOR INSTALLATION.
2. REFER TO CIVIL SHEETS FOR LOCATION OF WOOD GUARDRAIL POST TO BE ANCHORED TO PRECAST BOX CULVERT.
3. CONTRACTOR MUST FABRICATE POST BASE PLATES TO ANCHOR ALL GUARDRAIL POSTS DIRECTLY ABOVE THE PRECAST BOX CULVERT.
4. GUARDRAIL POST BASE MUST BE HOT DIP GALVANIZED AFTER FABRICATION.
5. ALL ANCHOR RODS, BOLTS, NUTS, AND WASHERS SPECIFIED ON THIS SHEET TO BE HOT DIP GALVANIZED.
6. SURFACE OF PRECAST BOX CULVERT BENEATH GUARDRAIL POST BASE TO BE GROUND SMOOTH PRIOR TO POST BASE INSTALLATION TO THE SATISFACTION OF THE CORP.



| DATE        | 06/25/2026                           |
|-------------|--------------------------------------|
| DESCRIPTION | SHEET REMOVED - NOT PART OF CONTRACT |
| MARK        | 4                                    |

|                                        |                                    |
|----------------------------------------|------------------------------------|
| DESIGNED BY:<br>N. MCLEMORE            | ISSUE DATE:<br>JUNE 2026           |
| DRAWN BY:<br>J. HARRIS                 | SOLICITATION NO.:<br>444304-66C9B7 |
| CHECKED BY:<br>R. MUHAMMAD             | CONTRACT NO.:<br>TBD               |
| SUBMITTED BY:<br>G. FAYE LEFFLER, P.E. | PROJECT ID:<br>444304-66C9B7       |
| FILE NAME:<br>444304-66C9B7_S-505.dgn  | ANSI D:                            |

|                                                                                                              |                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| U.S. ARMY CORPS OF ENGINEERS<br>CHICAGO DISTRICT<br>231 S. LASALLE ST. SUITE 1500<br>CHICAGO, ILLINOIS 60604 | UPPER DES PLAINES RIVER AND TRIBUTARIES PHASE II<br>AQUATIC ECOSYSTEM RESTORATION<br>RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE<br>ANTIOCH, LAKE COUNTY, ILLINOIS |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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| STRUCTURAL GUARD RAIL DETAILS 3 |
| SHEET ID<br>S-505               |



[illegible]

|                                                                                      |                                                                                                                                                           |                                        |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|
| DRAWN BY:<br>A. WILLIAMS<br>231 S. LASALLE ST, SUITE 1500<br>CHICAGO, ILLINOIS 60604 | SOLICITATION NO:<br>W5127P62-ER-A009<br>CONTRACT NO.:<br>TBD<br>CHECKED BY:<br>SUPERVISOR<br>SUPERVISOR NAME:<br>A. KARR<br>PROJECT ID:<br>4443304-66C9B7 | FILE NAME:<br>4443304-66C9B7 R-001.dgn |
|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|

RAVEN GLEN (POLLACK LAKE AND HASTINGS CREEK) - FOREST PRESERVE  
ANTIOCH, LAKE COUNTY, ILLINOIS

REFERENCE DRAWING 1

SHEET ID  
R-001

## Attachment 6: Earthen Ramp Detail

|                  |            |           |
|------------------|------------|-----------|
| Project/Inquiry: | Loading:   | Date:     |
| System:          | Pipe Data: | Revision: |

GEOTEXTILE STABILIZATION LINER AMOCO  
ENGINEERING FABRIC PROPEX 2006 WOVEN  
POLYPROPYLENE FABRIC OR APPROVED EQUAL  
AMOCO FABRIC CO.  
ATLANTA, GEORGIA  
PHONE: (770)944-4569

**TEMPORARY (WET CONDITIONS) CONSTRUCTION RAMP  
OVER BPL PIPELINE (S)**

**NOTES:** NO SCALE

- RAMP SHALL BE 15 FOOT PLUS/MINUS WIDE WITH SIDES TAPERED ON A MINIMUM 1:1 SLOPE.
- IF DRY CONDITIONS PREVAIL AT CROSSING SITE LINER AND STONE CAN BE REPLACED WITH FILL MATERIAL.

\* Indicates item supplied by Buckeye Pipe Line Company.

|                                                                                                                                                                                                                                                         |  |  |                                                                |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------------------------------------------------|--|
| <b>Legend &amp; Notes:</b><br>A. Required pipeline cover must be a minimum of:      *      feet<br>B. Existing pipeline cover is currently:                      TBD      feet<br>C. Earthen ramp height above existing grade:              *      feet |  |  | <b>Buckeye Pipe Line Company</b><br><b>Earthen Ramp Detail</b> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|----------------------------------------------------------------|--|

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DIVISION 01 - GENERAL REQUIREMENTS

SECTION 01 11 00

SUMMARY OF WORK

**08/15**

PART 1 GENERAL

1.1 WORK COVERED BY CONTRACT DOCUMENTS

1.1.1 Project Description

1.1.2 Location

1.2 EXISTING WORK

1.3 LOCATION OF UNDERGROUND UTILITIES

1.3.1 Notification Prior to Excavation

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section Table of Contents --

## SECTION 01 11 00

SUMMARY OF WORK  
08/15

## PART 1 GENERAL

## 1.1 WORK COVERED BY CONTRACT DOCUMENTS

## 1.1.1 Project Description

Regrade Hastings Creek by both widening and adding linear length to the creek. Provide riffles, cobble bars, boulder clusters in the stream channel to provide hydraulic diversity, instream habitat for macroinvertebrates and fishes. Eradicate invasive and non-native vegetation via herbicide application, prescribed/control burnings and hand removal. Provide native plant communities. ~~Remove existing culvert and replace with new precast concrete culvert.~~ Remove existing water control and regrade for installation of riffles. Disablement of agricultural drain tiles and replace with installation of riser structures, and riprap.

## 1.1.2 Location

The work is located at Raven Glen Forest Preserve in Antioch, Illinois. The project area is approximately 429 acres. 7 of those acres will be utilized for the regrading of Hastings Creek, 387 acres will be used to establish native communities and the remaining 35 acres pertain to Pollack Lake and White Slough which will not be touched unless invasive species control and native planting is needed. The exact locations will be shown by the Contracting Officer.

## 1.2 EXISTING WORK

In addition to "FAR 52.236-9, Protection of Existing Vegetation, Structures, Equipment, Utilities, and Improvements":

- a. Remove or alter existing work in such a manner as to prevent injury or damage to any portions of the existing work which remain.
- b. Repair or replace portions of existing work which have been altered during construction operations to match existing or adjoining work, as approved by the Contracting Officer. At the completion of operations, existing work must be in a condition equal to or better than that which existed before new work started.

## 1.3 LOCATION OF UNDERGROUND UTILITIES

Obtain digging permits prior to start of excavation, and comply with Installation requirements for locating and marking underground utilities. Contact local utility locating service a minimum of 48 hours prior to excavating, to mark utilities, and within sufficient time required if work occurs on a Monday or after a Holiday. Verify existing utility locations indicated on contract drawings, within area of work. There currently resides a high pressure liquid petroleum line that bisects Hastings Creek which will require coordination with all parties, including the COR and owner of line, West Shore Pipe Line Company.

Identify and mark all other utilities not managed and located by the local utility companies. Scan the construction site with Ground Penetrating Radar (GPR), electromagnetic, or sonic equipment, and mark the surface of the ground, or paved surface where existing underground utilities are discovered. Verify the elevations of existing piping, utilities, and any type of underground or encased obstruction not indicated, or specified to be removed, that is indicated or discovered during scanning, in locations to be traversed by piping, ducts, and other work to be conducted or installed. Verify elevations before installing new work closer than nearest manhole or other structure at which an adjustment in grade can be made.

#### 1.3.1 Notification Prior to Excavation

Notify the Contracting Officer at least 15 days prior to starting excavation work. Notify West Shore Pipe Line Company at least 15 days prior to starting excavation on liquid petroleum easement.

PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section --

## SECTION TABLE OF CONTENTS

## DIVISION 01 - GENERAL REQUIREMENTS

## SECTION 01 20 00

## PRICE AND PAYMENT PROCEDURES

**11/20, CHG 2: 08/21**

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    - 1.3.1.2 Unit of Measure
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    - 1.3.3.2 Unit of Measure
  - 1.3.4 Tree and Shrub Removal (Bid Item 0007AA)
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    - 1.4.2.2 Measurement
    - 1.4.2.3 Unit of Measure
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    - 1.4.3.2 Measurement
    - 1.4.3.3 Unit of Measure
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- 1.4.6.3 Unit of Measure
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  - 1.4.8.2 Measurement
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- 1.4.12 Storm Drain Pipe Installation (Bid Item 0004AF)
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  - 1.4.12.3 Unit of Measure
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  - 1.4.13.3 Unit of Measure
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  - 1.4.14.1 Payment
  - 1.4.14.2 Measurement
  - 1.4.14.3 Unit of Measure
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  - 1.4.15.2 Measurement
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PART 2 PRODUCTS (NOT USED)

PART 3 EXECUTION (NOT USED)

-- End of Section Table of Contents --

## SECTION 01 20 00

## PRICE AND PAYMENT PROCEDURES

11/20, CHG 2: 08/21

## PART 1 GENERAL

## 1.1 CONTRACT COST BREAKDOWN

The Contractor must furnish within 30 days after the date of Notice to Proceed, and prior to the submission of its first partial payment estimate, a breakdown of its single job pay item or items which will be reviewed by the Contracting Officer as to propriety of distribution of the total cost to the various accounts. Any unbalanced items as between early and late payment items or other discrepancies will be revised by the Contracting Officer to agree with a reasonable cost of the work included in the various items. This Contract cost breakdown will then be utilized as the basis for progress payments to the Contractor.

## 1.2 CONTRACTOR'S INVOICE AND CONTRACT PERFORMANCE STATEMENT

## 1.3 SINGLE JOB PAYMENT ITEMS

Payment items for the work of this Contract for which Contract job payments will be made are listed in the BID SCHEDULE and described below. All costs for items of work, which are not specifically mentioned to be included in a particular job or unit price payment item, are included in the listed job item most closely associated with the work involved. The job price and payment made for each item listed constitutes full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

## 1.3.1 Mobilization and Demobilization (Base Bid Item 0001AA)

## 1.3.1.1 Payment

Payment will be made for costs associated with mobilization/demobilization, as defined in Special Contract Requirement 252.236-7004, PAYMENT FOR MOBILIZATION AND DEMOBILIZATION. The Contractor will be compensated for the totality of the activities needed to mobilize the equipment and labor force to the project site. The Government will pay all costs for the mobilization of all of the Contractor's equipment at the job price for this item. The Contracting Officer Representative may require the Contractor to furnish cost data to justify the bid price for this item if the Contracting Officer deems there is no reasonable relationship to the cost of the work in this contract. Failure to justify the line item price to the satisfaction of the Contracting Officer will result in payment determined by the Contracting Officer of the actual cost, which is not subject to appeal.

## 1.3.1.2 Unit of Measure

Unit of Measure: JOB

### 1.3.2 Disposal of Poly Drain Tile (Bid Item 0004AB)

#### 1.3.2.1 Payment

Payment will be made for costs associated with poly line disposal in accordance with Section 02 41 00 DEMOLITION. All poly lines excavated from the drain tile disablement are to be disposed of properly in accordance with Section 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

#### 1.3.2.2 Unit of Measure

Unit of Measure: JOB

### ~~1.3.3 Demolition and Removal of Existing Crossing (Bid Item 0005AA)~~

#### ~~1.3.3.1 Payment~~

~~Payment will be made for costs associated for demolition and removal of existing culvert crossing, including post grading demolition and disposal of culvert crossing features in accordance with Sections 31 00 00 EARTHWORK, 02 41 00 DEMOLITION, 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS and as shown on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

#### ~~1.3.3.2 Unit of Measure~~

~~Unit of Measure: JOB~~

### ~~1.3.4 Box Culvert and Box Culvert Installation (Bid Item 0005AB)~~

#### ~~1.3.4.1 Payment~~

~~Payment will be made for costs associated with acquiring and installing box culvert and wingwalls in accordance with Sections 33 40 00 STORMWATER UTILITIES, 03 30 53 MISCELLANEOUS CAST-IN-PLACE CONCRETE, 05 05 20 POST-INSTALLED CONCRETE AND MASONRY ANCHORS, 34 71 13.16 VEHICLE CRASH BARRIERS, 31 00 00 EARTHWORK and as shown on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

#### ~~1.3.4.2 Unit of Measure~~

~~Unit of Measure: JOB~~

### ~~1.3.5 Base Earthwork for Trail Installation (Bid Item 0005AD)~~

#### ~~1.3.5.1 Payment~~

~~Payment will be made for costs associated with grading and establishing base work for trail installation in accordance with Section 31 00 00 EARTHWORK and as shown on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.3.5.2 Unit of Measure~~~~Unit of Measure: JOB~~~~1.3.6 Gravel Trail Installation (Bid Item 0005AE)~~~~1.3.6.1 Payment~~

~~Payment will be made for costs associated with acquiring all aggregate and installing of gravel surface trail in accordance with Sections 31 00 00 EARTHWORK and 32 15 00 AGGREGATE SURFACING. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.3.6.2 Unit of Measure~~~~Unit of Measure: JOB~~~~1.3.7 Embankment Fill with Drainage Layer (Bid Item 0005AF)~~~~1.3.7.1 Payment~~

~~Payment will be made for costs associated with acquiring all materials for embankment filling and installation of drainage layer as shown on the plans and in accordance with 31 00 00 EARTHWORK. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.3.7.2 Unit of Measure~~~~Unit of Measure : JOB~~~~1.3.8 Fabrication of Base Plate of Guard Rail (Bid Item 0005AG)~~~~1.3.8.1 Payment~~

~~Payment will be made for costs associated with the fabrication of the base plate of the guard rail as shown on the plans and in accordance with 34 71 13.16 VEHICLE CRASH BARRIERS. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.3.8.2 Unit of Measure~~~~Unit of Measure : JOB~~~~1.3.9 Acquiring Guard Rail and Installation (Bid Item 0005AH)~~~~1.3.9.1 Payment~~

~~Payment will be made for costs associated with the acquisition and installation of the guard rail as shown on the plans and in accordance with 34 71 13.16 VEHICLE CRASH BARRIERS. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.3.9.2 Unit of Measure~~~~Unit of Measure : JOB~~

### 1.3.3 Demolish/Remove Concrete Water Control Structure (Bid Item 0006AA)

#### 1.3.3.1 Payment

Payment will be made for costs associated with the demolition and removal of the concrete water control structure in accordance with Sections 02 41 00 DEMOLITION and 31 00 00 EARTHWORK, and as shown on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

#### 1.3.3.2 Unit of Measure

Unit of Measure: JOB

### 1.3.4 Tree and Shrub Removal (Bid Item 0007AA)

#### 1.3.4.1 Payment

Payment will be made for costs associated with tree and shrub removal, grubbing within grading boundaries and up to the creek including handling, transporting, on-site stockpiling, and disposal, and all associated costs as described in Section 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL, Section 31 31 19.13 CHEMICAL VEGETATION CONTROL, and as shown on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work. The refilling of holes resulting from clearing and grubbing operations will not be measured for payment but will be considered as a incidental under the above item. Any removal, hauling, and disposal costs for obstructions, such as fences and debris, and woody debris resulting from clearing activities will be considered incidental to tree and shrub clearing.

#### 1.3.4.2 Unit of Measure

Unit of Measure: JOB

### 1.3.5 Invasive Species Control, Establishment, Maintenance & Monitoring Activities (Bid Item 0007AB)

#### 1.3.5.1 Payment

Payment will be made for costs associated with invasive species control, establishment, maintenance, and monitoring activities in accordance with Section 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL, Section 31 31 19.13 CHEMICAL VEGETATION CONTROL, Section 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES, and Section 31 31 19.16 PRESCRIPTION BURNING. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

Payments will be made yearly, for 45 years, and based on the performance criteria described in the above sections; however, monthly progress payments will be allowed with prior approval by the COR and after a monthly Invasive Control Report has been approved as described in Section 31 31 19.13 CHEMICAL VEGETATION CONTROL. If the Contractor fails to establish the performance criteria in any year, none or partial of the payment will be paid to the Contractor. The balance withheld from the previous year will then be paid the following year, if the performance



criteria are met.

The results of prescribed burns must be documented with a map of prescribed burn areas to be submitted with payment invoice. The map must be created using either GIS or CADD delineating the areas that were treated. The areas must be delineated with a handheld GPS unit with a minimum of three meter accuracy. The Contracting Officer's Representative will review the submittal for payment and may elect to verify the completed work in the field. Yearly required minimum prescribed burn acreages and acceptance criteria are contained in Section 31 31 19.16 PRESCRIPTION BURNING. The Contractor will be paid for the actual area completed, not to exceed the yearly required minimum prescribed burn acreage quantity in Section 31 31 19.16 PRESCRIPTION BURNING.

#### 1.3.5.2 Unit of Measure

Unit of Measure: JOB

#### 1.4 UNIT PRICE PAYMENT ITEMS

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the BID SCHEDULE and described below. The unit price and payment made for each item listed constitutes full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items. Notwithstanding the requirements of any other specification, drawing, or clause in this Contract, the Government will only pay for the actual quantities of the unit price items incorporated into the work, up to the estimated Contract Quantities listed on the BID SCHEDULE. Any quantity placed in excess of the Contract Quantity without first receiving a Contract Modification increasing the estimated quantity of that unit price item shall be at the Contractor's expense. The Contractor is responsible for notifying the Government of the need to increase the contract quantity of a line item at least seven calendar days before the item is needed.

##### 1.4.1 Cut (Bid Item 0002AA)

###### 1.4.1.1 Payment

Payment will be made for costs associated with cuts/removal of earth for the regrading of Hastings Creek in accordance with Section 31 00 00 EARTHWORK. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

###### 1.4.1.2 Measurement

The measurement will be by cubic yard.

###### 1.4.1.3 Unit of Measure

Unit of Measure: CUBIC YARD (CY)

## 1.4.2 Riffles (Bid Items 0002AB, 0006AC)

## 1.4.2.1 Payment

Payment will be made for costs associated with cobble riffles being installed in Hastings Creek, riffles replacing the water control structure, and riffles immediately downstream of the water control structure in accordance with Section 31 32 39 STREAM HABITAT RESTORATION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.2.2 Measurement

The measurement will be each.

## 1.4.2.3 Unit of Measure

Unit of Measure: EACH (EA)

## 1.4.3 Cobble Bars (Bid Item 0002AC)

## 1.4.3.1 Payment

Payment will be made for costs associated with cobble bars being installed in Hastings Creek in accordance with Section 31 32 39 STREAM HABITAT RESTORATION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.3.2 Measurement

The measurement will be for each.

## 1.4.3.3 Unit of Measure

Unit of Measure: EACH (EA)

## 1.4.4 Cobble Bars with Boulder Clusters (Bid Item 0002AD)

## 1.4.4.1 Payment

Payment will be made for costs associated with cobble bars with boulder clusters being installed in Hastings Creek in accordance with Section 31 32 39 STREAM HABITAT RESTORATION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.4.2 Measurement

The measurement will be for each.

## 1.4.4.3 Unit of Measure

Unit of Measure: EACH (EA)

#### 1.4.5 Existing Creek Fill (Bid Item 0002AE)

##### 1.4.5.1 Payment

Payment will be made for costs associated with grading/transporting existing creek fill from cut areas to fill areas on Hastings Creek in accordance with Section 31 32 39 STREAM HABITAT RESTORATION and Section 31 00 00 EARTHWORK. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.5.2 Measurement

The measurement will be by cubic yard.

##### 1.4.5.3 Unit of Measure

Unit of Measure: CUBIC YARD (CY)

#### 1.4.6 Fill (Bid Item 0003AA)

##### 1.4.6.1 Payment

Payment will be made for costs associated with moving fill from Hastings Creek and spoil pile grading in accordance with Section 31 00 00 EARTHWORK. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.6.2 Measurement

The measurement will be by cubic yard.

##### 1.4.6.3 Unit of Measure

Unit of Measure: CUBIC YARD (CY)

#### 1.4.7 Seeding (Bid Items 0003AB, 0008AA, 0008BA, 0008CA, 0008DA, 0008EA, 0008FA, 0011AA)

##### 1.4.7.1 Payment

Payment will be made for costs associated with seeding, including spoil pile and embankment fill seeding areas, and soil stability, in accordance with Sections 32 92 19.10 NATIVE PLANTS, 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES, and 31 00 00 EARTHWORK. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.7.2 Measurement

The measurement will be by acre.

A bill of material delivery must accompany the seeds to verify and substantiate the quantity of seeds delivered to the site. Copies of the bills of delivery shall be submitted to the COR and a USACE, Chicago District botanist or ecologist.

Seed plantings will be measured by the acreage of seed installed and

accepted by the COR in accordance with Section 32 92 19.10 NATIVE PLANTS. 20% of the payment will be retained. After the second growing season, the retention will be paid if all areas meet the performance criteria. Performance criteria is contained in SECTION 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. If the Contractor fails to establish the performance criteria in any year, none of the payment percentage will be paid to the Contractor. The balance withheld from the previous year will then be paid the following year, if the performance criteria is met. However, notwithstanding this or any other Contract requirement, the Contractor shall not be paid for any quantity of native seeds that exceeds the quantity listed in the bid schedule. The Contractor shall bear the cost of any native seeds installed in excess of the quantity listed in the bid schedule in accordance with Section 32 92 19.10 NATIVE PLANTS.

#### 1.4.7.3 Unit of Measure

Unit of Measure : ACRE (AC)

#### 1.4.8 Drain Tile Disablement (Bid Item 0004AA)

##### 1.4.8.1 Payment

Payment will be made for costs associated with disablement of drain tiles and disablement and removal of poly lines in accordance with Sections 31 00 00 EARTHWORK and 02 41 00 DEMOLITION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.8.2 Measurement

The measurement will be by linear foot.

##### 1.4.8.3 Unit of Measure

Unit of Measure: LINEAR FOOT (LF)

#### 1.4.9 Clay Breaks with Bentonite Fill (Bid Item 0004AC)

##### 1.4.9.1 Payment

Payment will be made for costs associated with concrete/clay breaks with bentonite fill in accordance with Sections 31 00 00 EARTHWORK and 02 41 00 DEMOLITION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.9.2 Measurement

The measurement will be priced by each.

##### 1.4.9.3 Unit of Measure

Unit of Measure: EACH (EA)

#### 1.4.10 Rock Check Dam Installation (Bid Items 0004AD, 0016AA)

##### 1.4.10.1 Payment

Payment will be made for costs associated with rock check dam installation

as depicted on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

#### 1.4.10.2 Measurement

The measurement will be priced by each.

#### 1.4.10.3 Unit of Measure

Unit of Measure: EACH (EA)

#### 1.4.11 Observation Riser Structure Installation (Bid Item 0004AE)

##### 1.4.11.1 Payment

Payment will be made for costs associated with Observation Riser Structure Installation as depicted on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.11.2 Measurement

The measurement will be priced by each.

##### 1.4.11.3 Unit of Measure

Unit of Measure: EACH (EA)

#### 1.4.12 Storm Drain Pipe Installation (Bid Item 0004AF)

##### 1.4.12.1 Payment

Payment will be made for costs associated with new pipe installation as depicted on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.12.2 Measurement

The measurement will be by linear foot.

##### 1.4.12.3 Unit of Measure

Unit of Measure: LINEAR FOOT (LF)

#### 1.4.13 Storm Inlet Structure (Bid Item 0004AG)

##### 1.4.13.1 Payment

Payment will be made for costs associated with Storm Inlet Structure Installation as depicted on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

##### 1.4.13.2 Measurement

The measurement will be priced by each.

## 1.4.13.3 Unit of Measure

Unit of Measure: EACH (EA)

## 1.4.14 Riprap Outlet Protection (Bid Item 0004AH)

## 1.4.14.1 Payment

Payment will be made for costs associated with Riprap Outlet Protection Installation as depicted on the drawings. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.14.2 Measurement

The measurement will be priced by each.

## 1.4.14.3 Unit of Measure

Unit of Measure: EACH (EA)

~~1.4.15 Demolition and Clearing for New Trail (Bid Item 0005AC)~~~~1.4.15.1 Payment~~

~~Payment will be made for costs associated with demolition and clearing for new trail in accordance to Sections 31 00 00 EARTHWORK and 02 41 00 DEMOLITION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.~~

~~1.4.15.2 Measurement~~

~~The measurement will be by acre.~~

~~1.4.15.3 Unit of Measure~~

~~Unit of Measure: Acre (AC)~~

## 1.4.15 Post Demolition Grading (Bid Item 0006AB)

## 1.4.15.1 Payment

Payment will be made for costs associated with post demolition grading in accordance to Sections 31 00 00 EARTHWORK and 02 41 00 DEMOLITION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.15.2 Measurement

The measurement will be by acre.

## 1.4.15.3 Unit of Measure

Unit of Measure: Acre (AC)



## 1.4.16 Adaptive Management - Riffles (Bid Item 0009AA)

## 1.4.16.1 Payment

Payment will be made for costs associated with adaptive management riffles in accordance with Section 31 32 39 STREAM HABITAT RESTORATION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.16.2 Measurement

The measurement will be each.

## 1.4.16.3 Unit of Measure

Unit of Measure: EACH (EA)

## 1.4.17 Adaptive Management - Cobble Bars (Bid Item 0015AA)

## 1.4.17.1 Payment

Payment will be made for costs associated with adaptive management cobble bars in accordance with Section 31 32 39 STREAM HABITAT RESTORATION. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

## 1.4.17.2 Measurement

The measurement will be each.

## 1.4.17.3 Unit of Measure

Unit of Measure: EACH (EA)

## 1.4.18 Seeding (Bid Items 0010AA, 0012AA, 0013AA, 0014AA)

## 1.4.18.1 Payment

Payment will be made for costs associated with seeding in accordance with Section 32 92 19.10 NATIVE PLANTS and Section 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

A bill of material delivery must accompany the seeds to verify and substantiate the quantity of seeds delivered to the site. Copies of the bills of delivery shall be submitted to the COR and a USACE, Chicago District botanist or ecologist.

Seed plantings will be measured by the ounce of seed installed and accepted by the COR in accordance with Section 32 92 19.10 NATIVE PLANTS. 20% of the payment will be retained. After the second growing season, the retention will be paid if all areas meet the performance criteria. Performance criteria is contained in SECTION 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. If the Contractor fails to establish the performance criteria in any year, none of the payment percentage will be paid to the Contractor. The balance withheld from the previous year will then be paid the following year, if the performance criteria is met. However, notwithstanding this or any other Contract requirement, the

Contractor shall not be paid for any quantity of native seeds that exceeds the quantity listed in the bid schedule. The Contractor shall bear the cost of any native seeds installed in excess of the quantity listed in the bid schedule in accordance with Section 32 92 19.10 NATIVE PLANTS.

#### 1.4.18.2 Measurement

The measurement will be per ounce.

#### 1.4.18.3 Unit of Measure

Unit of Measure: Ounce (OZ)

#### 1.4.19 Plugs (Bid Items 0008AB, 0008BB, 0008CB, 0008DB, 0008EB, 0010AB, 0012AB, 0013AB, 0014AB)

##### 1.4.19.1 Payment

Payment will be made for costs associated with plugs in accordance with Section 32 92 19.10 NATIVE PLANTS and Section 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

After all plantings have been installed, the Contractor must notify the COR and request an inspection. As soon as practicable thereafter, at least one month after all plantings have been installed for that particular year, the COR will make an inspection, at which time all areas planted in accordance with SECTION 32 92 19.10 NATIVE PLANTS will be accepted.

##### 1.4.19.2 Measurement

The measurement will be per each plug installed.

A bill of material delivery must accompany the material to verify and substantiate the quantity of plugs delivered to the site. Copies of the bills of delivery must be submitted to the COR and a USACE, Chicago District botanist or ecologist.

Planting will be measured by the number of plugs installed and accepted by the COR at least one month after all plantings have been installed for that particular year. Performance criteria is contained in 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. The Contractor will be paid for the actual quantity of native plugs installed and accepted. However, notwithstanding this or any other contract requirement, the Contractor will not be paid for any quantity of native plugs that exceeds the quantity listed in the bid schedule. The Contractor must bear the cost of any native plugs installed in excess of the quantity listed in the bid schedule.

##### 1.4.19.3 Unit of Measure

Unit of Measure: Each (EA)

#### 1.4.20 Trees/Shrubs (1 Gallon) (Bid Item 0010AC)

##### 1.4.20.1 Payment

Payment will be made for costs associated with trees and shrubs, one

gallon in accordance with Section 32 92 19.10 NATIVE PLANTS and Section 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES. Payment constitutes full compensation for all plant, labor, materials, equipment, tools, and incidentals necessary to complete the work.

1.4.20.2 Measurement

The measurement will be each.

1.4.20.3 Unit of Measure

Unit of Measure: Each (EA)

PART 2 PRODUCTS (NOT USED)

Not Used

PART 3 EXECUTION (NOT USED)

Not Used

-- End of Section --

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SECTION 02 41 00

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08/22

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## SECTION 02 41 00

DEMOLITION  
08/22

## PART 1 GENERAL

## 1.1 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

## AMERICAN SOCIETY OF SAFETY PROFESSIONALS (ASSP)

ASSP A10.6 (2006) Safety & Health Program  
Requirements for Demolition Operations -  
American National Standard for  
Construction and Demolition Operations

## U.S. ARMY CORPS OF ENGINEERS (USACE)

EM 385-1-1 (2024) Safety and Occupational Health  
Requirements

## U.S. DEFENSE LOGISTICS AGENCY (DLA)

DLA 4145.25 (Jun 2000; Reaffirmed Oct 2010) Storage  
and Handling of Liquefied and Gaseous  
Compressed Gases and Their Full and Empty  
Cylinders;  
[https://www.dla.mil/Portals/104/Documents/Dispositions/  
/ddsr/docs/cylinderjointpub.pdf](https://www.dla.mil/Portals/104/Documents/Dispositions/ddsr/docs/cylinderjointpub.pdf)

## U.S. DEPARTMENT OF DEFENSE (DOD)

DOD 4000.25-1-M (2006) MILSTRIP - Military Standard  
Requisitioning and Issue Procedures

MIL-STD-129 (2014; Rev R; Change 1 2018; Change 2  
2019; Change 3 2023) Military Marking for  
Shipment and Storage

## U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)

40 CFR 61 National Emission Standards for Hazardous  
Air Pollutants

49 CFR 173.301 Shipment of Compressed Gases in Cylinders  
and Spherical Pressure Vessels



## 1.2 PROJECT DESCRIPTION

### 1.2.1 Definitions

#### 1.2.1.1 Demolition

Demolition is the process of tearing apart and removing any feature of a facility together with any related handling and disposal operations.

#### 1.2.1.2 Crimping Method

Crimping is the process of breaking at least 10 feet of the drain tile in place. Approximately 6 feet of the exposed ends of the tiles (disabled sections) should be plugged with bentonite, cement, or concrete to prevent draining of the subsurface water. The tile opening should be securely closed and watertight. The broken clay tiles should be left in place and covered with native materials after grouting.

#### 1.2.1.3 Demolition Plan

Demolition Plan is the planned steps and processes for managing demolition activities and identifying the required sequencing activities and disposal mechanisms.

### 1.2.2 Demolition

Prepare a [Demolition Plan](#) and submit proposed salvage, demolition, and removal procedures for approval before work is started. Include in the plan procedures for careful removal and disposition of materials specified to be salvaged, coordination with other work in progress, a disconnection schedule of utility services, a detailed description of methods and equipment to be used for each operation and of the sequence of operations. Coordinate with Section [01 57 19.01](#) TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS. Provide procedures for safe conduct of the work in accordance with [EM 385-1-1](#). Plan must be approved by Contracting Officer prior to work beginning.

### 1.2.3 General Requirements

Do not begin demolition or deconstruction until authorization is received from the Contracting Officer. The work includes demolition, deconstruction, salvage of identified items and materials, and removal of resulting rubbish and debris. Remove rubbish and debris from the project site property daily, unless otherwise directed. Store materials that cannot be removed daily in areas specified by the Contracting Officer. In the interest of occupational safety and health, perform the work in accordance with [EM 385-1-1](#), Section 23, Demolition, and other applicable Sections.

## 1.3 ITEMS TO REMAIN IN PLACE

Comply with FAR 52.236-9 to protect existing vegetation, structures, equipment, utilities, and improvements. Coordinate the work of this section with all other work indicated. Construct and maintain shoring, bracing, and supports as required. Ensure that structural elements are not overloaded. Increase structural supports or add new supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract. Do not overload structural elements and pavements to remain. Provide new supports and reinforcement

for existing construction weakened by demolition, deconstruction, or removal work. Repairs, reinforcement, or structural replacement require approval by the Contracting Officer prior to performing such work.

#### 1.3.1 Existing Construction Limits and Protection

Do not disturb existing construction beyond the extent indicated or necessary for installation of new construction. Provide temporary shoring and bracing for support of building components to prevent settlement or other movement. Provide protective measures to control accumulation and migration of dust and dirt in all work areas. Remove snow, dust, dirt, and debris from work areas daily.

#### 1.3.2 Trees

Refer to Section 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL and drawings for protection of trees.

#### 1.3.3 Utility Service

Maintain existing utilities indicated to stay in service and protect against damage during demolition and deconstruction operations.

##### 1.3.3.1 Drain Tiles to Remain

Drain tiles under permanently ponded areas, under the liquified petroleum line, and under trails are to remain in place. This includes drain tiles B-O, B-P, A-E and C-A. Drain tiles with NO crimps assigned and to be abandoned will be located and recorded in the as-builds. This includes invert elevations, material of drain tile, condition of drain tile and size of drain tile. Drain tiles that bisect existing trail or the liquified petroleum line easement will be disabled/crimped 10 feet from the trail/easement line and into the project area to avoid excavation in the trail/easement.

#### 1.3.4 Facilities

Protect electrical and mechanical services and utilities. Where removal of existing utilities and pavement is specified or indicated, provide approved barricades, temporary covering of exposed areas, and temporary services or connections for electrical and mechanical utilities. Floors, roofs, walls, columns, pilasters, and other structural components that are designed and constructed to stand without lateral support or shoring, and are determined to be in stable condition, must remain standing without additional bracing, shoring, or lateral support until demolished or deconstructed, unless directed otherwise by the Contracting Officer. Ensure that no elements determined to be unstable are left unsupported and place and secure bracing, shoring, or lateral supports as may be required as a result of any cutting, removal, deconstruction, or demolition work performed under this contract.

#### 1.4 BURNING

Only burning of vegetative waste will be allowed on the project site unless specified in other sections of the specifications or authorized in writing by the Contracting Officer. The specific time, location, and manner of burning is subject to approval.

## 1.5 AVAILABILITY OF WORK AREAS

Areas in which the work is to be accomplished will be available at contract award.

## 1.6 SUBMITTALS

Government approval is required for submittals with a "G" classification. Submittals not having a "G" classification are for Contractor Quality Control approval.. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

### SD-01 Preconstruction Submittals

Demolition Plan; G, AOF

Existing Conditions; G, AOF

### SD-07 Certificates

Notification;

## 1.7 QUALITY ASSURANCE

Submit timely notification of demolition projects to Federal, State, regional, and local authorities in accordance with 40 CFR 61, Subpart M. Notify the local air pollution control district/agency and the Contracting Officer in writing 10 working days prior to the commencement of work in accordance with 40 CFR 61, Subpart M. Comply with federal, state, and local hauling and disposal regulations. In addition to the requirements of the Contract Clauses, conform to the safety requirements contained in ASSP A10.6. Comply with the Environmental Protection Agency requirements specified. Use of explosives will not be permitted.

### 1.7.1 Dust and Debris Control

Prevent the spread of dust and debris and avoid the creation of a nuisance or hazard in the surrounding area. Do not use water if it results in hazardous or objectionable conditions such as, but not limited to, ice, flooding, or pollution. Sweep pavements as often as necessary to control the spread of debris to public right-of-way.

## 1.8 PROTECTION

### 1.8.1 Traffic Control Signs

a. Where pedestrian and driver safety is endangered in the area of removal work, use traffic barricades with flashing lights. Anchor barricades in a manner to prevent displacement by wind. Notify the Contracting Officer prior to beginning such work.

### 1.8.2 Protection of Personnel

Before, during and after the demolition work continuously evaluate the condition of the site specific features being demolished and take immediate action to protect all personnel working in and around the project site. No area, section, or component of floors, roofs, walls,

columns, pilasters, or other structural element will be allowed to be left standing without sufficient bracing, shoring, or lateral support to prevent collapse or failure while workmen remove debris or perform other work in the immediate area.

#### 1.9 RELOCATIONS

Perform the removal and reinstallation of relocated items as indicated with workmen skilled in the trades involved. Repair or replace items to be relocated which are damaged by the Contractor with new undamaged items as approved by the Contracting Officer.

#### 1.10 EXISTING CONDITIONS

Before beginning any demolition or deconstruction work, survey the site and examine the drawings and specifications to determine the extent of the work. Record existing conditions in the presence of the Contracting Officer or the Contracting Officer's Representative showing the condition of structures and other facilities adjacent to areas of alteration or removal. Photographs or electronic images with a minimum resolution of 3072 x 2304 pixels, capable of a print resolution of 300 dpi, will be acceptable as a record of existing conditions. Include in the record the elevation of the top of foundation walls, location of drain tiles, drain tile inverts, culvert inverts, possible conflicting electrical conduits, plumbing lines, alarms systems, the location and extent of existing cracks and other damage and description of surface conditions that exist prior to starting work. It is the Contractor's responsibility to verify and document all required outages which will be required during the course of work, and to note these outages on the record document. Submit survey results to the Contracting Officer or the Contracting Officer's Representative.

Two drain tile surveys were completed on behalf of Lake County Forest Preserve District. The first drain tile survey was completed by Hey and Associates Inc in November 2013, and the second was completed by Huddleston McBride in September 2014. The data provided included the location, size, material, depth and direction of flow of the drain tiles located throughout the site which was used to complete the disablement plan for this project.

A summary of the drain tile material, width, depth and length can be found below. For the locations of the drain tiles, reference the Drain Tile Disablement Plan sheets.

| Label | Material | Width (in.) | Length (ft.) | Depth (in.) |
|-------|----------|-------------|--------------|-------------|
| A-A   | Clay     | 8           | 246          | -           |
| A-B   | Clay     | 2.5         | 195          | 38          |
| A-C   | Clay     | 8           | 734          | -           |
| A-D   | Clay     | 3           | 178          | 36          |
| A-E   | Clay     | 2.5         | 17           | -           |
| A-F   | Clay     | 2           | 812          | 32          |

| Label | Material | Width (in.) | Length (ft.) | Depth (in.) |
|-------|----------|-------------|--------------|-------------|
| A-G   | Clay     | 3           | 1107         | 30          |
| A-H   | Clay     | 3           | 572          | 25          |
| A-I   | Clay     | 5           | 496          | 36          |
| A-J   | Clay     | 3           | 379          | 32          |
| A-K   | Clay     | 3           | 542          | 48          |
| A-L   | Clay     | 2           | 144          | 50          |
| A-M   | Clay     | 2           | 242          | 22          |
| A-N   | Clay     | 4           | 245          | 42          |
| A-O   | Clay     | 2           | 292          | 31          |
| A-P   | Clay     | 10          | 2485         | 60          |
| A-Q   | Clay     | 5           | 209          | -           |
| A-R   | Clay     | 8           | 119          | 44          |
| A-S   | Clay     | 4           | 277          | 21          |
| A-T   | Clay     | 10          | 957          | 67          |
| A-U   | Clay     | 6           | 610          | 67          |
| B-A   | Poly     | 6           | 358          | 32          |
| B-B   | Poly     | 6           | 613          | 29          |
| B-C   | Poly     | 6           | 1217         | 36          |
| B-D   | Poly     | 6           | 2359         | 50          |
| B-E   | Poly     | 6           | 871          | 37          |
| B-F   | Poly     | 4           | 638          | 33          |
| B-G   | Poly     | 4           | 277          | 44          |
| B-H   | Poly     | 4           | 234          | 34          |
| B-I   | Poly     | 5           | 547          | 45          |
| B-J   | Poly     | 6           | 761          | 47          |
| B-K   | Poly     | 4           | 446          | 44          |
| B-L   | Poly     | 8           | 402          | 39          |

| Label | Material | Width (in.) | Length (ft.) | Depth (in.) |
|-------|----------|-------------|--------------|-------------|
| B-M   | Poly     | 4           | 297          | 35          |
| B-N   | Poly     | 12          | 521          | 46          |
| B-O   | Poly     | 5           | 560          | -           |
| B-P   | Poly     | 8           | 27           | 34          |
| C-A   | Concrete | 8           | 85           | -           |

## PART 2 PRODUCTS

### 2.1 FILL MATERIAL

- a. Comply with excavating, backfilling, and compacting procedures for soils used as backfill material to fill voids, depressions or excavations resulting from demolition or deconstruction of structures.

## PART 3 EXECUTION

### 3.1 EXISTING FACILITIES TO BE REMOVED

Inspect and evaluate existing structures onsite for reuse. Disassemble existing construction scheduled to be removed for reuse. Dismantled and removed materials are to be separated, set aside, and prepared as specified, and stored or delivered to a collection point for reuse, remanufacture, recycling, or other disposal, as specified. Designate materials for reuse onsite whenever possible.

#### 3.1.1 Structures

- a. Remove existing structures indicated to be removed as shown on drawings.
- b. Demolish structures in a systematic manner from the top of the structure to the ground. Demolish concrete in small sections.

##### ~~3.1.1.1 Culvert~~

~~During construction, the existing culvert will need to stay active while the new box culvert is being installed.~~

#### 3.1.2 Utilities and Related Equipment

##### 3.1.2.1 General Requirements

Do not interrupt existing utilities serving occupied or used facilities, except when authorized in writing by the Contracting Officer. Do not interrupt existing utilities serving facilities occupied and used by the Government except when approved in writing and then only after temporary



utility services have been approved and provided. Do not begin demolition or deconstruction work until all utility disconnections have been made. Shut off and cap utilities for future use, as indicated.

#### 3.1.2.2 Drain Tile Disablement

The disablement of drain tiles must include all topsoil stripping, stockpiling, excavation, tile abandonment, backfilling of trench, and topsoil replacement. Drain tiles must be disabled by locating, excavating, exposing, and using the crimp method, as indicated on the drawings, such that it ceases to function in a drainage capacity, then backfilling the trench as indicated on the drawings. All lengths of plastic drain tile material, except where otherwise noted, must be excavated, removed, and disposed of offsite. See paragraph 1.3.3.1 Drain Tiles to Remain for further details.

#### 3.1.3 Concrete Water Control Structure

A water control structure is located downstream of SRLSDV Pond, and roughly 300 feet west of Route 45. It is approximately 4.15 CY of concrete removal. Concrete near existing tree must be saw cut up to the tree trunk and down to existing ground. Saw concrete along straight lines to a depth of a minimum 2 inch. Make each cut in walls perpendicular to the face and in alignment with the cut in the opposite face. Break out the remainder of the concrete provided that the broken area is concealed in the finished work, and the remaining concrete is sound. At locations where the broken face cannot be concealed, grind smooth or saw cut entirely through the concrete. Existing tree MUST be gridded as specified on 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL .

#### 3.1.4 Miscellaneous Metal

Salvage shop-fabricated items such as access doors and frames, steel gratings, metal ladders, wire mesh partitions, metal railings, metal windows and similar items as whole units. Salvage light-gage and cold-formed metal framing, such as steel studs, steel trusses, metal gutters, roofing and siding, metal toilet partitions, toilet accessories and similar items. Scrap metal is the Contractor's property. Recycle scrap metal as part of demolition and deconstruction operations. Provide separate containers to collect scrap metal and transport to a scrap metal collection or recycling facility, in accordance with Section 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS.

### 3.2 CONCURRENT EARTH-MOVING OPERATIONS

Do not begin excavation, filling, and other earth-moving operations that are sequential to demolition or deconstruction work in areas occupied by structures to be demolished or deconstructed until all demolition and deconstruction in the area has been completed and debris removed. Fill holes and other hazardous openings.

### 3.3 DISPOSITION OF MATERIAL

#### 3.3.1 Title to Materials

Except for salvaged items specified in related Sections, and for materials or equipment scheduled for salvage, all materials and equipment removed and not reused or salvaged, become the property of the Contractor and must be removed from Government property. Materials approved for storage

by the Contracting Officer must be removed before completion of the contract. Title to materials resulting from demolition and deconstruction, and materials and equipment to be removed, is vested in the Contractor upon approval by the Contracting Officer. The Government will not be responsible for the condition or loss of, or damage to, such property after contract award. Showing for sale or selling materials and equipment on site is prohibited.

### 3.3.2 Reuse of Materials and Equipment

Remove and store materials and equipment indicated on the plans to be reused or relocated to prevent damage, and reinstall as the work progresses. Coordinate the re-use of materials and equipment with the re-use requirements in accordance with Section 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS. Capture re-use of materials in the diversion calculations for the project.

### 3.3.3 Transportation Guidance

Ship all ODS containers in accordance with MIL-STD-129, DLA 4145.25 (also referenced one of the following: Army Regulation 700-68, Naval Supply Instruction 4440.128C, Marine Corps Order 10330.2C, and Air Force Regulation 67-12), 49 CFR 173.301, and DOD 4000.25-1-M.

### 3.3.4 Unsalvageable and Non-Recyclable Material

Dispose of unsalvageable and non-recyclable noncombustible material in the disposal area located on the project site. Maintain the fill in the disposal area in accordance with Section 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS and after disposal is completed, uniformly grade the disposal area to drain. Dispose of unsalvageable and non-recyclable combustible material off the site.

## 3.4 CLEANUP

Remove debris and rubbish from project site and similar excavations. Remove and transport the debris in a manner that prevents spillage on streets or adjacent areas. Apply local regulations regarding hauling and disposal.

## 3.5 DISPOSAL OF REMOVED MATERIALS

### 3.5.1 Regulation of Removed Materials

Dispose of debris, rubbish, scrap, and other nonsalvageable materials resulting from removal operations with all applicable federal, state and local regulations in accordance with Section 01 57 19.01 TEMPORARY ENVIRONMENTAL CONTROLS ILLINOIS.

### 3.5.2 Removal to Spoil Areas on Project Site

Transport noncombustible materials removed from demolition and deconstruction structures to designated spoil areas on project site.

### 3.5.3 Removal from Project Site

Transport waste materials removed from demolished and deconstructed structures, except waste soil, from the project site for legal disposal. Dispose of waste soil per Section 01 57 19.01 TEMPORARY ENVIRONMENTAL

CONTROLS ILLINOIS.

### 3.6 REUSE OF SALVAGED ITEMS

Recondition salvaged materials and equipment designated for reuse before installation. Replace items damaged during removal and salvage operations or restore them as necessary to usable condition.

-- End of Section --

SECTION TABLE OF CONTENTS

DIVISION 03 - CONCRETE

-- End of Section Table of Contents --

~~SECTION 03 30 53~~~~MISCELLANEOUS CAST-IN-PLACE CONCRETE~~  
~~05/14~~~~PART 1 GENERAL~~~~1.1 SUMMARY~~

~~Perform all work in accordance with ACI 318.~~

~~1.2 REFERENCES~~

~~The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.~~

~~AMERICAN CONCRETE INSTITUTE (ACI)~~

|                       |                                                                                                                        |
|-----------------------|------------------------------------------------------------------------------------------------------------------------|
| <del>ACI 117</del>    | <del>(2010; R 2015) Specifications for Tolerances for Concrete Construction and Materials and Commentary</del>         |
| <del>ACI 301</del>    | <del>(2020) Specifications for Structural Concrete</del>                                                               |
| <del>ACI 301M</del>   | <del>(2020) Metric Specifications for Structural Concrete</del>                                                        |
| <del>ACI 302.1R</del> | <del>(2015) Guide for Concrete Floor and Slab Construction</del>                                                       |
| <del>ACI 304R</del>   | <del>(2000; R 2009) Guide for Measuring, Mixing, Transporting, and Placing Concrete</del>                              |
| <del>ACI 305R</del>   | <del>(2020) Guide to Hot Weather Concreting</del>                                                                      |
| <del>ACI 306R</del>   | <del>(2016) Guide to Cold Weather Concreting</del>                                                                     |
| <del>ACI 318</del>    | <del>(2019; R 2022) Building Code Requirements for Structural Concrete (ACI 318-19) and Commentary (ACI 318R-19)</del> |
| <del>ACI 318M</del>   | <del>(2019; Errata 2022) Building Code Requirements for Structural Concrete &amp; Commentary</del>                     |
| <del>ACI 347R</del>   | <del>(2014; Errata 1 2017) Guide to Formwork for Concrete</del>                                                        |
| <del>ACI SP-66</del>  | <del>(2004) ACI Detailing Manual</del>                                                                                 |

~~ASTM INTERNATIONAL (ASTM)~~

|                            |                                                                                                              |
|----------------------------|--------------------------------------------------------------------------------------------------------------|
| <del>ASTM A615/A615M</del> | <del>(2024) Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement</del> |
|----------------------------|--------------------------------------------------------------------------------------------------------------|

|                              |                                                                                                                                |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A1064/A1064M</del> | <del>(2024) Standard Specification for Carbon Steel Wire and Welded Wire Reinforcement, Plain and Deformed, for Concrete</del> |
| <del>ASTM C31/C31M</del>     | <del>(2025a) Standard Practice for Making and Curing Concrete Test Specimens in the Field</del>                                |
| <del>ASTM C33/C33M</del>     | <del>(2024a) Standard Specification for Concrete Aggregates</del>                                                              |
| <del>ASTM C39/C39M</del>     | <del>(2024) Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens</del>                              |
| <del>ASTM C94/C94M</del>     | <del>(2024d) Standard Specification for Ready-Mixed Concrete</del>                                                             |
| <del>ASTM C143/C143M</del>   | <del>(2020) Standard Test Method for Slump of Hydraulic Cement Concrete</del>                                                  |
| <del>ASTM C150/C150M</del>   | <del>(2024) Standard Specification for Portland Cement</del>                                                                   |
| <del>ASTM C172/C172M</del>   | <del>(2017) Standard Practice for Sampling Freshly Mixed Concrete</del>                                                        |
| <del>ASTM C173/C173M</del>   | <del>(2024a) Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method</del>                     |
| <del>ASTM C231/C231M</del>   | <del>(2024) Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method</del>                        |
| <del>ASTM C260/C260M</del>   | <del>(2024) Standard Specification for Air-Entraining Admixtures for Concrete</del>                                            |
| <del>ASTM C309</del>         | <del>(2019) Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete</del>                             |
| <del>ASTM C494/C494M</del>   | <del>(2024) Standard Specification for Chemical Admixtures for Concrete</del>                                                  |
| <del>ASTM C595/C595M</del>   | <del>(2024) Standard Specification for Blended Hydraulic Cements</del>                                                         |
| <del>ASTM C618</del>         | <del>(2023; E 2023) Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use in Concrete</del>     |
| <del>ASTM C685/C685M</del>   | <del>(2024) Standard Specification for Concrete Made by Volumetric Batching and Continuous Mixing</del>                        |
| <del>ASTM C920</del>         | <del>(2018; R 2024) Standard Specification for Elastomeric Joint Sealants</del>                                                |



|                              |                                                                                                                                                                                    |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM C989/C989M</del>   | <del>(2024) Standard Specification for Slag Cement for Use in Concrete and Mortars</del>                                                                                           |
| <del>ASTM C1064/C1064M</del> | <del>(2023) Standard Test Method for Temperature of Freshly Mixed Hydraulic Cement Concrete</del>                                                                                  |
| <del>ASTM C1157/C1157M</del> | <del>(2023) Standard Performance Specification for Hydraulic Cement</del>                                                                                                          |
| <del>ASTM C1260</del>        | <del>(2023) Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)</del>                                                                           |
| <del>ASTM C1567</del>        | <del>(2023) Standard Test Method for Potential Alkali-Silica Reactivity of Combinations of Cementitious Materials and Aggregate (Accelerated Mortar-Bar Method)</del>              |
| <del>ASTM C1602/C1602M</del> | <del>(2022) Standard Specification for Mixing Water Used in Production of Hydraulic Cement Concrete</del>                                                                          |
| <del>ASTM D75/D75M</del>     | <del>(2019) Standard Practice for Sampling Aggregates</del>                                                                                                                        |
| <del>ASTM D98</del>          | <del>(2015) Calcium Chloride</del>                                                                                                                                                 |
| <del>ASTM D412</del>         | <del>(2016; R 2021) Standard Test Methods for Vulcanized Rubber and Thermoplastic Elastomers - Tension</del>                                                                       |
| <del>ASTM D471</del>         | <del>(2016a) Standard Test Method for Rubber Property - Effect of Liquids</del>                                                                                                    |
| <del>ASTM D1752</del>        | <del>(2018) Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction</del>                |
| <del>ASTM E96/E96M</del>     | <del>(2024a) Standard Test Methods for Gravimetric Determination of Water Vapor Transmission Rate of Materials</del>                                                               |
| <del>ASTM E1155</del>        | <del>(2020) Standard Test Method for Determining Floor Flatness and Floor Levelness Numbers</del>                                                                                  |
| <del>ASTM E1155M</del>       | <del>(2014) Standard Test Method for Determining Floor Flatness and Floor Levelness Numbers (Metric)</del>                                                                         |
| <del>ASTM E1643</del>        | <del>(2018a) Standard Practice for Selection, Design, Installation, and Inspection of Water Vapor Retarders Used in Contact with Earth or Granular Fill Under Concrete Slabs</del> |
| <del>ASTM E1745</del>        | <del>(2017; R 2023) Standard Specification for</del>                                                                                                                               |

~~Water Vapor Retarders Used in Contact with  
Soil or Granular Fill under Concrete Slabs~~

~~ASTM E1993/E1993M~~

~~(1998; R 2020) Standard Specification for  
Bituminous Water Vapor Retarders Used in  
Contact with Soil or Granular Fill Under  
Concrete Slabs~~

~~U.S. ARMY CORPS OF ENGINEERS (USACE)~~

~~COE CRD-C 513~~

~~(1974) Corps of Engineers Specifications  
for Rubber Waterstops~~

~~COE CRD-C 572~~

~~(1974) Corps of Engineers Specifications  
for Polyvinylchloride Waterstops~~

~~U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)~~

~~40 CFR 247~~

~~Comprehensive Procurement Guideline for  
Products Containing Recovered Materials~~

### ~~1.3 SUBMITTALS~~

~~Government approval is required for submittals with a "G" or "S"  
classification. Submittals not having a "G" or "S" classification are for  
information only. When used, a code following the "G" classification  
identifies the office that will review the submittal for the Government.  
Submit the following in accordance with Section 01 33 00 SUBMITTAL  
PROCEDURES:~~

~~SD-02 Shop Drawings~~

~~Installation Drawings; G, AOF, DT~~

~~SD-03 Product Data~~

~~Air-Entraining Admixture~~

~~Water-Reducing or Retarding Admixture~~

~~Curing Materials~~

~~Expansion Joint Filler Strips, Premolded~~

~~Joint Sealants - Field Molded Sealants~~

~~Waterstops~~

~~Batching and Mixing Equipment~~

~~Conveying and Placing Concrete~~

~~Formwork~~

~~Curing Compound~~

~~Mechanical Reinforcing Bar Connectors~~

~~SD-06 Test Reports~~

~~Aggregates~~~~Concrete Mixture Proportions; G, AOF, DT~~~~Compressive Strength Testing; G, AOF, DT~~~~Slump; G, AOF, DT~~~~Air Content~~~~Water~~~~SD-07 Certificates~~~~Cementitious Materials~~~~Pozzolan~~~~Aggregates~~~~SD-08 Manufacturer's Instructions~~~~Curing Compound~~~~1.4 QUALITY ASSURANCE~~

~~Indicate specific locations of Concrete Placement, Forms, Steel Reinforcement, Accessories, Expansion Joints, Construction Joints, Contraction Joints, and Control Joints on installation drawings and include, but not be limited to, square feet of concrete placements, thicknesses and widths, plan dimensions, and arrangement of cast-in-place concrete section.~~

~~PART 2 PRODUCTS~~~~2.1 SYSTEM DESCRIPTION~~

~~The Government retains the option to sample and test joint sealer, joint filler material, waterstop, aggregates and concrete to determine compliance with the specifications. Provide facilities and labor as may be necessary to assist the Government in procurement of representative test samples. Obtain samples of aggregates at the point of batching in accordance with ASTM D75/D75M. Sample concrete in accordance with ASTM C172/C172M. Determine slump and air content in accordance with ASTM C143/C143M and ASTM C231/C231M, respectively, when cylinders are molded. Prepare, cure, and transport compression test specimens in accordance with ASTM C31/C31M. Test compression test specimens in accordance with ASTM C39/C39M. Take samples for strength tests not less than once each shift in which concrete is produced. Provide a minimum of four 6 x 12 inch or six 4 x 8 inch specimens from each sample; two 6 x 12 inch or three 4 x 8 inch to be tested at 28 days (90 days if pozzolan or slag cement is used) for acceptance. Two 6 x 12 inch or three 4 x 8 inch will be tested at 7 days for information.~~

~~2.1.1 Strength~~

~~Acceptance test results are the average strengths of two 6 x 12 inch or three 4 x 8 inch specimens tested at 28 days (90 days if pozzolan or slag~~

~~cement is used). The strength of the concrete is considered satisfactory so long as the average of all three consecutive acceptance test results equal or exceed the specified compressive strength,  $f'_c$ , and no individual acceptance test result falls below  $f'_c$  by more than 500 psi.~~

### ~~2.1.2 Construction Tolerances~~

~~Apply a Class "C" finish to all surfaces except those specified to receive a Class "D" finish. Apply a Class "D" finish to all post-construction surfaces which will be permanently concealed. Surface requirements for the classes of finish required are as specified in ACI 117.~~

### ~~2.1.3 Concrete Mixture Proportions~~

~~Concrete mixture proportions are the responsibility of the Contractor. Mixture proportions must include the dry weights of cementitious material(s); the nominal maximum size of the coarse aggregate; the specific gravities, absorptions, and saturated surface-dry weights of fine and coarse aggregates; the quantities, types, and names of admixtures; and quantity of water per yard of concrete. Provide materials included in the mixture proportions of the same type and from the same source as will be used on the project. The specified compressive strength  $f'_c$  is 4500 psi at 28 days (90 days if pozzolan is used). The maximum nominal size coarse aggregate is 3/4 inch, in accordance with ACI 304R. The air content must be between 4.5 and 7.5 percent with a slump between 2 and 5 inches. The maximum water-cementitious material ratio is 0.50. Submit the applicable test reports and mixture proportions that will produce concrete of the quality required, ten days prior to placement of concrete.~~

## ~~2.2 MATERIALS~~

~~Submit manufacturer's literature from suppliers which demonstrates compliance with applicable specifications for the specified materials.~~

### ~~2.2.1 Cementitious Materials~~

~~Submit Manufacturer's certificates of compliance, accompanied by mill test reports, attesting that the concrete materials meet the requirements of the specifications in accordance with the Special Clause "CERTIFICATES OF COMPLIANCE". Also, certificates for all material conforming to EPA's Comprehensive Procurement Guidelines (CPG), in accordance with 40 CFR 247. Provide cementitious materials that conform to the appropriate specifications listed:~~

#### ~~2.2.1.1 Portland Cement~~

~~ASTM C150/C150M, Type I, with tri-calcium aluminates (C3A) content less than 10 percent and a maximum cement-alkali content of 0.80 percent Na<sub>2</sub>Oe (sodium oxide) equivalent.~~

#### ~~2.2.1.2 Blended Hydraulic Cement~~

~~Provide blended cement conforming to ASTM C595/C595M and ASTM C1157/C1157M, Type IP, IL or IS, including the optional requirement for mortar expansion and consist of a mixture of ASTM C150/C150M Type I, or Type II cement and a complementary cementing material. The slag added to the Type IS blend must be ASTM C989/C989M ground granulated blast-furnace slag. The pozzolan added to the Type IP blend must be ASTM C618 Class F, interground with the cement clinker. Provide the manufacturer's written~~

~~statement that the amount of pozzolan in the finished cement will not vary more than plus or minus 5 mass percent of the finished cement from lot to lot or within a lot. Do not change the percentage and type of mineral admixture used in the blend from that submitted for the aggregate evaluation and mixture proportioning.~~

#### ~~2.2.1.3 — Pozzolan~~

~~Provide pozzolan that conforms to ASTM C618, Class F, including requirements of Tables 1A and 2A.~~

#### ~~2.2.2 — Aggregates~~

~~For fine and coarse aggregates meet the quality and grading requirements of ASTM C33/C33M. Submit certificates of compliance and test reports for aggregates showing the material(s) meets the quality and grading requirements of the specifications under which it is furnished.~~

#### ~~2.2.3 — Admixtures~~

~~Provide admixtures, when required or approved, in compliance with the appropriate specification listed. Retest chemical admixtures that have been in storage at the project site, for longer than 6 months or that have been subjected to freezing, at the expense of the Contractor at the request of the Contracting Officer and will be rejected if test results are not satisfactory.~~

##### ~~2.2.3.1 — Air-Entraining Admixture~~

~~Provide air-entraining admixture that meets the requirements of ASTM C260/C260M.~~

##### ~~2.2.3.2 — Water-Reducing or Retarding Admixture~~

~~Provide water-reducing or retarding admixture meeting the requirements of ASTM C494/C494M, Type A, B, or D. High-range water-reducing admixture Type F or G may be used only when approved, approval being contingent upon particular placement requirements as described in the Contractor's Quality Control Plan.~~

#### ~~2.2.4 — Water~~

~~Mixing and curing water in compliance with the requirements of ASTM C1602/C1602M; potable, and free of injurious amounts of oil, acid, salt, or alkali. Submit test report showing water complies with ASTM C1602/C1602M.~~

#### ~~2.2.5 — Reinforcing Steel~~

~~Provide reinforcing bars conforming to the requirements of ASTM A615/A615M, Grade 60, deformed. Provide welded steel wire reinforcement conforming to the requirements of ASTM A1064/A1064M. Detail reinforcement not indicated in accordance with ACI 301 and ACI SP-66. Provide mechanical reinforcing bar connectors in accordance with ACI 301 and provide 125 percent minimum yield strength of the reinforcement bar.~~

#### ~~2.2.6 — Expansion Joint Filler Strips, Premolded~~

~~Expansion joint filler strips, premolded of sponge rubber conforming to~~

~~ASTM D1752, Type I.~~

#### ~~2.2.7 Joint Sealants - Field Molded Sealants~~

~~Conform to ASTM C920, Type M, Grade NS, Class 25, use NT for vertical joints and Type M, Grade P, Class 25, use T for horizontal joints. Provide polyethylene tape, coated paper, metal foil, or similar type bond-breaker materials. The backup material needs to be compressible, nonshrink, nonreactive with the sealant, and a nonabsorptive material such as extruded butyl or polychloroprene foam rubber. Immediately prior to installation of field molded sealants, clean the joint of all debris and further cleaned using water, chemical solvents, or other means as recommended by the sealant manufacturer or directed.~~

#### ~~2.2.8 Formwork~~

~~Design and engineer the formwork as well as its construction in accordance with ACI 301 Section 2 and 5 and ACI 347R. Fabricate of wood, steel, or other approved material. Submit formwork design prior to the first concrete placement.~~

#### ~~2.2.9 Form Coatings~~

~~Provide form coating in accordance with ACI 301.~~

#### ~~2.2.10 Curing Materials~~

~~Provide curing materials in accordance with ACI 301, Section 5.~~

### ~~2.3 ACCESSORIES~~

#### ~~2.3.1 Waterstops~~

##### ~~2.3.1.1 PVC Waterstop~~

~~Polyvinylchloride waterstops conforming to COE CRD-C 572.~~

##### ~~2.3.1.2 Rubber Waterstop~~

~~Rubber waterstops conforming to COE CRD-C 513.~~

##### ~~2.3.1.3 Thermoplastic Elastomeric Rubber Waterstop~~

~~Thermoplastic elastomeric rubber waterstops conforming to ASTM D471.~~

##### ~~2.3.1.4 Hydrophilic Waterstop~~

~~Swellable strip type compound of polymer modified chloroprene rubber that swells upon contact with water conforming to ASTM D412 as follows: Tensile strength 420 psi minimum; ultimate elongation 600 percent minimum. Minimum hardness of 50 on the type A durometer and the volumetric expansion ratio in distilled water at 70 degrees F; 3 to 1 minimum.~~

#### ~~2.3.2 Curing Compound~~

~~Provide curing compound conforming to ASTM C309. Submit manufacturer's instructions for placing curing compound.~~



## ~~PART 3 — EXECUTION~~

### ~~3.1 — PREPARATION~~

~~Prepare construction joints to expose coarse aggregate. The surface must be clean, damp, and free of laitance. Construct ramps and walkways, as necessary, to allow safe and expeditious access for concrete and workmen. Remove snow, ice, standing or flowing water, loose particles, debris, and foreign matter. Satisfactorily compact earth foundations. Make spare vibrators available. Placement cannot begin until the entire preparation has been accepted by the Government.~~

#### ~~3.1.1 — Embedded Items~~

~~Secure reinforcement in place after joints, anchors, and other embedded items have been positioned. Arrange internal ties so that when the forms are removed the metal part of the tie is not less than 2 inches from concrete surfaces permanently exposed to view or exposed to water on the finished structures. Prepare embedded items so they are free of oil and other foreign matters such as loose coatings or rust, paint, and scale. The embedding of wood in concrete is permitted only when specifically authorized or directed. Provide all equipment needed to place, consolidate, protect, and cure the concrete at the placement site and in good operating condition.~~

#### ~~3.1.2 — Formwork Installation~~

~~Forms must be properly aligned, adequately supported, and mortar-tight. Provide smooth form surfaces, free from irregularities, dents, sags, or holes when used for permanently exposed faces. Chamfer all exposed joints and edges, unless otherwise indicated.~~

#### ~~3.1.3 — Production of Concrete~~

##### ~~3.1.3.1 — Concrete Made by Volumetric Batching and Continuous Mixing~~

~~Conform to ASTM C685/C685M.~~

##### ~~3.1.3.2 — Batching and Mixing Equipment~~

~~The option of using an on-site batching and mixing facility is available. The facility must provide sufficient batching and mixing equipment capacity to prevent cold joints. Submit the method of measuring materials, batching operation, and mixer for review, and manufacturer's data for batching and mixing equipment demonstrating compliance with the applicable specifications. Provide an Onsite Plant conforming to the requirements of either ASTM C94/C94M or ASTM C685/C685M.~~

#### ~~3.1.4 — Waterstops~~

~~Install and splice waterstops as directed by the manufacturer.~~

## ~~3.2 — CONVEYING AND PLACING CONCRETE~~

~~Convey and place concrete in accordance with ACI 301, Section 5.~~

### ~~3.2.1 — Cold-Weather Requirements~~

~~Place concrete in cold weather in accordance with ACI 306R.~~

### ~~3.2.2 Hot Weather Requirements~~

~~Place concrete in hot weather in accordance with ACI 305R.~~

### ~~3.2.3 Placing Concrete Underwater~~

~~ACI 301 methods and equipment used must prevent the washing of the cement from the mixture, minimize the formation of laitance, prevent the flow of water through the concrete before it has hardened, and minimize disturbance to the previously placed concrete. Tremies, if used, must be watertight and sufficiently large to permit a free flow of concrete. Keep the discharge end continuously submerged in fresh concrete. Keep the shaft full of concrete to a level well above the water surface. Discharge and spread the concrete by raising the tremie to maintain a uniform flow. Place concrete without interruption until the top of the fresh concrete is at the required height.~~

## ~~3.3 FINISHING~~

### ~~3.3.1 Temperature Requirement~~

~~Do not finish or repair concrete when either the concrete or the ambient temperature is below 50 degrees F.~~

### ~~3.3.2 Finishing Formed Surfaces~~

~~Remove all fins and loose materials, and surface defects including filling of tie holes. Repair all honeycomb areas and other defects. Remove all unsound concrete from areas to be repaired. Ream or chip surface defects greater than 1/2 inch in diameter and holes left by removal of tie rods in all surfaces not to receive additional concrete and fill with dry-pack mortar. Brush-coat the prepared area with an approved epoxy resin or latex bonding compound or with a neat cement grout after dampening and filling with mortar or concrete. Use a blend of portland cement and white cement in mortar or concrete for repairs to all surfaces permanently exposed to view so that the final color when cured is the same as adjacent concrete.~~

### ~~3.3.3 Finishing Unformed Surfaces~~

~~Finish unformed surfaces in accordance with ACI 301, Section 5.~~

## ~~3.4 CURING AND PROTECTION~~

~~Cure and protect in accordance with ACI 301, Section 5.~~

## ~~3.5 FORM WORK~~

~~Provide form work in accordance with ACI 301, Section 2 and Section 5.~~

### ~~3.5.1 Removal of Forms~~

~~Remove forms in accordance with ACI 301, Section 2.~~

## ~~3.6 STEEL REINFORCING~~

~~Reinforcement must be free from loose, flaky rust and scale, and free from oil, grease, or other coating which might destroy or reduce the~~

~~reinforcement's bond with the concrete.~~

### ~~3.6.1 Fabrication~~

~~Shop fabricate steel reinforcement in accordance with ACI 318 and ACI SP-66. Provide shop details and bending in accordance with ACI 318 and ACI SP-66.~~

### ~~3.6.2 Splicing~~

~~Perform splices in accordance with ACI 318 and ACI SP-66.~~

### ~~3.6.3 Supports~~

~~Secure reinforcement in place by the use of metal or concrete supports, spacers, or ties.~~

## ~~3.7 EMBEDDED ITEMS~~

~~Before placing concrete, take care to determine that all embedded items are firmly and securely fastened in place. Provide embedded items free of oil and other foreign matter, such as loose coatings of rust, paint and scale. Embedding of wood in concrete is permitted only when specifically authorized or directed.~~

## ~~3.8 TESTING AND INSPECTING~~

~~Report the results of all tests and inspections conducted at the project site informally at the end of each shift. Submit written reports weekly. Deliver within three days after the end of each weekly reporting period. See Section 01 45 00 QUALITY CONTROL.~~

### ~~3.8.1 Field Testing Technicians~~

~~The individuals who sample and test concrete must have demonstrated a knowledge and ability to perform the necessary test procedures equivalent to the ACI minimum guidelines for certification of Concrete Field Testing Technicians, Grade I.~~

### ~~3.8.2 Preparations for Placing~~

~~Inspect foundation or construction joints, forms, and embedded items in sufficient time prior to each concrete placement to certify that it is ready to receive concrete.~~

### ~~3.8.3 Sampling and Testing~~

- ~~a. Obtain samples and test concrete for quality control during placement. Sample fresh concrete for testing in accordance with ASTM C172/C172M. Make six test cylinders.~~
- ~~b. Test concrete for compressive strength at 7 and 28 days for each design mix and for every 100 cubic yards of concrete. Test two cylinders at 7 days; two cylinders at 28 days; and hold two cylinders in reserve. Conform test specimens to ASTM C31/C31M. Perform compressive strength testing conforming to ASTM C39/C39M.~~
- ~~c. Test slump at the site of discharge for each design mix in accordance with ASTM C143/C143M. Check slump once during each shift that concrete is produced.~~

- ~~d. Test air content for air-entrained concrete in accordance with ASTM C231/C231M. Test concrete using lightweight or extremely porous aggregates in accordance with ASTM C173/C173M. Check air content at least twice during each shift that concrete is placed.~~
- ~~e. Determine temperature of concrete at time of placement in accordance with ASTM C1064/C1064M. Check concrete temperature at least once during each shift that concrete is placed.~~

#### ~~3.8.4 Action Required~~

##### ~~3.8.4.1 Placing~~

~~Do not begin placement until the availability of an adequate number of acceptable vibrators, which are in working order and have competent operators, has been verified. Discontinue placing if any lift is inadequately consolidated.~~

##### ~~3.8.4.2 Air Content~~

~~Whenever an air content test result is outside the specification limits, adjust the dosage of the air-entrainment admixture prior to delivery of concrete to forms.~~

##### ~~3.8.4.3 Slump~~

~~Whenever a slump test result is outside the specification limits, adjust the batch weights of water and fine aggregate prior to delivery of concrete to the forms. Make the adjustments so that the water-cementitious material ratio does not exceed that specified in the submitted concrete mixture proportion and the required concrete strength is still met.~~

~~--- End of Section ---~~

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~~SECTION 05 05 20~~~~POST-INSTALLED CONCRETE AND MASONRY ANCHORS  
05/22, CHG 1: 08/24~~~~PART 1 GENERAL~~~~1.1 REFERENCES~~

~~The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.~~

~~AMERICAN CONCRETE INSTITUTE (ACI)~~

- |                      |                                                                                                           |
|----------------------|-----------------------------------------------------------------------------------------------------------|
| <del>ACI 355.2</del> | <del>(2007) Qualification of Post-Installed Mechanical Anchors in Concrete and Commentary</del>           |
| <del>ACI 355.4</del> | <del>(2011) Qualification of Post-Installed Adhesive Anchors in Concrete (ACI 355.4) and Commentary</del> |

~~ASTM INTERNATIONAL (ASTM)~~

- |                            |                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A36/A36M</del>   | <del>(2019) Standard Specification for Carbon Structural Steel</del>                                                                                                |
| <del>ASTM A153/A153M</del> | <del>(2023) Standard Specification for Zinc Coating (Hot Dip) on Iron and Steel Hardware</del>                                                                      |
| <del>ASTM A193/A193M</del> | <del>(2024a) Standard Specification for Alloy Steel and Stainless Steel Bolting Materials for High Temperature Service and Other Special Purpose Applications</del> |
| <del>ASTM A615/A615M</del> | <del>(2024) Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement</del>                                                        |
| <del>ASTM E488/E488M</del> | <del>(2022) Standard Test Methods for Strength of Anchors in Concrete Elements</del>                                                                                |
| <del>ASTM F1554</del>      | <del>(2020) Standard Specification for Anchor Bolts, Steel, 36, 55, and 105-ksi Yield Strength</del>                                                                |

~~INTERNATIONAL CODE COUNCIL (ICC)~~

- |                    |                                               |
|--------------------|-----------------------------------------------|
| <del>ICC IBC</del> | <del>(2024) International Building Code</del> |
|--------------------|-----------------------------------------------|

~~U.S. ARMY CORPS OF ENGINEERS (USACE)~~

- |                       |                                                                               |
|-----------------------|-------------------------------------------------------------------------------|
| <del>EM 385-1-1</del> | <del>(2024) Safety -- Safety and Occupational Health (SOH) Requirements</del> |
|-----------------------|-------------------------------------------------------------------------------|



## ~~1.2 APPLICABILITY~~

~~This guide specification covers the requirements for all anchors that are post-installed into hardened concrete. This guide specification does not cover through bolts, powder or pneumatic actuated nails, or cast in anchors.~~

## ~~1.3 DEFINITIONS~~

### ~~1.3.1 Anchor~~

~~"Anchor" includes steel elements post-installed into hardened concrete and used to transmit applied loads.~~

### ~~1.3.2 Periodic Special Inspections~~

~~"Periodic Special Inspection" as used herein means that, as a minimum, the Post-Installed Anchor Special Inspector must perform inspections in accordance with this specification.~~

### ~~1.3.3 Continuous Special Inspections~~

~~"Continuous Special Inspection" as used herein means that the Post-Installed Anchor Special Inspector observes the drilling and cleaning of holes, the injection of adhesive into the holes, and the insertion of anchors into the holes. When applicable for the type of installation, or as indicated in the project drawings, "Continuous Special Inspection" also includes observation of measures to secure the anchor during the adhesive curing period.~~

## ~~1.4 SUBMITTALS~~

~~Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:~~

### ~~SD-01 Preconstruction Submittals~~

~~Installer Qualifications; G, AOF~~

### ~~SD-03 Product Data~~

~~Adhesive Anchor System in Concrete; G, AOF~~

~~Non-Shrink, Non-Metallic Grout; G, AOF~~

### ~~SD-07 Certificates~~

~~Post-Installed Anchor Certification; G, AOF~~

### ~~SD-08 Manufacturer's Instructions~~

~~Non-Shrink, Non-Metallic Grout;~~

~~Manufacturer's Safety Data Sheets~~

~~Manufacturer's Printed Installation Instructions;~~~~1.5 — QUALITY ASSURANCE~~

~~Perform all work in accordance with EM 385-1-1 and all manufacturer's instructions and recommendations. To protect personnel from overexposure to toxic materials, conform to the applicable manufacturer's Safety Data Sheets (SDS) or local regulation. Submit the SDS for epoxies and other potentially hazardous materials.~~

~~1.5.1 — Qualifications~~

~~The submittals must identify individuals who will be working on this contract and their relevant experience and training. Do not make changes in approved personnel without prior approval of the Contracting Officer.~~

~~1.5.1.1 — Installer Qualifications~~

~~Each worker engaged in the installation of post-installed anchors must have satisfactorily completed an applicable certification program or equivalent instruction program through the manufacturer or manufacturer's representative for all anchoring products they will install. A manufacturer's representative must train all installers per the installation instructions as listed in the ICC-ES Evaluation Report for the anchor being installed. Training must consist of a review and performance test of the complete installation process, including but not limited to:~~

- ~~a. Hole drilling procedure~~
- ~~b. Hole preparation & cleaning technique~~
- ~~c. Adhesive injection technique & dispenser training / maintenance~~
- ~~d. Rebar dowel preparation and installation~~
- ~~e. Installation in horizontal and upward orientations~~

~~Submit certification for each worker showing that they have completed the above training within three years prior to onsite work. Certification must include organization or manufacturer's name, instructor's name and qualifications, trainee's name, list of instruction received, date of instruction, and confirmation of successful performance tests.~~

~~1.6 — DELIVERY, STORAGE, AND HANDLING~~~~1.6.1 — Packing, Shipping, Handling, and Unloading~~

~~Deliver products to job site in manufacturer's or distributor's original packaging undamaged, complete with installation instructions. Inspect materials delivered to site for damage. Unload and store with minimal handling.~~

~~1.6.2 — Storage~~

~~Protect, store, and handle materials in accordance with manufacturer's recommendations to prevent damage or deterioration. Do not allow chemical materials to freeze. Remove materials that have not be stored in~~

~~accordance with the manufacturer's recommendations, including expired materials, from the job site.~~

## ~~PART 2 — PRODUCTS~~

### ~~2.1 — MATERIALS~~

#### ~~2.1.1 — Post-Installed Anchors~~

~~Provide anchors of the type, effective embedment, and diameter indicated on contract drawings. Minimum spacing and concrete edge distances must be as shown on contract drawings. Design values listed must be as tested according to ASTM E488/E488M for the substrate type, substrate moisture condition, concrete aggregate type (normal weight or lightweight concrete), and concrete strength. Minimum yield strength must be as indicated on contract drawings.~~

##### ~~2.1.1.1 — Post-Installed Anchor Certification~~

~~Submit product information with recommended design values and physical characteristics for each type of anchor shown on the drawings.~~

~~Provide certified test reports showing compliance with specified performance characteristics and physical properties. Anchors must have one of the following certifications:~~

- ~~a. ICC-ES Evaluation Report indicating conformance with current applicable ICC-ES Acceptance Criteria.~~
- ~~b. Third party Evaluation Report in conformance with ACI 355.4, as applicable. Third party must be accredited under ISO/IEC 17025 by a recognized accreditation body conforming to the requirements of ISO/IEC 17011 in accordance with ACI 355.4.~~

##### ~~2.1.1.2 — Manufacturer's Printed Installation Instructions~~

~~Submit manufacturer's instructions for each anchor type shown on the drawings.~~

##### ~~2.1.1.3 — Adhesive Anchor System in Concrete~~

~~Use an adhesive to bond steel anchors to concrete. The adhesive must be a moisture insensitive, structural adhesive.~~

~~Threaded rod anchors must meet the requirements of ASTM F1554, Grade 55. Threaded rods must be galvanized in accordance with ASTM A153/A153M unless otherwise indicated.~~

~~Adhesive anchors must have the below characteristic bond strengths for uncracked and cracked concrete in 2500 psi concrete with maximum short term temperatures of 130 degrees F and maximum long term temperatures of 110 degrees F:~~

| ANCHOR                                                   | <del>Tau, uncr-</del><br><del>(characteristic bond</del><br><del>strength, uncracked</del><br><del>concrete)</del> | <del>Tau, cr (characteristic</del><br><del>bond strength, cracked</del><br><del>concrete)</del> |
|----------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
|                                                          | <del>(psi)</del>                                                                                                   | <del>(psi)</del>                                                                                |
|                                                          |                                                                                                                    |                                                                                                 |
| <del>1" diameter threaded anchor</del><br><del>rod</del> | <del>2,220 psi</del>                                                                                               | <del>1,135 psi</del>                                                                            |

## ~~2.2 EQUIPMENT~~

~~Assemble at the site of the work, sufficient equipment that is dependable, appropriate and adequate to accomplish the work specified. Maintain the equipment in good working condition.~~

## ~~PART 3 EXECUTION~~

### ~~3.1 ANCHORING AND REINFORCING~~

~~Install anchors in accordance with the spacing and edge clearances indicated on the drawings. Anchor capacity is also highly dependent on proper installation. Follow all manufacturer and Evaluation Report installation instructions.~~

#### ~~3.1.1 Drilling and Installing Adhesive Anchors~~

~~Drill holes for anchors using drilling equipment and bits suitable for the intended purpose, in accordance with Manufacturer's Printed Installation Instructions and Evaluation Report installation instructions. Diameter of holes must be as recommended by the anchor manufacturer. Unless otherwise shown on the drawings, all holes must be drilled perpendicular to the concrete surface. Deviations more than 10 degrees from perpendicular are not acceptable. Unless otherwise specified, do not drill holes in concrete until concrete has achieved full design strength. Adhesive anchors must not be installed in concrete that is less than 21 days old.~~

~~Clean holes, place grout, and install anchors in accordance with anchor manufacturer's recommendations. Remove excess adhesive after the anchor has been set in place. Remove spills on adjacent surfaces. Protect threads and anchor from damage during anchor installation. Ensure proper embedment and placement in accordance with contract documents and all other work. Do not disturb or load anchors before manufacturer specified cure time has elapsed.~~

~~Adhesives must be stored at temperatures prescribed by the manufacturer and must not be used beyond the expiration date.~~

#### ~~3.1.2 Unused or Repairs to Drilled Holes~~

~~Any holes made for anchors that are not used must be filled with non-shrink, non-metallic grout suitable for the orientation and size of hole and have a minimum compressive strength of 5000 psi. Repair must completely fill hole and be flush with existing concrete or masonry. Place in accordance with manufacturer's recommended instructions. Final anchor positions must not be within 1 inch of repair patches.~~

### ~~3.2 EMBEDDED ITEMS~~

~~Existing reinforcing bars or other embedded items in the structure may~~

~~conflict with specified anchor locations. Existing reinforcing and embedded items must not be damaged during installation of post-installed anchors.~~

~~The contractor must review the project drawings and must use Radar detection systems (such as Hilti Ferroskan), X-Ray, or other appropriate means to accurately locate the position of existing reinforcing bars and embedded items at the locations of the anchors in the field. Scanning method must provide enough accuracy and precision to locate the space between rebar. Structural integrity of existing concrete or masonry must not be impaired by investigating method.~~

~~Create a template at each anchor connection location prior to fabricating holes in connection plates. Template must be made by locating existing reinforcing with an approved reinforcement detection system.~~

### ~~3.3 TESTS AND INSPECTIONS~~

#### ~~3.3.1 Adhesive Anchors~~

~~For adhesive anchors, perform tests and inspections in accordance with manufacturer's recommendations. Inspections must be in accordance with ICC-IBC and the Evaluation Report.~~

~~Adhesive anchors must be inspected during installation, to verify anchor type, anchor dimensions, base material type, base material age, drill bit, hole dimensions, hole cleaning procedures, anchor spacing, edge distances, base material thickness, effective embedment, adhesive mixing, filling of the hole with adhesive, adherence to the manufacturer's printed installation instructions, and any additional items recommended in the Evaluation Report.~~

~~Submit Post-Installed Anchor Inspection and Testing Plan for review and approval by the Contracting Officer prior to beginning construction.~~

~~Adhesive anchors and capsule anchors must not be torque tested.~~

### ~~3.4 DUST CONTROL~~

~~Control dust resulting from demolition to prevent the spread of dust and avoid creation of a nuisance in the surrounding area. Do not use water when it will result in, or create, hazardous or objectionable conditions such as ice, flooding, or pollution.~~

~~----- End of Section -----~~

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~~SECTION 05 12 00~~~~STRUCTURAL STEEL~~~~08/18, CHG 2: 05/21~~~~PART 1 GENERAL~~~~1.1 REFERENCES~~

~~The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.~~

~~AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)~~

~~AASHTO LRFD (8th Edition; 2017) Bridge Design  
Specifications~~

~~AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)~~

~~AISC 207 (2016; R 2017) Certification Standard for  
Steel Fabrication and Erection, and  
Manufacturing of Metal Components~~

~~AISC 325 (2017) Steel Construction Manual~~

~~AISC 326 (2009) Detailing for Steel Construction~~

~~AISC 341 (2016) Seismic Provisions for Structural  
Steel Buildings~~

~~AISC 360 (2016) Specification for Structural Steel  
Buildings~~

~~AISC 420 (2010) Certification Standard for Shop  
Application of Complex Protective Coating  
Systems~~

~~AISC DESIGN GUIDE 10 (1997) Erection Bracing of Low-Rise  
Structural Steel Buildings~~

~~ANSI/AISC 303 (2022) Code of Standard Practice for  
Structural Steel Buildings and Bridges~~

~~AMERICAN SOCIETY FOR NONDESTRUCTIVE TESTING (ASNT)~~

~~ANSI/ASNT CP-189 (2020) ASNT Standard for Qualification and  
Certification of Nondestructive Testing  
Personnel~~

~~AMERICAN SOCIETY OF MECHANICAL ENGINEERS (ASME)~~

~~ASME B46.1 (2020) Surface Texture, Surface Roughness,  
Waviness and Lay~~

~~AMERICAN WELDING SOCIETY (AWS)~~

|                           |                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------|
| <del>AWS A2.4</del>       | <del>(2012) Standard Symbols for Welding, Brazing and Nondestructive Examination</del> |
| <del>AWS D1.1/D1.1M</del> | <del>(2020; Errata 1 2021) Structural Welding Code — Steel</del>                       |
| <del>AWS D1.8/D1.8M</del> | <del>(2016) Structural Welding Code Seismic Supplement</del>                           |
| <del>AWS QC1</del>        | <del>(2016) Specification for AWS Certification of Welding Inspectors</del>            |

~~ASTM INTERNATIONAL (ASTM)~~

|                            |                                                                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A6/A6M</del>     | <del>(2024b) Standard Specification for General Requirements for Rolled Structural Steel Bars, Plates, Shapes, and Sheet Piling</del>                                        |
| <del>ASTM A29/A29M</del>   | <del>(2023) Standard Specification for General Requirements for Steel Bars, Carbon and Alloy, Hot-Wrought</del>                                                              |
| <del>ASTM A36/A36M</del>   | <del>(2019) Standard Specification for Carbon Structural Steel</del>                                                                                                         |
| <del>ASTM A53/A53M</del>   | <del>(2024) Standard Specification for Pipe, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless</del>                                                             |
| <del>ASTM A108</del>       | <del>(2024) Standard Specification for Steel Bar, Carbon and Alloy, Cold-Finished</del>                                                                                      |
| <del>ASTM A123/A123M</del> | <del>(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products</del>                                                                   |
| <del>ASTM A143/A143M</del> | <del>(2007; R 2020) Standard Practice for Safeguarding Against Embrittlement of Hot-Dip Galvanized Structural Steel Products and Procedure for Detecting Embrittlement</del> |
| <del>ASTM A193/A193M</del> | <del>(2024a) Standard Specification for Alloy Steel and Stainless Steel Bolting Materials for High-Temperature Service and Other Special Purpose Applications</del>          |
| <del>ASTM A276/A276M</del> | <del>(2024) Standard Specification for Stainless Steel Bars and Shapes</del>                                                                                                 |
| <del>ASTM A307</del>       | <del>(2023) Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60-000 PSI Tensile Strength</del>                                                         |
| <del>ASTM A325</del>       | <del>(2014) Standard Specification for Structural Bolts, Steel, Heat Treated, 120/105 ksi Minimum Tensile Strength</del>                                                     |

|                              |                                                                                                                                                                    |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A500/A500M</del>   | <del>(2023) Standard Specification for Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes</del>                                   |
| <del>ASTM A563</del>         | <del>(2021; E 2022a) Standard Specification for Carbon and Alloy Steel Nuts</del>                                                                                  |
| <del>ASTM A563M</del>        | <del>(2007; R 2013) Standard Specification for Carbon and Alloy Steel Nuts (Metric)</del>                                                                          |
| <del>ASTM A572/A572M</del>   | <del>(2025) Standard Specification for High-Strength Low-Alloy Columbium-Vanadium Structural Steel</del>                                                           |
| <del>ASTM A668/A668M</del>   | <del>(2023) Standard Specification for Steel Forgings, Carbon and Alloy, for General Industrial Use</del>                                                          |
| <del>ASTM A780/A780M</del>   | <del>(2020) Standard Practice for Repair of Damaged and Uncoated Areas of Hot-Dip Galvanized Coatings</del>                                                        |
| <del>ASTM A992/A992M</del>   | <del>(2022) Standard Specification for Structural Steel Shapes</del>                                                                                               |
| <del>ASTM A1085/A1085M</del> | <del>(2015) Standard Specification for Cold-Formed Welded Carbon Steel Hollow Structural Sections (HSS)</del>                                                      |
| <del>ASTM B695</del>         | <del>(2021) Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel</del>                                                             |
| <del>ASTM C827/C827M</del>   | <del>(2023) Standard Test Method for Change in Height at Early Ages of Cylindrical Specimens of Cementitious Mixtures</del>                                        |
| <del>ASTM C1107/C1107M</del> | <del>(2020) Standard Specification for Packaged Dry, Hydraulic Cement Grout (Nonshrink)</del>                                                                      |
| <del>ASTM F436/F436M</del>   | <del>(2024) Standard Specification for Hardened Steel Washers Inch and Metric Dimensions</del>                                                                     |
| <del>ASTM F844</del>         | <del>(2019; R 2024) Standard Specification for Washers, Steel, Plain (Flat), Unhardened for General Use</del>                                                      |
| <del>ASTM F959/F959M</del>   | <del>(2017a; R 2023) Standard Specification for Compressible Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series</del> |
| <del>ASTM F1136/F1136M</del> | <del>(2011) Standard Specification for Zinc/Aluminum Corrosion Protective Coatings for Fasteners</del>                                                             |
| <del>ASTM F1554</del>        | <del>(2020) Standard Specification for Anchor</del>                                                                                                                |

~~Bolts, Steel, 36, 55, and 105-ksi Yield Strength~~

~~ASTM F2329/F2329M (2015; R 2023) Standard Specification for Zinc Coating, Hot-Dip, Requirements for Application to Carbon and Alloy Steel Bolts, Screws, Washers, Nuts, and Special Threaded Fasteners~~

~~ASTM F2833 (2011; R 2017) Standard Specification for Corrosion Protective Fastener Coatings with Zinc Rich Base Coat and Aluminum Organic/Inorganic Type~~

~~ASTM F3125/F3125M (2019) Standard Specification for High-Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength~~

~~CRANE MANUFACTURERS ASSOCIATION OF AMERICA (CMAA)~~

~~CMAA 70 (2020) Specification for Top Running Bridge and Gantry Type Multiple Girder Electric Overhead Traveling Cranes~~

~~SOCIETY FOR PROTECTIVE COATINGS (SSPC)~~

~~SSPC PA 1 (2024) Shop, Field, and Maintenance Coating of Metals~~

~~SSPC Paint 20 (2019) Zinc Rich Primers (Type I, Inorganic, and Type II, Organic)~~

~~SSPC Paint 29 (2002; E 2004) Zinc Dust Sacrificial Primer, Performance-Based~~

~~SSPC SP 3 (2024) Power Tool Cleaning~~

~~SSPC SP 6/NACE No.3 (2007) Commercial Blast Cleaning~~

~~U.S. DEPARTMENT OF DEFENSE (DOD)~~

~~UFC 3-301-01 (2023; with Change 3, 2025) Structural Engineering~~

~~U.S. NATIONAL ARCHIVES AND RECORDS ADMINISTRATION (NARA)~~

~~29 CFR Part 1926, Subpart R Steel Erection~~

~~1.2 SUBMITTALS~~

~~Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL~~

~~PROCEDURES:~~~~SD-02 Shop Drawings~~~~Fabrication Drawings Including Details of Connections; G, DT~~~~SD-03 Product Data~~~~Welding Electrodes and Rods~~~~SD-06 Test Reports~~~~Bolts, Nuts, and Washers~~~~Weld Inspection Reports~~~~SD-07 Certificates~~~~Steel~~~~Bolts, Nuts, and Washers~~~~Galvanizing~~~~Welding Procedures and Qualifications~~~~Welding Electrodes and Rods~~~~Certified Welding Inspector~~~~NDT Technician~~~~Welding Procedure Specifications (WPS)~~~~1.3 QUALITY ASSURANCE~~~~1.3.1 Preconstruction Submittals~~~~1.3.2 Fabrication Drawing Requirements~~

~~Submit fabrication drawings for approval prior to fabrication. Prepare in accordance with ANSI/AISC 303, AISC 326 and AISC 325. Fabrication drawings must not be reproductions of contract drawings. Include complete information for the fabrication and erection of the structure's components, including the location, type, and size of bolts, welds, member sizes and lengths, connection details, blocks, copes, and cuts. Use AWS A2.4 standard welding symbols. Clearly highlight any deviations from the details shown on the contract drawings highlighted on the fabrication drawings. Explain the reasons for any deviations from the contract drawings.~~

~~1.3.3 Certifications~~~~1.3.3.1 Welding Procedures and Qualifications~~

~~Prior to welding, submit certification for each welder stating the type of welding and positions qualified for, the code and procedure qualified under, date qualified, and the firm and individual certifying the~~

~~qualification tests. If the qualification date of the welder or welding operator is more than 6 months old, the welding operator's qualification certificate must be accompanied by a current certificate by the welder attesting to the fact that he has been engaged in welding since the date of certification, with no break in welding service greater than 6 months.~~

~~Conform to all requirements specified in AWS D1.1/D1.1M.~~

## ~~PART 2 — PRODUCTS~~

### ~~2.1 — SYSTEM DESCRIPTION~~

~~Provide the structural steel system, including galvanizing, complete and ready for use. Provide structural steel systems including design, materials, installation, workmanship, fabrication, assembly, erection, inspection, quality control, and testing in accordance with ANSI/AISC 303, AISC 360, AISC 341, and UFC 3-301-01 except as modified in this contract.~~

### ~~2.2 — STEEL~~

#### ~~2.2.1 — Structural Steel~~

~~Angles, Channels and Plates, ASTM A572/A572M. Provide structural steel containing a minimum of 80percent recycled content.~~

### ~~2.3 — BOLTS, NUTS, AND WASHERS~~

~~Submit the certified manufacturer's mill reports which clearly show the applicable ASTM mechanical and chemical requirements together with the actual test results for the supplied fasteners.~~

#### ~~2.3.1 — High-Strength Bolts~~

~~High strength bolts and nuts must be shipped together in the same shipping container. Fasteners indicated to be galvanized shall be tested by the supplier to show that the galvanized nut with the supplied lubricant provided may be rotated from the snug tight condition well in excess of the rotation required for pretensioned installation without stripping. The supplier shall supply nuts that have been lubricated and tested with the supplied bolts.~~

##### ~~2.3.1.1 — Bolts~~

~~ASTM F3125/F3125M, Grade A325M A325, Type 1 Heavy Hex Head Style, plain finish hot dipped zinc coating galvanized.~~

##### ~~2.3.1.2 — Nuts~~

~~ASTM A563, Grade and Style as specified in the applicable ASTM bolt standard, galvanized.~~

##### ~~2.3.1.3 — Washers~~

~~ASTM F436/F436M, plain carbon steel, galvanized.~~



## ~~2.4 — STRUCTURAL STEEL ACCESSORIES~~

### ~~2.4.1 — Welding Electrodes and Rods~~

~~AWS D1.1/D1.1M. Submit product data for welding electrodes and rods.~~

## ~~2.5 — GALVANIZING~~

~~ASTM F2329/F2329M, ASTM F1136/F1136M, ASTM F2833 or ASTM B695 for threaded parts or ASTM A123/A123M for structural steel members, as applicable, unless specified otherwise galvanize after fabrication where practicable.~~

## ~~2.6 — FABRICATION~~

~~Fabrication must be in accordance with the applicable provisions of AISC 325. Fabrication and assembly must be done in the shop to the greatest extent possible. Punch, subpunch and ream, or drill bolt holes perpendicular to the surface of the member.~~

## ~~2.7 — DRAINAGE HOLES~~

~~Drill adequate drainage holes to eliminate water traps. Hole diameter must be 1/2 inch. Hole size and locations must not affect the structural integrity.~~

## ~~PART 3 — EXECUTION~~

### ~~3.1 — ERECTION~~

~~After final positioning of steel members, provide full bearing under base plates and bearing plates using nonshrink grout. Place nonshrink grout in accordance with the manufacturer's instructions.~~

#### ~~3.1.1 — STORAGE~~

~~Store the material out of contact with the ground in such manner and location as to minimize deterioration.~~

### ~~3.2 — CONNECTIONS~~

~~Do not tighten anchor bolts set in concrete with impact torque wrenches. Holes must not be cut or enlarged by burning. Bolts, nuts, and washers must be clean of dirt and rust, and lubricated immediately prior to installation.~~

#### ~~3.2.1 — High-Strength Bolts~~

~~Tighten ASTM A325 bolts to a "snug tight" fit. "Snug tight" is the tightness that exists when plies in a joint are in firm contact. If firm contact of joint plies cannot be obtained with a few impacts of an impact wrench, or the full effort of a man using a spud wrench, contact the Contracting Officer for further instructions.~~

### ~~3.3 — GAS CUTTING~~

~~Use of gas-cutting torch in the field for correcting fabrication errors is not permitted on any major member in the structural framing. Use of a gas-cutting torch will be permitted on minor members not under stress only after approval has been obtained from the Contracting Officer.~~

### ~~3.4 — WELDING~~

~~Welding must be in accordance with AWS D1.1/D1.1M. Grind exposed welds smooth as indicated. Provide AWS D1.1/D1.1M qualified welders, welding operators, and tackers.~~

~~Develop and submit the Welding Procedure Specifications (WPS) for all welding, including welding done using prequalified procedures. Submit for approval all WPS, whether prequalified or qualified by testing.~~

#### ~~3.4.1 — Removal of Temporary Welds, Run-Off Plates, and Backing Strips~~

~~Remove only from finished areas.~~

### ~~3.5 — GALVANIZING REPAIR~~

~~Repair damage to galvanized coatings using ASTM A780/A780M zinc rich paint for galvanizing damaged by handling, transporting, cutting, welding, or bolting. Do not heat surfaces to which repair paint has been applied.~~

### ~~3.6 — FIELD QUALITY CONTROL~~

~~Perform field tests, and provide labor, equipment, and incidentals required for testing. Notify the Contracting Officer in writing of defective welds, bolts, nuts, and washers within 7 working days of the date of the inspection.~~

#### ~~3.6.1 — Welds~~

##### ~~3.6.1.1 — Visual Inspection~~

~~AWS D1.1/D1.1M. Furnish the services of AWS-certified welding inspectors for fabrication and erection inspection and testing and verification inspections. A Certified Welding Inspector must perform visual inspection on 100 percent of all welds. Document this inspection in the Visual Weld Inspection Log. Submit certificates indicating that certified welding inspectors meet the requirements of AWS QC1.~~

##### ~~3.6.1.2 — Nondestructive Testing~~

~~Nondestructive testing must be in accordance with AWS D1.1/D1.1M. All personnel performing NDT must be certified in accordance with ANSI/ASNT CP-189 in the method of testing being performed. Submit certificates showing compliance with ANSI/ASNT CP-189 for all NDT technicians. If more than 20 percent of welds made by a welder contain defects identified by testing, then all groove welds made by that welder must be tested by ultrasonic testing, and all fillet welds made by that welder must be inspected by magnetic particle testing (MT) or dye penetrant testing (PT) as approved by the Contracting Officer. When groove welds made by an individual welder are required to be tested, magnetic particle or dye penetrant testing may be used only in areas inaccessible to ultrasonic testing. Retest all repaired areas. Submit weld inspection reports.~~

~~Testing frequency: Provide the following types and number of tests:~~

| <u>Test Type</u>  | <u>Number of Tests</u>             |
|-------------------|------------------------------------|
| Ultrasonic        | 50 percent of CJP Welds            |
| Magnetic Particle | 50 percent of PJP and Fillet Welds |
| Dye Penetrant     | 50 percent of PJP and Fillet Welds |
|                   |                                    |

### ~~3.6.2 High-Strength Bolts~~

~~-- End of Section --~~

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## SECTION 31 00 00

EARTHWORK  
08/23

## PART 1 GENERAL

## 1.1 APPLICABILITY

This specification section is applicable to the following features of work: ~~culvert installations, road embankments and subgrades, trail embankments and subgrades,~~ stormwater pipes and appurtenant structures.

For stream grading features of work not listed above, only paragraph 3.3 STREAM GRADING applies.

## 1.2 REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)

AASHTO T 180 (2017) Standard Method of Test for  
Moisture-Density Relations of Soils Using  
a 4.54-kg (10-lb) Rammer and a 457-mm  
(18-in.) Drop

AMERICAN WATER WORKS ASSOCIATION (AWWA)

AWWA C600 (2023) Installation of Ductile-Iron Mains  
and Their Appurtenances

ASTM INTERNATIONAL (ASTM)

ASTM C117 (2023) Standard Test Method for Materials  
Finer than 75-um (No. 200) Sieve in  
Mineral Aggregates by Washing

ASTM C136/C136M (2019) Standard Test Method for Sieve  
Analysis of Fine and Coarse Aggregates

ASTM D698 (2012; R 2021) Standard Test Methods for  
Laboratory Compaction Characteristics of  
Soil Using Standard Effort (12,400  
ft-lbf/cu. ft. (600 kN-m/cu. m.))

ASTM D1140 (2017) Standard Test Methods for  
Determining the Amount of Material Finer  
than 75-um (No. 200) Sieve in Soils by  
Washing

ASTM D1556/D1556M (2015; E 2016) Standard Test Method for  
Density and Unit Weight of Soil in Place  
by Sand-Cone Method

|                                      |                                                                                                                                   |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| ASTM D2167                           | (2015) Density and Unit Weight of Soil in Place by the Rubber Balloon Method                                                      |
| ASTM D2216                           | (2019) Standard Test Methods for Laboratory Determination of Water (Moisture) Content of Soil and Rock by Mass                    |
| ASTM D2487                           | (2017; R 2025) Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)        |
| ASTM D4253                           | (2016; E 2019) Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table                   |
| ASTM D4254                           | (2016) Standard Test Methods for Minimum Index Density and Unit Weight of Soils and Calculation of Relative Density               |
| ASTM D4318                           | (2017; E 2018) Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils                               |
| ASTM D4829                           | (2021) Standard Test Method for Expansion Index of Soils                                                                          |
| ASTM D4873/D4873M                    | (2017) Standard Guide for Identification, Storage, and Handling of Geosynthetic Rolls and Samples                                 |
| ASTM D5268                           | (2019) Topsoil Used for Landscaping Purposes                                                                                      |
| ASTM D6938                           | (2017a) Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth) |
| ASTM D8167/D8167M                    | (2023) Standard Test Method for In-Place Bulk Density of Soil and Soil-Aggregate by a Low-Activity Nuclear Method (Shallow Depth) |
| GEOSYNTHETIC INSTITUTE (GSI)         |                                                                                                                                   |
| GSI GRI GG4a                         | (2012) Determination of the Long-Term Design Strength of Stiff Geogrids                                                           |
| GSI GRI GG4b                         | (2012) Determination of the Long-Term Design Strength of Flexible Geogrids                                                        |
| U.S. ARMY CORPS OF ENGINEERS (USACE) |                                                                                                                                   |
| EM 385-1-1                           | (2024) Safety -- Safety and Occupational Health Requirements                                                                      |



### 1.3 DEFINITIONS

#### 1.3.1 Structural Fill

Soil material placed to support ~~retaining walls, culverts, and~~ drain tiles.

#### 1.3.2 Embankment Fill

Soil material placed to construct embankments.

#### 1.3.3 Porous Fill

Free-draining material placed for subsurface drainage, as a capillary break, or another specific purpose.

#### 1.3.4 Topsoil

Surface layer of primarily organic soil capable of supporting vegetation growth.

#### 1.3.5 Utility Bedding Material

Fill placed to directly support pipes, conduits, cables, and appurtenant structures. Bedding may also be used to provide a cushion between utilities and bedrock, obstacles, obstructions and other unyielding materials.

#### 1.3.6 Satisfactory Materials

Satisfactory materials shall consist of materials classified in accordance with [ASTM D2487](#) as CL, CL-ML, CH, GC, ML, MH, SC, SP, SW, SP-SC, SW-SC, SP-SM, and SW-SM, free from roots and other organic matter, contamination from hazardous, toxic, or radiological substances, trash, debris, frozen materials, and stones not larger than three (3) inches in any dimension. Materials classified as sand must contain at least 50% by weight finer than a No. 40 sieve. Satisfactory materials may also be called acceptable materials in these specifications.

#### 1.3.7 Unsatisfactory Materials

Materials which do not comply with the requirements for satisfactory materials are unsatisfactory. Unsatisfactory materials also include man-made fills; trash; refuse; backfills from previous construction; roots and other organic matter or frozen material. Notify the Contracting Officer when encountering any contaminated materials.

#### 1.3.8 Cohesionless Materials

Cohesionless materials include materials classified in [ASTM D2487](#) as GW, GP, SW, SP, GC, and SC. Materials classified as GM and SM will be identified as cohesionless only when the fines are nonplastic. Perform testing, required for classifying materials, in accordance with [ASTM D4318](#), [ASTM C117](#), [ASTM C136/C136M](#) and [ASTM D1140](#).

#### 1.3.9 Cohesive Materials

Cohesive materials include materials classified as ML, CL, MH, and CH. Materials classified as GM and SM will be identified as cohesive only when the fines are plastic. Perform testing, required for classifying

materials, in accordance with ASTM D4318, ASTM C117, ASTM C136/C136M and ASTM D1140.

#### 1.3.10 Hard/Unyielding Materials

Hard/Unyielding materials comprise weathered rock, or conglomerate materials with stones greater than 12 inch in any dimension or as defined by the pipe manufacturer, whichever is smaller. These materials usually require the use of heavy excavation equipment, ripper teeth, or jack hammers for removal.

#### 1.3.11 Unstable Material

Unstable materials are too weak to adequately support the utility pipe, conduit, equipment, or appurtenant structure. Satisfactory material may become unstable due to ineffective drainage, dewatering, becoming frozen, excessive loading.

#### 1.3.12 Expansive Soils

Expansive soils are defined as soils that have an expansion index greater than 20 when tested in accordance with ASTM D4829.

#### 1.3.13 Degree of Compaction (Proctor)

Degree of compaction required, except as noted in the second sentence, is expressed as a percentage of the maximum density obtained by the test procedure presented in ASTM D698 abbreviated as a percent of laboratory maximum density. Since ASTM D698 applies only to soils that have 30 percent or less by weight of their particles retained on the 3/4 inch sieve, express the degree of compaction for material having more than 30 percent by weight of their particles retained on the 3/4 inch sieve as a percentage of the maximum density in accordance with AASHTO T 180-21 paragraph 1.5, Note 1.

#### 1.3.14 Degree of Compaction (Relative Density)

Degree of compaction required for soils with less than 5 percent passing the No. 200 sieve, is expressed as a relative percentage of the maximum index density/dry unit weight and minimum index density/dry unit weight, obtained by the test procedures in accordance with ASTM D4253 and ASTM D4254, respectively, abbreviated as a percent of laboratory relative density.

#### 1.3.15 Spoil Areas

Soil from excavations that cannot be utilized for fill for specific features are to be placed in permanent spoil locations to be seeded and planted as part of the overall restoration plan.

#### ~~1.3.16 Subgrade~~

~~Earth materials directly below foundations and directly below granular base materials in culvert, retaining walls, and trail areas including shoulders.~~

#### 1.3.16 In-situ Borrow Materials

In-situ borrow materials are those native, undisturbed materials that are

in-situ at a borrow source (new or existing) prior to being selected for use on this project.

#### 1.3.17 Stockpiled Borrow Materials

Stockpiled borrow materials are those materials that are stockpiled for use at the time of identification for use on the project. This includes but is not limited to spoil piles, soils identified for re-use or purchased for re-use off of the original site, recycled materials including those from a commercial recycling operation, piles of material that are ex-situ at the time of identification for use on the project, and any other materials that are not in-situ in the native condition.

#### 1.3.18 Buckeye Partners, L.P and Affiliates

West Shore Pipe Line Company is the owner of the liquified petroleum line in the project area. Buckeye Partners, L.P and Affiliates manages the right-of-away for West Shore Pipe Line Company and developed the right-of-away restriction specifications.

#### 1.4 SUBSURFACE DATA

Subsurface soil boring logs are shown in as an Attachment to this section. The information represents subsurface conditions at the individual boring locations and depths at the time that they were performed, and variations of characteristics of the subsurface materials should be anticipated. The specifications, plans, and boring logs do not reflect variations that may occur between borings, across the site, or due to the modifying effects of construction or weather. The nature and extent of such variations may not become evident until, during or after construction.

#### 1.5 CRITERIA FOR BIDDING

Base bids on the following criteria:

- a. Surface elevations are as indicated.
- b. Pipes or other artificial obstructions, except those indicated, will not be encountered.
- c. Ground water elevations indicated by the boring log were those encountered at the time of subsurface investigations and do not necessarily represent ground water elevation at the time of construction.
- d. Material characteristics are indicated by the attached boring logs.

#### 1.6 SUBMITTALS

Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:

##### SD-01 Preconstruction Submittals

Excavation and Trenching Plan; G, DG, DC

Earthwork Sequencing Plan; G, DG, DC

Dewatering Work Plan; G, DG, DC

Disposition of Surplus Materials; G, AOF

Professional (Licensed) Geotechnical Engineer; G, DG

Construction Equipment List; G, AOF, DC

~~SD-02 Shop Drawings~~

~~Interface Friction Testing; G, DG~~

~~Installation Of Geogrid Reinforced Soil Embankment; G, DG~~

~~SD-03 Product Data~~

~~Geotextiles~~

SD-04 Samples

Geotextiles

~~Geogrid Reinforcement; G, DG~~

~~SD-05 Design Data~~

~~Allowable Strength Calculations; G, DG~~

SD-06 Test Reports

Material Test Report; G, DG

Geotechnical Evaluation Report; G, DG

~~Coefficient of Interaction; G, DG~~

Splices; G, DG

~~Geogrid Reinforcement Manufacturer Test Report; G, DG~~

~~SD-07 Certificates~~

~~Certificates Of Compliance; G, DG~~

1.6.1 Construction Equipment List

Submit a list of all heavy equipment, tools, and machines, including their type, model, sizes, capacities, axle weight and operating speeds, to be used in the performance of the work. Highlight heavy equipment that will be used over or in the vicinity of the pressurized petroleum line. Maintain all heavy equipment, tools and machines in satisfactory working conditions at all times.

## 1.7 QUALITY CONTROL

### 1.7.1 Contractor's Geotechnical Engineer

Provide a [Professional \(Licensed\) Geotechnical Engineer](#) to inspect and approve of earthwork construction activities, including: excavations, stripping of topsoil, subgrade preparation, proofrolling, fill placement, geogrid placement, and the documentation of soil and groundwater conditions. The Contractor's Geotechnical Engineer is responsible for performing pre-construction inspections and periodic site visits throughout construction, to assess site conditions and confirm the proper placement and compaction of fill. The Contractor's Geotechnical Engineer is responsible for preparing and updating the Excavation and Trenching Plan and Dewatering Work Plan as construction progresses, to reflect changing conditions on the site. If necessary, the Contractor's Geotechnical Engineer must submit updated plans if the Excavation and Trenching Plan or Dewatering Work Plan are inadequate.

The Contractor's Geotechnical Engineer will provide recommendations to the Contractor for all soil-related matters on the project. The Contractor's Geotechnical Engineer must be able to meet with the Contracting Officer at any time throughout the contract. The Contractor is responsible for arranging meetings with the Contractor's Geotechnical Engineer and Contracting Officer throughout the contract duration.

The Contractor's Geotechnical Engineer must submit a monthly [Geotechnical Evaluation report](#), informing the Contractor and Contracting Officer of the status of the plan and an accounting of the Contractor's adherence to the plan addressing any present or potential problems. The Geotechnical Evaluation Report must include the results of topsoil stripping inspections, excavation inspections, subgrade conditions prior to fill, proofrolling, and fill placement if any of these activities occurred during that month.

### 1.7.2 Qualified Technician

Provide a Qualified Technician to inspect, monitor, sample, and perform field testing. The technician qualifications need to be one of the following: a current National Institute for Certification in Engineering Technologies (NICET) Level II minimum certification in Construction Materials Testing Soils; a Geologist-in-Training with minimum one-year experience; an Engineer-in-Training with minimum one-year experience; a Registered Geologist; or a Professional Engineer.

### 1.7.3 Lab Validation

Perform testing by a Corps validated commercial testing laboratory or Contractor established testing laboratory meeting the requirements of Section [01 45 00](#) entitled QUALITY CONTROL and approved by the Contracting Officer. Submit testing laboratory validation for the testing to be performed. Do not permit work requiring testing until testing facilities have been inspected, Corps validated and approved by the Contracting Officer.

## PART 2 PRODUCTS

### 2.1 SOIL MATERIALS

#### 2.1.1 General Fill

On-site satisfactory material classified as CL-ML or CL in accordance with [ASTM D2487](#).

#### ~~2.1.2 Embankment Fill for Geogrid Reinforced Slopes~~

~~Provide clean, coarse aggregate consisting of gravel or crushed rock, conforming to IDOT gradation CA-6, meeting Coarse Aggregate Quality Class A.~~

#### ~~2.1.3 Bedding Material for Culverts and Retaining Walls~~

~~Provide clean, coarse aggregate consisting of gravel or crushed rock, conforming to IDOT gradation CA-6, meeting Coarse Aggregate Quality Class A.~~

#### 2.1.2 Topsoil

Material suitable for topsoil obtained from excavations is defined as: Natural, friable soil representative of productive, well-drained soils in the area, free of subsoil, stumps, rocks larger than [one inch](#) diameter, brush, weeds, toxic substances, and other material detrimental to plant growth. Topsoil material will be in accordance with [ASTM D5268](#).

#### 2.1.3 Borrow

Borrow material will not be required for this project, except for previously specified structural material. Excess excavated material obtained from excavations for stream grading and drain tile removal will be placed onsite as indicated on drawings.

#### 2.1.4 Drain Tile Bedding Material

Except as specified otherwise in the individual piping section, provide bedding for buried piping and drain tile disablement trenches in accordance with [AWWA C600](#). Install bedding for plastic piping to spring line of pipe. Utility bedding material is described in the plans and includes the following:

##### 2.1.4.1 Gravel and Crushed Stone

For drain tile bedding and haunches, provide clean material conforming to IDOT gradation CA-7, or 11, meeting Coarse Aggregate Quality Class A.

For drain tile overlay material as show in the plans, provide clean, coarsely graded natural gravel, crushed stone or a combination conforming to IDOT gradation CA-6, 7, or 11, meeting Coarse Aggregate Quality Class A.

### 2.2 MATERIAL FOR ROCK CHECK DAMS

Provide bedding material and rip rap conforming to these requirements for construction indicated.

### 2.2.1 Coarse Aggregate

Provide clean, coarse aggregate consisting of gravel or crushed rock, conforming to IDOT gradation CA-1, meeting Coarse Aggregate Quality Class A.

### 2.2.2 Rip-Rap

Provide rip rap material conforming to IDOT gradation RR-3 and meet Quality Designation A.

### 2.3 GEOTEXTILE-FILTER FABRIC

Provide a pervious non-woven sheet of polyester, nylon, glass or polypropylene ultraviolet resistant filaments woven, spun bonded, fused, or otherwise manufactured into a non-raveling fabric with uniform thickness and strength. Fabric for erosion control of reinforced soil slopes must conform to IDOT article 1081.10, "Excelsior Blanket" standards. Fabric for rock check dams and under Bedding Material for culverts and retaining walls must conform to IDOT Art. 1080.02 Ground Stabilization, Nonwoven standards. Submit a sample and material product data for all [Geotextiles](#) utilized.

### ~~2.4 GEOGRID REINFORCEMENT~~

~~Submit one properly identified 24 by 24 inches minimum size geogrid sample with the fasteners proposed for use. Provide a geogrid that is a geosynthetic manufactured for reinforcement applications and a regular network of integrally connected polymer tensile elements with aperture geometry sufficient to permit significant mechanical interlock with the surrounding soil and fill materials.~~

~~a. Submit manufacturer's certified raw and roll Geogrid Reinforcement Manufacturer Test Report including ultimate strength performed in accordance with ASTM D6637 or ASTM D4595 (modified). Test results not meeting the requirements in Table 1 or in the approved Manufacturer's Quality Control Manual will result in rejection of applicable rolls. Provide certified test reports a minimum of 7 calendar days prior to delivery of geogrid to the site.~~

~~b. Provide geogrid structure that is dimensionally stable and able to retain its geometry under manufacture, transport and installation. Manufacture geogrid with 100 percent virgin resin consisting of polyethylene, polypropylene, polyester, or other approved material and with a maximum of 5 percent in-plant regrind material. Provide polyester resin with a minimum molecular weight of 25,000 and a carboxyl end group number less than 30. Stabilize polyethylene and polypropylene with long term antioxidants.~~

~~c. Submit Certificates of Compliance for the materials provided and results of conformance testing. Submit an affidavit certifying raw and roll material test results submitted are accurate and that the reinforcement meets the requirements of the project specifications. Provide certificate of compliance a minimum of 7 calendar days prior to delivery of geogrid to the site.~~

### ~~2.4.1 Geogrid Reinforcement Properties~~

~~The reinforcement shown on the contract drawings must meet the property~~



~~requirements listed in Table 1. Reinforcement strength requirements represent minimum average roll values in the machine direction.~~

| TABLE 1                                                                                                                                                                                                                                                                                                                                                                              |                                                                  |                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|
| PROPERTY                                                                                                                                                                                                                                                                                                                                                                             | REQUIREMENT                                                      | TEST DESIGNATION                        |
| <del>Allowable Strength (Ta) at 5 percent strain</del>                                                                                                                                                                                                                                                                                                                               | <del>4400 lb/ft</del>                                            | <del>GSI GRI GG4a or GSI GRI GG4b</del> |
| <del>UV Resistance</del>                                                                                                                                                                                                                                                                                                                                                             | <del>70 percent after 500 hours</del>                            | <del>ASTM D4355/D4355M</del>            |
| <del>Coefficient of Interaction*<br/>for Pullout</del>                                                                                                                                                                                                                                                                                                                               | <del>0.9</del>                                                   | <del>ASTM D6706</del>                   |
| <del>Interface Friction at Peak,<br/>Degrees</del>                                                                                                                                                                                                                                                                                                                                   | <del>27.5</del>                                                  | <del>ASTM D5321/D5321M</del>            |
| <del>Apparent Opening Size</del>                                                                                                                                                                                                                                                                                                                                                     | <del>Sufficiently small to retain<br/>CA-6 Embankment Fill</del> |                                         |
| <del>*Submit the coefficient of interaction for pull-out resistance of the proposed geogrid in a soil of similar gradation and texture to the material that will be used for fill in the reinforced zone. Establish the coefficient of interaction in accordance with ASTM D6706. Provide certified test results a minimum of 7 days prior to delivery of geogrid to the site.</del> |                                                                  |                                         |

#### ~~2.4.1.1 Allowable Strength~~

~~Submit Geogrid allowable strength calculated in accordance with GSI GRI GG4a or GSI GRI GG4b. Itemize each reduction factor. Provide allowable strength calculations a minimum of 7 calendar days prior to delivery of geogrid to the site. Allowable strength is based on reduction factors for installation damage, durability, and creep that are applicable to site specific conditions. Determine reduction factors in accordance with the test procedures documented in GSI GRI GG4a or GSI GRI GG4b. The minimum reduction factor for durability is 1.1 for polyethylene and polypropylene geogrids and 1.15 for coated polyester geogrids. The minimum reduction factor for installation damage is 1.1 for all polymers. Base the reduction factor for creep on testing performed in accordance with ASTM D5262 at the strain specified in Table 1.~~

#### ~~2.4.1.2 Interface Friction Testing~~

~~Submit certified laboratory interface friction test results including description of equipment and test method, a minimum of 7 calendar days prior to delivery of geogrid to the site. Conduct laboratory interface friction tests on the following interfaces: CA-6 to CA-6 and CA-6 to CL. The frequency of testing for each interface must be at a rate of 1 per project. Conduct tests in accordance with ASTM D5321/D5321M. Use normal stresses of 65 and 130 psf along with a displacement rate of 0.2 inches~~

~~per minute. Orient geosynthetics such that the shear force is parallel to the down slope orientation of these components in the field.~~

## 2.4 COBBLES AND BOULDERS FOR ENVIRONMENTAL HABITATS

Refer to 31 32 39 STREAM HABITAT RESTORATION for specifications of stone, cobbles, gravels, and other materials related to environmental habitats.

## 2.5 SPLICES

Provide splices consisting of a standard method or device recommended by the manufacturer of the geogrid. Splices will not be allowed unless identified on the approved layout drawings. Splices must be at least 75 percent efficient. Demonstrate the splice efficiency through tests performed in accordance with GSI GRI GG4a or GSI GRI GG4b. Splicing may consist of overlaps, fusion wedge welding, sewing, or bodkin connections. Splicing methods that are dependent on installer experience and skill level, such as hot air and torch-applied open flame, are not acceptable. Construct overlap splices by placing a minimum of 2 inches of soil between the layers of geogrid.

# PART 3 EXECUTION

## 3.1 PROTECTION

Perform all work specified in accordance with applicable requirements of EM 385-1-1. Provide a Geotechnical Engineer to monitor construction activities and to prepare necessary work plans and reports; see paragraph QUALITY CONTROL.

Use equipment of type and size appropriate for the site conditions (soil character and moisture content). Maintenance of exposed subgrades and fills is the responsibility of the Contractor. The Contractor is required to prevent damage by ineffective drainage, dewatering, and heavy loads and equipment by implementing precautionary measures. Repair or replace any defects or damage.

### 3.1.1 Underground Utilities

Location of the existing utilities indicated is approximate. Physically verify the location and elevation of the existing utilities indicated prior to starting construction. The Contractor is responsible for protecting utilities from damage during construction.

#### 3.1.1.1 Buckeye Partner Requirements

Before any preliminary field work or construction begins in the vicinity of Buckeye's pipeline, a determination of the exact location and elevation of the pipeline must be made. To coordinate this procedure, contact local Field Operations Manager at the Buckeye facility nearest to project at the following:

| Buckeye Facility Locations and Phone Numbers |             |                |
|----------------------------------------------|-------------|----------------|
| Illinois                                     | Des Plaines | (847)-878-3428 |

Buckeye makes no assurance that it's permanent pipeline markers are positioned directly over its pipeline(s). Line markers should be placed at intervals determined by "line of sight". The relocation, removal, or destruction of Buckeye's pipeline markers are prohibited by federal law. Pipeline markers damaged or made unusable must be repaired or replaced by the Contractor. Contact Buckeye for re-marking of a pipeline if the existing markers are inadequate for any reason, including disturbance due to construction activities.

All activities and projects that are performed near Buckeye's pipeline facilities are subject to formal review by Buckeye prior to issuance of final written approval. Any damage caused by the Contractor to Buckeye's pipeline(s), the pipeline cathodic protection system, or other Buckeye assets is the responsibility of the Contractor. Buckeye will pursue reimbursement for all costs associated with the event including, but not limited to, excavation services, inspection services, pipeline repairs, and loss of operations.

The safety of the pipeline must be considered at all times. No attempt to probe for or engage in any construction activities which might damage the pipeline is permitted. When any construction activity is conducted in or around the pipeline right-of-away, Buckeye's On-Site Inspector must be present at all times. Before the contractor begins excavation a Buckeye representative must locate the pipeline and determine the depth of cover Buckeye's On-Site Inspector:

BILL O'MALLEY  
1.847.878.3428  
WOMALLEY@BUCKEYE.COM

**BUCKEYE PARTNERS EMERGENCY HOT LINE (EASEMENT MANAGER):**

1.888.625.7310

**Do not perform excavation, crossing, backfilling, or any other construction operations until Buckeye's On-Site Inspector has reviewed the proposed work on site and given approval for work to proceed. Buckeye's On-Site Inspector has full authority to stop work for any reason, including determination of unsafe construction activities.**

Perform excavation activities in accordance with appropriate State "One-Call" utility locating system requirements. As a matter of State law, anyone undertaking excavation work is required to call two (2) working days before excavation.

**Do not** operate equipment directly over the pipeline. Install temporary fencing along Buckeye's right-of-way boundaries so that equipment will not inadvertently pass over the pipeline at locations other than those established for crossing.

**Do not** store any equipment or materials on the right-of-way. Full access must be maintained to the pipeline(s) at all times. The stockpiling of items including soil, or topsoil over the pipeline(s) is not permitted.

### 3.1.2 Drainage and Dewatering

Provide for the collection and disposal of surface and subsurface water encountered during construction.

### 3.1.2.1 Drainage

Provide for the collection and disposal of surface and subsurface water encountered during construction. Construct storm drainage features (ponds/basins) at the earliest stages of site development, and throughout construction grade the construction area to provide positive surface water runoff away from the construction activity and provide temporary ditches, swales, and other drainage features and equipment as required to keep soils from becoming unstable, prevent erosion, or undermining of foundations. Remove unstable material from working platforms for equipment operation and soil support for subsequent construction features and provide new material as specified herein. It is the responsibility of the Contractor to assess the site conditions to employ necessary measures to permit construction to proceed.

### 3.1.2.2 Dewatering

Control groundwater flowing toward or into excavations to prevent sloughing of excavation slopes and walls, boils, uplift and heave in the excavation and to eliminate interference with orderly progress of construction. French drains, sumps, ditches or trenches are not allowed within **3 feet** of the foundation of any structure, except with specific written approval, and after specific contractual provisions for restoration of the foundation area have been made. Perform control measures by the time the excavation reaches the water level in order to maintain the integrity of the in-situ material. While the excavation is open, maintain the water level continuously, at least **2 feet** below the working level. Submit a **Dewatering Work Plan** outlining procedures for accomplishing dewatering work.

### 3.1.3 Shoring and Sheet piling

Submit an **Excavation and Trenching Plan** outlining procedures to stabilize features, prevent undermining or unintended horizontal and vertical movement of adjacent structures, and prevent slippage or movement in banks or slopes adjacent to the excavation. Submit drawings and calculations, certified by a registered professional engineer, describing the methods for shoring and sheet piling of excavations. Drawings must include material sizes and types, arrangement of members, and the sequence and method of installation and removal. Calculations are to include data and references used.

### 3.1.4 Protection of Graded Surfaces

Protect newly backfilled, graded, and topsoiled areas from traffic, erosion, and settlements that may occur. Repair or reestablish damaged grades, elevations, or slopes.

## 3.2 DELIVERY, STORAGE, AND HANDLING OF GEOGRID

Check products upon delivery to ensure that the proper material has been received and is dry and undamaged. Protect the materials from damage and exposure following the guidelines presented in **ASTM D4873/D4873M**.

### 3.2.1 Labeling

Label each roll with the manufacturer's name, product identification, roll dimensions, lot number, and date manufactured.

### 3.2.2 Handling

Handle and unload geogrid rolls by hand, or with load carrying straps, a fork lift with a stinger bar, or an axial bar assembly. Do not drag, lift by one end, lift by cables or chains, or drop geosynthetic rolls to the ground.

### 3.2.3 Storage

Protect geogrid from deleterious materials, chemicals, sparks and flames, temperatures in excess of 160 degrees F, and any other environmental condition that may degrade the physical properties. If stored outdoors, elevate the rolls from the ground surface. Protect geogrids, except for extruded grids, with an opaque waterproof cover.

## 3.3 STREAM GRADING

Perform all work specified in accordance with applicable requirements of EM 385-1-1.

The Contractor is responsible for all stream grading work to ensure the successful establishment of native plant communities, in accordance with the requirements and performance criteria in Section 32 92 19.10 NATIVE PLANTS and Section 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES.

Use equipment of type and size appropriate for the site conditions (soil character and moisture content). Maintenance of exposed subgrades and fills is the responsibility of the Contractor. The Contractor is required to prevent damage by ineffective drainage, dewatering, and heavy loads and equipment by implementing precautionary measures. Repair or replace any defects or damage.

Stream grading includes the excavation and establishment of the new re-meandered Hastings Creek river. Excavation will include stripping of up to 12 inches of topsoil for re-use in the new channel, excavation of soil to elevation and grades specified on drawings, proofroll of the channel subgrade, installation of in-stream cobble bars, boulders, and riffles, and the placement of at least 6 inches of topsoil across the stream grading area prior to seeding and planting. Place excess excavated materials from stream grading activities in stockpile locations shown on drawings.

Stream grading activities must be completed to minimize erosion and sediment entering the Hastings Creek River. Submit an Earthwork Sequencing Plan that includes materials to be excavated, stockpile locations, proposed slopes, drainage, temporary measures and plan for connecting the Hastings Creek River to the new channel.

Soils for stream grading may be comprised of any materials classified as a natural soil series, top soil, organic detritus (roots and plant material), and glacial tills, gravels, and stone. There must be no compaction of the soil in wetland or native plant restoration areas, or at least minimized in order to promote native plant growth. The surface of areas to be planted must be finished to a smoothness suitable for the application of planting materials and must mimic the microtopography of a natural wetland or prairie setting.

Dispose on the project site all material not suitable for filling or backfilling, along with brush, refuse, stumps, roots, and timber. Brush,

stumps, roots, and timber can be burned onsite, see Section 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL.

#### 3.3.1 Spoil Area Closure

Complete spoil areas final grading, so that finish elevations are no greater than 3 feet above existing grade and slopes are not steeper than 1 vertical on 10 horizontal, except as otherwise indicated. Avoid abrupt changes in grade. Distribute stripped material and stockpiles of unstable materials over the disturbed spoil area, as directed. Final grade the borrow area to drain.

#### 3.3.2 Drainage of Spoil Areas

Provide adequate drainage of spoil areas. Ensure that spoil operations result in minimum detrimental effects on natural environmental conditions.

#### 3.3.3 Stripping and Stockpiling Operations for Stream Grading

Strip in accordance with paragraph STRIPPING. Strip at least 5 feet beyond the limits of the stream grading excavation and any spoil locations of excavated materials.

Stockpile materials within the work limits such that the stockpiles does not interfere with stream grading. Maintain a minimum of 30 feet between all stockpile and spoiltiles and excavations.

### 3.4 SURFACE PREPARATION

#### 3.4.1 Clearing and Grubbing

Clear and grub as specified in Section 31 13 13 SELECTIVE TREE AND SHRUB CLEARING AND REMOVAL.

Remove trees, stumps, logs, shrubs, brush and vegetation and other items that would interfere with construction operations. Remove stumps entirely. Grub out matted roots over 3 inches in diameter to at least 18 inches below existing surface.

#### 3.4.2 Stripping

Strip site where indicated on the plans. Strip existing topsoil to a maximum depth of 12 inches. Strip in all areas within the planned limits of disturbance. All stripped materials not suitable for reuse as topsoil will be placed in specified disposal area. Screen all stripped soils to remove roots and organic materials prior to disposal.

Strip suitable soil from the site where excavation or grading is indicated and stockpile separately from other excavated material. Protect topsoil and keep in segregated piles until needed.

#### 3.4.3 Proof Rolling

Perform proof rolling on exposed subgrade that is unfrozen and free of surface water (wet conditions resulting from rainfall). Notify the Contracting Officer a minimum of three calendar days prior to proof rolling.

After stripping, excavating, and rough grading to the planned elevation,

proof roll the existing subgrade of all pavement and embankment locations with six passes of a 20 ton, pneumatic-tired or smooth drum roller. Operate the roller in a systematic manner to ensure the number of passes over all areas, and at speeds between 2.5 to 3.5 miles per hour. ~~Subgrade materials that exhibit excessive deflection and/or rutting during proof rolling need to be scarified to a minimum depth of 6 inches for trail subgrades and 9 inches for culvert, retaining walls, and embankment fill subgrades, aerated, and re-compacted to 95% of maximum dry density at plus or minus 2 percent of optimum moisture content of ASTM D698 prior to being considered for remedial action by the Contracting Officer.~~

#### 3.4.4 Stockpiling Operations

Place and grade stockpiles of satisfactory, and unsatisfactory materials as specified. Keep stockpiles in a neat and well drained condition, giving due consideration to drainage at all times. Clear, grub, and seal by rubber-tired equipment, the ground surface at stockpile locations; separately stockpile excavated satisfactory and unsatisfactory materials. Protect stockpiles of satisfactory materials from contamination which may destroy the quality and fitness of the stockpiled material. Do not create stockpiles that could obstruct the flow of any stream, endanger a partly finished structure, impair the efficiency or appearance of any structure, or be detrimental to the completed work in any way. If the Contractor fails to protect the stockpiles, and any material becomes unsatisfactory, remove and replace such material with satisfactory material from approved sources.

### 3.5 EXCAVATION

Excavate to contours, elevation, and dimensions indicated. Excavate soil disturbed or weakened by Contractor's operations, and soils softened or made unstable for subsequent construction due to exposure to weather. Use material removed from excavations meeting the specified requirements in the construction of fills, embankments, subgrades, shoulders, bedding (as backfill), and for similar purposes to minimize surplus material and to minimize additional material to be brought on site. Do not excavate below indicated depths except to remove unstable material as determined by the Geotechnical Engineer and confirmed by the Contracting Officer. Remove and replace excavations below the grades shown with appropriate materials as directed by the Contracting Officer.

If at any time during excavation, including excavation from borrow areas, the Contractor encounters material that may be classified as rock or as hard/unyielding material, uncover such material, and notify the Contracting Officer. Do not proceed with the excavation of this material until the Contracting Officer has classified the materials as common excavation or rock excavation. Failure on the part of the Contractor to uncover such material, notify the Contracting Officer, and allow sufficient time for classification and delineation of the undisturbed surface of such material will cause the forfeiture of the Contractor's right of claim to any classification or volume of material to be paid for other than that allowed by the Contracting Officer for the areas of work in which such deposits occur.

#### 3.5.1 Ditches, Gutters, and Channel Changes

Finish excavation of ditches, gutters, and channel changes by cutting accurately to the cross sections, grades, and elevations shown. Do not excavate below grades shown. Backfill excessive excavation as directed by



the Contracting Officer, with satisfactory, compacted, material or with suitable stone or cobble to grades shown. Dispose excavated material as shown or as directed. Do not allow material to be deposited within **4 feet** from edge of a ditch. Maintain excavations free from detrimental quantities of leaves, brush, sticks, trash, and other debris until final acceptance of the work.

### 3.5.2 Trench Excavation Requirements

Excavate the trench as recommended by the manufacturer of the pipe to be installed. Slope trench walls below the top of the pipe, or make vertical, and of such width as recommended by the manufacturer. Provide vertical trench walls where no manufacturer installation instructions are available. Do not exceed the trench width of **24 inches** below the top pipe plus pipe outside diameter (O.D.) for pipes of less than **24 inches** inside diameter, and do not exceed **36 inches** plus pipe outside diameter for pipe sizes larger than **24 inches** inside diameter. Where recommended trench widths are exceeded, provide redesign, stronger pipe, or special installation procedures. The Contractor is responsible for the cost of redesign, stronger pipe, or special installation procedures without any additional cost to the Government.

#### 3.5.2.1 Bottom Preparation

Grade the bottoms of trenches accurately to provide uniform bearing and support for the bottom quadrant of each section of the pipe. Excavate bell holes to the necessary size at each joint or coupling to eliminate point bearing. Remove stones of **3 inch** or greater in any dimension, or as recommended by the pipe manufacturer, whichever is smaller, to avoid point bearing.

#### 3.5.2.2 Removal of Unyielding Material

Where unyielding material is encountered in the bottom of the trench, notify the Contracting Officer. Following approval, remove such material **3 inch** below the required grade and replace with suitable materials as provided in paragraph FILLING AND COMPACTION.

#### 3.5.2.3 Removal of Unstable Material

Where unstable material is encountered in the bottom of the trench, remove such material to the depth directed and replace it to the proper grade with suitable material as provided in paragraph FILLING AND COMPACTION. When removal of unstable material is required due to the Contractor's fault or neglect in performing the work, the Contractor is responsible for excavating the resulting material and replacing it without additional cost to the Government.

#### 3.5.2.4 Excavation for Appurtenances

Provide excavation for manholes, catch-basins, inlets, or similar structures sufficient to leave at least **12 inches** clear between the outer structure surfaces and the face of the excavation or support members.

### 3.5.3 Underground Utilities

Perform work adjacent to utilities in accordance with procedures outlined by utility owner. **Excavation made with power-driven equipment is not permitted within **20 feet** of known utility or subsurface construction.** For

work immediately adjacent to or for excavations exposing a utility or other buried obstruction, excavate by hand. Exercise extreme caution when performing any excavation, trenching, grading, or earthwork operations in the vicinity of existing utilities. Start hand excavation on each side of the indicated obstruction and continue until the obstruction is uncovered or until clearance for the new grade is assured. Support uncovered lines or other existing work affected by the contract excavation until approval for backfill is granted by the Contracting Officer. Report damage to utility lines or subsurface construction immediately to the Contracting Officer. The contractor is fully responsible for preventing damage to all existing underground and overhead utilities and services.

#### 3.5.3.1 Liquefied Petroleum Line

The existing liquefied petroleum line is a high pressure (800 lbs) steel 16 inch diameter pipe owned by West Shore Pipe Line Company and managed by Buckeye Partners, L.P and Affiliates. All excavation in the right-of-away of Buckeye Partner will be done by hand. **Excavation made with power driven equipment is not permitted within 30 feet of known liquefied petroleum line.** Any excavation near the liquid petroleum line must be done under the supervision of a designated Buckeye Partner representative. **Don't perform work in the right-of-way without a Buckeye On-Site Inspector present.** Buckeye's On-Site Inspector reserves the right to stop work for any reason, including for construction activities deemed unsafe.

Buckeye Partner Supervision includes the excavation, and installation of the proposed riffle on top of the liquefied petroleum line. Installation of material above the liquefied petroleum line must be done by hand and with care. Do not dump stone from a high altitude which may result in damaging the liquefied petroleum line. The Contractor is fully responsible for the prevention of damage to the liquefied petroleum line.

#### 3.5.4 Structural Excavation

Following general excavation and rough grading activities, excavate to the depths shown on the drawings. Do not excavate to final grade until just before concrete is to be placed. Roughen level surfaces. Cut sloped surfaces as indicated into rough steps or benches to provide a satisfactory bond for compacting materials.

Make excavations to the lines, grades, and elevations shown, or as directed. Provide trenches and foundation pits of sufficient size to permit the placement and removal of forms for the full length and width of structure footings and foundations as shown. Clean rock or other hard foundation material of loose debris and cut to a firm, level, stepped, or serrated surface. Remove loose disintegrated rock and thin strata.

Concrete placement is not allowed until footing subgrades have been inspected and approved by the Contractor's Geotechnical Engineer and the Contracting Officer.

### 3.6 SUBGRADE PREPARATION

#### 3.6.1 General Requirements

Shape subgrade to line, grade, and cross section as indicated. Remove unsatisfactory and unstable material in surfaces to receive fill or in excavated areas, as determined by proof rolling, and replaced with satisfactory materials or embankment fill depending on the fill specified

in the plans. Do not place material on surfaces that are muddy, frozen, contain frost, or otherwise contain unstable material.

### 3.6.2 Subgrade Filter Fabric

Place filter fabric as indicated directly on prepared subgrade free of vegetation, stumps, rocks larger than 2 inch diameter and other debris which may puncture or otherwise damage the fabric. Repair damaged fabric by placing an additional layer of fabric to cover the damaged area a minimum of 3 feet overlap in all directions. Overlap fabric at joints a minimum of 3 feet. Obtain approval of filter fabric installation before placing fill or backfill. Place fill or backfill on fabric in the direction of overlaps and compact as specified herein. Follow manufacturer's recommended installation procedures.

## 3.7 FILLING AND COMPACTION

Prepare ground surface on which backfill is to be placed and provide compaction requirements for backfill materials in conformance with the applicable portions of paragraphs for SUBGRADE PREPARATION. Do not place material on surfaces that are muddy, frozen, or contain frost. Finish compaction by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers, or other approved equipment well suited to the soil being compacted. Moisten material as necessary to plus or minus 2 percent of optimum moisture. Fill and backfill to contours, elevations, and dimensions indicated. Compact and test each lift before placing overlaying lift.

### 3.7.1 Trench Backfill for Drain Tile Disablement

Backfill trenches to the grade shown.

#### 3.7.1.1 Replacement of Unyielding Material

Replace unyielding material removed from the bottom of the trench with satisfactory material or initial backfill material.

#### 3.7.1.2 Replacement of Unstable Material

Replace unstable material removed from the bottom of the trench or excavation with satisfactory material placed in layers not exceeding 6 inches loose thickness.

#### 3.7.1.3 Bedding and Initial Backfill

Place initial backfill material and compact it with approved tampers to a height of at least 4 inches above the top of the replacement drain tile pipe. Bring up the backfill evenly on both sides of the pipe for the full length of the pipe. Take care to ensure thorough compaction of the fill under the haunches of the pipe. Except where shown or when specified otherwise in the individual piping section, provide bedding for buried piping in accordance with PART 2 paragraph Drain Tile Bedding Material. Compact bedding backfill to 95 percent of ASTM D698.

#### 3.7.1.4 Final Backfill

Do not begin backfill until construction below finish grade has been approved, and the excavation cleaned of trash and debris. Bring backfill to indicated finish grade. Heavy equipment for spreading and compacting

backfill are not to be operated closer to foundation or retaining walls than a distance equal to the height of backfill above the top of footing; compact remaining area in layers not more than 4 inches in compacted thickness with power-driven hand tampers suitable for the material being compacted.

Fill the remainder of the trench, except for special materials for structures and pavements with satisfactory material. Place backfill material in 8 inch lifts and compact to 95% Standard Proctor.

#### 3.7.1.4.1 Turfed or Seeded Areas and Miscellaneous Areas

Place backfill in layers of a maximum of 12 inches loose thickness, and do not compact.

#### ~~3.7.2 Bedding Material Placement~~

~~Place bedding material fill and backfill beneath culvert and retaining walls structures in successive horizontal layers of loose material not more than 8 inches in depth, or in loose layers not more than 6 inches in depth when using hand-operated compaction equipment. Do not place over wet or frozen materials. Compact Bedding Material for culverts and retaining walls to at least 98% of ASTM D698. Perform compaction in such a manner as to prevent wedging action or eccentric loading upon or other damage to the structure. Moisture condition fill and backfill material to within range of plus 2 or minus 2 percent of optimum moisture content at the time of compaction.~~

#### ~~3.7.3 Earth Embankments with shallow slopes~~

~~Construct earth embankments with overall slopes less than 2H:1V from embankment fill free of organic or frozen material and rocks with any dimension greater than 3 inches. For earth embankments with slopes steeper than 2H:1V follow paragraphs 3.7.5 "Installation of Geogrid Reinforced Soil Embankment". Place the material in successive horizontal layers of loose material not more than 8 inches in depth. Spread each layer uniformly on a soil surface that has been moistened or aerated as necessary and scarified or otherwise broken up so that the fill will bond with the surface on which it is placed. After spreading, plow, disk, or otherwise break up each layer; moisten or aerate as necessary; thoroughly mix; and compact to at least 95 percent laboratory maximum density from ASTM D698. Backfill and fill material are to be within the range of minus 2 to plus 2 percent of optimum moisture.~~

~~Compact embankment fill for the final 24 inches of earth embankments forming subgrade for pavements to 98 percent laboratory maximum density of ASTM D698. Finish compaction by sheepsfoot rollers, pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment.~~

#### 3.7.2 Earth Embankments with steep slopes

Construct earth embankments with overall slopes greater than or equal to 2H:1V from CA-6 Fill reinforced with Geogrid. Follow construction sequencing as outlined on the plans for layering of CA-6 Fill, face wrapping, and geogrid layer placement.

Place the first layer of geogrid on a surface that is free of rock and other material that could damage the geogrid. Ensure no damaging materials

are underneath subsequent geogrid layers before laying new geogrid layers down.

Position adjacent rolls of geogrid edge-to-edge and loosely fasten to maintain alignment during fill placement. Do not overlap adjacent rolls. Use fastener type and spacing as recommended by the manufacturer and approved by the Contracting Officer. Metallic fasteners will not be allowed.

Install the geogrid in accordance with the Manufacturer's recommendations. Unroll the geogrid in the direction of reinforcement. After a layer of geogrid has been placed, use suitable means, that do not damage the underlying geosynthetics, to hold the geogrid flat and in place until cover fill can be placed. Remove geogrid damaged during placement and covering and replace at no additional cost to the Government. Do not splice the geogrid. Geogrid must be a continuous run in the reinforcement direction.

Place fill in successive horizontal layers of loose material not more than 8 inches in depth. After spreading, moisten or aerate as necessary and compact to at least 95 percent laboratory maximum density from ASTM D698. Fill Material is to be within the range of minus 2 to plus 2 percent of optimum moisture.

Compact fill for the final 18 inches of earth embankments forming subgrade for pavements to 98 percent laboratory maximum density of ASTM D698. Finish compaction by pneumatic-tired rollers, steel-wheeled rollers, vibratory compactors, or other approved equipment.

### ~~3.7.3 Installation of Geogrid Reinforced Soil Embankment~~

~~Submit Geogrid layout plan along with anchorage and joint details, sequencing and construction procedures, a minimum of 7 calendar days prior to geogrid placement.~~

#### ~~3.7.3.1 Subgrade Preparation~~

~~Immediately prior to placement of the geogrid, place the geogrid on a surface that is free of rock and other material that could damage the geogrid or the underlying geosynthetics.~~

#### ~~3.7.3.2 Placement~~

~~Install the geogrid in accordance with the Manufacturer's recommendations. Unroll the geogrid in the direction of reinforcement. After a layer of geogrid has been placed, use suitable means, that do not damage the underlying geosynthetics, to hold the geogrid flat and in place until cover soil can be placed. Remove geogrid damaged during placement and covering and replace at no additional cost to the Government.~~

#### ~~3.7.3.3 Overlaps and Fasteners~~

~~Position adjacent rolls of geogrid edge-to-edge and loosely fasten to maintain alignment during fill placement. Do not overlap adjacent rolls. Use fastener type and spacing as recommended by the manufacturer and approved by the Contracting Officer. Metallic fasteners will not be allowed.~~

#### ~~3.7.3.4 Penetrations~~

~~For small penetrations through geogrids, cut only transverse members of the geogrid. The load-carrying longitudinal (machine direction) members must be spread around the penetration. For larger penetrations, place additional geogrid on each side of the penetration and spliced to the adjacent geogrid to compensate for any longitudinal tensile members that must be cut.~~

#### ~~3.7.3.5 Splices~~

~~Do not splice geogrid lengths unless necessary for remediating penetrations as listed in Paragraph 3.7.5.4 "Penetrations". Submit test data showing splice efficiency. Provide certified test results a minimum of 7 calendar days prior to delivery of geogrid to the site. Pull and hold splices taut in geogrid reinforcement during cover soil placement.~~

#### ~~3.7.3.6 Cover Fill Placement~~

~~Cover geogrid with soil within 5 calendar days of acceptance. Keep the geogrid smooth and taut during placement of cover materials. Do not drop cover soil onto the geogrid from a height greater than 3 feet. Push the soil out over the geogrid in an upward tumbling motion. Place soil from the bottom of the slope upward. The initial loose soil lift thickness must be 6 to 8 inches. Use equipment with ground pressures less than 7 psi to place the first lift over the geogrid. Do not use equipment placing cover soil that stops abruptly, makes sharp turns, spins their wheels, or travels at speeds exceeding 5 mph. Compact embankment fill to 95% of ASTM D698 for each lift of 6-8 inches maximum. Embankment fill must be within +/- 2 percent of optimum moisture content as determined by ASTM D698. Use lightweight compaction equipment above the culvert and within 3 feet of the edge of the reinforced slope. Typical weight compaction equipment can be used elsewhere within the geogrid reinforced zone. for final 24 inches of slope, compact to 98% of ASTM D698.~~

~~Ensure length of geogrid at the face of the slope is sufficient to wrap the face and provide embedment of the top portion. Wrap each 2 foot high section of compacted embankment fill with geogrid, shaping the face of the slope to the specified grade. Hold back the top of each 2 foot wrapped face by embedding a minimum of 3 ft length of geogrid into the top layer. Apply 2 inches of fill and compact before applying subsequent geogrid layer.~~

#### ~~3.7.3.7 Slope Dressing~~

~~Cover shaped geogrid/fill face with 6 inches of clay topsoil, seed, and cover with Excelsior Blanket. Compact sufficiently to allow plant establishment while minimizing sloughing under the erosion control blanket.~~

### 3.7.3 Spoil Pile Placement

Place spoil piles as shown on the plans. Compact to a degree to safely support the heights and grades shown.

### 3.7.4 Compaction

Do not compact under areas designated for vegetation and areas outside the 5 foot line of the paved area or stone structures.

Compact all other areas not specified previously, inside the 5 foot line of the paved area or structures, to 95 percent of ASTM D698.

### 3.7.5 Rock Check Dams

Construct rock check dams as shown on the drawings. Trim and dress indicated areas to conform to cross sections, lines and grades shown within a tolerance of 0.1 foot. Place filter fabric over the cleared area prior to the placement of rock.

#### 3.7.5.1 Stone Placement

Place rock for rip-rap on prepared bedding material to produce a well graded mass with the minimum practicable percentage of voids in conformance with lines and grades indicated. Distribute larger rock fragments, with dimensions extending the full depth of the rip-rap throughout the entire mass and eliminate "pockets" of small rock fragments. Rearrange individual pieces by mechanical equipment or by hand as necessary to obtain the distribution of fragment sizes specified above.

### 3.8 FINISHING/FINISH OPERATIONS

During construction, keep embankments and excavations shaped and drained. Maintain ditches and drains along subgrade to drain effectively at all times. Do not disturb the finished subgrade by traffic or other operation. Protect and maintain the finished subgrade in a satisfactory condition until ballast, subbase, base, or pavement is placed. Do not permit the storage or stockpiling of materials on finished subgrade. Do not lay subbase, base course, ballast, or pavement until the subgrade has been checked and approved, and in no case place subbase, base, surfacing, pavement, or ballast on a muddy, spongy, frozen or otherwise unstable subgrade.

Finish the surface of excavations, embankments, and subgrades to a smooth and compact surface in accordance with the lines, grades, and cross sections or elevations shown. Provide the degree of finish for graded areas within 0.1 foot of the grades and elevations indicated except as indicated for subgrades specified in paragraph SUBGRADE PREPARATION. Grading near utilities must match elevations exactly as stated on the plans. Finish gutters and ditches in a manner that will result in effective drainage. Grade areas to drain water away from structures. Maintain areas free of trash and debris. For existing grades that will remain but which were disturbed by Contractor's operations, grade as directed. Finish the surface of areas to be turfed to a smoothness suitable for the application of turfing materials. Repair graded, topsoiled, or backfilled areas prior to acceptance of the work, and re-established grades to the required elevations and slopes.

#### ~~3.8.1 Grading Around Structures~~

~~Construct areas within 5 feet of the trail, culvert and retaining walls true to grade, shape to drain, and maintain free of trash and debris until final inspection has been completed and the work has been accepted.~~

#### 3.8.1 Topsoil and Seed

Provide as specified in Section 32 92 19.10 NATIVE PLANTS and 32 01 90.45 ESTABLISHMENT OF NATIVE PLANT COMMUNITIES.



On areas to receive topsoil, prepare the compacted subgrade soil to a 2 inches depth for bonding of topsoil with subsoil. Spread topsoil evenly to a thickness of at least 6 inches and grade to the elevations and slopes shown. Do not spread topsoil when frozen or excessively wet or dry. Keep topsoil separate from other excavated materials, brush, litter, objectionable weeds, roots, stones larger than 2 inches in diameter, and other materials that would interfere with planting and maintenance operations. Stockpile in locations indicated any surplus of topsoil from excavations and gradings. Obtain material required for topsoil in excess of that produced by excavation within the grading limits from areas indicated.

### 3.9 DISPOSITION OF SURPLUS MATERIAL

Place all surplus or other soil material not required or not suitable for filling or backfilling in the spoil pile marked on the plans. Remove from the project site all brush, refuse, stumps, roots, and timber. Properly dispose in accordance with all applicable laws and regulations. Prepare plan for [Disposition of Surplus Materials](#) to include permissions document to dispose of non-salable products.

### 3.10 TESTING

Perform testing as indicated in Table 1. Submit [Material Test Reports](#) within 24 hours of tests being completed. When test results indicate, as determined by the Contracting Officer, that compaction is not as specified, the material must be removed, replaced and recompact to meet specification requirements. Tests on recompact areas must be performed to determine conformance with specification requirements. Inspections and test results must be certified by a registered professional civil engineer. These certifications must state that the tests and observations were performed by or under the direct supervision of the engineer and that the results are representative of the materials or conditions being certified by the tests.

| Material Type          | Location of Material                                                                                                                         | Test Method                                                                                                                                                                                                                                      | Test Frequency                                                                                                                                                                                                                                                                                                                                                                                                                               |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All Fills and Backfill | <del>Culverts,</del><br><del>Embankments,</del><br><del>Structure</del><br><del>Foundations,</del><br><del>Trails, and</del> Trench backfill | Density - ASTM D2167<br>ASTM D6938 or<br>ASTM D8167/D8167M.<br>When ASTM D6938 or<br>ASTM D8167/D8167M<br>is used, check the<br>calibration curves<br>and adjust using<br>only the sand cone<br>method as<br>described in<br>ASTM D1556/D1556M.. | One test per 500<br>square feet, or<br>fraction thereof,<br>of each lift of<br>fill or backfill<br>areas compacted by<br>other than<br>hand-operated<br>machines. Double<br>testing frequency<br>for areas<br>compacted by<br>hand-operated<br>machines.<br><br>If ASTM D6938 or<br>ASTM D8167/D8167M<br>is used, check<br>in-place densities<br>by<br>ASTM D1556/D1556M<br>as follows: One<br>check test per<br>lift for every 10<br>tests. |

| Material Type                    | Location of Material                                             | Test Method                                  | Test Frequency                                                                                                                                                                                                                                           |
|----------------------------------|------------------------------------------------------------------|----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All Fills and backfill           | All areas not including river infill and spoil pile              | Moisture Content -<br>ASTM D2216             | One per day for each type of fill and backfill.<br><br>Sample taken immediately prior to compaction after moisture conditioning.                                                                                                                         |
| All cohesive excavated materials | All excavated materials to be placed as embankment fill on site. | Moisture Density Relationship -<br>ASTM D698 | One representative test per 1000 cubic yards of fill and backfill, or when any change in material occurs which may affect the optimum moisture content or laboratory maximum density.<br><br>Sample to be taken from stockpile or location of placement. |

| Material Type                    | Location of Material                                                                      | Test Method                     | Test Frequency                                                                                                                                                                                                     |
|----------------------------------|-------------------------------------------------------------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| All granular excavated materials | All excavated materials to be placed as fill on site, except river infill and spoil pile. | Relative Density -<br>ASTM D698 | One test per 1000 square feet, or fraction thereof, of each lift of fill or backfill areas compacted by other than hand-operated machines. Double testing frequency for areas compacted by hand-operated machines. |

-- End of Section --

| RAVEN GLEN                                |                           |           |                          |                          |                          |                          |                           |                           |
|-------------------------------------------|---------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| SCIENTIFIC NAME                           | COMMON NAME               | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz) | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz) |
| <b>Stream/Earthwork</b>                   |                           |           |                          |                          |                          |                          |                           |                           |
| <i>Alisma subcordatum</i>                 | American Water-Plantain   | Seed      | 0                        | 0                        | 6                        | 0                        | 66                        | 0                         |
| <i>Asclepias incarnata</i>                | Swamp Milkweed            | Seed      | 0                        | 0                        | 3                        | 0                        | 33                        | 0                         |
| <i>Bidens cernua</i>                      | Nodding Burr-Marigold     | Seed      | 0                        | 0                        | 2.5                      | 0                        | 27.5                      | 0                         |
| <i>Carex emoryi</i>                       | Emory's Sedge             | Plug      | 38,000                   | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Carex pellita</i>                      | Woolly Sedge              | Plug      | 20,000                   | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Carex stricta</i>                      | Uptight Sedge             | Plug      | 8,000                    | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Eleocharis palustris</i>               | Common Spike-Rush         | Seed      | 0                        | 0                        | 1                        | 0                        | 11                        | 0                         |
| <i>Elymus riparius</i>                    | River-Bank Wild Rye       | Seed      | 0                        | 0                        | 15                       | 0                        | 165                       | 0                         |
| <i>Elymus virginicus</i>                  | Virginia Wild Rye         | Seed      | 0                        | 0                        | 14                       | 0                        | 154                       | 0                         |
| <i>Epilobium coloratum</i>                | Purple-Leaf Willowherb    | Seed      | 0                        | 0                        | 0.125                    | 0                        | 1.375                     | 0                         |
| <i>Iris virginica</i> var. <i>shrevei</i> | Virginia Blueflag         | Plug      | 4,000                    | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Leersia oryzoides</i>                  | Rice Cut Grass            | Seed      | 0                        | 0                        | 4                        | 0                        | 44                        | 0                         |
| <i>Juncus tenuis</i>                      | Path Rush                 | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5.5                       | 0                         |
| <i>Justicia americana</i> ****            | American Water-Willow**** | Plug      | 1,500                    | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Penthorum sedoides</i>                 | Ditch-Stonecrop           | Seed      | 0                        | 0                        | 0.125                    | 0                        | 1.375                     | 0                         |
| <i>Potamogeton foliosus</i>               | Leafy Pondweed            | Plug      | 300                      | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Potamogeton nodosus</i>                | Long-Leaf Pondweed        | Plug      | 200                      | 0                        | 0                        | 0                        | 0                         | 0                         |
| <i>Sagittaria cuneata</i>                 | Arum-Leaf Arrowhead       | Seed      | 0                        | 0                        | 3                        | 0                        | 33                        | 0                         |
| <i>Scirpus pendulus</i>                   | Rufous Bulrush            | Seed      | 0                        | 0                        | 0.75                     | 0                        | 8.25                      | 0                         |
| <i>Vallisneria americana</i>              | American Eel-Grass        | Plug      | 1,000                    | 0                        | 0                        | 0                        | 0                         | 0                         |
| <b>TOTAL QUANTITY</b>                     |                           |           | <b>73,000</b>            | <b>0</b>                 | <b>50</b>                | <b>0</b>                 | <b>550</b>                | <b>0</b>                  |
| <b>Stream/Earthwork Cover Crop</b>        |                           |           |                          |                          |                          |                          |                           |                           |
| <i>Avena sativa</i>                       | Common Oat                | Seed      | 0                        | 0                        | 300                      | 0                        | 3,300                     | 0                         |
| <i>Lolium multiflorum</i>                 | Annual Rye                | Seed      | 0                        | 0                        | 200                      | 0                        | 2,200                     | 0                         |

| SCIENTIFIC NAME                                         | COMMON NAME                  | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz) | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz) |
|---------------------------------------------------------|------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| <b>Spoil Pile and Embankment Fill Areas</b>             |                              |           |                          |                          |                          |                          |                           |                           |
| <i>Allium cernuum</i>                                   | Nodding Onion                | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Asclepias sullivantii</i>                            | Prairie Milkweed             | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Asclepias verticillata</i>                           | Whorled Milkweed             | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Astragalus canadensis</i>                            | Canadian Milk-Vetch          | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Baptisia alba</i> var. <i>macrophylla</i>            | White Wild Indigo            | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Brickellia eupatorioides</i> var. <i>corymbulosa</i> | False Boneset                | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Bouteloua curtipendula</i>                           | Side-Oats Grama              | Seed      | 0                        | 0                        | 40                       | 0                        | 100                       | 0                         |
| <i>Bromus kalmii</i>                                    | Kalm's Brome                 | Seed      | 0                        | 0                        | 12                       | 0                        | 30                        | 0                         |
| <i>Carex bicknellii</i>                                 | Bicknell's Sedge             | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Carex brevior</i>                                    | Plains Oval Sedge            | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Carex granularis</i>                                 | Pale Sedge                   | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Carex grisea</i>                                     | Wood Gray Sedge              | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Carex molesta</i>                                    | Field Oval Sedge             | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Carex normalis</i>                                   | Greater Straw Sedge          | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Chamaecrista fasciculata</i>                         | Sleepingplant                | Seed      | 0                        | 0                        | 30                       | 0                        | 75                        | 0                         |
| <i>Coreopsis palmata</i>                                | Prairie Tickseed             | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Coreopsis tripteris</i>                              | Tall Tickseed                | Seed      | 0                        | 0                        | 1.5                      | 0                        | 4                         | 0                         |
| <i>Dalea candida</i>                                    | White Prairie-Clover         | Seed      | 0                        | 0                        | 5                        | 0                        | 13                        | 0                         |
| <i>Dalea purpurea</i>                                   | Purple Prairie-Clover        | Seed      | 0                        | 0                        | 5                        | 0                        | 13                        | 0                         |
| <i>Desmodium canadense</i>                              | Showy Tick-Trefoil           | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Dodecatheon meadia</i> ***                           | Pride-of-Ohio***             | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Elymus canadensis</i>                                | Nodding Wild Rye             | Seed      | 0                        | 0                        | 38                       | 0                        | 95                        | 0                         |
| <i>Eryngium yuccifolium</i>                             | Button Eryngo                | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Euphorbia corollata</i>                              | Flowering Spurge             | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Helianthus occidentalis</i>                          | Few-Leaf Sunflower           | Seed      | 0                        | 0                        | 2                        | 0                        | 4                         | 0                         |
| <i>Helianthus pauciflorus</i>                           | Prairie Sunflower            | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Hesperostipa spartea</i>                             | Porcupine Grass              | Seed      | 0                        | 0                        | 4                        | 0                        | 10                        | 0                         |
| <i>Juncus tenuis</i>                                    | Path Rush                    | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Lespedeza capitata</i>                               | Round-Head Bush-Clover       | Seed      | 0                        | 0                        | 4                        | 0                        | 10                        | 0                         |
| <i>Monarda fistulosa</i>                                | Oswego-Tea                   | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Packera plattensis</i>                               | Prairie Groundsel            | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Panicum virgatum</i>                                 | Switch Grass                 | Seed      | 0                        | 0                        | 13                       | 0                        | 33                        | 0                         |
| <i>Parthenium integrifolium</i>                         | Wild Quinine                 | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Penstemon digitalis</i>                              | Foxglove Beardtongue         | Seed      | 0                        | 0                        | 3.5                      | 0                        | 9                         | 0                         |
| <i>Ratibida pinnata</i>                                 | Yellow Coneflower            | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Rudbeckia hirta</i>                                  | Black-Eyed-Susan             | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Schizachyrium scoparium</i>                          | Little False Bluestem        | Seed      | 0                        | 0                        | 35                       | 0                        | 88                        | 0                         |
| <i>Silphium laciniatum</i>                              | Compass-Plant                | Seed      | 0                        | 0                        | 3                        | 0                        | 8                         | 0                         |
| <i>Silphium terebinthinaceum</i>                        | Prairie Dock                 | Seed      | 0                        | 0                        | 4                        | 0                        | 10                        | 0                         |
| <i>Solidago juncea</i>                                  | Early Goldenrod              | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Solidago nemoralis</i>                               | Gray Goldenrod               | Seed      | 0                        | 0                        | 1.0                      | 0                        | 3                         | 0                         |
| <i>Solidago rigida</i>                                  | Hard-Leaf Flat-Top-Goldenrod | Seed      | 0                        | 0                        | 5                        | 0                        | 13                        | 0                         |
| <i>Solidago speciosa</i>                                | Showy Goldenrod              | Seed      | 0                        | 0                        | 2                        | 0                        | 5                         | 0                         |
| <i>Symphyotrichum ericoides</i>                         | White Heath American-Aster   | Seed      | 0                        | 0                        | 0.5                      | 0                        | 1                         | 0                         |
| <i>Symphyotrichum laeve</i>                             | Smooth Blue American-Aster   | Seed      | 0                        | 0                        | 4                        | 0                        | 10                        | 0                         |
| <i>Symphyotrichum oolentangiense</i>                    | Azure Aster                  | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Tradescantia ohiensis</i>                            | Bluejacket                   | Seed      | 0                        | 0                        | 1                        | 0                        | 3                         | 0                         |
| <i>Verbena stricta</i>                                  | Hoary Vervain                | Seed      | 0                        | 0                        | 4                        | 0                        | 10                        | 0                         |
| <i>Zizia aurea</i>                                      | Golden Alexanders            | Seed      | 0                        | 0                        | 5                        | 0                        | 13                        | 0                         |
| <b>TOTAL QUANTITY</b>                                   |                              |           | <b>0</b>                 | <b>0</b>                 | <b>264</b>               | <b>0</b>                 | <b>660</b>                | <b>0</b>                  |
| <b>Spoil Pile and Embankment Fill Areas Cover Crop</b>  |                              |           |                          |                          |                          |                          |                           |                           |
| <i>Avena sativa</i>                                     | Common Oat                   | Seed      | 0                        | 0                        | 350                      | 0                        | 875                       | 0                         |
| <i>Lolium multiflorum</i>                               | Annual Rye                   | Seed      | 0                        | 0                        | 250                      | 0                        | 625                       | 0                         |

| SCIENTIFIC NAME                                      | COMMON NAME                   | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity<br>OPTION | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz)<br>OPTION | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz)<br>OPTION |
|------------------------------------------------------|-------------------------------|-----------|--------------------------|------------------------------------|--------------------------|------------------------------------|---------------------------|-------------------------------------|
| <b>Wetlands (Marsh / Wet Prairie / Sedge Meadow)</b> |                               |           |                          |                                    |                          |                                    |                           |                                     |
| <i>Acorus americanus</i>                             | Several-Vein Sweetflag        | Plug      | 1,000                    | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Agalinis tenuifolia</i>                           | Slender-Leaf False Foxglove   | Seed      | 0                        | 0                                  | 0.75                     | 0.5                                | 57                        | 25                                  |
| <i>Alisma subcordatum</i>                            | American Water-Plantain       | Seed      | 0                        | 0                                  | 20                       | 10                                 | 1520                      | 500                                 |
| <i>Angelica atropurpurea</i>                         | Great Angelica                | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Asclepias incarnata</i>                           | Swamp Milkweed                | Seed      | 0                        | 0                                  | 12                       | 6                                  | 912                       | 300                                 |
| <i>Beckmannia syzigachne</i> ***                     | American Slough Grass***      | Seed      | 0                        | 0                                  | 8                        | 4                                  | 608                       | 200                                 |
| <i>Bidens cernua</i>                                 | Nodding Burr-Marigold         | Seed      | 0                        | 0                                  | 3                        | 1.5                                | 228                       | 75                                  |
| <i>Calamagrostis canadensis</i>                      | Bluejoint                     | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Carex aquatilis</i>                               | Leafy Tussock Sedge           | Plug      | 5,000                    | 2,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex comosa</i>                                  | Bearded Sedge                 | Plug      | 5,000                    | 2,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex emoryi</i>                                  | Emory's Sedge                 | Plug      | 12,000                   | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex haydenii</i>                                | Cloud Sedge                   | Plug      | 2,000                    | 1,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex hystericina</i>                             | Porcupine Sedge               | Plug      | 1,000                    | 1,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex lacustris</i>                               | Lakebank Sedge                | Plug      | 6,000                    | 5,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex pellita</i>                                 | Woolly Sedge                  | Plug      | 10,000                   | 10,000                             | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex sartwellii</i>                              | Sartwell's Sedge              | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Carex scoparia</i>                                | Pointed Broom Sedge           | Seed      | 0                        | 0                                  | 3                        | 0                                  | 228                       | 0                                   |
| <i>Carex stipata</i>                                 | Stalk-Grain Sedge             | Seed      | 0                        | 0                                  | 3                        | 0                                  | 228                       | 0                                   |
| <i>Carex stricta</i>                                 | Uptight Sedge                 | Plug      | 25,000                   | 20,000                             | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex tribuloides</i>                             | Blunt Broom Sedge             | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Carex trichocarpa</i>                             | Hairy-Fruit Sedge             | Plug      | 8,000                    | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex vulpinoidea</i>                             | Common Fox Sedge              | Seed      | 0                        | 0                                  | 5                        | 2.5                                | 380                       | 125                                 |
| <i>Cirsium muticum</i> ***                           | Swamp Thistle***              | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Eleocharis obtusa</i>                             | Blunt Spike-Rush              | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Eleocharis palustris</i>                          | Common Spike-Rush             | Seed      | 0                        | 0                                  | 1.5                      | 0.5                                | 114                       | 25                                  |
| <i>Elymus virginicus</i>                             | Virginia Wild Rye             | Seed      | 0                        | 0                                  | 10                       | 5                                  | 760                       | 250                                 |
| <i>Eupatorium perfoliatum</i>                        | Common Boneset                | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Eutrochium maculatum</i>                          | Spotted Trumpetweed           | Seed      | 0                        | 0                                  | 4                        | 2                                  | 304                       | 100                                 |
| <i>Glyceria striata</i>                              | Fowl Manna Grass              | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 38                        | 25                                  |
| <i>Helenium autumnale</i>                            | Sneezeweed                    | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Hypericum ascyron</i>                             | Great St. John's-Wort         | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Iris virginica</i> var. <i>shrevei</i>            | Virginia Blueflag             | Plug/Seed | 9,000                    | 3,000                              | 6                        | 3                                  | 456                       | 150                                 |
| <i>Juncus dudleyi</i>                                | Dudley's Rush                 | Seed      | 0                        | 0                                  | 0.125                    | 0.25                               | 9.5                       | 12.5                                |
| <i>Juncus nodosus</i>                                | Knotted Rush                  | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Juncus torreyi</i>                                | Torrey's Rush                 | Seed      | 0                        | 0                                  | 0.125                    | 0.25                               | 9.5                       | 12.5                                |
| <i>Leersia oryzoides</i>                             | Rice Cut Grass                | Seed      | 0                        | 0                                  | 5                        | 2.5                                | 380                       | 125                                 |
| <i>Liatis spicata</i>                                | Dense Gayfeather              | Seed      | 0                        | 0                                  | 3                        | 1.5                                | 228                       | 75                                  |
| <i>Lobelia cardinalis</i>                            | Cardinal-Flower               | Seed      | 0                        | 0                                  | 0.125                    | 0.125                              | 9.5                       | 6.25                                |
| <i>Lobelia siphilitica</i>                           | Great Blue Lobelia            | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Lycopus americanus</i>                            | Cut-Leaf Water-Horehound      | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Lycopus uniflorus</i> ***                         | Northern Water-Horehound***   | Seed      | 0                        | 0                                  | 0.125                    | 0.125                              | 9.5                       | 6.25                                |
| <i>Lysimachia thyrsiflora</i>                        | Tufted Loosestrife            | Plug      | 2,000                    | 4,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Mentha arvensis</i>                               | American Wild Mint            | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Mimulus ringens</i>                               | Allegheny Monkey-Flower       | Seed      | 0                        | 0                                  | 0.125                    | 0.125                              | 9.5                       | 6.25                                |
| <i>Monarda fistulosa</i>                             | Oswego-Tea                    | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Onoclea sensibilis</i>                            | Sensitive Fern                | Plug      | 1,500                    | 1,500                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Pedicularis lanceolata</i> ***                    | Swamp Lousewort***            | Plug/Seed | 500                      | 2,000                              | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Penthorum sedoides</i>                            | Ditch-Stonewort               | Seed      | 0                        | 0                                  | 0.125                    | 0.125                              | 9.5                       | 6.25                                |
| <i>Physostegia virginiana</i>                        | Obedient-Plant                | Seed      | 0                        | 0                                  | 8                        | 4                                  | 608                       | 200                                 |
| <i>Pontederia cordata</i>                            | Pickersweed                   | Plug      | 5,000                    | 5,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Pycnanthemum virginianum</i>                      | Mountain Mint                 | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Rudbeckia subtomentosa</i>                        | Sweet Coneflower              | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Rumex britanica</i>                               | Greater Water Dock            | Plug      | 500                      | 1,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Sagittaria cuneata</i> ***                        | Arrow-Leaf Arrowhead***       | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Sagittaria latifolia</i>                          | Duck-Potato                   | Seed      | 0                        | 0                                  | 3                        | 1.5                                | 228                       | 75                                  |
| <i>Schoenoplectus acutus</i>                         | Hard-Stem Club-Rush           | Plug      | 6,000                    | 6,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Schoenoplectus tabernaemontani</i>                | Soft-Stem Club-Rush           | Plug/Seed | 7,000                    | 7,000                              | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Scirpus atrovirens</i>                            | Dark-Green Bulrush            | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Scirpus cyperinus</i>                             | Wool Grass                    | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Scirpus pendulus</i>                              | Rufous Bulrush                | Seed      | 0                        | 0                                  | 0.5                      | 0.25                               | 38                        | 12.5                                |
| <i>Sium suave</i>                                    | Hemlock Water-Parsnip         | Seed      | 0                        | 0                                  | 4                        | 2                                  | 304                       | 100                                 |
| <i>Solidago riddellii</i>                            | Riddell's Goldenrod           | Seed      | 0                        | 0                                  | 1                        | 1                                  | 76                        | 50                                  |
| <i>Sparganium eurycarpum</i>                         | Broad-Fruit Burr-Reed         | Plug/Seed | 15,000                   | 12,000                             | 2                        | 1                                  | 152                       | 50                                  |
| <i>Spartina pectinata</i>                            | Freshwater Cord Grass         | Plug/Seed | 2,000                    | 2,000                              | 7                        | 3                                  | 532                       | 150                                 |
| <i>Symphyotrichum novae-angliae</i>                  | New England American-Aster    | Seed      | 0                        | 0                                  | 5                        | 2                                  | 380                       | 100                                 |
| <i>Symphyotrichum puniceum</i> ***                   | Purple-Stem American-Aster*** | Seed      | 0                        | 0                                  | 1                        | 1                                  | 76                        | 50                                  |
| <i>Thalictrum dasycarpum</i> ***                     | Purple Meadow Rue***          | Seed      | 0                        | 0                                  | 1                        | 1                                  | 76                        | 50                                  |
| <i>Onoclea sensibilis</i>                            | Sensitive Fern                | Plug      | 1,500                    | 1,500                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Verbena hastata</i>                               | Blue Vervain                  | Seed      | 0                        | 0                                  | 2                        | 1                                  | 152                       | 50                                  |
| <i>Vernonia fasciculata</i>                          | Prairie Ironweed              | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 76                        | 25                                  |
| <i>Veronicastrum virginicum</i>                      | Culver's-Root                 | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 38                        | 25                                  |
|                                                      |                               |           | Total Quantity Seed/Acre |                                    | 145                      | 71                                 |                           |                                     |
| <b>TOTAL QUANTITY</b>                                |                               |           | <b>125,000</b>           | <b>95,000</b>                      |                          |                                    | <b>11,020</b>             | <b>3,550</b>                        |



| SCIENTIFIC NAME                              | COMMON NAME                  | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity<br>OPTION | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz)<br>OPTION | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz)<br>OPTION |
|----------------------------------------------|------------------------------|-----------|--------------------------|------------------------------------|--------------------------|------------------------------------|---------------------------|-------------------------------------|
| <b>Prairie Conversion</b>                    |                              |           |                          |                                    |                          |                                    |                           |                                     |
| <i>Allium cernuum</i>                        | Nodding Onion                | Seed      | 0                        | 0                                  | 10                       | 2.5                                | 500                       | 75                                  |
| <i>Anemone canadensis</i>                    | Round-Leaf Thimbleweed       | Plug      | 2,000                    | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Antennaria neglecta</i>                   | Cat's-Foot                   | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 25                        | 15                                  |
| <i>Antennaria plantaginifolia</i>            | Pussy-Toes                   | Plug      | 1,000                    | 2,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Asclepias sullivantii</i>                 | Prairie Milkweed             | Seed      | 0                        | 0                                  | 3                        | 1                                  | 150                       | 30                                  |
| <i>Asclepias tuberosa</i>                    | Butterfly-Weed               | Seed      | 0                        | 0                                  | 12                       | 3                                  | 600                       | 90                                  |
| <i>Asclepias verticillata</i>                | Whorled Milkweed             | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Astragalus canadensis</i>                 | Canadian Milk-Vetch          | Seed      | 0                        | 0                                  | 2                        | 1                                  | 100                       | 30                                  |
| <i>Baptisia alba</i> var. <i>macrophylla</i> | White Wild Indigo            | Plug/Seed | 1,000                    | 1,500                              | 7                        | 3                                  | 350                       | 90                                  |
| <i>Baptisia bracteata</i>                    | Cream Wild Indigo            | Seed      | 0                        | 0                                  | 3                        | 1                                  | 150                       | 30                                  |
| <i>Bouteloua curtipendula</i>                | Side-Oats Grama              | Seed      | 0                        | 0                                  | 30                       | 10                                 | 1500                      | 300                                 |
| <i>Bromus kalmii</i>                         | Kalm's Brome                 | Seed      | 0                        | 0                                  | 12                       | 3                                  | 600                       | 90                                  |
| <i>Carex bicknellii</i>                      | Bicknell's Sedge             | Seed      | 0                        | 0                                  | 2                        | 1                                  | 100                       | 30                                  |
| <i>Carex granularis</i>                      | Pale Sedge                   | Seed      | 0                        | 0                                  | 3                        | 1                                  | 150                       | 30                                  |
| <i>Carex grisea</i>                          | Wood Gray Sedge              | Seed      | 0                        | 0                                  | 2                        | 2                                  | 100                       | 60                                  |
| <i>Carex molesta</i>                         | Field Oval Sedge             | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 50                        | 15                                  |
| <i>Carex normalis</i>                        | Greater Straw Sedge          | Seed      | 0                        | 0                                  | 2                        | 0.5                                | 100                       | 15                                  |
| <i>Castilleja coccinea</i> ***               | Scarlet Indian-Paintbrush*** | Seed      | 0                        | 0                                  | 0.125                    | 0.125                              | 6.25                      | 3.75                                |
| <i>Chamaecrista fasciculata</i>              | Sleepingplant                | Seed      | 0                        | 0                                  | 25                       | 12                                 | 1250                      | 360                                 |
| <i>Comandra umbellata</i> ***                | Bastard-Toadflax***          | Plug/Seed | 500                      | 1,000                              | 0.5                      | 0.5                                | 25                        | 15                                  |
| <i>Coreopsis palmata</i>                     | Prairie Tickseed             | Seed      | 0                        | 0                                  | 3.5                      | 2                                  | 175                       | 60                                  |
| <i>Coreopsis tripteris</i>                   | Tall Tickseed                | Seed      | 0                        | 0                                  | 6                        | 1.5                                | 300                       | 45                                  |
| <i>Dalea candida</i>                         | White Prairie-Clover         | Seed      | 0                        | 0                                  | 3                        | 2                                  | 150                       | 60                                  |
| <i>Dalea purpurea</i>                        | Purple Prairie-Clover        | Seed      | 0                        | 0                                  | 5                        | 3                                  | 250                       | 90                                  |
| <i>Desmodium canadense</i>                   | Showy Tick-Trefoil           | Seed      | 0                        | 0                                  | 2                        | 0.5                                | 100                       | 15                                  |
| <i>Dichanthelium oligosanthos</i>            | Heller's Rosette Grass       | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Dodecatheon meadia</i> ***                | Pride-of-Ohio***             | Plug/Seed | 1,500                    | 2,000                              | 0.5                      | 1                                  | 25                        | 30                                  |
| <i>Elymus canadensis</i>                     | Nodding Wild Rye             | Seed      | 0                        | 0                                  | 30                       | 12                                 | 1500                      | 360                                 |
| <i>Eryngium yuccifolium</i>                  | Button Eryngo                | Seed      | 0                        | 0                                  | 3                        | 1                                  | 150                       | 30                                  |
| <i>Euphorbia corollata</i>                   | Flowering Spurge             | Seed      | 0                        | 0                                  | 6                        | 3                                  | 300                       | 90                                  |
| <i>Fragaria virginiana</i>                   | Virginia Strawberry          | Plug      | 3,000                    | 5,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Gentiana alba</i>                         | Yellow Gentian               | Seed      | 0                        | 0                                  | 0.75                     | 1                                  | 37.5                      | 30                                  |
| <i>Heuchera richardsonii</i>                 | Richardson's Alumroot        | Seed      | 0                        | 0                                  | 0                        | 0.5                                | 0                         | 15                                  |
| <i>Helianthus occidentalis</i>               | Few-Leaf Sunflower           | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 50                        | 15                                  |
| <i>Helianthus pauciflorus</i>                | Prairie Sunflower            | Seed      | 0                        | 0                                  | 3                        | 2                                  | 150                       | 60                                  |
| <i>Hesperostipa spartea</i>                  | Porcupine Grass              | Seed      | 0                        | 0                                  | 3                        | 8                                  | 150                       | 240                                 |
| <i>Juncus tenuis</i>                         | Path Rush                    | Seed      | 0                        | 0                                  | 0.5                      | 0                                  | 25                        | 0                                   |
| <i>Koeleria macrantha</i>                    | June Grass                   | Seed      | 0                        | 0                                  | 1                        | 0                                  | 50                        | 0                                   |
| <i>Lespedeza capitata</i>                    | Round-Head Bush-Clover       | Seed      | 0                        | 0                                  | 2                        | 1                                  | 100                       | 30                                  |
| <i>Liatis aspera</i>                         | Rough Gayfeather             | Seed      | 0                        | 0                                  | 2                        | 5                                  | 100                       | 150                                 |
| <i>Monarda fistulosa</i>                     | Oswego-Tea                   | Seed      | 0                        | 0                                  | 2                        | 0.5                                | 100                       | 15                                  |
| <i>Oenothera pilosella</i>                   | Meadow Evening-Primrose      | Plug      | 1,500                    | 1,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Packera paupercula</i> ***                | Balsam Groundsel ***         | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Packera plattensis</i>                    | Prairie Groundsel            | Plug      | 3,000                    | 5,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Parthenium integrifolium</i>              | Wild Quinine                 | Seed      | 0                        | 0                                  | 8                        | 2                                  | 400                       | 60                                  |
| <i>Pedicularis canadensis</i> **             | Canadian Lousewort**         | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 25                        | 15                                  |
| <i>Penstemon digitalis</i>                   | Foxglove Beardtongue         | Seed      | 0                        | 0                                  | 3                        | 0.75                               | 150                       | 22.5                                |
| <i>Phlox pilosa</i>                          | Downy Phlox                  | Seed      | 0                        | 0                                  | 0.125                    | 0.5                                | 6.25                      | 15                                  |
| <i>Potentilla simplex</i>                    | Oldfield Cinquefoil          | Plug      | 2,000                    | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Ratibida pinnata</i>                      | Yellow Coneflower            | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Rudbeckia hirta</i>                       | Black-Eyed-Susan             | Seed      | 0                        | 0                                  | 3                        | 0.75                               | 150                       | 22.5                                |
| <i>Rudbeckia subtomentosa</i>                | Sweet Coneflower             | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Ruellia humilis</i>                       | Fringe-Leaf Wild Petunia     | Plug      | 2,500                    | 1,500                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Schizachyrium scoparium</i>               | Little False Bluestem        | Seed      | 0                        | 0                                  | 40                       | 18                                 | 2000                      | 540                                 |
| <i>Silphium laciniatum</i>                   | Compass-Plant                | Seed      | 0                        | 0                                  | 7                        | 2                                  | 350                       | 60                                  |
| <i>Silphium terebinthinaceum</i>             | Prairie Dock                 | Seed      | 0                        | 0                                  | 10                       | 3                                  | 500                       | 90                                  |
| <i>Solidago juncea</i>                       | Early Goldenrod              | Seed      | 0                        | 0                                  | 0.5                      | 0.125                              | 25                        | 3.75                                |
| <i>Solidago nemoralis</i>                    | Gray Goldenrod               | Seed      | 0                        | 0                                  | 1                        | 0.5                                | 50                        | 15                                  |
| <i>Solidago rigida</i>                       | Hard-Leaf Flat-Top-Goldenrod | Seed      | 0                        | 0                                  | 0.5                      | 2                                  | 25                        | 60                                  |
| <i>Solidago speciosa</i>                     | Showy Goldenrod              | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 25                        | 15                                  |
| <i>Sporobolus heterolepis</i>                | Prairie Dropseed             | Seed      | 0                        | 0                                  | 16                       | 11                                 | 800                       | 330                                 |
| <i>Symphyotrichum ericoides</i>              | White Heath American-Aster   | Seed      | 0                        | 0                                  | 1                        | 0.25                               | 50                        | 7.5                                 |
| <i>Symphyotrichum laeae</i>                  | Smooth Blue American-Aster   | Seed      | 0                        | 0                                  | 2                        | 0.25                               | 100                       | 7.5                                 |
| <i>Symphyotrichum oolentangiense</i>         | Azure Aster                  | Seed      | 0                        | 0                                  | 2                        | 0.5                                | 100                       | 15                                  |
| <i>Tradescantia ohimensis</i>                | Bluejacket                   | Seed      | 0                        | 0                                  | 4                        | 1                                  | 200                       | 30                                  |
| <i>Verbena stricta</i>                       | Hoary Vervain                | Seed      | 0                        | 0                                  | 2                        | 1                                  | 100                       | 30                                  |
| <i>Veronicastrum virginicum</i>              | Culver's-Root                | Seed      | 0                        | 0                                  | 0.5                      | 0.5                                | 25                        | 15                                  |
| <i>Zizia aurea</i>                           | Golden Alexanders            | Seed      | 0                        | 0                                  | 6                        | 1.5                                | 300                       | 45                                  |
| Total Quantity Seed/Acre                     |                              |           |                          |                                    | 302                      | 135                                |                           |                                     |
| <b>TOTAL QUANTITY</b>                        |                              |           | <b>18,000</b>            | <b>25,000</b>                      |                          |                                    | <b>15,100</b>             | <b>4,050</b>                        |

| SCIENTIFIC NAME                                  | COMMON NAME                  | Type/Size | YEAR 2<br>Total Quantity<br>OPTION | YEAR 3<br>Total Quantity<br>OPTION | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz)<br>OPTION | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz)<br>OPTION |
|--------------------------------------------------|------------------------------|-----------|------------------------------------|------------------------------------|--------------------------|------------------------------------|---------------------------|-------------------------------------|
| <b>Savanna</b>                                   |                              |           |                                    |                                    |                          |                                    |                           |                                     |
| <i>Agostache scrophulariaefolia</i>              | Purple Giant Hyssop          | Seed      | 0                                  | 0                                  | 0.5                      | 0.5                                | 30                        | 20                                  |
| <i>Allium canadense</i>                          | Wild Onion                   | Seed      | 0                                  | 0                                  | 10                       | 5                                  | 600                       | 200                                 |
| <i>Amorpha canescens</i>                         | Leadplant                    | Seed      | 0                                  | 0                                  | 8                        | 4                                  | 480                       | 160                                 |
| <i>Anemone virginiana</i>                        | Tall Thimbleweed             | Seed      | 0                                  | 0                                  | 2                        | 2                                  | 120                       | 80                                  |
| <i>Antennaria plantaginifolia</i>                | Pussy-Toes                   | Plug      | 2,000                              | 2,500                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Asclepias exaltata</i>                        | Poke Milkweed                | Seed      | 0                                  | 0                                  | 3                        | 3                                  | 180                       | 120                                 |
| <i>Asclepias purpurascens***</i>                 | Purple Milkweed***           | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Asclepias tuberosa</i>                        | Butterfly-Weed               | Seed      | 0                                  | 0                                  | 10                       | 5                                  | 600                       | 200                                 |
| <i>Astragalus canadensis</i>                     | Canadian Milk-Vetch          | Seed      | 0                                  | 0                                  | 3                        | 2                                  | 180                       | 80                                  |
| <i>Aureolaria grandiflora var. pulchra***</i>    | Yellow False Foxglove***     | Seed      | 0                                  | 0                                  | 0.25                     | 0.25                               | 15                        | 10                                  |
| <i>Baptisia alba var. macrophylla</i>            | White Wild Indigo            | Plug/Seed | 1,500                              | 500                                | 4                        | 3                                  | 240                       | 120                                 |
| <i>Brickellia eupatorioides var. corymbulosa</i> | False Boneset                | Seed      | 0                                  | 0                                  | 2                        | 1                                  | 120                       | 40                                  |
| <i>Bromus latiglumis</i>                         | Early-Leaf Brome             | Seed      | 0                                  | 0                                  | 4                        | 4                                  | 240                       | 160                                 |
| <i>Carex gracillima***</i>                       | Graceful Sedge***            | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Carex grisea</i>                              | Wood Gray Sedge              | Seed      | 0                                  | 0                                  | 4                        | 2                                  | 240                       | 80                                  |
| <i>Carex normalis</i>                            | Greater Straw Sedge          | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Carex pensylvanica</i>                        | Pennsylvania Sedge           | Plug      | 15,000                             | 20,000                             | 0                        | 0                                  | 0                         | 0                                   |
| <i>Carex projecta</i>                            | Necklace Sedge               | Seed      | 0                                  | 0                                  | 0.5                      | 0.5                                | 30                        | 20                                  |
| <i>Carex rosea</i>                               | Rosy Sedge                   | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Carex sparganioides</i>                       | Burr-Reed Sedge              | Seed      | 0                                  | 0                                  | 2                        | 2                                  | 120                       | 80                                  |
| <i>Ceanothus americanus</i>                      | New Jersey Tea               | Seed      | 0                                  | 0                                  | 3                        | 5                                  | 180                       | 200                                 |
| <i>Chamaecrista fasciculata</i>                  | Sleepingplant                | Seed      | 0                                  | 0                                  | 18                       | 8                                  | 1080                      | 320                                 |
| <i>Cirsium altissimum***</i>                     | Tall Thistle***              | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Clematis virginiana***</i>                    | Devil's-Darning-Needles***   | Seed      | 0                                  | 0                                  | 0.5                      | 0.5                                | 30                        | 20                                  |
| <i>Comandra umbellata***</i>                     | Bastard-Toadflax***          | Plug/Seed | 500                                | 1,000                              | 0.5                      | 1                                  | 30                        | 40                                  |
| <i>Coreopsis tripteris</i>                       | Tall Tickseed                | Seed      | 0                                  | 0                                  | 2                        | 1                                  | 120                       | 40                                  |
| <i>Dalea candida</i>                             | White Prairie-Clover         | Seed      | 0                                  | 0                                  | 5                        | 1                                  | 300                       | 40                                  |
| <i>Desmodium canadense</i>                       | Showy Tick-Trefoil           | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Desmodium glutinosum***</i>                   | Pointed Tick-Trefoil***      | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Dioscorea villosa***</i>                      | Wild Yam***                  | Seed      | 0                                  | 0                                  | 1.5                      | 0.75                               | 90                        | 30                                  |
| <i>Dodecatheon meadia***</i>                     | Pride-of-Ohio***             | Seed      | 0                                  | 0                                  | 0.5                      | 1                                  | 30                        | 40                                  |
| <i>Elymus hystrix</i>                            | Eastern Bottle-Brush Grass   | Seed      | 0                                  | 0                                  | 15                       | 8                                  | 900                       | 320                                 |
| <i>Elymus villosus</i>                           | Hairy Wild Rye               | Seed      | 0                                  | 0                                  | 12                       | 4                                  | 720                       | 160                                 |
| <i>Euphorbia corollata</i>                       | Flowering Spurge             | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Eutrochium purpureum</i>                      | Sweet-Scented Joe-Pye-Weed   | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Festuca subverticillata</i>                   | Nodding Fescue               | Seed      | 0                                  | 0                                  | 5                        | 4                                  | 300                       | 160                                 |
| <i>Fragaria virginiana</i>                       | Virginia Strawberry          | Plug      | 3,000                              | 2,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Galium concinnum</i>                          | Shining Bedstraw             | Seed      | 0                                  | 0                                  | 0.5                      | 0.25                               | 30                        | 10                                  |
| <i>Gentiana alba</i>                             | Yellow Gentian               | Seed      | 0                                  | 0                                  | 0.125                    | 0.5                                | 7.5                       | 20                                  |
| <i>Geranium maculatum</i>                        | Spotted Crane's-Bill         | Plug      | 2,000                              | 1,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Helianthus strumosus</i>                      | Pale-Leaf Woodland Sunflower | Seed      | 0                                  | 0                                  | 1.5                      | 0.75                               | 90                        | 30                                  |
| <i>Hesperostipa spartea</i>                      | Porcupine Grass              | Seed      | 0                                  | 0                                  | 5                        | 5                                  | 300                       | 200                                 |
| <i>Heuchera richardsonii</i>                     | Richardson's Alumroot        | Seed      | 0                                  | 0                                  | 0.125                    | 0.125                              | 7.5                       | 5                                   |
| <i>Liatriis scariosa var. nieuwlantii***</i>     | Savanna Gayfeather***        | Seed      | 0                                  | 0                                  | 0.5                      | 0.75                               | 30                        | 30                                  |
| <i>Maianthemum stellatum</i>                     | Starry False Solomon's-Seal  | Plug      | 3,000                              | 3,000                              | 0                        | 0                                  | 0                         | 0                                   |
| <i>Nabalus altissimus***</i>                     | Tall Rattlesnake-Root***     | Seed      | 0                                  | 0                                  | 0.5                      | 0.5                                | 30                        | 20                                  |
| <i>Osmorhiza claytonii</i>                       | Hairy Sweet-Cicely           | Seed      | 0                                  | 0                                  | 2.5                      | 1.25                               | 150                       | 50                                  |
| <i>Packera plattensis</i>                        | Prairie Groundsel            | Plug      | 1,000                              | 5,000                              | 0.25                     | 0.125                              | 15                        | 5                                   |
| <i>Pedicularis canadensis**</i>                  | Canadian Lousewort**         | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Perideridia americana***</i>                  | Thicket Parsley***           | Seed      | 0                                  | 0                                  | 0.5                      | 0.25                               | 30                        | 10                                  |
| <i>Phlox divaricata</i>                          | Wild Blue Phlox              | Seed      | 0                                  | 0                                  | 1                        | 1                                  | 60                        | 40                                  |
| <i>Phryma leptostachya***</i>                    | Lopseed***                   | Seed      | 0                                  | 0                                  | 4                        | 3                                  | 240                       | 120                                 |
| <i>Polemonium reptans</i>                        | Greek-Valerian               | Seed      | 0                                  | 0                                  | 2                        | 1                                  | 120                       | 40                                  |
| <i>Rosa setigera</i>                             | Climbing Rose                | Seed      | 0                                  | 0                                  | 3                        | 2                                  | 180                       | 80                                  |
| <i>Rudbeckia subtomentosa</i>                    | Sweet Coneflower             | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Schizachyrium scoparium</i>                   | Little False Bluestem        | Seed      | 0                                  | 0                                  | 30                       | 18                                 | 1800                      | 720                                 |
| <i>Silene stellata</i>                           | Starry Campion               | Seed      | 0                                  | 0                                  | 1.5                      | 0.5                                | 90                        | 20                                  |
| <i>Silphium integrifolium</i>                    | Entire-Leaf Rosinweed        | Seed      | 0                                  | 0                                  | 6                        | 3                                  | 360                       | 120                                 |
| <i>Solidago speciosa</i>                         | Showy Goldenrod              | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Solidago ulmifolia</i>                        | Elm-Leaf Goldenrod           | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Symphyotrichum oolentangiense</i>             | Azure Aster                  | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Symphyotrichum shortii</i>                    | Short's Aster                | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Taenidia integerrima</i>                      | Yellow Pimpernel             | Seed      | 0                                  | 0                                  | 1.25                     | 0.25                               | 75                        | 10                                  |
| <i>Triosteum perfoliatum***</i>                  | Late Horse Gentian***        | Seed      | 0                                  | 0                                  | 4                        | 2                                  | 240                       | 80                                  |
| <i>Veronicastrum virginicum</i>                  | Culver's-Root                | Seed      | 0                                  | 0                                  | 0.5                      | 0.25                               | 30                        | 10                                  |
| <i>Zizia aptera</i>                              | Heart-Leaf Alexanders        | Seed      | 0                                  | 0                                  | 1                        | 0.5                                | 60                        | 20                                  |
| <i>Zizia aurea</i>                               | Golden Alexanders            | Seed      | 0                                  | 0                                  | 4                        | 2                                  | 240                       | 80                                  |
| Total Quantity Seed/Acre                         |                              |           |                                    |                                    | 201                      | 121.5                              |                           |                                     |
| <b>TOTAL QUANTITY</b>                            |                              |           | <b>28,000</b>                      | <b>35,000</b>                      |                          |                                    | <b>12,060</b>             | <b>4,860</b>                        |

| SCIENTIFIC NAME                     | COMMON NAME                  | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz) | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz) |
|-------------------------------------|------------------------------|-----------|--------------------------|--------------------------|--------------------------|--------------------------|---------------------------|---------------------------|
| Old Field/Degraded Prairie (BASE)   |                              |           |                          |                          |                          |                          |                           |                           |
| Allium cernuum                      | Nodding Onion                | Seed      | 0                        | 0                        | 5                        | 0                        | 50                        | 0                         |
| Amorpha canescens                   | Leadplant                    | Seed      | 0                        | 0                        | 12                       | 0                        | 120                       | 0                         |
| Anemone canadensis                  | Round-Leaf Thimbleweed       | Plug      | 0                        | 0                        | 0                        | 0                        | 0                         | 0                         |
| Antennaria plantaginifolia          | Pussy-Toes                   | Plug      | 0                        | 0                        | 0                        | 0                        | 0                         | 0                         |
| Asclepias tuberosa                  | Butterfly-Weed               | Seed      | 0                        | 0                        | 8                        | 0                        | 80                        | 0                         |
| Baptisia alba var. macrophylla      | White Wild Indigo            | Plug/Seed | 0                        | 0                        | 7                        | 0                        | 70                        | 0                         |
| Baptisia bracteata                  | Cream Wild Indigo            | Plug/Seed | 0                        | 0                        | 4                        | 0                        | 40                        | 0                         |
| Castilleja coccinea***              | Scarlet Indian-Paintbrush*** | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5                         | 0                         |
| Ceanothus americanus                | New Jersey Tea               | Seed      | 0                        | 0                        | 3                        | 0                        | 30                        | 0                         |
| Chamaecrista fasciculata            | Sleepingplant                | Seed      | 0                        | 0                        | 10                       | 0                        | 100                       | 0                         |
| Comandra umbellata                  | Bastard-Toadflax             | Plug/Seed | 0                        | 0                        | 0.75                     | 0                        | 7.5                       | 0                         |
| Coreopsis palmata                   | Prairie Tickseed             | Seed      | 0                        | 0                        | 3                        | 0                        | 30                        | 0                         |
| Dalea candida                       | White Prairie-Clover         | Seed      | 0                        | 0                        | 6                        | 0                        | 60                        | 0                         |
| Dodecatheon meadia***               | Pride-of-Ohio***             | Plug/Seed | 0                        | 0                        | 2                        | 0                        | 20                        | 0                         |
| Drymocallis arguta                  | Prairie Cinquefoil           | Seed      | 0                        | 0                        | 1.5                      | 0                        | 15                        | 0                         |
| Eryngium yuccifolium                | Button Eryngo                | Seed      | 0                        | 0                        | 6                        | 0                        | 60                        | 0                         |
| Euphorbia corollata                 | Flowering Spurge             | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Fragaria virginiana                 | Virginia Strawberry          | Plug      | 0                        | 0                        | 0                        | 0                        | 0                         | 0                         |
| Koeleria macrantha                  | June Grass                   | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Lespedeza capitata                  | Round-Head Bush-Clover       | Seed      | 0                        | 0                        | 3                        | 0                        | 30                        | 0                         |
| Liatris aspera                      | Rough Gayfeather             | Seed      | 0                        | 0                        | 4                        | 0                        | 40                        | 0                         |
| Oenothera pilosella                 | Meadow Evening-Primrose      | Plug      | 0                        | 0                        | 0                        | 0                        | 0                         | 0                         |
| Packera paupercula***               | Balsam Groundsel ***         | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5                         | 0                         |
| Packera plattensis                  | Prairie Groundsel            | Plug      | 0                        | 0                        | 0                        | 0                        | 0                         | 0                         |
| Parthenium integrifolium            | Wild Quinine                 | Seed      | 0                        | 0                        | 5                        | 0                        | 50                        | 0                         |
| Pedicularis canadensis**            | Canadian Louisewort**        | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Penstemon digitalis                 | Foxglove Beardtongue         | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Phlox pilosa                        | Downy Phlox                  | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5                         | 0                         |
| Schizachyrium scoparium             | Little False Bluestem        | Seed      | 0                        | 0                        | 15                       | 0                        | 150                       | 0                         |
| Silphium laciniatum                 | Compass-Plant                | Seed      | 0                        | 0                        | 8                        | 0                        | 80                        | 0                         |
| Silphium terebinthinaceum           | Prairie Dock                 | Seed      | 0                        | 0                        | 6                        | 0                        | 60                        | 0                         |
| Solidago nemoralis                  | Gray Goldenrod               | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5                         | 0                         |
| Sporobolus heterolepis              | Prairie Dropseed             | Seed      | 0                        | 0                        | 7                        | 0                        | 70                        | 0                         |
| Symphyotrichum ericoides            | White Heath American-Aster   | Seed      | 0                        | 0                        | 0.5                      | 0                        | 5                         | 0                         |
| Symphyotrichum laeve                | Smooth Blue American-Aster   | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Veronicastrum virginicum            | Culver's-Root                | Seed      | 0                        | 0                        | 0.25                     | 0                        | 2.5                       | 0                         |
| Zizia aptera                        | Heart-Leaf Alexanders        | Seed      | 0                        | 0                        | 1                        | 0                        | 10                        | 0                         |
| Zizia aurea                         | Golden Alexanders            | Seed      | 0                        | 0                        | 3                        | 0                        | 30                        | 0                         |
|                                     |                              |           | Total Quantity           | Seed/Acre                | 128                      | 0                        |                           |                           |
| TOTAL QUANTITY                      |                              |           | 0                        | 0                        |                          |                          | 1,280                     | 0                         |
|                                     |                              |           |                          |                          |                          |                          |                           |                           |
| SCIENTIFIC NAME                     | COMMON NAME                  | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity | YEAR 2<br>Seed/acre (oz) | YEAR 3<br>Seed/acre (oz) | YEAR 2<br>Total Seed (oz) | YEAR 3<br>Total Seed (oz) |
| Old Field/Degraded Prairie (OPTION) |                              |           |                          |                          |                          |                          |                           |                           |
| Allium cernuum                      | Nodding Onion                | Seed      | 0                        | 0                        | 5                        | 2.5                      | 425                       | 130                       |
| Amorpha canescens                   | Leadplant                    | Seed      | 0                        | 0                        | 12                       | 6                        | 1020                      | 312                       |
| Anemone canadensis                  | Round-Leaf Thimbleweed       | Plug      | 1,000                    | 5,000                    | 0                        | 0                        | 0                         | 0                         |
| Antennaria plantaginifolia          | Pussy-Toes                   | Plug      | 1,000                    | 2,500                    | 0                        | 0                        | 0                         | 0                         |
| Asclepias tuberosa                  | Butterfly-Weed               | Seed      | 0                        | 0                        | 8                        | 4                        | 680                       | 208                       |
| Baptisia alba var. macrophylla      | White Wild Indigo            | Plug/Seed | 1,000                    | 2,000                    | 7                        | 3.5                      | 595                       | 182                       |
| Baptisia bracteata                  | Cream Wild Indigo            | Plug/Seed | 2,000                    | 3,000                    | 4                        | 2                        | 340                       | 104                       |
| Castilleja coccinea***              | Scarlet Indian-Paintbrush*** | Seed      | 0                        | 0                        | 0.5                      | 0.25                     | 42.5                      | 13                        |
| Ceanothus americanus                | New Jersey Tea               | Seed      | 0                        | 0                        | 3                        | 4                        | 255                       | 208                       |
| Chamaecrista fasciculata            | Sleepingplant                | Seed      | 0                        | 0                        | 10                       | 5                        | 850                       | 260                       |
| Comandra umbellata                  | Bastard-Toadflax             | Plug/Seed | 500                      | 1,000                    | 0.75                     | 0.375                    | 63.75                     | 19.5                      |
| Coreopsis palmata                   | Prairie Tickseed             | Seed      | 0                        | 0                        | 3                        | 1.5                      | 255                       | 78                        |
| Dalea candida                       | White Prairie-Clover         | Seed      | 0                        | 0                        | 6                        | 3                        | 510                       | 156                       |
| Dodecatheon meadia***               | Pride-of-Ohio***             | Plug/Seed | 500                      | 1,500                    | 2                        | 1                        | 170                       | 52                        |
| Drymocallis arguta                  | Prairie Cinquefoil           | Seed      | 0                        | 0                        | 1.5                      | 0.75                     | 127.5                     | 39                        |
| Eryngium yuccifolium                | Button Eryngo                | Seed      | 0                        | 0                        | 6                        | 3                        | 510                       | 156                       |
| Euphorbia corollata                 | Flowering Spurge             | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Fragaria virginiana                 | Virginia Strawberry          | Plug      | 1,000                    | 2,000                    | 0                        | 0                        | 0                         | 0                         |
| Koeleria macrantha                  | June Grass                   | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Lespedeza capitata                  | Round-Head Bush-Clover       | Seed      | 0                        | 0                        | 3                        | 1.5                      | 255                       | 78                        |
| Liatris aspera                      | Rough Gayfeather             | Seed      | 0                        | 0                        | 4                        | 2                        | 340                       | 104                       |
| Oenothera pilosella                 | Meadow Evening-Primrose      | Plug      | 1,500                    | 3,000                    | 0                        | 0                        | 0                         | 0                         |
| Packera paupercula***               | Balsam Groundsel ***         | Seed      | 0                        | 0                        | 0.5                      | 0.25                     | 42.5                      | 13                        |
| Packera plattensis                  | Prairie Groundsel            | Plug      | 1,500                    | 3,000                    | 0                        | 0                        | 0                         | 0                         |
| Parthenium integrifolium            | Wild Quinine                 | Seed      | 0                        | 0                        | 5                        | 2.5                      | 425                       | 130                       |
| Pedicularis canadensis**            | Canadian Louisewort**        | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Penstemon digitalis                 | Foxglove Beardtongue         | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Phlox pilosa                        | Downy Phlox                  | Seed      | 0                        | 0                        | 0.5                      | 0.25                     | 42.5                      | 13                        |
| Schizachyrium scoparium             | Little False Bluestem        | Seed      | 0                        | 0                        | 15                       | 7.5                      | 1275                      | 390                       |
| Silphium laciniatum                 | Compass-Plant                | Seed      | 0                        | 0                        | 8                        | 4                        | 680                       | 208                       |
| Silphium terebinthinaceum           | Prairie Dock                 | Seed      | 0                        | 0                        | 6                        | 3                        | 510                       | 156                       |
| Solidago nemoralis                  | Gray Goldenrod               | Seed      | 0                        | 0                        | 0.5                      | 0.25                     | 42.5                      | 13                        |
| Sporobolus heterolepis              | Prairie Dropseed             | Seed      | 0                        | 0                        | 7                        | 3.5                      | 595                       | 182                       |
| Symphyotrichum ericoides            | White Heath American-Aster   | Seed      | 0                        | 0                        | 0.5                      | 0.25                     | 42.5                      | 13                        |
| Symphyotrichum laeve                | Smooth Blue American-Aster   | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Veronicastrum virginicum            | Culver's-Root                | Seed      | 0                        | 0                        | 0.25                     | 0.125                    | 21.25                     | 6.5                       |
| Zizia aptera                        | Heart-Leaf Alexanders        | Seed      | 0                        | 0                        | 1                        | 0.5                      | 85                        | 26                        |
| Zizia aurea                         | Golden Alexanders            | Seed      | 0                        | 0                        | 3                        | 1.5                      | 255                       | 78                        |
|                                     |                              |           | Total Quantity           | Seed/Acre                | 128                      | 67                       |                           |                           |
| TOTAL QUANTITY                      |                              |           | 10,000                   | 23,000                   |                          |                          | 10,880                    | 3,458                     |

| SCIENTIFIC NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COMMON NAME                | Type/Size | YEAR 2<br>Total Quantity | YEAR 3<br>Total Quantity | YEAR 2<br>Seed/acre (oz)<br>OPTION | YEAR 3<br>Seed/acre (oz) | YEAR 2<br>Total Seed (oz)<br>OPTION | YEAR 3<br>Total Seed (oz) |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------|--------------------------|--------------------------|------------------------------------|--------------------------|-------------------------------------|---------------------------|
| <b>Woodland</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |           |                          |                          |                                    |                          |                                     |                           |
| <i>Agostache nepetoides</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Yellow Giant-Hyssop        | Seed      | 0                        | 0                        | 0.5                                | 0                        | 12.5                                | 0                         |
| <i>Allium tricoccum</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | Ramp                       | Seed      | 0                        | 0                        | 4                                  | 0                        | 100                                 | 0                         |
| <i>Carex grisea</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Wood Gray Sedge            | Seed      | 0                        | 0                        | 3                                  | 0                        | 75                                  | 0                         |
| <i>Carex normalis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Greater Straw Sedge        | Seed      | 0                        | 0                        | 1                                  | 0                        | 25                                  | 0                         |
| <i>Carex sparganioides</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Burr-Reed Sedge            | Seed      | 0                        | 0                        | 3                                  | 0                        | 75                                  | 0                         |
| <i>Elymus canadensis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Nodding Wild Rye           | Seed      | 0                        | 0                        | 10                                 | 0                        | 250                                 | 0                         |
| <i>Elymus hystrix</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Eastern Bottle-Brush Grass | Seed      | 0                        | 0                        | 22                                 | 0                        | 550                                 | 0                         |
| <i>Elymus villosus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Hairy Wild Rye             | Seed      | 0                        | 0                        | 15                                 | 0                        | 375                                 | 0                         |
| <i>Elymus virginicus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Virginia Wild Rye          | Seed      | 0                        | 0                        | 15                                 | 0                        | 375                                 | 0                         |
| <i>Eurybia macrophylla</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Large-Leaf Wood-Aster      | Seed      | 0                        | 0                        | 1                                  | 0                        | 25                                  | 0                         |
| <i>Eutrochium purpureum</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Sweet-Scented Joe-Pye-Weed | Seed      | 0                        | 0                        | 1                                  | 0                        | 25                                  | 0                         |
| <i>Hydrophyllum virginianum</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Shawnee-Salad              | Seed      | 0                        | 0                        | 2                                  | 0                        | 50                                  | 0                         |
| <i>Persicaria virginiana</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Jumpseed                   | Seed      | 0                        | 0                        | 1.5                                | 0                        | 37.5                                | 0                         |
| <i>Polygonatum biflorum</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | King Solomon's-Seal        | Seed      | 0                        | 0                        | 5                                  | 0                        | 125                                 | 0                         |
| <i>Scrophularia marilandica</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Carpenter's-Square         | Seed      | 0                        | 0                        | 0.25                               | 0                        | 6.25                                | 0                         |
| <i>Solidago flexicaulis</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Zigzag Goldenrod           | Seed      | 0                        | 0                        | 0.5                                | 0                        | 12.5                                | 0                         |
| <i>Symphotrichum shortii</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Short's Aster              | Seed      | 0                        | 0                        | 0.75                               | 0                        | 18.75                               | 0                         |
| <i>Symphotrichum urophyllum</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Arrow-Leaf Aster           | Seed      | 0                        | 0                        | 0.5                                | 0                        | 12.5                                | 0                         |
| Total Quantity Seed/Acre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                            |           |                          |                          | 86                                 | 0                        |                                     |                           |
| <b>TOTAL QUANTITY</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                            |           | <b>0</b>                 | <b>0</b>                 |                                    |                          | <b>2,150</b>                        | <b>0</b>                  |
| <p><b>**Contractor will provide fresh viable seed only, immediately after collection from seed pods (i.e. no stored seeds from previous collection years), for the Government to install within project boundaries. This species does not count towards Contractor's performance criteria for % of seeded native species present, but will count towards % of native species coverage if encountered within transect quadrats.</b></p> <p><b>***This species does not count towards Contractor's performance criteria for % of seeded native species present, but will count towards % of native species coverage if encountered within transect quadrats.</b></p> <p><b>**** This species must be installed only in cobble bar and riffle structures.</b></p> |                            |           |                          |                          |                                    |                          |                                     |                           |
| <b>TREES/SHRUBS (OPTION)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                            |           |                          |                          |                                    |                          |                                     |                           |
| SCIENTIFIC NAME                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | COMMON NAME                | SIZE      | Total Quantity           |                          |                                    |                          |                                     |                           |
| <b>Wetlands</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                            |           |                          |                          |                                    |                          |                                     |                           |
| <i>Decodon verticillatus</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Swamp-Loosestrife          | 1 Gallon  | 350                      |                          |                                    |                          |                                     |                           |
| <i>Spiraea alba</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | White Meadowsweet          | 1 Gallon  | 350                      |                          |                                    |                          |                                     |                           |

SECTION TABLE OF CONTENTS

DIVISION 33 - UTILITIES

-- End of Section Table of Contents --

~~SECTION 33 40 00~~~~STORMWATER UTILITIES~~~~11/21~~~~PART 1 — GENERAL~~~~1.1 — UNIT PRICES~~~~1.1.1 — Box Culverts~~

~~The length of box culvert installed will be measured along the centerline of the box from end to end of the box culvert. Box Culvert will be paid for at the contract unit price for the number of linear feet of box culverts placed in the accepted work.~~

~~1.1.2 — Walls and Headwalls~~

~~Walls and headwalls will be measured by the number of cubic yards of reinforced concrete, plain concrete, or masonry used in the construction of the walls and headwalls. Wall and headwalls will be paid for at the contract unit price for the number of walls and headwalls constructed in the completed work.~~

~~1.1.3 — Backfill Replacing Unstable Material~~

~~Payment will be made for the number of cubic yards of select granular material required to replace unstable material for foundations under pipes or drainage structures, which will constitute full compensation for this backfill material, including removal and disposal of unstable material and all excavating, hauling, placing, compacting, and all incidentals necessary to complete the construction of the foundation satisfactorily.~~

~~1.2 — REFERENCES~~

~~The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.~~

~~AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS—  
(AASHTO)~~

|                                |                                                                                                                                                     |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>AASHTO HB-17</del>        | <del>(2002; Errata 2003; Errata 2005, 17th Edition) Standard Specifications for Highway Bridges</del>                                               |
| <del>AASHTO M-43</del>         | <del>(2005; R 2018) Standard Specification for Sizes of Aggregate for Road and Bridge Construction</del>                                            |
| <del>AASHTO M-167M/M-167</del> | <del>(2017; R 2021) Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field Bolted Pipe, Pipe Arches, and Arches</del> |
| <del>AASHTO M-190</del>        | <del>(2004; R 2019) Standard Specification for Asphalt-Coated Corrugated Metal Culvert</del>                                                        |

~~Pipe and Pipe Arches~~

|                         |                                                                                                                                                   |
|-------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>AASHTO M 219</del> | <del>(1992; R 2021) Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field Bolted Pipe, Pipe Arches, and Arches</del>    |
| <del>AASHTO M 243</del> | <del>(1996; R 2021) Standard Specification for Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe Arches, and Arches</del> |
| <del>AASHTO M 288</del> | <del>(2021) Standard Specification for Geosynthetic Specification for Highway Applications</del>                                                  |
| <del>AASHTO M 294</del> | <del>(2021) Standard Specification for Corrugated Polyethylene Pipe, 300 to 1500 mm (12 to 60 in.) Diameter</del>                                 |

~~ASTM INTERNATIONAL (ASTM)~~

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A48/A48M</del>   | <del>(2022) Standard Specification for Gray Iron Castings</del>                                                             |
| <del>ASTM A123/A123M</del> | <del>(2024) Standard Specification for Zinc (Hot Dip Galvanized) Coatings on Iron and Steel Products</del>                  |
| <del>ASTM A536</del>       | <del>(2024) Standard Specification for Ductile Iron Castings</del>                                                          |
| <del>ASTM A716</del>       | <del>(2018; R 2022) Standard Specification for Ductile Iron Culvert Pipe</del>                                              |
| <del>ASTM A742/A742M</del> | <del>(2023a) Standard Specification for Steel Sheet, Metallic Coated and Polymer Precoated for Corrugated Steel Pipe</del>  |
| <del>ASTM A760/A760M</del> | <del>(2015, R 2020) Standard Specification for Corrugated Steel Pipe, Metallic Coated for Sewers and Drains</del>           |
| <del>ASTM A762/A762M</del> | <del>(2019) Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains</del>                 |
| <del>ASTM A798/A798M</del> | <del>(2022) Standard Practice for Installing Factory-Made Corrugated Steel Pipe for Sewers and Other Applications</del>     |
| <del>ASTM A807/A807M</del> | <del>(2019) Standard Practice for Installing Corrugated Steel Structural Plate Pipe for Sewers and Other Applications</del> |
| <del>ASTM A929/A929M</del> | <del>(2024) Standard Specification for Steel Sheet, Metallic Coated by the Hot Dip Process for Corrugated Steel Pipe</del>  |



|                              |                                                                                                                                                                                                         |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A1011/A1011M</del> | <del>(2023) Standard Specification for Steel Sheet and Strip, Hot-Rolled, Carbon, Structural, High-Strength Low-Alloy, High-Strength Low-Alloy with Improved Formability, and Ultra-High Strength</del> |
| <del>ASTM B26/B26M</del>     | <del>(2018; E 2018) Standard Specification for Aluminum-Alloy Sand Castings</del>                                                                                                                       |
| <del>ASTM B745/B745M</del>   | <del>(2015; R 2021) Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains</del>                                                                                                     |
| <del>ASTM C12</del>          | <del>(2024) Standard Practice for Installing Vitrified Clay Pipe Lines</del>                                                                                                                            |
| <del>ASTM C14</del>          | <del>(2020; R 2025) Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe</del>                                                                                        |
| <del>ASTM C14M</del>         | <del>(2020; R 2025) Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe (Metric)</del>                                                                               |
| <del>ASTM C32</del>          | <del>(2023) Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)</del>                                                                                                          |
| <del>ASTM C55</del>          | <del>(2023) Standard Specification for Concrete Building Brick</del>                                                                                                                                    |
| <del>ASTM C62</del>          | <del>(2023) Standard Specification for Building Brick (Solid Masonry Units Made from Clay or Shale)</del>                                                                                               |
| <del>ASTM C76</del>          | <del>(2022a) Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe</del>                                                                                                  |
| <del>ASTM C76M</del>         | <del>(2022a) Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe (Metric)</del>                                                                                         |
| <del>ASTM C139</del>         | <del>(2023) Standard Specification for Concrete Masonry Units for Construction of Catch Basins and Manholes</del>                                                                                       |
| <del>ASTM C231/C231M</del>   | <del>(2024) Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method</del>                                                                                                 |
| <del>ASTM C270</del>         | <del>(2025) Standard Specification for Mortar for Unit Masonry</del>                                                                                                                                    |
| <del>ASTM C425</del>         | <del>(2021) Standard Specification for Compression Joints for Vitrified Clay Pipe and Fittings</del>                                                                                                    |
| <del>ASTM C443</del>         | <del>(2021) Standard Specification for Joints for Concrete Pipe and Manholes, Using</del>                                                                                                               |

~~Rubber Gaskets~~

|                            |                                                                                                                                                                    |
|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM C443M</del>      | <del>(2021) Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets (Metric)</del>                                                  |
| <del>ASTM C478/C478M</del> | <del>(2022) Standard Specification for Circular Precast Reinforced Concrete Manhole Sections</del>                                                                 |
| <del>ASTM C506</del>       | <del>(2022a) Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe</del>                                                        |
| <del>ASTM C506M</del>      | <del>(2022a) Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe (Metric)</del>                                               |
| <del>ASTM C507</del>       | <del>(2022) Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe</del>                                                   |
| <del>ASTM C507M</del>      | <del>(2022) Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe (Metric)</del>                                          |
| <del>ASTM C655</del>       | <del>(2019a) Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe</del>                                                      |
| <del>ASTM C655M</del>      | <del>(2019a) Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe (Metric)</del>                                             |
| <del>ASTM C700</del>       | <del>(2018; R 2022) Standard Specification for Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated</del>                                        |
| <del>ASTM C828</del>       | <del>(2023) Standard Test Method for Low-Pressure Air Test of Vitrified Clay Pipe Lines</del>                                                                      |
| <del>ASTM C923/C923M</del> | <del>(2020) Standard Specification for Resilient Connectors Between Reinforced Concrete Manhole Structures, Pipes and Laterals</del>                               |
| <del>ASTM C990</del>       | <del>(2009; R 2019) Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants</del>          |
| <del>ASTM C990M</del>      | <del>(2009; R 2019) Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants (Metric)</del> |
| <del>ASTM C1103</del>      | <del>(2022) Standard Practice for Joint Acceptance Testing of Installed Precast</del>                                                                              |

~~Concrete Pipe Sewer Lines~~

|                        |                                                                                                                                                                             |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM C1103M</del> | <del>(2019) Standard Practice for Joint Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines (Metric)</del>                                                    |
| <del>ASTM C1433</del>  | <del>(2024) Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers</del>                                     |
| <del>ASTM C1433M</del> | <del>(2022) Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers (Metric)</del>                            |
| <del>ASTM C1577</del>  | <del>(2020) Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers Designed According to AASHTO LRFD</del>   |
| <del>ASTM D1056</del>  | <del>(2020) Standard Specification for Flexible Cellular Materials - Sponge or Expanded Rubber</del>                                                                        |
| <del>ASTM D1171</del>  | <del>(2018) Standard Test Method for Rubber Deterioration - Surface Ozone Cracking Outdoors (Triangular Specimens)</del>                                                    |
| <del>ASTM D1751</del>  | <del>(2018) Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types)</del> |
| <del>ASTM D1752</del>  | <del>(2018) Standard Specification for Preformed Sponge Rubber, Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction</del>         |
| <del>ASTM D2321</del>  | <del>(2020) Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications</del>                                       |
| <del>ASTM D2487</del>  | <del>(2017; R 2025) Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)</del>                                       |
| <del>ASTM D2564</del>  | <del>(2020) Standard Specification for Solvent Cements for Poly(Vinyl Chloride) (PVC) Plastic Piping Systems</del>                                                          |
| <del>ASTM D3034</del>  | <del>(2016) Standard Specification for Type PSM Poly(Vinyl Chloride) (PVC) Sewer Pipe and Fittings</del>                                                                    |
| <del>ASTM D3212</del>  | <del>(2020) Standard Specification for Joints for Drain and Sewer Plastic Pipes Using</del>                                                                                 |

~~Flexible Elastomeric Seals~~

|                              |                                                                                                                                                                              |
|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM F477</del>         | <del>(2014; R 2021) Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe</del>                                                                    |
| <del>ASTM F679</del>         | <del>(2016) Standard Specification for Poly(Vinyl Chloride) (PVC) Large-Diameter Plastic Gravity Sewer Pipe and Fittings</del>                                               |
| <del>ASTM F714</del>         | <del>(2024) Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter</del>                                                                |
| <del>ASTM F794</del>         | <del>(2021) Standard Specification for Poly(Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter</del>                          |
| <del>ASTM F894</del>         | <del>(2024) Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe</del>                                                              |
| <del>ASTM F949</del>         | <del>(2020) Standard Specification for Poly(Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings</del>                                            |
| <del>ASTM F1417</del>        | <del>(2011a; E 2024) Standard Practice for Installation Acceptance of Plastic Non-pressure Sewer Lines Using Low-Pressure Air</del>                                          |
| <del>ASTM F2418</del>        | <del>(2019) Standard Specification for Polypropylene (PP) Corrugated Wall Stormwater Collection Chambers</del>                                                               |
| <del>ASTM F2562/F2562M</del> | <del>(2015; R 2019) Specification for Steel-Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage</del>                                   |
| <del>ASTM F2620</del>        | <del>(2024) Standard Practice for Heat Fusion Joining of Polyethylene Pipe and Fittings</del>                                                                                |
| <del>ASTM F2764/F2764M</del> | <del>(2024) Standard Specification for 6 to 60 in. Polypropylene (PP) Corrugated Double and Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications</del> |
| <del>ASTM F2881/F2881M</del> | <del>(2021; E 2021) Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications</del>  |
| <del>ASTM F2922</del>        | <del>(2013; R 2018) Standard Specification for Polyethylene (PE) Corrugated Wall Stormwater Collection Chambers</del>                                                        |

~~ASTM F3219~~~~(2019) Standard Specification for 3 to 30-  
in. (75 to 750 mm) Polypropylene (PP)  
Corrugated Single Wall Pipe and Fittings~~~~1.3 SUBMITTALS~~

~~Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:~~

~~SD-02 Shop Drawings~~~~Precast Reinforced Concrete Box Culvert; G, DT~~~~SD-08 Manufacturer's Instructions~~~~Placing Box Culvert; G, AOF, DT~~~~SD-11 Closeout Submittals~~~~Post-Installation Inspection Report; G, AOF~~~~1.4 DELIVERY, STORAGE, AND HANDLING~~~~1.4.1 Delivery and Storage~~

~~Inspect materials delivered to site for damage and unload and store materials with minimal handling. Do not store materials directly on the ground. Keep a copy of the manufacturer's instructions available at the construction site at all times and follow these instructions unless directed otherwise by the Contracting Officer.~~

~~1.4.2 Handling~~

~~Handle materials in a manner that ensures delivery to the trench in sound, undamaged condition.~~

~~PART 2 PRODUCTS~~~~2.1 PRECAST REINFORCED CONCRETE BOX CULVERT~~

~~Manufacture precast reinforced concrete box culverts in accordance with and conforming to ASTM C1577.~~

~~PART 3 EXECUTION~~~~3.1 EXCAVATION BOX CULVERTS~~

~~Excavate trenches, excavate for appurtenances and backfill for culverts, in accordance with the applicable portions of Section 31 00 00 EARTHWORK and the requirements specified below.~~

~~3.1.1 Trenching~~

~~Excavate trenches to the width indicated on the drawings or as specified~~

~~herein. Trench width should permit satisfactory jointing and thorough tamping of the bedding material under and around the box culvert.~~

### ~~3.1.2 Removal of Unstable Material~~

~~Where wet or otherwise unstable soil incapable of properly supporting the box culvert, as determined by the Contracting Officer, is unexpectedly encountered in the bottom of a trench, remove such material to the depth required and replace with select granular material to the proper grade. Compact select granular material as specified in paragraph FINAL BACKFILL. When removal of unstable material is due to the fault or neglect of the Contractor while performing shoring and sheeting, water removal, or other specified requirements, perform such removal and replacement at no additional cost to the Government.~~

## ~~3.2 BEDDING AND INITIAL BACKFILL~~

~~Provide a firm bedding foundation of uniform density throughout the entire length of the pipe or box culvert.~~

### ~~3.2.1 Precast Reinforced Box Culvert~~

~~Use granular material a minimum of 6 inches in depth for bedding precast concrete box culverts in trenches with soil foundation and in accordance with the applicable portions of Section 31 00 00 EARTHWORK. Provide uniform support along the entire length of box culvert.~~

#### ~~3.2.1.1 Trenches~~

~~After the box culvert has been properly bedded, place selected material from excavation or borrow, at a moisture content that will facilitate compaction, along both sides of box culvert in layers not exceeding 6 inches in compacted depth. Bring the backfill up evenly on both sides of box culvert for the full length box culvert. Thoroughly compact each layer with mechanical tampers or rammers. Continue this method of filling and compacting until the fill has reached an elevation equal to the top of the box culvert. Backfill and compact the remainder of the trench by spreading and rolling or by compacting with mechanical rammers or tampers in layers not exceeding 8 inches. Test density as necessary to ensure conformance to the compaction requirements specified below.~~

#### ~~3.2.1.2 Fill Sections~~

~~Use backfill material and placement and compaction procedures for box culvert placed in fill sections as specified below. Uniformly spread the fill material longitudinally on both sides of the box in layers not exceeding 6 inches in compacted depth. Compacted by rolling parallel with pipe or by using mechanical tamping or ramming. Prior to commencing normal filling operations, the width of the fill at a height of 12 inches above the top of the box must extend a distance of not less than twice the outside width of the box culvert on each side of the box or 12 feet, whichever is less. After the backfill has reached at least 12 inches above the top of the box, place and thoroughly compact the remainder of the fill in layers not exceeding 8 inches.~~

## ~~3.3 PLACING BOX CULVERT~~

~~Submit printed copies of the box culvert manufacturer's recommended box culvert installation procedures prior to installation. Thoroughly examine~~

~~each section of box culvert before being laid; do not use defective or damaged box culvert sections. Divert drainage or dewater trenches during construction as necessary.~~

### ~~3.3.1 Precast Reinforced Concrete Box Culvert~~

~~Proceed upgrade with laying of sections and point tongue ends of tongue and groove box culvert section in the direction of flow.~~

## ~~3.4 JOINTING~~

### ~~3.4.1 Plastic Sealing Compound Joints for Tongue and Grooved Pipe and Box Culverts~~

~~Follow the recommendation of the particular manufacturer in regard to sealing compound special installation requirements. When lubricants, primers, or adhesives are used, only apply on surfaces that are dry and clean. Affix sealing compounds to the pipe or box culvert not more than 3 hours prior to installation of the pipe or box culvert. Protect sealing compounds from the sun, blowing dust, and other deleterious agents at all times. Inspect sealing compounds before installation of the pipe or box culvert, and remove and replace any loose or improperly affixed sealing compound. Align the box culvert with the previously installed box culvert, and pull the joint together.~~

## ~~3.5 DRAINAGE STRUCTURES~~

### ~~3.5.1 Walls and Headwalls~~

~~Construct headwalls and retaining walls as indicated on the plans.~~

## ~~3.6 FINAL BACKFILL~~

~~Backfill trenches with satisfactory material deposited in layers of a maximum of 8 inches loose thickness and compacted to 90 percent of maximum density for cohesive soils and 95 percent of maximum density for cohesionless soils in accordance with Section 31 00 00 EARTHWORK. Testing is the responsibility of the Contractor and will be performed at no additional cost to the Government. Unless otherwise specified, determine field in-place density of final backfill at a frequency of one test per 50 linear feet, or fraction thereof, of each lift of backfill. Submit test results in accordance with Section 31 00 00 EARTHWORK. Do not displace or damage pipe or box when compacting final backfill by rolling or operating heavy equipment parallel with the pipe or box. Movement of construction machinery over a culvert or storm drain at any stage of construction will be at the Contractor's risk. Repair or replace any damaged pipe. Protect concrete box culverts with a minimum of 3 feet of cover prior to permitting heavy construction equipment to pass over them during construction.~~

## ~~3.7 FIELD QUALITY CONTROL~~

### ~~3.7.1 Inspection~~

#### ~~3.7.1.1 Post-Installation Inspection~~

~~Inspect each segment of pipe for alignment, settlement, joint separations, soil migration through the joint, cracks, buckling, bulging~~



~~and deflection. An engineer must evaluate all defects to determine if any remediation or repair is required.~~

#### ~~3.7.1.1.1 Post-Installation Inspection Report~~

~~The final post installation inspection report must include: a copy of all video taken, box culvert location identification, equipment used for inspection, inspector name, deviation from design, grade, deviation from line, inspector notes, condition of joints, condition of box culvert wall (e.g. distress, cracking, wall damage dents, bulges, creases, tears, holes, etc.).~~

#### ~~3.7.2 Repair of Defects~~

##### ~~3.7.2.1 Inspection~~

~~Replace pipe or repair defects indicated in the Post-Installation Inspection Report.~~

#### ~~3.8 PROTECTION~~

~~Protect the box culvert and adjacent areas from superimposed and external loads during construction.~~

#### ~~3.9 WARRANTY PERIOD~~

~~box culvert segments found to have defects during the warranty period must be replaced with new pipe and retested.~~

~~-- End of Section --~~

SECTION TABLE OF CONTENTS  
DIVISION 34 - TRANSPORTATION

-- End of Section Table of Contents --

~~SECTION 34 71 13.16~~~~VEHICLE CRASH BARRIERS~~~~02/15, CHG 1: 05/17~~~~PART 1 GENERAL~~~~1.1 REFERENCES~~

~~The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.~~

~~AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS  
(AASHTO)~~

|                         |                                                                                                                     |
|-------------------------|---------------------------------------------------------------------------------------------------------------------|
| <del>AASHTO M 30</del>  | <del>(2002; R 2010) Standard Specification for Zinc-Coated Steel Wire Rope and Fittings for Highway Guardrail</del> |
| <del>AASHTO M 133</del> | <del>(2012; R 2016) Standard Specification for Preservatives and Pressure Treatment Processes for Timber</del>      |
| <del>AASHTO M 168</del> | <del>(2007; R 2012) Standard Specification for Wood Products</del>                                                  |
| <del>AASHTO M 180</del> | <del>(2012; R 2017) Standard Specification for Corrugated Sheet Steel Beams for Highway Guardrail</del>             |
| <del>AASHTO MASH</del>  | <del>(2016) Manual for Assessing Safety Hardware - Second Edition</del>                                             |

~~ASTM INTERNATIONAL (ASTM)~~

|                            |                                                                                                            |
|----------------------------|------------------------------------------------------------------------------------------------------------|
| <del>ASTM A1</del>         | <del>(2000; R 2018) Standard Specification for Carbon Steel Tee Rails</del>                                |
| <del>ASTM A27/A27M</del>   | <del>(2020) Standard Specification for Steel Castings, Carbon, for General Application</del>               |
| <del>ASTM A36/A36M</del>   | <del>(2019) Standard Specification for Carbon Structural Steel</del>                                       |
| <del>ASTM A47/A47M</del>   | <del>(1999; R 2022; E 2022) Standard Specification for Ferritic Malleable Iron Castings</del>              |
| <del>ASTM A123/A123M</del> | <del>(2024) Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products</del> |
| <del>ASTM A153/A153M</del> | <del>(2023) Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware</del>             |

|                              |                                                                                                                                                                    |
|------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <del>ASTM A242/A242M</del>   | <del>(2024) Standard Specification for High-Strength Low-Alloy Structural Steel</del>                                                                              |
| <del>ASTM A307</del>         | <del>(2023) Standard Specification for Carbon Steel Bolts, Studs, and Threaded Rod 60-000 PSI Tensile Strength</del>                                               |
| <del>ASTM A449</del>         | <del>(2014; R 2020) Standard Specification for Hex Cap Screws, Bolts, and Studs, Steel, Heat Treated, 120/105/90 ksi Minimum Tensile Strength, General Use</del>   |
| <del>ASTM A499</del>         | <del>(2015, R 2020) Standard Specification for Steel Bars and Shapes, Carbon Rolled from "T" Rails</del>                                                           |
| <del>ASTM A563</del>         | <del>(2021; E 2022a) Standard Specification for Carbon and Alloy Steel Nuts</del>                                                                                  |
| <del>ASTM A563M</del>        | <del>(2007; R 2013) Standard Specification for Carbon and Alloy Steel Nuts (Metric)</del>                                                                          |
| <del>ASTM A568/A568M</del>   | <del>(2019a) Standard Specification for Steel, Sheet, Carbon, Structural, and High-Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for</del> |
| <del>ASTM A588/A588M</del>   | <del>(2024) Standard Specification for High-Strength Low-Alloy Structural Steel, up to 50 ksi Minimum Yield Point, with Atmospheric Corrosion Resistance</del>     |
| <del>ASTM A615/A615M</del>   | <del>(2024) Standard Specification for Deformed and Plain Carbon Steel Bars for Concrete Reinforcement</del>                                                       |
| <del>ASTM A706/A706M</del>   | <del>(2024) Standard Specification for Low-Alloy Steel Deformed and Plain Bars for Concrete Reinforcement</del>                                                    |
| <del>ASTM A709/A709M</del>   | <del>(2024) Standard Specification for Structural Steel for Bridges</del>                                                                                          |
| <del>ASTM A1035/A1035M</del> | <del>(2024) Standard Specification for Deformed and Plain, Low-carbon, Chromium, Steel Bars for Concrete Reinforcement</del>                                       |
| <del>ASTM B695</del>         | <del>(2021) Standard Specification for Coatings of Zinc Mechanically Deposited on Iron and Steel</del>                                                             |
| <del>ASTM C94/C94M</del>     | <del>(2024d) Standard Specification for Ready-Mixed Concrete</del>                                                                                                 |
| <del>ASTM D4956</del>        | <del>(2013) Standard Specification for Retroreflective Sheeting for Traffic Control</del>                                                                          |

~~ASTM F3125/F3125M (2019) Standard Specification for High-Strength Structural Bolts and Assemblies, Steel and Alloy Steel, Heat Treated, Inch Dimensions 120 ksi and 150 ksi Minimum Tensile Strength, and Metric Dimensions 830 MPa and 1040 MPa Minimum Tensile Strength~~

~~ILLINOIS DEPARTMENT OF TRANSPORTATION (IDOT)~~

~~IDOT (2022) Illinois Department of Transportation Standard Specifications for Road and Bridge Construction~~

~~U.S. FEDERAL HIGHWAY ADMINISTRATION (FHWA)~~

~~FHWA FP-24 (2024) Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects~~

~~NCHRP 350 (1993) Recommended Procedures for the Safety Performance Evaluation of Highway Features~~

~~1.2 SUBMITTALS~~

~~Government approval is required for submittals with a "G" or "S" classification. Submittals not having a "G" or "S" classification are for information only. When used, a code following the "G" classification identifies the office that will review the submittal for the Government. Submit the following in accordance with Section 01 33 00 SUBMITTAL PROCEDURES:~~

~~SD-08 Manufacturer's Instructions~~

~~End Anchorage~~

~~Submit at least 14 days prior to installation.~~

~~PART 2 PRODUCTS~~

~~2.1 GUARDRAIL POSTS~~

~~Guardrail posts must be either wood or steel and of the dimensions indicated. Unless otherwise indicated, use only one type of post throughout the project.~~

~~2.1.1 Sawn Wood Posts and Offset Blocks~~

~~Except as otherwise specified herein, provide wood posts and offset blocks as specified in FHWA FP-24 standard specifications. Posts and blocks must be double end trimmed with the mounting bolt hole in each being drilled 1/16 inch oversize and within 1/2 inch of the specified location on either side of the post or block. All wood posts and offset blocks must be~~

~~rough, free of wane, squarecut, and fully sawn to the dimensions indicated. Drill post bolt holes before preservative treatment is applied. Unless otherwise approved, use only one preservative on the project. Do not use a wood guardrail post that has a through check, shake, or end slit in the same plane as, or parallel to the bolt hole and extending from the top of the post to within 3 inches of the bolt hole.~~

### ~~2.1.2 Steel-Backed Timber Rail~~

~~Furnish timber conforming to AASHTO M 168. Fabricate the timber rail, blockouts, and posts from dry, well seasoned, and dressed rough sawn Douglas fir, southern pine, or other species having a stress grade of at least 1,500 pounds per square inch. Treat the timber rail, blockout elements, and posts according to AASHTO M 133.~~

## ~~2.2 GUARDRAIL HARDWARE~~

~~All fittings (bolts, nuts, washers, etc.) for guardrail must conform to the requirements of FHWA FP-24.~~

## ~~PART 3 EXECUTION~~

### ~~3.1 POSTS~~

~~Posts may be placed by driving or by setting in excavated holes. Post holes for guardrail posts must be round and at least 4 inches larger, in diameter, than the greater dimensions (not the diagonal) of the posts, and must be backfilled around the posts with material removed or other suitable soil, placed in lifts not exceeding 4 inches, each lift thoroughly tamped. When placed by driving, drive the posts plumb, to the depth and in the position indicated. Remove posts which are broomed, split or damaged in any other way and replace with a sound post. Carry on driving operations in such manner that nearby structures, shoulders, or pavements are not damaged. Cuts and abrasions in preservative-treated posts and blocks must have the newly exposed surfaces treated with at least three applications of the same type of preservative with which the material was originally treated. Each application must be reasonably dry before the succeeding coat is applied. At the time a timber post is installed, any seasoning check which extends the full length of the piece cannot exceed 1/4 inch in width. Adjust posts used for vertical transition in length so that a minimum of 60 inches will be buried. Where guardrail cross buried structures and 60 inches of bury is not obtainable, install the guardrail post as deep as possible and with a 24 inch diameter concrete encasement for the full depth of bury. Where guardrail cross a concrete box culvert and 60 inches of bury is not obtainable, anchor the guardrail post to the top of the box culvert with a guardrail post base as detailed on the plan set.~~

### ~~3.2 GUARDRAIL BEAM ELEMENTS~~

~~Place and fasten the beam elements, fittings, and other parts of the guardrail as indicated. Erect the elements to produce a smooth, even rail, closely conforming to a line and grade parallel to the pavement. Bolt the beam elements to each post. Splice only at posts. Where the rail is on a curve, the beams at the splice must make contact throughout the area of the splice, forming a continuous beam before erection. Tighten all bolts in the finished rail.~~

~~3.3 GUARDRAIL END ANCHORAGE~~

~~Install flared and non-flared end anchorages in accordance with the manufacturer's instructions. Submit a copy of the manufacturer's end anchorage installation instructions prior to installation.~~

~~-- End of Section --~~